TA73

DEPARTMENT OF ENERGY
National Nuclear Security Administration
Los Alamos Site Office
Los Alamos, New Mexico 87544

August 19, 2005

Mr. James Bearzi, Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303

Dear Mr. Bearzi;

This letter and enclosures are the DOE-LASO response to the NMED Notice of Disapproval (NOD) for the Corrective Action Workplan for SWMU 73-002, dated July 19, 2005. All comments are addressed in the attached matrix table with cross-references to NMED's numbered comments. Enclosures include a revised Corrective Action Workplan, and Historical Investigation Report as separate documents. With this transmittal you are provided two paper copies and one electronic copy in accordance with section XI.A of the March 1, 2005 Consent Order. Section 7 of the work plan outlines the project schedule.

NMED's NOD indicates a January 31, 2006, due date for the Investigation Report based on the schedule shown on the Investigation Workplan. DOE requests that the due date be contingent on the date that NMED approves the Corrective Action Workplan. DOE anticipates a duration of 180 days from the date that NMED approves the Corrective Action Workplan to conduct readiness reviews, field work, sampling and analytical and finalizing the Investigation Report,

If you have questions about the document, please contact Bob Enz (667-7640) of our Environmental Restoration staff.

Sincerely,

David R. Gregory, P.E.
Federal Project Director
Office of Environmental Stewardship

ES: 2BE-008

Enclosures

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Notice of Disapproval – Comment Resolution

Part 1

Date: 8/16/05

Title: Corrective Action Workplan for the Incinerator Ash SWMU 73-002 ID # NM0890010515- HWB-LANL-05-005 Rev. #:

Reviewer's Name (Print): James P. Bearzi Group: NMED MS: Comments are due by: Aug. 21, 2005

Return comments or questions to (Author): ITSI Jeff Hess and Dwight Houser Phone: FAX:

AND Bob Enz AT

Part 2

Received on (Date): /05 Review completed on: /05 Phone: Signature:

Comment #	Location[1]		Reviewer's Comment/Suggestion	New Location		Final Resolution
1	General Comment Page 2 NOD		Format to Section XI. Permittees must submit any variations of the general document (work plan, report, other) format in outline form to NMED for approval prior to submittal in accordance with Section XI.A of the Order			The Corrective Action Work Plan (CAWP) will be reformatted to the Consent Order requirements
2	General Comment Page 2 NOD		The Permittees must provide a brief description of investigation, sampling or analytical methods and procedures, as part of this work plan. The description must include sufficient detail to evaluate the quality of the acquired data in accordance with Section IX.A, Standard Operating Procedures, of the Order. The Permittees may not substitute references to the Facility's SOPs for this requirement. (Submit to NMED within 30 days of receipt of this letter.)			The Sampling and Analysis Plan (SAP, Appendix A) will be conducted in accordance with the Consent Order SOP's.

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Comment #	Location [1]		Reviewer's Comment/Suggestion	New Location		Final Comment Resolution
3	General Comment Page 2 NOD		In accordance with Section XI.B.13, Appendices, of the Order, the Permittees must provide the results of historical investigations in a separate document to be submitted with the investigation work plan. The Permittees must submit the Historical Investigation Report (HIR) with the response to this NOD. (Submit to NMED within 30 days of receipt of this letter.)			Write and submit an HIR in accordance with Section XI.B.13.
4	General Comments Page 2 NOD		The Permittees have not provided a HIR or the waste characterization sampling results for NMED review. Therefore, the Permittees must complete full suite analyses for each sample obtained at this site. This suite must include VOCs, SVOCs, explosive compounds, pH, PCBs, dioxins, furans, nitrates, perchlorate, TAL metals, cyanide, and radionuclides. (Submit revised text and/or pages to NMED within 30 days of receipt of this letter.)			A full suite of analysis is in the updated Sampling Analysis Plan (SAP) included in the Corrective Action Work Plan (CAWP). Appendix "A".

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Comment #	Location [i]		Reviewer's Comment/Suggestion	New Location		Final Comment Resolution
1	Specific Comments Sec 3.2 Sub Surface Condition, Page 9 Page 2 NOD		Permittees' Statement: "Below the ash pile there is evidence of native soil and rock. No further investigation has been done of this area. NMED Comment: The information provided by the Permittees in this section is insufficient. The Permittees must provide the information required under Section XI.B.6.b of the Order. This information must include: a brief, detailed description of the site conditions observed during previous subsurface investigations, including relevant soil horizons; stratigraphy; presence of groundwater; and other relevant information. A site plan showing the locations of all borings and excavations advanced during previous investigations shall be included in the Figures section of the work plan. A brief description of the anticipated stratigraphic units that may be encountered during the investigation may be included in this subsection if no previous investigations have been conducted at this site. (Submit to NMED within 30 days of receipt of this letter.)	Specific Comments Section 3.2 Sub Surface Conditions Page 7		As a result of development at LANL, very little undisturbed soil exists at the facility. The majority of surface material tends to be artificial fill, which may be crushed tuff, disturbed soil, or imported material. Undisturbed soil on the mesa surfaces is generally thin and sandy in texture near the surface, with increasing clay content with depth. Cliff-forming south-facing slopes tend to have poorly developed soil profiles, while north-facing slopes generally have higher organic content. Variable thicknesses of alluvial deposits exist within the canyons. Based on regional information described in the Pueblo Canyon Aggregate Area Investigation Work Plan (DOE, 2005), subsurface lithologic units underlying surficial alluvium and soil in the vicinity of LANL consist of the Bandelier Tuff (Qbt) and the Puye Formation (Tp). The deeper lithologic unit, the Puye Formation, consists of clastic fanglomerate sediments. This unit is overlain by the Guaje Pumice Bed, which occurs at the base of the overlying Bandelier Tuff. The tuff deposits originated as gas-charged material expelled and deposited during violent volcanic eruptions. The tuff is subdivided into the deeper Otowi Member and the shallower Tshirege Member; the upper and lower members of the Bandelier Tuff are separated by the Cerro Toledo Interval at approximately 350 feet below ground surface (bgs) beneath the mesa top sites

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Comment #	Location [i]		Reviewer's Comment/Suggestion	New Location		Final Comment Resolution
2	Permit Notify & Util Clear Section 4.5 pg 12, par 1: Page 3 NOD		Permittees' Statement: "ITSI will make formal notifications before field activities are initiatedto DOE, USACE, Los Alamos County, and Airport Operations personne1." NMED Comment: In accordance with Section III.L of the Order, the Permittees are required to inform NMED prior to commencement of field activities (i.e. Sample Notify).	Permit Notify & Util Clear Section 5.5 page 11		Added NMED to the notification list.
3	Section 4.11.1 Ash Removal with Vacuum Truck - Keers, page 16: Page 3 NOD		Permittees' Statement: "All associated debris such as plant material, trash, cans, and miscellaneous municipal debris, will be hand picked and or segregated, bagged and disposed of as municipal waste. This may include brushing off ash from the debris to accomplish the goal of sending most of the debris to a local landfill. "NMED Comment: NMED does not believe that the Permittees will be able to reasonably demonstrate that all contamination has been successfully removed from debris encountered at this site nor have the Permittees proposed a method to demonstrate this. The Permittees have also failed to submit the results of waste characterization activities conducted in April of 2005. Additionally, the Permittees have not submitted a plan for NMED review that explains how the Permittees will conduct 40 CFR 262.11 activities for waste generated at this site. This information is crucial in determining proper waste disposal, and without it, NMED cannot assess the Permittees' plan for waste disposa1.	Section 5.11 Ash & Debris Removal Activities Page 13 and Section 5.11.1 Ash Removal with Vacuum Truck – Keers page 15		Given that the ash contains radioisotopes, and the sensitivity of the radioisotopic methods is extremely high, it is unlikely that any debris that has been in contact with the ash will be not-detected. Therefore the debris (PPE, cans, vegetation, etc.) will continue to be classified in the same category as the original ash. The current acceptance profile to the landfill includes debris, so there should not be any change required there. Revise the cited statement to indicate that all material in contact with the ash will be segregated as appropriate and managed with the same ash waste and debris stream. Segregate all new material (PPE, etc.). Put all of the new material in the last bag to leave the site. All associated debris, not in direct contact with the ash, such as plant material, trash, cans and miscellaneous municipal debris, will be hand picked and or segregated, bagged and disposed of as municipal waste. Larger metal items removed from the ash will be evaluated on a case-by-case basis for decontamination with the intent of being disposed of as municipal waste. This decontamination process will initially evaluate the item to ensure that all surfaces are accessible and available for decontamination. Each item that meets this criterion will be cleaned in an area setup for decontamination by brushing off ash residue, using wet wipes to wipe all surfaces, followed by a visual inspection by the waste management representative to ensure proper cleanliness. These items will also be evaluated by radiation safety personnel prior to release to a municipal landfill.

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Comment #	Location [i]		Reviewer's Comment/Suggestion	New Location		Final Comment Resolution
4	4) Section 5.1 Ash Waste Char/Sam page 20,para 2: Pg 3 NOD		Permittees' Statement: "The following tables summarize the radionuclide and metals results. The results and an evaluation of the results for purposes of disposal characterization are presented in a technical memorandum currently being prepared. NMED Comment: See specific comment #3 above.	Section 6.1 Ash Waste Character and Sample Page 19		The characterization samples were taken to profile ash for disposal. The confirmation samples are to verify that the ash is adequately removed.
5	Section 5.3 Confirmation Soil Samples, page 24 Page 3 NOD		Permittees' Statement: "Judgmental sampling will be performed along drainlines and outside the perimeter of the remediated area. Furthermore, samples will be taken to establish a background value comparison for the confirmation samples. NMED Comment: The "Inorganic and Radionuclide Background Data for Soils, Sediments, and Bandelier Tuff at Los Alamos National Laboratory" (LANL 1998, 59730), provides the background values for comparison for the confirmation samples. The Permittees must use these established values for background comparison and not site-specific samples for background comparisons. NMED will not accept site-specific BVs.	Section 6.3 Confirm Soil Samples Page 20		Confirmation samples will be taken upon removal of the ash and debris. Appendix A describes the sampling plan in detail. In summary, the field crew will obtain up to three samples, depending on the nature of the substrate at each confirmation sample location: one surface soil sample, one sample from the soil/tuff interface (first 6" of soil immediately above the rock surface), and a core sample of the underlying tuff. In addition, surface sediment samples will be collected on the basis of one sample per 100 lineal feet along each of the three drainages identified at the site. Samples will be collected from the top of the slope (starting at the base of the ash pile) and continue (1 per 100 ft) to the toe of the alluvium. Sediment sample collection will be biased towards areas of fine-grained sediment in outfall channels or pockets of sediment accumulation in the drainages. Sample results will be compared to published values obtained from "Inorganic and Radionuclide Background Data for Soils, Canyon Sediments, and Bandelier Tuff at Los Alamos National Laboratory," dated September 1998.

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Comment #	Location [i]		Reviewer's Comment/Suggestion	New Location		Final Comment Resolution
6	Section 6.2 Corrective Action Report, page 25: Page 4 NOD		Permittees' Statement: "The Corrective Action Report will be submitted to USACE/DOE within 90 calendar days after project completion or ITSI demobilization, whichever comes first, if the option is exercised." NMED Comment: Based on Figure 6, Project Schedule, provided in this Work Plan, the Investigation Report must be submitted to NMED no later than January 31, 2006. Also, the Investigation Report must follow the format and include all information required in Section XI.C Of the Order.	Section 8.0 Corrective Action Work Report - Schedule Page 57 Figure 6		The original schedule was based on mobilization to the site June 22, 2005 starting with GET and Rad Worker II training. Once the corrective action work plan is approved the schedule will readjust or shift out. The schedule will also be impacted by inclimate weather conditions such as snow, rain and lightning.
7	Appendix A: Sampling & Analyses Plan, page 2, paragraph 2 Page 4 NOD		A) Section 1.1 Background Permittees' Statement: "The results and an evaluation of the results for purposes of disposal characterization are presented in a technical memorandum currently being prepared. NMED Comment: See specific comment #4. (Submit to NMED within 30 days of receipt of this letter.)	Appendix A Sampling & Analysis Plan Section 1.1 Background Page 1 - 3		Delete the reference to the tech memo and add in the actual difference. Characterization sampling was completed to profile the ash for disposal. Confirmation samples will be taken after the ash is removed to verify that the ash was adequately removed.

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Comment #	Location [i]		Reviewer's Comment/Suggestion	New Location		Final Comment Resolution
7	Appendix A: Sampling & Analyses Plan, page 3 Bullet #2 Page 4 NOD		B) Section 2.0 Field Sampling Plan, Permittees' Statement: "Choose a random location within 30 feet of one of the edges of the footprint. Establish the sampling grid to cover the footprint in a 30-foot by 30-foot grid, with the grid extending a minimum of one grid unit outside the footprint of the ash along the slope and down the slope from the former footprint of the ash. **Comment:** NMED concurs with the 30-foot by 30-foot sampling grid proposed by the Permittees. However, the Permittees also state that "where inadequate soil exists, the sample location will be moved in the down slope direction, staying within the grid, until sufficient soil is present to sample." Soil is not the only medium in which a release may have occurred. If there is insufficient soil to obtain a sample, the Permittees must sample the medium (tuff) present in that location to determine if contamination is still present at the site. Also, the Permittees must sample the drainages associated with the ash pile. Samples within the drainages must be obtained from the top of the slope to the toe of the colluviums. Sampling must target areas such as fine-grained sediment in outfall channels or areas of sediment accumulation. Additionally, NMED understands that it is not the Permittees' intent to determine extent of contamination as part of this work plan. However, it is a requirement of Section IX, Investigation and Sampling Methods and Procedures, of the Order that the Permittees define nature and extent of contamination. NMED recommends that the Permittees obtain one surface soil sample, one sample from the soil/tuff interface, and one at least 2-feet into the tuff from each grid unit. Completing this additional sampling now may eliminate the need for a second phase of sampling in the future.	Appendix A Sampling & Analysis Plan Section 2.0 Field Sampling Plan Page 4		Delineate the approximate footprint where the ash was located using visual observations and survey coordinates from April 2005 ash sampling event. Choose a random location within 30 feet of one of the edges of the footprint. Establish the sampling grid to cover the footprint in a 30-foot by 30-foot grid, with the grid extending a minimum of one grid unit outside the footprint of the ash along the slope and down the slope from the former footprint of the ash. At each pre-determined confirmation sampling location, the field crew will obtain up to three samples, depending on the nature of the substrate at each location: one surface soil sample, one sample from the soil/tuff interface (first 6" of soil immediately above the rock surface), and a core sample of the underlying tuff. Practical limits of the hand-operated field equipment (necessary due to the difficulty of access to the hillside slope) may limit collection of samples where soil is more than a few feet deep.Collect surface sediment samples on the basis of one sample per 100 lineal feet along each of the three drainages identified at the site. Samples will be collected from the top of the slope (starting at the base of the ash pile) and continue (1 per 100 ft) to the toe of the alluvium. Sample collection will be biased towards areas of fine-grained sediment in outfall channels or pockets of sediment accumulation in the drainages. Screen samples onsite using field screening techniques. • Submit samples to Sample Management Office (SMO) for analysis (as negotiated, LANL is managing the laboratory analysis for this project, and ITSI will utilize their paperwork and procedures, where possible, to facilitate the process). • Once analytical results are available, evaluate the results relative to data quality objectives specified in Section 3.1.

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Comment #	Location [i]		Reviewer's Comment/Suggestion	New Location		Final Comment Resolution
7	Appendix A: Sampling & Analyses Plan, page 4, paragraph 2 Page 5 NOD		C) Section 2.2 Collecting the Soil Samples, Permittees' Statement: "Samples will be collected in a manner primarily with Los Alamos National Laboratory's (LANL) Standard Operating Procedures (SOPs), and ITSI's Chemical Data Quality Management Plan (CDQMP) (reviewed and approved by USACE Sacramento District for use under the PRAC)." NMED comment; See general comment # 2	Section 2.1 Collecting Soil Samples Page 5		Samples will be collected from the approximate center of each grid. At each pre-determined confirmation sampling location, the field crew will obtain up to three samples, depending on the nature of the substrate at each location: one surface soil sample, one sample from the soil/tuff interface (first 6" of soil immediately above the rock surface), and a core sample of the underlying tuff. Soil samples will be collected using a stainless steel or disposable trowel (SOP–06.09) within the top few inches from within each sample grid. Subsurface soil samples will be collected using either a portable hand-held power hollow stem auger drill (for deeper soils) or a hand auger. Samples of the tuff will be collected by first excavating any overlying soils (by shovel) to expose the rock surface and then using a portable diamond coring device (or rock drill) to remove a core sample to a cutting depth of 24 inches into the tuff, or until refusal of the cutting tool. If the tuff proves friable enough to be penetrated using the power hollow stem auger, it will be sampled using that method. The above-proposed sampling methods are consistent with the Standard Operating Procedures listed in Section IX.A, Standard Operating Procedures, of the Compliance Order on Consent (NMED, 2005). Samples will be transferred into appropriate containers provided by the Sample Management Office (SMO). Samples will be labeled with unique sample identification number (ID) for each location and depth. Following labeling, samples will be placed in re-sealable plastic bags and transferred to the SMO under proper chain-of-custody (COC) procedures (consistent with SOP–15.09). Sampling equipment will be decontaminated following each use by washing in a non-phosphate detergent, water rinse, and a distilled or de-ionized water rinse (consistent with SOP–01.08).

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Comment #	Location [i]		Reviewer's Comment/Suggestion	New Location		Final Comment Resolution
7	Appendix A: Sampling & Analyses Plan, page 4, paragraph 1 Page 5 NOD		D) Section 2.3 Field Screening of Samples, Permittees' Statement: "Samples will be field screened for lead (Pb) and selected other metals using field portable x-ray fluorescence (XRF). Based on a review of available laboratory results from previous sampling efforts, the ash contains measurable concentrations of Pb, other metals and radiological isotopes. Tentative screening criteria have been developed (Table 7) that should allow for screening of the soils prior to collecting formal confirmation samples. NMED Comment: The Permittees have not provided a HIR or the waste characterization sampling results for NMED review. Therefore, NMED has no basis on which to determine appropriate field screening methods. The Permittees must complete field screening of samples in accordance with Section IX.B.2.d of the Order. The Permittees must revise the text to reflect these changes. A work plan is designed to outline the methods and procedures that will be applied during field work. If field conditions warrant a deviation from the work plan, it must be noted in the Investigation Report. Therefore, the Permittees must explain why the screening criteria are "tentative". (Submit response and revised text and/or pages to NMED within 30 days of receipt of this letter.)	Section 2.2 Field Screening of Samples Page 6		Samples will be screened for lead (Pb) and selected other metals using field portable x- ray fluorescence (XRF). Based on a review of available laboratory results from previous sampling efforts, the ash contains measurable concentrations of Pb, other metals and radiological isotopes. Screening criteria have been developed (Table 7) that should allow for screening of the soils prior to collecting formal confirmation samples. The XRF results are intended only as a preliminary evaluation that the ash removal was completed. Under no circumstances will a result from XRF testing be used to confirm the completion of the ash removal. Samples collected for offsite chemical analysis will also be screened for radioactivity prior to packaging. A radiological survey will be performed external to the packaging by LANL (LANL is providing the onsite radiological monitoring and safety oversight). LANL will then authorize delivery to the SMO for analysis. This screening is for health and safety purposes only. Under no circumstances will a result from radiological screening be used to confirm the completion of the ash removal."

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Comment #	Location [i]		Reviewer's Comment/Suggestion	New Location		Final Comment Resolution
7	Appendix A: Sampling & Analyses Plan, page 5 Page 6 NOD		E) Section 2.4 Analytical Criteria, NMED Comment: See general comment #4. In addition, the LANL 2005, SWMU 73-002 Fact Sheet (LANL 2005, 88700) that the Permittees reference throughout this work plan states that SVOCs and VOCs were detected as well as the pesticides 4,4'-DDE, 4,4'- DDT, and alpha chlordane. For this reason, pesticides must also be included in the analytical suite. (Submit revised text and/or pages to NMED within 30 days of receipt of this letter.) Also, in accordance with Section IX.C of the Order, the Permittees must submit an electronic copy (preferably Excel format) of all analytical data (non-detects, estimated blanks, and detects) with qualifiers attached from the analytical laboratory with the Investigation Report. The summary tables shall include only detects of the data based on the corresponding qualifiers. The Permittees shall not censor the data based on detection limits, quantitation limits, or measurement uncertainty.	Section 2.3 Analytical Criteria Page 6		Submit an electronic copy (preferably Excel format) of all analytical data (non-detects, estimated blanks, and detects) with qualifiers attached from the analytical laboratory with the Investigation Report.

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Comment #	Location [i]		Reviewer's Comment/Suggestion	New Location		Final Comment Resolution
7	Appendix A: Sampling & Analyses Plan, page 11 Page 6 NOD		F) Section 3.4 Reporting Limits, Permittees' Statement: "Project-required reporting limits (RLs) are provided in Table 1. Where appropriate, the practical quantization limit (PQL) will be a minimum of 2 to 5 times lower than the RL, and the minimum detectable activity (MDA) should be a minimum of2 times lower than the RL." NMED Comment: NMED interprets this statement to mean that the practical quantization limit (PQL) and the minimum detectable activity (MDA) will be lower than the Reporting Limits (RL), and therefore, more stringent than the required reporting limits. However, the Permittees must clarify this statement. (Submit as a response to NMED within 30 days of receipt of this letter.)	Section 3.4 Reporting Limits Page 14		Project-required reporting limits (RLs) are provided in Table 1. In accordance with Section IX.C.3.c of the NMED/LANL Order on Consent, the RL will be approximately five times higher than the experimentally-determined method detection limit (MDL) or the experimentally-determined and the minimum detectable activity (MDA). Due to the inherent uncertainty of laboratory analytical methods and procedures, in certain cases the sample-specific MDL or MDA may exceed the project RL. These cases will be considered data quality exceptions and explained in the appendix to the Investigation Report in accordance with Section XI.C.14.c of the NMED/LANL Order on Consent.
7	Appendix A: Sampling & Analyses Plan, page 12 Page 6-7 NOD:		G) Section 4.2 Electronic Data Deliverables, Permittees' Statement: "Use of electronic data deliverables (EDDs) and electronic data validation promotes objectivity, substantially reduce costs, and facilitate data exchange. EDDs will be provided in a format consistent with LANL requirements." NMED Comment: Electronic versions of data must be submitted in the format and include all information consistent with those required in Section IX.C of the Order. See letter E above. (Submit revised text and/or pages to NMED within 30 days of receipt of this letter.)	Section 4.2 Electronic Data Deliverable Page 16		Laboratory data shall be supplied in an electronic data deliverable (EDDs) in multiple formats. In accordance with Section IX.C of the NMED/LANL Order on Consent, all analytical data for each sample delivery group shall be reported from the laboratory as a file compatible with MicrosoftTM Excel, and as a text file.

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Comment #	Location [1]		Reviewer's Comment/Suggestion	New Location		Final Comment Resolution
7	Appendix A: Sampling & Analyses Plan, pages 12-13 Page 7 NOD:		H) Section 4.3 Data Validation Reports, pages 12-13: NMED Comment: See letter E above. Submit an electronic copy (preferably Excel format) of all analytical data (non-detects, estimated blanks, and detects) with qualifiers attached from the analytical laboratory with the Investigation Report.	Section 4.3 Data Validation Reports Page 16		Level III validation reports will be prepared.
8	Tables 1 thru 9 Page 7 NOD		NMED Comment: This section of the work plan must include all tables listed in Section XI.B.II of the Order. If a table is not applicable to this work plan, it must be stated and adequate justification must be provided to support its exclusion from the work plan. The Tables section must be revised to include all applicable tables and justifications for exclusion. (Submit revised text and/or pages to NMED within 30 days of receipt of this letter.)	CAWP Section 7 Tables Listed		Follow table format listed in Section XI.B.II of the Order. If a table is not applicable to this work plan, it must be stated and adequate justification must be provided to support its exclusion from the work plan. Revise the Tables section to include all applicable tables and justifications for exclusion.
9	Appendix B: Best Management Practices Page 7 NOD		Stormwater Management: NMED Comment: This Appendix is not a requirement under Section XI.B of the Order. In the future, the Permittees must submit variations of the general document (work plan, report, other) format in outline form to NMED for approval prior to submittal in accordance with Section XI.A of the Order.	Removed From CAWP		Removed from the CAWP.

[1]Comment, Section, Description, Page

CORRECTIVE ACTION WORKPLAN

For SWMU 73-002
(Incinerator Ash Removal)
Los Alamos National Laboratory, New Mexico

Contract No. DACA05-99-D-0014
Task Order CM26
Document Control No. 04-400.12.0012

Prepared for:
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Corrective Action Work Plan for SWMU 73-002
(Incinerator Ash Removal)
Document Approvals

Contract No. DACA05-99-D-0014

Task Order CM26

ITSI Program Manager:

Kent D. Dorr

Kent Dorr, PMP
(D&D Program Manager for Nuclear Services)

8/16/05
Date

EXECUTIVE SUMMARY

The purpose of this Corrective Action Workplan (WP) is to provide details on the remediation of SWMU 73-002 (Los Alamos Incinerator Ash Project) located at the Los Alamos Airport on the south slope of Pueblo Canyon, immediately north of the incinerator building. This WP involves the removal of incinerator ash and debris from Pueblo Canyon; taking soil samples below the ash upon removal; and subsequently restoring the site.

This report summarizes the sampling data that was obtained in April 2005 to characterize the incinerator ash for determining appropriate disposal paths. According to these sample results, the incinerator ash will be treated as Low Level Radioactive Waste (LLRW). The basis for this determination was conducted by comparing the incinerator ash to the background values established in "Inorganic and Radionuclide Background Data for Soils, Sediments, and Bandelier Tuff at Los Alamos National Laboratory" ([LANL] 1998, ER ID 59730).

The incinerator ash will be removed from the majority of the site by use of a vacuum system that exhausts through a HEPA filtration system. This will minimize any dust migration during remediation of the ash. Ash that is not able to be removed by the vacuum system may be removed by excavation with use of a Spyder All-Terrain Excavator. The ash will be collected in appropriate United States Department of Energy (DOE) approved containers that can be used for staging in an approved storage area, while waiting for transportation to an approved disposal facility.

Debris will be removed by the assistance of a skyline that will be erected to run the vertical length of the canyon wall. The skyline will hoist material to the top surface of the canyon for packaging. Prior to transportation of the debris for off-site disposal, the industrial debris will be evaluated by LANL radiation safety personnel. Items meeting LANL release criteria will be disposed at a sanitary waste landfill. Items that cannot be released will be packaged for disposal at a low-level radiological waste facility.

Site restoration will be performed after evaluation and approval of site closure from soil samples taken after ash removal. If soil samples indicate the need for additional soil removal, that task will be performed under a separate Scope of Work, and separate Work Plan.

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1.0 INTRODUCTION

This Corrective Action Workplan (WP) was developed by Innovative Technical Solutions, Incorporated (ITSI), for implementation of the Corrective Action to remove and package ash and debris from SWMU 73-002 located north-northwest of the existing Los Alamos Airport terminal building in Los Alamos, New Mexico (Figures 1, 2 & 3). Disposal of the ash and debris will occur as a separate action once the ash and debris is brought up out of the canyon and staged at the top of the mesa. This WP and its associated documents were prepared on behalf of the United States Army Corps of Engineers (USACE), Sacramento District and the United States Department of Energy (DOE) under the USACE Pre-Placed Remediation Action Contract (PRAC) number DACA05-99-D-0014, Task Order CM26.

This WP provides overall plans and a detailed description of the removal and packaging activities. Appendix A, Sampling and Analysis Plan (SAP), describes procedures to conduct confirmation soil sampling activities and the analytical protocols for analyses of the samples. Field activities will be conducted in compliance with the Site-Specific Health and Safety Plan (SSHSP), which will be maintained on-site during field work. Appendix B presents a copy of the Voluntary Corrective Action Fact Sheet for PRS 73-002. Appendix C, Investigation Derived Waste for SWMU 73-002, describes procedures for the disposition of waste derived during investigation procedures.

1.1 Project Objectives

The primary purpose of the project activities is to implement the Corrective Action for the site which involves removal of the ash and associated debris. Confirmation samples will be taken of the soil. If additional remediation is required, then it will be accomplished under a separate Scope of Work, and separate Work Plan.

1.2 Project Organization

Figure 4 shows a project organization chart identifying key project personnel and depicting lines of reporting and communication. Key project personnel, responsibilities, and contact information are listed below.

Position	Key Personnel	Contact Information
Program Manager	Dan Ledford	925-946-3124
Project Manager	Kent Dorr	303-420-6325
Project Superintendent	Jim Cox	925-946-3230
Corporate Health and Safety Manager	Irene Fanelli	336-446-0118

The USACE Project Manager, Hyland Morrow, will be responsible for providing project contract procurement services.

The DOE Project Manager, David Gregory, will be responsible for overall project execution at LANL, coordination with regulatory agencies, and DOE personnel management. The DOE Project Geologist, Robert Enz, will be the DOE Point of Contact (POC) for implementation of field activities and has the authority to suspend the project if DOE/USACE requirements are not fulfilled.

The ITSI Project Manager, Mr. Kent Dorr, will be the point of contact with USACE and DOE, and will be responsible for project execution and reporting. Mr. Dorr will report to Mr. Dan Ledford, PRAC Program Manager, who will assist Mr. Dorr in coordinating resources within the company to execute work in a timely and effective manner. Ms. Irene Fanelli, Certified Industrial Hygienist (CIH), is the ITSI Corporate Health and Safety Program Manager, and Mr. Jim Schollard is the ITSI Program Contractor Quality Control System Manager. Mr. Kevin Konzen is ITSI's Certified Health Physicist (CHP) and will be periodically onsite, be available as a consultant, and act as the interface between ITSI and LANL's Radiation Safety department. Either Kevin or another member of ITSI's radiation safety staff will visit the site on a weekly basis to support site personnel for questions or problems relating to radiological hazards during field activities.

Reporting directly to the Project Manager will be Mr. Jim Cox who will serve as both the Site Superintendent (SS) and the Contractor Quality Control System Manager (CQCSM). Mr. Cox will be responsible for all field activities, including managing labor and subcontractors, field performance, site health and safety issues, oversee the sampling, testing, and inspections, and to maintain the level of quality control required under the terms of the contract. Mr. Cox will be on site during all field activities, with full authority and control over all aspects of field performance to execute all activities in compliance with project requirements. The ITSI labor force, subcontractors, material suppliers, and vendors will report directly to Mr. Cox in the field. As the CQCSM, Mr. Cox will work closely with the Project Manager and Site Health and Safety Officer (SHSO) to ensure the quality of work, maintain quality data, and ensure performance in accordance with contract requirements.

The SHSO will assist the Project Manager in health and safety and quality management on this project. The SHSO will implement the SSHSP and ensure that a safe working environment is maintained. In addition, the SHSO will work with the Project Manager, Site Superintendent and CHP to ensure compliance with federal, state, and local, laws, rules, and regulations, and USACE/DOE requirements.

The Project Manager will have administrative support from the Contract Administrative Manager to procure subcontracts, lease agreements and purchases, and administer subcontracts. The Project Manager will also be supported with Cost and Schedule by ITSI's Cost and Schedule Specialist, which will update the schedule and provide regular cost reports.

Subcontractors shall meet ITSI's quality assurance and, Site Specific Health and Safety Plans while conducting their scopes of work. Each subcontractor is required to become familiar with ITSI's QMP and SSHSP, and document this understanding and compliance with ITSI. ITSI's SS will provide oversight and ensure compliance with all subcontractors. It is of utmost importance that all goals are achieved in an appropriate manner especially with regard to worker health and safety and environmental impact. Any events, actions, or conditions that potentially affect worker health and safety or impact the environment shall be reported to the ITSI Project Manager immediately for resolution.

Keers Remediation will be subcontracted to perform the vacuum extraction to remove the incinerator ash.

Swaggart Enterprises will be subcontracted to install and operate the skyline system and provided the labor necessary for the installation and operation.

Kemp West will be subcontracted to provide and operate the spyder excavator that may be used to excavate material from the sloped canyon wall, if required.

The LANL Sample Management Office (SMO) will submit samples for laboratory analysis for the confirmation and verification samples collected.

Subcontractors may be changed or replaced, depending on availability and best-value determinations.

2.0 BACKGROUND

Consolidated Unit 73-002-99 is comprised of Potential Release Sites (PRS) 73-002, 73-003, 73-004(a,b), and 73-006. The Correction Action Work Plan is for SWMU 73-002, a small incinerator operated for a short time at the site beginning in 1947. The incinerator's primary use was for the destruction of classified documents; however, it did not function properly and was removed from service shortly after completion.

In 1948, The Zia Company acquired the facility, which it held until 1973 and used the incinerator for other than classified sanitary waste, such as municipal trash from the townsite. The incinerator stack and equipment have been removed from the building, which is currently in use as a storage facility (USACE, 2004).

The ash pile generated by operations of the incinerator is located on the south slope of Pueblo Canyon, immediately north of the incinerator building. The ash and debris covers an area of approximately 30,000 square feet, and ranges in thickness from less than one foot to greater than eight feet. During recent ash characterization activities conducted by ITSI in preparation of implementing ash removal, the ash pile was surveyed and covers approximately 11,000 square feet with thicknesses ranging from six (6) inches to seven and a half (7.5) feet and consisting of approximately 1,200 cubic yards of ash. Inclusion of the debris field with the ash was determined to cover approximately 30,000 square feet.

Sampling was conducted of the incinerator's ash pile and within the associated drainages in 1996, 1997, and 1998. A preliminary review of the resulting data tentatively identified several potential contaminants of concern. In general, high concentrations of several inorganic chemicals have been noted in the ash samples but not in soil and sediment (non-ash) samples, with concentrations of lead as high as 13,100 milligrams per kilogram (mg/kg). The ash also contains low concentrations of several organic chemicals including, but not limited to, pesticides and dioxins/furans. Low levels of several radionuclides have been detected above background in a limited number of ash samples. The past sample results were never finalized and the original data was not available. A summary of this data was documented in

the Voluntary Corrective Action Fact Sheet for PRS 73-002 (Appendix B) and in the Historical Information Report. See Figure 5A for a map of sample locations.

3.0 SITE CONDITIONS

This section provides a description of current site surface conditions and subsurface conditions.

3.1 Surface Conditions

The surface conditions of the incinerator ash contain a significant amount of debris such as metal posts, car fenders, cans, and broken glass similar to a landfill dump. The ash is soft but supports workers walking on it. The area is steep. Some sections of the canyon wall are greater than a 70 degree slope. The area has brush, plants and small trees located in the vicinity of the incinerator ash. At the bottom perimeter of the ash is several feet of cans and debris above the first ridge. Below the first ridge, there is some evidence of trace amounts of ash that follow normal drainage from the first ridge that stops well before the second ridge. There is more debris above the second ridge and some below. (See Figure 5).

3.2 Subsurface Conditions

As a result of development at LANL, very little undisturbed soil exists at the facility. The majority of surface material tends to be artificial fill, which may be crushed tuff, disturbed soil, or imported material. Undisturbed soil on the mesa surfaces is generally thin and sandy in texture near the surface, with increasing clay content with depth. Cliff-forming south-facing slopes tend to have poorly developed soil profiles, while north-facing slopes generally have higher organic content. Variable thicknesses of alluvial deposits exist within the canyons.

Based on regional information described in the Pueblo Canyon Aggregate Area Investigation Work Plan (DOE, 2005), subsurface lithologic units underlying surficial alluvium and soil in the vicinity of LANL consist of the Bandelier Tuff (Qbt) and the Puye Formation (Tp). The deeper lithologic unit, the Puye Formation, consists of clastic fanglomerate sediments. This unit is overlain by the Guaje Pumice Bed, which occurs at the base of the overlying Bandelier Tuff. The tuff deposits originated as gas-charged material expelled and deposited during violent volcanic eruptions. The tuff is subdivided into the deeper Otowi Member and the

shallower Tshirege Member; the upper and lower members of the Bandelier Tuff are separated by the Cerro Toledo Interval at approximately 350 feet below ground surface (bgs) beneath the mesa top sites. The Cerro Toledo interval is a 10 to 40-foot thick sequence of volcaniclastic sediments and primary fallout deposits. The Tshirege Member, the shallower member of the Bandelier Tuff, is a compound cooling unit subdivided into four distinct units: Qbt 4, Qbt 3, Qbt 2, and Qbt 1v/1g. The Upper Tshirege, including Qbt 4 and Qbt 3, is a cliff-forming non-welded to partially welded tuff and underlies most of the SMWUs at LANL; this is the most likely unit to be encountered beneath the ash debris.

The depth to groundwater in the regional aquifer beneath the Pueblo Canyon area is greater than 1,000 feet bgs. Discontinuous areas of perched alluvial and intermediate groundwater also exist at depths of 100 to 250 feet bgs. These saturated zones, which are expected to form mainly at subsurface horizons where lithologic properties change, have been observed within the Puye Formation during installation of site wells.

4.0 SCOPE OF ACTIVITIES

The Corrective Action for this site involves the removal of the ash and associated debris. The proposed Corrective Action represents work associated with removal of incinerator ash disposed of at the Los Alamos Airport.

The Work Plan for removal of the ash will be conducted in two phases— ash removal, and confirmation sampling. Ash characterization sampling, for waste disposal purposes, was completed the week of April 20 through 22, 2005. Mobilization for the ash removal and confirmation sampling activities are contingent on the approval of this WP. Target date for mobilization is TBD.

ITSI will conduct a Pre-Construction meeting (i.e., Readiness Review) to be attended by USACE, DOE, ITSI, and key subcontractors prior to the start of ash removal. The meeting will address the scope of work, lines of communication, health and safety, public relations, and contract requirements to be fulfilled. In addition, ITSI will conduct Pre-Evolution Briefings (PEB) each morning and a Plan of the Day (POD) after the mid-day break.

Project activities to be discussed will include:

- Mobilization and demobilization of equipment
- Preparation of equipment lay-down and staging areas
- Installation of BMP for storm water management
- Removal of ash and debris from the slopes.
- Sampling and characterization of any unknown sludges or liquids encountered during the removal
- Confirmatory soil sampling after waste removal.
- Site restoration

5.0 INVESTIGATION METHODS

5.1 Mobilization

Mobilization and site preparation activities include setup of a field trailer for ITSI personnel; placement of sanitation facilities; location of underground utilities; connection of utilities to the field trailer; establishment of staging areas; and mobilization of health and safety and sampling equipment. Secured storage containers will be mobilized to the job site as needed to store materials, small tools, and equipment.

5.2 Site Layout and Security

The ITSI field trailer and container storage unit will be set up near the work area as approved by the airport representative with concurrence from the Los Alamos County representative (Figure 3). The location will be determined at a time prior to mobilization and will be based on field conditions such as proximity to utilities (water, electricity, phone, and sewer) and work areas. ITSI will use the following utilities during project execution:

- Potable water will be available.
- For sanitation, portable toilets and refuse containers will be set up near the office trailer and work areas. Hand washing facility will be available.
- If practicable, local electrical lines will be used to provide power to the office trailer.
- Telephone lines will be installed at the office trailer for telephone service, faxing, and computer connections.

Access to the work site will be restricted to LANL, DOE, USACE, ITSI and ITSI's subcontractors. ITSI project signs will be mounted at the site entrances near the site access.

The project site boundary will be secured by installing a temporary security fence. The access point to the staging area will be posted and locked to prevent unauthorized personnel from entry. The ITSI Site Superintendent will be the field point of contact for public relations and will refer any public relations questions/issues to the USACE and DOE Project Manager.

5.3 Daily Work Schedule

Onsite work hours will be Monday through Saturday, 7:00 AM to 6:00 PM. The typical work week will be Monday through Friday, with Saturday as an optional work day to make up for any delays. ITSI will notify LANL/DOE 24 hours in advance of working on Saturdays. The above working hours do not pertain to off-site activities such as office work, mobile lab work, morning safety meetings, or off-site trucking and disposal.

5.4 Equipment Certification and Inspection

Prior to initial on-site use, equipment will be inspected and tested by the equipment operator or manufacturer's representative. Certification in writing that the equipment is operating within the manufacturer's tolerances and specifications, is in safe operating condition, and complies with applicable safety requirements of the contract, and be maintained in the site office. Daily equipment inspections will be documented with the daily quality control (QC) reports.

5.5 Permits, Notifications, and Utility Clearance

ITSI will make formal notifications before field activities are initiated to DOE, USACE, NMED, Los Alamos County, and Airport Operations personnel.

Underground Service Alert will be notified a minimum of 2 days prior to intrusive activities for the access road and securing the office trailer so that utility companies can mark underground conduits and pipes.

5.6 Haul Routes and Traffic Control

Both on-site personnel and off-site truck traffic will proceed to work areas (e.g., excavation locations, sampling locations, applicable stockpile storage areas, etc.) over existing roads where possible. An additional access road will be constructed east of the incinerator building (Figure 3). Haul routes and traffic control measures will be established to control and minimize soil dispersion by vehicle transport and runoff during wet weather. In addition, haul

routes and traffic will be coordinated with the Los Alamos County Engineer and other area contractors to minimize potential work delays due to uncontrolled traffic. Prior to start of construction activities, ITSI will:

- Coordinate the proposed traffic route with the Los Alamos County Engineer,
- Identify on-site contractors, and
- Meet with the Los Alamos County Engineer to ensure that impacts to all airport operations are minimized during ash removal activities and to coordinate haul routes and equipment traffic.

Figure 3 depicts typical haul routes.

5.7 Photographic Documentation

Before, during, and after photographs will be taken to document project activities and to record existing vegetation density. Photographs will be taken of the following: typical ash area with debris, ash area during removal, ash area at completion of removal, and locations of confirmation sample locations. In addition, photographs will be taken of runoff and dust prevention measures implemented during field activities.

5.8 Vegetation and Debris Removal

Work areas will be cleared of vegetation and debris as needed. Shrubs and brush within the clearing limits will be removed and disposed of with the debris. It is currently anticipated that there are no trees over 8-inches in diameter within the work area. If there is a change in the anticipated condition, then ITSI will coordinate with the Los Alamos County Engineer and the LANL Environmental Representative for permission to remove the trees.

5.9 Topographic Survey

Pre- and post-excavation surveys will be conducted to document the depths of the excavations. The post-excavation elevation will provide the as-built after ash removal contours.

All vertical surveying will reference North American Vertical Datum (NAVD) 1988 benchmarks. Each survey point within the ash pile area will be located using a global positioning satellite (GPS) coordinate or tape measured from the location to a known fixed horizontal point surveyed using North American Datum (NAD) 1983. All survey data will identify the sector number, reference the applicable plan sheet number, state the name of the survey company, and list the applicable certifications. A New Mexico licensed surveyor will conduct all topographic surveys and stamp documents submitted with the Post-Construction Report.

5.10 Erosion control

Silt fencing will be installed at the base of the ash pile near the drainages. Silt fences will extend between 16 and 34 inches above the ground surface. Joints in the filter fabric will be minimized, but where unavoidable, joints will overlap by a minimum of 6 inches. A trench approximately 4 inches wide and 4 inches deep will be excavated on the upslope side of the silt fences. This trench will be backfilled over the filter fabric. Silt fences will be removed as a part of demobilization with the approval of LANL and the Los Alamos County Engineer.

5.11 Ash and Debris Removal Activities

Prior to ash removal, crews will begin packaging the surface debris; cans, municipal debris, cut and or trimmed trees and remove shrubs within the work area. A skyline will be used to remove the bagged debris up the side of the canyon to a loading operation near the incinerator building. In conjunction with the hand picking operation ITSI will mobilize the vacuuming and packaging operation. The vacuum system utilizes two feed lines off an 8-inch main line to the vacuum hopper. When the hopper is full, it is dumped into a container as appropriate to the packaging requirements of the ash. If required, a Spyder All-Terrain Excavator will be utilized to pick-up and remove heavy materials and load into special containers that will be skylined up the canyon and dumped into appropriate containers for disposal.

During removal, if an unknown sludge or liquid is encountered in any kind of a container, samples of this material will be collected and analyzed per the waste characterization strategy

form (WCSF) by DOE personnel. The material will then be properly packaged and moved to the staging area. All waste segregation, management and disposal will be conducted pursuant to the WCSF.

All associated debris, not in direct contact with the ash, such as plant material, trash, cans and miscellaneous municipal debris, will be hand picked and or segregated, bagged and disposed of as municipal waste.

Larger metal items removed from the ash will be evaluated on a case-by-case basis for decontamination with the intent of being disposed of as municipal waste. This decontamination process will initially evaluate the item to ensure that all surfaces are accessible and available for decontamination. Each item that meets this criterion will be cleaned in an area setup for decontamination by brushing off ash residue, using wet wipes to wipe all surfaces, followed by a visual inspection by the waste management representative to ensure proper cleanliness. These items will also be evaluated by radiation safety personnel prior to release to a municipal landfill.

DOE will provide Radiological Control Technicians for radiological support.

Staging of Packaged Ash and Debris:

The 90-day staging location is shown on the site plan and work area (Figure 3). A forklift will load and unload waste material bags for staging as necessary.

Site Restoration:

Site Restoration is to prevent, retard or contain soil and sediment erosion. Site restoration work will be completed after all waste is removed and samples have been taken. Site restoration will include raking and re-contouring disturbed areas, placing jutematting, straw bales and/or straw wattles to prevent erosion, mulching and reseeding with approved LANL mixtures of seed to stabilize disturbed areas.

5.11.1 Ash Removal with Vacuum Truck - Keers Remediation

Action at this site will involve the complete removal of ash and associated debris as depicted in Figure 5. The collection of ash and associated debris will be performed utilizing a Guzzler Vacuum Loader system with high efficiency particulate air filter (HEPA) filtration. The vacuumed material will be packaged in approved containers supplied by ITSI and staged for proper disposal.

Given that the ash contains radioisotopes, and the sensitivity of the radioisotopic methods is extremely high, it is unlikely that any debris that has been in contact with the ash will be not-detected. Therefore the debris (PPE, cans, vegetation, etc.) will continue to be classified in the same category as the original ash. The current acceptance profile to the landfill includes debris, so there should not be any change required there.

All associated debris, not in direct contact with the ash, such as plant material, trash, cans and miscellaneous municipal debris, will be hand picked and or segregated, bagged and disposed of as municipal waste. Larger metal items removed from the ash will be evaluated on a case-by-case basis for decontamination with the intent of being disposed of as municipal waste. This decontamination process will initially evaluate the item to ensure that all surfaces are accessible and available for decontamination. Each item that meets this criterion will be cleaned in an area setup for decontamination by brushing off ash residue, using wet wipes to wipe all surfaces, followed by a visual inspection by the waste management representative to ensure proper cleanliness. These items will also be evaluated by radiation safety personnel prior to release to a municipal landfill.

Equipment and Materials:

A trailer mounted portable Guzzler Reach 2648 Module vacuum for wet or dry pick-up of ash and debris, complete with a HEPA filtration system, continuous cleaning bag filters, 136 hp diesel engine, V-belt drive, belt guard, high temperature safety switch, vacuum relief valve, silencer and Type 304 stainless steel cyclone collector.

5.11.2 Movement of Ash via Skyline - Skyline Yarding Plan

A skyline yarder will remove the debris up the slope into roll-off containers or as directed by ITSI. A Madill-Thunderbird TMY-40 Mobile Skyline Yarder equipped with a 40-foot tower and an Eaglet motorized carriage. This machine has a 2,000-foot external yarding capability. It runs with a 3/4-inch skyline and a 1/2-inch skidding line. The clamping carriage maintains a fixed position on the skyline during lateral yarding (Figure 7).

The skyline yarder is stabilized by anchoring the 40-foot tower with two guyline cables that run from internally-powered drums, up through sheaves at the top of the tower. The rigging crew anchors the skyline to a tailhold in the bottom of the canyon. Four men manage the skyline yarding system: an operator who runs the machine, two rigging men who set up the lines and hook the loads, and one chaser who unhooks the loads at the landing.

In the skyline yarding method, a radio-controlled, motorized carriage rides down the skyline, stops at a pre-determined spot, and pays out the skidding line to the hooking crew. The crew hooks the skidding line to the load. The yarder operator then hoists the loaded skidding line up to the carriage and "flies" it to the landing. The crew hooks onto large debris with wire-rope chokers. They hook the skidding line directly to loads of smaller debris that is pre-bundled in heavy-duty cargo nets, tarps, bags, cans, or other containers. When the carriage arrives at the top of the tower, the operator lowers the load to the landing where a chaser unhooks it from the skidding line.

5.11.3 Removal of Large Debris Items

An All Terrain Spyder Excavator may be used, as needed, to remove designated debris that could not be hand picked or vacuumed. The all terrain Spyder excavator works safely on extreme grades.

5.11.4 Packaging and Staging of Ash for Disposal

The ash will be collected in appropriate containers that will be used for storage in an approved staging area, while waiting for transportation to an approved disposal facility. Figure 3 shows where the containers will be staged. Note: Upon initial evaluation of the incinerator ash sample results, it is likely that the material will be classified as Low Specific Activity Type 1 (LSA - 1). Per 49 CFR 173.427, LSA-1 solid material is required to be packaged for transportation in an IP-1/IP2 rated package (IP-1 indicates a poly propylene construction and IP-2 is a water proof inner liner placed inside an IP-1 package). This will require the packages to meet the requirements specified in 49CFR173.411 for IP-1 rated containers, such as Supersacks. IP-1/IP-2 containers will be obtained from a vendor or manufacturer that has

certified the containers as meeting the specified regulatory requirements. Each container will be QA/QC visually inspected by ITSI for integrity prior to filling, during filling, and during movement. The ITSI Container Custodian is responsible for maintaining control over the waste containers from their arrival on site to their transport to the staging area. All waste will be placed in the approved waste packages. Filled containers will be stored in a secure area that is fenced.

Debris will be loaded directly into a dump truck, rolloff, or packaged in burlap or plastic bags. The debris will be evaluated by LANL Radiation Safety personnel for disposal at a sanitary waste landfill. If the debris cannot be released for sanitary waste, the waste will be packaged accordingly.

5.12 Hydroseeding and Hydromulching

After removal of the ash and debris and receipt of confirmation sample results, the disturbed work area will be hydroseeded and hydromulched to provide erosion control and re-vegetation. The steeply sloped and relatively small work area to be hydroseeded will require a higher seed rate (live seed pounds per acre) in order to optimize germination of the seeds[1]. In addition, seed blend selection will also take into consideration the timing of when hydroseeding will occur (i.e. cooler, wetter weather conditions verses warmer, drier weather conditions). Final selection of the hydroseed blend will be coordinated with and approved by LANL and Los Alamos County personnel.

5.13 Post-Construction Inspection and Cleanup

Prior to demobilizing from the work site, ITSI, DOE, NMED, and Los Alamos County will jointly inspect the site to ensure that final site conditions meet with the Scope of Work requirements. Any deficiencies noted during the site walk will be addressed, documented, and corrected before personnel and equipment are fully demobilized.

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[1] LANL Engineering Standards Manual OST220-03-01-ESM, Section G2050 Landscaping, Subsection 6.0 Seeding. Rev.2, 8/16/04

Upon completion of field activities, and subject to input from DOE and Los Alamos County, ITSI will perform final site cleanup and will leave work areas in a suitably restored condition.

5.14 Demobilization

ITSI will demobilize equipment and personnel as activities are completed. Temporary facilities, including staging areas, fencing, and temporary utilities, will be removed from each work area upon the completion of the field activities. The immediate work area will be inspected by the ITSI field representative to verify that all project-related equipment, trash, and debris have been collected and properly disposed.

Demobilization will include the removal of equipment, tools, and supplies; and evacuation of the temporary office space. Temporary fencing, traffic control devices, signs, storage containers, portable toilets, refuse containers, and any temporary power and phone lines will be removed from the site. Debris will be removed and disposed of in accordance with Contract requirements, and work areas will be cleaned and left in an appropriate condition. Final demobilization will include removal of all site fencing.

6.0 MONITORING AND SAMPLING PROGRAM

6.1 Ash Waste Characterization Sampling

The incinerator ash was characterized to provide accurate and recent information for characterizing the bulk material for waste disposition of the ash. This sampling was conducted by ITSI in April 2005. The sampling was performed based on a 30-foot grid pattern with one or two samples taken within the grid depending on the thickness of the ash to represent 100 cubic yards of material. A hand auger was used to gather both surface and subsurface ash samples through the extent of the ash. The suite of analyses requested included radionuclides, metals, volatile and semivolatile organic compounds, pesticides, and dioxins/furans.

6.2 Air Sampling During Ash Removal Activities

The following types of monitoring will be conducted during ash disturbing or handling activities:

Perimeter Air Sampling:

- Real-time monitoring utilizing a portable dust meter, such as the mini real-time aerosol monitor (RAM) or Personal DataRAM (Frequency - Daily during work activities)
- Air sampling for lead concentrations with subsequent lead analysis (Frequency - Daily during first week; Thereafter, weekly during work activities)
- Radiological Air Monitoring performed during work activities.

Personal Air Sampling

- Real-time monitoring utilizing a portable dust meter, such as a mini real-time aerosol monitor (RAM) or Personal DataRAM (Frequency - Daily during work activities)
- Personal exposure samples with subsequent laboratory analysis (Frequency - Daily during first week; Thereafter, weekly during work activities)

Real-time monitoring will be conducted regularly during all periods of active handling of ash materials. Monitoring will be conducted throughout the work zone, with special focus on the

breathing zone of the workers most involved with the activities, and downwind of potential source areas.

Airborne lead concentrations will be measured through the collection of air samples with subsequent laboratory analysis. This monitoring will be performed daily during the first week of ash-handling activities, and at least once per week thereafter. Monitoring frequency may also be increased based upon the results of the sampling, in accordance with the Occupational Safety and Health Administration (OSHA) Lead in Construction Standard. This sampling will be performed in accordance with National Institute for Occupational Safety and Health (NIOSH) or OSHA Reference methods. Although a time delay exists between collection of the samples and receipt of the analytical results, these samples will provide an indication of exposure levels during the work, so that work practices may be modified for ongoing activities as necessary.

6.3 Confirmation Soil Samples

Confirmation samples will be taken upon removal of the ash and debris. Appendix A describes the sampling plan in detail. In summary, the field crew will obtain up to three samples, depending on the nature of the substrate at each confirmation sample location: one surface soil sample, one sample from the soil/tuff interface (first 6" of soil immediately above the rock surface), and a core sample of the underlying tuff. In addition, surface sediment samples will be collected on the basis of one sample per 100 lineal feet along each of the three drainages identified at the site. Samples will be collected from the top of the slope (starting at the base of the ash pile) and continue (1 per 100 ft) to the toe of the alluvium. Sediment sample collection will be biased towards areas of fine-grained sediment in outfall channels or pockets of sediment accumulation in the drainages. Sample results will be compared to published values obtained from "Inorganic and Radionuclide Background Data for Soils, Canyon Sediments, and Bandelier Tuff at Los Alamos National Laboratory," dated September 1998.

6.4 Waste Classification

Based on the results of the most recent (April 2005) sampling efforts, along with the results of previous sampling efforts at the site, the appropriate waste classification can be determined. The results will be evaluated against requirements promulgated under the RCRA, and rules governing the classification of radiological wastes.

6.4.1 RCRA Waste Classification

A solid waste can be considered hazardous based on the following primary criteria:

- The waste exhibits the characteristics of a hazardous waste if it exhibits on one or more of the following (40CFR 261 Subpart C):
  - Characteristics of ignitability (40CFR 261.21)
  - Characteristics of corrosivity (40CFR 261.22)
  - Characteristics of reactivity (40CFR 261.23)
  - Characteristics of toxicity (40CFR 261.24)
- The waste is specifically listed as hazardous (40CFR 261 Subpart D)

6.4.1.1 Reactivity, Corrosivity and Ignitability (RCI)

The results of the characterization sampling efforts included testing for reactivity, corrosivity and ignitability (known collectively as RCI). The results of analyses for each of the characteristics of RCI are shown in the Historical Investigation Report, and discussed below:

- The ash did not exhibit characteristics of **reactivity** (several criteria, most relevant is the generation of cyanide or sulfide in sufficient quantity to present a danger to human health or the environment [typically reactive cyanide >250 mg/kg, and reactive sulfide >500 mg/kg]) based on non-detect reactive sulfide and reactive cyanide measurements for samples analyzed ranging from 0.052 to 0.14 mg/kg.
- The ash did not exhibit characteristics of **corrosivity** (requiring a pH of ≤2 or ≥12.5) based on pH measurements for samples analyzed ranging from 8 to 8.3.
- The ash did not exhibit characteristics of **ignitability** (requiring a flashpoint <60°C) based on flashpoint measurements for each sample analyzed of >60°C.

6.4.1.2 Toxicity

The results of the characterization sampling efforts included testing for organic and inorganic compounds with established maximum concentrations by Toxicity Characteristic Leaching Procedure (TCLP) listed in 40CFR 261.24. The Historical Investigation Report provides the results for metals analyzed using TCLP methodology, and provides the results for organic

compounds analyzed as totals, and adjusting these results based on the 20:1 dilution employed in the TCLP methodology and assuming 100% solubility (a very conservative assumption). See Table 1 for a summary of the inorganic chemicals sampled in 2005.
The 90% Upper Confidence Interval (UCI) of the mean is then calculated using all the sample results from the most recent ash characterization sampling, per EPA methodology (EPA SW-846 Chapter 9). The 90% UCI of the mean is then compared to the established regulatory levels. In every case, the 90% USI of the mean is below the established regulatory levels, and the waste is non-hazardous.

To further clarify this methodology, an example will be calculated using TCLP lead. The raw values reported for lead by TCLP ranged from minimum of 0.316 to a maximum of 6.29 milligrams per liter (mg/L), with a regulatory level for lead of 5.0 mg/L. To calculate the confidence interval (CI) of the mean, the following equation is used:

$$CI = \bar{x} \pm t_{.20} s_{\bar{x}}$$

with $t_{.20}$ from tabulated student's "t" test values for two-tailed probability of 0.20 (equivalent to 0.10 single tail probability) with appropriate degrees of freedom (n-1, where n is number of samples collected and analyzed). The first step is calculating the mean of the samples using the equation:

$$\bar{x} = \frac{\sum_{i=n}^{n} x_i}{n}$$

where n = number of sample measurements. For lead, 20 samples were collected, and the calculated mean is 1.811. Standard error is calculated using the following equation:

$$s_{\bar{x}} = \frac{s}{\sqrt{n}}$$

where s is the standard deviation of the samples. For lead, the standard deviation is 1.527 and, as mentioned above, n is 20.

Now, calculating the CI and substituting the above equation:

$$CI = \bar{x} \pm t_{.20} s_{\bar{x}} = (1.811) \pm (1.328)(\frac{1.527}{\sqrt{20}}) = 1.811 \pm 0.453 = 1.358 - 2.264$$

Thus, the 90% UCI for lead is 2.264 mg/L, well below the regulatory level of 5.0 mg/L.

6.5 Radiological Waste Classification

Characterizing the incinerator ash is complicated by the presence of low-levels of radioactive material. The key questions are 1) whether the ash is considered a radioactive waste (typically material that has become contaminated [i.e., greater than background concentrations] by radioactive elements or isotopes, and 2) if a radioactive waste, should the ash be considered a LLRW, or 3) could the ash be released to an industrial-waste landfill.

There is little guidance on evaluating bulk media for release from radioactive waste requirements. The guidance available is mainly governed by DOE Order 5400.5, "Radiation Protection of the Public and the Environment" (DOE, 1990), DOE-EH memorandum "Application of DOE 5400.5 Requirements for Release and Control of Property Containing Residual Radioactive Material" (DOE, 1995) regarding the implementation of DOE 5400.5, and the proposed regulation 10 CFR 834, "Radiation Protection of the Public and the Environment" The "Multi-Agency Radiation Survey and Site Investigation Manual" (MARSSIM) process is not applicable for waste characterization, but is applicable for final site closure after completion of remediation activities.

Furthermore, the proposed DOE Standard, "Guide to Good Practice for Establishing Authorized Limits for the Release of Waste and Property Contaminated with Residual Radioactivity," was reviewed. This standard reiterates the requirements specified in the DOE 1995 memorandum.

6.5.1 2005 Sample Results

Samples were collected from April 19 - 21, 2005 of the incinerator ash. The Historical Investigation Report lists the results of the radionuclide analyses. LANL SOP – 15.13, "Performing Background Value Comparisons for Radionuclides," dated 4/10/2000, provides guidance on comparing background and fallout values on radionuclides at the LANL Environmental Restoration (ER) project. Background values are obtained from "Inorganic and Radionuclide Background Data for Soils, Canyon Sediments, and Bandelier Tuff at Los Alamos National Laboratory," dated September 1998.

Table 2 summarizes the sample results and compares them to the background values (BV) specified by LANL (1998) and compares results to the 1999 draft report that summarizes the samples taken in 1996 to 1998.

Table 3 demonstrates a comparison between sample results and background values.

The 2005 sample results demonstrably exceed background values (LANL, 1998) for the following radionuclides: Ra–226; U–234; U–235; U–238; Pu–239; and Am–241. Likewise, the sample results exceeded the 1999 summary report for the following radionuclides: Ra–226; U–234; U–235; and U–238. The samples also revealed the presence of plutonium. Nearly all plutonium is manufactured synthetically by exposing U–238 to neutron radiation, thus its presence could suggest a classification of "low level radioactive waste" under Nuclear Regulatory Commission guidelines NUREG/BR-0216, Rev. 2 "Radioactive Waste: Production, Storage, Disposal" (NRC, 2002).

In addition to the radioisotope lab results discussed above, a gross alpha mean activity of 11.2 pCi/g and a gross beta mean activity of 13.3 pCi/g, was also provided by the analytical laboratory. These results were lower than expected when comparing to the individual radionuclide analytical results, which was mainly due to the analytical errors associated with sampling. These values will be used for information only with more weight placed on the individual radioisotope lab results when used for waste characterization.

6.5.2 Waste Characterization

Based on the presence of transuranic radionuclides (e.g., plutonium), the waste may be classified as LLRW. However, the waste may be subject to release from regulation based on calculated authorized limits, with approval of DOE headquarters. If released, the waste may still be subject to regulations under the Department of Transportation (DOT).

According to the DOT regulations (49 Code of Federal Regulations [CFR]173.403, revised 10/2004), radioactive material means any material containing radionuclides where both the activity concentration and the total activity in the consignment exceed the values specified in the table in article 173.436 or values derived according to the instructions in article 173.433.

The activity of the waste is based on the mean concentration of the radionuclides. The samples that were taken of the incinerator ash were based on collecting a representative sample for each 100 cubic yards of ash. As shown in Table A-6, the distribution of radionuclides is relatively consistent between samples (e.g., plutonium is reported in each of the samples), thus using the mean and 95% Upper Confidence Level (UCL95%) of the samples is appropriate to characterize the entire waste stream.

Table 4 compares the sample results to 49CFR173.436, "Exempt Material Activity Concentrations and Exempt Consignment Activity Limits for Radionuclides". The mean activity concentration of the radionuclides were compared to the exemption limits specified in 49CFR173.436. In every case, the individual radionuclides met the exemption criteria for activity concentration; and thus the material is classified as DOT exempt.

6.5.3 Summary

Based on the activities demonstrably greater than background, and the presence of transuranic radionuclides (e.g., plutonium), the waste is classified as LLRW. The waste may be subject to release from regulation based on calculated authorized limits, however, this exception would require approval of DOE headquarters based on the previously calculated exposure greater than 1 mrem/yr.

6.6 Conclusions

Based on the discussions and analyses contained in this section, the ash as a whole is classified as non-hazardous, low-level radioactive waste. The results of the characterization for the ash has been reviewed by EnviroCare of Utah, who has tentatively accepted the ash for disposal as LLRW, to be handled as a debris due to its physical properties (low bulk density).

The miscellaneous debris associated with the ash (degraded cans, etc.) that are in direct contact with the ash can be managed with the ash (and has been approved by EnviroCare for handling in this manner). Other surficial debris (cans and other metallic debris) located away from the ash can be handled as non-hazardous debris for disposal at a municipal or industrial landfill. This surficial debris has been tentatively accepted for disposal at Rio Rancho Landfill, as long as it contains no ash (due to classification of ash as a "special waste" by State of New Mexico with specific permit requirements [which Rio Rancho Landfill is excluded from accepting] and not due to any chemical or radiological constituent in the ash).

7.0 SCHEDULE

Figure 6 (Project Schedule) provides the anticipated schedule for completion of field investigation, monitoring, and sampling activities. In addition, this Figure 6 sets forth a schedule for submittal of reports and data to NMED, including a schedule for submitting all status reports and preliminary data.

8.0 TABLES

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Table 1: Summary of Selected Inorganic Chemical Sampling Results in 2005

Analyte	Sample Results Range milligrams per kilogram (mg/kg)	Sample Results Range for TCLP (mg/kg)	90% UCL (mg/kg)	Federal TCLP	Soil Background Value [BV][1]
Antimony	17.2 - 543	NA	NA	NA	29,200
Arsenic	19 - 138	0.5 (ND)	0	5	8.7
Barium	575 - 5030	0.786 - 3.84	1.888	100	295
Beryllium	0.089 - 2.4	NA	--	NA	NA
Cadmium	2.8 - 78.5	0.0112 - 1.73	0.265	1	0.4
Chromium	54.1 - 154	0.05 (ND)	0	5	19.3
Cobalt	10.1 - 49.7	NA	--	NA	8.64
Copper	490- 219,000	NA	--	NA	14.7
Lead	1740 - 33,000	0.316 – 6.29	2.264	5	22.3
Manganese	859 - 21,800	NA	--	NA	671
Mercury	0.28 - 2.1	0.00037 – 0.00037	0.00037	0.2	0.1
Nickel	43.7 - 792	NA	--	NA	15.4
Selenium	0.45 - 2.2	0.5 (ND)	0	1	1.52
Silver	15.4 - 190	0.05 (ND)	0	5	1
Thallium	0.34 – 0.54	NA	--	NA	0.73
Vanadium	3.8 - 24.7	NA	--	NA	39.6
Zinc	823 - 43,000	5.1 – 67.5	35.4969	NA	48.8

Notes:

[1] Soil BV from Voluntary Corrective Action Fact Sheet For PRS 73-002, LANL.

TCLP - Toxicity Characteristic Leaching Potential

NA – not analyzed or not available

Table 2: Summary of Radionuclide Sampling Results

Radionuclide	Sample Results Range picocurie per gram (pCi/g)	UCL95% (pCi/g)	# of Detects >BV	Soil BV (pCi/g)	1999 Report (pCi/g)
Cesium 137 (Cs-137)	0.025(non-detect [ND]) to 0.138	0.066	0	1.65	0.49
Radium 226 (Ra-226)	0.65(ND) to 25.2	7.409	12	2.59	5.3
Uranium 234 (U-234)	1.59 to 37.3	11.55	13	2.59	7.2
Uranium 235 (U-235)	0.057 to 2.02	0.59	10	0.2	0.4
Uranium 238 (U-238)	1.15 to 31.2	9.318	13	2.29	5.2
Plutonium 238 (Pu-238)	0.01(ND) to 0.022(ND)	0.015	0	0.023	0.005
Plutonium 239 (Pu-239)	0.10 to 2.34	0.832	18	0.054	1.3
Americium 241 (Am-241)	0.003(ND) to 0.037	0.023[(1)]	6	0.013	0.16

Note 1: The Americium 241 UCL95 exceeded the BV partially due to the Minimum Detectable Concentration (MDC) exceeding the BV value. Six out of eighteen samples indicated a presence of Am-241 above the MDC.

Note 2: The following radionuclides showed up in some of the analytical results exceeding the laboratory MDC and were not included in the table above: Ac-228; Bi-211; Bi-214; K-40; Pa-234m; Pb-212; Pb-214; Ra-228; Tl-208; Th-231. All radionuclides normally exist in background; with most accounted for due to the natural decay series of Actinium, Thorium, and Uranium, applying the assumption of secular equilibrium.

Note 3: 2005 sample results that were below MDC were calculated at 50% of MDC for statistical purposes.

Table 3: Sample Comparison to Background Values and 1999 Report

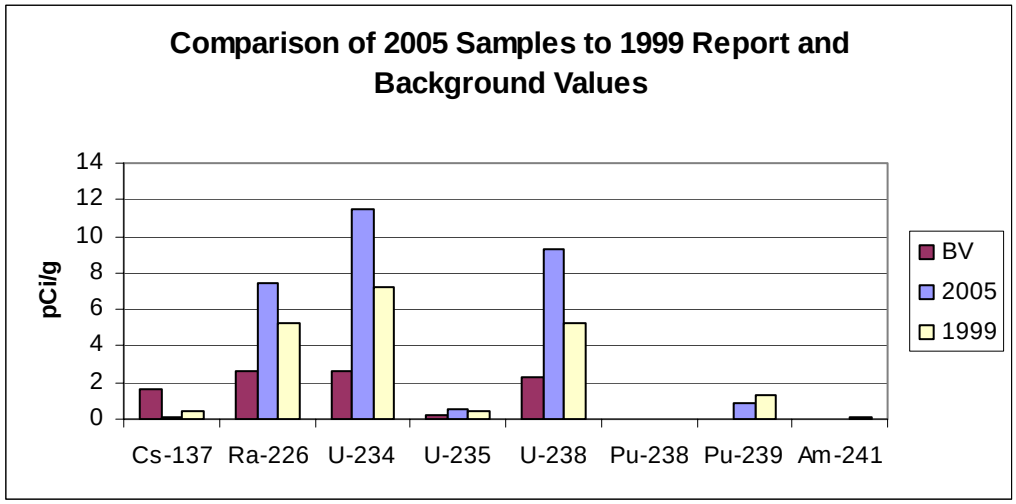

Table 4: DOT Exempt Consignment Evaluation

Description	Mean SA (in pCi/g)	Calculated SA for Parent and Progeny	Exempt Concentration (in pCi/g)	Exempt Concentration Met
U-234	7.91		270	Exempt
U-235	0.4	0.8	270	Exempt
U-238*	6.25	18.75	27	Exempt
Pu-238	0.01		27	Exempt
Pu-239	0.59		27	Exempt
Am-241	0.02		27	Exempt
Ra-226	5.17	46.53	270	Exempt
Cs-137	0.066	0.132	270	Exempt
K-40	8.3		2700	Exempt

* This assumes $U_{natural}$ for Exempt Limits; however, only Th-234, and Pa-234m are used for Progeny due to Ra-226 Progeny are already included.

LISTS OF TABLES PER NMED/LANL ORDER ON CONSENT

1 Summaries of regulatory criteria, background, and applicable cleanup levels

Regulatory criteria, background, and applicable cleanup levels are addressed in Number 4 below.

2 Summaries of historical field survey location data

Figure 5A addresses all previous sample locations.

3 Summaries of historical field screening and field parameter measurements:

Field Screening was only performed for information only, and not used for comparison to background values nor waste characterization. A discussion of field screening is included in Appendix A.

4 Summaries of historical soil, rock, or sediment laboratory analytical data:

The following tables summarize historical soil, ash, and tuff analytical data:

- A-1 Inorganic Results - SWMU 73-002, 1996, 1997, and 1998 Sampling Data
- A-2 Laboratory Results for Metals and Miscellaneous Parameters, Incinerator Ash Characterization Sampling – 2005
- A-3 Organic Results - SWMU 73-002, 1996, 1997, and 1998 Sampling Data
- A-4 Laboratory Results for Organic Compounds, Incinerator Ash Characterization Sampling - 2005
- A-5 Radiological Results - SWMU 73-002, 1996, 1997, and 1998 Sampling Data
- A-6 Laboratory Results for Radionuclides, Incinerator Ash Characterization Sampling - 2005

Table A-1: Inorganic Results (Soil/Fill) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
Corrective Action Work Plan for Los Alamos National Laboratory

Sample ID	Location ID	Depth (ft)	Media (Units)	Aluminum (mg/kg)	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Calcium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Iron (mg/kg)	Lead (mg/kg)	Magnesium (mg/kg)	Manganese (mg/kg)	Mercury (mg/kg)
0173-96-0304	73-02264	0.00-0.00	NA	8340	54.6	15	5290	0.29	5	12800	94.8	26	3690	6.4 (U)	4500	1290 (J)	1240	2
0173-96-0305	73-02260	0.00-0.70	NA	13400	40.1	11.4	883	0.21	12.6	12500	76.5	22.5	999	160000	3020	6010	1250	1.3
0173-96-0307	73-02262	0.00-1.00	NA	4390	85.7	28.3	440	0.46	7.5	24300	90.2	37.8	543	431000	4290	964 (J)	1960	0.55
0173-96-0309	73-02266	0.00-0.00	NA	18300	54.4	6.9	6280	0.43	15.1	39800	106	30.3	843	174000	2170	2380	1500	1.4
0173-96-0314	73-02268	0.00-1.00	NA	15200	119	8.9	3030	0.22	11.4	29600	103	18	6330	106000	9620	2440	1140	2.3
0173-96-0316	73-02270	0.00-0.00	NA	4320	41.3	9.7	689	0.22	4.5	8990	58.3	24.2	1360	265000	1380	1250	1190	1.1
0173-96-0331	73-02252	0.10-0.30	NA	7000	56	90	650	2.8	7.4	3600	90	13	1800	170000	1300	1000	730	19
0173-96-0345	73-02268	0.00-1.00	NA	19000	95.3	11.4	4090	0.4	13.3	33200	109	21.1	2420	117000	9780	3800	1340	0.07
0173-96-0346	73-02270	0.00-0.00	NA	4540	50.8	25.1	646	0.27	5	15900	29.5	11.6	588	115000	1210	711 (J)	770	0.07
0173-97-0001	73-02268	1.20-2.20	NA	16900	32.5	27	1490	0.58	23.3	45900	73.9	17.2	2760	52800	6790	4800	1330	0.41
0173-97-0002	73-02268	0.50-1.00	NA	18900	49	76.5	2020	0.65	24.9	36200	74.3	16.7	2230	98600	3770	4020	1880	0.49
0173-97-0003	73-02261	0.50-1.00	NA	25300	16.8	19.8	2330	0.65	11.2	30300	133	22.7	1550	78400	2690	3200	1660	1.2
0173-97-0004	73-02261	3.50-4.50	NA	22900	29.6	20.1	1920	0.51	42.9	38700	90.5	17.7	4590	70600	4480	3960	1760	2.2
0173-97-0008	73-02268	1.20-2.20	NA	16700	159	20.4	1240	0.5	31.1	40600	71.8	15.6	2390	83500	13100	4380	1530	0.44
		Count		14	14	14	14	14	14	14	14	14	14	13	14	11	14	14
		Mean		13942.14	63.15	26.46	2214.14	0.59	15.37	26599.29	85.77	21.03	2292.36	147838.46	4864.29	3385.45	1377.14	2.32
		Min		4320.00	16.80	6.90	440.00	0.21	4.50	3600.00	29.50	11.60	543.00	52800.00	1210.00	1000.00	730.00	0.07
		Max		25300.00	159.00	90.00	6280.00	2.80	42.90	45900.00	133.00	37.80	6330.00	431000.00	13100.00	6010.00	1960.00	19.00
		Std. Dev.		7062.55	38.85	25.15	1838.45	0.66	11.31	13575.12	24.95	7.04	1645.15	102222.89	3655.45	1515.67	369.50	4.86
		TINV (0.10,n-1)		1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.78	1.77	1.81	1.77	1.77
		UCL95		17284.86	**81.54**	**38.37**	**3084.28**	0.90	**20.72**	**33024.41**	**97.58**	**24.36**	**3071.01**	**198369.02**	**6594.42**	4213.74	**1552.03**	**4.62**
Soil Background Value				29200	0.83	8.17	295	1.83	0.4	6120	19.3	8.64	14.7	21500	22.3	4610	671	0.1

*** Note: Red/Bold indicates value exceeds Background Value.**

Table A-1: Inorganic Results (Soil/Fill) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
Corrective Action Work Plan for Los Alamos National Laboratory

Sample ID	Location ID	Depth (ft)	Media (Units)	Nickel (mg/kg)	Potassium (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Sodium (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
0173-96-0304	73-02264	0.00-0.00	NA	131	1150	1.7	213	842	0.41	6.4	3820
0173-96-0305	73-02260	0.00-0.70	NA	165	1990	0.93	28.9	940	0.31	5.5	1470
0173-96-0307	73-02262	0.00-1.00	NA	119	806	0.96	23.2	675	0.3	10	752
0173-96-0309	73-02266	0.00-0.00	NA	134	2040	4.3	448	1760	0.4	12.6	2530
0173-96-0314	73-02268	0.00-1.00	NA	94.1	2660	1	156	2280	0.36	14.4	4260
0173-96-0316	73-02270	0.00-0.00	NA	81.2	640	0.99	41.8	674	0.37	4.8	1050
0173-96-0331	73-02252	0.10-0.30	NA	60	740	1.1	66	390	1.4	47	1900
0173-96-0345	73-02268	0.00-1.00	NA	104	3270	1.2	188	2480	0.48	15.9	4250
0173-96-0346	73-02270	0.00-0.00	NA	50.5	582	1.2	31.6	613	3.6	5.9	1590
0173-97-0001	73-02268	1.20-2.20	NA	79.9	4290	2	21.3	3930	7.4	13.2	4790
0173-97-0002	73-02268	0.50-1.00	NA	147	4610	2.1	55.3	3180	10.6	8.2	3860
0173-97-0003	73-02261	0.50-1.00	NA	236	3220	2.8	55.4	3530	9.3	12.5	4380
0173-97-0004	73-02261	3.50-4.50	NA	112	5040	1.9	19.6	7760	6.4	12.8	7170
0173-97-0008	73-02268	1.20-2.20	NA	101	4240	3.8	17.9	4190	8.6	7.8	3790
		Count		14	14	14	14	14	14	14	14
		Mean		115.34	2519.86	1.86	97.57	2374.57	3.57	12.64	3258.00
		Min		50.50	582.00	0.93	17.90	390.00	0.30	4.80	752.00
		Max		236.00	5040.00	4.30	448.00	7760.00	10.60	47.00	7170.00
		Std. Dev.		47.33	1609.26	1.09	120.33	2044.29	3.98	10.53	1783.85
		TINV (0.10,n-1)		1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77
		UCL95		**137.74**	3281.52	**2.37**	**154.52**	**3342.13**	**5.45**	17.63	**4102.30**
Soil Background Value				15.4	3460	1.52	1	915	0.73	39.6	48.8

*** Note: Red/Bold indicates value exceeds Background Value.**

Table A-1: Inorganic Results (Soil/Fill) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
Corrective Action Work Plan for Los Alamos National Laboratory

Sample ID	Location ID	Depth (ft)	Media (Units)	Aluminum (mg/kg)	Antimony (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Calcium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Iron (mg/kg)	Lead (mg/kg)	Magnesium (mg/kg)	Manganese (mg/kg)
0173-96-0302	73-02253	0.00-0.50	Soil		10	-	-	0.52	-	-	-	-	-	-	-
0173-96-0308	73-02255	0.00-0.50	Soil		12	-	-	0.62	-	-	-	-	48	-	-
0173-96-0320	73-02254	0.00-0.50	Soil		11	-	-	0.56	-	-	-	-	-	-	-
0173-96-0501	73-02326	14.00-15.0(	Fill		12	-	-	0.59	6500	-	-	-	-	-	-
0173-96-0502	73-02327	14.00-15.0(	Fill		12	-	-	0.59	-	-	-	-	-	-	-
0173-97-0312	73-02451	0.50-1.00	Soil	-	-	-	-	-	-	-	-	-	-	-	-
0173-97-0313	73-02452	0.10-0.50	Soil	-	-	-	-	-	-	-	-	-	-	-	-
0173-97-0318	73-02454	0.10-0.50	Soil	-	-	-	-	12.2	-	-	-	-	168	-	-
0173-97-0321	73-02457	0.10-0.50	Soil	-	-	-	-	-	-	9.9	-	-	44.6	-	790
0173-97-0323	73-02459	0.10-0.50	Soil	-	-	-	-	-	-	-	-	-	28.8	-	-
0173-97-0324	73-02460	0.10-0.50	Soil	-	-	-	-	-	-	-	15.1	-	23.4	-	-
0173-97-0325	73-02461	0.10-0.50	Soil	-	-	325	-	0.81	-	-	40.2	-	82.2	-	-
0173-97-0326	73-02462	0.10-0.50	Soil	-	-	415	-	0.65	-	-	36.8	-	83.7	-	-
RE73-99-0089	73-10099	7.50-8.50	Fill	35000		-	1.9	-	-	-	-	25000	-	5500	-
RE73-99-0102	73-10106	4.80-5.30	Fill			-	-	-	-	-	-	-	32	-	-
		Count		1	5	2	1	8	1	1	3	1	8	1	1
		Mean		35000.00	11.40	370.00	1.90	2.07	6500.00	9.90	30.70	25000.00	63.84	5500.00	790.00
		Min		35000.00	10.00	325.00	1.90	0.52	6500.00	9.90	15.10	25000.00	23.40	5500.00	790.00
		Max		35000.00	12.00	415.00	1.90	12.20	6500.00	9.90	40.20	25000.00	168.00	5500.00	790.00
		Std. Dev.			0.89	63.64		4.10			13.62		47.93		
		TINV (0.10,n-1)			2.13	6.31		1.89			2.92		1.89		
		UCL95			**12.25**	**654.12**		**4.81**			**53.66**		**95.94**		
Soil/Fill Background Value				29200	0.83	295	1.83	0.4	6120	8.64	14.7	21500	22.3	4610	671

*** Note: If there is only one sample performed, the actual sample data is used in place of the UCL95; Red/Bold indicates value exceeds Background Value.**

Table A-1: Inorganic Results (Soil/Fill) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
Corrective Action Work Plan for Los Alamos National Laboratory

Sample ID	Location ID	Depth (ft)	Media (Units)	Mercury (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)	Zinc (mg/kg)
0173-96-0302	73-02253	0.00-0.50	Soil	-	2.1	1.3	-
0173-96-0308	73-02255	0.00-0.50	Soil	0.12	2.5	1.5	52
0173-96-0320	73-02254	0.00-0.50	Soil	0.11	2.2	1.4	470
0173-96-0501	73-02326	14.00-15.0(	Fill	0.12	2.4	1.2	260
0173-96-0502	73-02327	14.00-15.0(	Fill	0.12	2.4	1.2	61
0173-97-0312	73-02451	0.50-1.00	Soil	-	-	0.87	-
0173-97-0313	73-02452	0.10-0.50	Soil	-	-	0.8	-
0173-97-0318	73-02454	0.10-0.50	Soil	-	-	-	-
0173-97-0321	73-02457	0.10-0.50	Soil	-	-	-	-
0173-97-0323	73-02459	0.10-0.50	Soil	0.14	1.1	-	-
0173-97-0324	73-02460	0.10-0.50	Soil	-	1.9	0.77	-
0173-97-0325	73-02461	0.10-0.50	Soil	0.24	8.8	-	-
0173-97-0326	73-02462	0.10-0.50	Soil	-	10.7	-	-
RE73-99-0089	73-10099	7.50-8.50	Fill	0.14	-	-	62
RE73-99-0102	73-10106	4.80-5.30	Fill	-	-	-	-
		Count		7	9	8	5
		Mean		0.14	3.79	1.13	181.00
		Min		0.11	1.10	0.77	52.00
		Max		0.24	10.70	1.50	470.00
		Std. Dev.		0.04	3.44	0.28	183.69
		TINV (0.10,n-1)		1.94	1.86	1.89	2.13
		UCL95		**0.17**	**5.92**	**1.32**	**356.13**
Soil/Fill Background Value				0.1	1	0.73	48.8

*** Note: If there is only one sample performed, the actual sample**

Table A-1: Inorganic Results (Soil/Fill) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
Corrective Action Work Plan for Los Alamos National Laboratory

Sample ID	Location ID	Depth (ft)	Media (Units)	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Calcium (mg/kg)	Selenium (mg/kg)
0173-97-0333	73-02463	3.50-4.00	Qbt 3	0.71	-	-	-	-
0173-97-0337	73-02463	3.50-4.00	Qbt 3	0.72	-	-	-	-
RE73-99-0094	73-02207	5.50-6.00	Qbt 3		3.2	80	17000	-
RE73-99-0109	73-10096	4.30-4.80	Qbt 3		-	-	-	0.41
		Count		2	1	1	1	1
		Mean		0.72	3.20	80.00	17000.00	0.41
		Min		0.71	3.20	80.00	17000.00	0.41
		Max		0.72	3.20	80.00	17000.00	0.41
		Std. Dev.		0.01				
		TINV (0.10,n-1)		6.31				
		UCL95*		**0.75**	**3.20**	**80.00**	**17000.00**	**0.41**
Qbt 2,3,4 Background Value				**0.5**	**2.79**	**46**	**2200**	**0.3**

*** Note: If there is only one sample performed, the actual sample data is used in place of the UCL95; Red/Bold indicates value exceeds Background Value.**

Table A-2: Laboratory Results for Metals and Miscellaneous Parameters
Incinerator Ash Characterization Sampling - 2005
Corrective Action Work Plan for Los Alamos National Laboratory

		Silver		Arsenic		Barium		Beryllium		Cadmium		Cobalt	
Total Metals	(mg/kg)	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Previous Maximum		*448*		*90*		*6280*				*42.9*		*37.8*	
RE-73-05-58824	4/18/2005	17.5	0.52	42	0.52	1170	5.2	0.27	0.26	16.9	0.65	16.2	1.3
RE-73-05-58825	4/19/2005	190	0.53	29.6	0.53	5030	5.3	0.21	0.27	12.4	0.66	17.9	1.3
RE-73-05-58826	4/19/2005	54.9	0.53	22.7	0.53	1490	5.3	0.34	0.27	19.7	0.66	13.8	1.3
RE-73-05-58827	4/19/2005	118	0.48	33.6	0.48	4150	4.8	0.37	0.24	9	0.6	11.3	1.2
RE-73-05-58828	4/19/2005	37.2	0.49	39.3	0.49	1550	4.9	2.4	0.24	48.3	0.61	18.3	1.2
RE-73-05-58829	4/19/2005												
RE-73-05-58830	4/19/2005	54	0.51	26.1	0.51	1980	5.1	0.39	0.25	18.2	0.63	40.3	1.3
RE-73-05-58831	4/19/2005	49.5	0.53	19	0.53	1880	5.3	0.28	0.27	78.5	0.66	15.1	1.3
RE-73-05-58832	4/19/2005	35.6	0.53	20.5	0.53	1580	5.3	0.28	0.27	14.9	0.67	13.2	1.3
RE-73-05-58833	4/19/2005	119	0.48	26.8	0.48	2660	4.8	1.2	0.24	7.7	0.6	17.3	1.2
RE-73-05-58834	4/19/2005	56.9	0.53	26.3	0.53	1000	5.3	0.74	0.27	15.4	0.66	17.7	1.3
RE-73-05-58835	4/19/2005												
RE-73-05-58836	4/19/2005	21.2	0.45	66.4	0.45	643	4.5	0.11	0.22	4.1	0.56	41.9	1.1
RE-73-05-58837	4/19/2005	15.4	0.47	133	0.47	575	4.7	0.089	0.23	2.8	0.59	49.7	1.2
RE-73-05-58838	4/19/2005	95.7	0.54	19.5	0.54	2600	5.4	0.33	0.27	67.5	0.67	10.1	1.3
RE-73-05-58839	4/19/2005	125	0.53	76	0.53	2870	5.3	0.33	0.27	16.4	0.67	14.8	1.3
RE-73-05-58840	4/19/2005	187	0.47	22.1	0.47	3490	4.7	0.2	0.23	16.5	0.59	14.4	1.2
RE-73-05-58841	4/19/2005												
RE-73-05-58842	4/20/2005	63	0.5	29.8	0.5	1790	5	0.33	0.25	17.7	0.63	16.4	1.3
RE-73-05-58843	4/20/2005	59.6	0.5	56.4	0.5	1710	5	0.26	0.25	16.8	0.62	16.8	1.2
RE-73-05-58844	4/20/2005	73.3	0.56	45.1	0.56	1990	5.6	0.25	0.28	5.9	0.69	16.5	1.4
RE-73-05-58845	4/20/2005	78.2	0.53	138	0.53	1940	5.3	0.25	0.27	6	0.67	40.2	1.3
RE-73-05-58846	4/20/2005	102	0.51	21	0.51	3330	5.1	0.17	0.25	7.2	0.63	18.6	1.3
RE-73-05-58879	4/20/2005												
	Min	15.4		19		575		0.089		2.8		10.1	
	Max	190		138		5030		2.4		78.5		49.7	
	Mean	77.65		44.66		2171.4		0.43995		20.095		21.025	
TCLP Metals	(mg/L)												
Previous Maximum		*ND*		*ND*		*1.45*				*0.151*			
RE-73-05-58824	4/18/2005	ND	0.05	ND	0.5	0.884	0.5			0.18	0.025		
RE-73-05-58825	4/19/2005	ND	0.05	ND	0.5	1.65	0.5			0.0912	0.025		
RE-73-05-58826	4/19/2005	ND	0.05	ND	0.5	1.44	0.5			0.105	0.025		
RE-73-05-58827	4/19/2005	ND	0.05	ND	0.5	2.4	0.5			0.0406	0.025		
RE-73-05-58828	4/19/2005	ND	0.05	ND	0.5	1.43	0.5			0.133	0.025		
RE-73-05-58829	4/19/2005												
RE-73-05-58830	4/19/2005	ND	0.05	ND	0.5	3.84	0.5			1.73	0.25		
RE-73-05-58831	4/19/2005	ND	0.05	ND	0.5	1.18	0.5			0.134	0.025		
RE-73-05-58832	4/19/2005	ND	0.05	ND	0.5	1.32	0.5			0.0403	0.025		
RE-73-05-58833	4/19/2005	ND	0.05	ND	0.5	0.939	0.5			0.0205	0.025		
RE-73-05-58834	4/19/2005	ND	0.05	ND	0.5	1.06	0.5			0.0316	0.025		
RE-73-05-58835	4/19/2005												
RE-73-05-58836	4/19/2005	ND	0.05	ND	0.5	1.76	0.5			0.0117	0.025		
RE-73-05-58837	4/19/2005	ND	0.05	ND	0.5	1.62	0.5			0.0112	0.025		
RE-73-05-58838	4/19/2005	ND	0.05	ND	0.5	1.79	0.5			0.16	0.025		
RE-73-05-58839	4/19/2005	ND	0.05	ND	0.5	1.59	0.5			0.095	0.025		
RE-73-05-58840	4/19/2005	ND	0.05	ND	0.5	0.786	0.5			0.0739	0.025		
RE-73-05-58841	4/19/2005												
RE-73-05-58842	4/20/2005	ND	0.05	ND	0.5	2.33	0.5			0.0719	0.025		

Table A-2: Laboratory Results for Metals and Miscellaneous Parameters
Incinerator Ash Characterization Sampling - 2005
Corrective Action Work Plan for Los Alamos National Laboratory

		Chromium		Copper		Manganese		Nickel		Lead		Antimony	
Total Metals	(mg/kg)	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Previous Maximum		*133*		*6320*		*1960*		*236*		*13100*		*159*	
RE-73-05-58824	4/18/2005	102	1.3	1620	2.6	1520	2.6	203	0.52	3330	1.6	33.4	0.52
RE-73-05-58825	4/19/2005	74	1.3	993	2.7	1270	2.7	96.3	0.53	6650	1.6	52.1	0.53
RE-73-05-58826	4/19/2005	77	1.3	1670	2.7	1230	2.7	79.7	0.53	6700	1.6	48.4	0.53
RE-73-05-58827	4/19/2005	61.3	1.2	1270	1.2	895	2.4	43.7	0.48	2400	0.72	32.8	0.48
RE-73-05-58828	4/19/2005	85.9	1.2	219000	24.3	21800	2.4	146	0.49	2460	0.73	27.8	0.49
RE-73-05-58829	4/19/2005												
RE-73-05-58830	4/19/2005	154	1.3	1330	2.5	2190	2.5	633	0.51	6110	1.5	73.1	0.51
RE-73-05-58831	4/19/2005	88.5	1.3	4130	3.3	1330	2.7	125	0.53	3950	0.79	27.8	0.53
RE-73-05-58832	4/19/2005	66.8	1.3	1930	1.3	1380	2.7	131	0.53	2390	0.8	29.1	0.53
RE-73-05-58833	4/19/2005	107	1.2	1190	1.2	1750	2.4	115	0.48	2500	0.72	29.8	0.48
RE-73-05-58834	4/19/2005	81.8	1.3	31500	3.3	2540	2.7	295	0.53	8770	2	123	0.53
RE-73-05-58835	4/19/2005												
RE-73-05-58836	4/19/2005	104	1.1	815	1.1	2050	2.2	220	0.45	2840	0.67	36.2	0.45
RE-73-05-58837	4/19/2005	94.4	1.2	490	1.2	2330	2.3	219	0.47	4310	0.7	24.7	0.47
RE-73-05-58838	4/19/2005	54.1	1.3	3260	6.7	859	2.7	77	0.54	13700	4	116	0.54
RE-73-05-58839	4/19/2005	68.7	1.3	3820	13.3	2810	2.7	98.6	0.53	33000	8	543	0.53
RE-73-05-58840	4/19/2005	85	1.2	1040	1.2	1050	2.3	215	0.47	1950	0.7	19.9	0.47
RE-73-05-58841	4/19/2005												
RE-73-05-58842	4/20/2005	85.9	1.3	2710	6.3	1580	2.5	234	0.5	3430	3.8	32.6	0.5
RE-73-05-58843	4/20/2005	72.2	1.2	2360	1.2	1770	2.5	189	0.5	2220	0.74	27.3	0.5
RE-73-05-58844	4/20/2005	67.7	1.4	536	1.4	974	2.8	115	0.56	2990	0.83	17.2	0.56
RE-73-05-58845	4/20/2005	116	1.3	1640	1.3	2010	2.7	215	0.53	3690	0.8	64.7	0.53
RE-73-05-58846	4/20/2005	66.5	1.3	2750	1.3	1130	2.5	792	0.51	1740	0.76	29.8	0.51
RE-73-05-58879	4/20/2005												
	Min	54.1		490		859		43.7		1740		17.2	
	Max	154		219000		21800		792		33000		543	
	Mean	85.64		14202.7		2623.4		212.115		5756.5		69.435	
TCLP Metals	(mg/L)												
Previous Maximum		*0.033*								*4.1*			
RE-73-05-58824	4/18/2005	ND	0.05							3.14	0.25		
RE-73-05-58825	4/19/2005	ND	0.05							0.786	0.25		
RE-73-05-58826	4/19/2005	ND	0.05							2.39	0.25		
RE-73-05-58827	4/19/2005	ND	0.05							6.29	0.25		
RE-73-05-58828	4/19/2005	ND	0.05							2.56	0.25		
RE-73-05-58829	4/19/2005												
RE-73-05-58830	4/19/2005	ND	0.05							3.33	0.25		
RE-73-05-58831	4/19/2005	ND	0.05							4.37	0.25		
RE-73-05-58832	4/19/2005	ND	0.05							1.08	0.25		
RE-73-05-58833	4/19/2005	ND	0.05							0.633	0.25		
RE-73-05-58834	4/19/2005	ND	0.05							0.63	0.25		
RE-73-05-58835	4/19/2005												
RE-73-05-58836	4/19/2005	ND	0.05							0.792	0.25		
RE-73-05-58837	4/19/2005	ND	0.05							0.316	0.25		
RE-73-05-58838	4/19/2005	ND	0.05							2.47	0.25		
RE-73-05-58839	4/19/2005	ND	0.05							1.47	0.25		
RE-73-05-58840	4/19/2005	ND	0.05							1.44	0.25		
RE-73-05-58841	4/19/2005												
RE-73-05-58842	4/20/2005	ND	0.05							0.817	0.25		

Table A-2: Laboratory Results for Metals and Miscellaneous Parameters
Incinerator Ash Characterization Sampling - 2005
Corrective Action Work Plan for Los Alamos National Laboratory

		Selenium		Thallium		Vanadium		Zinc		Mercury		pH	Flash
Total Metals	(mg/kg)	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL		Point
Previous Maximum		*3.8*		*10.6*		*65*		*7170*		*19*			
RE-73-05-58824	4/18/2005	1.1	0.52	0.54	0.26	16.1	2.6	8220	13.1	0.62	0.044		
RE-73-05-58825	4/19/2005	1.6	0.53	ND	0.27	12.8	2.7	3020	13.3				
RE-73-05-58826	4/19/2005	1.1	0.53	ND	0.27	15.3	2.7	4360	2.7	0.7	0.044		
RE-73-05-58827	4/19/2005	0.89	0.48	ND	0.24	14.1	2.4	4450	2.4	0.9	0.04		
RE-73-05-58828	4/19/2005	0.92	0.49	ND	0.24	24.7	2.4	11300	12.2	0.92	0.041		
RE-73-05-58829	4/19/2005											8	>60
RE-73-05-58830	4/19/2005	0.81	0.51	ND	0.25	20.9	2.5	4880	2.5	1.6	0.042		
RE-73-05-58831	4/19/2005	1.7	0.53	ND	0.27	17.2	2.7	43000	26.5	1.4	0.044		
RE-73-05-58832	4/19/2005	0.68	0.53	ND	0.27	17.1	2.7	3940	2.7	1.7	0.044		
RE-73-05-58833	4/19/2005	0.57	0.48	ND	0.24	12.9	2.4	3760	2.4	2.1	0.08		
RE-73-05-58834	4/19/2005	2	0.53	ND	0.27	12.6	2.7	9830	13.3	1.6	0.044		
RE-73-05-58835	4/19/2005											8	>60
RE-73-05-58836	4/19/2005	0.45	0.45	ND	0.22	3.8	2.2	939	55.9	0.71	0.037		
RE-73-05-58837	4/19/2005	0.64	0.47	ND	0.23	4.1	2.3	823	58.6	0.28	0.039		
RE-73-05-58838	4/19/2005	1.2	0.54	ND	0.27	14.5	2.7	4630	2.7	0.56	0.045		
RE-73-05-58839	4/19/2005	1.7	0.53	ND	0.27	15.1	2.7	4370	2.7	1.2	0.044		
RE-73-05-58840	4/19/2005	0.94	0.47	ND	0.23	14.1	2.3	5500	2.3	0.6	0.039		
RE-73-05-58841	4/19/2005											8.1	>60
RE-73-05-58842	4/20/2005	2.2	0.5	ND	0.25	16.6	2.5	6460	12.6	0.79	0.042		
RE-73-05-58843	4/20/2005	1.6	0.5	0.31	0.25	15.3	2.5	6120	2.5	1.5	0.041		
RE-73-05-58844	4/20/2005	0.93	0.56	ND	0.28	10.1	2.8	2040	2.8	0.7	0.046		
RE-73-05-58845	4/20/2005	0.55	0.53	ND	0.27	8.6	2.7	1710	66.7	0.5	0.045		
RE-73-05-58846	4/20/2005	0.85	0.51	ND	0.25	14.8	2.5	2190	2.5	0.33	0.042		
RE-73-05-58879	4/20/2005											8.3	>60
	Min	0.45		0.31		3.8		823		0.28			
	Max	2.2		0.54		24.7		43000		2.1			
	Mean	1.1215		0.425		14.035		6577.1		0.98473684			

TCLP Metals	(mg/L)												
Previous Maximum		*ND*											
RE-73-05-58824	4/18/2005	ND	0.5					37.4	0.1	ND	0.01		
RE-73-05-58825	4/19/2005	ND	0.5					19.4	0.1	ND	0.01		
RE-73-05-58826	4/19/2005	ND	0.5					39.1	0.1	ND	0.01		
RE-73-05-58827	4/19/2005	ND	0.5					19.2	0.1	ND	0.01		
RE-73-05-58828	4/19/2005	ND	0.5					40.5	0.1	ND	0.01		
RE-73-05-58829	4/19/2005												
RE-73-05-58830	4/19/2005	ND	0.5					35.1	0.1	ND	0.01		
RE-73-05-58831	4/19/2005	ND	0.5					42.4	0.1	ND	0.01		
RE-73-05-58832	4/19/2005	ND	0.5					30.3	0.1	ND	0.01		
RE-73-05-58833	4/19/2005	ND	0.5					24.9	0.1	ND	0.01		
RE-73-05-58834	4/19/2005	ND	0.5					57.2	0.5	ND	0.01		
RE-73-05-58835	4/19/2005												
RE-73-05-58836	4/19/2005	ND	0.5					5.1	0.1	ND	0.01		
RE-73-05-58837	4/19/2005	ND	0.5					8.5	0.1	ND	0.01		
RE-73-05-58838	4/19/2005	ND	0.5					36.7	0.1	ND	0.01		
RE-73-05-58839	4/19/2005	ND	0.5					33.7	0.1	ND	0.01		
RE-73-05-58840	4/19/2005	ND	0.5					67.5	0.5	ND	0.01		
RE-73-05-58841	4/19/2005												
RE-73-05-58842	4/20/2005	ND	0.5					30.6	0.1	ND	0.01		

Table A-2: Laboratory Results for Metals and Miscellaneous Parameters
Incinerator Ash Characterization Sampling - 2005
Corrective Action Work Plan for Los Alamos National Laboratory

		Paint Filter	% Moisture		Reactive Cyanide		Reactive Sulfide		Bulk Density (g/cm3)	
Total Metals	(mg/kg)	Test	Result	RL	Result	RL	Result	RL	Dry	Wet
Previous Maximum										
RE-73-05-58824	4/18/2005									
RE-73-05-58825	4/19/2005									
RE-73-05-58826	4/19/2005									
RE-73-05-58827	4/19/2005									
RE-73-05-58828	4/19/2005									
RE-73-05-58829	4/19/2005	Pass	23.5	0.1	0.052	0.065	ND	5.8	0.74	0.99
RE-73-05-58830	4/19/2005									
RE-73-05-58831	4/19/2005									
RE-73-05-58832	4/19/2005									
RE-73-05-58833	4/19/2005									
RE-73-05-58834	4/19/2005									
RE-73-05-58835	4/19/2005	Pass	23.8	0.1	0.092	0.066	ND	5.8	0.66	0.91
RE-73-05-58836	4/19/2005									
RE-73-05-58837	4/19/2005									
RE-73-05-58838	4/19/2005									
RE-73-05-58839	4/19/2005									
RE-73-05-58840	4/19/2005									
RE-73-05-58841	4/19/2005	Pass	19.6	0.1	0.062	0.062	ND	5.5	0.86	1.04
RE-73-05-58842	4/20/2005									
RE-73-05-58843	4/20/2005									
RE-73-05-58844	4/20/2005									
RE-73-05-58845	4/20/2005									
RE-73-05-58846	4/20/2005									
RE-73-05-58879	4/20/2005	Pass	22.3	0.1	0.14	0.064	ND	5.7		
	Min									
	Max									
	Mean									
TCLP Metals	(mg/L)									
Previous Maximum										
RE-73-05-58824	4/18/2005									
RE-73-05-58825	4/19/2005									
RE-73-05-58826	4/19/2005									
RE-73-05-58827	4/19/2005									
RE-73-05-58828	4/19/2005									
RE-73-05-58829	4/19/2005									
RE-73-05-58830	4/19/2005									
RE-73-05-58831	4/19/2005									
RE-73-05-58832	4/19/2005									
RE-73-05-58833	4/19/2005									
RE-73-05-58834	4/19/2005									
RE-73-05-58835	4/19/2005									
RE-73-05-58836	4/19/2005									
RE-73-05-58837	4/19/2005									
RE-73-05-58838	4/19/2005									
RE-73-05-58839	4/19/2005									
RE-73-05-58840	4/19/2005									
RE-73-05-58841	4/19/2005									
RE-73-05-58842	4/20/2005									

Table A-3: Organic Results (Ash) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
Corrective Action Work Plan for Los Alamos National Laboratory

Sample ID	Location ID	Depth (ft)	Media	Acetone	Aroclor-1254	Benzene	Benzo(a) - anthracene	Benzo(b) - fluoranthene	Benzo(k) fluoranthene	BHC[beta-]	Bis (2-ethylhexyl) phthalate	Chrysene	DDD[4,4'-]	DDE[4,4'-]	DDT[4,4'-]	Dichloro - benzene[1,2-]	Dichloro - benzene[1,3-]	Dichloro - benzene[1,4-]
0173-96-0304	73-02264	0.00-0.00	NA		0.046					0.0026				0.032	0.024			
0173-96-0305	73-02260	0.00-0.70	NA		0.066									0.0057				
0173-96-0307	73-02262	0.00-1.00	NA															
0173-96-0309	73-02266	0.00-0.00	NA			0.002								0.019	0.02			
0173-96-0314	73-02268	0.00-1.00	NA		0.17		0.043					0.047		0.03	0.022			
0173-96-0316	73-02270	0.00-0.00	NA		0.059									0.0072	0.006			0.01
0173-96-0331	73-02252	0.10-0.30	NA										1.3	0.31	3.9			
0173-96-0345	73-02268	0.00-1.00	NA	0.005	0.13									0.027	0.023			
0173-96-0346	73-02270	0.00-0.00	NA		0.04		0.09	0.094	0.075			0.11		0.005				
0173-97-0001	73-02268	1.20-2.20	NA															
0173-97-0002	73-02268	0.50-1.00	NA															
0173-97-0003	73-02261	0.50-1.00	NA															
0173-97-0004	73-02261	3.50-4.50	NA								0.19					0.12	0.12	
0173-97-0008	73-02268	1.20-2.20	NA	0.097							0.12			0.035	0.019			
0173-97-0327	73-02465	3.20-3.70	NA															
0173-97-0336	73-02464	7.00-7.50	NA															
0173-97-0338	73-02464	7.00-7.50	NA															
		Count		2	6	1	2	1	1	1	2	2	1	9	7	1	1	1
		Mean		0.05	0.09	0.00	0.07	0.09	0.08	0.00	0.16	0.08	1.30	0.05	0.57	0.12	0.12	0.01
		Min		0.01	0.04	0.00	0.04	0.09	0.08	0.00	0.12	0.05	1.30	0.01	0.01	0.12	0.12	0.01
		Max		0.10	0.17	0.00	0.09	0.09	0.08	0.00	0.19	0.11	1.30	0.31	3.90	0.12	0.12	0.01
		Std. Dev.		0.07	0.05		0.03				0.05	0.04		0.10	1.47			
		TINV (0.10,n-1)		6.31	2.02		6.31				6.31	6.31		1.86	1.94			
		UCL95		0.34	0.13		0.21				0.38	0.28		0.11	1.65			

Table A-3: Organic Results (Ash) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
Corrective Action Work Plan for Los Alamos National Laboratory

Sample ID	Location ID	Depth (ft)	Media	Endosulfan I	Fluoranthene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofuran [1,2,3,4,7,8,9-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzodioxin [1,2,3,4,7,8-]	Hexachlorodibenzodioxin [1,2,3,6,7,8-]	Hexachlorodibenzodioxin [1,2,3,7,8,9-]	Hexachlorodibenzodioxins (Total)	Hexachlorodibenzofuran [1,2,3,4,7,8-]	Hexachlorodibenzofuran [1,2,3,6,7,8-]
0173-96-0304	73-02264	0.00-0.00	NA													
0173-96-0305	73-02260	0.00-0.70	NA													
0173-96-0307	73-02262	0.00-1.00	NA													
0173-96-0309	73-02266	0.00-0.00	NA													
0173-96-0314	73-02268	0.00-1.00	NA		0.078											
0173-96-0316	73-02270	0.00-0.00	NA													
0173-96-0331	73-02252	0.10-0.30	NA													
0173-96-0345	73-02268	0.00-1.00	NA													
0173-96-0346	73-02270	0.00-0.00	NA													
0173-97-0001	73-02268	1.20-2.20	NA			1.80E-10	0.33	0.098	0.0053	0.17	0.0062	0.024	0.022	0.18	0.012	0.011
0173-97-0002	73-02268	0.50-1.00	NA			1.80E-10	0.33	0.066	0.0064	0.11	0.0059	0.021	0.025	0.14	0.025	0.017
0173-97-0003	73-02261	0.50-1.00	NA			1.10E-09	1.8	0.13	0.011	0.25	0.014	0.056	0.065	0.46	0.023	0.021
0173-97-0004	73-02261	3.50-4.50	NA	0.0023		9.00E-10	1.6	0.35	0.0088	0.61	0.026	0.14	0.12	1	0.046	0.049
0173-97-0008	73-02268	1.20-2.20	NA			2.80E-10	0.51	0.071	0.004	0.15	0.0063	0.037	0.037	0.29	0.015	0.01
0173-97-0327	73-02465	3.20-3.70	NA			5.90E-11	0.11	0.011	0.00075	0.024	0.00067	0.0037	0.0033	0.03	0.0021	0.0019
0173-97-0336	73-02464	7.00-7.50	NA			4.90E-11	0.094	0.28	0.0099	0.34	0.016	0.02	0.041	0.27	0.43	0.14
0173-97-0338	73-02464	7.00-7.50	NA			7.60E-11	0.15	0.4	0.014	0.48	0.022	0.029	0.063	0.42	0.67	0.23
		Count		1	1	8	8	8	8	8	8	8	8	8	8	8
		Mean		0.00	0.08	0.000000	0.615500	0.175750	0.007519	0.266750	0.012134	0.041338	0.047038	0.348750	0.152888	0.059988
		Min		0.00	0.08	0.000000	0.094000	0.011000	0.000750	0.024000	0.000670	0.003700	0.003300	0.030000	0.002100	0.001900
		Max		0.00	0.08	0.000000	1.800000	0.400000	0.014000	0.610000	0.026000	0.140000	0.120000	1.000000	0.670000	0.230000
		Std. Dev.				0.000000	0.685629	0.146296	0.004239	0.198362	0.008844	0.042605	0.035983	0.298780	0.253672	0.082000
		TINV (0.10,n-1)				1.894578	1.894578	1.894578	1.894578	1.894578	1.894578	1.894578	1.894578	1.894578	1.894578	1.894578
		UCL95				0.000000	1.074758	0.273744	0.010358	0.399619	0.018058	0.069876	0.071140	0.548883	0.322806	0.114914

Table A-3: Organic Results (Ash) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
Corrective Action Work Plan for Los Alamos National Laboratory

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofuran [1,2,3,7,8,9-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]	Hexachlorodibenzofurans (Total)	Isopropyltoluene [4-]	Methylene Chloride	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzodioxin [1,2,3,7,8-]	Pentachlorodibenzodioxins (Total)	Pentachlorodibenzofuran [1,2,3,7,8-]	Pentachlorodibenzofuran [2,3,4,7,8-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene
0173-96-0304	73-02264	0.00-0.00	NA					0.043									
0173-96-0305	73-02260	0.00-0.70	NA					0.034									
0173-96-0307	73-02262	0.00-1.00	NA					0.032									
0173-96-0309	73-02266	0.00-0.00	NA					0.036									
0173-96-0314	73-02268	0.00-1.00	NA					0.1									0.076
0173-96-0316	73-02270	0.00-0.00	NA					0.059									
0173-96-0331	73-02252	0.10-0.30	NA				0.013										
0173-96-0345	73-02268	0.00-1.00	NA					0.069									
0173-96-0346	73-02270	0.00-0.00	NA					0.08									0.049
0173-97-0001	73-02268	1.20-2.20	NA		0.012	0.12			0.64	0.048	0.0082	0.1	0.014	0.021	0.24		
0173-97-0002	73-02268	0.50-1.00	NA		0.018	0.15			0.68	0.031	0.0084	0.071	0.023	0.035	0.43		
0173-97-0003	73-02261	0.50-1.00	NA		0.027	0.21			4.8	0.1	0.016	0.25	0.019	0.032	0.4		
0173-97-0004	73-02261	3.50-4.50	NA		0.052	0.5			3.2	0.15	0.049	0.58	0.11	0.15	1.9	0.25	
0173-97-0008	73-02268	1.20-2.20	NA		0.0098	0.1			1	0.043	0.013	0.15	0.015	0.02	0.27		
0173-97-0327	73-02465	3.20-3.70	NA			0.029			0.29		0.00095	0.014	0.00066	0.00091	0.019		
0173-97-0336	73-02464	7.00-7.50	NA	0.0061	0.14	1.4					0.06	0.56	0.43	0.54	6.3		
0173-97-0338	73-02464	7.00-7.50	NA	0.01	0.2	2.1					0.096	0.87	0.75	0.84	9.6		
		Count		2	7	8	1	8	6	5	8	8	8	8	8	1	2
		Mean		0.008050	0.065543	0.576125	0.01	0.06	1.76833	0.07440	0.03144	0.32438	0.17021	0.20486	2.39488	0.25	0.06
		Min		0.006100	0.009800	0.029000	0.01	0.03	0.29000	0.03100	0.00095	0.01400	0.00066	0.00091	0.01900	0.25	0.05
		Max		0.010000	0.200000	2.100000	0.01	0.10	4.80000	0.15000	0.09600	0.87000	0.75000	0.84000	9.60000	0.25	0.08
		Std. Dev.		0.002758	0.074751	0.761247		0.02	1.81516	0.04984	0.03353	0.30831	0.27491	0.31329	3.58673		0.02
		TINV (0.10,n-1)		6.313749	1.943181	1.894578		1.89	2.01505	2.13185	1.89458	1.89458	1.89458	1.89458	1.89458		6.31
		UCL95		0.020362	0.120444	1.086034		0.07	3.26156	0.12192	0.05391	0.53089	0.35435	0.41471	4.79739		0.15

Table A-3: Organic Results (Ash) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
Corrective Action Work Plan for Los Alamos National Laboratory

Sample ID	Location ID	Depth (ft)	Media	Tetrachlorodibenzodioxin [2,3,7,8-]	Tetrachlorodibenzodioxins (Total)	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Total)	Tetrachloroethene	Toluene	Trichloroethane [1,1,1-]	Trichloroethene	Trichlorofluoromethane	Trimethylbenzene [1,3,5-]
0173-96-0304	73-02264	0.00-0.00	NA					0.003		0.004		0.013	
0173-96-0305	73-02260	0.00-0.70	NA					0.004		0.006	0.006	0.013	
0173-96-0307	73-02262	0.00-1.00	NA					0.002		0.002	0.001	0.005	
0173-96-0309	73-02266	0.00-0.00	NA					0.002		0.004	0.007	0.009	
0173-96-0314	73-02268	0.00-1.00	NA					0.005		0.007	0.002	0.016	
0173-96-0316	73-02270	0.00-0.00	NA					0.008		0.003	0.004	0.006	
0173-96-0331	73-02252	0.10-0.30	NA										0.01
0173-96-0345	73-02268	0.00-1.00	NA					0.007		0.009	0.003	0.016	
0173-96-0346	73-02270	0.00-0.00	NA					0.009	0.001	0.006	0.005	0.007	
0173-97-0001	73-02268	1.20-2.20	NA	0.0033	0.1	0.029	0.51						
0173-97-0002	73-02268	0.50-1.00	NA	0.0045	0.12	0.042	0.79						
0173-97-0003	73-02261	0.50-1.00	NA	0.0064	0.27	0.032	0.57						
0173-97-0004	73-02261	3.50-4.50	NA	0.037	0.71	0.35	5.4						
0173-97-0008	73-02268	1.20-2.20	NA	0.0066	0.11	0.031	0.51						
0173-97-0327	73-02465	3.20-3.70	NA		0.0084	0.0026	0.025						
0173-97-0336	73-02464	7.00-7.50	NA	0.096	1.5	4.5	28						
0173-97-0338	73-02464	7.00-7.50	NA	0.14	2.1	6.7	42						
		Count		7	8	8	8	8	1	8	7	8	1
		Mean		0.04	0.61	1.46	9.73	0.01	0.001	0.01	0.00	0.01	0.01
		Min		0.00	0.01	0.00	0.03	0.00	0.001	0.00	0.00	0.01	0.01
		Max		0.14	2.10	6.70	42.00	0.01	0.001	0.01	0.01	0.02	0.01
		Std. Dev.		0.05	0.78	2.62	16.13	0.00		0.00	0.00	0.00	
		TINV (0.10,n-1)		1.94	1.89	1.89	1.89	1.89		1.89	1.94	1.89	
		UCL95		0.08	1.14	3.22	20.53	0.01		0.01	0.01	0.01	

Table A-3: Organic Results (Ash) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
Corrective Action Work Plan for Los Alamos National Laboratory

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Benzo(a) - anthracene	Benzo(a) - pyrene	Benzo(b) - fluoranthene	Benzoic Acid	Bis (2-ethylhexyl) phthalate	Chlordane[alpha-]	Chlordane[gamma-]	Chrysene	DDD[4,4'-]	DDE[4,4'-]
0173-96-0308	73-02255	0.00-0.50	Soil									0.0035				0.029
0173-96-0501	73-02326	14.00-15.00	Fill		0.025							0.028	0.038		0.31	0.089
0173-96-0502	73-02327	14.00-15.00	Fill												0.042	0.01
0173-97-0311	73-02451	0.10-0.50	Soil													
0173-97-0321	73-02457	0.10-0.50	Soil							0.092						
0173-97-0322	73-02458	0.10-0.50	Soil							0.043						
0173-97-0323	73-02459	0.10-0.50	Soil													
0173-97-0324	73-02460	0.10-0.50	Soil													
0173-97-0325	73-02461	0.10-0.50	Soil	0.035		0.061	0.1	0.11	0.21	0.051	0.05			0.11		
0173-97-0326	73-02462	0.10-0.50	Soil	0.78												
RE73-99-0093	73-10098	7.50-7.75	Fill													0.0043
RE73-99-0102	73-10106	4.80-5.30	Fill												0.006	
RE73-99-0104	73-10107	6.00-6.50	Fill													0.0046
		Count		2	1	1	1	1	1	3	1	2	1	1	3	5
		Mean		0.41	0.03	0.06	0.10	0.11	0.21	0.06	0.05	0.02	0.04	0.11	0.12	0.03
		Min		0.04	0.03	0.06	0.10	0.11	0.21	0.04	0.05	0.00	0.04	0.11	0.01	0.00
		Max		0.78	0.03	0.06	0.10	0.11	0.21	0.09	0.05	0.03	0.04	0.11	0.31	0.09
		Std. Dev.		0.53						0.03		0.02			0.17	0.04
		TINV (0.10,n-1)		6.31						2.92		6.31			2.92	2.13
		UCL95		2.76						0.11		0.09			0.40	0.06

Table A-3: Organic Results (Ash) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
Corrective Action Work Plan for Los Alamos National Laboratory

Sample ID	Location ID	Depth (ft)	Media	DDT[4,4'-]	Di-n-butyl phthalate	Fluoranthene	Heptachlorodi benzodioxin [1,2,3,4,6,7,8-]	Heptachlorodi benzodioxins (Total)	Heptachlorodi benzofuran [1,2,3,4,6,7,8-]	Heptachlorodi benzofuran [1,2,3,4,7,8,9-]	Heptachlorodi benzofurans (Total)	Hexachlorodi benzodioxin [1,2,3,4,7,8-]	Hexachlorodi benzodioxin [1,2,3,6,7,8-]	Hexachlorodi benzodioxin [1,2,3,7,8,9-]	Hexachlorodi benzodioxins (Total)
0173-96-0308	73-02255	0.00-0.50	Soil	0.034											
0173-96-0501	73-02326	14.00-15.00	Fill	0.11											
0173-96-0502	73-02327	14.00-15.00	Fill	0.021											
0173-97-0311	73-02451	0.10-0.50	Soil				1.00E-12		0.00065						
0173-97-0321	73-02457	0.10-0.50	Soil				3.50E-12	0.0069	0.0022		0.0041				0.0023
0173-97-0322	73-02458	0.10-0.50	Soil				5.00E-12	0.0099	0.0016		0.0029		0.00034		0.0027
0173-97-0323	73-02459	0.10-0.50	Soil		0.19										
0173-97-0324	73-02460	0.10-0.50	Soil				1.40E-11	0.026	0.0033		0.0073	0.00027	0.00081	0.00085	0.0068
0173-97-0325	73-02461	0.10-0.50	Soil		0.077	0.24	1.00E-10	0.17	0.044	0.0043	0.12	0.0033	0.0068	0.0073	0.052
0173-97-0326	73-02462	0.10-0.50	Soil												
RE73-99-0093	73-10098	7.50-7.75	Fill												
RE73-99-0102	73-10106	4.80-5.30	Fill	0.19											
RE73-99-0104	73-10107	6.00-6.50	Fill	0.03											
		Count		5	2	1	5	4	5	1	4	2	3	2	4
		Mean		0.08	0.13	0.24	2.47E-11	5.32E-02	1.04E-02	4.30E-03	3.36E-02	1.79E-03	2.65E-03	4.08E-03	1.60E-02
		Min		0.02	0.08	0.24	1.00E-12	6.90E-03	6.50E-04	4.30E-03	2.90E-03	2.70E-04	3.40E-04	8.50E-04	2.30E-03
		Max		0.19	0.19	0.24	1.00E-10	1.70E-01	4.40E-02	4.30E-03	1.20E-01	3.30E-03	6.80E-03	7.30E-03	5.20E-02
		Std. Dev.		0.07	0.08		4.24E-11	7.83E-02	1.88E-02		5.76E-02	2.14E-03	3.60E-03	4.56E-03	2.41E-02
		TINV (0.10,n-1)		2.13	6.31		2.13E+00	2.35E+00	2.13E+00		2.35E+00	6.31E+00	2.92E+00	6.31E+00	2.35E+00
		UCL95		0.15	0.49		6.51E-11	1.45E-01	2.83E-02		1.01E-01	1.14E-02	8.72E-03	2.44E-02	4.43E-02

Table A-3: Organic Results (Ash) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
Corrective Action Work Plan for Los Alamos National Laboratory

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofuran [1,2,3,4,7,8-]	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]	Hexachlorodibenzofurans (Total)	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzodioxin [1,2,3,7,8-]	Pentachlorodibenzodioxins (Total)	Pentachlorodibenzofuran [1,2,3,7,8-]	Pentachlorodibenzofuran [2,3,4,7,8-]
0173-96-0308	73-02255	0.00-0.50	Soil											
0173-96-0501	73-02326	14.00-15.00	Fill											
0173-96-0502	73-02327	14.00-15.00	Fill											
0173-97-0311	73-02451	0.10-0.50	Soil							0.00071				
0173-97-0321	73-02457	0.10-0.50	Soil	0.00066	0.00041	0.00032			0.02	0.0024		0.00066		0.00068
0173-97-0322	73-02458	0.10-0.50	Soil				0.0013		0.037	0.0025				
0173-97-0323	73-02459	0.10-0.50	Soil											
0173-97-0324	73-02460	0.10-0.50	Soil	0.00067	0.0021		0.028		0.082	0.005	0.00037	0.0016		0.00045
0173-97-0325	73-02461	0.10-0.50	Soil	0.0059	0.022	0.0085	0.32	0.041	0.61	0.055	0.0026	0.017	0.0022	0.0025
0173-97-0326	73-02462	0.10-0.50	Soil											
RE73-99-0093	73-10098	7.50-7.75	Fill											
RE73-99-0102	73-10106	4.80-5.30	Fill											
RE73-99-0104	73-10107	6.00-6.50	Fill											
		Count		3	3	2	3	1	4	5	2	3	1	3
		Mean		2.41E-03	8.17E-03	4.41E-03	1.16E-01	0.04	0.18725	0.01312	0.00149	0.00642	0.00220	0.00121
		Min		6.60E-04	4.10E-04	3.20E-04	1.30E-03	0.04	0.02000	0.00071	0.00037	0.00066	0.00220	0.00045
		Max		5.90E-03	2.20E-02	8.50E-03	3.20E-01	0.04	0.61000	0.05500	0.00260	0.01700	0.00220	0.00250
		Std. Dev.		3.02E-03	1.20E-02	5.78E-03	1.77E-01		0.28304	0.02346	0.00158	0.00917		0.00112
		TINV (0.10,n-1)		2.92E+00	2.92E+00	6.31E+00	2.92E+00		2.35336	2.13185	6.31375	2.91999		2.91999
		UCL95		7.51E-03	2.84E-02	3.02E-02	4.14E-01		0.52030	0.03549	0.00852	0.02189		0.00310

Table A-3: Organic Results (Ash) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
Corrective Action Work Plan for Los Alamos National Laboratory

Sample ID	Location ID	Depth (ft)	Media	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Tetrachlorodibenzodioxin [2,3,7,8-]	Tetrachlorodibenzodioxins (Total)	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Total)
0173-96-0308	73-02255	0.00-0.50	Soil							
0173-96-0501	73-02326	14.00-15.00	Fill							
0173-96-0502	73-02327	14.00-15.00	Fill							
0173-97-0311	73-02451	0.10-0.50	Soil							
0173-97-0321	73-02457	0.10-0.50	Soil	0.0094				0.0011	0.0031	0.026
0173-97-0322	73-02458	0.10-0.50	Soil	0.0019				0.00081	0.00085	0.0045
0173-97-0323	73-02459	0.10-0.50	Soil							
0173-97-0324	73-02460	0.10-0.50	Soil	0.017				0.00073	0.00097	0.017
0173-97-0325	73-02461	0.10-0.50	Soil	0.089	0.21	0.32	0.00069	0.012	0.0062	0.093
0173-97-0326	73-02462	0.10-0.50	Soil							
RE73-99-0093	73-10098	7.50-7.75	Fill							
RE73-99-0102	73-10106	4.80-5.30	Fill							
RE73-99-0104	73-10107	6.00-6.50	Fill							
		Count		4	1	1	1	4	4	4
		Mean		0.02933	0.21	0.32	0.00	0.00	0.00	0.04
		Min		0.00190	0.21	0.32	0.00	0.00	0.00	0.00
		Max		0.08900	0.21	0.32	0.00	0.01	0.01	0.09
		Std. Dev.		0.04026				0.01	0.00	0.04
		TINV (0.10,n-1)		2.35336				2.35	2.35	2.35
		UCL95		0.07670				0.01	0.01	0.08

Table A-3: Organic Results (Ash) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
Corrective Action Work Plan for Los Alamos National Laboratory

Sample ID	Location ID	Depth (ft)	Media	DDT[4,4'-]	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)	Isopropyltoluene [4-]	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Total)
0173-97-0337	73-02463	3.50-4.00	Qbt 3		2.80E-13	0.00043	0.00014	0.00014		0.0003	0.00068
RE73-99-0094	73-02207	5.50-6.00	Qbt 3	0.0076							
RE73-99-0109	73-10096	4.30-4.80	Qbt 3	0.0041					0.00076		
		Count		2	1	1	1	1	1	1	1
		Mean		0.01	2.80E-13	4.30E-04	1.40E-04	1.40E-04	7.60E-04	3.00E-04	6.80E-04
		Min		0.00	2.80E-13	4.30E-04	1.40E-04	1.40E-04	7.60E-04	3.00E-04	6.80E-04
		Max		0.01	2.80E-13	4.30E-04	1.40E-04	1.40E-04	7.60E-04	3.00E-04	6.80E-04
		Std. Dev.		0.00							
		TINV (0.10,n-1)		6.31							
		UCL95		0.02							

Table A-4: Laboratory Results for Organic Compounds
Incinerator Ash Characterization Sampling - 2005
Corrective Action Work Plan for Los Alamos National Laboratory

Sample Name:	RE73-05-58829		RE73-05-58835		RE73-05-58841		RE73-05-58878		RE73-05-58879	
Matrix:	Ash		Ash		Ash		Ash		Ash	
Sample Date:	4/19/2005		4/19/2005		4/19/2005		4/20/2005		4/20/2005	
Units:	(ug/kg)		(ug/kg)		(ug/kg)		(ug/kg)		(ug/kg)	
	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
VOCs										
Bromomethane	3.5	13	4.7	12	2.4	13	ND	10	3	11
Acetone	ND	25	ND	25	ND	25	26	20	ND	22
Methylene Chloride	11	6.3	12	6.2	6.6	6.3	14	5	31	5.5
Carbon Disulfide	ND	6.3	ND	6.2	ND	6.3	ND	5	ND	5.5
2-Butanone (MEK)	ND	25	ND	25	ND	25	3.9	20	ND	22
Chloroform	ND	6.3	ND	6.2	ND	6.3	ND	5	ND	5.5
Trichloroethene	0.71	6.3	ND	6.2	ND	6.3	ND	5	ND	5.5
Bromodichloromethane	ND	6.3	ND	6.2	ND	6.3	ND	5	ND	5.5
Toluene	ND	6.3	0.99	6.2	ND	6.3	ND	5	ND	5.5
Chlorodibromomethane	ND	6.3	ND	6.2	ND	6.3	ND	5	ND	5.5
Xylenes (total)	ND	6.3	ND	6.2		6.3	ND	5	3.7	5.5
1,2,4-Trimethylbenzene	0.79	6.3	ND	6.2	ND	6.3	ND	5	ND	5.5
p-Isopropyltoluene	17	6.3	ND	6.2	1.3	6.3	ND	5	ND	5.5
1,3-Dichlorobenzene	ND	6.3	2.1	6.2	ND	6.3	ND	5	ND	5.5
1,4-Dichlorobenzene	ND	6.3	ND	6.2	ND	6.3	ND	5	2.5	5.5
1,2-Dichlorobenzene	ND	6.3	2.6	6.2	ND	6.3	ND	5	ND	5.5
SVOCs										
1,3-Dichlorobenzene	160	410	ND	410	ND	410			ND	360
1,4-Dichlorobenzene	170	410	ND	410	ND	410			ND	360
Benzyl alcohol	ND	410	ND	410	ND	410			ND	360
1,2-Dichlorobenzene	150	410	ND	410	ND	410			ND	360
Nitrobenzene	210	410	ND	410	ND	410			ND	360
2-Nitrophenol	180	410	ND	410	ND	410			ND	360
Benzoic Acid	830	2000	490	2000	ND	2000			ND	1700
1,2,4-Trichlorobenzene	180	410	ND	410	ND	410			ND	360
Naphthalene	130	410	ND	410	ND	410			ND	360
Hexachlorobutadiene	140	410	ND	410	ND	410			ND	360
2-Methylnaphthalene	120	410	ND	410	ND	410			ND	360
2,4,6-Trichlorophenol	130	410	ND	410	ND	410			ND	360
2-Chloronaphthalene	140	410	ND	410	ND	410			ND	360
Acenaphthylene	150	410	ND	410	ND	410			ND	360
Acenaphthene	130	410	ND	410	ND	410			ND	360
Dibenz(a,h)anthracene	86	410	ND	410	ND	410			ND	360
Dibenzofuran	140	410	ND	410	ND	410			ND	360
Fluorene	150	410	ND	410	ND	410			ND	360
4-Chlorophenyl phenyl ether	190	410	ND	410	ND	410			ND	360
N-Nitrosodiphenylamine	190	410	ND	410	ND	410			ND	360
Pyrene	470	410	110	410	320	410			ND	360
4-Bromophenyl phenyl ether	190	410	ND	410	ND	410			ND	360
Hexachlorobenzene	450	410	110	410	ND	410			ND	360
Pentachlorophenol	180	2000	ND	2000	ND	2000			ND	1700
Phenanthrene	150	410	ND	410	200	410			ND	360
Anthracene	140	410	ND	410	ND	410			ND	360
Fluoranthene	140	410	ND	410	300	410			ND	360
Benzo(a)anthracene	150	410	ND	410	150	410			ND	360
Chrysene	160	410	ND	410	150	410			ND	360
Bis(2-ethylhexyl)phthalate	88	410	97	410	98	410			330	360
Benzo(b)fluoranthene	180	410	ND	410	120	410			ND	360
Benzo(k)fluoranthene	150	410	ND	410	120	410			ND	360
Benzo(a)pyrene	540	410	ND	410	110	410			ND	360
Indeno(1,2,3-cd)pyrene	530	410	ND	410	ND	410			ND	360
Benzo(ghi)perylene	130	410	340	410	ND	410			ND	360
Di-n-butyl phthalate	500	830	ND	820	ND	830			ND	360
Benzo(ghi)perylene	420	830	ND	820	ND	830			ND	360
PCBs										
Aroclor 1254	ND	41	58	41	96	41			380	36
Dioxins/Furans										
TEQ	0.0612		0.0742		0.0768				0.0353	

Table A-4: Laboratory Results for Organic Compounds
Incinerator Ash Characterization Sampling - 2005
Corrective Action Work Plan for Los Alamos National Laboratory

Sample Name:	RE73-05-58923		RE73-05-58924		Min	Max	TCLP	Pass/Fail
Matrix:	Water		Water				(ug/L)	
Sample Date:	4/20/2005		4/20/2005					
Units:	ug/L		ug/L					
	Result	RL	Result	RL				
VOCs								
Bromomethane	ND	2	ND	10	2.4	4.7		NA
Acetone	ND	10	3.4	50	3.4	26		NA
Methylene Chloride	5.5	5	6	5	5.5	31		NA
Carbon Disulfide	2.2	1	ND	5	2.2	2.2		NA
2-Butanone (MEK)	ND	5	ND	25	3.9	3.9	200000	Pass
Chloroform	2.1	1	2.5	5	2.1	2.5	6000	Pass
Trichloroethene	ND	1	ND	5	0.71	0.71	500	Pass
Bromodichloromethane	0.34	1	ND	5	0.34	0.34		NA
Toluene	0.27	1	ND	5	0.27	0.99		NA
Chlorodibromomethane	0.19	1	1.9	5	0.19	1.9		NA
Xylenes (total)	ND	1	ND	5	3.7	3.7		NA
1,2,4-Trimethylbenzene	ND	1	ND	5	0.79	0.79		NA
p-Isopropyltoluene	ND	1	ND	1	1.3	17		NA
1,3-Dichlorobenzene	ND	1	ND	5	2.1	2.1		NA
1,4-Dichlorobenzene	0.14	1	ND	5	0.14	2.5	7500	Pass
1,2-Dichlorobenzene	ND	1	ND	5	2.6	2.6		NA
SVOCs								
1,3-Dichlorobenzene	ND	10	ND	10	160	160		NA
1,4-Dichlorobenzene	ND	10	ND	10	170	170	7500	Pass
Benzyl alcohol	ND	10	3.1	10	3.1	3.1		NA
1,2-Dichlorobenzene	ND	10	ND	10	150	150		NA
Nitrobenzene	ND	10	ND	10	210	210	2000	Pass
2-Nitrophenol	ND	10	ND	10	180	180		NA
Benzoic Acid	ND	20	ND	20	490	830		NA
1,2,4-Trichlorobenzene	ND	10	ND	10	180	180		NA
Naphthalene	ND	10	ND	10	130	130		NA
Hexachlorobutadiene	ND	10	ND	10	140	140	500	Pass
2-Methylnaphthalene	ND	10	ND	10	120	120		NA
2,4,6-Trichlorophenol	ND	10	ND	10	130	130	2000	Pass
2-Chloronaphthalene	ND	10	ND	10	140	140		NA
Acenaphthylene	ND	10	ND	10	150	150		NA
Acenaphthene	ND	10	ND	10	130	130		NA
Dibenz(a,h)anthracene	ND	10	ND	10	86	86		NA
Dibenzofuran	ND	10	ND	10	140	140		NA
Fluorene	ND	10	ND	10	150	150		NA
4-Chlorophenyl phenyl ether	ND	10	ND	10	190	190		NA
N-Nitrosodiphenylamine	ND	10	ND	10	190	190		NA
Pyrene	ND	10	ND	10	110	470		NA
4-Bromophenyl phenyl ether	ND	10	ND	10	190	190		NA
Hexachlorobenzene	ND	10	ND	10	110	450	130	Pass
Pentachlorophenol	ND	50	ND	50	180	180	100000	Pass
Phenanthrene	ND	10	ND	10	150	200		NA
Anthracene	ND	10	ND	10	140	140		NA
Fluoranthene	ND	10	ND	10	140	300		NA
Benzo(a)anthracene	ND	10	ND	10	150	150		NA
Chrysene	ND	10	ND	10	150	160		NA
Bis(2-ethylhexyl)phthalate	ND	10	ND	10	88	330		NA
Benzo(b)fluoranthene	ND	10	ND	10	120	180		NA
Benzo(k)fluoranthene	ND	10	ND	10	120	150		NA
Benzo(a)pyrene	ND	10	ND	10	110	540		NA
Indeno(1,2,3-cd)pyrene	ND	10	ND	10	530	530		NA
Benzo(ghi)perylene	ND	10	ND	10	130	340		NA
Di-n-butyl phthalate	ND	10	ND	10	500	500		NA
Benzo(ghi)perylene	ND	10	ND	10	420	420		NA
PCBs								
Aroclor 1254	ND	1	ND	1	58	380		NA
Dioxins/Furans								
TEQ					0.0353	0.0768		NA

Table A-5: Radiological Results (Ash) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
Corrective Action Work Plan for Los Alamos National Laboratory

Sample ID	Location ID	Depth (ft)	Media (Units)	Gross alpha (pCi/g)	Gross beta (pCi/g)	Gross gamma (pCi/g)	Cs-137 (pCi/g)	Pu-239 (pCi/g)	U-234 (pCi/g)	U-235 (pCi/g)	U-238 (pCi/g)	Tritium (pCi/ml)
0173-96-0331	73-02252	0.1-0.3	NA	-	-	-						0.08
0173-96-0331	73-02252	0.10-0.30	NA	8.9	6.7	6.65						-
0173-96-0305	73-02260	0.00-0.70	NA	6.4	7.7	6.98						-
0173-96-0307	73-02262	0.00-1.00	NA	2.88	-	2.24						-
0173-96-0304	73-02264	0.00-0.00	NA	4.7	7.8	5.32						-
0173-96-0309	73-02266	0.00-0.00	NA	11.6	8.8	5.33						-
0173-96-0314	73-02268	0.00-1.00	NA	8.7	9.4	7.11						-
0173-96-0345	73-02268	0.00-1.00	NA	10.7	9	6.21						-
0173-96-0316	73-02270	0.00-0.00	NA	2.94	5.6	3.99						-
0173-96-0346	73-02270	0.00-0.00	NA	-	5.2	2.48						-
0173-97-0331	73-02467	0.10-0.50	NA	22.2	13.8	9.15	-	-	12.57	0.5	8.84	
0173-97-0332	73-02468	0.1-0.5	NA	-	-	-	0.239	-	-	-	-	
0173-97-0332	73-02468	0.10-0.50	NA	19.8	21.4	8.89	-	-	17.1	0.771	15.93	
RE73-98-0001	73-10000	0.00-0.50	NA	-	-	-	-	-	5.37	0.308	2.51	
RE73-98-0001	73-10000	0-0.5	NA	-	-	-	1.51	2.54	-	-	-	
RE73-98-0002	73-10000	0.00-0.50	NA	-	-	-	-	-	4.9	0.578	2.23	
RE73-98-0002	73-10000	0-0.5	NA	-	-	-	1.45	2.5	-	-	-	
RE73-98-0003	73-10001	0.00-0.50	NA	-	-	-	-	-	3.84	0.352	1.98	
RE73-98-0003	73-10001	0-0.5	NA	-	-	-	0.98	0.522	-	-	-	
RE73-98-0066	73-10002	0.00-0.50	NA	-	-	-	-	-	2.82	0.219	1.44	
RE73-98-0066	73-10002	0-0.5	NA	-	-	-	0.87	0.801	-	-	-	
RE73-98-0004	73-10003	0.00-0.50	NA	-	-	-	-	-	14.15	0.765	6.6	
RE73-98-0004	73-10003	0-0.5	NA	-	-	-	-	1.228	-	-	-	
RE73-98-0005	73-10004	0.00-0.50	NA	-	-	-	-	-	14.53	0.966	11.62	
RE73-98-0005	73-10004	0-0.5	NA	-	-	-	0.34	0.731	-	-	-	
RE73-98-0006	73-10005	0.00-0.50	NA	-	-	-	-	-	9.41	0.783	8.11	
RE73-98-0006	73-10005	0-0.5	NA	-	-	-	-	0.709	-	-	-	
RE73-98-0007	73-10006	0.00-0.50	NA	-	-	-	-	-	5.89	0.523	4.31	
RE73-98-0007	73-10006	0-0.5	NA	-	-	-	0.32	1.82	-	-	-	
RE73-98-0008	73-10007	0.00-0.50	NA	-	-	-	-	-	4.97	0.289	4.32	
RE73-98-0008	73-10007	0-0.5	NA	-	-	-	0.26	1.052	-	-	-	
RE73-98-0009	73-10008	0.00-0.50	NA	-	-	-	-	-	3.15	0.211	2.41	
RE73-98-0009	73-10008	0-0.5	NA	-	-	-	0.5	0.469	-	-	-	
RE73-98-0010	73-10009	0.00-0.50	NA	-	-	-	-	-	3.53	0.219	2.83	
RE73-98-0010	73-10009	0-0.5	NA	-	-	-	0.33	0.363	-	-	-	
RE73-98-0011	73-10010	0.00-0.50	NA	-	-	-	-	-	5.7	0.439	4.57	
RE73-98-0011	73-10010	0-0.5	NA	-	-	-	0.38	0.627	-	-	-	
RE73-98-0012	73-10011	0.00-0.50	NA	-	-	-	-	-	6.71	0.353	4.12	
RE73-98-0012	73-10011	0-0.5	NA	-	-	-	-	1.95	-	-	-	
RE73-98-0027	73-10026	0.00-0.50	NA	-	-	-	-	-	1.62	0.082	1.5	
RE73-98-0027	73-10026	0-0.5	NA	-	-	-	0.35	1.242	-	-	-	
RE73-98-0028	73-10027	0.00-0.50	NA	-	-	-	-	-	1.45	0.085	1.332	
RE73-98-0028	73-10027	0-0.5	NA	-	-	-	-	0.202	-	-	-	
RE73-98-0029	73-10028	0.00-0.50	NA	-	-	-	-	-	1.298	0.086	1.253	
RE73-98-0029	73-10028	0-0.5	NA	-	-	-	-	0.088	-	-	-	
RE73-98-0030	73-10029	0.00-0.50	NA	-	-	-	-	-	2.88	0.201	2.26	
RE73-98-0030	73-10029	0-0.5	NA	-	-	-	-	0.51	-	-	-	
RE73-98-0031	73-10030	0.00-0.50	NA	-	-	-	-	-	1.49	0.083	1.281	
RE73-98-0031	73-10030	0-0.5	NA	-	-	-	-	0.273	-	-	-	
RE73-98-0032	73-10031	0.00-0.50	NA	-	-	-	-	-	1.86	0.158	1.69	
RE73-98-0032	73-10031	0-0.5	NA	-	-	-	0.53	0.225	-	-	-	
RE73-98-0033	73-10032	0.00-0.50	NA	-	-	-	-	-	2.67	0.226	2.23	
RE73-98-0033	73-10032	0-0.5	NA	-	-	-	0.43	0.353	-	-	-	
RE73-98-0034	73-10033	0.00-0.50	NA	-	-	-	-	-	1.43	0.129	1.205	
RE73-98-0034	73-10033	0-0.5	NA	-	-	-	0.42	0.218	-	-	-	
RE73-98-0035	73-10034	0.00-0.50	NA	-	-	-	-	-	3.18	0.306	2.98	
RE73-98-0035	73-10034	0-0.5	NA	-	-	-	0.36	0.322	-	-	-	
RE73-98-0068	73-10034	0.00-0.50	NA	-	-	-	-	-	3.04	0.216	2.61	
RE73-98-0068	73-10034	0-0.5	NA	-	-	-	0.27	0.546	-	-	-	
RE73-98-0036	73-10035	0.00-0.50	NA	-	-	-	-	-	4	0.409	3.48	
RE73-98-0036	73-10035	0-0.5	NA	-	-	-	0.42	0.48	-	-	-	
RE73-98-0037	73-10036	0.00-0.50	NA	-	-	-	-	-	5.25	0.383	4.92	
RE73-98-0037	73-10036	0-0.5	NA	-	-	-	0.29	0.346	-	-	-	
RE73-98-0038	73-10037	0.00-0.50	NA	-	-	-	-	-	1.312	0.131	1.215	
RE73-98-0038	73-10037	0-0.5	NA	-	-	-	0.29	0.115	-	-	-	
		Count		10	10	11	20	26	28	28	28	1
		Mean		9.88	9.54	5.85	0.53	0.78	5.22	0.35	3.92	0.08
		Min		2.88	5.20	2.24	0.24	0.09	1.30	0.08	1.21	0.08
		Max		22.20	21.40	9.15	1.51	2.54	17.10	0.97	15.93	0.08
		Std. Dev.		6.60	4.81	2.28	0.38	0.70	4.38	0.24	3.48	
		TINV (0.10,n-1)		1.833	1.833	1.812	1.729	1.708	1.703	1.703	1.703	
		UCL95*		13.71	12.33	7.10	0.67	1.01	**6.63**	0.43	**5.04**	0.08
Soil Background Value							1.65	0.054	2.59	0.2	2.29	0.76

*** Note: Red/Bold indicates value exceeds Background Value. If there is only one sample result, that result is used for comparison to the Background Value.**

Table A-5: Radiological Results (Ash) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
Corrective Action Work Plan for Los Alamos National Laboratory

Sample ID	Location ID	Depth (ft)	Media (Units)	Gross alpha (pCi/g)	Gross beta (pCi/g)	Gross gamma (pCi/g)	Tritium (pCi/ml)
0173-96-0302	73-02253	0.00-0.50	Soil	0.66	1.04	8.08	-
0173-96-0320	73-02254	0.00-0.50	Soil	3.55	3.6	14.1	0.054
0173-96-0308	73-02255	0.00-0.50	Soil	3.07	4.33	16.5	0.064
0173-96-0501	73-02326	14.00-15.00	Fill	6.02	3.15	12.3	-
0173-96-0502	73-02327	14.00-15.00	Fill	2.44	1.42	13	-
		Count		5	5	5	2
		Mean		3.15	2.71	12.80	0.06
		Min		0.66	1.04	8.08	0.05
		Max		6.02	4.33	16.50	0.06
		Std. Dev.		1.94	1.42	3.08	0.01
		TINV (0.10,n-1)		2.132	2.132	2.132	6.314
		UCL95		5.00	4.06	15.73	0.09
Soil Background Value							0.76

Table A-6: Laboratory Results for Radionuclides
Incinerator Ash Characterization Sampling - 2005
Corrective Action Work Plan for Los Alamos National Laboratory

Sample ID		Am-241		U-234		U-235		U-238		Pu-238		Pu-239		Ra-226		Ra-224		Th-234		Cs-137	
Units in pCi/g	Location	Result	MDC	Result	MDC	Result	MDC	Result	MDC	Result	MDC	Result	MDC	Result	MDC	Result	MDC	Result	MDC	Result	MDC
RE-73-05-58842/43	B3	0.036	0.015	9.090	0.030	0.360	0.021	7.160	0.010	0.017	0.034	1.070	0.020	6.240	1.100	2.440	1.600	5.050	1.000	0.048	0.095
RE-73-05-58844/45	Ash	0.029	0.010	1.700	0.020	0.081	0.025	1.360	0.017	0.017	0.034	0.143	0.027	1.950	0.940	2.190	1.400	0.600	1.200	0.138	0.060
RE-73-05-58846	B4	0.012	0.023	3.290	0.020	0.157	0.025	2.770	0.017	0.017	0.034	0.296	0.027	2.060	0.830	0.700	1.400	1.340	0.670	0.030	0.060
RE73-05-58824	C3 East	0.035	0.029	8.410	0.050	0.400	0.023	7.640	0.030	0.015	0.030	0.360	0.014	4.740	0.800	2.900	1.600	3.870	0.890	0.039	0.077
RE73-05-58825	C3 West	0.014	0.027	12.400	0.040	0.458	0.047	5.780	0.040	0.015	0.030	2.340	0.030	4.910	1.900	0.550	1.100	2.390	0.700	0.050	0.100
RE73-05-58826	C2 East	0.024	0.016	8.220	0.044	0.475	0.041	7.010	0.020	0.010	0.020	0.475	0.017	6.210	1.300	2.040	1.800	4.330	1.000	0.055	0.110
RE73-05-58827	C2 West	0.010	0.019	9.970	0.030	0.494	0.023	6.970	0.040	0.010	0.020	0.544	0.006	6.910	2.400	5.400	2.300	5.490	1.200	0.070	0.140
RE73-05-58828	C1	0.037	0.019	5.230	0.030	0.267	0.052	3.310	0.050	0.022	0.044	1.680	0.023	6.650	2.200	2.340	1.600	5.220	0.930	0.050	0.100
RE73-05-58830	D2	0.023	0.019	5.540	0.030	0.264	0.022	4.990	0.040	0.010	0.020	0.375	0.016	3.360	1.100	0.700	1.400	2.200	0.930	0.060	0.120
RE73-05-58831	D3	0.009	0.018	20.000	0.020	1.060	0.040	18.700	0.040	0.010	0.020	0.310	0.006	8.120	2.600	2.300	1.600	7.500	1.100	0.045	0.089
RE73-05-58832	D3	0.003	0.006	3.540	0.040	0.193	0.039	2.610	0.040	0.010	0.020	0.236	0.014	2.810	0.940	2.110	1.500	1.790	0.860	0.036	0.071
RE73-05-58833	E3	0.010	0.020	1.590	0.040	0.057	0.041	1.240	0.020	0.015	0.030	0.219	0.018	3.970	1.100	2.040	1.700	2.970	1.000	0.046	0.092
RE73-05-58834	E3	0.020	0.039	1.730	0.040	0.092	0.025	1.150	0.050	0.017	0.033	0.186	0.007	0.650	1.300	1.990	1.500	0.550	1.100	0.045	0.090
RE73-05-58836	D4	0.014	0.027	2.240	0.030	0.106	0.043	1.930	0.050	0.015	0.030	0.104	0.017	1.900	0.810	1.150	1.100	1.060	0.670	0.092	0.056
RE73-05-58837	C4	0.011	0.021	1.680	0.040	0.089	0.024	1.450	0.020	0.010	0.020	0.100	0.006	1.370	0.580	1.130	0.940	1.000	0.520	0.025	0.050
RE73-05-58838	B1	0.011	0.022	37.300	0.200	2.020	0.110	31.200	0.200	0.010	0.020	0.848	0.013	25.200	4.700	0.900	1.800	21.100	1.500	0.060	0.120
RE73-05-58839	B2	0.019	0.038	7.400	0.040	0.340	0.050	4.840	0.030	0.010	0.019	0.455	0.011	4.390	0.990	2.490	1.600	2.490	1.000	0.048	0.095
RE73-05-58840	B3	0.019	0.037	3.030	0.060	0.194	0.056	2.420	0.050	0.010	0.02	0.842	0.006	1.640	1.4	0.700	1.400	1.160	0.78	0.060	0.12
Primary Emission		Alpha		Alpha		Alpha		Alpha		Alpha		Alpha		Alpha		Alpha		Alpha		Beta	
Count		18		18		18		18		18		18		18		18		18		18	
Detects >MDC		6		18.000		18		18.000		0		18.000		17		13		16		2	
Mean		0.018		7.909		0.395		6.252		0.013		0.588		5.171		1.893		3.895		0.055	
Min		0.003		1.590		0.057		1.150		0.010		0.100		0.650		0.550		0.550		0.025	
Max		0.037		37.300		2.020		31.200		0.022		2.340		25.200		5.400		21.100		0.138	
Std. Dev.		0.010		8.748		0.470		7.478		0.004		0.595		5.459		1.156		4.726		0.026	
TINV (0.10,n-1)		1.740		1.740		1.740		1.740		1.740		1.740		1.740		1.740		1.740		1.740	
UCL95		0.023		11.496		0.588		9.318		0.015		0.832		7.409		2.367		5.833		0.066	
Background (UTL)																					
BV		0.013		2.59		0.2		2.29		0.023		0.054		2.59		2.33		2.29		1.65	
Detects >BV		6		13		10		13		0		18		12		5		10		0	
Mean/BV		1.42		3.05		1.97		2.73		0.58		10.89		2.00						0.03	
UCL95/BV		1.74		4.44		2.94		4.07		0.64		15.40		2.86						0.04	
1999 Report Comparison																					
UCL-95		0.16		7.2		0.4		5.2		0.005		1.3		5.3						0.49	
Max		1.33		17.1		0.97		15.9		0.066		2.82		11.1						1.51	
UCL95/'99 UCL95		0.14		1.60		1.47		1.79		2.96		0.64		1.40						0.13	

LISTS OF TABLES PER NMED/LANL ORDER ON CONSENT (continued)

5 Summaries of historical groundwater elevation and depth to groundwater data:
Groundwater is discussed in Section 3.2 (Subsurface Conditions).

6 Summaries of historical groundwater laboratory analytical data:
(There are no historical groundwater analysis, nor any monitoring wells for SWMU 73-002)

7 Summary of historical surface water laboratory analytical data:
(There are no historical surface water laboratory analytical data for SWMU 73-002)

8 Summary of historical air sample screening and chemical analytical data:
(No table generated due to no air sample data is available)

9 Summary of historical pilot or other test data:
(None Performed)

9.0 FIGURES

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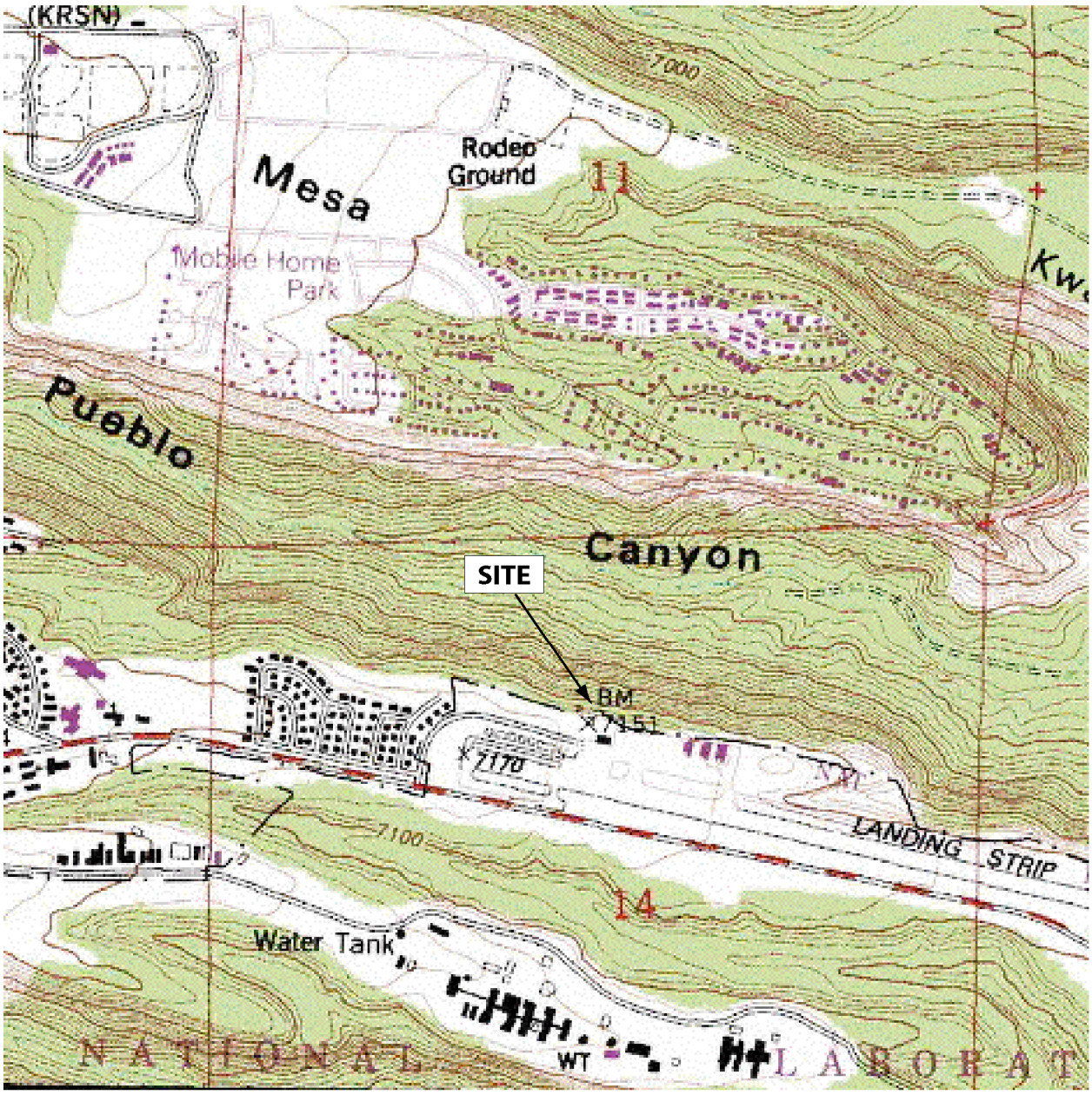

N

Source: USGS 7.5 minute, Guaje Mountain Quadrangle, 1984

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U.S. Army Corps of Engineers, Sacramento District

Los Alamos National Laboratory, U.S. Department of Energy

Consolidated Unit 73-002-99, Los Alamos National Laboratory, New Mexico

Figure 1
Site Location Map

04-400.12\LANL\Graphics\Waste Characterization Workplan\Fig 1 - Site Location Map.ai

N

Source: USGS Aerial Photograph for 1996 (from TerraServer).

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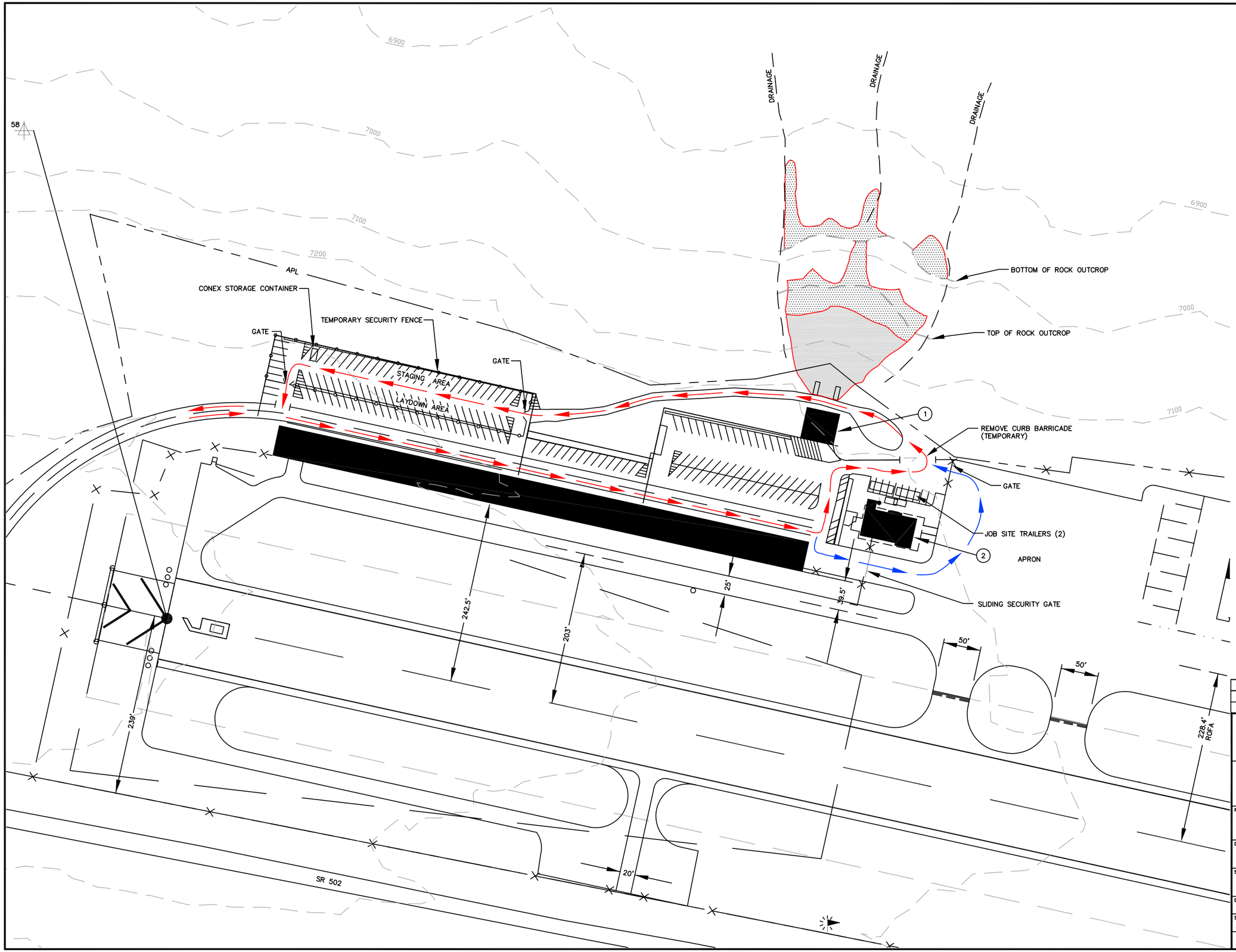
U.S. Army Corps of Engineers, Sacramento District

Los Alamos National Laboratory, U.S. Department of Energy

Consolidated Unit 73-002-99, Los Alamos National Laboratory, New Mexico

Figure 2
Site Layout

04-400.12\LANL\Graphics\Waste Characterization Workplan\Fig 1 - Site Layout.ai



LEGEND

ITEM	EXISTING	FUTURE
AIRPORT PROPERTY LINE	APL	
AIRFIELD PAVEMENT		
TAXILANE OBJECT FREE LINE		
BUILDINGS		
8' CHAIN LINK FENCE		
TEMP. CHAIN LINK FENCE		
AIRPORT BEACON		
LIGHTED WIND CONE		
OBSTRUCTIONS		
CONTROL POINTS		
AIRPORT REFERENCE POINT (ARP)		
LIGHTED SEGMENTED CIRCLE AND WIND CONE		
THRESHOLD LIGHTS		
REIL		
VEHICLE PARKING		
BUILDING NBR.–BLDG. DATA TABLE	①	
HAUL ROUTE		
OPTIONAL HAUL ROUTE FOR LONGER TRUCKS (ONLY IF NECESSARY)		
APPROX. AERIAL EXTENT OF ASH		
APPROX. AERIAL EXTENT OF DEBRIS		

BUILDING DATA TABLE

BLDG #	DESCRIPTION
①	INCINERATOR BUILDING
②	TERMINAL BUILDING 73–1

VAR 11°7' E

AUGUST 1992
ANNUAL RATE OF CHANGE 0.1° W
SOURCE: ALBUQUERQUE SECTIONAL
November 1992

GRAPHIC SCALE IN FEET

60 0 60 120

FIGURE 3

REV	DATE	DESCRIPTION	DRAWN	APPR'D

ITSI Innovative Technical Solutions, Inc.
2730 Shadelands Drive, Suite 100
Walnut Creek, California 94598

LOS ALAMOS NATIONAL LABORATORY
LOS ALAMOS, NEW MEXICO

PROJECT TITLE
LOS ALAMOS AIRPORT
LOS ALAMOS, NEW MEXICO

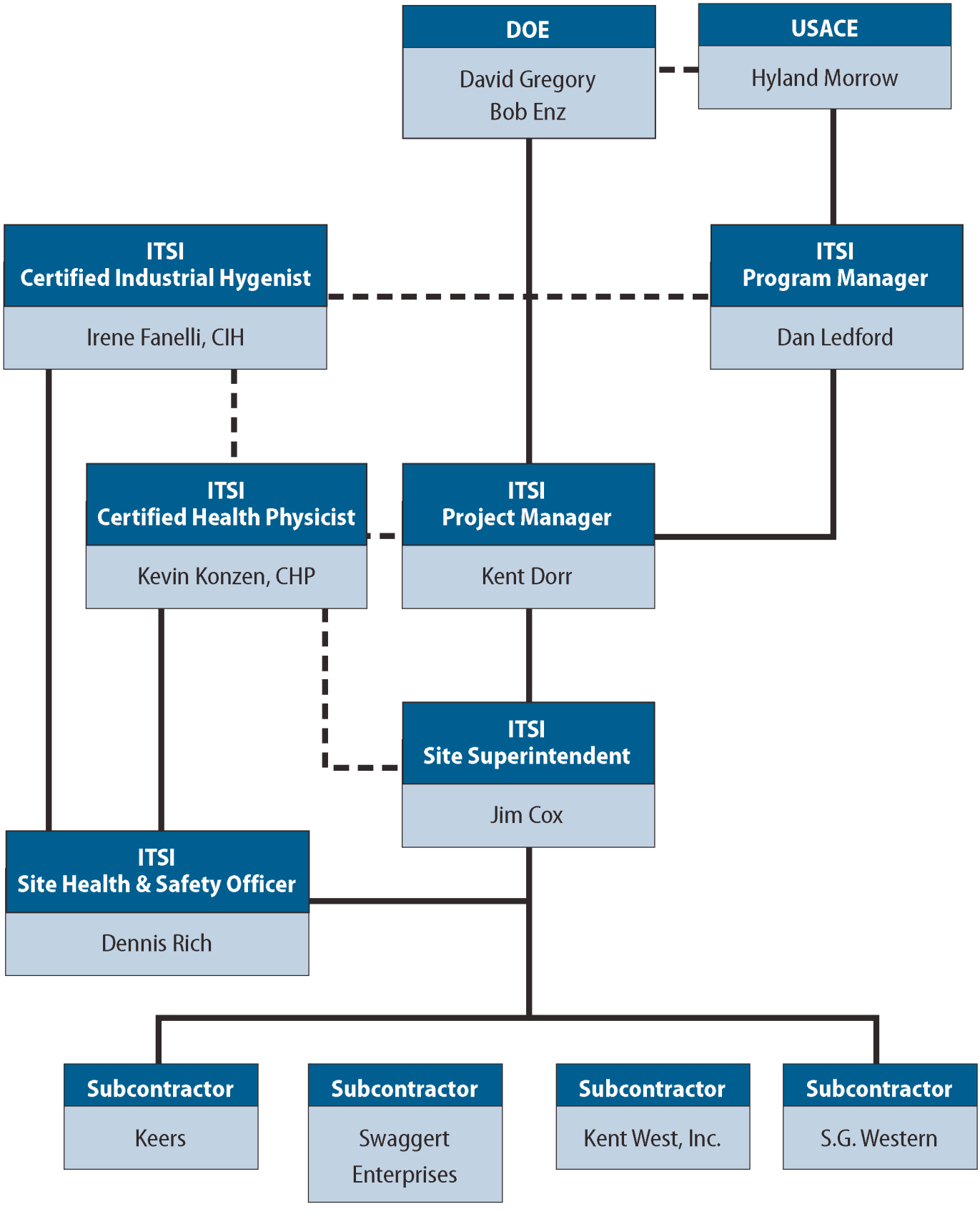
DRAWING TITLE
SITE PLAN WITH WORK AREAS

SUBMITTED	APPROVED	APPROVED
CHIEF ENGINEER	CIVIL ENGINEER	COMMANDER

DRAWN BY	DESIGNED BY	DATE	SHEET
RDB	JC	5-19-2005	

SCALE	ITSI PROJECT NO.	DRAWING NO.
AS NOTED	04.400.12.110	04400.12/GRAPHICS/CAD

FILE
SITE PLAN



Projects\2004\04-400 SPD PRAC\04-400.12 Los Alamos Ash Removal\Graphics\Project Org.ai

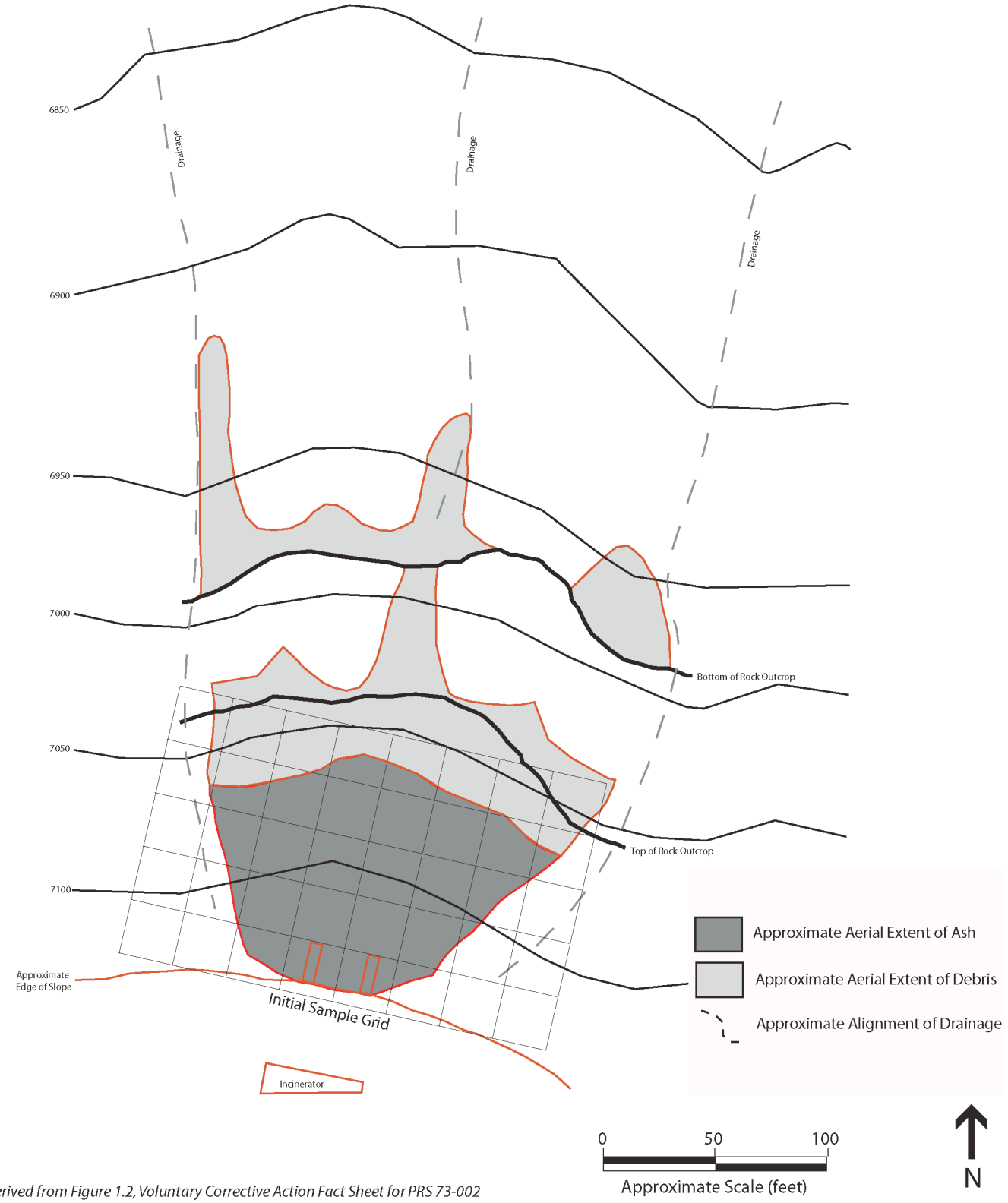
Innovative Technical Solutions, Inc.

U.S. Army Corps of Engineers, Sacramento District

Los Alamos National Laboratory, U.S. Department of Energy

Consolidated Unit 73-002-99, Los Alamos National Laboratory, New Mexico

Figure 4
Organization Chart



Source: Derived from Figure 1.2, Voluntary Corrective Action Fact Sheet for PRS 73-002

Innovative Technical Solutions, Inc.

U.S. Army Corps of Engineers, Sacramento District

Los Alamos National Laboratory, U.S. Department of Energy

Consolidated Unit 73-002-99, Los Alamos National Laboratory, New Mexico

Figure 5
Distribution of Ash and Proposed Initial Sample Grid

04-400.12\LANL\Graphics\Waste Characterization Workplan\Fig 3 - Distribution of Ash.ai

DRAINAGE

DRAINAGE

DRAINAGE

BOTTOM OF ROCK OUTCROP

TOP OF ROCK OUTCROP

73-02253

73-02257

73-02258

73-02254

73-02245

73-02456

73-02454

73-02255

73-02465

73-02461

73-02262

73-02462

73-02261

73-02264

73-02266

73-02464

73-02268

73-02270

73-02463

73-02460

73-02459

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73-10037

73-10032

73-10031

73-10260

73-10026

73-10036

73-10030

73-10033

73-10027

73-10035

73-10034

73-10029

73-10028

58828

73-10003

73-10004

73-10006

73-10005

73-10011

73-10007

58839

58838

73-10263

73-02252

73-02251

73-10010

73-02467

73-10008

73-10002

73-10001

73-02209

73-10009

73-10000

STRAW WATTLES

SILT FENCE

SILT FENCE

1

LEGEND

ITEM	EXISTING	FUTURE
AIRPORT PROPERTY LINE	APL	
AIRFIELD PAVEMENT		
TAXILANE OBJECT FREE LINE		
BUILDINGS		
8' CHAIN LINK FENCE		
TEMP. CHAIN LINK FENCE		
SILT FENCE		
STRAW WATTLE		
AIRPORT BEACON		
LIGHTED WIND CONE		
OBSTRUCTIONS		
CONTROL POINTS		
AIRPORT REFERENCE POINT (ARP)		
LIGHTED SEGMENTED CIRCLE AND WIND CONE		
THRESHOLD LIGHTS		
REIL		
VEHICLE PARKING		
BUILDING NBR.-BLDG. DATA TABLE		
APPROXIMATE LOCATION OF 2005 SAMPLES		
APPROXIMATE LOCATION OF HISTORIC SAMPLES		
APPROX. AERIAL EXTENT OF ASH		
APPROX. AERIAL EXTENT OF DEBRIS		

BUILDING DATA TABLE

BLDG #	DESCRIPTION
①	INCINERATOR BUILDING
②	TERMINAL BUILDING 73-1

TRUE NORTH

AUGUST 1992
ANNUAL RATE OF CHANGE 0.1° W
SOURCE: ALBUQUERQUE SECTIONAL
November 1992

GRAPHIC SCALE IN FEET

20 0 20 40

FIGURE 5A

REV	DATE	DESCRIPTION	DRAWN	APPR'D

ITSI Innovative Technical Solutions, Inc.
2730 Shadelands Drive, Suite 100
Walnut Creek, California 94598

LOS ALAMOS NATIONAL LABORATORY
LOS ALAMOS, NEW MEXICO

PROJECT TITLE
LOS ALAMOS AIRPORT
LOS ALAMOS, NEW MEXICO

DRAWING TITLE
APPROXIMATE LOCATION OF 2005 SAMPLES

SUBMITTED	APPROVED	APPROVED
CHIEF ENGINEER	CIVIL ENGINEER	COMMANDER

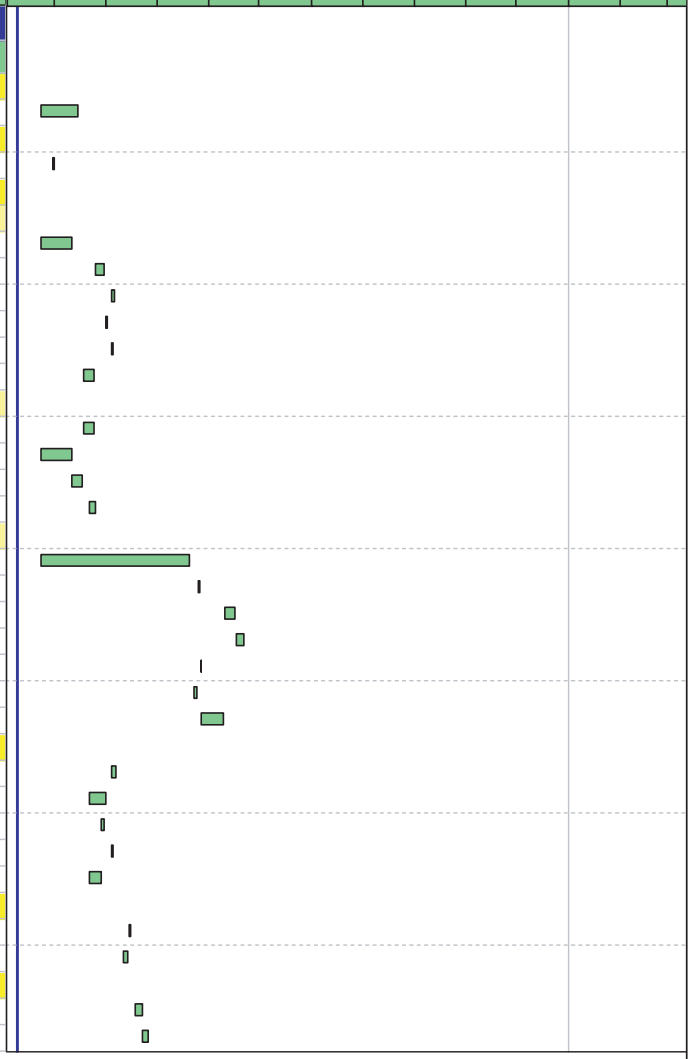
DRAWN BY	DESIGNED BY	DATE	SHEET
RDB	JC	5-19-2005	

SCALE	ITSI PROJECT NO.	DRAWING NO.
AS NOTED	04.400.12.110	04400.12/GRAPHICS/CAD

FILE
SAMPLE LOCATION MAP

Los Alamos National Laboratory | SWMU 73-002

Activity ID	Activity Name	Original Duration	Physical % Complete	Start	Finish
Project: VCA for Construction Los Alamos Natl. Labs		234		21-Feb-05	12-Jan-06
WBS: Engineering		234		21-Feb-05	12-Jan-06
WBS: Kickoff Meeting & Site Visit		16		21-Feb-05	14-Mar-05
1.05	Kickoff Meeting & Site Visit - Sampling	16	0%	21-Feb-05*	14-Mar-05
WBS: Planning Communication & Management		1		28-Feb-05	28-Feb-05
1.10	Planning Communication & Management	1	0%	28-Feb-05	28-Feb-05
WBS: Plans		87		21-Feb-05	21-Jun-05
WBS: Waste Characterization Sampling Work Plan		32		21-Feb-05	05-Apr-05
2.01	Develop Waste Characterization Work Plan	15	0%	21-Feb-05	11-Mar-05
2.03	Incorporate USACE/DOE Comments	4	0%	25-Mar-05	30-Mar-05
2.07	Submit Final Sampling for Approval	2	0%	04-Apr-05	05-Apr-05
2.04	Submit Final Waste Characterization Work Plan	2	0%	31-Mar-05	01-Apr-05
2.05	Submit Final Waste Characterization WP to Disposal Facilities	1	0%	04-Apr-05	04-Apr-05
2.02	Submit Work Plan for Review	5	0%	18-Mar-05	24-Mar-05
WBS: Health & Safety Plan (SSHSP)		25		21-Feb-05	25-Mar-05
3.23	Complete Final SSHSP for Submittal & Approval Sigs	5	0%	18-Mar-05	24-Mar-05
3.19	Develop Site Specific Health & Safety Plan	15	0%	21-Feb-05	11-Mar-05
3.22	Incorporate USACE/DOE Comments	5	0%	11-Mar-05	17-Mar-05
3.24	Obtain USACE/DOE Approval Signatures	4	0%	22-Mar-05	25-Mar-05
WBS: Corrective Action Work Plan - Ash Removal		87		21-Feb-05	21-Jun-05
3.10	Develop Draft Corrective Action WP - Waste Sampling Results	65	0%	21-Feb-05	20-May-05
3.13	Incorporate Comments	2	0%	25-May-05	26-May-05
3.16	Incorporate USACE/DOE/Regulator Comments	5	0%	10-Jun-05	16-Jun-05
3.18	Public Meeting	3	0%	17-Jun-05	21-Jun-05
3.14	Submit Draft Final WP to USACE/DOE/Regulators	1	0%	27-May-05	27-May-05
3.12	USACE/DOE Review Draft CA Work Plan	2	0%	23-May-05	24-May-05
3.15	USACE/DOE/Regulators Review Draft CA Work Plan	10	0%	27-May-05	09-Jun-05
WBS: Site Access Request - Sampling		12		22-Mar-05	06-Apr-05
2.28	Radiological Work Permit Complete	3	0%	04-Apr-05	06-Apr-05
2.26	Radiological Work Permit Request Development	8	0%	22-Mar-05	31-Mar-05
2.27	Receive Site Access	2	0%	29-Mar-05	30-Mar-05
2.29	Received Radiological Work Permit	1	0%	04-Apr-05	04-Apr-05
2.25	Site Access Request	5	0%	22-Mar-05	28-Mar-05
WBS: Specialized Training - Sampling		5		11-Apr-05	15-Apr-05
2.31	8hr GET - Lead Awareness	2	0%	14-Apr-05	15-Apr-05
2.30	Rad Worker II Training	3	0%	11-Apr-05	13-Apr-05
WBS: Waste Characterization & Disposal Options - Sampling		48		11-Apr-05	15-Jun-05
2.13	Collect & Ship Samples	5	0%	18-Apr-05	22-Apr-05
2.14	Demobilize Sampling Team	2	0%	22-Apr-05	25-Apr-05



Actual Level of Effort | Remaining Work | Critical Remaining Work
Actual Work | Remaining Level of Effort | Milestone

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Contract No. DACA05-99-D-0014,

Task Order No. CM26 Baseline

ITSI Innovative Technical Solutions, Inc.

U.S. Army Corps of Engineers, Sacramento District

Los Alamos National Laboratory, U.S. Department of Energy

SWMU 73-002, Los Alamos National Laboratory, New Mexico

Figure 6
Project Schedule

Los Alamos National Laboratory | SWMU 73-002

Activity ID	Activity Name	Original Duration	Physical % Complete	Start	Finish
2.17	Draft Waste Disposal Option Plan (WD04)	11	0%	13-May-05	27-May-05
2.19	Final Waste Disposal Option Plan	2	0%	06-Jun-05	07-Jun-05
2.12	Layout Survey Grid	2	0%	14-Apr-05	15-Apr-05
2.10	Mobilize Sampling Team for Training	1	0%	11-Apr-05	11-Apr-05
2.16	Review Analytical Data	3	0%	10-May-05	12-May-05
2.18	Review Draft Waste Disposal Option Plan	5	0%	30-May-05	03-Jun-05
2.15	Sample Analysis	15	0%	19-Apr-05	09-May-05
2.11	Sampling Readiness Review	1	0%	14-Apr-05	14-Apr-05
2.20	Submit Site Characterization Report	3	0%	08-Jun-05	10-Jun-05
2.21	Waste Profiling	3	0%	13-Jun-05	15-Jun-05
WBS: Site Access Request - Ash Removal		6		13-Jun-05	20-Jun-05
3.02	RWP Complete	2	0%	17-Jun-05	20-Jun-05
3.01	RWP Request Development	3	0%	14-Jun-05	16-Jun-05
3.00	Site Access Request	6	0%	13-Jun-05*	20-Jun-05
WBS: Work Plan Addendum		1		21-Jun-05	21-Jun-05
4.01	Work Plan Addendum	1	0%	21-Jun-05	21-Jun-05
WBS: Specialized Training - Ash Removal		5		22-Jun-05	28-Jun-05
4.14	8hr GET - Lead Awareness	2	0%	27-Jun-05	28-Jun-05
4.10	RadWorker II Training	3	0%	22-Jun-05	24-Jun-05
WBS: Mob & Site Readiness - Ash Removal		19		27-May-05	22-Jun-05
4.08	Ash Removal Readiness Review	1	0%	22-Jun-05	22-Jun-05
4.03	Assessment Pattern of Wildlife/Environmental Concerns	8	0%	27-May-05	07-Jun-05
4.07	Secure Site	0	0%	22-Jun-05	
WBS: Ash Removal Activities		108		27-Jun-05	23-Nov-05
4.43	Ash Removal	57	0%	14-Jul-05	30-Sep-05
4.42	Debris & Removal	10	0%	18-Jul-05	29-Jul-05
4.45	Demobilization/Ash Removal Team	1	0%	23-Nov-05	23-Nov-05
4.34	Kickoff Meeting & Site Visit - Ash Removal	1	0%	27-Jun-05	27-Jun-05
4.39	Mobilize Exavator Unit	15	0%	18-Jul-05	05-Aug-05
4.35	Mobilize Field Staff	5	0%	07-Jul-05	13-Jul-05
4.36	Mobilize Skyline Unit	5	0%	11-Jul-05	15-Jul-05
4.38	Mobilize Vacuum Unit	5	0%	11-Jul-05	15-Jul-05
4.44	Site Restoration	7	0%	15-Nov-05	23-Nov-05
WBS: Confirmation Sampling - Post Ash Removal		74		03-Oct-05	12-Jan-06
4.49	Analyze Samples	15	0%	18-Oct-05	07-Nov-05
4.52	Corrective Action Report	1	0%	15-Nov-05	15-Nov-05
4.54	DOE/USACE Review Correction Action Report	10	0%	21-Nov-05	02-Dec-05
4.53	Draft Correction Action Report	3	0%	16-Nov-05	18-Nov-05
4.55	Draft Final Corr. Action Report DOE/USACE/Regulators	2	0%	05-Dec-05	06-Dec-05
4.57	Final Corr. Action Reports DOE/USACE/Regulators	1	0%	21-Dec-05	21-Dec-05

Actual Level of Effort | Actual Work | Remaining Work | Remaining Level of Effort | Critical Remaining Work | Milestone

30-Mar-05 10:38

Contract No. DACA05-99-D-0014,

Task Order No. CM26 Baseline

ITSI Innovative Technical Solutions, Inc.

U.S. Army Corps of Engineers, Sacramento District

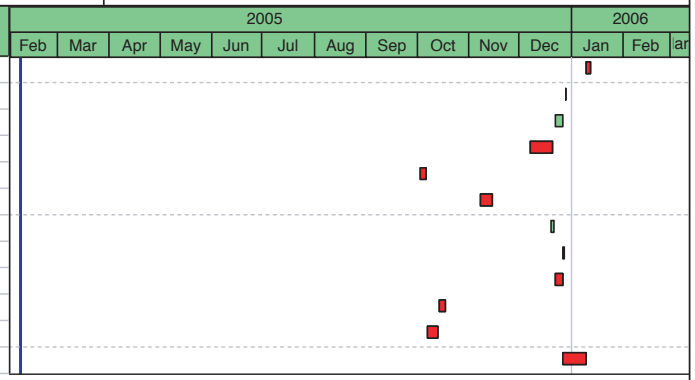
Los Alamos National Laboratory, U.S. Department of Energy

SWMU 73-002, Los Alamos National Laboratory, New Mexico

Figure 6
Project Schedule

Los Alamos National Laboratory | SWMU 73-002

Activity ID	Activity Name	Original Duration	Physical % Complete	Start	Finish
4.60	Final Report for Approval	3	0%	10-Jan-06	12-Jan-06
4.64	Final Report for Approval	1	0%	28-Dec-05	28-Dec-05
4.62	Generate Final Site Characterization Report	3	0%	22-Dec-05	26-Dec-05
4.56	Incorporate Comments by DOE/USACE/Regulators	10	0%	07-Dec-05	20-Dec-05
4.46	Mobilize Sampling Team	4	0%	03-Oct-05	06-Oct-05
4.50	Record Results	5	0%	08-Nov-05	14-Nov-05
4.61	Review Data/Initiate Final Site Characterization Report	2	0%	20-Dec-05	21-Dec-05
4.63	Submit Final Site Characterization Report	1	0%	27-Dec-05	27-Dec-05
4.58	Submit Report for Review	3	0%	22-Dec-05	26-Dec-05
4.48	Submit Samples	2	0%	14-Oct-05	17-Oct-05
4.47	Take Confirmation Samples	5	0%	07-Oct-05	13-Oct-05
4.59	USACE/DOE Review	10	0%	27-Dec-05	09-Jan-06



Actual Level of Effort | Remaining Work | Critical Remaining Work
Actual Work | Remaining Level of Effort | Milestone

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Contract No. DACA05-99-D-0014,

Task Order No. CM26 Baseline

Innovative Technical Solutions, Inc.

U.S. Army Corps of Engineers, Sacramento District

Los Alamos National Laboratory, U.S. Department of Energy

SWMU 73-002, Los Alamos National Laboratory, New Mexico

Figure 6
Project Schedule

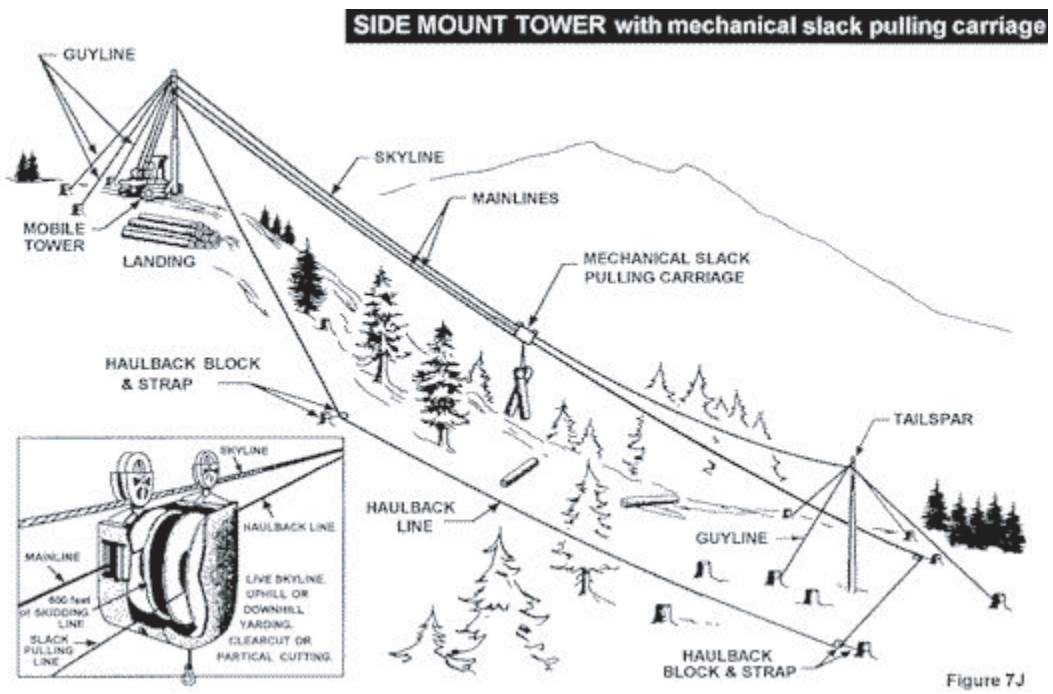

Figure 7J

04-400.12\LANL\Graphics\Waste Characterization Work\an\Fig 7- Skyline Diagram.ai

ITSI Innovative Technical Solutions, Inc.	U.S. Army Corps of Engineers, Sacramento District Los Alamos National Laboratory, U.S. Department of Energy Consolidated Unit 73-002-99, Los Alamos National Laboratory, New Mexico	Figure 7 Skyline Diagram

10.0 APPENDICES

Appendix A Sampling and Analysis Plan for Confirmatory Samples for SWMU 73-002

Appendix B Voluntary Corrective Action Fact Sheet for PRS 73-002

Appendix C Investigation Derived Waste for SWMU 73-002

APPENDIX A

SAMPLING AND ANALYSIS PLAN

For CONFIRMATORY SAMPLES

SWMU 73-002

Los Alamos National Laboratory

New Mexico

SAMPLING AND ANALYSIS PLAN

Corrective Action for SWMU 73-002
(Incinerator Ash Removal)
Los Alamos National Laboratory, New Mexico

Contract No. DACA05-99-D-0014
Task Order CM26

Prepared for:

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And

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ACRONYMS AND ABBREVIATIONS

lbs/ft^3	pounds per cubic feet
mg/kg	milligrams per kilogram
yd^3	cubic yards
CCA	comprehensive certificate of analysis
CDQMP	Chemical Data Quality Management Plan
COC	Chain of Custody
DOE	U.S. Department of Energy
DQO	Data Quality Objectives
EDDs	electronic data deliverables
ID	identification number
LANL	Los Alamos National Laboratory
LCS	laboratory control sample
MDA	minimum detectable activity
MDL	method detection limit
MS/MSD	matrix spike/matrix spike duplicate
NELAP	National Environmental Laboratory Accreditation Program
Pb	lead
PCB	polychlorinated biphenyl
PQL	Practical Quantitation Limit
QA	quality assurance
QAPP	Quality Assurance Project Plan
QC	quality control
RPD	relative percent difference
RL	reporting limit
SAP	Sampling and Analysis Plan
SEDD	Staged Electronic Data Deliverable
SOP	standard operating procedures
SVOC	semi-volatile organic compounds
SWMU	Solid Waste Management Unit
TCLP	toxicity characteristic leaching procedure
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
XRF	x-ray fluorescence

1.0 INTRODUCTION

Innovative Technical Solutions, Inc. (ITSI) has been contracted by U.S. Army Corps of Engineers, Sacramento District (USACE) to remove and properly dispose of ash located on the slope of Pueblo Canyon adjacent to the Los Alamos Airport on behalf of the National Nuclear Security Administration, U.S. Department of Energy (DOE). The ash was generated from the operation of a small incinerator located immediately adjacent to the ash.

To support the removal and proper disposal of the ash, the ash was sampled in April 2005 to properly characterize the ash for disposal purposes and to evaluate health and safety requirements associated with working with the ash during the removal process on the steep slope where it is located.

Upon completion of the removal of the ash, confirmation samples are needed to confirm that the extent of the excavation was sufficient to remove the ash and that no migration of contaminants from the ash to the surrounding soils has occurred. This Sampling and Analysis Plan (SAP) provides the details of the proposed sampling activities and subsequent analyses of the samples. This SAP includes the requirements for a field sampling plan (FSP) and a quality assurance project plan (QAPP).

1.1 BACKGROUND

Consolidated Unit 73–002–99 is comprised of Potential Release Sites (PRS) 73–002, 73–003, 73–004 (a, b), and 73–006. The Correction Action is for PRS 73-002 (subsequently referred to as Solid Waste Management Unit (SWMU) 73-002), a small incinerator operated for a short time at the site beginning in 1947. The incinerator's primary use was for the destruction of classified documents, however, it did not function properly and was removed from service shortly after completion.

In 1948, The Zia Company acquired the facility, which it held until 1973 and operated the incinerator for other than classified sanitary waste. The stack and equipment have been removed

from the building, which is currently in use as a storage facility

The ash is located on the south slope of Pueblo Canyon, immediately north of the incinerator building. The ash covers an area of approximately 30,000 square foot, and ranges in thickness from less than one foot to greater than eight feet (Voluntary Corrective Action Fact Sheet for PRS 73–002).

Sampling was conducted of the ash pile generated by operations of the incinerator and within the associated drainages in 1996, 1997, and 1998. A preliminary review of the resulting data tentatively identified several potential contaminants of concern. In general, high concentrations of several inorganic chemicals have been noted in the ash samples but not in soil and sediment (non-ash) samples, with concentrations of lead as high as 13,100 milligrams per kilogram (mg/kg). The ash also contains low concentrations of several organic chemicals including, but not limited to, pesticides and dioxins/furans. Low levels of several radiological constituents have been detected in a limited number of ash samples.

Sampling and analysis of the ash was conducted in April 2005 to adequately profile the material for waste disposal. A sample grid was established on a 30-foot by 30-foot grid system down the slope. The extent of the ash was evaluated by visual inspection, and its depth was estimated using a thin rigid rod pushed or driven into the ash perpendicular to the slope until refusal, or by hand-auguring until encountering either native soil or bedrock. Samples were collected from locations where the ash appeared to be the thickest in each grid, and a sampling frequency of approximately 1 sample per 100 cubic yards of ash was maintained.

These samples were analyzed for VOCs, SVOCs, PCBs, Metals (Total and TCLP), Dioxins and Furans, Reactive Cyanide, Reactive Sulfide, Gross Alpha and Beta, Radioisotope Analysis, and physical characteristics. The ash samples contained elevated levels, greater than background, of metals, several radionuclides, and detectable concentrations of many organic compounds. The results were consistent with results from previous sampling activities of the ash.

Further evaluation of the sample results indicates the ash is not a hazardous waste by current Resource Conservation and Recovery Act (RCRA) standards promulgated by the U.S. Environmental Protection Agency (EPA). However, the ash contains low-levels of radioactive material and will be controlled as low-level radioactive waste as required by the Department of Energy.

1.2 OBJECTIVE OF SAMPLING PROGRAM

The principal objective of the sampling program is to provide a sufficient number and types of analyses to confirm that the ash has been removed, and to verify components of the ash have not migrated into the underlying soils. The confirmation sample results may be used to support decisions for final closure of the site consistent with State of New Mexico and federal requirements.

Although only soil samples are expected to be collected for this project, the additional requirements for water samples have been included in the event that water samples are collected.

2.0 FIELD SAMPLING PLAN

Samples will be collected in a manner consistent primarily with the New Mexico Environmental Department/Los Alamos National Laboratory (NMED/LANL) Order on Consent (Order) and ITSI's Chemical Data Quality Management Plan (CDQMP) (reviewed and approved by USACE Sacramento District for use under the PRAC).

The general approach of the sampling program that will be conducted is described below.

- Delineate the approximate footprint where the ash was located using visual observations and survey coordinates from April 2005 ash sampling event.
- Choose a random location within 30 feet of one of the edges of the footprint. Establish the sampling grid to cover the footprint in a 30-foot by 30-foot grid, with the grid extending a minimum of one grid unit outside the footprint of the ash along the slope and down the slope from the former footprint of the ash.
- Sample points shall be located by using a registered New Mexico Registered Land Surveyor using the methods described in Section IX.B.2.f of the NMED/LANL Order on Consent. Horizontal locations shall be measured to the nearest 0.5 ft. A table of sample location identifiers and coordinates will be included in the final report.
- At each pre-determined confirmation sampling location, the field crew will obtain up to three samples, depending on the nature of the substrate at each location: one surface soil sample, one sample from the soil/tuff interface (first 6" of soil immediately above the rock surface), and a core sample of the underlying tuff. Practical limits of the hand-operated field equipment (necessary due to the difficulty of access to the hillside slope) may limit collection of samples where soil is more than a few feet deep.
- Collect surface sediment samples on the basis of one sample per 100 lineal feet along each of the three drainages identified at the site. Samples will be collected from the top of the slope (starting at the base of the ash pile) and continue (1 per 100 ft) to the toe of the alluvium. Sample collection will be biased towards areas of fine-grained sediment in outfall channels or pockets of sediment accumulation in the drainages.
- Screen samples onsite using field screening techniques.
- Submit samples to Sample Management Office (SMO) for analysis (as negotiated, LANL is managing the laboratory analysis for this project, and ITSI will utilize their paperwork and procedures, where possible, to facilitate the process).

- Once analytical results are available, evaluate the results relative to data quality objectives specified in Section 3.1.

2.1 COLLECTING THE SOIL SAMPLES

Samples will be collected from the approximate center of each grid. At each pre-determined confirmation sampling location, the field crew will obtain up to three samples, depending on the nature of the substrate at each location: one surface soil sample, one sample from the soil/tuff interface (first 6" of soil immediately above the rock surface), and a core sample of the underlying tuff.

Soil samples will be collected using a stainless steel or disposable trowel (SOP–06.09) within the top few inches from within each sample grid. Subsurface soil samples will be collected using either a portable hand-held power hollow stem auger drill (for deeper soils) or a hand auger. Samples of the tuff will be collected by first excavating any overlying soils (by shovel) to expose the rock surface and then using a portable diamond coring device (or rock drill) to remove a core sample to a cutting depth of 24 inches into the tuff, or until refusal of the cutting tool. If the tuff proves friable enough to be penetrated using the power hollow stem auger, it will be sampled using that method.

The above-proposed sampling methods are consistent with the Standard Operating Procedures listed in Section IX.A, Standard Operating Procedures, of the Compliance Order on Consent (NMED, 2005). Samples will be transferred into appropriate containers provided by the Sample Management Office (SMO). Samples will be labeled with unique sample identification number (ID) for each location and depth. Samples will be transferred into appropriate containers provided by the Sample Management Office (SMO). Samples will be labeled with unique sample identification number (ID) for each location and depth. Following labeling, samples will be placed in re-sealable plastic bags and transferred to the SMO under proper chain-of-custody

(COC) procedures (consistent with Section IX.B.2.j of the NMED/LANL Order on Consent). ITSI's Chain of Custody (Figure 2) or its equivalent will be used.

Sampling equipment will be decontaminated following each use by washing in a non-phosphate detergent, water rinse, and a distilled or de-ionized water rinse (consistent with SOP–01.08).

2.2 FIELD SCREENING OF SAMPLES

Samples will be screened for lead (Pb) and selected other metals using field portable x-ray fluorescence (XRF). Based on a review of available laboratory results from previous sampling efforts, the ash contains measurable concentrations of Pb, other metals and radiological isotopes. Screening criteria have been developed (Table 7) that should allow for screening of the soils prior to collecting formal confirmation samples. The XRF results are intended only as a preliminary evaluation that the ash removal has been completed. Under no circumstances will a result from XRF testing be used to confirm the completion of the ash removal.

Samples collected for offsite chemical analysis will also be screened for radioactivity prior to packaging. A radiological survey will be performed external to the packaging by LANL (LANL is providing the onsite radiological monitoring and safety oversight). LANL will then authorize delivery to the SMO for analysis. This screening is for health and safety purposes only. Under no circumstances will a result from radiological screening be used to confirm the completion of the ash removal.

2.3 ANALYTICAL CRITERIA

Confirmation samples will be analyzed for the following:

- Volatile Organic Compounds (VOCs) by EPA Method 8260B
- Polychlorinated Biphenyls (PCBs) by EPA Method 8082
- Semi-volatile Organic Compounds (SVOCs) by EPA Method 8270C
- Explosive Compounds (Explosives) by EPA Method 8330
- Pesticides by EPA Method 8081A
- Dioxins and Furans by EPA Method 8290
- Metals (Total) by EPA Method 6010B/7471
- Nitrates in Soils by EPA Method 9056
- Perchlorate in Soils by EPA Method 8321A (Modified)
- Cyanides by EPA Method 9014

- Soils pH by EPA Method 9045C
- Gross Alpha, Beta and Gamma by EPA Method 9310
- Alpha and Gamma Spectroscopy
- Specific Radioisotope analyses (based on previous detections)
  - Americium 241
  - Cesium 137
  - Plutonium (Pu-238, 239/240)
  - Radium 226
  - Uranium (U-234, 235, 238)

Table 1 describes the analytical methods and reporting limits for the above analyses. The reporting limits were established consistent with those from previous studies. In certain cases, the analytical method (e.g., EPA Method 8321A) may need to be adapted and modified for soil samples (e.g., nitrate and perchlorate). When an analytical method is adapted, it must be documented in accordance with the laboratory's quality system. Radiological levels were established based on 1/2 previously reported levels for the ash, and below background values. Table 2 provides the sample volumes and containers needed for the selected analyses.

2.4 QUALITY CONTROL SAMPLES

Quality control (QC) samples consisting of field duplicate samples, matrix spike/matrix spike duplicate (MS/MSD) samples, and equipment blanks (if applicable), will be collected as part of the sampling activity. QC samples will be collected as described below, and will be packaged, labeled, handled, and transported in the same manner as the primary samples. Field QC samples and frequencies are listed in Table 3 (consistent with Section IX.C.3.b of the NMED/LANL Order on Consent).

2.4.1 Quality Assurance Samples

At the sole discretion of USACE and/or DOE, duplicate samples may be collected at a frequency of 5% (one duplicate sample will be collected for every 20 primary samples collected) and sent to an alternate laboratory for independent comparison of results. These split samples will be labeled in the same manner as the primary samples, and will be recorded on a separate COC form for shipment to the designated alternate laboratory.

2.4.2 Field Duplicate Samples

Field duplicate samples will be collected as part of the normal QA/QC procedures at a frequency of 10% of the primary samples for each analytical method (consistent with Section IX.B.2.j of the NMED/LANL Order on Consent). Each duplicate sample will be collected from a location as close to the primary sample as possible.

2.4.3 Laboratory Blanks

Laboratory blank samples will be prepared and analyzed as part of the normal QA/QC procedures at a minimum frequency of one in twenty for all batches analyzed by EPA Methods, and one in ten for any non-EPA methods (consistent with Section IX.C.1.c of the NMED/LANL Order on Consent). The sample count is based upon the primary samples within each analytical batch.

2.4.4 Laboratory Blank Spike/Blank Spike Duplicate Samples

Laboratory blank spike/blank spike duplicate (BS/BSD) samples will be prepared and analyzed as part of the normal QA/QC procedures at a minimum frequency of one in twenty for all batches analyzed by EPA Methods, and one in ten for any non-EPA methods (consistent with Section IX.C.1.c of the NMED/LANL Order on Consent). The sample count is based upon the primary samples within each analytical batch. The BS/BSD samples may also be called laboratory control sample/laboratory control sample duplicate (LCS/LCSD).

2.4.5 Matrix Spike/Matrix Spike Duplicate Samples

Matrix spike/matrix spike duplicate (MS/MSD) samples will be prepared and analyzed as part of the normal QA/QC procedures at a minimum frequency of one in twenty for all batches analyzed by EPA Methods, and one in ten for any non-EPA methods (consistent with Section IX.C.1.c of the NMED/LANL Order on Consent). The sample count is based upon the primary samples within each analytical batch. The MS/MSD samples must be selected from the primary project samples. Field blanks and samples from other projects may not be used for MS/MSD analysis.

2.4.6 Equipment Rinse Blanks

Equipment rinse blank samples will be collected at a frequency of 5% (one per every 20 samples) (consistent with Section IX.C.3.a of the NMED/LANL Order on Consent). Equipment

rinse blanks will be collected for any non-disposable sampling equipment used. The rinse blank samples will be collected by pouring analyte-free source water over the sampling equipment that comes in direct contact with the environmental sample. Equipment rinse blank samples will be used to assess the efficiency of the decontamination process and possible cross-contamination between environmental samples. Rinse blank samples will be collected and analyzed for the same constituents as the primary sample. Due to differences between the sample matrix (e.g., solids) and the equipment rinse, the analytical method for the equipment rinse may be different than that of the primary sample. A comparable analytical method will be used in these instances for the equipment rinse blanks.

2.5 RECORDKEEPING

2.5.1 Sample Labels

Samples will be labeled for identification. Pre-printed sample labels will be provided by LANL SMO. Labels will be secured to the sample container with clear tape wider than the label itself before the samples are packaged for transportation to the laboratory. At a minimum, labels will contain the information listed below.

- Sample identification number
- Sample location
- Date and time of collection
- Initials of the person collecting the sample
- Analysis requested
- Preservation method
- Any other information pertinent to the sample.

2.5.2 Chain of Custody/Documentation

The purpose of sample custody procedures is to maintain the integrity of field samples throughout field activities, from the point of collection through delivery to and acceptance by the laboratory. Sample collection activities will be documented using COC procedures consistent with Section IX.B.6.b of the NMED/LANL Order on Consent.

Chain of Custody Records

A COC form will be completed and will accompany each group of samples sent to the laboratory to document sample possession from the time of collection to sample receipt. The COC form

will contain information listed below.

- Sample number or identification
- Name and signature of the collector, sampler, or recorder
- Name and location of the project
- Date of sample collection
- Sample matrix
- Preservative type, if any
- Analyses requested
- Signatures of the persons relinquishing and receiving the samples
- Date and time of laboratory receipt of the samples.

Field Logbook

Daily field activities and relevant sampling information will be documented in a field logbook. The field team involved in the collection of data in the field will maintain the logbook with serially numbered pages, consistent with requirements in the CDQMP (ITSI, 1999). The logbook will be signed and dated each day before field work begins. Logbook corrections will be made by striking out the incorrect entry with a single line and entering the correct information. The person making the entry will initial and date the correction. Unused partial logbook pages will be crossed out and signed and dated at the end of each workday. Entries must be legible, in ink, and factual in content.

Logbook entries may include the following information, as appropriate:

- Project name and number
- Site name and location
- Arrival and departure dates/times for project personnel
- Names and affiliations of personnel on site, and any other individuals or organizations contacted
- Author's name and date
- Field instruments, calibration methods and equipment identification numbers
- Chronology, locations, and descriptions of activities conducted
- Sampling locations
- Sample identification numbers
- Sample type and amount collected
- Date and time of sample collection
- Name of sampler
- Sampling method and container (size/type) for each sample collected, including QC samples. (Alternatively, this information may be contained on the COC form, soil sampling form, or other field form. The logbook will then contain a unique identifier linking the field logbook entry to the field form).

- Field observations and appropriate comments
- Modifications to or deviations from the Work Plan.

3.0 QUALITY ASSURANCE PROJECT PLAN

The Quality Assurance Project Plan (QAPP) presents the Data Quality Objectives (DQOs), procedures for sample custody and holding, laboratory analytical methods, and general QC procedures for this project. This QAPP was prepared in accordance with ITSI's Chemical Data Quality Management Plan (CDQMP) (ITSI, 1999).

3.1 DATA QUALITY OBJECTIVES

The following table is a brief description of the seven-step DQO process used in developing the scope of work outlined in the FSP.

Step 1: State the Problem
1. Analytical results demonstrating that ash removal has been completed are required, and identify potential migration of contaminants into underlying native soils.
Step 2: Identify the Decisions
Study Questions: 1) What characteristics of the ash may be used as markers to confirm adequate removal and identify potential migration? Decisions: 1) Assess concentrations of target compounds to confirm that ash removal goals has been met and no contaminants have impacted native soils.
Step 3: Identify Inputs to Decisions
Inputs for Study Question 1 include: Historical data from previous investigations, analytical data collected during the April 2005 sampling event and analytical data collected in accordance with this SAP, which will use concentrations of metals as markers to confirm ash removal and assess vertical migration of contaminants.
Step 4: Define Study Boundaries
The physical limits of the study area are just beyond the physical limits of the ash, as confirmed through visual inspection, and unimpacted areas that are to be sampled to determine background concentrations. This study is limited to approximately 100 samples.

Step 5: Develop Decision Rules
Decision 1: Assess concentrations of target compounds to confirm that ash removal goals have been met. Decision Rule 1:Are the concentrations of lead (Pb) and zinc (Zn) below background concentrations? If yes, then the ash has been confirmed to have been removed. If no, and the visual inspection at that location indicates that the ash is no longer present, then the presumption will be that some contaminants migrated from the ash to the surrounding soil. Decision 2: Soil samples will be taken and analyzed for target compounds. Decision Rule 2: Are the levels of target compounds present in the soil indicating that compounds from the ash have migrated into the surrounding soil? If no, then the results of the confirmation samples and the corresponding background samples will be forwarded to a final closure study. If yes, then a recommendation for possible further soil remediation may be determined.
Step 6: Specify Tolerable Limits on Decision Errors
In order to support the project purposes, the data generated from this sampling effort needs to be accurate and reliable. All samples collected for this activity will be analyzed in accordance with accepted methods and protocols. The precision, accuracy, and sensitivity requirements for the laboratory data generated during this sampling effort will be in accordance with the published requirements for each method.. Decision errors will be considered tolerable when data meet stated goals for precision, accuracy, representativeness, completeness, and comparability (collectively known as PARCC parameters). Data associated with precision and accuracy results outside acceptance criteria will be evaluated for usability.
Step 7: Optimize Sampling Design
The sampling locations for this effort will be established at the perimeter of the excavated ash, as identified during previous sampling efforts. A sampling grid will be established at the site based on an anticipated 30-foot grid. Field XRF results will be used to provide an initial estimate that the ash has been removed. Field XRF results are in addition to and not in lieu of confirmation samples. Decisions whether the ash removal goal has been met will be made based upon confirmation samples only, not field XRF results.

3.2 SAMPLE CUSTODY AND HOLDING TIMES

As samples are collected, they will be logged on a COC form. COC procedures are addressed in

Section 2.5.2 above.

3.3 ANALYTICAL PROCEDURES

Field screening will be performed using an XRF to provide real-time semi-quantitative results for metals. Table 4 provides the calibration procedure and precision requirements for this field-screening instrument.

Laboratory analyses will be coordinated by LANL SMO. Thus, sections of this QAPP dealing with laboratory selection and specific QC requirements of the laboratory and individual methods are not included here. However, specific quality assurance project goals are presented in Tables 5 and 6 to insure the objectives of the sampling program are met. The analytes and methods for the project are listed below.

- Volatile Organic Compounds (VOCs) by EPA Method 8260B
- Polychlorinated Biphenyls (PCBs) by EPA Method 8082
- Semi-volatile Organic Compounds (SVOCs) by EPA Method 8270C
- Explosive Compounds (Explosives) by EPA Method 8330
- Pesticides by EPA Method 8081A
- Dioxins and Furans by EPA Method 8290
- Metals (Total) by EPA Method 6010B/7471
- Nitrates in Soils by EPA Method 9056
- Perchlorate in Soils by EPA Method 8321A (Modified)
- Cyanides by EPA Method 9014
- Soils pH by EPA Method 9045C
- Gross Alpha, Beta and Gamma by EPA Method 9310
- Alpha and Gamma Spectroscopy
- Specific Radioisotope analyses (based on previous detections)
  - Americium 241
  - Cesium 137
  - Plutonium (Pu-238, 239/240)
  - Radium 226
  - Uranium (U-234, 235, 238)

3.4 REPORTING LIMITS

Project-required reporting limits (RLs) are provided in Table 1. In accordance with Section IX.C.3.c of the NMED/LANL Order on Consent, the RL will be approximately five times higher than the experimentally-determined method detection limit (MDL) or the experimentally-determined and the minimum detectable activity (MDA). Due to the inherent uncertainty of

laboratory analytical methods and procedures, in certain cases the sample-specific MDL or MDA may exceed the project RL. These cases will be considered data quality exceptions and explained in the appendix to the Investigation Report in accordance with Section XI.C.14.c of the NMED/LANL Order on Consent.

3.5 HOLDING TIMES

In accordance with Section IX.C.3.d of the NMED/LANL Order on Consent, all analyses shall be completed within the appropriate analytical holding times. All results will be reviewed to ensure that holding times have been met. If holding times were exceeded, appropriate qualifiers will identify those results.

4.0 DATA REDUCTION, VALIDATION, AND REPORTING

Only data necessary for the purposes of this project will be collected. Necessary data include the laboratory analyses for target analytes. One hundred percent of the laboratory-generated data will be evaluated by ITSI upon receipt of the results from LANL.

4.1 COMPREHENSIVE CERTIFICATES OF ANALYSIS

The project laboratories will report all analytical results in the form of comprehensive certificates of analysis (CCAs). Each CCA will include the field sample ID, the corresponding laboratory ID, and a clear association to the applicable preparation and method QA/QC batch results. Each CCA will also contain a case narrative.

Case narratives will be written on laboratory letterhead and the laboratory manager or his/her designee will authorize the release of data. Items to be included in the case narrative include the items listed below.

- The field sample ID with the corresponding laboratory ID
- Analytic parameters for each sample and the methodology used (USEPA method numbers or other citation)
- A statement on the status of samples analyzed with respect to holding times (met or exceeded)
- A detailed description of all problems encountered
- A discussion of possible reasons for out-of-control QA/QC criteria
- Observations regarding any occurrences which may effect sample integrity or data quality

4.2 ELECTRONIC DATA DELIVERABLES

Laboratory data shall be supplied in an electronic data deliverable (EDDs) in multiple formats. In accordance with Section IX.C of the NMED/LANL Order on Consent, all analytical data for each sample delivery group shall be reported from the laboratory as a file compatible with Microsoft™ Excel, and as a text file.

4.3 DATA VALIDATION REPORTS

In accordance with Section IX.C.5 of the NMED/LANL Order on Consent, Formal Level 3 Validation will be performed for the confirmation samples, to include review of all QA/QC

parameters outlined in the Order, and as appropriate to the level of detail contained in the laboratory report. Table 8 provides an overview of the validation procedures, and Table 9 provides the appropriate qualifiers applied during the validation process. All laboratory data will be reviewed for completeness and to insure the data is adequate for its intended purposes. A data usability summary will then be provided in the Final Report.

4.4 FINAL REPORT

The sample results from confirmation samples collected in accordance with this SAP will be included as part of the Corrective Action Report. The Corrective Action Report shall include an evaluation of representativeness and comparability in accordance with Section IX.C.4 of the NMED/LANL Order on Consent.

5.0 REFERENCES

Innovative Technical Solutions, Inc. (ITSI), 1999. Chemical Data Quality Management Plan, SmART (Small Action Remediation Type) Services Contract No. DACA05-98-R-0007. September 21.

U.S. Environmental Protection Agency (USEPA), 1986. Test Methods for Evaluating Solid Wastes–Physical/Chemical Methods, SW-846, Office of Solid Waste and Emergency Response, USEPA, Washington, D.C., 3rd Edition, September 1986 (including Update III, January 1995).

U. S. Department of Energy, Environmental Measurements Laboratory (EML), 1997, HASL-300; EML Procedures Manual, 28th Edition

Compliance Order on Consent (Consent Order) between State of New Mexico Environmental Department and, the United Stated Department of Energy and Regents of the University of California for the Los Alamos National Laboratory, Los Alamos County, New Mexico. March 1, 2005.

Table 1

Analytical Methods, Parameters for Analysis, and Reporting Limits

Method and Parameters	Reporting Limit	
	Water (µg/L)	**Soil** (µg/kg)
EPA Method 8260B: Volatile Organic Compounds		
Acetone	20	20
Benzene	5.0	5.0
Bromodichloromethane	5.0	5.0
Bromoform	5.0	5.0
Bromomethane	10	10
2-Butanone (methyl ethyl ketone)	20	20
Carbon disulfide	5.0	5.0
Carbon tetrachloride	5.0	5.0
Chlorobenzene	5.0	5.0
Chloroethane	10	10
Chloroform	5.0	5.0
Chloromethane	10	10
Dibromochloromethane	5.0	5.0
1,1-Dichloroethane	5.0	5.0
1,2-Dichloroethane	5.0	5.0
1,1-Dichloroethene	5.0	5.0
1,2-Dichloroethene (total)	5.0	5.0
1,2-Dichloropropane	5.0	5.0
cis-1,3-Dichloropropene	5.0	5.0
trans-1,3-Dichloropropene	5.0	5.0
Ethylbenzene	5.0	5.0
2-Hexanone	20	20
4-Methyl-2-pentanone	20	20
Methylene chloride	10	5.0
Styrene	5.0	5.0
1,1,2,2-Tetrachloroethane	5.0	5.0
Tetrachloroethene	5.0	5.0

Table 1 (Continued)

Analytical Methods, Parameters for Analysis, and Reporting Limits

Method and Parameters	Reporting Limit	
	Water (µg/L)	**Soil** (µg/kg)
EPA Method 8260B: Volatile Organic Compounds (continued)		
Toluene	5.0	5.0
1,1,1-Trichloroethane	5.0	5.0
1,1,2-Trichloroethane	5.0	5.0
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	10
Trichloroethene	5.0	5.0
Vinyl acetate	10	10
Vinyl chloride	10	10
Xylenes (total)	5.0	5.0
EPA Method 8082: Polychlorinated Biphenyls		
Aroclor 1016	1.0	500
Aroclor 1221	1.0	500
Aroclor 1242	1.0	500
Aroclor 1248	1.0	500
Aroclor 1254	1.0	500
Aroclor 1260	1.0	500
EPA Method 8270C: Semivolatile Organic Compounds		
Acenaphthene	10	330
Acenaphthylene	10	330
Anthracene	10	330
Benzoic acid	50	1,660
Benzo[a]anthracene	10	330
Benzo[b]fluoranthene	10	330
Benzo[k]fluoranthene	10	330
Benzo[g,h,i]perylene	10	330
Benzo[a]pyrene	10	330
Benzyl alcohol	10	330

Table 1 (Continued)

Analytical Methods, Parameters for Analysis, and Reporting Limits

Method and Parameters	Reporting Limit	
	Water (µg/L)	**Soil** (µg/kg)
EPA Method 8270C: Semivolatile Organic Compounds (continued)		
Bis(2-chloroethoxy)methane	10	330
Bis(2-chloroethyl)ether	10	330
Bis(2-ethylhexyl)phthalate	10	330
4-Bromophenyl phenyl ether	10	330
Butylbenzylphthalate	10	330
4-Chloroaniline	10	330
4-Chloro-3-methylphenol	10	330
2-Chloronaphthalene	10	330
2-Chlorophenol	10	330
4-Chlorophenyl phenyl ether	10	330
Chrysene	10	330
Dibenzo(a,h)anthracene	10	330
3,3'-Dichlorobenzidine	20	660
Dibenzofuran	10	330
1,2-Dichlorobenzene	10	330
1,3-Dichlorobenzene	10	330
1,4-Dichlorobenzene	10	330
2,4-Dichlorophenol	10	330
Diethylphthalate	10	330
2,4-Dimethylphenol	10	330
Dimethyl phthalate	10	330
Di-n-butylphthalate	10	330
4,6-Dinitro-2-methylphenol	50	1,660
2,4-Dinitrophenol	50	1,660
2,4-Dinitrotoluene	10	330
2,6-Dinitrotoluene	10	330

Table 1 (Continued)

Analytical Methods, Parameters for Analysis, and Reporting Limits

Method and Parameters	Reporting Limit	
	Water (µg/L)	**Soil** (µg/kg)
EPA Method 8270C: Semivolatile Organic Compounds (Continued)		
Di-n-octyl phthalate	10	330
Fluoranthene	10	330
Fluorene	10	330
Hexachlorobenzene	10	330
Hexachlorobutadiene	10	330
Hexachlorocyclopentadiene	10	330
Hexachloroethane	10	330
Indeno(1,2,3-cd)pyrene	10	330
Isophorone	10	330
2-Methylnaphthalene	10	330
2-Methylphenol	10	330
4-Methylphenol	10	330
Naphthalene	10	330
2-Nitroaniline	50	1,660
3-Nitroaniline	50	1,660
4-Nitroaniline	50	1,660
Nitrobenzene	10	330
2-Nitrophenol	10	330
4-Nitrophenol	50	1,660
N-Nitrosodiphenylamine	10	330
N-Nitroso-di-n-propylamine	10	330
2,2'-Oxybis(1-chloropropane)	10	330
Pentachlorophenol	50	1,660
Phenanthrene	10	330
Phenol	10	330
Pyrene	10	330

Table 1 (Continued)

Analytical Methods, Parameters for Analysis, and Reporting Limits

Method and Parameters	Reporting Limit	
	Water (µg/L)	**Soil** (µg/kg)
EPA Method 8270C: Semivolatile Organic Compounds (Continued)		
1,2,4-Trichlorobenzene	10	330
2,4,5-Trichlorophenol	10	330
2,4,6-Trichlorophenol	10	330
EPA Method 8330: Nitroaromatics and Nitramines		
HMX	5.0	300
1,3,5-Trinitrobenzene	5.0	300
RDX	5.0	300
1,3-Dinitrobenzene	5.0	300
Nitrobenzene	5.0	300
2,4,6-Trinitrotoluene	5.0	300
Tetryl	40	700
2,4-Dinitrotoluene	5.0	300
2,6-Dinitrotoluene	5.0	300
2-Nitrotoluene	5.0	300
4-Nitrotoluene	5.0	300
3-Nitrotoluene	5.0	300
2-Amino-4,6-dinitrotoluene	5.0	300
4-Amino-2,6-dinitrotoluene	5.0	300
EPA Method 8081A: Organochlorine Pesticides		
alpha-BHC	0.050	50
beta-BHC	0.050	50
gamma-BHC	0.050	50
delta-BHC	0.050	50
Heptachlor	0.010	50
Aldrin	0.050	50
alpha-Chlordane	0.050	50
gamma-Chlordane	0.050	50

Table 1 (Continued)

Analytical Methods, Parameters for Analysis, and Reporting Limits

Method and Parameters	Reporting Limit	
	Water (µg/L)	**Soil** (µg/kg)
EPA Method 8081A: Organochlorine Pesticides (Continued)		
Heptachlor epoxide	0.010	50
Dieldrin	0.10	50
Endrin	0.10	50
Endrin aldehyde	0.10	50
4,4'-DDD	0.10	50
4,4'-DDE	0.10	50
4,4'-DDT	0.10	50
Endosulfan I	0.10	50
Endosulfan II	0.10	50
Endosulfan sulfate	0.10	50
Methoxychlor	1.0	50
Toxaphene	1.0	1,000
EPA Method 8290: Dioxins and Furans		
2,3,7,8-TCDF	0.00001	0.001
1,2,3,7,8-PeCDF	0.00001	0.001
2,3,4,7,8-PeCDF	0.00001	0.001
1,2,3,4,7,8-HxCDF	0.00001	0.001
1,2,3,6,7,8-HxCDF	0.00001	0.001
1,2,3,7,8,9-HxCDF	0.00001	0.001
2,3,4,6,7,8-HxCDF	0.00001	0.001
1,2,3,4,6,7,8-HpCDF	0.00001	0.001
1,2,3,4,7,8,9-HpCDF	0.00001	0.001
OCDF	0.00001	0.001
2,3,7,8-TCDD	0.00001	0.001
1,2,3,7,8-PeCDD	0.00001	0.001
1,2,3,4,7,8-HxCDD	0.00001	0.001
1,2,3,6,7,8-HxCDD	0.00001	0.001
1,2,3,7,8,9-HxCDD	0.00001	0.001

Table 1 (Continued)

Analytical Methods, Parameters for Analysis, and Reporting Limits

Method and Parameters	Reporting Limit	
	Water (µg/L)	**Soil** (µg/kg)
EPA Method 8290: Dioxins and Furans (continued)		
1,2,3,4,6,7,8-HpCDD	0.00001	0.001
OCDD	0.00001	0.001
EPA Method 6010B/6020: Metals by ICP		
Aluminum	50	50,000
Antimony	5.0	500
Arsenic	5.0	500
Barium	20	2,000
Beryllium	3.0	300
Cadmium	2.5	250
Calcium	500	50,000
Chromium	5.0	500
Cobalt	70	7,000
Copper	60	6,000
Iron	70	7,000
Lead	5.0	500
Magnesium	500	50,000
Manganese	20	2,000
Molybdenum	80	8,000
Nickel	40	15,000
Potassium	500	50,000
Selenium	5.0	500
Silver	70	7,000
Sodium	500	50,000
Thallium	2.0	1,000
Vanadium	4.0	400
Zinc	50	5,000

Table 1 (Continued)

Analytical Methods, Parameters for Analysis, and Reporting Limits

Method and Parameters	Reporting Limit	
	Water (µg/L)	**Soil** (µg/kg)
EPA Method 7470A/7471A		
Mercury	0.2	100
EPA Method 9056		
Nitrates in soils	100	1,000
EPA Method 8321A (Modified)		
Perchlorate in soils	20	100
EPA Method 9014		
Cyanide	20	500
EPA Method 9045C		
Soil pH	NA	0.2 (pH units)
Radiochemistry	**pCi/g**	**pCi/g**
Gross alpha, beta and gamma	10/10/5	10/10/5
Gamma spectroscopy	1	1
Specific radioisotopes		
- Americium 241	0.013	0.013
- Cesium 137	0.1	0.1
- Plutonium 238, 239/ 240	0.01	0.01
- Radium 226	0.1	0.1
- Uranium 234, 235, 238	0.01	0.01

(1) Reporting Limits (RLs) in this table are typical values. Variations between different labs, techniques, equipment, etc may be permitted. Permissible RL values must be examined on an individual project basis.

NA = Not Applicable

Table 2

Sample Preservation and Storage Requirements

Method Number	Parameters	Matrix	Holding Time (from sample date)	Containers	Preservative	Minimum Sample Size
8260B	Volatile Organic Compounds	water	analysis -14 days	40 mL VOA vials with Teflon® septa	Store at 4 deg C	3 x 40 mL
		soil	analysis - 7 days For Encore® Samplers 24 hours or 7 days if frozen	8-ounce glass jar, or 3 X 5g Encore® or equivalent	Store at 4 deg C	500 g or 15 g for Encore®
8081A/8082	Organochlorine Pesticides and Polychlorinated Biphenyls	water	extraction - 7 days analysis - 40 days	1.0 liter glass	Store at 4 deg C	2 X 1.0 L
		soil	extraction - 14 days analysis - 40 days	8-ounce glass jar or stainless steel tube	Store at 4 deg C	500 g
8270C	Semivolatile Organic Compounds	water	extraction - 7 days analysis - 40 days	1.0 liter glass	Store at 4 deg C	2 X 1.0 L
		soil	extraction - 14 days analysis - 40 days	8-ounce glass jar or stainless steel tube	Store at 4 deg C	500 g
8330	Explosive Compounds	water	extraction - 7 days analysis - 40 days	1.0 liter glass	Store at 4 deg C	2 X 1.0 L
		soil	extraction - 14 days analysis - 40 days	8-ounce glass jar or stainless steel tube with Teflon ® liners	Store at 4 deg C	500 g
8290	Dioxins and Furans	water	extraction - 30 days analysis - 45 days	1.0 liter glass	Store at 4 deg C	2 X 1.0 L
		soil	extraction - 30 days analysis - 45 days	8-ounce glass jar or stainless steel tube	Store at 4 deg C	500 g

Table 2 (Continued)

Sample Preservation and Storage Requirements

Method Number	Parameters	Matrix	Holding Time (from sample date)	Containers	Preservative	Minimum Sample Size
6010B/6020	Metals by ICP	water	analysis - 6 months	500 mL plastic (a)	Nitric acid to pH < 2	500 mL
		soil	analysis - 6 months	8-ounce glass jar or stainless steel tube	Store at 4 deg C	250 g
7471A	Mercury by CVAA	water	analysis - 28 days	500 mL plastic (a)	Nitric acid to pH < 2	500 mL
		soil	analysis - 28 days	8-ounce glass jar or stainless steel tube	Store at 4 deg C	500 g
9056	Nitrate	water	analysis - 48 hours	500 mL plastic	Store at 4 deg C	500 mL
		soil	analysis - 28 days	8-ounce glass jar or stainless steel tube	Store at 4 deg C	500 g
9045C	Soils pH	water	analysis - 28 days	500 mL plastic	Store at 4 deg C	500 mL
		soil	analysis - 28 days	8-ounce glass jar or stainless steel tube	Store at 4 deg C	500 g
8321A	Perchlorate	water	analysis - 28 days	500 mL plastic	Store at 4 deg C	500 mL
		soil	analysis - 28 days	8-ounce glass jar or stainless steel tube	Store at 4 deg C	500 g
9310 and specific radioisotopes	Radiochemistry	water	analysis – 6 months	1.0 liter plastic	Nitric acid to pH < 2	1 L
		soil	analysis – 6 months	8-ounce glass jar or stainless steel tube	Store at 4 deg C	500 g

(a) = The following methods can be sampled together in a 1.0 L plastic container preserved with nitric acid: 6010A, 6020, 7041, 7060A, 7421, 7740, 7841, and 7471A

Table 3

Summary of External (Field) QC Samples

Method Number	Parameters	Trip Blanks	Equipment Rinse Blanks	Field Water Blanks	QA Samples (if requested)	Field Duplicates
8260B	Volatile Organic Compounds	1 per cooler	1 per 20 samples	1 per lot of water	1 per 20 samples	1 per 10 samples
8081A	Organochlorine Pesticides	NA	1 per 20 samples	1 per lot of water	1 per 20 samples	1 per 10 samples
8082	Polychlorinated Biphenyls	NA	1 per 20 samples	1 per lot of water	1 per 20 samples	1 per 10 samples
8270C	Semivolatile Organic Compounds	NA	1 per 20 samples	1 per lot of water	1 per 20 samples	1 per 10 samples
8330	Explosive Compounds	NA	1 per 20 samples	1 per lot of water	1 per 20 samples	1 per 10 samples
8290	Dioxins and Furans	NA	1 per 20 samples	1 per lot of water	1 per 20 samples	1 per 10 samples
6010B/6020	Metals by ICP	NA	1 per 20 samples	1 per lot of water	1 per 20 samples	1 per 10 samples
7471A	Mercury by CVAA	NA	1 per 20 samples	1 per lot of water	1 per 20 samples	1 per 10 samples
9056/9045C/8321A	Nitrate/pH/perchlorate	NA	1 per 20 samples	1 per lot of water	1 per 20 samples	1 per 10 samples
9310	Gamma Spectroscopy	NA	1 per 20 samples	1 per lot of water	1 per 20 samples	1 per 10 samples
	Specific Radioisotopes	NA	1 per 20 samples	1 per lot of water	1 per 20 samples	1 per 10 samples

1 per container indicates one trip blank per shipping container per laboratory.
1 per event indicates one equipment blank per day for groundwater sampling activities if reusable bailers are used. The frequency of equipment blanks for soil sampling activities (if required) will be specified in the SAP.
1 per lot of water indicates one field water blank per discrete lot of water used for rinsing reusable sampling equipment.
Field water blanks are not required when dedicated or disposable sampling equipment is used.
QA samples are Quality Assurance samples, if requested, which will be submitted to the COE contract QA laboratory as specified by the USACE District Chemist.

Table 4

Field Measurement Calibration Procedures and Precision Requirements

Field Measurement	Instrument	Calibration Procedure	Precision
Elevation of Sample Site	Level and rod or Total Station	Surveyor Calibration	0.01 foot
Location of Sample Site	Steel or Fiberglass Tape or Total Station	Reference to New Tape or Surveyor Calibration	1 foot
Soil Sample Depth	Steel or Fiberglass Tape	Reference to New Tape	Variable, depending on depth and surface irregularities
	Length of Sample Rod	Reference to Steel Tape	0.5 foot
Portable Metals Analysis	XRF	In accordance with manufacturer's manual to NIST standards	Variable, depending on specific metals reported

Table 5

Quality Assurance Goals, Precision, Relative Percent Difference

Method and Parameters	Soils Maximum RPD[(1)]	
	MS/MSD	Field Duplicates
EPA Method 8082: Polychlorinated Biphenyls		
Aroclor 1016	20	50
Aroclor 1221	20	50
Aroclor 1242	20	50
Aroclor 1248	20	50
Aroclor 1254	20	50
Aroclor 1260	20	50
EPA Method 8270C: Semivolatile Organic Compounds		
Acenaphthene	20	50
Acenaphthylene	20	50
Anthracene	20	50
Benzoic acid	20	50
Benzo[a]anthracene	20	50
Benzo[b]fluoranthene	20	50
Benzo[k]fluoranthene	20	50
Benzo[g,h,i]perylene	20	50
Benzo[a]pyrene	20	50
Benzyl alcohol	20	50
EPA Method 8260B: Volatile Organic Compounds		
Acetone	20	50
Benzene	20	50
Bromodichloromethane	20	50
Bromoform	20	50
Bromomethane	20	50
2-Butanone (methyl ethyl ketone)	20	50
Carbon disulfide	20	50
Carbon tetrachloride	20	50
Chlorobenzene	20	50

Table 5 (Continued)

Quality Assurance Goals, Precision, Relative Percent Difference

Method and Parameters	Maximum RPD	
	MS/MSD	Field Duplicates
EPA Method 8260B: Volatile Organic Compounds		
Chloroethane	20	50
Chloroform	20	50
Chloromethane	20	50
Dibromochloromethane	20	50
1,1-Dichloroethane	20	50
1,2-Dichloroethane	20	50
1,1-Dichloroethene	20	50
1,2-Dichloroethene (total)	20	50
1,2-Dichloropropane	20	50
cis-1,3-Dichloropropene	20	50
trans-1,3-Dichloropropene	20	50
Ethylbenzene	20	50
2-Hexanone	20	50
4-Methyl-2-pentanone	20	50
Methylene chloride	20	50
Styrene	20	50
1,1,2,2-Tetrachloroethane	20	50
Tetrachloroethene	20	50
Toluene	20	50
1,1,1-Trichloroethane	20	50
1,1,2-Trichloroethane	20	50
1,1,2-Trichloro-1,2,2-trifluoroethane	20	50
Trichloroethene	20	50
Vinyl acetate	20	50
Vinyl chloride	20	50
Xylenes (total)	20	50

Table 5 (Continued)

Quality Assurance Goals, Precision, Relative Percent Difference

Method and Parameters	Maximum RPD	
	MS/MSD	Field Duplicates
EPA Method 8081A: Organochlorine Pesticides		
alpha-BHC	20	50
beta-BHC	20	50
gamma-BHC	20	50
delta-BHC	20	50
Heptachlor	20	50
Aldrin	20	50
alpha-Chlordane	20	50
gamma-Chlordane	20	50
Heptachlor epoxide	20	50
Dieldrin	20	50
Endrin	20	50
Endrin aldehyde	20	50
4,4'-DDD	20	50
4,4'-DDE	20	50
4,4'-DDT	20	50
Endosulfan I	20	50
Endosulfan II	20	50
Endosulfan sulfate	20	50
Methoxychlor	20	50
Toxaphene	20	50
EPA Method 8082: Polychlorinated Biphenyls		
Aroclor 1016	20	50
Aroclor 1221	20	50
Aroclor 1242	20	50
Aroclor 1248	20	50
Aroclor 1254	20	50
Aroclor 1260	20	50

Table 5 (Continued)

Quality Assurance Goals, Precision, Relative Percent Difference

Method and Parameters	Maximum RPD	
	MS/MSD	Field Duplicates
EPA Method 8270C: Semivolatile Organic Compounds		
Bis(2-chloroethoxy)methane	20	50
Bis(2-chloroethyl)ether	20	50
Bis(2-ethylhexyl)phthalate	20	50
4-Bromophenyl phenyl ether	20	50
Butylbenzylphthalate	20	50
4-Chloroaniline	20	50
4-Chloro-3-methylphenol	20	50
2-Chloronaphthalene	20	50
2-Chlorophenol	20	50
4-Chlorophenyl phenyl ether	20	50
Chrysene	20	50
Dibenzo(a,h)anthracene	20	50
3,3'-Dichlorobenzidine	20	50
Dibenzofuran	20	50
1,2-Dichlorobenzene	20	50
1,3-Dichlorobenzene	20	50
1,4-Dichlorobenzene	20	50
2,4-Dichlorophenol	20	50
Diethylphthalate	20	50
2,4-Dimethylphenol	20	50
Dimethyl phthalate	20	50
Di-n-butylphthalate	20	50
4,6-Dinitro-2-methylphenol	20	50
2,4-Dinitrophenol	20	50
2,4-Dinitrotoluene	20	50
2,6-Dinitrotoluene	20	50

Table 5 (Continued)

Quality Assurance Goals, Precision, Relative Percent Difference

Method and Parameters	Maximum RPD	
	MS/MSD	Field Duplicates
EPA Method 8270C: Semivolatile Organic Compounds (Continued)		
Di-n-octyl phthalate	20	50
Fluoranthene	20	50
Fluorene	20	50
Hexachlorobenzene	20	50
Hexachlorobutadiene	20	50
Hexachlorocyclopentadiene	20	50
Hexachloroethane	20	50
Indeno(1,2,3-cd)pyrene	20	50
Isophorone	20	50
2-Methylnaphthalene	20	50
2-Methylphenol	20	50
4-Methylphenol	20	50
Naphthalene	20	50
2-Nitroaniline	20	50
3-Nitroaniline	20	50
4-Nitroaniline	20	50
Nitrobenzene	20	50
2-Nitrophenol	20	50
4-Nitrophenol	20	50
N-Nitrosodiphenylamine	20	50
N-Nitroso-di-n-propylamine	20	50
2,2'-Oxybis(1-chloropropane)	20	50
Pentachlorophenol	20	50
Phenanthrene	20	50
Phenol	20	50
Pyrene	20	50

Table 5 (Continued)

Quality Assurance Goals, Precision, Relative Percent Difference

Method and Parameters	Maximum RPD	
	MS/MSD	Field Duplicates
EPA Method 8270C: Semivolatile Organic Compounds (Continued)		
1,2,4-Trichlorobenzene	20	50
2,4,5-Trichlorophenol	20	50
2,4,6-Trichlorophenol	20	50
EPA Method 8330: Nitroaromatics and Nitramines		
HMX	20	50
1,3,5-Trinitrobenzene	20	50
RDX	20	50
1,3-Dinitrobenzene	20	50
Nitrobenzene	20	50
2,4,6-Trinitrotoluene	20	50
Tetryl	20	50
2,4-Dinitrotoluene	20	50
2,6-Dinitrotoluene	20	50
2-Nitrotoluene	20	50
4-Nitrotoluene	20	50
3-Nitrotoluene	20	50
2-Amino-4,6-dinitrotoluene	20	50
4-Amino-2,6-dinitrotoluene	20	50
EPA Method 8290: Dioxins and Furans		
2,3,7,8-TCDF	20	50
1,2,3,7,8-PeCDF	20	50
2,3,4,7,8-PeCDF	20	50
1,2,3,4,7,8-HxCDF	20	50
1,2,3,6,7,8-HxCDF	20	50
1,2,3,7,8,9-HxCDF	20	50
2,3,4,6,7,8-HxCDF	20	50
1,2,3,4,6,7,8-HpCDF	20	50
1,2,3,4,7,8,9-HpCDF	20	50

Table 5 (Continued)

Quality Assurance Goals, Precision, Relative Percent Difference

Method and Parameters	Maximum RPD	
	MS/MSD	Field Duplicates
EPA Method 8290: Dioxins and Furans (continued)		
OCDF	20	50
2,3,7,8-TCDD	20	50
1,2,3,7,8-PeCDD	20	50
1,2,3,4,7,8-HxCDD	20	50
1,2,3,6,7,8-HxCDD	20	50
1,2,3,7,8,9-HxCDD	20	50
1,2,3,4,6,7,8-HpCDD	20	50
OCDD	20	50
EPA Method 6010B/6020: Metals by ICP		
Aluminum	20	50
Antimony	20	50
Arsenic	20	50
Barium	20	50
Beryllium	20	50
Cadmium	20	50
Calcium	20	50
Chromium	20	50
Cobalt	20	50
Copper	20	50
Iron	20	50
Lead	20	50
Magnesium	20	50
Manganese	20	50
Molybdenum	20	50
Nickel	20	50

Table 5 (Continued)

Quality Assurance Goals, Precision, Relative Percent Difference

Method and Parameters	Maximum RPD	
	MS/MSD	Field Duplicates
EPA Method 6010B/6020: Metals by ICP		
Potassium	20	50
Selenium	20	50
Silver	20	50
Sodium	20	50
Thallium	20	50
Vanadium	20	50
Zinc	20	50
EPA Method 7470A/7471A		
Mercury	20	50
EPA Method 9056		
Nitrates in soils	20	50
EPA Method 8321A (Modified)		
Perchlorate in soils	20	50
EPA Method 9014		
Cyanide	20	50
EPA Method 9045C		
Soil pH	NA	50
Radiochemistry	**pCi/g**	**pCi/g**
Gross alpha, beta and gamma	NA	50
Gamma spectroscopy	NA	50
Specific radioisotopes		
- Americium 241		50
- Cesium 137		50
- Plutonium 238, 239/240	NA	50
- Radium 226		50
- Uranium 234, 235, 238		50

(1) Maximum relative percent difference unless otherwise specified by the analytical method.

NA Not Applicable

Table 6

Quality Assurance Goals: Accuracy, Percent Recovery

Method and Parameters	Minimum Recovery[1]	
	LCS	MS/MSD
EPA Method 8260B: Volatile Organic Compounds		
Acetone	65-135	65-135
Benzene	65-135	65-135
Bromodichloromethane	65-135	65-135
Bromoform	65-135	65-135
Bromomethane	65-135	65-135
2-Butanone (methyl ethyl ketone)	65-135	65-135
Carbon disulfide	65-135	65-135
Carbon tetrachloride	65-135	65-135
Chlorobenzene	65-135	65-135
Chloroethane	65-135	65-135
Chloroform	65-135	65-135
Chloromethane	65-135	65-135
Dibromochloromethane	65-135	65-135
1,1-Dichloroethane	65-135	65-135
1,2-Dichloroethane	65-135	65-135
1,1-Dichloroethene	65-135	65-135
1,2-Dichloroethene (total)	65-135	65-135
1,2-Dichloropropane	65-135	65-135
cis-1,3-Dichloropropene	65-135	65-135
trans-1,3-Dichloropropene	65-135	65-135
Ethylbenzene	65-135	65-135
2-Hexanone	65-135	65-135
4-Methyl-2-pentanone	65-135	65-135
Methylene chloride	65-135	65-135
Styrene	65-135	65-135
1,1,2,2-Tetrachloroethane	65-135	65-135
Tetrachloroethene	65-135	65-135
Toluene	65-135	65-135

Table 6 (Continued)

Quality Assurance Goals: Accuracy, Percent Recovery

Method and Parameters	Minimum Recovery[(1)]	
	LCS	MS/MSD
EPA Method 8260B: Volatile Organic Compounds (continued)		
1,1,1-Trichloroethane	65-135	65-135
1,1,2-Trichloroethane	65-135	65-135
1,1,2-Trichloro-1,2,2-trifluoroethane	65-135	65-135
Trichloroethene	65-135	65-135
Vinyl acetate	65-135	65-135
Vinyl chloride	65-135	65-135
Xylenes (total)	65-135	65-135
EPA Method 8082: Polychlorinated Biphenyls		
Aroclor 1016	65-135	65-135
Aroclor 1221	65-135	65-135
Aroclor 1242	65-135	65-135
Aroclor 1248	65-135	65-135
Aroclor 1254	65-135	65-135
Aroclor 1260	65-135	65-135
EPA Method 8270C: Semivolatile Organic Compounds		
Acenaphthene	65-135	65-135
Acenaphthylene	65-135	65-135
Anthracene	65-135	65-135
Benzoic acid	65-135	65-135
Benzo[a]anthracene	65-135	65-135
Benzo[b]fluoranthene	65-135	65-135
Benzo[k]fluoranthene	65-135	65-135
Benzo[g,h,i]perylene	65-135	65-135
Benzo[a]pyrene	65-135	65-135
Benzyl alcohol	65-135	65-135

Table 6 (Continued)

Quality Assurance Goals: Accuracy, Percent Recovery

Method and Parameters	Soils Minimum Recovery	
	LCS	MS/MSD
EPA Method 8270C: Semivolatile Organic Compounds		
Bis(2-chloroethoxy)methane	65-135	65-135
Bis(2-chloroethyl)ether	65-135	65-135
Bis(2-ethylhexyl)phthalate	65-135	65-135
4-Bromophenyl phenyl ether	65-135	65-135
Butylbenzylphthalate	65-135	65-135
4-Chloroaniline	65-135	65-135
4-Chloro-3-methylphenol	65-135	65-135
2-Chloronaphthalene	65-135	65-135
2-Chlorophenol	65-135	65-135
4-Chlorophenyl phenyl ether	65-135	65-135
Chrysene	65-135	65-135
Dibenzo(a,h)anthracene	65-135	65-135
3,3'-Dichlorobenzidine	65-135	65-135
Dibenzofuran	65-135	65-135
1,2-Dichlorobenzene	65-135	65-135
1,3-Dichlorobenzene	65-135	65-135
1,4-Dichlorobenzene	65-135	65-135
2,4-Dichlorophenol	65-135	65-135
Diethylphthalate	65-135	65-135
2,4-Dimethylphenol	65-135	65-135
Dimethyl phthalate	65-135	65-135
Di-n-butylphthalate	65-135	65-135
4,6-Dinitro-2-methylphenol	65-135	65-135
2,4-Dinitrophenol	65-135	65-135
2,4-Dinitrotoluene	65-135	65-135
2,6-Dinitrotoluene	65-135	65-135
Di-n-octyl phthalate	65-135	65-135

Table 6 (Continued)

Quality Assurance Goals: Accuracy, Percent Recovery

Method and Parameters	Soils Minimum Recovery	
	LCS	MS/MSD
EPA Method 8270C: Semivolatile Organic Compounds (Continued)		
Fluoranthene	65-135	65-135
Fluorene	65-135	65-135
Hexachlorobenzene	65-135	65-135
Hexachlorobutadiene	65-135	65-135
Hexachlorocyclopentadiene	65-135	65-135
Hexachloroethane	65-135	65-135
Indeno(1,2,3-cd)pyrene	65-135	65-135
Isophorone	65-135	65-135
2-Methylnaphthalene	65-135	65-135
2-Methylphenol	65-135	65-135
4-Methylphenol	65-135	65-135
Naphthalene	65-135	65-135
2-Nitroaniline	65-135	65-135
3-Nitroaniline	65-135	65-135
4-Nitroaniline	65-135	65-135
Nitrobenzene	65-135	65-135
2-Nitrophenol	65-135	65-135
4-Nitrophenol	65-135	65-135
N-Nitrosodiphenylamine	65-135	65-135
N-Nitroso-di-n-propylamine	65-135	65-135
2,2'-Oxybis(1-chloropropane)	65-135	65-135
Pentachlorophenol	65-135	65-135
Phenanthrene	65-135	65-135
Phenol	65-135	65-135
Pyrene	65-135	65-135
1,2,4-Trichlorobenzene	65-135	65-135

Table 6 (Continued)

Quality Assurance Goals: Accuracy, Percent Recovery

Method and Parameters	Soils Minimum Recovery	
	LCS	MS/MSD
EPA Method 8270C: Semivolatile Organic Compounds (Continued)		
2,4,5-Trichlorophenol	65-135	65-135
2,4,6-Trichlorophenol	65-135	65-135
EPA Method 8330: Nitroaromatics and Nitramines		
HMX	65-135	65-135
1,3,5-Trinitrobenzene	65-135	65-135
RDX	65-135	65-135
1,3-Dinitrobenzene	65-135	65-135
Nitrobenzene	65-135	65-135
2,4,6-Trinitrotoluene	65-135	65-135
Tetryl	65-135	65-135
2,4-Dinitrotoluene	65-135	65-135
2,6-Dinitrotoluene	65-135	65-135
2-Nitrotoluene	65-135	65-135
4-Nitrotoluene	65-135	65-135
3-Nitrotoluene	65-135	65-135
2-Amino-4,6-dinitrotoluene	65-135	65-135
4-Amino-2,6-dinitrotoluene	65-135	65-135
EPA Method 8081A: Organochlorine Pesticides		
alpha-BHC	65-135	65-135
beta-BHC	65-135	65-135
gamma-BHC	65-135	65-135
delta-BHC	65-135	65-135
Heptachlor	65-135	65-135
Aldrin	65-135	65-135
alpha-Chlordane	65-135	65-135
gamma-Chlordane	65-135	65-135
Heptachlor epoxide	65-135	65-135
Dieldrin	65-135	65-135

Table 6 (Continued)

Quality Assurance Goals: Accuracy, Percent Recovery

Method and Parameters	Soils Minimum Recovery	
	LCS	MS/MSD
EPA Method 8081A: Organochlorine Pesticides (Continued)		
Endrin	65-135	65-135
Endrin aldehyde	65-135	65-135
4,4'-DDD	65-135	65-135
4,4'-DDE	65-135	65-135
4,4'-DDT	65-135	65-135
Endosulfan I	65-135	65-135
Endosulfan II	65-135	65-135
Endosulfan sulfate	65-135	65-135
Methoxychlor	65-135	65-135
Toxaphene	65-135	65-135
EPA Method 8290: Dioxins and Furans		
2,3,7,8-TCDF	65-135	65-135
1,2,3,7,8-PeCDF	65-135	65-135
2,3,4,7,8-PeCDF	65-135	65-135
1,2,3,4,7,8-HxCDF	65-135	65-135
1,2,3,6,7,8-HxCDF	65-135	65-135
1,2,3,7,8,9-HxCDF	65-135	65-135
2,3,4,6,7,8-HxCDF	65-135	65-135
1,2,3,4,6,7,8-HpCDF	65-135	65-135
1,2,3,4,7,8,9-HpCDF	65-135	65-135
OCDF	65-135	65-135
2,3,7,8-TCDD	65-135	65-135
1,2,3,7,8-PeCDD	65-135	65-135
1,2,3,4,7,8-HxCDD	65-135	65-135
1,2,3,6,7,8-HxCDD	65-135	65-135
1,2,3,7,8,9-HxCDD	65-135	65-135
1,2,3,4,6,7,8-HpCDD	65-135	65-135
OCDD	65-135	65-135

Table 6 (Continued)

Quality Assurance Goals: Accuracy, Percent Recovery

Method and Parameters	Soils Minimum Recovery	
	LCS	MS/MSD
EPA Method 6010B/6065-135: Metals by ICP		
Aluminum	80-120	75-125
Antimony	80-120	75-125
Arsenic	80-120	75-125
Barium	80-120	75-125
Beryllium	80-120	75-125
Cadmium	80-120	75-125
Calcium	80-120	75-125
Chromium	80-120	75-125
Cobalt	80-120	75-125
Copper	80-120	75-125
Iron	80-120	75-125
Lead	80-120	75-125
Magnesium	80-120	75-125
Manganese	80-120	75-125
Molybdenum	80-120	75-125
Nickel	80-120	75-125
Potassium	80-120	75-125
Selenium	80-120	75-125
Silver	80-120	75-125
Sodium	80-120	75-125
Thallium	80-120	75-125
Vanadium	80-120	75-125
Zinc	80-120	75-125

Table 6 (Continued)

Quality Assurance Goals: Accuracy, Percent Recovery

Method and Parameters	Soils Minimum Recovery	
	LCS	**MS/MSD**
EPA Method 7470A/7471A		
Mercury	80-120	75-125
EPA Method 9056		
Nitrates in soils	80-120	75-125
EPA Method 8321A (Modified)		
Perchlorate in soils	80-120	75-125
EPA Method 9014		
Cyanide	80-120	75-125
EPA Method 9045C		
Soil pH	NA	NA
Radiochemistry	**pCi/g**	**pCi/g**
Gross alpha, beta and gamma	As specified in method	NA
Gamma spectroscopy	As specified in method	NA
Specific radioisotopes	As specified in method	
- Americium 241		
- Cesium 137		NA
- Plutonium 238, 239/240		
- Radium 226		
- Uranium 234, 235, 238		

(1) Maximum relative percent difference unless otherwise specified by the analytical method.

NA Not Applicable

Table 7

Selected Ash Characteristic Parameters[1]

Parameters	Ash Concentration Average[3]	Background Concentration[2] Upper Threshold Limit (UTL)[4]
Metals (in mg/kg)		
Barium	2,171	295
Copper	3,423	14.7
Lead	5,756	22.3
Nickel	212	15.4
Zinc	6,577	48.8
Radionuclides (in pCi/g)		
Americium-241	0.018	0.013
Cesium-137	0.055	1.65
Plutonium-238	ND	0.023
Plutonium-239	0.588	0.054
Plutonium-240	(reported as Plutonium 239)	Not available
Plutonium-241	Not reported	Not available
Radium-226	5.171	2.59
Uranium-234	7.909	2.59
Uranium-235	0.395	0.20
Uranium-238	6.252	2.29

[1]Parameters have been selected based upon the waste characterization sampling conducted in April 2005. Other parameters may be added if warranted.
[2]Results taken from *Draft Inorganic and Radionuclide Background Data for Soils, Canyon Sediments and Bandelier Tuff at Los Alamos National Laboratory*, Environmental Restoration Project, 1998, September
[3]One value for copper has been excluded as an anomaly.
[4]Upper Threshold Limit is determined at the 95% confidence interval.

Note: Screening criteria are provided for use as guidance in the field and are intended a supplemental evaluation in addition to final confirmation sampling

Table 8

Data Validation Procedures

Control Parameter	Exceedance of Control Limits	Qualification of Detected Results	Qualification of Nondetected Results	Associated Results
Holding Times (Volatile organic methods)	Holding time exceeded by 1 - 7 days	J-	J-	All method results in affected sample
	Holding time exceeded by > 7 days	J-	R	All method results in affected sample
Holding Times (Mercury and hexavalent Cr)	Holding time exceeded	J-	R	All method results in affected sample
Holding Times (All other methods)	Holding time exceeded	J-	J-	All method results in affected sample
Laboratory Blanks	Analyte detected in blank. Determine action level, x10 for common lab contaminant or x5 for other analytes	U detected results below action level	Not qualified	Analyte results in the analytical batch
Trip Blanks	Same as laboratory blanks	U detected results below action level	Not qualified	Analyte results in samples in the same cooler
Equipment Blanks	Same as laboratory blanks	U detected results below action level	Not qualified	Analyte results in samples in the same sampling event
Surrogate Recovery (GC, HPLC methods)	recovery > UCL LCL > recovery > 50% recovery < 50%	J+ J- J-	Not qualified J- R	All method results in affected sample
Surrogate Recovery (GC/MS methods)	recovery > UCL LCL > recovery > 10% recovery < 10%	J+ J- J-	Not qualified J- R	All method results in affected sample

[1]Not all analytical methods may be included in the study. Data validation procedures may be modified for radiological methods, as appropriate.

Table 8 (Continued)

Data Validation Procedures

Control Parameter	Exceedance of Control Limits	Qualification of Detected Results	Qualification of Nondetected Results	Associated Results
Laboratory Control Sample (LCS) Recovery (GC, HPLC methods)	recovery > UCL LCL > recovery > 50% recovery < 50%	J+ J- J-	Not qualified J- R	Analyte results in the analytical batch or sub-analytical batch
LCS Recovery (GC/MS methods)	recovery > UCL LCL > recovery > 10% recovery < 10%	J+ J- J-	Not qualified J- R	Analyte results in the analytical batch or sub-analytical batch
LCS Recovery (Inorganic methods)	recovery > UCL LCL > recovery > 50% recovery < 50%	J+ J- J-	Not qualified J- R	Analyte results in the analytical batch or sub-analytical batch
Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries (GC, HPLC methods)	recovery > UCL LCL > recovery > 50% recovery < 50%	J+ J- J-	Not qualified J- R	Analyte results in the analytical batch (1)
MS/MSD Recoveries (GC/MS methods)	recovery > UCL LCL > recovery > 10% recovery < 10%	J+ J- J-	Not qualified J- R	Analyte results in the analytical batch (1)
MS Recovery (Inorganic methods)	recovery > UCL LCL > recovery > 30% recovery < 30%	J+ J- J-	Not qualified J- R	Analyte results in the analytical batch (1)
MS/MSD RPD (Organic methods)	RPD > CL	J	J	Analyte results in the spiked sample
Matrix Duplicate RPD (Inorganic methods)	RPD > CL and sample and duplicate results > 5x PQL	J	Not qualified	Analyte results in the analytical batch (1)
	RPD > CL and sample and/or duplicate results < 5x PQL	J	Not qualified	Analyte results in the analytical batch (1)

Table 8 (Continued)

Data Validation Procedures

Control Parameter	Exceedance of Control Limits	Qualification of Detected Results	Qualification of Nondetected Results	Associated Results
Initial Calibration %RSD (Organic methods)	%RSD > CL or r < 0.995	J	J	Analyte results associated with the initial calibration
Initial Calibration RRF (GC/MS methods)	RRF < 0.05	J	R	Analyte results associated with the initial calibration
Continuing Calibration %D (Organic methods)	%D > UCL -50% < %D < LCL %D < -50%	J+ J- J-	Not qualified J- R	Analyte results associated with the continuing calibration
Initial Calibration and Continuing Calibration Verification (ICV and CCV) Recoveries (Inorganic methods)	recovery > 125% 125% > recovery > UCL LCL > recovery > 75% recovery < 75%	R J+ J- R	Not qualified Not qualified J- R	Analyte results associated with the ICV or CCV
Field Duplicate RPD (All Methods)	RPD > CL	Not qualified; discuss in report	Not qualified; discuss in report	Analyte results in the sample and duplicate
Internal Standard Area Counts (GC/MS methods)	Area counts > 2x the associated standard	J+	Not qualified	Associated analyte results in the sample
	Area counts < 0.5x the associated standard	J-	R	Associated analyte results in the sample
Interference check sample recovery	recovery > UCL LCL > recovery > 30%	J+ J-	Not qualified J-	Analyte results in the analytical batch
Serial dilution %D	%D > UCL	J	J	
Post-digestion spike recovery	recovery > UCL LCL > recovery > 10% recovery < 10%	J+ J- J-	Not qualified J- R	All analyte results in affected sample

(1) If the spiked sample or duplicate is not considered representative of the analytical batch, only the sample is qualified.

Table 8

Data Validation Procedures

Control Parameter	Exceedance of Control Limits	Qualification of Detected Results	Qualification of Nondetected Results	Associated Results
Holding Times (Volatile organic methods)	Holding time exceeded by 1 - 7 days	J-	J-	All method results in affected sample
	Holding time exceeded by > 7 days	J-	R	All method results in affected sample
Holding Times (Mercury and hexavalent Cr)	Holding time exceeded	J-	R	All method results in affected sample
Holding Times (All other methods)	Holding time exceeded	J-	J-	All method results in affected sample
Laboratory Blanks	Analyte detected in blank. Determine action level, x10 for common lab contaminant or x5 for other analytes	U detected results below action level	Not qualified	Analyte results in the analytical batch
Trip Blanks	Same as laboratory blanks	U detected results below action level	Not qualified	Analyte results in samples in the same cooler
Equipment Blanks	Same as laboratory blanks	U detected results below action level	Not qualified	Analyte results in samples in the same sampling event
Surrogate Recovery (GC, HPLC methods)	recovery > UCL LCL > recovery > 50% recovery < 50%	J+ J- J-	Not qualified J- R	All method results in affected sample
Surrogate Recovery (GC/MS methods)	recovery > UCL LCL > recovery > 10% recovery < 10%	J+ J- J-	Not qualified J- R	All method results in affected sample

[1]Not all analytical methods may be included in the study. Data validation procedures may be modified for radiological methods, as appropriate.

Table 8 (Continued)

Data Validation Procedures

Control Parameter	Exceedance of Control Limits	Qualification of Detected Results	Qualification of Nondetected Results	Associated Results
Laboratory Control Sample (LCS) Recovery (GC, HPLC methods)	recovery > UCL LCL > recovery > 50% recovery < 50%	J+ J- J-	Not qualified J- R	Analyte results in the analytical batch or sub-analytical batch
LCS Recovery (GC/MS methods)	recovery > UCL LCL > recovery > 10% recovery < 10%	J+ J- J-	Not qualified J- R	Analyte results in the analytical batch or sub-analytical batch
LCS Recovery (Inorganic methods)	recovery > UCL LCL > recovery > 50% recovery < 50%	J+ J- J-	Not qualified J- R	Analyte results in the analytical batch or sub-analytical batch
Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries (GC, HPLC methods)	recovery > UCL LCL > recovery > 50% recovery < 50%	J+ J- J-	Not qualified J- R	Analyte results in the analytical batch (1)
MS/MSD Recoveries (GC/MS methods)	recovery > UCL LCL > recovery > 10% recovery < 10%	J+ J- J-	Not qualified J- R	Analyte results in the analytical batch (1)
MS Recovery (Inorganic methods)	recovery > UCL LCL > recovery > 30% recovery < 30%	J+ J- J-	Not qualified J- R	Analyte results in the analytical batch (1)
MS/MSD RPD (Organic methods)	RPD > CL	J	J	Analyte results in the spiked sample
Matrix Duplicate RPD (Inorganic methods)	RPD > CL and sample and duplicate results > 5x PQL	J	Not qualified	Analyte results in the analytical batch (1)
	RPD > CL and sample and/or duplicate results < 5x PQL	J	Not qualified	Analyte results in the analytical batch (1)

Table 8 (Continued)

Data Validation Procedures

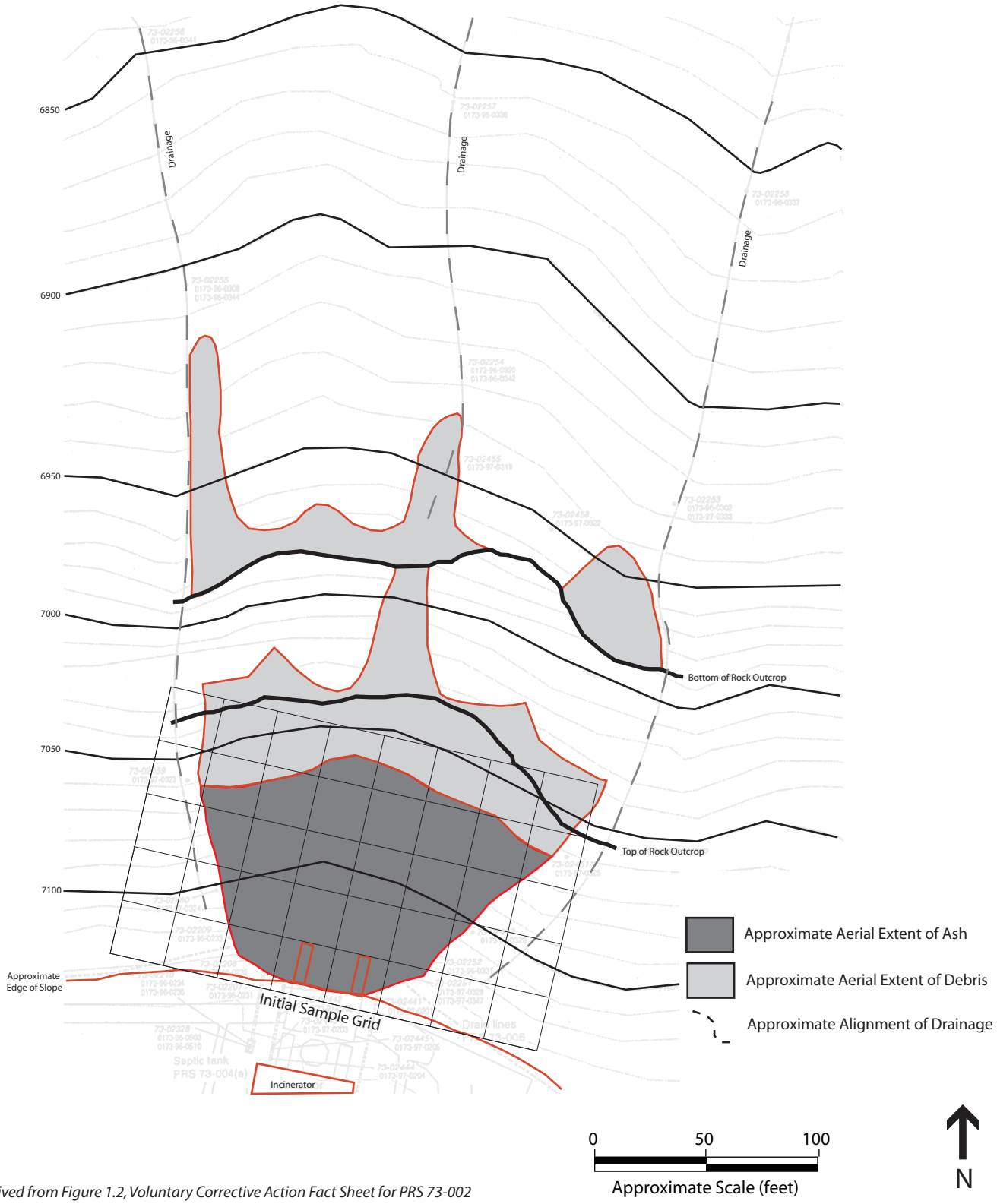
Control Parameter	Exceedance of Control Limits	Qualification of Detected Results	Qualification of Nondetected Results	Associated Results
Initial Calibration %RSD (Organic methods)	%RSD > CL or r < 0.995	J	J	Analyte results associated with the initial calibration
Initial Calibration RRF (GC/MS methods)	RRF < 0.05	J	R	Analyte results associated with the initial calibration
Continuing Calibration %D (Organic methods)	%D > UCL -50% < %D < LCL %D < -50%	J+ J- J-	Not qualified J- R	Analyte results associated with the continuing calibration
Initial Calibration and Continuing Calibration Verification (ICV and CCV) Recoveries (Inorganic methods)	recovery > 125% 125% > recovery > UCL LCL > recovery > 75% recovery < 75%	R J+ J- R	Not qualified Not qualified J- R	Analyte results associated with the ICV or CCV
Field Duplicate RPD (All Methods)	RPD > CL	Not qualified; discuss in report	Not qualified; discuss in report	Analyte results in the sample and duplicate
Internal Standard Area Counts (GC/MS methods)	Area counts > 2x the associated standard	J+	Not qualified	Associated analyte results in the sample
	Area counts < 0.5x the associated standard	J-	R	Associated analyte results in the sample
Interference check sample recovery	recovery > UCL LCL > recovery > 30%	J+ J-	Not qualified J-	Analyte results in the analytical batch
Serial dilution %D	%D > UCL	J	J	
Post-digestion spike recovery	recovery > UCL LCL > recovery > 10% recovery < 10%	J+ J- J-	Not qualified J- R	All analyte results in affected sample

(1) If the spiked sample or duplicate is not considered representative of the analytical batch, only the sample is qualified.

Table 9

Qualifiers Applied During Data Validation

Qualifier	Definition of Qualifier
A	Sample has undergone routine data validation.
J+	Data are qualified as estimated, with a high bias likely to occur. False positives or false negatives are unlikely to have been reported.
J-	Data are qualified as estimated, with a low bias likely to occur. False positives or false negatives are unlikely to have been reported.
J	Data are qualified as estimated; it is not possible to assess the direction of the potential bias.
	False positives or false negatives are unlikely to have been reported.
R	Data are qualified as rejected. There is a significant potential for the reporting of false negatives or false positives.
U	Data are qualified as nondetected, because the analyte was observed in an associated laboratory or field blank.



Source: Derived from Figure 1.2, Voluntary Corrective Action Fact Sheet for PRS 73-002

Innovative Technical Solutions, Inc.

U.S. Army Corps of Engineers, Sacramento District

Los Alamos National Laboratory, U.S. Department of Energy

SWMU 73-002, Los Alamos National Laboratory, New Mexico

Figure 1
Distribution of Ash and Proposed Confirmation Sample Grid

04-400.12\LANL\Graphics\Waste Characterization Workan\Fig 1 - Distribution of Ash.ai

Innovative Technical Solutions, Inc.
2730 Shadelands Drive, Suite 100
Walnut Creek, California 94598
(925) 946-3100 – (925) 256-8998 (fax)

Local Address: _____

Chain-Of-Custody

Project Name and Number: _____ Laboratory Name: _____ Date: _____

Project Manager: _____ Address: _____ Contact Name: _____ Page: _____ of _____

Site Location: _____ _____ Phone: _____

Sample I.D.	Date	Time	Sample Depth	No. of Containers	Sample Matrix	Analysis:	Special Instructions/Comments
						Preservative:	
						Container Type:	

Sampled By: _____

Signature: _____

Special Instructions: _____

_____

_____

Send Results to: _____
(w/fax #) _____

Turnaround Time: _____

Courier/Airbill No.:

Relinquished By/Affiliation:	Date:	Time:	Received By/Affiliation:	Date:	Time:

Original – Laboratory Yellow – Field/Office

APPENDIX B

VOLUNTARY CORRECTIVE ACTION FACT SHEET FOR

PRS 73-002

Los Alamos National Laboratory

New Mexico

VOLUNTARY CORRECTIVE ACTION FACT SHEET FOR PRS 73-002

Description and History

Potential Release Site (PRS) 73-002, a former incinerator and associated disposal area, is located north-northwest of the existing Los Alamos Airport terminal building. The incinerator's primary purpose was to destroy classified documents from the Laboratory. It was used for this purpose for only about one year because of incomplete combustion problems. The incinerator was also used to incinerate municipal trash from the townsite. The incinerator equipment and stack have been removed, but no information on the removal operation is available.

The ash disposal area is located on the south slope of Pueblo Canyon, immediately north of the incinerator building, and covers an area of approximately 30,000 square feet. The ash ranges in thickness from less than one foot to greater than eight feet.

Contaminants

Based on the results of sampling events conducted in 1996 and 1997, several contaminants of potential concern (COPCs) have been tentatively identified. Several inorganic chemicals were detected at concentrations exceeding their background values (BVs). Of these, lead is the most notable with a maximum concentration of 13,100 ppm. Other inorganic chemicals exceeding BVs are antimony, arsenic, barium, cadmium, calcium, chromium, cobalt, copper, iron, magnesium, manganese, mercury, nickel, potassium, selenium, silver, sodium, thallium, and zinc.

The list of detected organic chemicals includes the pesticides 4,4'-DDE, 4,4'-DDT, and alpha chlordane. Dioxins and furans were detected at concentrations in the part per trillion to low part per billion range. Several volatile and semivolatile organic chemicals were also detected, including aroclor-1254.

Radiological constituents, U-234 and U-238, were detected above BVs in two samples. Waste characterization samples collected from within one of the incinerator building's drainlines (PRS 73-006), also contained low levels of Pu-239. Additional sampling of the ash debris was completed for radiological analyses, but the results are not yet available.

Voluntary Corrective Action

The corrective action at this site will involve the complete removal of the ash and associated debris, and any contaminated soil beneath the ash and debris. The outfall areas of the associated PRSs 73-004(a) (incinerator building septic system) and 73-006 (incinerator building drainlines) have been removed since they were incorporated with the ash material. Details of the ash removal have not been finalized, but it is currently believed that these activities could be completed using the combined efforts of a vacuum truck and other heavy equipment capable of moving large volumes of material with minimum disturbance to the surrounding environment. Site restoration most likely would involve the installation of erosion control matting and seeding, as appropriate.

Anticipated Waste Types and Volumes

ITEM	WASTE TYPE	ANTICIPATED VOLUME
Incinerator ash and debris	Special waste (thought to be non hazardous but potentially low level radioactive)	3,700 cu yd
Contaminated soils	Non hazardous	200 cu yd
Sampling materials and PPE	Sanitary	2 cu yd

Estimated Cost

Since the details of the ash and debris removal have not been finalized, it is difficult to estimate the cost of the VCA activities at PRS 73-002. The remedial activities, including planning, cleanup, waste disposal, site restoration, and report preparation, could easily range from $2.5M to $8.0M. The single factor most affecting the final cost will be waste disposal. The cost of waste disposal could increase significantly if much or all of the ash must be disposed of as a low level radioactive special waste.

Ash Disposal Area
PRS 73-002
Maximum Inorganic Chemical Concentrations

Analyte	Maximum Concentration (ppm)	TCLP Concentration (ppm)	BV (ppm)
Aluminum	32000	–	29200
Antimony	159	–	0.83
Arsenic	90	ND	8.7
Barium	6280	1.45	295
Cadmium	42.9	0.151	0.4
Calcium	45900	–	6120
Chromium	133	0.033 (B)	19.3
Cobalt	37.8	–	8.64
Copper	6320	–	14.7
Iron	431000	–	21500
Lead	13100	4.1	22.3
Magnesium	6010	–	4610
Manganese	1960	–	671
Mercury	19	ND	0.1
Nickel	236	–	15.4
Potassium	5040	–	3460
Selenium	3.8	ND	1.52
Silver	448	ND	1
Sodium	7760	–	915
Thallium	10.6	–	0.73
Vanadium	65	–	39.6
Zinc	7170	–	48.8

Note: Max. concentrations all occur in ash.

Ash Disposal Area
PRS 73-002
Maximum Radionuclide Concentrations

Analyte	Maximum Concentration (pCi/g)	BV (pCi/g)
Pu-239	2.54	0.054
U-234	17.1	2.59
U-235	0.97	0.2
U-238	15.93	2.29

Note: Max. concentrations all occur in ash.

Ash Disposal Area
PRS 73-002
Maximum Organic Chemical Concentrations

Analyte	Maximum Concentration (ppm)	No. of Detects	Location	EQL (ppm)
Volatile Organics				
Benzene	0.005 (J)	2	Ash	0.005
1,4-Dichlorobenzene	0.048 (J+)	1	Ash	0.005
4-Isopropyltoluene	24 (J+)	3	006 Outfall	0.005
Tetrachloroethene	0.019 (J)	6	Ash	0.005
Toluene	1 (J+)	3	006 Outfall	0.005
1,1,1-Trichloroethane	0.025	7	Ash	0.005
Trichloroethene	0.03	7	Ash	0.005
Trichlorofluoromethane	0.018	1	Ash	0.005
1,3,5-Trimethylbenzene	0.01 (J)	1	006 Outfall	0.005
Semivolatile Organics				
Napthalene	0.36 (J)	3	004(a) Outfall	0.33
Phenol	0.52 (J)	1	004(a) Outfall	0.33
Pesticides/PCBs				
4,4-DDD	8.5	5	In 006 Drainline	0.0033
4,4-DDE	4.38	14	In 004(a) Drainline	0.0033
4,4-DDT	35.4	10	In 004(a) Drainline	0.0033
Beta-BHC	0.0026	1	Ash	0.00165
Alpha Chlordane	0.13	4	In 006 Drainline	0.00165
Gamma Chlordane	0.19	3	In 006 Drainline	0.00165
Aroclor 1254	0.17	6	Ash	0.0033

Note: Several samples were diluted resulting in detection levels well in excess of the EQLs.

Ash Disposal Area
PRS 73-002
Maximum Dioxin/Furan Concentrations

Analyte	Maximum Concentration (pptrillion)
TCDDs Total	2100
2,3,7,8-TCDD	140
PeCDDs Total	870
1,2,3,7,8-PeCDD	96
HxCDDs Total	1000
1,2,3,4,7,8-HxCDD	26
1,2,3,6,7,8-HxCDD	140
1,2,3,7,8,9-HxCDD	120
HpCDDs Total	1800
1,2,3,4,6,7,8-HpCDD	1100
OCDD	4800
TCDFs Total	42000
2,3,7,8-TCDF	6700
PeCDFs Total	9600
1,2,3,7,8-PeCDF	750
2,3,4,7,8-PeCDF	840
HxCDFs Total	2100
1,2,3,4,7,8-HxCDF	670
1,2,3,6,7,8-HxCDF	230
2,3,4,6,7,8-HxCDF	200
1,2,3,7,8,9-HxCDF	10
HpCDFs Total	610
1,2,3,4,6,7,8-HpCDF	400
1,2,3,4,7,8,9-HpCDF	14
OCDF	150

Note: Max. concentrations all occur in the ash.

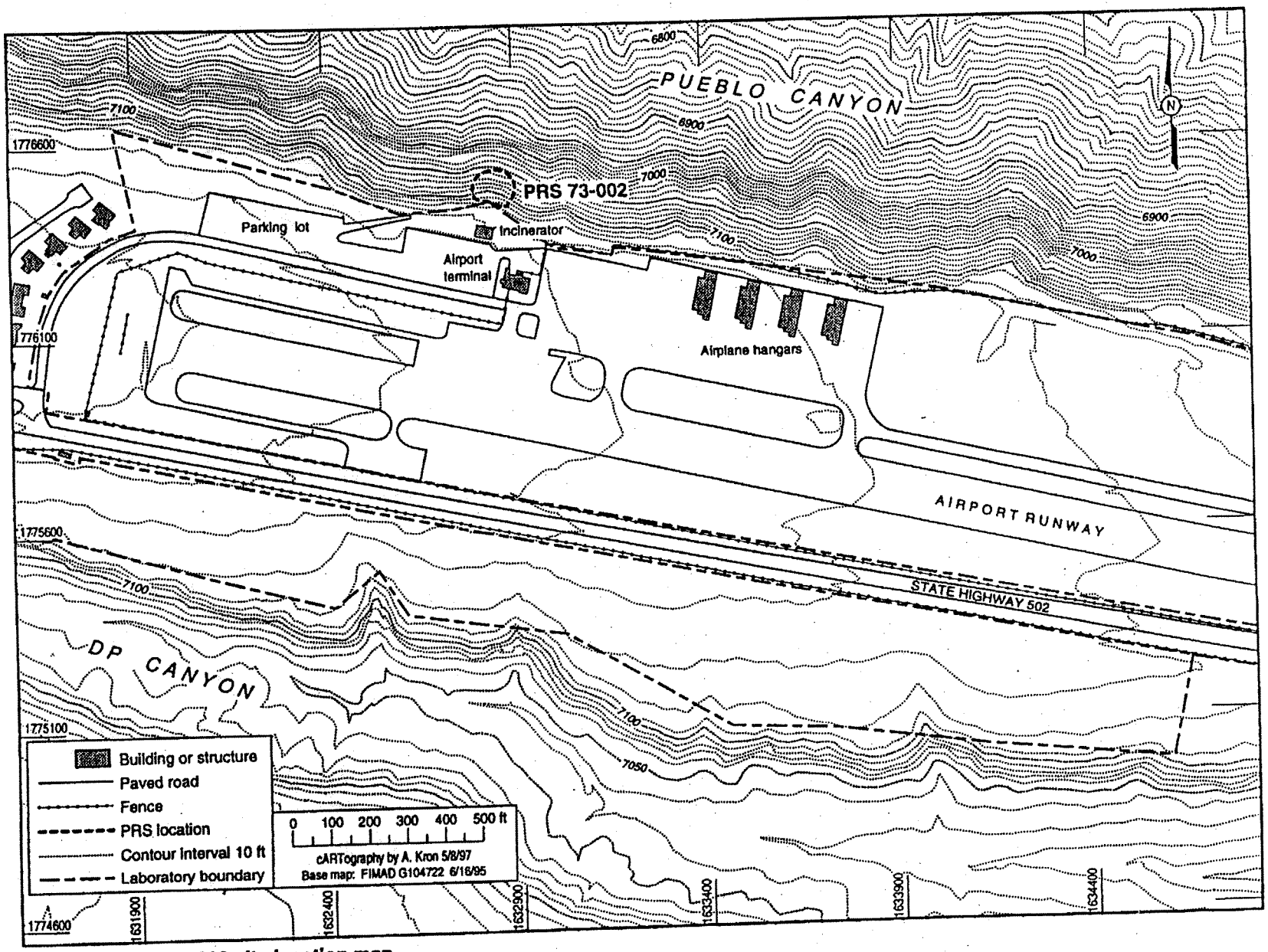
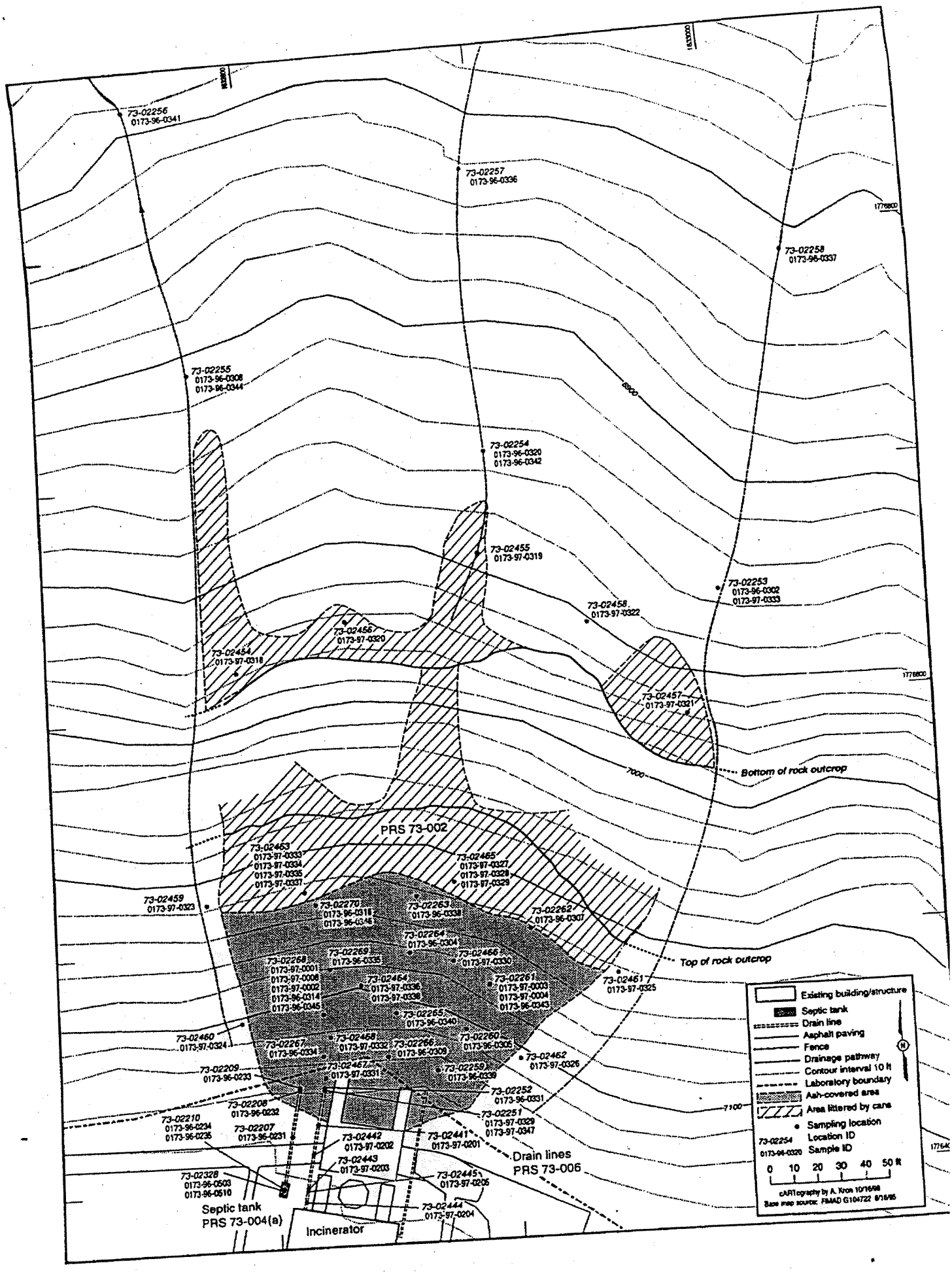


Figure 1.1 PRS 73-002 site location map.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73-02255
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0173-96-0344
73-02254
0173-96-0320
0173-96-0342
73-02455
0173-97-0319
73-02253
0173-96-0302
0173-97-0333
73-02458
0173-97-0322
73-02456
0173-97-0320
73-02454
0173-97-0318
73-02457
0173-97-0321
Bottom of rock outcrop
PRS 73-002
73-02463
0173-97-0333
0173-97-0334
0173-97-0335
0173-97-0337
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0173-97-0330
Top of rock outcrop
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0173-97-0001
0173-97-0006
0173-97-0002
0173-96-0314
0173-96-0345
73-02464
0173-97-0336
0173-97-0338
73-02261
0173-97-0003
0173-97-0004
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0173-96-0235
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0173-96-0231
73-02251
0173-97-0329
0173-97-0347
73-02442
0173-97-0202
73-02441
0173-97-0201
Drain lines
PRS 73-006
73-02443
0173-97-0203
73-02328
0173-96-0503
0173-96-0510
73-02445
0173-97-0205
Septic tank
PRS 73-004(a)
Incinerator
73-02444
0173-97-0204
Existing building/structure
Septic tank
Drain line
Asphalt paving
Fence
Drainage pathway
Contour interval 10 ft
Laboratory boundary
Ash-covered area
Area littered by cans
Sampling location
73-02254 Location ID
0173-96-0320 Sample ID
0 10 20 30 40 50 ft
cARTography by A. Kron 10/16/98
Base map source: FMAD G104722 8/15/95

PRS 73-002
ASH DISPOSAL AREA
SAMPLE SUMMARY (DRAFT)

1996 SAMPLING ACTIVITY

A total of 28 samples were collected at 22 locations. This total includes 12 samples that were analyzed for XRF metals only. The remaining 16 samples (one of which is not in the FIMAD data base) are summarized as follows:

- Three sediment samples, one from each of the three drainages below the ash disposal area, were collected from within the 0-12-inch interval. All three samples were analyzed for VOCs, SVOCs, pesticides/PCBs, metals, gross alpha/beta/gamma, and tritium.

- Thirteen ash samples were collected from within the 0-12-inch interval. All were analyzed for VOCs, SVOCs, pesticides/PCBs, metals, gross alpha/beta/gamma, and tritium

1997 SAMPLING ACTIVITY

A total of 31 samples were collected at 19 locations. These samples are summarized as follows:

- Seven sediment samples were collected from three locations within the two primary drainage pathways below the ash disposal area and close to the bottom of Pueblo Canyon. One was from a depth of 1.5-2 feet, the others were surface samples. All were analyzed for dioxins/furans and metals.

- Five surface soil samples were collected from below the rock outcrop to evaluate downgradient migration of contaminants. All but one were also collected below accumulations of tin cans. All were analyzed for dioxins/furans, SVOCs, and metals.

- Four surface soil samples, two from within 10 feet of each side of the ash disposal area, were collected to evaluate lateral migration. Two were analyzed for dioxins/furans, and all were analyzed for SVOCs and metals.

- Ten ash and debris samples were collected from depths ranging from the surface to 7.5 feet. Eight were analyzed for dioxins/furans, three for VOCs and SVOCs, three for pesticides/PCBs, five for metals, two for TCLP metals, and two for gross alpha/beta/gamma, gamma scan, and isotopic uranium.

- Five soil and tuff samples were collected from beneath the ash at depths ranging from 3.5 to 4.8 feet to determine if leaching was occurring. All were analyzed for dioxins/furans, four for VOCs, and three for SVOCs and metals.

Only a preliminary review of this data has been completed. In general, high concentrations of several inorganic chemicals have been noted in the ash samples but not in the soil and sediment samples. The ash also contains low concentrations of several organic chemicals including, but not limited to, dioxins/furans and certain pesticides. Two ash samples within the drainage pathway from the west outfall of PRS 73-006 contained elevated levels of uranium 234 and 238. Because of this, several additional samples were recently collected for rad. analyses, but these results are not yet available.

It is believed that the nature and extent of contamination will be sufficiently defined by existing and pending data to support the preparation of a Voluntary Corrective Action Plan.

APPENDIX C

Investigation Derived Waste

For SWMU 73-002

Los Alamos National Laboratory

New Mexico

Investigation Derived Waste

Corrective Action for SWMU 73-002
(Incinerator Ash Removal)
Los Alamos National Laboratory, New Mexico

Contract No. DACA05-99-D-0014
Task Order CM26

Prepared for:
United States Army Corps of Engineers, Sacramento District
1325 J Street
Sacramento, CA 95814

And

Los Alamos National Laboratory
National Nuclear Security Administration, US Department of Energy
P.O. Box 1663 MS-A316
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2730 Shadelands Drive, Suite 100
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May 2005
ITSI Project No: 04-400.12

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3.2.1 Liquid Investigation Derived Waste Profiling for Off-Site Disposal 4

4.0 References 5

1.0 INTRODUCTION

This plan describes the management of Investigation Derived Waste (IDW), which has been prepared to support the Incinerator Ash Removal of Solid Waste Management Unit (SWMU) 73-002 in Los Alamos, New Mexico. A copy of the referenced plan will be maintained in the ITSI Field Trailer.

The objective of this plan is to describe the procedure for storage and disposal of IDW in a manner that will meet regulatory requirements while limiting the on-site handling and storage of materials. The IDW includes waste materials generated during performance of sampling and remediation activities.

2.0 REQUIREMENTS FOR MANAGEMENT OF INVESTIGATION DERIVED WASTE

Investigation-derived waste will consist of solid and liquid waste. Solid waste, consisting of general refuse, disposable personal protective equipment (PPE), and disposal equipment generated during the remediation activities, will be placed in garbage bags, sealed, and disposed of in on-site trash receptacles following evaluation by LANL Radiation Safety personnel for release to a sanitary landfill.

Some liquid waste will be generated from decontamination and sampling activities. All liquid waste will be temporarily stored in an on-site selected staging area and labeled as non-hazardous waste for waste characterization, profiling and final offsite disposal. Regardless of its classification, every effort will be made to characterize, profile, and remove IDW from the site within 90 days from which it is generated.

Liquid waste generally will be stored before final disposition by one of the following processes:

- Non-hazardous liquids will be profiled and disposed at an offsite permitted industrial wastewater treatment plant.
- Hazardous liquids, if identified, will be disposed at an offsite permitted treatment/disposal facility.

3.0 METHODOLOGIES FOR MANAGEMENT OF INVESTIGATION DERIVED WASTE

This section presents the methodologies for management and disposal of IDW. The following standard practices will be followed:

- Solid IDW will be placed in garbage bags, sealed, evaluated for release by LANL Radiation Safety, and appropriately disposed of at either a sanitary landfill via on site trash receptacles, or disposed of at an industrial waste landfill for low-level radioactive material.
- All liquid IDW generated during purging will be placed into DOT approved 55 gallon-drums or other appropriate containers.
- DOT approved drums containing liquid waste will be temporarily labeled as non-hazardous waste and stored on-site pending waste characterization, profiling and final off-site disposal.
- The generation, management, characterization, and disposal of IDW will be documented.

3.1 SOLID INVESTIGATION DERIVED WASTE GENERATION AND HANDLING

Solid IDW will primarily be generated from the accumulation of used and discarded PPE during sampling activities. Field activities will generate used PPE, which may include Tyvek™ over-garments, latex gloves, disposable bailers, filters, tape, plastic sheeting, and plastic packaging. These materials will be collected in a plastic bag. The filled bags will be stored in a designated general refuse container or receptacle at the site.

- Evaluation criteria for Solid Waste is anticipated to include the following: Physical inspection to ensure no waste material has accumulated on solid waste
- Evaluated by LANL Radiation Safety personnel to ensure the release requirements of 10CFR835 are satisfied.

3.2 LIQUID INVESTIGATION DERIVED WASTE GENERATION AND HANDLING

Liquid IDW will primarily be consisted of decontamination water generated during confirmation soil sampling activities. The liquid will be placed into 55-gallon DOT-rated steel drums and staged near the packaged ash in the designated staging area. Following receipt of the analytical results, an appropriate offsite disposal facility will be selected for treatment and/or disposal. It is anticipated that liquid IDW will be non-hazardous.

3.2.1 Liquid Investigation Derived Waste Profiling for Off-Site Disposal

Profiling of the containerized liquid IDW will be necessary for waste acceptance by a receiving facility. A representative sample will be collected from liquid IDW stored in each drum using a clean disposable bailer and transferred into clean sample containers provided by the laboratory. Sample containers will then be labeled, placed in an ice-chilled cooler, and transported under chain-of-custody procedures to the LANL Sample Management Office for analysis.

Analytical criteria will be dependent on the requirements of the receiving facility, but are anticipated to include the following:

- VOCs/SVOCs
- Metals
- Polychlorinated biphenyls (PCBs)
- Radioactive Material

Additional tests beyond the above methods may be required based on the results of the above tests and discussions with the receiving facilities.

With the results of the waste characterization analysis, the liquid IDW will be properly profiled and disposal will be coordinated with the DOE and New Mexico State-permitted disposal facility. The facility will then issue a letter of waste acceptance for each waste stream as indicated by the waste characterization. The liquid IDW stored in drums will then be loaded and transported to the approved facility.

4.0 REFERENCES

Compliance Order on Consent (Consent Order) between State of New Mexico Environmental Department and, the United Stated Department of Energy and Regents of the University of California for the Los Alamos National Laboratory, Los Alamos County, New Mexico. March 1, 2005.

11.0 CLOSEOUT DOCUMENTATION

After completion of ash removal excavation activities and final confirmation sampling, a Corrective Action Report will be submitted.

11.1 Record Drawings

The as-builts will consist of drawings identifying updated coordinates from the survey for the ash/debris area before and after removal activities.

11.2 Corrective Action Report

The Corrective Action Report will be submitted to USACE/DOE within 90 calendar days after project completion or ITSI demobilization, whichever comes first, if the option is exercised. The following information will be included at a minimum:

- Pre- and post-construction surveys. These surveys will be certified by a New Mexico licensed surveyor.
- Topographic surveys. These surveys will be certified by a New Mexico licensed surveyor.
- As-built drawings of the ash/debris areas, showing the final elevations of the soil.
- Confirmation sampling results of all soil samples collected.
- A narrative description of construction project activities including surveying, confirmation sampling, major problems encountered and resolutions, lessons learned, and recommendations for improvement.
- The daily logbook (including daily inspection and spill cleanup records and toxic/hazardous materials inventory information) as an appendix.
- Digital photographs including pre- and post-excavation photographs.
- Any other technical information that is considered necessary by ITSI or DOE for historical purposes.
- A description of any modifications to the contract and the resulting impact.

Any deviations from the contract specifications will be listed in the report prior to the certification. The Corrective Action Report will be submitted as a CD-ROM in both native and PDF formats.

11.3 Safety Performance Report

The Safety Performance Report will be submitted in conjunction with the Post-Construction Report. The Safety Performance Report will summarize the overall performance of safety and lessons learned.

12.0 REFERENCES

"Inorganic and Radionuclide Background Data for Soils, Sediments, and Bandelier Tuff at Los Alamos National Laboratory" (LANL 1998, ER ID 59730).

LANL (Los Alamos National Laboratory), 2005, SWMU 73-002 Fact Sheet . (LANL 2005, 88700).

Compliance Order on Consent (Consent Order) between State of New Mexico Environmental Department and, the United Stated Department of Energy and Regents of the University of California for the Los Alamos National Laboratory, Los Alamos County, New Mexico. March 1, 2005.

United States Department of Transportation (DOT), 2004. "Shippers – General Requirements for Shipments and Packagings," Title 49 Code of Federal Regulations Part 173 (49 CFR 173).

13.0 ACRONYMS AND ABBREVIATIONS

mg/kg	milligrams per kilogram
pCi/g	picocurie per gram
BMP	Best Management Practice
CHP	Certified Health Physicist
CIH	Certified Industrial Hygienist
CQCSM	Contractor Quality Control System Manager
DOE	United States Department of Energy
DOT	United States Department of Transportation
GPS	Global Positioning Satellite
HEPA	High Efficiency Particulate Air filter
HIR	Historical Investigation Report
IDW	Investigation Derived Waste
ITSI	Innovative Technical Solutions, Inc.
LANL	Los Alamos National Laboratory
LLRW	Low Level Radiological Waste
NAVD	North American Vertical Datum
NAD	North American Datum
NIOSH	National Institute for Occupational Safety and Health
NMED	New Mexico Environmental Division
OSHA	Occupational Safety and Health Administration
PEB	Pre-Evolution Briefings
POC	Point of Contact
POD	Plan of the Day
ppm	part per million
PRS	Potential Release Site
QC	Quality Control
RAM	Real-time Aerosol Monitor
SAP	Sampling and Analysis Plan

Acronyms and Abbreviations (continued)

SHSO	Site Health and Safety Officer
SMO	LANL Sample Management Office
SS	Site Superintendent
SSHSP	Site-Specific Health and Safety Plan
SWMU	Solid Waste Management Unit
USACE	U.S. Army Corps of Engineers
WCSF	Waste Characterization Strategy Form
WP	Corrective Action Workplan

HISTORICAL INVESTIGATION REPORT FOR SWMU 73-002

Los Alamos National Laboratory, New Mexico

Contract No. DACA05-99-D-0014
Task Order CM26
Document Control No. 04-400.12.0014

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August 2005

04-400.12

ITSI Innovative Technical Solutions, Inc.

Historical Investigation Report for SWMU 73-002 (Incinerator Ash Removal) Document Approvals

Contract No. DACA05-99-D-0014
Task Order CM26

ITSI Program Manager:

Dwight Howard FOR KENT DORR 8-17-05

Kent Dorr, PMP
(D&D Program Manager for Nuclear Services)

Date

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1.0 INTRODUCTION

Los Alamos National Laboratory (LANL or the Laboratory) is a multidisciplinary research facility owned by the U.S. Department of Energy (DOE) and managed by the University of California (UC). The Laboratory is located in north-central New Mexico approximately 60 miles northeast of Albuquerque and 20 miles northwest of Santa Fe, within Los Alamos County. The Laboratory covers 40 square miles of the Pajarito Plateau, which consists of a series of finger-like mesas separated by deep canyons containing perennial and intermittent streams running from west to east. Mesa tops range in elevation between 6200 feet above sea level (asl) to slightly over 7800 feet asl (Figure 1.0-1).

This Historical Investigation Report (HIR) presents the results of previous investigations and includes a discussion of activities that were conducted at the solid waste management unit (SWMU) 73-002. The site is comprised of an incinerator building and adjacent surface disposal area with accumulated ash and noncombustible debris extending approximately 140 feet below the rim of Pueblo Canyon. The report describes the physical layout of the site, installation and demolition of structures, history of operations and associated releases, and present-day site status. Resource Conservation and Recovery Act (RCRA) facility investigations (RFIs) and those investigations performed before 1994 are described, analytical results are summarized, and all associated tabulated data are presented in appendices to this report. Supporting documents are also provided in appendices. Supporting figures, along with site and sampling location maps, will appear at the end of the main text.

2.0 DESCRIPTION AND OPERATIONAL HISTORY

2.1 Current Site Description

The SWMU 73-002 incinerator/surface disposal area is located slightly west and north of the Los Alamos Airport terminal. The upper portion of the ash debris is located on DOE property, while the remainder of the site is on Los Alamos County property. The former incinerator building had been used by Budget Car Rental for storage and automotive

detailing. The area of disposed ash and debris below the rim of Pueblo Canyon is essentially wedged-shaped, with dimensions being approximately 150 feet wide and 160 feet long. The thickness of the ash varies from essentially 0 feet at the edges to greater than 8 feet in some locations. The downslope extent of the ash is approximately 400 feet above the canyon floor and is marked by a band of rusting metal cans.

2.2 Soil and Subsurface Site Conditions

As a result of development at LANL, very little undisturbed soil exists at the facility. The majority of surface material tends to be artificial fill, which may be crushed tuff, disturbed soil, or imported material. Undisturbed soil on the mesa surfaces is generally thin and sandy in texture near the surface, with increasing clay content with depth. Cliff-forming south-facing slopes tend to have poorly developed soil profiles, while north-facing slopes generally have higher organic content. Variable thicknesses of alluvial deposits exist within the canyons.

Based on regional information described in the Pueblo Canyon Aggregate Area Investigation Work Plan (DOE, 2005), subsurface lithologic units underlying surficial alluvium and soil in the vicinity of LANL consist of the Bandelier Tuff (Qbt) and the Puye Formation (Tp). The deeper lithologic unit, the Puye Formation, consists of clastic fanglomerate sediments. This unit is overlain by the Guaje Pumice Bed, which occurs at the base of the overlying Bandelier Tuff. The tuff deposits originated as gas-charged material expelled and deposited during violent volcanic eruptions. The tuff is subdivided into the deeper Otowi Member and the shallower Tshirege Member; the upper and lower members of the Bandelier Tuff are separated by the Cerro Toledo Interval at approximately 350 feet below ground surface (bgs) beneath the mesa top sites. The Cerro Toledo interval is a 10 to 40-foot thick sequence of volcaniclastic sediments and primary fallout deposits. The Tshirege Member, the shallower member of the Bandelier Tuff, is a compound cooling unit subdivided into four distinct units: Qbt 4, Qbt 3, Qbt 2, and Qbt 1v/1g. The Upper Tshirege, including Qbt 4 and Qbt 3, is a cliff-forming non-welded to partially welded tuff and underlies most of the SMWUs at LANL; this is the most likely unit to be encountered beneath the ash debris.

The depth to groundwater in the regional aquifer beneath the Pueblo Canyon area is greater than 1,000 feet bgs. Discontinuous areas of perched alluvial and intermediate groundwater also exist at depths of 100 to 250 feet bgs. These saturated zones, which are expected to form mainly at subsurface horizons where lithologic properties change, have been observed within the Puye Formation during installation of site wells.

2.3 Historic Facility Description

The incinerator was housed in a two story concrete building (73-2) on the north side of the parking lot at the Los Alamos Airport, northwest of the existing airport terminal building. The first, or bottom, floor of the facility was known as the "stoking" floor and the second floor (level with the current airport terminal parking lot) was known as the "charging" floor. A 6-foot diameter stack was located behind the building. Immediately north of the building and extending over the edge of Pueblo Canyon is a pair of concrete landings used to dump the ash and unconsumed metal and glass generated as part of the incinerator operations.

2.4 Operational History

SWMU 73-002 is the result of periodic, intentional releases that occurred as part of the operation of an incinerator originally designed and installed for the destruction of classified documents. The incinerator operated as intended for a short time in 1947, but use was discontinued due to problems with incomplete combustion. In June 1948, the Zia Company acquired the incinerator building and used it to burn municipal trash until sometime before September 1973. Beginning in the early 1970s, after incineration had ceased and after the equipment had been removed, the Los Alamos Dog Obedience Club used the building. Documentation of the removal of the incinerator equipment and the effluent stack is not available. As noted in Section 2.1, the building is currently used as a storage facility.

2.5 Disposal, Discharges, and Releases

Historical information indicates no treatment, storage, or disposal of hazardous wastes at the incinerator building, nor on the hillside location of the SWMU. The primary source(s) of potential contamination would have been materials disposed of in the trash

brought on site for incineration. There were no known releases from this site except for the disposal of the incinerator ash and from floor drains in the incinerator building. The floor drain outfalls ceased operations prior to the enactment of permitting regulations.

2.6 Current Waste Inventory

Together the ash and debris cover an area of approximately 30,000 square feet and ranges in thickness from less than one foot to greater than eight feet. During recent ash characterization activities conducted by Innovative Technical Solutions, Inc. (ITSI) in preparation for implementing ash removal, the ash pile was surveyed and based on approximate thickness of the ash, the volume is estimated at 2,400 cubic yards.

According to the results of sampling performed in April 2005 to characterize the ash for appropriate disposal paths, the incinerator ash will be classified as non-hazardous low-level radioactive waste (LLRW) for disposal purposes.

3.0 HISTORIC INVESTIGATION AND FIELD ACTIVITIES

3.1 Pre-RFI Field Activities

There have been no documented pre-RFI characterization or remedial activities, the incinerator decommissioning and removal was conducted sometime between 1948 and 1973, but was not documented.

3.2 RFI Field Activities

The building floor drains (SWMU 73-006) were plugged with concrete sometime during the late 1980s but no details are available documenting this work. An initial RFI was conducted in July 1996, with the septic tank which served the building (SWMU 73-004(a)) being removed in August 1996. The drain lines were investigated as a part of the July 1996 RFI. The east drain line was not located at that time and was assumed to have been removed previously, the western drain line was removed as a part of the second RFI in February 1999.

Environmental sampling was conducted in the area of the SWMU 73-002 during three separate sampling events in 1996, 1997, and 1998. The results of the sampling were used to conduct a preliminary screening evaluation to determine the potential risks to human

health and the environment as a consequence of exposure to the ash debris, as documented in the "Draft Preliminary Screening Evaluations of the Ash Debris" (DOE, 1999). Fifty-one soil samples were collected from within the ash debris, an additional four samples were collected from either side of the ash debris, and 15 samples were collected from the drainages. Sample locations are shown on Figure 1. Samples were analyzed for some or all of the following: metals, pesticides and polychlorinated biphenyls (PCBs), semivolatile organic compounds (SVOCs), volatile organic compounds (VOCs), dioxins and furans, and various radionuclides. The results of these sampling events identified high concentrations of several metals, low concentrations of several organic chemicals, and low levels of several radiological constituents, as discussed further in Section 4.0. The risk evaluation concluded that the ash debris poses a potential for adverse ecological impacts to the terrestrial receptors evaluated primarily due to the release of inorganic contaminants. In addition, contaminant concentrations in the samples posed potential unacceptable noncarcinogenic as well as carcinogenic risks to human health for both residential and recreational exposure scenarios. Based on data collected from the sides of the ash debris and within the drainages, risks to both ecological and human receptors was significantly lower and within acceptable ranges for these areas. Although subject to wind and storm water runoff, it was concluded that there has been little movement of contaminated material from the ash debris.

In April 2005, ITSI performed sampling of the ash debris in order to implement a corrective action (removal of the ash and debris) at the site. Sampling data were collected primarily for waste characterization purposes. As such, selection of analytical parameters was based on disposal requirements for receiving facilities. In addition, analyses generally consistent with the previous sampling were performed, and screening data was collected to be used during removal activities for confirmation sampling. Samples were analyzed for some or all of the following: VOCs, SVOCs, PCBs, dioxins and furans, metals (both total metals and TCLP to satisfy the requirements of potential receiving facilities), gross alpha and beta, gamma, various specific radioisotopes, physical characteristics, reactive cyanide, reactive sulfide, and pH. A 30-foot by 30-foot sampling grid was established over the ash debris and 18 locations were sampled (Figure

1). Ash was composited for each grid square, for the purpose of waste characterization, with higher frequency sampling (1 sample per 100 cubic yards of ash) conducted for metals and radioisotopes and lower frequency sampling (1 sample per 500 cubic yards of ash) conducted for SVOCs, PCBs, and dioxins/furans. Discrete, undisturbed samples were collected in 6-inch diameter stainless steel tubes for analysis of VOCs and bulk density (at a rate of 1 sample per 500 cubic yards). Samples were appropriately packaged and sent to an off-site laboratory for analysis. Samples were also screened using a hand-held x-ray fluorescence meter. Results were evaluated relative to hazardous waste and radiological criteria, as appropriate for waste disposal classification. Based on an evaluation of the results of this sampling the ash debris is considered non-hazardous low-level radioactive waste (LLRW) for disposal purposes.

4.0 DATA REVIEW

4.1 Inorganic Constituent Results

Based on the results of the sampling events conducted between 1996 and 1998, several contaminants of potential concern (COPCs) were tentatively identified. The following inorganic chemicals were detected at concentrations exceeding their background values (BVs): antimony, arsenic, barium, cadmium, chromium, cobalt, copper, iron, lead (a notable maximum concentration of 13,100 milligrams per kilogram [mg/kg] of lead was detected, with an average concentration of 4864 mg/kg), magnesium, manganese, mercury, nickel, potassium, selenium, silver, sodium, thallium, and zinc. Results from samples collected outside the extent of the ash and debris generally exhibited fewer detections, lower concentrations, and fewer exceedances of BVs. Sampling data is presented in Appendix A, Table A-1.

Samples analyzed for inorganic constituents in 2005 exhibited elevated levels of various metals in excess of the BVs; these results were consistent, with some higher, than previous sampling results. For example the lead had a maximum concentration of 33,000 mg/kg and an average concentration of 5757 mg/kg. Appendix A, Table A-2 summarizes the 2005 data.

4.2 Organic Chemical Results

Organic compounds were detected during the sampling events conducted both in the late 1990s and in 2005. Appendix A, Table A-3 summarizes the organic compounds detected in the samples collected between 1996 and 1998 and Table A-4 summarizes the samples collected in 2005.

4.3 Radionuclide Results

Table A-6 summarizes the sample results from the 2005 sampling event and compares them to the background values (BV) specified by LANL (1998) and compares results to the samples taken in 1996 to 1998 and reported in 1999.

4.4 Background Comparison

"Inorganic and Radionuclide Background Data for Soils, Canyon Sediments, and Bandelier Tuff at Los Alamos National Laboratory" (LANL, 1998) and "Performing Background Value Comparisons for Radionuclides" (LANL, 2000) provide guidance on comparing background for metals and background and fallout values for radionuclides at LANL.

4.4.1 Soil/Fill Samples

Soil/Fill Sample Inorganic Data

The inorganic sample results of the soil and fill samples, taken in sampling investigations from 1996 to 1999, were compared to the background values established for soils obtained from "Inorganic and Radionuclide Background Data for Soils, Sediments, and Bandelier Tuff at Los Alamos National Laboratory" (LANL 1998, ER ID 59730).

The 95% upper confidence limit (UCL) of the arithmetic mean of the analytical results for each inorganic chemical was used in the comparison to soil background values. This comparison found that UCLs for aluminum. antimony, barium, beryllium, cadmium, calcium, cobalt, copper, iron, lead, magnesium, manganese, mercury, silver, thallium, and zinc exceeded their respective soil background values.

Soil/Fill Radionuclide Data

The radionuclide sample results of the soil and fill, taken in sampling investigations in 1996, were compared to the background values established for soils obtained from "Inorganic and Radionuclide Background Data for Soils, Sediments, and Bandelier Tuff at Los Alamos National Laboratory" (LANL 1998, ER ID 59730). This sampling included results for gross alpha, beta, gamma and tritium.

The 95% upper confidence limit (UCL) of the arithmetic mean of the analytical results for each radionuclide analyzed was used in the comparison to soil background values. This comparison found that UCLs for Tritium was below its respective background values. There are no background values established for gross alpha, beta, and gamma per (LANL 1998, ER ID 59730).

4.4.2 Ash Samples

Ash Inorganic Data

The inorganic sample results of the incinerator ash, taken in sampling investigations from the 1990's and in 2005, were compared to the background values established for soils obtained from "Inorganic and Radionuclide Background Data for Soils, Sediments, and Bandelier Tuff at Los Alamos National Laboratory" (LANL 1998, ER ID 59730).

The 95% upper confidence limit (UCL) of the arithmetic mean of the analytical results for each inorganic chemical was used in the comparison to soil background values. This comparison found that UCLs for aluminum, beryllium, and vanadium were below their respective soil background values. The other inorganic chemicals were greater than their respective soil background values: antimony, arsenic, barium. cadmium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, nickel, potassium, selenium, silver, sodium, thallium, and zinc.

Ash Radionuclide Data

The radionuclide sample results of the incinerator ash, taken in sampling investigations from the 1990's and in 2005, were compared to the background values established for soils obtained from "Inorganic and Radionuclide Background Data for Soils, Sediments, and Bandelier Tuff at Los Alamos National Laboratory" (LANL 1998, ER ID 59730).

This comparison, demonstrated in the table in Section 4.3, found that UCLs for Radium 226, Plutonium 239, Uranium 234, Uranium 235, and Uranium 238 exceeded their respective soil background values; while Americium 241, Cesium 137 and Tritium were below their respective background values.

4.4.3 Tuff Samples

Tuff Inorganic Data

The inorganic sample results of the soil and fill samples, taken in sampling investigations from 1997 to 1999, were compared to the background values established for QBT 3 tuff obtained from "Inorganic and Radionuclide Background Data for Soils, Sediments, and Bandelier Tuff at Los Alamos National Laboratory" (LANL 1998, ER ID 59730). Only 4 samples were collected with all chemicals analyzed exceeding the tuff background value, which were antimony, arsenic, barium, calcium, and selenium.

4.5 Data Comparison Summary

A comparison of the inorganic data from the ash debris to the data for the areas surrounding this site resulted in marked differences. Table A-7 demonstrates the differences in select inorganic materials between the various areas (note: mean values used). While there were only 3 to 4 samples taken in areas outside of the ash, which doesn't provide for a good statistical comparison, there are noted differences between the different media sampled. The Incinerator Ash samples were significantly higher in all

analytes except Thallium. All areas mean values exceeded the background value for soil, with the exception of Thallium for the Ash samples. From the available data, it appears that the inorganic metals had minimal migration from the incinerator ash to the outer adjacent soils and the drainages; however, the adjacent soils presently exceed the background values established for soil.

Table A-8 demonstrates the differences in select radionuclides materials between the various areas (note: mean values used). While there were only 3 samples taken in the drainage areas outside of the ash, and not all radionuclides were sampled for, there are noted differences between the incinerator ash and the drainages in gross alpha and beta. Also, the Incinerator Ash samples were higher than background in the above radionuclides listed, with the exception of Cesium 137. Based on this little information, we can hypothesize that radionuclides had minimal migration from the incinerator ash, similar to the inorganic metal migration.

5.0 REFERENCES

Department of Energy (DOE), 1999. "Draft Preliminary Screening Evaluations of the Ash Debris (PRS 73-002)", Los Alamos National Laboratory, July.

DOE, 2005, "Pueblo Canyon Aggregate Area Investigation Work Plan", Los Alamos National Laboratory, May.

Los Alamos National Laboratory (LANL), 1998. "Inorganic and Radionuclide Background Data for Soils, Canyon Sediments, and Bandelier Tuff at Los Alamos National Laboratory", Los Alamos, New Mexico (LANL 1998, ER ID 59730), September.

LANL, 2000. "Performing Background Value Comparisons for Radionuclides" (LANL SOP 15.13), April 10.

LANL November 1990, "Solid Waste Management Units Report", LANL Document number LA-UR-90-3400, Los Alamos New Mexico (LANL 1990, 07511)

LANL May 1992, "RFI Work Plan for Operable Unit 1071", LANL Document number LA-UR-92-0810, Los Alamos New Mexico (LANL 1992, 07667)

FIGURE 1

DRAINAGE

DRAINAGE

DRAINAGE

BOTTOM OF ROCK OUTCROP

TOP OF ROCK OUTCROP

73-02253

73-02457

73-02258

73-02254

73-02245

73-02456

73-02454

73-02255

73-02461

73-02262

58834

58833

73-02462

73-02465

58832

73-02261

58831

73-10037

73-10032

73-10031

58836

73-10260

73-10026

58824

58830

73-10036

73-10030

73-10033

73-10027

58837

73-10035

58826

73-10034

73-10028

73-10029

58828

73-02264

58825

58827

73-02266

73-02464

73-10003

58840

73-10006

73-10004

58846

73-10011

73-10005

58842

73-10007

58839

58838

73-02252

58843

73-02268

73-10263

73-02251

73-02270

73-10010

73-02467

58844

58845

73-02463

73-10008

73-10002

73-10001

73-02209

73-10009

73-10000

58844

58845

58844

58845

73-02460

73-02459

STRAW WATTLES

SILT FENCE

SILT FENCE

1

LEGEND

ITEM	EXISTING	FUTURE
AIRPORT PROPERTY LINE	APL	
AIRFIELD PAVEMENT		
TAXILANE OBJECT FREE LINE		
BUILDINGS		
8' CHAIN LINK FENCE		
TEMP. CHAIN LINK FENCE		
SILT FENCE		
STRAW WATTLE		
AIRPORT BEACON		
LIGHTED WIND CONE		
OBSTRUCTIONS		
CONTROL POINTS		
AIRPORT REFERENCE POINT (ARP)		
LIGHTED SEGMENTED CIRCLE AND WIND CONE		
THRESHOLD LIGHTS		
REIL		
VEHICLE PARKING		
BUILDING NBR.–BLDG. DATA TABLE		
APPROXIMATE LOCATION OF 2005 SAMPLES		
APPROXIMATE LOCATION OF HISTORIC SAMPLES		
APPROX. AERIAL EXTENT OF ASH		
APPROX. AERIAL EXTENT OF DEBRIS		

BUILDING DATA TABLE

BLDG #	DESCRIPTION
1	INCINERATOR BUILDING
2	TERMINAL BUILDING 73–1

TRUE NORTH

AUGUST 1992
ANNUAL RATE OF CHANGE 0.1° W
SOURCE: ALBUQUERQUE SECTIONAL
November 1992

GRAPHIC SCALE IN FEET

20 0 20 40

FIGURE 1

REV	DATE	DESCRIPTION	DRAWN	APPR'D

ITSI Innovative Technical Solutions, Inc.
2730 Shadelands Drive, Suite 100
Walnut Creek, California 94598

LOS ALAMOS NATIONAL LABORATORY
LOS ALAMOS, NEW MEXICO

PROJECT TITLE
LOS ALAMOS AIRPORT
LOS ALAMOS, NEW MEXICO

DRAWING TITLE
APPROXIMATE LOCATION OF 2005 SAMPLES

SUBMITTED	APPROVED	APPROVED
CHIEF ENGINEER	CIVIL ENGINEER	COMMANDER

DRAWN BY	DESIGNED BY	DATE	SHEET
RDB	JC	5–19–2005	

SCALE	ITSI PROJECT NO.	DRAWING NO.
AS NOTED	04.400.12.110	04400.12/GRAPHICS/CAD

FILE
SAMPLE LOCATION MAP

APPENDIX A

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A-3 Organic Results - SWMU 73-002, 1996, 1997, and 1998 Sampling Data
A-4 Laboratory Results for Organic Compounds, Incinerator Ash Characterization Sampling - 2005
A-5 Radiological Results - SWMU 73-002, 1996, 1997, and 1998 Sampling Data
A-6 Laboratory Results for Radionuclides, Incinerator Ash Characterization Sampling – 2005
A-7 Inorganic Sample Data Comparison for Various Areas
A-8 Radionuclide Sample Date Comparison for Various Areas

Table A-1: Inorganic Results (Ash) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
Historical Information Report for Los Alamos National Laboratory

Sample ID	Location ID	Depth (ft)	Media (Units)	Aluminum (mg/kg)	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Calcium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Iron (mg/kg)	Lead (mg/kg)	Magnesium (mg/kg)	Manganese (mg/kg)	Mercury (mg/kg)
0173-96-0304	73-02264	0.00-0.00	NA	8340	54.6	15	5290	0.29	5	12800	94.8	26	3690	6.4 (U)	4500	1290 (J)	1240	2
0173-96-0305	73-02260	0.00-0.70	NA	13400	40.1	11.4	883	0.21	12.6	12500	76.5	22.5	999	160000	3020	6010	1250	1.3
0173-96-0307	73-02262	0.00-1.00	NA	4390	85.7	28.3	440	0.46	7.5	24300	90.2	37.8	543	431000	4290	964 (J)	1960	0.55
0173-96-0309	73-02266	0.00-0.00	NA	18300	54.4	6.9	6280	0.43	15.1	39800	106	30.3	843	174000	2170	2380	1500	1.4
0173-96-0314	73-02268	0.00-1.00	NA	15200	119	8.9	3030	0.22	11.4	29600	103	18	6330	106000	9620	2440	1140	2.3
0173-96-0316	73-02270	0.00-0.00	NA	4320	41.3	9.7	689	0.22	4.5	8990	58.3	24.2	1360	265000	1380	1250	1190	1.1
0173-96-0331	73-02252	0.10-0.30	NA	7000	56	90	650	2.8	7.4	3600	90	13	1800	170000	1300	1000	730	19
0173-96-0345	73-02268	0.00-1.00	NA	19000	95.3	11.4	4090	0.4	13.3	33200	109	21.1	2420	117000	9780	3800	1340	0.07
0173-96-0346	73-02270	0.00-0.00	NA	4540	50.8	25.1	646	0.27	5	15900	29.5	11.6	588	115000	1210	711 (J)	770	0.07
0173-97-0001	73-02268	1.20-2.20	NA	16900	32.5	27	1490	0.58	23.3	45900	73.9	17.2	2760	52800	6790	4800	1330	0.41
0173-97-0002	73-02268	0.50-1.00	NA	18900	49	76.5	2020	0.65	24.9	36200	74.3	16.7	2230	98600	3770	4020	1880	0.49
0173-97-0003	73-02261	0.50-1.00	NA	25300	16.8	19.8	2330	0.65	11.2	30300	133	22.7	1550	78400	2690	3200	1660	1.2
0173-97-0004	73-02261	3.50-4.50	NA	22900	29.6	20.1	1920	0.51	42.9	38700	90.5	17.7	4590	70600	4480	3960	1760	2.2
0173-97-0008	73-02268	1.20-2.20	NA	16700	159	20.4	1240	0.5	31.1	40600	71.8	15.6	2390	83500	13100	4380	1530	0.44
		Count		14	14	14	14	14	14	14	14	14	14	13	14	11	14	14
		Mean		13942.14	63.15	26.46	2214.14	0.59	15.37	26599.29	85.77	21.03	2292.36	147838.46	4864.29	3385.45	1377.14	2.32
		Min		4320.00	16.80	6.90	440.00	0.21	4.50	3600.00	29.50	11.60	543.00	52800.00	1210.00	1000.00	730.00	0.07
		Max		25300.00	159.00	90.00	6280.00	2.80	42.90	45900.00	133.00	37.80	6330.00	431000.00	13100.00	6010.00	1960.00	19.00
		Std. Dev.		7062.55	38.85	25.15	1838.45	0.66	11.31	13575.12	24.95	7.04	1645.15	102222.89	3655.45	1515.67	369.50	4.86
		TINV (0.10,n-1)		1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.78	1.77	1.81	1.77	1.77
		UCL95		17284.86	**81.54**	**38.37**	**3084.28**	0.90	**20.72**	**33024.41**	**97.58**	**24.36**	**3071.01**	**198369.02**	**6594.42**	4213.74	**1552.03**	**4.62**
Soil Background Value				29200	0.83	8.17	295	1.83	0.4	6120	19.3	8.64	14.7	21500	22.3	4610	671	0.1

*** Note: Red/Bold indicates value exceeds Background Value.**

Table A-1: Inorganic Results (Ash) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
Historical Information Report for Los Alamos National Laboratory

Sample ID	Location ID	Depth (ft)	Media (Units)	Nickel (mg/kg)	Potassium (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Sodium (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
0173-96-0304	73-02264	0.00-0.00	NA	131	1150	1.7	213	842	0.41	6.4	3820
0173-96-0305	73-02260	0.00-0.70	NA	165	1990	0.93	28.9	940	0.31	5.5	1470
0173-96-0307	73-02262	0.00-1.00	NA	119	806	0.96	23.2	675	0.3	10	752
0173-96-0309	73-02266	0.00-0.00	NA	134	2040	4.3	448	1760	0.4	12.6	2530
0173-96-0314	73-02268	0.00-1.00	NA	94.1	2660	1	156	2280	0.36	14.4	4260
0173-96-0316	73-02270	0.00-0.00	NA	81.2	640	0.99	41.8	674	0.37	4.8	1050
0173-96-0331	73-02252	0.10-0.30	NA	60	740	1.1	66	390	1.4	47	1900
0173-96-0345	73-02268	0.00-1.00	NA	104	3270	1.2	188	2480	0.48	15.9	4250
0173-96-0346	73-02270	0.00-0.00	NA	50.5	582	1.2	31.6	613	3.6	5.9	1590
0173-97-0001	73-02268	1.20-2.20	NA	79.9	4290	2	21.3	3930	7.4	13.2	4790
0173-97-0002	73-02268	0.50-1.00	NA	147	4610	2.1	55.3	3180	10.6	8.2	3860
0173-97-0003	73-02261	0.50-1.00	NA	236	3220	2.8	55.4	3530	9.3	12.5	4380
0173-97-0004	73-02261	3.50-4.50	NA	112	5040	1.9	19.6	7760	6.4	12.8	7170
0173-97-0008	73-02268	1.20-2.20	NA	101	4240	3.8	17.9	4190	8.6	7.8	3790
		Count		14	14	14	14	14	14	14	14
		Mean		115.34	2519.86	1.86	97.57	2374.57	3.57	12.64	3258.00
		Min		50.50	582.00	0.93	17.90	390.00	0.30	4.80	752.00
		Max		236.00	5040.00	4.30	448.00	7760.00	10.60	47.00	7170.00
		Std. Dev.		47.33	1609.26	1.09	120.33	2044.29	3.98	10.53	1783.85
		TINV (0.10,n-1)		1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77
		UCL95		**137.74**	3281.52	**2.37**	**154.52**	**3342.13**	**5.45**	17.63	**4102.30**
Soil Background Value				15.4	3460	1.52	1	915	0.73	39.6	48.8

*** Note: Red/Bold indicates value exceeds Background Value.**

Table A-1: Inorganic Results (Soil/Fill) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
Historical Information Report for Los Alamos National Laboratory

Sample ID	Location ID	Depth (ft)	Media (Units)	Aluminum (mg/kg)	Antimony (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Calcium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Iron (mg/kg)	Lead (mg/kg)	Magnesium (mg/kg)	Manganese (mg/kg)
0173-96-0302	73-02253	0.00-0.50	Soil		10	-	-	0.52	-	-	-	-	-	-	-
0173-96-0308	73-02255	0.00-0.50	Soil		12	-	-	0.62	-	-	-	-	48	-	-
0173-96-0320	73-02254	0.00-0.50	Soil		11	-	-	0.56	-	-	-	-	-	-	-
0173-96-0501	73-02326	14.00-15.0(	Fill		12	-	-	0.59	6500	-	-	-	-	-	-
0173-96-0502	73-02327	14.00-15.0(	Fill		12	-	-	0.59	-	-	-	-	-	-	-
0173-97-0312	73-02451	0.50-1.00	Soil	-	-	-	-	-	-	-	-	-	-	-	-
0173-97-0313	73-02452	0.10-0.50	Soil	-	-	-	-	-	-	-	-	-	-	-	-
0173-97-0318	73-02454	0.10-0.50	Soil	-	-	-	-	12.2	-	-	-	-	168	-	-
0173-97-0321	73-02457	0.10-0.50	Soil	-	-	-	-	-	-	9.9	-	-	44.6	-	790
0173-97-0323	73-02459	0.10-0.50	Soil	-	-	-	-	-	-	-	-	-	28.8	-	-
0173-97-0324	73-02460	0.10-0.50	Soil	-	-	-	-	-	-	-	15.1	-	23.4	-	-
0173-97-0325	73-02461	0.10-0.50	Soil	-	-	325	-	0.81	-	-	40.2	-	82.2	-	-
0173-97-0326	73-02462	0.10-0.50	Soil	-	-	415	-	0.65	-	-	36.8	-	83.7	-	-
RE73-99-0089	73-10099	7.50-8.50	Fill	35000		-	1.9	-	-	-	-	25000	-	5500	-
RE73-99-0102	73-10106	4.80-5.30	Fill			-	-	-	-	-	-	-	32	-	-
		Count		1	5	2	1	8	1	1	3	1	8	1	1
		Mean		35000.00	11.40	370.00	1.90	2.07	6500.00	9.90	30.70	25000.00	63.84	5500.00	790.00
		Min		35000.00	10.00	325.00	1.90	0.52	6500.00	9.90	15.10	25000.00	23.40	5500.00	790.00
		Max		35000.00	12.00	415.00	1.90	12.20	6500.00	9.90	40.20	25000.00	168.00	5500.00	790.00
		Std. Dev.			0.89	63.64		4.10			13.62		47.93		
		TINV (0.10,n-1)			2.13	6.31		1.89			2.92		1.89		
		UCL95			**12.25**	**654.12**		**4.81**			**53.66**		**95.94**		
Soil/Fill Background Value				29200	0.83	295	1.83	0.4	6120	8.64	14.7	21500	22.3	4610	671

*** Note: If there is only one sample performed, the actual sample data is used in place of the UCL95; Red/Bold indicates value exceeds Background Value.**

Table A-1: Inorganic Results (Soil/Fill) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
Historical Information Report for Los Alamos National Laboratory

Sample ID	Location ID	Depth (ft)	Media (Units)	Mercury (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)	Zinc (mg/kg)
0173-96-0302	73-02253	0.00-0.50	Soil	-	2.1	1.3	-
0173-96-0308	73-02255	0.00-0.50	Soil	0.12	2.5	1.5	52
0173-96-0320	73-02254	0.00-0.50	Soil	0.11	2.2	1.4	470
0173-96-0501	73-02326	14.00-15.0(	Fill	0.12	2.4	1.2	260
0173-96-0502	73-02327	14.00-15.0(	Fill	0.12	2.4	1.2	61
0173-97-0312	73-02451	0.50-1.00	Soil	-	-	0.87	-
0173-97-0313	73-02452	0.10-0.50	Soil	-	-	0.8	-
0173-97-0318	73-02454	0.10-0.50	Soil	-	-	-	-
0173-97-0321	73-02457	0.10-0.50	Soil	-	-	-	-
0173-97-0323	73-02459	0.10-0.50	Soil	0.14	1.1	-	-
0173-97-0324	73-02460	0.10-0.50	Soil	-	1.9	0.77	-
0173-97-0325	73-02461	0.10-0.50	Soil	0.24	8.8	-	-
0173-97-0326	73-02462	0.10-0.50	Soil	-	10.7	-	-
RE73-99-0089	73-10099	7.50-8.50	Fill	0.14	-	-	62
RE73-99-0102	73-10106	4.80-5.30	Fill	-	-	-	-
		Count		7	9	8	5
		Mean		0.14	3.79	1.13	181.00
		Min		0.11	1.10	0.77	52.00
		Max		0.24	10.70	1.50	470.00
		Std. Dev.		0.04	3.44	0.28	183.69
		TINV (0.10,n-1)		1.94	1.86	1.89	2.13
		UCL95		**0.17**	**5.92**	**1.32**	**356.13**
Soil/Fill Background Value				0.1	1	0.73	48.8

*** Note: If there is only one sample performed, the actual sample**

Table A-1: Inorganic Results (Tuff) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
Historical Information Report for Los Alamos National Laboratory

Sample ID	Location ID	Depth (ft)	Media (Units)	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Calcium (mg/kg)	Selenium (mg/kg)
0173-97-0333	73-02463	3.50-4.00	Qbt 3	0.71	-	-	-	-
0173-97-0337	73-02463	3.50-4.00	Qbt 3	0.72	-	-	-	-
RE73-99-0094	73-02207	5.50-6.00	Qbt 3		3.2	80	17000	-
RE73-99-0109	73-10096	4.30-4.80	Qbt 3		-	-	-	0.41
		Count		2	1	1	1	1
		Mean		0.72	3.20	80.00	17000.00	0.41
		Min		0.71	3.20	80.00	17000.00	0.41
		Max		0.72	3.20	80.00	17000.00	0.41
		Std. Dev.		0.01				
		TINV (0.10,n-1)		6.31				
		UCL95*		**0.75**	**3.20**	**80.00**	**17000.00**	**0.41**
Qbt 2,3,4 Background Value				**0.5**	**2.79**	**46**	**2200**	**0.3**

*** Note: If there is only one sample performed, the actual sample data is used in place of the UCL95; Red/Bold indicates value exceeds Background Value.**

Table A-2: Laboratory Results for Metals and Miscellaneous Parameters
Incinerator Ash Characterization Sampling - 2005
Historical Information Report for Los Alamos National Laboratory

		Silver		Arsenic		Barium		Beryllium		Cadmium		Cobalt	
Total Metals	(mg/kg)	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Previous Maximum		*448*		*90*		*6280*				*42.9*		*37.8*	
RE-73-05-58824	4/18/2005	17.5	0.52	42	0.52	1170	5.2	0.27	0.26	16.9	0.65	16.2	1.3
RE-73-05-58825	4/19/2005	190	0.53	29.6	0.53	5030	5.3	0.21	0.27	12.4	0.66	17.9	1.3
RE-73-05-58826	4/19/2005	54.9	0.53	22.7	0.53	1490	5.3	0.34	0.27	19.7	0.66	13.8	1.3
RE-73-05-58827	4/19/2005	118	0.48	33.6	0.48	4150	4.8	0.37	0.24	9	0.6	11.3	1.2
RE-73-05-58828	4/19/2005	37.2	0.49	39.3	0.49	1550	4.9	2.4	0.24	48.3	0.61	18.3	1.2
RE-73-05-58829	4/19/2005												
RE-73-05-58830	4/19/2005	54	0.51	26.1	0.51	1980	5.1	0.39	0.25	18.2	0.63	40.3	1.3
RE-73-05-58831	4/19/2005	49.5	0.53	19	0.53	1880	5.3	0.28	0.27	78.5	0.66	15.1	1.3
RE-73-05-58832	4/19/2005	35.6	0.53	20.5	0.53	1580	5.3	0.28	0.27	14.9	0.67	13.2	1.3
RE-73-05-58833	4/19/2005	119	0.48	26.8	0.48	2660	4.8	1.2	0.24	7.7	0.6	17.3	1.2
RE-73-05-58834	4/19/2005	56.9	0.53	26.3	0.53	1000	5.3	0.74	0.27	15.4	0.66	17.7	1.3
RE-73-05-58835	4/19/2005												
RE-73-05-58836	4/19/2005	21.2	0.45	66.4	0.45	643	4.5	0.11	0.22	4.1	0.56	41.9	1.1
RE-73-05-58837	4/19/2005	15.4	0.47	133	0.47	575	4.7	0.089	0.23	2.8	0.59	49.7	1.2
RE-73-05-58838	4/19/2005	95.7	0.54	19.5	0.54	2600	5.4	0.33	0.27	67.5	0.67	10.1	1.3
RE-73-05-58839	4/19/2005	125	0.53	76	0.53	2870	5.3	0.33	0.27	16.4	0.67	14.8	1.3
RE-73-05-58840	4/19/2005	187	0.47	22.1	0.47	3490	4.7	0.2	0.23	16.5	0.59	14.4	1.2
RE-73-05-58841	4/19/2005												
RE-73-05-58842	4/20/2005	63	0.5	29.8	0.5	1790	5	0.33	0.25	17.7	0.63	16.4	1.3
RE-73-05-58843	4/20/2005	59.6	0.5	56.4	0.5	1710	5	0.26	0.25	16.8	0.62	16.8	1.2
RE-73-05-58844	4/20/2005	73.3	0.56	45.1	0.56	1990	5.6	0.25	0.28	5.9	0.69	16.5	1.4
RE-73-05-58845	4/20/2005	78.2	0.53	138	0.53	1940	5.3	0.25	0.27	6	0.67	40.2	1.3
RE-73-05-58846	4/20/2005	102	0.51	21	0.51	3330	5.1	0.17	0.25	7.2	0.63	18.6	1.3
RE-73-05-58879	4/20/2005												
	Min	15.4		19		575		0.089		2.8		10.1	
	Max	190		138		5030		2.4		78.5		49.7	
	Mean	77.65		44.66		2171.4		0.43995		20.095		21.025	
TCLP Metals	(mg/L)												
Previous Maximum		*ND*		*ND*		*1.45*				*0.151*			
RE-73-05-58824	4/18/2005	ND	0.05	ND	0.5	0.884	0.5			0.18	0.025		
RE-73-05-58825	4/19/2005	ND	0.05	ND	0.5	1.65	0.5			0.0912	0.025		
RE-73-05-58826	4/19/2005	ND	0.05	ND	0.5	1.44	0.5			0.105	0.025		
RE-73-05-58827	4/19/2005	ND	0.05	ND	0.5	2.4	0.5			0.0406	0.025		
RE-73-05-58828	4/19/2005	ND	0.05	ND	0.5	1.43	0.5			0.133	0.025		
RE-73-05-58829	4/19/2005												
RE-73-05-58830	4/19/2005	ND	0.05	ND	0.5	3.84	0.5			1.73	0.25		
RE-73-05-58831	4/19/2005	ND	0.05	ND	0.5	1.18	0.5			0.134	0.025		
RE-73-05-58832	4/19/2005	ND	0.05	ND	0.5	1.32	0.5			0.0403	0.025		
RE-73-05-58833	4/19/2005	ND	0.05	ND	0.5	0.939	0.5			0.0205	0.025		
RE-73-05-58834	4/19/2005	ND	0.05	ND	0.5	1.06	0.5			0.0316	0.025		
RE-73-05-58835	4/19/2005												
RE-73-05-58836	4/19/2005	ND	0.05	ND	0.5	1.76	0.5			0.0117	0.025		
RE-73-05-58837	4/19/2005	ND	0.05	ND	0.5	1.62	0.5			0.0112	0.025		
RE-73-05-58838	4/19/2005	ND	0.05	ND	0.5	1.79	0.5			0.16	0.025		
RE-73-05-58839	4/19/2005	ND	0.05	ND	0.5	1.59	0.5			0.095	0.025		
RE-73-05-58840	4/19/2005	ND	0.05	ND	0.5	0.786	0.5			0.0739	0.025		
RE-73-05-58841	4/19/2005												
RE-73-05-58842	4/20/2005	ND	0.05	ND	0.5	2.33	0.5			0.0719	0.025		

Table A-2: Laboratory Results for Metals and Miscellaneous Parameters
Incinerator Ash Characterization Sampling - 2005
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		Chromium		Copper		Manganese		Nickel		Lead		Antimony	
Total Metals	(mg/kg)	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Previous Maximum		*133*		*6320*		*1960*		*236*		*13100*		*159*	
RE-73-05-58824	4/18/2005	102	1.3	1620	2.6	1520	2.6	203	0.52	3330	1.6	33.4	0.52
RE-73-05-58825	4/19/2005	74	1.3	993	2.7	1270	2.7	96.3	0.53	6650	1.6	52.1	0.53
RE-73-05-58826	4/19/2005	77	1.3	1670	2.7	1230	2.7	79.7	0.53	6700	1.6	48.4	0.53
RE-73-05-58827	4/19/2005	61.3	1.2	1270	1.2	895	2.4	43.7	0.48	2400	0.72	32.8	0.48
RE-73-05-58828	4/19/2005	85.9	1.2	219000	24.3	21800	2.4	146	0.49	2460	0.73	27.8	0.49
RE-73-05-58829	4/19/2005												
RE-73-05-58830	4/19/2005	154	1.3	1330	2.5	2190	2.5	633	0.51	6110	1.5	73.1	0.51
RE-73-05-58831	4/19/2005	88.5	1.3	4130	3.3	1330	2.7	125	0.53	3950	0.79	27.8	0.53
RE-73-05-58832	4/19/2005	66.8	1.3	1930	1.3	1380	2.7	131	0.53	2390	0.8	29.1	0.53
RE-73-05-58833	4/19/2005	107	1.2	1190	1.2	1750	2.4	115	0.48	2500	0.72	29.8	0.48
RE-73-05-58834	4/19/2005	81.8	1.3	31500	3.3	2540	2.7	295	0.53	8770	2	123	0.53
RE-73-05-58835	4/19/2005												
RE-73-05-58836	4/19/2005	104	1.1	815	1.1	2050	2.2	220	0.45	2840	0.67	36.2	0.45
RE-73-05-58837	4/19/2005	94.4	1.2	490	1.2	2330	2.3	219	0.47	4310	0.7	24.7	0.47
RE-73-05-58838	4/19/2005	54.1	1.3	3260	6.7	859	2.7	77	0.54	13700	4	116	0.54
RE-73-05-58839	4/19/2005	68.7	1.3	3820	13.3	2810	2.7	98.6	0.53	33000	8	543	0.53
RE-73-05-58840	4/19/2005	85	1.2	1040	1.2	1050	2.3	215	0.47	1950	0.7	19.9	0.47
RE-73-05-58841	4/19/2005												
RE-73-05-58842	4/20/2005	85.9	1.3	2710	6.3	1580	2.5	234	0.5	3430	3.8	32.6	0.5
RE-73-05-58843	4/20/2005	72.2	1.2	2360	1.2	1770	2.5	189	0.5	2220	0.74	27.3	0.5
RE-73-05-58844	4/20/2005	67.7	1.4	536	1.4	974	2.8	115	0.56	2990	0.83	17.2	0.56
RE-73-05-58845	4/20/2005	116	1.3	1640	1.3	2010	2.7	215	0.53	3690	0.8	64.7	0.53
RE-73-05-58846	4/20/2005	66.5	1.3	2750	1.3	1130	2.5	792	0.51	1740	0.76	29.8	0.51
RE-73-05-58879	4/20/2005												
	Min	54.1		490		859		43.7		1740		17.2	
	Max	154		219000		21800		792		33000		543	
	Mean	85.64		14202.7		2623.4		212.115		5756.5		69.435	
TCLP Metals	(mg/L)												
Previous Maximum		*0.033*								*4.1*			
RE-73-05-58824	4/18/2005	ND	0.05							3.14	0.25		
RE-73-05-58825	4/19/2005	ND	0.05							0.786	0.25		
RE-73-05-58826	4/19/2005	ND	0.05							2.39	0.25		
RE-73-05-58827	4/19/2005	ND	0.05							6.29	0.25		
RE-73-05-58828	4/19/2005	ND	0.05							2.56	0.25		
RE-73-05-58829	4/19/2005												
RE-73-05-58830	4/19/2005	ND	0.05							3.33	0.25		
RE-73-05-58831	4/19/2005	ND	0.05							4.37	0.25		
RE-73-05-58832	4/19/2005	ND	0.05							1.08	0.25		
RE-73-05-58833	4/19/2005	ND	0.05							0.633	0.25		
RE-73-05-58834	4/19/2005	ND	0.05							0.63	0.25		
RE-73-05-58835	4/19/2005												
RE-73-05-58836	4/19/2005	ND	0.05							0.792	0.25		
RE-73-05-58837	4/19/2005	ND	0.05							0.316	0.25		
RE-73-05-58838	4/19/2005	ND	0.05							2.47	0.25		
RE-73-05-58839	4/19/2005	ND	0.05							1.47	0.25		
RE-73-05-58840	4/19/2005	ND	0.05							1.44	0.25		
RE-73-05-58841	4/19/2005												
RE-73-05-58842	4/20/2005	ND	0.05							0.817	0.25		

Table A-2: Laboratory Results for Metals and Miscellaneous Parameters
Incinerator Ash Characterization Sampling - 2005
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		Selenium		Thallium		Vanadium		Zinc		Mercury		pH	Flash
Total Metals	(mg/kg)	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL		Point
Previous Maximum		*3.8*		*10.6*		*65*		*7170*		*19*			
RE-73-05-58824	4/18/2005	1.1	0.52	0.54	0.26	16.1	2.6	8220	13.1	0.62	0.044		
RE-73-05-58825	4/19/2005	1.6	0.53	ND	0.27	12.8	2.7	3020	13.3				
RE-73-05-58826	4/19/2005	1.1	0.53	ND	0.27	15.3	2.7	4360	2.7	0.7	0.044		
RE-73-05-58827	4/19/2005	0.89	0.48	ND	0.24	14.1	2.4	4450	2.4	0.9	0.04		
RE-73-05-58828	4/19/2005	0.92	0.49	ND	0.24	24.7	2.4	11300	12.2	0.92	0.041		
RE-73-05-58829	4/19/2005											8	>60
RE-73-05-58830	4/19/2005	0.81	0.51	ND	0.25	20.9	2.5	4880	2.5	1.6	0.042		
RE-73-05-58831	4/19/2005	1.7	0.53	ND	0.27	17.2	2.7	43000	26.5	1.4	0.044		
RE-73-05-58832	4/19/2005	0.68	0.53	ND	0.27	17.1	2.7	3940	2.7	1.7	0.044		
RE-73-05-58833	4/19/2005	0.57	0.48	ND	0.24	12.9	2.4	3760	2.4	2.1	0.08		
RE-73-05-58834	4/19/2005	2	0.53	ND	0.27	12.6	2.7	9830	13.3	1.6	0.044		
RE-73-05-58835	4/19/2005											8	>60
RE-73-05-58836	4/19/2005	0.45	0.45	ND	0.22	3.8	2.2	939	55.9	0.71	0.037		
RE-73-05-58837	4/19/2005	0.64	0.47	ND	0.23	4.1	2.3	823	58.6	0.28	0.039		
RE-73-05-58838	4/19/2005	1.2	0.54	ND	0.27	14.5	2.7	4630	2.7	0.56	0.045		
RE-73-05-58839	4/19/2005	1.7	0.53	ND	0.27	15.1	2.7	4370	2.7	1.2	0.044		
RE-73-05-58840	4/19/2005	0.94	0.47	ND	0.23	14.1	2.3	5500	2.3	0.6	0.039		
RE-73-05-58841	4/19/2005											8.1	>60
RE-73-05-58842	4/20/2005	2.2	0.5	ND	0.25	16.6	2.5	6460	12.6	0.79	0.042		
RE-73-05-58843	4/20/2005	1.6	0.5	0.31	0.25	15.3	2.5	6120	2.5	1.5	0.041		
RE-73-05-58844	4/20/2005	0.93	0.56	ND	0.28	10.1	2.8	2040	2.8	0.7	0.046		
RE-73-05-58845	4/20/2005	0.55	0.53	ND	0.27	8.6	2.7	1710	66.7	0.5	0.045		
RE-73-05-58846	4/20/2005	0.85	0.51	ND	0.25	14.8	2.5	2190	2.5	0.33	0.042		
RE-73-05-58879	4/20/2005											8.3	>60
	Min	0.45		0.31		3.8		823		0.28			
	Max	2.2		0.54		24.7		43000		2.1			
	Mean	1.1215		0.425		14.035		6577.1		0.98473684			

TCLP Metals	(mg/L)												
Previous Maximum		*ND*											
RE-73-05-58824	4/18/2005	ND	0.5					37.4	0.1	ND	0.01		
RE-73-05-58825	4/19/2005	ND	0.5					19.4	0.1	ND	0.01		
RE-73-05-58826	4/19/2005	ND	0.5					39.1	0.1	ND	0.01		
RE-73-05-58827	4/19/2005	ND	0.5					19.2	0.1	ND	0.01		
RE-73-05-58828	4/19/2005	ND	0.5					40.5	0.1	ND	0.01		
RE-73-05-58829	4/19/2005												
RE-73-05-58830	4/19/2005	ND	0.5					35.1	0.1	ND	0.01		
RE-73-05-58831	4/19/2005	ND	0.5					42.4	0.1	ND	0.01		
RE-73-05-58832	4/19/2005	ND	0.5					30.3	0.1	ND	0.01		
RE-73-05-58833	4/19/2005	ND	0.5					24.9	0.1	ND	0.01		
RE-73-05-58834	4/19/2005	ND	0.5					57.2	0.5	ND	0.01		
RE-73-05-58835	4/19/2005												
RE-73-05-58836	4/19/2005	ND	0.5					5.1	0.1	ND	0.01		
RE-73-05-58837	4/19/2005	ND	0.5					8.5	0.1	ND	0.01		
RE-73-05-58838	4/19/2005	ND	0.5					36.7	0.1	ND	0.01		
RE-73-05-58839	4/19/2005	ND	0.5					33.7	0.1	ND	0.01		
RE-73-05-58840	4/19/2005	ND	0.5					67.5	0.5	ND	0.01		
RE-73-05-58841	4/19/2005												
RE-73-05-58842	4/20/2005	ND	0.5					30.6	0.1	ND	0.01		

Table A-2: Laboratory Results for Metals and Miscellaneous Parameters
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		Paint Filter	% Moisture		Reactive Cyanide		Reactive Sulfide		Bulk Density (g/cm3)	
Total Metals	(mg/kg)	Test	Result	RL	Result	RL	Result	RL	Dry	Wet
Previous Maximum										
RE-73-05-58824	4/18/2005									
RE-73-05-58825	4/19/2005									
RE-73-05-58826	4/19/2005									
RE-73-05-58827	4/19/2005									
RE-73-05-58828	4/19/2005									
RE-73-05-58829	4/19/2005	Pass	23.5	0.1	0.052	0.065	ND	5.8	0.74	0.99
RE-73-05-58830	4/19/2005									
RE-73-05-58831	4/19/2005									
RE-73-05-58832	4/19/2005									
RE-73-05-58833	4/19/2005									
RE-73-05-58834	4/19/2005									
RE-73-05-58835	4/19/2005	Pass	23.8	0.1	0.092	0.066	ND	5.8	0.66	0.91
RE-73-05-58836	4/19/2005									
RE-73-05-58837	4/19/2005									
RE-73-05-58838	4/19/2005									
RE-73-05-58839	4/19/2005									
RE-73-05-58840	4/19/2005									
RE-73-05-58841	4/19/2005	Pass	19.6	0.1	0.062	0.062	ND	5.5	0.86	1.04
RE-73-05-58842	4/20/2005									
RE-73-05-58843	4/20/2005									
RE-73-05-58844	4/20/2005									
RE-73-05-58845	4/20/2005									
RE-73-05-58846	4/20/2005									
RE-73-05-58879	4/20/2005	Pass	22.3	0.1	0.14	0.064	ND	5.7		
	Min									
	Max									
	Mean									
TCLP Metals	(mg/L)									
Previous Maximum										
RE-73-05-58824	4/18/2005									
RE-73-05-58825	4/19/2005									
RE-73-05-58826	4/19/2005									
RE-73-05-58827	4/19/2005									
RE-73-05-58828	4/19/2005									
RE-73-05-58829	4/19/2005									
RE-73-05-58830	4/19/2005									
RE-73-05-58831	4/19/2005									
RE-73-05-58832	4/19/2005									
RE-73-05-58833	4/19/2005									
RE-73-05-58834	4/19/2005									
RE-73-05-58835	4/19/2005									
RE-73-05-58836	4/19/2005									
RE-73-05-58837	4/19/2005									
RE-73-05-58838	4/19/2005									
RE-73-05-58839	4/19/2005									
RE-73-05-58840	4/19/2005									
RE-73-05-58841	4/19/2005									
RE-73-05-58842	4/20/2005									

Table A-3: Organic Results (Ash) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
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Sample ID	Location ID	Depth (ft)	Media	Acetone	Aroclor-1254	Benzene	Benzo(a) - anthracene	Benzo(b) - fluoranthene	Benzo(k) fluoranthene	BHC[beta-]	Bis (2-ethylhexyl) phthalate	Chrysene	DDD[4,4'-]	DDE[4,4'-]	DDT[4,4'-]	Dichloro - benzene[1,2-]	Dichloro - benzene[1,3-]	Dichloro - benzene[1,4-]
0173-96-0304	73-02264	0.00-0.00	NA		0.046					0.0026				0.032	0.024			
0173-96-0305	73-02260	0.00-0.70	NA		0.066									0.0057				
0173-96-0307	73-02262	0.00-1.00	NA															
0173-96-0309	73-02266	0.00-0.00	NA			0.002								0.019	0.02			
0173-96-0314	73-02268	0.00-1.00	NA		0.17		0.043					0.047		0.03	0.022			
0173-96-0316	73-02270	0.00-0.00	NA		0.059									0.0072	0.006			0.01
0173-96-0331	73-02252	0.10-0.30	NA										1.3	0.31	3.9			
0173-96-0345	73-02268	0.00-1.00	NA	0.005	0.13									0.027	0.023			
0173-96-0346	73-02270	0.00-0.00	NA		0.04		0.09	0.094	0.075			0.11		0.005				
0173-97-0001	73-02268	1.20-2.20	NA															
0173-97-0002	73-02268	0.50-1.00	NA															
0173-97-0003	73-02261	0.50-1.00	NA															
0173-97-0004	73-02261	3.50-4.50	NA								0.19					0.12	0.12	
0173-97-0008	73-02268	1.20-2.20	NA	0.097							0.12			0.035	0.019			
0173-97-0327	73-02465	3.20-3.70	NA															
0173-97-0336	73-02464	7.00-7.50	NA															
0173-97-0338	73-02464	7.00-7.50	NA															
		Count		2	6	1	2	1	1	1	2	2	1	9	7	1	1	1
		Mean		0.05	0.09	0.00	0.07	0.09	0.08	0.00	0.16	0.08	1.30	0.05	0.57	0.12	0.12	0.01
		Min		0.01	0.04	0.00	0.04	0.09	0.08	0.00	0.12	0.05	1.30	0.01	0.01	0.12	0.12	0.01
		Max		0.10	0.17	0.00	0.09	0.09	0.08	0.00	0.19	0.11	1.30	0.31	3.90	0.12	0.12	0.01
		Std. Dev.		0.07	0.05		0.03				0.05	0.04		0.10	1.47			
		TINV (0.10,n-1)		6.31	2.02		6.31				6.31	6.31		1.86	1.94			
		UCL95		0.34	0.13		0.21				0.38	0.28		0.11	1.65			

Table A-3: Organic Results (Ash) - SWMU 73-002
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Sample ID	Location ID	Depth (ft)	Media	Endosulfan I	Fluoranthene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofuran [1,2,3,4,7,8,9-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzodioxin [1,2,3,4,7,8-]	Hexachlorodibenzodioxin [1,2,3,6,7,8-]	Hexachlorodibenzodioxin [1,2,3,7,8,9-]	Hexachlorodibenzodioxins (Total)	Hexachlorodibenzofuran [1,2,3,4,7,8-]	Hexachlorodibenzofuran [1,2,3,6,7,8-]
0173-96-0304	73-02264	0.00-0.00	NA													
0173-96-0305	73-02260	0.00-0.70	NA													
0173-96-0307	73-02262	0.00-1.00	NA													
0173-96-0309	73-02266	0.00-0.00	NA													
0173-96-0314	73-02268	0.00-1.00	NA		0.078											
0173-96-0316	73-02270	0.00-0.00	NA													
0173-96-0331	73-02252	0.10-0.30	NA													
0173-96-0345	73-02268	0.00-1.00	NA													
0173-96-0346	73-02270	0.00-0.00	NA													
0173-97-0001	73-02268	1.20-2.20	NA			1.80E-10	0.33	0.098	0.0053	0.17	0.0062	0.024	0.022	0.18	0.012	0.011
0173-97-0002	73-02268	0.50-1.00	NA			1.80E-10	0.33	0.066	0.0064	0.11	0.0059	0.021	0.025	0.14	0.025	0.017
0173-97-0003	73-02261	0.50-1.00	NA			1.10E-09	1.8	0.13	0.011	0.25	0.014	0.056	0.065	0.46	0.023	0.021
0173-97-0004	73-02261	3.50-4.50	NA	0.0023		9.00E-10	1.6	0.35	0.0088	0.61	0.026	0.14	0.12	1	0.046	0.049
0173-97-0008	73-02268	1.20-2.20	NA			2.80E-10	0.51	0.071	0.004	0.15	0.0063	0.037	0.037	0.29	0.015	0.01
0173-97-0327	73-02465	3.20-3.70	NA			5.90E-11	0.11	0.011	0.00075	0.024	0.00067	0.0037	0.0033	0.03	0.0021	0.0019
0173-97-0336	73-02464	7.00-7.50	NA			4.90E-11	0.094	0.28	0.0099	0.34	0.016	0.02	0.041	0.27	0.43	0.14
0173-97-0338	73-02464	7.00-7.50	NA			7.60E-11	0.15	0.4	0.014	0.48	0.022	0.029	0.063	0.42	0.67	0.23
		Count		1	1	8	8	8	8	8	8	8	8	8	8	8
		Mean		0.00	0.08	0.000000	0.615500	0.175750	0.007519	0.266750	0.012134	0.041338	0.047038	0.348750	0.152888	0.059988
		Min		0.00	0.08	0.000000	0.094000	0.011000	0.000750	0.024000	0.000670	0.003700	0.003300	0.030000	0.002100	0.001900
		Max		0.00	0.08	0.000000	1.800000	0.400000	0.014000	0.610000	0.026000	0.140000	0.120000	1.000000	0.670000	0.230000
		Std. Dev.				0.000000	0.685629	0.146296	0.004239	0.198362	0.008844	0.042605	0.035983	0.298780	0.253672	0.082000
		TINV (0.10,n-1)				1.894578	1.894578	1.894578	1.894578	1.894578	1.894578	1.894578	1.894578	1.894578	1.894578	1.894578
		UCL95				0.000000	1.074758	0.273744	0.010358	0.399619	0.018058	0.069876	0.071140	0.548883	0.322806	0.114914

Table A-3: Organic Results (Ash) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
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Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofuran [1,2,3,7,8,9-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]	Hexachlorodibenzofurans (Total)	Isopropyltoluene [4-]	Methylene Chloride	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzodioxin [1,2,3,7,8-]	Pentachlorodibenzodioxins (Total)	Pentachlorodibenzofuran [1,2,3,7,8-]	Pentachlorodibenzofuran [2,3,4,7,8-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene
0173-96-0304	73-02264	0.00-0.00	NA					0.043									
0173-96-0305	73-02260	0.00-0.70	NA					0.034									
0173-96-0307	73-02262	0.00-1.00	NA					0.032									
0173-96-0309	73-02266	0.00-0.00	NA					0.036									
0173-96-0314	73-02268	0.00-1.00	NA					0.1									0.076
0173-96-0316	73-02270	0.00-0.00	NA					0.059									
0173-96-0331	73-02252	0.10-0.30	NA				0.013										
0173-96-0345	73-02268	0.00-1.00	NA					0.069									
0173-96-0346	73-02270	0.00-0.00	NA					0.08									0.049
0173-97-0001	73-02268	1.20-2.20	NA		0.012	0.12			0.64	0.048	0.0082	0.1	0.014	0.021	0.24		
0173-97-0002	73-02268	0.50-1.00	NA		0.018	0.15			0.68	0.031	0.0084	0.071	0.023	0.035	0.43		
0173-97-0003	73-02261	0.50-1.00	NA		0.027	0.21			4.8	0.1	0.016	0.25	0.019	0.032	0.4		
0173-97-0004	73-02261	3.50-4.50	NA		0.052	0.5			3.2	0.15	0.049	0.58	0.11	0.15	1.9	0.25	
0173-97-0008	73-02268	1.20-2.20	NA		0.0098	0.1			1	0.043	0.013	0.15	0.015	0.02	0.27		
0173-97-0327	73-02465	3.20-3.70	NA			0.029			0.29		0.00095	0.014	0.00066	0.00091	0.019		
0173-97-0336	73-02464	7.00-7.50	NA	0.0061	0.14	1.4					0.06	0.56	0.43	0.54	6.3		
0173-97-0338	73-02464	7.00-7.50	NA	0.01	0.2	2.1					0.096	0.87	0.75	0.84	9.6		
		Count		2	7	8	1	8	6	5	8	8	8	8	8	1	2
		Mean		0.008050	0.065543	0.576125	0.01	0.06	1.76833	0.07440	0.03144	0.32438	0.17021	0.20486	2.39488	0.25	0.06
		Min		0.006100	0.009800	0.029000	0.01	0.03	0.29000	0.03100	0.00095	0.01400	0.00066	0.00091	0.01900	0.25	0.05
		Max		0.010000	0.200000	2.100000	0.01	0.10	4.80000	0.15000	0.09600	0.87000	0.75000	0.84000	9.60000	0.25	0.08
		Std. Dev.		0.002758	0.074751	0.761247		0.02	1.81516	0.04984	0.03353	0.30831	0.27491	0.31329	3.58673		0.02
		TINV (0.10,n-1)		6.313749	1.943181	1.894578		1.89	2.01505	2.13185	1.89458	1.89458	1.89458	1.89458	1.89458		6.31
		UCL95		0.020362	0.120444	1.086034		0.07	3.26156	0.12192	0.05391	0.53089	0.35435	0.41471	4.79739		0.15

Table A-3: Organic Results (Ash) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
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Sample ID	Location ID	Depth (ft)	Media	Tetrachlorodibenzodioxin [2,3,7,8-]	Tetrachlorodibenzodioxins (Total)	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Total)	Tetrachloroethene	Toluene	Trichloroethane [1,1,1-]	Trichloroethene	Trichlorofluoromethane	Trimethylbenzene [1,3,5-]
0173-96-0304	73-02264	0.00-0.00	NA					0.003		0.004		0.013	
0173-96-0305	73-02260	0.00-0.70	NA					0.004		0.006	0.006	0.013	
0173-96-0307	73-02262	0.00-1.00	NA					0.002		0.002	0.001	0.005	
0173-96-0309	73-02266	0.00-0.00	NA					0.002		0.004	0.007	0.009	
0173-96-0314	73-02268	0.00-1.00	NA					0.005		0.007	0.002	0.016	
0173-96-0316	73-02270	0.00-0.00	NA					0.008		0.003	0.004	0.006	
0173-96-0331	73-02252	0.10-0.30	NA										0.01
0173-96-0345	73-02268	0.00-1.00	NA					0.007		0.009	0.003	0.016	
0173-96-0346	73-02270	0.00-0.00	NA					0.009	0.001	0.006	0.005	0.007	
0173-97-0001	73-02268	1.20-2.20	NA	0.0033	0.1	0.029	0.51						
0173-97-0002	73-02268	0.50-1.00	NA	0.0045	0.12	0.042	0.79						
0173-97-0003	73-02261	0.50-1.00	NA	0.0064	0.27	0.032	0.57						
0173-97-0004	73-02261	3.50-4.50	NA	0.037	0.71	0.35	5.4						
0173-97-0008	73-02268	1.20-2.20	NA	0.0066	0.11	0.031	0.51						
0173-97-0327	73-02465	3.20-3.70	NA		0.0084	0.0026	0.025						
0173-97-0336	73-02464	7.00-7.50	NA	0.096	1.5	4.5	28						
0173-97-0338	73-02464	7.00-7.50	NA	0.14	2.1	6.7	42						
		Count		7	8	8	8	8	1	8	7	8	1
		Mean		0.04	0.61	1.46	9.73	0.01	0.001	0.01	0.00	0.01	0.01
		Min		0.00	0.01	0.00	0.03	0.00	0.001	0.00	0.00	0.01	0.01
		Max		0.14	2.10	6.70	42.00	0.01	0.001	0.01	0.01	0.02	0.01
		Std. Dev.		0.05	0.78	2.62	16.13	0.00		0.00	0.00	0.00	
		TINV (0.10,n-1)		1.94	1.89	1.89	1.89	1.89		1.89	1.94	1.89	
		UCL95		0.08	1.14	3.22	20.53	0.01		0.01	0.01	0.01	

Table A-3: Organic Results (Soil/Fill) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
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Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Benzo(a) - anthracene	Benzo(a) - pyrene	Benzo(b) - fluoranthene	Benzoic Acid	Bis (2-ethylhexyl) phthalate	Chlordane[alpha-]	Chlordane[gamma-]	Chrysene	DDD[4,4'-]	DDE[4,4'-]
0173-96-0308	73-02255	0.00-0.50	Soil									0.0035				0.029
0173-96-0501	73-02326	14.00-15.00	Fill		0.025							0.028	0.038		0.31	0.089
0173-96-0502	73-02327	14.00-15.00	Fill												0.042	0.01
0173-97-0311	73-02451	0.10-0.50	Soil													
0173-97-0321	73-02457	0.10-0.50	Soil							0.092						
0173-97-0322	73-02458	0.10-0.50	Soil							0.043						
0173-97-0323	73-02459	0.10-0.50	Soil													
0173-97-0324	73-02460	0.10-0.50	Soil													
0173-97-0325	73-02461	0.10-0.50	Soil	0.035		0.061	0.1	0.11	0.21	0.051	0.05			0.11		
0173-97-0326	73-02462	0.10-0.50	Soil	0.78												
RE73-99-0093	73-10098	7.50-7.75	Fill													0.0043
RE73-99-0102	73-10106	4.80-5.30	Fill												0.006	
RE73-99-0104	73-10107	6.00-6.50	Fill													0.0046
		Count		2	1	1	1	1	1	3	1	2	1	1	3	5
		Mean		0.41	0.03	0.06	0.10	0.11	0.21	0.06	0.05	0.02	0.04	0.11	0.12	0.03
		Min		0.04	0.03	0.06	0.10	0.11	0.21	0.04	0.05	0.00	0.04	0.11	0.01	0.00
		Max		0.78	0.03	0.06	0.10	0.11	0.21	0.09	0.05	0.03	0.04	0.11	0.31	0.09
		Std. Dev.		0.53						0.03		0.02			0.17	0.04
		TINV (0.10,n-1)		6.31						2.92		6.31			2.92	2.13
		UCL95		2.76						0.11		0.09			0.40	0.06

Table A-3: Organic Results (Soil/Fill) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
Historical Information Report for Los Alamos National Laboratory

Sample ID	Location ID	Depth (ft)	Media	DDT[4,4'-]	Di-n-butyl phthalate	Fluoranthene	Heptachlorodi benzodioxin [1,2,3,4,6,7,8-]	Heptachlorodi benzodioxins (Total)	Heptachlorodi benzofuran [1,2,3,4,6,7,8-]	Heptachlorodi benzofuran [1,2,3,4,7,8,9-]	Heptachlorodi benzofurans (Total)	Hexachlorodi benzodioxin [1,2,3,4,7,8-]	Hexachlorodi benzodioxin [1,2,3,6,7,8-]	Hexachlorodi benzodioxin [1,2,3,7,8,9-]	Hexachlorodi benzodioxins (Total)
0173-96-0308	73-02255	0.00-0.50	Soil	0.034											
0173-96-0501	73-02326	14.00-15.00	Fill	0.11											
0173-96-0502	73-02327	14.00-15.00	Fill	0.021											
0173-97-0311	73-02451	0.10-0.50	Soil				1.00E-12		0.00065						
0173-97-0321	73-02457	0.10-0.50	Soil				3.50E-12	0.0069	0.0022		0.0041				0.0023
0173-97-0322	73-02458	0.10-0.50	Soil				5.00E-12	0.0099	0.0016		0.0029		0.00034		0.0027
0173-97-0323	73-02459	0.10-0.50	Soil		0.19										
0173-97-0324	73-02460	0.10-0.50	Soil				1.40E-11	0.026	0.0033		0.0073	0.00027	0.00081	0.00085	0.0068
0173-97-0325	73-02461	0.10-0.50	Soil		0.077	0.24	1.00E-10	0.17	0.044	0.0043	0.12	0.0033	0.0068	0.0073	0.052
0173-97-0326	73-02462	0.10-0.50	Soil												
RE73-99-0093	73-10098	7.50-7.75	Fill												
RE73-99-0102	73-10106	4.80-5.30	Fill	0.19											
RE73-99-0104	73-10107	6.00-6.50	Fill	0.03											
		Count		5	2	1	5	4	5	1	4	2	3	2	4
		Mean		0.08	0.13	0.24	2.47E-11	5.32E-02	1.04E-02	4.30E-03	3.36E-02	1.79E-03	2.65E-03	4.08E-03	1.60E-02
		Min		0.02	0.08	0.24	1.00E-12	6.90E-03	6.50E-04	4.30E-03	2.90E-03	2.70E-04	3.40E-04	8.50E-04	2.30E-03
		Max		0.19	0.19	0.24	1.00E-10	1.70E-01	4.40E-02	4.30E-03	1.20E-01	3.30E-03	6.80E-03	7.30E-03	5.20E-02
		Std. Dev.		0.07	0.08		4.24E-11	7.83E-02	1.88E-02		5.76E-02	2.14E-03	3.60E-03	4.56E-03	2.41E-02
		TINV (0.10,n-1)		2.13	6.31		2.13E+00	2.35E+00	2.13E+00		2.35E+00	6.31E+00	2.92E+00	6.31E+00	2.35E+00
		UCL95		0.15	0.49		6.51E-11	1.45E-01	2.83E-02		1.01E-01	1.14E-02	8.72E-03	2.44E-02	4.43E-02

Table A-3: Organic Results (Soil/Fill) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
Historical Information Report for Los Alamos National Laboratory

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofuran [1,2,3,4,7,8-]	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]	Hexachlorodibenzofurans (Total)	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzodioxin [1,2,3,7,8-]	Pentachlorodibenzodioxins (Total)	Pentachlorodibenzofuran [1,2,3,7,8-]	Pentachlorodibenzofuran [2,3,4,7,8-]
0173-96-0308	73-02255	0.00-0.50	Soil											
0173-96-0501	73-02326	14.00-15.00	Fill											
0173-96-0502	73-02327	14.00-15.00	Fill											
0173-97-0311	73-02451	0.10-0.50	Soil							0.00071				
0173-97-0321	73-02457	0.10-0.50	Soil	0.00066	0.00041	0.00032			0.02	0.0024		0.00066		0.00068
0173-97-0322	73-02458	0.10-0.50	Soil				0.0013		0.037	0.0025				
0173-97-0323	73-02459	0.10-0.50	Soil											
0173-97-0324	73-02460	0.10-0.50	Soil	0.00067	0.0021		0.028		0.082	0.005	0.00037	0.0016		0.00045
0173-97-0325	73-02461	0.10-0.50	Soil	0.0059	0.022	0.0085	0.32	0.041	0.61	0.055	0.0026	0.017	0.0022	0.0025
0173-97-0326	73-02462	0.10-0.50	Soil											
RE73-99-0093	73-10098	7.50-7.75	Fill											
RE73-99-0102	73-10106	4.80-5.30	Fill											
RE73-99-0104	73-10107	6.00-6.50	Fill											
		Count		3	3	2	3	1	4	5	2	3	1	3
		Mean		2.41E-03	8.17E-03	4.41E-03	1.16E-01	0.04	0.18725	0.01312	0.00149	0.00642	0.00220	0.00121
		Min		6.60E-04	4.10E-04	3.20E-04	1.30E-03	0.04	0.02000	0.00071	0.00037	0.00066	0.00220	0.00045
		Max		5.90E-03	2.20E-02	8.50E-03	3.20E-01	0.04	0.61000	0.05500	0.00260	0.01700	0.00220	0.00250
		Std. Dev.		3.02E-03	1.20E-02	5.78E-03	1.77E-01		0.28304	0.02346	0.00158	0.00917		0.00112
		TINV (0.10,n-1)		2.92E+00	2.92E+00	6.31E+00	2.92E+00		2.35336	2.13185	6.31375	2.91999		2.91999
		UCL95		7.51E-03	2.84E-02	3.02E-02	4.14E-01		0.52030	0.03549	0.00852	0.02189		0.00310

Table A-3: Organic Results (Soil/Fill) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
Historical Information Report for Los Alamos National Laboratory

Sample ID	Location ID	Depth (ft)	Media	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Tetrachlorodibenzodioxin [2,3,7,8-]	Tetrachlorodibenzodioxins (Total)	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Total)
0173-96-0308	73-02255	0.00-0.50	Soil							
0173-96-0501	73-02326	14.00-15.00	Fill							
0173-96-0502	73-02327	14.00-15.00	Fill							
0173-97-0311	73-02451	0.10-0.50	Soil							
0173-97-0321	73-02457	0.10-0.50	Soil	0.0094				0.0011	0.0031	0.026
0173-97-0322	73-02458	0.10-0.50	Soil	0.0019				0.00081	0.00085	0.0045
0173-97-0323	73-02459	0.10-0.50	Soil							
0173-97-0324	73-02460	0.10-0.50	Soil	0.017				0.00073	0.00097	0.017
0173-97-0325	73-02461	0.10-0.50	Soil	0.089	0.21	0.32	0.00069	0.012	0.0062	0.093
0173-97-0326	73-02462	0.10-0.50	Soil							
RE73-99-0093	73-10098	7.50-7.75	Fill							
RE73-99-0102	73-10106	4.80-5.30	Fill							
RE73-99-0104	73-10107	6.00-6.50	Fill							
		Count		4	1	1	1	4	4	4
		Mean		0.02933	0.21	0.32	0.00	0.00	0.00	0.04
		Min		0.00190	0.21	0.32	0.00	0.00	0.00	0.00
		Max		0.08900	0.21	0.32	0.00	0.01	0.01	0.09
		Std. Dev.		0.04026				0.01	0.00	0.04
		TINV (0.10,n-1)		2.35336				2.35	2.35	2.35
		UCL95		0.07670				0.01	0.01	0.08

Table A-3: Organic Results (Tuff) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
Historical Information Report for Los Alamos National Laboratory

Sample ID	Location ID	Depth (ft)	Media	DDT[4,4'-]	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)	Isopropyltoluene [4-]	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Total)
0173-97-0337	73-02463	3.50-4.00	Qbt 3		2.80E-13	0.00043	0.00014	0.00014		0.0003	0.00068
RE73-99-0094	73-02207	5.50-6.00	Qbt 3	0.0076							
RE73-99-0109	73-10096	4.30-4.80	Qbt 3	0.0041					0.00076		
		Count		2	1	1	1	1	1	1	1
		Mean		0.01	2.80E-13	4.30E-04	1.40E-04	1.40E-04	7.60E-04	3.00E-04	6.80E-04
		Min		0.00	2.80E-13	4.30E-04	1.40E-04	1.40E-04	7.60E-04	3.00E-04	6.80E-04
		Max		0.01	2.80E-13	4.30E-04	1.40E-04	1.40E-04	7.60E-04	3.00E-04	6.80E-04
		Std. Dev.		0.00							
		TINV (0.10,n-1)		6.31							
		UCL95		0.02							

Table A-4: Laboratory Results for Organic Compounds
Incinerator Ash Characterization Sampling - 2005
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Sample Name:	RE73-05-58829		RE73-05-58835		RE73-05-58841		RE73-05-58878		RE73-05-58879	
Matrix:	Ash		Ash		Ash		Ash		Ash	
Sample Date:	4/19/2005		4/19/2005		4/19/2005		4/20/2005		4/20/2005	
Units:	(ug/kg)		(ug/kg)		(ug/kg)		(ug/kg)		(ug/kg)	
	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
VOCs										
Bromomethane	3.5	13	4.7	12	2.4	13	ND	10	3	11
Acetone	ND	25	ND	25	ND	25	26	20	ND	22
Methylene Chloride	11	6.3	12	6.2	6.6	6.3	14	5	31	5.5
Carbon Disulfide	ND	6.3	ND	6.2	ND	6.3	ND	5	ND	5.5
2-Butanone (MEK)	ND	25	ND	25	ND	25	3.9	20	ND	22
Chloroform	ND	6.3	ND	6.2	ND	6.3	ND	5	ND	5.5
Trichloroethene	0.71	6.3	ND	6.2	ND	6.3	ND	5	ND	5.5
Bromodichloromethane	ND	6.3	ND	6.2	ND	6.3	ND	5	ND	5.5
Toluene	ND	6.3	0.99	6.2	ND	6.3	ND	5	ND	5.5
Chlorodibromomethane	ND	6.3	ND	6.2	ND	6.3	ND	5	ND	5.5
Xylenes (total)	ND	6.3	ND	6.2		6.3	ND	5	3.7	5.5
1,2,4-Trimethylbenzene	0.79	6.3	ND	6.2	ND	6.3	ND	5	ND	5.5
p-Isopropyltoluene	17	6.3	ND	6.2	1.3	6.3	ND	5	ND	5.5
1,3-Dichlorobenzene	ND	6.3	2.1	6.2	ND	6.3	ND	5	ND	5.5
1,4-Dichlorobenzene	ND	6.3	ND	6.2	ND	6.3	ND	5	2.5	5.5
1,2-Dichlorobenzene	ND	6.3	2.6	6.2	ND	6.3	ND	5	ND	5.5
SVOCs										
1,3-Dichlorobenzene	160	410	ND	410	ND	410			ND	360
1,4-Dichlorobenzene	170	410	ND	410	ND	410			ND	360
Benzyl alcohol	ND	410	ND	410	ND	410			ND	360
1,2-Dichlorobenzene	150	410	ND	410	ND	410			ND	360
Nitrobenzene	210	410	ND	410	ND	410			ND	360
2-Nitrophenol	180	410	ND	410	ND	410			ND	360
Benzoic Acid	830	2000	490	2000	ND	2000			ND	1700
1,2,4-Trichlorobenzene	180	410	ND	410	ND	410			ND	360
Naphthalene	130	410	ND	410	ND	410			ND	360
Hexachlorobutadiene	140	410	ND	410	ND	410			ND	360
2-Methylnaphthalene	120	410	ND	410	ND	410			ND	360
2,4,6-Trichlorophenol	130	410	ND	410	ND	410			ND	360
2-Chloronaphthalene	140	410	ND	410	ND	410			ND	360
Acenaphthylene	150	410	ND	410	ND	410			ND	360
Acenaphthene	130	410	ND	410	ND	410			ND	360
Dibenz(a,h)anthracene	86	410	ND	410	ND	410			ND	360
Dibenzofuran	140	410	ND	410	ND	410			ND	360
Fluorene	150	410	ND	410	ND	410			ND	360
4-Chlorophenyl phenyl ether	190	410	ND	410	ND	410			ND	360
N-Nitrosodiphenylamine	190	410	ND	410	ND	410			ND	360
Pyrene	470	410	110	410	320	410			ND	360
4-Bromophenyl phenyl ether	190	410	ND	410	ND	410			ND	360
Hexachlorobenzene	450	410	110	410	ND	410			ND	360
Pentachlorophenol	180	2000	ND	2000	ND	2000			ND	1700
Phenanthrene	150	410	ND	410	200	410			ND	360
Anthracene	140	410	ND	410	ND	410			ND	360
Fluoranthene	140	410	ND	410	300	410			ND	360
Benzo(a)anthracene	150	410	ND	410	150	410			ND	360
Chrysene	160	410	ND	410	150	410			ND	360
Bis(2-ethylhexyl)phthalate	88	410	97	410	98	410			330	360
Benzo(b)fluoranthene	180	410	ND	410	120	410			ND	360
Benzo(k)fluoranthene	150	410	ND	410	120	410			ND	360
Benzo(a)pyrene	540	410	ND	410	110	410			ND	360
Indeno(1,2,3-cd)pyrene	530	410	ND	410	ND	410			ND	360
Benzo(ghi)perylene	130	410	340	410	ND	410			ND	360
Di-n-butyl phthalate	500	830	ND	820	ND	830			ND	360
Benzo(ghi)perylene	420	830	ND	820	ND	830			ND	360
PCBs										
Aroclor 1254	ND	41	58	41	96	41			380	36
Dioxins/Furans										
TEQ	0.0612		0.0742		0.0768				0.0353	

Table A-4: Laboratory Results for Organic Compounds
Incinerator Ash Characterization Sampling - 2005
Historical Information Report for Los Alamos National Laboratory

Sample Name:	RE73-05-58923		RE73-05-58924		Min	Max	TCLP	Pass/Fail
Matrix:	Water		Water				(ug/L)	
Sample Date:	4/20/2005		4/20/2005					
Units:	ug/L		ug/L					
	Result	RL	Result	RL				
VOCs								
Bromomethane	ND	2	ND	10	2.4	4.7		NA
Acetone	ND	10	3.4	50	3.4	26		NA
Methylene Chloride	5.5	5	6	5	5.5	31		NA
Carbon Disulfide	2.2	1	ND	5	2.2	2.2		NA
2-Butanone (MEK)	ND	5	ND	25	3.9	3.9	200000	Pass
Chloroform	2.1	1	2.5	5	2.1	2.5	6000	Pass
Trichloroethene	ND	1	ND	5	0.71	0.71	500	Pass
Bromodichloromethane	0.34	1	ND	5	0.34	0.34		NA
Toluene	0.27	1	ND	5	0.27	0.99		NA
Chlorodibromomethane	0.19	1	1.9	5	0.19	1.9		NA
Xylenes (total)	ND	1	ND	5	3.7	3.7		NA
1,2,4-Trimethylbenzene	ND	1	ND	5	0.79	0.79		NA
p-Isopropyltoluene	ND	1	ND	1	1.3	17		NA
1,3-Dichlorobenzene	ND	1	ND	5	2.1	2.1		NA
1,4-Dichlorobenzene	0.14	1	ND	5	0.14	2.5	7500	Pass
1,2-Dichlorobenzene	ND	1	ND	5	2.6	2.6		NA
SVOCs								
1,3-Dichlorobenzene	ND	10	ND	10	160	160		NA
1,4-Dichlorobenzene	ND	10	ND	10	170	170	7500	Pass
Benzyl alcohol	ND	10	3.1	10	3.1	3.1		NA
1,2-Dichlorobenzene	ND	10	ND	10	150	150		NA
Nitrobenzene	ND	10	ND	10	210	210	2000	Pass
2-Nitrophenol	ND	10	ND	10	180	180		NA
Benzoic Acid	ND	20	ND	20	490	830		NA
1,2,4-Trichlorobenzene	ND	10	ND	10	180	180		NA
Naphthalene	ND	10	ND	10	130	130		NA
Hexachlorobutadiene	ND	10	ND	10	140	140	500	Pass
2-Methylnaphthalene	ND	10	ND	10	120	120		NA
2,4,6-Trichlorophenol	ND	10	ND	10	130	130	2000	Pass
2-Chloronaphthalene	ND	10	ND	10	140	140		NA
Acenaphthylene	ND	10	ND	10	150	150		NA
Acenaphthene	ND	10	ND	10	130	130		NA
Dibenz(a,h)anthracene	ND	10	ND	10	86	86		NA
Dibenzofuran	ND	10	ND	10	140	140		NA
Fluorene	ND	10	ND	10	150	150		NA
4-Chlorophenyl phenyl ether	ND	10	ND	10	190	190		NA
N-Nitrosodiphenylamine	ND	10	ND	10	190	190		NA
Pyrene	ND	10	ND	10	110	470		NA
4-Bromophenyl phenyl ether	ND	10	ND	10	190	190		NA
Hexachlorobenzene	ND	10	ND	10	110	450	130	Pass
Pentachlorophenol	ND	50	ND	50	180	180	100000	Pass
Phenanthrene	ND	10	ND	10	150	200		NA
Anthracene	ND	10	ND	10	140	140		NA
Fluoranthene	ND	10	ND	10	140	300		NA
Benzo(a)anthracene	ND	10	ND	10	150	150		NA
Chrysene	ND	10	ND	10	150	160		NA
Bis(2-ethylhexyl)phthalate	ND	10	ND	10	88	330		NA
Benzo(b)fluoranthene	ND	10	ND	10	120	180		NA
Benzo(k)fluoranthene	ND	10	ND	10	120	150		NA
Benzo(a)pyrene	ND	10	ND	10	110	540		NA
Indeno(1,2,3-cd)pyrene	ND	10	ND	10	530	530		NA
Benzo(ghi)perylene	ND	10	ND	10	130	340		NA
Di-n-butyl phthalate	ND	10	ND	10	500	500		NA
Benzo(ghi)perylene	ND	10	ND	10	420	420		NA
PCBs								
Aroclor 1254	ND	1	ND	1	58	380		NA
Dioxins/Furans								
TEQ					0.0353	0.0768		NA

Table A-5: Radiological Results (Ash) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
Historical Information Report for Los Alamos National Laboratory

Sample ID	Location ID	Depth (ft)	Media (Units)	Gross alpha (pCi/g)	Gross beta (pCi/g)	Gross gamma (pCi/g)	Cs-137 (pCi/g)	Pu-239 (pCi/g)	U-234 (pCi/g)	U-235 (pCi/g)	U-238 (pCi/g)	Tritium (pCi/ml)
0173-96-0331	73-02252	0.1-0.3	NA	-	-	-						0.08
0173-96-0331	73-02252	0.10-0.30	NA	8.9	6.7	6.65						-
0173-96-0305	73-02260	0.00-0.70	NA	6.4	7.7	6.98						-
0173-96-0307	73-02262	0.00-1.00	NA	2.88	-	2.24						-
0173-96-0304	73-02264	0.00-0.00	NA	4.7	7.8	5.32						-
0173-96-0309	73-02266	0.00-0.00	NA	11.6	8.8	5.33						-
0173-96-0314	73-02268	0.00-1.00	NA	8.7	9.4	7.11						-
0173-96-0345	73-02268	0.00-1.00	NA	10.7	9	6.21						-
0173-96-0316	73-02270	0.00-0.00	NA	2.94	5.6	3.99						-
0173-96-0346	73-02270	0.00-0.00	NA	-	5.2	2.48						-
0173-97-0331	73-02467	0.10-0.50	NA	22.2	13.8	9.15	-	-	12.57	0.5	8.84	
0173-97-0332	73-02468	0.1-0.5	NA	-	-	-	0.239	-	-	-	-	
0173-97-0332	73-02468	0.10-0.50	NA	19.8	21.4	8.89	-	-	17.1	0.771	15.93	
RE73-98-0001	73-10000	0.00-0.50	NA	-	-	-	-	-	5.37	0.308	2.51	
RE73-98-0001	73-10000	0-0.5	NA	-	-	-	1.51	2.54	-	-	-	
RE73-98-0002	73-10000	0.00-0.50	NA	-	-	-	-	-	4.9	0.578	2.23	
RE73-98-0002	73-10000	0-0.5	NA	-	-	-	1.45	2.5	-	-	-	
RE73-98-0003	73-10001	0.00-0.50	NA	-	-	-	-	-	3.84	0.352	1.98	
RE73-98-0003	73-10001	0-0.5	NA	-	-	-	0.98	0.522	-	-	-	
RE73-98-0066	73-10002	0.00-0.50	NA	-	-	-	-	-	2.82	0.219	1.44	
RE73-98-0066	73-10002	0-0.5	NA	-	-	-	0.87	0.801	-	-	-	
RE73-98-0004	73-10003	0.00-0.50	NA	-	-	-	-	-	14.15	0.765	6.6	
RE73-98-0004	73-10003	0-0.5	NA	-	-	-	-	1.228	-	-	-	
RE73-98-0005	73-10004	0.00-0.50	NA	-	-	-	-	-	14.53	0.966	11.62	
RE73-98-0005	73-10004	0-0.5	NA	-	-	-	0.34	0.731	-	-	-	
RE73-98-0006	73-10005	0.00-0.50	NA	-	-	-	-	-	9.41	0.783	8.11	
RE73-98-0006	73-10005	0-0.5	NA	-	-	-	-	0.709	-	-	-	
RE73-98-0007	73-10006	0.00-0.50	NA	-	-	-	-	-	5.89	0.523	4.31	
RE73-98-0007	73-10006	0-0.5	NA	-	-	-	0.32	1.82	-	-	-	
RE73-98-0008	73-10007	0.00-0.50	NA	-	-	-	-	-	4.97	0.289	4.32	
RE73-98-0008	73-10007	0-0.5	NA	-	-	-	0.26	1.052	-	-	-	
RE73-98-0009	73-10008	0.00-0.50	NA	-	-	-	-	-	3.15	0.211	2.41	
RE73-98-0009	73-10008	0-0.5	NA	-	-	-	0.5	0.469	-	-	-	
RE73-98-0010	73-10009	0.00-0.50	NA	-	-	-	-	-	3.53	0.219	2.83	
RE73-98-0010	73-10009	0-0.5	NA	-	-	-	0.33	0.363	-	-	-	
RE73-98-0011	73-10010	0.00-0.50	NA	-	-	-	-	-	5.7	0.439	4.57	
RE73-98-0011	73-10010	0-0.5	NA	-	-	-	0.38	0.627	-	-	-	
RE73-98-0012	73-10011	0.00-0.50	NA	-	-	-	-	-	6.71	0.353	4.12	
RE73-98-0012	73-10011	0-0.5	NA	-	-	-	-	1.95	-	-	-	
RE73-98-0027	73-10026	0.00-0.50	NA	-	-	-	-	-	1.62	0.082	1.5	
RE73-98-0027	73-10026	0-0.5	NA	-	-	-	0.35	1.242	-	-	-	
RE73-98-0028	73-10027	0.00-0.50	NA	-	-	-	-	-	1.45	0.085	1.332	
RE73-98-0028	73-10027	0-0.5	NA	-	-	-	-	0.202	-	-	-	
RE73-98-0029	73-10028	0.00-0.50	NA	-	-	-	-	-	1.298	0.086	1.253	
RE73-98-0029	73-10028	0-0.5	NA	-	-	-	-	0.088	-	-	-	
RE73-98-0030	73-10029	0.00-0.50	NA	-	-	-	-	-	2.88	0.201	2.26	
RE73-98-0030	73-10029	0-0.5	NA	-	-	-	-	0.51	-	-	-	
RE73-98-0031	73-10030	0.00-0.50	NA	-	-	-	-	-	1.49	0.083	1.281	
RE73-98-0031	73-10030	0-0.5	NA	-	-	-	-	0.273	-	-	-	
RE73-98-0032	73-10031	0.00-0.50	NA	-	-	-	-	-	1.86	0.158	1.69	
RE73-98-0032	73-10031	0-0.5	NA	-	-	-	0.53	0.225	-	-	-	
RE73-98-0033	73-10032	0.00-0.50	NA	-	-	-	-	-	2.67	0.226	2.23	
RE73-98-0033	73-10032	0-0.5	NA	-	-	-	0.43	0.353	-	-	-	
RE73-98-0034	73-10033	0.00-0.50	NA	-	-	-	-	-	1.43	0.129	1.205	
RE73-98-0034	73-10033	0-0.5	NA	-	-	-	0.42	0.218	-	-	-	
RE73-98-0035	73-10034	0.00-0.50	NA	-	-	-	-	-	3.18	0.306	2.98	
RE73-98-0035	73-10034	0-0.5	NA	-	-	-	0.36	0.322	-	-	-	
RE73-98-0068	73-10034	0.00-0.50	NA	-	-	-	-	-	3.04	0.216	2.61	
RE73-98-0068	73-10034	0-0.5	NA	-	-	-	0.27	0.546	-	-	-	
RE73-98-0036	73-10035	0.00-0.50	NA	-	-	-	-	-	4	0.409	3.48	
RE73-98-0036	73-10035	0-0.5	NA	-	-	-	0.42	0.48	-	-	-	
RE73-98-0037	73-10036	0.00-0.50	NA	-	-	-	-	-	5.25	0.383	4.92	
RE73-98-0037	73-10036	0-0.5	NA	-	-	-	0.29	0.346	-	-	-	
RE73-98-0038	73-10037	0.00-0.50	NA	-	-	-	-	-	1.312	0.131	1.215	
RE73-98-0038	73-10037	0-0.5	NA	-	-	-	0.29	0.115	-	-	-	
		Count		10	10	11	20	26	28	28	28	1
		Mean		9.88	9.54	5.85	0.53	0.78	5.22	0.35	3.92	0.08
		Min		2.88	5.20	2.24	0.24	0.09	1.30	0.08	1.21	0.08
		Max		22.20	21.40	9.15	1.51	2.54	17.10	0.97	15.93	0.08
		Std. Dev.		6.60	4.81	2.28	0.38	0.70	4.38	0.24	3.48	
		TINV (0.10,n-1)		1.833	1.833	1.812	1.729	1.708	1.703	1.703	1.703	
		UCL95*		13.71	12.33	7.10	0.67	1.01	**6.63**	0.43	**5.04**	0.08
Soil Background Value							1.65	0.054	2.59	0.2	2.29	0.76

*** Note: Red/Bold indicates value exceeds Background Value. If there is only one sample result, that result is used for comparison to the Background Value.**

Table A-5: Radiological Results (Soil/Fill) - SWMU 73-002
1996, 1997, and 1998 Sampling Data
Historical Information Report for Los Alamos National Laboratory

Sample ID	Location ID	Depth (ft)	Media (Units)	Gross alpha (pCi/g)	Gross beta (pCi/g)	Gross gamma (pCi/g)	Tritium (pCi/ml)
0173-96-0302	73-02253	0.00-0.50	Soil	0.66	1.04	8.08	-
0173-96-0320	73-02254	0.00-0.50	Soil	3.55	3.6	14.1	0.054
0173-96-0308	73-02255	0.00-0.50	Soil	3.07	4.33	16.5	0.064
0173-96-0501	73-02326	14.00-15.00	Fill	6.02	3.15	12.3	-
0173-96-0502	73-02327	14.00-15.00	Fill	2.44	1.42	13	-
		Count		5	5	5	2
		Mean		3.15	2.71	12.80	0.06
		Min		0.66	1.04	8.08	0.05
		Max		6.02	4.33	16.50	0.06
		Std. Dev.		1.94	1.42	3.08	0.01
		TINV (0.10,n-1)		2.132	2.132	2.132	6.314
		UCL95		5.00	4.06	15.73	0.09
Soil Background Value							0.76

Table A-6: Laboratory Results for Radionuclides
Incinerator Ash Characterization Sampling - 2005
Historical Information Report for Los Alamos National Laboratory

Sample ID		Am-241		U-234		U-235		U-238		Pu-238		Pu-239		Ra-226		Ra-224		Th-234		Cs-137	
Units in pCi/g	Location	Result	MDC	Result	MDC	Result	MDC	Result	MDC	Result	MDC	Result	MDC	Result	MDC	Result	MDC	Result	MDC	Result	MDC
RE-73-05-58842/43	B3	0.036	0.015	9.090	0.030	0.360	0.021	7.160	0.010	0.017	0.034	1.070	0.020	6.240	1.100	2.440	1.600	5.050	1.000	0.048	0.095
RE-73-05-58844/45	Ash	0.029	0.010	1.700	0.020	0.081	0.025	1.360	0.017	0.017	0.034	0.143	0.027	1.950	0.940	2.190	1.400	0.600	1.200	0.138	0.060
RE-73-05-58846	B4	0.012	0.023	3.290	0.020	0.157	0.025	2.770	0.017	0.017	0.034	0.296	0.027	2.060	0.830	0.700	1.400	1.340	0.670	0.030	0.060
RE73-05-58824	C3 East	0.035	0.029	8.410	0.050	0.400	0.023	7.640	0.030	0.015	0.030	0.360	0.014	4.740	0.800	2.900	1.600	3.870	0.890	0.039	0.077
RE73-05-58825	C3 West	0.014	0.027	12.400	0.040	0.458	0.047	5.780	0.040	0.015	0.030	2.340	0.030	4.910	1.900	0.550	1.100	2.390	0.700	0.050	0.100
RE73-05-58826	C2 East	0.024	0.016	8.220	0.044	0.475	0.041	7.010	0.020	0.010	0.020	0.475	0.017	6.210	1.300	2.040	1.800	4.330	1.000	0.055	0.110
RE73-05-58827	C2 West	0.010	0.019	9.970	0.030	0.494	0.023	6.970	0.040	0.010	0.020	0.544	0.006	6.910	2.400	5.400	2.300	5.490	1.200	0.070	0.140
RE73-05-58828	C1	0.037	0.019	5.230	0.030	0.267	0.052	3.310	0.050	0.022	0.044	1.680	0.023	6.650	2.200	2.340	1.600	5.220	0.930	0.050	0.100
RE73-05-58830	D2	0.023	0.019	5.540	0.030	0.264	0.022	4.990	0.040	0.010	0.020	0.375	0.016	3.360	1.100	0.700	1.400	2.200	0.930	0.060	0.120
RE73-05-58831	D3	0.009	0.018	20.000	0.020	1.060	0.040	18.700	0.040	0.010	0.020	0.310	0.006	8.120	2.600	2.300	1.600	7.500	1.100	0.045	0.089
RE73-05-58832	D3	0.003	0.006	3.540	0.040	0.193	0.039	2.610	0.040	0.010	0.020	0.236	0.014	2.810	0.940	2.110	1.500	1.790	0.860	0.036	0.071
RE73-05-58833	E3	0.010	0.020	1.590	0.040	0.057	0.041	1.240	0.020	0.015	0.030	0.219	0.018	3.970	1.100	2.040	1.700	2.970	1.000	0.046	0.092
RE73-05-58834	E3	0.020	0.039	1.730	0.040	0.092	0.025	1.150	0.050	0.017	0.033	0.186	0.007	0.650	1.300	1.990	1.500	0.550	1.100	0.045	0.090
RE73-05-58836	D4	0.014	0.027	2.240	0.030	0.106	0.043	1.930	0.050	0.015	0.030	0.104	0.017	1.900	0.810	1.150	1.100	1.060	0.670	0.092	0.056
RE73-05-58837	C4	0.011	0.021	1.680	0.040	0.089	0.024	1.450	0.020	0.010	0.020	0.100	0.006	1.370	0.580	1.130	0.940	1.000	0.520	0.025	0.050
RE73-05-58838	B1	0.011	0.022	37.300	0.200	2.020	0.110	31.200	0.200	0.010	0.020	0.848	0.013	25.200	4.700	0.900	1.800	21.100	1.500	0.060	0.120
RE73-05-58839	B2	0.019	0.038	7.400	0.040	0.340	0.050	4.840	0.030	0.010	0.019	0.455	0.011	4.390	0.990	2.490	1.600	2.490	1.000	0.048	0.095
RE73-05-58840	B3	0.019	0.037	3.030	0.060	0.194	0.056	2.420	0.050	0.010	0.02	0.842	0.006	1.640	1.4	0.700	1.400	1.160	0.78	0.060	0.12
Primary Emission		Alpha		Alpha		Alpha		Alpha		Alpha		Alpha		Alpha		Alpha		Alpha		Beta	
Count		18		18		18		18		18		18		18		18		18		18	
Detects >MDC		6		18.000		18		18.000		0		18.000		17		13		16		2	
Mean		0.018		7.909		0.395		6.252		0.013		0.588		5.171		1.893		3.895		0.055	
Min		0.003		1.590		0.057		1.150		0.010		0.100		0.650		0.550		0.550		0.025	
Max		0.037		37.300		2.020		31.200		0.022		2.340		25.200		5.400		21.100		0.138	
Std. Dev.		0.010		8.748		0.470		7.478		0.004		0.595		5.459		1.156		4.726		0.026	
TINV (0.10,n-1)		1.740		1.740		1.740		1.740		1.740		1.740		1.740		1.740		1.740		1.740	
UCL95		0.023		11.496		0.588		9.318		0.015		0.832		7.409		2.367		5.833		0.066	
Background (UTL)																					
BV		0.013		2.59		0.2		2.29		0.023		0.054		2.59		2.33		2.29		1.65	
Detects >BV		6		13		10		13		0		18		12		5		10		0	
Mean/BV		1.42		3.05		1.97		2.73		0.58		10.89		2.00						0.03	
UCL95/BV		1.74		4.44		2.94		4.07		0.64		15.40		2.86						0.04	
1999 Report Comparison																					
UCL-95		0.16		7.2		0.4		5.2		0.005		1.3		5.3						0.49	
Max		1.33		17.1		0.97		15.9		0.066		2.82		11.1						1.51	
UCL95/'99 UCL95		0.14		1.60		1.47		1.79		2.96		0.64		1.40						0.13	

A-7 Inorganic Sample Data Comparison for Various Areas

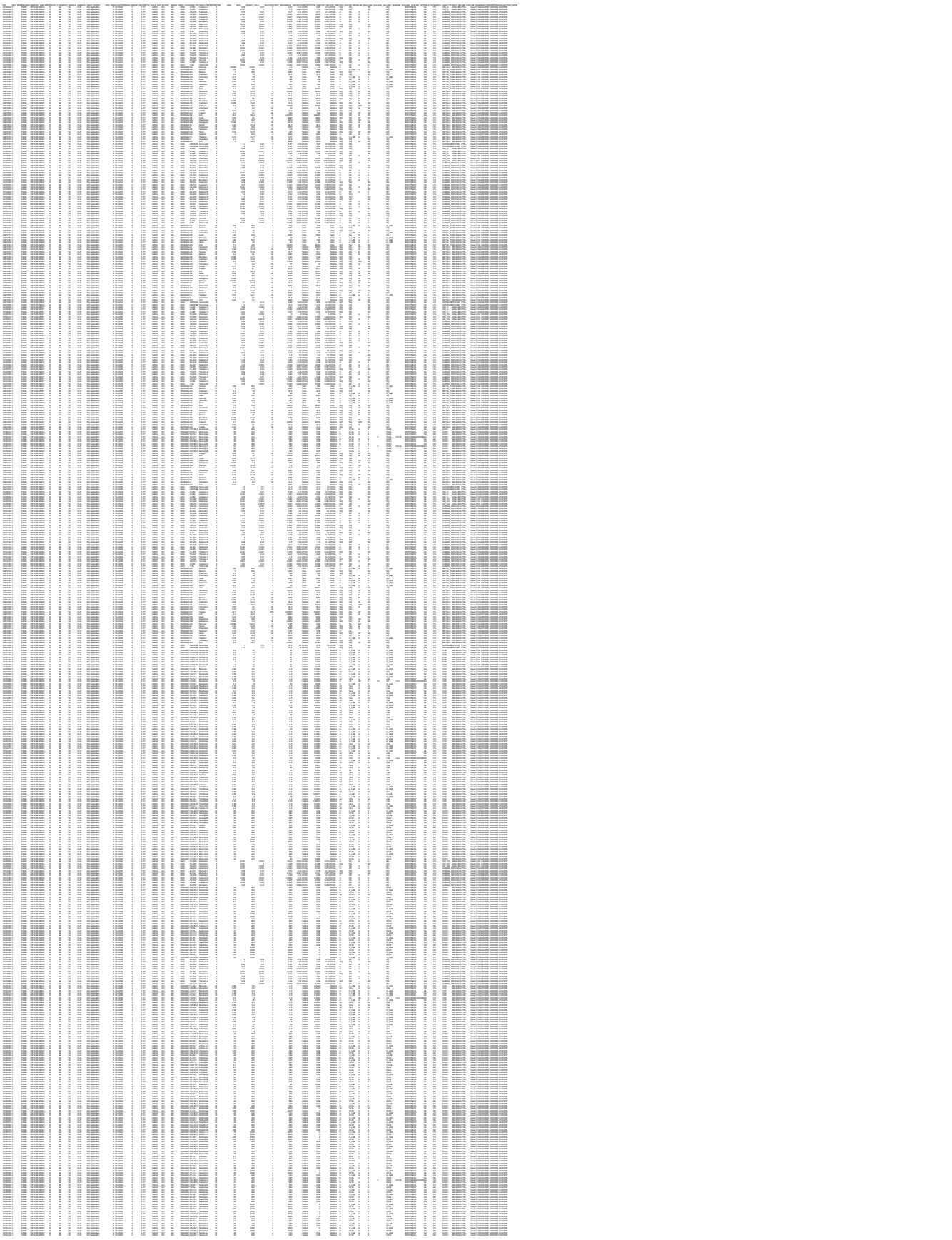
Analyte	Incinerator Ash	Soil Beneath Cans	Outside Ash Perimeter	Drainages	BV
Antimony	69.4	Not Sampled	Not Sampled	11	0.83
Cadmium	20.1	12.2	0.73	0.57	0.4
Lead	5757	106.3	54.5	48	22.3
Mercury	0.99	Not Sampled	0.19	0.12	0.1
Silver	77.7	Not Sampled	5.63	2.3	1
Thallium	0.43	Not Sampled	0.77	1.12	0.73

A-8 Radionuclide Sample Date Comparison for Various Areas

Analyte	Incinerator Ash	Drainages	BV
Gross Alpha	11.2	2.43	N/A
Gross Beta	13.3	2.99	N/A
Cesium 137	0.055	Not Sampled	1.65
Radium 226	5.17	Not Sampled	2.59
Plutonium 239	0.59	Not Sampled	0.054
Uranium 234	7.91	Not Sampled	2.59
Tritium	Not Sampled	0.06	0.08*

*Note: Value calculated based on 10% moisture

TO VIEW THE DATABASE THAT ACCOMPANIES THIS DOCUMENT PLEASE CALL THE HAZARDOUS WASTE BUREAU AT 505-476-6000 TO MAKE AN APPOINMENT



34730762 1	3166S	RE73-05-58923	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	76-13-1	Trichloro-1,2,2-trifluoroethane[1,	0.7	5	5	5	UG/L	5	UG/L	R	V19	U	R		V19	ROUTINE03	FR	CS	VOC	SW-846:8	STSL	Severn Tr	4/29/2005	4/21/2005	4/20/2005
34730772 1	3166S	RE73-05-58923	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	76-13-1	Trichloro-1,2,2-trifluoroethane[1,	0.14	1	1	1	UG/L	1	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	RE	VOC	SW-846:8	STSL	Severn Tr	5/2/2005	4/21/2005	4/20/2005
34730782 1	3166S	RE73-05-58923	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	71-55-6	Trichloroethane[1,1,1-]	0.4	5	5	5	UG/L	5	UG/L	R	V19	U	R		V19	ROUTINE03	FR	CS	VOC	SW-846:8	STSL	Severn Tr	4/29/2005	4/21/2005	4/20/2005
34730792 1	3166S	RE73-05-58923	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	71-55-6	Trichloroethane[1,1,1-]	0.08	1	1	1	UG/L	1	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	RE	VOC	SW-846:8	STSL	Severn Tr	5/2/2005	4/21/2005	4/20/2005
34730802 1	3166S	RE73-05-58923	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	79-00-5	Trichloroethane[1,1,2-]	0.35	5	5	5	UG/L	5	UG/L	R	V19	U	R		V19	ROUTINE03	FR	CS	VOC	SW-846:8	STSL	Severn Tr	4/29/2005	4/21/2005	4/20/2005
34730812 1	3166S	RE73-05-58923	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	79-00-5	Trichloroethane[1,1,2-]	0.07	1	1	1	UG/L	1	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	RE	VOC	SW-846:8	STSL	Severn Tr	5/2/2005	4/21/2005	4/20/2005
34730822 1	3166S	RE73-05-58923	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	79-01-6	Trichloroethene	0.65	5	5	5	UG/L	5	UG/L	R	V19	U	R		V19	ROUTINE03	FR	CS	VOC	SW-846:8	STSL	Severn Tr	4/29/2005	4/21/2005	4/20/2005
34730832 1	3166S	RE73-05-58923	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	79-01-6	Trichloroethene	0.13	1	1	1	UG/L	1	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	RE	VOC	SW-846:8	STSL	Severn Tr	5/2/2005	4/21/2005	4/20/2005
34730842 1	3166S	RE73-05-58923	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	75-69-4	Trichlorofluoromethane	0.35	10	5	10	UG/L	10	UG/L	R	V19	U	R		V19	ROUTINE03	FR	CS	VOC	SW-846:8	STSL	Severn Tr	4/29/2005	4/21/2005	4/20/2005
34730852 1	3166S	RE73-05-58923	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	75-69-4	Trichlorofluoromethane	0.07	2	1	2	UG/L	2	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	RE	VOC	SW-846:8	STSL	Severn Tr	5/2/2005	4/21/2005	4/20/2005
34730862 1	3166S	RE73-05-58923	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	96-18-4	Trichloropropane[1,2,3-]	0.75	5	5	5	UG/L	5	UG/L	R	V19	U	R		V19	ROUTINE03	FR	CS	VOC	SW-846:8	STSL	Severn Tr	4/29/2005	4/21/2005	4/20/2005
34730872 1	3166S	RE73-05-58923	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	96-18-4	Trichloropropane[1,2,3-]	0.15	1	1	1	UG/L	1	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	RE	VOC	SW-846:8	STSL	Severn Tr	5/2/2005	4/21/2005	4/20/2005
34730882 1	3166S	RE73-05-58923	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	95-63-6	Trimethylbenzene[1,2,4-]	0.25	5	5	5	UG/L	5	UG/L	R	V19	U	R		V19	ROUTINE03	FR	CS	VOC	SW-846:8	STSL	Severn Tr	4/29/2005	4/21/2005	4/20/2005
34730892 1	3166S	RE73-05-58923	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	95-63-6	Trimethylbenzene[1,2,4-]	0.05	1	1	1	UG/L	1	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	RE	VOC	SW-846:8	STSL	Severn Tr	5/2/2005	4/21/2005	4/20/2005
34730902 1	3166S	RE73-05-58923	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	108-67-8	Trimethylbenzene[1,3,5-]	0.3	5	5	5	UG/L	5	UG/L	R	V19	U	R		V19	ROUTINE03	FR	CS	VOC	SW-846:8	STSL	Severn Tr	4/29/2005	4/21/2005	4/20/2005
34730912 1	3166S	RE73-05-58923	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	108-67-8	Trimethylbenzene[1,3,5-]	0.06	1	1	1	UG/L	1	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	RE	VOC	SW-846:8	STSL	Severn Tr	5/2/2005	4/21/2005	4/20/2005
34730922 1	3166S	RE73-05-58923	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	75-01-4	Vinyl Chloride	0.35	10	5	10	UG/L	10	UG/L	R	V19	U	R		V19	ROUTINE03	FR	CS	VOC	SW-846:8	STSL	Severn Tr	4/29/2005	4/21/2005	4/20/2005
34730932 1	3166S	RE73-05-58923	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	75-01-4	Vinyl Chloride	0.07	2	1	2	UG/L	2	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	RE	VOC	SW-846:8	STSL	Severn Tr	5/2/2005	4/21/2005	4/20/2005
34730942 1	3166S	RE73-05-58923	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	1330-20-7	Xylene (Total)	0.65	5	5	5	UG/L	5	UG/L	R	V19	U	R		V19	ROUTINE03	FR	CS	VOC	SW-846:8	STSL	Severn Tr	4/29/2005	4/21/2005	4/20/2005
34730952 1	3166S	RE73-05-58923	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	1330-20-7	Xylene (Total)	0.13	1	1	1	UG/L	1	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	RE	VOC	SW-846:8	STSL	Severn Tr	5/2/2005	4/21/2005	4/20/2005
34719932 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	12674-11-	Aroclor-1016	0.22	1	1	1	UG/L	1	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	CS	PCB	SW-846:8	STSL	Severn Tr	5/2/2005	4/21/2005	4/20/2005
34719942 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	11104-28-	Aroclor-1221	0.22	1	1	1	UG/L	1	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	CS	PCB	SW-846:8	STSL	Severn Tr	5/2/2005	4/21/2005	4/20/2005
34719952 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	11141-16-	Aroclor-1232	0.49	1	1	1	UG/L	1	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	CS	PCB	SW-846:8	STSL	Severn Tr	5/2/2005	4/21/2005	4/20/2005
34719962 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	53469-21-	Aroclor-1242	0.2	1	1	1	UG/L	1	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	CS	PCB	SW-846:8	STSL	Severn Tr	5/2/2005	4/21/2005	4/20/2005
34719972 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	12672-29-	Aroclor-1248	0.14	1	1	1	UG/L	1	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	CS	PCB	SW-846:8	STSL	Severn Tr	5/2/2005	4/21/2005	4/20/2005
34719982 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	11097-69-	Aroclor-1254	0.38	1	1	1	UG/L	1	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	CS	PCB	SW-846:8	STSL	Severn Tr	5/2/2005	4/21/2005	4/20/2005
34719992 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	11096-82-	Aroclor-1260	0.19	1	1	1	UG/L	1	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	CS	PCB	SW-846:8	STSL	Severn Tr	5/2/2005	4/21/2005	4/20/2005
34720692 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	106-44-5	Methylphenol[4-]	1.1	10	1	10	UG/L	10	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	CS	SVOC	SW-846:8	STSL	Severn Tr	5/10/2005	4/21/2005	4/20/2005
34720702 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	83-32-9	Acenaphthene	1.9	10	1	10	UG/L	10	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	CS	SVOC	SW-846:8	STSL	Severn Tr	5/10/2005	4/21/2005	4/20/2005
34720712 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	208-96-8	Acenaphthylene	1.8	10	1	10	UG/L	10	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	CS	SVOC	SW-846:8	STSL	Severn Tr	5/10/2005	4/21/2005	4/20/2005
34720722 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	62-53-3	Aniline	1.4	20	1	20	UG/L	20	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	CS	SVOC	SW-846:8	STSL	Severn Tr	5/10/2005	4/21/2005	4/20/2005
34720732 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	120-12-7	Anthracene	2.2	10	1	10	UG/L	10	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	CS	SVOC	SW-846:8	STSL	Severn Tr	5/10/2005	4/21/2005	4/20/2005
34720742 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	103-33-3	Azobenzene	1.9	20	1	20	UG/L	20	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	CS	SVOC	SW-846:8	STSL	Severn Tr	5/10/2005	4/21/2005	4/20/2005
34720752 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	56-55-3	Benzo(a)anthracene	2.3	10	1	10	UG/L	10	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	CS	SVOC	SW-846:8	STSL	Severn Tr	5/10/2005	4/21/2005	4/20/2005
34720762 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	50-32-8	Benzo(a)pyrene	2.2	10	1	10	UG/L	10	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	CS	SVOC	SW-846:8	STSL	Severn Tr	5/10/2005	4/21/2005	4/20/2005
34720772 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	205-99-2	Benzo(b)fluoranthene	2.2	10	1	10	UG/L	10	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	CS	SVOC	SW-846:8	STSL	Severn Tr	5/10/2005	4/21/2005	4/20/2005
34720782 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	191-24-2	Benzo(g,h,i)perylene	2.4	10	1	10	UG/L	10	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	CS	SVOC	SW-846:8	STSL	Severn Tr	5/10/2005	4/21/2005	4/20/2005
34720792 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	207-08-9	Benzo(k)fluoranthene	2.5	10	1	10	UG/L	10	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	CS	SVOC	SW-846:8	STSL	Severn Tr	5/10/2005	4/21/2005	4/20/2005
34720802 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	65-85-0	Benzoic Acid	0.96	20	1	20	UG/L	20	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	CS	SVOC	SW-846:8	STSL	Severn Tr	5/10/2005	4/21/2005	4/20/2005
34720812 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	100-51-6	Benzyl Alcohol	0.59	10	1	3.1	UG/L	3.1	UG/L	J	J_LAB	J	J		J_LAB	ROUTINE03	FR	CS	SVOC	SW-846:8	STSL	Severn Tr	5/10/2005	4/21/2005	4/20/2005
34720822 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	111-91-1	Bis(2-chloroethoxy)methane	1.8	10	1	10	UG/L	10	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	CS	SVOC	SW-846:8	STSL	Severn Tr	5/10/2005	4/21/2005	4/20/2005
34720832 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	111-44-4	Bis(2-chloroethyl)ether	1.9	10	1	10	UG/L	10	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	CS	SVOC	SW-846:8	STSL	Severn Tr	5/10/2005	4/21/2005	4/20/2005
34720842 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	117-81-7	Bis(2-ethylhexyl)phthalate	2.6	10	1	10	UG/L	10	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	CS	SVOC	SW-846:8	STSL	Severn Tr	5/10/2005	4/21/2005	4/20/2005
34720852 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	101-55-3	Bromophenyl-phenylether[4-]	1.9	10	1	10	UG/L	10	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	CS	SVOC	SW-846:8	STSL	Severn Tr	5/10/2005	4/21/2005	4/20/2005
34720862 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	85-68-7	Butylbenzylphthalate	2.9	10	1	10	UG/L	10	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	CS	SVOC	SW-846:8	STSL	Severn Tr	5/10/2005	4/21/2005	4/20/2005
34720872 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	59-50-7	Chloro-3-methylphenol[4-]	1.6	20	1	20	UG/L	20	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	CS	SVOC	SW-846:8	STSL	Severn Tr	5/10/2005	4/21/2005	4/20/2005
34720882 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	106-47-8	Chloroaniline[4-]	1.8	20	1	20	UG/L	20	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	CS	SVOC	SW-846:8	STSL	Severn Tr	5/10/2005	4/21/2005	4/20/2005
34720892 1	3166S	RE73-05-58924	N	NA	DC	QC	Unfiltered	0	NA	0	0	FT	W	W	NA	ORGANIC	91-58-7	Chloronaphthalene[2-]	1.8	10	1	10	UG/L	10	UG/L	U	U_LAB	U	U		U_LAB	ROUTINE03	FR	CS	SVOC	SW-846:8	STSL	Severn Tr	5/10/2005	4/21/2005	4/20/2005

USI	SAMPLE_I	SAMPLE_T	FLD_PREF	FLD_MATF	FLD_QC_T	SAMPLE_L	COMPOS_	EXCAV_FL	EVAL_CLA	TOP_DEP	BOTTOM_	UOM	LOCATION	START_DA	COMMENTS
588242	RE73-05-5	SS	Not Applica	NASH	NA	CLN	NA	N	NA	0	5	FT	73-24452	2005-04-1	Sunny, warm ~77 degrees. Desc: Ash mixed w/metallic debris and glass. Location: Grid C
588252	RE73-05-5	SS	Not Applica	NASH	NA	CLN	NA	N	NA	0	3	FT	73-24453	2005-04-1	Desc: Ash mixed w/ glass ang metal. Location: Grid C-3 west
588262	RE73-05-5	SS	Not Applica	NASH	NA	CLN	NA	N	NA	0	5	FT	73-24454	2005-04-1	Desc: Ash mixed w/glass and metal debris. Location: Grid C2 (east)
588272	RE73-05-5	SS	Not Applica	NASH	NA	CLN	NA	N	NA	0	2	FT	73-24455	2005-04-1	Desc: Ash mixed w/glass and metal debris. Location: Grid C2 (west)
588282	RE73-05-5	SS	Not Applica	NASH	NA	CLN	NA	N	NA	0	3	FT	73-24456	2005-04-1	Desc: Ash mixed w/glass and debris. Location: Grid C-1
588292	RE73-05-5	SS	Not Applica	NASH	NA	CLN	NA	N	NA	2	3	FT	73-24454	2005-04-1	Desc: Ash mixed w/glass and metallic debris. Location: Composite of Grids C1, C2, and C
588302	RE73-05-5	SS	Not Applica	NASH	NA	CLN	NA	N	NA	0	2.5	FT	73-24457	2005-04-1	Desc: Ash mixed w/glass and metallic debris. Location: D2
588312	RE73-05-5	SS	Not Applica	NASH	NA	CLN	NA	N	NA	0	5	FT	73-24458	2005-04-1	Desc: Ash mixed w/glass and metallic debris. Location: D3
588322	RE73-05-5	SS	Not Applica	NASH	NA	CLN	NA	N	NA	0	2.5	FT	73-24459	2005-04-1	Desc: Ash mixed w/glass and metallic debris. Location: D3
588332	RE73-05-5	SS	Not Applica	NASH	NA	CLN	NA	N	NA	0	4	FT	73-24460	2005-04-1	Desc: Ash mixed w/glass and metallic debris. Location: E3
588342	RE73-05-5	SS	Not Applica	NASH	NA	CLN	NA	N	NA	0	5	FT	73-24461	2005-04-1	Desc: Ash mixed w/glass and metallic debris. Location: E3
588352	RE73-05-5	SS	Not Applica	NASH	NA	CLN	NA	N	NA	2	3	FT	73-24458	2005-04-1	Desc: Ash mixed w/glass and metallic debris. Location: VOC sample collected from depth
588362	RE73-05-5	SS	Not Applica	NASH	NA	CLN	NA	N	NA	0	3	FT	73-24462	2005-04-1	Desc: Ash mixed w/glass and metallic depbris. (mainly mettalic fragments) Location: D4
588372	RE73-05-5	SS	Not Applica	NASH	NA	CLN	NA	N	NA	0	3	FT	73-24463	2005-04-1	Desc: Mettallic debris and glass. Location: C4
588382	RE73-05-5	SS	Not Applica	NASH	NA	CLN	NA	N	NA	0	2.5	FT	73-24464	2005-04-1	Desc: Ash mixed w/glass and mettallic debris. Location: B1
588392	RE73-05-5	SS	Not Applica	NASH	NA	CLN	NA	N	NA	0	3	FT	73-24465	2005-04-1	Desc: Ash mixed w/glass and metallic debris. Location: B2
588402	RE73-05-5	SS	Not Applica	NASH	NA	CLN	NA	N	NA	0	5	FT	73-24466	2005-04-1	Desc: Ash mixed w/glasss and metallic debris. Location: B3
588412	RE73-05-5	SS	Not Applica	NASH	NA	CLN	NA	N	NA	1	2	FT	73-24465	2005-04-1	Desc: Composite of grids D4, C4, B1, B2. Voc sample was driven from ~1-2' bgs in grid B2
588422	RE73-05-5	SS	Not Applica	NASH	NA	CLN	NA	N	NA	0	6	FT	73-24467	2005-04-2	Desc; Ash mixed w/glass and metallic debris, some burned wood. Location: B3
588432	RE73-05-5	SS	Not Applica	NASH	FD	QC	NA	N	NA	0	6	FT	73-24467	2005-04-2	Desc: Field duplicate of 58842. Location: B3
588442	RE73-05-5	SS	Not Applica	NASH	NA	CLN	NA	N	NA	0	2	FT	73-24469	2005-04-2	Desc: Composite of A1 0-6" ash mixed w/glass and mettallic debris. A2 0-1' ash mixed w/gl
588452	RE73-05-5	SS	Not Applica	NASH	FD	QC	NA	N	NA	0	2	FT	73-24469	2005-04-2	Desc: Field duplicate of 58844. Location: A1, A2, A3
588462	RE73-05-5	SS	Not Applica	NASH	NA	CLN	NA	N	NA	0	3	FT	73-24471	2005-04-2	Desc: Ash mixed w/mettallic debris and broken glass. Location: B4
588782	RE73-05-5	DC	Not Applica	S	FTB	QC	NA	N	NA	0	0	FT	NA	2005-04-2	Trip blank
588792	RE73-05-5	SS	Not Applica	NASH	NA	CLN	NA	N	NA	1	2	FT	73-24467	2005-04-2	Desc: Composite of Grids A1, A2, A3, B3 and B4, VOC sample driven 1-2' in B3 near loatio
589202	RE73-05-5	DC	Unfiltered	W	FR	QC	NA	N	NA	0	0	FT	NA	2005-04-2	Rinsate poured through hand auger. Sample was collected outside of radiation area.
589212	RE73-05-5	DC	Unfiltered	W	FR	QC	NA	N	NA	0	0	FT	NA	2005-04-2	Equipment rinsate - stainless steel trowel.
589232	RE73-05-5	DC	Unfiltered	W	FR	QC	NA	N	NA	0	0	FT	NA	2005-04-2	Rinsate poured through hand auger. Sample collected outside of rad area.
589242	RE73-05-5	DC	Unfiltered	W	FR	QC	NA	N	NA	0	0	FT	NA	2005-04-2	Equip rinsate - stainless steel trowel.

:3 east side

3. Voc sample collected at depth of 2.0-3.0' in C2 near location: 58826

of 2.0-3.0 feet near sample location 58831

: near loc 58839

ass and mettallic debris. A3 0-2' ash mixed w/glass and mettallic debris.(more metal in A3)

n 58842. Location: Grids A1, A2, A3, B3, B4

Analytical Data Package

Request Number: 3157S

ERID Number: _____

EVENT: 4802

Relinquished by: _____ **Date:** _____

Received By: _____ **Date:** _____

Comments: DATA PACKAGE JOINT WITH 3161S

Wednesday, April 20, 2005

REQUEST NUMBER: 3157S

ANALYSIS TYPE: OTHER

Los Alamos
NATIONAL LABORATORY

ATTN: Mark Ankeny
Daniel B. Stevens & Associates
6020 Acedemy NE, Suite 100
Albuquerque, NM 87109

Please analyze the enclosed samples according to the schedule indicated:

SHIP DATE: 04/20/2005
REPORT DUE: 05/05/2005
TURN AROUND REQ'D: 15

RAD SCREENING: NOT REQ
COMMENTS:

These samples are on:

LANL Request Number: 3157S
Per Agreement Number:
Project Cost Code: MT3R0223KGT0

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
ASTM:D2216	RE73-05-58829	5	S	04/19/2005	
ASTM:D2937	RE73-05-58829	5	S	04/19/2005	
ASTM:D422	RE73-05-58829	5	S	04/19/2005	
ASTM:D854	RE73-05-58829	5	S	04/19/2005	
MOSA:18-1986	RE73-05-58829	5	S	04/19/2005	
ASTM:D2216	RE73-05-58835	5	S	04/19/2005	
ASTM:D2937	RE73-05-58835	5	S	04/19/2005	
ASTM:D422	RE73-05-58835	5	S	04/19/2005	
ASTM:D854	RE73-05-58835	5	S	04/19/2005	
MOSA:18-1986	RE73-05-58835	5	S	04/19/2005	
ASTM:D2216	RE73-05-58841	5	S	04/19/2005	
ASTM:D2937	RE73-05-58841	5	S	04/19/2005	
ASTM:D422	RE73-05-58841	5	S	04/19/2005	
ASTM:D854	RE73-05-58841	5	S	04/19/2005	
MOSA:18-1986	RE73-05-58841	5	S	04/19/2005	

Final Page of REQUEST NUMBER 3157S

Wednesday, April 20, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3157SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3157S

ANALYSIS TYPE: OTHER

ATTN: Mark Ankeny
Daniel B. Stevens & Associates
6020 Acedemy NE, Suite 100
Albuquerque, NM 87109

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58829	5	PROTECORE BAG	PSDA+PROP-DBS	ICE	S
RE73-05-58835	5	PROTECORE BAG	PSDA+PROP-DBS	ICE	S
RE73-05-58841	5	PROTECORE BAG	PSDA+PROP-DBS	ICE	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3157S

Relinquished By:		Date	Time	Received By:		Date	Time
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		

Received for DISPOSAL By:		Date	Time	Remarks:
PRINTED NAME	SIGNATURE			

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-7

COC ID: 219142 Event ID:4802

SAMPLE ID: RE73-05-58829

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	8260B	~~125 SEPTUM AMBER GLASS~~ 2"x6" SS TUBE	Ice	Y		
1	8270C+8082	250 ML AMBER GLASS	Ice	Y		
3	8290	125 ML GLASS	Ice	Y		
4	8290	125 ML GLASS	Ice	Y		
5	PSDA+PROP-DBS	~~PROTECORE BAG~~ 2"x6" SS TUBE	Ice	Y		
6	RC+RS+ph+PF+I	500 ML POLY	Ice	Y		

RELINQUISHED BY (printed name): K Lucero (signature):	Date/Time: 4.19.05 1705	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): Jeylene Joy (signature):	Date/Time: 4-19-05 1705	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-7

COC ID: 219152 Event ID:4802

SAMPLE ID: RE73-05-58835
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	8260B	~~125 SEPTUM AMBER GLASS~~ 2"x6" SS TUBE	Ice	Y		
1	8270C+8082	250 ML AMBER GLASS	Ice	Y		
3	8290	125 ML GLASS	Ice	Y		
4	8290	125 ML GLASS	Ice	Y		
5	PSDA+PROP-DBS	~~PROTECORE BAG~~ 2"x6" SS TUBE	Ice	Y		
6	RC+RS+ph+PF+I	500 ML POLY	Ice	Y		

RELINQUISHED BY (printed name): KRWood (signature):	Date/Time: 4.19.05 17:05	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4-19-05 1705	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-7

COC ID: 219162 Event ID:4802

SAMPLE ID: RE73-05-58841

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	8260B	~~125 SEPTUM AMBER GLASS~~ 2"x6" SS TUBE	Ice	Y		
1	8270C+8082	250 ML AMBER GLASS	Ice	Y		
3	8290	125 ML GLASS	Ice	Y		
4	8290	125 ML GLASS	Ice	Y		
5	PSDA+PROP-DBS	~~PROTECORE BAG~~ 2"x6" SS TUBE	Ice	Y		
6	RC+RS+ph+PF+I	500 ML POLY	Ice	Y		

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 1655	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4-19-05 1656	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-7

COC ID: 218712 **Event ID:**4802

SAMPLE ID: RE73-05-58826 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): K Reed **(signature):**	**Date/Time:** 4.19.05 17:10	**RELINQUISHED BY (printed name):** **(signature):**	**Date/Time:**
RECEIVED BY (printed name): **(signature):**	**Date/Time:** 4/19/05 17:10	**RECEIVED BY (printed name):** **(signature):**	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-7

COC ID: 218692 **Event ID:**4802

SAMPLE ID: RE73-05-58824 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): K R Leonard (signature):	**Date/Time:** 4.19.05 1710	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4-19-05 1710	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-

COC ID: 218722 Event ID:4802

SAMPLE ID: RE73-05-58827
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): K Rleonard (signature):	Date/Time: 4.19.05 1705	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 1705	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-

COC ID: 218702 Event ID:4802

SAMPLE ID: RE73-05-58825

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature): K Rivera	Date/Time: 4.19.05 17:05	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 17:05	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73

COC ID: 218672 Event ID:4802

SAMPLE ID: RE73-05-58877 ER TEAM LEADER: Terry Rust DESTINATION: SMO

SAMPLE ORDER MATRIX: Soil FIELD TEAM LEADER: John Tymkowych DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
1	8260B	125 SEPTUM AMBER GLASS	Ice	Y		

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 1705	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 1705	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-7

COC ID: 218732 Event ID:4802

SAMPLE ID: RE73-05-58828 ER TEAM LEADER: Terry Rust DESTINATION: SMO

SAMPLE ORDER MATRIX: Soil FIELD TEAM LEADER: John Tymkowych DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 1705	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 1705	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-7

COC ID: 218812 Event ID:4802

SAMPLE ID: RE73-05-58838

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 1655	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 16:55	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-7:

COC ID: 218822 Event ID:4802

SAMPLE ID: RE73-05-58839 ER TEAM LEADER: Terry Rust DESTINATION: SMO

SAMPLE ORDER MATRIX: Soil FIELD TEAM LEADER: John Tymkowych DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 1655	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4-19-05 1655	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-

COC ID: 218742 Event ID:4802

SAMPLE ID: RE73-05-58830
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 1655	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4.19.05 1655	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

EVENT NAME: TA-7

FIELD CHAIN OF CUSTODY

COC ID: 218782 Event ID:4802

SAMPLE ID: RE73-05-58834
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): KR Lesmes (signature):	Date/Time: 4.19.05 16:55	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 1655	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-7

COC ID: 218832 Event ID:4802

SAMPLE ID: RE73-05-58840 ER TEAM LEADER: Terry Rust DESTINATION: SMO

SAMPLE ORDER MATRIX: Soil FIELD TEAM LEADER: John Tymkowych DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4/19/05 1655	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 1655	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-7

COC ID: 218762 **Event ID:**4802

SAMPLE ID: RE73-05-58832 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): [illegible] **(signature):** [illegible]	**Date/Time:** 4.19.05 1655	**RELINQUISHED BY (printed name):** **(signature):**	**Date/Time:**
RECEIVED BY (printed name): [illegible] **(signature):** [illegible]	**Date/Time:** 4/19/05 1655	**RECEIVED BY (printed name):** **(signature):**	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-7

COC ID: 218752 Event ID:4802

SAMPLE ID: RE73-05-58831

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 1655	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 1655	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-7

COC ID: 218772 Event ID:4802

SAMPLE ID: RE73-05-58833
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 1655	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 1655	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-

COC ID: 218802 Event ID:4802

SAMPLE ID: RE73-05-58837

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): KR Leonard (signature):	Date/Time: 4.19.05 1655	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 1655	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA

COC ID: 218792 Event ID:4802

SAMPLE ID: RE73-05-58836

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature): K Reeoms	Date/Time: 4.19.05 1655	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4-19-05 1655	RECEIVED BY (printed name): (signature):	Date/Time:

Rad Screening Data Release Form

The Following samples were received at the Field Support Facility (FSF) without screening data (list sample number):

These samples will not be shipped until radiological screening data documentation arrives at the FSF. I understand that it is my responsibility to ensure this information arrives at the FSF in a timely manner. If holding times are missed because screening data does not arrive, I will pick up the samples.

The following samples do not require rad screening data for the reasons stated (list sample numbers):

RE73-05-58824,
" " -58825
" " -58826
-58827
-58828
-58829
-58830
-58831
-58832
-58833
-58834
-58835

RE73-05-58836
" " -58837
" " -58838
-58839
-58840
-58841
-58877

Reason: SCREENED IN THE FIELD BY RCT

Print Last Name Kenneth R. LEONARD Signature [signature] Date 4/19/05

RECD JUN 27 2005

Laboratory Report for
Los Alamos National Laboratory
(Request # 3157S) 3161 S

June 16, 2005

Daniel B. Stephens & Associates, Inc.

6020 Academy NE, Suite 100 • Albuquerque, New Mexico 87109

lebrating
20 Years

June 16, 2005

Keith Greene
Los Alamos National Laboratory
TA00 Building 1237
MS M707
Droppoint 03U
Los Alamos, NM 87545
(505) 665-9966

Re: DBS&A Laboratory Report for LANL Ash Pile samples (REQ # 3157S)

Dear Mr. Greene:

Enclosed is the final report for the fourth batch of the LANL Ash Pile samples (REQ # 3157S). Please review this report and provide any comments as samples will be held for a maximum of 30 days. After 30 days samples will be returned or disposed of in an appropriate manner.

All testing results were evaluated subjectively for consistency and reasonableness, and the results appear to be reasonably representative of the material tested. However, DBS&A does not assume any responsibility for interpretations or analyses based on the data enclosed, nor can we guarantee that these data are fully representative of the undisturbed materials at the field site. We recommend that careful evaluation of these laboratory results be made for your particular application.

The testing utilized to generate the enclosed final report employs methods that are standard for the industry. The results do not constitute a professional opinion by DBS&A, nor can the results affect any professional or expert opinions rendered with respect thereto by DBS&A. You have acknowledged that all the testing undertaken by us, and the final report provided, constitutes mere test results using standardized methods, and cannot be used to disqualify DBS&A from rendering any professional or expert opinion, having waived any claim of conflict of interest by DBS&A.

We are pleased to provide this service to LANL and look forward to future laboratory testing on other projects. If you have any questions about the enclosed data, please do not hesitate to call.

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.
LABORATORY / TESTING FACILITY

Joleen Hines, Laboratory Supervising Manager
Enclosure

Daniel B. Stephens & Associates, Inc.
6020 Academy NE, Suite 100 505-822-9400
Albuquerque, NM 87109 FAX 505-822-8877

Summaries

Summary of Tests Performed

Laboratory Sample Number	Initial Soil Properties[1] (θ, ρ_d, ϕ)	Saturated Hydraulic Conductivity[2]		Moisture Characteristics[3]					Unsaturated Hydraulic Conductivity	Particle Size[4]			Effective Porosity	Particle Density	Air Permeability	1/3, 15 Bar Points and Water Holding Capacity	Atterberg Limits	Proctor Compaction
		CH	FH	HC	PP	TH	WP	RH		DS	WS	H						
RE73-05-58829	X									X								
RE73-05-58835	X									X								
RE73-05-58841	X									X								
RE73-05-58879	X									X								

[1] θ = Initial moisture content, ρ_d = Dry bulk density, ϕ = Calculated porosity

[2] CH = Constant head, FH = falling head

[3] HC = Hanging column, PP = Pressure plate, TH = Thermocouple psychrometer, WP = Water activity meter, RH = Relative humidity box

[4] DS = Dry sieve, WS = Wet sieve, H = Hydrometer

Summary of Initial Moisture Content, Dry Bulk Density Wet Bulk Density and Calculated Porosity

Sample Number	Initial Moisture Content Gravimetric (%, g/g)	Initial Moisture Content Volumetric (%, cm^3/cm^3)	Dry Bulk Density (g/cm^3)	Wet Bulk Density (g/cm^3)	Calculated Porosity (%)
RE73-05-58829	34.2	25.3	0.74	0.99	72.1
RE73-05-58835	38.5	25.4	0.66	0.91	75.1
RE73-05-58841	22.2	19.0	0.86	1.04	67.7
RE73-05-58879	16.5	16.1	0.98	1.14	63.1

NA = Not analyzed

Summary of Particle Size Characteristics

Sample Number	d_{10} (mm)	d_{50} (mm)	d_{60} (mm)	C_u	C_c	Method	ASTM Classification	USDA Classification
RE73-05-58829	0.15	3.3	5.4	36	1.0	DS	Classification by ASTM 2487 requires Atterberg test	Sand †
RE73-05-58835	0.085	1.9	3.4	40	0.76	DS	Classification by ASTM 2487 requires Atterberg test	Sand †
RE73-05-58841	0.13	7.4	16	123	0.81	DS	Classification by ASTM 2487 requires Atterberg test	Sand †
RE73-05-58879	0.11	2.7	4.2	38	1.3	DS	Classification by ASTM 2487 requires Atterberg test	Sand †

d_{50} = Median particle diameter

Est = Reported values for d_{10}, C_u, C_c, and soil classification are estimates, since extrapolation was required to obtain the d_{10} diameter

$$C_u = \frac{d_{60}}{d_{10}}$$

$$C_c = \frac{(d_{30})^2}{(d_{10})(d_{60})}$$

DS = Dry sieve

H = Hydrometer

WS = Wet sieve

† Greater than 10% of sample is coarse material

Laboratory Data and Graphical Plots

Initial Properties

Data for Initial Moisture Content, Bulk Density, Porosity, and Percent Saturation

Job Name:	LANL - Ash Pile
Job Number:	LB05.0097.00
Sample Number:	RE73-05-58829
Location:	73-24456
Sampled Date/Time:	4/19/05 0930
Test Date:	5-May-05
Field weight of sample* (g):	490.90
Tare weight, ring (g):	0.00
Tare weight, cap/plate/epoxy (g):	210.27
Dry weight of sample (g):	209.12
Sample volume (cm^3):	282.70
Assumed particle density:	2.65

Initial Volumetric Moisture Content (% vol):	25.3
Initial Gravimetric Moisture Content (% g/g):	34.2
Dry bulk density (g/cm^3):	0.74
Wet bulk density (g/cm^3):	0.99
Calculated Porosity (% vol):	72.1
Percent Saturation:	35.1

Comments:

* Weight including tares
NA = Not analyzed

Laboratory analysis by:	S. Shannon
Data entered by:	D. O'Dowd
Checked by:	J. Hines

Data for Initial Moisture Content, Bulk Density, Porosity, and Percent Saturation

Job Name:	LANL - Ash Pile
Job Number:	LB05.0097.00
Sample Number:	RE73-05-58835
Location:	73-24456
Sampled Date/Time:	4/19/05 1130
Test Date:	5-May-05
Field weight of sample* (g):	469.59
Tare weight, ring (g):	0.00
Tare weight, cap/plate/epoxy (g):	208.49
Dry weight of sample (g):	188.51
Sample volume (cm^3):	285.59
Assumed particle density:	2.65

Initial Volumetric Moisture Content (% vol):	25.4
Initial Gravimetric Moisture Content (% g/g):	38.5
Dry bulk density (g/cm^3):	0.66
Wet bulk density (g/cm^3):	0.91
Calculated Porosity (% vol):	75.1
Percent Saturation:	33.8

Comments:

* Weight including tares
NA = Not analyzed

Laboratory analysis by:	S. Shannon
Data entered by:	D. O'Dowd
Checked by:	J. Hines

Data for Initial Moisture Content, Bulk Density, Porosity, and Percent Saturation

Job Name: LANL - Ash Pile
Job Number: LB05.0097.00
Sample Number: RE73-05-58841
Location: 73-24456
Sampled Date/Time: 4/19/05 1530

Test Date: 5-May-05

Field weight of sample* (g): 509.66
Tare weight, ring (g): 0.00
Tare weight, cap/plate/epoxy (g): 209.99

Dry weight of sample (g): 245.21
Sample volume (cm^3): 286.79
Assumed particle density: 2.65

Initial Volumetric Moisture Content (% vol):	19.0
Initial Gravimetric Moisture Content (% g/g):	22.2
Dry bulk density (g/cm^3):	0.86
Wet bulk density (g/cm^3):	1.04
Calculated Porosity (% vol):	67.7
Percent Saturation:	28.0

Comments:

* Weight including tares
NA = Not analyzed

Laboratory analysis by: S. Shannon
Data entered by: D. O'Dowd
Checked by: J. Hines

Data for Initial Moisture Content, Bulk Density, Porosity, and Percent Saturation

Job Name:	LANL - Ash Pile
Job Number:	LB05.0097.00
Sample Number:	RE73-05-58879
Location:	UA
Sampled Date/Time:	Not provided
Test Date:	26-May-05
Field weight of sample* (g):	273.28
Tare weight, ring (g):	113.86
Tare weight, cap/plate/epoxy (g):	0.00
Dry weight of sample (g):	136.83
Sample volume (cm^3):	140.11
Assumed particle density:	2.65

Initial Volumetric Moisture Content (% vol):	16.1
Initial Gravimetric Moisture Content (% g/g):	16.5
Dry bulk density (g/cm^3):	0.98
Wet bulk density (g/cm^3):	1.14
Calculated Porosity (% vol):	63.1
Percent Saturation:	25.5

Comments:

* Weight including tares
NA = Not analyzed

Laboratory analysis by:	D. O'Dowd
Data entered by:	J. Hines
Checked by:	J. Hines

Particle Size Analysis

Summary of Particle Size Characteristics

Sample Number	d_{10} (mm)	d_{50} (mm)	d_{60} (mm)	C_u	C_c	Method	ASTM Classification	USDA Classification
RE73-05-58829	0.15	3.3	5.4	36	1.0	DS	Classification by ASTM 2487 requires Atterberg test	Sand †
RE73-05-58835	0.085	1.9	3.4	40	0.76	DS	Classification by ASTM 2487 requires Atterberg test	Sand †
RE73-05-58841	0.13	7.4	16	123	0.81	DS	Classification by ASTM 2487 requires Atterberg test	Sand †
RE73-05-58879	0.11	2.7	4.2	38	1.3	DS	Classification by ASTM 2487 requires Atterberg test	Sand †

d_{50} = Median particle diameter

Est = Reported values for d_{10}, C_u, C_c, and soil classification are estimates, since extrapolation was required to obtain the d_{10} diameter

$$C_u = \frac{d_{60}}{d_{10}}$$

$$C_c = \frac{(d_{30})^2}{(d_{10})(d_{60})}$$

DS = Dry sieve

H = Hydrometer

WS = Wet sieve

† Greater than 10% of sample is coarse material

Daniel B. Stephens & Associates, Inc.

Particle Size Analysis
Dry Sieve Data

Job Name: LANL - Ash Pile
Job Number: LB05.0097.00
Sample Number: RE73-05-58829
Location: 73-24456
Sampled Date/Time: 4/19/05 0930

Test Date: 18-May-05

Shape: Angular
Hardness: Weathered and friable

Total Sample Weight (g): 209.42

Sieve Number	Diameter (mm)	Wt. Retained (g)	Cum Wt. Retained (g)	Wt. Passing (g)	% Passing
3"	75	0.00	0.00	209.42	100.00
2"	50	0.00	0.00	209.42	100.00
1.5"	38.1	0.00	0.00	209.42	100.00
1"	25	0.00	0.00	209.42	100.00
3/4"	19.0	9.70	9.70	199.72	95.37
3/8"	9.5	41.79	51.49	157.93	75.41
4	4.75	40.17	91.66	117.76	56.23
10	2.00	31.42	123.08	86.34	41.23
20	0.85	25.63	148.71	60.71	28.99
40	0.425	18.48	167.19	42.23	20.17
60	0.250	13.02	180.21	29.21	13.95
140	0.106	13.72	193.93	15.49	7.40
200	0.075	4.22	198.15	11.27	5.38
pan		11.55	209.70	- 0.28	

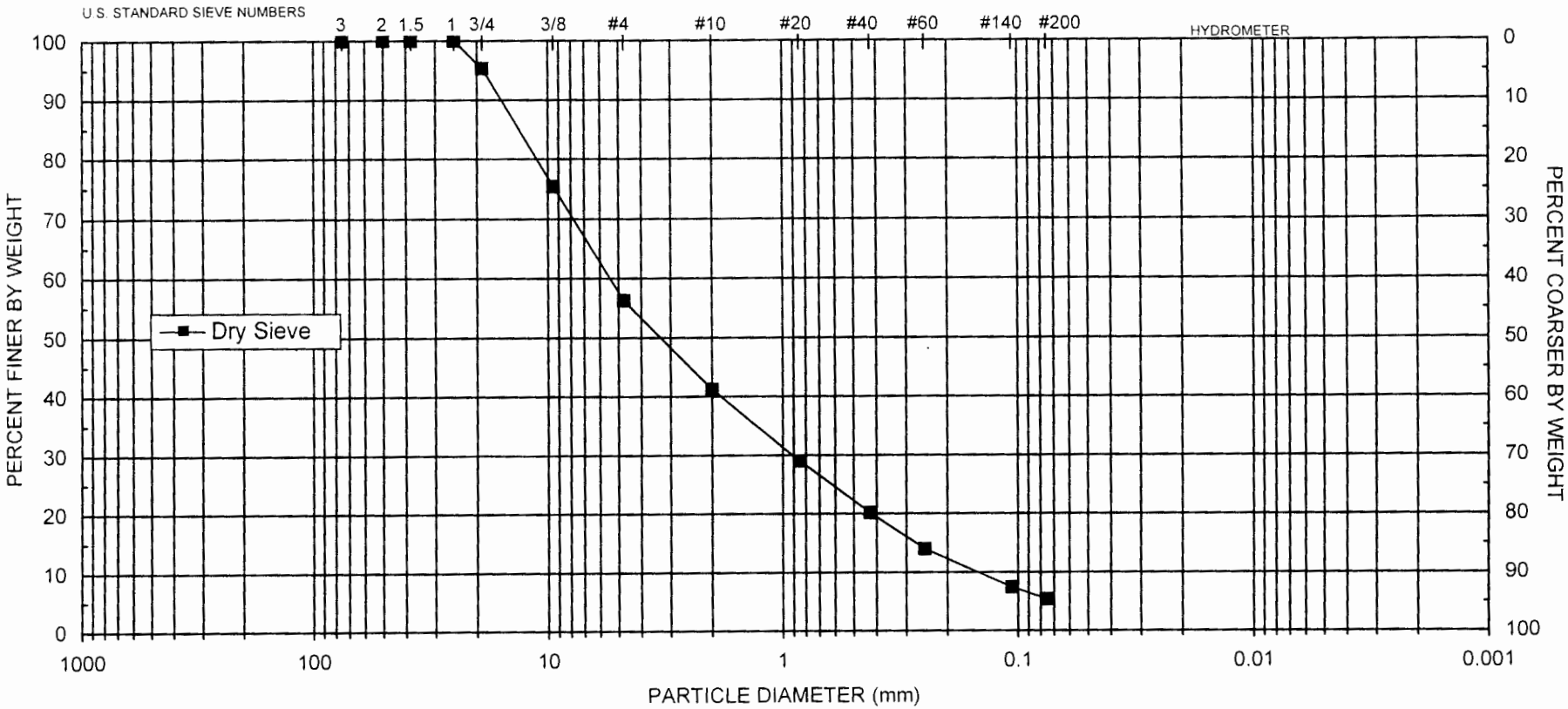
d_{10} (mm): 0.15
d_{16} (mm): 0.30
d_{30} (mm): 0.91
d_{50} (mm): 3.3
d_{60} (mm): 5.4
d_{84} (mm): 13

Median Particle Diameter--d_{50} (mm): 3.3
Uniformity Coefficient, Cu--$[d_{60}/d_{10}]$ (mm): 36
Coefficient of Curvature, Cc--$[(d_{30})^2/(d_{10}*d_{60})]$ (mm): 1.0
Mean Particle Diameter--$[(d_{16}+d_{50}+d_{84})/3]$ (mm): 5.5

ASTM Soil Classification: Classification by ASTM 2487 requires Atterberg test
USDA Soil Classification: Sand †

† Greater than 10% of sample is coarse material

Laboratory analysis by: D. O'Dowd
Data entered by: J. Hines
Checked by: J. Hines



UNIFIED	COBBLES	GRAVEL		SAND			SILT OR CLAY				
		Coarse	Fine	Coarse	Medium	Fine					
USDA	COBBLES	GRAVEL		SAND				SILT	CLAY		
				Very coarse	Coarse	Medium	Fine	Very fine			

d_{10} = **0.15**	d_{30} = **0.91**	d_{50} = **3.3**	d_{60} = **5.4**	C_u = **36**	C_c = **1.0**

SAMPLE NUMBER	SAMPLED DATE/TIME	ASTM CLASSIFICATION	USDA CLASSIFICATION
RE73-05-58829	**4/19/05 0930**	**Classification by ASTM 2487 requires Atterberg test**	**Sand** †

† Greater than 10% of sample is coarse material

Daniel B. Stephens & Associates, Inc.

Particle Size Analysis
Dry Sieve Data

Job Name: LANL - Ash Pile
Job Number: LB05.0097.00
Sample Number: RE73-05-58835
Location: 73-24456
Sampled Date/Time: 4/19/05 1130

Test Date: 18-May-05

Shape: Angular
Hardness: Weathered and friable

Total Sample Weight (g): 188.07

Sieve Number	Diameter (mm)	Wt. Retained (g)	Cum Wt. Retained (g)	Wt. Passing (g)	% Passing
3"	75	0.00	0.00	188.07	100.00
2"	50	0.00	0.00	188.07	100.00
1.5"	38.1	0.00	0.00	188.07	100.00
1"	25	0.00	0.00	188.07	100.00
3/4"	19.0	0.00	0.00	188.07	100.00
3/8"	9.5	27.74	27.74	160.33	85.25
4	4.75	36.93	64.67	123.40	65.61
10	2.00	28.29	92.96	95.11	50.57
20	0.85	22.69	115.65	72.42	38.51
40	0.425	18.92	134.57	53.50	28.45
60	0.250	14.65	149.22	38.85	20.66
140	0.106	16.25	165.47	22.60	12.02
200	0.075	5.85	171.32	16.75	8.91
pan		16.95	188.27	- 0.20	

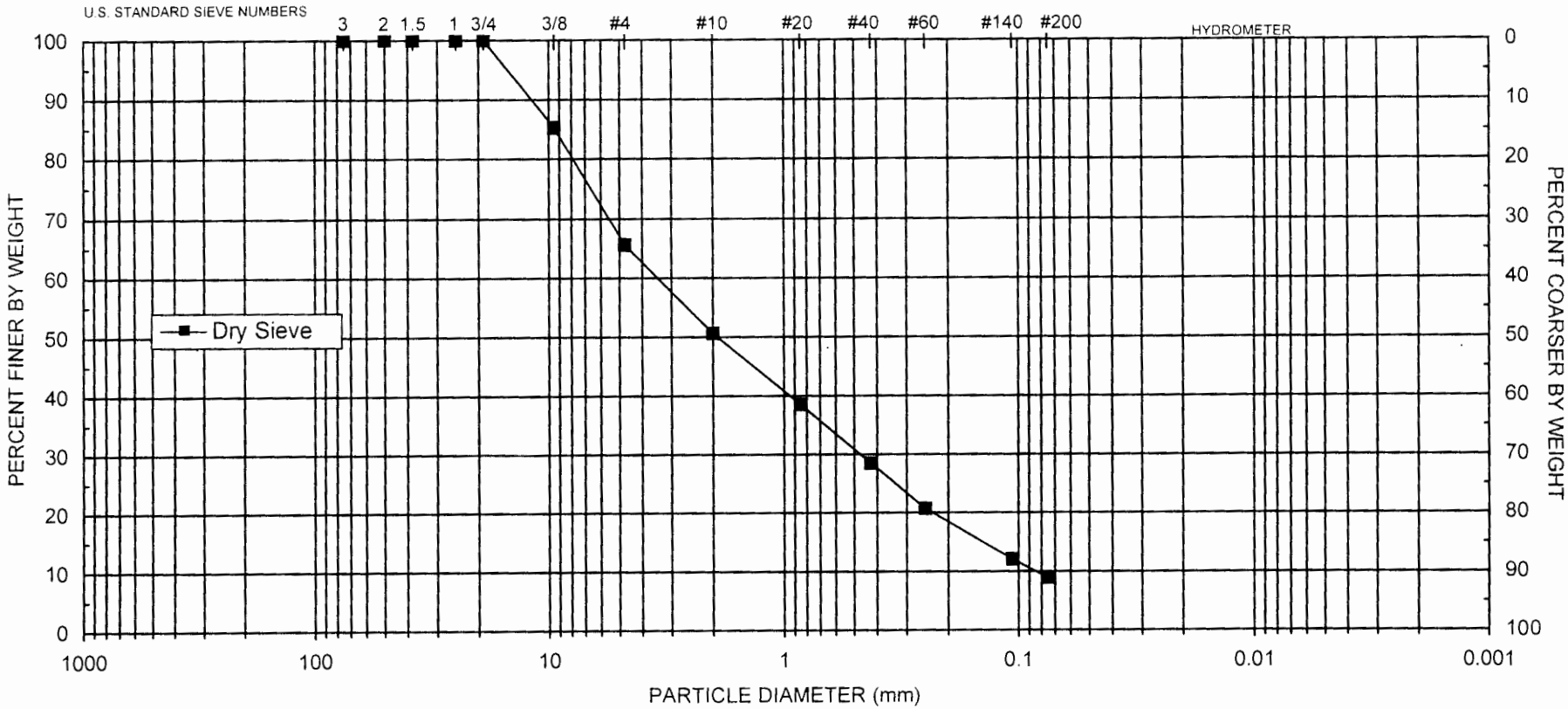
d_{10} (mm): 0.085
d_{16} (mm): 0.16
d_{30} (mm): 0.47
d_{50} (mm): 1.9
d_{60} (mm): 3.4
d_{84} (mm): 9.1

Median Particle Diameter--d_{50} (mm): 1.9
Uniformity Coefficient, Cu--$[d_{60}/d_{10}]$ (mm): 40
Coefficient of Curvature, Cc--$[(d_{30})^2/(d_{10}*d_{60})]$ (mm): 0.76
Mean Particle Diameter--$[(d_{16}+d_{50}+d_{84})/3]$ (mm): 3.7

ASTM Soil Classification: Classification by ASTM 2487 requires Atterberg test
USDA Soil Classification: Sand †

† Greater than 10% of sample is coarse material

Laboratory analysis by: D. O'Dowd
Data entered by: J. Hines
Checked by: J. Hines



UNIFIED	COBBLES	GRAVEL		SAND			SILT OR CLAY				
		Coarse	Fine	Coarse	Medium	Fine					
USDA	COBBLES	GRAVEL		SAND				SILT	CLAY		
				Very coarse	Coarse	Medium	Fine	Very fine			

d_{10} = **0.085**	d_{30} = **0.47**	d_{50} = **1.9**	d_{60} = **3.4**	C_u = **40**	C_c = **0.76**

SAMPLE NUMBER	SAMPLED DATE/TIME	ASTM CLASSIFICATION	USDA CLASSIFICATION
RE73-05-58835	**4/19/05 1130**	**Classification by ASTM 2487 requires Atterberg test**	**Sand †**

† Greater than 10% of sample is coarse material

Daniel B. Stephens & Associates, Inc.

Daniel B. Stephens & Associates, Inc.

Particle Size Analysis
Dry Sieve Data

Job Name: LANL - Ash Pile
Job Number: LB05.0097.00
Sample Number: RE73-05-58841
Location: 73-24456
Sampled Date/Time: 4/19/05 1530

Test Date: 18-May-05

Shape: Angular
Hardness: Weathered and friable

Total Sample Weight (g): 245.10

Sieve Number	Diameter (mm)	Wt. Retained (g)	Cum Wt. Retained (g)	Wt. Passing (g)	% Passing
3"	75	0.00	0.00	245.10	100.00
2"	50	0.00	0.00	245.10	100.00
1.5"	38.1	0.00	0.00	245.10	100.00
1"	25	0.00	0.00	245.10	100.00
3/4"	19.0	93.18	93.18	151.92	61.98
3/8"	9.5	21.31	114.49	130.61	53.29
4	4.75	22.48	136.97	108.13	44.12
10	2.00	24.24	161.21	83.89	34.23
20	0.85	20.52	181.73	63.37	25.85
40	0.425	16.53	198.26	46.84	19.11
60	0.250	11.79	210.05	35.05	14.30
140	0.106	13.39	223.44	21.66	8.84
200	0.075	4.49	227.93	17.17	7.01
pan		17.17	245.10	0.00	

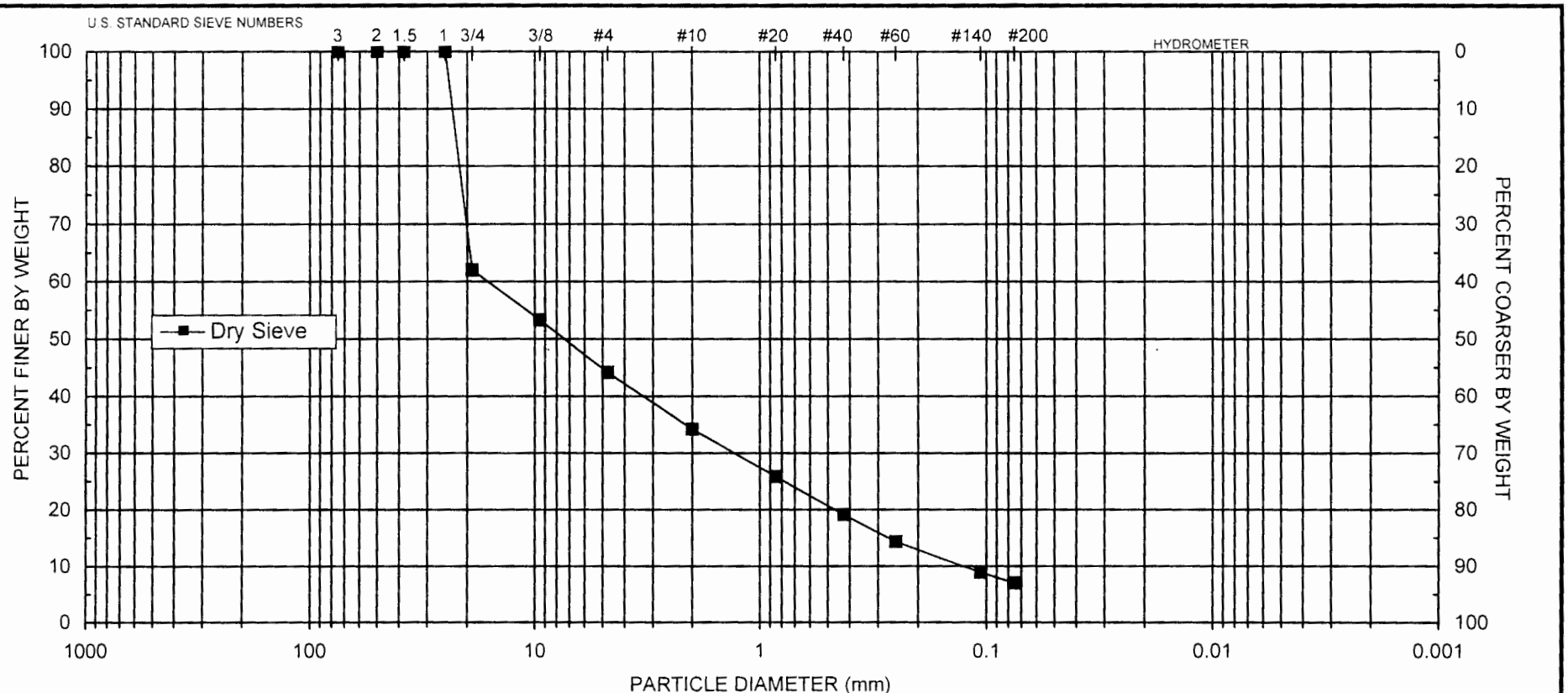
d_{10} (mm): 0.13
d_{16} (mm): 0.30
d_{30} (mm): 1.3
d_{50} (mm): 7.4
d_{60} (mm): 16
d_{84} (mm): 22

Median Particle Diameter--d_{50} (mm): 7.4
Uniformity Coefficient, Cu--$[d_{60}/d_{10}]$ (mm): 123
Coefficient of Curvature, Cc--$[(d_{30})^2/(d_{10}*d_{60})]$ (mm): 0.81
Mean Particle Diameter--$[(d_{16}+d_{50}+d_{84})/3]$ (mm): 9.9

ASTM Soil Classification: Classification by ASTM 2487 requires Atterberg test
USDA Soil Classification: Sand †

† Greater than 10% of sample is coarse material

Laboratory analysis by: D. O'Dowd
Data entered by: J. Hines
Checked by: J. Hines



UNIFIED	COBBLES	GRAVEL		SAND			SILT OR CLAY				
		Coarse	Fine	Coarse	Medium	Fine					
USDA	COBBLES	GRAVEL		SAND				SILT	CLAY		
				Very coarse	Coarse	Medium	Fine	Very fine			

d_{10} = **0.13**	d_{30} = **1.3**	d_{50} = **7.4**	d_{60} = **16**	C_u = **123**	C_c = **0.81**

SAMPLE NUMBER	SAMPLED DATE/TIME	ASTM CLASSIFICATION	USDA CLASSIFICATION
RE73-05-58841	**4/19/05 1530**	**Classification by ASTM 2487 requires Atterberg test**	**Sand** †

† Greater than 10% of sample is coarse material

Daniel B. Stephens & Associates, Inc.

Particle Size Analysis
Dry Sieve Data

Job Name: LANL - Ash Pile
Job Number: LB05.0097.00
Sample Number: RE73-05-58879
Location: UA
Sampled Date/Time: Not provided

Test Date: 2-Jun-05

Shape: Angular
Hardness: Weathered and friable

Total Sample Weight (g): 111.01

Sieve Number	Diameter (mm)	Wt. Retained (g)	Cum Wt. Retained (g)	Wt. Passing (g)	% Passing
3"	75	0.00	0.00	111.01	100.00
2"	50	0.00	0.00	111.01	100.00
1.5"	38.1	0.00	0.00	111.01	100.00
1"	25	0.00	0.00	111.01	100.00
3/4"	19.0	0.00	0.00	111.01	100.00
3/8"	9.5	12.89	12.89	98.12	88.39
4	4.75	28.54	41.43	69.58	62.68
10	2.00	21.75	63.18	47.83	43.09
20	0.85	13.24	76.42	34.59	31.16
40	0.425	9.78	86.20	24.81	22.35
60	0.250	6.36	92.56	18.45	16.62
140	0.106	7.81	100.37	10.64	9.58
200	0.075	2.86	103.23	7.78	7.01
pan		7.92	111.15	- 0.14	

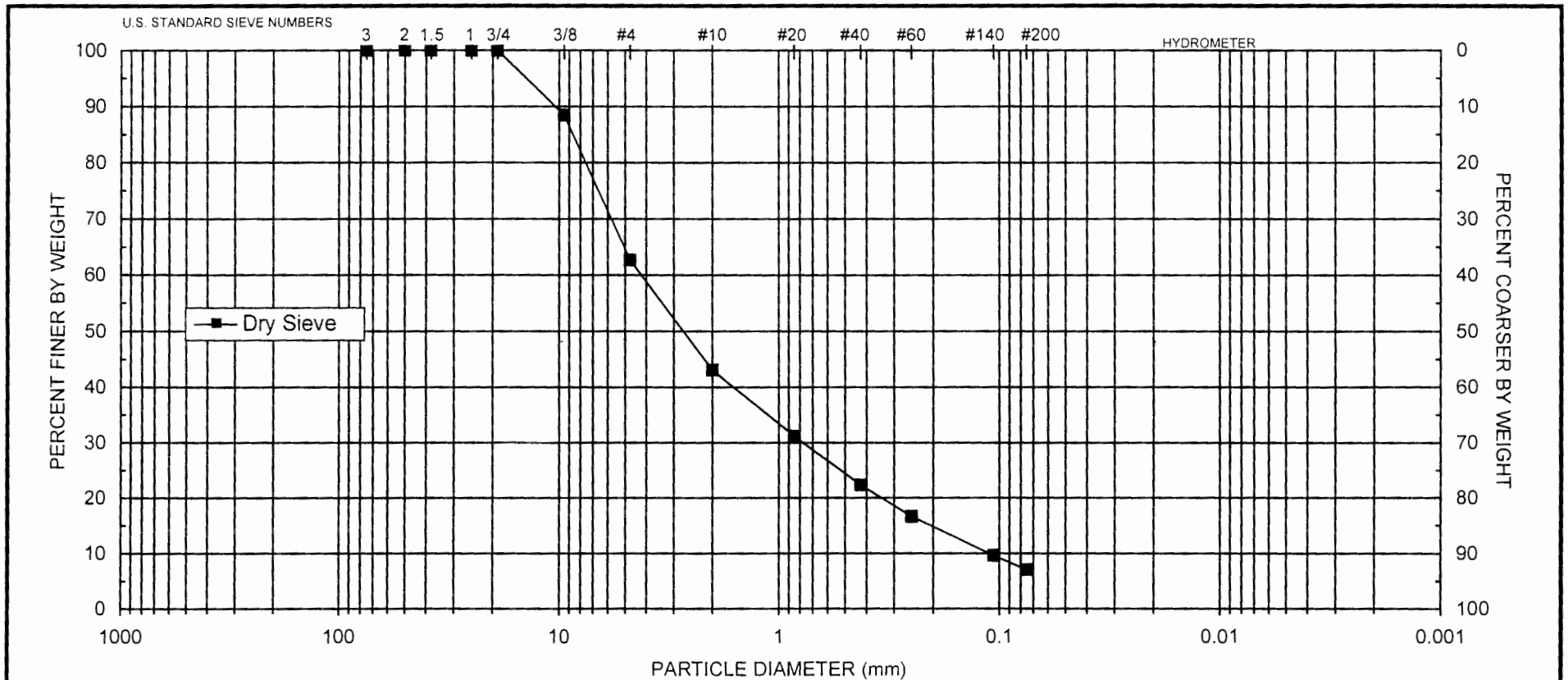
d_{10} (mm): 0.11
d_{16} (mm): 0.23
d_{30} (mm): 0.78
d_{50} (mm): 2.7
d_{60} (mm): 4.2
d_{84} (mm): 8.4

Median Particle Diameter--d_{50} (mm): 2.7
Uniformity Coefficient, Cu--$[d_{60}/d_{10}]$ (mm): 38
Coefficient of Curvature, Cc--$[(d_{30})^2/(d_{10}*d_{60})]$ (mm): 1.3
Mean Particle Diameter--$[(d_{16}+d_{50}+d_{84})/3]$ (mm): 3.8

ASTM Soil Classification: Classification by ASTM 2487 requires Atterberg test
USDA Soil Classification: Sand †

† Greater than 10% of sample is coarse material

Laboratory analysis by: S. Shannon
Data entered by: D. O'Dowd
Checked by: J. Hines



UNIFIED	COBBLES	GRAVEL		SAND			SILT OR CLAY			
		Coarse	Fine	Coarse	Medium	Fine				
USDA	COBBLES	GRAVEL		SAND				SILT	CLAY	
				Very coarse	Coarse	Medium	Fine	Very fine		

d_{10} = **0.11**	d_{30} = **0.78**	d_{50} = **2.7**	d_{60} = **4.2**	C_u = **38**	C_c = **1.3**

SAMPLE NUMBER	SAMPLED DATE/TIME	ASTM CLASSIFICATION	USDA CLASSIFICATION
RE73-05-58879	**Not provided**	**Classification by ASTM 2487 requires Atterberg test**	**Sand** †

† Greater than 10% of sample is coarse material

Laboratory Tests and Methods

Tests and Methods

Dry Bulk Density:	ASTM D 4531
Moisture Content:	ASTM D 2216
Calculated Porosity:	Klute, A. 1986. Porosty. Chp.18-2.1, pp. 444-445, in A. Klute (ed.), Methods of Soil Analysis, American Society of Agronomy, Madison, WI
Particle Size Analysis:	ASTM D 422

Thursday, April 21, 2005

REQUEST NUMBER: 3168S

ANALYSIS TYPE: RAD

Los Alamos
NATIONAL LABORATORY

ATTN: Mark Loeb
Severn Trent Laboraties, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

SHIP DATE: 04/21/2005
REPORT DUE: 05/06/2005
TURN AROUND REQ'D: 15

RAD SCREENING: NOT REQ
COMMENTS:

These samples are on:

LANL Request Number: 3168S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
EPA:901.1	RE73-05-58920	3	W	04/20/2005	
HASL-300:AM-241	RE73-05-58920	3	W	04/20/2005	
HASL-300:ISOPU	RE73-05-58920	3	W	04/20/2005	
HASL-300:ISOU	RE73-05-58920	3	W	04/20/2005	
EPA:901.1	RE73-05-58921	3	W	04/20/2005	
HASL-300:AM-241	RE73-05-58921	3	W	04/20/2005	
HASL-300:ISOPU	RE73-05-58921	3	W	04/20/2005	
HASL-300:ISOU	RE73-05-58921	3	W	04/20/2005	

Final Page of REQUEST NUMBER 3168S

Thursday, April 21, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3168SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3168S

ANALYSIS TYPE: RAD

ATTN: Mark Loeb
Severn Trent Laboraties, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58920	3	1 GAL POLY	AM-241+ISOU+ISOPU+GS	HNO3	W
RE73-05-58921	3	1 GAL POLY	AM-241+ISOU+ISOPU+GS	HNO3	W

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3168S

Relinquished By:	Date	Time	Received By:	Date	Time
PRINTED NAME SIGNATURE	4/21/05	2:30	PRINTED NAME SIGNATURE		
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		

Received for DISPOSAL By:	Date	Time	Remarks:
PRINTED NAME SIGNATURE			

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

EVENT NAME: 73- Ash Pile rinsates

FIELD CHAIN OF CUSTODY

COC ID: 219932 Event ID:4832

SAMPLE ID: RE73-05-58920
SAMPLE ORDER MATRIX: Water
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y/N	REASON	SPECIAL INSTRUCTIONS
3	AM-241+ISOU+ISOPU+GS	1 GAL POLY	Nitric Acid	Y		
1	METALS-STL	1 L POLY	Nitric Acid	Y		
2	METALS_TCLP	1 L POLY	Nitric Acid	Y		

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.20.05 1520	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/20/05 15:20	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: 73- Ash Pile rinsates

COC ID: 219962 **Event ID:**4832

SAMPLE ID: RE73-05-58923 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Water **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
3	8082	1 L AMBER GLASS	Ice	Y		
4	8082	1 L AMBER GLASS	Ice	Y		
5	8260B	40 ML SEPTUM AMBER GLASS	Hydrochloric Acid (Hydrogen Chloride)	Y		
6	8260B	40 ML SEPTUM AMBER GLASS	Hydrochloric Acid (Hydrogen Chloride)	Y		
1	8270C	1 L AMBER GLASS	Ice	Y		
2	8270C	1 L AMBER GLASS	Ice	Y		

RELINQUISHED BY (printed name): [illegible] **(signature):**	**Date/Time:** 4.20.05 1520	**RELINQUISHED BY (printed name):** **(signature):**	**Date/Time:**
RECEIVED BY (printed name): [illegible] **(signature):**	**Date/Time:** 4/20/05 1520	**RECEIVED BY (printed name):** **(signature):**	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: 73- Ash Pile rinsates

COC ID: 219972 Event ID:4832

SAMPLE ID: RE73-05-58924
SAMPLE ORDER MATRIX: Water
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y/N	REASON	SPECIAL INSTRUCTIONS
13	8082	1 L AMBER GLASS	Ice	Y		
14	8082	1 L AMBER GLASS	Ice	Y		
15	8260B	40 ML SEPTUM AMBER GLASS	~~Hydrochloric Acid~~ UNP. ~~(Hydrogen Chloride)~~ KR	Y		
16	8260B	40 ML SEPTUM AMBER GLASS	~~Hydrochloric Acid~~ UNP. ~~(Hydrogen Chloride)~~ KR	Y		
11	8270C	1 L AMBER GLASS	Ice	Y		
12	8270C	1 L AMBER GLASS	Ice	Y		

RELINQUISHED BY (printed name): KR Leonard (signature):	Date/Time: 4.20.05 1520	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/20/05 1520	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: 73- Ash Pile rinsates

COC ID: 219942 Event ID:4832

SAMPLE ID: RE73-05-58921
ER TEAM LEADER: Terry Rust
DESTINATION: SMO
SAMPLE ORDER MATRIX: Water
FIELD TEAM LEADER: John Tymkowych
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
3	AM-241+ISOU+ISOPU+GS	1 GAL POLY	Nitric Acid	Y 1		
1	METALS-STL	1 L POLY	Nitric Acid	Y 1		
2	METALS_TCLP	1 L POLY	Nitric Acid	Y 1		

RELINQUISHED BY (printed name): F R Leonard (signature):	Date/Time: 4.20.05 1520	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): Josephine C S (signature):	Date/Time: 4/20/05 1520	RECEIVED BY (printed name): (signature):	Date/Time:

Rad Screening Data Release Form

The Following samples were received at the Field Support Facility (FSF) without screening data (list sample number):

These samples will not be shipped until radiological screening data documentation arrives at the FSF. I understand that it is my responsibility to ensure this information arrives at the FSF in a timely manner. If holding times are missed because screening data does not arrive, I will pick up the samples.

The following samples do not require rad screening data for the reasons stated (list sample numbers):

RF73-05-58920
58923
58921
58924

Reason: rinsate samples collected in clean area

Print Last Name LEONARD Signature [signature] Date 4/20/05

Data-Validation Cover Sheet

☐ Rejected Data

Section I

Request Number: 3168S Validation Date: 26-May-05 Lab Code: GEL

Contract Laboratory Name: _____

Validator: Clifford Deiner Organization: ENV-ECR

Analytical Suite (check all that apply):
☐ Volatile Organics
☐ Semivolatile Organics
☐ Organochlorine Pesticides/Polychlorinated Biphenyls
☐ High Explosives
☐ Inorganics
☒ Radiochemistry

Other (describe): _____

Section II—Completeness Check

Yes	No	n/a	(check one)	Yes	No	n/a	(check one)
☒	☐	☐	1. Chain-of-custody form(s)	☒	☐	☐	6. Raw/BSS data
☒	☐	☐	2. Case narrative	☒	☐	☐	7. Quality control forms
☒	☐	☐	3. Sample result forms	☒	☐	☐	8. Quantitation reports
☐	☐	☒	4. Sample chromatograms	☐	☐	☒	9. TICs forms
☐	☐	☒	5. Standard chromatograms	☐	☐	☒	10. TICs mass spectra

Identify any samples in the assigned Request Number that are missing:

_____ _____ _____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____ _____ _____

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

Am-241, Isotopic Plutonium, Isotopic Uranium:

Sample results were less than the MDC and were qualified U,R5. One U-234 sample result was less than 3x the TPU and was qualified U,R11. All other QCs were within acceptance limits.

Gamma Spec:

Sample results were less than the MDC and were qualified U,R5. All QCs were within acceptance limits.

Validator's signature: Clifford Deiner Date: 5-26-05

(Attach additional comment sheets as necessary.)

Attachment D: RAD Checklist

Yes	No	N/A	(check one)	Assign qualifier listed below if criteria = Yes	
				Detected analyte	Undetected analyte
☐	☒	☐	1. The MDC and/or TPU were not stated for each radionuclide in each batch for each sample.	(See note)[a]	(See note)[a]
☒	☐	☐	2. The sample result is less than or equal to the MDC.	U, R5	U, R5
☒	☐	☐	3. The sample result is less than or equal to three times the TPU calculation.	U, R11	N/A
☐	☒	☐	4. Required blank information is missing.	R, R4	R, R4
☐	☒	☐	5. The analyte detected is shown in the blank and sample result for analyte is less than or equal to the amount in blank.	U, R4a	N/A
☐	☒	☐	6. The duplicate analysis information is not present.	J, R7	UJ, R7
☐	☐	☒	7. The duplicate analysis was performed in lieu of a preparation duplicate.	J, R7a	N/A
☐	☐	☒	8. The DER for detected analytes is greater than but less than or equal to four.	J, R7b	N/A
☐	☐	☒	9. The DER for detected analytes is greater than four.	R, R7c	N/A
☐	☒	☐	10. The tracer/carrier information is not present.	R, R1	R, R1
☐	☒	☐	11. The tracer/carrier %R is greater than the UAL.	J+, R1d	N/A
☐	☒	☐	12. The tracer/carrier %R is less than 30 but greater than or equal to 10%.	J-, R1b	UJ, R1c
☐	☒	☐	13. The tracer/carrier %R is less than 10%.	R, R1a	R, R1a
☐	☒	☐	14. The LCS information is not present.	R, R6	R, R6
☐	☒	☐	15. The LCS %R is greater than 120%.	J+, R6a	N/A
☐	☒	☐	16. The LCS %R is less than 80 but greater than or equal to 10%.	J-, R6c	UJ, R6d
☐	☒	☐	17. The LCS %R is less than 10%.	R, R6b	R, R6b
☐	☐	☒	18. The matrix spike information is not present.	R, R3	R, R3
☐	☐	☒	19. The matrix spike %R is greater than 125%.	J+, R3c	N/A
☐	☐	☒	20. The matrix spike %R is less than 75% but greater than or equal to 10%.	J-, R3d	UJ, R3e
☐	☐	☒	21. The matrix spike %R is less than 10%.	R, R3a	R, R3b
☐	☒	☐	22. The sample was extracted after the appropriate holding time was exceeded.	J-, R9	UJ, R9
☐	☒	☐	23. The sample was extracted after a period double the appropriate holding time was exceeded.	R, R9a	R, R9a
☐	☒	☐	24. Other obvious data quality issues are identified.	__, R19	__, R19

CP

Gamma Spectroscopy Data-Validation Checklist

Yes	No	n/a	(check one)	Assign qualifier listed below if criteria = Yes	
				Detected analyte	Undetected analyte
☐	☒	☐	1. MDC and/or TPU were not stated for each radionuclide in each batch for each sample.	a	a
☒	☐	☐	2. Sample result is ≤MDC.	U, R5	U, R5
☐	☒	☐	3. Sample result is ≤3 times the TPU calculation.	U, R11	N/A
☐	☒	☐	4. Sample results are tentative because of spectral interference.	R, R5b	R, R5b
☐	☒	☐	5. Preparation/method blank is not reported.	R, R4	R, R4
☐	☒	☐	6. Analyte detected in blank and sample result for analyte ≤5x the amount in blank	U, R4a	N/A
☐	☒	☐	7. Duplicate analysis information is not present.	J, R7	UJ, R7
☐	☐	☒	8. DER for detected analytes is ≥2 but ≤4.	J, R7b	N/A
☐	☐	☒	9. DER for detected analytes is >4.	R, R7c	N/A
☐	☒	☐	10. Laboratory Control Sample (LCS) information is not present.	R, R6	R, R6
☐	☒	☐	11. LCS % recovery is >120%.	J+, R6a	N/A
☐	☒	☐	12. LCS % recovery is <80 but ≥10%.	J-, R6c	UJ, R6d
☐	☒	☐	13. LCS % recovery is <10%.	R, R6b	R, R6b
☐	☒	☐	14. Sample was extracted outside of the appropriate hold time.	J-, R9	UJ, R9
☐	☒	☐	15. Sample was extracted >2 times the appropriate holding time.	R, R9a	R, R9a
☐	☒	☐	16. Other obvious data quality issues identified.	__, R19	__, R19

[a] If the laboratory cannot provide the missing MDC, an estimated MDC can be calculated using 3 times the TPU.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58920

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D220279-001
Work Order: G81GW
Matrix: WATER

Date Collected: 04/20/05 0000
Date Received: 04/22/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Iso AMERICIUM (LONG CT) MAS & DOE MOD				**pCi/L**		**3006/RP-725**			
Americium 241 U,R5	-0.009	U	-0.014	0.056	0.025	04/27/05	05/02/05	5117071	84
Iso URANIUM (LONG CT) MAS & DOE MOD				**pCi/L**		**3050/RP-725**			
Uranium 234 U,R11	**0.068**		**0.026**	**0.042**	**0.011**	**04/27/05**	**05/02/05**	**5117073**	**78**
Uranium 235 U,R5	0.0	U	0.0	0.03	0.0	04/27/05	05/02/05	5117073	78
Uranium 238 U,R5	0.0009	U	0.012	0.055	0.019	04/27/05	05/02/05	5117073	78
Gamma Cs-137 & Hits by DOE RP-730 MOD				**pCi/L**		**RP-730 MOD**			
Americium 241 U,R5	-0.03	U	3.1	11	5.1	04/28/05	05/02/05	5118335	
Bismuth 211 (assumes	13	U	12	44	21	04/28/05	05/02/05	5118335	
Bismuth 214	4.5	U	4.2	16	7.6	04/28/05	05/02/05	5118335	
Cadmium 109	-46	U	27	86	41	04/28/05	05/02/05	5118335	
Cerium 139	-1.6	U	1.4	4.5	2.2	04/28/05	05/02/05	5118335	
Cesium 134	-4.6	U	1.9	5.9	2.7	04/28/05	05/02/05	5118335	
Cesium 137	-0.07	U	2.2	8.0	3.7	04/28/05	05/02/05	5118335	
Cobalt 60	-0.8	U	1.6	6.0	2.4	04/28/05	05/02/05	5118335	
Europium 152	-16	U	11	35	14	04/28/05	05/02/05	5118335	
Lead 212	-2.4	U	3.5	12	5.7	04/28/05	05/02/05	5118335	
Lead 214	5.3	U	3.9	15	6.9	04/28/05	05/02/05	5118335	
Mercury 203	-1.7	U	1.7	5.7	2.7	04/28/05	05/02/05	5118335	
Potassium 40	36	U	28	110	52	04/28/05	05/02/05	5118335	
Radium (226)	20	U	38	140	66	04/28/05	05/02/05	5118335	
Radium 228	13.6	U	7.0	30	13	04/28/05	05/02/05	5118335	
Radium 223 (assumes e	-4	U	18	63	30	04/28/05	05/02/05	5118335	
Radium 224	12	U	36	130	61	04/28/05	05/02/05	5118335	
Ruthenium 106	2	U	18	67	31	04/28/05	05/02/05	5118335	
Sodium 22	-2.0	U	2.3	8.2	3.6	04/28/05	05/02/05	5118335	
Strontium 85	-12.1	U	2.9	8.2	3.9	04/28/05	05/02/05	5118335	
Thallium 208	-3.4	U	2.1	7.2	3.3	04/28/05	05/02/05	5118335	
Thorium 227	-15	U	12	39	19	04/28/05	05/02/05	5118335	
Thorium 231	23	U	15	55	26	04/28/05	05/02/05	5118335	
Thorium 234	-26	U	35	120	58	04/28/05	05/02/05	5118335	
Tin 113	1.8	U	2.1	7.9	3.7	04/28/05	05/02/05	5118335	
Uranium 235	6	U	10	37	18	04/28/05	05/02/05	5118335	
Yttrium 88	1.9	U	2.0	9.0	3.8	04/28/05	05/02/05	5118335	
Iso PLUTONIUM (LONG CT) DOE A-01-R MOD				**pCi/L**		**A-01-R MOD**			
Plutonium 238 U,R5	0.007	U	0.013	0.045	0.018	05/02/05	05/05/05	5125141	82
Plutonium 239/40 U,R5	0.0050	U	0.0086	0.033	0.012	05/02/05	05/05/05	5125141	82

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58921

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D220279-002
Work Order: G81G8
Matrix: WATER

Date Collected: 04/20/05 0000
Date Received: 04/22/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Iso AMERICIUM (LONG CT) HAS & DOE MOD				pCi/L		3006/RP-725			
Americium 241 U, R5	0.010	U	0.013	0.047	0.020	04/27/05	05/02/05	5117071	77
Iso URANIUM (LONG CT) HAS & DOE MOD				pCi/L		3050/RP-725			
Uranium 234 U, R5	0.024	U	0.019	0.058	0.022	04/27/05	05/02/05	5117073	83
Uranium 235	0.0	U	0.0	0.03	0.0	04/27/05	05/02/05	5117073	83
Uranium 238	0.009	U	0.014	0.053	0.019	04/27/05	05/02/05	5117073	83
Gamma Cs-137 & Hits by DOE RP-730 MOD				pCi/L		RP-730 MOD			
Americium 241 U, R5	-1.2	U	2.9	9.9	4.7	04/28/05	05/02/05	5118335	
Bismuth 211 (assumes	-8	U	11	38	18	04/28/05	05/02/05	5118335	
Bismuth 214	12.0	U	4.2	17	7.9	04/28/05	05/02/05	5118335	
Cadmium 109	-8	U	22	77	37	04/28/05	05/02/05	5118335	
Cerium 139	0.8	U	1.1	4.0	1.9	04/28/05	05/02/05	5118335	
Cesium 134	-0.7	U	1.8	6.3	2.9	04/28/05	05/02/05	5118335	
Cesium 137	-2.5	U	2.5	9.3	4.4	04/28/05	05/02/05	5118335	
Cobalt 60	1.3	U	2.8	11	5.1	04/28/05	05/02/05	5118335	
Europium 152	17	U	10	45	20	04/28/05	05/02/05	5118335	
Lead 212	4.1	U	3.3	12	5.8	04/28/05	05/02/05	5118335	
Lead 214	-6.1	U	4.0	13	6.4	04/28/05	05/02/05	5118335	
Mercury 203	-1.3	U	1.5	5.2	2.5	04/28/05	05/02/05	5118335	
Potassium 40	70	U	26	110	51	04/28/05	05/02/05	5118335	
Radium (226)	20	U	35	130	61	04/28/05	05/02/05	5118335	
Radium 228	1.8	U	7.1	27	12	04/28/05	05/02/05	5118335	
Radium 223 (assumes e	20	U	16	59	29	04/28/05	05/02/05	5118335	
Radium 224	-99	U	45	110	51	04/28/05	05/02/05	5118335	
Ruthenium 106	5	U	16	60	27	04/28/05	05/02/05	5118335	
Sodium 22	3.1	U	2.4	9.8	4.4	04/28/05	05/02/05	5118335	
Strontium 85	-10.3	U	2.8	8.3	4.0	04/28/05	05/02/05	5118335	
Thallium 208	3.5	U	2.2	8.2	3.9	04/28/05	05/02/05	5118335	
Thorium 227	-27	U	12	37	18	04/28/05	05/02/05	5118335	
Thorium 231	6	U	11	41	19	04/28/05	05/02/05	5118335	
Thorium 234	-45	U	31	100	49	04/28/05	05/02/05	5118335	
Tin 113	0.09	U	2.0	7.2	3.4	04/28/05	05/02/05	5118335	
Uranium 235	2.6	U	8.7	31	15	04/28/05	05/02/05	5118335	
Yttrium 88	-4.0	U	1.9	5.0	1.8	04/28/05	05/02/05	5118335	
Iso PLUTONIUM (LONG CT) DOE A-01-R MOD				pCi/L		A-01-R MOD			
Plutonium 238 U, R5	0.0008	U	0.012	0.053	0.019	05/02/05	05/02/05	5125141	85
Plutonium 239/40 U, R5	0.0	U	0.0	0.05	0.02	05/02/05	05/02/05	5125141	85

CD

STL ST LOUIS
Thursday, April 21, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3168SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3168S

ANALYSIS TYPE: RAD

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58920	3	1 GAL POLY	AM-241+ISOU+ISOPU+GS	HNO3	W
RE73-05-58921	3	1 GAL POLY	AM-241+ISOU+ISOPU+GS	HNO3	W

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3168S Page 1

Relinquished By:	Date	Time	Received By:	Date	Time
PRINTED NAME SIGNATURE	4/21/05	2:30	Sue Wilson PRINTED NAME SIGNATURE	4.22.05	0900
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		

Received for DISPOSAL By:	Date	Time	Remarks:
PRINTED NAME SIGNATURE			

LOT #FED220279

Thursday, April 21, 2005

REQUEST NUMBER: 3168S

ANALYSIS TYPE: RAD

cer 6193

Los Alamos
NATIONAL LABORATORY

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

SHIP DATE: 04/21/2005
REPORT DUE: 05/06/2005
TURN AROUND REQ'D: 15

RAD SCREENING: NOT REQ
COMMENTS:

These samples are on:

LANL Request Number: 3168S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
EPA:901.1	RE73-05-58920	3	W	04/20/2005	
HASL-300:AM-241	RE73-05-58920	3	W	04/20/2005	
HASL-300:ISOPU	RE73-05-58920	3	W	04/20/2005	
HASL-300:ISOU	RE73-05-58920	3	W	04/20/2005	
EPA:901.1	RE73-05-58921	3	W	04/20/2005	
HASL-300:AM-241	RE73-05-58921	3	W	04/20/2005	
HASL-300:ISOPU	RE73-05-58921	3	W	04/20/2005	
HASL-300:ISOU	RE73-05-58921	3	W	04/20/2005	

Final Page of REQUEST NUMBER 3168S

DATA VALIDATION COVER SHEET (Example)

SECTION I.

REQUEST NUMBER: 31685 COST CODE: _____

VALIDATION DATE: _____

LAB NAME: STL LAB CODE: _____

VALIDATOR: _____ ORGANIZATION: _____

ANALYTICAL SUITE: ___ VOLATILES ___ HIGH EXPLOSIVES

___ SEMIVOLATILES ___ INORGANICS

___ PESTICIDES/AROCLORS ___ RADIOCHEMISTRY

OTHER (describe) _____

SECTION II. COMPLETENESS CHECKLIST

Item	Present? (Y/N/NA)	Item	Present? (Y/N/NA)
1. COC form(s)		2. Case Narrative	
3. Sample Results		4. Sample Chromatograms	
5. Standard Chromatograms		6. Quantitation Reports	
7. QC Forms			

Identify any samples in the assigned Request Number that are missing:

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

Comments: include information about requests to the laboratory and agreed upon date of resolution and lab contact: (Attach additional comment sheets as necessary)

_____

_____

_____

Signature/1st validation: _____ Date/1st validation: _____

Signature/2nd validation: _____ Date/2nd validation: _____

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Tel: 314 298 8566 Fax: 314 298 8757
www.stl-inc.com

RECD MAY 17 2005

ANALYTICAL REPORT

PROJECT NO. 3168S

Los Alamos Non-Rad

Lot #: F5D220279

Joylene Valdez or Keith Greene

Los Alamos National Laboratory
SMO TA-00 Bldg 1237
DP: 03U; MS: 707
Los Alamos, NM 87545

SEVERN TRENT LABORATORIES, INC.

Elaine Wild

Ed Kao
Project Manager

May 11, 2005

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GAMMA 38
URANIUM 145
PLUTONIUM 166
ALPHAVISION - APRIL 2005 187
CLIENT ANALYSIS SUMMARY 330
CLIENT CHAIN OF CUSTODY 332

TOTAL # OF PAGES IN PACKAGE 334

Case Narrative
LOT NUMBER: **F5D220279**
LANL Request Number: **3168S**

This report contains the analytical results for the two samples received under chain of custody number by STL St. Louis on April 22, 2005. These samples are associated with your Los Alamos Non-Rad project.

All applicable quality control procedures met method-specified acceptance criteria except as noted on the following page.

This report is incomplete without the case narrative. All chemical analysis results are based upon dry weight correction as required per the statement of work. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances

Sample Receiving

Samples were received ambient. Samples were received at a pH of 7. Samples were acidified with nitric acid and held 18 hours before releasing for analysis.

Gamma Spec Method RP-730

QC Batch: 5118335
The Method Blank shows no contamination below the reporting limit.

The LCS is in control for spike compounds.

The Batch QC Duplicate was performed on F5D220279-001. The RPD/RER values are inside stated limits.

The gamma Radium-226 is reported from 186.10 keV. U-235 has an energy line at 185.72 keV (abn. 54%). The presence of U-235 may cause a high bias in the Ra-226 results.

Actinides by Method A-01-R

Americium
QC Batch:5117071
The Method Blank shows no contamination below the reporting limit. Tracer recovery is within laboratory stated limits.

The LCS is in control for spike and tracer compounds.

The Batch QC Matrix Spike and Duplicate was performed on F5D220279-001. The Matrix Spike recoveries and Duplicate RPD/RER values are inside stated limits. Tracer recoveries are in control for both the MS and Duplicate.

Plutonium
QC Batch: 5125141
The Method Blank shows no contamination below the reporting limit. Tracer recovery is within laboratory stated limits.

The LCS is in control for spike and tracer compounds.

The Batch QC Matrix Spike and Duplicate was performed on F5D220279-001. The Matrix Spike recoveries and Duplicate RPD/RER values are inside stated limits. Tracer recoveries are in control for both the MS and Duplicate.

Uranium
QC Batch: 5117073
The Method Blank shows contamination below the reporting limit. Tracer recovery is within laboratory stated limits.

The LCS is in control for spike and tracer compounds.

The Batch QC Matrix Spike and Duplicate was performed on F5D2202279-001. The Matrix Spike recoveries and Duplicate RPD/RER values are inside stated limits. Tracer recoveries are in control for both the MS and Duplicate.

I certify that this data is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the signature on the front page, has authorized release of the data contained in this hardcopy.

METHODS SUMMARY

F5D220279

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Cs-137 & Hits By Gamma GAMMA SPEC MULTI ISO CAL	DOE RP-730 MOD	
Isotopic AM by Alpha Spec Alpha Spectroscopy	NAS/DOE 3006/RP	
Isotopic Plutonium by Alpha Spectroscopy	EML A-01-R MOD	
Isotopic U by Alpha Spec Alpha Spectroscopy	NAS/DOE 3050/RP	

References:

DOE "DOE METHODS FOR EVALUATING ENVIRONMENTAL AND WASTE MANAGEMENT SAMPLES" OCTOBER 1994 US DEPARTMENT OF ENERGY

EML "ENVIRONMENTAL MEASUREMENTS LABORATORY PROCEDURES MANUAL" HASL-300 28TH EDITION, VOLUME I and II DEPARTMENT OF ENERGY

NAS/DOE NATIONAL ACADEMY OF SCIENCES. "DOE METHODS FOR EVALUATING ENVIRONMENTL AND WASTE MANGEMENT SAMPLE" OCTOBER 1994 US DEPARTMENT OF ENERGY.

SAMPLE SUMMARY

F5D220279

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
G81GW	001	RE73-05-58920		
G81G8	002	RE73-05-58921	04/20/05	
			04/20/05	

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58920

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D220279-001
Work Order: G81GW
Matrix: WATER

Date Collected: 04/20/05 0000
Date Received: 04/22/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Iso AMERICIUM (LONG CT) HAS & DOE MOD				**pCi/L**		**3006/RP-725**			
Americium 241	-0.009	U	-0.014	0.056	0.025	04/27/05	05/02/05	5117071	84
Iso URANIUM (LONG CT) HAS & DOE MOD				**pCi/L**		**3050/RP-725**			
Uranium 234	**0.068**		**0.026**	**0.062**	**0.011**	**04/27/05**	**05/02/05**	**5117073**	**78**
Uranium 235	0.0	U	0.0	0.03	0.0	04/27/05	05/02/05	5117073	78
Uranium 238	0.0009	U	0.012	0.055	0.019	04/27/05	05/02/05	5117073	78
Gamma Cs-137 & Hits by DOE RP-730 MOD				**pCi/L**		**RP-730 MOD**			
Americium 241	-0.03	U	3.1	11	5.1	04/28/05	05/02/05	5118335	
Bismuth 211 (assumes	13	U	12	44	21	04/28/05	05/02/05	5118335	
Bismuth 214	4.5	U	4.2	16	7.6	04/28/05	05/02/05	5118335	
Cadmium 109	-46	U	27	86	41	04/28/05	05/02/05	5118335	
Cerium 139	-1.6	U	1.4	4.5	2.2	04/28/05	05/02/05	5118335	
Cesium 134	-4.6	U	1.9	5.9	2.7	04/28/05	05/02/05	5118335	
Cesium 137	-0.07	U	2.2	8.0	3.7	04/28/05	05/02/05	5118335	
Cobalt 60	-0.8	U	1.6	6.0	2.4	04/28/05	05/02/05	5118335	
Europium 152	-16	U	11	35	14	04/28/05	05/02/05	5118335	
Lead 212	-2.4	U	3.5	12	5.7	04/28/05	05/02/05	5118335	
Lead 214	5.3	U	3.9	15	6.9	04/28/05	05/02/05	5118335	
Mercury 203	-1.7	U	1.7	5.7	2.7	04/28/05	05/02/05	5118335	
Potassium 40	36	U	28	110	52	04/28/05	05/02/05	5118335	
Radium (226)	20	U	38	140	66	04/28/05	05/02/05	5118335	
Radium 228	13.6	U	7.0	30	13	04/28/05	05/02/05	5118335	
Radium 223 (assumes (	-4	U	18	63	30	04/28/05	05/02/05	5118335	
Radium 224	12	U	36	130	61	04/28/05	05/02/05	5118335	
Ruthenium 106	2	U	18	67	31	04/28/05	05/02/05	5118335	
Sodium 22	-2.0	U	2.3	8.2	3.6	04/28/05	05/02/05	5118335	
Strontium 85	-12.1	U	2.9	8.2	3.9	04/28/05	05/02/05	5118335	
Thallium 208	-3.4	U	2.1	7.2	3.3	04/28/05	05/02/05	5118335	
Thorium 227	-15	U	12	39	19	04/28/05	05/02/05	5118335	
Thorium 231	23	U	15	55	26	04/28/05	05/02/05	5118335	
Thorium 234	-26	U	35	120	58	04/28/05	05/02/05	5118335	
Tin 113	1.8	U	2.1	7.9	3.7	04/28/05	05/02/05	5118335	
Uranium 235	6	U	10	37	18	04/28/05	05/02/05	5118335	
Yttrium 88	1.9	U	2.0	9.0	3.8	04/28/05	05/02/05	5118335	
Iso PLUTONIUM (LONG CT) DOE A-01-R MOD				**pCi/L**		**A-01-R MOD**			
Plutonium 238	0.007	U	0.013	0.045	0.018	05/02/05	05/05/05	5125141	82
Plutonium 239/40	0.0050	U	0.0086	0.033	0.012	05/02/05	05/05/05	5125141	82

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC
U Result is less than the sample detection limit.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58920 DUP

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D220279-001X
Work Order: G81GW
Matrix: WATER

Date Collected: 04/20/05 0000
Date Received: 04/22/05 0900

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Mits by DOE RP-730 MOD				pCi/L		RP-730 MOD			
Americium 241	0.5	U	2.7	9.3	4.4	04/28/05	05/02/05	5118335	
Bismuth 211 (assumes	10	U	12	43	20	04/28/05	05/02/05	5118335	
Bismuth 214	4.4	U	4.0	15	7.2	04/28/05	05/02/05	5118335	
Cadmium 109	-8	U	23	80	38	04/28/05	05/02/05	5118335	
Cerium 139	0.6	U	1.2	4.3	2.1	04/28/05	05/02/05	5118335	
Cesium 134	-2.3	U	1.9	6.3	2.9	04/28/05	05/02/05	5118335	
Cesium 137	2.4	U	2.2	8.3	3.9	04/28/05	05/02/05	5118335	
Cobalt 60	3.3	U	2.3	9.6	4.3	04/28/05	05/02/05	5118335	
Europium 152	-3	U	12	45	20	04/28/05	05/02/05	5118335	
Lead 212	-1.5	U	3.1	11	5.2	04/28/05	05/02/05	5118335	
Lead 214	4.1	U	3.9	14	6.9	04/28/05	05/02/05	5118335	
Mercury 203	1	U	1.5	5.5	2.6	04/28/05	05/02/05	5118335	
Potassium 40	23	U	27	110	48	04/28/05	05/02/05	5118335	
Radium (226)	54	U	38	140	68	04/28/05	05/02/05	5118335	
Radium 228	7.0	U	7.2	28	13	04/28/05	05/02/05	5118335	
Radium 223 (assumes e	-28	U	16	51	24	04/28/05	05/02/05	5118335	
Radium 224	11	U	33	120	56	04/28/05	05/02/05	5118335	
Ruthenium 106	-30	U	19	63	29	04/28/05	05/02/05	5118335	
Sodium 22	0.5	U	2.4	9.0	4.0	04/28/05	05/02/05	5118335	
Strontium 85	-7.4	U	2.8	8.9	4.3	04/28/05	05/02/05	5118335	
Thallium 208	8.2	U	2.1	8.7	4.1	04/28/05	05/02/05	5118335	
Thorium 227	-19	U	11	38	18	04/28/05	05/02/05	5118335	
Thorium 231	13	U	13	47	23	04/28/05	05/02/05	5118335	
Thorium 234	25	U	33	120	60	04/28/05	05/02/05	5118335	
Tin 113	-3.5	U	2.0	6.3	2.9	04/28/05	05/02/05	5118335	
Uranium 235	9.2	U	9.3	33	16	04/28/05	05/02/05	5118335	
Yttrium 88	2.8	U	2.1	9.6	4.1	04/28/05	05/02/05	5118335	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC
U Result is less than the sample detection limit.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58921

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D220279-002
Work Order: G81G8
Matrix: WATER

Date Collected: 04/20/05 0000
Date Received: 04/22/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Iso AMERICIUM (LONG CT) HAS & DOE MOD				**pCi/L**		**3006/RP-725**			
Americium 241	0.010	U	0.013	0.047	0.020	04/27/05	05/02/05	5117071	77
Iso URANIUM (LONG CT) HAS & DOE MOD				**pCi/L**		**3050/RP-725**			
Uranium 234	0.024	U	0.019	0.058	0.022	04/27/05	05/02/05	5117073	83
Uranium 235	0.0	U	0.0	0.03	0.0	04/27/05	05/02/05	5117073	83
Uranium 238	0.009	U	0.014	0.053	0.019	04/27/05	05/02/05	5117073	83
Gamma Cs-137 & Hits by DOE RP-730 MOD				**pCi/L**		**RP-730 MOD**			
Americium 241	-1.2	U	2.9	9.9	4.7	04/28/05	05/02/05	5118335	
Bismuth 211 (assumes	-8	U	11	38	18	04/28/05	05/02/05	5118335	
Bismuth 214	12.0	U	4.2	17	7.9	04/28/05	05/02/05	5118335	
Cadmium 109	-8	U	22	77	37	04/28/05	05/02/05	5118335	
Cerium 139	0.8	U	1.1	4.0	1.9	04/28/05	05/02/05	5118335	
Cesium 134	-0.7	U	1.8	6.3	2.9	04/28/05	05/02/05	5118335	
Cesium 137	-2.5	U	2.5	9.3	4.4	04/28/05	05/02/05	5118335	
Cobalt 60	1.3	U	2.8	11	5.1	04/28/05	05/02/05	5118335	
Europium 152	17	U	10	45	20	04/28/05	05/02/05	5118335	
Lead 212	4.1	U	3.3	12	5.8	04/28/05	05/02/05	5118335	
Lead 214	-6.1	U	4.0	13	6.4	04/28/05	05/02/05	5118335	
Mercury 203	-1.3	U	1.5	5.2	2.5	04/28/05	05/02/05	5118335	
Potassium 40	70	U	26	110	51	04/28/05	05/02/05	5118335	
Radium (226)	20	U	35	130	61	04/28/05	05/02/05	5118335	
Radium 228	1.8	U	7.1	27	12	04/28/05	05/02/05	5118335	
Radium 223 (assumes e	20	U	16	59	29	04/28/05	05/02/05	5118335	
Radium 224	-99	U	45	110	51	04/28/05	05/02/05	5118335	
Ruthenium 106	5	U	16	60	27	04/28/05	05/02/05	5118335	
Sodium 22	3.1	U	2.4	9.8	4.4	04/28/05	05/02/05	5118335	
Strontium 85	-10.3	U	2.8	8.3	4.0	04/28/05	05/02/05	5118335	
Thallium 208	3.5	U	2.2	8.2	3.9	04/28/05	05/02/05	5118335	
Thorium 227	-27	U	12	37	18	04/28/05	05/02/05	5118335	
Thorium 231	6	U	11	41	19	04/28/05	05/02/05	5118335	
Thorium 234	-45	U	31	100	49	04/28/05	05/02/05	5118335	
Tin 113	0.09	U	2.0	7.2	3.4	04/28/05	05/02/05	5118335	
Uranium 235	2.6	U	8.7	31	15	04/28/05	05/02/05	5118335	
Yttrium 88	-4.0	U	1.9	5.0	1.8	04/28/05	05/02/05	5118335	
Iso PLUTONIUM (LONG CT) DOE A-01-R MOD				**pCi/L**		**A-01-R MOD**			
Plutonium 238	0.0008	U	0.012	0.053	0.019	05/02/05	05/02/05	5125141	85
Plutonium 239/40	0.0	U	0.0	0.05	0.02	05/02/05	05/02/05	5125141	85

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC
U Result is less than the sample detection limit.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58921 DUP

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D220279-002X
Work Order: G81G8
Matrix: WATER

Date Collected: 04/20/05 0000
Date Received: 04/22/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Iso PLUTONIUM (LONG CT) DOE A-01-R MOD				**pCi/L**		**A-01-R MOD**			
Plutonium 238	0.012	U	0.014	0.048	0.015	05/02/05	05/02/05	5125141	81
Plutonium 239/40	0.0	U	0.0	0.04	0.01	05/02/05	05/02/05	5125141	81

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

DUPLICATE EVALUATION REPORT

Severn Trent Laboratories - Radiochemistry

Client Lot ID: F5D220279
Matrix: WATER

Date Sampled: 04/20/05
Date Received: 04/22/05

Parameter	SAMPLE Result		Total Uncert. (1σ +/-)	% Yld	DUPLICATE Result		Total Uncert. (1 σ +/-)	% Yld	QC Sample ID Precision	
Iso PLUTONIUM (LONG CT) DOE A-01-R MOD				**pCi/L**	**A-01-R MOD**				**F5D220279-002**	
Plutonium 238	0.0008	U	0.012	85	0.012	U	0.014	81	0.2	RER
Plutonium 239/40	0.0	U	0.0	85	0.0	U	0.0	81	Erro	RER
	Batch #:		5125141 (Sample)		5125141 (Duplicate)					
Gamma Cs-137 & Hits by DOE RP-730 MOD				**pCi/L**	**RP-730 MOD**				**F5D220279-001**	
Americium 241	-0.03	U	3.1		0.5	U	2.7		0.1	RER
Bismuth 211 (assumes e	13	U	12		10	U	12		0.1	RER
Bismuth 214	**4.5**	U	**4.2**		**4.4**	U	**4.0**		0.01	RER
Cadmium 109	-46	U	27		-8	U	23		0.8	RER
Cerium 139	-1.6	U	1.4		0.6	U	1.2		0.9	RER
Cesium 134	-4.6	U	1.9		-2.3	U	1.9		0.6	RER
Cesium 137	-0.07	U	2.2		2.4	U	2.2		0.6	RER
Cobalt 60	-0.8	U	1.6		3.3	U	2.3		1	RER
Europium 152	-16	U	11		-3	U	12		0.6	RER
Lead 212	**-2.4**	U	**3.5**		-1.5	U	3.1		0.2	RER
Lead 214	**5.3**	U	**3.9**		**4.1**	U	**3.9**		0.1	RER
Mercury 203	-1.7	U	1.7		1	U	1.5		0.8	RER
Potassium 40	**36**	U	**28**		**23**	U	**27**		0.2	RER
Radium (226)	**20**	U	**38**		**54**	U	**38**		0.4	RER
Radium 223 (assumes eq	-4	U	18		-28	U	16		0.7	RER
Radium 224	12	U	36		11	U	33		0.02	RER
Radium 228	13.6	U	7.0		**7.0**	U	**7.2**		0.5	RER
Ruthenium 106	2	U	18		-30	U	19		0.9	RER
Sodium 22	-2.0	U	2.3		0.5	U	2.4		0.6	RER
Strontium 85	-12.1	U	2.9		-7.4	U	2.8		0.8	RER
Thallium 208	-3.4	U	2.1		8.2	U	2.1		3	RER
Thorium 227	-15	U	12		-19	U	11		0.2	RER
Thorium 231	23	U	15		13	U	13		0.4	RER
Thorium 234	**-26**	U	**35**		**25**	U	**33**		0.8	RER
Tin 113	1.8	U	2.1		-3.5	U	2.0		1	RER
Uranium 235	**6**	U	**10**		**9.2**	U	**9.3**		0.2	RER
Yttrium 88	1.9	U	2.0		2.8	U	2.1		0.2	RER
	Batch #:		5118335 (Sample)		5118335 (Duplicate)					

NOTE(S)

Data are incomplete without the case narrative.
Calculations are performed before rounding to avoid round-off error in calculated results

U Result is less than the sample detection limit.

MATRIX SPIKE REPORT

Severn Trent Laboratories - Radiochemistry

Client Lot Id: F5D220279 Date Sampled: 04/20/05
Matrix: WATER Date Received: 04/22/05

Parameter	Sample Result	Spike Amount	Spike Result	Total Uncert. (1σ +/-)	MDC	DLC	QC Sample ID Spike Yld.	%Rec	QC Control Limits
Iso AMERICIUM (LONG CT)	**MAS & DOE MOD**		**pCi/L**	**3006/RP-725**			**F5D220279-001**		
Americium 241	-0.009	3.86	3.36	0.16	0.04	0.02	84	88	(67 - 107)
	Batch #: 5117071			Analysis Date: 05/02/05					
Iso URANIUM (LONG CT)	**MAS & DOE MOD**		**pCi/L**	**3050/RP-725**			**F5D220279-001**		
Uranium 234	0.068	5.36	5.20	0.30	0.02	0.0	83	96	(77 - 109)
Uranium 238	0.0009	5.36	5.46	0.31	0.04	0.01	83	102	(70 - 130)
	Batch #: 5117073			Analysis Date: 05/02/05					
Iso PLUTONIUM (LONG CT)	**DOE A-01-R MOD**		**pCi/L**	**A-01-R MOD**			**F5D220279-001**		
Plutonium 238	0.007	1.49	1.48	0.13	0.05	0.02	89	99	(50 - 150)
Plutonium 239/40	0.0050	1.44	1.40	0.12	0.04	0.01	89	97	(50 - 150)
	Batch #: 5125141			Analysis Date: 05/02/05					

NOTE(S)

Data are incomplete without the case narrative.

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

Severn Trent Laboratories - Radiochemistry

Client Lot ID: F5D220279
Matrix: WATER

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Lab Sample ID Batch #	Yld %
Iso AMERICIUM (LONG CT) HAS & DOE MOD			**pCi/L**	**3006/RP-725**				**F5D270000-071B**	
Americium 241	0.0115	U	0.0084	0.026	0.0094	04/27/05	05/02/05	5117071	87
Iso URANIUM (LONG CT) HAS & DOE MOD			**pCi/L**	**3050/RP-725**				**F5D270000-073B**	
Uranium 234	0.014	U	0.013	0.040	0.011	04/27/05	05/02/05	5117073	84
Uranium 235	0.010	U	0.015	0.028	0.0	04/27/05	05/02/05	5117073	84
Uranium 238	0.017	U	0.015	0.023	0.0	04/27/05	05/02/05	5117073	84
Gamma Cs-137 & Nits by DOE RP-730 MOD			**pCi/L**	**RP-730 MOD**				**F5D280000-335B**	
Americium 241	7.0	U	2.6	9.7	4.6	04/28/05	05/02/05	5118335	
Bismuth 211 (assumes	22	U	12	45	21	04/28/05	05/02/05	5118335	
Bismuth 214	1.7	U	4.5	18	8.3	04/28/05	05/02/05	5118335	
Cadmium 109	64	U	24	91	44	04/28/05	05/02/05	5118335	
Cerium 139	-0.6	U	1.3	4.3	2.0	04/28/05	05/02/05	5118335	
Cesium 134	-4.3	U	1.7	5.2	2.3	04/28/05	05/02/05	5118335	
Cesium 137	3.3	U	2.0	8.2	3.7	04/28/05	05/02/05	5118335	
Cobalt 60	2.2	U	2.5	10	4.5	04/28/05	05/02/05	5118335	
Europium 152	4	U	10	41	18	04/28/05	05/02/05	5118335	
Lead 212	-2.7	U	3.2	11	5.4	04/28/05	05/02/05	5118335	
Lead 214	8.2	U	3.8	15	7.0	04/28/05	05/02/05	5118335	
Mercury 203	0.8	U	1.5	5.5	2.6	04/28/05	05/02/05	5118335	
Potassium 40	-6	U	29	120	52	04/28/05	05/02/05	5118335	
Radium (226)	-31	U	36	130	62	04/28/05	05/02/05	5118335	
Radium 228	10.4	U	6.4	27	12	04/28/05	05/02/05	5118335	
Radium 223 (assumes ε	-3	U	17	59	28	04/28/05	05/02/05	5118335	
Radium 224	-96	U	44	110	52	04/28/05	05/02/05	5118335	
Ruthenium 106	6	U	16	62	28	04/28/05	05/02/05	5118335	
Sodium 22	-4.9	U	2.4	7.1	3.0	04/28/05	05/02/05	5118335	
Strontium 85	-11.6	U	2.8	7.7	3.6	04/28/05	05/02/05	5118335	
Thallium 208	1.8	U	2.0	7.8	3.6	04/28/05	05/02/05	5118335	
Thorium 227	-22	U	11	36	17	04/28/05	05/02/05	5118335	
Thorium 231	45	U	14	54	26	04/28/05	05/02/05	5118335	
Thorium 234	49	U	34	130	61	04/28/05	05/02/05	5118335	
Tin 113	1.3	U	2.1	7.9	3.7	04/28/05	05/02/05	5118335	
Uranium 235	-9.0	U	9.5	32	15	04/28/05	05/02/05	5118335	
Yttrium 88	-1.2	U	2.2	8.1	3.3	04/28/05	05/02/05	5118335	
Iso PLUTONIUM (LONG CT) DOE A-01-R MOD			**pCi/L**	**A-01-R MOD**				**F5E050000-141B**	
Plutonium 238	0.011	U	0.013	0.046	0.015	05/02/05	05/02/05	5125141	85
Plutonium 239/40	0.0	U	0.0	0.02	0.0	05/02/05	05/02/05	5125141	85

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined using instrument performance only
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Laboratory Control Sample Report

Severn Trent Laboratories - Radiochemistry

Client Lot ID: F5D220279
Matrix: WATER

Parameter	Spike Amount	Result	Total Uncert. (1 σ +/-)	MDC	% Yld	% Rec	Lab Sample ID QC Control Limits
Iso AMERICIUM (LONG CT) MAS & DOE MOD			**pCi/L**	**3006/RP-725**			**F5D270000-071C**
Americium 241	3.86	3.23	0.18	0.04	54	84	(67 - 107)
	Batch #:	5117071		**Analysis Date:**	05/02/05		
Iso URANIUM (LONG CT) MAS & DOE MOD			**pCi/L**	**3050/RP-725**			**F5D270000-073C**
Uranium 234	5.36	5.42	0.31	0.02	86	101	(77 - 109)
Uranium 238	5.36	5.77	0.33	0.02	86	107	(70 - 130)
	Batch #:	5117073		**Analysis Date:**	05/02/05		
Gamma Cs-137 & Hits by DOE RP-730 MOD			**pCi/L**	**RP-730 MOD**			**F5D280000-335C**
Americium 241	60700	59100	3600	300		97	(90 - 110)
Cesium 137	24400	23500	1400	100		96	(90 - 110)
Cobalt 60	40300	38500	2100	100		95	(90 - 110)
	Batch #:	5118335		**Analysis Date:**	04/30/05		
Iso PLUTONIUM (LONG CT) DOE A-01-R MOD			**pCi/L**	**A-01-R MOD**			**F5E050000-141C**
Plutonium 238	1.49	1.54	0.13	0.04	89	103	(79 - 119)
Plutonium 239/40	1.44	1.62	0.14	0.04	89	113	(59 - 131)
	Batch #:	5125141		**Analysis Date:**	05/02/05		

NOTE(S)

MDC is determined by instrument performance only
Calculations are performed before rounding to avoid round-off error in calculated results

SEVERN TRENT STL

Alpha Spectroscopy Americium

SEVERN TRENT STL

ALPHA SPECTROSCOPY

Data Reports
Results Reports
Channel by Channel Report

Calibration Data

Instrument Checks

Batch Summary Sheets
Run Logs
Yield Summary(ies)
Batch Yield Plot(s)

Raw Data
Prep Data Sheet(s)
QC Acceptance Sheet(s)
LCS Standard Sheet(s)
Tracer Standard Sheets

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:51:43PM 5/3/2005

Analyst: 60040

Sample

Sample Name: F5D220279-001
SampleType: Sample
WRKNO: G81GW1AA
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Volume : 1.0000L
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5117071
:
Description:

Client Name: Undefined
Client Contact:

Tracer

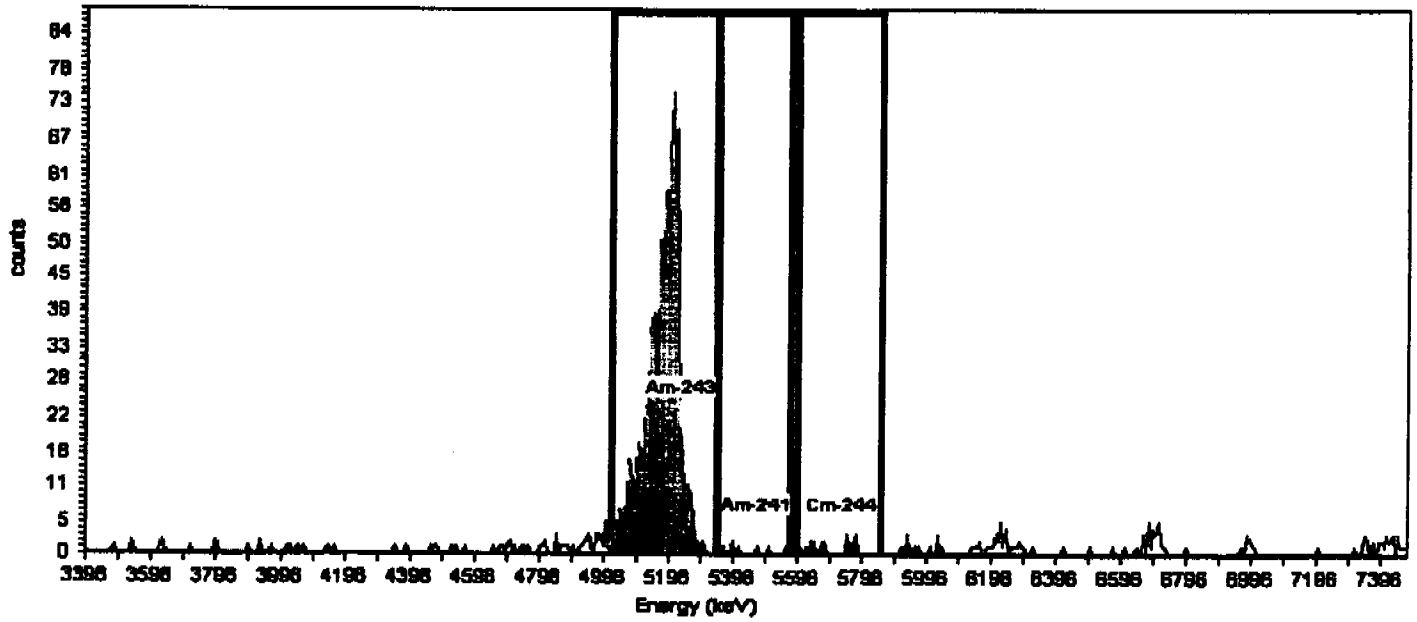
Tracer Name: Am243_Rad04-0092
Tracer Activity: 68.50 DPM/mL x (Vol.)0.10 mL = 6.85 DPM
Tracer Ref. Date: 4/23/2004 12:00:37PM

Tracer Nuclide: Am-243
Tracer Recovery: 84.30%

Acquisition

Detector: AV2
Serial Number: 41-158W7
Acquisition Start Date: 5/2/2005 2:59:52PM
Live Time: 600.00 min.
Real Time: 600.01 min.
Background Date: 4/26/2005 10:37:38AM
Background Info: Sample: AV2; Det: AV2; Spectrum #1; Apr-26-2005 10:37

Calibration Name: April2005_AV2
Calibration Date: 4/28/2005 7:27:46PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.31% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = AmROI
Decay Correction: 5/2/2005 2:58:37PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Americium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/L	1.00Sigma TPU pCi/L	Critical Level pCi/L	MDA pCi/L
Am-243	5232.950	5015.156	5341.847	81.430	100.0	913.00	1.5000	912	2.601E+000	8.738E-002	9.022E-003	2.720E-002
Am-241	5465.263	5349.106	5574.160	179.256	98.0	7.00	9.7500	-3	-9.498E-003	-1.414E-002	2.347E-002	5.629E-002
Cm-244	5733.876	5595.940	5857.292	138.117	100.0	22.00	17.2500	5	1.608E-002	2.121E-002	3.059E-002	7.035E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:52:29PM 5/3/2005

Analyst: 60040

Sample

Sample Name: F5D220279-001S
SampleType: Sample
WRKNO: G81GW1AF
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Volume : 1.0000L
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5117071
:
Description:

Client Name: Undefined
Client Contact:

Tracer

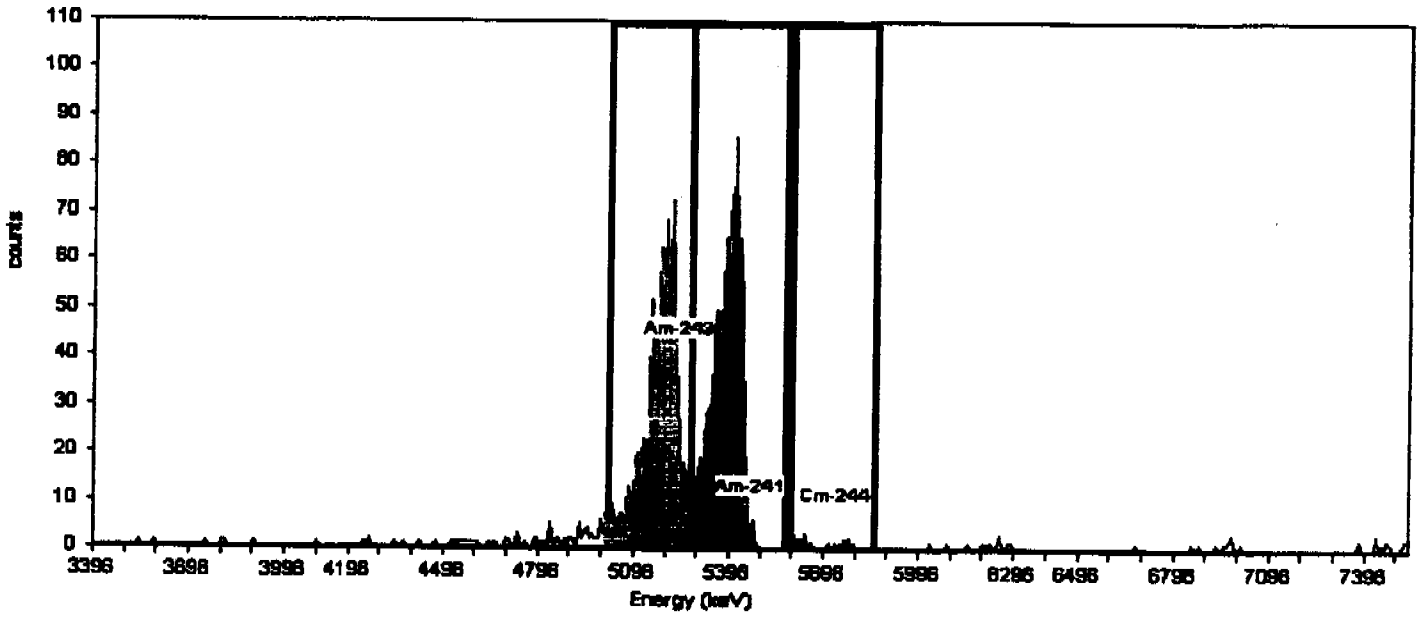
Tracer Name: Am243_Rad04-0092
Tracer Activity: 68.50 DPM/mL x (Vol.)0.10 mL = 6.85 DPM
Tracer Ref. Date: 4/23/2004 12:00:37PM

Tracer Nuclide: Am-243
Tracer Recovery: 84.06%

Acquisition

Detector: AV3
Serial Number: 41-158X5
Acquisition Start Date: 5/2/2005 2:59:54PM
Live Time: 600.00 min.
Real Time: 600.01 min.
Background Date: 4/26/2005 10:37:40AM
Background Info: Sample: AV3; Det: AV3; Spectrum #1; Apr-26-2005 10:37

Calibration Name: April2005_AV3
Calibration Date: 4/28/2005 7:27:53PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.19% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = AmROI
Decay Correction: 5/2/2005 2:58:37PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Americium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/L	1.00Sigma TPU pCi/L	Critical Level pCi/L	MDA pCi/L
Am-243	5232.950	5015.156	5276.509	107.568	100.0	940.00	0.7500	939	2.594E+000	8.585E-002	6.191E-003	2.127E-002
Am-241	5465.263	5276.509	5574.160	94.110	98.0	1,010.00	6.0000	1,004	3.365E+000	1.554E-001	1.787E-002	4.480E-002
Cm-244	5733.876	5595.940	5857.292	46.245	100.0	24.00	22.5000	2	4.927E-003	2.240E-002	3.391E-002	7.670E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 3:52:45PM 5/3/2005

Sample

Sample Name: F5D220279-002
SampleType: Sample
WRKNO: G81G81AA
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Volume : 1.0000L
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5117071
:
Description:

Client Name: Undefined
Client Contact:

Tracer

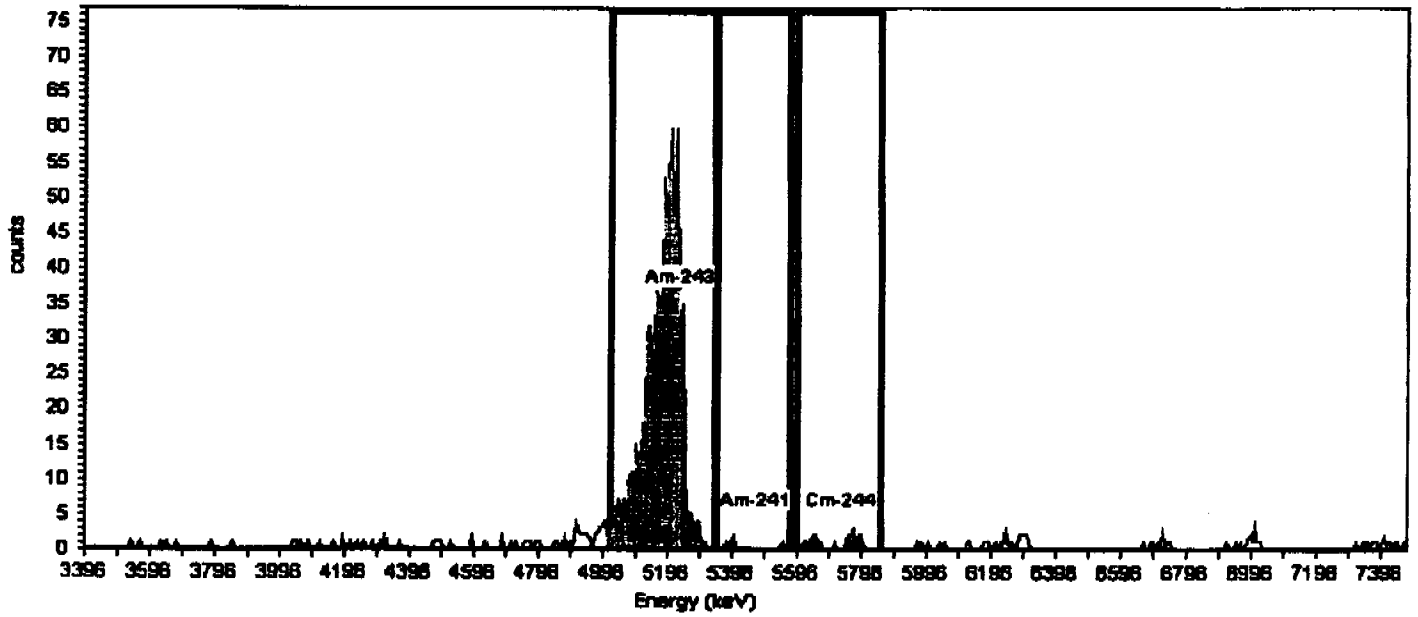
Tracer Name: Am243_Rad04-0092
Tracer Activity: 68.50 DPM/mL x (Vol.)0.10 mL = 6.85 DPM
Tracer Ref. Date: 4/23/2004 12:00:37PM

Tracer Nuclide: Am-243
Tracer Recovery: 77.05%

Acquisition

Detector: AV4
Serial Number: 41-172B5
Acquisition Start Date: 5/2/2005 2:59:56PM
Live Time: 600.00 min.
Real Time: 600.01 min.
Background Date: 4/26/2005 10:37:42AM
Background Info: Sample: AV4; Det: AV4; Spectrum #1; Apr-26-2005 10:37

Calibration Name: April2005_AV4
Calibration Date: 4/28/2005 7:28:00PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.07% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = AmROI
Decay Correction: 5/2/2005 2:58:37PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Americium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/L	1.00Sigma TPU pCi/L	Critical Level pCi/L	MDA pCi/L
Am-243	5232.950	5015.156	5341.847	100.203	100.0	858.00	0.7500	857	2.377E+000	8.216E-002	6.783E-003	2.331E-002
Am-241	5465.263	5349.106	5574.160	162.630	98.0	8.00	5.2500	3	1.010E-002	1.337E-002	1.831E-002	4.656E-002
Cm-244	5733.876	5595.940	5857.292	167.259	100.0	22.00	23.2500	-1	-4.499E-003	-2.421E-002	3.776E-002	8.527E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:40:31AM 5/4/2005

Analyst: 60040

Sample

Sample Name: F5D220279-002X
SampleType: Sample
WRKNO: G81G81AG
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Volume : 1.0000L
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5117071
:
Description:

Client Name: Undefined
Client Contact:

Tracer

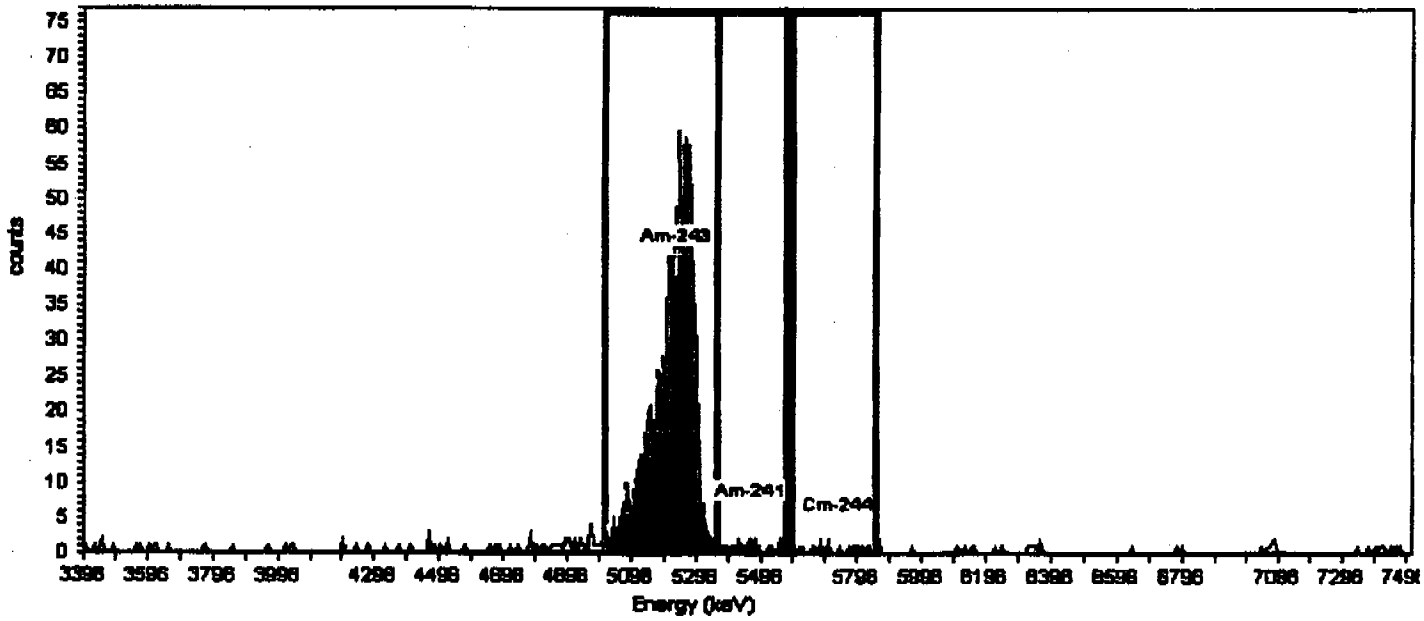
Tracer Name: Am243_Rad04-0092
Tracer Activity: 68.50 DPM/mL x (Vol.)0.10 mL = 6.85 DPM
Tracer Ref. Date: 4/23/2004 12:00:37PM

Tracer Nuclide: Am-243
Tracer Recovery: 85.10%

Acquisition

Detector: AV6
Serial Number:
Acquisition Start Date: 5/2/2005 2:59:58PM
Live Time: 600.00 min.
Real Time: 600.01 min.
Background Date: 4/26/2005 10:37:43AM
Background Info: Sample: AV6; Det: AV6; Spectrum #1; Apr-26-2005 10:37

Calibration Name: April2005_AV6a
Calibration Date: 4/30/2005 1:01:34AM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.71% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = AmROI
Decay Correction: 5/2/2005 2:58:37PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Americium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/L	1.00Sigma TPU pCi/L	Critical Level pCi/L	MDA pCi/L
Am-243	5232.950	5015.156	5363.626	102.180	100.0	953.00	18.7500	934	2.626E+000	8.869E-002	3.112E-002	7.118E-002
Am-241	5465.263	5363.626	5574.160	96.286	98.0	22.00	12.7500	9	3.117E-002	1.989E-002	2.618E-002	6.149E-002
Cm-244	5733.876	5595.940	5857.292	.330	100.0	18.00	22.5000	-5	-1.486E-002	-2.102E-002	3.409E-002	7.711E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:40:02AM 5/4/2005

Analyst: 60040

Sample

Sample Name: F5D270000-071B
SampleType: Blank
WRKNO: G88V31AA
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Volume : 1.0000L
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5117071
:
Description:

Client Name: Undefined
Client Contact:

Tracer

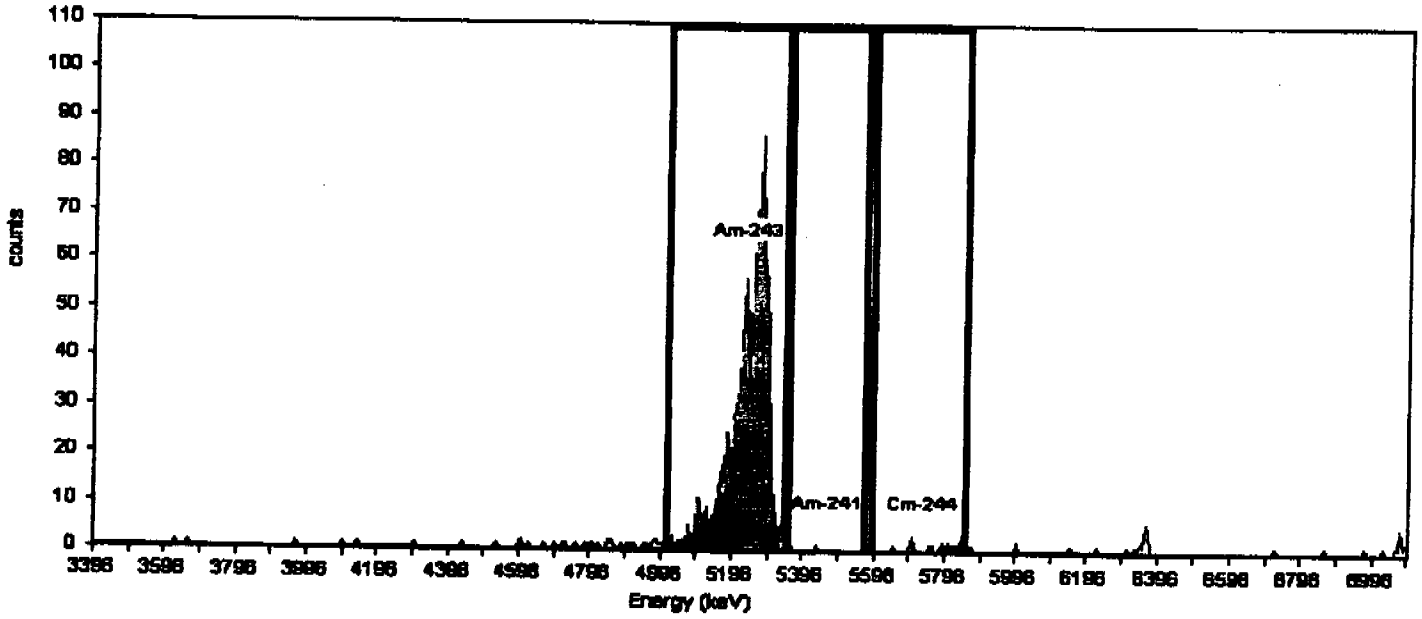
Tracer Name: Am243_Rad04-0092
Tracer Activity: 68.50 DPM/mL x (Vol.)0.10 mL = 6.85 DPM
Tracer Ref. Date: 4/23/2004 12:00:37PM

Tracer Nuclide: Am-243
Tracer Recovery: 87.04%

Acquisition

Detector: AV10
Serial Number: 41-172R3
Acquisition Start Date: 5/2/2005 3:00:05PM
Live Time: 600.00 min.
Real Time: 600.01 min.
Background Date: 4/28/2005 9:01:10AM
Background Info: Sample: AV10; Det: AV10; Spectrum #1; Apr-28-2005 09:01

Calibration Name: April2005_AV10
Calibration Date: 4/29/2005 10:59:11AM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.76% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = AmROI
Decay Correction: 5/2/2005 2:58:37PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Americium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/L	1.00Sigma TPU pCi/L	Critical Level pCi/L	MDA pCi/L
Am-243	5232.950	5015.156	5356.366	83.161	100.0	958.00	0.7500	957	2.686E+000	8.800E-002	6.075E-003	2.087E-002
Am-241	5465.263	5349.106	5574.160	.000	98.0	5.00	1.5000	4	1.151E-002	8.394E-003	8.765E-003	2.643E-002
Cm-244	5733.876	5595.940	5857.292	38.552	100.0	22.00	21.0000	1	3.223E-003	2.114E-002	3.214E-002	7.300E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:59:50AM 5/3/2005

Analyst: 60040

Sample

Sample Name: F5D270000-071C
SampleType: Control
WRKNO: G88V31AC
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Volume : 1.0000L
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5117071
:
Description:

Client Name: Undefined
Client Contact:

Tracer

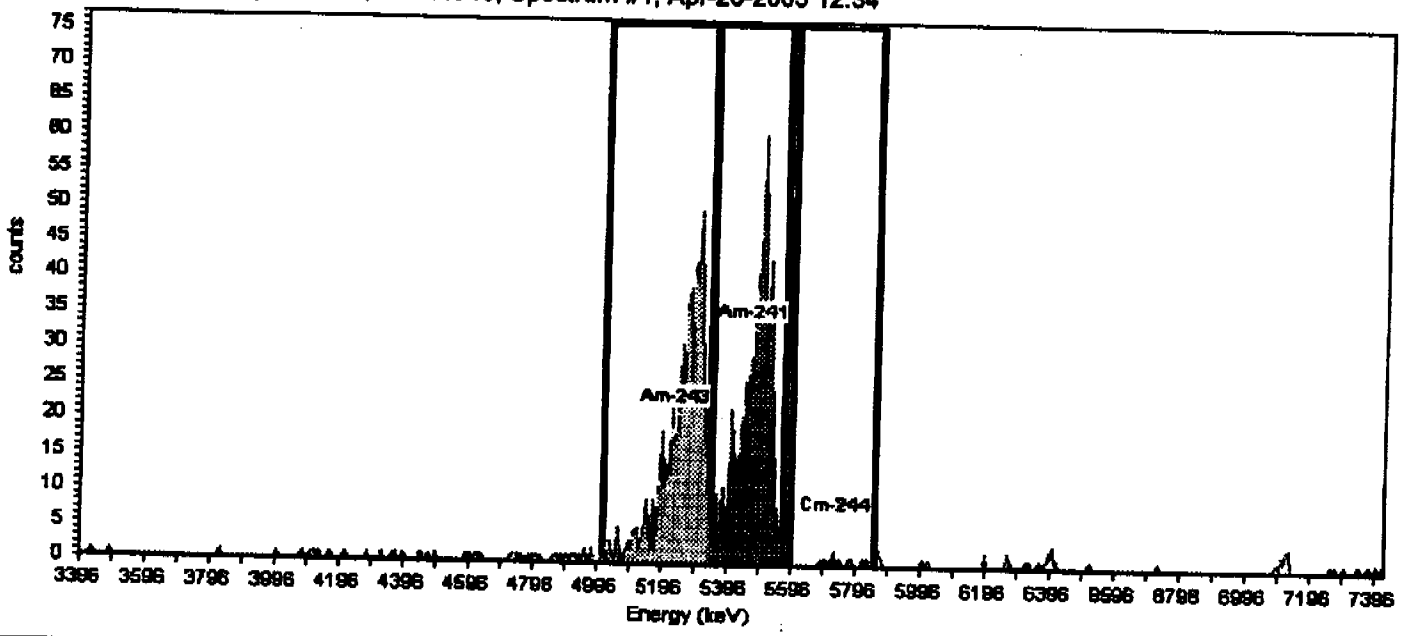
Tracer Name: Am243_Rad04-0092
Tracer Activity: 68.50 DPM/mL x (Vol.)0.10 mL = 6.85 DPM
Tracer Ref. Date: 4/23/2004 12:00:37PM

Tracer Nuclide: Am-243
Tracer Recovery: 54.27%

Acquisition

Detector: AV45
Serial Number: AV45
Acquisition Start Date: 5/2/2005 3:00:35PM
Live Time: 600.00 min.
Real Time: 600.00 min.
Background Date: 4/26/2005 12:34:24PM
Background Info: Sample: AV45; Det: AV45; Spectrum #1; Apr-26-2005 12:34

Calibration Name: April2005_AV45
Calibration Date: 4/29/2005 9:26:13PM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 27.85% +/- 0.30% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = AmROI
Decay Correction: 5/2/2005 2:58:37PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Americium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/L	2.00Sigma TPU pCi/L	Critical Level pCi/L	MDA pCi/L
Am-243	5232.950	5015.156	5341.847	26.102	100.0	621.00	0.0000	621	1.674E+000	1.357E-001	0.000E+000	1.345E-002
Am-241	5465.263	5349.106	5574.160	63.349	96.0	638.00	1.5000	637	3.227E+000	3.678E-001	1.351E-002	4.074E-002
Cm-244	5733.876	5595.940	5857.292	133.903	100.0	11.00	6.7500	4	2.112E-002	4.190E-002	2.809E-002	6.962E-002

SEVERN TRENT STL

DAILY PULSERS

Daily Pulser Check - Severn Trent Lab

Pulser Date: 5/2/2005

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria	P/F	FWHM (keV) Result	FWHM (keV) Criteria	P/F	Pulser Center Result	Pulser Center Criteria	P/F	Energy (keV) Result	Energy (keV) Criteria	P/F
AV1	05/02/2005 7:36	7364	7218.7 +/-5%	Pass	14.2	5-50	Pass	227.1	229.0 +/-5%	Pass	5037	5051.1 +/-25%	Pass
AV2	05/02/2005 7:36	7364	7468.7 +/-5%	Pass	14.0	5-50	Pass	227.0	222.9 +/-5%	Pass	5037	5007.5 +/-25%	Pass
AV3	05/02/2005 7:36	7365	7484.9 +/-5%	Pass	13.7	5-50	Pass	229.1	225.9 +/-5%	Pass	5052	5028.8 +/-25%	Pass
AV4	05/02/2005 7:36	7362	7413.7 +/-5%	Pass	13.8	5-50	Pass	226.1	224.9 +/-5%	Pass	5030	5021.6 +/-25%	Pass
AV4	05/02/2005 7:36	7362	7413.7 +/-5%	Pass	13.8	5-50	Pass	226.1	224.9 +/-5%	Pass	5030	5021.6 +/-25%	Pass
AV6	05/02/2005 7:36	7355	7476.7 +/-5%	Pass	14.3	5-50	Pass	226.9	224.0 +/-5%	Pass	5036	5015.3 +/-25%	Pass
AV7	05/02/2005 6:46	7313	7477.0 +/-5%	Pass	15.7	5-50	Pass	228.2	224.9 +/-5%	Pass	5046	5021.9 +/-25%	Pass
AV8	05/02/2005 6:46	7364	7327.4 +/-5%	Pass	13.3	5-50	Pass	228.0	228.0 +/-5%	Pass	5044	5044.6 +/-25%	Pass
AV9	05/02/2005 6:46	7669	7519.3 +/-5%	Pass	16.1	5-50	Pass	221.0	227.9 +/-5%	Pass	4994	5043.3 +/-25%	Pass
AV10	05/02/2005 6:46	7717	7749.6 +/-5%	Pass	15.4	5-50	Pass	219.0	226.1 +/-5%	Pass	4979	5030.3 +/-25%	Pass
AV11	05/02/2005 6:46	7719	7666.2 +/-5%	Pass	14.0	5-50	Pass	222.9	225.0 +/-5%	Pass	5007	5022.1 +/-25%	Pass
AV12	05/02/2005 6:46	7706	7588.7 +/-5%	Pass	14.8	5-50	Pass	229.1	230.0 +/-5%	Pass	5052	5058.4 +/-25%	Pass
AV13	05/02/2005 6:46	7678	7584.6 +/-5%	Pass	17.0	5-50	Pass	227.0	228.0 +/-5%	Pass	5037	5044.1 +/-25%	Pass
AV15	05/02/2005 7:35	7615	7770.5 +/-5%	Pass	14.1	5-50	Pass	227.0	226.9 +/-5%	Pass	5037	5036.6 +/-25%	Pass
AV16	05/02/2005 7:36	7436	7456.0 +/-5%	Pass	12.5	5-50	Pass	225.0	226.9 +/-5%	Pass	5022	5036.2 +/-25%	Pass
AV17	05/02/2005 7:36	7617	7619.1 +/-5%	Pass	14.2	5-50	Pass	225.9	229.9 +/-5%	Pass	5029	5058.3 +/-25%	Pass
AV18	05/02/2005 7:36	7618	7714.5 +/-5%	Pass	13.8	5-50	Pass	228.0	226.9 +/-5%	Pass	5044	5036.4 +/-25%	Pass
AV19	05/02/2005 6:46	7533	7269.8 +/-5%	Pass	12.6	5-50	Pass	222.0	227.7 +/-5%	Pass	5000	5041.9 +/-25%	Pass
AV20	05/02/2005 6:46	7732	7503.6 +/-5%	Pass	13.2	5-50	Pass	227.0	226.0 +/-5%	Pass	5037	5029.9 +/-25%	Pass
AV21	05/02/2005 6:46	7716	7550.9 +/-5%	Pass	13.3	5-50	Pass	225.0	226.0 +/-5%	Pass	5022	5029.6 +/-25%	Pass
AV22	05/02/2005 6:46	7708	7691.4 +/-5%	Pass	14.7	5-50	Pass	224.1	225.0 +/-5%	Pass	5016	5022.4 +/-25%	Pass
AV23	05/02/2005 6:47	7710	7665.3 +/-5%	Pass	14.5	5-50	Pass	229.9	229.8 +/-5%	Pass	5058	5057.0 +/-25%	Pass
AV24	05/02/2005 6:47	7717	7354.0 +/-5%	Pass	14.7	5-50	Pass	228.9	226.9 +/-5%	Pass	5051	5036.4 +/-25%	Pass
AV25	05/02/2005 6:47	5157	5122.1 +/-5%	Pass	14.8	5-50	Pass	225.1	224.0 +/-5%	Pass	5023	5015.1 +/-25%	Pass
AV26	05/02/2005 6:47	5079	5069.9 +/-5%	Pass	19.8	5-50	Pass	224.0	226.9 +/-5%	Pass	5015	5036.5 +/-25%	Pass
AV27	05/02/2005 6:47	5051	4919.2 +/-5%	Pass	14.9	5-50	Pass	223.2	225.0 +/-5%	Pass	5009	5022.5 +/-25%	Pass
AV29	05/02/2005 6:47	5023	5005.4 +/-5%	Pass	26.7	5-50	Pass	225.0	223.8 +/-5%	Pass	5022	5014.0 +/-25%	Pass
AV29	05/02/2005 6:47	5023	5047.7 +/-5%	Pass	26.7	5-50	Pass	225.0	223.3 +/-5%	Pass	5022	5010.1 +/-25%	Pass
AV33	05/02/2005 6:46	5057	4977.0 +/-5%	Pass	11.3	5-50	Pass	209.0	218.0 +/-5%	Pass	4906	4971.5 +/-25%	Pass
AV34	05/02/2005 6:46	5181	5045.5 +/-5%	Pass	17.8	5-50	Pass	224.0	219.0 +/-5%	Pass	5015	4978.8 +/-25%	Pass
AV35	05/02/2005 6:46	4869	4932.6 +/-5%	Pass	12.8	5-50	Pass	274.9	275.0 +/-5%	Pass	5385	5385.6 +/-25%	Pass
AV37	05/02/2005 6:46	4994	5082.9 +/-5%	Pass	20.4	5-50	Pass	236.1	236.1 +/-5%	Pass	5103	5103.2 +/-25%	Pass

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria		Gross Counts P/F	FWHM (keV) Result	FWHM (keV) Criteria	FWHM (keV) P/F	Pulser Center Result	Pulser Center Criteria		Pulser Center P/F	Energy (keV) Result	Energy (keV) Criteria		Energy (keV) P/F
AV38	05/02/2005 6:46	5328	5419.4	+/-5%	Pass	17.2	5-50	Pass	219.0	217.9	+/-5%	Pass	4979	4448.6	+/-25%	Pass
AV39	05/02/2005 6:46	5267	5316.2	+/-5%	Pass	14.9	5-50	Pass	227.8	224.2	+/-5%	Pass	5043	5016.3	+/-25%	Pass
AV40	05/02/2005 6:46	4892	4755.8	+/-5%	Pass	13.1	5-50	Pass	227.0	226.0	+/-5%	Pass	5037	5029.5	+/-25%	Pass
AV41	05/02/2005 6:46	4953	4990.8	+/-5%	Pass	11.9	5-50	Pass	228.9	229.0	+/-5%	Pass	5051	5051.6	+/-25%	Pass
AV42	05/02/2005 6:46	4797	4977.0	+/-5%	Pass	12.8	5-50	Pass	236.9	228.1	+/-5%	Pass	5109	5044.9	+/-25%	Pass
AV43	05/02/2005 6:46	7663	7162.4	+/-5%	FAIL	13.1	5-50	Pass	222.0	224.1	+/-5%	Pass	5000	5015.9	+/-25%	Pass
AV43	05/02/2005 7:54	7530	7162.4	+/-5%	FAIL	12.9	5-50	Pass	222.0	224.1	+/-5%	Pass	5001	5015.9	+/-25%	Pass
AV45	05/02/2005 6:47	7621	7593.5	+/-5%	Pass	15.5	5-50	Pass	226.9	225.6	+/-5%	Pass	5036	5026.9	+/-25%	Pass
AV46	05/02/2005 6:47	7654	7722.7	+/-5%	Pass	14.2	5-50	Pass	224.1	225.8	+/-5%	Pass	5016	5028.0	+/-25%	Pass
AV47	05/02/2005 6:47	7653	7532.5	+/-5%	Pass	13.5	5-50	Pass	218.0	226.0	+/-5%	Pass	4972	5029.6	+/-25%	Pass
AV48	05/02/2005 6:47	7634	7717.5	+/-5%	Pass	14.7	5-50	Pass	214.9	224.0	+/-5%	Pass	4949	5015.2	+/-25%	Pass
AV49	05/02/2005 6:47	7646	7703.4	+/-5%	Pass	13.8	5-50	Pass	232.0	226.0	+/-5%	Pass	5073	5029.5	+/-25%	Pass
AV50	05/02/2005 6:47	7645	7660.9	+/-5%	Pass	13.8	5-50	Pass	225.0	227.0	+/-5%	Pass	5023	5037.2	+/-25%	Pass
AV51	05/02/2005 6:47	7350	7070.5	+/-5%	Pass	12.9	5-50	Pass	220.0	223.0	+/-5%	Pass	4986	5007.6	+/-25%	Pass
AV52	05/02/2005 6:47	7026	7156.4	+/-5%	Pass	12.8	5-50	Pass	225.1	225.0	+/-5%	Pass	5023	5022.4	+/-25%	Pass
AV53	05/02/2005 6:47	7143	7144.1	+/-5%	Pass	12.7	5-50	Pass	223.0	223.0	+/-5%	Pass	5008	5007.8	+/-25%	Pass
AV54	05/02/2005 6:47	7341	7313.1	+/-5%	Pass	13.7	5-50	Pass	227.9	226.0	+/-5%	Pass	5044	5029.5	+/-25%	Pass
AV55	05/02/2005 6:47	7341	7132.9	+/-5%	Pass	13.2	5-50	Pass	227.0	226.0	+/-5%	Pass	5037	5029.7	+/-25%	Pass
AV56	05/02/2005 6:47	6910	7163.7	+/-5%	Pass	13.1	5-50	Pass	221.1	222.0	+/-5%	Pass	4994	5000.7	+/-25%	Pass
AV57	05/02/2005 6:47	7333	7309.5	+/-5%	Pass	14.2	5-50	Pass	222.0	222.0	+/-5%	Pass	5000	5000.6	+/-25%	Pass
AV58	05/02/2005 6:47	7333	7249.2	+/-5%	Pass	13.4	5-50	Pass	225.0	223.0	+/-5%	Pass	5022	5008.0	+/-25%	Pass
AV59	05/02/2005 6:47	7125	7141.4	+/-5%	Pass	12.3	5-50	Pass	285.0	284.0	+/-5%	Pass	5458	5450.6	+/-25%	Pass
AV60	05/02/2005 6:47	6962	7019.7	+/-5%	Pass	12.8	5-50	Pass	222.9	223.0	+/-5%	Pass	5008	5007.5	+/-25%	Pass
AV61	05/02/2005 6:47	7275	7078.3	+/-5%	Pass	13.1	5-50	Pass	224.0	225.0	+/-5%	Pass	5015	5022.2	+/-25%	Pass
AV62	05/02/2005 6:47	7271	7083.5	+/-5%	Pass	13.9	5-50	Pass	222.0	222.0	+/-5%	Pass	5000	5000.7	+/-25%	Pass
AV63	05/02/2005 6:47	6884	7120.8	+/-5%	Pass	13.0	5-50	Pass	221.9	223.0	+/-5%	Pass	5000	5007.9	+/-25%	Pass
AV64	05/02/2005 6:47	7267	7153.7	+/-5%	Pass	13.1	5-50	Pass	223.0	224.0	+/-5%	Pass	5008	5015.3	+/-25%	Pass
AV65	05/02/2005 6:47	7265	7233.4	+/-5%	Pass	13.4	5-50	Pass	223.0	224.0	+/-5%	Pass	5008	5015.3	+/-25%	Pass
AV66	05/02/2005 6:47	7149	7165.5	+/-5%	Pass	12.0	5-50	Pass	221.0	222.0	+/-5%	Pass	4993	5000.5	+/-25%	Pass
AV67	05/02/2005 6:47	7390	7128.1	+/-5%	Pass	16.4	5-50	Pass	221.0	224.1	+/-5%	Pass	4994	5015.6	+/-25%	Pass
AV68	05/02/2005 6:47	7442	7259.5	+/-5%	Pass	12.9	5-50	Pass	221.0	222.0	+/-5%	Pass	4993	5000.8	+/-25%	Pass
AV69	05/02/2005 6:47	7231	7305.4	+/-5%	Pass	12.6	5-50	Pass	221.0	222.0	+/-5%	Pass	4994	5000.6	+/-25%	Pass
AV70	05/02/2005 6:47	7437	7406.5	+/-5%	Pass	12.9	5-50	Pass	221.0	222.6	+/-5%	Pass	4993	5004.7	+/-25%	Pass
AV71	05/02/2005 6:47	7434	7187.3	+/-5%	Pass	13.2	5-50	Pass	222.1	225.0	+/-5%	Pass	5001	5022.7	+/-25%	Pass
AV72	05/02/2005 6:47	7068	7090.0	+/-5%	Pass	12.8	5-50	Pass	219.1	223.9	+/-5%	Pass	4979	5014.6	+/-25%	Pass
AV73	05/02/2005 7:36	6880	7251.3	+/-5%	FAIL	13.1	5-50	Pass	224.1	225.0	+/-5%	Pass	5016	5022.4	+/-25%	Pass

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria	Gross Counts P/F	FWHM (keV) Result	FWHM (keV) Criteria	FWHM (keV) P/F	Pulser Center Result	Pulser Center Criteria	Pulser Center P/F	Energy (keV) Result	Energy (keV) Criteria	Energy (keV) P/F
AV73	05/02/2005 7:54	7317	7251.3 +/-5%	Pass ✓	13.4	5 - 50	Pass	224.1	225.0 +/-5%	Pass	5016	5022.4 +/-25%	Pass
AV74	05/02/2005 7:36	7334	7227.1 +/-5%	Pass	13.0	5 - 50	Pass	220.0	224.0 +/-5%	Pass	4986	5015.0 +/-25%	Pass

STL

Run Log

Alphavision
5/2/05

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	4/30/5	5117193	F5D250160-12	16	400'	Pu	RAH	RR
2			13	17				
3			F5D270000-193B	18				
4			193C	19				
5		5117192	F5D250160-01	20		Th		RR
6			01X	21				
7			02	22				
8			03	23				
9			04	24				
10			05	46				
11			06	49				
12			07	50				
13			08	51				
14			09	52				
15			10	53				
16			11	56				
17			12	60				
18			13	61				
19			F5D270000-192B	64				
20			192C	65				
21	5-1-5	Daily	Pulser ✓	1-79	1 Min	QA	RAH	—
22		5117192	F5D250160-01	1	400'	Th		RR
23			01X	2				
24			02	4				
25			06	7				
26	5-2-5	Daily	Pulser	1-74	1 Min	QA	JW	—
27	5-2-05	5120105	F5D300000-105B	1	180	Th	RR	RR
28			105C	2				
29			F5D300120-001	3				

Reviewed By: RR Date: 5-2-05

RR 5/2/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5/2/	5120105	FSD300120-001X	4	180	Th	RK	RK
2		5117112	FSD220284-001	37				RK
3			-001X	38				
4			-002	39				
5			-003	40				
6			-004	41				
7			FSD270000-112B	42				
8			" -112C	10				
9		5120106	FSD300000-106B	6		U		RK
10			" -106C	7				
11			FSD300120-001	8				
12			" -001X	9				
13		5117113	FSD220284-001	25				
14			-001X	26				
15			-002	27				
16			-003	28 29				
17			-004	30 31 32 33				
18			FSD270000-113B	34				
19			" -113C	35				
20		5115452	FSD140191-008X KC	11	180	Th	RK	RK
21		"	FSD050000-452B	12	"	"	"	"
22		5118229	FSD220110-001	13			GW	RK
23			-001X	15				
24			-002	16				
25			-003	17				
26			-004	18				
27			-005	19				
28			-006	20				
29			-007	21				

Reviewed By: _____ Date: 5-2-5

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5-25	5118629	FSD280000-229B	22	180	TH		RR
2			-229C	23				
3		5118231	FSD270110-001	24		U-Nat		RR
4			-001X	46				
5			-002	49				
6			-003	50				
7			-004	51				
8			-005	52				
9			-006	53				
10			-007	56				
11			FSD280000-231B	60				
12			-231C	61				
13	5-2	5117632	FSD140271-006 RE	1	180	U-Nat	RE	RR
14	5-25	5113068	FSD280000-068B	57	400 min 29 min	Pu	~	
15			-068C	58				
16		5117072	FSD270279-001	12	240 min	Pu	~	RR
17			-003	63				
18			-002	64				
19			-002X	73				
20			FSD270000-072B	54				
21			-072C	55				
22		5117073	FSD270279-001	7	240 min	U-Nat	~	RR
23			-001S	8				
24			-002	9				
25			-002X	11				
26			FSD270000-073B	49				
27			-073C	48				
28		5117071	FSD270279-001	2	600 min	Am	~	
29			-001S	3				

Reviewed By: RR Date: 5/3/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5-2-5	5117071	FSD220279-002	4	600min	Am	~	
2			-002X	6				
3			FSD270000-071B	10				
4			-071C	45				
5	5-2-05	5115433	FSD220356-001 Rc	1	400	Uu	RR	RR
6	5-2-05	5113068	FSD210345-001	13		Pu	RR	
7			-001S	15				
8			-001X	16				
9			-002	17				
10			-003	18				
11			-004	19				
12			-005	20				
13			-006	21				
14			-007	22				
15			-008	23				
16			-009	24				
17			-010	49				
18			-011	50				
19			-012	53				
20			-013	56				
21			-014	60				
22			-015	61				
23		5117492	FSD250136-003	25	190	Am		RR
24			-003X	26				
25			-00	27				
26			-015	29				
27			-021	33				
28			FSD270000-492B	54				
29			-492C	62				

Reviewed By: RR Date: 5/2/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5/2/05	5117495	F5D250136-003	34	180	Pu	RR	RR
2			-003X	35				
3			-010	37				
4			-015	38				
5			-021	39				
6			F5D270000-495B	05				
7			" -495C	06				
8		5117498	F5D250136-003	40		Um		RR
9			-003X	41				
10			-010	42				
11			F5D270000-498B	07				
12			" -498C	08				
13		5117498	F5D250136-015	25	180	U	CH	
14	"	"	" -021	26	"	"	"	
15	5/3/5	Daily	Pulses	1-24	1 min	QA	JW	—
16	5/3/05	5119118	F5D270288-001	25	180	Th	RR	
17			-001X	26				
18			-002	27				
19			-003	28				
20			-004	33				
21			-005	34				
22			-006	35				
23			-007	37				
24			-008	38				
25			-009	39				
26			-010	40				
27			-011	41				
28			-012	42				
29			-013	1				

Reviewed By: RR Date: 5/3/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

STL Radiochemistry Prep Report

Alpha Spectroscopy

Batch # 5117071

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

General Prep Information

Method	Tracer ID	Aliquot	Isotope	Reference Date	Activity	Units	Analyst
Iso AMERICIUM (LONG CT) NAS & DOE MOD							
	Rad04-0092	0.1	Am-243	4/23/2004	6.85E+01	dpm/mL	401627

Weights

Lot ID	Work Order #	Geometry	Aliquot	Dilution	Adj Aliquot
F5D220279-001	G81GW1AA	Planchette, 44mm	1000	1	1000 mL
[redacted]					
F5D220279-001S	G81GW1AF	Planchette, 44mm	1000	1	1000 mL
[redacted]					
F5D220279-002	G81G81AA	Planchette, 44mm	1000	1	1000 mL
[redacted]					
F5D220279-002X	G81G81AG	Planchette, 44mm	1000	1	1000 mL
[redacted]					
F5D270000-071B	G88V31AA	Planchette, 44mm	1000	1	1000 mL
[redacted]					
F5D270000-071C	G88V31AC	Planchette, 44mm	1000	1	1000 mL
[redacted]					

Spike Information

Lot ID	Work Order #	Standard ID	Aliquot	Isotope	Reference Date	Activity	Units
F5D220279-001S	G81GW1AF	Rad04-0006	0.1	Am-241	4/18/1996	3.86E+00	pCi/L
F5D270000-071C	G88V31AC	Rad04-0006	0.1	Am-241	4/18/1996	3.86E+00	pCi/L

Standard Operating Procedures

	SOP Number	Rev	Title
☐	STL-RC-0002	3	Planchet Preparation For Radiochemistry And Radiological Screening Analysis
☐	STL-RC-0003	5	Drying And Grinding Of Soil And Solid Samples
☐	STL-RC-0004	7	Preparation Of Soil, Sludge, And Filter Paper Samples For Radiochemical Analysis
☒	STL-RC-0090	4	Preparation Of Samples For Sequential Determination Of Isotopic Americium, Curium, Neptunium, Plutonium, Thorium, And Uranium In Aqueous Samples
☒	STL-RC-0100	7	Actinide Coprecipitation
☒	STL-RC-0240	3	Isotopic Americium, Curium, Plutonium, Thorium, and Uranium in Water, Soil, Sludge and Filters by Eichrome Separation Resin
☐	STL-RC-0241	1	Isotopic Americium, Plutonium, Curium, and Uranium in Water, Soil, Sludge and Filters by Eichrome Uteva and Tru Resins
☒	STL-RD-0201	2	Daily Operations Of An Alpha Spectroscopy System
☒	STL-RD-0203	1	Calibration And Maintenance Of A Alpha Spectroscopy System

(Check all that apply)

Routine

JMW	5-2-05	JMW	KEG	04-27-05
Coprecipitated By	Precip Date	Spiked By	Spike Verified By	Spike Date
James M. Wilson	5-2-05			5-4-05
Analyst's Signature	Date		Reviewed By	Date

STL St. Louis

Isotopic Actinide DLC calculation when decay and ingrowth calculations are not required.

Sample ID	Isotope	Total Bkgd Cts	L/g Sample Volume	decimal det. eff.	minutes ct. length	decimal yield	decimal abundance	DLC
F5D220279-001	Am241	9.75	1	0.2631	600	0.843	0.98	0.0251
F5D220279-001S	Am241	6	1	0.2719	600	0.8406	0.98	0.0191
F5D220279-002	Am241	5.25	1	0.2707	600	0.7705	0.98	0.0196
F5D220279-002X	Am241	12.75	1	0.2671	600	0.851	0.98	0.0280
F5D270000-071B	Am241	1.5	1	0.2676	600	0.8704	0.98	0.0094
F5D270000-071C	Am241	1.5	1	0.2785	600	0.5427	0.98	0.0144

Calculated by: RR Date: 5/5/05

Reviewed by: [signature] Date: 5/5/05

St. Louis Laboratory
13715 Rider Trail North
Earth City, MO 63045-1205

Alpha Spectroscopy Quality Assurance Worksheet

Batch: 5117071

F5D270000-071C Recovery Summary			
Isotope	Certified Activity	Observed Activity	% Recovery
Am-241	3.86E+00	3.23E+00	84%

F5D220279-001 Spike Summary				
Isotope	Spike Activity	Sample Activity	Spike Added	% Recovery
U-234	3.37E+00	-9.50E-03	3.86E+00	88%

F5D220279-002 Duplicate Summary			
Isotope	Sample Activity	Duplicate Activity	RPD
Am-241	<MDA	<MDA	N/A

Comments:

Calculated By: RR DATE: 5/5/2005

Reviewed By: DL DATE: 5/5/05

SEVERN TRENT STL

Gamma Spectroscopy

SEVERN TRENT STL

GAMMA SPECTROSCOPY

Data and Results Reports

Calibration Data

Instrument Checks
Daily Instrument Check
Background

Batch Summary Sheets
Run Logs

Raw Data
Prep Data Sheet(s)
QC Acceptance Sheet(s)
Certificate/Standard Sheets

VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:15:29
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G81GW1AE_GE4_MARN1L_57963.CNF;1

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118335
Project Number : F5D220279-001
Sample ID : G81GW1AE

Sample Quantity : 1.00000E+00 L
Sample Type : WATER
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 2-MAY-2005 11:40:43.
Acquisition date : 2-MAY-2005 11:40:43.
Decay time : 0 00:00:00.00

Elapsed live time: 0 03:00:00.00
Elapsed real time: 0 03:00:01.09
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE4

Counting geometry: Marn1L

Energy cal. time : 16-MAR-2005 08:34:49
Effic. cal. time : 18-APR-2005 22:11:43

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE4__57454.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

---- Energy, FWHM, and Efficiency Curves ----

```
**********************************************************************************
*                                                                                *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)                *
*                          A = 1.10653E-01                                       *
*                          B = 2.49919E-01                                       *
*                          C = 1.94892E-08                                       *
*                                                                                *
*                                                                                *
*                    FWHM(keV) = A + (B * SQRT(Energy))                          *
*                          A = 8.02351E-01                                       *
*                          B = 2.65421E-02                                       *
*                                                                                *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                                *
*     a1=9.47750E+02   a2=-4.90823E+00 a3=9.11545E-01                           *
*     a4=7.22030E-02   a5=-2.91264E-02 a6=-1.59994E-02   a7=0.00000E+00         *
**********************************************************************************
```

Post-NID Peak Search Report
***** No peaks found *****

Summary of Nuclide Activity
Sample ID : G81GW1AE

Acquisition date : 2-MAY-2005 11:40:43

**** There are no nuclides meeting summary criteria ****

Flags: "K" = Keyline not found
"E" = Manually edited
"M" = Manually accepted
"A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G81GW1AE

Acquisition date : 2-MAY-2005 11:40:43

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/L)	K.L. Ided	Act error	MDA (pCi/L)	MDA error	Act/MDA
BE-7	9.287E+00		1.438E+01	5.326E+01	1.846E+00	0.174
NA-22	-2.021E+00		2.301E+00	8.193E+00	2.359E-01	-0.247
K-40	3.555E+01		2.840E+01	1.149E+02	3.542E+00	0.309
CR-51	-3.741E+00		1.343E+01	4.745E+01	1.501E+00	-0.079
MN-54	1.805E-01		2.130E+00	7.781E+00	2.570E-01	0.023
CO-57	8.220E-01		1.070E+00	3.870E+00	1.227E-01	0.212
FE-59	8.183E-01		3.733E+00	1.434E+01	5.725E-01	0.057
CO-60	-8.085E-01		1.557E+00	6.001E+00	1.737E-01	-0.135
ZN-65	6.579E-01		4.740E+00	1.780E+01	5.265E-01	0.037
SE-75	-2.672E+00		2.146E+00	7.024E+00	2.031E-01	-0.380
SR-85	-1.207E+01		2.912E+00	8.150E+00	2.537E-01	-1.481
Y-88	1.874E+00		1.974E+00	9.013E+00	2.442E-01	0.208
NB-95	-1.193E+00		2.088E+00	7.300E+00	2.470E-01	-0.163
ZR-95	-2.368E+00		3.388E+00	1.183E+01	4.666E-01	-0.200
MO-99	-4.554E+00		1.529E+01	5.474E+01	3.895E+00	-0.083
TC-99M	-9.534E-01		1.531E+00	5.191E+00	1.582E-01	-0.184
RU-103	1.564E-01		1.862E+00	6.645E+00	2.668E-01	0.024
RH-105	3.569E+01		2.530E+01	9.488E+01	2.681E+00	0.376
RH-106	-6.758E+01		1.657E+01	5.965E+01	1.853E+00	-1.133
RU-106	2.156E+00		1.817E+01	6.685E+01	4.076E+00	0.032
CD-109	-4.561E+01		2.673E+01	8.561E+01	4.035E+00	-0.533
SN-113	1.753E+00		2.125E+00	7.903E+00	2.295E-01	0.222
SB-124	-1.807E+00		1.852E+00	6.372E+00	2.110E-01	-0.284
SB-125	5.323E+00		5.112E+00	1.912E+01	5.660E-01	0.278
I-131	-1.477E+00		1.646E+00	5.637E+00	1.739E-01	-0.262
I-132	7.945E-01		2.817E+00	1.045E+01	3.546E-01	0.076
TE-132	-2.197E+00		1.434E+00	4.664E+00	1.353E-01	-0.471
BA-133	-2.051E+00		2.312E+00	7.904E+00	4.525E-01	-0.260
I-133	9.480E-01		2.056E+00	7.480E+00	2.359E-01	0.127
CS-134	-4.575E+00		1.898E+00	5.868E+00	1.953E-01	-0.780
CS-137	-6.579E-02		2.185E+00	7.957E+00	2.706E-01	-0.008
CE-139	-1.590E+00		1.354E+00	4.532E+00	1.295E-01	-0.351
BA-140	-4.145E+00		5.984E+00	2.107E+01	3.436E+00	-0.197
LA-140	-2.755E+00		2.356E+00	8.028E+00	2.305E-01	-0.343
CE-141	2.229E+00		2.239E+00	8.041E+00	2.503E-01	0.277
CE-144	4.204E+00		9.075E+00	3.229E+01	1.531E+00	0.130
ND-147	-2.587E+01		1.304E+01	4.052E+01	1.279E+00	-0.638
EU-152	-1.562E+01		1.054E+01	3.479E+01	1.314E+00	-0.449
EU-154	-6.235E+00		1.779E+01	6.503E+01	3.523E+00	-0.096
EU-155	-3.872E-01		4.728E+00	1.605E+01	5.409E-01	-0.024
HG-203	-1.670E+00		1.717E+00	5.683E+00	1.699E-01	-0.294
TL-208	-3.422E+00		2.131E+00	7.240E+00	3.463E-01	-0.473
BI-211	1.278E+01		1.188E+01	4.404E+01	1.231E+00	0.290
PB-211	-2.198E+00		7.674E+01	2.780E+02	9.194E+00	-0.008
BI-212	6.750E+00		2.777E+01	1.034E+02	3.517E+00	0.065
PB-212	-2.449E+00		3.452E+00	1.172E+01	4.497E-01	-0.209
BI-214	4.532E+00		4.218E+00	1.634E+01	6.091E-01	0.277
PB-214	5.288E+00		3.874E+00	1.452E+01	4.896E-01	0.364

Combined Activity-MDA Report (continued)
Sample ID : G81GW1AE Acquisition date : 2-MAY-2005 11:40:43

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/L)	K.L. Ided	Act error	MDA (pCi/L)	MDA error	Act/MDA
RN-219	-1.924E+00		1.353E+01	4.646E+01	1.335E+00	-0.041
RA-223	-3.957E+00		1.810E+01	6.298E+01	2.229E+00	-0.063
RA-224	1.164E+01		3.636E+01	1.259E+02	3.569E+01	0.092
RA-226	2.047E+01		3.828E+01	1.357E+02	3.912E+00	0.151
TH-227	-1.509E+01		1.200E+01	3.942E+01	1.141E+00	-0.383
AC-228	-3.787E+00		1.134E+01	3.977E+01	7.461E+00	-0.095
RA-228	1.361E+01		7.041E+00	2.954E+01	9.372E-01	0.461
PA-231	-7.564E+01		5.422E+01	1.818E+02	9.426E+00	-0.416
TH-231	2.298E+01		1.538E+01	5.471E+01	3.156E+00	0.420
TH-232	7.924E-01		4.371E+01	1.615E+02	5.261E+00	0.005
PA-233	3.222E+00		3.596E+00	1.322E+01	3.980E-01	0.244
PA-234M	1.520E+02		3.201E+02	1.245E+03	3.878E+01	0.122
TH-234	-2.597E+01		3.460E+01	1.192E+02	1.011E+01	-0.218
U-235	5.818E+00		1.038E+01	3.682E+01	3.017E+00	0.158
NP-237	3.454E+00		3.855E+00	1.418E+01	4.006E-01	0.244
NP-239	-5.304E+00		6.273E+00	2.078E+01	7.180E-01	-0.255
AM-241	-2.799E-02		3.053E+00	1.058E+01	3.576E-01	-0.003
ANN RAD	-1.102E+01		3.359E+00	1.249E+01	3.877E-01	-0.882

Nuclide Line Activity Report
Sample ID : G81GW1AE

Acquisition date : 2-MAY-2005 11:40:43

Flag: "*" = Keyline

Rejected Report
Sample ID : G81GW1AE

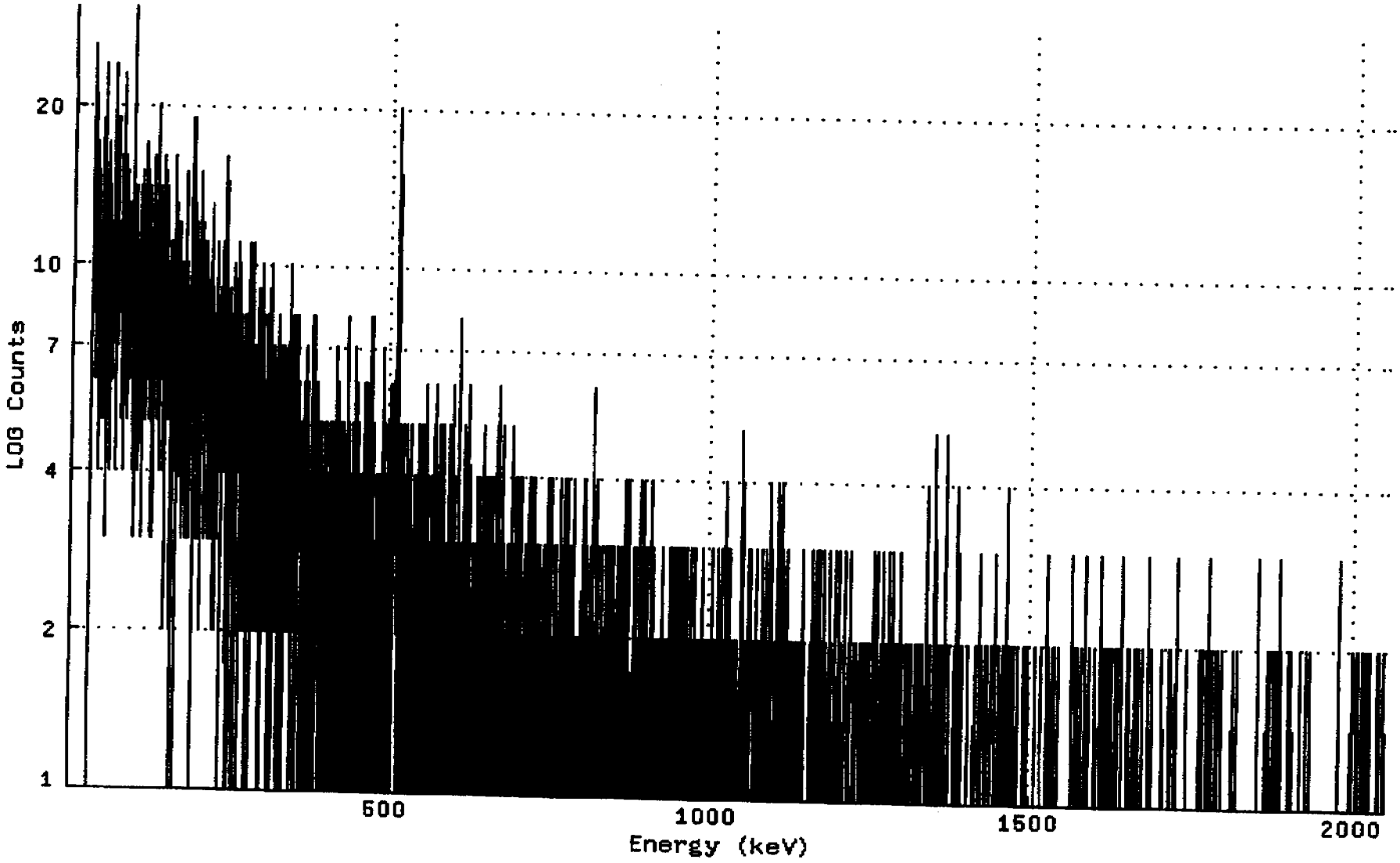
Acquisition date : 2-MAY-2005 11:40:43

Flag: "*" = Keyline

Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G81GW1AE_GE4_MARN1L_57963.CNF;1
Title :
Sample Title: F6D220279-001
Start Time: 2-MAY-2005 11:40:
Real Time : 0 03:00:01.09
Live Time : 0 03:00:00.00

Sample Time: 2-MAY-2005 11:40:
Sample ID : G81GW1AE
Sample Type: WATER

Energy Offset: 1.10653E-01
Energy Slope : 2.49919E-01
Energy Quad : 1.94892E-08



VMS Gamma Spectroscopy Report generated 8-MAY-2005 19:19:07
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G81GW1APRC_GE7_MARN1L_57972.CNF;

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118335
Project Number : F5D220279-001X
Sample ID : G81GW1AP-RC

Sample Quantity : 1.00000E+00 L
Sample Type : WATER
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 2-MAY-2005 15:11:48.
Acquisition date : 2-MAY-2005 15:11:48.
Decay time : 0 00:00:00.00

Elapsed live time: 0 03:00:00.00
Elapsed real time: 0 03:00:00.83
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE7

Counting geometry: Marn1L

Energy cal. time : 25-FEB-2005 09:11:05
Effic. cal. time : 18-APR-2005 23:20:25

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE7__57457.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G81GW1AP-RC Acquisition date : 2-MAY-2005 15:11:48

---- Energy, FWHM, and Efficiency Curves ----

```
*********************************************************************************
*                                                                               *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)               *
*                            A = 7.85538E-02                                    *
*                            B = 2.50061E-01                                    *
*                            C = -1.56700E-08                                   *
*                                                                               *
*                                                                               *
*                      FWHM(keV) = A + (B * SQRT(Energy))                       *
*                            A = 5.33118E-01                                    *
*                            B = 4.95085E-02                                    *
*                                                                               *
*                                                                               *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                               *
*     a1=9.47750E+02   a2=-4.81002E+00 a3=9.08362E-01                           *
*     a4=5.38130E-02   a5=-2.31329E-02 a6=-1.58434E-02   a7=0.00000E+00         *
*                                                                               *
*********************************************************************************
```

Post-NID Peak Search Report
Sample ID : G81GW1AP-RC

Acquisition date : 2-MAY-2005 15:11:48

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	198.47	28	85	0.59	793.39	788	11	58.8		

Summary of Nuclide Activity
Sample ID : G81GW1AP-RC Acquisition date : 2-MAY-2005 15:11:48

Total number of lines in spectrum	1	
Number of unidentified lines	1	
Number of lines tentatively identified by NID	0	0.00%

**** There are no nuclides meeting summary criteria ****

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G81GW1AP-RC

Acquisition date : 2-MAY-2005 15:11:48

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/L)	K.L. Ided	Act error	MDA (pCi/L)	MDA error	Act/MDA
BE-7	1.095E+01		1.442E+01	5.382E+01	1.992E+00	0.204
NA-22	4.972E-01		2.351E+00	8.976E+00	2.702E-01	0.055
K-40	2.336E+01		2.668E+01	1.054E+02	3.304E+00	0.222
CR-51	2.582E+00		1.410E+01	5.047E+01	1.726E+00	0.051
MN-54	-7.573E-02		2.187E+00	7.949E+00	2.848E-01	-0.010
CO-57	8.518E-01		1.013E+00	3.561E+00	1.283E-01	0.239
FE-59	-3.899E+00		3.631E+00	1.242E+01	5.067E-01	-0.314
CO-60	3.313E+00		2.288E+00	9.550E+00	2.828E-01	0.347
ZN-65	5.279E+00		4.552E+00	1.809E+01	5.603E-01	0.292
SE-75	1.075E+00		2.030E+00	7.241E+00	2.334E-01	0.148
SR-85	-7.350E+00		2.825E+00	8.872E+00	3.119E-01	-0.828
Y-88	2.809E+00		2.134E+00	9.589E+00	2.607E-01	0.293
NB-95	-1.751E+00		2.111E+00	7.185E+00	2.908E-01	-0.244
ZR-95	-1.546E+00		3.605E+00	1.266E+01	5.782E-01	-0.122
MO-99	8.028E+00		1.507E+01	5.613E+01	4.224E+00	0.143
TC-99M	1.564E+00		1.253E+00	4.549E+00	1.514E-01	0.344
RU-103	-1.677E+00		1.813E+00	6.199E+00	2.652E-01	-0.271
RH-105	1.069E+01		2.449E+01	8.662E+01	2.729E+00	0.123
RH-106	-6.615E+01		1.653E+01	6.087E+01	2.131E+00	-1.087
RU-106	-3.027E+01		1.919E+01	6.321E+01	4.193E+00	-0.479
CD-109	-7.873E+00		2.318E+01	7.966E+01	3.998E+00	-0.099
SN-113	-3.544E+00		1.972E+00	6.343E+00	1.850E-01	-0.559
SB-124	2.569E-01		1.805E+00	6.473E+00	2.661E-01	0.040
SB-125	-1.328E+00		4.869E+00	1.698E+01	5.207E-01	-0.078
I-131	5.130E-01		1.640E+00	5.916E+00	1.893E-01	0.087
I-132	-5.709E+00		2.722E+00	8.544E+00	3.833E-01	-0.668
TE-132	-1.701E-01		1.257E+00	4.419E+00	1.374E-01	-0.038
BA-133	-8.524E-01		2.460E+00	8.574E+00	4.977E-01	-0.099
I-133	-3.857E+00		1.921E+00	6.079E+00	2.200E-01	-0.634
CS-134	-2.280E+00		1.867E+00	6.335E+00	2.619E-01	-0.360
CS-137	2.449E+00		2.174E+00	8.313E+00	3.752E-01	0.295
CE-139	5.873E-01		1.220E+00	4.312E+00	1.252E-01	0.136
BA-140	5.765E+00		6.199E+00	2.315E+01	3.800E+00	0.249
LA-140	5.905E-01		2.761E+00	1.062E+01	3.095E-01	0.056
CE-141	3.828E+00		1.995E+00	7.341E+00	2.455E-01	0.521
CE-144	9.400E+00		7.851E+00	2.867E+01	1.425E+00	0.328
ND-147	-5.330E+00		1.136E+01	3.985E+01	1.446E+00	-0.134
EU-152	-2.978E+00		1.225E+01	4.486E+01	1.716E+00	-0.066
EU-154	-6.881E+00		1.737E+01	6.217E+01	3.382E+00	-0.111
EU-155	3.283E+00		4.307E+00	1.515E+01	5.721E-01	0.217
HG-203	9.826E-01		1.521E+00	5.465E+00	1.838E-01	0.180
TL-208	8.186E+00		2.125E+00	8.658E+00	4.580E-01	0.946
BI-211	1.006E+01		1.162E+01	4.251E+01	1.265E+00	0.237
PB-211	1.170E+02		7.848E+01	3.071E+02	1.108E+01	0.381
BI-212	-1.776E+01		3.143E+01	1.091E+02	4.638E+00	-0.163
PB-212	-1.459E+00		3.092E+00	1.078E+01	4.338E-01	-0.135
BI-214	4.445E+00		4.045E+00	1.536E+01	6.889E-01	0.289
PB-214	4.144E+00		3.923E+00	1.441E+01	5.070E-01	0.288

Combined Activity-MDA Report (continued)
Sample ID : G81GW1AP-RC Acquisition date : 2-MAY-2005 15:11:48

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/L)	K.L. Ided	Act error	MDA (pCi/L)	MDA error	Act/MDA
RN-219	2.484E+01		1.281E+01	4.751E+01	1.536E+00	0.523
RA-223	-2.762E+01		1.565E+01	5.103E+01	1.874E+00	-0.541
RA-224	1.053E+01		3.278E+01	1.154E+02	3.275E+01	0.091
RA-226	5.393E+01		3.784E+01	1.403E+02	4.173E+00	0.384
TH-227	-1.906E+01		1.146E+01	3.775E+01	1.181E+00	-0.505
AC-228	1.315E+01		1.070E+01	3.898E+01	7.326E+00	0.337
RA-228	7.028E+00		7.218E+00	2.798E+01	8.555E-01	0.251
PA-231	-2.823E+01		5.149E+01	1.755E+02	9.434E+00	-0.161
TH-231	1.255E+01		1.328E+01	4.748E+01	2.841E+00	0.264
TH-232	6.513E+01		4.787E+01	1.887E+02	6.379E+00	0.345
PA-233	-5.309E+00		3.356E+00	1.080E+01	3.565E-01	-0.492
PA-234M	-2.354E+02		3.659E+02	1.312E+03	4.067E+01	-0.179
TH-234	2.548E+01		3.270E+01	1.230E+02	1.047E+01	0.207
U-235	9.184E+00		9.336E+00	3.347E+01	2.775E+00	0.274
NP-237	-5.693E+00		3.598E+00	1.158E+01	3.630E-01	-0.492
NP-239	5.490E+00		5.278E+00	1.895E+01	7.305E-01	0.290
AM-241	5.244E-01		2.703E+00	9.259E+00	3.140E-01	0.057
ANN RAD	-1.091E+01		3.389E+00	1.280E+01	4.475E-01	-0.853

Nuclide Line Activity Report
Sample ID : G81GW1AP-RC

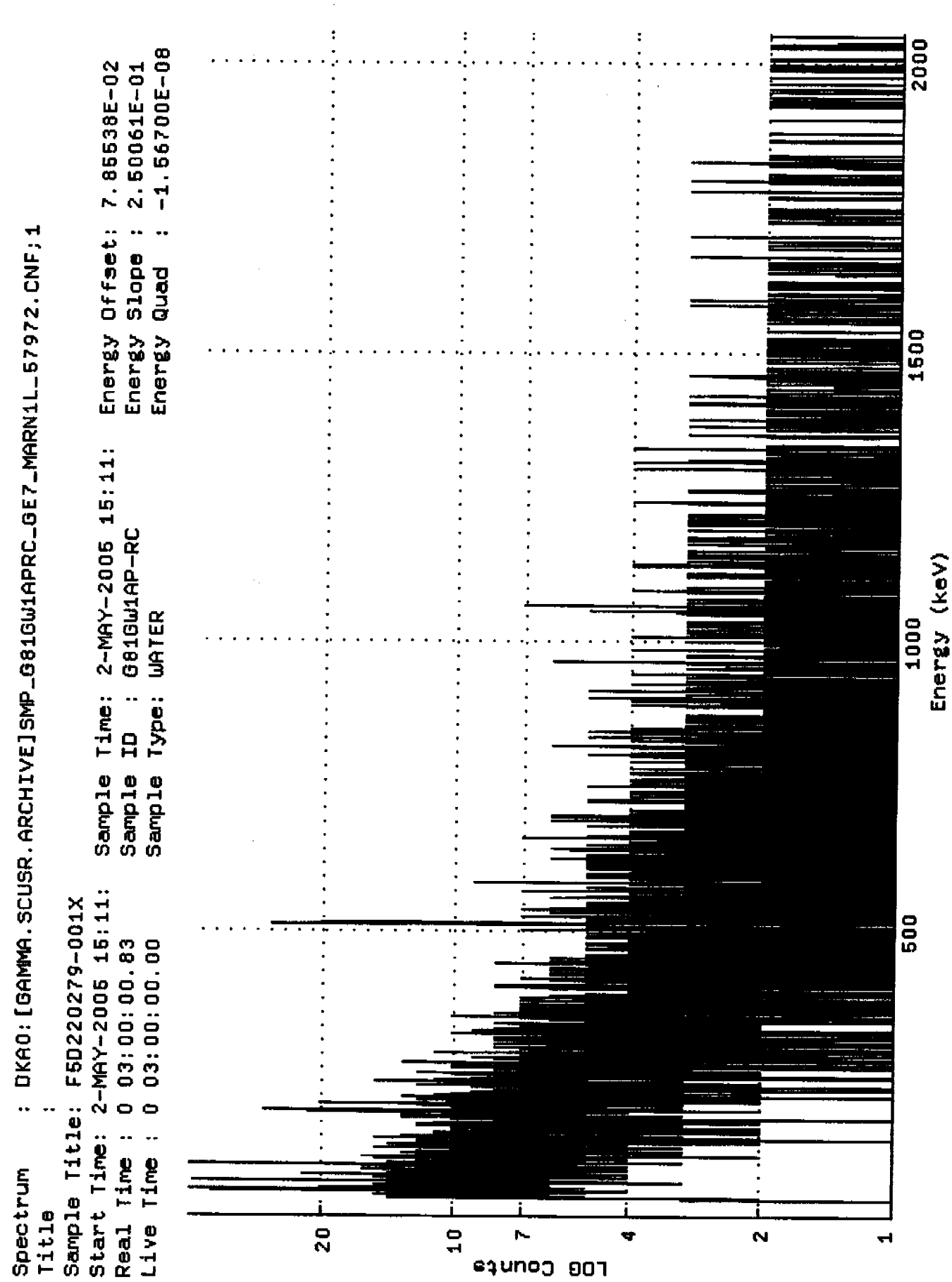
Acquisition date : 2-MAY-2005 15:11:48

Flag: "*" = Keyline

Rejected Report
Sample ID : G81GW1AP-RC

Acquisition date : 2-MAY-2005 15:11:48

Flag: "*" = Keyline


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G81GW1APRC_GE7_MARN1L_57972.CNF;1
Title :
Sample Title: F5D220279-001X
Start Time: 2-MAY-2006 15:11: Sample Time: 2-MAY-2006 15:11: Energy Offset: 7.85538E-02
Real Time : 0 03:00:00.83 Sample ID : G81GW1AP-RC Energy Slope : 2.50061E-01
Live Time : 0 03:00:00.00 Sample Type: WATER Energy Quad : -1.56700E-08
Log Counts
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:16:41
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G81G81AE_GE5_MARN1L_57967.CNF;1

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118335
Project Number : F5D220279-002
Sample ID : G81G81AE

Sample Quantity : 1.00000E+00 L
Sample Type : WATER
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 2-MAY-2005 11:53:27. Elapsed live time: 0 03:00:00.00
Acquisition date : 2-MAY-2005 11:53:27. Elapsed real time: 0 03:00:02.03
Decay time : 0 00:00:00.00 % dead time : 0.0%

---- Detector Parameters ----

Detector name : GE5 Counting geometry: Marn1L

Energy cal. time : 9-MAR-2005 09:18:16. Energy cal. type : Poly
Effic. cal. time : 18-APR-2005 20:53:17 FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150 End channel : 8100
Sensitivity : 3.00000 Gaussian Sens. : 15.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.25000 Half life ratio : 8.00000
Abundance limit : 70.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE5__57455.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G81G81AE Acquisition date : 2-MAY-2005 11:53:27

---- Energy, FWHM, and Efficiency Curves ----

```
*********************************************************************************
*                                                                               *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)               *
*                            A = -7.14002E-03                                   *
*                            B = 2.49998E-01                                    *
*                            C = -1.90945E-09                                   *
*                                                                               *
*                                                                               *
*                       FWHM(keV) = A + (B * SQRT(Energy))                      *
*                            A = 5.02556E-01                                    *
*                            B = 3.66242E-02                                    *
*                                                                               *
*                                                                               *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                               *
*     a1=9.47750E+02   a2=-4.80027E+00 a3=8.90135E-01                           *
*     a4=4.74050E-02   a5=-1.37129E-02 a6=-1.78918E-02   a7=0.00000E+00         *
*                                                                               *
*********************************************************************************
```

Post-NID Peak Search Report
Sample ID : G81G81AE

Acquisition date : 2-MAY-2005 11:53:27

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	66.48	55	145	0.54	265.94	260	15	43.4		

Summary of Nuclide Activity
Sample ID : G81G81AE Acquisition date : 2-MAY-2005 11:53:27

Total number of lines in spectrum	1	
Number of unidentified lines	1	
Number of lines tentatively identified by NID	0	0.00%

**** There are no nuclides meeting summary criteria ****

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G81G81AE Acquisition date : 2-MAY-2005 11:53:27

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/L)	K.L. Ided	Act error	MDA (pCi/L)	MDA error	Act/MDA
BE-7	-1.967E+01		1.373E+01	4.565E+01	1.586E+00	-0.431
NA-22	3.094E+00		2.415E+00	9.796E+00	3.012E-01	0.316
K-40	6.966E+01		2.590E+01	1.118E+02	3.697E+00	0.623
CR-51	-3.239E+00		1.335E+01	4.666E+01	1.497E+00	-0.069
MN-54	3.552E+00		1.876E+00	7.620E+00	2.695E-01	0.466
CO-57	-1.069E+00		9.779E-01	3.193E+00	1.036E-01	-0.335
FE-59	5.981E+00		3.957E+00	1.600E+01	6.583E-01	0.374
CO-60	1.347E+00		2.806E+00	1.116E+01	3.549E-01	0.121
ZN-65	-4.668E-01		4.343E+00	1.590E+01	4.926E-01	-0.029
SE-75	-9.519E-01		1.910E+00	6.683E+00	1.958E-01	-0.142
SR-85	-1.034E+01		2.806E+00	8.316E+00	2.575E-01	-1.243
Y-88	-3.954E+00		1.857E+00	5.010E+00	1.376E-01	-0.789
NB-95	1.966E+00		2.092E+00	7.913E+00	2.729E-01	0.248
ZR-95	3.932E+00		3.268E+00	1.280E+01	5.100E-01	0.307
MO-99	-9.907E+00		1.295E+01	4.521E+01	3.218E+00	-0.219
TC-99M	2.762E+00		1.354E+00	4.996E+00	1.546E-01	0.553
RU-103	-4.119E+00		1.874E+00	5.896E+00	2.365E-01	-0.699
RH-105	-1.761E+00		2.182E+01	7.745E+01	2.226E+00	-0.023
RH-106	-5.291E+01		1.578E+01	5.884E+01	1.819E+00	-0.899
RU-106	5.024E+00		1.632E+01	5.967E+01	3.606E+00	0.084
CD-109	-8.142E+00		2.244E+01	7.685E+01	3.737E+00	-0.106
SN-113	8.514E-02		2.028E+00	7.165E+00	2.119E-01	0.012
SB-124	3.932E-01		1.937E+00	6.917E+00	2.231E-01	0.057
SB-125	1.354E+00		4.444E+00	1.641E+01	4.921E-01	0.082
I-131	2.017E+00		1.558E+00	5.833E+00	1.827E-01	0.346
I-132	1.064E+00		2.653E+00	9.918E+00	3.239E-01	0.107
TE-132	2.559E-01		1.168E+00	4.095E+00	1.197E-01	0.062
BA-133	2.233E+00		2.335E+00	8.504E+00	4.890E-01	0.263
I-133	-8.422E-02		1.809E+00	6.501E+00	2.032E-01	-0.013
CS-134	-6.763E-01		1.816E+00	6.319E+00	2.047E-01	-0.107
CS-137	-2.524E+00		2.485E+00	9.272E+00	3.025E-01	-0.272
CE-139	8.174E-01		1.093E+00	3.957E+00	1.132E-01	0.207
BA-140	-2.317E+00		6.713E+00	2.351E+01	3.833E+00	-0.099
LA-140	-4.100E-01		2.581E+00	9.747E+00	2.969E-01	-0.042
CE-141	-3.265E+00		1.859E+00	6.142E+00	1.935E-01	-0.532
CE-144	-3.842E+00		7.315E+00	2.558E+01	1.223E+00	-0.150
ND-147	-6.325E+00		1.168E+01	4.069E+01	1.273E+00	-0.155
EU-152	1.728E+01		1.041E+01	4.480E+01	1.783E+00	0.386
EU-154	-1.612E+01		1.759E+01	6.136E+01	3.453E+00	-0.263
EU-155	-8.281E-01		3.975E+00	1.358E+01	4.757E-01	-0.061
HG-203	-1.284E+00		1.519E+00	5.221E+00	1.584E-01	-0.246
TL-208	3.547E+00		2.171E+00	8.245E+00	3.905E-01	0.430
BI-211	-7.995E+00		1.129E+01	3.843E+01	1.095E+00	-0.208
PB-211	-2.783E+01		7.264E+01	2.562E+02	9.053E+00	-0.109
BI-212	5.137E+01		2.938E+01	1.158E+02	3.920E+00	0.444
PB-212	4.131E+00		3.325E+00	1.198E+01	4.624E-01	0.345
BI-214	1.196E+01		4.206E+00	1.666E+01	6.073E-01	0.718
PB-214	-6.124E+00		4.049E+00	1.340E+01	4.576E-01	-0.457

Combined Activity-MDA Report (continued)
Sample ID : G81G81AE Acquisition date : 2-MAY-2005 11:53:27

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/L)	K.L. Ided	Act error	MDA (pCi/L)	MDA error	Act/MDA
RN-219	-6.951E+00		1.121E+01	3.904E+01	1.139E+00	-0.178
RA-223	2.021E+01		1.621E+01	5.939E+01	2.113E+00	0.340
RA-224	-9.936E+01		4.514E+01	1.070E+02	3.035E+01	-0.928
RA-226	1.962E+01		3.475E+01	1.265E+02	3.657E+00	0.155
TH-227	-2.718E+01		1.202E+01	3.744E+01	1.094E+00	-0.726
AC-228	3.761E-01		1.067E+01	3.766E+01	7.069E+00	0.010
RA-228	1.850E+00		7.106E+00	2.672E+01	9.546E-01	0.069
PA-231	-1.588E+01		5.595E+01	1.956E+02	1.019E+01	-0.081
TH-231	5.823E+00		1.143E+01	4.069E+01	2.391E+00	0.143
TH-232	6.737E+01		4.357E+01	1.745E+02	6.215E+00	0.386
PA-233	7.275E-01		3.037E+00	1.092E+01	3.337E-01	0.067
PA-234M	2.757E+02		3.091E+02	1.218E+03	4.155E+01	0.226
TH-234	-4.517E+01		3.119E+01	1.002E+02	8.515E+00	-0.451
U-235	2.560E+00		8.714E+00	3.105E+01	2.549E+00	0.082
NP-237	7.800E-01		3.257E+00	1.171E+01	3.366E-01	0.067
NP-239	5.083E+00		5.544E+00	1.970E+01	7.110E-01	0.258
AM-241	-1.200E+00		2.860E+00	9.855E+00	3.349E-01	-0.122
ANN RAD	-1.167E+01		3.280E+00	1.211E+01	3.743E-01	-0.964

Nuclide Line Activity Report
Sample ID : G81G81AE

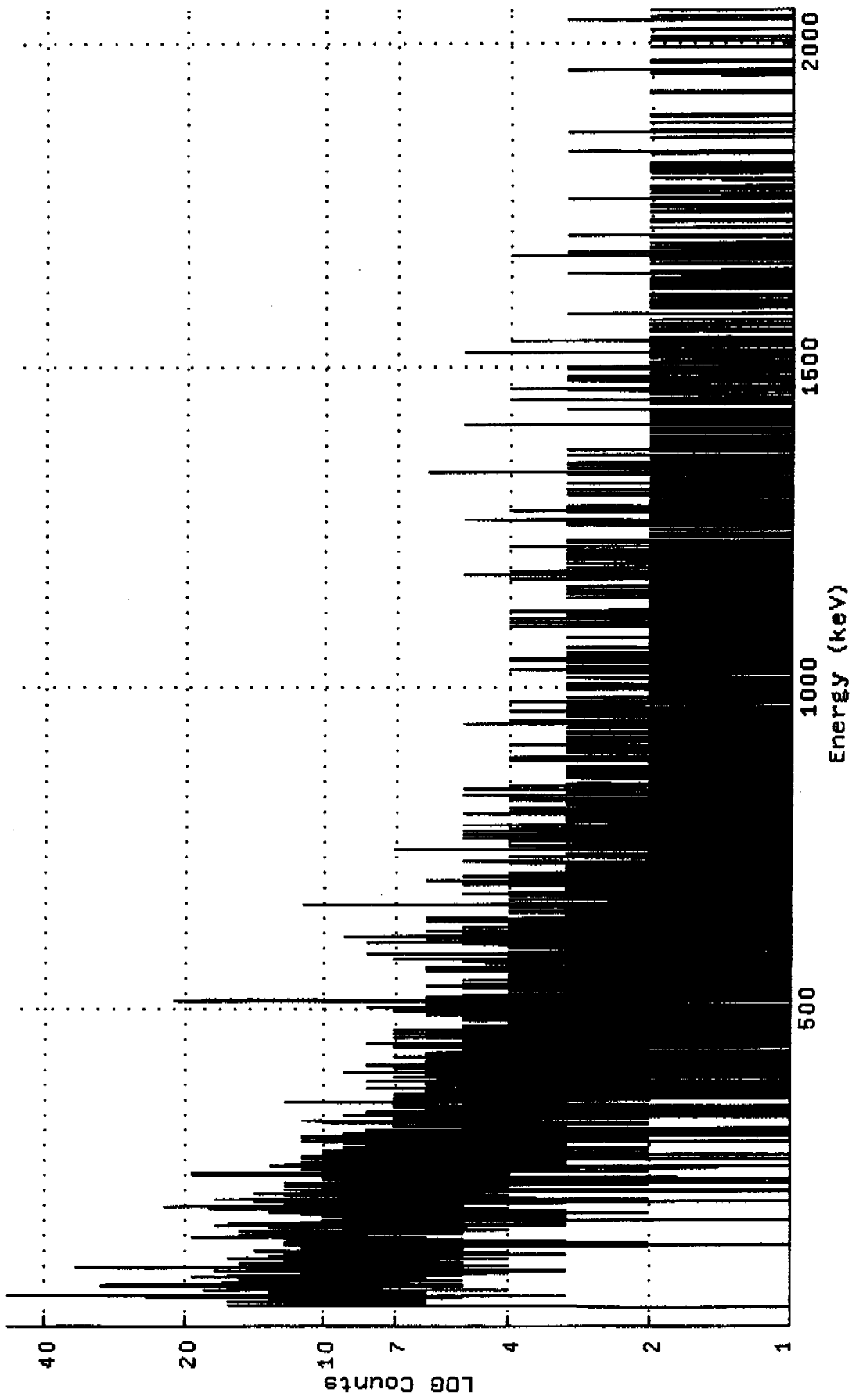
Acquisition date : 2-MAY-2005 11:53:27

Flag: "*" = Keyline

Rejected Report
Sample ID : G81G81AE

Acquisition date : 2-MAY-2005 11:53:27

Flag: "*" = Keyline


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G81G81AE_GE5_MARN1L_67967.CNF;1
Title :
Sample Title: F5D220279-002
Start Time: 2-MAY-2005 11:53: Sample Time: 2-MAY-2005 11:53: Energy Offset: -7.14002E-03
Real Time : 0 03:00:02.03 Sample ID : G81G81AE Energy Slope : 2.49998E-01
Live Time : 0 03:00:00.00 Sample Type: WATER Energy Quad : -1.90945E-09
LOG Counts
40
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:17:07
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G9D2J1AA_GE6_MARN1L_57965.CNF;1

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118335
Project Number : F5D280000-335B
Sample ID : G9D2J1AA

Sample Quantity : 1.00000E+00 L
Sample Type : WATER
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 2-MAY-2005 11:42:27.
Acquisition date : 2-MAY-2005 11:42:27.
Decay time : 0 00:00:00.00

Elapsed live time: 0 03:00:00.00
Elapsed real time: 0 03:00:00.98
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE6

Counting geometry: Marn1L

Energy cal. time : 3-MAR-2004 08:43:53.
Effic. cal. time : 19-APR-2005 00:32:27

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE6__57456.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G9D2J1AA Acquisition date : 2-MAY-2005 11:42:27

---- Energy, FWHM, and Efficiency Curves ----

```
*****************************************************************************
*                                                                           *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)           *
*                            A = 1.54285E-01                                *
*                            B = 2.49832E-01                                *
*                            C = 1.86799E-08                                *
*                                                                           *
*                                                                           *
*                       FWHM(keV) = A + (B * SQRT(Energy))                  *
*                            A = 4.67797E-01                                *
*                            B = 3.35494E-02                                *
*                                                                           *
*                                                                           *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                           *
*     a1=9.47750E+02   a2=-4.93244E+00 a3=8.93311E-01                       *
*     a4=8.77785E-02   a5=-2.99163E-02 a6=-1.70193E-02   a7=0.00000E+00     *
*                                                                           *
*****************************************************************************
```

Post-NID Peak Search Report
Sample ID : G9D2J1AA

Acquisition date : 2-MAY-2005 11:42:27

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	46.68*	31	79	0.79	186.21	181	11	65.5		

Summary of Nuclide Activity
Sample ID : G9D2J1AA Acquisition date : 2-MAY-2005 11:42:27

Total number of lines in spectrum	1	
Number of unidentified lines	1	
Number of lines tentatively identified by NID	0	0.00%

**** There are no nuclides meeting summary criteria ****

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G9D2J1AA

Acquisition date : 2-MAY-2005 11:42:27

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/L)	K.L. Ided	Act error	MDA (pCi/L)	MDA error	Act/MDA
BE-7	-2.377E+00		1.512E+01	5.362E+01	1.939E+00	-0.044
NA-22	-4.937E+00		2.350E+00	7.116E+00	2.057E-01	-0.694
K-40	-5.823E+00		2.860E+01	1.153E+02	3.403E+00	-0.051
CR-51	1.227E+01		1.332E+01	4.847E+01	1.652E+00	0.253
MN-54	6.193E-01		1.853E+00	7.155E+00	2.310E-01	0.087
CO-57	9.752E-01		9.832E-01	3.561E+00	1.062E-01	0.274
FE-59	-1.475E+00		3.998E+00	1.441E+01	5.953E-01	-0.102
CO-60	2.237E+00		2.527E+00	1.018E+01	2.776E-01	0.220
ZN-65	-1.657E+00		4.427E+00	1.638E+01	5.184E-01	-0.101
SE-75	-3.099E+00		1.813E+00	5.858E+00	1.827E-01	-0.529
SR-85	-1.162E+01		2.784E+00	7.680E+00	2.490E-01	-1.514
Y-88	-1.219E+00		2.164E+00	8.073E+00	2.185E-01	-0.151
NB-95	1.864E+00		1.686E+00	6.757E+00	2.224E-01	0.276
ZR-95	5.734E+00		3.425E+00	1.388E+01	5.363E-01	0.413
MO-99	6.753E+00		1.172E+01	4.616E+01	3.262E+00	0.146
TC-99M	1.579E+00		1.218E+00	4.410E+00	1.292E-01	0.358
RU-103	-2.615E+00		1.787E+00	5.806E+00	2.398E-01	-0.450
RH-105	-8.684E+00		2.425E+01	8.343E+01	2.586E+00	-0.104
RH-106	9.327E+01		1.549E+01	5.900E+01	1.911E+00	1.581
RU-106	5.962E+00		1.647E+01	6.230E+01	3.787E+00	0.096
CD-109	6.411E+01		2.404E+01	9.075E+01	4.264E+00	0.707
SN-113	1.321E+00		2.123E+00	7.891E+00	2.466E-01	0.167
SB-124	3.613E-01		1.541E+00	5.823E+00	1.928E-01	0.062
SB-125	-4.342E+00		4.289E+00	1.464E+01	4.636E-01	-0.297
I-131	-4.215E+00		1.714E+00	5.378E+00	1.782E-01	-0.784
I-132	-1.555E+00		2.480E+00	8.774E+00	2.880E-01	-0.177
TE-132	-1.279E+00		1.276E+00	4.330E+00	1.312E-01	-0.295
BA-133	3.369E+00		2.000E+00	7.834E+00	4.587E-01	0.430
I-133	-1.549E+00		2.007E+00	6.816E+00	2.225E-01	-0.227
CS-134	-4.313E+00		1.718E+00	5.203E+00	1.729E-01	-0.829
CS-137	3.298E+00		2.022E+00	8.158E+00	2.683E-01	0.404
CE-139	-5.554E-01		1.262E+00	4.252E+00	1.214E-01	-0.131
BA-140	7.170E+00		6.685E+00	2.497E+01	4.077E+00	0.287
LA-140	2.265E+00		2.107E+00	9.395E+00	2.608E-01	0.241
CE-141	-2.098E+00		1.943E+00	6.423E+00	1.940E-01	-0.327
CE-144	-2.519E+00		8.012E+00	2.752E+01	1.279E+00	-0.092
ND-147	1.214E+01		1.238E+01	4.654E+01	1.520E+00	0.261
EU-152	4.015E+00		1.015E+01	4.095E+01	1.500E+00	0.098
EU-154	-1.119E+01		1.821E+01	6.496E+01	3.495E+00	-0.172
EU-155	-9.662E+00		4.119E+00	1.308E+01	4.272E-01	-0.739
HG-203	7.745E-01		1.521E+00	5.479E+00	1.781E-01	0.141
TL-208	1.836E+00		2.024E+00	7.769E+00	3.734E-01	0.236
BI-211	2.196E+01		1.157E+01	4.495E+01	1.374E+00	0.489
PB-211	-2.324E+01		6.727E+01	2.471E+02	7.989E+00	-0.094
BI-212	-8.632E-01		2.836E+01	1.034E+02	3.414E+00	-0.008
PB-212	-2.729E+00		3.151E+00	1.117E+01	4.422E-01	-0.244
BI-214	1.678E+00		4.549E+00	1.759E+01	6.535E-01	0.095
PB-214	8.233E+00		3.774E+00	1.480E+01	5.313E-01	0.556

Combined Activity-MDA Report (continued)
Sample ID : G9D2J1AA Acquisition date : 2-MAY-2005 11:42:27

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/L)	K.L. Ided	Act error	MDA (pCi/L)	MDA error	Act/MDA
RN-219	6.971E+00		1.210E+01	4.360E+01	1.361E+00	0.160
RA-223	-3.407E+00		1.714E+01	5.862E+01	2.046E+00	-0.058
RA-224	-9.589E+01		4.441E+01	1.094E+02	3.105E+01	-0.876
RA-226	-3.107E+01		3.642E+01	1.292E+02	3.769E+00	-0.241
TH-227	-2.216E+01		1.105E+01	3.559E+01	1.084E+00	-0.623
AC-228	4.042E+00		1.178E+01	4.280E+01	8.048E+00	0.094
RA-228	1.040E+01		6.421E+00	2.707E+01	8.479E-01	0.384
PA-231	6.422E+00		5.568E+01	1.959E+02	1.046E+01	0.033
TH-231	4.478E+01		1.443E+01	5.431E+01	3.128E+00	0.825
TH-232	5.086E+01		4.408E+01	1.788E+02	5.706E+00	0.284
PA-233	-4.358E+00		3.279E+00	1.069E+01	3.493E-01	-0.408
PA-234M	1.464E+02		3.535E+02	1.346E+03	4.269E+01	0.109
TH-234	4.937E+01		3.415E+01	1.255E+02	1.065E+01	0.394
U-235	-9.028E+00		9.514E+00	3.171E+01	2.586E+00	-0.285
NP-237	-4.673E+00		3.515E+00	1.146E+01	3.552E-01	-0.408
NP-239	3.964E+00		5.483E+00	1.984E+01	6.708E-01	0.200
AM-241	6.956E+00		2.568E+00	9.700E+00	3.289E-01	0.717
ANN RAD	-1.775E+01		3.607E+00	1.273E+01	4.121E-01	-1.394

Nuclide Line Activity Report
Sample ID : G9D2J1AA

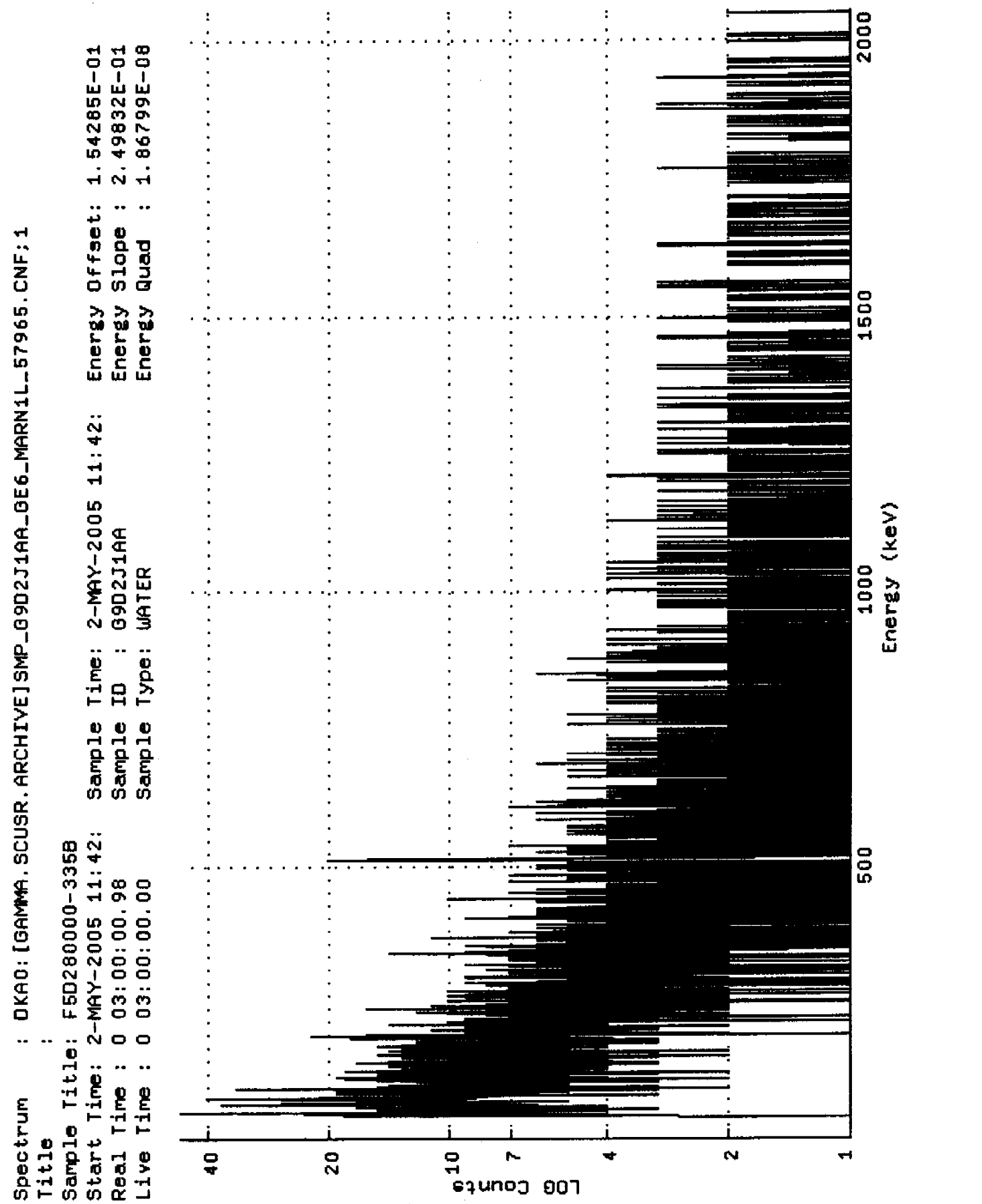
Acquisition date : 2-MAY-2005 11:42:27

Flag: "*" = Keyline

Rejected Report
Sample ID : G9D2J1AA

Acquisition date : 2-MAY-2005 11:42:27

Flag: "*" = Keyline


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G9D2J1AA_GE6_MARN1L_57965.CNF;1
Title :
Sample Title: F5D280000-3358
Start Time: 2-MAY-2005 11:42:
Real Time : 0 03:00:00.98
Live Time : 0 03:00:00.00
Sample Time: 2-MAY-2005 11:42:
Sample ID : G9D2J1AA
Sample Type: WATER
Energy Offset: 1.54285E-01
Energy Slope : 2.49832E-01
Energy Quad : 1.86799E-08
Log Counts
40
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:17:39
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G9D2J1AC_GE6_MARN1L_57939.CNF;1

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118335
Project Number : F5D280000-335C
Sample ID : G9D2J1AC

Sample Quantity : 1.00000E+00 L
Sample Type : WATER
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 1-OCT-2003 12:00:00. Elapsed live time: 0 01:00:00.00
Acquisition date : 30-APR-2005 14:52:57 Elapsed real time: 0 01:00:31.78
Decay time : 577 02:52:57.21 % dead time : 0.9%

---- Detector Parameters ----

Detector name : GE6 Counting geometry: Marn1L

Energy cal. time : 3-MAR-2004 08:43:53. Energy cal. type : Poly
Effic. cal. time : 19-APR-2005 00:32:27 FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150 End channel : 8100
Sensitivity : 3.00000 Gaussian Sens. : 15.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.25000 Half life ratio : 8.00000
Abundance limit : 70.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE6__57456.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G9D2J1AC Acquisition date : 30-APR-2005 14:52:57

---- Energy, FWHM, and Efficiency Curves ----

```
*****************************************************************************
*                                                                           *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)           *
*                          A = 1.54285E-01                                  *
*                          B = 2.49832E-01                                  *
*                          C = 1.86799E-08                                  *
*                                                                           *
*                                                                           *
*                     FWHM(keV) = A + (B * SQRT(Energy))                    *
*                          A = 4.67797E-01                                  *
*                          B = 3.35494E-02                                  *
*                                                                           *
*                                                                           *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                           *
*     a1=9.47750E+02   a2=-4.93244E+00 a3=8.93311E-01                       *
*     a4=8.77785E-02   a5=-2.99163E-02 a6=-1.70193E-02   a7=0.00000E+00     *
*                                                                           *
*****************************************************************************
```

Post-NID Peak Search Report
Sample ID : G9D2J1AC

Acquisition date : 30-APR-2005 14:52:57

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	40.98*	3016	4570	1.74	163.41	160	15	4.7		
0	49.60	7550	26363	1.72	197.92	186	24	5.0		
0	59.61	91820	19378	0.78	237.99	226	19	0.5		AM-241
0	75.01*	400	5679	0.53	299.64	296	9	30.4		
0	88.09	61460	6708	0.80	351.96	346	14	0.5		CD-109
0	122.07	17946	5324	0.86	487.96	476	21	1.1		CO-57
0	136.46	2057	3513	0.86	545.56	537	17	6.1		CO-57
0	165.86	5234	4293	0.91	663.24	648	23	3.1		CE-139
0	391.58	2100	2067	1.14	1566.59	1556	19	4.9		SN-113
0	661.46	25779	1466	1.30	2646.46	2634	24	0.7		CS-137
7	894.57	143	1014	1.56	3579.12	3573	35	21.0	1.06E+00	
7	897.78	1881	1307	1.56	3591.95	3573	35	2.9		Y-88
0	915.73	82	740	0.44	3663.75	3659	10	55.4		
0	1172.91	24948	911	1.63	4692.51	4672	36	0.7		CO-60
0	1332.14	22329	271	1.66	5329.38	5311	33	0.7		CO-60
0	1835.50	1034	54	2.10	7342.26	7329	29	3.6		Y-88

Summary of Nuclide Activity
Sample ID : G9D2J1AC Acquisition date : 30-APR-2005 14:52:57

Total number of lines in spectrum 16
Number of unidentified lines 4
Number of lines tentatively identified by NID 12 75.00%

Nuclide Type : fission

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/L	Wtd Mean Decay Corr pCi/L	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
CO-57	271.00D	4.38	4.202E+03	1.839E+04	0.107E+04	5.81	
CS-137	30.20Y	1.04	2.265E+04	2.349E+04	0.142E+04	6.03	
Total Activity :			2.685E+04	4.188E+04			

Nuclide Type : activation

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/L	Wtd Mean Decay Corr pCi/L	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
CO-60	5.27Y	1.23	3.124E+04	3.846E+04	0.209E+04	5.43	
Y-88	106.60D	42.6	1.934E+03	8.244E+04	0.485E+04	5.89	
CD-109	464.00D	2.37	3.225E+05	7.637E+05	0.525E+05	6.88	
SN-113	115.10D	32.3	1.473E+03	4.761E+04	0.369E+04	7.76	
CE-139	137.66D	18.3	1.501E+03	2.745E+04	0.180E+04	6.55	
Total Activity :			3.586E+05	9.597E+05			

Nuclide Type : Np Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/L	Wtd Mean Decay Corr pCi/L	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
AM-241	432.70Y	1.00	5.899E+04	5.914E+04	0.358E+04	6.06	
Total Activity :			5.899E+04	5.914E+04			

Grand Total Activity : 4.445E+05 1.061E+06

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G9D2J1AC

Acquisition date : 30-APR-2005 14:52:57

---- Identified Nuclides ----

Nuclide	Activity (pCi/L)	Act error	MDA (pCi/L)	MDA error	Act/MDA
CO-57	1.839E+04	1.068E+03	2.433E+02	7.302E+00	75.568
CO-60	3.846E+04	2.088E+03	1.069E+02	2.914E+00	359.784
Y-88	8.244E+04	4.852E+03	2.280E+03	6.179E+01	36.162
CD-109	7.637E+05	5.254E+04	4.029E+03	1.895E+02	189.572
SN-113	4.761E+04	3.693E+03	4.158E+03	1.353E+02	11.451
CS-137	2.349E+04	1.416E+03	1.365E+02	4.489E+00	172.120
CE-139	2.745E+04	1.797E+03	1.106E+03	3.170E+01	24.828
AM-241	5.914E+04	3.583E+03	2.742E+02	9.297E+00	215.691

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/L)	K.L. Ided	Act error	MDA (pCi/L)	MDA error	Act/MDA
BE-7	-4.658E-01		5.088E-01	Half-Life too short		
NA-22	-4.826E+01		3.579E+01	1.182E+02	3.418E+00	-0.408
K-40	-1.886E+01		1.733E+02	6.188E+02	1.827E+01	-0.030
CR-51	-4.987E+02		4.021E+02	Half-Life too short		
MN-54	3.825E+01		1.550E+02	5.251E+02	1.697E+01	0.073
FE-59	2.276E+00		8.230E-01	Half-Life too short		
ZN-65	2.106E+02		5.463E+02	1.857E+03	5.882E+01	0.113
SE-75	1.929E+03		9.211E+02	3.089E+03	9.651E+01	0.624
SR-85	-4.124E-02		1.419E-02	Half-Life too short		
NB-95	4.261E+00		3.477E+00	Half-Life too short		
ZR-95	1.324E-02		3.517E-02	Half-Life too short		
MO-99	-1.000E+35		1.093E+35	Half-Life too short		
TC-99M	1.000E+35		5.329E+35	Half-Life too short		
RU-103	1.006E+00		8.696E-01	Half-Life too short		
RH-105	1.000E+35		6.410E+34	Half-Life too short		
RH-106	6.974E+02		4.215E+02	1.408E+03	4.561E+01	0.495
RU-106	-2.279E+02		9.179E+02	3.082E+03	1.877E+02	-0.074
SB-124	4.932E-02		2.365E-02	Half-Life too short		
SB-125	2.984E+01		1.395E+02	4.666E+02	1.501E+01	0.064
I-131	7.530E+16		1.134E+17	Half-Life too short		
I-132	-1.000E+35		8.580E+34	Half-Life too short		
TE-132	-1.000E+35		6.353E+34	Half-Life too short		
BA-133	3.540E+01		4.097E+01	1.394E+02	8.165E+00	0.254
I-133	1.000E+35		9.712E+34	Half-Life too short		
CS-134	-9.220E+01		5.285E+01	1.740E+02	5.785E+00	-0.530
BA-140	-3.642E+09		4.485E+09	Half-Life too short		
LA-140	1.416E+09		8.324E+08	Half-Life too short		
CE-141	8.303E-01		6.380E+00	Half-Life too short		
CE-144	1.409E+02		5.881E+02	1.685E+03	7.837E+01	0.084
ND-147	1.501E+11		1.085E+12	Half-Life too short		
EU-152	-1.497E+02		9.652E+01	3.129E+02	1.147E+01	-0.478
EU-154	-5.086E+02		4.667E+02	1.549E+03	8.336E+01	-0.328
EU-155	-6.582E+01		8.562E+01	2.847E+02	9.298E+00	-0.231
HG-203	1.795E-01		1.391E-01	Half-Life too short		
TL-208	1.021E+02		5.901E+01	2.021E+02	9.713E+00	0.505

Combined Activity-MDA Report (continued) Page : 6
Sample ID : G9D2J1AC Acquisition date : 30-APR-2005 14:52:57

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/L)	K.L. Ided	Act error	MDA (pCi/L)	MDA error	Act/MDA
BI-211	3.033E+02		1.901E+02	6.507E+02	1.989E+01	0.466
PB-211	-9.608E+02		1.597E+03	5.364E+03	1.734E+02	-0.179
BI-212	-1.993E+02		9.514E+02	3.156E+03	1.042E+02	-0.063
PB-212	1.179E+02		7.843E+01	2.641E+02	1.045E+01	0.446
BI-214	1.121E+02		6.563E+01	2.246E+02	8.346E+00	0.499
PB-214	5.579E+01		5.918E+01	2.020E+02	7.251E+00	0.276
RN-219	9.693E+01		2.104E+02	7.000E+02	2.191E+01	0.138
RA-223	-2.242E+02		2.693E+02	8.761E+02	3.058E+01	-0.256
RA-224	-1.283E+03		9.509E+02	2.893E+03	8.207E+02	-0.443
RA-226	7.893E+02		4.461E+02	1.527E+03	4.456E+01	0.517
TH-227	-2.795E+02		1.818E+02	5.981E+02	1.827E+01	-0.467
AC-228	3.781E+02		2.215E+02	7.206E+02	1.355E+02	0.525
RA-228	6.090E+00		2.431E+02	7.461E+02	2.337E+01	0.008
PA-231	-7.543E+02		8.959E+02	2.922E+03	1.560E+02	-0.258
TH-231	7.887E+02		3.423E+02	1.118E+03	6.440E+01	0.705
TH-232	8.904E+02		1.066E+03	3.619E+03	1.155E+02	0.246
PA-233	1.603E+01		5.548E+01	1.827E+02	5.971E+00	0.088
PA-234M	1.149E+04		8.058E+03	2.712E+04	8.603E+02	0.424
TH-234	-2.430E+03		6.254E+02	1.757E+03	1.491E+02	-1.383
U-235	-1.125E+02		1.316E+02	4.292E+02	3.500E+01	-0.262
NP-237	1.718E+01		5.949E+01	1.959E+02	6.072E+00	0.088
NP-239	2.581E+01		9.327E+01	3.136E+02	1.060E+01	0.082
ANN RAD	5.082E+01		2.940E+01	9.947E+01	3.221E+00	0.511

Nuclide Line Activity Report
Sample ID : G9D2J1AC

Acquisition date : 30-APR-2005 14:52:57

Nuclide Type: fission

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/L	Decay Corr pCi/L	1-Sigma %Error	Status
CO-57	122.06	85.51*	3.723E+00	4.232E+03	1.852E+04	5.94	OK
	136.48	10.60	3.582E+00	4.068E+03	1.780E+04	8.56	OK
	Final Mean for 2 Valid Peaks = 1.839E+04+/- 1.068E+03 (5.81%)						
CS-137	661.65	85.12*	1.003E+00	2.266E+04	2.350E+04	6.03	OK
	Final Mean for 1 Valid Peaks = 2.349E+04+/- 1.416E+03 (6.03%)						

Nuclide Type: activation

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/L	Decay Corr pCi/L	1-Sigma %Error	Status
CO-60	1173.24	99.90	5.983E-01	3.134E+04	3.857E+04	5.94	OK
	1332.50	99.98*	5.377E-01	3.118E+04	3.839E+04	5.74	OK
	Final Mean for 2 Valid Peaks = 3.846E+04+/- 2.088E+03 (5.43%)						
Y-88	898.02	93.40	7.566E-01	1.998E+03	8.520E+04	6.60	OK
	1836.01	99.38*	4.172E-01	1.873E+03	7.987E+04	6.71	OK
	Final Mean for 2 Valid Peaks = 8.244E+04+/- 4.852E+03 (5.89%)						
CD-109	88.03	3.72*	3.846E+00	3.225E+05	7.638E+05	6.88	OK
	Final Mean for 1 Valid Peaks = 7.637E+05+/- 5.254E+04 (6.88%)						
SN-113	391.69	64.90*	1.648E+00	1.474E+03	4.763E+04	7.74	OK
	Final Mean for 1 Valid Peaks = 4.761E+04+/- 3.693E+03 (7.76%)						
CE-139	165.85	80.35*	3.257E+00	1.501E+03	2.745E+04	6.54	OK
	Final Mean for 1 Valid Peaks = 2.745E+04+/- 1.797E+03 (6.55%)						

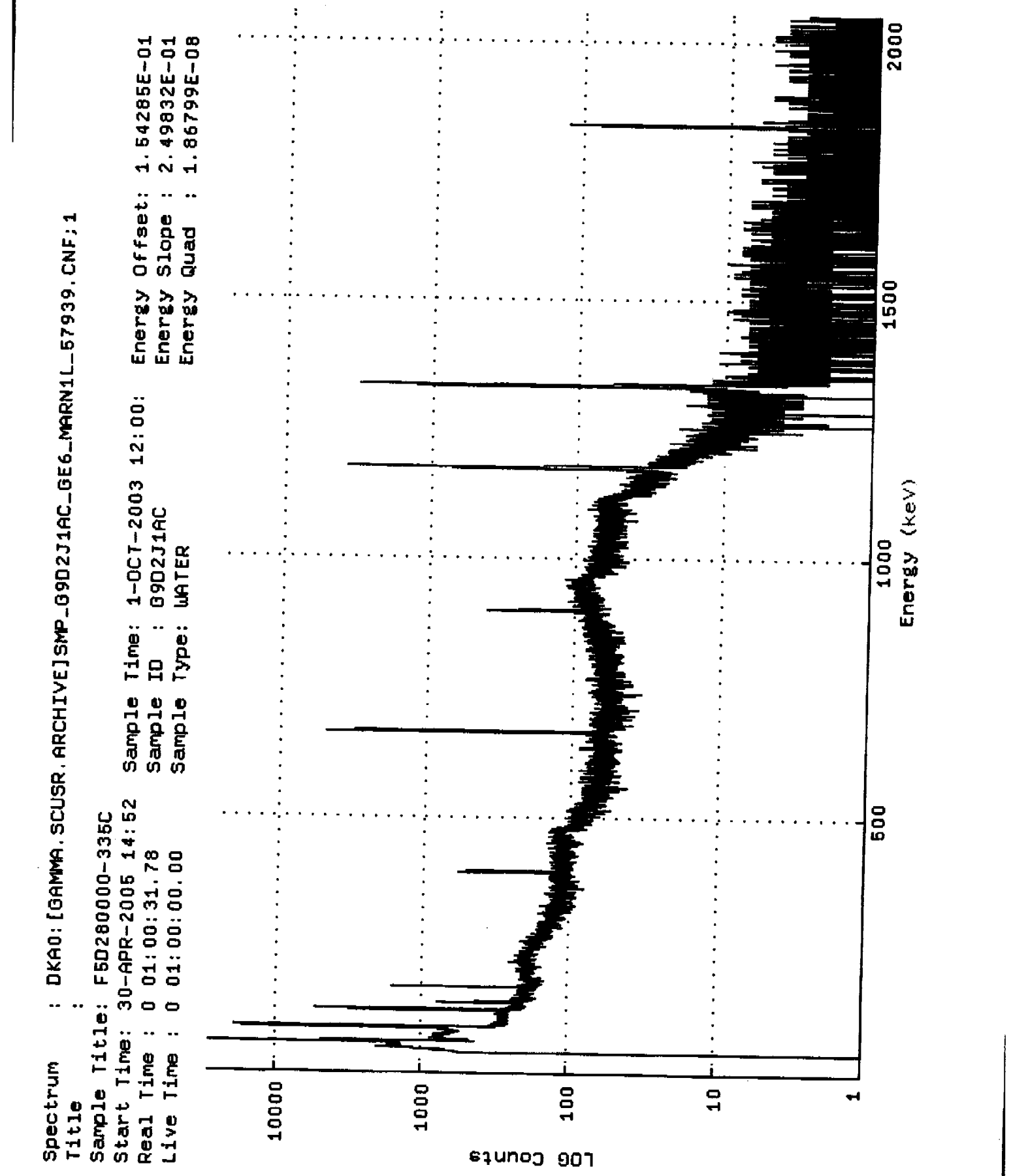
Nuclide Type: Np Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/L	Decay Corr pCi/L	1-Sigma %Error	Status
AM-241	59.54	35.70*	3.270E+00	5.905E+04	5.920E+04	6.06	OK
	Final Mean for 1 Valid Peaks = 5.914E+04+/- 3.583E+03 (6.06%)						

Flag: "*" = Keyline

Nuclide	Half-life	Half-Life Ratio	Energy	%Abund	Activity (pCi/L)	1-Sigma %Error	Rejected by
SE-75	119.78D	4.82	121.11	16.70	--- Not Found ---		Abun.
			136.00	59.20	2.052E+04	9.39	
			264.65*	59.80	--- Not Found ---		
			279.53	25.20	--- Not Found ---		
			400.65	11.40	--- Not Found ---		
		% Abundances	Found =	34.36			
TE-132	3.25D	177.80	49.72	14.50	1.000E+41	7.93	Decay,Abun.
			228.16*	88.50	--- Not Found ---		
		% Abundances	Found =	14.08			
EU-152	13.60Y	0.12	121.78	28.40	1.380E+04	6.43	Abun.
			344.27	26.50	--- Not Found ---		
			778.89	12.74	--- Not Found ---		
			964.01	14.40	--- Not Found ---		
			1085.78	10.00	--- Not Found ---		
			1112.02	13.30	--- Not Found ---		
			1407.95*	20.70	--- Not Found ---		
		% Abundances	Found =	22.53			

Flag: "*" = Keyline


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G9D2J1AC_GE6_MARN1L_57939.CNF;1
Title :
Sample Title: F5D280000-335C
Start Time: 30-APR-2005 14:52
Real Time : 0 01:00:31.78
Live Time : 0 01:00:00.00
Sample Time: 1-OCT-2003 12:00:
Sample ID : G9D2J1AC
Sample Type: WATER
Energy Offset: 1.64285E-01
Energy Slope : 2.49832E-01
Energy Quad : 1.86799E-08
Log Counts
10000
1000
100
10
1
500
1000
1500
2000
Energy (keV)

MLcC

VMS Gamma Spectroscopy Report generated 8-MAY-2005 21:04:14
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G81GW1AE_GE4_MARN1L_57963.CNF;1

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118335
Project Number : F5D220279-001
Sample ID : G81GW1AE

Sample Quantity : 1.00000E+00 L
Sample Type : WATER
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 2-MAY-2005 11:40:43.
Acquisition date : 2-MAY-2005 11:40:43.
Decay time : 0 00:00:00.00

Elapsed live time: 0 03:00:00.00
Elapsed real time: 0 03:00:01.09
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE4

Counting geometry: Marn1L

Energy cal. time : 16-MAR-2005 08:34:49
Effic. cal. time : 18-APR-2005 22:11:43

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE4__57454.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G81GW1AE

Acquisition date : 2-MAY-2005 11:40:43

---- Energy, FWHM, and Efficiency Curves ----

```
**********************************************************************************
*                                                                                *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)                *
*                            A = 1.10653E-01                                     *
*                            B = 2.49919E-01                                     *
*                            C = 1.94892E-08                                     *
*                                                                                *
*                                                                                *
*                       FWHM(keV) = A + (B * SQRT(Energy))                       *
*                            A = 8.02351E-01                                     *
*                            B = 2.65421E-02                                     *
*                                                                                *
*                                                                                *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                                *
*     a1=9.47750E+02   a2=-4.90823E+00 a3=9.11545E-01                           *
*     a4=7.22030E-02   a5=-2.91264E-02 a6=-1.59994E-02   a7=0.00000E+00         *
*                                                                                *
**********************************************************************************
```

Combined Activity-MDA Report
Sample ID : G81GW1AE

Acquisition date : 2-MAY-2005 11:40:43

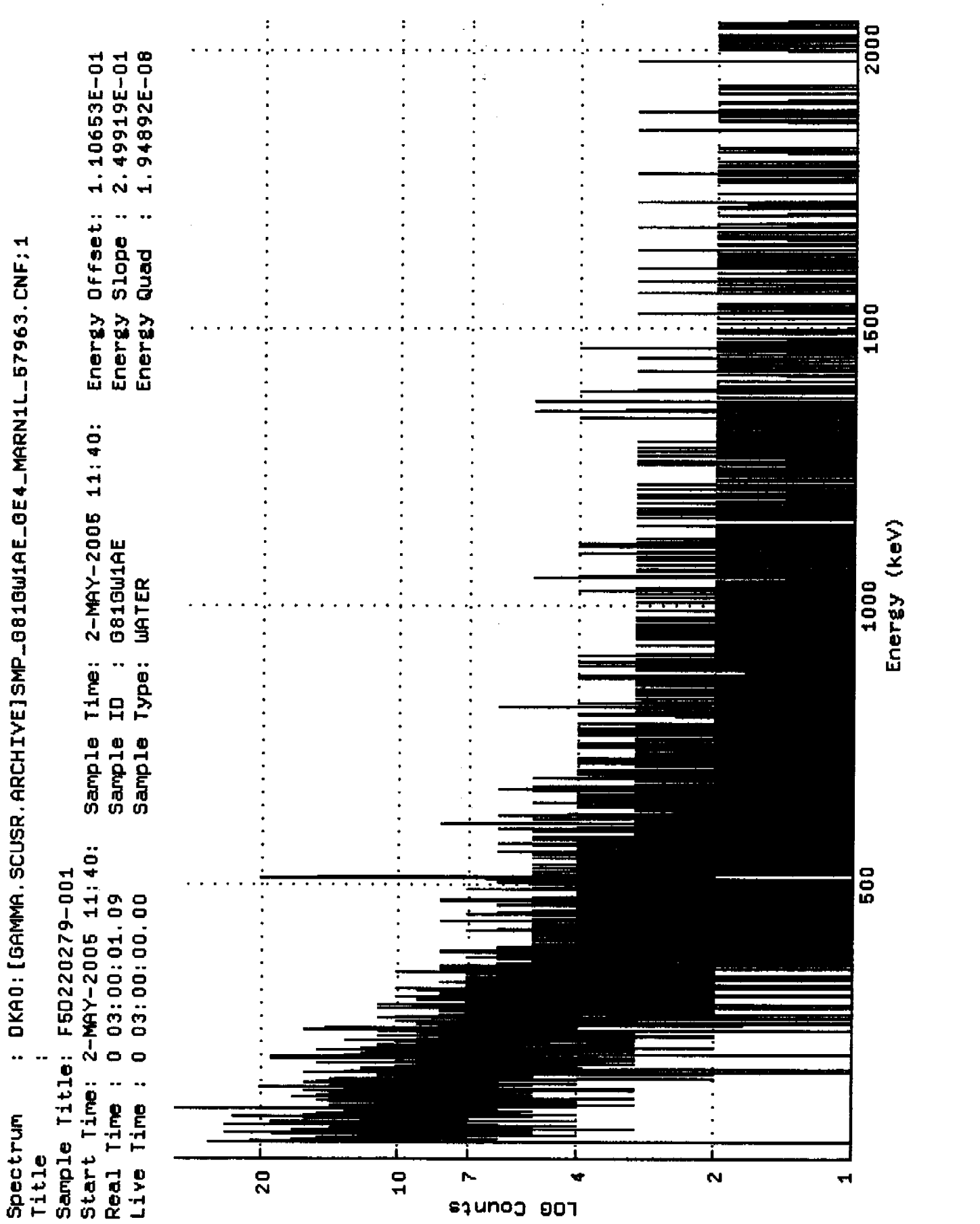
---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/L)	K.L. Ided	Act error	MDA (pCi/L)	MDA error	Act/MDA
BE-7	9.287E+00		1.438E+01	2.473E+01	8.572E-01	0.376
NA-22	-2.021E+00		2.301E+00	3.559E+00	1.025E-01	-0.568
K-40	3.555E+01		2.840E+01	5.206E+01	1.604E+00	0.683
CR-51	-3.741E+00		1.343E+01	2.240E+01	7.086E-01	-0.167
MN-54	1.805E-01		2.130E+00	3.541E+00	1.170E-01	0.051
CO-57	8.220E-01		1.070E+00	1.862E+00	5.902E-02	0.442
FE-59	8.183E-01		3.733E+00	6.349E+00	2.534E-01	0.129
CO-60	-8.085E-01		1.557E+00	2.421E+00	7.007E-02	-0.334
ZN-65	6.579E-01		4.740E+00	7.987E+00	2.362E-01	0.082
SE-75	-2.672E+00		2.146E+00	3.331E+00	9.629E-02	-0.802
SR-85	-1.207E+01		2.912E+00	3.879E+00	1.207E-01	-3.111
Y-88	1.874E+00		1.974E+00	3.756E+00	1.018E-01	0.499
NB-95	-1.193E+00		2.088E+00	3.328E+00	1.126E-01	-0.358
ZR-95	-2.368E+00		3.388E+00	5.318E+00	2.098E-01	-0.445
MO-99	-4.554E+00		1.529E+01	2.489E+01	1.771E+00	-0.183
TC-99M	-9.534E-01		1.531E+00	2.513E+00	7.656E-02	-0.379
RU-103	1.564E-01		1.862E+00	3.092E+00	1.241E-01	0.051
RH-105	3.569E+01		2.530E+01	4.516E+01	1.276E+00	0.790
RH-106	-6.758E+01		1.657E+01	2.906E+01	9.026E-01	-2.326
RU-106	2.156E+00		1.817E+01	3.078E+01	1.877E+00	0.070
CD-109	-4.561E+01		2.673E+01	4.117E+01	1.940E+00	-1.108
SN-113	1.753E+00		2.125E+00	3.705E+00	1.076E-01	0.473
SB-124	-1.807E+00		1.852E+00	2.928E+00	9.693E-02	-0.617
SB-125	5.323E+00		5.112E+00	8.967E+00	2.655E-01	0.594
I-131	-1.477E+00		1.646E+00	2.631E+00	8.114E-02	-0.562
I-132	7.945E-01		2.817E+00	4.803E+00	1.630E-01	0.165
TE-132	-2.197E+00		1.434E+00	2.225E+00	6.454E-02	-0.987
BA-133	-2.051E+00		2.312E+00	3.709E+00	2.123E-01	-0.553
I-133	9.480E-01		2.056E+00	3.479E+00	1.097E-01	0.273
CS-134	-4.575E+00		1.898E+00	2.670E+00	8.884E-02	-1.714
CS-137	-6.579E-02		2.185E+00	3.654E+00	1.242E-01	-0.018
CE-139	-1.590E+00		1.354E+00	2.175E+00	6.218E-02	-0.731
BA-140	-4.145E+00		5.984E+00	9.614E+00	1.568E+00	-0.431
LA-140	-2.755E+00		2.356E+00	3.312E+00	9.509E-02	-0.832
CE-141	2.229E+00		2.239E+00	3.888E+00	1.210E-01	0.573
CE-144	4.204E+00		9.075E+00	1.558E+01	7.386E-01	0.270
ND-147	-2.587E+01		1.304E+01	1.859E+01	5.870E-01	-1.391
EU-152	-1.562E+01		1.054E+01	1.450E+01	5.478E-01	-1.077
EU-154	-6.235E+00		1.779E+01	2.930E+01	1.588E+00	-0.213
EU-155	-3.872E-01		4.728E+00	7.736E+00	2.607E-01	-0.050
HG-203	-1.670E+00		1.717E+00	2.695E+00	8.056E-02	-0.620
TL-208	-3.422E+00		2.131E+00	3.337E+00	1.596E-01	-1.026
BI-211	1.278E+01		1.188E+01	2.089E+01	5.840E-01	0.612
PB-211	-2.198E+00		7.674E+01	1.266E+02	4.186E+00	-0.017
BI-212	6.750E+00		2.777E+01	4.708E+01	1.602E+00	0.143
PB-212	-2.449E+00		3.452E+00	5.653E+00	2.170E-01	-0.433
BI-214	4.532E+00		4.218E+00	7.640E+00	2.847E-01	0.593
PB-214	5.288E+00		3.874E+00	6.887E+00	2.322E-01	0.768

Combined Activity-MDA Report (continued)
Sample ID : G81GW1AE Acquisition date : 2-MAY-2005 11:40:43

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/L)	K.L. Ided	Act error	MDA (pCi/L)	MDA error	Act/MDA
RN-219	-1.924E+00		1.353E+01	2.214E+01	6.363E-01	-0.087
RA-223	-3.957E+00		1.810E+01	3.024E+01	1.070E+00	-0.131
RA-224	1.164E+01		3.636E+01	6.059E+01	1.718E+01	0.192
RA-226	2.047E+01		3.828E+01	6.580E+01	1.897E+00	0.311
TH-227	-1.509E+01		1.200E+01	1.887E+01	5.464E-01	-0.800
AC-228	-3.787E+00		1.134E+01	1.879E+01	3.524E+00	-0.202
RA-228	1.361E+01		7.041E+00	1.347E+01	4.273E-01	1.011
PA-231	-7.564E+01		5.422E+01	8.544E+01	4.430E+00	-0.885
TH-231	2.298E+01		1.538E+01	2.648E+01	1.528E+00	0.868
TH-232	7.924E-01		4.371E+01	7.220E+01	2.352E+00	0.011
PA-233	3.222E+00		3.596E+00	6.294E+00	1.894E-01	0.512
PA-234M	1.520E+02		3.201E+02	5.578E+02	1.737E+01	0.272
TH-234	-2.597E+01		3.460E+01	5.802E+01	4.922E+00	-0.448
U-235	5.818E+00		1.038E+01	1.780E+01	1.459E+00	0.327
NP-237	3.454E+00		3.855E+00	6.749E+00	1.907E-01	0.512
NP-239	-5.304E+00		6.273E+00	9.980E+00	3.449E-01	-0.532
AM-241	-2.799E-02		3.053E+00	5.093E+00	1.721E-01	-0.005
ANN RAD	-1.102E+01		3.359E+00	6.088E+00	1.890E-01	-1.810


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G81GW1AE_GE4_MARN1L_57963.CNF;1
Title :
Sample Title: F5D220279-001
Start Time: 2-MAY-2005 11:40: Sample Time: 2-MAY-2005 11:40: Energy Offset: 1.10653E-01
Real Time : 0 03:00:01.09 Sample ID : G81GW1AE Energy Slope : 2.49919E-01
Live Time : 0 03:00:00.00 Sample Type: WATER Energy Quad : 1.94892E-08
Log Counts
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 8-MAY-2005 22:03:19
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G81GW1APRC_GE7_MARN1L_57972.CNF;

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118335
Project Number : F5D220279-001X
Sample ID : G81GW1AP-RC

Sample Quantity : 1.00000E+00 L
Sample Type : WATER
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 2-MAY-2005 15:11:48. Elapsed live time: 0 03:00:00.00
Acquisition date : 2-MAY-2005 15:11:48. Elapsed real time: 0 03:00:00.83
Decay time : 0 00:00:00.00 % dead time : 0.0%

---- Detector Parameters ----

Detector name : GE7 Counting geometry: Marn1L

Energy cal. time : 25-FEB-2005 09:11:05 Energy cal. type : Poly
Effic. cal. time : 18-APR-2005 23:20:25 FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150 End channel : 8100
Sensitivity : 3.00000 Gaussian Sens. : 15.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.25000 Half life ratio : 8.00000
Abundance limit : 70.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE7__57457.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G81GW1AP-RC Acquisition date : 2-MAY-2005 15:11:48

---- Energy, FWHM, and Efficiency Curves ----

```
*****************************************************************************
*                                                                           *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)           *
*                            A = 7.85538E-02                                *
*                            B = 2.50061E-01                                *
*                            C = -1.56700E-08                               *
*                                                                           *
*                                                                           *
*                       FWHM(keV) = A + (B * SQRT(Energy))                  *
*                            A = 5.33118E-01                                *
*                            B = 4.95085E-02                                *
*                                                                           *
*                                                                           *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                           *
*     a1=9.47750E+02   a2=-4.81002E+00 a3=9.08362E-01                       *
*     a4=5.38130E-02   a5=-2.31329E-02 a6=-1.58434E-02   a7=0.00000E+00     *
*                                                                           *
*****************************************************************************
```

Combined Activity-MDA Report
Sample ID : G81GW1AP-RC

Acquisition date : 2-MAY-2005 15:11:48

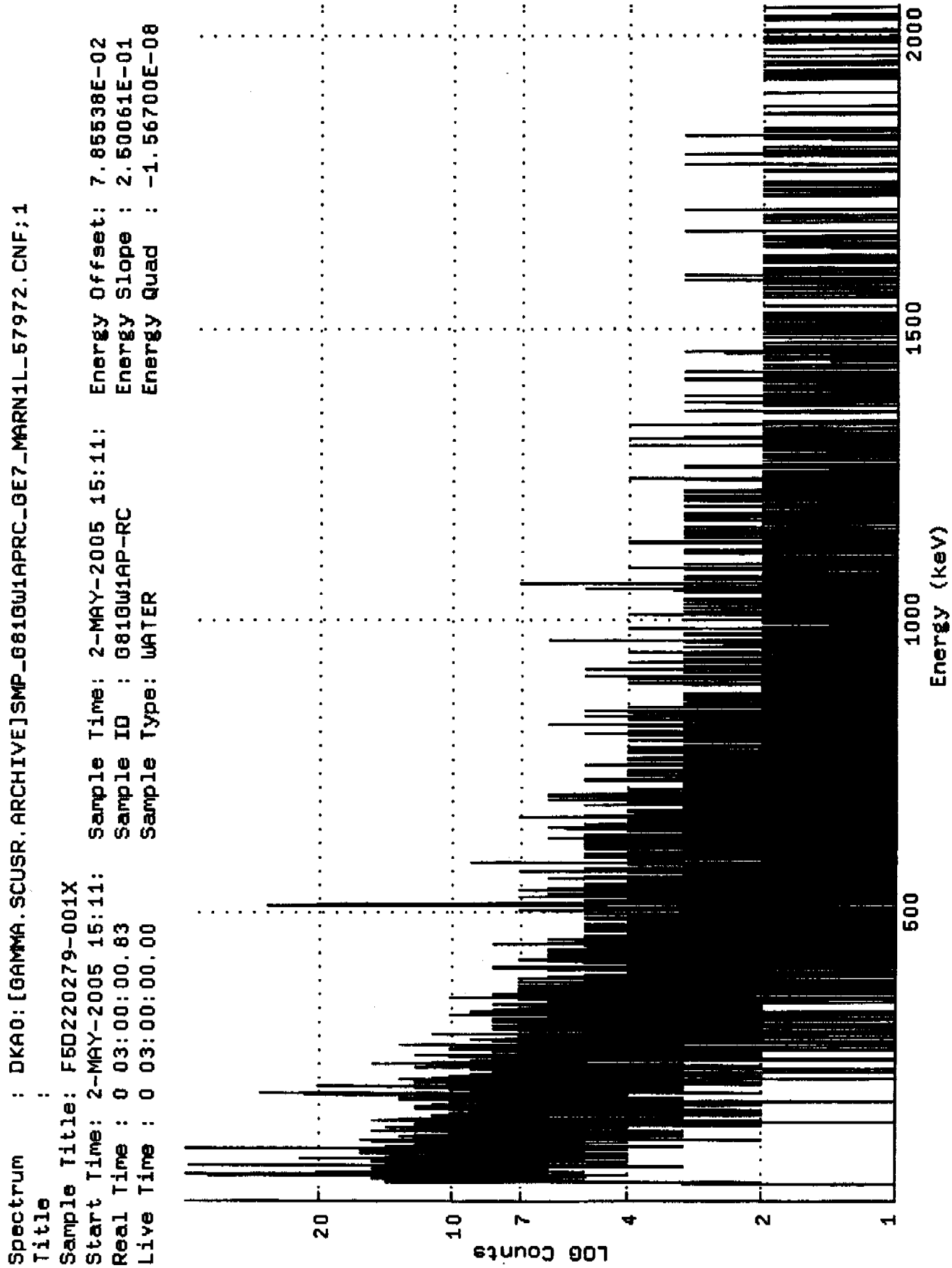
---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/L)	K.L. Ided	Act error	MDA (pCi/L)	MDA error	Act/MDA
BE-7	1.095E+01		1.442E+01	2.522E+01	9.334E-01	0.434
NA-22	4.972E-01		2.351E+00	4.013E+00	1.208E-01	0.124
K-40	2.336E+01		2.668E+01	4.780E+01	1.498E+00	0.489
CR-51	2.582E+00		1.410E+01	2.407E+01	8.231E-01	0.107
MN-54	-7.573E-02		2.187E+00	3.665E+00	1.313E-01	-0.021
CO-57	8.518E-01		1.013E+00	1.712E+00	6.166E-02	0.498
FE-59	-3.899E+00		3.631E+00	5.460E+00	2.227E-01	-0.714
CO-60	3.313E+00		2.288E+00	4.284E+00	1.268E-01	0.773
ZN-65	5.279E+00		4.552E+00	8.231E+00	2.550E-01	0.641
SE-75	1.075E+00		2.030E+00	3.459E+00	1.115E-01	0.311
SR-85	-7.350E+00		2.825E+00	4.269E+00	1.501E-01	-1.722
Y-88	2.809E+00		2.134E+00	4.121E+00	1.120E-01	0.682
NB-95	-1.751E+00		2.111E+00	3.304E+00	1.337E-01	-0.530
ZR-95	-1.546E+00		3.605E+00	5.803E+00	2.651E-01	-0.266
MO-99	8.028E+00		1.507E+01	2.587E+01	1.946E+00	0.310
TC-99M	1.564E+00		1.253E+00	2.195E+00	7.304E-02	0.713
RU-103	-1.677E+00		1.813E+00	2.890E+00	1.236E-01	-0.580
RH-105	1.069E+01		2.449E+01	4.120E+01	1.298E+00	0.259
RH-106	-6.615E+01		1.653E+01	2.979E+01	1.043E+00	-2.220
RU-106	-3.027E+01		1.919E+01	2.922E+01	1.938E+00	-1.036
CD-109	-7.873E+00		2.318E+01	3.831E+01	1.923E+00	-0.206
SN-113	-3.544E+00		1.972E+00	2.938E+00	8.568E-02	-1.207
SB-124	2.569E-01		1.805E+00	3.007E+00	1.236E-01	0.085
SB-125	-1.328E+00		4.869E+00	7.943E+00	2.436E-01	-0.167
I-131	5.130E-01		1.640E+00	2.791E+00	8.932E-02	0.184
I-132	-5.709E+00		2.722E+00	3.879E+00	1.740E-01	-1.472
TE-132	-1.701E-01		1.257E+00	2.111E+00	6.562E-02	-0.081
BA-133	-8.524E-01		2.460E+00	4.074E+00	2.365E-01	-0.209
I-133	-3.857E+00		1.921E+00	2.795E+00	1.011E-01	-1.380
CS-134	-2.280E+00		1.867E+00	2.935E+00	1.213E-01	-0.777
CS-137	2.449E+00		2.174E+00	3.870E+00	1.747E-01	0.633
CE-139	5.873E-01		1.220E+00	2.072E+00	6.016E-02	0.283
BA-140	5.765E+00		6.199E+00	1.077E+01	1.768E+00	0.535
LA-140	5.905E-01		2.761E+00	4.700E+00	1.369E-01	0.126
CE-141	3.828E+00		1.995E+00	3.546E+00	1.186E-01	1.080
CE-144	9.400E+00		7.851E+00	1.379E+01	6.854E-01	0.682
ND-147	-5.330E+00		1.136E+01	1.843E+01	6.687E-01	-0.289
EU-152	-2.978E+00		1.225E+01	1.991E+01	7.615E-01	-0.150
EU-154	-6.881E+00		1.737E+01	2.820E+01	1.534E+00	-0.244
EU-155	3.283E+00		4.307E+00	7.305E+00	2.759E-01	0.449
HG-203	9.826E-01		1.521E+00	2.598E+00	8.738E-02	0.378
TL-208	8.186E+00		2.125E+00	4.088E+00	2.163E-01	2.002
BI-211	1.006E+01		1.162E+01	2.023E+01	6.018E-01	0.498
PB-211	1.170E+02		7.848E+01	1.428E+02	5.148E+00	0.820
BI-212	-1.776E+01		3.143E+01	5.049E+01	2.146E+00	-0.352
PB-212	-1.459E+00		3.092E+00	5.199E+00	2.092E-01	-0.281
BI-214	4.445E+00		4.045E+00	7.200E+00	3.229E-01	0.617
PB-214	4.144E+00		3.923E+00	6.868E+00	2.417E-01	0.603

Combined Activity-MDA Report (continued)
Sample ID : G81GW1AP-RC Acquisition date : 2-MAY-2005 15:11:48

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/L)	K.L. Ided	Act error	MDA (pCi/L)	MDA error	Act/MDA
RN-219	2.484E+01		1.281E+01	2.278E+01	7.364E-01	1.090
RA-223	-2.762E+01		1.565E+01	2.428E+01	8.917E-01	-1.137
RA-224	1.053E+01		3.278E+01	5.550E+01	1.575E+01	0.190
RA-226	5.393E+01		3.784E+01	6.838E+01	2.034E+00	0.789
TH-227	-1.906E+01		1.146E+01	1.811E+01	5.666E-01	-1.053
AC-228	1.315E+01		1.070E+01	1.850E+01	3.477E+00	0.711
RA-228	7.028E+00		7.218E+00	1.282E+01	3.919E-01	0.548
PA-231	-2.823E+01		5.149E+01	8.278E+01	4.449E+00	-0.341
TH-231	1.255E+01		1.328E+01	2.290E+01	1.370E+00	0.548
TH-232	6.513E+01		4.787E+01	8.698E+01	2.940E+00	0.749
PA-233	-5.309E+00		3.356E+00	5.096E+00	1.682E-01	-1.042
PA-234M	-2.354E+02		3.659E+02	5.988E+02	1.856E+01	-0.393
TH-234	2.548E+01		3.270E+01	6.015E+01	5.118E+00	0.424
U-235	9.184E+00		9.336E+00	1.616E+01	1.340E+00	0.568
NP-237	-5.693E+00		3.598E+00	5.464E+00	1.713E-01	-1.042
NP-239	5.490E+00		5.278E+00	9.089E+00	3.504E-01	0.604
AM-241	5.244E-01		2.703E+00	4.445E+00	1.507E-01	0.118
ANN RAD	-1.091E+01		3.389E+00	6.269E+00	2.192E-01	-1.741


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_081GW1APRC_GE7_MARN1L_57972.CNF;1
Title :
Sample Title: F5D220279-001X
Start Time: 2-MAY-2005 15:11: Sample Time: 2-MAY-2005 15:11: Energy Offset: 7.85538E-02
Real Time : 0 03:00:00.83 Sample ID : 081GW1AP-RC Energy Slope : 2.60061E-01
Live Time : 0 03:00:00.00 Sample Type: WATER Energy Quad : -1.56700E-08
Log Counts
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 8-MAY-2005 22:04:10
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G81G81AE_GE5_MARN1L_57967.CNF;1

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118335
Project Number : F5D220279-002
Sample ID : G81G81AE

Sample Quantity : 1.00000E+00 L
Sample Type : WATER
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 2-MAY-2005 11:53:27. Elapsed live time: 0 03:00:00.00
Acquisition date : 2-MAY-2005 11:53:27. Elapsed real time: 0 03:00:02.03
Decay time : 0 00:00:00.00 % dead time : 0.0%

---- Detector Parameters ----

Detector name : GE5 Counting geometry: Marn1L

Energy cal. time : 9-MAR-2005 09:18:16. Energy cal. type : Poly
Effic. cal. time : 18-APR-2005 20:53:17 FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150 End channel : 8100
Sensitivity : 3.00000 Gaussian Sens. : 15.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.25000 Half life ratio : 8.00000
Abundance limit : 70.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE5__57455.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G81G81AE Acquisition date : 2-MAY-2005 11:53:27

---- Energy, FWHM, and Efficiency Curves ----

```
*********************************************************************************
*                                                                               *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)               *
*                          A = -7.14002E-03                                     *
*                          B = 2.49998E-01                                      *
*                          C = -1.90945E-09                                     *
*                                                                               *
*                                                                               *
*                     FWHM(keV) = A + (B * SQRT(Energy))                        *
*                          A = 5.02556E-01                                      *
*                          B = 3.66242E-02                                      *
*                                                                               *
*                                                                               *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                               *
*     a1=9.47750E+02   a2=-4.80027E+00 a3=8.90135E-01                           *
*     a4=4.74050E-02   a5=-1.37129E-02 a6=-1.78918E-02   a7=0.00000E+00         *
*                                                                               *
*********************************************************************************
```

Combined Activity-MDA Report
Sample ID : G81G81AE Acquisition date : 2-MAY-2005 11:53:27

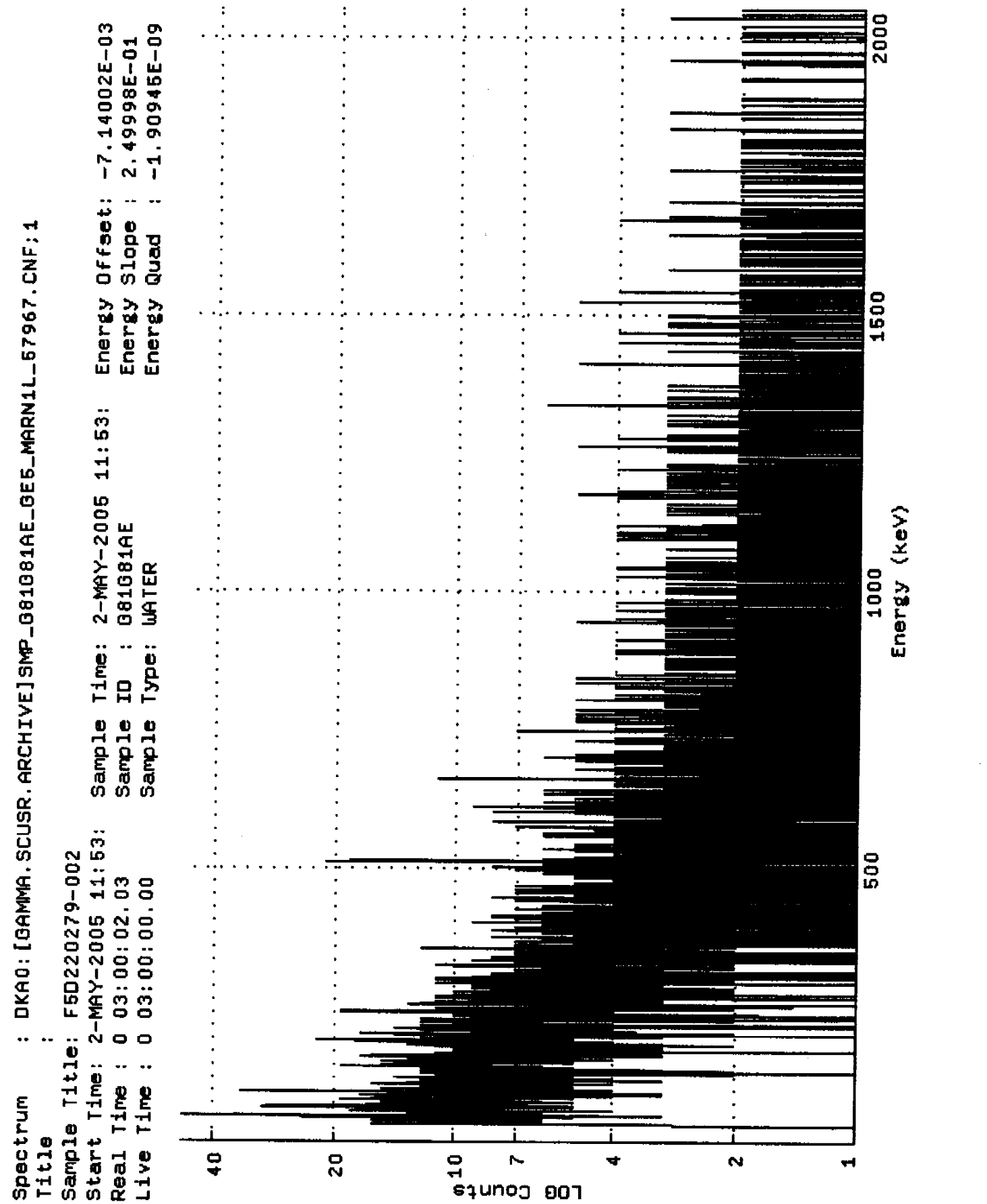
---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/L)	K.L. Ided	Act error	MDA (pCi/L)	MDA error	Act/MDA
BE-7	-1.967E+01		1.373E+01	2.106E+01	7.315E-01	-0.934
NA-22	3.094E+00		2.415E+00	4.438E+00	1.365E-01	0.697
K-40	6.966E+01		2.590E+01	5.113E+01	1.691E+00	1.362
CR-51	-3.239E+00		1.335E+01	2.212E+01	7.097E-01	-0.146
MN-54	3.552E+00		1.876E+00	3.500E+00	1.238E-01	1.015
CO-57	-1.069E+00		9.779E-01	1.524E+00	4.945E-02	-0.702
FE-59	5.981E+00		3.957E+00	7.287E+00	2.999E-01	0.821
CO-60	1.347E+00		2.806E+00	5.108E+00	1.625E-01	0.264
ZN-65	-4.668E-01		4.343E+00	7.131E+00	2.209E-01	-0.065
SE-75	-9.519E-01		1.910E+00	3.173E+00	9.297E-02	-0.300
SR-85	-1.034E+01		2.806E+00	3.986E+00	1.234E-01	-2.593
Y-88	-3.954E+00		1.857E+00	1.805E+00	4.958E-02	-2.191
NB-95	1.966E+00		2.092E+00	3.676E+00	1.268E-01	0.535
ZR-95	3.932E+00		3.268E+00	5.881E+00	2.343E-01	0.669
MO-99	-9.907E+00		1.295E+01	2.033E+01	1.447E+00	-0.487
TC-99M	2.762E+00		1.354E+00	2.421E+00	7.490E-02	1.141
RU-103	-4.119E+00		1.874E+00	2.735E+00	1.097E-01	-1.506
RH-105	-1.761E+00		2.182E+01	3.651E+01	1.049E+00	-0.048
RH-106	-5.291E+01		1.578E+01	2.875E+01	8.889E-01	-1.840
RU-106	5.024E+00		1.632E+01	2.742E+01	1.657E+00	0.183
CD-109	-8.142E+00		2.244E+01	3.686E+01	1.792E+00	-0.221
SN-113	8.514E-02		2.028E+00	3.354E+00	9.920E-02	0.025
SB-124	3.932E-01		1.937E+00	3.233E+00	1.042E-01	0.122
SB-125	1.354E+00		4.444E+00	7.653E+00	2.295E-01	0.177
I-131	2.017E+00		1.558E+00	2.748E+00	8.608E-02	0.734
I-132	1.064E+00		2.653E+00	4.579E+00	1.495E-01	0.232
TE-132	2.559E-01		1.168E+00	1.944E+00	5.684E-02	0.132
BA-133	2.233E+00		2.335E+00	4.036E+00	2.321E-01	0.553
I-133	-8.422E-02		1.809E+00	3.009E+00	9.404E-02	-0.028
CS-134	-6.763E-01		1.816E+00	2.927E+00	9.485E-02	-0.231
CS-137	-2.524E+00		2.485E+00	4.358E+00	1.422E-01	-0.579
CE-139	8.174E-01		1.093E+00	1.890E+00	5.406E-02	0.432
BA-140	-2.317E+00		6.713E+00	1.095E+01	1.785E+00	-0.212
LA-140	-4.100E-01		2.581E+00	4.266E+00	1.299E-01	-0.096
CE-141	-3.265E+00		1.859E+00	2.934E+00	9.244E-02	-1.113
CE-144	-3.842E+00		7.315E+00	1.221E+01	5.836E-01	-0.315
ND-147	-6.325E+00		1.168E+01	1.885E+01	5.898E-01	-0.336
EU-152	1.728E+01		1.041E+01	1.992E+01	7.932E-01	0.867
EU-154	-1.612E+01		1.759E+01	2.782E+01	1.565E+00	-0.580
EU-155	-8.281E-01		3.975E+00	6.503E+00	2.279E-01	-0.127
HG-203	-1.284E+00		1.519E+00	2.473E+00	7.505E-02	-0.519
TL-208	3.547E+00		2.171E+00	3.878E+00	1.837E-01	0.915
BI-211	-7.995E+00		1.129E+01	1.814E+01	5.168E-01	-0.441
PB-211	-2.783E+01		7.264E+01	1.170E+02	4.133E+00	-0.238
BI-212	5.137E+01		2.938E+01	5.392E+01	1.825E+00	0.953
PB-212	4.131E+00		3.325E+00	5.808E+00	2.241E-01	0.711
BI-214	1.196E+01		4.206E+00	7.860E+00	2.866E-01	1.522
PB-214	-6.124E+00		4.049E+00	6.352E+00	2.169E-01	-0.964

Combined Activity-MDA Report (continued)
Sample ID : G81G81AE Acquisition date : 2-MAY-2005 11:53:27

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/L)	K.L. Ided	Act error	MDA (pCi/L)	MDA error	Act/MDA
RN-219	-6.951E+00		1.121E+01	1.846E+01	5.386E-01	-0.376
RA-223	2.021E+01		1.621E+01	2.851E+01	1.015E+00	0.709
RA-224	-9.936E+01		4.514E+01	5.121E+01	1.452E+01	-1.940
RA-226	1.962E+01		3.475E+01	6.133E+01	1.773E+00	0.320
TH-227	-2.718E+01		1.202E+01	1.794E+01	5.240E-01	-1.515
AC-228	3.761E-01		1.067E+01	1.782E+01	3.344E+00	0.021
RA-228	1.850E+00		7.106E+00	1.219E+01	4.356E-01	0.152
PA-231	-1.588E+01		5.595E+01	9.294E+01	4.843E+00	-0.171
TH-231	5.823E+00		1.143E+01	1.944E+01	1.142E+00	0.300
TH-232	6.737E+01		4.357E+01	7.983E+01	2.843E+00	0.844
PA-233	7.275E-01		3.037E+00	5.152E+00	1.575E-01	0.141
PA-234M	2.757E+02		3.091E+02	5.516E+02	1.882E+01	0.500
TH-234	-4.517E+01		3.119E+01	4.852E+01	4.125E+00	-0.931
U-235	2.560E+00		8.714E+00	1.492E+01	1.225E+00	0.172
NP-237	7.800E-01		3.257E+00	5.524E+00	1.588E-01	0.141
NP-239	5.083E+00		5.544E+00	9.468E+00	3.417E-01	0.537
AM-241	-1.200E+00		2.860E+00	4.745E+00	1.612E-01	-0.253
ANN RAD	-1.167E+01		3.280E+00	5.919E+00	1.829E-01	-1.972


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_081081AE_GE6_MARN1L_67967.CNF;1
Title :
Sample Title: F5D220279-002
Start Time: 2-MAY-2005 11:53:
Real Time : 0 03:00:02.03
Live Time : 0 03:00:00.00
Sample Time: 2-MAY-2005 11:53:
Sample ID : 081081AE
Sample Type: WATER
Energy Offset: -7.14002E-03
Energy Slope : 2.49998E-01
Energy Quad : -1.90945E-09
Log Counts
40
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 8-MAY-2005 21:05:44
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G9D2J1AA_GE6_MARN1L_57965.CNF;1

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118335
Project Number : F5D280000-335B
Sample ID : G9D2J1AA

Sample Quantity : 1.00000E+00 L
Sample Type : WATER
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 2-MAY-2005 11:42:27. Elapsed live time: 0 03:00:00.00
Acquisition date : 2-MAY-2005 11:42:27. Elapsed real time: 0 03:00:00.98
Decay time : 0 00:00:00.00 % dead time : 0.0%

---- Detector Parameters ----

Detector name : GE6 Counting geometry: Marn1L

Energy cal. time : 3-MAR-2004 08:43:53. Energy cal. type : Poly
Effic. cal. time : 19-APR-2005 00:32:27 FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150 End channel : 8100
Sensitivity : 3.00000 Gaussian Sens. : 15.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.25000 Half life ratio : 8.00000
Abundance limit : 70.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE6__57456.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G9D2J1AA Acquisition date : 2-MAY-2005 11:42:27

---- Energy, FWHM, and Efficiency Curves ----

```
**********************************************************************************
*                                                                                *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)                *
*                          A = 1.54285E-01                                       *
*                          B = 2.49832E-01                                       *
*                          C = 1.86799E-08                                       *
*                                                                                *
*                                                                                *
*                     FWHM(keV) = A + (B * SQRT(Energy))                         *
*                          A = 4.67797E-01                                       *
*                          B = 3.35494E-02                                       *
*                                                                                *
*                                                                                *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                                *
*     a1=9.47750E+02   a2=-4.93244E+00 a3=8.93311E-01                           *
*     a4=8.77785E-02   a5=-2.99163E-02 a6=-1.70193E-02   a7=0.00000E+00         *
*                                                                                *
**********************************************************************************
```

Combined Activity-MDA Report
Sample ID : G9D2J1AA

Acquisition date : 2-MAY-2005 11:42:27

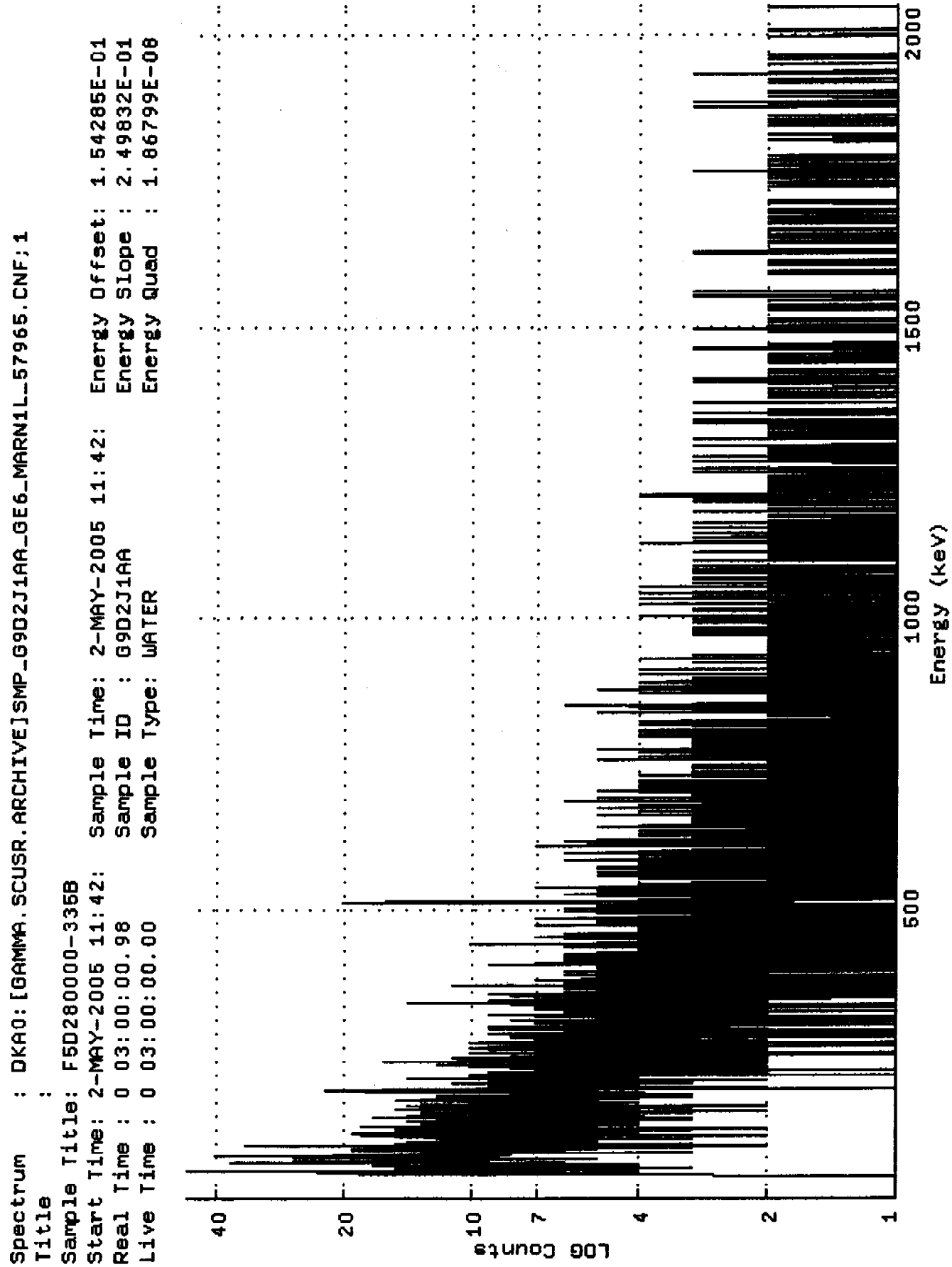
---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/L)	K.L. Ided	Act error	MDA (pCi/L)	MDA error	Act/MDA
BE-7	-2.377E+00		1.512E+01	2.484E+01	8.981E-01	-0.096
NA-22	-4.937E+00		2.350E+00	3.001E+00	8.676E-02	-1.645
K-40	-5.823E+00		2.860E+01	5.213E+01	1.539E+00	-0.112
CR-51	1.227E+01		1.332E+01	2.287E+01	7.795E-01	0.537
MN-54	6.193E-01		1.853E+00	3.212E+00	1.037E-01	0.193
CO-57	9.752E-01		9.832E-01	1.702E+00	5.078E-02	0.573
FE-59	-1.475E+00		3.998E+00	6.364E+00	2.629E-01	-0.232
CO-60	2.237E+00		2.527E+00	4.537E+00	1.237E-01	0.493
ZN-65	-1.657E+00		4.427E+00	7.243E+00	2.292E-01	-0.229
SE-75	-3.099E+00		1.813E+00	2.732E+00	8.519E-02	-1.135
SR-85	-1.162E+01		2.784E+00	3.632E+00	1.178E-01	-3.200
Y-88	-1.219E+00		2.164E+00	3.274E+00	8.862E-02	-0.372
NB-95	1.864E+00		1.686E+00	3.041E+00	1.001E-01	0.613
ZR-95	5.734E+00		3.425E+00	6.341E+00	2.450E-01	0.904
MO-99	6.753E+00		1.172E+01	2.045E+01	1.445E+00	0.330
TC-99M	1.579E+00		1.218E+00	2.113E+00	6.192E-02	0.747
RU-103	-2.615E+00		1.787E+00	2.657E+00	1.097E-01	-0.984
RH-105	-8.684E+00		2.425E+01	3.925E+01	1.217E+00	-0.221
RH-106	9.327E+01		1.549E+01	2.869E+01	9.292E-01	3.251
RU-106	5.962E+00		1.647E+01	2.837E+01	1.725E+00	0.210
CD-109	6.411E+01		2.404E+01	4.373E+01	2.055E+00	1.466
SN-113	1.321E+00		2.123E+00	3.690E+00	1.153E-01	0.358
SB-124	3.613E-01		1.541E+00	2.639E+00	8.737E-02	0.137
SB-125	-4.342E+00		4.289E+00	6.669E+00	2.112E-01	-0.651
I-131	-4.215E+00		1.714E+00	2.492E+00	8.259E-02	-1.691
I-132	-1.555E+00		2.480E+00	3.935E+00	1.292E-01	-0.395
TE-132	-1.279E+00		1.276E+00	2.051E+00	6.214E-02	-0.623
BA-133	3.369E+00		2.000E+00	3.664E+00	2.145E-01	0.919
I-133	-1.549E+00		2.007E+00	3.131E+00	1.022E-01	-0.495
CS-134	-4.313E+00		1.718E+00	2.323E+00	7.718E-02	-1.857
CS-137	3.298E+00		2.022E+00	3.745E+00	1.232E-01	0.881
CE-139	-5.554E-01		1.262E+00	2.030E+00	5.794E-02	-0.274
BA-140	7.170E+00		6.685E+00	1.156E+01	1.888E+00	0.620
LA-140	2.265E+00		2.107E+00	3.999E+00	1.110E-01	0.566
CE-141	-2.098E+00		1.943E+00	3.061E+00	9.245E-02	-0.685
CE-144	-2.519E+00		8.012E+00	1.313E+01	6.104E-01	-0.192
ND-147	1.214E+01		1.238E+01	2.159E+01	7.050E-01	0.562
EU-152	4.015E+00		1.015E+01	1.758E+01	6.442E-01	0.228
EU-154	-1.119E+01		1.821E+01	2.917E+01	1.570E+00	-0.384
EU-155	-9.662E+00		4.119E+00	6.217E+00	2.030E-01	-1.554
HG-203	7.745E-01		1.521E+00	2.586E+00	8.404E-02	0.300
TL-208	1.836E+00		2.024E+00	3.596E+00	1.728E-01	0.511
BI-211	2.196E+01		1.157E+01	2.130E+01	6.510E-01	1.031
PB-211	-2.324E+01		6.727E+01	1.105E+02	3.572E+00	-0.210
BI-212	-8.632E-01		2.836E+01	4.694E+01	1.550E+00	-0.018
PB-212	-2.729E+00		3.151E+00	5.369E+00	2.125E-01	-0.508
BI-214	1.678E+00		4.549E+00	8.252E+00	3.067E-01	0.203
PB-214	8.233E+00		3.774E+00	7.012E+00	2.518E-01	1.174

Combined Activity-MDA Report (continued)
Sample ID : G9D2J1AA Acquisition date : 2-MAY-2005 11:42:27

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/L)	K.L. Ided	Act error	MDA (pCi/L)	MDA error	Act/MDA
RN-219	6.971E+00		1.210E+01	2.064E+01	6.444E-01	0.338
RA-223	-3.407E+00		1.714E+01	2.798E+01	9.768E-01	-0.122
RA-224	-9.589E+01		4.441E+01	5.213E+01	1.479E+01	-1.839
RA-226	-3.107E+01		3.642E+01	6.244E+01	1.822E+00	-0.498
TH-227	-2.216E+01		1.105E+01	1.689E+01	5.143E-01	-1.312
AC-228	4.042E+00		1.178E+01	2.029E+01	3.815E+00	0.199
RA-228	1.040E+01		6.421E+00	1.217E+01	3.813E-01	0.854
PA-231	6.422E+00		5.568E+01	9.239E+01	4.933E+00	0.070
TH-231	4.478E+01		1.443E+01	2.624E+01	1.512E+00	1.706
TH-232	5.086E+01		4.408E+01	8.075E+01	2.577E+00	0.630
PA-233	-4.358E+00		3.279E+00	4.995E+00	1.632E-01	-0.872
PA-234M	1.464E+02		3.535E+02	6.071E+02	1.926E+01	0.241
TH-234	4.937E+01		3.415E+01	6.112E+01	5.187E+00	0.808
U-235	-9.028E+00		9.514E+00	1.518E+01	1.238E+00	-0.595
NP-237	-4.673E+00		3.515E+00	5.356E+00	1.660E-01	-0.872
NP-239	3.964E+00		5.483E+00	9.492E+00	3.209E-01	0.418
AM-241	6.956E+00		2.568E+00	4.636E+00	1.572E-01	1.500
ANN RAD	-1.775E+01		3.607E+00	6.202E+00	2.008E-01	-2.861


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G9D2J1AA_GE6_MARN1L_57965.CNF;1
Title :
Sample Title: F5D280000-335B
Start Time: 2-MAY-2005 11:42: Sample Time: 2-MAY-2005 11:42: Energy Offset: 1.54285E-01
Real Time : 0 03:00:00.98 Sample ID : G9D2J1AA Energy Slope : 2.49832E-01
Live Time : 0 03:00:00.00 Sample Type: WATER Energy Quad : 1.86799E-08
Log Counts
40
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 8-MAY-2005 21:06:18
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G9D2J1AC_GE6_MARN1L_57939.CNF;1

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118335
Project Number : F5D280000-335C
Sample ID : G9D2J1AC

Sample Quantity : 1.00000E+00 L
Sample Type : WATER
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 1-OCT-2003 12:00:00. Elapsed live time: 0 01:00:00.00
Acquisition date : 30-APR-2005 14:52:57 Elapsed real time: 0 01:00:31.78
Decay time : 577 02:52:57.21 % dead time : 0.9%

---- Detector Parameters ----

Detector name : GE6 Counting geometry: Marn1L

Energy cal. time : 3-MAR-2004 08:43:53. Energy cal. type : Poly
Effic. cal. time : 19-APR-2005 00:32:27 FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150 End channel : 8100
Sensitivity : 3.00000 Gaussian Sens. : 15.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.25000 Half life ratio : 8.00000
Abundance limit : 70.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE6__57456.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G9D2J1AC Acquisition date : 30-APR-2005 14:52:57

---- Energy, FWHM, and Efficiency Curves ----

```
*************************************************************************
*                                                                       *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)       *
*                            A = 1.54285E-01                            *
*                            B = 2.49832E-01                            *
*                            C = 1.86799E-08                            *
*                                                                       *
*                                                                       *
*                      FWHM(keV) = A + (B * SQRT(Energy))               *
*                            A = 4.67797E-01                            *
*                            B = 3.35494E-02                            *
*                                                                       *
*                                                                       *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                       *
*     a1=9.47750E+02   a2=-4.93244E+00 a3=8.93311E-01                   *
*     a4=8.77785E-02   a5=-2.99163E-02 a6=-1.70193E-02   a7=0.00000E+00 *
*                                                                       *
*************************************************************************
```

Combined Activity-MDA Report
Sample ID : G9D2J1AC Acquisition date : 30-APR-2005 14:52:57

---- Identified Nuclides ----

Nuclide	Activity (pCi/L)	Act error	MDA (pCi/L)	MDA error	Act/MDA
CO-57	1.839E+04	1.068E+03	1.223E+02	3.669E+00	150.379
CO-60	3.846E+04	2.088E+03	5.198E+01	1.417E+00	739.920
Y-88	8.244E+04	4.852E+03	1.053E+03	2.854E+01	78.305
CD-109	7.637E+05	5.254E+04	2.031E+03	9.550E+01	376.055
SN-113	4.761E+04	3.693E+03	2.083E+03	6.777E+01	22.862
CS-137	2.349E+04	1.416E+03	6.812E+01	2.241E+00	344.814
CE-139	2.745E+04	1.797E+03	5.549E+02	1.591E+01	49.475
AM-241	5.914E+04	3.583E+03	1.385E+02	4.696E+00	427.015

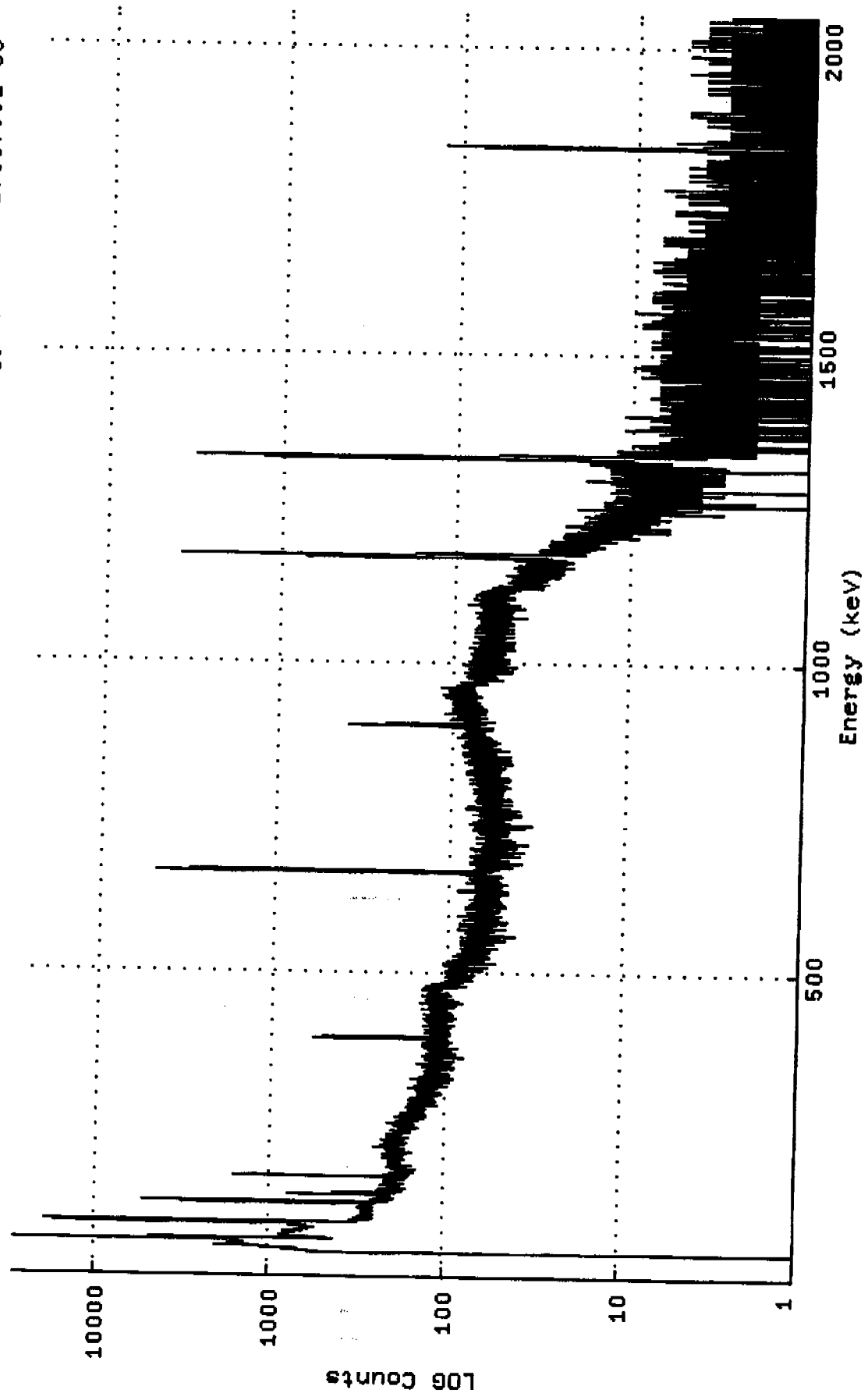
---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/L)	K.L. Ided	Act error	MDA (pCi/L)	MDA error	Act/MDA
BE-7	-4.658E-01		5.088E-01	Half-Life too short		
NA-22	-4.826E+01		3.579E+01	5.728E+01	1.656E+00	-0.843
K-40	-1.886E+01		1.733E+02	2.952E+02	8.715E+00	-0.064
CR-51	-4.987E+02		4.021E+02	Half-Life too short		
MN-54	3.825E+01		1.550E+02	2.623E+02	8.476E+00	0.146
FE-59	2.276E+00		8.230E-01	Half-Life too short		
ZN-65	2.106E+02		5.463E+02	9.274E+02	2.937E+01	0.227
SE-75	1.929E+03		9.211E+02	1.549E+03	4.841E+01	1.245
SR-85	-4.124E-02		1.419E-02	Half-Life too short		
NB-95	4.261E+00		3.477E+00	Half-Life too short		
ZR-95	1.324E-02		3.517E-02	Half-Life too short		
MO-99	-1.000E+35		1.093E+35	Half-Life too short		
TC-99M	1.000E+35		5.329E+35	Half-Life too short		
RU-103	1.006E+00		8.696E-01	Half-Life too short		
RH-105	1.000E+35		6.410E+34	Half-Life too short		
RH-106	6.974E+02		4.215E+02	7.041E+02	2.281E+01	0.990
RU-106	-2.279E+02		9.179E+02	1.538E+03	9.364E+01	-0.148
SB-124	4.932E-02		2.365E-02	Half-Life too short		
SB-125	2.984E+01		1.395E+02	2.337E+02	7.522E+00	0.128
I-131	7.530E+16		1.134E+17	Half-Life too short		
I-132	-1.000E+35		8.580E+34	Half-Life too short		
TE-132	-1.000E+35		6.353E+34	Half-Life too short		
BA-133	3.540E+01		4.097E+01	6.983E+01	4.089E+00	0.507
I-133	1.000E+35		9.712E+34	Half-Life too short		
CS-134	-9.220E+01		5.285E+01	8.679E+01	2.886E+00	-1.062
BA-140	-3.642E+09		4.485E+09	Half-Life too short		
LA-140	1.416E+09		8.324E+08	Half-Life too short		
CE-141	8.303E-01		6.380E+00	Half-Life too short		
CE-144	1.409E+02		5.881E+02	8.463E+02	3.935E+01	0.167
ND-147	1.501E+11		1.085E+12	Half-Life too short		
EU-152	-1.497E+02		9.652E+01	1.486E+02	5.445E+00	-1.008
EU-154	-5.086E+02		4.667E+02	7.742E+02	4.167E+01	-0.657
EU-155	-6.582E+01		8.562E+01	1.431E+02	4.674E+00	-0.460
HG-203	1.795E-01		1.391E-01	Half-Life too short		
TL-208	1.021E+02		5.901E+01	1.009E+02	4.847E+00	1.013

Combined Activity-MDA Report (continued)
Sample ID : G9D2J1AC Acquisition date : 30-APR-2005 14:52:57

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/L)	K.L. Ided	Act error	MDA (pCi/L)	MDA error	Act/MDA
BI-211	3.033E+02		1.901E+02	3.259E+02	9.960E+00	0.931
PB-211	-9.608E+02		1.597E+03	2.679E+03	8.659E+01	-0.359
BI-212	-1.993E+02		9.514E+02	1.574E+03	5.198E+01	-0.127
PB-212	1.179E+02		7.843E+01	1.326E+02	5.248E+00	0.889
BI-214	1.121E+02		6.563E+01	1.121E+02	4.166E+00	1.000
PB-214	5.579E+01		5.918E+01	1.011E+02	3.631E+00	0.552
RN-219	9.693E+01		2.104E+02	3.510E+02	1.099E+01	0.276
RA-223	-2.242E+02		2.693E+02	4.396E+02	1.535E+01	-0.510
RA-224	-1.283E+03		9.509E+02	1.452E+03	4.119E+02	-0.883
RA-226	7.893E+02		4.461E+02	7.667E+02	2.237E+01	1.029
TH-227	-2.795E+02		1.818E+02	3.003E+02	9.170E+00	-0.931
AC-228	3.781E+02		2.215E+02	3.610E+02	6.787E+01	1.047
RA-228	6.090E+00		2.431E+02	3.735E+02	1.170E+01	0.016
PA-231	-7.543E+02		8.959E+02	1.464E+03	7.816E+01	-0.515
TH-231	7.887E+02		3.423E+02	5.643E+02	3.250E+01	1.398
TH-232	8.904E+02		1.066E+03	1.809E+03	5.774E+01	0.492
PA-233	1.603E+01		5.548E+01	9.157E+01	2.992E+00	0.175
PA-234M	1.149E+04		8.058E+03	1.356E+04	4.300E+02	0.848
TH-234	-2.430E+03		6.254E+02	8.853E+02	7.512E+01	-2.745
U-235	-1.125E+02		1.316E+02	2.154E+02	1.757E+01	-0.522
NP-237	1.718E+01		5.949E+01	9.819E+01	3.043E+00	0.175
NP-239	2.581E+01		9.327E+01	1.576E+02	5.329E+00	0.164
ANN RAD	5.082E+01		2.940E+01	4.976E+01	1.611E+00	1.021


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G9D2J1AC_GE6_MARN1L_57939.CNF;1
Title :
Sample Title: F6D280000-335C
Start Time: 30-APR-2006 14:52
Real Time : 0 01:00:31.78
Live Time : 0 01:00:00.00
Sample Time: 1-OCT-2003 12:00:
Sample ID : G9D2J1AC
Sample Type: WATER
Energy Offset: 1.54285E-01
Energy Slope : 2.49832E-01
Energy Quad : 1.86799E-08
Log Counts
10000
1000
100
10
1
500
1000
1500
2000
Energy (keV)

Instrument Checks

QA filename : DKA0:[GAMMA.SCUSR.QA]QCB_GE4.QAF;1

Sample ID : Bkgrnd Check
Sample date : 2-MAY-2005 06:04:00
Elapsed live time: 0 00:20:00.00
Sample quantity : 1.00 EACH
Acquisition date : 2-MAY-2005 06:04:00
Elapsed real time: 0 00:20:00.11

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*Background Rate GE4 [1.25639+/-0.04128]	1.3067E+00	1.22	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: JW Approval Date: 5-2-5 5 / 2 / 5

QA filename : DKA0:[GAMMA.SCUSR.QA]QCB_GE5.QAF;1

Sample ID : Bkgrnd Check
Sample date : 2-MAY-2005 06:04:10
Elapsed live time: 0 00:20:00.00
Sample quantity : 1.00 EACH
Acquisition date : 2-MAY-2005 06:04:10
Elapsed real time: 0 00:20:00.22

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*Background Rate GE5 [1.40558+/-0.04394]	1.3342E+00	-1.63	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 5/21/5

QA filename : DKA0:[GAMMA.SCUSR.QA]QCB_GE6.QAF;1

Sample ID : Bkgrnd Check Sample quantity : 1.00 EACH
Sample date : 2-MAY-2005 06:04:17 Acquisition date : 2-MAY-2005 06:04:17
Elapsed live time: 0 00:20:00.00 Elapsed real time: 0 00:20:00.12

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*Background Rate GE6 [1.34312+/-0.03885]	1.2942E+00	-1.26	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 5 / 2 / 5

QA filename : DKA0:[GAMMA.SCUSR.QA]QCB_GE7.QAF;1

Sample ID : Bkgrnd Check
Sample date : 2-MAY-2005 06:04:24
Elapsed live time: 0 00:20:00.00
Sample quantity : 1.00 EACH
Acquisition date : 2-MAY-2005 06:04:24
Elapsed real time: 0 00:20:00.09

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*Background Rate GE7 [1.25481+/-0.09021]	1.2458E+00	-0.10	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 5/2/5

QA filename : DKA0:[GAMMA.SCUSR.QA]QCC_GE4_PETRI060.QAF;1

Sample ID : Calib Check
Sample date : 1-OCT-1997 12:00:00
Elapsed live time: 0 00:10:00.00
Sample quantity : 1.00 EACH
Acquisition date : 2-MAY-2005 06:40:25
Elapsed real time: 0 00:10:00.98

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*GE4 Peak Energy 59.5 keV [59.4767+/-0.1698]	5.9624E+01	0.87	
*GE4 Peak Energy 661.6 keV [661.6337+/-0.2656]	6.6178E+02	0.54	
*GE4 Peak Energy 1332 keV [1332.5527+/-0.3974]	1.3328E+03	0.52	
*GE4 Peak FWHM 59.5 keV [0.83589+/-0.08221]	1.0734E+00	2.89	Investigate
*GE4 Peak FWHM 661.6 keV [1.3474+/-0.1465]	1.5437E+00	1.34	
*GE4 Peak FWHM 1332 keV [1.7541+/-0.2243]	1.5173E+00	-1.06	
*GE4 Am-241 Activity, 59.5 keV [0.0051039+/-2.5843E-04]	5.2497E-03	0.56	
*GE4 Cs-137 Activity, 661.6 keV [0.0019680+/-1.1831E-04]	2.0112E-03	0.36	
*GE4 Co-60 Activity, 1332 keV [0.0031155+/-2.7324E-04]	3.2043E-03	0.32	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*GE4 Peak Centroid 59.5 keV	2.3200E+02	2.4400E+02	2.3813E+02	
*GE4 Peak Centroid 661 keV	2.6380E+03	2.6500E+03	2.6470E+03	
*GE4 Peak Centroid 1332 keV	5.3220E+03	5.3340E+03	5.3301E+03	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 5 / 2 / 5

QA filename : DKA0:[GAMMA.SCUSR.QA]QCC_GE5_PETRI060.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-OCT-1997 12:00:00 Acquisition date : 2-MAY-2005 06:40:50
Elapsed live time: 0 00:10:00.00 Elapsed real time: 0 00:10:01.09

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*GE5 Peak Energy 59.5 keV [59.51143+/-0.03576]	5.9490E+01	-0.60	
*GE5 Peak Energy 661.6 keV [661.6370+/-0.2149]	6.6192E+02	1.32	
*GE5 Peak Energy 1332 keV [1332.4376+/-0.3451]	1.3331E+03	1.87	
*GE5 Peak FWHM 59.5 keV [0.79683+/-0.01892]	7.8258E-01	-0.75	
*GE5 Peak FWHM 661 KEV [1.34206+/-0.08835]	1.4137E+00	0.81	
*GE5 Peak FWHM 1332 keV [1.7736+/-0.2140]	1.3949E+00	-1.77	
*GE5 Am-241 Activity, 59.5 keV [0.00537092+/-9.5029E-05]	5.4732E-03	1.08	
*GE5 Cs-137 Activity, 661.6 keV [0.00198257+/-7.2602E-05]	1.9842E-03	0.02	
*GE5 Co-60 Activity, 1332 keV [0.0031156+/-1.4953E-04]	2.7835E-03	-2.22	Investigate

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*GE5 Peak Centroid 59.5 keV	2.3500E+02	2.4100E+02	2.3799E+02	
*GE5 Peak Centroid 661 keV	2.6406E+03	2.6526E+03	2.6478E+03	
*GE5 Peak Centroid 1332 keV	5.3239E+03	5.3359E+03	5.3326E+03	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 5 / 2 / 5

QA filename : DKA0:[GAMMA.SCUSR.QA]QCC_GE6_PETRI060.QAF;1

Sample ID : Calib Check
Sample date : 1-OCT-1997 12:00:00
Elapsed live time: 0 00:10:00.00
Sample quantity : 1.00 EACH
Acquisition date : 2-MAY-2005 06:41:07
Elapsed real time: 0 00:10:00.70

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*GE-6 Peak Energy 59.5 keV [59.57895+/-0.06881]	5.9634E+01	0.81	
*GE-6 Peak Energy 661.6 keV [661.6124+/-0.1401]	6.6153E+02	-0.58	
*Ge-6 Peak Energy 1332 keV [1332.4098+/-0.2469]	1.3322E+03	-0.91	
*GE-6 Peak FWHM 59.5 keV [0.74419+/-0.01982]	8.1069E-01	3.35	Action
*GE-6 Peak FWHM 661.6 keV [1.24488+/-0.09401]	1.2198E+00	-0.27	
*GE-6 Peak FWHM 1332 keV [1.6124+/-0.2106]	1.5876E+00	-0.12	
GE-6 Am-241 Activity, 59.5 keV [0.0044729+/-1.0326E-04]	4.4664E-03	-0.06	
GE-6 Cs-137 Activity, 661.6 keV [0.00178314+/-7.5930E-05]	1.7248E-03	-0.77	
GE-6 Co-60 Activity, 1332 keV [0.0037600+/-2.1368E-04]	3.8664E-03	0.50	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*GE-6 Peak Centroid 59.5	2.3200E+02	2.4400E+02	2.3808E+02	
*GE-6 Peak Centroid 661 keV	2.6380E+03	2.6500E+03	2.6468E+03	
*GE-6 Peak Centroid 1332 keV	5.3220E+03	5.3340E+03	5.3296E+03	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 5 / 2 / 5

QA filename : DKA0:[GAMMA.SCUSR.QA]QCC_GE7_PETRI060.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-OCT-1997 12:00:00 Acquisition date : 2-MAY-2005 06:41:24
Elapsed live time: 0 00:10:00.00 Elapsed real time: 0 00:10:00.75

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*GE7 Peak Energy 59.5 keV [59.48854+/-0.07971]	5.9594E+01	1.32	
*GE7 Peak Energy 661.6 keV [661.4800+/-0.2331]	6.6177E+02	1.24	
*GE7 Peak Energy 1332 keV [1332.2655+/-0.4909]	1.3327E+03	0.82	
*GE7 Peak FWHM 59.5 keV [0.96014+/-0.02820]	9.4073E-01	-0.69	
*GE7 Peak FWHM 661.6 keV [1.6034+/-0.1178]	1.6111E+00	0.07	
*GE7 Peak FWHM 1332 keV [2.1455+/-0.2865]	2.3310E+00	0.65	
*GE7 Am-241 Activity, 59.5 keV [0.0062991+/-1.1998E-04]	6.3686E-03	0.58	
*GE7 Cs-137 Activity, 661.6 keV [0.00261233+/-8.7429E-05]	2.8278E-03	2.46	Investigate
*GE7 Co-60 Activity, 1332 keV [0.0040824+/-1.9734E-04]	4.0793E-03	-0.02	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*GE7 Peak Centroid 59.5 keV	2.3200E+02	2.4400E+02	2.3801E+02	
*GE7 Peak Centroid 661 keV	2.6380E+03	2.6500E+03	2.6466E+03	
*GE7 Peak Centroid 1332 keV	5.3220E+03	5.3340E+03	5.3309E+03	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 5 / 2 / 5

STL

Monthly Background

April 17, 2005

VMS Gamma Spectroscopy Report generated 18-APR-2005 09:26:03
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE4__57454.CNF;1

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number :
Project Number : MONTHLY BKG
Sample ID : LNGBKG_4-17-05

Sample Quantity : 1.00000E+00 EA
Sample Type : Empty
Sample Analyst : 400214

---- Sample Decay/Count Information ----

Sample Date : 17-APR-2005 21:26:02
Acquisition date : 17-APR-2005 21:26:02
Decay time : 0 00:00:00.00

Elapsed live time: 0 12:00:00.00
Elapsed real time: 0 12:00:04.27
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE4

Counting geometry:

Energy cal. time : 16-MAR-2005 08:34:49
Effic. cal. time : 6-APR-2004 13:53:47.

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.50000
Abundance limit : 50.00000
MDA Width (FWHM) : 3.00000

End channel : 8192
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File :

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]MAIN.NLB;

Sample ID : LNGBKG_4-17-05 Acquisition date : 17-APR-2005 21:26:02

---- Energy, FWHM, and Efficiency Curves ----

```
*********************************************************************************
*                                                                               *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)               *
*                          A = 1.10653E-01                                      *
*                          B = 2.49919E-01                                      *
*                          C = 1.94892E-08                                      *
*                                                                               *
*                                                                               *
*                    FWHM(keV) = A + (B * SQRT(Energy))                         *
*                          A = 8.02351E-01                                      *
*                          B = 2.65421E-02                                      *
*                                                                               *
*                                                                               *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                               *
*     a1=9.47750E+02   a2=-4.92113E+00 a3=9.16377E-01                           *
*     a4=5.88282E-02   a5=-2.51537E-02 a6=-1.56778E-02   a7=0.00000E+00         *
*                                                                               *
*********************************************************************************
```

Post-NID Peak Search Report
Sample ID : LNGBKG_4-17-05

Acquisition date : 17-APR-2005 21:26:02

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
6	46.59	264	366	1.08	185.98	180	14	18.7	1.11E+00	PB-210
5	63.38	215	367	0.95	253.17	246	13	21.7	6.97E-01	TH-234
5	92.64	332	420	1.22	370.23	365	13	16.6	8.56E-01	TH-234
19	139.95	52	254	0.84	559.50	555	11	65.2	6.50E-01	TC-99M
5	185.76	142	287	1.10	742.79	733	14	30.0	7.29E-01	U-235
										RA-226
7	238.68	108	258	0.89	954.53	948	13	34.2	5.61E-01	PB-212
5	511.13	766	264	2.64	2044.40	2025	38	8.3	9.54E-01	TL-208
										ANN RAD
5	583.64	52	87	1.06	2334.47	2328	13	45.0	9.92E-01	TL-208
5	609.43	42	85	0.82	2437.61	2430	13	50.4	1.41E+00	
32	969.27	22	35	0.98	3876.72	3871	12	59.8	8.84E-01	

Unidentified Energy Lines
Sample ID : LNGBKG_4-17-05

Acquisition date : 17-APR-2005 21:26:02

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
5	609.43	42	85	0.82	2437.61	2430	13	9.81E-04	50.4	1.10E+00	T
32	969.27	22	35	0.98	3876.72	3871	12	5.01E-04	59.8	7.14E-01	T

Flags: "T" = Tentatively associated

QA filename : DKA0:[GAMMA.SCUSR.QA]LBC_GE4.QAF;1

Sample ID : LNGBKG_4-17-05 Sample quantity : 1.00 EA
Sample date : 17-APR-2005 21:26:02 Acquisition date : 17-APR-2005 21:26:02
Elapsed live time: 0 12:00:00.00 Elapsed real time: 0 12:00:04.27

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*Background Rate [1.11477+/-0.01667]	1.1942E+00	4.76	Action

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: CH Approval Date: 4 / 18 / 05

Energy lines were compared to previous Backgrounds on GE4. The 'Value' and previous energy lines were comparable. the background will be subtracted during sample analysis.

CH

VMS Gamma Spectroscopy Report generated 18-APR-2005 09:30:24
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE5__57455.CNF;1

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number :
Project Number : MONTHLY BKG
Sample ID : LNGBKG_4-17-05

Sample Quantity : 1.00000E+00 EA
Sample Type : Empty
Sample Analyst : 400214

---- Sample Decay/Count Information ----

Sample Date : 17-APR-2005 21:30:17
Acquisition date : 17-APR-2005 21:30:17
Decay time : 0 00:00:00.00

Elapsed live time: 0 12:00:00.00
Elapsed real time: 0 12:00:07.87
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE5

Counting geometry:

Energy cal. time : 9-MAR-2005 09:18:16.
Effic. cal. time : 15-DEC-2004 23:41:28

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.50000
Abundance limit : 50.00000
MDA Width (FWHM) : 3.00000

End channel : 8192
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File :

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]MAIN.NLB;

Sample ID : LNGBKG_4-17-05 Acquisition date : 17-APR-2005 21:30:17

---- Energy, FWHM, and Efficiency Curves ----

```
*************************************************************************
*                                                                       *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)       *
*                          A = -7.14002E-03                             *
*                          B = 2.49998E-01                              *
*                          C = -1.90945E-09                             *
*                                                                       *
*                                                                       *
*                    FWHM(keV) = A + (B * SQRT(Energy))                 *
*                          A = 5.02556E-01                              *
*                          B = 3.66242E-02                              *
*                                                                       *
*                                                                       *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                       *
*     a1=9.41250E+02   a2=-4.61703E+00 a3=8.62748E-01                   *
*     a4=8.21586E-02   a5=3.49412E-03  a6=-3.05292E-02   a7=0.00000E+00 *
*                                                                       *
*************************************************************************
```

Post-NID Peak Search Report
Sample ID : LNGBKG_4-17-05

Acquisition date : 17-APR-2005 21:30:17

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
5	46.51	444	286	0.75	186.07	178	15	12.1	8.12E-01	PB-210
15	59.27	127	394	1.55	237.12	229	16	36.4	1.43E+00	AM-241
4	63.20	309	304	0.81	252.83	245	14	15.6	1.32E+00	TH-234
32	77.08	69	327	0.79	308.37	304	11	47.6	1.55E+00	PB-214
										PB-212
4	92.62	501	341	1.06	370.53	364	21	11.6	1.17E+00	TH-234
6	185.80	173	215	0.77	743.23	732	23	21.8	9.30E-01	U-235
										RA-226
4	238.65	136	210	0.97	954.63	950	10	27.9	1.06E+00	PB-212
6	352.13	79	215	1.26	1408.58	1401	20	41.0	9.18E-01	PB-214
5	511.16	860	295	2.69	2044.72	2029	31	7.9	5.74E-01	ANN RAD
5	661.95	131	112	1.07	2647.92	2637	19	23.1	8.46E-01	CS-137
7	779.16	32	38	1.30	3116.79	3111	11	55.4	1.04E+00	
8	803.23	45	67	1.19	3213.05	3203	17	46.0	7.24E-01	
9	1173.53	56	54	1.38	4694.35	4687	16	37.8	1.03E+00	CO-60
15	1333.00	38	30	0.96	5332.28	5326	15	41.9	1.21E+00	CO-60

Unidentified Energy Lines
Sample ID : LNGBKG_4-17-05

Acquisition date : 17-APR-2005 21:30:17

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
7	779.16	32	38	1.30	3116.79	3111	11	7.48E-04	55.4	1.17E+00	T
8	803.23	45	67	1.19	3213.05	3203	17	1.03E-03	46.0	1.14E+00	

Flags: "T" = Tentatively associated

QA filename : DKA0:[GAMMA.SCUSR.QA]LBC_GE5.QAF;1

Sample ID : LNGBKG_4-17-05 Sample quantity : 1.00 EA
Sample date : 17-APR-2005 21:30:17 Acquisition date : 17-APR-2005 21:30:17
Elapsed live time: 0 12:00:00.00 Elapsed real time: 0 12:00:07.87

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*Background Rate [1.22039+/-0.01247]	1.2126E+00	-0.63	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: RR Approval Date: 4 / 18 / 05

VMS Gamma Spectroscopy Report generated 18-APR-2005 09:30:59
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE6__57456.CNF;1

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number :
Project Number : MONTHLY BKG
Sample ID : LNGBKG_4-17-05

Sample Quantity : 1.00000E+00 EA
Sample Type : Empty
Sample Analyst : 400214

---- Sample Decay/Count Information ----

Sample Date	: 17-APR-2005 21:30:59	Elapsed live time:	0 12:00:00.00
Acquisition date	: 17-APR-2005 21:30:59	Elapsed real time:	0 12:00:03.81
Decay time	: 0 00:00:00.00	% dead time :	0.0%

---- Detector Parameters ----

Detector name : GE6 Counting geometry:

Energy cal. time	: 3-MAR-2004 08:43:53.	Energy cal. type	: Poly
Effic. cal. time	: 8-JUL-2004 17:41:15.	FWHM cal. type	: Sqrt

---- Processing Parameters ----

Start channel	: 150	End channel	: 8192
Sensitivity	: 3.00000	Gaussian Sens.	: 15.00000
Critical level?	: Yes	Propagate Errors?:	Yes
Empirical Eff?	: No	Library-based eff:	Yes
Energy tolerance	: 1.50000	Half life ratio	: 8.00000
Abundance limit	: 50.00000	WTM error limit	: 3.00000
MDA Width (FWHM)	: 3.00000	MDA Confid Level	: 5.00000 %

Bkgd File :

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]MAIN.NLB;

---- Energy, FWHM, and Efficiency Curves ----

```
*************************************************************************
*                                                                       *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)       *
*                          A = 1.54285E-01                              *
*                          B = 2.49832E-01                              *
*                          C = 1.86799E-08                              *
*                                                                       *
*                                                                       *
*                     FWHM(keV) = A + (B * SQRT(Energy))                *
*                          A = 4.67797E-01                              *
*                          B = 3.35494E-02                              *
*                                                                       *
*                                                                       *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                       *
*     a1=9.47750E+02   a2=-4.64127E+00 a3=9.31555E-01                   *
*     a4=8.26639E-02   a5=-4.44934E-02 a6=-8.73174E-03   a7=0.00000E+00 *
*                                                                       *
*************************************************************************
```

Post-NID Peak Search Report
Sample ID : LNGBKG_4-17-05

Acquisition date : 17-APR-2005 21:30:59

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
6	40.86	325	234	1.03	162.93	158	13	13.8	2.20E+00	
4	46.57	410	269	0.80	185.78	182	9	12.9	9.47E-01	PB-210
4	63.34	280	317	0.74	252.90	246	14	16.8	4.26E-01	TH-234
5	72.88	183	375	0.71	291.10	285	21	22.0	2.11E+00	
5	74.97	385	401	0.72	299.47	285	21	14.2		PB-214
										PB-212
5	84.78	350	464	1.16	338.73	331	14	16.1	1.09E+00	
5	92.73	452	360	1.02	370.53	363	21	12.5	6.94E-01	TH-234
8	143.66	88	259	1.02	574.39	570	14	41.5	9.95E-01	U-235
4	185.70	189	286	0.95	742.65	737	12	22.3	6.75E-01	U-235
										RA-226
5	238.53	184	232	1.03	954.09	949	11	22.4	1.21E+00	PB-212
14	295.32	57	155	0.87	1181.37	1177	12	49.9	8.25E-01	PB-214
19	351.91	69	178	0.97	1407.83	1395	18	44.2	1.14E+00	PB-214
5	510.99	851	265	2.68	2044.41	2024	38	7.8	6.90E-01	ANN RAD
6	609.49	103	135	1.69	2438.52	2431	18	29.9	8.53E-01	
4	1460.75	51	29	1.83	5843.77	5837	18	35.0	7.88E-01	K-40

Unidentified Energy Lines
Sample ID : LNGBKG_4-17-05

Acquisition date : 17-APR-2005 21:30:59

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
6	40.86	325	234	1.03	162.93	158	13	7.53E-03	13.8	4.37E+00	
5	72.88	183	375	0.71	291.10	285	21	4.24E-03	22.0	5.86E+00	T
5	84.78	350	464	1.16	338.73	331	14	8.10E-03	16.1	5.88E+00	T
6	609.49	103	135	1.69	2438.52	2431	18	2.39E-03	29.9	1.47E+00	T

Flags: "T" = Tentatively associated

STL ST LOUIS

QA filename : DKA0:[GAMMA.SCUSR.QA]LBC_GE6.QAF;1

Sample ID : LNGBKG_4-17-05 Sample quantity : 1.00 EA
Sample date : 17-APR-2005 21:30:59 Acquisition date : 17-APR-2005 21:30:59
Elapsed live time: 0 12:00:00.00 Elapsed real time: 0 12:00:03.81

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*Background Rate [1.5258+/-0.2127]	1.1626E+00	-1.71	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: PL Approval Date: 4 / 18 / 05

VMS Gamma Spectroscopy Report generated 18-APR-2005 09:31:33
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE7__57457.CNF;1

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number :
Project Number : MONTHLY BKG
Sample ID : LNGBKG_4-17-05

Sample Quantity : 1.00000E+00 EA
Sample Type : Empty
Sample Analyst : 400214

---- Sample Decay/Count Information ----

Sample Date	: 17-APR-2005 21:31:33	Elapsed live time:	0 12:00:00.00
Acquisition date	: 17-APR-2005 21:31:33	Elapsed real time:	0 12:00:03.12
Decay time	: 0 00:00:00.00	% dead time :	0.0%

---- Detector Parameters ----

Detector name : GE7 Counting geometry:

Energy cal. time	: 25-FEB-2005 09:11:05	Energy cal. type	: Poly
Effic. cal. time	: 8-JUL-2004 20:41:38.	FWHM cal. type	: Sqrt

---- Processing Parameters ----

Start channel	: 150	End channel	: 8192
Sensitivity	: 3.00000	Gaussian Sens.	: 15.00000
Critical level?	: Yes	Propagate Errors?	: Yes
Empirical Eff?	: No	Library-based eff	: Yes
Energy tolerance	: 1.50000	Half life ratio	: 8.00000
Abundance limit	: 50.00000	WTM error limit	: 3.00000
MDA Width (FWHM)	: 3.00000	MDA Confid Level	: 5.00000 %

Bkgd File :

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]MAIN.NLB;

Sample ID : LNGBKG_4-17-05 Acquisition date : 17-APR-2005 21:31:33

---- Energy, FWHM, and Efficiency Curves ----

```
*********************************************************************************
*                                                                               *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)               *
*                            A = 7.85538E-02                                    *
*                            B = 2.50061E-01                                    *
*                            C = -1.56700E-08                                   *
*                                                                               *
*                                                                               *
*                       FWHM(keV) = A + (B * SQRT(Energy))                      *
*                            A = 5.33118E-01                                    *
*                            B = 4.95085E-02                                    *
*                                                                               *
*                                                                               *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                               *
*     a1=9.47750E+02   a2=-4.36268E+00 a3=9.88960E-01                           *
*     a4=5.56421E-02   a5=-4.27284E-02 a6=-7.82275E-03   a7=0.00000E+00         *
*                                                                               *
*********************************************************************************
```

Post-NID Peak Search Report
Sample ID : LNGBKG_4-17-05

Acquisition date : 17-APR-2005 21:31:33

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
4	46.40	474	364	0.90	185.24	176	18	12.1	6.20E-01	PB-210
4	63.16	399	329	0.82	252.25	247	11	13.3	1.29E+00	TH-234
5	74.82	70	327	0.86	298.89	294	20	48.4	6.13E-01	PB-212
5	76.95	98	302	0.86	307.43	294	20	37.3		PB-212
4	92.52	576	392	1.14	369.70	363	16	10.7	8.91E-01	TH-234
4	185.76	264	308	1.13	742.58	734	16	17.5	7.93E-01	U-235
										RA-226
5	238.62	110	259	0.86	954.00	948	12	32.5	4.88E-01	PB-212
32	360.07	29	109	1.00	1439.74	1435	11	39.7	2.59E+00	
5	511.10	958	263	3.12	2043.87	2025	38	7.3	9.21E-01	ANN RAD
21	637.77	24	58	0.82	2550.55	2545	12	71.7	2.50E-01	
21	1001.38	22	44	1.00	4005.24	3998	15	69.9	6.39E-01	

Unidentified Energy Lines
Sample ID : LNGBKG_4-17-05

Acquisition date : 17-APR-2005 21:31:33

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
32	360.07	29	109	1.00	1439.74	1435	11	6.68E-04	39.7	3.34E+00	
21	637.77	24	58	0.82	2550.55	2545	12	5.54E-04	71.7	1.90E+00	T
21	1001.38	22	44	1.00	4005.24	3998	15	5.15E-04	69.9	1.21E+00	T

Flags: "T" = Tentatively associated

STL ST LOUIS

QA filename : DKA0:[GAMMA.SCUSR.QA]LBC_GE7.QAF;1

Sample ID : LNGBKG_4-17-05 Sample quantity : 1.00 EA
Sample date : 17-APR-2005 21:31:33 Acquisition date : 17-APR-2005 21:31:33
Elapsed live time: 0 12:00:00.00 Elapsed real time: 0 12:00:03.12

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*Background Rate [1.15490+/-0.06361]	1.0968E+00	-0.91	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: PR Approval Date: 4 / 18 / 05

SEVERN TRENT STL

Run Log

Logbook No.: 2615

STL
St. Louis

Gamma Counting Runlog

Date	Batch #	Sample #	Detector	Count Time	Geometry	Initials
5-1-5	5120102	G9K461AA	4	1hr	1LM	RTM
↓	↓	G9K461AC	6	↓	↓	↓
↓	↓	G9KNDIA8	7	↓	↓	↓
↓	↓	G9KNDICD	4	↓	↓	↓
5-1-5	Roller 5-1-05	1D2905-1	5	30"	TUNA	↓
↓	↓	2	6	↓	↓	↓
↓	↓	3	7	↓	↓	↓
↓	↓	4	4	↓	↓	↓
↓	↓	5	5	↓	↓	↓
↓	↓	6	6	↓	↓	↓
↓	↓	7	7	↓	↓	↓
5-2-5	Daily	BKG + Source	4-7	20+10min	QA	GW
↓	Roller 5-1-05	1D2905-8	4	30min	TUNA	↓
↓	↓	9	5	↓	↓	↓
↓	↓	10	6	↓	↓	↓
↓	↓	11	7	↓	↓	↓
↓	↓	12	4	↓	↓	↓
↓	↓	13	5	↓	↓	↓
↓	↓	14	6	↓	↓	↓
↓	↓	15	7	↓	↓	↓
↓	↓	16	4	↓	↓	↓
↓	↓	17	5	↓	↓	↓
↓	↓	18	6	↓	↓	↓
5-2-5	5118335	G81GWIAE	4	3hr	1Lmarn	GW
↓	↓	G81G81AE	5	↓	↓	↓
↓	↓	G9D2J1AA	6	↓	↓	↓
5-2-5	5122946	G9HCXCAG	7	14hr	Solid10mL	~

Reviewed By: _____ Date: 5-2-5

Logbook No.: 2615

STL
St. Louis

Gamma Counting Runlog

Date	Batch #	Sample #	Detector	Count Time	Geometry	Initials
5-2-5	5118335	G8 1GW1APA	7	3hr	1L Marn	
	5122296	G9HGX1A0	4	1 hr	100 mL Solid	
		G9MJE1AA	6			
		G9MJE1AC	5			
5-2-05	5122343	G9HH71AN	4	1hr	100mL d=1	RR
		G9MNH1AA	5			
		G9MNH1AC	6			
	5122343	G9HH71AT	Ca Sh #5			CH
	5119100	G8VQW1AC	7	2hr	.5L Marn	CH
	1	G8VQW1AA	4	1	1	
5-3-5	Daily	Bkd + Soon	4-7	20, 10mm	QA	QW
	5119100	G8VQW1AA	5	2hr	.5L Marn	QW
	5123052	G9GD11AK	4	30	TUN 9	
		G9NXV1AA	6			
		G9NXV1AC	7			
		G9GD11AR	6			
5-3-5	5119100	G8VQW1AC-AC	6	120mm	0.5L Marn	—
5-3-05	5123256	G8QEM1AQ	4	1hr	1L Marn	RR
		G8QEM1AP	5			
		G8QEM1AO	1			
5-3-5	5123256	G9PG51AA	4	1hr	1L Marn	
		G9PG51AC	5			
		G8QEM1AG	6			
	5123224	G84K41AC	7	2hr		
		G84K41AF	4			
		G84PX1AC	7			
		G9PCT1AA	4			

Reviewed By: _____ Date: 5-3-5

Hostlanco2-5/10

STL

Prep Report for:
Gamma Spectroscopy

Batch: 5118335 **Prep Analyst:** 402441

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

SampID	WRKNO	Aliquot		Dilution	Adjusted Aliquot		GeometryDesc
F5D220279-001	G81GW1AE	1.0000E+003	mL	1.00	1.0000E+003	mL	Marinell, 1L
F5D220279-001X	G81GW1AP	1.0000E+003	mL	1.00	1.0000E+003	mL	Marinell, 1L
F5D220279-002	G81G81AE	1.0000E+003	mL	1.00	1.0000E+003	mL	Marinell, 1L
F5D280000-335B	G9D2J1AA	1.0000E+003	mL	1.00	1.0000E+003	mL	Marinell, 1L
F5D280000-335C	G9D2J1AC	1.0000E+003	mL	1.00	1.0000E+003	mL	Marinell, 1L

Spike Information

Sample ID	Standard ID	Analyte	Std Conc	Aliquot	Ref Date	StdAdded

Spiked By | Spike Verified By | Spike Date

Standard Operating Procedures

	SOPNumber	Title	Revision
☐	STL-RC-0025	Preparation Of Samples For Gamma Spectroscopy	3.00
☑	STL-RD-0101	Daily Operations Of A Germanium Spectroscopy System	3.00
☑	STL-RD-0103	Maintenance Of The Germanium Spectroscopy System	0.00

CH — Reviewed By
5/4/05 — Review Date

JM — Analyst/Relenquished By
4/28/05 — Release Date
RR — Received By
4/29/05 — Receipt Date

St. Louis Laboratory
13715 Rider Trail North
Earth City, MO 63045-1205

Gamma Spectroscopy Quality Assurance Worksheet

Batch: 5118335

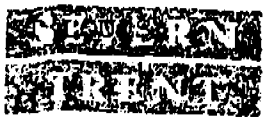
F5D280000-335 C Recovery Summary			
Isotope	Certified Activity	Observed Activity	% Recovery
Am-241	60709	5.91E+04	97%
Cs-137	24357	2.35E+04	96%
Co-60	40335	3.85E+04	95%

F5D220279-001 Duplicate Summary						
Isotope	Sample Activity	Sample Uncertainty	Duplicate Activity	Duplicate Uncertainty	RPD	RER
none identified	<MDA	NA	<MDA	NA	N/A	N/A

Comments:

Calculated By: CH DATE: 5/5/2005

Reviewed By: [signature] DATE: 5/9/05



Alpha Spectroscopy Uranium

ALPHA SPECTROSCOPY

Data Reports
Results Reports
Channel by Channel Report

Calibration Data

Instrument Checks

Batch Summary Sheets
Run Logs
Yield Summary(ies)
Batch Yield Plot(s)

Raw Data
Prep Data Sheet(s)
QC Acceptance Sheet(s)
LCS Standard Sheet(s)
Tracer Standard Sheets

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 9:32:49AM 5/3/2005

Sample

Sample Name: F5D220279-001
SampleType: Sample
WRKNO: G81GW1AD
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Volume : 1.0000L
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5117073
:
Description:

Client Name: Undefined
Client Contact:

Tracer

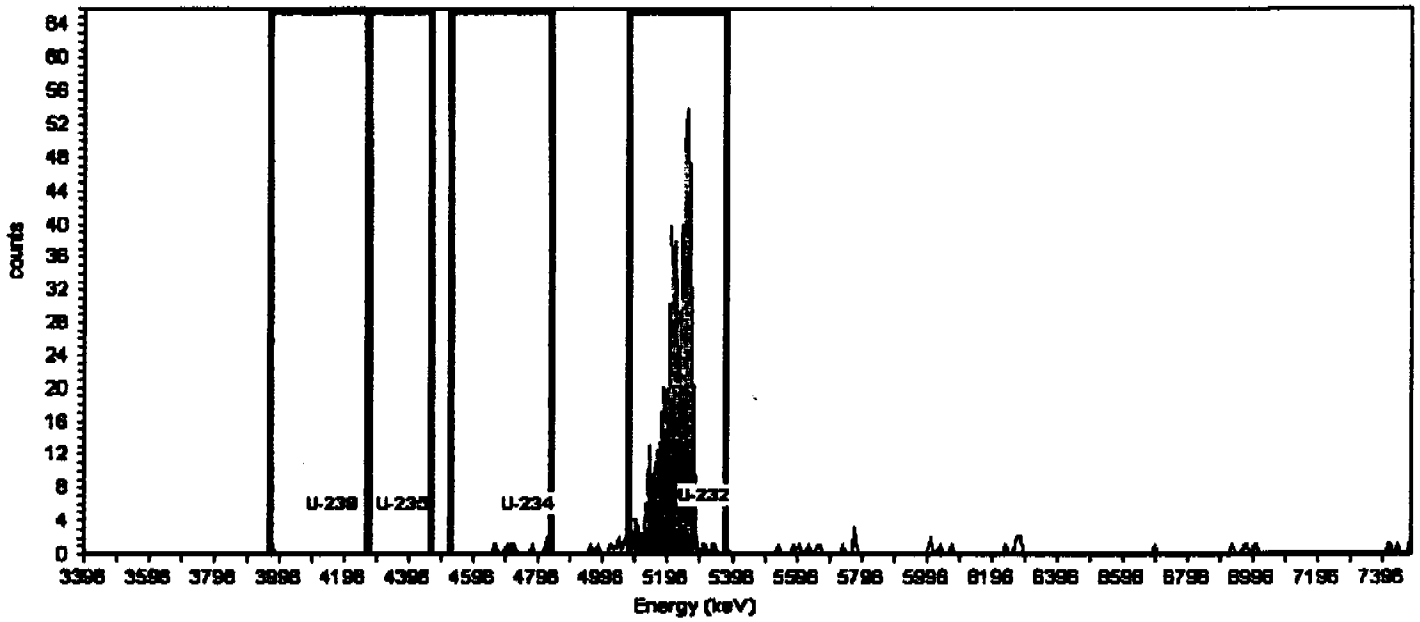
Tracer Name: U232_Rad04-0036
Tracer Activity: 109.94 DPM/mL x (Vol.)0.10 mL = 10.99 DPM
Tracer Ref. Date: 9/16/1997 12:00:15PM

Tracer Nuclide: U-232
Tracer Recovery: 78.43%

Acquisition

Detector: AV7
Serial Number: 41-158X6
Acquisition Start Date: 5/2/2005 2:58:16PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 4/26/2005 10:37:45AM
Background Info: Sample: AV7; Det: AV7; Spectrum #1; Apr-26-2005 10:37

Calibration Name: April2005_AV7
Calibration Date: 4/28/2005 11:43:07PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 27.23% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 5/2/2005 2:57:14PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/L	1.00Sigma TPU pCi/L	Critical Level pCi/L	MDA pCi/L
U-238	4158.500	3962.485	4260.137	17.503	100.0	1.00	0.9000	0	8.787E-004	1.211E-002	1.564E-002	5.505E-002
U-235	4376.294	4267.397	4463.412	.000	80.2	0.00	0.0000	0	0.000E+000	0.000E+000	0.000E+000	2.965E-002
U-234	4761.063	4521.490	4833.661	13.903	99.8	8.00	0.3000	8	6.780E-002	2.555E-002	9.045E-003	4.192E-002
U-232	5312.808	5073.234	5378.146	90.859	100.1	531.00	6.9000	524	3.884E+000	1.731E-001	4.655E-002	1.187E-001

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:33:01AM 5/3/2005

Analyst: 60040

Sample

Sample Name: F5D220279-001S
SampleType: Sample
WRKNO: G81GW1AH
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Volume : 1.0000L
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5117073
:
Description:

Client Name: Undefined
Client Contact:

Tracer

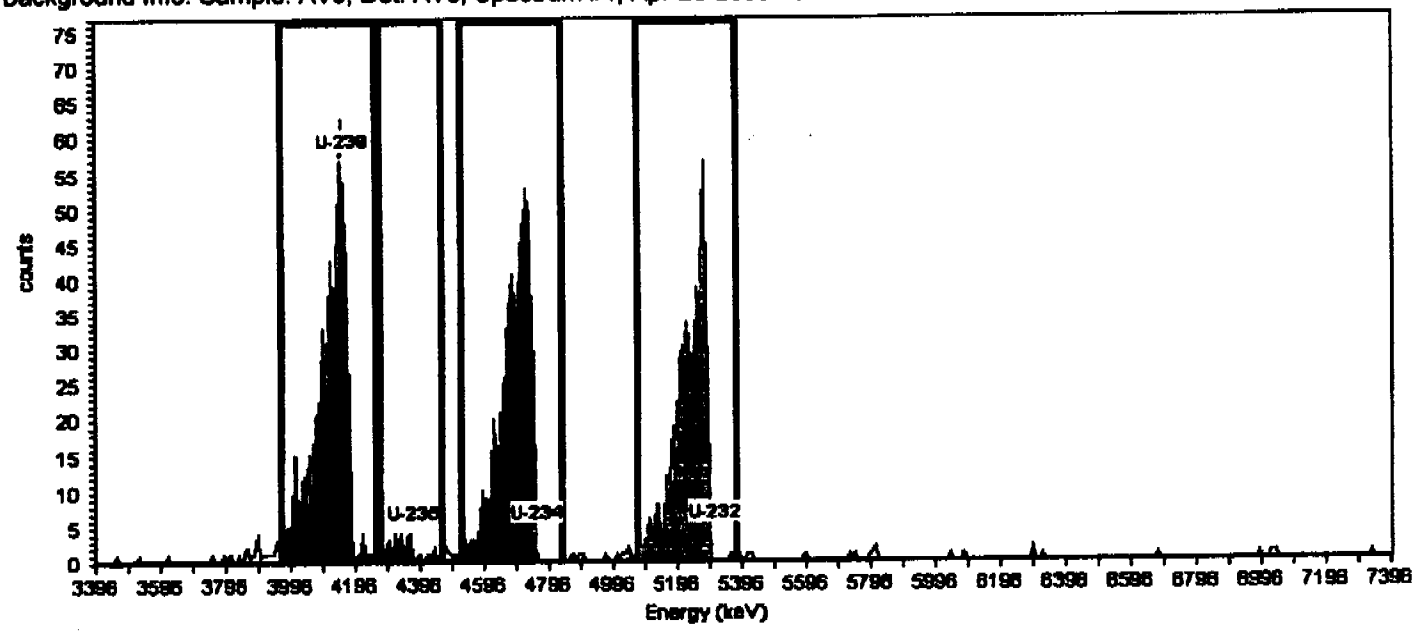
Tracer Name: U232_Rad04-0036
Tracer Activity: 109.94 DPM/mL x (Vol.)0.10 mL = 10.99 DPM
Tracer Ref. Date: 9/16/1997 12:00:15PM

Tracer Nuclide: U-232
Tracer Recovery: 82.64%

Acquisition

Detector: AV8
Serial Number: 41-158X1
Acquisition Start Date: 5/2/2005 2:58:18PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 4/26/2005 10:37:46AM
Background Info: Sample: AV8; Det: AV8; Spectrum #1; Apr-26-2005 10:37

Calibration Name: April2005_AV8
Calibration Date: 4/28/2005 11:42:56PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 28.42% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 5/2/2005 2:57:14PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/L	1.00Sigma TPU pCi/L	Critical Level pCi/L	MDA pCi/L
U-238	4158.500	3962.485	4260.137	84.631	100.0	684.00	0.3000	684	5.464E+000	3.122E-001	8.210E-003	3.804E-002
U-235	4376.294	4267.397	4463.412	77.569	80.2	27.00	0.3000	27	2.660E-001	5.327E-002	1.024E-002	4.744E-002
U-234	4761.063	4521.490	4833.661	90.328	99.8	649.00	0.0000	649	5.197E+000	3.005E-001	0.000E+000	2.167E-002
U-232	5312.808	5073.234	5378.146	96.858	100.1	579.00	2.7000	576	4.092E+000	1.725E-001	2.648E-002	7.622E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:33:08AM 5/3/2005

Analyst: 60040

Sample

Sample Name: F5D220279-002
SampleType: Sample
WRKNO: G81G81AD
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Volume : 1.0000L
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5117073
:
Description:

Client Name: Undefined
Client Contact:

Tracer

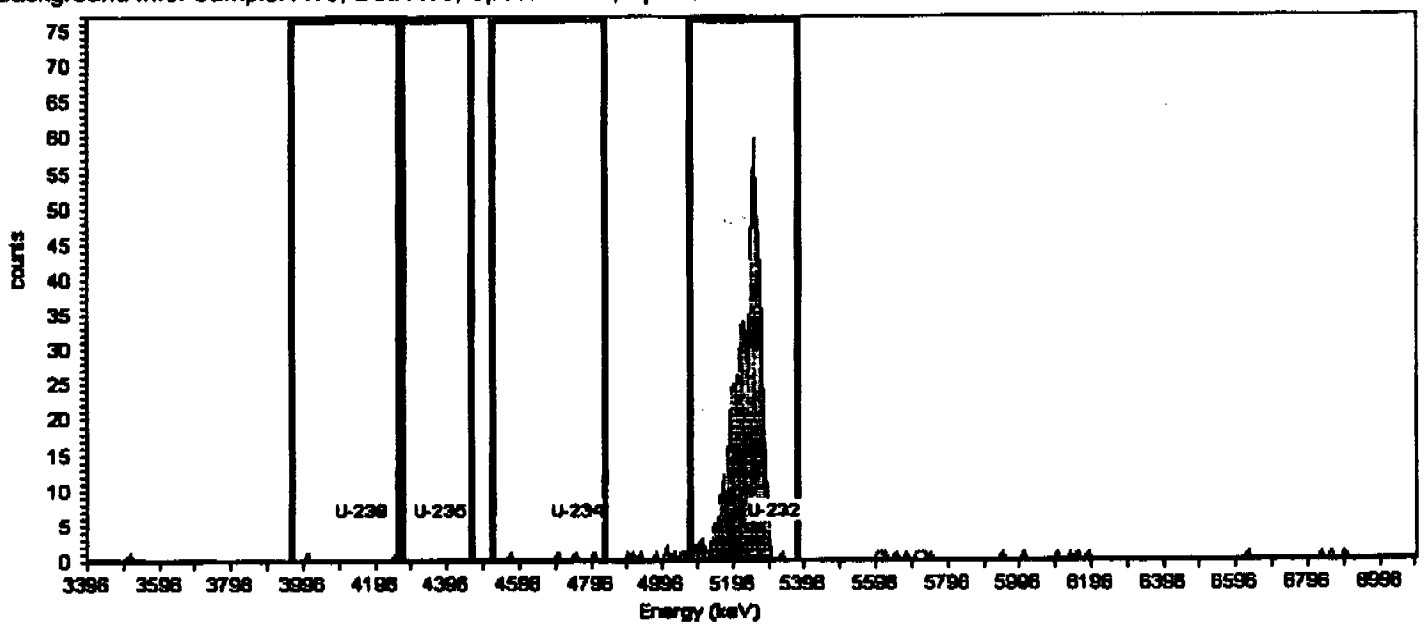
Tracer Name: U232_Rad04-0036
Tracer Activity: 109.94 DPM/mL x (Vol.)0.10 mL = 10.99 DPM
Tracer Ref. Date: 9/16/1997 12:00:15PM

Tracer Nuclide: U-232
Tracer Recovery: 82.96%

Acquisition

Detector: AV9
Serial Number: 41-172R1
Acquisition Start Date: 5/2/2005 2:58:20PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 4/26/2005 10:37:48AM
Background Info: Sample: AV9; Det: AV9; Spectrum #1; Apr-26-2005 10:37

Calibration Name: April2005_AV9
Calibration Date: 4/29/2005 10:59:04AM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.58% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 5/2/2005 2:57:14PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/L	1.00Sigma TPU pCi/L	Critical Level pCi/L	MDA pCi/L
U-238	4158.500	3962.485	4260.137	10.002	100.0	2.00	0.9000	1	9.361E-003	1.450E-002	1.514E-002	5.331E-002
U-235	4376.294	4267.397	4463.412	.000	80.2	0.00	0.0000	0	0.000E+000	0.000E+000	0.000E+000	2.871E-002
U-234	4761.063	4521.490	4833.661	9.587	99.8	4.00	1.2000	3	2.387E-002	1.947E-002	1.752E-002	5.811E-002
U-232	5312.808	5073.234	5378.146	86.550	100.1	543.00	1.8000	541	4.109E+000	1.784E-001	2.303E-002	7.081E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:33:16AM 5/3/2005

Analyst: 60040

Sample

Sample Name: F5D220279-002X
SampleType: Sample
WRKNO: G81G81AF
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Volume : 1.0000L
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5117073
:
Description:

Client Name: Undefined
Client Contact:

Tracer

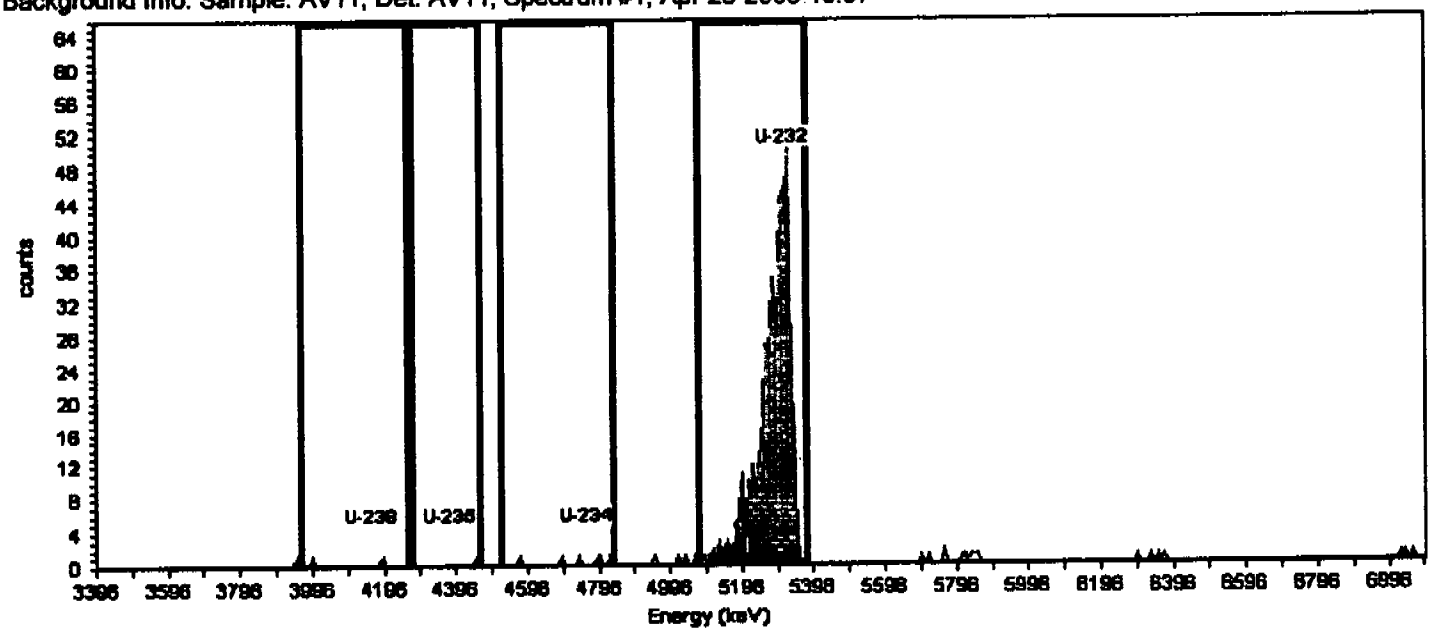
Tracer Name: U232_Rad04-0036
Tracer Activity: 109.94 DPM/mL x (Vol.)0.10 mL = 10.99 DPM
Tracer Ref. Date: 9/16/1997 12:00:15PM

Tracer Nuclide: U-232
Tracer Recovery: 80.86%

Acquisition

Detector: AV11
Serial Number: 41-172Q3
Acquisition Start Date: 5/2/2005 2:58:21PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 4/26/2005 10:37:50AM
Background Info: Sample: AV11; Det: AV11; Spectrum #1; Apr-26-2005 10:37

Calibration Name: April2005_AV11
Calibration Date: 4/29/2005 10:59:17AM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.81% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 5/2/2005 2:57:14PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/L	1.00Sigma TPU pCi/L	Critical Level pCi/L	MDA pCi/L
U-238	4158.500	3962.485	4260.137	33.692	100.0	2.00	0.0000	2	1.732E-002	1.502E-002	0.000E+000	2.343E-002
U-235	4376.294	4267.397	4463.412	10.744	80.2	1.00	0.3000	1	7.557E-003	1.231E-002	1.109E-002	5.140E-002
U-234	4761.063	4521.490	4833.661	10.248	99.8	6.00	0.9000	5	4.425E-002	2.287E-002	1.544E-002	5.435E-002
U-232	5312.808	5073.234	5378.146	84.634	100.1	534.00	2.1000	532	4.004E+000	1.757E-001	2.531E-002	7.581E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:33:22AM 5/3/2005

Analyst: 60040

Sample

Sample Name: F5D270000-073B
SampleType: Blank
WRKNO: G88V61AA
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Volume : 1.0000L
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5117073
:
Description:

Client Name: Undefined
Client Contact:

Tracer

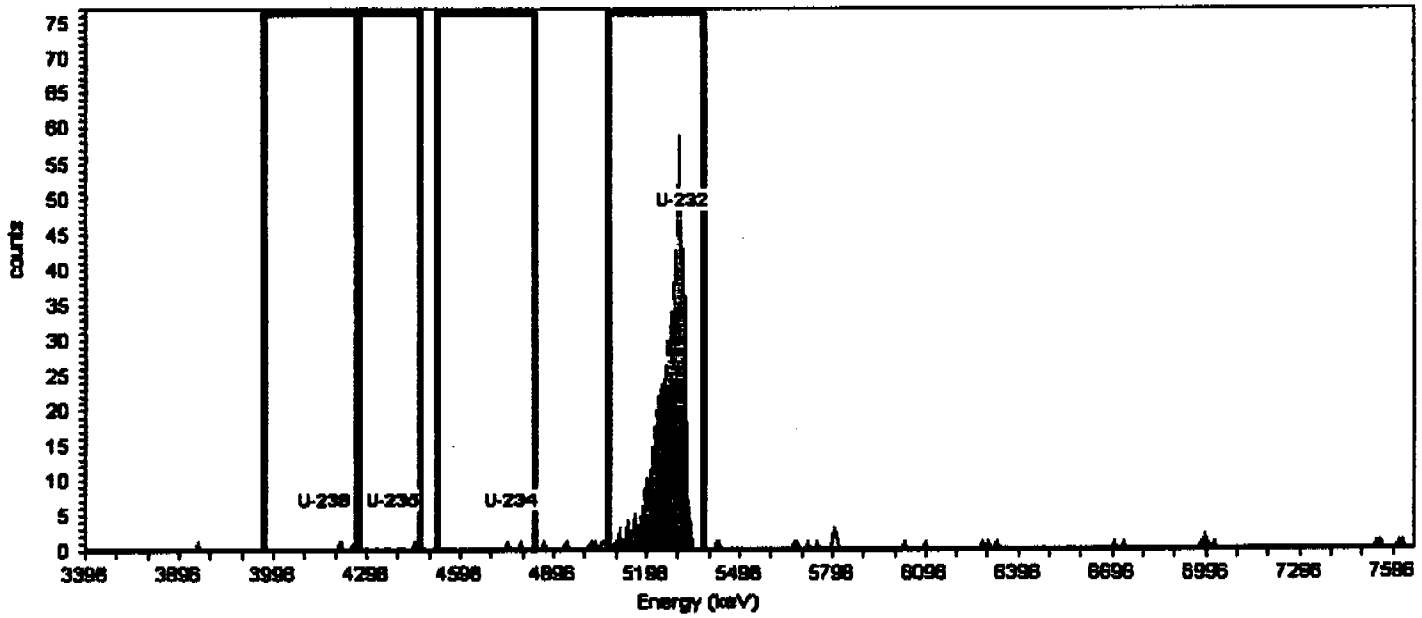
Tracer Name: U232_Rad04-0036
Tracer Activity: 109.94 DPM/mL x (Vol.)0.10 mL = 10.99 DPM
Tracer Ref. Date: 9/16/1997 12:00:15PM

Tracer Nuclide: U-232
Tracer Recovery: 84.35%

Acquisition

Detector: AV47
Serial Number: AV47
Acquisition Start Date: 5/2/2005 2:58:41PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 4/25/2005 11:48:42AM
Background Info: Sample: AV47; Det: AV47; Spectrum #1; Apr-25-2005 11:48

Calibration Name: April2005_AV47
Calibration Date: 4/28/2005 3:02:16PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.56% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 5/2/2005 2:57:14PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/L	1.00Sigma TPU pCi/L	Critical Level pCi/L	MDA pCi/L
U-238	4158.500	3962.485	4260.137	10.261	100.0	2.00	0.0000	2	1.676E-002	1.453E-002	0.000E+000	2.267E-002
U-235	4376.294	4267.397	4463.412	10.744	80.2	1.00	0.0000	1	1.045E-002	1.478E-002	0.000E+000	2.827E-002
U-234	4761.063	4521.490	4833.661	81.390	99.8	2.00	0.3000	2	1.427E-002	1.275E-002	8.624E-003	3.996E-002
U-232	5312.808	5073.234	5378.146	79.884	100.1	550.00	0.3000	550	4.177E+000	1.795E-001	9.255E-003	4.289E-002

STL

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:33:29AM 5/3/2005

Analyst: 60040

Sample

Sample Name: F5D270000-073C
SampleType: Control
WRKNO: G88V61AC
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Volume : 1.0000L
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5117073
:
Description:

Client Name: Undefined
Client Contact:

Tracer

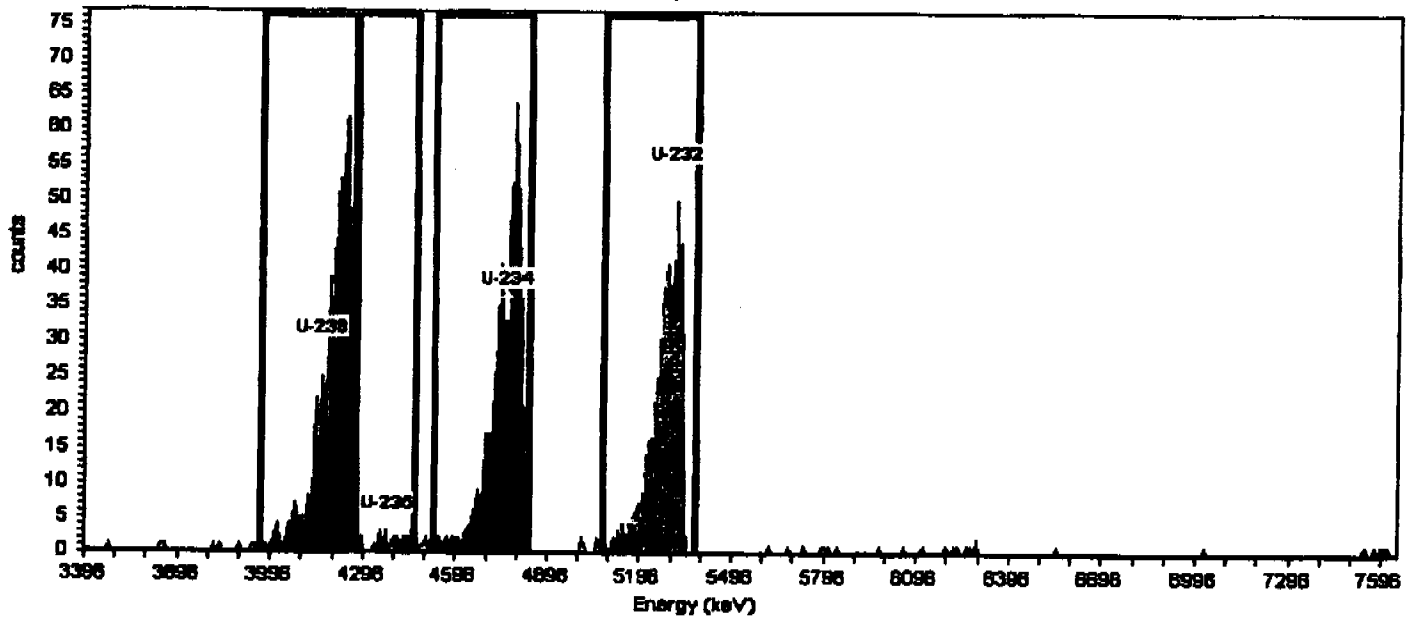
Tracer Name: U232_Rad04-0036
Tracer Activity: 109.94 DPM/mL x (Vol.)0.10 mL = 10.99 DPM
Tracer Ref. Date: 9/16/1997 12:00:15PM

Tracer Nuclide: U-232
Tracer Recovery: 85.94%

Acquisition

Detector: AV48
Serial Number: AV48
Acquisition Start Date: 5/2/2005 2:58:42PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 4/25/2005 11:48:43AM
Background Info: Sample: AV48; Det: AV48; Spectrum #1; Apr-25-2005 11:48

Calibration Name: April2205_AV48
Calibration Date: 4/28/2005 3:02:24PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 26.51% +/- 0.28% TPU(2 sigma)



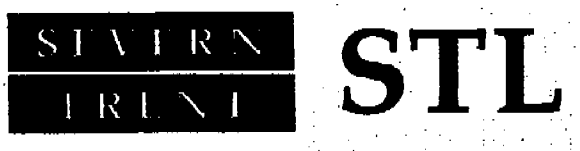
General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 5/2/2005 2:57:14PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/L	1.00Sigma TPU pCi/L	Critical Level pCi/L	MDA pCi/L
U-238	4158.500	3962.485	4260.137	38.118	100.0	700.00	0.0000	700	5.767E+000	3.302E-001	0.000E+000	2.229E-002
U-235	4376.294	4267.397	4463.412	11.824	80.2	26.00	0.0000	26	2.671E-001	5.460E-002	0.000E+000	2.780E-002
U-234	4761.063	4521.490	4833.661	37.109	99.8	657.00	0.0000	657	5.424E+000	3.149E-001	0.000E+000	2.234E-002
U-232	5312.808	5073.234	5378.146	93.224	100.1	559.00	0.0000	559	4.256E+000	1.816E-001	0.000E+000	2.397E-002



DAILY PULSERS

Daily Pulser Check - Severn Trent Lab

Pulser Date: 5/2/2005

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria		P/F	FWHM (keV) Result	FWHM (keV) Criteria	P/F	Pulser Center Result	Pulser Center Criteria		P/F	Energy (keV) Result	Energy (keV) Criteria		P/F
AV1	05/02/2005 7:36	7364	7218.7	+/-5%	Pass	14.2	5-50	Pass	227.1	229.0	+/-5%	Pass	5037	5051.1	+/-25%	Pass
AV2	05/02/2005 7:36	7364	7468.7	+/-5%	Pass	14.0	5-50	Pass	227.0	222.9	+/-5%	Pass	5037	5007.5	+/-25%	Pass
AV3	05/02/2005 7:36	7365	7484.9	+/-5%	Pass	13.7	5-50	Pass	229.1	225.9	+/-5%	Pass	5052	5028.8	+/-25%	Pass
AV4	05/02/2005 7:36	7362	7413.7	+/-5%	Pass	13.8	5-50	Pass	226.1	224.9	+/-5%	Pass	5030	5021.6	+/-25%	Pass
AV4	05/02/2005 7:36	7362	7413.7	+/-5%	Pass	13.8	5-50	Pass	226.1	224.9	+/-5%	Pass	5030	5021.6	+/-25%	Pass
AV6	05/02/2005 7:36	7355	7476.7	+/-5%	Pass	14.3	5-50	Pass	226.9	224.0	+/-5%	Pass	5036	5015.3	+/-25%	Pass
AV7	05/02/2005 6:46	7313	7477.0	+/-5%	Pass	15.7	5-50	Pass	228.2	224.9	+/-5%	Pass	5046	5021.9	+/-25%	Pass
AV8	05/02/2005 6:46	7364	7327.4	+/-5%	Pass	13.3	5-50	Pass	228.0	228.0	+/-5%	Pass	5044	5044.6	+/-25%	Pass
AV9	05/02/2005 6:46	7669	7519.3	+/-5%	Pass	16.1	5-50	Pass	221.0	227.9	+/-5%	Pass	4994	5043.3	+/-25%	Pass
AV10	05/02/2005 6:46	7717	7749.6	+/-5%	Pass	15.4	5-50	Pass	219.0	226.1	+/-5%	Pass	4979	5030.3	+/-25%	Pass
AV11	05/02/2005 6:46	7719	7666.2	+/-5%	Pass	14.0	5-50	Pass	222.9	225.0	+/-5%	Pass	5007	5022.1	+/-25%	Pass
AV12	05/02/2005 6:46	7706	7588.7	+/-5%	Pass	14.8	5-50	Pass	229.1	230.0	+/-5%	Pass	5052	5058.4	+/-25%	Pass
AV13	05/02/2005 6:46	7678	7584.6	+/-5%	Pass	17.0	5-50	Pass	227.0	228.0	+/-5%	Pass	5037	5044.1	+/-25%	Pass
AV15	05/02/2005 7:35	7615	7770.5	+/-5%	Pass	14.1	5-50	Pass	227.0	226.9	+/-5%	Pass	5037	5036.6	+/-25%	Pass
AV16	05/02/2005 7:36	7436	7456.0	+/-5%	Pass	12.5	5-50	Pass	225.0	226.9	+/-5%	Pass	5022	5036.2	+/-25%	Pass
AV17	05/02/2005 7:36	7617	7619.1	+/-5%	Pass	14.2	5-50	Pass	225.9	229.9	+/-5%	Pass	5029	5058.3	+/-25%	Pass
AV18	05/02/2005 7:36	7618	7714.5	+/-5%	Pass	13.8	5-50	Pass	228.0	226.9	+/-5%	Pass	5044	5036.4	+/-25%	Pass
AV19	05/02/2005 6:46	7533	7269.8	+/-5%	Pass	12.6	5-50	Pass	222.0	227.7	+/-5%	Pass	5000	5041.9	+/-25%	Pass
AV20	05/02/2005 6:46	7732	7503.6	+/-5%	Pass	13.2	5-50	Pass	227.0	226.0	+/-5%	Pass	5037	5029.9	+/-25%	Pass
AV21	05/02/2005 6:46	7716	7550.9	+/-5%	Pass	13.3	5-50	Pass	225.0	226.0	+/-5%	Pass	5022	5029.6	+/-25%	Pass
AV22	05/02/2005 6:46	7708	7691.4	+/-5%	Pass	14.7	5-50	Pass	224.1	225.0	+/-5%	Pass	5016	5022.4	+/-25%	Pass
AV23	05/02/2005 6:47	7710	7665.3	+/-5%	Pass	14.5	5-50	Pass	229.9	229.8	+/-5%	Pass	5058	5057.0	+/-25%	Pass
AV24	05/02/2005 6:47	7717	7354.0	+/-5%	Pass	14.7	5-50	Pass	228.9	226.9	+/-5%	Pass	5051	5036.4	+/-25%	Pass
AV25	05/02/2005 6:47	5157	5122.1	+/-5%	Pass	14.8	5-50	Pass	225.1	224.0	+/-5%	Pass	5023	5015.1	+/-25%	Pass
AV26	05/02/2005 6:47	5079	5069.9	+/-5%	Pass	19.8	5-50	Pass	224.0	226.9	+/-5%	Pass	5015	5036.5	+/-25%	Pass
AV27	05/02/2005 6:47	5051	4919.2	+/-5%	Pass	14.9	5-50	Pass	223.2	225.0	+/-5%	Pass	5009	5022.5	+/-25%	Pass
AV29	05/02/2005 6:47	5023	5005.4	+/-5%	Pass	26.7	5-50	Pass	225.0	223.8	+/-5%	Pass	5022	5014.0	+/-25%	Pass
AV29	05/02/2005 6:47	5023	5047.7	+/-5%	Pass	26.7	5-50	Pass	225.0	223.3	+/-5%	Pass	5022	5010.1	+/-25%	Pass
AV33	05/02/2005 6:46	5057	4977.0	+/-5%	Pass	11.3	5-50	Pass	209.0	218.0	+/-5%	Pass	4906	4971.5	+/-25%	Pass
AV34	05/02/2005 6:46	5181	5045.5	+/-5%	Pass	17.8	5-50	Pass	224.0	219.0	+/-5%	Pass	5015	4978.8	+/-25%	Pass
AV35	05/02/2005 6:46	4869	4932.6	+/-5%	Pass	12.8	5-50	Pass	274.9	275.0	+/-5%	Pass	5385	5385.6	+/-25%	Pass
AV37	05/02/2005 6:46	4994	5082.9	+/-5%	Pass	20.4	5-50	Pass	236.1	236.1	+/-5%	Pass	5103	5103.2	+/-25%	Pass

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria		Gross Counts P/F	FWHM (keV) Result	FWHM (keV) Criteria	FWHM (keV) P/F	Pulser Center Result	Pulser Center Criteria		Pulser Center P/F	Energy (keV) Result	Energy (keV) Criteria		Energy (keV) P/F
AV38	05/02/2005 6:46	5328	5419.4	+/-5%	Pass	17.2	5-50	Pass	219.0	217.9	+/-5%	Pass	4979	4448.6	+/-25%	Pass
AV39	05/02/2005 6:46	5267	5316.2	+/-5%	Pass	14.9	5-50	Pass	227.8	224.2	+/-5%	Pass	5043	5016.3	+/-25%	Pass
AV40	05/02/2005 6:46	4892	4755.8	+/-5%	Pass	13.1	5-50	Pass	227.0	226.0	+/-5%	Pass	5037	5029.5	+/-25%	Pass
AV41	05/02/2005 6:46	4953	4990.8	+/-5%	Pass	11.9	5-50	Pass	228.9	229.0	+/-5%	Pass	5051	5051.6	+/-25%	Pass
AV42	05/02/2005 6:46	4797	4977.0	+/-5%	Pass	12.8	5-50	Pass	236.9	228.1	+/-5%	Pass	5109	5044.9	+/-25%	Pass
AV43	05/02/2005 6:46	7663	7162.4	+/-5%	FAIL	13.1	5-50	Pass	222.0	224.1	+/-5%	Pass	5000	5015.9	+/-25%	Pass
AV43	05/02/2005 7:54	7530	7162.4	+/-5%	FAIL	12.9	5-50	Pass	222.0	224.1	+/-5%	Pass	5001	5015.9	+/-25%	Pass
AV45	05/02/2005 6:47	7621	7593.5	+/-5%	Pass	15.5	5-50	Pass	226.9	225.6	+/-5%	Pass	5036	5026.9	+/-25%	Pass
AV46	05/02/2005 6:47	7654	7722.7	+/-5%	Pass	14.2	5-50	Pass	224.1	225.8	+/-5%	Pass	5016	5028.0	+/-25%	Pass
AV47	05/02/2005 6:47	7653	7532.5	+/-5%	Pass	13.5	5-50	Pass	218.0	226.0	+/-5%	Pass	4972	5029.6	+/-25%	Pass
AV48	05/02/2005 6:47	7634	7717.5	+/-5%	Pass	14.7	5-50	Pass	214.9	224.0	+/-5%	Pass	4949	5015.2	+/-25%	Pass
AV49	05/02/2005 6:47	7646	7703.4	+/-5%	Pass	13.8	5-50	Pass	232.0	226.0	+/-5%	Pass	5073	5029.5	+/-25%	Pass
AV50	05/02/2005 6:47	7645	7660.9	+/-5%	Pass	13.8	5-50	Pass	225.0	227.0	+/-5%	Pass	5023	5037.2	+/-25%	Pass
AV51	05/02/2005 6:47	7350	7070.5	+/-5%	Pass	12.9	5-50	Pass	220.0	223.0	+/-5%	Pass	4986	5007.6	+/-25%	Pass
AV52	05/02/2005 6:47	7026	7156.4	+/-5%	Pass	12.8	5-50	Pass	225.1	225.0	+/-5%	Pass	5023	5022.4	+/-25%	Pass
AV53	05/02/2005 6:47	7143	7144.1	+/-5%	Pass	12.7	5-50	Pass	223.0	223.0	+/-5%	Pass	5008	5007.8	+/-25%	Pass
AV54	05/02/2005 6:47	7341	7313.1	+/-5%	Pass	13.7	5-50	Pass	227.9	226.0	+/-5%	Pass	5044	5029.5	+/-25%	Pass
AV55	05/02/2005 6:47	7341	7132.9	+/-5%	Pass	13.2	5-50	Pass	227.0	226.0	+/-5%	Pass	5037	5029.7	+/-25%	Pass
AV56	05/02/2005 6:47	6910	7163.7	+/-5%	Pass	13.1	5-50	Pass	221.1	222.0	+/-5%	Pass	4994	5000.7	+/-25%	Pass
AV57	05/02/2005 6:47	7333	7309.5	+/-5%	Pass	14.2	5-50	Pass	222.0	222.0	+/-5%	Pass	5000	5000.6	+/-25%	Pass
AV58	05/02/2005 6:47	7333	7249.2	+/-5%	Pass	13.4	5-50	Pass	225.0	223.0	+/-5%	Pass	5022	5008.0	+/-25%	Pass
AV59	05/02/2005 6:47	7125	7141.4	+/-5%	Pass	12.3	5-50	Pass	285.0	284.0	+/-5%	Pass	5458	5450.6	+/-25%	Pass
AV60	05/02/2005 6:47	6962	7019.7	+/-5%	Pass	12.8	5-50	Pass	222.9	223.0	+/-5%	Pass	5008	5007.5	+/-25%	Pass
AV61	05/02/2005 6:47	7275	7078.3	+/-5%	Pass	13.1	5-50	Pass	224.0	225.0	+/-5%	Pass	5015	5022.2	+/-25%	Pass
AV62	05/02/2005 6:47	7271	7083.5	+/-5%	Pass	13.9	5-50	Pass	222.0	222.0	+/-5%	Pass	5000	5000.7	+/-25%	Pass
AV63	05/02/2005 6:47	6884	7120.8	+/-5%	Pass	13.0	5-50	Pass	221.9	223.0	+/-5%	Pass	5000	5007.9	+/-25%	Pass
AV64	05/02/2005 6:47	7267	7153.7	+/-5%	Pass	13.1	5-50	Pass	223.0	224.0	+/-5%	Pass	5008	5015.3	+/-25%	Pass
AV65	05/02/2005 6:47	7265	7233.4	+/-5%	Pass	13.4	5-50	Pass	223.0	224.0	+/-5%	Pass	5008	5015.3	+/-25%	Pass
AV66	05/02/2005 6:47	7149	7165.5	+/-5%	Pass	12.0	5-50	Pass	221.0	222.0	+/-5%	Pass	4993	5000.5	+/-25%	Pass
AV67	05/02/2005 6:47	7390	7128.1	+/-5%	Pass	16.4	5-50	Pass	221.0	224.1	+/-5%	Pass	4994	5015.6	+/-25%	Pass
AV68	05/02/2005 6:47	7442	7259.5	+/-5%	Pass	12.9	5-50	Pass	221.0	222.0	+/-5%	Pass	4993	5000.8	+/-25%	Pass
AV69	05/02/2005 6:47	7231	7305.4	+/-5%	Pass	12.6	5-50	Pass	221.0	222.0	+/-5%	Pass	4994	5000.6	+/-25%	Pass
AV70	05/02/2005 6:47	7437	7406.5	+/-5%	Pass	12.9	5-50	Pass	221.0	222.6	+/-5%	Pass	4993	5004.7	+/-25%	Pass
AV71	05/02/2005 6:47	7434	7187.3	+/-5%	Pass	13.2	5-50	Pass	222.1	225.0	+/-5%	Pass	5001	5022.7	+/-25%	Pass
AV72	05/02/2005 6:47	7068	7090.0	+/-5%	Pass	12.8	5-50	Pass	219.1	223.9	+/-5%	Pass	4979	5014.6	+/-25%	Pass
AV73	05/02/2005 7:36	6880	7251.3	+/-5%	FAIL	13.1	5-50	Pass	224.1	225.0	+/-5%	Pass	5016	5022.4	+/-25%	Pass

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria		Gross Counts P/F	FWHM (keV) Result	FWHM (keV) Criteria	FWHM (keV) P/F	Pulser Center Result	Pulser Center Criteria		Pulser Center P/F	Energy (keV) Result	Energy (keV) Criteria		Energy (keV) P/F
AV73	05/02/2005 7:54	7317	7251.3	+/-5%	Pass	13.4	5 - 50	Pass	224.1	225.0	+/-5%	Pass	5016	5022.4	+/-25%	Pass
AV74	05/02/2005 7:36	7334	7227.1	+/-5%	Pass	13.0	5 - 50	Pass	220.0	224.0	+/-5%	Pass	4986	5015.0	+/-25%	Pass

SEVERN TRENT STL

Run Log

Alphavision
5/2/05

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	4/30/5	5117193	FSD250160-12	16	400'	Pu	RAH	RR
2			13	17				
3			FSD270000-193B	18				
4			193C	19				
5		5117192	FSD250160-01	20		Th		RR
6			01X	21				
7			02	22				
8			03	23				
9			04	24				
10			05	46				
11			06	49				
12			07	50				
13			08	51				
14			09	52				
15			10	53				
16			11	56				
17			12	60				
18			13	61				
19			FSD270000-192B	64				
20			192C	65				
21	5-1-5	Daily	Pulser ✓	1-74	1 min	QA	RAH	—
22		5117192	FSD250160-01	1	400'	Th		RR
23			01X	2				
24			02	4				
25			06	7				
26	5-2-5	Daily	Pulsers	1-74	1 min	QA	JW	—
27	5-2-05	5120105	FSD300020-105B	1	180	Th	RR	RR
28			1 -105C	2				
29			FSD300120-001	3				

Reviewed By: RR

Date: 5-2-05

RR 5/2/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5/2/	5120105	FSD300120-D01X	4	180	TW	RK	RK
2		5117118	FSD280284-001	37				RK
3			-001X	38				
4			-002	39				
5			-003	40				
6			-004	41				
7			FSD270000-112B	42				
8			-112C	10				
9		5120106	FSD300000-106B	6		YH		RK
10			-106C	7				
11			FSD300120-001	8				
12			-001X	9				
13		5117113	FSD280284-001	25				
14			-001X	26				
15			-002	27				
16			-003	28 29				
17			-004	32 33				
18			FSD270000-113B	33 34				
19			-113C	35				
20		5118458	FSD140151-008X KC	11	180	TW	RK	RK
21		1	FSD050000-458B	12			1	1
22		5118229	FSD270110-001	13			QW	RK
23			-001X	15				
24			-002	16				
25			-003	17				
26			-004	18				
27			-005	19				
28			-006	20				
29			-007	21				

Reviewed By: QW Date: 5-2-5

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5-25	5118629	FSD280000-229B	22	180	TH	gw	RR
2		↓	↓ -229C	29		↓		↓
3		5118231	FSD270110-001	24		Um		RR
4			-001X	46				
5			-002	49				
6			-003	58				
7			-004	51				
8			-005	52				
9			-006	53				
10			-007	56				
11			FSD280000-231B	60				
12	↓	↓	↓ -231C	61	↓	↓	↓	↓
13	5-2	5117632	FSD140271-006 RE	1	180	UU	RR	RR
14	5-25	5113068	FSD280000-068B	57	200 min; 29 min	Pu	~	↓
15		↓	↓ -068C	58	↓	↓	↓	
16		5117072	FSD220279-001	12	240 min	Pu	~	RR
17			-003	63				
18			-002	64				
19			-002X	73				
20			FSD270000-072B	54				
21			-072C	55				
22		5117073	FSD220279-001	7	240 min	Um	~	RR
23			-003	8				
24			-002	9				
25			-002X	11				
26			FSD270000-073B	41				
27			-073C	48				
28		5117071	FSD220279-001	2	600 min	Am	~	
29			-003	3				

Reviewed By: RR Date: 5/3/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5-2-5	5112071	FSD220279-003	4	60min	Am	~	
2			-003X	6				
3			FSD270000-071B	10				
4			-071C	45				
5	5-2-05	5115433	FSD220356-001 RC	1	400	U	RR	RR
6	5-2-05	5113068	FSD210345-001	13		Pu	RR	
7			-001S	15				
8			-001X	16				
9			-002	17				
10			-003	18				
11			-004	19				
12			-005	20				
13			-006	21				
14			-007	22				
15			-008	23				
16			-009	24				
17			-010	49				
18			-011	50				
19			-012	53				
20			-013	56				
21			-014	60				
22			-015	61				
23		5117492	FSD250136-003	25	190	Th		RR
24			-003X	26				
25			-00	27				
26			-015	29				
27			-021	33				
28			FSD270000-492B	54				
29			-492C	62				

Reviewed By: RR Date: 5/2/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5/2/05	5117495	F5D250136-003	34	180	Pu	PR	PR
2			-003X	35				
3			-010	37				
4			-015	38				
5			-021	39				
6			F5D270000-495B	105				
7			1 -495C	106				
8		5117498	F5D250136-003	40		Uu		PR
9			-003X	41				
10			-010	42				
11			F5D270000-498B	107				
12			1 -498C	108				
13		5117498	F5D250136-015	25	180	U	CH	
14		1	1 -021	26	1	1	1	
15	5/3/5	Daily	Pulses	1-24	1min	QA	QA	—
16	5/3/05	5119118	F5D270289-001	25	180	Th	PR	
17			-001X	26				
18			-002	27				
19			-003	29				
20			-004	33				
21			-005	34				
22			-006	35				
23			-007	37				
24			-008	38				
25			-009	39				
26			-010	40				
27			-011	41				
28			-012	42				
29			-013	1				

Reviewed By: RR Date: 5/3/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

For LL ~ 40 mg 5/10

STL Radiochemistry Prep Report

Alpha Spectroscopy

Batch # 5117073

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

General Prep Information

1 Sigma

Method	Tracer ID	Aliquot	Isotope	Reference Date	Activity	Units	Analyst
Iso URANIUM (LONG CT) NAS & DOE MOD							
	Rad04-0036	0.1	U-232	9/16/1997	1.10E+02	dpm/mL	401627

✓

Weights

Lot ID	Work Order #	Geometry	Aliquot	Dilution	Adj Aliquot	
F5D220279-001	G81GW1AD	Planchette, 44mm	1000	1	1000 mL	7
[redacted]						
F5D220279-001S	G81GW1AH	Planchette, 44mm	1000	1	1000 mL	8
[redacted]						
F5D220279-002	G81G81AD	Planchette, 44mm	1000	1	1000 mL	9
[redacted]						
F5D220279-002X	G81G81AF	Planchette, 44mm	1000	1	1000 mL	11
[redacted]						
F5D270000-073B	G88V61AA	Planchette, 44mm	1000	1	1000 mL	47
[redacted]						
F5D270000-073C	G88V61AC	Planchette, 44mm	1000	1	1000 mL	48
[redacted]						

Spike Information

Lot ID	Work Order #	Standard ID	Aliquot	Isotope	Reference Date	Activity	Units
F5D220279-001S	G81GW1AH	Rad04-0056	0.1	U-234	5/1/1989	5.37E+00	pCi/L
F5D220279-001S	G81GW1AH	Rad04-0056	0.1	U-238	5/1/1989	5.37E+00	pCi/L
F5D270000-073C	G88V61AC	Rad04-0056	0.1	U-234	5/1/1989	5.37E+00	pCi/L
F5D270000-073C	G88V61AC	Rad04-0056	0.1	U-238	5/1/1989	5.37E+00	pCi/L

Standard Operating Procedures

	SOP Number	Rev	Title
☐	STL-RC-0002	3	Planchet Preparation For Radiochemistry And Radiological Screening Analysis
☐	STL-RC-0003	5	Drying And Grinding Of Soil And Solid Samples
☐	STL-RC-0004	7	Preparation Of Soil, Sludge, And Filter Paper Samples For Radiochemical Analysis
☒	STL-RC-0090	4	Preparation Of Samples For Sequential Determination Of Isotopic Americium, Curium, Neptunium, Plutonium, Thorium, And Uranium In Aqueous Samples
☒	STL-RC-0100	7	Actinide Coprecipitation
☐	STL-RC-0238	3	Isotopic Uranium By Eichrom UTEVA Resin for Water, Soil, Sludge and Filters
☒	STL-RC-0240	3	Isotopic Americium, Curium, Plutonium, Thorium, and Uranium in Water, Soil, Sludge and Filters by Eichrome Separation Resin
☐	STL-RC-0241	1	Isotopic Americium, Plutonium, Curium, and Uranium in Water, Soil, Sludge and Filters by Eichrome Uteva and Tru Resins
☐	STL-RC-0242	3	Isotopic Thorium, Plutonium and Uranium in Water, Soil, Sludge and Filters by Eichrome Separation Resin
☐	STL-RD-0201	2	Daily Operations Of An Alpha Spectroscopy System
☐	STL-RD-0203	1	Calibration And Maintenance Of A Alpha Spectroscopy System

(Check all that apply)

Routine

JTW	5-2-05	JTW	KEG	04-27-05
Coprecipitated By	Precip Date	Spiked By	Spike Verified By	Spike Date
Jane M. Tilton	5-2-05			5/4/05
Analyst's Signature	Date		Reviewed By	Date

STL St. Louis

Isotopic Actinide DLC calculation when decay and ingrowth calculations are not required.

Sample ID	Isotope	Total Bkgd Cts	L/g Sample Volume	decimal det. eff.	minutes ct. length	decimal yield	decimal abundance	DLC
F5D220279-001	U234	0.3	1	0.2723	240	0.7843	0.998	0.0112
F5D220279-001	U235	0	1	0.2723	240	0.7843	0.809	0.0000
F5D220279-001	U238	0.9	1	0.2723	240	0.7843	1	0.0194
F5D220279-001S	U234	0	1	0.2842	240	0.8264	0.998	0.0000
F5D220279-001S	U235	0.3	1	0.2842	240	0.8264	0.809	0.0126
F5D220279-001S	U238	0.3	1	0.2842	240	0.8264	1	0.0102
F5D220279-002	U234	1.2	1	0.2658	240	0.8296	0.998	0.0217
F5D220279-002	U235	0	1	0.2658	240	0.8296	0.809	0.0000
F5D220279-002	U238	0.9	1	0.2658	240	0.8296	1	0.0188
F5D220279-002X	U234	0.9	1	0.2681	240	0.8086	0.998	0.0191
F5D220279-002X	U235	0.3	1	0.2681	240	0.8086	0.809	0.0136
F5D220279-002X	U238	0	1	0.2681	240	0.8086	1	0.0000
F5D270000-073B	U234	0.3	1	0.2656	240	0.8435	0.998	0.0107
F5D270000-073B	U235	0	1	0.2656	240	0.8435	0.809	0.0000
F5D270000-073B	U238	0	1	0.2656	240	0.8435	1	0.0000
F5D270000-073C	U234	0	1	0.2651	240	0.8594	0.998	0.0000
F5D270000-073C	U238	0	1	0.2651	240	0.8594	1	0.0000

Calculated by: PE Date: 5/4/05

Reviewed by: [illegible] Date: 5/5/05

St. Louis Laboratory
13715 Rider Trail North
Earth City, MO 63045-1205

Alpha Spectroscopy Quality Assurance Worksheet

Batch: 5117073

F5D270000-073C Recovery Summary			
Isotope	Certified Activity	Observed Activity	% Recovery
U-234	5.37E+00	5.42E+00	101%
U-238	5.37E+00	5.77E+00	107%

F5D220279-002 Duplicate Summary			
Isotope	Sample Activity	Duplicate Activity	RER
U-234	<MDA	<MDA	N/A
U-235	<MDA	<MDA	N/A
U-238	<MDA	<MDA	N/A

F5D220279-001 Spike Summary				
Isotope	Spike Activity	Sample Activity	Spike Added	% Recovery
U-234	5.20E+00	6.78E-02	5.37E+00	96%
U-238	5.46E+00	8.79E-04	5.37E+00	102%

Comments:

Calculated By: PR DATE: 5/4/2005

Reviewed By: DJ DATE: 5/5/05

Alpha Spectroscopy Plutonium

SEVERN TRENT STL

ALPHA SPECTROSCOPY

Data Reports
Results Reports
Channel by Channel Report

Calibration Data

Instrument Checks

Batch Summary Sheets
Run Logs
Yield Summary(ies)
Batch Yield Plot(s)

Raw Data
Prep Data Sheet(s)
QC Acceptance Sheet(s)
LCS Standard Sheet(s)
Tracer Standard Sheets

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:40:26PM 5/5/2005

Analyst: 60040

Sample

Sample Name: F5D220279-001
SampleType: Sample
WRKNO: G81GW1AQ
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Volume : 1.0000L
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5125141
:
Description:

Client Name: Undefined
Client Contact:

Tracer

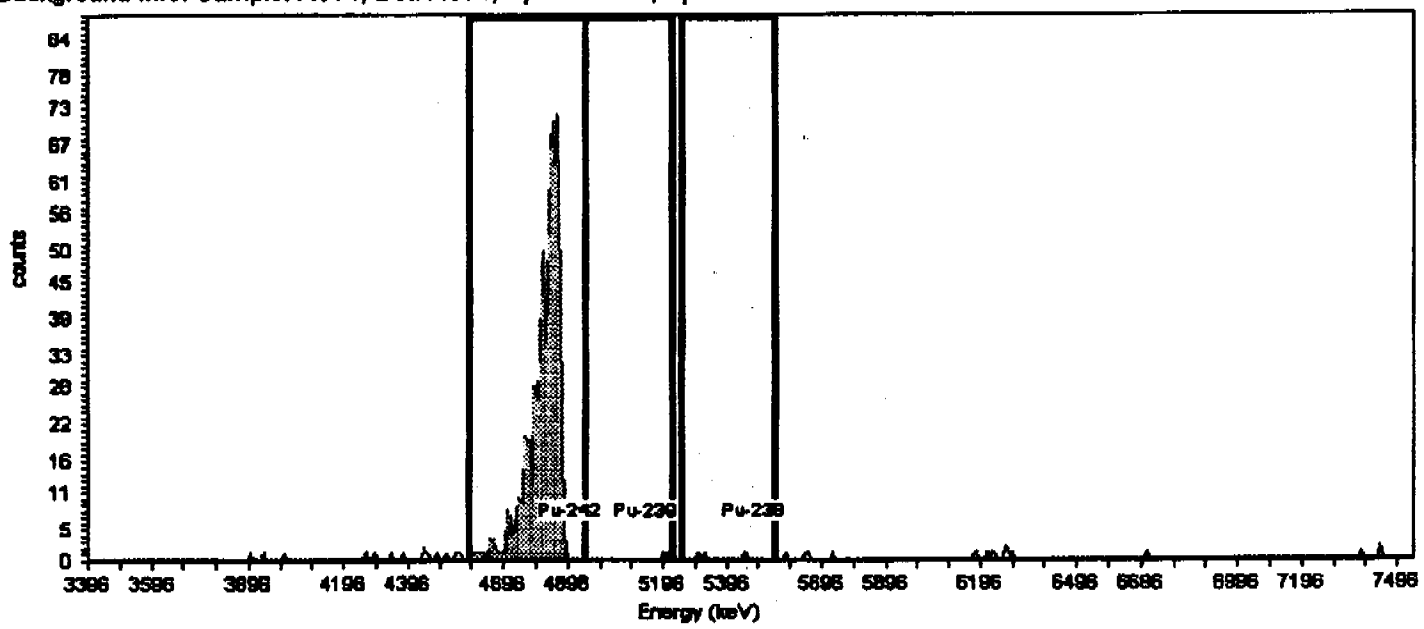
Tracer Name: Pu-242Rad05-0003
Tracer Activity: 84.30 DPM/mL x (Vol.)0.10 mL = 8.43 DPM
Tracer Ref. Date: 6/15/2004 12:00:13PM

Tracer Nuclide: Pu-242
Tracer Recovery: 82.15%

Acquisition

Detector: AV74
Serial Number:
Acquisition Start Date: 5/5/2005 12:00:08PM
Live Time: 400.00 min.
Real Time: 400.00 min.
Background Date: 4/25/2005 11:48:41AM
Background Info: Sample: AV74; Det: AV74; Spectrum #1; Apr-25-2005 11:48

Calibration Name: April2005_AV74a
Calibration Date: 4/27/2005 6:27:51PM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.66% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PuROI
Decay Correction: 5/5/2005 11:59:19AM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/L	1.00Sigma TPU pCi/L	Critical Level pCi/L	MDA pCi/L
Pu-242	4898.999	4586.828	4949.818	69.391	99.0	761.00	2.5000	759	3.120E+000	1.147E-001	1.595E-002	4.544E-002
Pu-239	5138.573	4949.818	5225.690	24.220	99.9	2.00	1.0000	1	4.961E-003	8.595E-003	9.995E-003	3.342E-002
Pu-238	5479.783	5254.729	5545.121	178.338	100.0	4.00	2.5000	2	7.434E-003	1.264E-002	1.579E-002	4.499E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:48:31AM 5/3/2005

Analyst: 60040

Sample

Sample Name: F5D220279-001S
SampleType: Sample
WRKNO: G81GW1AG
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Volume : 1.0000L
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: ~~5117072~~ 5125141
Description: DF 05/05/05

Client Name: Undefined
Client Contact:

Tracer

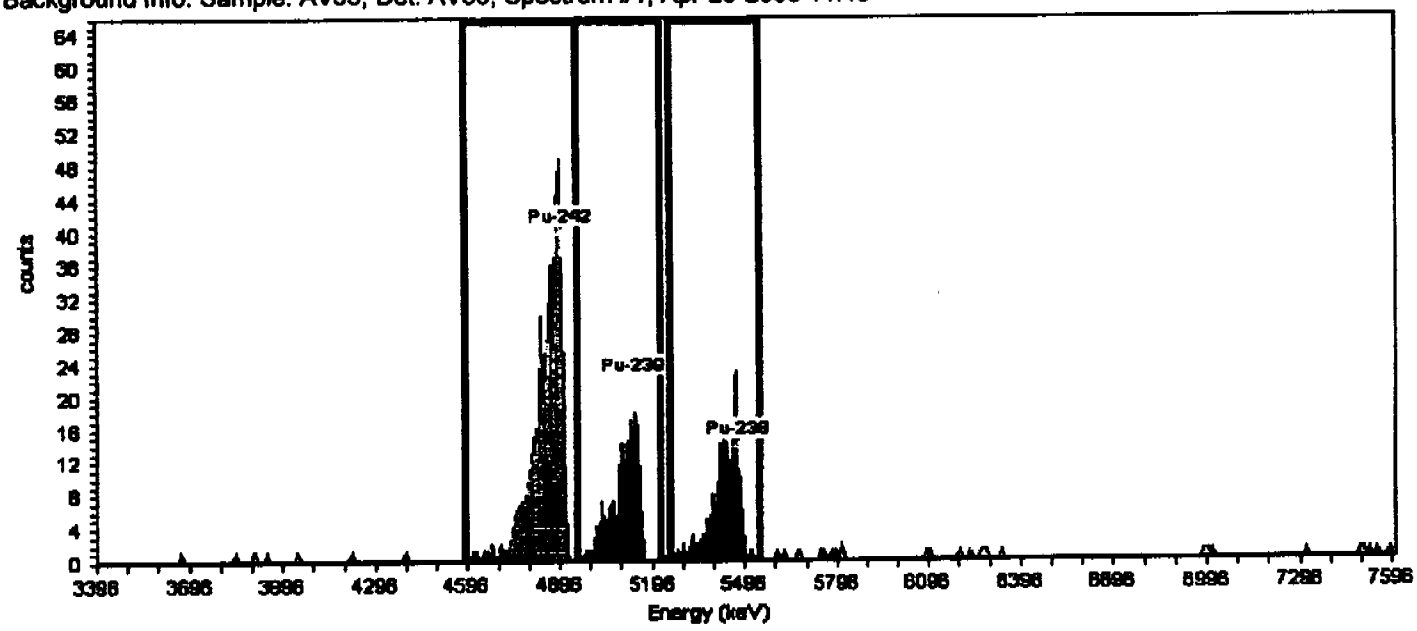
Tracer Name: Pu-242Rad05-0003
Tracer Activity: 84.30 DPM/mL x (Vol.)0.10 mL = 8.43 DPM
Tracer Ref. Date: 6/15/2004 12:00:13PM

Tracer Nuclide: Pu-242
Tracer Recovery: 88.91%

Acquisition

Detector: AV63
Serial Number:
Acquisition Start Date: 5/2/2005 2:56:44PM
Live Time: 240.00 min.
Real Time: 240.02 min.
Background Date: 4/25/2005 11:48:26AM
Background Info: Sample: AV63; Det: AV63; Spectrum #1; Apr-25-2005 11:48

Calibration Name: Apr2005_AV63
Calibration Date: 4/28/2005 12:22:08AM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.03% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PuROI
Decay Correction: 5/2/2005 2:55:08PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/L	1.00Sigma TPU pCi/L	Critical Level pCi/L	MDA pCi/L
Pu-242	4898.999	4586.828	4949.818	87.729	99.0	482.00	0.6000	481	3.376E+000	1.550E-001	1.146E-002	4.427E-002
Pu-239	5138.573	4949.818	5225.690	67.356	99.9	180.00	0.3000	180	1.405E+000	1.234E-001	8.030E-003	3.721E-002
Pu-238	5479.783	5254.729	5545.121	78.958	100.0	190.00	0.9000	189	1.477E+000	1.276E-001	1.390E-002	4.892E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:48:41AM 5/3/2005

Analyst: 60040

Sample

Sample Name: F5D220279-002
SampleType: Sample
WRKNO: G81G81AQ J
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Volume : 1.0000L
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: ~~5117072~~ 5125141
: pp 5/5/05
Description:

Client Name: Undefined
Client Contact:

Tracer

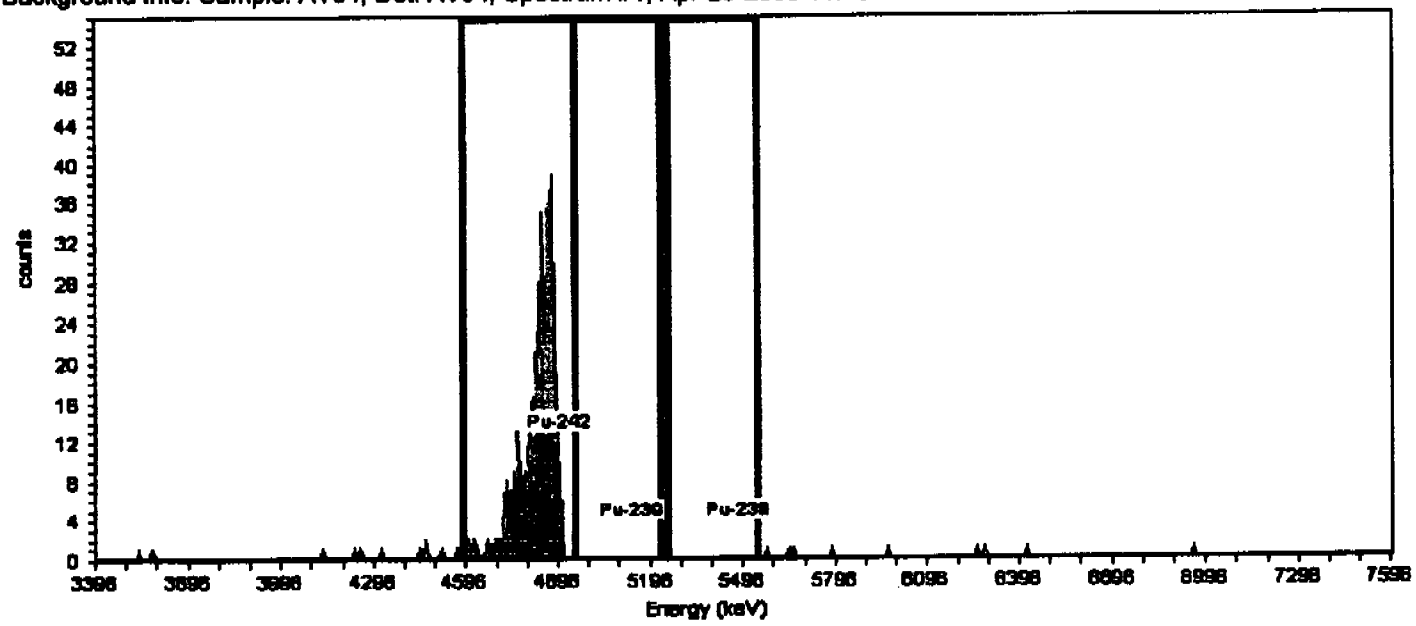
Tracer Name: Pu-242Rad05-0003
Tracer Activity: 84.30 DPM/mL x (Vol.)0.10 mL = 8.43 DPM
Tracer Ref. Date: 6/15/2004 12:00:13PM

Tracer Nuclide: Pu-242
Tracer Recovery: 84.72%

Acquisition

Detector: AV64
Serial Number:
Acquisition Start Date: 5/2/2005 2:56:46PM
Live Time: 240.00 min.
Real Time: 240.02 min.
Background Date: 4/25/2005 11:48:27AM
Background Info: Sample: AV64; Det: AV64; Spectrum #1; Apr-25-2005 11:48

Calibration Name: Apr2005_AV64
Calibration Date: 4/28/2005 12:22:17AM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.29% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PuROI
Decay Correction: 5/2/2005 2:55:08PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/L	1.00Sigma TPU pCi/L	Critical Level pCi/L	MDA pCi/L
Pu-242	4898.999	4586.828	4949.818	76.381	99.0	448.00	1.8000	446	3.217E+000	1.539E-001	2.142E-002	6.586E-002
Pu-239	5136.573	4949.818	5225.690	.000	99.9	0.00	0.6000	-1	0.000E+000	0.000E+000	1.225E-002	4.733E-002
Pu-238	5479.783	5254.729	5545.121	.316	100.0	1.00	0.9000	0	8.425E-004	1.161E-002	1.499E-002	5.278E-002

STL ST. LOUIS

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
4:23:54PM 5/4/2005

Analyst: 60040

Sample

Sample Name: F5D220279-002X
SampleType: Sample
WRKNO: G81G81AM K
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Volume : 1.0000L
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: ~~5117072~~ 5125141
:
Description: RR 5/5/05

Client Name: Undefined
Client Contact:

Tracer

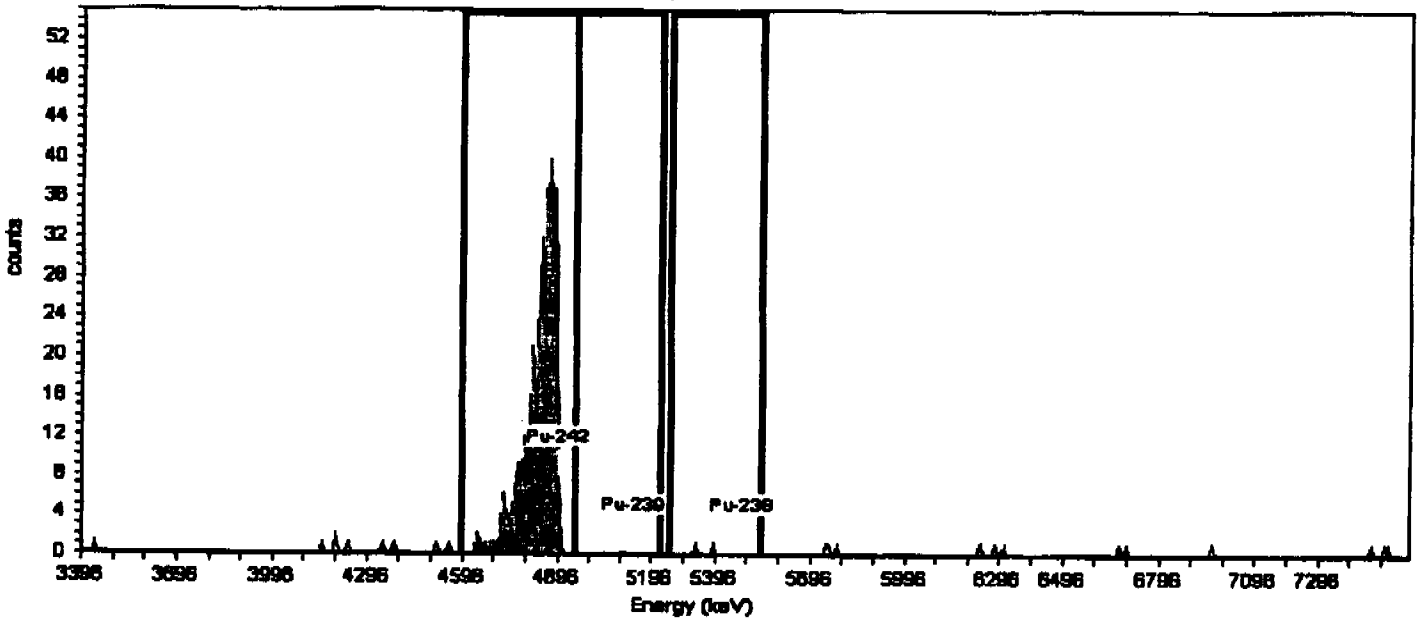
Tracer Name: Pu-242Rad05-0003
Tracer Activity: 84.30 DPM/mL x (Vol.)0.10 mL = 8.43 DPM
Tracer Ref. Date: 6/15/2004 12:00:13PM

Tracer Nuclide: Pu-242
Tracer Recovery: 81.05%

Acquisition

Detector: AV73
Serial Number:
Acquisition Start Date: 5/2/2005 2:56:47PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 4/25/2005 11:48:38AM
Background Info: Sample: AV73; Det: AV73; Spectrum #1; Apr-25-2005 11:48

Calibration Name: April2005_AV73a
Calibration Date: 4/27/2005 6:27:41PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.32% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PuROI
Decay Correction: 5/2/2005 2:55:08PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/L	1.00Sigma TPU pCi/L	Critical Level pCi/L	MDA pCi/L
Pu-242	4898.999	4586.828	4949.818	70.237	99.0	445.00	1.5000	444	3.078E+000	1.476E-001	1.967E-002	6.251E-002
Pu-239	5138.573	4949.818	5225.690	.000	99.9	0.00	0.3000	0	0.000E+000	0.000E+000	8.717E-003	4.039E-002
Pu-238	5479.783	5254.729	5545.121	38.890	100.0	2.00	0.6000	1	1.187E-002	1.368E-002	1.231E-002	4.757E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:48:58AM 5/3/2005

Analyst: 60040

Sample

Sample Name: ~~F5D270000-072B~~ F5E050000-141B
SampleType: Blank 5/5/05 RR
WRKNO: ~~G88V51AA~~ G9V3J1AA
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Volume : 1.0000L
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: ~~5117072~~ 5125141
: RR 5/5/05
Description:

Client Name: Undefined
Client Contact:

Tracer

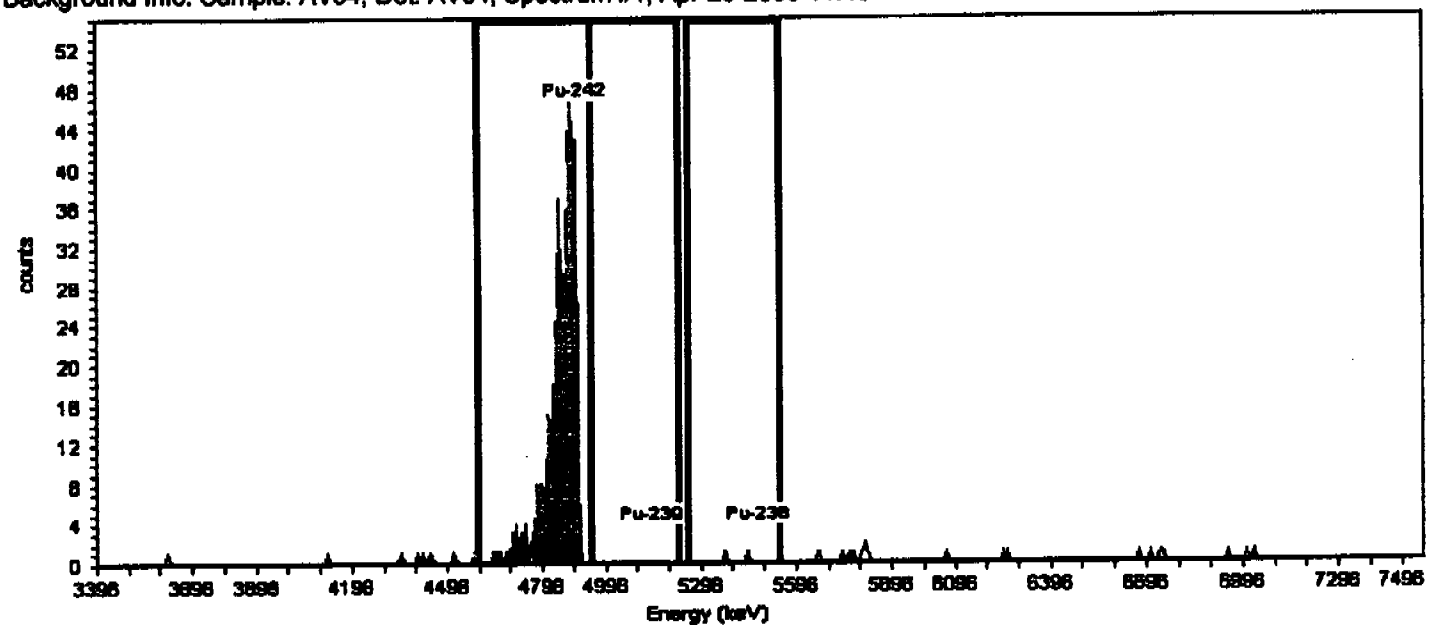
Tracer Name: Pu-242Rad05-0003
Tracer Activity: 84.30 DPM/mL x (Vol.)0.10 mL = 8.43 DPM
Tracer Ref. Date: 6/15/2004 12:00:13PM

Tracer Nuclide: Pu-242
Tracer Recovery: 84.75%

Acquisition

Detector: AV54
Serial Number:
Acquisition Start Date: 5/2/2005 2:57:12PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 4/25/2005 11:48:54AM
Background Info: Sample: AV54; Det: AV54; Spectrum #1; Apr-25-2005 11:48

Calibration Name: April2005_AV54
Calibration Date: 4/29/2005 4:36:56AM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.20% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PuROI
Decay Correction: 5/2/2005 2:55:08PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/L	1.00Sigma TPU pCi/L	Critical Level pCi/L	MDA pCi/L
Pu-242	4898.999	4586.828	4949.818	76.794	99.0	462.00	0.3000	462	3.218E+000	1.507E-001	8.449E-003	3.915E-002
Pu-239	5138.573	4949.818	5225.690	.000	99.9	0.00	0.0000	0	0.000E+000	0.000E+000	0.000E+000	2.206E-002
Pu-238	5479.783	5254.729	5545.121	43.256	100.0	2.00	0.6000	1	1.140E-002	1.314E-002	1.183E-002	4.569E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:49:05AM 5/3/2005

Analyst: 60040

Sample

Sample Name: ~~F5D270000-072C~~ F5E050000-141C
SampleType: Control RR 5/5/05
WRKNO: ~~G66V51AC~~ G9V351AC
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Volume : 1.0000L
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: ~~5117072~~ 5125141
: RR 5/5/05
Description:

Client Name: Undefined
Client Contact:

Tracer

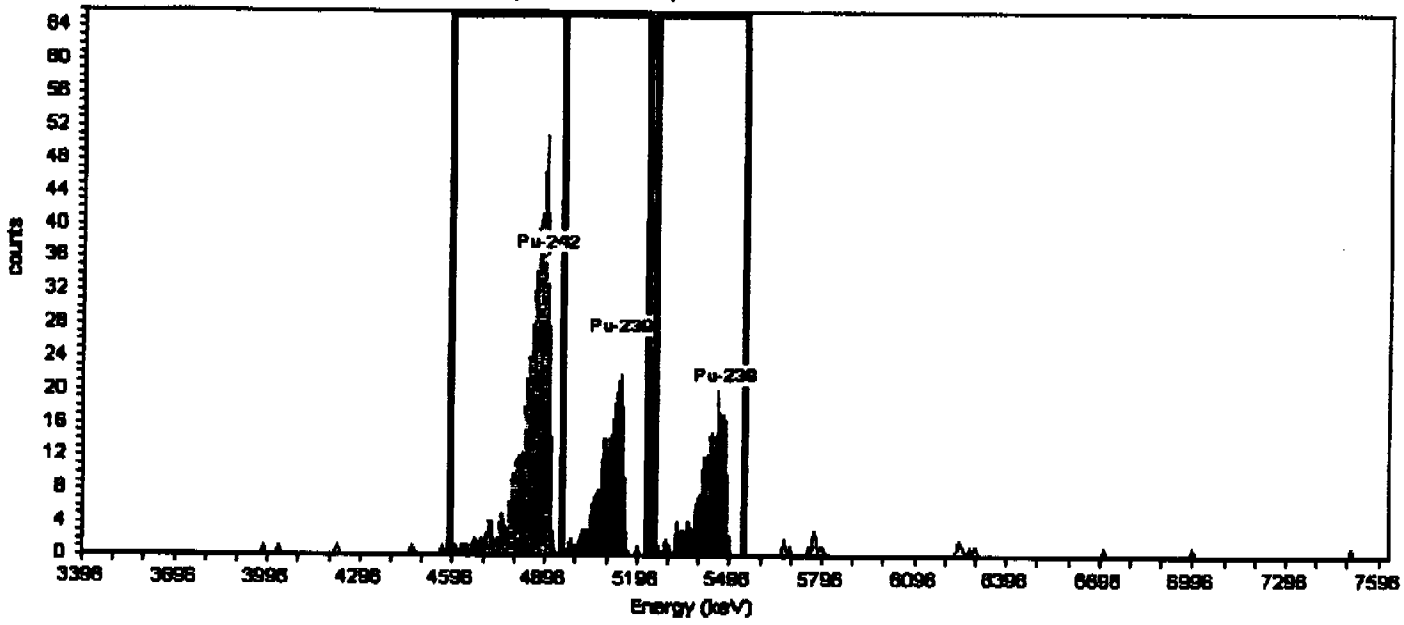
Tracer Name: Pu-242Rad05-0003
Tracer Activity: 84.30 DPM/mL x (Vol.)0.10 mL = 8.43 DPM
Tracer Ref. Date: 6/15/2004 12:00:13PM

Tracer Nuclide: Pu-242
Tracer Recovery: 88.76%

Acquisition

Detector: AV55
Serial Number:
Acquisition Start Date: 5/2/2005 2:57:13PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 4/25/2005 11:48:56AM
Background Info: Sample: AV55; Det: AV55; Spectrum #1; Apr-25-2005 11:48

Calibration Name: April2005_AV55
Calibration Date: 4/28/2005 11:52:21AM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.94% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PuROI
Decay Correction: 5/2/2005 2:55:08PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/L	1.00Sigma TPU pCi/L	Critical Level pCi/L	MDA pCi/L
Pu-242	4898.999	4586.828	4949.818	68.381	99.0	479.00	0.0000	479	3.370E+000	1.550E-001	0.000E+000	2.145E-002
Pu-239	5138.573	4949.818	5225.690	76.501	99.9	207.00	0.3000	207	1.624E+000	1.358E-001	8.071E-003	3.740E-002
Pu-238	5479.783	5254.729	5545.121	81.850	100.0	197.00	0.6000	196	1.541E+000	1.314E-001	1.140E-002	4.404E-002

DAILY PULSERS

Daily Pulser Check - Severn Trent Lab

Pulser Date: 5/2/2005

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria	P/F	FWHM (keV) Result	FWHM (keV) Criteria	P/F	Pulser Center Result	Pulser Center Criteria	P/F	Energy (keV) Result	Energy (keV) Criteria	P/F
AV1	05/02/2005 7:36	7364	7218.7 +/-5%	Pass	14.2	5-50	Pass	227.1	229.0 +/-5%	Pass	5037	5051.1 +/-25%	Pass
AV2	05/02/2005 7:36	7364	7468.7 +/-5%	Pass	14.0	5-50	Pass	227.0	222.9 +/-5%	Pass	5037	5007.5 +/-25%	Pass
AV3	05/02/2005 7:36	7365	7484.9 +/-5%	Pass	13.7	5-50	Pass	229.1	225.9 +/-5%	Pass	5052	5028.8 +/-25%	Pass
AV4	05/02/2005 7:36	7362	7413.7 +/-5%	Pass	13.8	5-50	Pass	226.1	224.9 +/-5%	Pass	5030	5021.6 +/-25%	Pass
AV4	05/02/2005 7:36	7362	7413.7 +/-5%	Pass	13.8	5-50	Pass	226.1	224.9 +/-5%	Pass	5030	5021.6 +/-25%	Pass
AV6	05/02/2005 7:36	7355	7476.7 +/-5%	Pass	14.3	5-50	Pass	226.9	224.0 +/-5%	Pass	5036	5015.3 +/-25%	Pass
AV7	05/02/2005 6:46	7313	7477.0 +/-5%	Pass	15.7	5-50	Pass	228.2	224.9 +/-5%	Pass	5046	5021.9 +/-25%	Pass
AV8	05/02/2005 6:46	7364	7327.4 +/-5%	Pass	13.3	5-50	Pass	228.0	228.0 +/-5%	Pass	5044	5044.6 +/-25%	Pass
AV9	05/02/2005 6:46	7669	7519.3 +/-5%	Pass	16.1	5-50	Pass	221.0	227.9 +/-5%	Pass	4994	5043.3 +/-25%	Pass
AV10	05/02/2005 6:46	7717	7749.6 +/-5%	Pass	15.4	5-50	Pass	219.0	226.1 +/-5%	Pass	4979	5030.3 +/-25%	Pass
AV11	05/02/2005 6:46	7719	7666.2 +/-5%	Pass	14.0	5-50	Pass	222.9	225.0 +/-5%	Pass	5007	5022.1 +/-25%	Pass
AV12	05/02/2005 6:46	7706	7588.7 +/-5%	Pass	14.8	5-50	Pass	229.1	230.0 +/-5%	Pass	5052	5058.4 +/-25%	Pass
AV13	05/02/2005 6:46	7678	7584.6 +/-5%	Pass	17.0	5-50	Pass	227.0	228.0 +/-5%	Pass	5037	5044.1 +/-25%	Pass
AV15	05/02/2005 7:35	7615	7770.5 +/-5%	Pass	14.1	5-50	Pass	227.0	226.9 +/-5%	Pass	5037	5036.6 +/-25%	Pass
AV16	05/02/2005 7:36	7436	7456.0 +/-5%	Pass	12.5	5-50	Pass	225.0	226.9 +/-5%	Pass	5022	5036.2 +/-25%	Pass
AV17	05/02/2005 7:36	7617	7619.1 +/-5%	Pass	14.2	5-50	Pass	225.9	229.9 +/-5%	Pass	5029	5058.3 +/-25%	Pass
AV18	05/02/2005 7:36	7618	7714.5 +/-5%	Pass	13.8	5-50	Pass	228.0	226.9 +/-5%	Pass	5044	5036.4 +/-25%	Pass
AV19	05/02/2005 6:46	7533	7269.8 +/-5%	Pass	12.6	5-50	Pass	222.0	227.7 +/-5%	Pass	5000	5041.9 +/-25%	Pass
AV20	05/02/2005 6:46	7732	7503.6 +/-5%	Pass	13.2	5-50	Pass	227.0	226.0 +/-5%	Pass	5037	5029.9 +/-25%	Pass
AV21	05/02/2005 6:46	7716	7550.9 +/-5%	Pass	13.3	5-50	Pass	225.0	226.0 +/-5%	Pass	5022	5029.6 +/-25%	Pass
AV22	05/02/2005 6:46	7708	7691.4 +/-5%	Pass	14.7	5-50	Pass	224.1	225.0 +/-5%	Pass	5016	5022.4 +/-25%	Pass
AV23	05/02/2005 6:47	7710	7665.3 +/-5%	Pass	14.5	5-50	Pass	229.9	229.8 +/-5%	Pass	5058	5057.0 +/-25%	Pass
AV24	05/02/2005 6:47	7717	7354.0 +/-5%	Pass	14.7	5-50	Pass	228.9	226.9 +/-5%	Pass	5051	5036.4 +/-25%	Pass
AV25	05/02/2005 6:47	5157	5122.1 +/-5%	Pass	14.8	5-50	Pass	225.1	224.0 +/-5%	Pass	5023	5015.1 +/-25%	Pass
AV26	05/02/2005 6:47	5079	5069.9 +/-5%	Pass	19.8	5-50	Pass	224.0	226.9 +/-5%	Pass	5015	5036.5 +/-25%	Pass
AV27	05/02/2005 6:47	5051	4919.2 +/-5%	Pass	14.9	5-50	Pass	223.2	225.0 +/-5%	Pass	5009	5022.5 +/-25%	Pass
AV29	05/02/2005 6:47	5023	5005.4 +/-5%	Pass	26.7	5-50	Pass	225.0	223.8 +/-5%	Pass	5022	5014.0 +/-25%	Pass
AV29	05/02/2005 6:47	5023	5047.7 +/-5%	Pass	26.7	5-50	Pass	225.0	223.3 +/-5%	Pass	5022	5010.1 +/-25%	Pass
AV33	05/02/2005 6:46	5057	4977.0 +/-5%	Pass	11.3	5-50	Pass	209.0	218.0 +/-5%	Pass	4906	4971.5 +/-25%	Pass
AV34	05/02/2005 6:46	5181	5045.5 +/-5%	Pass	17.8	5-50	Pass	224.0	219.0 +/-5%	Pass	5015	4978.8 +/-25%	Pass
AV35	05/02/2005 6:46	4869	4932.6 +/-5%	Pass	12.8	5-50	Pass	274.9	275.0 +/-5%	Pass	5385	5385.6 +/-25%	Pass
AV37	05/02/2005 6:46	4994	5082.9 +/-5%	Pass	20.4	5-50	Pass	236.1	236.1 +/-5%	Pass	5103	5103.2 +/-25%	Pass

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria		Gross Counts P/F	FWHM (keV) Result	FWHM (keV) Criteria	FWHM (keV) P/F	Pulser Center Result	Pulser Center Criteria		Pulser Center P/F	Energy (keV) Result	Energy (keV) Criteria		Energy (keV) P/F
AV38	05/02/2005 6:46	5328	5419.4	+/-5%	Pass	17.2	5 - 50	Pass	219.0	217.9	+/-5%	Pass	4979	4448.6	+/-25%	Pass
AV39	05/02/2005 6:46	5267	5316.2	+/-5%	Pass	14.9	5 - 50	Pass	227.8	224.2	+/-5%	Pass	5043	5016.3	+/-25%	Pass
AV40	05/02/2005 6:46	4892	4755.8	+/-5%	Pass	13.1	5 - 50	Pass	227.0	226.0	+/-5%	Pass	5037	5029.5	+/-25%	Pass
AV41	05/02/2005 6:46	4953	4990.8	+/-5%	Pass	11.9	5 - 50	Pass	228.9	229.0	+/-5%	Pass	5051	5051.6	+/-25%	Pass
AV42	05/02/2005 6:46	4797	4977.0	+/-5%	Pass	12.8	5 - 50	Pass	236.9	228.1	+/-5%	Pass	5109	5044.9	+/-25%	Pass
AV43	05/02/2005 6:46	7663	7162.4	+/-5%	FAIL	13.1	5 - 50	Pass	222.0	224.1	+/-5%	Pass	5000	5015.9	+/-25%	Pass
AV43	05/02/2005 7:54	7530	7162.4	+/-5%	FAIL	12.9	5 - 50	Pass	222.0	224.1	+/-5%	Pass	5001	5015.9	+/-25%	Pass
AV45	05/02/2005 6:47	7621	7593.5	+/-5%	Pass	15.5	5 - 50	Pass	226.9	225.6	+/-5%	Pass	5036	5026.9	+/-25%	Pass
AV46	05/02/2005 6:47	7654	7722.7	+/-5%	Pass	14.2	5 - 50	Pass	224.1	225.8	+/-5%	Pass	5016	5028.0	+/-25%	Pass
AV47	05/02/2005 6:47	7653	7532.5	+/-5%	Pass	13.5	5 - 50	Pass	218.0	226.0	+/-5%	Pass	4972	5029.6	+/-25%	Pass
AV48	05/02/2005 6:47	7634	7717.5	+/-5%	Pass	14.7	5 - 50	Pass	214.9	224.0	+/-5%	Pass	4949	5015.2	+/-25%	Pass
AV49	05/02/2005 6:47	7646	7703.4	+/-5%	Pass	13.8	5 - 50	Pass	232.0	226.0	+/-5%	Pass	5073	5029.5	+/-25%	Pass
AV50	05/02/2005 6:47	7645	7660.9	+/-5%	Pass	13.8	5 - 50	Pass	225.0	227.0	+/-5%	Pass	5023	5037.2	+/-25%	Pass
AV51	05/02/2005 6:47	7350	7070.5	+/-5%	Pass	12.9	5 - 50	Pass	220.0	223.0	+/-5%	Pass	4986	5007.6	+/-25%	Pass
AV52	05/02/2005 6:47	7026	7156.4	+/-5%	Pass	12.8	5 - 50	Pass	225.1	225.0	+/-5%	Pass	5023	5022.4	+/-25%	Pass
AV53	05/02/2005 6:47	7143	7144.1	+/-5%	Pass	12.7	5 - 50	Pass	223.0	223.0	+/-5%	Pass	5008	5007.8	+/-25%	Pass
AV54	05/02/2005 6:47	7341	7313.1	+/-5%	Pass	13.7	5 - 50	Pass	227.9	226.0	+/-5%	Pass	5044	5029.5	+/-25%	Pass
AV55	05/02/2005 6:47	7341	7132.9	+/-5%	Pass	13.2	5 - 50	Pass	227.0	226.0	+/-5%	Pass	5037	5029.7	+/-25%	Pass
AV56	05/02/2005 6:47	6910	7163.7	+/-5%	Pass	13.1	5 - 50	Pass	221.1	222.0	+/-5%	Pass	4994	5000.7	+/-25%	Pass
AV57	05/02/2005 6:47	7333	7309.5	+/-5%	Pass	14.2	5 - 50	Pass	222.0	222.0	+/-5%	Pass	5000	5000.6	+/-25%	Pass
AV58	05/02/2005 6:47	7333	7249.2	+/-5%	Pass	13.4	5 - 50	Pass	225.0	223.0	+/-5%	Pass	5022	5008.0	+/-25%	Pass
AV59	05/02/2005 6:47	7125	7141.4	+/-5%	Pass	12.3	5 - 50	Pass	285.0	284.0	+/-5%	Pass	5458	5450.6	+/-25%	Pass
AV60	05/02/2005 6:47	6962	7019.7	+/-5%	Pass	12.8	5 - 50	Pass	222.9	223.0	+/-5%	Pass	5008	5007.5	+/-25%	Pass
AV61	05/02/2005 6:47	7275	7078.3	+/-5%	Pass	13.1	5 - 50	Pass	224.0	225.0	+/-5%	Pass	5015	5022.2	+/-25%	Pass
AV62	05/02/2005 6:47	7271	7083.5	+/-5%	Pass	13.9	5 - 50	Pass	222.0	222.0	+/-5%	Pass	5000	5000.7	+/-25%	Pass
AV63	05/02/2005 6:47	6884	7120.8	+/-5%	Pass	13.0	5 - 50	Pass	221.9	223.0	+/-5%	Pass	5000	5007.9	+/-25%	Pass
AV64	05/02/2005 6:47	7267	7153.7	+/-5%	Pass	13.1	5 - 50	Pass	223.0	224.0	+/-5%	Pass	5008	5015.3	+/-25%	Pass
AV65	05/02/2005 6:47	7265	7233.4	+/-5%	Pass	13.4	5 - 50	Pass	223.0	224.0	+/-5%	Pass	5008	5015.3	+/-25%	Pass
AV66	05/02/2005 6:47	7149	7165.5	+/-5%	Pass	12.0	5 - 50	Pass	221.0	222.0	+/-5%	Pass	4993	5000.5	+/-25%	Pass
AV67	05/02/2005 6:47	7390	7128.1	+/-5%	Pass	16.4	5 - 50	Pass	221.0	224.1	+/-5%	Pass	4994	5015.6	+/-25%	Pass
AV68	05/02/2005 6:47	7442	7259.5	+/-5%	Pass	12.9	5 - 50	Pass	221.0	222.0	+/-5%	Pass	4993	5000.8	+/-25%	Pass
AV69	05/02/2005 6:47	7231	7305.4	+/-5%	Pass	12.6	5 - 50	Pass	221.0	222.0	+/-5%	Pass	4994	5000.6	+/-25%	Pass
AV70	05/02/2005 6:47	7437	7406.5	+/-5%	Pass	12.9	5 - 50	Pass	221.0	222.6	+/-5%	Pass	4993	5004.7	+/-25%	Pass
AV71	05/02/2005 6:47	7434	7187.3	+/-5%	Pass	13.2	5 - 50	Pass	222.1	225.0	+/-5%	Pass	5001	5022.7	+/-25%	Pass
AV72	05/02/2005 6:47	7068	7090.0	+/-5%	Pass	12.8	5 - 50	Pass	219.1	223.9	+/-5%	Pass	4979	5014.6	+/-25%	Pass
AV73	05/02/2005 7:36	6880	7251.3	+/-5%	FAIL	13.1	5 - 50	Pass	224.1	225.0	+/-5%	Pass	5016	5022.4	+/-25%	Pass

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria	P/F	FWHM (keV) Result	FWHM (keV) Criteria	P/F	Pulser Center Result	Pulser Center Criteria	P/F	Energy (keV) Result	Energy (keV) Criteria	P/F
AV73	05/02/2005 7:54	7317	7251.3 +/-5%	Pass ✓	13.4	5-50	Pass	224.1	225.0 +/-5%	Pass	5016	5022.4 +/-25%	Pass
AV74	05/02/2005 7:36	7334	7227.1 +/-5%	Pass	13.0	5-50	Pass	220.0	224.0 +/-5%	Pass	4986	5015.0 +/-25%	Pass

SEVERN TRENT STL

Run Log

Alphavision
5/2/05

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	4/30/5	5117193	FSD250160-12	16	400'	Pu	RAK	RR
2			13	17				
3			FSD270000-193B	18				
4			193C	19				
5		5117192	FSD250160-01	20		Th		RR
6			01X	21				
7			02	22				
8			03	23				
9			04	24				
10			05	46				
11			06	49				
12			07	50				
13			08	51				
14			09	52				
15			10	53				
16			11	56				
17			12	60				
18			13	61				
19			FSD270000-192B	64				
20			192C	65				
21	5-1-5	Daily	Pulser ✓	1-74	1 min	QA	RAK	—
22		5117192	FSD250160-01	1	400'	Th		RR
23			01X	2				
24			02	4				
25			06	7				
26	5-2-5	Daily	Pulsers	1-74	1 min	QA	JW	—
27	5-2-05	5120105	FSD300000-105B	1	180	Th	RR	RR
28			105C	2				
29			FSD300120-001	3				

Reviewed By: RR Date: 5-2-05

RR 5/2/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5/2/	5120105	FSD300120-001X	4	180	TW	RK	RK
2		5117112	FSD220284-001	37				RK
3			-001X	38				
4			-002	39				
5			-003	40				
6			-004	41				
7			FSD270000-112B	42				
8			-112C	10				
9		5120106	FSD300000-106B	6		UU		RK
10			-106C	7				
11			FSD300120-001	8				
12			-001X	9				
13		5117113	FSD220284-001	25				
14			-001X	26				
15			-002	27				
16			-003	28 29				
17			-004	33				
18			FSD270000-113B	34				
19			-113C	35				
20		5117117	FSD140191-008X RC	11	180	TW	RK	RK
21		1	FSD050000-428	12			1	1
22		5118229	FSD270110-001	13			GW	RK
23			-001X	15				
24			-002	16				
25			-003	17				
26			-004	18				
27			-005	19				
28			-006	20				
29			-007	21				

Reviewed By: GW Date: 5-2-5

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Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5-2-5	5118629	FSD280000-229B	22	180	TH	gw	RR
2			-229C	23				
3		5118231	FSD270110-001	24		Um		RR
4			-001X	46				
5			-002	49				
6			-003	50				
7			-004	51				
8			-005	52				
9			-006	53				
10			-007	56				
11			FSD280000-231B	60				
12			-231C	61				
13	5-2	5117632	FSD140271-006 RE	1	180	Um	RR	RR
14	5-2-5	5113068	FSD280000-068B	57	200 Dead 29-Min	Pu	~	
15			-068C	58				
16		5117072	FSD220279-001	12	240 min	Pu	~	RR
17			-003	63				
18			-002	64				
19			-002X	73				
20			FSD270000-072B	54				
21			-072C	55				
22		5117073	FSD220279-001	7	240 min	Um	~	RR
23			-001S	8				
24			-002	9				
25			-002X	11				
26			FSD270000-073B	49				
27			-073C	48				
28		5117071	FSD220279001	2	600 min	Am	~	
29			-001S	3				

Reviewed By: RR Date: 5/3/05

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Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5-2-5	5112071	FSD220279-002	4	600min	Am	~	
2			-002X	6				
3			FSD220000-071B	10				
4			-071C	45				
5	5-2-05	5115433	FSD220356-001 RC	1	400	Uu	RR	RR
6	5-2-05	5113068	FSD210345-001	13		Pu	RR	
7			-001S	15				
8			-001X	16				
9			-002	17				
10			-003	18				
11			-004	19				
12			-005	20				
13			-006	21				
14			-007	22				
15			-008	23				
16			-009	24				
17			-010	49				
18			-011	50				
19			-012	53				
20			-013	56				
21			-014	60				
22			-015	61				
23		5117492	FSD250136-003	25	130	Am		RR
24			-003X	26				
25			-00D	27				
26			-015	29				
27			-021	33				
28			FSD270000-492B	54				
29			-492C	62				

Reviewed By: RR

Date: 5/2/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04

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Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5/2/05	5117495	F5D250136-003	34	180	Pu	PR	PR
2			-003X	35				
3			-010	37				
4			-015	38				
5			-021	39				
6			F5D270000-495B	65				
7			" -495C	66				
8		5117498	F5D250136-003	40		Pu		PR
9			-003X	41				
10			-010	42				
11			F5D270000-498B	67				
12			" -498C	68				
13		5117498	F5D250136-015	25	180	U	CH	
14		"	" -021	26	"	"	"	
15	5/3/5	Daily	Pulsers	1-24	1 min	QA	QA	—
16	5/3/05	5119118	F5D270289-001	25	180	TH	PR	
17			-001X	26				
18			-002	27				
19			-003	29				
20			-004	33				
21			-005	34				
22			-006	35				
23			-007	37				
24			-008	38				
25			-009	39				
26			-010	40				
27			-011	41				
28			-012	42				
29			-013	1				

Reviewed By: RP Date: 5/3/05

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STL Radiochemistry Prep Report

Alpha Spectroscopy

Batch # 5125141

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

General Prep Information

Method	Tracer ID	Aliquot	Isotope	Reference Date	Activity	Units	Analyst
PLUTONIUM (LONG CT) DOE A-01-R MOD							
	Rad05-0003	0.1	Pu-242	6/15/2004	8.43E+01	dpm/mL	401627

Weights

Lot ID	Work Order #	Geometry	Aliquot	Dilution	Adj Aliquot	
F5D220279-001	G81GW1AQ	Planchette, 44mm	1000	1	1000 mL	
[redacted] RC= 74 (400uln)						12
F5D220279-001S	G81GW1AR	Planchette, 44mm	1000	1	1000 mL	
[redacted]						63
F5D220279-002	G81G81AJ	Planchette, 44mm	1000	1	1000 mL	
[redacted]						64
F5D220279-002X	G81G81AK	Planchette, 44mm	1000	1	1000 mL	
[redacted]						73
F5E050000-141B	G9V3J1AA	Planchette, 44mm	1000	1	1000 mL	
[redacted]						54
F5E050000-141C	G9V3J1AC	Planchette, 44mm	1000	1	1000 mL	
[redacted]						55

Spike Information

Lot ID	Work Order #	Standard ID	Aliquot	Isotope	Reference Date	Activity	Units
F5D220279-001S	G81GW1AR	RAD03-0069	0.1	Pu-239/40	9/11/2003	1.44E+00	pCi/L
F5D220279-001S	G81GW1AR	RAD03-0069	0.1	Pu-238	9/11/2003	1.49E+00	pCi/L
F5E050000-141C	G9V3J1AC	RAD03-0069	0.1	Pu-239/40	9/11/2003	1.44E+00	pCi/L
F5E050000-141C	G9V3J1AC	RAD03-0069	0.1	Pu-238	9/11/2003	1.49E+00	pCi/L

Standard Operating Procedures

	SOP Number	Rev	Title
☐	STL-RC-0002	3	Planchet Preparation For Radiochemistry And Radiological Screening Analysis
☐	STL-RC-0003	5	Drying And Grinding Of Soil And Solid Samples
☐	STL-RC-0004	7	Preparation Of Soil, Sludge, And Filter Paper Samples For Radiochemical Analysis
☑	STL-RC-0090	4	Preparation Of Samples For Sequential Determination Of Isotopic Americium, Curium, Neptunium, Plutonium, Thorium, And Uranium In Aqueous Samples
☑	STL-RC-0100	7	Actinide Coprecipitation
☐	STL-RC-0232	4	Isotopic Thorium And/oR Neptunium In Water, Soil, Sludge, and Filters by Eichrom TEVA Separation Resins
☐	STL-RC-0238	3	Isotopic Uranium By Eichrom UTEVA Resin for Water, Soil, Sludge and Filters
☑	STL-RC-0240	3	Isotopic Americium, Curium, Plutonium, Thorium, and Uranium In Water, Soil, Sludge and Filters by Eichrome Separation Resin
☐	STL-RC-0241	1	Isotopic Americium, Plutonium, Curium, and Uranium In Water, Soil, Sludge and Filters by Eichrome Uteva and Tru Resins
☐	STL-RC-0242	3	Isotopic Thorium, Plutonium and Uranium in Water, Soil, Sludge and Filters by Eichrome Separation Resin

(Check all that apply)

JMW	5-2-05	JMW	KEG	4-27-05	
Coprecipitated By	Precip Date	Spiked By	Spike Verified By	Spike Date	
JMW	5-2-05	RR		5-5-05	
Analyst's Signature	Date		Reviewed By	Date	

LOT #F5D220279 Reprint DU RR 5/5/05

STL St. Louis

Isotopic Actinide DLC calculation when decay and ingrowth calculations are not required.

Sample ID	Isotope	Total Bkgd Cts	L/g Sample Volume	decimal det. eff.	minutes ct. length	decimal yield	decimal abundance	DLC
F5D220279-001	Pu238	2.5	1	0.2766	400	0.8215	0.999	0.0182
F5D220279-001	Pu239/240	1	1	0.2766	400	0.8215	0.999	0.0115
F5D220279-001S	Pu238	0.9	1	0.2703	240	0.8891	0.999	0.0173
F5D220279-001S	Pu239/240	0.3	1	0.2703	240	0.8891	0.999	0.0100
F5D220279-002	Pu238	0.9	1	0.2629	240	0.8472	0.999	0.0186
F5D220279-002	Pu239/240	0.6	1	0.2629	240	0.8472	0.999	0.0152
F5D220279-002X	Pu238	0.6	1	0.2732	240	0.8105	0.999	0.0153
F5D220279-002X	Pu239/240	0.3	1	0.2732	240	0.8105	0.999	0.0108
F5E050000-141B	Pu238	0.6	1	0.272	240	0.8475	0.999	0.0147
F5E050000-141B	Pu239/240	0	1	0.272	240	0.8475	0.999	0.0000
F5D050000-141C	Pu238	0.6	1	0.2694	240	0.8876	0.999	0.0142
F5D050000-141C	Pu239/240	0.3	1	0.2694	240	0.8876	0.999	0.0100

Calculated by: PE Date: 5/6/05

Reviewed by: AF Date: 5/6/05

St. Louis Laboratory
13715 Rider Trail North
Earth City, MO 63045-1205

Alpha Spectroscopy Quality Assurance Worksheet

Batch: 5125141

F5D270000-072C Recovery Summary			
Isotope	Certified Activity	Observed Activity	% Recovery
Pu-238	1.49E+00	1.54E+00	103%
Pu-239	1.44E+00	1.62E+00	113%

F5D220279-002 Duplicate Summary			
Isotope	Sample Activity	Duplicate Activity	RER
Pu-238	<MDA	<MDA	N/A
Pu-239	<MDA	<MDA	N/A

F5D220279-001 Spike Summary				
Isotope	Spike Activity	Sample Activity	Spike Added	% Recovery
U-234	1.48E+00	7.43E-03	1.49E+00	99%
U-238	1.41E+00	4.96E-03	1.44E+00	97%

Comments:

Calculated By: DR DATE: 5/6/2005

Reviewed By: AL DATE: 5/16/05

Monthly Backgrounds
April 2005
Alphavision

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:36AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV1
Comment:

Spectrum #1 Analysis #1

Batch

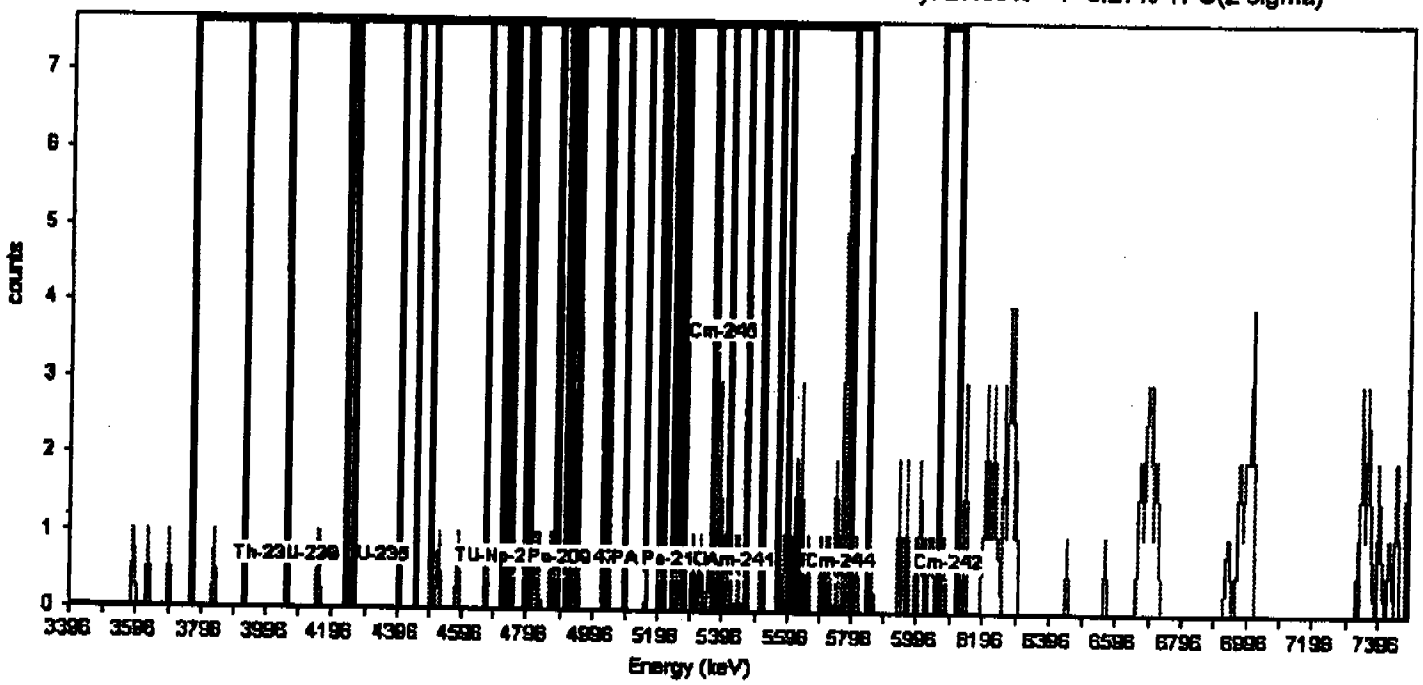
Batch Name: April_2005
Description:

Acquisition

Detector: AV1 , SN: 41-158W6
Acquisition Start Date: 4/26/2005 10:37:36AM
Live Time: 800.00 min.
Real Time: 800.11 min.
Calibration Name: March2005_AV1
Calibration Date: 3/16/2005 7:59:48PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²

Efficiency: 27.33% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 156.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	3.00	3.750E-003	2.500E-003
U-234	4.70	4.50	4.80	3.00	3.750E-003	2.500E-003
Pu-242	4.88	4.67	4.93	4.00	5.000E-003	2.795E-003
Th-229	4.84	4.72	5.10	4.00	5.000E-003	2.795E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	6.00	7.500E-003	3.307E-003
Th-228	5.41	5.16	5.47	14.00	1.750E-002	4.841E-003
Po-210	5.25	5.20	5.28	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	15.00	1.875E-002	5.000E-003
Am-241	5.45	5.27	5.57	14.00	1.750E-002	4.841E-003
Cm-245	5.39	5.36	5.41	9.00	1.125E-002	3.953E-003
Pu-236	5.74	5.52	5.80	25.00	3.125E-002	6.374E-003
Cm-244	5.76	5.60	5.86	25.00	3.125E-002	6.374E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:40AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV2
Comment:

Spectrum #1 Analysis #1

Batch

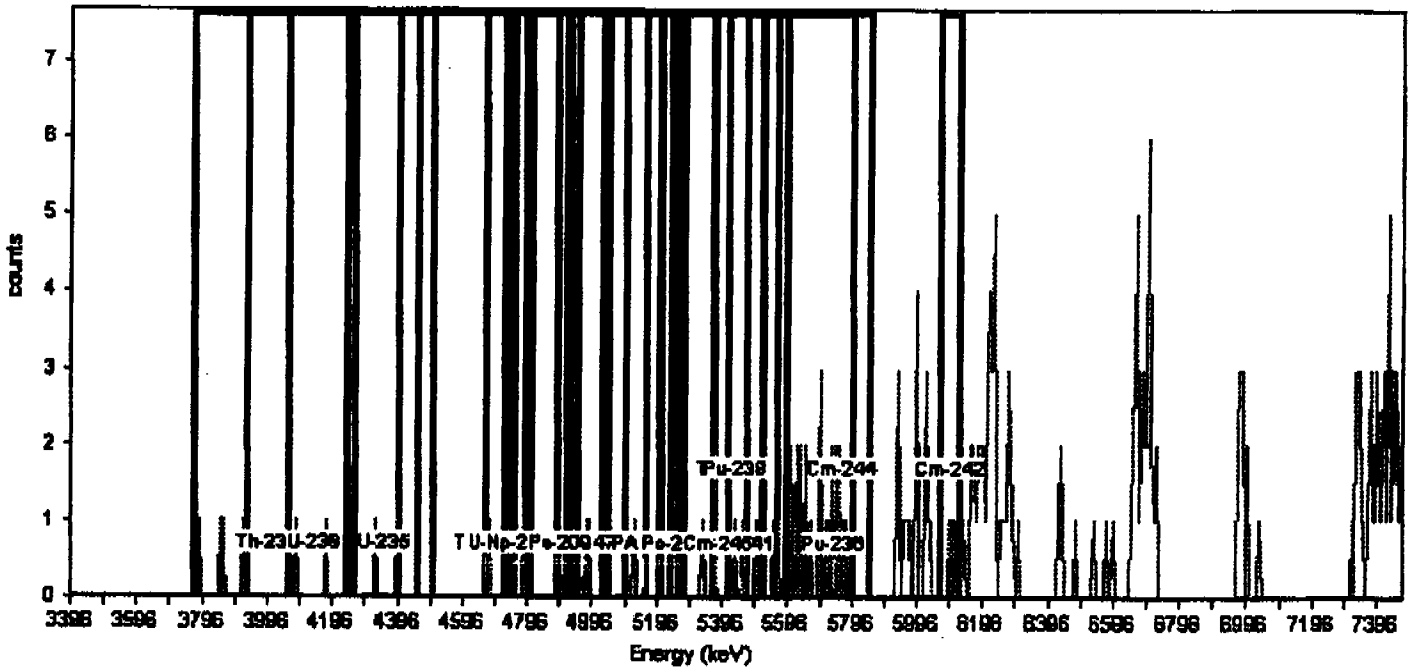
Batch Name: April_2005
Description:

Acquisition

Detector: AV2 , SN: 41-158W7
Acquisition Start Date: 4/26/2005 10:37:38AM
Live Time: 800.00 min.
Real Time: 800.11 min.
Calibration Name: March2005_AV2
Calibration Date: 3/16/2005 7:59:52PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.39% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 197.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	4.00	5.000E-003	2.795E-003
U-238	4.14	3.93	4.24	2.00	2.500E-003	2.165E-003
U-235	4.35	4.26	4.46	2.00	2.500E-003	2.165E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	3.00	3.750E-003	2.500E-003
Pu-242	4.88	4.67	4.93	4.00	5.000E-003	2.795E-003
Th-229	4.84	4.72	5.10	5.00	6.250E-003	3.062E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	4.00	5.000E-003	2.795E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	3.00	3.750E-003	2.500E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	5.00	6.250E-003	3.062E-003
Th-228	5.41	5.16	5.47	10.00	1.250E-002	4.148E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	11.00	1.375E-002	4.330E-003
Am-241	5.45	5.27	5.57	14.00	1.750E-002	4.841E-003
Cm-245	5.39	5.36	5.41	5.00	6.250E-003	3.062E-003
Pu-236	5.74	5.52	5.80	26.00	3.250E-002	6.495E-003
Cm-244	5.76	5.60	5.85	23.00	2.875E-002	6.124E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:43AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV3
Comment:

Spectrum #1 Analysis #1

Batch

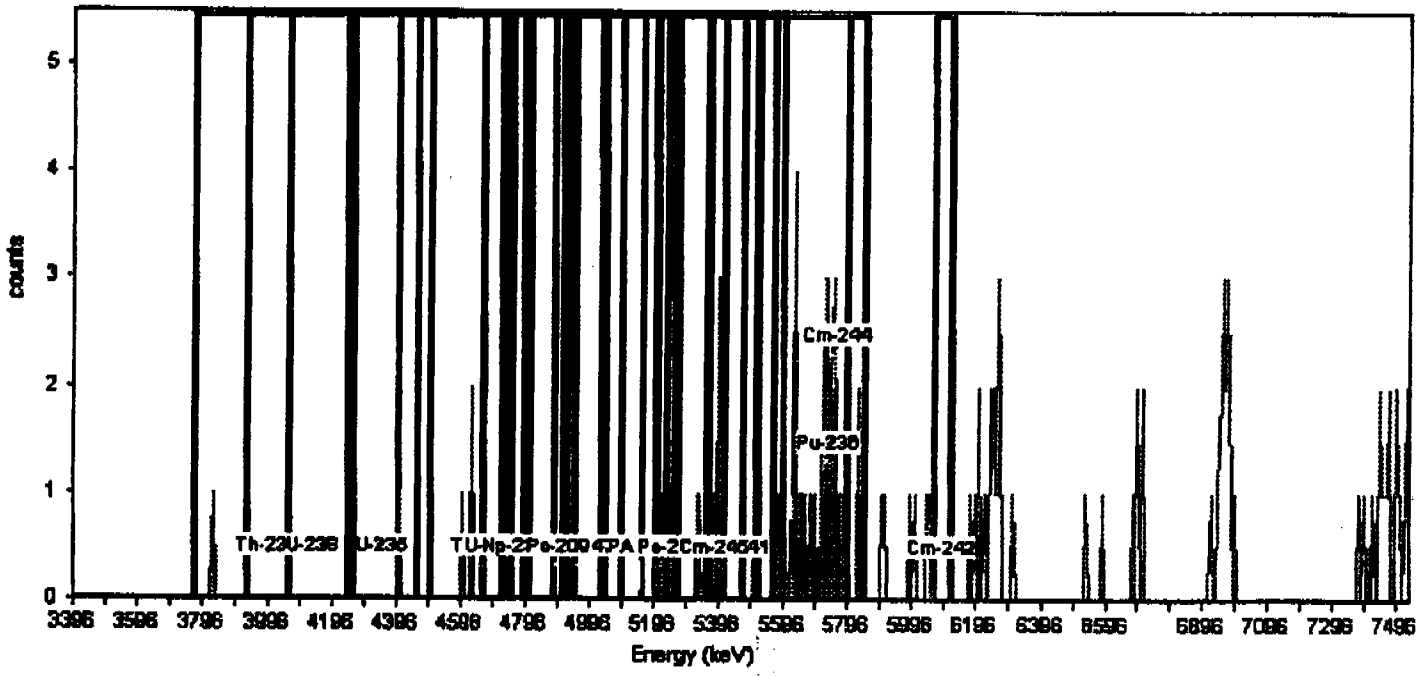
Batch Name: April_2005
Description:

Acquisition

Detector: AV3 , SN: 41-158X5
Acquisition Start Date: 4/26/2005 10:37:40AM
Live Time: 800.00 min.
Real Time: 800.11 min.
Calibration Name: March2005_AV3
Calibration Date: 3/16/2005 7:59:56PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.35% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 107.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	4.00	5.000E-003	2.795E-003
U-234	4.70	4.50	4.80	3.00	3.750E-003	2.500E-003
Pu-242	4.86	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	3.00	3.750E-003	2.500E-003
Th-228	5.41	5.16	5.47	8.00	1.000E-002	3.750E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	8.00	1.000E-002	3.750E-003
Am-241	5.45	5.27	5.57	8.00	1.000E-002	3.750E-003
Cm-245	5.39	5.36	5.41	6.00	7.500E-003	3.307E-003
Pu-236	5.74	5.52	5.80	29.00	3.625E-002	6.847E-003
Cm-244	5.76	5.60	5.85	30.00	3.750E-002	6.960E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:46AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV4
Comment:

Spectrum #1 Analysis #1

Batch

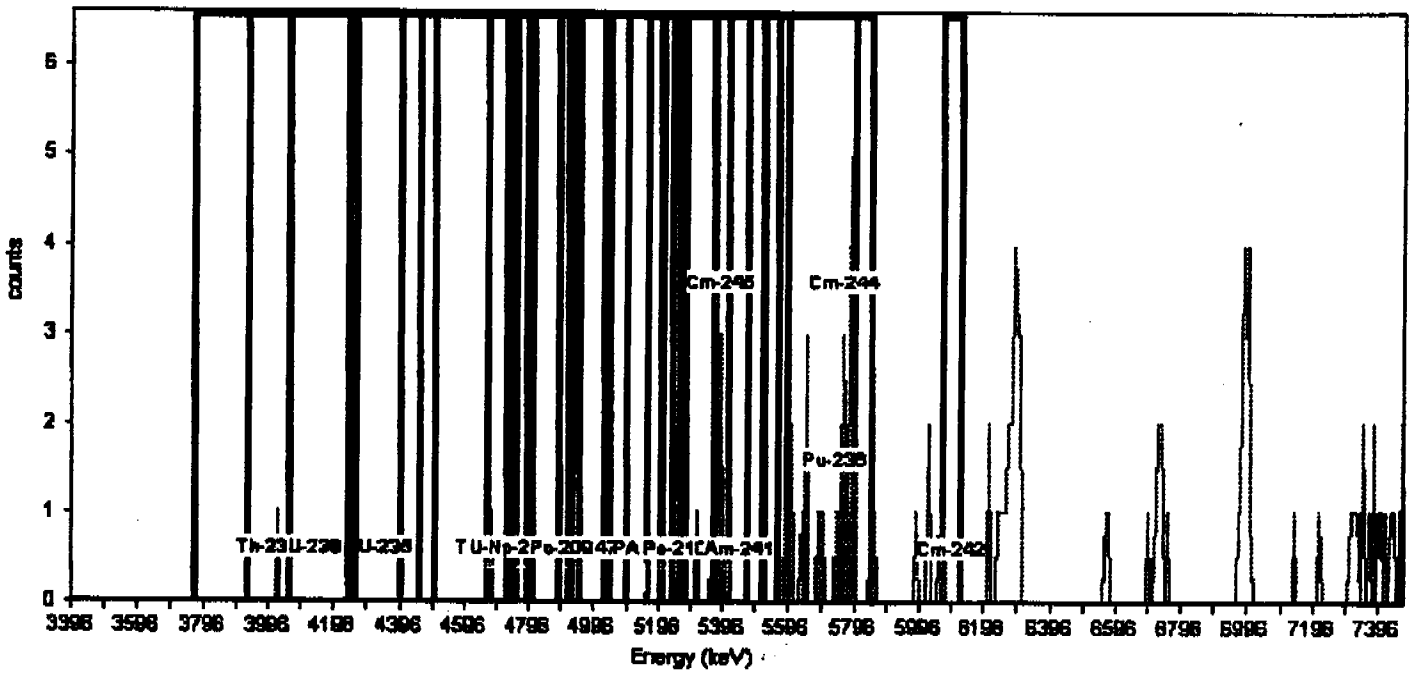
Batch Name: April_2005
Description:

Acquisition

Detector: AV4 , SN: 41-172B5
Acquisition Start Date: 4/26/2005 10:37:42AM
Live Time: 800.00 min.
Real Time: 800.11 min.
Calibration Name: March2005_AV4
Calibration Date: 3/16/2005 7:59:59PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.17% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND_ROI, Library: Background ROI Library
Total Background Counts: 117.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	2.00	2.500E-003	2.165E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.86	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	8.00	1.000E-002	3.750E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	8.00	1.000E-002	3.750E-003
Am-241	5.45	5.27	5.57	8.00	1.000E-002	3.750E-003
Cm-245	5.39	5.36	5.41	7.00	8.750E-003	3.538E-003
Pu-236	5.74	5.52	5.80	31.00	3.875E-002	7.071E-003
Cm-244	5.76	5.60	5.85	31.00	3.875E-002	7.071E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
2:53:46AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV5
Comment:

Spectrum #1 Analysis #1

Batch

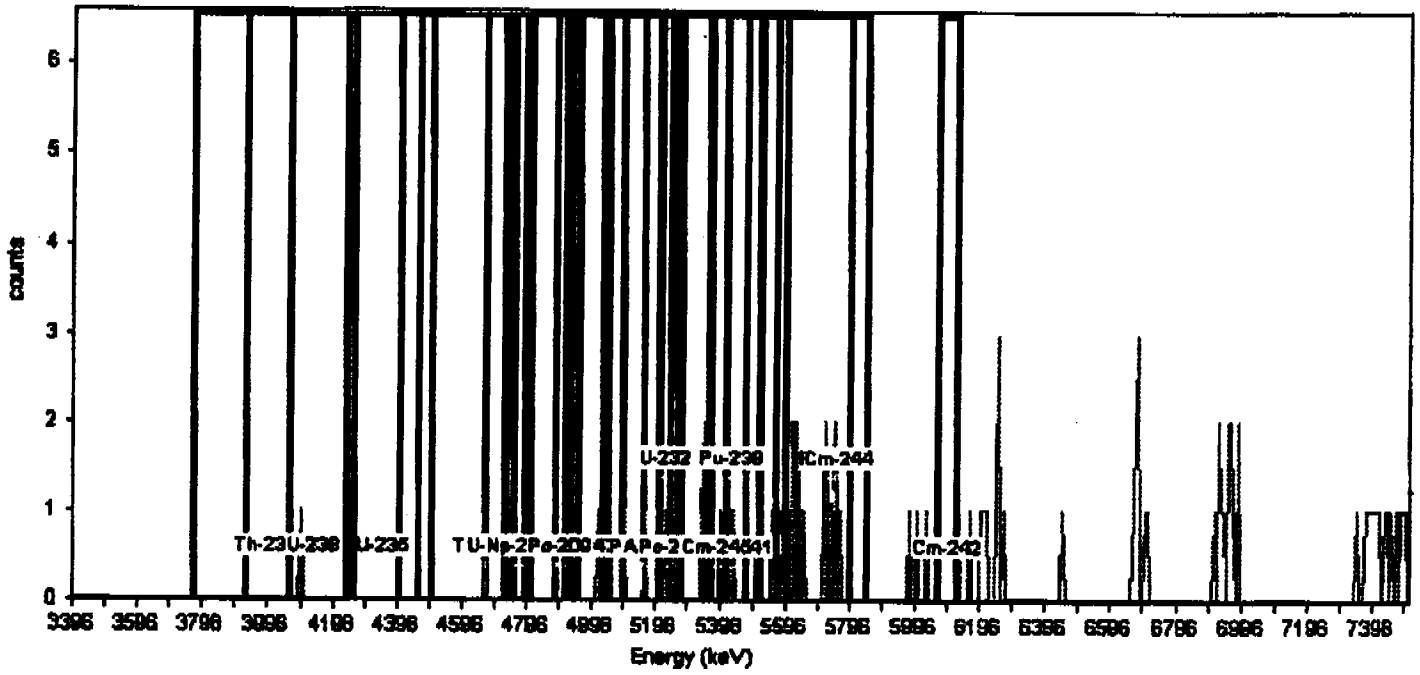
Batch Name: April_2005
Description:

Acquisition

Detector: AV5 , SN: 41-158X7
Acquisition Start Date: 4/26/2005 1:33:24PM
Live Time: 800.00 min.
Real Time: 800.04 min.
Calibration Name: March2005_AV5
Calibration Date: 3/16/2005 10:54:03PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 29.32% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 91.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	4.00	5.000E-003	2.795E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	5.00	6.250E-003	3.062E-003
Am-243	5.20	5.03	5.28	7.00	8.750E-003	3.536E-003
U-232	5.23	5.04	5.37	17.00	2.125E-002	5.303E-003
Th-228	5.41	5.16	5.47	17.00	2.125E-002	5.303E-003
Po-210	5.25	5.20	5.28	3.00	3.750E-003	2.500E-003
Pu-238	5.44	5.24	5.52	16.00	2.000E-002	5.154E-003
Am-241	5.45	5.27	5.57	15.00	1.875E-002	5.000E-003
Cm-245	5.39	5.36	5.41	8.00	1.000E-002	3.750E-003
Pu-236	5.74	5.52	5.80	19.00	2.375E-002	5.590E-003
Cm-244	5.76	5.60	5.85	17.00	2.125E-002	5.303E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:50AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV6
Comment:

Spectrum #1 Analysis #1

Batch

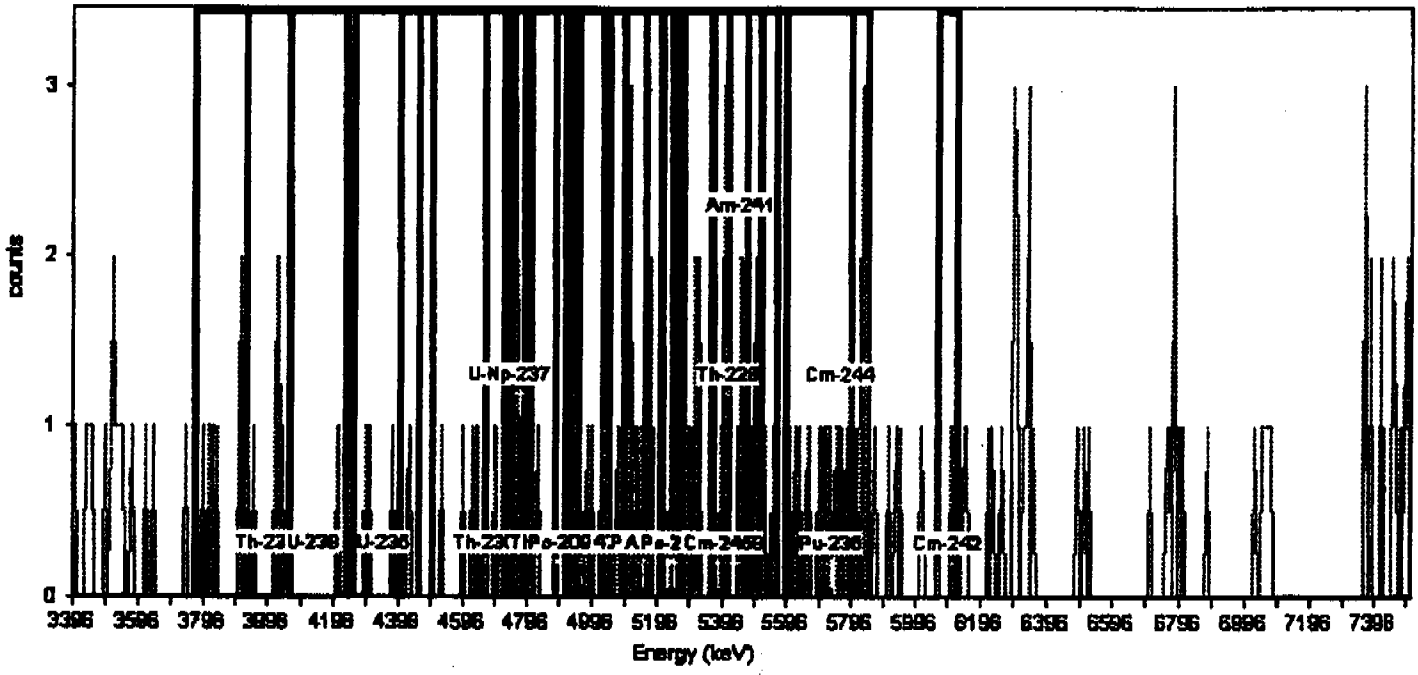
Batch Name: April_2005
Description:

Acquisition

Detector: AV6 , SN:
Acquisition Start Date: 4/26/2005 10:37:43AM
Live Time: 800.00 min.
Real Time: 800.11 min.
Calibration Name: March2005_AV6
Calibration Date: 3/16/2005 10:54:07PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.74% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 182.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	14.00	1.750E-002	4.841E-003
U-238	4.14	3.93	4.24	9.00	1.125E-002	3.953E-003
U-235	4.35	4.26	4.46	4.00	5.000E-003	2.795E-003
Th-230	4.67	4.40	4.73	8.00	1.000E-002	3.750E-003
U-234	4.70	4.50	4.80	11.00	1.375E-002	4.330E-003
Pu-242	4.88	4.67	4.93	9.00	1.125E-002	3.953E-003
Th-229	4.84	4.72	5.10	20.00	2.500E-002	5.728E-003
Np-237	4.77	4.75	4.79	3.00	3.750E-003	2.500E-003
Cm-247	4.96	4.88	5.04	12.00	1.500E-002	4.507E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	19.00	2.375E-002	5.590E-003
Am-243	5.20	5.03	5.26	16.00	2.000E-002	5.154E-003
U-232	5.23	5.04	5.37	23.00	2.875E-002	6.124E-003
Th-228	5.41	5.16	5.47	23.00	2.875E-002	6.124E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	21.00	2.625E-002	5.863E-003
Am-241	5.45	5.27	5.57	24.00	3.000E-002	6.250E-003
Cm-245	5.39	5.36	5.41	7.00	8.750E-003	3.536E-003
Pu-236	5.74	5.52	5.80	22.00	2.750E-002	5.995E-003
Cm-244	5.76	5.60	5.85	29.00	3.625E-002	6.847E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:53AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV7
Comment:

Spectrum #1 Analysis #1

Batch

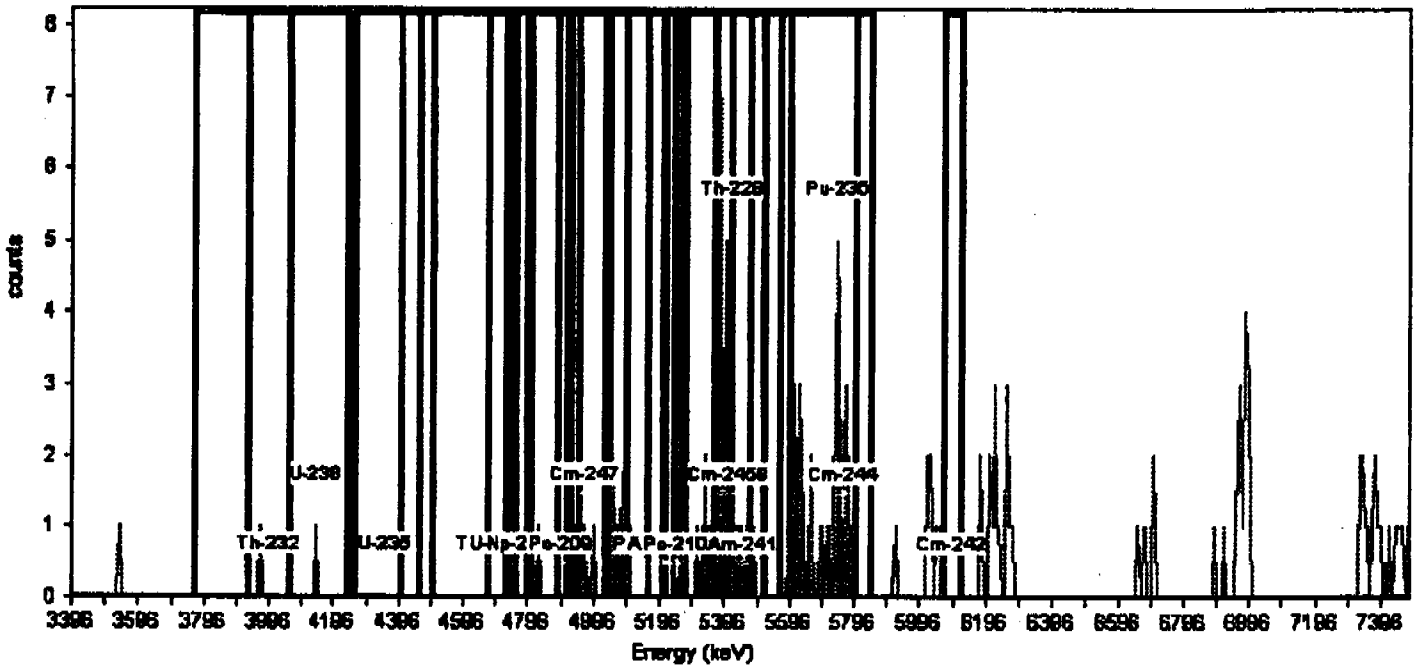
Batch Name: April_2005
Description:

Acquisition

Detector: AV7 , SN: 41-158X6
Acquisition Start Date: 4/26/2005 10:37:45AM
Live Time: 600.00 min.
Real Time: 600.11 min.
Calibration Name: March2005_AV7
Calibration Date: 3/16/2005 10:54:14PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.46% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 154.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	3.00	3.750E-003	2.500E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	13.00	1.625E-002	4.677E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	3.00	3.750E-003	2.500E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	13.00	1.625E-002	4.677E-003
Am-243	5.20	5.03	5.28	14.00	1.750E-002	4.841E-003
U-232	5.23	5.04	5.37	20.00	2.500E-002	5.728E-003
Th-228	5.41	5.16	5.47	34.00	4.250E-002	7.395E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	35.00	4.375E-002	7.500E-003
Am-241	5.45	5.27	5.57	34.00	4.250E-002	7.395E-003
Cm-245	5.39	5.36	5.41	21.00	2.625E-002	5.863E-003
Pu-236	5.74	5.52	5.80	35.00	4.375E-002	7.500E-003
Cm-244	5.78	5.60	5.85	35.00	4.375E-002	7.500E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:56AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV8
Comment:

Spectrum #1 Analysis #1

Batch

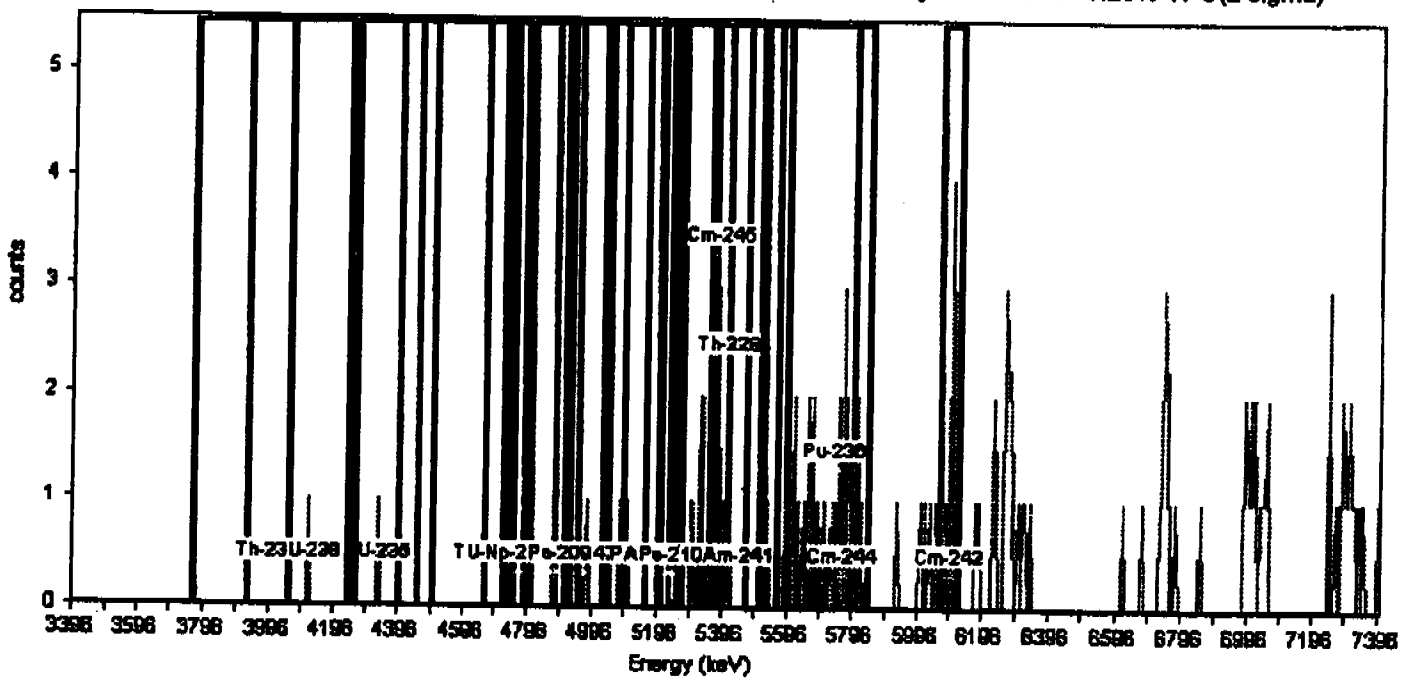
Batch Name: April_2005
Description:

Acquisition

Detector: AV8 , SN: 41-158X1
Acquisition Start Date: 4/26/2005 10:37:46AM
Live Time: 800.00 min.
Real Time: 800.11 min.
Calibration Name: March2005_AV8
Calibration Date: 3/16/2005 10:54:19PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²

Efficiency: 28.25% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 119.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	3.00	3.750E-003	2.500E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	3.00	3.750E-003	2.500E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	9.00	1.125E-002	3.953E-003
Th-228	5.41	5.16	5.47	15.00	1.875E-002	5.000E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	15.00	1.875E-002	5.000E-003
Am-241	5.45	5.27	5.57	16.00	2.000E-002	5.154E-003
Cm-245	5.39	5.36	5.41	9.00	1.125E-002	3.953E-003
Pu-236	5.74	5.52	5.80	26.00	3.250E-002	6.495E-003
Cm-244	5.76	5.60	5.85	27.00	3.375E-002	6.614E-003
Cm-242	6.10	6.07	6.13	8.00	1.000E-002	3.750E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
2:58:06AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV9
Comment:

Spectrum #1 Analysis #1

Batch

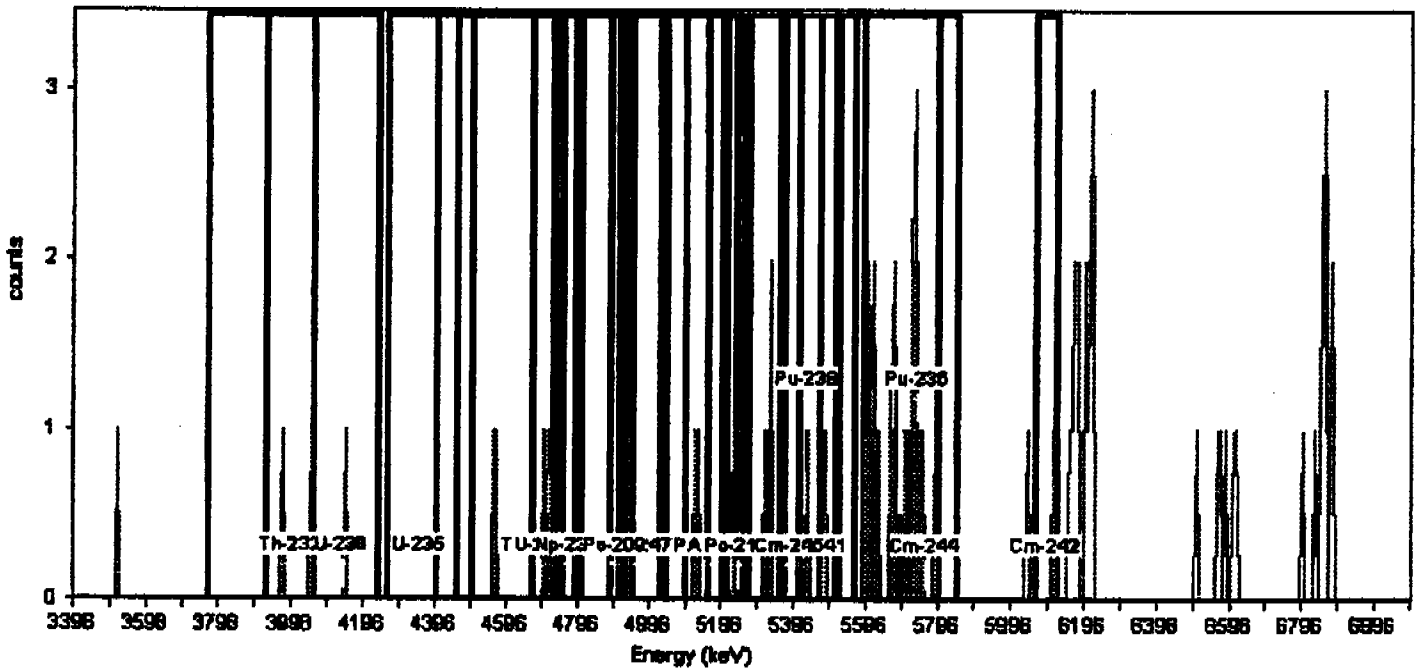
Batch Name: April_2005
Description:

Acquisition

Detector: AV9 , SN: 41-172R1
Acquisition Start Date: 4/26/2005 10:37:48AM
Live Time: 800.00 min.
Real Time: 979.61 min.
Calibration Name: March2005_AV9#2
Calibration Date: 3/21/2005 8:25:56PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.56% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROU[illegible]Library: Background ROI Library
Total Background Counts: 72.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	3.00	3.750E-003	2.500E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	4.00	5.000E-003	2.795E-003
U-234	4.70	4.50	4.80	4.00	5.000E-003	2.795E-003
Pu-242	4.88	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	3.00	3.750E-003	2.500E-003
U-232	5.23	5.04	5.37	6.00	7.500E-003	3.307E-003
Th-228	5.41	5.16	5.47	5.00	6.250E-003	3.062E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	5.00	6.250E-003	3.062E-003
Am-241	5.45	5.27	5.57	5.00	6.250E-003	3.062E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	23.00	2.875E-002	6.124E-003
Cm-244	5.76	5.60	5.85	23.00	2.875E-002	6.124E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:21:18PM 4/28/2005

Analyst: 60040

Sample

Sample Name: AV10
Comment:

Spectrum #1 Analysis #1

Batch

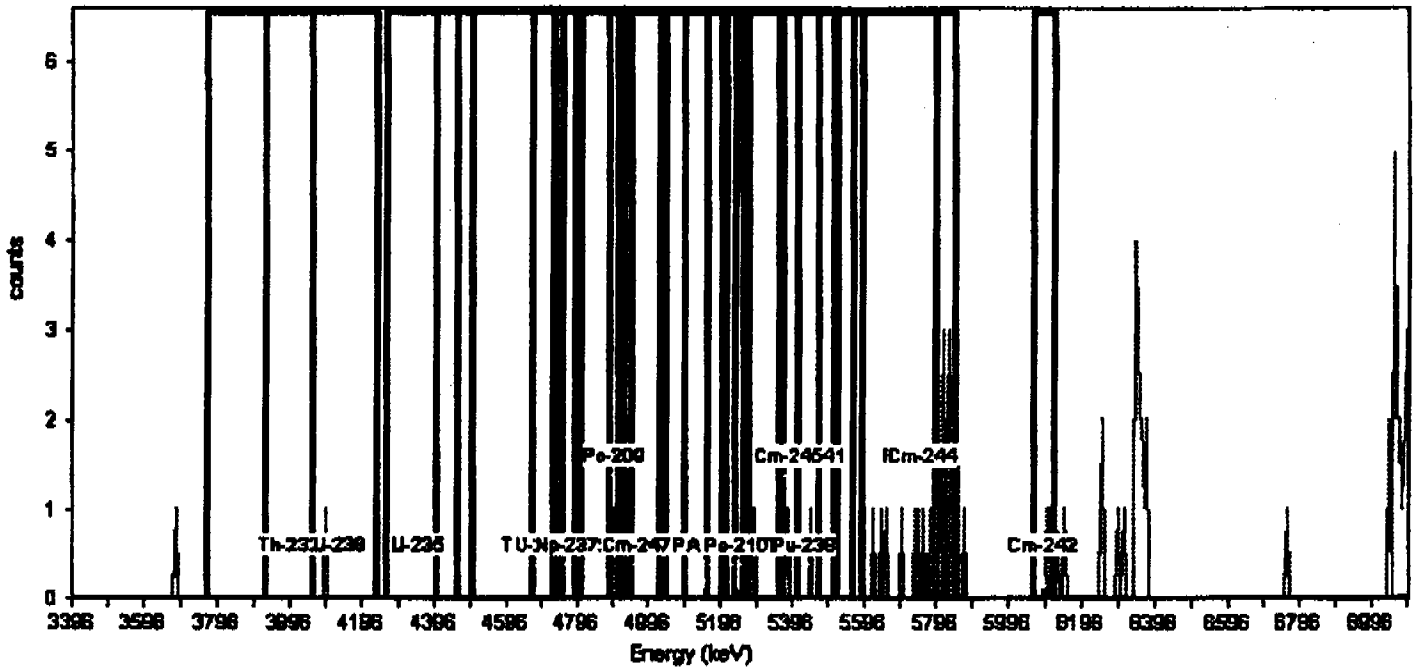
Batch Name: Aprila_2005
Description:

Acquisition

Detector: AV10 , SN: 41-172R3
Acquisition Start Date: 4/28/2005 9:01:10AM
Live Time: 800.00 min.
Real Time: 800.00 min.
Calibration Name: March2005_AV10
Calibration Date: 3/16/2005 5:27:48PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.75% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 72.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.26	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	3.00	3.750E-003	2.500E-003
Am-241	5.45	5.27	5.57	3.00	3.750E-003	2.500E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	11.00	1.375E-002	4.330E-003
Cm-244	5.76	5.60	5.85	25.00	3.125E-002	6.374E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 2:58:14AM 4/27/2005

Sample

Sample Name: AV11 Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

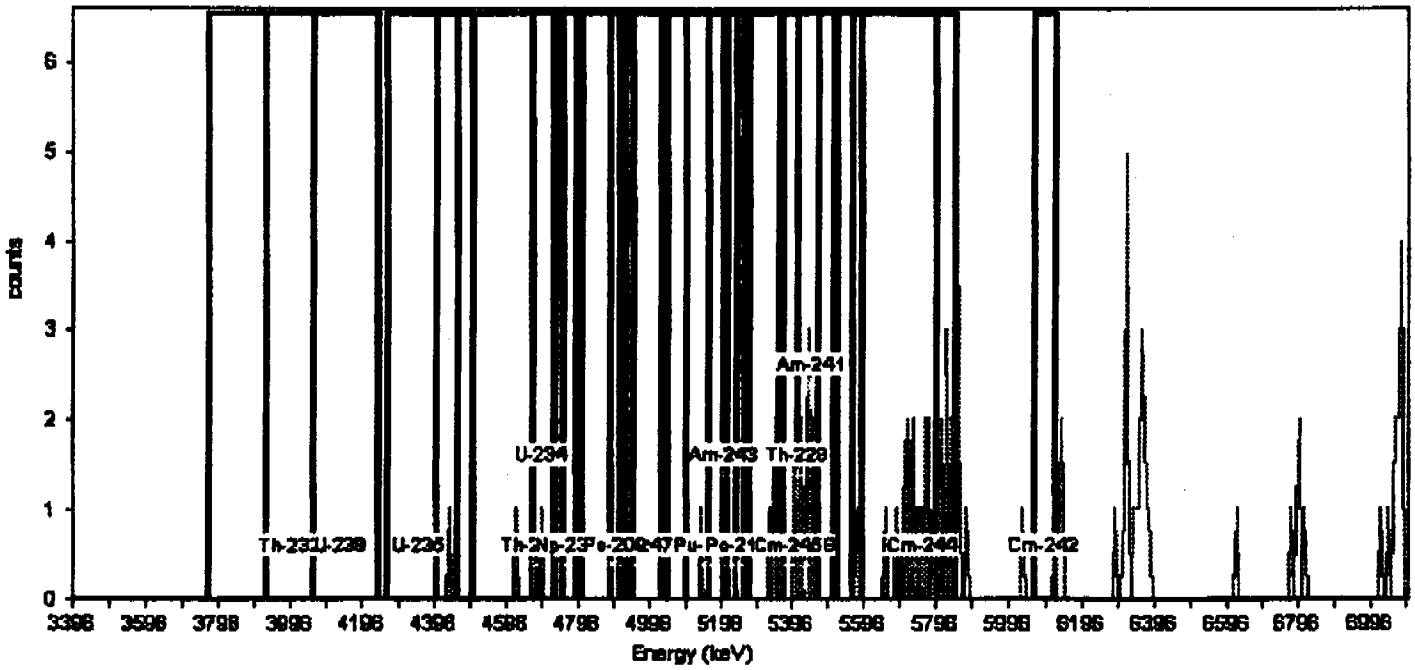
Description:

Acquisition

Detector: AV11 , SN: 41-172Q3
Acquisition Start Date: 4/26/2005 10:37:50AM
Live Time: 800.00 min.
Real Time: 979.61 min.
Calibration Name: March2005_AV11
Calibration Date: 3/16/2005 5:27:52PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.13% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library

Total Background Counts: 100.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.08	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	4.00	5.000E-003	2.795E-003
U-234	4.70	4.50	4.80	3.00	3.750E-003	2.500E-003
Pu-242	4.88	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	7.00	8.750E-003	3.536E-003
Th-228	5.41	5.16	5.47	19.00	2.375E-002	5.590E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	18.00	2.250E-002	5.449E-003
Am-241	5.45	5.27	5.57	18.00	2.250E-002	5.449E-003
Cm-245	5.39	5.36	5.41	5.00	6.250E-003	3.062E-003
Pu-236	5.74	5.52	5.80	16.00	2.000E-002	5.154E-003
Cm-244	5.76	5.60	5.85	26.00	3.250E-002	6.495E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 2:58:17AM 4/27/2005

Sample

Sample Name: AV12 Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

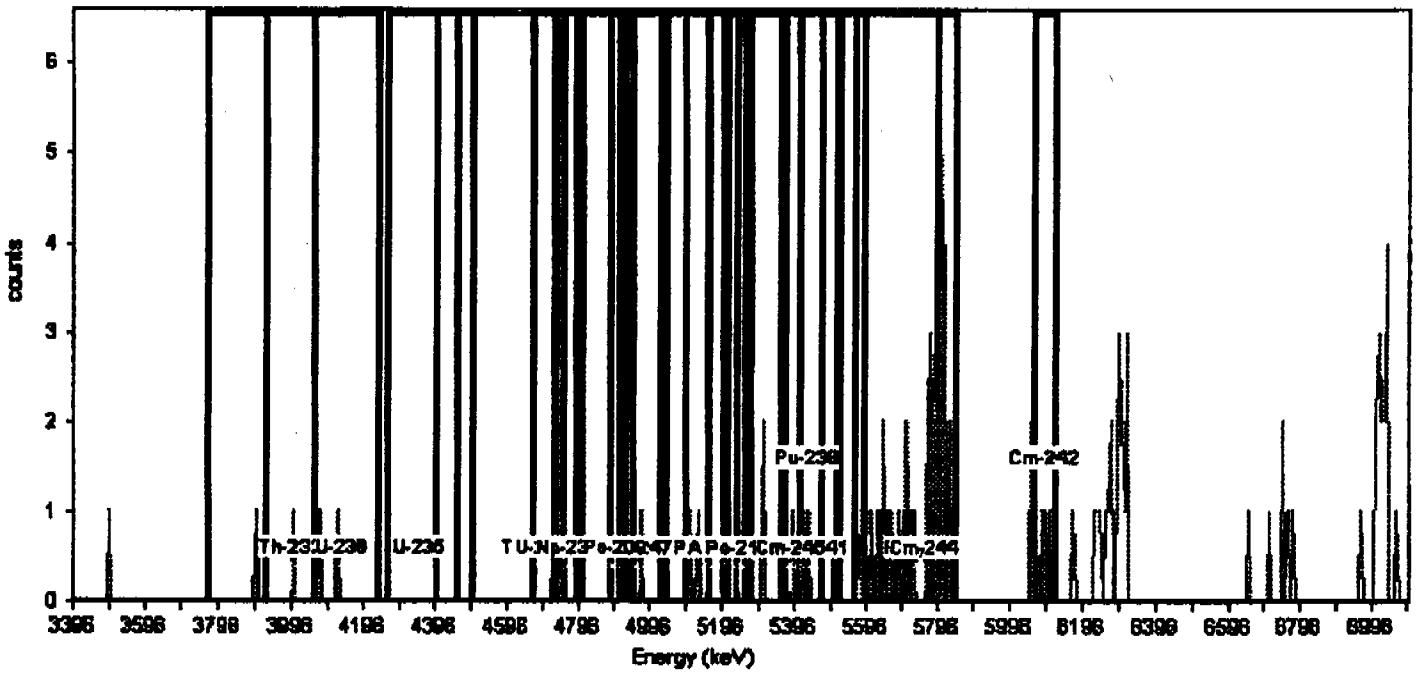
Description:

Acquisition

Detector: AV12 , SN: 41-172Q2
Acquisition Start Date: 4/26/2005 10:37:53AM
Live Time: 800.00 min.
Real Time: 979.61 min.
Calibration Name: March2005_AV12
Calibration Date: 3/16/2005 5:27:57PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.80% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library

Total Background Counts: 101.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	3.00	3.750E-003	2.500E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	2.00	2.500E-003	2.165E-003
Pu-242	4.88	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	3.00	3.750E-003	2.500E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	4.00	5.000E-003	2.795E-003
Am-243	5.20	5.03	5.28	5.00	6.250E-003	3.062E-003
U-232	5.23	5.04	5.37	7.00	8.750E-003	3.536E-003
Th-228	5.41	5.16	5.47	8.00	1.000E-002	3.750E-003
Po-210	5.25	5.20	5.28	2.00	2.500E-003	2.165E-003
Pu-238	5.44	5.24	5.52	8.00	1.000E-002	3.750E-003
Am-241	5.45	5.27	5.57	7.00	8.750E-003	3.536E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	25.00	3.125E-002	6.374E-003
Cm-244	5.76	5.60	5.85	37.00	4.625E-002	7.706E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
2:58:20AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV13
Comment:

Spectrum #1 Analysis #1

Batch

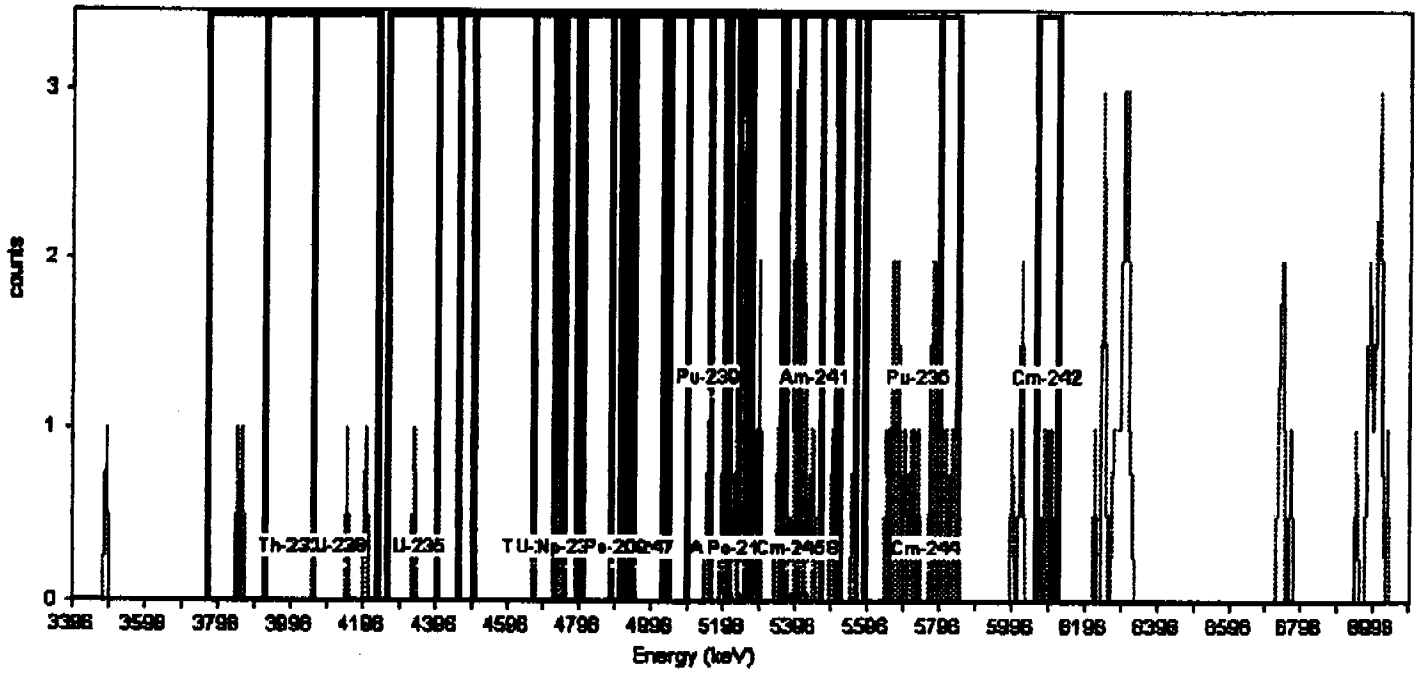
Batch Name: April_2005
Description:

Acquisition

Detector: AV13 , SN: 41-172Q1
Acquisition Start Date: 4/26/2005 10:37:55AM
Live Time: 800.00 min.
Real Time: 979.61 min.
Calibration Name: March2005_AV13
Calibration Date: 3/16/2005 1:21:34PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.86% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND_ROI Library: Background ROI Library
Total Background Counts: 94.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	3.00	3.750E-003	2.500E-003
U-238	4.14	3.93	4.24	3.00	3.750E-003	2.500E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	3.00	3.750E-003	2.500E-003
U-232	5.23	5.04	5.37	7.00	8.750E-003	3.536E-003
Th-228	5.41	5.16	5.47	15.00	1.875E-002	5.000E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	14.00	1.750E-002	4.841E-003
Am-241	5.45	5.27	5.57	15.00	1.875E-002	5.000E-003
Cm-245	5.39	5.36	5.41	5.00	6.250E-003	3.062E-003
Pu-236	5.74	5.52	5.80	20.00	2.500E-002	5.728E-003
Cm-244	5.76	5.60	5.85	25.00	3.125E-002	6.374E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
5:21:32AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV14
Comment:

Spectrum #1 Analysis #1

Batch

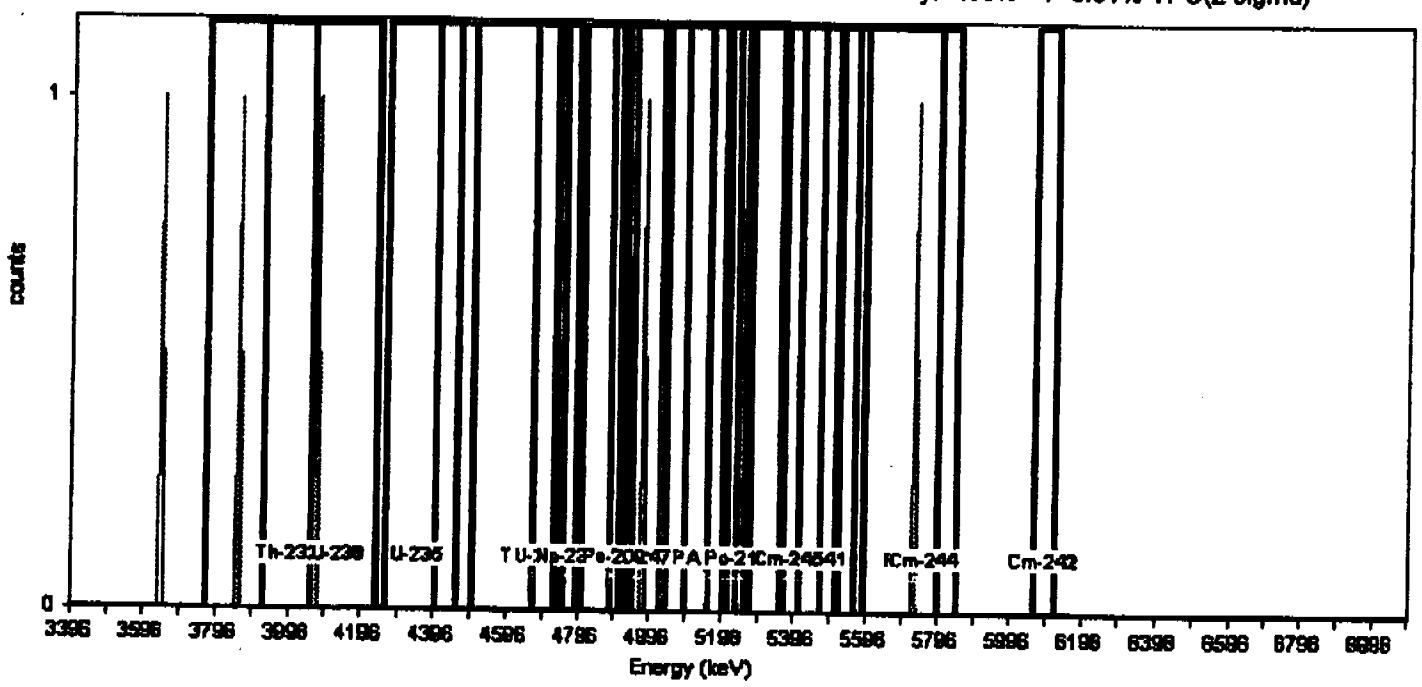
Batch Name: April_2005
Description:

Acquisition

Detector: AV14 , SN: 41-172C4
Acquisition Start Date: 4/26/2005 1:33:40PM
Live Time: 800.00 min.
Real Time: 947.91 min.
Calibration Name: March2005_AV14
Calibration Date: 3/16/2005 1:21:48PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 0.05% +/- 0.01% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Nuclide Library: Background ROI Library
Total Background Counts: 6.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.768E-003
Th-228	5.41	5.16	5.47	0.00	0.000E+000	1.768E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	0.00	0.000E+000	1.768E-003
Am-241	5.45	5.27	5.57	0.00	0.000E+000	1.768E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	1.00	1.250E-003	1.768E-003
Cm-244	5.76	5.60	5.85	1.00	1.250E-003	1.768E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
2:58:24AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV15
Comment:

Spectrum #1 Analysis #1

Batch

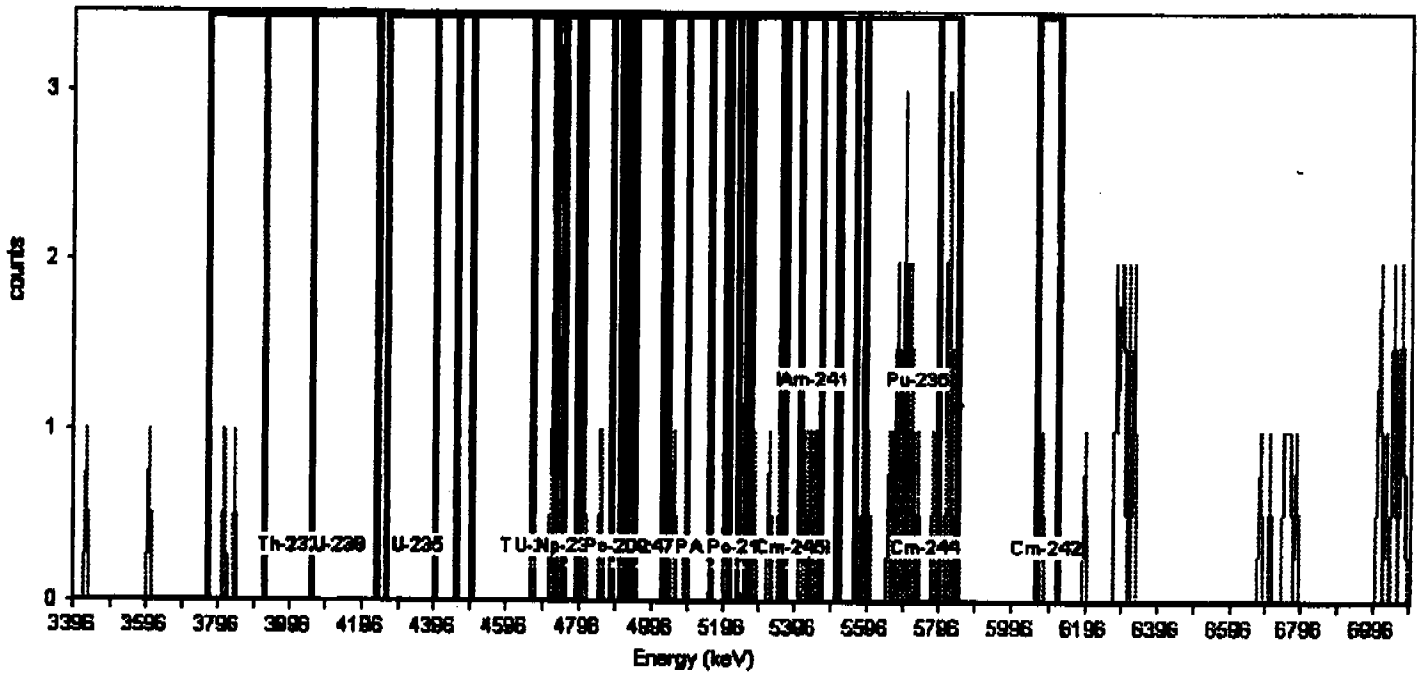
Batch Name: April_2005
Description:

Acquisition

Detector: AV15 , SN: 41-172C5
Acquisition Start Date: 4/26/2005 10:37:57AM
Live Time: 800.00 min.
Real Time: 979.61 min.
Calibration Name: March2005_AV15
Calibration Date: 3/16/2005 1:21:55PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.84% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND_ROI Library: Background ROI Library
Total Background Counts: 72.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	3.00	3.750E-003	2.500E-003
Th-229	4.84	4.72	5.10	4.00	5.000E-003	2.795E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	5.00	6.250E-003	3.062E-003
Th-228	5.41	5.16	5.47	8.00	1.000E-002	3.750E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	8.00	1.000E-002	3.750E-003
Am-241	5.45	5.27	5.57	8.00	1.000E-002	3.750E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	19.00	2.375E-002	5.590E-003
Cm-244	5.76	5.60	5.85	24.00	3.000E-002	6.250E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 2:58:27AM 4/27/2005

Sample

Sample Name: AV16 Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

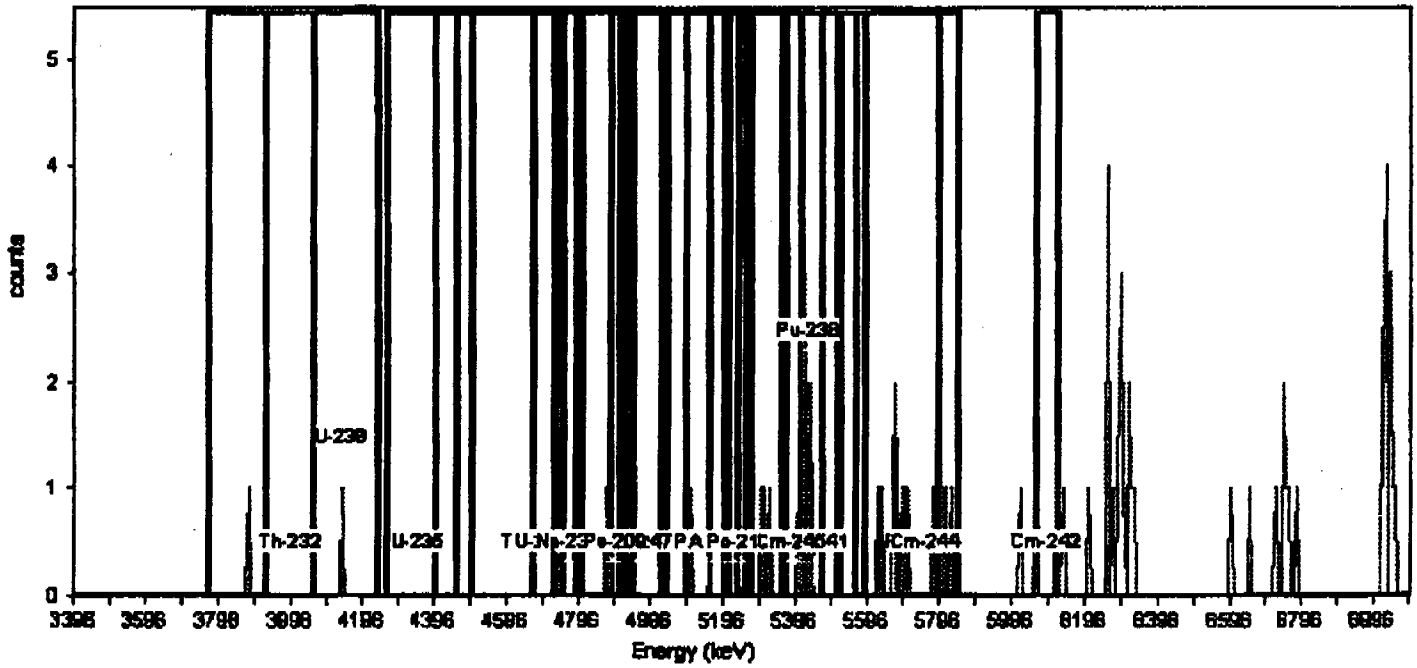
Description:

Acquisition

Detector: AV16 , SN: 41-172Q7
Acquisition Start Date: 4/26/2005 10:37:58AM
Live Time: 800.00 min.
Real Time: 979.61 min.
Calibration Name: March2005_AV16
Calibration Date: 3/16/2005 1:22:01PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²

Efficiency: 28.82% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library

Total Background Counts: 68.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	4.00	5.000E-003	2.795E-003
Th-228	5.41	5.16	5.47	11.00	1.375E-002	4.330E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	11.00	1.375E-002	4.330E-003
Am-241	5.45	5.27	5.57	11.00	1.375E-002	4.330E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	9.00	1.125E-002	3.953E-003
Cm-244	5.76	5.60	5.85	13.00	1.625E-002	4.677E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:09AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV17
Comment:

Spectrum #1 Analysis #1

Batch

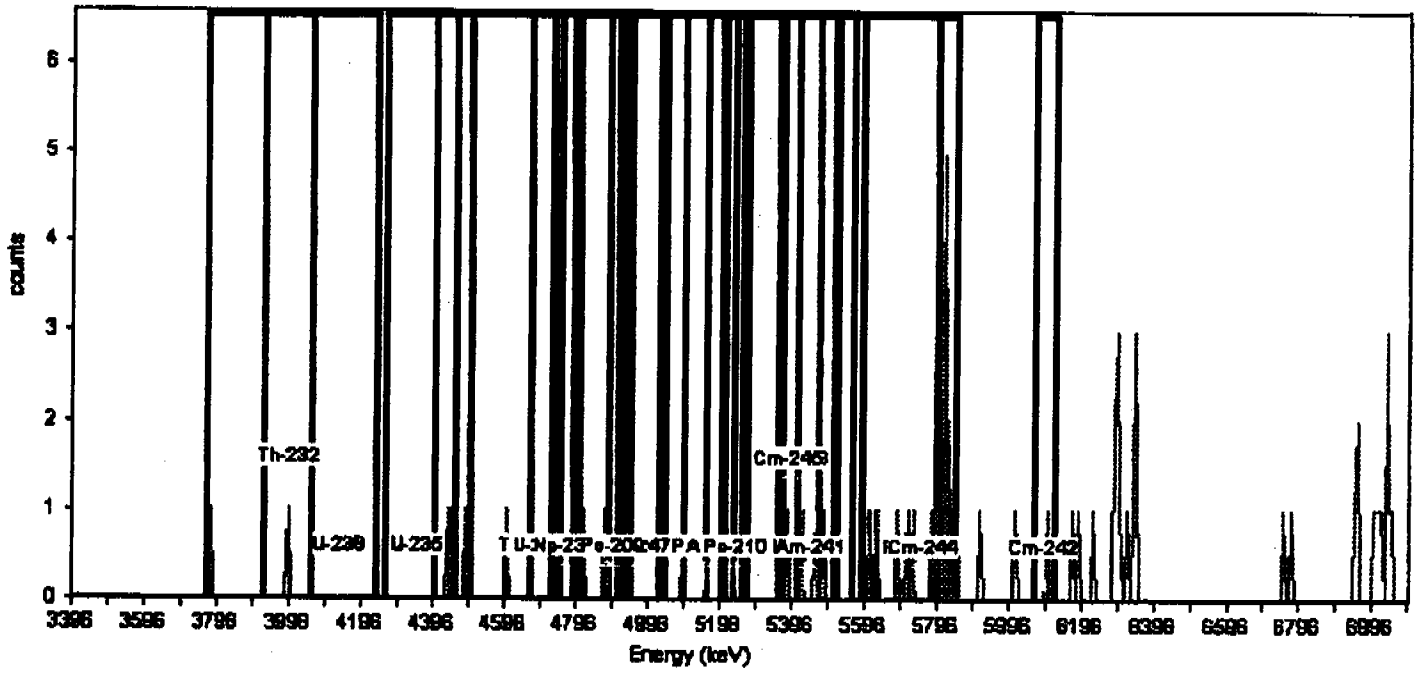
Batch Name: April_2005
Description:

Acquisition

Detector: AV17 , SN: 41-172Q4
Acquisition Start Date: 4/26/2005 10:38:00AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: Mar2005_AV17
Calibration Date: 3/16/2005 5:28:41PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.69% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 68.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	2.00	2.500E-003	2.165E-003
Th-230	4.67	4.40	4.73	5.00	6.250E-003	3.062E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	3.00	3.750E-003	2.500E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.86	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	4.00	5.000E-003	2.795E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	5.00	6.250E-003	3.062E-003
Am-241	5.45	5.27	5.57	5.00	6.250E-003	3.062E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	9.00	1.125E-002	3.953E-003
Cm-244	5.76	5.80	5.85	21.00	2.625E-002	5.863E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:12AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV18
Comment:

Spectrum #1 Analysis #1

Batch

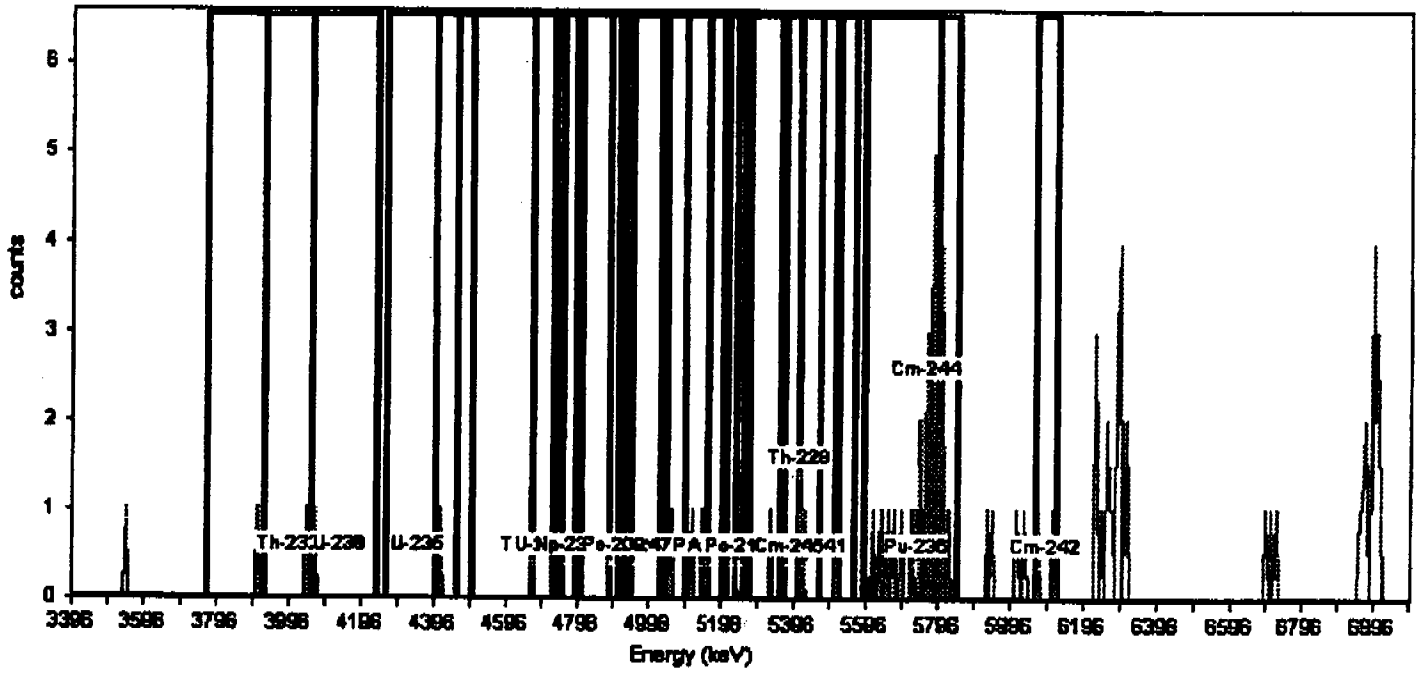
Batch Name: April_2005
Description:

Acquisition

Detector: AV18 , SN: 41-172C8
Acquisition Start Date: 4/26/2005 10:38:01AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: Mar2005_AV18
Calibration Date: 3/16/2005 5:28:55PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 25.79% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 87.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	2.00	2.500E-003	2.165E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	3.00	3.750E-003	2.500E-003
Am-243	5.20	5.03	5.28	3.00	3.750E-003	2.500E-003
U-232	5.23	5.04	5.37	4.00	5.000E-003	2.795E-003
Th-228	5.41	5.16	5.47	4.00	5.000E-003	2.795E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	5.00	6.250E-003	3.062E-003
Am-241	5.45	5.27	5.57	5.00	6.250E-003	3.062E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	26.00	3.250E-002	6.495E-003
Cm-244	5.76	5.60	5.85	32.00	4.000E-002	7.181E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL ST. LOUIS

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:16AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV19
Comment:

Spectrum #1 Analysis #1

Batch

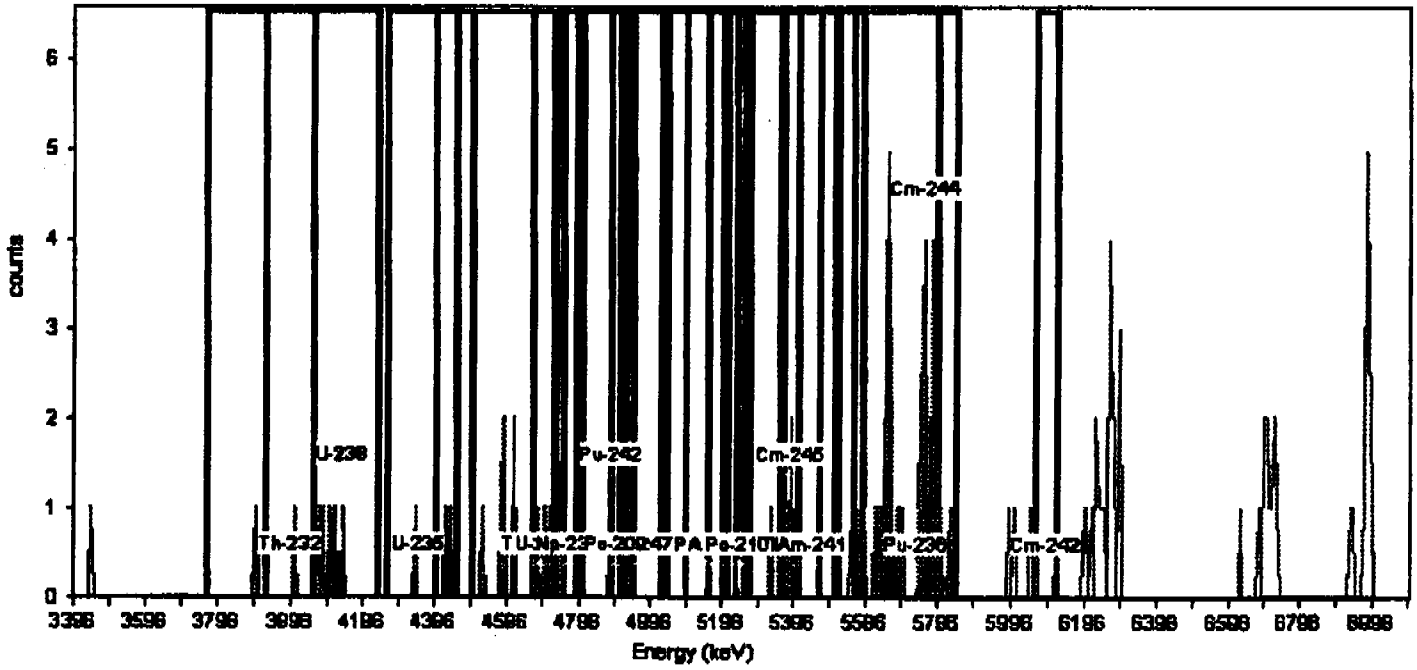
Batch Name: April_2005
Description:

Acquisition

Detector: AV19 , SN: 41-172Q6
Acquisition Start Date: 4/26/2005 10:38:03AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: Mar2005_AV19
Calibration Date: 3/16/2005 5:29:03PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 28.94% +/- 0.30% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI, Library: Background ROI Library
Total Background Counts: 117.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	6.00	7.500E-003	3.307E-003
U-235	4.35	4.26	4.46	4.00	5.000E-003	2.795E-003
Th-230	4.67	4.40	4.73	13.00	1.625E-002	4.677E-003
U-234	4.70	4.50	4.80	12.00	1.500E-002	4.507E-003
Pu-242	4.88	4.67	4.93	7.00	8.750E-003	3.536E-003
Th-229	4.84	4.72	5.10	5.00	6.250E-003	3.062E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	3.00	3.750E-003	2.500E-003
Th-228	5.41	5.16	5.47	7.00	8.750E-003	3.536E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	7.00	8.750E-003	3.536E-003
Am-241	5.45	5.27	5.57	7.00	8.750E-003	3.536E-003
Cm-245	5.39	5.36	5.41	5.00	6.250E-003	3.062E-003
Pu-236	5.74	5.52	5.80	35.00	4.375E-002	7.500E-003
Cm-244	5.76	5.60	5.85	35.00	4.375E-002	7.500E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:19AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV20 Spectrum #1 Analysis #1
Comment:

Batch

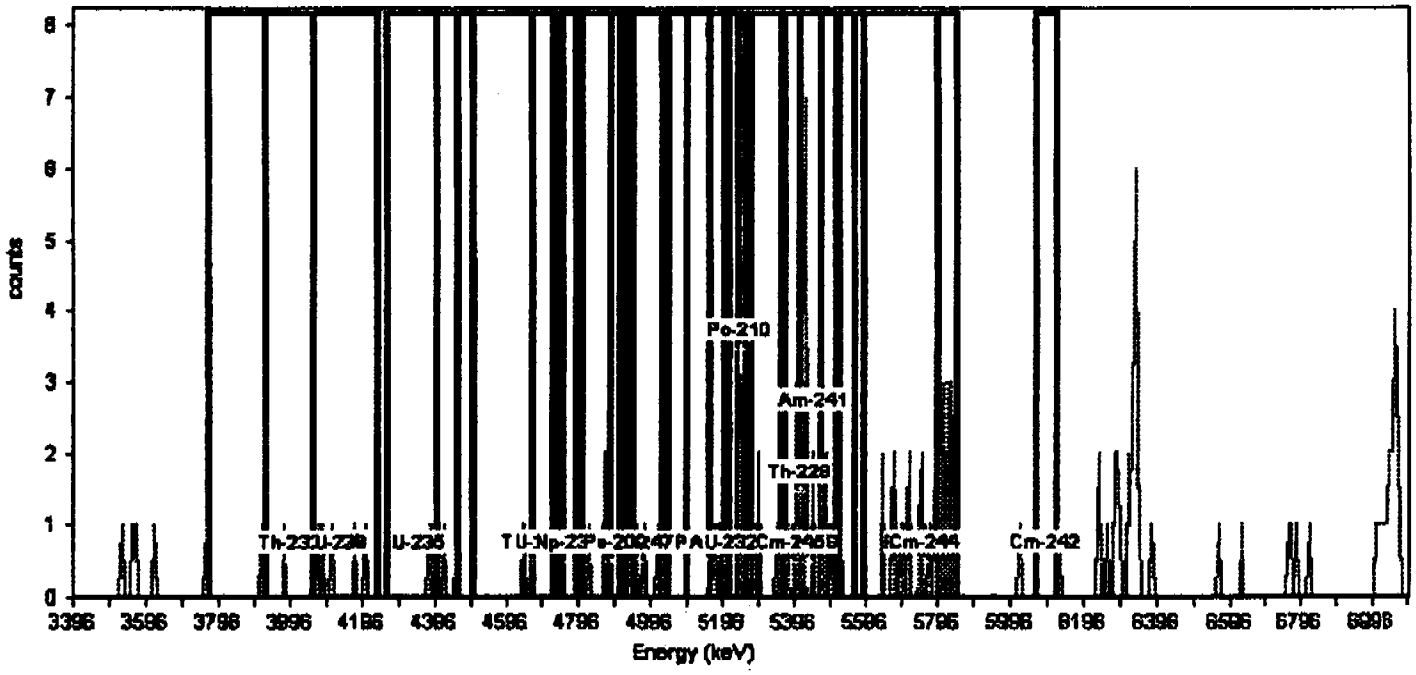
Batch Name: April_2005
Description:

Acquisition

Detector: AV20 , SN: 41-172R2
Acquisition Start Date: 4/26/2005 10:38:06AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: Mar2005_AV20
Calibration Date: 3/16/2005 5:29:11PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.11% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 140.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	6.00	7.500E-003	3.307E-003
U-235	4.35	4.26	4.46	4.00	5.000E-003	2.795E-003
Th-230	4.67	4.40	4.73	3.00	3.750E-003	2.500E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	3.00	3.750E-003	2.500E-003
Th-229	4.84	4.72	5.10	7.00	8.750E-003	3.536E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.86	4.88	5.04	4.00	5.000E-003	2.795E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	6.00	7.500E-003	3.307E-003
Am-243	5.20	5.03	5.28	7.00	8.750E-003	3.536E-003
U-232	5.23	5.04	5.37	11.00	1.375E-002	4.330E-003
Th-228	5.41	5.16	5.47	33.00	4.125E-002	7.289E-003
Po-210	5.25	5.20	5.28	3.00	3.750E-003	2.500E-003
Pu-238	5.44	5.24	5.52	35.00	4.375E-002	7.500E-003
Am-241	5.45	5.27	5.57	33.00	4.125E-002	7.289E-003
Cm-245	5.39	5.36	5.41	8.00	1.000E-002	3.750E-003
Pu-236	5.74	5.52	5.80	16.00	2.000E-002	5.154E-003
Cm-244	5.76	5.60	5.85	29.00	3.625E-002	6.847E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:23AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV21
Comment:

Spectrum #1 Analysis #1

Batch

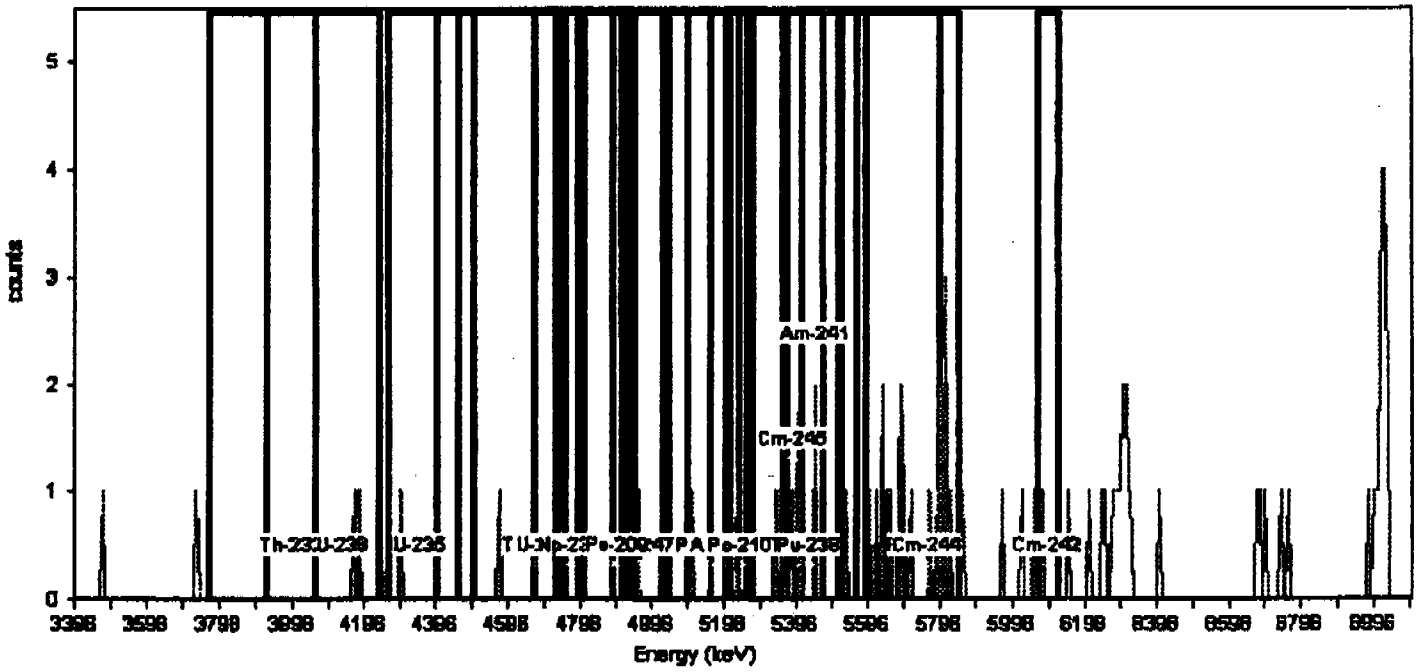
Batch Name: April_2005
Description:

Acquisition

Detector: AV21 , SN: 41-172C7
Acquisition Start Date: 4/26/2005 10:38:07AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV21
Calibration Date: 3/16/2005 12:47:04AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.06% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND_ROI Library: Background ROI Library
Total Background Counts: 85.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	3.00	3.750E-003	2.500E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	3.00	3.750E-003	2.500E-003
Pu-242	4.88	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	4.00	5.000E-003	2.795E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	3.00	3.750E-003	2.500E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	4.00	5.000E-003	2.795E-003
Th-228	5.41	5.16	5.47	10.00	1.250E-002	4.146E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	9.00	1.125E-002	3.953E-003
Am-241	5.45	5.27	5.57	11.00	1.375E-002	4.330E-003
Cm-245	5.39	5.36	5.41	5.00	6.250E-003	3.062E-003
Pu-236	5.74	5.52	5.80	17.00	2.125E-002	5.303E-003
Cm-244	5.76	5.60	5.85	22.00	2.750E-002	5.995E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:26AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV22
Spectrum #1 Analysis #1
Comment:

Batch

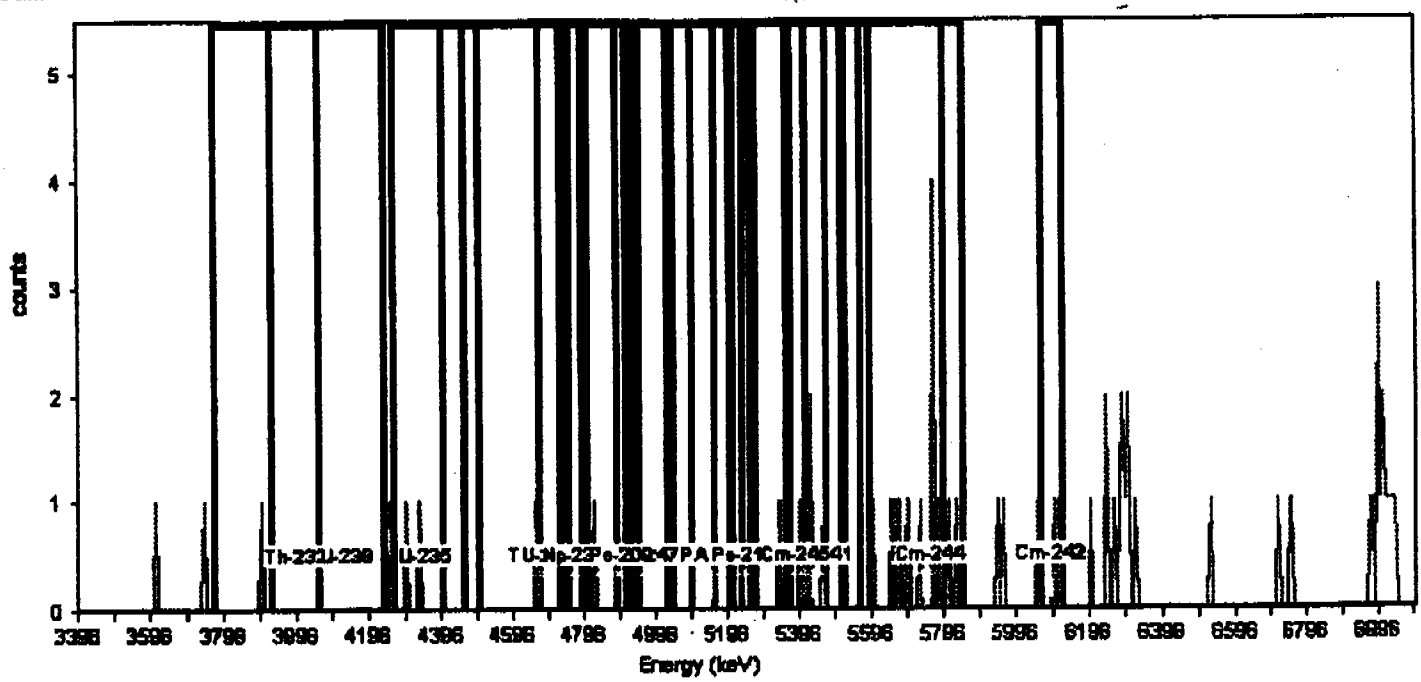
Batch Name: April_2005
Description:

Acquisition

Detector: AV22 , SN: 41-172Q5
Acquisition Start Date: 4/26/2005 10:38:09AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV22
Calibration Date: 3/16/2005 12:47:13AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 25.61% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND_ROI Library: Background ROI Library
Total Background Counts: 64.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	2.00	2.500E-003	2.165E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	7.00	8.750E-003	3.536E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	7.00	8.750E-003	3.536E-003
Am-241	5.45	5.27	5.57	7.00	8.750E-003	3.536E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	14.00	1.750E-002	4.841E-003
Cm-244	5.76	5.60	5.85	16.00	2.000E-002	5.154E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:29AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV23
Comment:

Spectrum #1 Analysis #1

Batch

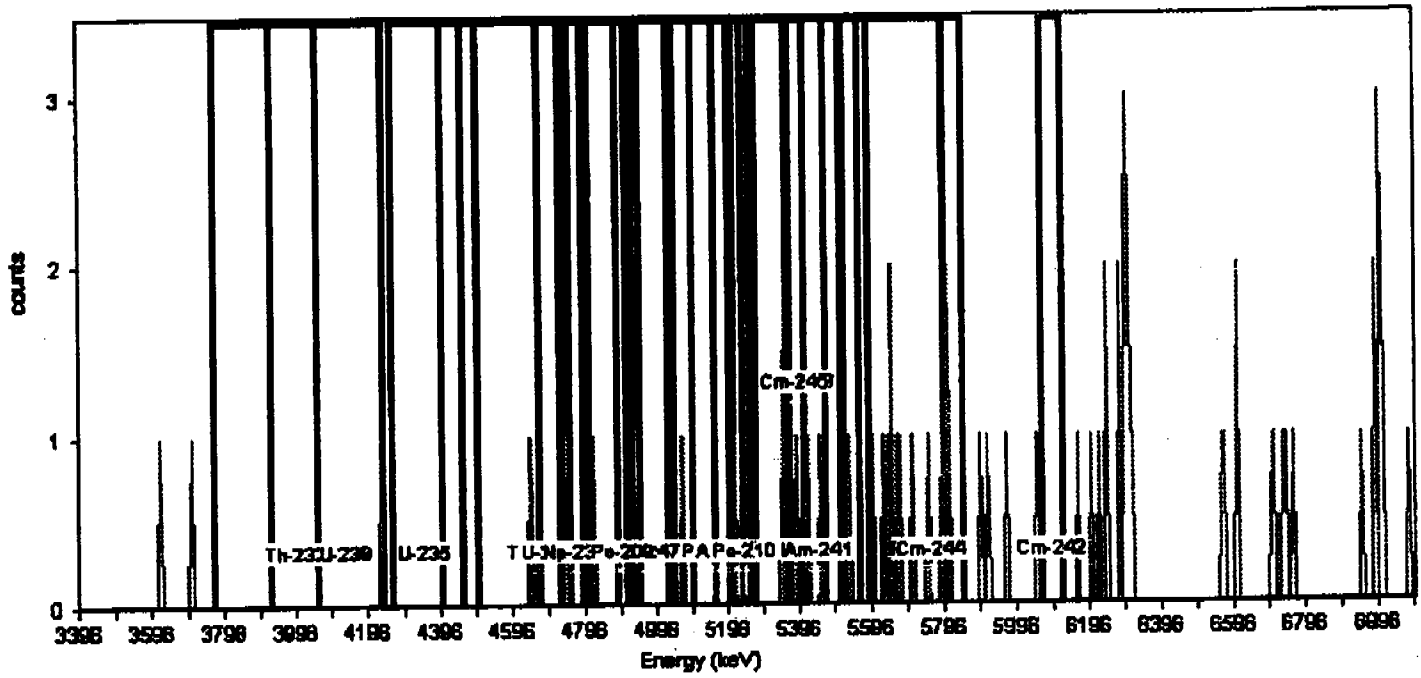
Batch Name: April_2005
Description:

Acquisition

Detector: AV23 , SN: 41-172R4
Acquisition Start Date: 4/26/2005 10:38:11AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV23
Calibration Date: 3/16/2005 12:47:20AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.07% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 66.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	2.00	2.500E-003	2.165E-003
Pu-242	4.88	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	3.00	3.750E-003	2.500E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	5.00	6.250E-003	3.062E-003
Th-228	5.41	5.16	5.47	9.00	1.125E-002	3.953E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	8.00	1.000E-002	3.750E-003
Am-241	5.46	5.27	5.57	9.00	1.125E-002	3.953E-003
Cm-245	5.39	5.36	5.41	3.00	3.750E-003	2.500E-003
Pu-236	5.74	5.52	5.80	11.00	1.375E-002	4.330E-003
Cm-244	5.76	5.60	5.85	13.00	1.625E-002	4.677E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040

12:35:33AM 4/27/2005

Sample

Sample Name: AV24

Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

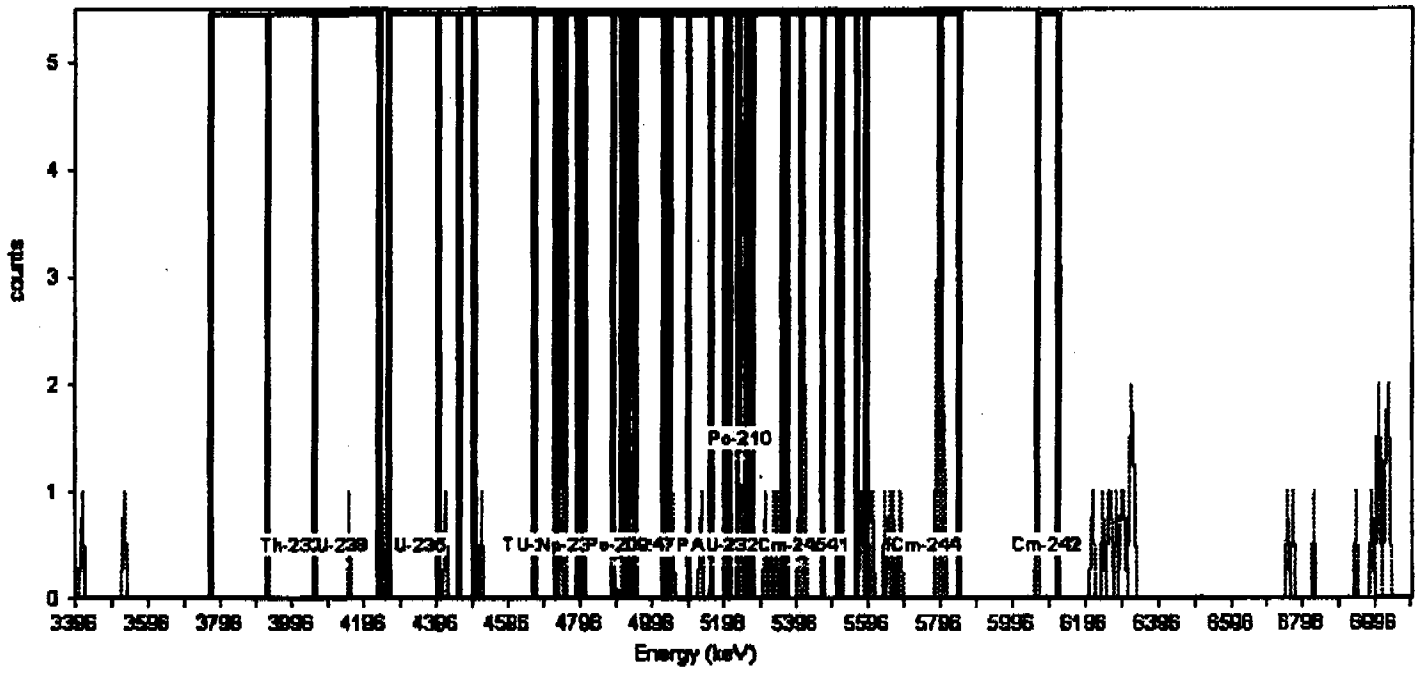
Description:

Acquisition

Detector: AV24 , SN: 41-172R5
Acquisition Start Date: 4/26/2005 10:38:13AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV24
Calibration Date: 3/16/2005 12:47:29AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.59% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library

Total Background Counts: 57.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.08	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	3.00	3.750E-003	2.500E-003
Pu-242	4.88	4.67	4.93	3.00	3.750E-003	2.500E-003
Th-229	4.84	4.72	5.10	4.00	5.000E-003	2.795E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	3.00	3.750E-003	2.500E-003
U-232	5.23	5.04	5.37	6.00	7.500E-003	3.307E-003
Th-228	5.41	5.16	5.47	7.00	8.750E-003	3.536E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	7.00	8.750E-003	3.536E-003
Am-241	5.46	5.27	5.57	6.00	7.500E-003	3.307E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	12.00	1.500E-002	4.507E-003
Cm-244	5.76	5.60	5.85	14.00	1.750E-002	4.841E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 1:16:38AM 4/26/2005

Sample

Sample Name: AV25 Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

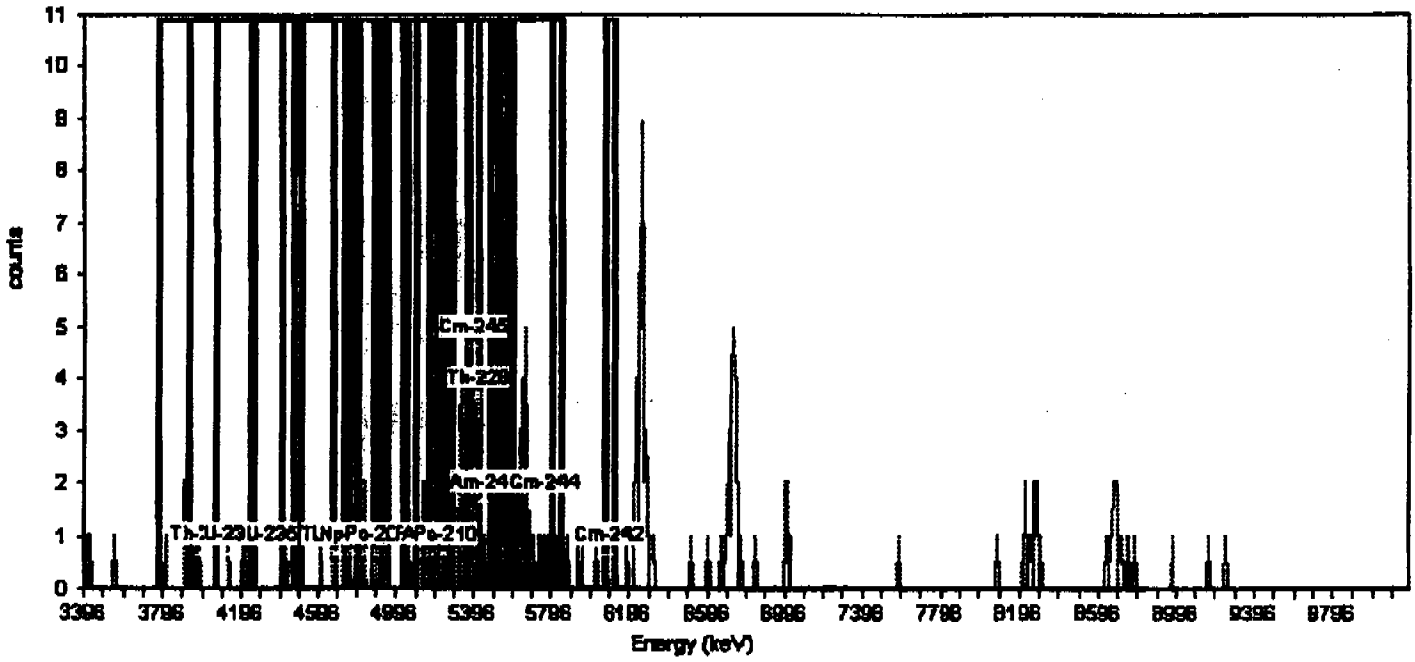
Description:

Acquisition

Detector: AV25 , SN: ALDR17
Acquisition Start Date: 4/25/2005 11:49:22AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV25
Calibration Date: 3/18/2005 4:19:57PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 24.95% +/- 0.25% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROU[illegible] Library: Background ROI Library

Total Background Counts: 228.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	6.00	7.500E-003	3.307E-003
U-238	4.14	3.93	4.24	6.00	7.500E-003	3.307E-003
U-235	4.36	4.26	4.46	2.00	2.500E-003	2.165E-003
Th-230	4.67	4.40	4.73	6.00	7.500E-003	3.307E-003
U-234	4.70	4.50	4.80	7.00	8.750E-003	3.536E-003
Pu-242	4.88	4.67	4.93	10.00	1.250E-002	4.146E-003
Th-229	4.84	4.72	5.10	11.00	1.375E-002	4.330E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	3.00	3.750E-003	2.500E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	6.00	7.500E-003	3.307E-003
Am-243	5.20	5.03	5.28	6.00	7.500E-003	3.307E-003
U-232	5.23	5.04	5.37	20.00	2.500E-002	5.728E-003
Th-228	5.41	5.16	5.47	40.00	5.000E-002	8.004E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	39.00	4.875E-002	7.906E-003
Am-241	5.46	5.27	5.57	40.00	5.000E-002	8.004E-003
Cm-245	5.39	5.36	5.41	23.00	2.875E-002	6.124E-003
Pu-236	5.74	5.52	5.80	36.00	4.500E-002	7.603E-003
Cm-244	5.76	5.60	5.85	38.00	4.750E-002	7.806E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 1:16:44AM 4/26/2005

Sample

Sample Name: AV26 Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

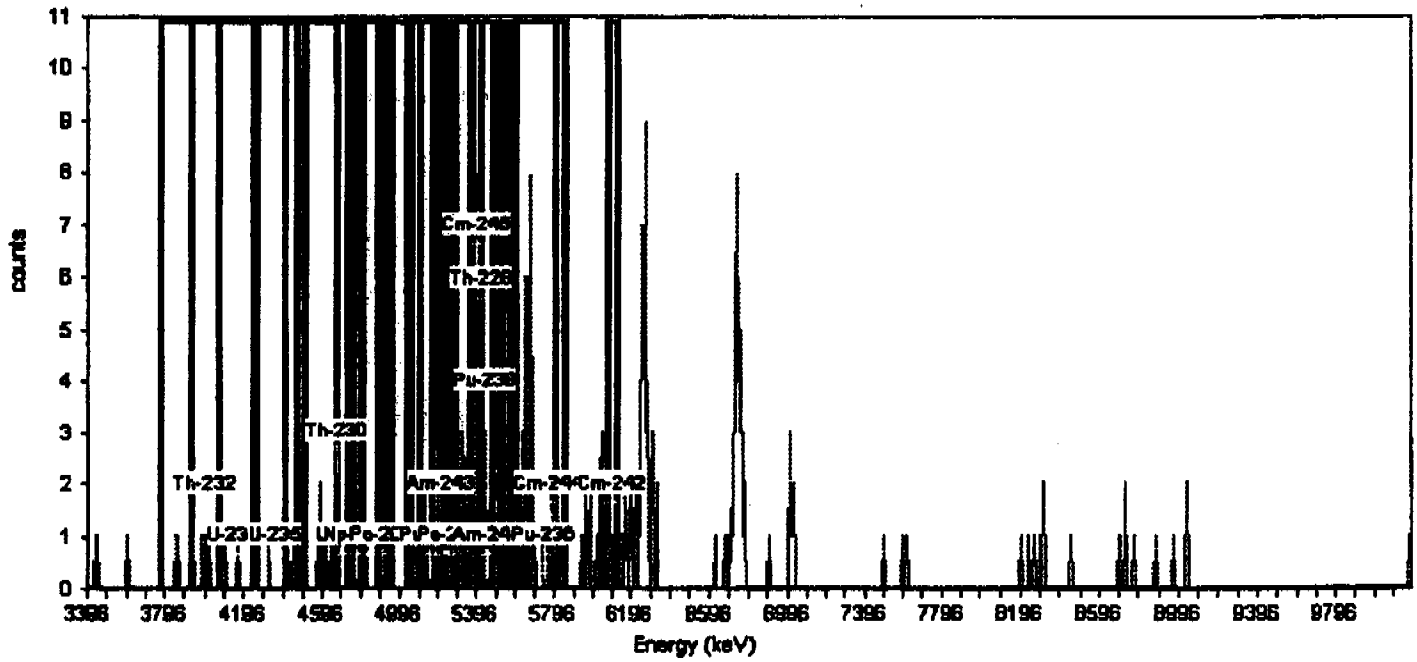
Description:

Acquisition

Detector: AV26 , SN: ALDR16
Acquisition Start Date: 4/25/2005 11:49:23AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV26
Calibration Date: 3/18/2005 4:20:03PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 23.91% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library

Total Background Counts: 288.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
U-234	4.70	4.50	4.80	12.00	1.500E-002	4.507E-003
Pu-242	4.88	4.67	4.93	8.00	1.000E-002	3.750E-003
Th-229	4.84	4.72	5.10	7.00	8.750E-003	3.536E-003
Np-237	4.77	4.75	4.79	2.00	2.500E-003	2.165E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	5.00	6.250E-003	3.062E-003
Am-243	5.20	5.03	5.28	7.00	8.750E-003	3.536E-003
U-232	5.23	5.04	5.37	29.00	3.625E-002	6.847E-003
Th-228	5.41	5.16	5.47	55.00	6.875E-002	9.354E-003
Po-210	5.25	5.20	5.28	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	55.00	6.875E-002	9.354E-003
Am-241	5.45	5.27	5.57	55.00	6.875E-002	9.354E-003
Cm-245	5.39	5.36	5.41	31.00	3.875E-002	7.071E-003
Pu-236	5.74	5.52	5.80	55.00	6.875E-002	9.354E-003
Cm-244	5.76	5.60	5.85	55.00	6.875E-002	9.354E-003
Cm-242	6.10	6.07	6.13	7.00	8.750E-003	3.536E-003
Th-232	3.99	3.77	4.06	6.00	7.500E-003	3.307E-003
U-238	4.14	3.93	4.24	6.00	7.500E-003	3.307E-003
U-235	4.35	4.26	4.46	3.00	3.750E-003	2.500E-003
Th-230	4.67	4.40	4.73	12.00	1.500E-002	4.507E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:16:49AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV27
Comment:

Spectrum #1 Analysis #1

Batch

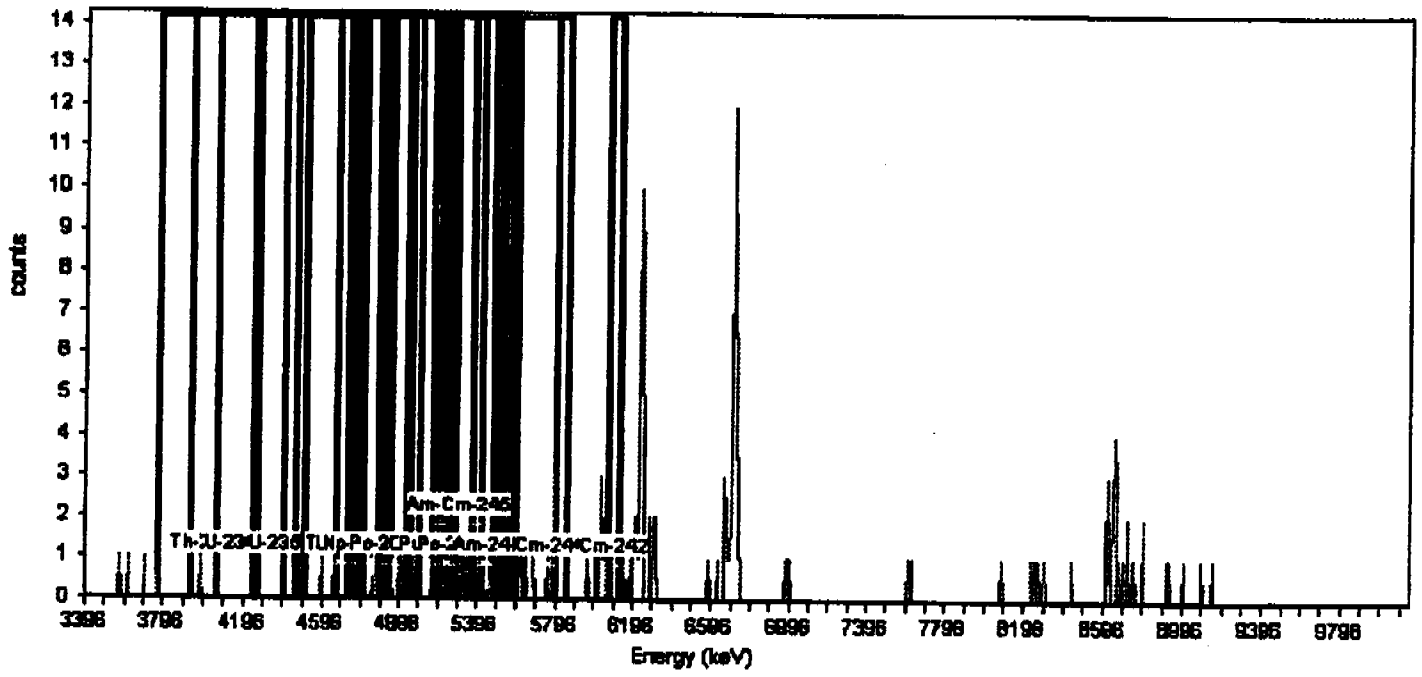
Batch Name: April_2005
Description:

Acquisition

Detector: AV27 , SN: ALDR19
Acquisition Start Date: 4/25/2005 11:48:20AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV27
Calibration Date: 3/18/2005 4:20:09PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 24.34% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 172.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.28	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	3.00	3.750E-003	2.500E-003
U-234	4.70	4.50	4.80	3.00	3.750E-003	2.500E-003
Pu-242	4.88	4.67	4.93	3.00	3.750E-003	2.500E-003
Th-229	4.84	4.72	5.10	7.00	8.750E-003	3.536E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.95	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	6.00	7.500E-003	3.307E-003
Am-243	5.20	5.03	5.28	4.00	5.000E-003	2.795E-003
U-232	5.23	5.04	5.37	7.00	8.750E-003	3.536E-003
Th-228	5.41	5.16	5.47	6.00	7.500E-003	3.307E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	5.00	6.250E-003	3.062E-003
Am-241	5.45	5.27	5.57	6.00	7.500E-003	3.307E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	9.00	1.125E-002	3.953E-003
Cm-244	5.76	5.60	5.85	7.00	8.750E-003	3.536E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:16:55AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV28
Comment:

Spectrum #1 Analysis #1

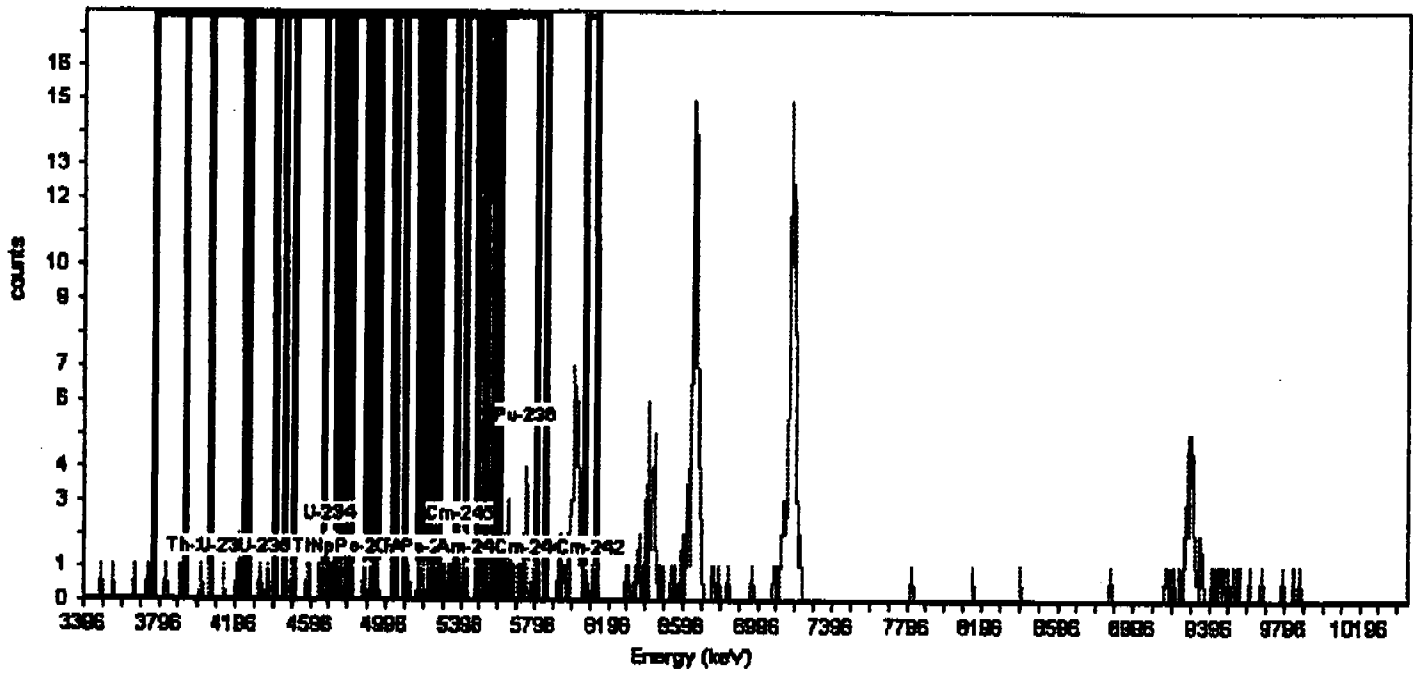
Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV28 , SN: ALDR20
Acquisition Start Date: 4/25/2005 11:48:20AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: Feb2005_AV28
Calibration Date: 2/28/2005 11:00:16PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 0.68% +/- 0.04% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI, Library: Background ROI Library
Total Background Counts: 381.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	5.00	6.250E-003	3.062E-003
U-238	4.14	3.93	4.24	8.00	1.000E-002	3.750E-003
U-235	4.35	4.26	4.46	2.00	2.500E-003	2.165E-003
Th-230	4.67	4.40	4.73	9.00	1.125E-002	3.953E-003
U-234	4.70	4.50	4.80	9.00	1.125E-002	3.953E-003
Pu-242	4.88	4.67	4.93	6.00	7.500E-003	3.307E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.98	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	3.00	3.750E-003	2.500E-003
Am-243	5.20	5.03	5.28	3.00	3.750E-003	2.500E-003
U-232	5.23	5.04	5.37	6.00	7.500E-003	3.307E-003
Th-228	5.41	5.16	5.47	6.00	7.500E-003	3.307E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	6.00	7.500E-003	3.307E-003
Am-241	5.46	5.27	5.57	7.00	8.750E-003	3.536E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	29.00	3.625E-002	6.847E-003
Cm-244	5.78	5.60	5.85	27.00	3.375E-002	6.614E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 1:17:00AM 4/26/2005

Sample

Sample Name: AV29 Spectrum #1 Analysis #1
Comment:

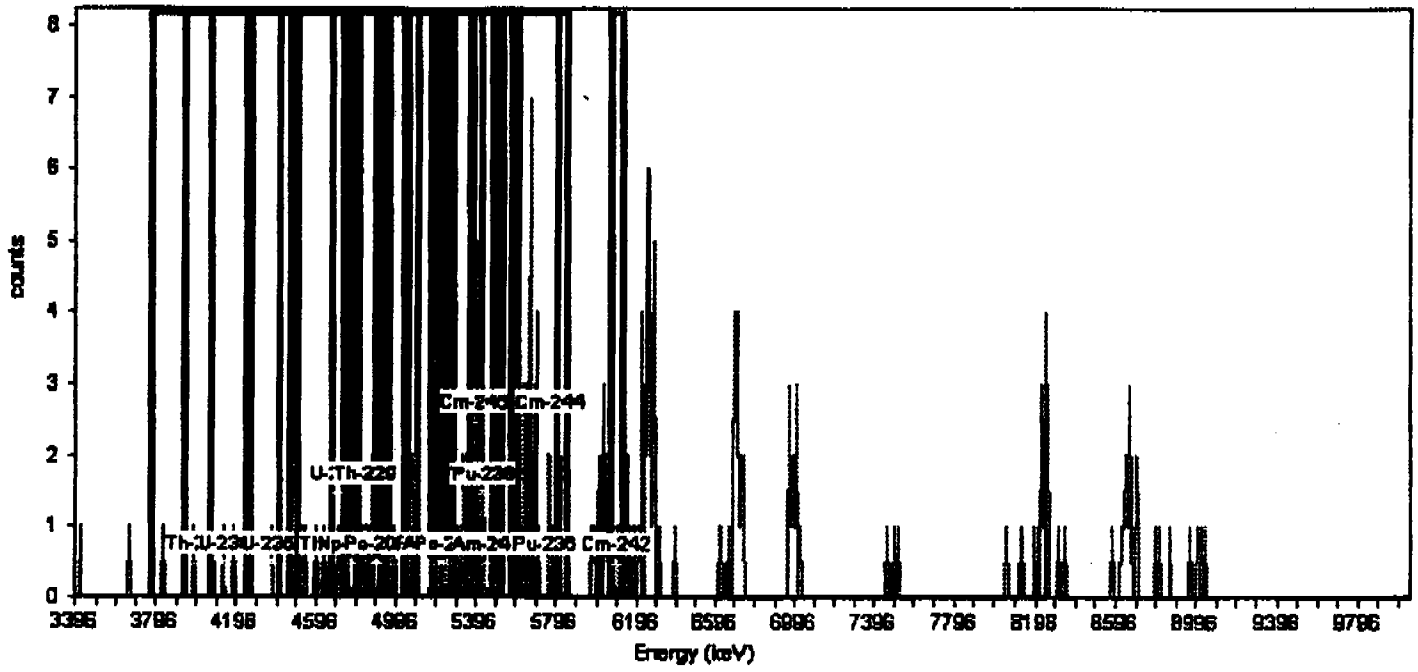
Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV29 , SN: ALDR21
Acquisition Start Date: 4/25/2005 11:48:21AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: MARCH2005_AV29
Calibration Date: 3/19/2005 6:47:49AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 25.44% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROU[illegible] Library: Background ROI Library
Total Background Counts: 255.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	4.00	5.000E-003	2.795E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	7.00	8.750E-003	3.536E-003
U-234	4.70	4.50	4.80	7.00	8.750E-003	3.536E-003
Pu-242	4.86	4.67	4.93	8.00	1.000E-002	3.750E-003
Th-229	4.84	4.72	5.10	17.00	2.125E-002	5.303E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	15.00	1.875E-002	5.000E-003
Am-243	5.20	5.03	5.28	15.00	1.875E-002	5.000E-003
U-232	5.23	5.04	5.37	27.00	3.375E-002	6.614E-003
Th-228	5.41	5.16	5.47	41.00	5.125E-002	8.101E-003
Po-210	5.25	5.20	5.26	2.00	2.500E-003	2.165E-003
Pu-238	5.44	5.24	5.52	41.00	5.125E-002	8.101E-003
Am-241	5.46	5.27	5.57	40.00	5.000E-002	8.004E-003
Cm-245	5.39	5.36	5.41	19.00	2.375E-002	5.590E-003
Pu-236	5.74	5.52	5.80	38.00	4.750E-002	7.806E-003
Cm-244	5.76	5.60	5.85	44.00	5.500E-002	8.385E-003
Cm-242	6.10	6.07	6.13	4.00	5.000E-003	2.795E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 1:17:06AM 4/26/2005

Sample

Sample Name: AV30 Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

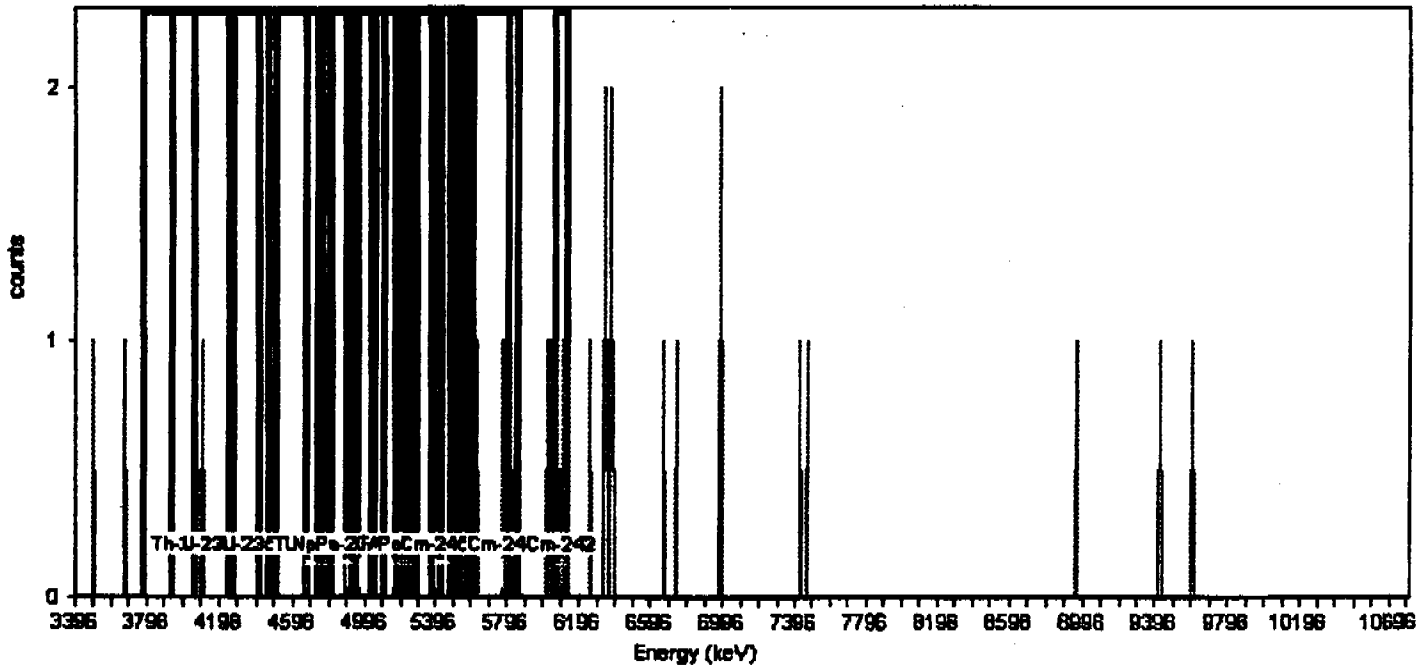
Description:

Acquisition

Detector: AV30 , SN:
Acquisition Start Date: 4/25/2005 11:48:22AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: Test
Calibration Date: 12/27/2004 4:30:29PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 24.04% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library

Total Background Counts: 34.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	1.00	1.250E-003	1.768E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	1.00	1.250E-003	1.768E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	3.00	3.750E-003	2.500E-003
Cm-244	5.76	5.60	5.85	3.00	3.750E-003	2.500E-003
Cm-242	6.10	6.07	6.13	5.00	6.250E-003	3.062E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:17:12AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV33
Comment:

Spectrum #1 Analysis #1

Batch

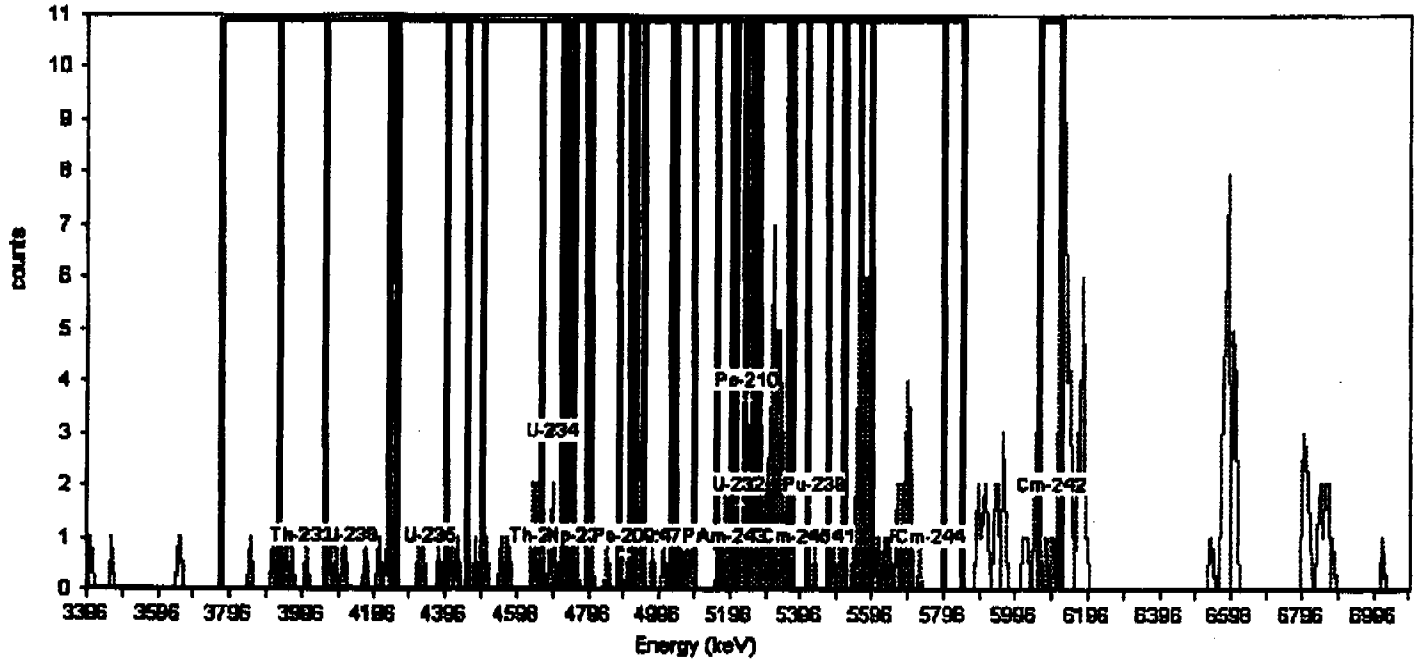
Batch Name: April_2005
Description:

Acquisition

Detector: AV33 , SN: ALDR25
Acquisition Start Date: 4/25/2005 11:48:23AM
Live Time: 800.00 min.
Real Time: 800.00 min.
Calibration Name: March2005_AV33
Calibration Date: 3/21/2005 2:52:41PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 23.43% +/- 0.25% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 270.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	7.00	8.750E-003	3.536E-003
U-238	4.14	3.93	4.24	12.00	1.500E-002	4.507E-003
U-235	4.35	4.26	4.46	6.00	7.500E-003	3.307E-003
Th-230	4.67	4.40	4.73	17.00	2.125E-002	5.303E-003
U-234	4.70	4.50	4.80	18.00	2.250E-002	5.449E-003
Pu-242	4.86	4.67	4.93	13.00	1.625E-002	4.677E-003
Th-229	4.84	4.72	5.10	18.00	2.250E-002	5.449E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	8.00	1.000E-002	3.750E-003
Po-209	4.90	4.88	4.91	3.00	3.750E-003	2.500E-003
Pu-239	5.15	4.95	5.21	9.00	1.125E-002	3.953E-003
Am-243	5.20	5.03	5.28	19.00	2.375E-002	5.590E-003
U-232	5.23	5.04	5.37	49.00	6.125E-002	8.839E-003
Th-228	5.41	5.16	5.47	46.00	5.750E-002	8.570E-003
Po-210	5.25	5.20	5.26	8.00	1.000E-002	3.750E-003
Pu-238	5.44	5.24	5.52	46.00	5.750E-002	8.570E-003
Am-241	5.45	5.27	5.57	54.00	6.750E-002	9.270E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	47.00	5.875E-002	8.660E-003
Cm-244	5.76	5.60	5.85	18.00	2.250E-002	5.449E-003
Cm-242	6.10	6.07	6.13	14.00	1.750E-002	4.841E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 1:17:17AM 4/26/2005

Sample

Sample Name: AV34 Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

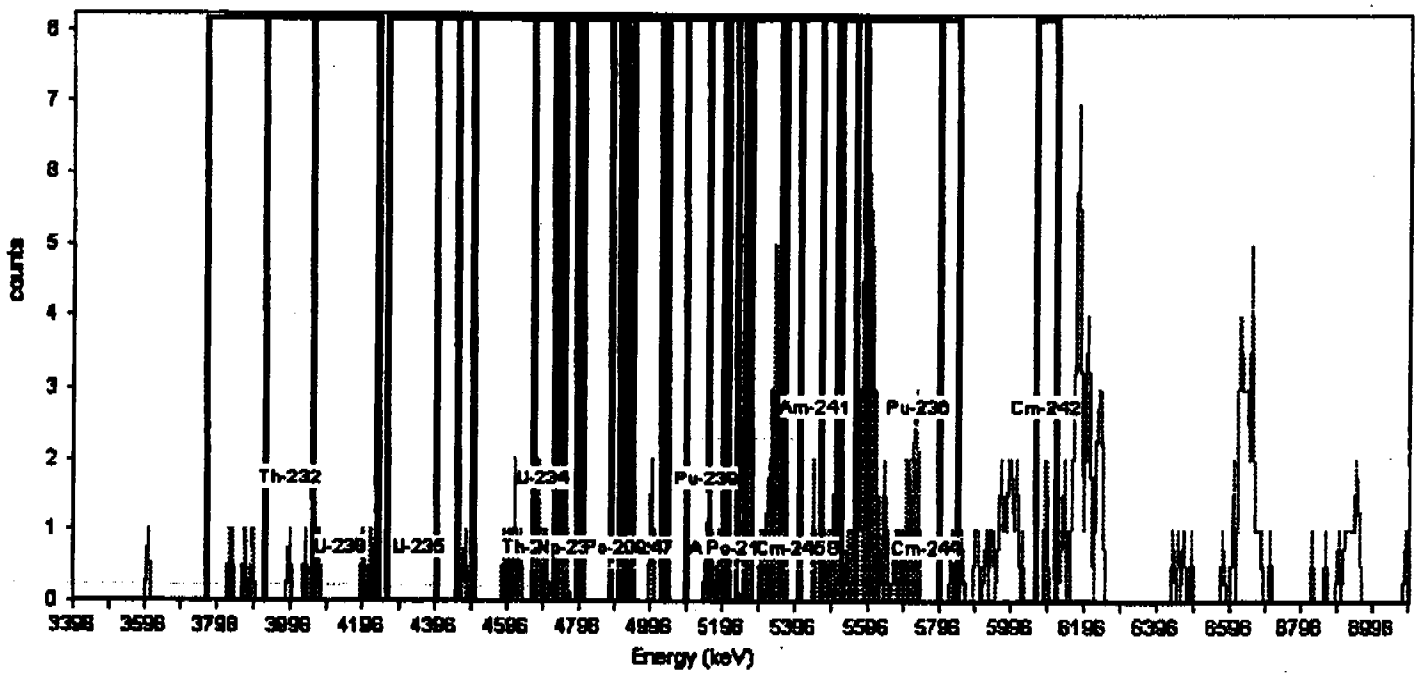
Description:

Acquisition

Detector: AV34 , SN: ALDR26
Acquisition Start Date: 4/25/2005 11:48:24AM
Live Time: 800.00 min.
Real Time: 800.00 min.
Calibration Name: March2005_AV34
Calibration Date: 3/18/2005 7:00:45PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 23.85% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND_ROI Library: Background ROI Library

Total Background Counts: 208.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	6.00	7.500E-003	3.307E-003
U-238	4.14	3.93	4.24	5.00	6.250E-003	3.062E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	12.00	1.500E-002	4.507E-003
U-234	4.70	4.50	4.80	13.00	1.625E-002	4.677E-003
Pu-242	4.88	4.67	4.93	7.00	8.750E-003	3.536E-003
Th-229	4.84	4.72	5.10	5.00	6.250E-003	3.062E-003
Np-237	4.77	4.75	4.79	2.00	2.500E-003	2.165E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	5.00	6.250E-003	3.062E-003
Am-243	5.20	5.03	5.28	7.00	8.750E-003	3.536E-003
U-232	5.23	5.04	5.37	24.00	3.000E-002	6.250E-003
Th-228	5.41	5.16	5.47	25.00	3.125E-002	6.374E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	29.00	3.625E-002	6.847E-003
Am-241	5.45	5.27	5.57	32.00	4.000E-002	7.181E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	48.00	6.000E-002	8.750E-003
Cm-244	5.76	5.80	5.86	37.00	4.625E-002	7.706E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 1:17:23AM 4/26/2005

Sample

Sample Name: AV35 Spectrum #1 Analysis #1
Comment:

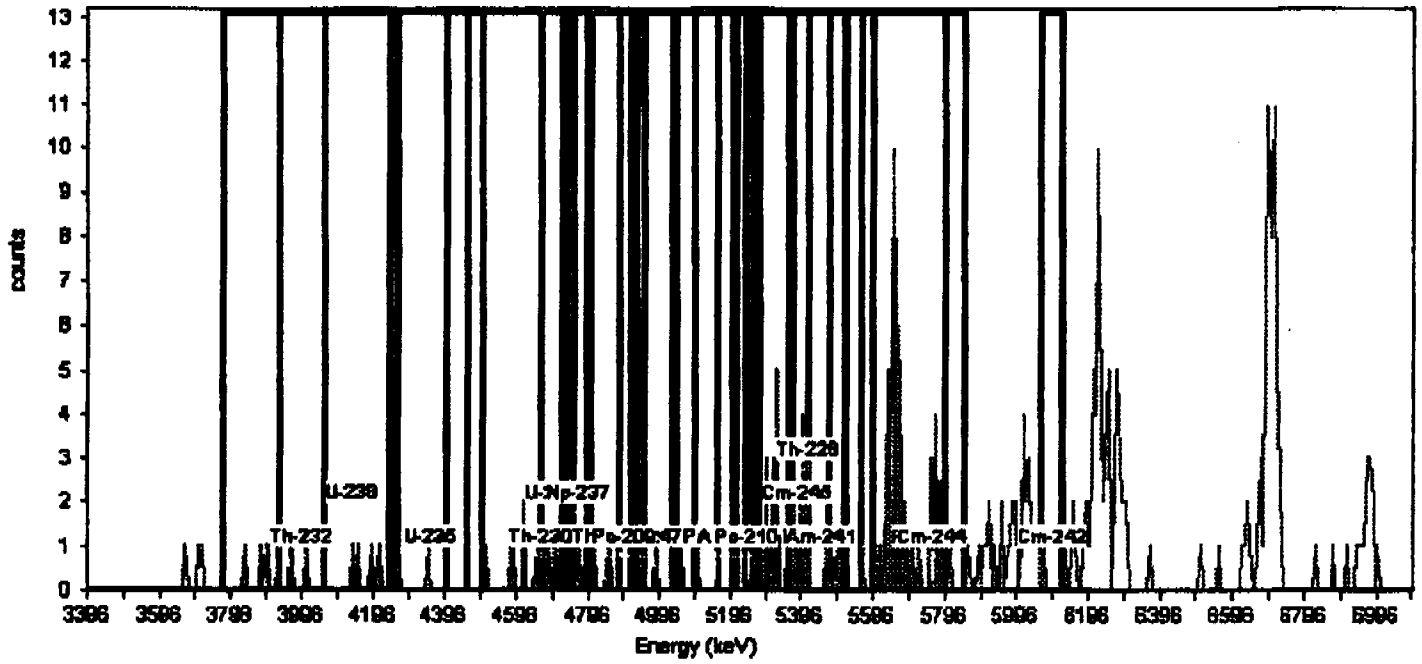
Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV35 , SN: ALDR27
Acquisition Start Date: 4/25/2005 11:48:25AM
Live Time: 800.00 min.
Real Time: 800.00 min.
Calibration Name: March2005_AV35
Calibration Date: 3/16/2005 7:00:50PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.52% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 293.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.08	7.00	8.750E-003	3.536E-003
U-238	4.14	3.93	4.24	7.00	8.750E-003	3.536E-003
U-235	4.35	4.26	4.46	2.00	2.500E-003	2.165E-003
Th-230	4.67	4.40	4.73	11.00	1.375E-002	4.330E-003
U-234	4.70	4.50	4.80	14.00	1.750E-002	4.841E-003
Pu-242	4.88	4.67	4.93	11.00	1.375E-002	4.330E-003
Th-229	4.84	4.72	5.10	10.00	1.250E-002	4.146E-003
Np-237	4.77	4.75	4.79	3.00	3.750E-003	2.500E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.96	5.21	5.00	6.250E-003	3.062E-003
Am-243	5.20	5.03	5.26	4.00	5.000E-003	2.795E-003
U-232	5.23	5.04	5.37	17.00	2.125E-002	5.303E-003
Th-228	5.41	5.16	5.47	29.00	3.625E-002	6.847E-003
Po-210	5.25	5.20	5.26	2.00	2.500E-003	2.165E-003
Pu-238	5.44	5.24	5.52	30.00	3.750E-002	6.960E-003
Am-241	5.45	5.27	5.57	30.00	3.750E-002	6.960E-003
Cm-245	5.39	5.36	5.41	13.00	1.625E-002	4.677E-003
Pu-236	5.74	5.52	5.80	54.00	6.750E-002	9.270E-003
Cm-244	5.76	5.60	5.85	54.00	6.750E-002	9.270E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:17:28AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV37
Spectrum #1 Analysis #1
Comment:

Batch

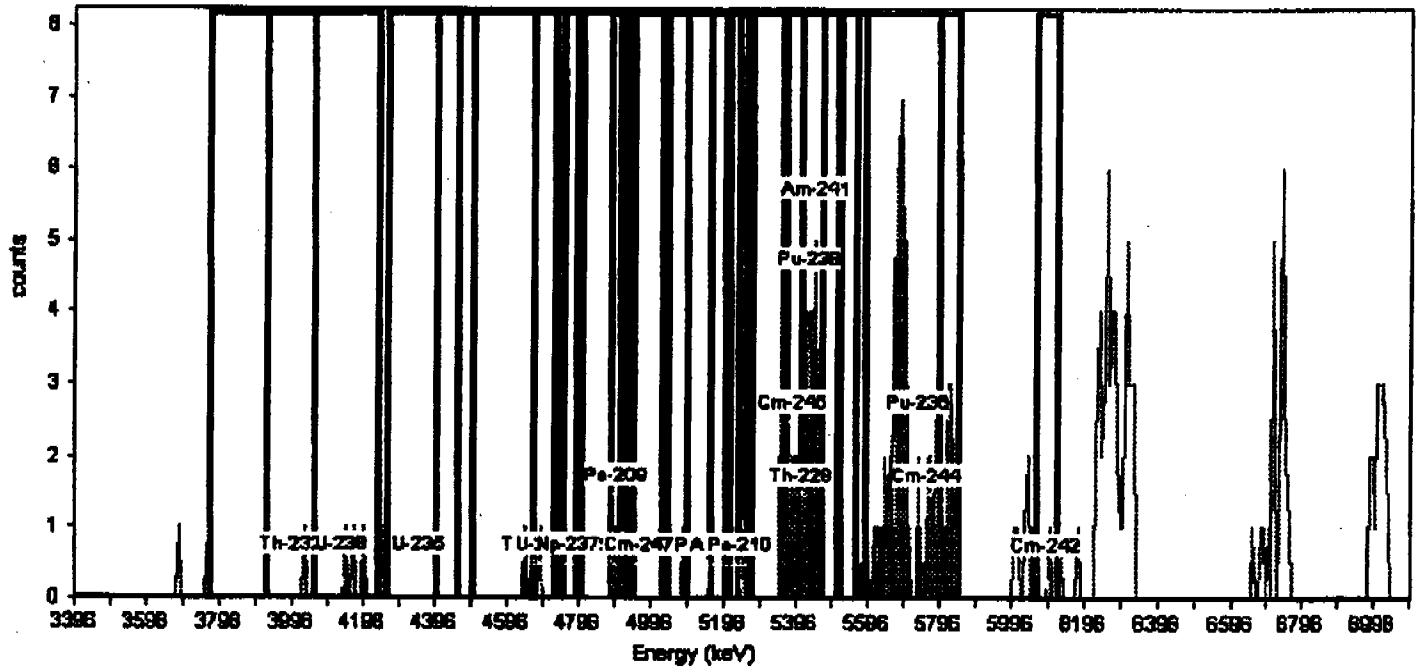
Batch Name: April_2005
Description:

Acquisition

Detector: AV37 , SN:
Acquisition Start Date: 4/25/2005 11:48:26AM
Live Time: 800.00 min.
Real Time: 800.00 min.
Calibration Name: March2005_AV37
Calibration Date: 3/21/2005 5:29:23PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 22.97% +/- 0.24% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 202.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	4.00	5.000E-003	2.795E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	2.00	2.500E-003	2.165E-003
Pu-242	4.88	4.67	4.93	4.00	5.000E-003	2.795E-003
Th-229	4.84	4.72	5.10	4.00	5.000E-003	2.795E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	3.00	3.750E-003	2.500E-003
Po-209	4.90	4.88	4.91	3.00	3.750E-003	2.500E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	8.00	1.000E-002	3.750E-003
Th-228	5.41	5.16	5.47	34.00	4.250E-002	7.395E-003
Po-210	5.25	5.20	5.28	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	34.00	4.250E-002	7.395E-003
Am-241	5.45	5.27	5.57	33.00	4.125E-002	7.289E-003
Cm-245	5.39	5.36	5.41	11.00	1.375E-002	4.330E-003
Pu-236	5.74	5.52	5.80	50.00	6.250E-002	8.927E-003
Cm-244	5.76	5.60	5.85	59.00	7.375E-002	9.682E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:17:34AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV38 Spectrum #1 Analysis #1
Comment:

Batch

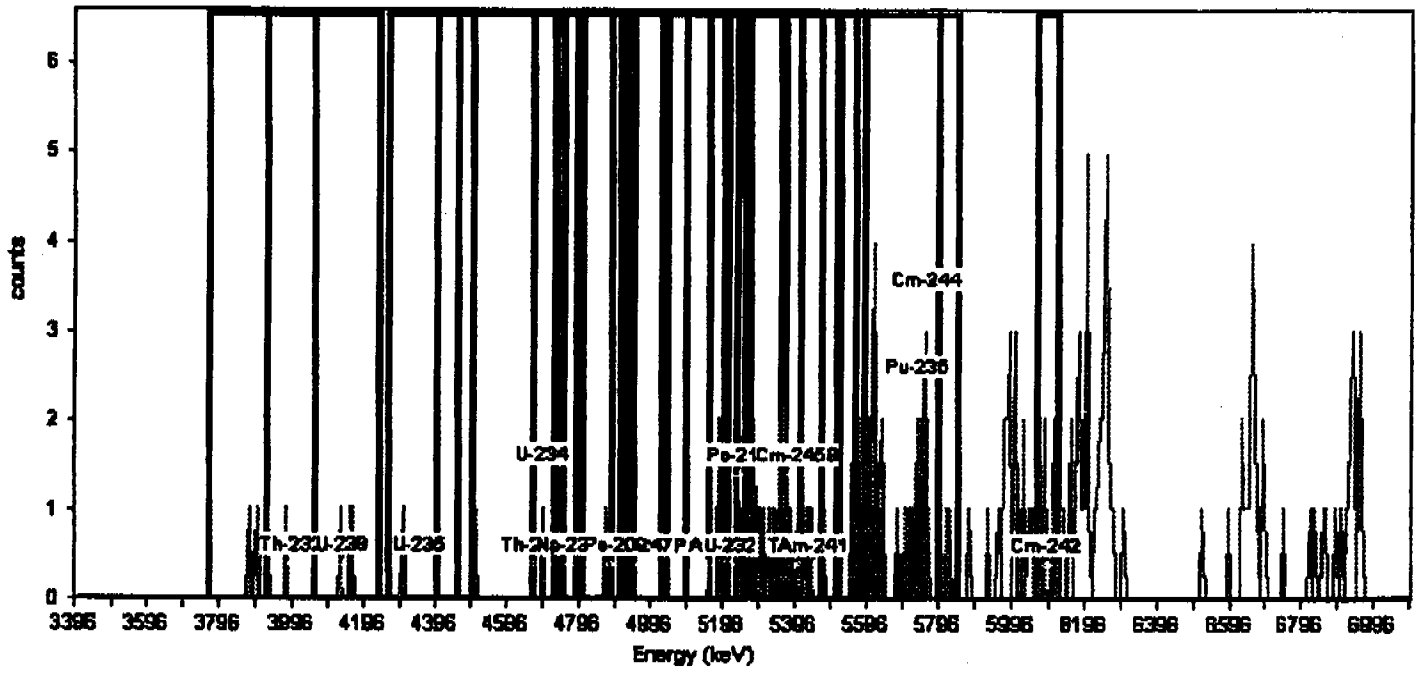
Batch Name: April_2005
Description:

Acquisition

Detector: AV38 , SN: ALDR30
Acquisition Start Date: 4/25/2005 11:48:27AM
Live Time: 800.00 min.
Real Time: 800.00 min.
Calibration Name: March2005_AV38
Calibration Date: 3/19/2005 6:48:01AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 24.37% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROU[illegible]Library: Background ROI Library
Total Background Counts: 170.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	4.00	5.000E-003	2.795E-003
U-238	4.14	3.93	4.24	4.00	5.000E-003	2.795E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	2.00	2.500E-003	2.165E-003
Pu-242	4.88	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	4.00	5.000E-003	2.795E-003
Am-243	5.20	5.03	5.26	7.00	8.750E-003	3.536E-003
U-232	5.23	5.04	5.37	21.00	2.625E-002	5.863E-003
Th-228	5.41	5.16	5.47	26.00	3.250E-002	6.495E-003
Po-210	5.25	5.20	5.26	2.00	2.500E-003	2.165E-003
Pu-238	5.44	5.24	5.52	24.00	3.000E-002	6.250E-003
Am-241	5.45	5.27	5.57	27.00	3.375E-002	6.614E-003
Cm-245	5.39	5.36	5.41	8.00	1.000E-002	3.750E-003
Pu-236	5.74	5.52	5.80	39.00	4.875E-002	7.906E-003
Cm-244	5.76	5.60	5.85	33.00	4.125E-002	7.289E-003
Cm-242	6.10	6.07	6.13	7.00	8.750E-003	3.536E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:17:39AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV39
Comment:

Spectrum #1 Analysis #1

Batch

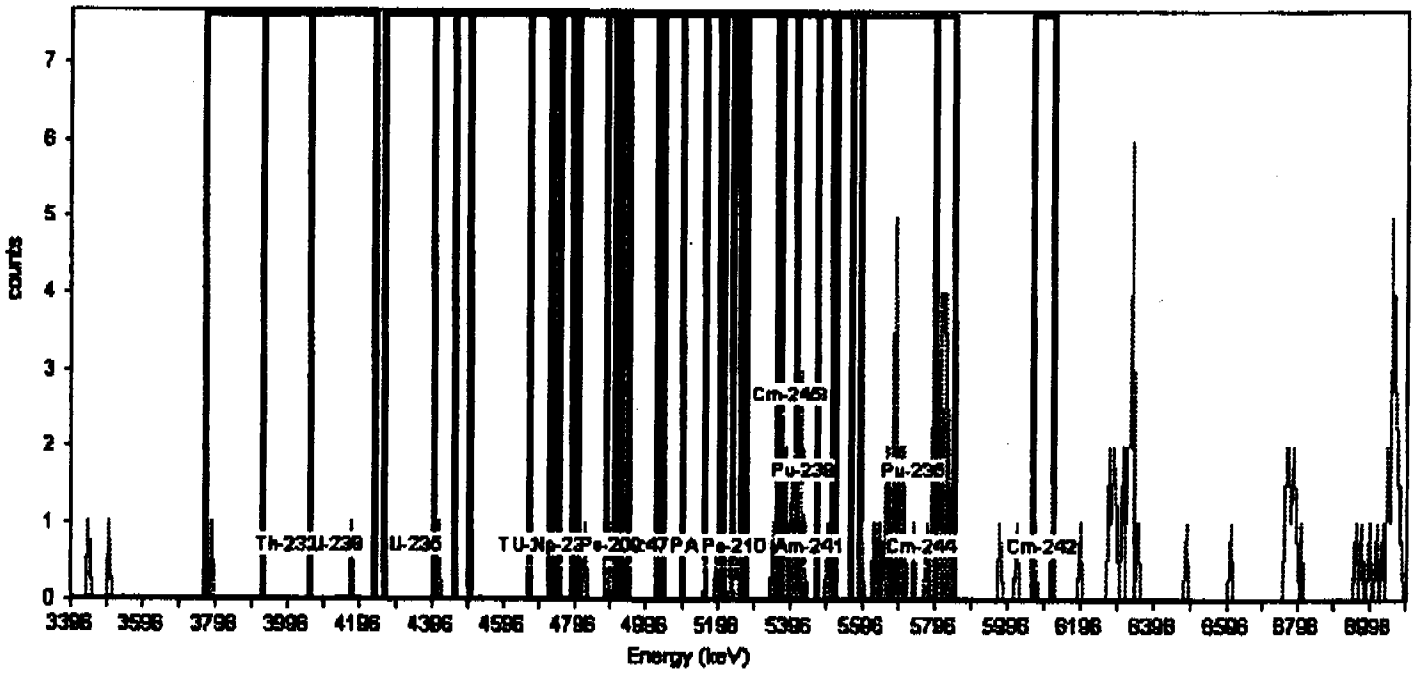
Batch Name: April_2005
Description:

Acquisition

Detector: AV39 , SN: ALDR31
Acquisition Start Date: 4/25/2005 11:48:28AM
Live Time: 800.00 min.
Real Time: 800.00 min.
Calibration Name: March2005_AV39
Calibration Date: 3/19/2005 6:48:11AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 25.89% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 115.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.86	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.26	3.00	3.750E-003	2.500E-003
U-232	5.23	5.04	5.37	5.00	6.250E-003	3.062E-003
Th-228	5.41	5.16	5.47	17.00	2.125E-002	5.303E-003
Po-210	5.25	5.20	5.26	2.00	2.500E-003	2.165E-003
Pu-238	5.44	5.24	5.52	16.00	2.000E-002	5.154E-003
Am-241	5.45	5.27	5.57	15.00	1.875E-002	5.000E-003
Cm-245	5.39	5.36	5.41	7.00	8.750E-003	3.536E-003
Pu-236	5.74	5.52	5.80	23.00	2.875E-002	6.124E-003
Cm-244	5.76	5.60	5.85	35.00	4.375E-002	7.500E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 1:17:45AM 4/26/2005

Sample

Sample Name: AV40 Spectrum #1 Analysis #1
Comment:

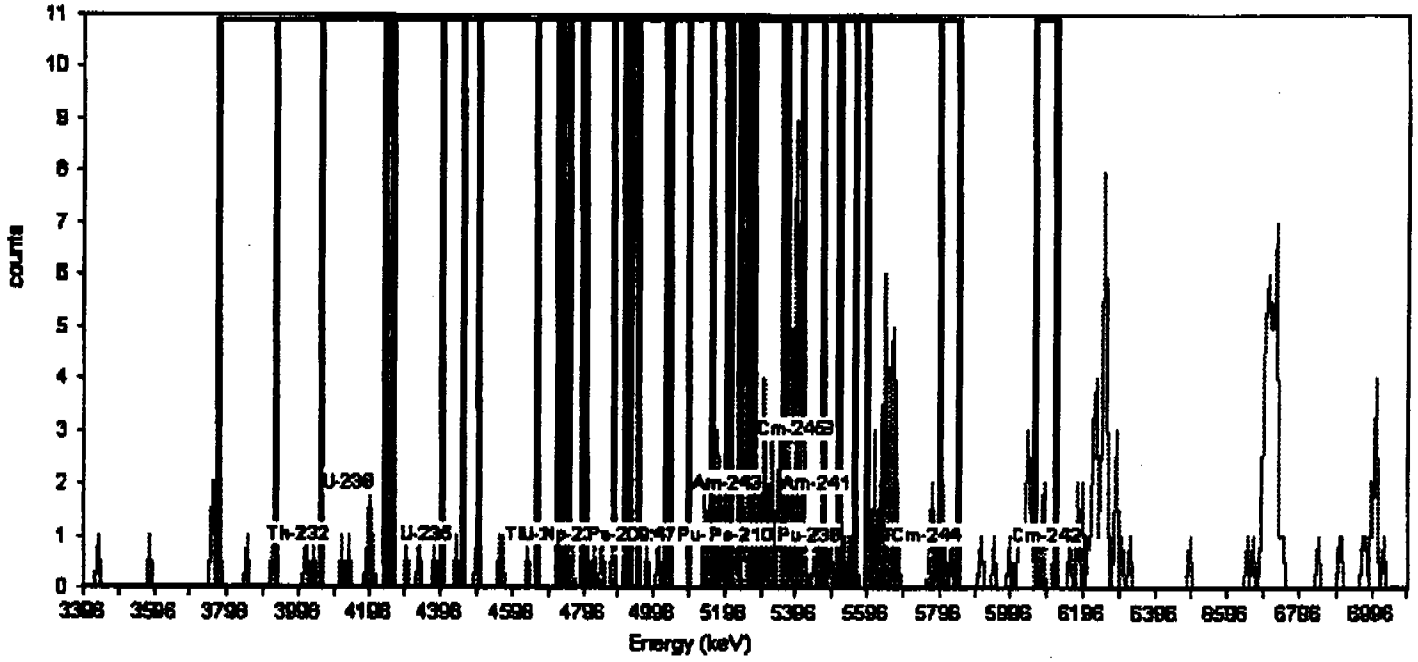
Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV40 , SN: ALDR32
Acquisition Start Date: 4/25/2005 11:48:29AM
Live Time: 800.00 min.
Real Time: 800.00 min.
Calibration Name: March2005_AV40
Calibration Date: 3/18/2005 4:20:21PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 25.23% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 255.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	7.00	8.750E-003	3.536E-003
U-238	4.14	3.93	4.24	9.00	1.125E-002	3.953E-003
U-235	4.35	4.26	4.46	4.00	5.000E-003	2.795E-003
Th-230	4.67	4.40	4.73	7.00	8.750E-003	3.536E-003
U-234	4.70	4.50	4.80	7.00	8.750E-003	3.536E-003
Pu-242	4.88	4.67	4.93	7.00	8.750E-003	3.536E-003
Th-229	4.84	4.72	5.10	11.00	1.375E-002	4.330E-003
Np-237	4.77	4.75	4.79	2.00	2.500E-003	2.165E-003
Cm-247	4.96	4.88	5.04	3.00	3.750E-003	2.500E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.16	4.95	5.21	14.00	1.750E-002	4.841E-003
Am-243	5.20	5.03	5.28	19.00	2.375E-002	5.590E-003
U-232	5.23	5.04	5.37	38.00	4.750E-002	7.806E-003
Th-228	5.41	5.16	5.47	67.00	8.375E-002	1.031E-002
Po-210	5.25	5.20	5.26	6.00	7.500E-003	3.307E-003
Pu-238	5.44	5.24	5.52	61.00	7.625E-002	9.843E-003
Am-241	5.45	5.27	5.57	61.00	7.625E-002	9.843E-003
Cm-245	5.39	5.36	5.41	34.00	4.250E-002	7.395E-003
Pu-236	5.74	5.52	5.80	37.00	4.625E-002	7.706E-003
Cm-244	5.76	5.60	5.85	37.00	4.625E-002	7.706E-003
Cm-242	6.10	6.07	6.13	5.00	6.250E-003	3.062E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 1:17:50AM 4/26/2005

Sample

Sample Name: AV41 Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

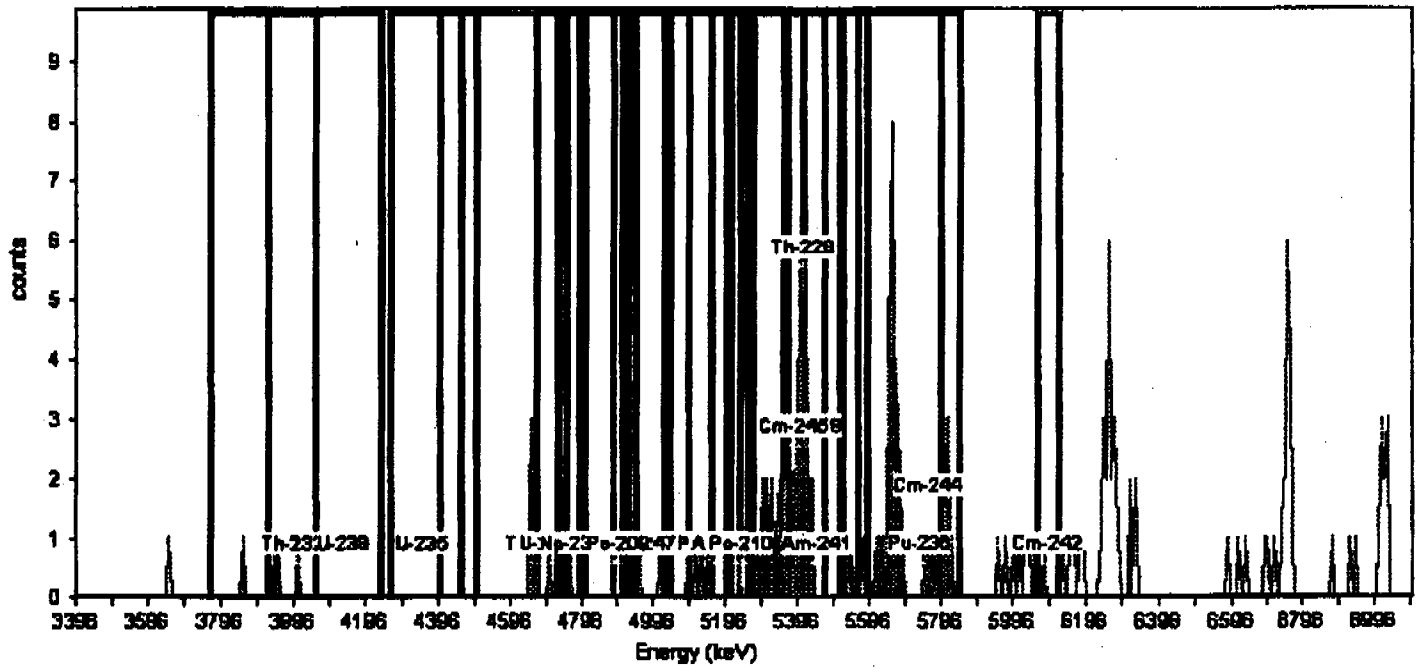
Description:

Acquisition

Detector: AV41 , SN: ALDR33
Acquisition Start Date: 4/25/2005 11:48:30AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV41
Calibration Date: 3/21/2005 12:30:51PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 23.34% +/- 0.24% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library

Total Background Counts: 175.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	4.00	5.000E-003	2.795E-003
U-238	4.14	3.93	4.24	3.00	3.750E-003	2.500E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	5.00	6.250E-003	3.062E-003
U-234	4.70	4.50	4.80	6.00	7.500E-003	3.307E-003
Pu-242	4.88	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	4.00	5.000E-003	2.795E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	6.00	7.500E-003	3.307E-003
Am-243	5.20	5.03	5.28	5.00	6.250E-003	3.062E-003
U-232	5.23	5.04	5.37	22.00	2.750E-002	5.995E-003
Th-228	5.41	5.16	5.47	45.00	5.625E-002	8.478E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	45.00	5.625E-002	8.478E-003
Am-241	5.45	5.27	5.57	45.00	5.625E-002	8.478E-003
Cm-245	5.39	5.36	5.41	24.00	3.000E-002	6.250E-003
Pu-236	5.74	5.52	5.80	32.00	4.000E-002	7.181E-003
Cm-244	5.76	5.60	5.85	38.00	4.750E-002	7.806E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:17:56AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV42 Spectrum #1 Analysis #1
Comment:

Batch

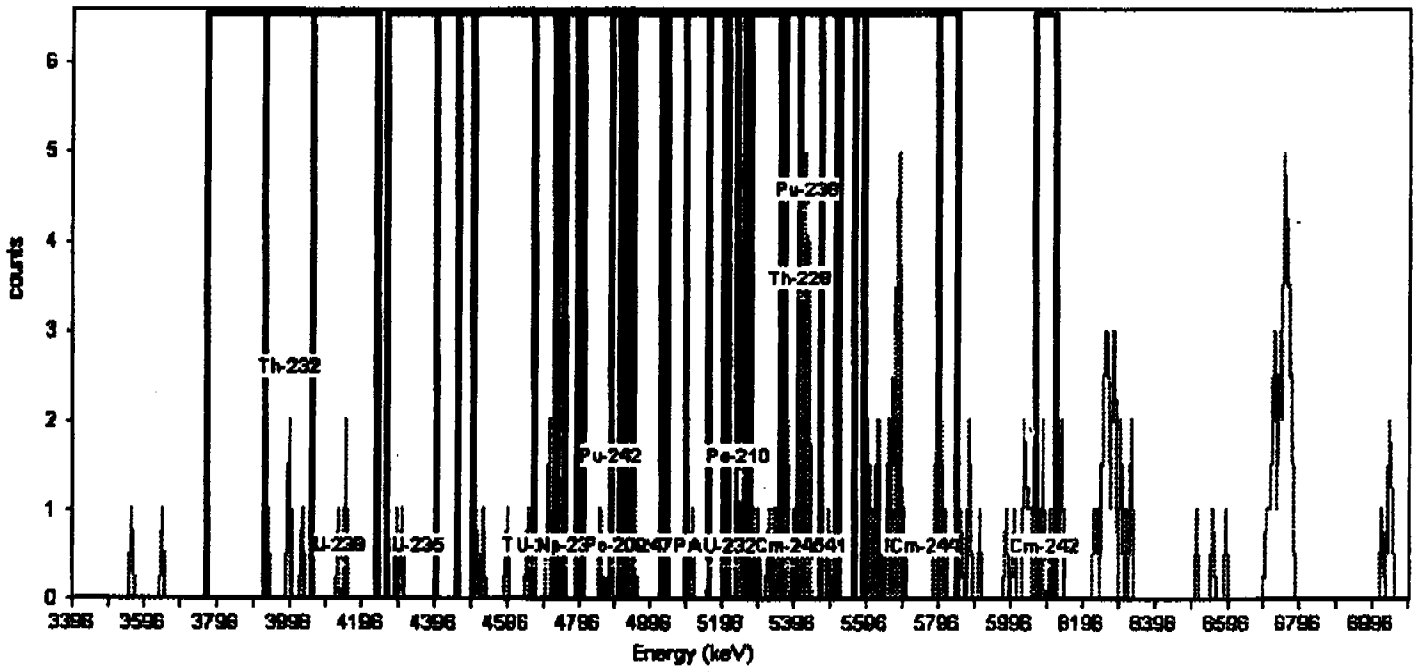
Batch Name: April_2005
Description:

Acquisition

Detector: AV42 , SN: ALDR34
Acquisition Start Date: 4/25/2005 11:48:32AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV42
Calibration Date: 3/21/2005 12:31:05PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 24.13% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 155.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	4.00	5.000E-003	2.795E-003
U-238	4.14	3.93	4.24	7.00	8.750E-003	3.536E-003
U-235	4.35	4.26	4.46	2.00	2.500E-003	2.165E-003
Th-230	4.67	4.40	4.73	6.00	7.500E-003	3.307E-003
U-234	4.70	4.50	4.80	7.00	8.750E-003	3.536E-003
Pu-242	4.88	4.67	4.93	6.00	7.500E-003	3.307E-003
Th-229	4.84	4.72	5.10	5.00	6.250E-003	3.062E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.98	4.88	5.04	3.00	3.750E-003	2.500E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	9.00	1.125E-002	3.953E-003
Th-228	5.41	5.16	5.47	28.00	3.500E-002	6.731E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	29.00	3.625E-002	6.847E-003
Am-241	5.45	5.27	5.57	28.00	3.500E-002	6.731E-003
Cm-245	5.39	5.36	5.41	7.00	8.750E-003	3.536E-003
Pu-236	5.74	5.52	5.80	25.00	3.125E-002	6.374E-003
Cm-244	5.76	5.60	5.85	28.00	3.500E-002	6.731E-003
Cm-242	6.10	6.07	6.13	6.00	7.500E-003	3.307E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 1:18:01AM 4/26/2005

Sample

Sample Name: AV43 Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

Description:

Acquisition

Detector: AV43 , SN: AV43
Acquisition Start Date: 4/25/2005 11:48:33AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV43
Calibration Date: 3/17/2005 12:19:51PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.51% +/- 0.27% TPU(2 sigma)

General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library

Total Background Counts: 14.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.60	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.96	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	1.00	1.250E-003	1.768E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	1.00	1.250E-003	1.768E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	3.00	3.750E-003	2.500E-003
Cm-244	5.76	5.60	5.85	3.00	3.750E-003	2.500E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:07AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV44
Comment:

Spectrum #1 Analysis #1

Batch

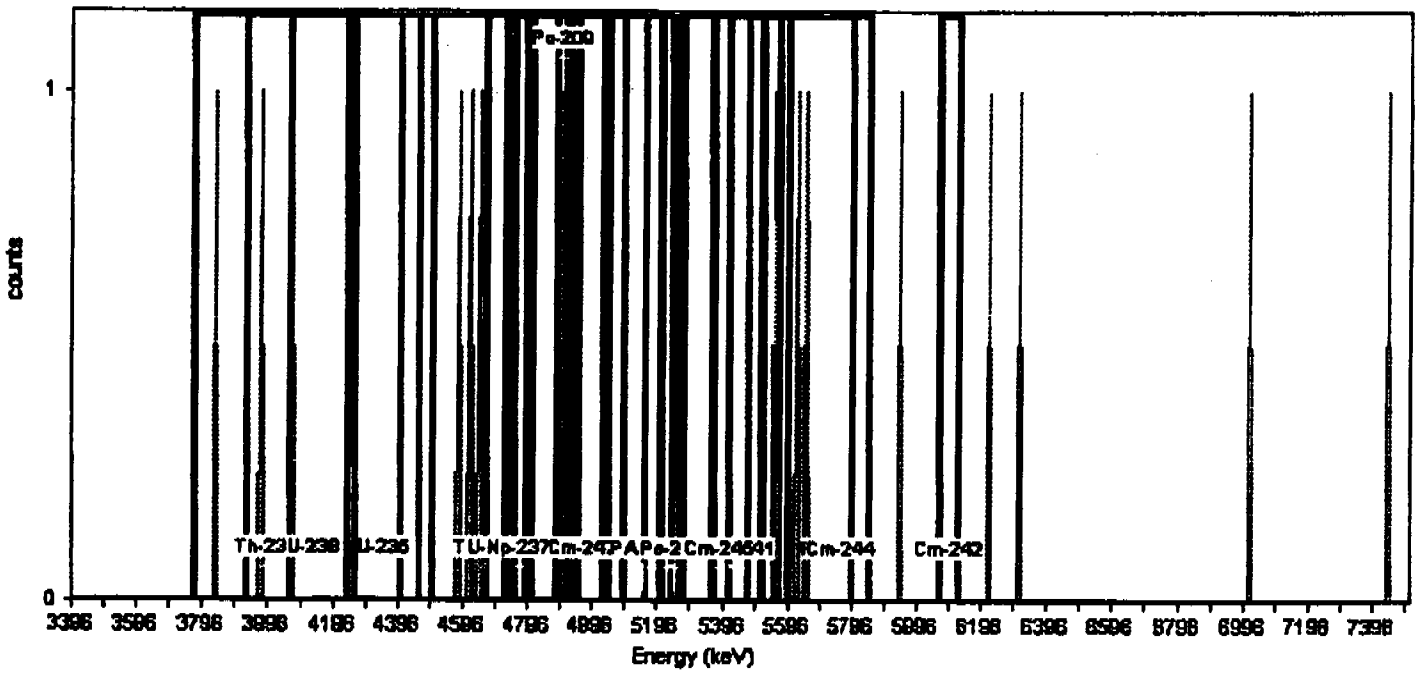
Batch Name: April_2005
Description:

Acquisition

Detector: AV44 , SN: AV44
Acquisition Start Date: 4/25/2005 11:48:35AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV44
Calibration Date: 3/17/2005 12:19:57PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 28.18% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Library: Background ROI Library
Total Background Counts: 15.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	2.00	2.500E-003	2.165E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	3.00	3.750E-003	2.500E-003
U-234	4.70	4.50	4.80	3.00	3.750E-003	2.500E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.768E-003
Th-228	5.41	5.16	5.47	0.00	0.000E+000	1.768E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	0.00	0.000E+000	1.768E-003
Am-241	5.45	5.27	5.57	1.00	1.250E-003	1.768E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	3.00	3.750E-003	2.500E-003
Cm-244	5.76	5.60	5.85	2.00	2.500E-003	2.165E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:54:44AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV45
Comment:

Spectrum #1 Analysis #1

Batch

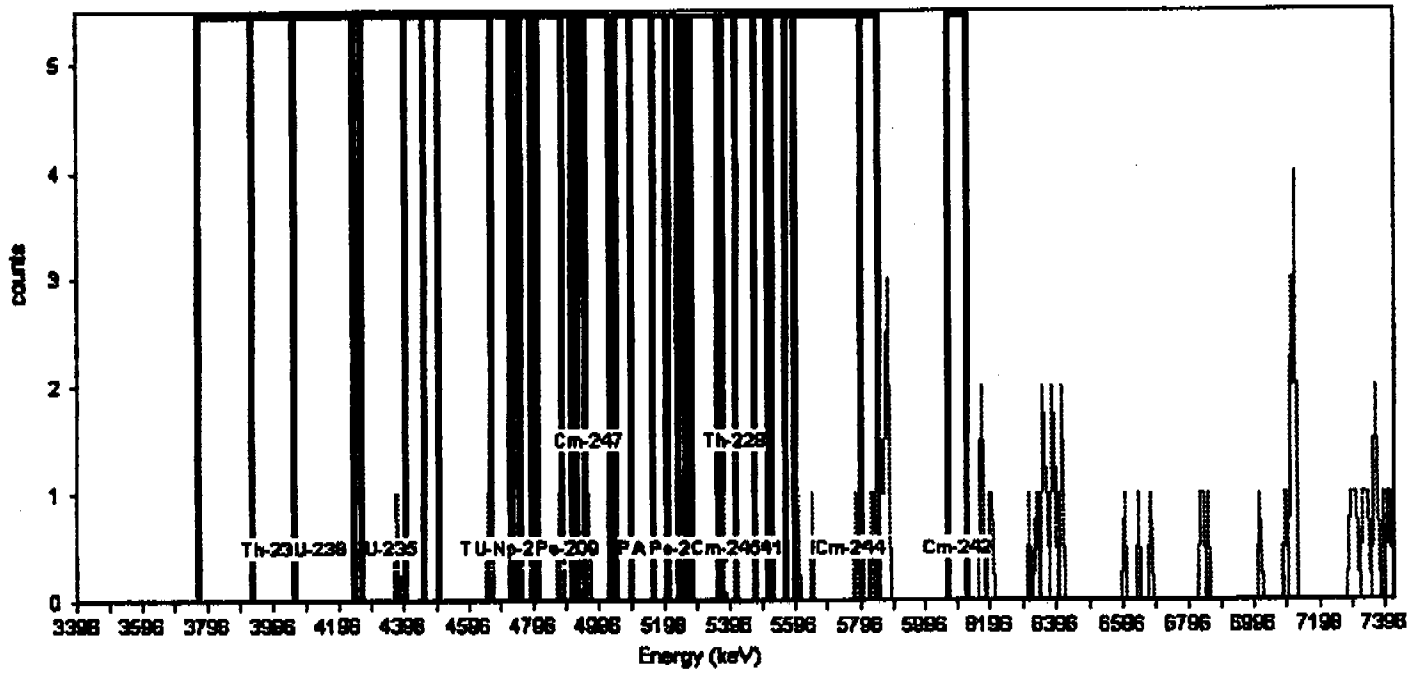
Batch Name: April_2005
Description:

Acquisition

Detector: AV45 , SN: AV45
Acquisition Start Date: 4/26/2005 12:34:24PM
Live Time: 800.00 min.
Real Time: 800.00 min.
Calibration Name: March2005_AV45
Calibration Date: 3/17/2005 12:20:04PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.96% +/- 0.30% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 70.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.768E-003
Th-228	5.41	5.16	5.47	2.00	2.500E-003	2.165E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	4.00	5.000E-003	2.795E-003
Cm-244	5.76	5.60	5.85	7.00	8.750E-003	3.536E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:13AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV46
Comment:

Spectrum #1 Analysis #1

Batch

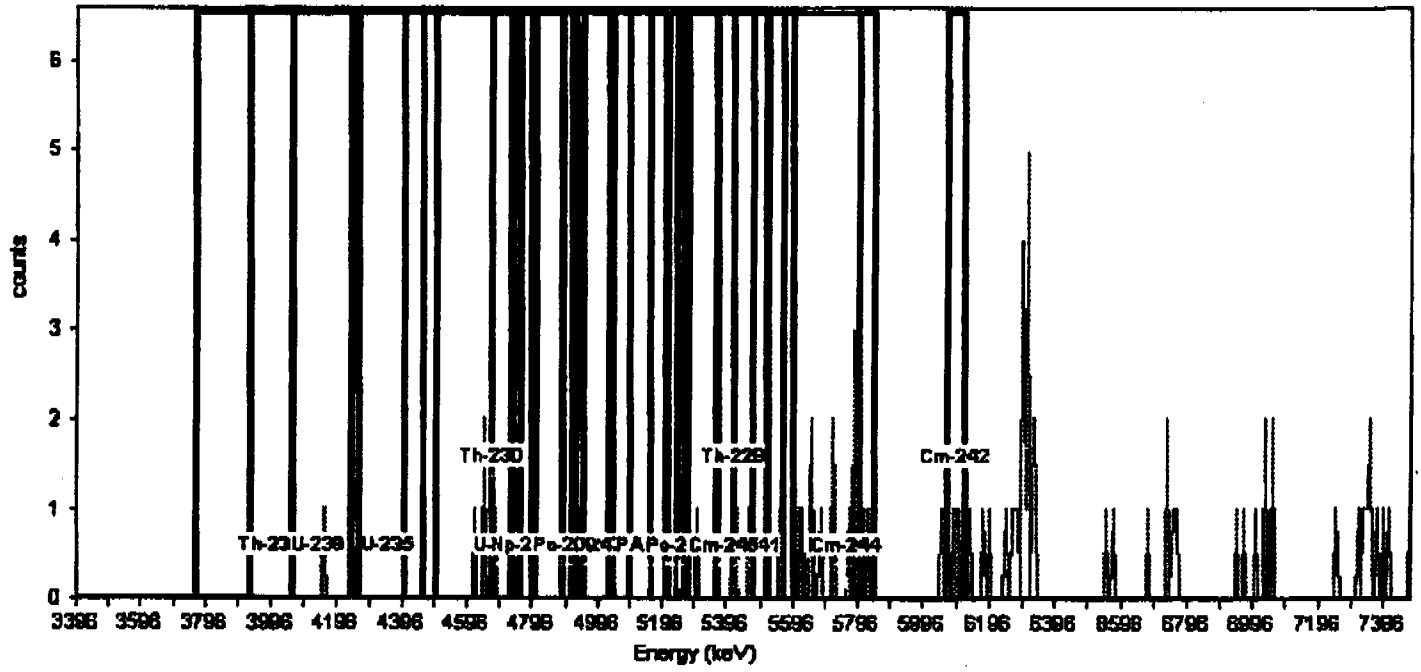
Batch Name: April_2005
Description:

Acquisition

Detector: AV46 , SN: AV46
Acquisition Start Date: 4/25/2005 11:48:40AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV46
Calibration Date: 3/17/2005 12:20:10PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 29.31% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 82.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	5.00	6.250E-003	3.062E-003
U-234	4.70	4.50	4.80	5.00	6.250E-003	3.062E-003
Pu-242	4.88	4.67	4.93	3.00	3.750E-003	2.500E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	5.00	6.250E-003	3.062E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	5.00	6.250E-003	3.062E-003
Am-241	5.45	5.27	5.57	6.00	7.500E-003	3.307E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	15.00	1.875E-002	5.000E-003
Cm-244	5.76	5.60	5.85	17.00	2.125E-002	5.303E-003
Cm-242	6.10	6.07	6.13	4.00	5.000E-003	2.795E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:18AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV47
Spectrum #1 Analysis #1
Comment:

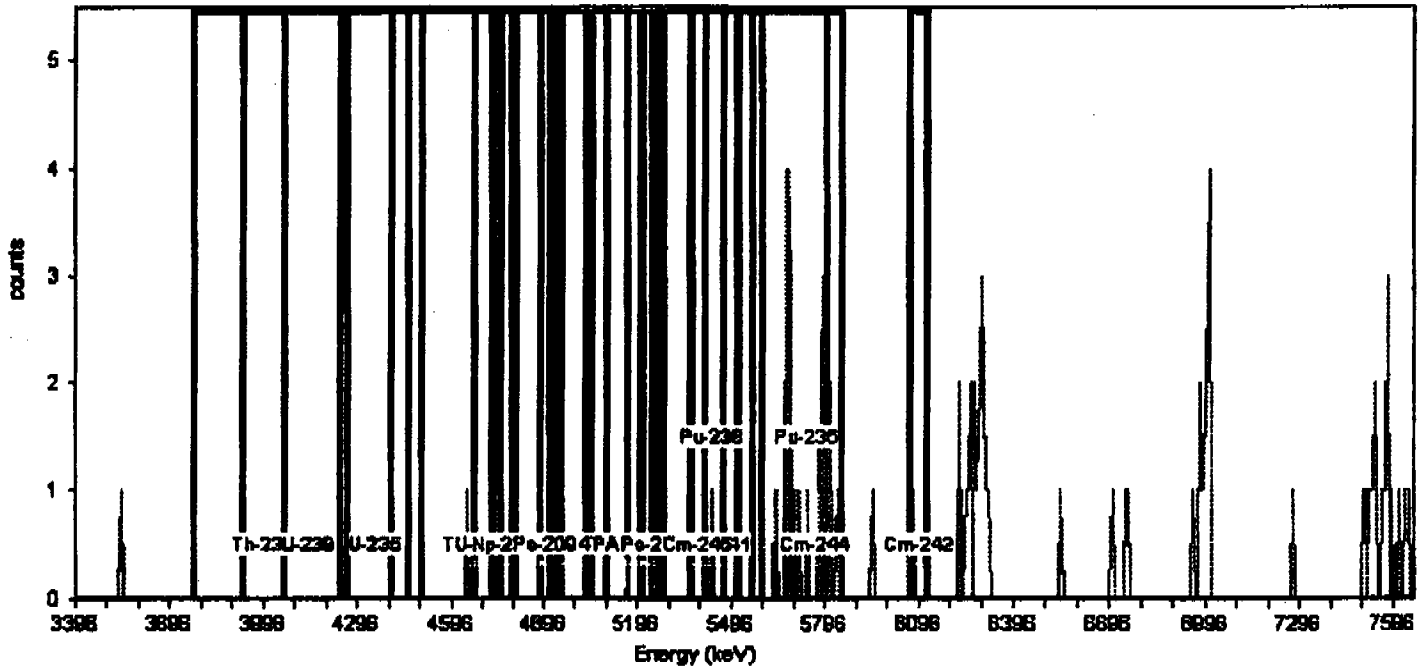
Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV47 , SN: AV47
Acquisition Start Date: 4/25/2005 11:48:42AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV47
Calibration Date: 3/17/2005 4:29:23PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.70% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI, Library: Background ROI Library
Total Background Counts: 82.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.86	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	2.00	2.500E-003	2.165E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	19.00	2.375E-002	5.590E-003
Cm-244	5.78	5.80	5.85	24.00	3.000E-002	6.250E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

SEVERN TRENT **STL**

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 1:18:24AM 4/26/2005

Sample

Sample Name: AV48 Spectrum #1 Analysis #1
Comment:

Batch

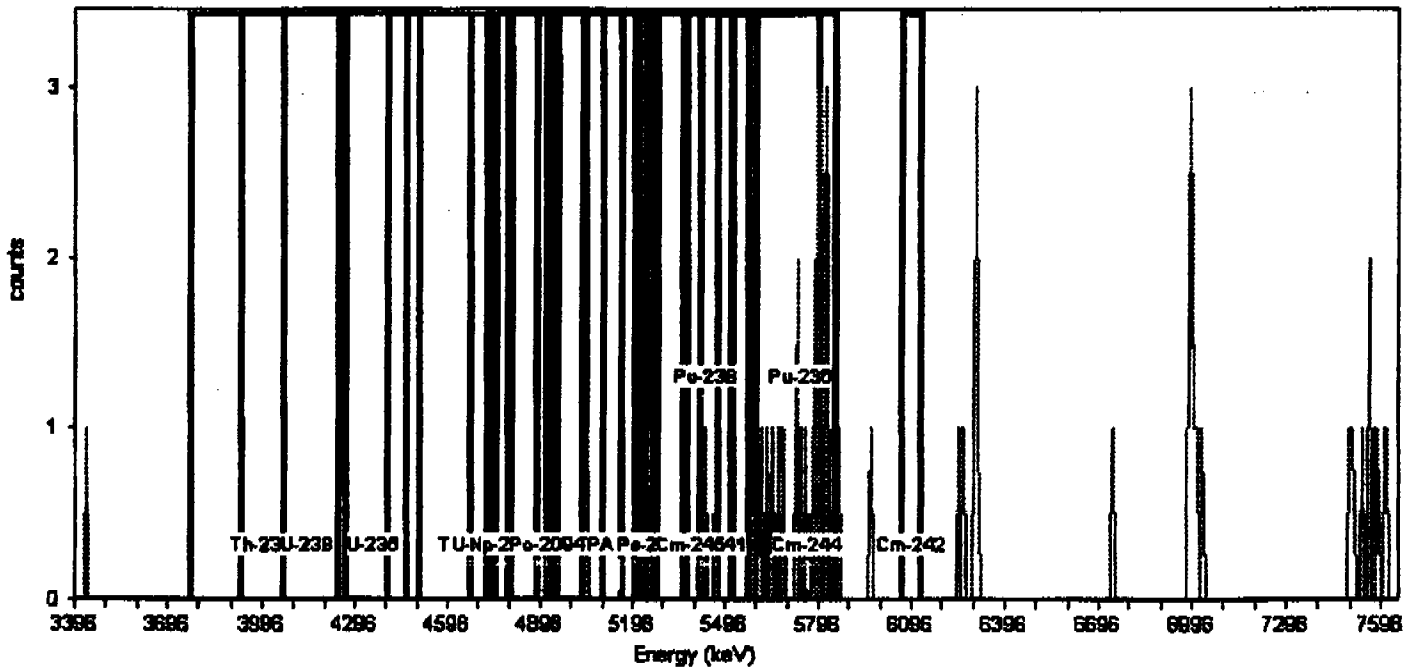
Batch Name: April_2005
Description:

Acquisition

Detector: AV48 , SN: AV48
Acquisition Start Date: 4/25/2005 11:48:43AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV48
Calibration Date: 3/17/2005 4:29:35PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.24% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 62.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	3.00	3.750E-003	2.500E-003
Am-241	5.45	5.27	5.57	3.00	3.750E-003	2.500E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	18.00	2.250E-002	5.449E-003
Cm-244	5.76	5.60	5.85	24.00	3.000E-002	6.250E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 1:18:29AM 4/26/2005

Sample

Sample Name: AV49 Spectrum #1 Analysis #1
Comment:

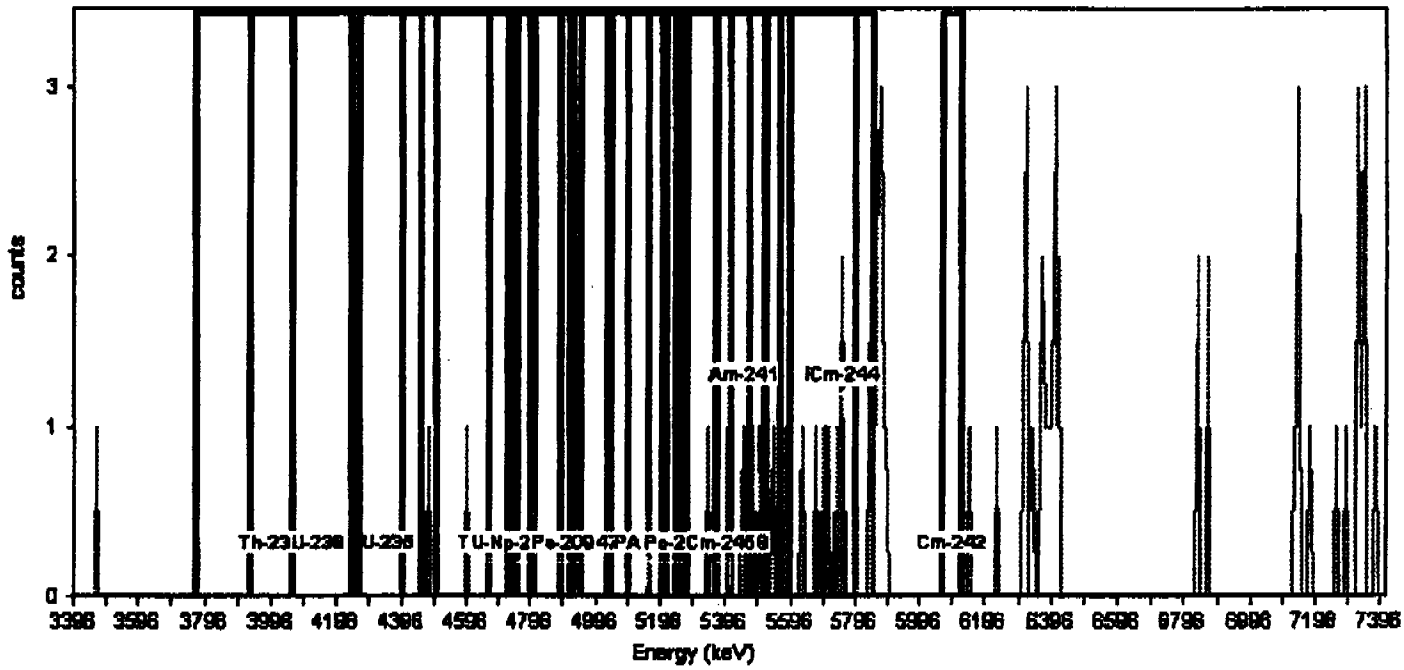
Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV49 , SN: AV49
Acquisition Start Date: 4/25/2005 11:48:45AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV49
Calibration Date: 3/17/2005 4:29:42PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.84% +/- 0.30% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 81.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	2.00	2.500E-003	2.165E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.98	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	6.00	7.500E-003	3.307E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	7.00	8.750E-003	3.536E-003
Am-241	5.45	5.27	5.57	8.00	1.000E-002	3.750E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	13.00	1.625E-002	4.677E-003
Cm-244	5.76	5.60	5.85	13.00	1.625E-002	4.677E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:35AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV50
Comment:

Spectrum #1 Analysis #1

Batch

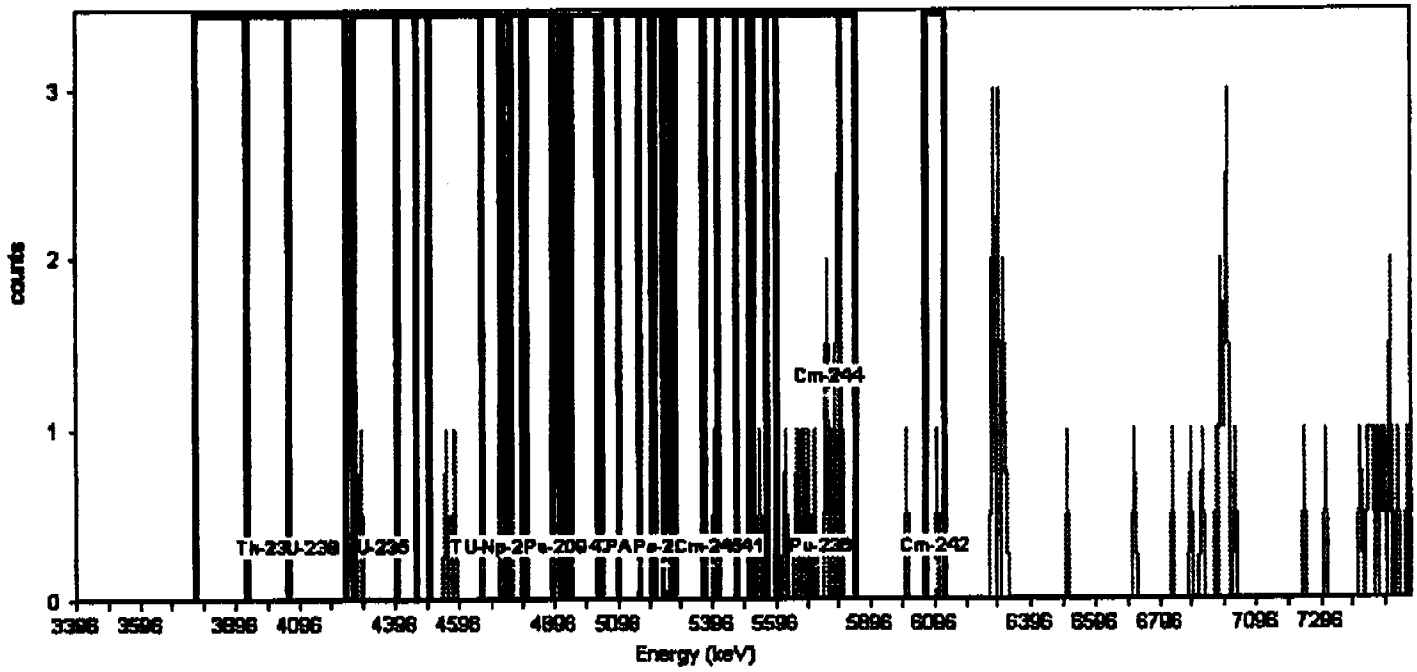
Batch Name: April_2005
Description:

Acquisition

Detector: AV50 , SN: AV50
Acquisition Start Date: 4/25/2005 11:48:47AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV50
Calibration Date: 3/17/2005 4:29:48PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.29% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI, Library: Background ROI Library
Total Background Counts: 65.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	3.00	3.750E-003	2.500E-003
U-234	4.70	4.50	4.80	4.00	5.000E-003	2.795E-003
Pu-242	4.88	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.768E-003
Th-228	5.41	5.16	5.47	1.00	1.250E-003	1.768E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	1.00	1.250E-003	1.768E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	16.00	2.000E-002	5.154E-003
Cm-244	5.76	5.60	5.85	17.00	2.125E-002	5.303E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:40AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV51
Comment:

Spectrum #1 Analysis #1

Batch

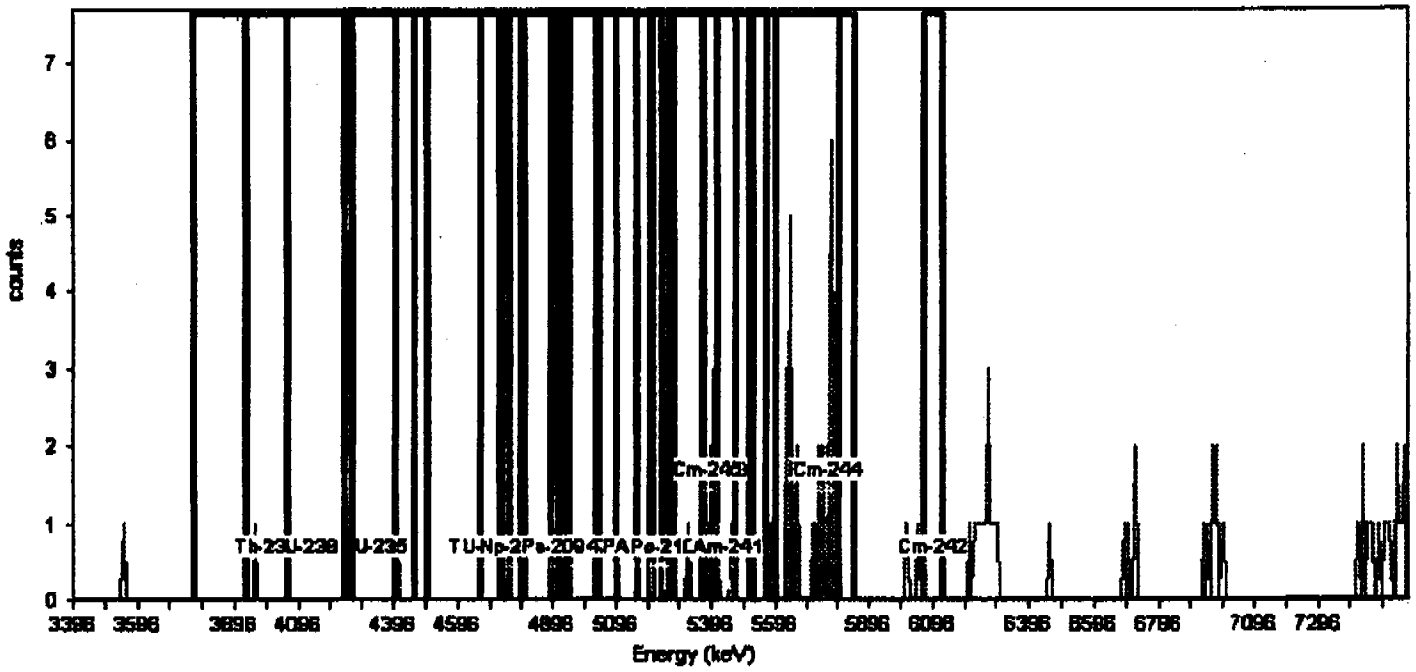
Batch Name: April_2005
Description:

Acquisition

Detector: AV51 , SN:
Acquisition Start Date: 4/25/2005 11:48:48AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV51
Calibration Date: 3/18/2005 12:58:33PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.39% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROU[illegible]Library: Background ROI Library
Total Background Counts: 98.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Pu-236	5.74	5.52	5.80	34.00	4.250E-002	7.395E-003
Cm-244	5.76	5.80	5.85	33.00	4.125E-002	7.289E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	3.00	3.750E-003	2.500E-003
Th-228	5.41	5.16	5.47	12.00	1.500E-002	4.507E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	11.00	1.375E-002	4.330E-003
Am-241	5.45	5.27	5.57	11.00	1.375E-002	4.330E-003
Cm-245	5.39	5.36	5.41	9.00	1.125E-002	3.953E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:46AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV52
Comment:

Spectrum #1 Analysis #1

Batch

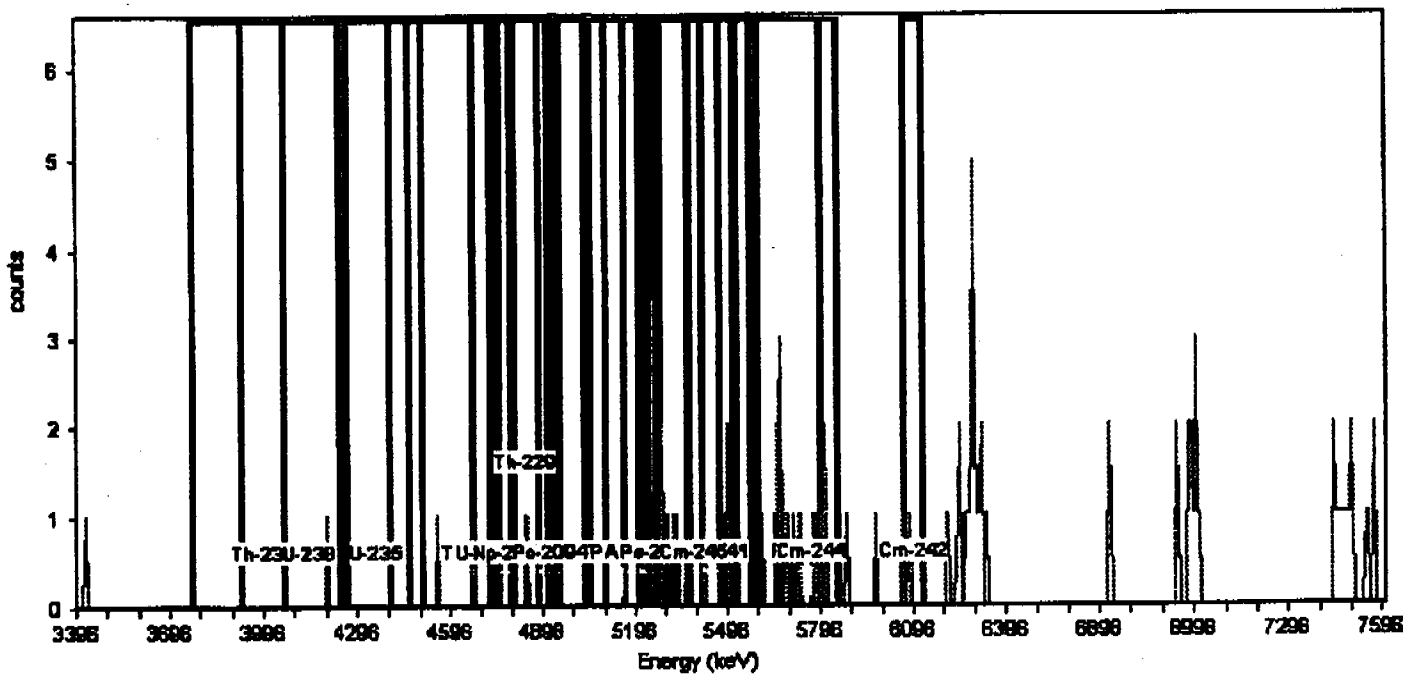
Batch Name: April_2005
Description:

Acquisition

Detector: AV52 , SN:
Acquisition Start Date: 4/25/2005 11:48:50AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV52
Calibration Date: 3/18/2005 12:58:40PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.60% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 91.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.86	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	7.00	8.750E-003	3.536E-003
Th-228	5.41	5.16	5.47	8.00	1.000E-002	3.750E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	10.00	1.250E-002	4.146E-003
Am-241	5.45	5.27	5.57	10.00	1.250E-002	4.146E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	17.00	2.125E-002	5.303E-003
Cm-244	5.76	5.60	5.85	20.00	2.500E-002	5.728E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:51AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV53
Comment:

Spectrum #1 Analysis #1

Batch

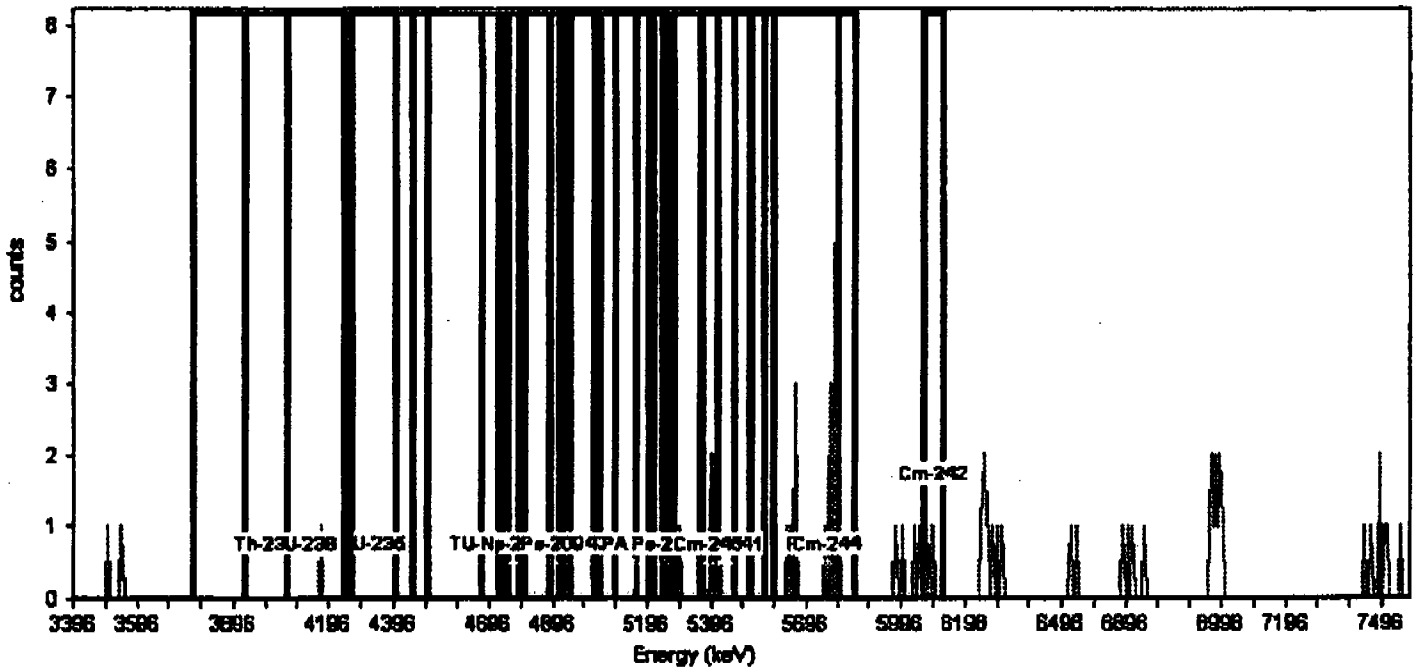
Batch Name: April_2005
Description:

Acquisition

Detector: AV53 , SN:
Acquisition Start Date: 4/25/2005 11:48:51AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV53
Calibration Date: 3/18/2005 12:58:46PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.69% +/- 0.30% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 68.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.86	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	6.00	7.500E-003	3.307E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	6.00	7.500E-003	3.307E-003
Am-241	5.46	5.27	5.57	6.00	7.500E-003	3.307E-003
Cm-245	5.39	5.36	5.41	4.00	5.000E-003	2.795E-003
Pu-236	5.74	5.52	5.80	21.00	2.625E-002	5.863E-003
Cm-244	5.76	5.60	5.85	22.00	2.750E-002	5.995E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:57AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV54
Comment:

Spectrum #1 Analysis #1

Batch

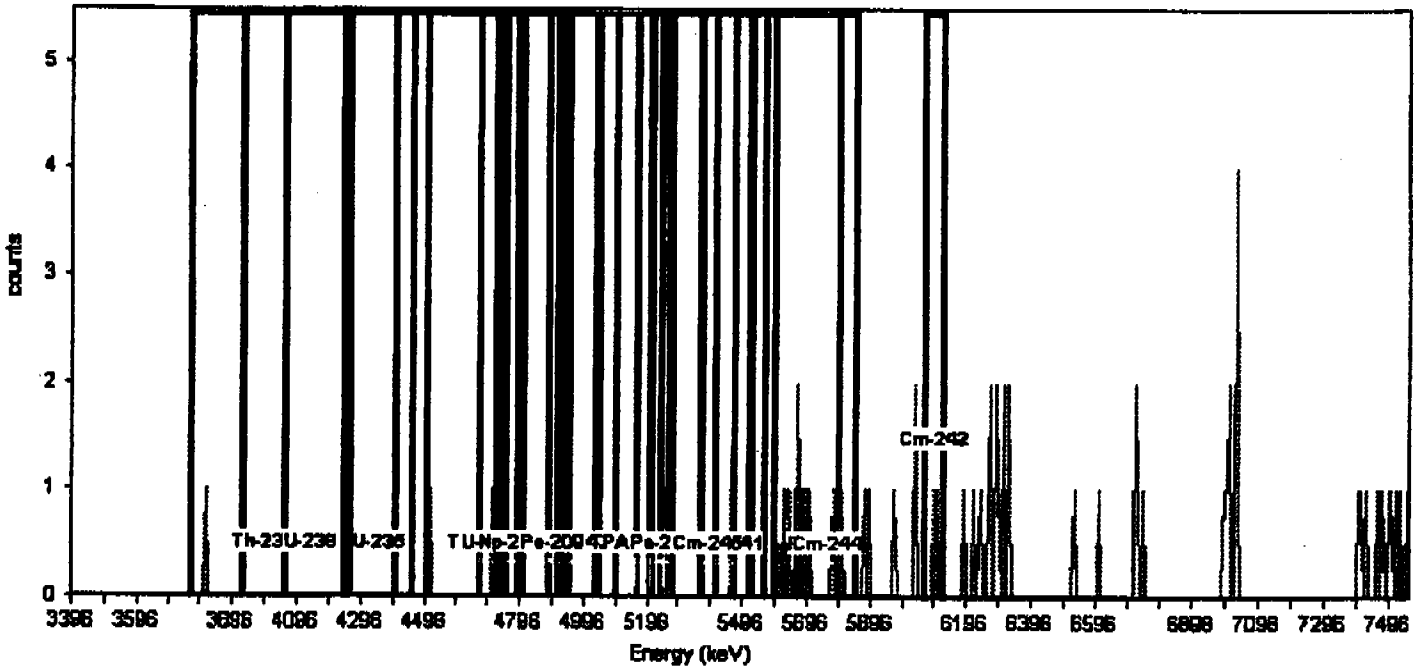
Batch Name: April_2005
Description:

Acquisition

Detector: AV54 , SN:
Acquisition Start Date: 4/25/2005 11:48:54AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV54
Calibration Date: 3/18/2005 12:58:53PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.27% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI, Library: Background ROI Library
Total Background Counts: 64.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	2.00	2.500E-003	2.165E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	2.00	2.500E-003	2.165E-003
Po-210	5.25	5.20	5.28	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.45	5.27	5.57	1.00	1.250E-003	1.768E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	14.00	1.750E-002	4.841E-003
Cm-244	5.78	5.60	5.85	15.00	1.875E-002	5.000E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:19:02AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV55 Spectrum #1 Analysis #1
Comment:

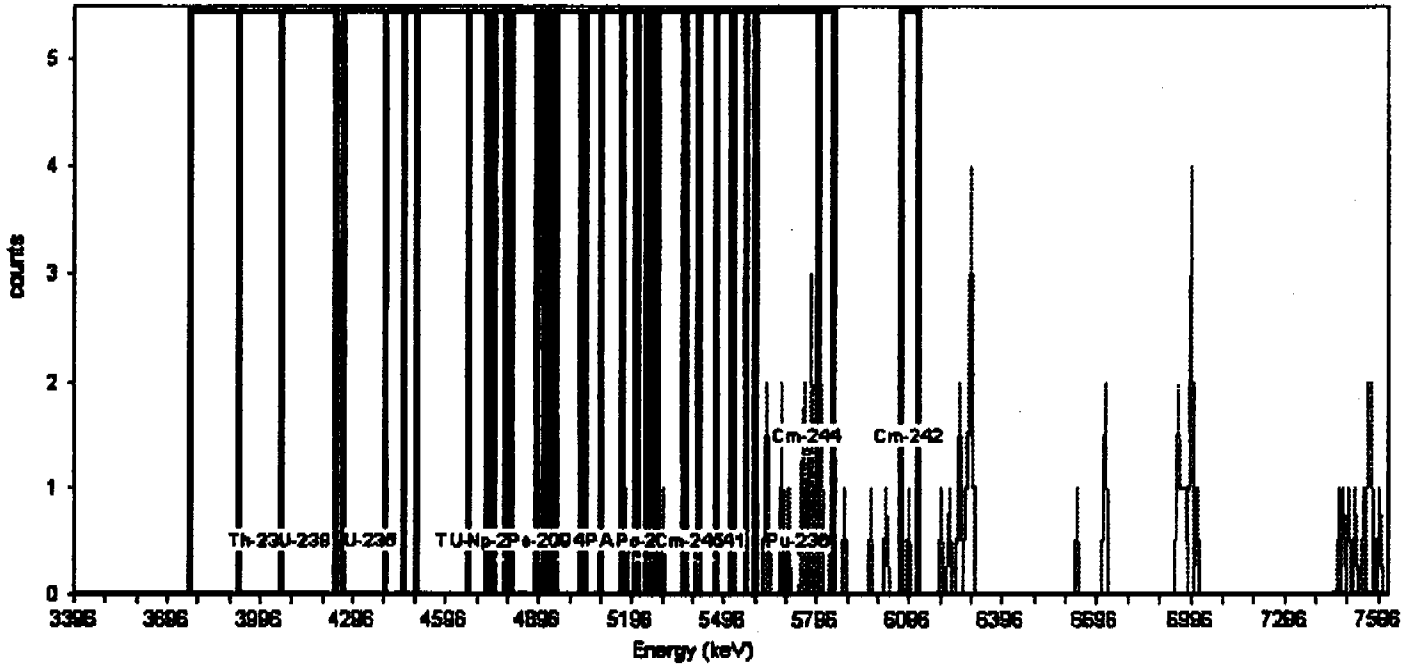
Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV55 , SN:
Acquisition Start Date: 4/25/2005 11:48:56AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: Mar2005_AV55
Calibration Date: 3/18/2005 9:23:08AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 26.78% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Nuclide Library: Background ROI Library
Total Background Counts: 67.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.36	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.26	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	16.00	2.000E-002	5.154E-003
Cm-244	5.76	5.60	5.85	20.00	2.500E-002	5.728E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:19:08AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV56
Comment:

Spectrum #1 Analysis #1

Batch

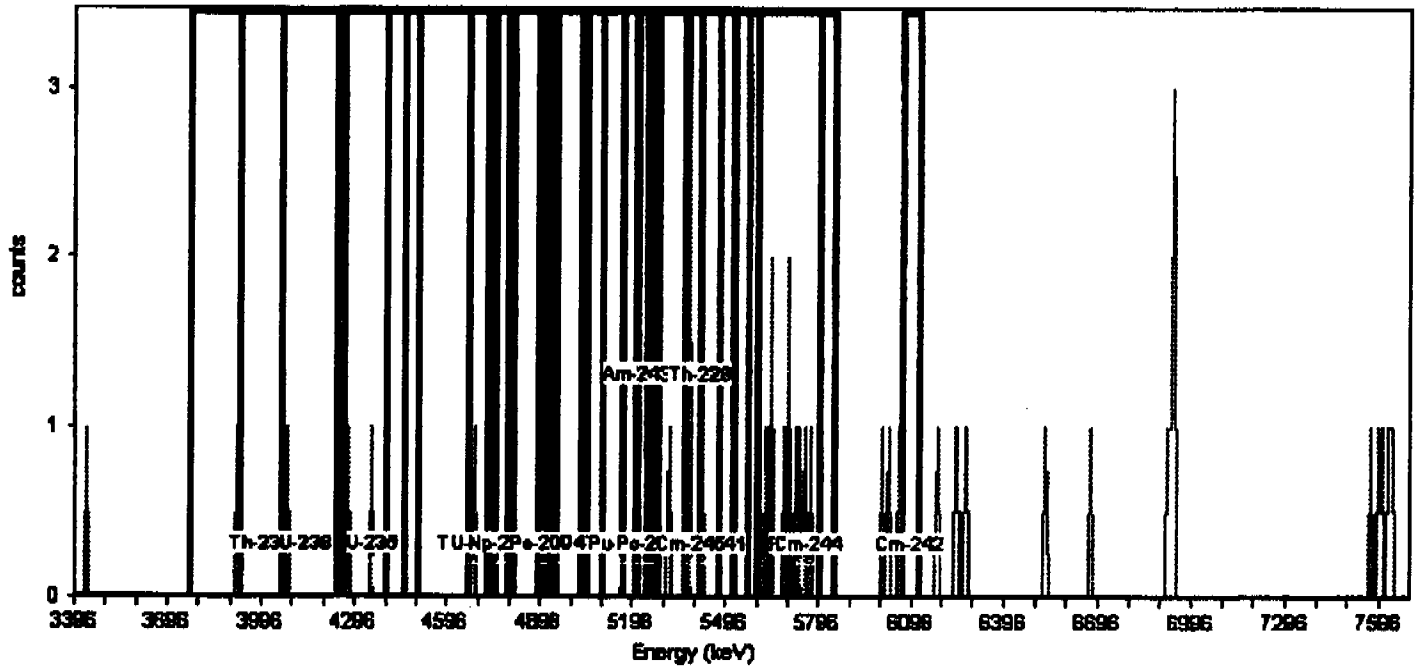
Batch Name: April_2005
Description:

Acquisition

Detector: AV56 , SN:
Acquisition Start Date: 4/25/2005 11:48:57AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: Mar2005_AV56
Calibration Date: 3/18/2005 9:23:19AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 25.92% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 49.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Pu-236	5.74	5.52	5.80	11.00	1.375E-002	4.330E-003
Cm-244	5.76	5.60	5.85	11.00	1.375E-002	4.330E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	3.00	3.750E-003	2.500E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	3.00	3.750E-003	2.500E-003
Th-228	5.41	5.16	5.47	8.00	1.000E-002	3.750E-003
Po-210	5.25	5.20	5.28	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	7.00	8.750E-003	3.536E-003
Am-241	5.45	5.27	5.67	7.00	8.750E-003	3.536E-003
Cm-245	5.39	5.36	5.41	5.00	6.250E-003	3.062E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:19:13AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV57
Comment:

Spectrum #1 Analysis #1

Batch

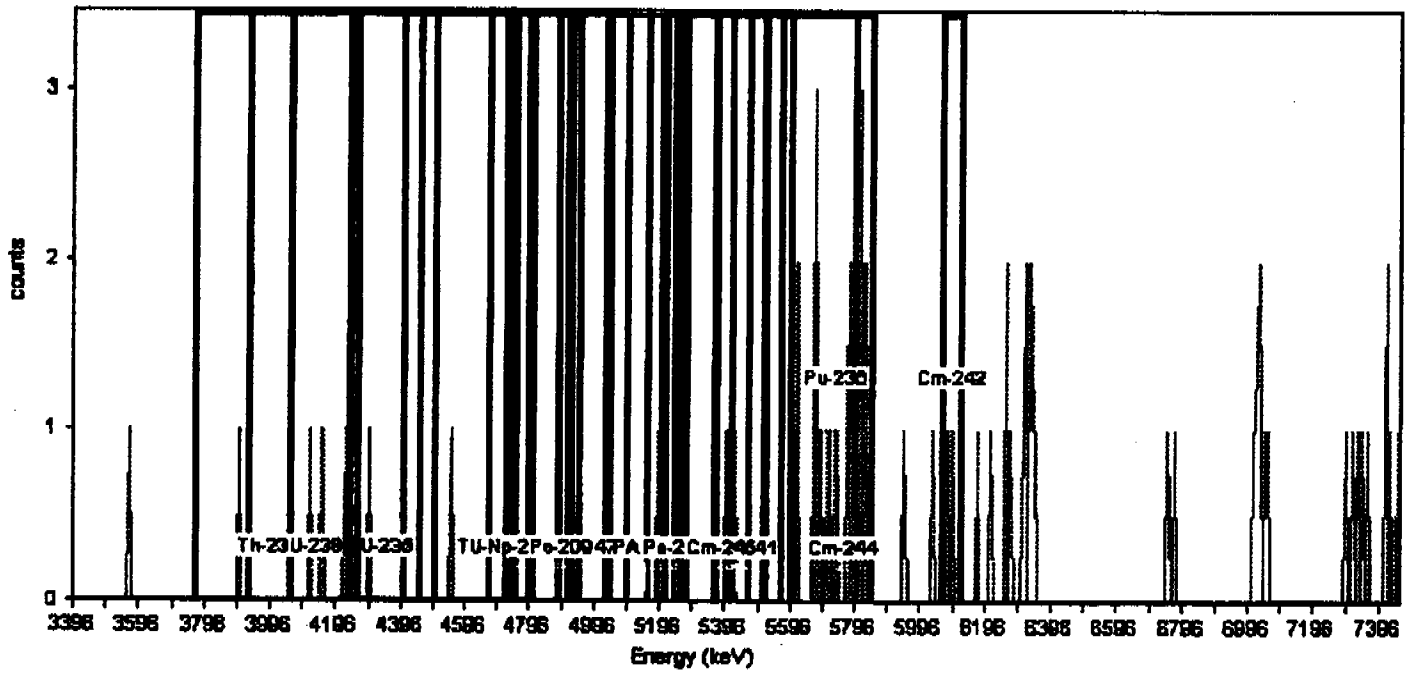
Batch Name: April_2005
Description:

Acquisition

Detector: AV57 , SN:
Acquisition Start Date: 4/25/2005 11:48:59AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: Mar2005_AV57
Calibration Date: 3/18/2005 9:23:31AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.01% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI, Library: Background ROI Library
Total Background Counts: 67.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	3.00	3.750E-003	2.500E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.86	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	16.00	2.000E-002	5.154E-003
Cm-244	5.76	5.60	5.85	23.00	2.875E-002	6.124E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:19:19AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV58
Comment:

Spectrum #1 Analysis #1

Batch

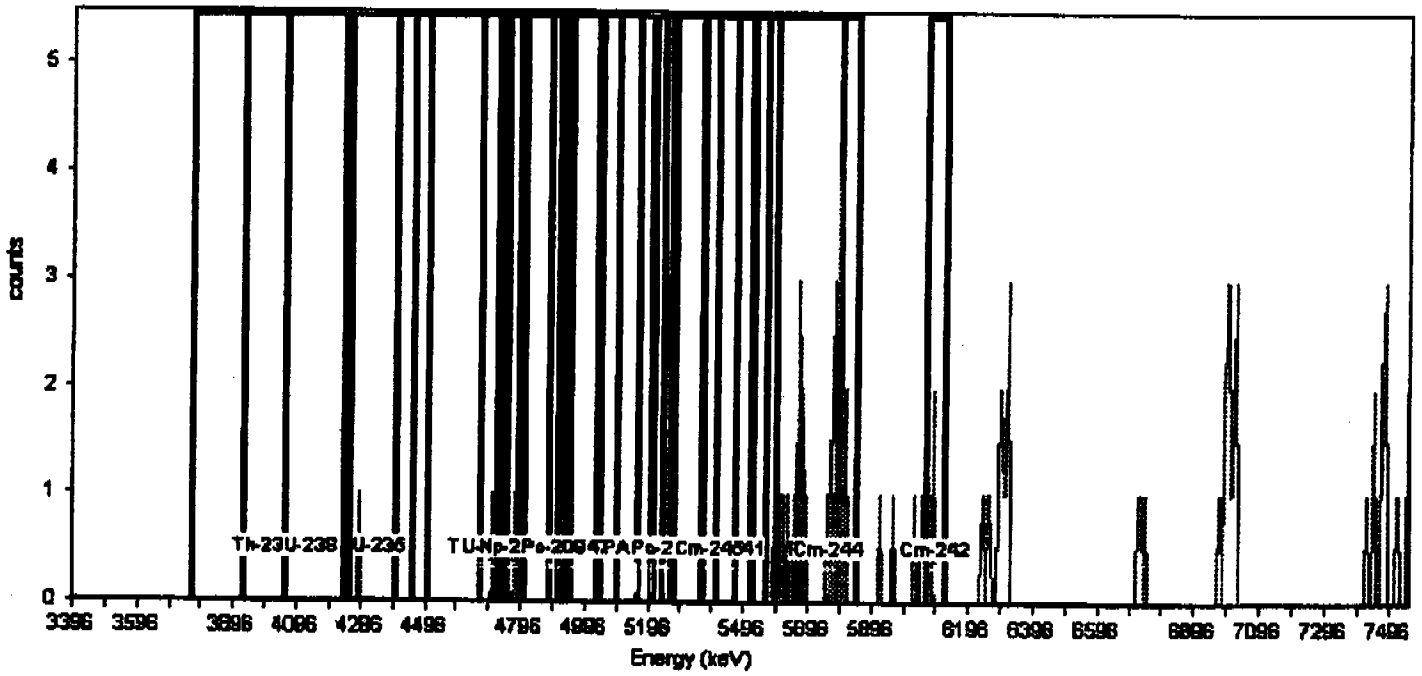
Batch Name: April_2005
Description:

Acquisition

Detector: AV58 , SN:
Acquisition Start Date: 4/25/2005 11:49:00AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: Mar2005_AV58
Calibration Date: 3/18/2005 9:23:40AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²

Efficiency: 27.78% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 76.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	2.00	2.500E-003	2.165E-003
Pu-242	4.88	4.67	4.93	3.00	3.750E-003	2.500E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.768E-003
Th-228	5.41	5.16	5.47	0.00	0.000E+000	1.768E-003
Po-210	5.26	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	0.00	0.000E+000	1.768E-003
Am-241	5.45	5.27	5.57	0.00	0.000E+000	1.768E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	23.00	2.875E-002	6.124E-003
Cm-244	5.76	5.60	5.85	26.00	3.250E-002	6.495E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 1:19:24AM 4/26/2005

Sample

Sample Name: AV59 Spectrum #1 Analysis #1
Comment:

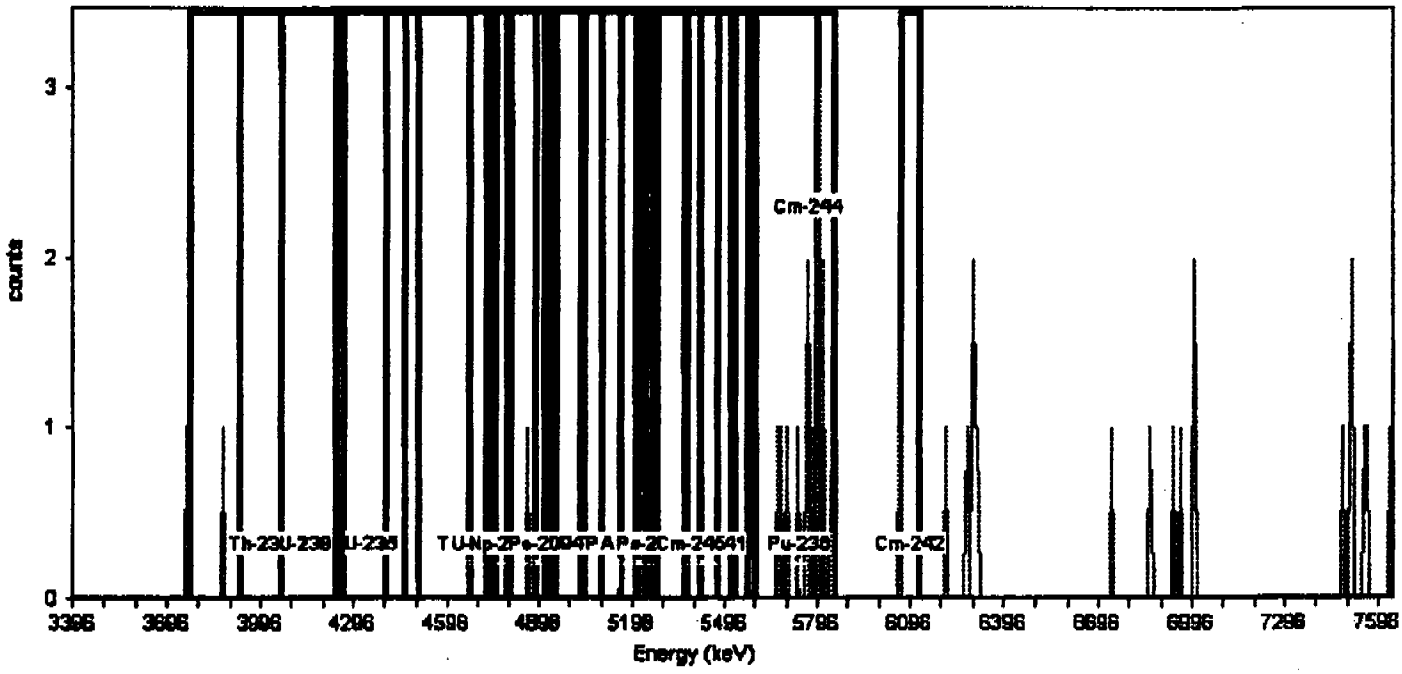
Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV59 , SN:
Acquisition Start Date: 4/25/2005 11:48:22AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV59
Calibration Date: 3/18/2005 1:41:17AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.09% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 40.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-236	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.28	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.768E-003
Th-228	5.41	5.16	5.47	0.00	0.000E+000	1.768E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	0.00	0.000E+000	1.768E-003
Am-241	5.45	5.27	5.57	0.00	0.000E+000	1.768E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	11.00	1.375E-002	4.330E-003
Cm-244	5.76	5.60	5.85	14.00	1.750E-002	4.641E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 1:19:30AM 4/26/2005

Sample

Sample Name: AV60 Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

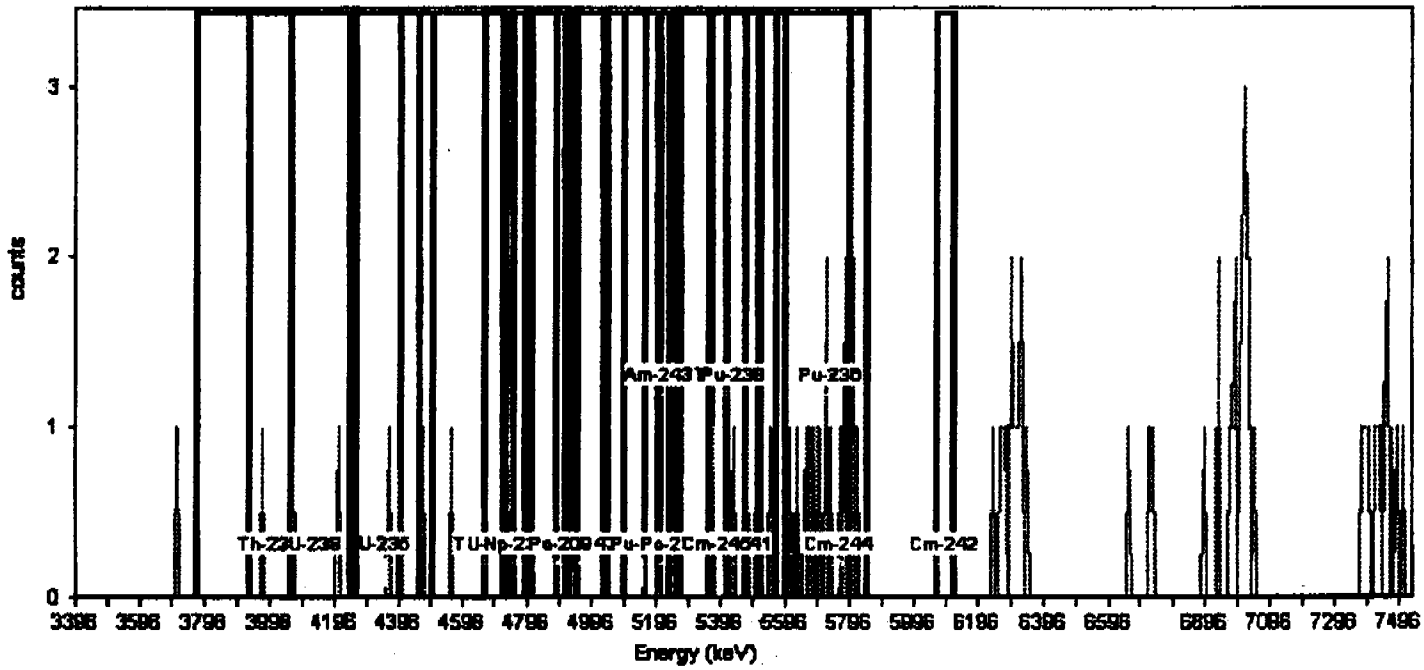
Description:

Acquisition

Detector: AV60 , SN:
Acquisition Start Date: 4/25/2005 11:48:23AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV60
Calibration Date: 3/18/2005 1:41:25AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 28.01% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library

Total Background Counts: 83.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	3.00	3.750E-003	2.500E-003
U-235	4.35	4.28	4.46	2.00	2.500E-003	2.165E-003
Th-230	4.67	4.40	4.73	3.00	3.750E-003	2.500E-003
U-234	4.70	4.50	4.80	2.00	2.500E-003	2.165E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	4.00	5.000E-003	2.795E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	5.00	6.250E-003	3.062E-003
Am-241	5.45	5.27	5.57	6.00	7.500E-003	3.307E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	15.00	1.875E-002	5.000E-003
Cm-244	5.76	5.60	5.85	19.00	2.375E-002	5.590E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:19:36AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV61
Comment:

Spectrum #1 Analysis #1

Batch

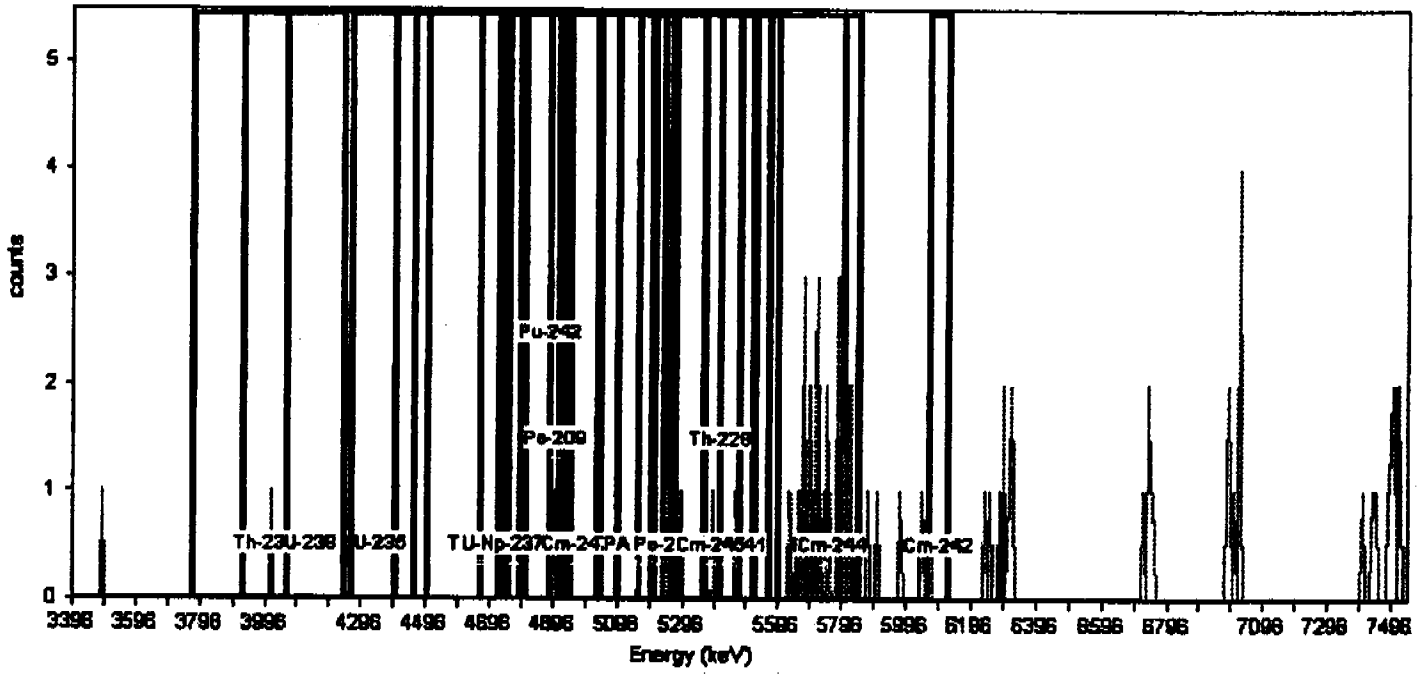
Batch Name: April_2005
Description:

Acquisition

Detector: AV61 , SN:
Acquisition Start Date: 4/25/2005 11:48:24AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV61
Calibration Date: 3/18/2005 1:41:36AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²

Efficiency: 27.35% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Library: Background ROI Library
Total Background Counts: 78.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.86	4.67	4.93	3.00	3.750E-003	2.500E-003
Th-229	4.84	4.72	5.10	3.00	3.750E-003	2.500E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	3.00	3.750E-003	2.500E-003
Po-209	4.90	4.88	4.91	3.00	3.750E-003	2.500E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	5.00	6.250E-003	3.062E-003
Po-210	5.25	5.20	5.28	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	5.00	6.250E-003	3.062E-003
Am-241	5.45	5.27	5.57	4.00	5.000E-003	2.795E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	24.00	3.000E-002	6.250E-003
Cm-244	5.76	5.60	5.85	28.00	3.500E-002	6.731E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:15:30AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV62
Comment:

Spectrum #1 Analysis #1

Batch

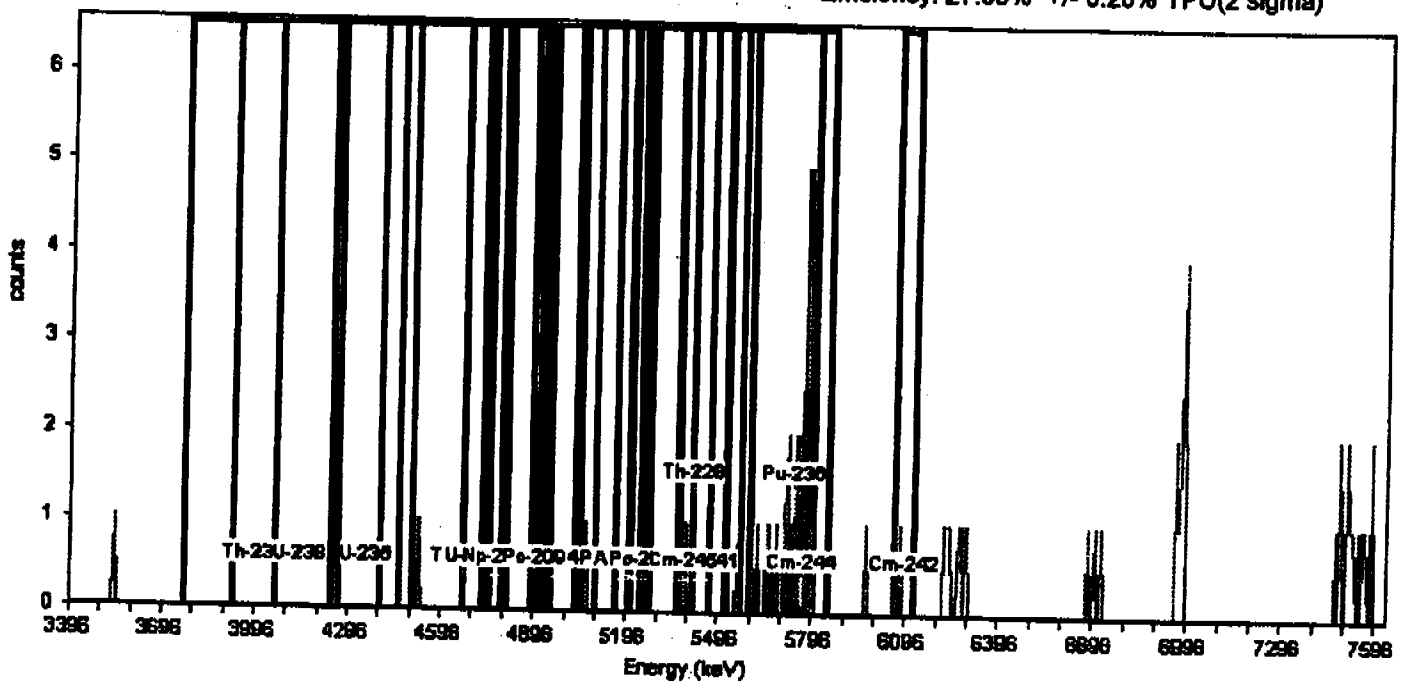
Batch Name: April_2005
Description:

Acquisition

Detector: AV62 , SN:
Acquisition Start Date: 4/25/2005 11:48:25AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV62
Calibration Date: 3/18/2005 1:41:44AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²

Efficiency: 27.65% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 68.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	2.00	2.500E-003	2.165E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.45	5.27	5.57	3.00	3.750E-003	2.500E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	26.00	3.250E-002	6.495E-003
Cm-244	5.76	5.60	5.85	25.00	3.125E-002	6.374E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

SEVERN TRENT **STL**

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:15:36AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV63
Comment:

Spectrum #1 Analysis #1

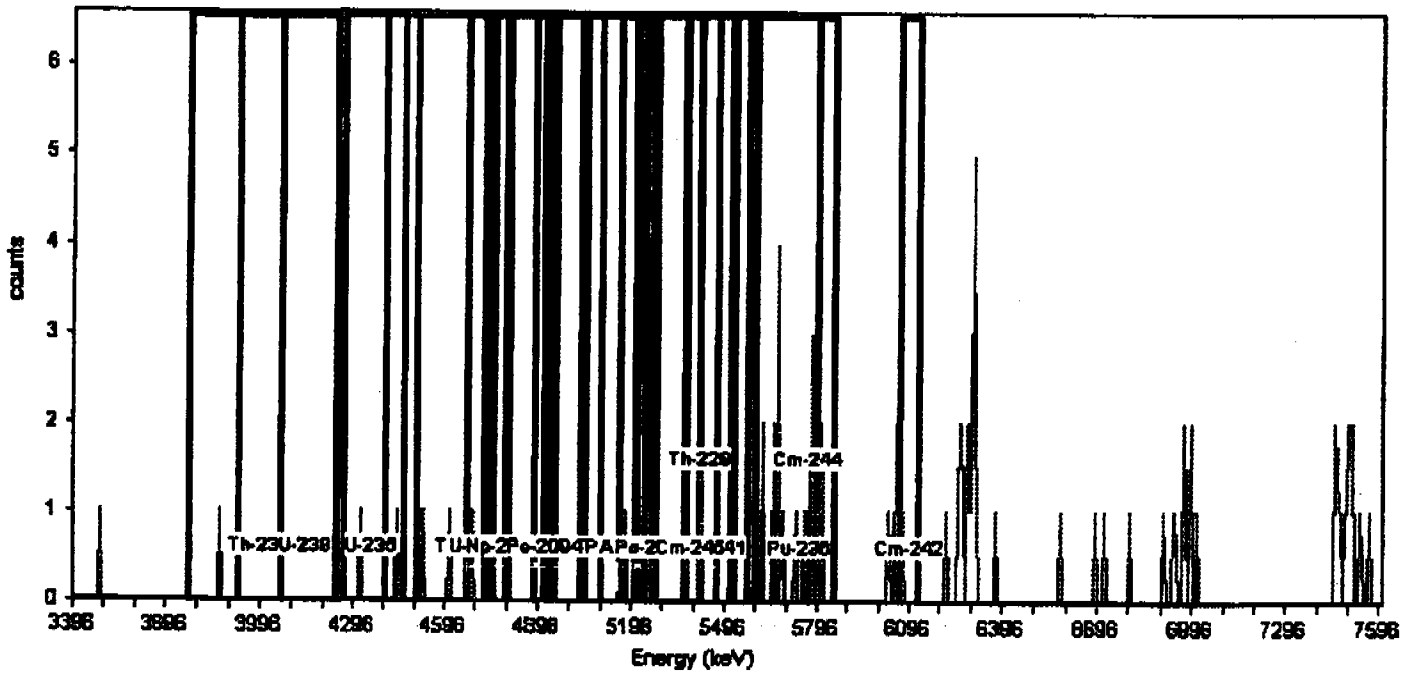
Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV63 , SN:
Acquisition Start Date: 4/25/2005 11:48:26AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: Mar2005_AV63
Calibration Date: 3/17/2005 10:32:03PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.17% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 79.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	2.00	2.500E-003	2.165E-003
Th-230	4.67	4.40	4.73	4.00	5.000E-003	2.795E-003
U-234	4.70	4.50	4.80	3.00	3.750E-003	2.500E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	4.00	5.000E-003	2.795E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	3.00	3.750E-003	2.500E-003
Am-241	5.45	5.27	5.57	3.00	3.750E-003	2.500E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	18.00	2.250E-002	5.449E-003
Cm-244	5.78	5.60	5.85	21.00	2.625E-002	5.863E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:15:42AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV64
Comment:

Spectrum #1 Analysis #1

Batch

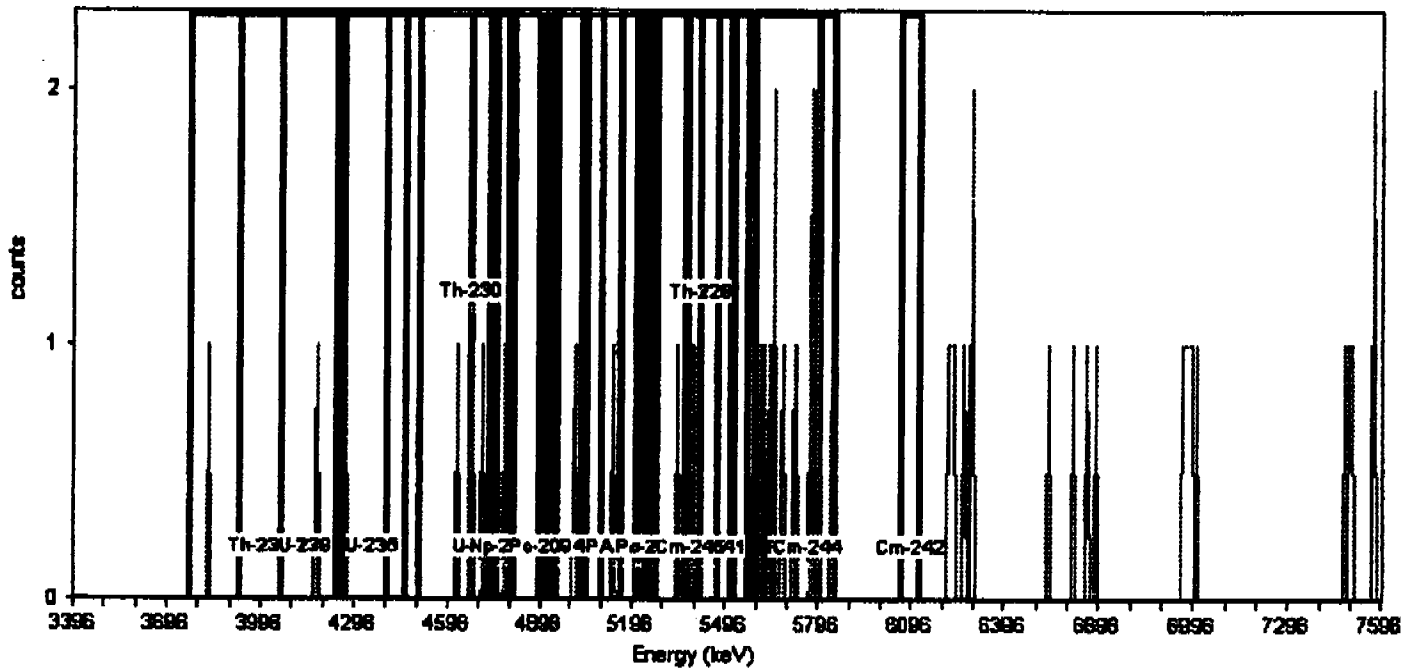
Batch Name: April_2005
Description:

Acquisition

Detector: AV64 , SN:
Acquisition Start Date: 4/25/2005 11:48:27AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: Mar2005_AV64
Calibration Date: 3/17/2005 10:32:07PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.00% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 54.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
U-234	4.70	4.50	4.80	6.00	7.500E-003	3.307E-003
Pu-242	4.88	4.87	4.93	5.00	6.250E-003	3.062E-003
Th-229	4.84	4.72	5.10	3.00	3.750E-003	2.500E-003
Np-237	4.77	4.75	4.79	2.00	2.500E-003	2.165E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	3.00	3.750E-003	2.500E-003
Am-241	5.45	5.27	5.57	3.00	3.750E-003	2.500E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	17.00	2.125E-002	5.303E-003
Cm-244	5.76	5.80	5.85	17.00	2.125E-002	5.303E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	4.00	5.000E-003	2.795E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 1:15:47AM 4/26/2005

Sample

Sample Name: AV65 Spectrum #1 Analysis #1
Comment:

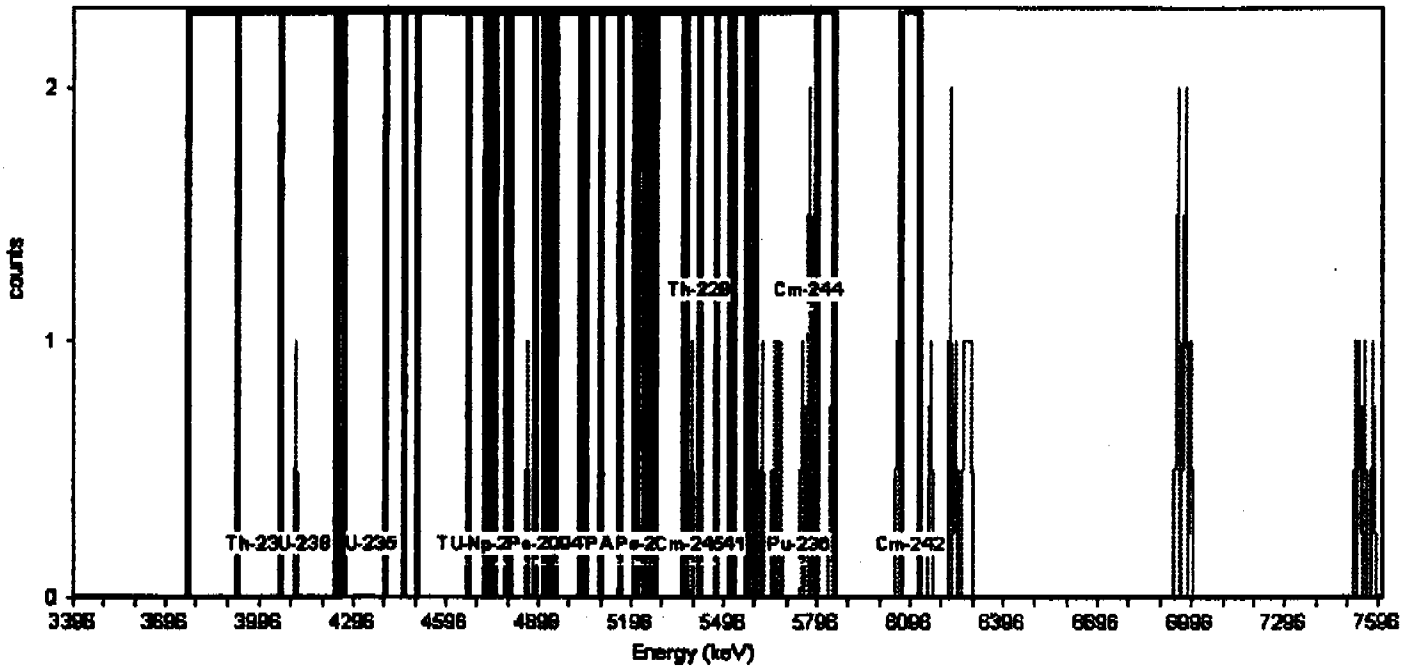
Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV65 , SN:
Acquisition Start Date: 4/25/2005 11:48:28AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: Mar2005_AV65
Calibration Date: 3/17/2005 10:32:12PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.10% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI, Library: Background ROI Library
Total Background Counts: 40.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.86	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	3.00	3.750E-003	2.500E-003
Am-241	5.45	5.27	5.57	3.00	3.750E-003	2.500E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	13.00	1.625E-002	4.677E-003
Cm-244	5.76	5.60	5.85	13.00	1.625E-002	4.677E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

TESTAMERICA LABORATORIES **STL**

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 1:16:16AM 4/26/2005

Sample

Sample Name: AV66 Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

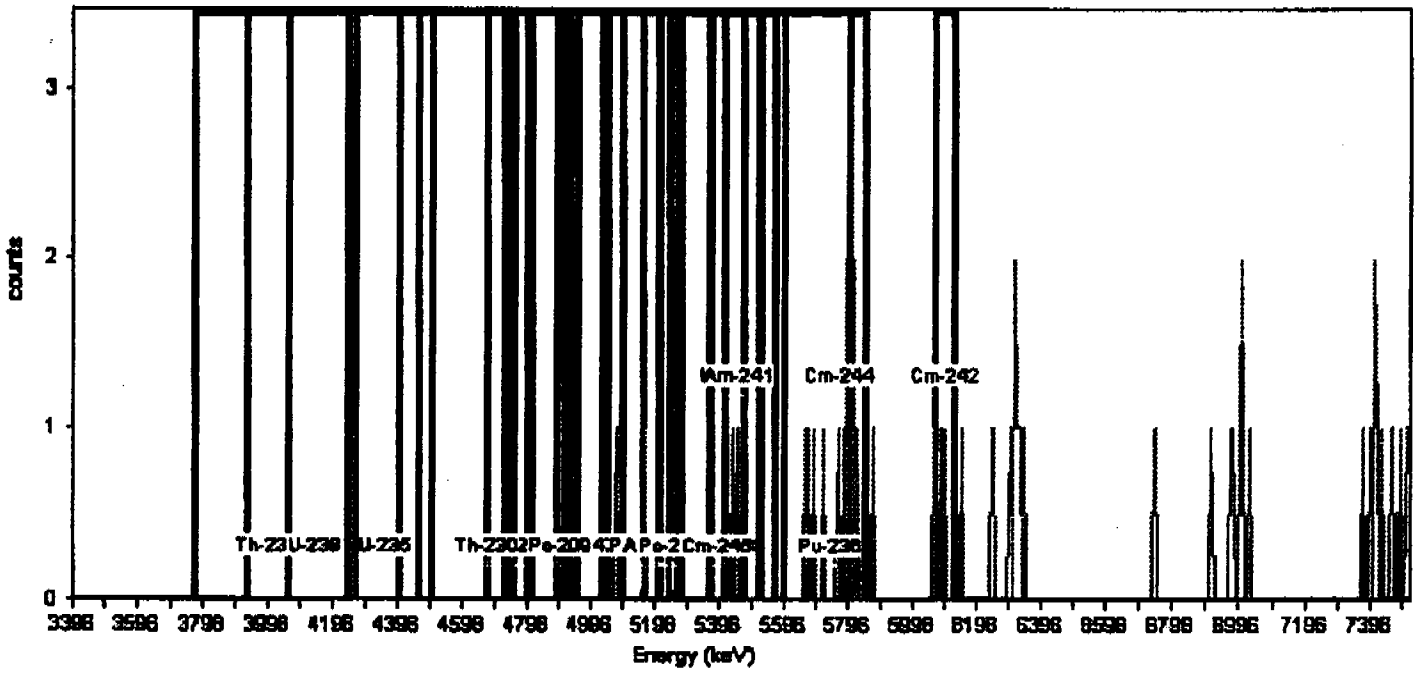
Description:

Acquisition

Detector: AV66 , SN:
Acquisition Start Date: 4/25/2005 11:48:29AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: Mar2005_AV66
Calibration Date: 3/17/2005 10:32:16PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.56% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library

Total Background Counts: 51.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	7.00	8.750E-003	3.536E-003
Cm-244	5.76	5.60	5.85	12.00	1.500E-002	4.507E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:15:53AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV67 Spectrum #1 Analysis #1
Comment:

Batch

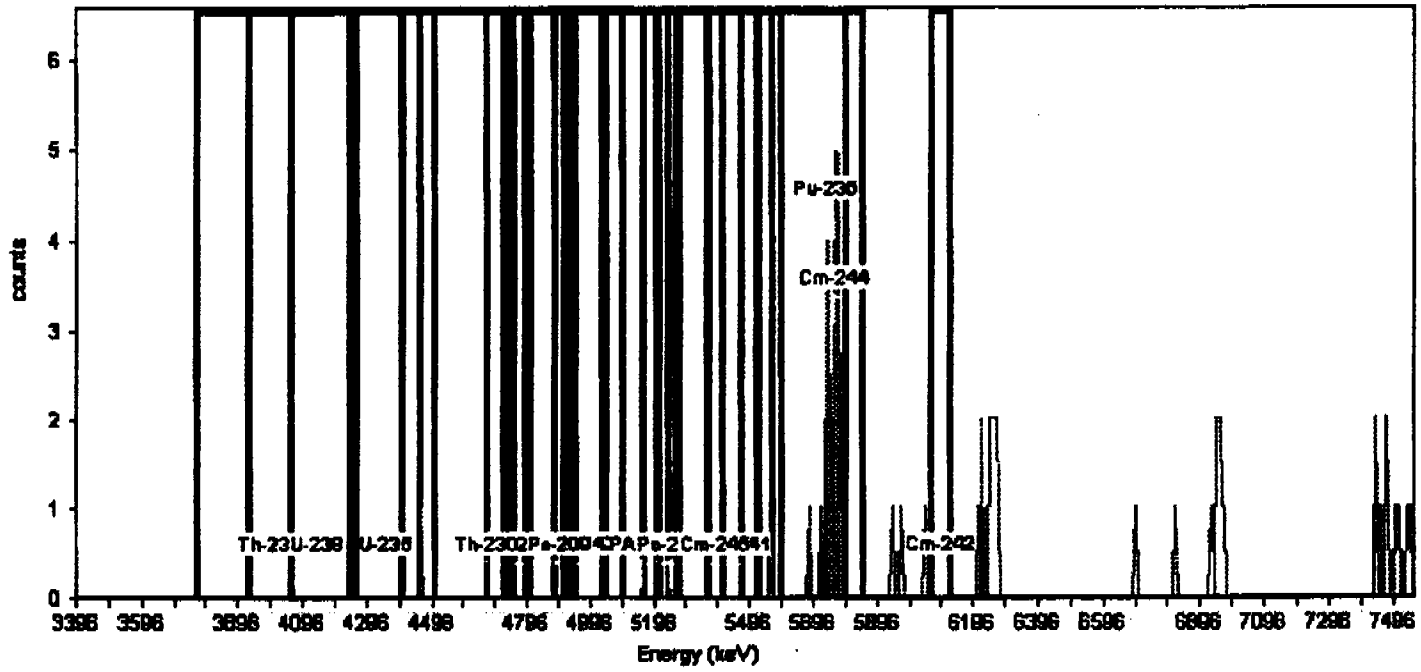
Batch Name: April_2005
Description:

Acquisition

Detector: AV67 , SN:
Acquisition Start Date: 4/25/2005 11:48:30AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV67
Calibration Date: 3/17/2005 8:01:05PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.87% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 56.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.86	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.26	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	1.00	1.250E-003	1.768E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	1.00	1.250E-003	1.768E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	20.00	2.500E-002	5.728E-003
Cm-244	5.76	5.60	5.85	19.00	2.375E-002	5.590E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.36	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:15:58AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV68 Spectrum #1 Analysis #1
Comment:

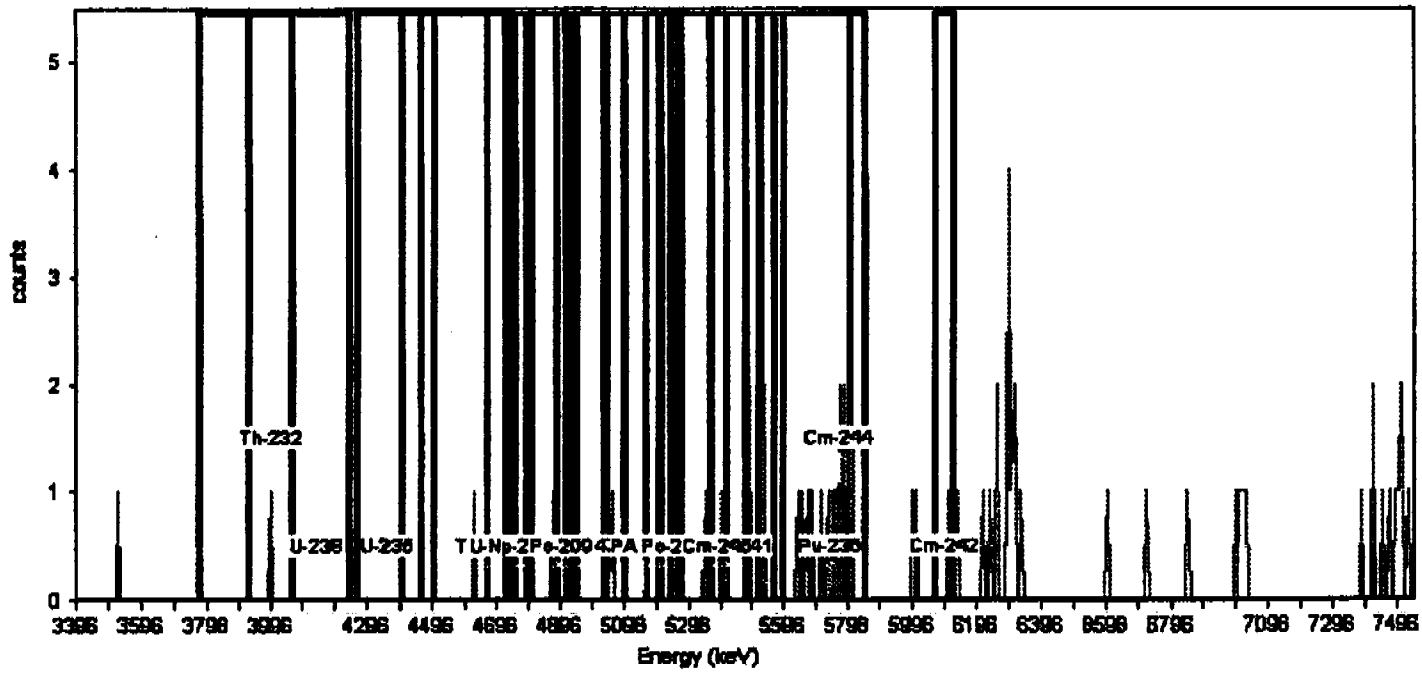
Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV68 , SN:
Acquisition Start Date: 4/25/2005 11:48:31AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV68
Calibration Date: 3/17/2005 8:01:31PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.17% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROU[illegible] Library: Background ROI Library
Total Background Counts: 71.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.86	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	3.00	3.750E-003	2.500E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.98	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	5.00	6.250E-003	3.062E-003
Am-241	5.45	5.27	5.57	7.00	8.750E-003	3.536E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	20.00	2.500E-002	5.728E-003
Cm-244	5.76	5.60	5.85	21.00	2.625E-002	5.863E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:16:04AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV69
Spectrum #1 Analysis #1
Comment:

Batch

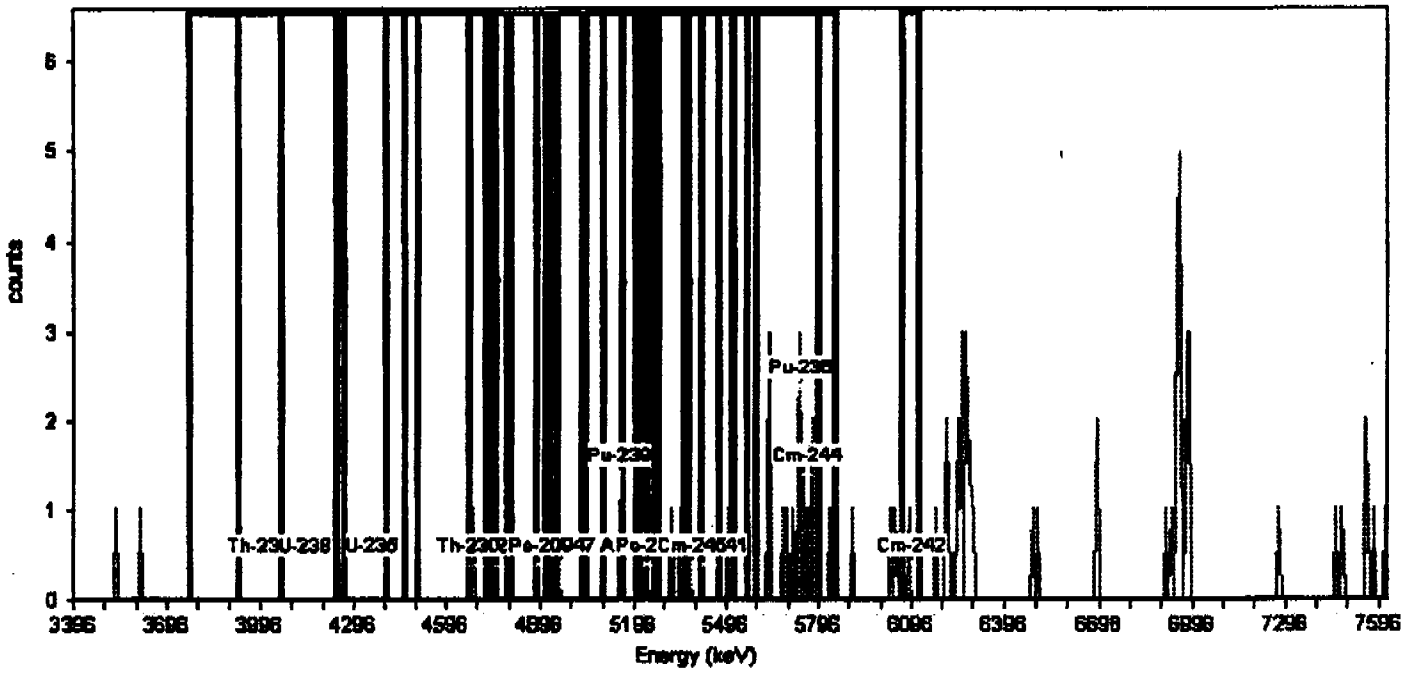
Batch Name: April_2005
Description:

Acquisition

Detector: AV69 , SN:
Acquisition Start Date: 4/25/2005 11:48:32AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March05_AV69
Calibration Date: 3/17/2005 8:01:49PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 28.07% +/- 0.30% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND_ROI Library: Background ROI Library
Total Background Counts: 84.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	3.00	3.750E-003	2.500E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	4.00	5.000E-003	2.795E-003
Am-241	5.46	5.27	5.57	4.00	5.000E-003	2.795E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	22.00	2.750E-002	5.995E-003
Cm-244	5.76	5.60	5.85	23.00	2.875E-002	6.124E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 1:16:09AM 4/26/2005

Sample

Sample Name: AV70 Spectrum #1 Analysis #1
Comment:

Batch

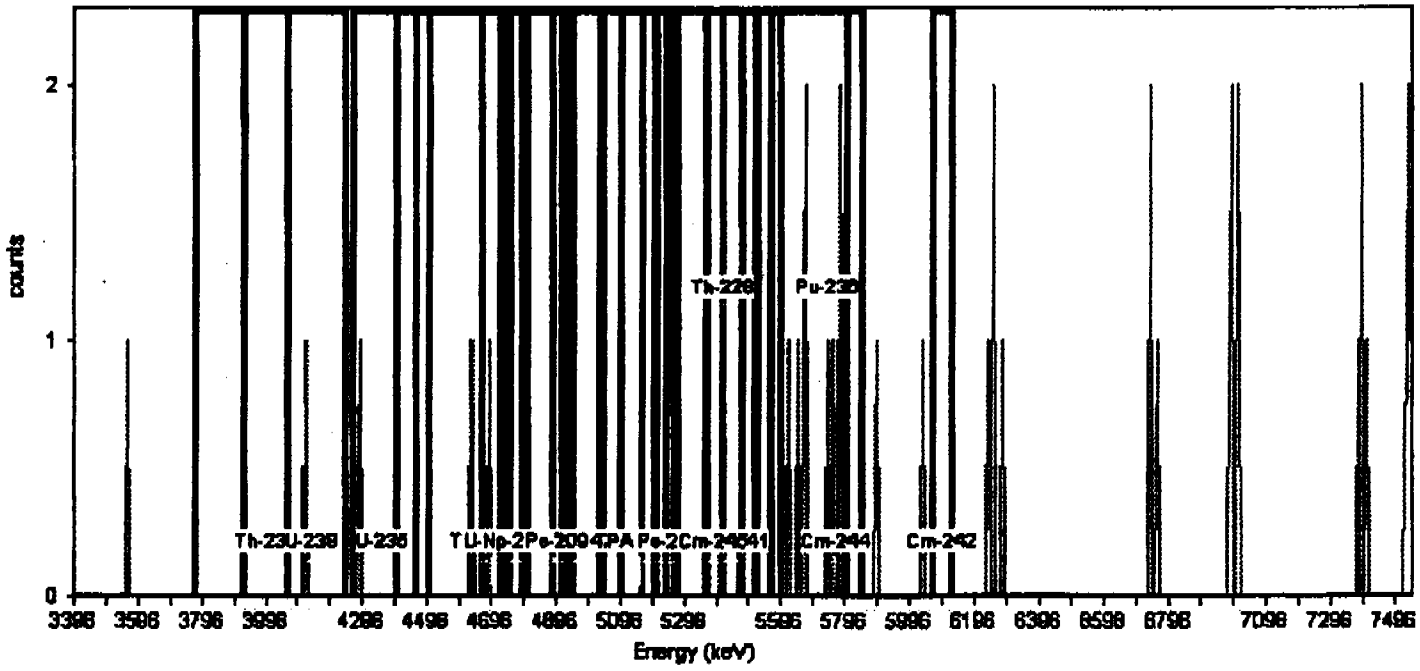
Batch Name: April_2005
Description:

Acquisition

Detector: AV70 , SN:
Acquisition Start Date: 4/25/2005 11:48:33AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV70
Calibration Date: 3/17/2005 8:01:57PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.03% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 37.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	2.00	2.500E-003	2.165E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.768E-003
Th-228	5.41	5.16	5.47	2.00	2.500E-003	2.165E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	9.00	1.125E-002	3.953E-003
Cm-244	5.78	5.60	5.85	9.00	1.125E-002	3.953E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:38:45PM 4/28/2005

Analyst: 60040

Sample

Sample Name: AV71
Spectrum #1 Analysis #1
Comment:

Batch

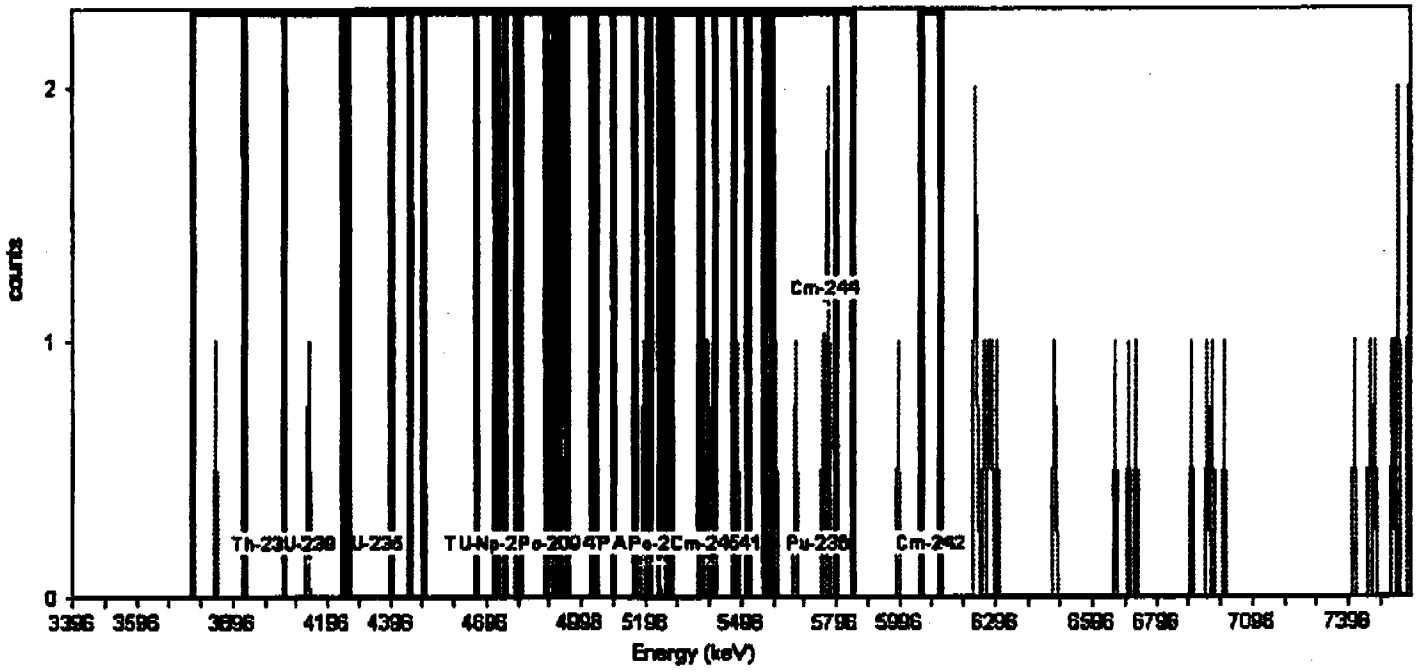
Batch Name: Aprilb_2005
Description:

Acquisition

Detector: AV71 , SN:
Acquisition Start Date: 4/28/2005 9:18:33AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: April2005_AV71a
Calibration Date: 4/27/2005 6:27:17PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.10% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 36.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	2.00	2.500E-003	2.165E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	6.00	7.500E-003	3.307E-003
Cm-244	5.76	5.60	5.85	6.00	7.500E-003	3.307E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 1:16:21AM 4/26/2005

Sample

Sample Name: AV72 Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

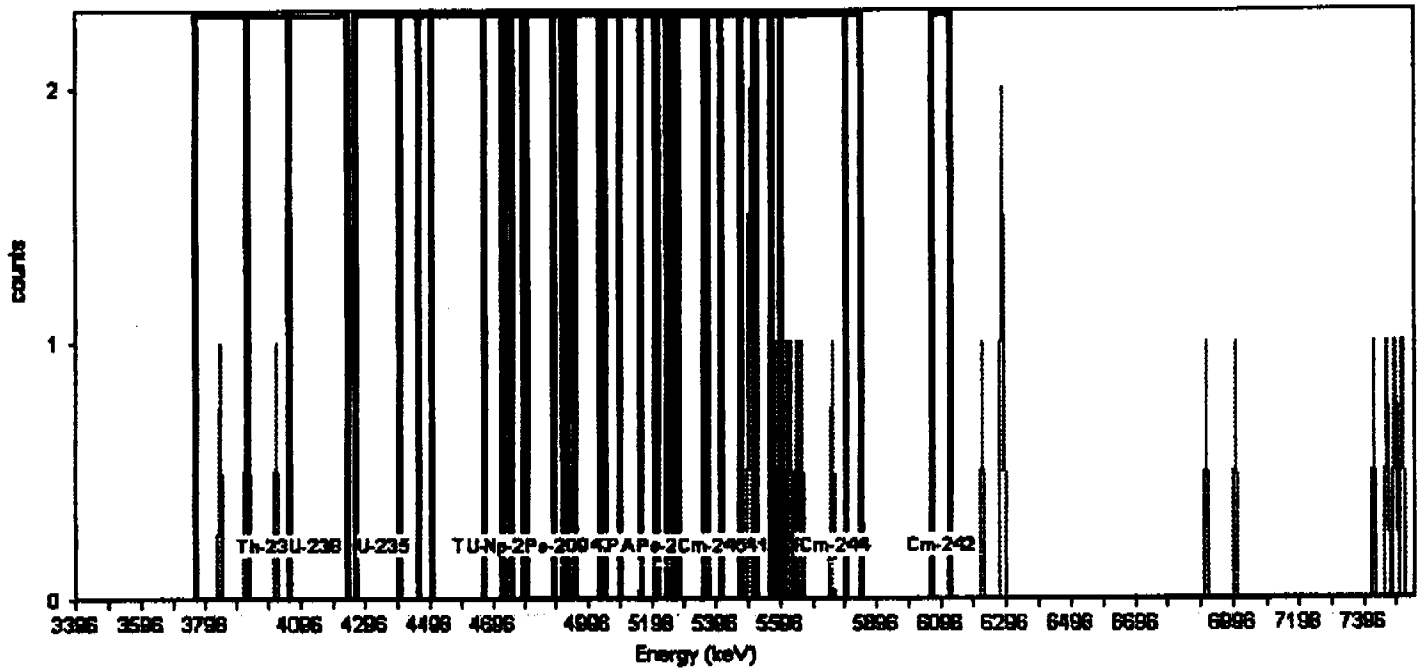
Description:

Acquisition

Detector: AV72 , SN:
Acquisition Start Date: 4/25/2005 11:48:36AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV72
Calibration Date: 3/17/2005 8:34:09AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.14% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library

Total Background Counts: 25.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	3.00	3.750E-003	2.500E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.26	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.768E-003
Th-228	5.41	5.16	5.47	0.00	0.000E+000	1.768E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	7.00	8.750E-003	3.536E-003
Cm-244	5.76	5.60	5.85	6.00	7.500E-003	3.307E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:16:27AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV73 Spectrum #1 Analysis #1
Comment:

Batch

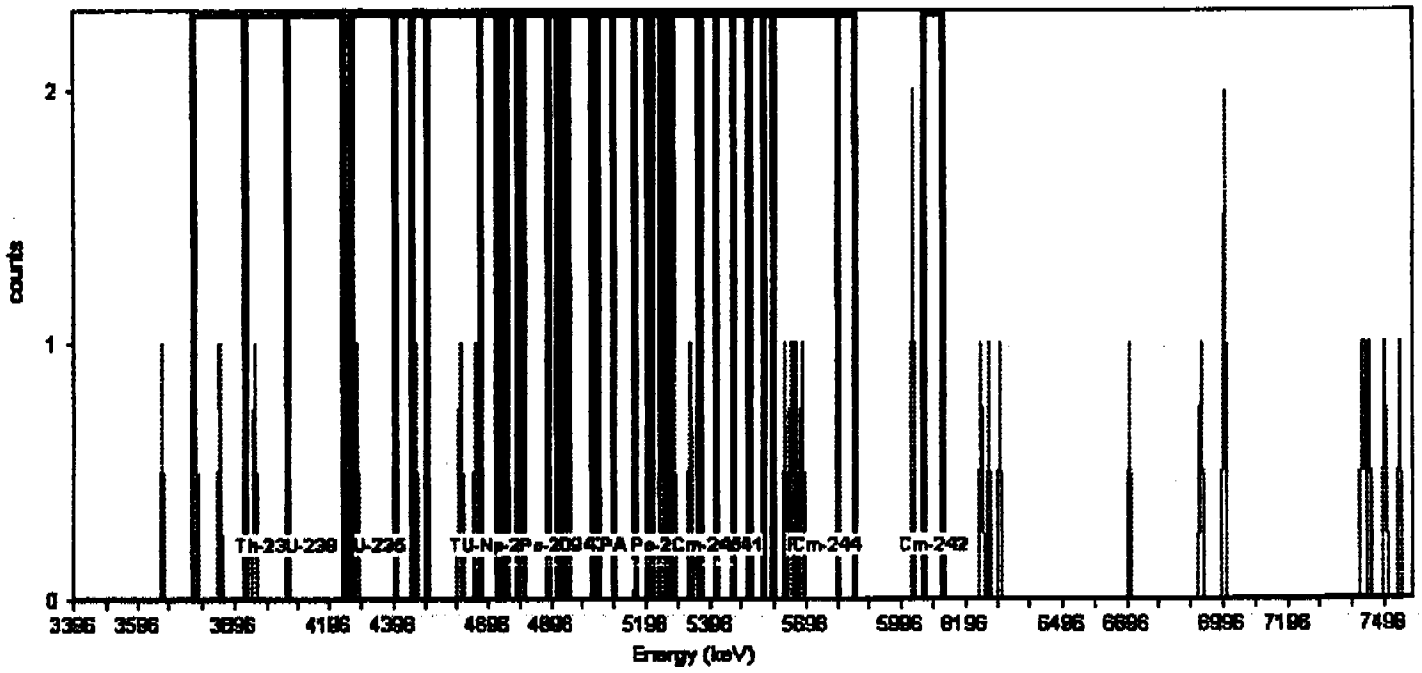
Batch Name: April_2005
Description:

Acquisition

Detector: AV73 , SN:
Acquisition Start Date: 4/25/2005 11:48:38AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV73
Calibration Date: 3/17/2005 8:34:15AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.38% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 35.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	4.00	5.000E-003	2.795E-003
U-236	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	4.00	5.000E-003	2.795E-003
U-234	4.70	4.50	4.80	4.00	5.000E-003	2.795E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.86	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.86	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	3.00	3.750E-003	2.500E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	3.00	3.750E-003	2.500E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	6.00	7.500E-003	3.307E-003
Cm-244	5.76	5.60	5.85	6.00	7.500E-003	3.307E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

SEVERN TRENT **STL**

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:16:32AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV74
Spectrum #1 Analysis #1
Comment:

Batch

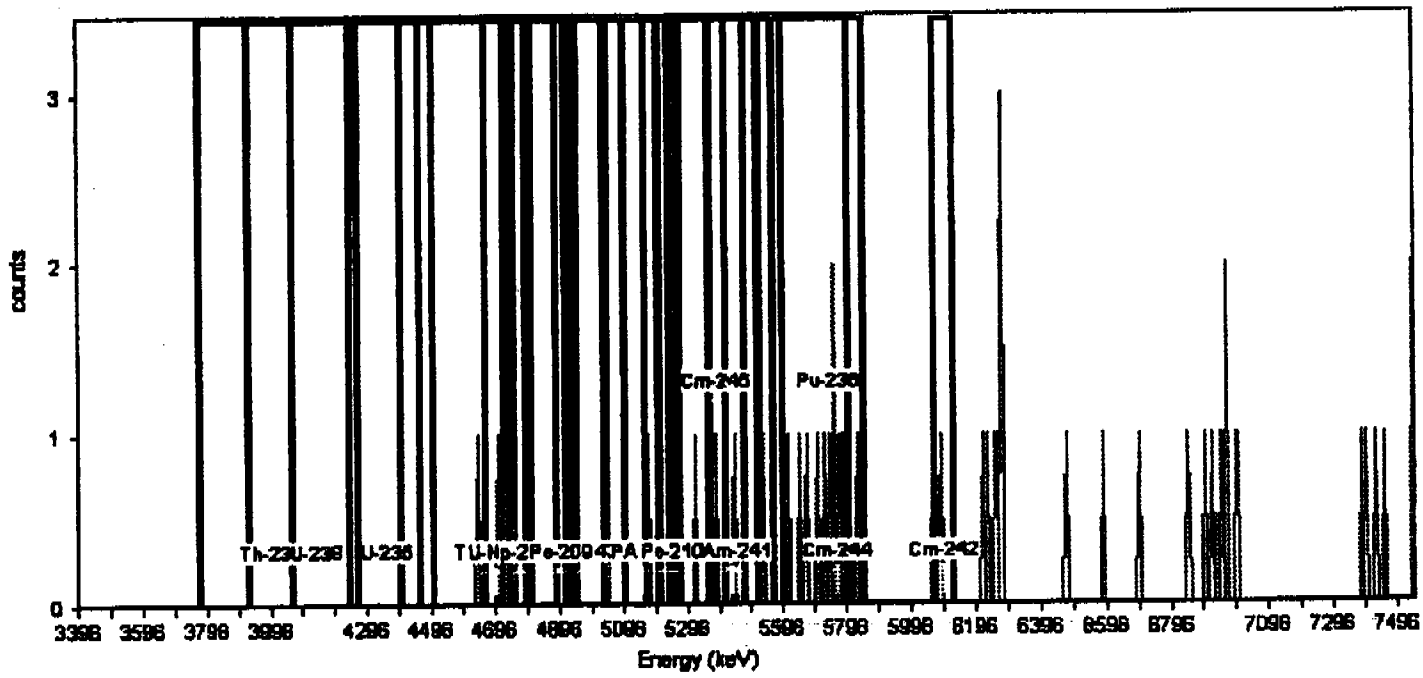
Batch Name: April_2005
Description:

Acquisition

Detector: AV74 , SN:
Acquisition Start Date: 4/25/2005 11:48:41AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV74
Calibration Date: 3/17/2005 8:34:21AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.79% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 49.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	3.00	3.750E-003	2.500E-003
U-234	4.70	4.50	4.80	4.00	5.000E-003	2.795E-003
Pu-242	4.88	4.67	4.93	3.00	3.750E-003	2.500E-003
Th-229	4.84	4.72	5.10	4.00	5.000E-003	2.795E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	4.00	5.000E-003	2.795E-003
Th-228	5.41	5.16	5.47	5.00	6.250E-003	3.062E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	4.00	5.000E-003	2.795E-003
Am-241	5.45	5.27	5.57	5.00	6.250E-003	3.062E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	11.00	1.375E-002	4.330E-003
Cm-244	5.76	5.60	5.85	11.00	1.375E-002	4.330E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

F5D220279

CLIENT ANALYSIS SUMMARY

Storage Loc: RAD45

Project Manager: EK | Quote #: 44975 | SDG: F5D220279

Date Received: 2005-04-22

Project: 3168S | Los Alamos Non-Rad

Analytical Due Date: 2005-05-~~18~~10

PO#: 126310021 | Report to: Joylene Valdez or Keith

Report Due Date: 2005-05-~~16~~12

Client: 108581 LOS ALAMOS NATIONAL LABORATORY

Report Type: D Expanded Deliverable

#SMPS in LOT: 2 | EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

	SAMPLE #		CLIENT SAMPLE ID			Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	
	1		RE73-05-58920					2005-04-20 / 0	G81GW	WATER
	SAMPLE COMMENTS:									
	XX	11	NAS/DOE	3058/RP-725 MOD	Iso PLUTONIUM (SHORT CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01 STANDARD TEST SET	PROT: B	WRK LOC 06
	XX	16	NAS/DOE	3050/RP-725 MOD	Iso URANIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01 STANDARD TEST SET	PROT: B	WRK LOC 06
	XX	17	NAS/DOE	3006/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01 STANDARD TEST SET	PROT: B	WRK LOC 06
	XX	Z8	DOE	RP-730 MOD	Gamma Cs-137 & Hits by DOE RP-730 MOD	G7	Direct Addition of Sample to Geometry	01 STANDARD TEST SET	PROT: B	WRK LOC 06
S	XX	11	NAS/DOE	3058/RP-725 MOD	Iso PLUTONIUM (SHORT CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01 STANDARD TEST SET	PROT: B	WRK LOC 06
S	XX	16	NAS/DOE	3050/RP-725 MOD	Iso URANIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01 STANDARD TEST SET	PROT: B	WRK LOC 06
S	XX	17	NAS/DOE	3006/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01 STANDARD TEST SET	PROT: B	WRK LOC 06
S	XX	Z8	DOE	RP-730 MOD	Gamma Cs-137 & Hits by DOE RP-730 MOD	G7	Direct Addition of Sample to Geometry	01 STANDARD TEST SET	PROT: B	WRK LOC 06
X	XX	11	NAS/DOE	3058/RP-725 MOD	Iso PLUTONIUM (SHORT CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01 STANDARD TEST SET	PROT: B	WRK LOC 06
X	XX	16	NAS/DOE	3050/RP-725 MOD	Iso URANIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01 STANDARD TEST SET	PROT: B	WRK LOC 06
X	XX	17	NAS/DOE	3006/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01 STANDARD TEST SET	PROT: B	WRK LOC 06
X	XX	Z8	DOE	RP-730 MOD	Gamma Cs-137 & Hits by DOE RP-730 MOD	G7	Direct Addition of Sample to Geometry	01 STANDARD TEST SET	PROT: B	WRK LOC 06

	SAMPLE #		CLIENT SAMPLE ID			Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	
	2		RE73-05-58921					2005-04-20 / 0	G81G8	WATER
	SAMPLE COMMENTS:									
	XX	11	NAS/DOE	3058/RP-725 MOD	Iso PLUTONIUM (SHORT CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01 STANDARD TEST SET	PROT: B	WRK LOC 06
	XX	16	NAS/DOE	3050/RP-725 MOD	Iso URANIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01 STANDARD TEST SET	PROT: B	WRK LOC 06
	XX	17	NAS/DOE	3006/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01 STANDARD TEST SET	PROT: B	WRK LOC 06
	XX	Z8	DOE	RP-730 MOD	Gamma Cs-137 & Hits by DOE RP-730 MOD	G7	Direct Addition of Sample to Geometry	01 STANDARD TEST SET	PROT: B	WRK LOC 06

F5D220279

CLIENT COMMENTS SUMMARY

Storage Loc: RAD45

Project Manager: EK Quote #: 44975 SDG: F5D220279

Date Received: 2005-04-22

Project: 3168S Los Alamos Non-Rad

Analytical Due Date: 2005-05-13

PO#: 126310021 Report to: Joylene Valdez or Keith

Report Due Date: 2005-05-16

Client: 108581 LOS ALAMOS NATIONAL LABORATORY

Report Type: D Expanded Deliverable

#SMPS in LOT: 2 EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMEN
Enter COC NUMBER on sample sample header in the COC Fi
SDG = "Lot Number"
Project Name = "Request number"

********** METALS AND WETCHEMISTRY **********
Can batch multiple Lots together and report Client specific
Batch QC: Matrix Spike and Sample Duplicate
Met Prep: GFAA Spike Level and Standard Spike Level
Sb spike at 100 ppb
Pb - Spike Solids at 100 ppb, spike Waters at 20
- Perform analytical spike when matrix spike is swamped with indigenous analyte.
********** GC/MS ORGANICS **********
Can batch multiple Lots together and report Client specific
Batch QC MS and MSD
Clouseau observations for:
- Dilutions and elevated detection limits
- Unknown aldol condensate in TIC report
USE GPC for sample extracts as required.
Put client ID on all raw data
Client requires qualifiers
********** GC/HPLC **********
Can batch multiple Lots together and report Client specific
Batch QC
USE GPC for sample extracts as required.
Client requires Qualifiers for both GC and HPLC
- No averaging of CCV compounds
- Include Form Xs in data packages
********** Radiochemistry **********
Rad Chem with no tracers require MS (spk <= 100 pCi/L or g) and sample duplicate ..... Gamma does not require MS.
Radium 228 requires MS and Sample Duplicate
Radiological: "Do not include control chart, standard certif certificates, or calibration data as part of data package"
- Tracers need to be added at a level to yield at least 400
- Report 1 sigma uncertainty
Gross Alpha/Beta requires a total digestion.

STL ST LOUIS
Thursday, April 21, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3168SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3168S
ANALYSIS TYPE: RAD

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58920	3	1 GAL POLY	AM-241+ISOU+ISOPU+GS	HNO3	W
RE73-05-58921	3	1 GAL POLY	AM-241+ISOU+ISOPU+GS	HNO3	W

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3168S

Relinquished By:		Date	Time	Received By:		Date	Time
		4/21/05	2:30	Sue Wilson		4.22.05	0900
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		

Received for DISPOSAL By:		Date	Time	Remarks:
PRINTED NAME	SIGNATURE			

LOT# RE5D220279

Thursday, April 21, 2005

REQUEST NUMBER: 3168S

ANALYSIS TYPE: RAD

Los Alamos
NATIONAL LABORATORY

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

SHIP DATE: 04/21/2005
REPORT DUE: 05/06/2005
TURN AROUND REQ'D: 15

RAD SCREENING: NOT REQ
COMMENTS:

These samples are on:

LANL Request Number: 3168S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
EPA:901.1	RE73-05-58920	3	W	04/20/2005	
HASL-300:AM-241	RE73-05-58920	3	W	04/20/2005	
HASL-300:ISOPU	RE73-05-58920	3	W	04/20/2005	
HASL-300:ISOU	RE73-05-58920	3	W	04/20/2005	
EPA:901.1	RE73-05-58921	3	W	04/20/2005	
HASL-300:AM-241	RE73-05-58921	3	W	04/20/2005	
HASL-300:ISOPU	RE73-05-58921	3	W	04/20/2005	
HASL-300:ISOU	RE73-05-58921	3	W	04/20/2005	

Final Page of REQUEST NUMBER 3168S

SEVERN TRENT **STL**

Lot No: F5D220279

Condition Upon Receipt Form
St. Louis Laboratory

Client: LANL

Quote No: 44975

Shipper/No: FedEx 6954 7789 2939

Date: 4.22.05 Time: 0900

Initiated by: BN

COC/RFA Numbers: Below

Condition/Variance (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	(Y) N	Sample received in undamaged condition?	7.	(Y) N	Sample received with Chain of Custody?
2.	(Y) N	Sample received within 4-C ± 2-C* ?	8.	(Y) N	Chain of Custody matches sample IDs on containers?
	BN 4.22.05	Record	9.	(Y) N N/A	Custody seal received intact on cooler.?
3.	(Y) N N/A	Sample received with proper pH [1]?	10.	(Y) N N/A	Custody seal tamper evident on cooler.?
4.	Y N	If N/A - Was pH taken by original STL lab?	11.	(Y) N N/A	Custody seal on bottles received intact?
5.	(Y) N	Sample received in proper containers?	12.	(Y) N N/A	Custody seal tamper evident on bottles?
6.	(Y) N	Sample volume sufficient for analysis?	13.	Y N	Was CUR (equivalent) rec' d from original STL lab?

* Temperature Variance Does Not Affect the Following Analyses:

[1]For DOE-AL (Pantex, LANL, Sandia) sites, verify pH all containers received, except for VOA, TOX, and soils.

Notes: 28615C, 31635C thru 68SC.

Chain 31635C - containers received were different than C-O-C.

Chains 31675C, 31685C - samples should be preserved but have pH of 7.

Corrective Action:

☐ Client's Name: _____ Informed by: _____ By: _____

☐ Sample(s) processed "as is".

☐ Sample(s) on hold until: _____ If released, notify: _____

Project Management Review: Tony Foley Date: 4/25/05

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED
IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIALS AND THE DATE NEXT TO THAT ITEM

6193

Thursday, April 21, 2005

REQUEST NUMBER: 3167S

Los Alamos
NATIONAL LABORATORY

ANALYSIS TYPE: INORGANIC

ATTN: Mark Loeb
Severn Trent Laboraties, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

SHIP DATE: 04/21/2005
REPORT DUE: 05/06/2005
TURN AROUND REQ'D: 15

RAD SCREENING: NOT REQ
COMMENTS:

These samples are on:

LANL Request Number: 3167S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:6010B	RE73-05-58920	1	W	04/20/2005	
SW-846:6020	RE73-05-58920	1	W	04/20/2005	
SW-846:7470A	RE73-05-58920	1	W	04/20/2005	
SW-846:6020_TCLP	RE73-05-58920	2	W	04/20/2005	
SW-846:7470A_TCLP	RE73-05-58920	2	W	04/20/2005	
SW-846:6010B	RE73-05-58921	1	W	04/20/2005	
SW-846:6020	RE73-05-58921	1	W	04/20/2005	
SW-846:7470A	RE73-05-58921	1	W	04/20/2005	
SW-846:6020_TCLP	RE73-05-58921	2	W	04/20/2005	
SW-846:7470A_TCLP	RE73-05-58921	2	W	04/20/2005	

Final Page of REQUEST NUMBER 3167S

Thursday, April 21, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3167SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3167S

ANALYSIS TYPE: INORGANIC

ATTN: Mark Loeb
Severn Trent Laboraties, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58920	1	1 L POLY	METALS-STL	HNO3	W
RE73-05-58920	2	1 L POLY	METALS_TCLP	HNO3	W
RE73-05-58921	1	1 L POLY	METALS-STL	HNO3	W
RE73-05-58921	2	1 L POLY	METALS_TCLP	HNO3	W

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3167S

Relinquished By:		Date	Time	Received By:		Date	Time
[signature]		4/21/05	2:30				
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		

Received for DISPOSAL By:		Date	Time	Remarks:
PRINTED NAME	SIGNATURE			

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

EVENT NAME: 73- Ash Pile rinsates

FIELD CHAIN OF CUSTODY

COC ID: 219932 Event ID:4832

SAMPLE ID: RE73-05-58920
SAMPLE ORDER MATRIX: Water
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
3	AM-241+ISOU+ISOPU+GS	1 GAL POLY	Nitric Acid	Y		
1	METALS-STL	1 L POLY	Nitric Acid	Y		
2	METALS_TCLP	1 L POLY	Nitric Acid	Y		

RELINQUISHED BY (printed name): (signature):	Date/Time: 4-20-05 1520	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/20/05 15:20	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

EVENT NAME: 73- Ash Pile rinsates

FIELD CHAIN OF CUSTODY

COC ID: 219962 Event ID:4832

SAMPLE ID: RE73-05-58923
ER TEAM LEADER: Terry Rust
DESTINATION: SMO
SAMPLE ORDER MATRIX: Water
FIELD TEAM LEADER: John Tymkowych
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
3	8082	1 L AMBER GLASS	Ice	Y		
4	8082	1 L AMBER GLASS	Ice	Y		
5	8260B	40 ML SEPTUM AMBER GLASS	Hydrochloric Acid (Hydrogen Chloride)	Y		
6	8260B	40 ML SEPTUM AMBER GLASS	Hydrochloric Acid (Hydrogen Chloride)	Y		
1	8270C	1 L AMBER GLASS	Ice	Y		
2	8270C	1 L AMBER GLASS	Ice	Y		

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.20.05 1520	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4.20.05 1520	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: 73- Ash Pile rinsates

COC ID: 219972 **Event ID:**4832

SAMPLE ID: RE73-05-58924 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Water **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
3	8082	1 L AMBER GLASS	Ice	Y		
4	8082	1 L AMBER GLASS	Ice	Y		
5	8260B	40 ML SEPTUM AMBER GLASS	~~Hydrochloric Acid~~ UNP. ~~(Hydrogen Chloride)~~ KR	Y		
6	8260B	40 ML SEPTUM AMBER GLASS	~~Hydrochloric Acid~~ UNP. ~~(Hydrogen Chloride)~~ KR	Y		
1	8270C	1 L AMBER GLASS	Ice	Y		
2	8270C	1 L AMBER GLASS	Ice	Y		

RELINQUISHED BY (printed name): K Reed **(signature):**	**Date/Time:** 4.20.05 1520	**RELINQUISHED BY (printed name):** **(signature):**	**Date/Time:**
RECEIVED BY (printed name): **(signature):**	**Date/Time:** 4/20/05 1520	**RECEIVED BY (printed name):** **(signature):**	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: 73- Ash Pile rinsates

COC ID: 219942 Event ID:4832

SAMPLE ID: RE73-05-58921 ER TEAM LEADER: Terry Rust DESTINATION: SMO

SAMPLE ORDER MATRIX: Water FIELD TEAM LEADER: John Tymkowych DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
3	AM-241+ISOU+ISOPU+GS	1 GAL POLY	Nitric Acid	Y		
1	METALS-STL	1 L POLY	Nitric Acid	Y		
2	METALS_TCLP	1 L POLY	Nitric Acid	Y		

RELINQUISHED BY (printed name): LR Worrell (signature):	Date/Time: 4.20.05 1520	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): Jeeyhee US (signature):	Date/Time: 4/20/05 1520	RECEIVED BY (printed name): (signature):	Date/Time:

Rad Screening Data Release Form

The Following samples were received at the Field Support Facility (FSF) without screening data (list sample number):

These samples will not be shipped until radiological screening data documentation arrives at the FSF. I understand that it is my responsibility to ensure this information arrives at the FSF in a timely manner. If holding times are missed because screening data does not arrive, I will pick up the samples.

The following samples do not require rad screening data for the reasons stated (list sample numbers):

RF73-05-58920
58923
58921
58924

Reason: rinsate samples collected in clean area

Print Last Name LEONARD Signature [signature] Date 4/20/05

Data-Validation Cover Sheet

☐ Rejected Data

Section I

Request Number: 3167S Validation Date: 25-May-05 Lab Code: STL- St Louis

Contract Laboratory Name: _____

Validator: Clifford Deiner Organization: ENV-ECR

Analytical Suite (check all that apply):
☐ Volatile Organics
☐ Semivolatile Organics
☐ Organochlorine Pesticides/Polychlorinated Biphenyls
☐ High Explosives
☒ Inorganics
☐ Radiochemistry

Other (describe): _____

Section II—Completeness Check

Yes	No	n/a	(check one)	Yes	No	n/a	(check one)
☒	☐	☐	1. Chain-of-custody form(s)	☒	☐	☐	6. Raw/BSS data
☒	☐	☐	2. Case narrative	☒	☐	☐	7. Quality control forms
☒	☐	☐	3. Sample result forms	☒	☐	☐	8. Quantitation reports
☐	☐	☒	4. Sample chromatograms	☐	☐	☒	9. TICs forms
☐	☐	☒	5. Standard chromatograms	☐	☐	☒	10. TICs mass spectra

Identify any samples in the assigned Request Number that are missing:

_____ _____ _____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____ _____ _____

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

Metals:

Blank contamination was present for Se and Mg in water. The 5x rule was applied and sample results for Se and Mg were qualified U,I4a. B-flagged sample results were qualified J,I1. All other QCs met acceptance limits.

TCLP_Metals:

Blank contamination was present for Ba and Zn in water. The 5x rule was applied and some sample results for Ba and Zn were qualified U,I4a. B-flagged sample results were qualified J,I1. All other QCs met acceptance limits.

Validator's signature: Clifford Deiner Date: 5/25/05

(Attach additional comment sheets as necessary.)

Inorganic Data-Validation Checklist

Yes	No	(check one)	Assign qualifier listed below if criteria = Yes: Detected analyte	Assign qualifier listed below if criteria = Yes: Undetected analyte
☐	☒	1. The preparation Blank (PB), ICB, or CCB was not analyzed with the samples.	R, I4	R, I4
☒	☐	2. The analyte detected in PB and the sample result for the analyte ≤5x the amount in PB.	U, I4a	N/A
☐	☒	3. The initial or continuing calibration verification (ICV or CCV) was not analyzed with the samples.	R, I16	R, I16
☐	☒	4. The ICV or CCV recovery is >UAL.	R, I16a	N/A
☐	☒	5. The ICV or CCV recovery is >UWL and ≤UAL.	J+, I16b	N/A
☐	☒	6. The ICV or CCV recovery is <LWL but ≥LAL.	J-, I16c	UJ, I16c
☐	☒	7. The ICV or CCV recovery is <LAL.	R, I16d	R, I16d
☐	☒	8. For ICPMS and CN analyses: The correlation coefficient is <0.995?	R, I16e	R,I16e
☐	☒	9. The interference check sample (ICS) was not analyzed with the samples.	R, I7	R, I7
☐	☒	10. The ICS recovery is >120%.	J+, I7a	N/A
☐	☒	11. The ICS recovery is ≥50% and <80%.	J-, I7b	UJ, I7b
☐	☒	12. The ICS recovery is <50%.	R, I7c	R, I7d
☐	☒	13. The MS was not analyzed with the sample without explanation.	R, I3	R, I3
☐	☒	14. Insufficient sample volume for MS analyses was provided.	J, I3a	UJ, I3a
☐	☒	15. An MS analyses was performed on a non-LANL sample.	J, I3b	UJ, I3b
☐	☒	16. The MS recovery was > 150%*.	J+, I3c	UJ, I3c
☐	☒	17. The MS recovery was >125% and ≤150%.	J+, I3d	N/A
☐	☒	18. The MS recovery was ≥30% and <75%.	J-, I3e	UJ, I3e
☐	☒	19. The MS recovery was <30%.	R, I3f	R, I3f
☐	☒	20. A duplicate sample was not analyzed without explanation.	J, I10	UJ, I10
☐	☒	21. Insufficient sample volume for duplicate sample analysis was provided.	J, I10a	UJ, I10a
☐	☒	22. A duplicate sample was performed on a non-LANL sample.	J, I10b	UJ, I10b
☐	☒	23. Both the sample and the duplicate are ≥5x RL, and the RPD is >20 for water samples or >35 for soil samples	J, I10c	UJ, I10c
☐	☒	24. Either the sample or Dup is ≥5x the RL and the sample and Dup results are not within ±1x the RL for water or ±2x the RL for soil.	J, I10d	UJ, I10d
☐	☒	25. The LCS was not analyzed with the samples.	R, I6	R, I6
☐	☒	26. The LCS recovery was >the UWL.	J+, I6a	N/A
☐	☒	27. The LCS recovery was ≥LAL and <LWL.	J-, I6b	UJ, I6b
☐	☒	28. The LCS recovery was <the LAL.	R, I6c	R, I6c
☐	☒	29. The serial dilution sample was not analyzed with the samples.	J, I18	UJ, I18
☐	☒	30. The serial dilution sample was performed on a non-LANL sample.	J, I18a	UJ, I18a
☐	☒	31. The RPD between the sample and the serial dilution sample is >10, and the undiluted sample result is >50x the RL(>100x for ICPMS).	J, I18b	UJ, I18b
☐	☒	32. The sample was analyzed past the appropriate hold time.	J-, I9	UJ, I9
☐	☒	33. The sample was analyzed past double the hold time.	J-, I9a	R, I9a
☒	☐	34. B-flagged sample results are present.	J, I1	N/A
☐	☒	35. Other obvious data quality issues are identified.	__, I19	__, I19

CD

STL ST. LOUIS
Thursday, April 21, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3167SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3167S

ANALYSIS TYPE: INORGANIC

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	QRDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58920	1	1 L POLY	METALS-STL	HNO3	W
RE73-05-58920	2	1 L POLY	METALS_TCLP	HNO3	W
RE73-05-58921	1	1 L POLY	METALS-STL	HNO3	W
RE73-05-58921	2	1 L POLY	METALS_TCLP	HNO3	W

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3167S Page 1

Relinquished By:	Date	Time	Received By:	Date	Time
PRINTED NAME SIGNATURE	4/21/05	2:30	Sue Wilson PRINTED NAME Sue Wilson SIGNATURE	4.22.05	0900
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		

Received for DISPOSAL By:	Date	Time	Remarks:
PRINTED NAME SIGNATURE			

LOT # E5D220359

STL ST. LOUIS

Thursday, April 21, 2005

REQUEST NUMBER: 3167S

ANALYSIS TYPE: INORGANIC

Los Alamos
NATIONAL LABORATORY

Cur
6193

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

SHIP DATE: 04/21/2005
REPORT DUE: 05/06/2005
TURN AROUND REQ'D: 15

RAD SCREENING: NOT REQ
COMMENTS:

These samples are on:

LANL Request Number: 3167S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:6010B	RE73-05-58920	1	W	04/20/2005	
SW-846:6020	RE73-05-58920	1	W	04/20/2005	
SW-846:7470A	RE73-05-58920	1	W	04/20/2005	
SW-846:6020_TCLP	RE73-05-58920	2	W	04/20/2005	
SW-846:7470A_TCLP	RE73-05-58920	2	W	04/20/2005	
SW-846:6010B	RE73-05-58921	1	W	04/20/2005	
SW-846:6020	RE73-05-58921	1	W	04/20/2005	
SW-846:7470A	RE73-05-58921	1	W	04/20/2005	
SW-846:6020_TCLP	RE73-05-58921	2	W	04/20/2005	
SW-846:7470A_TCLP	RE73-05-58921	2	W	04/20/2005	

Final Page of REQUEST NUMBER 3167S

LOT # F5D220359

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58920

TCLP Metals

Lot-Sample #...: F5D220359-001
Date Sampled...: 04/20/05 **Date Received..: 04/22/05** **Matrix.....: WATER**
Leach Date.....: 04/29/05 **Leach Batch #..: P511906**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5122274						
Silver	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 16:19	05/02-05/05/05	G81701AA
Arsenic	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 16:19	05/02-05/05/05	G81701AC
Barium J, I-1	157 B	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 16:19	05/02-05/05/05	G81701AD
Cadmium	ND	25 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 16:19	05/02-05/05/05	G81701AE
Chromium	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 16:19	05/02-05/05/05	G81701AF
Lead	ND	250 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 16:19	05/02-05/05/05	G81701AG
Selenium	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 16:19	05/02-05/05/05	G81701AH
Zinc U, I-4a	34.5 B	100 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 16:19	05/02-05/05/05	G81701AK
Prep Batch #...: 5123055						
Mercury	ND	10 Dilution Factor: 1	ug/L	SW846 7470A Analysis Time..: 19:28	05/03/05	G81701AJ

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

B Estimated result. Result is less than RL.

CP

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: EE73-05-58921

TCLP Metals

Lot-Sample #...: F5D220359-002
Date Sampled...: 04/20/05 Date Received..: 04/22/05
Leach Date.....: 04/29/05 Leach Batch #..: P511906
Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5122274						
Silver	ND	50	ug/L	SW846 6010B	05/02-05/05/05	G84EP1AE
		Dilution Factor: 1		Analysis Time..: 16:41		
Arsenic	ND	500	ug/L	SW846 6010B	05/02-05/05/05	G84EP1AF
		Dilution Factor: 1		Analysis Time..: 16:41		
Barium U, I4a	103 B	500	ug/L	SW846 6010B	05/02-05/05/05	G84EP1AG
		Dilution Factor: 1		Analysis Time..: 16:41		
Cadmium	ND	25	ug/L	SW846 6010B	05/02-05/05/05	G84EP1AH
		Dilution Factor: 1		Analysis Time..: 16:41		
Chromium	ND	50	ug/L	SW846 6010B	05/02-05/05/05	G84EP1AJ
		Dilution Factor: 1		Analysis Time..: 16:41		
Lead	ND	250	ug/L	SW846 6010B	05/02-05/05/05	G84EP1AK
		Dilution Factor: 1		Analysis Time..: 16:41		
Selenium	ND	500	ug/L	SW846 6010B	05/02-05/05/05	G84EP1AL
		Dilution Factor: 1		Analysis Time..: 16:41		
Zinc U, I4a	41.9 B	100	ug/L	SW846 6010B	05/02-05/05/05	G84EP1AN
		Dilution Factor: 1		Analysis Time..: 16:41		
Prep Batch #...: 5123055						
Mercury	ND	10	ug/L	SW846 7470A	05/03/05	G84EP1AM
		Dilution Factor: 1		Analysis Time..: 19:37		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

B Estimated result. Result is less than RL.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58920

TOTAL Metals

Lot-Sample #...: F5D220359-001 **Matrix.....: WATER**
Date Sampled...: 04/20/05 **Date Received..: 04/22/05**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115332						
Silver	ND	10 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:05	04/25-04/27/05	G81701CK
Arsenic	ND	10 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:05	04/25-04/27/05	G81701A8
Barium J.F1	**2.0 B**	**200** Dilution Factor: 2	**ug/L**	**SW846 6020** Analysis Time..: 21:05	**04/25-04/27/05**	**G81701A9**
Beryllium	ND	2 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:05	04/25-04/27/05	G81701CA
Cadmium	ND	2 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:05	04/25-04/27/05	G81701CC
Cobalt	ND	50 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:05	04/25-04/27/05	G81701CD
Chromium J.F1	**4.4 B**	**10** Dilution Factor: 2	**ug/L**	**SW846 6020** Analysis Time..: 21:05	**04/25-04/27/05**	**G81701CN**
Copper	ND	25 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:05	04/25-04/27/05	G81701CE
Manganese	ND	15 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:05	04/25-04/27/05	G81701CG
Nickel	ND	20 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:05	04/25-04/27/05	G81701CH
Lead	ND	3 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:05	04/25-04/27/05	G81701CF
Antimony	ND	2 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:05	04/25-04/27/05	G81701A7
Selenium U.I4a	**0.93 B**	**1** Dilution Factor: 2	**ug/L**	**SW846 6020** Analysis Time..: 21:05	**04/25-04/27/05**	**G81701CJ**

(Continued on next page)

CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58920

TOTAL Metals

Lot-Sample #...: F5D220359-001 Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium J.I1	0.63 B	1	ug/L	SW846 6020	04/25-04/27/05	G81701CL
		Dilution Factor: 2		Analysis Time..: 21:05		
Vanadium	ND	50	ug/L	SW846 6020	04/25-04/27/05	G81701CM
		Dilution Factor: 2		Analysis Time..: 21:05		
Prep Batch #...: 5115334						
Aluminum	ND	100	ug/L	SW846 6010B	04/25-04/26/05	G81701CP
		Dilution Factor: 1		Analysis Time..: 12:24		
Calcium J,I1	65.9 B	5000	ug/L	SW846 6010B	04/25-04/26/05	G81701CQ
		Dilution Factor: 1		Analysis Time..: 11:30		
Iron	ND	100	ug/L	SW846 6010B	04/25-04/26/05	G81701CR
		Dilution Factor: 1		Analysis Time..: 11:30		
Magnesium U,I4a	107 B	5000	ug/L	SW846 6010B	04/25-04/26/05	G81701CT
		Dilution Factor: 1		Analysis Time..: 11:30		
Potassium	ND	5000	ug/L	SW846 6010B	04/25-04/26/05	G81701CU
		Dilution Factor: 1		Analysis Time..: 11:30		
Sodium J,I1	120 B	5000	ug/L	SW846 6010B	04/25-04/26/05	G81701CV
		Dilution Factor: 1		Analysis Time..: 11:30		
Zinc J,I1	2.6 B	20	ug/L	SW846 6010B	04/25-04/26/05	G81701CW
		Dilution Factor: 1		Analysis Time..: 12:24		
Prep Batch #...: 5119205						
Mercury	ND	0.2	ug/L	SW846 7470A	04/29-05/02/05	G81701CX
		Dilution Factor: 1		Analysis Time..: 11:35		

NOTE(S):

B Estimated result. Result is less than RL.

CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58921

TOTAL Metals

Lot-Sample #...: F5D220359-002 **Matrix.....: WATER**
Date Sampled...: 04/20/05 **Date Received..: 04/22/05**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115332						
Silver	ND	10 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:31	04/25-04/27/05	G84EP1A0
Arsenic	ND	10 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:31	04/25-04/27/05	G84EP1AC
Barium J, I-1	0.68 B	200 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:31	04/25-04/27/05	G84EP1AD
Beryllium	ND	2 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:31	04/25-04/27/05	G84EP1AP
Cadmium	ND	2 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:31	04/25-04/27/05	G84EP1AQ
Cobalt	ND	50 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:31	04/25-04/27/05	G84EP1AR
Chromium	ND	10 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:31	04/25-04/27/05	G84EP1A3
Copper	ND	25 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:31	04/25-04/27/05	G84EP1AT
Manganese	ND	15 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:31	04/25-04/27/05	G84EP1AV
Nickel	ND	20 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:31	04/25-04/27/05	G84EP1AW
Lead	ND	3 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:31	04/25-04/27/05	G84EP1AU
Antimony	ND	2 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:31	04/25-04/27/05	G84EP1AA
Selenium U, I-4a	0.65 B	1 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:31	04/25-04/27/05	G84EP1AX

(Continued on next page)

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58921

TOTAL Metals

Lot-Sample #...: F5D220359-002 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1	ug/L	SW846 6020	04/25-04/27/05	G84EP1A1
		Dilution Factor: 2		Analysis Time..: 21:31		
Vanadium	ND	50	ug/L	SW846 6020	04/25-04/27/05	G84EP1A2
		Dilution Factor: 2		Analysis Time..: 21:31		
Prep Batch #...: 5115334						
Aluminum	ND	100	ug/L	SW846 6010B	04/25-04/26/05	G84EP1A4
		Dilution Factor: 1		Analysis Time..: 12:41		
Calcium J.I1	21.2 B	5000	ug/L	SW846 6010B	04/25-04/26/05	G84EP1A5
		Dilution Factor: 1		Analysis Time..: 11:47		
Iron	ND	100	ug/L	SW846 6010B	04/25-04/26/05	G84EP1A6
		Dilution Factor: 1		Analysis Time..: 11:47		
Magnesium 4.249	110 B	5000	ug/L	SW846 6010B	04/25-04/26/05	G84EP1A7
		Dilution Factor: 1		Analysis Time..: 11:47		
Potassium J.I1	1400 B	5000	ug/L	SW846 6010B	04/25-04/26/05	G84EP1A8
		Dilution Factor: 1		Analysis Time..: 11:47		
Sodium J.I1	91.1 B	5000	ug/L	SW846 6010B	04/25-04/26/05	G84EP1A9
		Dilution Factor: 1		Analysis Time..: 11:47		
Zinc J.I1	1.8 B	20	ug/L	SW846 6010B	04/25-04/26/05	G84EP1CA
		Dilution Factor: 1		Analysis Time..: 12:41		
Prep Batch #...: 5119205						
Mercury	ND	0.2	ug/L	SW846 7470A	04/29-05/02/05	G84EP1CC
		Dilution Factor: 1		Analysis Time..: 11:37		

NOTE(S):

B Estimated result. Result is less than RL.

DATA VALIDATION COVER SHEET (Example)

SECTION I.

REQUEST NUMBER: 31675 COST CODE: _____

VALIDATION DATE: _____

LAB NAME: STL LAB CODE: _____

VALIDATOR: _____ ORGANIZATION: _____

ANALYTICAL SUITE: ___ VOLATILES ___ HIGH EXPLOSIVES

___ SEMIVOLATILES ___ INORGANICS

___ PESTICIDES/AROCLORS ___ RADIOCHEMISTRY

OTHER (describe) _____

SECTION II. COMPLETENESS CHECKLIST

Item	Present? (Y/N/NA)	Item	Present? (Y/N/NA)
1. COC form(s)		2. Case Narrative	
3. Sample Results		4. Sample Chromatograms	
5. Standard Chromatograms		6. Quantitation Reports	
7. QC Forms			

Identify any samples in the assigned Request Number that are missing:

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

Comments: Include information about requests to the laboratory and agreed upon date of resolution and lab contact: (Attach additional comment sheets as necessary)

_____

_____

_____

Signature/1st validation: _____ Date/1st validation: _____

Signature/2nd validation: _____ Date/2nd validation: _____

SEVERN TRENT STL

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

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RECD MAY 18 2005

ANALYTICAL REPORT

PROJECT NO. 31678

Los Alamos Non-Rad

Lot #: F5D220359

Joylene Valdez or Keith Greene

Los Alamos National Laboratory
SMO TA-00 Bldg 1237
DP: 03U; MS: 707
Los Alamos, NM 87545

SEVERN TRENT LABORATORIES, INC.

Elaine Wildroe

Ed Kao
Project Manager

May 12, 2005

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CLIENT CHAIN OF CUSTODY 542

TOTAL NUMBER OF PAGES IN PACKAGE 548

Case Narrative
LOT NUMBER: **F5D220359**
LANL Request Number: **3167S**

This report contains the analytical results for the two samples received under chain of custody number by STL St. Louis on April 22, 2005. These samples are associated with your Los Alamos Non-Rad project.

All applicable quality control procedures met method-specified acceptance criteria.

This report is incomplete without the case narrative. All chemical analysis results are based upon dry weight correction as required per the statement of work. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances

Sample Receiving

Samples were received at 4.0 +/- 2°C. No problems were noted at the time of sample receipt.

Metals Method 6020A

QC Batch: 5115332
The Method Blank shows contamination below the reporting limit for Selenium.

The LCS is in control for spike compounds.

The Batch QC Matrix Spike and Matrix Spike Duplicate was performed on F5D220359-001. The Matrix Spike and Matrix Spike Duplicate recoveries and RPD values are inside stated limits.

Metals Method 6010B

QC Batch: 5115334
The Method Blank shows contamination below the reporting limit for Magnesium.

The LCS is in control for spike compounds.

The Batch QC Matrix Spike and Matrix Spike Duplicate was performed on F5D220359-001. The Matrix Spike and Matrix Spike Duplicate recoveries and RPD values are inside stated limits.

Mercury Method 7471A

QC Batch: 5119205
The Method Blank shows no contamination below the reporting limit.

The LCS is in control for spike compounds.

The Batch QC Matrix Spike and Matrix Spike Duplicate was performed on F5D220359-001. The Matrix Spike and Matrix Spike Duplicate recovery and RPD value is within stated limits.

TCLP Metals Method 6010B

QC Batch: 5122274

The Method Blank shows contamination below the reporting limit Barium and Zinc.

The LCS is in control for spike compounds.

The Batch QC Matrix Spike and Matrix Spike Duplicate was performed on F5D220359-001. The Matrix Spike and Matrix Spike Duplicate recoveries and RPD values are inside stated limits.

TCLP Mercury Method 7470A

QC Batch: 5122274

The Method Blank shows no contamination below the reporting limit.

The LCS is in control for spike compounds.

The Batch QC Matrix Spike and Matrix Spike Duplicate was performed on F5D220359-001. The Matrix Spike and Matrix Spike Duplicate recoveries and RPD values are inside stated limits.

I certify that this data is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the signature on the front page, has authorized release of the data contained in this hardcopy.

METHODS SUMMARY

F5D220359

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 1311/3010
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3010A
ICP-MS (6020)	SW846 6020	SW846 3010
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A	SW846 1311/7470
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A	SW846 7470A

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

F5D220359

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
G8170	001	RE73-05-58920	04/20/05	
G84EP	002	RE73-05-58921	04/20/05	

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

QC DATA ASSOCIATION SUMMARY

F5D220359

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	SW846 6020		5115332	5115269
	WATER	SW846 7470A		5119205	5119152
	WATER	SW846 7470A	P511906	5123055	5123049
	WATER	SW846 6010B		5115334	5115270
	WATER	SW846 6010B	P511906	5122274	5122171
002	WATER	SW846 6020		5115332	5115269
	WATER	SW846 7470A		5119205	5119152
	WATER	SW846 7470A	P511906	5123055	5123049
	WATER	SW846 6010B		5115334	5115270
	WATER	SW846 6010B	P511906	5122274	5122171

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58920

TOTAL Metals

Lot-Sample #...: F5D220359-001 **Matrix.....:** WATER
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115332						
Silver	ND	10 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:05	04/25-04/27/05	G81701CK
Arsenic	ND	10 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:05	04/25-04/27/05	G81701A8
Barium	**2.0 B**	**200** Dilution Factor: 2	**ug/L**	**SW846 6020** Analysis Time..: 21:05	**04/25-04/27/05**	**G81701A9**
Beryllium	ND	2 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:05	04/25-04/27/05	G81701CA
Cadmium	ND	2 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:05	04/25-04/27/05	G81701CC
Cobalt	ND	50 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:05	04/25-04/27/05	G81701CD
Chromium	**4.4 B**	**10** Dilution Factor: 2	**ug/L**	**SW846 6020** Analysis Time..: 21:05	**04/25-04/27/05**	**G81701CN**
Copper	ND	25 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:05	04/25-04/27/05	G81701CE
Manganese	ND	15 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:05	04/25-04/27/05	G81701CG
Nickel	ND	20 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:05	04/25-04/27/05	G81701CH
Lead	ND	3 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:05	04/25-04/27/05	G81701CF
Antimony	ND	2 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:05	04/25-04/27/05	G81701A7
Selenium	**0.93 B**	**1** Dilution Factor: 2	**ug/L**	**SW846 6020** Analysis Time..: 21:05	**04/25-04/27/05**	**G81701CJ**

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58920

TOTAL Metals

Lot-Sample #...: F5D220359-001 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.63 B**	**1**	**ug/L**	**SW846 6020**	**04/25-04/27/05**	**G81701CL**
		Dilution Factor: 2		Analysis Time..: 21:05		
Vanadium	ND	50	ug/L	SW846 6020	04/25-04/27/05	G81701CM
		Dilution Factor: 2		Analysis Time..: 21:05		
Prep Batch #...: 5115334						
Aluminum	ND	100	ug/L	SW846 6010B	04/25-04/26/05	G81701CP
		Dilution Factor: 1		Analysis Time..: 12:24		
Calcium	**65.9 B**	**5000**	**ug/L**	**SW846 6010B**	**04/25-04/26/05**	**G81701CQ**
		Dilution Factor: 1		Analysis Time..: 11:30		
Iron	ND	100	ug/L	SW846 6010B	04/25-04/26/05	G81701CR
		Dilution Factor: 1		Analysis Time..: 11:30		
Magnesium	**107 B**	**5000**	**ug/L**	**SW846 6010B**	**04/25-04/26/05**	**G81701CT**
		Dilution Factor: 1		Analysis Time..: 11:30		
Potassium	ND	5000	ug/L	SW846 6010B	04/25-04/26/05	G81701CU
		Dilution Factor: 1		Analysis Time..: 11:30		
Sodium	**120 B**	**5000**	**ug/L**	**SW846 6010B**	**04/25-04/26/05**	**G81701CV**
		Dilution Factor: 1		Analysis Time..: 11:30		
Zinc	**2.6 B**	**20**	**ug/L**	**SW846 6010B**	**04/25-04/26/05**	**G81701CW**
		Dilution Factor: 1		Analysis Time..: 12:24		
Prep Batch #...: 5119205						
Mercury	ND	0.2	ug/L	SW846 7470A	04/29-05/02/05	G81701CX
		Dilution Factor: 1		Analysis Time..: 11:35		

NOTE(S):

B Estimated result. Result is less than RL.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58920

TCLP Metals

Lot-Sample #...: F5D220359-001
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05
Leach Date.....: 04/29/05 **Leach Batch #..:** P511906
Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5122274						
Silver	ND	50	ug/L	SW846 6010B	05/02-05/05/05	G81701AA
		Dilution Factor: 1		Analysis Time..: 16:19		
Arsenic	ND	500	ug/L	SW846 6010B	05/02-05/05/05	G81701AC
		Dilution Factor: 1		Analysis Time..: 16:19		
Barium	**157 B**	**500**	**ug/L**	**SW846 6010B**	**05/02-05/05/05**	**G81701AD**
		Dilution Factor: 1		Analysis Time..: 16:19		
Cadmium	ND	25	ug/L	SW846 6010B	05/02-05/05/05	G81701AE
		Dilution Factor: 1		Analysis Time..: 16:19		
Chromium	ND	50	ug/L	SW846 6010B	05/02-05/05/05	G81701AF
		Dilution Factor: 1		Analysis Time..: 16:19		
Lead	ND	250	ug/L	SW846 6010B	05/02-05/05/05	G81701AG
		Dilution Factor: 1		Analysis Time..: 16:19		
Selenium	ND	500	ug/L	SW846 6010B	05/02-05/05/05	G81701AH
		Dilution Factor: 1		Analysis Time..: 16:19		
Zinc	**34.5 B**	**100**	**ug/L**	**SW846 6010B**	**05/02-05/05/05**	**G81701AK**
		Dilution Factor: 1		Analysis Time..: 16:19		
Prep Batch #...: 5123055						
Mercury	ND	10	ug/L	SW846 7470A	05/03/05	G81701AJ
		Dilution Factor: 1		Analysis Time..: 19:28		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

B Estimated result. Result is less than RL.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58921

TOTAL Metals

Lot-Sample #...: F5D220359-002
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115332						
Silver	ND	10 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:31	04/25-04/27/05	G84EP1A0
Arsenic	ND	10 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:31	04/25-04/27/05	G84EP1AC
Barium	**0.68 B**	**200** Dilution Factor: 2	ug/L	**SW846 6020** Analysis Time..: 21:31	**04/25-04/27/05**	**G84EP1AD**
Beryllium	ND	2 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:31	04/25-04/27/05	G84EP1AP
Cadmium	ND	2 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:31	04/25-04/27/05	G84EP1AQ
Cobalt	ND	50 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:31	04/25-04/27/05	G84EP1AR
Chromium	ND	10 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:31	04/25-04/27/05	G84EP1A3
Copper	ND	25 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:31	04/25-04/27/05	G84EP1AT
Manganese	ND	15 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:31	04/25-04/27/05	G84EP1AV
Nickel	ND	20 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:31	04/25-04/27/05	G84EP1AW
Lead	ND	3 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:31	04/25-04/27/05	G84EP1AU
Antimony	ND	2 Dilution Factor: 2	ug/L	SW846 6020 Analysis Time..: 21:31	04/25-04/27/05	G84EP1AA
Selenium	**0.65 B**	**1** Dilution Factor: 2	**ug/L**	**SW846 6020** Analysis Time..: 21:31	**04/25-04/27/05**	**G84EP1AX**

(Continued on next page)

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58921

TOTAL Metals

Lot-Sample #...: F5D220359-002 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	1	ug/L	SW846 6020	04/25-04/27/05	G84EP1A1
		Dilution Factor: 2		Analysis Time..: 21:31		
Vanadium	ND	50	ug/L	SW846 6020	04/25-04/27/05	G84EP1A2
		Dilution Factor: 2		Analysis Time..: 21:31		
Prep Batch #...: 5115334						
Aluminum	ND	100	ug/L	SW846 6010B	04/25-04/26/05	G84EP1A4
		Dilution Factor: 1		Analysis Time..: 12:41		
Calcium	**21.2 B**	**5000**	**ug/L**	**SW846 6010B**	**04/25-04/26/05**	**G84EP1A5**
		Dilution Factor: 1		Analysis Time..: 11:47		
Iron	ND	100	ug/L	SW846 6010B	04/25-04/26/05	G84EP1A6
		Dilution Factor: 1		Analysis Time..: 11:47		
Magnesium	**110 B**	**5000**	**ug/L**	**SW846 6010B**	**04/25-04/26/05**	**G84EP1A7**
		Dilution Factor: 1		Analysis Time..: 11:47		
Potassium	**1400 B**	**5000**	**ug/L**	**SW846 6010B**	**04/25-04/26/05**	**G84EP1A8**
		Dilution Factor: 1		Analysis Time..: 11:47		
Sodium	**91.1 B**	**5000**	**ug/L**	**SW846 6010B**	**04/25-04/26/05**	**G84EP1A9**
		Dilution Factor: 1		Analysis Time..: 11:47		
Zinc	**1.8 B**	**20**	**ug/L**	**SW846 6010B**	**04/25-04/26/05**	**G84EP1CA**
		Dilution Factor: 1		Analysis Time..: 12:41		
Prep Batch #...: 5119205						
Mercury	ND	0.2	ug/L	SW846 7470A	04/29-05/02/05	G84EP1CC
		Dilution Factor: 1		Analysis Time..: 11:37		

NOTE(S):

B Estimated result. Result is less than RL.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58921

TCLP Metals

Lot-Sample #...: F5D220359-002 **Matrix.....:** WATER
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05
Leach Date.....: 04/29/05 **Leach Batch #..:** P511906

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5122274						
Silver	ND	50	ug/L	SW846 6010B	05/02-05/05/05	G84EP1AE
		Dilution Factor: 1		Analysis Time..: 16:41		
Arsenic	ND	500	ug/L	SW846 6010B	05/02-05/05/05	G84EP1AF
		Dilution Factor: 1		Analysis Time..: 16:41		
Barium	**103 B**	**500**	**ug/L**	**SW846 6010B**	**05/02-05/05/05**	**G84EP1AG**
		Dilution Factor: 1		Analysis Time..: 16:41		
Cadmium	ND	25	ug/L	SW846 6010B	05/02-05/05/05	G84EP1AH
		Dilution Factor: 1		Analysis Time..: 16:41		
Chromium	ND	50	ug/L	SW846 6010B	05/02-05/05/05	G84EP1AJ
		Dilution Factor: 1		Analysis Time..: 16:41		
Lead	ND	250	ug/L	SW846 6010B	05/02-05/05/05	G84EP1AK
		Dilution Factor: 1		Analysis Time..: 16:41		
Selenium	ND	500	ug/L	SW846 6010B	05/02-05/05/05	G84EP1AL
		Dilution Factor: 1		Analysis Time..: 16:41		
Zinc	**41.9 B**	**100**	**ug/L**	**SW846 6010B**	**05/02-05/05/05**	**G84EP1AN**
		Dilution Factor: 1		Analysis Time..: 16:41		
Prep Batch #...: 5123055						
Mercury	ND	10	ug/L	SW846 7470A	05/03/05	G84EP1AM
		Dilution Factor: 1		Analysis Time..: 19:37		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: F5D220359 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: F5D250000-332 **Prep Batch #...:** 5115332						
Antimony	ND	4	ug/L	SW846 6020	04/25-04/27/05	G849V1AA
		Dilution Factor: 2				
		Analysis Time..: 20:54				
Arsenic	ND	20	ug/L	SW846 6020	04/25-04/27/05	G849V1AC
		Dilution Factor: 2				
		Analysis Time..: 20:54				
Barium	ND	400	ug/L	SW846 6020	04/25-04/27/05	G849V1AD
		Dilution Factor: 2				
		Analysis Time..: 20:54				
Beryllium	ND	4	ug/L	SW846 6020	04/25-04/27/05	G849V1AE
		Dilution Factor: 2				
		Analysis Time..: 20:54				
Cadmium	ND	4	ug/L	SW846 6020	04/25-04/27/05	G849V1AF
		Dilution Factor: 2				
		Analysis Time..: 20:54				
Chromium	ND	20	ug/L	SW846 6020	04/25-04/27/05	G849V1AR
		Dilution Factor: 2				
		Analysis Time..: 20:54				
Cobalt	ND	100	ug/L	SW846 6020	04/25-04/27/05	G849V1AG
		Dilution Factor: 2				
		Analysis Time..: 20:54				
Copper	ND	50	ug/L	SW846 6020	04/25-04/27/05	G849V1AH
		Dilution Factor: 2				
		Analysis Time..: 20:54				
Lead	ND	6	ug/L	SW846 6020	04/25-04/27/05	G849V1AJ
		Dilution Factor: 2				
		Analysis Time..: 20:54				
Manganese	ND	30	ug/L	SW846 6020	04/25-04/27/05	G849V1AK
		Dilution Factor: 2				
		Analysis Time..: 20:54				
Nickel	ND	40	ug/L	SW846 6020	04/25-04/27/05	G849V1AL
		Dilution Factor: 2				
		Analysis Time..: 20:54				

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: F5D220359 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Selenium	**0.98 B**	**2**	**ug/L**	**SW846 6020**	**04/25-04/27/05**	**G849V1AM**
		Dilution Factor: 2				
		Analysis Time..: 20:54				
Silver	ND	20	ug/L	SW846 6020	04/25-04/27/05	G849V1AN
		Dilution Factor: 2				
		Analysis Time..: 20:54				
Thallium	ND	2	ug/L	SW846 6020	04/25-04/27/05	G849V1AP
		Dilution Factor: 2				
		Analysis Time..: 20:54				
Vanadium	ND B	100	ug/L	SW846 6020	04/25-04/27/05	G849V1AQ
		Dilution Factor: 2				
		Analysis Time..: 20:54				
MB Lot-Sample #: F5D250000-334 **Prep Batch #...:** 5115334						
Aluminum	ND	100	ug/L	SW846 6010B	04/25-04/26/05	G84961AA
		Dilution Factor: 1				
		Analysis Time..: 12:15				
Calcium	ND B	5000	ug/L	SW846 6010B	04/25-04/26/05	G84961AC
		Dilution Factor: 1				
		Analysis Time..: 11:21				
Iron	ND	100	ug/L	SW846 6010B	04/25-04/26/05	G84961AD
		Dilution Factor: 1				
		Analysis Time..: 11:21				
Magnesium	**60.2 B**	**5000**	**ug/L**	**SW846 6010B**	**04/25-04/26/05**	**G84961AE**
		Dilution Factor: 1				
		Analysis Time..: 11:21				
Potassium	ND	5000	ug/L	SW846 6010B	04/25-04/26/05	G84961AF
		Dilution Factor: 1				
		Analysis Time..: 11:21				
Sodium	ND	5000	ug/L	SW846 6010B	04/25-04/26/05	G84961AG
		Dilution Factor: 1				
		Analysis Time..: 11:21				
Zinc	ND	20	ug/L	SW846 6010B	04/25-04/26/05	G84961AH
		Dilution Factor: 1				
		Analysis Time..: 12:15				

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: F5D220359

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: F5D290000-205 **Prep Batch #...:** 5119205						
Mercury	ND	0.20	ug/L	SW846 7470A	04/29-05/02/05	G9GNJ1AE
		Dilution Factor: 1				
		Analysis Time..: 11:20				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

TCLP Metals

Client Lot #...: F5D220359 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: F5D290000-371 **Prep Batch #...:** 5122274						
Leach Date.....: 04/29/05 **Leach Batch #..:** P511906						
Arsenic	ND	500	ug/L	SW846 6010B	05/02-05/05/05	G9HX11AK
		Dilution Factor: 1				
		Analysis Time..: 16:10				
Barium	**26.9 B**	**500**	**ug/L**	**SW846 6010B**	**05/02-05/05/05**	**G9HX11AL**
		Dilution Factor: 1				
		Analysis Time..: 16:10				
Cadmium	ND	15.0	ug/L	SW846 6010B	05/02-05/05/05	G9HX11AM
		Dilution Factor: 1				
		Analysis Time..: 16:10				
Chromium	ND	25.0	ug/L	SW846 6010B	05/02-05/05/05	G9HX11AN
		Dilution Factor: 1				
		Analysis Time..: 16:10				
Lead	ND	250	ug/L	SW846 6010B	05/02-05/05/05	G9HX11AP
		Dilution Factor: 1				
		Analysis Time..: 16:10				
MB Lot-Sample #: F5D290000-371 **Prep Batch #...:** 5123055						
Leach Date.....: 04/29/05 **Leach Batch #..:** P511906						
Mercury	ND	10	ug/L	SW846 7470A	05/03/05	G9HX11AR
		Dilution Factor: 1				
		Analysis Time..: 19:24				
MB Lot-Sample #: F5D290000-371 **Prep Batch #...:** 5122274						
Leach Date.....: 04/29/05 **Leach Batch #..:** P511906						
Selenium	ND	500	ug/L	SW846 6010B	05/02-05/05/05	G9HX11AQ
		Dilution Factor: 1				
		Analysis Time..: 16:10				
Silver	ND	25.0	ug/L	SW846 6010B	05/02-05/05/05	G9HX11AJ
		Dilution Factor: 1				
		Analysis Time..: 16:10				
Zinc	**12.0 B**	**60.0**	**ug/L**	**SW846 6010B**	**05/02-05/05/05**	**G9HX11AT**
		Dilution Factor: 1				
		Analysis Time..: 16:10				

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METHOD BLANK REPORT

TCLP Metals

Client Lot #...: F5D220359 **Matrix.....:** WATER

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F5D220359 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: F5D250000-332 **Prep Batch #...:** 5115332					
Antimony	94	(85 - 115)	SW846 6020	04/25-04/27/05	G849V1AT
		Dilution Factor: 2	Analysis Time..: 21:00		
Arsenic	102	(85 - 115)	SW846 6020	04/25-04/27/05	G849V1AU
		Dilution Factor: 2	Analysis Time..: 21:00		
Barium	98	(85 - 115)	SW846 6020	04/25-04/27/05	G849V1AV
		Dilution Factor: 2	Analysis Time..: 21:00		
Beryllium	93	(85 - 115)	SW846 6020	04/25-04/27/05	G849V1AW
		Dilution Factor: 2	Analysis Time..: 21:00		
Cadmium	94	(85 - 115)	SW846 6020	04/25-04/27/05	G849V1AX
		Dilution Factor: 2	Analysis Time..: 21:00		
Cobalt	92	(85 - 115)	SW846 6020	04/25-04/27/05	G849V1A0
		Dilution Factor: 2	Analysis Time..: 21:00		
Copper	91	(85 - 115)	SW846 6020	04/25-04/27/05	G849V1A1
		Dilution Factor: 2	Analysis Time..: 21:00		
Lead	93	(85 - 115)	SW846 6020	04/25-04/27/05	G849V1A2
		Dilution Factor: 2	Analysis Time..: 21:00		
Manganese	93	(85 - 115)	SW846 6020	04/25-04/27/05	G849V1A3
		Dilution Factor: 2	Analysis Time..: 21:00		
Nickel	94	(85 - 115)	SW846 6020	04/25-04/27/05	G849V1A4
		Dilution Factor: 2	Analysis Time..: 21:00		
Selenium	96	(85 - 115)	SW846 6020	04/25-04/27/05	G849V1A5
		Dilution Factor: 2	Analysis Time..: 21:00		
Silver	95	(85 - 115)	SW846 6020	04/25-04/27/05	G849V1A6
		Dilution Factor: 2	Analysis Time..: 21:00		
Thallium	91	(85 - 115)	SW846 6020	04/25-04/27/05	G849V1A7
		Dilution Factor: 2	Analysis Time..: 21:00		
Vanadium	94	(85 - 115)	SW846 6020	04/25-04/27/05	G849V1A8
		Dilution Factor: 2	Analysis Time..: 21:00		

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F5D220359 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Chromium	97	(85 - 115)	SW846 6020	04/25-04/27/05	G849V1A9
		Dilution Factor: 2	Analysis Time..: 21:00		
LCS Lot-Sample#: F5D250000-334 **Prep Batch #...:** 5115334					
Aluminum	105	(80 - 120)	SW846 6010B	04/25-04/26/05	G84961AJ
		Dilution Factor: 1	Analysis Time..: 12:20		
Calcium	107	(80 - 120)	SW846 6010B	04/25-04/26/05	G84961AK
		Dilution Factor: 1	Analysis Time..: 11:25		
Iron	110	(80 - 120)	SW846 6010B	04/25-04/26/05	G84961AL
		Dilution Factor: 1	Analysis Time..: 11:25		
Magnesium	105	(80 - 120)	SW846 6010B	04/25-04/26/05	G84961AM
		Dilution Factor: 1	Analysis Time..: 11:25		
Potassium	114	(80 - 120)	SW846 6010B	04/25-04/26/05	G84961AN
		Dilution Factor: 1	Analysis Time..: 11:25		
Sodium	110	(80 - 120)	SW846 6010B	04/25-04/26/05	G84961AP
		Dilution Factor: 1	Analysis Time..: 11:25		
Zinc	105	(80 - 120)	SW846 6010B	04/25-04/26/05	G84961AQ
		Dilution Factor: 1	Analysis Time..: 12:20		
LCS Lot-Sample#: F5D290000-205 **Prep Batch #...:** 5119205					
Mercury	100	(82 - 125)	SW846 7470A	04/29-05/02/05	G9GNJ1AF
		Dilution Factor: 1	Analysis Time..: 11:22		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TCLP Metals

Client Lot #...: F5D220359 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: F5E020000-274 **Prep Batch #...:** 5122274					
Silver	100	(80 - 120)	SW846 6010B	05/02-05/05/05	G9MDJ1AA
		Dilution Factor: 1		Analysis Time..: 16:14	
Arsenic	102	(80 - 120)	SW846 6010B	05/02-05/05/05	G9MDJ1AC
		Dilution Factor: 1		Analysis Time..: 16:14	
Barium	111	(80 - 120)	SW846 6010B	05/02-05/05/05	G9MDJ1AD
		Dilution Factor: 1		Analysis Time..: 16:14	
Cadmium	103	(80 - 120)	SW846 6010B	05/02-05/05/05	G9MDJ1AE
		Dilution Factor: 1		Analysis Time..: 16:14	
Chromium	101	(80 - 120)	SW846 6010B	05/02-05/05/05	G9MDJ1AF
		Dilution Factor: 1		Analysis Time..: 16:14	
Lead	100	(80 - 120)	SW846 6010B	05/02-05/05/05	G9MDJ1AG
		Dilution Factor: 1		Analysis Time..: 16:14	
Selenium	103	(80 - 120)	SW846 6010B	05/02-05/05/05	G9MDJ1AH
		Dilution Factor: 1		Analysis Time..: 16:14	
Zinc	101	(80 - 120)	SW846 6010B	05/02-05/05/05	G9MDJ1AJ
		Dilution Factor: 1		Analysis Time..: 16:14	
LCS Lot-Sample#: F5E030000-055 **Prep Batch #...:** 5123055					
Mercury	106	(82 - 125)	SW846 7470A	05/03/05	G9NWJ1AA
		Dilution Factor: 1		Analysis Time..: 19:26	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F5D220359 **Matrix.....:** WATER
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F5D220359-001 **Prep Batch #...:** 5115332					
Antimony	94	(80 - 120)	SW846 6020	04/25-04/27/05	G81701C0
		Dilution Factor: 2		Analysis Time..: 21:05	
Arsenic	98	(80 - 120)	SW846 6020	04/25-04/27/05	G81701C1
		Dilution Factor: 2		Analysis Time..: 21:05	
Barium	99	(80 - 120)	SW846 6020	04/25-04/27/05	G81701C2
		Dilution Factor: 2		Analysis Time..: 21:05	
Beryllium	94	(80 - 120)	SW846 6020	04/25-04/27/05	G81701C3
		Dilution Factor: 2		Analysis Time..: 21:05	
Cadmium	97	(80 - 120)	SW846 6020	04/25-04/27/05	G81701C4
		Dilution Factor: 2		Analysis Time..: 21:05	
Chromium	99	(80 - 120)	SW846 6020	04/25-04/27/05	G81701DF
		Dilution Factor: 2		Analysis Time..: 21:05	
Cobalt	93	(80 - 120)	SW846 6020	04/25-04/27/05	G81701C5
		Dilution Factor: 2		Analysis Time..: 21:05	
Copper	92	(80 - 120)	SW846 6020	04/25-04/27/05	G81701C6
		Dilution Factor: 2		Analysis Time..: 21:05	
Lead	97	(80 - 120)	SW846 6020	04/25-04/27/05	G81701C7
		Dilution Factor: 2		Analysis Time..: 21:05	
Manganese	91	(80 - 120)	SW846 6020	04/25-04/27/05	G81701C8
		Dilution Factor: 2		Analysis Time..: 21:05	
Nickel	94	(80 - 120)	SW846 6020	04/25-04/27/05	G81701C9
		Dilution Factor: 2		Analysis Time..: 21:05	
Selenium	95	(80 - 120)	SW846 6020	04/25-04/27/05	G81701DA
		Dilution Factor: 2		Analysis Time..: 21:05	
Silver	96	(80 - 120)	SW846 6020	04/25-04/27/05	G81701DC
		Dilution Factor: 2		Analysis Time..: 21:05	
Thallium	96	(80 - 120)	SW846 6020	04/25-04/27/05	G81701DD
		Dilution Factor: 2		Analysis Time..: 21:05	

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F5D220359
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	103	(80 - 120)	SW846 6020	04/25-04/27/05	G81701DE
		Dilution Factor: 2	Analysis Time..: 21:05		

MS Lot-Sample #: P5D220359-001 **Prep Batch #...:** 5115334

Aluminum	104	(75 - 125)	SW846 6010B	04/25-04/26/05	G81701D0
		Dilution Factor: 1	Analysis Time..: 12:24		
Calcium	104	(75 - 125)	SW846 6010B	04/25-04/26/05	G81701D1
		Dilution Factor: 1	Analysis Time..: 11:30		
Iron	109	(75 - 125)	SW846 6010B	04/25-04/26/05	G81701D2
		Dilution Factor: 1	Analysis Time..: 11:30		
Magnesium	103	(75 - 125)	SW846 6010B	04/25-04/26/05	G81701D3
		Dilution Factor: 1	Analysis Time..: 11:30		
Potassium	107	(75 - 125)	SW846 6010B	04/25-04/26/05	G81701D4
		Dilution Factor: 1	Analysis Time..: 11:30		
Sodium	107	(75 - 125)	SW846 6010B	04/25-04/26/05	G81701D5
		Dilution Factor: 1	Analysis Time..: 11:30		
Zinc	104	(75 - 125)	SW846 6010B	04/25-04/26/05	G81701D6
		Dilution Factor: 1	Analysis Time..: 12:24		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F5D220359 **Matrix.....:** WATER
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F5D220359-002 **Prep Batch #...:** 5119205							
Mercury	108	(59 - 136)			SW846 7470A	04/29-05/02/05	G84EP1CD
	96	(59 - 136)	12	(0-20)	SW846 7470A	04/29-05/02/05	G84EP1CE

Dilution Factor: 1
Analysis Time..: 11:41

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TCLP Metals

Client Lot #...: F5D220359
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F5D220359-001 **Prep Batch #...:** 5122274							
Leach Date.....: 04/29/05 **Leach Batch #..:** P511906							
Arsenic	102	(83 - 111)			SW846 6010B	05/02-05/05/05	G81701EH
	102	(83 - 111)	0.44	(0-20)	SW846 6010B	05/02-05/05/05	G81701EJ
		Dilution Factor: 1					
		Analysis Time..: 16:27					
Barium	109	(79 - 111)			SW846 6010B	05/02-05/05/05	G81701EK
	109	(79 - 111)	0.30	(0-20)	SW846 6010B	05/02-05/05/05	G81701EL
		Dilution Factor: 1					
		Analysis Time..: 16:27					
Cadmium	101	(65 - 122)			SW846 6010B	05/02-05/05/05	G81701EM
	102	(65 - 122)	0.71	(0-20)	SW846 6010B	05/02-05/05/05	G81701EN
		Dilution Factor: 1					
		Analysis Time..: 16:27					
Chromium	101	(74 - 114)			SW846 6010B	05/02-05/05/05	G81701EP
	101	(74 - 114)	0.29	(0-20)	SW846 6010B	05/02-05/05/05	G81701EQ
		Dilution Factor: 1					
		Analysis Time..: 16:27					
Lead	99	(65 - 121)			SW846 6010B	05/02-05/05/05	G81701ER
	100	(65 - 121)	0.75	(0-20)	SW846 6010B	05/02-05/05/05	G81701ET
		Dilution Factor: 1					
		Analysis Time..: 16:27					
Selenium	101	(76 - 124)			SW846 6010B	05/02-05/05/05	G81701EU
	102	(76 - 124)	0.63	(0-20)	SW846 6010B	05/02-05/05/05	G81701EV
		Dilution Factor: 1					
		Analysis Time..: 16:27					
Silver	98	(70 - 123)			SW846 6010B	05/02-05/05/05	G81701EF
	99	(70 - 123)	1.2	(0-20)	SW846 6010B	05/02-05/05/05	G81701EG
		Dilution Factor: 1					
		Analysis Time..: 16:27					
Zinc	100	(10 - 150)			SW846 6010B	05/02-05/05/05	G81701EW
	100	(10 - 150)	0.45	(0-20)	SW846 6010B	05/02-05/05/05	G81701EX
		Dilution Factor: 1					
		Analysis Time..: 16:27					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TCLP Metals

Client Lot #...: F5D220359 **Matrix.....:** WATER
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F5D220359-001 **Prep Batch #...:** 5123055					
Mercury	95	(64 - 122)	SW846 7470A	05/03/05	G81701AU
		Dilution Factor: 1		Analysis Time..: 19:28	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Client Lot #...: F5D220359 **Work Order #...:** G8170-SMP G8170-DUP **Matrix.....:** WATER

Date Sampled...: 04/20/05 **Date Received..:** 04/22/05

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Silver						SD Lot-Sample #: F5D220359-001		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/25-04/27/05	5115332
		Dilution Factor: 2				Analysis Time..: 21:05		
Arsenic						SD Lot-Sample #: F5D220359-001		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/25-04/27/05	5115332
		Dilution Factor: 2				Analysis Time..: 21:05		
Barium						SD Lot-Sample #: F5D220359-001		
	2.0 B	1.9 B	ug/L	5.1	(0-20)	SW846 6020	04/25-04/27/05	5115332
		Dilution Factor: 2				Analysis Time..: 21:05		
Beryllium						SD Lot-Sample #: F5D220359-001		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/25-04/27/05	5115332
		Dilution Factor: 2				Analysis Time..: 21:05		
Cadmium						SD Lot-Sample #: F5D220359-001		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/25-04/27/05	5115332
		Dilution Factor: 2				Analysis Time..: 21:05		
Cobalt						SD Lot-Sample #: F5D220359-001		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/25-04/27/05	5115332
		Dilution Factor: 2				Analysis Time..: 21:05		
Chromium						SD Lot-Sample #: F5D220359-001		
	4.4 B	ND	ug/L	200	(0-20)	SW846 6020	04/25-04/27/05	5115332
		Dilution Factor: 2				Analysis Time..: 21:05		
Copper						SD Lot-Sample #: F5D220359-001		
	ND	0.78 B	ug/L	200	(0-20)	SW846 6020	04/25-04/27/05	5115332
		Dilution Factor: 2				Analysis Time..: 21:05		
Manganese						SD Lot-Sample #: F5D220359-001		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/25-04/27/05	5115332
		Dilution Factor: 2				Analysis Time..: 21:05		
Nickel						SD Lot-Sample #: F5D220359-001		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/25-04/27/05	5115332
		Dilution Factor: 2				Analysis Time..: 21:05		
Lead						SD Lot-Sample #: F5D220359-001		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/25-04/27/05	5115332
		Dilution Factor: 2				Analysis Time..: 21:05		

(Continued on next page)

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Lot-Sample #...: F5D220359-000 **Work Order #...:** G8170-SMP G8170-DUP **Matrix.....:** WATER

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Antimony						SD Lot-Sample #: F5D220359-001		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/25-04/27/05	5115332
		Dilution Factor: 2				Analysis Time..: 21:05		
Selenium						SD Lot-Sample #: F5D220359-001		
	0.93 B	0.75 B	ug/L	21	(0-20)	SW846 6020	04/25-04/27/05	5115332
		Dilution Factor: 2				Analysis Time..: 21:05		
Thallium						SD Lot-Sample #: F5D220359-001		
	0.63 B	ND	ug/L	200	(0-20)	SW846 6020	04/25-04/27/05	5115332
		Dilution Factor: 2				Analysis Time..: 21:05		
Vanadium						SD Lot-Sample #: F5D220359-001		
	ND	ND	ug/L	0	(0-20)	SW846 6020	04/25-04/27/05	5115332
		Dilution Factor: 2				Analysis Time..: 21:05		
Aluminum						SD Lot-Sample #: F5D220359-001		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/25-04/26/05	5115334
		Dilution Factor: 1				Analysis Time..: 12:24		
Calcium						SD Lot-Sample #: F5D220359-001		
	65.9 B	61.8 B	ug/L	6.4	(0-20)	SW846 6010B	04/25-04/26/05	5115334
		Dilution Factor: 1				Analysis Time..: 11:30		
Iron						SD Lot-Sample #: F5D220359-001		
	ND	12.0 B	ug/L	200	(0-20)	SW846 6010B	04/25-04/26/05	5115334
		Dilution Factor: 1				Analysis Time..: 11:30		
Magnesium						SD Lot-Sample #: F5D220359-001		
	107 B	90.6 B	ug/L	17	(0-20)	SW846 6010B	04/25-04/26/05	5115334
		Dilution Factor: 1				Analysis Time..: 11:30		
Potassium						SD Lot-Sample #: F5D220359-001		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	04/25-04/26/05	5115334
		Dilution Factor: 1				Analysis Time..: 11:30		
Sodium						SD Lot-Sample #: F5D220359-001		
	120 B	116 B	ug/L	3.4	(0-20)	SW846 6010B	04/25-04/26/05	5115334
		Dilution Factor: 1				Analysis Time..: 11:30		
Zinc						SD Lot-Sample #: F5D220359-001		
	2.6 B	2.1 B	ug/L	21	(0-20)	SW846 6010B	04/25-04/26/05	5115334
		Dilution Factor: 1				Analysis Time..: 12:24		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Client Lot #...: F5D220359 **Work Order #...:** G84EP-SMP G84EP-DUP **Matrix.....:** WATER

Date Sampled...: 04/20/05 **Date Received..:** 04/22/05

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Mercury						SD Lot-Sample #: F5D220359-002		
	ND	ND	ug/L	0	(0-20)	SW846 7470A	04/29-05/02/05	5119205

Dilution Factor: 1 Analysis Time..: 11:37

SAMPLE DUPLICATE EVALUATION REPORT

TCLP Metals

Client Lot #...: F5D220359 **Work Order #...:** G8170-SMP G8170-DUP **Matrix.....:** WATER

Date Sampled...: 04/20/05 **Date Received..:** 04/22/05

Leach Date.....: 04/29/05 **Leach Batch #..:** P511906 **Dilution Factor:**

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Silver						SD Lot-Sample #: F5D220359-001		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	05/02-05/05/05	5122274
			Dilution Factor: 1			Analysis Time..: 16:19		
Arsenic						SD Lot-Sample #: F5D220359-001		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	05/02-05/05/05	5122274
			Dilution Factor: 1			Analysis Time..: 16:19		
Barium						SD Lot-Sample #: F5D220359-001		
	157 B	163 B	ug/L	3.8	(0-20)	SW846 6010B	05/02-05/05/05	5122274
			Dilution Factor: 1			Analysis Time..: 16:19		
Cadmium						SD Lot-Sample #: F5D220359-001		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	05/02-05/05/05	5122274
			Dilution Factor: 1			Analysis Time..: 16:19		
Chromium						SD Lot-Sample #: F5D220359-001		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	05/02-05/05/05	5122274
			Dilution Factor: 1			Analysis Time..: 16:19		
Mercury						SD Lot-Sample #: F5D220359-001		
	ND	ND	ug/L	0	(0-20)	SW846 7470A	05/03/05	5123055
			Dilution Factor: 1			Analysis Time..: 19:28		
Lead						SD Lot-Sample #: F5D220359-001		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	05/02-05/05/05	5122274
			Dilution Factor: 1			Analysis Time..: 16:19		
Selenium						SD Lot-Sample #: F5D220359-001		
	ND	ND	ug/L	0	(0-20)	SW846 6010B	05/02-05/05/05	5122274
			Dilution Factor: 1			Analysis Time..: 16:19		
Zinc						SD Lot-Sample #: F5D220359-001		
	34.5 B	35.2 B	ug/L	2.0	(0-20)	SW846 6010B	05/02-05/05/05	5122274
			Dilution Factor: 1			Analysis Time..: 16:19		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

F5D220359

CLIENT ANALYSIS SUMMARY

Storage Loc: METS,A94

Project Manager: EK | Quote #: 44975 | SDG: F5D220359 | Date Received: 2005-04-22

Project: 31679 | Los Alamos Non-Rad | Analytical Due Date: 2005-05-04 5-11

PO#: 126310021 | Report to: Joylene Valdez or Keith | Report Due Date: 2005-05-06 5-13

Client: 108581 LOS ALAMOS NATIONAL LABORATORY | #SMPS in LOT: 2 | Report Type: D Expanded Deliverable | EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is surrogate with

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	
1	RE73-05-56920			2005-04-20 / 0	GB170	WATER

SAMPLE COMMENTS:

	CD	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	PB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	SB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	CU	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	SE	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	CR	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	NI	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	CO	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	MN	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	TL	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	BE	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	VX	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	BA	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	AS	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	AG	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	HG	CS	SW846 7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	HG	CS	SW846 7470A	Mercury (7470A, Cold Vapor) - Liquid	19	METALS, TOTAL (Method exclusive) - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	ZN	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	ZN	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	PB	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	SE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	AS	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	AG	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	NA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	AL	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	BA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	CA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	CD	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	CR	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	FE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	KX	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	MG	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
S	HG	CS	SW846 7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
S	SE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06		

METALS SAMPLE AND QC SUMMARY RESULTS

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8170 **Client ID:** RE73-05-58920

Matrix: Water **Units:** ug/L **Prep Date:** 4/25/05 **Prep Batch:** 5115334

Weight: 50 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	308.22	22.1	100	22.1	U	1	ICPST	4/26/05	12:24
Calcium	**317.93**	**11.2**	**5000**	**65.9**	**B**	**1**	**ICP**	**4/26/05**	**11:30**
Iron	259.94	7.4	100	7.4	U	1	ICP	4/26/05	11:30
Magnesium	**383.27**	**45.7**	**5000**	**107**	**B**	**1**	**ICP**	**4/26/05**	**11:30**
Potassium	766.49	961	5000	961	U	1	ICP	4/26/05	11:30
Sodium	**589**	**58.5**	**5000**	**120**	**B**	**1**	**ICP**	**4/26/05**	**11:30**
Zinc	**213.86**	**1.1**	**20.0**	**2.6**	**B**	**1**	**ICPST**	**4/26/05**	**12:24**

Comments: Lot #: F5D220359 Sample #: 1

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G84EP **Client ID:** RE73-05-58921

Matrix: Water **Units:** ug/L **Prep Date:** 4/25/05 **Prep Batch:** 5115334

Weight: 50 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	308.22	22.1	100	22.1	U	1	ICPST	4/26/05	12:41
Calcium	**317.93**	**11.2**	**5000**	**21.2**	**B**	**1**	**ICP**	**4/26/05**	**11:47**
Iron	259.94	7.4	100	7.4	U	1	ICP	4/26/05	11:47
Magnesium	**383.27**	**45.7**	**5000**	**110**	**B**	**1**	**ICP**	**4/26/05**	**11:47**
Potassium	**766.49**	**961**	**5000**	**1400**	**B**	**1**	**ICP**	**4/26/05**	**11:47**
Sodium	**589**	**58.5**	**5000**	**91.1**	**B**	**1**	**ICP**	**4/26/05**	**11:47**
Zinc	**213.86**	**1.1**	**20.0**	**1.8**	**B**	**1**	**ICPST**	**4/26/05**	**12:41**

Comments: Lot #: F5D220359 Sample #: 2

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8170 **Client ID:** RE73-05-58920

Matrix: Water **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119205

Weight: 30 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.10	0.20	0.10	U	1	CVAA	5/2/05	11:35

Comments: Lot #: F5D220359 Sample #: 1

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G84EP **Client ID:** RE73-05-58921

Matrix: Water **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119205

Weight: 30 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.10	0.20	0.10	U	1	CVAA	5/2/05	11:37

Comments: Lot #: F5D220359 Sample #: 2

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: CVAA **Units:** ug/L

Chart Number: AA0502A.PRN **Acceptable Range:** 80% - 120%

Standard Source: Leeman **Standard ID:** HG

Element	WL/ Mass	True Conc	ICV 5/2/05 9:38 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	2.5	2.47	98.8								

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICP

Units: ug/L

Chart Number: 0426IE1.ARC

Acceptable Range: 90% - 110%

Standard Source: IV

Standard ID: _____

Element	WL/ Mass	True Conc	ICV 4/26/05 10:40 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Calcium	317.933	20000.0	20463.98	102.3								
Iron	259.94	40000.0	41519.40	103.8								
Magnesium	383.273	20000.0	20309.71	101.5								
Potassium	766.49	40000.0	41832.29	104.6								
Sodium	588.995	40000.0	41571.12	103.9								

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICPST **Units:** ug/L

Chart Number: 0426IT2.ARC **Acceptable Range:** 90% - 110%

Standard Source: IV **Standard ID:**

Element	WL/ Mass	True Conc	ICV 4/26/05 11:16 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	40000.0	40087.16	**100.2**								
Zinc	213.856	4000.0	4073.51	**101.8**								

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: CVAA **Units:** ug/L

Chart Number: AA0502A.PRN **Acceptable Range:** 80% - 120%

Standard Source: Leeman **Standard ID:** HG

Element	WL/ Mass	True Conc	CCV 5/2/05 9:44 AM Found	% Rec	CCV 5/2/05 10:10 AM Found	% Rec	CCV 5/2/05 10:36 AM Found	% Rec	CCV 5/2/05 11:01 AM Found	% Rec	CCV 5/2/05 11:26 AM Found	% Rec
Mercury	253.7	5.0	5.20	**104.0**	5.33	**106.6**	5.38	**107.6**	5.44	**108.8**	5.48	**109.6**

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: CVAA **Units:** ug/L

Chart Number: AA0502A.PRN **Acceptable Range:** 80% - 120%

Standard Source: Leeman **Standard ID:** HG

Element	WL/ Mass	True Conc	CCV 5/2/05 11:46 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	5.0	5.57	111.4								

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICP **Units:** ug/L

Chart Number: 0426IE1.ARC **Acceptable Range:** 90% - 110%

Standard Source: IV **Standard ID:**

Element	WL/ Mass	True Conc	CCV 4/26/05 11:04 AM Found	% Rec	CCV 4/26/05 11:51 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Calcium	317.933	20000.0	20292.16	101.5	20308.09	101.5						
Iron	259.94	40000.0	41937.80	104.8	41009.26	102.5						
Magnesium	383.273	20000.0	20016.41	100.1	20007.71	100.0						
Potassium	766.49	40000.0	40055.01	100.1	40267.06	100.7						
Sodium	588.995	40000.0	41037.87	102.6	40474.22	101.2						

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPST **Units:** ug/L

Chart Number: 0426IT2.ARC **Acceptable Range:** 90% - 110%

Standard Source: IV **Standard ID:**

Element	WL/ Mass	True Conc	CCV 4/26/05 11:44 AM Found	% Rec	CCV 4/26/05 12:59 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	40000.0	40033.06	**100.1**	39932.84	**99.8**						
Zinc	213.856	4000.0	4040.80	**101.0**	4050.79	**101.3**						

STL-ST. LOUIS

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: CVAA **Units:** ug/L

Chart Number: AA0502A.PRN **Acceptable Range:** 50% - 150%

Standard Source: Leeman **Standard ID:** HG

Element	WL/ Mass	True Conc	CRA 5/2/05 9:42 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	0.2	0.20	99.5								

STL-ST. LOUIS

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: ICP **Units:** ug/L

Chart Number: 0426IE1.ARC **Acceptable Range:** 50% - 150%

Standard Source: IV **Standard ID:**

Element	WL/ Mass	True Conc	CRI 4/26/05 10:49 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Calcium	317.933	5000.0	5181.14	103.6								
Iron	259.94	100.0	106.82	106.8								
Magnesium	383.273	5000.0	5136.02	102.7								
Potassium	766.49	5000.0	5231.80	104.6								
Sodium	588.995	5000.0	5200.73	104.0								

STL-ST. LOUIS

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: ICPST **Units:** ug/L

Chart Number: 0426IT2.ARC **Acceptable Range:** 50% - 150%

Standard Source: IV **Standard ID:**

Element	WL/ Mass	True Conc	CRI 4/26/05 11:25 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	200.0	204.59	**102.3**								
Zinc	213.856	20.0	23.11	**115.6**								

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: CVAA **Units:** ug/L

Chart Number: AA0502A.PRN

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 5/2/05 9:40 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.1	U								

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICP **Units:** ug/L

Chart Number: 0426IE1.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 4/26/05 10:45 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Calcium	317.933	5000	**13.6**	**B**								
Iron	259.94	100	**7.4**	**U**								
Magnesium	383.273	5000	**99.0**	**B**								
Potassium	766.49	5000	961.0	U								
Sodium	588.995	5000	**58.5**	**U**								

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: 0426IT2.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 4/26/05 11:20 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	308.215	100	22.1	U								
Zinc	213.856	20	**2.0**	**B**								

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: CVAA **Units:** ug/L

Chart Number: AA0502A.PRN

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 5/2/05 9:46 AM		CCB 5/2/05 10:12 AM		CCB 5/2/05 10:37 AM		CCB 5/2/05 11:03 AM		CCB 5/2/05 11:28 AM	
			Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: CVAA **Units:** ug/L

Chart Number: AA0502A.PRN

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 5/2/05 11:48 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.1	U								

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICP **Units:** ug/L

Chart Number: 0426IE1.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 4/26/05 11:08 AM Found	Q	CCB 4/26/05 11:56 AM Found	Q	Found	Q	Found	Q	Found	Q
Calcium	317.933	5000	**11.2**	**U**	**11.2**	**U**						
Iron	259.94	100	**12.0**	**B**	**16.8**	**B**						
Magnesium	383.273	5000	**107.0**	**B**	**203.0**	**B**						
Potassium	766.49	5000	961.0	U	961.0	U						
Sodium	588.995	5000	**58.5**	**U**	**116.0**	**B**						

U Result is less than the MDL
B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: 0426IT2.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 4/26/05 11:48 AM Found	Q	CCB 4/26/05 1:03 PM Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	308.215	100	32.2	B	22.1	U						
Zinc	213.856	20	2.5	B	1.7	B						

U Result is less than the MDL
B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: G8496B

Matrix: Water **Units:** ug/L **Prep Date:** 4/25/05 **Prep Batch:** 5115334

Weight: 50 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	308.215	22.1	100	22.1	U	1	ICPST	4/26/05	12:15
Calcium	317.933	11.2	5000	-20	B	1	ICP	4/26/05	11:21
Iron	259.94	7.4	100	7.4	U	1	ICP	4/26/05	11:21
Magnesium	**383.273**	**45.7**	**5000**	**60.2**	**B**	**1**	**ICP**	**4/26/05**	**11:21**
Potassium	766.49	961	5000	961	U	1	ICP	4/26/05	11:21
Sodium	588.995	58.5	5000	58.5	U	1	ICP	4/26/05	11:21
Zinc	213.856	1.1	20.0	1.1	U	1	ICPST	4/26/05	12:15

Comments: Lot #: F5D220359

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: G9GNJB

Matrix: Water **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119205

Weight: 30 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.10	0.20	0.10	U	1	CVAA	5/2/05	11:20

Comments: Lot #: F5D220359

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICP **Units:** ug/L

Chart Number: 0426IE1.ARC **Acceptable Range:** 80% - 120%

Standard Source: IV **Standard ID:**

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 4/26/05 10:53 AM Found	Found	Found	Found	Found
Calcium	317.933		500000	449000				
Iron	259.94		200000	180000				
Magnesium	383.273		500000	478000				
Potassium	766.49	5000		409				
Sodium	588.995	5000		7				

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL

Form 4 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPST **Units:** ug/L

Chart Number: 0426IT2.ARC **Acceptable Range:** 80% - 120%

Standard Source: IV **Standard ID:**

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 4/26/05 11:33 AM Found	Found	Found	Found	Found
Aluminum	308.215		500000	456000				
Zinc	213.856	20		2				

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 4 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICP

Units: ug/L

Chart Number: 0426IE1.ARC

Acceptable Range: 80% - 120%

Standard Source: IV

Standard ID:

Element	WL/ Mass	True Conc	ICSAB 4/26/05 10:58 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Calcium	317.933	500000	446570.1	**89.3**								
Iron	259.94	200000	180330.0	**90.2**								
Magnesium	383.273	500000	474326.0	**94.9**								
Potassium	766.49	20000	21302.2	**106.5**								
Sodium	588.995	20000	20758.0	**103.8**								

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed

Form 4 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPST **Units:** ug/L

Chart Number: 0426IT2.ARC **Acceptable Range:** 80% - 120%

Standard Source: IV **Standard ID:**

Element	WL/ Mass	True Conc	ICSAB 4/26/05 11:38 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	500000	454791.3	91.0								
Zinc	213.856	1000	955.7	95.6								

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed

Form 4 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: G8170S

Original Sample ID: G8170 **Client ID:** RE73-05-58920 S

Matrix: Water **Units:** ug/L **Prep Date:** 4/25/05 **Prep Batch:** 5115334

Weight: 50 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Aluminum	308.2	22.1	U	1040		1000	104.2	1	1	ICPST	4/26/05	12:24	4/26/05	12:33
Calcium	317.9	65.9	B	26100		25000	104.0	1	1	ICP	4/26/05	11:30	4/26/05	11:38
Iron	259.9	7.4	U	545		500	108.9	1	1	ICP	4/26/05	11:30	4/26/05	11:38
Magnesium	383.3	107	B	25900		25000	103.0	1	1	ICP	4/26/05	11:30	4/26/05	11:38
Potassium	766.5	961	U	26800		25000	107.3	1	1	ICP	4/26/05	11:30	4/26/05	11:38
Sodium	589	120	B	26900		25000	107.3	1	1	ICP	4/26/05	11:30	4/26/05	11:38
Zinc	213.9	2.6	B	263		250	104.3	1	1	ICPST	4/26/05	12:24	4/26/05	12:33

Comments: Lot #: F5D220359 Sample #: 1

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: G84EPS

Original Sample ID: G84EP **Client ID:** RE73-05-58921 S

Matrix: Water **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119205

Weight: 30 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Mercury	253.7	0.10	U	1.1		1	108.0	1	1	CVAA	5/2/05	11:37	5/2/05	11:41

Comments: Lot #: F5D220359 Sample #: 2

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Duplicate Sample Results

Lab Sample ID: G8170X **Client ID:** RE73-05-58920 X

Matrix: Water **Units:** ug/L **Prep Date:** 4/25/05 **Prep Batch:** 5115334

Weight: 50 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	IDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	308.215	22.1	100	22.1	U	1	ICPST	4/26/05	12:28
Calcium	**317.933**	**11.2**	**5000**	**61.8**	**B**	**1**	**ICP**	**4/26/05**	**11:34**
Iron	**259.94**	**7.4**	**100**	**12.0**	**B**	**1**	**ICP**	**4/26/05**	**11:34**
Magnesium	**383.273**	**45.7**	**5000**	**90.6**	**B**	**1**	**ICP**	**4/26/05**	**11:34**
Potassium	766.49	961	5000	961	U	1	ICP	4/26/05	11:34
Sodium	**588.995**	**58.5**	**5000**	**116**	**B**	**1**	**ICP**	**4/26/05**	**11:34**
Zinc	**213.856**	**1.1**	**20.0**	**2.1**	**B**	**1**	**ICPST**	**4/26/05**	**12:28**

Comments: Lot #: F5D220359 Sample #: 1

Version 4.75.1

U Result is less than the MDL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Duplicate Sample Results

Lab Sample ID: G84EPX **Client ID:** RE73-05-58921 X

Matrix: Water **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119205

Weight: 30 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	IDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.10	0.20	0.10	U	1	CVAA	5/2/05	11:39

Comments: Lot #: F5D220359 Sample #: 2

Version 4.75.1

U Result is less than the MDL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Duplicate RPD Report

Duplicate Sample ID: G8170X

Original Sample ID: G8170 **Client ID:** RE73-05-58920 X

Matrix: Water **Units:** ug/L **Prep Date:** 4/25/05 **Prep Batch:** 5115334

Weight: 50 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	Dupe Conc	Q	% RPD	OS DF	Dupe DF	Instr	OS Anal Date	OS Anal Time	Dupe Anal Date	Dupe Anal Time
Aluminum	308.215	22.1	U	22.1	U		1	1	ICPST	4/26/05	12:24	4/26/05	12:28
Calcium	317.933	65.9	B	61.8	B	4.1	1	1	ICP	4/26/05	11:30	4/26/05	11:34
Iron	259.94	7.4	U	12.0	B	6.5	1	1	ICP	4/26/05	11:30	4/26/05	11:34
Magnesium	383.273	107	B	90.6	B	16.7	1	1	ICP	4/26/05	11:30	4/26/05	11:34
Potassium	766.49	961	U	961	U		1	1	ICP	4/26/05	11:30	4/26/05	11:34
Sodium	588.995	120	B	116	B	4.5	1	1	ICP	4/26/05	11:30	4/26/05	11:34
Zinc	213.856	2.6	B	2.1	B	0.5	1	1	ICPST	4/26/05	12:24	4/26/05	12:28

U Result is less than the MDL
B Result is between MDL and RL
* Duplicate analysis RPD was not within limits

Form 6 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Duplicate RPD Report

Duplicate Sample ID: G84EPX

Original Sample ID: G84EP **Client ID:** RE73-05-58921 X

Matrix: Water **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119205

Weight: 30 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	Dupe Conc	Q	% RPD	OS DF	Dupe DF	Instr	OS Anal Date	OS Anal Time	Dupe Anal Date	Dupe Anal Time
Mercury	253.7	0.10	U	0.10	U		1	1	CVAA	5/2/05	11:37	5/2/05	11:39

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
* Duplicate analysis RPD was not within limits

Form 6 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: G8496C

Matrix: Water **Units:** ug/L **Prep Date:** 4/25/05 **Prep Batch:** 5115334

Weight: 50 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Aluminum	308.215	500	527	105.4		80-120	1	ICPST	4/26/05	12:20
Calcium	317.933	10000	10700	106.6		80-120	1	ICP	4/26/05	11:25
Iron	259.94	500	551	110.2		80-120	1	ICP	4/26/05	11:25
Magnesium	383.273	10000	10500	105.4		80-120	1	ICP	4/26/05	11:25
Potassium	766.49	10000	11400	113.7		80-120	1	ICP	4/26/05	11:25
Sodium	588.995	10000	11000	109.8		80-120	1	ICP	4/26/05	11:25
Zinc	213.856	500	527	105.3		80-120	1	ICPST	4/26/05	12:20

Comments: Lot #: F5D220359

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 7 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: G9GNJC

Matrix: Water **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119205

Weight: 30 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Mercury	253.7	1.0	1.0	100.0		80-120	1	CVAA	5/2/05	11:22

Comments: Lot #: F5D220359

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 7 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: G8170V

Original Sample ID: G8170 **Client ID:** RE73-05-58920

Matrix: Water **Units:** ug/L **Prep Date:** 4/25/05 **Prep Batch:** 5115334

Weight: 50 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Aluminum	308.215	22.1	U	111	U		1	5	ICPST	4/26/05	12:24	4/26/05	12:37
Calcium	317.933	65.9	B	684	B		1	5	ICP	4/26/05	11:30	4/26/05	11:43
Iron	259.94	7.4	U	36.8	U		1	5	ICP	4/26/05	11:30	4/26/05	11:43
Magnesium	383.273	107	B	728	B		1	5	ICP	4/26/05	11:30	4/26/05	11:43
Potassium	766.49	961	U	4810	U		1	5	ICP	4/26/05	11:30	4/26/05	11:43
Sodium	588.995	120	B	462	B		1	5	ICP	4/26/05	11:30	4/26/05	11:43
Zinc	213.856	2.6	B	28.5	B		1	5	ICPST	4/26/05	12:24	4/26/05	12:37

Comments:

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
E Serial dilution percent difference not within limits

Form 9 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: G84EPV

Original Sample ID: G84EP **Client ID:** RE73-05-58921

Matrix: Water **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119205

Weight: 30 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Mercury	253.7	0.10	U	0.50	U		1	5	CVAA	5/2/05	11:37	5/2/05	11:45

Comments:

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
E Serial dilution percent difference not within limits

Form 9 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Detection Limits

Instrument: CVAA **Units:** ug/L

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Mercury	253.70	0.2	0.10	1/6/04

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICP **Units:** ug/L

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Calcium	317.93	5000	11.2	12/29/04
Iron	259.94	100	7.4	12/29/04
Magnesium	383.27	5000	45.7	12/29/04
Potassium	766.49	5000	961	12/29/04
Sodium	589.00	5000	58.5	12/29/04

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICPST **Units:** ug/L

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Aluminum	308.21	100	22.1	12/29/04
Zinc	213.86	20	1.1	12/29/04

STL-ST. LOUIS

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICP **Date of IEC's:** 6/2/04

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	As(-0.002148), Cd(-0.000059), Cr(0.00001), Fe(0.00006), Mn(0.000011), Pb(0.001404), Se(-0.001822), Si(0.000412), Tl(0.00016), Zn(-0.000003)
Arsenic	193.696	Cd(0.00774)
Calcium	317.933	Ag(0.000008), Ba(-0.000006), Cu(0.00005), Mn(0.000014), Se(-0.00002), Si(0.000412), V(0.0004)
Iron	259.94	Ag(-0.00049), As(-0.000542), B(0.001012), Cd(0.000156), Co(0.00008), Cr(-0.000013), Cu(-0.000202), Mn(0.000161), Mo(0.000049), Sb(-0.000528), Se(0.004534), Si(-0.000876), Sn(-0.000083), Tl(-0.000251), V(0.00027), Zn(0.000012)
Magnesium	383.273	As(-0.000312), B(0.00019), Ba(0.000003), Co(-0.000018), Cr(-0.000014), Fe(0.00019), Mn(0.000028), Sb(0.000105), Se(-0.000102), Si(0.00004), Tl(-0.00028), V(0.000117)
Nickel	231.604	Cd(-0.000914), Co(0.000546), Zn(0.00503)
Sodium	588.995	K(-0.000963)
Thorium	283.73	Ag(-0.00253), Al(0.181039), As(-0.001959), B(0.00014), Ba(0.00031), Be(0.000015), Ca(0.0033), Co(-0.000854), Cr(-0.001124), Cu(0.002515), Fe(0.002718), K(-0.00082), Li(-0.00021), Mg(0.007), Mn(0.000103), Na(0.00042), Ni(-0.000169), Pb(-0.00176), Sb(-0.000639), Se(-0.002503), Si(0.00029), Sn(0.001125), Tl(-0.000627), V(0.00243)
Uranium	409.014	Ag(0.00107), Al(0.020406), As(0.00282), B(0.00036), Ba(0.00009), Be(0.000062), Ca(0.0052), Cd(-0.000037), Co(0.000098), Cr(-0.002773), Cu(0.001594), Fe(0.0018), K(-0.004418), Li(0.000075), Mg(0.0108), Mn(0.00031), Na(0.00041), Ni(0.000186), Pb(0.001642), Sb(0.000309), Se(0.001177), Si(-0.000876), Sn(0.00033), Sr(0.00007), Tl(0.00048), V(0.00161)

STL-ST. LOUIS

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICPST **Date of IEC's:** 6/2/04

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	Pb(-0.000204)
Calcium	317.933	Sr(0.00002)
Iron	217.441	Cd(0.000075), Mn(0.000002), Pb(0.000031), Sb(0.000048), Se(-0.000184), Tl(-0.000813), Zn(0.000274)
Magnesium	279.078	Mn(0.000025), Zn(-0.000003)
Manganese	257.61	Cr(0.000228), Pb(0.000148), Se(0.000736), Tl(-0.000492)
Nickel	231.604	Co(0.000232), Pb(0.000099), Zn(0.00567)
Thorium	401.913	Ag(0.000475), Al(0.0062265), Cd(0.000027), Co(-0.00009), Cu(0.002327), Fe(-0.1011), Pb(0.000033), Sb(0.000007), Se(-0.000167), Sn(0.00021), Tl(-0.000314), V(0.00064)
Uranium	385.958	Ag(0.0012), Al(0.005), As(-0.000021), Co(0.000148), Cr(0.000488), Cu(0.00052), Fe(-0.048618), Mn(0.000226), Mo(-0.00046), Pb(0.001395), Sb(-0.00045), Se(0.000104), Sn(0.000185), Tl(-0.00043), V(-0.00018)

STL-ST. LOUIS

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: CVAA **Units:** ug/L

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Mercury	253.70	10	1/6/04

STL-ST. LOUIS

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICP **Units:** ug/L

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Calcium	317.93	1000000	2/3/04
Iron	259.94	500000	2/3/04
Magnesium	383.27	1000000	2/3/04
Potassium	766.49	1000000	2/3/04
Sodium	589.00	300000	2/3/04

STL-ST. LOUIS

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICPST **Units:** ug/L

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Aluminum	308.21	250000	2/3/04
Zinc	213.86	5000	2/3/04

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Log

Preparation Batch: 5115334 **Instrument:** ICP **Matrix:** Water

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
G8496B	4/25/05	50	50	NA
G8496C	4/25/05	50	50	NA
G8170	4/25/05	50	50	NA
G8170S	4/25/05	50	50	NA
G8170X	4/25/05	50	50	NA
G84EP	4/25/05	50	50	NA

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Log

Preparation Batch: 5119205 **Instrument:** CVAA **Matrix:** Water

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
G9GNJB	4/29/05	30	30	NA
G9GNJC	4/29/05	30	30	NA
G8170	4/29/05	30	30	NA
G84EP	4/29/05	30	30	NA
G84EPS	4/29/05	30	30	NA
G84EPX	4/29/05	30	30	NA

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAA **Chart Number:** AA0502A.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
Std01Rep1		5/2/05	9:27
Std02Rep1		5/2/05	9:28
Std03Rep1		5/2/05	9:30
Std04Rep1		5/2/05	9:32
Std05Rep1		5/2/05	9:34
Std06Rep1		5/2/05	9:36
ICV		5/2/05	9:38
ICB		5/2/05	9:40
CRA		5/2/05	9:42
CCV		5/2/05	9:44
CCB		5/2/05	9:46
ZZZZZZ		5/2/05	9:48
ZZZZZZ		5/2/05	9:50
ZZZZZZ		5/2/05	9:52
ZZZZZZ		5/2/05	9:54
ZZZZZZ		5/2/05	9:56
ZZZZZZ		5/2/05	9:58
ZZZZZZ		5/2/05	10:00
ZZZZZZ		5/2/05	10:02
ZZZZZZ		5/2/05	10:05
ZZZZZZ		5/2/05	10:06
CCV		5/2/05	10:10
CCB		5/2/05	10:12
ZZZZZZ		5/2/05	10:15
ZZZZZZ		5/2/05	10:17
ZZZZZZ		5/2/05	10:19
ZZZZZZ		5/2/05	10:21
ZZZZZZ		5/2/05	10:24
ZZZZZZ		5/2/05	10:26
ZZZZZZ		5/2/05	10:28
ZZZZZZ		5/2/05	10:30
ZZZZZZ		5/2/05	10:32
ZZZZZZ		5/2/05	10:34
CCV		5/2/05	10:36
CCB		5/2/05	10:37
ZZZZZZ		5/2/05	10:40
ZZZZZZ		5/2/05	10:42
ZZZZZZ		5/2/05	10:44
ZZZZZZ		5/2/05	10:46

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAA **Chart Number:** AA0502A.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		5/2/05	10:48
ZZZZZZ		5/2/05	10:50
ZZZZZZ		5/2/05	10:52
ZZZZZZ		5/2/05	10:54
ZZZZZZ		5/2/05	10:57
ZZZZZZ		5/2/05	10:59
CCV		5/2/05	11:01
CCB		5/2/05	11:03
ZZZZZZ		5/2/05	11:05
ZZZZZZ		5/2/05	11:08
ZZZZZZ		5/2/05	11:10
ZZZZZZ		5/2/05	11:12
ZZZZZZ		5/2/05	11:14
ZZZZZZ		5/2/05	11:16
ZZZZZZ		5/2/05	11:18
G9GNJB		5/2/05	11:20
G9GNJC		5/2/05	11:22
ZZZZZZ		5/2/05	11:24
CCV		5/2/05	11:26
CCB		5/2/05	11:28
ZZZZZZ		5/2/05	11:31
ZZZZZZ		5/2/05	11:33
G8170	RE73-05-58920	5/2/05	11:35
G84EP	RE73-05-58921	5/2/05	11:37
G84EPX	RE73-05-58921 X	5/2/05	11:39
G84EPS	RE73-05-58921 S	5/2/05	11:41
ZZZZZZ		5/2/05	11:43
G84EPV	RE73-05-58921	5/2/05	11:45
CCV		5/2/05	11:46
CCB		5/2/05	11:48

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICP **Chart Number:** 0426IE1.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
CALBLK		4/26/05	10:25
CAL1		4/26/05	10:29
CAL2		4/26/05	10:33
CAL3		4/26/05	10:37
ICV		4/26/05	10:40
ICB		4/26/05	10:45
CRI		4/26/05	10:49
ICSA		4/26/05	10:53
ICSAB		4/26/05	10:58
CCV		4/26/05	11:04
CCB		4/26/05	11:08
G8496B		4/26/05	11:21
G8496C		4/26/05	11:25
G8170	RE73-05-58920	4/26/05	11:30
G8170X	RE73-05-58920 X	4/26/05	11:34
G8170S	RE73-05-58920 S	4/26/05	11:38
G8170V	RE73-05-58920	4/26/05	11:43
G84EP	RE73-05-58921	4/26/05	11:47
CCV		4/26/05	11:51
CCB		4/26/05	11:56
ZZZZZZ		4/26/05	12:00
ZZZZZZ		4/26/05	12:04
ZZZZZZ		4/26/05	12:09
ZZZZZZ		4/26/05	12:13
ZZZZZZ		4/26/05	12:17
ZZZZZZ		4/26/05	12:22
ZZZZZZ		4/26/05	12:26
ZZZZZZ		4/26/05	12:31
ZZZZZZ		4/26/05	12:35
ZZZZZZ		4/26/05	12:39
ZZZZZZ		4/26/05	12:44
ZZZZZZ		4/26/05	12:48
ZZZZZZ		4/26/05	12:52
ZZZZZZ		4/26/05	12:57
ZZZZZZ		4/26/05	13:01
ZZZZZZ		4/26/05	13:05
ZZZZZZ		4/26/05	13:10
ZZZZZZ		4/26/05	13:14
ZZZZZZ		4/26/05	13:19

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICP **Chart Number:** 0426IE1.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		4/26/05	13:23
ZZZZZZ		4/26/05	13:27
ZZZZZZ		4/26/05	13:32
ZZZZZZ		4/26/05	13:36
ZZZZZZ		4/26/05	13:43
ZZZZZZ		4/26/05	13:48
ZZZZZZ		4/26/05	13:52
ZZZZZZ		4/26/05	13:57
ZZZZZZ		4/26/05	14:01
ZZZZZZ		4/26/05	14:05
ZZZZZZ		4/26/05	14:10
ZZZZZZ		4/26/05	14:14
ZZZZZZ		4/26/05	14:18
ZZZZZZ		4/26/05	14:23
ZZZZZZ		4/26/05	14:27
ZZZZZZ		4/26/05	14:31
ZZZZZZ		4/26/05	14:36
ZZZZZZ		4/26/05	14:40
ZZZZZZ		4/26/05	14:44
ZZZZZZ		4/26/05	14:49
ZZZZZZ		4/26/05	14:53
ZZZZZZ		4/26/05	14:58
ZZZZZZ		4/26/05	15:02
ZZZZZZ		4/26/05	15:06
ZZZZZZ		4/26/05	15:11
ZZZZZZ		4/26/05	15:15
ZZZZZZ		4/26/05	15:19
ZZZZZZ		4/26/05	15:24
ZZZZZZ		4/26/05	15:28
ZZZZZZ		4/26/05	15:32
ZZZZZZ		4/26/05	15:37
ZZZZZZ		4/26/05	15:41
ZZZZZZ		4/26/05	15:45
ZZZZZZ		4/26/05	15:50
ZZZZZZ		4/26/05	15:54
ZZZZZZ		4/26/05	15:59
ZZZZZZ		4/26/05	16:03
ZZZZZZ		4/26/05	16:26
ZZZZZZ		4/26/05	16:30

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICP **Chart Number:** 0426IE1.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		4/26/05	17:09
ZZZZZZ		4/26/05	17:13
ZZZZZZ		4/26/05	17:18
ZZZZZZ		4/26/05	17:22
ZZZZZZ		4/26/05	17:26
ZZZZZZ		4/26/05	17:31
ZZZZZZ		4/26/05	17:35
ZZZZZZ		4/26/05	17:39
ZZZZZZ		4/26/05	17:44
ZZZZZZ		4/26/05	17:48
ZZZZZZ		4/26/05	17:52
ZZZZZZ		4/26/05	17:57
ZZZZZZ		4/26/05	18:01
ZZZZZZ		4/26/05	18:05
ZZZZZZ		4/26/05	18:10
ZZZZZZ		4/26/05	18:14
ZZZZZZ		4/26/05	18:19
ZZZZZZ		4/26/05	18:44
ZZZZZZ		4/26/05	18:49
ZZZZZZ		4/26/05	18:53
ZZZZZZ		4/26/05	18:57
ZZZZZZ		4/26/05	19:02
ZZZZZZ		4/26/05	19:06
ZZZZZZ		4/26/05	19:10
ZZZZZZ		4/26/05	19:21
ZZZZZZ		4/26/05	19:26
ZZZZZZ		4/26/05	19:30
ZZZZZZ		4/26/05	19:34
ZZZZZZ		4/26/05	19:39
ZZZZZZ		4/26/05	19:43
ZZZZZZ		4/26/05	19:47
ZZZZZZ		4/26/05	19:52
ZZZZZZ		4/26/05	19:56
ZZZZZZ		4/26/05	20:00
ZZZZZZ		4/26/05	20:05
ZZZZZZ		4/26/05	20:09
ZZZZZZ		4/26/05	20:14
ZZZZZZ		4/26/05	20:18
ZZZZZZ		4/26/05	20:22

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICP **Chart Number:** 0426IE1.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		4/26/05	20:27
ZZZZZZ		4/26/05	20:31
ZZZZZZ		4/26/05	20:35
ZZZZZZ		4/26/05	20:40
ZZZZZZ		4/26/05	20:44
ZZZZZZ		4/26/05	20:48
ZZZZZZ		4/26/05	20:53
ZZZZZZ		4/26/05	20:57
ZZZZZZ		4/26/05	21:34
ZZZZZZ		4/26/05	21:38
ZZZZZZ		4/26/05	21:42
ZZZZZZ		4/26/05	21:46
ZZZZZZ		4/26/05	21:49
ZZZZZZ		4/26/05	21:54
ZZZZZZ		4/26/05	21:59
ZZZZZZ		4/26/05	22:03
ZZZZZZ		4/26/05	22:08
ZZZZZZ		4/26/05	22:12
ZZZZZZ		4/26/05	22:16
ZZZZZZ		4/26/05	22:21
ZZZZZZ		4/26/05	22:25
ZZZZZZ		4/26/05	22:30

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST **Chart Number:** 0426IT2.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
CALBLK		4/26/05	11:03
CAL1		4/26/05	11:08
CAL2		4/26/05	11:12
ICV		4/26/05	11:16
ICB		4/26/05	11:20
CRI		4/26/05	11:25
ZZZZZZ		4/26/05	11:29
ICSA		4/26/05	11:33
ICSAB		4/26/05	11:38
CCV		4/26/05	11:44
CCB		4/26/05	11:48
G8496B		4/26/05	12:15
G8496C		4/26/05	12:20
G8170	RE73-05-58920	4/26/05	12:24
G8170X	RE73-05-58920 X	4/26/05	12:28
G8170S	RE73-05-58920 S	4/26/05	12:33
G8170V	RE73-05-58920	4/26/05	12:37
G84EP	RE73-05-58921	4/26/05	12:41
ZZZZZZ		4/26/05	12:46
ZZZZZZ		4/26/05	12:50
ZZZZZZ		4/26/05	12:54
CCV		4/26/05	12:59
CCB		4/26/05	13:03
ZZZZZZ		4/26/05	13:08
ZZZZZZ		4/26/05	13:12
ZZZZZZ		4/26/05	13:16
ZZZZZZ		4/26/05	13:21
ZZZZZZ		4/26/05	13:25
ZZZZZZ		4/26/05	13:29
ZZZZZZ		4/26/05	13:34
ZZZZZZ		4/26/05	13:38
ZZZZZZ		4/26/05	13:43
ZZZZZZ		4/26/05	13:47
ZZZZZZ		4/26/05	13:51
ZZZZZZ		4/26/05	13:56
ZZZZZZ		4/26/05	14:00
ZZZZZZ		4/26/05	14:04
ZZZZZZ		4/26/05	14:09
ZZZZZZ		4/26/05	14:13

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST **Chart Number:** 0426IT2.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		4/26/05	14:18
ZZZZZZ		4/26/05	14:22
ZZZZZZ		4/26/05	14:26
ZZZZZZ		4/26/05	14:31
ZZZZZZ		4/26/05	14:35
ZZZZZZ		4/26/05	14:39
ZZZZZZ		4/26/05	14:44
ZZZZZZ		4/26/05	14:48
ZZZZZZ		4/26/05	14:53
ZZZZZZ		4/26/05	14:57
ZZZZZZ		4/26/05	15:01
ZZZZZZ		4/26/05	15:06
ZZZZZZ		4/26/05	15:10
ZZZZZZ		4/26/05	15:14
ZZZZZZ		4/26/05	15:19
ZZZZZZ		4/26/05	15:23
ZZZZZZ		4/26/05	15:28

METALS RAW DATA

JJ 4/26/05

Analysis Report Summary 04/26/05 04:03:21 PM

STD 042205 L001OC 6/7

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	CALBLK	0426IT2	6010C	04/26/05	11:03		X	IR
2	CAL1	0426IT2	6010C	04/26/05	11:08		X	IR
3	CAL2	0426IT2	6010C	04/26/05	11:12		X	IR
4	ICV	0426IT2	6010C	04/26/05	11:16	STL	Q	CONC
5	ICB	0426IT2	6010C	04/26/05	11:20	STL	Q	CONC
6	LLC	0426IT2	6010C	04/26/05	11:25	STL	Q	CONC
7	LLC AG	0426IT2	6010C	04/26/05	11:29	STL	S	CONC
8	ICSA	0426IT2	6010C	04/26/05	11:33	STL	Q	CONC
9	ICSAB	0426IT2	6010C	04/26/05	11:38	STL	Q	CONC
10	CCV	0426IT2	6010C	04/26/05	11:44	STL	Q	CONC
11	CCB	0426IT2	6010C	04/26/05	11:48	STL	Q	CONC
12	G8496B	0426IT2	6010C	04/26/05	12:15	STL	S	CONC
13	G8496C	0426IT2	6010C	04/26/05	12:20	STL	S	CONC
14	G8170	0426IT2	6010C	04/26/05	12:24	STL	S	CONC
15	G8170X	0426IT2	6010C	04/26/05	12:28	STL	S	CONC
16	G8170S	0426IT2	6010C	04/26/05	12:33	STL	S	CONC
17	G8170V 5X	0426IT2	6010C	04/26/05	12:37	STL	S	CONC
18	G84EP	0426IT2	6010C	04/26/05	12:41	STL	S	CONC
19	G81EWB	0426IT2	6010C	04/26/05	12:46	STL	S	CONC
20	G85CDC	0426IT2	6010C	04/26/05	12:50	STL	S	CONC
21	G8WWH	0426IT2	6010C	04/26/05	12:54	STL	S	CONC
22	CCV	0426IT2	6010C	04/26/05	12:59	STL	Q	CONC
23	CCB	0426IT2	6010C	04/26/05	13:03	STL	Q	CONC
24	G8WWJ	0426IT2	6010C	04/26/05	13:08	STL	S	CONC
25	G8WWK	0426IT2	6010C	04/26/05	13:12	STL	S	CONC
26	G8WWL	0426IT2	6010C	04/26/05	13:16	STL	S	CONC
27	G8WX1	0426IT2	6010C	04/26/05	13:21	STL	S	CONC
28	G8WX1S	0426IT2	6010C	04/26/05	13:25	STL	S	CONC
29	G8WX1D	0426IT2	6010C	04/26/05	13:29	STL	S	CONC
30	G8WX1V 5X	0426IT2	6010C	04/26/05	13:34	STL	S	CONC
31	G8W0H	0426IT2	6010C	04/26/05	13:38	STL	S	CONC
32	G8W03	0426IT2	6010C	04/26/05	13:43	STL	S	CONC
33	G8W08	0426IT2	6010C	04/26/05	13:47	STL	S	CONC
34	CCV	0426IT2	6010C	04/26/05	13:51	STL	Q	CONC
35	CCB	0426IT2	6010C	04/26/05	13:56	STL	Q	CONC
36	G8W1F	0426IT2	6010C	04/26/05	14:00	STL	S	CONC
37	G8W1H	0426IT2	6010C	04/26/05	14:04	STL	S	CONC
38	G8W1L	0426IT2	6010C	04/26/05	14:09	STL	S	CONC
39	G8W1N	0426IT2	6010C	04/26/05	14:13	STL	S	CONC
40	G8W1T	0426IT2	6010C	04/26/05	14:18	STL	S	CONC
41	G8W10	0426IT2	6010C	04/26/05	14:22	STL	S	CONC
42	G8W2M	0426IT2	6010C	04/26/05	14:26	STL	S	CONC
43	G8W2N	0426IT2	6010C	04/26/05	14:31	STL	S	CONC
44	G8X1C	0426IT2	6010C	04/26/05	14:35	STL	S	CONC
45	CCV	0426IT2	6010C	04/26/05	14:39	STL	Q	CONC
46	CCB	0426IT2	6010C	04/26/05	14:44	STL	Q	CONC
47	G849JB	0426IT2	6010C	04/26/05	14:48	STL	S	CONC
48	G849JC	0426IT2	6010C	04/26/05	14:53	STL	S	CONC
49	G833J	0426IT2	6010C	04/26/05	14:57	STL	S	CONC
50	G833JS	0426IT2	6010C	04/26/05	15:01	STL	S	CONC
51	G833JD	0426IT2	6010C	04/26/05	15:06	STL	S	CONC
52	G833JV 5X	0426IT2	6010C	04/26/05	15:10	STL	S	CONC
53	G833K	0426IT2	6010C	04/26/05	15:14	STL	S	CONC

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#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	G833M	0426IT2	6010C	04/26/05	15:19	STL	S	CONC
55	CCV	0426IT2	6010C	04/26/05	15:23	STL	Q	CONC
56	CCB	0426IT2	6010C	04/26/05	15:28	STL	Q	CONC

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#	Sample Name	Ag3280	Al	Ba4934	Be3130	Cd2265	Ca
1	CALBLK	-.02499	1.55592	.00449	-.82245	.00699	.14249
2	CAL1	208.784		367.673	997.372	610.965	
3	CAL2		255.368				66.2977
4	ICV	1.0060	40.087	4.2325	4.1476	4.0052	20.443
5	ICB	-.00010	.00822	.00031	.00027	.00013	.00264
6	LLC	Q.01258	.20459	.22028	.00521	.00493	5.1762
7	LLC AG	.00980	.01546	.05443	.05402	.05175	.07670
8	ICSA	.00048	455.92	.00145	-.00019	-.00415	433.68
9	ICSAB	.97774	454.79	.50997	.48748	.87720	431.21
10	CCV	1.0024	40.033	4.2196	4.1273	3.9796	20.429
11	CCB	.00019	.03216	.00155	.00153	.00137	.02116
12	G8496B	.00012	L.01410	.00010	-.00053	-.00013	-.00566
13	G8496C	.12706	L.52709	L.55785	L.54532	L.51972	L10.443
14	G8170	.00002	.01842	.00197	-.00043	-.00022	.06348
15	G8170X	.00006	.01491	.00194	-.00065	.00000	.06499
16	G8170S	.02480	1.0415	1.0998	.02699	.02573	26.098
17	G8170V 5X	-.00025	.00567	.00033	-.00032	-.00028	.13376
18	G84EP	.00003	.01357	.00061	-.00058	-.00015	.03136
19	G81EWB	-.00013	L.02062	.01837	-.00059	.00014	H.48141
20	G85CDC	.25185	1.1471	1.0659	1.0537	.98789	20.407
21	G8WWH	-.00011	.48884	.17837	-.00026	.00007	4.9071
22	CCV	1.0060	39.933	4.2265	4.1415	3.9912	20.362
23	CCB	-.00041	.01994	.00051	.00054	.00039	.00491
24	G8WWJ	.00040	.58723	.14085	-.00041	.00000	3.7353
25	G8WWK	-.00031	.47017	.21304	-.00039	.00017	5.0326
26	G8WWL	.00008	.26517	.14312	-.00036	.00638	2.6686
27	G8WX1	-.00025	.08000	.20426	-.00038	-.00006	77.290
28	G8WX1S	.04940	2.2258	2.2503	.05204	.04776	119.98
29	G8WX1D	.04848	2.1748	2.1987	.05092	.04708	117.43
30	G8WX1V 5X	-.00034	.02090	.04271	-.00031	-.00018	16.342
31	G8W0H	-.00004	.06853	.19581	-.00047	-.00009	76.271
32	G8W03	-.00015	.07712	.28147	-.00042	.00000	165.71
33	G8W08	-.00020	.07565	.09795	-.00040	-.00021	12.554
34	CCV	1.0106	40.090	4.2439	4.1487	3.9993	20.465
35	CCB	.00035	.02467	.00110	.00103	.00094	.00793
36	G8W1F	.00002	.06313	.18625	-.00037	-.00001	70.579
37	G8W1H	.00002	.07202	.21166	-.00048	.00000	72.294
38	G8W1L	-.00009	.07302	.21125	-.00042	-.00001	87.350
39	G8W1N	-.00009	.08999	.23363	-.00036	.00004	120.48
40	G8W1T	-.00032	.07943	.19082	-.00036	-.00023	61.699
41	G8W10	-.00025	.07088	.21572	-.00036	-.00008	87.587
42	G8W2M	-.00029	.06716	.19239	-.00041	-.00013	77.033
43	G8W2N	.00001	.06453	.14636	-.00041	-.00016	24.563
44	G8X1C	.00001	.01102	.09478	-.00038	.00054	267.49
45	CCV	1.0186	40.430	4.2843	4.1603	4.0199	20.596
46	CCB	-.00009	.03205	.00141	.00138	.00127	.00869
47	G849JB	.00049	L.02197	.00050	-.00018	.00003	-.00566
48	G849JC	.12953	L.54456	L.56836	L.55780	L.53355	L10.782
49	G833J	.00012	.12342	.01023	-.00045	-.00056	28.675
50	G833JS	.02585	1.1596	1.1277	.02731	.02549	53.834
51	G833JD	.02547	1.1572	1.1222	.02710	.02527	54.128
52	G833JV 5X	-.00045	.03208	.00206	-.00023	-.00022	5.8851
53	G833K	.00054	.12258	.01017	-.00046	-.00046	28.216

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#	Sample Name	Ag3280	Al	Ba4934	Be3130	Cd2265	Ca
54	G833M	.00007	.12568	.00996	-.00048	-.00053	28.202
55	CCV	1.0125	40.109	4.2450	4.1346	4.0042	20.481
56	CCB	.00018	.03070	.00195	.00192	.00171	.00982

#	Sample Name	Cr2677	Co2286	Cu3247	Mg	Ni2316	Mn2576
1	CALBLK	.00999	-.00749	.08199	.90195	-.04349	.41397
2	CAL1	540.403	86.3037	135.725		132.839	549.005
3	CAL2				106.004		
4	ICV	3.9292	3.9474	4.0043	20.108	3.9624	4.0768
5	ICB	.00035	.00029	.00003	-.00237	.00041	.00023
6	LLC	.00997	.05021	.02469	4.9814	.04116	.01562
7	LLC AG	.05071	.05034	.05039	.00166	.05030	.05269
8	ICSA	.00232	.00110	-.00830	492.38	.00353	.00382
9	ICSAB	.44977	.43291	.51453	488.21	.87847	.47370
10	CCV	3.9051	3.9261	3.9918	20.004	3.9293	4.0524
11	CCB	.00130	.00133	.00158	.02259	.00127	.00143
12	G8496B	-.00041	.00052	-.00006	-.01141	.00116	-.00033
13	G8496C	L.50686	L.50590	L.50346	L10.144	L.50820	L.52675
14	G8170	.00187	.00040	.00063	.01165	.00176	-.00006
15	G8170X	.00041	.00057	.00085	.00309	.00161	-.00020
16	G8170S	.10153	.24927	.12750	25.561	.25438	.25973
17	G8170V 5X	.00017	-.00011	.00019	-.00356	-.00037	-.00016
18	G84EP	-.00051	.00011	-.00017	-.00285	.00173	-.00024
19	G81EWB	.00197	.00249	.00270	.03234	.00067	.00029
20	G85CDC	.98134	.97548	1.0476	19.745	.98431	1.0109
21	G8WWH	.00227	.00266	.00137	1.2356	.00285	.06676
22	CCV	3.9075	3.9350	4.0069	20.037	3.9415	4.0567
23	CCB	.00034	.00046	.00015	.00903	.00037	.00056
24	G8WWJ	.00111	.00237	.00133	.82273	.00229	.05862
25	G8WWK	.00085	.00272	.00196	1.1850	.00304	.04089
26	G8WWL	.00111	.00185	.00107	.54872	.00293	.08623
27	G8WX1	-.00012	.00057	.00119	4.4557	.00274	.15588
28	G8WX1S	.19233	.47010	.26249	52.967	.48119	.63759
29	G8WX1D	.18793	.46106	.25595	51.928	.47253	.62318
30	G8WX1V 5X	-.00016	.00017	.00027	.91620	.00015	.03233
31	G8W0H	.00036	.00052	.00300	4.3482	.00210	.16100
32	G8W03	.00029	.00069	.00064	5.2582	.00150	.33925
33	G8W08	.00038	.00127	.00141	1.5089	.00206	.02199
34	CCV	3.9188	3.9396	4.0277	20.109	3.9506	4.0666
35	CCB	.00097	.00121	.00066	.01141	.00116	.00100
36	G8W1F	-.00004	.00052	.00366	3.9805	.00173	.14168
37	G8W1H	.00004	.00081	.00118	4.9692	.00323	.19594
38	G8W1L	.00025	.00052	.00137	4.4264	.00218	.11110
39	G8W1N	.00025	.00075	.00215	4.8346	.00195	.20016
40	G8W1T	.00010	.00081	.00071	3.9231	.00218	.17848
41	G8W10	.00016	.00069	.00144	4.6324	.00259	.16431
42	G8W2M	-.00034	.00063	.00100	4.2832	.00203	.14205
43	G8W2N	.00086	.00034	.00052	3.0928	.00195	.02380
44	G8X1C	.00013	.00133	.00012	2.1497	.00387	.14108
45	CCV	3.9438	3.9614	4.0722	20.217	3.9794	4.0916
46	CCB	.00120	.00127	.00085	.00737	.00176	.00130
47	G849JB	.00010	.00110	-.00006	-.00903	.00229	.00005

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#	Sample Name	Cr2677	Co2286	Cu3247	Mg	Ni2316	Mn2576
48	G849JC	L.51975	L.51853	L.51386	L10.454	L.52133	L.53917
49	G833J	.21033	.00028	-.00010	11.355	.00218	.00889
50	G833JS	.30638	.24927	.12923	37.154	.25363	.27206
51	G833JD	.30895	.24823	.12856	37.169	.25385	.26930
52	G833JV 5X	.04280	-.00034	-.00054	2.2311	-.00011	.00159
53	G833K	.20756	.00063	-.00025	11.181	.00293	.00784
54	G833M	.20838	.00011	-.00061	11.171	.00225	.00607
55	CCV	3.9224	3.9392	4.0367	20.141	3.9580	4.0690
56	CCB	.00164	.00173	.00103	.00285	.00158	.00167

#	Sample Name	Sb2068	Sr4215	V_2924	Zn2138
1	CALBLK		.00249	.00349	.19599
2	CAL1		158.082	127.096	123.195
3	CAL2				
4	ICV	4.0034	4.2572	3.9986	4.0735
5	ICB	.00160	.00025	-.00008	.00199
6	LLC	.06109	.05530	.05070	.02311
7	LLC AG	.04932	.05594	.05015	.05208
8	ICSA	.00116	-.00595	.00432	.00149
9	ICSAB	.94229	1.0070	.46744	.95567
10	CCV	3.9808	4.2052	3.9865	4.0408
11	CCB	.00320	.00151	.00149	.00253
12	G8496B	.00081	-.00009	-.00035	.00100
13	G8496C	L.51774	L.55391	L.51357	L.52663
14	G8170	.00059	.00047	-.00031	.00257
15	G8170X	.00001	.00040	.00011	.00209
16	G8170S	.25576	.54787	.25574	.26340
17	G8170V 5X	-.00016	.00015	-.00039	.00569
18	G84EP	.00081	.00015	-.00055	.00178
19	G81EWB	-.00017	.00131	-.00003	.00830
20	G85CDC	1.0058	1.0467	1.0062	1.0477
21	G8WWH	.00284	.03026	.00240	.04776
22	CCV	3.9955	4.1791	4.0094	4.0508
23	CCB	.00065	.00047	.00031	.00172
24	G8WWJ	.00145	.02089	.00291	.03204
25	G8WWK	.00154	.03272	.00137	.05535
26	G8WWL	.01701	.01873	.00027	.03418
27	G8WX1	.00007	.16579	.00078	.00357
28	G8WX1S	.49383	1.1897	.49582	.50959
29	G8WX1D	.48854	1.1656	.48417	.49809
30	G8WX1V 5X	.00065	.03459	.00027	.00527
31	G8W0H	.00186	.16452	.00090	.00887
32	G8W03	.00210	.41613	.00200	.00430
33	G8W08	.00053	.04874	.00039	.01442
34	CCV	4.0080	4.2087	4.0029	4.0499
35	CCB	.00264	.00098	.00090	.00222
36	G8W1F	.00113	.14550	.00082	.00492
37	G8W1H	.00361	.16232	.00118	.00679
38	G8W1L	.00116	.19010	.00098	.00392
39	G8W1N	.00189	.22645	.00137	.00592
40	G8W1T	.00199	.14166	.00059	.01145
41	G8W10	.00082	.17511	.00082	.00374

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#	Sample Name	Sb2068	Sr4215	V_2924	Zn2138		
42	G8W2M	.00141	.16621	.00066	.00406		
43	G8W2N	.00205	.07256	.00059	.00866		
44	G8X1C	.00200	.30207	.00137	.12588		
45	CCV	4.0318	4.2534	4.0248	4.0792		
46	CCB	.00207	.00142	.00121	.00243		
47	G849JB	.00195	.00025	.00043	.00137		
48	G849JC	L.52241	L.57022	L.52412	L.54342		
49	G833J	.00190	.12616	.01901	.00278		
50	G833JS	.26404	.68433	.27620	.26518		
51	G833JD	.26023	.68445	.27503	.26355		
52	G833JV 5X	.00051	.02556	.00338	.00510		
53	G833K	.00135	.12468	.01920	.00148		
54	G833M	.00274	.12424	.01830	.00245		
55	CCV	4.0118	4.2307	4.0082	4.0634		
56	CCB	.00400	.00199	.00165	.00277		

JJ 4/26/05 SID 042205 6010C

Standardization Rpt. 04/26/05 11:08:12 AM 6/7 page 1

Method: 6010C Standard: CALBLK
Run Time: 04/26/05 11:03:53

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Avge	-.07250	-.01650	.99495	-.27349	-.55447	.52947	1.5559
SDev	.07141	.01343	.10040	.01768	.13222	.00212	.0113
%RSD	98.507	81.424	10.091	6.4635	23.847	.40063	.72710
#1	-.12299	-.02600	1.0659	-.28599	-.64797	.53097	1.5479
#2	-.02200	-.00700	.92395	-.26099	-.46098	.52797	1.5639

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Avge	.02925	.00450	-.82246	.00700	.14249	.01000	-.00750
SDev	.11278	.00212	.00212	.00141	.00212	.00424	.00354
%RSD	385.58	47.140	.25791	20.203	1.4886	42.426	47.140
#1	-.05050	.00300	-.82396	.00600	.14099	.01300	-.00500
#2	.10899	.00600	-.82096	.00800	.14399	.00700	-.01000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Avge	.08200	-.00650	.90195	.41398	-.04350	-.02500	-.27799
SDev	.00000	.00354	.01697	.00566	.00212	.02828	.03111
%RSD	.00000	54.393	1.8814	1.3664	4.8766	113.14	11.192
#1	.08200	-.00400	.88996	.40998	-.04200	-.04500	-.29998
#2	.08200	-.00900	.91395	.41798	-.04500	-.00500	-.25599

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Avge	.00350	.19599	.01600	.00250	-.01950	.01850	.01050
SDev	.00212	.00000	.00283	.00071	.01768	.00071	.00778
%RSD	60.609	.00000	17.678	28.284	90.655	3.8222	74.078
#1	.00500	.19599	.01800	.00200	-.03200	.01900	.00500
#2	.00200	.19599	.01400	.00300	-.00700	.01800	.01600

Elem	Ti3349	Zr3496	Na3302
Avge	-.01850	43.543	5.0897
SDev	.00212	.576	.0750
%RSD	11.467	1.3234	1.4726
#1	-.02000	43.136	5.0367
#2	-.01700	43.951	5.1427

Method: 6010C Standard: CAL1
Run Time: 04/26/05 11:08:15

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	As1890
Avge	702.76	632.30	1529.1	2651.8	374.78	425.83	983.02
SDev	1.98	1.59	4.3	7.8	1.01	.82	1.46
%RSD	.28162	.25183	.27879	.29528	.26979	.19212	.14825
#1	701.36	631.18	1526.1	2646.2	374.06	425.25	981.99
#2	704.16	633.43	1532.1	2657.3	375.49	426.41	984.05

Elem	Ba4934	Be3130	Cd2265	Cr2677	Co2286	Cu3247	Mn2576
Avge	367.67	997.37	610.97	540.40	86.304	135.72	549.01
SDev	.89	1.52	1.02	1.38	.195	.44	1.34
%RSD	.24328	.15214	.16758	.25501	.22612	.32352	.24406

#1	367.04	996.30	610.24	539.43	86.166	135.41	548.06
#2	368.31	998.45	611.69	541.38	86.442	136.04	549.95
Elem	Ni2316	Ag3280	Tl1908	V_2924	Zn2138	Mo2020	Sr4215
Avge	132.84	208.78	319.38	127.10	123.20	112.55	158.08
SDev	.34	.55	.34	.24	.33	.31	.95
%RSD	.25815	.26551	.10604	.18637	.26689	.27391	.59936
#1	132.60	208.39	319.14	126.93	122.96	112.33	157.41
#2	133.08	209.18	319.62	127.26	123.43	112.77	158.75

Elem	Sn1899	Th	U	Ti3349	Zr3496
Avge	68.818	147.71	36.396	143.99	194.63
SDev	.158	.42	.114	.42	.05
%RSD	.22912	.28577	.31278	.29168	.02434
#1	68.707	147.41	36.315	143.69	194.60
#2	68.930	148.01	36.476	144.29	194.67

Method: 6010C Standard: CAL2
Run Time: 04/26/05 11:12:39

Elem	Al	Ca	Fe	Mg	Na3302
Avge	255.37	66.298	227.86	106.00	19.848
SDev	.92	.199	.72	.31	.049
%RSD	.36189	.30076	.31590	.29349	.24937
#1	254.71	66.157	227.35	105.78	19.813
#2	256.02	66.439	228.37	106.22	19.883

Method: 6010C Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Sb1	206.831	CAL1	CALBLK	.014209	.001030	04/26/05 11:12:39
Sb2	206.832	CAL1	CALBLK	.015808	.000261	04/26/05 11:12:39
Pb1	220.351	CAL1	CALBLK	.006529	-.006496	04/26/05 11:12:39
Pb2	220.352	CAL1	CALBLK	.003777	.001033	04/26/05 11:12:39
Se1	196.021	CAL1	CALBLK	.026024	.014430	04/26/05 11:12:39
Se2	196.022	CAL1	CALBLK	.023529	-.012458	04/26/05 11:12:39
Al	308.215	CAL2	CALBLK	.393993	-.613022	04/26/05 11:12:39
As1890	189.042	CAL1	CALBLK	.010173	-.000298	04/26/05 11:12:39
Ba4934	493.409	CAL1	CALBLK	.027198	-.000122	04/26/05 11:12:39
Be3130	313.042	CAL1	CALBLK	.010018	.008239	04/26/05 11:12:39
Cd2265	226.502	CAL1	CALBLK	.016368	-.000115	04/26/05 11:12:39
Ca	317.933	CAL2	CALBLK	.755799	-.107696	04/26/05 11:12:39
Cr2677	267.760	CAL1	CALBLK	.018518	-.000185	04/26/05 11:12:39
Co2286	228.616	CAL1	CALBLK	.115893	.000869	04/26/05 11:12:39
Cu3247	324.753	CAL1	CALBLK	.073933	-.006062	04/26/05 11:12:39
Fe	217.441	CAL2	CALBLK	.438854	.002852	04/26/05 11:12:39
Mg	279.078	CAL2	CALBLK	.475729	-.429087	04/26/05 11:12:39
Mn2576	257.610	CAL1	CALBLK	.018233	-.007548	04/26/05 11:12:39
Ni2316	231.604	CAL1	CALBLK	.075255	.003273	04/26/05 11:12:39
Ag3280	328.068	CAL1	CALBLK	.009658	.000241	04/26/05 11:12:39
Tl1908	190.864	CAL1	CALBLK	.031245	.008686	04/26/05 11:12:39
V_2924	292.402	CAL1	CALBLK	.078719	-.000276	04/26/05 11:12:39

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Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Zn2138	213.856	CAL1	CALBLK	.900274	-.019453	04/26/05 11:12:39
Mo2020	202.030	CAL1	CALBLK	.088822	-.001421	04/26/05 11:12:39
Sr4215	421.552	CAL1	CALBLK	.063259	-.000158	04/26/05 11:12:39
Sn1899	189.989	CAL1	CALBLK	.145327	.002834	04/26/05 11:12:39
Th	401.913	CAL1	CALBLK	.068093	-.001260	04/26/05 11:12:39
U	385.958	CAL1	CALBLK	.275637	-.002894	04/26/05 11:12:39
Pb2203	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Se1960	196.026	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Sb2068	206.838	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Ti3349	334.941	CAL1	CALBLK	.069439	.001285	04/26/05 11:12:39
Zr3496	349.621	CAL1	CALBLK	.033093	-1.44098	04/26/05 11:12:39
Na3302	330.232	CAL2	CALBLK	6.77587	-34.4874	04/26/05 11:12:39

Method: 6010C

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sb1	206.831	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.98635	.013650
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sb2	206.832	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.99557	.004431
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Pb1	220.351	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.97654	.023456
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Pb2	220.352	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0168	-.016750
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Se1	196.021	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.76756	.232440
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Se2	196.022	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0067	-.006726
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Al	308.215	CALBLK	.000000	-.000000	.000000
		CAL2	100.000	100.000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
As1890	189.042	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	9.99979	.000210

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Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ba4934	493.409	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Be3130	313.042	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cd2265	226.502	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0003	-.000270
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ca	317.933	CALBLK	.000000	-.000000	.000000
		CAL2	50.0000	50.0000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cr2677	267.760	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0072	-.007160
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Co2286	228.616	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0029	-.002900
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cu3247	324.753	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0285	-.028476
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Fe	217.441	CALBLK	.000000	-.000000	.000000
		CAL2	100.000	100.000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mg	279.078	CALBLK	.000000	.000000	-.000000
		CAL2	50.0000	50.0000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mn2576	257.610	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0023	-.002260
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ni2316	231.604	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0000	.000000

			Known	Measured	Residual

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Element	Wavelength	Standard	Concentration	Concentration	Concentration
Ag3280	328.068	CALBLK	.000000	-.000000	.000000
		CAL1	2.00000	2.01675	-.016750

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Tl1908	190.864	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.98764	.012361

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
V_2924	292.402	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0046	-.004601

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Zn2138	213.856	CALBLK	.156992	.195990	-.038998
		CAL1	110.890	123.195	-12.3052

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mo2020	202.030	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.99540	.004600

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sr4215	421.552	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sn1899	189.989	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0040	-.003950

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Th	401.913	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0570	-.057000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
U	385.958	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0291	-.029115

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Pb2203	220.353	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Se1960	196.026	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Sb2068	206.838	NONE	.000000	.000000	.000000

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		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ti3349	334.941	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Zr3496	349.621	CALBLK	.000000	-.000000	.000000
		CAL1	5.00000	5.00000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Na3302	330.232	CALBLK	.000000	.000001	-.000001
		CAL2	100.000	100.000	.000000

Method: 6010C Sample Name: ICV Operator: STL
Run Time: 04/26/05 11:16:30
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	4.0046	4.0008	3.9693	3.9775	4.0516	4.0440	40.087
SDev	.0104	.0009	.0023	.0113	.0059	.0139	.114
%RSD	.25924	.02150	.05886	.28518	.14489	.34386	.28551
#1	3.9973	4.0014	3.9676	3.9695	4.0557	4.0341	40.006
#2	4.0120	4.0002	3.9709	3.9855	4.0474	4.0538	40.168
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.0548	4.2325	4.1476	4.0052	20.443	3.9292	3.9474
SDev	.0186	.0111	.0113	.0099	.063	.0091	.0116
%RSD	.45928	.26217	.27291	.24741	.30586	.23071	.29468
#1	4.0416	4.2247	4.1396	3.9982	20.398	3.9228	3.9391
#2	4.0679	4.2404	4.1556	4.0122	20.487	3.9356	3.9556
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.0043	41.724	20.108	4.0768	3.9624	1.0060	3.8903
SDev	.0103	.121	.044	.0112	.0127	.0019	.0106
%RSD	.25782	.28996	.21747	.27501	.31960	.19352	.27321
#1	3.9970	41.638	20.077	4.0689	3.9535	1.0046	3.8828
#2	4.0116	41.809	20.139	4.0847	3.9714	1.0073	3.8978

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	3.9986	4.0735	4.0960	4.2572	4.1272	Q3.3188	4.0170
SDev	.0134	.0108	.0124	.0138	.0070	.0086	.0133
%RSD	.33540	.26441	.30374	.32463	.16920	.25885	.33123
#1	3.9891	4.0659	4.0872	4.2474	4.1222	Q3.3127	4.0076
#2	4.0081	4.0811	4.1048	4.2669	4.1321	Q3.3249	4.0264

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	3.9748	4.0465	4.0034	4.1211	3.8205	41.493	
SDev	.0083	.0073	.0066	.0116	.0005	.057	
%RSD	.20991	.18091	.16581	.28117	.01215	.13856	
#1	3.9689	4.0413	3.9987	4.1129	3.8209	41.453	
#2	3.9807	4.0517	4.0081	4.1293	3.8202	41.534	

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	4.0000	4.0000	4.0000	4.0000	4.0000	
Range	10.000	10.000	10.000	10.000	10.000	

Method: 6010C Sample Name: ICB Operator: STL
Run Time: 04/26/05 11:20:52
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00223	.00035	.00137	.00144	.00175	-.00080	.00822
SDev	.00048	.00250	.00175	.00104	.00143	.00131	.00099
%RSD	21.511	710.24	127.57	72.220	81.306	164.40	12.072
#1	.00189	.00212	.00261	.00071	.00276	.00013	.00893
#2	.00257	-.00142	.00013	.00218	.00075	-.00173	.00752

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00197	.00031	.00027	.00014	.00265	.00036	.00029
SDev	.00084	.00015	.00014	.00013	.00000	.00039	.00033
%RSD	42.467	49.190	49.759	91.541	.00000	110.47	112.72
#1	.00257	.00042	.00037	.00023	.00265	.00063	.00052
#2	.00138	.00020	.00018	.00005	.00265	.00008	.00006

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00004	-.00086	-.00238	.00024	.00041	-.00010	.00115
SDev	.00015	.00163	.00269	.00013	.00021	.00017	.00018
%RSD	405.82	189.29	113.14	53.961	51.426	167.06	15.308
#1	.00014	-.00201	-.00428	.00033	.00056	-.00023	.00128
#2	-.00007	.00029	-.00048	.00015	.00026	.00002	.00103

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00008	.00200	.00288	.00025	.00095	.00133	-.00689
SDev	.00017	.00005	.00094	.00013	.00144	.00187	.00097
%RSD	205.37	2.3913	32.687	53.044	152.08	140.45	14.082
#1	.00004	.00203	.00355	.00035	.00196	.00266	-.00621
#2	-.00020	.00196	.00222	.00016	-.00007	.00001	-.00758

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00142	.00005	.00161	.00094	-.01549	Q-.35571
SDev	.00011	.00135	.00051	.00030	.01046	.10061
%RSD	7.8443	2672.7	31.956	31.427	67.531	28.284
#1	.00134	.00101	.00197	.00115	-.02288	Q-.42686
#2	.00150	-.00090	.00124	.00073	-.00809	Q-.28457

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00300	.00400	.06000	.05000	.10000	.25000

Method: 6010C Sample Name: LLC Operator: STL
Run Time: 04/26/05 11:25:14
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.06156	.06017	.00840	.01190	.02023	.01265	.20460
SDev	.00085	.00053	.00129	.00008	.00346	.00033	.00147
%RSD	1.3774	.88894	15.421	.69341	17.082	2.6209	.72028
#1	.06216	.05979	.00748	.01184	.01779	.01241	.20355
#2	.06096	.06055	.00931	.01196	.02268	.01288	.20564

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.20000
Range							20.000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.01157	.22028	.00522	.00493	5.1762	.00998	.05021
SDev	.00010	.00065	.00002	.00002	.0027	.00009	.00041
%RSD	.90213	.29683	.40716	.48183	.05162	.89673	.81724
#1	.01165	.22074	.00520	.00492	5.1781	.01004	.04992
#2	.01150	.21982	.00523	.00495	5.1743	.00992	.05050
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.01000	.20000	.00500	.00500	5.0000	.01000	.05000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.02469	.10880	4.9814	.01562	.04116	Q.01259	Q.02448
SDev	.00015	.00807	.0024	.00005	.00016	.00003	.00023
%RSD	.61692	7.4169	.04727	.33629	.38782	.20892	.95674
#1	.02480	.11451	4.9797	.01558	.04128	Q.01257	Q.02432
#2	.02458	.10310	4.9830	.01566	.04105	Q.01261	Q.02465
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Fail
Value	.02500	.10000	5.0000	.01500	.04000	.01000	.02000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.05071	.02311	.04091	.05531	.10381	Q-.00171	.50842
SDev	.00050	.00000	.00025	.00022	.00134	.00094	.00447
%RSD	.98833	.01316	.61906	.40425	1.2858	54.935	.87959
#1	.05106	.02311	.04109	.05547	.10475	Q-.00104	.51159
#2	.05035	.02312	.04073	.05515	.10287	Q-.00237	.50526
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	.05000	.02000	.04000	.05000	.10000	.50000	.50000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.01073	.01517	.06110	.05267	.46149	3.5029	
SDev	.00049	.00137	.00039	.00020	.00375	.1821	
%RSD	4.5302	9.0420	.63409	.37290	.81255	5.1972	
#1	.01039	.01420	.06137	.05281	.45884	3.3742	
#2	.01108	.01614	.06082	.05253	.46414	3.6317	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	
Value	.01000	.01500	.06000	.05000	.50000		
Range	20.000	20.000	20.000	20.000	20.000		

Method: 6010C Sample Name: LLC AG Operator: STL
Run Time: 04/26/05 11:29:36
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.04927	.04943	.05204	.05020	.04627	.04637	.01546
SDev	.00142	.00075	.00115	.00125	.00174	.00028	.00143
%RSD	2.8905	1.5175	2.2020	2.4979	3.7555	.60992	9.2500
#1	.04826	.04996	.05123	.04932	.04750	.04657	.01445
#2	.05028	.04890	.05285	.05109	.04504	.04617	.01648
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.05025	.05443	.05403	.05175	.07671	.05071	.05034
SDev	.00008	.00015	.00033	.00023	.00000	.00017	.00016
%RSD	.15041	.28263	.60307	.44735	.00000	.33295	.32628
#1	.05031	.05433	.05380	.05159	.07671	.05083	.05023
#2	.05020	.05454	.05426	.05191	.07671	.05059	.05046
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.05039	.01272	.00167	.05270	.05031	.00981	.05106
SDev	.00026	.00049	.00034	.00023	.00011	.00020	.00201
%RSD	.51396	3.8480	20.202	.44159	.21155	2.0512	3.9337
#1	.05058	.01307	.00143	.05253	.05023	.00995	.04964
#2	.05021	.01238	.00190	.05286	.05038	.00967	.05249
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.05016	.05208	.05242	.05595	.05148	.11163	.04762
SDev	.00006	.00010	.00013	.00027	.00103	.00037	.00292
%RSD	.11039	.19150	.24216	.47968	1.9971	.33011	6.1357
#1	.05012	.05201	.05251	.05576	.05076	.11189	.04969
#2	.05020	.05215	.05233	.05614	.05221	.11137	.04556
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.05081	.04634	.04932	.05190	.01440	L-.27102
SDev	.00122	.00077	.00070	.00030	.00059	.02875
%RSD	2.3970	1.6558	1.4193	.56757	4.0657	10.606
#1	.04995	.04688	.04883	.05170	.01398	L-.25069
#2	.05168	.04580	.04982	.05211	.01481	L-.29135
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: ICSA Operator: STL
Run Time: 04/26/05 11:33:59
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00410	-.00473	.03101	-.01661	.00628	-.00934	455.92
SDev	.00047	.00058	.00402	.00283	.00170	.00240	.42
%RSD	11.448	12.336	12.976	17.009	27.024	25.742	.09244
#1	.00444	-.00514	.03385	-.01861	.00748	-.01104	455.62
#2	.00377	-.00431	.02816	-.01461	.00508	-.00764	456.22
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							500.00
Range							100.00

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00378	.00146	-.00019	-.00415	433.68	.00233	.00110
SDev	.00082	.00004	.00002	.00006	1.41	.00048	.00049
%RSD	21.797	2.6434	11.165	1.4931	.32409	20.747	44.655
#1	.00436	.00143	-.00018	-.00420	432.69	.00267	.00075
#2	.00320	.00148	-.00021	-.00411	434.67	.00199	.00145
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	500.00	.00000	.00000
Range	.02000	.20000	.01000	.01000	100.00	.02000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00831	187.40	492.38	.00383	.00354	.00049	.00373
SDev	.00026	.41	.91	.00004	.00037	.00013	.00002
%RSD	3.1422	.21755	.18513	1.0812	10.531	25.635	.55965
#1	-.00812	187.11	491.73	.00380	.00380	.00040	.00374
#2	-.00849	187.68	493.02	.00386	.00327	.00058	.00371
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	200.00	500.00	.00000	.00000	.00000	.00000
Range	.02500	40.000	100.00	.01500	.04000	.02000	.02000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00433	.00149	-.00187	-.00595	.00632	-.00043	-.01359
SDev	.00006	.00020	.00075	.00002	.00205	.00040	.00235
%RSD	1.3019	13.242	40.329	.27914	32.492	92.003	17.252
#1	.00437	.00163	-.00134	-.00597	.00778	-.00072	-.01194
#2	.00429	.00135	-.00241	-.00594	.00487	-.00015	-.01525
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.02000	.04000	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	-.00075	-.00414	.00116	.00837	.05020	1.1451
SDev	.00054	.00104	.00012	.00000	.00016	.1341
%RSD	72.286	25.094	10.247	.00000	.32351	11.716
#1	-.00114	-.00487	.00125	.00837	.05031	1.0502
#2	-.00037	-.00340	.00108	.00837	.05009	1.2399
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.00000	.00000	.00000	.00000	.00000	
Range	.00600	.01000	.06000	.05000	.10000	

Method: 6010C Sample Name: ICSAB Operator: STL
Run Time: 04/26/05 11:38:22
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.94451	.93786	.95939	.86762	.96450	.95343	454.79
SDev	.00146	.00010	.00358	.00639	.00368	.00602	1.70
%RSD	.15450	.01031	.37269	.73641	.38137	.63176	.37283
#1	.94348	.93780	.95686	.86310	.96190	.94917	453.59
#2	.94554	.93793	.96192	.87214	.96710	.95769	455.99
Errors	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value	1.0000	1.0000					500.00
Range	20.000	20.000					20.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.96263	.50997	.48749	.87720	431.21	.44978	.43292
SDev	.00584	.00198	.00225	.00424	1.96	.00217	.00172
%RSD	.60638	.38842	.46063	.48371	.45347	.48258	.39713
#1	.95850	.50857	.48590	.87420	429.82	.44824	.43170
#2	.96675	.51137	.48907	.88020	432.59	.45131	.43413
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	.50000	.50000	1.0000	500.00	.50000	.50000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

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Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.51454	186.15	488.21	.47371	.87848	.97775	.87104
SDev	.00266	.83	2.09	.00198	.00420	.00441	.01047
%RSD	.51701	.44545	.42856	.41835	.47851	.45049	1.2019
#1	.51265	185.56	486.73	.47231	.87551	.97463	.86364
#2	.51642	186.73	489.69	.47511	.88145	.98086	.87844
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	200.00	500.00	.50000	1.0000	1.0000	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.46744	.95568	.92254	1.0070	.93342	.76587	.93257
SDev	.00234	.00321	.00578	.0041	.01048	.00137	.00523
%RSD	.50012	.33618	.62657	.40477	1.1227	.17842	.56128
#1	.46579	.95341	.91845	1.0041	.92601	.76490	.92886
#2	.46910	.95795	.92662	1.0099	.94083	.76684	.93627
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass
Value	.50000	1.0000	1.0000	1.0000	1.0000		1.0000
Range	20.000	20.000	20.000	20.000	20.000		20.000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.89818	.95712	.94230	.48907	.89196	22.186	
SDev	.00545	.00524	.00101	.00187	.00357	.292	
%RSD	.60704	.54774	.10671	.38149	.40051	1.3173	
#1	.89433	.95341	.94159	.48775	.88944	21.980	
#2	.90204	.96083	.94301	.49039	.89449	22.393	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	
Value	1.0000	1.0000	1.0000	.50000	1.0000		
Range	20.000	20.000	20.000	20.000	20.000		

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 04/26/05 11:44:27
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	3.9843	3.9737	3.9414	3.9522	4.0114	4.0166	40.033
SDev	.0081	.0039	.0067	.0123	.0035	.0037	.097
%RSD	.20279	.09729	.17000	.31186	.08705	.09145	.24294
#1	3.9786	3.9710	3.9367	3.9435	4.0089	4.0140	39.964
#2	3.9900	3.9765	3.9461	3.9609	4.0139	4.0192	40.102
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.0482	4.2196	4.1273	3.9796	20.429	3.9051	3.9261
SDev	.0064	.0116	.0131	.0114	.059	.0102	.0102
%RSD	.15930	.27391	.31647	.28593	.28776	.26236	.25875
#1	4.0436	4.2115	4.1181	3.9716	20.387	3.8978	3.9189
#2	4.0528	4.2278	4.1366	3.9877	20.470	3.9123	3.9332
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	3.9918	41.485	20.004	4.0524	3.9293	1.0024	3.8853
SDev	.0112	.116	.054	.0127	.0092	.0028	.0209
%RSD	.28073	.28077	.27073	.31264	.23292	.28176	.53787
#1	3.9839	41.403	19.965	4.0435	3.9228	1.0004	3.8706
#2	3.9998	41.568	20.042	4.0614	3.9357	1.0044	3.9001
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	3.9865	4.0408	4.0737	4.2052	4.1164	Q3.3061	4.0024
SDev	.0131	.0121	.0158	.0169	.0086	.0122	.0090
%RSD	.32795	.29919	.38707	.40097	.20959	.36836	.22517
#1	3.9773	4.0323	4.0625	4.1933	4.1103	Q3.2974	3.9960
#2	3.9958	4.0494	4.0848	4.2172	4.1225	Q3.3147	4.0088
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	3.9486	4.0148	3.9808	4.1018	3.7873	41.277
SDev	.0105	.0036	.0067	.0132	.0046	.029
%RSD	.26471	.08999	.16772	.32080	.12129	.06964
#1	3.9412	4.0123	3.9760	4.0925	3.7841	41.256
#2	3.9560	4.0174	3.9855	4.1111	3.7906	41.297
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 04/26/05 11:48:51
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

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Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00344	.00275	.00295	.00240	.00307	-.00175	.03216
SDev	.00053	.00258	.00020	.00002	.00224	.00057	.00060
%RSD	15.404	93.960	6.7706	.69692	72.686	32.403	1.8586
#1	.00306	.00458	.00281	.00242	.00466	-.00215	.03174
#2	.00381	.00092	.00309	.00239	.00149	-.00135	.03258
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00225	.00155	.00154	.00137	.02116	.00131	.00133
SDev	.00004	.00010	.00014	.00005	.00053	.00014	.00000
%RSD	1.7585	6.2027	9.2131	3.4044	2.5254	10.926	.02110
#1	.00228	.00162	.00164	.00141	.02154	.00141	.00133
#2	.00223	.00148	.00144	.00134	.02078	.00120	.00133
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00158	.01824	.02260	.00144	.00128	.00020	.00331
SDev	.00036	.00633	.00034	.00008	.00048	.00023	.00029
%RSD	22.945	34.717	1.4887	5.3284	37.435	116.53	8.7831
#1	.00184	.01376	.02236	.00149	.00094	.00003	.00311
#2	.00133	.02272	.02283	.00139	.00162	.00036	.00352
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00149	.00253	.00369	.00152	.00262	.00231	.00025
SDev	.00061	.00004	.00069	.00013	.00236	.00042	.00293
%RSD	40.995	1.7489	18.779	8.8406	90.347	18.008	1165.7
#1	.00193	.00250	.00418	.00161	.00429	.00261	.00232
#2	.00106	.00257	.00320	.00142	.00094	.00202	-.00182
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00259	-.00014	.00321	.00198	-.00968	Q-.29812
SDev	.00006	.00037	.00051	.00030	.00334	.12457
%RSD	2.1388	255.23	15.793	14.886	34.532	41.784

#1	.00255	.00012	.00357	.00219	-.01204	Q-.38621
#2	.00262	-.00040	.00285	.00177	-.00731	-.21004
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00300	.00400	.06000	.05000	.10000	.25000

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Method: 6010C Sample Name: G8496B Operator: STL
Run Time: 04/26/05 12:15:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00003	.00250	-.00397	.00167	.00517	-.00458	L.01411
SDev	.00007	.00004	.00098	.00126	.00122	.00073	.00202
%RSD	210.55	1.7660	24.791	75.233	23.693	16.002	14.301
#1	-.00008	.00253	-.00327	.00078	.00604	-.00406	L.01268
#2	.00002	.00247	-.00466	.00256	.00430	-.00510	L.01553
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Low
High							.20000
Low							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L.00061	.00011	-.00053	-.00013	-.00567	-.00041	.00052
SDev	.00003	.00006	.00002	.00007	.00000	.00004	.00016
%RSD	4.1568	53.033	4.0025	53.466	.00000	9.6085	31.450
#1	L.00062	.00015	-.00055	-.00018	-.00567	-.00039	.00064
#2	L.00059	.00007	-.00052	-.00008	-.00567	-.00044	.00041
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00700	.20000	.20000	.00500	.25000	.01000	.05000
Low	.00700	-.20000	-.20000	-.00500	-.25000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00007	-.01095	-.01142	-.00034	.00117	.00012	.00402
SDev	.00011	.00100	.00269	.00004	.00000	.00004	.00186
%RSD	157.96	9.1380	23.570	11.434	.00000	32.752	46.163
#1	-.00014	-.01024	-.01332	-.00036	.00117	.00009	.00271
#2	.00001	-.01166	-.00951	-.00031	.00117	.00015	.00533
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.02500	.05000	.25000	.01500	.04000	.01000	.01000
Low	-.02500	-.05000	-.25000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00035	.00100	-.00098	-.00009	.00182	-.00150	-.00550
SDev	.00011	.00010	.00013	.00000	.00226	.00116	.00098
%RSD	31.684	9.6148	12.777	.00000	124.36	77.372	17.805
#1	-.00043	.00094	-.00089	-.00009	.00342	-.00068	-.00619
#2	-.00027	.00107	-.00107	-.00009	.00022	-.00232	-.00481
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.04000	.05000	.10000	.50000	.50000
Low	-.05000	-.01000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	-.00021	-.00133	.00081	.00038	-.02433	L-1.6736
SDev	.00051	.00090	.00003	.00000	.00538	.1629
%RSD	247.78	67.323	3.9768	.00000	22.123	9.7334
#1	-.00057	-.00070	.00079	.00038	-.02814	L-1.7887
#2	.00016	-.00197	.00083	.00038	-.02052	L-1.5584
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Low
High	.00300	.00500	.01000	.05000		.25000
Low	-.00300	-.00500	-.01000	-.05000		-.25000

Method: 6010C Sample Name: G8496C Operator: STL
Run Time: 04/26/05 12:20:03
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.51733	.51857	.50445	.50578	.56437	.53623	L.52710
SDev	.00355	.00264	.00133	.00001	.00377	.00393	.00603
%RSD	.68651	.50829	.26271	.00222	.66721	.73210	1.1443
#1	.51482	.51671	.50352	.50577	.56170	.53345	L.52283
#2	.51984	.52043	.50539	.50579	.56703	.53900	L.53136
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Low
High							1.2000
Low							.80000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L.52887	L.55785	L.54533	L.51973	L10.443	L.50686	L.50591
SDev	.00012	.00315	.00141	.00027	.019	.00070	.00016
%RSD	.02310	.56537	.25849	.05119	.18423	.13727	.03245
#1	L.52878	L.55562	L.54433	L.51954	L10.429	L.50637	L.50579
#2	L.52896	L.56008	L.54632	L.51992	L10.456	L.50736	L.50602
Errors	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low
High	1.2040	1.2040	1.2000	1.2040	24.000	1.2040	1.2000
Low	.79500	.79500	.80000	.79500	16.000	.79500	.80000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	L.50347	L.56860	L10.144	L.52675	L.50821	.12707	L.50584
SDev	.00304	.00263	.027	.00131	.00075	.00020	.00091
%RSD	.60386	.46332	.26528	.24969	.14658	.15585	.17909
#1	L.50132	L.56674	L10.125	L.52582	L.50768	.12693	L.50520
#2	L.50562	L.57046	L10.163	L.52768	L.50873	.12721	L.50648
Errors	LC Low	LC Low	LC Low	LC Low	LC Low	LC Pass	LC Low
High	1.2000	1.2000	24.000	1.2040	1.2000	.33700	1.2040
Low	.80000	.80000	16.000	.79500	.80000	.12300	.79500

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	L.51357	L.52663	L.52464	L.55391	L.00153	L-.00146	L-.01309
SDev	.00045	.00160	.00176	.00273	.00185	.00258	.00428
%RSD	.08687	.30367	.33480	.49250	120.91	176.72	32.724
#1	L.51326	L.52550	L.52340	L.55199	L.00284	L.00036	L-.01006
#2	L.51389	L.52776	L.52588	L.55584	L.00022	L-.00328	L-.01612
Errors	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low
High	1.2000	1.2000	1.2000	1.2000	2.4000	2.4000	2.4000
Low	.80000	.80000	.80000	.80000	1.6000	1.6000	1.6000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	L.50534	L.54560	L.51774	L.00083	L-.01255	6.4401
SDev	.00045	.00387	.00325	.00015	.00524	.1868
%RSD	.08882	.70974	.62707	17.678	41.779	2.9013
#1	L.50502	L.54286	L.51544	L.00094	L-.00884	6.5723
#2	L.50566	L.54833	L.52004	L.00073	L-.01626	6.3080
Errors	LC Low	LC Low	LC Low	LC Low	LC Low	NOCHECK
High	1.2040	1.2040	1.2040	2.4000	2.4000	
Low	.79500	.79500	.79500	1.6000	1.6000	

Method: 6010C Sample Name: G8170 Operator: STL
Run Time: 04/26/05 12:24:25
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00018	.00141	-.00135	-.00005	.00990	-.00475	.01842
SDev	.00358	.00018	.00274	.00088	.00393	.00095	.00028
%RSD	1976.5	12.529	203.11	1779.4	39.677	19.953	1.5343
#1	-.00235	.00129	.00059	-.00067	.01267	-.00408	.01862
#2	.00272	.00154	-.00329	.00057	.00712	-.00542	.01822
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00030	.00197	-.00043	-.00023	.06348	.00187	.00041
SDev	.00021	.00000	.00005	.00002	.00160	.00023	.00033
%RSD	71.943	.00000	11.511	10.250	2.5254	12.479	80.971
#1	-.00014	.00197	-.00047	-.00025	.06462	.00204	.00017
#2	-.00045	.00197	-.00040	-.00021	.06235	.00171	.00064
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

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Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00063	-.00711	.01165	-.00006	.00177	.00003	.00599
SDev	.00016	.00389	.00101	.00004	.00021	.00030	.00066
%RSD	24.559	54.735	8.6584	62.589	12.036	1032.5	10.981
#1	.00074	-.00436	.01094	-.00009	.00162	-.00018	.00553
#2	.00052	-.00986	.01237	-.00004	.00192	.00024	.00646
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00031	.00257	-.00009	.00047	.00313	-.00138	-.00343
SDev	.00005	.00019	.00025	.00000	.00123	.00041	.00429
%RSD	17.364	7.5559	275.72	.00678	39.477	29.762	124.77
#1	-.00035	.00271	-.00027	.00047	.00225	-.00167	-.00040
#2	-.00028	.00244	.00009	.00047	.00400	-.00109	-.00646
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	-.00048	.00012	.00059	.00045	-.00373	L-.98923
SDev	.00033	.00194	.00245	.00010	.00845	.20122
%RSD	68.395	1559.4	413.97	21.757	226.30	20.341
#1	-.00025	.00150	-.00114	.00038	-.00971	L-1.1315
#2	-.00072	-.00125	.00232	.00052	.00224	L-.84694
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8170X Operator: STL
Run Time: 04/26/05 12:28:47
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00046	.00098	-.00208	.00072	.00645	-.00707	.01492
SDev	.00072	.00053	.00033	.00026	.00040	.00030	.00191
%RSD	155.43	53.758	15.684	36.395	6.2064	4.2212	12.784
#1	-.00098	.00135	-.00185	.00053	.00674	-.00686	.01357
#2	.00005	.00061	-.00231	.00090	.00617	-.00728	.01627
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00057	.00194	-.00066	.00000	.06500	.00042	.00058
SDev	.00023	.00000	.00000	.00005	.00053	.00038	.00008
%RSD	39.411	.00000	.00000	7870.8	.82222	90.638	14.071
#1	-.00073	.00194	-.00066	.00003	.06462	.00069	.00064
#2	-.00041	.00194	-.00066	-.00003	.06537	.00015	.00052
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00086	-.00712	.00309	-.00020	.00162	.00006	.00437
SDev	.00005	.00308	.00370	.00005	.00011	.00032	.00168
%RSD	6.2023	43.246	119.66	25.980	6.5777	515.32	38.410
#1	.00089	-.00929	.00048	-.00024	.00169	-.00016	.00555
#2	.00082	-.00494	.00571	-.00016	.00154	.00029	.00318
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00012	.00209	-.00031	.00041	.00145	-.00213	-.00205
SDev	.00022	.00010	.00031	.00000	.00031	.00088	.00234
%RSD	186.16	4.6204	100.36	.00261	21.184	41.254	114.13
#1	-.00004	.00202	-.00053	.00041	.00167	-.00276	-.00040
#2	.00028	.00216	-.00009	.00041	.00124	-.00151	-.00371
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	-.00022	-.00257	.00002	.00031	-.03823	L-1.7921
SDev	.00007	.00033	.00031	.00010	.00730	.1773
%RSD	30.242	12.951	1874.0	31.427	19.089	9.8915
#1	-.00026	-.00233	-.00020	.00024	-.04339	L-1.9175
#2	-.00017	-.00280	.00023	.00038	-.03307	L-1.6668
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8170S Operator: STL
Run Time: 04/26/05 12:33:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

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Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.25572	.25586	.25208	.25359	1.1046	1.0797	1.0415
SDev	.00119	.00226	.00015	.00010	.0024	.0063	.0022
%RSD	.46462	.88307	.06002	.03760	.21563	.58559	.21384
#1	.25656	.25746	.25219	.25353	1.1029	1.0753	1.0431
#2	.25488	.25426	.25197	.25366	1.1063	1.0842	1.0400
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.0665	1.0998	.02700	.02574	26.098	.10153	.24927
SDev	.0049	.0016	.00002	.00002	.017	.00018	.00016
%RSD	.45491	.14689	.07872	.08968	.06348	.17876	.06543
#1	1.0699	1.1009	.02698	.02572	26.110	.10166	.24939
#2	1.0631	1.0986	.02701	.02576	26.086	.10140	.24916
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.12751	.53092	25.561	.25974	.25439	.02481	1.0103
SDev	.00016	.00079	.013	.00042	.00106	.00018	.0006
%RSD	.12203	.14817	.05000	.16336	.41835	.73220	.05894
#1	.12762	.53036	25.570	.26004	.25514	.02468	1.0099
#2	.12740	.53148	25.552	.25944	.25363	.02494	1.0108
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.25575	.26340	.52731	.54788	.00131	-.00347	-.01222
SDev	.00006	.00035	.00138	.00063	.00175	.00026	.00351
%RSD	.02207	.13367	.26172	.11424	133.21	7.5119	28.724
#1	.25579	.26365	.52633	.54832	.00255	-.00366	-.00974
#2	.25571	.26316	.52828	.54743	.00008	-.00329	-.01470
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.25309	1.0880	.25576	.00118	.03781	21.055
SDev	.00001	.0050	.00154	.00005	.00239	.005
%RSD	.00522	.46051	.60402	4.1594	6.3111	.02275

#1	.25308	1.0845	.25686	.00115	.03612	21.058
#2	.25310	1.0916	.25467	.00122	.03950	21.052
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8170V 5X Operator: STL
Run Time: 04/26/05 12:37:31
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00122	.00196	.00074	.00048	.00478	.00035	.00568
SDev	.00114	.00019	.00203	.00003	.00138	.00214	.00629
%RSD	93.402	9.6435	275.43	6.7051	28.900	611.20	110.77
#1	-.00203	.00182	-.00070	.00046	.00380	-.00117	.00123
#2	-.00041	.00209	.00217	.00051	.00576	.00187	.01012
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00171	.00034	-.00032	-.00029	.13377	.00017	-.00011
SDev	.00115	.00008	.00008	.00001	.00160	.00011	.00057
%RSD	67.255	22.627	24.307	4.3910	1.1985	62.668	499.10
#1	.00253	.00039	-.00038	-.00029	.13264	.00009	.00029
#2	.00090	.00029	-.00027	-.00028	.13490	.00025	-.00052
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00019	-.01461	-.00357	-.00016	-.00038	-.00025	.00272
SDev	.00006	.01191	.00168	.00003	.00069	.00054	.00127
%RSD	30.831	81.514	47.141	16.444	183.85	215.37	46.780
#1	.00015	-.00619	-.00476	-.00018	-.00087	.00013	.00362
#2	.00024	-.02302	-.00238	-.00014	.00011	-.00063	.00182
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00039	.00569	.00031	.00016	-.00029	-.00200	-.00742
SDev	.00039	.00010	.00032	.00000	.00010	.00224	.00407
%RSD	98.803	1.7095	102.75	.02062	35.151	111.96	54.902

#1	-.00012	.00562	.00053	.00016	-.00022	-.00042	-.00454
#2	-.00067	.00576	.00008	.00016	-.00036	-.00358	-.01030
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00057	.00183	-.00016	-.00010	-.02216	L-.65384
SDev	.00070	.00189	.00082	.00020	.00495	.22518
%RSD	122.72	103.51	505.57	188.56	22.319	34.440
#1	.00008	.00049	-.00075	.00003	-.02566	L-.81306
#2	.00106	.00316	.00042	-.00024	-.01866	L-.49461
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G84EP Operator: STL
Run Time: 04/26/05 12:41:52
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00191	-.00138	-.00508	.00280	.00522	-.00373	.01358
SDev	.00107	.00004	.00071	.00207	.00173	.00003	.00491
%RSD	55.999	2.6761	14.080	73.976	33.216	.87618	36.164
#1	.00115	-.00135	-.00457	.00133	.00644	-.00375	.01705
#2	.00266	-.00141	-.00558	.00426	.00399	-.00371	.01010
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00062	.00061	-.00059	-.00015	.03136	-.00051	.00012
SDev	.00034	.00004	.00001	.00008	.00107	.00044	.00024
%RSD	54.711	6.2854	2.4175	52.094	3.4077	86.129	208.65
#1	-.00038	.00064	-.00060	-.00010	.03212	-.00020	.00029
#2	-.00086	.00058	-.00058	-.00021	.03061	-.00082	-.00006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00017	-.01376	-.00285	-.00024	.00173	.00004	.00365
SDev	.00015	.00734	.00538	.00009	.00037	.00026	.00118
%RSD	86.400	53.300	188.56	36.281	21.521	735.17	32.321

#1	-.00007	-.00858	.00095	-.00018	.00199	.00022	.00449
#2	-.00028	-.01895	-.00666	-.00031	.00147	-.00015	.00282
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00055	.00179	-.00112	.00016	.00029	-.00187	-.01294
SDev	.00061	.00004	.00057	.00000	.00031	.00101	.00837
%RSD	111.04	2.4910	50.985	.01357	104.46	54.184	64.709
#1	-.00012	.00182	-.00071	.00016	.00051	-.00115	-.00702
#2	-.00099	.00175	-.00152	.00016	.00008	-.00258	-.01885
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00018	-.00075	.00081	.00038	-.02446	L-1.5347
SDev	.00114	.00056	.00070	.00010	.02026	.4360
%RSD	649.17	73.901	86.173	25.713	82.819	28.409
#1	-.00063	-.00036	.00032	.00045	-.01014	L-1.2264
#2	.00098	-.00114	.00131	.00031	-.03879	L-1.8429
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G81EWB Operator: STL
Run Time: 04/26/05 12:46:14
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00083	.00114	.01105	.01265	.01043	-.00247	L.02063
SDev	.00196	.00093	.00219	.00139	.00083	.00173	.00117
%RSD	235.20	81.742	19.806	11.009	7.9570	70.006	5.6544
#1	.00055	.00048	.00950	.01364	.00984	-.00125	L.01980
#2	-.00221	.00180	.01260	.01167	.01101	-.00370	L.02145
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Low
High							.20000
Low							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L.00168	.01837	-.00059	.00014	H.48142	.00197	.00249
SDev	.00165	.00004	.00002	.00007	.00053	.00040	.00066
%RSD	98.710	.20936	3.5954	49.678	.11100	20.421	26.355

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#1	L.00285	.01840	-.00061	.00019	H.48104	.00169	.00296
#2	L.00051	.01834	-.00058	.00009	H.48180	.00226	.00203

Errors	LC Low	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	.00700	.20000	.20000	.00500	.25000	.01000	.05000
Low	.00700	-.20000	-.20000	-.00500	-.25000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00270	H.31370	.03235	.00030	.00068	-.00014	.00038
SDev	.00016	.00327	.00000	.00004	.00005	.00007	.00008
%RSD	5.7946	1.0428	.00000	12.431	7.8567	49.793	21.927
#1	.00259	H.31138	.03235	.00027	.00064	-.00009	.00044
#2	.00281	H.31601	.03235	.00033	.00071	-.00019	.00032

Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.02500	.05000	.25000	.01500	.04000	.01000	.01000
Low	-.02500	-.05000	-.25000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00004	.00830	-.00005	.00132	.00981	-.00210	-.00154
SDev	.00011	.00010	.00019	.00005	.00020	.00134	.00624
%RSD	285.57	1.1696	423.97	3.3926	2.0857	63.535	405.51
#1	.00004	.00824	-.00018	.00135	.00967	-.00116	-.00595
#2	-.00012	.00837	.00009	.00129	.00995	-.00305	.00287

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.04000	.05000	.10000	.50000	.50000
Low	-.05000	-.01000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	H.01212	.00182	-.00018	.00062	-.07474	H663.22
SDev	.00020	.00088	.00099	.00015	.00547	.26
%RSD	1.6546	48.156	566.82	23.570	7.3229	.03901
#1	H.01226	.00244	.00053	.00073	-.07861	H663.41
#2	H.01198	.00120	-.00088	.00052	-.07087	H663.04

Errors	LC High	LC Pass	LC Pass	LC Pass	NOCHECK	LC High
High	.00300	.00500	.01000	.05000		.25000
Low	-.00300	-.00500	-.01000	-.05000		-.25000

Method: 6010C Sample Name: G85CDC Operator: STL
Run Time: 04/26/05 12:50:36
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	1.0058	1.0056	.98686	.99702	1.1010	1.0732	1.1471
SDev	.0057	.0011	.00200	.00245	.0018	.0037	.0022
%RSD	.56489	.11084	.20253	.24609	.16040	.34732	.18966

#1	1.0018	1.0048	.98827	.99529	1.0998	1.0705	1.1455
#2	1.0099	1.0064	.98544	.99876	1.1023	1.0758	1.1486
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							1.2000
Low							.80000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.0402	1.0659	1.0537	.98789	20.407	.98135	.97549
SDev	.0005	.0003	.0007	.00106	.021	.00136	.00115
%RSD	.04459	.02525	.06185	.10776	.10213	.13907	.11768
#1	1.0399	1.0661	1.0532	.98714	20.392	.98038	.97468
#2	1.0405	1.0657	1.0541	.98864	20.422	.98231	.97630
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2040	1.2040	1.2000	1.2040	24.000	1.2040	1.2000
Low	.79500	.79500	.80000	.79500	16.000	.79500	.80000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.0476	H1.4416	19.745	1.0109	.98432	.25186	.97817
SDev	.0015	.0029	.018	.0009	.00149	.00048	.00261
%RSD	.14469	.20260	.09369	.08428	.15136	.19046	.26646
#1	1.0486	H1.4395	19.732	1.0103	.98326	.25152	.98001
#2	1.0465	H1.4437	19.758	1.0115	.98537	.25219	.97633
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2000	1.2000	24.000	1.2040	1.2000	.33700	1.2040
Low	.80000	.80000	16.000	.79500	.80000	.12300	.79500
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	1.0062	1.0477	1.0186	1.0467	L.01105	L-.00225	L-.01724
SDev	.0011	.0000	.0014	.0004	.00072	.00139	.00663
%RSD	.11043	.00091	.13534	.03842	6.5022	61.573	38.479
#1	1.0054	1.0477	1.0177	1.0464	L.01156	L-.00323	L-.01255
#2	1.0070	1.0477	1.0196	1.0470	L.01054	L-.00127	L-.02193
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Low	LC Low
High	1.2000	1.2000	1.2000	1.2000	2.4000	2.4000	2.4000
Low	.80000	.80000	.80000	.80000	1.6000	1.6000	1.6000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.99364	1.0825	1.0058	L.00160	L-.00966	701.22	
SDev	.00097	.0031	.0042	.00015	.00178	.68	
%RSD	.09772	.28401	.41370	9.2231	18.391	.09634	
#1	.99295	1.0803	1.0028	L.00149	L-.01091	700.74	
#2	.99432	1.0846	1.0087	L.00170	L-.00840	701.69	
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Low	NOCHECK	
High	1.2040	1.2040	1.2040	2.4000	2.4000		

Low	.79500	.79500	.79500	1.6000	1.6000

Method: 6010C Sample Name: G8WWH Operator: STL
Run Time: 04/26/05 12:54:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00342	.00167	.01373	.01480	.01162	-.00276	.48885
SDev	.00261	.00217	.00127	.00009	.00154	.00361	.00031
%RSD	76.168	129.84	9.2713	.59049	13.299	130.63	.06303
#1	.00158	.00321	.01463	.01474	.01271	-.00532	.48863
#2	.00527	.00014	.01283	.01486	.01053	-.00021	.48907
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.09144	.17837	-.00027	.00007	4.9072	.00227	.00267
SDev	.00100	.00008	.00001	.00003	.0069	.00002	.00025
%RSD	1.0974	.04313	5.3367	46.551	.14157	.68325	9.2515
#1	.09215	.17843	-.00028	.00010	4.9022	.00226	.00249
#2	.09073	.17832	-.00026	.00005	4.9121	.00228	.00284
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00137	.20501	1.2356	.06676	.00286	-.00011	.00131
SDev	.00015	.00068	.0017	.00014	.00005	.00001	.00100
%RSD	11.213	.33057	.13611	.21406	1.8608	5.5383	76.158
#1	.00148	.20453	1.2345	.06666	.00290	-.00011	.00201
#2	.00126	.20549	1.2368	.06686	.00282	-.00011	.00060
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00240	.04776	.00053	.03026	.00632	-.00171	-.00391
SDev	.00011	.00010	.00025	.00005	.00082	.00007	.00507
%RSD	4.6703	.20931	47.747	.14825	12.987	3.9328	129.46
#1	.00248	.04783	.00071	.03030	.00690	-.00167	-.00033
#2	.00232	.04769	.00035	.03023	.00574	-.00176	-.00750
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000

Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.01444	.00203	.00284	.00496	-.00684	H658.91	
SDev	.00037	.00189	.00102	.00010	.00227	1.10	
%RSD	2.5314	93.508	35.793	1.9779	33.192	.16723	
#1	.01470	.00069	.00212	.00490	-.00844	H658.13	
#2	.01418	.00336	.00356	.00503	-.00523	H659.69	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 04/26/05 12:59:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	3.9961	3.9943	3.9504	3.9548	4.0506	4.0411	39.933
SDev	.0052	.0199	.0102	.0092	.0084	.0074	.084
%RSD	.12923	.49909	.25802	.23215	.20621	.18220	.20967
#1	3.9925	3.9802	3.9432	3.9483	4.0447	4.0359	39.874
#2	3.9998	4.0084	3.9577	3.9613	4.0565	4.0463	39.992
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.0749	4.2265	4.1415	3.9912	20.362	3.9075	3.9350
SDev	.0067	.0071	.0084	.0085	.046	.0090	.0093
%RSD	.16565	.16835	.20183	.21414	.22571	.23020	.23738
#1	4.0701	4.2214	4.1356	3.9851	20.330	3.9012	3.9284
#2	4.0797	4.2315	4.1474	3.9972	20.395	3.9139	3.9416
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.0069	41.613	20.037	4.0567	3.9415	1.0060	3.8972
SDev	.0079	.076	.045	.0081	.0079	.0027	.0062
%RSD	.19797	.18319	.22495	.20020	.20115	.26484	.15875
#1	4.0013	41.559	20.005	4.0509	3.9359	1.0041	3.8928
#2	4.0125	41.667	20.069	4.0624	3.9471	1.0079	3.9016
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000

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Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.0094	4.0508	4.0908	4.1791	4.1307	Q3.3206	4.0091
SDev	.0093	.0088	.0117	.0145	.0075	.0068	.0034
%RSD	.23311	.21786	.28552	.34783	.18158	.20357	.08498
#1	4.0028	4.0446	4.0825	4.1688	4.1254	Q3.3158	4.0115
#2	4.0160	4.0570	4.0990	4.1893	4.1360	Q3.3254	4.0067
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	3.9534	4.0442	3.9955	4.1078	3.7454	40.850
SDev	.0095	.0077	.0101	.0084	.0066	.172
%RSD	.24076	.19021	.25236	.20438	.17654	.42222
#1	3.9466	4.0388	3.9884	4.1018	3.7408	40.728
#2	3.9601	4.0497	4.0026	4.1137	3.7501	40.972
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 04/26/05 13:03:44
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00030	.00136	.00300	.00145	.00242	.00114	.01995
SDev	.00032	.00022	.00044	.00207	.00054	.00117	.00126
%RSD	108.14	16.356	14.756	143.08	22.481	102.23	6.3363
#1	.00053	.00121	.00331	.00291	.00280	.00197	.02084
#2	.00007	.00152	.00269	-.00002	.00203	.00032	.01905
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00201	.00052	.00055	.00039	.00491	.00035	.00046
SDev	.00022	.00006	.00001	.00007	.00000	.00007	.00041
%RSD	11.112	11.165	2.5949	17.854	.00000	19.193	88.258
#1	.00185	.00056	.00054	.00034	.00491	.00030	.00017
#2	.00216	.00048	.00056	.00044	.00491	.00039	.00075
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000

Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00015	-.00236	.00904	.00057	.00038	-.00041	.00209
SDev	.00020	.00898	.00067	.00003	.00059	.00015	.00012
%RSD	133.74	380.91	7.4433	4.6279	155.56	37.409	5.9276
#1	.00030	.00399	.00856	.00055	.00079	-.00030	.00200
#2	.00001	-.00870	.00951	.00059	-.00004	-.00052	.00218
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00031	.00172	.00235	.00047	.00102	-.00026	-.00730
SDev	.00017	.00005	.00032	.00000	.00216	.00191	.00193
%RSD	53.506	3.1273	13.399	.00000	211.91	723.16	26.499
#1	.00020	.00168	.00257	.00047	-.00051	.00109	-.00593
#2	.00043	.00176	.00213	.00047	.00255	-.00162	-.00867
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00196	.00157	.00065	.00094	-.00389	-.17616	
SDev	.00153	.00096	.00014	.00030	.00341	.05749	
%RSD	77.857	61.243	21.679	31.427	87.729	32.635	
#1	Q.00305	.00224	.00075	.00115	-.00148	-.13551	
#2	.00088	.00089	.00055	.00073	-.00630	-.21681	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.00300	.00400	.06000	.05000	.10000	.25000	

Method: 6010C Sample Name: G8WWJ Operator: STL
Run Time: 04/26/05 13:08:07
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00174	.00088	.00729	.01047	.00812	-.00287	.58723
SDev	.00164	.00028	.00000	.00063	.00402	.00132	.00140
%RSD	94.088	31.556	.01150	5.9993	49.519	45.786	.23843
#1	.00290	.00108	.00729	.01002	.00528	-.00194	.58624
#2	.00058	.00069	.00730	.01091	.01097	-.00380	.58822
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00

Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.10453	.14085	-.00042	-.00001	3.7353	.00112	.00238
SDev	.00001	.00010	.00001	.00002	.0021	.00003	.00033
%RSD	.01029	.06827	3.4077	238.54	.05722	2.4132	13.792
#1	.10453	.14079	-.00043	.00001	3.7338	.00114	.00214
#2	.10452	.14092	-.00041	-.00003	3.7369	.00110	.00261
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00133	.34561	.82273	.05862	.00230	.00041	.00068
SDev	.00021	.00460	.00101	.00014	.00053	.00014	.00040
%RSD	15.709	1.3320	.12265	.24136	23.184	34.922	58.526
#1	.00148	.34887	.82345	.05852	.00267	.00031	.00097
#2	.00118	.34236	.82202	.05872	.00192	.00051	.00040
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00291	.03205	.00080	.02089	.00560	.00009	-.00406
SDev	.00039	.00030	.00000	.00000	.00144	.00025	.00156
%RSD	13.366	.94600	.09023	.00020	25.714	273.71	38.568
#1	.00319	.03183	.00080	.02089	.00661	.00027	-.00516
#2	.00264	.03226	.00080	.02089	.00458	-.00009	-.00295
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00941	.00079	.00145	.00611	-.04041	H675.04
SDev	.00042	.00046	.00118	.00005	.00108	1.20
%RSD	4.4536	58.589	81.448	.80353	2.6718	.17743
#1	.00911	.00046	.00229	.00608	-.04118	H675.89
#2	.00971	.00112	.00062	.00615	-.03965	H674.19
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

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Method: 6010C Sample Name: G8WWK Operator: STL
Run Time: 04/26/05 13:12:29
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00098	.00269	.01545	.01528	.01064	-.00596	.47018
SDev	.00073	.00078	.00118	.00116	.00084	.00157	.00216
%RSD	74.353	28.956	7.6572	7.6191	7.8993	26.262	.45971
#1	.00149	.00214	.01629	.01446	.01123	-.00707	.46865
#2	.00046	.00324	.01461	.01610	.01004	-.00486	.47171
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.10990	.21305	-.00040	.00017	5.0326	.00085	.00272
SDev	.00110	.00012	.00003	.00006	.0102	.00022	.00049
%RSD	1.0015	.05416	7.1605	33.158	.20176	25.733	18.104
#1	.11068	.21297	-.00038	.00013	5.0254	.00101	.00237
#2	.10913	.21313	-.00042	.00021	5.0398	.00070	.00307
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00197	.42559	1.1850	.04090	.00305	-.00031	.00135
SDev	.00016	.00728	.0020	.00000	.00043	.00030	.00073
%RSD	7.9902	1.7105	.17031	.00361	13.968	96.560	54.213
#1	.00208	.42044	1.1836	.04090	.00335	-.00052	.00083
#2	.00185	.43073	1.1864	.04090	.00275	-.00010	.00187
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00138	.05535	.00018	.03273	.00421	-.00265	-.00068
SDev	.00033	.00010	.00012	.00005	.00010	.00163	.00683
%RSD	24.055	.18188	69.063	.13604	2.4611	61.388	1004.4
#1	.00114	.05528	.00009	.03270	.00414	-.00380	.00415
#2	.00161	.05542	.00026	.03276	.00429	-.00150	-.00551
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.01534	-.00044	.00155	.00698	-.03422	H640.88
SDev	.00038	.00076	.00023	.00000	.00005	.13
%RSD	2.4943	175.40	14.600	.00000	.15249	.02093
#1	.01507	-.00098	.00171	.00698	-.03418	H640.79
#2	.01561	.00010	.00139	.00698	-.03426	H640.98
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WWL Operator: STL
Run Time: 04/26/05 13:16:51
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.01731	.01644	.00336	.00320	.00601	-.00429	.26517
SDev	.00094	.00228	.00033	.00039	.00040	.00223	.00332
%RSD	5.4477	13.877	9.7490	12.220	6.6534	51.992	1.2520
#1	.01798	.01482	.00313	.00348	.00629	-.00271	.26282
#2	.01664	.01805	.00360	.00292	.00573	-.00586	.26752
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.1714	.14312	-.00036	.00638	2.6686	.00112	.00185
SDev	.0003	.00019	.00005	.00007	.0048	.00012	.00025
%RSD	.02977	.13437	13.749	1.0888	.18023	10.601	13.280
#1	1.1717	.14326	-.00040	.00633	2.6652	.00120	.00203
#2	1.1712	.14299	-.00033	.00643	2.6720	.00103	.00168
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00107	.24909	.54873	.08624	.00293	.00009	.00237
SDev	.00005	.00054	.00437	.00005	.00037	.00015	.00057
%RSD	4.9920	.21662	.79693	.05931	12.692	162.45	24.210
#1	.00111	.24947	.54563	.08620	.00267	.00019	.00278
#2	.00103	.24871	.55182	.08628	.00320	-.00001	.00197
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00028	.03418	-.00027	.01873	.00421	-.00063	.00224
SDev	.00011	.00010	.00013	.00005	.00113	.00023	.00136
%RSD	40.254	.28617	47.087	.23927	26.817	37.239	60.869
#1	.00035	.03411	-.00018	.01877	.00341	-.00079	.00128
#2	.00020	.03425	-.00035	.01870	.00501	-.00046	.00321
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00326	-.00086	.01702	.00083	-.00819	H593.47
SDev	.00015	.00162	.00013	.00005	.01102	.55
%RSD	4.6615	188.56	.76688	5.8926	134.52	.09202
#1	.00336	.00029	.01693	.00087	-.01599	H593.85
#2	.00315	-.00200	.01711	.00080	-.00040	H593.08
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WX1 Operator: STL
Run Time: 04/26/05 13:21:13
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00022	.00065	.00413	.00301	.01146	-.00268	.08001
SDev	.00196	.00023	.00129	.00113	.00262	.00145	.00141
%RSD	889.22	34.514	31.336	37.448	22.844	53.954	1.7599
#1	.00116	.00049	.00321	.00380	.01331	-.00370	.08100
#2	-.00160	.00081	.00504	.00221	.00960	-.00166	.07901
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00349	.20426	-.00038	-.00006	77.290	-.00012	.00058
SDev	.00080	.00004	.00001	.00014	.152	.00026	.00024
%RSD	22.745	.01883	1.8608	213.21	.19706	207.97	42.327
#1	.00406	.20424	-.00039	.00003	77.182	-.00031	.00041
#2	.00293	.20429	-.00038	-.00016	77.398	.00006	.00075
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

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Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00119	-.00524	4.4557	.15589	.00275	-.00025	-.00101
SDev	.00031	.00416	.0044	.00027	.00011	.00022	.00011
%RSD	26.122	79.393	.09814	.17304	3.8746	88.739	11.105
#1	.00097	-.00230	4.4526	.15570	.00282	-.00009	-.00093
#2	.00141	-.00818	4.4588	.15608	.00267	-.00041	-.00109
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00079	.00358	-.00085	.16580	.00778	-.00316	-.00646
SDev	.00006	.00005	.00044	.00000	.00041	.00007	.00390
%RSD	7.1582	1.3179	52.132	.00184	5.2946	2.2251	60.378
#1	.00075	.00361	-.00116	.16580	.00807	-.00311	-.00922
#2	.00083	.00354	-.00053	.16580	.00749	-.00321	-.00370
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00338	.00203	.00007	.00031	.03389	H691.60
SDev	.00032	.00009	.00123	.00010	.00180	.78
%RSD	9.4835	4.5927	1735.4	31.427	5.3268	.11223
#1	.00361	.00196	.00094	.00024	.03261	H691.05
#2	.00315	.00209	-.00080	.00038	.03517	H692.15
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WX1S Operator: STL
Run Time: 04/26/05 13:25:36
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.49513	.49123	.47546	.48046	2.1395	2.1011	2.2258
SDev	.00565	.00152	.00025	.00201	.0040	.0051	.0051
%RSD	1.1419	.30914	.05331	.41762	.18514	.24309	.22749
#1	.49114	.49016	.47564	.47905	2.1367	2.0975	2.2222
#2	.49913	.49231	.47528	.48188	2.1423	2.1047	2.2294
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	2.0619	2.2503	.05205	.04776	119.98	.19234	.47010
SDev	.0049	.0090	.00017	.00005	.28	.00030	.00213
%RSD	.23982	.40081	.32664	.09591	.23740	.15703	.45319
#1	2.0584	2.2439	.05193	.04773	119.78	:19213	.46860
#2	2.0654	2.2567	.05217	.04780	120.18	.19255	.47161
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.26250	1.0446	52.967	.63760	.48119	.04940	1.9064
SDev	.00068	.0066	.128	.00161	.00192	.00009	.0093
%RSD	.25990	.63622	.24132	.25233	.39809	.17300	.48696
#1	.26202	1.0399	52.877	.63646	.47984	.04946	1.8999
#2	.26298	1.0493	53.057	.63874	.48255	.04934	1.9130
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.49583	.50959	1.0053	1.1897	.00531	-.00255	-.01258
SDev	.00050	.00128	.0044	.0049	.00123	.00056	.00254
%RSD	.10102	.25125	.43718	.41308	23.246	22.092	20.177
#1	.49547	.50869	1.0022	1.1862	.00443	-.00215	-.01079
#2	.49618	.51050	1.0084	1.1932	.00618	-.00295	-.01438
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.47880	2.1139	.49383	.00181	.03192	H729.92
SDev	.00125	.0047	.00428	.00005	.00251	1.53
%RSD	.26190	.22356	.86602	2.7196	7.8596	.20939
#1	.47791	2.1105	.49081	.00184	.03369	H728.84
#2	.47968	2.1172	.49686	.00177	.03014	H731.00
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WX1D Operator: STL
Run Time: 04/26/05 13:29:58
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.48931	.48700	.46714	.47231	2.0916	2.0526	2.1748
SDev	.00160	.00095	.00239	.00004	.0039	.0036	.0125
%RSD	.32636	.19504	.51250	.00858	.18867	.17422	.57316
#1	.49044	.48633	.46883	.47228	2.0889	2.0501	2.1660
#2	.48818	.48768	.46544	.47234	2.0944	2.0551	2.1836
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	2.0157	2.1987	.05093	.04709	117.43	.18794	.46107
SDev	.0035	.0079	.00006	.00024	.26	.00020	.00115
%RSD	.17147	.35949	.12518	.51579	.22482	.10469	.24875
#1	2.0132	2.1931	.05088	.04691	117.24	.18808	.46026
#2	2.0181	2.2043	.05097	.04726	117.61	.18780	.46188
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.25596	1.0235	51.928	.62319	.47254	.04849	1.8710
SDev	.00094	.0020	.120	.00197	.00202	.00039	.0024
%RSD	.36662	.19239	.23061	.31603	.42790	.80218	.12768
#1	.25529	1.0221	51.843	.62179	.47111	.04821	1.8693
#2	.25662	1.0249	52.012	.62458	.47397	.04876	1.8727
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.48418	.49809	.98632	1.1656	.00771	-.00274	-.01449
SDev	.00161	.00107	.00377	.0046	.00010	.00116	.00020
%RSD	.33322	.21556	.38204	.39095	1.3363	42.166	1.3815
#1	.48303	.49733	.98365	1.1624	.00778	-.00356	-.01435
#2	.48532	.49885	.98898	1.1689	.00763	-.00193	-.01463
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.47059	2.0656	.48854	.00181	.03988	H710.54
SDev	.00077	.0037	.00075	.00005	.00541	2.32
%RSD	.16367	.17909	.15328	2.7196	13.559	.32635

#1	.47113	2.0630	.48907	.00177	.04370	H708.90
#2	.47004	2.0682	.48801	.00184	.03605	H712.18
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WX1V 5X Operator: STL
Run Time: 04/26/05 13:34:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00047	.00103	.00128	.00038	.00579	-.00082	.02091
SDev	.00048	.00114	.00126	.00047	.00163	.00148	.00021
%RSD	103.66	110.65	98.490	124.31	28.074	180.06	1.0129
#1	.00012	.00184	.00217	.00072	.00464	-.00187	.02076
#2	.00081	.00022	.00039	.00005	.00694	.00022	.02106
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00103	.04271	-.00031	-.00019	16.342	-.00017	.00018
SDev	.00074	.00000	.00002	.00008	.078	.00013	.00033
%RSD	72.477	.00000	6.8429	43.207	.47743	77.500	187.19
#1	.00050	.04271	-.00033	-.00013	16.287	-.00026	-.00006
#2	.00155	.04271	-.00030	-.00025	16.397	-.00008	.00041
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00027	.00183	.91621	.03233	.00015	-.00034	.00073
SDev	.00026	.00415	.00538	.00017	.00005	.00020	.00004
%RSD	95.585	226.63	.58742	.51779	35.355	59.494	5.5159
#1	.00009	-.00110	.91240	.03221	.00011	-.00049	.00076
#2	.00045	.00477	.92001	.03245	.00019	-.00020	.00070
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00028	.00527	.00026	.03459	.00109	-.00276	-.01074
SDev	.00044	.00010	.00000	.00004	.00000	.00106	.00019
%RSD	161.49	1.8276	.03305	.12479	.02352	38.277	1.7445

#1	-.00004	.00520	.00026	.03456	.00109	-.00351	-.01088
#2	.00059	.00534	.00026	.03462	.00109	-.00202	-.01061
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00068	.00138	.00065	-.00010	.00361	109.86	
SDev	.00073	.00153	.00006	.00000	.00788	.53	
%RSD	108.14	110.79	8.8050	.00000	218.65	.48410	
#1	.00120	.00030	.00069	-.00010	-.00197	109.48	
#2	.00016	.00246	.00061	-.00010	.00918	110.23	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G8W0H Operator: STL
Run Time: 04/26/05 13:38:42
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00170	.00221	.00337	.00455	.01184	-.00335	.06854
SDev	.00225	.00006	.00130	.00167	.00384	.00150	.00013
%RSD	132.16	2.6207	38.633	36.776	32.403	44.610	.19460
#1	.00329	.00225	.00245	.00573	.00913	-.00441	.06863
#2	.00011	.00217	.00429	.00337	.01456	-.00230	.06844
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00350	.19582	-.00048	-.00009	76.271	.00036	.00052
SDev	.00052	.00133	.00000	.00003	.121	.00004	.00049
%RSD	14.786	.67764	.00000	37.735	.15905	11.488	94.105
#1	.00314	.19488	-.00048	-.00007	76.186	.00033	.00087
#2	.00387	.19676	-.00048	-.00011	76.357	.00039	.00017
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00300	.00387	4.3482	.16101	.00211	-.00004	.00003
SDev	.00025	.00821	.0077	.00052	.00090	.00042	.00078
%RSD	8.4634	212.12	.17792	.32094	42.931	1023.4	2414.3

#1	.00318	.00968	4.3427	.16064	.00275	.00025	.00059
#2	.00282	-.00194	4.3537	.16137	.00147	-.00033	-.00052
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00091	.00888	-.00058	.16452	.00465	-.00252	-.00537
SDev	.00044	.00001	.00057	.00094	.00010	.00189	.00544
%RSD	49.129	.08037	97.922	.56946	2.2392	75.110	101.35
#1	.00122	.00887	-.00018	.16386	.00458	-.00118	-.00152
#2	.00059	.00888	-.00098	.16518	.00473	-.00386	-.00922
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00416	.00171	.00187	.00024	.00928	H682.90	
SDev	.00068	.00228	.00152	.00010	.01413	3.02	
%RSD	16.406	133.24	81.155	40.406	152.24	.44269	
#1	.00464	.00010	.00294	.00031	.01927	H680.76	
#2	.00367	.00332	.00080	.00017	-.00071	H685.03	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G8W03 Operator: STL
Run Time: 04/26/05 13:43:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00247	.00138	.00102	.00403	.01219	-.00341	.07712
SDev	.00103	.00002	.00059	.00051	.00152	.00023	.00162
%RSD	41.728	1.5066	58.381	12.615	12.446	6.7926	2.1038
#1	.00174	.00136	.00060	.00439	.01112	-.00358	.07827
#2	.00320	.00139	.00144	.00367	.01326	-.00325	.07597
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00825	.28148	-.00043	.00001	165.71	.00029	.00070
SDev	.00151	.00154	.00000	.00006	.31	.00009	.00008
%RSD	18.268	.54658	.00000	753.22	.18415	30.833	11.652

#1	.00932	.28039	-.00043	.00005	165.49	.00036	.00075
#2	.00718	.28256	-.00043	-.00003	165.92	.00023	.00064
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00064	.00852	5.2582	.33926	.00151	-.00015	.00103
SDev	.00026	.00428	.0064	.00101	.00069	.00057	.00103
%RSD	40.040	50.193	.12155	.29664	45.962	371.57	100.81
#1	.00083	.01155	5.2537	.33854	.00199	.00025	.00029
#2	.00046	.00550	5.2627	.33997	.00102	-.00056	.00176
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V 2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00201	.00431	-.00058	.41614	.00516	-.00348	-.01598
SDev	.00056	.00009	.00031	.00210	.00082	.00046	.00409
%RSD	27.761	2.1493	53.387	.50372	15.940	13.152	25.571
#1	.00240	.00437	-.00081	.41465	.00458	-.00316	-.01309
#2	.00161	.00424	-.00036	.41762	.00574	-.00381	-.01887
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00302	.00178	.00211	-.00024	.05415	H668.72	
SDev	.00014	.00066	.00069	.00010	.00262	3.62	
%RSD	4.6592	36.995	32.983	40.406	4.8354	.54163	
#1	.00312	.00132	.00162	-.00017	.05600	H666.16	
#2	.00292	.00225	.00260	-.00031	.05230	H671.29	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G8W08 Operator: STL
Run Time: 04/26/05 13:47:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00041	.00078	.00522	.00528	.01121	-.00388	.07566
SDev	.00158	.00265	.00051	.00133	.00026	.00051	.00149
%RSD	383.05	337.96	9.8619	25.237	2.2914	13.210	1.9746

#1	-.00071	.00266	.00558	.00434	.01139	-.00352	.07672
#2	.00153	-.00109	.00485	.00622	.01102	-.00425	.07460
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00265	.09795	-.00040	-.00021	12.554	.00039	.00127
SDev	.00032	.00019	.00002	.00006	.009	.00034	.00008
%RSD	11.927	.19634	5.3033	27.103	.06811	87.459	6.5179
#1	.00243	.09781	-.00039	-.00025	12.548	.00062	.00122
#2	.00288	.09809	-.00042	-.00017	12.560	.00015	.00133
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00141	.08201	1.5089	.02200	.00207	-.00020	.00012
SDev	.00032	.00951	.0000	.00007	.00021	.00045	.00090
%RSD	22.296	11.601	.00000	.29979	10.285	223.26	736.18
#1	.00164	.07528	1.5089	.02195	.00192	-.00052	.00076
#2	.00119	.08874	1.5089	.02204	.00222	.00012	-.00051
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00039	.01443	-.00045	.04874	.00640	-.00315	-.00352
SDev	.00028	.00010	.00037	.00000	.00052	.00216	.00664
%RSD	69.811	.65950	83.859	.00035	8.0458	68.539	188.93
#1	.00020	.01436	-.00071	.04874	.00603	-.00467	.00118
#2	.00059	.01449	-.00018	.04874	.00676	-.00162	-.00821
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00526	.00114	.00054	.00139	-.02877	H663.41	
SDev	.00072	.00043	.00017	.00015	.00322	.41	
%RSD	13.646	37.462	32.163	10.607	11.200	.06211	
#1	.00475	.00144	.00041	.00128	-.03105	H663.11	
#2	.00577	.00084	.00066	.00149	-.02649	H663.70	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	

Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 04/26/05 13:51:49
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	4.0070	4.0100	3.9551	3.9566	4.0551	4.0599	40.090
SDev	.0158	.0046	.0036	.0063	.0081	.0006	.086
%RSD	.39394	.11434	.09057	.15809	.20053	.01441	.21486
#1	3.9959	4.0068	3.9526	3.9521	4.0494	4.0595	40.029
#2	4.0182	4.0132	3.9576	3.9610	4.0609	4.0604	40.151
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.0891	4.2439	4.1487	3.9993	20.465	3.9188	3.9396
SDev	.0052	.0111	.0093	.0095	.046	.0088	.0097
%RSD	.12658	.26237	.22350	.23806	.22458	.22533	.24535
#1	4.0854	4.2360	4.1421	3.9925	20.432	3.9126	3.9328
#2	4.0928	4.2518	4.1552	4.0060	20.497	3.9251	3.9464
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.0277	41.728	20.109	4.0666	3.9506	1.0106	3.9188
SDev	.0100	.053	.049	.0096	.0115	.0030	.0122
%RSD	.24734	.12799	.24255	.23609	.29093	.29496	.31034
#1	4.0206	41.690	20.075	4.0598	3.9424	1.0085	3.9102
#2	4.0347	41.765	20.144	4.0734	3.9587	1.0128	3.9274
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.0029	4.0499	4.0999	4.2087	4.1439	Q3.3434	4.0428
SDev	.0106	.0111	.0132	.0184	.0128	.0071	.0114
%RSD	.26414	.27350	.32180	.43677	.30988	.21263	.28263
#1	3.9954	4.0421	4.0906	4.1957	4.1349	Q3.3384	4.0348
#2	4.0103	4.0577	4.1093	4.2217	4.1530	Q3.3484	4.0509
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000

Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	3.9561	4.0583	4.0080	4.1256	3.7186	40.602	
SDev	.0054	.0031	.0121	.0104	.0064	.149	
%RSD	.13561	.07634	.30079	.25230	.17158	.36579	
#1	3.9523	4.0561	3.9995	4.1183	3.7231	40.497	
#2	3.9599	4.0605	4.0165	4.1330	3.7141	40.707	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000	
Range	10.000	10.000	10.000	10.000	10.000	10.000	

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 04/26/05 13:56:12
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00311	.00171	.00043	.00331	.00240	.00274	.02467
SDev	.00128	.00082	.00101	.00109	.00052	.00136	.00003
%RSD	41.109	48.128	234.04	33.066	21.675	49.631	.11642
#1	.00221	.00113	.00114	.00253	.00203	.00371	.02465
#2	.00402	.00229	-.00028	.00408	.00277	.00178	.02469
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00147	.00110	.00104	.00095	.00794	.00098	.00122
SDev	.00006	.00004	.00001	.00012	.00000	.00004	.00000
%RSD	3.9181	3.4919	1.3664	12.140	.00000	4.3699	.08364
#1	.00151	.00107	.00103	.00087	.00794	.00095	.00122
#2	.00143	.00113	.00105	.00103	.00794	.00101	.00122
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00066	.01467	.01142	.00100	.00117	.00036	.00334
SDev	.00010	.00836	.00067	.00000	.00000	.00014	.00210
%RSD	15.286	57.018	5.8926	.15041	.00000	38.404	62.758
#1	.00073	.00876	.01094	.00100	.00117	.00026	.00482
#2	.00059	.02059	.01189	.00100	.00117	.00046	.00186
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000

Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00090	.00223	.00293	.00098	.00211	.00290	-.00664
SDev	.00011	.00010	.00101	.00000	.00103	.00009	.00683
%RSD	12.197	4.2573	34.427	.00000	48.693	3.0051	102.89
#1	.00082	.00216	.00364	.00098	.00283	.00284	-.00181
#2	.00098	.00229	.00222	.00098	.00138	.00296	-.01147
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00235	.00263	.00265	.00160	-.00443	-.19310
SDev	.00039	.00073	.00113	.00015	.00290	.04312
%RSD	16.751	27.942	42.620	9.2231	65.378	22.329
#1	.00207	.00315	.00185	.00170	-.00648	-.22359
#2	.00263	.00211	.00345	.00149	-.00238	-.16261
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00300	.00400	.06000	.05000	.10000	.25000

Method: 6010C Sample Name: G8W1F Operator: STL
Run Time: 04/26/05 14:00:35
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00131	.00078	.00148	.00422	.00965	-.00296	.06313
SDev	.00011	.00083	.00020	.00138	.00131	.00053	.00003
%RSD	8.2805	106.10	13.725	32.665	13.530	17.963	.04640
#1	.00139	.00136	.00134	.00324	.01057	-.00259	.06311
#2	.00124	.00019	.00163	.00519	.00873	-.00334	.06315
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00369	.18626	-.00037	-.00002	70.579	-.00005	.00052
SDev	.00157	.00077	.00004	.00000	.021	.00002	.00000
%RSD	42.622	.41300	9.5555	.63739	.03028	53.848	.09156
#1	.00480	.18680	-.00040	-.00002	70.594	-.00006	.00052
#2	.00258	.18572	-.00035	-.00002	70.564	-.00003	.00052
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000

Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00367	-.00360	3.9805	.14168	.00173	.00003	.00033
SDev	.00016	.00161	.0044	.00037	.00005	.00029	.00121
%RSD	4.2828	44.831	.10986	.26424	3.0744	1120.7	369.69
#1	.00356	-.00474	3.9836	.14195	.00169	-.00018	.00119
#2	.00378	-.00246	3.9774	.14142	.00177	.00023	-.00053
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00083	.00493	-.00036	.14550	.00778	-.00080	-.00923
SDev	.00034	.00000	.00050	.00054	.00000	.00069	.00273
%RSD	40.575	.01473	139.40	.36860	.00463	86.361	29.574
#1	.00059	.00493	-.00001	.14588	.00778	-.00031	-.01116
#2	.00106	.00493	-.00071	.14512	.00778	-.00129	-.00730
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00331	.00124	.00114	.00028	.03314	H620.31	
SDev	.00099	.00079	.00035	.00015	.00744	2.46	
%RSD	29.836	63.812	30.614	53.033	22.446	.39623	
#1	.00261	.00180	.00138	.00038	.02788	H622.05	
#2	.00401	.00068	.00089	.00017	.03840	H618.57	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G8W1H Operator: STL
Run Time: 04/26/05 14:04:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00441	.00201	.00113	.00540	.01403	-.00269	.07202
SDev	.00031	.00101	.00111	.00056	.00081	.00062	.00045
%RSD	6.9807	49.904	98.312	10.308	5.8137	22.898	.62159
#1	.00463	.00272	.00191	.00501	.01345	-.00225	.07234
#2	.00420	.00130	.00034	.00579	.01460	-.00312	.07170
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00

Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00349	.21166	-.00048	.00000	72.294	.00005	.00081
SDev	.00063	.00035	.00001	.00007	.141	.00013	.00008
%RSD	17.921	.16355	1.4732	13449.	.19515	264.99	10.093
#1	.00393	.21191	-.00048	-.00005	72.194	.00014	.00075
#2	.00305	.21142	-.00049	.00005	72.394	-.00004	.00087
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00119	-.00628	4.9692	.19595	.00324	.00002	.00032
SDev	.00010	.00223	.0034	.00017	.00005	.00046	.00347
%RSD	8.1966	35.531	.06769	.08521	1.6444	1851.6	1073.7
#1	.00112	-.00786	4.9668	.19583	.00327	-.00030	-.00213
#2	.00126	-.00470	4.9716	.19607	.00320	.00035	.00278
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00118	.00679	-.00014	.16232	.00719	-.00161	-.00399
SDev	.00017	.00010	.00032	.00023	.00288	.00254	.00233
%RSD	14.036	1.4416	233.30	.13951	40.005	157.53	58.438
#1	.00106	.00672	-.00036	.16248	.00923	-.00341	-.00563
#2	.00130	.00686	.00009	.16216	.00516	.00018	-.00234
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00398	.00288	.00362	.00038	.01552	H686.01	
SDev	.00000	.00014	.00054	.00010	.00536	.67	
%RSD	.05221	4.8190	14.943	25.713	34.505	.09708	
#1	.00398	.00298	.00400	.00031	.01174	H686.48	
#2	.00398	.00278	.00323	.00045	.01931	H685.53	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G8W1L Operator: STL
Run Time: 04/26/05 14:09:18
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00142	.00065	.00031	.00279	.01000	-.00036	.07302
SDev	.00277	.00145	.00284	.00251	.00040	.00201	.00107
%RSD	194.67	222.11	923.59	90.234	4.0109	552.29	1.4608
#1	.00338	-.00037	-.00170	.00456	.00971	.00106	.07378
#2	-.00054	.00168	.00231	.00101	.01028	-.00179	.07227
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00337	.21125	-.00042	-.00002	87.350	.00025	.00052
SDev	.00050	.00015	.00006	.00009	.199	.00021	.00016
%RSD	14.942	.07283	15.152	574.85	.22759	82.138	31.436
#1	.00373	.21114	-.00047	.00005	87.209	.00011	.00064
#2	.00301	.21136	-.00038	-.00008	87.490	.00040	.00041
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00137	-.00344	4.4264	.11110	.00218	-.00010	-.00042
SDev	.00005	.00344	.0108	.00026	.00122	.00062	.00070
%RSD	3.7083	99.866	.24317	.23155	56.081	647.24	168.18
#1	.00141	-.00101	4.4188	.11092	.00305	.00034	-.00092
#2	.00134	-.00587	4.4341	.11129	.00132	-.00054	.00008
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00098	.00392	-.00062	.19011	.00647	-.00192	-.00357
SDev	.00044	.00004	.00000	.00013	.00144	.00087	.00137
%RSD	45.147	1.0500	.10110	.06850	22.243	45.540	38.334
#1	.00130	.00395	-.00062	.19002	.00749	-.00130	-.00454
#2	.00067	.00390	-.00062	.19020	.00545	-.00254	-.00261
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00196	.00309	.00117	.00021	.01304	H664.67
SDev	.00073	.00121	.00136	.00005	.00326	.09
%RSD	37.372	39.218	116.88	23.570	24.963	.01369
#1	.00248	.00394	.00213	.00024	.01074	H664.60
#2	.00144	.00223	.00020	.00017	.01534	H664.73
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8W1N Operator: STL
Run Time: 04/26/05 14:13:40
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00213	.00141	.00222	.00412	.01015	-.00109	.08999
SDev	.00393	.00056	.00113	.00077	.00541	.00211	.00060
%RSD	184.48	39.827	50.667	18.701	53.289	194.56	.66403
#1	.00491	.00101	.00143	.00467	.00632	.00041	.09041
#2	-.00065	.00181	.00302	.00358	.01397	-.00258	.08957
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00563	.23364	-.00037	.00005	120.48	.00025	.00075
SDev	.00093	.00038	.00000	.00005	.31	.00039	.00016
%RSD	16.556	.16462	.00000	95.153	.25726	153.22	21.610
#1	.00628	.23336	-.00037	.00002	120.26	-.00002	.00064
#2	.00497	.23391	-.00037	.00008	120.70	.00053	.00087
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00215	.00977	4.8346	.20017	.00196	-.00010	.00007
SDev	.00031	.00285	.0128	.00047	.00027	.00029	.00105
%RSD	14.388	29.145	.26439	.23730	13.598	300.19	1471.7
#1	.00193	.00776	4.8256	.19983	.00214	-.00030	.00082
#2	.00237	.01178	4.8436	.20050	.00177	.00011	-.00067
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00138	.00593	.00009	.22645	.00799	-.00211	-.00676
SDev	.00011	.00015	.00013	.00057	.00010	.00005	.00740
%RSD	8.1747	2.4926	150.52	.25403	1.3027	2.5682	109.58
#1	.00130	.00582	-.00001	.22604	.00807	-.00214	-.01199
#2	.00146	.00603	.00018	.22686	.00792	-.00207	-.00152
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00349	.00265	.00189	.00031	.03502	H673.98
SDev	.00014	.00039	.00244	.00010	.00183	.59
%RSD	3.9934	14.733	128.76	31.427	5.2180	.08815
#1	.00359	.00238	.00361	.00024	.03631	H673.56
#2	.00339	.00293	.00017	.00038	.03373	H674.40
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8W1T Operator: STL
Run Time: 04/26/05 14:18:02
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00239	.00121	.00117	.00429	.01032	-.00470	.07943
SDev	.00216	.00186	.00088	.00056	.00532	.00128	.00054
%RSD	90.493	154.20	75.165	12.973	51.494	27.236	.68023
#1	.00086	-.00011	.00055	.00468	.00656	-.00560	.07981
#2	.00392	.00252	.00180	.00389	.01408	-.00379	.07905
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00345	.19083	-.00036	-.00024	61.699	.00010	.00081
SDev	.00039	.00004	.00001	.00003	.063	.00004	.00025
%RSD	11.260	.02015	1.9641	14.457	.10220	41.043	30.410
#1	.00318	.19080	-.00036	-.00021	61.655	.00013	.00099
#2	.00373	.19086	-.00037	-.00026	61.744	.00007	.00064
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

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Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00071	-.00649	3.9231	.17848	.00218	-.00033	-.00009
SDev	.00015	.00630	.0067	.00003	.00037	.00018	.00276
%RSD	21.751	97.036	.17149	.01530	17.068	53.816	2920.5
#1	.00060	-.00204	3.9184	.17850	.00192	-.00046	-.00205
#2	.00082	-.01094	3.9279	.17846	.00245	-.00020	.00186
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00059	.01145	-.00076	.14166	.00691	-.00315	-.00963
SDev	.00000	.00000	.00069	.00005	.00205	.00076	.00605
%RSD	.26637	.00256	90.608	.03247	29.748	24.058	62.816
#1	.00059	.01145	-.00027	.14169	.00545	-.00261	-.01391
#2	.00059	.01145	-.00125	.14163	.00836	-.00368	-.00535
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00325	.00030	.00200	.00024	.01979	H648.33
SDev	.00008	.00262	.00206	.00000	.00368	.07
%RSD	2.3761	861.56	103.30	.00000	18.587	.01108
#1	.00331	-.00155	.00054	.00024	.01719	H648.38
#2	.00320	.00216	.00346	.00024	.02239	H648.28
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8W10 Operator: STL
Run Time: 04/26/05 14:22:24
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00059	.00129	.00286	.00279	.01129	-.00450	.07088
SDev	.00181	.00058	.00239	.00193	.00217	.00221	.00095
%RSD	304.10	44.713	83.638	69.364	19.217	49.228	1.3390
#1	-.00068	.00088	.00455	.00142	.01282	-.00606	.07021
#2	.00187	.00170	.00117	.00416	.00976	-.00293	.07155
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00339	.21573	-.00037	-.00008	87.587	.00017	.00069
SDev	.00234	.00052	.00003	.00007	.143	.00028	.00008
%RSD	69.022	.24069	7.7492	84.736	.16351	169.67	11.554
#1	.00505	.21536	-.00035	-.00013	87.486	.00037	.00075
#2	.00174	.21609	-.00039	-.00003	87.688	-.00003	.00064
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00145	-.00007	4.6324	.16432	.00260	-.00026	.00042
SDev	.00015	.00245	.0087	.00018	.00032	.00008	.00154
%RSD	10.273	3420.3	.18879	.11129	12.298	31.438	364.50
#1	.00155	-.00181	4.6262	.16419	.00282	-.00020	-.00067
#2	.00134	.00166	4.6386	.16445	.00237	-.00032	.00151
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00083	.00375	-.00027	.17511	.00639	-.00262	-.00054
SDev	.00022	.00010	.00026	.00031	.00154	.00090	.01150
%RSD	27.067	2.5744	96.176	.17716	24.067	34.273	2115.4
#1	.00099	.00382	-.00009	.17489	.00748	-.00198	.00759
#2	.00067	.00368	-.00045	.17533	.00531	-.00325	-.00867
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00281	.00076	.00083	.00038	.03006	H646.27
SDev	.00049	.00075	.00140	.00000	.00164	1.61
%RSD	17.586	99.236	169.35	.00000	5.4559	.24835
#1	.00246	.00023	-.00016	.00038	.03122	H645.14
#2	.00316	.00129	.00181	.00038	.02890	H647.41
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8W2M Operator: STL
Run Time: 04/26/05 14:26:45
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00181	.00064	.00095	.00362	.00871	-.00415	.06716
SDev	.00095	.00014	.00021	.00065	.00285	.00085	.00007
%RSD	52.565	21.328	22.321	18.024	32.761	20.420	.10277
#1	.00248	.00054	.00110	.00408	.01072	-.00355	.06721
#2	.00114	.00073	.00080	.00316	.00669	-.00475	.06711
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00279	.19239	-.00042	-.00013	77.033	-.00034	.00064
SDev	.00016	.00025	.00001	.00012	.131	.00016	.00016
%RSD	5.6654	.12995	3.4077	87.920	.16996	46.483	25.767
#1	.00268	.19257	-.00043	-.00021	76.941	-.00023	.00075
#2	.00291	.19222	-.00041	-.00005	77.126	-.00045	.00052
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00101	.00169	4.2833	.14206	.00203	-.00029	.00041
SDev	.00005	.00710	.0087	.00006	.00027	.00009	.00076
%RSD	4.7992	419.87	.20417	.04460	13.095	32.265	185.18
#1	.00097	-.00333	4.2771	.14201	.00184	-.00022	-.00013
#2	.00104	.00671	4.2894	.14210	.00222	-.00036	.00095
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00067	.00406	-.00058	.16621	.00436	-.00219	-.01033
SDev	.00000	.00005	.00006	.00014	.00236	.00080	.00389
%RSD	.02847	1.1205	10.482	.08230	54.202	36.394	37.641
#1	.00067	.00403	-.00054	.16631	.00603	-.00275	-.01308
#2	.00067	.00409	-.00063	.16612	.00269	-.00162	-.00758
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00273	.00013	.00142	.00017	.01332	H633.47
SDev	.00051	.00152	.00059	.00010	.00598	.45
%RSD	18.522	1155.4	41.541	56.568	44.938	.07034

#1	.00309	.00120	.00183	.00010	.00909	H633.15
#2	.00237	-.00094	.00100	.00024	.01755	H633.78
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8W2N Operator: STL
Run Time: 04/26/05 14:31:07
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00230	.00156	.00063	.00335	.01248	-.00240	.06454
SDev	.00004	.00048	.00042	.00154	.00116	.00253	.00131
%RSD	1.5942	30.892	66.392	45.986	9.3222	105.25	2.0340
#1	.00228	.00190	.00034	.00226	.01330	-.00061	.06547
#2	.00233	.00122	.00093	.00444	.01166	-.00419	.06361
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00111	.14636	-.00042	-.00016	24.563	.00087	.00035
SDev	.00080	.00004	.00003	.00005	.061	.00008	.00057
%RSD	71.686	.02628	6.8155	28.148	.25020	8.8411	164.86
#1	.00055	.14639	-.00044	-.00020	24.520	.00092	-.00006
#2	.00167	.14633	-.00040	-.00013	24.606	.00081	.00075
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00052	.01444	3.0928	.02381	.00196	.00001	-.00115
SDev	.00031	.00059	.0057	.00003	.00090	.00014	.00033
%RSD	58.996	4.0884	.18490	.11122	46.234	1003.5	28.984
#1	.00074	.01485	3.0888	.02379	.00132	.00011	-.00092
#2	.00031	.01402	3.0968	.02383	.00260	-.00008	-.00139
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00059	.00866	-.00054	.07257	.00487	-.00146	-.00690
SDev	.00011	.00019	.00000	.00004	.00144	.00099	.00370
%RSD	18.861	2.2150	.31747	.05995	29.523	67.871	53.614

#1	.00051	.00853	-.00053	.07254	.00589	-.00076	-.00428
#2	.00067	.00880	-.00054	.07260	.00385	-.00216	-.00952
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00245	.00255	.00206	.00122	-.02226	H594.79	
SDev	.00117	.00207	.00014	.00010	.00491	.85	
%RSD	47.743	81.221	6.6218	8.0812	22.072	.14337	
#1	.00162	.00402	.00215	.00115	-.02574	H594.19	
#2	.00327	.00109	.00196	.00128	-.01879	H595.39	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G8X1C Operator: STL
Run Time: 04/26/05 14:35:29
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00216	.00171	.00190	.00411	.00918	-.00109	.01103
SDev	.00214	.00036	.00041	.00054	.00030	.00078	.00150
%RSD	99.002	21.036	21.750	13.235	3.2662	71.642	13.639
#1	.00367	.00196	.00220	.00450	.00896	-.00054	.00997
#2	.00065	.00146	.00161	.00373	.00939	-.00165	.01209
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00036	.09478	-.00038	.00055	267.49	.00013	.00133
SDev	.00233	.00029	.00001	.00006	.52	.00015	.00016
%RSD	654.06	.30435	1.8608	10.457	.19538	111.86	12.242
#1	.00200	.09458	-.00039	.00059	267.12	.00003	.00145
#2	-.00129	.09499	-.00038	.00051	267.86	.00023	.00122
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00012	-.00826	2.1497	.14108	.00388	.00001	.00021
SDev	.00016	.00567	.0034	.00021	.00000	.00045	.00220
%RSD	133.26	68.661	.15648	.14700	.00000	4327.9	1033.3

#1	.00001	-.00425	2.1473	.14093	.00388	.00033	-.00134
#2	.00024	-.01226	2.1521	.14123	.00388	-.00031	.00177
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00138	.12589	.00048	.30207	.00451	-.00218	-.01184
SDev	.00011	.00041	.00006	.00075	.00010	.00137	.00525
%RSD	8.0907	.32270	13.502	.24826	2.2517	62.690	44.374
#1	.00146	.12560	.00053	.30154	.00458	-.00121	-.00812
#2	.00130	.12617	.00044	.30261	.00444	-.00315	-.01555
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00338	.00233	.00201	-.00087	.04575	H626.00	
SDev	.00050	.00042	.00154	.00000	.00093	1.18	
%RSD	14.833	18.149	76.887	.00000	2.0360	.18828	
#1	.00373	.00263	.00310	-.00087	.04641	H625.17	
#2	.00302	.00203	.00092	-.00087	.04510	H626.84	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 04/26/05 14:39:53
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	4.0305	4.0344	3.9650	3.9784	4.0910	4.0887	40.430
SDev	.0133	.0046	.0045	.0106	.0015	.0041	.085
%RSD	.32923	.11470	.11444	.26762	.03622	.09949	.21015
#1	4.0211	4.0311	3.9618	3.9708	4.0899	4.0858	40.370
#2	4.0399	4.0376	3.9683	3.9859	4.0920	4.0916	40.490
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.1139	4.2843	4.1603	4.0199	20.596	3.9438	3.9614
SDev	.0098	.0043	.0095	.0109	.065	.0119	.0086
%RSD	.23745	.10056	.22951	.27132	.31656	.30062	.21711

#1	4.1070	4.2812	4.1536	4.0122	20.550	3.9354	3.9554
#2	4.1208	4.2873	4.1671	4.0276	20.642	3.9522	3.9675
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.0722	42.025	20.217	4.0916	3.9794	1.0186	3.9439
SDev	.0050	.092	.062	.0107	.0123	.0024	.0157
%RSD	.12163	.21832	.30447	.26047	.30888	.23673	.39877
#1	4.0687	41.960	20.174	4.0841	3.9707	1.0169	3.9328
#2	4.0758	42.089	20.261	4.0991	3.9881	1.0203	3.9550
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.0248	4.0792	4.1244	4.2534	4.1663	Q3.3926	4.0796
SDev	.0085	.0138	.0119	.0133	.0233	.0037	.0095
%RSD	.21019	.33804	.28790	.31229	.55980	.10910	.23164
#1	4.0188	4.0695	4.1160	4.2440	4.1498	Q3.3900	4.0729
#2	4.0308	4.0890	4.1328	4.2628	4.1828	Q3.3953	4.0863
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	3.9739	4.0895	4.0318	4.1616	3.6616	39.749	
SDev	.0086	.0032	.0104	.0076	.0019	.244	
%RSD	.21672	.07841	.25775	.18169	.05118	.61472	
#1	3.9678	4.0872	4.0244	4.1563	3.6603	39.576	
#2	3.9800	4.0917	4.0391	4.1670	3.6629	39.921	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000	
Range	10.000	10.000	10.000	10.000	10.000	10.000	

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 04/26/05 14:44:16
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00194	.00234	.00213	.00200	.00309	-.00072	.03206
SDev	.00149	.00025	.00043	.00015	.00077	.00003	.00087
%RSD	76.844	10.596	20.122	7.6308	25.033	4.6065	2.7264

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#1	.00089	.00252	.00243	.00189	.00364	-.00069	.03144
#2	.00300	.00217	.00183	.00210	.00255	-.00074	.03267
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00165	.00141	.00139	.00128	.00869	.00121	.00128
SDev	.00068	.00006	.00007	.00002	.00000	.00023	.00057
%RSD	41.398	4.0795	5.1055	1.8234	.00000	19.307	45.035
#1	.00117	.00146	.00144	.00126	.00869	.00137	.00087
#2	.00213	.00137	.00134	.00129	.00869	.00104	.00168
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00085	.00839	.00737	.00130	.00177	-.00010	.00280
SDev	.00005	.00153	.00101	.00001	.00021	.00008	.00015
%RSD	5.7584	18.269	13.686	.89186	12.036	75.706	5.3867
#1	.00088	.00947	.00666	.00131	.00162	-.00015	.00269
#2	.00082	.00730	.00809	.00130	.00192	-.00005	.00291
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00122	.00243	.00297	.00142	.00174	.00136	-.00635
SDev	.00000	.00000	.00082	.00009	.00072	.00016	.00565
%RSD	.07507	.03060	27.554	6.2862	41.289	11.759	88.956
#1	.00122	.00243	.00355	.00149	.00124	.00148	-.00236
#2	.00122	.00243	.00239	.00136	.00225	.00125	-.01035
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00204	.00055	.00208	.00184	-.01966	Q-.63351	
SDev	.00004	.00028	.00091	.00030	.00728	.00479	
%RSD	2.0183	50.662	43.966	16.010	37.016	.75625	
#1	.00207	.00075	.00143	.00205	-.02481	Q-.63690	
#2	.00201	.00035	.00272	.00163	-.01452	Q-.63012	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	
Value	.00000	.00000	.00000	.00000	.00000	.00000	

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Range .00300 .00400 .06000 .05000 .10000 .25000

Method: 6010C Sample Name: G849JB Operator: STL
Run Time: 04/26/05 14:48:39
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00243	.00099	-.00402	.00194	.00714	-.00293	L.02197
SDev	.00075	.00149	.00086	.00131	.00130	.00173	.00011
%RSD	30.708	149.65	21.435	67.380	18.235	58.991	.50099
#1	.00296	.00205	-.00463	.00102	.00622	-.00415	L.02205
#2	.00190	-.00006	-.00341	.00286	.00806	-.00171	L.02190
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Low
High							.20000
Low							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L.00060	.00050	-.00019	.00003	-.00567	.00010	.00110
SDev	.00098	.00004	.00009	.00002	.00000	.00014	.00016
%RSD	164.91	7.6444	45.867	67.573	.00000	136.98	14.878
#1	L-.00010	.00048	-.00025	.00005	-.00567	.00021	.00122
#2	L.00129	.00053	-.00013	.00002	-.00567	.00000	.00099
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00700	.20000	.20000	.00500	.25000	.01000	.05000
Low	.00700	-.20000	-.20000	-.00500	-.25000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00007	-.00410	-.00904	.00006	.00230	.00049	.00340
SDev	.00010	.00969	.00404	.00003	.00043	.00049	.00169
%RSD	142.66	236.25	44.659	47.336	18.547	99.988	49.677
#1	.00000	.00275	-.00618	.00004	.00199	.00084	.00459
#2	-.00014	-.01096	-.01189	.00007	.00260	.00014	.00221
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.02500	.05000	.25000	.01500	.04000	.01000	.01000
Low	-.02500	-.05000	-.25000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00043	.00137	-.00031	.00025	.00269	-.00137	-.00482
SDev	.00056	.00005	.00032	.00005	.00185	.00249	.00271
%RSD	128.31	3.5374	100.70	17.670	68.731	181.83	56.317
#1	.00083	.00134	-.00009	.00022	.00400	.00039	-.00290
#2	.00004	.00140	-.00054	.00028	.00138	-.00313	-.00673
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.04000	.05000	.10000	.50000	.50000

Low	-.05000	-.01000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	-.00004	.00042	.00195	.00087	-.01825	L-1.5889	
SDev	.00116	.00159	.00099	.00000	.01502	.1964	
%RSD	2591.2	375.20	50.862	.00000	82.288	12.363	
#1	-.00086	-.00070	.00266	.00087	-.00763	L-1.4500	
#2	.00077	.00154	.00125	.00087	-.02886	L-1.7278	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Low	
High	.00300	.00500	.01000	.05000		.25000	
Low	-.00300	-.00500	-.01000	-.05000		-.25000	

Method: 6010C Sample Name: G849JC Operator: STL
Run Time: 04/26/05 14:53:02
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.52192	.52340	.51783	.51880	.56775	.55555	L.54457
SDev	.00260	.00421	.00025	.00042	.00083	.00171	.00307
%RSD	.49764	.80446	.04887	.08132	.14635	.30807	.56289
#1	.52008	.52042	.51765	.51850	.56834	.55676	L.54673
#2	.52376	.52637	.51801	.51910	.56716	.55434	L.54240
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Low
High							1.2000
Low							.80000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L.54566	L.56836	L.55780	L.53356	L10.782	L.51975	L.51854
SDev	.00068	.00040	.00052	.00034	.011	.00088	.00082
%RSD	.12521	.07106	.09397	.06278	.10408	.16935	.15816
#1	L.54517	L.56808	L.55743	L.53332	L10.775	L.51913	L.51796
#2	L.54614	L.56865	L.55817	L.53379	L10.790	L.52037	L.51912
Errors	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low
High	1.2040	1.2040	1.2000	1.2040	24.000	1.2040	1.2000
Low	.79500	.79500	.80000	.79500	16.000	.79500	.80000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	L.51386	L.57943	L10.454	L.53917	L.52134	.12953	L.52021
SDev	.00026	.00875	.016	.00038	.00133	.00035	.00182
%RSD	.05127	1.5096	.15766	.06952	.25516	.26921	.34917
#1	L.51368	L.57324	L10.443	L.53891	L.52040	.12929	L.51892
#2	L.51405	L.58561	L10.466	L.53944	L.52228	.12978	L.52149
Errors	LC Low	LC Low	LC Low	LC Low	LC Low	LC Pass	LC Low
High	1.2000	1.2000	24.000	1.2040	1.2000	.33700	1.2040

Low	.80000	.80000	16.000	.79500	.80000	.12300	.79500
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	L.52412	L.54343	L.53139	L.57023	L.00088	L-.00334	L-.01668
SDev	.00178	.00051	.00125	.00040	.00031	.00052	.00625
%RSD	.33955	.09344	.23583	.07055	35.083	15.465	37.459
#1	L.52286	L.54307	L.53050	L.56994	L.00109	L-.00371	L-.01226
#2	L.52538	L.54379	L.53228	L.57051	L.00066	L-.00298	L-.02109
Errors	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low
High	1.2000	1.2000	1.2000	1.2000	2.4000	2.4000	2.4000
Low	.80000	.80000	.80000	.80000	1.6000	1.6000	1.6000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	L.51848	L.55961	L.52241	L.00087	L.00672	6.4910
SDev	.00037	.00142	.00313	.00010	.00095	.0671
%RSD	.07052	.25343	.60000	11.314	14.185	1.0334
#1	L.51822	L.56061	L.52019	L.00094	L.00604	6.4435
#2	L.51873	L.55861	L.52463	L.00080	L.00739	6.5384
Errors	LC Low	LC Low	LC Low	LC Low	LC Low	NOCHECK
High	1.2040	1.2040	1.2040	2.4000	2.4000	
Low	.79500	.79500	.79500	1.6000	1.6000	

Method: 6010C Sample Name: G833J Operator: STL
Run Time: 04/26/05 14:57:24
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00164	.00242	-.00315	.00072	.00734	-.00370	.12342
SDev	.00051	.00074	.00122	.00119	.00205	.00186	.00006
%RSD	31.144	30.468	38.683	164.78	27.912	50.382	.05099
#1	.00128	.00294	-.00401	-.00012	.00879	-.00502	.12338
#2	.00201	.00190	-.00229	.00156	.00589	-.00238	.12347
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00104	.01024	-.00045	-.00056	28.675	.21034	.00029
SDev	.00041	.00004	.00001	.00012	.038	.00052	.00049
%RSD	39.670	.37562	1.5714	20.575	.13419	.24901	169.77
#1	.00075	.01027	-.00045	-.00048	28.648	.20997	.00064
#2	.00134	.01021	-.00046	-.00064	28.703	.21071	-.00006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000

Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00011	.07691	11.355	.00890	.00218	.00012	.00442
SDev	.00015	.00041	.014	.00001	.00048	.00003	.00192
%RSD	146.25	.53614	.12146	.14878	21.945	22.216	43.463
#1	.00000	.07721	11.345	.00891	.00252	.00014	.00578
#2	-.00021	.07662	11.365	.00889	.00184	.00010	.00306
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01901	.00279	.00186	.12616	.00095	-.00148	-.00352
SDev	.00011	.00000	.00000	.00027	.00205	.00101	.00000
%RSD	.58218	.09809	.00008	.21212	217.37	68.413	.09511
#1	.01909	.00278	.00186	.12597	-.00051	-.00076	-.00352
#2	.01893	.00279	.00186	.12635	.00240	-.00219	-.00351
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	-.00057	-.00002	.00190	.00056	.03884	8.9505	
SDev	.00120	.00056	.00010	.00005	.00168	.1437	
%RSD	211.47	2527.2	5.0321	8.8388	4.3368	1.6058	
#1	-.00142	-.00042	.00183	.00059	.04003	9.0521	
#2	.00028	.00037	.00197	.00052	.03765	8.8488	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G833JS Operator: STL
Run Time: 04/26/05 15:01:46
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.26510	.26193	.24966	.25419	1.1217	1.0955	1.1596
SDev	.00135	.00019	.00049	.00032	.0010	.0001	.0023
%RSD	.51093	.07267	.19811	.12721	.08721	.00596	.20018
#1	.26414	.26207	.24931	.25396	1.1211	1.0954	1.1580
#2	.26606	.26180	.25001	.25442	1.1224	1.0955	1.1612
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00

Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.0881	1.1277	.02731	.02549	53.834	.30639	.24928
SDev	.0012	.0038	.00010	.00013	.091	.00047	.00016
%RSD	.11007	.33424	.36308	.49760	.16975	.15405	.06581
#1	1.0889	1.1251	.02724	.02558	53.770	.30605	.24939
#2	1.0872	1.1304	.02738	.02540	53.899	.30672	.24916
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.12924	.63031	37.154	.27207	.25363	.02586	1.0197
SDev	.00011	.00548	.059	.00030	.00096	.00031	.0013
%RSD	.08396	.86963	.15934	.10855	.37763	1.2059	.12731
#1	.12916	.63419	37.112	.27186	.25296	.02608	1.0188
#2	.12931	.62643	37.196	.27227	.25431	.02564	1.0206
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.27621	.26519	.53064	.68433	.00153	-.00136	-.01218
SDev	.00006	.00122	.00195	.00197	.00020	.00139	.00135
%RSD	.01991	.46133	.36678	.28732	13.411	102.06	11.121
#1	.27625	.26432	.52926	.68294	.00167	-.00038	-.01122
#2	.27617	.26605	.53201	.68573	.00138	-.00234	-.01314
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.25268	1.1042	.26405	.00128	.03231	32.143	
SDev	.00038	.0004	.00084	.00000	.00187	.086	
%RSD	.15054	.03344	.31814	.00000	5.7814	.26830	
#1	.25241	1.1040	.26345	.00128	.03363	32.082	
#2	.25295	1.1045	.26464	.00128	.03099	32.204	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

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Method: 6010C Sample Name: G833JD Operator: STL
Run Time: 04/26/05 15:06:08
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.26013	.26046	.24958	.25289	1.1223	1.0966	1.1572
SDev	.00022	.00067	.00012	.00020	.0034	.0035	.0005
%RSD	.08432	.25711	.04974	.07736	.30127	.32004	.04607
#1	.25997	.25999	.24966	.25303	1.1199	1.0991	1.1576
#2	.26028	.26093	.24949	.25275	1.1247	1.0942	1.1569
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.0786	1.1222	.02711	.02527	54.128	.30896	.24823
SDev	.0014	.0020	.00001	.00007	.042	.00003	.00049
%RSD	.13237	.18165	.02614	.27525	.07799	.00816	.19816
#1	1.0775	1.1236	.02711	.02532	54.098	.30898	.24788
#2	1.0796	1.1207	.02710	.02522	54.158	.30894	.24858
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.12857	.63047	37.169	.26931	.25386	.02548	1.0146
SDev	.00021	.00174	.003	.00006	.00021	.00013	.0031
%RSD	.16142	.27659	.00905	.02380	.08383	.49768	.30706
#1	.12872	.62924	37.166	.26936	.25371	.02557	1.0124
#2	.12842	.63171	37.171	.26926	.25401	.02539	1.0168
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.27503	.26356	.52793	.68446	.00276	-.00203	-.00295
SDev	.00028	.00015	.00113	.00081	.00072	.00023	.00195
%RSD	.10111	.05884	.21395	.11775	26.027	11.334	66.150
#1	.27483	.26367	.52713	.68503	.00327	-.00186	-.00157
#2	.27523	.26345	.52873	.68389	.00225	-.00219	-.00433
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.25179	1.1052	.26024	.00135	.02933	32.004
SDev	.00017	.0012	.00037	.00010	.00501	.120
%RSD	.06825	.10994	.14191	7.2524	17.068	.37425
#1	.25191	1.1061	.25998	.00142	.02579	32.089
#2	.25166	1.1043	.26050	.00128	.03287	31.920
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G833JV 5X Operator: STL
Run Time: 04/26/05 15:10:30
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00028	.00211	.00100	-.00092	.00211	-.00148	.03209
SDev	.00111	.00069	.00116	.00264	.00073	.00145	.00065
%RSD	394.77	32.853	116.25	287.90	34.843	97.598	2.0389
#1	.00050	.00260	.00018	.00095	.00159	-.00046	.03163
#2	-.00106	.00162	.00181	-.00278	.00263	-.00251	.03255
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00077	.00207	-.00023	-.00022	5.8851	.04280	-.00035
SDev	.00067	.00006	.00002	.00015	.0134	.00012	.00041
%RSD	86.816	2.7912	9.2231	68.077	.22702	.27487	117.80
#1	.00124	.00211	-.00025	-.00011	5.8757	.04272	-.00064
#2	.00030	.00203	-.00022	-.00033	5.8946	.04289	-.00006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00055	.00512	2.2311	.00159	-.00011	-.00046	.00269
SDev	.00005	.00296	.0108	.00001	.00011	.00014	.00261
%RSD	8.9134	57.789	.48247	.83129	94.281	31.435	96.823
#1	-.00051	.00303	2.2234	.00160	-.00019	-.00035	.00453
#2	-.00058	.00722	2.2387	.00159	-.00004	-.00056	.00085
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00339	.00510	.00098	.02556	.00058	-.00271	-.00179
SDev	.00006	.00005	.00038	.00005	.00113	.00159	.00039
%RSD	1.6759	.98438	38.584	.17601	194.20	58.638	21.891
#1	.00335	.00514	.00124	.02560	-.00022	-.00159	-.00207
#2	.00343	.00507	.00071	.02553	.00138	-.00384	-.00151
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	-.00028	-.00029	.00052	-.00014	-.02802	.59625
SDev	.00138	.00072	.00097	.00005	.00547	.11498
%RSD	490.69	250.70	187.82	35.355	19.536	19.285
#1	.00069	.00022	.00120	-.00010	-.03189	.51494
#2	-.00125	-.00080	-.00017	-.00017	-.02415	.67755
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G833K Operator: STL
Run Time: 04/26/05 15:14:52
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00143	.00121	-.00356	.00169	.00640	-.00252	.12258
SDev	.00187	.00002	.00084	.00072	.00026	.00060	.00117
%RSD	131.00	1.9493	23.666	42.783	4.1432	23.798	.95224
#1	.00011	.00122	-.00297	.00220	.00622	-.00295	.12341
#2	.00275	.00119	-.00416	.00118	.00659	-.00210	.12176
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00040	.01017	-.00046	-.00046	28.216	.20757	.00064
SDev	.00101	.00002	.00001	.00009	.007	.00043	.00000
%RSD	251.51	.18907	1.5372	19.894	.02651	.20766	.05474
#1	-.00031	.01019	-.00046	-.00053	28.221	.20787	.00064
#2	.00112	.01016	-.00047	-.00040	28.211	.20726	.00064
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

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Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00026	.07622	11.181	.00784	.00293	.00054	.00292
SDev	.00016	.00341	.008	.00004	.00027	.00007	.00091
%RSD	60.711	4.4766	.06919	.48456	9.0655	12.978	31.049
#1	-.00037	.07381	11.187	.00787	.00275	.00049	.00228
#2	-.00015	.07864	11.176	.00782	.00312	.00059	.00357
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01921	.00148	.00111	.12468	.00174	-.00088	-.00090
SDev	.00017	.00000	.00057	.00005	.00113	.00102	.00215
%RSD	.86400	.15769	51.020	.03600	64.816	116.28	239.39
#1	.01909	.00148	.00151	.12465	.00094	-.00160	.00062
#2	.01932	.00148	.00071	.12471	.00254	-.00016	-.00242
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	-.00006	.00045	.00135	.00062	.02010	8.4931
SDev	.00076	.00049	.00124	.00005	.00115	.0814
%RSD	1310.4	108.27	91.542	7.8568	5.7183	.95899
#1	.00048	.00011	.00048	.00059	.02091	8.4355
#2	-.00060	.00080	.00223	.00066	.01928	8.5507
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G833M Operator: STL
Run Time: 04/26/05 15:19:14
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00337	.00151	-.00294	.00067	.00904	-.00587	.12569
SDev	.00136	.00090	.00155	.00085	.00081	.00086	.00033
%RSD	40.499	59.780	52.517	127.52	9.0094	14.746	.26489
#1	.00433	.00215	-.00404	.00007	.00962	-.00648	.12592
#2	.00240	.00087	-.00185	.00127	.00847	-.00525	.12545
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00005	.00997	-.00049	-.00054	28.202	.20839	.00012
SDev	.00139	.00008	.00003	.00010	.005	.00025	.00008
%RSD	2606.7	.77174	5.8318	19.448	.01895	.11861	70.882
#1	.00103	.01002	-.00051	-.00061	28.199	.20821	.00017
#2	-.00093	.00991	-.00047	-.00046	28.206	.20856	.00006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00062	.04589	11.171	.00608	.00226	.00007	.00368
SDev	.00016	.00053	.005	.00004	.00016	.00003	.00046
%RSD	25.873	1.1608	.04215	.64692	7.0711	41.092	12.564
#1	-.00051	.04551	11.174	.00610	.00237	.00005	.00400
#2	-.00073	.04626	11.167	.00605	.00214	.00009	.00335
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01830	.00245	.00146	.12424	-.00058	-.00275	-.00720
SDev	.00056	.00000	.00019	.00013	.00175	.00061	.00331
%RSD	3.0402	.02889	12.990	.10809	301.38	22.069	45.968
#1	.01870	.00245	.00133	.12434	-.00181	-.00318	-.00954
#2	.01791	.00245	.00160	.12415	.00066	-.00232	-.00486
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	-.00054	-.00090	.00275	.00038	.01875	8.4626
SDev	.00108	.00031	.00121	.00010	.00782	.0383
%RSD	202.04	33.903	44.031	25.713	41.690	.45290
#1	-.00130	-.00112	.00360	.00031	.01322	8.4355
#2	.00023	-.00069	.00189	.00045	.02427	8.4897
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 04/26/05 15:23:37
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	4.0063	4.0228	3.9572	3.9563	4.0690	4.0590	40.109
SDev	.0093	.0161	.0003	.0159	.0162	.0081	.024
%RSD	.23228	.40021	.00737	.40198	.39858	.19940	.05958
#1	3.9997	4.0342	3.9570	3.9450	4.0805	4.0533	40.093
#2	4.0129	4.0114	3.9574	3.9675	4.0576	4.0647	40.126
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.1118	4.2450	4.1346	4.0042	20.481	3.9224	3.9392
SDev	.0027	.0050	.0078	.0125	.071	.0082	.0070
%RSD	.06604	.11869	.18966	.31259	.34441	.20795	.17676
#1	4.1099	4.2485	4.1290	3.9954	20.432	3.9166	3.9343
#2	4.1137	4.2414	4.1401	4.0131	20.531	3.9281	3.9441
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.0367	41.808	20.141	4.0690	3.9580	1.0125	3.9220
SDev	.0047	.083	.061	.0082	.0081	.0001	.0110
%RSD	.11607	.19902	.30396	.20147	.20569	.01424	.27945
#1	4.0400	41.749	20.098	4.0632	3.9522	1.0126	3.9142
#2	4.0333	41.867	20.184	4.0748	3.9637	1.0124	3.9297
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.0082	4.0634	4.1008	4.2307	4.1603	Q3.3655	4.0539
SDev	.0057	.0101	.0086	.0052	.0099	.0078	.0020
%RSD	.14176	.24926	.20979	.12368	.23717	.23142	.04951
#1	4.0042	4.0563	4.0947	4.2270	4.1533	Q3.3710	4.0553
#2	4.0122	4.0706	4.1069	4.2344	4.1673	Q3.3600	4.0524
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	3.9566	4.0623	4.0118	4.1318	3.6050	39.390
SDev	.0107	.0000	.0008	.0038	.0014	.369
%RSD	.27055	.00006	.02107	.09269	.03936	.93656

#1	3.9490	4.0623	4.0112	4.1290	3.6060	39.129
#2	3.9642	4.0623	4.0124	4.1345	3.6040	39.650
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 04/26/05 15:28:01
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00378	.00445	.00186	.00197	.00173	.00260	.03070
SDev	.00038	.00117	.00067	.00025	.00368	.00113	.00154
%RSD	9.9411	26.203	35.932	12.502	213.11	43.470	5.0013
#1	.00352	.00527	.00233	.00179	.00433	.00340	.03179
#2	.00405	.00362	.00139	.00214	-.00088	.00180	.02962
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00271	.00196	.00192	.00172	.00982	.00164	.00174
SDev	.00093	.00021	.00020	.00028	.00053	.00043	.00074
%RSD	34.202	10.803	10.680	16.168	5.4392	26.147	42.364
#1	.00337	.00211	.00207	.00191	.01020	.00194	.00226
#2	.00206	.00181	.00178	.00152	.00945	.00134	.00122
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00104	.01057	.00285	.00168	.00158	.00018	.00134
SDev	.00041	.00015	.00135	.00020	.00048	.00011	.00051
%RSD	39.689	1.4694	47.140	12.206	30.305	58.440	38.288
#1	.00133	.01046	.00381	.00182	.00192	.00026	.00170
#2	.00075	.01068	.00190	.00153	.00124	.00011	.00097
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00165	.00277	.00391	.00199	.00029	.00088	-.00553
SDev	.00017	.00000	.00151	.00018	.00031	.00170	.00604
%RSD	10.111	.09163	38.666	8.9795	105.26	192.48	109.26

#1	.00177	.00277	.00497	.00212	.00051	.00208	-.00126
#2	.00153	.00278	.00284	.00187	.00007	-.00032	-.00979
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00193	.00231	.00400	.00246	-.04551	Q-1.2365	
SDev	.00006	.00198	.00014	.00039	.00082	.0048	
%RSD	3.0366	85.715	3.4268	15.935	1.7992	.38763	
#1	.00197	.00371	.00410	.00274	-.04609	Q-1.2399	
#2	.00189	.00091	.00391	.00219	-.04493	Q-1.2331	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.00300	.00400	.06000	.05000	.10000	.25000	

LJ 4/26/05 SJP 042205 6010C

Analysis Report Summary 04/26/05 04:54:18 PM 4IE page 1

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	CALBLK	0426IE1	6010C	04/26/05	10:25		X	IR
2	CAL1	0426IE1	6010C	04/26/05	10:29		X	IR
3	CAL2	0426IE1	6010C	04/26/05	10:33		X	IR
4	CAL3	0426IE1	6010C	04/26/05	10:37		X	IR
5	ICV	0426IE1	6010C	04/26/05	10:40	STL	Q	CONC
6	ICB	0426IE1	6010C	04/26/05	10:45	STL	Q	CONC
7	LLC	0426IE1	6010C	04/26/05	10:49	STL	Q	CONC
8	ICSA	0426IE1	6010C	04/26/05	10:53	STL	Q	CONC
9	ICSAB	0426IE1	6010C	04/26/05	10:58	STL	Q	CONC
10	CCV	0426IE1	6010C	04/26/05	11:04	STL	Q	CONC
11	CCB	0426IE1	6010C	04/26/05	11:08	STL	Q	CONC
12	G8496B	0426IE1	6010C	04/26/05	11:21	STL	S	CONC
13	G8496C	0426IE1	6010C	04/26/05	11:25	STL	S	CONC
14	G8170	0426IE1	6010C	04/26/05	11:30	STL	S	CONC
15	G8170X	0426IE1	6010C	04/26/05	11:34	STL	S	CONC
16	G8170S	0426IE1	6010C	04/26/05	11:38	STL	S	CONC
17	G8170V 5X	0426IE1	6010C	04/26/05	11:43	STL	S	CONC
18	G84EP	0426IE1	6010C	04/26/05	11:47	STL	S	CONC
19	CCV	0426IE1	6010C	04/26/05	11:51	STL	Q	CONC
20	CCB	0426IE1	6010C	04/26/05	11:56	STL	Q	CONC
21	G849JB	0426IE1	6010C	04/26/05	12:00	STL	S	CONC
22	G849JC	0426IE1	6010C	04/26/05	12:04	STL	S	CONC
23	G833J	0426IE1	6010C	04/26/05	12:09	STL	S	CONC
24	G833JS	0426IE1	6010C	04/26/05	12:13	STL	S	CONC
25	G833JD	0426IE1	6010C	04/26/05	12:17	STL	S	CONC
26	G833JV 5X	0426IE1	6010C	04/26/05	12:22	STL	S	CONC
27	G833K	0426IE1	6010C	04/26/05	12:26	STL	S	CONC
28	G833M	0426IE1	6010C	04/26/05	12:31	STL	S	CONC
29	CCV	0426IE1	6010C	04/26/05	12:35	STL	Q	CONC
30	CCB	0426IE1	6010C	04/26/05	12:39	STL	Q	CONC
31	G8487B	0426IE1	6010C	04/26/05	12:44	STL	S	CONC
32	G8487C	0426IE1	6010C	04/26/05	12:48	STL	S	CONC
33	G8WVT	0426IE1	6010C	04/26/05	12:52	STL	S	CONC
34	G8WVTS	0426IE1	6010C	04/26/05	12:57	STL	S	CONC
35	G8WVTD	0426IE1	6010C	04/26/05	13:01	STL	S	CONC
36	G8WVTV 5X	0426IE1	6010C	04/26/05	13:05	STL	S	CONC
37	CCV	0426IE1	6010C	04/26/05	13:10	STL	Q	CONC
38	CCB	0426IE1	6010C	04/26/05	13:14	STL	Q	CONC
39	G8478B	0426IE1	6010C	04/26/05	13:19	STL	S	CONC
40	G8478C	0426IE1	6010C	04/26/05	13:23	STL	S	CONC
41	G8RED	0426IE1	6010C	04/26/05	13:27	STL	S	CONC
42	G8REDS	0426IE1	6010C	04/26/05	13:32	STL	S	CONC
43	G8REDD	0426IE1	6010C	04/26/05	13:36	STL	S	CONC
44	G8REDV 5X	0426IE1	6010C	04/26/05	13:43	STL	S	CONC
45	CCV	0426IE1	6010C	04/26/05	13:48	STL	Q	CONC
46	CCB	0426IE1	6010C	04/26/05	13:52	STL	Q	CONC
47	G8GD7B	0426IE1	6010C	04/26/05	13:57	STL	S	CONC
48	G8GD7C	0426IE1	6010C	04/26/05	14:01	STL	S	CONC
49	G79ET	0426IE1	6010C	04/26/05	14:05	STL	S	CONC
50	G79ETS	0426IE1	6010C	04/26/05	14:10	STL	S	CONC
51	G79ETD	0426IE1	6010C	04/26/05	14:14	STL	S	CONC
52	G79ETV 5X	0426IE1	6010C	04/26/05	14:18	STL	S	CONC
53	G79GG	0426IE1	6010C	04/26/05	14:23	STL	S	CONC

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#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	G8DEP	0426IE1	6010C	04/26/05	14:27	STL	S	CONC
55	G8DPW	0426IE1	6010C	04/26/05	14:31	STL	S	CONC
56	G8QQ2B	0426IE1	6010C	04/26/05	14:36	STL	S	CONC
57	CCV	0426IE1	6010C	04/26/05	14:40	STL	Q	CONC
58	CCB	0426IE1	6010C	04/26/05	14:44	STL	Q	CONC
59	G8QQ2C	0426IE1	6010C	04/26/05	14:49	STL	S	CONC
60	G8MQ5	0426IE1	6010C	04/26/05	14:53	STL	S	CONC
61	G8MVF	0426IE1	6010C	04/26/05	14:58	STL	S	CONC
62	G8MWF	0426IE1	6010C	04/26/05	15:02	STL	S	CONC
63	G8MWFS	0426IE1	6010C	04/26/05	15:06	STL	S	CONC
64	G8MWFD	0426IE1	6010C	04/26/05	15:11	STL	S	CONC
65	G8MWFV 5X	0426IE1	6010C	04/26/05	15:15	STL	S	CONC
66	G8MXL	0426IE1	6010C	04/26/05	15:19	STL	S	CONC
67	G8M0K	0426IE1	6010C	04/26/05	15:24	STL	S	CONC
68	G8P4M	0426IE1	6010C	04/26/05	15:28	STL	S	CONC
69	CCV	0426IE1	6010C	04/26/05	15:32	STL	Q	CONC
70	CCB	0426IE1	6010C	04/26/05	15:37	STL	Q	CONC
71	G8P5V	0426IE1	6010C	04/26/05	15:41	STL	S	CONC
72	G8P59	0426IE1	6010C	04/26/05	15:45	STL	S	CONC
73	CCV	0426IE1	6010C	04/26/05	15:50	STL	Q	CONC
74	CCB	0426IE1	6010C	04/26/05	15:54	STL	Q	CONC
75	ICSA	0426IE1	6010C	04/26/05	15:59	STL	Q	CONC
76	ICSAB	0426IE1	6010C	04/26/05	16:03	STL	Q	CONC
77	CCV	0426IE1	6010C	04/26/05	16:26	STL	Q	CONC
78	CCB	0426IE1	6010C	04/26/05	16:30	STL	Q	CONC

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#	Sample Name	Ca3179	Fe	K	Mg	Na	Zn
1	CALBLK	.0474	.02609	-.0559	.1906	.1206	.0004
2	CAL1						3.5144
3	CAL2	11.2681	29.0922	1.21568	5.03579	15.5902	
4	CAL3						
5	ICV	20.464	41.519	41.832	20.310	41.571	3.9546
6	ICB	.01363	.00334	.18712	.09904	.05040	.00110
7	LLC	5.1811	.10682	5.2318	5.1360	5.2007	Q.02667
8	ICSA	449.12	179.53	.40883	478.32	.00710	-.00231
9	ICSAB	446.57	180.33	21.302	474.33	20.758	.90497
10	CCV	20.292	41.938	40.055	20.016	41.038	4.0065
11	CCB	-.00588	.01197	-.63367	.10655	.05623	.00197
12	G8496B	-.01958	.00034	.02740	.06022	.03232	.00053
13	G8496C	L10.656	L.55106	L11.369	L10.540	L10.980	L.51216
14	G8170	.06589	.00545	-.13456	.10737	.12023	.00311
15	G8170X	.06179	.01197	.45566	.09062	.11569	.00111
16	G8170S	26.072	.54463	26.834	25.869	26.933	.25404
17	G8170V 5X	.13672	.00665	.47703	.14549	.09239	.00513
18	G84EP	.02119	.00335	1.3981	.11038	.09113	.00005
19	CCV	20.308	41.009	40.267	20.008	40.474	3.9170
20	CCB	.00897	.01683	.29141	.20317	.11636	.00082
21	G849JB	-.01368	.00242	.06221	.12879	.07693	-.00061
22	G849JC	L10.822	L.54766	L10.435	L10.734	L11.131	L.51098
23	G833J	28.817	.09590	5.0614	11.694	14.032	-.00004
24	G833JS	54.041	.63747	31.713	37.519	40.983	.25521
25	G833JD	54.098	.62444	30.422	37.296	40.476	.24809
26	G833JV 5X	5.8761	.02324	.77842	2.3713	2.7331	.00253
27	G833K	28.365	.09522	4.7385	11.462	13.573	.00255
28	G833M	28.202	.07342	3.3995	11.394	13.469	.00140
29	CCV	20.379	40.465	39.360	20.039	40.792	3.8643
30	CCB	.02235	.01841	-.38356	.17735	.10533	.00137
31	G8487B	-.01922	.00046	-.61409	.12520	.06790	-.00030
32	G8487C	21.806	1.1031	22.671	21.577	22.696	1.0480
33	G8WVT	6.5086	.01679	3.3367	4.1650	152.98	.00082
34	G8WVTS	56.574	1.0506	54.691	54.292	194.22	.50310
35	G8WVTD	56.337	1.0663	55.147	53.852	191.84	.51086
36	G8WVTV 5X	1.4213	.00940	1.1064	.94200	29.619	.00425
37	CCV	20.642	40.958	39.622	20.122	40.806	3.9237
38	CCB	.02069	.01741	.22883	.15688	.11181	.00167
39	G8478B	-.00514	.00382	-1.0360	.17038	.11508	.00428
40	G8478C	20.862	1.0665	20.451	20.576	20.977	1.0365
41	G8RED	39.735	10.061	24.195	19.664	82.097	.48206
42	G8REDS	89.345	9.5126	77.043	71.379	134.18	.95447
43	G8REDD	90.315	9.7912	80.875	72.408	137.17	.98413
44	G8REDV 5X	8.1596	2.0653	3.5060	3.9013	15.671	.09623
45	CCV	20.157	39.974	39.541	19.752	40.081	3.8375
46	CCB	-.00006	.00922	-.87175	.12834	.08984	-.00002
47	G8GD7B	-.00026	.00313	-.72258	.14855	.08922	-.00116
48	G8GD7C	L10.761	L.54748	L10.466	L10.667	L10.874	L.50736
49	G79ET	182.81	.05436	20.797	90.614	H569.10	.24480
50	G79ETS	201.66	.53051	47.516	113.85	H588.52	.46555
51	G79ETD	195.28	.52351	45.949	109.69	H564.18	.46134
52	G79ETV 5X	38.785	.01998	3.0052	18.510	118.37	.05518
53	G79GG	181.03	.04738	20.541	91.144	H560.63	.14697

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#	Sample Name	Ca3179	Fe	K	Mg	Na	Zn
54	G8DEP	352.48	.15509	17.657	323.43	H922.25	.04260
55	G8DPW	.30640	.02483	-.69523	.23555	.29738	.00170
56	G8QQ2B	.01807	.00110	-1.0834	.07402	.07306	.00170
57	CCV	19.978	40.295	39.623	19.480	39.452	3.8740
58	CCB	-.00587	.01473	-.89371	.17703	.12475	.00027
59	G8QQ2C	L10.468	L.53808	L8.7157	L10.371	L10.537	L.50283
60	G8MQ5	H640.32	1.2761	57.154	H669.68	H2125.2	-.00436
61	G8MVF	H966.69	L-.14400	92.490	H1595.1	H2029.1	.13297
62	G8MWF	H630.89	-.04613	k79.348	H987.51	S10342.	.34607
63	G8MWFS	H637.69	.30247	99.572	H1015.8	H2095.0	.52747
64	G8MWFD	H638.55	.30990	100.81	H1010.7	H2044.3	.52567
65	G8MWFV 5X	169.44	.04306	13.463	220.08	H1271.1	.08494
66	G8MXL	91.503	.03183	12.421	40.182	340.37	.77877
67	G8M0K	96.091	.03573	13.339	50.055	326.37	.26709
68	G8P4M	288.08	.01701	76.606	399.52	H2087.9	.23621
69	CCV	20.187	40.045	38.138	19.437	39.688	3.8299
70	CCB	.02788	.02380	.46828	.22134	Q.39491	.00222
71	G8P5V	213.82	.04453	53.610	310.31	H2018.2	.06062
72	G8P59	130.14	.07713	23.670	119.90	H886.67	.22445
73	CCV	19.935	39.765	37.847	19.195	38.944	3.8277
74	CCB	.02505	.02561	-.01290	Q.26237	Q.37296	.00143
75	ICSA	436.67	170.11	.16038	448.89	.14479	-.00320
76	ICSAB	444.64	175.10	19.623	459.04	19.974	.88559
77	CCV	19.926	39.996	39.769	19.248	39.067	3.8122
78	CCB	.00596	.02201	-.89014	.24382	.19070	-.00004

4/26/05

Standardization Rpt.

STD 042205 6010C 6016

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Method: 6010C Standard: CALBLK
Run Time: 04/26/05 10:25:08

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Avge	-.00350	.13940	-.00050	.01600	.00000	.00880	.05950
SDev	.00071	.00170	.00085	.00000	.00000	.00000	.00156
%RSD	20.203	1.2174	169.71	.00000	.00000	.00000	2.6145
#1	-.00300	.13820	.00010	.01600	.00000	.00880	.05840
#2	-.00400	.14060	-.00110	.01600	.00000	.00880	.06060

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Avge	.04740	.00110	.00090	.00370	.00280	.02610	-.05590
SDev	.00283	.00014	.00127	.00156	.00000	.00071	.00773
%RSD	5.9671	12.856	141.42	42.044	.00000	2.7092	13.835
#1	.04540	.00100	.00180	.00480	.00280	.02560	-.05043
#2	.04940	.00120	.00000	.00260	.00280	.02660	-.06137

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Avge	.70930	.19060	.01200	-.00030	.12060	-.00330	.00010
SDev	.01230	.00339	.00000	.00042	.00339	.00042	.00014
%RSD	1.7346	1.7808	.00000	141.42	2.8144	12.856	141.42
#1	.70060	.18820	.01200	.00000	.11820	-.00360	.00000
#2	.71800	.19300	.01200	-.00060	.12300	-.00300	.00020

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Avge	.00050	-.00040	-.00010	.00290	.00010	.01350	-.00370
SDev	.00071	.00057	.00014	.00071	.00014	.00014	.00071
%RSD	141.42	141.42	141.42	24.383	141.42	1.0476	19.111
#1	.00100	.00000	-.00020	.00240	.00000	.01340	-.00420
#2	.00000	-.00080	.00000	.00340	.00020	.01360	-.00320

Elem	Tl	U	V	Zn
Avge	-.00170	.00110	.04450	.00040
SDev	.00099	.00269	.00099	.00028
%RSD	58.232	244.27	2.2246	70.711
#1	-.00100	.00300	.04380	.00060
#2	-.00240	-.00080	.04520	.00020

LOT # F5D220359

Method: 6010C Standard: CAL1
Run Time: 04/26/05 10:29:30

Elem	Ag	As1936	B	Ba	Be	Bi	Cd2288
Avge	1.2823	.45960	2.9383	10.411	16.575	1.2331	8.1846
SDev	.0066	.00226	.0279	.066	.133	.0075	.0450
%RSD	.51834	.49233	.94816	.63438	.80460	.60784	.54948
#1	1.2776	.45800	2.9186	10.364	16.480	1.2384	8.1528
#2	1.2870	.46120	2.9580	10.457	16.669	1.2278	8.2164

Elem	Co	Cr	Cu	Li	Mn	Mo	Ni
Avge	4.8441	17.715	4.9688	50.080	8.0131	.51720	8.3591
SDev	.0219	.042	.0065	.338	.0805	.00622	.0762
%RSD	.45252	.23791	.13093	.67519	1.0042	1.2031	.91190
#1	4.8286	17.685	4.9734	50.319	7.9562	.51280	8.3052
#2	4.8596	17.744	4.9642	49.841	8.0700	.52160	8.4130

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Tl
Avge	.65010	.14230	.34970	3.0627	.05000	18.166	.49460
SDev	.00382	.00184	.00042	.0132	.00226	.111	.00396
%RSD	.58735	1.2920	.12132	.42943	4.5255	.61189	.80060
#1	.64740	.14100	.35000	3.0534	.04840	18.088	.49180
#2	.65280	.14360	.34940	3.0720	.05160	18.245	.49740

Elem	U	V	Zn
Avge	.35100	4.9885	3.5144

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SDev	.00028	.0123	.0438
%RSD	.08058	.24664	1.2475
#1	.35120	4.9798	3.4834
#2	.35080	4.9972	3.5454

Method: 6010C Standard: CAL2
Run Time: 04/26/05 10:33:42

Elem	Al	Ca3179	Fe	K	Mg	Na	P_1782
Avge	13.352	11.268	29.092	1.2157	5.0358	15.590	.14030
SDev	.038	.037	.128	.0053	.0110	.018	.00467
%RSD	.28280	.32506	.44042	.43364	.21905	.11248	3.3264
#1	13.325	11.242	29.002	1.2120	5.0280	15.578	.13700
#2	13.379	11.294	29.183	1.2194	5.0436	15.603	.14360

Method: 6010C Standard: CAL3
Run Time: 04/26/05 10:37:22

Elem	Th
Avge	2.4696
SDev	.0164
%RSD	.66427
#1	2.4580
#2	2.4812

Method: 6010C Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Ag	328.068	CAL1	CALBLK	1.56377	.005473	04/26/05 10:37:22
Al	308.215	CAL2	CALBLK	7.56859	-1.05506	04/26/05 10:37:22
As1936	193.696	CAL1	CALBLK	21.7957	.010898	04/26/05 10:37:22
B	249.678	CAL1	CALBLK	3.42319	-.054771	04/26/05 10:37:22
Ba	455.403	CAL1	CALBLK	.960637	.000000	04/26/05 10:37:22
Be	313.242	CAL1	CALBLK	.603687	-.005312	04/26/05 10:37:22
Bi	223.000	CAL1	CALBLK	8.54761	-.508583	04/26/05 10:37:22
Ca3179	317.933	CAL2	CALBLK	4.45605	-.211217	04/26/05 10:37:22
Cd2288	228.802	CAL1	CALBLK	1.23027	-.001353	04/26/05 10:37:22
Co	228.612	CAL1	CALBLK	2.06608	-.001859	04/26/05 10:37:22
Cr	267.716	CAL1	CALBLK	.563058	-.002083	04/26/05 10:37:22
Cu	324.754	CAL1	CALBLK	2.01690	-.005647	04/26/05 10:37:22
Fe	259.940	CAL2	CALBLK	3.44097	-.089809	04/26/05 10:37:22
K	766.490	CAL2	CALBLK	78.5660	4.39211	04/26/05 10:37:22
Li	670.789	CAL1	CALBLK	.202568	-.143681	04/26/05 10:37:22
Mg	383.273	CAL2	CALBLK	10.3617	-1.97494	04/26/05 10:37:22
Mn	257.610	CAL1	CALBLK	1.25022	-.015003	04/26/05 10:37:22
Mo	202.030	CAL1	CALBLK	19.3237	.005797	04/26/05 10:37:22
Na	588.995	CAL2	CALBLK	6.46429	-.779594	04/26/05 10:37:22
Ni	231.604	CAL1	CALBLK	1.19597	.003947	04/26/05 10:37:22
P_1782	178.287	CAL2	CALBLK	34.5998	-.003460	04/26/05 10:37:22
Pb	220.353	CAL1	CALBLK	15.4194	-.007710	04/26/05 10:37:22
Sb	206.838	CAL1	CALBLK	70.0987	.028039	04/26/05 10:37:22
Se1960	196.026	CAL1	CALBLK	28.6214	.002862	04/26/05 10:37:22
Si	251.616	CAL1	CALBLK	3.26532	-.009469	04/26/05 10:37:22

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Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Sn	189.989	CAL1	CALBLK	200.467	-.020047	04/26/05 10:37:22
Sr	421.552	CAL1	CALBLK	.550921	-.007437	04/26/05 10:37:22
Th	283.730	CAL3	CALBLK	4.04318	.014960	04/26/05 10:37:22
Tl	190.801	CAL1	CALBLK	20.1588	.034270	04/26/05 10:37:22
U	409.014	CAL1	CALBLK	28.5796	-.031438	04/26/05 10:37:22
V	292.402	CAL1	CALBLK	2.02591	-.090153	04/26/05 10:37:22
Zn	213.856	CAL1	CALBLK	2.86007	-.001144	04/26/05 10:37:22

Method: 6010C

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ag	328.068	CALBLK	.000000	.000000	-.000000
		CAL1	2.00000	2.01070	-.010700
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Al	308.215	CALBLK	.000000	.000000	-.000000
		CAL2	100.000	100.000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
As1936	193.696	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0282	-.028200
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
B	249.678	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0036	-.003600
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ba	455.403	CALBLK	.000000	.000000	.000000
		CAL1	10.0000	10.0009	-.000900
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Be	313.242	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0006	-.000620
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Bi	223.000	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0315	-.031479
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ca3179	317.933	CALBLK	.000000	-.000000	.000000
		CAL2	50.0000	50.0000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cd2288	228.802	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0679	-.067890

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Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Co	228.612	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0064	-.006440
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cr	267.716	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.97227	.027730
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cu	324.754	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0159	-.015940
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Fe	259.940	CALBLK	.000000	-.000000	.000000
		CAL2	100.000	100.015	-.015495
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
K	766.490	CALBLK	.000000	.000000	-.000000
		CAL2	100.000	99.9037	.096291
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Li	670.789	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0010	-.000980
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mg	383.273	CALBLK	.000000	.000000	-.000000
		CAL2	50.0000	50.2045	-.204498
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mn	257.610	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0031	-.003100
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mo	202.030	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Na	588.995	CALBLK	.000000	-.000000	.000000
		CAL2	100.000	100.000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ni	231.604	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0012	-.001200
			Known	Measured	Residual

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Element	Wavelength	Standard	Concentration	Concentration	Concentration
P_1782	178.287	CALBLK	.000000	.000000	-.000000
		CAL2	5.00000	4.85089	.149110

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Pb	220.353	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0164	-.016420

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sb	206.838	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0031	-.003090

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Se1960	196.026	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0118	-.011770

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Si	251.616	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	9.99124	.008760

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sn	189.989	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0033	-.003300

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sr	421.552	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0007	-.000700

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Th	283.730	CALBLK	.000000	-.000000	.000000
		CAL3	10.0000	10.0000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Tl	190.801	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0048	-.004800

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
U	409.014	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
V	292.402	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0161	-.016100

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Zn	213.856	CALBLK	.000000	.000000	-.000000

Standardization	Readback Report	04/26/05 10:40:38 AM		page 8
	CAL1	10.0000	10.0503	-.050300

Method: 6010C Sample Name: ICV Operator: STL
Run Time: 04/26/05 10:40:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.81294	40.796	4.3465	4.0403	4.0735	3.9230	4.1844
SDev	.00448	.124	.0950	.0066	.0213	.0220	.0035
%RSD	.55063	.30318	2.1863	.16328	.52376	.56151	.08457
#1	Q.80977	40.708	Q4.4137	4.0357	4.0584	3.9075	4.1869
#2	Q.81610	40.883	4.2793	4.0450	4.0886	3.9386	4.1819
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	40.000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.464	3.9661	3.9396	3.9352	3.8813	41.519	41.832
SDev	.044	.0232	.0161	.0073	.0102	.191	.566
%RSD	.21330	.58372	.40759	.18667	.26182	.45958	1.3531
#1	20.433	3.9497	3.9282	3.9300	3.8885	41.384	41.432
#2	20.495	3.9825	3.9509	3.9404	3.8741	41.654	42.233
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.000	4.0000	4.0000	4.0000	4.0000	40.000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9698	20.310	3.9285	4.0289	41.571	3.9420	3.9375
SDev	.0029	.060	.0237	.0137	.038	.0108	.1520
%RSD	.07389	.29665	.60253	.33893	.09240	.27454	3.8604
#1	3.9719	20.267	3.9118	4.0192	41.544	3.9496	3.8300
#2	3.9677	20.352	3.9453	4.0385	41.598	3.9343	4.0449
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	20.000	4.0000	4.0000	40.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.8932	3.9901	4.0223	4.1419	4.2278	3.9067	3.7293
SDev	.0544	.0990	.0967	.0019	.0000	.0225	.0124
%RSD	1.3965	2.4820	2.4032	.04695	.00089	.57640	.33203
#1	3.8548	4.0601	3.9539	4.1405	4.2277	3.8908	3.7380
#2	3.9317	3.9201	4.0907	4.1433	4.2278	3.9227	3.7205
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass

Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	3.7835	4.0580	3.9394	3.9546
SDev	.0200	.0243	.0092	.0255
%RSD	.52774	.59856	.23305	.64544
#1	3.7693	4.0752	3.9329	3.9366
#2	3.7976	4.0408	3.9459	3.9727

Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: ICB Operator: STL
Run Time: 04/26/05 10:45:03
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00061	.04084	-.01422	.00887	.00009	.00018	.03287
SDev	.00014	.01884	.01671	.00094	.00040	.00008	.00263
%RSD	23.750	46.139	117.53	10.585	432.60	44.230	8.0078
#1	.00071	.02751	-.00240	.00953	.00037	.00024	.03101
#2	.00050	Q.05416	-.02604	.00820	-.00019	.00012	.03474
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.01000	.05000	.20000	.02500	.20000	.00500	.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01363	.00172	.00144	.00032	.00054	.00335	.18712
SDev	.00747	.00022	.00292	.00227	.00296	.00029	1.2790
%RSD	54.792	12.645	202.23	711.18	545.24	8.7161	683.49
#1	.00835	.00187	.00351	.00193	.00263	.00356	-.71724
#2	.01892	.00157	-.00062	-.00129	-.00155	.00314	1.0915
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass

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Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.25000	.00500	.05000	.01000	.02500	.05000	2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00545	.09904	.00074	.00580	.05041	.00681	.02072
SDev	.00265	.03626	.00003	.00000	.02016	.00407	.00487
%RSD	48.566	36.608	4.1249	.00041	39.987	59.740	23.523
#1	.00358	.07340	.00072	.00580	.03615	.00394	.01727
#2	.00732	.12468	.00076	.00580	.06466	.00969	.02416
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.01000	.25000	.01500	.04000	.25000	.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01089	.05606	-.03430	-.00293	-.02006	.00038	.00501
SDev	.00424	.01981	.02037	.00471	.05674	.00001	.01037
%RSD	38.949	35.332	59.379	160.71	282.84	1.7695	206.87
#1	-.00789	Q.07007	-.04870	.00040	-.06019	.00038	.01235
#2	-.01389	.04206	-.01990	-.00626	.02006	.00039	-.00232
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.10000	.06000	.20000	.50000	.10000	.05000	.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.02218	.03141	.00337	.00111
SDev	.00005	.09695	.00247	.00083
%RSD	.21212	308.69	73.292	74.738
#1	.02215	.09996	.00162	.00170
#2	.02222	-.03715	.00512	.00052
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000
Range	2.0000	.50000	.05000	.02000

Method: 6010C Sample Name: LLC Operator: STL
Run Time: 04/26/05 10:49:24
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01101	Q.24454	.21782	.19995	.20174	.00515	.23379
SDev	.00197	.01875	.06472	.00002	.00054	.00000	.03726
%RSD	17.885	7.6677	29.712	.00753	.26681	.01838	15.939
#1	Q.01240	.23128	Q.26359	.19996	.20136	.00515	.20744
#2	.00962	Q.25779	.17206	.19994	.20212	.00515	Q.26014
Errors	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.01000	.20000	.20000	.20000	.20000	.00500	.20000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1811	.00551	.04803	.00975	.02390	.10683	5.2318
SDev	.0270	.00068	.00059	.00315	.00223	.00237	1.4873
%RSD	.52095	12.382	1.2245	32.360	9.3236	2.2162	28.427
#1	5.1621	.00502	.04761	Q.00752	.02232	.10515	4.1802
#2	5.2002	.00599	.04844	.01198	.02548	.10850	Q6.2835
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	5.0000	.00500	.05000	.01000	.02500	.10000	5.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05479	5.1360	.01544	.03671	5.2007	.04003	.30252
SDev	.00218	.0348	.00017	.00000	.0274	.00609	.03427
%RSD	3.9718	.67825	1.1034	.00032	.52755	15.210	11.327
#1	.05325	5.1114	.01532	.03671	5.2201	.03572	.32676
#2	.05633	5.1607	.01556	.03671	5.1813	.04433	.27829
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.05000	5.0000	.01500	.04000	5.0000	.04000	.30000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.06274	Q.09081	.17876	.50154	Q.07946	.04855	.49668
SDev	.02614	.00991	.01209	.00831	.02833	.00008	.01332
%RSD	41.664	10.915	6.7659	1.6575	35.653	.15873	2.6814
#1	Q.04426	Q.09781	.18731	.49566	Q.05943	.04850	.48727
#2	.08123	Q.08380	.17020	.50742	.09950	.04861	.50610
Errors	QC Fail	QC Fail	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value	.10000	.06000	.20000	.50000	.10000	.05000	.50000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Tl	U	V	Zn

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Units	ppm	ppm	ppm	ppm
Avge	Q.25950	.52302	.05284	Q.02668
SDev	.00286	.01205	.00224	.00078
%RSD	1.1023	2.3040	4.2332	2.9172
#1	Q.25747	.51450	.05125	Q.02613
#2	Q.26152	.53154	.05442	Q.02723
Errors	QC Fail	QC Pass	QC Pass	QC Fail
Value	.20000	.50000	.05000	.02000
Range	20.000	20.000	20.000	20.000

Method: 6010C Sample Name: ICSA Operator: STL
Run Time: 04/26/05 10:53:45
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00625	490.23	-.10514	.01336	.00172	.00097	.13696
SDev	.00061	1.53	.03150	.00387	.00012	.00000	.03602
%RSD	9.7909	.31192	29.957	28.943	6.9960	.36005	26.301
#1	-.00582	489.15	-.12741	.01610	.00181	.00097	.11148
#2	-.00668	491.31	-.08286	.01063	.00164	.00097	.16243
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	500.00	.00000	.00000	.00000	.00000	.00000
Range	.02000	100.00	.20000	.02500	.20000	.01000	.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	449.12	.00168	.00234	.00986	-.00080	179.53	.40883
SDev	1.51	.00129	.00005	.00022	.00207	.85	.28688
%RSD	.33641	76.705	2.0735	2.2676	258.35	.47401	70.170
#1	448.05	.00077	.00238	.01002	.00066	178.92	.20598
#2	450.18	.00259	.00231	.00970	-.00226	180.13	.61169
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.00	.00000	.00000	.00000	.00000	200.00	.00000
Range	100.00	.01000	.05000	.02000	.02500	40.000	2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.01034	478.32	.00812	.01246	.00710	.00467	.05266
SDev	.00122	.96	.00004	.01636	.01008	.00913	.05471
%RSD	11.774	.20135	.47458	131.27	141.98	195.36	103.88
#1	.00948	477.64	.00809	.00089	-.00003	.01113	.01398
#2	Q.01120	479.00	.00815	.02402	.01423	-.00178	.09135
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	500.00	.00000	.00000	.00000	.00000	.00000
Range	.01000	100.00	.01500	.04000	.25000	.04000	.25000

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01832	.04443	Q-.42222	-.01589	-.00520	.00452	.06105
SDev	.03068	.06901	.31954	.00960	.00010	.00008	.01369
%RSD	167.49	155.31	75.680	60.423	1.9898	1.8054	22.428
#1	-.04001	Q.09323	Q-.64817	-.00910	-.00527	.00446	.07074
#2	.00338	-.00436	-.19627	-.02268	-.00513	.00458	.05137
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.10000	.06000	.20000	.50000	.10000	.05000	.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.13083	-.04190	-.00248	-.00232
SDev	.03430	.05288	.00156	.00243
%RSD	26.213	126.21	62.810	104.76
#1	-.15508	-.00451	-.00358	-.00060
#2	-.10658	-.07928	-.00138	-.00404
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000
Range	.20000	.50000	.05000	.01000

Method: 6010C Sample Name: ICSAB Operator: STL
Run Time: 04/26/05 10:58:07
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi

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Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.93909	488.96	.86081	.97105	.47708	.44811	1.0987
SDev	.00730	1.10	.03993	.00847	.00449	.00427	.0535
%RSD	.77720	.22498	4.6387	.87194	.94192	.95307	4.8681
#1	.93393	489.74	.88904	.96507	.47390	.44509	1.0608
#2	.94425	488.18	.83257	.97704	.48025	.45113	1.1365
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	500.00	1.0000	1.0000	.50000	.50000	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	446.57	.91222	.41538	.44459	.47179	180.33	21.302
SDev	.39	.00447	.00079	.00157	.00060	2.17	.051
%RSD	.08745	.49043	.19083	.35406	.12638	1.2022	.23721
#1	446.85	.90906	.41594	.44348	.47221	178.80	21.338
#2	446.29	.91539	.41482	.44571	.47137	181.86	21.266
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.00	1.0000	.50000	.50000	.50000	200.00	20.000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0549	474.33	.44168	.90131	20.758	.83160	.44023
SDev	.0025	1.73	.00500	.03269	.076	.00490	.06331
%RSD	.24167	.36381	1.1318	3.6266	.36545	.58950	14.382
#1	1.0567	475.55	.43815	.87820	20.812	.83507	.48500
#2	1.0531	473.11	.44521	.92442	20.704	.82814	Q.39546
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	500.00	.50000	1.0000	20.000	1.0000	.50000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.92525	.99190	Q.66925	.98516	Q.75536	.91214	.92750
SDev	.03336	.08071	.20456	.00269	.05691	.00865	.01598
%RSD	3.6051	8.1374	30.566	.27357	7.5340	.94833	1.7225
#1	.94883	.93482	.81390	.98707	Q.71511	.90603	.93880
#2	.90166	1.0490	Q.52461	.98326	Q.79560	.91826	.91621
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Fail	QC Pass	QC Pass
Value	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	Q.67070	.90747	.44136	.90497
SDev	.14805	.02946	.00203	.01323
%RSD	22.074	3.2463	.46035	1.4623

#1	Q.56601	.92830	.44280	.89562
#2	Q.77539	.88663	.43992	.91433

Errors	QC Fail	QC Pass	QC Pass	QC Pass
Value	1.0000	1.0000	.50000	1.0000
Range	20.000	20.000	20.000	20.000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 04/26/05 11:04:12
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.80843	40.491	4.2819	4.0746	4.0539	3.9331	4.1582
SDev	.00772	.122	.0822	.0389	.0401	.0358	.0388
%RSD	.95479	.30087	1.9187	.95520	.98859	.90957	.93314
#1	Q.80297	40.405	4.2238	4.0471	4.0255	3.9078	4.1307
#2	Q.81389	40.577	4.3399	4.1021	4.0822	3.9584	4.1856
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	40.000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.292	3.9505	3.9092	3.9144	3.8590	41.938	40.055
SDev	.083	.0266	.0152	.0105	.0126	.311	.121
%RSD	.41097	.67430	.38856	.26829	.32769	.74151	.30268
#1	20.233	3.9317	3.8984	3.9069	3.8501	41.718	40.141
#2	20.351	3.9694	3.9199	3.9218	3.8680	42.158	39.969
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.000	4.0000	4.0000	4.0000	4.0000	40.000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9080	20.016	3.9419	4.0888	41.038	3.9241	3.9039
SDev	.0023	.082	.0302	.0328	.032	.0057	.1120
%RSD	.05936	.41045	.76607	.80166	.07793	.14636	2.8690

#1	3.9097	19.958	3.9205	4.0656	41.060	3.9281	3.9831
#2	3.9064	20.075	3.9632	4.1119	41.015	3.9200	3.8247
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	20.000	4.0000	4.0000	40.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9539	4.0114	3.8800	4.1077	4.2680	3.8880	3.7064
SDev	.0392	.0295	.0194	.0177	.1134	.0386	.0189
%RSD	.99137	.73651	.50053	.43133	2.6565	.99405	.50880
#1	3.9262	4.0323	3.8662	4.0952	4.3481	3.8606	3.6930
#2	3.9816	3.9905	3.8937	4.1202	4.1878	3.9153	3.7197
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	3.8057	3.9521	3.9067	4.0065
SDev	.0170	.0528	.0194	.0324
%RSD	.44799	1.3366	.49739	.80790
#1	3.8177	3.9895	3.8930	3.9836
#2	3.7936	3.9148	3.9204	4.0294
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 04/26/05 11:08:34
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00125	Q.05395	-.02062	.00612	.00028	.00066	.02692
SDev	.00110	.03005	.00770	.00096	.00068	.00009	.02551
%RSD	87.830	55.697	37.328	15.704	239.29	12.963	94.758

#1	.00048	.03270	-.01518	.00544	-.00020	.00060	.04496
#2	.00203	Q.07519	-.02607	.00680	.00077	.00072	.00888
Errors	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.01000	.05000	.20000	.02500	.20000	.00500	.20000
Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00589	-.00033	-.00165	-.00130	.00037	.01198	-.63368
SDev	.00069	.00011	.00204	.00043	.00054	.00099	2.09389
%RSD	11.723	33.852	123.58	32.696	147.26	8.2769	330.43
#1	-.00637	-.00025	-.00310	-.00100	.00075	.01128	Q-2.1143
#2	-.00540	-.00040	-.00021	-.00160	-.00002	.01268	.84692
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.25000	.00500	.05000	.01000	.02500	.05000	2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00628	.10656	.00137	.00580	.05623	.00454	-.00349
SDev	.00404	.04848	.00053	.00000	.02469	.00288	.00003
%RSD	64.343	45.496	38.972	.00079	43.906	63.303	.72496
#1	.00342	.07228	.00099	.00580	.03877	.00251	-.00348
#2	.00914	.14084	.00174	.00580	.07369	.00658	-.00351
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.01000	.25000	.01500	.04000	.25000	.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01859	.02803	-.00852	-.00229	Q.10022	.00088	.00560
SDev	.00658	.03965	.08090	.00279	.05669	.00008	.00543
%RSD	35.378	141.43	949.01	121.76	56.566	8.9129	96.824
#1	-.01394	-.00000	.04868	-.00032	Q.14031	.00082	.00944
#2	-.02324	.05607	-.06573	-.00426	.06014	.00094	.00177
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.10000	.06000	.20000	.50000	.10000	.05000	.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.05848	.01425	.00440	.00198
SDev	.02850	.00805	.00375	.00042
%RSD	48.735	56.534	85.023	21.172
#1	.07863	.01994	.00176	.00227
#2	.03833	.00855	.00705	.00168
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000

Range	2.0000	.50000	.05000	.02000

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Method: 6010C Sample Name: G8496B Operator: STL
Run Time: 04/26/05 11:21:23
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00250	.02167	-.00435	-.00138	.00038	.00006	.00921
SDev	.00018	.00680	.00315	.00001	.00000	.00008	.00012
%RSD	7.3310	31.391	72.363	.88731	.21835	138.56	1.2819
#1	.00237	.01686	-.00213	-.00137	.00039	.00000	.00929
#2	.00263	.02648	-.00658	-.00139	.00038	.00012	.00913
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.05000	.20000	.20000	.20000	.00500	.20000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01958	-.00021	.00103	-.00097	-.00039	.00034	.02741
SDev	.00011	.00085	.00233	.00070	.00003	.00094	.49069
%RSD	.56309	412.22	226.67	72.304	6.7209	273.95	1790.4
#1	-.01951	.00039	-.00062	-.00146	-.00037	-.00032	-.31957
#2	-.01966	-.00080	.00268	-.00047	-.00041	.00101	.37438
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.00500	.05000	.01000	.02500	.05000	2.0000
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00352	.06022	.00000	.01159	.03232	.00658	-.01387
SDev	.00106	.01736	.00001	.00820	.00182	.00169	.02446
%RSD	30.005	28.820	11537.	70.710	5.6319	25.760	176.35
#1	.00278	.04795	.00001	.00580	.03104	.00778	-.03116
#2	.00427	.07250	-.00001	.01739	.03361	.00538	.00343
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.01000	.25000	.01500	.04000	.25000	.04000	
Low	-.01000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00774	.02102	-.00854	-.00459	-.02004	.00017	-.00231
SDev	.00006	.00992	.01622	.00137	.00000	.00015	.00483
%RSD	.72433	47.211	189.83	29.777	.01427	93.140	209.39
#1	-.00770	.02804	.00292	-.00362	-.02004	.00006	.00111
#2	-.00778	.01400	-.02001	-.00555	-.02005	.00027	-.00573
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.10000	.06000	.20000	.50000	.10000	.05000	.50000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn

Units	ppm	ppm	ppm	ppm
Avge	.03025	-.00285	.00122	.00054
SDev	.07981	.02428	.00026	.00163
%RSD	263.83	852.24	21.093	301.76
#1	-.02619	-.02001	.00104	-.00061
#2	.08669	.01432	.00140	.00169
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	.20000	.50000	.05000	.01000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8496C Operator: STL
Run Time: 04/26/05 11:25:44
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.12842	L.61638	L.47090	L.01529	L.52110	L.50094	.06221
SDev	.00007	.00728	.02138	.00196	.00082	.00103	.01303
%RSD	.05546	1.1816	4.5410	12.815	.15747	.20526	20.939
#1	.12837	L.61123	L.48602	L.01391	L.52052	L.50021	.07142
#2	.12847	L.62153	L.45578	L.01668	L.52168	L.50167	.05300
Errors	LC Pass	LC Low	LC Low	LC Low	LC Low	LC Low	NOCHECK
High	.33700	1.2000	1.2000	2.4000	1.2000	1.2000	
Low	.12300	.80000	.80000	1.6000	.80000	.80000	

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L10.656	L.50895	L.51182	L.51484	L.50010	L.55106	L11.369
SDev	.017	.00018	.00205	.00200	.00095	.00303	.016
%RSD	.16263	.03547	.40040	.38862	.18968	.54942	.13673
#1	L10.669	L.50908	L.51037	L.51625	L.49943	L.54892	L11.380
#2	L10.644	L.50883	L.51327	L.51342	L.50077	L.55320	L11.358
Errors	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low
High	24.000	1.2000	1.2000	1.2000	1.2000	1.2000	24.000
Low	16.000	.80000	.80000	.80000	.80000	.80000	16.000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782

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Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.00371	L10.540	L.50533	L.52558	L10.980	L.52001	L-.01377
SDev	.00098	.026	.00249	.01366	.113	.00457	.06849
%RSD	26.404	.24349	.49363	2.5998	1.0322	.87959	497.28
#1	L.00302	L10.559	L.50356	L.53524	L11.060	L.51678	L.03466
#2	L.00441	L10.522	L.50709	L.51591	L10.900	L.52324	L-.06220
Errors	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low
High	2.4000	24.000	1.2000	1.2000	24.000	1.2000	2.4000
Low	1.6000	16.000	.80000	.80000	16.000	.80000	1.6000

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.48487	L.51091	.52408	L.13018	L.02014	L.49688	L-.03182
SDev	.00009	.00989	.00008	.00513	.05668	.00125	.00208
%RSD	.01898	1.9356	.01455	3.9435	281.48	.25174	6.5345
#1	L.48480	L.51791	.52403	L.13381	L.06022	L.49599	L-.03329
#2	L.48493	L.50392	.52414	L.12655	L-.01994	L.49776	L-.03035
Errors	LC Low	LC Low	NOCHECK	LC Low	LC Low	LC Low	LC Low
High	1.2000	1.2000		2.4000	2.4000	1.2000	2.4000
Low	.80000	.80000		1.6000	1.6000	.80000	1.6000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	L.54918	L-.02881	L.51112	L.51217
SDev	.02853	.06064	.00162	.00321
%RSD	5.1952	210.49	.31793	.62727
#1	L.52900	L.01407	L.51226	L.50989
#2	L.56935	L-.07169	L.50997	L.51444
Errors	LC Low	LC Low	LC Low	LC Low
High	1.2000	2.4000	1.2000	1.2000
Low	.80000	1.6000	.80000	.80000

Method: 6010C Sample Name: G8170 Operator: STL
Run Time: 04/26/05 11:30:06
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi

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Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00438	.04167	.02837	.00134	.00221	.00012	.02694
SDev	.00064	.00264	.02154	.00193	.00014	.00000	.02542
%RSD	14.505	6.3256	75.913	144.00	6.1513	.77834	94.342
#1	.00483	.04354	.04360	.00270	.00230	.00012	.00897
#2	.00393	.03981	.01314	-.00002	.00211	.00012	.04492
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06590	-.00157	-.00207	.00104	-.00063	.00546	-.13456
SDev	.00007	.00191	.00087	.00012	.00144	.00144	.64872
%RSD	.10517	121.81	42.225	11.469	229.20	26.433	482.10
#1	.06585	-.00291	-.00145	.00113	-.00165	.00648	-.59328
#2	.06594	-.00022	-.00268	.00096	.00039	.00444	.32415
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00409	.10738	.00062	.00386	.12023	.00586	-.02426
SDev	.00055	.00014	.00017	.01913	.00001	.00102	.00978
%RSD	13.340	.13282	27.839	495.01	.00411	17.356	40.324
#1	.00371	.10728	.00074	.01739	.12023	.00514	-.03118
#2	.00448	.10748	.00050	-.00966	.12023	.00658	-.01735
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00932	.03504	-.06290	.01730	-.02005	.00077	.00297
SDev	.00222	.00991	.06075	.00002	.05670	.00008	.00456
%RSD	23.795	28.271	96.573	.09090	282.76	9.9623	153.45
#1	-.01089	.04205	-.10586	.01731	-.06015	.00082	-.00025
#2	-.00775	.02804	-.01995	.01729	.02004	.00072	.00620
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.06050	.00855	.00179	.00312
SDev	.00856	.01619	.00002	.00121
%RSD	14.155	189.30	.85772	38.775

#1	.05444	.02000	.00178	.00226
#2	.06655	-.00290	.00180	.00397

Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8170X Operator: STL
Run Time: 04/26/05 11:34:27
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00372	.03812	.00876	-.00072	.00211	-.00000	.02097
SDev	.00288	.00018	.02466	.00097	.00000	.00000	.01689
%RSD	77.381	.48618	281.53	134.14	.08209	17.899	80.548
#1	.00576	.03825	-.00868	-.00141	.00211	-.00000	.03292
#2	.00169	.03799	.02620	-.00004	.00211	-.00000	.00903
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06179	-.00166	-.00207	.00031	-.00065	.01197	.45567
SDev	.00060	.00085	.00205	.00038	.00084	.00002	.12032
%RSD	.96235	51.045	98.783	124.79	128.96	.16105	26.406
#1	.06221	-.00226	-.00352	.00004	-.00006	.01196	.37059
#2	.06137	-.00106	-.00062	.00058	-.00124	.01199	.54075
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00466	.09063	.00036	.00580	.11570	.00538	-.00694
SDev	.00003	.00008	.00018	.00000	.00457	.00575	.01468
%RSD	.60656	.08480	49.359	.00002	3.9535	106.92	211.42

#1	.00468	.09057	.00024	.00580	.11246	.00944	-.01732
#2	.00464	.09068	.00049	.00580	.11893	.00131	.00344
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02169	.02803	.02576	.02222	-.00001	.00066	-.00056
SDev	.01963	.03966	.00001	.00231	.08506	.00008	.00444
%RSD	90.494	141.49	.02709	10.400	1026200.	11.778	797.73
#1	-.00781	.05607	.02576	.02386	-.06015	.00071	.00258
#2	-.03556	-.00001	.02575	.02059	.06014	.00060	-.00369
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.01815	.02858	.00177	.00112
SDev	.02851	.00402	.00002	.00003
%RSD	157.08	14.059	.97376	2.5908
#1	-.00201	.03142	.00176	.00110
#2	.03831	.02573	.00178	.00114
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8170S Operator: STL
Run Time: 04/26/05 11:38:48
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02746	1.1196	.97097	.00554	1.0289	.02560	.10387
SDev	.00022	.0037	.06325	.00004	.0024	.00000	.02606
%RSD	.81279	.33010	6.5140	.70552	.23756	.00114	25.087

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#1	.02730	1.1170	.92624	.00557	1.0272	.02560	.12229
#2	.02762	1.1222	1.0157	.00551	1.0307	.02560	.08544
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000
Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	26.072	.02507	.24386	.09768	.12172	.54463	26.834
SDev	.124	.00013	.00175	.00034	.00088	.00092	.622
%RSD	.47604	.52482	.71841	.34351	.71896	.16927	2.3162
#1	25.984	.02517	.24262	.09744	.12234	.54398	27.274
#2	26.160	.02498	.24510	.09792	.12110	.54529	26.395
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00258	25.869	.24577	.52558	26.933	.26335	.03518
SDev	.00126	.191	.00052	.01366	.312	.01065	.02928
%RSD	48.928	.73983	.21229	2.5998	1.1574	4.0460	83.233
#1	.00347	25.734	.24540	.51592	26.713	.25582	.01448
#2	.00169	26.005	.24614	.53524	27.154	.27089	.05589
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.23593	.26396	.99059	.01797	.00007	.48894	-.01934
SDev	.00217	.00002	.03241	.00092	.02836	.00156	.00278
%RSD	.92104	.00721	3.2717	5.1438	37982.	.31864	14.385
#1	.23439	.26398	.96767	.01862	.02012	.48784	-.02131
#2	.23747	.26395	1.0135	.01731	-.01998	.49005	-.01737
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000
Elem	Tl	U	V	Zn			
Units	ppm	ppm	ppm	ppm			
Avge	1.0090	-.02330	.25261	.25405			
SDev	.0172	.00402	.00003	.00278			
%RSD	1.7005	17.260	.01224	1.0934			
#1	.99685	-.02614	.25263	.25209			
#2	1.0211	-.02045	.25259	.25601			
Errors	LC Pass	LC Pass	LC Pass	LC Pass			
High	50.000	50.000	50.000	50.000			

Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8170V 5X Operator: STL
Run Time: 04/26/05 11:43:08
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00024	.06526	.03250	.00198	.00047	.00011	.04617
SDev	.00126	.01602	.02199	.00102	.00015	.00001	.01738
%RSD	530.62	24.547	67.675	51.446	32.290	8.3765	37.642
#1	-.00065	.05393	.01695	.00126	.00036	.00011	.03388
#2	.00112	.07659	.04805	.00271	.00058	.00012	.05846
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.13673	-.00061	.00186	.00196	.00264	.00666	.47704
SDev	.00082	.00017	.00233	.00386	.00202	.00078	.92804
%RSD	.59882	28.044	125.36	196.44	76.444	11.663	194.54
#1	.13615	-.00049	.00350	.00469	.00407	.00611	1.1333
#2	.13730	-.00073	.00021	-.00076	.00122	.00720	-.17918
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00982	.14549	.00121	.00966	.09240	.00166	.00340
SDev	.00156	.01342	.00005	.01093	.01012	.00357	.00001
%RSD	15.914	9.2244	3.9554	113.14	10.955	214.61	.23432
#1	.00871	.13600	.00118	.01739	.08524	-.00086	.00340
#2	.01092	.15498	.00125	.00193	.09955	.00419	.00339
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	

Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01365	.04903	-.04005	.01377	-.04013	.00071	.00933
SDev	.02159	.04961	.00385	.00891	.02829	.00017	.00614
%RSD	158.17	101.17	9.6253	64.715	70.494	23.474	65.825
#1	.02891	.01395	-.03732	.02008	-.02013	.00059	.01367
#2	-.00162	.08411	-.04277	.00747	-.06014	.00083	.00499
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.00606	.09426	.00609	.00514
SDev	.00007	.15355	.00198	.00245
%RSD	1.1736	162.91	32.490	47.569
#1	-.00611	.20284	.00469	.00687
#2	-.00601	-.01432	.00749	.00341
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G84EP Operator: STL
Run Time: 04/26/05 11:47:29
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00293	.04329	.00755	.00065	.00057	.00006	.00634
SDev	.00006	.00262	.03558	.00289	.00027	.00008	.00350
%RSD	2.0098	6.0536	471.28	446.22	46.802	141.89	55.230
#1	.00297	.04515	.03271	-.00139	.00038	-.00000	.00386
#2	.00289	.04144	-.01761	.00269	.00076	.00012	.00882
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000

Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000
Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02120	-.00128	-.00021	.00050	-.00127	.00335	1.3981
SDev	.00150	.00024	.00058	.00093	.00050	.00041	.3297
%RSD	7.0915	19.039	268.83	186.38	39.474	12.170	23.579
#1	.02226	-.00110	-.00062	-.00016	-.00162	.00306	1.1650
#2	.02014	-.00145	.00019	.00115	-.00091	.00364	1.6312
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00583	.11039	.00061	.00580	.09113	.01004	-.03119
SDev	.00129	.00489	.00016	.00000	.00276	.00219	.00978
%RSD	22.191	4.4335	26.549	.00041	3.0300	21.837	31.366
#1	.00675	.11385	.00050	.00580	.09308	.00849	-.02427
#2	.00492	.10693	.00073	.00580	.08918	.01159	-.03811
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00783	.03503	.00003	.00720	-.02006	.00049	-.00084
SDev	.00008	.02976	.00398	.00143	.05671	.00000	.00282
%RSD	1.0233	84.951	12336.	19.870	282.75	.68842	334.89
#1	-.00777	.05607	-.00278	.00619	.02004	.00050	.00115
#2	-.00789	.01399	.00284	.00821	-.06016	.00049	-.00283
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.03024	.03715	.00175	-.00005
SDev	.03424	.04851	.00007	.00001
%RSD	113.20	130.58	4.0426	21.869
#1	.05445	.00285	.00180	-.00004
#2	.00604	.07145	.00170	-.00006
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

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Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.8651	3.9408	3.8741	4.0825	4.0474	3.8439	3.6801
SDev	.0258	.0494	.0151	.0159	.2552	.0100	.0044
%RSD	.66879	1.2541	.38876	.39000	6.3047	.25938	.12010
#1	3.8468	3.9058	3.8848	4.0713	4.2278	3.8368	3.6833
#2	3.8833	3.9757	3.8635	4.0938	3.8670	3.8509	3.6770
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	3.9145	3.9042	3.8777	3.9170
SDev	.0456	.0325	.0215	.0184
%RSD	1.1661	.83238	.55444	.46923
#1	3.9468	3.8812	3.8625	3.9300
#2	3.8823	3.9272	3.8929	3.9041
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 04/26/05 11:56:14
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00144	Q.10322	-.00743	.01022	.00096	.00097	.04549
SDev	.00134	.01764	.03243	.00097	.00000	.00000	.01325
%RSD	93.011	17.088	436.30	9.4669	.40837	.16463	29.134
#1	.00049	Q.09075	-.03036	.01090	.00096	.00097	.03612
#2	.00238	Q.11570	.01550	.00954	.00096	.00097	.05486
Errors	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.01000	.05000	.20000	.02500	.20000	.00500	.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00897	.00154	.00042	.00104	.00062	.01683	.29142
SDev	.00015	.00147	.00029	.00039	.00137	.00102	.03038
%RSD	1.6247	95.329	70.503	37.736	221.21	6.0859	10.427
#1	.00887	.00258	.00021	.00132	.00159	.01611	.26993
#2	.00908	.00050	.00062	.00076	-.00035	.01755	.31290
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.25000	.00500	.05000	.01000	.02500	.05000	2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.01400	.20318	.00212	.01159	.11636	.00670	.02068
SDev	.00350	.04133	.00018	.01366	.01647	.00253	.03427
%RSD	24.981	20.343	8.6652	117.86	14.152	37.831	165.69
#1	Q.01153	.17395	.00199	.02126	.10472	.00849	.04492
#2	Q.01647	.23240	.00225	.00193	.12801	.00491	-.00355
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.01000	.25000	.01500	.04000	.25000	.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02324	.00701	-.04276	.00158	-.02005	.00138	.00419
SDev	.02181	.00991	.02433	.00736	.00001	.00016	.00601
%RSD	93.855	141.51	56.906	464.91	.07404	11.428	143.51
#1	-.03867	-.00000	-.05996	-.00362	-.02006	.00127	.00844
#2	-.00782	.01401	-.02555	.00679	-.02003	.00149	-.00006
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.10000	.06000	.20000	.50000	.10000	.05000	.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.04843	-.01433	.00991	.00082
SDev	.03134	.02422	.00234	.00120
%RSD	64.716	169.03	23.614	145.79
#1	.07059	.00280	.00826	.00167
#2	.02627	-.03145	.01157	-.00003
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000
Range	2.0000	.50000	.05000	.02000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 04/26/05 11:51:51
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.80563	40.099	4.2622	4.0022	4.0073	3.8686	4.1823
SDev	.00121	.189	.1199	.0055	.0049	.0048	.0682
%RSD	.15041	.47014	2.8121	.13753	.12202	.12353	1.6305
#1	Q.80477	39.965	4.3469	3.9984	4.0038	3.8652	4.1341
#2	Q.80648	40.232	4.1774	4.0061	4.0108	3.8720	4.2306
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	40.000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.308	3.9412	3.8861	3.8836	3.8181	41.009	40.267
SDev	.110	.0224	.0280	.0173	.0036	.221	.516
%RSD	.54228	.56849	.72161	.44645	.09474	.53890	1.2819
#1	20.230	3.9253	3.8663	3.8713	3.8155	41.166	40.632
#2	20.386	3.9570	3.9059	3.8958	3.8206	40.853	39.902
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.000	4.0000	4.0000	4.0000	4.0000	40.000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.8286	20.008	3.8638	3.9535	40.474	3.9153	3.8779
SDev	.0034	.092	.0016	.0328	.036	.0384	.0582
%RSD	.08957	.45756	.04184	.82919	.08806	.98051	1.5009
#1	3.8310	19.943	3.8626	3.9767	40.449	3.8882	3.8368
#2	3.8262	20.072	3.8649	3.9304	40.499	3.9425	3.9191
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	20.000	4.0000	4.0000	40.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th

Analytical Runlog for Mercury Analysis

Run #: AA0502A

Instrument ID:

Seq	Sample ID	Run Date/Time		Instr Conc.	Dilution	Final Conc.		QC Expected		% Recovery
1	S0	5/2/2005	9:27:01		1					
2	S0.2	5/2/2005	9:28:49		1					
3	S0.5	5/2/2005	9:30:50		1					
4	S1	5/2/2005	9:32:42		1					
5	S5	5/2/2005	9:34:33		1					
6	S10	5/2/2005	9:36:47		1					
7	ICV	5/2/2005	9:38:49	2.47	1	2.47	ppb	2.5	ppb	98.8%
8	~~CCB~~ ECB	5/2/2005	9:40:38	-0.02	1	-0.02	ppb	<0.2	ppb	
9	CRA	5/2/2005	9:42:28	0.199	1	0.199	ppb	0.2	ppb	99.5%
10	CCV	5/2/2005	9:44:37	5.2	1	5.2	ppb	5	ppb	104.0%
11	CCB	5/2/2005	9:46:36	-0.006	1	-0.006	ppb	<0.2	ppb	
12	G9EAVB	5/2/2005	9:48:25	0.019	1	0.019	ppb			✓
13	G9GMRC	5/2/2005	9:50:25	4.78	1	4.78	ppb	5		96
14	G843A	5/2/2005	9:52:13	0.091	1	0.091	ppb			
15	G843AS	5/2/2005	9:54:13	4.74	1	4.74	ppb	5		93
16	G843AD	5/2/2005	9:56:04	4.99	1	4.99	ppb	5		98
17	G843AV	5/2/2005	9:58:17	0.061	5	0.305	ppb			
18	G843D	5/2/2005	10:00:06	0.155	1	0.155	ppb			
19	G843F	5/2/2005	10:02:46	0.037	1	0.037	ppb			
20	G843H	5/2/2005	10:05:00	0.069	1	0.069	ppb			
21	G843M	5/2/2005	10:06:54	0.105	1	0.105	ppb			
22	CCV	5/2/2005	10:10:39	5.33	1	5.33	ppb	5	ppb	106.6%
23	CCB	5/2/2005	10:12:27	-0.061	1	-0.061	ppb	<0.2	ppb	
24	G843P	5/2/2005	10:15:27	-0.005	1	-0.005	ppb			
25	G843R	5/2/2005	10:17:18	0.03	1	0.03	ppb			
26	G843X	5/2/2005	10:19:59	0.003	1	0.003	ppb			
27	G85JQ	5/2/2005	10:21:53	0.007	1	0.007	ppb			
28	G89LL	5/2/2005	10:24:43	0.025	1	0.025	ppb			
29	G9A7F	5/2/2005	10:26:32	0.109	1	0.109	ppb			
30	G9A7P	5/2/2005	10:28:21	0.005	1	0.005	ppb			
31	G9ECFB	5/2/2005	10:30:31	0.008	1	0.008	ppb			✓
32	G9GMTC	5/2/2005	10:32:22	4.18	1	4.18	ppb	5		84
33	G8WP7	5/2/2005	10:34:13	-0.031	1	-0.031	ppb			
34	CCV	5/2/2005	10:36:05	5.38	1	5.38	ppb	5	ppb	107.6%
35	CCB	5/2/2005	10:37:59	-0.034	1	-0.034	ppb	<0.2	ppb	
36	G8WP7S	5/2/2005	10:40:29	5.13	1	5.13	ppb	5		163
37	G8WP7D	5/2/2005	10:42:21	4.97	1	4.97	ppb	5		99
38	G8WP7V	5/2/2005	10:44:30	0.022	5	0.11	ppb			
39	G8WQL	5/2/2005	10:46:29	0.007	1	0.007	ppb			
40	G8WQN	5/2/2005	10:48:23	0.01	1	0.01	ppb			
41	G8WQR	5/2/2005	10:50:14	-0.001	1	-0.001	ppb			
42	G8WQT	5/2/2005	10:52:48	0.015	1	0.015	ppb			
43	G8WR6	5/2/2005	10:54:48	0.027	1	0.027	ppb			
44	G8WTA	5/2/2005	10:57:20	0.01	1	0.01	ppb			
45	G8WTE	5/2/2005	10:59:50	0.008	1	0.008	ppb			
46	CCV	5/2/2005	11:01:49	5.44	1	5.44	ppb	5	ppb	108.8%
47	CCB	5/2/2005	11:03:37	-0.05	1	-0.05	ppb	<0.2	ppb	

Analyst: JJ

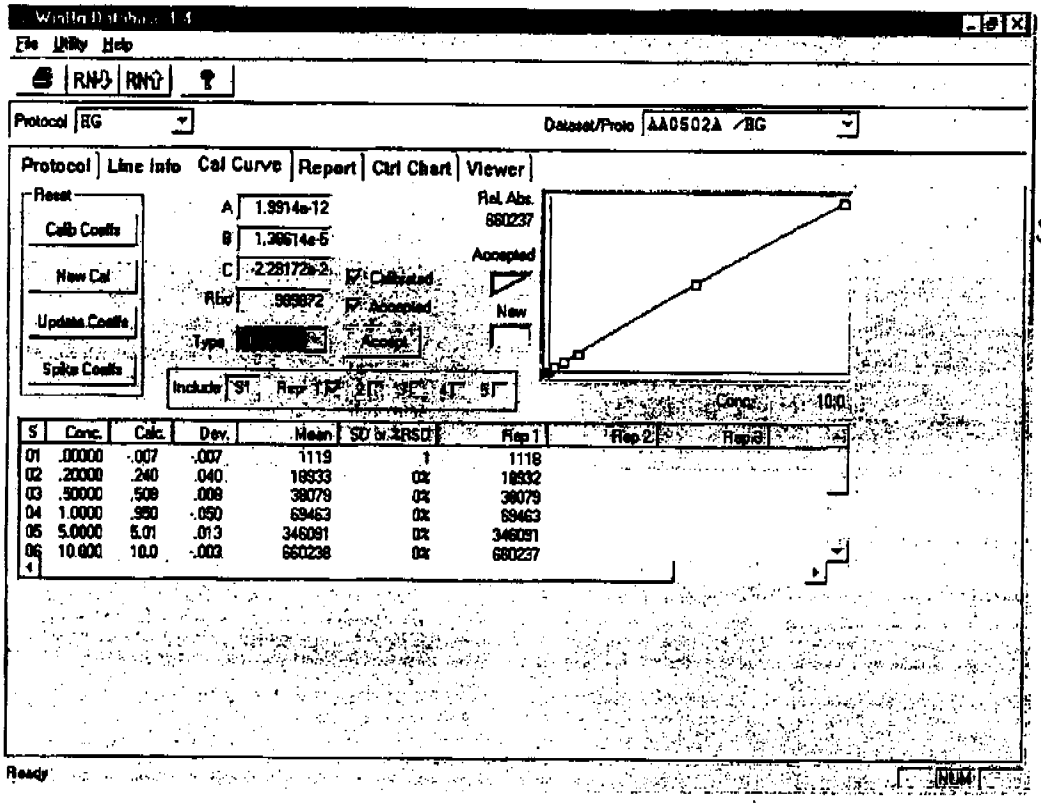
Page 1 of 2

Reviewed by: 6/4/05

Analytical Runlog for Mercury Analysis										
Run #: AA0502A										
Instrument ID:										
Seq	Sample ID	Run Date/Time		Instr Conc.	Dilution	Final Conc.		QC Expected		% Recovery
48	G8WTG	5/2/2005	11:05:57	0.009	1	0.009	ppb			
49	G8WTR	5/2/2005	11:08:20	0.004	1	0.004	ppb			
50	G8WTV	5/2/2005	11:10:44	-0.001	1	-0.001	ppb			
51	G8WTW	5/2/2005	11:12:53	-0.006	1	-0.006	ppb			
52	G8WTX	5/2/2005	11:14:42	0.011	1	0.011	ppb			
53	G8WT0	5/2/2005	11:16:45	0.011	1	0.011	ppb			
54	G8WT1	5/2/2005	11:18:46	0.007	1	0.007	ppb			
55	G9GNJB	5/2/2005	11:20:56	0.018	1	0.018	ppb			✓
56	G9GNJC	5/2/2005	11:22:45	1	1	1	ppb	1		100
57	G8C15	5/2/2005	11:24:58	0.01	1	0.01	ppb			
58	CCV	5/2/2005	11:26:47	5.48	1	5.48	ppb	5	ppb	109.6%
59	CCB	5/2/2005	11:28:39	-0.033	1	-0.033	ppb	<0.2	ppb	
60	G8H85	5/2/2005	11:31:18	0.022	1	0.022	ppb			
61	G813T	5/2/2005	11:33:29	1.81	1	1.81	ppb			
62	G8170	5/2/2005	11:35:19	-0.001	1	-0.001	ppb			
63	G84EP	5/2/2005	11:37:21	-0.004	1	-0.004	ppb			
64	G84EPX	5/2/2005	11:39:25	0.014	1	0.014	ppb			
65	G84EPS	5/2/2005	11:41:15	1.08	1	1.08	ppb	1		108
66	G84EPD	5/2/2005	11:43:18	0.962	1	0.962	ppb	1		96
67	G84EPV	5/2/2005	11:45:08	0.006	5	0.03	ppb			
68	CCV	5/2/2005	11:46:59	5.57	1	5.57	ppb	5	ppb	111.4%
69	CCB	5/2/2005	11:48:48	-0.058	1	-0.058	ppb	<0.2	ppb	

Analyst: _____

Reviewed by: _____ 5/4/05



22 for FC
5/2/05
7470A
STD #16042905

JJ for FC 5/24/05

STD HG040805 JJM

09:27:01 02 May 2005 Folder: AA0502A Protocol: HG

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1 Seq: 1 09:27:01 02 May 05 HG

Hg .000 ppb 1118

*** Standard: 2 Rep: 1 Seq: 2 09:28:49 02 May 05 HG

Hg .200 ppb 18932

*** Standard: 3 Rep: 1 Seq: 3 09:30:50 02 May 05 HG

Hg .500 ppb 38079

*** Standard: 4 Rep: 1 Seq: 4 09:32:42 02 May 05 HG

Hg 1.00 ppb 69463

*** Standard: 5 Rep: 1 Seq: 5 09:34:33 02 May 05 HG

Hg 5.00 ppb 346091

*** Standard: 6 Rep: 1 Seq: 6 09:36:47 02 May 05 HG

Hg 10.0 ppb 660237

*** Check Standard: 4 Ck4ICV Seq: 7 09:38:49 02 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		98.9	2.47	2.50	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 8 09:40:38 02 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.020	.200	ppb	.000 %

*** Check Standard: 5 Ck5CRA Seq: 9 09:42:28 02 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		99.4	.199	.200	ppb	.000 %

*** Check Standard: 2 Ck2CCV Seq: 10 09:44:37 02 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		104.	5.20	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 11 09:46:36 02 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.006	.200	ppb	.000 %

*** Sample ID: G9EAVB AA0502A Seq: 12 09:48:25 02 May 05 HG

Hg .019 ppb .000 % .019

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: G9GMRC		AA0502A	Seq: 13	09:50:25 02 May 05	HG			
Hg	4.78	ppb	.000 %	4.78				
*** Sample ID: G843A		AA0502A	Seq: 14	09:52:13 02 May 05	HG			
Hg	.091	ppb	.000 %	.091				
*** Sample ID: G843AS		AA0502A	Seq: 15	09:54:13 02 May 05	HG			
Hg	4.74	ppb	.000 %	4.74				
*** Sample ID: G843AD		AA0502A	Seq: 16	09:56:04 02 May 05	HG			
Hg	4.99	ppb	.000 %	4.99				
*** Sample ID: G843AV		AA0502A 5X	Seq: 17	09:58:17 02 May 05	HG			
Hg	.061	ppb	.000 %	.061				
*** Sample ID: G843D		AA0502A	Seq: 18	10:00:06 02 May 05	HG			
Hg	.155	ppb	.000 %	.155				
*** Sample ID: G843F		AA0502A	Seq: 19	10:02:46 02 May 05	HG			
Hg	.037	ppb	.000 %	.037				
*** Sample ID: G843H		AA0502A	Seq: 20	10:05:00 02 May 05	HG			
Hg	.069	ppb	.000 %	.069				
*** Sample ID: G843M		AA0502A	Seq: 21	10:06:54 02 May 05	HG			
Hg	.105	ppb	.000 %	.105				

*** Check Standard: 2 Ck2CCV Seq: 22 10:10:39 02 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		107.	5.33	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 23 10:12:27 02 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.061	.200	ppb	.000 %

*** Sample ID: G843P		AA0502A	Seq: 24	10:15:27 02 May 05	HG			
Hg	-.005	ppb	.000 %	-.005				

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID: G843R			AA0502A	Seq: 25		10:17:18 02 May 05			HG
Hg	.030	ppb	.000 %	.030					
*** Sample ID: G843X			AA0502A	Seq: 26		10:19:59 02 May 05			HG
Hg	.003	ppb	.000 %	.003					
*** Sample ID: G85JQ			AA0502A	Seq: 27		10:21:53 02 May 05			HG
Hg	.007	ppb	.000 %	.007					
*** Sample ID: G89LL			AA0502A	Seq: 28		10:24:43 02 May 05			HG
Hg	.025	ppb	.000 %	.025					
*** Sample ID: G9A7F			AA0502A	Seq: 29		10:26:32 02 May 05			HG
Hg	.109	ppb	.000 %	.109					
*** Sample ID: G9A7P			AA0502A	Seq: 30		10:28:21 02 May 05			HG
Hg	.005	ppb	.000 %	.005					
*** Sample ID: G9ECFB			AA0502A	Seq: 31		10:30:31 02 May 05			HG
Hg	.008	ppb	.000 %	.008					
*** Sample ID: G9GMTC			AA0502A	Seq: 32		10:32:22 02 May 05			HG
Hg	4.18	ppb	.000 %	4.18					
*** Sample ID: G8WP7			AA0502A	Seq: 33		10:34:13 02 May 05			HG
Hg	-.031	ppb	.000 %	-.031					
*** Check Standard: 2 Ck2CCV				Seq: 34		10:36:05 02 May 05			HG
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		108.	5.38	5.00	ppb	.000 %			
*** Check Standard: 1 Ck1CCB				Seq: 35		10:37:59 02 May 05			HG
Line	Flag	Found	Range(+/-)	Units	SD/RSD				
Hg		-.034	.200	ppb	.000 %				
*** Sample ID: G8WP7S			AA0502A	Seq: 36		10:40:29 02 May 05			HG
Hg	5.13	ppb	.000 %	5.13					

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: G8WP7D AA0502A Seq: 37 10:42:21 02 May 05 HG

Hg 4.97 ppb .000 % 4.97

*** Sample ID: G8WP7V AA0502A Seq: 38 10:44:30 02 May 05 HG
5X

Hg .022 ppb .000 % .022

*** Sample ID: G8WQL AA0502A Seq: 39 10:46:29 02 May 05 HG

Hg .007 ppb .000 % .007

*** Sample ID: G8WQN AA0502A Seq: 40 10:48:23 02 May 05 HG

Hg .010 ppb .000 % .010

*** Sample ID: G8WQR AA0502A Seq: 41 10:50:14 02 May 05 HG

Hg -.001 ppb .000 % -.001

*** Sample ID: G8WQT AA0502A Seq: 42 10:52:48 02 May 05 HG

Hg .015 ppb .000 % .015

*** Sample ID: G8WR6 AA0502A Seq: 43 10:54:48 02 May 05 HG

Hg .027 ppb .000 % .027

*** Sample ID: G8WTA AA0502A Seq: 44 10:57:20 02 May 05 HG

Hg .010 ppb .000 % .010

*** Sample ID: G8WTE AA0502A Seq: 45 10:59:50 02 May 05 HG

Hg .008 ppb .000 % .008

*** Check Standard: 2 Ck2CCV Seq: 46 11:01:49 02 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		109.	5.44	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 47 11:03:37 02 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.050	.200	ppb	.000 %

*** Sample ID: G8WTG AA0502A Seq: 48 11:05:57 02 May 05 HG

Hg .009 ppb .000 % .009

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: G8WTR AA0502A Seq: 49 11:08:20 02 May 05 HG

Hg .004 ppb .000 % .004

*** Sample ID: G8WTV AA0502A Seq: 50 11:10:44 02 May 05 HG

Hg -.001 ppb .000 % -.001

*** Sample ID: G8WTW AA0502A Seq: 51 11:12:53 02 May 05 HG

Hg -.006 ppb .000 % -.006

*** Sample ID: G8WTX AA0502A Seq: 52 11:14:42 02 May 05 HG

Hg .011 ppb .000 % .011

*** Sample ID: G8WT0 AA0502A Seq: 53 11:16:45 02 May 05 HG

Hg .011 ppb .000 % .011

*** Sample ID: G8WT1 AA0502A Seq: 54 11:18:46 02 May 05 HG

Hg .007 ppb .000 % .007

*** Sample ID: G9GNJB AA0502A Seq: 55 11:20:56 02 May 05 HG

Hg .018 ppb .000 % .018

*** Sample ID: G9GNJC AA0502A Seq: 56 11:22:45 02 May 05 HG

Hg 1.00 ppb .000 % 1.00

*** Sample ID: G8C15 AA0502A Seq: 57 11:24:58 02 May 05 HG

Hg .010 ppb .000 % .010

*** Check Standard: 2 Ck2CCV Seq: 58 11:26:47 02 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		110.	5.48	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 59 11:28:39 02 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.033	.200	ppb	.000 %

*** Sample ID: G8H85 AA0502A Seq: 60 11:31:18 02 May 05 HG

Hg .022 ppb .000 % .022

11:33:29 02 May 2005 Folder: AA0502A Protocol: HG

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID: G813T			AA0502A	Seq: 61		11:33:29 02 May 05			HG
Hg	1.81	ppb	.000 %	1.81					
*** Sample ID: G8170			AA0502A	Seq: 62		11:35:19 02 May 05			HG
Hg	-.001	ppb	.000 %	-.001					
*** Sample ID: G84EP			AA0502A	Seq: 63		11:37:21 02 May 05			HG
Hg	-.004	ppb	.000 %	-.004					
*** Sample ID: G84EPX			AA0502A	Seq: 64		11:39:25 02 May 05			HG
Hg	.014	ppb	.000 %	.014					
*** Sample ID: G84EPS			AA0502A	Seq: 65		11:41:15 02 May 05			HG
Hg	1.08	ppb	.000 %	1.08					
*** Sample ID: G84EPD			AA0502A	Seq: 66		11:43:18 02 May 05			HG
Hg	.962	ppb	.000 %	.962					
*** Sample ID: G84EPV			AA0502A 5X	Seq: 67		11:45:08 02 May 05			HG
Hg	.006	ppb	.000 %	.006					

*** Check Standard: 2 Ck2CCV Seq: 68 11:46:59 02 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		111.	5.57	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 69 11:48:48 02 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.058	.200	ppb	.000 %

*** Sample ID: G9F5WC			AA0502A	Seq: 70		12:46:21 02 May 05			HG
Hg	1.75	ppb	.000 %	1.75					

METALS MISCELLANEOUS DATA

SEVERN TRENT **STL** Metals Prep Report for Batch # 5115334

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Prep Method: SW-846 3010A **SOP Number:** STL-IP-0013, Rev 6

Extraction Code: 05 **Extraction:** TOTAL **Matrix:** WATER **Prep Date:** 4/25/2005

Standard Log Ref#: MET-04/05-H20

Lot ID	Work Order #	Initial Wt/Vol	Final Volume	Lab Filtered	Due Date	Sample Location	Target List
F5D220359-001	G8170	50 mL	50 mL	☐	05/04/2005	METS,A94	AL CA FE K MG NA ZN
F5D220359-001S	G8170S	50 mL	50 mL	☐		METS,A94	
F5D220359-001X	G8170X	50 mL	50 mL	☐		METS,A94	
F5D220359-002	G84EP	50 mL	50 mL	☐	05/04/2005	METS,A94	
F5D250000-334B	G8496B	50 mL	50 mL	☐			
F5D250000-334C	G8496C	50 mL	50 mL	☐			

Comments:

Chemical Lot Information

Chemical	Lot Number
Hydrochloric Acid	4104090
Nitric Acid	1104100

Custody Information

Relinquished By: MC

Review/Received By: JH

Date of Transfer: 4-21-05

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.16, updated 2/7/2005

SEVERN TRENT **STL** Mercury Prep Report for Batch # 5119205

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Prep Method: SW-846 7470A **SOP Number:** STL-MT-0006, Rev 0

Extraction Code: 19 **Extraction:** TOTAL **Matrix:** WATER **Prep Date:** 4/29/2005

Time In: 14:00 **Temp In:** 94 C

Time Out: 10:00 **Temp Out:** 95 C **Standard Log Ref#:** HG042905

Lot ID	Work Order #		Initial Wt/Vol	Final Volume	Lab Filtered	Due Date	Sample Location
F5D140191-001	G8C15	[redacted]	30 mL	30 mL	☐	05/10/2005	A1,RAD15,MET
F5D160137-001	G8H86	[redacted]	30 mL	30 mL	☐	05/12/2005	RAD22,A28,ME
F5D220333-010	G813T	[redacted]	30 mL	30 mL	☐	05/10/2005	V90,A91,A90ME
F5D220359-001	G8170	[redacted]	30 mL	30 mL	☐	05/11/2005	METS,A94
F5D220359-002	G84EP	[redacted]	30 mL	30 mL	☐	05/11/2005	METS,A94
F5D220359-002D	G84EPD	[redacted]	30 mL	30 mL	☐		METS,A94
F5D220359-002S	G84EPS	[redacted]	30 mL	30 mL	☐		METS,A94
F5D220359-002X	G84EPX	[redacted]	30 mL	30 mL	☐		METS,A94
F5D290000-205B	G9GNJB	[redacted]	30 mL	30 mL	☐		
F5D290000-205C	G9GNJC	[redacted]	30 mL	30 mL	☐		

Comments:

Custody Information

Relinquished By: FedEx Ground

Review/Received By: FedEx FC

Date of Transfer: 4/29/05

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.13, updated 8/3/2004

METALS SAMPLE AND QC SUMMARY RESULTS

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8170 **Client ID:** RE73-05-58920

Matrix: Water **Units:** ug/L **Prep Date:** 4/25/05 **Prep Batch:** 5115332

Weight: 50 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Antimony	123	0.61	2.0	0.61	U	2	ICPMS	4/27/05	21:05
Arsenic	75	1.8	10.0	1.8	U	2	ICPMS	4/27/05	21:05
Barium	**135**	**0.60**	**200**	**2.0**	**B**	**2**	**ICPMS**	**4/27/05**	**21:05**
Beryllium	9	0.13	2.0	0.13	U	2	ICPMS	4/27/05	21:05
Cadmium	111	0.067	2.0	0.067	U	2	ICPMS	4/27/05	21:05
Chromium	**52**	**3.7**	**10.0**	**4.4**	**B**	**2**	**ICPMS**	**4/27/05**	**21:05**
Cobalt	59	0.52	50.0	0.52	U	2	ICPMS	4/27/05	21:05
Copper	65	0.72	25.0	0.72	U	2	ICPMS	4/27/05	21:05
Lead	208	0.57	3.0	0.57	U	2	ICPMS	4/27/05	21:05
Manganese	55	0.54	15.0	0.54	U	2	ICPMS	4/27/05	21:05
Nickel	60	1.2	20.0	1.2	U	2	ICPMS	4/27/05	21:05
Selenium	**82**	**0.57**	**1.0**	**0.93**	**B**	**2**	**ICPMS**	**4/27/05**	**21:05**
Silver	107	1.5	10.0	1.5	U	2	ICPMS	4/27/05	21:05
Thallium	**205**	**0.22**	**1.0**	**0.63**	**B**	**2**	**ICPMS**	**4/27/05**	**21:05**
Vanadium	51	1.6	50.0	1.6	U	2	ICPMS	4/27/05	21:05

Comments: Lot #: F5D220359 Sample #: 1

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G84EP **Client ID:** RE73-05-58921

Matrix: Water **Units:** ug/L **Prep Date:** 4/25/05 **Prep Batch:** 5115332

Weight: 50 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Antimony	123	0.61	2.0	0.61	U	2	ICPMS	4/27/05	21:31
Arsenic	75	1.8	10.0	1.8	U	2	ICPMS	4/27/05	21:31
Barium	**135**	**0.60**	**200**	**0.68**	**B**	**2**	**ICPMS**	**4/27/05**	**21:31**
Beryllium	9	0.13	2.0	0.13	U	2	ICPMS	4/27/05	21:31
Cadmium	111	0.067	2.0	0.067	U	2	ICPMS	4/27/05	21:31
Chromium	52	3.7	10.0	3.7	U	2	ICPMS	4/27/05	21:31
Cobalt	59	0.52	50.0	0.52	U	2	ICPMS	4/27/05	21:31
Copper	65	0.72	25.0	0.72	U	2	ICPMS	4/27/05	21:31
Lead	208	0.57	3.0	0.57	U	2	ICPMS	4/27/05	21:31
Manganese	55	0.54	15.0	0.54	U	2	ICPMS	4/27/05	21:31
Nickel	60	1.2	20.0	1.2	U	2	ICPMS	4/27/05	21:31
Selenium	**82**	**0.57**	**1.0**	**0.65**	**B**	**2**	**ICPMS**	**4/27/05**	**21:31**
Silver	107	1.5	10.0	1.5	U	2	ICPMS	4/27/05	21:31
Thallium	205	0.22	1.0	0.22	U	2	ICPMS	4/27/05	21:31
Vanadium	51	1.6	50.0	1.6	U	2	ICPMS	4/27/05	21:31

Comments: Lot #: F5D220359 Sample #: 2

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICPMS **Units:** ug/L

Chart Number: 042705M2.REP **Acceptable Range:** 90% - 110%

Standard Source: INORGANIC VENTURES **Standard ID:** See Standards Log

Element	WL/ Mass	True Conc	ICV 4/27/05 7:26 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Antimony	123	200.0	197.63	98.8								
Arsenic	75	200.0	201.38	100.7								
Barium	135	200.0	204.65	102.3								
Beryllium	9	200.0	204.20	102.1								
Cadmium	111	200.0	191.39	95.7								
Chromium	52	200.0	194.41	97.2								
Cobalt	59	200.0	199.24	99.6								
Copper	65	200.0	200.73	100.4								
Lead	208	200.0	196.43	98.2								
Manganese	55	200.0	200.52	100.3								
Nickel	60	200.0	198.06	99.0								
Selenium	82	200.0	199.40	99.7								
Silver	107	50.0	48.13	96.3								
Thallium	205	200.0	192.66	96.3								
Vanadium	51	200.0	193.01	96.5								

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPMS **Units:** ug/L

Chart Number: 042705M2.REP **Acceptable Range:** 90% - 110%

Standard Source: INORGANIC VENTURES **Standard ID:** See Standards Log

Element	WL/ Mass	True Conc	CCV 4/27/05 7:56 PM Found	% Rec	CCV 4/27/05 8:42 PM Found	% Rec	CCV 4/27/05 9:46 PM Found	% Rec	Found	% Rec	Found	% Rec
Antimony	123	200.0	198.12	99.1	195.11	97.6	197.02	98.5				
Arsenic	75	200.0	199.76	99.9	199.50	99.7	198.32	99.2				
Barium	135	200.0	206.86	103.4	209.10	104.5	203.78	101.9				
Beryllium	9	200.0	193.28	96.6	192.38	96.2	195.08	97.5				
Cadmium	111	200.0	193.74	96.9	192.18	96.1	193.65	96.8				
Chromium	52	200.0	195.89	97.9	195.26	97.6	194.53	97.3				
Cobalt	59	200.0	203.91	102.0	188.89	94.4	191.64	95.8				
Copper	65	200.0	199.87	99.9	192.34	96.2	198.99	99.5				
Lead	208	200.0	194.30	97.1	193.74	96.9	193.18	96.6				
Manganese	55	200.0	200.00	100.0	193.11	96.6	194.15	97.1				
Nickel	60	200.0	196.87	98.4	191.78	95.9	198.14	99.1				
Selenium	82	200.0	198.17	99.1	199.39	99.7	196.90	98.5				
Silver	107	50.0	49.42	98.8	48.35	96.7	48.79	97.6				
Thallium	205	200.0	190.51	95.3	192.45	96.2	190.85	95.4				
Vanadium	51	200.0	194.78	97.4	188.54	94.3	191.66	95.8				

STL-ST. LOUIS

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: ICPMS **Units:** ug/L

Chart Number: 042705M2.REP **Acceptable Range:** 50% - 150%

Standard Source: Inorganic Ventures **Standard ID:** See Standards Log

Element	WL/ Mass	True Conc	CRI 4/27/05 7:39 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Antimony	123	60.0	58.77	**98.0**								
Arsenic	75	10.0	10.21	**102.1**								
Barium	135	200.0	204.35	**102.2**								
Beryllium	9	5.0	5.18	**103.7**								
Cadmium	111	5.0	4.92	**98.3**								
Chromium	52	10.0	9.90	**99.0**								
Cobalt	59	50.0	49.63	**99.3**								
Copper	65	25.0	24.99	**100.0**								
Lead	208	3.0	3.05	**101.6**								
Manganese	55	15.0	15.49	**103.3**								
Nickel	60	40.0	39.64	**99.1**								
Selenium	82	5.0	5.22	**104.5**								
Silver	107	10.0	9.86	**98.6**								
Thallium	205	10.0	9.63	**96.3**								
Vanadium	51	50.0	50.78	**101.6**								

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: 042705M2.REP

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 4/27/05 7:32 PM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Antimony	123	1	0.3	U								
Arsenic	75	5	0.9	U								
Barium	135	100	0.3	U								
Beryllium	9	1	0.1	U								
Cadmium	111	1	0.0	U								
Chromium	52	5	1.9	U								
Cobalt	59	25	0.3	U								
Copper	65	12.5	0.4	U								
Lead	208	1.5	0.3	U								
Manganese	55	7.5	0.3	U								
Nickel	60	10	0.6	U								
Selenium	82	0.5	0.3	B								
Silver	107	5	0.8	U								
Thallium	205	0.5	0.2	B								
Vanadium	51	25	0.8	U								

U Result is less than the IDL
B Result is between IDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: 042705M2.REP

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 4/27/05 8:01 PM Found	Q	CCB 4/27/05 8:48 PM Found	Q	CCB 4/27/05 9:52 PM Found	Q	Found	Q	Found	Q
Antimony	123	1	0.3	U	0.3	U	0.3	U				
Arsenic	75	5	0.9	U	0.9	U	**1.0**	**B**				
Barium	135	100	0.3	U	0.3	U	0.3	U				
Beryllium	9	1	**0.1**	**U**	**0.1**	**U**	**0.1**	**U**				
Cadmium	111	1	**0.0**	**U**	**0.0**	**U**	**0.0**	**U**				
Chromium	52	5	**1.9**	**U**	**1.9**	**U**	**1.9**	**U**				
Cobalt	59	25	**0.3**	**U**	**0.3**	**U**	**0.3**	**U**				
Copper	65	12.5	**0.4**	**U**	**0.4**	**U**	**0.4**	**U**				
Lead	208	1.5	0.3	U	0.3	U	0.3	U				
Manganese	55	7.5	0.3	U	0.3	U	0.3	U				
Nickel	60	10	**0.6**	**U**	**0.6**	**U**	**0.6**	**U**				
Selenium	82	0.5	**0.4**	**B**	**0.4**	**B**	**0.3**	**B**				
Silver	107	5	0.8	U	0.8	U	0.8	U				
Thallium	205	0.5	**0.4**	**B**	**0.3**	**B**	**0.3**	**B**				
Vanadium	51	25	0.8	U	0.8	U	0.8	U				

Version 4.75.1

U Result is less than the IDL
B Result is between IDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: G849VB

Matrix: Water **Units:** ug/L **Prep Date:** 4/25/05 **Prep Batch:** 5115332

Weight: 50 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Antimony	123	0.61	2.0	0.61	U	2	ICPMS	4/27/05	20:54
Arsenic	75	1.8	10.0	1.8	U	2	ICPMS	4/27/05	20:54
Barium	135	0.60	200	0.60	U	2	ICPMS	4/27/05	20:54
Beryllium	9	0.13	2.0	0.13	U	2	ICPMS	4/27/05	20:54
Cadmium	111	0.067	2.0	0.067	U	2	ICPMS	4/27/05	20:54
Chromium	52	3.7	10.0	3.7	U	2	ICPMS	4/27/05	20:54
Cobalt	59	0.52	50.0	0.52	U	2	ICPMS	4/27/05	20:54
Copper	65	0.72	25.0	0.72	U	2	ICPMS	4/27/05	20:54
Lead	208	0.57	3.0	0.57	U	2	ICPMS	4/27/05	20:54
Manganese	55	0.54	15.0	0.54	U	2	ICPMS	4/27/05	20:54
Nickel	60	1.2	20.0	1.2	U	2	ICPMS	4/27/05	20:54
Selenium	**82**	**0.57**	**1.0**	**0.98**	**B**	**2**	**ICPMS**	**4/27/05**	**20:54**
Silver	107	1.5	10.0	1.5	U	2	ICPMS	4/27/05	20:54
Thallium	205	0.22	1.0	0.22	U	2	ICPMS	4/27/05	20:54
Vanadium	51	1.6	50.0	-2.7	B	2	ICPMS	4/27/05	20:54

Comments: Lot #: F5D220359

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPMS **Units:** ug/L

Chart Number: 042705M2.REP **Acceptable Range:** 50% - 150%

Standard Source: Inorganic Ventures **Standard ID:** See Standards Log

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 4/27/05 7:51 PM Found	Found	Found	Found	Found
Antimony	123	1		0				
Arsenic	75	5		0				
Barium	135	100		0				
Beryllium	9	1		0				
Cadmium	111	1		0				
Chromium	52	5		1				
Cobalt	59	25		0				
Copper	65	12.5		0				
Lead	208	1.5		1				
Manganese	55	7.5		1				
Nickel	60	10		1				
Selenium	82	0.5		0				
Silver	107	5		0				
Thallium	205	0.5		0				
Vanadium	51	25		-1				

STL-ST. LOUIS

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPMS

Units: ug/L

Chart Number: 042705M2.REP

Acceptable Range: 50% - 150%

Standard Source: Inorganic Ventures

Standard ID: See Standards Log

Element	WL/ Mass	True Conc	ICSAB 4/27/05 7:45 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Antimony	123	100	101.5	**101.5**								
Arsenic	75	100	103.3	**103.3**								
Barium	135	50	50.9	**101.8**								
Beryllium	9	50	49.7	**99.4**								
Cadmium	111	100	99.2	**99.2**								
Chromium	52	50	51.8	**103.6**								
Cobalt	59	50	48.9	**97.7**								
Copper	65	50	48.2	**96.5**								
Lead	208	100	96.4	**96.4**								
Manganese	55	50	51.8	**103.6**								
Nickel	60	100	98.1	**98.1**								
Selenium	82	100	98.6	**98.6**								
Silver	107	100	93.0	**93.0**								
Thallium	205	100	98.3	**98.3**								
Vanadium	51	50	49.9	**99.8**								

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: G8170S

Original Sample ID: G8170 **Client ID:** RE73-05-58920 S

Matrix: Water **Units:** ug/L **Prep Date:** 4/25/05 **Prep Batch:** 5115332

Weight: 50 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Antimony	123	0.61	U	94.1		100	94.1	2	2	ICPMS	4/27/05	21:05	4/27/05	21:20
Arsenic	75	1.8	U	39.0		40	97.5	2	2	ICPMS	4/27/05	21:05	4/27/05	21:20
Barium	135	2.0	B	994		1000	99.1	2	2	ICPMS	4/27/05	21:05	4/27/05	21:15
Beryllium	9	0.13	U	23.6		25	94.5	2	2	ICPMS	4/27/05	21:05	4/27/05	21:15
Cadmium	111	0.067	U	4.8		5	96.6	2	2	ICPMS	4/27/05	21:05	4/27/05	21:20
Chromium	52	4.4	B	103		100	98.8	2	2	ICPMS	4/27/05	21:05	4/27/05	21:15
Cobalt	59	0.52	U	232		250	92.9	2	2	ICPMS	4/27/05	21:05	4/27/05	21:15
Copper	65	0.72	U	115		125	92.2	2	2	ICPMS	4/27/05	21:05	4/27/05	21:15
Lead	208	0.57	U	19.4		20	97.1	2	2	ICPMS	4/27/05	21:05	4/27/05	21:20
Manganese	55	0.54	U	228		250	91.4	2	2	ICPMS	4/27/05	21:05	4/27/05	21:15
Nickel	60	1.2	U	235		250	93.8	2	2	ICPMS	4/27/05	21:05	4/27/05	21:15
Selenium	82	0.93	B	10.4		10	94.6	2	2	ICPMS	4/27/05	21:05	4/27/05	21:20
Silver	107	1.5	U	24.1		25	96.3	2	2	ICPMS	4/27/05	21:05	4/27/05	21:15
Thallium	205	0.63	B	48.6		50	95.9	2	2	ICPMS	4/27/05	21:05	4/27/05	21:20
Vanadium	51	1.6	U	257		250	102.6	2	2	ICPMS	4/27/05	21:05	4/27/05	21:15

Comments: Lot #: F5D220359 Sample #: 1

Version 4.75.1

U Result is less than the IDL
B Result is between IDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Duplicate Sample Results

Lab Sample ID: G8170X **Client ID:** RE73-05-58920 X

Matrix: Water **Units:** ug/L **Prep Date:** 4/25/05 **Prep Batch:** 5115332

Weight: 50 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	IDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Antimony	123	0.61	2.0	0.61	U	2	ICPMS	4/27/05	21:10
Arsenic	75	1.8	10.0	1.8	U	2	ICPMS	4/27/05	21:10
Barium	**135**	**0.60**	**200**	**1.9**	**B**	**2**	**ICPMS**	**4/27/05**	**21:10**
Beryllium	9	0.13	2.0	0.13	U	2	ICPMS	4/27/05	21:10
Cadmium	111	0.067	2.0	0.067	U	2	ICPMS	4/27/05	21:10
Chromium	52	3.7	10.0	3.7	U	2	ICPMS	4/27/05	21:10
Cobalt	59	0.52	50.0	0.52	U	2	ICPMS	4/27/05	21:10
Copper	**65**	**0.72**	**25.0**	**0.78**	**B**	**2**	**ICPMS**	**4/27/05**	**21:10**
Lead	208	0.57	3.0	0.57	U	2	ICPMS	4/27/05	21:10
Manganese	55	0.54	15.0	0.54	U	2	ICPMS	4/27/05	21:10
Nickel	60	1.2	20.0	1.2	U	2	ICPMS	4/27/05	21:10
Selenium	**82**	**0.57**	**1.0**	**0.75**	**B**	**2**	**ICPMS**	**4/27/05**	**21:10**
Silver	107	1.5	10.0	1.5	U	2	ICPMS	4/27/05	21:10
Thallium	205	0.22	1.0	0.22	U	2	ICPMS	4/27/05	21:10
Vanadium	51	1.6	50.0	1.6	U	2	ICPMS	4/27/05	21:10

Comments: Lot #: F5D220359 Sample #: 1

Version 4.75.1

U Result is less than the IDL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Duplicate RPD Report

Duplicate Sample ID: G8170X

Original Sample ID: G8170 **Client ID:** RE73-05-58920 X

Matrix: Water **Units:** ug/L **Prep Date:** 4/25/05 **Prep Batch:** 5115332

Weight: 50 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	Dupe Conc	Q	% RPD	OS DF	Dupe DF	Instr	OS Anal Date	OS Anal Time	Dupe Anal Date	Dupe Anal Time
Antimony	123	0.61	U	0.61	U		2	2	ICPMS	4/27/05	21:05	4/27/05	21:10
Arsenic	75	1.8	U	1.8	U		2	2	ICPMS	4/27/05	21:05	4/27/05	21:10
Barium	135	2.0	B	1.9	B	0.1	2	2	ICPMS	4/27/05	21:05	4/27/05	21:10
Beryllium	9	0.13	U	0.13	U		2	2	ICPMS	4/27/05	21:05	4/27/05	21:10
Cadmium	111	0.067	U	0.067	U		2	2	ICPMS	4/27/05	21:05	4/27/05	21:10
Chromium	52	4.4	B	3.7	U	1.0	2	2	ICPMS	4/27/05	21:05	4/27/05	21:10
Cobalt	59	0.52	U	0.52	U		2	2	ICPMS	4/27/05	21:05	4/27/05	21:10
Copper	65	0.72	U	0.78	B	0.2	2	2	ICPMS	4/27/05	21:05	4/27/05	21:10
Lead	208	0.57	U	0.57	U		2	2	ICPMS	4/27/05	21:05	4/27/05	21:10
Manganese	55	0.54	U	0.54	U		2	2	ICPMS	4/27/05	21:05	4/27/05	21:10
Nickel	60	1.2	U	1.2	U		2	2	ICPMS	4/27/05	21:05	4/27/05	21:10
Selenium	82	0.93	B	0.75	B	0.2	2	2	ICPMS	4/27/05	21:05	4/27/05	21:10
Silver	107	1.5	U	1.5	U		2	2	ICPMS	4/27/05	21:05	4/27/05	21:10
Thallium	205	0.63	B	0.22	U	0.5	2	2	ICPMS	4/27/05	21:05	4/27/05	21:10
Vanadium	51	1.6	U	1.6	U		2	2	ICPMS	4/27/05	21:05	4/27/05	21:10

Version 4.75.1

U Result is less than the IDL
B Result is between IDL and RL
* Duplicate analysis RPD was not within limits

Form 6 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: G849VC

Matrix: Water **Units:** ug/L **Prep Date:** 4/25/05 **Prep Batch:** 5115332

Weight: 50 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Antimony	123	500	472	94.4		80-120	2	ICPMS	4/27/05	21:00
Arsenic	75	500	510	101.9		80-120	2	ICPMS	4/27/05	21:00
Barium	135	500	491	98.2		80-120	2	ICPMS	4/27/05	21:00
Beryllium	9	500	463	92.6		80-120	2	ICPMS	4/27/05	21:00
Cadmium	111	500	470	94.0		80-120	2	ICPMS	4/27/05	21:00
Chromium	52	500	485	96.9		80-120	2	ICPMS	4/27/05	21:00
Cobalt	59	500	462	92.4		80-120	2	ICPMS	4/27/05	21:00
Copper	65	500	456	91.3		80-120	2	ICPMS	4/27/05	21:00
Lead	208	500	465	93.0		80-120	2	ICPMS	4/27/05	21:00
Manganese	55	500	466	93.3		80-120	2	ICPMS	4/27/05	21:00
Nickel	60	500	470	94.1		80-120	2	ICPMS	4/27/05	21:00
Selenium	82	500	479	95.7		80-120	2	ICPMS	4/27/05	21:00
Silver	107	125	118	94.6		80-120	2	ICPMS	4/27/05	21:00
Thallium	205	500	456	91.1		80-120	2	ICPMS	4/27/05	21:00
Vanadium	51	500	470	93.9		80-120	2	ICPMS	4/27/05	21:00

Comments: Lot #: F5D220359

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

Form 7 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: G8170V

Original Sample ID: G8170 **Client ID:** RE73-05-58920

Matrix: Water **Units:** ug/L **Prep Date:** 4/25/05 **Prep Batch:** 5115332

Weight: 50 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Antimony	123	0.61	U	3.0	U		2	10	ICPMS	4/27/05	21:05	4/27/05	21:25
Arsenic	75	1.8	U	12.7	B		2	10	ICPMS	4/27/05	21:05	4/27/05	21:25
Barium	135	2.0	B	3.0	U		2	10	ICPMS	4/27/05	21:05	4/27/05	21:25
Beryllium	9	0.13	U	0.63	U		2	10	ICPMS	4/27/05	21:05	4/27/05	21:25
Cadmium	111	0.067	U	0.34	U		2	10	ICPMS	4/27/05	21:05	4/27/05	21:25
Chromium	52	4.4	B	18.5	U		2	10	ICPMS	4/27/05	21:05	4/27/05	21:25
Cobalt	59	0.52	U	2.6	U		2	10	ICPMS	4/27/05	21:05	4/27/05	21:25
Copper	65	0.72	U	3.6	U		2	10	ICPMS	4/27/05	21:05	4/27/05	21:25
Lead	208	0.57	U	2.8	U		2	10	ICPMS	4/27/05	21:05	4/27/05	21:25
Manganese	55	0.54	U	2.7	U		2	10	ICPMS	4/27/05	21:05	4/27/05	21:25
Nickel	60	1.2	U	5.8	U		2	10	ICPMS	4/27/05	21:05	4/27/05	21:25
Selenium	82	0.93	B	2.9	U		2	10	ICPMS	4/27/05	21:05	4/27/05	21:25
Silver	107	1.5	U	7.5	U		2	10	ICPMS	4/27/05	21:05	4/27/05	21:25
Thallium	205	0.63	B	2.9	B		2	10	ICPMS	4/27/05	21:05	4/27/05	21:25
Vanadium	51	1.6	U	12.1	B		2	10	ICPMS	4/27/05	21:05	4/27/05	21:25

Comments: 10X

Version 4.75.1

U Result is less than the IDL
B Result is between IDL and RL
E Serial dilution percent difference not within limits

Form 9 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICPMS **Units:** ppb

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Antimony	123.00	1	0.30	1/28/05
Arsenic	75.00	5	0.90	1/28/05
Barium	135.00	100	0.30	1/28/05
Beryllium	9.00	1	0.063	1/28/05
Cadmium	111.00	1	0.034	1/28/05
Chromium	52.00	5	1.9	1/28/05
Cobalt	59.00	25	0.26	1/28/05
Copper	65.00	12.5	0.36	1/28/05
Lead	208.00	1.5	0.28	1/28/05
Manganese	55.00	7.5	0.27	1/28/05
Nickel	60.00	10	0.58	1/28/05
Selenium	82.00	0.5	0.29	1/28/05
Silver	107.00	5	0.75	1/28/05
Thallium	205.00	0.5	0.11	1/28/05
Vanadium	51.00	25	0.81	1/28/05

STL-ST. LOUIS

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICPMS **Units:** ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Antimony	123.00	20000	6/21/04
Arsenic	75.00	20000	6/21/04
Barium	135.00	4000	6/21/04
Beryllium	9.00	4000	6/21/04
Cadmium	111.00	20000	6/21/04
Chromium	52.00	20000	6/21/04
Cobalt	59.00	20000	6/21/04
Copper	65.00	4000	6/21/04
Lead	208.00	4000	6/21/04
Manganese	55.00	20000	6/21/04
Nickel	60.00	20000	6/21/04
Selenium	82.00	20000	6/21/04
Silver	107.00	4000	6/21/04
Thallium	205.00	2000	6/21/04
Vanadium	51.00	4000	6/21/04

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Log

Preparation Batch: 5115332 **Instrument:** ICP **Matrix:** Water

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
G849VB	4/25/05	50	50	NA
G849VC	4/25/05	50	50	NA
G8170	4/25/05	50	50	NA
G8170S	4/25/05	50	50	NA
G8170X	4/25/05	50	50	NA
G84EP	4/25/05	50	50	NA

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPMS **Chart Number:** 042705M2.REP

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
Blank		4/27/05	18:55
Standard 1		4/27/05	19:00
Standard 2		4/27/05	19:06
Standard 3		4/27/05	19:11
Standard 4		4/27/05	19:16
Standard 5		4/27/05	19:21
ICV		4/27/05	19:26
ICB		4/27/05	19:32
CRI		4/27/05	19:39
ICSAB		4/27/05	19:45
ICSA		4/27/05	19:51
CCV		4/27/05	19:56
CCB		4/27/05	20:01
ZZZZZZ		4/27/05	20:06
ZZZZZZ		4/27/05	20:11
ZZZZZZ		4/27/05	20:16
ZZZZZZ		4/27/05	20:22
ZZZZZZ		4/27/05	20:27
ZZZZZZ		4/27/05	20:32
ZZZZZZ		4/27/05	20:37
CCV		4/27/05	20:42
CCB		4/27/05	20:48
G849VB		4/27/05	20:54
G849VC		4/27/05	21:00
G8170	RE73-05-58920	4/27/05	21:05
G8170X	RE73-05-58920 X	4/27/05	21:10
G8170S	RE73-05-58920 S	4/27/05	21:15
G8170S	RE73-05-58920 S	4/27/05	21:20
G8170V	RE73-05-58920	4/27/05	21:25
G84EP	RE73-05-58921	4/27/05	21:31
ZZZZZZ		4/27/05	21:36
ZZZZZZ		4/27/05	21:41
CCV		4/27/05	21:46
CCB		4/27/05	21:52
ZZZZZZ		4/27/05	21:58
ZZZZZZ		4/27/05	22:04
ZZZZZZ		4/27/05	22:09
ZZZZZZ		4/27/05	22:14
ZZZZZZ		4/27/05	22:19

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPMS **Chart Number:** 042705M2.REP

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		4/27/05	22:24
ZZZZZZ		4/27/05	22:29
ZZZZZZ		4/27/05	22:34
ZZZZZZ		4/27/05	22:40
ZZZZZZ		4/27/05	22:45
ZZZZZZ		4/27/05	22:50
ZZZZZZ		4/27/05	22:56
ZZZZZZ		4/27/05	23:02
ZZZZZZ		4/27/05	23:07
ZZZZZZ		4/27/05	23:13
ZZZZZZ		4/27/05	23:18
ZZZZZZ		4/27/05	23:23
ZZZZZZ		4/27/05	23:28
ZZZZZZ		4/27/05	23:33
ZZZZZZ		4/27/05	23:38
ZZZZZZ		4/27/05	23:43
ZZZZZZ		4/27/05	23:48
ZZZZZZ		4/27/05	23:54
ZZZZZZ		4/28/05	0:00
ZZZZZZ		4/28/05	0:06
ZZZZZZ		4/28/05	0:11
ZZZZZZ		4/28/05	0:16
ZZZZZZ		4/28/05	0:21
ZZZZZZ		4/28/05	0:26
ZZZZZZ		4/28/05	0:32
ZZZZZZ		4/28/05	0:37
ZZZZZZ		4/28/05	0:42
ZZZZZZ		4/28/05	0:47
ZZZZZZ		4/28/05	0:52
ZZZZZZ		4/28/05	0:57
ZZZZZZ		4/28/05	1:04
ZZZZZZ		4/28/05	1:10
ZZZZZZ		4/28/05	1:15
ZZZZZZ		4/28/05	1:20
ZZZZZZ		4/28/05	1:25
ZZZZZZ		4/28/05	1:30
ZZZZZZ		4/28/05	1:35
ZZZZZZ		4/28/05	1:40
ZZZZZZ		4/28/05	1:45

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPMS **Chart Number:** 042705M2.REP

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		4/28/05	1:51
ZZZZZZ		4/28/05	1:56
ZZZZZZ		4/28/05	2:01
ZZZZZZ		4/28/05	2:07
ZZZZZZ		4/28/05	2:13
ZZZZZZ		4/28/05	2:18
ZZZZZZ		4/28/05	2:23
ZZZZZZ		4/28/05	2:29
ZZZZZZ		4/28/05	2:34
ZZZZZZ		4/28/05	2:39
ZZZZZZ		4/28/05	2:44
ZZZZZZ		4/28/05	2:49
ZZZZZZ		4/28/05	2:54
ZZZZZZ		4/28/05	2:59
ZZZZZZ		4/28/05	3:04
ZZZZZZ		4/28/05	3:11
ZZZZZZ		4/28/05	3:17
ZZZZZZ		4/28/05	3:22
ZZZZZZ		4/28/05	3:27
ZZZZZZ		4/28/05	3:33

METALS RAW DATA

4/28/05

file : 042705MZ

Sample/Batch Report

STL ST. LOUIS - PERKIN ELMER ELAN 6100 - METHOD 6020 / 200.8 QUANTITATIVE ANALYSIS REP

User Name: stlmetals
Computer Name: SLICP03
Sample File: D:\Elandata\Sample\SW846 TEMP.sam
Report Date/Time: Wednesday, April 27, 2005 18:50:27
Method File: d:\Elandata\Method\epa temp.mth
Tuning File: d:\Elandata\Tuning\epa tuning.tun
Optimization File: d:\Elandata\Optimize\EPA.dac
Calibration File:
Calibration Type: External Calibration
Number of Replicates: 3
Number of Readings: 1
Number of Sweeps: 10
Dual Detector Mode: Dual

MS 042705

A/S Loc.	Batch ID	Sample ID	Description	Aliquot Vol.	Diluted Vol.
158		ICSA			
7		CCV			
1		CCB			
24	5115326	G849FB	2X		
25	5115326	G849FC	2X		
26	5115326	G833J	2X		
27	5115326	G833JS	2X		
28	5115326	G833JD	2X		
29	5115326	G833JA	2X		
30	5115326	G833JV	10X		
31	5115332	G849VB	2X		
32	5115332	G849VC	2X		
33	5115332	G8170	2X		
34	5115332	G8170X	2X		
35	5115332	G8170S	2X		
36	5115332	G8170S LL	2X		
37	5115332	G8170V	10X		
38	5115332	G84EP	5X		
39	5109067	G8L0KB	5X		
40	5109067	G8L0KC	5X		
41	5109067	G8L0KC	5X		
42	5109067	G7NWL	5X		
43	5109067	G7NW8	5X		
44	5109067	G7NW8S	5X		
45	5109067	G7NW8D	25X		
46	5109067	G7NW8V	5X		
47	5109067	G7NXD	5X		
48	5109067	G73N6	5X		
49	5109067	G73N6S	5X		
50	5109067	G73N6D	5X		
51	5109067	G73N8	5X		
52	5109067	G77EX	5X		
53	5109067	G77EXS	5X		
54	5109067	G77EXD	5X		
55	5109067	G77FD	5X		
56	5109067	G782L	5X		
57	5109067	G782LS	5X		
58	5109067	G782LD	5X		
59	5109067	G783X	5X		
60	5109067	G8JDL	5X		
61	5109067	G8JDLS	5X		

Report All

Report All

All except Na

All but Na Ca

All except Na Ca

All except Na

62	5109067	G8JDLD	5X
63	5109067	G8JD2	5X
64	5109067	G8JEE	5X
65	5115187	G84MFB	5X
66	5115187	G84MFC	5X
67	5115187	G8WP7	10X
68	5115187	G8WP7S	10X
69	5115187	G8WP7D	10X
70	5115187	G8WP7S LL	10X
71	5115187	G8WP7V	50X
72	5115187	G8WQL	10X
73	5115187	G8WQN	10X
74	5115187	G8WQR	10X
75	5115187	G8WQT	10X
76	5115187	G8WR6	10X
77	5115187	G8WTA	10X
78	5115187	G8WTE	10X
79	5115187	G8WTG	10X
80	5115187	G8WTR	10X
81	5115187	G8WTV	10X
82	5115187	G8WTW	10X
83	5115187	G8WTX	10X
84	5115187	G8WT0	10X
85	5115187	G8WT1	10X
86	5115187	G817C	10X
87	5115187	G817CS	10X
88	5115187	G817CD	10X
89	5115187	G817D	10X
90	5115187	G817E	10X
91	5115187	G817F	10X
92	5115187	G817G	10X

Quantitative Analysis Calibration Report

File Name: 042705M2.cal
File Path: D:\Elandata\System
Calibration Type: External Calibration

Analyte	Mass	Curve Type	Slope	Intercept	Corr. Coeff.
Be	9.012	Linear Thru Zero	0.000382	0.00	0.999981
B	10.013	Linear Thru Zero	0.000072	0.00	0.999959
Na	22.990	Linear Thru Zero	0.008430	0.00	0.999993
Mg	23.985	Linear Thru Zero	0.006127	0.00	0.999993
Al	26.982	Linear Thru Zero	0.009368	0.00	0.999992
K	38.964	Linear Thru Zero	0.018130	0.00	0.999998
Ca	43.956	Linear Thru Zero	0.000581	0.00	0.999928
Sc-1	44.956	Linear Thru Zero	0.000000	0.00	0.000000
V	50.944	Linear Thru Zero	0.022635	0.00	0.999998
Cr	51.941	Linear Thru Zero	0.019942	0.00	0.999977
Mn	54.938	Linear Thru Zero	0.032781	0.00	0.999962
Fe	56.935	Linear Thru Zero	0.000689	0.00	0.999997
Co	58.933	Linear Thru Zero	0.025326	0.00	0.999992
Ni	59.933	Linear Thru Zero	0.005442	0.00	0.999990
Cu	64.928	Linear Thru Zero	0.005987	0.00	0.999997
Zn	65.926	Linear Thru Zero	0.003517	0.00	0.999991
Ge-1	71.922	Linear Thru Zero	0.000000	0.00	0.000000
As	74.922	Linear Thru Zero	0.002810	0.00	0.999994
Se	81.917	Linear Thru Zero	0.000311	0.00	0.999998
Mo	96.906	Linear Thru Zero	0.001936	0.00	0.999999
Ag	106.905	Linear Thru Zero	0.008999	0.00	0.999994
Cd	110.904	Linear Thru Zero	0.002066	0.00	0.999985
In-1	114.904	Linear Thru Zero	0.000000	0.00	0.000000
Sb	122.904	Linear Thru Zero	0.005147	0.00	0.999982
Ba	134.906	Linear Thru Zero	0.001503	0.00	0.999996
Ho-1	164.930	Linear Thru Zero	0.000000	0.00	0.000000
Tl	204.975	Linear Thru Zero	0.017287	0.00	0.999969
Pb	207.977	Linear Thru Zero	0.023674	0.00	0.999996
U	238.050	Linear Thru Zero	0.030302	0.00	0.999997
Sc-2	44.956	Linear Thru Zero	0.000000	0.00	0.000000
Cr	52.941	Linear Thru Zero	0.002733	0.00	0.998494
Fe	53.940	Linear Thru Zero	0.001566	0.00	0.999970
Ni	60.931	Linear Thru Zero	0.000244	0.00	0.999995
Cu	62.930	Linear Thru Zero	0.012387	0.00	0.999970
Zn	66.927	Linear Thru Zero	0.000621	0.00	0.999598
Ge	71.922	Linear Thru Zero	0.000000	0.00	0.000000
Se	76.920	Linear Thru Zero	0.000251	0.00	0.999978
Mo	97.906	Linear Thru Zero	0.004887	0.00	0.999993
Ag	108.905	Linear Thru Zero	0.009178	0.00	0.999989
In-2	114.904	Linear Thru Zero	0.000000	0.00	0.000000

Report Date/Time: Thursday, April 28, 2005 09:30:00
Page 1

Cd	113.904	Linear Thru Zero	0.004615	0.00	0.999989
Sb	120.904	Linear Thru Zero	0.006741	0.00	0.999980
Ba	136.905	Linear Thru Zero	0.002563	0.00	0.999981
Ho-2	164.930	Linear Thru Zero	0.000000	0.00	0.000000
Tl	202.972	Linear Thru Zero	0.007347	0.00	0.999967
Pb	205.975	Linear Thru Zero	0.005901	0.00	0.999996
Pb	206.976	Linear Thru Zero	0.004973	0.00	0.999992
Sc	44.956	Linear Thru Zero	0.000000	0.00	0.000000
Ti	46.952	Linear Thru Zero	0.001635	0.00	0.999985
Sr	85.909	Linear Thru Zero	0.007936	0.00	0.999999
Sr	87.906	Linear Thru Zero	0.069070	0.00	0.999986
In	114.904	Linear Thru Zero	0.000000	0.00	0.000000
Sn	117.902	Linear Thru Zero	0.005668	0.00	0.999997
Sn	119.902	Linear Thru Zero	0.007458	0.00	0.999971

Instrument Tuning Report

File Name: EPA TUNING.tun
File Path: d:\Elandata\Tuning
Sample ID: daily check
Sample Date/Time: Wednesday, April 27, 2005 11:18:52

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
He	3.016	2.975	595	2079	0.668	
Mg	23.985	24.028	5677	2073	0.718	
Rh	102.905	102.879	24914	2066	0.727	
Ce	139.905	139.879	33928	2109	0.694	
Pb	207.977	207.927	50397	2284	0.733	

Replicates: 6

Meas. Intens. RSD	Mass
0.656	2.000
1.394	3.000
17.534	4.000
10.189	5.000
12.177	22.000
2.065	23.000
2.565	24.000
2.574	25.000
4.666	26.000
1.694	102.000
0.346	103.000
3.439	104.000
3.395	139.000
0.969	140.000
1.519	141.000
2.744	206.000
2.277	207.000
0.568	208.000
4.717	209.000

Report Date/Time: Wednesday, April 27, 2005 11:20:05
Page 1

Daily Performance Report

Sample ID: daily check
Sample Date/Time: Wednesday, April 27, 2005 11:22:54
Sample Description:
Method File: d:\Elandata\Method\DAILY EPA.mth
Dataset File: d:\Elandata\Dataset\DAILY PEFORMANCE EPA\daily check.177
Tuning File: d:\Elandata\Tuning\EPA TUNING.tun
Optimization File: d:\Elandata\Optimize\EPA.dac
Dual Detector Mode: Pulse
Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24.0	52822.2	52822.204	429.986	0.8
	Rh	102.9	419851.8	419851.764	3585.720	0.9
	Pb	208.0	270582.7	270582.662	1537.037	0.6
⌈>	Ba	137.9	416802.2	416802.168	3897.641	0.9
⌊	Ba++	69.0	5899.9	0.014	0.000	1.6
⌈>	Ce	139.9	501663.8	501663.842	1422.297	0.3
⌊	CeO	155.9	13643.3	0.027	0.000	1.7
	Bkgd	220.0	7.9	7.944	1.452	18.3

Current Optimization File Data

Current Value	Description
0.88	Nebulizer Gas Flow
8.75	Lens Voltage
1200.00	ICP RF Power
-2200.00	Analog Stage Voltage
1400.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-13.50	AC Rod Offset
60.00	Service DAC 1
0.00	Quadrupole Rod Offset

Current AutoIens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	25	7.8	2935.3
Mg	24	25	5.8	58094.9
Co	59	25	6.8	190724.7
Rh	103	25	7.8	479282.3
In	115	25	8.0	555076.3
Ba	138	25	8.3	454846.5
Ce	140	25	8.3	543658.6
Pb	208	25	9.5	308645.5

LOT # F5D220359

QUANTITATIVE ANALYSIS REPORT

Sample ID: Blank
Sample Date/Time: Wednesday, April 27, 2005 18:55:49
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042705M2\Blank.003

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be			7.667	ug/L	
	10	B			27.667	ug/L	
	23	Na			18838.944	ug/L	
	24	Mg			2106.176	ug/L	
	27	Al			3413.777	ug/L	
	39	K			807733.282	ug/L	
	44	Ca			51872.368	ug/L	
>	45	Sc-1			454114.374	ug/L	
	51	V			-26072.212	ug/L	
	52	Cr			26547.338	ug/L	
	55	Mn			3062.361	ug/L	
	57	Fe			9798.695	ug/L	
	59	Co			232.338	ug/L	
	60	Ni			301.006	ug/L	
	65	Cu			168.336	ug/L	
	66	Zn			15137.170	ug/L	
>	72	Ge-1			739226.379	ug/L	
	75	As			-1945.453	ug/L	
	82	Se			-120.854	ug/L	
	97	Mo			72.001	ug/L	
	107	Ag			267.339	ug/L	
	111	Cd			39.334	ug/L	
>	115	In-1			1483966.870	ug/L	
	123	Sb			268.758	ug/L	
	135	Ba			112.002	ug/L	
>	165	Ho-1			1592460.464	ug/L	
	205	Tl			3951.949	ug/L	
	208	Pb			4580.000	ug/L	
	238	U			234.671	ug/L	
>	45	Sc-2			454114.374	ug/L	
	53	Cr			154333.029	ug/L	
	54	Fe			62090.940	ug/L	
	61	Ni			1661.113	ug/L	
	63	Cu			345.008	ug/L	
	67	Zn			9047.975	ug/L	
>	72	Ge			739226.379	ug/L	
	77	Se			8561.780	ug/L	
	98	Mo			141.970	ug/L	
	109	Ag			288.339	ug/L	
>	115	In-2			1483966.870	ug/L	
	114	Cd			84.731	ug/L	
	121	Sb			349.674	ug/L	
	137	Ba			156.669	ug/L	
>	165	Ho-2			1592460.464	ug/L	
	203	Tl			1582.773	ug/L	
	206	Pb			1161.392	ug/L	
	207	Pb			995.045	ug/L	
>	45	Sc			454114.374	ug/L	
	47	Ti			297.006	ug/L	
	86	Sr			716.656	ug/L	
	88	Sr			5834.250	ug/L	
>	115	In			1483966.870	ug/L	
	118	Sn			855.034	ug/L	
	120	Sn			1103.483	ug/L	

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10
	Na	23
	Mg	24
	Al	27
	K	39
	Ca	44
>	Sc-1	45
	V	51
	Cr	52
	Mn	55
	Fe	57
	Co	59
	Ni	60
	Cu	65
	Zn	66
>	Ge-1	72
	As	75
	Se	82
	Mo	97
	Ag	107
	Cd	111
>	In-1	115
	Sb	123
	Ba	135
>	Ho-1	165
	Tl	205
	Pb	208
	U	238
>	Sc-2	45
	Cr	53
	Fe	54
	Ni	61
	Cu	63
	Zn	67
>	Ge	72
	Se	77
	Mo	98
	Ag	109
>	In-2	115
	Cd	114
	Sb	121
	Ba	137
>	Ho-2	165
	Tl	203
	Pb	206
	Pb	207
>	Sc	45
	Ti	47
	Sr	86
	Sr	88
>	In	115
	Sn	118
	Sn	120

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: Standard 1
Sample Date/Time: Wednesday, April 27, 2005 19:00:56
Autosampler Position: 2
Dataset File: D:\Elandata\Dataset\042705M2\Standard 1.004

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	20.000000	2.828	3416.443	ug/L	7.667
	10	B	20.000000	4.287	657.022	ug/L	27.667
	23	Na			36669.719	ug/L	18838.944
	24	Mg			4869.212	ug/L	2106.176
	27	Al			9693.051	ug/L	3413.777
	39	K			798184.810	ug/L	807733.282
	44	Ca			66531.232	ug/L	61872.368
>	45	Sc-1			461404.320	ug/L	454114.374
	51	V	20.000000	1.075	181969.324	ug/L	-26072.212
	52	Cr	20.000000	4.797	216901.295	ug/L	26547.338
	55	Mn	20.000000	3.216	313098.106	ug/L	3062.361
	57	Fe			9648.598	ug/L	9798.695
	59	Co	20.000000	3.967	241779.530	ug/L	232.338
	60	Ni	20.000000	1.709	50807.036	ug/L	301.006
	65	Cu	20.000000	2.211	56749.396	ug/L	168.336
	66	Zn	20.000000	5.487	47957.879	ug/L	15137.170
>	72	Ge-1			739744.143	ug/L	739226.379
	75	As	20.000000	2.397	40933.560	ug/L	-1945.453
	82	Se	20.000000	0.348	4460.398	ug/L	-120.854
	97	Mo	20.000000	3.349	56605.202	ug/L	72.001
	107	Ag	4.000000	1.002	53647.081	ug/L	267.339
	111	Cd	20.000000	2.032	61013.645	ug/L	39.334
>	115	In-1			1446304.234	ug/L	1483966.870
	123	Sb	20.000000	0.574	154526.672	ug/L	268.758
	135	Ba	20.000000	0.747	49063.627	ug/L	112.002
>	165	Ho-1			1583142.734	ug/L	1592460.464
	205	Tl	20.000000	0.592	542762.502	ug/L	3951.949
	208	Pb	20.000000	0.627	762296.314	ug/L	4580.000
	238	U	20.000000	4.113	941022.019	ug/L	234.671
>	45	Sc-2			461404.320	ug/L	454114.374
	53	Cr	20.000000	48.870	189687.478	ug/L	154333.029
	54	Fe			64559.611	ug/L	62090.940
	61	Ni	20.000000	5.312	3885.901	ug/L	1661.113
	63	Cu	20.000000	3.976	118557.856	ug/L	345.008
	67	Zn	20.000000	18.401	15450.859	ug/L	9047.975
>	72	Ge			739744.143	ug/L	739226.379
	77	Se	20.000000	21.011	12525.180	ug/L	8561.760
	98	Mo	20.000000	0.955	146190.358	ug/L	141.970
	109	Ag	4.000000	1.507	55367.977	ug/L	288.339
>	115	In-2			1446304.234	ug/L	1483966.870
	114	Cd	20.000000	1.699	140068.705	ug/L	84.731
	121	Sb	20.000000	1.087	204609.088	ug/L	349.674
	137	Ba	20.000000	1.750	85000.644	ug/L	156.669
>	165	Ho-2			1583142.734	ug/L	1592460.464
	203	Tl	20.000000	1.374	226838.678	ug/L	1562.773
	206	Pb	20.000000	1.468	192160.292	ug/L	1161.392
	207	Pb	20.000000	0.804	162228.272	ug/L	995.045
>	45	Sc			461404.320	ug/L	454114.374
	47	Ti	20.000000	1.310	15129.492	ug/L	297.006
	86	Sr	20.000000	1.154	72931.787	ug/L	716.656
	88	Sr	20.000000	5.186	626921.282	ug/L	5834.250
>	115	In			1446304.234	ug/L	1483966.870
	118	Sn	20.000000	0.591	169078.134	ug/L	855.034
	120	Sn	20.000000	2.193	223660.780	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

B	10
Na	23
Mg	24
Al	27
K	39
Ca	44
Sc-1	45
V	51
Cr	52
Mn	55
Fe	57
Co	59
Ni	60
Cu	65
Zn	66
Ge-1	72
As	75
Se	82
Mo	97
Ag	107
Cd	111
In-1	115
Sb	123
Ba	135
Ho-1	165
Tl	205
Pb	208
U	238
Sc-2	45
Cr	53
Fe	54
Ni	61
Cu	63
Zn	67
Ge	72
Se	77
Mo	98
Ag	109
In-2	115
Cd	114
Sb	121
Ba	137
Ho-2	165
Tl	203
Pb	206
Pb	207
Sc	45
Tl	47
Sr	86
Sr	88
In	115
Sn	118
Sn	120

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: Standard 2
Sample Date/Time: Wednesday, April 27, 2005 19:06:04
Autosampler Position: 3
Dataset File: D:\Elandata\Dataset\042705M2\Standard 2.005

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	50.084342	3.571	8489.942	ug/L	7.667
	10	B	50.557045	0.715	1708.453	ug/L	27.667
	23	Na			60742.218	ug/L	18838.944
	24	Mg			7143.192	ug/L	2106.176
	27	Al			6931.088	ug/L	3413.777
	39	K			784921.339	ug/L	807733.282
	44	Ca			68117.362	ug/L	61872.368
>	45	Sc-1			453669.751	ug/L	454114.374
	51	V	49.969641	1.294	483397.134	ug/L	-26072.212
	52	Cr	49.941689	4.141	489638.296	ug/L	26547.338
	55	Mn	50.086436	0.726	771425.525	ug/L	3062.361
	57	Fe			10551.822	ug/L	9796.685
	59	Co	49.940055	1.047	580376.795	ug/L	232.338
	60	Ni	50.079736	3.483	125884.729	ug/L	301.006
	65	Cu	49.829366	0.790	135905.776	ug/L	168.336
	66	Zn	50.086305	1.144	96250.788	ug/L	15137.170
>	72	Ge-1			742207.268	ug/L	739226.379
	75	As	49.727726	2.842	101495.323	ug/L	-1945.453
	82	Se	49.962436	1.580	11339.909	ug/L	-120.854
	97	Mo	49.919207	0.471	141878.510	ug/L	72.001
	107	Ag	9.960461	2.719	130996.059	ug/L	267.339
	111	Cd	49.713104	2.007	148534.101	ug/L	39.334
>	115	In-1			1467812.057	ug/L	1483966.870
	123	Sb	49.883183	1.647	385101.711	ug/L	268.758
	135	Ba	49.802055	1.567	119495.225	ug/L	112.002
>	165	Ho-1			1589172.952	ug/L	1592460.464
	205	Tl	49.889211	0.264	1334836.134	ug/L	3951.949
	208	Pb	49.854974	2.917	1866545.656	ug/L	4580.000
	238	U	50.091287	1.245	2393586.768	ug/L	234.671
>	45	Sc-2			453669.751	ug/L	454114.374
	53	Cr	49.286829	16.684	227410.470	ug/L	154333.029
	54	Fe			68297.378	ug/L	62090.940
	61	Ni	50.227342	2.804	7241.574	ug/L	1661.113
	63	Cu	49.955723	1.012	289114.396	ug/L	345.008
	67	Zn	50.080826	9.900	24624.496	ug/L	9047.975
>	72	Ge			742207.268	ug/L	739226.379
	77	Se	49.496822	4.712	17849.486	ug/L	8561.780
	98	Mo	49.829065	2.694	361704.073	ug/L	141.970
	109	Ag	9.964628	1.965	136535.786	ug/L	288.339
>	115	In-2			1467812.057	ug/L	1483966.870
	114	Cd	49.677277	2.263	339261.086	ug/L	84.731
	121	Sb	49.795165	1.238	503579.444	ug/L	349.674
	137	Ba	49.801014	0.555	207110.277	ug/L	156.669
>	165	Ho-2			1589172.952	ug/L	1592460.464
	203	Tl	50.012043	2.273	567804.025	ug/L	1582.773
	206	Pb	49.899468	3.940	473579.721	ug/L	1161.392
	207	Pb	49.924605	1.775	401211.416	ug/L	995.045
>	45	Sc			453669.751	ug/L	454114.374
	47	Ti	49.977009	2.123	38624.926	ug/L	297.006
	86	Sr	50.080515	1.568	180300.759	ug/L	716.656
	88	Sr	50.046612	1.324	1543393.200	ug/L	5834.250
>	115	In			1467812.057	ug/L	1483966.870
	118	Sn	49.818993	1.570	415740.961	ug/L	855.034
	120	Sn	49.973604	3.023	563675.221	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10
	Na	23
	Mg	24
	Al	27
	K	39
	Ca	44
>	Sc-1	45
	V	51
	Cr	52
	Mn	55
	Fe	57
	Co	59
	Ni	60
	Cu	65
	Zn	66
>	Ge-1	72
	As	75
	Se	82
	Mo	97
	Ag	107
	Cd	111
>	In-1	115
	Sb	123
	Ba	135
>	Ho-1	165
	Tl	205
	Pb	208
	U	238
>	Sc-2	45
	Cr	53
	Fe	54
	Ni	61
	Cu	63
	Zn	67
>	Ge	72
	Se	77
	Mo	98
	Ag	109
>	In-2	115
	Cd	114
	Sb	121
	Ba	137
>	Ho-2	165
	Tl	203
	Pb	206
	Pb	207
>	Sc	45
	Ti	47
	Sr	88
	Sr	88
>	In	115
	Sn	118
	Sn	120

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: Standard 3
Sample Date/Time: Wednesday, April 27, 2005 19:11:13
Autosampler Position: 4
Dataset File: D:\Elandata\Dataset\042705M2\Standard 3.006

Sample Result Summary

Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
9	Be	200.323122	3.752	34648.664	ug/L	7.667
10	B	199.722128	2.875	6530.891	ug/L	27.667
23	Na	500.000000	1.417	1812455.730	ug/L	18838.944
24	Mg	250.000000	4.511	655341.040	ug/L	2106.176
27	Al	500.000000	4.187	2097096.985	ug/L	3413.777
39	K	500.000000	2.818	4809970.860	ug/L	807733.282
44	Ca	250.000000	3.285	140544.384	ug/L	61872.368
45	Sc-1			452988.498	ug/L	454114.374
51	V	200.100530	1.362	2025405.873	ug/L	-26072.212
52	Cr	199.634396	1.230	1829631.979	ug/L	26547.338
55	Mn	199.533363	1.623	2965924.899	ug/L	3062.361
57	Fe	500.000000	4.426	161145.570	ug/L	9798.695
59	Co	199.810725	1.557	2292322.268	ug/L	232.338
60	Ni	199.770681	2.795	492725.132	ug/L	301.006
65	Cu	199.957196	4.565	542173.334	ug/L	168.336
66	Zn	199.778921	2.620	333275.827	ug/L	15137.170
72	Ge-1			719651.870	ug/L	739226.379
75	As	200.032279	1.730	402461.819	ug/L	-1945.453
82	Se	200.113153	2.627	44711.844	ug/L	-120.854
97	Mo	200.003284	0.746	559093.674	ug/L	72.001
107	Ag	40.016405	2.266	520221.776	ug/L	267.339
111	Cd	200.216343	2.235	597177.442	ug/L	39.334
115	In-1			1443960.816	ug/L	1483966.870
123	Sb	199.690680	3.816	1483605.528	ug/L	268.758
135	Ba	199.949125	3.525	470633.761	ug/L	112.002
165	Ho-1			1567164.675	ug/L	1592460.464
205	Tl	200.420044	2.976	5430266.292	ug/L	3951.949
208	Pb	200.102320	2.548	7424555.269	ug/L	4580.000
238	U	200.111828	5.209	9492787.201	ug/L	234.671
45	Sc-2			452988.498	ug/L	454114.374
53	Cr	197.106074	4.629	397942.113	ug/L	154333.029
54	Fe	500.000009	5.064	437417.402	ug/L	62090.940
61	Ni	199.948405	2.688	23763.320	ug/L	1681.113
63	Cu	199.584623	3.036	1119859.429	ug/L	345.008
67	Zn	198.474551	0.724	64851.551	ug/L	9047.975
72	Ge			719651.870	ug/L	739226.379
77	Se	199.962407	2.584	44488.687	ug/L	8561.780
98	Mo	199.832694	1.453	1410177.928	ug/L	141.970
109	Ag	39.956360	0.690	529791.124	ug/L	288.339
115	In-2			1443960.816	ug/L	1483966.870
114	Cd	199.883418	2.315	1331711.528	ug/L	84.731
121	Sb	199.687983	3.482	1943054.940	ug/L	349.674
137	Ba	199.703414	3.526	801563.380	ug/L	156.669
165	Ho-2			1567164.675	ug/L	1592460.464
203	Tl	200.437257	3.135	2307858.407	ug/L	1582.773
206	Pb	199.857865	2.068	1848718.071	ug/L	1161.392
207	Pb	199.789941	4.109	1556785.249	ug/L	995.045
45	Sc			452988.498	ug/L	454114.374
47	Ti	200.289850	3.802	148585.435	ug/L	297.006
86	Sr	200.057238	1.093	719826.165	ug/L	716.656
88	Sr	200.282339	0.560	6272236.909	ug/L	5834.250
115	In			1443960.816	ug/L	1483966.870
118	Sn	199.950612	1.300	1637253.164	ug/L	855.034
120	Sn	199.687256	1.992	2150083.669	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

B	10
Na	23
Mg	24
Al	27
K	39
Ca	44
Sc-1	45
V	51
Cr	52
Mn	55
Fe	57
Co	59
Ni	60
Cu	65
Zn	66
Ge-1	72
As	75
Se	82
Mo	97
Ag	107
Cd	111
In-1	115
Sb	123
Ba	135
Ho-1	165
Tl	205
Pb	208
U	238
Sc-2	45
Cr	53
Fe	54
Ni	61
Cu	63
Zn	67
Ge	72
Se	77
Mo	98
Ag	109
In-2	115
Cd	114
Sb	121
Ba	137
Ho-2	165
Tl	203
Pb	206
Pb	207
Sc	45
Tl	47
Sr	86
Sr	88
In	115
Sn	118
Sn	120

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: Standard 4
Sample Date/Time: Wednesday, April 27, 2005 19:16:23
Autosampler Position: 5
Dataset File: D:\Elandata\Dataset\042705M2\Standard 4.007

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.036751	124.308	13.667	ug/L	7.667
	10	B	5.174197	23.855	192.337	ug/L	27.667
	23	Na	2009.381275	2.998	7606065.165	ug/L	18838.944
	24	Mg	1002.702180	3.185	2693573.782	ug/L	2106.176
	27	Al	2003.794878	0.324	8505812.744	ug/L	3413.777
	39	K	2003.681972	3.680	17035687.523	ug/L	807733.282
	44	Ca	990.684496	3.741	327777.278	ug/L	61872.368
>	45	Sc-1			445162.813	ug/L	454114.374
	51	V	0.059919	498.300	-24953.280	ug/L	-28072.212
	52	Cr	-0.059119	153.327	25504.698	ug/L	26547.338
	55	Mn	0.110884	20.619	4617.127	ug/L	3062.361
	57	Fe	2002.259504	2.819	616219.050	ug/L	9798.695
	59	Co	0.068165	23.566	994.045	ug/L	232.338
	60	Ni	0.097041	18.002	530.015	ug/L	301.006
	65	Cu	0.055748	19.573	313.340	ug/L	168.336
	66	Zn	1.462646	6.128	17112.750	ug/L	15137.170
>	72	Ge-1			719861.230	ug/L	739226.379
	75	As	0.778866	19.544	-321.657	ug/L	-1945.453
	82	Se	0.314640	29.078	-47.079	ug/L	-120.854
	97	Mo	0.144544	44.373	471.013	ug/L	72.001
	107	Ag	0.008603	29.553	331.674	ug/L	267.339
	111	Cd	0.012765	58.304	76.001	ug/L	39.334
>	115	In-1			1439464.290	ug/L	1483966.870
	123	Sb	0.122882	37.051	1167.893	ug/L	268.758
	135	Ba	0.512332	8.491	1327.742	ug/L	112.002
>	165	Ho-1			1581503.472	ug/L	1592460.464
	205	Tl	0.437819	48.490	15804.241	ug/L	3951.949
	208	Pb	0.054874	50.057	6587.007	ug/L	4580.000
	238	U	0.013679	98.595	879.045	ug/L	234.671
>	45	Sc-2			445162.813	ug/L	454114.374
	53	Cr	6.049469	108.562	158696.648	ug/L	154333.029
	54	Fe	1997.320765	4.227	1504017.694	ug/L	62090.940
	61	Ni	-0.560325	139.763	1566.435	ug/L	1661.113
	63	Cu	0.075245	22.969	752.027	ug/L	345.008
	67	Zn	8.521578	31.672	11232.212	ug/L	9047.975
>	72	Ge			719861.230	ug/L	739226.379
	77	Se	-11.468904	7.764	6263.062	ug/L	8561.780
	98	Mo	0.149391	42.052	1184.999	ug/L	141.970
	109	Ag	0.018247	38.446	520.015	ug/L	288.339
>	115	In-2			1439464.290	ug/L	1483966.870
	114	Cd	0.011585	78.028	158.492	ug/L	84.731
	121	Sb	0.119011	35.792	1490.096	ug/L	349.674
	137	Ba	0.534136	2.665	2319.545	ug/L	156.669
>	165	Ho-2			1581503.472	ug/L	1592460.464
	203	Tl	0.436836	51.581	6807.066	ug/L	1582.773
	206	Pb	0.081322	44.646	1629.110	ug/L	1161.392
	207	Pb	0.056824	38.193	1432.420	ug/L	995.045
>	45	Sc			445162.813	ug/L	454114.374
	47	Ti	0.249738	3.665	473.013	ug/L	297.006
	86	Sr	0.123469	26.456	1137.457	ug/L	716.656
	88	Sr	0.105870	11.291	8971.575	ug/L	5834.250
>	115	In			1439464.290	ug/L	1483966.870
	118	Sn	0.105117	42.797	1684.119	ug/L	855.034
	120	Sn	0.109373	30.118	2240.719	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

B	10
Na	23
Mg	24
Al	27
K	39
Ca	44
Sc-1	45
V	51
Cr	52
Mn	55
Fe	57
Co	59
Ni	60
Cu	65
Zn	66
Ge-1	72
As	75
Se	82
Mo	97
Ag	107
Cd	111
In-1	115
Sb	123
Ba	135
Ho-1	165
Tl	205
Pb	208
U	238
Sc-2	45
Cr	53
Fe	54
Ni	61
Cu	63
Zn	67
Ge	72
Se	77
Mo	98
Ag	109
In-2	115
Cd	114
Sb	121
Ba	137
Ho-2	165
Tl	203
Pb	206
Pb	207
Sc	45
Ti	47
Sr	86
Sr	88
In	115
Sn	118
Sn	120

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: Standard 5
Sample Date/Time: Wednesday, April 27, 2005 19:21:34
Autosampler Position: 6
Dataset File: D:\Elandata\Dataset\042705M2\Standard 5.008

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.003076	506.328	8.000	ug/L	7.667
	10	B	2.449690	17.783	105.001	ug/L	27.667
	23	Na	9997.032827	1.292	37346436.042	ug/L	18838.944
	24	Mg	5003.293048	1.707	13579885.718	ug/L	2106.176
	27	Al	9992.575978	2.023	41466399.402	ug/L	3413.777
	39	K	9997.879228	1.230	81070528.627	ug/L	807733.282
	44	Ca	4990.676768	2.360	1343540.196	ug/L	61872.368
>	45	Sc-1			442910.499	ug/L	454114.374
	51	V	-0.758547	146.196	-33030.257	ug/L	-26072.212
	52	Cr	0.079131	251.980	26590.728	ug/L	26547.338
	55	Mn	0.124076	5.111	4788.184	ug/L	3062.361
	57	Fe	10004.926314	0.388	3061061.837	ug/L	9798.695
	59	Co	0.269128	4.787	3245.402	ug/L	232.338
	60	Ni	0.151473	6.401	731.026	ug/L	301.006
	65	Cu	0.116337	5.056	472.679	ug/L	168.336
	66	Zn	0.970585	21.450	16275.765	ug/L	15137.170
>	72	Ge-1			743053.465	ug/L	739226.379
	75	As	0.580041	53.092	-791.534	ug/L	-1945.453
	82	Se	0.334826	52.268	-44.448	ug/L	-120.854
	97	Mo	0.063708	18.928	211.670	ug/L	72.001
	107	Ag	0.008924	30.381	381.008	ug/L	267.339
	111	Cd	0.003822	92.603	47.667	ug/L	39.334
>	115	In-1			1387502.391	ug/L	1483966.870
	123	Sb	0.062300	8.737	686.390	ug/L	268.758
	135	Ba	0.191024	9.129	555.883	ug/L	112.002
>	165	Ho-1			1555541.748	ug/L	1592460.464
	205	Tl	0.119567	44.769	7090.887	ug/L	3951.949
	208	Pb	0.060720	20.944	6714.687	ug/L	4580.000
	238	U	0.002921	7.231	367.008	ug/L	234.671
>	45	Sc-2			442910.499	ug/L	454114.374
	53	Cr	28.575373	51.663	182688.792	ug/L	154333.029
	54	Fe	9984.232207	0.776	6985017.754	ug/L	62090.940
	61	Ni	0.572817	221.593	1682.116	ug/L	1661.113
	63	Cu	0.216840	5.378	1528.097	ug/L	345.008
	67	Zn	17.740607	39.480	13703.125	ug/L	9047.975
>	72	Ge			743053.465	ug/L	739226.379
	77	Se	-15.009876	8.618	5816.398	ug/L	8561.780
	98	Mo	0.047551	16.338	456.464	ug/L	141.970
	109	Ag	0.014800	11.511	458.012	ug/L	288.339
>	115	In-2			1387502.391	ug/L	1483966.870
	114	Cd	0.005324	35.250	113.225	ug/L	84.731
	121	Sb	0.063656	18.235	923.373	ug/L	349.674
	137	Ba	0.186102	2.954	891.037	ug/L	156.669
>	165	Ho-2			1555541.748	ug/L	1592460.464
	203	Tl	0.117589	42.429	2895.998	ug/L	1562.773
	206	Pb	0.063052	15.740	1714.120	ug/L	1161.392
	207	Pb	0.062244	27.347	1454.756	ug/L	995.045
>	45	Sc			442910.499	ug/L	454114.374
	47	Ti	1.221538	7.143	1174.393	ug/L	297.006
	86	Sr	0.217417	3.431	1483.224	ug/L	716.656
	88	Sr	0.196859	1.608	11715.586	ug/L	5834.250
>	115	In			1387502.391	ug/L	1483966.870
	118	Sn	0.063181	1.890	1296.405	ug/L	855.034
	120	Sn	0.063250	7.728	1685.781	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

⌈	B	10
|	Na	23
|	Mg	24
|	Al	27
|	K	39
|	Ca	44
|>	Sc-1	45
|	V	51
|	Cr	52
|	Mn	55
|	Fe	57
|	Co	59
|	Ni	60
|	Cu	65
⌊	Zn	66
⌈>	Ge-1	72
|	As	75
⌊	Se	82
⌈	Mo	97
|	Ag	107
|	Cd	111
|>	In-1	115
⌊	Sb	123
⌈	Ba	135
|>	Ho-1	165
|	Tl	205
|	Pb	208
⌊	U	238
⌈>	Sc-2	45
|	Cr	53
|	Fe	54
|	Ni	61
|	Cu	63
⌊	Zn	67
⌈>	Ge	72
⌊	Se	77
⌈	Mo	98
|	Ag	109
|>	In-2	115
|	Cd	114
⌊	Sb	121
⌈	Ba	137
|>	Ho-2	165
|	Tl	203
|	Pb	206
⌊	Pb	207
⌈>	Sc	45
|	Ti	47
|	Sr	88
⌊	Sr	88
⌈>	In	115
|	Sn	118
⌊	Sn	120

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Wednesday, April 27, 2005 19:26:48
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 1.009

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	204.197421	4.656	34000.769	ug/L	7.667
	10	B	202.931479	3.799	6389.159	ug/L	27.667
	23	Na	1910.932281	2.748	7042874.555	ug/L	18838.944
	24	Mg	983.107668	4.718	2574487.603	ug/L	2106.176
	27	Al	1970.902075	1.189	8057969.797	ug/L	3413.777
	39	K	1945.902935	5.614	16151790.015	ug/L	807733.282
	44	Ca	1032.084287	7.124	320463.169	ug/L	61872.368
>	45	Sc-1			436296.235	ug/L	454114.374
	51	V	193.006472	2.196	1880532.791	ug/L	-26072.212
	52	Cr	194.413417	1.670	1716407.733	ug/L	26547.338
	55	Mn	200.520061	3.354	2869843.739	ug/L	3062.361
	57	Fe	1949.200320	2.097	594800.464	ug/L	9798.695
	59	Co	199.235070	5.248	2199472.463	ug/L	232.338
	60	Ni	198.057053	2.873	470384.190	ug/L	301.006
	65	Cu	200.734170	2.883	524203.763	ug/L	168.338
	66	Zn	202.537083	3.297	325134.998	ug/L	15137.170
>	72	Ge-1			718305.334	ug/L	739226.379
	75	As	201.376029	3.801	404394.742	ug/L	-1945.453
	82	Se	199.397348	3.100	44467.881	ug/L	-120.854
	97	Mo	198.991666	1.910	557809.368	ug/L	72.001
	107	Ag	48.131515	1.261	627443.646	ug/L	267.339
	111	Cd	191.387451	1.165	572577.664	ug/L	39.334
>	115	In-1			1447954.290	ug/L	1483966.870
	123	Sb	197.625291	1.252	1473010.133	ug/L	268.758
	135	Ba	204.654881	3.959	474866.084	ug/L	112.002
>	165	Ho-1			1544030.050	ug/L	1592460.464
	205	Tl	192.657396	2.215	5144502.511	ug/L	3951.949
	208	Pb	196.426387	0.930	7183424.354	ug/L	4580.000
	238	U	195.891431	3.758	9159853.250	ug/L	234.671
>	45	Sc-2			436296.235	ug/L	454114.374
	53	Cr	173.962869	4.475	355568.207	ug/L	154333.029
	54	Fe	2024.674890	2.480	1442187.137	ug/L	62090.940
	61	Ni	199.226819	5.548	22790.742	ug/L	1661.113
	63	Cu	196.702442	1.781	1062995.175	ug/L	345.008
	67	Zn	203.254066	1.639	63746.275	ug/L	9047.975
>	72	Ge			718305.334	ug/L	739226.379
	77	Se	173.441682	3.144	39815.759	ug/L	8561.780
	98	Mo	199.993034	0.072	1415449.876	ug/L	141.970
	109	Ag	47.211517	1.878	627744.506	ug/L	288.339
>	115	In-2			1447954.290	ug/L	1483966.870
	114	Cd	196.897148	1.081	1315828.576	ug/L	84.731
	121	Sb	197.468252	1.868	1927561.821	ug/L	349.574
	137	Ba	206.713986	3.945	817563.034	ug/L	156.669
>	165	Ho-2			1544030.050	ug/L	1592460.464
	203	Tl	193.108885	2.605	2191324.139	ug/L	1582.773
	208	Pb	198.491617	1.846	1809185.046	ug/L	1161.392
	207	Pb	200.112774	1.584	1537163.862	ug/L	995.045
>	45	Sc			436296.235	ug/L	454114.374
	47	Ti	197.375188	1.815	141053.172	ug/L	297.006
	86	Sr	200.898598	3.201	694812.417	ug/L	716.856
	88	Sr	202.418807	0.582	6105102.920	ug/L	5834.250
>	115	In			1447954.290	ug/L	1483966.870
	118	Sn	199.602944	0.983	1639071.548	ug/L	855.034
	120	Sn	201.823103	2.090	2180682.263	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		102.099

	B	10		101.466
	Na	23		95.647
	Mg	24		96.311
	Al	27		96.545
	K	39		97.295
	Ca	44		103.208
>	Sc-1	45	96.076	
	V	51		96.503
	Cr	52		97.297
	Mn	55		100.260
	Fe	57		97.460
	Co	59		99.618
	Ni	60		99.029
	Cu	65		100.367
	Zn	66		101.269
>	Ge-1	72	97.170	
	As	75		100.888
	Se	82		99.699
	Mo	97		99.496
	Ag	107		96.283
	Cd	111		96.894
>	In-1	115	97.573	
	Sb	123		98.813
	Ba	136		102.527
>	Ho-1	165	96.959	
	Tl	205		96.328
	Pb	206		96.213
	U	238		97.946
>	Sc-2	45	96.076	
	Cr	53		96.981
	Fe	54		101.234
	Ni	61		99.618
	Cu	63		99.351
	Zn	67		101.827
>	Ge	72	97.170	
	Se	77		96.721
	Mo	96		99.997
	Ag	109		94.423
>	In-2	115	97.573	
	Cd	114		96.449
	Sb	121		98.734
	Ba	137		103.357
>	Ho-2	165	96.959	
	Tl	203		96.564
	Pb	206		99.246
	Pb	207		100.068
>	Sc	45	96.076	
	Ti	47		96.686
	Sr	86		100.299
	Sr	88		101.209
>	In	115	97.573	
	Sn	118		99.801
	Sn	120		100.912

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cr	53	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Wednesday, April 27, 2005 19:32:56
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 2.010

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.004323	254.389	8.000	ug/L	7.667
	10	B	3.809390	22.308	138.335	ug/L	27.667
	23	Na	0.112569	189.200	18342.291	ug/L	18838.944
	24	Mg	0.017426	86.876	2051.501	ug/L	2108.176
	27	Al	0.015007	136.943	3312.751	ug/L	3413.777
	39	K	-5.515896	38.752	725705.295	ug/L	807733.282
	44	Ca	0.098781	630.863	58944.640	ug/L	61872.368
>	45	Sc-1			432458.282	ug/L	454114.374
	51	V	0.275949	168.363	-22192.566	ug/L	-26072.212
	52	Cr	-0.814483	22.970	18275.953	ug/L	26547.338
	55	Mn	0.043023	19.983	3527.472	ug/L	3082.361
	57	Fe	-3.086262	20.431	8411.950	ug/L	9798.695
	59	Co	0.009539	52.276	325.007	ug/L	232.338
	60	Ni	-0.002200	284.010	281.339	ug/L	301.006
	65	Cu	0.015256	46.822	202.337	ug/L	168.336
	66	Zn	-0.024539	394.858	14377.377	ug/L	15137.170
>	72	Ge-1			714291.692	ug/L	739226.379
	75	As	0.631649	14.614	-815.056	ug/L	-1945.453
	82	Se	0.321502	80.739	-45.294	ug/L	-120.854
	97	Mo	0.080182	43.160	294.006	ug/L	72.001
	107	Ag	0.002174	104.897	268.339	ug/L	267.339
	111	Cd	0.006069	26.312	56.334	ug/L	39.334
>	115	In-1			1443884.675	ug/L	1483966.870
	123	Sb	0.092345	33.170	947.208	ug/L	268.758
	135	Ba	-0.002524	123.981	102.668	ug/L	112.002
>	165	Ho-1			1544378.791	ug/L	1592460.464
	205	Tl	0.242489	51.628	10305.074	ug/L	3951.949
	208	Pb	0.007544	14.626	4718.018	ug/L	4580.000
	238	U	0.004618	10.456	443.678	ug/L	234.671
>	45	Sc-2			432458.282	ug/L	454114.374
	53	Cr	-17.721942	59.297	126186.136	ug/L	154333.029
	54	Fe	-0.437646	1000.818	58600.733	ug/L	62090.940
	61	Ni	-0.868712	68.392	1521.783	ug/L	1661.113
	63	Cu	0.013292	21.563	399.676	ug/L	345.008
	67	Zn	2.137176	164.893	9202.417	ug/L	9047.975
>	72	Ge			714291.692	ug/L	739226.379
	77	Se	-28.461946	12.631	3165.468	ug/L	6561.780
	98	Mo	0.088664	30.527	763.107	ug/L	141.970
	109	Ag	0.014907	21.437	478.013	ug/L	288.339
>	115	In-2			1443884.675	ug/L	1483966.870
	114	Cd	0.003574	79.394	106.172	ug/L	84.731
	121	Sb	0.094534	26.543	1259.736	ug/L	349.874
	137	Ba	0.003658	134.880	166.669	ug/L	156.669
>	165	Ho-2			1544378.791	ug/L	1592460.464
	203	Tl	0.247444	52.193	4343.753	ug/L	1582.773
	206	Pb	0.011071	24.447	1227.398	ug/L	1161.392
	207	Pb	0.006282	32.667	1013.379	ug/L	995.045
>	45	Sc			432458.282	ug/L	454114.374
	47	Ti	0.020022	224.477	297.339	ug/L	297.006
	86	Sr	-0.000436	5376.171	681.023	ug/L	716.656
	88	Sr	0.002928	131.636	5641.837	ug/L	5834.250
>	115	In			1443884.675	ug/L	1483966.870
	118	Sn	0.063130	26.499	1348.078	ug/L	855.034
	120	Sn	0.059240	33.968	1711.190	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		0.432

	B	10		360.939
	Na	23		0.113
	Mg	24		0.017
	Al	27		0.015
	K	39		-5.519
	Ca	44		6.100
>	Sc-1	45	98.231	
	V	51		27.696
	Cr	52		-81.448
	Mn	55		4.302
	Fe	57		-3.086
	Co	59		0.954
	Ni	60		-0.230
	Cu	65		1.828
	Zn	66		-2.464
>	Ge-1	72	96.627	
	As	75		53.165
	Se	82		32.150
	Mo	97		8.018
	Ag	107		0.217
	Cd	111		0.606
>	In-1	115	97.299	
	Sb	123		9.234
	Ba	135		-0.252
>	Ho-1	165	96.981	
	Tl	205		24.248
	Pb	208		0.764
	U	238		0.462
>	Sc-2	45	95.231	
	Cr	53		-1772.194
	Fe	54		-0.438
	Ni	61		-86.871
	Cu	63		1.329
	Zn	67		213.718
>	Ge	72	96.627	
	Se	77		-2846.195
	Mo	98		8.866
	Ag	109		1.491
>	In-2	115	97.299	
	Cd	114		0.357
	Sb	121		9.483
	Ba	137		0.368
>	Ho-2	165	96.981	
	Tl	203		24.744
	Pb	208		1.107
	Pb	207		0.628
>	Sc	45	98.231	
	Tl	47		2.002
	Sr	86		-0.044
	Sr	88		0.293
>	In	115	97.299	
	Sn	118		6.313
	Sn	120		5.924

QC Out Of Limits

Analyte	Mass	Out of Limits Message
B	10	Q
Cr	53	Q
Zn	67	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 3
Sample Date/Time: Wednesday, April 27, 2005 19:39:04
Autosampler Position: 160
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 3.011

Sample Result Summary

Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
9	Be	5.184022	4.805	910.371	ug/L	7.667
10	B	207.805223	4.379	6839.372	ug/L	27.667
23	Na	4713.913671	2.320	18154386.149	ug/L	18838.944
24	Mg	4775.421017	2.542	13344721.433	ug/L	2106.176
27	Al	199.294044	1.198	855111.152	ug/L	3413.777
39	K	4808.361680	3.497	40575050.846	ug/L	807733.282
44	Ca	4829.823447	5.861	1339853.465	ug/L	61872.368
> 45	Sc-1			456283.090	ug/L	454114.374
51	V	50.778845	5.656	497888.820	ug/L	-26072.212
52	Cr	9.895815	3.906	116638.084	ug/L	26547.338
55	Mn	16.468409	0.906	234705.031	ug/L	3062.361
57	Fe	96.052570	8.810	39965.396	ug/L	9798.695
59	Co	49.631176	5.145	573087.020	ug/L	232.338
60	Ni	39.641618	4.431	98651.505	ug/L	301.006
65	Cu	24.893797	5.860	68353.211	ug/L	168.336
66	Zn	21.428193	6.349	49546.611	ug/L	15137.170
> 72	Ge-1			732723.484	ug/L	739226.379
75	As	10.212666	1.692	19098.848	ug/L	-1945.453
82	Se	5.223142	6.551	1072.456	ug/L	-120.854
97	Mo	40.341252	1.260	114662.559	ug/L	72.001
107	Ag	9.867392	1.095	130440.920	ug/L	287.339
111	Cd	4.916688	0.321	14944.964	ug/L	39.334
> 115	In-1			1467378.174	ug/L	1483966.870
123	Sb	58.773925	2.901	444031.337	ug/L	268.758
135	Ba	204.349609	2.305	484902.037	ug/L	112.002
> 165	Ho-1			1578363.534	ug/L	1592460.464
205	Tl	9.629465	2.811	288591.831	ug/L	3951.949
208	Pb	3.047949	1.677	118410.421	ug/L	4580.000
238	U	498.533846	4.206	23836682.715	ug/L	234.671
> 45	Sc-2			456283.090	ug/L	454114.374
53	Cr	-6.966898	145.430	148667.908	ug/L	154333.029
54	Fe	115.577492	6.461	144840.301	ug/L	62090.940
61	Ni	40.750481	6.842	6201.408	ug/L	1661.113
63	Cu	24.940705	3.584	141191.371	ug/L	345.008
67	Zn	27.547614	4.300	16898.505	ug/L	9047.975
> 72	Ge			732723.484	ug/L	739226.379
77	Se	-12.807751	34.631	6123.122	ug/L	8561.780
98	Mo	41.622481	0.255	298644.796	ug/L	141.970
109	Ag	9.237980	0.896	124696.434	ug/L	288.339
> 115	In-2			1467378.174	ug/L	1483966.870
114	Cd	5.036452	2.136	34184.993	ug/L	84.731
121	Sb	59.259575	1.606	566418.036	ug/L	349.674
137	Ba	207.077796	3.306	837463.527	ug/L	156.669
> 165	Ho-2			1578363.534	ug/L	1592460.464
203	Tl	9.396007	2.694	110494.187	ug/L	1582.773
206	Pb	3.119367	2.941	30197.522	ug/L	1161.392
207	Pb	3.128565	3.805	25534.394	ug/L	995.046
> 45	Sc			456283.090	ug/L	454114.374
47	Ti	49.818891	4.947	37424.671	ug/L	297.006
86	Sr	48.782889	3.203	177250.503	ug/L	716.856
88	Sr	47.585741	2.879	1504544.697	ug/L	5834.250
> 115	In			1467378.174	ug/L	1483966.870
118	Sn	101.776816	2.480	847551.801	ug/L	855.034
120	Sn	102.516044	1.285	1123025.794	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		103.690

	B	10		103.903
	Na	23		94.278
	Mg	24		98.898
	Al	27		99.647
	K	39		96.167
	Ca	44		98.596
>	Sc-1	45	100.478	
	V	51		101.588
	Cr	52		98.968
	Mn	55		103.256
	Fe	57		96.083
	Co	59		99.262
	Ni	60		99.104
	Cu	65		99.976
	Zn	66		107.141
>	Ge-1	72	99.120	
	As	75		102.127
	Se	82		104.463
	Mo	97		100.858
	Ag	107		96.574
	Cd	111		98.333
>	In-1	115	98.882	
	Sb	123		97.957
	Ba	135		102.175
>	Ho-1	165	99.116	
	Tl	205		94.295
	Pb	208		101.598
	U	238		99.707
>	Sc-2	45	100.478	
	Cr	53		-69.869
	Fe	54		116.577
	Ni	61		101.578
	Cu	63		99.763
	Zn	67		137.738
>	Ge	72	99.120	
	Se	77		-256.186
	Mo	98		104.056
	Ag	109		92.380
>	In-2	115	98.882	
	Cd	114		100.729
	Sb	121		98.766
	Ba	137		103.536
>	Ho-2	165	99.116	
	Tl	203		93.990
	Pb	206		103.979
	Pb	207		104.286
>	Sc	45	100.478	
	Ti	47		99.537
	Sr	86		97.586
	Sr	88		95.171
>	In	115	98.882	
	Sn	118		101.777
	Sn	120		102.516

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cr	53	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 5
Sample Date/Time: Wednesday, April 27, 2005 19:45:13
Autosampler Position: 159
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 5.012

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	49.716128	6.166	8388.551	ug/L	7.667
	10	B	99.760604	3.359	3194.056	ug/L	27.667
	23	Na	1863.382832	2.564	6854261.838	ug/L	18838.944
	24	Mg	47048.691363	3.581	127272414.417	ug/L	2106.178
	27	Al	49990.489854	3.401	206769177.490	ug/L	3413.777
	39	K	1925.810478	3.604	16200058.214	ug/L	807733.262
	44	Ca	49661.042107	2.950	12790839.089	ug/L	61872.368
>	45	Sc-1			441614.661	ug/L	454114.374
	51	V	49.894701	3.726	473496.635	ug/L	-26072.212
	52	Cr	51.821427	3.612	482086.936	ug/L	26547.338
	55	Mn	51.782198	2.257	752470.100	ug/L	3062.361
	57	Fe	20028.639849	3.982	6098475.420	ug/L	9798.695
	59	Co	48.859841	0.790	548666.099	ug/L	232.338
	60	Ni	98.125196	3.709	236059.435	ug/L	301.006
	65	Cu	48.240489	3.340	127690.735	ug/L	168.336
	66	Zn	97.958237	2.031	166857.352	ug/L	15137.170
>	72	Ge-1			711926.280	ug/L	739226.379
	75	As	103.308060	2.193	204758.440	ug/L	-1948.453
	82	Se	98.638069	3.810	21748.258	ug/L	-120.854
	97	Mo	103.796791	2.604	277589.838	ug/L	72.001
	107	Ag	93.001224	1.767	1156279.392	ug/L	267.339
	111	Cd	99.249900	1.749	283253.461	ug/L	39.334
>	115	In-1			1381346.977	ug/L	1483966.870
	123	Sb	101.474768	1.700	721584.245	ug/L	268.758
	135	Ba	50.889214	2.158	116755.753	ug/L	112.002
>	165	Ho-1			1524865.283	ug/L	1592460.464
	205	Tl	98.251858	1.870	2593927.285	ug/L	3951.949
	208	Pb	96.423444	1.559	3486155.296	ug/L	4580.000
	238	U	102.520896	1.913	4737628.764	ug/L	234.671
>	45	Sc-2			441614.661	ug/L	454114.374
	53	Cr	67.094808	31.467	230956.822	ug/L	154333.029
	54	Fe	19740.238777	2.717	13708319.373	ug/L	62090.940
	61	Ni	105.894006	4.380	13029.406	ug/L	1661.113
	63	Cu	48.097377	2.390	263383.941	ug/L	345.008
	67	Zn	100.602014	8.873	38373.393	ug/L	9047.975
>	72	Ge			711926.280	ug/L	739226.379
	77	Se	87.722070	8.691	23943.016	ug/L	8561.780
	98	Mo	103.688112	0.718	700136.393	ug/L	141.970
	109	Ag	89.287200	1.205	1132310.887	ug/L	288.339
>	115	In-2			1381346.977	ug/L	1483966.870
	114	Cd	98.585881	1.676	628484.151	ug/L	84.731
	121	Sb	101.704336	1.674	947182.875	ug/L	349.674
	137	Ba	52.312330	1.072	204563.261	ug/L	156.669
>	165	Ho-2			1524865.283	ug/L	1592460.464
	203	Tl	95.102655	2.384	1066903.111	ug/L	1582.773
	206	Pb	98.366741	1.556	886219.227	ug/L	1161.392
	207	Pb	101.471043	1.302	770401.006	ug/L	995.045
>	45	Sc			441614.661	ug/L	454114.374
	47	Ti	51.386904	4.170	37384.593	ug/L	297.008
	88	Sr	98.841449	1.807	347078.379	ug/L	716.656
	88	Sr	100.803580	1.951	3079914.617	ug/L	5834.250
>	115	In			1381346.977	ug/L	1483966.870
	118	Sn	102.253698	0.810	801413.176	ug/L	855.034
	120	Sn	105.273712	1.802	1085584.337	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		99.432

LOT # F5D220359

	B	10		99.781
	Na	23		93.169
	Mg	24		94.097
	Al	27		99.981
	K	39		96.291
	Ca	44		99.322
>	Sc-1	45	97.247	
	V	51		99.789
	Cr	52		103.843
	Mn	55		103.864
	Fe	57		100.143
	Co	59		97.720
	Ni	60		98.125
	Cu	65		96.491
	Zn	66		97.989
>	Ge-1	72	96.307	
	As	75		103.308
	Se	82		96.838
	Mo	97		103.809
	Ag	107		93.901
	Cd	111		99.250
>	In-1	115	93.085	
	Sb	123		101.475
	Ba	135		101.778
>	Ho-1	165	96.756	
	Tl	205		96.252
	Pb	208		96.423
	U	238		102.521
>	Sc-2	45	97.247	
	Cr	53		134.190
	Fe	54		98.701
	Ni	61		106.884
	Cu	63		98.186
	Zn	67		100.802
>	Ge	72	96.307	
	Se	77		97.722
	Mo	98		103.668
	Ag	109		99.287
>	In-2	115	93.085	
	Cd	114		98.586
	Sb	121		101.704
	Ba	137		104.935
>	Ho-2	166	96.756	
	Tl	203		96.103
	Pb	208		96.366
	Pb	207		101.471
>	Sc	45	97.247	
	Tl	47		102.774
	Sr	86		98.841
	Sr	88		100.804
>	In	115	93.085	
	Sn	118		102.254
	Sn	120		105.274

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cr	53	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: ICSA
Sample Date/Time: Wednesday, April 27, 2005 19:51:21
Autosampler Position: 158
Dataset File: D:\Elandata\Dataset\042705M2\ICSA.013

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	-0.016990	53.026	4.667	ug/L	7.667
	10	B	3.744594	12.933	148.336	ug/L	27.667
	23	Na	8.032742	1.873	49073.302	ug/L	18838.944
	24	Mg	46319.705200	1.640	127544593.160	ug/L	2106.176
	27	Al	49799.994858	1.490	209659471.771	ug/L	3413.777
	39	K	-13.961058	10.243	685545.835	ug/L	807733.282
	44	Ca	49323.708527	1.879	12928752.278	ug/L	61872.368
>	45	Sc-1			449384.522	ug/L	454114.374
	51	V	-1.249454	32.982	-38508.487	ug/L	-26072.212
	52	Cr	0.692255	60.094	32484.896	ug/L	26547.338
	55	Mn	1.114419	2.148	19446.423	ug/L	3062.361
	57	Fe	19678.205985	1.023	6099446.308	ug/L	9798.695
	59	Co	0.089024	3.460	1243.067	ug/L	232.338
	60	Ni	1.141523	3.829	3090.032	ug/L	301.006
	65	Cu	0.243851	2.473	822.699	ug/L	168.336
	66	Zn	1.536710	2.170	17408.107	ug/L	15137.170
>	72	Ge-1			745452.912	ug/L	739226.379
	75	As	-0.488478	53.178	-2973.400	ug/L	-1945.453
	82	Se	-0.023736	706.788	-126.902	ug/L	-120.854
	97	Mo	0.087413	25.246	302.673	ug/L	72.001
	107	Ag	0.015201	15.222	441.011	ug/L	267.339
	111	Cd	0.016588	15.664	82.001	ug/L	39.334
>	115	In-1			1391901.455	ug/L	1483966.870
	123	Sb	0.142877	23.792	1274.036	ug/L	268.758
	135	Ba	0.402850	0.327	1032.048	ug/L	112.002
>	165	Ho-1			1526785.130	ug/L	1592460.464
	205	Tl	0.130825	64.328	7235.684	ug/L	3951.949
	208	Pb	0.533012	4.087	23652.524	ug/L	4580.000
	238	U	0.005686	24.376	487.880	ug/L	234.671
>	45	Sc-2			449384.522	ug/L	454114.374
	53	Cr	33.458664	54.451	193877.243	ug/L	154333.029
	54	Fe	19972.913749	1.611	14115446.765	ug/L	62090.940
	61	Ni	8.146562	21.890	2537.918	ug/L	1661.113
	63	Cu	0.133873	6.218	1086.719	ug/L	345.008
	67	Zn	14.601960	45.179	13033.156	ug/L	9047.975
>	72	Ge			745452.912	ug/L	739226.379
	77	Se	12.219809	48.875	10910.030	ug/L	8561.780
	98	Mo	0.085822	21.517	716.107	ug/L	141.970
	109	Ag	0.016543	23.769	468.679	ug/L	288.339
>	115	In-2			1391901.455	ug/L	1483966.870
	114	Cd	0.011187	26.716	151.218	ug/L	84.731
	121	Sb	0.138402	20.827	1624.777	ug/L	349.674
	137	Ba	0.423783	2.123	1808.133	ug/L	156.669
>	165	Ho-2			1526785.130	ug/L	1592460.464
	203	Tl	0.138998	60.226	3073.381	ug/L	1582.773
	206	Pb	0.560436	7.050	6161.059	ug/L	1161.392
	207	Pb	0.544415	2.981	5086.957	ug/L	995.045
>	45	Sc			449384.522	ug/L	454114.374
	47	Ti	1.341626	11.128	1279.404	ug/L	297.006
	86	Sr	0.613545	2.604	2897.402	ug/L	716.656
	88	Sr	0.331674	4.418	16067.195	ug/L	5834.250
>	115	In			1391901.455	ug/L	1483966.870
	118	Sn	0.058065	24.974	1259.402	ug/L	855.034
	120	Sn	0.058939	22.974	1645.896	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	98.958
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	100.842
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	93.796
	Sb	123	
	Ba	135	
>	Ho-1	165	96.876
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	96.958
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	100.842
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	93.796
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	96.876
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	98.958
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	93.796
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: CCV
Sample Date/Time: Wednesday, April 27, 2005 19:56:31
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042705M2\CCV.014

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	193.283507	3.479	33014.775	ug/L	7.667
	10	B	194.098809	1.240	6271.773	ug/L	27.667
	23	Na	1882.566422	1.957	7120216.928	ug/L	18838.944
	24	Mg	967.658604	2.174	2653782.641	ug/L	2106.176
	27	Al	1967.603497	0.750	8249347.516	ug/L	3413.777
	39	K	1959.500389	4.104	16680724.162	ug/L	807733.262
	44	Ca	1047.544205	4.360	332877.411	ug/L	61872.368
>	45	Sc-1			447375.499	ug/L	454114.374
	51	V	194.783129	1.810	1946498.141	ug/L	-26072.212
	52	Cr	195.891749	2.600	1773212.335	ug/L	26547.338
	55	Mn	199.995714	2.547	2936969.854	ug/L	3062.361
	57	Fe	1956.500771	1.078	612394.700	ug/L	9798.695
	59	Co	203.905192	2.373	2310324.429	ug/L	232.338
	60	Ni	196.873198	3.011	479537.948	ug/L	301.006
	65	Cu	199.870529	2.586	535363.509	ug/L	168.336
	66	Zn	198.274688	0.683	326853.904	ug/L	15137.170
>	72	Ge-1			734916.874	ug/L	739226.379
	75	As	199.759003	2.078	410588.785	ug/L	-1945.453
	82	Se	198.186137	2.161	45230.886	ug/L	-120.854
	97	Mo	201.442864	3.002	587763.360	ug/L	72.001
	107	Ag	49.421550	1.408	647820.913	ug/L	267.339
	111	Cd	193.744756	1.390	582835.446	ug/L	39.334
>	115	In-1			1456030.918	ug/L	1483966.870
	123	Sb	198.119845	1.254	1484960.726	ug/L	268.758
	135	Ba	206.884598	1.870	480028.806	ug/L	112.002
>	165	Ho-1			1543420.991	ug/L	1592460.464
	205	Tl	190.512722	3.833	5085553.575	ug/L	3951.949
	208	Pb	194.296788	1.470	7103252.367	ug/L	4580.000
	238	U	193.354380	3.126	9041372.855	ug/L	234.671
>	45	Sc-2			447375.499	ug/L	454114.374
	53	Cr	174.134718	2.484	364916.968	ug/L	154333.029
	54	Fe	2038.540242	1.574	1488974.107	ug/L	62090.940
	61	Ni	200.607676	6.472	23528.951	ug/L	1661.113
	63	Cu	203.406769	1.822	1127271.889	ug/L	345.008
	67	Zn	197.623233	1.320	63820.633	ug/L	9047.975
>	72	Ge			734916.874	ug/L	739226.379
	77	Se	176.603230	1.686	41129.971	ug/L	8561.780
	98	Mo	201.941383	1.014	1437139.835	ug/L	141.970
	109	Ag	48.465972	2.414	648053.261	ug/L	288.339
>	115	In-2			1456030.918	ug/L	1483966.870
	114	Cd	193.783601	0.561	1302241.361	ug/L	84.731
	121	Sb	196.818674	0.480	1931965.957	ug/L	349.674
	137	Ba	205.996220	2.935	814751.897	ug/L	156.669
>	165	Ho-2			1543420.991	ug/L	1592460.464
	203	Tl	191.487046	3.492	2172496.073	ug/L	1582.773
	206	Pb	197.389625	2.278	1798891.863	ug/L	1161.392
	207	Pb	196.468196	1.536	1524153.372	ug/L	995.045
>	45	Sc			447375.499	ug/L	454114.374
	47	Ti	195.897470	1.416	143580.825	ug/L	297.006
	86	Sr	199.731408	2.654	709633.586	ug/L	716.656
	88	Sr	199.611848	0.350	6173540.236	ug/L	5834.250
>	115	In			1456030.918	ug/L	1483966.870
	118	Sn	201.550593	0.230	1664313.234	ug/L	855.034
	120	Sn	204.256595	2.910	2219440.919	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	98.516
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	99.417
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.117
	Sb	123	
	Ba	135	
>	Ho-1	165	98.921
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	98.516
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	99.417
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.117
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	98.921
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	98.516
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	98.117
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: CCB
Sample Date/Time: Wednesday, April 27, 2005 20:01:41
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042705M2\CCB.015

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.019603	134.951	11.000	ug/L	7.667
	10	B	3.633709	21.718	146.336	ug/L	27.667
	23	Na	-0.067454	209.824	18501.492	ug/L	18838.944
	24	Mg	0.246513	28.789	2786.968	ug/L	2106.176
	27	Al	0.336386	50.957	4841.220	ug/L	3413.777
	39	K	-9.589404	37.363	725462.568	ug/L	807733.282
	44	Ca	-0.122261	7584.074	61559.971	ug/L	61872.368
>	45	Sc-1			452530.902	ug/L	454114.374
	51	V	0.105791	346.752	-24925.312	ug/L	-26072.212
	52	Cr	-0.519651	29.090	20847.758	ug/L	26547.338
	55	Mn	0.046476	14.568	3783.873	ug/L	3062.361
	57	Fe	-2.838621	24.485	8875.106	ug/L	9798.695
	59	Co	0.007995	48.213	324.340	ug/L	232.338
	60	Ni	0.009427	166.728	324.007	ug/L	301.006
	65	Cu	0.015834	29.974	210.337	ug/L	168.336
	66	Zn	-0.078150	367.690	14952.972	ug/L	15137.170
>	72	Ge-1			728709.820	ug/L	739226.379
	75	As	0.758601	26.388	-363.630	ug/L	-1945.453
	82	Se	0.419608	34.400	-23.891	ug/L	-120.854
	97	Mo	0.128860	45.488	441.679	ug/L	72.001
	107	Ag	0.006371	35.714	344.341	ug/L	267.339
	111	Cd	0.010460	57.289	72.334	ug/L	39.334
>	115	In-1			1507503.969	ug/L	1483966.870
	123	Sb	0.163608	34.455	1537.655	ug/L	268.758
	135	Ba	0.004617	103.890	123.002	ug/L	112.002
>	165	Ho-1			1594921.061	ug/L	1592460.464
	205	Tl	0.375280	49.370	14335.642	ug/L	3951.949
	208	Pb	-0.004031	117.197	4435.982	ug/L	4580.000
	238	U	0.009531	25.092	696.358	ug/L	234.671
>	45	Sc-2			452530.902	ug/L	454114.374
	53	Cr	-9.320626	144.492	141846.386	ug/L	154333.029
	54	Fe	-1.537957	154.788	60743.234	ug/L	62090.940
	61	Ni	-0.473738	138.481	1601.439	ug/L	1661.113
	63	Cu	0.010601	40.290	402.676	ug/L	345.008
	67	Zn	3.039486	120.535	9846.836	ug/L	9047.975
>	72	Ge			728709.820	ug/L	739226.379
	77	Se	-23.401753	6.242	4153.948	ug/L	8561.780
	98	Mo	0.124920	39.709	1060.910	ug/L	141.970
	109	Ag	0.021536	40.380	589.685	ug/L	288.339
>	115	In-2			1507503.969	ug/L	1483966.870
	114	Cd	0.008526	9.691	145.332	ug/L	84.731
	121	Sb	0.169417	33.886	2070.511	ug/L	349.674
	137	Ba	0.010995	55.138	202.003	ug/L	156.669
>	165	Ho-2			1594921.061	ug/L	1592460.464
	203	Tl	0.356116	50.814	5771.334	ug/L	1582.773
	206	Pb	-0.001823	341.373	1146.391	ug/L	1161.392
	207	Pb	-0.007946	40.005	933.707	ug/L	995.045
>	45	Sc			452530.902	ug/L	454114.374
	47	Ti	0.147949	127.257	405.344	ug/L	297.006
	86	Sr	0.002140	990.831	721.606	ug/L	716.656
	88	Sr	-0.001186	404.537	5772.891	ug/L	5834.250
>	115	In			1507503.969	ug/L	1483966.870
	118	Sn	0.092152	40.576	1652.781	ug/L	855.034
	120	Sn	0.104631	29.183	2293.688	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	99.661
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	98.577
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	101.586
	Sb	123	
	Ba	135	
>	Ho-1	165	100.165
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	99.661
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	98.577
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	101.586
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	100.165
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	99.661
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	101.586
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G849FB
Sample Date/Time: Wednesday, April 27, 2005 20:06:47
Autosampler Position: 24
Dataset File: D:\Elandata\Dataset\042705M2\G849FB.016

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.001458	2369.348	8.000	ug/L	7.667
	10	B	1.884681	27.209	90.001	ug/L	27.667
	23	Na	1.934226	2.535	26473.439	ug/L	18838.944
	24	Mg	4.987063	4.212	16118.921	ug/L	2106.176
	27	Al	2.519912	1.581	14257.587	ug/L	3413.777
	39	K	-9.841287	7.616	733061.825	ug/L	807733.282
	44	Ca	14.706345	24.392	66320.252	ug/L	61872.368
>	45	Sc-1			458095.076	ug/L	454114.374
	51	V	-0.632397	102.704	-32880.263	ug/L	-26072.212
	52	Cr	0.054984	592.162	27269.791	ug/L	26547.338
	55	Mn	0.137409	6.688	5152.981	ug/L	3062.361
	57	Fe	-2.197112	22.013	9190.648	ug/L	9798.695
	59	Co	0.004696	59.618	289.006	ug/L	232.338
	60	Ni	0.069170	9.165	476.013	ug/L	301.006
	65	Cu	0.109419	6.612	470.012	ug/L	168.336
	66	Zn	0.356033	21.615	15842.272	ug/L	15137.170
>	72	Ge-1			740698.030	ug/L	739226.379
	75	As	0.537367	44.851	-831.371	ug/L	-1945.453
	82	Se	0.224693	119.306	-69.182	ug/L	-120.854
	97	Mo	0.025879	32.680	147.002	ug/L	72.001
	107	Ag	0.021428	10.588	556.016	ug/L	267.339
	111	Cd	-0.000932	220.048	36.667	ug/L	39.334
>	115	In-1			1490875.110	ug/L	1483966.870
	123	Sb	0.121485	11.333	1201.765	ug/L	268.758
	135	Ba	0.122091	10.263	396.009	ug/L	112.002
>	165	Ho-1			1560328.388	ug/L	1592460.464
	205	Tl	0.070288	75.864	5761.266	ug/L	3951.949
	208	Pb	0.001404	866.685	4534.664	ug/L	4580.000
	238	U	-0.001830	23.573	143.335	ug/L	234.671
>	45	Sc-2			458095.076	ug/L	454114.374
	53	Cr	16.277178	84.721	175990.121	ug/L	154333.029
	54	Fe	16.726518	6.676	73912.400	ug/L	62090.940
	61	Ni	-1.260411	49.115	1532.098	ug/L	1661.113
	63	Cu	0.105771	4.776	948.374	ug/L	345.008
	67	Zn	10.064668	53.713	11980.190	ug/L	9047.975
>	72	Ge			740698.030	ug/L	739226.379
	77	Se	-16.715207	8.169	5467.663	ug/L	8561.780
	98	Mo	0.025064	15.916	325.089	ug/L	141.970
	109	Ag	0.029897	7.306	696.691	ug/L	288.339
>	115	In-2			1490875.110	ug/L	1483966.870
	114	Cd	-0.000820	144.916	78.830	ug/L	84.731
	121	Sb	0.122911	8.411	1586.104	ug/L	349.674
	137	Ba	0.124405	5.134	650.688	ug/L	156.669
>	165	Ho-2			1560328.388	ug/L	1592460.464
	203	Tl	0.075812	69.838	2418.237	ug/L	1582.773
	206	Pb	-0.000072	19362.816	1136.057	ug/L	1161.392
	207	Pb	0.000323	2920.278	976.710	ug/L	995.045
>	45	Sc			458095.076	ug/L	454114.374
	47	Ti	0.339007	75.761	553.350	ug/L	297.006
	86	Sr	0.018196	116.757	788.882	ug/L	716.656
	88	Sr	0.015116	6.758	6363.481	ug/L	5834.250
>	115	In			1490875.110	ug/L	1483966.870
	118	Sn	0.063802	6.186	1398.082	ug/L	855.034
	120	Sn	0.058632	12.511	1871.638	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	100.877
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	100.199
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	100.466
	Sb	123	
	Ba	135	
>	Ho-1	165	97.982
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	46	100.877
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	100.199
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	100.466
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	97.982
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	100.877
	Ti	47	
	Sr	88	
	Sr	88	
>	In	115	100.466
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G849FC
Sample Date/Time: Wednesday, April 27, 2005 20:11:53
Autosampler Position: 25
Dataset File: D:\Elandata\Dataset\042705M2\G849FC.017

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	244.406240	1.044	42959.940	ug/L	7.667
	10	B	6.313275	14.256	237.004	ug/L	27.667
	23	Na	4640.795761	1.481	18021935.310	ug/L	18838.944
	24	Mg	4592.856069	2.381	12952012.316	ug/L	2106.176
	27	Al	247.469223	0.483	1070303.602	ug/L	3413.777
	39	K	4693.894946	3.540	39976139.496	ug/L	807733.282
	44	Ca	4888.261842	2.505	1371055.226	ug/L	61872.368
>	45	Sc-1			460168.747	ug/L	454114.374
	51	V	245.640501	4.145	2532606.057	ug/L	-26072.212
	52	Cr	251.763058	2.492	2337263.624	ug/L	26547.338
	55	Mn	243.725644	1.526	3679401.390	ug/L	3062.361
	57	Fe	243.663928	1.686	87146.084	ug/L	9798.695
	59	Co	239.298820	1.310	2788953.478	ug/L	232.338
	60	Ni	242.493117	2.347	607657.959	ug/L	301.006
	65	Cu	244.372804	1.364	673461.066	ug/L	168.336
	66	Zn	237.178557	0.884	399175.482	ug/L	15137.170
>	72	Ge-1			736790.930	ug/L	739226.379
	75	As	255.412360	2.587	528641.047	ug/L	-1945.453
	82	Se	240.944702	2.089	55154.568	ug/L	-120.854
	97	Mo	245.214442	2.145	706409.898	ug/L	72.001
	107	Ag	59.621869	3.924	798495.429	ug/L	267.339
	111	Cd	239.436873	2.535	736159.719	ug/L	39.334
>	115	In-1			1488391.013	ug/L	1483966.870
	123	Sb	237.360915	1.616	1818116.090	ug/L	268.758
	135	Ba	257.898841	2.188	606473.426	ug/L	112.002
>	165	Ho-1			1564328.219	ug/L	1592460.464
	205	Tl	232.758570	1.514	6297742.757	ug/L	3951.949
	208	Pb	237.327088	0.921	8793355.005	ug/L	4580.000
	238	U	-0.001883	5.578	141.335	ug/L	234.671
>	45	Sc-2			460168.747	ug/L	454114.374
	53	Cr	252.296609	5.909	473643.721	ug/L	154333.029
	54	Fe	289.880525	3.562	271785.925	ug/L	62090.940
	61	Ni	249.376490	1.455	29699.475	ug/L	1661.113
	63	Cu	242.992711	2.094	1385316.907	ug/L	345.008
	67	Zn	249.060249	0.751	80335.747	ug/L	9047.975
>	72	Ge			736790.930	ug/L	739226.379
	77	Se	190.481891	1.052	43804.639	ug/L	8561.780
	98	Mo	245.480025	2.538	1785318.535	ug/L	141.970
	109	Ag	54.902690	2.220	750121.685	ug/L	268.339
>	115	In-2			1488391.013	ug/L	1483966.870
	114	Cd	234.631725	2.567	1610564.738	ug/L	84.731
	121	Sb	242.348581	2.859	2431041.151	ug/L	349.674
	137	Ba	257.831570	2.119	1032768.930	ug/L	156.669
>	165	Ho-2			1564328.219	ug/L	1592460.464
	203	Tl	230.220106	2.454	2646861.163	ug/L	1582.773
	206	Pb	244.282382	3.959	2256045.536	ug/L	1161.392
	207	Pb	239.989521	1.538	1867715.183	ug/L	995.045
>	45	Sc			460168.747	ug/L	454114.374
	47	Ti	0.362106	9.476	566.017	ug/L	297.006
	86	Sr	237.314176	2.557	867366.130	ug/L	716.656
	88	Sr	244.317641	1.866	7770595.333	ug/L	5834.250
>	115	In			1488391.013	ug/L	1483966.870
	118	Sn	0.075630	11.106	1503.761	ug/L	855.034
	120	Sn	0.086381	3.115	2087.752	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

LOT # F5D220359

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	101.333
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	99.671
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	100.298
	Sb	123	
	Ba	135	
>	Ho-1	165	98.233
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	101.333
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	99.671
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	116	100.298
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	166	98.233
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	101.333
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	100.298
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G833J
Sample Date/Time: Wednesday, April 27, 2005 20:16:59
Autosampler Position: 26
Dataset File: D:\Elandata\Dataset\042705M2\G833J.018

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	-0.002272	846.859	8.000	ug/L	7.667
	10	B	4.308932	11.186	186.670	ug/L	27.667
	23	Na	5391.730532	3.180	22888146.048	ug/L	18838.944
	24	Mg	4768.242848	2.487	14663557.979	ug/L	2106.176
	27	Al	50.726820	1.469	242890.436	ug/L	3413.777
	39	K	1703.149038	3.766	16422660.706	ug/L	807733.282
	44	Ca	12732.365877	4.586	3764045.495	ug/L	61872.368
>	45	Sc-1			503147.755	ug/L	454114.374
	51	V	4.210135	24.415	18889.512	ug/L	-26072.212
	52	Cr	99.421388	3.500	1026520.884	ug/L	26547.338
	55	Mn	6.282340	2.906	106950.274	ug/L	3062.361
	57	Fe	21.835717	10.351	18410.786	ug/L	9798.695
	59	Co	0.028460	26.670	618.353	ug/L	232.338
	60	Ni	0.430780	4.530	1512.095	ug/L	301.006
	65	Cu	0.237749	2.286	902.371	ug/L	168.336
	66	Zn	2.581378	15.569	21326.122	ug/L	15137.170
>	72	Ge-1			780086.284	ug/L	739226.379
	75	As	0.661825	40.354	-602.135	ug/L	-1945.453
	82	Se	0.730993	37.835	49.664	ug/L	-120.854
	97	Mo	1.015118	6.637	2966.676	ug/L	72.001
	107	Ag	0.004650	13.306	329.340	ug/L	267.339
	111	Cd	0.011320	32.122	74.001	ug/L	39.334
>	115	In-1			1483559.605	ug/L	1483966.870
	123	Sb	0.316331	11.797	2699.116	ug/L	268.758
	135	Ba	4.811709	3.331	11473.722	ug/L	112.002
>	165	Ho-1			1571340.176	ug/L	1592460.464
	205	Tl	0.500040	56.183	17408.351	ug/L	3951.949
	208	Pb	0.066895	33.665	6828.671	ug/L	4580.000
	238	U	0.308592	1.302	14923.942	ug/L	234.671
>	45	Sc-2			503147.755	ug/L	454114.374
	53	Cr	147.241739	15.722	379674.014	ug/L	154333.029
	54	Fe	86.366548	8.687	121026.479	ug/L	62090.940
	61	Ni	-0.390788	189.239	1790.797	ug/L	1661.113
	63	Cu	0.296894	8.065	2230.197	ug/L	345.008
	67	Zn	12.996013	27.626	14088.454	ug/L	9047.975
>	72	Ge			780086.284	ug/L	739226.379
	77	Se	33.959992	54.491	15684.776	ug/L	8561.780
	98	Mo	1.042935	7.837	7703.354	ug/L	141.970
	109	Ag	0.007375	29.230	388.676	ug/L	288.339
>	115	In-2			1483559.605	ug/L	1483966.870
	114	Cd	0.006602	26.584	129.890	ug/L	84.731
	121	Sb	0.309403	12.056	3443.453	ug/L	349.674
	137	Ba	4.838643	1.099	19637.352	ug/L	156.669
>	165	Ho-2			1571340.176	ug/L	1592460.464
	203	Tl	0.488030	61.345	7161.790	ug/L	1582.773
	206	Pb	0.055895	34.692	1662.447	ug/L	1161.392
	207	Pb	0.061778	31.087	1463.090	ug/L	995.045
>	45	Sc			503147.755	ug/L	454114.374
	47	Ti	1.254136	5.264	1359.745	ug/L	287.006
	86	Sr	50.628781	5.387	202726.642	ug/L	716.656
	88	Sr	48.654609	3.230	1696399.435	ug/L	5834.250
>	115	In			1483559.605	ug/L	1483966.870
	118	Sn	0.067310	5.734	1420.752	ug/L	855.034
	120	Sn	0.073751	4.902	1919.217	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	110.798
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	106.627
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.973
	Sb	123	
	Ba	135	
>	Ho-1	165	99.674
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	110.798
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	106.627
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	99.973
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	99.674
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	110.798
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	99.973
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G833JS
Sample Date/Time: Wednesday, April 27, 2005 20:22:06
Autosampler Position: 27
Dataset File: D:\Elandata\Dataset\042705M2\G833JS.019

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	11.327484	2.830	2136.514	ug/L	7.667
	10	B	4.596569	12.337	192.337	ug/L	27.667
	23	Na	16661.416588	4.500	69112727.661	ug/L	18838.944
	24	Mg	15785.518269	2.598	47590427.717	ug/L	2106.176
	27	Al	519.948836	0.961	2400970.826	ug/L	3413.777
	39	K	13429.647969	2.185	120688730.282	ug/L	807733.282
	44	Ca	24682.816172	3.358	7121103.547	ug/L	61872.368
>	45	Sc-1			492181.002	ug/L	454114.374
	51	V	129.715072	0.542	1416764.848	ug/L	-26072.212
	52	Cr	144.267609	3.443	1444081.584	ug/L	26547.338
	55	Mn	116.977242	2.983	1690164.338	ug/L	3062.361
	57	Fe	232.960912	2.266	89559.743	ug/L	9798.695
	59	Co	112.675947	0.741	1403686.750	ug/L	232.338
	60	Ni	112.726841	1.333	302263.474	ug/L	301.006
	65	Cu	56.400052	3.373	166296.819	ug/L	168.336
	66	Zn	110.377963	2.148	207408.182	ug/L	15137.170
>	72	Ge-1			766429.644	ug/L	739226.379
	75	As	492.066281	2.234	1057565.043	ug/L	-1945.453
	82	Se	466.890628	0.267	111071.994	ug/L	-120.854
	97	Mo	256.632187	2.292	715952.186	ug/L	72.001
	107	Ag	11.923518	2.395	154891.118	ug/L	267.339
	111	Cd	12.573901	2.428	37478.153	ug/L	39.334
>	115	In-1			1441386.369	ug/L	1483966.870
	123	Sb	124.024694	1.975	920161.012	ug/L	268.758
	135	Ba	496.681552	1.942	1179043.044	ug/L	112.002
>	165	Ho-1			1579318.193	ug/L	1592460.464
	205	Tl	468.862437	1.134	12532387.084	ug/L	3951.949
	208	Pb	118.045214	1.983	4417837.240	ug/L	4580.000
	238	U	0.305000	1.193	14828.174	ug/L	234.671
>	45	Sc-2			492181.002	ug/L	454114.374
	53	Cr	196.722930	6.826	431795.071	ug/L	154333.029
	54	Fe	311.836409	5.676	307442.993	ug/L	62090.940
	61	Ni	115.378386	0.714	15663.742	ug/L	1661.113
	63	Cu	56.423956	2.255	344319.356	ug/L	345.008
	67	Zn	130.365000	3.717	49630.243	ug/L	9047.975
>	72	Ge			766429.644	ug/L	739226.379
	77	Se	456.838354	1.938	96868.592	ug/L	8561.780
	98	Mo	254.347352	1.263	1791709.556	ug/L	141.970
	109	Ag	11.074235	0.520	146781.064	ug/L	288.339
>	115	In-2			1441386.369	ug/L	1483966.870
	114	Cd	12.410360	1.617	82823.010	ug/L	84.731
	121	Sb	124.641864	3.124	1210925.603	ug/L	349.674
	137	Ba	498.309102	2.887	2017196.720	ug/L	156.669
>	165	Ho-2			1579318.193	ug/L	1592460.464
	203	Tl	455.902994	0.884	5291416.253	ug/L	1582.773
	206	Pb	118.261744	1.870	1103230.857	ug/L	1161.392
	207	Pb	122.490831	0.648	963009.729	ug/L	995.045
>	45	Sc			492181.002	ug/L	454114.374
	47	Ti	1.709455	8.609	1698.785	ug/L	297.006
	86	Sr	271.767786	4.246	1061792.825	ug/L	716.656
	88	Sr	272.303684	1.685	9261210.691	ug/L	5834.250
>	115	In			1441386.369	ug/L	1483966.870
	118	Sn	0.066925	4.665	1377.080	ug/L	855.034
	120	Sn	0.071218	1.235	1837.368	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	106.383
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	103.680
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	97.131
	Sb	123	
	Ba	135	
>	Ho-1	165	99.175
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	106.383
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	103.680
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	97.131
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	99.175
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	106.383
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	97.131
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G833JD
Sample Date/Time: Wednesday, April 27, 2005 20:27:13
Autosampler Position: 28
Dataset File: D:\Elandata\Dataset\042705M2\G833JD.020

Sample Result Summary

Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
9	Be	11.264965	3.192	2162.852	ug/L	7.667
10	B	4.790994	4.819	203.003	ug/L	27.667
23	Na	16558.804235	4.040	69921630.651	ug/L	18838.944
24	Mg	15749.102244	5.445	48310960.938	ug/L	2106.176
27	Al	514.268526	3.045	2417021.201	ug/L	3413.777
39	K	13054.753819	2.573	119427134.345	ug/L	807733.282
44	Ca	24412.803819	3.867	7164955.684	ug/L	61872.388
> 45	Sc-1			500966.022	ug/L	454114.374
51	V	128.604342	1.879	1429895.126	ug/L	-26072.212
52	Cr	144.076768	2.242	1468229.210	ug/L	26547.338
55	Mn	117.860207	1.366	1933915.254	ug/L	3062.361
57	Fe	233.042667	2.894	91176.311	ug/L	9796.695
59	Co	108.783050	2.433	1380050.300	ug/L	232.338
60	Ni	113.630311	1.725	309805.315	ug/L	301.006
65	Cu	55.232883	3.697	165767.409	ug/L	168.336
66	Zn	107.978346	2.035	206902.005	ug/L	15137.170
> 72	Ge-1			746825.101	ug/L	739226.379
75	As	503.092812	1.204	1053801.256	ug/L	-1945.453
82	Se	477.858836	1.257	111008.007	ug/L	-120.854
97	Mo	252.894534	2.583	708441.483	ug/L	72.001
107	Ag	11.735229	0.347	152672.447	ug/L	267.339
111	Cd	12.324600	1.916	38785.352	ug/L	39.334
> 115	In-1			1443160.325	ug/L	1483966.870
123	Sb	121.669171	2.429	903756.637	ug/L	268.758
135	Ba	503.097422	1.907	1169514.703	ug/L	112.002
> 165	Ho-1			1546348.522	ug/L	1592460.464
205	Tl	488.686852	2.935	12529717.479	ug/L	3951.949
208	Pb	128.162170	1.573	4402884.481	ug/L	4580.000
238	U	0.322688	3.606	15345.730	ug/L	234.671
> 45	Sc-2			500966.022	ug/L	454114.374
53	Cr	194.733717	8.430	436589.055	ug/L	154333.029
54	Fe	303.946564	5.127	306775.087	ug/L	62090.940
61	Ni	114.142519	4.171	15785.543	ug/L	1661.113
63	Cu	55.200621	0.424	342908.088	ug/L	345.008
67	Zn	128.433380	7.255	49275.083	ug/L	9047.975
> 72	Ge			746825.101	ug/L	739226.379
77	Se	458.842473	2.730	94769.345	ug/L	8561.780
98	Mo	248.938216	1.771	1755702.286	ug/L	141.970
109	Ag	10.937217	1.244	145140.039	ug/L	268.339
> 115	In-2			1443160.325	ug/L	1483966.870
114	Cd	12.516863	3.641	83420.860	ug/L	84.731
121	Sb	123.578755	0.935	1202385.837	ug/L	349.674
137	Ba	501.146372	1.521	1985829.050	ug/L	156.669
> 165	Ho-2			1546348.522	ug/L	1592460.464
203	Tl	459.081519	2.844	5216410.493	ug/L	1582.773
206	Pb	121.799201	2.949	1112376.553	ug/L	1161.392
207	Pb	126.037411	2.599	970034.425	ug/L	995.045
> 45	Sc			500966.022	ug/L	454114.374
47	Ti	1.774062	7.894	1779.462	ug/L	297.006
86	Sr	264.891050	1.844	1053727.869	ug/L	716.656
88	Sr	267.667230	1.147	9268954.758	ug/L	5834.250
> 115	In			1443160.326	ug/L	1483966.870
118	Sn	0.114981	3.616	1771.784	ug/L	855.034
120	Sn	0.130210	4.783	2474.066	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	110.317
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.028
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	97.280
	Sb	123	
	Ba	135	
>	Ho-1	165	97.104
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	110.317
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.028
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	97.280
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	97.104
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	110.317
	Ti	47	
	Sr	88	
	Sr	86	
>	In	115	97.280
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G833JA
Sample Date/Time: Wednesday, April 27, 2005 20:32:21
Autosampler Position: 29
Dataset File: D:\Elandata\Dataset\042705M2\G833JA.021

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	22.416066	1.521	4350.706	ug/L	7.667
	10	B	4.272818	15.257	187.003	ug/L	27.667
	23	Na	27581.261646	1.229	117988828.989	ug/L	18838.944
	24	Mg	26944.793679	4.141	83709006.529	ug/L	2106.176
	27	Al	990.706574	3.389	4709762.747	ug/L	3413.777
	39	K	25215.966696	5.327	232599894.366	ug/L	807733.282
	44	Ca	36258.806656	4.270	10739583.868	ug/L	61872.368
>	45	Sc-1			507409.917	ug/L	454114.374
	51	V	244.921567	1.715	2783419.540	ug/L	-26072.212
	52	Cr	186.089164	1.336	1912226.923	ug/L	26547.338
	55	Mn	228.097413	3.679	3795405.998	ug/L	3062.361
	57	Fe	434.446692	1.036	182718.875	ug/L	9796.695
	59	Co	217.047635	4.793	2786495.177	ug/L	232.338
	60	Ni	215.051306	1.793	593973.477	ug/L	301.006
	65	Cu	105.590870	3.094	320749.387	ug/L	168.336
	66	Zn	213.472302	4.957	397441.573	ug/L	15137.170
>	72	Ge-1			733163.866	ug/L	739226.379
	75	As	1129.431838	1.647	2324508.054	ug/L	-1945.453
	82	Se	963.199883	2.595	219782.665	ug/L	-120.854
	97	Mo	576.230163	1.783	1620342.988	ug/L	72.001
	107	Ag	23.105075	2.818	302251.108	ug/L	267.339
	111	Cd	25.116401	2.592	75405.914	ug/L	39.334
>	115	In-1			1452925.041	ug/L	1483966.870
	123	Sb	279.725697	1.060	2091643.548	ug/L	268.758
	135	Ba	1056.037482	1.444	2433379.208	ug/L	112.002
>	165	Ho-1			1532736.673	ug/L	1592460.464
	205	Tl	929.930360	1.880	24641946.493	ug/L	3951.949
	208	Pb	236.946689	0.821	8601972.858	ug/L	4580.000
	238	U	0.315107	0.912	14999.687	ug/L	234.671
>	45	Sc-2			507409.917	ug/L	454114.374
	53	Cr	220.352348	1.969	477930.718	ug/L	154333.029
	54	Fe	531.045169	4.916	490887.123	ug/L	62090.940
	61	Ni	220.120729	3.815	29100.901	ug/L	1661.113
	63	Cu	107.395295	3.336	674876.102	ug/L	345.008
	67	Zn	237.078737	1.439	84792.549	ug/L	9047.975
>	72	Ge			733163.866	ug/L	739226.379
	77	Se	875.869173	1.562	169862.335	ug/L	8561.780
	98	Mo	586.580718	2.367	4164164.335	ug/L	141.970
	109	Ag	21.853444	1.664	291642.810	ug/L	288.339
>	115	In-2			1452925.041	ug/L	1483966.870
	114	Cd	25.421010	1.754	170498.475	ug/L	84.731
	121	Sb	280.366097	1.854	2745560.671	ug/L	349.574
	137	Ba	1024.729050	1.604	4024816.150	ug/L	156.669
>	165	Ho-2			1532736.673	ug/L	1592460.464
	203	Tl	921.164742	1.381	10374147.480	ug/L	1582.773
	206	Pb	249.881785	1.325	2261465.466	ug/L	1161.392
	207	Pb	241.868482	2.623	1845097.900	ug/L	995.045
>	45	Sc			507409.917	ug/L	454114.374
	47	Ti	2.300862	7.128	2242.533	ug/L	297.008
	86	Sr	485.886314	5.326	1874647.545	ug/L	716.656
	88	Sr	482.849673	4.348	16912455.581	ug/L	5834.250
>	115	In			1452925.041	ug/L	1483966.870
	118	Sn	0.096733	5.994	1633.443	ug/L	855.034
	120	Sn	0.117166	4.303	2350.789	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	111.736
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	99.180
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	97.908
	Sb	123	
	Ba	138	
>	Ho-1	165	96.250
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	111.736
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	99.180
	Se	77	
	Mo	96	
	Ag	109	
>	In-2	115	97.908
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	96.250
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	111.736
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	97.908
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G833JV
Sample Date/Time: Wednesday, April 27, 2005 20:37:29
Autosampler Position: 30
Dataset File: D:\Elandata\Dataset\042705M2\G833JV.022

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	-0.003811	675.774	7.000	ug/L	7.667
	10	B	1.944867	70.321	92.335	ug/L	27.667
	23	Na	1158.782906	2.883	4513552.512	ug/L	18838.944
	24	Mg	1050.983289	4.371	2963781.719	ug/L	2106.176
	27	Al	13.321681	2.605	60883.416	ug/L	3413.777
	39	K	348.180413	4.367	3730627.307	ug/L	807733.282
	44	Ca	2575.217491	2.776	750519.025	ug/L	61872.368
>	45	Sc-1			460376.166	ug/L	454114.374
	51	V	2.739473	3.014	2133.253	ug/L	-26072.212
	52	Cr	20.092710	3.457	211238.217	ug/L	26547.338
	55	Mn	1.312848	2.361	22906.916	ug/L	3062.361
	57	Fe	3.100539	14.692	10913.382	ug/L	9798.695
	59	Co	0.026853	14.976	546.349	ug/L	232.338
	60	Ni	0.127866	10.189	625.020	ug/L	301.006
	65	Cu	0.034600	12.950	286.338	ug/L	168.336
	66	Zn	0.279146	196.375	15777.201	ug/L	15137.170
>	72	Ge-1			714353.543	ug/L	739226.379
	75	As	1.431267	12.555	992.807	ug/L	-1945.453
	82	Se	0.741743	10.485	48.212	ug/L	-120.854
	97	Mo	0.420394	27.559	1283.406	ug/L	72.001
	107	Ag	-0.001519	47.993	247.671	ug/L	267.339
	111	Cd	-0.000805	199.048	37.000	ug/L	39.334
>	115	In-1			1487909.700	ug/L	1483966.870
	123	Sb	1.086713	37.782	8595.758	ug/L	268.758
	135	Ba	0.967013	4.200	2393.224	ug/L	112.002
>	165	Ho-1			1570626.233	ug/L	1592460.464
	205	Tl	0.576543	34.286	19513.466	ug/L	3951.949
	208	Pb	-0.007371	68.824	4242.290	ug/L	4580.000
	238	U	0.058213	1.291	3002.012	ug/L	234.671
>	45	Sc-2			460376.166	ug/L	454114.374
	53	Cr	-21.113121	2.285	129894.621	ug/L	154333.029
	54	Fe	6.527134	67.761	67580.835	ug/L	62090.940
	61	Ni	-1.811535	71.929	1589.102	ug/L	1661.113
	63	Cu	0.039177	18.194	572.684	ug/L	345.008
	67	Zn	-7.945259	11.259	6907.411	ug/L	9047.975
>	72	Ge			714353.543	ug/L	739226.379
	77	Se	-12.746553	6.708	5965.340	ug/L	8561.780
	98	Mo	0.441488	25.660	3353.485	ug/L	141.970
	109	Ag	-0.003318	91.180	243.671	ug/L	288.339
>	115	In-2			1487909.700	ug/L	1483966.870
	114	Cd	-0.002617	128.065	67.083	ug/L	84.731
	121	Sb	1.119722	38.536	11585.257	ug/L	349.674
	137	Ba	1.019233	5.812	4256.011	ug/L	156.669
>	165	Ho-2			1570626.233	ug/L	1592460.464
	203	Tl	0.570732	38.394	8131.535	ug/L	1582.773
	206	Pb	-0.005576	55.891	1093.719	ug/L	1161.392
	207	Pb	-0.010517	101.343	898.704	ug/L	995.045
>	45	Sc			460376.166	ug/L	454114.374
	47	Ti	0.249833	20.831	488.347	ug/L	297.006
	86	Sr	10.743688	5.711	39927.192	ug/L	716.656
	88	Sr	10.551836	1.979	341353.256	ug/L	5834.250
>	115	In			1487909.700	ug/L	1483966.870
	118	Sn	0.038014	23.685	1177.394	ug/L	855.034
	120	Sn	0.036392	14.852	1532.607	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	101.379
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	96.635
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	100.286
	Sb	123	
	Ba	135	
>	Ho-1	165	98.841
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	101.379
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	96.635
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	100.286
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	98.841
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	101.379
	Ti	47	
	Sr	88	
	Sr	88	
>	In	115	100.286
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Wednesday, April 27, 2005 20:42:39
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 1.023

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	192.378871	0.617	34681.729	ug/L	7.667
	10	B	187.997439	3.456	6409.169	ug/L	27.667
	23	Na	1838.533230	2.449	7334854.910	ug/L	18838.944
	24	Mg	922.814793	0.284	2670737.960	ug/L	2106.176
	27	Al	1904.538265	1.529	8424717.458	ug/L	3413.777
	39	K	1914.993363	1.180	17226088.587	ug/L	807733.282
	44	Ca	1015.229297	1.337	342469.317	ug/L	61872.368
>	45	Sc-1			471966.706	ug/L	454114.374
	51	V	188.538729	1.583	1967099.359	ug/L	-26072.212
	52	Cr	195.258825	1.667	1865239.556	ug/L	26547.338
	55	Mn	193.110467	1.331	2990955.747	ug/L	3062.361
	57	Fe	1874.386095	2.326	619386.240	ug/L	9796.695
	59	Co	188.886650	1.253	2258123.602	ug/L	232.338
	60	Ni	191.780983	3.127	492971.224	ug/L	301.006
	65	Cu	192.336648	1.358	543639.096	ug/L	168.336
	66	Zn	190.773280	2.260	332406.654	ug/L	15137.170
>	72	Ge-1			731720.822	ug/L	739226.379
	75	As	199.494973	3.229	406001.785	ug/L	-1945.453
	82	Se	199.385260	0.534	45309.383	ug/L	-120.854
	97	Mo	195.485416	2.309	583931.448	ug/L	72.001
	107	Ag	48.352069	1.750	648612.572	ug/L	267.339
	111	Cd	192.180068	0.904	591671.263	ug/L	39.334
>	115	In-1			1490135.733	ug/L	1483966.870
	123	Sb	196.109010	0.949	1496522.102	ug/L	268.758
	135	Ba	209.098998	1.249	485529.388	ug/L	112.002
>	165	Ho-1			1544250.330	ug/L	1592460.464
	205	Tl	192.445139	3.419	5140715.734	ug/L	3951.949
	208	Pb	193.741158	1.173	7086895.719	ug/L	4580.000
	238	U	194.336214	2.447	9092620.096	ug/L	234.671
>	45	Sc-2			471966.706	ug/L	454114.374
	53	Cr	179.739999	1.666	392223.784	ug/L	154333.029
	54	Fe	1979.676402	1.085	1527463.729	ug/L	62090.940
	61	Ni	190.658031	1.624	23695.543	ug/L	1661.113
	63	Cu	194.899529	2.114	1138833.325	ug/L	345.008
	67	Zn	181.077285	2.950	62471.317	ug/L	9047.975
>	72	Ge			731720.822	ug/L	739226.379
	77	Se	212.899225	1.427	47679.831	ug/L	8561.780
	98	Mo	198.998445	1.844	1434929.586	ug/L	141.970
	109	Ag	47.884803	1.576	651037.452	ug/L	288.339
>	115	In-2			1490135.733	ug/L	1483966.870
	114	Cd	196.233667	0.887	1349651.228	ug/L	84.731
	121	Sb	192.937223	0.489	1938199.013	ug/L	349.674
	137	Ba	211.503466	2.095	837059.887	ug/L	156.669
>	165	Ho-2			1544250.330	ug/L	1592460.464
	203	Tl	191.697085	2.758	2176159.519	ug/L	1562.773
	206	Pb	195.311187	0.888	1780944.949	ug/L	1161.392
	207	Pb	202.726009	1.292	1557744.522	ug/L	995.045
>	45	Sc			471966.706	ug/L	454114.374
	47	Ti	192.946656	1.140	149208.698	ug/L	297.006
	86	Sr	187.151910	1.681	701723.479	ug/L	716.656
	88	Sr	188.392041	0.326	6147377.527	ug/L	5834.250
>	115	In			1490135.733	ug/L	1483966.870
	118	Sn	196.770328	1.206	1662772.761	ug/L	855.034
	120	Sn	197.403567	1.863	2194774.099	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		96.169

LOT # F5D220359

	B	10		93.998
	Na	23		91.927
	Mg	24		92.281
	Al	27		95.227
	K	39		96.758
	Ca	44		101.823
>	Sc-1	45	103.931	
	V	51		94.269
	Cr	52		97.829
	Mn	55		96.585
	Fe	57		93.719
	Co	59		94.443
	Ni	60		95.899
	Cu	65		96.168
	Zn	66		95.387
>	Ge-1	72	98.986	
	As	75		99.747
	Se	82		99.693
	Mo	97		97.743
	Ag	107		96.704
	Cd	111		96.090
>	In-1	115	100.416	
	Sb	123		97.555
	Ba	136		104.649
>	Ho-1	165	96.973	
	Tl	205		96.223
	Pb	208		96.871
	U	238		97.168
>	Sc-2	46	103.931	
	Cr	53		99.578
	Fe	54		98.979
	Ni	61		95.329
	Cu	63		97.369
	Zn	67		96.539
>	Ge	72	98.986	
	Se	77		106.386
	Mo	98		98.496
	Ag	109		95.179
>	In-2	115	100.416	
	Cd	114		98.117
	Sb	121		96.489
	Ba	137		106.752
>	Ho-2	165	96.973	
	Tl	203		95.849
	Pb	206		97.856
	Pb	207		101.364
>	Sc	45	103.931	
	Ti	47		96.473
	Sr	86		93.578
	Sr	88		94.196
>	In	115	100.416	
	Sn	118		98.386
	Sn	120		98.702

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cr	53	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Wednesday, April 27, 2005 20:48:49
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 2.024

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	-0.001314	2391.857	7.667	ug/L	7.667
	10	B	2.447366	28.323	110.668	ug/L	27.667
	23	Na	0.205335	26.775	20206.490	ug/L	18838.944
	24	Mg	0.045231	85.077	2299.542	ug/L	2106.178
	27	Al	0.001235	1137.204	3520.136	ug/L	3413.777
	39	K	-10.235690	21.093	744590.566	ug/L	807733.282
	44	Ca	-2.282783	234.973	63061.175	ug/L	61872.368
>	45	Sc-1			467539.448	ug/L	454114.374
	51	V	0.252354	343.623	-24174.726	ug/L	-26072.212
	52	Cr	0.088244	238.791	28148.406	ug/L	26547.338
	55	Mn	0.042170	45.279	3796.877	ug/L	3062.361
	57	Fe	-3.287650	24.596	9026.270	ug/L	9798.695
	59	Co	0.095819	155.743	1348.479	ug/L	232.338
	60	Ni	-0.009916	59.964	284.672	ug/L	301.006
	65	Cu	0.007140	129.136	193.003	ug/L	168.336
	66	Zn	-0.230105	26.492	15205.575	ug/L	15137.170
>	72	Ge-1			747851.937	ug/L	739226.379
	75	As	0.229879	95.821	-1483.382	ug/L	-1945.453
	82	Se	0.374567	21.838	-35.194	ug/L	-120.854
	97	Mo	0.113828	14.429	393.009	ug/L	72.001
	107	Ag	0.001419	84.302	282.339	ug/L	267.339
	111	Cd	0.004927	45.265	53.667	ug/L	39.334
>	115	In-1			1463063.528	ug/L	1483966.870
	123	Sb	0.219530	13.913	1919.279	ug/L	268.758
	136	Ba	-0.004685	104.378	101.335	ug/L	112.002
>	165	Ho-1			1598264.114	ug/L	1592460.464
	205	Tl	0.288641	43.408	12245.029	ug/L	3951.949
	208	Pb	-0.003395	102.745	4468.987	ug/L	4580.000
	238	U	0.005254	35.851	490.680	ug/L	234.671
>	45	Sc-2			467539.448	ug/L	454114.374
	53	Cr	5.397493	280.059	165738.949	ug/L	154333.029
	54	Fe	0.980667	371.185	64608.554	ug/L	62090.940
	61	Ni	-1.428203	10.389	1547.433	ug/L	1861.113
	63	Cu	0.010087	41.045	413.343	ug/L	345.008
	67	Zn	-0.763007	391.846	9093.670	ug/L	9047.975
>	72	Ge			747851.937	ug/L	739226.379
	77	Se	10.436343	62.142	10612.685	ug/L	8561.780
	98	Mo	0.113398	21.831	951.787	ug/L	141.970
	109	Ag	0.011679	24.188	444.011	ug/L	288.339
>	115	In-2			1463063.528	ug/L	1483966.870
	114	Cd	0.002950	59.208	103.524	ug/L	84.731
	121	Sb	0.227640	15.275	2580.597	ug/L	349.674
	137	Ba	0.003680	29.152	172.336	ug/L	156.669
>	165	Ho-2			1598264.114	ug/L	1592460.464
	203	Tl	0.290073	40.197	5004.641	ug/L	1582.773
	206	Pb	-0.003638	208.733	1131.723	ug/L	1161.392
	207	Pb	-0.004837	51.165	980.375	ug/L	995.045
>	45	Sc			467539.448	ug/L	454114.374
	47	Ti	0.040586	256.323	335.874	ug/L	297.006
	86	Sr	0.013201	148.354	787.249	ug/L	716.656
	88	Sr	-0.009085	29.029	5712.533	ug/L	5834.250
>	115	In			1463063.528	ug/L	1483966.870
	118	Sn	0.066733	23.848	1397.083	ug/L	855.034
	120	Sn	0.070008	31.432	1853.241	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		-0.131

	B	10		244.737
	Na	23		0.205
	Mg	24		0.045
	Al	27		0.001
	K	39		-10.256
	Ca	44		-2.283
>	Sc-1	45	102.958	
	V	51		25.238
	Cr	52		8.824
	Mn	55		4.217
	Fe	57		-3.288
	Co	59		9.582
	Ni	60		-0.992
	Cu	65		8.714
	Zn	66		-23.010
>	Ge-1	72	101.187	
	As	75		22.968
	Se	82		37.467
	Mo	97		11.368
	Ag	107		0.142
	Cd	111		0.483
>	In-1	115	98.891	
	Sb	123		21.953
	Ba	135		-0.488
>	Ho-1	165	100.364	
	Tl	205		28.864
	Pb	208		-0.348
	U	238		8.526
>	Sc-2	45	102.958	
	Cr	53		539.749
	Fe	54		0.981
	Ni	61		-142.829
	Cu	63		1.008
	Zn	67		-76.381
>	Ge	72	101.187	
	Se	77		1043.534
	Mo	98		11.348
	Ag	109		1.188
>	In-2	115	98.891	
	Cd	114		0.286
	Sb	121		22.784
	Ba	137		0.368
>	Ho-2	165	100.364	
	Tl	203		29.007
	Pb	208		-0.364
	Pb	207		-0.484
>	Sc	45	102.958	
	Ti	47		4.088
	Sr	86		1.320
	Sr	88		-0.999
>	In	115	98.891	
	Sn	118		6.873
	Sn	120		7.901

QC Out Of Limits

Analyte	Mass	Out of Limits Message
B	10	Q
Cr	53	Q
Ni	61	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: G849VB
Sample Date/Time: Wednesday, April 27, 2005 20:54:57
Autosampler Position: 31
Dataset File: D:\Elandata\Dataset\042705M2\G849VB.025

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.008058	349.346	9.333	ug/L	7.667
	10	B	0.949386	47.039	63.667	ug/L	27.667
	23	Na	1.755471	14.379	27815.669	ug/L	18838.944
	24	Mg	4.857710	4.893	16999.280	ug/L	2106.176
	27	Al	2.330812	0.974	14516.522	ug/L	3413.777
	39	K	-12.289060	16.136	769092.211	ug/L	807733.282
	44	Ca	9.566588	39.924	70108.349	ug/L	61872.368
>	45	Sc-1			494502.482	ug/L	454114.374
	51	V	-1.336184	37.402	-43431.954	ug/L	-26072.212
	52	Cr	0.929807	21.167	38110.679	ug/L	26547.338
	55	Mn	0.108461	5.882	5091.625	ug/L	3062.361
	57	Fe	-2.007239	12.295	9965.709	ug/L	9796.695
	59	Co	0.006757	88.349	336.341	ug/L	232.338
	60	Ni	0.063451	15.149	496.680	ug/L	301.006
	65	Cu	0.037917	5.707	295.673	ug/L	168.336
	66	Zn	-0.097727	130.385	16311.807	ug/L	15137.170
>	72	Ge-1			769793.759	ug/L	739226.379
	75	As	-0.404011	21.937	-2899.468	ug/L	-1945.463
	82	Se	0.487728	33.022	-8.027	ug/L	-120.854
	97	Mo	0.028160	20.761	145.336	ug/L	72.001
	107	Ag	-0.008779	310.756	253.671	ug/L	267.339
	111	Cd	0.000266	484.507	39.667	ug/L	39.334
>	115	In-1			1465841.604	ug/L	1483966.870
	123	Sb	0.144616	4.454	1356.249	ug/L	268.758
	135	Ba	0.105979	6.381	370.675	ug/L	112.002
>	165	Ho-1			1614336.329	ug/L	1592460.464
	205	Tl	0.109350	57.606	7069.585	ug/L	3951.949
	208	Pb	-0.002170	368.087	4561.333	ug/L	4580.000
	238	U	-0.002635	8.267	109.002	ug/L	234.671
>	45	Sc-2			494502.482	ug/L	454114.374
	53	Cr	35.486018	34.665	216298.113	ug/L	154333.029
	54	Fe	18.704269	33.480	82013.212	ug/L	62090.940
	61	Ni	-1.662362	41.369	1606.773	ug/L	1661.113
	63	Cu	0.033479	3.254	580.664	ug/L	345.008
	67	Zn	5.330636	96.477	11515.835	ug/L	9047.975
>	72	Ge			769793.759	ug/L	739226.379
	77	Se	27.182817	28.105	14170.239	ug/L	8561.780
	98	Mo	0.034475	20.572	387.312	ug/L	141.970
	109	Ag	0.005591	31.889	360.006	ug/L	288.339
>	115	In-2			1465841.604	ug/L	1483966.870
	114	Cd	-0.002221	87.536	66.726	ug/L	84.731
	121	Sb	0.141473	9.044	1742.791	ug/L	349.674
	137	Ba	0.108507	9.240	607.686	ug/L	156.669
>	165	Ho-2			1614336.329	ug/L	1592460.464
	203	Tl	0.113642	54.686	2957.349	ug/L	1582.773
	206	Pb	0.001065	887.877	1188.062	ug/L	1161.392
	207	Pb	-0.006484	73.933	957.375	ug/L	995.045
>	45	Sc			494502.482	ug/L	454114.374
	47	Ti	0.085550	41.237	392.676	ug/L	297.006
	86	Sr	0.027759	30.943	889.888	ug/L	716.656
	88	Sr	0.066809	39.855	6584.250	ug/L	5834.250
>	115	In			1465841.604	ug/L	1483966.870
	118	Sn	0.074698	11.460	1464.090	ug/L	855.034
	120	Sn	0.086476	4.276	2035.270	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	108.894
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	104.135
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.779
	Sb	123	
	Ba	135	
>	Ho-1	165	101.374
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	108.894
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	104.135
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.779
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	101.374
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	108.894
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	98.779
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G849VC
Sample Date/Time: Wednesday, April 27, 2005 21:00:06
Autosampler Position: 32
Dataset File: D:\Elandata\Dataset\042705M2\G849VC.026

Sample Result Summary

Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
9	Be	231.677890	2.199	43324.362	ug/L	7.667
10	B	6.391919	13.481	255.338	ug/L	27.667
23	Na	4505.621210	2.841	18623672.542	ug/L	18838.944
24	Mg	4584.473200	4.180	13757322.130	ug/L	2106.176
27	Al	240.781681	1.210	1106381.221	ug/L	3413.777
39	K	4751.690800	3.006	43063044.723	ug/L	807733.282
44	Ca	4769.956567	4.776	1422671.112	ug/L	61872.368
45	Sc-1			489971.030	ug/L	454114.374
51	V	234.740950	3.159	2574676.838	ug/L	-26072.212
52	Cr	242.240644	3.404	2394750.951	ug/L	26547.338
55	Mn	233.206486	3.261	3747045.130	ug/L	3062.361
57	Fe	227.446895	5.660	87245.880	ug/L	9796.695
59	Co	231.066662	3.511	2865998.375	ug/L	232.338
60	Ni	236.127926	1.454	627203.765	ug/L	301.006
65	Cu	228.135866	1.777	669226.958	ug/L	168.336
66	Zn	226.335844	3.469	404438.597	ug/L	15137.170
72	Ge-1			748330.879	ug/L	739226.379
75	As	254.745782	3.031	533591.451	ug/L	-1945.453
82	Se	239.358836	1.714	55857.429	ug/L	-120.854
97	Mo	249.687834	0.751	715524.032	ug/L	72.001
107	Ag	59.152918	1.107	788259.050	ug/L	267.339
111	Cd	235.100832	1.335	719097.768	ug/L	39.334
115	In-1			1480273.134	ug/L	1483966.870
123	Sb	236.005368	1.754	1798107.911	ug/L	268.758
135	Ba	246.695327	2.889	588107.225	ug/L	112.002
165	Ho-1			1592888.462	ug/L	1592460.464
205	Tl	227.813518	0.904	6277053.320	ug/L	3951.949
208	Pb	232.540887	1.090	8773275.340	ug/L	4580.000
238	U	-0.002183	16.552	129.335	ug/L	234.671
45	Sc-2			489971.030	ug/L	454114.374
53	Cr	262.495526	7.404	517643.942	ug/L	154333.029
54	Fe	277.128285	7.607	279357.288	ug/L	62090.940
61	Ni	234.817149	3.347	29666.822	ug/L	1661.113
63	Cu	229.004766	2.463	1390231.827	ug/L	345.008
67	Zn	234.060967	3.491	80950.924	ug/L	9047.975
72	Ge			748330.879	ug/L	739226.379
77	Se	229.121152	2.341	51752.887	ug/L	8561.780
98	Mo	242.485112	1.199	1754385.695	ug/L	141.970
109	Ag	56.338386	2.113	752072.012	ug/L	288.339
115	In-2			1480273.134	ug/L	1483966.870
114	Cd	233.848529	2.164	1597734.981	ug/L	84.731
121	Sb	237.775368	0.600	2372866.270	ug/L	349.674
137	Ba	248.815591	3.653	1015574.341	ug/L	156.669
165	Ho-2			1592888.462	ug/L	1592460.464
203	Tl	226.930302	2.118	2657034.157	ug/L	1582.773
206	Pb	241.755573	2.122	2273586.666	ug/L	1161.392
207	Pb	236.241290	3.368	1871965.733	ug/L	995.045
45	Sc			489971.030	ug/L	454114.374
47	Ti	0.291034	4.616	553.883	ug/L	297.006
86	Sr	222.719093	2.977	866408.479	ug/L	716.656
88	Sr	226.949962	2.572	7651433.196	ug/L	5834.250
115	In			1480273.134	ug/L	1483966.870
118	Sn	0.983410	6.942	1552.767	ug/L	855.034
120	Sn	0.096893	9.398	2170.067	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	107.696
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.232
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.761
	Sb	123	
	Ba	136	
>	Ho-1	165	100.027
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	107.696
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.232
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	99.761
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	166	100.027
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	107.696
	Ti	47	
	Sr	88	
	Sr	88	
>	In	115	99.761
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8170
Sample Date/Time: Wednesday, April 27, 2005 21:05:16
Autosampler Position: 33
Dataset File: D:\Elandata\Dataset\042705M2\G8170.027

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	-0.012403	153.003	6.000	ug/L	7.667
	10	B	0.509291	14.186	48.001	ug/L	27.667
	23	Na	31.706563	2.212	151927.523	ug/L	18838.944
	24	Mg	12.885440	3.019	41126.548	ug/L	2106.176
	27	Al	4.596602	3.980	24883.911	ug/L	3413.777
	39	K	-0.152032	681.164	873823.072	ug/L	807733.282
	44	Ca	51.799273	9.149	81830.520	ug/L	61872.368
>	45	Sc-1			492067.864	ug/L	454114.374
	51	V	-1.684872	20.557	-47001.342	ug/L	-26072.212
	52	Cr	2.196219	12.652	50301.063	ug/L	26547.338
	55	Mn	0.248410	3.558	7324.617	ug/L	3062.361
	57	Fe	2.252583	20.073	11381.997	ug/L	9798.695
	59	Co	0.011049	59.454	389.343	ug/L	232.338
	60	Ni	0.103143	3.298	602.352	ug/L	301.006
	65	Cu	0.282689	3.894	1015.046	ug/L	168.336
	66	Zn	1.351932	25.351	18738.808	ug/L	15137.170
>	72	Ge-1			763204.579	ug/L	739226.379
	75	As	0.140616	115.623	-1703.221	ug/L	-1945.453
	82	Se	0.466816	63.971	-14.098	ug/L	-120.854
	97	Mo	0.166471	42.819	526.016	ug/L	72.001
	107	Ag	0.010521	24.145	411.677	ug/L	267.339
	111	Cd	0.011516	23.694	75.334	ug/L	39.334
>	115	In-1			1498252.874	ug/L	1483966.870
	123	Sb	0.264077	19.142	2306.718	ug/L	268.758
	135	Ba	1.000761	1.621	2494.909	ug/L	112.002
>	165	Ho-1			1584340.526	ug/L	1592460.464
	206	Tl	0.316116	44.444	12581.336	ug/L	3951.949
	208	Pb	0.164003	14.643	10706.358	ug/L	4580.000
	238	U	-0.000954	6.604	187.670	ug/L	234.671
>	45	Sc-2			492067.864	ug/L	454114.374
	53	Cr	54.875418	28.583	240996.033	ug/L	154333.029
	54	Fe	21.978445	6.344	84215.671	ug/L	62090.940
	61	Ni	-1.749345	48.902	1589.436	ug/L	1661.113
	63	Cu	0.273680	4.008	2041.500	ug/L	345.008
	67	Zn	14.270066	33.299	14161.538	ug/L	9047.975
>	72	Ge			763204.579	ug/L	739226.379
	77	Se	22.976604	28.661	13229.488	ug/L	8561.780
	98	Mo	0.160027	40.490	1314.234	ug/L	141.970
	109	Ag	0.011226	26.300	445.345	ug/L	288.339
>	115	In-2			1498252.874	ug/L	1483966.870
	114	Cd	0.009013	51.171	147.801	ug/L	84.731
	121	Sb	0.262963	15.100	3008.017	ug/L	349.674
	137	Ba	1.010545	2.407	4258.677	ug/L	156.669
>	165	Ho-2			1584340.526	ug/L	1592460.464
	203	Tl	0.335048	44.811	5471.172	ug/L	1582.773
	205	Pb	0.166588	17.845	2713.286	ug/L	1161.392
	207	Pb	0.166292	12.571	2299.875	ug/L	995.045
>	45	Sc			492067.864	ug/L	454114.374
	47	Ti	0.086726	18.221	391.676	ug/L	297.006
	86	Sr	0.257317	5.422	1781.219	ug/L	716.656
	88	Sr	0.243984	0.575	14613.951	ug/L	5834.250
>	115	In			1498252.874	ug/L	1483966.870
	118	Sn	0.071893	2.175	1473.757	ug/L	855.034
	120	Sn	0.073456	0.717	1934.922	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	108.358
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	103.244
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	100.963
	Sb	123	
	Ba	135	
>	Ho-1	165	99.499
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	108.358
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	103.244
	Se	77	
	Mo	96	
	Ag	109	
>	In-2	115	100.963
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	99.499
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	108.358
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	100.963
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8170X
Sample Date/Time: Wednesday, April 27, 2005 21:10:26
Autosampler Position: 34
Dataset File: D:\Elandata\Dataset\042705M2\G8170X.028

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.000672	3205.794	8.333	ug/L	7.667
	10	B	0.534904	51.768	48.001	ug/L	27.667
	23	Na	32.081861	4.265	150659.884	ug/L	16838.944
	24	Mg	13.243349	4.711	41414.381	ug/L	2106.176
	27	Al	4.663669	0.058	24738.990	ug/L	3413.777
	39	K	-0.516048	325.912	854569.582	ug/L	807733.282
	44	Ca	49.557289	17.503	79886.792	ug/L	61872.368
>	45	Sc-1			483096.570	ug/L	454114.374
	51	V	-1.868424	32.520	-48092.345	ug/L	-26072.212
	52	Cr	1.683528	17.241	44437.925	ug/L	26547.338
	55	Mn	0.236577	3.898	7003.120	ug/L	3062.361
	57	Fe	5.697704	39.876	12312.066	ug/L	9798.695
	59	Co	0.007427	39.330	337.674	ug/L	232.338
	60	Ni	0.154333	6.589	725.692	ug/L	301.006
	65	Cu	0.390963	2.989	1309.406	ug/L	168.336
	66	Zn	0.622160	38.959	17154.465	ug/L	15137.170
>	72	Ge-1			753054.231	ug/L	739226.379
	75	As	-0.144600	479.689	-2285.395	ug/L	-1945.453
	82	Se	0.373981	46.031	-35.212	ug/L	-120.854
	97	Mo	0.033422	22.335	168.003	ug/L	72.001
	107	Ag	0.007610	17.769	368.675	ug/L	267.339
	111	Cd	0.004797	41.584	54.001	ug/L	39.334
>	115	In-1			1483090.901	ug/L	1483966.870
	123	Sb	0.099313	7.398	1026.849	ug/L	268.758
	135	Ba	0.947107	1.755	2357.885	ug/L	112.002
>	165	Ho-1			1577811.946	ug/L	1592460.464
	205	Tl	0.078759	55.872	5997.012	ug/L	3951.949
	208	Pb	0.155496	7.797	10341.248	ug/L	4580.000
	238	U	-0.001852	11.189	144.002	ug/L	234.671
>	45	Sc-2			483096.570	ug/L	454114.374
	53	Cr	57.978621	28.207	240498.922	ug/L	154333.029
	54	Fe	30.922136	7.967	89423.510	ug/L	62090.940
	61	Ni	-1.569680	43.360	1581.437	ug/L	1661.113
	63	Cu	0.400829	1.505	2765.295	ug/L	345.008
	67	Zn	13.779837	33.461	13746.116	ug/L	9047.975
>	72	Ge			753054.231	ug/L	739226.379
	77	Se	28.902287	15.777	14192.349	ug/L	8561.780
	98	Mo	0.046956	14.007	482.462	ug/L	141.970
	109	Ag	0.008386	23.241	402.343	ug/L	288.339
>	115	In-2			1483090.901	ug/L	1483966.870
	114	Cd	0.000136	1592.348	85.633	ug/L	84.731
	121	Sb	0.103839	11.871	1388.082	ug/L	349.674
	137	Ba	0.971545	3.133	4082.291	ug/L	156.669
>	165	Ho-2			1577811.946	ug/L	1592460.464
	203	Tl	0.079792	59.251	2487.914	ug/L	1582.773
	206	Pb	0.153287	7.356	2576.925	ug/L	1161.392
	207	Pb	0.159178	10.190	2233.530	ug/L	995.045
>	45	Sc			483096.570	ug/L	454114.374
	47	Ti	0.179588	47.625	458.679	ug/L	297.006
	86	Sr	0.245069	2.794	1701.583	ug/L	716.656
	88	Sr	0.236823	2.169	14106.438	ug/L	5834.250
>	115	In			1483090.901	ug/L	1483966.870
	118	Sn	0.059629	3.436	1355.745	ug/L	855.034
	120	Sn	0.073069	32.994	1912.285	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	106.382
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.871
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.941
	Sb	123	
	Ba	135	
>	Ho-1	165	99.090
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	106.382
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.871
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	99.941
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	99.090
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	46	106.382
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	99.941
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8170S
Sample Date/Time: Wednesday, April 27, 2005 21:15:36
Autosampler Position: 35
Dataset File: D:\Elandata\Dataset\042705M2\G8170S.029

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	11.806300	2.747	2218.861	ug/L	7.667
	10	B	0.572088	38.266	50.001	ug/L	27.667
	23	Na	11506.629970	2.460	47586634.083	ug/L	18838.944
	24	Mg	11616.426465	2.155	34899279.960	ug/L	2106.176
	27	Al	489.250618	3.877	2250920.286	ug/L	3413.777
	39	K	12040.274741	4.737	107893878.604	ug/L	807733.282
	44	Ca	12752.824529	3.068	3696572.376	ug/L	61872.368
>	45	Sc-1			490377.195	ug/L	454114.374
	51	V	128.291549	1.820	1385766.057	ug/L	-26072.212
	52	Cr	51.609477	2.109	533304.181	ug/L	26547.338
	55	Mn	114.199402	2.673	1838963.271	ug/L	3062.361
	57	Fe	218.714968	0.905	84438.714	ug/L	9798.695
	59	Co	116.121287	2.262	1442441.085	ug/L	232.338
	60	Ni	117.237647	0.705	313232.228	ug/L	301.006
	65	Cu	57.620966	1.726	169335.144	ug/L	168.336
	66	Zn	111.953728	1.403	209406.370	ug/L	15137.170
>	72	Ge-1			749802.048	ug/L	739226.379
	75	As	494.756249	0.821	1040346.452	ug/L	-1945.453
	82	Se	481.246657	1.361	112241.335	ug/L	-120.854
	97	Mo	268.823827	0.727	721162.533	ug/L	72.001
	107	Ag	12.041240	1.202	156392.288	ug/L	267.339
	111	Cd	12.608697	1.515	37577.083	ug/L	39.334
>	115	In-1			1440976.681	ug/L	1483966.870
	123	Sb	121.314154	1.486	899823.070	ug/L	268.758
	135	Ba	498.740917	0.224	1168627.438	ug/L	112.002
>	165	Ho-1			1564763.022	ug/L	1592460.464
	205	Tl	453.271643	1.884	12263409.894	ug/L	3951.949
	208	Pb	116.863622	2.531	4325730.699	ug/L	4580.000
	238	U	-0.001524	2.796	158.336	ug/L	234.671
>	45	Sc-2			490377.195	ug/L	454114.374
	53	Cr	114.323334	16.038	319745.591	ug/L	154333.029
	54	Fe	276.887704	0.898	279861.818	ug/L	62090.940
	61	Ni	117.501405	2.566	15859.292	ug/L	1661.113
	63	Cu	58.370878	1.868	354882.559	ug/L	345.008
	67	Zn	132.536683	3.426	50120.633	ug/L	9047.975
>	72	Ge			749802.048	ug/L	739226.379
	77	Se	431.846094	1.863	90060.814	ug/L	8561.780
	98	Mo	254.120260	3.523	1789244.788	ug/L	141.970
	109	Ag	11.149940	2.398	147719.364	ug/L	288.339
>	115	In-2			1440976.681	ug/L	1483966.870
	114	Cd	12.473650	0.493	83029.916	ug/L	84.731
	121	Sb	123.179870	1.184	1196645.583	ug/L	349.674
	137	Ba	491.193100	1.959	1969612.163	ug/L	156.669
>	165	Ho-2			1564763.022	ug/L	1592460.464
	203	Tl	441.149955	2.812	5072368.493	ug/L	1582.773
	206	Pb	117.921918	3.024	1089974.375	ug/L	1161.392
	207	Pb	120.017224	2.021	934798.509	ug/L	995.045
>	45	Sc			490377.195	ug/L	454114.374
	47	Ti	0.566094	12.234	775.029	ug/L	297.006
	88	Sr	225.848696	0.764	879668.437	ug/L	716.656
	88	Sr	228.691590	2.471	7683998.296	ug/L	5834.250
>	115	In			1440976.681	ug/L	1483966.870
	118	Sn	0.099686	7.360	1644.111	ug/L	855.034
	120	Sn	0.107429	4.330	2225.738	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	107.986
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.431
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	97.169
	Sb	123	
	Ba	135	
>	Ho-1	165	98.281
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	107.986
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.431
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	97.169
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	166	98.281
	Tl	205	
	Pb	208	
	Pb	207	
>	Sc	45	107.986
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	97.169
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8170S LL
Sample Date/Time: Wednesday, April 27, 2005 21:20:48
Autosampler Position: 36
Dataset File: D:\Etandata\Dataset\042705M2\G8170S LL.030

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.008254	243.514	10.000	ug/L	7.667
	10	B	0.178178	46.435	36.334	ug/L	27.667
	23	Na	33.124518	5.794	157886.309	ug/L	18838.944
	24	Mg	13.386470	2.156	42678.752	ug/L	2106.176
	27	Al	6.527021	0.332	29212.139	ug/L	3413.777
	39	K	-0.656686	461.745	869982.884	ug/L	807733.282
	44	Ca	42.688416	8.449	79320.108	ug/L	61872.368
>	45	Sc-1			492651.625	ug/L	454114.374
	51	V	-1.678544	9.966	-46973.178	ug/L	-26072.212
	52	Cr	5.383985	3.692	81471.160	ug/L	26547.338
	55	Mn	0.406858	3.377	9921.543	ug/L	3062.361
	57	Fe	14.502664	14.361	15572.912	ug/L	9798.695
	59	Co	0.023160	29.289	539.682	ug/L	232.338
	60	Ni	0.768193	6.404	2384.223	ug/L	301.006
	65	Cu	0.448964	3.617	1506.094	ug/L	168.336
	66	Zn	0.181889	144.943	16731.295	ug/L	15137.170
>	72	Ge-1			755403.964	ug/L	739226.379
	75	As	19.503722	3.550	39404.528	ug/L	-1945.453
	82	Se	5.194397	2.804	1098.193	ug/L	-120.854
	97	Mo	0.225349	27.847	730.360	ug/L	72.001
	107	Ag	0.011728	5.231	430.011	ug/L	267.339
	111	Cd	2.414074	2.425	7548.070	ug/L	39.334
>	115	In-1			1505240.760	ug/L	1483966.870
	123	Sb	47.026513	1.440	364552.624	ug/L	288.758
	135	Ba	0.993112	1.845	2503.244	ug/L	112.002
>	165	Ho-1			1601194.168	ug/L	1592460.464
	205	Tl	24.297289	2.695	676588.010	ug/L	3951.949
	208	Pb	9.713780	0.489	372828.445	ug/L	4580.000
	238	U	-0.001888	14.033	144.336	ug/L	234.671
>	45	Sc-2			492651.625	ug/L	454114.374
	53	Cr	70.567329	7.895	262543.831	ug/L	154333.029
	54	Fe	39.572784	12.763	97825.428	ug/L	62090.940
	61	Ni	-0.719948	74.272	1715.454	ug/L	1661.113
	63	Cu	0.463156	5.946	3137.378	ug/L	345.008
	67	Zn	12.192413	22.116	13557.261	ug/L	9047.975
>	72	Ge			755403.964	ug/L	739226.379
	77	Se	37.462654	12.199	15854.235	ug/L	8561.780
	98	Mo	0.241880	28.385	1925.051	ug/L	141.970
	109	Ag	0.017272	7.768	531.015	ug/L	288.339
>	115	In-2			1505240.760	ug/L	1483966.870
	114	Cd	2.410358	2.338	16828.522	ug/L	84.731
	121	Sb	48.143817	0.321	488820.988	ug/L	349.674
	137	Ba	1.080919	1.139	4592.784	ug/L	156.669
>	165	Ho-2			1601194.168	ug/L	1592460.464
	203	Tl	23.566407	2.752	278814.551	ug/L	1582.773
	206	Pb	9.814404	1.238	93908.648	ug/L	1161.392
	207	Pb	9.881677	1.493	79689.491	ug/L	995.045
>	45	Sc			492651.625	ug/L	454114.374
	47	Ti	0.170474	6.856	459.679	ug/L	297.006
	86	Sr	0.244804	11.134	1732.944	ug/L	716.656
	88	Sr	0.234368	7.078	14295.961	ug/L	5834.250
>	115	In			1505240.760	ug/L	1483966.870
	118	Sn	0.205069	111.376	2608.351	ug/L	855.034
	120	Sn	0.072385	9.120	1931.597	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	108.486
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	102.188
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	101.434
	Sb	125	
	Ba	135	
>	Ho-1	165	100.548
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	46	108.486
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	102.188
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	101.434
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	100.548
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	108.486
	Ti	47	
	Sr	86	
	Sr	88	
>	In	116	101.434
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8170V
Sample Data/Time: Wednesday, April 27, 2005 21:25:59
Autosampler Position: 37
Dataset File: D:\Elandata\Dataset\042705M2\G8170V.031

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	-0.012691	86.489	5.667	ug/L	7.667
	10	B	-0.144576	49.261	23.667	ug/L	27.667
	23	Na	8.902065	1.743	54628.818	ug/L	18838.944
	24	Mg	10.422150	3.889	32097.682	ug/L	2106.176
	27	Al	3.831283	10.283	20332.040	ug/L	3413.777
	39	K	-4.638131	24.136	794326.411	ug/L	807733.282
	44	Ca	2.588365	202.193	54560.867	ug/L	61872.368
>	45	Sc-1			468805.348	ug/L	454114.374
	51	V	1.209508	22.662	-14045.476	ug/L	-26072.212
	52	Cr	-0.555267	14.858	22206.138	ug/L	26547.338
	55	Mn	0.079413	21.347	4378.716	ug/L	3062.361
	57	Fe	1.492419	43.307	10594.952	ug/L	9798.695
	59	Co	0.017849	4.929	461.678	ug/L	232.338
	60	Ni	0.079469	23.652	514.014	ug/L	301.006
	65	Cu	0.060353	14.773	343.341	ug/L	168.336
	66	Zn	0.116568	404.704	15809.908	ug/L	15137.170
>	72	Ge-1			720231.427	ug/L	739226.379
	75	As	1.273513	6.781	682.534	ug/L	-1845.453
	82	Se	0.283920	53.154	-54.122	ug/L	-120.854
	97	Mo	0.034447	23.356	174.669	ug/L	72.001
	107	Ag	-0.002155	126.602	243.671	ug/L	267.339
	111	Cd	-0.004431	3.979	26.334	ug/L	39.334
>	115	In-1			1517785.376	ug/L	1483966.870
	123	Sb	0.071279	17.081	831.052	ug/L	268.758
	135	Ba	0.208772	3.677	618.353	ug/L	112.002
>	165	Ho-1			1609162.761	ug/L	1592460.464
	205	Tl	0.285872	21.500	11962.543	ug/L	3951.949
	208	Pb	-0.004288	33.380	4464.984	ug/L	4580.000
	238	U	-0.003074	6.785	87.334	ug/L	234.671
>	45	Sc-2			468805.348	ug/L	454114.374
	53	Cr	-50.684475	8.121	94325.617	ug/L	154333.029
	54	Fe	1.913379	260.252	85459.182	ug/L	82090.940
	61	Ni	-0.350819	168.646	1674.782	ug/L	1661.113
	63	Cu	0.055822	13.458	680.690	ug/L	345.008
	67	Zn	-7.680975	22.571	7098.838	ug/L	9047.975
>	72	Ge			720231.427	ug/L	739226.379
	77	Se	-22.514746	2.132	4266.363	ug/L	8561.780
	98	Mo	0.044016	19.344	471.203	ug/L	141.970
	109	Ag	-0.003841	17.523	241.338	ug/L	288.339
>	115	In-2			1517785.376	ug/L	1483966.870
	114	Cd	-0.003764	53.525	60.297	ug/L	84.731
	121	Sb	0.074433	10.802	1116.388	ug/L	349.674
	137	Ba	0.206319	5.901	1017.713	ug/L	156.689
>	165	Ho-2			1609162.761	ug/L	1592460.464
	203	Tl	0.291942	19.201	5057.292	ug/L	1582.773
	206	Pb	-0.004349	93.716	1132.056	ug/L	1161.392
	207	Pb	-0.004036	73.039	973.376	ug/L	995.045
>	45	Sc			468805.348	ug/L	454114.374
	47	Ti	0.288936	73.324	530.016	ug/L	297.006
	86	Sr	0.063767	4.531	977.090	ug/L	716.656
	88	Sr	0.054630	15.603	7790.203	ug/L	5834.250
>	115	In			1517785.376	ug/L	1483966.870
	118	Sn	0.028512	5.722	1119.722	ug/L	855.034
	120	Sn	0.040983	18.284	1593.299	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	103.235
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	97.430
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	102.279
	Sb	123	
	Ba	135	
>	Ho-1	165	101.049
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	103.235
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	97.430
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	102.279
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	101.049
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	103.235
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	102.279
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G84EP
Sample Date/Time: Wednesday, April 27, 2005 21:31:11
Autosampler Position: 38
Dataset File: D:\Elandata\Dataset\042705M2\G84EP.032

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.001164	2349.674	8.333	ug/L	7.667
	10	B	0.037714	620.473	30.667	ug/L	27.667
	23	Na	23.614398	3.430	116299.314	ug/L	18838.944
	24	Mg	8.698887	4.683	27999.360	ug/L	2106.176
	27	Al	4.481961	7.001	23920.931	ug/L	3413.777
	39	K	-1.195115	291.522	849270.412	ug/L	807733.282
	44	Ca	30.537093	14.213	74461.352	ug/L	61872.368
>	45	Sc-1			483766.664	ug/L	454114.374
	51	V	-1.522925	41.039	-44574.064	ug/L	-26072.212
	52	Cr	1.251191	19.987	40404.128	ug/L	26547.338
	55	Mn	0.154350	13.763	5713.871	ug/L	3052.361
	57	Fe	3.085041	38.593	11450.315	ug/L	9798.695
	59	Co	0.007679	92.089	339.674	ug/L	232.338
	60	Ni	0.096339	13.736	574.351	ug/L	301.006
	65	Cu	0.127020	7.291	546.683	ug/L	168.336
	66	Zn	0.550056	53.848	17049.672	ug/L	15137.170
>	72	Ge-1			764122.697	ug/L	739226.379
	75	As	-0.209437	133.903	-2462.630	ug/L	-1945.453
	82	Se	0.322494	95.567	-47.688	ug/L	-120.854
	97	Mo	0.019000	15.312	128.335	ug/L	72.001
	107	Ag	0.000070	2541.338	272.005	ug/L	267.339
	111	Cd	-0.002310	61.383	32.667	ug/L	39.334
>	115	In-1			1504135.302	ug/L	1483966.870
	123	Sb	0.063783	5.387	766.169	ug/L	268.758
	136	Ba	0.339978	4.110	927.706	ug/L	112.002
>	165	Ho-1			1595857.330	ug/L	1592460.464
	205	Tl	0.093152	74.336	6535.314	ug/L	3951.949
	208	Pb	0.060827	3.880	6502.650	ug/L	4580.000
	238	U	-0.002671	13.866	106.001	ug/L	234.671
>	45	Sc-2			483766.664	ug/L	454114.374
	53	Cr	42.308859	33.405	220723.287	ug/L	154333.029
	54	Fe	25.489268	25.760	85336.786	ug/L	62090.940
	61	Ni	-0.616476	252.347	1692.451	ug/L	1661.113
	63	Cu	0.121307	8.125	1093.053	ug/L	345.008
	67	Zn	6.618102	86.028	11861.978	ug/L	9047.976
>	72	Ge			764122.697	ug/L	739226.379
	77	Se	27.479134	17.268	14124.488	ug/L	8561.780
	98	Mo	0.022590	28.748	310.162	ug/L	141.970
	109	Ag	0.000031	834.282	292.673	ug/L	288.339
>	115	In-2			1504135.302	ug/L	1483966.870
	114	Cd	-0.001668	79.313	74.355	ug/L	84.731
	121	Sb	0.063671	11.927	1000.379	ug/L	349.674
	137	Ba	0.344809	2.567	1567.435	ug/L	156.669
>	165	Ho-2			1595857.330	ug/L	1592460.464
	203	Tl	0.096070	72.938	2702.632	ug/L	1582.773
	206	Pb	0.046273	3.556	1599.772	ug/L	1161.392
	207	Pb	0.063466	4.039	1421.418	ug/L	995.045
>	45	Sc			483766.664	ug/L	454114.374
	47	Ti	0.148379	48.872	434.344	ug/L	297.006
	86	Sr	0.129024	13.606	1257.615	ug/L	716.656
	88	Sr	0.129611	9.561	10539.327	ug/L	5834.250
>	115	In			1504135.302	ug/L	1483966.870
	118	Sn	0.042544	6.625	1229.399	ug/L	855.034
	120	Sn	0.049982	10.715	1678.954	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	106.530
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	103.368
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	101.359
	Sb	123	
	Ba	135	
>	Ho-1	165	100.213
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	106.530
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	103.368
	Se	77	
	Mo	96	
	Ag	109	
>	In-2	115	101.359
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	100.213
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	106.530
	Ti	47	
	Sr	88	
	Sr	86	
>	In	116	101.359
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8L0KB
Sample Date/Time: Wednesday, April 27, 2005 21:36:23
Autosampler Position: 39
Dataset File: D:\Elandata\Dataset\042705M2\G8L0KB.033

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.012408	191.027	10.667	ug/L	7.667
	10	B	6.249499	14.831	250.671	ug/L	27.667
	23	Na	20.817785	3.453	106418.842	ug/L	18838.944
	24	Mg	98.505849	2.567	296209.329	ug/L	2106.176
	27	Al	23.872000	2.114	113353.746	ug/L	3413.777
	39	K	-4.220648	76.825	834612.213	ug/L	807733.282
	44	Ca	26.242857	22.020	73897.232	ug/L	61872.368
>	45	Sc-1			490533.956	ug/L	454114.374
	51	V	-0.289073	150.305	-31291.784	ug/L	-26072.212
	52	Cr	0.927617	13.034	37748.566	ug/L	26547.338
	55	Mn	0.295761	5.257	8059.687	ug/L	3062.361
	57	Fe	8.473679	20.869	12766.929	ug/L	9798.695
	59	Co	0.015819	16.513	448.345	ug/L	232.338
	60	Ni	0.190265	8.525	832.366	ug/L	301.006
	65	Cu	0.090777	2.104	448.345	ug/L	168.336
	66	Zn	0.621886	60.012	17413.114	ug/L	15137.170
>	72	Ge-1			753147.165	ug/L	739226.379
	75	As	0.463951	51.723	-999.221	ug/L	-1945.453
	82	Se	0.320014	87.953	-48.237	ug/L	-120.854
	97	Mo	0.042384	20.660	197.003	ug/L	72.001
	107	Ag	0.000954	160.156	285.006	ug/L	267.338
	111	Cd	-0.003122	46.215	30.334	ug/L	39.334
>	115	In-1			1510751.571	ug/L	1483966.870
	123	Sb	0.029494	13.467	502.682	ug/L	268.758
	135	Ba	0.133090	9.755	436.678	ug/L	112.002
>	165	Ho-1			1615439.172	ug/L	1592460.464
	205	Tl	0.028262	89.851	4795.864	ug/L	3951.949
	208	Pb	0.016848	28.785	5290.437	ug/L	4580.000
	238	U	-0.002248	11.441	128.002	ug/L	234.671
>	45	Sc-2			490533.956	ug/L	454114.374
	53	Cr	4.176643	134.618	172324.716	ug/L	154333.029
	54	Fe	22.778431	22.842	84500.938	ug/L	62090.940
	61	Ni	-1.743148	50.935	1583.770	ug/L	1661.113
	63	Cu	0.087501	3.645	904.038	ug/L	345.008
	67	Zn	0.220860	948.450	9841.184	ug/L	9047.975
>	72	Ge			753147.165	ug/L	739226.379
	77	Se	6.460951	34.229	9947.149	ug/L	8561.780
	98	Mo	0.053638	6.480	540.391	ug/L	141.970
	109	Ag	0.000504	316.763	300.340	ug/L	288.339
>	115	In-2			1510751.571	ug/L	1483966.870
	114	Cd	-0.003311	32.271	63.244	ug/L	84.731
	121	Sb	0.024397	19.336	604.019	ug/L	348.674
	137	Ba	0.127848	7.296	688.023	ug/L	156.669
>	165	Ho-2			1615439.172	ug/L	1592460.464
	203	Tl	0.035089	81.366	2020.832	ug/L	1582.773
	206	Pb	0.015157	47.601	1322.406	ug/L	1161.392
	207	Pb	0.018900	37.131	1161.392	ug/L	995.045
>	45	Sc			490533.956	ug/L	454114.374
	47	Ti	0.273925	27.166	539.682	ug/L	297.006
	86	Sr	0.049247	69.265	963.679	ug/L	716.656
	88	Sr	0.040018	18.286	7653.793	ug/L	5834.250
>	115	In			1510751.571	ug/L	1483966.870
	118	Sn	0.051128	6.102	1308.073	ug/L	855.034
	120	Sn	0.066463	17.746	1871.562	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	100.020
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.883
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	101.886
	Sb	123	
	Ba	135	
>	Ho-1	165	101.443
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	100.020
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.883
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	101.805
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	101.443
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	100.020
	Ti	47	
	Sr	88	
	Sr	88	
>	In	115	101.805
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8L0KC
Sample Date/Time: Wednesday, April 27, 2005 21:41:33
Autosampler Position: 40
Dataset File: D:\Elandata\Dataset\042705M2\G8L0KC.034

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	176.273668	2.052	34015.456	ug/L	7.667
	10	B	169.723062	4.886	6230.088	ug/L	27.667
	23	Na	740.636840	0.936	3193954.861	ug/L	18838.944
	24	Mg	3374.328888	2.134	10506784.064	ug/L	2106.176
	27	Al	9212.868974	1.718	43857121.501	ug/L	3413.777
	39	K	3284.188658	5.737	31146224.314	ug/L	807733.262
	44	Ca	5979.761773	2.607	1832869.908	ug/L	61872.368
>	45	Sc-1			508171.551	ug/L	454114.374
	51	V	176.313108	3.220	1998445.075	ug/L	-26072.212
	52	Cr	128.302966	1.593	1309426.643	ug/L	26547.338
	55	Mn	718.429184	2.425	11936538.030	ug/L	3062.361
	57	Fe	17649.382650	0.905	6187592.040	ug/L	9798.695
	59	Co	84.038901	3.442	824246.843	ug/L	232.338
	60	Ni	275.744671	2.967	762761.841	ug/L	301.006
	65	Cu	261.247858	3.014	794762.437	ug/L	168.336
	66	Zn	290.407214	1.673	535869.794	ug/L	15137.170
>	72	Ge-1			726190.073	ug/L	739226.379
	75	As	347.751725	3.009	707219.198	ug/L	-1945.453
	82	Se	134.294820	1.986	30260.864	ug/L	-120.854
	97	Mo	176.974327	3.480	496576.831	ug/L	72.001
	107	Ag	269.619691	1.565	3538064.558	ug/L	267.339
	111	Cd	259.297127	1.526	781149.000	ug/L	39.334
>	115	In-1			1458448.851	ug/L	1483986.870
	123	Sb	125.074213	1.195	938881.958	ug/L	288.758
	136	Ba	536.583700	1.007	1258173.253	ug/L	112.002
>	165	Ho-1			1559385.890	ug/L	1592460.464
	205	Tl	176.743794	2.603	4740507.157	ug/L	3951.949
	208	Pb	293.674132	1.874	10844468.916	ug/L	4580.000
	238	U	2.733816	2.177	129373.168	ug/L	234.671
>	45	Sc-2			508171.551	ug/L	454114.374
	53	Cr	91.648431	2.981	299943.096	ug/L	154333.029
	54	Fe	17845.309209	4.659	14266050.654	ug/L	62090.940
	61	Ni	275.998876	1.121	36097.579	ug/L	1661.113
	63	Cu	262.511153	1.517	1652986.064	ug/L	345.008
	67	Zn	276.580825	1.826	97389.203	ug/L	9047.975
>	72	Ge			726190.073	ug/L	739226.379
	77	Se	95.929762	5.653	25938.126	ug/L	8561.780
	98	Mo	177.982668	2.442	1268290.818	ug/L	141.970
	109	Ag	262.434268	2.009	3512055.610	ug/L	288.339
>	115	In-2			1458448.851	ug/L	1483986.870
	114	Cd	261.570421	1.225	1760461.815	ug/L	84.731
	121	Sb	125.165697	1.033	1230701.586	ug/L	349.674
	137	Ba	552.668106	3.735	2209051.962	ug/L	156.669
>	165	Ho-2			1559385.890	ug/L	1592460.464
	203	Tl	170.203649	2.131	1951373.194	ug/L	1582.773
	206	Pb	296.051096	2.862	2716003.116	ug/L	1161.392
	207	Pb	309.324760	3.621	2399125.990	ug/L	995.045
>	45	Sc			508171.551	ug/L	454114.374
	47	Ti	483.984975	1.766	402415.502	ug/L	297.006
	86	Sr	147.240771	4.027	594358.409	ug/L	716.656
	88	Sr	150.665138	2.020	5293811.782	ug/L	5834.250
>	115	In			1458448.851	ug/L	1483986.870
	118	Sn	124.886193	0.823	1033171.144	ug/L	855.034
	120	Sn	126.262629	2.548	1373985.307	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	111.904
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	98.238
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.280
	Sb	123	
	Ba	135	
>	Ho-1	165	97.923
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	111.904
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	98.238
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.280
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	97.923
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	111.904
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	98.280
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Wednesday, April 27, 2005 21:46:41
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 1.035

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	196.083176	3.724	33738.818	ug/L	7.667
	10	B	189.036405	5.694	6181.401	ug/L	27.667
	23	Na	1868.191568	3.067	7150230.239	ug/L	18838.944
	24	Mg	946.144024	4.291	2626789.774	ug/L	2106.176
	27	Al	1952.592069	1.124	8287701.438	ug/L	3413.777
	39	K	1919.754096	1.705	16568877.511	ug/L	807733.282
	44	Ca	1035.253108	3.371	334077.518	ug/L	61872.388
>	45	Sc-1			452883.208	ug/L	454114.374
	51	V	191.656691	1.561	1938534.024	ug/L	-26072.212
	52	Cr	194.529034	2.177	1783063.993	ug/L	26547.338
	55	Mn	194.163919	4.009	2885258.561	ug/L	3062.361
	57	Fe	1941.083333	3.460	615006.943	ug/L	9798.695
	59	Co	191.639062	3.836	2197786.450	ug/L	232.338
	60	Ni	198.138518	4.361	486581.610	ug/L	301.006
	65	Cu	198.988436	4.462	539539.750	ug/L	168.336
	66	Zn	183.285194	0.525	322948.564	ug/L	15137.170
>	72	Ge-1			724499.242	ug/L	739226.379
	75	As	198.318640	4.258	401712.180	ug/L	-1945.463
	82	Se	196.901894	1.387	44303.300	ug/L	-120.854
	97	Mo	197.251219	1.274	560879.572	ug/L	72.001
	107	Ag	48.790780	2.267	645251.576	ug/L	267.339
	111	Cd	193.652947	0.646	587706.945	ug/L	39.334
>	115	In-1			1468771.972	ug/L	1483966.870
	123	Sb	197.018577	1.655	1469407.900	ug/L	268.758
	135	Ba	203.779884	1.243	463960.875	ug/L	112.002
>	165	Ho-1			1579635.152	ug/L	1592460.464
	205	Tl	190.849266	3.325	5213955.761	ug/L	3951.949
	208	Pb	193.177596	1.590	7227334.360	ug/L	4580.000
	238	U	192.787379	2.621	8226134.173	ug/L	234.671
>	45	Sc-2			452883.208	ug/L	454114.374
	53	Cr	157.545418	10.638	348765.805	ug/L	154333.029
	54	Fe	2008.881827	2.758	1486344.129	ug/L	62090.940
	61	Ni	196.408936	2.457	23369.334	ug/L	1661.113
	63	Cu	196.277907	1.720	1101350.929	ug/L	345.008
	67	Zn	182.305345	4.004	63088.020	ug/L	9047.975
>	72	Ge			724499.242	ug/L	739226.379
	77	Se	173.663475	3.954	40012.716	ug/L	8561.780
	98	Mo	196.871769	2.843	1413160.694	ug/L	141.970
	109	Ag	47.714623	2.292	643495.710	ug/L	288.339
>	115	In-2			1468771.972	ug/L	1483966.870
	114	Cd	193.664213	2.965	1312475.748	ug/L	84.731
	121	Sb	197.822233	2.026	1958897.252	ug/L	349.674
	137	Ba	209.182866	2.089	846719.812	ug/L	156.669
>	165	Ho-2			1579635.152	ug/L	1592460.464
	203	Tl	190.021160	3.826	2205875.753	ug/L	1582.773
	206	Pb	193.450666	3.168	1803762.317	ug/L	1161.392
	207	Pb	199.494002	2.090	1567752.799	ug/L	995.045
>	45	Sc			452883.208	ug/L	454114.374
	47	Ti	199.217731	2.000	147801.840	ug/L	297.006
	86	Sr	190.545626	3.598	685429.060	ug/L	716.656
	88	Sr	193.151026	2.217	6047151.872	ug/L	5834.250
>	115	In			1468771.972	ug/L	1483966.870
	118	Sn	199.503070	0.905	1661763.876	ug/L	855.034
	120	Sn	202.625806	2.425	2220375.238	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		97.542

	B	10		94.518
	Na	23		93.418
	Mg	24		94.814
	Al	27		97.639
	K	39		96.968
	Ca	44		103.825
>	Sc-1	45	99.729	
	V	51		96.828
	Cr	52		97.286
	Mn	55		97.077
	Fe	57		97.054
	Co	59		96.820
	Ni	60		99.699
	Cu	65		99.494
	Zn	66		96.843
>	Ge-1	72	98.008	
	As	75		99.169
	Se	82		96.451
	Mo	97		96.626
	Ag	107		97.582
	Cd	111		96.826
>	In-1	115	98.976	
	Sb	123		96.516
	Ba	135		101.990
>	Ho-1	165	99.195	
	Tl	205		95.425
	Pb	208		96.599
	U	238		96.394
>	Sc-2	45	99.729	
	Cr	53		78.778
	Fe	54		109.444
	Ni	61		96.264
	Cu	63		96.139
	Zn	67		96.153
>	Ge	72	98.008	
	Se	77		96.832
	Mo	98		96.436
	Ag	109		95.429
>	In-2	115	98.976	
	Cd	114		96.832
	Sb	121		96.911
	Ba	137		104.691
>	Ho-2	165	99.195	
	Tl	203		95.911
	Pb	206		96.725
	Pb	207		99.747
>	Sc	45	99.729	
	Ti	47		99.809
	Sr	86		96.273
	Sr	88		96.578
>	In	115	98.976	
	Sn	118		99.752
	Sn	120		101.313

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cr	53	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Wednesday, April 27, 2005 21:52:51
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 2.036

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	-0.009246	102.400	6.000	ug/L	7.667
	10	B	3.623037	24.245	144.336	ug/L	27.667
	23	Na	-0.050294	160.252	18397.359	ug/L	18838.944
	24	Mg	0.059737	111.015	2240.866	ug/L	2106.176
	27	Al	0.161198	15.345	4045.814	ug/L	3413.777
	39	K	-5.802037	25.922	749720.916	ug/L	807733.282
	44	Ca	-4.993245	161.746	59727.559	ug/L	61872.368
>	45	Sc-1			448070.962	ug/L	454114.374
	51	V	0.531629	50.780	-20326.657	ug/L	-26072.212
	52	Cr	-0.778370	27.914	19219.510	ug/L	26547.338
	55	Mn	0.022561	29.168	3352.093	ug/L	3062.361
	57	Fe	-3.784736	23.078	8497.813	ug/L	9798.695
	59	Co	0.009426	52.805	336.674	ug/L	232.338
	60	Ni	-0.006391	99.669	281.339	ug/L	301.006
	65	Cu	0.023788	15.076	230.004	ug/L	168.336
	66	Zn	-0.198254	45.351	14621.959	ug/L	15137.170
>	72	Ge-1			718154.348	ug/L	739226.379
	75	As	0.995619	30.390	120.447	ug/L	-1945.453
	82	Se	0.320686	67.085	-45.706	ug/L	-120.854
	97	Mo	0.089212	35.593	326.674	ug/L	72.001
	107	Ag	0.007050	28.022	359.675	ug/L	267.339
	111	Cd	0.010675	6.033	71.668	ug/L	39.334
>	115	In-1			1476030.759	ug/L	1483966.870
	123	Sb	0.116501	26.194	1144.987	ug/L	268.758
	135	Ba	-0.006421	75.523	96.668	ug/L	112.002
>	165	Ho-1			1593960.540	ug/L	1592460.464
	205	Tl	0.316541	48.709	12645.437	ug/L	3951.949
	208	Pb	-0.008118	32.002	4277.980	ug/L	4560.000
	238	U	0.006502	16.032	549.016	ug/L	234.671
>	45	Sc-2			448070.962	ug/L	454114.374
	53	Cr	-20.837975	64.133	126602.043	ug/L	154333.029
	54	Fe	-3.542899	94.613	58754.296	ug/L	62090.940
	61	Ni	-0.703196	141.473	1561.434	ug/L	1661.113
	63	Cu	0.032569	13.510	521.348	ug/L	345.008
	67	Zn	0.929479	441.186	9174.394	ug/L	9047.975
>	72	Ge			718154.348	ug/L	739228.379
	77	Se	-27.864763	8.112	3287.666	ug/L	8561.780
	98	Mo	0.111411	24.424	945.457	ug/L	141.970
	109	Ag	0.014395	26.296	482.013	ug/L	288.339
>	115	In-2			1476030.759	ug/L	1483966.870
	114	Cd	0.006683	3.891	143.308	ug/L	84.731
	121	Sb	0.116425	26.133	1496.762	ug/L	349.674
	137	Ba	0.009098	12.593	194.003	ug/L	156.669
>	165	Ho-2			1593960.540	ug/L	1592460.464
	203	Tl	0.310157	45.342	5216.067	ug/L	1582.773
	206	Pb	-0.012304	29.207	1046.716	ug/L	1161.392
	207	Pb	-0.003806	186.691	967.376	ug/L	995.045
>	45	Sc			448070.962	ug/L	454114.374
	47	Ti	0.000204	12349.335	293.006	ug/L	297.006
	86	Sr	-0.000888	1800.707	703.352	ug/L	716.656
	88	Sr	0.001753	122.369	5810.239	ug/L	5834.250
>	115	In			1476030.759	ug/L	1483966.870
	118	Sn	0.064766	19.912	1392.749	ug/L	855.034
	120	Sn	0.071980	37.414	1690.629	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		-0.925

	B	10		362.304
	Na	23		-0.080
	Mg	24		0.080
	Al	27		0.191
	K	39		-5.802
	Ca	44		-4.983
>	Sc-1	45	99.669	
	V	51		53.183
	Cr	52		-77.637
	Mn	55		2.256
	Fe	57		-3.785
	Co	59		0.943
	Ni	60		-0.639
	Cu	65		2.379
	Zn	66		-19.825
>	Ga-1	72	97.149	
	As	75		98.562
	Se	82		32.089
	Mo	97		8.921
	Ag	107		0.706
	Cd	111		1.068
>	In-1	115	99.466	
	Sb	123		11.569
	Ba	135		-0.842
>	Ho-1	165	100.094	
	Tl	205		31.564
	Pb	208		-0.812
	U	238		0.650
>	Sc-2	45	99.669	
	Cr	53		-2863.798
	Fe	54		-3.543
	Ni	61		-70.320
	Cu	63		3.257
	Zn	67		92.946
>	Ge	72	97.149	
	Se	77		-2756.476
	Mo	98		11.141
	Ag	109		1.439
>	In-2	115	99.466	
	Cd	114		0.866
	Sb	121		11.542
	Ba	137		0.910
>	Ho-2	165	100.094	
	Tl	203		31.016
	Pb	208		-1.220
	Pb	207		-0.361
>	Sc	45	99.669	
	Ti	47		0.020
	Sr	86		-0.089
	Sr	88		0.175
>	In	115	99.466	
	Sn	118		6.477
	Sn	120		7.196

QC Out Of Limits

Analyte	Mass	Out of Limits Message
B	10	Q
Cr	53	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8L0KC ODD
Sample Date/Time: Wednesday, April 27, 2005 21:58:58
Autosampler Position: 41
Dataset File: D:\Elandata\Dataset\042705M2\G8L0KC ODD.037

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.000320	951.903	7.667	ug/L	7.667
	10	B	196.558890	2.230	6368.817	ug/L	27.667
	23	Na	8.264638	7.093	50074.474	ug/L	18838.944
	24	Mg	8.653007	3.982	25974.856	ug/L	2106.176
	27	Al	3.875286	0.876	19755.188	ug/L	3413.777
	39	K	-4.870368	52.148	761676.015	ug/L	807733.282
	44	Ca	34.615007	9.511	70467.453	ug/L	61872.368
>	45	Sc-1			450755.756	ug/L	454114.374
	51	V	0.222061	74.466	-23604.855	ug/L	-26072.212
	52	Cr	-0.022352	591.875	26161.255	ug/L	26547.338
	55	Mn	0.176584	2.965	5633.500	ug/L	3062.381
	57	Fe	1.729762	65.195	10258.438	ug/L	9798.695
	59	Co	0.026096	22.294	527.882	ug/L	232.338
	60	Ni	0.142804	10.066	648.688	ug/L	301.006
	65	Cu	0.250041	8.747	841.033	ug/L	166.336
	66	Zn	1.996805	13.691	18185.083	ug/L	15137.170
>	72	Ge-1			734727.690	ug/L	739226.379
	75	As	0.854661	13.941	-171.897	ug/L	-1945.453
	82	Se	0.392737	31.734	-30.496	ug/L	-120.854
	97	Mo	0.027139	28.321	149.336	ug/L	72.001
	107	Ag	0.822865	2.055	11208.842	ug/L	267.339
	111	Cd	0.128352	3.662	431.011	ug/L	39.334
>	115	In-1			1477746.490	ug/L	1483966.870
	123	Sb	0.060766	11.818	729.823	ug/L	268.758
	135	Ba	0.078154	3.248	296.673	ug/L	112.002
>	165	Ho-1			1589698.478	ug/L	1592460.464
	205	Tl	0.134691	49.624	7686.557	ug/L	3951.949
	208	Pb	0.018641	34.711	5308.104	ug/L	4580.000
	238	U	187.058241	1.508	9008863.779	ug/L	234.671
>	45	Sc-2			450755.756	ug/L	454114.374
	53	Cr	-24.616425	36.827	122982.010	ug/L	154333.029
	54	Fe	20.630773	17.012	76159.776	ug/L	62090.940
	61	Ni	-0.562961	128.794	1585.771	ug/L	1661.113
	63	Cu	0.177394	9.525	1332.409	ug/L	345.008
	67	Zn	0.186142	1260.116	9039.631	ug/L	9047.975
>	72	Ge			734727.690	ug/L	739226.379
	77	Se	-25.183401	15.964	3858.608	ug/L	8561.780
	98	Mo	0.034607	12.123	391.312	ug/L	141.970
	109	Ag	0.039236	8.691	819.365	ug/L	288.339
>	115	In-2			1477746.490	ug/L	1483966.870
	114	Cd	0.262879	31.543	1875.838	ug/L	84.731
	121	Sb	0.086913	12.394	1014.713	ug/L	349.674
	137	Ba	0.074775	8.137	460.679	ug/L	156.669
>	165	Ho-2			1589698.478	ug/L	1592460.464
	203	Tl	0.133605	42.851	3147.390	ug/L	1582.773
	206	Pb	0.022893	28.421	1373.747	ug/L	1161.392
	207	Pb	0.019268	57.997	1144.391	ug/L	995.045
>	45	Sc			450755.756	ug/L	454114.374
	47	Ti	198.523004	1.603	146582.671	ug/L	297.006
	86	Sr	0.078773	7.738	992.840	ug/L	716.656
	88	Sr	0.054943	7.648	7500.711	ug/L	5834.250
>	115	In			1477746.490	ug/L	1483966.870
	118	Sn	200.985305	2.950	1684064.655	ug/L	855.034
	120	Sn	196.668414	2.611	2168596.146	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	99.260
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	99.391
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.581
	Sb	123	
	Ba	135	
>	Ho-1	165	99.827
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	99.260
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	99.391
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	99.581
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	99.827
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	99.260
	Ti	47	
	Sr	88	
	Sr	88	
>	In	115	99.581
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G7NWL
Sample Date/Time: Wednesday, April 27, 2005 22:04:04
Autosampler Position: 42
Dataset File: D:\Elandata\Dataset\042705M2\G7NWL.038

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	1.386812	5.405	291.006	ug/L	7.667
	10	B	6.538397	8.810	283.006	ug/L	27.667
	23	Na	41.372037	4.106	207868.760	ug/L	18838.944
	24	Mg	9427.982160	3.881	30767775.473	ug/L	2106.176
	27	Al	22318.993865	5.305	111398735.225	ug/L	3413.777
	39	K	2348.205394	3.286	23623806.606	ug/L	807733.282
	44	Ca	16247.337007	2.332	5714435.250	ug/L	61872.368
>	45	Sc-1			532489.503	ug/L	454114.374
	51	V	37.966893	5.535	427294.739	ug/L	-26072.212
	52	Cr	33.564380	6.549	387649.571	ug/L	26547.338
	55	Mn	1215.876968	4.646	21236640.313	ug/L	3062.361
	57	Fe	37248.651539	5.371	13675476.389	ug/L	9798.695
	59	Co	27.244887	4.866	367868.808	ug/L	232.338
	60	Ni	31.822171	4.641	92616.216	ug/L	301.006
	65	Cu	24.205305	3.166	77385.758	ug/L	168.336
	66	Zn	93.930128	4.594	193738.223	ug/L	15137.170
>	72	Ge-1			747264.159	ug/L	739226.379
	75	As	6.450720	6.740	11577.775	ug/L	-1945.453
	82	Se	1.009535	7.110	112.751	ug/L	-120.854
	97	Mo	0.833171	6.987	2423.897	ug/L	72.001
	107	Ag	0.089115	3.757	1432.086	ug/L	267.339
	111	Cd	0.162725	0.926	529.015	ug/L	39.334
>	115	In-1			1458439.963	ug/L	1483966.870
	123	Sb	0.195486	7.077	1731.901	ug/L	268.758
	135	Ba	218.503251	7.675	517000.001	ug/L	112.002
>	165	Ho-1			1574326.976	ug/L	1592460.464
	205	Tl	0.368566	14.220	13656.364	ug/L	3951.949
	208	Pb	42.978909	7.571	1605578.561	ug/L	4580.000
	238	U	1.200706	11.087	57471.054	ug/L	234.671
>	45	Sc-2			532489.503	ug/L	454114.374
	53	Cr	7.454100	135.189	191671.409	ug/L	154333.029
	54	Fe	36832.026759	0.839	30785706.747	ug/L	62090.940
	61	Ni	33.556691	5.151	6312.126	ug/L	1661.113
	63	Cu	24.262263	6.886	180546.180	ug/L	345.008
	67	Zn	91.410481	2.211	40837.391	ug/L	9047.975
>	72	Ge			747264.159	ug/L	739226.379
	77	Se	-19.172095	10.870	5054.461	ug/L	8561.780
	98	Mo	0.835572	5.729	6097.485	ug/L	141.970
	109	Ag	0.050052	3.919	953.375	ug/L	288.339
>	115	In-2			1458439.963	ug/L	1483966.870
	114	Cd	0.158805	7.162	1152.682	ug/L	84.731
	121	Sb	0.193615	8.759	2248.200	ug/L	349.674
	137	Ba	221.036907	8.250	891446.759	ug/L	156.669
>	165	Ho-2			1574326.976	ug/L	1592460.464
	203	Tl	0.358416	17.007	5705.873	ug/L	1582.773
	206	Pb	43.758440	7.873	407289.073	ug/L	1161.392
	207	Pb	44.283256	7.072	347530.208	ug/L	995.045
>	45	Sc			532489.503	ug/L	454114.374
	47	Ti	286.902487	4.782	250245.699	ug/L	297.008
	86	Sr	16.975763	4.208	72607.121	ug/L	716.656
	88	Sr	17.212015	4.391	640159.180	ug/L	5834.250
>	115	In			1458439.963	ug/L	1483966.870
	118	Sn	1.842730	7.568	16082.249	ug/L	855.034
	120	Sn	1.898987	8.867	21753.192	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	117.259
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.887
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.280
	Sb	123	
	Ba	136	
>	Ho-1	165	98.861
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	117.259
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.887
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.280
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	98.861
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	117.259
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	98.280
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G7NW8
Sample Date/Time: Wednesday, April 27, 2005 22:09:11
Autosampler Position: 43
Dataset File: D:\Elandata\Dataset\042705M2\G7NW8.039

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	1.292762	7.597	248.005	ug/L	7.667
	10	B	3.941908	9.616	157.336	ug/L	27.667
	23	Na	84.596434	2.353	366561.121	ug/L	18838.944
	24	Mg	10062.295827	3.059	29948287.023	ug/L	2106.176
	27	Al	18977.733642	2.215	86362603.779	ug/L	3413.777
	39	K	1978.430495	3.640	18285709.964	ug/L	807733.282
	44	Ca	283322.282038	5.143	71488094.675	ug/L	61872.368
>	45	Sc-1			485764.394	ug/L	454114.374
	51	V	27.221434	2.056	271401.853	ug/L	-26072.212
	52	Cr	25.922288	2.106	279508.762	ug/L	26547.338
	55	Mn	782.578414	2.864	12463548.540	ug/L	3062.361
	57	Fe	29036.452064	1.112	9723048.286	ug/L	9798.695
	59	Co	16.121406	3.596	198558.492	ug/L	232.338
	60	Ni	27.953980	2.847	74226.185	ug/L	301.006
	65	Cu	22.421498	2.263	65383.639	ug/L	168.336
	66	Zn	139.676512	4.307	254784.334	ug/L	15137.170
>	72	Ge-1			724498.270	ug/L	739226.379
	75	As	5.218348	13.564	8691.880	ug/L	-1945.453
	82	Se	0.472986	43.140	-10.931	ug/L	-120.854
	97	Mo	0.503818	3.187	1435.086	ug/L	72.001
	107	Ag	0.064910	9.441	944.707	ug/L	267.339
	111	Cd	0.113132	4.963	364.675	ug/L	39.334
>	115	In-1			1402178.473	ug/L	1483966.870
	123	Sb	0.103932	7.149	1003.158	ug/L	268.758
	135	Ba	142.932627	1.492	327292.182	ug/L	112.002
>	165	Ho-1			1522739.764	ug/L	1592460.464
	205	Tl	0.230883	15.362	9850.510	ug/L	3951.949
	208	Pb	20.153297	1.352	730824.984	ug/L	4580.000
	238	U	0.732749	2.078	34031.166	ug/L	234.671
>	45	Sc-2			485764.394	ug/L	454114.374
	53	Cr	-8.365930	126.523	153939.574	ug/L	154333.029
	54	Fe	29845.826855	2.444	22766414.483	ug/L	62090.940
	61	Ni	63.221549	6.847	9274.442	ug/L	1661.113
	63	Cu	22.150556	0.937	133645.901	ug/L	345.008
	67	Zn	127.680188	3.597	48186.647	ug/L	9047.975
>	72	Ge			724498.270	ug/L	739226.379
	77	Se	-5.527219	64.722	7396.284	ug/L	8561.780
	98	Mo	0.493474	1.943	3514.957	ug/L	141.970
	109	Ag	0.021104	6.194	544.016	ug/L	288.339
>	115	In-2			1402178.473	ug/L	1483966.870
	114	Cd	0.102059	9.804	741.377	ug/L	84.731
	121	Sb	0.097297	4.850	1249.400	ug/L	349.674
	137	Ba	148.210140	2.091	566707.789	ug/L	156.669
>	165	Ho-2			1522739.764	ug/L	1592460.464
	203	Tl	0.232072	11.775	4107.633	ug/L	1582.773
	206	Pb	20.395103	3.694	184389.418	ug/L	1161.392
	207	Pb	20.501276	2.578	156171.325	ug/L	995.045
>	45	Sc			485764.394	ug/L	454114.374
	47	Ti	280.117410	1.374	222800.577	ug/L	297.006
	86	Sr	361.118607	0.443	1392909.844	ug/L	716.656
	88	Sr	367.227050	0.846	12327081.233	ug/L	5834.250
>	115	In			1402178.473	ug/L	1483966.870
	118	Sn	0.734547	4.233	6647.615	ug/L	855.034
	120	Sn	0.726420	4.452	8634.442	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	106.970
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	96.906
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	94.489
	Sb	123	
	Ba	135	
>	Ho-1	165	95.822
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	106.970
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	96.906
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	94.489
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	95.822
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	106.979
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	94.489
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G7NW8S
Sample Date/Time: Wednesday, April 27, 2005 22:14:18
Autosampler Position: 44
Dataset File: D:\Elandata\Dataset\042705M2\G7NW8S.040

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	6.127250	1.588	1360.745	ug/L	7.667
	10	B	148.873311	1.857	6096.360	ug/L	27.667
	23	Na	4074.089905	1.792	19846694.811	ug/L	18838.944
	24	Mg	15348.295178	1.520	54281531.042	ug/L	2106.176
	27	Al	36192.875880	1.514	195823571.437	ug/L	3413.777
	39	K	7120.680362	2.941	75574832.493	ug/L	807733.282
	44	Ca	20319.780031	2.344	6893550.156	ug/L	61872.368
>	45	Sc-1			577403.226	ug/L	454114.374
	51	V	83.641583	3.834	1060920.246	ug/L	-26072.212
	52	Cr	58.315552	1.591	705379.743	ug/L	26547.338
	55	Mn	964.806279	2.786	18082179.750	ug/L	3062.361
	57	Fe	42882.677873	1.874	17068750.829	ug/L	9798.895
	59	Co	63.640163	2.639	931249.745	ug/L	232.338
	60	Ni	82.462989	2.322	259444.441	ug/L	301.006
	65	Cu	53.584236	1.302	185386.167	ug/L	168.336
	66	Zn	191.703406	2.697	406610.377	ug/L	15137.170
>	72	Ge-1			760707.452	ug/L	739226.379
	75	As	219.093200	5.207	466323.911	ug/L	-1945.453
	82	Se	197.865325	5.553	46758.316	ug/L	-120.854
	97	Mo	103.666724	5.719	292787.720	ug/L	72.001
	107	Ag	5.881910	6.735	77201.103	ug/L	267.339
	111	Cd	5.719964	4.816	17279.623	ug/L	39.334
>	115	In-1			1459803.359	ug/L	1483966.870
	123	Sb	19.321825	8.635	145257.319	ug/L	268.758
	135	Ba	466.852200	3.277	1095687.830	ug/L	112.002
>	165	Ho-1			1560997.807	ug/L	1592460.464
	205	Tl	192.833163	4.118	5208079.729	ug/L	3951.949
	208	Pb	77.350706	4.178	2863442.484	ug/L	4580.000
	238	U	202.919263	5.121	9600937.352	ug/L	234.671
>	45	Sc-2			577403.226	ug/L	454114.374
	53	Cr	30.344585	33.643	243726.388	ug/L	154333.029
	54	Fe	42080.554518	1.790	38118451.679	ug/L	62090.940
	61	Ni	82.929771	2.659	13796.801	ug/L	1661.113
	63	Cu	53.509784	1.429	383293.661	ug/L	345.008
	67	Zn	189.402891	3.848	79371.499	ug/L	9047.975
>	72	Ge			760707.452	ug/L	739226.379
	77	Se	149.558518	2.720	37401.859	ug/L	8561.780
	98	Mo	104.935765	7.239	748078.272	ug/L	141.870
	109	Ag	4.855699	6.083	65423.951	ug/L	288.339
>	115	In-2			1459803.359	ug/L	1483966.870
	114	Cd	6.002886	6.380	40469.132	ug/L	84.731
	121	Sb	19.416201	6.780	191216.967	ug/L	349.674
	137	Ba	461.739629	2.640	1847442.784	ug/L	156.669
>	165	Ho-2			1560997.807	ug/L	1592460.464
	203	Tl	193.852916	3.304	2225185.467	ug/L	1582.773
	206	Pb	79.393178	6.730	732679.154	ug/L	1161.392
	207	Pb	81.336201	3.399	632403.212	ug/L	995.045
>	45	Sc			577403.226	ug/L	454114.374
	47	Ti	499.942642	3.129	472408.516	ug/L	297.006
	86	Sr	102.649113	2.786	471336.302	ug/L	716.656
	88	Sr	105.000729	3.933	4197943.808	ug/L	5834.250
>	115	In			1459803.359	ug/L	1483966.870
	118	Sn	209.049321	5.751	1654889.862	ug/L	855.034
	120	Sn	204.699802	6.078	2227950.665	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

|	B	10	
|	Na	23	
|	Mg	24	
|	Al	27	
|	K	39	
|	Ca	44	
|>	Sc-1	45	127.149
|	V	51	
|	Cr	52	
|	Mn	55	
|	Fe	57	
|	Co	59	
|	Ni	60	
|	Cu	65	
|	Zn	66	
⌈>	Ge-1	72	102.906
|	As	75	
⌊	Se	82	
⌈	Mo	97	
|	Ag	107	
|	Cd	111	
|>	In-1	115	98.372
⌊	Sb	123	
⌈	Ba	135	
|>	Ho-1	165	98.024
|	Tl	205	
|	Pb	208	
⌊	U	238	
⌈>	Sc-2	45	127.149
|	Cr	53	
|	Fe	54	
|	Ni	61	
|	Cu	63	
⌊	Zn	67	
⌈>	Ge	72	102.906
⌊	Se	77	
⌈	Mo	98	
|	Ag	109	
|>	In-2	115	98.372
|	Cd	114	
⌊	Sb	121	
⌈	Ba	137	
|>	Ho-2	165	98.024
|	Tl	203	
|	Pb	206	
⌊	Pb	207	
⌈>	Sc	45	127.149
|	Ti	47	
|	Sr	88	
⌊	Sr	88	
⌈>	In	115	98.372
|	Sn	118	
⌊	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G7NW8D
Sample Date/Time: Wednesday, April 27, 2005 22:19:25
Autosampler Position: 45
Dataset File: D:\Elandata\Dataset\042705M2\G7NW8D.041

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	5.965975	6.861	1329.409	ug/L	7.667
	10	B	150.483220	4.939	6299.121	ug/L	27.667
	23	Na	4109.497891	4.264	20085776.698	ug/L	18838.944
	24	Mg	14272.924283	3.134	50631374.088	ug/L	2106.176
	27	Al	36204.119984	6.704	196433144.914	ug/L	3413.777
	39	K	7108.341509	4.660	75654617.216	ug/L	807733.282
	44	Ca	18193.723326	4.358	6193582.210	ug/L	61872.368
>	45	Sc-1			578827.890	ug/L	454114.374
	51	V	81.215116	2.330	1031126.332	ug/L	-26072.212
	52	Cr	56.872906	5.594	690515.218	ug/L	26547.338
	55	Mn	1050.441177	6.295	19940384.625	ug/L	3062.361
	57	Fe	45351.506368	3.572	18090062.668	ug/L	9798.695
	59	Co	65.926538	6.731	967094.742	ug/L	232.338
	60	Ni	82.876538	5.305	261518.963	ug/L	301.006
	65	Cu	52.888702	4.387	183522.971	ug/L	168.336
	66	Zn	168.638624	7.047	362716.323	ug/L	15137.170
>	72	Ge-1			740638.749	ug/L	739226.379
	75	As	225.464164	7.680	467042.917	ug/L	-1945.453
	82	Se	198.788238	8.071	45717.058	ug/L	-120.854
	97	Mo	104.483349	6.364	296968.723	ug/L	72.001
	107	Ag	5.886687	7.791	78007.606	ug/L	267.339
	111	Cd	5.751772	6.054	17481.888	ug/L	39.334
>	115	In-1			1468060.303	ug/L	1483966.870
	123	Sb	19.116627	8.808	144693.270	ug/L	268.758
	135	Ba	450.048047	6.378	1066946.640	ug/L	112.002
>	165	Ho-1			1542921.788	ug/L	1592460.464
	205	Tl	197.115063	6.110	5260209.565	ug/L	3951.949
	208	Pb	80.079181	6.784	2928742.896	ug/L	4580.000
	238	U	207.792855	7.434	9712506.872	ug/L	234.671
>	45	Sc-2			578827.890	ug/L	454114.374
	53	Cr	35.712760	15.311	253114.231	ug/L	154333.029
	54	Fe	43936.680787	4.317	39905687.356	ug/L	52090.940
	61	Ni	86.366677	4.353	14185.862	ug/L	1661.113
	63	Cu	53.513727	5.889	384206.169	ug/L	345.008
	67	Zn	188.139280	3.176	71961.978	ug/L	9047.975
>	72	Ge			740638.749	ug/L	739226.379
	77	Se	165.763949	3.255	39426.905	ug/L	8561.780
	98	Mo	104.035472	9.075	746423.958	ug/L	141.970
	109	Ag	4.931499	8.396	66723.794	ug/L	288.339
>	115	In-2			1468060.303	ug/L	1483966.870
	114	Cd	6.020203	5.654	40665.949	ug/L	84.731
	121	Sb	19.264125	8.681	190952.050	ug/L	349.674
	137	Ba	462.303875	6.855	1827612.541	ug/L	156.669
>	165	Ho-2			1542921.788	ug/L	1592460.464
	203	Tl	193.707500	10.278	2196569.517	ug/L	1582.773
	206	Pb	81.111733	9.075	739405.563	ug/L	1161.392
	207	Pb	83.441222	6.346	841061.908	ug/L	995.045
>	45	Sc			578827.890	ug/L	454114.374
	47	Ti	526.900884	2.895	499082.904	ug/L	297.006
	88	Sr	101.228142	5.353	465890.113	ug/L	716.656
	88	Sr	101.775832	6.988	4078805.208	ug/L	5834.250
>	115	In			1468060.303	ug/L	1483966.870
	118	Sn	203.447112	8.301	1693551.699	ug/L	855.034
	120	Sn	204.443842	7.340	2239361.805	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	127.463
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	100.191
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	96.928
	Sb	123	
	Ba	135	
>	Ho-1	165	96.869
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	127.463
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	100.191
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	96.928
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	96.869
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	127.463
	Ti	47	
	Sr	88	
	Sr	88	
>	In	115	96.928
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G7NW8V
Sample Date/Time: Wednesday, April 27, 2005 22:24:33
Autosampler Position: 46
Dataset File: D:\Elandata\Dataset\042705M2\G7NW8V.042

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.307869	15.350	61.667	ug/L	7.667
	10	B	5.585039	17.658	212.670	ug/L	27.667
	23	Na	22.696972	2.086	106567.441	ug/L	16838.944
	24	Mg	2327.972817	2.134	6554997.995	ug/L	2106.176
	27	Al	4397.081588	1.114	18929483.434	ug/L	3413.777
	39	K	443.144533	2.010	4507710.254	ug/L	807733.282
	44	Ca	54234.002193	1.340	14527587.902	ug/L	61872.368
>	45	Sc-1			459465.268	ug/L	454114.374
	51	V	7.968560	4.542	56448.231	ug/L	-26072.212
	52	Cr	4.547314	3.035	68507.891	ug/L	26547.338
	55	Mn	172.944931	1.363	2607531.933	ug/L	3062.361
	57	Fe	6217.923421	8.135	1976206.218	ug/L	9798.695
	59	Co	3.422508	2.540	40051.141	ug/L	232.338
	60	Ni	6.232086	4.515	15879.316	ug/L	301.006
	65	Cu	4.943460	4.400	13764.438	ug/L	168.336
	66	Zn	30.496358	1.928	64582.634	ug/L	15137.170
>	72	Ge-1			701991.646	ug/L	739226.379
	75	As	2.534731	2.089	3152.812	ug/L	-1945.453
	82	Se	0.674334	6.666	32.863	ug/L	-120.854
	97	Mo	0.138510	18.925	468.346	ug/L	72.001
	107	Ag	0.007467	20.136	366.008	ug/L	267.339
	111	Cd	0.019565	27.908	99.001	ug/L	39.334
>	115	In-1			1479571.203	ug/L	1483966.870
	123	Sb	0.021418	28.081	430.982	ug/L	268.758
	135	Ba	30.170058	2.007	70513.654	ug/L	112.002
>	165	Ho-1			1552420.941	ug/L	1592460.464
	205	Tl	0.425986	16.343	15282.089	ug/L	3951.949
	208	Pb	4.076701	0.845	154291.681	ug/L	4580.000
	238	U	0.149489	1.802	7260.584	ug/L	234.671
>	45	Sc-2			459465.268	ug/L	454114.374
	53	Cr	-69.741165	5.592	68606.119	ug/L	154333.029
	54	Fe	6356.363499	4.844	4633719.786	ug/L	62090.940
	61	Ni	14.344964	5.461	3288.745	ug/L	1661.113
	63	Cu	5.069819	2.397	29187.442	ug/L	345.008
	67	Zn	17.559508	2.239	14163.494	ug/L	9047.975
>	72	Ge			701991.646	ug/L	739226.379
	77	Se	-37.811252	2.133	1458.827	ug/L	8561.780
	98	Mo	0.154102	13.858	1255.629	ug/L	141.970
	109	Ag	-0.002143	80.560	258.338	ug/L	288.339
>	115	In-2			1479571.203	ug/L	1483966.870
	114	Cd	0.015746	11.137	192.023	ug/L	84.731
	121	Sb	0.018990	7.736	538.016	ug/L	349.674
	137	Ba	30.657067	1.464	122111.945	ug/L	156.669
>	185	Ho-2			1552420.941	ug/L	1592460.464
	203	Tl	0.416209	22.567	6287.806	ug/L	1582.773
	206	Pb	4.119245	0.927	38869.199	ug/L	1161.392
	207	Pb	4.130943	1.207	32860.747	ug/L	995.045
>	45	Sc			459465.268	ug/L	454114.374
	47	Ti	62.883193	2.442	47379.249	ug/L	297.006
	86	Sr	76.878015	3.535	280925.779	ug/L	716.656
	88	Sr	78.363931	3.078	2491789.154	ug/L	5834.250
>	115	In			1479571.203	ug/L	1483966.870
	118	Sn	0.218317	4.964	2683.279	ug/L	855.034
	120	Sn	0.231236	4.814	3651.658	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	101.178
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	94.063
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.704
	Sb	123	
	Ba	135	
>	Ho-1	165	97.488
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	101.178
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	94.063
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	99.704
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	97.488
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	101.178
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	99.704
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G7NXD
Sample Date/Time: Wednesday, April 27, 2005 22:29:41
Autosampler Position: 47
Dataset File: D:\Elandata\Dataset\042705M2\G7NXD.043

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	1.888885	4.956	432.011	ug/L	7.667
	10	B	6.045887	8.013	293.006	ug/L	27.667
	23	Na	88.012396	3.575	448282.983	ug/L	18838.944
	24	Mg	10956.909779	6.683	39694650.997	ug/L	2106.176
	27	Al	27291.897405	4.121	151173132.037	ug/L	3413.777
	39	K	1604.511530	4.553	15249401.682	ug/L	807733.282
	44	Ca	9241.516824	5.625	3252512.904	ug/L	61872.368
>	45	Sc-1			591258.242	ug/L	454114.374
	51	V	36.937094	8.819	460353.117	ug/L	-26072.212
	52	Cr	35.854551	5.948	454967.603	ug/L	26547.338
	55	Mn	14831.858894	5.099	287500277.878	ug/L	3062.361
	57	Fe	44692.732951	4.937	18212471.032	ug/L	9798.695
	59	Co	44.766960	4.300	670677.828	ug/L	232.338
	60	Ni	54.154766	1.758	174662.302	ug/L	301.006
	65	Cu	27.659696	6.401	98133.150	ug/L	168.336
	66	Zn	626.930998	6.044	1323277.888	ug/L	15137.170
>	72	Ge-1			761468.618	ug/L	739226.379
	75	As	19.881707	1.773	40533.547	ug/L	-1945.453
	82	Se	0.885093	42.650	86.502	ug/L	-120.854
	97	Mo	1.173163	7.258	3474.792	ug/L	72.001
	107	Ag	0.132962	4.307	2062.836	ug/L	267.339
	111	Cd	7.632187	6.643	23663.195	ug/L	39.334
>	115	In-1			1498766.059	ug/L	1483966.870
	123	Sb	0.160432	6.255	1508.588	ug/L	268.758
	135	Ba	647.918077	5.468	1547837.148	ug/L	112.002
>	165	Ho-1			1588114.454	ug/L	1592460.464
	205	Tl	0.476898	16.528	17026.445	ug/L	3951.949
	208	Pb	176.563676	4.005	6607868.894	ug/L	4580.000
	238	U	0.899706	4.310	33918.307	ug/L	234.671
>	45	Sc-2			591258.242	ug/L	454114.374
	53	Cr	-5.770781	197.516	191577.926	ug/L	154333.029
	54	Fe	44772.130708	4.317	41534449.349	ug/L	62080.940
	61	Ni	56.878359	8.951	10374.216	ug/L	1661.113
	63	Cu	27.814611	5.600	204156.482	ug/L	345.008
	67	Zn	671.211687	3.977	221491.719	ug/L	9047.975
>	72	Ge			761468.618	ug/L	739226.379
	77	Se	-31.959915	16.868	2685.337	ug/L	6561.780
	98	Mo	1.176582	7.976	8757.014	ug/L	141.970
	109	Ag	0.029553	2.483	697.691	ug/L	288.339
>	115	In-2			1498766.059	ug/L	1483966.870
	114	Cd	7.869212	6.130	54491.369	ug/L	84.731
	121	Sb	0.165304	12.219	2021.831	ug/L	349.674
	137	Ba	671.767034	2.017	2734593.174	ug/L	156.669
>	165	Ho-2			1588114.454	ug/L	1592460.464
	203	Tl	0.480218	15.734	7190.237	ug/L	1582.773
	206	Pb	178.032620	4.021	1670324.347	ug/L	1161.392
	207	Pb	176.964767	2.862	1399015.229	ug/L	995.045
>	45	Sc			591258.242	ug/L	454114.374
	47	Ti	118.466838	7.899	114922.826	ug/L	297.006
	86	Sr	10.705294	7.733	51169.807	ug/L	716.656
	88	Sr	10.767083	5.747	447342.432	ug/L	5834.250
>	115	In			1498766.059	ug/L	1483966.870
	118	Sn	1.015226	8.926	9482.918	ug/L	855.034
	120	Sn	1.019570	4.230	12508.302	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	130.200
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	103.000
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	100.997
	Sb	123	
	Ba	135	
>	Ho-1	165	99.727
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	130.200
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	103.000
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	100.997
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	99.727
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	130.200
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	100.997
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Sc-1	45	Q
Sc-2	45	Q
Sc	45	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: G73N6
Sample Date/Time: Wednesday, April 27, 2005 22:34:51
Autosampler Position: 48
Dataset File: D:\Elandata\Dataset\042705M2\G73N6.044

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.520010	26.177	137.335	ug/L	7.667
	10	B	3.107531	8.097	154.002	ug/L	27.667
	23	Na	43.291556	6.964	220003.291	ug/L	18838.944
	24	Mg	3972.589449	7.789	13161750.899	ug/L	2106.176
	27	Al	19743.761529	6.002	100119444.942	ug/L	3413.777
	39	K	1198.917935	6.605	12726880.782	ug/L	807733.282
	44	Ca	25815.884407	9.542	8217984.860	ug/L	61872.368
>	45	Sc-1			541043.834	ug/L	454114.374
	51	V	53.335655	6.090	622528.604	ug/L	-26072.212
	52	Cr	29.808715	9.174	353517.380	ug/L	26547.338
	55	Mn	201.411597	9.209	3577935.781	ug/L	3062.361
	57	Fe	56313.019089	9.663	21008017.536	ug/L	9798.695
	59	Co	5.164935	7.329	71075.556	ug/L	232.338
	60	Ni	18.174828	7.374	53921.013	ug/L	301.006
	65	Cu	25.901018	9.675	84180.581	ug/L	168.336
	66	Zn	49.278864	9.763	111867.330	ug/L	15137.170
>	72	Ge-1			762768.790	ug/L	739226.379
	75	As	12.357377	7.654	24507.903	ug/L	-1945.453
	82	Se	0.584542	36.343	14.848	ug/L	-120.854
	97	Mo	1.946387	7.778	5650.845	ug/L	72.001
	107	Ag	0.141105	9.561	2147.184	ug/L	267.339
	111	Cd	0.103878	9.340	357.006	ug/L	39.334
>	115	In-1			1480999.131	ug/L	1483966.870
	123	Sb	0.342180	10.800	2875.197	ug/L	268.758
	135	Ba	72.618091	7.289	169445.807	ug/L	112.002
>	165	Ho-1			1550232.500	ug/L	1592460.464
	205	Tl	0.502686	13.532	17332.443	ug/L	3951.949
	208	Pb	33.753412	8.640	1244157.041	ug/L	4580.000
	238	U	1.654443	6.802	77989.617	ug/L	234.671
>	45	Sc-2			541043.834	ug/L	454114.374
	53	Cr	16.242864	28.659	207796.925	ug/L	154333.029
	54	Fe	56252.928602	7.735	47750400.127	ug/L	62090.940
	61	Ni	22.460661	13.635	4946.910	ug/L	1661.113
	63	Cu	25.793609	7.405	173405.891	ug/L	345.008
	67	Zn	52.396364	5.593	28380.474	ug/L	9047.975
>	72	Ge			762768.790	ug/L	739226.379
	77	Se	-20.327243	12.616	4938.183	ug/L	8561.780
	98	Mo	1.989167	7.817	14536.573	ug/L	141.970
	109	Ag	0.028960	13.608	681.356	ug/L	288.339
>	115	In-2			1480999.131	ug/L	1483966.870
	114	Cd	0.087084	2.806	679.645	ug/L	84.731
	121	Sb	0.344712	9.076	3789.876	ug/L	349.674
	137	Ba	73.569210	8.109	292815.884	ug/L	156.669
>	165	Ho-2			1550232.500	ug/L	1592460.464
	203	Tl	0.496696	13.219	7202.236	ug/L	1582.773
	206	Pb	34.982608	6.975	321373.944	ug/L	1161.392
	207	Pb	34.274572	9.311	265417.640	ug/L	995.045
>	45	Sc			541043.834	ug/L	454114.374
	47	Ti	127.006287	9.350	112810.285	ug/L	297.006
	86	Sr	34.257297	10.071	148083.726	ug/L	716.656
	88	Sr	33.689336	6.518	1266395.565	ug/L	5834.250
>	115	In			1480999.131	ug/L	1483966.870
	118	Sn	1.474006	8.848	13223.608	ug/L	855.034
	120	Sn	1.456922	7.880	17521.778	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	119.143
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	103.185
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.800
	Sb	123	
	Ba	135	
>	Ho-1	165	97.348
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	119.143
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	103.185
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	99.800
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	97.348
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	119.143
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	99.800
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G73N6S
Sample Date/Time: Wednesday, April 27, 2005 22:40:01
Autosampler Position: 49
Dataset File: D:\Elandata\Dataset\042705M2\G73N6S.045

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	4.897589	5.395	1032.714	ug/L	7.667
	10	B	132.887885	7.240	5262.025	ug/L	27.667
	23	Na	4212.218733	1.712	19449108.101	ug/L	18838.944
	24	Mg	9467.661849	6.287	31738521.323	ug/L	2106.176
	27	Al	28668.209950	4.305	135709120.212	ug/L	3413.777
	39	K	6588.448982	5.308	56407799.361	ug/L	807733.282
	44	Ca	27626.924214	8.847	8848654.294	ug/L	61872.368
>	45	Sc-1			547069.378	ug/L	454114.374
	51	V	94.909269	5.447	1144010.031	ug/L	-26072.212
	52	Cr	46.629236	4.160	540648.666	ug/L	26547.338
	55	Mn	254.828673	3.219	4574118.431	ug/L	3052.361
	57	Fe	44380.695962	5.170	16731246.961	ug/L	9798.695
	59	Co	51.230630	3.766	710133.496	ug/L	232.338
	60	Ni	61.164350	6.214	182483.333	ug/L	301.006
	65	Cu	46.560365	5.512	152679.835	ug/L	168.336
	66	Zn	93.050289	7.354	197267.975	ug/L	15137.170
>	72	Ge-1			746755.691	ug/L	739226.379
	75	As	229.510486	3.557	479661.478	ug/L	-1945.453
	82	Se	200.952990	9.097	48629.505	ug/L	-120.854
	97	Mo	106.489635	7.113	297378.046	ug/L	72.001
	107	Ag	6.020994	8.341	78401.111	ug/L	267.339
	111	Cd	5.757708	7.206	17193.538	ug/L	39.334
>	115	In-1			1442985.249	ug/L	1483966.870
	123	Sb	19.576192	6.897	145546.196	ug/L	268.758
	135	Ba	299.511688	6.740	685590.552	ug/L	112.002
>	165	Ho-1			1521701.991	ug/L	1592460.464
	205	Tl	196.217148	3.406	5140353.016	ug/L	3951.949
	208	Pb	80.891428	5.097	2919426.900	ug/L	4580.000
	238	U	204.997889	3.363	9454654.750	ug/L	234.671
>	45	Sc-2			547069.378	ug/L	454114.374
	53	Cr	30.240178	16.933	231130.020	ug/L	154333.029
	54	Fe	44763.114526	5.593	38421886.487	ug/L	52090.940
	61	Ni	66.566324	7.950	10757.502	ug/L	1661.113
	63	Cu	47.883729	3.962	322649.675	ug/L	345.008
	67	Zn	96.831462	2.005	43795.152	ug/L	9047.975
>	72	Ge			746755.691	ug/L	739226.379
	77	Se	152.571153	5.269	37289.387	ug/L	8561.780
	98	Mo	108.573727	8.160	765317.889	ug/L	141.970
	109	Ag	5.063674	6.153	67314.174	ug/L	266.339
>	115	In-2			1442985.249	ug/L	1483966.870
	114	Cd	6.098574	6.318	40668.094	ug/L	84.731
	121	Sb	19.662969	7.300	191482.660	ug/L	349.674
	137	Ba	299.528660	3.788	1168502.084	ug/L	156.669
>	165	Ho-2			1521701.991	ug/L	1592460.464
	203	Tl	197.226387	3.485	2206999.599	ug/L	1582.773
	206	Pb	83.277445	5.866	749203.044	ug/L	1161.392
	207	Pb	83.186846	4.458	630625.347	ug/L	995.045
>	45	Sc			547069.378	ug/L	454114.374
	47	Ti	235.650417	5.341	211066.161	ug/L	297.006
	86	Sr	116.348508	8.747	506009.834	ug/L	716.656
	88	Sr	119.297306	5.572	4514920.977	ug/L	5834.250
>	115	In			1442985.249	ug/L	1483966.870
	118	Sn	194.877946	7.068	1593741.796	ug/L	855.034
	120	Sn	196.277926	4.652	2112426.714	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	46	120.470
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	161.919
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	97.238
	Sb	123	
	Ba	135	
>	Ho-1	165	95.567
	Tl	205	
	Pb	206	
	U	238	
>	Sc-2	46	120.470
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	161.919
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	97.238
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	95.567
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	120.470
	Ti	47	
	Sr	88	
	Sr	89	
>	In	115	97.238
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G73N6D
Sample Date/Time: Wednesday, April 27, 2005 22:45:10
Autosampler Position: 50
Dataset File: D:\Elandata\Dataset\042705M2\G73N6D.046

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	4.674607	3.398	862.701	ug/L	7.667
	10	B	166.579112	4.343	5695.193	ug/L	27.667
	23	Na	4388.788696	4.181	17515617.133	ug/L	18838.944
	24	Mg	25162.285279	2.961	72932158.130	ug/L	2106.176
	27	Al	11637.973103	1.781	51143105.745	ug/L	3413.777
	39	K	5332.021758	2.288	46571468.848	ug/L	807733.282
	44	Ca	406531.603567	2.889	111703615.264	ug/L	61872.368
>	45	Sc-1			473238.015	ug/L	454114.374
	51	V	67.499753	1.486	695950.741	ug/L	-26072.212
	52	Cr	31.303706	4.059	322865.601	ug/L	26547.338
	55	Mn	327.466932	1.895	5081835.822	ug/L	3062.361
	57	Fe	22907.886297	2.809	7471949.906	ug/L	9798.696
	59	Co	49.296445	2.621	590965.467	ug/L	232.338
	60	Ni	61.928659	3.123	159721.602	ug/L	301.006
	65	Cu	38.870139	5.347	110204.143	ug/L	168.336
	66	Zn	77.723270	1.609	145096.692	ug/L	15137.170
>	72	Ge-1			694990.262	ug/L	739226.379
	75	As	210.411053	2.361	408020.979	ug/L	-1945.453
	82	Se	187.863498	1.475	40544.032	ug/L	-120.854
	97	Mo	101.374492	2.970	271506.076	ug/L	72.001
	107	Ag	6.536086	0.193	69172.431	ug/L	267.339
	111	Cd	6.279715	1.848	15125.822	ug/L	39.334
>	115	In-1			1383394.462	ug/L	1483986.870
	123	Sb	25.603867	1.102	182554.528	ug/L	268.758
	135	Ba	283.281799	2.339	623008.229	ug/L	112.002
>	165	Ho-1			1462817.878	ug/L	1592460.464
	205	Tl	176.297479	2.124	4461852.850	ug/L	3951.949
	208	Pb	59.852244	0.911	2069928.317	ug/L	4580.000
	238	U	184.934040	1.010	8197627.644	ug/L	234.671
>	45	Sc-2			473238.015	ug/L	454114.374
	53	Cr	2.816201	362.086	164472.208	ug/L	154333.029
	54	Fe	23651.188084	3.678	17579174.019	ug/L	62090.940
	61	Ni	116.785304	2.395	15218.591	ug/L	1661.113
	63	Cu	38.445979	1.708	225671.151	ug/L	345.008
	67	Zn	82.516934	3.685	33670.998	ug/L	9047.975
>	72	Ge			694990.262	ug/L	739226.379
	77	Se	177.823486	2.428	39111.957	ug/L	8561.780
	98	Mo	103.557391	0.203	700305.399	ug/L	141.970
	109	Ag	4.387207	0.389	55975.011	ug/L	288.339
>	115	In-2			1383394.462	ug/L	1483986.870
	114	Cd	5.282377	3.182	33806.857	ug/L	84.731
	121	Sb	26.009858	0.594	242858.017	ug/L	349.674
	137	Ba	286.052231	0.924	1072476.437	ug/L	156.669
>	165	Ho-2			1462817.878	ug/L	1592460.464
	203	Tl	187.528748	1.112	1801925.025	ug/L	1582.773
	206	Pb	60.964871	1.486	527229.181	ug/L	1161.392
	207	Pb	61.640082	1.272	449336.471	ug/L	995.045
>	45	Sc			473238.015	ug/L	454114.374
	47	Ti	209.948180	1.746	162718.860	ug/L	297.006
	86	Sr	402.712309	5.798	1511586.994	ug/L	716.656
	88	Sr	403.700460	1.627	13198257.090	ug/L	5634.250
>	115	In			1383394.462	ug/L	1483986.870
	118	Sn	187.832801	1.226	1473721.876	ug/L	855.034
	120	Sn	187.948260	1.655	1940114.529	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

METALS MISCELLANEOUS DATA

SEVERN TRENT **STL** Metals Prep Report for Batch # 5115332

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Prep Method: SW-846 6020, Water **SOP Number:** STL-IP-0013, Rev 6

Extraction Code: 05 **Extraction:** TOTAL **Matrix:** WATER **Prep Date:** 4/25/2005

Standard Log Ref#: MET-04/05-H20

Lot ID	Work Order #	Initial Wt/Vol	Final Volume	Lab Filtered	Due Date	Sample Location	Target List
F5D220359-001	G8170	50 mL	50 mL	☐	05/04/2005	METS,A94	AG 10 AS 10 BA 200 BE 2 CD 2 CO 50 CR 10 CU 25 MN 15 NI 20 PB 3 SB 2 SE 1 TL 1 V 50
F5D220359-001S	G8170S	50 mL	50 mL	☐		METS,A94	
F5D220359-001X	G8170X	50 mL	50 mL	☐		METS,A94	
F5D220359-002	G84EP	50 mL	50 mL	☐	05/04/2005	METS,A94	
F5D250000-332B	G849VB	50 mL	50 mL	☐			
F5D250000-332C	G849VC	50 mL	50 mL	☐			

Comments:

Chemical Lot Information

Chemical	Lot Number
Hydrochloric Acid	4104090
Nitric Acid	1104100

Custody Information

Relinquished By: MC

Review/Received By: [illegible]

Date of Transfer: 4/26/05

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.16, updated 2/7/2005

METALS SAMPLE AND QC SUMMARY RESULTS

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8170 **Client ID:** RE73-05-58920

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/2/05 **Prep Batch:** 5122274

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	154	500	154	U	1	ICPST	5/5/05	16:19
Barium	**493.41**	**2.0**	**500**	**157**	**B**	**1**	**ICPST**	**5/5/05**	**16:19**
Cadmium	226.50	5.4	25.0	5.4	U	1	ICPST	5/5/05	16:19
Chromium	267.76	11.9	50.0	11.9	U	1	ICPST	5/5/05	16:19
Lead	220.35	112	250	112	U	1	ICPST	5/5/05	16:19
Selenium	196.03	184	500	184	U	1	ICPST	5/5/05	16:19
Silver	328.07	13.8	50.0	13.8	U	1	ICPST	5/5/05	16:19
Zinc	**213.86**	**7.4**	**100**	**34.5**	**B**	**1**	**ICPST**	**5/5/05**	**16:19**

Comments: Lot #: F5D220359 Sample #: 1

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G84EP **Client ID:** RE73-05-58921

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/2/05 **Prep Batch:** 5122274

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	154	500	154	U	1	ICPST	5/5/05	16:41
Barium	**493.41**	**2.0**	**500**	**103**	**B**	**1**	**ICPST**	**5/5/05**	**16:41**
Cadmium	226.50	5.4	25.0	5.4	U	1	ICPST	5/5/05	16:41
Chromium	267.76	11.9	50.0	11.9	U	1	ICPST	5/5/05	16:41
Lead	220.35	112	250	112	U	1	ICPST	5/5/05	16:41
Selenium	196.03	184	500	184	U	1	ICPST	5/5/05	16:41
Silver	328.07	13.8	50.0	13.8	U	1	ICPST	5/5/05	16:41
Zinc	**213.86**	**7.4**	**100**	**41.9**	**B**	**1**	**ICPST**	**5/5/05**	**16:41**

Comments: Lot #: F5D220359 Sample #: 2

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8170 **Client ID:** RE73-05-58920

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/3/05 **Prep Batch:** 5123055

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.23	10.0	0.23	U	1	CVAA	5/3/05	19:28

Comments: Lot #: F5D220359 Sample #: 1

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G84EP **Client ID:** RE73-05-58921

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/3/05 **Prep Batch:** 5123055

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.23	10.0	0.23	U	1	CVAA	5/3/05	19:37

Comments: Lot #: F5D220359 Sample #: 2

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: CVAA

Units: ug/L

Chart Number: AA0503C.PRN

Acceptable Range: 80% - 120%

Standard Source: Leeman

Standard ID: SEE STANDARDS LOG

Element	WL/ Mass	True Conc	ICV 5/3/05 5:14 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	2.5	2.44	97.6								

Version 4.75.1

Form 2A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICPST **Units:** ug/L

Chart Number: 0505IT1.ARC **Acceptable Range:** 90% - 110%

Standard Source: Solutions Plus **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	ICV 5/5/05 2:35 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	4000.0	4020.05	**100.5**								
Barium	493.409	4000.0	4260.62	**106.5**								
Cadmium	226.502	4000.0	4023.06	**100.6**								
Chromium	267.76	4000.0	3940.77	**98.5**								
Lead	220.353	4000.0	3966.77	**99.2**								
Selenium	196.026	4000.0	4012.41	**100.3**								
Silver	328.068	1000.0	1004.54	**100.5**								
Zinc	213.856	4000.0	3986.72	**99.7**								

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: CVAA **Units:** ug/L

Chart Number: AA0503C.PRN **Acceptable Range:** 80% - 120%

Standard Source: Leeman **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	CCV 5/3/05 5:20 PM Found	% Rec	CCV 5/3/05 5:43 PM Found	% Rec	CCV 5/3/05 6:07 PM Found	% Rec	CCV 5/3/05 6:31 PM Found	% Rec	CCV 5/3/05 6:55 PM Found	% Rec
Mercury	253.7	5.0	4.99	99.8	4.87	97.4	5.12	102.4	4.85	97.0	4.86	97.2

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: CVAA

Units: ug/L

Chart Number: AA0503C.PRN

Acceptable Range: 80% - 120%

Standard Source: Leeman

Standard ID: SEE STANDARDS LOG

Element	WL/ Mass	True Conc	CCV 5/3/05 7:08 PM Found	% Rec	CCV 5/3/05 7:19 PM Found	% Rec	CCV 5/3/05 7:41 PM Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	5.0	4.90	98.0	4.87	97.4	4.83	96.6				

Version 4.75.1

Form 2A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPST **Units:** ug/L

Chart Number: 0505IT1.ARC **Acceptable Range:** 90% - 110%

Standard Source: Solutions Plus **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	CCV 5/5/05 3:03 PM Found	% Rec	CCV 5/5/05 4:01 PM Found	% Rec	CCV 5/5/05 4:54 PM Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	4000.0	4126.45	**103.2**	4137.18	**103.4**	4099.67	**102.5**				
Barium	493.409	4000.0	4354.84	**108.9**	4347.53	**108.7**	4311.14	**107.8**				
Cadmium	226.502	4000.0	4120.69	**103.0**	4127.99	**103.2**	4073.39	**101.8**				
Chromium	267.76	4000.0	4031.25	**100.8**	4029.39	**100.7**	3990.93	**99.8**				
Lead	220.353	4000.0	4078.79	**102.0**	4062.70	**101.6**	4010.04	**100.3**				
Selenium	196.026	4000.0	4128.96	**103.2**	4098.40	**102.5**	4058.36	**101.5**				
Silver	328.068	1000.0	1028.93	**102.9**	1029.73	**103.0**	1022.50	**102.3**				
Zinc	213.856	4000.0	4064.52	**101.6**	4063.71	**101.6**	4061.57	**101.5**				

STL-ST. LOUIS

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: CVAA **Units:** ug/L

Chart Number: AA0503C.PRN **Acceptable Range:** 50% - 150%

Standard Source: SPEX **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	CRA 5/3/05 5:18 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	0.2	0.21	107.0								

Version 4.75.1

Form 2B Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: ICPST **Units:** ug/L

Chart Number: 0505IT1.ARC **Acceptable Range:** 80% - 120%

Standard Source: Solutions Plus **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	CRI 5/5/05 2:44 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	10.0	10.83	**108.3**								
Barium	493.409	200.0	221.04	**110.5**								
Cadmium	226.502	5.0	4.67	**93.4**								
Chromium	267.76	10.0	9.67	**96.7**								
Lead	220.353	10.0	10.89	**108.9**								
Selenium	196.026	15.0	15.56	**103.7**								
Zinc	213.856	20.0	21.86	**109.3**								

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: CVAA **Units:** ug/L

Chart Number: AA0503C.PRN

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 5/3/05 5:16 PM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Mercury	253.7	2	0.0	U								

U Result is less than the MDL
B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: 0505IT1.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 5/5/05 2:39 PM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	200	61.5	U								
Barium	493.409	200	0.8	U								
Cadmium	226.502	10	**2.2**	**U**								
Chromium	267.76	20	**4.8**	**U**								
Lead	220.353	100	**44.8**	**U**								
Selenium	196.026	200	73.5	U								
Silver	328.068	20	5.5	U								
Zinc	213.856	40	**3.0**	**U**								

U Result is less than the MDL
B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: CVAA **Units:** ug/L

Chart Number: AA0503C.PRN

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 5/3/05 5:21 PM Found	Q	CCB 5/3/05 5:45 PM Found	Q	CCB 5/3/05 6:09 PM Found	Q	CCB 5/3/05 6:33 PM Found	Q	CCB 5/3/05 6:57 PM Found	Q
Mercury	253.7	2	-0.1	B	-0.1	B	0.0	U	0.0	U	0.0	U

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: CVAA **Units:** ug/L

Chart Number: AA0503C.PRN

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 5/3/05 7:09 PM Found	Q	CCB 5/3/05 7:22 PM Found	Q	CCB 5/3/05 7:43 PM Found	Q	Found	Q	Found	Q
Mercury	253.7	2	-0.1	B	0.0	U	0.0	U				

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: 0505IT1.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 5/5/05 3:07 PM Found	Q	CCB 5/5/05 4:06 PM Found	Q	CCB 5/5/05 4:58 PM Found	Q	Found	Q	Found	Q
Arsenic	189.042	200	61.5	U	61.5	U	61.5	U				
Barium	493.409	200	0.8	U	0.8	U	0.8	U				
Cadmium	226.502	10	**2.2**	**U**	**2.2**	**U**	**2.2**	**U**				
Chromium	267.76	20	**4.8**	**U**	**4.8**	**U**	**4.8**	**U**				
Lead	220.353	100	**44.8**	**U**	**44.8**	**U**	**44.8**	**U**				
Selenium	196.026	200	73.5	U	73.5	U	73.5	U				
Silver	328.068	20	5.5	U	5.5	U	5.5	U				
Zinc	213.856	40	**3.0**	**U**	**3.0**	**U**	**3.0**	**U**				

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: G9HX1B

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/2/05 **Prep Batch:** 5122274

Weight: 25 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.042	123	400	123	U	1	ICPST	5/5/05	16:10
Barium	**493.409**	**1.6**	**400**	**26.9**	**B**	**1**	**ICPST**	**5/5/05**	**16:10**
Cadmium	226.502	4.3	20.0	4.3	U	1	ICPST	5/5/05	16:10
Chromium	267.76	9.6	40.0	9.6	U	1	ICPST	5/5/05	16:10
Lead	220.353	89.5	200	89.5	U	1	ICPST	5/5/05	16:10
Selenium	196.026	147	400	147	U	1	ICPST	5/5/05	16:10
Silver	328.068	11.1	40.0	11.1	U	1	ICPST	5/5/05	16:10
Zinc	**213.856**	**5.9**	**80.0**	**12.0**	**B**	**1**	**ICPST**	**5/5/05**	**16:10**

Comments: Lot #: F5D220359

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: G9HX1B

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/3/05 **Prep Batch:** 5123055

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.23	10.0	0.23	U	1	CVAA	5/3/05	19:24

Comments: Lot #: F5D220359

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPST **Units:** ug/L

Chart Number: 0505IT1.ARC **Acceptable Range:** 80% - 120%

Standard Source: Solutions Plus **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 5/5/05 2:52 PM Found	Found	Found	Found	Found
Arsenic	189.042	200		2				
Barium	493.409	200		2				
Cadmium	226.502	10		-7				
Chromium	267.76	20		0				
Lead	220.353	100		8				
Selenium	196.026	200		-3				
Silver	328.068	20		1				
Zinc	213.856	40		-4				

STL-ST. LOUIS

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPST

Units: ug/L

Chart Number: 0505IT1.ARC

Acceptable Range: 80% - 120%

Standard Source: Solutions Plus

Standard ID: SEE STANDARDS LOG

Element	WL/ Mass	True Conc	ICSAB 5/5/05 2:57 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	1000	976.1	**97.6**								
Barium	493.409	500	538.2	**107.6**								
Cadmium	226.502	1000	913.0	**91.3**								
Chromium	267.76	500	469.6	**93.9**								
Lead	220.353	1000	928.1	**92.8**								
Selenium	196.026	1000	973.9	**97.4**								
Silver	328.068	1000	1005.9	**100.6**								
Zinc	213.856	1000	958.3	**95.8**								

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed

Form 4 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: G8170S

Original Sample ID: G8170 **Client ID:** RE73-05-58920 S

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/2/05 **Prep Batch:** 5122274

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Arsenic	189.0	154	U	5100		5000	102.0	1	1	ICPST	5/5/05	16:19	5/5/05	16:27
Barium	493.4	157	B	5620		5000	109.3	1	1	ICPST	5/5/05	16:19	5/5/05	16:27
Cadmium	226.5	5.4	U	126		125	100.9	1	1	ICPST	5/5/05	16:19	5/5/05	16:27
Chromium	267.8	11.9	U	503		500	100.6	1	1	ICPST	5/5/05	16:19	5/5/05	16:27
Lead	220.4	112	U	1240		1250	99.4	1	1	ICPST	5/5/05	16:19	5/5/05	16:27
Selenium	196.0	184	U	5070		5000	101.4	1	1	ICPST	5/5/05	16:19	5/5/05	16:27
Silver	328.1	13.8	U	123		125	98.0	1	1	ICPST	5/5/05	16:19	5/5/05	16:27
Zinc	213.9	34.5	B	1280		1250	99.5	1	1	ICPST	5/5/05	16:19	5/5/05	16:27

Comments: Lot #: F5D220359 Sample #: 1

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: G8170S

Original Sample ID: G8170 **Client ID:** RE73-05-58920 S

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/3/05 **Prep Batch:** 5123055

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Mercury	253.7	0.23	U	23.9		25	95.4	1	1	CVAA	5/3/05	19:28	5/3/05	19:32

Comments: Lot #: F5D220359 Sample #: 1

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Duplicate Sample Results

Lab Sample ID: G8170X **Client ID:** RE73-05-58920 X

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/2/05 **Prep Batch:** 5122274

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	IDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.042	154	500	154	U	1	ICPST	5/5/05	16:23
Barium	**493.409**	**2.0**	**500**	**163**	**B**	**1**	**ICPST**	**5/5/05**	**16:23**
Cadmium	226.502	5.4	25.0	5.4	U	1	ICPST	5/5/05	16:23
Chromium	267.76	11.9	50.0	11.9	U	1	ICPST	5/5/05	16:23
Lead	220.353	112	250	112	U	1	ICPST	5/5/05	16:23
Selenium	196.026	184	500	184	U	1	ICPST	5/5/05	16:23
Silver	328.068	13.8	50.0	13.8	U	1	ICPST	5/5/05	16:23
Zinc	**213.856**	**7.4**	**100**	**35.2**	**B**	**1**	**ICPST**	**5/5/05**	**16:23**

Comments: Lot #: F5D220359 Sample #: 1

Version 4.75.1

U Result is less than the MDL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Duplicate Sample Results

Lab Sample ID: G8170X **Client ID:** RE73-05-58920 X

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/3/05 **Prep Batch:** 5123055

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	IDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.23	10.0	0.23	U	1	CVAA	5/3/05	19:30

Comments: Lot #: F5D220359 Sample #: 1

Version 4.75.1

U Result is less than the MDL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Duplicate RPD Report

Duplicate Sample ID: G8170X

Original Sample ID: G8170 **Client ID:** RE73-05-58920 X

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/2/05 **Prep Batch:** 5122274

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	Dupe Conc	Q	% RPD	OS DF	Dupe DF	Instr	OS Anal Date	OS Anal Time	Dupe Anal Date	Dupe Anal Time
Arsenic	189.042	154	U	154	U		1	1	ICPST	5/5/05	16:19	5/5/05	16:23
Barium	493.409	157	B	163	B	6.3	1	1	ICPST	5/5/05	16:19	5/5/05	16:23
Cadmium	226.502	5.4	U	5.4	U		1	1	ICPST	5/5/05	16:19	5/5/05	16:23
Chromium	267.76	11.9	U	11.9	U		1	1	ICPST	5/5/05	16:19	5/5/05	16:23
Lead	220.353	112	U	112	U		1	1	ICPST	5/5/05	16:19	5/5/05	16:23
Selenium	196.026	184	U	184	U		1	1	ICPST	5/5/05	16:19	5/5/05	16:23
Silver	328.068	13.8	U	13.8	U		1	1	ICPST	5/5/05	16:19	5/5/05	16:23
Zinc	213.856	34.5	B	35.2	B	0.6	1	1	ICPST	5/5/05	16:19	5/5/05	16:23

U Result is less than the MDL
B Result is between MDL and RL
* Duplicate analysis RPD was not within limits

Form 6 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Duplicate RPD Report

Duplicate Sample ID: G8170X

Original Sample ID: G8170 **Client ID:** RE73-05-58920 X

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/3/05 **Prep Batch:** 5123055

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	Dupe Conc	Q	% RPD	OS DF	Dupe DF	Instr	OS Anal Date	OS Anal Time	Dupe Anal Date	Dupe Anal Time
Mercury	253.7	0.23	U	0.23	U		1	1	CVAA	5/3/05	19:28	5/3/05	19:30

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
* Duplicate analysis RPD was not within limits

Form 6 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: G9MDJC

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/2/05 **Prep Batch:** 5122274

Weight: 25 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Arsenic	189.042	2000	2040	102.2		80-120	1	ICPST	5/5/05	16:14
Barium	493.409	2000	2210	110.6		80-120	1	ICPST	5/5/05	16:14
Cadmium	226.502	2000	2060	103.1		80-120	1	ICPST	5/5/05	16:14
Chromium	267.76	2000	2020	100.8		80-120	1	ICPST	5/5/05	16:14
Lead	220.353	2000	2000	100.0		80-120	1	ICPST	5/5/05	16:14
Selenium	196.026	2000	2050	102.6		80-120	1	ICPST	5/5/05	16:14
Silver	328.068	500	498	99.6		80-120	1	ICPST	5/5/05	16:14
Zinc	213.856	2000	2020	101.0		80-120	1	ICPST	5/5/05	16:14

Comments: Lot #: F5D220359

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 7 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: G9NWJC

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/3/05 **Prep Batch:** 5123055

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Mercury	253.7	25.0	26.6	106.2		82-125	1	CVAA	5/3/05	19:26

Comments: Lot #: F5D220359

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 7 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: G8170V

Original Sample ID: G8170 **Client ID:** RE73-05-58920

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/2/05 **Prep Batch:** 5122274

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Arsenic	189.042	154	U	769	U		1	5	ICPST	5/5/05	16:19	5/5/05	16:36
Barium	493.409	157	B	152	B	3.0	1	5	ICPST	5/5/05	16:19	5/5/05	16:36
Cadmium	226.502	5.4	U	27.0	U		1	5	ICPST	5/5/05	16:19	5/5/05	16:36
Chromium	267.76	11.9	U	59.7	U		1	5	ICPST	5/5/05	16:19	5/5/05	16:36
Lead	220.353	112	U	559	U		1	5	ICPST	5/5/05	16:19	5/5/05	16:36
Selenium	196.026	184	U	919	U		1	5	ICPST	5/5/05	16:19	5/5/05	16:36
Silver	328.068	13.8	U	69.1	U		1	5	ICPST	5/5/05	16:19	5/5/05	16:36
Zinc	213.856	34.5	B	62.8	B		1	5	ICPST	5/5/05	16:19	5/5/05	16:36

Comments:

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
E Serial dilution percent difference not within limits

Form 9 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: G8170V

Original Sample ID: G8170 **Client ID:** RE73-05-58920

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/3/05 **Prep Batch:** 5123055

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Mercury	253.7	0.23	U	1.2	U		1	5	CVAA	5/3/05	19:28	5/3/05	19:34

Comments:

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
E Serial dilution percent difference not within limits

Form 9 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Detection Limits

Instrument: CVAA **Units:** ug/L

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Mercury	253.70	2	0.046	8/16/04

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICPST **Units:** ug/L

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Arsenic	189.04	200	61.5	12/29/04
Barium	493.41	200	0.80	12/29/04
Cadmium	226.50	10	2.2	12/29/04
Chromium	267.76	20	4.8	12/29/04
Lead	220.35	100	44.8	12/29/04
Selenium	196.03	200	73.5	12/29/04
Silver	328.07	20	5.5	12/29/04
Zinc	213.86	40	3.0	12/29/04

STL-ST. LOUIS

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICP **Date of IEC's:** 6/2/04

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	As(-0.002148), Cd(-0.000059), Cr(0.00001), Fe(0.00006), Mn(0.000011), Pb(0.001404), Se(-0.001822), Si(0.000412), Tl(0.00016), Zn(-0.000003)
Arsenic	193.696	Cd(0.00774)
Calcium	317.933	Ag(0.000008), Ba(-0.000006), Cu(0.00005), Mn(0.000014), Se(-0.00002), Si(0.000412), V(0.0004)
Iron	259.94	Ag(-0.00049), As(-0.000542), B(0.001012), Cd(0.000156), Co(0.00008), Cr(-0.000013), Cu(-0.000202), Mn(0.000161), Mo(0.000049), Sb(-0.000528), Se(0.004534), Si(-0.000876), Sn(-0.000083), Tl(-0.000251), V(0.00027), Zn(0.000012)
Magnesium	383.273	As(-0.000312), B(0.00019), Ba(0.000003), Co(-0.000018), Cr(-0.000014), Fe(0.00019), Mn(0.000028), Sb(0.000105), Se(-0.000102), Si(0.00004), Tl(-0.00028), V(0.000117)
Nickel	231.604	Cd(-0.000914), Co(0.000546), Zn(0.00503)
Sodium	588.995	K(-0.000963)
Thorium	283.73	Ag(-0.00253), Al(0.181039), As(-0.001959), B(0.00014), Ba(0.00031), Be(0.000015), Ca(0.0033), Co(-0.000854), Cr(-0.001124), Cu(0.002515), Fe(0.002718), K(-0.00082), Li(-0.00021), Mg(0.007), Mn(0.000103), Na(0.00042), Ni(-0.000169), Pb(-0.00176), Sb(-0.000639), Se(-0.002503), Si(0.00029), Sn(0.001125), Tl(-0.000627), V(0.00243)
Uranium	409.014	Ag(0.00107), Al(0.020406), As(0.00282), B(0.00036), Ba(0.00009), Be(0.000062), Ca(0.0052), Cd(-0.000037), Co(0.000098), Cr(-0.002773), Cu(0.001594), Fe(0.0018), K(-0.004418), Li(0.000075), Mg(0.0108), Mn(0.00031), Na(0.00041), Ni(0.000186), Pb(0.001642), Sb(0.000309), Se(0.001177), Si(-0.000876), Sn(0.00033), Sr(0.00007), Tl(0.00048), V(0.00161)

STL-ST. LOUIS

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICPST **Date of IEC's:** 6/2/04

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	Pb(-0.000204)
Calcium	317.933	Sr(0.00002)
Iron	217.441	Cd(0.000075), Mn(0.000002), Pb(0.000031), Sb(0.000048), Se(-0.000184), Tl(-0.000813), Zn(0.000274)
Magnesium	279.078	Mn(0.000025), Zn(-0.000003)
Manganese	257.61	Cr(0.000228), Pb(0.000148), Se(0.000736), Tl(-0.000492)
Nickel	231.604	Co(0.000232), Pb(0.000099), Zn(0.00567)
Thorium	401.913	Ag(0.000475), Al(0.0062265), Cd(0.000027), Co(-0.00009), Cu(0.002327), Fe(-0.1011), Pb(0.000033), Sb(0.000007), Se(-0.000167), Sn(0.00021), Tl(-0.000314), V(0.00064)
Uranium	385.958	Ag(0.0012), Al(0.005), As(-0.000021), Co(0.000148), Cr(0.000488), Cu(0.00052), Fe(-0.048618), Mn(0.000226), Mo(-0.00046), Pb(0.001395), Sb(-0.00045), Se(0.000104), Sn(0.000185), Tl(-0.00043), V(-0.00018)

STL-ST. LOUIS

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: CVAA **Units:** ug/L

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Mercury	253.70	10	1/6/04

STL-ST. LOUIS

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICPST **Units:** ug/L

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Arsenic	189.04	20000	10/26/04
Barium	493.41	20000	10/26/04
Cadmium	226.50	20000	10/26/04
Chromium	267.76	50000	10/26/04
Lead	220.35	50000	10/26/04
Selenium	196.03	50000	10/26/04
Silver	328.07	10000	10/26/04
Zinc	213.86	5000	2/3/04

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Log

Preparation Batch: 5122274 **Instrument:** ICP **Matrix:** TCLP

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
G9HX1B	5/2/05	25	50	NA
G9MDJC	5/2/05	25	50	NA
G8170	5/2/05	20	50	NA
G8170S	5/2/05	20	50	NA
G8170X	5/2/05	20	50	NA
G84EP	5/2/05	20	50	NA

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Log

Preparation Batch: 5123055 **Instrument:** CVAA **Matrix:** TCLP

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
G9HX1B	5/3/05	6	30	NA
G9NWJC	5/3/05	6	30	NA
G8170	5/3/05	6	30	NA
G8170S	5/3/05	6	30	NA
G8170X	5/3/05	6	30	NA
G84EP	5/3/05	6	30	NA

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAA **Chart Number:** AA0503C.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
Std01Rep1		5/3/05	17:02
Std02Rep1		5/3/05	17:04
Std03Rep1		5/3/05	17:06
Std04Rep1		5/3/05	17:08
Std05Rep1		5/3/05	17:10
Std06Rep1		5/3/05	17:12
ICV		5/3/05	17:14
ICB		5/3/05	17:16
CRA		5/3/05	17:18
CCV		5/3/05	17:20
CCB		5/3/05	17:21
ZZZZZZ		5/3/05	17:23
ZZZZZZ		5/3/05	17:25
ZZZZZZ		5/3/05	17:27
ZZZZZZ		5/3/05	17:29
ZZZZZZ		5/3/05	17:31
ZZZZZZ		5/3/05	17:33
ZZZZZZ		5/3/05	17:36
ZZZZZZ		5/3/05	17:37
ZZZZZZ		5/3/05	17:39
ZZZZZZ		5/3/05	17:42
CCV		5/3/05	17:43
CCB		5/3/05	17:45
ZZZZZZ		5/3/05	17:47
ZZZZZZ		5/3/05	17:49
ZZZZZZ		5/3/05	17:51
ZZZZZZ		5/3/05	17:53
ZZZZZZ		5/3/05	17:55
ZZZZZZ		5/3/05	17:57
ZZZZZZ		5/3/05	18:00
ZZZZZZ		5/3/05	18:02
ZZZZZZ		5/3/05	18:04
ZZZZZZ		5/3/05	18:05
CCV		5/3/05	18:07
CCB		5/3/05	18:09
ZZZZZZ		5/3/05	18:11
ZZZZZZ		5/3/05	18:13
ZZZZZZ		5/3/05	18:15
ZZZZZZ		5/3/05	18:17

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAA **Chart Number:** AA0503C.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		5/3/05	18:19
ZZZZZZ		5/3/05	18:21
ZZZZZZ		5/3/05	18:23
ZZZZZZ		5/3/05	18:25
ZZZZZZ		5/3/05	18:27
ZZZZZZ		5/3/05	18:29
CCV		5/3/05	18:31
CCB		5/3/05	18:33
ZZZZZZ		5/3/05	18:35
ZZZZZZ		5/3/05	18:36
ZZZZZZ		5/3/05	18:38
ZZZZZZ		5/3/05	18:40
ZZZZZZ		5/3/05	18:42
ZZZZZZ		5/3/05	18:45
ZZZZZZ		5/3/05	18:47
ZZZZZZ		5/3/05	18:49
ZZZZZZ		5/3/05	18:51
ZZZZZZ		5/3/05	18:53
CCV		5/3/05	18:55
CCB		5/3/05	18:57
ZZZZZZ		5/3/05	19:00
ZZZZZZ		5/3/05	19:02
ZZZZZZ		5/3/05	19:04
ZZZZZZ		5/3/05	19:06
CCV		5/3/05	19:08
CCB		5/3/05	19:09
ZZZZZZ		5/3/05	19:12
ZZZZZZ		5/3/05	19:14
ZZZZZZ		5/3/05	19:15
ZZZZZZ		5/3/05	19:17
CCV		5/3/05	19:19
CCB		5/3/05	19:22
G9HX1B		5/3/05	19:24
G9NWJC		5/3/05	19:26
G8170	RE73-05-58920	5/3/05	19:28
G8170X	RE73-05-58920 X	5/3/05	19:30
G8170S	RE73-05-58920 S	5/3/05	19:32
G8170V	RE73-05-58920	5/3/05	19:34
G84EP	RE73-05-58921	5/3/05	19:37

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAA **Chart Number:** AA0503C.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		5/3/05	19:39
CCV		5/3/05	19:41
CCB		5/3/05	19:43

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST **Chart Number:** 0505IT1.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
CALBLK		5/5/05	14:22
CAL1		5/5/05	14:27
CAL2		5/5/05	14:31
ICV		5/5/05	14:35
ICB		5/5/05	14:39
CRI		5/5/05	14:44
CRI		5/5/05	14:48
ICSA		5/5/05	14:52
ICSAB		5/5/05	14:57
CCV		5/5/05	15:03
CCB		5/5/05	15:07
ZZZZZZ		5/5/05	15:18
ZZZZZZ		5/5/05	15:22
ZZZZZZ		5/5/05	15:26
ZZZZZZ		5/5/05	15:31
ZZZZZZ		5/5/05	15:35
ZZZZZZ		5/5/05	15:39
ZZZZZZ		5/5/05	15:44
ZZZZZZ		5/5/05	15:48
ZZZZZZ		5/5/05	15:52
ZZZZZZ		5/5/05	15:57
CCV		5/5/05	16:01
CCB		5/5/05	16:06
G9HX1B		5/5/05	16:10
G9MDJC		5/5/05	16:14
G8170	RE73-05-58920	5/5/05	16:19
G8170X	RE73-05-58920 X	5/5/05	16:23
G8170S	RE73-05-58920 S	5/5/05	16:27
ZZZZZZ		5/5/05	16:32
G8170V	RE73-05-58920	5/5/05	16:36
G84EP	RE73-05-58921	5/5/05	16:41
ZZZZZZ		5/5/05	16:45
ZZZZZZ		5/5/05	16:49
CCV		5/5/05	16:54
CCB		5/5/05	16:58
ZZZZZZ		5/5/05	17:02
ZZZZZZ		5/5/05	17:07
ZZZZZZ		5/5/05	17:11
ZZZZZZ		5/5/05	17:16

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST **Chart Number:** 0505IT1.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		5/5/05	17:20
ZZZZZZ		5/5/05	17:24
ZZZZZZ		5/5/05	17:29
ZZZZZZ		5/5/05	17:33
ZZZZZZ		5/5/05	17:37
ZZZZZZ		5/5/05	17:42
ZZZZZZ		5/5/05	17:46
ZZZZZZ		5/5/05	17:51
ZZZZZZ		5/5/05	17:55
ZZZZZZ		5/5/05	17:59
ZZZZZZ		5/5/05	18:04
ZZZZZZ		5/5/05	18:08
ZZZZZZ		5/5/05	18:12
ZZZZZZ		5/5/05	18:17
ZZZZZZ		5/5/05	18:21
ZZZZZZ		5/5/05	18:25
ZZZZZZ		5/5/05	18:30
ZZZZZZ		5/5/05	18:34
ZZZZZZ		5/5/05	18:39
ZZZZZZ		5/5/05	18:43
ZZZZZZ		5/5/05	18:47
ZZZZZZ		5/5/05	18:52
ZZZZZZ		5/5/05	18:56
ZZZZZZ		5/5/05	19:00
ZZZZZZ		5/5/05	19:05
ZZZZZZ		5/5/05	19:09
ZZZZZZ		5/5/05	19:14
ZZZZZZ		5/5/05	19:18
ZZZZZZ		5/5/05	19:22
ZZZZZZ		5/5/05	19:27
ZZZZZZ		5/5/05	19:31
ZZZZZZ		5/5/05	19:35
ZZZZZZ		5/5/05	19:40
ZZZZZZ		5/5/05	19:44
ZZZZZZ		5/5/05	19:49
ZZZZZZ		5/5/05	19:53
ZZZZZZ		5/5/05	19:57
ZZZZZZ		5/5/05	20:02
ZZZZZZ		5/5/05	20:06

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST **Chart Number:** 0505IT1.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		5/5/05	20:10
ZZZZZZ		5/5/05	20:15
ZZZZZZ		5/5/05	20:19
ZZZZZZ		5/5/05	20:24
ZZZZZZ		5/5/05	20:28
ZZZZZZ		5/5/05	20:32
ZZZZZZ		5/5/05	20:37
ZZZZZZ		5/5/05	20:41
ZZZZZZ		5/5/05	20:46
ZZZZZZ		5/5/05	20:50
ZZZZZZ		5/5/05	20:54
ZZZZZZ		5/5/05	20:59
ZZZZZZ		5/5/05	21:03
ZZZZZZ		5/5/05	21:07
ZZZZZZ		5/5/05	21:12
ZZZZZZ		5/5/05	21:16
ZZZZZZ		5/5/05	21:21
ZZZZZZ		5/6/05	7:25
ZZZZZZ		5/6/05	7:30
ZZZZZZ		5/6/05	7:34
ZZZZZZ		5/6/05	7:38
ZZZZZZ		5/6/05	7:43
ZZZZZZ		5/6/05	7:47

METALS RAW DATA

JJ 5/5/05

STD 042005 6010C

Analysis Report Summary 05/06/05 07:54:48 AM CDT

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	CALBLK	0505IT1	6010C	05/05/05	14:22		X	IR
2	CAL1	0505IT1	6010C	05/05/05	14:27		X	IR
3	CAL2	0505IT1	6010C	05/05/05	14:31		X	IR
4	ICV	0505IT1	6010C	05/05/05	14:35	STL	Q	CONC
5	ICB	0505IT1	6010C	05/05/05	14:39	STL	Q	CONC
6	LLC	0505IT1	6010C	05/05/05	14:44	STL	Q	CONC
7	LLC AG	0505IT1	6010C	05/05/05	14:48	STL	Q	CONC
8	ICSA	0505IT1	6010C	05/05/05	14:52	STL	Q	CONC
9	ICSAB	0505IT1	6010C	05/05/05	14:57	STL	Q	CONC
10	CCV	0505IT1	6010C	05/05/05	15:03	STL	Q	CONC
11	CCB	0505IT1	6010C	05/05/05	15:07	STL	Q	CONC
12	G71P3 20	0505IT1	6010C	05/05/05	15:18	STL	S	CONC
13	G71P5 20	0505IT1	6010C	05/05/05	15:22	STL	S	CONC
14	G71QJ 20	0505IT1	6010C	05/05/05	15:26	STL	S	CONC
15	G71QK 20	0505IT1	6010C	05/05/05	15:31	STL	S	CONC
16	G71QL 20	0505IT1	6010C	05/05/05	15:35	STL	S	CONC
17	G71QN 20	0505IT1	6010C	05/05/05	15:39	STL	S	CONC
18	G71QQ 20	0505IT1	6010C	05/05/05	15:44	STL	S	CONC
19	G71Q0 20	0505IT1	6010C	05/05/05	15:48	STL	S	CONC
20	G71Q1 20	0505IT1	6010C	05/05/05	15:52	STL	S	CONC
21	G71Q5 20	0505IT1	6010C	05/05/05	15:57	STL	S	CONC
22	CCV	0505IT1	6010C	05/05/05	16:01	STL	Q	CONC
23	CCB	0505IT1	6010C	05/05/05	16:06	STL	Q	CONC
24	G9HX1B	0505IT1	6010C	05/05/05	16:10	STL	S	CONC
25	G9MDJC	0505IT1	6010C	05/05/05	16:14	STL	S	CONC
26	G8170	0505IT1	6010C	05/05/05	16:19	STL	S	CONC
27	G8170X	0505IT1	6010C	05/05/05	16:23	STL	S	CONC
28	G8170S	0505IT1	6010C	05/05/05	16:27	STL	S	CONC
29	G8170D	0505IT1	6010C	05/05/05	16:32	STL	S	CONC
30	G8170V 5X	0505IT1	6010C	05/05/05	16:36	STL	S	CONC
31	G84EP	0505IT1	6010C	05/05/05	16:41	STL	S	CONC
32	G9GFM	0505IT1	6010C	05/05/05	16:45	STL	S	CONC
33	G9GFN	0505IT1	6010C	05/05/05	16:49	STL	S	CONC
34	CCV	0505IT1	6010C	05/05/05	16:54	STL	Q	CONC
35	CCB	0505IT1	6010C	05/05/05	16:58	STL	Q	CONC
36	G9GFP	0505IT1	6010C	05/05/05	17:02	STL	S	CONC
37	G9L66B	0505IT1	6010C	05/05/05	17:07	STL	S	CONC
38	G9L66C	0505IT1	6010C	05/05/05	17:11	STL	S	CONC
39	G9L66L	0505IT1	6010C	05/05/05	17:16	STL	S	CONC
40	G9H43	0505IT1	6010C	05/05/05	17:20	STL	S	CONC
41	G9H43V 5X	0505IT1	6010C	05/05/05	17:24	STL	S	CONC
42	G9L63B	0505IT1	6010C	05/05/05	17:29	STL	S	CONC
43	G9L63C	0505IT1	6010C	05/05/05	17:33	STL	S	CONC
44	G9L63L	0505IT1	6010C	05/05/05	17:37	STL	S	CONC
45	G9G4K	0505IT1	6010C	05/05/05	17:42	STL	S	CONC
46	CCV	0505IT1	6010C	05/05/05	17:46	STL	Q	CONC
47	CCB	0505IT1	6010C	05/05/05	17:51	STL	Q	CONC
48	G9G4KV 5X	0505IT1	6010C	05/05/05	17:55	STL	S	CONC
49	G9G4N	0505IT1	6010C	05/05/05	17:59	STL	S	CONC
50	G9G4P	0505IT1	6010C	05/05/05	18:04	STL	S	CONC
51	G9G4W	0505IT1	6010C	05/05/05	18:08	STL	S	CONC
52	G9G42	0505IT1	6010C	05/05/05	18:12	STL	S	CONC
53	G9G47	0505IT1	6010C	05/05/05	18:17	STL	S	CONC

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#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	G9G5A	0505IT1	6010C	05/05/05	18:21	STL	S	CONC
55	G9G5J	0505IT1	6010C	05/05/05	18:25	STL	S	CONC
56	G9G5N	0505IT1	6010C	05/05/05	18:30	STL	S	CONC
57	G9G5Q	0505IT1	6010C	05/05/05	18:34	STL	S	CONC
58	CCV	0505IT1	6010C	05/05/05	18:39	STL	Q	CONC
59	CCB	0505IT1	6010C	05/05/05	18:43	STL	Q	CONC
60	G9G5R	0505IT1	6010C	05/05/05	18:47	STL	S	CONC
61	G9G5W	0505IT1	6010C	05/05/05	18:52	STL	S	CONC
62	G9G50	0505IT1	6010C	05/05/05	18:56	STL	S	CONC
63	G9G56	0505IT1	6010C	05/05/05	19:00	STL	S	CONC
64	G9G59	0505IT1	6010C	05/05/05	19:05	STL	S	CONC
65	G9G6D	0505IT1	6010C	05/05/05	19:09	STL	S	CONC
66	G9G6E	0505IT1	6010C	05/05/05	19:14	STL	S	CONC
67	G9G6F	0505IT1	6010C	05/05/05	19:18	STL	S	CONC
68	G9H40	0505IT1	6010C	05/05/05	19:22	STL	S	CONC
69	G9H42	0505IT1	6010C	05/05/05	19:27	STL	S	CONC
70	CCV	0505IT1	6010C	05/05/05	19:31	STL	Q	CONC
71	CCB	0505IT1	6010C	05/05/05	19:35	STL	Q	CONC
72	G9ECFB	0505IT1	6010C	05/05/05	19:40	STL	S	CONC
73	G9G7VC	0505IT1	6010C	05/05/05	19:44	STL	S	CONC
74	G8WP7	0505IT1	6010C	05/05/05	19:49	STL	S	CONC
75	G8WP7S	0505IT1	6010C	05/05/05	19:53	STL	S	CONC
76	G8WP7D	0505IT1	6010C	05/05/05	19:57	STL	S	CONC
77	G8WP7V 5X	0505IT1	6010C	05/05/05	20:02	STL	S	CONC
78	G8WQL	0505IT1	6010C	05/05/05	20:06	STL	S	CONC
79	G8WQN	0505IT1	6010C	05/05/05	20:10	STL	S	CONC
80	G8WQR	0505IT1	6010C	05/05/05	20:15	STL	S	CONC
81	G8WQT	0505IT1	6010C	05/05/05	20:19	STL	S	CONC
82	CCV1	0505IT1	6010C	05/05/05	20:24	STL	Q	CONC
83	CCB1	0505IT1	6010C	05/05/05	20:28	STL	Q	CONC
84	G8WR6	0505IT1	6010C	05/05/05	20:32	STL	S	CONC
85	G8WTA	0505IT1	6010C	05/05/05	20:37	STL	S	CONC
86	G8WTE	0505IT1	6010C	05/05/05	20:41	STL	S	CONC
87	G8WTG	0505IT1	6010C	05/05/05	20:46	STL	S	CONC
88	G8WTR	0505IT1	6010C	05/05/05	20:50	STL	S	CONC
89	G8WTV	0505IT1	6010C	05/05/05	20:54	STL	S	CONC
90	G8WTW	0505IT1	6010C	05/05/05	20:59	STL	S	CONC
91	G8WTX	0505IT1	6010C	05/05/05	21:03	STL	S	CONC
92	G8WT0	0505IT1	6010C	05/05/05	21:07	STL	S	CONC
93	G8WT1	0505IT1	6010C	05/05/05	21:12	STL	S	CONC
94	CCV1	0505IT1	6010C	05/05/05	21:16	STL	Q	CONC
95	CCB1	0505IT1	6010C	05/05/05	21:21	STL	Q	CONC
96	CCV	0505IT1	6010C	05/06/05	07:25	STL	Q	CONC
97	CCB	0505IT1	6010C	05/06/05	07:30	STL	Q	CONC
98	G8WTR 5	0505IT1	6010C	05/06/05	07:34	STL	S	CONC
99	G8WT1 5	0505IT1	6010C	05/06/05	07:38	STL	S	CONC
100	CCV	0505IT1	6010C	05/06/05	07:43	STL	Q	CONC
101	CCB	0505IT1	6010C	05/06/05	07:47	STL	Q	CONC

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#	Sample Name	Ag3280	As1890	Ba4934	Be3130	Cd2265	Cr2677
1	CALBLK	-.06799	.41397	.02399	-1.1289	.05799	.07349
2	CAL1	281.783	1662.06	419.632	1608.06	1134.27	859.304
3	CAL2						
4	ICV	1.0045	4.0201	4.2606	4.2316	4.0231	3.9408
5	ICB	.00104	.00205	.00015	.00012	.00019	.00009
6	LLC	Q.01220	.01083	.22104	.00526	.00467	.00967
7	LLC AG	.00994	.05030	.05289	.05459	.05174	.04911
8	ICSA	.00056	.00205	.00185	-.00061	-.00734	.00011
9	ICSAB	1.0059	.97607	.53818	.51989	.91299	.46956
10	CCV	1.0289	4.1265	4.3548	4.3187	4.1207	4.0313
11	CCB	.00089	.00111	.00053	.00055	.00043	.00014
12	G71P3 20	.05720	.00266	.05882	-.00022	.00180	.04218
13	G71P5 20	.11326	.00193	.07534	-.00024	.00270	.09027
14	G71QJ 20	.13500	.00270	.05887	-.00040	.00453	.08426
15	G71QK 20	.11418	.00145	.05887	-.00037	.00302	.09808
16	G71QL 20	.09172	.00202	.05973	-.00023	.00404	.05482
17	G71QN 20	.11117	.00273	.05467	-.00025	.00194	.06832
18	G71QQ 20	.08845	.00064	.03976	-.00041	.00364	.05267
19	G71Q0 20	.06418	.00130	.04780	-.00035	.00094	.04211
20	G71Q1 20	.07470	.00139	.04248	-.00028	.00118	.04803
21	G71Q5 20	.09261	.00048	.05365	-.00038	.00429	.05259
22	CCV	1.0297	4.1372	4.3475	4.3194	4.1280	4.0294
23	CCB	-.00009	.00140	-.00008	.00014	-.00009	.00045
24	G9HX1B	.00077	L.00060	.01347	-.00057	-.00050	.00015
25	G9MDJC	.24892	1.0217	1.1059	1.1062	1.0305	1.0076
26	G8170	-.00035	.00034	.06260	-.00058	-.00056	-.00018
27	G8170X	-.00033	-.00095	.06514	-.00064	-.00069	-.00108
28	G8170S	.04900	2.0408	2.2491	.05529	.05046	.20126
29	G8170D	.04960	2.0498	2.2423	.05541	.05082	.20185
30	G8170V 5X	.00078	.00012	.01214	-.00047	-.00040	-.00046
31	G84EP	-.00085	-.00043	.04136	-.00055	-.00070	-.00008
32	G9GFM	-.00656	L-.02226	.30096	.00373	L-.00592	12.615
33	G9GFN	.00058	-.00238	.14203	-.00053	-.00091	.98118
34	CCV	1.0225	4.0997	4.3111	4.2586	4.0734	3.9909
35	CCB	.00076	.00172	.00045	.00067	.00045	.00075
36	G9GFP	.00003	.00095	.12773	-.00042	.00914	.48032
37	G9L66B	-.00043	L-.00021	-.00034	-.00050	-.00056	-.00041
38	G9L66C	.24586	1.0127	1.0753	1.0890	1.0212	.99597
39	G9L66L	.24504	1.0081	1.0686	1.0841	1.0152	.98897
40	G9H43	-.00045	.00175	.00249	-.00032	.00075	.00046
41	G9H43V 5X	-.00058	.00091	-.00002	-.00044	-.00035	-.00012
42	G9L63B	-.00062	L-.00058	-.00040	-.00052	-.00061	-.00093
43	G9L63C	.22235	.92255	.96936	.98675	.92744	.90144
44	G9L63L	.24332	.99978	1.0584	1.0750	1.0074	.98097
45	G9G4K	.01977	-.00952	.07072	.00318	.00920	4.5238
46	CCV	1.0198	4.1014	4.2934	4.2400	4.0649	3.9787
47	CCB	.00042	.00393	.00142	.00168	.00139	.00088
48	G9G4KV 5X	.00461	-.00100	.01442	.00037	.00161	.96204
49	G9G4N	.00017	.00115	.03731	-.00044	.00033	.00094
50	G9G4P	.00271	.00273	.05986	.00685	.02931	.11660
51	G9G4W	.00149	.00149	.03287	-.00041	.00034	.06294
52	G9G42	.00606	-.00007	.05832	.01508	.05500	.23441
53	G9G47	.00123	.00109	.08474	-.00054	.16479	1.0779

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#	Sample Name	Ag3280	As1890	Ba4934	Be3130	Cd2265	Cr2677
54	G9G5A	.02935	.01128	.04895	.00618	.01003	.69825
55	G9G5J	.09999	.04252	.09210	.01375	.06972	.66980
56	G9G5N	.00494	-.00087	.05122	.01351	.05752	.22107
57	G9G5Q	.00997	.01766	.06511	.02411	.09250	.60075
58	CCV	1.0347	4.1564	4.3548	4.2747	4.1134	4.0260
59	CCB	.00002	.00181	.00103	.00124	.00104	.00096
60	G9G5R	.01582	L-.06174	.05582	.01071	.04250	18.384
61	G9G5W	.01116	.04085	.10667	.02008	.02283	.12659
62	G9G50	.01914	L-.09118	.04449	-.00004	.00353	27.061
63	G9G56	.00115	.02876	.17287	.00113	.00323	.00685
64	G9G59	.00000	.00150	.04789	-.00046	-.00015	.11421
65	G9G6D	.00098	.02102	.11202	.00746	.01374	.21823
66	G9G6E	.00282	.02265	.25100	.00848	.01179	1.7012
67	G9G6F	.01777	L-.14890	.08153	.00472	.01503	40.130
68	G9H40	.00583	.00120	.02267	.00014	.00110	.01767
69	G9H42	.00228	L-.02164	.02085	-.00011	.00061	5.8422
70	CCV	.99789	4.0215	4.1751	4.1497	3.9888	3.8860
71	CCB	.00024	.00331	.00159	.00197	.00160	.00137
72	G9ECFB	-.00005	L-.00010	.06436	-.00059	-.00054	-.00039
73	G9G7VC	.25498	1.0324	1.1471	1.0790	1.0073	.99956
74	G8WP7	.00020	.00616	.35360	-.00068	.07197	-.00055
75	G8WP7S	.04972	2.0414	2.4394	.05285	.11352	.19362
76	G8WP7D	.04911	2.0224	2.4017	.05256	.11276	.19287
77	G8WP7V 5X	-.00028	.00242	.07087	-.00042	.01448	-.00011
78	G8WQL	-.00063	-.00048	.65980	-.00066	.03646	-.00107
79	G8WQN	.00064	.00392	.57621	-.00057	.04197	-.00022
80	G8WQR	.00107	.00108	.96110	-.00049	.01622	-.00015
81	G8WQT	.00022	.00148	.57257	-.00050	.05329	-.00027
82	CCV1	.96995	3.9096	4.0609	4.0404	3.8860	3.7789
83	CCB1	.00024	.00044	-.00065	-.00042	-.00055	-.00026
84	G8WR6	-.00073	.00492	1.5339	-.00052	.69378	-.00030
85	G8WTA	-.00036	.00215	.46998	-.00054	.05353	-.00076
86	G8WTE	.00106	.00476	.52605	-.00056	.01612	-.00144
87	G8WTG	.00070	.00135	.37574	-.00052	.00819	-.00051
88	G8WTR	-.00012	.00004	.42214	-.00055	.01263	-.00020
89	G8WTV	-.00024	.00025	.70270	-.00059	.00469	-.00023
90	G8WTW	.00000	.00132	.64764	-.00063	.00447	-.00010
91	G8WTX	.00065	.00271	.71603	-.00046	.06394	.00014
92	G8WT0	.00073	.00134	.63657	-.00056	.03800	-.00057
93	G8WT1	.00047	.00106	.31450	-.00053	.02954	.00038
94	CCV1	.98220	3.9458	4.1144	4.0824	3.9210	3.8195
95	CCB1	-.00011	.00151	-.00029	-.00007	-.00043	-.00048
96	CCV	1.0206	4.0171	4.3334	4.3184	4.0238	3.9587
97	CCB	.00025	.00073	-.00052	-.00051	-.00056	-.00051
98	G8WTR 5	.00007	-.00026	.08880	-.00056	.00222	-.00056
99	G8WT1 5	-.00005	.00103	.06736	-.00055	.00591	-.00031
100	CCV	1.0358	4.1103	Q4.4184	Q4.4068	4.1670	4.0907
101	CCB	.00069	.00054	-.00039	-.00046	-.00032	-.00024

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#	Sample Name	Ni2316	Zn2138	Pb2203	Se1960	Sb2068	Fe
1	CALBLK	-.02799	.36398				-.00599
2	CAL1	227.236	204.438				
3	CAL2						385.435
4	ICV	3.9766	3.9867	3.9668	4.0124	3.9653	40.499
5	ICB	.00035	.00208	.00076	-.00038	.00176	.02581
6	LLC	.04045	.02186	.01089	.01556	.05759	.11656
7	LLC AG	.04976	.05147	.05006	.04795	.04971	.02354
8	ICSA	.00173	-.00444	Q.00769	-.00326	.00118	188.22
9	ICSAB	.91175	.95834	.92811	.97385	.96038	189.21
10	CCV	4.0715	4.0645	4.0788	4.1290	4.0763	41.375
11	CCB	-.00030	.00233	.00049	.00022	.00264	.02435
12	G71P3 20	.02285	.06172	.00951	-.00196	-.00056	8.7232
13	G71P5 20	.04230	.10391	.01206	-.00135	-.00163	9.0229
14	G71QJ 20	.04111	.11965	.01206	-.00178	-.00149	6.4720
15	G71QK 20	.04003	.10574	.01054	-.00233	-.00020	6.0853
16	G71QL 20	.02690	.08064	.01025	-.00078	-.00406	6.9708
17	G71QN 20	.03225	.08460	.01003	-.00082	-.00259	7.2015
18	G71QQ 20	.02402	.07602	.00750	-.00151	-.00374	4.6092
19	G71Q0 20	.02050	.05820	.00879	-.00160	.00072	6.1301
20	G71Q1 20	.02307	.06148	.00815	-.00124	-.00182	6.1163
21	G71Q5 20	.02591	.08074	.00940	-.00065	-.00393	6.3906
22	CCV	4.0781	4.0637	4.0627	4.0984	4.0490	41.412
23	CCB	-.00063	.00178	.00079	-.00036	.00012	.00103
24	G9HX1B	.00002	.00600	-.00050	-.00026	-.00073	.00644
25	G9MDJC	1.0091	1.0100	.99959	1.0256	1.0035	1.0995
26	G8170	-.00114	.01381	-.00009	-.00100	.00064	.00200
27	G8170X	-.00081	.01406	.00046	-.00123	.00099	-.00874
28	G8170S	.50251	.51133	.49724	2.0277	.48817	1.0417
29	G8170D	.50341	.51366	.50102	2.0405	.48995	1.0540
30	G8170V 5X	-.00008	.00502	.00025	.00015	.00225	.00317
31	G84EP	-.00129	.01676	.00099	-.00152	-.00244	-.00512
32	G9GFM	.81946	C.00000	.26389	.00035	.09085	130.72
33	G9GFN	.03979	.03614	.00599	-.00015	.00898	9.8187
34	CCV	4.0292	4.0616	4.0100	4.0584	4.0178	40.960
35	CCB	.00004	.00233	.00049	.00011	.00381	.01674
36	G9GFP	.28425	5.0808	.07848	-.00096	.00509	5.4376
37	G9L66B	-.00021	.00537	-.00043	-.00176	-.00085	-.00807
38	G9L66C	.99979	1.0048	.99044	1.0145	.99469	1.0876
39	G9L66L	.99273	.99331	.98221	1.0043	.98621	1.0873
40	G9H43	.00505	.01924	.02482	.00070	L-.01316	.09053
41	G9H43V 5X	.00015	.00641	.00427	.00078	-.00244	.01226
42	G9L63B	-.00074	.00200	-.00056	-.00158	-.00080	-.01982
43	G9L63C	.90641	.90335	.89941	.92439	.90033	.98453
44	G9L63L	.98644	.99057	.97899	1.0035	.98485	1.0794
45	G9G4K	.13034	1.3362	.58802	.00539	.06672	4.8740
46	CCV	4.0220	4.0358	3.9902	4.0472	3.9960	40.861
47	CCB	.00048	.00308	.00144	.00113	.00303	.01435
48	G9G4KV 5X	.02745	.28087	.12598	.00036	.01388	1.0382
49	G9G4N	.00070	.00410	.02787	-.00087	.00153	.00641
50	G9G4P	.01451	.23222	.03894	L-.00674	L-.02742	2.8598
51	G9G4W	.02019	.34618	.02015	-.00118	.00244	3.5562
52	G9G42	.09847	.44130	.08310	L-.00588	L-.03166	4.2307
53	G9G47	.25458	1.2499	.28768	.00445	.01707	.81988

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#	Sample Name	Ni2316	Zn2138	Pb2203	Se1960	Sb2068	Fe
54	G9G5A	.13232	.28507	.13683	.00104	L-.15946	2.3313
55	G9G5J	.23528	.71006	.34001	.06858	.03288	4.4873
56	G9G5N	.02283	.36617	.07930	L-.00546	L-.03770	3.4550
57	G9G5Q	.09569	.64935	.11759	.00288	L-.18585	6.5281
58	CCV	4.0734	4.0820	4.0468	4.1315	4.0746	41.384
59	CCB	.00054	.00252	.00145	.00179	.00278	.00847
60	G9G5R	.05972	.74353	1.0720	-.00456	.15972	9.2198
61	G9G5W	.45242	3.3018	.45602	.01726	.03134	6.0965
62	G9G50	.22089	1.4329	1.9315	.00221	.38610	9.6413
63	G9G56	.04296	.30883	.28755	.00085	.00787	3.9575
64	G9G59	.00409	.07826	.01255	.00194	.00144	.93745
65	G9G6D	.07229	8.0525	.99458	.00572	.02004	4.9348
66	G9G6E	.14040	.92075	.24253	-.00184	L-.03811	3.1474
67	G9G6F	.63909	3.3369	3.4847	-.00494	.51559	14.190
68	G9H40	.00593	.02933	.03330	.00359	-.00952	.25807
69	G9H42	.00567	.10265	.34181	.00050	.07357	.48186
70	CCV	3.9427	3.9571	3.9099	3.9656	3.9072	39.985
71	CCB	.00169	.00319	.00109	.00110	.00240	.01738
72	G9ECFB	-.00048	H.01422	.00246	-.00058	-.00007	.00628
73	G9G7VC	1.0033	1.0289	.99240	1.0583	1.0108	1.1119
74	G8WP7	.10573	14.956	1.2559	.00104	.01691	-.00126
75	G8WP7S	.57982	14.099	1.6094	2.0410	.50518	1.0771
76	G8WP7D	.57612	14.044	1.6026	2.0165	.49491	1.0133
77	G8WP7V 5X	.02109	3.0826	.25780	.00106	.00070	-.00554
78	G8WQL	.04001	7.7763	.31435	.00065	.00992	-.00959
79	G8WQN	.05739	15.641	.95774	-.00142	.08261	.00223
80	G8WQR	.02512	7.6756	2.5173	-.00057	.03136	.01841
81	G8WQT	.09094	16.185	1.0247	-.00051	.01452	-.00836
82	CCV1	3.8427	3.8682	3.8226	3.8917	3.8281	38.976
83	CCB1	-.00109	.00137	.00041	.00050	.00144	-.00042
84	G8WR6	.05862	14.051	1.3312	-.00066	.10965	-.00548
85	G8WTA	.13554	16.953	1.7473	-.00105	.01361	-.00682
86	G8WTE	.04969	12.131	.43072	-.00150	.03794	-.00528
87	G8WTG	.04813	9.9498	.25299	-.00048	.00735	-.00710
88	G8WTR	.06866	~~H21.475~~	.25187	-.00037	.00083	-.00511
89	G8WTV	.01788	2.0400	.31698	-.00096	.00100	-.00525
90	G8WTW	.01810	3.3994	.12648	-.00113	.00823	.00576
91	G8WTX	.04586	14.686	.98792	-.00010	.02265	.00095
92	G8WT0	.05125	13.497	.58727	.00037	.02648	.00175
93	G8WT1	.13899	~~H24.589~~	.57383	.00272	.03698	.00108
94	CCV1	3.8822	3.9015	3.8636	3.9456	3.8782	39.373
95	CCB1	-.00010	.00207	.00004	-.00021	.00086	-.00392
96	CCV	3.9918	4.0521	3.9651	4.0400	4.0168	40.822
97	CCB	-.00065	.00086	-.00055	-.00067	.00096	-.00361
98	G8WTR 5	.01388	4.5719	.05301	-.00061	.00184	-.00540
99	G8WT1 5	.02963	5.3957	.12270	.00015	.00717	-.00848
100	CCV	4.1332	4.1709	4.1093	4.1508	4.1047	42.104
101	CCB	-.00070	.00121	-.00015	-.00041	.00064	.00952

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Standardization Rpt. 05/05/05 02:27:08 PM

Method: 6010C Standard: CALBLK
Run Time: 05/05/05 14:22:49

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Avge	.01300	.23549	1.5824	-.19899	-.45248	.59347	3.2298
SDev	.32667	.32879	1.8136	1.50041	.59889	.24535	.0184
%RSD	2512.9	139.62	114.61	754.01	132.36	41.342	.56919
#1	-.21799	.46798	2.8649	-1.2599	-.02900	.41998	3.2428
#2	-.24399	.00300	.29998	-.86196	-.87596	.76696	3.2168

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Avge	.41398	.02400	-1.1289	.05800	.27899	.07350	-.00100
SDev	.00353	.00141	.0099	.00848	.00283	.10111	.00424
%RSD	.85399	5.8926	.87683	14.630	1.0138	137.57	424.26
#1	.41148	.02500	-1.1219	.06400	.28099	.14499	-.00400
#2	.41648	.02300	-1.1359	.05200	.27699	.00200	.00200

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Avge	.12749	-.00600	2.1574	1.0114	-.02800	-.06800	-.26549
SDev	.02050	.00141	.0205	.0078	.00283	.03111	.13222
%RSD	16.083	23.570	.95046	.76897	10.102	45.754	49.804
#1	.14199	-.00700	2.1719	1.0169	-.02600	-.04600	-.17199
#2	.11299	-.00500	2.1429	1.0059	-.03000	-.09000	-.35898

Elem	V 2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Avge	.01150	.36398	.02950	.01250	.01150	.01650	.03800
SDev	.00353	.00283	.01626	.00071	.02333	.03748	.17818
%RSD	30.744	.77704	55.130	5.6569	202.91	227.13	468.92
#1	.01400	.36598	.04100	.01300	.02800	.04300	.16399
#2	.00900	.36198	.01800	.01200	-.00500	-.01000	-.08800

Elem	Ti3349	Zr3496	Na3302
Avge	-.01300	103.48	11.873
SDev	.00141	1.08	.091
%RSD	10.879	1.0406	.76824
#1	-.01200	104.24	11.937
#2	-.01400	102.72	11.808

Method: 6010C Standard: CAL1
Run Time: 05/05/05 14:27:12

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	As1890
Avge	1032.9	934.57	2757.9	4780.4	605.94	690.03	1662.1
SDev	4.4	8.75	16.2	4.9	5.10	2.80	15.4
%RSD	.42949	.93581	.58713	.10194	.84098	.40547	.92606
#1	1036.0	940.75	2769.3	4783.9	609.55	692.01	1672.9
#2	1029.7	928.38	2746.4	4777.0	602.34	688.06	1651.2

Elem	Ba4934	Be3130	Cd2265	Cr2677	Co2286	Cu3247	Mn2576
Avge	419.63	1608.1	1134.3	859.30	142.81	164.91	837.64
SDev	5.86	12.3	6.6	6.99	1.10	2.38	6.85
%RSD	1.3963	.76517	.58485	.81296	.76745	1.4436	.81770

#1	423.78	1616.8	1139.0	864.24	143.58	166.59	842.48
#2	415.49	1599.4	1129.6	854.36	142.03	163.23	832.80
Elem	Ni2316	Ag3280	Tl1908	V_2924	Zn2138	Mo2020	Sr4215
Avge	227.24	281.78	518.25	189.77	204.44	179.68	195.67
SDev	1.83	3.08	4.30	1.99	1.27	1.45	1.56
%RSD	.80560	1.0918	.82937	1.0477	.62047	.80553	.79573
#1	228.53	283.96	521.29	191.18	205.33	180.70	196.77
#2	225.94	279.61	515.22	188.36	203.54	178.66	194.56
Elem	Sn1899	Th	U	Ti3349	Zr3496		
Avge	127.99	174.56	40.360	198.29	295.09		
SDev	.88	2.38	.585	2.07	.67		
%RSD	.68999	1.3635	1.4488	1.0419	.22667		
#1	128.62	176.24	40.774	199.75	295.57		
#2	127.37	172.87	39.947	196.83	294.62		

Method: 6010C Standard: CAL2
Run Time: 05/05/05 14:31:35

Elem	Al	Ca	Fe	Mg	Na3302
Avge	329.96	118.70	385.44	195.38	29.964
SDev	2.06	.31	1.57	.37	.002
%RSD	.62465	.25792	.40633	.18783	.00708
#1	331.42	118.92	386.54	195.64	29.966
#2	328.50	118.49	384.33	195.12	29.963

Method: 6010C Slope = Conc(SIR)/IR

Element	Wavelen	High std.	Low std	Slope	Y-intercept	Date Standardized
Sb1	206.831	CAL1	CALBLK	.009669	-.000126	05/05/05 02:31:35
Sb2	206.832	CAL1	CALBLK	.010698	-.002519	05/05/05 02:31:35
Pb1	220.351	CAL1	CALBLK	.003620	-.005728	05/05/05 02:31:35
Pb2	220.352	CAL1	CALBLK	.002095	.000417	05/05/05 02:31:35
Se1	196.021	CAL1	CALBLK	.016108	.007288	05/05/05 02:31:35
Se2	196.022	CAL1	CALBLK	.014514	-.008614	05/05/05 02:31:35
Al	308.215	CAL2	CALBLK	.306062	-.988531	05/05/05 02:31:35
As1890	189.042	CAL1	CALBLK	.006018	-.002491	05/05/05 02:31:35
Ba4934	493.409	CAL1	CALBLK	.023832	-.000572	05/05/05 02:31:35
Be3130	313.042	CAL1	CALBLK	.006214	.007016	05/05/05 02:31:35
Cd2265	226.502	CAL1	CALBLK	.008817	-.000511	05/05/05 02:31:35
Ca	317.933	CAL2	CALBLK	.422213	-.117792	05/05/05 02:31:35
Cr2677	267.760	CAL1	CALBLK	.011647	-.000856	05/05/05 02:31:35
Co2286	228.616	CAL1	CALBLK	.070045	.000070	05/05/05 02:31:35
Cu3247	324.753	CAL1	CALBLK	.060858	-.007759	05/05/05 02:31:35
Fe	217.441	CAL2	CALBLK	.259443	.001557	05/05/05 02:31:35
Mg	279.078	CAL2	CALBLK	.258775	-.558278	05/05/05 02:31:35
Mn2576	257.610	CAL1	CALBLK	.011955	-.012092	05/05/05 02:31:35
Ni2316	231.604	CAL1	CALBLK	.044002	.001232	05/05/05 02:31:35
Ag3280	328.068	CAL1	CALBLK	.007155	.000487	05/05/05 02:31:35
Tl1908	190.864	CAL1	CALBLK	.019262	.005114	05/05/05 02:31:35
V_2924	292.402	CAL1	CALBLK	.052723	-.000606	05/05/05 02:31:35

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Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Zn2138	213.856	CAL1	CALBLK	.542613	-.040509	05/05/05 02:31:35
Mo2020	202.030	CAL1	CALBLK	.055638	-.001641	05/05/05 02:31:35
Sr4215	421.552	CAL1	CALBLK	.051111	-.000639	05/05/05 02:31:35
Sn1899	189.989	CAL1	CALBLK	.078168	-.000899	05/05/05 02:31:35
Th	401.913	CAL1	CALBLK	.057620	-.000951	05/05/05 02:31:35
U	385.958	CAL1	CALBLK	.248723	-.009451	05/05/05 02:31:35
Pb2203	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Se1960	196.026	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Sb2068	206.838	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Ti3349	334.941	CAL1	CALBLK	.050428	.000656	05/05/05 02:31:35
Zr3496	349.621	CAL1	CALBLK	.026095	-2.70034	05/05/05 02:31:35
Na3302	330.232	CAL2	CALBLK	5.52758	-65.6285	05/05/05 02:31:35

Method: 6010C

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sb1	206.831	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	9.98635	.013650

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sb2	206.832	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.99557	.004431

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Pb1	220.351	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.97654	.023456

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Pb2	220.352	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0168	-.016750

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Se1	196.021	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.76756	.232440

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Se2	196.022	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0067	-.006726

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Al	308.215	CALBLK	.000000	-.000000	.000000
		CAL2	100.000	100.000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
As1890	189.042	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	9.99979	.000210

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Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ba4934	493.409	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0000	.000000
Be3130	313.042	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0000	.000000
Cd2265	226.502	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0003	-.000271
Ca	317.933	CALBLK	.000000	.000000	-.000000
		CAL2	50.0000	50.0000	.000000
Cr2677	267.760	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0072	-.007160
Co2286	228.616	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0029	-.002900
Cu3247	324.753	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0285	-.028476
Fe	217.441	CALBLK	.000000	-.000000	.000000
		CAL2	100.000	100.000	.000000
Mg	279.078	CALBLK	.000000	.000000	-.000000
		CAL2	50.0000	50.0000	.000000
Mn2576	257.610	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0023	-.002260
Ni2316	231.604	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration

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Element	Wavelength	Standard	Concentration	Concentration	Concentration
Ag3280	328.068	CALBLK	.000000	-.000000	.000000
		CAL1	2.00000	2.01675	-.016750

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Tl1908	190.864	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.98764	.012361

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
V_2924	292.402	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0046	-.004601

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Zn2138	213.856	CALBLK	.156992	.363982	-.206990
		CAL1	110.890	204.438	-93.5477

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mo2020	202.030	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.99540	.004600

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sr4215	421.552	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sn1899	189.989	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0040	-.003950

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Th	401.913	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0570	-.057000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
U	385.958	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0291	-.029115

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Pb2203	220.353	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Se1960	196.026	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Sb2068	206.838	NONE	.000000	.000000	.000000

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		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ti3349	334.941	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Zr3496	349.621	CALBLK	.000000	.000000	-.000000
		CAL1	5.00000	5.00000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Na3302	330.232	CALBLK	.000000	-.000002	.000002
		CAL2	100.000	100.000	.000000

Method: 6010C Sample Name: ICV Operator: STL
Run Time: 05/05/05 14:35:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	3.9636	3.9687	3.9862	3.9571	4.0363	4.0005	38.511
SDev	.0084	.0184	.0069	.0146	.0195	.0129	.169
%RSD	.21303	.46326	.17291	.36837	.48414	.32128	.43877
#1	3.9576	3.9817	3.9911	3.9468	4.0502	3.9914	38.630
#2	3.9695	3.9557	3.9813	3.9674	4.0225	4.0096	38.391
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.0201	4.2606	4.2316	4.0231	19.891	3.9408	3.9696
SDev	.0165	.0242	.0102	.0069	.041	.0117	.0096
%RSD	.40986	.56912	.24110	.17253	.20863	.29595	.24202
#1	4.0317	4.2778	4.2388	4.0280	19.920	3.9490	3.9764
#2	4.0084	4.2435	4.2244	4.0182	19.862	3.9325	3.9628
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.0153	40.499	19.636	4.0999	3.9766	1.0045	3.9008
SDev	.0244	.130	.018	.0129	.0067	.0044	.0102
%RSD	.60871	.32038	.09225	.31520	.16899	.44109	.26145
#1	4.0325	40.590	19.649	4.1090	3.9814	1.0077	3.9080
#2	3.9980	40.407	19.623	4.0907	3.9719	1.0014	3.8935

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Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.0100	3.9867	4.0890	4.2302	4.1229	Q3.2709	4.0527
SDev	.0135	.0128	.0087	.0183	.0059	.0174	.0065
%RSD	.33720	.32221	.21365	.43225	.14199	.53197	.16055
#1	4.0196	3.9958	4.0952	4.2432	4.1271	Q3.2832	4.0573
#2	4.0004	3.9776	4.0828	4.2173	4.1188	Q3.2586	4.0481

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	3.9668	4.0124	3.9653	4.1079	3.8178	40.214	
SDev	.0074	.0021	.0005	.0163	.0031	.328	
%RSD	.18723	.05148	.01237	.39668	.08227	.81640	
#1	3.9615	4.0110	3.9656	4.1194	3.8156	39.982	
#2	3.9720	4.0139	3.9649	4.0963	3.8200	40.446	

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	4.0000	4.0000	4.0000	4.0000	4.0000	
Range	10.000	10.000	10.000	10.000	10.000	

Method: 6010C Sample Name: ICB Operator: STL
Run Time: 05/05/05 14:39:48
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00339	-.00149	-.00222	.00226	-.00280	.00083	.01565
SDev	.00792	.00358	.00448	.00438	.00361	.00438	.00559
%RSD	233.39	240.46	201.27	193.70	128.72	530.26	35.745
#1	.00900	-.00402	-.00539	.00535	-.00536	.00392	.01961
#2	-.00221	.00104	.00094	-.00084	-.00025	-.00227	.01169

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00206	.00015	.00012	.00019	.01077	.00010	.00077
SDev	.00007	.00032	.00004	.00030	.00209	.00036	.00099
%RSD	3.6078	206.69	35.355	154.86	19.411	367.05	128.49
#1	.00201	.00038	.00016	.00040	.01224	.00035	.00147
#2	.00211	-.00007	.00009	-.00002	.00929	-.00016	.00007

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Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00017	.02582	.00944	.00013	.00035	.00105	.00175
SDev	.00019	.02471	.00988	.00018	.00100	.00197	.00078
%RSD	112.68	95.708	104.61	134.36	282.84	188.18	44.414
#1	.00030	.04329	.01643	.00025	.00106	.00245	.00120
#2	.00003	.00835	.00246	.00001	-.00035	-.00035	.00231

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00092	.00209	.00309	.00005	.00015	.00650	.00257
SDev	.00186	.00013	.00181	.00011	.00027	.01035	.00751
%RSD	202.27	6.4369	58.696	212.95	176.58	159.27	292.43
#1	.00223	.00218	.00437	.00013	.00035	.01381	.00788
#2	-.00040	.00199	.00181	-.00003	-.00004	-.00082	-.00274

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00077	-.00038	.00177	.00103	.01358	Q.45876
SDev	.00143	.00172	.00409	.00082	.05458	.98882
%RSD	186.38	447.89	231.41	79.334	402.03	215.54
#1	.00178	.00083	.00466	.00161	.05217	Q1.1580
#2	-.00024	-.00160	-.00113	.00045	-.02502	-.24044

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00300	.00400	.06000	.05000	.50000	.25000

Method: 601QC Sample Name: LLC Operator: STL
Run Time: 05/05/05 14:44:10
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.05682	.05914	.01057	.01105	.02012	.01329	.20127
SDev	.00018	.00208	.00023	.00190	.00016	.00132	.00154
%RSD	.32489	3.5225	2.1480	17.204	.79338	9.9480	.76726
#1	.05695	.06062	.01073	.01240	.02023	.01236	.20018
#2	.05669	.05767	.01041	.00971	.02000	.01423	.20237

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.20000
Range							20.000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.01083	.22104	.00526	.00468	5.0530	.00967	.05101
SDev	.00016	.00022	.00022	.00042	.0116	.00022	.00005
%RSD	1.5142	.09910	4.1742	8.9262	.23042	2.2612	.09999
#1	.01072	.22089	.00542	.00497	5.0448	.00983	.05105
#2	.01095	.22120	.00511	.00438	5.0612	.00952	.05097
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.01000	.20000	.00500	.00500	5.0000	.01000	.05000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.02432	.11656	4.9284	.01571	.04046	Q.01221	.02041
SDev	.00005	.00205	.0126	.00020	.00016	.00017	.00041
%RSD	.18541	1.7568	.25617	1.2535	.38451	1.4146	1.9913
#1	.02436	.11801	4.9194	.01585	.04057	Q.01233	.02070
#2	.02429	.11511	4.9373	.01557	.04035	Q.01209	.02012
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	.02500	.10000	5.0000	.01500	.04000	.01000	.02000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.05071	.02186	.04222	.05410	.10414	Q-.00301	.51746
SDev	.00048	.00024	.00055	.00015	.00265	.00124	.00950
%RSD	.95081	1.0881	1.2943	.26763	2.5461	41.091	1.8363
#1	.05105	.02203	.04260	.05420	.10226	Q-.00213	.51074
#2	.05037	.02169	.04183	.05400	.10601	Q-.00388	.52418
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	.05000	.02000	.04000	.05000	.10000	.50000	.50000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.01089	.01557	.05759	.05282	.46701	3.5209	
SDev	.00134	.00083	.00082	.00011	.00138	.0899	
%RSD	12.338	5.3254	1.4184	.20251	.29599	2.5531	
#1	.01184	.01498	.05817	.05290	.46799	3.4573	
#2	.00994	.01615	.05702	.05275	.46603	3.5845	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	
Value	.01000	.01500	.06000	.05000	.50000		
Range	20.000	20.000	20.000	20.000	20.000		

Method: 6010C Sample Name: LLC AG Operator: STL
Run Time: 05/05/05 14:48:33
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.05109	.04694	.04852	.05084	.04582	.04902	.01610
SDev	.00937	.00385	.00492	.00299	.00473	.00160	.00019
%RSD	18.339	8.2063	10.134	5.8872	10.322	3.2733	1.2111
#1	.04447	.04967	.05200	.04872	.04917	.04788	.01624
#2	.05772	.04422	.04505	.05296	.04248	.05015	.01597
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.05030	.05289	.05459	.05175	.09542	.04911	.05077
SDev	.00031	.00039	.00020	.00040	.00179	.00105	.00020
%RSD	.62006	.73275	.36219	.77148	1.8773	2.1400	.40209
#1	.05008	.05262	.05445	.05147	.09415	.04986	.05063
#2	.05052	.05317	.05473	.05203	.09668	.04837	.05092
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.04899	.02354	.00246	.05171	.04976	.00995	.04891
SDev	.00111	.00588	.00073	.00013	.00050	.00003	.00007
%RSD	2.2549	24.967	29.773	.24636	1.0003	.29287	.15319
#1	.04977	.02770	.00298	.05162	.04941	.00997	.04896
#2	.04821	.01939	.00194	.05180	.05012	.00993	.04886
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value						.01000	
Range						20.000	

Elem	V 2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.04944	.05148	.05201	.05348	.04960	.10968	.03473
SDev	.00033	.00021	.00033	.00036	.00006	.00288	.04010
%RSD	.66028	.40819	.64041	.67564	.12516	2.6229	115.47
#1	.04921	.05133	.05224	.05323	.04956	.10764	.06308
#2	.04967	.05163	.05177	.05374	.04965	.11171	.00637
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.05007	.04795	.04971	.05116	.00932	-.26531
SDev	.00036	.00051	.00497	.00032	.01481	.40256
%RSD	.71691	1.0531	9.9915	.62730	158.86	151.73
#1	.04981	.04831	.04620	.05093	.01980	.01934
#2	.05032	.04760	.05322	.05138	-.00115	-.54997
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value						
Range						

Method: 6010C Sample Name: ICSA Operator: STL
Run Time: 05/05/05 14:52:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00463	-.00572	.13153	-.05414	.00567	-.00773	470.06
SDev	.00144	.00001	.00795	.00470	.00677	.00192	3.36
%RSD	31.056	.24756	6.0452	8.6779	119.29	24.831	.71503
#1	.00565	-.00573	.13715	-.05746	.01046	-.00637	467.69
#2	.00361	-.00571	.12591	-.05081	.00089	-.00909	472.44
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							500.00
Range							100.00

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00206	.00186	-.00062	-.00735	448.91	.00012	.00035
SDev	.00008	.00007	.00004	.00006	2.28	.00056	.00000
%RSD	3.6975	3.6262	7.1425	.80740	.50694	467.23	1.0940
#1	.00200	.00181	-.00058	-.00731	447.30	.00051	.00035
#2	.00211	.00191	-.00065	-.00739	450.52	-.00027	.00036
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	500.00	.00000	.00000
Range	.02000	.20000	.01000	.01000	100.00	.02000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.01350	188.22	490.39	.00383	.00174	.00057	.01211
SDev	.00107	1.21	2.18	.00003	.00034	.00021	.00208
%RSD	7.9023	.64089	.44416	.67615	19.692	36.161	17.201
#1	-.01274	187.36	488.85	.00385	.00198	.00042	.01358
#2	-.01425	189.07	491.93	.00381	.00150	.00072	.01064
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	200.00	500.00	.00000	.00000	.00000	.00000
Range	.02500	40.000	100.00	.01500	.04000	.02000	.02000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00310	-.00445	-.00221	-.00701	.00063	.00078	-.03092
SDev	.00078	.00001	.00022	.00003	.00005	.00153	.02474
%RSD	25.042	.33119	10.157	.38177	8.0864	195.37	80.008
#1	.00255	-.00444	-.00237	-.00703	.00067	-.00030	-.01343
#2	.00365	-.00446	-.00205	-.00699	.00059	.00186	-.04841
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.02000	.04000	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	Q.00769	-.00327	.00118	.00729	-.07393	-2.0727
SDev	.00049	.00353	.00096	.00004	.01894	.3322
%RSD	6.3157	108.17	80.645	.48934	25.618	16.028
#1	Q.00735	-.00077	.00186	.00731	-.06054	-1.8378
#2	Q.00803	-.00577	.00051	.00726	-.08733	-2.3077
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.00000	.00000	.00000	.00000	.00000	
Range	.00600	.01000	.06000	.05000	.50000	

Method: 6010C Sample Name: ICSAB Operator: STL
Run Time: 05/05/05 14:57:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.96106	.95902	1.0864	.84910	.98873	.96642	474.72
SDev	.01427	.00634	.0019	.00842	.00473	.01140	.34
%RSD	1.4848	.66136	.17301	.99103	.47813	1.1791	.07066
#1	.95097	.96350	1.0877	.84315	.99207	.95837	474.96
#2	.97115	.95453	1.0851	.85505	.98538	.97448	474.49
Errors	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value	1.0000	1.0000					500.00
Range	20.000	20.000					20.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.97607	.53819	.51989	.91299	452.41	.46957	.45218
SDev	.00147	.00135	.00017	.00045	.75	.00048	.00020
%RSD	.15039	.25048	.03211	.04943	.16550	.10292	.04350
#1	.97711	.53914	.52001	.91267	451.88	.46923	.45204
#2	.97503	.53724	.51978	.91331	452.94	.46991	.45232
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	.50000	.50000	1.0000	500.00	.50000	.50000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

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Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.53143	189.21	492.00	.49695	.91176	1.0059	.91081
SDev	.00215	.03	.19	.00035	.00106	.0022	.00232
%RSD	.40382	.01614	.03886	.07095	.11602	.22027	.25493
#1	.53295	189.23	491.87	.49720	.91101	1.0075	.90917
#2	.52991	189.18	492.14	.49670	.91250	1.0044	.91245
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	200.00	500.00	.50000	1.0000	1.0000	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.48838	.95835	.95527	1.0436	.94508	.79534	.98714
SDev	.00093	.00104	.00051	.0018	.00033	.00362	.00549
%RSD	.19015	.10864	.05380	.17459	.03507	.45472	.55635
#1	.48904	.95909	.95491	1.0449	.94485	.79790	.98325
#2	.48773	.95761	.95564	1.0423	.94532	.79278	.99102
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass
Value	.50000	1.0000	1.0000	1.0000	1.0000		1.0000
Range	20.000	20.000	20.000	20.000	20.000		20.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.92812	.97385	.96038	.51059	.80798	18.315
SDev	.00499	.00603	.00741	.00039	.01631	.352
%RSD	.53730	.61882	.77117	.07682	2.0192	1.9206
#1	.92459	.96959	.95514	.51086	Q.79644	18.066
#2	.93164	.97811	.96562	.51031	.81952	18.563
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	1.0000	1.0000	1.0000	.50000	1.0000	
Range	20.000	20.000	20.000	20.000	20.000	

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/05/05 15:03:25
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	4.0632	4.1026	4.1026	4.0669	4.1660	4.1105	39.493
SDev	.0300	.0411	.0207	.0107	.0372	.0319	.440
%RSD	.73753	1.0012	.50381	.26248	.89414	.77673	1.1148
#1	4.0844	4.0736	4.0880	4.0745	4.1397	4.1330	39.804
#2	4.0420	4.1317	4.1172	4.0594	4.1924	4.0879	39.182
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.1265	4.3548	4.3187	4.1207	20.427	4.0313	4.0610
SDev	.0323	.0707	.0444	.0302	.130	.0342	.0292
%RSD	.78261	1.6228	1.0279	.73403	.63575	.84741	.71916
#1	4.1493	Q4.4048	4.3501	4.1421	20.519	4.0554	4.0817
#2	4.1036	4.3049	4.2874	4.0993	20.335	4.0071	4.0404
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.1056	41.375	20.010	4.1907	4.0715	1.0289	3.9891
SDev	.0646	.334	.079	.0386	.0321	.0101	.0419
%RSD	1.5732	.80770	.39502	.92034	.78784	.98472	1.0509
#1	4.1512	41.611	20.066	4.2180	4.0942	1.0361	4.0188
#2	4.0599	41.138	19.955	4.1635	4.0488	1.0218	3.9595
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.1050	4.0645	4.1801	4.2892	4.2247	Q3.3625	4.1428
SDev	.0421	.0376	.0360	.0521	.0360	.0375	.0792
%RSD	1.0250	.92487	.86200	1.2158	.85245	1.1158	1.9126
#1	4.1347	4.0911	4.2056	4.3260	4.2502	Q3.3890	4.1988
#2	4.0752	4.0379	4.1547	4.2523	4.1993	Q3.3359	4.0867
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	4.0788	4.1290	4.0763	4.1998	3.8601	40.924
SDev	.0002	.0089	.0063	.0476	.0032	.840
%RSD	.00581	.21533	.15479	1.1343	.08195	2.0533
#1	4.0790	4.1352	4.0808	4.2335	3.8579	40.330
#2	4.0786	4.1227	4.0719	4.1661	3.8623	41.518
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 05/05/05 15:07:49
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

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Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00425	-.00056	-.00242	.00194	-.00162	.00114	.03820
SDev	.00728	.00310	.00558	.00403	.00721	.00327	.02373
%RSD	171.04	549.10	230.87	207.10	445.02	286.04	62.126
#1	-.00089	.00163	.00153	-.00090	.00348	-.00117	.02142
#2	.00940	-.00275	-.00636	.00479	-.00672	.00346	.05499
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00111	.00054	.00056	.00044	.02301	.00014	.00074
SDev	.00219	.00099	.00072	.00076	.02478	.00045	.00164
%RSD	197.35	185.42	128.85	172.62	107.69	316.39	222.40
#1	-.00044	-.00017	.00005	-.00010	.00549	-.00017	-.00042
#2	.00266	.00124	.00107	.00097	.04053	.00046	.00189
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00004	.02436	.02782	.00063	-.00031	.00090	.00302
SDev	.00043	.03712	.02196	.00065	.00205	.00212	.00059
%RSD	1143.0	152.38	78.933	102.98	666.70	236.06	19.605
#1	-.00034	-.00189	.01229	.00017	-.00176	-.00060	.00344
#2	.00026	Q.05060	.04334	.00108	.00114	.00239	.00260
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00097	.00234	.00211	.00043	-.00113	.00350	-.00252
SDev	.00275	.00053	.00036	.00087	.00022	.00614	.01905
%RSD	282.87	22.869	17.171	199.75	19.699	175.37	755.57
#1	-.00097	.00196	.00237	-.00018	-.00129	-.00084	.01095
#2	.00292	.00272	.00186	.00105	-.00098	.00784	-.01599
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00049	.00022	.00265	.00119	.04360	Q1.1276
SDev	.00083	.00022	.00382	.00082	.01328	.2697
%RSD	168.19	97.275	144.24	69.206	30.450	23.917

#1	-.00009	.00038	-.00005	.00061	.05298	Q1.3183
#2	.00108	.00007	.00535	.00176	.03421	Q.93688
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00300	.00400	.06000	.05000	.50000	.25000

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Method: 6010C Sample Name: G71P3 20 Operator: STL
Run Time: 05/05/05 15:18:03
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00197	-.00563	.01107	.00874	-.00440	-.00076	7.4552
SDev	.00314	.00225	.00668	.00276	.00283	.00429	.0024
%RSD	159.23	39.992	60.363	31.636	64.379	567.55	.03168
#1	-.00025	-.00404	.01580	.00678	-.00240	-.00379	7.4535
#2	.00419	-.00722	.00635	.01069	-.00640	.00228	7.4568
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00267	.05883	-.00023	.00180	9.4839	.04218	.00357
SDev	.00090	.00018	.00001	.00027	.0170	.00004	.00079
%RSD	33.832	.31510	5.8117	14.746	.17943	.08878	22.251
#1	.00203	.05869	-.00024	.00161	9.4719	.04216	.00301
#2	.00330	.05896	-.00022	.00199	9.4959	.04221	.00413
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.42583	8.7232	.93827	.29019	.02286	.05721	.00007
SDev	.00095	.0314	.00531	.00026	.00121	.00143	.00014
%RSD	.22366	.35966	.56554	.08805	5.3084	2.4973	192.65
#1	.42650	8.7010	.93452	.29001	.02200	.05620	.00018
#2	.42516	8.7454	.94202	.29038	.02372	.05822	-.00003
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01336	.06173	-.00011	.00985	.04674	.00218	-.00809
SDev	.00111	.00002	.00052	.00007	.00017	.00458	.00936
%RSD	8.3354	.02436	448.50	.73010	.35640	210.09	115.81
#1	.01257	.06171	.00025	.00980	.04662	-.00106	-.00146
#2	.01415	.06174	-.00048	.00990	.04686	.00541	-.01471
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00951	-.00197	-.00056	.09326	2.6673	.87055
SDev	.00038	.00192	.00134	.00032	.0183	.41429
%RSD	4.0219	97.310	239.83	.34409	.68533	47.589
#1	.00978	-.00332	-.00151	.09304	2.6544	.57760
#2	.00924	-.00061	.00039	.09349	2.6803	1.1635
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G71P5 20 Operator: STL
Run Time: 05/05/05 15:22:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00172	-.00837	.01812	.00905	-.00299	-.00054	10.289
SDev	.01053	.00494	.00949	.00598	.00956	.00488	.131
%RSD	610.65	59.051	52.374	66.076	319.40	903.69	1.2768
#1	-.00572	-.00488	.02483	.00482	.00377	-.00399	10.196
#2	.00917	-.01187	.01141	.01328	-.00975	.00291	10.382
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00193	.07534	-.00024	.00270	26.993	.09027	.00409
SDev	.00018	.00140	.00009	.00017	.252	.00012	.00055
%RSD	9.5203	1.8564	36.262	6.3885	.93344	.13436	13.483
#1	.00180	.07435	-.00018	.00258	26.815	.09019	.00370
#2	.00206	.07633	-.00030	.00283	27.171	.09036	.00448
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.87796	9.0229	1.3681	.19290	.04231	.11327	.00088
SDev	.01439	.1051	.0049	.00222	.00134	.00251	.00359
%RSD	1.6388	1.1652	.36111	1.1535	3.1623	2.2166	408.35
#1	.86778	8.9486	1.3646	.19133	.04136	.11149	.00342
#2	.88813	9.0973	1.3716	.19447	.04325	.11504	-.00166
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01623	.10392	-.00082	.01518	.10600	-.00461	-.03596
SDev	.00085	.00106	.00152	.00028	.00150	.00402	.04707
%RSD	5.2133	1.0196	184.22	1.8719	1.4164	87.201	130.88
#1	.01564	.10317	.00025	.01498	.10494	-.00745	-.00268
#2	.01683	.10467	-.00190	.01538	.10706	-.00177	-.06925
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.01207	-.00136	-.00164	.15213	6.0212	1.4150
SDev	.00083	.00007	.00537	.00221	.0272	.7543
%RSD	6.8580	5.1867	328.17	1.4531	.45191	53.309
#1	.01148	-.00141	-.00544	.15057	6.0020	1.9484
#2	.01265	-.00131	.00216	.15370	6.0405	.88160
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G71QJ 20 Operator: STL
Run Time: 05/05/05 15:26:48
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00086	-.00622	.01955	.00833	-.00133	-.00201	8.0771
SDev	.00377	.00158	.00181	.00132	.00269	.00351	.0699
%RSD	439.53	25.359	9.2822	15.886	202.07	174.95	.86522
#1	-.00181	-.00510	.02083	.00739	.00057	-.00449	8.0277
#2	.00352	-.00734	.01826	.00926	-.00323	.00048	8.1265
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00271	.05887	-.00040	.00453	26.389	.08426	.00360
SDev	.00013	.00076	.00007	.00007	.170	.00034	.00084
%RSD	4.9503	1.2880	17.406	1.5508	.64483	.40182	23.420
#1	.00261	.05834	-.00035	.00448	26.269	.08402	.00300
#2	.00280	.05941	-.00045	.00458	26.509	.08450	.00419
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

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Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.95375	6.4720	1.4978	.18326	.04112	.13501	.00088
SDev	.01084	.0592	.0018	.00128	.00078	.00177	.00105
%RSD	1.1362	.91410	.12216	.69673	1.8917	1.3125	119.97
#1	.94609	6.4302	1.4965	.18236	.04057	.13375	.00013
#2	.96141	6.5139	1.4991	.18417	.04167	.13626	.00162
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01184	.11965	-.00031	.01624	.11080	.00019	.00194
SDev	.00082	.00102	.00000	.00025	.00310	.00393	.00253
%RSD	6.9104	.84919	.38157	1.5372	2.7932	2059.3	130.76
#1	.01126	.11893	-.00030	.01606	.10861	-.00259	.00373
#2	.01241	.12037	-.00031	.01641	.11298	.00297	.00015
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.01206	-.00178	-.00150	.12201	6.2999	1.9290
SDev	.00028	.00145	.00199	.00153	.0251	.4885
%RSD	2.3073	81.108	132.47	1.2567	.39820	25.326
#1	.01187	-.00280	-.00290	.12092	6.2822	2.2745
#2	.01226	-.00076	-.00009	.12309	6.3177	1.5836
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G71QK 20 Operator: STL
Run Time: 05/05/05 15:31:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00385	-.00833	.01318	.00922	-.00646	-.00027	7.3585
SDev	.00426	.00362	.00831	.00458	.00791	.00213	.0548
%RSD	110.57	43.453	63.028	49.717	122.48	777.21	.74532
#1	.00084	-.00577	.01906	.00598	-.00086	-.00178	7.3973
#2	.00686	-.01089	.00731	.01246	-.01205	.00123	7.3198
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00145	.05887	-.00038	.00303	24.479	.09809	.00381
SDev	.00101	.00025	.00001	.00030	.138	.00041	.00134
%RSD	69.416	.42933	3.5064	9.9178	.56465	.42222	35.104
#1	.00074	.05905	-.00039	.00281	24.577	.09838	.00286
#2	.00217	.05869	-.00037	.00324	24.382	.09779	.00476
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.74201	6.0853	1.3233	.19061	.04004	.11419	.00042
SDev	.00902	.0158	.0002	.00119	.00019	.00116	.00099
%RSD	1.2160	.26000	.01383	.62153	.46622	1.0175	237.22
#1	.74839	6.0965	1.3232	.19145	.03991	.11336	-.00028
#2	.73563	6.0741	1.3234	.18977	.04017	.11501	.00112
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01125	.10574	-.00045	.01472	.10255	.00142	-.01175
SDev	.00171	.00088	.00035	.00000	.00116	.01146	.00543
%RSD	15.183	.83176	78.041	.01879	1.1351	806.37	46.263
#1	.01004	.10636	-.00020	.01471	.10337	-.00668	-.01559
#2	.01246	.10512	-.00070	.01472	.10173	.00952	-.00790
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.01054	-.00233	-.00021	.11268	5.7673	2.6835
SDev	.00029	.00121	.00163	.00032	.0257	.6097
%RSD	2.7549	51.891	790.74	.28481	.44480	22.721
#1	.01034	-.00148	-.00136	.11290	5.7855	2.2524
#2	.01075	-.00319	.00095	.11245	5.7492	3.1146
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G71QL 20 Operator: STL
Run Time: 05/05/05 15:35:31
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

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Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00449	-.00321	.01726	.00675	.00178	-.00207	7.2631
SDev	.00189	.00019	.00160	.00109	.00134	.00236	.0607
%RSD	41.966	5.8243	9.2682	16.137	75.700	114.39	.83622
#1	-.00316	-.00335	.01839	.00753	.00082	-.00374	7.3061
#2	-.00583	-.00308	.01613	.00598	.00273	-.00039	7.2202
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00202	.05973	-.00024	.00405	12.146	.05482	.00332
SDev	.00023	.00046	.00006	.00001	.066	.00032	.00035
%RSD	11.480	.76170	26.051	.23348	.54566	.57734	10.411
#1	.00186	.06005	-.00028	.00404	12.192	.05505	.00308
#2	.00218	.05941	-.00019	.00406	12.099	.05460	.00356
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.59696	6.9708	.97734	.18999	.02691	.09172	-.00060
SDev	.00595	.0437	.00092	.00129	.00028	.00035	.00095
%RSD	.99609	.62714	.09360	.67722	1.0407	.38002	160.22
#1	.60116	7.0017	.97670	.19090	.02671	.09197	.00008
#2	.59275	6.9398	.97799	.18908	.02710	.09148	-.00127
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V 2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01176	.08064	-.00014	.00957	.06499	-.00128	.00730
SDev	.00026	.00032	.00048	.00011	.00011	.00158	.00795
%RSD	2.2229	.40123	350.50	1.1190	.16731	123.74	108.91
#1	.01157	.08087	-.00047	.00965	.06491	-.00240	.00168
#2	.01194	.08041	.00020	.00949	.06507	-.00016	.01292
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.01025	-.00079	-.00407	.09868	3.6991	1.4067
SDev	.00126	.00202	.00120	.00078	.0042	.6019
%RSD	12.286	257.21	29.391	.79491	.11235	42.788

#1	.01114	-.00222	-.00322	.09924	3.7021	.98109
#2	.00936	.00064	-.00491	.09813	3.6962	1.8323
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G71QN 20 Operator: STL
Run Time: 05/05/05 15:39:53
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00280	-.00218	.01983	.00515	.00252	-.00250	7.6919
SDev	.00357	.00244	.00095	.00108	.00191	.00001	.0589
%RSD	127.35	111.76	4.7822	21.067	75.956	.24959	.76522
#1	-.00533	-.00046	.02050	.00438	.00387	-.00250	7.7335
#2	-.00028	-.00391	.01916	.00591	.00117	-.00249	7.6503
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00274	.05468	-.00025	.00194	15.159	.06833	.00360
SDev	.00085	.00042	.00005	.00007	.062	.00025	.00074
%RSD	31.271	.77043	19.205	3.6289	.40765	.36672	20.629
#1	.00213	.05498	-.00029	.00189	15.203	.06851	.00307
#2	.00334	.05438	-.00022	.00199	15.116	.06815	.00412
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.71024	7.2015	.98109	.20178	.03225	.11118	.00071
SDev	.00815	.0277	.00402	.00112	.00019	.00026	.00078
%RSD	1.1477	.38424	.41030	.55391	.57880	.23550	109.40
#1	.71600	7.2211	.97825	.20257	.03212	.11099	.00126
#2	.70448	7.1819	.98394	.20098	.03238	.11136	.00016
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01210	.08461	-.00005	.00971	.08262	-.00192	.00845
SDev	.00044	.00042	.00011	.00003	.00038	.00623	.00775
%RSD	3.6752	.49481	221.17	.35930	.46497	324.36	91.705

#1	.01179	.08490	.00003	.00974	.08235	-.00633	.00297
#2	.01242	.08431	-.00013	.00969	.08289	.00248	.01392
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.01004	-.00083	-.00260	.10398	4.6768	1.9926
SDev	.00041	.00063	.00157	.00043	.0024	.9615
%RSD	4.0581	76.593	60.464	.41150	.05084	48.252
#1	.00975	-.00038	-.00371	.10428	4.6785	1.3127
#2	.01033	-.00127	-.00149	.10368	4.6752	2.6724
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G71QQ 20 Operator: STL
Run Time: 05/05/05 15:44:15
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00322	-.00479	.01436	.00408	-.00024	-.00216	5.1225
SDev	.00030	.00018	.00184	.00154	.00077	.00292	.0067
%RSD	9.4468	3.6667	12.806	37.817	318.97	135.51	.13065
#1	-.00300	-.00491	.01566	.00299	-.00078	-.00009	5.1272
#2	-.00343	-.00466	.01306	.00518	.00030	-.00422	5.1177
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00064	.03976	-.00042	.00365	12.332	.05268	.00171
SDev	.00107	.00012	.00004	.00003	.007	.00010	.00035
%RSD	166.55	.29665	8.4430	.68151	.05326	.19086	20.380
#1	-.00011	.03984	-.00044	.00367	12.327	.05275	.00147
#2	.00140	.03968	-.00039	.00363	12.336	.05261	.00196
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.50959	4.6092	.89208	.16006	.02402	.08846	.00129
SDev	.00232	.0014	.00549	.00006	.00044	.00035	.00070
%RSD	.45499	.03140	.61532	.03878	1.8131	.39370	54.436

#1	.51123	4.6102	.88820	.16001	.02433	.08821	.00079
#2	.50795	4.6082	.89596	.16010	.02372	.08871	.00179
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00704	.07602	-.00095	.00952	.08047	-.00429	-.01142
SDev	.00023	.00021	.00005	.00004	.00056	.00089	.01337
%RSD	3.2110	.27551	4.7830	.37844	.68968	20.794	117.07
#1	.00720	.07617	-.00092	.00949	.08008	-.00492	-.00197
#2	.00688	.07587	-.00098	.00954	.08086	-.00365	-.02087
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00750	-.00152	-.00374	.07453	4.4282	1.0916	
SDev	.00042	.00169	.00014	.00021	.0088	.5159	
%RSD	5.5689	111.53	3.8569	.28705	.19961	47.260	
#1	.00721	-.00032	-.00364	.07438	4.4219	.72684	
#2	.00780	-.00272	-.00384	.07468	4.4344	1.4564	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G71Q0 20 Operator: STL
Run Time: 05/05/05 15:48:36
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00396	-.00575	.00934	.00852	-.00614	.00066	6.4020
SDev	.00347	.00373	.00470	.00263	.00295	.00072	.0162
%RSD	87.603	64.803	50.284	30.885	48.055	108.58	.25273
#1	.00641	-.00839	.00602	.01039	-.00822	.00117	6.4135
#2	.00151	-.00312	.01267	.00666	-.00405	.00015	6.3906
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00130	.04780	-.00036	.00094	10.380	.04211	.00273
SDev	.00220	.00014	.00001	.00007	.016	.00050	.00020
%RSD	169.02	.28200	3.6892	7.9634	.14955	1.1967	7.4193

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#1	-.00025	.04790	-.00037	.00100	10.391	.04176	.00287
#2	.00286	.04771	-.00035	.00089	10.369	.04247	.00259
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.41298	6.1301	.76697	.21078	.02050	.06418	-.00140
SDev	.00049	.0028	.00018	.00039	.00000	.00021	.00226
%RSD	.11858	.04559	.02385	.18376	.00000	.33309	161.75
#1	.41332	6.1281	.76684	.21105	.02050	.06433	-.00300
#2	.41263	6.1321	.76710	.21050	.02050	.06403	.00020
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01078	.05820	-.00132	.00953	.04737	-.00001	-.02907
SDev	.00023	.00015	.00064	.00000	.00115	.00003	.03060
%RSD	2.1337	.26091	48.722	.00326	2.4365	409.67	105.26
#1	.01061	.05831	-.00178	.00953	.04656	-.00003	-.05071
#2	.01094	.05810	-.00087	.00953	.04819	.00001	-.00743
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00880	-.00160	.00073	.08567	2.7839	.61906	
SDev	.00019	.00050	.00107	.00007	.0004	.01172	
%RSD	2.1761	31.313	147.77	.08323	.01384	1.8937	
#1	.00893	-.00196	.00148	.08562	2.7836	.61077	
#2	.00866	-.00125	-.00003	.08572	2.7842	.62734	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G71Q1 20 Operator: STL
Run Time: 05/05/05 15:52:58
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00108	-.00333	.01332	.00558	-.00010	-.00182	6.6242
SDev	.00094	.00190	.00032	.00015	.00419	.00133	.0095
%RSD	86.791	56.890	2.3636	2.6440	4281.2	73.323	.14307

#1	-.00174	-.00467	.01354	.00568	-.00306	-.00088	6.6309
#2	-.00042	-.00199	.01310	.00548	.00286	-.00276	6.6175
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00140	.04249	-.00029	.00119	10.713	.04804	.00245
SDev	.00068	.00017	.00003	.00017	.010	.00032	.00020
%RSD	48.664	.39658	10.645	14.646	.08917	.66036	8.0591
#1	.00188	.04261	-.00031	.00131	10.706	.04826	.00259
#2	.00092	.04237	-.00027	.00107	10.719	.04781	.00231
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.48036	6.1163	.73799	.16581	.02308	.07470	.00025
SDev	.00179	.0022	.00348	.00004	.00047	.00046	.00058
%RSD	.37365	.03587	.47108	.02443	2.0222	.61462	232.79
#1	.48163	6.1179	.73553	.16584	.02341	.07503	.00066
#2	.47909	6.1148	.74045	.16578	.02275	.07438	-.00016
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01084	.06149	-.00028	.00853	.05671	-.00052	.00104
SDev	.00030	.00003	.00011	.00011	.00067	.00350	.00808
%RSD	2.7519	.05450	41.161	1.2740	1.1736	667.04	777.67
#1	.01105	.06146	-.00036	.00860	.05624	.00195	.00675
#2	.01062	.06151	-.00020	.00845	.05718	-.00300	-.00467
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00816	-.00125	-.00183	.08467	3.2158	1.9124
SDev	.00020	.00051	.00125	.00021	.0077	.2931
%RSD	2.4916	40.517	68.645	.25269	.23874	15.328
#1	.00830	-.00160	-.00272	.08482	3.2104	1.7052
#2	.00801	-.00089	-.00094	.08451	3.2212	2.1197
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00

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Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G71Q5 20 Operator: STL
Run Time: 05/05/05 15:57:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00438	-.00303	.01622	.00601	.00245	-.00220	6.6601
SDev	.00431	.00004	.00211	.00344	.00341	.00410	.0243
%RSD	98.520	1.1712	13.003	57.200	139.11	186.00	.36441
#1	-.00133	-.00301	.01473	.00844	.00004	.00069	6.6429
#2	-.00743	-.00306	.01771	.00358	.00485	-.00510	6.6772
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00049	.05365	-.00038	.00430	13.225	.05259	.00238
SDev	.00074	.00002	.00009	.00002	.088	.00107	.00010
%RSD	151.20	.03141	24.145	.51210	.66592	2.0422	4.2333
#1	-.00003	.05364	-.00045	.00428	13.163	.05183	.00245
#2	.00101	.05367	-.00032	.00431	13.287	.05335	.00231
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.58499	6.3906	.98692	.20621	.02592	.09262	-.00271
SDev	.00060	.0394	.01446	.00107	.00050	.00030	.00065
%RSD	.10265	.61641	1.4646	.51939	1.9208	.32187	23.971
#1	.58457	6.3627	.97670	.20546	.02556	.09241	-.00225
#2	.58542	6.4184	.99714	.20697	.02627	.09283	-.00317
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00931	.08074	-.00132	.01077	.07137	-.00651	-.02047
SDev	.00045	.00041	.00040	.00004	.00160	.00132	.00929
%RSD	4.7891	.50952	30.199	.35175	2.2438	20.216	45.356
#1	.00962	.08045	-.00160	.01080	.07024	-.00558	-.02704
#2	.00899	.08103	-.00104	.01075	.07250	-.00744	-.01391
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000

Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00941	-.00066	-.00393	.08978	3.9590	.58589	
SDev	.00159	.00160	.00289	.00039	.0409	.84031	
%RSD	16.908	244.34	73.508	.43686	1.0320	143.42	
#1	.01053	.00048	-.00189	.08951	3.9301	L-.00829	
#2	.00828	-.00179	-.00597	.09006	3.9879	1.1801	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/05/05 16:01:43
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	4.0416	4.0638	4.0766	4.0558	4.1212	4.0870	39.403
SDev	.0059	.0355	.0170	.0045	.0333	.0065	.212
%RSD	.14543	.87393	.41691	.11118	.80843	.15908	.53927
#1	4.0458	4.0387	4.0645	4.0590	4.0977	4.0916	39.253
#2	4.0374	4.0889	4.0886	4.0526	4.1448	4.0824	39.554
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.1372	4.3475	4.3194	4.1280	20.407	4.0294	4.0629
SDev	.0306	.0274	.0197	.0203	.092	.0196	.0179
%RSD	.73966	.62983	.45675	.49073	.44911	.48541	.44119
#1	4.1155	4.3282	4.3055	4.1137	20.342	4.0156	4.0502
#2	4.1588	4.3669	4.3334	4.1423	20.472	4.0432	4.0756
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.1034	41.412	20.060	4.1881	4.0781	1.0297	3.9971
SDev	.0301	.208	.074	.0215	.0217	.0066	.0209
%RSD	.73263	.50178	.36849	.51341	.53251	.63750	.52280
#1	4.0821	41.265	20.008	4.1729	4.0628	1.0251	3.9823
#2	4.1246	41.559	20.113	4.2033	4.0935	1.0344	4.0119
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000

Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.1060	4.0637	4.1917	4.2434	4.2392	Q3.3641	4.1305
SDev	.0216	.0253	.0268	.0357	.0186	.0243	.0052
%RSD	.52714	.62236	.64012	.84224	.43923	.72092	.12540
#1	4.0907	4.0458	4.1728	4.2181	4.2261	Q3.3469	4.1269
#2	4.1213	4.0816	4.2107	4.2687	4.2524	Q3.3812	4.1342
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	4.0627	4.0984	4.0490	4.1974	3.7711	40.670
SDev	.0027	.0068	.0079	.0252	.0007	.238
%RSD	.06527	.16490	.19526	.60143	.01793	.58621
#1	4.0608	4.0936	4.0434	4.1795	3.7706	40.838
#2	4.0646	4.1032	4.0546	4.2152	3.7716	40.501
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 05/05/05 16:06:07
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00127	.00293	.00307	-.00035	.00337	-.00223	.02781
SDev	.00030	.00136	.00190	.00098	.00271	.00154	.00298
%RSD	23.894	46.308	61.861	284.97	80.527	69.011	10.701
#1	-.00105	.00388	.00441	-.00104	.00529	-.00332	.02991
#2	-.00148	.00197	.00173	.00035	.00145	-.00114	.02571
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00140	-.00008	.00015	-.00009	.00612	.00045	-.00007
SDev	.00064	.00002	.00001	.00003	.00090	.00048	.00010
%RSD	45.719	20.203	9.0270	33.018	14.630	104.82	138.26
#1	.00185	-.00010	.00014	-.00007	.00676	.00079	-.00000
#2	.00095	-.00007	.00016	-.00011	.00549	.00012	-.00014
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000

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Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00046	.00103	.01164	.00013	-.00064	-.00010	-.00024
SDev	.00026	.00752	.00494	.00008	.00065	.00028	.00082
%RSD	55.331	727.65	42.426	62.279	102.41	288.32	350.11
#1	-.00028	.00635	.01514	.00019	-.00110	.00010	.00035
#2	-.00064	-.00428	.00815	.00008	-.00018	-.00029	-.00082
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000
Elem	V 2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00021	.00179	.00262	-.00010	.00066	-.00024	.01107
SDev	.00004	.00012	.00098	.00004	.00077	.00068	.00228
%RSD	17.847	6.6090	37.579	35.331	116.73	288.06	20.574
#1	-.00018	.00187	.00332	-.00013	.00121	.00024	.01268
#2	-.00024	.00171	.00192	-.00008	.00012	-.00072	.00946
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00079	-.00036	.00013	.00045	.03190	Q.96175	
SDev	.00002	.00012	.00065	.00036	.02808	.70742	
%RSD	3.0205	33.478	507.62	78.567	88.019	73.555	
#1	.00078	-.00045	.00059	.00071	.05175	Q1.4620	
#2	.00081	-.00028	-.00033	.00020	.01205	Q.46153	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.00300	.00400	.06000	.05000	.50000	.25000	

Method: 6010C -- Sample Name: G9HX1B ----- Operator: STL ----

Run Time: 05/05/05 16:10:29

Comment:

Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00119	.00017	-.00070	-.00040	.00521	-.00300	L.03236
SDev	.00237	.00091	.00164	.00201	.00353	.00037	.00240
%RSD	199.62	530.30	235.32	498.30	67.767	12.398	7.4266
#1	.00049	.00082	-.00186	.00102	.00271	-.00273	L.03406
#2	-.00286	-.00047	.00046	-.00182	.00771	-.00326	L.03066
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Low
High							.20000

Low							.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L.00060	.01348	-.00058	-.00050	H.30250	.00016	.00003
SDev	.00088	.00005	.00000	.00005	.00090	.00008	.00094
%RSD	146.36	.37513	.00000	9.6577	.29607	53.435	2845.7
#1	L.00122	.01351	-.00058	-.00047	H.30187	.00021	.00070
#2	L-.00002	.01344	-.00058	-.00054	H.30313	.00010	-.00063
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	.00700	.20000	.20000	.00500	.25000	.01000	.05000
Low	.00700	-.20000	-.20000	-.00500	-.25000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00047	.00644	.03429	-.00027	.00002	.00078	.00023
SDev	.00032	.01522	.00366	.00006	.00072	.00102	.00006
%RSD	68.885	236.27	10.673	23.453	3252.7	130.59	26.889
#1	-.00024	.01720	.03687	-.00023	.00053	.00150	.00019
#2	-.00070	-.00432	.03170	-.00032	-.00048	.00006	.00028
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.02500	.05000	.25000	.01500	.04000	.01000	.01000
Low	-.02500	-.05000	-.25000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00037	.00600	-.00008	.00028	-.00082	.00254	.01516
SDev	.00123	.00004	.00016	.00007	.00000	.00537	.01509
%RSD	332.16	.62347	214.83	26.285	.47581	211.95	99.580
#1	.00124	.00597	.00004	.00033	-.00083	.00633	.02583
#2	-.00050	.00603	-.00019	.00022	-.00082	-.00126	.00448
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.04000	.05000	.10000	.50000	.50000
Low	-.05000	-.01000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti9349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	-.00050	-.00026	-.00073	-.00018	.02125	H3.0345	
SDev	.00079	.00093	.00188	.00032	.01586	.4885	
%RSD	158.35	351.53	256.73	181.83	74.625	16.100	
#1	.00006	-.00092	.00060	.00005	.03246	H3.3799	
#2	-.00106	.00039	-.00206	-.00040	.01004	H2.6890	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC High	
High	.00300	.00500	.01000	.05000		.25000	
Low	-.00300	-.00500	-.01000	-.05000		-.25000	

Method: 6010C Sample Name: G9MDJC Operator: STL
Run Time: 05/05/05 16:14:51
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	1.0026	1.0054	1.0016	.99860	1.0432	1.0167	1.0219
SDev	.0025	.0004	.0007	.00085	.0055	.0006	.0007
%RSD	.24838	.04319	.06803	.08554	.52513	.05775	.06992
#1	1.0044	1.0057	1.0021	.99920	1.0471	1.0172	1.0214
#2	1.0008	1.0051	1.0011	.99800	1.0394	1.0163	1.0224
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							1.2000
Low							.80000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.0218	1.1059	1.1062	1.0305	20.463	1.0076	1.0067
SDev	.0028	.0003	.0003	.0006	.003	.0002	.0009
%RSD	.27214	.02285	.02662	.05395	.01605	.01757	.09339
#1	1.0198	1.1061	1.1060	1.0301	20.465	1.0075	1.0074
#2	1.0237	1.1057	1.1064	1.0309	20.460	1.0078	1.0061
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2040	1.2040	1.2000	1.2040	24.000	1.2040	1.2000
Low	.79500	.79500	.80000	.79500	16.000	.79500	.80000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.0090	1.0995	19.722	1.0447	1.0091	.24893	.99377
SDev	.0014	.0149	.007	.0003	.0005	.00107	.00561
%RSD	.14368	1.3566	.03711	.02735	.04625	.42988	.56445
#1	1.0100	1.1101	19.717	1.0449	1.0094	.24968	.98981
#2	1.0079	1.0890	19.728	1.0445	1.0087	.24817	.99774
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2000	1.2000	24.000	1.2040	1.2000	.33700	1.2040
Low	.80000	.80000	16.000	.79500	.80000	.12300	.79500

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	1.0221	1.0100	1.0548	1.0769	L-.00136	L-.00304	L-.02705
SDev	.0014	.0007	.0005	.0001	.00166	.00386	.00824
%RSD	.13484	.07287	.04813	.01007	121.55	126.96	30.465
#1	1.0231	1.0095	1.0544	1.0770	L-.00019	L-.00031	L-.02122
#2	1.0211	1.0105	1.0551	1.0768	L-.00253	L-.00578	L-.03287
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Low	LC Low
High	1.2000	1.2000	1.2000	1.2000	2.4000	2.4000	2.4000
Low	.80000	.80000	.80000	.80000	1.6000	1.6000	1.6000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.99959	1.0256	1.0035	L.00050	L.03534	18.177
SDev	.00080	.0022	.0018	.00021	.00182	.125
%RSD	.07970	.21607	.17992	42.426	5.1484	.68809
#1	1.0002	1.0271	1.0048	L.00066	L.03405	18.088
#2	.99903	1.0240	1.0022	L.00035	L.03662	18.265
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Low	NOCHECK
High	1.2040	1.2040	1.2040	2.4000	2.4000	
Low	.79500	.79500	.79500	1.6000	1.6000	

Method: 6010C Sample Name: G8170 Operator: STL
Run Time: 05/05/05 16:19:13
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00064	.00066	-.00051	.00012	.00138	-.00220	.02814
SDev	.00631	.00420	.00554	.00279	.00336	.00105	.00552
%RSD	985.10	638.58	1081.9	2414.0	243.10	47.787	19.628
#1	-.00382	.00363	.00341	-.00186	.00376	-.00294	.03205
#2	.00510	-.00231	-.00443	.00209	-.00099	-.00145	.02423
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00035	.06260	-.00058	-.00057	.59508	-.00018	-.00066
SDev	.00058	.00081	.00007	.00002	.00328	.00098	.00035
%RSD	166.14	1.2920	12.856	3.2698	.55184	543.62	53.039
#1	.00076	.06203	-.00053	-.00056	.59276	.00051	-.00091
#2	-.00006	.06317	-.00063	-.00058	.59740	-.00087	-.00041
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00105	.00200	.04606	-.00040	-.00114	-.00036	-.00070
SDev	.00119	.00325	.00421	.00007	.00025	.00041	.00167
%RSD	113.27	162.13	9.1368	16.794	21.757	114.59	238.31
#1	-.00021	.00430	.04904	-.00036	-.00132	-.00065	.00048
#2	-.00189	-.00029	.04308	-.00045	-.00097	-.00007	-.00188
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00076	.01381	-.00001	.00052	-.00172	-.00364	-.01255
SDev	.00008	.00003	.00068	.00007	.00182	.00118	.03535
%RSD	10.685	.21927	11865.	13.762	105.89	32.356	281.64
#1	-.00071	.01383	.00048	.00047	-.00043	-.00448	.01244
#2	-.00082	.01379	-.00049	.00058	-.00300	-.00281	-.03755

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	-.00009	-.00101	.00065	-.00048	-.00586	2.2745
SDev	.00002	.00042	.00281	.00011	.03118	.6566
%RSD	16.551	41.664	434.94	22.330	532.07	28.869
#1	-.00010	-.00071	-.00134	-.00055	.01619	2.7388
#2	-.00008	-.00130	.00263	-.00040	-.02791	1.8102

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8170X Operator: STL
Run Time: 05/05/05 16:23:35
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00262	-.00225	-.00259	.00199	-.00297	-.00038	.02677
SDev	.01609	.00898	.01249	.00757	.01358	.00622	.00247
%RSD	614.96	398.74	482.88	380.12	457.54	1656.5	9.2107
#1	-.00876	.00410	.00624	-.00336	.00663	-.00477	.02851
#2	.01400	-.00860	-.01142	.00735	-.01257	.00402	.02502
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00096	.06514	-.00065	-.00069	.61809	-.00109	-.00077
SDev	.00117	.00049	.00005	.00006	.00179	.00159	.00070
%RSD	122.38	.75019	8.1589	8.0014	.28980	145.93	92.040
#1	-.00013	.06480	-.00061	-.00073	.61682	.00003	-.00126
#2	-.00179	.06549	-.00068	-.00065	.61936	-.00221	-.00027

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

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Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00180	-.00874	.04528	-.00049	-.00081	-.00034	-.00090
SDev	.00191	.00607	.00275	.00004	.00053	.00088	.00229
%RSD	106.20	69.382	6.0610	8.6876	64.977	261.81	253.91
#1	-.00045	-.01303	.04722	-.00046	-.00119	-.00096	.00072
#2	-.00315	-.00445	.04334	-.00053	-.00044	.00029	-.00252
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00098	.01406	-.00141	.00055	-.00159	-.00416	-.03778
SDev	.00058	.00009	.00094	.00004	.00264	.00363	.07142
%RSD	59.347	.60309	66.584	6.5663	165.60	87.082	189.02
#1	-.00139	.01400	-.00075	.00052	.00027	-.00673	.01272
#2	-.00057	.01412	-.00207	.00058	-.00346	-.00160	-.08829
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00047	-.00124	.00100	-.00053	-.01997	1.7743
SDev	.00089	.00038	.00774	.00018	.01724	.4416
%RSD	190.78	30.272	777.86	33.672	86.331	24.892
#1	-.00016	-.00097	-.00448	-.00066	-.00778	2.0866
#2	.00110	-.00150	.00647	-.00040	-.03216	1.4620
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8170S Operator: STL
Run Time: 05/05/05 16:27:58
Comment:
Mode: CONC - Corr. Factor= 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.48731	.48990	.49692	.49742	2.0601	2.0114	2.0238
SDev	.00300	.00294	.00085	.00017	.0064	.0008	.0028
%RSD	.61553	.60104	.17158	.03377	.31192	.03970	.13776
#1	.48943	.49198	.49631	.49754	2.0647	2.0109	2.0258
#2	.48519	.48782	.49752	.49730	2.0556	2.0120	2.0218
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	2.0408	2.2491	.05530	.05047	50.792	.20126	.49462
SDev	.0073	.0130	.00013	.00012	.082	.00024	.00114
%RSD	.35893	.57990	.23044	.24558	.16046	.11714	.23062
#1	2.0460	2.2583	.05539	.05055	50.849	.20143	.49543
#2	2.0356	2.2399	.05521	.05038	50.734	.20110	.49382

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.25695	1.0417	49.464	.51663	.50252	.04900	1.9723
SDev	.00091	.0095	.055	.00178	.00100	.00087	.0045
%RSD	.35285	.91045	.11171	.34384	.19812	1.7717	.23010
#1	.25760	1.0484	49.503	.51789	.50322	.04961	1.9755
#2	.25631	1.0350	49.425	.51538	.50181	.04839	1.9691

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.51025	.51133	1.0439	1.0842	-.00250	-.00405	-.02749
SDev	.00268	.00168	.0040	.0050	.00050	.00133	.01144
%RSD	.52546	.32759	.38765	.45985	19.861	32.800	41.638
#1	.51214	.51252	1.0468	1.0877	-.00285	-.00311	-.03558
#2	.50835	.51015	1.0411	1.0807	-.00214	-.00499	-.01939

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.49725	2.0277	.48817	.00083	.02124	44.039
SDev	.00017	.0016	.00298	.00011	.01850	.156
%RSD	.03457	.07927	.61067	12.856	87.092	.35499
#1	.49713	2.0288	.49028	.00091	.00816	43.928
#2	.49737	2.0265	.48606	.00076	.03431	44.149

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8170D Operator: STL
Run Time: 05/05/05 16:32:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

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Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.48869	.49249	.50247	.50031	2.0699	2.0258	2.0349
SDev	.00487	.00149	.00873	.00008	.0041	.0216	.0033
%RSD	.99689	.30173	1.7384	.01546	.19891	1.0655	.16458
#1	.48525	.49144	.50864	.50036	2.0670	2.0411	2.0373
#2	.49214	.49355	.49629	.50025	2.0728	2.0106	2.0326
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	2.0498	2.2423	.05542	.05083	50.970	.20185	.49637
SDev	.0031	.0047	.00009	.00006	.002	.00175	.00025
%RSD	.14982	.20816	.16650	.12115	.00410	.86712	.05120
#1	2.0520	2.2456	.05548	.05078	50.969	.20309	.49619
#2	2.0477	2.2390	.05535	.05087	50.972	.20061	.49655
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.25703	1.0540	49.641	.51755	.50342	.04960	1.9810
SDev	.00197	.0084	.005	.00059	.00028	.00098	.0027
%RSD	.76613	.79830	.01106	.11419	.05562	1.9817	.13391
#1	.25842	1.0480	49.638	.51797	.50322	.04891	1.9828
#2	.25564	1.0599	49.645	.51713	.50362	.05030	1.9791
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.51094	.51366	1.0443	1.0857	-.00082	-.00252	-.00698
SDev	.00009	.00000	.0034	.0015	.00187	.00504	.04118
%RSD	.01665	.00076	.32203	.13980	228.68	199.76	589.65
#1	.51100	.51366	1.0467	1.0868	.00051	-.00609	.02213
#2	.51088	.51366	1.0419	1.0847	-.00214	.00104	-.03610
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.50103	2.0405	.48996	.00098	.04341	44.672	
SDev	.00296	.0130	.00374	.00025	.00745	.168	
%RSD	.59084	.63838	.76420	25.383	17.158	.37621	

#1	.50312	2.0497	.48731	.00081	.03814	44.553
#2	.49893	2.0313	.49261	.00116	.04867	44.791
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8170V 5X Operator: STL

Run Time: 05/05/05 16:36:42

Comment:

Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00471	-.00266	-.00297	.00187	-.00147	.00097	.02037
SDev	.00152	.00127	.00106	.00101	.00122	.00027	.00261
%RSD	32.245	47.561	35.674	54.233	82.687	27.476	12.787
#1	.00579	-.00356	-.00372	.00258	-.00234	.00078	.02222
#2	.00364	-.00177	-.00222	.00115	-.00061	.00116	.01853
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00012	.01214	-.00048	-.00041	.15178	-.00047	-.00003
SDev	.00043	.00005	.00003	.00009	.00209	.00041	.00044
%RSD	352.62	.41635	6.4702	21.314	1.3768	87.173	1328.9
#1	.00043	.01211	-.00045	-.00034	.15030	-.00018	.00028
#2	-.00018	.01218	-.00050	-.00047	.15326	-.00075	-.00035
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00136	.00318	.01139	-.00043	-.00009	.00078	.00056
SDev	.00042	.00956	.00018	.00003	.00075	.00052	.00035
%RSD	30.704	301.02	1.6070	7.2411	848.53	66.247	63.369
#1	-.00107	.00994	.01151	-.00041	.00044	.00115	.00081
#2	-.00166	-.00359	.01126	-.00046	-.00062	.00042	.00031
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00005	.00502	-.00023	-.00028	-.00074	.00046	-.01033
SDev	.00004	.00001	.00027	.00000	.00000	.00251	.01036
%RSD	74.237	.13084	119.06	.01471	.32983	542.57	100.32

#1	.00008	.00502	-.00042	-.00028	-.00074	.00224	-.00300
#2	.00002	.00503	-.00004	-.00028	-.00074	-.00131	-.01765
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00025	.00015	.00226	-.00040	.00797	.79593
SDev	.00032	.00058	.00059	.00021	.01531	.39475
%RSD	126.26	377.52	26.230	53.033	192.08	49.596
#1	.00048	-.00026	.00268	-.00025	.01879	1.0751
#2	.00003	.00057	.00184	-.00055	-.00285	.51680
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G84EP Operator: STL
Run Time: 05/05/05 16:41:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00532	.00333	.00544	-.00122	.00239	-.00348	.02673
SDev	.00467	.00460	.00454	.00198	.00552	.00249	.00620
%RSD	87.772	138.14	83.437	162.53	231.03	71.469	23.201
#1	-.00863	.00658	.00865	-.00262	.00629	-.00524	.03112
#2	-.00202	.00008	.00223	.00018	-.00151	-.00172	.02235
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00043	.04137	-.00056	-.00070	.47476	-.00008	-.00109
SDev	.00000	.00064	.00011	.00011	.00269	.00082	.00025
%RSD	.64527	1.5478	20.427	15.167	.56594	992.02	23.201
#1	-.00043	.04092	-.00048	-.00078	.47286	.00050	-.00127
#2	-.00044	.04182	-.00064	-.00063	.47665	-.00067	-.00091
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00006	-.00512	.04606	-.00038	-.00130	-.00085	.00131
SDev	.00106	.00381	.00677	.00013	.00034	.00043	.00150
%RSD	1889.9	74.344	14.698	33.528	26.367	50.717	114.49

#1	.00069	-.00243	.05085	-.00029	-.00154	-.00116	.00237
#2	-.00081	-.00781	.04127	-.00047	-.00106	-.00055	.00025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00084	.01676	-.00022	.00009	-.00008	-.00542	.01532
SDev	.00025	.00003	.00100	.00004	.00005	.00141	.03218
%RSD	30.367	.17268	463.26	38.918	62.123	25.950	210.13
#1	-.00102	.01674	.00049	.00007	-.00004	-.00641	.03807
#2	-.00066	.01678	-.00092	.00012	-.00011	-.00442	-.00744
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00100	-.00152	-.00244	-.00073	.00366	1.2768	
SDev	.00019	.00018	.00159	.00004	.03887	.8247	
%RSD	18.858	11.803	64.909	4.8766	1062.9	64.588	
#1	.00113	-.00140	-.00356	-.00076	.03115	1.8599	
#2	.00086	-.00165	-.00132	-.00071	-.02383	.69368	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9GFM Operator: STL
Run Time: 05/05/05 16:45:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.12091	.03065	.33901	.22640	.01747	-.00819	305.87
SDev	.00685	.00117	.00071	.00326	.00381	.00209	.81
%RSD	5.6651	3.8082	.20873	1.4391	21.805	25.492	.26644
#1	.11607	.03148	.33951	.22409	.02017	-.00966	305.30
#2	.12576	.02983	.33851	.22870	.01478	-.00671	306.45
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L-.02226	.30097	.00373	L-.00593	66.472	12.615	.12228
SDev	.00135	.00052	.00005	.00012	.334	.052	.00084
%RSD	6.0420	.17357	1.2953	1.9723	.50300	.41536	.69015

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#1	L-.02131	.30060	.00370	L-.00601	66.236	12.578	.12169
#2	L-.02321	.30134	.00377	L-.00585	66.709	12.652	.12288

Errors	LC Low	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.41676	130.72	2.4170	.68967	.81947	-.00656	.00325
SDev	.00056	.52	.0201	.00244	.00289	.00027	.00229
%RSD	.13568	.39661	.83274	.35335	.35310	4.0846	70.667
#1	.41636	130.35	2.4027	.68794	.81742	-.00675	.00487
#2	.41716	131.08	2.4312	.69139	.82151	-.00637	.00162

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.3751	C.00000	12.459	1.5492	.30420	.00066	-.03949
SDev	.0124	.00000	.047	.0035	.00127	.00124	.01721
%RSD	.28280	.00000	.37568	.22352	.41883	188.50	43.580
#1	4.3663	C.00000	12.426	1.5467	.30330	-.00022	-.02732
#2	4.3838	C.00000	12.493	1.5516	.30510	.00153	-.05166

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.26390	.00036	.09086	1.1733	L-.10307	H7487.1
SDev	.00194	.00012	.00418	.0042	.02823	10.4
%RSD	.73420	34.282	4.6008	.35860	27.390	.13948
#1	.26253	.00027	.08790	1.1703	L-.12304	H7479.7
#2	.26527	.00045	.09381	1.1763	-.08311	H7494.5

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9GFN Operator: STL
Run Time: 05/05/05 16:49:48
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.01419	-.00143	.00724	.00537	.00088	-.00067	14.787
SDev	.00710	.00491	.00690	.00309	.00566	.00148	.174
%RSD	50.048	342.56	95.258	57.429	646.24	219.03	1.1742

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#1	.00917	.00204	.01212	.00319	.00488	-.00172	14.910
#2	.01921	-.00491	.00236	.00755	-.00313	.00037	14.665
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00238	.14203	-.00053	-.00092	15.725	.98119	.00458
SDev	.00149	.00192	.00006	.00046	.103	.00836	.00193
%RSD	62.462	1.3525	11.511	50.052	.65686	.85208	42.134
#1	-.00343	.14339	-.00058	-.00124	15.798	.98710	.00321
#2	-.00133	.14067	-.00049	-.00059	15.652	.97527	.00594
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.05583	9.8187	.29990	.03939	.03980	.00058	.00163
SDev	.00039	.0581	.00860	.00021	.00184	.00354	.00309
%RSD	.69188	.59199	2.8675	.52727	4.6124	605.47	189.90
#1	.05610	9.8598	.29382	.03954	.03850	-.00192	-.00056
#2	.05555	9.7776	.30599	.03925	.04110	.00309	.00381
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.40228	.03614	1.3756	.37127	.00696	.00340	.00030
SDev	.00247	.00023	.0146	.00556	.00115	.01337	.02094
%RSD	.61282	.65092	1.0632	1.4985	16.590	393.38	6983.8
#1	.40402	.03631	1.3859	.37520	.00614	-.00605	-.01451
#2	.40054	.03597	1.3652	.36734	.00777	.01285	.01511
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00599	-.00016	.00899	.06369	.03053	H607.52
SDev	.00024	.00090	.00310	.00007	.05171	5.28
%RSD	4.0067	569.96	34.504	.11197	169.37	.86916
#1	.00616	.00048	.00679	.06364	-.00603	H611.25
#2	.00582	-.00080	.01118	.06374	.06709	H603.78
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00

Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/05/05 16:54:11
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	4.0146	4.0243	4.0165	4.0068	4.0644	4.0554	39.114
SDev	.0105	.0047	.0042	.0104	.0098	.0077	.047
%RSD	.26213	.11631	.10566	.26032	.24036	.19081	.11926
#1	4.0071	4.0276	4.0195	3.9994	4.0713	4.0499	39.081
#2	4.0220	4.0210	4.0135	4.0142	4.0575	4.0608	39.147
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.0997	4.3111	4.2586	4.0734	20.199	3.9909	4.0112
SDev	.0063	.0023	.0076	.0105	.050	.0088	.0085
%RSD	.15330	.05277	.17830	.25774	.24535	.21978	.21114
#1	4.0952	4.3095	4.2532	4.0660	20.164	3.9847	4.0052
#2	4.1041	4.3128	4.2639	4.0808	20.234	3.9971	4.0172
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.0779	40.960	19.821	4.1408	4.0292	1.0225	3.9651
SDev	.0027	.082	.051	.0074	.0047	.0012	.0082
%RSD	.06538	.19917	.25663	.17985	.11737	.11679	.20657
#1	4.0760	40.902	19.785	4.1356	4.0258	1.0217	3.9593
#2	4.0798	41.017	19.857	4.1461	4.0325	1.0233	3.9709
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.0590	4.0616	4.1546	4.2562	4.1950	Q3.3457	4.1047
SDev	.0053	.0092	.0111	.0106	.0116	.0019	.0052
%RSD	.13036	.22665	.26791	.24876	.27670	.05812	.12632
#1	4.0552	4.0551	4.1468	4.2487	4.1867	Q3.3443	4.1083
#2	4.0627	4.0681	4.1625	4.2636	4.2032	Q3.3470	4.1010
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000

Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	4.0100	4.0584	4.0178	4.1591	3.6520	38.876	
SDev	.0055	.0019	.0055	.0065	.0065	.102	
%RSD	.13826	.04702	.13591	.15689	.17871	.26140	
#1	4.0061	4.0570	4.0140	4.1545	3.6474	38.804	
#2	4.0140	4.0597	4.0217	4.1638	3.6566	38.948	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000	
Range	10.000	10.000	10.000	10.000	10.000	10.000	

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 05/05/05 16:58:35
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00466	.00211	-.00050	.00099	-.00107	.00071	.03847
SDev	.01512	.00685	.01272	.00618	.01075	.00684	.00140
%RSD	324.31	324.59	2558.0	624.35	1005.3	968.66	3.6427
#1	-.00603	.00695	.00850	-.00338	.00653	-.00413	.03946
#2	.01535	-.00273	-.00949	.00536	-.00867	.00555	.03748
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00172	.00045	.00067	.00046	.00844	.00076	.00038
SDev	.00129	.00030	.00003	.00028	.00060	.00105	.00134
%RSD	74.819	66.989	5.2378	62.367	7.0710	138.73	349.12
#1	.00264	.00024	.00070	.00026	.00802	.00150	-.00056
#2	.00081	.00067	.00065	.00066	.00887	.00001	.00133
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00035	.01675	.01488	.00057	.00004	.00076	.00040
SDev	.00146	.01967	.00220	.00001	.00168	.00182	.00249
%RSD	422.80	117.42	14.757	1.6256	3818.4	238.23	620.79
#1	.00069	.00284	.01333	.00057	-.00114	-.00052	.00216
#2	-.00138	.03066	.01643	.00056	.00123	.00205	-.00136
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000

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Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00092	.00234	.00390	.00038	.00035	.00348	.00644
SDev	.00185	.00004	.00304	.00015	.00110	.00790	.03451
%RSD	201.04	1.8564	78.130	37.726	314.65	227.06	535.88
#1	-.00039	.00237	.00605	.00028	.00113	-.00211	.03084
#2	.00223	.00231	.00174	.00049	-.00043	.00906	-.01796
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00049	.00012	.00381	.00111	.04368	Q.93135
SDev	.00011	.00099	.00781	.00021	.00666	.21887
%RSD	22.808	855.49	204.74	19.285	15.256	23.501
#1	.00057	-.00058	-.00171	.00096	.03897	Q.77658
#2	.00042	.00081	.00933	.00126	.04839	Q1.0861
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00300	.00400	.06000	.05000	.50000	.25000

Method: 6010C Sample Name: G9GFP Operator: STL
Run Time: 05/05/05 17:02:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.01044	-.00561	.07865	.07840	.00415	-.00351	7.4046
SDev	.01069	.00481	.01138	.00761	.00968	.00547	.0771
%RSD	102.34	85.737	14.475	9.7039	233.15	155.83	1.0408
#1	.00289	-.00221	.08670	.07302	.01100	-.00738	7.4591
#2	.01800	-.00902	.07060	.08378	-.00269	.00036	7.3501
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00095	.12773	-.00042	.00914	6.8370	.48033	.03825
SDev	.00189	.00142	.00007	.00046	.0263	.00389	.00198
%RSD	199.13	1.1082	16.638	4.9708	.38425	.81028	5.1856
#1	-.00039	.12873	-.00047	.00882	6.8556	.48308	.03684
#2	.00229	.12673	-.00037	.00947	6.8184	.47757	.03965
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000

Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.51145	5.4376	.29706	.05881	.28426	.00003	.00389
SDev	.00829	.0014	.01263	.00011	.00034	.00317	.00072
%RSD	1.6217	.02581	4.2500	.18488	.12040	9476.3	18.502
#1	.51731	5.4367	.28813	.05889	.28402	-.00221	.00439
#2	.50558	5.4386	.30599	.05873	.28450	.00227	.00338
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.32533	5.0808	2.0703	.09160	.00637	.00351	.00057
SDev	.00057	.0337	.0172	.00112	.00033	.01523	.00655
%RSD	.17523	.66234	.83245	1.2224	5.1864	433.84	1158.9
#1	.32574	5.1046	2.0825	.09239	.00614	-.00726	.00520
#2	.32493	5.0570	2.0581	.09081	.00660	.01428	-.00407
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.07849	-.00096	.00510	.01667	.02166	H1191.1	
SDev	.00128	.00043	.00553	.00075	.06186	10.0	
%RSD	1.6355	44.484	108.43	4.4930	285.58	.83937	
#1	.07758	-.00126	.00119	.01614	-.02208	H1198.2	
#2	.07939	-.00066	.00900	.01720	.06541	H1184.0	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9L66B Operator: STL

Run Time: 05/05/05 17:07:19

Comment:

Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00120	-.00017	.00055	-.00093	.00489	-.00508	L.03071
SDev	.00115	.00181	.00098	.00049	.00438	.00192	.00415
%RSD	95.884	1095.1	178.50	52.787	89.583	37.764	13.505
#1	-.00039	-.00145	-.00014	-.00058	.00179	-.00644	L.02778
#2	-.00201	.00112	.00124	-.00127	.00798	-.00372	L.03364
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Low
High							.20000

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Low							.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L-.00022	-.00035	-.00050	-.00057	.03525	-.00042	-.00063
SDev	.00032	.00002	.00007	.00009	.00090	.00007	.00010
%RSD	147.20	4.8766	13.176	16.414	2.5405	16.875	15.530
#1	L-.00043	-.00033	-.00055	-.00050	.03462	-.00037	-.00056
#2	L.00001	-.00036	-.00045	-.00063	.03589	-.00047	-.00070
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00700	.20000	.20000	.00500	.25000	.01000	.05000
Low	.00700	-.20000	-.20000	-.00500	-.25000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00157	-.00808	.00181	-.00032	-.00022	-.00044	.00053
SDev	.00038	.00383	.00567	.00015	.00031	.00009	.00111
%RSD	24.394	47.381	313.14	48.493	141.42	20.029	208.41
#1	-.00130	-.00537	-.00220	-.00043	.00000	-.00038	.00132
#2	-.00184	-.01078	.00582	-.00021	-.00044	-.00050	-.00025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.02500	.05000	.25000	.01500	.04000	.01000	.01000
Low	-.02500	-.05000	-.25000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00084	.00538	.00078	-.00056	-.00059	-.00409	-.00023
SDev	.00011	.00009	.00059	.00004	.00011	.00000	.00703
%RSD	13.148	1.6955	76.187	6.4170	19.108	.01625	3070.5
#1	-.00092	.00532	.00120	-.00059	-.00066	-.00409	.00474
#2	-.00076	.00544	.00036	-.00054	-.00051	-.00409	-.00520
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.04000	.05000	.10000	.50000	.50000
Low	-.05000	-.01000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	-.00044	-.00176	-.00085	-.00050	.01587	L-.30124
SDev	.00000	.00274	.00016	.00007	.03161	.73478
%RSD	.14588	155.29	18.944	14.142	199.16	243.92
#1	-.00044	-.00370	-.00074	-.00045	-.00648	L-.82081
#2	-.00043	.00017	-.00097	-.00055	.03822	.21832
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Low
High	.00300	.00500	.01000	.05000		.25000
Low	-.00300	-.00500	-.01000	-.05000		-.25000

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Method: 6010C Sample Name: G9L66C Operator: STL
Run Time: 05/05/05 17:11:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.99309	.99791	.99321	.98907	1.0341	1.0047	1.0053
SDev	.00068	.00257	.00303	.00051	.0037	.0005	.0012
%RSD	.06873	.25727	.30522	.05195	.35337	.04587	.12407
#1	.99357	.99972	.99535	.98870	1.0315	1.0051	1.0062
#2	.99260	.99609	.99107	.98943	1.0367	1.0044	1.0045
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							1.2000
Low							.80000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.0127	1.0753	1.0890	1.0212	20.068	.99598	.99394
SDev	.0021	.0033	.0013	.0010	.013	.00185	.00010
%RSD	.20780	.30558	.12024	.09581	.06694	.18565	.01011
#1	1.0142	1.0776	1.0899	1.0219	20.077	.99728	.99387
#2	1.0112	1.0729	1.0881	1.0205	20.058	.99467	.99401
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2040	1.2040	1.2000	1.2040	24.000	1.2040	1.2000
Low	.79500	.79500	.80000	.79500	16.000	.79500	.80000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.99229	1.0876	19.511	1.0324	.99980	.24586	.98817
SDev	.00361	.0050	.004	.0016	.00193	.00032	.00118
%RSD	.36383	.45616	.01970	.15213	.19294	.12985	.11928
#1	.99485	1.0911	19.508	1.0335	1.0012	.24609	.98900
#2	.98974	1.0841	19.513	1.0313	.99844	.24564	.98733
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2000	1.2000	24.000	1.2040	1.2000	.33700	1.2040
Low	.80000	.80000	16.000	.79500	.80000	.12300	.79500

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	1.0084	1.0048	1.0444	1.0651	L-.00062	L-.00325	L-.01609
SDev	.0017	.0010	.0007	.0028	.00050	.00024	.00720
%RSD	.16647	.09650	.06435	.26123	80.240	7.5113	44.775
#1	1.0096	1.0055	1.0449	1.0671	L-.00097	L-.00308	L-.01100
#2	1.0072	1.0041	1.0439	1.0631	L-.00027	L-.00342	L-.02119
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Low	LC Low
High	1.2000	1.2000	1.2000	1.2000	2.4000	2.4000	2.4000
Low	.80000	.80000	.80000	.80000	1.6000	1.6000	1.6000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.99045	1.0145	.99469	L.00043	L.04835	14.487
SDev	.00067	.0009	.00131	.00004	.01744	.270
%RSD	.06732	.08964	.13172	8.3189	36.068	1.8615
#1	.99092	1.0139	.99562	L.00040	L.03602	14.296
#2	.98998	1.0152	.99377	L.00045	L.06068	14.678
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Low	NOCHECK
High	1.2040	1.2040	1.2040	2.4000	2.4000	
Low	.79500	.79500	.79500	1.6000	1.6000	

Method: 6010C Sample Name: G9L66L Operator: STL
Run Time: 05/05/05 17:16:02
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.98244	.99376	.98522	.98071	1.0269	.99299	.99571
SDev	.00301	.00664	.00016	.00402	.0066	.00237	.00437
%RSD	.30622	.66769	.01649	.41021	.63913	.23826	.43919
#1	.98032	.98907	.98534	.97786	1.0223	.99466	.99262
#2	.98457	.99845	.98511	.98355	1.0316	.99132	.99880
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							1.2000
Low							.80000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.0081	1.0686	1.0841	1.0152	19.933	.98898	.98883
SDev	.0110	.0096	.0065	.0053	.105	.00530	.00585
%RSD	1.0910	.89408	.60350	.52002	.52868	.53585	.59187
#1	1.0003	1.0619	1.0795	1.0114	19.859	.98523	.98469
#2	1.0158	1.0754	1.0887	1.0189	20.008	.99273	.99297
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2040	1.2040	1.2000	1.2040	24.000	1.2040	1.2000
Low	.79500	.79500	.80000	.79500	16.000	.79500	.80000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.98641	1.0873	19.400	1.0260	.99274	.24505	.98187
SDev	.00734	.0143	.088	.0069	.00526	.00280	.00634
%RSD	.74399	1.3121	.45460	.67018	.52965	1.1430	.64515
#1	.98122	1.0773	19.338	1.0211	.98902	.24307	.97739
#2	.99160	1.0974	19.462	1.0308	.99646	.24703	.98635
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2000	1.2000	24.000	1.2040	1.2000	.33700	1.2040
Low	.80000	.80000	16.000	.79500	.80000	.12300	.79500

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	1.0019	.99331	1.0385	1.0596	L-.00218	L-.00305	L-.05079
SDev	.0077	.00640	.0053	.0089	.00203	.00431	.06263
%RSD	.76884	.64389	.51242	.83541	93.379	141.17	123.33
#1	.99644	.98879	1.0347	1.0533	L-.00074	L-.00610	L-.00650
#2	1.0073	.99783	1.0423	1.0658	L-.00362	L-.00001	L-.09508
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Low	LC Low
High	1.2000	1.2000	1.2000	1.2000	2.4000	2.4000	2.4000
Low	.80000	.80000	.80000	.80000	1.6000	1.6000	1.6000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.98221	1.0043	.98621	L.00030	L.04157	14.631
SDev	.00263	.0006	.00422	.00028	.02420	.504
%RSD	.26753	.06050	.42751	94.281	58.217	3.4461
#1	.98035	1.0039	.98323	L.00010	L.05868	14.987
#2	.98407	1.0047	.98919	L.00050	L.02446	14.274
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Low	NOCHECK
High	1.2040	1.2040	1.2040	2.4000	2.4000	
Low	.79500	.79500	.79500	1.6000	1.6000	

Method: 6010C Sample Name: G9H43 Operator: STL
Run Time: 05/05/05 17:20:24
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00360	-.03232	.02058	.02695	.00539	-.00163	.08741
SDev	.00551	.00140	.00208	.00222	.00175	.00267	.00271
%RSD	152.92	4.3190	10.094	8.2449	32.552	164.12	3.1059
#1	-.00750	-.03133	.02204	.02538	.00663	-.00352	.08549
#2	.00029	-.03330	.01911	.02852	.00415	.00026	.08933
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00176	.00249	-.00033	.00075	9.8236	.00046	-.00154
SDev	.00044	.00008	.00004	.00004	.0245	.00029	.00060
%RSD	25.294	3.3833	12.122	4.8818	.24919	63.252	38.629
#1	.00207	.00243	-.00030	.00073	9.8063	.00067	-.00196
#2	.00144	.00255	-.00035	.00078	9.8409	.00026	-.00112
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

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Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.15117	.09053	2.8193	.09455	.00506	-.00045	.00460
SDev	.00021	.00884	.0077	.00014	.00025	.00057	.00069
%RSD	.14167	9.7587	.27258	.14469	4.9190	126.17	15.028
#1	.15102	.08428	2.8139	.09445	.00488	-.00085	.00509
#2	.15132	.09678	2.8248	.09464	.00524	-.00005	.00411
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00393	.01924	3.8501	.07401	.19205	-.00039	-.00208
SDev	.00044	.00003	.0130	.00011	.00028	.00220	.00775
%RSD	11.318	.13602	.33812	.14582	.14440	562.85	373.41
#1	-.00424	.01923	3.8409	.07394	.19185	-.00195	.00341
#2	-.00361	.01926	3.8593	.07409	.19225	.00117	-.00756
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.02483	.00071	L-.01317	-.00003	-.02912	H2786.4
SDev	.00079	.00120	.00321	.00004	.01095	8.9
%RSD	3.1836	169.15	24.394	141.42	37.611	.31980
#1	.02427	-.00014	L-.01544	-.00000	-.03687	H2780.1
#2	.02538	.00155	L-.01089	-.00005	-.02138	H2792.8
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9H43V 5X Operator: STL
Run Time: 05/05/05 17:24:46
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00157	-.00421	.00559	.00361	.00766	-.00265	.03591
SDev	.00428	.00117	.00175	.00107	.00521	.00171	.00669
%RSD	272.10	27.747	31.229	29.646	67.969	64.487	18.623
#1	.00145	-.00503	.00436	.00437	.00398	-.00144	.03118
#2	-.00460	-.00338	.00683	.00285	.01134	-.00385	.04063
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00092	-.00002	-.00044	-.00035	2.1384	-.00012	-.00109
SDev	.00073	.00003	.00006	.00004	.0101	.00047	.00015
%RSD	79.811	141.42	12.857	10.647	.47466	374.44	13.383
#1	.00144	.00000	-.00048	-.00038	2.1312	-.00045	-.00119
#2	.00040	-.00005	-.00040	-.00033	2.1456	.00021	-.00098
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.02989	.01227	.59373	.01951	.00015	-.00058	.00098
SDev	.00038	.00257	.00842	.00015	.00003	.00027	.00069
%RSD	1.2688	20.982	1.4176	.75363	20.203	46.816	70.264
#1	.02962	.01409	.58778	.01941	.00018	-.00039	.00146
#2	.03016	.01045	.59968	.01962	.00013	-.00078	.00049
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00176	.00642	.82474	.01534	.04018	-.00372	-.00410
SDev	.00030	.00015	.00131	.00004	.00149	.00139	.02164
%RSD	17.173	2.3151	.15862	.23426	3.7050	37.250	527.14
#1	-.00198	.00631	.82382	.01532	.03913	-.00274	-.01941
#2	-.00155	.00652	.82567	.01537	.04123	-.00470	.01120
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00427	.00079	-.00245	-.00066	-.01131	H472.72
SDev	.00013	.00060	.00246	-.00014	-.02567	1.73
%RSD	3.0966	75.792	100.61	21.757	226.99	.36626
#1	.00437	.00036	-.00071	-.00055	-.02946	H471.50
#2	.00418	.00121	-.00419	-.00076	.00684	H473.95
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9L63B Operator: STL
Run Time: 05/05/05 17:29:08
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

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Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00076	-.00091	-.00079	-.00045	.00193	-.00333	L.03076
SDev	.00072	.00080	.00132	.00063	.00049	.00312	.00379
%RSD	95.395	87.525	167.35	141.38	25.198	93.651	12.319
#1	-.00127	-.00035	.00014	-.00089	.00227	-.00554	L.02808
#2	-.00025	-.00147	-.00172	-.00000	.00158	-.00113	L.03344
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Low
High							.20000
Low							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L-.00058	-.00041	-.00052	-.00062	.01604	-.00093	-.00087
SDev	.00045	.00000	.00004	.00001	.00060	.00014	.00005
%RSD	76.855	.00000	8.4179	1.9964	3.7216	15.218	5.6142
#1	L-.00090	-.00041	-.00055	-.00062	.01562	-.00103	-.00084
#2	L-.00027	-.00041	-.00049	-.00061	.01647	-.00083	-.00091
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00700	.20000	.20000	.00500	.25000	.01000	.05000
Low	.00700	-.20000	-.20000	-.00500	-.25000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00220	-.01983	.00013	-.00051	-.00075	-.00063	.00089
SDev	.00026	.00169	.00402	.00008	.00044	.00000	.00128
%RSD	11.630	8.5124	3109.5	15.100	58.232	.31499	144.26
#1	-.00238	-.02102	-.00272	-.00056	-.00106	-.00063	-.00002
#2	-.00201	-.01863	.00298	-.00045	-.00044	-.00063	.00179
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.02500	.05000	.25000	.01500	.04000	.01000	.01000
Low	-.02500	-.05000	-.25000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00145	.00200	-.00007	-.00064	-.00144	-.00530	-.02596
SDev	.00015	.00006	-.00051	.00000	.00177	-.00197	.00335
%RSD	10.144	2.7794	759.10	.00187	122.83	37.280	12.902
#1	-.00156	.00196	.00030	-.00064	-.00269	-.00669	-.02359
#2	-.00135	.00204	-.00043	-.00064	-.00019	-.00390	-.02832
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.04000	.05000	.10000	.50000	.50000
Low	-.05000	-.01000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	-.00056	-.00158	-.00081	-.00068	.01318	L-.32611
SDev	.00002	.00192	.00022	.00011	.02170	.28531
%RSD	3.3889	121.43	26.880	15.713	164.63	87.489

#1	-.00055	-.00294	-.00096	-.00076	-.00216	L-.52786
#2	-.00057	-.00022	-.00065	-.00061	.02852	-.12437
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Low
High	.00300	.00500	.01000	.05000		.25000
Low	-.00300	-.00500	-.01000	-.05000		-.25000

Method: 6010C Sample Name: G9L63C Operator: STL
Run Time: 05/05/05 17:33:30
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.89927	.90248	.90261	.89782	.94045	.91638	.91341
SDev	.00702	.00270	.00102	.00393	.00337	.00167	.00084
%RSD	.78042	.29881	.11249	.43817	.35809	.18174	.09179
#1	.89431	.90057	.90189	.89504	.93807	.91520	.91282
#2	.90423	.90438	.90332	.90060	.94283	.91756	.91401

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							1.2000
Low							.80000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.92256	.96937	.98675	.92744	18.159	.90145	.90154
SDev	.00538	.00265	.00276	.00259	.039	.00227	.00352
%RSD	.58298	.27292	.27965	.27881	.21701	.25151	.39015
#1	.91876	.96750	.98480	.92562	18.131	.89984	.89905
#2	.92636	.97124	.98870	.92927	18.187	.90305	.90403

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2040	1.2040	1.2000	1.2040	24.000	1.2040	1.2000
Low	.79500	.79500	.80000	.79500	16.000	.79500	.80000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.89118	.98453	17.696	.93382	.90641	.22236	.89732
SDev	.00270	.01756	.032	.00244	.00171	.00211	.00585
%RSD	.30343	1.7834	.18301	.26168	.18878	.94718	.65250
#1	.88927	.97212	17.673	.93209	.90520	.22087	.89318
#2	.89310	.99695	17.719	.93555	.90762	.22385	.90146

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2000	1.2000	24.000	1.2040	1.2000	.33700	1.2040
Low	.80000	.80000	16.000	.79500	.80000	.12300	.79500

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.91063	.90336	.94427	.95728	L-.00121	L-.00391	L-.01599
SDev	.00264	.00333	.00432	.00311	.00077	.00444	.00654
%RSD	.29021	.36904	.45796	.32459	64.045	113.39	40.882

#1	.90876	.90100	.94121	.95508	L-.00066	L-.00705	L-.01137
#2	.91250	.90572	.94733	.95948	L-.00175	L-.00078	L-.02061
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Low	LC Low
High	1.2000	1.2000	1.2000	1.2000	2.4000	2.4000	2.4000
Low	.80000	.80000	.80000	.80000	1.6000	1.6000	1.6000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.89941	.92439	.90034	L.00030	L.06325	13.390
SDev	.00296	.00223	.00558	.00036	.00258	.133
%RSD	.32933	.24148	.61966	117.85	4.0754	.99244
#1	.89732	.92282	.89639	L.00005	L.06507	13.484
#2	.90151	.92597	.90428	L.00055	L.06143	13.296
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Low	NOCHECK
High	1.2040	1.2040	1.2040	2.4000	2.4000	
Low	.79500	.79500	.79500	1.6000	1.6000	

Method: 6010C Sample Name: G9L63L Operator: STL
Run Time: 05/05/05 17:37:52
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.98309	.98840	.98032	.97833	1.0228	.99385	.98657
SDev	.01536	.01258	.00688	.00693	.0142	.00901	.01310
%RSD	1.5626	1.2728	.70141	.70792	1.3864	.90674	1.3278
#1	.97222	.97950	.97546	.97343	1.0127	.98748	.97731
#2	.99395	.99729	.98518	.98323	1.0328	1.0002	.99583
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							1.2000
Low							.80000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.99978	1.0584	1.0750	1.0074	19.777	.98097	.98046
SDev	.02004	.0305	.0215	.0167	.334	.01755	.01699
%RSD	2.0045	2.8816	2.0000	1.6540	1.6907	1.7892	1.7329
#1	.98561	1.0369	1.0598	.99566	19.540	.96856	.96845
#2	1.0140	1.0800	1.0902	1.0192	20.013	.99338	.99247
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2040	1.2040	1.2000	1.2040	24.000	1.2040	1.2000
Low	.79500	.79500	.80000	.79500	16.000	.79500	.80000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.97753	1.0794	19.253	1.0169	.98645	.24332	.97678
SDev	.02840	.0080	.252	.0203	.01571	.00497	.01916
%RSD	2.9047	.74021	1.3096	2.0005	1.5928	2.0419	1.9611

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#1	.95746	1.0737	19.074	1.0025	.97534	.23981	.96323
#2	.99761	1.0850	19.431	1.0313	.99756	.24683	.99032
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2000	1.2000	24.000	1.2040	1.2000	.33700	1.2040
Low	.80000	.80000	16.000	.79500	.80000	.12300	.79500

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.99372	.99058	1.0318	1.0466	L-.00136	L-.00099	L-.02405
SDev	.02076	.02084	.0201	.0283	.00176	.00494	.04800
%RSD	2.0890	2.1041	1.9500	2.7064	129.01	500.91	199.61
#1	.97904	.97584	1.0176	1.0266	L-.00012	L.00251	L.00990
#2	1.0084	1.0053	1.0460	1.0667	L-.00261	L-.00448	L-.05799
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Low	LC Low
High	1.2000	1.2000	1.2000	1.2000	2.4000	2.4000	2.4000
Low	.80000	.80000	.80000	.80000	1.6000	1.6000	1.6000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.97899	1.0035	.98485	L.00040	L.05012	14.316
SDev	.00691	.0107	.01443	.00028	.07108	1.176
%RSD	.70575	1.0695	1.4657	70.711	141.82	8.2177
#1	.97411	.99589	.97465	L.00061	L.10038	15.148
#2	.98388	1.0111	.99506	L.00020	L-.00014	13.484
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Low	NOCHECK
High	1.2040	1.2040	1.2040	2.4000	2.4000	
Low	.79500	.79500	.79500	1.6000	1.6000	

Method: 6010C Sample Name: G9G4K Operator: STL
Run Time: 05/05/05 17:42:14
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.07711	.04591	.58714	.58846	.00656	.00482	2.0694
SDev	.00710	.00477	.00584	.00320	.00759	.00150	.0114
%RSD	9.2090	10.378	.99460	.54322	115.64	31.158	.55090
#1	.07209	.04928	.59127	.58620	.01192	.00376	2.0614
#2	.08214	.04255	.58301	.59072	.00120	.00588	2.0775
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00952	.07073	.00318	.00921	28.790	4.5238	.00725
SDev	.00068	.00071	.00000	.00002	.168	.0281	.00090
%RSD	7.1143	1.0006	.00000	.16149	.58380	.62090	12.388

#1	-.00904	.07023	.00318	.00922	28.671	4.5039	.00662
#2	L-.01000	.07123	.00318	.00920	28.909	4.5436	.00789
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.13819	4.8740	7.6480	10.277	.13035	.01978	.23322
SDev	.00006	.0317	.0349	.067	.00072	.00039	.00033
%RSD	.04449	.64966	.45696	.64722	.54897	1.9621	.14230
#1	.13815	4.8517	7.6232	10.230	.12984	.01950	.23345
#2	.13824	4.8964	7.6727	10.324	.13085	.02005	.23298
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00841	1.3362	.00499	.41501	.02544	-.00160	.02239
SDev	.00066	.0083	.00097	.00347	.00088	.00156	.04576
%RSD	7.8722	.62380	19.344	.83515	3.4468	97.977	204.37
#1	.00795	1.3303	.00567	.41256	.02606	-.00270	.05475
#2	.00888	1.3421	.00431	.41746	.02482	-.00049	-.00997
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.58802	.00540	.06672	.42363	.42683	214.23
SDev	.00019	.00153	.00315	.00364	.01128	1.76
%RSD	.03189	28.246	4.7208	.85853	2.6424	.82281
#1	.58789	.00648	.06450	.42106	.43480	212.98
#2	.58815	.00432	.06895	.42620	.41885	215.47
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/05/05 17:46:38
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	3.9871	4.0136	4.0007	3.9850	4.0650	4.0384	38.888
SDev	.0029	.0047	.0028	.0066	.0065	.0046	.059
%RSD	.07383	.11651	.07015	.16681	.15926	.11454	.15124

#1	3.9892	4.0103	3.9987	3.9803	4.0604	4.0351	38.846
#2	3.9851	4.0169	4.0026	3.9897	4.0695	4.0416	38.930
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.1014	4.2934	4.2400	4.0649	20.148	3.9787	4.0023
SDev	.0078	.0040	.0053	.0081	.035	.0070	.0092
%RSD	.18897	.09419	.12425	.19835	.17337	.17682	.23016
#1	4.0959	4.2905	4.2362	4.0591	20.123	3.9737	3.9958
#2	4.1069	4.2962	4.2437	4.0706	20.172	3.9837	4.0088
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.0655	40.861	19.783	4.1356	4.0220	1.0198	3.9650
SDev	.0055	.058	.038	.0073	.0082	.0020	.0084
%RSD	.13424	.14262	.19146	.17723	.20422	.19662	.21165
#1	4.0616	40.820	19.756	4.1305	4.0162	1.0184	3.9590
#2	4.0693	40.902	19.810	4.1408	4.0278	1.0212	3.9709
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.0468	4.0358	4.1527	4.2433	4.1927	Q3.3352	4.0636
SDev	.0072	.0074	.0109	.0121	.0058	.0048	.0075
%RSD	.17768	.18274	.26138	.28445	.13843	.14420	.18350
#1	4.0417	4.0306	4.1450	4.2347	4.1886	Q3.3318	4.0689
#2	4.0518	4.0410	4.1604	4.2518	4.1968	Q3.3386	4.0583
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	3.9902	4.0472	3.9960	4.1450	Q3.5826	38.078
SDev	.0054	.0052	.0004	.0070	.0021	.004
%RSD	.13454	.12950	.01017	.16773	.05956	.01026
#1	3.9864	4.0435	3.9963	4.1401	Q3.5811	38.075
#2	3.9940	4.0509	3.9957	4.1499	Q3.5841	38.080
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000

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Range	10.000	10.000	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 05/05/05 17:51:02
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00469	-.00028	-.00144	.00288	-.00101	.00221	.03647
SDev	.00927	.00502	.00989	.00441	.00618	.00408	.00874
%RSD	197.64	1817.6	685.55	152.98	611.19	184.73	23.969
#1	-.00186	.00327	.00555	-.00024	.00336	-.00068	.03029
#2	.01125	-.00383	-.00843	.00600	-.00538	.00510	.04265
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00393	.00143	.00168	.00139	.01203	.00088	.00158
SDev	.00194	.00118	.00099	.00110	.00567	.00045	.00134
%RSD	49.394	82.496	58.817	78.726	47.140	50.720	85.135
#1	.00256	.00060	.00098	.00062	.00802	.00120	.00063
#2	.00530	.00226	.00238	.00217	.01604	.00057	.00253
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00024	.01436	.01113	.00171	.00048	.00042	.00233
SDev	.00038	.01761	.00457	.00134	.00199	.00136	.00030
%RSD	156.19	122.70	41.111	78.060	411.41	321.07	13.092
#1	.00003	.00190	.00789	.00077	-.00092	-.00054	.00254
#2	-.00051	.02681	.01436	.00266	.00189	.00139	.00211
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00168	.00308	.00394	.00141	.00051	.00313	-.01805
SDev	.00204	.00089	.00101	.00101	.00099	.00580	.04593
%RSD	121.20	28.985	25.487	72.001	193.36	185.52	254.43
#1	.00024	.00245	.00465	.00069	.00121	-.00098	.01443
#2	.00312	.00371	.00323	.00212	-.00019	.00723	-.05054
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000

Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00144	.00114	.00304	.00187	-.01002	Q-.39797	
SDev	.00035	.00066	.00451	.00100	.00466	.03517	
%RSD	24.220	58.416	148.57	53.511	46.545	8.8381	
#1	.00169	.00067	-.00015	.00116	-.00672	Q-.37310	
#2	.00120	.00161	.00623	.00257	-.01331	Q-.42284	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.00300	.00400	.06000	.05000	.50000	.25000	

Method: 6010C Sample Name: G9G4KV 5X Operator: STL
Run Time: 05/05/05 17:55:25
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.01564	.01036	.12693	.12551	.00438	-.00164	.42553
SDev	.00215	.00173	.00025	.00004	.00095	.00008	.00019
%RSD	13.747	16.690	.19824	.03241	21.786	4.7544	.04490
#1	.01412	.01159	.12711	.12554	.00505	-.00169	.42540
#2	.01717	.00914	.12675	.12548	.00370	-.00158	.42567
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00100	.01443	.00038	.00161	6.1646	.96204	.00143
SDev	.00038	.00008	.00003	.00007	.0505	.00850	.00054
%RSD	38.487	.58391	9.2735	4.2741	.81841	.88341	38.095
#1	-.00127	.01437	.00040	.00166	6.1290	.95603	.00181
#2	-.00073	.01449	.00035	.00156	6.2003	.96805	.00104
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.02801	1.0382	1.6192	2.2458	.02746	.00462	.05036
SDev	.00007	.0042	.0048	.0217	.00006	.00032	.00059
%RSD	.26920	.40604	.29381	.96711	.22663	6.9338	1.1732
#1	.02806	1.0352	1.6158	2.2304	.02750	.00484	.05078
#2	.02796	1.0412	1.6226	2.2611	.02741	.00439	.04994
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000

Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00158	.28088	.00104	.08740	.00445	.00118	.02088
SDev	.00011	.00268	.00087	.00101	.00127	.00222	.01055
%RSD	7.0878	.95511	83.778	1.1566	28.504	188.67	50.532
#1	.00166	.27898	.00165	.08669	.00535	.00275	.02834
#2	.00151	.28278	.00042	.08811	.00355	-.00039	.01342
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.12598	.00037	.01389	.08915	.11502	37.016	
SDev	.00011	.00027	.00086	.00100	.02838	.387	
%RSD	.08805	72.708	6.1826	1.1199	24.675	1.0453	
#1	.12606	.00055	.01328	.08845	.13509	37.290	
#2	.12590	.00018	.01449	.08986	.09495	36.743	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9G4N Operator: STL
Run Time: 05/05/05 17:59:47
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00231	-.00002	.02638	.02862	.00593	-.00428	.03795
SDev	.00011	.00220	.00294	.00001	.00036	.00236	.00683
%RSD	4.6870	10912.	11.141	.04855	6.1269	55.213	17.989
#1	.00223	.00154	.02846	.02863	.00567	-.00595	.03313
#2	.00239	-.00158	.02430	.02861	.00619	-.00261	.04278
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00116	.03732	-.00045	.00033	7.6501	.00095	-.00025
SDev	.00006	.00034	.00004	.00009	.0340	.00003	.00035
%RSD	5.5261	.90308	9.8209	25.908	.44487	3.3533	139.13
#1	.00120	.03756	-.00048	.00027	7.6742	.00097	-.00049
#2	.00111	.03708	-.00042	.00040	7.6261	.00092	-.00000
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000

Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00227	.00641	.01359	.00290	.00070	.00017	-.00010
SDev	.00017	.00721	.00695	.00009	.00025	.00046	.00178
%RSD	7.6963	112.50	51.181	2.9232	35.355	268.22	1804.2
#1	.00240	.00131	.00867	.00284	.00053	-.00015	.00116
#2	.00215	.01151	.01850	.00296	.00088	.00050	-.00136
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00019	.00410	.00580	.10981	.02962	-.00223	.02711
SDev	.00008	.00011	.00004	.00094	.00127	.00177	.00247
%RSD	39.896	2.7900	.65881	.85508	4.2915	79.237	9.1268
#1	.00024	.00402	.00577	.11047	.03052	-.00348	.02886
#2	.00014	.00418	.00583	.10914	.02872	-.00098	.02536
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.02788	-.00088	.00153	-.00023	.03416	H1303.1	
SDev	.00099	.00170	.00066	.00018	.03276	8.8	
%RSD	3.5442	193.14	43.078	78.567	95.896	.67276	
#1	.02857	-.00208	.00200	-.00035	.01100	H1309.3	
#2	.02718	.00032	.00107	-.00010	.05733	H1296.9	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9G4P Operator: STL
Run Time: 05/05/05 18:04:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.04548	.00876	.04234	.03725	-.00076	-.00974	1.6998
SDev	.00077	.00032	.00003	.00052	.00049	.00005	.0144
%RSD	1.6849	3.5965	.06894	1.3893	64.170	.49766	.84736
#1	-.04494	.00898	.04236	.03689	-.00042	-.00970	1.7100
#2	-.04603	.00854	.04232	.03762	-.00111	-.00977	1.6896
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00

Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00274	.05986	.00685	.02931	43.458	.11661	.00920
SDev	.00135	.00081	.00002	.00012	.280	.00048	.00015
%RSD	49.477	1.3512	.25643	.42439	.64435	.41462	1.5821
#1	.00178	.06043	.00684	.02940	43.656	.11695	.00910
#2	.00369	.05929	.00687	.02922	43.260	.11627	.00930
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.03633	2.8598	13.320	H26.952	.01452	.00272	.01800
SDev	.00002	.0052	.048	.203	.00006	.00061	.00032
%RSD	.05515	.18016	.35991	.75221	.42855	22.585	1.8008
#1	.03635	2.8635	13.354	H27.096	.01448	.00228	.01823
#2	.03632	2.8562	13.286	H26.809	.01456	.00315	.01777
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V 2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01656	.23222	.02931	.26684	18.295	.00391	.03738
SDev	.00049	.00255	.00017	.00408	.177	.00362	.02233
%RSD	2.9370	1.0989	.57195	1.5283	.96766	92.689	59.729
#1	.01621	.23403	.02919	.26972	18.420	.00135	.02159
#2	.01690	.23042	.02943	.26395	18.170	.00647	.05317
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.03895	L-.00675	L-.02742	.03795	.19735	174.47
SDev	.00034	.00020	.00062	.00032	.05240	.54
%RSD	.86140	2.8917	2.2466	.84571	26.554	.30913
#1	.03871	L-.00661	L-.02699	.03817	.16029	174.85
#2	.03918	L-.00689	L-.02786	.03772	.23440	174.09
Errors	LC Pass	LC Low	LC Low	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9G4W Operator: STL
Run Time: 05/05/05 18:08:31
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00477	-.00222	.01679	.02183	-.00112	-.00122	.32654
SDev	.01524	.00977	.01551	.00860	.01166	.00672	.00476
%RSD	319.48	440.85	92.330	39.389	1040.1	548.93	1.4581
#1	-.00600	.00469	.02776	.01575	.00712	-.00597	.32318
#2	.01554	-.00912	.00583	.02790	-.00937	.00353	.32991
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00149	.03287	-.00041	.00035	26.398	.06295	.00160
SDev	.00103	.00022	.00000	.00043	.127	.00136	.00189
%RSD	68.756	.66635	1.0634	123.89	.47951	2.1643	118.02
#1	.00077	.03272	-.00041	.00004	26.487	.06391	.00026
#2	.00221	.03303	-.00042	.00065	26.308	.06198	.00294
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.02096	3.5562	8.5064	1.1068	.02020	.00150	.00284
SDev	.00143	.0163	.0201	.0073	.00212	.00352	.00122
%RSD	6.8265	.45892	.23661	.65982	10.476	234.96	42.919
#1	.02198	3.5446	8.5206	1.1119	.01870	-.00099	.00370
#2	.01995	3.5677	8.4922	1.1016	.02169	.00399	.00197
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00660	.34619	.00706	.41273	.15343	.00408	.04305
SDev	.00278	.00234	.00112	.00444	.00514	.01363	.03980
%RSD	42.152	.67530	15.867	1.0764	3.3473	334.42	92.451
#1	.00463	.34784	.00785	.41588	.15706	-.00556	.07119
#2	.00856	.34453	.00627	.40959	.14979	.01371	.01491
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.02015	-.00119	.00244	.00265	.03636	36.582
SDev	.00057	.00060	.00691	.00096	.04187	.719
%RSD	2.8319	50.212	282.81	36.365	115.17	1.9658
#1	.01975	-.00161	-.00244	.00197	.00675	36.074
#2	.02055	-.00077	.00733	.00333	.06596	37.091
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9G42 Operator: STL
Run Time: 05/05/05 18:12:52
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.05111	.00728	.08739	.08097	.00429	-.01096	3.2905
SDev	.00146	.00016	.00207	.00045	.00443	.00044	.0081
%RSD	2.8492	2.1760	2.3691	.55350	103.15	4.0323	.24687
#1	-.05214	.00739	.08885	.08065	.00743	-.01127	3.2962
#2	-.05008	.00717	.08592	.08129	.00116	-.01065	3.2847
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00007	.05833	.01508	.05500	56.032	.23442	.01989
SDev	.00031	.00039	.00003	.00019	.031	.00087	.00015
%RSD	426.38	.66449	.17481	.34952	.05488	.37292	.73455
#1	-.00029	.05860	.01506	.05514	56.054	.23504	.02000
#2	.00015	.05805	.01510	.05487	56.011	.23380	.01979
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.08733	4.2307	15.747	H57.157	.09847	.00607	.03349
SDev	.00115	.0135	.007	.030	.00037	.00020	.00229
%RSD	1.3196	.31951	.04183	.05219	.37915	3.3278	6.8447
#1	.08814	4.2403	15.743	H57.178	.09821	.00621	.03512
#2	.08651	4.2212	15.752	H57.136	.09873	.00592	.03187
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.02262	.44131	-.00959	.20308	19.135	.01127	.06899
SDev	.00004	.00056	.00044	.00094	.011	.00023	.01722
%RSD	.17785	.12641	4.5935	.46238	.05630	2.0203	24.962
#1	.02265	.44170	-.00928	.20375	19.143	.01144	.08117
#2	.02259	.44091	-.00990	.20242	19.127	.01111	.05681
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.08311	L-.00588	L-.03167	.05327	.41701	H304.00
SDev	.00039	.00118	.00092	.00011	.02036	.16
%RSD	.46987	20.070	2.9007	.20078	4.8826	.05400
#1	.08338	L-.00505	L-.03232	.05335	.40262	H304.12
#2	.08283	L-.00672	L-.03102	.05320	.43141	H303.88

Errors	LC Pass	LC Low	LC Low	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9G47 Operator: STL

Run Time: 05/05/05 18:17:14

Comment:

Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.01961	.01200	.28683	.28810	.00848	.00245	.43899
SDev	.00433	.00073	.00187	.00072	.00235	.00037	.00043
%RSD	22.085	6.0502	.65167	.24807	27.757	15.214	.09866
#1	.02267	.01148	.28551	.28861	.00682	.00271	.43930
#2	.01655	.01251	.28816	.28760	.01015	.00219	.43869
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00109	.08474	-.00055	.16479	126.57	1.0779	.07671
SDev	.00113	.00010	.00000	.00023	.16	.0025	.00025
%RSD	103.02	.11931	.79897	.14045	.12360	.23001	.32285
#1	.00189	.08467	-.00055	.16463	126.46	1.0761	.07688
#2	.00030	.08481	-.00055	.16496	126.68	1.0796	.07653
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

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Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.33041	.81989	8.6166	1.0346	.25458	.00124	.00274
SDev	.00096	.00941	.0088	.0016	.00012	.00098	.00052
%RSD	.28914	1.1477	.10193	.15282	.04888	79.530	19.166
#1	.32974	.82654	8.6104	1.0334	.25467	.00193	.00311
#2	.33109	.81323	8.6228	1.0357	.25449	.00054	.00237
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00444	1.2499	.00528	.62950	.00996	.00165	.23050
SDev	.00067	.0029	.00036	.00144	.00215	.00333	.00174
%RSD	15.063	.23004	6.7207	.22915	21.627	201.45	.75480
#1	.00492	1.2479	.00553	.62848	.01149	.00401	.23173
#2	.00397	1.2519	.00503	.63052	.00844	-.00070	.22927
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.28768	.00446	.01707	.01954	.25903	H330.75
SDev	.00015	.00054	.00265	.00025	.00066	.32
%RSD	.05067	12.011	15.502	1.2774	.25376	.09690
#1	.28758	.00408	.01895	.01972	.25950	H330.52
#2	.28778	.00484	.01520	.01936	.25857	H330.97
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9G5A Operator: STL
Run Time: 05/05/05 18:21:36
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.25928	.04047	.13488	.13781	.00478	-.00082	1.7195
SDev	.00349	.00698	.00448	.00446	.00523	.00249	.0167
%RSD	1.3455	17.251	3.3205	3.2370	109.48	305.94	.96832
#1	-.26175	.04541	.13805	.13466	.00848	-.00258	1.7078
#2	-.25681	.03554	.13171	.14097	.00108	.00095	1.7313
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.01129	.04896	.00618	.01003	14.133	.69825	.00942
SDev	.00075	.00066	.00002	.00037	.133	.00676	.00050
%RSD	6.6017	1.3423	.28426	3.6460	.93998	.96854	5.3043
#1	.01182	.04850	.00617	.00977	14.039	.69347	.00907
#2	.01076	.04942	.00620	.01029	14.227	.70304	.00978

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.06076	2.3313	9.4978	H59.369	.13233	.02935	.22853
SDev	.00020	.0274	.0851	.456	.00184	.00086	.00063
%RSD	.33749	1.1733	.89580	.76884	1.3872	2.9349	.27400
#1	.06091	2.3120	9.4377	H59.046	.13103	.02874	.22809
#2	.06062	2.3507	9.5580	H59.692	.13363	.02996	.22897

Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V 2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01054	.28508	-.00324	.17121	H101.99	.00765	.02334
SDev	.00040	.00276	.00022	.00209	.86	.00275	.03169
%RSD	3.8186	.96779	6.8270	1.2227	.84512	35.935	135.80
#1	.01026	.28313	-.00340	.16973	H101.38	.00570	.04574
#2	.01083	.28703	-.00309	.17269	H102.60	.00959	.00093

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.13684	.00105	L-.15946	.39549	.39327	146.44
SDev	.00148	.00008	.00000	.00478	.00705	1.41
%RSD	1.0846	7.4649	.00112	1.2081	1.7927	.96618
#1	.13579	.00110	L-.15946	.39211	.39825	145.44
#2	.13789	.00099	L-.15946	.39887	.38828	147.44

Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9G5J Operator: STL
Run Time: 05/05/05 18:25:58
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.03363	.03138	.34098	.33953	.07647	.06464	3.0977
SDev	.00036	.00114	.00075	.00080	.00342	.00145	.0103
%RSD	1.0611	3.6212	.21942	.23567	4.4669	2.2439	.33188
#1	.03338	.03058	.34151	.33896	.07405	.06567	3.0905
#2	.03389	.03218	.34045	.34009	.07889	.06362	3.1050
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.04252	.09211	.01375	.06972	54.760	.66980	.10681
SDev	.00004	.00010	.00004	.00019	.135	.00134	.00010
%RSD	.09491	.10977	.28750	.27768	.24587	.19968	.09193
#1	.04255	.09203	.01373	.06959	54.665	.66886	.10674
#2	.04250	.09218	.01378	.06986	54.855	.67075	.10687
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.17150	4.4873	14.069	H58.735	.23529	.10000	.25011
SDev	.00005	.0039	.039	.086	.00090	.00020	.00140
%RSD	.02687	.08695	.27701	.14726	.38348	.20523	.56074
#1	.17146	4.4900	14.041	H58.673	.23465	.10014	.24912
#2	.17153	4.4845	14.096	H58.796	.23593	.09985	.25110
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.02431	.71006	.19210	.33839	.10841	.01116	.63953
SDev	.00011	.00138	.00063	.00036	.00486	.00201	.00317
%RSD	.46776	.19398	.32843	.10600	4.4866	18.047	.49650
#1	.02423	.70909	.19165	.33814	.11185	.01259	.63728
#2	.02439	.71104	.19254	.33865	.10497	.00974	.64177
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.34001	.06858	.03288	.45212	.41557	249.66
SDev	.00028	.00017	.00062	.00036	.00784	.39
%RSD	.08369	.24788	1.8746	.07886	1.8876	.15811

#1	.33981	.06846	.03245	.45187	.41002	249.38
#2	.34021	.06870	.03332	.45237	.42112	249.94
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9G5N Operator: STL
Run Time: 05/05/05 18:30:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.06055	.00804	.08304	.07744	.00309	-.00974	3.1808
SDev	.00085	.00031	.00101	.00048	.00030	.00013	.0010
%RSD	1.3997	3.8976	1.2101	.62272	9.8194	1.3710	.03036
#1	-.05995	.00782	.08233	.07710	.00330	-.00984	3.1815
#2	-.06114	.00826	.08375	.07778	.00288	-.00965	3.1801
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00087	.05122	.01351	.05752	18.730	.22107	.01743
SDev	.00016	.00008	.00000	.00001	.020	.00012	.00010
%RSD	18.788	.16448	.03252	.02291	.10838	.05354	.56136
#1	-.00099	.05128	.01351	.05753	18.744	.22116	.01736
#2	-.00076	.05116	.01352	.05751	18.716	.22099	.01750
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.06017	3.4550	12.569	H47.292	.02284	.00494	.03478
SDev	.00009	.0091	.001	.041	.00025	.00042	.00118
%RSD	.15392	.26414	.01164	.08613	1.0900	8.5872	3.3793
#1	.06023	3.4485	12.570	H47.321	.02266	.00464	.03395
#2	.06010	3.4615	12.568	H47.264	.02301	.00524	.03561
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01867	.36618	-.00264	.15267	23.147	.00939	.05607
SDev	.00018	.00072	.00020	.00058	.032	.00093	.00843
%RSD	.99358	.19566	7.5841	.37848	.13826	9.9026	15.036

#1	.01880	.36669	-.00279	.15308	23.170	.00873	.05011
#2	.01854	.36567	-.00250	.15226	23.124	.01005	.06203
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.07930	L-.00547	L-.03771	.05658	.25045	H788.81	
SDev	.00066	.00001	.00046	.00014	.00948	1.32	
%RSD	.82753	.21874	1.2223	.25209	3.7840	.16747	
#1	.07884	L-.00546	L-.03738	.05668	.24375	H789.74	
#2	.07977	L-.00548	L-.03803	.05648	.25715	H787.88	
Errors	LC Pass	LC Low	LC Low	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9G5Q Operator: STL
Run Time: 05/05/05 18:34:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.30081	.04441	.11738	.11770	.00772	.00046	5.2500
SDev	.00609	.00196	.00168	.00017	.00064	.00122	.0036
%RSD	2.0236	4.4096	1.4290	.14650	8.3003	264.31	.06774
#1	-.29651	.04302	.11619	.11782	.00818	.00133	5.2475
#2	-.30512	.04579	.11857	.11758	.00727	-.00040	5.2525
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.01766	.06512	.02412	.09250	27.703	.60075	.02966
SDev	.00017	.00005	.00007	.00011	.030	.00036	.00020
%RSD	.96327	.07763	.29151	.11518	.10991	.06001	.66652
#1	.01754	.06515	.02407	.09243	27.682	.60050	.02980
#2	.01778	.06508	.02417	.09258	27.725	.60101	.02952
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.10543	6.5281	21.481	H68.791	.09570	.00997	.17611
SDev	.00031	.0071	.024	.086	.00037	.00025	.00162
%RSD	.28993	.10806	.11329	.12537	.39013	2.4962	.91744

#1	.10521	6.5331	21.463	H68.730	.09596	.01015	.17497
#2,	.10564	6.5231	21.498	H68.852	.09543	.00980	.17725
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.03699	.64936	.31302	.21855	H113.47	.02189	.08613
SDev	.00060	.00079	.00094	.00004	.12	.00129	.00280
%RSD	1.6118	.12126	.30122	.01626	.10892	5.8819	3.2547
#1	.03741	.64880	.31235	.21852	H113.38	.02280	.08811
#2	.03656	.64992	.31368	.21857	H113.56	.02098	.08415
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.11759	.00288	L-.18585	.35311	.45807	H358.96
SDev	.00044	.00103	.00341	.00018	.00167	.01
%RSD	.37720	35.757	1.8337	.05049	.36540	.00328
#1	.11728	.00361	L-.18344	.35298	.45926	H358.95
#2	.11791	.00215	L-.18826	.35323	.45689	H358.97
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/05/05 18:39:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	4.0667	4.0905	4.0564	4.0420	4.1451	4.1247	39.440
SDev	.0073	.0075	.0064	.0056	.0164	.0049	.024
%RSD	.18019	.18236	.15813	.13785	.39610	.11856	.06084
#1	4.0615	4.0852	4.0518	4.0381	4.1335	4.1282	39.423
#2	4.0719	4.0958	4.0609	4.0459	4.1568	4.1212	39.457
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.1564	4.3548	4.2747	4.1134	20.386	4.0260	4.0452
SDev	.0030	.0044	.0062	.0040	.026	.0043	.0022
%RSD	.07114	.10021	.14390	.09736	.12741	.10563	.05389

#1	4.1543	4.3579	4.2704	4.1106	20.368	4.0230	4.0437
#2	4.1585	4.3517	4.2791	4.1162	20.405	4.0290	4.0468
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.1328	41.384	19.958	4.1639	4.0734	1.0347	4.0098
SDev	.0018	.047	.042	.0067	.0056	.0010	.0077
%RSD	.04472	.11350	.21179	.16041	.13825	.09985	.19238
#1	4.1341	41.350	19.928	4.1591	4.0695	1.0340	4.0043
#2	4.1314	41.417	19.987	4.1686	4.0774	1.0354	4.0152
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.1023	4.0820	4.1994	4.3021	4.2452	Q3.4069	4.1662
SDev	.0026	.0048	.0030	.0083	.0066	.0012	.0097
%RSD	.06265	.11686	.07109	.19319	.15627	.03392	.23334
#1	4.1005	4.0786	4.1973	4.2963	4.2405	Q3.4061	4.1731
#2	4.1041	4.0854	4.2015	4.3080	4.2499	Q3.4077	4.1594
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	4.0468	4.1315	4.0746	4.2059	Q3.5218	36.920
SDev	.0059	.0022	.0074	.0024	.0053	.164
%RSD	.14462	.05339	.18093	.05764	.14990	.44462
#1	4.0427	4.1300	4.0694	4.2042	Q3.5181	36.804
#2	4.0509	4.1331	4.0798	4.2076	Q3.5255	37.036
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 05/05/05 18:43:28
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00364	.00107	.00113	.00162	.00414	.00063	.03176
SDev	.00374	.00241	.00206	.00237	.00305	.00211	.00227
%RSD	102.71	225.15	182.82	146.68	73.735	336.66	7.1323

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#1	.00628	-.00063	-.00033	.00330	.00198	.00212	.03016
#2	.00100	.00277	.00258	-.00006	.00630	-.00086	.03336
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00181	.00104	.00125	.00104	.00760	.00096	.00084
SDev	.00017	.00032	.00006	.00014	.00000	.00016	.00079
%RSD	9.2679	30.885	4.5847	13.616	.00000	16.507	94.244
#1	.00193	.00126	.00129	.00114	.00760	.00107	.00140
#2	.00169	.00081	.00121	.00094	.00760	.00085	.00028
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00042	.00848	-.00323	.00092	.00055	.00002	.00213
SDev	.00003	.01429	.00220	.00008	.00003	.00103	.00006
%RSD	7.7744	168.51	67.883	8.3480	5.6569	4853.7	3.0298
#1	-.00040	.01858	-.00479	.00098	.00053	.00075	.00218
#2	-.00044	-.00162	-.00168	.00087	.00057	-.00070	.00208
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00100	.00252	.00447	.00102	.02662	-.00045	-.01145
SDev	.00070	.00000	.00134	.00018	.00730	.00544	.00425
%RSD	70.411	.14127	29.857	17.680	27.408	1200.7	37.130
#1	.00150	.00252	.00542	.00115	.03178	.00340	-.01445
#2	.00050	.00253	.00353	.00089	.02146	-.00430	-.00844
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00145	.00180	.00278	.00139	-.07980	Q-1.8903
SDev	.00090	.00039	.00169	.00053	.00494	.0352
%RSD	61.716	21.655	60.773	38.569	6.1862	1.8609
#1	.00209	.00207	.00398	.00176	-.08329	Q-1.8655
#2	.00082	.00152	.00159	.00101	-.07631	Q-1.9152
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.00000	.00000	.00000	.00000	.00000	.00000

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Range	.00300	.00400	.06000	.05000	.50000	.25000

Method: 6010C Sample Name: G9G5R Operator: STL
Run Time: 05/05/05 18:47:51
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.14491	.18942	1.0676	1.0743	-.00150	-.00609	2.9780
SDev	.00105	.00088	.0001	.0034	.00242	.00043	.0091
%RSD	.72758	.46245	.01240	.31391	161.36	7.0564	.30417
#1	.14565	.18880	1.0677	1.0767	.00021	-.00639	2.9716
#2	.14416	.19004	1.0675	1.0719	-.00322	-.00579	2.9844
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L-.06175	.05582	.01072	.04251	15.635	18.384	.01080
SDev	.00094	.00018	.00002	.00000	.036	.063	.00034
%RSD	1.5305	.33204	.20502	.00412	.22913	.34116	3.1874
#1	L-.06108	.05569	.01070	.04251	15.609	18.339	.01104
#2	L-.06241	.05595	.01073	.04251	15.660	18.428	.01056
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.37010	9.2198	11.227	H38.971	.05973	.01583	.10883
SDev	.00130	.0239	.029	.080	.00028	.00031	.00066
%RSD	.35227	.25959	.25913	.20423	.46880	1.9397	.60733
#1	.36918	9.2029	11.206	H38.915	.05953	.01604	.10836
#2	.37103	9.2367	11.247	H39.027	.05993	.01561	.10929
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.02085	.74353	.18418	.71528	H53.868	.01010	.04700
SDev	.00030	.00178	.00050	.00210	.110	.00157	.01760
%RSD	1.4356	.23984	.27330	.29294	.20398	15.540	37.461
#1	.02107	.74227	.18382	.71380	H53.790	.01121	.05944
#2	.02064	.74479	.18453	.71676	H53.946	.00899	.03455
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000

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Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	1.0720	-.00456	.15973	.22215	1.3641	H280.22	
SDev	.0023	.00052	.00041	.00053	.0070	.84	
%RSD	.21393	11.404	.25765	.24076	.51530	.30128	
#1	1.0737	-.00419	.16002	.22177	1.3691	H279.62	
#2	1.0704	-.00493	.15944	.22253	1.3591	H280.81	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9G5W Operator: STL
Run Time: 05/05/05 18:52:13
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.03376	.02653	.45768	.45520	.02030	.01575	3.1924
SDev	.00096	.00206	.00043	.00061	.00009	.00081	.0054
%RSD	2.8289	7.7782	.09482	.13476	.45904	5.1304	.16983
#1	.03308	.02507	.45799	.45476	.02037	.01518	3.1886
#2	.03443	.02799	.45738	.45563	.02024	.01632	3.1962
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.04086	.10668	.02008	.02284	35.815	.12659	.02237
SDev	.00126	.00008	.00004	.00007	.058	.00038	.00059
%RSD	3.0881	.07898	.19693	.29637	.16088	.30291	2.6556
#1	.04175	.10662	.02005	.02279	35.774	.12632	.02279
#2	.03997	.10674	.02011	.02289	35.856	.12687	.02195
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.29720	6.0965	10.310	16.432	.45242	.01116	.02469
SDev	.00056	.0118	.017	.021	.00034	.00005	.00199
%RSD	.18864	.19363	.16682	.12753	.07564	.47969	8.0685
#1	.29681	6.0882	10.298	16.417	.45218	.01113	.02329
#2	.29760	6.1049	10.322	16.447	.45267	.01120	.02610
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000

Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.02249	3.3018	1.0145	.26924	.08725	.01597	.07488
SDev	.00000	.0056	.0024	.00018	.00376	.00001	.00247
%RSD	.00202	.16860	.24032	.06668	4.3069	.08831	3.3035
#1	.02249	3.2979	1.0127	.26911	.08991	.01596	.07663
#2	.02249	3.3058	1.0162	.26937	.08460	.01598	.07313
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.45602	.01727	.03135	.05983	.07982	118.75
SDev	.00026	.00051	.00132	.00018	.00287	.32
%RSD	.05803	2.9418	4.2235	.29798	3.5951	.26990
#1	.45584	.01691	.03041	.05970	.07779	118.52
#2	.45621	.01762	.03229	.05996	.08185	118.97
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9G50 Operator: STL
Run Time: 05/05/05 18:56:35
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.44133	.27546	1.9192	1.9376	.00639	.00014	1.7667
SDev	.01542	.00590	.0100	.0170	.00950	.00685	.0204
%RSD	3.4941	2.1418	.51859	.87657	148.63	5023.4	1.1570
#1	.43043	.27964	1.9122	1.9256	.01311	-.00471	1.7523
#2	.45224	.27129	1.9263	1.9496	-.00033	.00498	1.7812
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L-.09118	.04449	-.00005	.00354	26.231	27.061	.01494
SDev	.00176	.00077	.00008	.00026	.237	.291	.00100
%RSD	1.9285	1.7422	159.10	7.3311	.90364	1.0761	6.6794
#1	L-.08994	.04394	.00001	.00336	26.064	26.855	.01424
#2	L-.09242	.04504	-.00011	.00372	26.399	27.266	.01565
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000

Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.56370	9.6413	5.2618	2.5390	.22090	.01915	.03202
SDev	.00794	.1132	.0300	.0294	.00283	.00100	.00133
%RSD	1.4085	1.1742	.57029	1.1583	1.2817	5.1966	4.1562
#1	.55809	9.5612	5.2406	2.5182	.21890	.01844	.03296
#2	.56932	9.7213	5.2830	2.5598	.22290	.01985	.03107
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.02354	1.4329	.01931	1.0533	.04666	-.00352	.42529
SDev	.00077	.0168	.00176	.0168	.00226	.00280	.05446
%RSD	3.2765	1.1716	9.0955	1.5985	4.8358	79.447	12.805
#1	.02299	1.4210	.02055	1.0413	.04826	-.00550	.46380
#2	.02408	1.4448	.01806	1.0652	.04507	-.00154	.38678
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	1.9315	.00222	.38610	6.7568	1.5979	H2089.7	
SDev	.0146	.00140	.00833	.0909	.0301	23.9	
%RSD	.75813	63.295	2.1565	1.3457	1.8863	1.1422	
#1	1.9211	.00123	.38021	6.6925	1.6192	H2072.9	
#2	1.9418	.00321	.39199	6.8211	1.5766	H2106.6	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9G56 Operator: STL
Run Time: 05/05/05 19:00:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00731	.00901	.28810	.28729	.00450	-.00097	1.5527
SDev	.00567	.00041	.00177	.00074	.00311	.00088	.0025
%RSD	77.519	4.5034	.61362	.25691	69.096	91.288	.15856
#1	.00330	.00930	.28935	.28677	.00669	-.00159	1.5545
#2	.01132	.00872	.28685	.28781	.00230	-.00034	1.5510
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00

Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.02876	.17288	.00113	.00324	38.221	.00686	.01354
SDev	.00068	.00035	.00003	.00016	.032	.00077	.00005
%RSD	2.3516	.20469	2.7122	4.9957	.08357	11.243	.35339
#1	.02828	.17313	.00111	.00312	38.199	.00631	.01358
#2	.02924	.17263	.00116	.00335	38.244	.00740	.01351
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.11504	3.9575	5.5806	3.4198	.04297	.00116	.00258
SDev	.00043	.0033	.0099	.0002	.00040	.00035	.00165
%RSD	.37364	.08411	.17705	.00710	.94136	30.270	63.860
#1	.11535	3.9551	5.5736	3.4200	.04268	.00091	.00375
#2	.11474	3.9598	5.5876	3.4197	.04325	.00141	.00142
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00514	.30883	.03338	.17122	.01505	-.00043	.00388
SDev	.00000	.00037	.00052	.00025	.00099	.00222	.01056
%RSD	.06461	.12106	1.5428	.14813	6.6058	521.72	272.45
#1	.00514	.30910	.03375	.17139	.01575	-.00199	.01134
#2	.00514	.30857	.03302	.17104	.01434	.00114	-.00359
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.28755	.00085	.00788	.01077	.10121	73.334
SDev	.00010	.00044	.00364	.00025	.01741	.188
%RSD	.03356	52.230	46.271	2.3184	17.207	.25583
#1	.28762	.00116	.00530	.01059	.08890	73.201
#2	.28749	.00054	.01045	.01094	.11353	73.466
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9G59 Operator: STL
Run Time: 05/05/05 19:05:19
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00234	-.00035	.01332	.01217	.00362	.00110	.76679
SDev	.00048	.00061	.00045	.00006	.00255	.00195	.00058
%RSD	20.699	175.11	3.3711	.48390	70.372	177.07	.07622
#1	.00200	.00008	.01300	.01213	.00182	.00248	.76637
#2	.00268	-.00078	.01363	.01221	.00543	-.00028	.76720
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00151	.04790	-.00047	-.00015	24.102	.11422	.00361
SDev	.00019	.00000	.00002	.00006	.064	.00018	.00024
%RSD	12.446	.00000	4.6828	35.861	.26754	.15800	6.7956
#1	.00164	.04790	-.00048	-.00011	24.057	.11434	.00378
#2	.00137	.04790	-.00045	-.00019	24.148	.11409	.00343
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.03080	.93746	9.3809	.18650	.00409	.00000	-.00001
SDev	.00003	.01145	.0269	.00066	.00044	.00068	.00210
%RSD	.10199	1.2210	.28672	.35544	10.645	42782.	14047.
#1	.03082	.94555	9.3619	.18604	.00378	.00048	-.00150
#2	.03078	.92936	9.3999	.18697	.00440	-.00048	.00147
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V 2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00058	.07827	.00267	.47516	.03689	-.00230	-.00040
SDev	.00056	.00027	.00013	.00094	.00138	.00083	.01863
%RSD	96.677	.34974	4.7406	.19748	3.7551	36.088	4607.5
#1	.00098	.07807	.00276	.47449	.03591	-.00171	.01277
#2	.00018	.07846	.00258	.47582	.03787	-.00289	-.01358
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.01255	.00194	.00144	.00174	.18162	177.40
SDev	.00019	.00045	.00012	.00025	.00649	.66
%RSD	1.5037	23.293	8.2268	14.347	3.5705	.37014
#1	.01242	.00226	.00136	.00192	.17703	176.93
#2	.01269	.00162	.00153	.00156	.18620	177.86
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9G6D Operator: STL
Run Time: 05/05/05 19:09:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.02432	.01148	.99456	.99460	.00936	.00391	1.5084
SDev	.00220	.00093	.00066	.00494	.00314	.00129	.0036
%RSD	9.0607	8.0947	.06615	.49681	33.544	32.933	.23647
#1	.02277	.01214	.99410	.99111	.00714	.00300	1.5059
#2	.02588	.01083	.99503	.99810	.01158	.00483	1.5109
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.02103	.11203	.00747	.01375	57.590	.21823	.01288
SDev	.00129	.00010	.00002	.00006	.148	.00049	.00044
%RSD	6.1606	.09025	.23531	.40058	.25712	.22679	3.4447
#1	.02011	.11196	.00746	.01371	57.486	.21788	.01320
#2	.02194	.11210	.00748	.01379	57.695	.21858	.01257
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.57693	4.9348	12.872	10.212	.07229	.00098	.00912
SDev	.00027	.0140	.037	.025	.00000	.00033	.00278
%RSD	.04619	.28312	.28573	.24107	.00000	33.430	30.425
#1	.57674	4.9249	12.846	10.194	.07229	.00121	.01109
#2	.57711	4.9447	12.898	10.229	.07229	.00075	.00716
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00965	8.0525	1.6758	.33430	.01619	-.00001	.14258
SDev	.00007	.0255	.0059	.00072	.00044	.00062	.01320
%RSD	.75231	.31639	.35177	.21532	2.7147	10191.	9.2592
#1	.00960	8.0345	1.6716	.33379	.01650	.00043	.15191
#2	.00970	8.0705	1.6800	.33481	.01588	-.00044	.13324
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.99459	.00573	.02005	.02688	.07309	228.02
SDev	.00351	.00191	.00116	.00014	.00209	.84
%RSD	.35340	33.266	5.7888	.53066	2.8636	.36681
#1	.99210	.00438	.01923	.02678	.07161	227.43
#2	.99707	.00707	.02087	.02698	.07457	228.61
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9G6E Operator: STL
Run Time: 05/05/05 19:14:03
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.08037	.04651	.24893	.23933	.00591	-.00571	10.949
SDev	.00183	.00395	.00089	.00137	.00252	.00143	.018
%RSD	2.2793	8.4996	.35924	.57207	42.586	24.998	.16038
#1	-.07907	.04930	.24956	.23837	.00769	-.00470	10.962
#2	-.08166	.04371	.24830	.24030	.00413	-.00672	10.937
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.02266	.25101	.00848	.01179	37.639	1.7012	.03543
SDev	.00002	.00081	.00001	.00007	.014	.0006	.00069
%RSD	.07429	.32223	.10360	.58235	.03729	.03356	1.9618
#1	.02264	.25158	.00848	.01184	37.629	1.7016	.03494
#2	.02267	.25044	.00849	.01175	37.649	1.7008	.03592
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

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Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.11371	3.1474	11.094	H57.934	.14040	.00283	.00821
SDev	.00064	.0010	.010	.031	.00068	.00057	.00042
%RSD	.56597	.03064	.09235	.05347	.48751	20.068	5.1266
#1	.11417	3.1467	11.087	H57.913	.14089	.00242	.00791
#2	.11326	3.1481	11.102	H57.956	.13992	.00323	.00851
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.03488	.92075	.00703	.97728	H50.012	.01048	.35456
SDev	.00008	.00072	.00150	.00224	.017	.00123	.00915
%RSD	.22075	.07855	21.312	.22930	.03449	11.769	2.5805
#1	.03493	.92126	.00809	.97887	H50.000	.00961	.36103
#2	.03482	.92024	.00597	.97570	H50.024	.01135	.34809
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.24253	-.00184	L-.03812	10.860	3.7672	H2842.6	
SDev	.00061	.00179	.00254	.015	.0073	3.8	
%RSD	.25375	97.277	6.6583	.13593	.19344	.13515	
#1	.24210	-.00057	L-.03632	10.871	3.7621	H2845.3	
#2	.24297	-.00311	L-.03991	10.850	3.7724	H2839.9	
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9G6F Operator: STL
Run Time: 05/05/05 19:18:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.58306	.38047	3.4657	3.4941	.00444	-.00963	3.7182
SDev	.00847	.00076	.0032	.0234	.00562	.00352	.0104
%RSD	1.4527	.19970	.09235	.66840	126.67	36.518	.27868
#1	.57707	.38100	3.4634	3.4776	.00842	-.01212	3.7109
#2	.58905	.37993	3.4679	3.5106	.00046	-.00714	3.7255
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L-.14890	.08154	.00473	.01503	36.058	40.130	.01462
SDev	.00077	.00008	.00004	.00008	.147	.135	.00010
%RSD	.51749	.10333	.92918	.54877	.40817	.33710	.69377
#1	L-.14836	.08148	.00470	.01498	35.954	40.034	.01455
#2	L-.14945	.08160	.00476	.01509	36.162	40.226	.01469
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.44860	14.190	10.200	H40.194	.63909	.01777	.04280
SDev	.00034	.063	.053	.148	.00168	.00040	.00030
%RSD	.07565	.44390	.52381	.36770	.26289	2.2485	.69660
#1	.44884	14.145	10.162	H40.090	.63790	.01749	.04301
#2	.44836	14.234	10.238	H40.299	.64028	.01805	.04259
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.02210	3.3369	.01360	1.7931	7.8529	.00100	1.5072
SDev	.00018	.0099	.00019	.0026	.0453	.00181	.0175
%RSD	.82405	.29716	1.3871	.14293	.57717	180.71	1.1595
#1	.02197	3.3299	.01347	1.7913	7.8208	-.00028	1.5196
#2	.02223	3.3439	.01373	1.7949	7.8849	.00228	1.4949
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	3.4847	-.00495	.51559	.25916	3.2130	H1041.9
SDev	.0166	.00047	.00540	.00011	.0272	3.6
%RSD	.47762	9.5721	1.0467	.04127	.84500	.34512
#1	3.4729	L-.00528	.51178	.25909	3.1938	H1039.4
#2	3.4964	-.00461	.51941	.25924	3.2322	H1044.4
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9H40 Operator: STL
Run Time: 05/05/05 19:22:49
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00304	-.02251	.03277	.03357	.00742	.00169	.23429
SDev	.00303	.00191	.00241	.00226	.00122	.00206	.00049
%RSD	99.504	8.4757	7.3540	6.7346	16.432	122.00	.21083
#1	-.00518	-.02116	.03448	.03197	.00828	.00023	.23394
#2	-.00090	-.02386	.03107	.03517	.00655	.00315	.23463
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00121	.02267	.00015	.00110	11.433	.01768	.00230
SDev	.00075	.00015	.00001	.00003	.037	.00020	.00000
%RSD	62.077	.66884	5.8928	2.2521	.32380	1.1315	.12651
#1	.00068	.02257	.00016	.00108	11.406	.01782	.00230
#2	.00174	.02278	.00014	.00112	11.459	.01753	.00230
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00789	.25807	2.9404	4.9068	.00594	.00583	.00240
SDev	.00055	.00186	.0091	.0164	.00025	.00014	.00338
%RSD	6.9798	.71866	.31113	.33345	4.1903	2.3088	140.81
#1	.00828	.25676	2.9340	4.8952	.00576	.00574	.00479
#2	.00750	.25938	2.9469	4.9184	.00612	.00593	.00001
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00215	.02934	3.2599	.11494	.03493	-.00195	.05348
SDev	.00019	.00018	.0170	.00036	.00138	.00060	.01970
%RSD	8.8496	.60740	.52105	.31377	3.9457	30.879	36.839
#1	-.00202	.02921	3.2479	.11469	.03590	-.00237	.06741
#2	-.00229	.02946	3.2719	.11520	.03396	-.00152	.03955
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.03331	.00360	-.00952	.00401	-.02996	H719.32
SDev	.00071	.00097	.00138	.00011	.00172	3.01
%RSD	2.1180	26.975	14.529	2.6683	5.7311	.41783

#1	.03281	.00291	L-.01050	.00393	-.02875	H717.19
#2	.03381	.00428	-.00855	.00408	-.03118	H721.44

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9H42 Operator: STL
Run Time: 05/05/05 19:27:11
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.09030	.04009	.33851	.34347	.00644	-.00246	.24231
SDev	.00090	.00288	.00163	.00148	.00038	.00261	.00659
%RSD	1.0000	7.1845	.48244	.43029	5.9669	106.13	2.7213
#1	.08966	.04213	.33967	.34242	.00671	-.00431	.23765
#2	.09094	.03805	.33736	.34451	.00617	-.00061	.24697
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L-.02165	.02085	-.00012	.00062	10.217	5.8422	-.00050
SDev	.00054	.00003	.00007	.00030	.035	.0305	.00099
%RSD	2.5042	.16163	59.546	48.298	.34478	.52125	199.12
#1	L-.02126	.02083	-.00017	.00041	10.242	5.8637	-.00119
#2	L-.02203	.02088	-.00007	.00083	10.193	5.8206	.00020
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.09508	.48187	3.0406	2.6490	.00568	.00228	.00353
SDev	.00063	.01812	.0051	.0157	.00050	.00139	.00348
%RSD	.66294	3.7601	.16849	.59439	8.7703	60.964	98.369
#1	.09553	.46906	3.0370	2.6601	.00532	.00130	.00108
#2	.09463	.49468	3.0442	2.6379	.00603	.00327	.00599
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00163	.10266	2.8852	.25521	.13463	-.00344	.02802
SDev	.00138	.00062	.0123	.00246	.00211	.00700	.02230
%RSD	84.744	.60031	.42643	.96263	1.5642	203.34	79.574

#1	-.00260	.10310	2.8939	.25695	.13612	-.00840	.01225
#2	-.00065	.10222	2.8765	.25347	.13314	.00151	.04379
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.34182	.00050	.07358	.02993	.24529	H1475.6
SDev	.00044	.00161	.00036	.00025	.04204	8.2
%RSD	.12929	320.04	.48501	.83399	17.138	.55704
#1	.34150	-.00064	.07383	.02975	.21556	H1481.4
#2	.34213	.00164	.07333	.03010	.27501	H1469.7
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/05/05 19:31:34
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	3.8950	3.9317	3.9301	3.8998	3.9808	3.9580	37.903
SDev	.0263	.0131	.0140	.0204	.0125	.0221	.009
%RSD	.67597	.33429	.35652	.52208	.31418	.55922	.02322
#1	3.8763	3.9224	3.9201	3.8854	3.9720	3.9424	37.897
#2	3.9136	3.9410	3.9400	3.9142	3.9897	3.9737	37.909
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.0215	4.1751	4.1497	3.9888	19.747	3.8860	3.9199
SDev	.0062	.0072	.0035	.0011	.008	.0006	.0002
%RSD	.15384	.17355	.08523	.02862	.04233	.01581	.00499
#1	4.0259	4.1802	4.1522	3.9880	19.741	3.8856	3.9197
#2	4.0171	4.1700	4.1472	3.9896	19.753	3.8865	3.9200
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	3.9642	39.985	19.416	4.0245	3.9427	.99790	3.8805
SDev	.0065	.006	.018	.0011	.0030	.00091	.0005
%RSD	.16472	.01586	.09141	.02799	.07654	.09133	.01239

#1	3.9689	39.989	19.404	4.0253	3.9405	.99854	3.8809
#2	3.9596	39.980	19.429	4.0237	3.9448	.99725	3.8802
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	3.9539	3.9571	4.0677	4.1456	4.1213	Q3.2549	3.9758
SDev	.0022	.0008	.0011	.0019	.0006	.0064	.0072
%RSD	.05549	.01938	.02603	.04621	.01475	.19528	.18198
#1	3.9555	3.9577	4.0684	4.1443	4.1218	Q3.2594	3.9707
#2	3.9523	3.9566	4.0669	4.1470	4.1209	Q3.2504	3.9809
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	3.9099	3.9656	3.9072	4.0482	Q3.4603	37.116
SDev	.0182	.0189	.0219	.0022	.0022	.379
%RSD	.46666	.47731	.56148	.05550	.06359	1.0214
#1	3.8970	3.9522	3.8917	4.0498	Q3.4587	36.848
#2	3.9228	3.9790	3.9227	4.0466	Q3.4618	37.384
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 05/05/05 19:35:58
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00364	-.00007	.00011	.00158	.00156	.00088	.04143
SDev	.00017	.00124	.00082	.00048	.00091	.00218	.00741
%RSD	4.7588	1684.1	710.89	30.537	58.099	247.36	17.886
#1	.00376	-.00095	-.00046	.00124	.00092	.00242	.04667
#2	.00352	.00081	.00069	.00192	.00220	-.00066	.03619
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00331	.00160	.00198	.00161	.01245	.00138	.00140
SDev	.00123	.00084	.00082	.00080	.00328	.00070	.00109
%RSD	37.118	52.769	41.359	49.963	26.367	51.080	77.822

#1	.00418	.00219	.00255	.00218	.01478	.00188	.00217
#2	.00244	.00100	.00140	.00104	.01013	.00088	.00063
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00018	.01738	.01359	.00208	.00169	.00025	.00317
SDev	.00081	.01168	.00183	.00076	.00096	.00020	.00108
%RSD	442.78	67.229	13.469	36.738	56.936	82.594	34.149
#1	.00076	.02564	.01488	.00261	.00238	.00039	.00393
#2	-.00039	.00912	.01229	.00154	.00101	.00010	.00240
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00153	.00320	.00628	.00161	.00907	.00120	-.00785
SDev	.00153	.00072	.00303	.00072	.00072	.00326	.00793
%RSD	99.883	22.659	48.153	44.899	7.9320	272.64	101.02
#1	.00260	.00371	.00842	.00212	.00958	.00350	-.01347
#2	.00045	.00269	.00414	.00110	.00856	-.00111	-.00224
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00109	.00111	.00240	.00204	-.00826	Q-.25702
SDev	.00059	.00115	.00030	.00096	.00612	.02345
%RSD	54.354	103.90	12.444	47.140	74.056	9.1236
#1	.00067	.00192	.00219	.00272	-.01258	Q-.27360
#2	.00151	.00029	.00261	.00136	-.00393	-.24044
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00300	.00400	.06000	.05000	.50000	.25000

Method: 6010C Sample Name: G9ECFB Operator: STL
Run Time: 05/05/05 19:40:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00022	-.00068	.00239	.00250	.00562	-.00368	L.02297
SDev	.00101	.00214	.00277	.00137	.00026	.00002	.00188
%RSD	455.15	313.56	115.88	54.809	4.5888	.53229	8.1705

#1	.00094	-.00219	.00043	.00347	.00580	-.00369	L.02164
#2	-.00049	.00083	.00436	.00153	.00543	-.00366	L.02429
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Low
High							.20000
Low							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L-.00011	.06437	-.00060	-.00054	H.62674	-.00040	-.00017
SDev	.00006	.00034	.00002	.00007	.00209	.00084	.00015
%RSD	60.356	.52358	2.9463	12.634	.33343	209.14	84.255
#1	L-.00006	.06413	-.00058	-.00059	H.62527	-.00099	-.00028
#2	L-.00015	.06460	-.00061	-.00049	H.62822	.00019	-.00007
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	.00700	.20000	.20000	.00500	.25000	.01000	.05000
Low	.00700	-.20000	-.20000	-.00500	-.25000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00170	.00628	.04904	-.00068	-.00048	-.00006	.00003
SDev	.00021	.00015	.00073	.00002	.00056	.00012	.00044
%RSD	12.335	2.3463	1.4926	3.3914	115.71	213.94	1455.3
#1	-.00184	.00618	.04852	-.00070	-.00088	.00003	-.00028
#2	-.00155	.00639	.04955	-.00067	-.00009	-.00014	.00034
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.02500	.05000	.25000	.01500	.04000	.01000	.01000
Low	-.02500	-.05000	-.25000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00066	H.01423	.00030	.00180	.00274	-.00231	-.00473
SDev	.00037	.00015	.00056	.00000	.00016	.00035	.00985
%RSD	56.857	1.0246	182.77	.00232	5.9886	15.230	208.41
#1	-.00092	H.01412	-.00009	.00180	.00262	-.00255	-.01169
#2	-.00039	H.01433	.00070	.00180	.00285	-.00206	.00224
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.04000	.05000	.10000	.50000	.50000
Low	-.05000	-.01000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00247	-.00058	-.00008	-.00030	-.06336	H565.02
SDev	.00001	.00007	.00004	.00007	.00223	2.45
%RSD	.36466	12.488	47.796	23.570	3.5240	.43441
#1	.00246	-.00053	-.00011	-.00035	-.06494	H563.28
#2	.00247	-.00063	-.00005	-.00025	-.06178	H566.76
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC High
High	.00300	.00500	.01000	.05000		.25000

Low	-.00300	-.00500	-.01000	-.05000		-.25000	

Method: 6010C Sample Name: G9G7VC Operator: STL
Run Time: 05/05/05 19:44:43
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	1.0103	1.0119	.98708	.99507	1.0786	1.0481	1.1289
SDev	.0037	.0018	.00242	.00363	.0010	.0048	.0031
%RSD	.36588	.17686	.24473	.36445	.08971	.45956	.27127
#1	1.0077	1.0107	.98537	.99251	1.0793	1.0447	1.1311
#2	1.0129	1.0132	.98879	.99763	1.0780	1.0515	1.1268
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							1.2000
Low							.80000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.0324	1.1471	1.0790	1.0073	20.651	.99957	.99138
SDev	.0023	.0094	.0039	.0008	.037	.00232	.00174
%RSD	.21942	.81971	.36568	.07995	.17781	.23200	.17518
#1	1.0340	1.1537	1.0818	1.0079	20.677	1.0012	.99261
#2	1.0308	1.1404	1.0762	1.0067	20.625	.99793	.99015
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2040	1.2040	1.2000	1.2040	24.000	1.2040	1.2000
Low	.79500	.79500	.80000	.79500	16.000	.79500	.80000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.0666	1.1119	19.776	1.0276	1.0033	.25499	.98638
SDev	.0079	.0164	.008	.0038	.0023	.00032	.00278
%RSD	.74488	1.4745	.03978	.37409	.23256	.12392	.28204
#1	1.0722	1.1004	19.781	1.0303	1.0050	.25521	.98834
#2	1.0610	1.1235	19.770	1.0249	1.0017	.25476	.98441
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2000	1.2000	24.000	1.2040	1.2000	.33700	1.2040
Low	.80000	.80000	16.000	.79500	.80000	.12300	.79500

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	1.0266	1.0289	1.0410	1.0864	L.00325	L-.00351	L-.00542
SDev	.0040	.0036	.0006	.0074	.00165	.00505	.02864
%RSD	.39199	.35045	.05795	.68520	50.893	143.82	528.36
#1	1.0295	1.0315	1.0406	1.0916	L.00208	L-.00708	L-.02567
#2	1.0238	1.0264	1.0414	1.0811	L.00441	L.00006	L.01483
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Low	LC Low
High	1.2000	1.2000	1.2000	1.2000	2.4000	2.4000	2.4000

Low	.80000	.80000	.80000	.80000	1.6000	1.6000	1.6000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.99241	1.0583	1.0108	L.00050	L-.08169	622.87	
SDev	.00322	.0029	.0031	.00036	.03595	3.02	
%RSD	.32479	.27314	.30286	70.711	44.006	.48442	
#1	.99013	1.0563	1.0087	L.00025	L-.10711	625.00	
#2	.99469	1.0603	1.0130	L.00076	L-.05627	620.74	
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Low	NOCHECK	
High	1.2040	1.2040	1.2040	2.4000	2.4000		
Low	.79500	.79500	.79500	1.6000	1.6000		

Method: 6010C Sample Name: G8WP7 Operator: STL
Run Time: 05/05/05 19:49:05
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.01762	.01550	1.2505	1.2586	.00561	-.00123	.00649
SDev	.00083	.00177	.0015	.0065	.00055	.00302	.00041
%RSD	4.6911	11.431	.12111	.51722	9.8060	245.27	6.3615
#1	.01704	.01675	1.2495	1.2540	.00522	-.00336	.00678
#2	.01820	.01425	1.2516	1.2632	.00600	.00090	.00620
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00616	.35361	-.00068	.07197	204.17	-.00056	.00971
SDev	.00000	.00022	.00001	.00013	.47	.00012	.00060
%RSD	.03352	.06196	1.2856	.18059	.23204	20.867	6.1256
#1	.00616	.35376	-.00069	.07188	203.84	-.00064	.00929
#2	.00616	.35345	-.00068	.07207	204.51	-.00047	.01013
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.5507	-.00127	11.082	1.9782	.10573	.00021	-.00219
SDev	.0010	.01157	.026	.0025	.00056	.00070	.00003
%RSD	.06423	911.09	.23280	.12392	.52967	339.49	1.4454
#1	1.5514	-.00945	11.063	1.9765	.10533	-.00029	-.00217
#2	1.5500	.00691	11.100	1.9799	.10613	.00070	-.00221
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000

Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00047	14.956	.00194	.54060	.00391	-.00271	-.00981
SDev	.00056	.037	.00004	.00023	.00006	.00340	.00301
%RSD	117.27	.24711	1.9537	.04187	1.4093	125.43	30.676
#1	-.00087	14.930	.00192	.54076	.00387	-.00511	-.00769
#2	-.00008	14.982	.00197	.54044	.00395	-.00031	-.01194
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	1.2559	.00105	.01691	-.00154	-.06951	H666.88
SDev	.0048	.00220	.00004	.00011	.01208	.79
%RSD	.38588	209.76	.22896	6.9551	17.374	.11839
#1	1.2525	-.00051	.01694	-.00161	-.07805	H666.32
#2	1.2593	.00260	.01689	-.00146	-.06097	H667.44
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WP7S Operator: STL
Run Time: 05/05/05 19:53:27
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.50373	.50808	1.6036	1.6123	2.0731	2.0250	2.1319
SDev	.01069	.00094	.0057	.0054	.0224	.0012	.0218
%RSD	2.1225	.18476	.35744	.33218	1.0828	.06098	1.0242
#1	.49617	.50742	1.5995	1.6085	2.0572	2.0241	2.1164
#2	.51129	.50875	1.6076	1.6161	2.0890	2.0259	2.1473
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	2.0414	2.4394	.05285	.11352	233.66	.19362	.48498
SDev	.0173	.0320	.00043	.00118	1.90	.00054	.00516
%RSD	.84853	1.3104	.80641	1.0361	.81411	.28089	1.0633
#1	2.0291	2.4168	.05255	.11269	232.32	.19324	.48133
#2	2.0536	2.4620	.05315	.11436	235.01	.19401	.48862
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000

Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.6803	1.0771	58.383	2.2941	.57982	.04972	1.9045
SDev	.0223	.0261	.439	.0230	.00498	.00161	.0200
%RSD	1.3275	2.4222	.75154	1.0026	.85854	3.2394	1.0490
#1	1.6645	1.0587	58.073	2.2779	.57630	.04858	1.8904
#2	1.6960	1.0956	58.693	2.3104	.58334	.05086	1.9186
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.50037	14.099	1.0096	1.5562	.00204	-.00491	-.02279
SDev	.00592	.117	.0110	.0207	.00137	.00401	.04523
%RSD	1.1825	.82778	1.0890	1.3282	67.443	81.563	198.47
#1	.49618	14.017	1.0019	1.5416	.00301	-.00774	.00919
#2	.50455	14.182	1.0174	1.5708	.00107	-.00208	-.05478
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	1.6094	2.0410	.50518	-.00003	-.05271	H675.74	
SDev	.0055	.0083	.00744	.00025	.02788	6.28	
%RSD	.34057	.40660	1.4735	989.95	52.890	.92889	
#1	1.6055	2.0352	.49992	-.00020	-.03300	H671.31	
#2	1.6133	2.0469	.51044	.00015	-.07243	H680.18	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G8WP7D Operator: STL
Run Time: 05/05/05 19:57:49
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.49408	.49659	1.5947	1.6066	2.0385	2.0055	2.1134
SDev	.00003	.00051	.0008	.0033	.0065	.0019	.0131
%RSD	.00571	.10271	.04908	.20644	.31928	.09276	.61824
#1	.49410	.49623	1.5941	1.6043	2.0339	2.0042	2.1042
#2	.49406	.49695	1.5952	1.6090	2.0431	2.0068	2.1226
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00

Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	2.0224	2.4017	.05256	.11276	232.82	.19287	.48189
SDev	.0107	.0139	.00019	.00059	.88	.00043	.00139
%RSD	.53042	.57953	.35947	.52549	.37724	.22313	.28796
#1	2.0148	2.3919	.05243	.11234	232.20	.19257	.48091
#2	2.0299	2.4116	.05269	.11318	233.44	.19318	.48287
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.6523	1.0133	58.205	2.2748	.57613	.04911	1.8934
SDev	.0100	.0040	.210	.0105	.00180	.00007	.0087
%RSD	.60457	.39425	.36088	.46291	.31321	.14859	.45883
#1	1.6453	1.0161	58.057	2.2673	.57485	.04906	1.8873
#2	1.6594	1.0104	58.354	2.2822	.57740	.04917	1.8995
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.49568	14.044	1.0023	1.5374	.00301	-.00682	-.00606
SDev	.00227	.063	.0058	.0087	.00033	.00056	.00932
%RSD	.45851	.44844	.57652	.56774	10.949	8.1799	153.70
#1	.49407	13.999	.99824	1.5312	.00325	-.00643	.00053
#2	.49728	14.088	1.0064	1.5435	.00278	-.00722	-.01265
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	1.6026	2.0165	.49491	.00028	.00599	H670.86	
SDev	.0025	.0034	.00015	.00004	.01033	3.63	
%RSD	.15429	.16901	.03053	12.856	172.37	.54065	
#1	1.6009	2.0141	.49481	.00025	.01330	H668.30	
#2	1.6044	2.0189	.49502	.00030	-.00131	H673.43	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G8WP7V 5X Operator: STL
Run Time: 05/05/05 20:02:11
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00053	.00318	.25940	.25701	.00368	-.00024	.01731
SDev	.00388	.00070	.00051	.00369	.00272	.00015	.00115
%RSD	735.23	22.028	.19686	1.4377	73.883	63.751	6.6399
#1	-.00327	.00367	.25904	.25439	.00560	-.00013	.01650
#2	.00222	.00268	.25976	.25962	.00176	-.00035	.01812
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00243	.07087	-.00043	.01448	42.129	-.00012	.00167
SDev	.00016	.00121	.00001	.00028	.252	.00024	.00050
%RSD	6.6526	1.7119	2.0495	1.9331	.59736	198.74	29.650
#1	.00231	.07001	-.00043	.01428	41.952	.00005	.00132
#2	.00254	.07173	-.00042	.01468	42.307	-.00029	.00203
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.29862	-.00555	2.2476	.40196	.02110	-.00029	.00115
SDev	.00150	.00674	.0254	.00224	.00028	.00075	.00062
%RSD	.50331	121.44	1.1316	.55755	1.3272	260.29	54.181
#1	.29756	-.01031	2.2296	.40038	.02090	-.00081	.00159
#2	.29968	-.00078	2.2656	.40354	.02130	.00024	.00071
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00037	3.0826	.00142	.10797	.00391	-.00336	.00760
SDev	.00041	.0174	.00095	.00097	.00083	.00297	.00723
%RSD	111.31	.56330	66.621	.89909	21.199	88.626	95.064
#1	-.00065	3.0703	.00209	.10728	.00449	-.00546	.01271
#2	-.00008	3.0949	.00075	.10865	.00332	-.00125	.00249
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.25780	.00106	.00071	-.00098	.00284	101.54
SDev	.00264	.00101	.00235	.00004	.00180	.71
%RSD	1.0219	94.606	333.68	3.6262	63.597	.70055
#1	.25594	.00178	-.00096	-.00101	.00156	101.04
#2	.25967	.00035	.00237	-.00096	.00411	102.04
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WQL Operator: STL
Run Time: 05/05/05 20:06:33
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.01080	.00815	.30948	.31679	.00337	-.00071	.02857
SDev	.00887	.00654	.00353	.00400	.00744	.00558	.00316
%RSD	82.076	80.234	1.1399	1.2638	220.77	789.93	11.048
#1	.00453	.01278	.31198	.31396	.00864	-.00465	.03080
#2	.01708	.00353	.30699	.31962	-.00189	.00324	.02634
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00049	.65981	-.00066	.03646	139.18	-.00107	.00914
SDev	.00148	.00605	.00007	.00018	.65	.00155	.00035
%RSD	302.61	.91685	10.574	.49545	.47017	144.21	3.8674
#1	.00056	.65553	-.00062	.03633	138.72	.00002	.00889
#2	-.00153	.66409	-.00071	.03659	139.64	-.00217	.00939
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.0071	-.00960	6.5709	1.6417	.04002	-.00063	-.00104
SDev	.0088	.00061	.0220	.0103	.00034	.00025	.00203
%RSD	.86923	6.3895	.33415	.62568	.85521	39.111	195.57
#1	1.0009	-.00917	6.5553	1.6344	.04026	-.00081	.00040
#2	1.0133	-.01003	6.5864	1.6489	.03978	-.00046	-.00247
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00122	7.7763	-.00138	.37468	.00298	-.00609	-.03803
SDev	.00040	.0459	.00120	.00317	.00071	.00204	.04327
%RSD	32.988	.58986	86.929	.84530	23.869	33.473	113.79
#1	-.00150	7.7439	-.00053	.37244	.00348	-.00753	-.00743
#2	-.00093	7.8088	-.00223	.37692	.00248	-.00465	-.06862

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.31436	.00065	.00992	-.00149	-.06096	H631.31
SDev	.00150	.00124	.00374	.00004	.02461	2.96
%RSD	.47574	190.73	37.669	2.3970	40.378	.46927
#1	.31330	-.00023	.00728	-.00151	-.04356	H629.21
#2	.31541	.00153	.01256	-.00146	-.07837	H633.40

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WQN Operator: STL
Run Time: 05/05/05 20:10:55
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.08309	.08166	.95313	.96006	.00086	-.00257	.01197
SDev	.00089	.00133	.00018	.00219	.00164	.00135	.00196
%RSD	1.0662	1.6235	.01921	.22821	189.98	52.485	16.366
#1	.08246	.08072	.95300	.95851	.00202	-.00352	.01058
#2	.08372	.08260	.95326	.96160	-.00030	-.00162	.01335

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00393	.57621	-.00057	.04198	191.03	-.00023	.00920
SDev	.00046	.00403	.00004	.00001	.39	.00014	.00024
%RSD	11.815	.69894	6.8799	.03001	.20222	61.282	2.6596
#1	.00360	.57906	-.00060	.04198	191.30	-.00033	.00902
#2	.00426	.57336	-.00055	.04197	190.76	-.00013	.00937

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.1462	.00224	9.9888	2.1513	.05740	.00065	.00027
SDev	.0077	.00230	.0143	.0080	.00009	.00024	.00062
%RSD	.66955	102.60	.14287	.37076	.16261	36.685	229.96
#1	1.1517	.00061	9.9989	2.1569	.05733	.00048	-.00017
#2	1.1408	.00386	9.9788	2.1457	.05746	.00081	.00071
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00032	15.641	.00058	.45102	.00109	-.00043	-.00112
SDev	.00056	.028	.00095	.00296	.00072	.00159	.02127
%RSD	177.71	.18102	163.44	.65533	66.032	373.44	1899.1
#1	-.00071	15.661	-.00009	.45311	.00161	-.00155	-.01616
#2	.00008	15.621	.00126	.44893	.00058	.00070	.01392
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.95775	-.00143	.08261	-.00141	-.00723	H630.46	
SDev	.00152	.00035	.00103	.00014	.02858	2.11	
%RSD	.15895	24.805	1.2496	10.102	395.29	.33476	
#1	.95667	-.00168	.08188	-.00151	-.02744	H631.96	
#2	.95882	-.00118	.08334	-.00131	.01298	H628.97	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G8WQR Operator: STL
Run Time: 05/05/05 20:15:17
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.03244	.02922	2.5160	2.5180	.00177	-.00175	.06666
SDev	.00518	.00334	.0055	.0118	.00847	.00642	.00558
%RSD	15.973	11.431	.21817	.46688	480.00	367.83	8.3741
#1	.02877	.03159	2.5121	2.5097	.00776	-.00628	.06272
#2	.03610	.02686	2.5198	2.5263	-.00423	.00279	.07061
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00108	.96111	-.00049	.01623	113.44	-.00016	.00872
SDev	.00034	.01146	.00002	.00017	.48	.00034	.00144
%RSD	31.059	1.1922	4.4472	1.0236	.42054	216.27	16.470
#1	.00085	.96921	-.00051	.01611	113.78	-.00039	.00770
#2	.00132	.95301	-.00048	.01634	113.10	.00008	.00973
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.0428	.01842	5.7071	1.9336	.02512	.00107	-.00035
SDev	.0117	.02735	.0128	.0129	.00168	.00177	.00073
%RSD	1.1210	148.51	.22442	.66940	6.6872	165.43	207.84
#1	1.0511	-.00092	5.7162	1.9428	.02394	-.00018	.00016
#2	1.0346	.03776	5.6981	1.9245	.02631	.00232	-.00087
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00008	7.6756	-.00131	.28361	.00149	-.00062	-.01208
SDev	.00149	.0501	.00032	.00303	.00016	.01042	.00891
%RSD	1922.4	.65306	24.282	1.0670	10.889	1673.7	73.786
#1	-.00097	7.7111	-.00154	.28575	.00137	-.00799	-.01838
#2	.00113	7.6402	-.00109	.28147	.00160	.00675	-.00578
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	2.5173	-.00058	.03137	-.00081	.00296	H624.51
SDev	.0097	.00146	.00234	.00050	.03328	3.88
%RSD	.38411	253.37	7.4704	61.872	1124.3	.62145
#1	2.5105	-.00161	.02971	-.00116	-.02058	H627.26
#2	2.5242	.00046	.03302	-.00045	.02650	H621.77
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WQT Operator: STL
Run Time: 05/05/05 20:19:40
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

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Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.01401	.01556	1.0194	1.0273	.00679	-.00416	.01422
SDev	.00269	.00187	.0003	.0014	.01099	.00277	.00347
%RSD	19.227	12.051	.02670	.13266	161.86	66.497	24.399
#1	.01592	.01423	1.0196	1.0282	-.00098	-.00220	.01177
#2	.01211	.01688	1.0192	1.0263	.01457	-.00612	.01668
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00148	.57258	-.00050	.05330	190.09	-.00027	.00891
SDev	.00036	.00260	.00008	.00011	.07	.00051	.00055
%RSD	24.682	.45322	15.713	.20768	.03533	185.27	6.1641
#1	.00174	.57441	-.00056	.05337	190.04	-.00063	.00930
#2	.00122	.57074	-.00045	.05322	190.14	.00008	.00852
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.2308	-.00837	8.9391	1.7259	.09095	.00022	-.00034
SDev	.0059	.01755	.0066	.0023	.00149	.00086	.00067
%RSD	.47563	209.73	.07369	.13213	1.6421	391.51	199.08
#1	1.2349	.00404	8.9344	1.7275	.09200	.00083	.00014
#2	1.2266	-.02077	8.9437	1.7243	.08989	-.00039	-.00081
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00058	16.185	-.00034	.46770	.00071	-.00410	-.00881
SDev	.00062	.005	.00005	.00181	.00060	.00591	.02870
%RSD	107.93	.03172	15.551	.38664	85.543	144.16	325.80
#1	-.00014	16.181	-.00038	.46898	.00028	.00008	-.02910
#2	-.00102	16.189	-.00030	.46642	.00113	-.00828	.01148
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	1.0247	-.00051	.01453	-.00164	-.00631	H615.10
SDev	.0010	.00182	.00117	.00018	.02431	.83
%RSD	.09756	354.16	8.0741	10.879	385.40	.13534

#1	1.0254	-.00180	.01536	-.00151	-.02350	H615.69
#2	1.0240	.00077	.01370	-.00176	.01088	H614.51

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: CCV1 Operator: STL
Run Time: 05/05/05 20:24:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	3.8172	3.8500	3.8331	3.8174	3.9042	3.8855	36.803
SDev	.0057	.0255	.0087	.0103	.0254	.0036	.365
%RSD	.14995	.66263	.22726	.27010	.65001	.09329	.99309
#1	3.8131	3.8680	3.8392	3.8101	3.9222	3.8830	36.544
#2	3.8212	3.8319	3.8269	3.8247	3.8863	3.8881	37.061
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	3.9096	4.0609	4.0404	3.8860	19.307	3.7789	3.8144
SDev	.0308	.0470	.0329	.0279	.123	.0315	.0303
%RSD	.78709	1.1565	.81475	.71699	.63552	.83457	.79312
#1	3.8878	4.0277	4.0172	3.8663	19.220	3.7566	3.7930
#2	3.9313	4.0941	4.0637	3.9057	19.393	3.8012	3.8358
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	3.8515	38.976	18.880	3.9245	3.8427	.96996	3.7814
SDev	.0439	.304	.116	.0337	.0284	.00804	.0306
%RSD	1.1399	.78068	.61541	.85814	.73840	.82934	.81054
#1	3.8205	38.761	18.797	3.9007	3.8227	.96427	3.7597
#2	3.8826	39.192	18.962	3.9483	3.8628	.97564	3.8030
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	3.8514	3.8682	3.9577	4.0422	3.9976	Q3.1781	3.8860
SDev	.0353	.0306	.0367	.0491	.0289	.0263	.0234
%RSD	.91532	.79061	.92669	1.2141	.72284	.82909	.60140

#1	3.8265	3.8466	3.9318	4.0075	3.9772	Q3.1594	3.8694
#2	3.8763	3.8899	3.9837	4.0769	4.0181	Q3.1967	3.9025
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	3.8226	3.8917	3.8281	3.9399	Q3.3422	Q35.552	
SDev	.0040	.0060	.0047	.0383	.0079	.207	
%RSD	.10403	.15502	.12218	.97106	.23503	.58266	
#1	3.8198	3.8960	3.8314	3.9129	Q3.3366	Q35.698	
#2	3.8254	3.8875	3.8248	3.9670	Q3.3477	Q35.405	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Fail	
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000	
Range	10.000	10.000	10.000	10.000	10.000	10.000	

Method: 6010C Sample Name: CCB1 Operator: STL
Run Time: 05/05/05 20:28:29
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00141	.00152	.00187	-.00031	.00286	-.00067	.01563
SDev	.00179	.00389	.00223	.00056	.00410	.00015	.00039
%RSD	127.54	257.03	119.07	181.95	143.19	21.526	2.5173
#1	.00014	.00427	.00345	.00009	.00576	-.00078	.01535
#2	.00267	-.00124	.00030	-.00071	-.00004	-.00057	.01590
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00044	-.00066	-.00042	-.00055	-.00127	-.00027	-.00042
SDev	.00089	.00012	.00010	.00007	.00060	.00015	.00010
%RSD	201.31	17.999	22.877	12.425	47.141	55.549	24.029
#1	.00107	-.00074	-.00049	-.00060	-.00169	-.00016	-.00049
#2	-.00019	-.00057	-.00035	-.00050	-.00084	-.00038	-.00035
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00211	-.00043	-.00440	-.00051	-.00110	.00024	.00155
SDev	.00010	.00208	.00165	.00002	.00006	.00010	.00137
%RSD	4.6239	485.47	37.435	3.9396	5.6569	42.840	88.087

#1	-.00217	-.00190	-.00556	-.00052	-.00106	.00017	.00252
#2	-.00204	.00104	-.00323	-.00049	-.00114	.00032	.00059
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00048	.00138	.00356	-.00066	.00305	.00191	.00323
SDev	.00011	.00000	.00138	.00004	.00072	.00171	.01407
%RSD	23.841	.01436	38.835	5.4377	23.481	89.574	435.75
#1	-.00040	.00138	.00454	-.00069	.00355	.00312	.01317
#2	-.00056	.00138	.00258	-.00064	.00254	.00070	-.00672
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00042	.00050	.00144	-.00013	-.03091	Q-.85121
SDev	.00112	.00127	.00010	.00018	.01129	.16806
%RSD	268.54	251.84	7.0145	141.42	36.528	19.744
#1	.00121	.00140	.00151	-.00000	-.03889	Q-.97004
#2	-.00037	-.00039	.00137	-.00025	-.02292	Q-.73237
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00300	.00400	.06000	.05000	.50000	.25000

Method: 6010C Sample Name: G8WR6 Operator: STL
Run Time: 05/05/05 20:32:53
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.10923	.11052	1.3244	1.3346	.00549	-.00373	.02589
SDev	.00470	.00091	.0028	.0012	.00416	.00089	.00369
%RSD	4.3060	.82687	.21347	.09069	75.860	23.761	14.261
#1	.11256	.10987	1.3264	1.3338	.00254	-.00310	.02328
#2	.10590	.11116	1.3224	1.3355	.00843	-.00436	.02850
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00493	1.5339	-.00053	.69378	159.55	-.00030	.00661
SDev	.00076	.0030	.00008	.00029	.09	.00030	.00055
%RSD	15.374	.19774	14.974	.04204	.05408	99.095	8.2757

#1	.00439	1.5361	-.00058	.69399	159.49	-.00051	.00699
#2	.00546	1.5318	-.00047	.69358	159.61	-.00009	.00622
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.68574	-.00549	7.2381	1.6086	.05863	-.00073	-.00080
SDev	.00159	.01604	.0134	.0011	.00090	.00098	.00009
%RSD	.23152	292.36	.18454	.07060	1.5389	134.37	10.882
#1	.68686	.00585	7.2286	1.6094	.05927	-.00004	-.00086
#2	.68462	-.01683	7.2475	1.6078	.05799	-.00143	-.00074
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00140	14.051	.00072	.40910	.00180	-.00669	-.01353
SDev	.00134	.005	.00060	.00090	.00016	.00463	.01181
%RSD	95.822	.03321	83.055	.22127	9.1358	69.183	87.303
#1	-.00045	14.048	.00030	.40974	.00169	-.00342	-.02188
#2	-.00234	14.055	.00114	.40846	.00192	-.00997	-.00518
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	1.3312	-.00066	.10966	-.00111	.00452	H615.24	
SDev	.0001	.00080	.00283	.00036	.01143	.79	
%RSD	.01007	120.27	2.5833	32.141	253.04	.12832	
#1	1.3313	-.00122	.11166	-.00086	-.00357	H615.79	
#2	1.3311	-.00010	.10765	-.00136	.01260	H614.68	

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WTA Operator: STL
Run Time: 05/05/05 20:37:16
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.01397	.01291	1.7423	1.7498	.00281	-.00298	.01448
SDev	.00229	.00103	.0020	.0073	.00001	.00190	.00061
%RSD	16.396	7.9955	.11502	.41503	.17434	63.819	4.1966

#1	.01235	.01364	1.7409	1.7447	.00281	-.00432	.01491
#2	.01559	.01218	1.7437	1.7550	.00281	-.00163	.01405
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00216	.46999	-.00054	.05354	185.09	-.00076	.00978
SDev	.00004	.00394	.00001	.00009	1.14	.00067	.00019
%RSD	1.8991	.83897	1.6256	.17509	.61645	87.548	1.9949
#1	.00218	.46720	-.00053	.05347	184.29	-.00029	.00991
#2	.00213	.47277	-.00055	.05361	185.90	-.00123	.00964
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	3.7154	-.00682	10.141	1.9065	.13554	-.00036	-.00100
SDev	.0303	.00361	.058	.0126	.00140	.00053	.00133
%RSD	.81585	52.924	.57199	.65910	1.0329	145.04	132.92
#1	3.6940	-.00427	10.100	1.8976	.13455	.00001	-.00006
#2	3.7368	-.00937	10.182	1.9154	.13653	-.00073	-.00194
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00095	16.953	-.00020	.42804	-.00031	-.00547	-.01154
SDev	.00034	.089	.00017	.00330	.00006	.00218	.02444
%RSD	35.725	.52420	84.286	.77144	19.475	39.941	211.70
#1	-.00071	16.891	-.00008	.42570	-.00035	-.00392	.00574
#2	-.00119	17.016	-.00032	.43037	-.00027	-.00701	-.02882
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	1.7473	-.00105	.01361	-.00113	-.00383	H630.70	
SDev	.0055	.00127	.00118	.00018	.01271	4.52	
%RSD	.31541	120.76	8.6958	15.713	331.80	.71698	
#1	1.7434	-.00195	.01278	-.00101	.00516	H627.51	
#2	1.7512	-.00015	.01445	-.00126	-.01282	H633.90	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	

Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WTE Operator: STL
Run Time: 05/05/05 20:41:38
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.03903	.03578	.42731	.43243	.00234	-.00342	.02441
SDev	.00242	.00064	.00283	.00411	.00005	.00096	.00082
%RSD	6.1938	1.7918	.66283	.94986	2.2224	28.016	3.3712
#1	.04074	.03533	.42530	.42952	.00230	-.00410	.02383
#2	.03732	.03623	.42931	.43533	.00237	-.00274	.02499
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00476	.52606	-.00056	.01612	172.53	-.00145	.00549
SDev	.00025	.00094	.00000	.00003	.44	.00018	.00005
%RSD	5.2339	.17938	.78132	.19416	.25679	12.356	.86495
#1	.00458	.52539	-.00057	.01610	172.21	-.00157	.00546
#2	.00494	.52673	-.00056	.01614	172.84	-.00132	.00552
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.41776	-.00528	9.1578	8.4379	.04970	.00106	-.00115
SDev	.00146	.00108	.0196	.0197	.00072	.00006	.00110
%RSD	.34880	20.355	.21379	.23318	1.4399	6.1449	95.925
#1	.41673	-.00452	9.1440	8.4240	.04919	.00111	-.00037
#2	.41879	-.00605	9.1717	8.4519	.05020	.00102	-.00193
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00053	12.131	-.00009	.42719	.00055	-.00192	-.02200
SDev	.00004	.036	.00040	.00082	.00072	.00032	.01249
%RSD	7.4969	.29981	426.56	.19249	129.85	16.439	56.765
#1	-.00056	12.106	-.00038	.42661	.00005	-.00170	-.03083
#2	-.00050	12.157	.00019	.42777	.00106	-.00214	-.01317
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000

Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.43072	-.00151	.03794	-.00131	.03803	H628.22
SDev	.00368	.00066	.00140	.00014	.00306	1.52
%RSD	.85504	43.641	3.6864	10.879	8.0561	.24201
#1	.42812	-.00197	.03893	-.00141	.03587	H627.15
#2	.43333	-.00104	.03696	-.00121	.04020	H629.30

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WTG Operator: STL
Run Time: 05/05/05 20:46:01
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00837	.00533	.25124	.25387	.00513	-.00328	.03945
SDev	.00128	.00065	.00228	.00193	.00018	.00158	.00155
%RSD	15.352	12.130	.90587	.75852	3.5605	48.194	3.9281
#1	.00746	.00578	.25285	.25251	.00500	-.00440	.03836
#2	.00928	.00487	.24964	.25523	.00526	-.00216	.04055
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00135	.37575	-.00053	.00820	118.58	-.00051	.00745
SDev	.00064	.00447	.00001	.00007	1.00	.00055	.00025
%RSD	47.191	1.1884	1.6637	.84654	.84565	106.78	3.3682
#1	.00181	.37259	-.00052	.00815	117.87	-.00013	.00727
#2	.00090	.37891	-.00053	.00824	119.29	-.00090	.00763

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.1077	-.00710	6.7182	7.4170	.04814	.00071	-.00059
SDev	.0119	.00984	.0540	.0685	.00062	.00068	.00018
%RSD	1.0777	138.60	.80344	.92403	1.2927	96.853	29.595
#1	1.0993	-.00014	6.6801	7.3686	.04770	.00119	-.00047
#2	1.1161	-.01406	6.7564	7.4655	.04858	.00022	-.00072

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000

Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00055	9.9498	-.00218	.26462	.00106	-.00310	-.01690
SDev	.00008	.0811	.00084	.00291	.00144	.00206	.02461
%RSD	14.004	.81533	38.459	1.0986	136.17	66.414	145.63
#1	-.00050	9.8925	-.00159	.26256	.00004	-.00164	.00050
#2	-.00061	10.007	-.00277	.26667	.00208	-.00456	-.03430
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.25299	-.00048	.00736	-.00111	-.00474	H627.21
SDev	.00053	.00112	.00064	.00007	.01038	5.10
%RSD	.20812	232.01	8.7280	6.4282	218.83	.81381
#1	.25262	-.00127	.00690	-.00106	.00260	H623.60
#2	.25337	.00031	.00781	-.00116	-.01208	H630.82
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WTR Operator: STL
Run Time: 05/05/05 20:50:23
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00062	.00374	.25266	.25149	.00569	-.00340	.05042
SDev	.00005	.00042	.00096	.00172	.00001	.00132	.00333
%RSD	8.7226	11.366	.38093	.68283	.17471	38.920	6.6013
#1	-.00066	.00404	.25334	.25027	.00570	-.00434	.05277
#2	-.00058	.00344	.25198	.25270	.00569	-.00246	.04807
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00004	.42215	-.00056	.01263	103.52	-.00021	.00709
SDev	.00061	.00018	.00004	.00007	.17	.00015	.00015
%RSD	1395.7	.04391	6.2854	.54177	.16237	71.760	2.1009
#1	.00047	.42202	-.00058	.01258	103.40	-.00031	.00699
#2	-.00039	.42228	-.00053	.01268	103.63	-.00010	.00720
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000

Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.88571	-.00512	7.0643	1.7192	.06866	-.00013	-.00107
SDev	.00047	.00152	.0091	.0019	.00016	.00007	.00089
%RSD	.05317	29.748	.12950	.11114	.22657	58.632	82.888
#1	.88537	-.00620	7.0579	1.7178	.06877	-.00007	-.00170
#2	.88604	-.00404	7.0708	1.7205	.06855	-.00018	-.00044
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00111	H21.475	-.00101	.25664	.00114	-.00545	-.00856
SDev	.00063	.052	.00020	.00003	.00055	.00148	.00194
%RSD	57.226	.24158	19.654	.01278	48.645	27.097	22.668
#1	-.00155	H21.438	-.00087	.25662	.00153	-.00650	-.00719
#2	-.00066	H21.512	-.00115	.25666	.00075	-.00441	-.00993
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.25188	-.00037	.00083	-.00113	-.01513	H592.45	
SDev	.00082	.00088	.00011	.00004	.00426	.28	
%RSD	.32750	236.48	12.680	3.1427	28.162	.04750	
#1	.25129	-.00099	.00091	-.00116	-.01814	H592.25	
#2	.25246	.00025	.00076	-.00111	-.01212	H592.65	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G8WTV Operator: STL
Run Time: 05/05/05 20:54:45
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00004	.00292	.31805	.31646	.00757	-.00522	.04967
SDev	.00063	.00081	.00112	.00038	.00090	.00032	.00748
%RSD	1450.0	27.567	.35270	.11841	11.861	6.0616	15.055
#1	-.00040	.00349	.31885	.31672	.00694	-.00545	.04438
#2	.00049	.00235	.31726	.31619	.00821	-.00500	.05496
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00

Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00025	.70270	-.00059	.00469	50.878	-.00023	.00357
SDev	.00056	.01329	.00008	.00012	.501	.00045	.00049
%RSD	220.45	1.8920	14.068	2.6395	.98519	191.23	13.775
#1	-.00014	.71210	-.00065	.00460	51.232	-.00055	.00322
#2	.00065	.69330	-.00053	.00478	50.523	.00008	.00392
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.07627	-.00526	2.6030	3.1421	.01789	-.00024	-.00088
SDev	.00075	.01056	.0124	.0402	.00022	.00092	.00095
%RSD	.98610	200.98	.47799	1.2792	1.2176	382.33	108.30
#1	.07680	-.01273	2.6118	3.1705	.01773	-.00089	-.00021
#2	.07574	.00221	2.5942	3.1137	.01804	.00041	-.00155
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00110	2.0400	-.00153	.14042	.00168	-.00572	-.00819
SDev	.00049	.0270	.00009	.00252	.00012	.00291	.02636
%RSD	44.121	1.3255	5.9206	1.7943	6.8931	50.837	322.04
#1	-.00145	2.0591	-.00160	.14221	.00177	-.00777	-.02683
#2	-.00076	2.0209	-.00147	.13864	.00160	-.00366	.01045
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.31699	-.00096	.00100	-.00093	-.02318	H601.11	
SDev	.00062	.00051	.00015	.00032	.04546	7.72	
%RSD	.19669	53.032	15.213	34.400	196.10	1.2841	
#1	.31743	-.00132	.00089	-.00116	-.05532	H606.56	
#2	.31655	-.00060	.00111	-.00071	.00896	H595.65	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G8WTW Operator: STL
Run Time: 05/05/05 20:59:08
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00916	.00638	.12473	.12736	.00366	-.00353	.03564
SDev	.00236	.00181	.00263	.00040	.00011	.00317	.00388
%RSD	25.814	28.425	2.1054	.31111	2.9730	89.823	10.886
#1	.01083	.00509	.12287	.12765	.00373	-.00129	.03289
#2	.00749	.00766	.12659	.12708	.00358	-.00578	.03838
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00132	.64764	-.00064	.00447	50.444	-.00010	.00325
SDev	.00182	.00192	.00004	.00007	.056	.00064	.00005
%RSD	137.95	.29662	6.2087	1.5298	.11126	632.87	1.6377
#1	.00003	.64900	-.00066	.00443	50.404	-.00055	.00329
#2	.00261	.64628	-.00061	.00452	50.484	.00035	.00322
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.15857	.00577	2.1155	.87747	.01811	-.00000	-.00220
SDev	.00015	.00255	.0088	.00054	.00003	.00049	.00067
%RSD	.09746	44.256	.41516	.06140	.17184	44249.	30.330
#1	.15846	.00396	2.1093	.87785	.01813	-.00035	-.00267
#2	.15868	.00757	2.1217	.87709	.01808	.00034	-.00173
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00069	3.3994	-.00129	.13573	.00200	-.00362	-.01255
SDev	.00071	.0013	.00068	.00036	.00121	.00160	.02655
%RSD	103.90	.03959	52.980	.26709	60.648	44.264	211.46
#1	-.00119	3.4003	-.00177	.13599	.00114	-.00475	-.03133
#2	-.00018	3.3984	-.00080	.13548	.00285	-.00248	.00622
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.12649	-.00114	.00823	-.00081	-.03138	H559.48
SDev	.00061	.00215	.00097	.00014	.02424	.00
%RSD	.48240	189.12	11.825	17.678	77.252	.00069
#1	.12606	.00038	.00892	-.00091	-.04853	H559.48
#2	.12692	-.00266	.00754	-.00071	-.01424	H559.48
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WTX Operator: STL
Run Time: 05/05/05 21:03:30
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.02236	.02324	.98335	.99021	.00539	-.00285	.02022
SDev	.00108	.00051	.00701	.00104	.00283	.00046	.00377
%RSD	4.8124	2.1735	.71267	.10487	52.498	16.126	18.630
#1	.02312	.02288	.98831	.99095	.00339	-.00318	.01756
#2	.02160	.02360	.97840	.98948	.00739	-.00253	.02289
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00271	.71604	-.00046	.06395	202.21	.00015	.00548
SDev	.00057	.00876	.00009	.00020	1.13	.00058	.00034
%RSD	21.105	1.2237	19.932	.31222	.55719	399.84	6.2908
#1	.00311	.72223	-.00053	.06409	203.00	-.00027	.00524
#2	.00231	.70984	-.00040	.06381	201.41	.00056	.00572
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.44945	.00096	9.5720	1.7127	.04587	.00066	.00049
SDev	.00513	.00240	.0318	.0130	.00009	.00006	.00016
%RSD	1.1414	250.74	.33261	.75629	.20349	9.7926	33.747
#1	.45308	-.00074	9.5945	1.7218	.04580	.00061	.00037
#2	.44582	.00265	9.5495	1.7035	.04594	.00070	.00060
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00003	14.686	.03424	.50034	.00312	.00074	.04750
SDev	.00045	.077	.00005	.00543	.00116	.00098	.01336
%RSD	1304.1	.52570	.13286	1.0861	37.315	133.30	28.127
#1	-.00028	14.741	.03421	.50419	.00394	.00004	.03805
#2	.00035	14.632	.03427	.49650	.00229	.00143	.05695
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.98793	-.00011	.02265	-.00151	.04548	H609.97
SDev	.00303	.00125	.00055	.00007	.03618	4.20
%RSD	.30633	1145.8	2.4256	4.7140	79.550	.68816
#1	.99007	-.00099	.02304	-.00156	.01990	H612.94
#2	.98579	.00077	.02226	-.00146	.07107	H607.01
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WT0 Operator: STL
Run Time: 05/05/05 21:07:53
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.02854	.02237	.58299	.58942	.00525	-.00206	.00926
SDev	.00319	.00153	.00135	.00258	.00796	.00079	.00401
%RSD	11.190	6.8587	.23109	.43762	151.55	38.630	43.290
#1	.02628	.02346	.58394	.58759	.01088	-.00262	.01210
#2	.03079	.02129	.58204	.59124	-.00038	-.00149	.00643
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00135	.63657	-.00056	.03801	207.12	-.00058	.00587
SDev	.00047	.00605	.00002	.00020	1.04	.00091	.00029
%RSD	34.977	.95030	3.9067	.52565	.50376	156.99	4.9829
#1	.00168	.63230	-.00055	.03787	206.38	.00006	.00608
#2	.00101	.64085	-.00058	.03815	207.85	-.00122	.00567
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.70623	.00175	10.887	1.7213	.05126	.00073	-.00220
SDev	.00618	.00475	.041	.0110	.00000	.00037	.00103
%RSD	.87456	271.24	.37645	.63831	.00000	50.526	46.998
#1	.70187	.00511	10.858	1.7135	.05126	.00099	-.00147
#2	.71060	-.00161	10.916	1.7291	.05126	.00047	-.00293
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00019	13.497	-.00014	.51553	.00168	-.00040	-.01119
SDev	.00030	.065	.00112	.00457	.00001	.00255	.03200
%RSD	162.31	.48358	773.89	.88623	.38357	641.41	285.86
#1	.00003	13.451	.00065	.51230	.00168	.00140	.01143
#2	-.00040	13.544	-.00093	.51876	.00169	-.00220	-.03382
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.58728	.00038	.02648	-.00071	-.00906	H611.07
SDev	.00127	.00212	.00162	.00007	.01777	5.20
%RSD	.21657	561.78	6.1127	10.102	196.17	.85130
#1	.58638	.00188	.02534	-.00066	.00351	H607.39
#2	.58818	-.00112	.02763	-.00076	-.02162	H614.75
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WT1 Operator: STL
Run Time: 05/05/05 21:12:15
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.03414	.04267	.57277	.57436	.00967	-.00073	.01177
SDev	.00181	.00181	.00546	.00370	.00599	.00274	.00065
%RSD	5.3082	4.2319	.95344	.64379	61.969	373.39	5.5319
#1	.03543	.04139	.56890	.57175	.00543	.00120	.01223
#2	.03286	.04394	.57663	.57698	.01390	-.00267	.01131
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00106	.31450	-.00053	.02954	185.93	.00038	.00575
SDev	.00002	.00194	.00004	.00004	.97	.00055	.00045
%RSD	2.1796	.61616	6.5777	.12975	.52022	144.73	7.7911
#1	.00108	.31313	-.00056	.02952	185.25	-.00001	.00606
#2	.00105	.31587	-.00051	.02957	186.62	.00077	.00543
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.57056	.00108	10.635	1.1643	.13899	.00047	-.00004
SDev	.00431	.01074	.052	.0064	.00006	.00073	.00222
%RSD	.75497	992.26	.49031	.54930	.04476	155.15	4975.7
#1	.56751	.00868	10.598	1.1598	.13895	.00099	.00153
#2	.57360	-.00651	10.672	1.1688	.13904	-.00005	-.00162
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00032	H24.589	.00142	.50742	.00035	-.00197	-.00298
SDev	.00018	.114	.00007	.00313	.00133	.00430	.01057
%RSD	57.586	.46497	5.2081	.61582	375.79	218.05	354.88
#1	-.00019	H24.508	.00147	.50521	-.00058	.00107	-.01046
#2	-.00044	H24.670	.00137	.50963	.00129	-.00501	.00450
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.57383	.00273	.03698	-.00154	-.00890	H613.17	
SDev	.00428	.00017	.00061	.00018	.00551	3.40	
%RSD	.74671	6.1585	1.6430	11.592	61.907	.55454	
#1	.57080	.00261	.03741	-.00141	-.00500	H610.77	
#2	.57686	.00285	.03655	-.00166	-.01279	H615.58	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: CCV1 Operator: STL
Run Time: 05/05/05 21:16:40
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

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Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	3.8653	3.9041	3.8703	3.8602	3.9564	3.9403	37.223
SDev	.0041	.0015	.0022	.0016	.0077	.0038	.109
%RSD	.10512	.03810	.05751	.04042	.19512	.09648	.29410
#1	3.8681	3.9031	3.8688	3.8613	3.9619	3.9429	37.145
#2	3.8624	3.9052	3.8719	3.8591	3.9510	3.9376	37.300
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	3.9458	4.1144	4.0824	3.9210	19.516	3.8195	3.8546
SDev	.0041	.0124	.0085	.0074	.047	.0092	.0104
%RSD	.10348	.30020	.20720	.18875	.24016	.24009	.26977
#1	3.9429	4.1056	4.0764	3.9158	19.483	3.8130	3.8472
#2	3.9486	4.1231	4.0884	3.9263	19.550	3.8260	3.8619
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	3.9056	39.373	19.048	3.9709	3.8822	.98221	3.8190
SDev	.0138	.067	.027	.0105	.0105	.00171	.0040
%RSD	.35322	.17025	.14312	.26459	.27168	.17460	.10452
#1	3.8958	39.326	19.029	3.9634	3.8747	.98099	3.8162
#2	3.9153	39.421	19.068	3.9783	3.8896	.98342	3.8218
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	3.8967	3.9015	3.9985	4.0855	4.0363	Q3.2230	3.9444
SDev	.0112	.0086	.0113	.0194	.0030	.0073	.0015
%RSD	.28689	.22115	.28142	.47587	.07527	.22601	.03794
#1	3.8888	3.8954	3.9905	4.0718	4.0342	Q3.2179	3.9433
#2	3.9046	3.9076	4.0064	4.0992	4.0384	Q3.2282	3.9454
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	3.8636	3.9456	3.8782	3.9870	Q3.3498	Q35.209
SDev	.0003	.0051	.0022	.0122	.0028	.004
%RSD	.00775	.12942	.05711	.30675	.08411	.01109

#1	3.8638	3.9492	3.8798	3.9783	Q3.3517	Q35.212
#2	3.8634	3.9420	3.8766	3.9956	Q3.3478	Q35.206
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Fail
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB1 Operator: STL
Run Time: 05/05/05 21:21:05
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00211	-.00164	-.00023	.00019	-.00024	-.00020	.01759
SDev	.00339	.00184	.00146	.00009	.00297	.00048	.00463
%RSD	160.70	112.04	622.96	47.972	1254.9	236.78	26.333
#1	-.00029	-.00034	.00080	.00026	.00186	.00014	.02087
#2	.00451	-.00294	-.00127	.00013	-.00233	-.00054	.01431
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00151	-.00030	-.00007	-.00044	.00676	-.00049	-.00017
SDev	.00024	.00029	.00020	.00019	.00060	.00035	.00035
%RSD	15.586	96.167	271.06	44.098	8.8388	72.646	199.17
#1	.00168	-.00050	-.00022	-.00057	.00633	-.00073	-.00042
#2	.00135	-.00010	.00007	-.00030	.00718	-.00024	.00007
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00207	-.00393	-.00543	-.00018	-.00011	-.00012	.00014
SDev	.00004	.01200	.00384	.00014	.00009	.00077	.00179
%RSD	1.8760	305.69	70.712	80.639	84.853	661.13	1290.2
#1	-.00209	-.01241	-.00272	-.00028	-.00018	-.00066	.00140
#2	-.00204	.00456	-.00815	-.00008	-.00004	.00043	-.00113
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00034	.00208	.00258	-.00028	.00125	.00073	-.00758
SDev	.00045	.00006	.00197	.00022	.00005	.00117	.00297
%RSD	129.79	2.6373	76.083	77.098	4.3515	158.52	39.223

#1	-.00066	.00204	.00397	-.00043	.00121	-.00009	-.00969
#2	-.00003	.00211	.00119	-.00013	.00129	.00156	-.00548
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00005	-.00021	.00086	.00013	-.04549	Q-1.2298	
SDev	.00055	.00131	.00165	.00018	.02355	.4377	
%RSD	1109.4	611.32	191.51	141.42	51.774	35.594	
#1	.00044	.00071	-.00031	-.00000	-.02884	Q-.92030	
#2	-.00034	-.00114	.00203	.00025	-.06214	Q-1.5394	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.00300	.00400	.06000	.05000	.50000	.25000	

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Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/06/05 07:25:39
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	4.0223	4.0059	3.9987	3.9482	4.0603	4.0300	38.718
SDev	.0013	.0137	.0095	.0096	.0093	.0034	.113
%RSD	.03311	.34074	.23838	.24433	.22814	.08346	.29199
#1	4.0213	3.9962	3.9920	3.9414	4.0537	4.0276	38.638
#2	4.0232	4.0156	4.0055	3.9551	4.0668	4.0323	38.798
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.0171	4.3334	4.3184	4.0238	19.895	3.9587	4.0049
SDev	.0034	.0068	.0080	.0130	.057	.0124	.0114
%RSD	.08432	.15749	.18641	.32323	.28810	.31376	.28434
#1	4.0147	4.3286	4.3127	4.0146	19.854	3.9499	3.9969
#2	4.0195	4.3383	4.3241	4.0330	19.935	3.9675	4.0130
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.1272	40.822	19.646	4.1394	3.9918	1.0206	3.8979
SDev	.0055	.140	.069	.0112	.0136	.0018	.0125
%RSD	.13414	.34306	.35019	.27029	.34059	.17649	.32146
#1	4.1233	40.723	19.597	4.1315	3.9822	1.0193	3.8890
#2	4.1311	40.921	19.694	4.1473	4.0014	1.0219	3.9068
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.0510	4.0521	4.1267	4.0935	4.1051	Q3.3445	4.1227
SDev	.0098	.0129	.0176	.0259	.0082	.0050	.0064
%RSD	.24197	.31803	.42620	.63208	.19920	.14875	.15418
#1	4.0440	4.0430	4.1142	4.0752	4.0994	Q3.3409	4.1182
#2	4.0579	4.0613	4.1391	4.1118	4.1109	Q3.3480	4.1272
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	3.9651	4.0400	4.0168	4.1441	3.8099	38.072
SDev	.0096	.0053	.0054	.0109	.0033	.270
%RSD	.24233	.13188	.13527	.26415	.08638	.70833
#1	3.9583	4.0363	4.0130	4.1363	3.8076	37.881
#2	3.9718	4.0438	4.0207	4.1518	3.8123	38.263
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 05/06/05 07:30:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00120	.00048	.00052	-.00110	-.00222	.00010	-.03582
SDev	.00096	.00116	.00119	.00035	.00108	.00211	.00034
%RSD	79.874	240.94	230.73	32.077	48.771	2083.2	.95016
#1	.00052	.00131	.00136	-.00134	-.00146	-.00139	-.03558
#2	.00188	-.00034	-.00033	-.00085	-.00299	.00159	-.03606
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00074	-.00052	-.00052	-.00056	-.00676	-.00051	-.00035
SDev	.00062	.00000	.00001	.00004	.00000	.00028	.00000
%RSD	84.769	.00000	2.5405	6.6217	.00000	54.775	.61011
#1	.00118	-.00052	-.00051	-.00059	-.00676	-.00031	-.00035
#2	.00029	-.00052	-.00053	-.00054	-.00676	-.00071	-.00035
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00076	-.00361	-.01203	-.00063	-.00066	.00025	.00065
SDev	.00094	.00094	.00256	.00005	.00050	.00003	.00025
%RSD	123.13	25.974	21.289	7.5662	75.425	12.796	38.774
#1	-.00010	-.00428	-.01022	-.00059	-.00031	.00023	.00047
#2	-.00143	-.00295	-.01384	-.00066	-.00101	.00027	.00083
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00042	.00087	.00334	-.00064	.00227	-.00002	.00311
SDev	.00026	.00003	.00201	.00000	.00116	.00037	.01389
%RSD	61.418	3.0682	60.270	.00000	51.100	2079.7	446.38
#1	-.00060	.00088	.00476	-.00064	.00309	.00024	.01294
#2	-.00024	.00085	.00192	-.00064	.00145	-.00028	-.00671
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	-.00056	-.00067	.00096	-.00015	-.06954	Q-1.7162
SDev	.00016	.00104	.00025	.00021	.00958	.2345
%RSD	28.974	154.93	26.248	141.42	13.773	13.664
#1	-.00044	-.00141	.00078	-.00000	-.06276	Q-1.5504
#2	-.00067	.00006	.00114	-.00030	-.07631	Q-1.8820
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00300	.00400	.06000	.05000	.50000	.25000

Method: 6010C Sample Name: G8WTR 5 Operator: STL
Run Time: 05/06/05 07:34:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00282	-.00011	.05146	.05379	-.00114	-.00035	-.02522
SDev	.00047	.00072	.00016	.00129	.00006	.00073	.00123
%RSD	16.563	663.69	.31766	2.4059	5.3661	206.69	4.8578
#1	.00249	.00040	.05157	.05470	-.00110	.00016	-.02435
#2	.00315	-.00062	.05134	.05287	-.00119	-.00087	-.02609
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00027	.08880	-.00057	.00223	21.559	-.00057	.00151
SDev	.00041	.00083	.00001	.00001	.117	.00011	.00025
%RSD	154.04	.92978	2.3184	.25003	.54282	19.879	16.496
#1	.00002	.08822	-.00058	.00223	21.476	-.00065	.00168
#2	-.00055	.08939	-.00056	.00222	21.642	-.00049	.00133
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

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Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.17960	-.00540	1.4545	.36368	.01388	.00007	-.00025
SDev	.00108	.00769	.0060	.00199	.00009	.00045	.00051
%RSD	.59988	142.28	.41513	.54599	.67237	627.04	208.19
#1	.17884	.00003	1.4502	.36228	.01382	.00039	-.00061
#2	.18036	-.01084	1.4588	.36509	.01395	-.00025	.00012
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00069	4.5719	-.00020	.05167	-.00004	-.00151	-.01728
SDev	.00011	.0256	.00023	.00036	.00199	.00145	.00335
%RSD	16.489	.55962	115.70	.69484	5595.1	95.396	19.412
#1	-.00077	4.5538	-.00004	.05142	.00137	-.00049	-.01965
#2	-.00061	4.5900	-.00037	.05193	-.00144	-.00254	-.01490
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.05301	-.00062	.00184	-.00076	-.04505	100.87
SDev	.00092	.00051	.00007	.00007	.00490	.30
%RSD	1.7309	82.412	3.8065	9.4281	10.882	.30222
#1	.05366	-.00026	.00179	-.00071	-.04158	100.65
#2	.05236	-.00098	.00189	-.00081	-.04851	101.09
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WT1 5 Operator: STL
Run Time: 05/06/05 07:38:49
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00643	.00867	.12349	.12232	.00104	-.00028	-.02961
SDev	.00059	.00189	.00081	.00045	.00110	.00135	.00280
%RSD	9.1358	21.767	.65428	.36463	105.97	483.75	9.4644
#1	.00685	.01001	.12406	.12200	.00182	-.00124	-.03159
#2	.00602	.00734	.12292	.12263	.00026	.00068	-.02763
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00103	.06737	-.00056	.00592	39.696	-.00031	.00069
SDev	.00030	.00017	.00001	.00017	.107	.00006	.00030
%RSD	29.051	.25012	2.3701	2.9558	.26999	19.626	42.961
#1	.00125	.06725	-.00055	.00579	39.620	-.00027	.00048
#2	.00082	.06749	-.00057	.00604	39.771	-.00036	.00091
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.11786	-.00849	2.2461	.25112	.02963	-.00006	-.00032
SDev	.00000	.00421	.0090	.00067	.00009	.00021	.00070
%RSD	.00220	49.545	.39917	.26668	.31497	376.64	218.25
#1	.11786	-.00551	2.2397	.25064	.02957	-.00021	-.00082
#2	.11786	-.01146	2.2524	.25159	.02970	.00009	.00017
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00087	5.3957	-.00028	.10538	.00008	-.00276	-.01142
SDev	.00015	.0140	.00004	.00014	.00016	.00091	.00914
%RSD	17.392	.25925	12.396	.13514	203.21	32.910	80.035
#1	-.00076	5.3858	-.00031	.10528	.00020	-.00340	-.00496
#2	-.00098	5.4056	-.00026	.10548	-.00004	-.00212	-.01789
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.12271	.00016	.00718	-.00086	-.02429	106.01
SDev	.00003	.00054	.00102	.00000	.01331	.34
%RSD	.02317	336.26	14.217	.00000	54.788	.32076
#1	.12269	-.00022	.00790	-.00086	-.03370	105.77
#2	.12273	.00054	.00646	-.00086	-.01488	106.25
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/06/05 07:43:12
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

Analysis Report QC Standard 05/06/05 07:47:32 AM page 6

Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	4.1104	4.0933	4.1399	4.0941	4.1729	4.1397	39.770
SDev	.0167	.0157	.0084	.0144	.0139	.0201	.048
%RSD	.40722	.38351	.20392	.35115	.33357	.48608	.12124
#1	4.0985	4.1044	4.1459	4.0839	4.1827	4.1255	39.804
#2	4.1222	4.0822	4.1339	4.1042	4.1631	4.1539	39.736
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.1103	Q4.4184	Q4.4068	4.1670	20.571	4.0907	4.1346
SDev	.0045	.0089	.0022	.0004	.005	.0011	.0017
%RSD	.10905	.20212	.04936	.00986	.02323	.02627	.04079
#1	4.1135	Q4.4248	Q4.4084	4.1673	20.568	4.0899	4.1358
#2	4.1072	Q4.4121	Q4.4053	4.1667	20.575	4.0915	4.1334
Errors	QC Pass	QC Fail	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.1816	42.104	20.361	4.2682	4.1332	1.0358	3.9728
SDev	.0083	.013	.015	.0028	.0018	.0020	.0006
%RSD	.19929	.03185	.07459	.06524	.04441	.19073	.01498
#1	4.1875	42.114	20.350	4.2702	4.1319	1.0372	3.9732
#2	4.1757	42.095	20.371	4.2662	4.1345	1.0344	3.9724
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.1699	4.1709	4.2191	4.2826	4.1993	Q3.4130	4.2025
SDev	.0038	.0009	.0032	.0041	.0004	.0084	.0095
%RSD	.09191	.02236	.07470	.09535	.01053	.24511	.22687
#1	4.1726	4.1716	4.2169	4.2797	4.1990	Q3.4189	4.1957
#2	4.1672	4.1703	4.2213	4.2855	4.1996	Q3.4071	4.2092
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	4.1093	4.1508	4.1047	4.2575	3.9681	40.164	
SDev	.0068	.0088	.0059	.0045	.0002	.281	
%RSD	.16494	.21167	.14464	.10636	.00393	.70064	

#1	4.1045	4.1445	4.1005	4.2607	3.9682	39.965
#2	4.1141	4.1570	4.1089	4.2543	3.9680	40.363
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 05/06/05 07:47:36
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00226	-.00259	-.00215	.00085	-.00199	.00037	-.01992
SDev	.00148	.00151	.00050	.00070	.00247	.00015	.00136
%RSD	65.603	58.511	23.158	83.118	124.03	41.670	6.8280
#1	.00331	-.00366	-.00180	.00035	-.00024	.00026	-.01896
#2	.00121	-.00152	-.00250	.00134	-.00373	.00047	-.02088
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00055	-.00039	-.00046	-.00033	-.00443	-.00024	.00000
SDev	.00116	.00019	.00000	.00004	.00030	.00050	.00020
%RSD	211.97	47.140	.94911	11.077	6.7344	208.94	1436100.
#1	.00137	-.00026	-.00046	-.00030	-.00422	.00011	.00014
#2	-.00027	-.00052	-.00047	-.00035	-.00464	-.00060	-.00014
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00038	.00953	-.00155	-.00044	-.00070	.00070	.00031
SDev	.00028	.01409	.00128	.00002	.00106	.00080	.00015
%RSD	74.414	147.87	82.497	4.8933	150.26	115.17	50.105
#1	-.00018	.01949	-.00065	-.00043	.00004	.00127	.00042
#2	-.00058	-.00043	-.00246	-.00046	-.00145	.00013	.00020
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00052	.00121	.00392	-.00054	-.00063	.00505	.00408
SDev	.00101	.00011	.00276	.00007	.00038	.00468	.01598
%RSD	191.80	8.8288	70.363	13.470	61.065	92.642	391.60

#1	.00124	.00129	.00588	-.00049	-.00036	.00835	.01538
#2	-.00019	.00114	.00197	-.00059	-.00090	.00174	-.00722
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	-.00015	-.00042	.00065	.00010	-.02386	Q-.81528	
SDev	.00030	.00072	.00049	.00050	.01093	.25796	
%RSD	197.95	172.03	75.032	494.97	45.820	31.640	
#1	-.00037	.00009	.00099	.00045	-.01613	Q-.63288	
#2	.00006	-.00093	.00030	-.00025	-.03159	Q-.99768	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.00300	.00400	.06000	.05000	.50000	.25000	

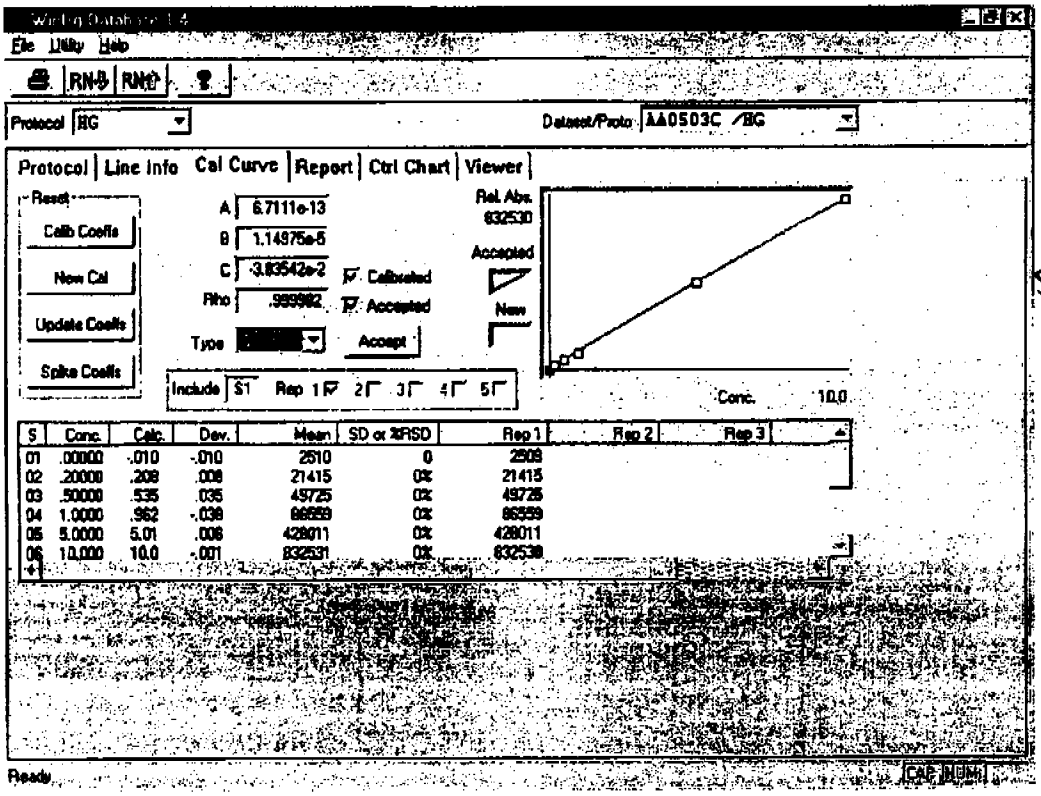
Analytical Runlog for Mercury Analysis											
Run #: AA0503C											
Instrument ID:											
Seq	Sample ID	Run Date/Time		Instr Conc.	Dilution	Final Conc.		QC Expected		% Recovery
1	S0	5/3/2005	17:02:31		1					
2	S0.2	5/3/2005	17:04:22		1					
3	S0.5	5/3/2005	17:06:21		1					
4	S1	5/3/2005	17:08:11		1					
5	S5	5/3/2005	17:10:20		1					
6	S10	5/3/2005	17:12:30		1					
7	ICV	5/3/2005	17:14:35	2.44	1	2.44	ppb	2.5	ppb	97.6%
8	CCB	5/3/2005	17:16:24	-0.039	1	-0.039	ppb	<0.2	ppb	
9	CRA	5/3/2005	17:18:15	0.214	1	0.214	ppb	0.2	ppb	107.0%
10	CCV	5/3/2005	17:20:04	4.99	1	4.99	ppb	5	ppb	99.8%
11	CCB	5/3/2005	17:21:53	-0.069	1	-0.069	ppb	<0.2	ppb	
12	G9MPRB	5/3/2005	17:23:47	-0.01	1	-0.01	ppb			✓
13	G9N88C	5/3/2005	17:25:37	5.41	1	5.41	ppb	5		105
14	G817C	5/3/2005	17:27:57	-0.003	1	-0.003	ppb			
15	G817CX	5/3/2005	17:29:46	-0.031	1	-0.031	ppb			
16	G817CS	5/3/2005	17:31:45	4.91	1	4.91	ppb	5		98
17	G817CD	5/3/2005	17:33:55	5.12	1	5.12	ppb	5		102
18	G817CV	5/3/2005	17:36:06	-0.048	5	-0.24	ppb			
19	G817D	5/3/2005	17:37:55	-0.012	1	-0.012	ppb			
20	G817E	5/3/2005	17:39:58	0.074	1	0.074	ppb			
21	G817F	5/3/2005	17:42:01	0.022	1	0.022	ppb			
22	CCV	5/3/2005	17:43:52	4.87	1	4.87	ppb	5	ppb	97.4%
23	CCB	5/3/2005	17:45:40	-0.069	1	-0.069	ppb	<0.2	ppb	
24	G817G	5/3/2005	17:47:30	-0.018	1	-0.018	ppb			
25	G8943	5/3/2005	17:49:34	-0.015	1	-0.015	ppb			
26	G896E	5/3/2005	17:51:47	-0.009	1	-0.009	ppb			
27	G8985	5/3/2005	17:53:49	0.003	1	0.003	ppb			
28	G899L	5/3/2005	17:55:48	-0.008	1	-0.008	ppb			
29	G9NWVB	5/3/2005	17:57:57	-0.004	1	-0.004	ppb			✓
30	G9NWVC	5/3/2005	18:00:20	1.04	1	1.04	ppb	1		104
31	G9ACV	5/3/2005	18:02:10	-0.02	1	-0.02	ppb			
32	G9GGF	5/3/2005	18:04:04	0.004	1	0.004	ppb			
33	G9GGQ	5/3/2005	18:05:55	0.023	1	0.023	ppb			
34	CCV	5/3/2005	18:07:45	5.12	1	5.12	ppb	5	ppb	102.4%
35	CCB	5/3/2005	18:09:33	-0.045	1	-0.045	ppb	<0.2	ppb	
36	G9GGQS	5/3/2005	18:11:36	1.1	1	1.1	ppb	1		110
37	G9GGQD	5/3/2005	18:13:48	1.1	1	1.1	ppb	1		110
38	G9GGQV	5/3/2005	18:15:37	-0.032	5	-0.16	ppb			
39	G9GGT	5/3/2005	18:17:51	-0.002	1	-0.002	ppb			
40	G9GG1	5/3/2005	18:19:55	-0.005	1	-0.005	ppb			
41	G9K03	5/3/2005	18:21:45	0.082	1	0.082	ppb			
42	G9K20	5/3/2005	18:23:36	-0.003	1	-0.003	ppb			
43	G9K3D	5/3/2005	18:25:27	-0.003	1	-0.003	ppb			
44	G9N7TB	5/3/2005	18:27:18	-0.005	1	-0.005	ppb			✓
45	G9N7TC	5/3/2005	18:29:18	1.04	1	1.04	ppb	1		104
46	CCV	5/3/2005	18:31:09	4.85	1	4.85	ppb	5	ppb	97.0%
47	CCB	5/3/2005	18:33:01	-0.041	1	-0.041	ppb	<0.2	ppb	

Analyst: [signature] Page 1 of 2 Reviewed by: [signature] 5/10/05

Analytical Runlog for Mercury Analysis											
Run #: AA0503C											
Instrument ID:											
Seq	Sample ID	Run Date/Time		Instr Conc.	Dilution	Final Conc.		QC Expected		% Recovery
48	G8MQ5	5/3/2005	18:35:03	-0.039	1	-0.039	ppb			
49	G8MVF	5/3/2005	18:36:54	0.012	1	0.012	ppb			
50	G8MWF	5/3/2005	18:38:50	0.001	1	0.001	ppb			
51	G8MWFS	5/3/2005	18:40:52	1.07	1	1.07	ppb	1		107
52	G8MWFD	5/3/2005	18:42:47	1	1	1	ppb	1		100
53	G8MWFV	5/3/2005	18:45:07	-0.034	5	-0.17	ppb			
54	G8MXL	5/3/2005	18:47:47	0.014	1	0.014	ppb			
55	G8M0K	5/3/2005	18:49:48	0.009	1	0.009	ppb			
56	G8P4M	5/3/2005	18:51:43	0.003	1	0.003	ppb			
57	G8P5V	5/3/2005	18:53:52	-0.006	1	-0.006	ppb			
58	CCV	5/3/2005	18:55:44	4.86	1	4.86	ppb	5	ppb	97.2%
59	CCB	5/3/2005	18:57:43	-0.022	1	-0.022	ppb	<0.2	ppb	
60	G8P59	5/3/2005	19:00:14	0.007	1	0.007	ppb			
61	G8WET	5/3/2005	19:02:25	0.001	1	0.001	ppb			
62	G8WFR	5/3/2005	19:04:17	0.009	1	0.009	ppb			
63	G80EM	5/3/2005	19:06:08	0.009	1	0.009	ppb			
64	CCV	5/3/2005	19:08:00	4.9	1	4.9	ppb	5	ppb	98.0%
65	CCB	5/3/2005	19:09:51	-0.059	1	-0.059	ppb	<0.2	ppb	
66	G80EMS	5/3/2005	19:12:12	0.932	1	0.932	ppb	1		93
67	G80EMD	5/3/2005	19:14:03	1.03	1	1.03	ppb	1		103
68	G8015	5/3/2005	19:15:57	-0.018	1	-0.018	ppb			
69	G805A	5/3/2005	19:17:49	-0.027	1	-0.027	ppb			
70	CCV	5/3/2005	19:19:43	4.87	1	4.87	ppb	5	ppb	97.4%
71	CCB	5/3/2005	19:22:21	-0.004	1	-0.004	ppb	<0.2	ppb	
72	G9HX1B	5/3/2005	19:24:10	-0.01	1	-0.01	ppb			V
73	G9NWJC	5/3/2005	19:26:22	5.31	1	5.31	ppb	5		106
74	G8170	5/3/2005	19:28:13	-0.059	1	-0.059	ppb			
75	G8170X	5/3/2005	19:30:24	0.003	1	0.003	ppb			
76	G8170S	5/3/2005	19:32:15	4.77	1	4.77	ppb	5		95
77	G8170V	5/3/2005	19:34:50	-0.011	5	-0.055	ppb			
78	G84EP	5/3/2005	19:37:16	-0.02	1	-0.02	ppb			
79	G9GG0	5/3/2005	19:39:16	-0.009	1	-0.009	ppb			
80	CCV	5/3/2005	19:41:16	4.83	1	4.83	ppb	5	ppb	96.6%
81	CCB	5/3/2005	19:43:30	-0.006	1	-0.006	ppb	<0.2	ppb	

Analyst: LJ for FC

Reviewed by: SW 5/10/05



HJ for FC
5/3/05
7470A
STD
H0505305

JJ for FC 5/3/05

Folder: AA0503C 7470A Page 1
17:02:31 03 May 2005 Protocol: HG
S1D H6050505

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1 Seq: 1 17:02:31 03 May 05 HG

Hg .000 ppb 2509

*** Standard: 2 Rep: 1 Seq: 2 17:04:22 03 May 05 HG

Hg .200 ppb 21415

*** Standard: 3 Rep: 1 Seq: 3 17:06:21 03 May 05 HG

Hg .500 ppb 49725

*** Standard: 4 Rep: 1 Seq: 4 17:08:11 03 May 05 HG

Hg 1.00 ppb 86559

*** Standard: 5 Rep: 1 Seq: 5 17:10:20 03 May 05 HG

Hg 5.00 ppb 428011

*** Standard: 6 Rep: 1 Seq: 6 17:12:30 03 May 05 HG

Hg 10.0 ppb 832530

*** Check Standard: 4 Ck4ICV Seq: 7 17:14:35 03 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		97.7	2.44	2.50	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 8 17:16:24 03 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.039	.200	ppb	.000 %

*** Check Standard: 5 Ck5CRA Seq: 9 17:18:15 03 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		107.	.214	.200	ppb	.000 %

*** Check Standard: 2 Ck2CCV Seq: 10 17:20:04 03 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		99.8	4.99	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 11 17:21:53 03 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.069	.200	ppb	.000 %

*** Sample ID: G9MPRB AA0503C Seq: 12 17:23:47 03 May 05 HG

Hg -.010 ppb .000 % -.010

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID: G9N86C		AA0503C	Seq: 13	17:25:37 03 May 05					HG
Hg	5.41	ppb	.000 %	5.41					
*** Sample ID: G817C		AA0503C	Seq: 14	17:27:57 03 May 05					HG
Hg	-.003	ppb	.000 %	-.003					
*** Sample ID: G817CX		AA0503C	Seq: 15	17:29:46 03 May 05					HG
Hg	-.031	ppb	.000 %	-.031					
*** Sample ID: G817CS		AA0503C	Seq: 16	17:31:45 03 May 05					HG
Hg	4.91	ppb	.000 %	4.91					
*** Sample ID: G817CD		AA0503C	Seq: 17	17:33:55 03 May 05					HG
Hg	5.12	ppb	.000 %	5.12					
*** Sample ID: G817CV		AA0503C 5X	Seq: 18	17:36:06 03 May 05					HG
Hg	-.048	ppb	.000 %	-.048					
*** Sample ID: G817D		AA0503C	Seq: 19	17:37:55 03 May 05					HG
Hg	-.012	ppb	.000 %	-.012					
*** Sample ID: G817E		AA0503C	Seq: 20	17:39:58 03 May 05					HG
Hg	.074	ppb	.000 %	.074					
*** Sample ID: G817F		AA0503C	Seq: 21	17:42:01 03 May 05					HG
Hg	.022	ppb	.000 %	.022					

*** Check Standard: 2 Ck2CCV Seq: 22 17:43:52 03 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		97.5	4.87	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 23 17:45:40 03 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.069	.200	ppb	.000 %

*** Sample ID: G817G		AA0503C	Seq: 24	17:47:30 03 May 05					HG
Hg	-.018	ppb	.000 %	-.018					

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: G8943 AA0503C Seq: 25 17:49:34 03 May 05 HG

Hg -.015 ppb .000 % -.015

*** Sample ID: G896E AA0503C Seq: 26 17:51:47 03 May 05 HG

Hg -.009 ppb .000 % -.009

*** Sample ID: G8985 AA0503C Seq: 27 17:53:49 03 May 05 HG

Hg .003 ppb .000 % .003

*** Sample ID: G899L AA0503C Seq: 28 17:55:48 03 May 05 HG

Hg -.008 ppb .000 % -.008

*** Sample ID: G9NWVB AA0503C Seq: 29 17:57:57 03 May 05 HG

Hg -.004 ppb .000 % -.004

*** Sample ID: G9NWVC AA0503C Seq: 30 18:00:20 03 May 05 HG

Hg 1.04 ppb .000 % 1.04

*** Sample ID: G9ACV AA0503C Seq: 31 18:02:10 03 May 05 HG

Hg -.020 ppb .000 % -.020

*** Sample ID: G9GGF AA0503C Seq: 32 18:04:04 03 May 05 HG

Hg .004 ppb .000 % .004

*** Sample ID: G9GGQ AA0503C Seq: 33 18:05:55 03 May 05 HG

Hg .023 ppb .000 % .023

*** Check Standard: 2 Ck2CCV Seq: 34 18:07:45 03 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		102.	5.12	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 35 18:09:33 03 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.045	.200	ppb	.000 %

*** Sample ID: G9GGQS AA0503C Seq: 36 18:11:36 03 May 05 HG

Hg 1.10 ppb .000 % 1.10

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID: G9GGQD			AA0503C	Seq: 37		18:13:48 03 May 05			HG
Hg	1.10	ppb	.000 %	1.10					
*** Sample ID: G9GGQV			AA0503C 5X	Seq: 38		18:15:37 03 May 05			HG
Hg	-.032	ppb	.000 %	-.032					
*** Sample ID: G9GGT			AA0503C	Seq: 39		18:17:51 03 May 05			HG
Hg	-.002	ppb	.000 %	-.002					
*** Sample ID: G9GG1			AA0503C	Seq: 40		18:19:55 03 May 05			HG
Hg	-.005	ppb	.000 %	-.005					
*** Sample ID: G9K03			AA0503C	Seq: 41		18:21:45 03 May 05			HG
Hg	.082	ppb	.000 %	.082					
*** Sample ID: G9K20			AA0503C	Seq: 42		18:23:36 03 May 05			HG
Hg	-.003	ppb	.000 %	-.003					
*** Sample ID: G9K3D			AA0503C	Seq: 43		18:25:27 03 May 05			HG
Hg	-.003	ppb	.000 %	-.003					
*** Sample ID: G9N7TB			AA0503C	Seq: 44		18:27:18 03 May 05			HG
Hg	-.005	ppb	.000 %	-.005					
*** Sample ID: G9N7TC			AA0503C	Seq: 45		18:29:18 03 May 05			HG
Hg	1.04	ppb	.000 %	1.04					

*** Check Standard: 2 Ck2CCV Seq: 46 18:31:09 03 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		96.9	4.85	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 47 18:33:01 03 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.041	.200	ppb	.000 %

*** Sample ID: G8MQ5			AA0503C	Seq: 48		18:35:03 03 May 05			HG
Hg	-.039	ppb	.000 %	-.039					

Folder: AA0503C Page 5
18:36:54 03 May 2005 Protocol: HG

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID: G8MVF			AA0503C	Seq: 49		18:36:54 03 May 05			HG
Hg	.012	ppb	.000 %	.012					
*** Sample ID: G8MWF			AA0503C	Seq: 50		18:38:50 03 May 05			HG
Hg	.001	ppb	.000 %	.001					
*** Sample ID: G8MWFS			AA0503C	Seq: 51		18:40:52 03 May 05			HG
Hg	1.07	ppb	.000 %	1.07					
*** Sample ID: G8MWFD			AA0503C	Seq: 52		18:42:47 03 May 05			HG
Hg	1.00	ppb	.000 %	1.00					
*** Sample ID: G8MWFV			AA0503C 5X	Seq: 53		18:45:07 03 May 05			HG
Hg	-.034	ppb	.000 %	-.034					
*** Sample ID: G8MXL			AA0503C	Seq: 54		18:47:47 03 May 05			HG
Hg	.014	ppb	.000 %	.014					
*** Sample ID: G8M0K			AA0503C	Seq: 55		18:49:48 03 May 05			HG
Hg	.009	ppb	.000 %	.009					
*** Sample ID: G8P4M			AA0503C	Seq: 56		18:51:43 03 May 05			HG
Hg	.003	ppb	.000 %	.003					
*** Sample ID: G8P5V			AA0503C	Seq: 57		18:53:52 03 May 05			HG
Hg	-.006	ppb	.000 %	-.006					

*** Check Standard: 2 Ck2CCV Seq: 58 18:55:44 03 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		97.2	4.86	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 59 18:57:43 03 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.022	.200	ppb	.000 %

*** Sample ID: G8P59			AA0503C	Seq: 60		19:00:14 03 May 05			HG
Hg	.007	ppb	.000 %	.007					

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID: G8WET		AA0503C	Seq: 61	19:02:25 03 May 05					HG
Hg	.001	ppb	.000 %	.001					
*** Sample ID: G8WFR		AA0503C	Seq: 62	19:04:17 03 May 05					HG
Hg	.009	ppb	.000 %	.009					
*** Sample ID: G80EM		AA0503C	Seq: 63	19:06:08 03 May 05					HG
Hg	.009	ppb	.000 %	.009					
*** Check Standard: 2 Ck2CCV			Seq: 64	19:08:00 03 May 05					HG
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		97.9	4.90	5.00	ppb	.000 %			
*** Check Standard: 1 Ck1CCB			Seq: 65	19:09:51 03 May 05					HG
Line	Flag	Found	Range(+/-)	Units	SD/RSD				
Hg		-.059	.200	ppb	.000 %				
*** Sample ID: G80EMS		AA0503C	Seq: 66	19:12:12 03 May 05					HG
Hg	.932	ppb	.000 %	.932					
*** Sample ID: G80EMD		AA0503C	Seq: 67	19:14:03 03 May 05					HG
Hg	1.03	ppb	.000 %	1.03					
*** Sample ID: G8015		AA0503C	Seq: 68	19:15:57 03 May 05					HG
Hg	-.018	ppb	.000 %	-.018					
*** Sample ID: G805A		AA0503C	Seq: 69	19:17:49 03 May 05					HG
Hg	-.027	ppb	.000 %	-.027					
*** Check Standard: 2 Ck2CCV			Seq: 70	19:19:43 03 May 05					HG
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		97.3	4.87	5.00	ppb	.000 %			
*** Check Standard: 1 Ck1CCB			Seq: 71	19:22:21 03 May 05					HG
Line	Flag	Found	Range(+/-)	Units	SD/RSD				
Hg		-.004	.200	ppb	.000 %				
*** Sample ID: G9HX1B		AA0503C	Seq: 72	19:24:10 03 May 05					HG
Hg	-.010	ppb	.000 %	-.010					

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID: G9NWJC			AA0503C	Seq: 73		19:26:22 03 May 05			HG
Hg	5.31	ppb	.000 %	5.31					
*** Sample ID: G8170			AA0503C	Seq: 74		19:28:13 03 May 05			HG
Hg	-.059	ppb	.000 %	-.059					
*** Sample ID: G8170X			AA0503C	Seq: 75		19:30:24 03 May 05			HG
Hg	.003	ppb	.000 %	.003					
*** Sample ID: G8170S			AA0503C	Seq: 76		19:32:15 03 May 05			HG
Hg	4.77	ppb	.000 %	4.77					
*** Sample ID: G8170V			AA0503C 5X	Seq: 77		19:34:50 03 May 05			HG
Hg	-.011	ppb	.000 %	-.011					
*** Sample ID: G84EP			AA0503C	Seq: 78		19:37:16 03 May 05			HG
Hg	-.020	ppb	.000 %	-.020					
*** Sample ID: G9GG0			AA0503C	Seq: 79		19:39:16 03 May 05			HG
Hg	-.009	ppb	.000 %	-.009					

*** Check Standard: 2 Ck2CCV Seq: 80 19:41:16 03 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		96.6	4.83	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 81 19:43:30 03 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.006	.200	ppb	.000 %

METALS MISCELLANEOUS DATA

SEVERN TRENT **STL** Metals Prep Report for Batch # 5122274

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Prep Method: SW-846 3010A **SOP Number:** STL-IP-0013, Rev 6

Extraction Code: 34 **Extraction:** TCLP **Matrix:** WATER **Prep Date:** 5/2/2005

Standard Log Ref#: MET-04/05-H20

Lot ID	Work Order #		Initial Wt/Vol	Final Volume	Lab Filtered	Due Date	Sample Location	Target List
F5D220359-001	G8170	[redacted]	20 mL	50 ML	☐	05/11/2005	METS,A94	AG AS BA CD CR PB SE ZN
F5D220359-001D	G8170D	[redacted]	20 ml	50 ml	☐		METS,A94	
F5D220359-001S	G8170S	[redacted]	20 ml	50 ml	☐		METS,A94	
F5D220359-001X	G8170X	[redacted]	20 mL	50 ML	☐		METS,A94	
F5D220359-002	G84EP	[redacted]	20 mL	50 ML	☐	05/11/2005	METS,A94	
F5D290000-371B	G9HX1B	[redacted]	25 mL	50 ML	☐			
F5D290139-001	G9GFM	[redacted]	25 mL	50 ML	☐	05/06/2005	A139	
F5D290139-002	G9GFN	[redacted]	25 mL	50 ML	☐	05/06/2005	A139	
F5D290139-003	G9GFP	[redacted]	25 mL	50 ML	☐	05/06/2005	A139	
F5E020000-274C	G9MDJC	[redacted]	25 ML	50 ML	☐			

Comments:

Chemical Lot Information

Chemical	Lot Number
Hydrochloric Acid	4104090
Nitric Acid	1104100

Custody Information

Relinquished By: MC

Review/Received By: JJ

Date of Transfer: 5-2-05

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.16, updated 2/7/2005

LOT # F5D220359

STL ST. LOUIS

TCLP Extraction Record/Chain of Custody

Form: SL-INORG-0087, Rev. 9/31/06; SW-846 Method 1311: SOP: STL-IP-0016, current revision

	Fluid #1	Fluid #2	Fluid #3 (DI Water)Filter Only & Wet Chem
Daily pH Check	(4.88 – 4.96)	(2.83 – 2.89)	N/A
Lot #			N/A

Logbook No.: 2651

	Date	Time	Temp (°C) [2]
Rotation Started	F:/Loc Only		
Rotation Ended			
During Rotation	N/A	N/A	

Batch #	P511906
Page #	1 of 1
Analyst	CB

5122274

Filtration Start Date/Time: 4/29/05 1330

Definition of QC Types: B=Blank, X=Duplicate, S=Matrix Spike, D=Matrix Spike Duplicate

Sample	Initial Vol. (ml)	Percent Solids Determination: Filter Tare	Sample Wt. (g)	Wt. Filtrate (g)	Wt. Dried Solids and Filter (g)	% Solids	Fluid Determination: pH #1	pH #2	Fluid #	Leachate Preparation: Wt. Sample (g) [1]	Wt. Filtrate [a] (g)	Volume Fluid Added (ml)	Wt. Leachate [a] (g)	Final pH	Size Reduction [b]	Requested Analyses [c]
F50290000-871 G9HX1 B	ICP	NA				-	NA		3	NA						M
	Hg															
F50240139-1 G9GFM	ICP					0										
	Hg															
-2 G9GFN	ICP															
	Hg															
-3 G9GFP	ICP															
	Hg															
F50220359-1 G3T0 S/D	ICP20															
	Hg b															
-2 G34EP	ICP					0										
	Hg				NA		NA		3						NA	M
	ICP															
	Hg															
	ICP															
	Hg															
	ICP															
	Hg															
	ICP															
	Hg															
	ICP															
	Hg															

CB 4/29/05

a Required for Immiscible Multi-Phasic Samples Only
b C=Cut, CR=Crush, G=Grind, O=Other _____
c B=BNA, H=Herbicides, P=Pesticides, M=Metals

Metals Preserved By	Date
CB	4/29/05

Generate a NCM for the following anomalies: Multiphasic samples, single phase oils, or samples that contain liquids that didn't filter under test conditions.

(1) Sample weights less than the method requirement require immediate notification of the PM and generation of a NCM.
(2) Temperature excursions outside 23° C ± 2° C require the immediate generation of a NCM.
NCM(s):

What [c]	From	To	Date	Dept.
	CB	MET	4/29/05	TCLP

Type	Standard Number(s) and Volume(s)		Expiration Date
ICP	MT 60239-05	500ml	1/1/06
ICP	MT 60240-05	500ml	1/1/06
HG	HG 01028-05	50ml	5/26/05

539 of 548

SEVERN TRENT **STL** Mercury Prep Report for Batch # 5123055

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Prep Method: SW-846 7470A **SOP Number:** STL-MT-0005, Rev 0

Extraction Code: 0M **Extraction:** TCLP **Matrix:** WATER **Prep Date:** 5/3/2005

Time In: 12:15 **Temp In:** 94 °C

Time Out: 14:15 **Temp Out:** 93 C **Standard Log Ref#:** HG050305

Lot ID	Work Order #	Initial Wt/Vol	Final Volume	Lab Filtered	Due Date	Sample Location
F5D220359-001	G8170	6 mL	30 mL	☐	05/11/2005	METS,A94
F5D220359-001S	G8170S	6 mL	30 mL	☐		METS,A94
F5D220359-001X	G8170X	6 mL	30 mL	☐		METS,A94
F5D220359-002	G84EP	6 mL	30 mL	☐	05/11/2005	METS,A94
F5D290000-371B	G9HX1B	6 mL	30 mL	☐		
F5E030000-055C	G9NWJC	6 mL	30 mL	☐		

Comments:

Custody Information

Relinquished By: DB

Review/Received By: JJ for me

Date of Transfer: 5/3/05

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.16, updated 2/7/2005

STL

TCLP Extraction Record/Chain of Custody

Form: SL-INORG-0087, Rev. 3/31/05; SW-846 Method 1311: SOP: STL-IP-0016, current revision

Logbook No.: 2651

	Fluid #1	Fluid #2	Fluid #3 (DI Water)/Filter Only & Wet Chem
Daily pH Check	(4.88 – 4.93)	(2.83 – 2.93)	N/A
Lot #			N/A

	Date	Time	Temp (°C) [2]
Rotation Started	Filter Only		
Rotation Ended			
During Rotation	N/A	N/A	

Batch #	P51906
Page #	1 of 1
Analyst	CB

Filtration Start Date/Time: 4/29/05 1330

Definition of QC Types: B=Blank, X=Duplicate, S=Matrix Spike, D=Matrix Spike Duplicate

Sample	Initial Vol. (ml)	Percent Solids Determination: Filter Tare	Sample Wt. (g)	Wt. Filtrate (g)	Wt. Dried Solids and Filter (g)	% Solids	Fluid Determination: pH #1	pH #2	Fluid #	Leachate Preparation: Wt. Sample (g) [1]	Wt. Filtrate [a] (g)	Volume Fluid Added (ml)	Wt. Leachate [a] (g)	Final pH	Size Reduction [b]	Requested Analyses [c]
F5D290000-S71 G9HX1 B	ICP	NA				-	NA		3	NA						M
	Hg															
F5D290139-1 G9GFM	ICP					0										
	Hg															
-2 G9GFN	ICP															
	Hg															
-3 G9GFP	ICP															
	Hg															
F5D220359-1 G8F70 S/D	ICP20															
	Hg 6															
-2 G9HEP	ICP					0									NA	M
	Hg				NA		NA		3							M
	ICP															
	Hg															
	ICP															
	Hg															
	ICP															
	Hg															
	ICP															
	Hg															
	ICP															
	Hg															

CB 4/29/05

a Required for Immiscible Multi-Phasic Samples Only
b C=Cut, CR=Crush, G=Grind, O=Other _____
c B=BNA, H=Herbicides, P=Pesticides, M=Metals

Generate a NCM for the following anomolies: Multiphasic samples, single phase oils, or samples that contain liquids that didn't filter under test conditions.

What [c]	From	To	Date	Dept.
	CB	MET	4/29/05	TCLP

Metals Preserved By	Date
CR	4/29/05

(1) Sample weights less than the method requirement require immediate notification of the PM and generation of a NCM.
(2) Temperature excursions outside 23° C ± 2° C require the immediate generation of a NCM.
NCM(s):

Type	Standard Number(s) and Volume(s)	Expiration Date
ICP	MT 0023-05 500ml	1/1/06
ICP	MT 0024-05 500ml	1/1/06
HG	HG 0028-05 50ml	5/26/05

SR

F5D220359

CLIENT ANALYSIS SUMMARY

Storage Loc: METS,A94

Project Manager: EK | Quote #: 44975 | SDG: F5D220359

Date Received: 2005-04-22

Project: 3167S | Los Alamos Non-Rad

Analytical Due Date: 2005-05-04 5-11

PO#: 126310021 | Report to: Joylene Valdez or Keith

Report Due Date: 2005-05-06 5-13

Client: 108581 LOS ALAMOS NATIONAL LABORATORY

Report Type: D Expanded Deliverable

#SMPS in LOT: 2 | EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	
1	RE73-05-58920			2005-04-20 / 0	G8170	WATER

SAMPLE COMMENTS:

	CD	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	PB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	SB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	CU	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	SE	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	CR	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	NI	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	CO	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	MN	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	TL	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	BE	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	VX	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	BA	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	AS	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	AG	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	HG	O8	SW846 7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	HG	O8	SW846 7470A	Mercury (7470A, Cold Vapor) - Liquid	19	METALS, TOTAL (Method exclusive) - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	ZN	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	ZN	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	PB	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	SE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	AS	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	AG	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	NA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	AL	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	BA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	CA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	CD	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	CR	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	FE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	KX	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
	MG	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
S	HG	O8	SW846 7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: B	WRK LOC	06
S	SE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06

F5D220359 CLIENT ANALYSIS SUMMARY

Storage Loc: METS,A94

Project Manager: EK | Quote #: 44975 | SDG: F5D220359

Date Received: 2005-04-22

Project: 3167S | Los Alamos Non-Rad

Analytical Due Date: 2005-05-04

PO#: 126310021 | Report to: Joylene Valdez or Keith

Report Due Date: 2005-05-06

Client: 108581 LOS ALAMOS NATIONAL LABORATORY

Report Type: D Expanded Deliverable

#SMPS in LOT: 2 EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ******** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

S	ZN	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06	
S	AS	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06	
S	BA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06	
S	CD	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06	
S	CR	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06	
S	PB	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06	
S	AG	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06	
X	HG	O8	SW846 7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: B	WRK LOC	06	
X	ZN	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06	
X	AS	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06	
X	BA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06	
X	CD	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06	
X	CR	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06	
X	PB	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06	
X	SE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06	
X	AG	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06	

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
2	RE73-05-58921			2005-04-20 / 0	G84EP	WATER

SAMPLE COMMENTS:

CU	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
MN	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
NI	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
PB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
SB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
SE	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
CR	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
VX	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
CO	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
TL	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
BA	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
CD	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
AG	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
BE	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
AS	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
HG	O8	SW846 7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
HG	O8	SW846 7470A	Mercury (7470A, Cold Vapor) - Liquid	19	METALS, TOTAL (Method exclusive) - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
ZN	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06		

F5D220359

CLIENT ANALYSIS SUMMARY

Storage Loc: METS,A94

Project Manager: EK Quote #: 44975 SDG: F5D220359

Date Received: 2005-04-22

Project: 3167S Los Alamos Non-Rad

Analytical Due Date: 2005-05-04

PO#: 126310021 Report to: Joylene Valdez or Keith

Report Due Date: 2005-05-06

Client: 108581 LOS ALAMOS NATIONAL LABORATORY

Report Type: D Expanded Deliverable

#SMPS in LOT: 2 EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

AG	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06
SE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06
AL	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
PB	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06
AS	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06
CD	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06
BA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06
ZN	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06
MG	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
KX	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
FE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
CR	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: B	WRK LOC	06
CA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06
NA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	05	METALS, TOTAL - Waters	01	STANDARD TEST SET	PROT: B	WRK LOC	06

F5D220359

CLIENT COMMENTS SUMMARY

Storage Loc: METS,A94
Date Received: 2005-04-22
Analytical Due Date: 2005-05-04
Report Due Date: 2005-05-06
Report Type: D Expanded Deliverable
EDD Code: 99

Project Manager: EK
Quote #: 44975 SDG: F5D220359
Project: 3167S Los Alamos Non-Rad
PO#: 126310021 Report to: Joylene Valdez or Keith
Client: 108581 LOS ALAMOS NATIONAL LABORATORY
#SMPS in LOT: 2

Sample Receiving: LOS ALAMOS CLIENT REQUIREMEN
Enter COC NUMBER on sample sample header in the COC Fi
SDG = "Lot Number"
Project Name = "Request number"

********** METALS AND WETCHEMISTRY **********
Can batch multiple Lots together and report Client specific
Batch QC: Matrix Spike and Sample Duplicate
Met Prep: GFAA Spike Level and Standard Spike Level
Sb spike at 100 ppb
Pb - Spike Solids at 100 ppb, spike Waters at 20
- Perform analytical spike when matrix spike is swamped with indigenous analyte.
********** GC/MS ORGANICS **********
Can batch multiple Lots together and report Client specific
Batch QC MS and MSD
Clouseau observations for:
- Dilutions and elevated detection limits
- Unknown aldol condensate in TIC report
USE GPC for sample extracts as required.
Put client ID on all raw data
Client requires qualifiers
********** GC/HPLC **********
Can batch multiple Lots together and report Client specific
Batch QC
USE GPC for sample extracts as required.
Client requires Qualifiers for both GC and HPLC
- No averaging of CCV compounds
- Include Form Xs in data packages
********** Radiochemistry **********
Rad Chem with no tracers require MS (spk <= 100 pCi/L or g) and sample duplicate ..... Gamma does not require MS.
Radium 228 requires MS and Sample Duplicate
Radiological: "Do not include control chart, standard certif certificates, or calibration data as part of data package"
- Tracers need to be added at a level to yield at least 400
- Report 1 sigma uncertainty
Gross Alpha/Beta requires a total digestion.

CHAIN OF CUSTODY DOCUMENT NUMBER: 3167SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3167S

ANALYSIS TYPE: INORGANIC

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58920	1	1 L POLY	METALS-STL	HNO3	W
RE73-05-58920	2	1 L POLY	METALS_TCLP	HNO3	W
RE73-05-58921	1	1 L POLY	METALS-STL	HNO3	W
RE73-05-58921	2	1 L POLY	METALS_TCLP	HNO3	W

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3167S Page 1

Relinquished By:		Date	Time	Received By:		Date	Time
		4/21/05	2:30	Sue Wilson		4.22.05	0900
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		

Received for DISPOSAL By:		Date	Time	Remarks:
PRINTED NAME	SIGNATURE			

Thursday, April 21, 2005

REQUEST NUMBER: 3167S

ANALYSIS TYPE: INORGANIC

Los Alamos
NATIONAL LABORATORY

Cul
6193

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

These samples are on:

SHIP DATE: 04/21/2005
REPORT DUE: 05/06/2005
TURN AROUND REQ'D: 15

RAD SCREENING: NOT REQ
COMMENTS:

LANL Request Number: 3167S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

LANL ER SMO CONTACT:
Signature:

Page 1

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:6010B	RE73-05-58920	1	W	04/20/2005	
SW-846:6020	RE73-05-58920	1	W	04/20/2005	
SW-846:7470A	RE73-05-58920	1	W	04/20/2005	
SW-846:6020_TCLP	RE73-05-58920	2	W	04/20/2005	
SW-846:7470A_TCLP	RE73-05-58920	2	W	04/20/2005	
SW-846:6010B	RE73-05-58921	1	W	04/20/2005	
SW-846:6020	RE73-05-58921	1	W	04/20/2005	
SW-846:7470A	RE73-05-58921	1	W	04/20/2005	
SW-846:6020_TCLP	RE73-05-58921	2	W	04/20/2005	
SW-846:7470A_TCLP	RE73-05-58921	2	W	04/20/2005	

Final Page of REQUEST NUMBER 3167S Page 1

SEVERN TRENT **STL**

Lot No: F5D220359

Condition Upon Receipt Form
St. Louis Laboratory

Client: LANL

Quote No: 44975

Shipper/No: FedX ~~6954 7789 2939~~

Date: 4.22.05 Time: 0900

Initiated by: SV

COC/RFA Numbers: below

Condition/Variance (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	(Y) N	Sample received in undamaged condition?	7.	(Y) N	Sample received with Chain of Custody?
2.	(Y) N	Sample received within 4C ± 2C* ?	8.	(Y) N	Chain of Custody matches sample IDs on containers?
	SV 4.22.05	Record	9.	(Y) N N/A	Custody seal received intact on cooler.?
3.	(Y) N N/A	Sample received with proper pH [1] ?	10.	(Y) N N/A	Custody seal tamper evident on cooler.?
4.	Y N	If N/A - Was pH taken by original STL lab?	11.	(Y) N N/A	Custody seal on bottles received intact?
5.	(Y) N	Sample received in proper containers?	12.	(Y) N N/A	Custody seal tamper evident on bottles?
6.	(Y) N	Sample volume sufficient for analysis?	13.	Y N	Was CUR (equivalent) rec' d from original STL lab?

* Temperature Variance Does Not Affect the Following Analyses:

[1] For DOE-AL (Pantex, LANL, Sandia) sites, verify pH all containers received, except for VOA, TOX, and soils.

Notes: 28615C, 31635C thru 68SC.

Chain 31635C - containers received were different than C-O-C.

Chains 31675C, 31685C - samples should be preserved but have pH of 7.

Corrective Action:

☐ Client's Name: _____ Informed by: _____ By: _____

☐ Sample(s) processed "as is". _____

☐ Sample(s) on hold until: _____ If released, notify: _____

Project Management Review: Tony Lolley Date: 4/25/05

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED
IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIALS AND THE DATE NEXT TO THAT ITEM

6193

ADMIN-0004, Revised 2/17/04
\\Slsvr01\QA\FORMS\ST-LOUIS\ADMIN\Admin004 rev7.doc

Thursday, April 21, 2005

REQUEST NUMBER: 3166S

ANALYSIS TYPE: ORGANIC

Los Alamos
NATIONAL LABORATORY

ATTN: Mark Loeb
Severn Trent Laboraties, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

SHIP DATE: 04/21/2005
REPORT DUE: 05/06/2005
TURN AROUND REQ'D: 15

RAD SCREENING: NOT REQ
COMMENTS:

These samples are on:

LANL Request Number: 3166S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:8270C	RE73-05-58923	1	W	04/20/2005	
SW-846:8270C	RE73-05-58923	2	W	04/20/2005	
SW-846:8082	RE73-05-58923	3	W	04/20/2005	
SW-846:8082	RE73-05-58923	4	W	04/20/2005	
SW-846:8260B	RE73-05-58923	5	W	04/20/2005	
SW-846:8260B	RE73-05-58923	6	W	04/20/2005	
SW-846:8270C	RE73-05-58924	1	W	04/20/2005	
SW-846:8270C	RE73-05-58924	2	W	04/20/2005	
SW-846:8082	RE73-05-58924	3	W	04/20/2005	
SW-846:8082	RE73-05-58924	4	W	04/20/2005	
SW-846:8260B	RE73-05-58924	5	W	04/20/2005	
SW-846:8260B	RE73-05-58924	6	W	04/20/2005	

Final Page of REQUEST NUMBER 3166S

Thursday, April 21, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3166SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3166S

ANALYSIS TYPE: ORGANIC

ATTN: Mark Loeb
Severn Trent Laboraties, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58923	1	1 L AMBER GLASS	8270C	ICE	W
RE73-05-58923	2	1 L AMBER GLASS	8270C	ICE	W
RE73-05-58923	3	1 L AMBER GLASS	8082	ICE	W
RE73-05-58923	4	1 L AMBER GLASS	8082	ICE	W
RE73-05-58923	5	40 ML SEPTUM AMBER GLASS	8260B	HCL	W
RE73-05-58923	6	40 ML SEPTUM AMBER GLASS	8260B	HCL	W
RE73-05-58924	1	1 L AMBER GLASS	8270C	ICE	W
RE73-05-58924	2	1 L AMBER GLASS	8270C	ICE	W
RE73-05-58924	3	1 L AMBER GLASS	8082	ICE	W
RE73-05-58924	4	1 L AMBER GLASS	8082	ICE	W
RE73-05-58924	5	40 ML SEPTUM AMBER GLASS	8260B	HCL	W
RE73-05-58924	6	40 ML SEPTUM AMBER GLASS	8260B	HCL	W

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3166S

Relinquished By:		Date	Time	Received By:		Date	Time
		4/21/05	2:30				
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		

Received for DISPOSAL By:		Date	Time	Remarks:
PRINTED NAME	SIGNATURE			

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: 73- Ash Pile rinsates

COC ID: 219932 **Event ID:**4832

SAMPLE ID: RE73-05-58920
SAMPLE ORDER MATRIX: Water
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
3	AM-241+ISOU+ISOPU+GS	1 GAL POLY	Nitric Acid	Y		
1	METALS-STL	1 L POLY	Nitric Acid	Y		
2	METALS_TCLP	1 L POLY	Nitric Acid	Y		

RELINQUISHED BY (printed name): (signature):	**Date/Time:** 4.20.05 1520	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4/20/05 15:20	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: 73- Ash Pile rinsates

COC ID: 219962 **Event ID:**4832

SAMPLE ID: RE73-05-58923
SAMPLE ORDER MATRIX: Water
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
3	8082	1 L AMBER GLASS	Ice	Y		
4	8082	1 L AMBER GLASS	Ice	Y		
5	8260B	40 ML SEPTUM AMBER GLASS	Hydrochloric Acid (Hydrogen Chloride)	Y		
6	8260B	40 ML SEPTUM AMBER GLASS	Hydrochloric Acid (Hydrogen Chloride)	Y		
1	8270C	1 L AMBER GLASS	Ice	Y		
2	8270C	1 L AMBER GLASS	Ice	Y		

RELINQUISHED BY (printed name): (signature):	**Date/Time:** 4.20.05 1520	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4/20/05 1520	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: 73- Ash Pile rinsates

COC ID: 219972 Event ID:4832

SAMPLE ID: RE73-05-58924
SAMPLE ORDER MATRIX: Water
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
3	8082	1 L AMBER GLASS	Ice	Y		
4	8082	1 L AMBER GLASS	Ice	Y		
5	8260B	40 ML SEPTUM AMBER GLASS	~~Hydrochloric Acid~~ UNP. ~~(Hydrogen Chloride)~~ KR	Y		
6	8260B	40 ML SEPTUM AMBER GLASS	~~Hydrochloric Acid~~ UNP. ~~(Hydrogen Chloride)~~ KR	Y		
1	8270C	1 L AMBER GLASS	Ice	Y		
2	8270C	1 L AMBER GLASS	Ice	Y		

RELINQUISHED BY (printed name): KR Leonard (signature):	Date/Time: 4.20.05 1520	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/20/05 1520	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: 73- Ash Pile rinsates

COC ID: 219942 **Event ID:**4832

SAMPLE ID: RE73-05-58921
SAMPLE ORDER MATRIX: Water
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
3	AM-241+ISOU+ISOPU+GS	1 GAL POLY	Nitric Acid	Y		
1	METALS-STL	1 L POLY	Nitric Acid	Y		
2	METALS_TCLP	1 L POLY	Nitric Acid	Y		

RELINQUISHED BY (printed name): FR Leonard **(signature):**	**Date/Time:** 4.20.05 1520	**RELINQUISHED BY (printed name):** **(signature):**	**Date/Time:**
RECEIVED BY (printed name): **(signature):**	**Date/Time:** 4/20/05 1520	**RECEIVED BY (printed name):** **(signature):**	**Date/Time:**

Rad Screening Data Release Form

The Following samples were received at the Field Support Facility (FSF) without screening data (list sample number):

These samples will not be shipped until radiological screening data documentation arrives at the FSF. I understand that it is my responsibility to ensure this information arrives at the FSF in a timely manner. If holding times are missed because screening data does not arrive, I will pick up the samples.

The following samples do not require rad screening data for the reasons stated (list sample numbers):

RE73-05-58920
58923
58921
58924

Reason: rinsate samples collected in clean area

Print Last Name LEONARD Signature [signature] Date 4/20/05

Data-Validation Cover Sheet

☐ Rejected Data

Section I

Request Number: 3166S Validation Date: 27-May-05 Lab Code: STL St Louis

Contract Laboratory Name:

Validator: Clifford Deiner Organization: ENV-ECR

Analytical Suite (check all that apply):
☒ Volatile Organics
☒ Semivolatile Organics
☒ Organochlorine Pesticides/Polychlorinated Biphenyls
☐ High Explosives
☐ Inorganics
☐ Radiochemistry

Other (describe):

Section II—Completeness Check

Yes	No	n/a	(check one)	Yes	No	n/a	(check one)
☒	☐	☐	1. Chain-of-custody form(s)	☒	☐	☐	6. Raw/BSS data
☒	☐	☐	2. Case narrative	☒	☐	☐	7. Quality control forms
☒	☐	☐	3. Sample result forms	☒	☐	☐	8. Quantitation reports
☒	☐	☐	4. Sample chromatograms	☒	☐	☐	9. TICs forms
☒	☐	☐	5. Standard chromatograms	☒	☐	☐	10. TICs mass spectra

Identify any samples in the assigned Request Number that are missing:

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

Volatiles:

Sample RE73-05-58923 was analyzed undiluted and diluted. The undiluted sample results were accepted and the diluted sample results were qualified R,V19. Methylene chloride was present in the method blank and the sample result for RE73-05-58924 was qualified U,V4. The ICALs and CCVs for some analytes did not meet acceptance limits and sample results were qualified UJ,V7a. The LCS recovery for sec-butylbenzene was greater than acceptance limits, however, the sample results were nondetects and thus not qualified. The mass spectrum for 1,4 dichlorobenzene for RE73-05-58923 did not meet method specifications and the sample result was qualified U,V8. All other QCs met acceptance limits.

Semivolatiles:

The LCS recovery for some analytes was less than acceptance limits and affected sample results were qualified UJ,SV12c. All other QCs met acceptance limits.

PCBs:

All QCs met acceptance limits.

CD

Validator's signature: Clifford Deimy Date: 5-27-05	
(Attach additional comment sheets as necessary.)	
SOP-15.02, R1	**Los Alamos National Laboratory** **RRES-Remediation Services Project**

VOC Data-Validation Checklist

Yes	No	n/a	(check one)	Assign qualifier listed below if criteria = Yes: Detected analyte	Assign qualifier listed below if criteria = Yes: Undetected analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	J, V9	UJ, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	R, V9a
☐	☒	☐	3. The instrument performance check was not present or fails acceptance criteria.	R, V16a	R, V16a
☐	☒	☐	4. The initial calibration was not present.	R, V16	R, V16
☐	☒	☐	5. The initial calibration did not have 5 calibration points and a low standard at the reporting limit.	R, V7	R, V7
☒	☐	☐	6. The initial calibration analyte %RSD was >30% .	J, V7a	UJ, V7a
☐	☒	☐	7. The analyte minimum RRF was <0.05.	J, V7b	R, V7b
☐	☒	☐	8. The CCV was not present.	R, V16	R, V16
☒	☐	☐	9. The continuing calibration analyte %D was >25%.	J, V7a	UJ, V7a
☐	☒	☐	10. The analyte minimum RRF was <0.05.	J, V7b	R, V7b
☐	☒	☐	11. The method blank was not reported.	R, V4b	R, V4b
☒	☐	☐	12. The analyte detected in the method blank and sample result for analyte was < 5x/10x the amount in the blank.	U, V4	N/A
☐	☒	☐	13. The analyte detected in the method blank and sample result for analyte was >5x/10x the amount in the method blank.	J, V4a	N/A
☐	☒	☐	14. The IS information was not present.	R, V2a	R, V2a
☐	☒	☐	15. The IS areas in CCV were <50% or >200% of the previous days' IS areas.	J, V1	UJ, V1
☐	☒	☐	16. The IS retention times had shifted by >30 s.	J, V0	UJ, V0
☐	☒	☐	17. The sample IS areas were >200% of the daily CCV IS areas.	J, V1b	N/A
☐	☒	☐	18. The sample IS areas were <50% but are ≥10% of the daily CCV IS areas.	J, V1a	UJ, V1a
☐	☒	☐	19. The sample IS areas were <10% of the daily CCV IS areas.	J, V2	R, V2
☐	☒	☐	20. The surrogate information was not present.	R, V3f	R, V3f
☐	☒	☐	21. The surrogate %R was >UAL.	J+, V3	N/A
☐	☒	☐	22. The surrogate %R was <LAL but ≥10%.	J-, V3a	UJ, V3c
☐	☒	☐	23. The surrogate %R was <10%.	J-, V3b	R, V3d
☐	☒	☐	24. The surrogate recoveries were (1) <LAL and (1) >UAL.	J, V3e	UJ, V3e
☐	☒	☐	25. The LCS information was not present.	R, V12	R, V12
☒	☐	☐	26. The LCS %R was >UAL.	J+, V12d	N/A
☐	☒	☐	27. The LCS %R was <LAL but ≥10%.	J-, V12b	UJ, V12c
☐	☒	☐	28. The LCS %R was <10%.	J-, V12a	R, V12a
☐	☒	☐	29. The mass spectral information was missing.	R, V8a	R, V8a
☒	☐	☐	30. The mass spectrum did not meet method specifications.	U, V8	N/A
☐	☒	☐	31. The TICs were requested but not reported.	R, V11	R, V11
☐	☒	☐	32. The sample was diluted inappropriately.	N/A	U, V10
☒	☐	☐	33. Other obvious data-quality issues were identified.	__, V19	__, V19

CD

Attachment D: SVOC Data-Validation Checklist

Yes	No	(check one)	Assign qualifier listed below if criteria = Yes: Detected analyte	Assign qualifier listed below if criteria = Yes: Undetected analyte
☐	☒	1. The Sample was extracted >1 to ≤2 times the appropriate hold time requirement.	J-, SV9	UJ, SV9
☐	☒	2. The Sample was extracted >2 times the appropriate holding time requirement.	R, SV9a	R, SV9a
☐	☒	3. The Sample was analyzed outside the analytical holding time requirement.	R, SV9b	R, SV9b
☐	☒	4. The instrument performance check (DFTPP) is not present or fails acceptance criteria.	R, SV16A	R, SV16A
☐	☒	5. The initial calibration is not present.	R, SV16	R, SV16
☐	☒	6. The initial calibration does not have either 5 calibration points or a low standard at the reporting limit.	R, SV7	R, SV7
☐	☒	7. The initial calibration analyte %RSD is >30%.	J, SV7a	UJ, SV7a
☐	☒	8. The analyte minimum RRF is <0.05 in the initial calibration.	J, SV7b	R, SV7b
☐	☒	9. CCV is not present.	R, SV16	R, SV16
☐	☒	10. The continuing calibration analyte %D is >25%.	J, SV7a	UJ, SV7a
☐	☒	11. The analyte minimum RRF is <0.05 in the continuing calibration.	J, SV7b	R, SV7b
☐	☒	12. The method blank information is not present.	R, SV4b	R, SV4b
☐	☒	13. The analyte detected in the method blank and sample result for analyte is ≤5x/10x the amount in blank.	U, SV4	N/A
☐	☒	14. The analyte detected in the method blank and sample result for analyte is >5x/10x the amount in method blank	J, SV4a	N/A
☐	☒	15. IS information is not present.	R, SV2a	R, SV2a
☐	☒	16. The IS area in the CCV is <50%R or >200%R.	J, SV1	UJ, SV1
☐	☒	17. The IS retention times have shifted by more 30 s.	J, SV0	R, SV0
☐	☒	18. The sample IS area is >200%R.	J, SV1b	N/A
☐	☒	19. The sample IS area is <50%R but ≥10%R.The s	J, SV1a	UJ, SV1a
☐	☒	20. The Sample IS area is <10%R.	J, SV2	R, SV2
☐	☒	21. The surrogate information is not present.	R, SV3f	R, SV3f
☐	☒	22. The surrogate %R is greater than the UAL.	J+, SV3	N/A
☐	☒	23. The surrogate %R is less than the LAL but ≥10%.	J-, SV3a	UJ, SV3c
☐	☒	24. The surrogate %R is <10%.	J-, SV3b	R, SV3d
☐	☒	25. There is one surrogate %R <LAL and one surrogate %R >UAL.	J, SV3e	UJ, SV3e
☐	☒	26. LCS information is not present.	R, SV12	R, SV12
☐	☒	27. The LCS %R is >UAL.	J+, SV12d	N/A
☒	☐	28. The LCS %R is <LAL but ≥10%.	J-, SV12b	UJ, SV12c
☐	☒	29. The LCS %R is <10%	J-, SV12a	R, SV12a
☐	☒	30. Mass spectral information is missing.	R, SV8a	R, SV8a
☐	☒	31. The mass spectrum does not meet method specifications.	U, SV8	N/A
☐	☒	32. TICs were requested but not reported.	none	none
☐	☒	33. The samplewas diluted inappropriately.	N/A	UJ, V10
☐	☒	34. Other obvious data quality issues were identified.	__, SV19	__, SV19

PEST/PCB Data-Validation Checklist

Yes	No	n/a	(check one)	Assign qualifier listed below if criteria = Yes: Detected analyte	Assign qualifier listed below if criteria = Yes: Undetected analyte
☐	☒	☐	1. The breakdown performance check is not present.	R, P10b	R, P10b
☐	☒	☐	2. The breakdown performance exceeds criteria for individual or combined.	J-, P10	---[a], P10
☐	☒	☐	3. The Breakdown performance exceeds criteria and the associated breakdown products are present in sample.	J+, P10a	UJ, P10a
☐	☒	☐	4. Initial calibration is not present.	R, P16	R, P16
☐	☒	☐	5. Initial calibration does not have 5 calibration points and/or low standard at or below the reporting limit.	J, P7	R, P7
☐	☒	☐	6. Initial calibration analyte %RSD is >20% or RSD is <0.995.	J, P7a	UJ, P7a
☐	☒	☐	7. The CCV is not present or analyzed at proper frequency.	R, P16	R, P16
☐	☒	☐	8. Continuing calibration analyte %D is >15%.	J, P7a	UJ, P7a
☐	☒	☐	9. A multicomponent analyte is reported with no standard being analyzed within 72 h of the initial analysis.	J, P7b	N/A
☐	☒	☐	10. The RT window information is not present.	R, P11	R, P11
☐	☒	☐	11. RT window for individual analytes in the CCV have shifted more than 0.05 minutes from the RT window from the initial calibration.	---[b], P11a	---[c], P11a
☐	☒	☐	12. The method blank is not reported.	R, P4b	R, P4b
☐	☒	☐	13. The analyte detected in blank and sample result for analyte < 5x the amount in blank.	UJ, P4	N/A
☐	☒	☐	14. The analyte detected in blank and sample result for analyte > 5x the amount in blank.	J, P4a	N/A
☐	☒	☐	15. The confirmation information is not present for positive results.	R, P8a	R, P8a
☐	☒	☐	16. The analyte reported was not confirmed on a second dissimilar column or detector.	UJ, P8	N/A
☐	☒	☐	17. The analyte reported exceeds the RT window but was confirmed.	J, P11b	N/A
☐	☒	☐	18. The multicomponent analyte is reported but does not match the pattern for the analyte in the associated standard.	J, P7b	N/A
☐	☒	☐	19. Surrogate information is not present.	R, P3f	R, P3f
☐	☒	☐	20. Surrogate % recovery is > the UAL.	J+, P3	N/A
☐	☒	☐	21. Surrogate % recovery is < LAL but ≥10%.	J-, P3a	UJ, P3c
☐	☒	☐	22. Surrogate % recovery is < 10%.	J-, P3b	R, P3d
☐	☒	☐	23. One surrogate recovery is < LAL and one surrogate recovery is > UAL.	J, P3e	UJ, P3e
☐	☒	☐	24. The LCS information is not present.	R, P12	R, P12
☐	☒	☐	25. LCS % recovery is >130%.	J+, P12d	N/A
☐	☒	☐	26. LCS % recovery is < 70% but ≥10%.	J-, P12b	UJ, P12c
☐	☒	☐	27. LCS % recovery is < 10%.	J-, P12a	R, P12a
☐	☒	☐	28. The sample was extracted outside of the appropriate hold time.	J-, P9	UJ, P9
☐	☒	☐	29. The sample was extracted 2 times the appropriate holding time.	R, P9a	R, P9a
☐	☒	☐	30. The sample was analyzed outside the analytical holding time.	R, P9b	R, P9b
☐	☒	☐	31. The sample was diluted inappropriately.	N/A	U, P10c
☐	☒	☐	32. The other obvious data quality issues identified.	__, P19	__, P19

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58923

GC/MS Volatiles

Lot-Sample #...: F5D220218-001
Date Sampled...: 04/20/05
Prep Date.....: 04/29/05
Prep Batch #...: 5121013
Dilution Factor: 5

Work Order #...: G800L1AC
Date Received..: 04/22/05
Analysis Date..: 04/29/05
Analysis Time..: 16:25

Matrix.....: WATER

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	10	ug/L
Chloromethane	ND	10	ug/L
Vinyl chloride	ND	10	ug/L
Bromomethane	ND	10	ug/L
Chloroethane	ND	10	ug/L
Trichlorofluoromethane	ND	10	ug/L
Trichlorotrifluoroethane	ND	5.0	ug/L
Acetone	ND	50	ug/L
1,1-Dichloroethene	ND	5.0	ug/L
Iodomethane	ND	5.0	ug/L
Methylene chloride	5.5 B	5.0	ug/L
Carbon disulfide	2.2 J	5.0	ug/L
1,1-Dichloroethane	ND	5.0	ug/L
2-Butanone	ND	25	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,2-Dichloroethene (total)	ND	5.0	ug/L
Chloroform	2.1 J	5.0	ug/L
Bromochloromethane	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	5.0	ug/L
1,1-Dichloropropene	ND	5.0	ug/L
Carbon tetrachloride	ND	5.0	ug/L
1,2-Dichloroethane	ND	5.0	ug/L
Benzene	ND	5.0	ug/L
Trichloroethene	ND	5.0	ug/L
1,2-Dichloropropane	ND	5.0	ug/L
Bromodichloromethane	ND	5.0	ug/L
Dibromomethane	ND	5.0	ug/L
4-Methyl-2-pentanone	ND	25	ug/L
cis-1,3-Dichloropropene	ND	5.0	ug/L
Toluene	ND	5.0	ug/L
1,1,2-Trichloroethane	ND	5.0	ug/L
2-Hexanone	ND	25	ug/L
1,3-Dichloropropane	ND	5.0	ug/L
Tetrachloroethene	ND	5.0	ug/L
Chlorodibromomethane	ND	5.0	ug/L
1,2-Dibromoethane	ND	5.0	ug/L
Chlorobenzene	ND	5.0	ug/L

R, V19

(Continued on next page)

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58923

GC/MS Volatiles

Lot-Sample #...: F5D220218-001 Work Order #...: G800L1AC Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L
Ethylbenzene	ND	5.0	ug/L
Xylenes (total)	ND	5.0	ug/L
Styrene	ND	5.0	ug/L
Bromoform	ND	5.0	ug/L
Isopropylbenzene	ND	5.0	ug/L
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L
1,2,3-Trichloropropane	ND	5.0	ug/L
n-Propylbenzene	ND	5.0	ug/L
trans-1,3-Dichloropropene	ND	5.0	ug/L
Bromobenzene	ND	5.0	ug/L
2-Chlorotoluene	ND	5.0	ug/L
1,3,5-Trimethylbenzene	ND	5.0	ug/L
4-Chlorotoluene	ND	5.0	ug/L
tert-Butylbenzene	ND	250	ug/L
1,2,4-Trimethylbenzene	ND	5.0	ug/L
sec-Butylbenzene	ND	5.0	ug/L
p-Isopropyltoluene	ND	5.0	ug/L
1,3-Dichlorobenzene	ND	5.0	ug/L
1,4-Dichlorobenzene	ND	5.0	ug/L
n-Butylbenzene	ND	5.0	ug/L
1,2-Dichlorobenzene	ND	5.0	ug/L
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L

R, V19

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	88	(75 - 126)
Dibromofluoromethane	95	(60 - 147)
1,2-Dichloroethane-d4	100	(71 - 138)
4-Bromofluorobenzene	91	(71 - 117)

NOTE(S):

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

J Estimated result. Result is less than RL.

CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: ER73-05-58923

GC/MS Volatiles

Lot-Sample #...: F5D220218-001 **Work Order #...: G800L2AC** **Matrix.....: WATER**
Date Sampled...: 04/20/05 **Date Received..: 04/22/05**
Prep Date.....: 05/02/05 **Analysis Date..: 05/02/05**
Prep Batch #...: 5123229 **Analysis Time..: 21:07**
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	2.0	ug/L ~~UJ, V7a~~ CO 5-27-05
Chloromethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L UJ, V7a
Chloroethane	ND	2.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
Trichlorotrifluoroethane	ND	1.0	ug/L
Acetone	ND	10	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
Iodomethane	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L UJ, V7a
2-Butanone	ND	5.0	ug/L UJ, V7a
2,2-Dichloropropane	ND	1.0	ug/L
1,2-Dichloroethene (total)	ND	1.0	ug/L
Chloroform	1.9	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
Bromodichloromethane	0.34 J	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L UJ, V7a
cis-1,3-Dichloropropene	ND	1.0	ug/L
Toluene	0.27 J	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
2-Hexanone	ND	5.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L UJ, V7a
Chlorodibromomethane	0.19 J	1.0	ug/L
1,2-Dibromoethane	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L

(Continued on next page)

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58923

GC/MS Volatiles

Lot-Sample #...: F5D220218-001 Work Order #...: G800L2AC Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Xylenes (total)	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L UJ, V7a
Isopropylbenzene	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
tert-Butylbenzene	ND	50	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	0.14 J,B	1.0	ug/L U, V8
n-Butylbenzene	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,2-Dibromo-3-chloro-propane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	119	(75 - 126)
Dibromofluoromethane	101	(60 - 147)
1,2-Dichloroethane-d4	106	(71 - 138)
4-Bromofluorobenzene	112	(71 - 117)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58924

GC/MS Volatiles

Lot-Sample #...: F5D220218-002 **Work Order #...: G80091AA** **Matrix.....: WATER**
Date Sampled...: 04/20/05 **Date Received..: 04/22/05**
Prep Date.....: 04/29/05 **Analysis Date..: 04/29/05**
Prep Batch #...: 5121013 **Analysis Time..: 18:16**
Dilution Factor: 5

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	10	ug/L UJ, V7a
Chloromethane	ND	10	ug/L
Vinyl chloride	ND	10	ug/L
Bromomethane	ND	10	ug/L UJ, V7a
Chloroethane	ND	10	ug/L
Trichlorofluoromethane	ND	10	ug/L
Trichlorotrifluoroethane	ND	5.0	ug/L
Acetone	**3.4 J**	**50**	**ug/L J, V7a**
1,1-Dichloroethene	ND	5.0	ug/L
Iodomethane	ND	5.0	ug/L
Methylene chloride	**6.0 B**	**5.0**	**ug/L U, V4**
Carbon disulfide	ND	5.0	ug/L
1,1-Dichloroethane	ND	5.0	ug/L
2-Butanone	ND	25	ug/L
2,2-Dichloropropane	ND	1.0	ug/L
1,2-Dichloroethene (total)	ND	5.0	ug/L
Chloroform	**2.5 J**	**5.0**	**ug/L**
Bromochloromethane	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Carbon tetrachloride	ND	5.0	ug/L
1,2-Dichloroethane	ND	5.0	ug/L
Benzene	ND	5.0	ug/L
Trichloroethene	ND	5.0	ug/L
1,2-Dichloropropane	ND	5.0	ug/L
Bromodichloromethane	ND	5.0	ug/L
Dibromomethane	ND	5.0	ug/L
4-Methyl-2-pentanone	ND	25	ug/L
cis-1,3-Dichloropropene	ND	5.0	ug/L
Toluene	ND	5.0	ug/L
1,1,2-Trichloroethane	ND	5.0	ug/L
2-Hexanone	ND	25	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
Tetrachloroethene	ND	5.0	ug/L
Chlorodibromomethane	**1.9 J**	**5.0**	**ug/L**
1,2-Dibromoethane	ND	5.0	ug/L
Chlorobenzene	ND	5.0	ug/L

(Continued on next page)

CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58924

GC/MS Volatiles

Lot-Sample #...: F5D220218-002 Work Order #...: G80091AA Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L
Ethylbenzene	ND	5.0	ug/L
Xylenes (total)	ND	5.0	ug/L
Styrene	ND	5.0	ug/L
Bromoform	ND	5.0	ug/L
Isopropylbenzene	ND	5.0	ug/L
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L
1,2,3-Trichloropropane	ND	5.0	ug/L
n-Propylbenzene	ND	5.0	ug/L
trans-1,3-Dichloropropene	ND	5.0	ug/L
Bromobenzene	ND	1.0	ug/L
2-Chlorotoluene	ND	5.0	ug/L
1,3,5-Trimethylbenzene	ND	5.0	ug/L
4-Chlorotoluene	ND	5.0	ug/L
tert-Butylbenzene	ND	250	ug/L UJ, V7a
1,2,4-Trimethylbenzene	ND	5.0	ug/L
sec-Butylbenzene	ND	5.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	5.0	ug/L
1,4-Dichlorobenzene	ND	5.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	5.0	ug/L
1,2-Dibromo-3-chloro-propane	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	89	(75 - 126)
Dibromofluoromethane	91	(60 - 147)
1,2-Dichloroethane-d4	95	(71 - 138)
4-Bromofluorobenzene	89	(71 - 117)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

GD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58923

GC Semivolatiles

Lot-Sample #...: F5D220218-001 **Work Order #...: G800L1AH** **Matrix.....: WATER**
Date Sampled...: 04/20/05 **Date Received..: 04/22/05**
Prep Date.....: 04/27/05 **Analysis Date..: 05/02/05**
Prep Batch #...: 5117672 **Analysis Time..: 18:01**
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	70	(30 - 150)

CP

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58924

GC Semivolatiles

Lot-Sample #...: F5D220218-002
Date Sampled...: 04/20/05
Prep Date.....: 04/27/05
Prep Batch #...: 5117672
Dilution Factor: 1

Work Order #...: G80091AD
Date Received..: 04/22/05
Analysis Date..: 05/02/05
Analysis Time..: 18:16

Matrix.....: WATER

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	66	(30 - 150)

UD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RF73-05-58923

GC/MS Semivolatiles

Lot-Sample #...: F5D220218-001 **Work Order #...: G800L1AA** **Matrix.....: WATER**
Date Sampled...: 04/20/05 **Date Received..: 04/22/05**
Prep Date.....: 04/27/05 **Analysis Date..: 05/09/05**
Prep Batch #...: 5117669 **Analysis Time..: 23:24**
Dilution Factor: 1

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
3-Methylphenol & 4-Methylphenol	ND	10	ug/L
Pyridine	ND	20	ug/L
N-Nitrosodimethylamine	ND	20	ug/L
Phenol	ND	10	ug/L
Aniline	ND	20	ug/L
bis(2-Chloroethyl)-ether	ND	10	ug/L
2-Chlorophenol	ND	10	ug/L
1,3-Dichlorobenzene	ND	10	ug/L UJ, SV12c
1,4-Dichlorobenzene	ND	10	ug/L UJ SV12c
Benzyl alcohol	ND	10	ug/L
1,2-Dichlorobenzene	ND	10	ug/L UJ SV12c
2-Methylphenol	ND	10	ug/L
2,2'-oxybis(1-Chloropropane)	ND	10	ug/L
N-Nitrosodi-n-propyl-amine	ND	10	ug/L
Hexachloroethane	ND	10	ug/L
Nitrobenzene	ND	10	ug/L
Isophorone	ND	10	ug/L
2-Nitrophenol	ND	10	ug/L
2,4-Dimethylphenol	ND	10	ug/L
bis(2-Chloroethoxy) methane	ND	10	ug/L
Benzoic acid	ND	20	ug/L
2,4-Dichlorophenol	ND	10	ug/L
1,2,4-Trichloro-benzene	ND	10	ug/L
Naphthalene	ND	10	ug/L
4-Chloroaniline	ND	20	ug/L
Hexachlorobutadiene	ND	10	ug/L
4-Chloro-3-methylphenol	ND	20	ug/L
2-Methylnaphthalene	ND	10	ug/L
Hexachlorocyclopenta-diene	ND	10	ug/L
2,4,6-Trichloro-phenol	ND	10	ug/L
2,4,5-Trichloro-phenol	ND	10	ug/L

(Continued on next page)

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58923

GC/MS Semivolatiles

Lot-Sample #...: F5D220218-001 Work Order #...: G800L1AA Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Chloronaphthalene	ND	10	ug/L
2-Nitroaniline	ND	50	ug/L
Dimethyl phthalate	ND	10	ug/L
Acenaphthylene	ND	10	ug/L
2,6-Dinitrotoluene	ND	10	ug/L
3-Nitroaniline	ND	50	ug/L
Acenaphthene	ND	10	ug/L
2,4-Dinitrophenol	ND	50	ug/L
4-Nitrophenol	ND	50	ug/L
Dibenzofuran	ND	10	ug/L
2,4-Dinitrotoluene	ND	10	ug/L
Diethyl phthalate	ND	10	ug/L
Fluorene	ND	10	ug/L
4-Chlorophenyl phenyl ether	ND	10	ug/L
4-Nitroaniline	ND	20	ug/L
4,6-Dinitro-2-methylphenol	ND	50	ug/L
N-Nitrosodiphenylamine	ND	10	ug/L
Azobenzene	ND	20	ug/L
4-Bromophenyl phenyl ether	ND	10	ug/L
Hexachlorobenzene	ND	10	ug/L
Pentachlorophenol	ND	50	ug/L
Phenanthrene	ND	10	ug/L
Anthracene	ND	10	ug/L
Fluoranthene	ND	10	ug/L
Pyrene	ND	10	ug/L
Butyl benzyl phthalate	ND	10	ug/L
Benzo(a)anthracene	ND	10	ug/L
3,3'-Dichlorobenzidine	ND	20	ug/L
Chrysene	ND	10	ug/L
bis(2-Ethylhexyl) phthalate	ND	10	ug/L
Di-n-butyl phthalate	ND	10	ug/L
Di-n-octyl phthalate	ND	10	ug/L
Benzo(b)fluoranthene	ND	10	ug/L
Benzo(k)fluoranthene	ND	10	ug/L
Benzo(a)pyrene	ND	10	ug/L
Indeno(1,2,3-cd)pyrene	ND	10	ug/L
Benzo(ghi)perylene	ND	10	ug/L
Dibenz(a,h)anthracene	ND	10	ug/L

(Continued on next page)

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58923

GC/MS Semivolatiles

Lot-Sample #...: F5D220218-001 Work Order #...: G800L1AA Matrix.....: WATER

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	30	(10 - 115)
Phenol-d5	21	(10 - 115)
Nitrobenzene-d5	60	(22 - 115)
2-Fluorobiphenyl	52	(18 - 115)
2,4,6-Tribromophenol	80	(10 - 118)
Terphenyl-d14	67	(10 - 115)

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58924

GC/MS Semivolatiles

Lot-Sample #...: F5D220218-002 Work Order #...: G80091AC Matrix.....: WATER
Date Sampled...: 04/20/05 Date Received..: 04/22/05
Prep Date.....: 04/27/05 Analysis Date..: 05/10/05
Prep Batch #...: 5117669 Analysis Time..: 00:59
Dilution Factor: 1

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
3-Methylphenol & 4-Methylphenol	ND	10	ug/L
Pyridine	ND	20	ug/L
N-Nitrosodimethylamine	ND	20	ug/L
Phenol	ND	10	ug/L
Aniline	ND	20	ug/L
bis(2-Chloroethyl)-ether	ND	10	ug/L
2-Chlorophenol	ND	10	ug/L
1,3-Dichlorobenzene	ND	10	ug/L UJ SVI2c
1,4-Dichlorobenzene	ND	10	ug/L UJ SVI2c
Benzyl alcohol	3.1 J	10	ug/L
1,2-Dichlorobenzene	ND	10	ug/L UJ. SVI2c
2-Methylphenol	ND	10	ug/L
2,2'-oxybis(1-Chloropropane)	ND	10	ug/L
N-Nitrosodi-n-propyl-amine	ND	10	ug/L
Hexachloroethane	ND	10	ug/L
Nitrobenzene	ND	10	ug/L
Isophorone	ND	10	ug/L
2-Nitrophenol	ND	10	ug/L
2,4-Dimethylphenol	ND	10	ug/L
bis(2-Chloroethoxy) methane	ND	10	ug/L
Benzoic acid	ND	20	ug/L
2,4-Dichlorophenol	ND	10	ug/L
1,2,4-Trichloro-benzene	ND	10	ug/L
Naphthalene	ND	10	ug/L
4-Chloroaniline	ND	20	ug/L
Hexachlorobutadiene	ND	10	ug/L
4-Chloro-3-methylphenol	ND	20	ug/L
2-Methylnaphthalene	ND	10	ug/L
Hexachlorocyclopenta-diene	ND	10	ug/L
2,4,6-Trichloro-phenol	ND	10	ug/L
2,4,5-Trichloro-phenol	ND	10	ug/L

(Continued on next page)

CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58924

GC/MS Semivolatiles

Lot-Sample #...: F5D220218-002 Work Order #...: G80091AC Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Chloronaphthalene	ND	10	ug/L
2-Nitroaniline	ND	50	ug/L
Dimethyl phthalate	ND	10	ug/L
Acenaphthylene	ND	10	ug/L
2,6-Dinitrotoluene	ND	10	ug/L
3-Nitroaniline	ND	50	ug/L
Acenaphthene	ND	10	ug/L
2,4-Dinitrophenol	ND	50	ug/L
4-Nitrophenol	ND	50	ug/L
Dibenzofuran	ND	10	ug/L
2,4-Dinitrotoluene	ND	10	ug/L
Diethyl phthalate	ND	10	ug/L
Fluorene	ND	10	ug/L
4-Chlorophenyl phenyl ether	ND	10	ug/L
4-Nitroaniline	ND	20	ug/L
4,6-Dinitro-2-methylphenol	ND	50	ug/L
N-Nitrosodiphenylamine	ND	10	ug/L
Azobenzene	ND	20	ug/L
4-Bromophenyl phenyl ether	ND	10	ug/L
Hexachlorobenzene	ND	10	ug/L
Pentachlorophenol	ND	50	ug/L
Phenanthrene	ND	10	ug/L
Anthracene	ND	10	ug/L
Fluoranthene	ND	10	ug/L
Pyrene	ND	10	ug/L
Butyl benzyl phthalate	ND	10	ug/L
Benzo(a)anthracene	ND	10	ug/L
3,3'-Dichlorobenzidine	ND	20	ug/L
Chrysene	ND	10	ug/L
bis(2-Ethylhexyl) phthalate	ND	10	ug/L
Di-n-butyl phthalate	ND	10	ug/L
Di-n-octyl phthalate	ND	10	ug/L
Benzo(b)fluoranthene	ND	10	ug/L
Benzo(k)fluoranthene	ND	10	ug/L
Benzo(a)pyrene	ND	10	ug/L
Indeno(1,2,3-cd)pyrene	ND	10	ug/L
Benzo(ghi)perylene	ND	10	ug/L
Dibenz(a,h)anthracene	ND	10	ug/L

(Continued on next page)

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58924

GC/MS Semivolatiles

Lot-Sample #...: F5D220218-002 Work Order #...: G80091AC Matrix.....: WATER

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	35	(10 - 115)
Phenol-d5	22	(10 - 115)
Nitrobenzene-d5	65	(22 - 115)
2-Fluorobiphenyl	53	(18 - 115)
2,4,6-Tribromophenol	81	(10 - 118)
Terphenyl-d14	72	(10 - 115)

NOTE(S):

J Estimated result. Result is less than RL.

REQUEST NUMBER: 3166S
ANALYSIS TYPE: ORGANIC

Los Alamos
NATIONAL LABORATORY

wr 6193

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

SHIP DATE: 04/21/2005
REPORT DUE: 05/06/2005
TURN AROUND REQ'D: 15

RAD SCREENING: NOT REQ
COMMENTS:

These samples are on:

LANL Request Number: 3166S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:8270C	RE73-05-58923	1	W	04/20/2005	
SW-846:8270C	RE73-05-58923	2	W	04/20/2005	
SW-846:8082	RE73-05-58923	3	W	04/20/2005	
SW-846:8082	RE73-05-58923	4	W	04/20/2005	
SW-846:8260B	RE73-05-58923	5	W	04/20/2005	
SW-846:8260B	RE73-05-58923	6	W	04/20/2005	
SW-846:8270C	RE73-05-58924	1	W	04/20/2005	
SW-846:8270C	RE73-05-58924	2	W	04/20/2005	
SW-846:8082	RE73-05-58924	3	W	04/20/2005	
SW-846:8082	RE73-05-58924	4	W	04/20/2005	
SW-846:8260B	RE73-05-58924	5	W	04/20/2005	
SW-846:8260B	RE73-05-58924	6	W	04/20/2005	

Final Page of REQUEST NUMBER 3166S

LOT #F5D220218

STL ST LOUIS
Thursday, April 21, 2005

Los Alamos
NATIONAL LABORATORY

CHAIN OF CUSTODY DOCUMENT NUMBER: 3166SC

REQUEST NUMBER: 3166S

ANALYSIS TYPE: ORGANIC

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58923	1	1 L AMBER GLASS	8270C	ICE	W
RE73-05-58923	2	1 L AMBER GLASS	8270C	ICE	W
RE73-05-58923	3	1 L AMBER GLASS	8082	ICE	W
RE73-05-58923	4	1 L AMBER GLASS	8082	ICE	W
RE73-05-58923	5	40 ML SEPTUM AMBER GLASS	8260B	HCL	W
RE73-05-58923	6	40 ML SEPTUM AMBER GLASS	8260B	HCL	W
RE73-05-58924	1	1 L AMBER GLASS	8270C	ICE	W
RE73-05-58924	2	1 L AMBER GLASS	8270C	ICE	W
RE73-05-58924	3	1 L AMBER GLASS	8082	ICE	W
RE73-05-58924	4	1 L AMBER GLASS	8082	ICE	W
RE73-05-58924	5	40 ML SEPTUM AMBER GLASS	8260B	HCL	W
RE73-05-58924	6	40 ML SEPTUM AMBER GLASS	8260B	HCL	W

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3166S Page 1

Heads up
non
pad
quote

Relinquished By:	Date	Time	Received By:	Date	Time
PRINTED NAME SIGNATURE	4/21/05	2:30	Sue Wilson Sue Wilson	4.22.05	0930
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		

Received for DISPOSAL By:	Date	Time	Remarks:
PRINTED NAME SIGNATURE			

LOT #RED220218

DATA VALIDATION COVER SHEET (Example)

SECTION I.

REQUEST NUMBER: 31665 COST CODE: _____

VALIDATION DATE: _____

LAB NAME: STL. LAB CODE: _____

VALIDATOR: _____ ORGANIZATION: _____

ANALYTICAL SUITE: ___ VOLATILES ___ HIGH EXPLOSIVES

___ SEMIVOLATILES ___ INORGANICS

___ PESTICIDES/AROCLORS ___ RADIOCHEMISTRY

OTHER (describe) _____

SECTION II. COMPLETENESS CHECKLIST

Item	Present? (Y/N/NA)	Item	Present? (Y/N/NA)
1. COC form(s)		2. Case Narrative	
3. Sample Results		4. Sample Chromatograms	
5. Standard Chromatograms		6. Quantitation Reports	
7. QC Forms			

Identify any samples in the assigned Request Number that are missing:

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

Comments: include information about requests to the laboratory and agreed upon date of resolution and lab contact: (Attach additional comment sheets as necessary)

_____

_____

_____

Signature/1st validation: _____ Date/1st validation: _____

Signature/2nd validation: _____ Date/2nd validation: _____

SEVERN TRENT STL

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Tel: 314 298 8566 Fax: 314 298 8757
www.stl-inc.com

RECD MAY 18 2005

ANALYTICAL REPORT

PROJECT NO. 31668

Los Alamos Non-Rad

Lot #: F5D220218

Joylene Valdez or Keith Greene

Los Alamos National Laboratory
SNO TA-00 Bldg 1237
DP: 03U; MS: 707
Los Alamos, NM 87545

SEVERN TRENT LABORATORIES, INC.

Elaine W Lofton

Ed Kao
Project Manager

May 12, 2005

[redacted]

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VOLATILES 625
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CLIENT CHAIN OF CUSTODY 994

TOTAL # OF PAGES IN PACKAGE 996

Case Narrative
LOT NUMBER: **F5D220218**
LANL Request Number: **3165S**

This report contains the analytical results for the two samples received under chain of custody number by STL St. Louis on April 22, 2005. These samples are associated with your Los Alamos Non-Rad project.

All applicable quality control procedures met method-specified acceptance criteria except as noted on the following page.

This report is incomplete without the case narrative. All chemical analysis results are based upon dry weight correction as required per the statement of work. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances

Sample Receiving

Samples were received at 4.0 +/- 2°C. No problems were noted at the time of sample receipt.

Volatile Organics Method 8260B

QC Batch: 5121013

The Method Blank shows contamination below the reporting limit for Methylene chloride. Methylene chloride and Acetone are recognized potential laboratory contaminants. Concentrations up to five times the level observed in the method blank, in associated laboratory samples, may be attributed to its presence in the laboratory. Surrogate recoveries are within laboratory stated limits.

The LCS is in control for spike and surrogate compounds.

The Batch QC Matrix Spike and Matrix Spike Duplicate was performed on F5D220218-001. The Matrix Spike and Matrix Spike Duplicate recoveries are within stated limits. The RPD values are inside stated limit, except for Vinyl chloride. Surrogates are in control for both the MS and MSD.

Affected Samples:
F5D220218 (1): RE73-05-58923

This sample was initially analyzed at a dilution based upon the sample's historical performance. The sample was reanalyzed undiluted. The dilution results are reported since the sample is the QC MS/MSD for batch 5121013.

Volatile Organics Method 8260B

QC Batch: 5123229

The Method Blank shows contamination below the reporting limit for 1,4-Dichlorobenzene. Surrogate recoveries are within laboratory stated limits.

The LCS is in control for spike and surrogate compounds, except sec-Butylbenzene. The LCS recoveries are outside QC limits for less than 10% of the compounds spiked. Laboratory QC practices, based on federal guidance documents, allow for up to 10% of the spike compounds to be outside QC criteria without necessitating re-preparation/re-analysis. Sample purge efficiency and compliance is demonstrated by the remaining acceptable LCS recoveries.

The Batch QC Matrix Spike and Matrix Spike Duplicate was performed on F5D220349-001. The Matrix Spike and Matrix Spike Duplicate recoveries are within stated limits, except for Acetone. The Acetone concentration in the original sample is greater than 4 times the amount spike, making % recovery information statistically invalid. The RPD values are within stated limit, except for Bromomethane, Chloroethane, and Acetone. Surrogates are in control for both the MS and MSD.

Semivolatile Organics Method 8270C

QC Batch: 5117669

The Method Blank shows no contamination below the reporting limit. Surrogate recoveries are within laboratory stated limits.

The LCS is in control for spike and surrogate compounds, except for 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, and 1,4-Dichlorobenzene. The LCS recoveries are outside QC limits for less than 10% of the compounds spiked. Laboratory QC practices, based on federal guidance documents, allow for up to 10% of the spike compounds to be outside QC criteria without necessitating re-preparation/re-analysis. Sample extraction efficiency and compliance is demonstrated by the remaining acceptable LCS recoveries.

The Batch QC Matrix Spike and Matrix Spike Duplicate was performed on F5D220218-001. The Matrix Spike and Matrix Spike Duplicate recoveries are within stated limits, except for 1,3-Dichlorobenzene, and 1,4-Dichlorobenzene. The RPD values are inside stated limits, except for Hexachlorocyclopentadiene. Surrogates are in control for both the MS and MSD.

PCBs Method 8082

QC Batch: 5117672

The Method Blank shows no contamination below the reporting limit. Surrogate recoveries are within laboratory stated limits.

The LCS is in control for spike and surrogate compounds.

The Batch QC Matrix Spike and Matrix Spike Duplicate was performed on F5D21290-001. The Matrix Spike and Matrix Spike Duplicate recoveries and RPD values are inside stated limits. Surrogates are in control for both the MS and MSD.

Affected Samples:
F5D220218 (1): RE73-05-58923

F5D220218 (2): RE73-05-58924

The CCV surrogate is greater than 15%D on the confirmation column (channel B). The samples are being reported from the primary column (channel A) which the surrogate in the CCV's are within acceptable limits. These samples did not require confirmation and thus this excursion does not affect the data results.

I certify that this data is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the signature on the front page, has authorized release of the data contained in this hardcopy.

METHODS SUMMARY

F5D220218

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
PCBs by SW-846 8082	SW846 8082	SW846 3510C
Semivolatile Organic Compounds by GC/MS	SW846 8270C	SW846 3510C
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

F5D220218

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
G800L	001	RE73-05-58923	04/20/05	
G8009	002	RE73-05-58924	04/20/05	

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

QC DATA ASSOCIATION SUMMARY

F5D220218

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	SW846 8082		5117672	5118165
	WATER	SW846 8260B		5121013	5121010
	WATER	SW846 8260B		5123229	5123168
	WATER	SW846 8270C		5117669	5118172
002	WATER	SW846 8082		5117672	5118165
	WATER	SW846 8260B		5121013	5121010
	WATER	SW846 8270C		5117669	5118172

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58923

GC/MS Volatiles

Lot-Sample #...: F5D220218-001 **Work Order #...:** G800L1AC **Matrix.....:** WATER
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05
Prep Date.....: 04/29/05 **Analysis Date..:** 04/29/05
Prep Batch #...: 5121013 **Analysis Time..:** 16:25
Dilution Factor: 5

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	10	ug/L
Chloromethane	ND	10	ug/L
Vinyl chloride	ND	10	ug/L
Bromomethane	ND	10	ug/L
Chloroethane	ND	10	ug/L
Trichlorofluoromethane	ND	10	ug/L
Trichlorotrifluoroethane	ND	5.0	ug/L
Acetone	ND	50	ug/L
1,1-Dichloroethene	ND	5.0	ug/L
Iodomethane	ND	5.0	ug/L
Methylene chloride	**5.5 B**	**5.0**	**ug/L**
Carbon disulfide	**2.2 J**	**5.0**	**ug/L**
1,1-Dichloroethane	ND	5.0	ug/L
2-Butanone	ND	25	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,2-Dichloroethene (total)	ND	5.0	ug/L
Chloroform	**2.1 J**	**5.0**	**ug/L**
Bromochloromethane	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	5.0	ug/L
1,1-Dichloropropene	ND	5.0	ug/L
Carbon tetrachloride	ND	5.0	ug/L
1,2-Dichloroethane	ND	5.0	ug/L
Benzene	ND	5.0	ug/L
Trichloroethene	ND	5.0	ug/L
1,2-Dichloropropane	ND	5.0	ug/L
Bromodichloromethane	ND	5.0	ug/L
Dibromomethane	ND	5.0	ug/L
4-Methyl-2-pentanone	ND	25	ug/L
cis-1,3-Dichloropropene	ND	5.0	ug/L
Toluene	ND	5.0	ug/L
1,1,2-Trichloroethane	ND	5.0	ug/L
2-Hexanone	ND	25	ug/L
1,3-Dichloropropane	ND	5.0	ug/L
Tetrachloroethene	ND	5.0	ug/L
Chlorodibromomethane	ND	5.0	ug/L
1,2-Dibromoethane	ND	5.0	ug/L
Chlorobenzene	ND	5.0	ug/L

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58923

GC/MS Volatiles

Lot-Sample #...: F5D220218-001 Work Order #...: G800L1AC Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L
Ethylbenzene	ND	5.0	ug/L
Xylenes (total)	ND	5.0	ug/L
Styrene	ND	5.0	ug/L
Bromoform	ND	5.0	ug/L
Isopropylbenzene	ND	5.0	ug/L
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L
1,2,3-Trichloropropane	ND	5.0	ug/L
n-Propylbenzene	ND	5.0	ug/L
trans-1,3-Dichloropropene	ND	5.0	ug/L
Bromobenzene	ND	5.0	ug/L
2-Chlorotoluene	ND	5.0	ug/L
1,3,5-Trimethylbenzene	ND	5.0	ug/L
4-Chlorotoluene	ND	5.0	ug/L
tert-Butylbenzene	ND	250	ug/L
1,2,4-Trimethylbenzene	ND	5.0	ug/L
sec-Butylbenzene	ND	5.0	ug/L
p-Isopropyltoluene	ND	5.0	ug/L
1,3-Dichlorobenzene	ND	5.0	ug/L
1,4-Dichlorobenzene	ND	5.0	ug/L
n-Butylbenzene	ND	5.0	ug/L
1,2-Dichlorobenzene	ND	5.0	ug/L
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	88	(75 - 126)
Dibromofluoromethane	95	(60 - 147)
1,2-Dichloroethane-d4	100	(71 - 138)
4-Bromofluorobenzene	91	(71 - 117)

NOTE(S):

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

J Estimated result. Result is less than RL.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: KE73-05-58923

GC/MS Volatiles

Lot-Sample #...: F5D220218-001 **Work Order #...:** G800L2AC **Matrix.....:** WATER
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05
Prep Date.....: 05/02/05 **Analysis Date..:** 05/02/05
Prep Batch #...: 5123229 **Analysis Time..:** 21:07
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	2.0	ug/L
Chloromethane	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
Bromomethane	ND	2.0	ug/L
Chloroethane	ND	2.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
Trichlorotrifluoroethane	ND	1.0	ug/L
Acetone	ND	10	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
Iodomethane	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Carbon disulfide	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
2-Butanone	ND	5.0	ug/L
2,2-Dichloropropane	ND	1.0	ug/L
1,2-Dichloroethene (total)	ND	1.0	ug/L
Chloroform	**1.9**	**1.0**	**ug/L**
Bromochloromethane	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
Bromodichloromethane	**0.34 J**	**1.0**	**ug/L**
Dibromomethane	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	5.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Toluene	**0.27 J**	**1.0**	**ug/L**
1,1,2-Trichloroethane	ND	1.0	ug/L
2-Hexanone	ND	5.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Chlorodibromomethane	**0.19 J**	**1.0**	**ug/L**
1,2-Dibromoethane	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58923

GC/MS Volatiles

Lot-Sample #...: F5D220218-001 Work Order #...: G800L2AC Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Xylenes (total)	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
tert-Butylbenzene	ND	50	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	0.14 J,B	1.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	119	(75 - 126)
Dibromofluoromethane	101	(60 - 147)
1,2-Dichloroethane-d4	106	(71 - 138)
4-Bromofluorobenzene	112	(71 - 117)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: EE73-05-58923

GC/MS Semivolatiles

Lot-Sample #...: F5D220218-001 **Work Order #...: G800L1AA** **Matrix.....: WATER**
Date Sampled...: 04/20/05 **Date Received..: 04/22/05**
Prep Date.....: 04/27/05 **Analysis Date..: 05/09/05**
Prep Batch #...: 5117669 **Analysis Time..: 23:24**
Dilution Factor: 1

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
3-Methylphenol & 4-Methylphenol	ND	10	ug/L
Pyridine	ND	20	ug/L
N-Nitrosodimethylamine	ND	20	ug/L
Phenol	ND	10	ug/L
Aniline	ND	20	ug/L
bis(2-Chloroethyl)-ether	ND	10	ug/L
2-Chlorophenol	ND	10	ug/L
1,3-Dichlorobenzene	ND	10	ug/L
1,4-Dichlorobenzene	ND	10	ug/L
Benzyl alcohol	ND	10	ug/L
1,2-Dichlorobenzene	ND	10	ug/L
2-Methylphenol	ND	10	ug/L
2,2'-oxybis(1-Chloropropane)	ND	10	ug/L
N-Nitrosodi-n-propyl-amine	ND	10	ug/L
Hexachloroethane	ND	10	ug/L
Nitrobenzene	ND	10	ug/L
Isophorone	ND	10	ug/L
2-Nitrophenol	ND	10	ug/L
2,4-Dimethylphenol	ND	10	ug/L
bis(2-Chloroethoxy) methane	ND	10	ug/L
Benzoic acid	ND	20	ug/L
2,4-Dichlorophenol	ND	10	ug/L
1,2,4-Trichloro-benzene	ND	10	ug/L
Naphthalene	ND	10	ug/L
4-Chloroaniline	ND	20	ug/L
Hexachlorobutadiene	ND	10	ug/L
4-Chloro-3-methylphenol	ND	20	ug/L
2-Methylnaphthalene	ND	10	ug/L
Hexachlorocyclopenta-diene	ND	10	ug/L
2,4,6-Trichloro-phenol	ND	10	ug/L
2,4,5-Trichloro-phenol	ND	10	ug/L

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58923

GC/MS Semivolatiles

Lot-Sample #...: F5D220218-001 Work Order #...: G800L1AA Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Chloronaphthalene	ND	10	ug/L
2-Nitroaniline	ND	50	ug/L
Dimethyl phthalate	ND	10	ug/L
Acenaphthylene	ND	10	ug/L
2,6-Dinitrotoluene	ND	10	ug/L
3-Nitroaniline	ND	50	ug/L
Acenaphthene	ND	10	ug/L
2,4-Dinitrophenol	ND	50	ug/L
4-Nitrophenol	ND	50	ug/L
Dibenzofuran	ND	10	ug/L
2,4-Dinitrotoluene	ND	10	ug/L
Diethyl phthalate	ND	10	ug/L
Fluorene	ND	10	ug/L
4-Chlorophenyl phenyl ether	ND	10	ug/L
4-Nitroaniline	ND	20	ug/L
4,6-Dinitro-2-methylphenol	ND	50	ug/L
N-Nitrosodiphenylamine	ND	10	ug/L
Azobenzene	ND	20	ug/L
4-Bromophenyl phenyl ether	ND	10	ug/L
Hexachlorobenzene	ND	10	ug/L
Pentachlorophenol	ND	50	ug/L
Phenanthrene	ND	10	ug/L
Anthracene	ND	10	ug/L
Fluoranthene	ND	10	ug/L
Pyrene	ND	10	ug/L
Butyl benzyl phthalate	ND	10	ug/L
Benzo(a)anthracene	ND	10	ug/L
3,3'-Dichlorobenzidine	ND	20	ug/L
Chrysene	ND	10	ug/L
bis(2-Ethylhexyl) phthalate	ND	10	ug/L
Di-n-butyl phthalate	ND	10	ug/L
Di-n-octyl phthalate	ND	10	ug/L
Benzo(b)fluoranthene	ND	10	ug/L
Benzo(k)fluoranthene	ND	10	ug/L
Benzo(a)pyrene	ND	10	ug/L
Indeno(1,2,3-cd)pyrene	ND	10	ug/L
Benzo(ghi)perylene	ND	10	ug/L
Dibenz(a,h)anthracene	ND	10	ug/L

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58923

GC/MS Semivolatiles

Lot-Sample #...: F5D220218-001 **Work Order #...: G800L1AA** **Matrix.....: WATER**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	30	(10 - 115)
Phenol-d5	21	(10 - 115)
Nitrobenzene-d5	60	(22 - 115)
2-Fluorobiphenyl	52	(18 - 115)
2,4,6-Tribromophenol	80	(10 - 118)
Terphenyl-d14	67	(10 - 115)

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58923

GC Semivolatiles

Lot-Sample #...: F5D220218-001	**Work Order #...:** G800L1AH	**Matrix.....:** WATER
Date Sampled...: 04/20/05	**Date Received..:** 04/22/05	
Prep Date.....: 04/27/05	**Analysis Date..:** 05/02/05	
Prep Batch #...: 5117672	**Analysis Time..:** 18:01	
Dilution Factor: 1		
	Method.....: SW846 8082	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	70	(30 - 150)

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58924

GC/MS Volatiles

Lot-Sample #...: F5D220218-002	**Work Order #...:** G80091AA	**Matrix.....:** WATER
Date Sampled...: 04/20/05	**Date Received..:** 04/22/05	
Prep Date.....: 04/29/05	**Analysis Date..:** 04/29/05	
Prep Batch #...: 5121013	**Analysis Time..:** 18:16	
Dilution Factor: 5		
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	10	ug/L
Chloromethane	ND	10	ug/L
Vinyl chloride	ND	10	ug/L
Bromomethane	ND	10	ug/L
Chloroethane	ND	10	ug/L
Trichlorofluoromethane	ND	10	ug/L
Trichlorotrifluoroethane	ND	5.0	ug/L
Acetone	**3.4 J**	**50**	**ug/L**
1,1-Dichloroethene	ND	5.0	ug/L
Iodomethane	ND	5.0	ug/L
Methylene chloride	**6.0 B**	**5.0**	**ug/L**
Carbon disulfide	ND	5.0	ug/L
1,1-Dichloroethane	ND	5.0	ug/L
2-Butanone	ND	25	ug/L
2,2-Dichloropropane	ND	1.0	ug/L
1,2-Dichloroethene (total)	ND	5.0	ug/L
Chloroform	**2.5 J**	**5.0**	**ug/L**
Bromochloromethane	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Carbon tetrachloride	ND	5.0	ug/L
1,2-Dichloroethane	ND	5.0	ug/L
Benzene	ND	5.0	ug/L
Trichloroethene	ND	5.0	ug/L
1,2-Dichloropropane	ND	5.0	ug/L
Bromodichloromethane	ND	5.0	ug/L
Dibromomethane	ND	5.0	ug/L
4-Methyl-2-pentanone	ND	25	ug/L
cis-1,3-Dichloropropene	ND	5.0	ug/L
Toluene	ND	5.0	ug/L
1,1,2-Trichloroethane	ND	5.0	ug/L
2-Hexanone	ND	25	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
Tetrachloroethene	ND	5.0	ug/L
Chlorodibromomethane	**1.9 J**	**5.0**	**ug/L**
1,2-Dibromoethane	ND	5.0	ug/L
Chlorobenzene	ND	5.0	ug/L

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: EE73-05-58924

GC/MS Volatiles

Lot-Sample #...: F5D220218-002 **Work Order #...:** G80091AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L
Ethylbenzene	ND	5.0	ug/L
Xylenes (total)	ND	5.0	ug/L
Styrene	ND	5.0	ug/L
Bromoform	ND	5.0	ug/L
Isopropylbenzene	ND	5.0	ug/L
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L
1,2,3-Trichloropropane	ND	5.0	ug/L
n-Propylbenzene	ND	5.0	ug/L
trans-1,3-Dichloropropene	ND	5.0	ug/L
Bromobenzene	ND	1.0	ug/L
2-Chlorotoluene	ND	5.0	ug/L
1,3,5-Trimethylbenzene	ND	5.0	ug/L
4-Chlorotoluene	ND	5.0	ug/L
tert-Butylbenzene	ND	250	ug/L
1,2,4-Trimethylbenzene	ND	5.0	ug/L
sec-Butylbenzene	ND	5.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	5.0	ug/L
1,4-Dichlorobenzene	ND	5.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	5.0	ug/L
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	89	(75 - 126)
Dibromofluoromethane	91	(60 - 147)
1,2-Dichloroethane-d4	95	(71 - 138)
4-Bromofluorobenzene	89	(71 - 117)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58924

GC/MS Semivolatiles

Lot-Sample #...: F5D220218-002 **Work Order #...:** G80091AC **Matrix.....:** WATER
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05
Prep Date.....: 04/27/05 **Analysis Date..:** 05/10/05
Prep Batch #...: 5117669 **Analysis Time..:** 00:59
Dilution Factor: 1

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
3-Methylphenol & 4-Methylphenol	ND	10	ug/L
Pyridine	ND	20	ug/L
N-Nitrosodimethylamine	ND	20	ug/L
Phenol	ND	10	ug/L
Aniline	ND	20	ug/L
bis(2-Chloroethyl)-ether	ND	10	ug/L
2-Chlorophenol	ND	10	ug/L
1,3-Dichlorobenzene	ND	10	ug/L
1,4-Dichlorobenzene	ND	10	ug/L
Benzyl alcohol	3.1 J	10	ug/L
1,2-Dichlorobenzene	ND	10	ug/L
2-Methylphenol	ND	10	ug/L
2,2'-oxybis(1-Chloropropane)	ND	10	ug/L
N-Nitrosodi-n-propyl-amine	ND	10	ug/L
Hexachloroethane	ND	10	ug/L
Nitrobenzene	ND	10	ug/L
Isophorone	ND	10	ug/L
2-Nitrophenol	ND	10	ug/L
2,4-Dimethylphenol	ND	10	ug/L
bis(2-Chloroethoxy) methane	ND	10	ug/L
Benzoic acid	ND	20	ug/L
2,4-Dichlorophenol	ND	10	ug/L
1,2,4-Trichloro-benzene	ND	10	ug/L
Naphthalene	ND	10	ug/L
4-Chloroaniline	ND	20	ug/L
Hexachlorobutadiene	ND	10	ug/L
4-Chloro-3-methylphenol	ND	20	ug/L
2-Methylnaphthalene	ND	10	ug/L
Hexachlorocyclopenta-diene	ND	10	ug/L
2,4,6-Trichloro-phenol	ND	10	ug/L
2,4,5-Trichloro-phenol	ND	10	ug/L

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58924

GC/MS Semivolatiles

Lot-Sample #...: F5D220218-002 Work Order #...: G80091AC Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Chloronaphthalene	ND	10	ug/L
2-Nitroaniline	ND	50	ug/L
Dimethyl phthalate	ND	10	ug/L
Acenaphthylene	ND	10	ug/L
2,6-Dinitrotoluene	ND	10	ug/L
3-Nitroaniline	ND	50	ug/L
Acenaphthene	ND	10	ug/L
2,4-Dinitrophenol	ND	50	ug/L
4-Nitrophenol	ND	50	ug/L
Dibenzofuran	ND	10	ug/L
2,4-Dinitrotoluene	ND	10	ug/L
Diethyl phthalate	ND	10	ug/L
Fluorene	ND	10	ug/L
4-Chlorophenyl phenyl ether	ND	10	ug/L
4-Nitroaniline	ND	20	ug/L
4,6-Dinitro-2-methylphenol	ND	50	ug/L
N-Nitrosodiphenylamine	ND	10	ug/L
Azobenzene	ND	20	ug/L
4-Bromophenyl phenyl ether	ND	10	ug/L
Hexachlorobenzene	ND	10	ug/L
Pentachlorophenol	ND	50	ug/L
Phenanthrene	ND	10	ug/L
Anthracene	ND	10	ug/L
Fluoranthene	ND	10	ug/L
Pyrene	ND	10	ug/L
Butyl benzyl phthalate	ND	10	ug/L
Benzo(a)anthracene	ND	10	ug/L
3,3'-Dichlorobenzidine	ND	20	ug/L
Chrysene	ND	10	ug/L
bis(2-Ethylhexyl) phthalate	ND	10	ug/L
Di-n-butyl phthalate	ND	10	ug/L
Di-n-octyl phthalate	ND	10	ug/L
Benzo(b)fluoranthene	ND	10	ug/L
Benzo(k)fluoranthene	ND	10	ug/L
Benzo(a)pyrene	ND	10	ug/L
Indeno(1,2,3-cd)pyrene	ND	10	ug/L
Benzo(ghi)perylene	ND	10	ug/L
Dibenz(a,h)anthracene	ND	10	ug/L

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58924

GC/MS Semivolatiles

Lot-Sample #...: F5D220218-002 Work Order #...: G80091AC Matrix.....: WATER

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	35	(10 - 115)
Phenol-d5	22	(10 - 115)
Nitrobenzene-d5	65	(22 - 115)
2-Fluorobiphenyl	53	(18 - 115)
2,4,6-Tribromophenol	81	(10 - 118)
Terphenyl-d14	72	(10 - 115)

NOTE(S):

J Estimated result. Result is less than RL.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58924

GC Semivolatiles

Lot-Sample #...: F5D220218-002	**Work Order #...:** G80091AD	**Matrix.....:** WATER
Date Sampled...: 04/20/05	**Date Received..:** 04/22/05	
Prep Date.....: 04/27/05	**Analysis Date..:** 05/02/05	
Prep Batch #...: 5117672	**Analysis Time..:** 18:16	
Dilution Factor: 1		
	Method.....: SW846 8082	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	66	(30 - 150)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F5D220218
Work Order #...: G9LN51AA
Matrix.....: WATER
MB Lot-Sample #: F5E010000-013
Prep Date.....: 04/29/05
Analysis Time..: 13:45
Analysis Date..: 04/29/05
Prep Batch #...: 5121013
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
Vinyl chloride	ND	2.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
Trichlorotrifluoroethane	ND	1.0	ug/L	SW846 8260B
Acetone	ND	10	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
Iodomethane	ND	1.0	ug/L	SW846 8260B
Methylene chloride	**0.70 J**	**1.0**	**ug/L**	**SW846 8260B**
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	5.0	ug/L	SW846 8260B
2,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Dibromomethane	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
1,3-Dichloropropane	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Chlorodibromomethane	ND	1.0	ug/L	SW846 8260B
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	1.0	ug/L	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F5D220218 **Work Order #...:** G9LN51AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Styrene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromobenzene	ND	1.0	ug/L	SW846 8260B
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
tert-Butylbenzene	ND	50	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B
p-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	1.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	101	(75 - 126)
Dibromofluoromethane	98	(60 - 147)
1,2-Dichloroethane-d4	95	(71 - 138)
4-Bromofluorobenzene	98	(71 - 117)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F5D220218 **Work Order #...:** G9PD41AA **Matrix.....:** WATER
MB Lot-Sample #: F5E030000-229

Prep Date.....: 05/02/05 **Analysis Time..:** 15:44
Analysis Date..: 05/02/05 **Prep Batch #...:** 5123229
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
Vinyl chloride	ND	2.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
Trichlorotrifluoroethane	ND	1.0	ug/L	SW846 8260B
Acetone	ND	10	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
Iodomethane	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	5.0	ug/L	SW846 8260B
2,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Dibromomethane	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
1,3-Dichloropropane	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Chlorodibromomethane	ND	1.0	ug/L	SW846 8260B
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	1.0	ug/L	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F5D220218 **Work Order #...:** G9PD41AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Styrene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Bromobenzene	ND	1.0	ug/L	SW846 8260B
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
tert-Butylbenzene	ND	50	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B
p-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	0.14 J	1.0	ug/L	SW846 8260B
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	93	(75 - 126)
Dibromofluoromethane	86	(60 - 147)
1,2-Dichloroethane-d4	81	(71 - 138)
4-Bromofluorobenzene	99	(71 - 117)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220218 **Work Order #...:** G9DL01AA **Matrix.....:** WATER
MB Lot-Sample #: F5D270000-669

Prep Date.....: 04/27/05 **Analysis Time..:** 19:41
Analysis Date..: 05/09/05 **Prep Batch #...:** 5117669
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
3-Methylphenol & 4-Methylphenol	ND	10	ug/L	SW846 8270C
Pyridine	ND	20	ug/L	SW846 8270C
N-Nitrosodimethylamine	ND	20	ug/L	SW846 8270C
Phenol	ND	10	ug/L	SW846 8270C
Aniline	ND	20	ug/L	SW846 8270C
bis(2-Chloroethyl)-ether	ND	10	ug/L	SW846 8270C
2-Chlorophenol	ND	10	ug/L	SW846 8270C
1,3-Dichlorobenzene	ND	10	ug/L	SW846 8270C
1,4-Dichlorobenzene	ND	10	ug/L	SW846 8270C
Benzyl alcohol	ND	10	ug/L	SW846 8270C
1,2-Dichlorobenzene	ND	10	ug/L	SW846 8270C
2-Methylphenol	ND	10	ug/L	SW846 8270C
2,2'-oxybis(1-Chloropropa	ND	10	ug/L	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	10	ug/L	SW846 8270C
Hexachloroethane	ND	10	ug/L	SW846 8270C
Nitrobenzene	ND	10	ug/L	SW846 8270C
Isophorone	ND	10	ug/L	SW846 8270C
2-Nitrophenol	ND	10	ug/L	SW846 8270C
2,4-Dimethylphenol	ND	10	ug/L	SW846 8270C
bis(2-Chloroethoxy) methane	ND	10	ug/L	SW846 8270C
Benzoic acid	ND	20	ug/L	SW846 8270C
2,4-Dichlorophenol	ND	10	ug/L	SW846 8270C
1,2,4-Trichloro-benzene	ND	10	ug/L	SW846 8270C
Naphthalene	ND	10	ug/L	SW846 8270C
4-Chloroaniline	ND	20	ug/L	SW846 8270C
Hexachlorobutadiene	ND	10	ug/L	SW846 8270C
4-Chloro-3-methylphenol	ND	20	ug/L	SW846 8270C
2-Methylnaphthalene	ND	10	ug/L	SW846 8270C
Hexachlorocyclopenta-diene	ND	10	ug/L	SW846 8270C
2,4,6-Trichloro-phenol	ND	10	ug/L	SW846 8270C
2,4,5-Trichloro-phenol	ND	10	ug/L	SW846 8270C
2-Chloronaphthalene	ND	10	ug/L	SW846 8270C
2-Nitroaniline	ND	50	ug/L	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220218 **Work Order #...:** G9DL01AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dimethyl phthalate	ND	10	ug/L	SW846 8270C
Acenaphthylene	ND	10	ug/L	SW846 8270C
2,6-Dinitrotoluene	ND	10	ug/L	SW846 8270C
3-Nitroaniline	ND	50	ug/L	SW846 8270C
Acenaphthene	ND	10	ug/L	SW846 8270C
2,4-Dinitrophenol	ND	50	ug/L	SW846 8270C
4-Nitrophenol	ND	50	ug/L	SW846 8270C
Dibenzofuran	ND	10	ug/L	SW846 8270C
2,4-Dinitrotoluene	ND	10	ug/L	SW846 8270C
Diethyl phthalate	ND	10	ug/L	SW846 8270C
Fluorene	ND	10	ug/L	SW846 8270C
4-Chlorophenyl phenyl ether	ND	10	ug/L	SW846 8270C
4-Nitroaniline	ND	20	ug/L	SW846 8270C
4,6-Dinitro-2-methylphenol	ND	50	ug/L	SW846 8270C
N-Nitrosodiphenylamine	ND	10	ug/L	SW846 8270C
Azobenzene	ND	20	ug/L	SW846 8270C
4-Bromophenyl phenyl ether	ND	10	ug/L	SW846 8270C
Hexachlorobenzene	ND	10	ug/L	SW846 8270C
Pentachlorophenol	ND	50	ug/L	SW846 8270C
Phenanthrene	ND	10	ug/L	SW846 8270C
Anthracene	ND	10	ug/L	SW846 8270C
Fluoranthene	ND	10	ug/L	SW846 8270C
Pyrene	ND	10	ug/L	SW846 8270C
Butyl benzyl phthalate	ND	10	ug/L	SW846 8270C
Benzo(a)anthracene	ND	10	ug/L	SW846 8270C
3,3'-Dichlorobenzidine	ND	20	ug/L	SW846 8270C
Chrysene	ND	10	ug/L	SW846 8270C
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	SW846 8270C
Di-n-butyl phthalate	ND	10	ug/L	SW846 8270C
Di-n-octyl phthalate	ND	10	ug/L	SW846 8270C
Benzo(b)fluoranthene	ND	10	ug/L	SW846 8270C
Benzo(k)fluoranthene	ND	10	ug/L	SW846 8270C
Benzo(a)pyrene	ND	10	ug/L	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	SW846 8270C
Benzo(ghi)perylene	ND	10	ug/L	SW846 8270C
Dibenz(a,h)anthracene	ND	10	ug/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	32	(10 - 115)
Phenol-d5	22	(10 - 115)

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220218 **Work Order #...:** G9DL01AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Nitrobenzene-d5	63	(22 - 115)		
2-Fluorobiphenyl	55	(18 - 115)		
2,4,6-Tribromophenol	64	(10 - 118)		
Terphenyl-d14	69	(10 - 115)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F5D220218 **Work Order #...:** G9DK31AA **Matrix.....:** WATER
MB Lot-Sample #: F5D270000-672

Prep Date.....: 04/27/05 **Analysis Time..:** 16:05
Analysis Date..: 05/02/05 **Prep Batch #...:** 5117672
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	1.0	ug/L	SW846 8082
Aroclor 1221	ND	1.0	ug/L	SW846 8082
Aroclor 1232	ND	1.0	ug/L	SW846 8082
Aroclor 1242	ND	1.0	ug/L	SW846 8082
Aroclor 1248	ND	1.0	ug/L	SW846 8082
Aroclor 1254	ND	1.0	ug/L	SW846 8082
Aroclor 1260	ND	1.0	ug/L	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	91	(30 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F5D220218 Work Order #...: G9LN51AC Matrix.....: WATER
LCS Lot-Sample#: F5E010000-013
Prep Date.....: 04/29/05 Analysis Date..: 04/29/05
Prep Batch #...: 5121013 Analysis Time..: 12:31
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Dichlorodifluoromethane (Freon 12)	88	(30 - 150)	SW846 8260B
Chloromethane	95	(46 - 137)	SW846 8260B
Vinyl chloride	100	(67 - 137)	SW846 8260B
Bromomethane	80	(30 - 130)	SW846 8260B
Chloroethane	92	(78 - 148)	SW846 8260B
Trichlorofluoromethane	105	(57 - 142)	SW846 8260B
Trichlorotrifluoroethane	111	(60 - 139)	SW846 8260B
Acetone	88	(30 - 150)	SW846 8260B
1,1-Dichloroethene	102	(65 - 128)	SW846 8260B
Methylene chloride	111	(53 - 143)	SW846 8260B
Carbon disulfide	98	(51 - 150)	SW846 8260B
1,1-Dichloroethane	114	(78 - 123)	SW846 8260B
2-Butanone	111	(30 - 150)	SW846 8260B
1,2-Dichloroethene (total)	111	(80 - 122)	SW846 8260B
Chloroform	102	(76 - 120)	SW846 8260B
Bromochloromethane	110	(77 - 122)	SW846 8260B
1,1,1-Trichloroethane	102	(80 - 124)	SW846 8260B
Carbon tetrachloride	107	(79 - 127)	SW846 8260B
1,2-Dichloroethane	99	(73 - 133)	SW846 8260B
Benzene	100	(84 - 123)	SW846 8260B
Trichloroethene	107	(69 - 117)	SW846 8260B
1,2-Dichloropropane	109	(78 - 130)	SW846 8260B
Bromodichloromethane	109	(77 - 123)	SW846 8260B
4-Methyl-2-pentanone	110	(49 - 132)	SW846 8260B
cis-1,3-Dichloropropene	109	(73 - 125)	SW846 8260B
Toluene	96	(82 - 125)	SW846 8260B
1,1,2-Trichloroethane	99	(78 - 127)	SW846 8260B
2-Hexanone	114	(46 - 146)	SW846 8260B
Tetrachloroethene	79	(42 - 146)	SW846 8260B
Chlorodibromomethane	98	(80 - 118)	SW846 8260B
1,2-Dibromoethane	110	(79 - 121)	SW846 8260B
Chlorobenzene	102	(83 - 121)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F5D220218 Work Order #...: G9LN51AC Matrix.....: WATER
LCS Lot-Sample#: F5E010000-013

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,1,1,2-Tetrachloroethane	110	(80 - 119)	SW846 8260B
Ethylbenzene	101	(83 - 121)	SW846 8260B
Styrene	109	(86 - 121)	SW846 8260B
Bromoform	97	(69 - 130)	SW846 8260B
Isopropylbenzene	135	(80 - 143)	SW846 8260B
1,1,2,2-Tetrachloroethane	115	(68 - 136)	SW846 8260B
trans-1,3-Dichloropropene	106	(71 - 149)	SW846 8260B
2-Chlorotoluene	120	(65 - 127)	SW846 8260B
1,3,5-Trimethylbenzene	118	(70 - 126)	SW846 8260B
4-Chlorotoluene	122	(67 - 130)	SW846 8260B
tert-Butylbenzene	113	(53 - 123)	SW846 8260B
sec-Butylbenzene	109	(76 - 115)	SW846 8260B
1,3-Dichlorobenzene	102	(86 - 117)	SW846 8260B
1,4-Dichlorobenzene	101	(83 - 115)	SW846 8260B
1,2-Dichlorobenzene	104	(87 - 119)	SW846 8260B
1,2-Dibromo-3-chloropropane (DBCP)	100	(72 - 133)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	97	(84 - 123)
Dibromofluoromethane	104	(80 - 126)
1,2-Dichloroethane-d4	100	(76 - 133)
4-Bromofluorobenzene	109	(74 - 122)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F5D220218 Work Order #...: G9PD41AC Matrix.....: WATER
LCS Lot-Sample#: F5E030000-229
Prep Date.....: 05/02/05 Analysis Date..: 05/02/05
Prep Batch #...: 5123229 Analysis Time..: 14:58
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Dichlorodifluoromethane (Freon 12)	82	(30 - 150)	SW846 8260B
Chloromethane	80	(46 - 137)	SW846 8260B
Vinyl chloride	92	(67 - 137)	SW846 8260B
Bromomethane	91	(30 - 130)	SW846 8260B
Chloroethane	90	(78 - 148)	SW846 8260B
Trichlorofluoromethane	93	(57 - 142)	SW846 8260B
Trichlorotrifluoroethane	96	(60 - 139)	SW846 8260B
Acetone	89	(30 - 150)	SW846 8260B
1,1-Dichloroethene	83	(65 - 128)	SW846 8260B
Methylene chloride	100	(53 - 143)	SW846 8260B
Carbon disulfide	88	(51 - 150)	SW846 8260B
1,1-Dichloroethane	94	(78 - 123)	SW846 8260B
2-Butanone	64	(30 - 150)	SW846 8260B
2,2-Dichloropropane	101	(64 - 141)	SW846 8260B
1,2-Dichloroethene (total)	106	(80 - 122)	SW846 8260B
Chloroform	86	(76 - 120)	SW846 8260B
Bromochloromethane	87	(77 - 122)	SW846 8260B
1,1,1-Trichloroethane	94	(80 - 124)	SW846 8260B
1,1-Dichloropropene	100	(77 - 126)	SW846 8260B
Carbon tetrachloride	94	(79 - 127)	SW846 8260B
1,2-Dichloroethane	78	(73 - 133)	SW846 8260B
Benzene	96	(84 - 123)	SW846 8260B
Trichloroethene	95	(69 - 117)	SW846 8260B
1,2-Dichloropropane	89	(78 - 130)	SW846 8260B
Bromodichloromethane	79	(77 - 123)	SW846 8260B
4-Methyl-2-pentanone	67	(49 - 132)	SW846 8260B
cis-1,3-Dichloropropene	84	(73 - 125)	SW846 8260B
Toluene	107	(82 - 125)	SW846 8260B
1,1,2-Trichloroethane	88	(78 - 127)	SW846 8260B
2-Hexanone	74	(46 - 146)	SW846 8260B
1,3-Dichloropropane	86	(74 - 122)	SW846 8260B
Tetrachloroethene	72	(42 - 146)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F5D220218 **Work Order #...:** G9PD41AC **Matrix.....:** WATER
LCS Lot-Sample#: F5E030000-229

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Chlorodibromomethane	84	(80 - 118)	SW846 8260B
1,2-Dibromoethane	90	(79 - 121)	SW846 8260B
Chlorobenzene	97	(83 - 121)	SW846 8260B
1,1,1,2-Tetrachloroethane	94	(80 - 119)	SW846 8260B
Ethylbenzene	110	(83 - 121)	SW846 8260B
Styrene	100	(86 - 121)	SW846 8260B
Bromoform	80	(69 - 130)	SW846 8260B
Isopropylbenzene	130	(80 - 143)	SW846 8260B
1,1,2,2-Tetrachloroethane	88	(68 - 136)	SW846 8260B
n-Propylbenzene	116	(69 - 129)	SW846 8260B
trans-1,3-Dichloropropene	95	(71 - 149)	SW846 8260B
Bromobenzene	101	(75 - 125)	SW846 8260B
2-Chlorotoluene	107	(65 - 127)	SW846 8260B
1,3,5-Trimethylbenzene	113	(70 - 126)	SW846 8260B
4-Chlorotoluene	106	(67 - 130)	SW846 8260B
tert-Butylbenzene	118	(53 - 123)	SW846 8260B
sec-Butylbenzene	116 a	(76 - 115)	SW846 8260B
p-Isopropyltoluene	126	(80 - 127)	SW846 8260B
1,3-Dichlorobenzene	107	(86 - 117)	SW846 8260B
1,4-Dichlorobenzene	99	(83 - 115)	SW846 8260B
n-Butylbenzene	118	(77 - 128)	SW846 8260B
1,2-Dichlorobenzene	102	(87 - 119)	SW846 8260B
1,2-Dibromo-3-chloropropane (DBCP)	91	(72 - 133)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	98	(84 - 123)
Dibromofluoromethane	90	(80 - 126)
1,2-Dichloroethane-d4	87	(76 - 133)
4-Bromofluorobenzene	99	(74 - 122)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220218 Work Order #...: G9DL01AC Matrix.....: WATER
LCS Lot-Sample#: F5D270000-669
Prep Date.....: 04/27/05 Analysis Date..: 05/09/05
Prep Batch #...: 5117669 Analysis Time..: 20:13
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
3-Methylphenol & 4-Methylphenol	46	(30 - 79)	SW846 8270C
Phenol	24	(18 - 40)	SW846 8270C
bis(2-Chloroethyl)-ether	55	(35 - 92)	SW846 8270C
2-Chlorophenol	51	(40 - 84)	SW846 8270C
1,3-Dichlorobenzene	44 a	(50 - 150)	SW846 8270C
1,4-Dichlorobenzene	44 a	(50 - 150)	SW846 8270C
1,2-Dichlorobenzene	47 a	(50 - 150)	SW846 8270C
2-Methylphenol	49	(36 - 78)	SW846 8270C
2,2'-oxybis(1-Chloropropa	57	(41 - 99)	SW846 8270C
N-Nitrosodi-n-propyl-amine	71	(52 - 108)	SW846 8270C
Hexachloroethane	45	(30 - 79)	SW846 8270C
Nitrobenzene	61	(46 - 97)	SW846 8270C
Isophorone	77	(54 - 106)	SW846 8270C
2-Nitrophenol	62	(45 - 95)	SW846 8270C
2,4-Dimethylphenol	63	(44 - 90)	SW846 8270C
bis(2-Chloroethoxy) methane	63	(48 - 99)	SW846 8270C
2,4-Dichlorophenol	62	(45 - 94)	SW846 8270C
1,2,4-Trichloro-benzene	49	(38 - 84)	SW846 8270C
Naphthalene	52	(45 - 91)	SW846 8270C
4-Chloroaniline	60	(31 - 126)	SW846 8270C
Hexachlorobutadiene	43	(32 - 78)	SW846 8270C
4-Chloro-3-methylphenol	73	(51 - 93)	SW846 8270C
2-Methylnaphthalene	56	(28 - 110)	SW846 8270C
Hexachlorocyclopenta-diene	51	(14 - 89)	SW846 8270C
2,4,6-Trichloro-phenol	77	(48 - 97)	SW846 8270C
2,4,5-Trichloro-phenol	80	(49 - 99)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220218 Work Order #...: G9DL01AC Matrix.....: WATER
LCS Lot-Sample#: F5D270000-669

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2-Nitroaniline	87	(52 - 110)	SW846 8270C
Dimethyl phthalate	88	(58 - 102)	SW846 8270C
Acenaphthylene	76	(52 - 100)	SW846 8270C
2,6-Dinitrotoluene	91	(60 - 104)	SW846 8270C
3-Nitroaniline	87	(51 - 115)	SW846 8270C
Acenaphthene	72	(53 - 100)	SW846 8270C
2,4-Dinitrophenol	80	(24 - 118)	SW846 8270C
4-Nitrophenol	37	(17 - 45)	SW846 8270C
Dibenzofuran	77	(49 - 102)	SW846 8270C
2,4-Dinitrotoluene	98	(65 - 113)	SW846 8270C
Diethyl phthalate	91	(50 - 106)	SW846 8270C
Fluorene	84	(58 - 101)	SW846 8270C
4-Chlorophenyl phenyl ether	83	(55 - 99)	SW846 8270C
4-Nitroaniline	93	(53 - 116)	SW846 8270C
4,6-Dinitro-2-methylphenol	95	(46 - 106)	SW846 8270C
N-Nitrosodiphenylamine	91	(59 - 110)	SW846 8270C
4-Bromophenyl phenyl ether	84	(54 - 99)	SW846 8270C
Hexachlorobenzene	90	(58 - 105)	SW846 8270C
Pentachlorophenol	73	(37 - 109)	SW846 8270C
Phenanthrene	83	(58 - 104)	SW846 8270C
Anthracene	84	(57 - 102)	SW846 8270C
Fluoranthene	84	(57 - 105)	SW846 8270C
Pyrene	78	(56 - 108)	SW846 8270C
Butyl benzyl phthalate	87	(57 - 112)	SW846 8270C
Benzo(a)anthracene	85	(58 - 111)	SW846 8270C
3,3'-Dichlorobenzidine	91	(49 - 114)	SW846 8270C
Chrysene	88	(54 - 115)	SW846 8270C
bis(2-Ethylhexyl) phthalate	87	(55 - 112)	SW846 8270C
Di-n-butyl phthalate	89	(57 - 108)	SW846 8270C
Di-n-octyl phthalate	89	(50 - 106)	SW846 8270C
Benzo(b)fluoranthene	90	(52 - 111)	SW846 8270C
Benzo(k)fluoranthene	91	(57 - 123)	SW846 8270C
Benzo(a)pyrene	88	(55 - 104)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220218 **Work Order #...:** G9DL01AC **Matrix.....:** WATER
LCS Lot-Sample#: F5D270000-669

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Indeno(1,2,3-cd)pyrene	**86**	**(43 - 119)**	**SW846 8270C**
Benzo(ghi)perylene	**90**	**(42 - 121)**	**SW846 8270C**
Dibenz(a,h)anthracene	**90**	**(43 - 128)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	31	(24 - 58)
Phenol-d5	24	(16 - 41)
Nitrobenzene-d5	64	(48 - 103)
2-Fluorobiphenyl	70	(53 - 107)
2,4,6-Tribromophenol	92	(57 - 107)
Terphenyl-d14	72	(48 - 102)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F5D220218 **Work Order #...:** G9DK31AC **Matrix.....:** WATER
LCS Lot-Sample#: F5D270000-672
Prep Date.....: 04/27/05 **Analysis Date..:** 05/02/05
Prep Batch #...: 5117672 **Analysis Time..:** 16:20
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	**80**	**(66 - 134)**	**SW846 8082**
Aroclor 1260	**82**	**(66 - 121)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	87	(48 - 139)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F5D220218
MS Lot-Sample #: F5D220218-001
Date Sampled...: 04/20/05
Prep Date.....: 04/29/05
Prep Batch #...: 5121013
Dilution Factor: 5

Work Order #...: G800L1AF-MS
G800L1AG-MSD
Date Received..: 04/22/05
Analysis Date..: 04/29/05
Analysis Time..: 17:02

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Dichlorodifluoromethane (Freon 12)	88	(30 - 150)			SW846 8260B
	101	(30 - 150)	14	(0-20)	SW846 8260B
Chloromethane	97	(30 - 141)			SW846 8260B
	108	(30 - 141)	11	(0-20)	SW846 8260B
Vinyl chloride	110	(39 - 147)			SW846 8260B
	138 p	(39 - 147)	22	(0-20)	SW846 8260B
Bromomethane	92	(30 - 144)			SW846 8260B
	92	(30 - 144)	0.15	(0-20)	SW846 8260B
Chloroethane	103	(50 - 150)			SW846 8260B
	105	(50 - 150)	2.3	(0-20)	SW846 8260B
Trichlorofluoromethane	112	(48 - 145)			SW846 8260B
	113	(48 - 145)	0.94	(0-20)	SW846 8260B
Trichlorotrifluoroethane	112	(54 - 136)			SW846 8260B
	114	(54 - 136)	1.9	(0-20)	SW846 8260B
Acetone	110	(30 - 150)			SW846 8260B
	98	(30 - 150)	11	(0-20)	SW846 8260B
1,1-Dichloroethene	102	(47 - 135)			SW846 8260B
	105	(47 - 135)	3.1	(0-20)	SW846 8260B
Methylene chloride	110	(38 - 150)			SW846 8260B
	104	(38 - 150)	4.5	(0-20)	SW846 8260B
Carbon disulfide	97	(32 - 150)			SW846 8260B
	96	(32 - 150)	1.4	(0-20)	SW846 8260B
1,1-Dichloroethane	114	(64 - 135)			SW846 8260B
	113	(64 - 135)	0.82	(0-20)	SW846 8260B
2-Butanone	106	(48 - 150)			SW846 8260B
	111	(48 - 150)	5.1	(0-20)	SW846 8260B
1,2-Dichloroethene (total)	111	(63 - 135)			SW846 8260B
	108	(63 - 135)	2.8	(0-20)	SW846 8260B
Chloroform	108	(67 - 129)			SW846 8260B
	101	(67 - 129)	6.8	(0-20)	SW846 8260B
Bromochloromethane	110	(57 - 147)			SW846 8260B
	104	(57 - 147)	5.8	(0-20)	SW846 8260B
1,1,1-Trichloroethane	108	(60 - 140)			SW846 8260B
	106	(60 - 140)	2.0	(0-20)	SW846 8260B
Carbon tetrachloride	113	(40 - 150)			SW846 8260B
	113	(40 - 150)	0.03	(0-20)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F5D220218 Work Order #...: G800L1AF-MS Matrix.....: WATER
MS Lot-Sample #: F5D220218-001 G800L1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,2-Dichloroethane	108	(65 - 140)			SW846 8260B
	98	(65 - 140)	9.1	(0-20)	SW846 8260B
Benzene	104	(73 - 132)			SW846 8260B
	103	(73 - 132)	0.98	(0-20)	SW846 8260B
Trichloroethene	102	(30 - 150)			SW846 8260B
	101	(30 - 150)	1.4	(0-20)	SW846 8260B
1,2-Dichloropropane	106	(70 - 137)			SW846 8260B
	105	(70 - 137)	0.75	(0-20)	SW846 8260B
Bromodichloromethane	112	(69 - 132)			SW846 8260B
	107	(69 - 132)	4.0	(0-20)	SW846 8260B
4-Methyl-2-pentanone	93	(39 - 149)			SW846 8260B
	87	(39 - 149)	7.4	(0-20)	SW846 8260B
cis-1,3-Dichloropropene	97	(69 - 141)			SW846 8260B
	93	(69 - 141)	3.7	(0-20)	SW846 8260B
Toluene	98	(74 - 126)			SW846 8260B
	98	(74 - 126)	0.45	(0-20)	SW846 8260B
1,1,2-Trichloroethane	98	(72 - 130)			SW846 8260B
	93	(72 - 130)	4.4	(0-20)	SW846 8260B
2-Hexanone	99	(33 - 148)			SW846 8260B
	90	(33 - 148)	9.9	(0-20)	SW846 8260B
Tetrachloroethene	81	(29 - 123)			SW846 8260B
	82	(29 - 123)	1.1	(0-20)	SW846 8260B
Chlorodibromomethane	100	(76 - 132)			SW846 8260B
	94	(76 - 132)	6.4	(0-20)	SW846 8260B
1,2-Dibromoethane	110	(50 - 150)			SW846 8260B
	103	(50 - 150)	6.7	(0-20)	SW846 8260B
Chlorobenzene	101	(77 - 123)			SW846 8260B
	98	(77 - 123)	2.9	(0-20)	SW846 8260B
1,1,1,2-Tetrachloroethane	110	(55 - 148)			SW846 8260B
	105	(55 - 148)	5.5	(0-20)	SW846 8260B
Ethylbenzene	99	(71 - 125)			SW846 8260B
	101	(71 - 125)	1.8	(0-20)	SW846 8260B
Styrene	108	(49 - 145)			SW846 8260B
	105	(49 - 145)	2.3	(0-20)	SW846 8260B
Bromoform	95	(64 - 130)			SW846 8260B
	87	(64 - 130)	9.0	(0-20)	SW846 8260B
Isopropylbenzene	121	(61 - 150)			SW846 8260B
	116	(61 - 150)	4.4	(0-20)	SW846 8260B
1,1,2,2-Tetrachloroethane	114	(65 - 139)			SW846 8260B
	106	(65 - 139)	7.1	(0-20)	SW846 8260B
n-Propylbenzene	105	(35 - 150)			SW846 8260B
	101	(35 - 150)	3.7	(0-20)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F5D220218 **Work Order #...:** G800L1AF-MS **Matrix.....:** WATER
MS Lot-Sample #: F5D220218-001 G800L1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
trans-1,3-Dichloropropene	107	(76 - 150)			SW846 8260B
	102	(76 - 150)	4.9	(0-20)	SW846 8260B
2-Chlorotoluene	110	(30 - 150)			SW846 8260B
	104	(30 - 150)	5.8	(0-20)	SW846 8260B
1,3,5-Trimethylbenzene	109	(30 - 150)			SW846 8260B
	105	(30 - 150)	4.0	(0-20)	SW846 8260B
4-Chlorotoluene	112	(45 - 150)			SW846 8260B
	105	(45 - 150)	6.1	(0-20)	SW846 8260B
tert-Butylbenzene	105	(32 - 148)			SW846 8260B
	104	(32 - 148)	0.38	(0-20)	SW846 8260B
sec-Butylbenzene	100	(42 - 150)			SW846 8260B
	103	(42 - 150)	2.6	(0-20)	SW846 8260B
1,3-Dichlorobenzene	102	(78 - 119)			SW846 8260B
	98	(78 - 119)	3.7	(0-20)	SW846 8260B
1,4-Dichlorobenzene	101	(76 - 117)			SW846 8260B
	96	(76 - 117)	4.6	(0-20)	SW846 8260B
1,2-Dichlorobenzene	106	(80 - 120)			SW846 8260B
	100	(80 - 120)	5.6	(0-20)	SW846 8260B
1,2-Dibromo-3-chloropropane (DBCP)	99	(30 - 150)			SW846 8260B
	93	(30 - 150)	7.0	(0-20)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	97	(75 - 126)
	97	(75 - 126)
Dibromofluoromethane	105	(60 - 147)
	100	(60 - 147)
1,2-Dichloroethane-d4	107	(71 - 138)
	98	(71 - 138)
4-Bromofluorobenzene	102	(71 - 117)
	96	(71 - 117)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

p Relative percent difference (RPD) is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F5D220218 Work Order #...: G81751AD-MS Matrix.....: WATER
MS Lot-Sample #: F5D220349-001 G81751AE-MSD
Date Sampled...: 04/20/05 Date Received..: 04/22/05
Prep Date.....: 05/02/05 Analysis Date..: 05/02/05
Prep Batch #...: 5123229 Analysis Time..: 17:41
Dilution Factor: 5

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Dichlorodifluoromethane (Freon 12)	65	(30 - 150)			SW846 8260B
	77	(30 - 150)	17	(0-20)	SW846 8260B
Chloromethane	74	(30 - 141)			SW846 8260B
	89	(30 - 141)	19	(0-20)	SW846 8260B
Vinyl chloride	76	(39 - 147)			SW846 8260B
	88	(39 - 147)	15	(0-20)	SW846 8260B
Bromomethane	68	(30 - 144)			SW846 8260B
	87 p	(30 - 144)	24	(0-20)	SW846 8260B
Chloroethane	71	(50 - 150)			SW846 8260B
	89 p	(50 - 150)	22	(0-20)	SW846 8260B
Trichlorofluoromethane	78	(48 - 145)			SW846 8260B
	92	(48 - 145)	16	(0-20)	SW846 8260B
Trichlorotrifluoroethane	98	(54 - 136)			SW846 8260B
	115	(54 - 136)	16	(0-20)	SW846 8260B
Acetone	32	(30 - 150)			SW846 8260B
	403 a,p	(30 - 150)	21	(0-20)	SW846 8260B
1,1-Dichloroethene	87	(47 - 135)			SW846 8260B
	98	(47 - 135)	12	(0-20)	SW846 8260B
Methylene chloride	102	(38 - 150)			SW846 8260B
	117	(38 - 150)	13	(0-20)	SW846 8260B
Carbon disulfide	87	(32 - 150)			SW846 8260B
	93	(32 - 150)	7.0	(0-20)	SW846 8260B
1,1-Dichloroethane	96	(64 - 135)			SW846 8260B
	109	(64 - 135)	13	(0-20)	SW846 8260B
2-Butanone	69	(48 - 150)			SW846 8260B
	81	(48 - 150)	16	(0-20)	SW846 8260B
2,2-Dichloropropane	104	(51 - 148)			SW846 8260B
	115	(51 - 148)	9.8	(0-20)	SW846 8260B
1,2-Dichloroethene (total)	108	(63 - 135)			SW846 8260B
	122	(63 - 135)	12	(0-20)	SW846 8260B
Chloroform	87	(67 - 129)			SW846 8260B
	99	(67 - 129)	13	(0-20)	SW846 8260B
Bromochloromethane	98	(57 - 147)			SW846 8260B
	114	(57 - 147)	16	(0-20)	SW846 8260B
1,1,1-Trichloroethane	94	(60 - 140)			SW846 8260B
	105	(60 - 140)	11	(0-20)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F5D220218 Work Order #...: G81751AD-MS Matrix.....: WATER
MS Lot-Sample #: F5D220349-001 G81751AE-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloropropene	98	(61 - 139)			SW846 8260B
	110	(61 - 139)	11	(0-20)	SW846 8260B
Carbon tetrachloride	95	(40 - 150)			SW846 8260B
	110	(40 - 150)	14	(0-20)	SW846 8260B
1,2-Dichloroethane	78	(65 - 140)			SW846 8260B
	88	(65 - 140)	12	(0-20)	SW846 8260B
Benzene	99	(73 - 132)			SW846 8260B
	111	(73 - 132)	11	(0-20)	SW846 8260B
Trichloroethene	96	(30 - 150)			SW846 8260B
	90	(30 - 150)	7.3	(0-20)	SW846 8260B
1,2-Dichloropropane	90	(70 - 137)			SW846 8260B
	89	(70 - 137)	1.6	(0-20)	SW846 8260B
Bromodichloromethane	76	(69 - 132)			SW846 8260B
	78	(69 - 132)	2.5	(0-20)	SW846 8260B
4-Methyl-2-pentanone	69	(39 - 149)			SW846 8260B
	75	(39 - 149)	7.0	(0-20)	SW846 8260B
cis-1,3-Dichloropropene	82	(69 - 141)			SW846 8260B
	82	(69 - 141)	0.48	(0-20)	SW846 8260B
Toluene	114	(74 - 126)			SW846 8260B
	104	(74 - 126)	9.2	(0-20)	SW846 8260B
1,1,2-Trichloroethane	91	(72 - 130)			SW846 8260B
	89	(72 - 130)	2.9	(0-20)	SW846 8260B
2-Hexanone	85	(33 - 148)			SW846 8260B
	95	(33 - 148)	11	(0-20)	SW846 8260B
1,3-Dichloropropane	87	(41 - 150)			SW846 8260B
	88	(41 - 150)	0.96	(0-20)	SW846 8260B
Tetrachloroethene	69	(29 - 123)			SW846 8260B
	67	(29 - 123)	2.6	(0-20)	SW846 8260B
Chlorodibromomethane	85	(76 - 132)			SW846 8260B
	84	(76 - 132)	0.99	(0-20)	SW846 8260B
1,2-Dibromoethane	91	(50 - 150)			SW846 8260B
	92	(50 - 150)	1.6	(0-20)	SW846 8260B
Chlorobenzene	93	(77 - 123)			SW846 8260B
	95	(77 - 123)	1.5	(0-20)	SW846 8260B
1,1,1,2-Tetrachloroethane	95	(55 - 148)			SW846 8260B
	96	(55 - 148)	1.0	(0-20)	SW846 8260B
Ethylbenzene	103	(71 - 125)			SW846 8260B
	103	(71 - 125)	0.73	(0-20)	SW846 8260B
Styrene	91	(49 - 145)			SW846 8260B
	93	(49 - 145)	1.6	(0-20)	SW846 8260B
Bromoform	83	(64 - 130)			SW846 8260B
	84	(64 - 130)	0.28	(0-20)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F5D220218 Work Order #...: G81751AD-MS Matrix.....: WATER
MS Lot-Sample #: F5D220349-001 G81751AE-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Isopropylbenzene	128	(61 - 150)			SW846 8260B
	125	(61 - 150)	3.0	(0-20)	SW846 8260B
1,1,2,2-Tetrachloroethane	96	(65 - 139)			SW846 8260B
	95	(65 - 139)	1.0	(0-20)	SW846 8260B
n-Propylbenzene	116	(35 - 150)			SW846 8260B
	114	(35 - 150)	2.3	(0-20)	SW846 8260B
trans-1,3-Dichloropropene	97	(76 - 150)			SW846 8260B
	95	(76 - 150)	2.1	(0-20)	SW846 8260B
Bromobenzene	102	(30 - 150)			SW846 8260B
	101	(30 - 150)	0.17	(0-20)	SW846 8260B
2-Chlorotoluene	108	(30 - 150)			SW846 8260B
	105	(30 - 150)	2.9	(0-20)	SW846 8260B
1,3,5-Trimethylbenzene	113	(30 - 150)			SW846 8260B
	109	(30 - 150)	3.5	(0-20)	SW846 8260B
4-Chlorotoluene	108	(45 - 150)			SW846 8260B
	106	(45 - 150)	1.6	(0-20)	SW846 8260B
tert-Butylbenzene	116	(32 - 148)			SW846 8260B
	113	(32 - 148)	3.0	(0-20)	SW846 8260B
sec-Butylbenzene	114	(42 - 150)			SW846 8260B
	112	(42 - 150)	1.6	(0-20)	SW846 8260B
p-Isopropyltoluene	125	(49 - 150)			SW846 8260B
	122	(49 - 150)	1.9	(0-20)	SW846 8260B
1,3-Dichlorobenzene	105	(78 - 119)			SW846 8260B
	104	(78 - 119)	1.1	(0-20)	SW846 8260B
1,4-Dichlorobenzene	99	(76 - 117)			SW846 8260B
	97	(76 - 117)	1.8	(0-20)	SW846 8260B
n-Butylbenzene	118	(34 - 150)			SW846 8260B
	117	(34 - 150)	1.0	(0-20)	SW846 8260B
1,2-Dichlorobenzene	101	(80 - 120)			SW846 8260B
	101	(80 - 120)	0.0	(0-20)	SW846 8260B
1,2-Dibromo-3-chloropropane (DBCP)	93	(30 - 150)			SW846 8260B
	97	(30 - 150)	4.4	(0-20)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	107	(75 - 126)
	100	(75 - 126)
Dibromofluoromethane	105	(60 - 147)
	113	(60 - 147)

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F5D220218 **Work Order #...:** G81751AD-MS **Matrix.....:** WATER
MS Lot-Sample #: F5D220349-001 G81751AE-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	96	(71 - 138)
	103	(71 - 138)
4-Bromofluorobenzene	109	(71 - 117)
	101	(71 - 117)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

p Relative percent difference (RPD) is outside stated control limits.

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220218 Work Order #...: G800L1AL-MS Matrix.....: WATER
MS Lot-Sample #: F5D220218-001 G800L1AM-MSD
Date Sampled...: 04/20/05 Date Received..: 04/22/05
Prep Date.....: 04/27/05 Analysis Date..: 05/09/05
Prep Batch #...: 5117669 Analysis Time..: 23:55
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
3-Methylphenol & 4-Methylphenol	49	(22 - 115)			SW846 8270C
	46	(22 - 115)	5.6	(0-28)	SW846 8270C
Phenol	26	(10 - 115)			SW846 8270C
	24	(10 - 115)	7.3	(0-20)	SW846 8270C
bis(2-Chloroethyl)-ether	64	(32 - 115)			SW846 8270C
	59	(32 - 115)	7.6	(0-20)	SW846 8270C
2-Chlorophenol	60	(21 - 115)			SW846 8270C
	58	(21 - 115)	4.6	(0-20)	SW846 8270C
1,3-Dichlorobenzene	54	(50 - 150)			SW846 8270C
	48 a	(50 - 150)	12	(0-20)	SW846 8270C
1,4-Dichlorobenzene	54	(50 - 150)			SW846 8270C
	48 a	(50 - 150)	13	(0-20)	SW846 8270C
1,2-Dichlorobenzene	57	(50 - 150)			SW846 8270C
	50	(50 - 150)	12	(0-20)	SW846 8270C
2-Methylphenol	54	(31 - 115)			SW846 8270C
	51	(31 - 115)	6.7	(0-20)	SW846 8270C
2,2'-oxybis(1-Chloropropa	68	(33 - 115)			SW846 8270C
	63	(33 - 115)	8.5	(0-20)	SW846 8270C
N-Nitrosodi-n-propyl-amine	80	(29 - 115)			SW846 8270C
	75	(29 - 115)	6.2	(0-20)	SW846 8270C
Hexachloroethane	53	(20 - 115)			SW846 8270C
	48	(20 - 115)	9.1	(0-20)	SW846 8270C
Nitrobenzene	70	(34 - 115)			SW846 8270C
	65	(34 - 115)	7.6	(0-20)	SW846 8270C
Isophorone	82	(23 - 116)			SW846 8270C
	75	(23 - 116)	7.9	(0-20)	SW846 8270C
2-Nitrophenol	69	(28 - 115)			SW846 8270C
	64	(28 - 115)	6.9	(0-20)	SW846 8270C
2,4-Dimethylphenol	65	(24 - 115)			SW846 8270C
	60	(24 - 115)	8.0	(0-20)	SW846 8270C
bis(2-Chloroethoxy) methane	72	(32 - 115)			SW846 8270C
	65	(32 - 115)	10	(0-20)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220218 Work Order #...: G800L1AL-MS Matrix.....: WATER
MS Lot-Sample #: F5D220218-001 G800L1AM-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2,4-Dichlorophenol	69	(37 - 115)			SW846 8270C
	64	(37 - 115)	8.2	(0-20)	SW846 8270C
1,2,4-Trichloro-benzene	57	(19 - 115)			SW846 8270C
	48	(19 - 115)	17	(0-20)	SW846 8270C
Naphthalene	60	(32 - 115)			SW846 8270C
	52	(32 - 115)	13	(0-20)	SW846 8270C
4-Chloroaniline	65	(17 - 115)			SW846 8270C
	60	(17 - 115)	8.5	(0-20)	SW846 8270C
Hexachlorobutadiene	51	(18 - 115)			SW846 8270C
	44	(18 - 115)	15	(0-20)	SW846 8270C
4-Chloro-3-methylphenol	74	(19 - 115)			SW846 8270C
	68	(19 - 115)	8.2	(0-20)	SW846 8270C
2-Methylnaphthalene	59	(32 - 115)			SW846 8270C
	50	(32 - 115)	17	(0-20)	SW846 8270C
Hexachlorocyclopenta-diene	53	(10 - 115)			SW846 8270C
	41 p	(10 - 115)	25	(0-20)	SW846 8270C
2,4,6-Trichloro-phenol	77	(38 - 115)			SW846 8270C
	72	(38 - 115)	6.1	(0-20)	SW846 8270C
2,4,5-Trichloro-phenol	79	(41 - 115)			SW846 8270C
	74	(41 - 115)	6.0	(0-20)	SW846 8270C
2-Nitroaniline	84	(41 - 115)			SW846 8270C
	79	(41 - 115)	6.7	(0-20)	SW846 8270C
Dimethyl phthalate	86	(53 - 115)			SW846 8270C
	81	(53 - 115)	6.5	(0-20)	SW846 8270C
Acenaphthylene	74	(43 - 115)			SW846 8270C
	66	(43 - 115)	11	(0-20)	SW846 8270C
2,6-Dinitrotoluene	90	(56 - 115)			SW846 8270C
	83	(56 - 115)	7.8	(0-20)	SW846 8270C
3-Nitroaniline	86	(54 - 115)			SW846 8270C
	80	(54 - 115)	7.3	(0-20)	SW846 8270C
Acenaphthene	71	(26 - 115)			SW846 8270C
	61	(26 - 115)	14	(0-20)	SW846 8270C
2,4-Dinitrophenol	89	(24 - 134)			SW846 8270C
	84	(24 - 134)	5.3	(0-20)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220218 Work Order #...: G800L1AL-MS Matrix.....: WATER
MS Lot-Sample #: F5D220218-001 G800L1AM-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
4-Nitrophenol	38	(10 - 115)			SW846 8270C
	35	(10 - 115)	7.9	(0-20)	SW846 8270C
Dibenzofuran	75	(40 - 115)			SW846 8270C
	66	(40 - 115)	12	(0-20)	SW846 8270C
2,4-Dinitrotoluene	100	(11 - 150)			SW846 8270C
	93	(11 - 150)	7.1	(0-20)	SW846 8270C
Diethyl phthalate	93	(56 - 117)			SW846 8270C
	86	(56 - 117)	8.0	(0-20)	SW846 8270C
Fluorene	81	(45 - 115)			SW846 8270C
	73	(45 - 115)	11	(0-20)	SW846 8270C
4-Chlorophenyl phenyl ether	82	(47 - 115)			SW846 8270C
	70	(47 - 115)	16	(0-20)	SW846 8270C
4-Nitroaniline	95	(54 - 115)			SW846 8270C
	90	(54 - 115)	5.9	(0-20)	SW846 8270C
4,6-Dinitro-2-methylphenol	99	(50 - 115)			SW846 8270C
	91	(50 - 115)	8.1	(0-20)	SW846 8270C
N-Nitrosodiphenylamine	91	(57 - 115)			SW846 8270C
	84	(57 - 115)	8.3	(0-20)	SW846 8270C
4-Bromophenyl phenyl ether	85	(51 - 115)			SW846 8270C
	74	(51 - 115)	15	(0-20)	SW846 8270C
Hexachlorobenzene	91	(50 - 115)			SW846 8270C
	82	(50 - 115)	9.9	(0-20)	SW846 8270C
Pentachlorophenol	84	(11 - 121)			SW846 8270C
	75	(11 - 121)	12	(0-20)	SW846 8270C
Phenanthrene	83	(55 - 115)			SW846 8270C
	74	(55 - 115)	12	(0-20)	SW846 8270C
Anthracene	85	(55 - 115)			SW846 8270C
	77	(55 - 115)	10	(0-20)	SW846 8270C
Fluoranthene	82	(57 - 115)			SW846 8270C
	74	(57 - 115)	11	(0-20)	SW846 8270C
Pyrene	78	(43 - 115)			SW846 8270C
	74	(43 - 115)	6.0	(0-20)	SW846 8270C
Butyl benzyl phthalate	89	(55 - 115)			SW846 8270C
	81	(55 - 115)	8.8	(0-20)	SW846 8270C
Benzo(a)anthracene	87	(56 - 115)			SW846 8270C
	80	(56 - 115)	8.5	(0-20)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220218 Work Order #...: G800L1AL-MS Matrix.....: WATER
MS Lot-Sample #: F5D220218-001 G800L1AM-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
3,3'-Dichlorobenzidine	91	(29 - 120)			SW846 8270C
	81	(29 - 120)	12	(0-20)	SW846 8270C
Chrysene	88	(21 - 150)			SW846 8270C
	80	(21 - 150)	8.7	(0-20)	SW846 8270C
bis(2-Ethylhexyl) phthalate	86	(56 - 115)			SW846 8270C
	77	(56 - 115)	11	(0-20)	SW846 8270C
Di-n-butyl phthalate	91	(60 - 115)			SW846 8270C
	82	(60 - 115)	11	(0-20)	SW846 8270C
Di-n-octyl phthalate	90	(55 - 115)			SW846 8270C
	80	(55 - 115)	12	(0-20)	SW846 8270C
Benzo(b)fluoranthene	91	(53 - 115)			SW846 8270C
	83	(53 - 115)	8.8	(0-20)	SW846 8270C
Benzo(k)fluoranthene	92	(54 - 115)			SW846 8270C
	85	(54 - 115)	7.5	(0-20)	SW846 8270C
Benzo(a)pyrene	91	(30 - 126)			SW846 8270C
	80	(30 - 126)	13	(0-20)	SW846 8270C
Indeno(1,2,3-cd)pyrene	84	(17 - 150)			SW846 8270C
	78	(17 - 150)	8.1	(0-20)	SW846 8270C
Benzo(ghi)perylene	94	(10 - 150)			SW846 8270C
	88	(10 - 150)	6.2	(0-20)	SW846 8270C
Dibenz(a,h)anthracene	93	(13 - 150)			SW846 8270C
	85	(13 - 150)	8.4	(0-20)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	34	(10 - 115)
	32	(10 - 115)
Phenol-d5	24	(10 - 115)
	23	(10 - 115)
Nitrobenzene-d5	70	(22 - 115)
	65	(22 - 115)
2-Fluorobiphenyl	68	(18 - 115)
	63	(18 - 115)
2,4,6-Tribromophenol	94	(10 - 118)
	87	(10 - 118)
Terphenyl-d14	69	(10 - 115)
	67	(10 - 115)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

p Relative percent difference (RPD) is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F5D220218 **Work Order #...:** G8V481AE-MS **Matrix.....:** WATER
MS Lot-Sample #: F5D210290-001 G8V481AF-MSD
Date Sampled...: 04/20/05 **Date Received..:** 04/21/05
Prep Date.....: 04/27/05 **Analysis Date..:** 05/02/05
Prep Batch #...: 5117672 **Analysis Time..:** 17:18
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	73	(30 - 150)			SW846 8082
	85	(30 - 150)	16	(0-20)	SW846 8082
Aroclor 1260	78	(65 - 137)			SW846 8082
	85	(65 - 137)	8.3	(0-20)	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	49	(30 - 150)
	86	(30 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

F5D220218

CLIENT ANALYSIS SUMMARY

Storage Loc: A87,V90

Project Manager: EK Quote #: 44975 SDG: F5D220218

Date Received: 2005-04-22

Project: 3166S Los Alamos Non-Rad

Analytical Due Date: 2005-05-10

PO#: 126310021 Report to: Joylene Valdez or Keith

Report Due Date: 2005-05-12

Client: 106581 LOS ALAMOS NATIONAL LABORATORY

Report Type: D Expanded Deliverable

#SMPS in LOT: 2 EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	I
1	RE73-05-58923	2005-04-20 / 0	G800L	WATER

SAMPLE COMMENTS:

	XX	QH	SW846 8082	PCBs (8082)	60	LIQ/LIQ, SEP FUNNEL w/ACID STRIP (PCB) - Nominal	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	XX	QL	SW846 8270C	Base/Neutrals and Acids (8270C)	49	LIQ/LIQ, CONT (A/B/N) - Acid->Base	01	STANDARD TEST SET	PROT: B	WRK LOC	06	TIC: N	
	XX	QK	SW846 8260B	Volatile Organics, GC/MS (8260B)	25	PURGE AND TRAP - 25 mL purge (Waters)	01	STANDARD TEST SET	PROT: B	WRK LOC	06	TIC: N	
D	XX	QH	SW846 8082	PCBs (8082)	60	LIQ/LIQ, SEP FUNNEL w/ACID STRIP (PCB) - Nominal	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
D	XX	QL	SW846 8270C	Base/Neutrals and Acids (8270C)	49	LIQ/LIQ, CONT (A/B/N) - Acid->Base	01	STANDARD TEST SET	PROT: B	WRK LOC	06	TIC: N	
D	XX	QK	SW846 8260B	Volatile Organics, GC/MS (8260B)	25	PURGE AND TRAP - 25 mL purge (Waters)	01	STANDARD TEST SET	PROT: B	WRK LOC	06	TIC: N	
S	XX	QH	SW846 8082	PCBs (8082)	60	LIQ/LIQ, SEP FUNNEL w/ACID STRIP (PCB) - Nominal	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
S	XX	QL	SW846 8270C	Base/Neutrals and Acids (8270C)	49	LIQ/LIQ, CONT (A/B/N) - Acid->Base	01	STANDARD TEST SET	PROT: B	WRK LOC	06	TIC: N	
S	XX	QK	SW846 8260B	Volatile Organics, GC/MS (8260B)	25	PURGE AND TRAP - 25 mL purge (Waters)	01	STANDARD TEST SET	PROT: B	WRK LOC	06	TIC: N	

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	I
2	RE73-05-58924	2005-04-20 / 0	G8009	WATER

SAMPLE COMMENTS:

	XX	QH	SW846 8082	PCBs (8082)	60	LIQ/LIQ, SEP FUNNEL w/ACID STRIP (PCB) - Nominal	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	XX	QL	SW846 8270C	Base/Neutrals and Acids (8270C)	49	LIQ/LIQ, CONT (A/B/N) - Acid->Base	01	STANDARD TEST SET	PROT: B	WRK LOC	06	TIC: N	
	XX	QK	SW846 8260B	Volatile Organics, GC/MS (8260B)	25	PURGE AND TRAP - 25 mL purge (Waters)	01	STANDARD TEST SET	PROT: B	WRK LOC	06	TIC: N	

F5D220218

CLIENT COMMENTS SUMMARY

Storage Loc: A87,V90

Project Manager: EK Quote #: 44975 SDG: F5D220218

Date Received: 2005-04-22

Project: 3166S Los Alamos Non-Rad

Analytical Due Date: 2005-05-10

PO#: 126310021 Report to: Joylene Valdez or Keith

Report Due Date: 2005-05-12

Client: 108581 LOS ALAMOS NATIONAL LABORATORY

Report Type: D Expanded Deliverable

#SMPS in LOT: 2 EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMEN
Enter COC NUMBER on sample sample header in the COC Fl
SDG = "Lot Number"
Project Name = "Request number"

********** METALS AND WETCHEMISTRY **********
Can batch multiple Lots together and report Client specific
Batch QC: Matrix Spike and Sample Duplicate
Met Prep: GFAA Spike Level and Standard Spike Level
Sb spike at 100 ppb
Pb - Spike Solids at 100 ppb, spike Waters at 20
- Perform analytical spike when matrix spike is swamped with indigenous analyte.
********** GC/MS ORGANICS **********
Can batch multiple Lots together and report Client specific
Batch QC MS and MSD
Clouseau observations for:
- Dilutions and elevated detection limits
- Unknown aldol condensate in TIC report
USE GPC for sample extracts as required.
Put client ID on all raw data
Client requires qualifiers
********** GC/HPLC **********
Can batch multiple Lots together and report Client specific
Batch QC
USE GPC for sample extracts as required.
Client requires Qualifiers for both GC and HPLC
- No averaging of CCV compounds
- Include Form Xs in data packages
********** Radiochemistry **********
Rad Chem with no tracers require MS (spk <= 100 pCi/L or g) and sample duplicate ..... Gamma does not require MS.
Radium 228 requires MS and Sample Duplicate
Radiological: "Do not include control chart, standard certif certificates, or calibration data as part of data package"
- Tracers need to be added at a level to yield at least 400
- Report 1 sigma uncertainty
Gross Alpha/Beta requires a total digestion.

CHAIN OF CUSTODY DOCUMENT NUMBER: 3166SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3166S

ANALYSIS TYPE: ORGANIC

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58923	1	1 L AMBER GLASS	8270C	ICE	W
RE73-05-58923	2	1 L AMBER GLASS	8270C	ICE	W
RE73-05-58923	3	1 L AMBER GLASS	8082	ICE	W
RE73-05-58923	4	1 L AMBER GLASS	8082	ICE	W
RE73-05-58923	5	40 ML SEPTUM AMBER GLASS	8260B	HCL	W
RE73-05-58923	6	40 ML SEPTUM AMBER GLASS	8260B	HCL	W
RE73-05-58924	1	1 L AMBER GLASS	8270C	ICE	W
RE73-05-58924	2	1 L AMBER GLASS	8270C	ICE	W
RE73-05-58924	3	1 L AMBER GLASS	8082	ICE	W
RE73-05-58924	4	1 L AMBER GLASS	8082	ICE	W
RE73-05-58924	5	40 ML SEPTUM AMBER GLASS	8260B	HCL	W
RE73-05-58924	6	40 ML SEPTUM AMBER GLASS	8260B	HCL	W

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3166S Page 1

Heads up from Sad Quarter

Relinquished By:		Date	Time	Received By:		Date	Time
		4/21/05	2:30	Sue Wilson		4.22.05	0930
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

PRINTED NAME SIGNATURE

REQUEST NUMBER: 3166S

ANALYSIS TYPE: ORGANIC

Los Alamos
NATIONAL LABORATORY

cer 6/93

ATTN: Mark Loeb
Severn Trent Laboratles, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

These samples are on:

SHIP DATE: 04/21/2005
REPORT DUE: 05/06/2005
TURN AROUND REQ'D: 15

RAD SCREENING: NOT REQ
COMMENTS:

LANL Request Number: 3166S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:8270C	RE73-05-58923	1	W	04/20/2005	
SW-846:8270C	RE73-05-58923	2	W	04/20/2005	
SW-846:8082	RE73-05-58923	3	W	04/20/2005	
SW-846:8082	RE73-05-58923	4	W	04/20/2005	
SW-846:8260B	RE73-05-58923	5	W	04/20/2005	
SW-846:8260B	RE73-05-58923	6	W	04/20/2005	
SW-846:8270C	RE73-05-58924	1	W	04/20/2005	
SW-846:8270C	RE73-05-58924	2	W	04/20/2005	
SW-846:8082	RE73-05-58924	3	W	04/20/2005	
SW-846:8082	RE73-05-58924	4	W	04/20/2005	
SW-846:8260B	RE73-05-58924	5	W	04/20/2005	
SW-846:8260B	RE73-05-58924	6	W	04/20/2005	

Final Page of REQUEST NUMBER 3166S

SEVERN TRENT **STL**

Lot No: F5D220218

Condition Upon Receipt Form
St. Louis Laboratory

Client: LANL

Date: 4.22.05 Time: 0900

Quote No: 44975

Initiated by: EV

Shipper/No: FedX 695477892939

COC/RFA Numbers: Below

Condition/Variance (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	(Y) N	Sample received in undamaged condition?	7.	(Y) N	Sample received with Chain of Custody?
2.	(Y) N	Sample received within 4°C ± 2°C* ?	8.	(Y) N	Chain of Custody matches sample IDs on containers?
		Record _____	9.	(Y) N N/A	Custody seal received intact on cooler.?
3.	(Y) N N/A	Sample received with proper pH [1]?	10.	(Y) N N/A	Custody seal tamper evident on cooler.?
4.	Y N	If N/A - Was pH taken by original STL lab?	11.	(Y) N N/A	Custody seal on bottles received intact?
5.	(Y) N	Sample received in proper containers?	12.	(Y) N N/A	Custody seal tamper evident on bottles?
6.	(Y) N	Sample volume sufficient for analysis?	13.	Y N	Was CUR (equivalent) rec' d from original STL lab?

* Temperature Variance Does Not Affect the Following Analyses: _____

[1]For DOE-AL (Pantex, LANL, Sandia) sites, verify pH all containers received, except for VOA, TOX, and soils.

Notes: 28615C, 31635C thru 68SC.

Chain 31635C - containers received were different than C-O-C.

Corrective Action:

☐ Client's Name: _____ Informed by: _____ By: _____

☐ Sample(s) processed "as is". _____

☐ Sample(s) on hold until: _____ If released, notify: _____

Project Management Review: Tony Lolley Date: 4/22/05

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED
IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIALS AND THE DATE NEXT TO THAT ITEM

GC SAMPLE AND QC DATA SUMMARY- FORMS I
PCB'S

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER
Method: SW846 8082
PCBs (8082)

Lab Sample ID:F5D210290 001

Sample WT/Vol: 1000 / mL
Work Order: G8V481AA
Dilution factor: 1
Moisture %:NA

Date Received: 04/21/05
Date Extracted:04/27/05
Date Analyzed: 05/02/05

QC Batch: 5117672

Client Sample Id: INTRA-LAB QC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
12674-11-2	Aroclor 1016	1.0	U
11096-82-5	Aroclor 1260	1.0	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Decachlorobiphenyl	86	(30 - 150)

FORM I

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220218 001
Method: SW846 8082
PCBs (8082)

Sample WT/Vol: 1000 / mL Date Received: 04/22/05
Work Order: G800L1AH Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 05/02/05
Moisture %:NA

QC Batch: 5117672

Client Sample Id: RE73-05-58923

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
12674-11-2	Aroclor 1016	1.0	U
11104-28-2	Aroclor 1221	1.0	U
11141-16-5	Aroclor 1232	1.0	U
53469-21-9	Aroclor 1242	1.0	U
12672-29-6	Aroclor 1248	1.0	U
11097-69-1	Aroclor 1254	1.0	U
11096-82-5	Aroclor 1260	1.0	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Decachlorobiphenyl	70	(30 - 150)

FORM I

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER
Method: SW846 8082
PCBs (8082)

Lab Sample ID:F5D220218 002

Sample WT/Vol: 1000 / mL
Work Order: G80091AD
Dilution factor: 1
Moisture %:NA

Date Received: 04/22/05
Date Extracted:04/27/05
Date Analyzed: 05/02/05

QC Batch: 5117672

Client Sample Id: RE73-05-58924

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
12674-11-2	Aroclor 1016	1.0	U
11104-28-2	Aroclor 1221	1.0	U
11141-16-5	Aroclor 1232	1.0	U
53469-21-9	Aroclor 1242	1.0	U
12672-29-6	Aroclor 1248	1.0	U
11097-69-1	Aroclor 1254	1.0	U
11096-82-5	Aroclor 1260	1.0	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Decachlorobiphenyl	66	(30 - 150)

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER
Method: SW846 8082
PCBs (8082)

Lab Sample ID:F5D270000 672

Sample WT/Vol: 1000 / mL
Work Order: G9DK31AA
Dilution factor: 1
Moisture %:NA

Date Received: 04/21/05
Date Extracted:04/27/05
Date Analyzed: 05/02/05

QC Batch: 5117672

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
12674-11-2	Aroclor 1016	1.0	U
11104-28-2	Aroclor 1221	1.0	U
11141-16-5	Aroclor 1232	1.0	U
53469-21-9	Aroclor 1242	1.0	U
12672-29-6	Aroclor 1248	1.0	U
11097-69-1	Aroclor 1254	1.0	U
11096-82-5	Aroclor 1260	1.0	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Decachlorobiphenyl	91	(30 - 150)

LOS ALAMOS NATIONAL LABORATORY
CHECK SAMPLE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D270000 672
Method: SW846 8082
PCBs (8082)

Sample WT/Vol: 1000 / mL Date Received: 04/21/05
Work Order: G9DK31AC Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 05/02/05
Moisture %:NA

QC Batch: 5117672

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
12674-11-2	Aroclor 1016	4.01	
11096-82-5	Aroclor 1260	4.11	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Decachlorobiphenyl	87	(48 - 139)

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D210290 001
Method: SW846 8082
PCBs (8082)

Sample WT/Vol: 1000 / mL Date Received: 04/21/05
Work Order: G8V481AF Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 05/02/05
Moisture %:NA

QC Batch: 5117672

Client Sample Id: LAB MS/MSD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
12674-11-2	Aroclor 1016	4.25	
11096-82-5	Aroclor 1260	4.25	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Decachlorobiphenyl	86	(30 - 150)

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER
Method: SW846 8082
PCBs (8082)

Lab Sample ID:F5D210290 001

Sample WT/Vol: 1000 / mL
Work Order: G8V481AE
Dilution factor: 1
Moisture %:NA

Date Received: 04/21/05
Date Extracted:04/27/05
Date Analyzed: 05/02/05

QC Batch: 5117672

Client Sample Id: LAB MS/MSD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
12674-11-2	Aroclor 1016	3.64	
11096-82-5	Aroclor 1260	3.91	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Decachlorobiphenyl	49	(30 - 150)

GC ADDITIONAL QC SUMMARY DATA
FORMS 2 THROUGH 4

SW846 8082 SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220218

Lot #: F5D220218

Extraction: XXI60QH01

	CLIENT ID.	SRG01	TOT OUT
01	INTRA-LAB QC	86	00
02	RE73-05-58923	70	00
03	RE73-05-58924	66	00
04	METHOD BLK. G9DK31AA	91	00
05	LCS G9DK31AC	87	00
06	LAB MS/MSD D	86	00
07	LAB MS/MSD S	49	00

SURROGATES		QC LIMITS
SRG01	= Decachlorobiphenyl	(30-150)

\# Column to be used to flag recovery values
* Values outside of required QC Limits
D System monitoring Compound diluted out

FORM II

SW846 8082 MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220218

Matrix Spike ID: LAB MS/MSD

Lot #: F5D210290 WO #: G8V481AE
BATCH: 5117672

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	MS CONCENT. (ug/L)	MS % REC	LIMITS REC	QUAL
Aroclor 1016	5.00	ND	3.64	73	30 - 150	
Aroclor 1260	5.00	ND	3.91	78	65 - 137	

NOTES(S):

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM III

SW846 8082 MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220218

Matrix Spike ID: LAB MS/MSD

Lot #: F5D210290 WO #: G8V481AF
BATCH: 5117672

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENT. (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
Aroclor 1016	5.00	4.25	85	16	20	30- 150	
Aroclor 1260	5.00	4.25	85	8.3	20	65- 137	

NOTES(S):

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 2 outside limits
Spike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM III

SW846 8082 CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220218

Lot #: F5D270000 WO #: G9DK31AC
BATCH: 5117672

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
Aroclor 1016	5.00	4.01	80	66- 134	
Aroclor 1260	5.00	4.11	82	66- 121	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM III

BLANK WORKORDER NO.

G9DK31AA

SW846 8082 METHOD BLANK SUMMARY

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: STLSTL — SDG Number:F5D220218

Lab File ID: ABLK627A — Lot Number: F5D220218

Matrix: WATER — Extraction Method: 3510C

Date Extracted: 04/27/05

Date Analyzed(1): 05/02/05 — Date Analyzed(2): N/A

Time Analyzed(1): 16:05 — Time Analyzed(2): N/A

Instrument ID(1): GCA — Instrument ID(2): N/A

GC Column(1): CLPEST ID: 053 — GC Column(2): N/A ID: N/A

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, AND MSD:

	CLIENT ID.	SAMPLE WORK ORDER #	DATE ANALYZED(1)	DATE ANALYZED(2)
01	INTRA-LAB QC	G8V481AA	05/02/05	N/A
02	LAB MS/MSD	G8V481AE S	05/02/05	N/A
03	LAB MS/MSD	G8V481AF D	05/02/05	N/A
04	RE73-05-58923	G800L1AH	05/02/05	N/A
05	RE73-05-58924	G80091AD	05/02/05	N/A
06	CHECK SAMPLE	G9DK31AC C	05/02/05	N/A
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

COMMENTS:

FORM IV

GC STANDARDS DATA

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 22-MAR-2005 12:57
End Cal Date : 22-MAR-2005 20:05
Quant Method : ESTD
Origin : Disabled
Target Version : 4.10
Integrator : Falcon
Method file : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04A.m
Cal Date : 23-Mar-2005 10:59 owenb
Curve Type : Average

Calibration File Names:
Level 2: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL344A.d
Level 3: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL345A.d
Level 4: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL358A.d
Level 5: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL347A.d
Level 6: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL348A.d
Level 7: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL349A.d
Level 8: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL350A.d

BLO 3/23/05

Compound	100.000 Level 2	250.000 Level 3	500.000 Level 4	1000.000 Level 5	1500.000 Level 6	2500.000 Level 7	RRF	% RSD	
	4000.000 Level 8								
22 Aroclor-1016(1)	22.43000	20.56400	18.58400	17.97500	16.94867	15.81960			
	15.36000						18.24018	13.971	
(2)	32.81000	30.52000	27.33800	25.90000	24.16067	22.06440			
	21.28000						26.29615	16.219	
(3)	55.28000	55.02000	52.33000	52.19600	50.57733	47.95240			
	47.48475						51.54864	6.000	
(4)	21.90000	20.34400	19.53200	18.14000	17.14067	15.81880			
	15.49450						18.33857	12.989	
(5)	25.53000	25.78400	23.60400	23.80500	23.76733	22.56920			
	22.61025						23.95283	5.318	
23 Aroclor-1221(1)	+++++	+++++	6.88400	+++++	+++++	+++++			
	+++++						6.88400	0.000	
(2)	+++++	+++++	6.42800	+++++	+++++	+++++			
	+++++						6.42800	0.000	<-
(3)	+++++	+++++	22.21400	+++++	+++++	+++++			
	+++++						22.21400	0.000	<-
24 Aroclor-1232(1)	+++++	+++++	19.05000	+++++	+++++	+++++			
	+++++						19.05000	0.000	<-
(2)	+++++	+++++	10.58200	+++++	+++++	+++++			
	+++++						10.58200	0.000	<-
(3)	+++++	+++++	19.40000	+++++	+++++	+++++			

STL ST LOUIS

	+++++						19.40000	0.000	<-
(4)	+++++	+++++	12.49600	+++++	+++++	+++++			
	+++++						12.49600	0.000	<-
(5)	+++++	+++++	8.03400	+++++	+++++	+++++			
	+++++						8.03400	0.000	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 22-MAR-2005 12:57
End Cal Date : 22-MAR-2005 20:05
Quant Method : ESTD
Origin : Disabled
Target Version : 4.10
Integrator : Falcon
Method file : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04A.m
Cal Date : 23-Mar-2005 10:59 owenb
Curve Type : Average

Compound	100.000 Level 2 / 4000.000 Level 8	250.000 Level 3	500.000 Level 4	1000.000 Level 5	1500.000 Level 6	2500.000 Level 7	RRF	% RSD	
25 Aroclor-1242(1)	+++++ / +++++	+++++	19.82600	+++++	+++++	+++++	19.82600	0.000	<-
(2)	+++++ / +++++	+++++	14.43400	+++++	+++++	+++++	14.43400	0.000	<-
(3)	+++++ / +++++	+++++	36.97000	+++++	+++++	+++++	36.97000	0.000	<-
(4)	+++++ / +++++	+++++	18.25000	+++++	+++++	+++++	18.25000	0.000	<-
(5)	+++++ / +++++	+++++	5.41200	+++++	+++++	+++++	5.41200	0.000	<-
26 Aroclor-1248(1)	+++++ / +++++	+++++	23.56000	+++++	+++++	+++++	23.56000	0.000	<-
(2)	+++++ / +++++	+++++	37.66800	+++++	+++++	+++++	37.66800	0.000	<-
(3)	+++++ / +++++	+++++	47.79000	+++++	+++++	+++++	47.79000	0.000	<-
(4)	+++++ / +++++	+++++	35.58200	+++++	+++++	+++++	35.58200	0.000	<-
(5)	+++++ / +++++	+++++	11.93000	+++++	+++++	+++++	11.93000	0.000	<-
27 Aroclor-1254(1)	+++++ / +++++	+++++	46.88000	+++++	+++++	+++++	46.88000	0.000	<-
(2)	+++++ / +++++	+++++	33.99800	+++++	+++++	+++++	33.99800	0.000	<-
(3)	+++++ / +++++	+++++	37.81600	+++++	+++++	+++++	37.81600	0.000	<-
(4)	+++++	+++++	27.19400	+++++	+++++	+++++			

	+++++						27.19400	0.000	<-
(5)	+++++	+++++	42.30800	+++++	+++++	+++++			
	+++++						42.30800	0.000	<-

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INITIAL CALIBRATION DATA

Start Cal Date : 22-MAR-2005 12:57
End Cal Date : 22-MAR-2005 20:05
Quant Method : ESTD
Origin : Disabled
Target Version : 4.10
Integrator : Falcon
Method file : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04A.m
Cal Date : 23-Mar-2005 10:59 owenb
Curve Type : Average

Compound	100.000 Level 2	250.000 Level 3	500.000 Level 4	1000.000 Level 5	1500.000 Level 6	2500.000 Level 7	4000.000 Level 8	RRF	% RSD	
28 Aroclor-1260(1)	38.52000	37.04400	34.65600	32.99700	31.69533	29.57120	29.12650	33.37286	10.738	
(2)	62.37000	59.51200	55.21000	51.98800	49.91867	46.31040	46.07700	53.05515	11.878	
(3)	46.21000	45.77600	43.97400	42.62700	41.47333	39.29520	39.19150	42.64958	6.687	
(4)	70.20000	70.42000	68.29800	68.18200	67.23467	65.28520	65.61250	67.89034	2.970	
(5)	19.84000	22.93200	19.20600	19.05100	18.65267	18.05360	18.32800	19.43761	8.490	
35 Aroclor-1262(1)	+++++	+++++	23.85200	+++++	+++++	+++++	+++++	23.85200	0.000	<-
(2)	+++++	+++++	41.08200	+++++	+++++	+++++	+++++	41.08200	0.000	<-
(3)	+++++	+++++	47.00400	+++++	+++++	+++++	+++++	47.00400	0.000	<-
(4)	+++++	+++++	68.60600	+++++	+++++	+++++	+++++	68.60600	0.000	<-
(5)	+++++	+++++	40.29800	+++++	+++++	+++++	+++++	40.29800	0.000	<-
36 Aroclor-1268(1)	+++++	+++++	54.47200	+++++	+++++	+++++	+++++	54.47200	0.000	<-
(2)	+++++	+++++	118	+++++	+++++	+++++	+++++	118	0.000	<-
(3)	+++++	+++++	66.83200	+++++	+++++	+++++	+++++	66.83200	0.000	<-
(4)	+++++	+++++	25.71800	+++++	+++++	+++++				

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(5)	+++++ +++++ +++++	+++++	202	+++++	+++++	+++++	25.71800 202	0.000 <- 0.000 <-

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INITIAL CALIBRATION DATA

Start Cal Date : 22-MAR-2005 12:57
End Cal Date : 22-MAR-2005 20:05
Quant Method : ESTD
Origin : Disabled
Target Version : 4.10
Integrator : Falcon
Method file : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04A.m
Cal Date : 23-Mar-2005 10:59 owenb
Curve Type : Average

Compound	100.000 Level 2	250.000 Level 3	500.000 Level 4	1000.000 Level 5	1500.000 Level 6	2500.000 Level 7	RRF	% RSD	
	4000.000 Level 8								
M 37 PCB (Total)	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
$ 32 Decachlorobiphenyl	780	758	718	711	682	641			
	635						704	7.810	

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL344A.d
Report Date: 23-Mar-2005 11:02

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Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL344A.d
Lab Smp Id: ICAL2
Inj Date : 22-MAR-2005 12:57
Operator : BLO Inst ID: gca.i
Smp Info : ICAL2
Misc Info : GC0946-04
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04A.m
Meth Date : 23-Mar-2005 10:59 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358A.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	1.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	1.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

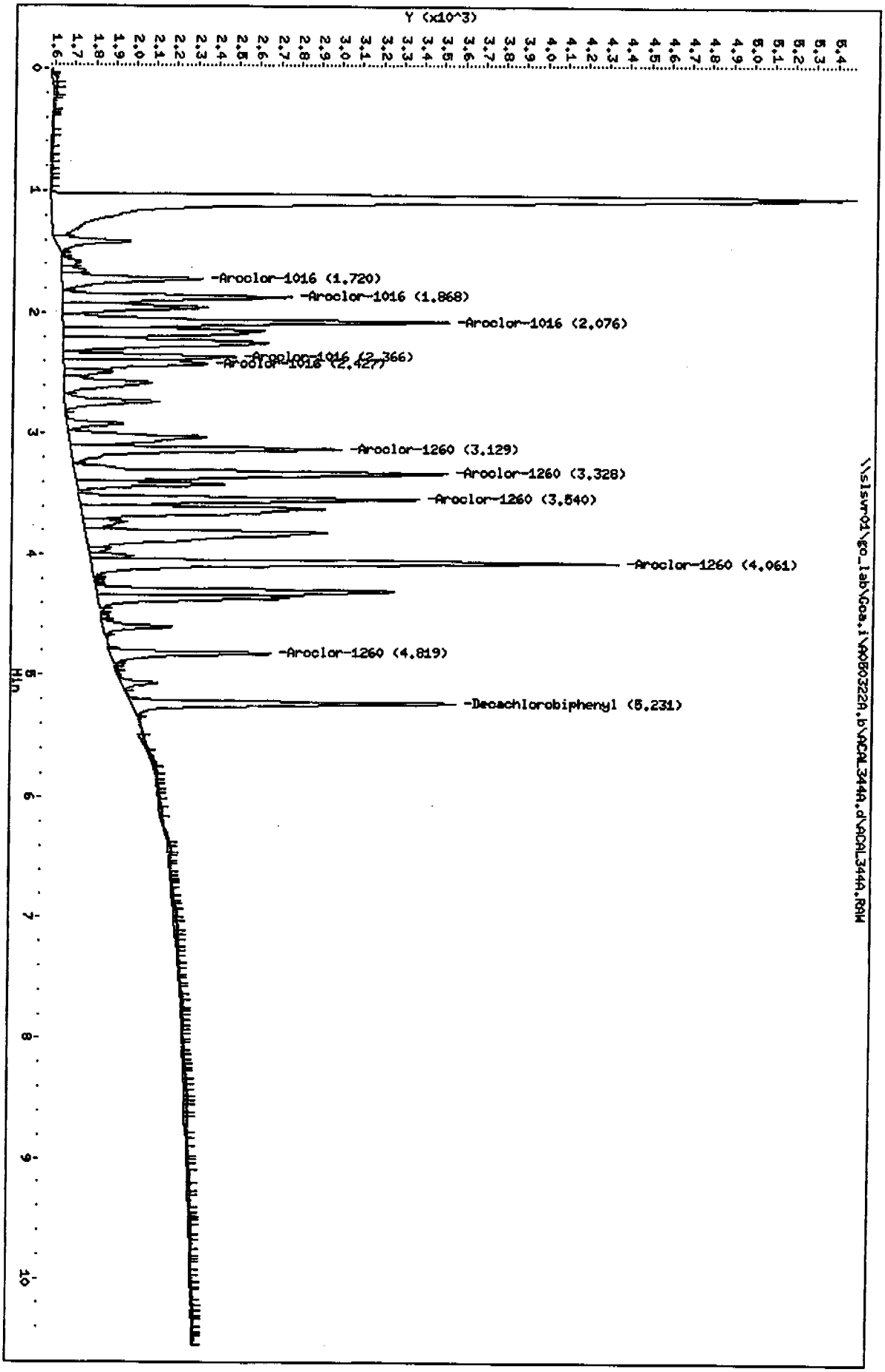
			AMOUNTS					
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ng/mL)	TARGET RANGE		RATIO
22 Aroclor-1016					CAS #: 12674-11-2			
1.720	1.716	0.004	2243	100.000	123.0	80.00-	120.00	100.00
1.867	1.859	0.008	3281	100.000	124.8	119.38-	179.06	146.28
2.075	2.067	0.008	5528	100.000	107.2	240.74-	361.10	246.46
2.366	2.357	0.009	2190	100.000	119.4	81.02-	121.53	97.64
2.426	2.418	0.008	2553	100.000	106.6	98.91-	148.36	113.82
		Average of Peak Amounts =			116.2			
28 Aroclor-1260					CAS #: 11096-82-5			
3.128	3.120	0.008	3852	100.000	115.4	80.00-	120.00	100.00(M)
3.328	3.319	0.009	6237	100.000	117.6	145.81-	218.72	161.92
3.540	3.536	0.004	4621	100.000	108.3	131.70-	197.55	119.96
4.060	4.051	0.009	7020	100.000	103.4	161.53-	242.29	182.24
4.818	4.814	0.004	1984	100.000	102.1	44.06-	66.10	51.51
		Average of Peak Amounts =			109.4			
$ 32 Decachlorobiphenyl					CAS #:			
5.230	5.226	0.004	3901	5.00000	5.544			(M)

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other_____

BLO 3/23/05

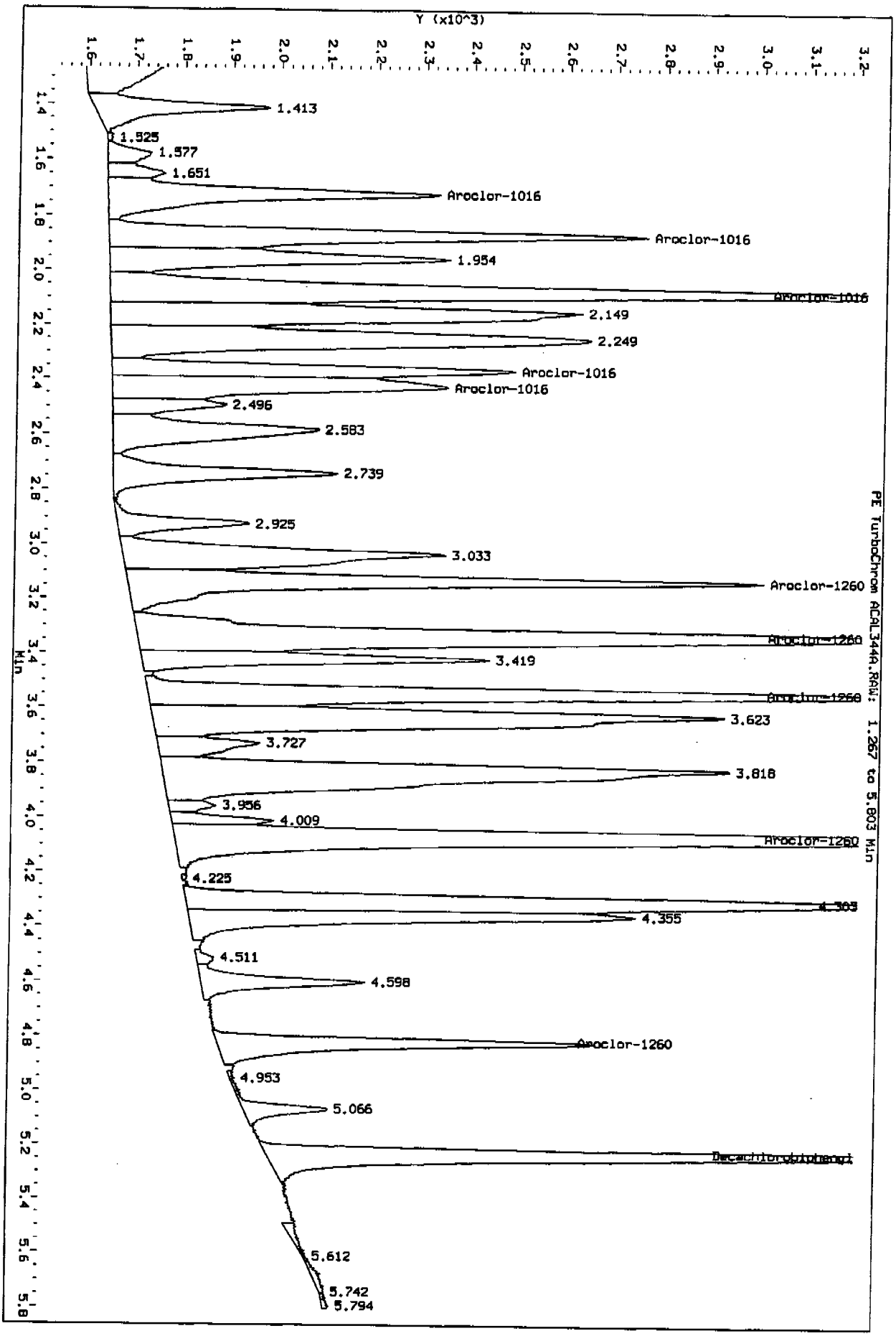
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\gc_lab\Gca.i\A080322A.b\ACAL344A.d
Date : 22-MAR-2008 12:57
Client ID:
Sample Info: ICAL2
Volume Injected (uL): 2.0
Column phase: CLPEST-1

Instrument: gca.i
Operator: BLD
Column diameter: 0.53


Y (x10^3)
Min
1.413
1.525
1.577
1.651
Aroclor-1016
Aroclor-1016
1.954
Aroclor-1016
2.149
2.249
Aroclor-1016
Aroclor-1016
2.496
2.583
2.739
2.925
3.033
Aroclor-1260
Aroclor-1260
3.419
Aroclor-1260
3.623
3.727
3.818
3.956
4.009
Aroclor-1260
4.225
4.303
4.355
4.511
4.598
Aroclor-1260
4.953
5.066
Decachlorobiphenyl
5.612
5.742
5.794
Data File: \\alsvr01\gc_lab\gca_1\A0503222A.b\ACAL344A.d\ACAL344A.RAW
Injection Date: 22-MAR-2005 12:57
Instrument: gca_1
Client Sample ID:
PE TurboChrom ACAL344A.RAW: 1.267 to 5.803 Min

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL345A.d
Report Date: 23-Mar-2005 11:02

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Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL345A.d
Lab Smp Id: ICAL3
Inj Date : 22-MAR-2005 13:12
Operator : BLO Inst ID: gca.i
Smp Info : ICAL3
Misc Info : GC0946-04
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04A.m
Meth Date : 23-Mar-2005 10:59 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358A.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	1.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	1.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

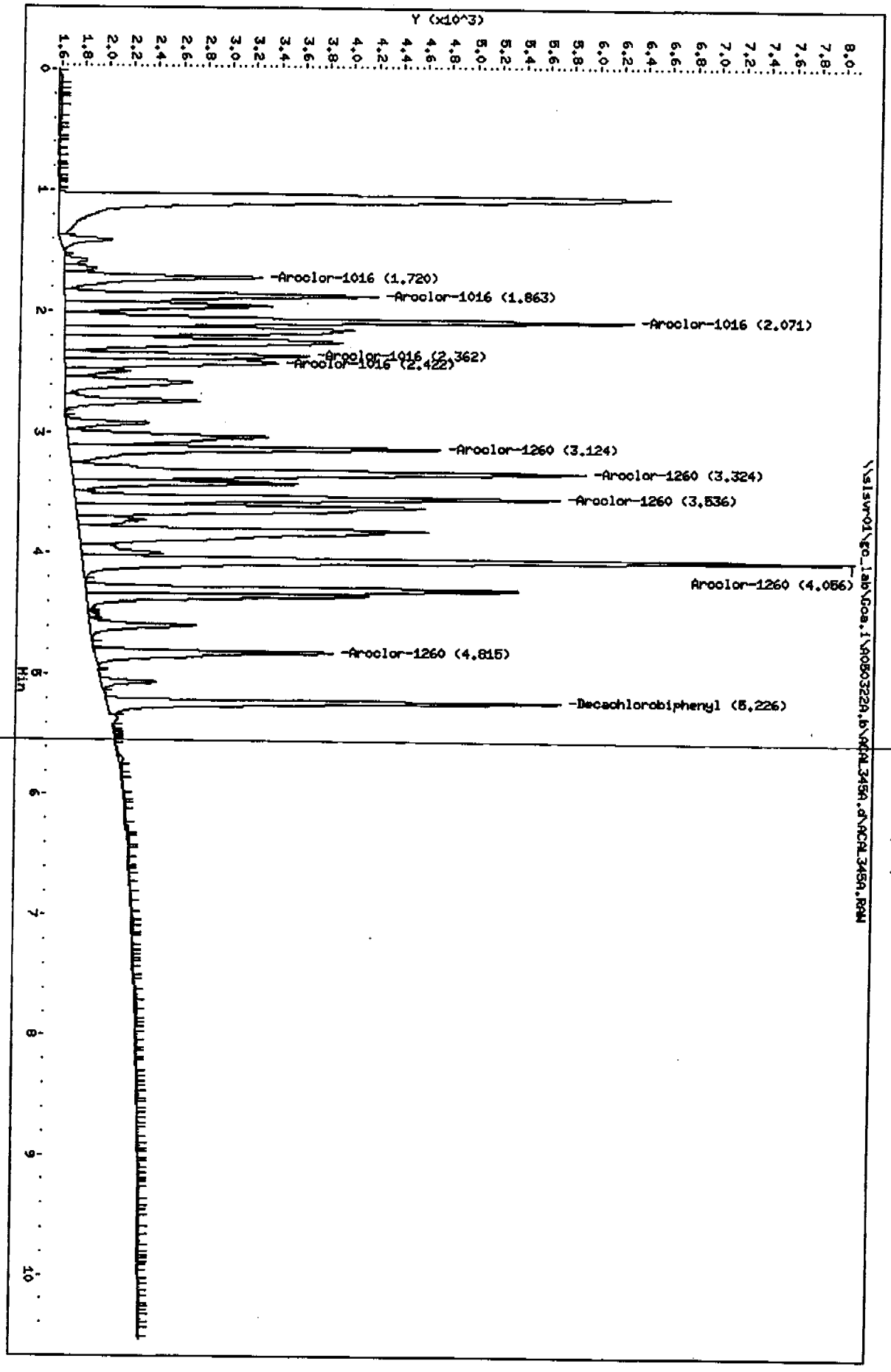
			AMOUNTS					
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ng/mL)	TARGET RANGE	RATIO	
22 Aroclor-1016					CAS #: 12674-11-2			
1.720	1.716	0.004	5141	250.000	281.8	80.00- 120.00	100.00	
1.863	1.859	0.004	7630	250.000	290.2	119.38- 179.06	148.41	
2.071	2.067	0.004	13755	250.000	266.8	240.74- 361.10	267.55	
2.361	2.357	0.004	5086	250.000	277.3	81.02- 121.53	98.93	
2.422	2.418	0.004	6446	250.000	269.1	98.91- 148.36	125.38	
Average of Peak Amounts =					277.1			
28 Aroclor-1260					CAS #: 11096-82-5			
3.124	3.120	0.004	9261	250.000	277.5	80.00- 120.00	100.00	(M)
3.323	3.319	0.004	14878	250.000	280.4	145.81- 218.72	160.65	
3.536	3.536	0.000	11444	250.000	268.3	131.70- 197.55	123.57	
4.056	4.051	0.005	17605	250.000	259.3	161.53- 242.29	190.10	
4.814	4.814	0.000	5733	250.000	294.9	44.06- 66.10	61.90	
Average of Peak Amounts =					276.1			
$ 32 Decachlorobiphenyl					CAS #:			
5.226	5.226	0.000	9473	12.5000	13.46			(M)

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other_____

BLO 3/23/05

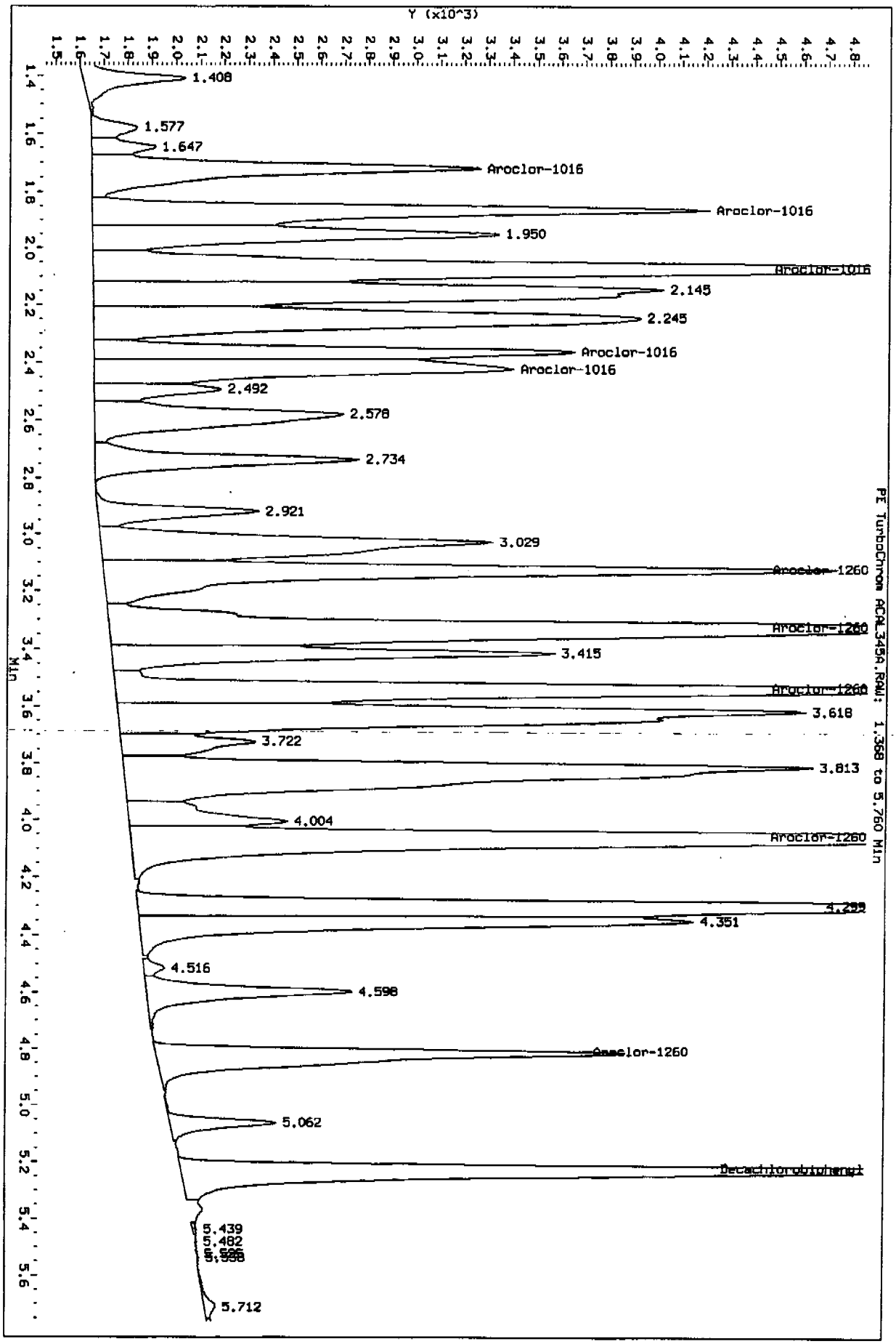
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL345A.d
Date : 22-MAR-2005 13:12
Client ID:
Sample Info: ICAL3
Volume Injected (uL): 2.0
Column phase: CLPEST-1

Instrument: gca.i
Operator: BLD
Column diameter: 0.53


Y (x10^3)
Min
1.408
1.577
1.647
Aroclor-1016
Aroclor-1016
1.950
Aroclor-1016
2.145
2.245
Aroclor-1016
Aroclor-1016
2.492
2.578
2.734
2.921
3.029
Aroclor-1260
Aroclor-1260
3.415
Aroclor-1260
3.618
3.722
3.813
4.004
Aroclor-1260
4.351
4.516
4.598
Aroclor-1260
5.062
Decachlorobiphenyl
5.439
5.482
5.712
Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL345A.d/ACAL345A.RAW
Injection Date: 22-MAR-2005 13:12
Instrument: gca.i
Client Sample ID:
PE TurboChrom ACAL345A.RAW: 1.368 to 5.760 Min

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL346A.d
Report Date: 23-Mar-2005 11:02

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Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL346A.d
Lab Smp Id: ICAL4
Inj Date : 22-MAR-2005 13:27
Operator : BLO Inst ID: gca.i
Smp Info : ICAL4
Misc Info : GC0946-04
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04A.m
Meth Date : 23-Mar-2005 10:59 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358A.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	1.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	1.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

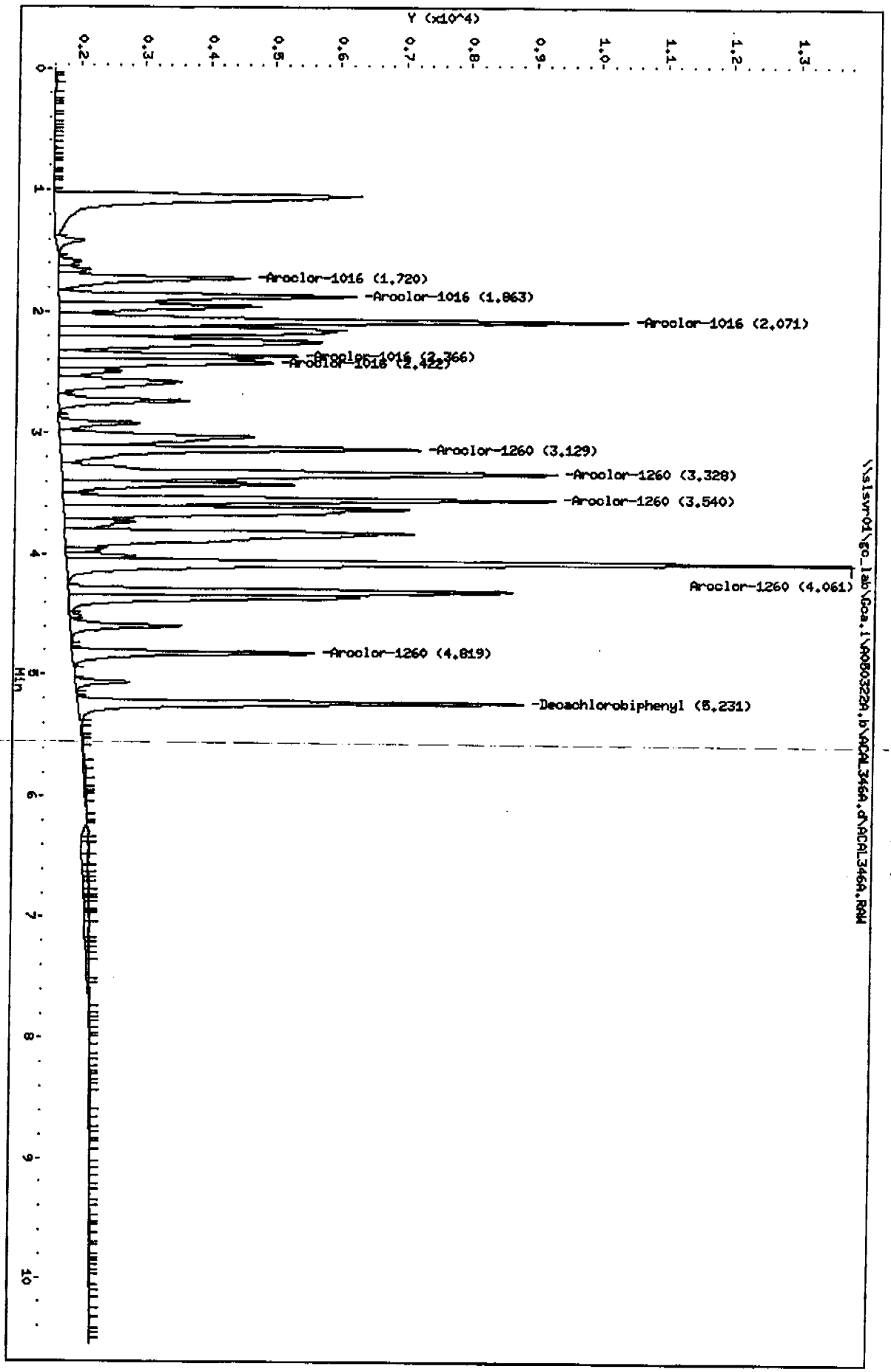
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.720	1.716	0.004	9292	500.000	509.4	80.00- 120.00	100.00
1.863	1.859	0.004	13669	500.000	519.8	119.38- 179.06	147.11
2.071	2.067	0.004	26165	500.000	507.6	240.74- 361.10	281.59
2.366	2.357	0.009	9766	500.000	532.5	81.02- 121.53	105.10
2.422	2.418	0.004	11802	500.000	492.7	98.91- 148.36	127.01
Average of Peak Amounts =					512.4		
28 Aroclor-1260					CAS #: 11096-82-5		
3.128	3.120	0.008	17328	500.000	519.2	80.00- 120.00	100.00(M)
3.328	3.319	0.009	27605	500.000	520.3	145.81- 218.72	159.31
3.540	3.536	0.004	21987	500.000	515.5	131.70- 197.55	126.89
4.060	4.051	0.009	34149	500.000	503.0	161.53- 242.29	197.07
4.818	4.814	0.004	9603	500.000	494.0	44.06- 66.10	55.42
Average of Peak Amounts =					510.4		
$ 32 Decachlorobiphenyl					CAS #:		
5.230	5.226	0.004	17962	25.0000	25.53		(M)

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 3/23/05

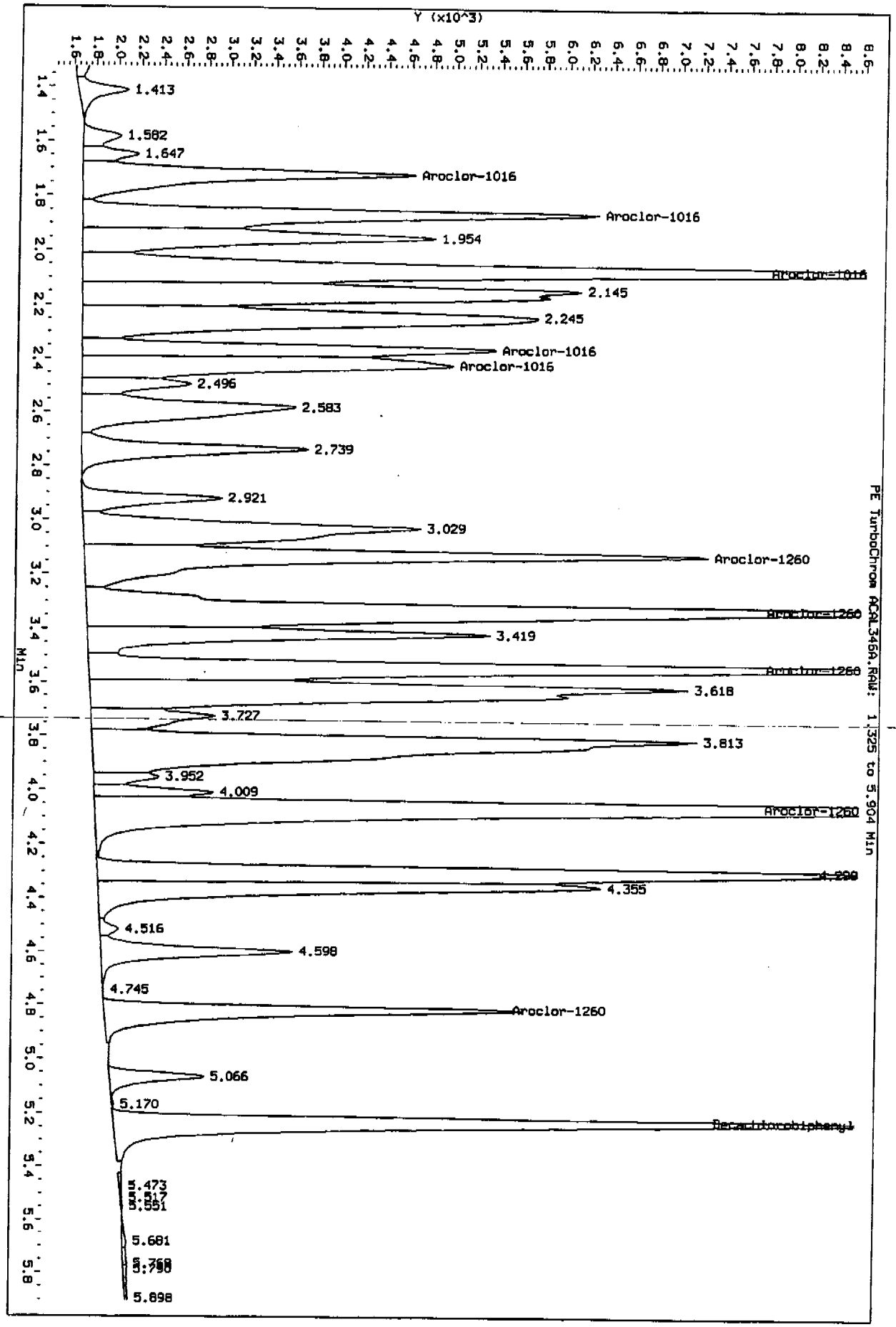
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\go_lab\Goa.i\A0803220A.b\ACAL346A.d
Date : 22-MAR-2005 13:27
Client ID:
Sample Info: ICAL4
Volume Injected (uL): 2.0
Column phase: CLPEST-1

Instrument: goa.i
Operator: BLO
Column diameter: 0.53


Y (x10^3)
Min
1.413
1.582
1.647
Aroclor-1016
Aroclor-1016
1.954
Aroclor-1016
2.145
2.245
Aroclor-1016
Aroclor-1016
2.496
2.583
2.739
2.921
3.029
Aroclor-1260
Aroclor-1260
3.419
Aroclor-1260
3.618
3.727
3.813
3.952
4.009
Aroclor-1260
4.299
4.355
4.516
4.598
4.745
Aroclor-1260
5.066
5.170
Decachlorobiphenyl
5.473
5.551
5.681
5.898
Data File: \\alsvr01\gc_lab\Gca.1\A050322A.b\ACAL346A.d\ACAL346A.RAW
Injection Date: 22-MAR-2005 13:27
Instrument: Gca.1
Client Sample ID:
PE TurboChrom ACAL346A.RAW: 1.325 to 5.904 Min

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL347A.d
Report Date: 23-Mar-2005 11:02

STL St. Louis

Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL347A.d
Lab Smp Id: ICAL5
Inj Date : 22-MAR-2005 13:41
Operator : BLO Inst ID: gca.i
Smp Info : ICAL5
Misc Info : GC0946-04
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04A.m
Meth Date : 23-Mar-2005 10:59 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358A.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	1.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	1.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.711	1.716	-0.005	17975	1000.00	985.5	80.00- 120.00	100.00(M)
1.859	1.859	0.000	25900	1000.00	984.9	119.38- 179.06	144.09
2.067	2.067	0.000	52196	1000.00	1012	240.74- 361.10	290.38
2.357	2.357	0.000	18140	1000.00	989.2	81.02- 121.53	100.92
2.418	2.418	0.000	23805	1000.00	993.8	98.91- 148.36	132.43
Average of Peak Amounts =					993.2		
28 Aroclor-1260					CAS #: 11096-82-5		
3.120	3.120	0.000	32997	1000.00	988.7	80.00- 120.00	100.00(M)
3.319	3.319	0.000	51988	1000.00	979.9	145.81- 218.72	157.55
3.531	3.536	-0.005	42627	1000.00	999.5	131.70- 197.55	129.18
4.051	4.051	0.000	68182	1000.00	1004	161.53- 242.29	206.63
4.814	4.814	0.000	19051	1000.00	980.1	44.06- 66.10	57.74
Average of Peak Amounts =					990.5		
$ 32 Decachlorobiphenyl					CAS #:		
5.226	5.226	0.000	35539	50.0000	50.50		(M)

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

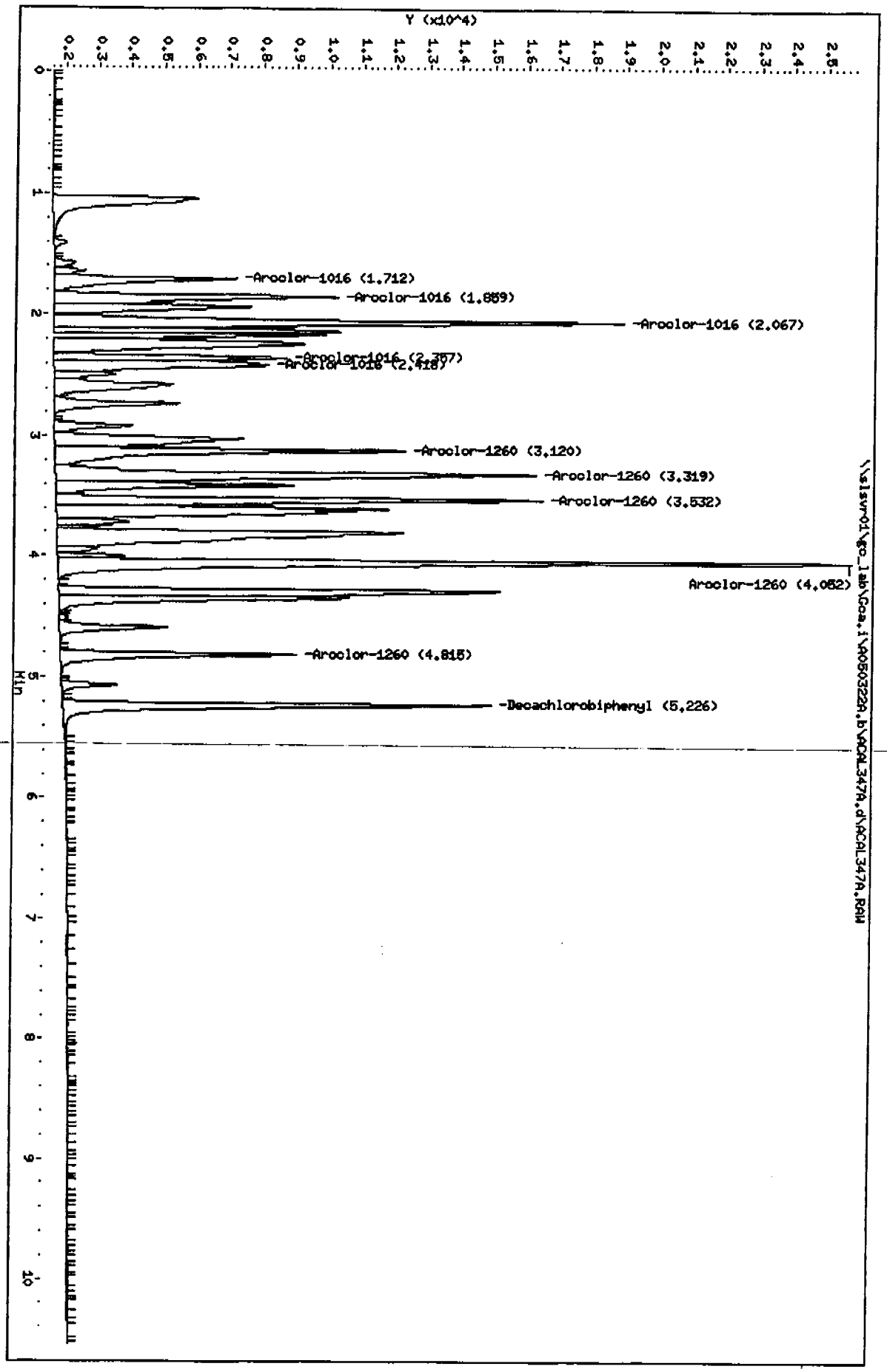
BLO 3/23/05

LOT #F5D220218

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL347A.d
Report Date: 23-Mar-2005 11:02

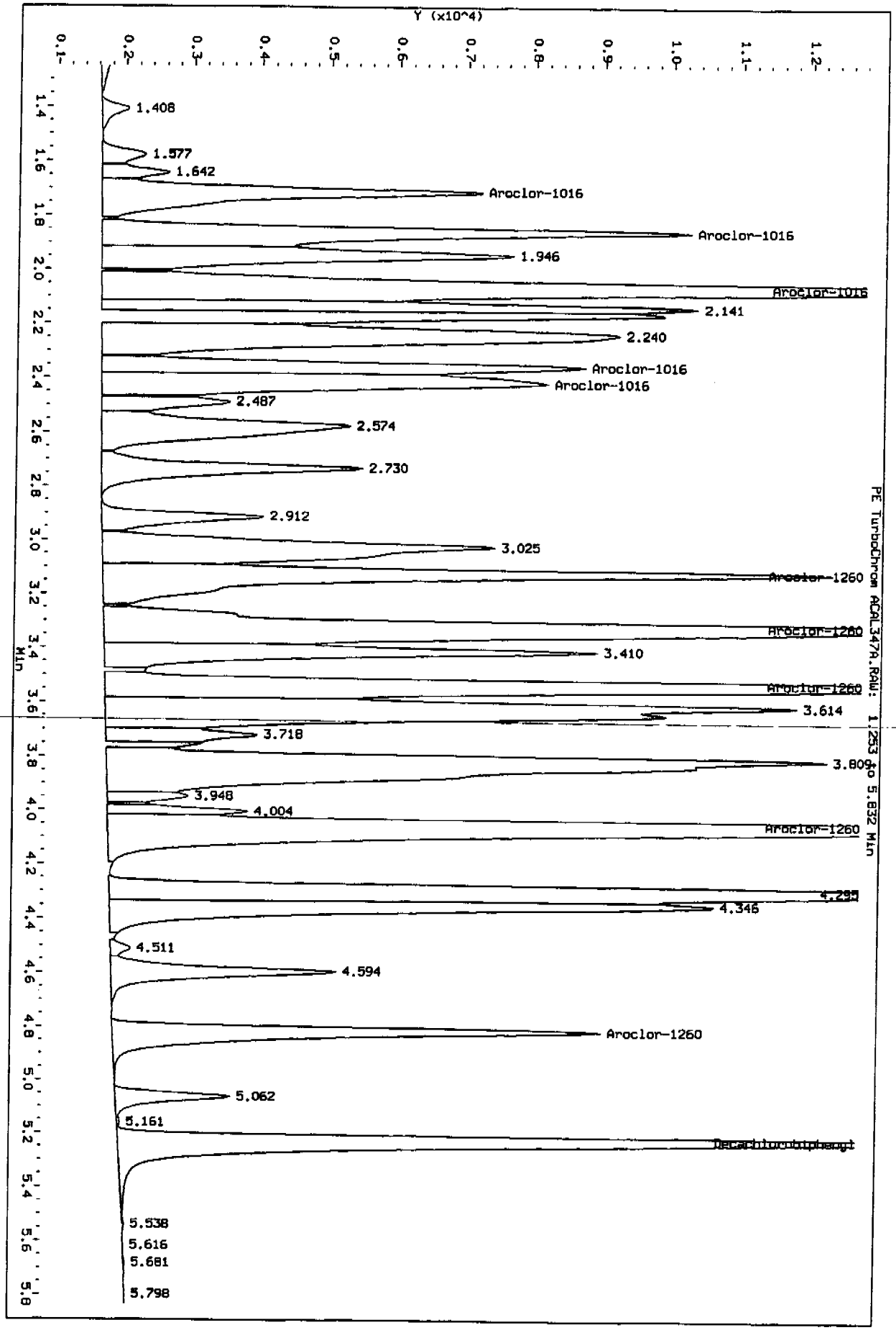
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\gc_lab\Goa.i\A050322A.b\ACAL347A.d
Date : 22-MAR-2005 13:41
Client ID:
Sample Info: ICAL5
Volume Injected (uL): 2.0
Column phase: CLPEST-1

Instrument: goa.i
Operator: BLO
Column diameter: 0.53


Y (x10^4)
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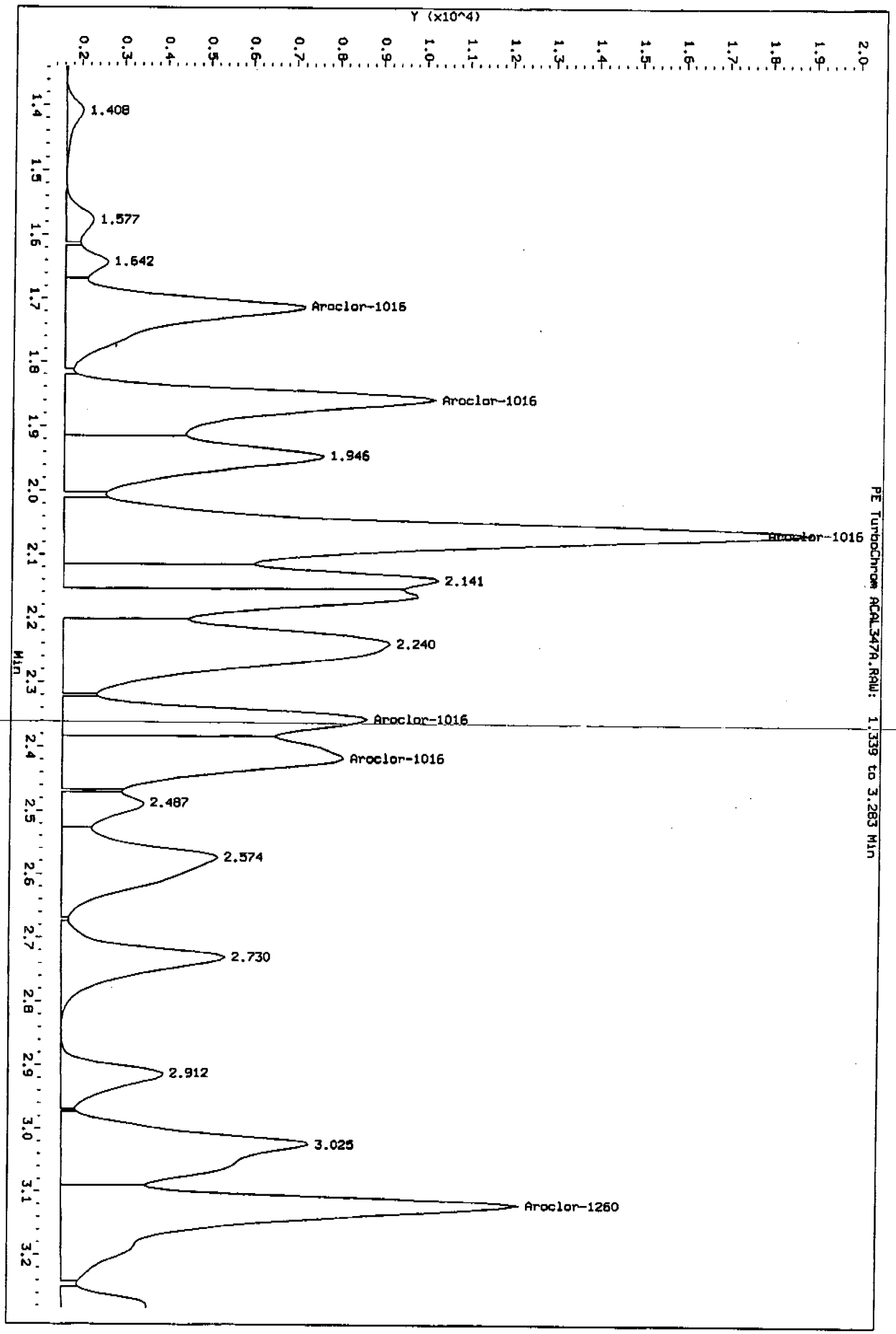
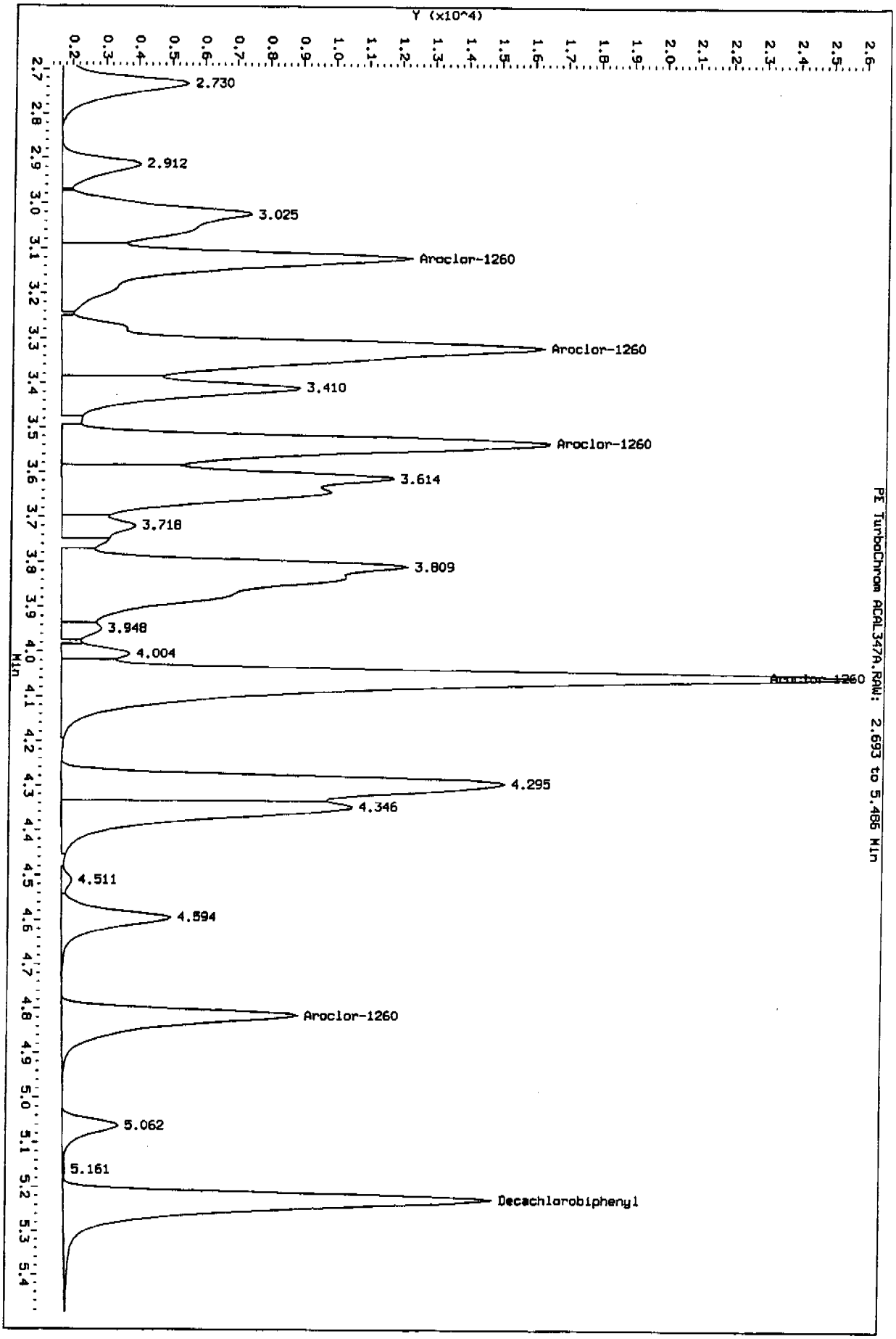
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
Min
1.4
1.6
1.8
2.0
2.2
2.4
2.6
2.8
3.0
3.2
3.4
3.6
3.8
4.0
4.2
4.4
4.6
4.8
5.0
5.2
5.4
5.6
5.8
1.408
1.577
1.642
Aroclor-1016
Aroclor-1016
1.946
Aroclor-1016
2.141
2.240
Aroclor-1016
Aroclor-1016
2.487
2.574
2.730
2.912
3.025
Aroclor-1260
Aroclor-1260
3.410
Aroclor-1260
3.614
3.718
3.809
3.948
4.004
Aroclor-1260
4.295
4.345
4.511
4.594
Aroclor-1260
5.062
5.161
Decachlorobiphenyl
5.538
5.616
5.681
5.798
Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL347A.d\ACAL347A.RAW
Injection Date: 22-MAR-2005 13:41
Instrument: gca.i
Client Sample ID:
PE TurboChrom ACAL347A.RAW: 1.253 to 5.832 Min


Y (x10^4)
Data File: \\slsvr01\gc_lab\Gca_1\A050322A.b\ACAL347A.d\ACAL347A.RAW
Injection Date: 22-MAR-2005 13:41
Instrument: gca_1
Client Sample ID:
PE TurboChrom ACAL347A.RAW: 1.339 to 3.283 Min
Min
1.408
1.577
1.642
Aroclor-1016
Aroclor-1016
1.946
Aroclor-1016
2.141
2.240
Aroclor-1016
Aroclor-1016
2.487
2.574
2.730
2.912
3.025
Aroclor-1260


Data File: \\slsvr01\gc_lab\Gca_1\A0503220.b\ACAL347A.d\ACAL347A.RAW
Injection Date: 22-MAR-2005 13:41
Instrument: gca_1
Client Sample ID:
Y (x10^4)
Min
2.730
2.912
3.025
Aroclor-1260
Aroclor-1260
3.410
Aroclor-1260
3.614
3.718
3.809
3.948
4.004
Aroclor-1260
4.295
4.346
4.511
4.594
Aroclor-1260
5.062
5.161
Decachlorobiphenyl
PE TurboChrom ACAL347A.RAW: 2.693 to 5.486 Min

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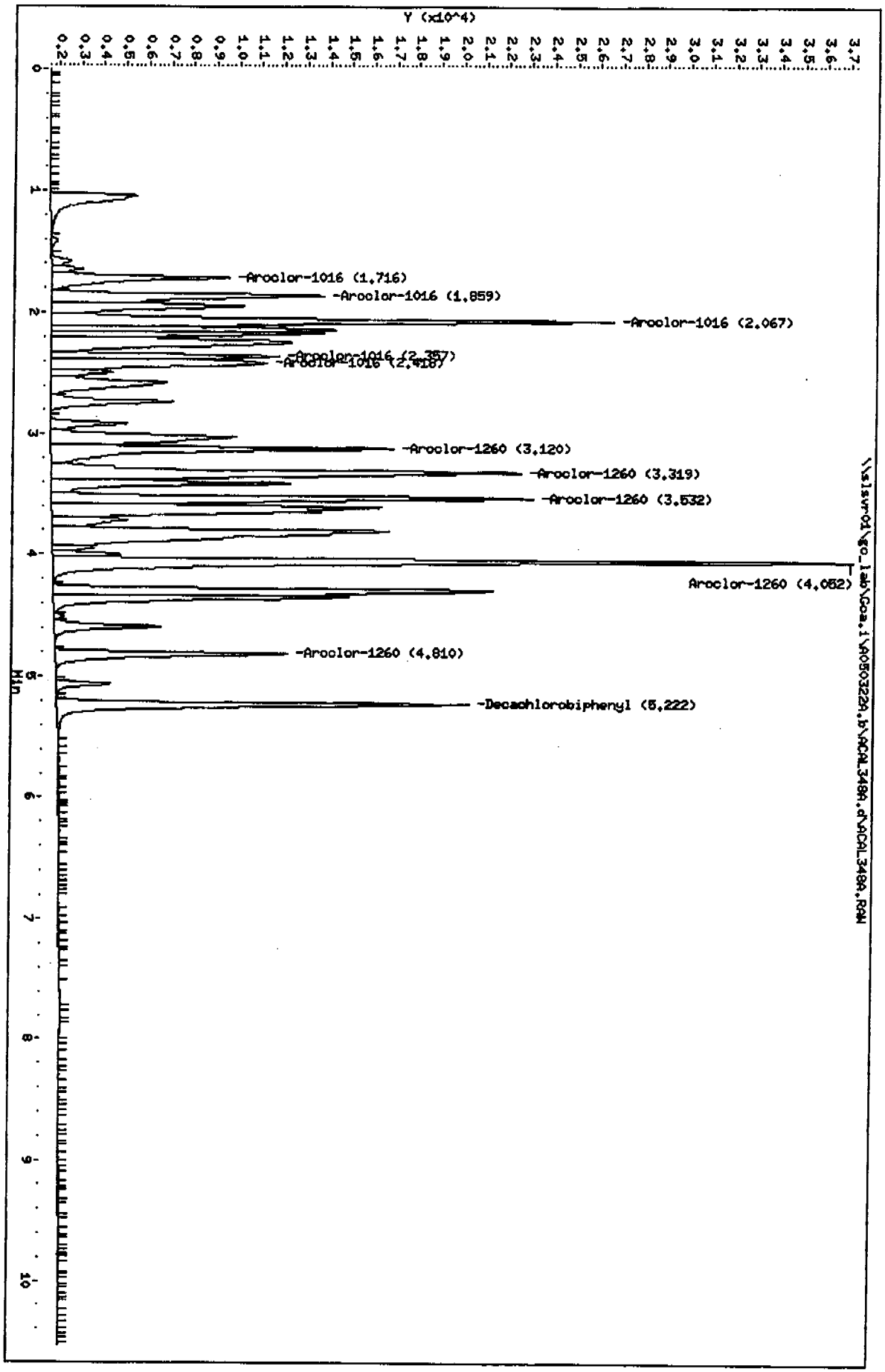
Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL348A.d
Lab Smp Id: ICAL6
Inj Date : 22-MAR-2005 13:56
Operator : BLO Inst ID: gca.i
Smp Info : ICAL6
Misc Info : GC0946-04
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04A.m
Meth Date : 23-Mar-2005 10:59 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358A.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	1.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	1.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

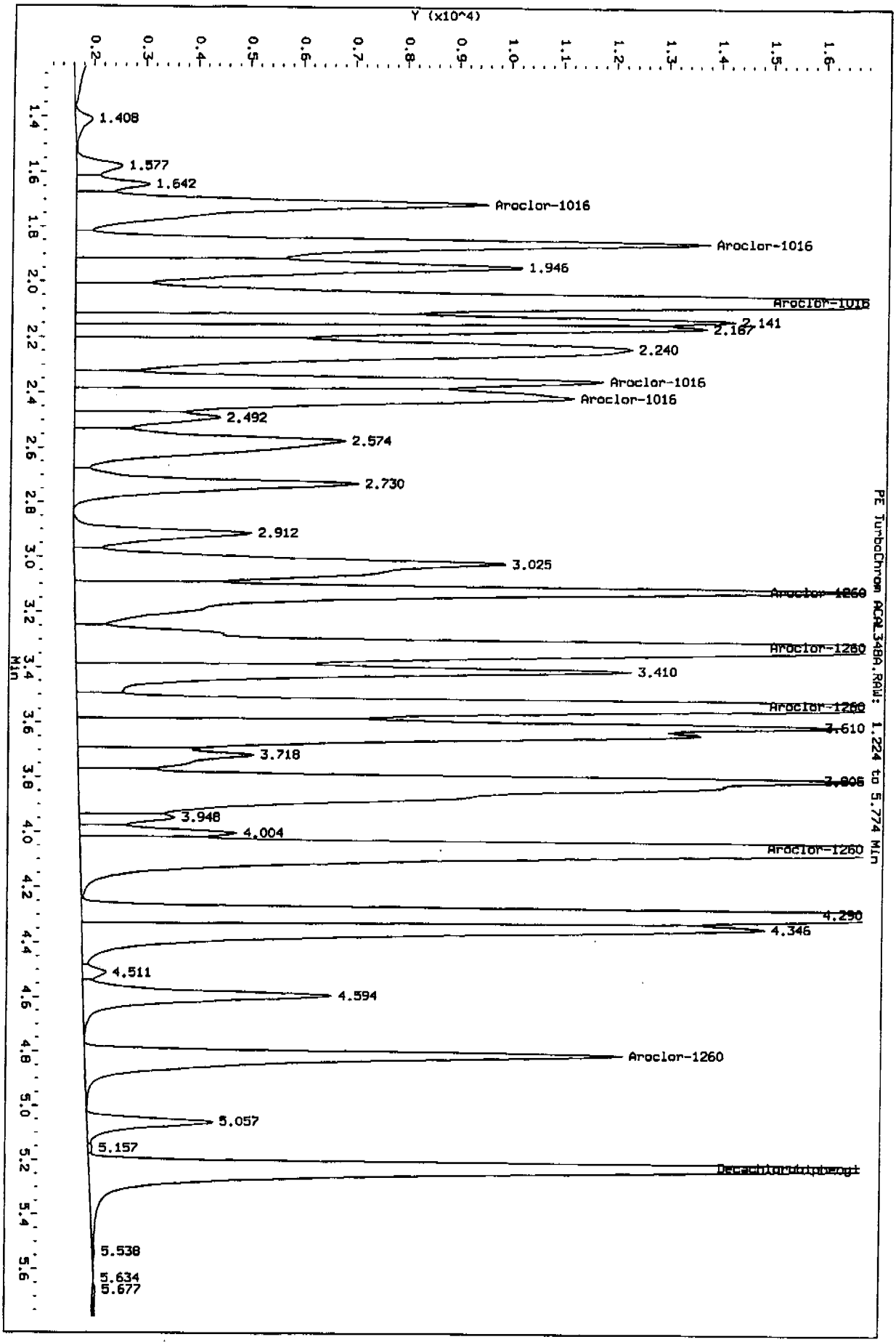
			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.716	1.716	0.000	25423	1500.00	1394	80.00- 120.00	100.00
1.859	1.859	0.000	36241	1500.00	1378	119.38- 179.06	142.55
2.067	2.067	0.000	75866	1500.00	1472	240.74- 361.10	298.41
2.357	2.357	0.000	25711	1500.00	1402	81.02- 121.53	101.13
2.418	2.418	0.000	35651	1500.00	1488	98.91- 148.36	140.23
	Average of Peak Amounts =				1427		
28 Aroclor-1260					CAS #: 11096-82-5		
3.120	3.120	0.000	47543	1500.00	1425	80.00- 120.00	100.00
3.319	3.319	0.000	74878	1500.00	1411	145.81- 218.72	157.50
3.531	3.536	-0.005	62210	1500.00	1459	131.70- 197.55	130.85
4.051	4.051	0.000	100852	1500.00	1486	161.53- 242.29	212.13
4.810	4.814	-0.004	27979	1500.00	1439	44.06- 66.10	58.85
	Average of Peak Amounts =				1444		
$ 32 Decachlorobiphenyl					CAS #:		
5.221	5.226	-0.005	51147	75.0000	72.69		

BLO 3/23/05



Data File: \\slsvr01\go_lab\Goa.i\A0503220.b\ACAL348A.d
Date : 22-MAR-2005 13:56
Client ID:
Sample Info: ICAL6
Volume Injected (uL): 2.0
Column phase: CLPEST-1

Instrument: goa.i
Operator: BLO
Column diameter: 0.53


Y (x10^4)
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0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
Min
1.4
1.6
1.8
2.0
2.2
2.4
2.6
2.8
3.0
3.2
3.4
3.6
3.8
4.0
4.2
4.4
4.6
4.8
5.0
5.2
5.4
5.6
1.408
1.577
1.642
Aroclor-1016
Aroclor-1016
1.946
Aroclor-1016
2.141
2.167
2.240
Aroclor-1016
Aroclor-1016
2.492
2.574
2.730
2.912
3.025
Aroclor-1260
Aroclor-1260
3.410
Aroclor-1260
3.610
3.718
3.805
3.948
4.004
Aroclor-1260
4.290
4.346
4.511
4.594
Aroclor-1260
5.057
5.157
Decachlorodiphenyl
5.538
5.634
5.677
Data File: \\alsvr01\gc_lab\Gca.i\A050322A.b\ACAL348A.d/ACAL348A.RAW
Injection Date: 22-MAR-2005 13:56
Instrument: gca.i
Client Sample ID:
PE TurboChrom ACAL348A.RAW: 1.224 to 5.774 Min

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL349A.d
Report Date: 23-Mar-2005 11:03

STL St. Louis

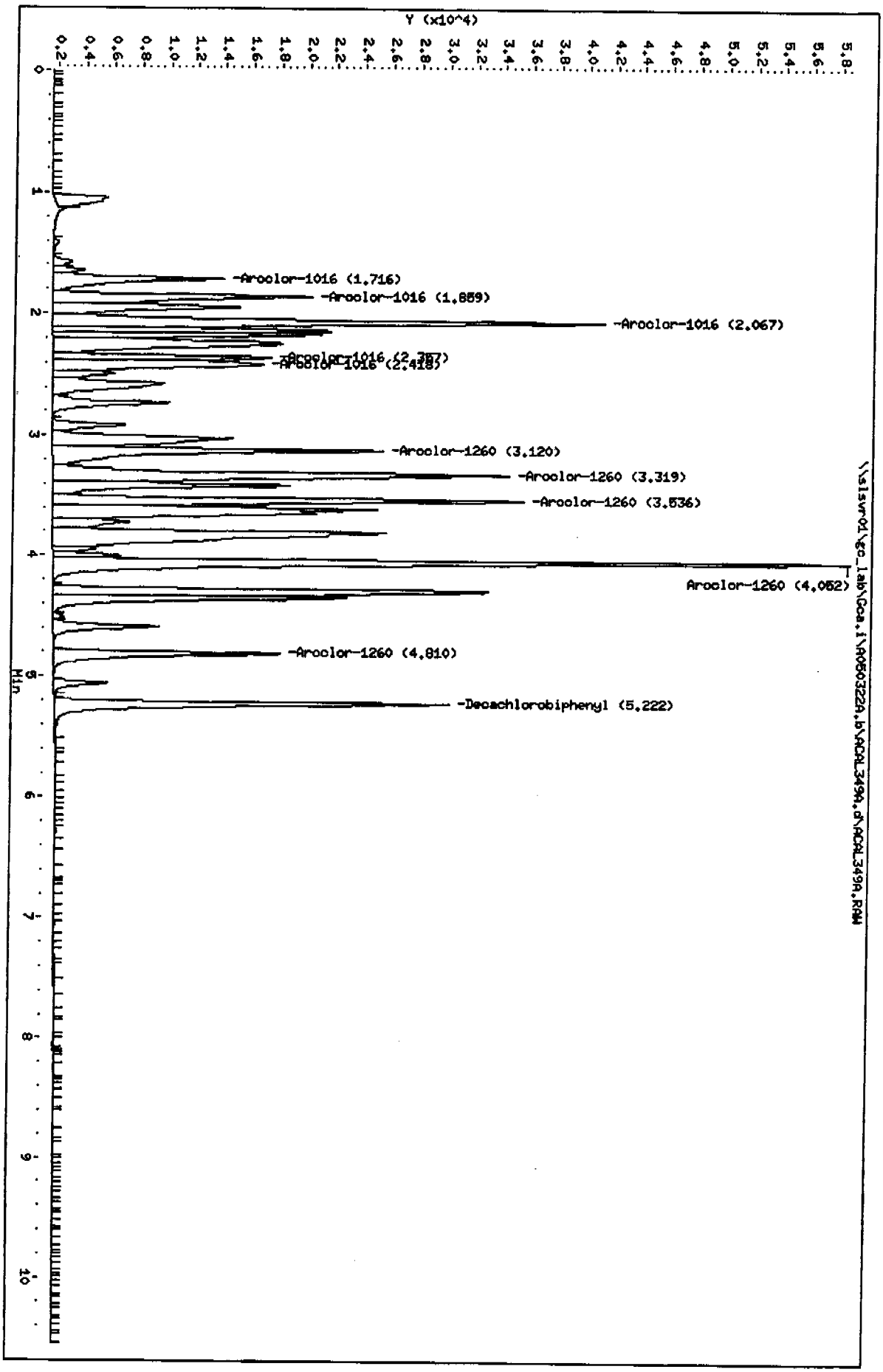
Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL349A.d
Lab Smp Id: ICAL7
Inj Date : 22-MAR-2005 14:10
Operator : BLO Inst ID: gca.i
Smp Info : ICAL7
Misc Info : GC0946-04
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04A.m
Meth Date : 23-Mar-2005 10:59 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358A.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	1.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	1.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

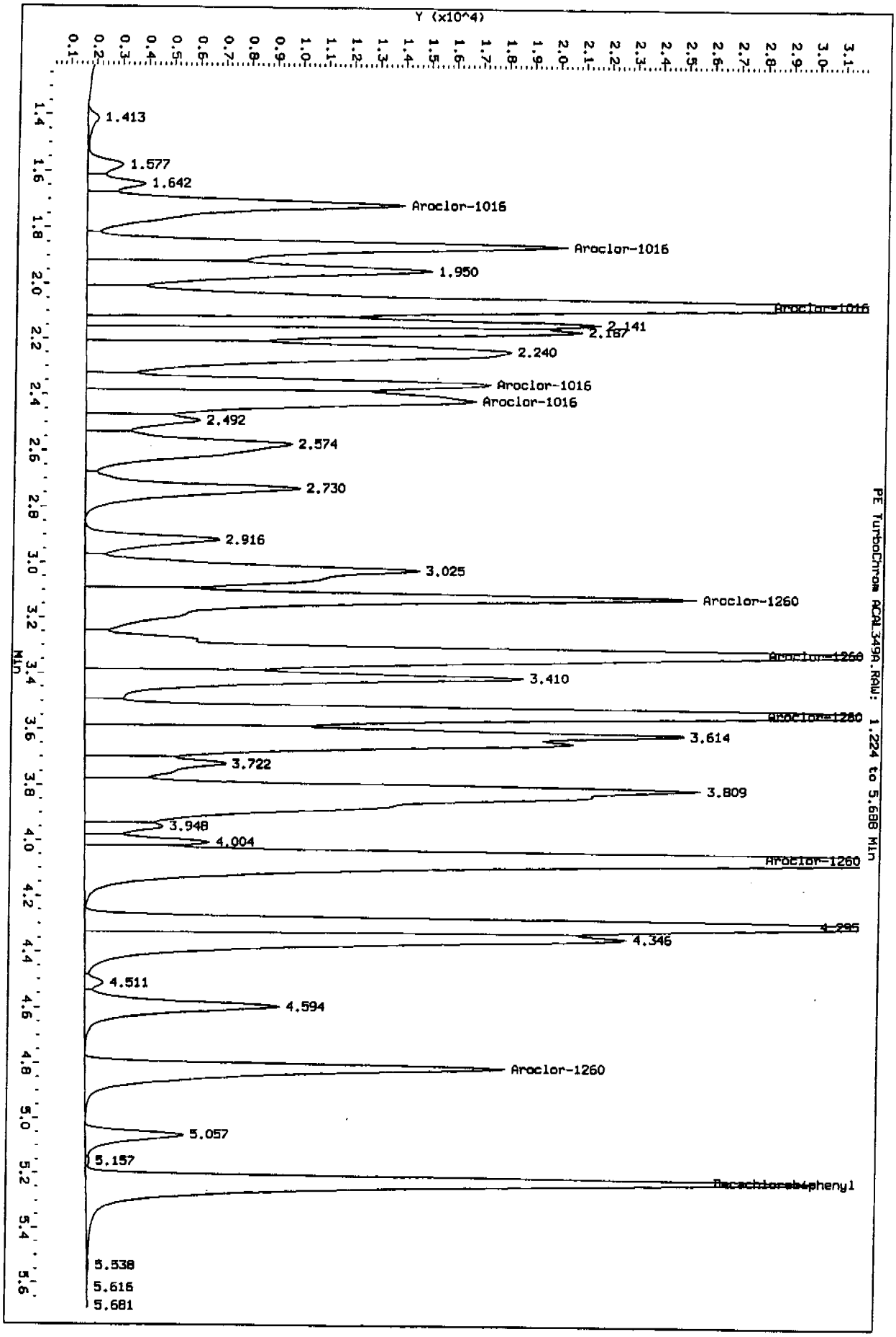
			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.716	1.716	0.000	39549	2500.00	2168	80.00- 120.00	100.00
1.859	1.859	0.000	55161	2500.00	2098	119.38- 179.06	139.48
2.067	2.067	0.000	119881	2500.00	2326	240.74- 361.10	303.12
2.357	2.357	0.000	39547	2500.00	2156	81.02- 121.53	99.99
2.418	2.418	0.000	56423	2500.00	2356	98.91- 148.36	142.67
		Average of Peak Amounts =			2221		
28 Aroclor-1260					CAS #: 11096-82-5		
3.120	3.120	0.000	73928	2500.00	2215	80.00- 120.00	100.00
3.319	3.319	0.000	115776	2500.00	2182	145.81- 218.72	156.61
3.536	3.536	0.000	98238	2500.00	2303	131.70- 197.55	132.88
4.051	4.051	0.000	163213	2500.00	2404	161.53- 242.29	220.77
4.810	4.814	-0.004	45134	2500.00	2322	44.06- 66.10	61.05
		Average of Peak Amounts =			2285		
$ 32 Decachlorobiphenyl					CAS #:		
5.221	5.226	-0.005	80154	125.000	113.9		

BLO 3/23/05



Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL349A.d
Date : 22-MAR-2005 14:10
Client ID:
Sample Info: ICAL7
Volume Injected (uL): 2.0
Column phase: CLPEST-1

Instrument: gca.i
Operator: BLO
Column diameter: 0.53


Y (x10^4)
Min
1.413
1.577
1.642
Aroclor-1016
Aroclor-1016
1.950
Aroclor-1016
2.141
2.187
2.240
Aroclor-1016
Aroclor-1016
2.492
2.574
2.730
2.916
3.025
Aroclor-1260
Aroclor-1260
3.410
Aroclor-1260
3.614
3.722
3.809
3.948
4.004
Aroclor-1260
4.295
4.346
4.511
4.594
Aroclor-1260
5.057
5.157
Decachlorobiphenyl
5.538
5.616
5.681
Data File: \\slsvr01\gc_lab\Gca_1\A050322A.b\ACAL349A.d\ACAL349A.RAW
Injection Date: 22-MAR-2005 14:10
Instrument: gca.1
Client Sample ID:
PE TurboChrom ACAL349A.RAW: 1.224 to 5.688 Min

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL350A.d
Report Date: 23-Mar-2005 11:03

STL St. Louis

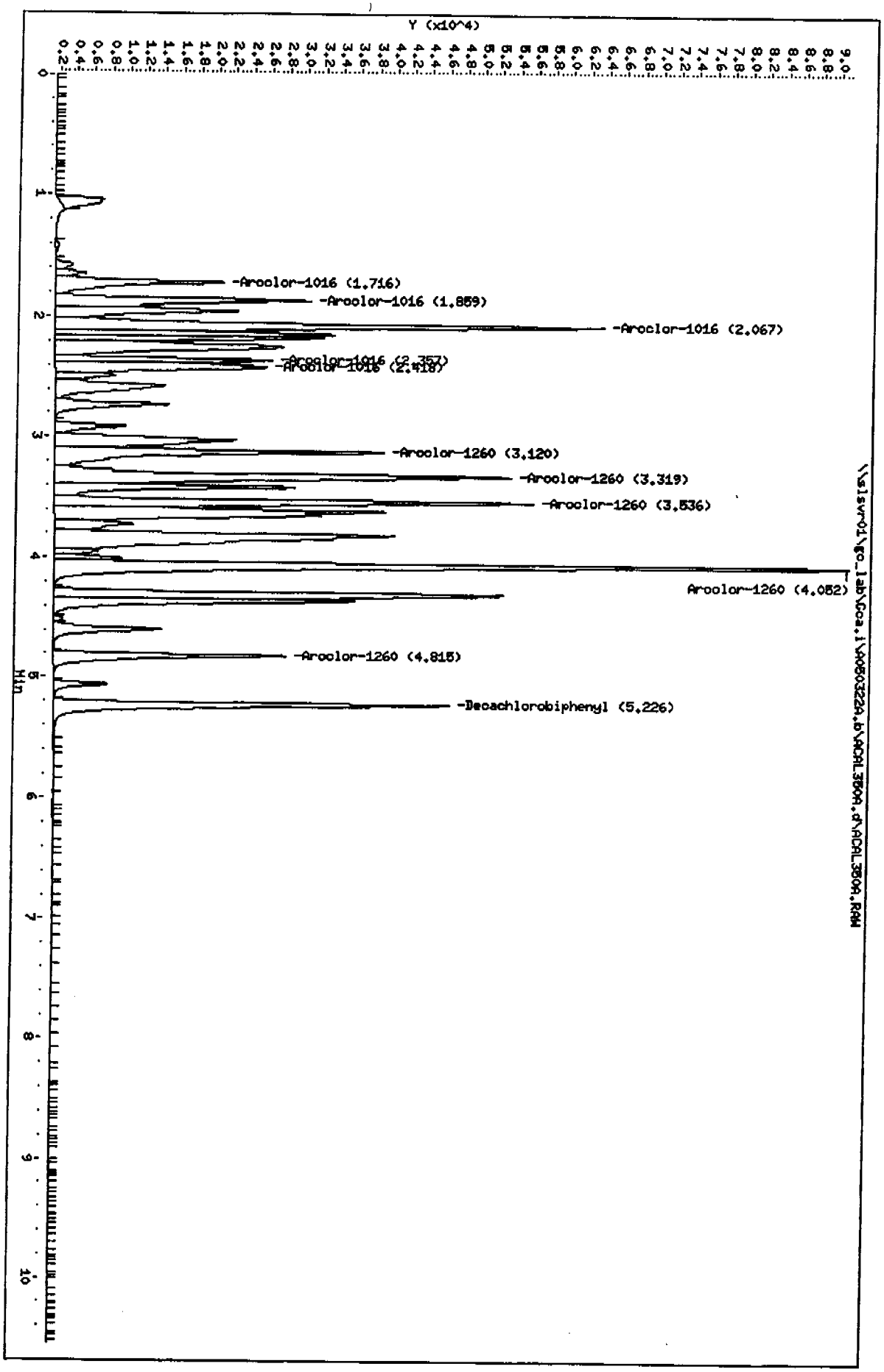
Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL350A.d
Lab Smp Id: ICAL8
Inj Date : 22-MAR-2005 14:25
Operator : BLO Inst ID: gca.i
Smp Info : ICAL8
Misc Info : GC0946-04
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04A.m
Meth Date : 23-Mar-2005 10:59 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358A.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	1.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	1.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

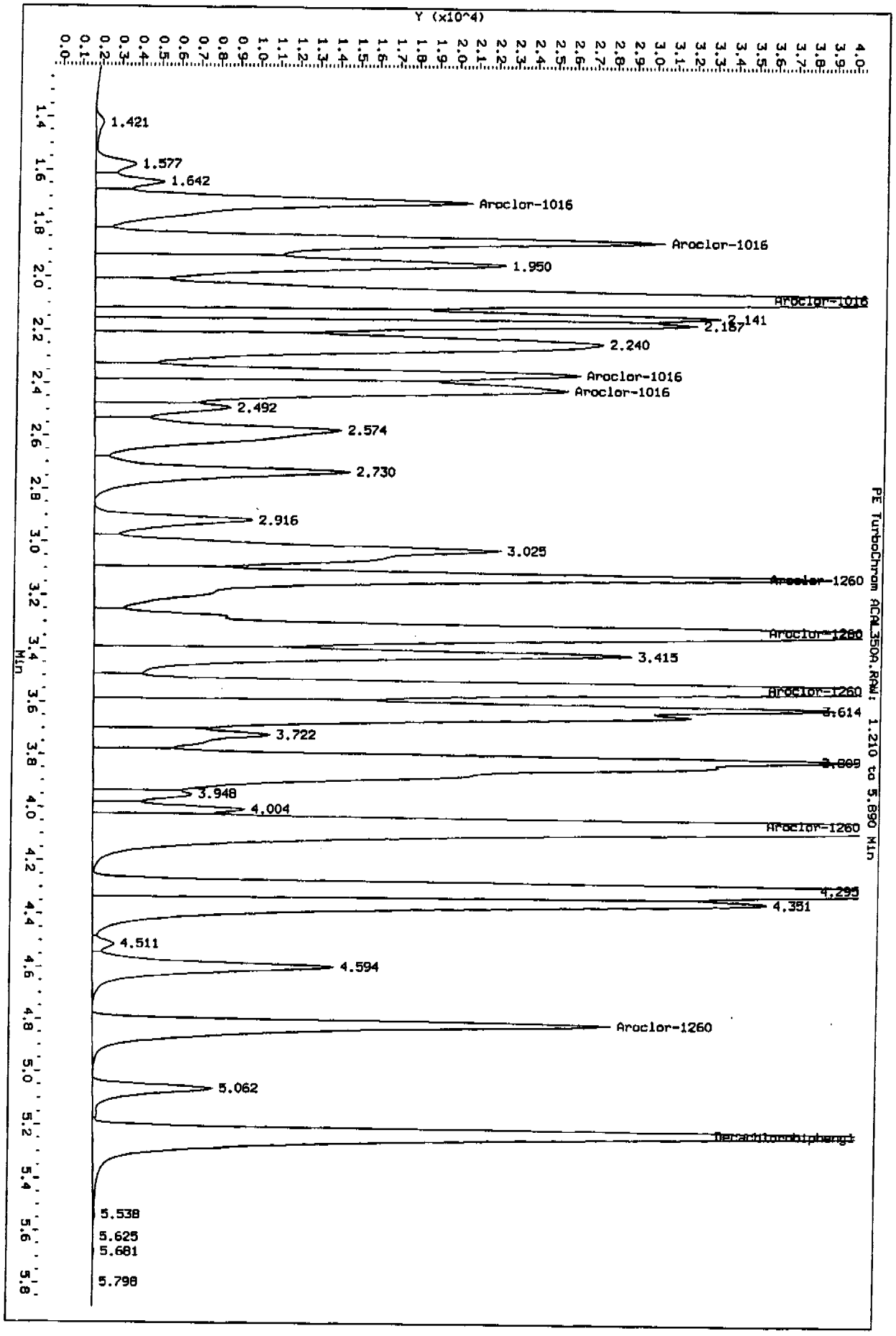
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.716	1.716	0.000	61440	4000.00	3368	80.00- 120.00	100.00
1.859	1.859	0.000	85120	4000.00	3237	119.38- 179.06	138.54
2.067	2.067	0.000	189939	4000.00	3685	240.74- 361.10	309.15
2.357	2.357	0.000	61978	4000.00	3380	81.02- 121.53	100.88
2.418	2.418	0.000	90441	4000.00	3776	98.91- 148.36	147.20
	Average of Peak Amounts =				3489		
28 Aroclor-1260					CAS #: 11096-82-5		
3.120	3.120	0.000	116506	4000.00	3491	80.00- 120.00	100.00
3.319	3.319	0.000	184308	4000.00	3474	145.81- 218.72	158.20
3.536	3.536	0.000	156766	4000.00	3676	131.70- 197.55	134.56
4.051	4.051	0.000	262450	4000.00	3866	161.53- 242.29	225.27
4.814	4.814	0.000	73312	4000.00	3772	44.06- 66.10	62.93
	Average of Peak Amounts =				3656		
$ 32 Decachlorobiphenyl					CAS #:		
5.226	5.226	0.000	127036	200.000	180.5		

BLO 3/23/05



Data File: \\slsvr01\go_lab\Goa.i\A050322A.b\ACAL350A.d
Date : 22-MAR-2005 14:25
Client ID:
Sample Info: ICAL8
Volume Injected (uL): 2.0
Column phase: CLPEST-1

Instrument: goa.i
Operator: BLO
Column diameter: 0.53


Y (x10^4)
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1.577
1.642
Aroclor-1016
Aroclor-1016
1.950
Aroclor-1016
2.141
2.187
2.240
Aroclor-1016
Aroclor-1016
2.492
2.574
2.730
2.916
3.025
Aroclor-1260
Aroclor-1260
3.415
Aroclor-1260
3.614
3.722
3.809
3.948
4.004
Aroclor-1260
4.295
4.351
4.511
4.594
Aroclor-1260
5.062
Decachlorobiphenyl
5.538
5.625
5.681
5.798
PE TurboChrom ACAL350A.RAW: 1.210 to 5.890 Min
Data File: \\elsvr01\GC_lab\Gca.i\A0503220.b\ACAL350A.d\ACAL350A.RAW
Injection Date: 22-MAR-2005 14:25
Instrument: gca.i
Client Sample ID:

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b/AICV352A.d
Report Date: 03/23/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: gca.i
Lab File ID: AICV352A.d
Analysis Type: WATER

Injection Date: 22-MAR-2005 14:54
Lab Sample ID: ICV
Method File: \\slsvr01\gc_lab\Gca.i\A050322A.

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	890.0179	11.0	15.0
29 Aroclor-1260	1000.0000	902.1290	9.8	15.0
34 Decachlorobiphenyl	~~50.0000~~	~~0.0000~~	~~100.0~~	~~15.0~~ <-

BLO 3/23/05

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\AICV352A.d
Report Date: 23-Mar-2005 11:07

STL St. Louis

Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\AICV352A.d
Lab Smp Id: ICV
Inj Date : 22-MAR-2005 14:54
Operator : BLO Inst ID: gca.i
Smp Info : ICV
Misc Info : OP0128-05
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04A.m
Meth Date : 23-Mar-2005 11:06 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358A.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 4.10 Sample Matrix: WATER
Processing Host: SLGC06

Concentration Formula: Amt * DF * (Uf/Vi) * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vi	2.000	Injection Volume
Vt	10.000	Volume of final extract (ml)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

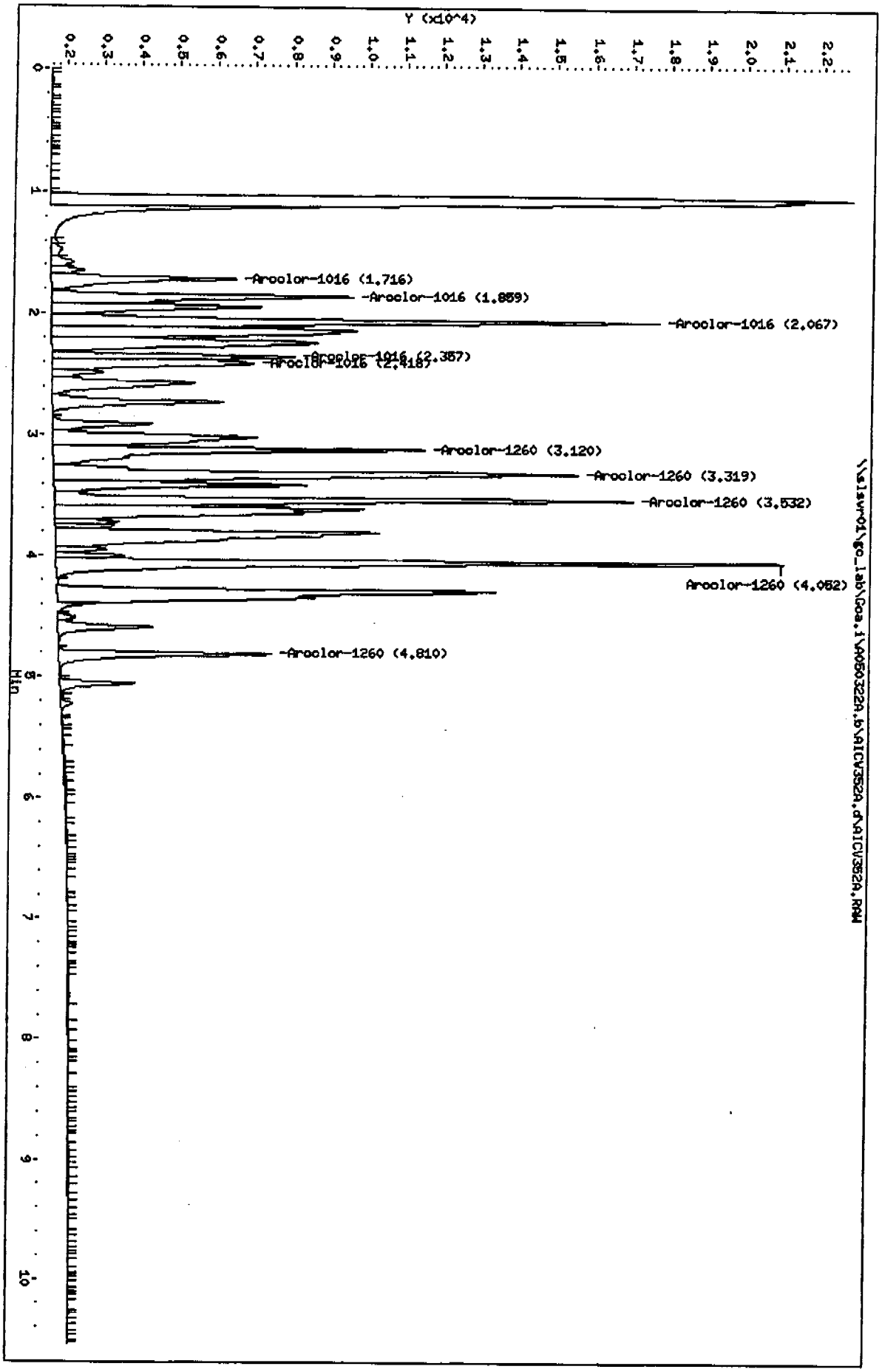
			AMOUNTS					
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ng/mL)	TARGET RANGE		RATIO
22 Aroclor-1016						CAS #: 12674-11-2		
1.716	1.716	0.000	16069	1000.00	881.0	80.00-	120.00	100.00
1.859	1.859	0.000	23995	1000.00	912.5	119.46-	179.19	149.32
2.067	2.067	0.000	48411	1000.00	939.1	241.02-	361.52	301.25
2.357	2.357	0.000	16283	1000.00	887.9	81.07-	121.60	101.33
2.418	2.418	0.000	19871	1000.00	829.6	98.93-	148.39	123.66
Average of Peak Amounts =					890			
28 Aroclor-1260						CAS #: 11096-82-5		
3.120	3.120	0.000	32030	1000.00	959.8	80.00-	120.00	100.00(M)
3.319	3.319	0.000	49371	1000.00	930.6	123.31-	184.97	154.14
3.531	3.536	-0.005	44607	1000.00	1046	111.41-	167.12	139.27
4.051	4.051	0.000	54728	1000.00	806.1	136.69-	205.04	170.86
4.810	4.814	-0.004	14934	1000.00	768.3	37.30-	55.95	46.63
Average of Peak Amounts =					902.1			

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other _____

BLO 3/23/05

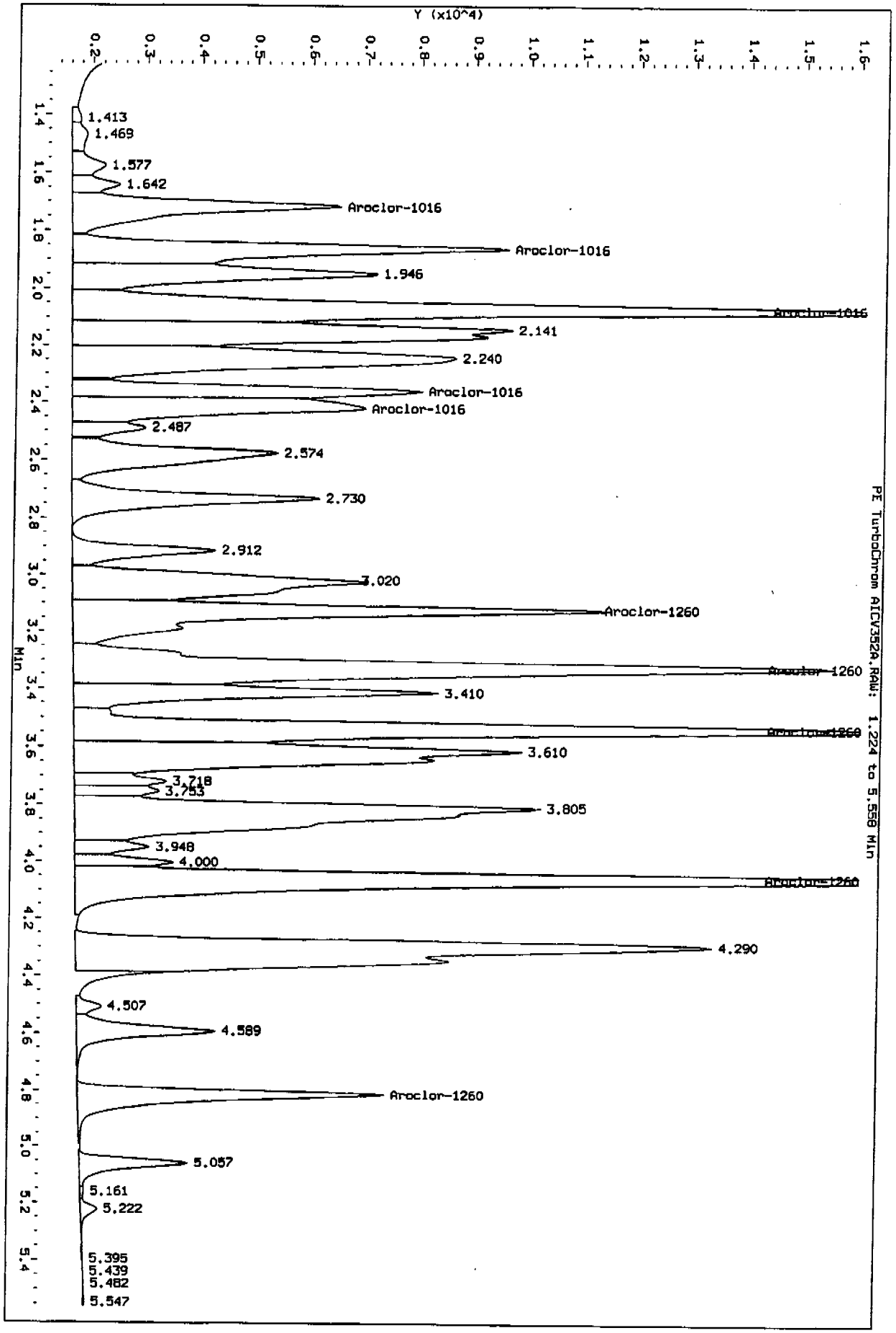
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\AICV352A.d
Date : 22-MAR-2005 14:54
Client ID:
Sample Info: ICV
Volume Injected (uL): 2.0
Column phase: CLPEST-1

Instrument: gca.i
Operator: BLO
Column diameter: 0.53


Y (x10^4)
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0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
Min
1.4
1.6
1.8
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2.2
2.4
2.6
2.8
3.0
3.2
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3.6
3.8
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5.2
5.4
1.413
1.469
1.577
1.642
Aroclor-1016
Aroclor-1016
1.946
Aroclor-1016
2.141
2.240
Aroclor-1016
Aroclor-1016
2.487
2.574
2.730
2.912
3.020
Aroclor-1260
Aroclor-1260
3.410
Aroclor-1260
3.610
3.718
3.753
3.805
3.948
4.000
Aroclor-1260
4.290
4.507
4.589
Aroclor-1260
5.057
5.161
5.222
5.395
5.439
5.482
5.547
PE TurboChrom AICV352A.RAW: 1.224 to 5.558 Min
Data File: \\slsvr01\gc_lab\Gca.i\A0503222A.b\AICV352A.d\AICV352A.RAW
Injection Date: 22-MAR-2005 14:54
Instrument: gca.i
Client Sample ID:

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL353A.d
Report Date: 23-Mar-2005 11:03

STL St. Louis

Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL353A.d
Lab Smp Id: 1232
Inj Date : 22-MAR-2005 18:53
Operator : BLO Inst ID: gca.i
Smp Info : 1232
Misc Info : GC0942-04
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04A.m
Meth Date : 23-Mar-2005 10:59 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358A.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1232.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	1.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	1.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

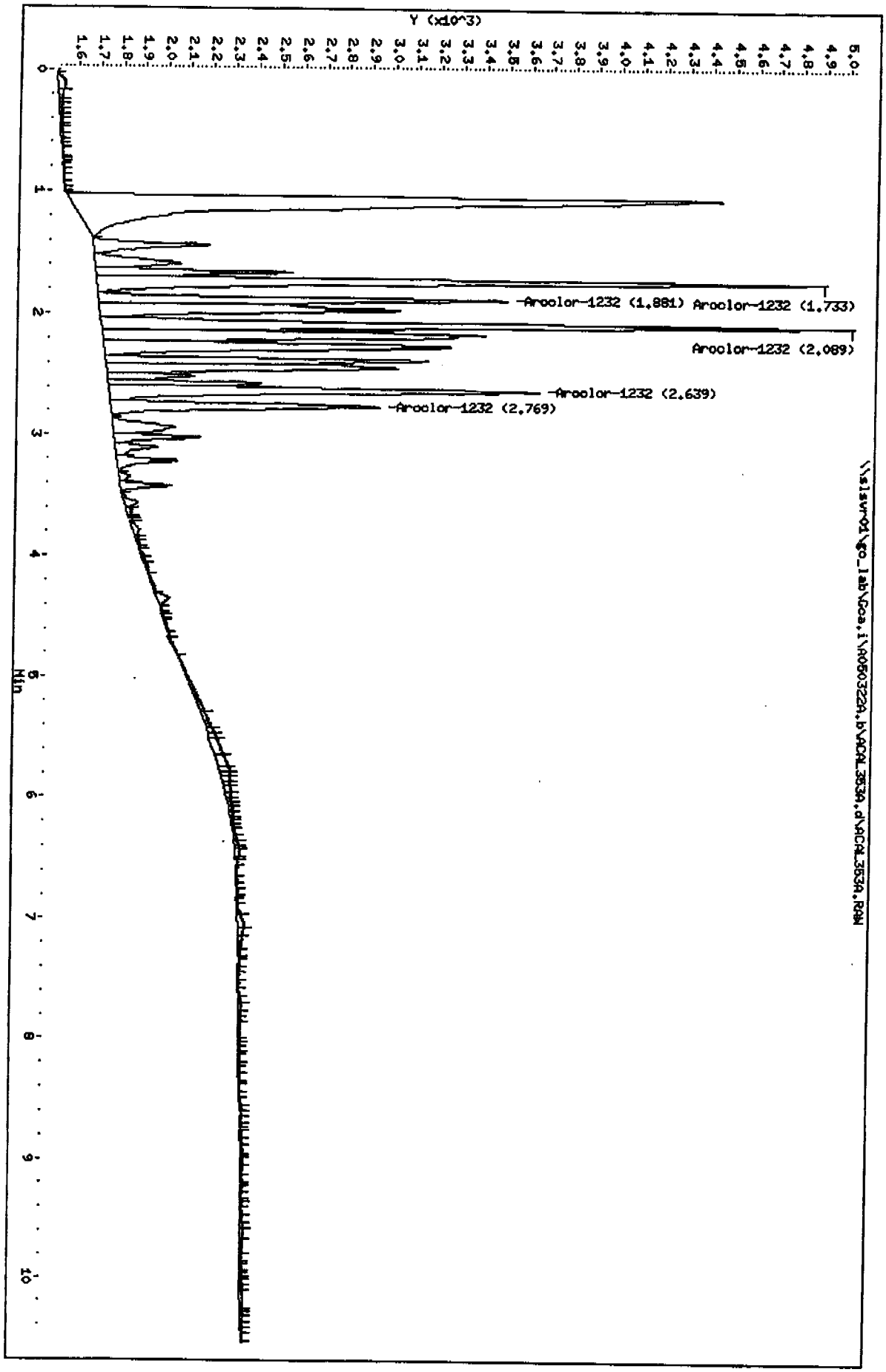
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
24 Aroclor-1232					CAS #: 1114-16-5		
1.733	1.733	0.000	9525	500.000	500.0	80.00- 120.00	100.00(M)
1.880	1.880	0.000	5291	500.000	500.0	44.44- 66.66	55.55
2.088	2.088	0.000	9700	500.000	500.0	81.47- 122.20	101.84
2.639	2.639	0.000	6248	500.000	500.0	52.48- 78.71	65.60
2.769	2.769	0.000	4017	500.000	500.0	33.74- 50.61	42.17
Average of Peak Amounts =					500		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other_____

BLO 3/23/05

QC Flag Legend

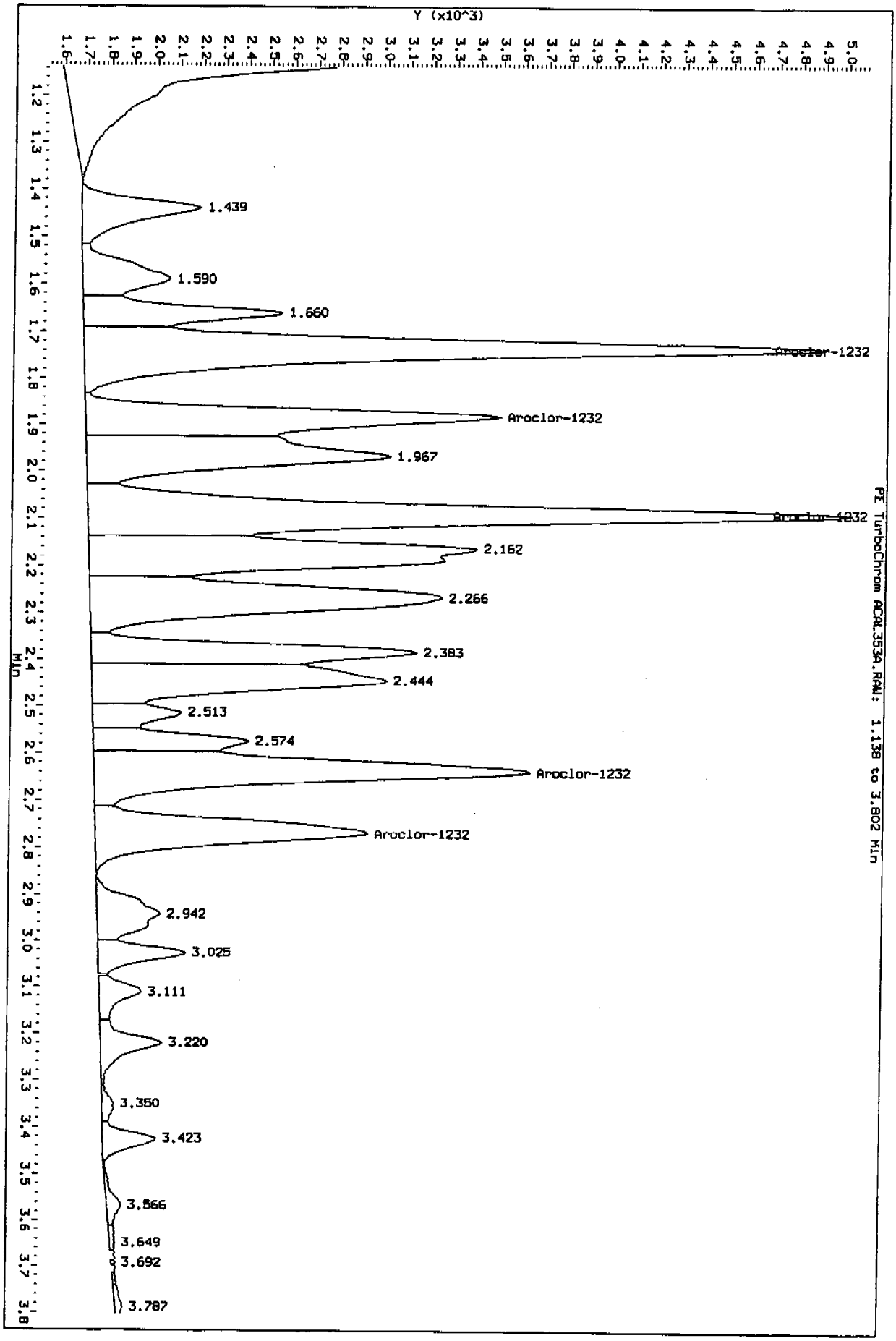
M - Compound response manually integrated.



Data File: \\slsvr01\gc_lab\Goa,i\A060322A,b\ACAL353A,d
Date : 22-MAR-2006 18:53
Client ID:
Sample Info: 1232
Volume Injected (uL): 2.0
Column phase: CLPEST-1

Instrument: goa,i
Operator: BLO
Column diameter: 0.53

\\slsvr01\gc_lab\Goa,i\A060322A,b\ACAL353A,d\ACAL353A.RAW


Data File: \\slsvr01\gc_lab\Gca.i\A0503220.b\ACAL353A.d\ACAL353A.RAW
Injection Date: 22-MAR-2005 18:53
Instrument: gca.i
Client Sample ID:
Y (x10^3)
Min
1.439
1.590
1.660
Aroclor-1232
Aroclor-1232
1.967
Aroclor-1232
2.162
2.266
2.383
2.444
2.513
2.574
Aroclor-1232
Aroclor-1232
2.942
3.025
3.111
3.220
3.350
3.423
3.566
3.649
3.692
3.787
PE TurboChrom ACAL353A.RAW: 1.138 to 3.802 Min

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL354A.d
Report Date: 23-Mar-2005 11:03

STL St. Louis

Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL354A.d
Lab Smp Id: 1242
Inj Date : 22-MAR-2005 19:07
Operator : BLO Inst ID: gca.i
Smp Info : 1242
Misc Info : GC0941-04
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04A.m
Meth Date : 23-Mar-2005 10:59 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358A.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1242.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	1.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	1.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

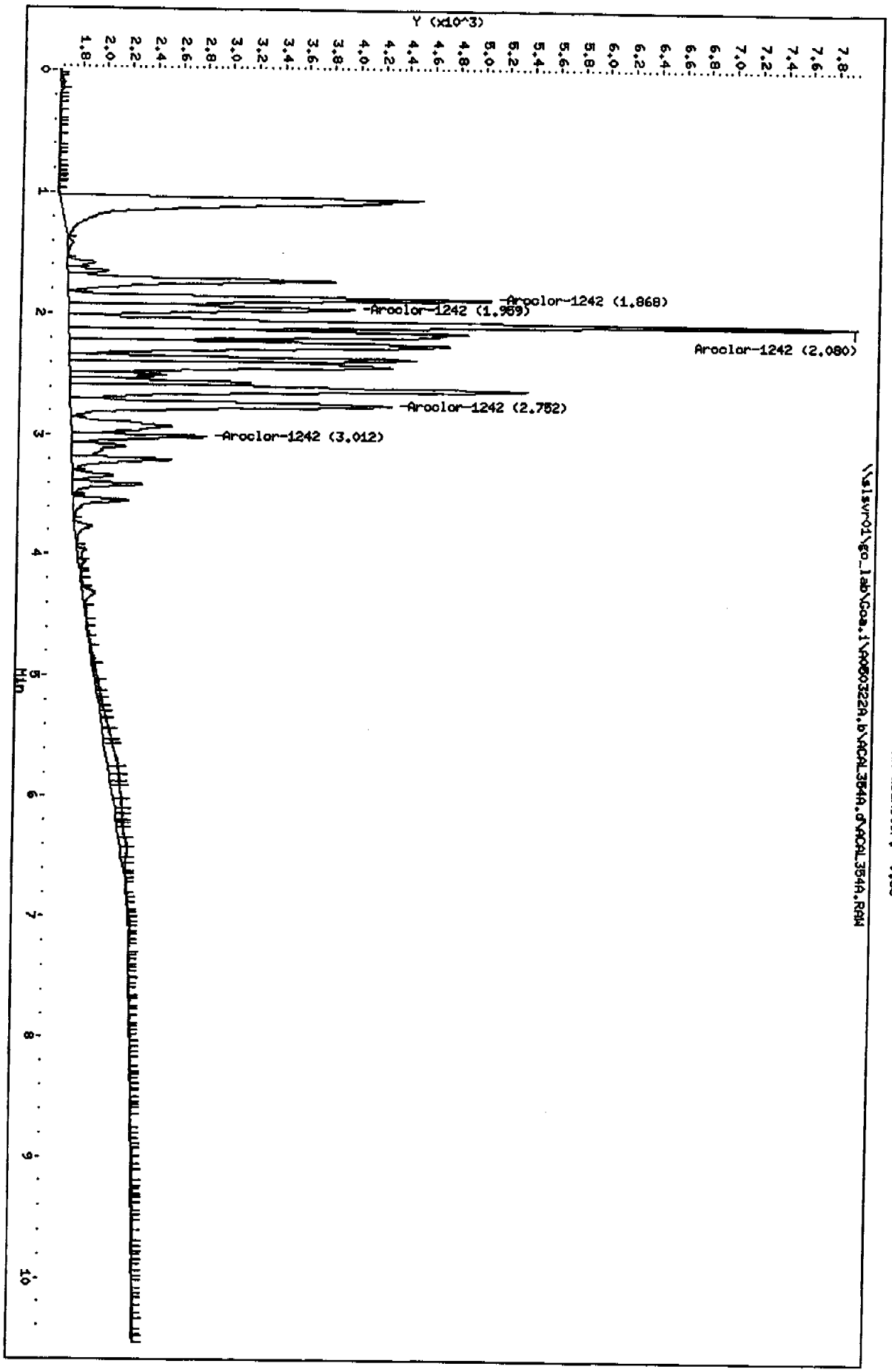
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
25 Aroclor-1242					CAS #: 53469-21-9		
1.867	1.867	0.000	9913	500.000	500.0	80.00- 120.00	100.00(M)
1.958	1.958	0.000	7217	500.000	500.0	58.24- 87.36	72.80
2.080	2.080	0.000	18485	500.000	500.0	149.18- 223.77	186.47
2.751	2.751	0.000	9125	500.000	500.0	73.64- 110.46	92.05
3.011	3.011	0.000	2706	500.000	500.0	21.84- 32.76	27.30
		Average of Peak Amounts =			500		

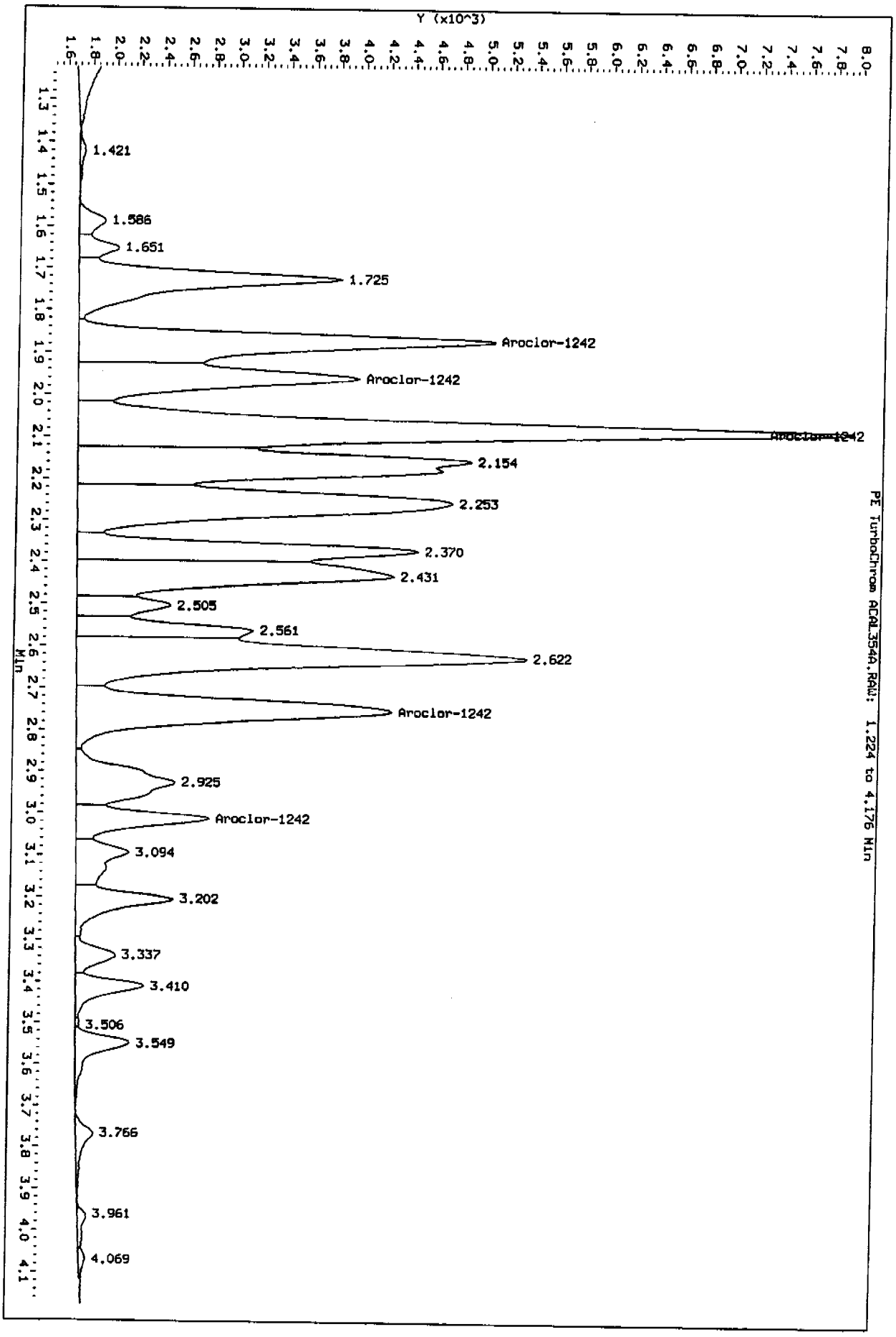
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 3/23/05

QC Flag Legend

M - Compound response manually integrated.


Y (x10^3)
Aroclor-1242 (1.868)
Aroclor-1242 (1.969)
Aroclor-1242 (2.080)
Aroclor-1242 (2.752)
Aroclor-1242 (3.012)
Min
Data File: \\slsvr01\go_lab\Goa.i\A060322A.b\ACAL354A.d
Date : 22-MAR-2005 19:07
Client ID:
Sample Info: 1242
Volume Injected (uL): 2.0
Column phase: CLPEST-1
Instrument: goa.i
Operator: BLO
Column diameter: 0.53
\\slsvr01\go_lab\Goa.i\A060322A.b\ACAL354A.d\ACAL354A.RAW


Data File: \\sisvr01\gc_lab\Gca.i\A0503222A.b\ACAL354A.d\ACAL354A.RAW
Injection Date: 22-MAR-2005 19:07
Instrument: gca.i
Client Sample ID:
Y (x10^3)
Min
PE TurboChrom ACAL354A.RAW: 1.224 to 4.176 Min
1.421
1.586
1.651
1.725
Aroclor-1242
Aroclor-1242
Aroclor-1242
2.154
2.253
2.370
2.431
2.505
2.561
2.622
Aroclor-1242
2.925
Aroclor-1242
3.094
3.202
3.337
3.410
3.506
3.549
3.766
3.961
4.069

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL355A.d
Report Date: 23-Mar-2005 11:03

STL St. Louis

Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL355A.d
Lab Smp Id: 1248
Inj Date : 22-MAR-2005 19:22
Operator : BLO Inst ID: gca.i
Smp Info : 1248
Misc Info : GC0943-04
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04A.m
Meth Date : 23-Mar-2005 10:59 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358A.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1248.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	1.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	1.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

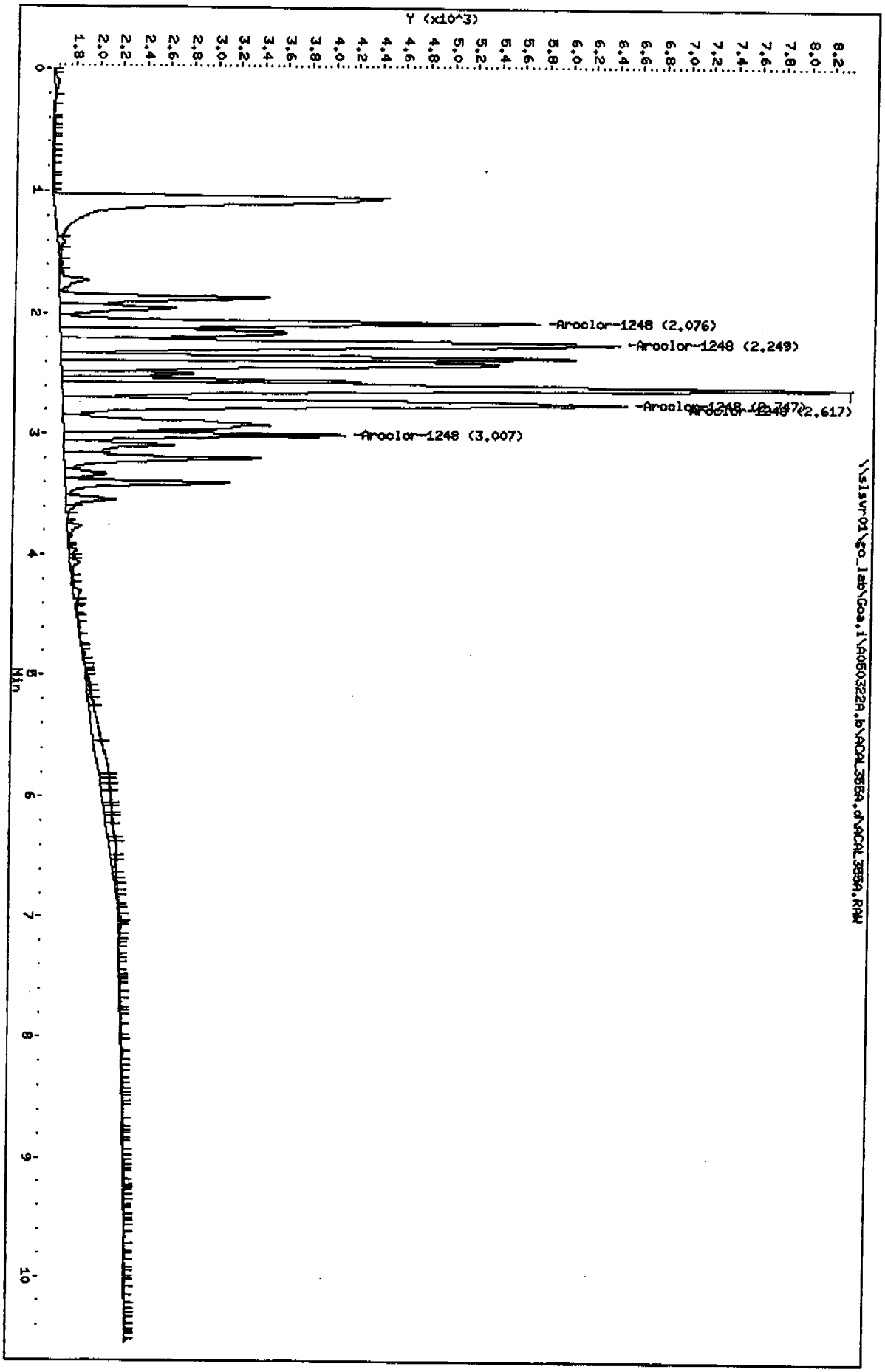
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)	TARGET RANGE	RATIO
26 Aroclor-1248					CAS #: 12672-29-6		
2.075	2.075	0.000	11780	500.000	500.0	80.00- 120.00	100.00(M)
2.249	2.249	0.000	18834	500.000	500.0	127.90- 191.86	159.88
2.617	2.617	0.000	23895	500.000	500.0	162.28- 243.41	202.84
2.747	2.747	0.000	17791	500.000	500.0	120.82- 181.23	151.03
3.007	3.007	0.000	5965	500.000	500.0	40.51- 60.76	50.64
		Average of Peak Amounts =			500		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 3/23/05

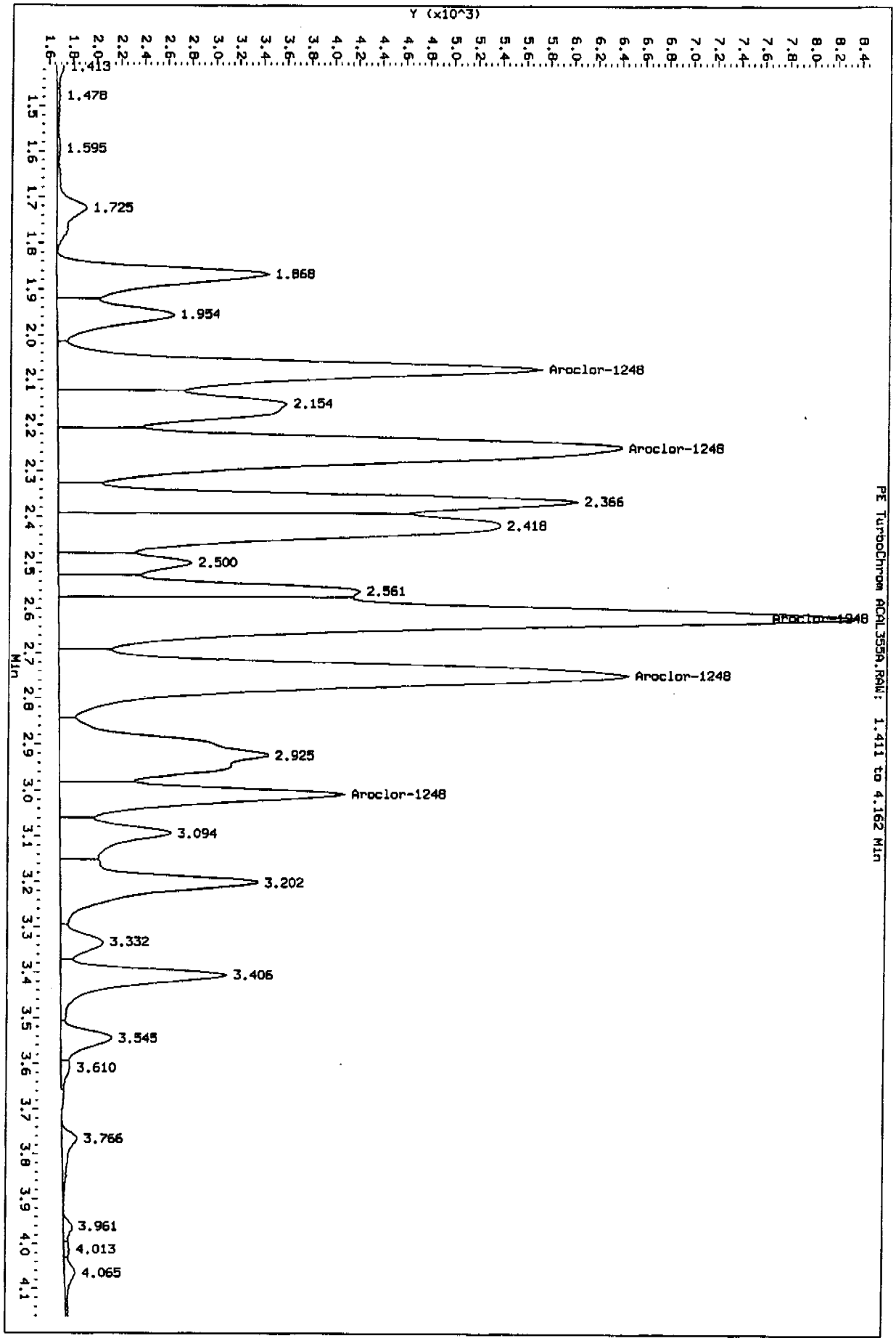
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\go_lab\Goa.i\A050322A.b\ACAL355A.d
Date : 22-MAR-2005 19:22
Client ID:
Sample Info: 1248
Volume Injected (uL): 2.0
Column phase: CLPEST-1

Instrument: goa.i
Operator: BLD
Column diameter: 0.53


Y (x10^3)
Min
1.413
1.478
1.595
1.725
1.868
1.954
Aroclor-1248
2.154
Aroclor-1248
2.366
2.418
2.500
2.561
Aroclor-1248
Aroclor-1248
2.925
Aroclor-1248
3.094
3.202
3.332
3.406
3.545
3.610
3.766
3.961
4.013
4.065
Data File: \\alsvr01\gc_lab\Gca_1\A0503222A.b\ACAL355A.d\ACAL355A.RAW
Injection Date: 22-MAR-2005 19:22
Instrument: gca_1
Client Sample ID:
PE TurboChrom ACAL355A.RAW: 1.411 to 4.162 Min

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL356A.d
Report Date: 23-Mar-2005 11:03

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Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL356A.d
Lab Smp Id: 2154
Inj Date : 22-MAR-2005 19:36
Operator : BLO Inst ID: gca.i
Smp Info : 2154
Misc Info : GC0940-04
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04A.m
Meth Date : 23-Mar-2005 10:59 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358A.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar2154.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	1.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	1.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

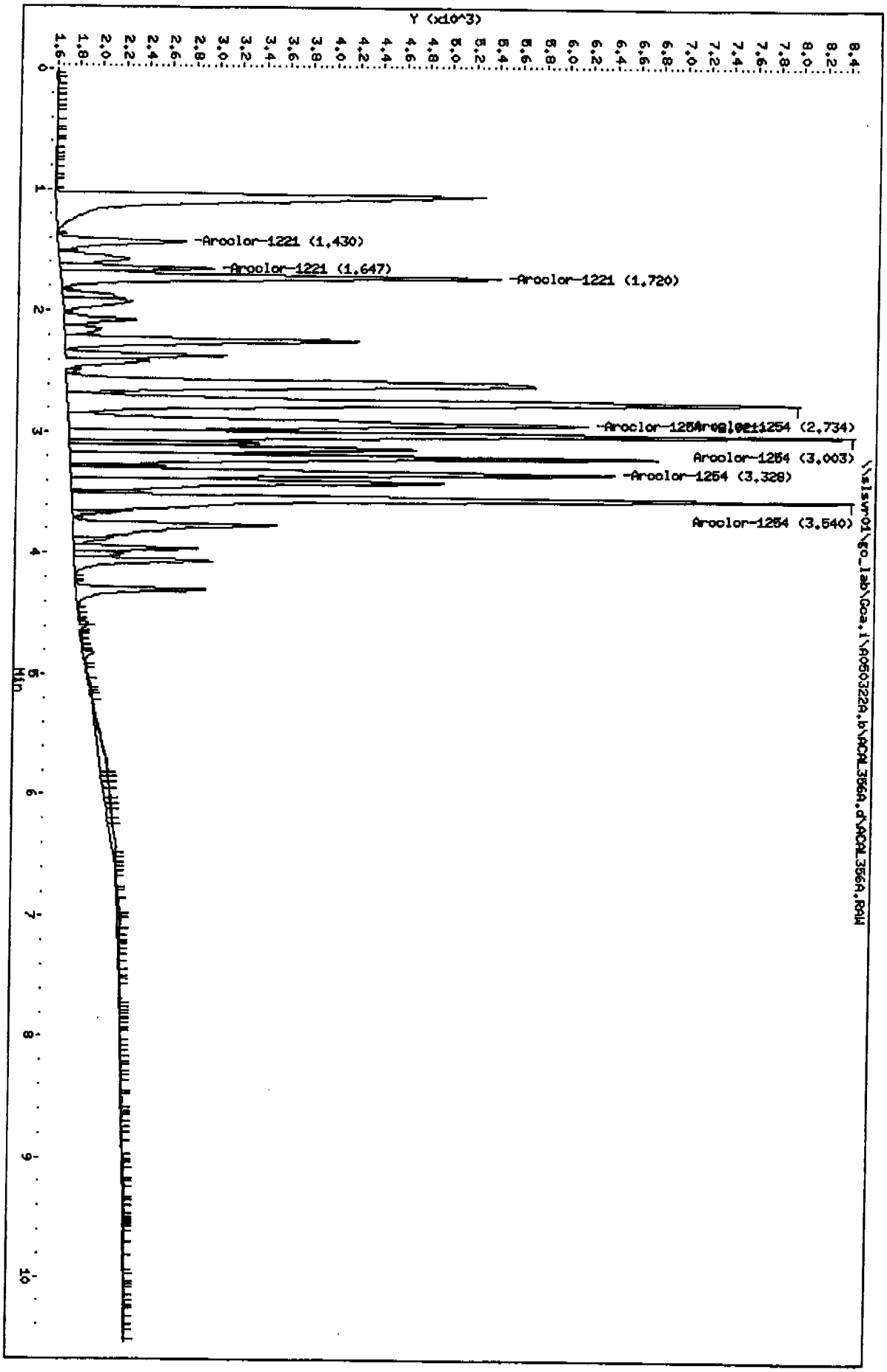
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)	TARGET RANGE	RATIO
23 Aroclor-1221					CAS #: 11104-28-2		
1.430	1.430	0.000	3442	500.000	500.0	80.00- 120.00	100.00(M)
1.646	1.646	0.000	3214	500.000	500.0	74.70- 112.05	93.38
1.720	1.720	0.000	11107	500.000	500.0	258.15- 387.23	322.69
Average of Peak Amounts =					500		
27 Aroclor-1254					CAS #: 11097-69-1		
2.734	2.734	0.000	23440	500.000	500.0	80.00- 120.00	100.00(M)
2.920	2.920	0.000	16999	500.000	500.0	58.02- 87.03	72.52
3.003	3.003	0.000	18908	500.000	500.0	64.53- 96.80	80.67
3.328	3.328	0.000	13597	500.000	500.0	46.41- 69.61	58.01
3.540	3.540	0.000	21154	500.000	500.0	72.20- 108.30	90.25
Average of Peak Amounts =					500		

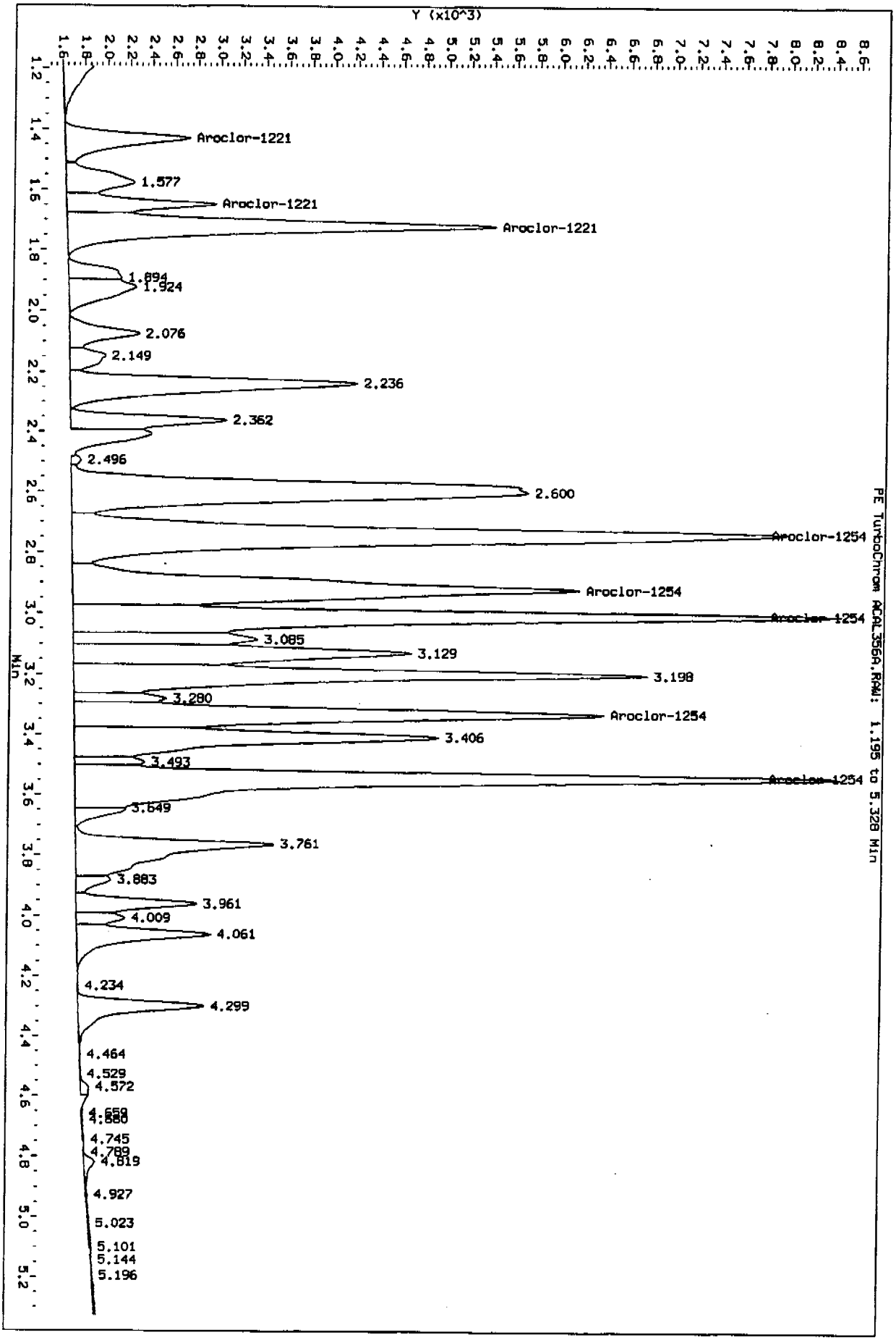
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other_____

BLO 3/23/05

QC Flag Legend

M - Compound response manually integrated.


Y (x10^3)
Min
Aroclor-1221 (1,430)
Aroclor-1221 (1,647)
Aroclor-1221 (1,720)
Aroclor-1254 (2,734)
Aroclor-1254 (3,003)
Aroclor-1254 (3,328)
Aroclor-1254 (3,540)
\\slsvr01\go_lab\Goa.i\A050322A.b\ACAL356A.d\ACAL356A.RAW
Data File: \\slsvr01\go_lab\Goa.i\A050322A.b\ACAL356A.d
Date : 22-MAR-2005 19:36
Client ID:
Sample Info: 2154
Volume Injected (uL): 2.0
Column phase: CLPEST-1
Instrument: goa.i
Operator: BLO
Column diameter: 0.53


Y (x10^3)
Min
Aroclor-1221
1.577
Aroclor-1221
Aroclor-1221
1.894
1.924
2.076
2.149
2.236
2.362
2.496
2.600
Aroclor-1254
Aroclor-1254
Aroclor-1254
3.085
3.129
3.198
3.280
Aroclor-1254
3.406
3.493
Aroclor-1254
3.649
3.761
3.883
3.961
4.009
4.061
4.234
4.299
4.464
4.529
4.572
4.659
4.680
4.745
4.789
4.819
4.927
5.023
5.101
5.144
5.196
PE TurboChrom ACAL356A.RAW: 1.195 to 5.328 Min
Data File: \\slavr01\GC_lab\Gca.i\A0503222A.b\ACAL356A.d\ACAL356A.RAW
Injection Date: 22-MAR-2005 19:36
Instrument: gca.i
Client Sample ID:

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL357A.d
Report Date: 23-Mar-2005 11:04

STL St. Louis

Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL357A.d
Lab Smp Id: 1262
Inj Date : 22-MAR-2005 19:51
Operator : BLO Inst ID: gca.i
Smp Info : 1262
Misc Info : GC0939-04
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04A.m
Meth Date : 23-Mar-2005 10:59 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358A.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1262.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	1.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	1.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

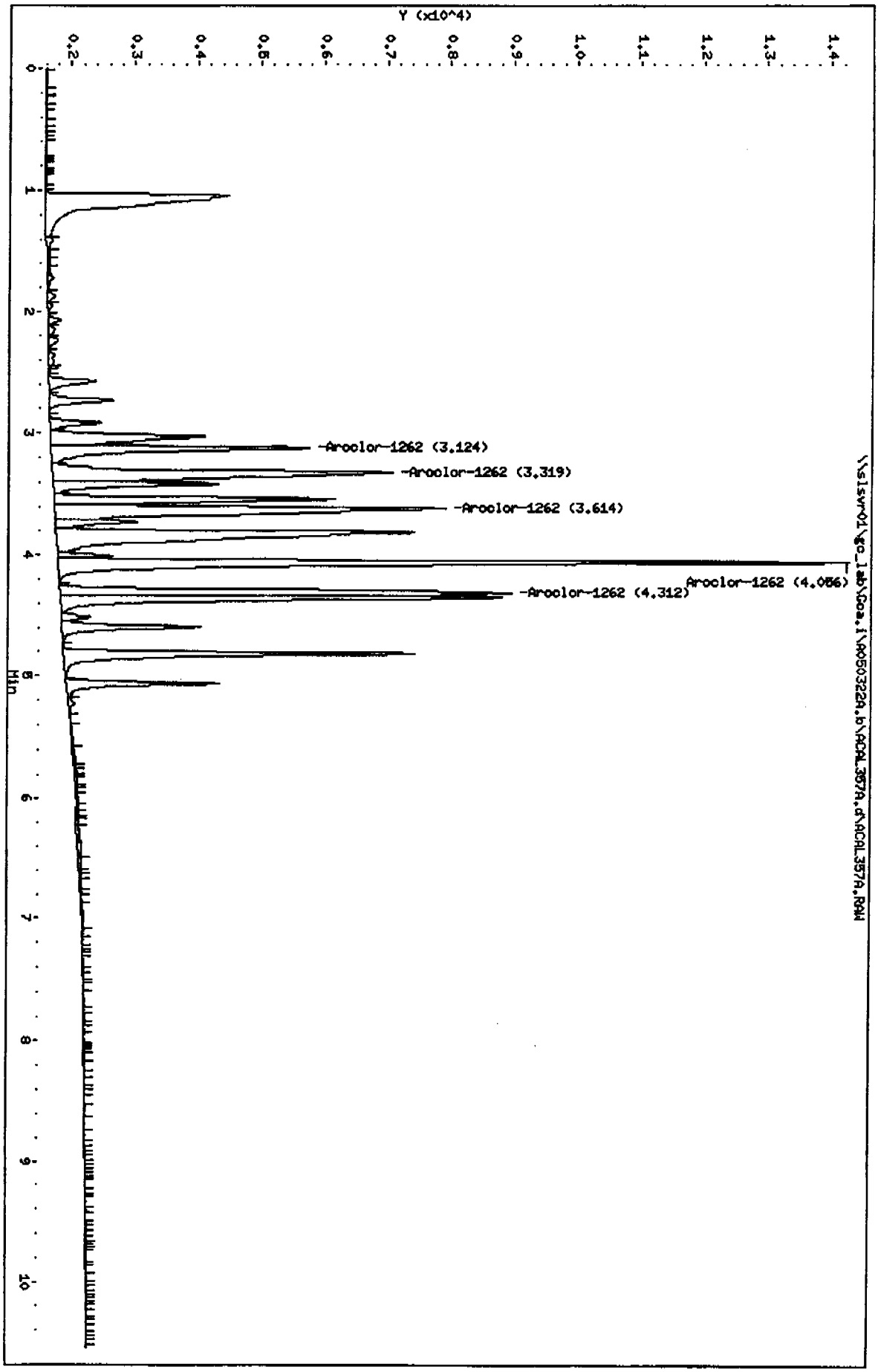
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
35 Aroclor-1262					CAS #: 37324-23-5		
3.124	3.124	0.000	11926	500.000	500.0	80.00- 120.00	100.00(M)
3.319	3.319	0.000	20541	500.000	500.0	137.79- 206.68	172.24
3.614	3.614	0.000	23502	500.000	500.0	157.65- 236.48	197.07
4.056	4.056	0.000	34303	500.000	500.0	230.11- 345.16	287.63
4.311	4.311	0.000	20149	500.000	500.0	135.16- 202.74	168.95
Average of Peak Amounts =					500		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other _____

BLO 3/23/05

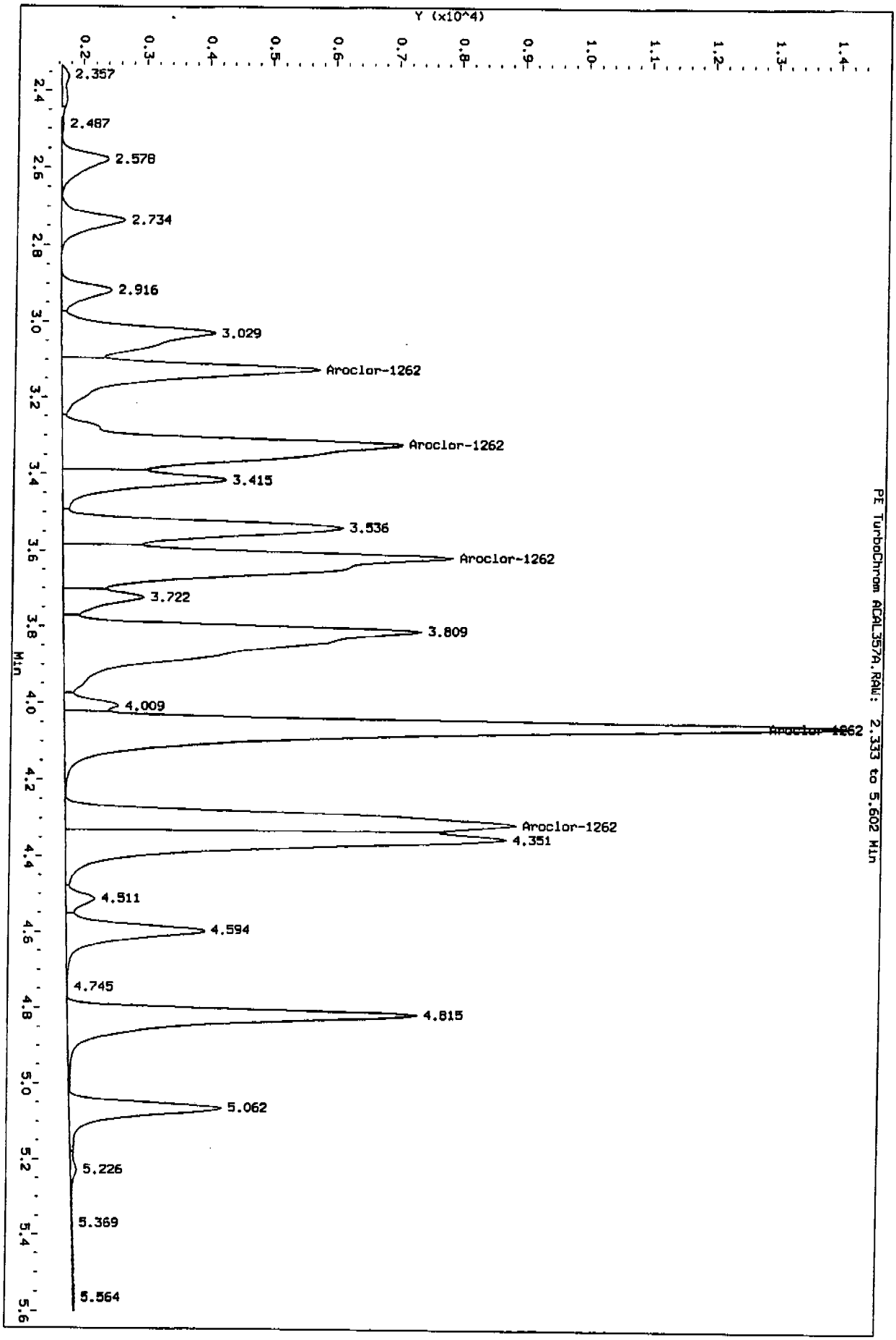
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\gc_lab\Gca.i\A0503220.b\ACAL357A.d
Date : 22-MAR-2005 19:51
Client ID:
Sample Info: 1262
Volume Injected (uL): 2.0
Column phase: CLPEST-1

Instrument: gca.i
Operator: BLO
Column diameter: 0.53


Y (x10^4)
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
2.357
2.487
2.578
2.734
2.916
3.029
Aroclor-1262
Aroclor-1262
3.415
3.536
Aroclor-1262
3.722
3.809
4.009
Aroclor-1262
Aroclor-1262
4.351
4.511
4.594
4.745
4.815
5.062
5.226
5.369
5.564
Min
2.4
2.6
2.8
3.0
3.2
3.4
3.6
3.8
4.0
4.2
4.4
4.6
4.8
5.0
5.2
5.4
5.6
Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL357A.d/ACAL357A.RAW
Injection Date: 22-MAR-2005 19:51
Instrument: gca.i
Client Sample ID:
PE TurboChrom ACAL357A.RAW: 2.333 to 5.602 Min

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL358A.d Page 1
Report Date: 23-Mar-2005 11:04

STL St. Louis

Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL358A.d
Lab Smp Id: 1268
Inj Date : 22-MAR-2005 20:05
Operator : BLO Inst ID: gca.i
Smp Info : 1268
Misc Info : GC0944-04
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04A.m
Meth Date : 23-Mar-2005 10:59 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358A.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1268.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	1.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	1.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

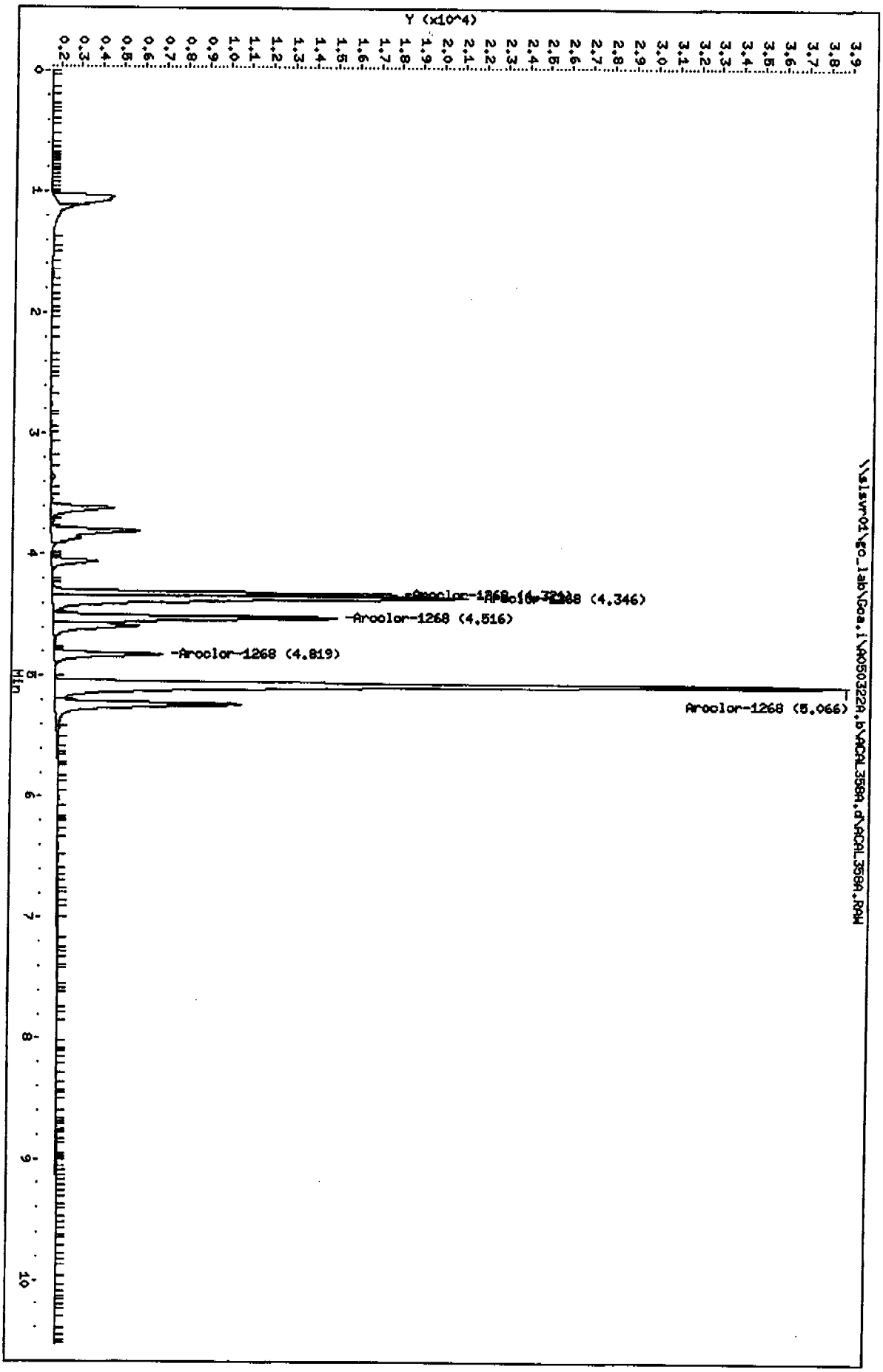
				AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
RT	EXP RT	DLT RT	RESPONSE				
36 Aroclor-1268					CAS #: 11100-14-4		
4.320	4.320	0.000	27236	500.000	500.0	80.00- 120.00	100.00(M)
4.346	4.346	0.000	59023	500.000	500.0	173.37- 260.05	216.71
4.515	4.515	0.000	33416	500.000	500.0	98.15- 147.23	122.69
4.818	4.818	0.000	12859	500.000	500.0	37.77- 56.66	47.21
5.065	5.065	0.000	100827	500.000	500.0	296.16- 444.24	370.20
		Average of Peak Amounts =			500		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other_____

BLO 3/23/05

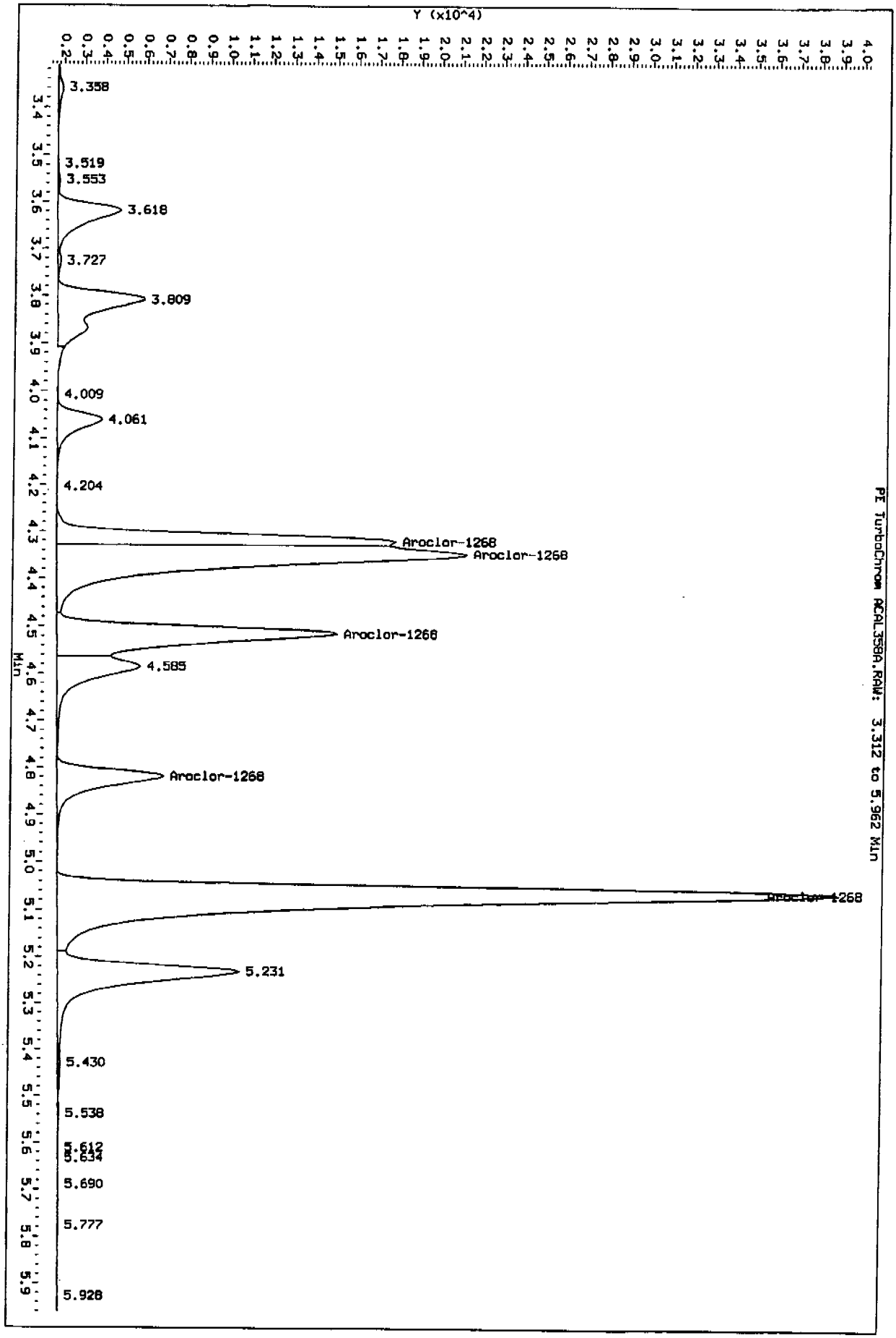
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\go_lab\Gca.i\A0503222A.b\ACAL358A.d
Date : 22-MAR-2005 20:05
Client ID:
Sample Info: 1268
Volume Injected (uL): 2.0
Column phase: CLPEST-1

Instrument: gca.i
Operator: BLO
Column diameter: 0.53


Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL358A.d\ACAL358A.RAW
Injection Date: 22-MAR-2005 20:05
Instrument: gca.i
Client Sample ID:
Y (x10^4)
PE TurboChrom ACAL358A.RAW: 3.312 to 5.962 Min
Min
3.358
3.519
3.553
3.618
3.727
3.809
4.009
4.061
4.204
Aroclor-1268
Aroclor-1268
Aroclor-1268
4.585
Aroclor-1268
Aroclor-1268
5.231
5.430
5.538
5.612
5.634
5.690
5.777
5.928

Report Date : 23-Mar-2005 11:24

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 22-MAR-2005 12:57
End Cal Date : 22-MAR-2005 20:05
Quant Method : ESTD
Origin : Disabled
Target Version : 4.10
Integrator : Falcon
Method file : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04B.m
Cal Date : 23-Mar-2005 11:24 owenb
Curve Type : Average

Calibration File Names:
Level 2: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL344B.d
Level 3: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL345B.d
Level 4: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL358B.d
Level 5: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL347B.d
Level 6: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL348B.d
Level 7: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL349B.d
Level 8: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL350B.d

BLO 3/23/05

Compound	100.000 Level 2	250.000 Level 3	500.000 Level 4	1000.000 Level 5	1500.000 Level 6	2500.000 Level 7	4000.000 Level 8	RRF	% RSD	
22 Aroclor-1016(1)	14.74000	13.72400	12.82200	12.46400	11.83667	10.96680	10.64525	12.45696	11.743	
(2)	27.80000	25.67600	23.25200	22.02600	20.62467	18.85160	18.04300	22.32475	15.884	
(3)	37.19000	34.76000	32.36000	31.91000	30.31200	28.52760	27.88550	31.84930	10.443	
(4)	18.11000	16.60000	15.73400	14.97700	14.31667	13.50080	13.13225	15.19582	11.620	
(5)	16.64000	16.26000	15.42000	15.53400	14.98600	14.02680	13.81075	15.23965	6.933	
23 Aroclor-1221(1)	+++++	+++++	5.76000	+++++	+++++	+++++	+++++	5.76000	0.000	<-
(2)	+++++	+++++	5.21600	+++++	+++++	+++++	+++++	5.21600	0.000	<-
(3)	+++++	+++++	16.97800	+++++	+++++	+++++	+++++	16.97800	0.000	<-
24 Aroclor-1232(1)	+++++	+++++	13.69800	+++++	+++++	+++++	+++++	13.69800	0.000	
(2)	+++++	+++++	9.84400	+++++	+++++	+++++	+++++	9.84400	0.000	
(3)	+++++	+++++	11.54200	+++++	+++++	+++++				

	+++++						11.54200	0.000
(4)	+++++	+++++	5.11800	+++++	+++++	+++++		
	+++++						5.11800	0.000
(5)	+++++	+++++	5.16800	+++++	+++++	+++++		
	+++++						5.16800	0.000

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 22-MAR-2005 12:57
End Cal Date : 22-MAR-2005 20:05
Quant Method : ESTD
Origin : Disabled
Target Version : 4.10
Integrator : Falcon
Method file : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04B.m
Cal Date : 23-Mar-2005 11:24 owenb
Curve Type : Average

Compound	100.000 Level 2	250.000 Level 3	500.000 Level 4	1000.000 Level 5	1500.000 Level 6	2500.000 Level 7	4000.000 Level 8	RRF	% RSD
25 Aroclor-1242(1)	+++++	+++++	16.81200	+++++	+++++	+++++	+++++	16.81200	0.000
(2)	+++++	+++++	10.02400	+++++	+++++	+++++	+++++	10.02400	0.000
(3)	+++++	+++++	22.41800	+++++	+++++	+++++	+++++	22.41800	0.000
(4)	+++++	+++++	10.89200	+++++	+++++	+++++	+++++	10.89200	0.000
(5)	+++++	+++++	4.87800	+++++	+++++	+++++	+++++	4.87800	0.000
26 Aroclor-1248(1)	+++++	+++++	14.80800	+++++	+++++	+++++	+++++	14.80800	0.000
(2)	+++++	+++++	18.05000	+++++	+++++	+++++	+++++	18.05000	0.000
(3)	+++++	+++++	19.51000	+++++	+++++	+++++	+++++	19.51000	0.000
(4)	+++++	+++++	21.49000	+++++	+++++	+++++	+++++	21.49000	0.000
(5)	+++++	+++++	10.27200	+++++	+++++	+++++	+++++	10.27200	0.000
27 Aroclor-1254(1)	+++++	+++++	19.20600	+++++	+++++	+++++	+++++	19.20600	0.000
(2)	+++++	+++++	30.57400	+++++	+++++	+++++	+++++	30.57400	0.000
(3)	+++++	+++++	30.34600	+++++	+++++	+++++	+++++	30.34600	0.000
(4)	+++++	+++++	20.64400	+++++	+++++	+++++			

(5)	+++++ +++++ +++++	+++++	29.57400	+++++	+++++	+++++	20.64400 29.57400	0.000 0.000

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 22-MAR-2005 12:57
End Cal Date : 22-MAR-2005 20:05
Quant Method : ESTD
Origin : Disabled
Target Version : 4.10
Integrator : Falcon
Method file : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04B.m
Cal Date : 23-Mar-2005 11:24 owenb
Curve Type : Average

Compound	100.000 Level 2	250.000 Level 3	500.000 Level 4	1000.000 Level 5	1500.000 Level 6	2500.000 Level 7	RRF	% RSD
	4000.000 Level 8							
28 Aroclor-1260(1)	29.08000	26.97600	24.90200	23.57600	22.23867	20.52640		
	19.90250						23.88594	14.045
(2)	30.81000	28.40400	26.11200	24.73700	23.72800	21.78600		
	21.18400						25.25157	13.786
(3)	27.87000	26.35200	24.82400	24.08000	23.20600	21.76000		
	21.32850						24.20293	9.791
(4)	25.38000	23.61200	22.34600	21.52400	20.47400	19.60000		
	19.18875						21.73211	10.265
(5)	49.70000	46.95600	44.25000	43.46300	42.34000	40.71960		
	41.02275						44.06448	7.408
35 Aroclor-1262(1)	+++++	+++++	17.85800	+++++	+++++	+++++		
	+++++						17.85800	0.000
(2)	+++++	+++++	18.94200	+++++	+++++	+++++		
	+++++						18.94200	0.000
(3)	+++++	+++++	23.10800	+++++	+++++	+++++		
	+++++						23.10800	0.000
(4)	+++++	+++++	30.66800	+++++	+++++	+++++		
	+++++						30.66800	0.000
(5)	+++++	+++++	27.95000	+++++	+++++	+++++		
	+++++						27.95000	0.000
36 Aroclor-1268(1)	+++++	+++++	50.47400	+++++	+++++	+++++		
	+++++						50.47400	0.000
(2)	+++++	+++++	69.33000	+++++	+++++	+++++		
	+++++						69.33000	0.000
(3)	+++++	+++++	50.48400	+++++	+++++	+++++		
	+++++						50.48400	0.000
(4)	+++++	+++++	16.89800	+++++	+++++	+++++		

(5)	+++++ +++++ +++++	+++++	135	+++++	+++++	+++++	16.89800 135	0.000 0.000

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 22-MAR-2005 12:57
End Cal Date : 22-MAR-2005 20:05
Quant Method : ESTD
Origin : Disabled
Target Version : 4.10
Integrator : Falcon
Method file : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04B.m
Cal Date : 23-Mar-2005 11:24 owenb
Curve Type : Average

Compound	100.000 Level 2	250.000 Level 3	500.000 Level 4	1000.000 Level 5	1500.000 Level 6	2500.000 Level 7	4000.000 Level 8	RRF	% RSD	
M 37 PCB (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
$ 32 Decachlorobiphenyl	638 +++++	602	565	548	511	406		545	14.884	

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL344B.d Page 1
Report Date: 23-Mar-2005 11:27

STL St. Louis

Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL344B.d
Lab Smp Id: ICAL2
Inj Date : 22-MAR-2005 12:57
Operator : BLO Inst ID: gca.i
Smp Info : ICAL2
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04B.m
Meth Date : 23-Mar-2005 11:25 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358B.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	1.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	1.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

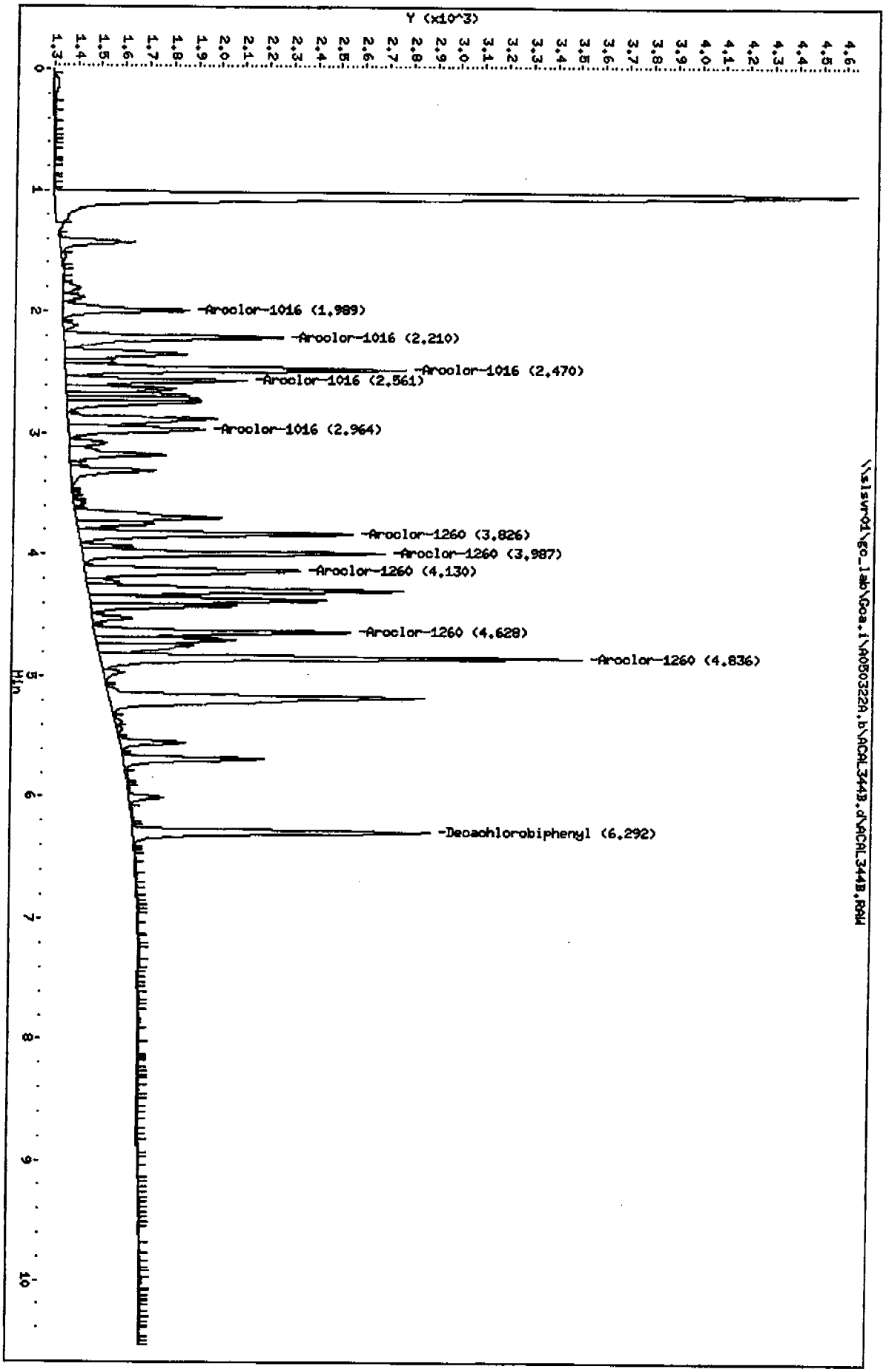
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.989	1.980	0.009	1474	100.000	118.3	80.00- 120.00	100.00
2.210	2.201	0.009	2780	100.000	124.5	144.96- 217.44	188.60
2.470	2.465	0.005	3719	100.000	116.8	211.27- 316.90	252.31
2.561	2.556	0.005	1811	100.000	119.2	99.01- 148.52	122.86
2.964	2.955	0.009	1664	100.000	109.2	89.53- 134.29	112.89
	Average of Peak Amounts =				117.6		
28 Aroclor-1260					CAS #: 11096-82-5		
3.826	3.817	0.009	2908	100.000	121.7	80.00- 120.00	100.00
3.986	3.978	0.008	3081	100.000	122.0	82.93- 124.39	105.95
4.129	4.121	0.008	2787	100.000	115.2	81.07- 121.61	95.84
4.628	4.619	0.009	2538	100.000	116.8	64.73- 97.09	87.28
4.836	4.831	0.005	4970	100.000	112.8	126.45- 189.68	170.91
	Average of Peak Amounts =				117.7		
$ 32 Decachlorobiphenyl					CAS #:		
6.292	6.283	0.009	3192	5.00000	5.858		(M)

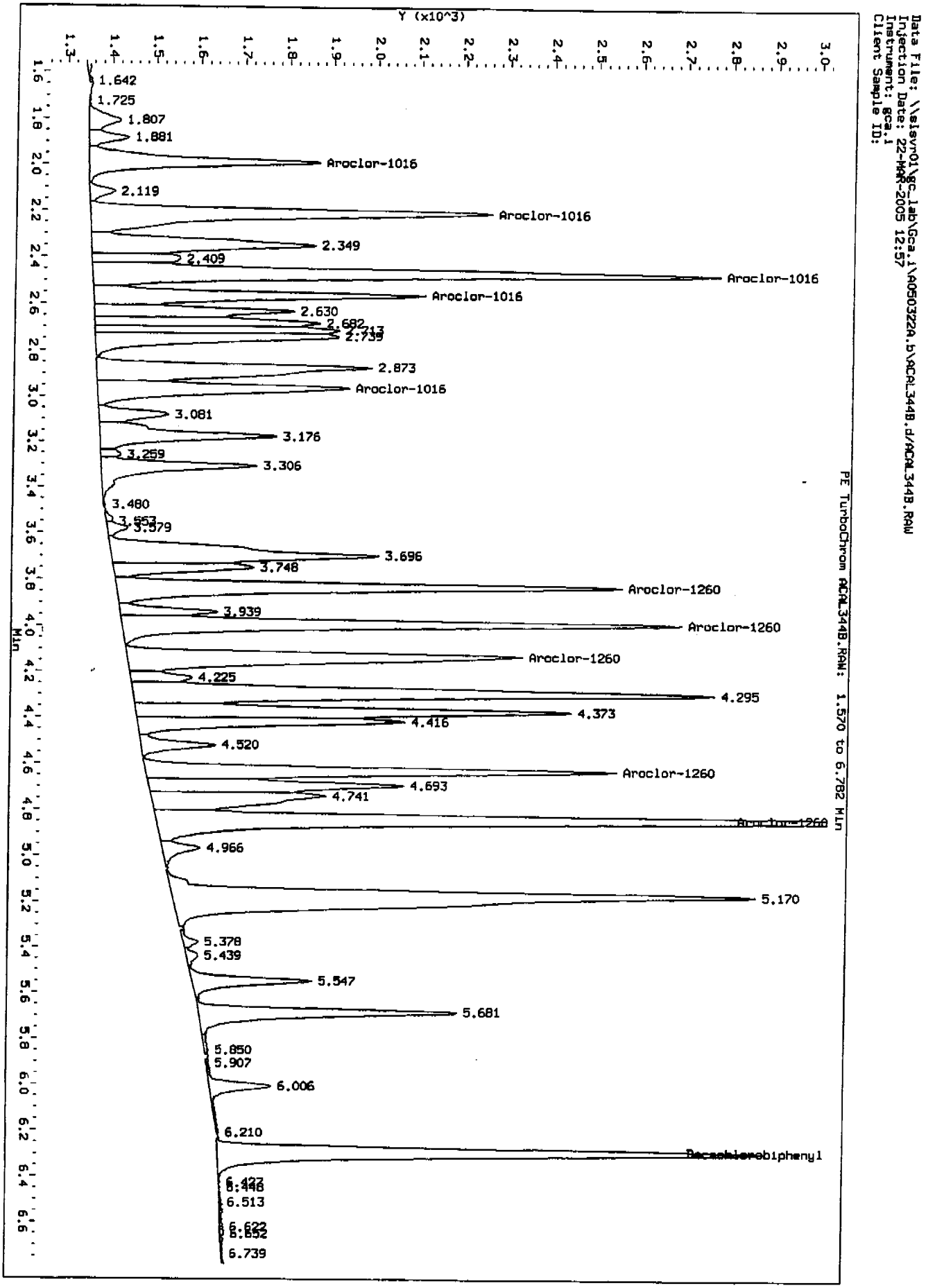
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 3/23/05

QC Flag Legend

M - Compound response manually integrated.


Y (x10^3)
Aroclor-1016 (1,989)
Aroclor-1016 (2,210)
Aroclor-1016 (2,470)
Aroclor-1016 (2,561)
Aroclor-1016 (2,964)
Aroclor-1260 (3,826)
Aroclor-1260 (3,987)
Aroclor-1260 (4,130)
Aroclor-1260 (4,628)
Aroclor-1260 (4,836)
Decachlorobiphenyl (6,292)
Min
\\slsvr01\go_lab\Goa,i\A0050322A,b\ACAL344B,d\ACAL344B,RAW
Data File: \\slsvr01\go_lab\Goa,i\A0050322A,b\ACAL344B,d
Date : 22-MAR-2005 12:57
Client ID:
Sample Info: ICAL2
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: goa,i
Operator: BLO
Column diameter: 0.53


Y (x10^3)
Data File: \\sisvr01\gc_lab\Gca.i\A0503222A.b\ACAL344B.d\ACAL344B.RAW
Injection Date: 22-MAR-2005 12:57
Instrument: gca.i
Client Sample ID:
PE TurboChrom ACAL344B.RAW: 1.570 to 6.782 Min
Min
1.642
1.725
1.807
1.881
Aroclor-1016
2.119
Aroclor-1016
2.349
2.409
Aroclor-1016
Aroclor-1016
2.630
2.682
2.713
2.739
2.873
Aroclor-1016
3.081
3.176
3.259
3.306
3.480
3.553
3.579
3.696
3.748
Aroclor-1260
3.939
Aroclor-1260
Aroclor-1260
4.225
4.295
4.373
4.416
4.520
Aroclor-1260
4.693
4.741
Aroclor-1260
4.966
5.170
5.378
5.439
5.547
5.681
5.850
5.907
6.006
6.210
Decachlorobiphenyl
6.422
6.448
6.513
6.622
6.652
6.739

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL345B.d
Report Date: 23-Mar-2005 11:27

STL St. Louis

Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL345B.d
Lab Smp Id: ICAL3
Inj Date : 22-MAR-2005 13:12
Operator : BLO Inst ID: gca.i
Smp Info : ICAL3
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04B.m
Meth Date : 23-Mar-2005 11:25 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358B.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	1.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	1.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

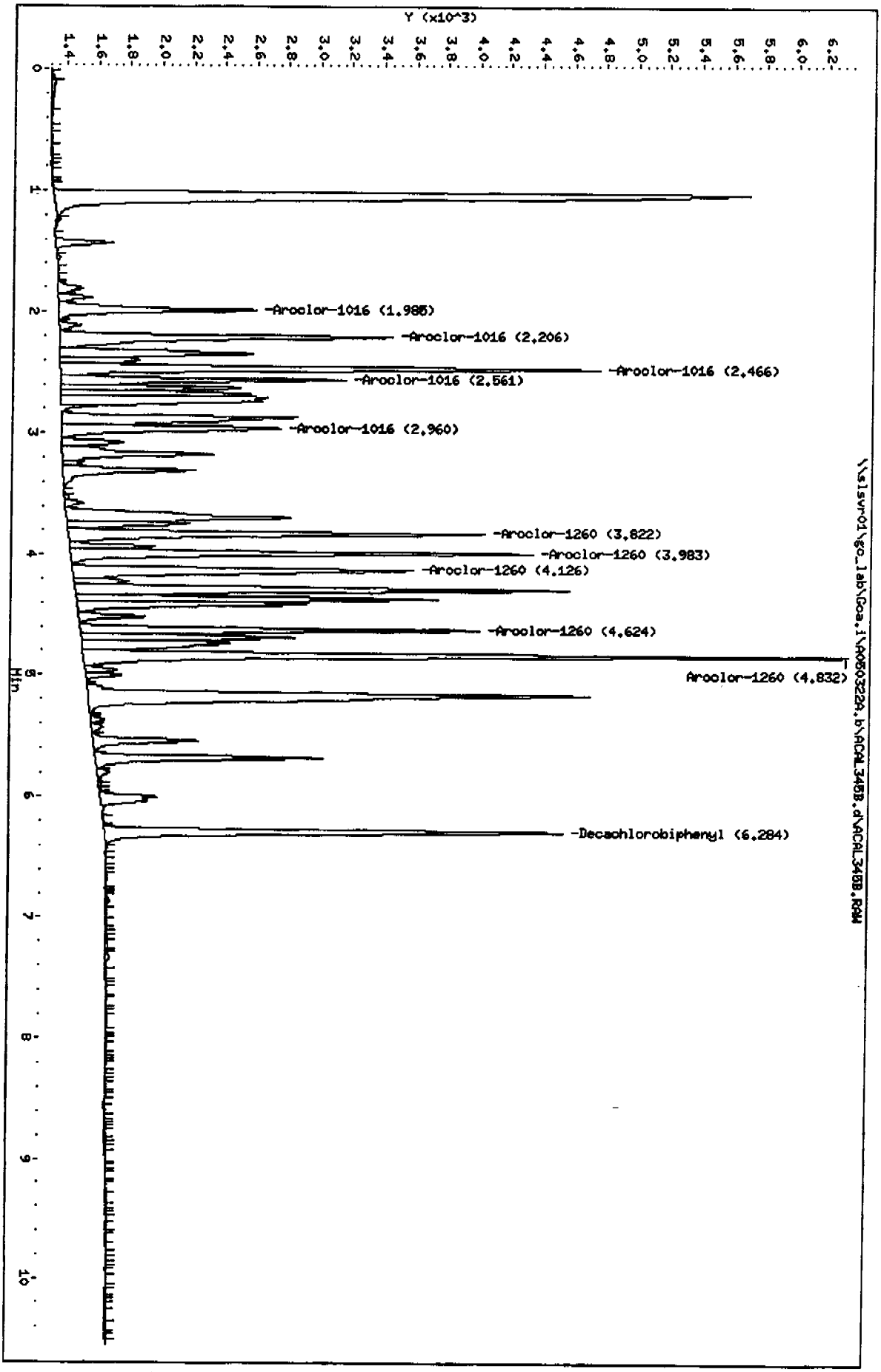
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.984	1.980	0.004	3431	250.000	275.4	80.00- 120.00	100.00
2.205	2.201	0.004	6419	250.000	287.5	144.96- 217.44	187.09
2.465	2.465	0.000	8690	250.000	272.8	211.27- 316.90	253.28
2.561	2.556	0.005	4150	250.000	273.1	99.01- 148.52	120.96
2.959	2.955	0.004	4065	250.000	266.7	89.53- 134.29	118.48
		Average of Peak Amounts =			275.1		
28 Aroclor-1260					CAS #: 11096-82-5		
3.822	3.817	0.005	6744	250.000	282.3	80.00- 120.00	100.00
3.982	3.978	0.004	7101	250.000	281.2	82.93- 124.39	105.29
4.125	4.121	0.004	6588	250.000	272.2	81.07- 121.61	97.69
4.623	4.619	0.004	5903	250.000	271.6	64.73- 97.09	87.53
4.831	4.831	0.000	11739	250.000	266.4	126.45- 189.68	174.07
		Average of Peak Amounts =			274.8		
$ 32 Decachlorobiphenyl					CAS #:		
6.283	6.283	0.000	7522	12.5000	13.80		(M)

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 3/23/05

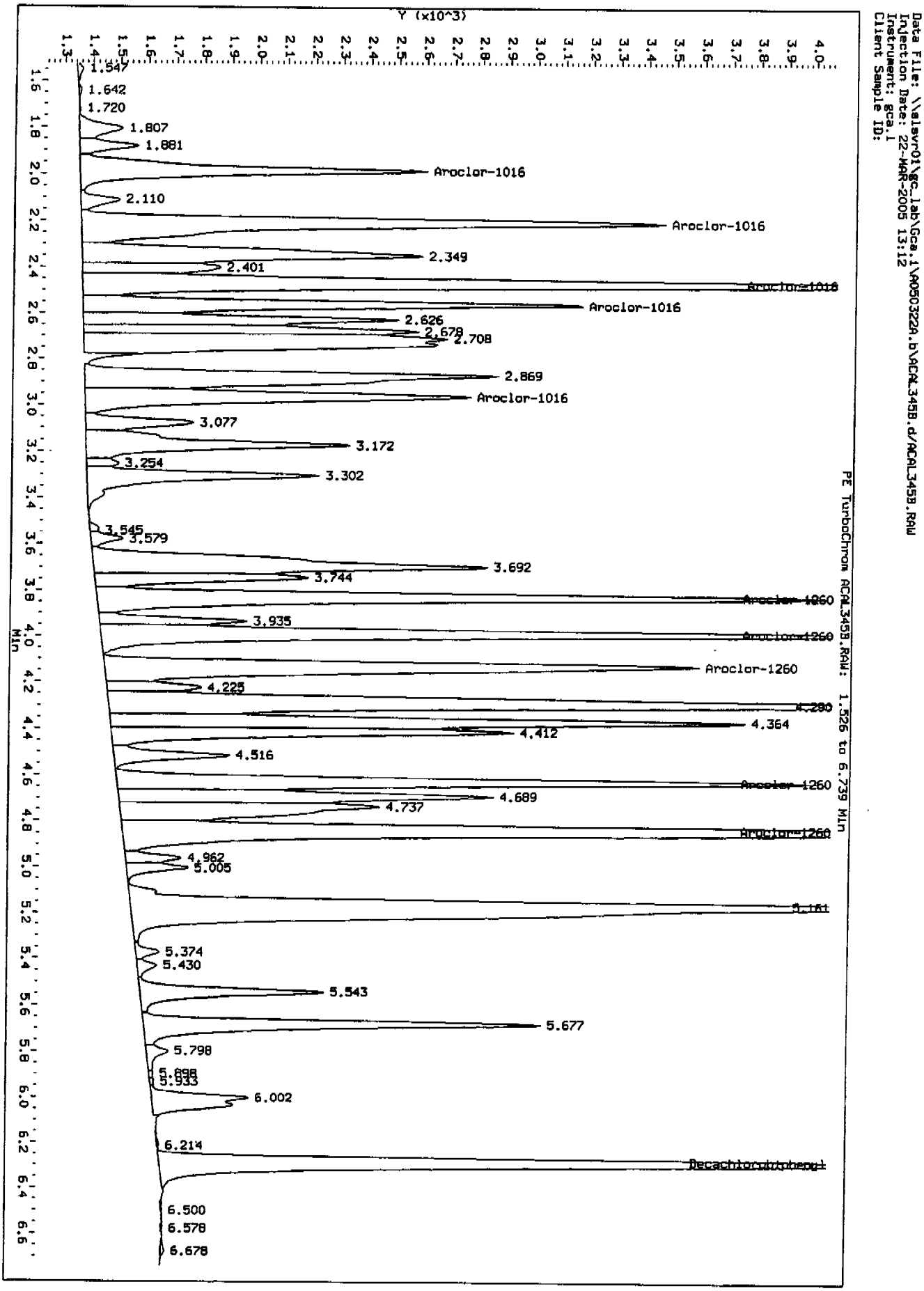
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\go_lab\Goa.i\A0503222A.b\ACAL345B.d
Date : 22-MAR-2005 13:12
Client ID:
Sample Info: ICAL3
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: goa.i
Operator: BLG
Column diameter: 0.53


Y (x10^3)
Min
1.547
1.642
1.720
1.807
1.881
Aroclor-1016
2.110
Aroclor-1016
2.349
2.401
Aroclor-1016
Aroclor-1016
2.626
2.678
2.708
2.869
Aroclor-1016
3.077
3.172
3.254
3.302
3.545
3.579
3.692
3.744
Aroclor-1260
3.935
Aroclor-1260
Aroclor-1260
4.225
4.290
4.364
4.412
4.516
Aroclor-1260
4.689
4.737
Aroclor-1260
4.962
5.005
5.161
5.374
5.430
5.543
5.677
5.798
5.898
5.933
6.002
6.214
Decachlorobiphenyl
6.500
6.578
6.678
Data File: \\elsvr01\gc_lab\Gca.i\A0503222A.b\ACAL345B.d\ACAL345B.RAW
Injection Date: 22-MAR-2005 13:12
Instrument: gca.i
Client Sample ID:
PE TurboChrom ACAL345B.RAW: 1.526 to 6.739 Min

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL346B.d Page 1
Report Date: 23-Mar-2005 11:27

STL St. Louis

Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL346B.d
Lab Smp Id: ICAL4
Inj Date : 22-MAR-2005 13:27
Operator : BLO Inst ID: gca.i
Smp Info : ICAL4
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04B.m
Meth Date : 23-Mar-2005 11:25 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358B.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	1.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	1.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.984	1.980	0.004	6411	500.000	514.6	80.00- 120.00	100.00
2.205	2.201	0.004	11626	500.000	520.8	144.96- 217.44	181.34
2.470	2.465	0.005	16180	500.000	508.0	211.27- 316.90	252.38
2.561	2.556	0.005	7867	500.000	517.7	99.01- 148.52	122.71
2.959	2.955	0.004	7710	500.000	505.9	89.53- 134.29	120.26
	Average of Peak Amounts =				513.4		
28 Aroclor-1260					CAS #: 11096-82-5		
3.826	3.817	0.009	12451	500.000	521.3	80.00- 120.00	100.00
3.986	3.978	0.008	13056	500.000	517.0	82.93- 124.39	104.86
4.125	4.121	0.004	12412	500.000	512.8	81.07- 121.61	99.69
4.628	4.619	0.009	11173	500.000	514.1	64.73- 97.09	89.74
4.836	4.831	0.005	22125	500.000	502.1	126.45- 189.68	177.70
	Average of Peak Amounts =				513.5		
$ 32 Decachlorobiphenyl					CAS #:		
6.287	6.283	0.004	14117	25.0000	25.91		(M)

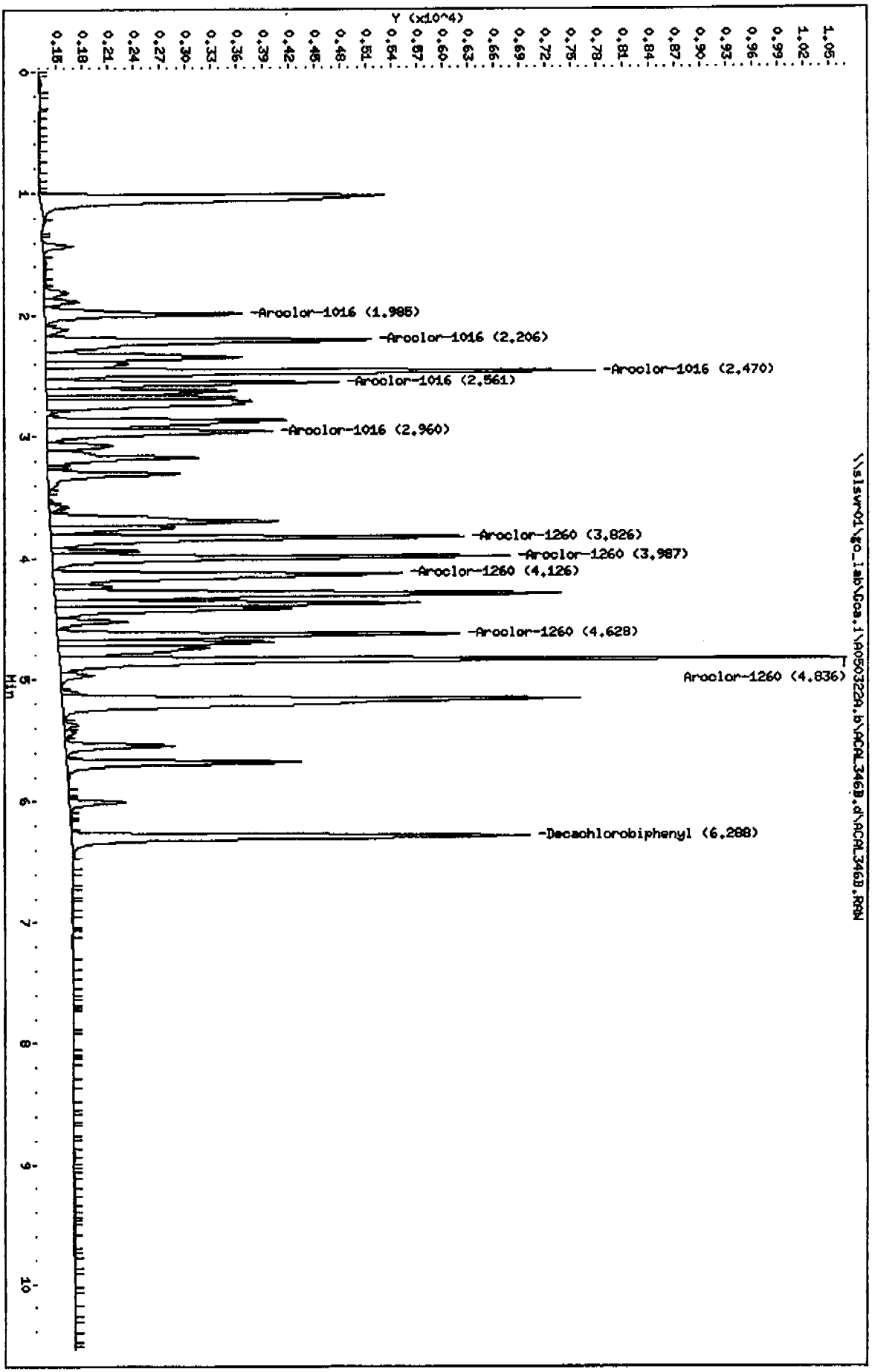
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 3/23/05

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL346B.d
Report Date: 23-Mar-2005 11:27

QC Flag Legend

M - Compound response manually integrated.



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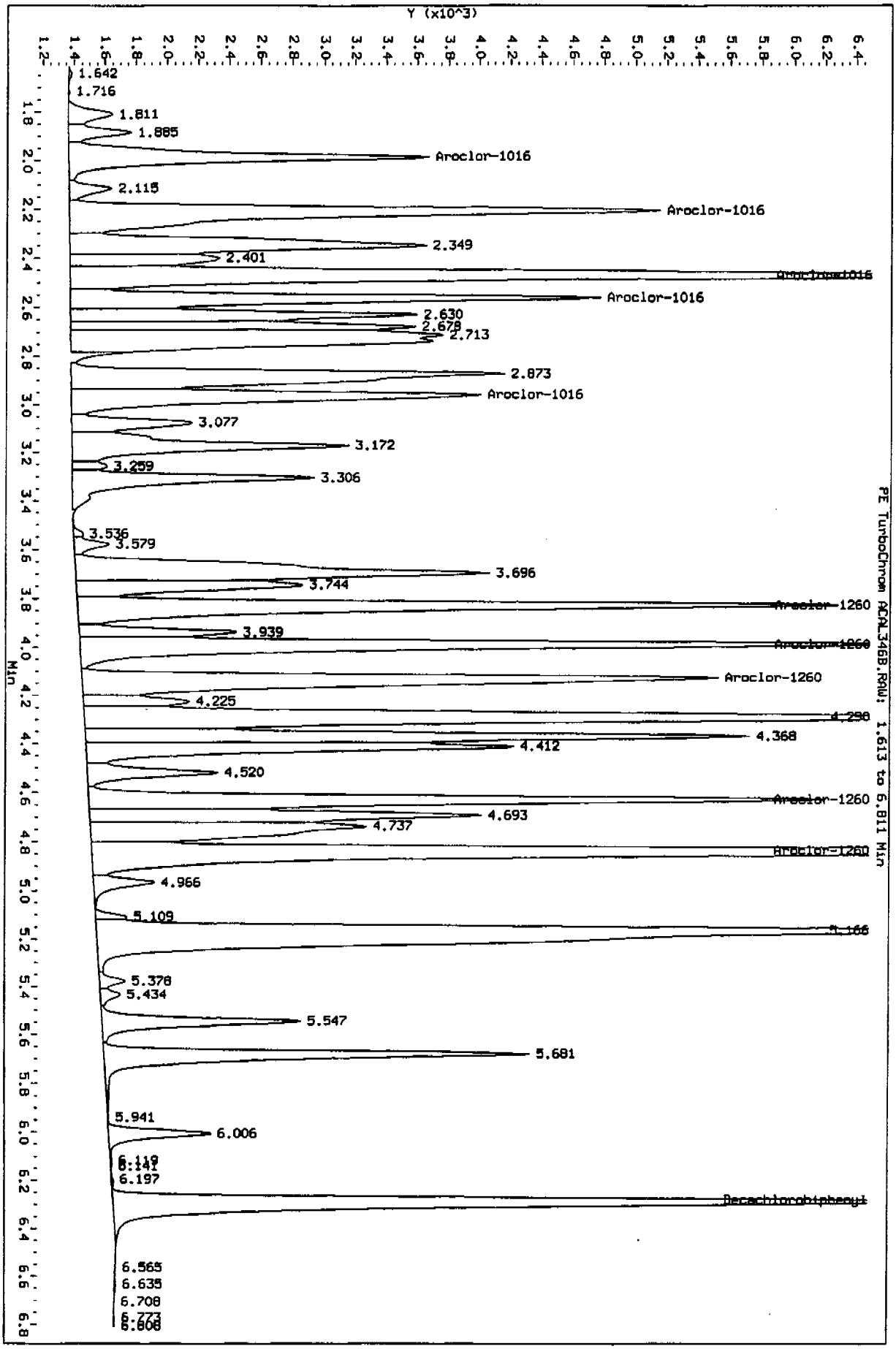
Date : 22-MAR-2005 13:27
Client ID:
Sample Info: ICAL4
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: goa.i
Operator: BLO
Column diameter: 0.53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1.885
Aroclor-1016
2.115
Aroclor-1016
2.349
2.401
Aroclor-1016
Aroclor-1016
2.630
2.678
2.713
2.873
Aroclor-1016
3.077
3.172
3.259
3.306
3.536
3.579
3.696
3.744
Aroclor-1260
3.939
Aroclor-1260
Aroclor-1260
4.225
4.290
4.368
4.412
4.520
Aroclor-1260
4.693
4.737
Aroclor-1260
4.966
5.109
5.166
5.378
5.434
5.547
5.681
5.941
6.006
6.119
6.141
6.197
Decachlorobiphenyl
6.565
6.635
6.708
6.773
6.808
Data File: \\alsvr01\gc_lab\Gca.1\A0503220.b\ACAL346B.d\ACAL346B.RAW
Injection Date: 22-MAR-2005 13:27
Instrument: gca.i
Client Sample ID:
PE TurboChrom ACAL346B.RAW: 1.613 to 6.811 Min

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL347B.d Page 1
Report Date: 23-Mar-2005 11:27

STL St. Louis

Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL347B.d
Lab Smp Id: ICAL5
Inj Date : 22-MAR-2005 13:41
Operator : BLO Inst ID: gca.i
Smp Info : ICAL5
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04B.m
Meth Date : 23-Mar-2005 11:25 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358B.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	1.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	1.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

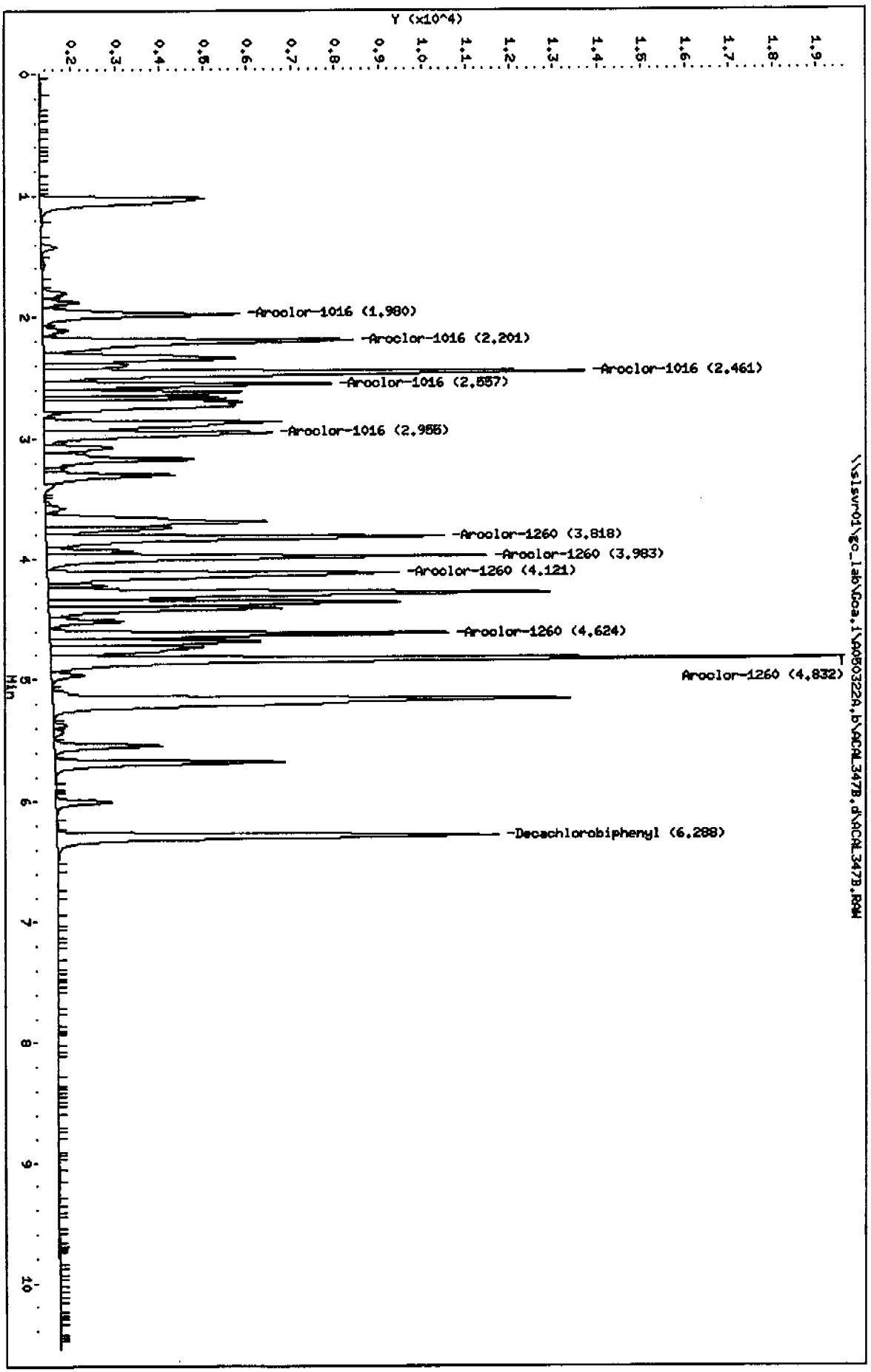
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO	
22 Aroclor-1016					CAS #: 12674-11-2			
1.980	1.980	0.000	12464	1000.00	1000	80.00- 120.00	100.00	(M)
2.201	2.201	0.000	22026	1000.00	986.6	144.96- 217.44	176.72	
2.461	2.465	-0.004	31910	1000.00	1002	211.27- 316.90	256.02	
2.556	2.556	0.000	14977	1000.00	985.6	99.01- 148.52	120.16	
2.955	2.955	0.000	15534	1000.00	1019	89.53- 134.29	124.63	
Average of Peak Amounts =					998.8			
28 Aroclor-1260					CAS #: 11096-82-5			
3.817	3.817	0.000	23576	1000.00	987.0	80.00- 120.00	100.00	(M)
3.982	3.978	0.004	24737	1000.00	979.6	82.93- 124.39	104.92	
4.121	4.121	0.000	24080	1000.00	994.9	81.07- 121.61	102.14	
4.623	4.619	0.004	21524	1000.00	990.4	64.73- 97.09	91.30	
4.831	4.831	0.000	43463	1000.00	986.4	126.45- 189.68	184.35	
Average of Peak Amounts =					987.7			
$ 32 Decachlorobiphenyl					CAS #:			
6.287	6.283	0.004	27394	50.0000	50.28			(M)

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other_____

BLO 3/23/05

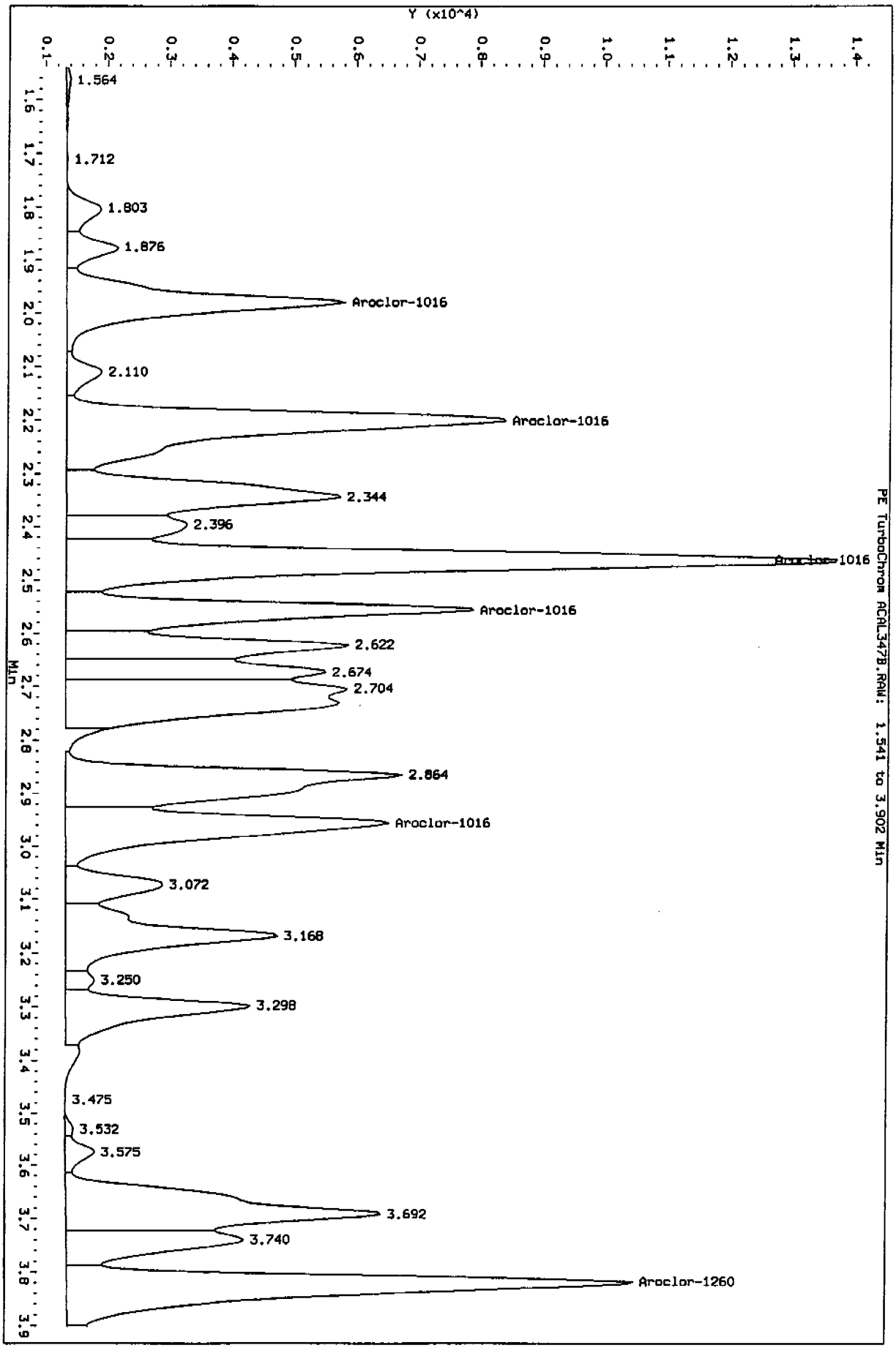
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\gc_lab\Goa.i\A050322A.b\ACAL347B.d
Date : 22-MAR-2005 13:41
Client ID:
Sample Info: ICAL5
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: goa.i
Operator: BLC
Column diameter: 0.53


Y (x10^4)
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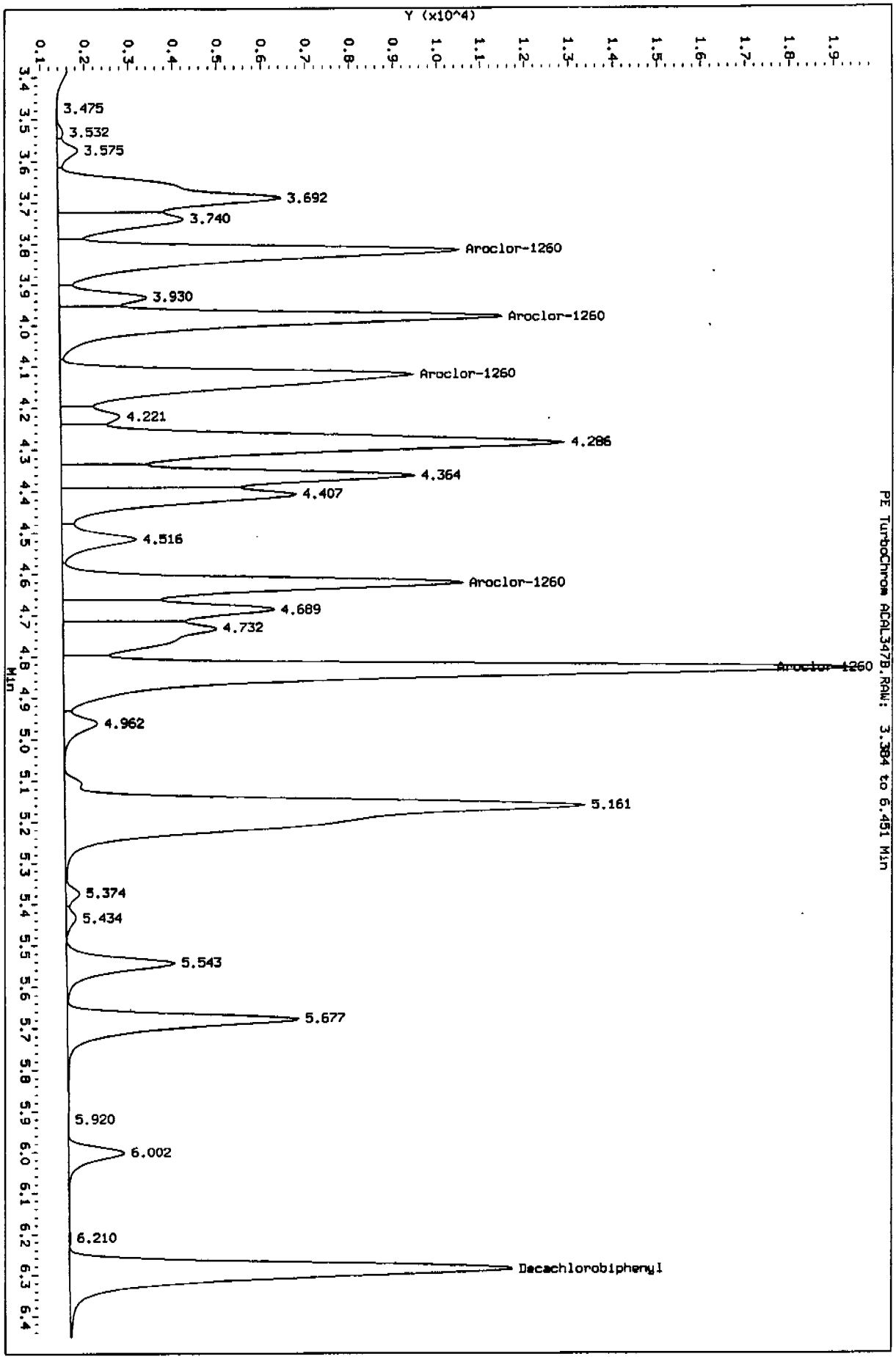
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
Min
1.6
1.7
1.8
1.9
2.0
2.1
2.2
2.3
2.4
2.5
2.6
2.7
2.8
2.9
3.0
3.1
3.2
3.3
3.4
3.5
3.6
3.7
3.8
3.9
1.564
1.712
1.803
1.876
Aroclor-1016
2.110
Aroclor-1016
2.344
2.396
Aroclor-1016
Aroclor-1016
2.622
2.674
2.704
2.864
Aroclor-1016
3.072
3.168
3.250
3.298
3.475
3.532
3.575
3.692
3.740
Aroclor-1260
Data File: \\stlsvr01\gc_lab\Gca.i\A0503022A.b\ACAL347B.d/ACAL347B.RAW
Injection Date: 22-MAR-2005 13:41
Instrument: gca.i
Client Sample ID:
PE TurboChrom ACAL347B.RAW: 1.541 to 3.902 Min


Y (x10^4)
Min
3.475
3.532
3.575
3.692
3.740
Aroclor-1260
3.930
Aroclor-1260
Aroclor-1260
4.221
4.286
4.364
4.407
4.516
Aroclor-1260
4.689
4.732
Aroclor-1260
4.962
5.161
5.374
5.434
5.543
5.677
5.920
6.002
6.210
Decachlorobiphenyl
Data File: \\slsvr01\gc_lab\Gca.i\A0503220.b\ACAL347B.d/ACAL347B.RAW
Injection Date: 22-MAR-2005 13:41
Instrument: gca.i
Client Sample ID:
PE TurboChrom ACAL347B.RAW: 3.384 to 6.451 Min

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL348B.d Page 1
Report Date: 23-Mar-2005 11:28

STL St. Louis

Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL348B.d
Lab Smp Id: ICAL6
Inj Date : 22-MAR-2005 13:56
Operator : BLO Inst ID: gca.i
Smp Info : ICAL6
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04B.m
Meth Date : 23-Mar-2005 11:25 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358B.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	1.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	1.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

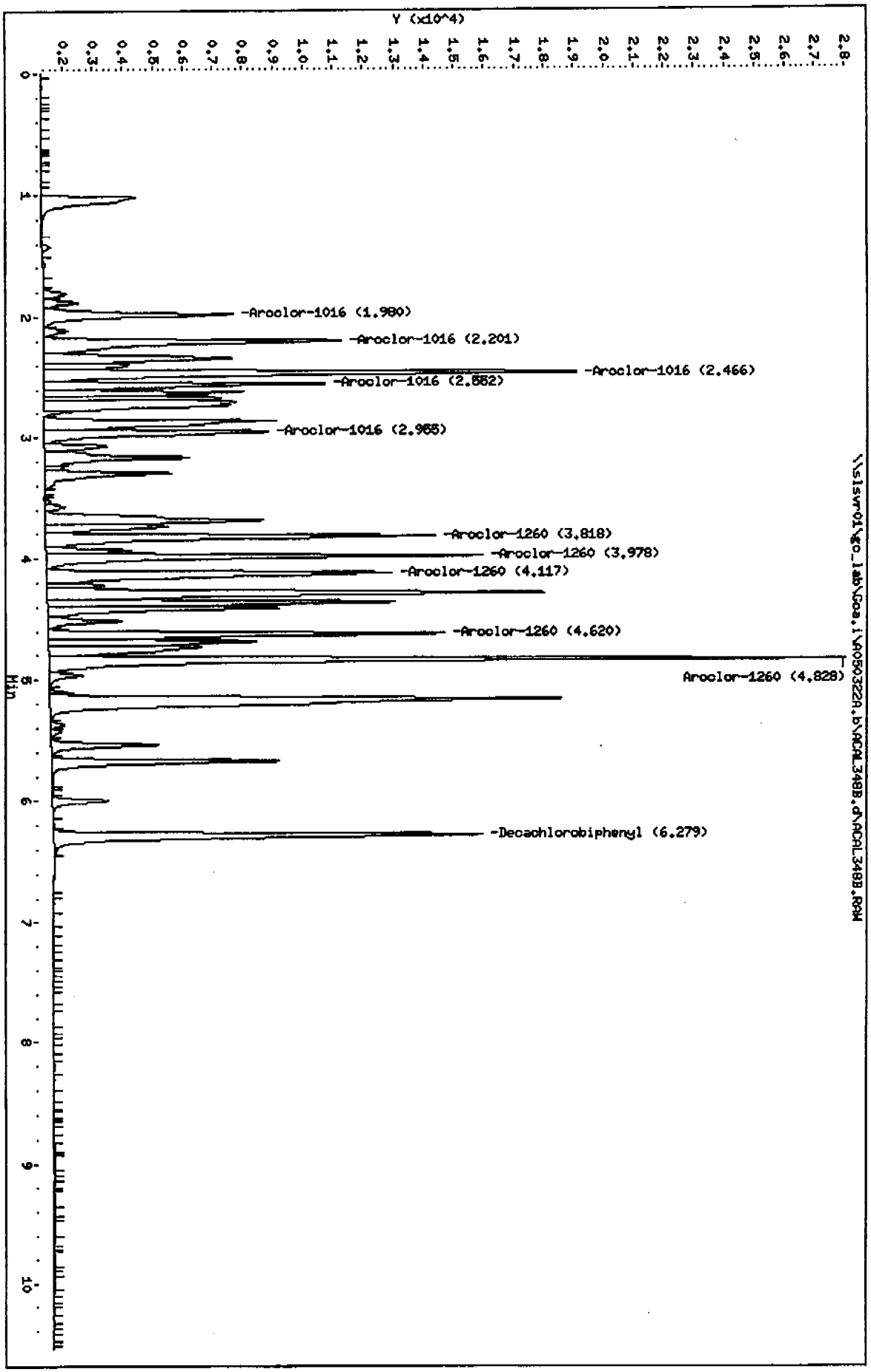
				AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.980	1.980	0.000	17755	1500.00	1425	80.00- 120.00	100.00
2.201	2.201	0.000	30937	1500.00	1386	144.96- 217.44	174.24
2.465	2.465	0.000	45468	1500.00	1428	211.27- 316.90	256.09
2.552	2.556	-0.004	21475	1500.00	1413	99.01- 148.52	120.95
2.955	2.955	0.000	22479	1500.00	1475	89.53- 134.29	126.61
		Average of Peak Amounts =			1425		
28 Aroclor-1260					CAS #: 11096-82-5		
3.817	3.817	0.000	33358	1500.00	1396	80.00- 120.00	100.00
3.978	3.978	0.000	35592	1500.00	1409	82.93- 124.39	106.70
4.116	4.121	-0.005	34809	1500.00	1438	81.07- 121.61	104.35
4.619	4.619	0.000	30711	1500.00	1413	64.73- 97.09	92.06
4.827	4.831	-0.004	63510	1500.00	1441	126.45- 189.68	190.39
		Average of Peak Amounts =			1420		
$ 32 Decachlorobiphenyl					CAS #:		
6.279	6.283	-0.004	38299	75.0000	70.29		(M)

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 3/23/05

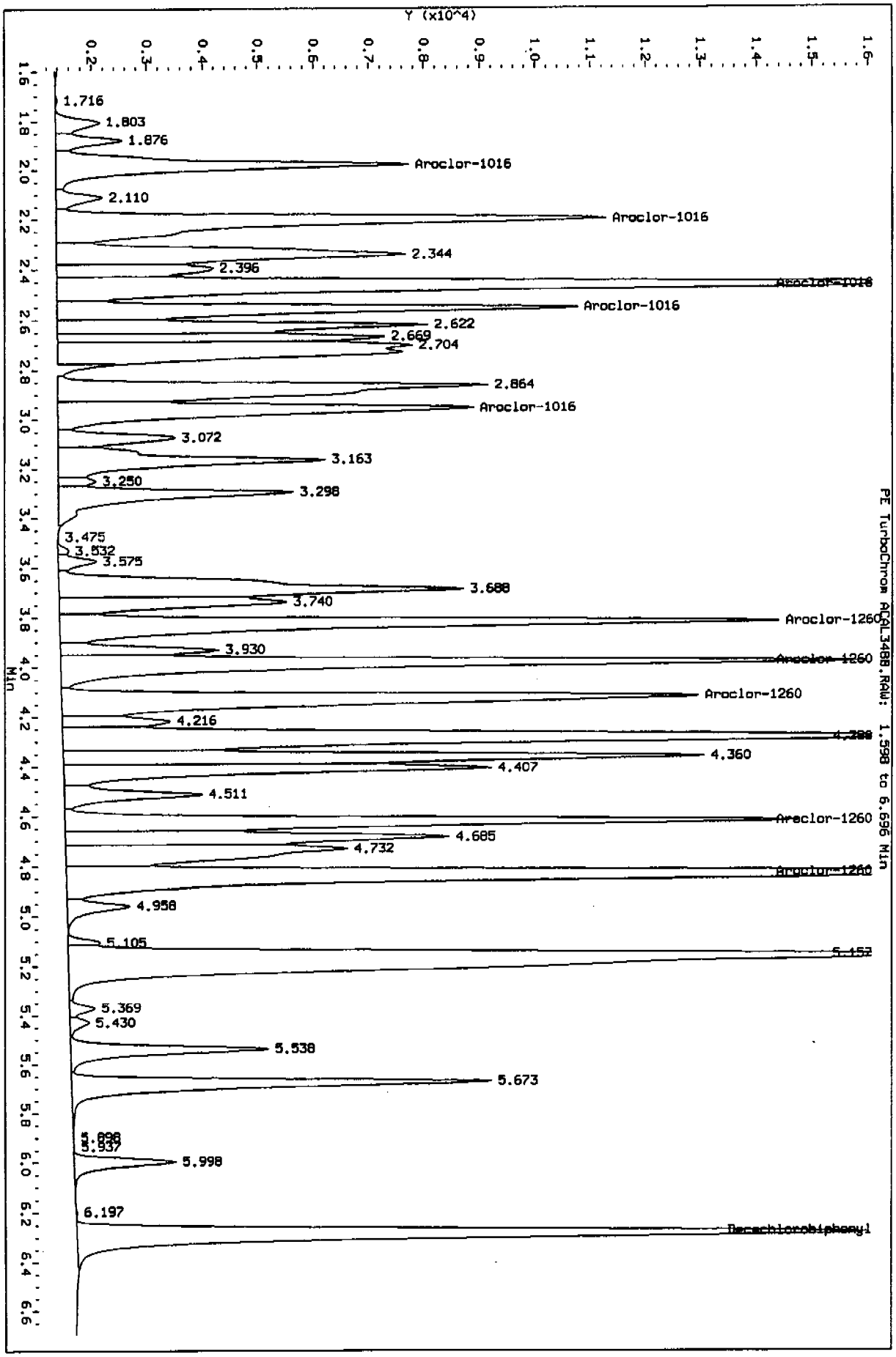
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\go_lab\Goa.i\A050322A.b\ACAL348B.d
Date : 22-MAR-2005 13:56
Client ID:
Sample Info: ICAL6
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: goa.i
Operator: BLO
Column diameter: 0.53



Data File: \\elevr01\gc_lab\Gca.i\A0503Z2A.b\ACAL348B.d/ACAL348B.RAW
Injection Date: 22-MAR-2005 13:56
Instrument: gca.i
Client Sample ID:

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL349B.d
Report Date: 23-Mar-2005 11:28

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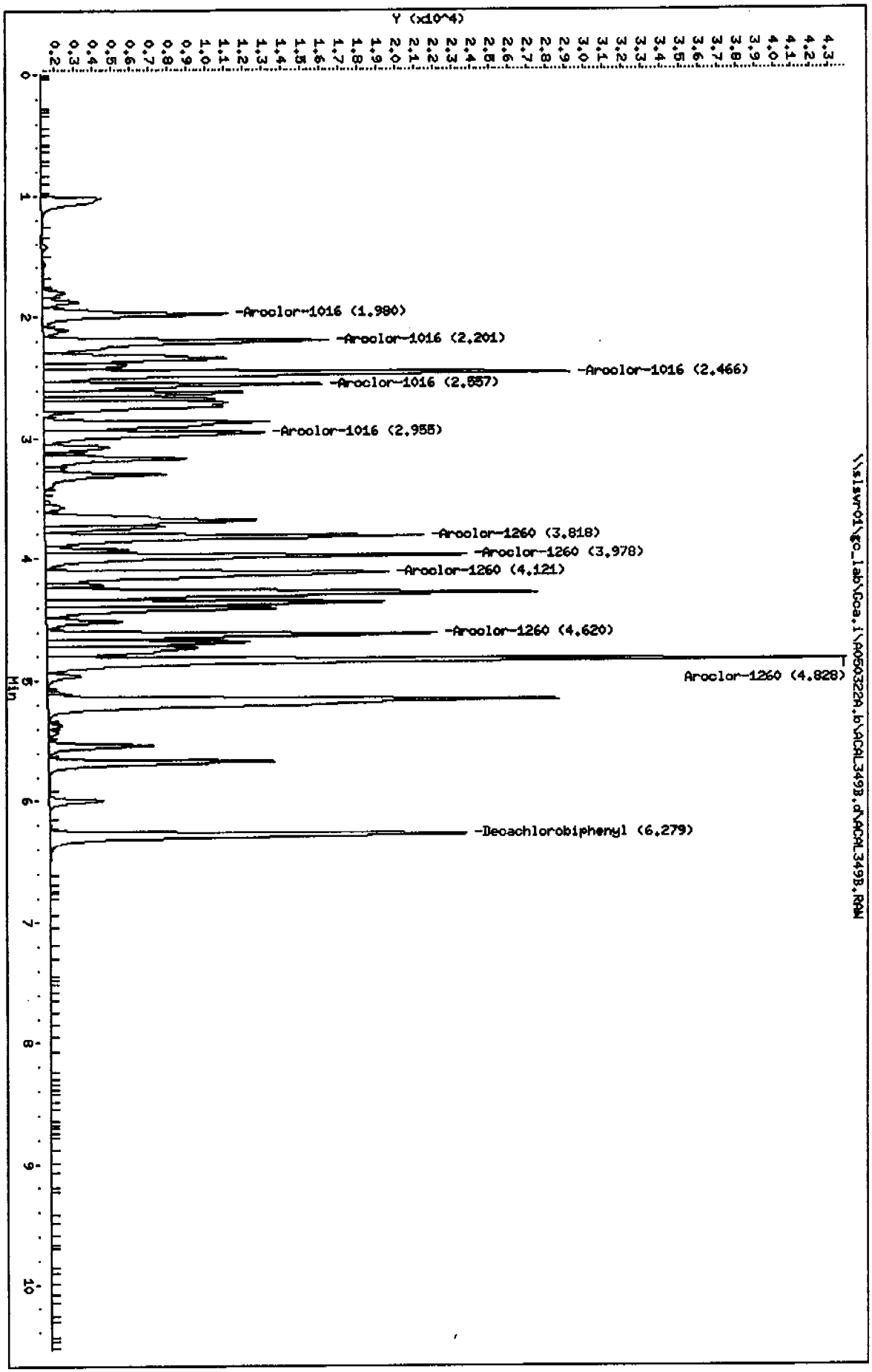
Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL349B.d
Lab Smp Id: ICAL7
Inj Date : 22-MAR-2005 14:10
Operator : BLO Inst ID: gca.i
Smp Info : ICAL7
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04B.m
Meth Date : 23-Mar-2005 11:25 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358B.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	1.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	1.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

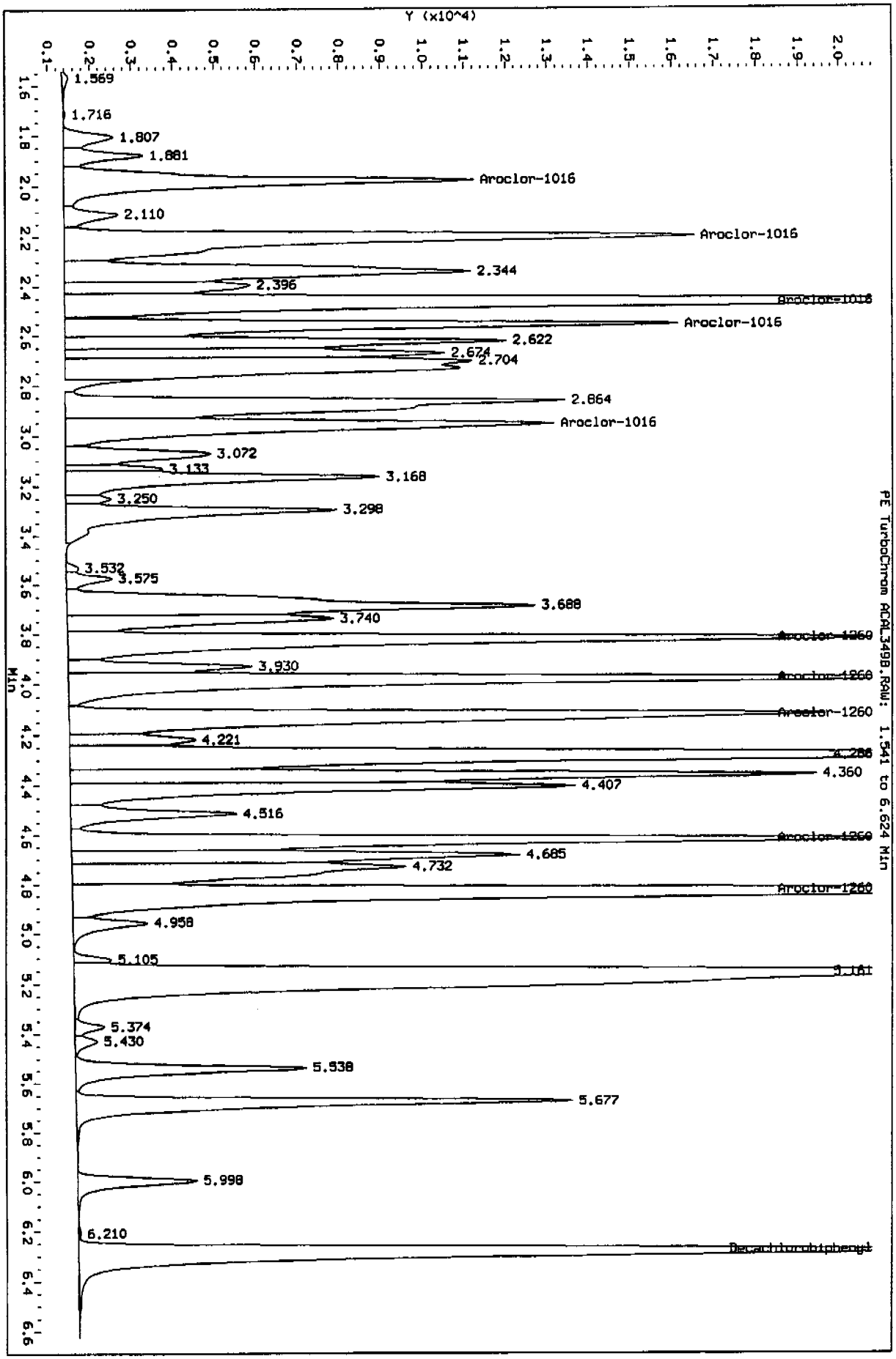
			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.980	1.980	0.000	27417	2500.00	2201	80.00- 120.00	100.00
2.201	2.201	0.000	47129	2500.00	2111	144.96- 217.44	171.90
2.465	2.465	0.000	71319	2500.00	2239	211.27- 316.90	260.13
2.556	2.556	0.000	33752	2500.00	2221	99.01- 148.52	123.11
2.955	2.955	0.000	35067	2500.00	2301	89.53- 134.29	127.90
		Average of Peak Amounts =			2215		
28 Aroclor-1260					CAS #: 11096-82-5		
3.817	3.817	0.000	51316	2500.00	2148	80.00- 120.00	100.00
3.978	3.978	0.000	54465	2500.00	2157	82.93- 124.39	106.14
4.121	4.121	0.000	54400	2500.00	2248	81.07- 121.61	106.01
4.619	4.619	0.000	49000	2500.00	2255	64.73- 97.09	95.49
4.827	4.831	-0.004	101799	2500.00	2310	126.45- 189.68	198.38
		Average of Peak Amounts =			2224		
$ 32 Decachlorobiphenyl					CAS #:		
6.279	6.283	-0.004	60877	150.000	111.7		

BWO 3/23/05



Data File: \\slsvr01\gc_lab\Gca.i\A0503220.b\ACAL3493.d
Date : 22-MAR-2005 14:10
Client ID:
Sample Info: ICAL7
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: gca.i
Operator: BLO
Column diameter: 0.53


Y (x10^4)
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0.4
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0.8
0.9
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1.1
1.2
1.3
1.4
1.5
1.6
1.7
1.8
1.9
2.0
Min
1.6
1.8
2.0
2.2
2.4
2.6
2.8
3.0
3.2
3.4
3.6
3.8
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4.2
4.4
4.6
4.8
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5.6
5.8
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6.4
6.6
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3.250
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3.532
3.575
3.688
3.740
Aroclor-1260
3.930
Aroclor-1260
Aroclor-1260
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4.286
4.360
4.407
4.516
Aroclor-1260
4.685
4.732
Aroclor-1260
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5.105
5.161
5.374
5.430
5.538
5.677
5.998
6.210
Decachlorobiphenyl
Data File: \\slsvr01\gc_lab\Gca.1\A050322A.b\ACAL349B.d\ACAL349B.RAW
Injection Date: 22-MAR-2005 14:10
Instrument: gca.i
Client Sample ID:
PE TurboChrom ACAL349B.RAW: 1.541 to 6.624 Min

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL350B.d
Report Date: 23-Mar-2005 11:28

STL St. Louis

Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL350B.d
Lab Smp Id: ICAL8
Inj Date : 22-MAR-2005 14:25
Operator : BLO Inst ID: gca.i
Smp Info : ICAL8
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04B.m
Meth Date : 23-Mar-2005 11:25 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358B.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	1.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	1.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.980	1.980	0.000	42581	4000.00	3418	80.00- 120.00	100.00
2.201	2.201	0.000	72172	4000.00	3233	144.96- 217.44	169.49
2.465	2.465	0.000	111542	4000.00	3502	211.27- 316.90	261.95
2.556	2.556	0.000	52529	4000.00	3457	99.01- 148.52	123.36
2.955	2.955	0.000	55243	4000.00	3625	89.53- 134.29	129.74
	Average of Peak Amounts =				3447		
28 Aroclor-1260					CAS #: 11096-82-5		
3.817	3.817	0.000	79610	4000.00	3333	80.00- 120.00	100.00
3.978	3.978	0.000	84736	4000.00	3356	82.93- 124.39	106.44
4.121	4.121	0.000	85314	4000.00	3525	81.07- 121.61	107.16
4.619	4.619	0.000	76755	4000.00	3532	64.73- 97.09	96.41
4.831	4.831	0.000	164091	4000.00	3724	126.45- 189.68	206.12
	Average of Peak Amounts =				3494		
$ 32 Decachlorobiphenyl					CAS #:		
6.283	6.283	0.000	94965	200.000	174.3		(M)

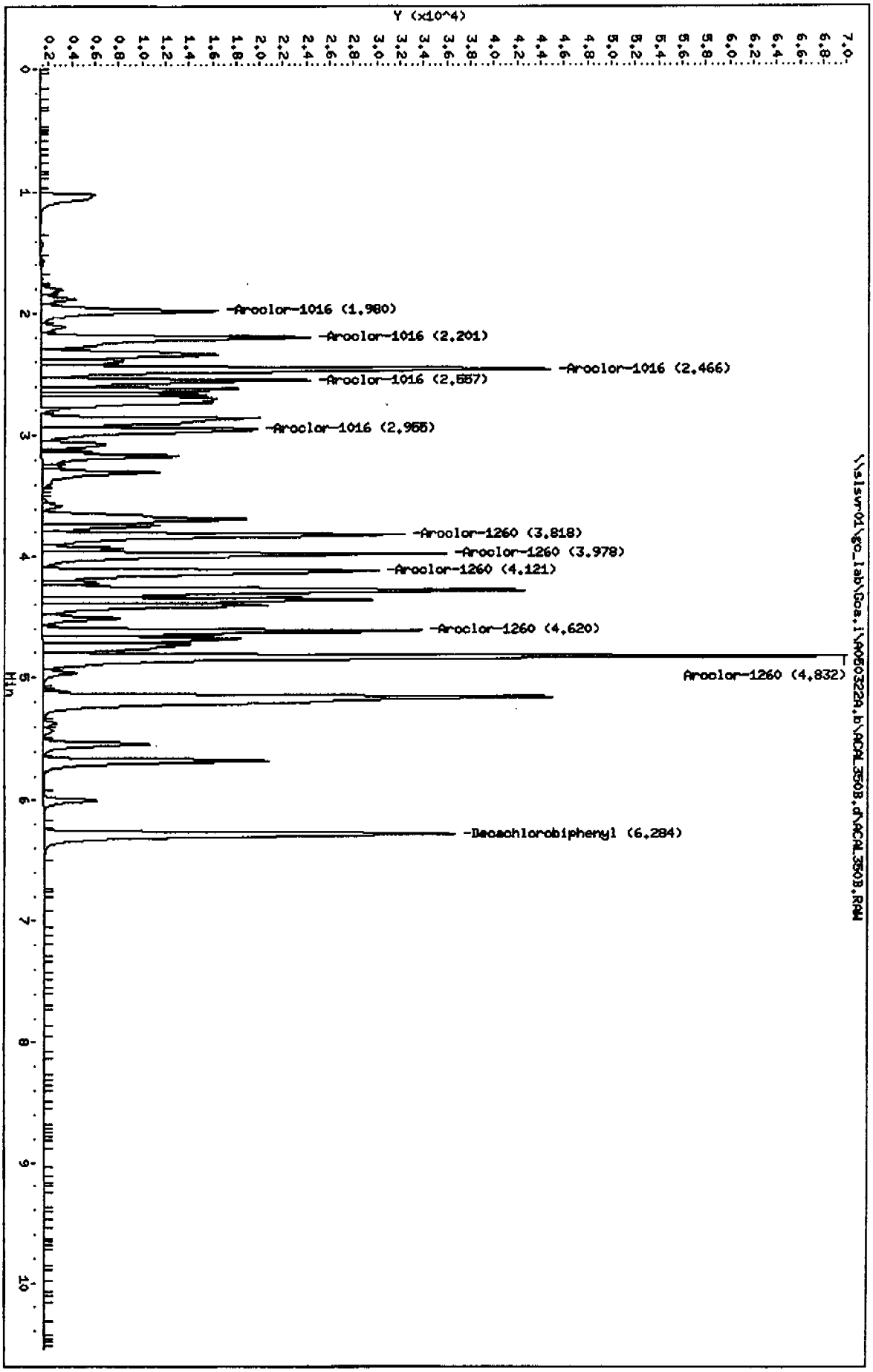
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 3/23/05

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL350B.d
Report Date: 23-Mar-2005 11:28

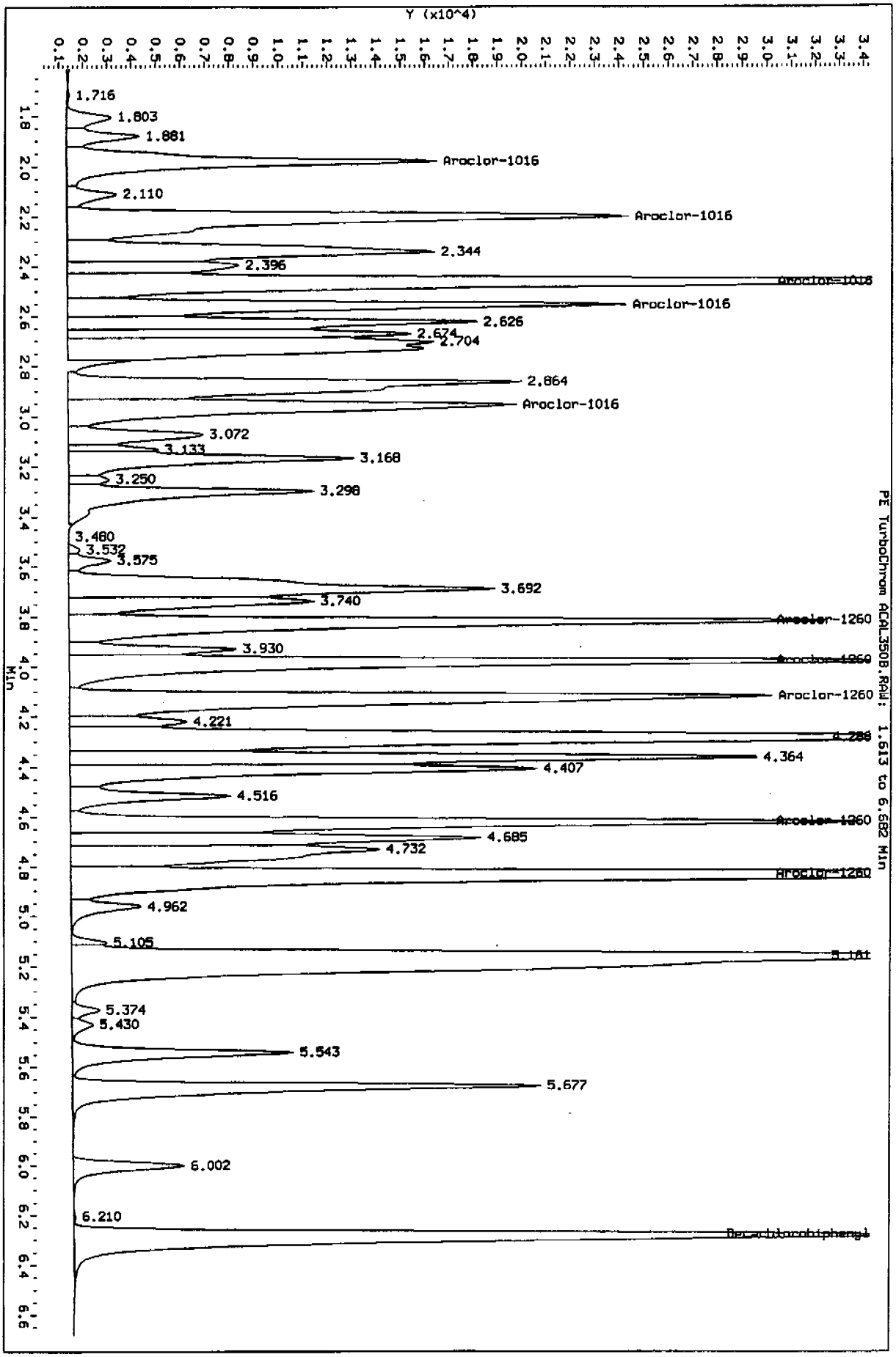
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\go_lab\Goa.i\A0503220.b\ACAL350B.d
Date : 22-MAR-2005 14:25
Client ID:
Sample Info: ICAL8
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: goa.i
Operator: BLO
Column diameter: 0.53


Y (x10^4)
Min
1.716
1.803
1.881
Aroclor-1016
2.110
Aroclor-1016
2.344
2.396
Aroclor-1016
Aroclor-1016
2.626
2.674
2.704
2.864
Aroclor-1016
3.072
3.133
3.168
3.250
3.298
3.480
3.532
3.575
3.692
3.740
Aroclor-1260
3.930
Aroclor-1260
Aroclor-1260
4.221
4.286
4.364
4.407
4.516
Aroclor-1260
4.685
4.732
Aroclor-1260
4.962
5.105
5.374
5.430
5.543
5.677
6.002
6.210
Decachlorobiphenyl
Data File: \\slsvr01\gc_lab\Gca.i\A0503222A.b\ACAL350B.d\ACAL350B.RAW
Injection Date: 22-MAR-2005 14:25
Instrument: gca.i
Client Sample ID:
PE TurboChrom ACAL350B.RAW: 1.613 to 6.682 Min

STL ST LOUIS

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b/AICV352B.d
Report Date: 03/23/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: gca.i
Lab File ID: AICV352B.d
Analysis Type: WATER

Injection Date: 22-MAR-2005 14:54
Lab Sample ID: ICV
Method File: \\slsvr01\gc_lab\Gca.i\A050322A.

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	909.7904	9.0	15.0
29 Aroclor-1260	1000.0000	899.0491	10.1	15.0
34 Decachlorobiphenyl	~~50.0000~~	~~0.0000~~	~~100.0~~	~~15.0~~

BLO 3/23/05

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\AICV352B.d
Report Date: 23-Mar-2005 11:31

STL St. Louis

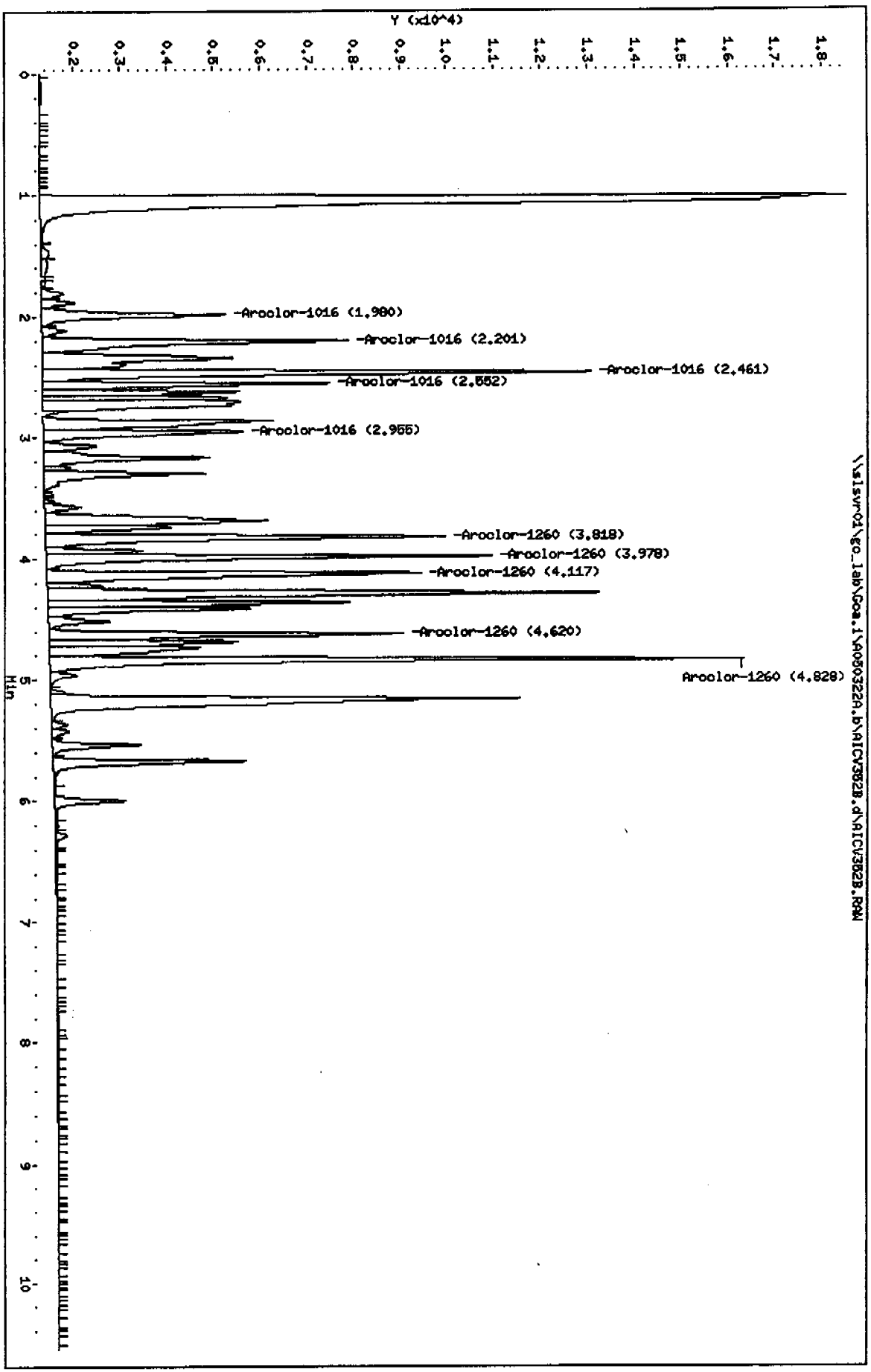
Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\AICV352B.d
Lab Smp Id: ICV
Inj Date : 22-MAR-2005 14:54
Operator : BLO Inst ID: gca.i
Smp Info : ICV
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04B.m
Meth Date : 23-Mar-2005 11:30 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358B.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 4.10 Sample Matrix: WATER
Processing Host: SLGC06

Concentration Formula: Amt * DF * (Uf/Vi) * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vi	2.000	Injection Volume
Vt	10.000	Volume of final extract (ml)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

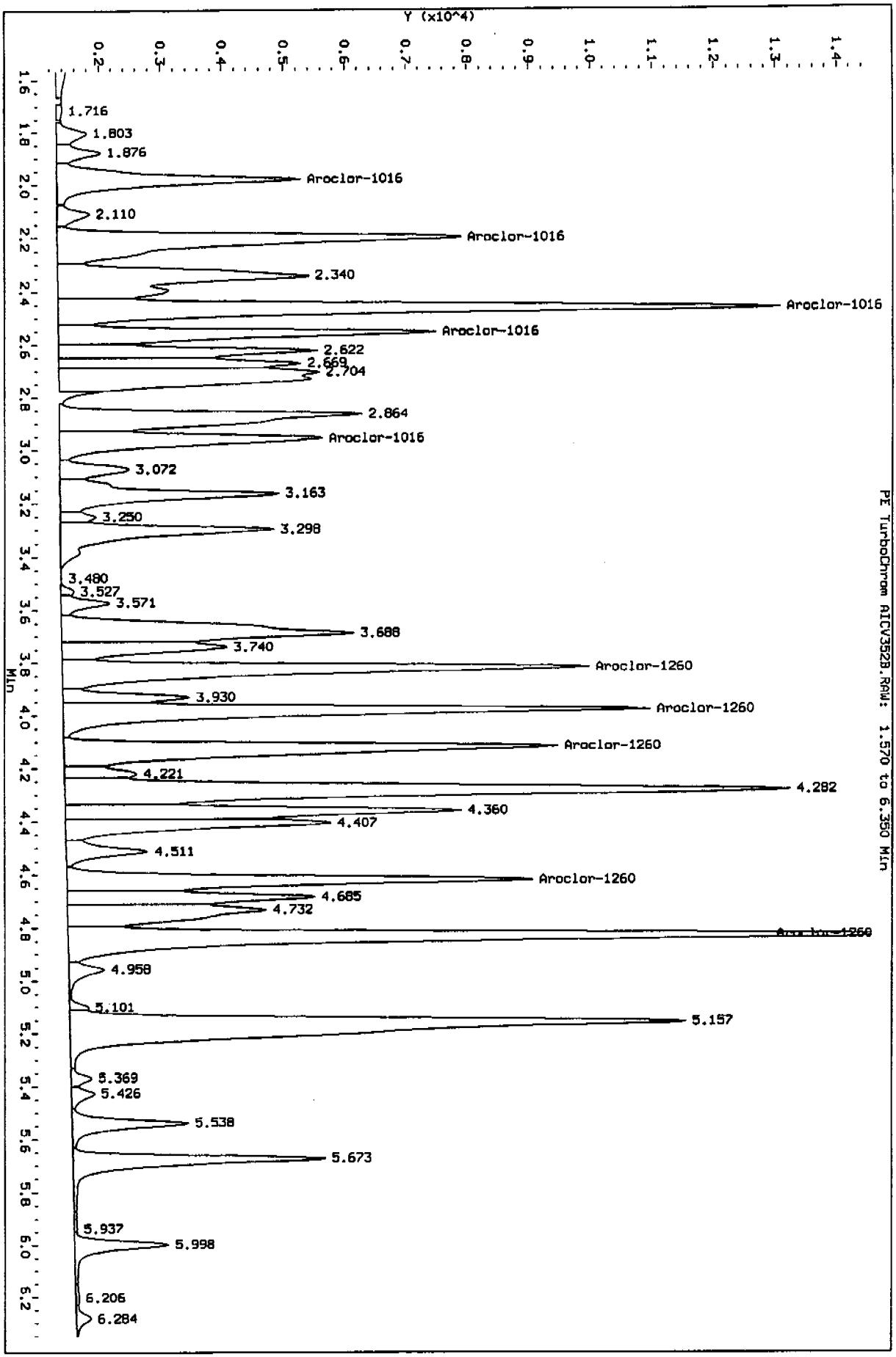
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ng/mL)	TARGET RANGE		RATIO
22 Aroclor-1016					CAS #: 12674-11-2			
1.980	1.980	0.000	11394	1000.00	914.7	80.00-	120.00	100.00
2.201	2.201	0.000	20646	1000.00	924.8	144.96-	217.44	181.20
2.461	2.465	-0.004	30090	1000.00	944.8	211.27-	316.90	264.09
2.552	2.556	-0.004	14102	1000.00	928.0	99.01-	148.52	123.77
2.955	2.955	0.000	12751	1000.00	836.7	89.53-	134.29	111.91
Average of Peak Amounts =					909.8			
28 Aroclor-1260					CAS #: 11096-82-5			
3.817	3.817	0.000	22716	1000.00	951.0	80.00-	120.00	100.00
3.978	3.978	0.000	23547	1000.00	932.5	82.93-	124.39	103.66
4.116	4.121	-0.005	23020	1000.00	951.1	81.07-	121.61	101.34
4.619	4.619	0.000	18380	1000.00	845.8	64.73-	97.09	80.91
4.827	4.831	-0.004	35906	1000.00	814.8	126.45-	189.68	158.06
Average of Peak Amounts =					899			

BW 3/23/05



Data File: \\slsvr01\go_lab\Goa.i\A050322A.b\AICV382B.d
Date : 22-MAR-2005 14:54
Client ID:
Sample Info: ICV
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: goa.i
Operator: BLD
Column diameter: 0.53


Y (x10^4)
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
Min
1.6
1.8
2.0
2.2
2.4
2.6
2.8
3.0
3.2
3.4
3.6
3.8
4.0
4.2
4.4
4.6
4.8
5.0
5.2
5.4
5.6
5.8
6.0
6.2
1.716
1.803
1.876
Aroclor-1016
2.110
Aroclor-1016
2.340
Aroclor-1016
Aroclor-1016
2.622
2.669
2.704
2.864
Aroclor-1016
3.072
3.163
3.250
3.298
3.480
3.527
3.571
3.688
3.740
Aroclor-1260
3.930
Aroclor-1260
Aroclor-1260
4.221
4.282
4.360
4.407
4.511
Aroclor-1260
4.685
4.732
Aroclor-1260
4.958
5.101
5.157
5.369
5.426
5.538
5.673
5.937
5.998
6.206
6.284
Data File: \\slsvr01\gc_lab\Gca.1\A0503220.b\AICV352B.d\AICV352B.RAW
Injection Date: 22-MAR-2005 14:54
Instrument: gca.1
Client Sample ID:
PE TurboChrom AICV352B.RAW: 1.570 to 6.350 Min

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL353B.d
Report Date: 23-Mar-2005 11:28

STL St. Louis

Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL353B.d
Lab Smp Id: 1232
Inj Date : 22-MAR-2005 18:53
Operator : BLO Inst ID: gca.i
Smp Info : 1232
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04B.m
Meth Date : 23-Mar-2005 11:25 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358B.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1232.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	1.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	1.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
RT	EXP RT	DLT RT	RESPONSE				
24 Aroclor-1232					CAS #: 1114-16-5		
1.997	1.997	0.000	6849	500.000	500.0	80.00- 120.00	100.00(M)
2.218	2.218	0.000	4922	500.000	500.0	57.49- 86.24	71.86
2.483	2.483	0.000	5771	500.000	500.0	67.41- 101.11	84.26
3.189	3.189	0.000	2559	500.000	500.0	29.89- 44.84	37.36
3.367	3.367	0.000	2584	500.000	500.0	30.18- 45.27	37.73
		Average of Peak Amounts =			500		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other_____

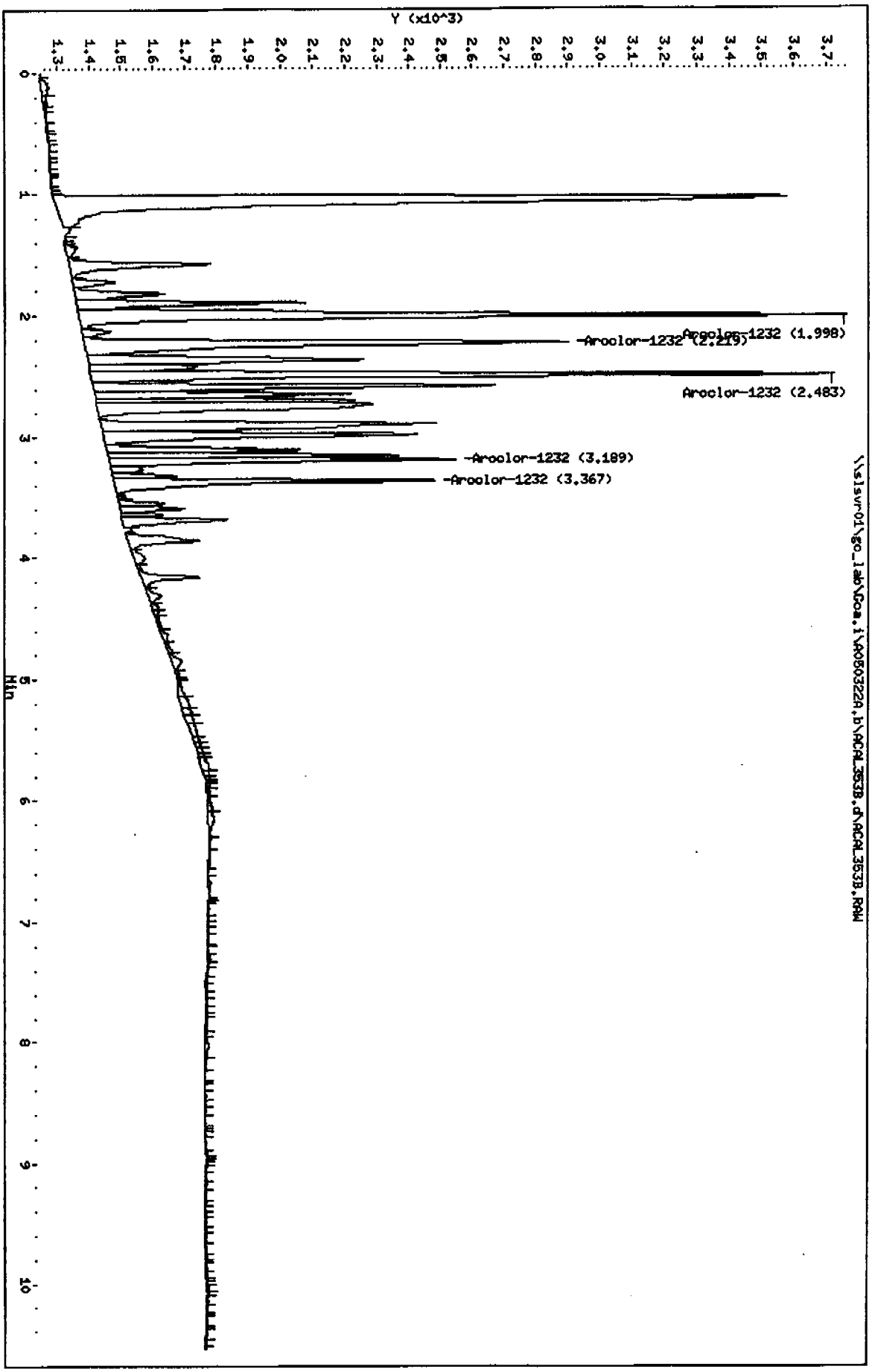
BLO 3/23/05

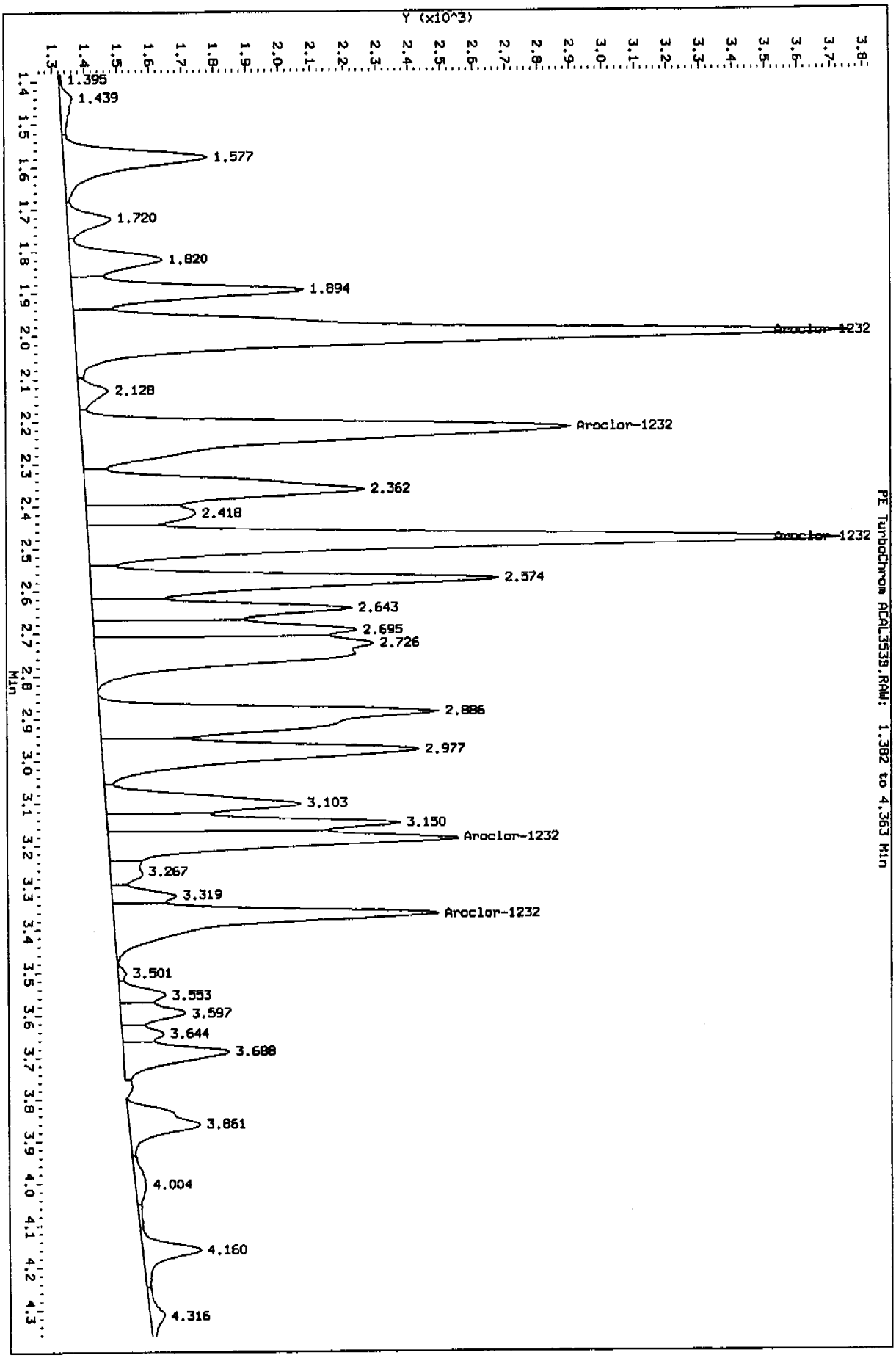
QC Flag Legend

M - Compound response manually integrated.

Data File: \\slsvr01\go_lab\Goa.i\A0503222A.b\ACAL353B.d
Date : 22-MAR-2005 18:53
Client ID:
Sample Info: 1232
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: gca.i
Operator: BLO
Column diameter: 0.53




Y (x10^3)
Min
1.395
1.439
1.577
1.720
1.820
1.894
Aroclor-1232
2.128
Aroclor-1232
2.362
2.418
Aroclor-1232
2.574
2.643
2.695
2.726
2.886
2.977
3.103
3.150
Aroclor-1232
3.267
3.319
Aroclor-1232
3.501
3.553
3.597
3.644
3.688
3.861
4.004
4.160
4.316
Data File: \\slevr01\gc_lab\Gca_1\A0503222A.b\ACAL353B.d/ACAL353B.RAW
Injection Date: 22-MAR-2005 18:53
Instrument: gca_1
Client Sample ID:
PE TurboChrom ACAL353B.RAW: 1.382 to 4.363 Min

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL354B.d Page 1
Report Date: 23-Mar-2005 11:28

STL St. Louis

Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL354B.d
Lab Smp Id: 1242
Inj Date : 22-MAR-2005 19:07
Operator : BLO Inst ID: gca.i
Smp Info : 1242
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04B.m
Meth Date : 23-Mar-2005 11:25 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358B.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1242.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	1.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	1.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

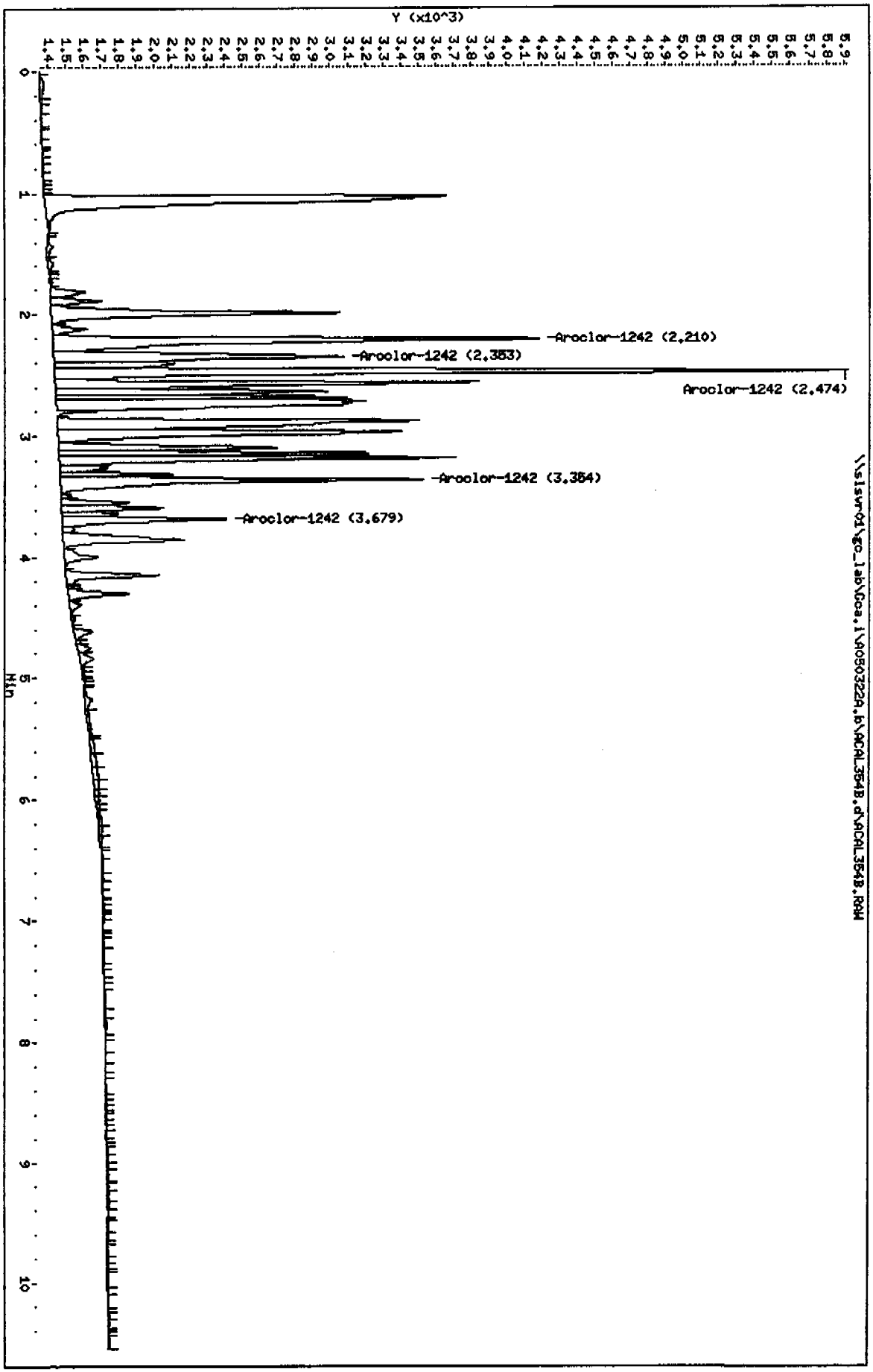
			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ng/mL)	TARGET RANGE	RATIO
25 Aroclor-1242					CAS #: 53469-21-9		
2.210	2.210	0.000	8406	500.000	500.0	80.00- 120.00	100.00(M)
2.353	2.353	0.000	5012	500.000	500.0	47.70- 71.55	59.62
2.474	2.474	0.000	11209	500.000	500.0	106.68- 160.01	133.35
3.354	3.354	0.000	5446	500.000	500.0	51.83- 77.74	64.79
3.679	3.679	0.000	2439	500.000	500.0	23.21- 34.82	29.01
		Average of Peak Amounts =			500		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other_____

BLO 3/23/05

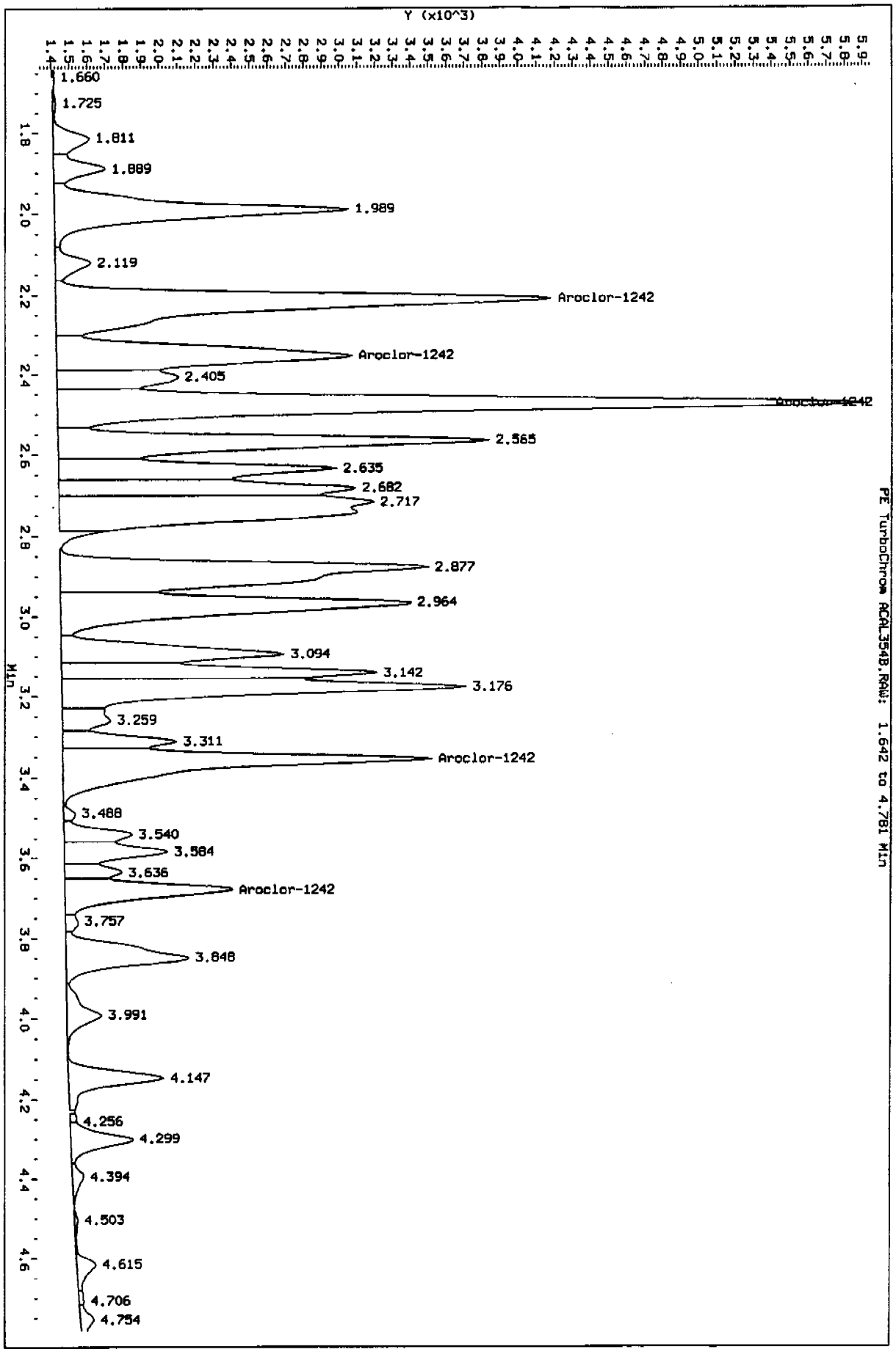
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\go_lab\Goa.i\A0503222A.b\ACAL354B.d
Date : 22-MAR-2005 19:07
Client ID:
Sample Info: 1242
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: goa.i
Operator: BLO
Column diameter: 0.53


Y (x10^3)
Min
1.660
1.725
1.811
1.889
1.989
2.119
Aroclor-1242
Aroclor-1242
2.405
Aroclor-1242
2.565
2.635
2.682
2.717
2.877
2.964
3.094
3.142
3.176
3.259
3.311
Aroclor-1242
3.488
3.540
3.584
3.636
Aroclor-1242
3.757
3.848
3.991
4.147
4.256
4.299
4.394
4.503
4.615
4.706
4.754
Data File: \\slsvr01\gc_lab\Gca.i\A0503222A.b\ACAL354B.d\ACAL354B.RAW
Injection Date: 22-MAR-2005 19:07
Instrument: gca.i
Client Sample ID:
PE TurboChrom ACAL354B.RAW: 1.642 to 4.781 Min

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL355B.d
Report Date: 23-Mar-2005 11:28

STL St. Louis

Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL355B.d
Lab Smp Id: 1248
Inj Date : 22-MAR-2005 19:22
Operator : BLO Inst ID: gca.i
Smp Info : 1248
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04B.m
Meth Date : 23-Mar-2005 11:25 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358B.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1248.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	1.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	1.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

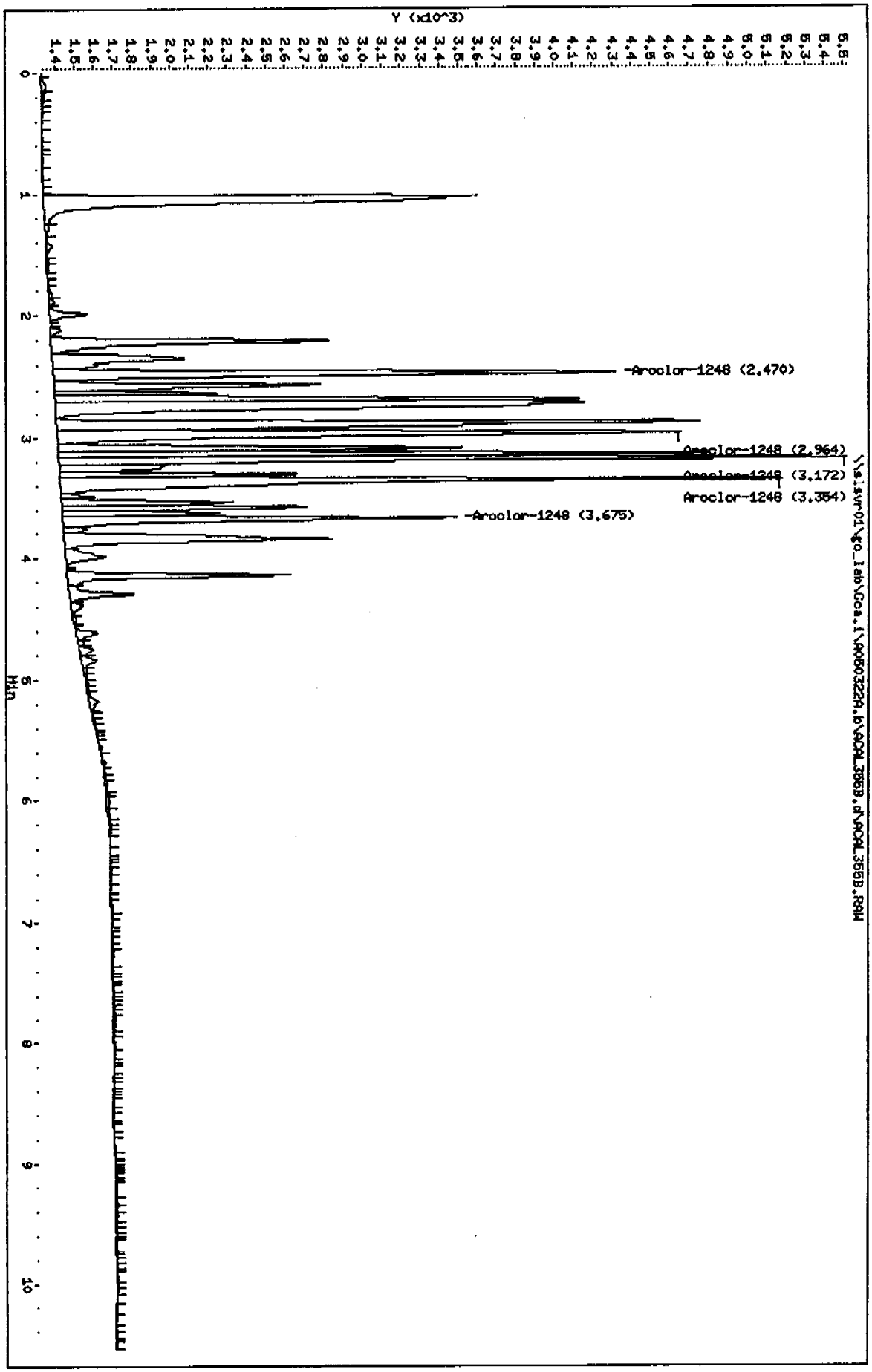
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
26 Aroclor-1248					CAS #: 12672-29-6		
2.470	2.470	0.000	7404	500.000	500.0	80.00- 120.00	100.00(M)
2.964	2.964	0.000	9025	500.000	500.0	97.51- 146.27	121.89
3.172	3.172	0.000	9755	500.000	500.0	105.40- 158.10	131.75
3.354	3.354	0.000	10745	500.000	500.0	116.10- 174.15	145.12
3.674	3.674	0.000	5136	500.000	500.0	55.49- 83.24	69.37
		Average of Peak Amounts =			500		

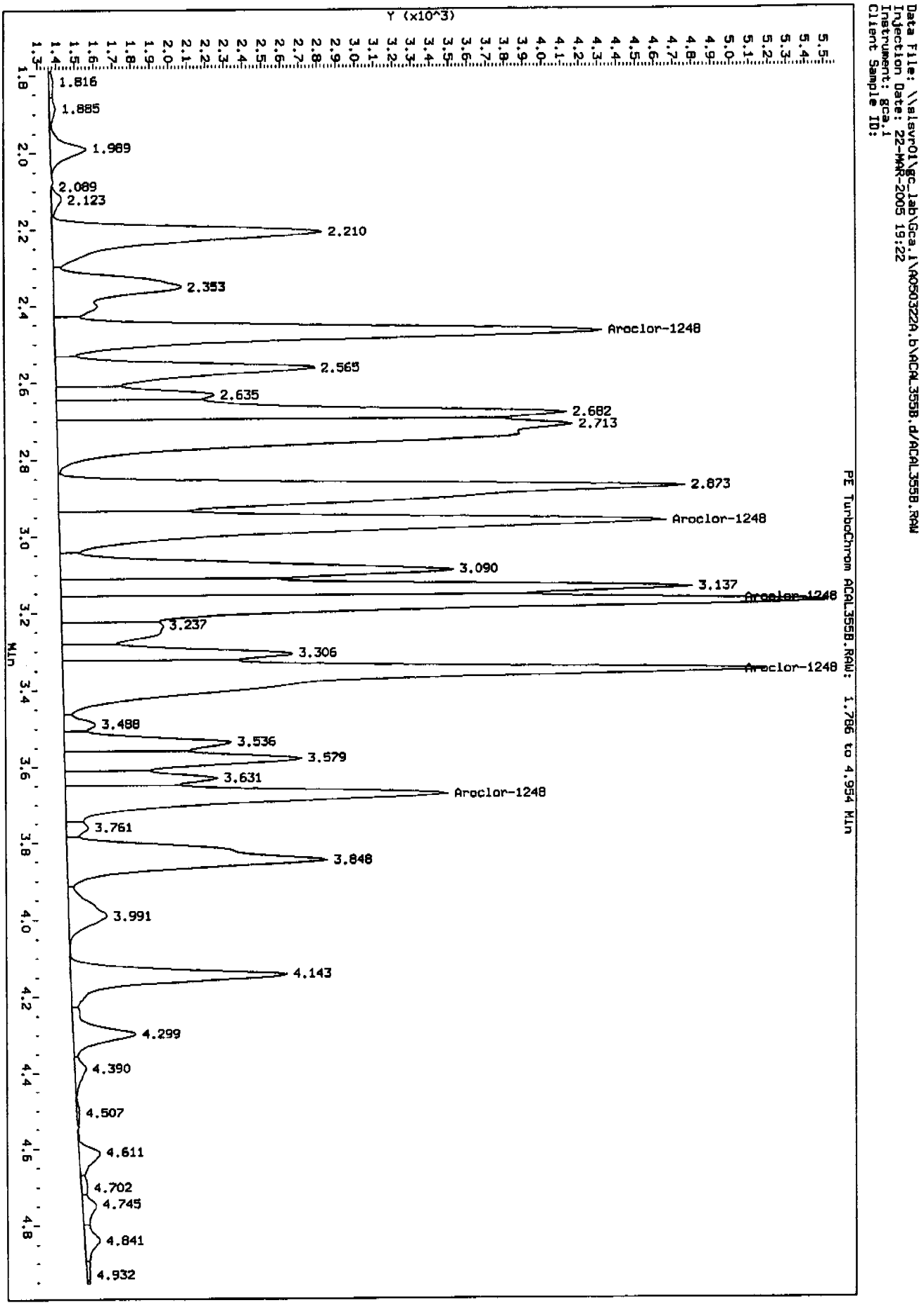
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 3/23/05

QC Flag Legend

M - Compound response manually integrated.


Data File: \\slsvr01\go_lab\Goa.i\A060322A.b\ACAL365B.d
Date : 22-MAR-2006 19:22
Client ID:
Sample Info: 1248
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: goa.i
Operator: BLO
Column diameter: 0.53
Y (x10^3)
Aroclor-1248 (2.470)
Aroclor-1248 (2.964)
Aroclor-1248 (3.172)
Aroclor-1248 (3.364)
Aroclor-1248 (3.675)
\\slsvr01\go_lab\Goa.i\A060322A.b\ACAL365B.d\ACAL365B.RAW
Min


Y (x10^3)
Min
1.816
1.885
1.989
2.089
2.123
2.210
2.353
Aroclor-1248
2.565
2.635
2.682
2.713
2.873
Aroclor-1248
3.090
3.137
Aroclor-1248
3.237
3.306
Aroclor-1248
3.488
3.536
3.579
3.631
Aroclor-1248
3.761
3.848
3.991
4.143
4.299
4.390
4.507
4.611
4.702
4.745
4.841
4.932
PE TurboChrom ACAL355B.RAW: 1.786 to 4.954 Min
Data File: \\alsvr01\gc_lab\Gca.I\A0503222A.b\ACAL355B.d\ACAL355B.RAW
Injection Date: 22-MAR-2005 19:22
Instrument: gca.i
Client Sample ID:

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL356B.d
Report Date: 23-Mar-2005 11:29

STL St. Louis

Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL356B.d
Lab Smp Id: 2154
Inj Date : 22-MAR-2005 19:36
Operator : BLO Inst ID: gca.i
Smp Info : 2154
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04B.m
Meth Date : 23-Mar-2005 11:25 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358B.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar2154.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	1.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	1.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

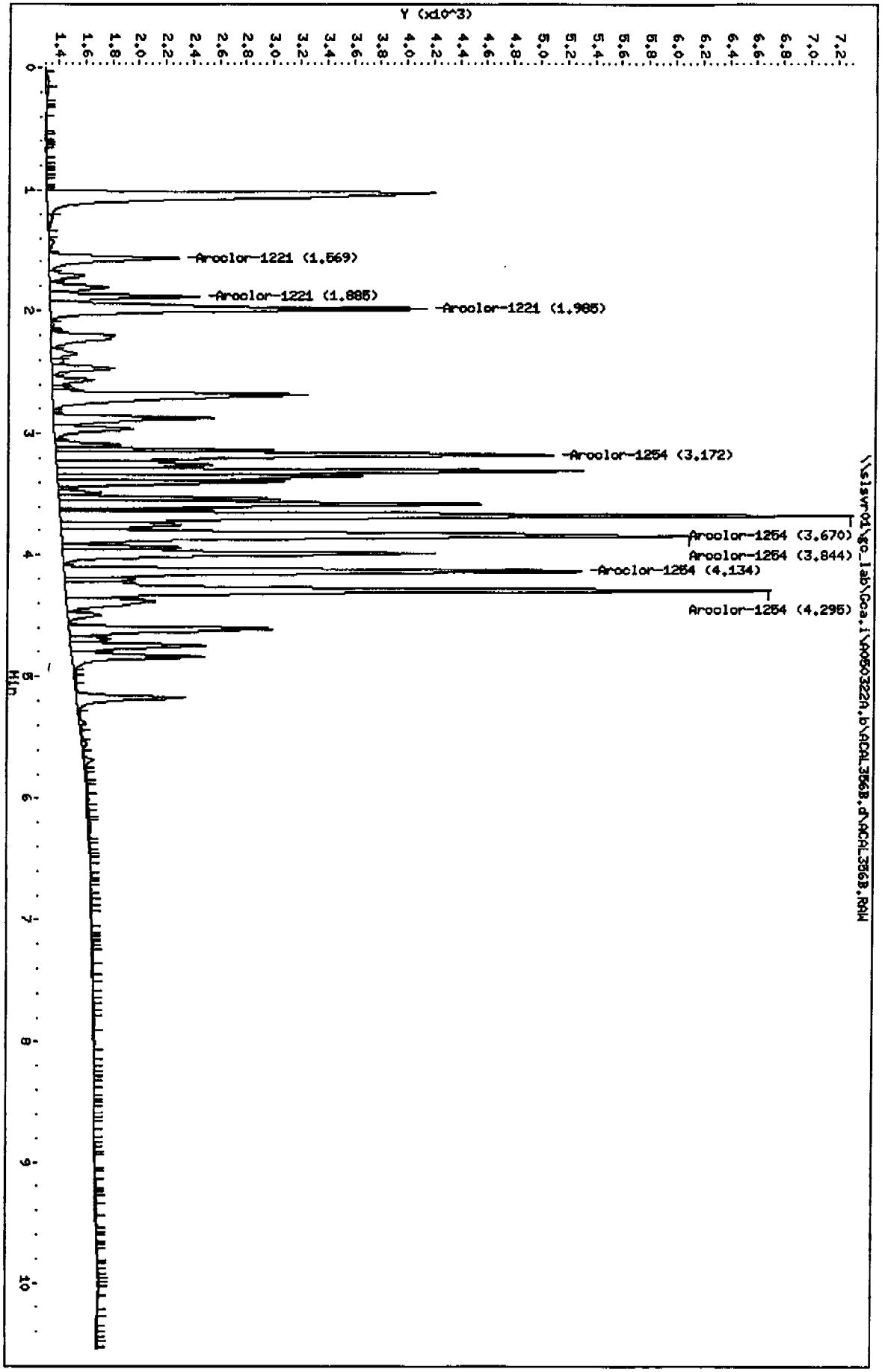
				AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO	
RT	EXP RT	DLT RT	RESPONSE					
23 Aroclor-1221						CAS #: 11104-28-2		
1.568	1.568	0.000	2880	500.000	500.0	80.00- 120.00	100.00(M)	
1.885	1.885	0.000	2608	500.000	500.0	72.44- 108.67	90.56	
1.984	1.984	0.000	8489	500.000	500.0	235.81- 353.71	294.76	
Average of Peak Amounts =					500			
27 Aroclor-1254						CAS #: 11097-69-1		
3.172	3.172	0.000	9603	500.000	500.0	80.00- 120.00	100.00(M)	
3.670	3.670	0.000	15287	500.000	500.0	127.35- 191.03	159.19	
3.843	3.843	0.000	15173	500.000	500.0	126.40- 189.60	158.00	
4.134	4.134	0.000	10322	500.000	500.0	85.99- 128.98	107.49	
4.294	4.294	0.000	14787	500.000	500.0	123.19- 184.78	153.98	
Average of Peak Amounts =					500			

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 3/23/05

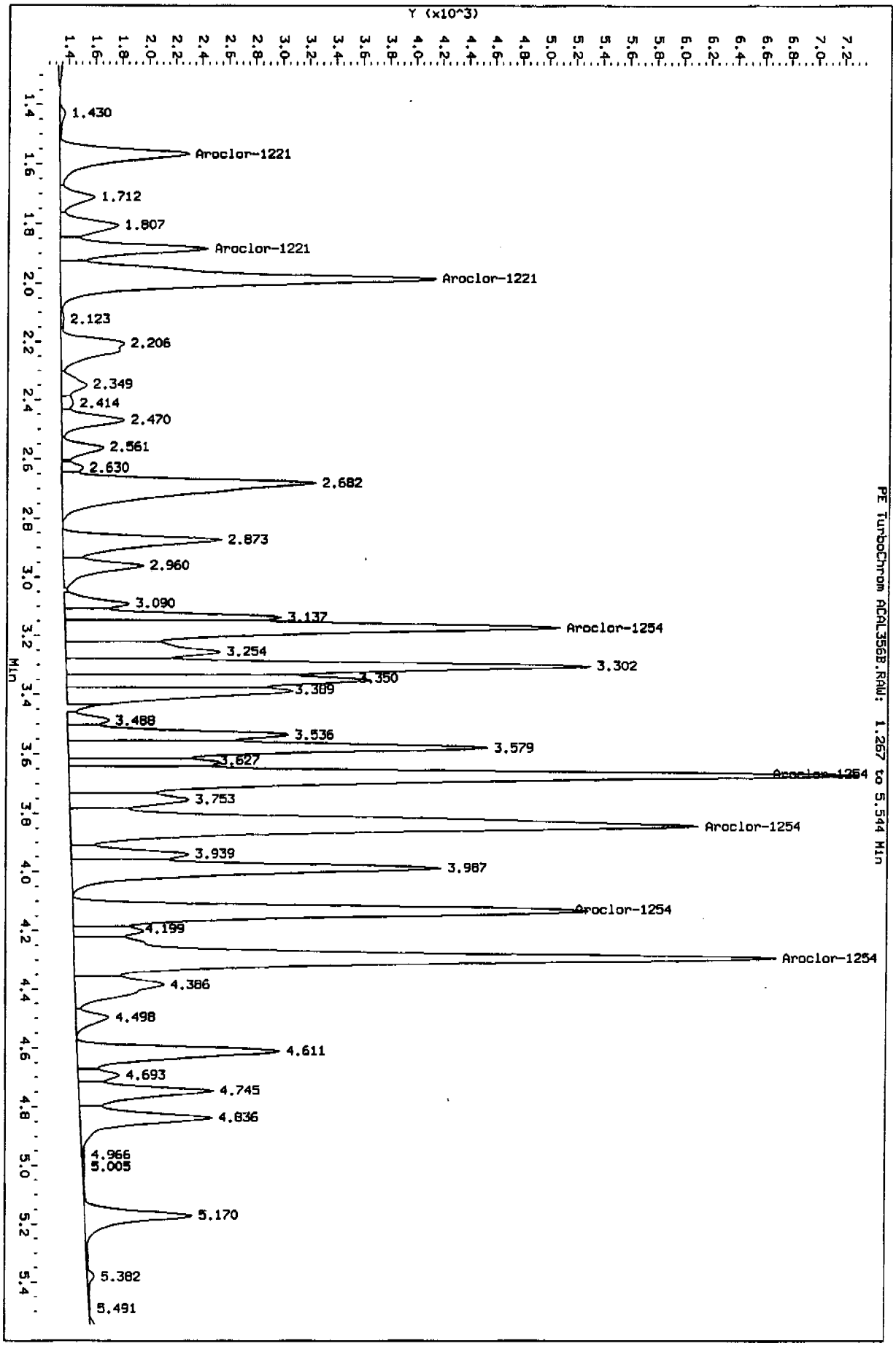
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\go_lab\Goa.i\A0803222A.b\ACAL356B.d
Date : 22-MAR-2005 19:36
Client ID:
Sample Info: 2154
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: goa.i
Operator: BLD
Column diameter: 0.53


Y (x10^3)
Min
1.430
Aroclor-1221
1.712
1.807
Aroclor-1221
Aroclor-1221
2.123
2.206
2.349
2.414
2.470
2.561
2.630
2.682
2.873
2.960
3.090
3.137
Aroclor-1254
3.254
3.302
3.350
3.389
3.488
3.536
3.579
3.627
Aroclor-1254
3.753
Aroclor-1254
3.939
3.987
Aroclor-1254
4.199
Aroclor-1254
4.386
4.498
4.611
4.693
4.745
4.836
4.966
5.005
5.170
5.382
5.491
PE TurboChrom ACAL356B.RAW: 1.267 to 5.544 Min
Data File: \\elsvr01\gc_lab\Gca.i\A0503222A.b\ACAL356B.d\ACAL356B.RAW
Injection Date: 22-MAR-2005 19:36
Instrument: Gca.i
Client Sample ID:

Data File: \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL357B.d
Report Date: 23-Mar-2005 11:29

STL St. Louis

Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL357B.d
Lab Smp Id: 1262
Inj Date : 22-MAR-2005 19:51
Operator : BLO Inst ID: gca.i
Smp Info : 1262
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04B.m
Meth Date : 23-Mar-2005 11:25 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358B.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1262.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	1.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	1.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

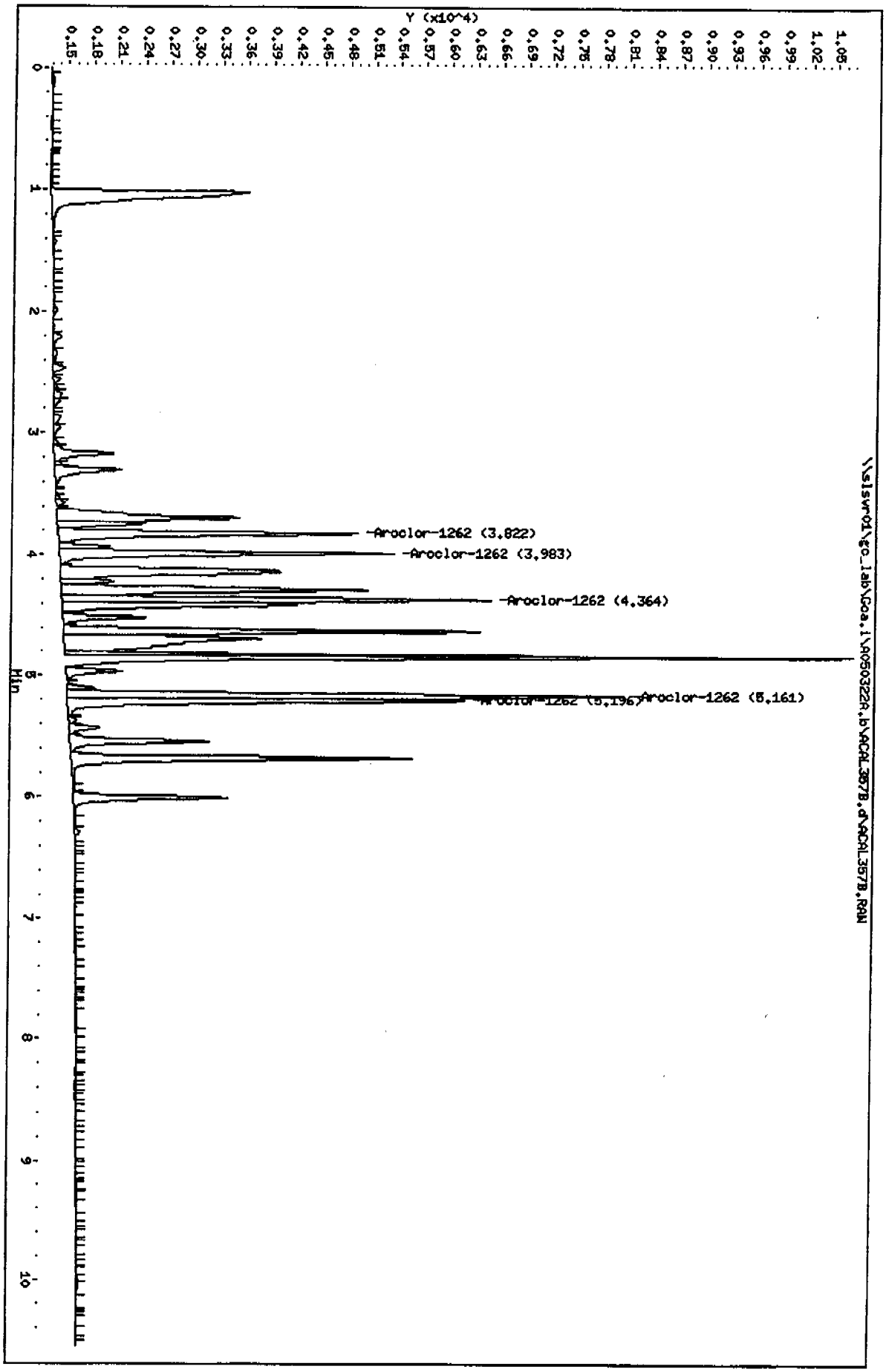
			AMOUNTS				
RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
35 Aroclor-1262					CAS #: 37324-23-5		
3.822	3.822	0.000	8929	500.000	500.0	80.00- 120.00	100.00(M)
3.982	3.982	0.000	9471	500.000	500.0	84.86- 127.28	106.07
4.363	4.363	0.000	11554	500.000	500.0	103.52- 155.28	129.40
5.161	5.161	0.000	15334	500.000	500.0	137.39- 206.08	171.73
5.195	5.195	0.000	13975	500.000	500.0	125.21- 187.81	156.51
		Average of Peak Amounts =			500		

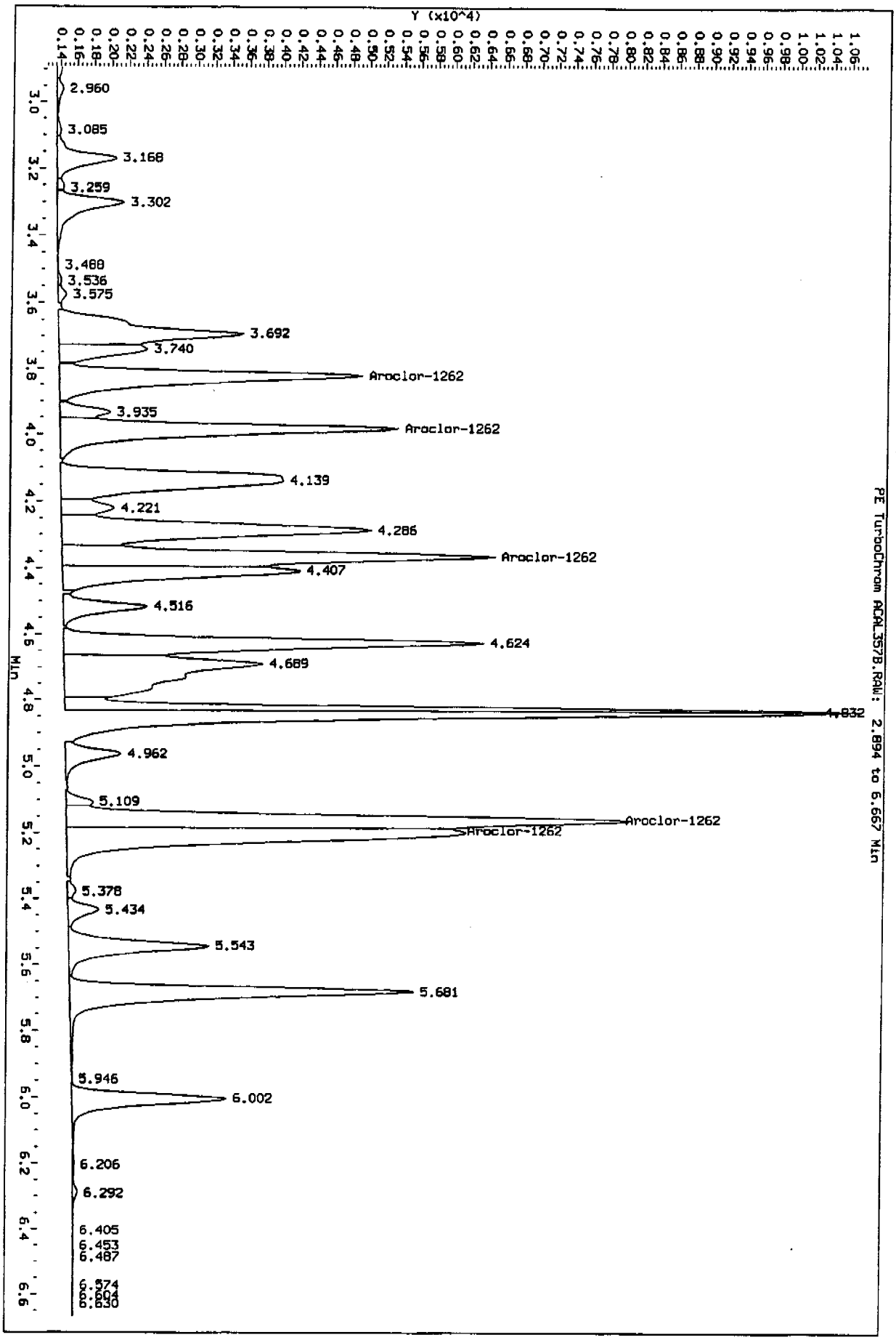
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 3/23/05

QC Flag Legend

M - Compound response manually integrated.


Data File: \\slsvr01\gc_lab\Goa.i\A050322A.b\ACAL357B.d
Date : 22-MAR-2005 19:51
Client ID:
Sample Info: 1262
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: goa.i
Operator: BLO
Column diameter: 0.53
Page 2
Y (x10^4)
Aroclor-1262 (3,822)
Aroclor-1262 (3,983)
Aroclor-1262 (4,364)
Aroclor-1262 (5,161)
\\slsvr01\gc_lab\Goa.i\A050322A.b\ACAL357B.d\ACAL357B.RAW
Min


Data File: \\eisvr01\gc_lab\gca_1\A0503220.b\ACAL357B.d\ACAL357B.RAW
Injection Date: 22-MAR-2005 19:51
Instrument: gca.i
Client Sample ID:
Y (x10^4)
Min
PE TurboChrom ACAL357B.RAW: 2.894 to 6.667 Min
2.960
3.085
3.168
3.259
3.302
3.468
3.536
3.575
3.692
3.740
Aroclor-1262
3.935
Aroclor-1262
4.139
4.221
4.286
Aroclor-1262
4.407
4.516
4.624
4.689
4.832
4.962
5.109
Aroclor-1262
Aroclor-1262
5.378
5.434
5.543
5.681
5.946
6.002
6.206
6.292
6.405
6.453
6.487
6.574
6.604
6.630

STL St. Louis

Data file : \\slsvr01\gc_lab\Gca.i\A050322A.b\ACAL358B.d
Lab Smp Id: 1268
Inj Date : 22-MAR-2005 20:05
Operator : BLO Inst ID: gca.i
Smp Info : 1268
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gca.i\A050322A.b\APCB04B.m
Meth Date : 23-Mar-2005 11:25 owenb Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358B.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1268.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	1.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	1.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

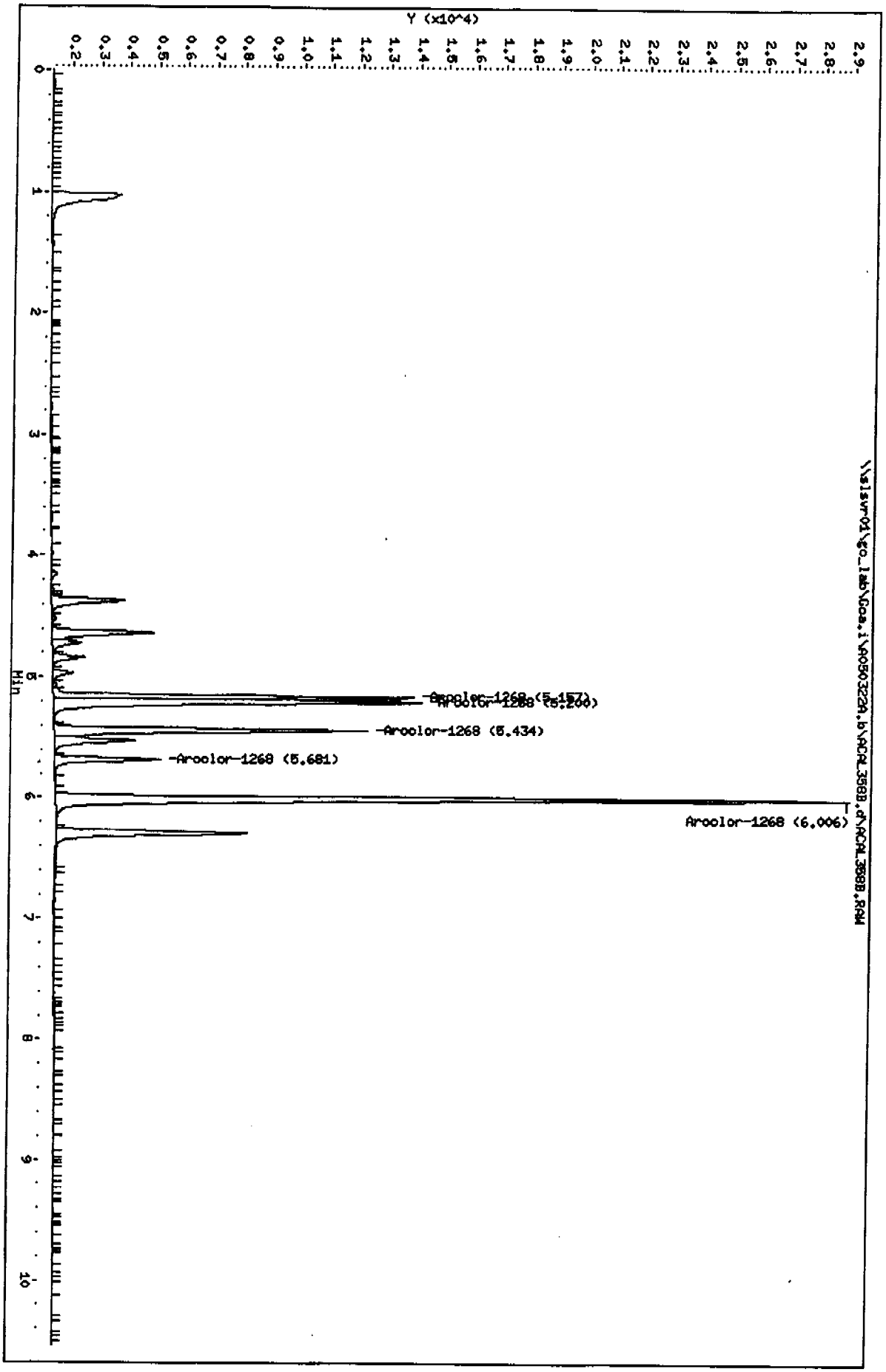
			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ng/mL)	TARGET RANGE	RATIO
36 Aroclor-1268					CAS #: 11100-14-4		
5.156	5.156	0.000	25237	500.000	500.0	80.00- 120.00	100.00(M)
5.200	5.200	0.000	34665	500.000	500.0	109.89- 164.83	137.36
5.434	5.434	0.000	25242	500.000	500.0	80.02- 120.02	100.02
5.681	5.681	0.000	8449	500.000	500.0	26.78- 40.17	33.48
6.006	6.006	0.000	67642	500.000	500.0	214.42- 321.63	268.03
		Average of Peak Amounts =			500		

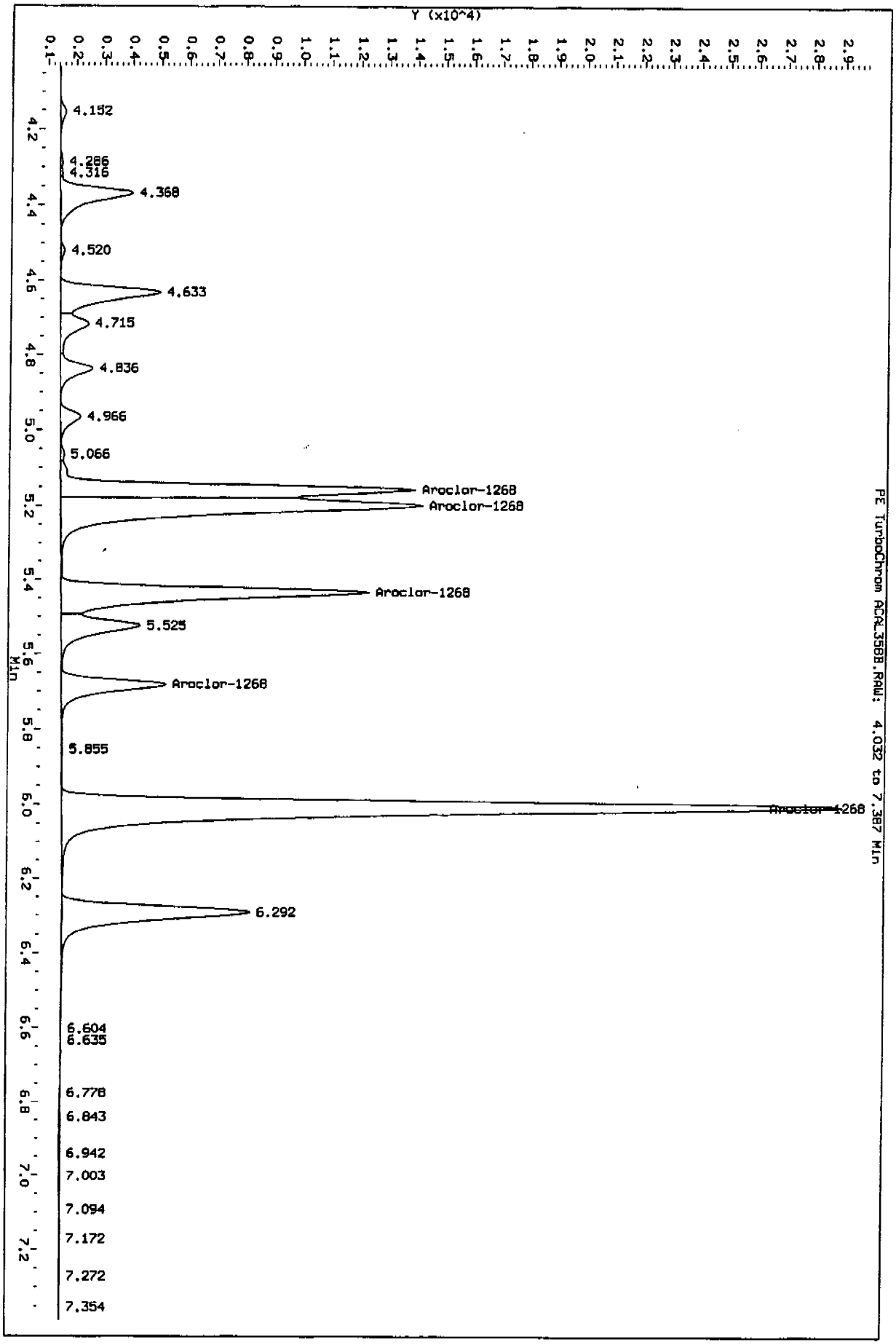
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 3/23/05

QC Flag Legend

M - Compound response manually integrated.


Data File: \\slsvr01\gc_lab\Gca_i\A0503220.b\ACAL358B.d
Date : 22-MAR-2005 20:05
Client ID:
Sample Info: 1268
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: gca_i
Operator: BLO
Column diameter: 0.53
Y (x10^4)
Min
Aroolor-1268 (5.157)
Aroolor-1268 (5.200)
Aroolor-1268 (5.434)
Aroolor-1268 (5.681)
Aroolor-1268 (6.006)
\\slsvr01\gc_lab\Gca_i\A0503220.b\ACAL358B.d\ACAL358B.RAW


Data File: \\alsvr01\gc_lab\Gca.i\A050322A.b\ACAL358B.d/ACAL358B.RAW
Injection Date: 22-MAR-2005 20:05
Instrument: gca.i
Client Sample ID:
Y (x10^4)
Min
4.152
4.286
4.316
4.368
4.520
4.633
4.715
4.836
4.966
5.066
Aroclor-1268
Aroclor-1268
Aroclor-1268
5.525
Aroclor-1268
5.855
Aroclor-1268
6.292
6.604
6.635
6.778
6.843
6.942
7.003
7.094
7.172
7.272
7.354
PE TurboChrom ACAL358B.RAW: 4.032 to 7.387 Min

STL ST LOUIS

Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b/ACAL626A.d
Report Date: 05/03/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: gca.i
Lab File ID: ACAL626A.d
Analysis Type: WATER

Injection Date: 02-MAY-2005 15:51
Lab Sample ID: CCAL1000
Method File: \\Slsvr01\GC_LAB\GCA.i\A050502A.

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	959.3977	4.1	15.0
29 Aroclor-1260	1000.0000	952.9523	4.7	15.0
34 Decachlorobiphenyl	50.0000	51.3069	2.6	15.0

DFK
5/3/05

LOT #F5D220218

Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ACAL626A.d
Report Date: 03-May-2005 08:39

STL St. Louis

Data file : \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ACAL626A.d
Lab Smp Id: CCAL1000
Inj Date : 02-MAY-2005 15:51
Operator : BLO Inst ID: gca.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\Slsvr01\GC_LAB\GCA.i\A050502A.b\APCB05A.m
Meth Date : 03-May-2005 08:37 target Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358A.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 4.10 Sample Matrix: WATER
Processing Host: SLGC08

Concentration Formula: Amt * DF * (Uf/Vi) * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vi	2.000	Injection Volume
Vt	10.000	Volume of final extract (ml)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other_____

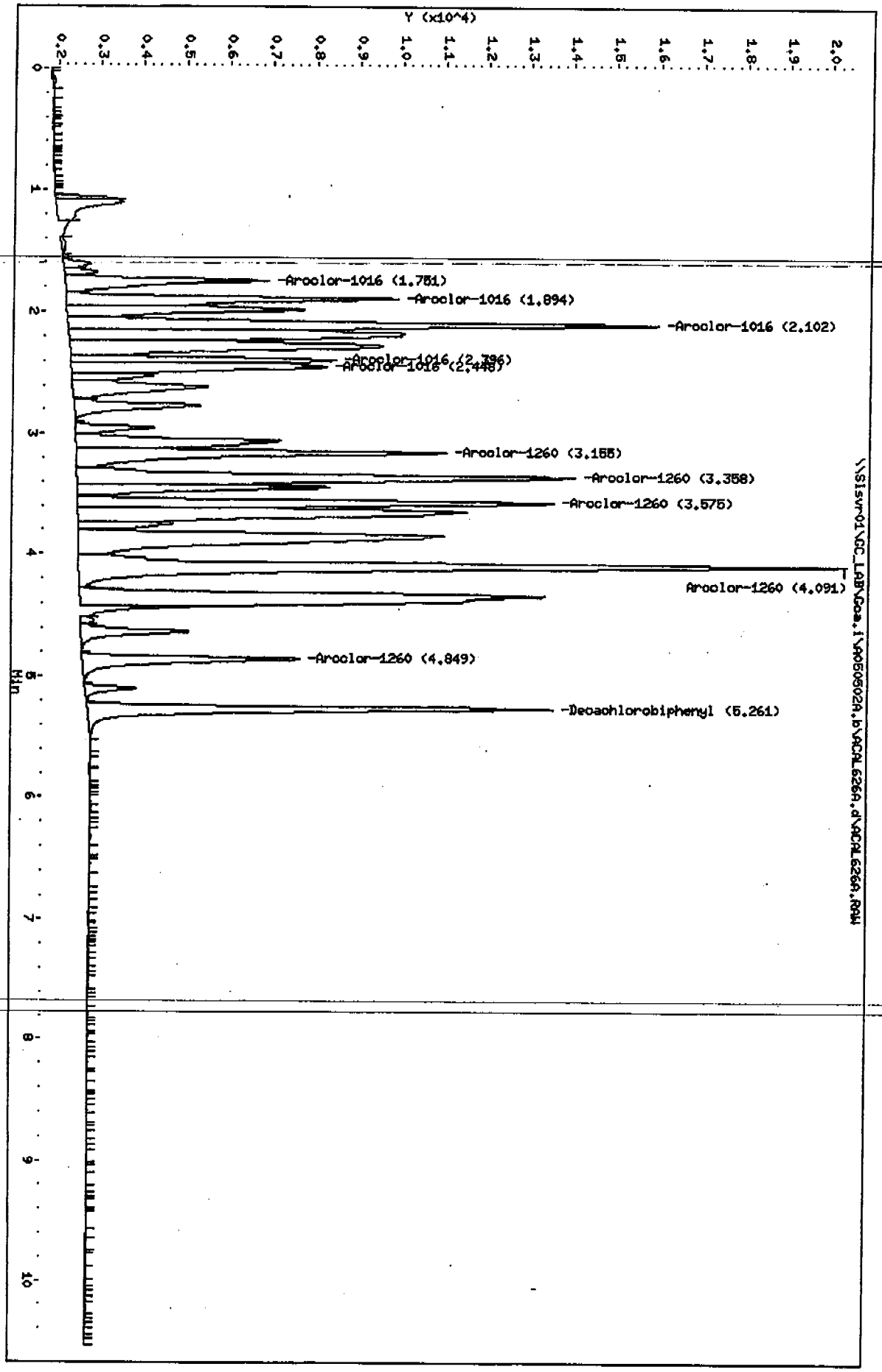
DEK 5/3/05

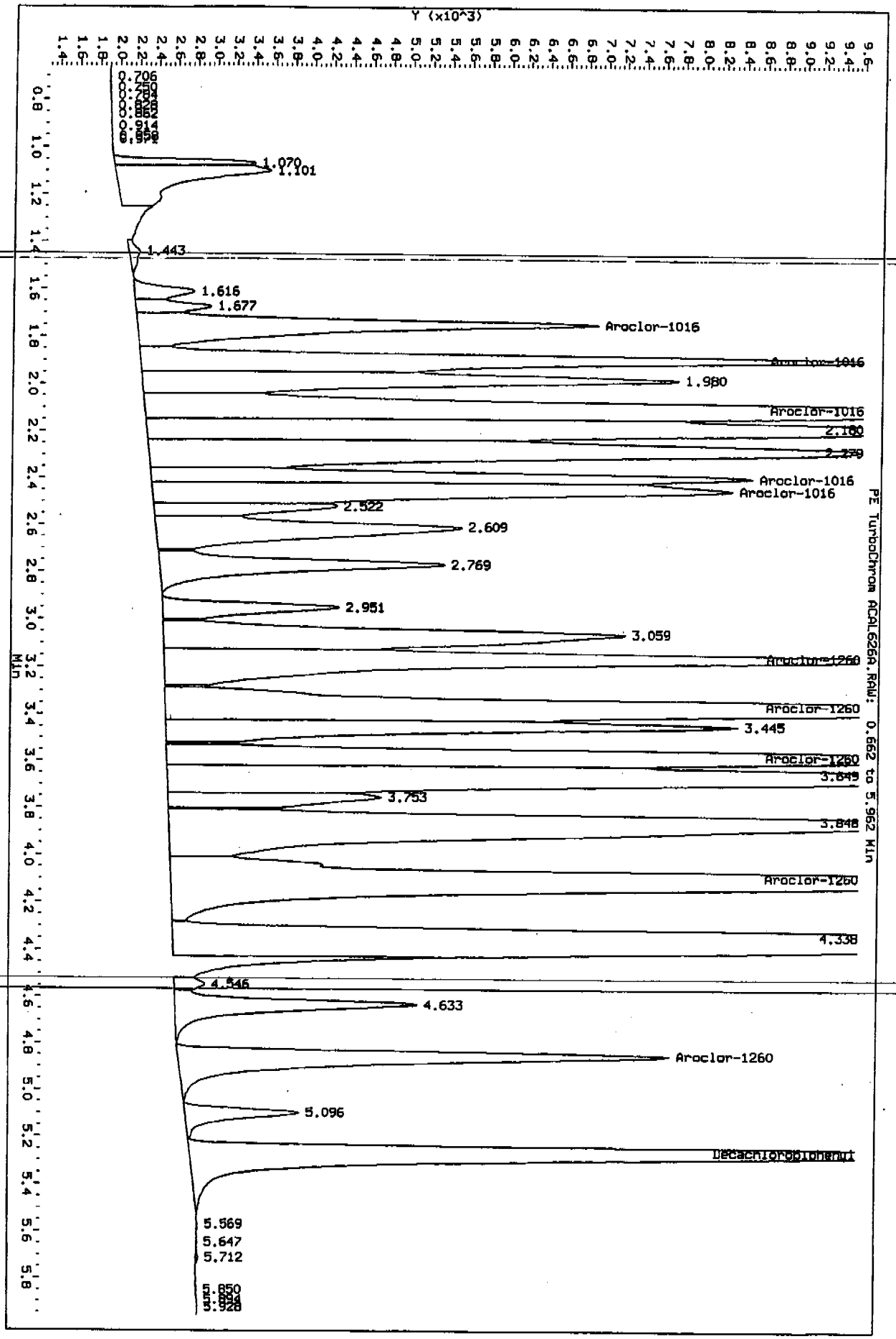
RT	EXP RT	DLT RT	AMOUNTS RESPONSE	CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.750	1.716	0.034	17125	1000.00	938.9	80.00- 120.00	100.00(M)
1.893	1.859	0.034	25317	1000.00	962.8	118.27- 177.40	147.84
2.101	2.067	0.034	48222	1000.00	935.5	225.27- 337.91	281.59
~~2.396~~	~~2.357~~	~~0.039~~	~~17260~~	~~1000.00~~	~~941.2~~	~~80.63- 120.95~~	~~100.79~~
2.448	2.418	0.030	24401	1000.00	1019	113.99- 170.99	142.49
		Average of Peak Amounts =			959.4		
28 Aroclor-1260					CAS #: 11096-82-5		
3.154	3.120	0.034	32135	1000.00	962.9	80.00- 120.00	100.00
3.358	3.319	0.039	49257	1000.00	928.4	122.63- 183.94	153.28
3.575	3.536	0.039	37623	1000.00	882.1	93.66- 140.49	117.08
4.090	4.082	0.008	71769	1000.00	1057	178.67- 268.00	223.33
4.849	4.814	0.035	18158	1000.00	934.2	45.20- 67.81	56.51
		Average of Peak Amounts =			953		
$ 32 Decachlorobiphenyl					CAS #:		
5.260	5.226	0.034	36103	50.0000	51.31		

Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ACAL626A.d
Report Date: 03-May-2005 08:39

QC Flag Legend

M - Compound response manually integrated.


Y (x10^4)
Data File: \\Slsvr01\GC_LAB\Goa.i\A050502A.b\ACAL626A.d
Date : 02-MAY-2005 15:51
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-1
Instrument: goa.i
Operator: BLO
Column diameter: 0.53
\\Slsvr01\GC_LAB\Goa.i\A050502A.b\ACAL626A.d\ACAL626A.RAW
Aroclor-1016 (1.751)
Aroclor-1016 (1.894)
Aroclor-1016 (2.102)
Aroclor-1016 (2.796)
Aroclor-1016 (2.448)
Aroclor-1260 (3.155)
Aroclor-1260 (3.358)
Aroclor-1260 (3.575)
Aroclor-1260 (4.091)
Aroclor-1260 (4.849)
Decachlorobiphenyl (5.261)
Min


Y (x10^3)
Data File: \\Slavr01\GC_LAB\Gcal\A050502A.b\ACAL626A.d\ACAL626A.RAW
Injection Date: 02-MAY-2005 15:51
Instrument: gca.i
Client Sample ID:
PE TurboChrom ACAL626A.RAW: 0.662 to 5.962 Min
Min
0.706
1.070
1.101
1.443
1.615
1.677
Aroclor-1016
1.980
Aroclor-1016
2.279
Aroclor-1016
Aroclor-1016
2.522
2.609
2.769
2.951
3.059
Aroclor-1260
Aroclor-1260
3.445
Aroclor-1260
3.753
3.848
Aroclor-1260
4.338
4.546
4.633
Aroclor-1260
5.096
Decachlorobiphenyl
5.569
5.647
5.712
5.850
5.928

STL ST LOUIS

Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b/ACAL637A.d
Report Date: 05/03/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: gca.i
Lab File ID: ACAL637A.d
Analysis Type: WATER

Injection Date: 02-MAY-2005 18:30
Lab Sample ID: CCAL1000
Method File: \\Slsvr01\GC_LAB\GCA.i\A050502A.

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	983.1640	1.7	15.0
29 Aroclor-1260	1000.0000	1003.6352	0.4	15.0
34 Decachlorobiphenyl	50.0000	56.2894	12.6	15.0

DEK
5/3/05

Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ACAL637A.d
Report Date: 03-May-2005 08:40

STL St. Louis

Data file : \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ACAL637A.d
Lab Smp Id: CCAL1000
Inj Date : 02-MAY-2005 18:30
Operator : BLQ Inst ID: gca.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\Slsvr01\GC_LAB\GCA.i\A050502A.b\APCB05A.m
Meth Date : 03-May-2005 08:37 target Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358A.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 4.10 Sample Matrix: WATER
Processing Host: SLGC08

Concentration Formula: Amt * DF * (Uf/Vi) * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vi	2.000	Injection Volume
Vt	10.000	Volume of final extract (ml)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

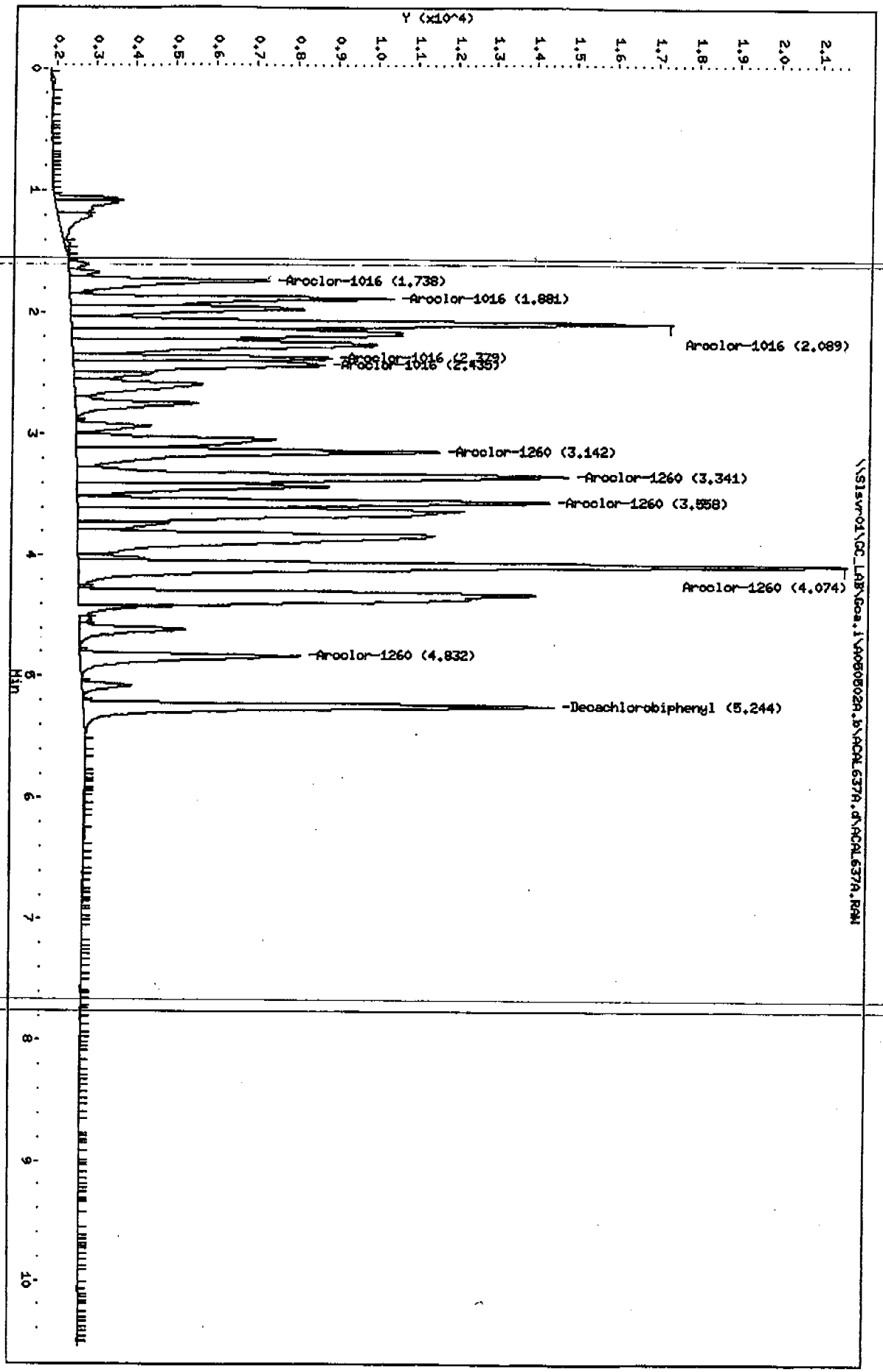
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other_____

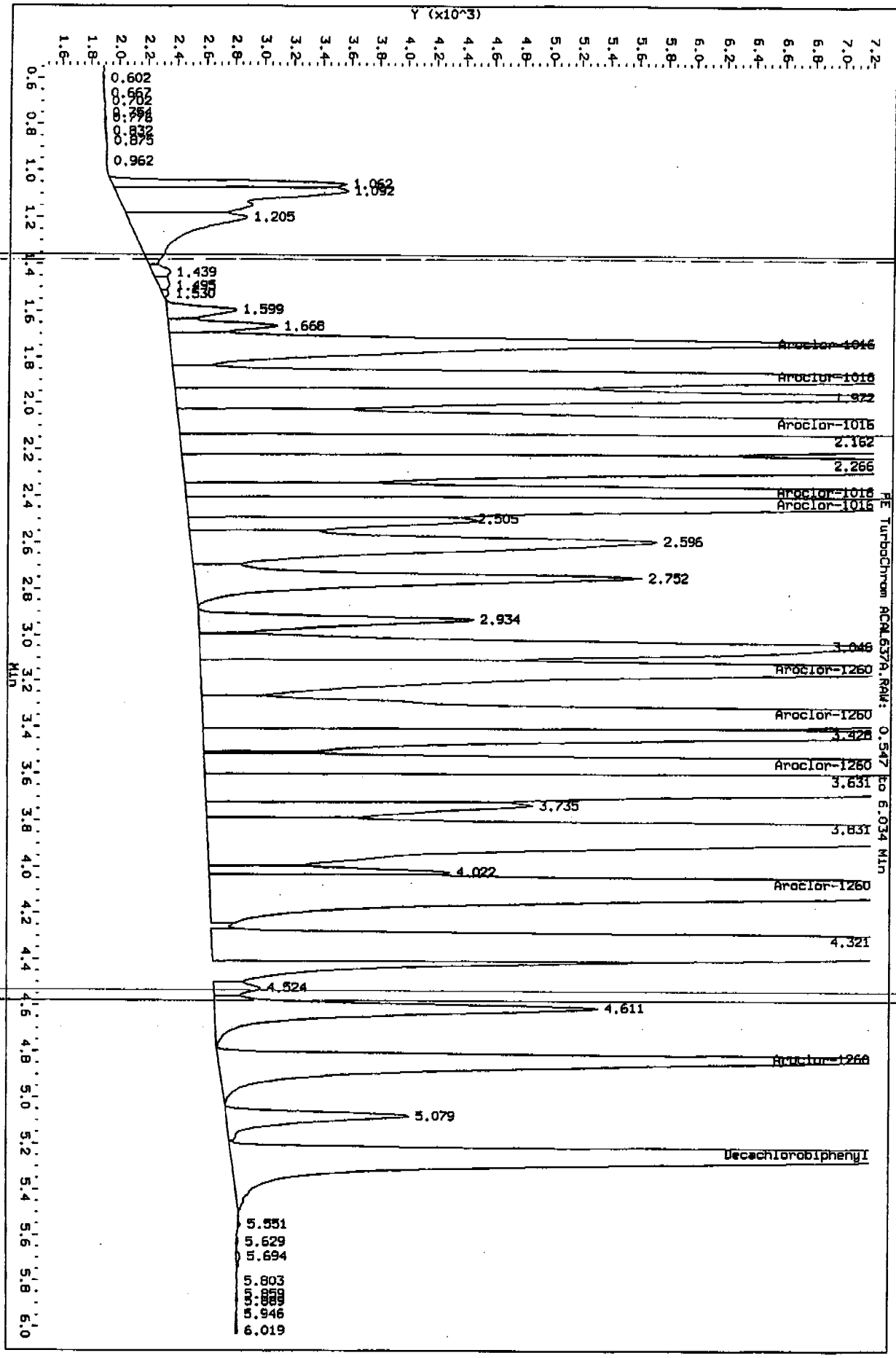
DEK
5/3/05

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.737	1.716	0.021	17199	1000.00	942.9	80.00- 120.00	100.00(M)
1.880	1.859	0.021	25654	1000.00	975.6	119.33- 178.99	149.16
2.088	2.067	0.021	50479	1000.00	979.2	234.80- 352.20	293.50
2.379	2.357	0.022	18003	1000.00	981.7	83.74- 125.61	104.68
2.435	2.418	0.017	24824	1000.00	1036	115.47- 173.20	174.98
Average of Peak Amounts =					983.2		
28 Aroclor-1260					CAS #: 11096-82-5		
3.141	3.120	0.021	33834	1000.00	1014	80.00- 120.00	100.00
3.341	3.319	0.022	51569	1000.00	972.0	121.93- 182.90	152.41
3.557	3.536	0.021	39656	1000.00	929.8	93.77- 140.65	117.21
4.073	4.082	-0.009	73790	1000.00	1087	174.48- 261.71	218.09
4.831	4.814	0.017	19742	1000.00	1016	46.68- 70.02	58.35
Average of Peak Amounts =					1004		
$ 32 Decachlorobiphenyl					CAS #:		
5.243	5.226	0.017	39609	50.0000	56.29		

QC Flag Legend

M - Compound response manually integrated.


Y (x10^4)
Aroclor-1016 (1.738)
Aroclor-1016 (1.881)
Aroclor-1016 (2.089)
Aroclor-1016 (2.379)
Aroclor-1016 (2.435)
Aroclor-1260 (3.142)
Aroclor-1260 (3.341)
Aroclor-1260 (3.558)
Aroclor-1260 (4.074)
Aroclor-1260 (4.832)
Decachlorobiphenyl (5.244)
Min
Data File: \\Slsvr01\GC_LAB\Gcs.i\A060802A.b\ACAL637A.d
Date : 02-MAY-2005 18:30
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-1
\\Slsvr01\GC_LAB\Gcs.i\A060802A.b\ACAL637A.d\ACAL637A.RAW
Instrument: gcs.i
Operator: BLO
Column diameter: 0.53


Y (x10^3)
Min
Data File: \\Slsvr01\GC_LAB\Gcal1\A0505020.b\ACAL637A.d\ACAL637A.RAW
Injection Date: 02-MAY-2005 18:50
Instrument: gca.1
Client Sample ID:
RE TurboChrom ACAL637A.RAW: 0.547 to 6.034 Min
0.602
0.962
1.062
1.092
1.205
1.439
1.599
1.668
Aroclor-1016
Aroclor-1016
1.972
Aroclor-1016
2.162
2.266
Aroclor-1016
Aroclor-1016
2.505
2.596
2.752
2.934
3.046
Aroclor-1260
Aroclor-1260
3.428
Aroclor-1260
3.631
3.735
3.831
4.022
Aroclor-1260
4.321
4.524
4.611
Aroclor-1260
5.079
Decachlorobiphenyl
5.551
5.629
5.694
5.803
5.946
6.019

STL ST LOUIS

Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b/ACAL648A.d
Report Date: 05/03/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: gca.i
Lab File ID: ACAL648A.d
Analysis Type: WATER

Injection Date: 02-MAY-2005 21:10
Lab Sample ID: CCAL1000
Method File: \\Slsvr01\GC_LAB\GCA.i\A050502A.

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	968.5713	3.1	15.0
29 Aroclor-1260	1000.0000	987.8034	1.2	15.0
34 Decachlorobiphenyl	50.0000	55.8815	11.8	15.0

DEK
5/3/05

Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ACAL648A.d
Report Date: 03-May-2005 08:42

STL St. Louis

Data file : \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ACAL648A.d
Lab Smp Id: CCAL1000
Inj Date : 02-MAY-2005 21:10
Operator : BLO Inst ID: gca.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\Slsvr01\GC_LAB\GCA.i\A050502A.b\APCB05A.m
Meth Date : 03-May-2005 08:37 target Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358A.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 4.10 Sample Matrix: WATER
Processing Host: SLGC08

Concentration Formula: Amt * DF * (Uf/Vi) * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vi	2.000	Injection Volume
Vt	10.000	Volume of final extract (ml)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

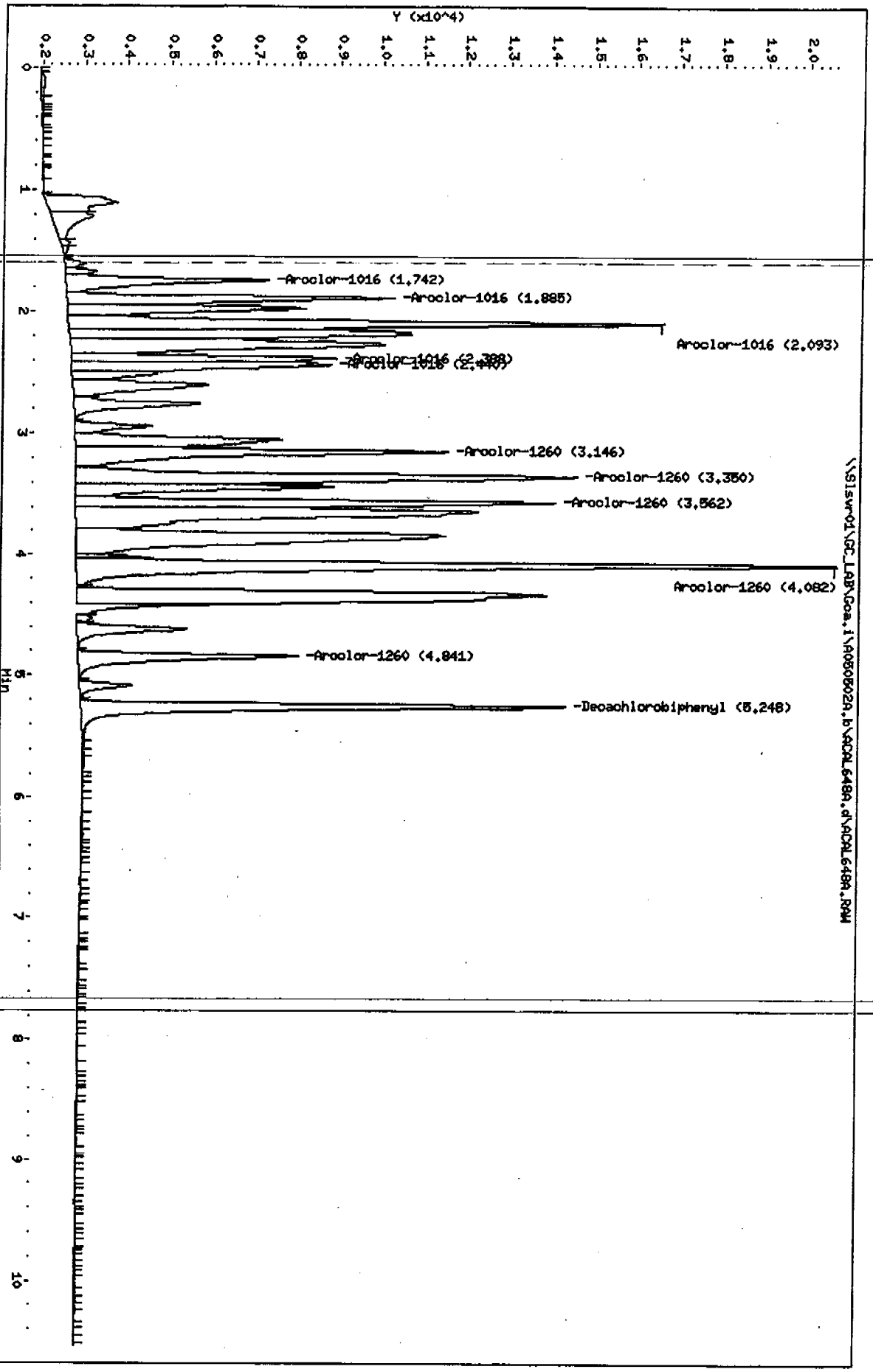
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other_____

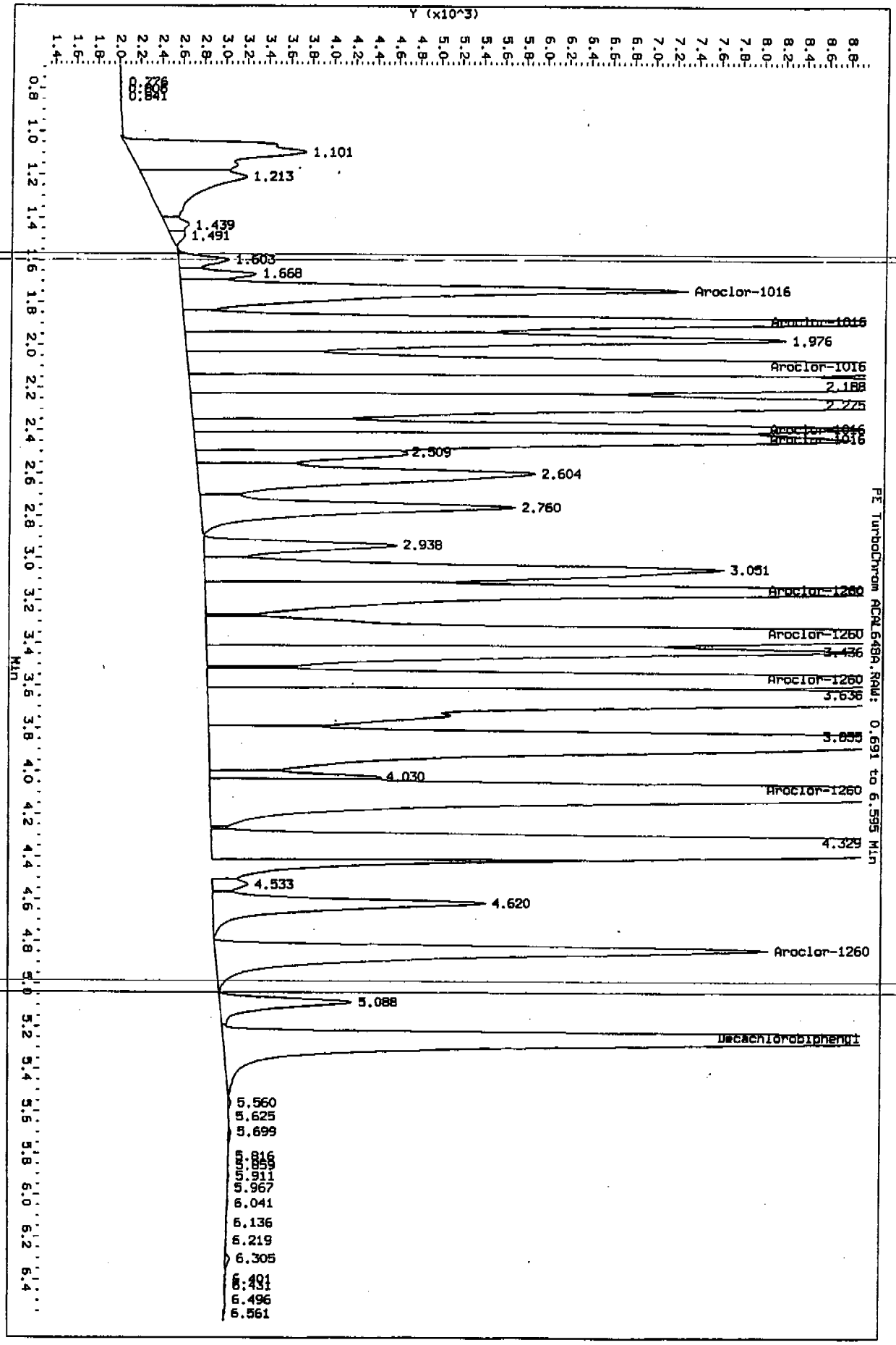
DEK 5/3/05

RT	EXP RT	DLT RT	AMOUNTS RESPONSE	CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.742	1.716	0.026	17027	1000.00	933.5	80.00- 120.00	100.00(M)
1.885	1.859	0.026	25371	1000.00	964.8	119.20- 178.81	149.01
2.093	2.067	0.026	49248	1000.00	955.4	231.39- 347.08	289.23
~~2.387~~	~~2.357~~	~~0.030~~	~~17575~~	~~1000.00~~	~~958.4~~	~~82.58- 123.87~~	~~103.22~~
2.439	2.418	0.021	24691	1000.00	1031	116.01- 174.01	145.01
		Average of Peak Amounts =			968.6		
28 Aroclor-1260					CAS #: 11096-82-5		
3.146	3.120	0.026	33831	1000.00	1014	80.00- 120.00	100.00(M)
3.349	3.319	0.030	50185	1000.00	945.9	118.67- 178.01	148.34
3.562	3.536	0.026	39345	1000.00	922.5	93.04- 139.56	116.30
4.082	4.082	0.000	72616	1000.00	1070	171.71- 257.57	214.64
4.840	4.814	0.026	19190	1000.00	987.3	45.38- 68.07	56.72
		Average of Peak Amounts =			987.8		
$ 32 Decachlorobiphenyl					CAS #:		
5.247	5.226	0.021	39322	50.0000	55.88		

QC Flag Legend

M - Compound response manually integrated.


Y (x10^4)
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
1.8
1.9
2.0
Min
1
2
3
4
5
6
7
8
9
10
-Aroclor-1016 (1,742)
-Aroclor-1016 (1,885)
Aroclor-1016 (2,093)
-Aroclor-1016 (2,308)
-Aroclor-1016 (2,440)
-Aroclor-1260 (3,146)
-Aroclor-1260 (3,350)
-Aroclor-1260 (3,562)
Aroclor-1260 (4,082)
-Aroclor-1260 (4,841)
-Decachlorobiphenyl (5,248)
\\Slsvr01\GC_LAB\Gcs.i\A0505029.b\ACAL648A.d\ACAL648A.RAW
Data File: \\Slsvr01\GC_LAB\Gcs.i\A0505029.b\ACAL648A.d
Date : 02-MAY-2005 21:10
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-1
Instrument: gcs.i
Operator: BLO
Column diameter: 0.53


Y (x10^3)
Data File: \\Slsvr01\GC_LAB\Gcal\A050502A.b\ACAL648A.d\ACAL648A.RAW
Injection Date: 02-MAY-2005 21:10
Instrument: gca.i
Client Sample ID:
PE TurboChrom ACAL648A.RAW: 0.691 to 6.595 Min
Min
0.841
1.101
1.213
1.439
1.491
1.603
1.668
Aroclor-1016
1.976
Aroclor-1016
2.188
2.225
2.509
2.604
2.760
2.938
3.051
Aroclor-1260
Aroclor-1260
3.436
Aroclor-1260
3.636
4.030
Aroclor-1260
4.329
4.533
4.620
Aroclor-1260
5.088
Decachlorobiphenyl
5.560
5.625
5.699
5.911
5.967
6.041
6.136
6.219
6.305
6.496
6.561

STL ST LOUIS

Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b/ACAL650A.d
Report Date: 05/03/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: gca.i
Lab File ID: ACAL650A.d
Analysis Type: WATER

Injection Date: 02-MAY-2005 21:39
Lab Sample ID: CCAL1000
Method File: \\Slsvr01\GC_LAB\GCA.i\A050502A.

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	958.5301	4.1	15.0
29 Aroclor-1260	1000.0000	963.5296	3.6	15.0
34 Decachlorobiphenyl	50.0000	54.1520	8.3	15.0

DEK
5/3/05

LOT #F5D220218

Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ACAL650A.d
Report Date: 03-May-2005 08:45

STL St. Louis

Data file : \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ACAL650A.d
Lab Smp Id: CCAL1000
Inj Date : 02-MAY-2005 21:39
Operator : BLO Inst ID: gca.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\Slsvr01\GC_LAB\GCA.i\A050502A.b\APCB05A.m
Meth Date : 03-May-2005 08:37 target Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358A.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 4.10 Sample Matrix: WATER
Processing Host: SLGC08

Concentration Formula: Amt * DF * (Uf/Vi) * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vi	2.000	Injection Volume
Vt	10.000	Volume of final extract (ml)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

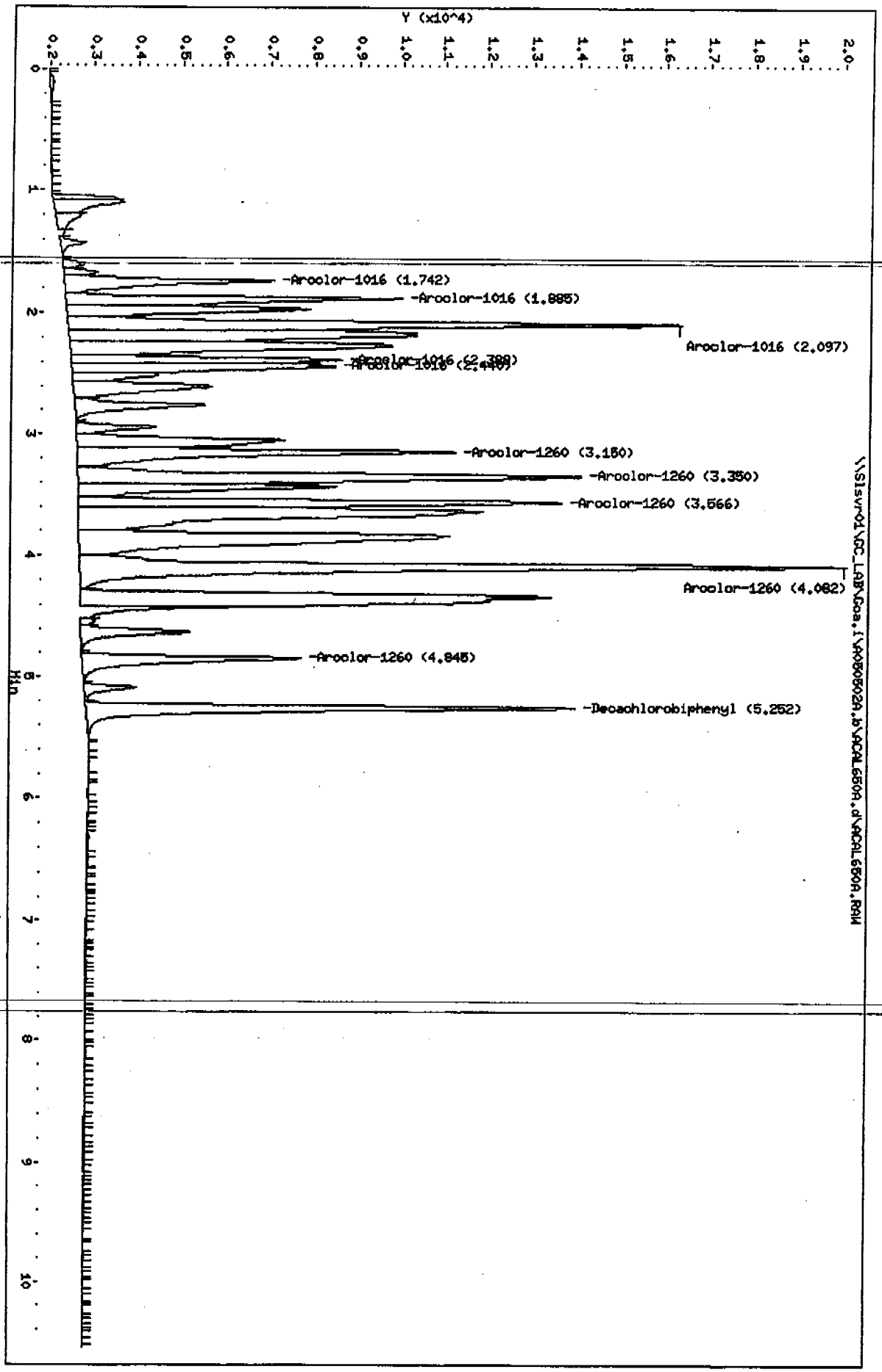
DFX
5/3/05

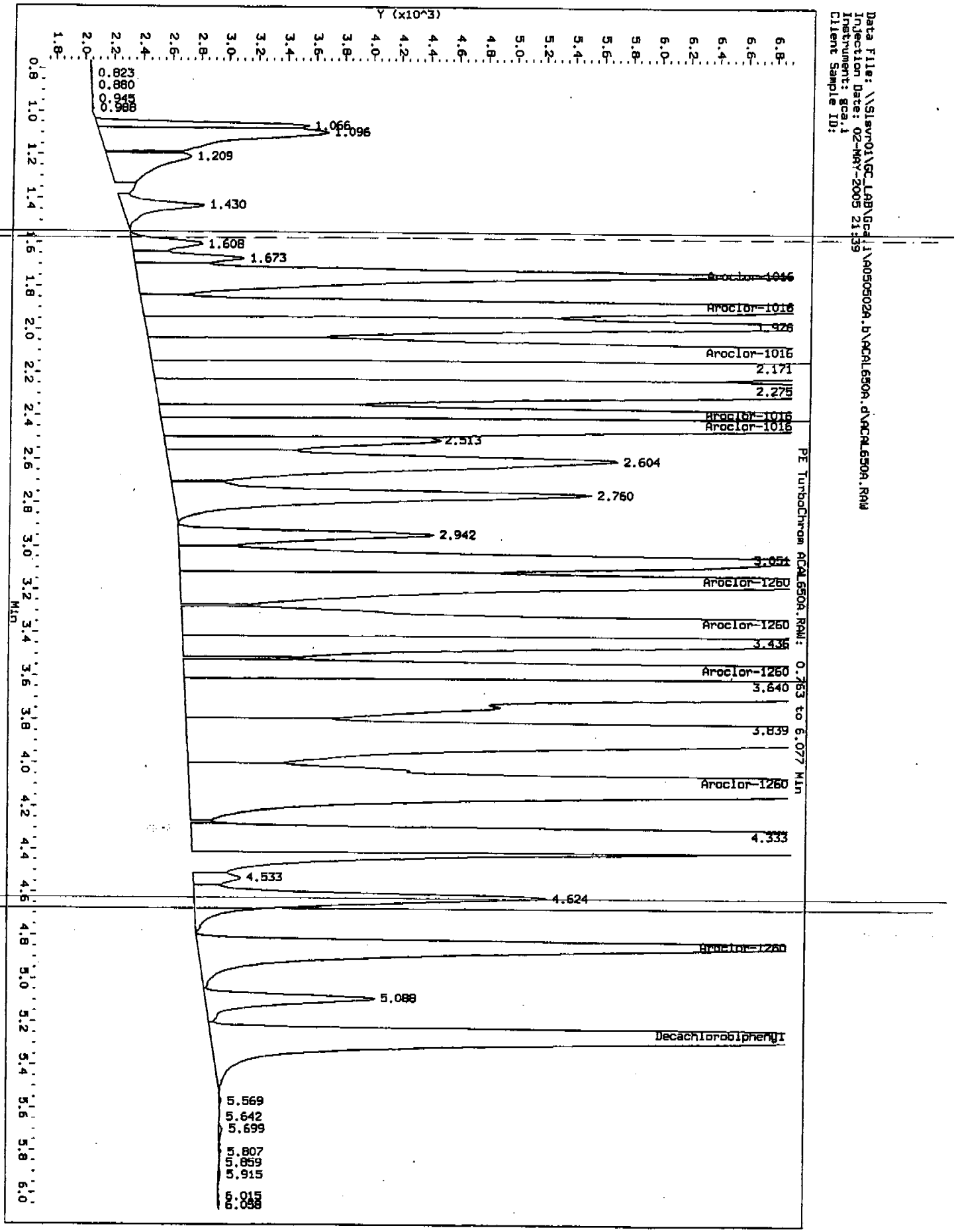
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.742	1.716	0.026	17140	1000.00	939.7	80.00- 120.00	100.00(M)
1.885	1.859	0.026	25040	1000.00	952.2	116.87- 175.30	146.09
2.097	2.067	0.030	49323	1000.00	956.8	230.21- 345.31	287.76
~~2.387~~	~~2.357~~	~~0.030~~	~~16986~~	~~1000.00~~	~~926.2~~	~~78.28- 118.92~~	~~99.10~~
2.439	2.418	0.021	24376	1000.00	1018	113.77- 170.65	142.21
		Average of Peak Amounts =			958.5		
28 Aroclor-1260					CAS #: 11096-82-5		
3.150	3.120	0.030	32603	1000.00	976.9	80.00- 120.00	100.00
3.349	3.319	0.030	49482	1000.00	932.6	121.42- 182.12	151.77
3.566	3.536	0.030	37314	1000.00	874.9	91.56- 137.34	114.45
4.082	4.082	0.000	72872	1000.00	1073	178.81- 268.21	223.51
4.844	4.814	0.030	18656	1000.00	959.8	45.78- 68.67	57.22
		Average of Peak Amounts =			963.5		
$ 32 Decachlorobiphenyl					CAS #:		
5.252	5.226	0.026	38105	50.0000	54.15		

Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ACAL650A.d
Report Date: 03-May-2005 08:45

QC Flag Legend

M - Compound response manually integrated.


Y (x10^4)
Data File: \\Slsvr01\GC_LAB\Goa.i\A050502A.b\ACAL650A.d
Date : 02-MAY-2005 21:39
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-1
-Aroclor-1016 (1.742)
-Aroclor-1016 (1.885)
Aroclor-1016 (2.097)
-Aroclor-1016 (2.389)
-Aroclor-1016 (2.449)
-Aroclor-1260 (3.150)
-Aroclor-1260 (3.350)
-Aroclor-1260 (3.566)
Aroclor-1260 (4.082)
-Aroclor-1260 (4.845)
-Decachlorobiphenyl (5.252)
\\Slsvr01\GC_LAB\Goa.i\A050502A.b\ACAL650A.d\ACAL650A.RAW
Instrument: goa.i
Operator: BLO
Column diameter: 0.53
Min


Y (x10^3)
Min
Data File: \\Slsvr01\GC_LAB\Gca_1\A050502A.b\ACAL650A.d\ACAL650A.RAW
Injection Date: 02-MAY-2005 21:39
Instrument: gca.i
Client Sample ID:
PE TurboChrom ACAL650A.RAW: 0.763 to 6.077 Min
0.823
0.880
0.945
0.988
1.066
1.096
1.209
1.430
1.608
1.673
Aroclor-1016
1.926
Aroclor-1016
2.171
2.275
Aroclor-1016
Aroclor-1016
2.513
2.604
2.760
2.942
3.051
Aroclor-1260
Aroclor-1260
3.436
Aroclor-1260
3.640
3.839
Aroclor-1260
4.333
4.533
4.624
Aroclor-1260
5.088
Decachlorobiphenyl
5.569
5.642
5.699
5.807
5.859
5.915
6.015
6.058

STL ST LOUIS

Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b/ACAL626B.d
Report Date: 05/03/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: gca.i
Lab File ID: ACAL626B.d
Analysis Type: WATER

Injection Date: 02-MAY-2005 15:51
Lab Sample ID: CCAL1000
Method File: \\Slsvr01\GC_LAB\GCA.i\A050502A.

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	1027.6227	2.8	15.0
29 Aroclor-1260	1000.0000	966.2565	3.4	15.0
34 Decachlorobiphenyl	50.0000	54.5415	9.1	15.0

DEK
5/3/05

Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ACAL626B.d
Report Date: 03-May-2005 08:52

STL St. Louis

Data file : \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ACAL626B.d
Lab Smp Id: CCAL1000
Inj Date : 02-MAY-2005 15:51
Operator : BLO Inst ID: gca.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\Slsvr01\GC_LAB\GCA.i\A050502A.b\APCB05B.m
Meth Date : 03-May-2005 08:50 target Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358B.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 4.10 Sample Matrix: WATER
Processing Host: SLGC08

Concentration Formula: Amt * DF * (Uf/Vi) * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vi	2.000	Injection Volume
Vt	10.000	Volume of final extract (ml)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

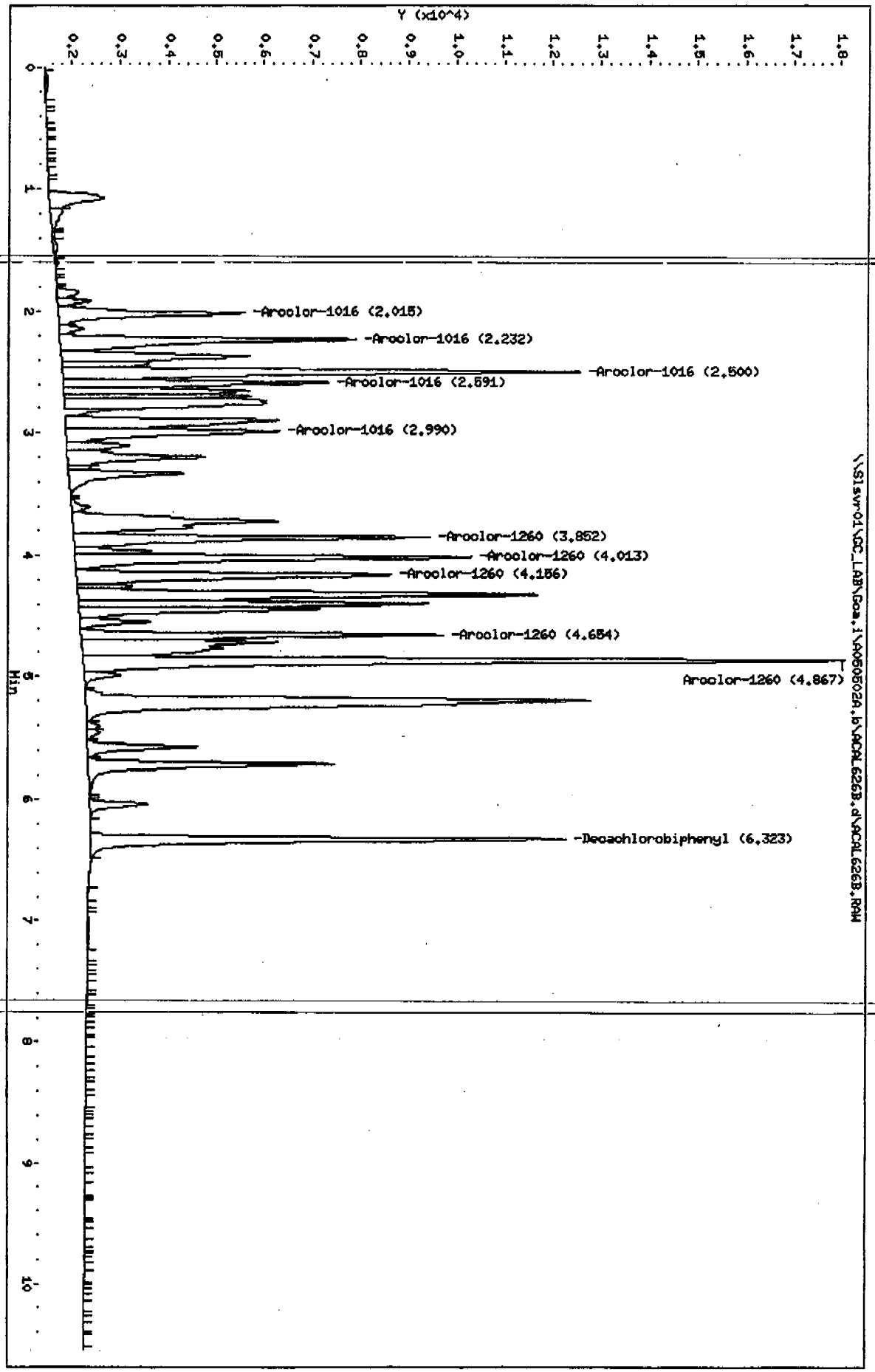
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other_____

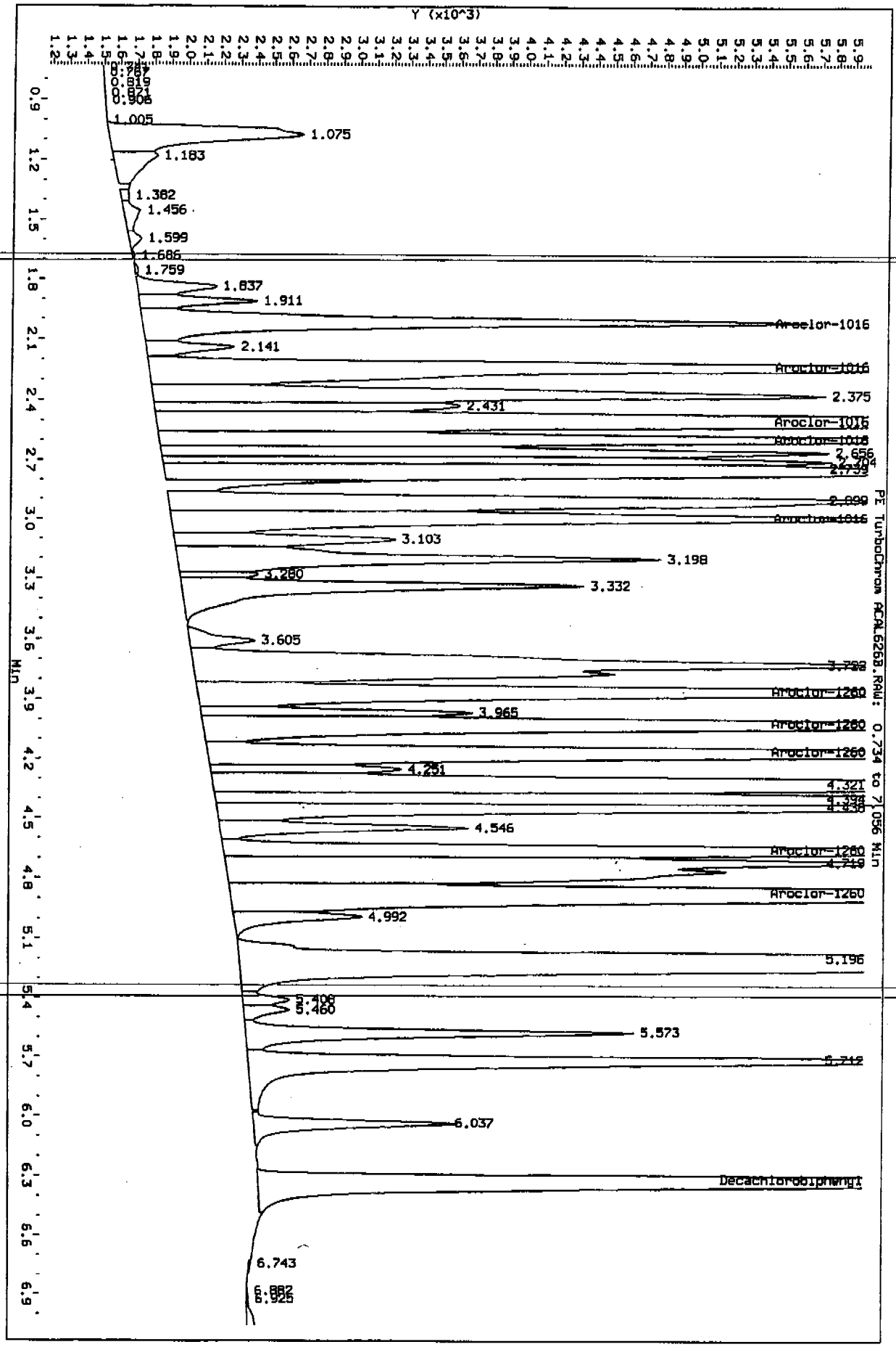
DEK 5/3/05

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.015	1.980	0.035	12830	1000.00	1030	80.00- 120.00	100.00
2.231	2.201	0.030	21396	1000.00	958.4	133.41- 200.11	166.76
2.500	2.465	0.035	33746	1000.00	1060	210.41- 315.62	263.02
~~2.591~~	~~2.556~~	~~0.035~~	~~16007~~	~~1000.00~~	~~1053~~	~~99.81- 149.71~~	~~124.76~~
2.990	2.955	0.035	15801	1000.00	1037	98.52- 147.79	123.16
		Average of Peak Amounts =			1028		
28 Aroclor-1260					CAS #: 11096-82-5		
3.852	3.817	0.035	22112	1000.00	925.7	80.00- 120.00	100.00
4.012	4.004	0.008	25317	1000.00	1002	91.60- 137.39	114.50
4.155	4.121	0.034	22366	1000.00	924.1	80.92- 121.38	101.15
4.654	4.619	0.035	19124	1000.00	880.0	69.19- 103.78	86.49
4.866	4.831	0.035	48421	1000.00	1099	175.18- 262.77	218.98
		Average of Peak Amounts =			966.3		
$ 32 Decachlorobiphenyl					CAS #:		
6.322	6.283	0.039	29718	50.0000	54.54		(M)

QC Flag Legend

M - Compound response manually integrated.


Y (x10^4)
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
1.8
0
1
2
3
4
5
6
7
8
9
10
Min
-Aroclor-1016 (2.015)
-Aroclor-1016 (2.232)
-Aroclor-1016 (2.500)
-Aroclor-1016 (2.591)
-Aroclor-1016 (2.990)
-Aroclor-1260 (3.852)
-Aroclor-1260 (4.013)
-Aroclor-1260 (4.156)
-Aroclor-1260 (4.654)
Aroclor-1260 (4.867)
-Decachlorobiphenyl (6.323)
Data File: \\S1svr01\GC_LAB\Goa,i\A0505020,b\ACAL626B.d
Date : 02-MAY-2005 15:51
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-2
\\S1svr01\GC_LAB\Goa,i\A0505020,b\ACAL626B.d\ACAL626B.RAW
Instrument: goa,i
Operator: BLD
Column diameter: 0.53


Y (x10^3)
Data File: \\Slavr01\GC_LAB\Gcal\A050502A.b\ACAL626B.d\ACAL626B.RAW
Injection Date: 02-MAY-2005 15:51
Instrument: gca.1
Client Sample ID:
1.005
1.075
1.183
1.382
1.456
1.599
1.686
1.759
1.837
1.911
Aroclor-1016
2.141
Aroclor-1016
2.375
2.431
Aroclor-1016
Aroclor-1016
2.656
2.699
Aroclor-1016
3.103
3.198
3.280
3.332
3.605
Aroclor-1260
3.965
Aroclor-1260
Aroclor-1260
4.251
4.321
4.546
Aroclor-1260
Aroclor-1260
4.992
5.196
5.406
5.460
5.573
6.037
Decachlorobiphenyl
6.743
6.882
6.925
Min
PE TurboChrom ACAL626B.RAW: 0.734 to 7.056 Min

Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b/ACAL637B.d
Report Date: 05/03/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: gca.i
Lab File ID: ACAL637B.d
Analysis Type: WATER

Injection Date: 02-MAY-2005 18:30
Lab Sample ID: CCAL1000
Method File: \\Slsvr01\GC_LAB\GCA.i\A050502A.

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
23 Aroclor-1016	1000.0000	1067.0682	6.7	15.0	
29 Aroclor-1260	1000.0000	1023.3877	2.3	15.0	
34 Decachlorobiphenyl	50.0000	58.6287	17.3	15.0	<-

DEK
5/3/05

Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ACAL637B.d
Report Date: 03-May-2005 08:53

STL St. Louis

Data file : \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ACAL637B.d
Lab Smp Id: CCAL1000
Inj Date : 02-MAY-2005 18:30
Operator : BLO Inst ID: gca.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\Slsvr01\GC_LAB\GCA.i\A050502A.b\APCB05B.m
Meth Date : 03-May-2005 08:50 target Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358B.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 4.10 Sample Matrix: WATER
Processing Host: SLGC08

Concentration Formula: Amt * DF * (Uf/Vi) * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vi	2.000	Injection Volume
Vt	10.000	Volume of final extract (ml)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

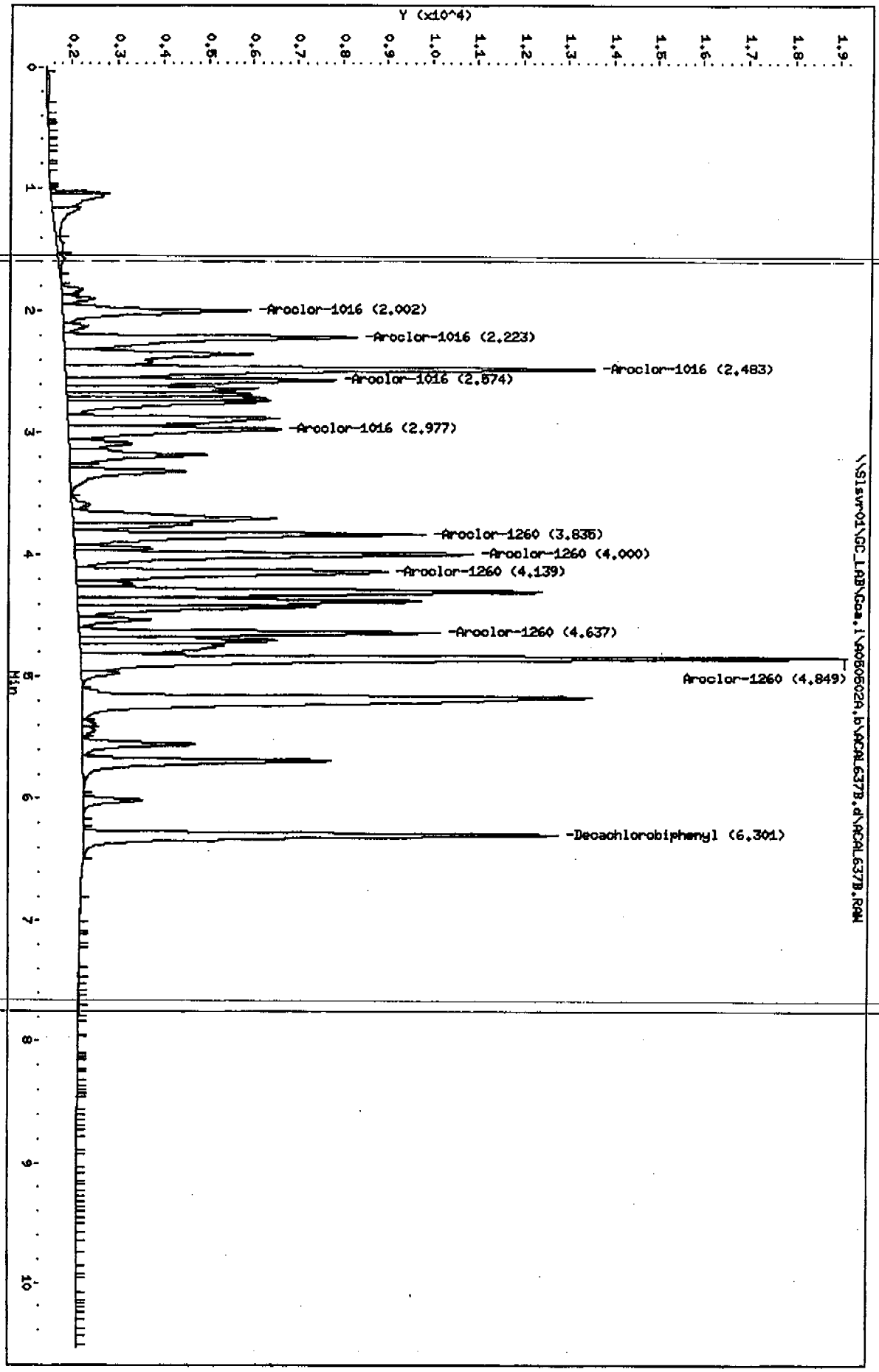
DEK 5/3/05

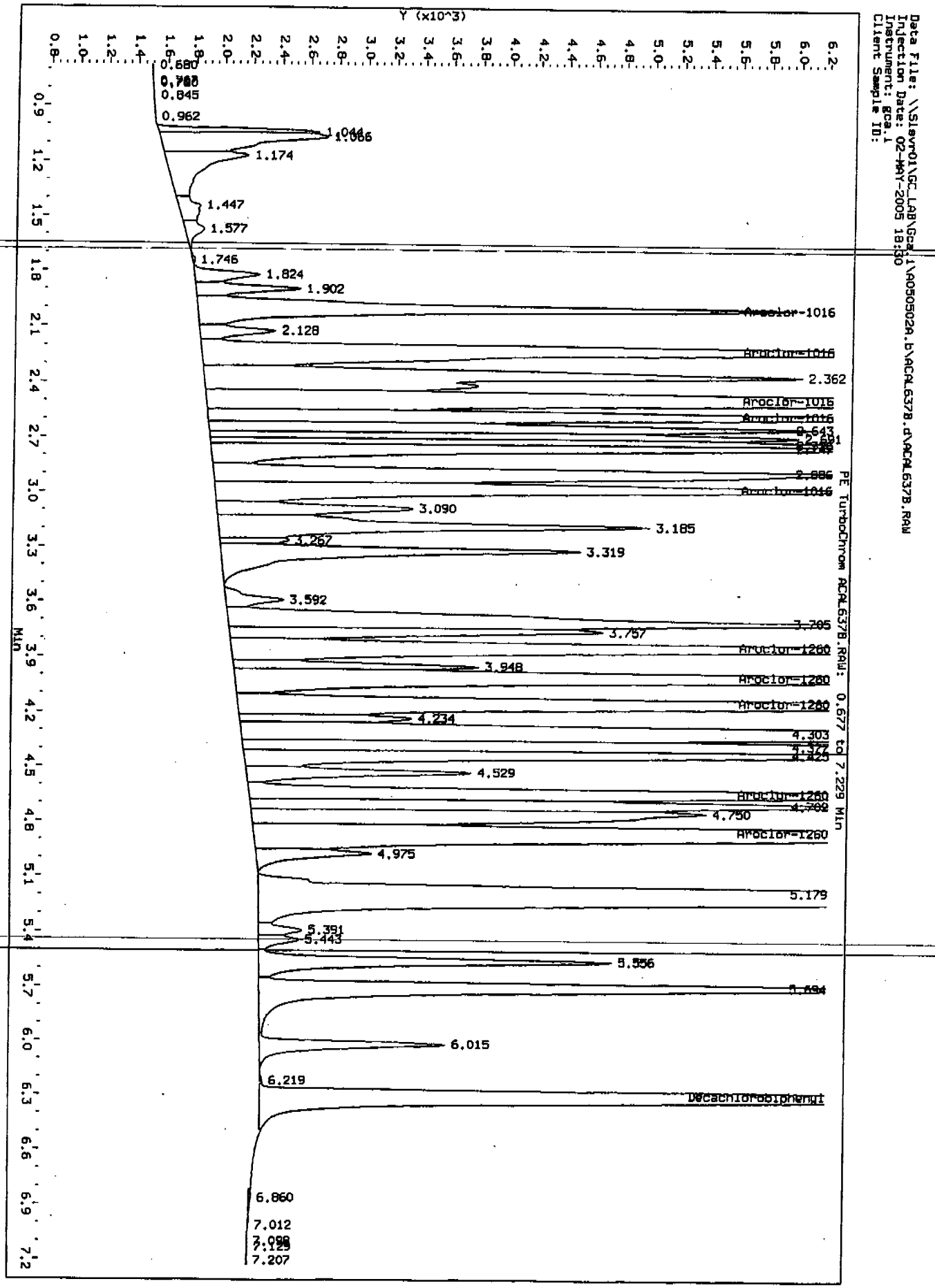
RT	EXP RT	DLT RT	AMOUNTS RESPONSE	CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO	
22 Aroclor-1016					CAS #: 12674-11-2			
2.002	1.980	0.022	13236	1000.00	1062	80.00- 120.00	100.00	
2.223	2.201	0.022	22165	1000.00	992.8	133.97- 200.96	167.46	
2.483	2.465	0.018	36093	1000.00	1133	218.15- 327.23	272.69	
2.674	2.656	0.018	16388	1000.00	1076	98.87- 148.31	123.59	
2.977	2.955	0.022	16310	1000.00	1070	98.58- 147.87	123.23	
		Average of Peak Amounts =			1067			
28 Aroclor-1260					CAS #: 11096-82-5			
3.835	3.817	0.018	23061	1000.00	965.5	80.00- 120.00	100.00	
3.999	4.004	-0.005	27087	1000.00	1073	93.97- 140.95	117.46	
4.138	4.121	0.017	23580	1000.00	974.3	81.80- 122.70	102.25	
4.636	4.619	0.017	20270	1000.00	932.7	70.32- 105.48	87.90	
4.849	4.831	0.018	51635	1000.00	1172	179.12- 268.68	223.90	
		Average of Peak Amounts =			1023			
$ 32 Decachlorobiphenyl					CAS #:			
6.300	6.283	0.017	31945	50.0000	58.63			(M)

Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ACAL637B.d
Report Date: 03-May-2005 08:53

QC Flag Legend

M - Compound response manually integrated.


Y (x10^4)
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
1.8
1.9
0
1
2
3
4
5
6
7
8
9
10
Min
Aroclor-1016 (2.002)
Aroclor-1016 (2.223)
Aroclor-1016 (2.483)
Aroclor-1016 (2.674)
Aroclor-1016 (2.977)
Aroclor-1260 (3.835)
Aroclor-1260 (4.000)
Aroclor-1260 (4.139)
Aroclor-1260 (4.637)
Aroclor-1260 (4.849)
Decachlorobiphenyl (6.301)
\\Slsvr01\GC_LAB\Gca.i\A0506502A.b\ACAL637B.d\ACAL637B.RAW
Data File: \\Slsvr01\GC_LAB\Gca.i\A0506502A.b\ACAL637B.d
Date : 02-MAY-2005 18:30
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: gca.i
Operator: BLO
Column diameter: 0.53
Page 3


Y (x10^3)
Data File: \\Slevr01\GC_LAB\Gc2_1\A050502A.b\ACAL6378.d\ACAL6378.RAW
Injection Date: 02-MAY-2005 18:30
Instrument: gca_1
Client Sample ID:
PE TurboChrom ACAL6378.RAW: 0.677 to 7.229 Min
Min
0.680
0.845
0.962
1.044
1.066
1.174
1.447
1.577
1.746
1.824
1.902
Aroclor-1016
2.128
Aroclor-1016
2.362
Aroclor-1016
Aroclor-1016
3.090
3.185
3.267
3.319
3.592
3.705
3.757
Aroclor-1260
3.948
Aroclor-1260
Aroclor-1260
4.234
4.303
4.425
4.529
Aroclor-1260
4.750
Aroclor-1260
4.975
5.179
5.391
5.443
5.556
6.015
6.219
Decachlorobiphenyl
6.860
7.012
7.207

Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b/ACAL648B.d
Report Date: 05/03/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: gca.i
Lab File ID: ACAL648B.d
Analysis Type: WATER

Injection Date: 02-MAY-2005 21:10
Lab Sample ID: CCAL1000
Method File: \\Slsvr01\GC_LAB\GCA.i\A050502A.

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
23 Aroclor-1016	1000.0000	1057.0887	5.7	15.0	
29 Aroclor-1260	1000.0000	1021.1291	2.1	15.0	
34 Decachlorobiphenyl	50.0000	58.2433	16.5	15.0	<-

DFK
5/3/05

Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ACAL648B.d Page 1
Report Date: 03-May-2005 08:55

STL St. Louis

Data file : \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ACAL648B.d
Lab Smp Id: CCAL1000
Inj Date : 02-MAY-2005 21:10
Operator : BLO Inst ID: gca.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\Slsvr01\GC_LAB\GCA.i\A050502A.b\APCB05B.m
Meth Date : 03-May-2005 08:50 target Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358B.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 4.10 Sample Matrix: WATER
Processing Host: SLGC08

Concentration Formula: Amt * DF * (Uf/Vi) * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vi	2.000	Injection Volume
Vt	10.000	Volume of final extract (ml)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

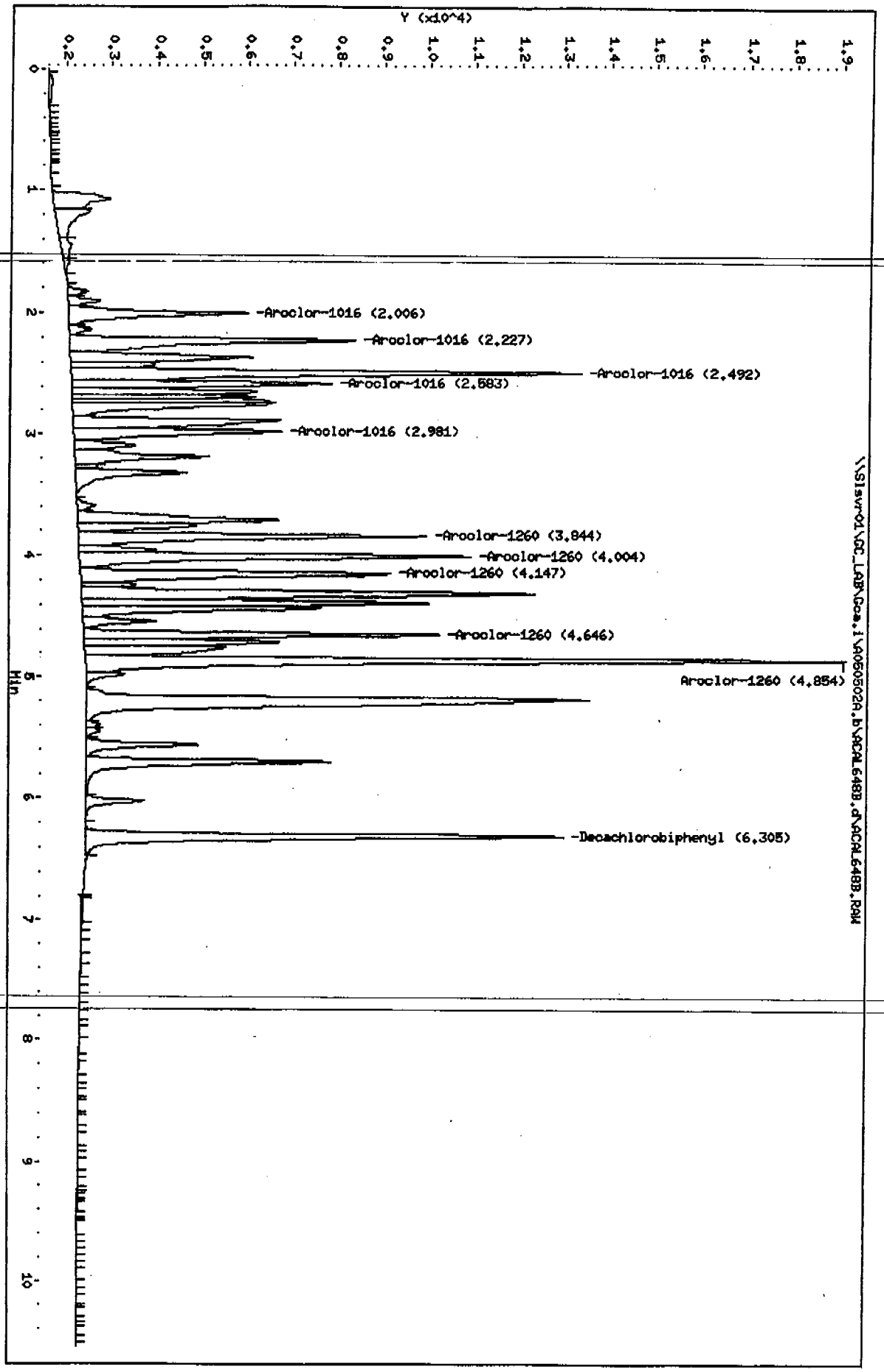
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other_____

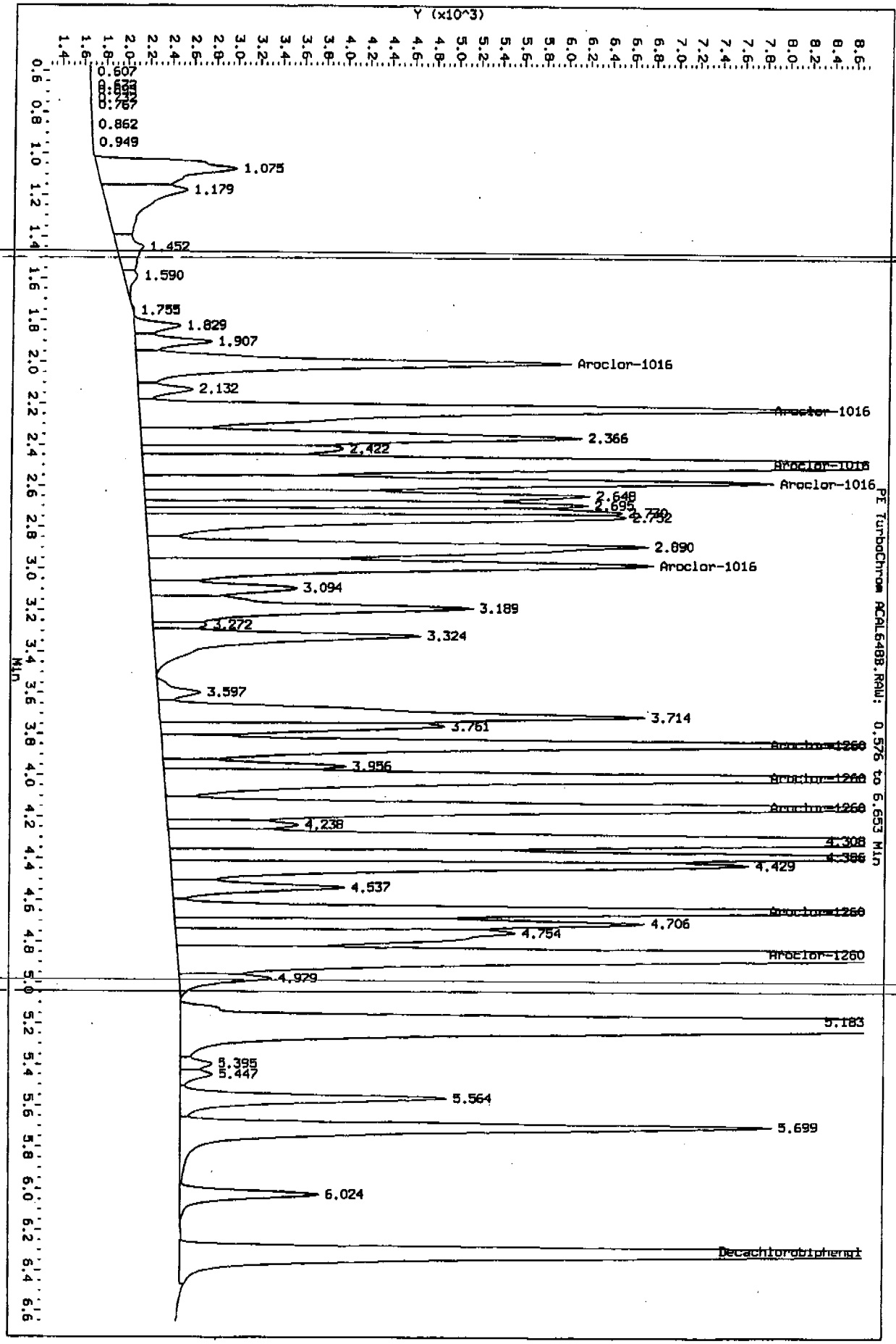
DEK
5/3/05

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.006	1.980	0.026	12949	1000.00	1039	80.00- 120.00	100.00
2.227	2.201	0.026	21795	1000.00	976.3	134.65- 201.98	168.31
2.491	2.465	0.026	35843	1000.00	1125	221.44- 332.16	276.80
2.582	2.556	0.026	16320	1000.00	1074	100.83- 151.24	126.03
2.981	2.955	0.026	16311	1000.00	1070	100.77- 151.15	125.96
		Average of Peak Amounts =			1057		
28 Aroclor-1260					CAS #: 11096-82-5		
3.843	3.817	0.026	22912	1000.00	959.2	80.00- 120.00	100.00
4.004	4.004	0.000	27002	1000.00	1069	94.28- 141.42	117.85
4.147	4.121	0.026	23282	1000.00	961.9	81.29- 121.94	101.62
4.645	4.619	0.026	20456	1000.00	941.3	71.43- 107.14	89.28
4.853	4.831	0.022	51726	1000.00	1174	180.61- 270.91	225.76
		Average of Peak Amounts =			1021		
$ 32 Decachlorobiphenyl					CAS #:		
6.305	6.283	0.022	31735	50.0000	58.24		(M)

QC Flag Legend

M - Compound response manually integrated.


Y (x10^4)
Min
-Aroclor-1016 (2.006)
-Aroclor-1016 (2.227)
-Aroclor-1016 (2.492)
-Aroclor-1016 (2.583)
-Aroclor-1016 (2.981)
-Aroclor-1260 (3.844)
-Aroclor-1260 (4.004)
-Aroclor-1260 (4.147)
-Aroclor-1260 (4.646)
Aroclor-1260 (4.854)
-Decachlorobiphenyl (6.305)
\\Slsvr01\GC_LAB\Gca.i\A0505020.b\ACAL648B.d\ACAL648B.RAW
Data File: \\Slsvr01\GC_LAB\Gca.i\A0505020.b\ACAL648B.d
Date : 02-MAY-2005 21:10
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: gca.i
Operator: BLD
Column diameter: 0.53
Page 3


Y (x10^3)
Data File: \\Slavr01\GC_LAB\Gc1\A050502A.b\ACAL648B.d\ACAL648B.RAW
Injection Date: 02-MAY-2005 21:10
Instrument: gca.i
Client Sample ID:
PE TurboChrom ACAL648B.RAW: 0.576 to 6.653 Min
Min
0.607
0.862
0.949
1.075
1.179
1.452
1.590
1.755
1.829
1.907
Aroclor-1016
2.132
Aroclor-1016
2.366
2.422
Aroclor-1016
Aroclor-1016
2.648
2.695
2.752
2.890
Aroclor-1016
3.094
3.189
3.272
3.324
3.597
3.714
3.761
Aroclor-1260
3.956
Aroclor-1260
Aroclor-1260
4.238
4.308
4.386
4.429
4.537
Aroclor-1260
4.706
4.754
Aroclor-1260
4.929
5.183
5.385
5.447
5.564
5.699
6.024
Decachlorobiphenyl

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Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b/ACAL650B.d
Report Date: 05/03/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: gca.i
Lab File ID: ACAL650B.d
Analysis Type: WATER

Injection Date: 02-MAY-2005 21:39
Lab Sample ID: CCAL1000
Method File: \\Slsvr01\GC_LAB\GCA.i\A050502A.

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	1044.8601	4.5	15.0
29 Aroclor-1260	1000.0000	988.2208	1.2	15.0
34 Decachlorobiphenyl	50.0000	57.1256	14.3	15.0

DEK
5/3/05

Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ACAL650B.d
Report Date: 03-May-2005 08:55

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Data file : \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ACAL650B.d
Lab Smp Id: CCAL1000
Inj Date : 02-MAY-2005 21:39
Operator : BLO Inst ID: gca.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\Slsvr01\GC_LAB\GCA.i\A050502A.b\APCB05B.m
Meth Date : 03-May-2005 08:50 target Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358B.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 4.10 Sample Matrix: WATER
Processing Host: SLGC08

Concentration Formula: Amt * DF * (Uf/Vi) * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vi	2.000	Injection Volume
Vt	10.000	Volume of final extract (ml)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

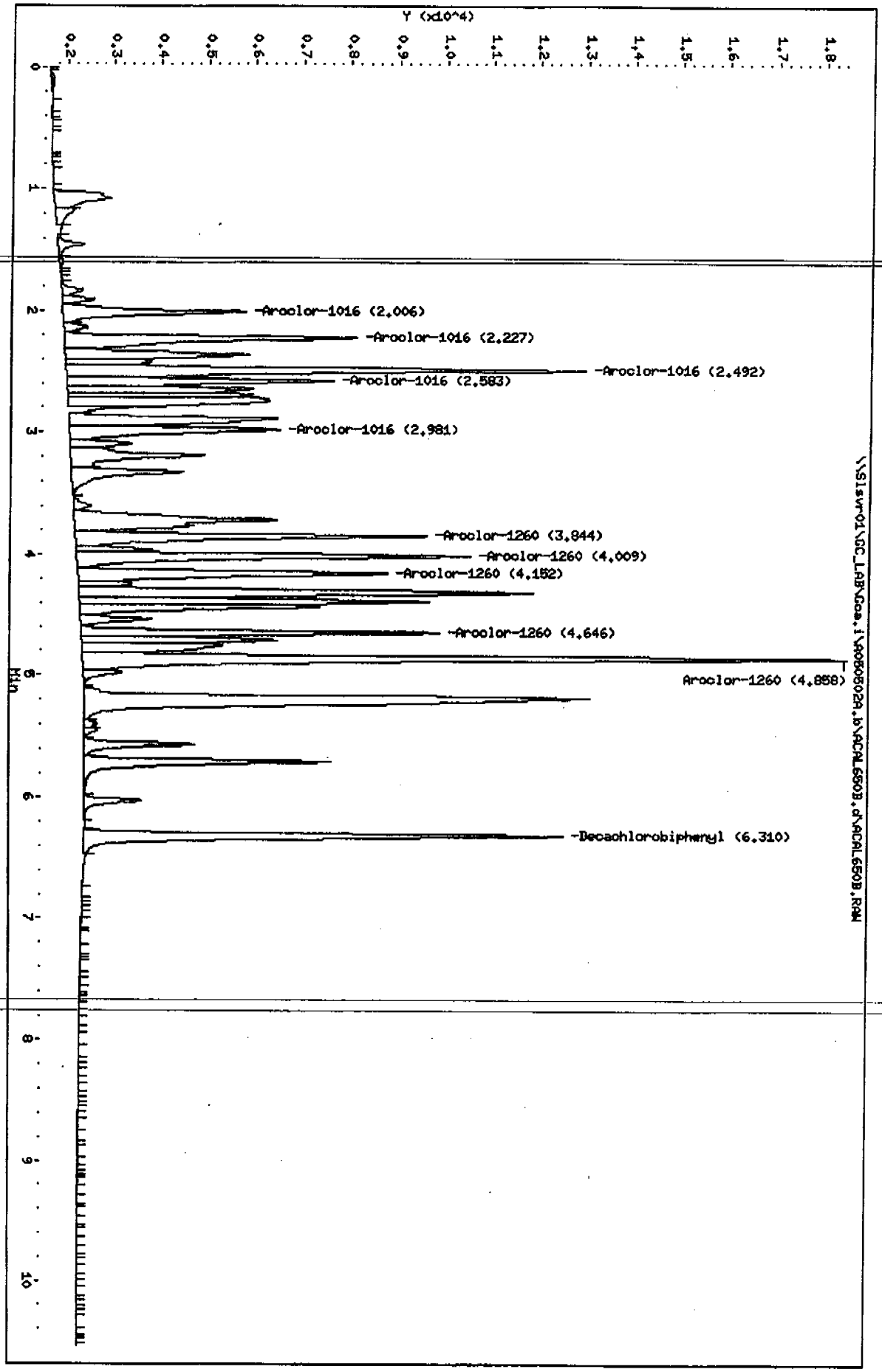
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

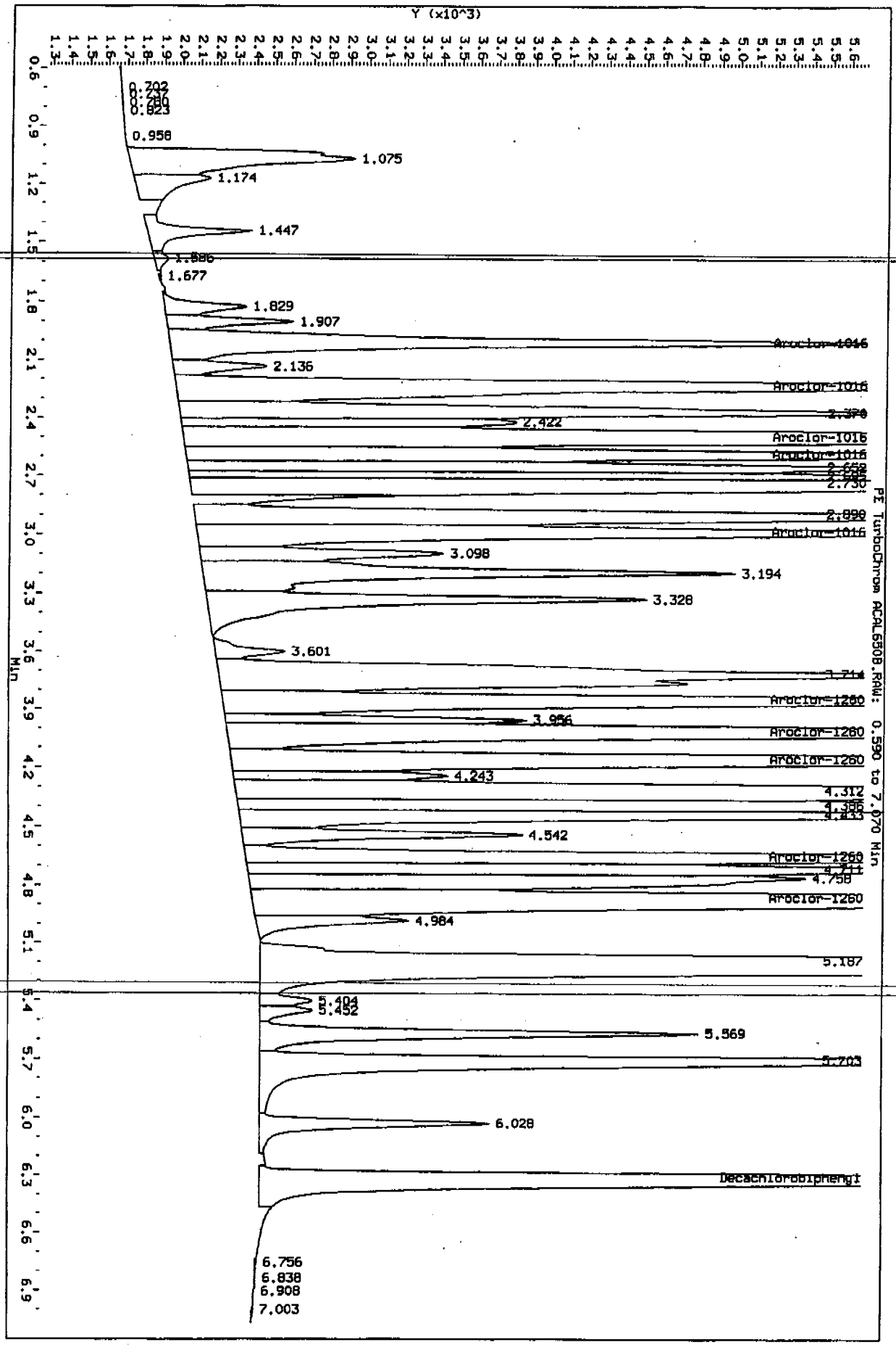
DEK
5/3/05

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.006	1.980	0.026	12763	1000.00	1024	80.00- 120.00	100.00
2.227	2.201	0.026	21451	1000.00	960.9	134.46- 201.69	168.07
2.491	2.465	0.026	34876	1000.00	1095	218.60- 327.90	273.25
2.582	2.556	0.026	16416	1000.00	1080	102.90- 154.35	128.62
2.981	2.955	0.026	16208	1000.00	1064	101.59- 152.38	126.99
Average of Peak Amounts =					1045		
28 Aroclor-1260					CAS #: 11096-82-5		
3.843	3.817	0.026	22435	1000.00	939.2	80.00- 120.00	100.00
4.008	4.004	0.004	26180	1000.00	1037	93.36- 140.03	116.70
4.151	4.121	0.030	22627	1000.00	934.9	80.69- 121.03	100.86
4.645	4.619	0.026	19350	1000.00	890.4	69.00- 103.50	86.25
4.857	4.831	0.026	50225	1000.00	1140	179.09- 268.64	223.87
Average of Peak Amounts =					988.2		
$ 32 Decachlorobiphenyl					CAS #:		
6.309	6.283	0.026	31126	50.0000	57.12		(M)

QC Flag Legend

M - Compound response manually integrated.


Y (x10^4)
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
1.8
0
1
2
3
4
5
6
7
8
9
10
Min
-Aroclor-1016 (2.006)
-Aroclor-1016 (2.227)
-Aroclor-1016 (2.492)
-Aroclor-1016 (2.583)
-Aroclor-1016 (2.981)
-Aroclor-1260 (3.844)
-Aroclor-1260 (4.009)
-Aroclor-1260 (4.152)
-Aroclor-1260 (4.646)
Aroclor-1260 (4.858)
-Decachlorobiphenyl (6.310)
\\Slsvr01\GC_LAB\Goa.i\A050502A.b\ACAL650B.d\ACAL650B.RAW
Data File: \\Slsvr01\GC_LAB\Goa.i\A050502A.b\ACAL650B.d
Date : 02-MAY-2005 21:39
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: goa.i
Operator: BLO
Column diameter: 0.53
Page 3


Y (x10^3)
Min
Data File: \\Slsvr01\GC_LAB\Gca\1\A050502A.b\ACAL650B.d\ACAL650B.RAW
Injection Date: 02-MAY-2005 21:39
Instrument: gca.i
Client Sample ID:
PE TurboChrom ACAL650B.RAW: 0.590 to 7.070 Min
0.702
0.958
1.075
1.174
1.447
1.677
1.829
1.907
Aroclor-1016
2.136
Aroclor-1016
2.422
Aroclor-1016
2.730
2.898
Aroclor-1016
3.098
3.194
3.328
3.601
Aroclor-1260
Aroclor-1260
Aroclor-1260
4.243
4.312
4.542
Aroclor-1260
4.758
Aroclor-1260
4.984
5.187
5.404
5.452
5.569
6.028
Decachlorobiphenyl
6.756
6.838
6.908
7.003

GC RAW SAMPLE DATA

Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ASMP635A.d Page 1
Report Date: 03-May-2005 15:32

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Data file : \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ASMP635A.d
Lab Smp Id: G800L1AH Client Smp ID: RE73-05-58923
Inj Date : 02-MAY-2005 18:01
Operator : BLO Inst ID: gca.i
Smp Info : G800L1AH
Misc Info : F5D220218-001
Comment :
Method : \\Slsvr01\GC_LAB\GCA.i\A050502A.b\APCB05A.m
Meth Date : 03-May-2005 08:37 target Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358A.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: sep05.sub
Target Version: 4.10 Sample Matrix: WATER
Processing Host: SLGC08

Concentration Formula: Amt * DF * (Uf/Vi) * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vi	2.000	Injection Volume
Vt	10.000	Volume of final extract (ml)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

			CONCENTRATIONS			
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ug/L)	TARGET RANGE	RATIO
$ 32 Decachlorobiphenyl					CAS #:		
5.247	5.226	0.021	9853	14.0024	0.1400		

DEK 5/3/05

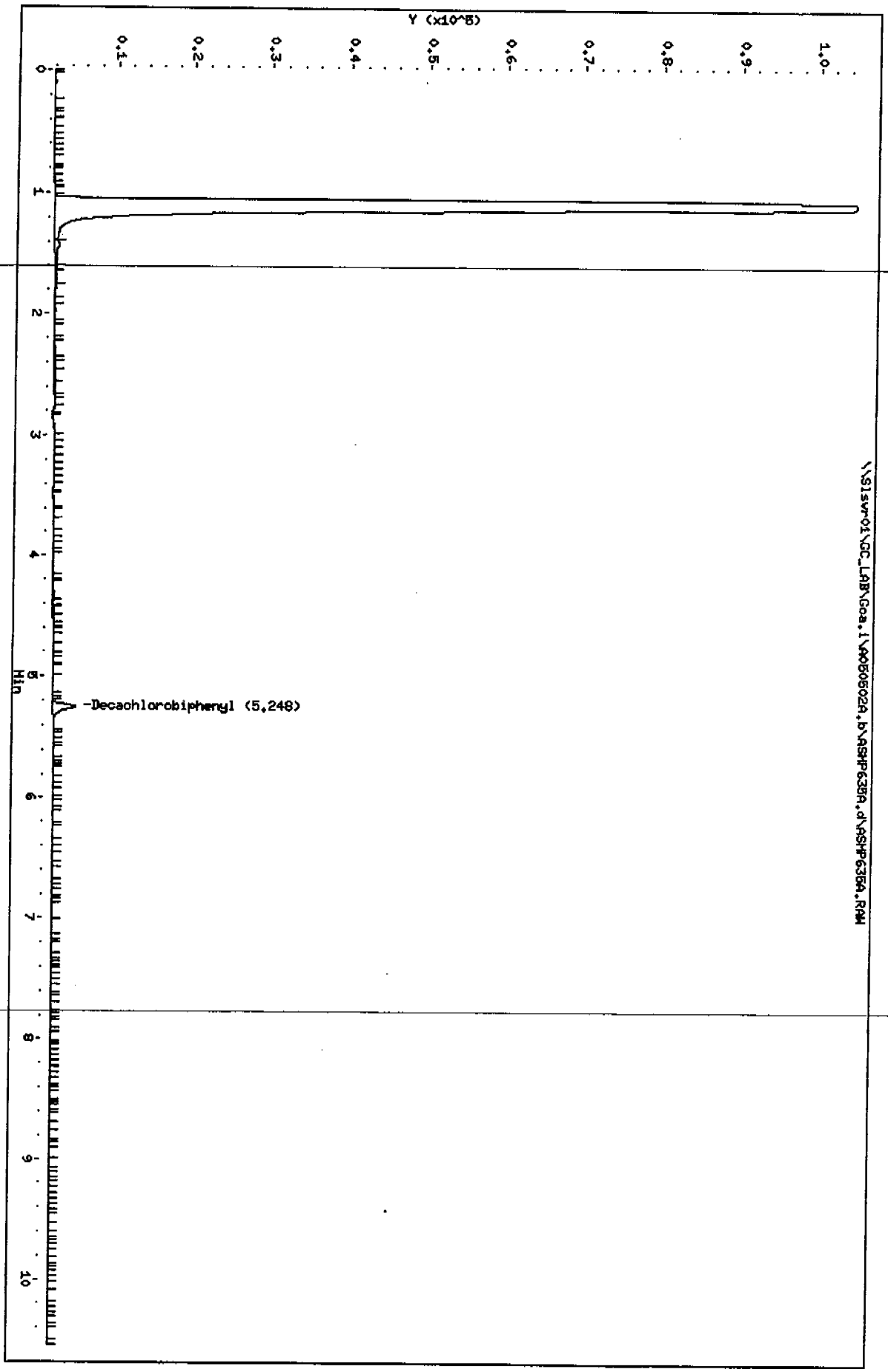
Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ASMP635A.d
Report Date: 03-May-2005 15:32

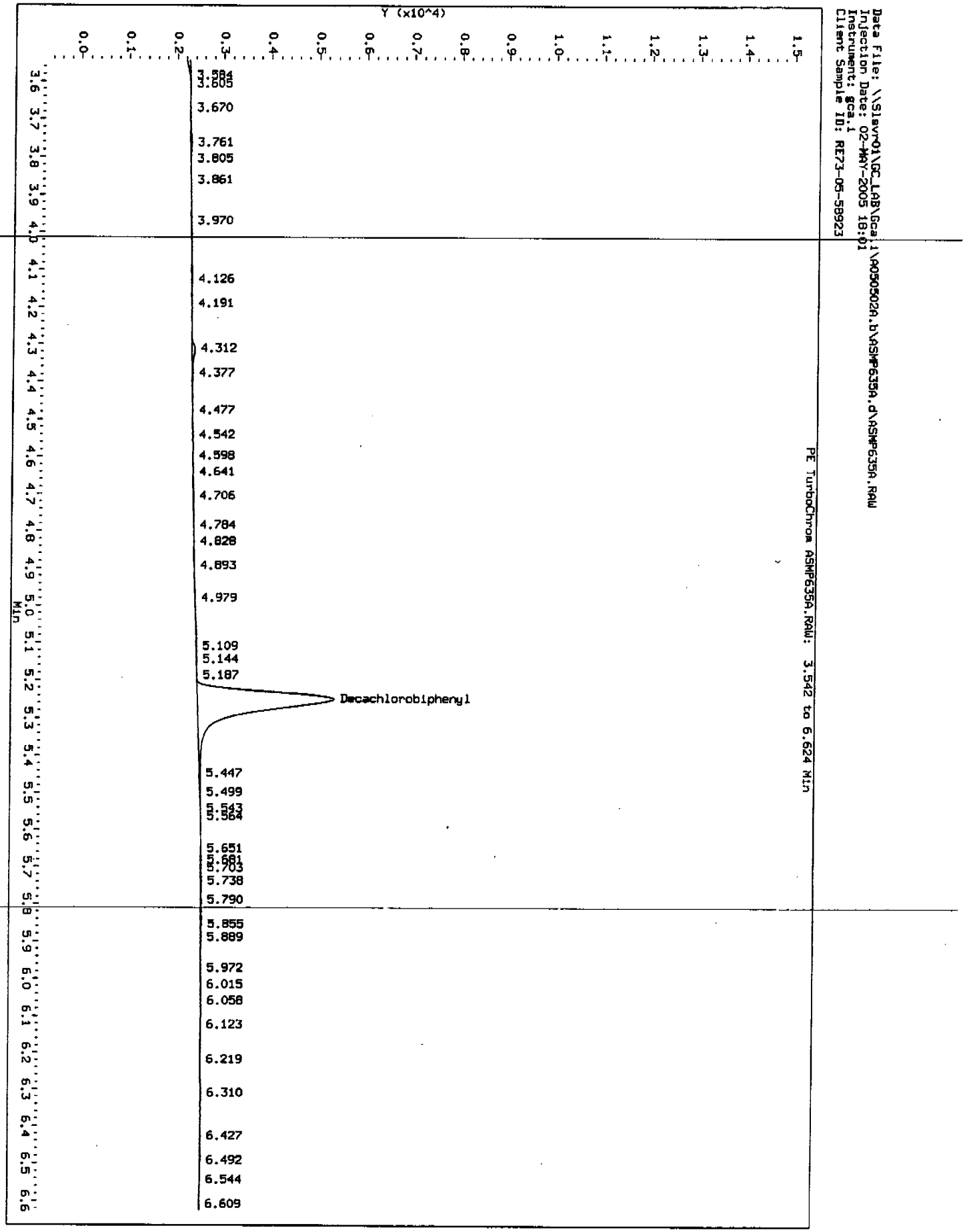
STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 22-APR-2005 00:00 Client SDG: F5D2202
Sample Matrix: LIQUID Fraction: PCB
Lab Smp Id: G800L1AH Client Smp ID: RE73-05-58923
Level: LOW Operator: BLO
Data Type: GC MULTI COMP SampleType: SAMPLE
SpikeList File: SOILSPKPCB.spk Quant Type: ESTD
Sublist File: sep05.sub
Method File: \\Slsvr01\GC_LAB\GCA.i\A050502A.b\APCB05A.m
Misc Info: F5D220218-001

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 32 Decachlorobiphenyl	0.2000	0.1400	70.01	30-150


Y (x10^5)
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1
2
3
4
5
6
7
8
9
10
Min
-Decachlorobiphenyl (5,248)
Data File: \\Slsvr01\GC_LAB\Gca.i\A0505022A.b\ASHP638A.d
Date : 02-MAY-2005 18:01
Client ID: RE73-05-58923
Sample Info: C800LIAH
Volume Injected (uL): 2.0
Column phase: CLPEST-1
\\Slsvr01\GC_LAB\Gca.i\A0505022A.b\ASHP638A.d\ASHP638A.RAW
Instrument: gca.i
Operator: BLO
Column diameter: 0.53


Y (x10^4)
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
Data File: \\Slavr01\GC_LAB\Gca.i\A050502A.b\ASMP635A.d\ASMP635A.RAW
Injection Date: 02-MAY-2005 18:01
Instrument: gca.i
Client Sample ID: RE73-05-58923
PE TurboChrom ASMP635A.RAW: 3.542 to 6.624 Min
3.584
3.605
3.670
3.761
3.805
3.861
3.970
4.126
4.191
4.312
4.377
4.477
4.542
4.598
4.641
4.706
4.784
4.828
4.893
4.979
5.109
5.144
5.187
Decachlorobiphenyl
5.447
5.499
5.543
5.564
5.651
5.681
5.703
5.738
5.790
5.855
5.889
5.972
6.015
6.058
6.123
6.219
6.310
6.427
6.492
6.544
6.609
3.6 3.7 3.8 3.9 4.0 4.1 4.2 4.3 4.4 4.5 4.6 4.7 4.8 4.9 5.0 5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8 5.9 6.0 6.1 6.2 6.3 6.4 6.5 6.6
Min

Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ASMP636A.d
Report Date: 03-May-2005 15:33

STL St. Louis

Data file : \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ASMP636A.d
Lab Smp Id: G80091AD Client Smp ID: RE73-05-58924
Inj Date : 02-MAY-2005 18:16
Operator : BLO Inst ID: gca.i
Smp Info : G80091AD
Misc Info : F5D220218-002
Comment :
Method : \\Slsvr01\GC_LAB\GCA.i\A050502A.b\APCB05A.m
Meth Date : 03-May-2005 08:37 target Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358A.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: sep05.sub
Target Version: 4.10 Sample Matrix: WATER
Processing Host: SLGC08

Concentration Formula: Amt * DF * (Uf/Vi) * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vi	2.000	Injection Volume
Vt	10.000	Volume of final extract (ml)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

			CONCENTRATIONS			
				ON-COL	FINAL	
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ug/L)	TARGET RANGE	RATIO
$ 32 Decachlorobiphenyl					CAS #:		
5.243	5.226	0.017	9317	13.2406	0.1324		

DEK 5/3/05

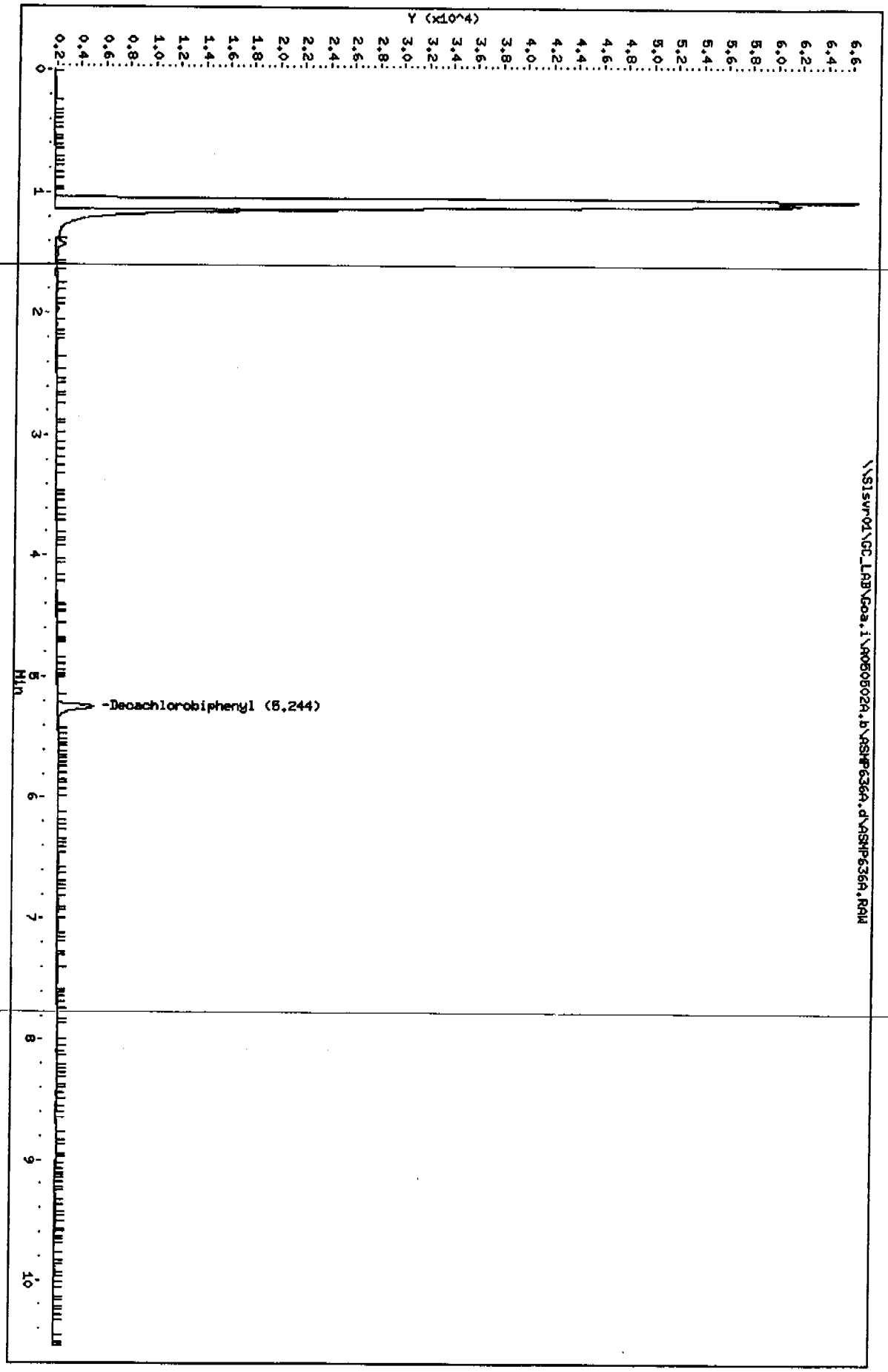
Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ASMP636A.d
Report Date: 03-May-2005 15:33

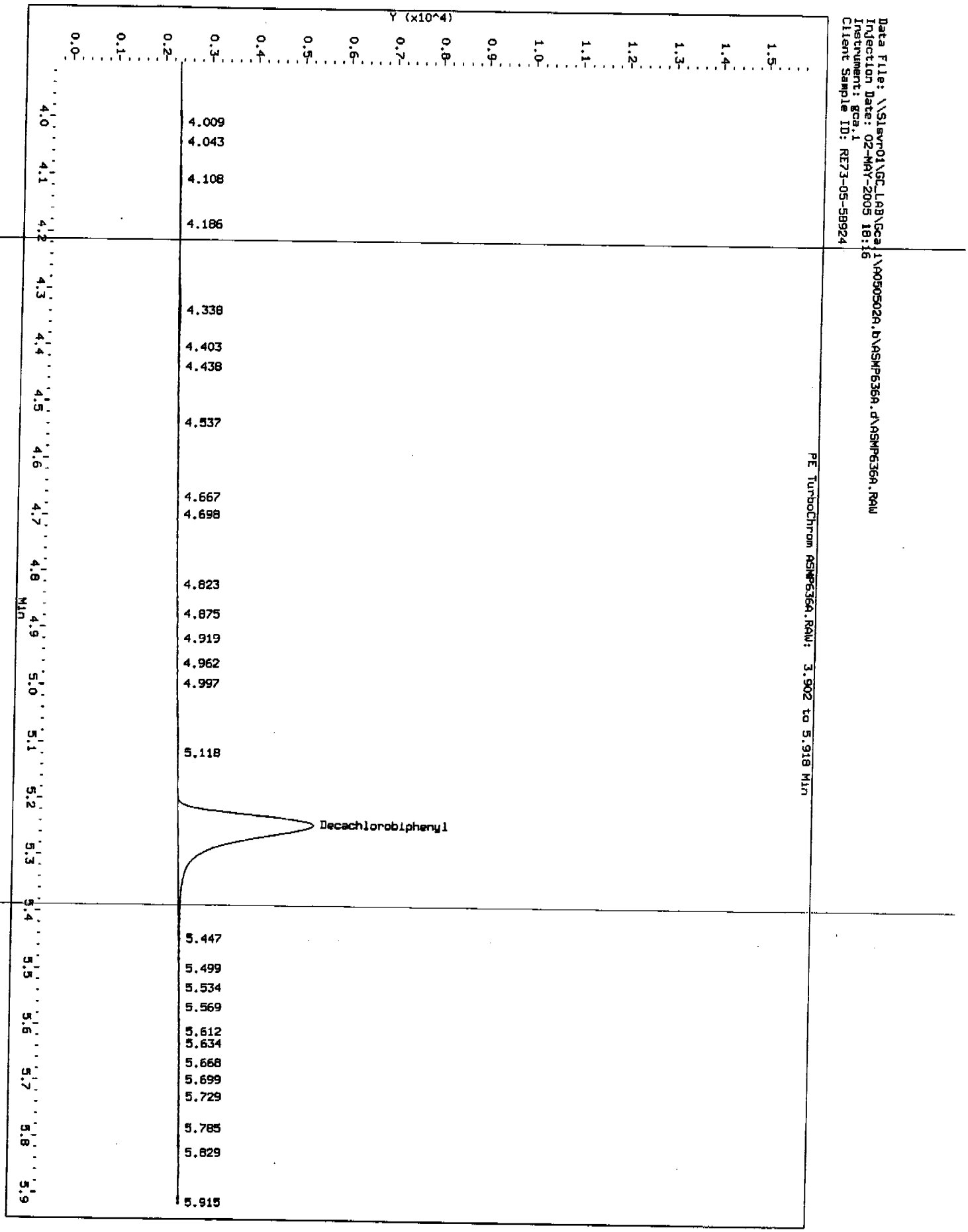
STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 22-APR-2005 00:00 Client SDG: F5D2202
Sample Matrix: LIQUID Fraction: PCB
Lab Smp Id: G80091AD Client Smp ID: RE73-05-58924
Level: LOW Operator: BLO
Data Type: GC MULTI COMP SampleType: SAMPLE
SpikeList File: SOILSPKPCB.spk Quant Type: ESTD
Sublist File: sep05.sub
Method File: \\Slsvr01\GC_LAB\GCA.i\A050502A.b\APCB05A.m
Misc Info: F5D220218-002

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 32 Decachlorobiphenyl	0.2000	0.1324	66.20	30-150


Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ASHP636A.d
Date : 02-MAY-2005 18:16
Client ID: RE73-05-58924
Sample Info: G80091AD
Volume Injected (uL): 2.0
Column phase: CLPEST-1
Instrument: gca.i
Operator: BLO
Column diameter: 0.53
\\Slsvr01\GC_LAB\Gca.i\A050502A.b\ASHP636A.d\ASHP636A.RAW
Y (x10^4)
Min
-Decachlorobiphenyl (8.244)


Y (x10^4)
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
Min
4.0
4.1
4.2
4.3
4.4
4.5
4.6
4.7
4.8
4.9
5.0
5.1
5.2
5.3
5.4
5.5
5.6
5.7
5.8
5.9
4.009
4.043
4.108
4.186
4.338
4.403
4.438
4.537
4.667
4.698
4.823
4.875
4.919
4.962
4.997
5.118
5.447
5.499
5.534
5.569
5.612
5.634
5.668
5.699
5.729
5.785
5.829
5.915
Decachlorobiphenyl
Data File: \\Slsvr01\GC_LAB\Cal\A050502A.b\ASMP636A.d\ASMP636A.RAW
Injection Date: 02-MAY-2005 18:16
Instrument: gca.i
Client Sample ID: RE73-05-58924
PE TurboChrom ASMP636A.RAW: 3.902 to 5.918 Min

GC RAW QC DATA

Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ABLK627A.d Page 1
Report Date: 03-May-2005 09:59

STL St. Louis

Data file : \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ABLK627A.d
Lab Smp Id: G9DK31AA Client Smp ID: INTRA-LAB BLANK
Inj Date : 02-MAY-2005 16:05
Operator : BLQ Inst ID: gca.i
Smp Info : G9DK31AA
Misc Info : F5D270000-672B
Comment :
Method : \\Slsvr01\GC_LAB\Gca.i\A050502A.b\APCB05A.m
Meth Date : 03-May-2005 08:37 target Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358A.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: QCsep05.sub
Target Version: 4.10 Sample Matrix: WATER
Processing Host: SLGC08

Concentration Formula: Amt * DF * (Uf/Vi) * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vi	2.000	Injection Volume
Vt	10.000	Volume of final extract (ml)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng/mL)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO	
$ 32 Decachlorobiphenyl					CAS #:			
5.260	5.226	0.034	12835	18.2402	0.1824			(M)

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

DEK 5/3/05

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ABLK627A.d
Report Date: 03-May-2005 09:59

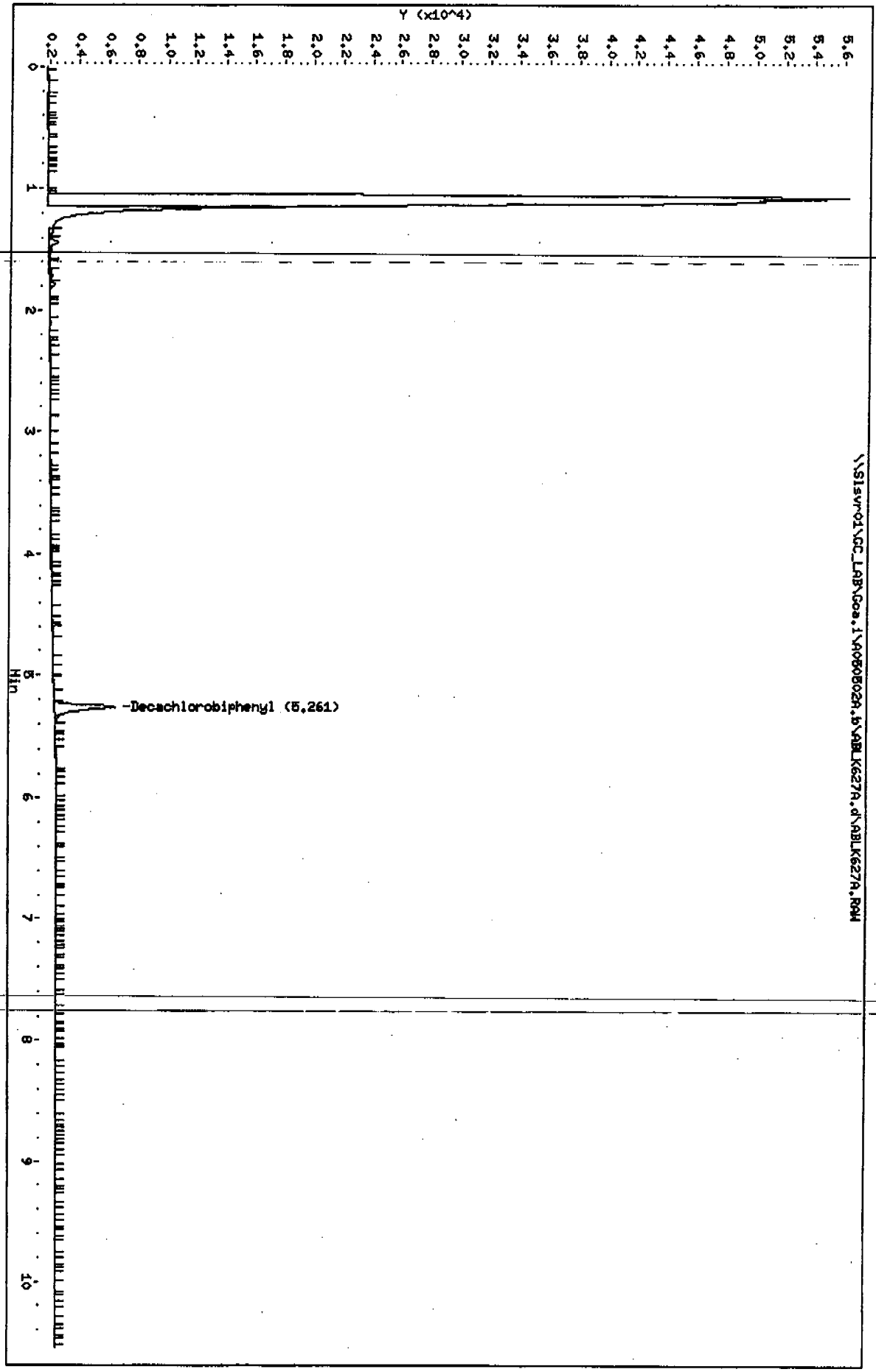
STL St. Louis

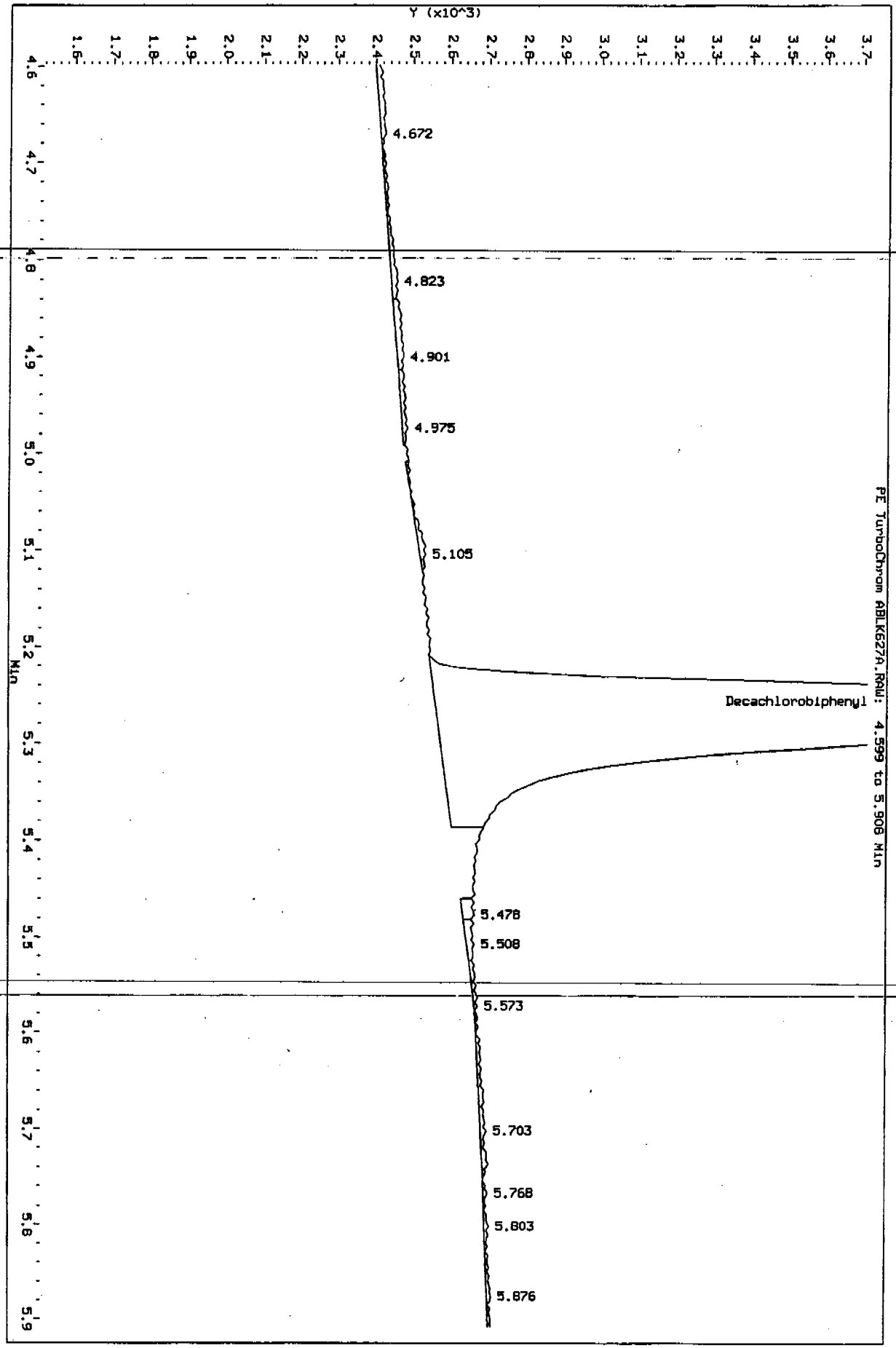
RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: G9DK31AA
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: SOILSPKPCB.spk
Sublist File: QCsep05.sub
Method File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b\APCB05A.m
Misc Info: F5D270000-672B

Client SDG: F5D270000
Fraction: PCB
Client Smp ID: INTRA-LAB BLANK
Operator: BLO
SampleType: BLANK
Quant Type: ESTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 32 Decachlorobiphenyl	0.2000	0.1824	91.20	48-139


Y (x10^4)
Min
-Decachlorobiphenyl (5.261)
Data File: \\Slsvr01\GC_LAB\Goa.i\A050502A.b\ABLK627A.d
Date : 02-MAY-2005 16:05
Client ID: INTRA-LAB BLANK
Sample Info: G9DK31AA
Volume Injected (uL): 2.0
Column phase: CLPEST-1
Instrument: goa.i
Operator: BLO
Column diameter: 0.53
\\Slsvr01\GC_LAB\Goa.i\A050502A.b\ABLK627A.d\ABLK627A.RAW


Y (x10^3)
Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ABLK627A.d\ABLK627A.RAW
Injection Date: 02-MAY-2005 16:05
Instrument: gca.i
Client Sample ID: INTRA-LAB BLANK
4.672
4.823
4.901
4.975
5.105
Decachlorobiphenyl
PE TurboChrom ABLK627A.RAW: 4.599 to 5.908 Min
5.478
5.508
5.573
5.703
5.768
5.803
5.876
Min

Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ALCS628A.d Page 1
Report Date: 03-May-2005 14:44

STL St. Louis

Data file : \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ALCS628A.d
Lab Smp Id: G9DK31AC Client Smp ID: INTRA-LAB CHECK
Inj Date : 02-MAY-2005 16:20
Operator : BLO Inst ID: gca.i
Smp Info : G9DK31AC
Misc Info : F5D270000-672C
Comment :
Method : \\Slsvr01\GC_LAB\Gca.i\A050502A.b\APCB05A.m
Meth Date : 03-May-2005 08:37 target Quant Type: ESTD
Cal Date : 22-MAR-2005 20:05 Cal File: ACAL358A.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: QCsep05.sub
Target Version: 4.10 Sample Matrix: WATER
Processing Host: SLGC08

Concentration Formula: Amt * DF * (Uf/Vi) * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vi	2.000	Injection Volume
Vt	10.000	Volume of final extract (ml)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

DFK 5/3/05

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng/mL)	FINAL (ug/L)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.742	1.716	0.026	7564	414.689	4.147	80.00- 120.00	100.00(M)
1.889	1.859	0.030	10915	415.080	4.151	116.87- 175.30	144.30
2.097	2.067	0.030	20312	394.036	3.940	230.21- 345.31	268.53
2.387	2.357	0.030	7691	419.389	4.194	79.28- 118.92	101.69
2.439	2.418	0.021	8720	364.049	3.640	113.77- 170.65	115.29
Average of Peak Concentrations =					4.014		
28 Aroclor-1260					CAS #: 11096-82-5		
3.150	3.120	0.030	15401	461.483	4.615	80.00- 120.00	100.00
3.349	3.319	0.030	23544	443.765	4.438	121.42- 182.12	152.87
3.562	3.536	0.026	18975	444.905	4.449	91.56- 137.34	123.20
4.082	4.082	0.000	25741	379.156	3.792	178.81- 268.21	167.14
4.840	4.814	0.026	6355	326.943	3.269	45.78- 68.67	41.27
Average of Peak Concentrations =					4.112		
$ 32 Decachlorobiphenyl					CAS #:		
5.247	5.226	0.021	12296	17.4742	0.1747		

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b\ALCS628A.d
Report Date: 03-May-2005 14:44

STL St. Louis

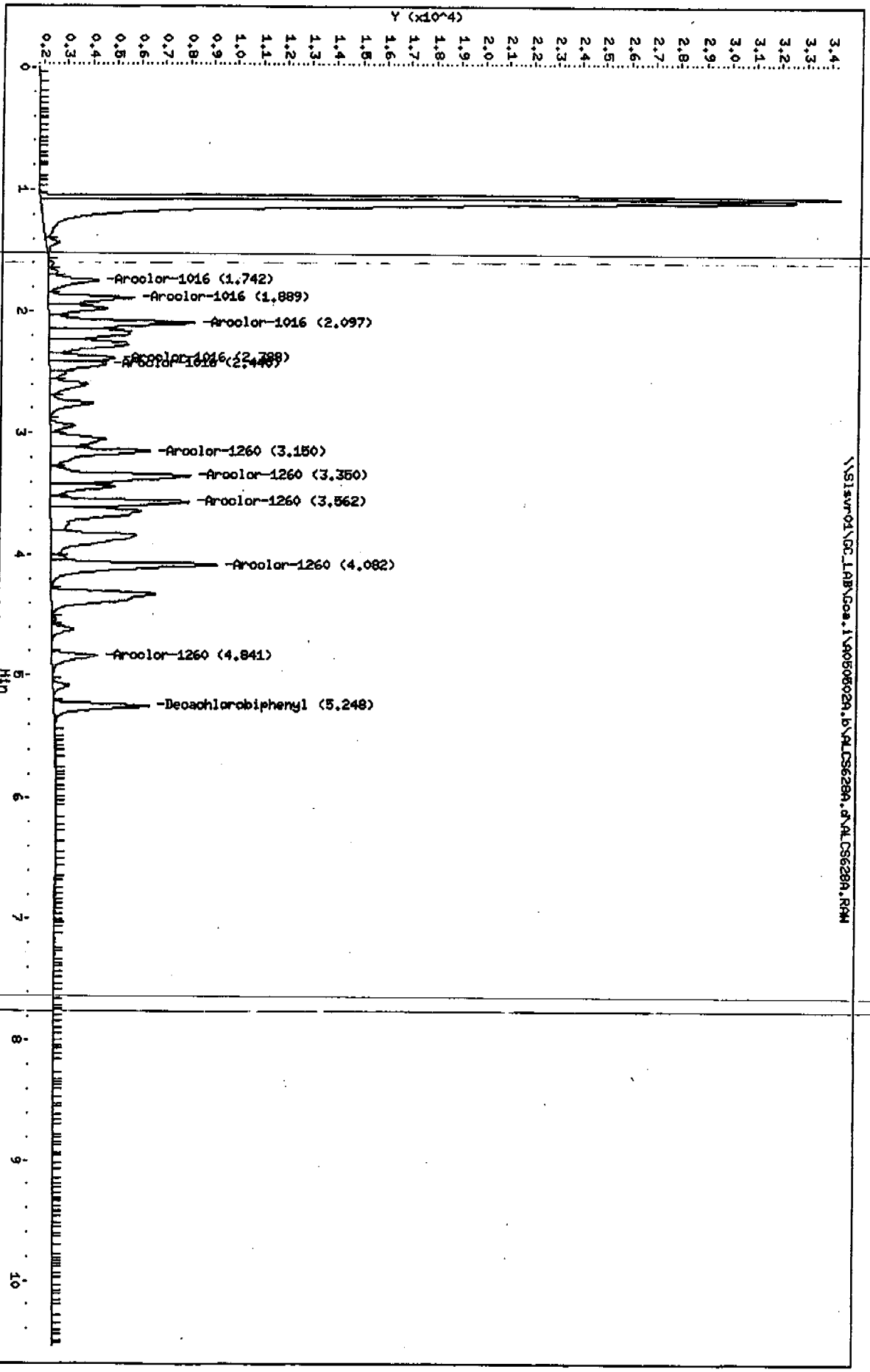
RECOVERY REPORT

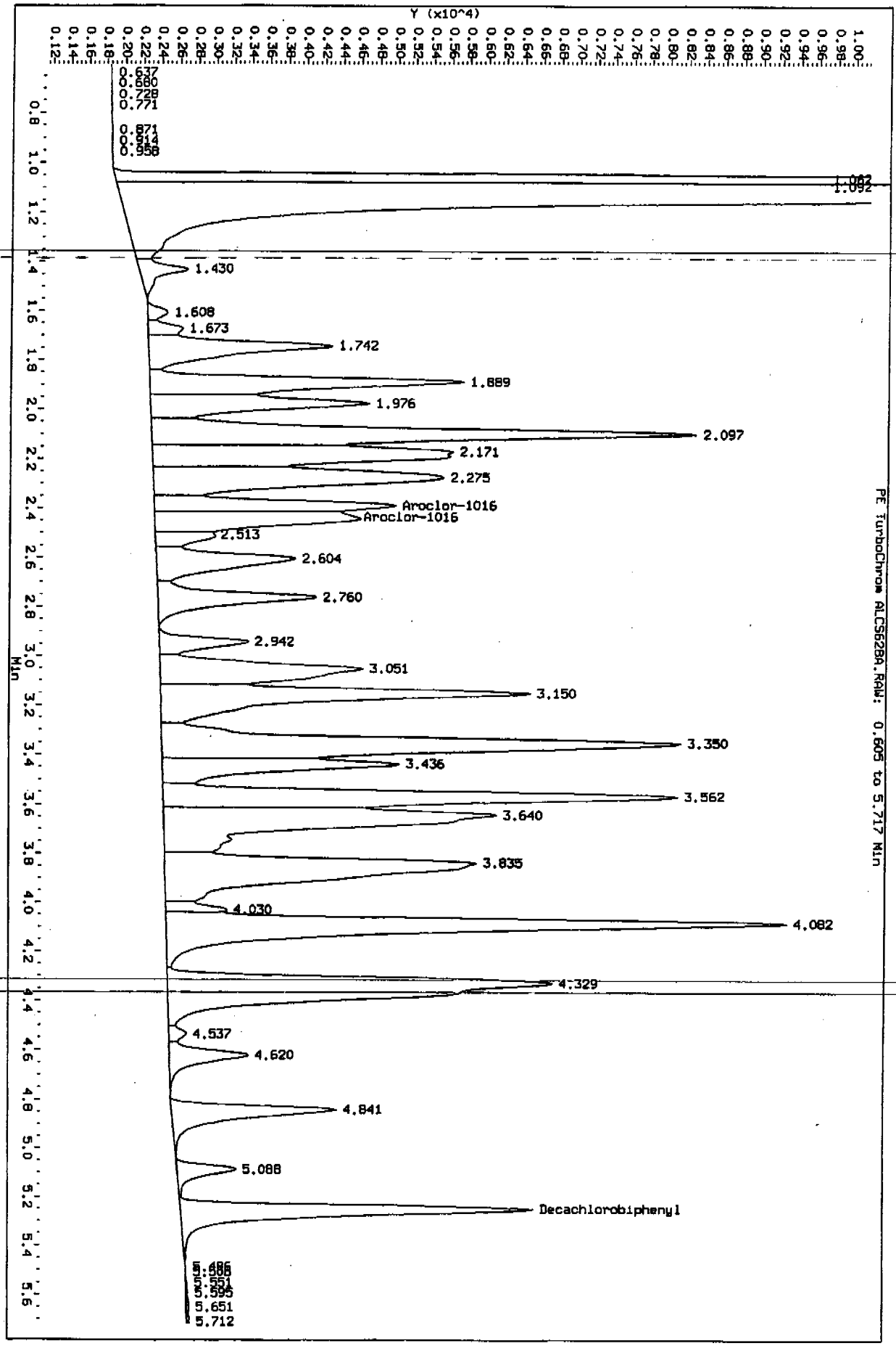
Client Name:
Sample Matrix: LIQUID
Lab Smp Id: G9DK31AC
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: sep051cs.spk
Sublist File: QCsep05.sub
Method File: \\Slsvr01\GC_LAB\Gca.i\A050502A.b\APCB05A.m
Misc Info: F5D270000-672C

Client SDG: F5D270000
Fraction: PCB
Client Smp ID: INTRA-LAB CHECK
Operator: BLO
SampleType: LCS
Quant Type: ESTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
22 Aroclor-1016	5.000	4.014	80.28	66-134
28 Aroclor-1260	5.000	4.112	82.24	66-121

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 32 Decachlorobiphenyl	0.2000	0.1747	87.37	48-139


Y (x10^4)
Aroclor-1016 (1.742)
Aroclor-1016 (1.889)
Aroclor-1016 (2.097)
Aroclor-1016 (2.388)
Aroclor-1016 (2.446)
Aroclor-1260 (3.150)
Aroclor-1260 (3.350)
Aroclor-1260 (3.562)
Aroclor-1260 (4.082)
Aroclor-1260 (4.841)
Decachlorobiphenyl (5.248)
Min
\\S1svr01\GC_LAB\gca.i\A050602A.b\ALCS628A.d\ALCS628A.RAW
Data File: \\S1svr01\GC_LAB\gca.i\A050602A.b\ALCS628A.d
Date : 02-MAY-2005 16:20
Client ID: INTRA-LAB CHECK
Sample Info: G9DK31AC
Volume Injected (uL): 2.0
Column phase: CLPEST-1
Instrument: gca.i
Operator: BLO
Column diameter: 0.53


Y (x10^4)
Min
Data File: \\Slsvr01\GC_LAB\Gca.1\A0505028.b\ALCS628A.d\ALCS628A.RAW
Injection Date: 02-MAY-2005 16:20
Instrument: gca.1
Client Sample ID: INTRA-LAB CHECK
PE TurboChrom ALCS628A.RAW: 0.605 to 5.717 Min
0.637
0.660
0.728
0.771
0.871
0.914
0.956
1.082
1.092
1.430
1.608
1.673
1.742
1.889
1.976
2.097
2.171
2.275
Aroclor-1016
Aroclor-1016
2.513
2.604
2.760
2.942
3.051
3.150
3.350
3.436
3.562
3.640
3.835
4.030
4.082
4.329
4.537
4.620
4.841
5.088
Decachlorobiphenyl
5.486
5.551
5.595
5.651
5.712

GC MISCELLANEOUS DATA

LOT #F5D220218

STL ST LOUIS

SEVERN TRENT **STL**

Organic Prep Report for Batch #5117672

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

CleanupMethod: MOD 3665 **Method No:** SW846 3665A

SOP Number: STL-OP-0002, Rev 4

Prep Method: SW846 3510C

Matrix: WATER

Prep Description: LIQ/LIQ, SEP FUNNEL w/ACID STRIP (PCB) - Nominal

Extraction Date: 4/27/2005

		Initials: SF				Initials: SL Concentration 1		Initials: SDB Cleanup 1		Initials: Cleanup 2	
Lot Number	WorkOrder No	Wt/Vol	pH 1	pH 2	Extr Unit	Volume	Date	Method	Date	Method	Date
F5D210290-001	G8V481AA	1000 mL				10 mL	4/28/2005	MOD 3665	4-28-5		
F5D210290-001D	G8V481AF	1000 mL				10 mL	4/28/2005	MOD 3665			
F5D210290-001S	G8V481AE	1000 mL				10 mL	4/28/2005	MOD 3665			
F5D210290-002	G8V5G1AA	1000 mL				10 mL	4/28/2005	MOD 3665			
F5D220218-001	G800L1AH	1000 mL				10 mL	4/28/2005	MOD 3665			
F5D220218-002	G80091AD	1000 mL				10 mL	4/28/2005	MOD 3665			
F5D220321-011	G81X61AA	100 mL				10 mL	4/28/2005	MOD 3665			
F5D220321-012	G81X91AA	100 mL				10 mL	4/28/2005	MOD 3665			
F5D220321-013	G810D1AA	100 mL				10 mL	4/28/2005	MOD 3665			
F5D220321-014	G810G1AA	100 mL				10 mL	4/28/2005	MOD 3665			
F5D270000-672B	G9DK31AA	1000 mL				10 mL	4/28/2005	MOD 3665			
F5D270000-672C	G9DK31AC	1000 mL				10 mL	4/28/2005	MOD 3665			

Spike Information

Name	Standard ID	Exp Date	Vol Added
PCB SPK.	OP0181-05	9/28/2005	500 uL
PCB SURR.	OP0179-05	9/25/2005	500 uL

Spiking verified by: JW 4/27

Miscellaneous Information

Start: **Stop:**

Extr 1:

Extr 2:

Conc Method: steam bath

Conc Temp C: 95

Chemical Lot Information

Chemical	Lot Number
Hexane	B05E59
Methylene Chloride	B12E02
Sodium Sulfate	A51621
Sulfuric Acid	5557A50H02

Comments:

Custody Information

Relinquished By: SDB **Review/Received By:** BLO **Date of Transfer:** 4-28-5

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.15, updated 10/20/2004

Logbook No.: 2634 — Instrument ID No.: GC A

STL St. Louis
GC Runlog

#	Data File	Clock	Lab I.D.	Dil.	STD#	Date	Oper.	Matrix	Method
1	ASMP311	A050318	GSD43IAC	10x		3-18-05	BLO	SOIL	8082
2	312		GSD5MIAC					SOIL	
3	313		DIAC						
4	314		TIAC						
5	ABLK315		GSINDIAA	1x					
6	ALCS316		DIAC	1x					
7	ASMP317		GSELLIAC	10x					
8	318		VIAC						
9	319		GSEMFIAC						
10	ACAL320		CCAL1000	4x	GC094604				
11	ASMP321		GSEMGIAC	10x					
12	322		KIAC						
13	323		MIAC						
14	324		IIAC						
15	325		4IAC						
16	326		8IAC	4x					
17	327		8IAD	4x					
18	328		8IAE	4x					
19	329		GSENCIAC	10x					
20	330		HIAC						
21	ACAL331		CCAL1000	4x	GC094604				
22	ASMP332		GSENLIAC	10x					
23	333		WIAC						
24	334		GSEPCIAC						
25	335		GIAC						
26	336		KIAC						
27	337		WIAC						
28	338		IIAC						
29	339		GSEQHIAC						
30	ACAL340		CCAL1000	4x	GC094604				
31	ACND341	A050322A	Cnd. std.	1x		3-22-05	BLO		8082
32	AHEX342		hex						
33	ACAL343		1CAL-1	80x	GC094604				
34	344		-2	40x					
35	345		-3	16x					

Review documented on next page.
QC Types: BLK or B = Blank; LCS or C = Laboratory Control Sample; LCSD or L = Laboratory Control Sample Duplicate; S = Matrix Spike; D = Matrix Spike Duplicate; SMP = Sample, Matrix Spike or Matrix Spike Duplicate, CAL = Calibration Standard or Continuing Calibration Standard.
Form: SL-ORG-0008, Rev. 1/4/05
SOP References: STL-GC-0015, current revisions.
27

Logbook No.: 2634 — Instrument ID No.: GC A

STL St. Louis
GC Runlog

#	Batch #	Comments	
1	5068497	FSC020263-007 1254(T)	A
2		-016 No hits	
3		-017 1254(T)/60	
4		-018 No hits	
5	5070025	FSC110000-025B OK	A,B
6		-025C OK	
7		FSC020310-001 1254(T)	A
8		-002 No hits	A
9		-007 No hits	A
10		CCAL A:OK, B: ALL↑	A,B
11		-008 No hits	A
12		-009 1254(>5ppm)	A,B
13		-010 No hits	A
14		-011 1254(T)	A
15		-012 No hits	A
16		-013 (4x) 1254(T) DCBT	A
17		-013S (4x) 1016/54/601/DCBT	
18		-013D (4x) 1016/54/601/DCBT	
19		-014 No hits	A
20		-015 1254(>5ppm)	A,B
21		CCAL A:OK, B: ALL↑	A,B
22		-016 1254(J)	A
23		-020 1254(>5ppm)	A,B
24		FSC020315-002 No hits	A
25		-003 Sol. Rerun 50x - can't report	*
26		-005 1254(J)	A
27		-008 1254(E) Dilute 50x→2AC	A,B *
28		-009 1254(E) Dilute 50x→2AC	A,B *
29		-010 1254(E) Dilute 50x→2AC	A,B *
30		ICAL A:OK, B: ALL↑	A,B
31			
32			
33		ICAL Data: Good on Both Channels 100ppb-4000ppb	
34			
35			

Reviewed By: _____
QC Types: BLK or B = Blank; LCS or C = Laboratory Control Sample; LCSD or L = Laboratory Control Sample Duplicate; S = Matrix Spike; D = Matrix Spike Duplicate; SMP = Sample, Matrix Spike or Matrix Spike Duplicate, CAL = Calibration Standard or Continuing Calibration Standard.
Form: SL-ORG-0008, Rev. 1/4/05
SOP References: STL-GC-0015, current revisions.
28

Logbook No.: 2634 — Instrument ID No.: GC A

STL St. Louis
GC Runlog

#	Data File	Clock	Lab I.D.	Dil.	STD#	Date	Oper.	Matrix	Method
1	ACAL346	A050322A	ICAL-4	8x	GC0946-04	3-22-05	BLO		8082
2	347		-5	4x					
3	348		-6	2.75x					
4	349		-7	1.6x					
5	350		-8	1x					
6	AHEX351		hexane						
7	AICV352		verification	10x	OP0128-05				
8	ACAL353		Aroclor 1232	8x	GC0942-04				
9	354		1242		941-04				
10	355		1248		943-04				
11	356		1221/51		940-04				
12	357		1262		939-04				
13	358		1260		944-04				
14	ABLK359		G60E91AA					SOLID WATER	
15	ALCS360		91AC						
16	ALCD361		91AD						
17	ASMP362		G387J1AA						
18	363		KIAA						
19	ABLK364		G544F1AA					H2O SED	
20	ALCS365		F1AC						
21	ALCD366		F1AD						
22	ASMP367		G50KJ1AE						
23	ACAL368		CCAL1000	4x	GC0946-04				
24	ABLK369		G53521AA					SOLID SOIL	
25	ALCS370		21AC						
26	ASMP371		G5EVJ1AB						
27	372		G5EWJ1AK						
28	373		QIAK						
29	374		QICE						
30	375		QICF						
31	ACAL376		CCAL1000	4x	GC0946-04				
32	ABLK377		G57HN1AA					SOLID SOIL	
33	ALCS378		NIAC						
34	ASMP379		G5EN91CX						
35	380		G5ERQ1C9						

Review documented on next page.

Form: SL-ORG-0008, Rev. 1/4/05

QC Types: BLK or B = Blank; LCS or C = Laboratory Control Sample; LCSD or L = Laboratory Control Sample Duplicate; S = Matrix Spike; D = Matrix Spike Duplicate; SMP = Sample, Matrix Spike or Matrix Spike Duplicate, CAL = Calibration Standard or Continuing Calibration Standard.

SOP References: STL-GC-0015, current revisions.

Logbook No.: 2634 — Instrument ID No.: GC A

STL St. Louis
GC Runlog

Batch #	Comments		#
	ICAL Data		1
			2
			3
			4
			5
			6
	Verification: Good on Both		7
	Aroclor Data: 500 ppb		8
			9
			10
			11
			12
			13
50813J0	FSC220000-370B OK	A,B A	14
	RPD Good -370C OK		15
	-370L OK		16
	FSB110127-015 1242	A,B	17
	-016 1254	A,B	18
5070530	FSC110000-530B OK	A	19
	RPD Good -530C OK		20
	-530L OK		21
	FSC080222-02 No hits		22
	ICCAL A:OK, B:OK	AB	23
5070440	FSC110000-440B OK	A	24
	-440C OK		25
	FSC020324-002 No hits		26
	-003 No hits		27
	-004 No hits (matrix in 1016 range)		28
	RPD Good -004S 1016(-1PK)/1260 OK		29
	-004D 1016(-1PK)/1260 OK		30
	ICCAL A:OK, B:OK	A,B	31
5073517	FSC140000-517B OK	A,B	32
	-517C OK	A,	33
	FSC020314-001 Sat: Rerun 10x (matrix?)	*	34
	-002 No hits	A	35

Reviewed By: _____

Form: SL-ORG-0008, Rev. 1/4/05

QC Types: BLK or B = Blank; LCS or C = Laboratory Control Sample; LCSD or L = Laboratory Control Sample Duplicate; S = Matrix Spike; D = Matrix Spike Duplicate; SMP = Sample, Matrix Spike or Matrix Spike Duplicate, CAL = Calibration Standard or Continuing Calibration Standard.

SOP References: STL-GC-0015, current revisions.

Logbook No.: 2634 — Instrument ID No.: GC A

STL St. Louis
GC Runlog

#	Data File	Clock	Lab I.D.	Dil.	STD#	Date	Oper.	Matrix	Method
1	ASMP381	A05D322A	G5ERVIC9			3-27-05	BLD	SOLID	8082
2	382	↓	↓ WIC9			↓	↓	SOIL	↓
3	383		G5LFRICX					↓	
4	384		G5LH41C9						
5	385		↓ 71C9						
6	↓ 386		G5LJA1C9						
7	ACAL387	↓	CCAL1000	4X	GC0946-04	↓	↓		↓
8	ASMP388		G5LFRZCX	10X					
9	389		G5EN91CX	20X					
10	↓ 390		G5T592AC	50X					
11	ACAL391	↓	CCAL1000	4X	GC0946-04	↓	↓	↓	↓
12									
13									
14									
15									
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18									
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BLD 3/23/05

Review documented on next page.

Form: SL-ORG-0008, Rev. 1/4/05 31

QC Types: BLK or B = Blank; LCS or C = Laboratory Control Sample; LCSD or L = Laboratory Control Sample Duplicate; S = Matrix Spike; D = Matrix Spike Duplicate; SMP = Sample, Matrix Spike or Matrix Spike Duplicate, CAL = Calibration Standard or Continuing Calibration Standard.

SOP References: STL-GC-0015, current revisions.

Logbook No.: 2634 — Instrument ID No.: GC A

STL St. Louis
GC Runlog

Batch #	Comments		#
5073517	FSC020314-003 No hits	A	1
	-004 No hits	A	2
	FSC040359-001 NA 1254/DCBT (matrix) Rerun 10X	A *	3
	-002 No hits	A	4
	-003 No hits	↓	5
	-004 No hits	↓	6
	ICCAL A:OK, B:OK	A,B	7
	FSC040359-001 (10X) No hits (ND 1254/NA others)	A	8
↓	FSC020314-001 (20X) No hits	A	9
5074449	FSC090205-011 (50X) 1254 (>50ppm)	A,B	10
	CCAL A:OK, B:OK	A,B	11
			12
			13
			14
			15
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			35

BLD 3/23/05

Reviewed By: _____

Form: SL-ORG-0008, Rev. 1/4/05 32

QC Types: BLK or B = Blank; LCS or C = Laboratory Control Sample; LCSD or L = Laboratory Control Sample Duplicate; S = Matrix Spike; D = Matrix Spike Duplicate; SMP = Sample, Matrix Spike or Matrix Spike Duplicate, CAL = Calibration Standard or Continuing Calibration Standard.

SOP References: STL-GC-0015, current revisions.

Logbook No.: 2657

STL St. Louis
GC Runlog

Instrument ID No.: GC A

#	Data File	Clock	Lab I.D.	Dil.	STD#	Date	Oper.	Matrix	Method
1	ACND 604	A05051A	Cind. STD			5/1/05	BLO		8082
2	AHEX 605		Hexane						
3	ACAL 606		CCAL1000	4X	GC1946-04				
4	ABLK 607		G9E591AA					solid	
5	608		91AD					son	
6	ALCS 609		91AC						
7	ASMP 610		G8S5Q1AU						
8	611		G89LL1AQ						
9	612		G9A7F1AG						
10	613		G9A7P1AJ						
11	ACAL 614		CCAL1000	4X	GC1946-04				
12	ASMP 615		G843C1AA						
13	616		C1AE						
14	617		C1AF						
15	618		G843E1AA						
16	619		G8436IAA						
17	620		G843L1AA						
18	621		G893N1AA						
19	622		G84W5W1AA						
20	ACAL 623		CCAL1000		GC1946-04				
21	ACND 624	A05051EA	Cond Std			5/2/05	DEK		8082
22	AHEX 625		Hexane						
23	ACAL 626		CCAL 1000	4X	GC1946-04				
24	ABLK 627		G9DK31AA					Liquid	
25	ALCS 628		G9DK31AC						
26	ABLK 629		G92KL1AA						
27	ALCS 630		G92KL1AC						
28	ASMP 631		G8W81AA						
29	632		1AE						
30	633		1AF						
31	634		G5U561AA						
32	635		G8WL1AH						
33	636		G8009 1AD						
34	ACAL 637		CCAL 1000	4X	GC1946-04				
35	ASMP 638		G81K61AA					Liquid	

Review documented on next page.

Form: SL-ORG-0008, Rev. 1/4/05

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SOP References: STL-GC-0015, current revisions.

Logbook No.: 2657

STL St. Louis
GC Runlog

Instrument ID No.: GC A

Batch #	Comments	#
		1
		2
	CCAL A. OK B. OK DCBT OK	3
5118440	F5D280148-001-440B OK on both A,B	4
	-440B OK on both A,B	5
	-440C OK on both A,B	6
	F5D250198-001 No hits A	7
	F5D220476-001 1260 DCBT (A,B) A,B	8
	F5D220323-001 1254 DCBT (B) A,B	9
	-002 1254 A,B	10
	CCAL A: OK B: OK	11
5118440	F5D250146-002 1254 DCB ↑ (A,B) A,B	12
	-002S 1016↑(A,B)/1254/1260↑(B) DCBT(A,B) A,B	13
	-002D 1016↑(A,B)/1254/1260↑(A,B) DCBT(A,B) A,B	14
	-004 1242/1254 A,B	15
	-006 1242/1254 A,B	16
	-008 1242/1254 DCBT (A,B) A,B	17
	-010 1242/1254 A,B	18
	-013 1242/1254/1260 A,B	19
	CCAL A: OK B: OK	20
		21
		22
	CCAL A: OK B: OK	23
5112672	F5D221000-672B OK A	24
	-672C OK A	25
5112519	F5D220000-519B OK A	26
	-519C OK A	27
5112677	F5D210290-001 No hits A	28
	-001S OK A	29
	-001D OK A	30
	-002 No hits A	31
	F5D220218-001 No hits A	32
	-002 No hits A	33
	CCAL A: OK B: DCB ↑	34
5112672	F5D220321-011 DCB ↓ A	35

Reviewed By: BLO 5/04/05

Form: SL-ORG-0008, Rev. 1/4/05

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SOP References: STL-GC-0015, current revisions.

2

Logbook No.: 2657

STL St. Louis
GC Runlog

Instrument ID No.: GC A

#	Data File	Clock	Lab I.D.	Dil.	STD#	Date	Oper.	Matrix	Method
1	ASMP 639	[illegible]	68IX91AA			5/2/05	DEK	Liquid	8082
2	640	|	68IUD1AA			|	|	|	|
3	641	|	68IUG1AA			|	|	|	|
4	642	|	68MU51A5			|	|	|	|
5	643	|	68MUF1AV			|	|	|	|
6	644	|	68MWF1AV			|	|	|	|
7	645	|	68MWF1AA			|	|	|	|
8	646	|	68MWF1HC			|	|	|	|
9	647	|	68MXL1AV			|	|	|	|
10	A1A1 648	|	MXL 1000	4X	GC0994-01	|	|		|
11	ASMP 649	|	68MOK1AV			|	|	Liquid	|
12	A2A1 650	|	MXL 1000	4X	GC0994-01	|	|		|
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DEK 5/4/05

Review documented on next page.
QC Types: BLK or B = Blank; LCS or C = Laboratory Control Sample; LCSD or L = Laboratory Control Sample Duplicate; S = Matrix Spike; D = Matrix Spike Duplicate; SMP = Sample, Matrix Spike or Matrix Spike Duplicate, CAL = Calibration Standard or Continuing Calibration Standard.
Form: SL-ORG-0008, Rev. 1/4/05
SOP References: STL-GC-0015, current revisions.

3

Logbook No.: 2657

STL St. Louis
GC Runlog

Instrument ID No.: GC A

Batch #	Comments		#
5117672	F5D220321-012 DCB↓ No hits	A	1
|	-013 DCB↓ No hits	A	2
|	-014 DCB↓ No hits	A	3
5112519	F5D190195-001 Saturated RE 10X	*	4
|	-004 No hits	A	5
|	-005 No hits	A	6
|	-005S 1016 (1 peak dropped)/1260↓ RPD good	A	7
|	-005D 1016 (1 peak dropped)/1260↓	A	8
|	-007 No hits	A	9
	CCAL A: OK B: DCB↑		10
5112519	F5D190195-008	A	11
	CCAL A: OK B: OK		12
			13
			14
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Reviewed By: BLO 5/04/05
QC Types: BLK or B = Blank; LCS or C = Laboratory Control Sample; LCSD or L = Laboratory Control Sample Duplicate; S = Matrix Spike; D = Matrix Spike Duplicate; SMP = Sample, Matrix Spike or Matrix Spike Duplicate, CAL = Calibration Standard or Continuing Calibration Standard.
Form: SL-ORG-0008, Rev. 1/4/05
SOP References: STL-GC-0015, current revisions.

4

GC/MS SAMPLE AND QC DATA SUMMARY – FORM 1
SEMIVOLATILES

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220218 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 1000 / mL Date Received: 04/22/05
Work Order: G800L1AA Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 05/09/05
Moisture %:NA

QC Batch: 5117669

Client Sample Id: RE73-05-58923

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
65794-96-9	3-Methylphenol & 4-Methylphe	10	U
110-86-1	Pyridine	20	U
62-75-9	N-Nitrosodimethylamine	20	U
108-95-2	Phenol	10	U
62-53-3	Aniline	20	U
111-44-4	bis(2-Chloroethyl) ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
621-64-7	N-Nitrosodi-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
65-85-0	Benzoic acid	20	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	20	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	20	U
91-57-6	2-Methylnaphthalene	10	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220218 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 1000 / mL Date Received: 04/22/05
Work Order: G800L1AA Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 05/09/05
Moisture %:NA

QC Batch: 5117669

Client Sample Id: RE73-05-58923

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethyl phthalate	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine	10	U
103-33-3	Azobenzene	20	U
101-55-3	4-Bromophenyl phenyl ether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220218 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 1000 / mL Date Received: 04/22/05
Work Order: G800L1AA Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 05/09/05
Moisture %:NA

QC Batch: 5117669

Client Sample Id: RE73-05-58923

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
85-68-7	Butyl benzyl phthalate	10	U
56-55-3	Benzo(a)anthracene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl) phthalate	10	U
84-74-2	Di-n-butyl phthalate	10	U
117-84-0	Di-n-octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
191-24-2	Benzo(ghi)perylene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	30	(10 - 115)
Phenol-d5	21	(10 - 115)
Nitrobenzene-d5	60	(22 - 115)
2-Fluorobiphenyl	52	(18 - 115)
2,4,6-Tribromophenol	80	(10 - 118)
Terphenyl-d14	67	(10 - 115)

FORM I

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220218 002
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 1000 / mL Date Received: 04/22/05
Work Order: G80091AC Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:NA

QC Batch: 5117669

Client Sample Id: RE73-05-58924

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
65794-96-9	3-Methylphenol & 4-Methylphe	10	U
110-86-1	Pyridine	20	U
62-75-9	N-Nitrosodimethylamine	20	U
108-95-2	Phenol	10	U
62-53-3	Aniline	20	U
111-44-4	bis(2-Chloroethyl) ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	**Benzyl alcohol**	**3.1**	**J**
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
621-64-7	N-Nitrosodi-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
65-85-0	Benzoic acid	20	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	20	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	20	U
91-57-6	2-Methylnaphthalene	10	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220218 002
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 1000 / mL Date Received: 04/22/05
Work Order: G80091AC Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:NA

QC Batch: 5117669

Client Sample Id: RE73-05-58924

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethyl phthalate	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine	10	U
103-33-3	Azobenzene	20	U
101-55-3	4-Bromophenyl phenyl ether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220218 002
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 1000 / mL Date Received: 04/22/05
Work Order: G80091AC Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:NA

QC Batch: 5117669

Client Sample Id: RE73-05-58924

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
85-68-7	Butyl benzyl phthalate	10	U
56-55-3	Benzo(a)anthracene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl) phthalate	10	U
84-74-2	Di-n-butyl phthalate	10	U
117-84-0	Di-n-octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
191-24-2	Benzo(ghi)perylene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	35	(10 - 115)
Phenol-d5	22	(10 - 115)
Nitrobenzene-d5	65	(22 - 115)
2-Fluorobiphenyl	53	(18 - 115)
2,4,6-Tribromophenol	81	(10 - 118)
Terphenyl-d14	72	(10 - 115)

FORM I

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D270000 669
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 1000 / mL Date Received: 04/22/05
Work Order: G9DL01AA Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 05/09/05
Moisture %:NA

QC Batch: 5117669

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
65794-96-9	3-Methylphenol & 4-Methylphe	10	U
110-86-1	Pyridine	20	U
62-75-9	N-Nitrosodimethylamine	20	U
108-95-2	Phenol	10	U
62-53-3	Aniline	20	U
111-44-4	bis(2-Chloroethyl) ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
621-64-7	N-Nitrosodi-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
65-85-0	Benzoic acid	20	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	20	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	20	U
91-57-6	2-Methylnaphthalene	10	U

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D270000 669
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 1000 / mL Date Received: 04/22/05
Work Order: G9DL01AA Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 05/09/05
Moisture %:NA

QC Batch: 5117669

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethyl phthalate	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine	10	U
103-33-3	Azobenzene	20	U
101-55-3	4-Bromophenyl phenyl ether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D270000 669
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 1000 / mL Date Received: 04/22/05
Work Order: G9DL01AA Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 05/09/05
Moisture %:NA

QC Batch: 5117669

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
85-68-7	Butyl benzyl phthalate	10	U
56-55-3	Benzo(a)anthracene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl) phthalate	10	U
84-74-2	Di-n-butyl phthalate	10	U
117-84-0	Di-n-octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
191-24-2	Benzo(ghi)perylene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	32	(10 - 115)
Phenol-d5	22	(10 - 115)
Nitrobenzene-d5	63	(22 - 115)
2-Fluorobiphenyl	55	(18 - 115)
2,4,6-Tribromophenol	64	(10 - 118)
Terphenyl-d14	69	(10 - 115)

FORM I

LOS ALAMOS NATIONAL LABORATORY
CHECK SAMPLE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D270000 669
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 1000 / mL Date Received: 04/22/05
Work Order: G9DL01AC Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 05/09/05
Moisture %:NA

QC Batch: 5117669

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
65794-96-9	3-Methylphenol & 4-Methylphe	46.5	
108-95-2	Phenol	24.3	
111-44-4	bis(2-Chloroethyl) ether	54.7	
95-57-8	2-Chlorophenol	50.8	
541-73-1	1,3-Dichlorobenzene	43.8	a
106-46-7	1,4-Dichlorobenzene	43.8	a
95-50-1	1,2-Dichlorobenzene	46.6	a
95-48-7	2-Methylphenol	48.9	
108-60-1	2,2'-oxybis(1-Chloropropane)	57.2	
621-64-7	N-Nitrosodi-n-propylamine	70.6	
67-72-1	Hexachloroethane	44.8	
98-95-3	Nitrobenzene	61.0	
78-59-1	Isophorone	77.4	
88-75-5	2-Nitrophenol	61.8	
105-67-9	2,4-Dimethylphenol	63.1	
111-91-1	bis(2-Chloroethoxy)methane	63.0	
120-83-2	2,4-Dichlorophenol	62.1	
120-82-1	1,2,4-Trichlorobenzene	48.5	
91-20-3	Naphthalene	51.7	
106-47-8	4-Chloroaniline	60.0	
87-68-3	Hexachlorobutadiene	42.6	
59-50-7	4-Chloro-3-methylphenol	73.0	
91-57-6	2-Methylnaphthalene	56.1	
77-47-4	Hexachlorocyclopentadiene	50.9	
88-06-2	2,4,6-Trichlorophenol	76.8	
95-95-4	2,4,5-Trichlorophenol	79.8	
88-74-4	2-Nitroaniline	86.7	
131-11-3	Dimethyl phthalate	87.7	

LOS ALAMOS NATIONAL LABORATORY
CHECK SAMPLE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D270000 669
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 1000 / mL Date Received: 04/22/05
Work Order: G9DL01AC Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 05/09/05
Moisture %:NA

QC Batch: 5117669

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
208-96-8	Acenaphthylene	75.6	
606-20-2	2,6-Dinitrotoluene	90.6	
99-09-2	3-Nitroaniline	87.4	
83-32-9	Acenaphthene	72.0	
51-28-5	2,4-Dinitrophenol	80.0	
100-02-7	4-Nitrophenol	37.1	
132-64-9	Dibenzofuran	77.3	
121-14-2	2,4-Dinitrotoluene	97.9	
84-66-2	Diethyl phthalate	91.3	
86-73-7	Fluorene	83.7	
7005-72-3	4-Chlorophenyl phenyl ether	82.8	
100-01-6	4-Nitroaniline	93.1	
534-52-1	4,6-Dinitro-2-methylphenol	95.1	
86-30-6	N-Nitrosodiphenylamine	91.3	
101-55-3	4-Bromophenyl phenyl ether	84.3	
118-74-1	Hexachlorobenzene	90.2	
87-86-5	Pentachlorophenol	73.4	
85-01-8	Phenanthrene	83.3	
120-12-7	Anthracene	84.3	
206-44-0	Fluoranthene	83.7	
129-00-0	Pyrene	77.6	
85-68-7	Butyl benzyl phthalate	87.2	
56-55-3	Benzo(a)anthracene	85.1	
91-94-1	3,3'-Dichlorobenzidine	91.2	
218-01-9	Chrysene	87.8	
117-81-7	bis(2-Ethylhexyl) phthalate	87.4	
84-74-2	Di-n-butyl phthalate	88.9	
117-84-0	Di-n-octyl phthalate	88.6	

LOS ALAMOS NATIONAL LABORATORY
CHECK SAMPLE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D270000 669
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 1000 / mL Date Received: 04/22/05
Work Order: G9DL01AC Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 05/09/05
Moisture %:NA

QC Batch: 5117669

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
205-99-2	Benzo(b)fluoranthene	90.0	
207-08-9	Benzo(k)fluoranthene	90.6	
50-32-8	Benzo(a)pyrene	88.5	
193-39-5	Indeno(1,2,3-cd)pyrene	85.9	
191-24-2	Benzo(ghi)perylene	90.3	
53-70-3	Dibenz(a,h)anthracene	90.3	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	31	(24 - 58)
Phenol-d5	24	(16 - 41)
Nitrobenzene-d5	64	(48 - 103)
2-Fluorobiphenyl	70	(53 - 107)
2,4,6-Tribromophenol	92	(57 - 107)
Terphenyl-d14	72	(48 - 102)

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220218 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 1000 / mL Date Received: 04/22/05
Work Order: G800L1AM Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:NA

QC Batch: 5117669

Client Sample Id: RE73-05-58923

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
65794-96-9	3-Methylphenol & 4-Methylphe	46.0	
108-95-2	Phenol	24.4	
111-44-4	bis(2-Chloroethyl) ether	59.1	
95-57-8	2-Chlorophenol	57.7	
541-73-1	1,3-Dichlorobenzene	47.6	a
106-46-7	1,4-Dichlorobenzene	47.6	a
95-50-1	1,2-Dichlorobenzene	50.0	
95-48-7	2-Methylphenol	50.8	
108-60-1	2,2'-oxybis(1-Chloropropane)	62.5	
621-64-7	N-Nitrosodi-n-propylamine	75.1	
67-72-1	Hexachloroethane	48.3	
98-95-3	Nitrobenzene	64.8	
78-59-1	Isophorone	75.4	
88-75-5	2-Nitrophenol	64.5	
105-67-9	2,4-Dimethylphenol	59.8	
111-91-1	bis(2-Chloroethoxy)methane	64.9	
120-83-2	2,4-Dichlorophenol	63.6	
120-82-1	1,2,4-Trichlorobenzene	47.7	
91-20-3	Naphthalene	52.2	
106-47-8	4-Chloroaniline	59.9	
87-68-3	Hexachlorobutadiene	44.0	
59-50-7	4-Chloro-3-methylphenol	68.1	
91-57-6	2-Methylnaphthalene	49.8	
77-47-4	Hexachlorocyclopentadiene	41.1	p
88-06-2	2,4,6-Trichlorophenol	72.4	
95-95-4	2,4,5-Trichlorophenol	74.2	
88-74-4	2-Nitroaniline	78.7	
131-11-3	Dimethyl phthalate	80.6	

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220218 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 1000 / mL Date Received: 04/22/05
Work Order: G800L1AM Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:NA

QC Batch: 5117669

Client Sample Id: RE73-05-58923

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
208-96-8	Acenaphthylene	66.5	
606-20-2	2,6-Dinitrotoluene	82.8	
99-09-2	3-Nitroaniline	80.3	
83-32-9	Acenaphthene	61.5	
51-28-5	2,4-Dinitrophenol	84.0	
100-02-7	4-Nitrophenol	35.3	
132-64-9	Dibenzofuran	66.2	
121-14-2	2,4-Dinitrotoluene	93.4	
84-66-2	Diethyl phthalate	85.9	
86-73-7	Fluorene	72.8	
7005-72-3	4-Chlorophenyl phenyl ether	69.6	
100-01-6	4-Nitroaniline	89.6	
534-52-1	4,6-Dinitro-2-methylphenol	91.2	
86-30-6	N-Nitrosodiphenylamine	83.9	
101-55-3	4-Bromophenyl phenyl ether	73.6	
118-74-1	Hexachlorobenzene	82.4	
87-86-5	Pentachlorophenol	74.5	
85-01-8	Phenanthrene	74.0	
120-12-7	Anthracene	77.0	
206-44-0	Fluoranthene	74.0	
129-00-0	Pyrene	73.8	
85-68-7	Butyl benzyl phthalate	81.3	
56-55-3	Benzo(a)anthracene	80.3	
91-94-1	3,3'-Dichlorobenzidine	80.9	
218-01-9	Chrysene	80.4	
117-81-7	bis(2-Ethylhexyl) phthalate	77.1	
84-74-2	Di-n-butyl phthalate	81.5	
117-84-0	Di-n-octyl phthalate	79.6	

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220218 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 1000 / mL Date Received: 04/22/05
Work Order: G800L1AM Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:NA

QC Batch: 5117669

Client Sample Id: RE73-05-58923

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
205-99-2	Benzo(b)fluoranthene	83.4	
207-08-9	Benzo(k)fluoranthene	85.1	
50-32-8	Benzo(a)pyrene	79.8	
193-39-5	Indeno(1,2,3-cd)pyrene	77.7	
191-24-2	Benzo(ghi)perylene	87.9	
53-70-3	Dibenz(a,h)anthracene	85.0	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	32	(10 - 115)
Phenol-d5	23	(10 - 115)
Nitrobenzene-d5	65	(22 - 115)
2-Fluorobiphenyl	63	(18 - 115)
2,4,6-Tribromophenol	87	(10 - 118)
Terphenyl-d14	67	(10 - 115)

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220218 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 1000 / mL Date Received: 04/22/05
Work Order: G800L1AL Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 05/09/05
Moisture %:NA

QC Batch: 5117669

Client Sample Id: RE73-05-58923

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
65794-96-9	3-Methylphenol & 4-Methylphe	48.6	
108-95-2	Phenol	26.2	
111-44-4	bis(2-Chloroethyl) ether	63.8	
95-57-8	2-Chlorophenol	60.4	
541-73-1	1,3-Dichlorobenzene	54.0	
106-46-7	1,4-Dichlorobenzene	54.0	
95-50-1	1,2-Dichlorobenzene	56.5	
95-48-7	2-Methylphenol	54.3	
108-60-1	2,2'-oxybis(1-Chloropropane)	68.1	
621-64-7	N-Nitrosodi-n-propylamine	79.9	
67-72-1	Hexachloroethane	52.9	
98-95-3	Nitrobenzene	69.9	
78-59-1	Isophorone	81.6	
88-75-5	2-Nitrophenol	69.0	
105-67-9	2,4-Dimethylphenol	64.7	
111-91-1	bis(2-Chloroethoxy)methane	72.0	
120-83-2	2,4-Dichlorophenol	69.0	
120-82-1	1,2,4-Trichlorobenzene	56.5	
91-20-3	Naphthalene	59.6	
106-47-8	4-Chloroaniline	65.2	
87-68-3	Hexachlorobutadiene	51.0	
59-50-7	4-Chloro-3-methylphenol	73.9	
91-57-6	2-Methylnaphthalene	59.0	
77-47-4	Hexachlorocyclopentadiene	52.7	
88-06-2	2,4,6-Trichlorophenol	77.0	
95-95-4	2,4,5-Trichlorophenol	78.8	
88-74-4	2-Nitroaniline	84.2	
131-11-3	Dimethyl phthalate	86.0	

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220218 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 1000 / mL Date Received: 04/22/05
Work Order: G800L1AL Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 05/09/05
Moisture %:NA

QC Batch: 5117669

Client Sample Id: RE73-05-58923

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
208-96-8	Acenaphthylene	73.9	
606-20-2	2,6-Dinitrotoluene	89.5	
99-09-2	3-Nitroaniline	86.4	
83-32-9	Acenaphthene	71.0	
51-28-5	2,4-Dinitrophenol	88.6	
100-02-7	4-Nitrophenol	38.2	
132-64-9	Dibenzofuran	75.0	
121-14-2	2,4-Dinitrotoluene	100	
84-66-2	Diethyl phthalate	93.1	
86-73-7	Fluorene	81.0	
7005-72-3	4-Chlorophenyl phenyl ether	82.0	
100-01-6	4-Nitroaniline	95.0	
534-52-1	4,6-Dinitro-2-methylphenol	98.9	
86-30-6	N-Nitrosodiphenylamine	91.2	
101-55-3	4-Bromophenyl phenyl ether	85.2	
118-74-1	Hexachlorobenzene	91.0	
87-86-5	Pentachlorophenol	83.7	
85-01-8	Phenanthrene	83.3	
120-12-7	Anthracene	85.4	
206-44-0	Fluoranthene	82.2	
129-00-0	Pyrene	78.3	
85-68-7	Butyl benzyl phthalate	88.8	
56-55-3	Benzo(a)anthracene	87.4	
91-94-1	3,3'-Dichlorobenzidine	91.2	
218-01-9	Chrysene	87.7	
117-81-7	bis(2-Ethylhexyl) phthalate	86.0	
84-74-2	Di-n-butyl phthalate	90.6	
117-84-0	Di-n-octyl phthalate	90.2	

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220218 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 1000 / mL Date Received: 04/22/05
Work Order: G800L1AL Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 05/09/05
Moisture %:NA

QC Batch: 5117669

Client Sample Id: RE73-05-58923

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
205-99-2	Benzo(b)fluoranthene	91.1	
207-08-9	Benzo(k)fluoranthene	91.7	
50-32-8	Benzo(a)pyrene	91.1	
193-39-5	Indeno(1,2,3-cd)pyrene	84.2	
191-24-2	Benzo(ghi)perylene	93.5	
53-70-3	Dibenz(a,h)anthracene	92.5	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	34	(10 - 115)
Phenol-d5	24	(10 - 115)
Nitrobenzene-d5	70	(22 - 115)
2-Fluorobiphenyl	68	(18 - 115)
2,4,6-Tribromophenol	94	(10 - 118)
Terphenyl-d14	69	(10 - 115)

FORM I

GC/MS ADDITIONAL QC DATA SUMMARY
FORMS 2 THROUGH 4
SEMIVOLATILES

SW846 8270C SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220218

Lot #: F5D220218

Extraction: XXI52QL01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
01	RE73-05-58923	30	21	60	52	80	67	00
02	RE73-05-58924	35	22	65	53	81	72	00
03	METHOD BLK. G9DL01AA	32	22	63	55	64	69	00
04	LCS G9DL01AC	31	24	64	70	92	72	00
05	RE73-05-58923 D	32	23	65	63	87	67	00
06	RE73-05-58923 S	34	24	70	68	94	69	00

SURROGATES		QC LIMITS
SRG01	= 2-Fluorophenol	(10-115)
SRG02	= Phenol-d5	(10-115)
SRG03	= Nitrobenzene-d5	(22-115)
SRG04	= 2-Fluorobiphenyl	(18-115)
SRG05	= 2,4,6-Tribromophenol	(10-118)
SRG06	= Terphenyl-d14	(10-115)

\# Column to be used to flag recovery values
* Values outside of required QC Limits
D System monitoring Compound diluted out

FORM II

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220218

Matrix Spike ID: RE73-05-58923

Lot #: F5D220218 WO #: G800L1AL
BATCH: 5117669

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	MS CONCENT. (ug/L)	MS % REC	LIMITS REC	QUAL
Phenol	100	ND	26.2	26	10 - 115	
bis(2-Chloroethyl) ether	100	ND	63.8	64	32 - 115	
2-Chlorophenol	100	ND	60.4	60	21 - 115	
2-Methylphenol	100	ND	54.3	54	31 - 115	
3-Methylphenol & 4-Methyl	100	ND	48.6	49	22 - 115	
2,2'-oxybis(1-Chloropropa	100	ND	68.1	68	33 - 115	
N-Nitrosodi-n-propylamine	100	ND	79.9	80	29 - 115	
Hexachloroethane	100	ND	52.9	53	20 - 115	
Nitrobenzene	100	ND	69.9	70	34 - 115	
Isophorone	100	ND	81.6	82	23 - 116	
2-Nitrophenol	100	ND	69.0	69	28 - 115	
2,4-Dimethylphenol	100	ND	64.7	65	24 - 115	
bis(2-Chloroethoxy)methan	100	ND	72.0	72	32 - 115	
2,4-Dichlorophenol	100	ND	69.0	69	37 - 115	
1,2,4-Trichlorobenzene	100	ND	56.5	57	19 - 115	
Naphthalene	100	ND	59.6	60	32 - 115	
4-Chloroaniline	100	ND	65.2	65	17 - 115	
Hexachlorobutadiene	100	ND	51.0	51	18 - 115	
4-Chloro-3-methylphenol	100	ND	73.9	74	19 - 115	
2-Methylnaphthalene	100	ND	59.0	59	32 - 115	
Hexachlorocyclopentadiene	100	ND	52.7	53	10 - 115	
2,4,6-Trichlorophenol	100	ND	77.0	77	38 - 115	
2,4,5-Trichlorophenol	100	ND	78.8	79	41 - 115	
2-Nitroaniline	100	ND	84.2	84	41 - 115	
Dimethyl phthalate	100	ND	86.0	86	53 - 115	
Acenaphthylene	100	ND	73.9	74	43 - 115	
2,6-Dinitrotoluene	100	ND	89.5	90	56 - 115	
3-Nitroaniline	100	ND	86.4	86	54 - 115	

(Continued on next page)

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220218

Matrix Spike ID: RE73-05-58923

Lot #: F5D220218 WO #: G800L1AL
BATCH: 5117669

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	MS CONCENT. (ug/L)	MS % REC	LIMITS REC	QUAL
Acenaphthene	100	ND	71.0	71	26 - 115	
2,4-Dinitrophenol	100	ND	88.6	89	24 - 134	
4-Nitrophenol	100	ND	38.2	38	10 - 115	
Dibenzofuran	100	ND	75.0	75	40 - 115	
2,4-Dinitrotoluene	100	ND	100	100	11 - 150	
Diethyl phthalate	100	ND	93.1	93	56 - 117	
4-Chlorophenyl phenyl eth	100	ND	82.0	82	47 - 115	
Fluorene	100	ND	81.0	81	45 - 115	
4-Nitroaniline	100	ND	95.0	95	54 - 115	
4,6-Dinitro-2-methylpheno	100	ND	98.9	99	50 - 115	
N-Nitrosodiphenylamine	100	ND	91.2	91	57 - 115	
4-Bromophenyl phenyl ethe	100	ND	85.2	85	51 - 115	
Hexachlorobenzene	100	ND	91.0	91	50 - 115	
Pentachlorophenol	100	ND	83.7	84	11 - 121	
Phenanthrene	100	ND	83.3	83	55 - 115	
Anthracene	100	ND	85.4	85	55 - 115	
Di-n-butyl phthalate	100	ND	90.6	91	60 - 115	
Fluoranthene	100	ND	82.2	82	57 - 115	
Pyrene	100	ND	78.3	78	43 - 115	
Butyl benzyl phthalate	100	ND	88.8	89	55 - 115	
3,3'-Dichlorobenzidine	100	ND	91.2	91	29 - 120	
Benzo(a)anthracene	100	ND	87.4	87	56 - 115	
Chrysene	100	ND	87.7	88	21 - 150	
bis(2-Ethylhexyl) phthala	100	ND	86.0	86	56 - 115	
Di-n-octyl phthalate	100	ND	90.2	90	55 - 115	
Benzo(b)fluoranthene	100	ND	91.1	91	53 - 115	
Benzo(k)fluoranthene	100	ND	91.7	92	54 - 115	
Benzo(a)pyrene	100	ND	91.1	91	30 - 126	

(Continued on next page)

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220218

Matrix Spike ID: RE73-05-58923

Lot #: F5D220218 WO #: G800L1AL
BATCH: 5117669

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	MS CONCENT. (ug/L)	MS % REC	LIMITS REC	QUAL
Indeno(1,2,3-cd)pyrene	100	ND	84.2	84	17- 150	
Dibenz(a,h)anthracene	100	ND	92.5	93	13- 150	
Benzo(ghi)perylene	100	ND	93.5	94	10- 150	
1,2-Dichlorobenzene	100	ND	56.5	57	50- 150	
1,3-Dichlorobenzene	100	ND	54.0	54	50- 150	
1,4-Dichlorobenzene	100	ND	54.0	54	50- 150	

NOTES(S):

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 62 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220218

Matrix Spike ID: RE73-05-58923

Lot #: F5D220218 WO #: G800L1AM
BATCH: 5117669

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENT. (ug/L)	MSD % REC	% RPD		QC LIMITS RPD	QC LIMITS REC	QUAL
Phenol	100	24.4	24	7.3		20	10 - 115	
bis(2-Chloroethyl) ether	100	59.1	59	7.6		20	32 - 115	
2-Chlorophenol	100	57.7	58	4.6		20	21 - 115	
2-Methylphenol	100	50.8	51	6.7		20	31 - 115	
3-Methylphenol & 4-Methyl	100	46.0	46	5.6		28	22 - 115	
2,2'-oxybis(1-Chloropropa	100	62.5	63	8.5		20	33 - 115	
N-Nitrosodi-n-propylamine	100	75.1	75	6.2		20	29 - 115	
Hexachloroethane	100	48.3	48	9.1		20	20 - 115	
Nitrobenzene	100	64.8	65	7.6		20	34 - 115	
Isophorone	100	75.4	75	7.9		20	23 - 116	
2-Nitrophenol	100	64.5	64	6.9		20	28 - 115	
2,4-Dimethylphenol	100	59.8	60	8.0		20	24 - 115	
bis(2-Chloroethoxy)methan	100	64.9	65	10		20	32 - 115	
2,4-Dichlorophenol	100	63.6	64	8.2		20	37 - 115	
1,2,4-Trichlorobenzene	100	47.7	48	17		20	19 - 115	
Naphthalene	100	52.2	52	13		20	32 - 115	
4-Chloroaniline	100	59.9	60	8.5		20	17 - 115	
Hexachlorobutadiene	100	44.0	44	15		20	18 - 115	
4-Chloro-3-methylphenol	100	68.1	68	8.2		20	19 - 115	
2-Methylnaphthalene	100	49.8	50	17		20	32 - 115	
Hexachlorocyclopentadiene	100	41.1	41	25	*	20	10 - 115	p
2,4,6-Trichlorophenol	100	72.4	72	6.1		20	38 - 115	
2,4,5-Trichlorophenol	100	74.2	74	6.0		20	41 - 115	
2-Nitroaniline	100	78.7	79	6.7		20	41 - 115	
Dimethyl phthalate	100	80.6	81	6.5		20	53 - 115	
Acenaphthylene	100	66.5	66	11		20	43 - 115	
2,6-Dinitrotoluene	100	82.8	83	7.8		20	56 - 115	
3-Nitroaniline	100	80.3	80	7.3		20	54 - 115	

(Continued on next page)

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220218

Matrix Spike ID: RE73-05-58923

Lot #: F5D220218 WO #: G800L1AM
BATCH: 5117669

COMPOUND	SPIKE ADDED	MSD CONCENT.	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
Acenaphthene	100	61.5	61	14	20	26- 115	
2,4-Dinitrophenol	100	84.0	84	5.3	20	24- 134	
4-Nitrophenol	100	35.3	35	7.9	20	10- 115	
Dibenzofuran	100	66.2	66	12	20	40- 115	
2,4-Dinitrotoluene	100	93.4	93	7.1	20	11- 150	
Diethyl phthalate	100	85.9	86	8.0	20	56- 117	
4-Chlorophenyl phenyl eth	100	69.6	70	16	20	47- 115	
Fluorene	100	72.8	73	11	20	45- 115	
4-Nitroaniline	100	89.6	90	5.9	20	54- 115	
4,6-Dinitro-2-methylpheno	100	91.2	91	8.1	20	50- 115	
N-Nitrosodiphenylamine	100	83.9	84	8.3	20	57- 115	
4-Bromophenyl phenyl ethe	100	73.6	74	15	20	51- 115	
Hexachlorobenzene	100	82.4	82	9.9	20	50- 115	
Pentachlorophenol	100	74.5	75	12	20	11- 121	
Phenanthrene	100	74.0	74	12	20	55- 115	
Anthracene	100	77.0	77	10	20	55- 115	
Di-n-butyl phthalate	100	81.5	82	11	20	60- 115	
Fluoranthene	100	74.0	74	11	20	57- 115	
Pyrene	100	73.8	74	6.0	20	43- 115	
Butyl benzyl phthalate	100	81.3	81	8.8	20	55- 115	
3,3'-Dichlorobenzidine	100	80.9	81	12	20	29- 120	
Benzo(a)anthracene	100	80.3	80	8.5	20	56- 115	
Chrysene	100	80.4	80	8.7	20	21- 150	
bis(2-Ethylhexyl) phthala	100	77.1	77	11	20	56- 115	
Di-n-octyl phthalate	100	79.6	80	12	20	55- 115	
Benzo(b)fluoranthene	100	83.4	83	8.8	20	53- 115	
Benzo(k)fluoranthene	100	85.1	85	7.5	20	54- 115	
Benzo(a)pyrene	100	79.8	80	13	20	30- 126	

(Continued on next page)

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220218

Matrix Spike ID: RE73-05-58923

Lot #: F5D220218 WO #: G800L1AM
BATCH: 5117669

COMPOUND	SPIKE ADDED	MSD CONCENT.	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
Indeno(1,2,3-cd)pyrene	100	77.7	78	8.1	20	17- 150	
Dibenz(a,h)anthracene	100	85.0	85	8.4	20	13- 150	
Benzo(ghi)perylene	100	87.9	88	6.2	20	10- 150	
1,2-Dichlorobenzene	100	50.0	50	12	20	50- 150	
1,3-Dichlorobenzene	100	47.6	48*	12	20	50- 150	a
1,4-Dichlorobenzene	100	47.6	48*	13	20	50- 150	a

NOTES (S) :

p Relative percent difference (RPD) is outside stated control limits.

a Spiked analyte recovery is outside stated control limits.

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 1 out of 62 outside limits
Spike Recovery: 2 out of 62 outside limits

COMMENTS:

FORM III

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220218

Lot #: F5D270000 WO #: G9DL01AC
BATCH: 5117669

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
Phenol	100	24.3	24	18 - 40	
bis(2-Chloroethyl) ether	100	54.7	55	35 - 92	
2-Chlorophenol	100	50.8	51	40 - 84	
2-Methylphenol	100	48.9	49	36 - 78	
2,2'-oxybis(1-Chloropropa	100	57.2	57	41 - 99	
N-Nitrosodi-n-propylamine	100	70.6	71	52 - 108	
Hexachloroethane	100	44.8	45	30 - 79	
Nitrobenzene	100	61.0	61	46 - 97	
Isophorone	100	77.4	77	54 - 106	
2-Nitrophenol	100	61.8	62	45 - 95	
2,4-Dimethylphenol	100	63.1	63	44 - 90	
bis(2-Chloroethoxy)methan	100	63.0	63	48 - 99	
2,4-Dichlorophenol	100	62.1	62	45 - 94	
1,2,4-Trichlorobenzene	100	48.5	49	38 - 84	
Naphthalene	100	51.7	52	45 - 91	
4-Chloroaniline	100	60.0	60	31 - 126	
Hexachlorobutadiene	100	42.6	43	32 - 78	
4-Chloro-3-methylphenol	100	73.0	73	51 - 93	
2-Methylnaphthalene	100	56.1	56	28 - 110	
Hexachlorocyclopentadiene	100	50.9	51	14 - 89	
2,4,6-Trichlorophenol	100	76.8	77	48 - 97	
2,4,5-Trichlorophenol	100	79.8	80	49 - 99	
2-Nitroaniline	100	86.7	87	52 - 110	
Dimethyl phthalate	100	87.7	88	58 - 102	
Acenaphthylene	100	75.6	76	52 - 100	
2,6-Dinitrotoluene	100	90.6	91	60 - 104	
3-Nitroaniline	100	87.4	87	51 - 115	
Acenaphthene	100	72.0	72	53 - 100	
2,4-Dinitrophenol	100	80.0	80	24 - 118	
4-Nitrophenol	100	37.1	37	17 - 45	
Dibenzofuran	100	77.3	77	49 - 102	

(Continued on next page)

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220218

Lot #: F5D270000 WO #: G9DL01AC
BATCH: 5117669

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
2,4-Dinitrotoluene	100	97.9	98	65- 113	
Diethyl phthalate	100	91.3	91	50- 106	
4-Chlorophenyl phenyl eth	100	82.8	83	55- 99	
Fluorene	100	83.7	84	58- 101	
4-Nitroaniline	100	93.1	93	53- 116	
4,6-Dinitro-2-methylpheno	100	95.1	95	46- 106	
N-Nitrosodiphenylamine	100	91.3	91	59- 110	
4-Bromophenyl phenyl ethe	100	84.3	84	54- 99	
Hexachlorobenzene	100	90.2	90	58- 105	
Pentachlorophenol	100	73.4	73	37- 109	
Phenanthrene	100	83.3	83	58- 104	
Anthracene	100	84.3	84	57- 102	
Di-n-butyl phthalate	100	88.9	89	57- 108	
Fluoranthene	100	83.7	84	57- 105	
Pyrene	100	77.6	78	56- 108	
Butyl benzyl phthalate	100	87.2	87	57- 112	
3,3'-Dichlorobenzidine	100	91.2	91	49- 114	
Benzo(a)anthracene	100	85.1	85	58- 111	
Chrysene	100	87.8	88	54- 115	
bis(2-Ethylhexyl) phthala	100	87.4	87	55- 112	
Di-n-octyl phthalate	100	88.6	89	50- 106	
Benzo(b)fluoranthene	100	90.0	90	52- 111	
Benzo(k)fluoranthene	100	90.6	91	57- 123	
Benzo(a)pyrene	100	88.5	88	55- 104	
Indeno(1,2,3-cd)pyrene	100	85.9	86	43- 119	
Dibenz(a,h)anthracene	100	90.3	90	43- 128	
Benzo(ghi)perylene	100	90.3	90	42- 121	
3-Methylphenol & 4-Methyl	100	46.5	46	30- 79	
1,2-Dichlorobenzene	100	46.6	47*	50- 150	a
1,3-Dichlorobenzene	100	43.8	44*	50- 150	a
1,4-Dichlorobenzene	100	43.8	44*	50- 150	a

NOTES (S) :

a Spiked analyte recovery is outside stated control limits.

* Values outside of QC limits

Spike Recovery: 3 out of 62 outside limits

COMMENTS:

SW846 8270C METHOD BLANK SUMMARY

BLANK WORKORDER NO.: G9DL01AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: STLSTL — SDG Number: F5D220218

Lab File ID: KBLK3009 — Lot Number: F5D220218

Date Analyzed: 05/09/05 — Time Analyzed: 19:41

Matrix: WATER — Date Extracted: 04/27/05

GC Column: RTX-5MS ID: .25 — Extraction Method: 3510C

Instrument ID: MSK — Level: (low/med) LOW

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS, LCSD, MS , MSD:

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	RE73-05-58923	G800L1AA	KSMP3016	05/09/05	23:24
02	RE73-05-58923	G800L1AL S	KSMP3017	05/09/05	23:55
03	RE73-05-58923	G800L1AM D	KSMP3018	05/10/05	00:28
04	RE73-05-58924	G80091AC	KSMP3019	05/10/05	00:59
05	CHECK SAMPLE	G9DL01AC C	KLCS3010	05/09/05	20:13
06					
07					
08					
09					
10					
11					
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30					

COMMENTS:

FORM IV

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220218

Lab File ID: KDFT2578 DFTPP Injection Date: 04/28/05

Instrument ID: MSK DFTPP Injection Time: 1120

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	45.2
68	Less than 2.0% of mass 69	0.5 (0.9)1
69	Mass 69 relative abundance	52.5
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	47.7
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.4
275	10.0 - 30.0% of mass 198	27.3
365	Greater than 1.0% of mass 198	4.0
441	Present, but less than mass 443	10.8
442	Greater than 40.0% of mass 198	82.7
443	17.0 - 23.0% of mass 442	15.1 (18.3)2

1-Value is % of mass 69 2-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050APPIX	SSTD050APPIX	KCAL2579	04/28/05	1141
02	SSTD200APPIX	SSTD200APPIX	KCAL2580	04/28/05	1215
03	SSTD160APPIX	SSTD160APPIX	KCAL2581	04/28/05	1250
04	SSTD120APPIX	SSTD120APPIX	KCAL2582	04/28/05	1324
05	SSTD080APPIX	SSTD080APPIX	KCAL2583	04/28/05	1359
06	SSTD020APPIX	SSTD020APPIX	KCAL2584	04/28/05	1433
07	SSTD010APPIX	SSTD010APPIX	KCAL2585	04/28/05	1508
08	SSTD002APPIX	SSTD002APPIX	KCAL2586	04/28/05	1542
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220218

Lab File ID: KDFT2953 DFTPP Injection Date: 05/07/05

Instrument ID: MSK DFTPP Injection Time: 1644

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	38.7
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	46.5
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	44.0
197	Less than 1.0% of mass 198	0.2
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.8
275	10.0 - 30.0% of mass 198	27.2
365	Greater than 1.0% of mass 198	3.6
441	Present, but less than mass 443	11.9
442	Greater than 40.0% of mass 198	73.6
443	17.0 - 23.0% of mass 442	14.0 (19.0)2

1-Value is % of mass 69 2-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050APPIX	SSTD050APPIXB	KCAL2963	05/07/05	2218
02	SSTD160APPIX	SSTD160APPIXB	KCAL2964	05/07/05	2249
03	SSTD120APPIX	SSTD120APPIXB	KCAL2965	05/07/05	2321
04	SSTD080APPIX	SSTD080APPIXB	KCAL2966	05/07/05	2352
05	SSTD020APPIX	SSTD020APPIXB	KCAL2967	05/08/05	0024
06	SSTD010APPIX	SSTD010APPIXB	KCAL2968	05/08/05	0055
07	SSTD002APPIX	SSTD002APPIXB	KCAL2969	05/08/05	0127
08					
09					
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11					
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22					

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220218

Lab File ID: KDFT2993 DFTPP Injection Date: 05/09/05

Instrument ID: MSK DFTPP Injection Time: 1140

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	46.8
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	55.2
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	48.4
197	Less than 1.0% of mass 198	0.4
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.3
275	10.0 - 30.0% of mass 198	25.1
365	Greater than 1.0% of mass 198	3.2
441	Present, but less than mass 443	10.1
442	Greater than 40.0% of mass 198	59.4
443	17.0 - 23.0% of mass 442	12.1 (20.4)2

1-Value is % of mass 69 2-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	SSTD050	KCAL2994	05/09/05	1201
02	SSTD160	SSTD160	KCAL2995	05/09/05	1233
03	SSTD120	SSTD120	KCAL2996	05/09/05	1304
04	SSTD080	SSTD080	KCAL2997	05/09/05	1336
05	SSTD020	SSTD020	KCAL2998	05/09/05	1408
06	SSTD010	SSTD010	KCAL2999	05/09/05	1440
07	SSTD002	SSTD002	KCAL3000	05/09/05	1512
08	SSTD050 ICV	SSTD050 ICV	KCAL3001	05/09/05	1544
09					
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21					
22					

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220218

Lab File ID: KDFT3002 DFTPP Injection Date: 05/09/05

Instrument ID: MSK DFTPP Injection Time: 1609

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0% of mass 198	46.6	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	53.8	
70	Less than 2.0% of mass 69	0.0	(0.0)1
127	40.0 - 60.0% of mass 198	49.6	
197	Less than 1.0% of mass 198	0.2	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 - 9.0% of mass 198	6.8	
275	10.0 - 30.0% of mass 198	27.3	
365	Greater than 1.0% of mass 198	3.4	
441	Present, but less than mass 443	11.7	
442	Greater than 40.0% of mass 198	69.6	
443	17.0 - 23.0% of mass 442	12.9	(18.5)2

1-Value is % of mass 69 2-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	SSTD050	KCAL3003	05/09/05	1630
02	SSTD050APPIX	SSTD050APPIX	KCAL3004	05/09/05	1702
03	SSTD050APPIX	SSTD050APPIXB	KCAL3006	05/09/05	1806
04	SVBLKK129B	G9DL01AA	KBLK3009	05/09/05	1941
05	SVLCSK129B	G9DL01AC	KLCS3010	05/09/05	2013
06	58923	G800L1AA	KSMP3016	05/09/05	2324
07	58923MS	G800L1AL	KSMP3017	05/09/05	2355
08	58923MSD	G800L1AM	KSMP3018	05/10/05	0028
09	58924	G80091AC	KSMP3019	05/10/05	0059
10					
11					
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17					
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22					

8B

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220218

Lab File ID (Standard): KCAL3003 Date Analyzed: 05/09/05

Instrument ID: MSK Time Analyzed: 1630

		IS1(ANT) AREA #	RT	IS2(DCB) AREA #	RT	IS3(CRY) AREA #	RT
	12 HOUR STD	276841	8.83	138615	4.56	445673	16.65
	UPPER LIMIT	553682	9.33	277230	5.06	891346	17.15
	LOWER LIMIT	138421	8.33	69308	4.06	222837	16.15
	EPA SAMPLE NO.						
01	SVBLKK129B	241681	8.82	118317	4.55	383741	16.64
02	SVLCSK129B	227099	8.82	113670	4.55	351931	16.65
03	58923	213895	8.80	103110	4.55	324142	16.62
04	58923MS	227707	8.80	108878	4.55	346190	16.63
05	58923MSD	219312	8.80	105733	4.54	330005	16.63
06	58924	260163	8.81	120647	4.55	372005	16.63
07							
08							
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10							
11							
12							
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17							
18							
19							
20							
21							
22							

IS1 (ANT) = Acenaphthene-d10
IS2 (DCB) = 1,4-Dichlorobenzene-d4
IS3 (CRY) = Chrysene-d12

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk.

8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220218

Lab File ID (Standard): KCAL3003 Date Analyzed: 05/09/05

Instrument ID: MSK Time Analyzed: 1630

		IS4 (NPT) AREA #	RT	IS5 (PRY) AREA #	RT	IS6 (PHN) AREA #	RT
	12 HOUR STD	492644	6.14	381519	19.27	505686	11.49
	UPPER LIMIT	985288	6.64	763038	19.77	1011372	11.99
	LOWER LIMIT	246322	5.64	190760	18.77	252843	10.99
	EPA SAMPLE NO.						
01	SVBLKK129B	439482	6.13	351470	19.25	423435	11.48
02	SVLCSK129B	408689	6.14	281346	19.26	403472	11.48
03	58923	387988	6.12	282117	19.23	375111	11.46
04	58923MS	395323	6.13	272452	19.24	405612	11.47
05	58923MSD	389519	6.13	255085	19.24	400763	11.46
06	58924	448107	6.13	321750	19.25	445217	11.47
07							
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16							
17							
18							
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20							
21							
22							

IS4 (NPT) = Naphthalene-d8
IS5 (PRY) = Perylene-d12
IS6 (PHN) = Phenanthrene-d10

UPPER LIMIT = +100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk.

FORM VIII SV-2 1/87 Rev.

GC/MS STANDARDS DATA
SEMIVOLATILES

DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	45.22		PASS
68	Less than 2% of mass 69	0.49	(0.93)	PASS
69	Mass 69 relative abundance	52.53		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	47.71		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.42		PASS
275	10 - 30% of mass 198	27.32		PASS
365	Greater than 1% of mass 198	4.06		PASS
441	Present, but less than mass 443	10.78	(71.35)	PASS
442	Greater than 40% of mass 198	82.70		PASS
443	17 - 23% of mass 442	15.10	(18.26)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.1570776	5.000	PASS
Benzidine	1.0036036	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	165399			N/A
4,4-DDE	11531	6.5	15.0	PASS
4,4-DDD	1112	0.7	15.0	PASS
4,4-DDD + DDE	12643	7.1	15.0	PASS

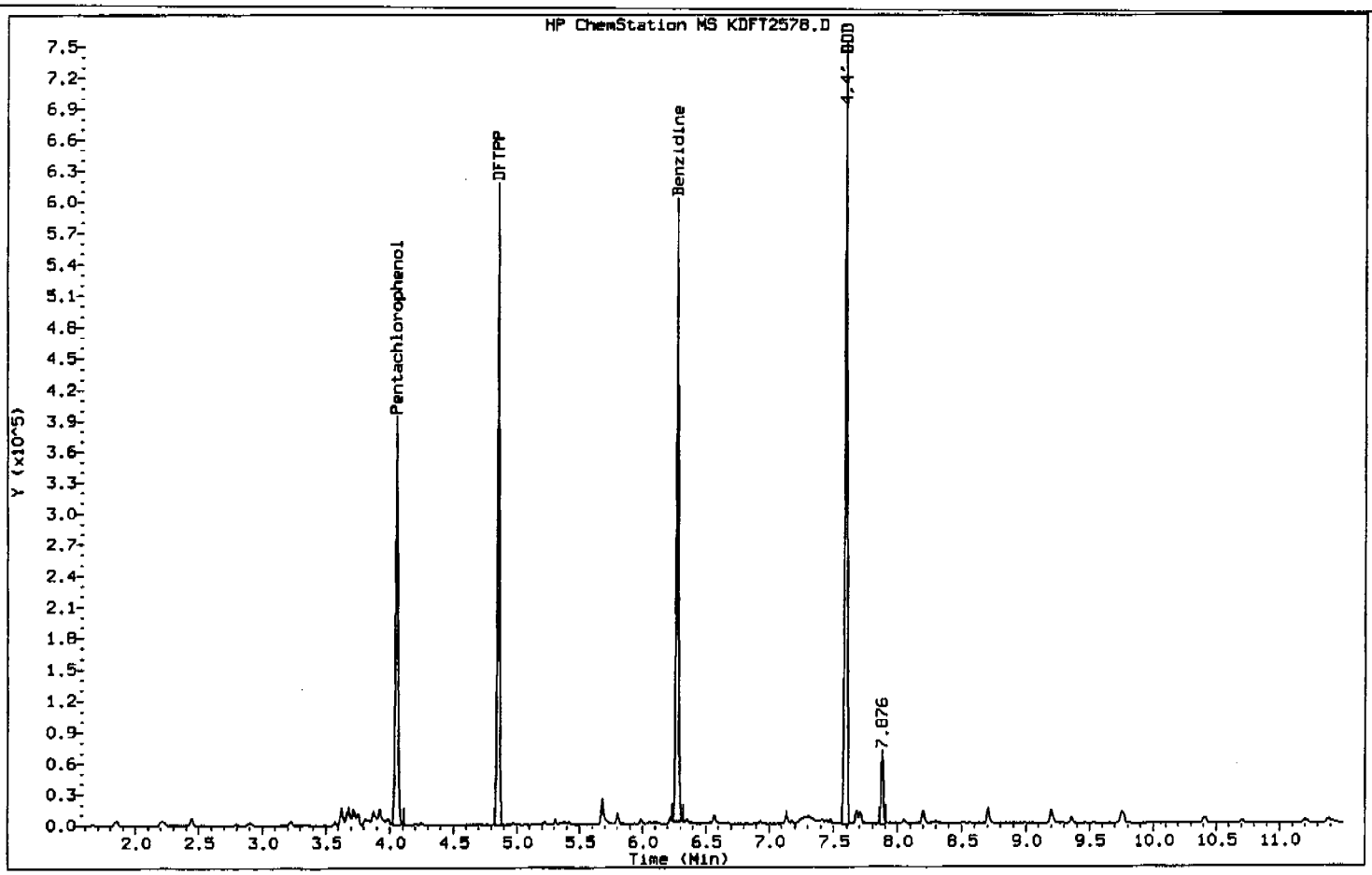
********** Tuning Sample, //Slsvr01/BNA_LAB/MSK.i/K050428B.B/KDFT2578.D/KDFT2578.D,*** PASSED **********

04/28/05

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

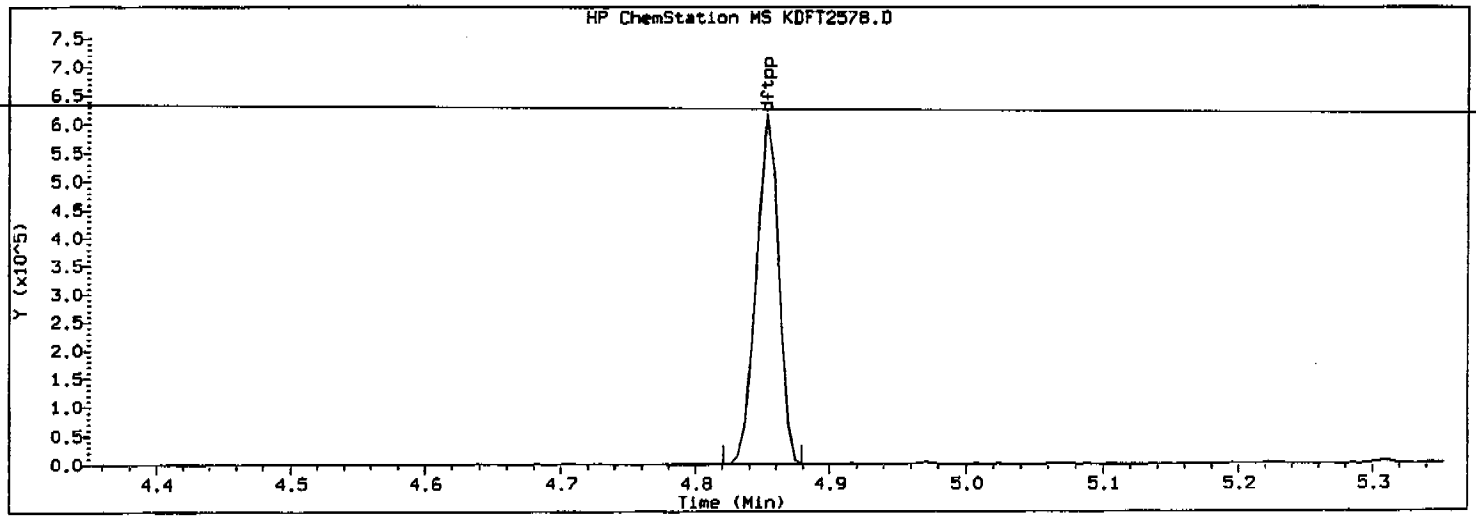
Report Date: 04/28/2005 15:23

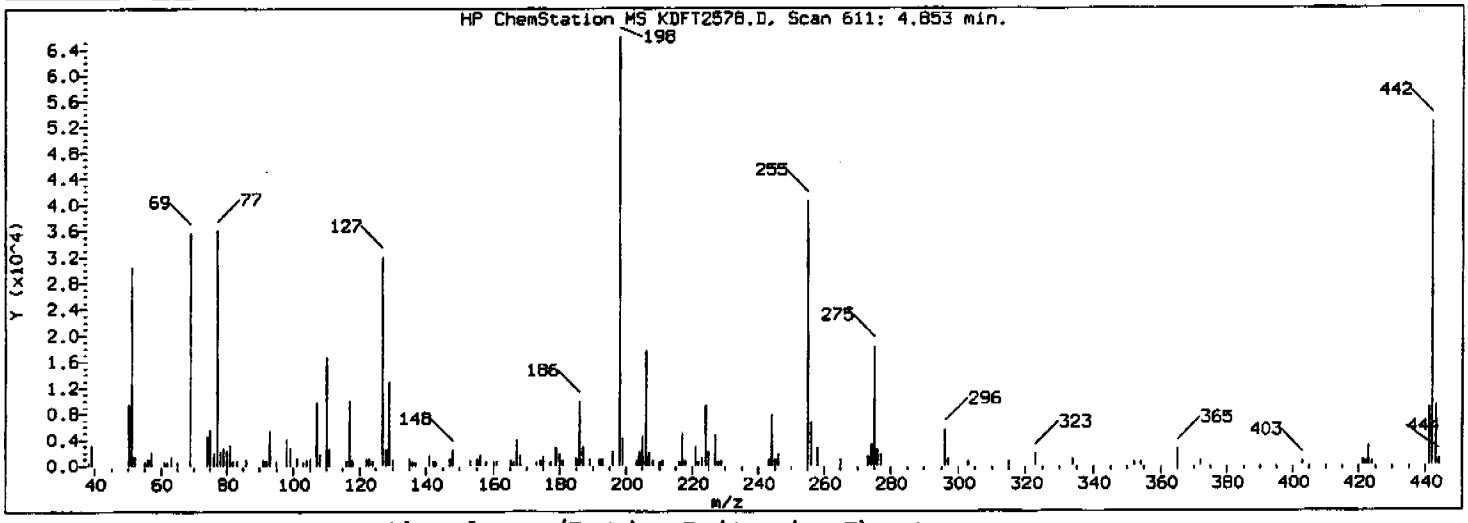
Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050428B.B/KDFT2578.D/KDFT2578.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050428B.B\sw846tun.m Inst: MSK
Injection Date: 28-APR-2005 11:20 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0193-05 (50NG)



Report Date: 04/28/2005 15:23

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050428B.B/KDFT2578.D/KDFT2578.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050428B.B\sw846tun.m Inst: MSK
Injection Date: 28-APR-2005 11:20 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0193-05 (50NG)



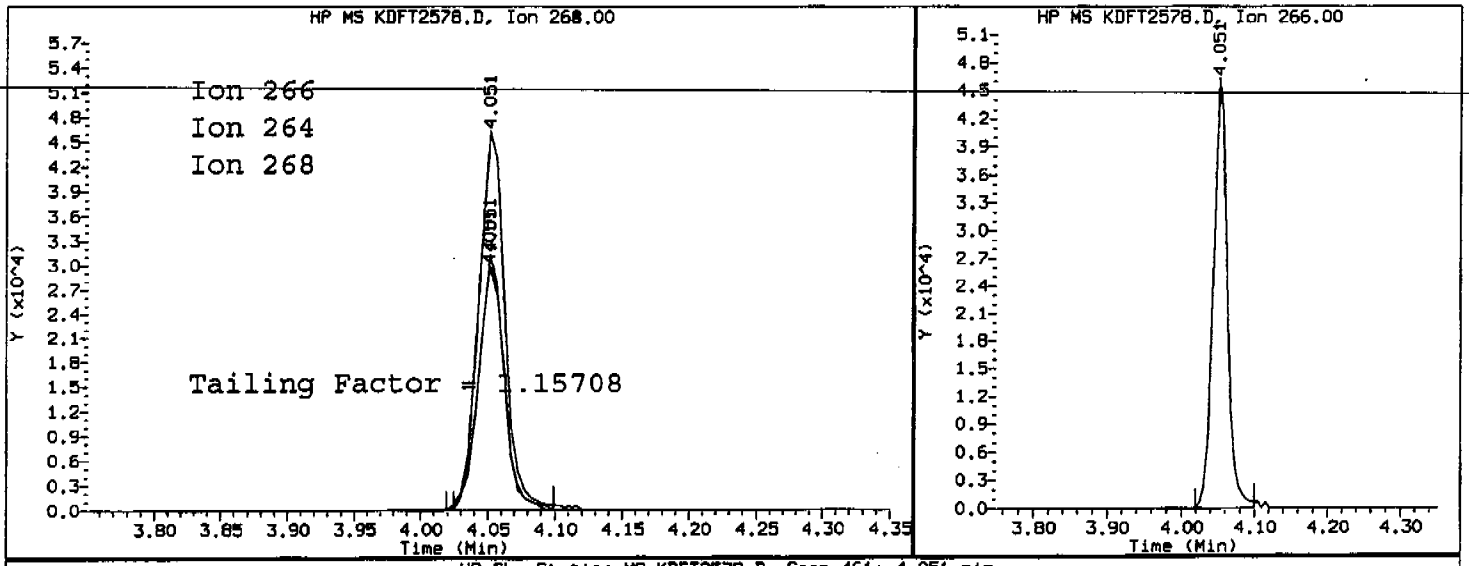


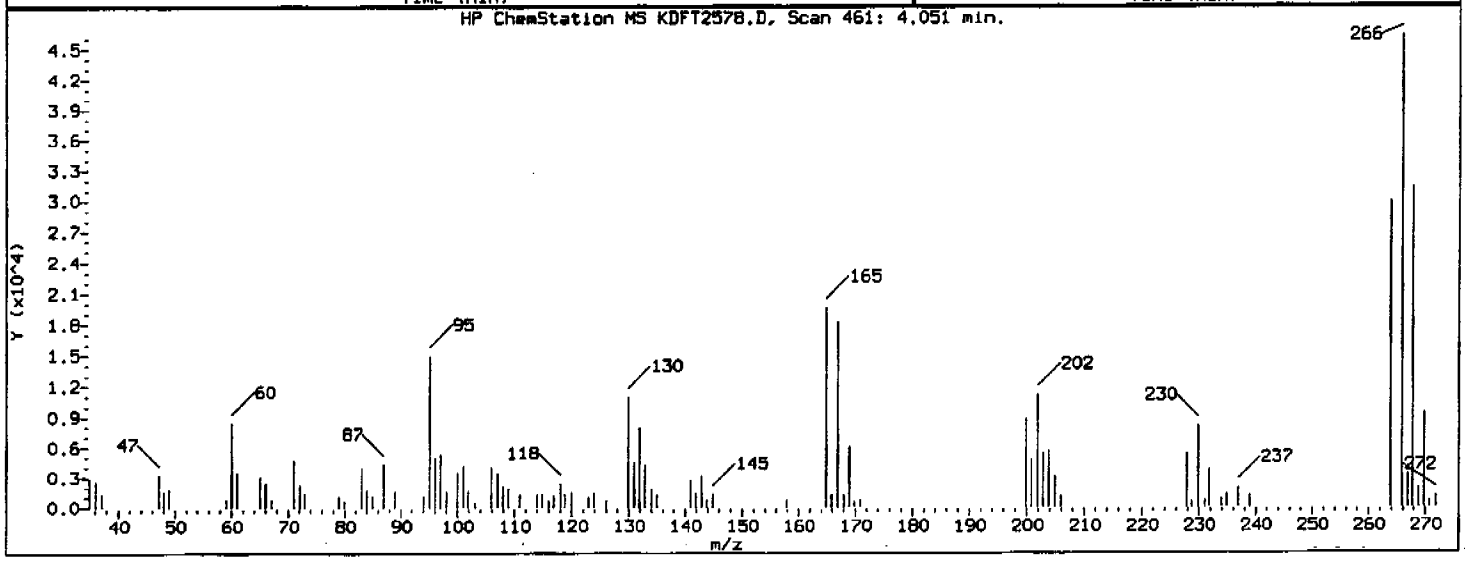
DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	45.22		PASS
68	Less than 2% of mass 69	0.49	(0.93)	PASS
69	Mass 69 relative abundance	52.53		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	47.71		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.42		PASS
275	10 - 30% of mass 198	27.32		PASS
365	Greater than 1% of mass 198	4.06		PASS
441	Present, but less than mass 443	10.78	(71.35)	PASS
442	Greater than 40% of mass 198	82.70		PASS
443	17 - 23% of mass 442	15.10	(18.26)	PASS

Report Date: 04/28/2005 15:23

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050428B.B/KDFT2578.D/KDFT2578.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050428B.B\sw846tun.m\resolut.m Inst:
Injection Date: 28-APR-2005 11:20 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)





Pentachlorophenol
==========
Exp. RT = 4.063
Found RT = 4.051

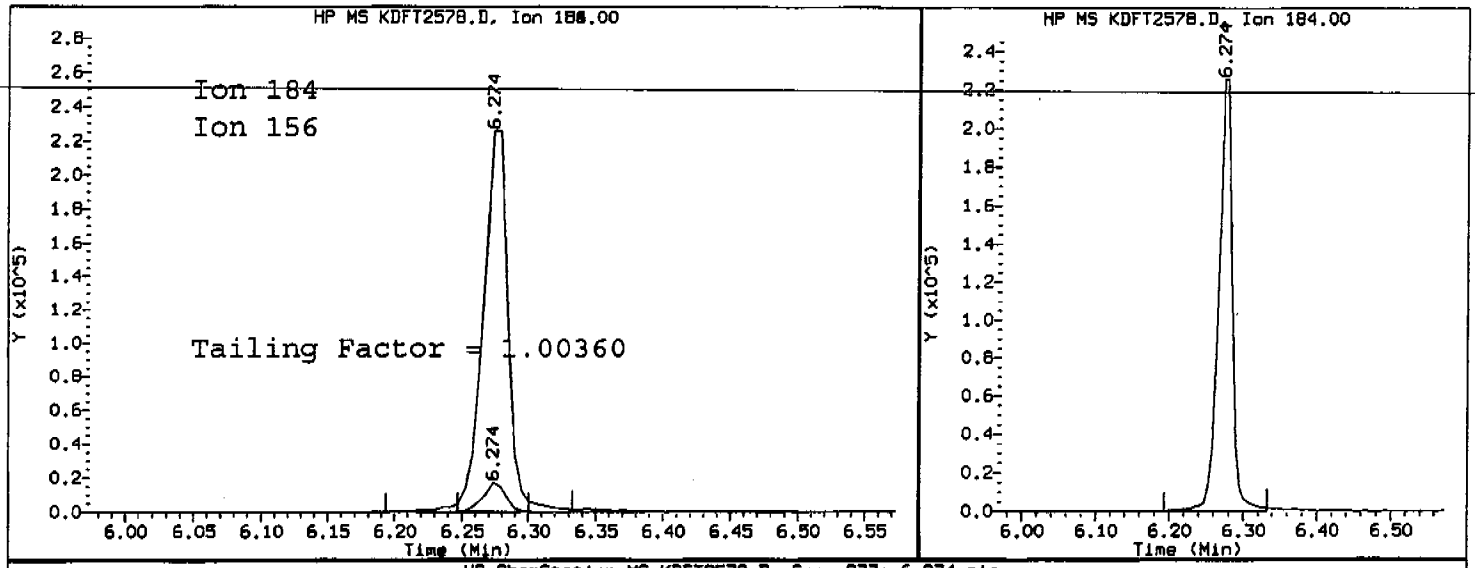
Mass	Area	Ratio
266	62964	100.00
264	39801	63.21
268	41066	65.22

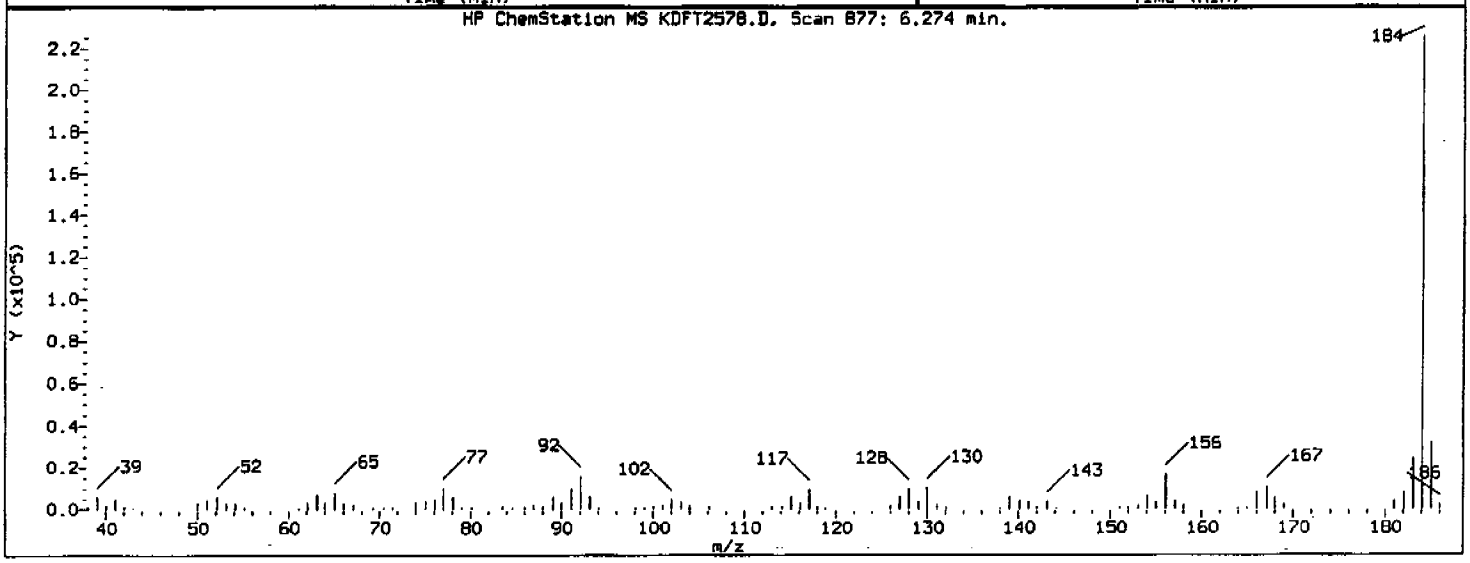
Tailing factor for Pentachlorophenol OK

Tail Factor = 1.157 Maximum Allowed = 5.0

Report Date: 04/28/2005 15:23

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050428B.B/KDFT2578.D/KDFT2578.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050428B.B\sw846tun.m\resolut.m Inst:
Injection Date: 28-APR-2005 11:20 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)





Benzidine
=========

Exp. RT =	6.285
Found RT =	6.274

Mass	Area	Ratio
184	297080	100.00
156	20138	6.78

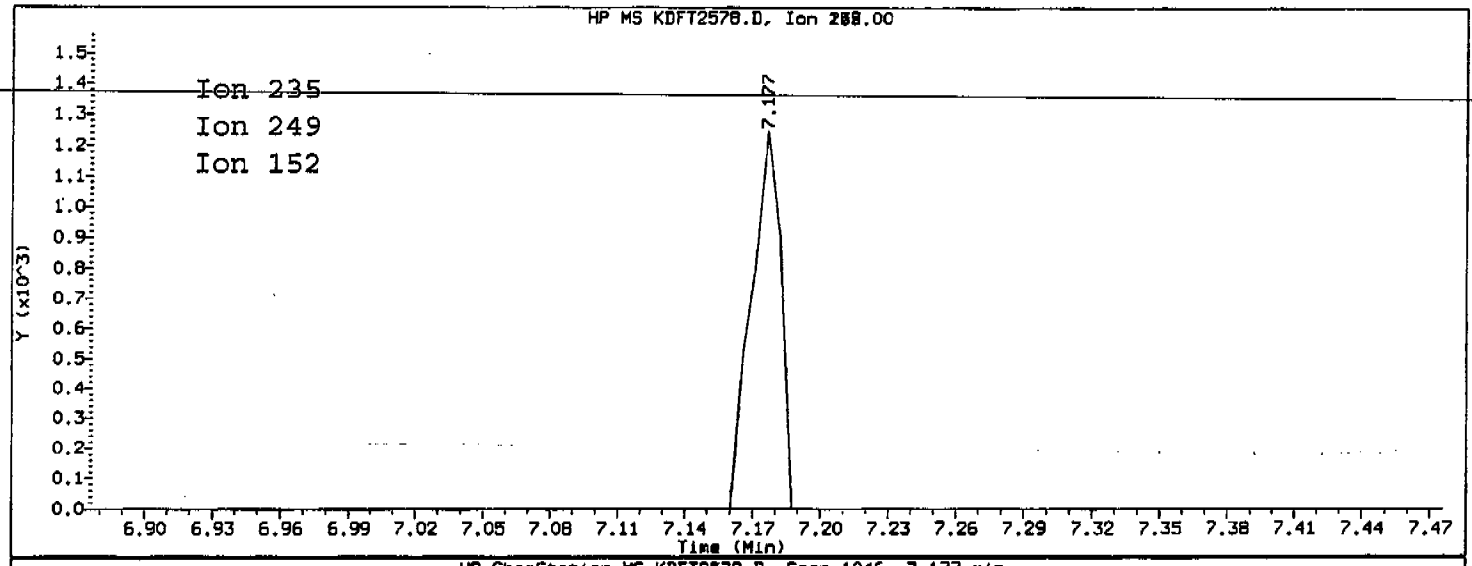
Tailing factor for Benzidine OK

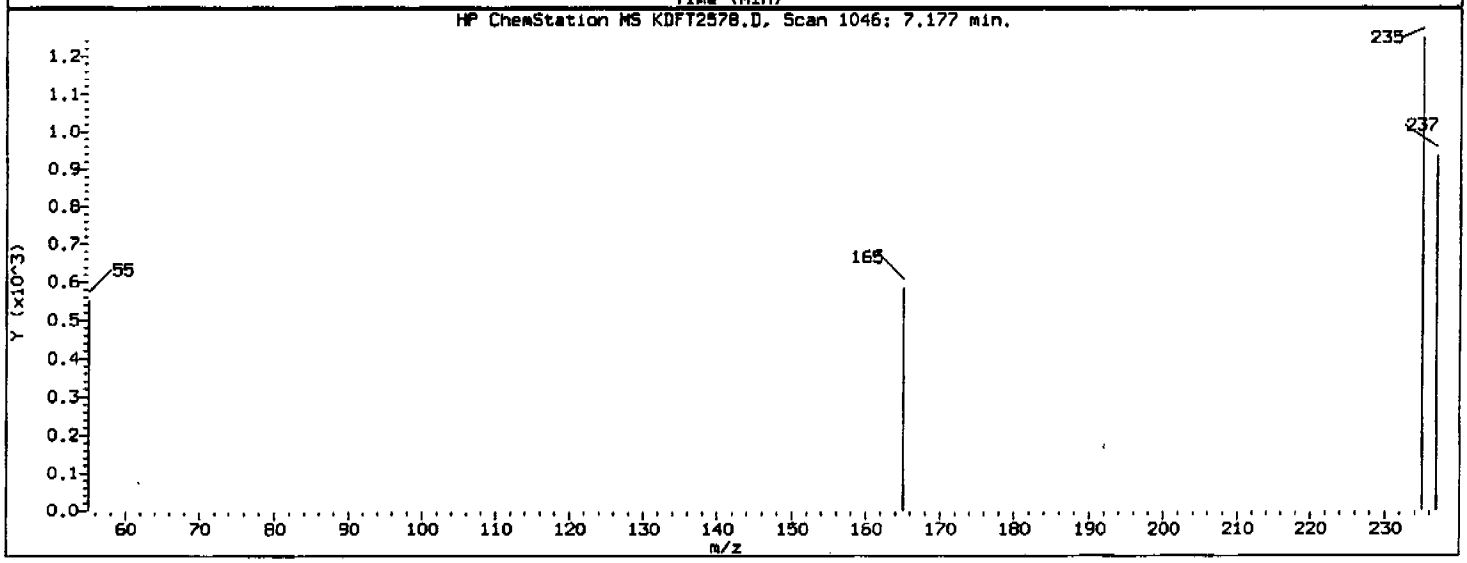
Tail Factor = 1.004 Maximum Allowed = 3.0

STL ST LOUIS

Report Date: 04/28/2005 15:23

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050428B.B/KDFT2578.D/KDFT2578.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050428B.B\sw846tun.m\resolut.m Inst:
Injection Date: 28-APR-2005 11:20 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)





4,4'-DDD

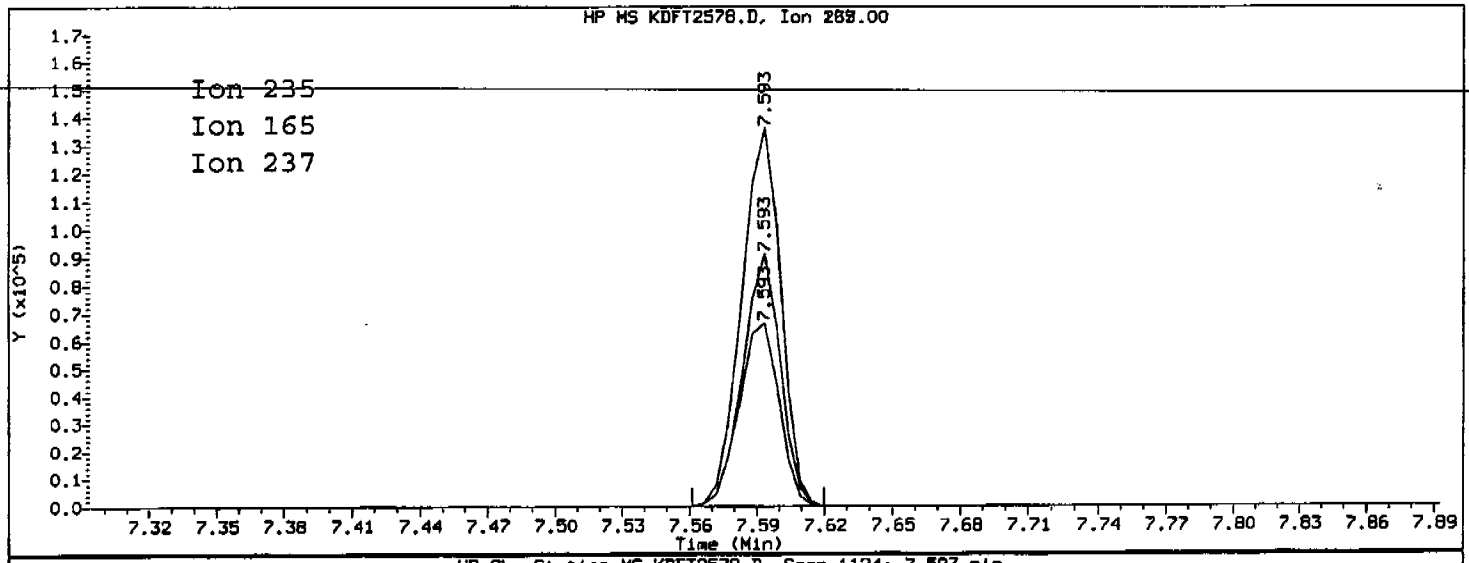
Exp. RT = 6.734
Found RT = 7.177

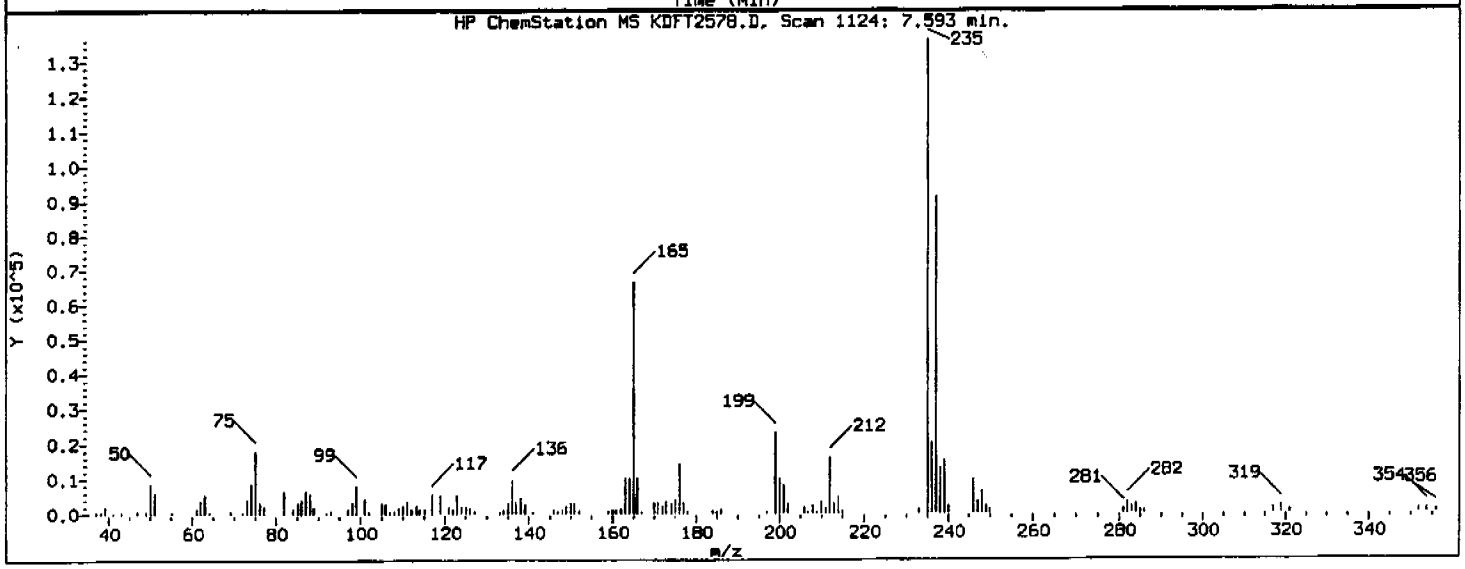
Mass	Area	Ratio
235	1112	100.00
249	0	0.00
152	1277	114.77

STL ST LOUIS

Report Date: 04/28/2005 15:23

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050428B.B/KDFT2578.D/KDFT2578.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050428B.B\sw846tun.m\resolut.m Inst:
Injection Date: 28-APR-2005 11:20 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)





4,4'-DDT

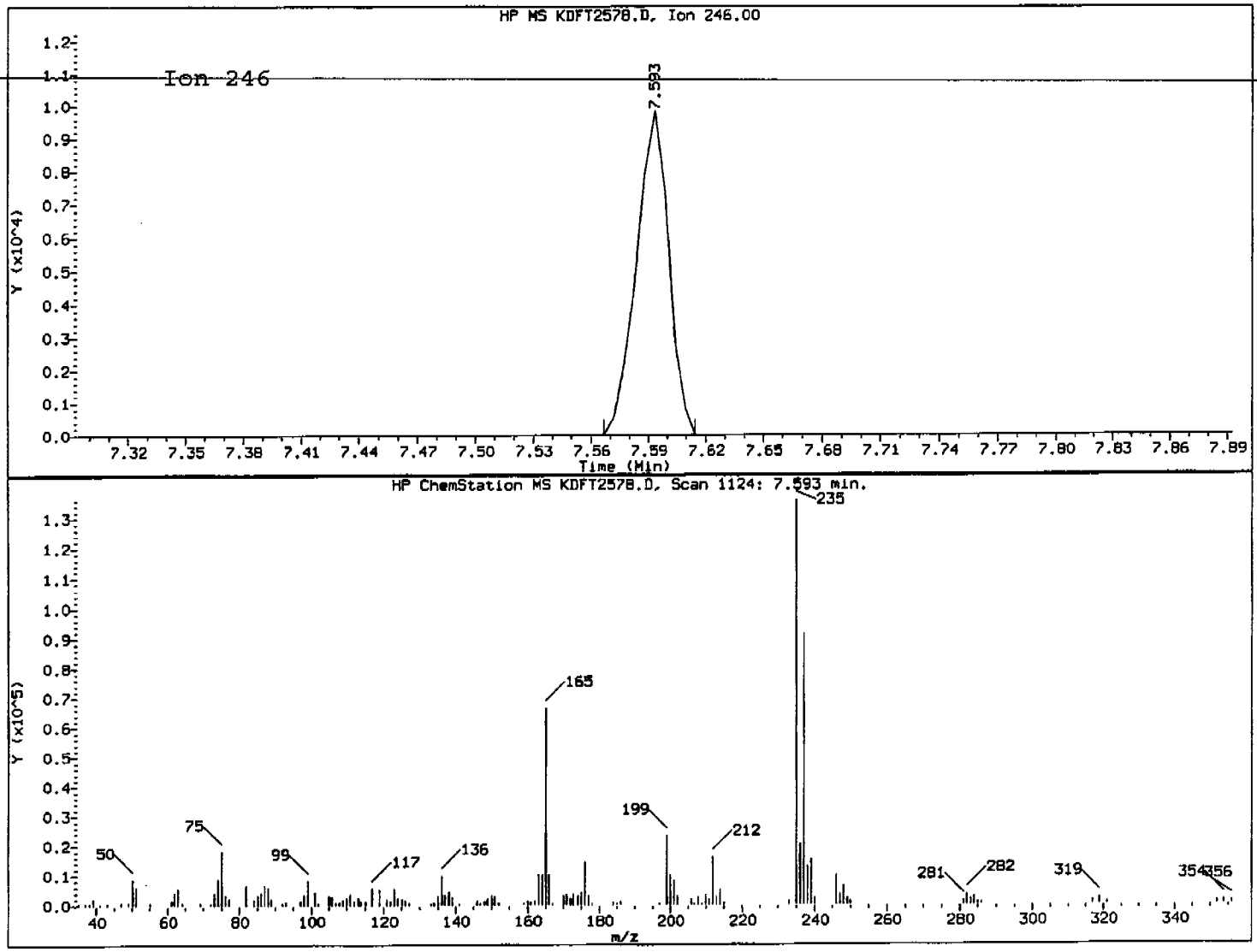
Exp. RT = 7.600
Found RT = 7.593

Mass	Area	Ratio
235	165399	100.00
165	82214	49.71
237	106341	64.29

STL ST LOUIS

Report Date: 04/28/2005 15:23

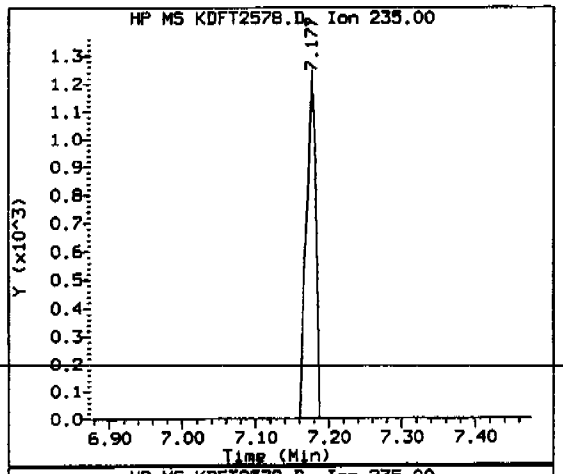
Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050428B.B/KDFT2578.D/KDFT2578.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050428B.B\sw846tun.m\resolut.m Inst:
Injection Date: 28-APR-2005 11:20 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)



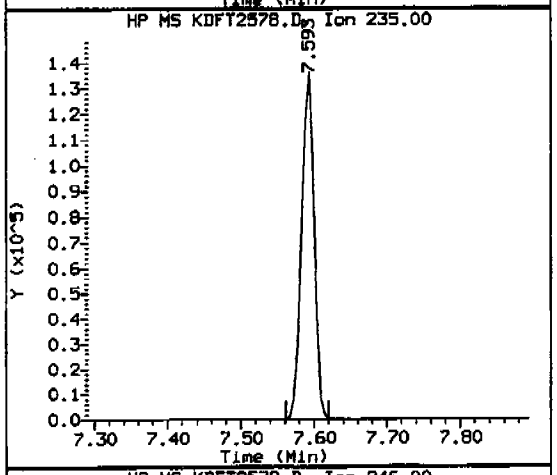
4,4'-DDE

Exp. RT = 8.000
Found RT = 7.593

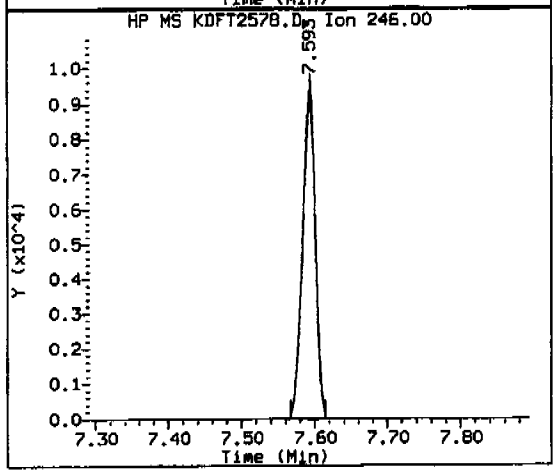
Mass	Area	Ratio
246	11531	100.00



Compound: 4,4'-DDD
Quant Mass: 235
RT: 7.177
Area: 1112



Compound: 4,4'-DDT
Quant Mass: 235
RT: 7.593
Area: 165399



Compound: 4,4'-DDE
Quant Mass: 246
RT: 7.593
Area: 11531

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	165399			N/A
4,4-DDE	11531	6.5	15.0	PASS
4,4-DDD	1112	0.7	15.0	PASS
4,4-DDD + DDE	12643	7.1	15.0	PASS

****
TUNE SAMPLE *** PASSED *** DDT BREAKDOWN TEST
****

Report Date : 29-Apr-2005 10:26 Page 1

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 29-APR-2005 01:44
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Calibration File Names:
Level 1: \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\KCAL2601.D
Level 2: \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\KCAL2600.D
Level 3: \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\KCAL2599.D
Level 4: \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\KCAL2595.D
Level 5: \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\KCAL2598.D
Level 6: \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\KCAL2597.D
Level 7: \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\KCAL2596.D

04/29/05

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
1 1,4-Dioxane	0.37860	0.43472	0.42645	0.38576	0.43423	0.42074	0.43063	0.41588	5.675	
2 Methyl methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
3 Pyridine	+++++	1.28795	1.40374	1.26051	1.29997	1.25121	1.35686	1.31004	4.513	<-
4 N-Nitrosodimethylamine	0.70861	0.74519	0.74513	0.69246	0.75157	0.74567	0.74317	0.73312	3.122	
5 Dimethylformamide	0.80592	0.88454	0.94889	0.89923	0.93709	0.94499	0.92505	0.90653	5.554	
6 Ethyl methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
7 2-Picoline	1.11672	1.19222	1.23144	1.30096	1.31132	1.30450	1.39292	1.26430	7.204	
8 N-Nitrosomethylethylamine	0.46950	0.57796	0.56912	0.57845	0.60310	0.58248	0.59178	0.56748	7.853	
9 Methyl methanesulfonate	0.35479	0.41151	0.41103	0.41324	0.46135	0.46437	0.49021	0.42950	10.596	
11 Cyclohexanol	1.13159	1.24663	1.34703	1.34793	1.44324	1.47767	1.45606	1.35002	9.303	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 29-APR-2005 01:44
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
12 N-Nitrosodiethylamine	0.61009	0.64225	0.62511	0.63051	0.70280	0.70476			
	0.71974						0.66218	6.828	
13 Ethyl Methanesulfonate	1.10180	1.07409	1.10510	1.05473	1.17698	1.15933			
	1.19896						1.12443	4.846	
14 Benzaldehyde	1.16166	1.23901	1.24283	1.29144	1.30102	1.36353			
	1.39704						1.28522	6.202	
16 Phenol	1.59182	1.65799	1.78303	1.78168	1.89286	1.96944			
	1.93915						1.80228	7.873	
17 Aniline	2.08985	2.12108	2.23541	2.05933	2.19179	2.21418			
	2.13936						2.15014	3.059	
18 Pentachloroethane	0.51171	0.48710	0.50536	0.53152	0.54099	0.55718			
	0.58367						0.53108	6.205	
19 Bis(2-chloroethyl)ether	1.42044	1.43863	1.43338	1.49434	1.54137	1.59087			
	1.59782						1.50241	5.015	
20 2-Chlorophenol	1.28743	1.29925	1.32343	1.32585	1.40017	1.43353			
	1.40842						1.35401	4.325	
21 1,3-Dichlorobenzene	1.52475	1.48639	1.46266	1.47287	1.54872	1.57694			
	1.59821						1.52436	3.462	
23 1,4-Dichlorobenzene	1.54939	1.55653	1.55992	1.59034	1.66583	1.68150			
	1.69627						1.61425	3.997	
24 Benzenethiol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
25 Benzyl Alcohol	0.20792	0.56942	0.67392	0.74425	0.77275	0.89502			
	0.79588						0.66559	33.933	<-
26 1,2-Dichlorobenzene	1.42590	1.38985	1.41334	1.47439	1.56405	1.58796			
	1.63615						1.49880	6.455	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 29-APR-2005 01:44
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD
	160.000 Level 7							
27 2-Methylphenol	1.11759	1.06078	1.16201	1.11714	1.18554	1.21224		
	1.20803						1.15190	4.848
28 2,2-oxybis(1-Chloropropane)	1.59518	1.44250	1.51851	1.51069	1.52027	1.52384		
	1.52052						1.51879	2.914
29 3 and 4-Methylphenol	1.10198	1.21132	1.26515	1.28160	1.34240	1.39381		
	1.36611						1.28034	7.868
30 Acetophenone	0.52107	0.53512	0.55618	0.57812	0.59620	0.62523		
	0.65259						0.58065	8.209
31 N-Nitrosopyrrolidine	0.17843	0.18370	0.18226	0.18768	0.19258	0.19901		
	0.21721						0.19155	6.907
32 N-Nitrosodinpropylamine	1.17472	1.17979	1.26477	1.29461	1.31770	1.31229		
	1.29274						1.26237	4.799
33 N-Nitrosomorpholine	0.06774	0.07645	0.07726	0.08065	0.08961	0.09511		
	0.10449						0.08447	14.906
34 O-Toluidine	0.56236	0.55680	0.56227	0.60066	0.63366	0.66229		
	0.71711						0.61359	9.900
35 Hexachloroethane	0.69167	0.65406	0.66038	0.69598	0.72422	0.72017		
	0.73528						0.69739	4.518
37 Nitrobenzene	0.57795	0.54753	0.52882	0.55654	0.55527	0.57193		
	0.57827						0.55947	3.229
38 N-Nitrosopiperidine	0.16432	0.16882	0.17079	0.17616	0.18096	0.18588		
	0.19442						0.17733	5.933
39 Isophorone	0.75985	0.74151	0.77064	0.77514	0.76787	0.77803		
	0.77937						0.76749	1.727
40 2-Nitrophenol	0.18384	0.19376	0.20079	0.20500	0.21118	0.21588		
	0.21957						0.20429	6.181

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INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 29-APR-2005 01:44
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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
41 2,4-Dimethylphenol	0.36687	0.39732	0.41399	0.44987	0.45674	0.47620			
	0.47283						0.43340	9.563	
42 Bis(2-chloroethoxy)methane	0.46695	0.45137	0.46047	0.48273	0.48105	0.49765			
	0.50608						0.47804	4.135	
43 o,o,o-Triethyl-Phosphorothioa	0.21535	0.22497	0.22572	0.23460	0.25461	0.26744			
	0.27953						0.24317	9.968	
44 Benzoic Acid	+++++	0.15128	0.18577	0.20987	0.23413	0.23921			
	0.24655						0.21113	17.465	
45 2,4-Dichlorophenol	0.24137	0.31577	0.31239	0.33166	0.33816	0.35171			
	0.35348						0.32065	11.976	
46 a,a-Dimethyl-phenethylamine	0.51145	0.76309	0.77322	0.78410	0.80856	0.82953			
	0.87545						0.76363	15.399	
47 1,2,4-Trichlorobenzene	0.35599	0.36527	0.35831	0.37853	0.39270	0.40331			
	0.41205						0.38088	5.863	
49 4-Chlorobenzenethiol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
50 Naphthalene	1.01653	1.01021	1.01516	1.08561	1.12092	1.18774			
	1.22348						1.09424	7.966	
51 4-Chloroaniline	0.36882	0.41649	0.44559	0.44690	0.48477	0.51837			
	0.51096						0.45598	11.705	
52 2,6-Dichlorophenol	0.25469	0.24292	0.25839	0.31185	0.29618	0.31378			
	0.32831						0.28659	11.858	
53 Hexachloropropene	0.31733	0.32521	0.33376	0.35006	0.35945	0.38047			
	0.38884						0.35073	7.781	
54 Hexachlorobutadiene	0.27711	0.26631	0.25418	0.27483	0.28212	0.29209			
	0.29748						0.27773	5.319	

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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
55 Benzothiazole	0.50139	0.46477	0.48632	0.49913	0.53104	0.55241	0.59151	0.51808	8.350	
56 Caprolactam	0.10983	0.13715	0.14068	0.13986	0.07457	0.14270	0.14775	0.12751	20.686	
57 n-Nitrosodi-n-butylamine	0.31342	0.29750	0.30099	0.31842	0.31943	0.33002	0.35040	0.31860	5.621	
58 p-Phenylenediamine	0.21874	0.29578	0.28872	0.36365	0.28733	0.27992	0.31741	0.29308	14.829	
59 4-Chloro-3-Methylphenol	0.27808	0.34113	0.38324	0.38943	0.39827	0.41002	0.41138	0.37308	12.893	
60 p-Chlorophenyl methyl sulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
61 Safrole	0.25500	0.27963	0.29140	0.29580	0.30963	0.32648	0.34629	0.30061	10.041	
62 2-Methylnaphthalene	0.79005	0.77460	0.80188	0.80540	0.82653	0.86454	0.87146	0.81921	4.504	
63 Phthalic anhydride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
64 cis-Isosafrole	0.04748	0.05826	0.05654	0.05553	0.05574	0.05770	0.05995	0.05589	7.184	
65 1,2,4,5-Tetrachlorobenzene	1.42931	1.31274	1.32205	1.39168	1.47308	1.54004	1.62334	1.44175	7.870	
66 Hexachlorocyclopentadiene	0.22609	0.37005	0.39916	0.44764	0.46898	0.49181	0.51922	0.41756	23.679	
67 2,4,6-Trichlorophenol	0.40347	0.44812	0.45383	0.47650	0.47896	0.50316	0.52140	0.46935	8.264	

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Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
68 2,4,5-Trichlorophenol	0.36628	0.45864	0.48372	0.52869	0.54048	0.56219			
	0.59062						0.50438	14.983	
70 trans-Isosafrole	0.56648	0.54163	0.54100	0.56420	0.59728	0.65850			
	0.75581						0.60356	12.995	
71 Biphenyl	1.54419	1.44874	1.47932	1.53624	1.66716	1.76228			
	1.79160						1.60422	8.519	
72 2-Chloronaphthalene	1.25515	1.23404	1.24704	1.29040	1.30943	1.38174			
	1.41165						1.30421	5.273	
73 2-Nitroaniline	0.48861	0.52007	0.54325	0.55904	0.55542	0.57208			
	0.58880						0.54675	6.131	
74 1,4-Naphthoquinone	0.27176	0.36890	0.37704	0.33375	0.21032	0.17342			
	0.12916						0.26634	36.895	<-
75 1,4-Dinitrobenzene	0.07763	0.12369	0.12115	0.12521	0.13042	0.13540			
	0.14150						0.12214	17.086	
76 Dimethylphthalate	1.45815	1.46456	1.50902	1.54752	1.58543	1.66616			
	1.69761						1.56121	6.025	
77 1,3-Dinitrobenzene	0.16587	0.22945	0.23025	0.24388	0.24166	0.24971			
	0.25601						0.23098	13.109	
78 N-(hydroxymethyl) phthalimide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
79 Acenaphthylene	1.75108	1.80726	1.83748	1.93134	1.98476	2.10600			
	2.17096						1.94127	8.057	
80 2,6-Dinitrotoluene	0.27499	0.31443	0.32749	0.33945	0.34305	0.35873			
	0.36389						0.33172	9.117	
81 3-Nitroaniline	0.24423	0.31322	0.32741	0.34492	0.35639	0.37039			
	0.36835						0.33213	13.258	

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Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
83 Acenaphthene	1.21878	1.13268	1.15338	1.22752	1.25002	1.31922			
	1.35473						1.23662	6.527	
84 2,4-Dinitrophenol	+++++	0.14781	0.19757	0.22407	0.24736	0.26118			
	0.26135						0.22322	19.856	<-
85 4-Nitrophenol	+++++	0.23727	0.27068	0.33499	0.33003	0.34462			
	0.34414						0.31029	14.573	
86 Dibenzofuran	1.72238	1.80014	1.77031	1.85902	1.87922	1.98809			
	2.03288						1.86458	6.079	
87 Pentachlorobenzene	0.70728	0.65613	0.66649	0.68327	0.70614	0.73519			
	0.75466						0.70131	5.086	
88 2,4-Dinitrotoluene	0.35745	0.42076	0.43608	0.45496	0.45904	0.47489			
	0.48091						0.44058	9.574	
89 1-Naphthylamine	1.03800	1.06591	1.04498	1.10302	1.05391	1.16285			
	1.16394						1.09037	4.961	
90 2-Naphthylamine	0.97677	0.98368	0.94490	1.00433	0.88786	1.05261			
	1.06727						0.98820	6.232	
91 Phenyl sulfide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
92 2,3,4,6-Tetrachlorophenol	0.22811	0.28943	0.32362	0.39276	0.41144	0.42643			
	0.46069						0.36178	23.112	
93 Diethylphthalate	1.41548	1.46650	1.48688	1.54557	1.60229	1.68658			
	1.73510						1.56263	7.554	
94 Fluorene	1.36651	1.41878	1.43699	1.51034	1.54068	1.61649			
	1.66344						1.50761	7.166	
95 4-Chlorophenyl-phenylether	0.76544	0.78936	0.79757	0.81479	0.85758	0.90175			
	0.93474						0.83732	7.491	

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INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
96 Thionazin	0.23139	0.25240	0.25864	0.26567	0.28537	0.29086	0.29032	0.26781	8.348	
97 5-Nitro-o-toluidine	0.15995	0.20034	0.19875	0.21045	0.21494	0.21816	0.22533	0.20399	10.587	
98 4-Nitroaniline	0.23718	0.30399	0.34479	0.34033	0.35333	0.35639	0.36113	0.32816	13.516	
99 4,6-Dinitro-2-methylphenol	0.09625	0.15210	0.16791	0.18306	0.19296	0.20080	0.20396	0.17101	22.084	
100 N-Nitrosodiphenylamine	0.54329	0.53324	0.53718	0.57973	0.61558	0.65237	0.66501	0.58949	9.412	
101 tri-n-butylphosphate	1.52154	1.63086	1.65030	1.71460	1.82251	1.87783	2.01075	1.74692	9.553	
102 Azobenzene	1.15917	1.09995	1.11092	1.18849	1.28315	1.31452	1.35621	1.21606	8.384	
103 Benzal Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
105 Sulfotepp	0.13055	0.14332	0.15072	0.15105	0.16041	0.16417	0.16883	0.15272	8.604	
106 Diallate (peak 1)	0.27906	0.28345	0.29123	0.30014	0.31100	0.32036	0.33572	0.30299	6.788	
107 1,3,5-Trinitrobenzene	0.05460	0.08597	0.09688	0.10024	0.10572	0.10753	0.11048	0.09449	20.515	
108 Phorate	0.49946	0.50445	0.50760	0.53049	0.56947	0.58636	0.62513	0.54614	8.860	
109 4-Bromophenyl-phenylether	0.25303	0.26866	0.26842	0.28618	0.29408	0.30240	0.30815	0.28299	7.152	

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Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
110 Phenacetin	0.38624	0.41341	0.42268	0.42532	0.42504	0.42869			
	0.43971						0.42015	4.015	
111 Diallate (peak 2)	0.06683	0.06004	0.06289	0.06373	0.06488	0.06546			
	0.06814						0.06457	4.135	
112 Hexachlorobenzene	0.28686	0.29871	0.29767	0.30893	0.31951	0.32920			
	0.33236						0.31046	5.537	
113 Dimethoate	0.27185	0.28949	0.28826	0.27480	0.21882	0.21567			
	0.18694						0.24940	16.564	
114 Atrazine	0.22048	0.24204	0.23940	0.24289	0.25564	0.25595			
	0.26658						0.24614	6.060	
115 tris(2-chloroethyl)phosphate	0.22625	0.21717	0.22304	0.21944	0.21858	0.22085			
	0.22796						0.22190	1.817	
116 4-Aminobiphenyl	0.70998	0.67001	0.68070	0.79368	0.77334	0.82627			
	0.87380						0.76111	10.111	
117 Pentachlorophenol	+++++	0.13566	0.16827	0.19160	0.20843	0.21816			
	0.21672						0.18981	17.112	
118 Pronamide	0.37755	0.36975	0.37320	0.37153	0.37705	0.38333			
	0.39158						0.37771	2.012	
119 Pentachloronitrobenzene	0.11754	0.12476	0.12783	0.13205	0.13537	0.13783			
	0.13768						0.13044	5.767	
120 Phenyl disulfide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
122 Phenanthrene	1.20008	1.16461	1.15560	1.20830	1.25524	1.28359			
	1.29872						1.22373	4.615	
123 Disulfoton	0.35737	0.36108	0.36643	0.37668	0.39485	0.40708			
	0.42916						0.38466	6.946	

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Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
124 Anthracene	1.10677	1.13662	1.12604	1.17583	1.21539	1.24242	1.24655	1.17852	4.866	
125 Dinoseb	0.13116	0.20289	0.23168	0.24451	0.26321	0.27373	0.28489	0.23315	22.611	
126 Carbazole	0.91819	0.96755	0.98977	1.02265	1.04991	1.07633	1.07010	1.01350	5.742	
127 Phenyl sulfone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
128 Methyl Parathion	0.22472	0.25273	0.25605	0.24165	0.20186	0.19848	0.17806	0.22194	13.501	
129 Di-n-Butylphthalate	1.17605	1.24618	1.26765	1.32252	1.36383	1.39771	1.40499	1.31127	6.499	
130 Parathion	0.13719	0.18275	0.18212	0.18480	0.18353	0.18558	0.18900	0.17785	10.162	
131 4-Nitroquinoline-1-oxide	+++++	0.06721	0.07979	0.10710	0.08542	0.08685	0.08235	0.08479	15.310	<-
132 Methapyrilene	0.34073	0.34857	0.33447	0.27766	0.21659	0.20104	0.18189	0.27156	26.360	
133 Isodrin	0.14938	0.13071	0.13659	0.12878	0.13896	0.13984	0.14629	0.13865	5.427	
134 Fluoranthene	1.19499	1.27310	1.28215	1.34880	1.38469	1.42778	1.40738	1.33127	6.332	
135 Benzidine	0.33912	0.41910	0.54791	0.48481	0.58860	0.56062	0.54024	0.49720	17.998	
136 Bis (4-chlorophenyl) disulfid	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 29-APR-2005 01:44
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
137 Pyrene	1.35449	1.40228	1.45272	1.58969	1.57324	1.61414			
	1.70160						1.52688	8.240	
138 4-chlorophenyl sulfone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
140 Aramite (peak 1)	0.05375	0.06879	0.07594	0.07526	0.07359	0.07265			
	0.07371						0.07053	10.986	
141 Kepone	+++++	0.00357	0.00453	0.00668	0.00729	0.00747			
	0.00748						0.00617	27.492	<-
142 Aramite (peak 2)	0.08770	0.10236	0.10922	0.11671	0.11420	0.11097			
	0.11134						0.10750	9.129	
143 p-(Dimethylamino)azobenzene	0.29047	0.32717	0.33641	0.34730	0.34129	0.34067			
	0.34674						0.33286	5.977	
144 Chlorobenzilate	0.40399	0.42688	0.44410	0.45660	0.49105	0.50109			
	0.53020						0.46484	9.587	
145 3,3-Dimethylbenzidine	0.44768	0.57060	0.62408	0.55179	0.62907	0.63004			
	0.62720						0.58292	11.596	
146 Butylbenzylphthalate	0.56589	0.56619	0.59126	0.58216	0.60822	0.61084			
	0.64514						0.59567	4.745	
147 Acrylamide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
148 2-Acetylaminofluorene(1)	0.44078	0.49973	0.51625	0.54235	0.55089	0.55882			
	0.56140						0.52432	8.256	
(2)	0.35522	0.39267	0.39584	0.41786	0.42490	0.43100			
	0.43659						0.40773	7.007	
149 Famphur	+++++	0.02197	0.03377	0.05429	0.01871	0.01486			
	0.00621						0.02497	67.953	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 29-APR-2005 01:44
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

	Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
		160.000 Level 7								
	150 Benzo(a)Anthracene	1.28334	1.27385	1.29850	1.37124	1.42584	1.44876			
		1.49673						1.37118	6.471	
	151 4,4'-Methylenebis(2-Chloroani	0.10305	0.10187	0.11221	0.12299	0.11640	0.12512			
		0.13117						0.11611	9.589	
	152 3,3'-Dichlorobenzidine	0.43617	0.42622	0.48158	0.52939	0.61023	0.62557			
		0.65260						0.53739	17.346	
	154 Chrysene	1.19485	1.16590	1.19487	1.28390	1.35974	1.41466			
		1.45936						1.29618	9.039	
	155 bis(2-ethylhexyl)Phthalate	0.66987	0.67984	0.68614	0.73988	0.75919	0.78014			
		0.82384						0.73413	7.905	
M	156 Toluenediamine	+++++	+++++	+++++	+++++	+++++	+++++			
		+++++						+++++	+++++	<-
	157 Triethylamine	+++++	+++++	+++++	+++++	+++++	+++++			
		+++++						+++++	+++++	<-
	158 Di-n-octylphthalate	1.20577	1.35313	1.39312	1.44437	1.55177	1.58020			
		1.55559						1.44057	9.405	
	159 1,2-Dinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
		+++++						+++++	+++++	<-
	160 Benzo(b)fluoranthene	1.23246	1.39824	1.38832	1.49419	1.57091	1.70833			
		1.63839						1.49012	11.004	
	161 Benzo(k)fluoranthene	1.52204	1.42449	1.42726	1.44412	1.54371	1.49258			
		1.57284						1.48958	3.982	
	162 7,12-Dimethylbenz(a)anthracen	0.63206	0.67147	0.70278	0.74963	0.79123	0.82571			
		0.80112						0.73914	9.807	
	163 Hexachlorophene	+++++	0.00594	0.00928	0.01407	0.00882	0.00689			
		0.09695						0.02366	152.219	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 29-APR-2005 01:44
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
164 N,N-Dimethylamine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
165 Benzo(a)pyrene	1.21296	1.27868	1.32447	1.35229	1.40893	1.45743	1.46739	1.35745	6.919	
167 Carbofuran Phenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
168 2,3- and 3,5-Diaminotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
169 3-methylcholanthrene	0.67245	0.68361	0.68395	0.73820	0.79182	0.82758	0.85552	0.75045	10.005	
170 2,6- and 2,4-Diaminotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
171 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
172 n-Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
173 Indeno(1,2,3-cd)pyrene	1.00017	1.16843	1.21446	1.31979	1.50474	1.68529	1.82842	1.38876	21.388	
174 Dibenzo(a,h)anthracene	1.11032	1.14511	1.25654	1.37646	1.49801	1.68131	1.80231	1.41001	18.762	
175 Dibenz(e,a) Pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
176 n-tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
177 Benzo(g,h,i)perylene	1.12458	1.13862	1.17441	1.24352	1.37253	1.56810	1.63125	1.32186	15.727	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 29-APR-2005 01:44
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
179 Phthalic Acid	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
180 n-Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
M 181 Isosafrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
$ 10 2-Fluorophenol	1.16730	1.16660	1.22691	1.23825	1.31981	1.35326	1.33401	1.25802	6.209	
$ 15 Phenol-d5	1.40728	1.53966	1.63802	1.70991	1.81475	1.87254	1.85644	1.69123	10.304	
$ 36 Nitrobenzene-d5	0.51707	0.51455	0.51984	0.53587	0.53545	0.54672	0.55055	0.53144	2.728	
$ 69 2-Fluorobiphenyl	1.39007	1.44968	1.46792	1.55481	1.60295	1.67991	1.75634	1.55738	8.465	
$ 104 2,4,6-Tribromophenol	0.19239	0.25734	0.27614	0.27826	0.28395	0.30209	0.30120	0.27019	13.920	
$ 139 Terphenyl-d14	1.05246	1.12964	1.15253	1.28007	1.27584	1.30784	1.37605	1.22492	9.392	
$ 178 2,4,6-Trichlorophenol-d2	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B/KCAL2579.D
Report Date: 04/29/2005

INITIAL CALIBRATION REPORT

Instrument ID: MSK.i
Injection Date: 28-APR-2005 11:41
Lab File ID: KCAL2579.D
Lab Sample ID: SSTD050APPIX
Analysis Type: WATER
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270

COMPOUND	%RSD
2-Picoline	7.2
N-Nitrosomethylethylamine	7.9
Methyl methanesulfonate	10.6
N-Nitrosodiethylamine	6.8
Methyl methacrylate	0.0
Ethyl methacrylate	0.0
Ethyl Methanesulfonate	4.8
Pentachloroethane	6.2
Acetophenone	7.4
N-Nitrosopyrrolidine	6.9
N-Nitrosomorpholine	14.9
O-Toluidine	9.9
N-Nitrosopiperidine	5.9
o,o,o-Triethyl-Phosphorothioa	10.0
a,a-Dimethyl-phenethylamine	15.4
Hexachloropropene	7.8
2,6-Dichlorophenol	11.9
Benzothiazole	8.3
p-Phenylenediamine	14.8
n-Nitrosodi-n-butylamine	5.6
Safrole	10.0
1,2,4,5-Tetrachlorobenzene	7.9
cis-Isosafrole	7.2
trans-Isosafrole	13.0
1,4-Naphthoquinone	36.9
1,4-Dinitrobenzene	17.1
1,3-Dinitrobenzene	13.1
Pentachlorobenzene	5.1
1-Naphthylamine	5.0
2-Naphthylamine	6.2
2,3,4,6-Tetrachlorophenol	23.1
Thionazin	8.3
5-Nitro-o-toluidine	10.6
tri-n-butylphosphate	9.6
Sulfotepp	8.6
Diallate (peak 1)	6.8
Phorate	8.9
1,3,5-Trinitrobenzene	20.5
Diallate (peak 2)	4.1

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B/KCAL2579.D
Report Date: 04/29/2005

INITIAL CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL2579.D
Analysis Type: WATER

Injection Date: 28-APR-2005 11:41
Lab Sample ID: SSTD050APPIX
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050428A

COMPOUND	%RSD
Phenacetin	4.0
Dimethoate	16.6
4-Aminobiphenyl	10.1
tris(2-chloroethyl)phosphate	1.8
Pentachloronitrobenzene	5.8
Pronamide	2.0
Disulfoton	6.9
Dinoseb	22.6
Methyl Parathion	13.5
4-Nitroquinoline-1-oxide	15.3
Parathion	10.2
Methapyrilene	26.4
Isodrin	5.4
Kepone	27.5
Aramite (peak 1)	11.0
Aramite (peak 2)	9.1
p-(Dimethylamino)azobenzene	6.0
Chlorobenzilate	9.6
2-Acetylaminofluorene	8.3
Famphur	68.0
4,4'-Methylenebis(2-Chloroani	9.6
7,12-Dimethylbenz(a)anthracen	9.8
Hexachlorophene	152.2
3-methylcholanthrene	10.0

The average of all %RSD's in the initial calibration is 13.4

04/29/05

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2579.D
Lab Smp Id: SSTD050APPIX Client Smp ID: SSTD050APPIX
Inj Date : 28-APR-2005 11:41
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD050APPIX
Misc Info : SV0185-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Meth Date : 29-Apr-2005 09:06 hongs Quant Type: ISTD
Cal Date : 28-APR-2005 16:17 Cal File: KCAL2587.D
Als bottle: 3 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIX.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
7	2-Picoline	93	2.541	2.541	(0.550)	263681	50.0000	51.45
8	N-Nitrosomethylethylamine	88	2.733	2.733	(0.592)	117240	50.0000	50.96(M)
9	Methyl methanesulfonate	80	3.102	3.102	(0.672)	83757	50.0000	48.11
12	N-Nitrosodiethylamine	102	3.492	3.492	(0.756)	127793	50.0000	47.61
13	Ethyl Methanesulfonate	79	3.871	3.871	(0.838)	213773	50.0000	46.90
18	Pentachloroethane	117	4.277	4.277	(0.926)	107729	50.0000	50.04
* 22	1,4-Dichlorobenzene-d4	152	4.619	4.619	(1.000)	162145	40.0000	
30	Acetophenone	105	5.159	5.159	(0.831)	380454	50.0000	49.30
31	N-Nitrosopyrrolidine	100	5.180	5.180	(0.835)	125730	50.0000	48.99
33	N-Nitrosomorpholine	116	5.212	5.212	(0.840)	54028	50.0000	47.74
34	O-Toluidine	106	5.228	5.228	(0.842)	402395	50.0000	48.94
38	N-Nitrosopiperidine	114	5.565	5.565	(0.897)	118015	50.0000	49.67
43	o,o,o-Triethyl-Phosphorothioa	198	5.987	5.987	(0.965)	157161	50.0000	48.24
* 48	Naphthalene-d8	136	6.206	6.206	(1.000)	535939	40.0000	
46	a,a-Dimethyl-phenethylamine	58	6.083	6.083	(0.980)	525288	50.0000	51.34(M)
52	2,6-Dichlorophenol	162	6.393	6.393	(1.030)	208918	50.0000	54.41
53	Hexachloropropene	213	6.387	6.387	(1.029)	234511	50.0000	49.90
55	Benzothiazole	135	6.596	6.596	(1.063)	334378	50.0000	48.17
58	p-Phenylenediamine	108	6.879	6.879	(1.108)	243620	50.0000	62.04
57	n-Nitrosodi-n-butylamine	84	6.884	6.884	(1.109)	213314	50.0000	49.97
61	Safrole	162	7.124	7.124	(1.148)	198165	50.0000	49.20

04/29/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
65	1,2,4,5-Tetrachlorobenzene	216	7.525	7.525	(0.845)	535105	50.0000	48.26
64	cis-Isosafrole	162	7.563	7.563	(0.849)	21352	50.0000	49.68(M)
70	trans-Isosafrole	162	7.920	7.920	(0.889)	216935	50.0000	46.74
74	1,4-Naphthoquinone	158	8.278	8.278	(0.929)	128327	50.0000	62.66
75	1,4-Dinitrobenzene	168	8.444	8.444	(1.361)	83882	50.0000	51.26
77	1,3-Dinitrobenzene	168	8.636	8.636	(0.969)	93774	50.0000	52.79
* 82	Acenaphthene-d10	164	8.909	8.909	(1.000)	307602	40.0000	
87	Pentachlorobenzene	250	9.283	9.283	(1.042)	262718	50.0000	48.71
89	1-Naphthylamine	143	9.422	9.422	(1.058)	424114	50.0000	50.58
90	2-Naphthylamine	143	9.560	9.560	(1.073)	386166	50.0000	50.82
92	2,3,4,6-Tetrachlorophenol	232	9.598	9.598	(1.077)	151016	50.0000	54.28
96	Thionazin	107	10.020	10.020	(1.125)	102152	50.0000	49.60
97	5-Nitro-o-toluidine	152	10.025	10.025	(0.866)	151109	50.0000	51.58
101	tri-n-butylphosphate	99	10.303	10.303	(1.156)	659269	50.0000	49.08
105	Sulfotepp	97	10.709	10.709	(0.925)	108455	50.0000	49.45
106	Diallate (peak 1)	86	10.778	10.778	(0.931)	215506	50.0000	49.53
108	Phorate	75	10.795	10.795	(0.932)	380896	50.0000	48.57
111	Diallate (peak 2)	86	10.917	10.917	(0.943)	45759	50.0000	49.35
107	1,3,5-Trinitrobenzene	213	10.875	10.875	(0.939)	71975	50.0000	53.04
110	Phenacetin	108	10.923	10.923	(0.943)	305382	50.0000	50.61
113	Dimethoate	87	11.158	11.158	(0.964)	197308	50.0000	55.09
116	4-Aminobiphenyl	169	11.329	11.329	(0.978)	569868	50.0000	52.14
115	tris(2-chloroethyl)phosphate	63	11.393	11.393	(0.984)	157558	50.0000	49.44
119	Pentachloronitrobenzene	237	11.542	11.542	(0.997)	94810	50.0000	50.62
118	Pronamide	173	11.596	11.596	(1.001)	266760	50.0000	49.18
* 121	Phenanthrene-d10	188	11.580	11.580	(1.000)	574409	40.0000	
123	Disulfoton	88	11.783	11.783	(1.018)	270463	50.0000	48.96
125	Dinoseb	211	11.826	11.826	(1.021)	175561	50.0000	52.44
128	Methyl Parathion	109	12.509	12.509	(1.080)	173505	50.0000	54.44
131	4-Nitroquinoline-1-oxide	190	13.236	13.236	(1.143)	76901	50.0000	63.16
130	Parathion	97	13.300	13.300	(1.149)	132687	50.0000	51.95
132	Methapyrilene	97	13.487	13.487	(1.165)	199360	50.0000	51.12(M)
133	Isodrin	193	13.637	13.637	(1.178)	92464	50.0000	46.44
141	Kepone	272	14.790	14.790	(0.884)	4340	50.0000	54.16
140	Aramite (peak 1)	185	14.876	14.876	(0.889)	48864	50.0000	53.36
142	Aramite (peak 2)	185	15.031	15.031	(0.898)	75776	50.0000	54.28
143	p-(Dimethylamino)azobenzene	120	15.106	15.106	(0.903)	225484	50.0000	52.17
144	Chlorobenzilate	251	15.245	15.245	(0.911)	296445	50.0000	49.11
148	2-Acetylaminofluorene	181	16.308	16.308	(0.974)	352117	50.0000	51.72
149	Famphur	218	16.698	16.698	(0.998)	35246	50.0000	108.7(M)
* 153	Chrysene-d12	240	16.735	16.735	(1.000)	519397	40.0000	
151	4,4'-Methylenebis(2-Chloroani	266	16.815	16.815	(1.005)	79848	50.0000	52.96
162	7,12-Dimethylbenz(a)anthracen	256	18.760	18.760	(0.970)	412760	50.0000	50.71
163	Hexachlorophene	196	19.198	19.198	(0.992)	7749	50.0000	29.74
* 166	Perylene-d12	264	19.347	19.347	(1.000)	440492	40.0000	
169	3-methylcholanthrene	268	19.898	19.898	(1.028)	406465	50.0000	49.18

QC Flag Legend

M - Compound response manually integrated.

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

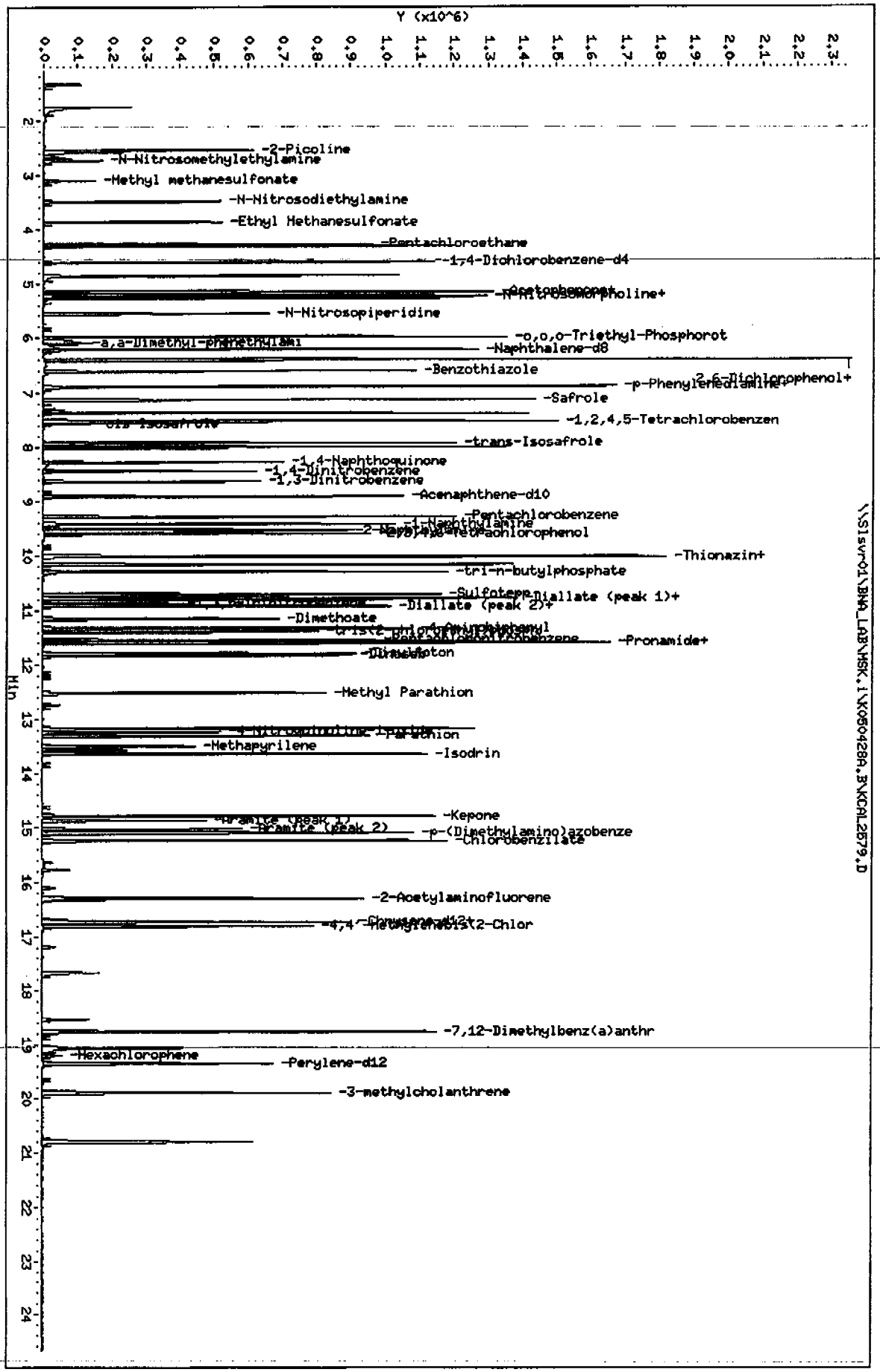
Instrument ID: MSK.i
Lab File ID: KCAL2579.D
Lab Smp Id: SSTD050APPIX
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Misc Info: SV0185-05

Calibration Date: 28-APR-2005
Calibration Time: 11:41
Client Smp ID: SSTD050APPIX
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	162145	81073	324290	162145	0.00
48 Naphthalene-d8	535939	267970	1071878	535939	0.00
82 Acenaphthene-d10	307602	153801	615204	307602	0.00
121 Phenanthrene-d10	574409	287205	1148818	574409	0.00
153 Chrysene-d12	519397	259699	1038794	519397	0.00
166 Perylene-d12	440492	220246	880984	440492	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.62	4.12	5.12	4.62	0.00
48 Naphthalene-d8	6.21	5.71	6.71	6.21	0.00
82 Acenaphthene-d10	8.91	8.41	9.41	8.91	0.00
121 Phenanthrene-d10	11.58	11.08	12.08	11.58	0.00
153 Chrysene-d12	16.74	16.24	17.24	16.74	0.00
166 Perylene-d12	19.35	18.85	19.85	19.35	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



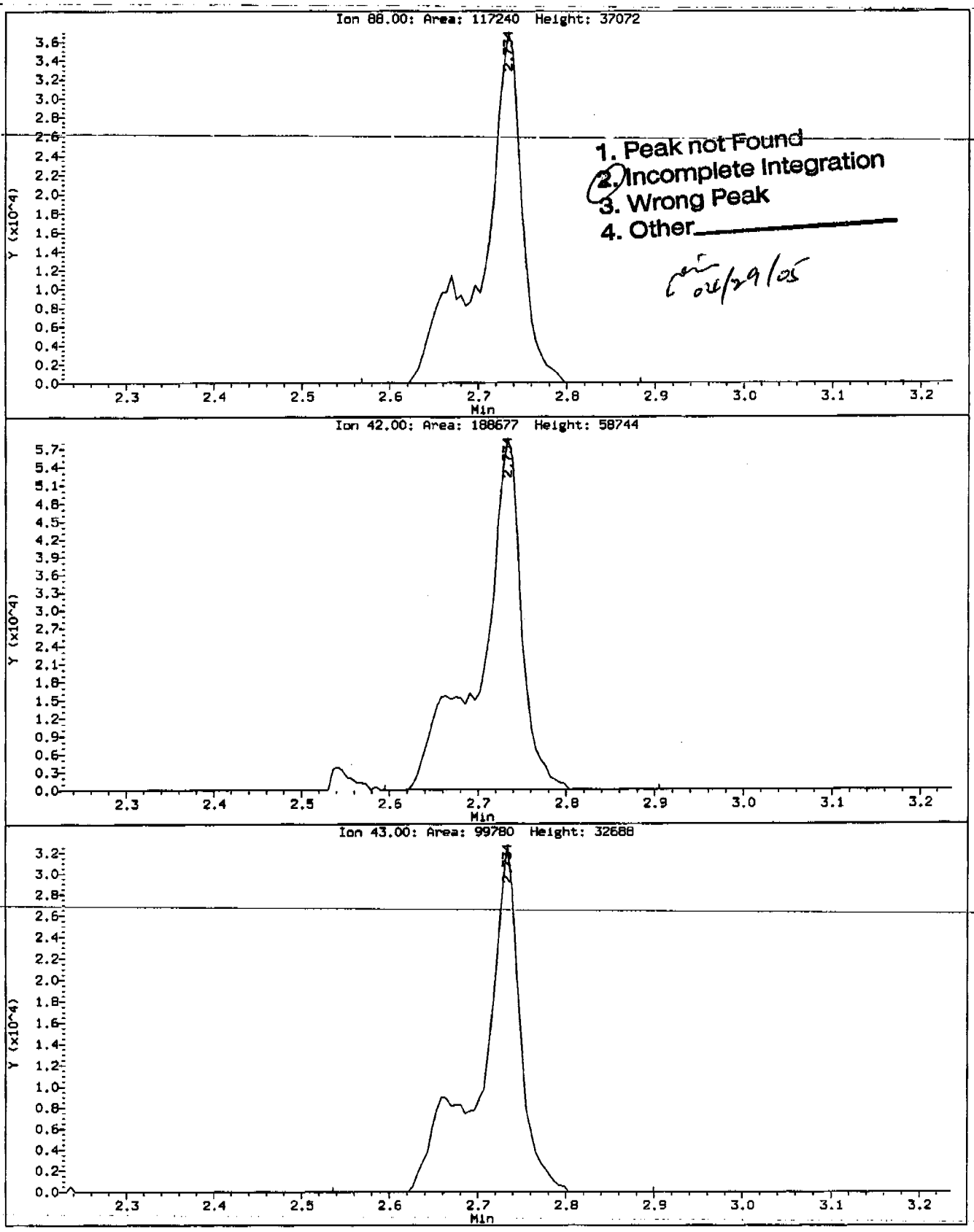
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2579.D
Date : 28-APR-2005 11:41
Client ID: SSTD050APPIX
Sample Info: SSTD050APPIX
Volume Injected (uL): 1.0
Column phase:

\\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2579.D

Instrument: MSK.i
Operator: XIA
Column diameter: 2.00

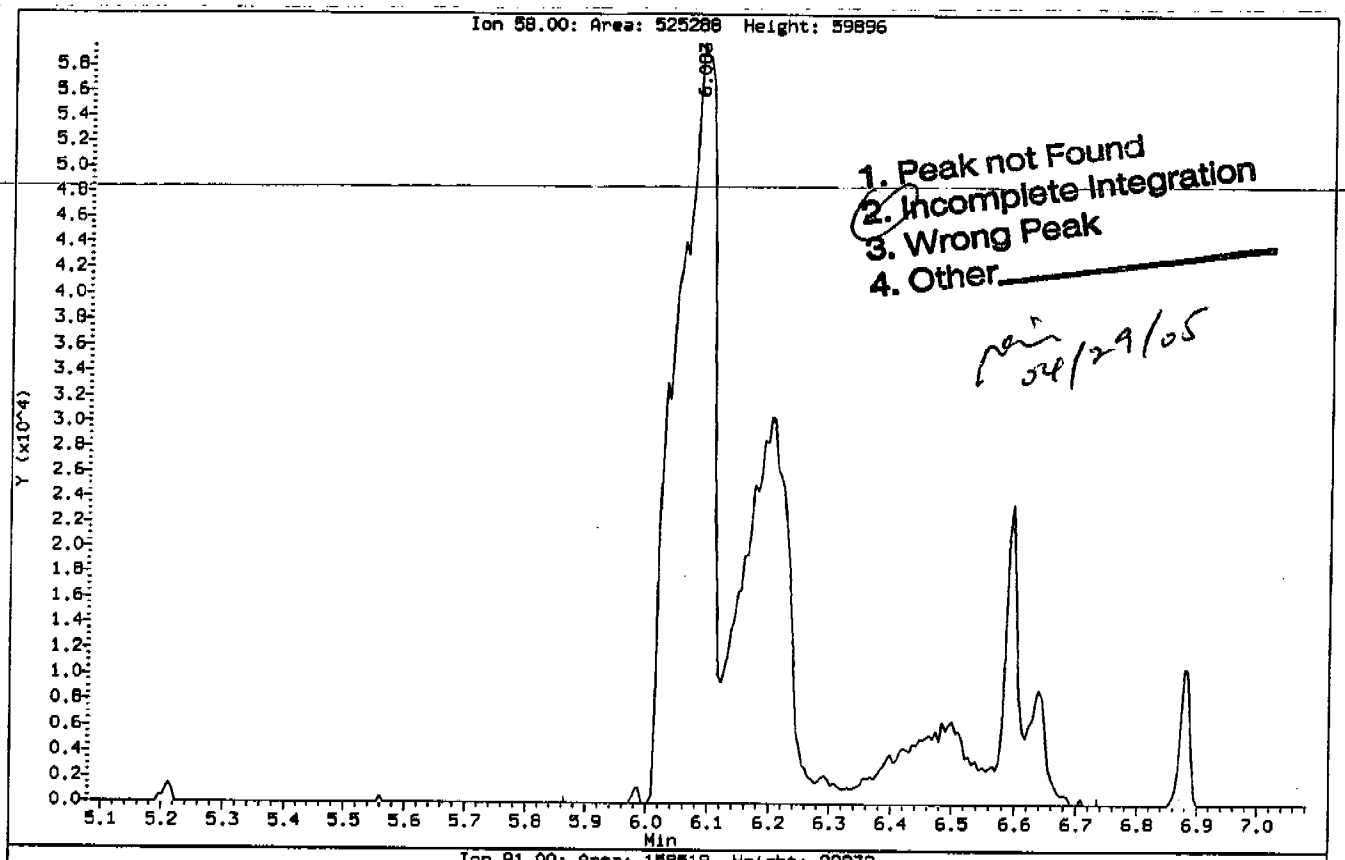
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2579.D
Injection Date: 28-APR-2005 11:41
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

Compound: N-Nitrosomethylethylamine
CAS Number: 10595-95-6



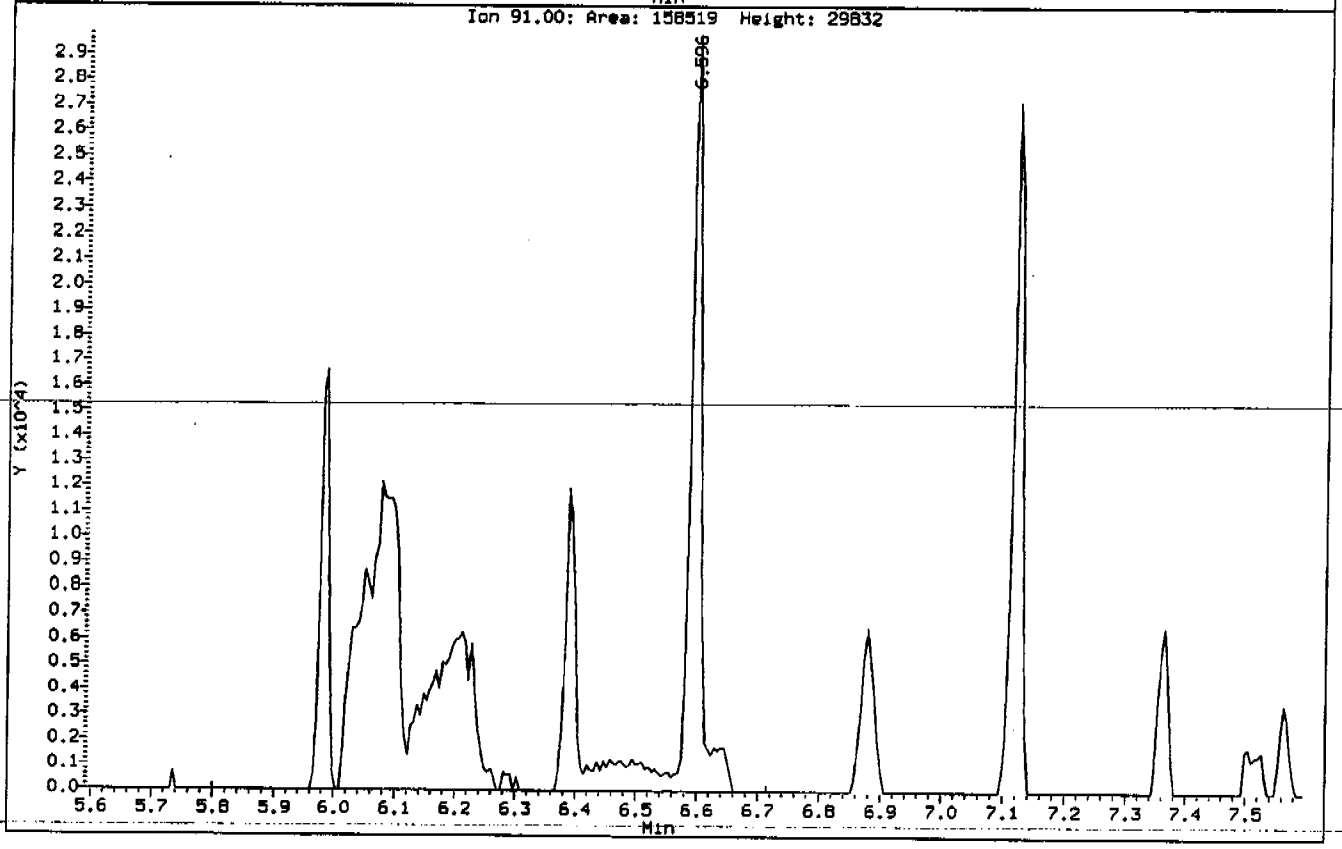
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2579.D
Injection Date: 28-APR-2005 11:41
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

Compound: a,a-Dimethyl-phenethylamine
CAS Number: 122-09-8



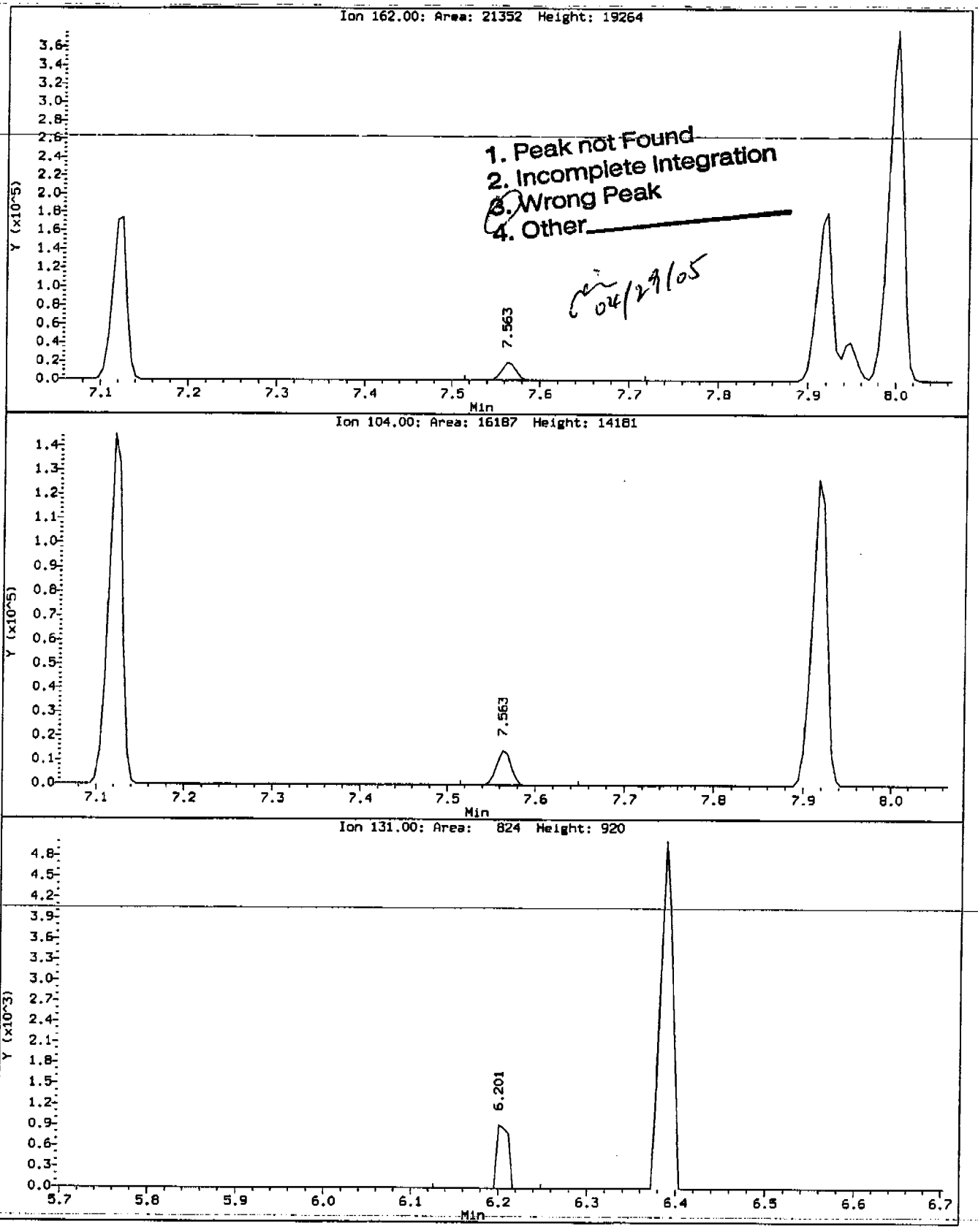
1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other _____

JH 4/29/05



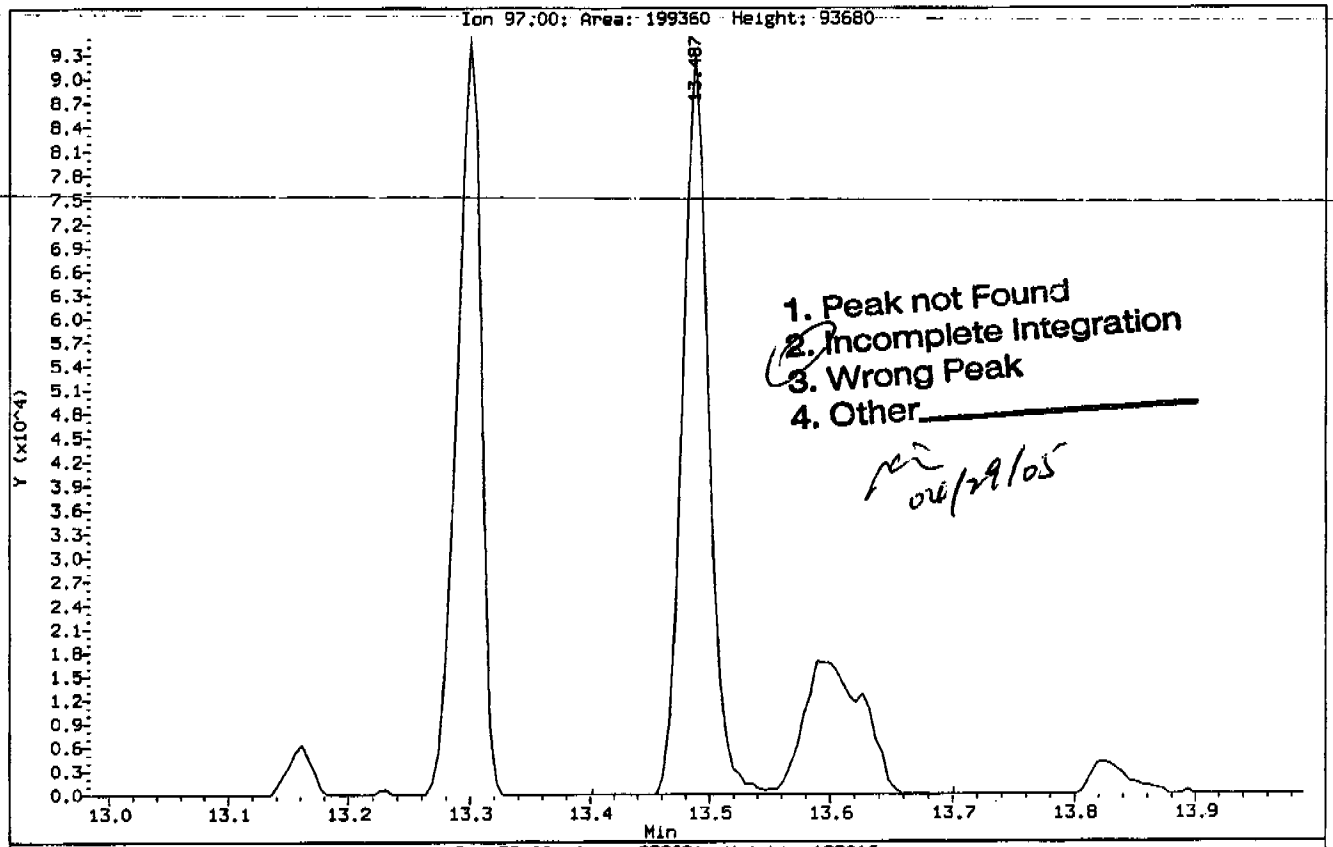
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2579.D
Injection Date: 28-APR-2005 11:41
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

Compound: cis-Isosafrole
CAS Number: 120-58-1



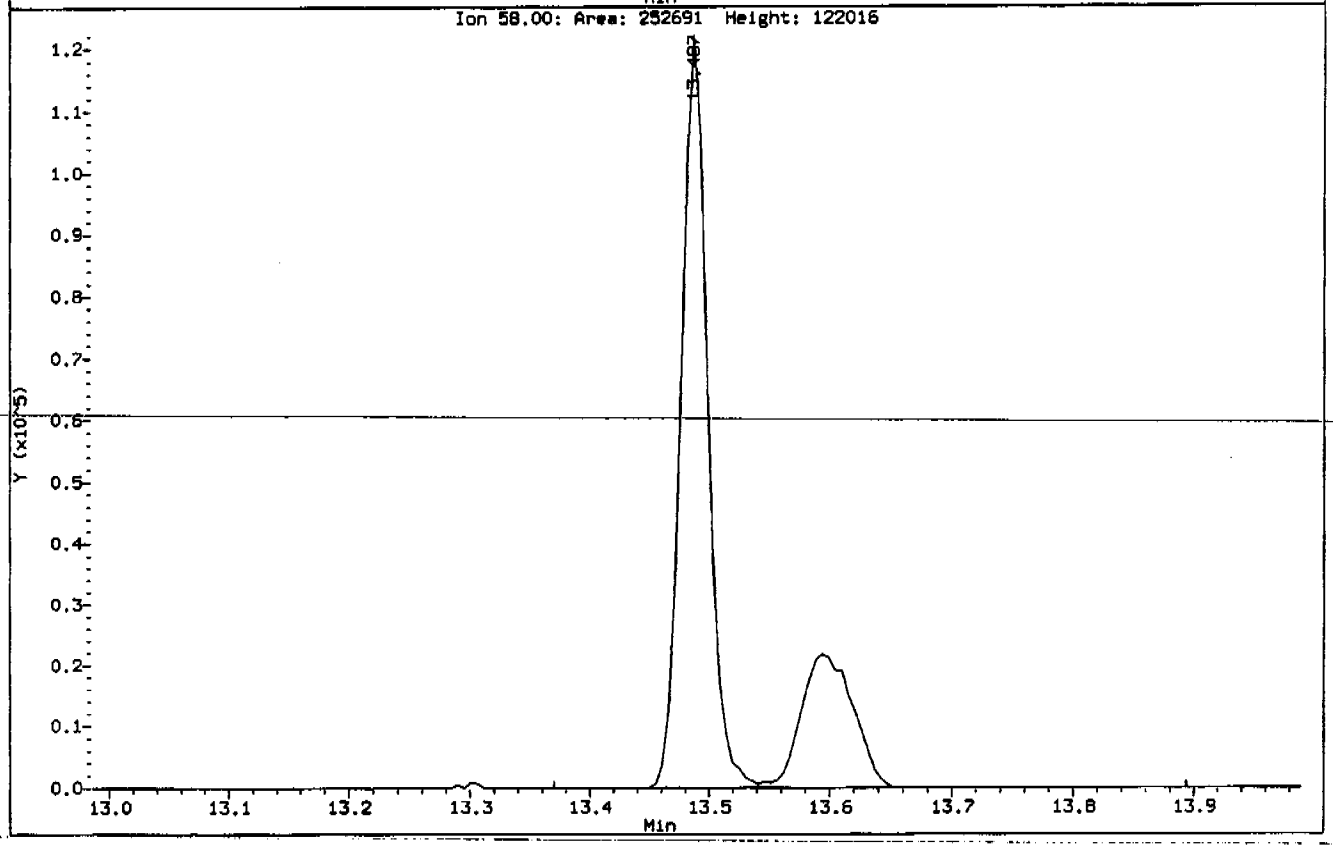
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2579.D
Injection Date: 28-APR-2005 11:41
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

Compound: Methapyrilene
CAS Number: 91-80-5



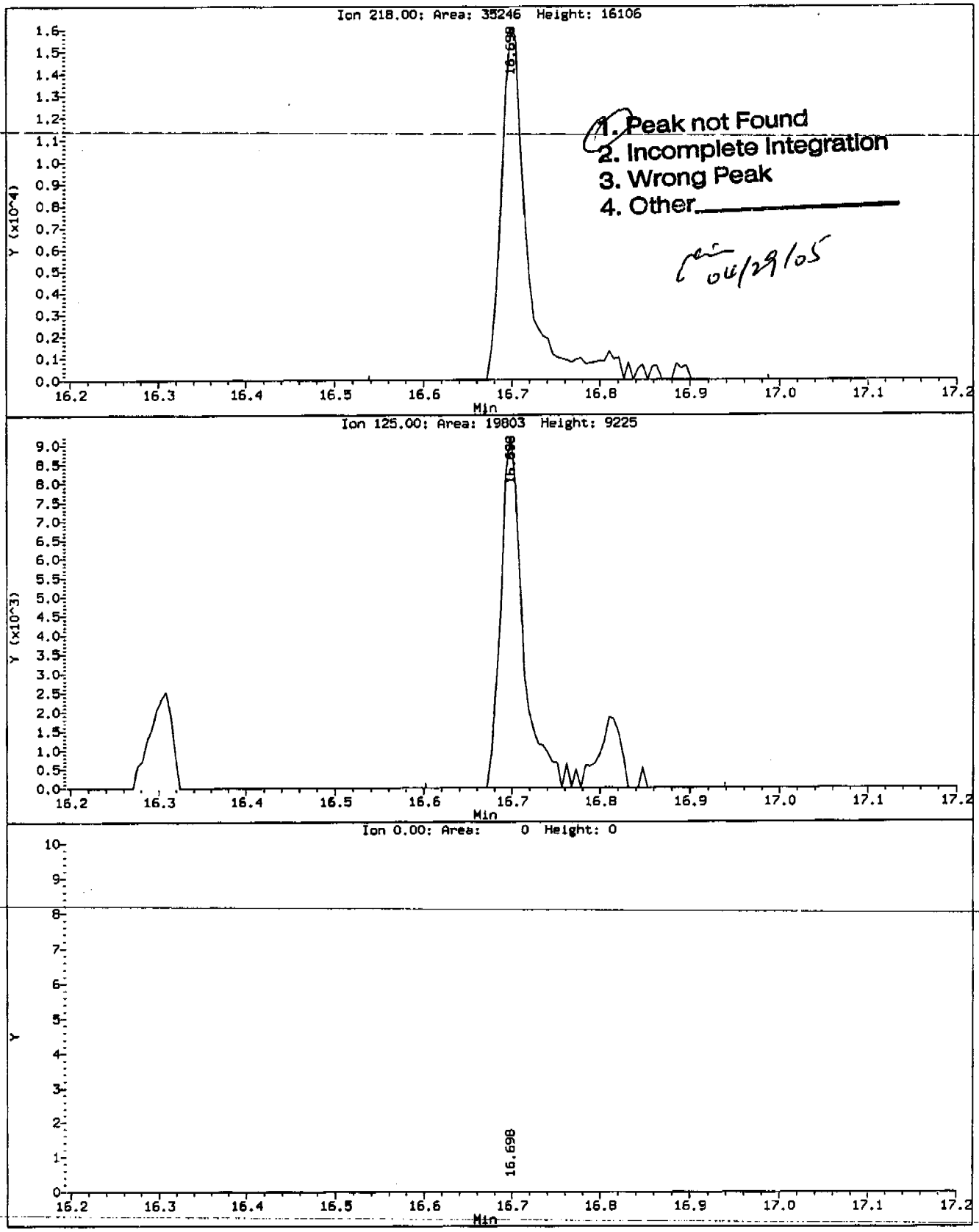
1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

01/29/05



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2579.D
Injection Date: 28-APR-2005 11:41
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

Compound: Famphur
CAS Number: 52-85-7



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

[signature] 04/29/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2581.D Page 1
Report Date: 29-Apr-2005 09:08

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2581.D
Lab Smp Id: SSTD160APPIX Client Smp ID: SSTD160APPIX
Inj Date : 28-APR-2005 12:50
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD160APPIX
Misc Info : SV0188-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Meth Date : 29-Apr-2005 09:07 hongs Quant Type: ISTD
Cal Date : 28-APR-2005 12:50 Cal File: KCAL2581.D
Als bottle: 5 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIX.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
7	2-Picoline	93	2.527	2.527	(0.548)	876346	160.000	176.3(A)
8	N-Nitrosomethylethylamine	88	2.730	2.730	(0.592)	372315	160.000	166.8(AM)
9	Methyl methanesulfonate	80	3.098	3.098	(0.672)	308410	160.000	182.6(A)
12	N-Nitrosodiethylamine	102	3.493	3.493	(0.758)	452820	160.000	173.9(A)
13	Ethyl Methanesulfonate	79	3.883	3.883	(0.842)	754320	160.000	170.6(A)
18	Pentachloroethane	117	4.268	4.268	(0.926)	367211	160.000	175.8(A)
* 22	1,4-Dichlorobenzene-d4	152	4.610	4.610	(1.000)	157286	40.0000	
30	Acetophenone	105	5.160	5.160	(0.833)	1458049	160.000	180.3(A)
31	N-Nitrosopyrrolidine	100	5.219	5.219	(0.843)	485296	160.000	181.4(A)
33	N-Nitrosomorpholine	116	5.235	5.235	(0.846)	233456	160.000	197.9(A)
34	O-Toluidine	106	5.235	5.235	(0.846)	1602194	160.000	187.0(A)
38	N-Nitrosopiperidine	114	5.572	5.572	(0.900)	434379	160.000	175.4(A)
43	o,o,o-Triethyl-Phosphorothioa	198	5.983	5.983	(0.966)	624538	160.000	183.9(A)
* 48	Naphthalene-d8	136	6.191	6.191	(1.000)	558559	40.0000	
46	a,a-Dimethyl-phenethylamine	58	6.074	6.074	(0.981)	1955959	160.000	183.4(AM)
52	2,6-Dichlorophenol	162	6.405	6.405	(1.035)	733515	160.000	183.3(A)
53	Hexachloropropene	213	6.378	6.378	(1.030)	868770	160.000	177.4(A)
55	Benzothiazole	135	6.597	6.597	(1.066)	1321579	160.000	182.7(A)
58	p-Phenylenediamine	108	6.902	6.902	(1.115)	709176	160.000	173.3(A)
57	n-Nitrosodi-n-butylamine	84	6.891	6.891	(1.113)	782887	160.000	176.0(A)
61	Safrole	162	7.121	7.121	(1.150)	773703	160.000	184.3(A)

04/29/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
65	1,2,4,5-Tetrachlorobenzene	216	7.527	7.527	(0.846)	2151431	160.000	180.2(A)
64	cis-Isosafrole	162	7.554	7.554	(0.849)	79454	160.000	171.6(AM)
70	trans-Isosafrole	162	7.922	7.922	(0.891)	1001681	160.000	200.4(A)
74	1,4-Naphthoquinone	158	8.264	8.264	(0.929)	171180	160.000	77.59
75	1,4-Dinitrobenzene	168	8.451	8.451	(1.365)	316148	160.000	185.4(A)
77	1,3-Dinitrobenzene	168	8.643	8.643	(0.972)	339294	160.000	177.3(A)
* 82	Acenaphthene-d10	164	8.894	8.894	(1.000)	331327	40.0000	
87	Pentachlorobenzene	250	9.284	9.284	(1.044)	1000152	160.000	172.2(A)
89	1-Naphthylamine	143	9.429	9.429	(1.060)	1542575	160.000	170.8(A)
90	2-Naphthylamine	143	9.573	9.573	(1.076)	1414457	160.000	172.8(A)
92	2,3,4,6-Tetrachlorophenol	232	9.605	9.605	(1.080)	610558	160.000	203.7(A)
96	Thionazin	107	10.048	10.048	(1.130)	384758	160.000	173.4(A)
97	5-Nitro-o-toluidine	152	10.070	10.070	(0.869)	564722	160.000	176.7(A)
101	tri-n-butylphosphate	99	10.326	10.326	(1.161)	2664863	160.000	184.2(A)
105	Sulfotepp	97	10.721	10.721	(0.925)	423104	160.000	176.9(A)
106	Diallate (peak 1)	86	10.775	10.775	(0.929)	841377	160.000	177.3(A)
108	Phorate	75	10.802	10.802	(0.932)	1566675	160.000	183.1(A)
111	Diallate (peak 2)	86	10.908	10.908	(0.941)	170770	160.000	168.8(A)
107	1,3,5-Trinitrobenzene	213	10.898	10.898	(0.940)	276885	160.000	187.1(A)
110	Phenacetin	108	10.994	10.994	(0.948)	1101975	160.000	167.4(A)
113	Dimethoate	87	11.202	11.202	(0.966)	468512	160.000	119.9
116	4-Aminobiphenyl	169	11.346	11.346	(0.979)	2189894	160.000	183.7(A)
115	tris(2-chloroethyl)phosphate	63	11.437	11.437	(0.987)	571306	160.000	164.4(A)
119	Pentachloronitrobenzene	237	11.544	11.544	(0.996)	345040	160.000	168.9(A)
118	Pronamide	173	11.630	11.630	(1.003)	981361	160.000	165.9(A)
* 121	Phenanthrene-d10	188	11.592	11.592	(1.000)	626541	40.0000	
123	Disulfoton	88	11.790	11.790	(1.017)	1075549	160.000	178.5(A)
125	Dinoseb	211	11.843	11.843	(1.022)	713987	160.000	195.5(A)
128	Methyl Parathion	109	12.511	12.511	(1.079)	446238	160.000	128.4
131	4-Nitroquinoline-1-oxide	190	13.248	13.248	(1.143)	206373	160.000	155.4
130	Parathion	97	13.312	13.312	(1.148)	473659	160.000	170.0(A)
132	Methapyrilene	97	13.515	13.515	(1.166)	455839	160.000	107.2(M)
133	Isodrin	193	13.633	13.633	(1.176)	366639	160.000	168.8(A)
141	Kepone	272	14.781	14.781	(0.884)	16008	160.000	194.0(A)
140	Aramite (peak 1)	185	14.872	14.872	(0.889)	157712	160.000	167.2(A)
142	Aramite (peak 2)	185	15.033	15.033	(0.899)	238217	160.000	165.7(A)
143	p-(Dimethylamino)azobenzene	120	15.113	15.113	(0.904)	741843	160.000	166.7(A)
144	Chlorobenzilate	251	15.252	15.252	(0.912)	1134368	160.000	182.5(A)
148	2-Acetylaminofluorene	181	16.347	16.347	(0.978)	1201114	160.000	171.3(A)
149	Famphur	218	16.721	16.721	(1.000)	13284	160.000	39.79(M)
* 153	Chrysene-d12	240	16.721	16.721	(1.000)	534877	40.0000	
151	4,4'-Methylenebis(2-Chloroani	266	16.822	16.822	(1.006)	280639	160.000	180.7(A)
162	7,12-Dimethylbenz(a)anthracen	256	18.767	18.767	(0.970)	1455402	160.000	173.4(A)
163	Hexachlorophene	196	19.205	19.205	(0.993)	176125	160.000	655.6(A)
* 166	Perylene-d12	264	19.338	19.338	(1.000)	454175	40.0000	
169	3-methylcholanthrene	268	19.921	19.921	(1.030)	1554224	160.000	182.4(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2581.D Page 3
Report Date: 29-Apr-2005 08:42

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

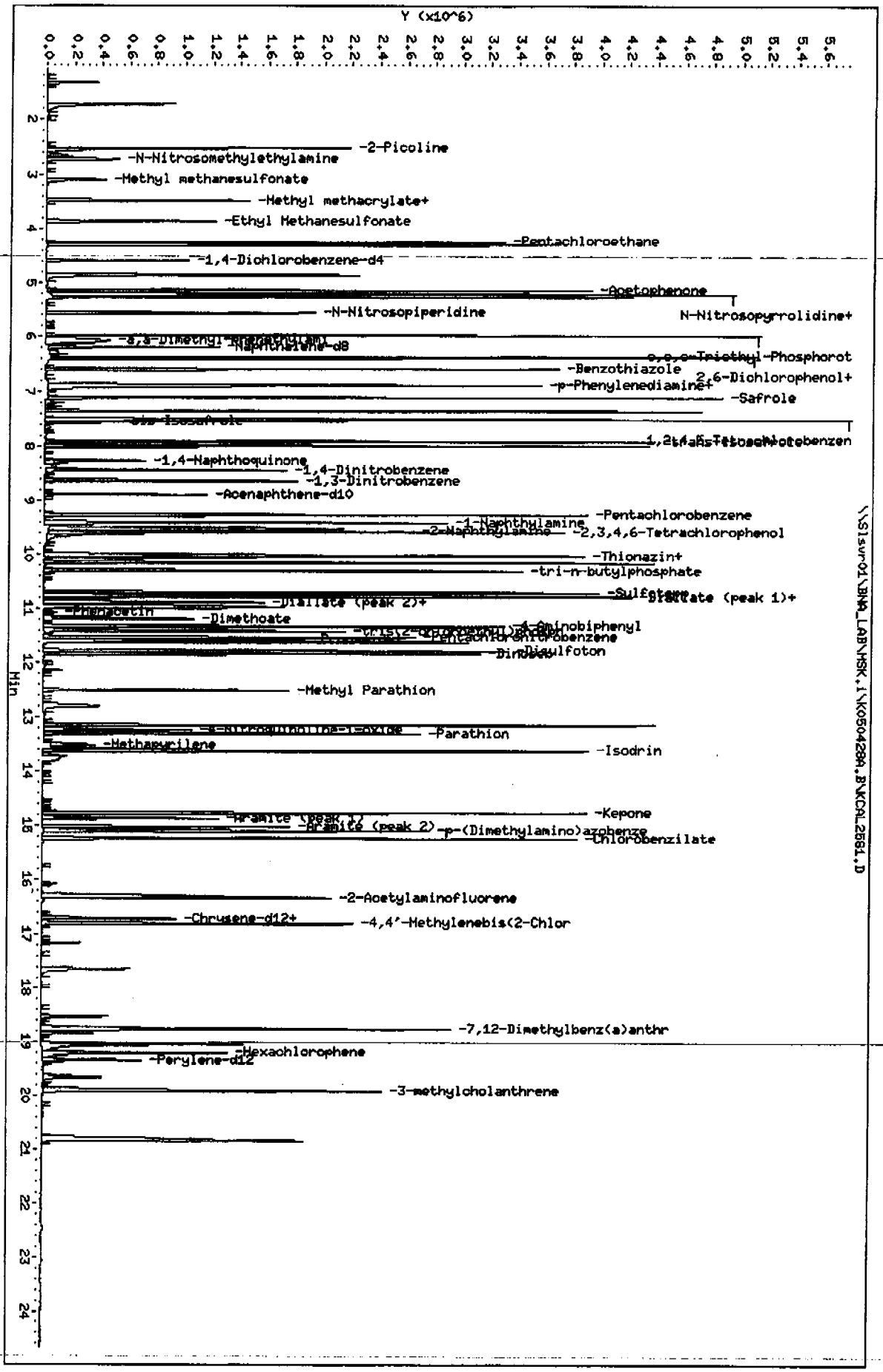
Instrument ID: MSK.i
Lab File ID: KCAL2581.D
Lab Smp Id: SSTD160APPIX
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Misc Info: SV0188-05

Calibration Date: 28-APR-2005
Calibration Time: 11:41
Client Smp ID: SSTD160APPIX
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	162145	81073	324290	157286	-3.00
48 Naphthalene-d8	535939	267970	1071878	558559	4.22
82 Acenaphthene-d10	307602	153801	615204	331327	7.71
121 Phenanthrene-d10	574409	287205	1148818	626541	9.08
153 Chrysene-d12	519397	259699	1038794	534877	2.98
166 Perylene-d12	440492	220246	880984	454175	3.11

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.62	4.12	5.12	4.61	-0.20
48 Naphthalene-d8	6.21	5.71	6.71	6.19	-0.23
82 Acenaphthene-d10	8.91	8.41	9.41	8.89	-0.16
121 Phenanthrene-d10	11.58	11.08	12.08	11.59	0.11
153 Chrysene-d12	16.74	16.24	17.24	16.72	-0.09
166 Perylene-d12	19.35	18.85	19.85	19.34	-0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.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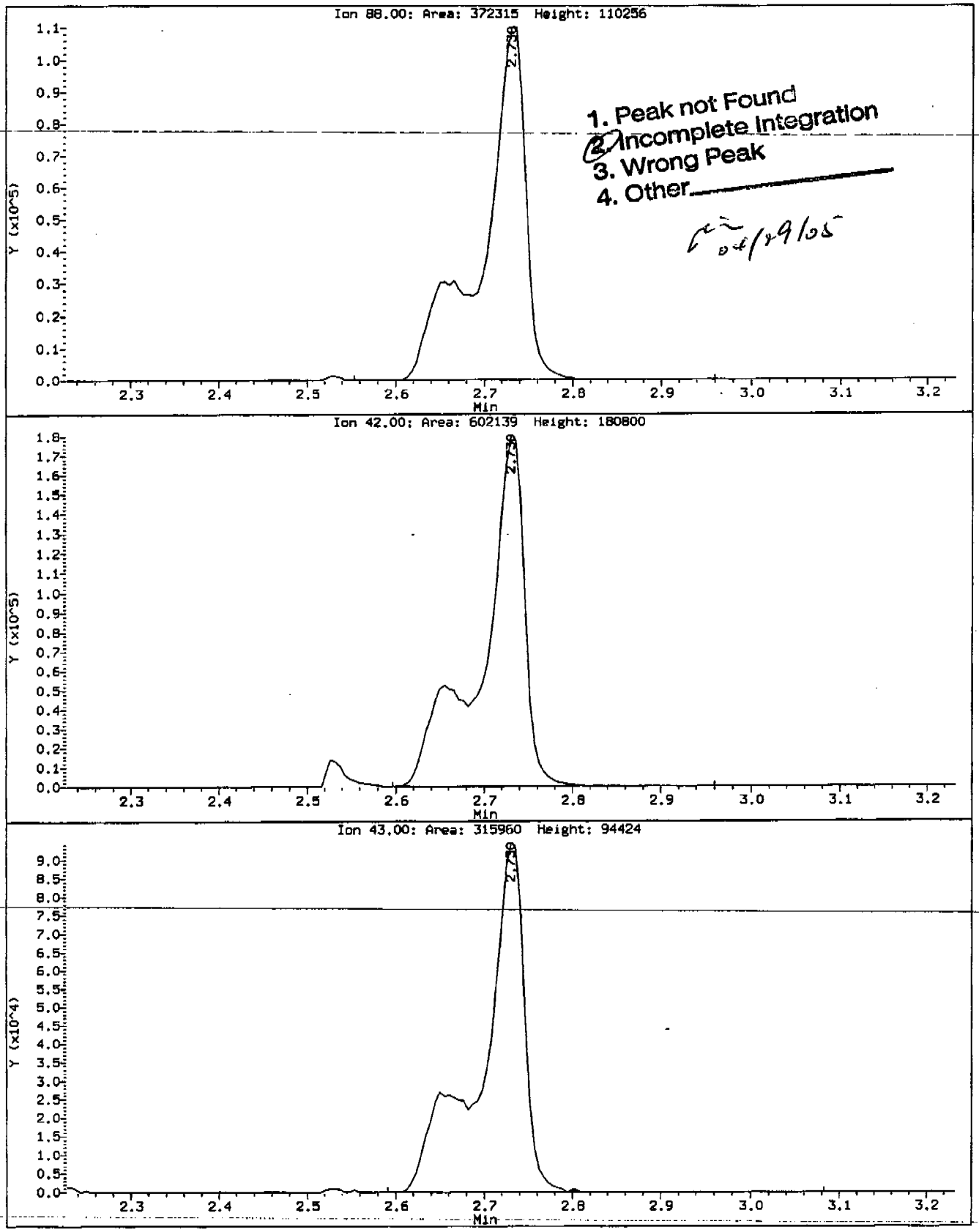
Min
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
-2-Picoline
-N-Nitrosomethylethylamine
-Methyl methanesulfonate
-Methyl methacrylate+
-Ethyl Methanesulfonate
-Pentachloroethane
-1,4-Dichlorobenzene-d4
-Acetophenone
-N-Nitrosopiperidine
N-Nitrosopyrrolidine+
-Naphthalene-d8
-Benzothiazole
2,6-Dichlorophenol+
-p-Phenylenediamine+
-Safrole
-1,4-Naphthoquinone
-1,4-Dinitrobenzene
-1,3-Dinitrobenzene
-Acenaphthene-d10
-Pentachlorobenzene
-1-Naphthylamine
-2-Naphthylamine
-2,3,4,6-Tetrachlorophenol
-Thionazin+
-tri-n-butylphosphate
-Diallate (peak 2)+
-Dimethoate
-Methyl Parathion
-Parathion
-Isodrin
-Kepone
-Chlorobenzilate
-2-Acetylaminofluorene
-Chrysene-d12+
-4,4'-Methylenebis(2-Chlor
-7,12-Dimethylbenz(a)anthr
-Perylene-d12
-3-methylcholanthrene
\\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2561.D
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2561.D
Date : 28-APR-2005 12:50
Client ID: SSTM160APPIX
Sample Info: SSTD160APPIX
Volume Injected (uL): 1.0
Column phase:
Instrument: MSK.i
Operator: XIA
Column diameter: 2.00

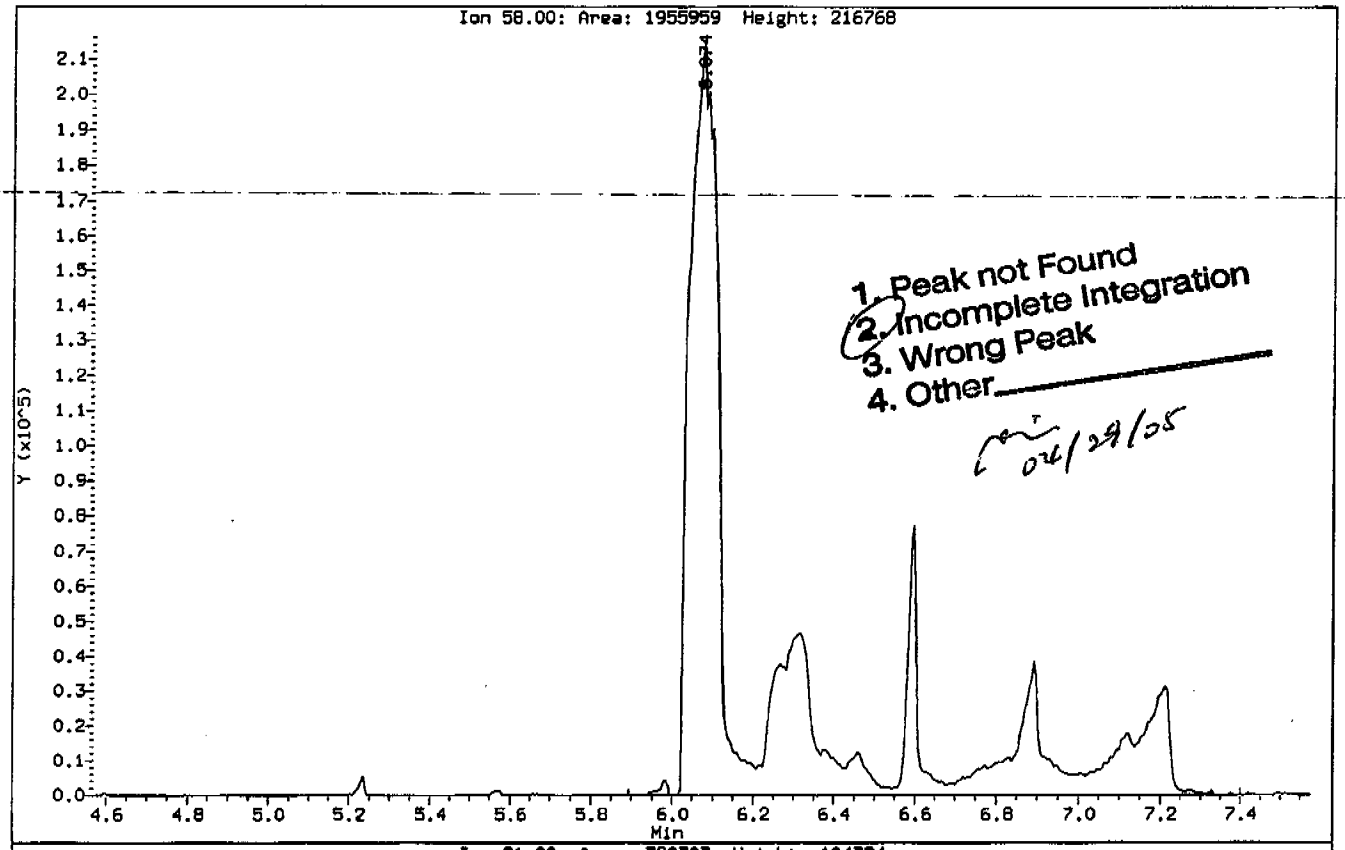
Data File: \\Slavr01\BNA_LAB\MSK.i\K050428A.B\KCAL2581.D
Injection Date: 28-APR-2005 12:50
Instrument: MSK.i
Client Sample ID: SSTD160APPIX

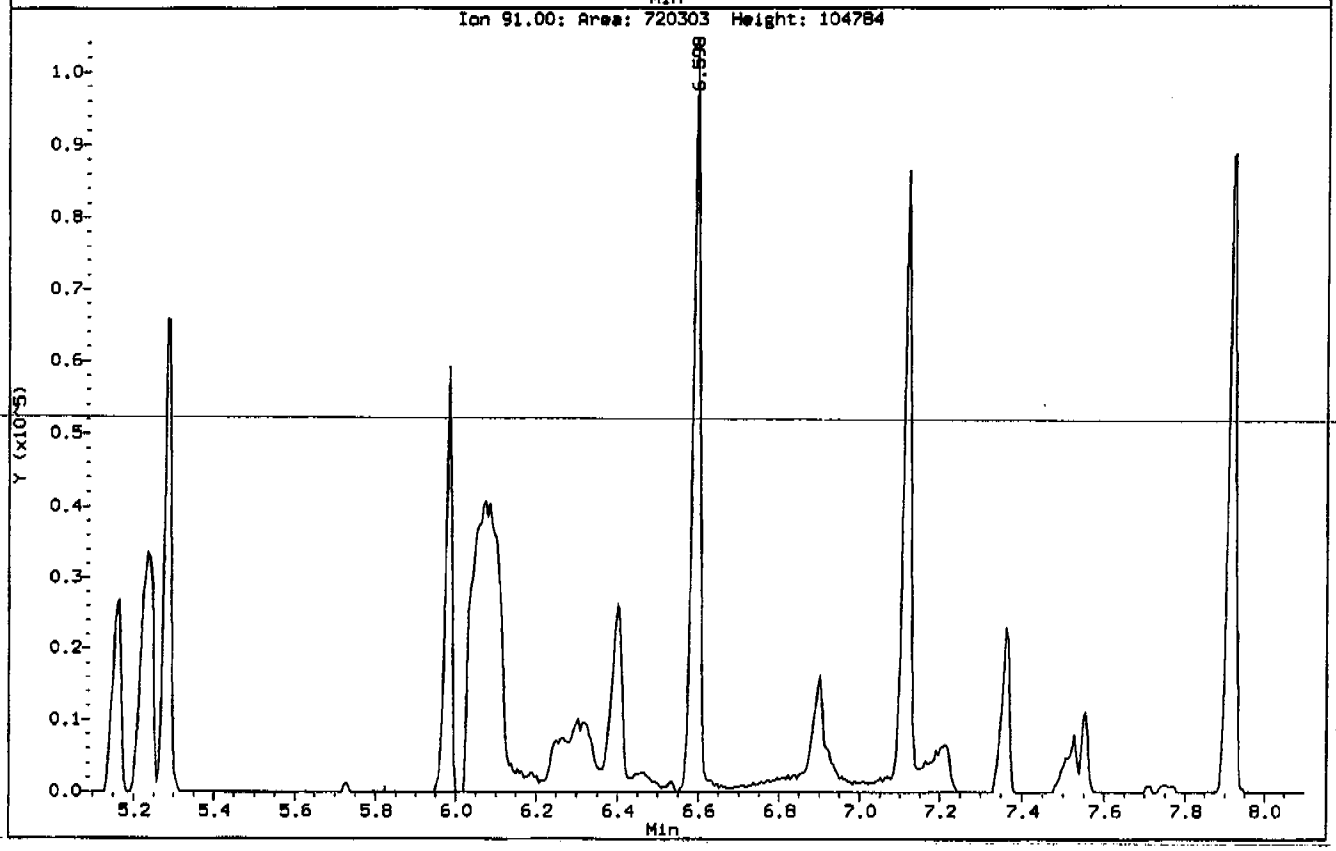
Compound: N-Nitrosomethylethylamine
CAS Number: 10595-95-6



Data File: \\Slavr01\BNA_LAB\MSK.i\K050428A.B\KCAL2581.D
Injection Date: 28-APR-2005 12:50
Instrument: MSK.i
Client Sample ID: SSTD160APPIX

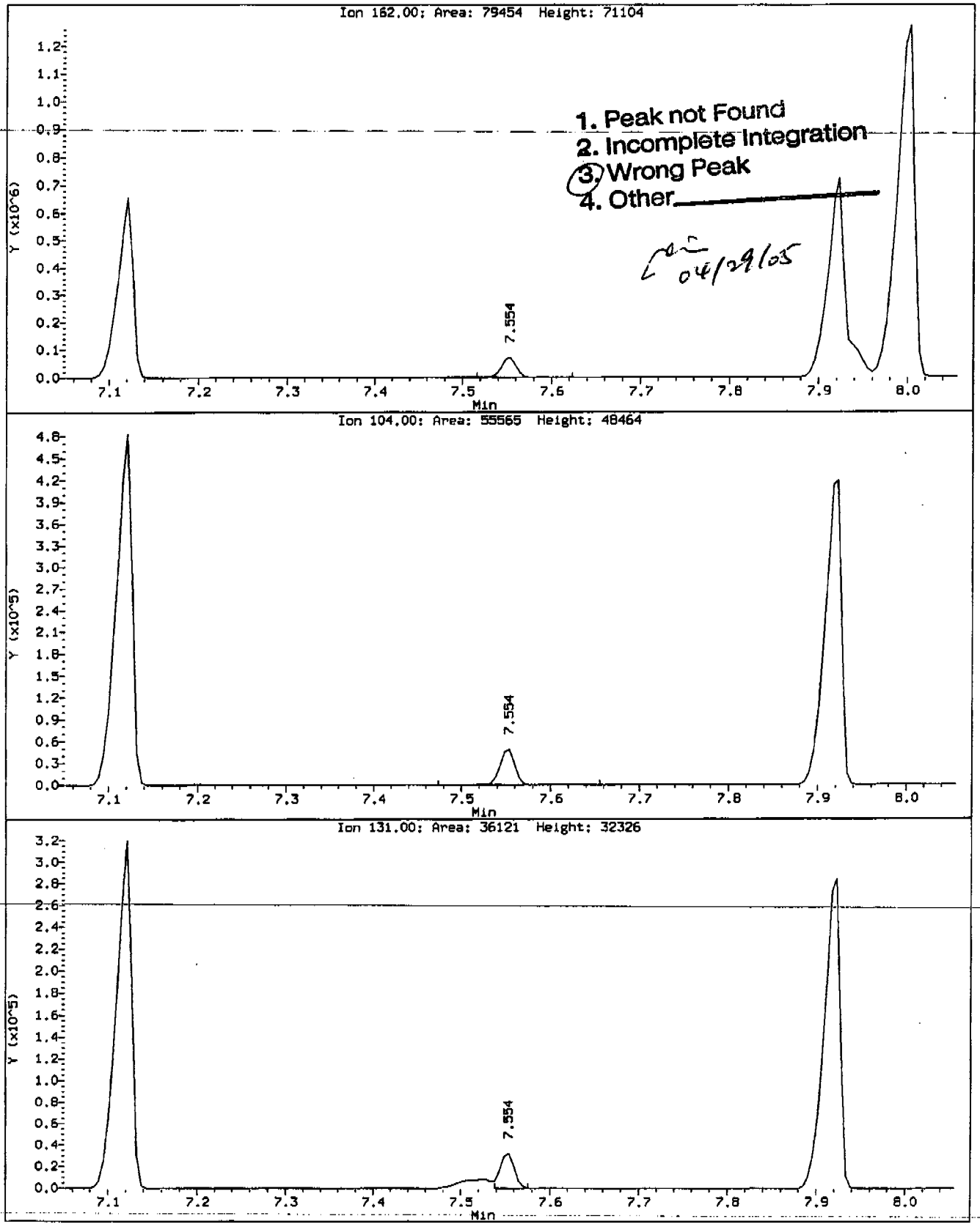
Compound: a,a-Dimethyl-phenethylamine
CAS Number: 122-09-8





Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2581.D
Injection Date: 28-APR-2005 12:50
Instrument: MSK.i
Client Sample ID: 5STD160APPIX

Compound: cis-Isosafrole
CAS Number: 120-58-1

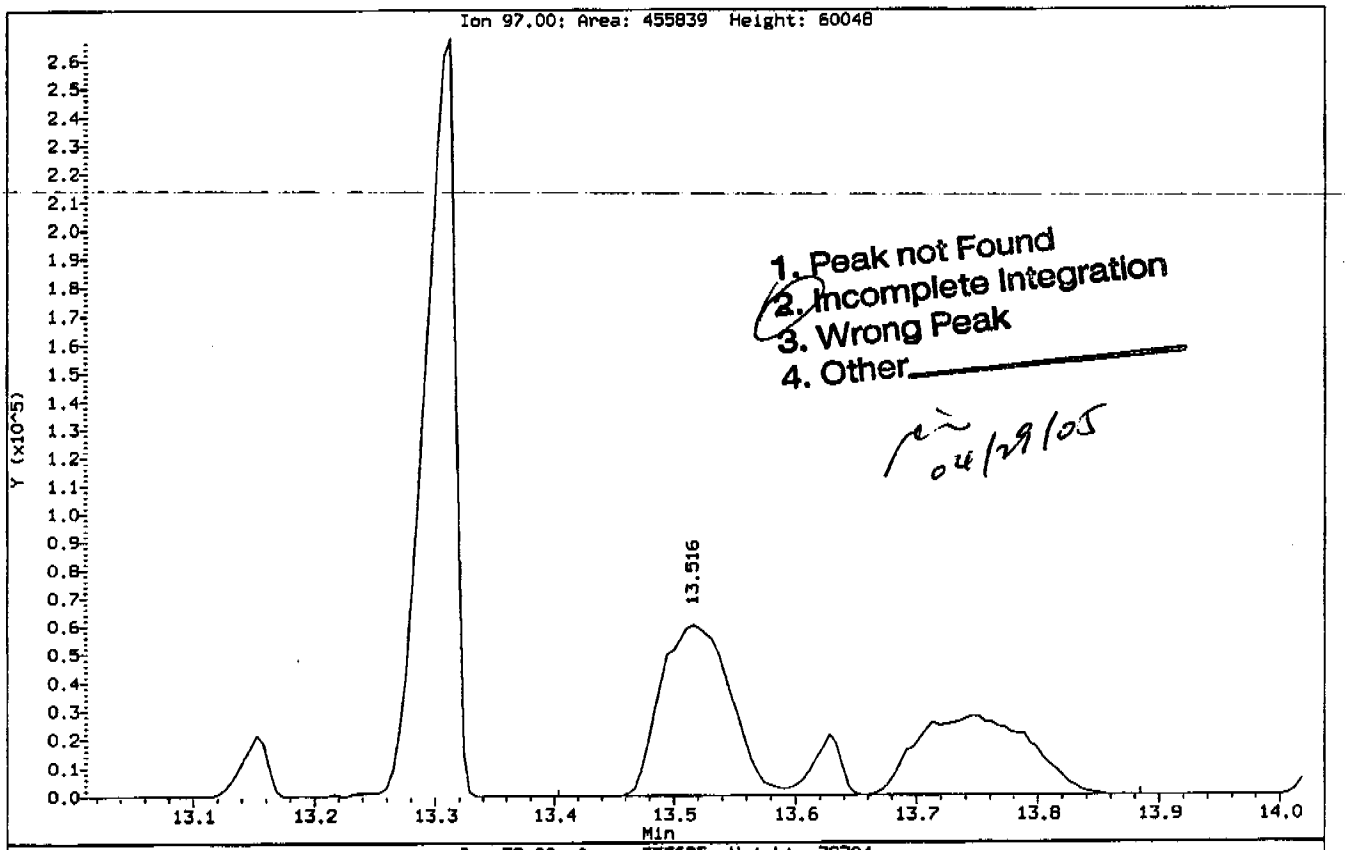


1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

04/29/05

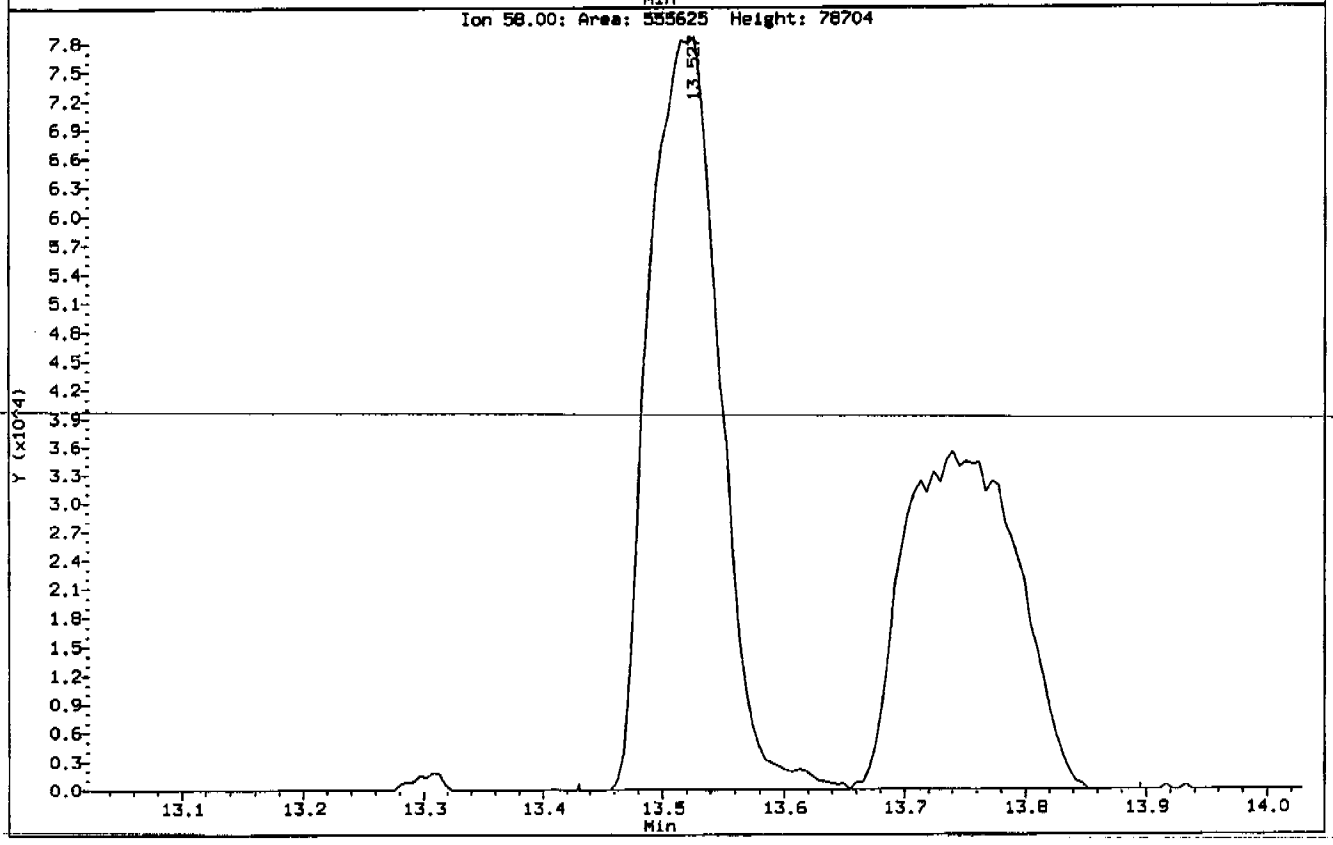
Data File: \\Slavr01\BNA_LAB\MSK.i\K050428A.B\KCAL2581.D
Injection Date: 28-APR-2005 12:50
Instrument: MSK.i
Client Sample ID: SSTD160APPIX

Compound: Methapyrilene
CAS Number: 91-80-5



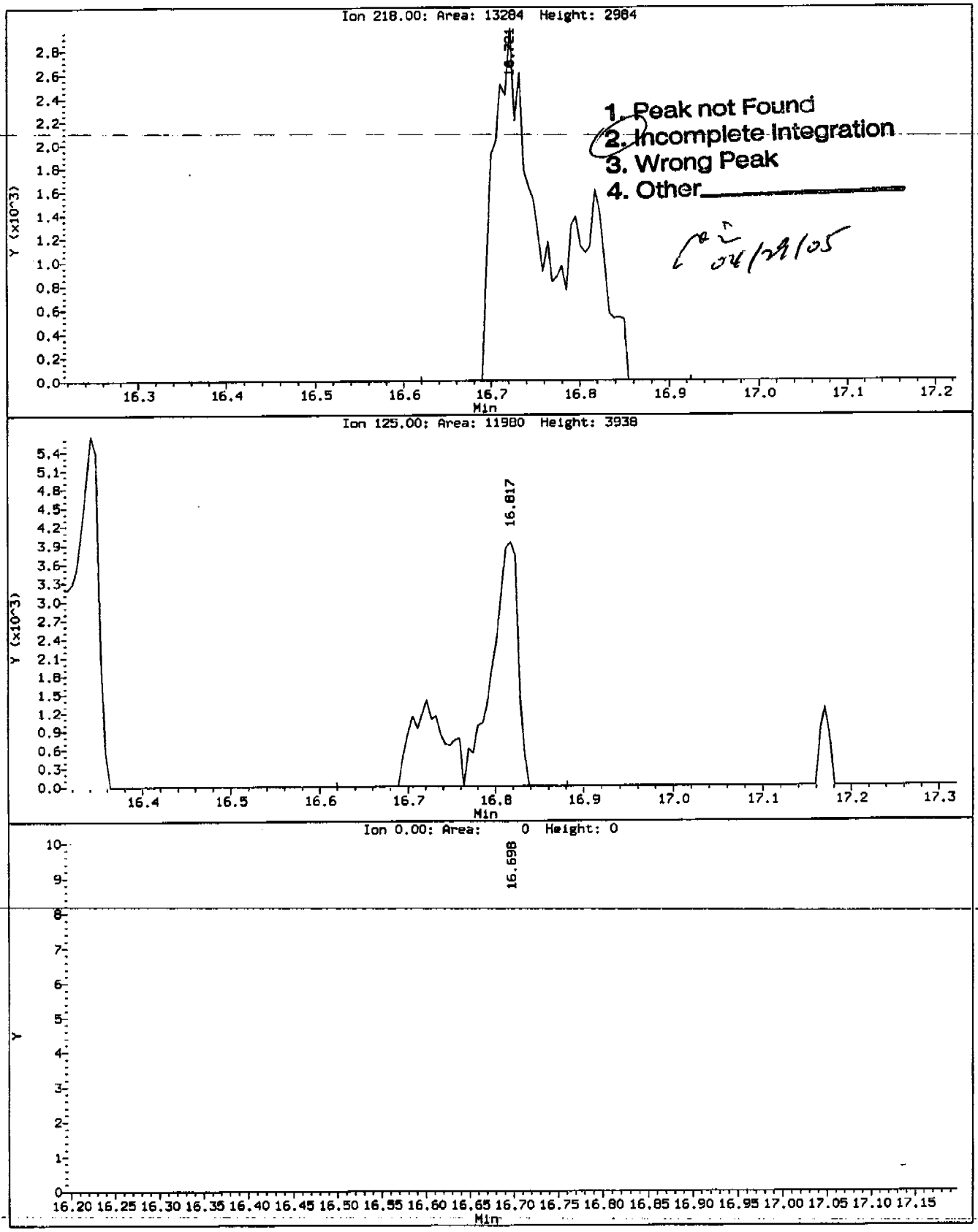
1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

04/29/05



Data File: \\Slavr01\BNA_LAB\MSK.i\K050428A.B\KCAL2581.D
Injection Date: 28-APR-2005 12:50
Instrument: MSK.i
Client Sample ID: SSTD160APPIX

Compound: Famphur
CAS Number: 52-85-7



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GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2582.D
Lab Smp Id: SSTD120APPIX Client Smp ID: SSTD120APPIX
Inj Date : 28-APR-2005 13:24
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD120APPIX
Misc Info : SV0187-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Meth Date : 29-Apr-2005 08:42 hongs Quant Type: ISTD
Cal Date : 28-APR-2005 13:24 Cal File: KCAL2582.D
Als bottle: 6 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIX.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
7	2-Picoline	93	2.530	2.530	(0.549)	632693	120.000	124.4
8	N-Nitrosomethylethylamine	88	2.727	2.727	(0.592)	282509	120.000	123.6(M)
9	Methyl methanesulfonate	80	3.096	3.096	(0.672)	225225	120.000	128.9
12	N-Nitrosodiethylamine	102	3.491	3.491	(0.758)	341812	120.000	126.7
13	Ethyl Methanesulfonate	79	3.876	3.876	(0.841)	562282	120.000	122.4
18	Pentachloroethane	117	4.271	4.271	(0.927)	270238	120.000	125.9
* 22	1,4-Dichlorobenzene-d4	152	4.608	4.608	(1.000)	161669	40.0000	
30	Acetophenone	105	5.158	5.158	(0.833)	1068225	120.000	126.9
31	N-Nitrosopyrrolidine	100	5.206	5.206	(0.840)	340903	120.000	124.2
33	N-Nitrosomorpholine	116	5.227	5.227	(0.844)	162928	120.000	134.1
34	O-Toluidine	106	5.238	5.238	(0.846)	1134515	120.000	129.1
38	N-Nitrosopiperidine	114	5.569	5.569	(0.899)	318413	120.000	125.6
43	o,o,o-Triethyl-Phosphorothioa	198	5.981	5.981	(0.966)	458138	120.000	131.2
* 48	Naphthalene-d8	136	6.194	6.194	(1.000)	571006	40.0000	
46	a,a-Dimethyl-phenethylamine	58	6.071	6.071	(0.980)	1420992	120.000	130.9(M)
52	2,6-Dichlorophenol	162	6.397	6.397	(1.033)	537519	120.000	133.3
53	Hexachloropropene	213	6.381	6.381	(1.030)	651747	120.000	130.1(M)
55	Benzothiazole	135	6.595	6.595	(1.065)	946286	120.000	127.2
58	p-Phenylenediamine	108	6.894	6.894	(1.113)	479505	120.000	119.4
57	n-Nitrosodi-n-butylamine	84	6.889	6.889	(1.112)	565324	120.000	124.3
61	Safrole	162	7.118	7.118	(1.149)	559272	120.000	130.0

04/29/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
65	1,2,4,5-Tetrachlorobenzene	216	7.524	7.524	(0.846)	1545981	120.000	127.4
64	cis-Isosafrole	162	7.556	7.556	(0.849)	57922	120.000	123.8(M)
70	trans-Isosafrole	162	7.920	7.920	(0.890)	661037	120.000	129.5
74	1,4-Naphthoquinone	158	8.267	8.267	(0.929)	174093	120.000	81.58
75	1,4-Dinitrobenzene	168	8.443	8.443	(1.363)	231938	120.000	133.6
77	1,3-Dinitrobenzene	168	8.641	8.641	(0.971)	250675	120.000	131.0
* 82	Acenaphthene-d10	164	8.897	8.897	(1.000)	334620	40.0000	
87	Pentachlorobenzene	250	9.282	9.282	(1.043)	738024	120.000	125.3
89	1-Naphthylamine	143	9.426	9.426	(1.059)	1167335	120.000	128.2
90	2-Naphthylamine	143	9.570	9.570	(1.076)	1056669	120.000	128.2
92	2,3,4,6-Tetrachlorophenol	232	9.603	9.603	(1.079)	428079	120.000	143.5
96	Thionazin	107	10.035	10.035	(1.128)	291978	120.000	130.2
97	5-Nitro-o-toluidine	152	10.046	10.046	(0.867)	409426	120.000	129.0
101	tri-n-butylphosphate	99	10.313	10.313	(1.159)	1885082	120.000	128.6
105	Sulfotepp	97	10.714	10.714	(0.925)	308094	120.000	128.8
106	Diallate (peak 1)	86	10.772	10.772	(0.930)	601217	120.000	126.7
108	Phorate	75	10.794	10.794	(0.932)	1100425	120.000	128.2
111	Diallate (peak 2)	86	10.906	10.906	(0.941)	122849	120.000	121.4
107	1,3,5-Trinitrobenzene	213	10.885	10.885	(0.940)	201804	120.000	138.0
110	Phenacetin	108	10.970	10.970	(0.947)	804532	120.000	122.7
113	Dimethoate	87	11.189	11.189	(0.966)	404758	120.000	105.6
116	4-Aminobiphenyl	169	11.339	11.339	(0.979)	1550673	120.000	131.2
115	tris(2-chloroethyl)phosphate	63	11.419	11.419	(0.986)	414473	120.000	119.2
119	Pentachloronitrobenzene	237	11.547	11.547	(0.997)	258669	120.000	127.1
118	Pronamide	173	11.616	11.616	(1.003)	719402	120.000	121.4
* 121	Phenanthrene-d10	188	11.584	11.584	(1.000)	625572	40.0000	
123	Disulfoton	88	11.782	11.782	(1.017)	763969	120.000	126.6
125	Dinoseb	211	11.836	11.836	(1.022)	513710	120.000	142.0
128	Methyl Parathion	109	12.509	12.509	(1.080)	372484	120.000	108.9
131	4-Nitroquinoline-1-oxide	190	13.241	13.241	(1.143)	162994	120.000	129.8
130	Parathion	97	13.305	13.305	(1.148)	348277	120.000	126.0
132	Methapyrilene	97	13.497	13.497	(1.165)	377298	120.000	89.17(M)
133	Isodrin	193	13.630	13.630	(1.177)	262442	120.000	119.6
141	Kepone	272	14.779	14.779	(0.884)	12345	120.000	147.7
140	Aramite (peak 1)	185	14.870	14.870	(0.889)	120048	120.000	125.0
142	Aramite (peak 2)	185	15.030	15.030	(0.899)	183382	120.000	125.7
143	p-(Dimethylamino)azobenzene	120	15.105	15.105	(0.903)	562960	120.000	123.7
144	Chlorobenzilate	251	15.249	15.249	(0.912)	828063	120.000	129.0
148	2-Acetylaminofluorene	181	16.334	16.334	(0.977)	923451	120.000	128.6
149	Famphur	218	16.702	16.702	(0.999)	24563	120.000	93.37(M)
* 153	Chrysene-d12	240	16.724	16.724	(1.000)	550836	40.0000	
151	4,4'-Methylenebis(2-Chloroani	266	16.814	16.814	(1.005)	206761	120.000	130.6
162	7,12-Dimethylbenz(a)anthracen	256	18.764	18.764	(0.970)	1109134	120.000	134.4
163	Hexachlorophene	196	19.047	19.047	(0.985)	9258	120.000	32.34(H)
* 166	Perylene-d12	264	19.341	19.341	(1.000)	447751	40.0000	
169	3-methylcholanthrene	268	19.907	19.907	(1.029)	1111655	120.000	132.0

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

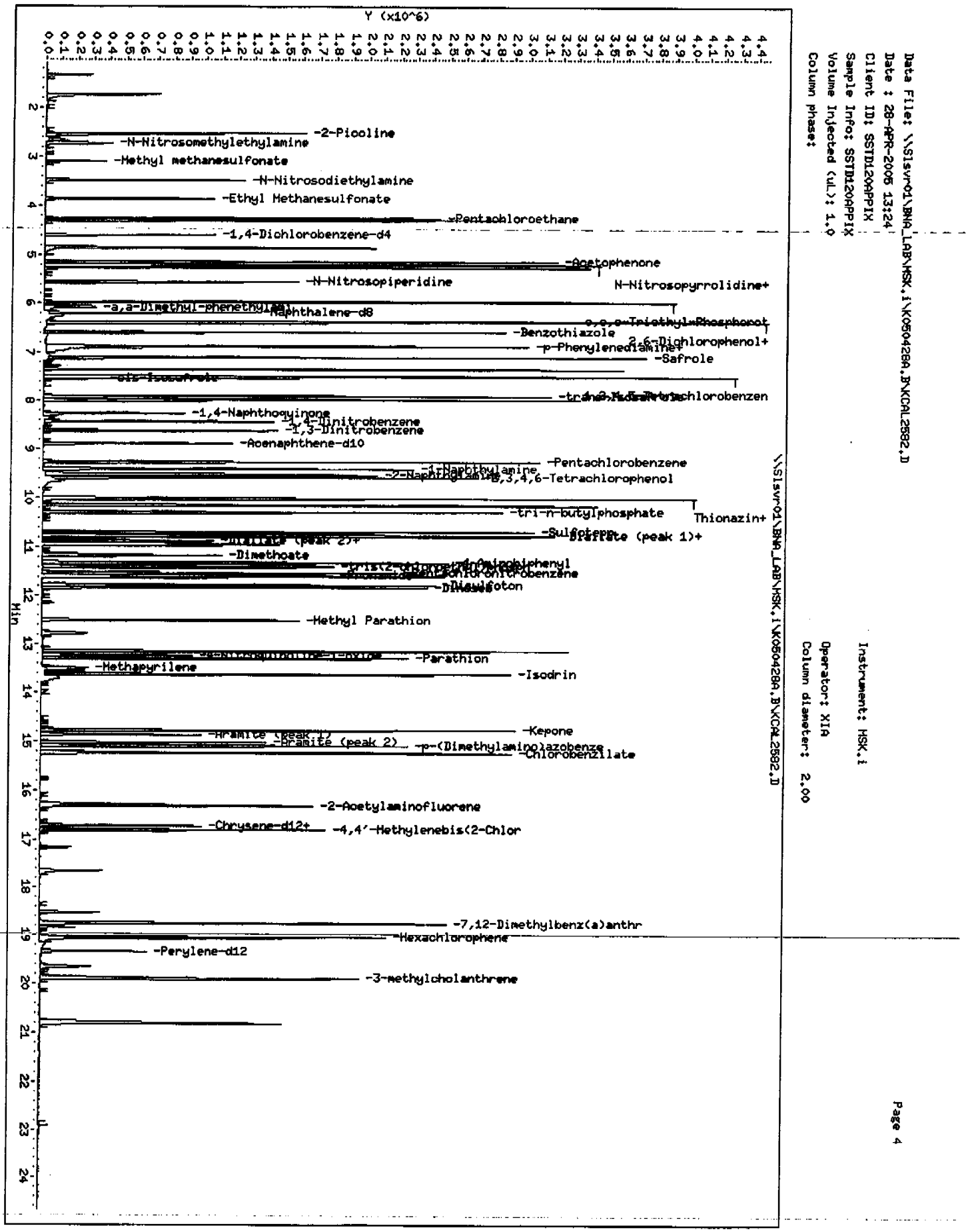
Instrument ID: MSK.i
Lab File ID: KCAL2582.D
Lab Smp Id: SSTD120APPIX
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Misc Info: SV0187-05

Calibration Date: 28-APR-2005
Calibration Time: 11:41
Client Smp ID: SSTD120APPIX
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	162145	81073	324290	161669	-0.29
48 Naphthalene-d8	535939	267970	1071878	571006	6.54
82 Acenaphthene-d10	307602	153801	615204	334620	8.78
121 Phenanthrene-d10	574409	287205	1148818	625572	8.91
153 Chrysene-d12	519397	259699	1038794	550836	6.05
166 Perylene-d12	440492	220246	880984	447751	1.65

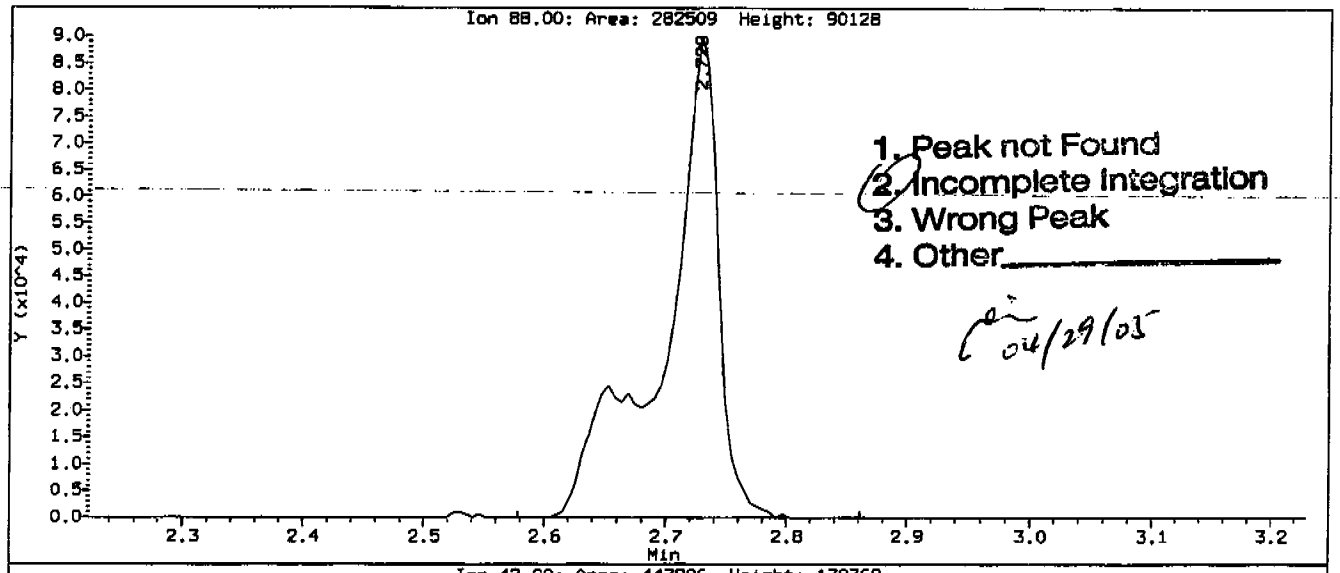
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.62	4.12	5.12	4.61	-0.25
48 Naphthalene-d8	6.21	5.71	6.71	6.19	-0.18
82 Acenaphthene-d10	8.91	8.41	9.41	8.90	-0.13
121 Phenanthrene-d10	11.58	11.08	12.08	11.58	0.04
153 Chrysene-d12	16.74	16.24	17.24	16.72	-0.07
166 Perylene-d12	19.35	18.85	19.85	19.34	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^6)
Min
-2-Picoline
-N-Nitrosomethylethylamine
-Methyl methanesulfonate
-N-Nitrosodiethylamine
-Ethyl Methanesulfonate
-Pentachloroethane
-1,4-Dichlorobenzene-d4
-Acetophenone
-N-Nitrosopiperidine
N-Nitrosopyrrolidine+
-a,a-Dimethyl-phenethylam
-Naphthalene-d8
-Benzothiazole
2,6-Dichlorophenol+
-p-Phenylenediamine+
-Safrole
-1,4-Naphthoquinone
-1,4-Dinitrobenzene
-1,3-Dinitrobenzene
-Acenaphthene-d10
-Pentachlorobenzene
-1-Naphthylamine
-2-Naphthylamine
2,3,4,6-Tetrachlorophenol
-tri-n-butylphosphate
Thionazin+
-Sulfotepp
-Dimethoate
-Disulfoton
-Methyl Parathion
-Parathion
-Methapyrilene
-Isodrin
-Kepone
-Aramite (peak 2)
-p-(Dimethylamino)azobenze
-Chlorobenzilate
-2-Acetylaminofluorene
-Chrysene-d12+
-4,4'-Methylenebis(2-Chlor
-7,12-Dimethylbenz(a)anthr
-Hexachlorophene
-Perylene-d12
-3-methylcholanthrene
Data File: \\Slsvr01\BNA_LAB\MSK.i\KO50428A.B\KCAL2582.D
Date : 28-APR-2005 13:24
Client ID: SSTD1200PPIX
Sample Info: SSTD1200PPIX
Volume Injected (uL): 1.0
Column phase:
\\Slsvr01\BNA_LAB\MSK.i\KO50428A.B\KCAL2582.D
Instrument: MSK.i
Operator: XIA
Column diameter: 2.00
Page 4

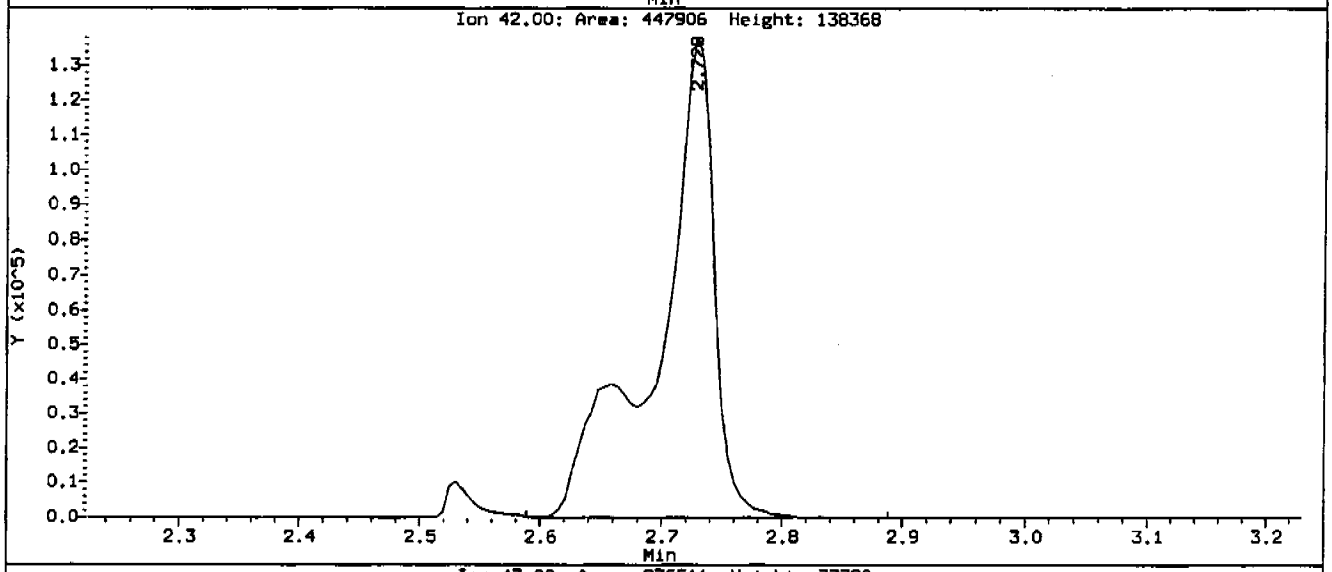
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2582.D
Injection Date: 28-APR-2005 13:24
Instrument: MSK.i
Client Sample ID: SSTD120APPIX

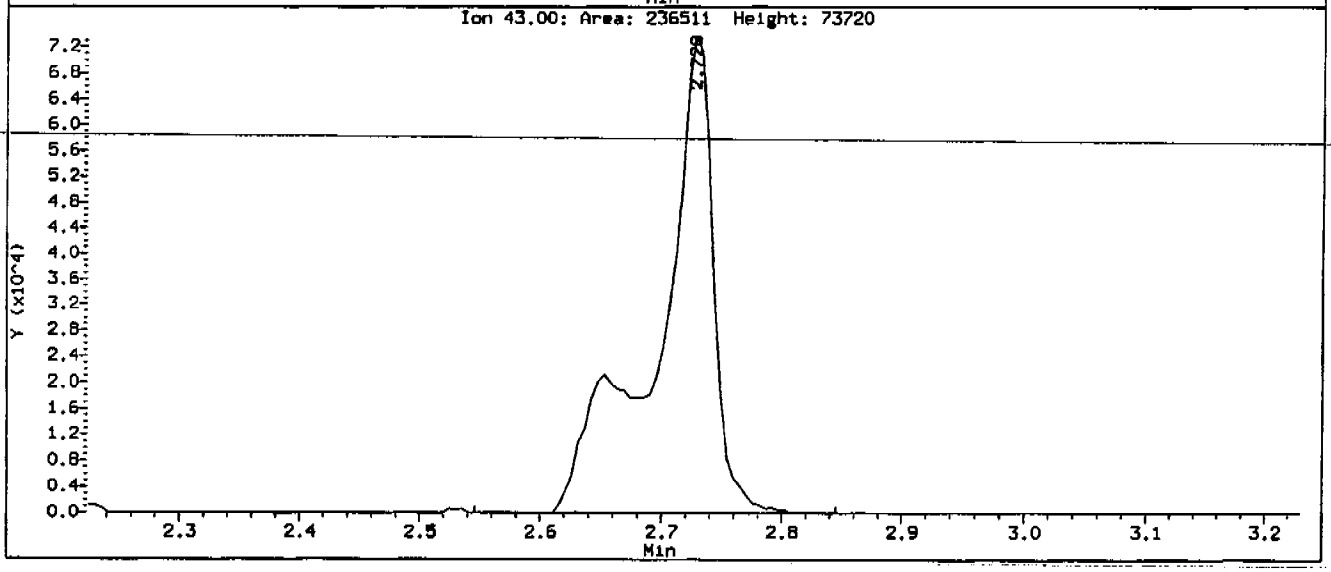
Compound: N-Nitrosomethylethylamine
CAS Number: 10595-95-6



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

04/29/05





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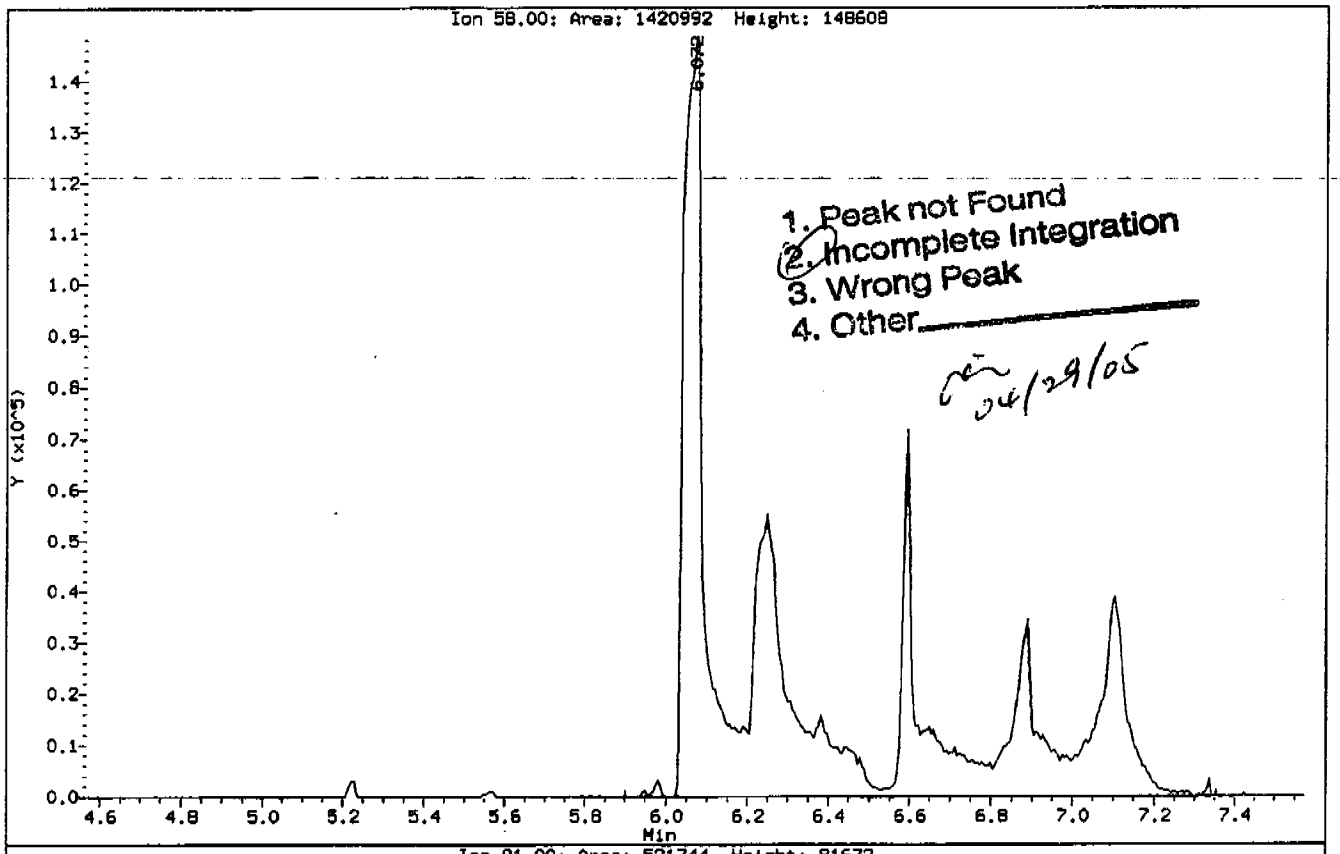
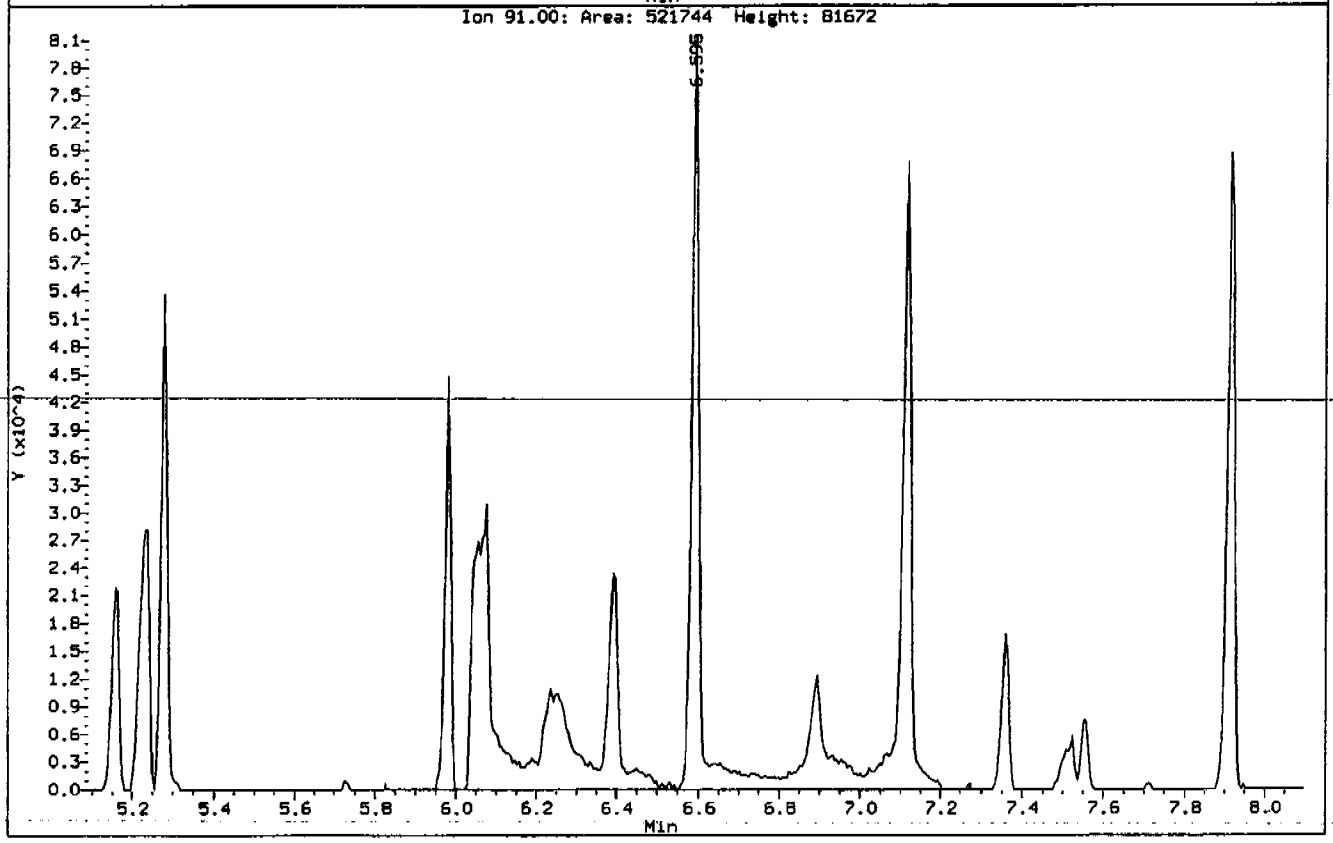
Injection Date: 28-APR-2005 13:24
Instrument: MSK.i
Client Sample ID: SSTD120APPIX

Compound: a,a-Dimethyl-phenethylamine
CAS Number: 122-09-8





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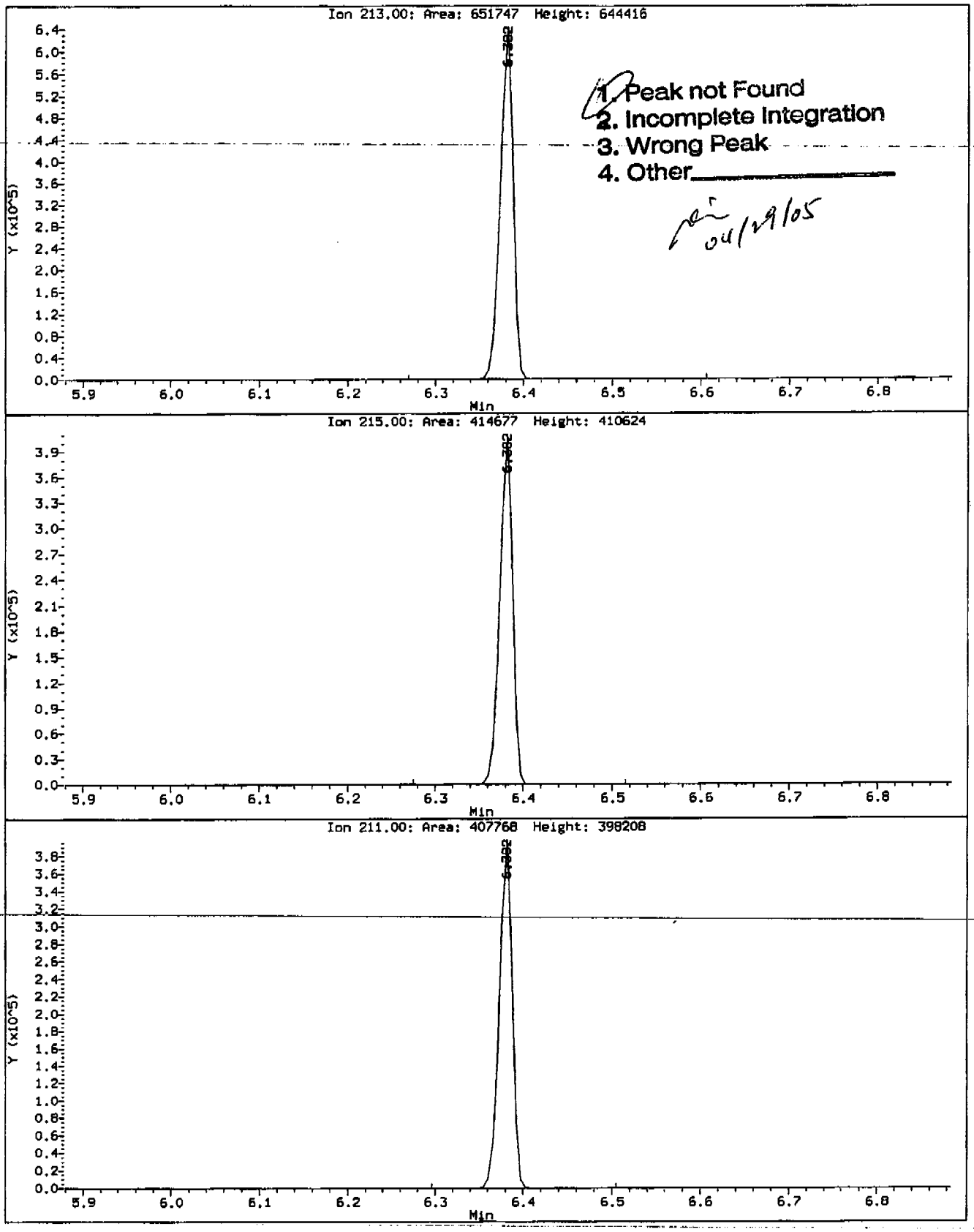
Injection Date: 28-APR-2005 13:24
Instrument: MSK.i
Client Sample ID: SSTD120APPIX

Compound: Hexachloropropene
CAS Number: 1888-71-7



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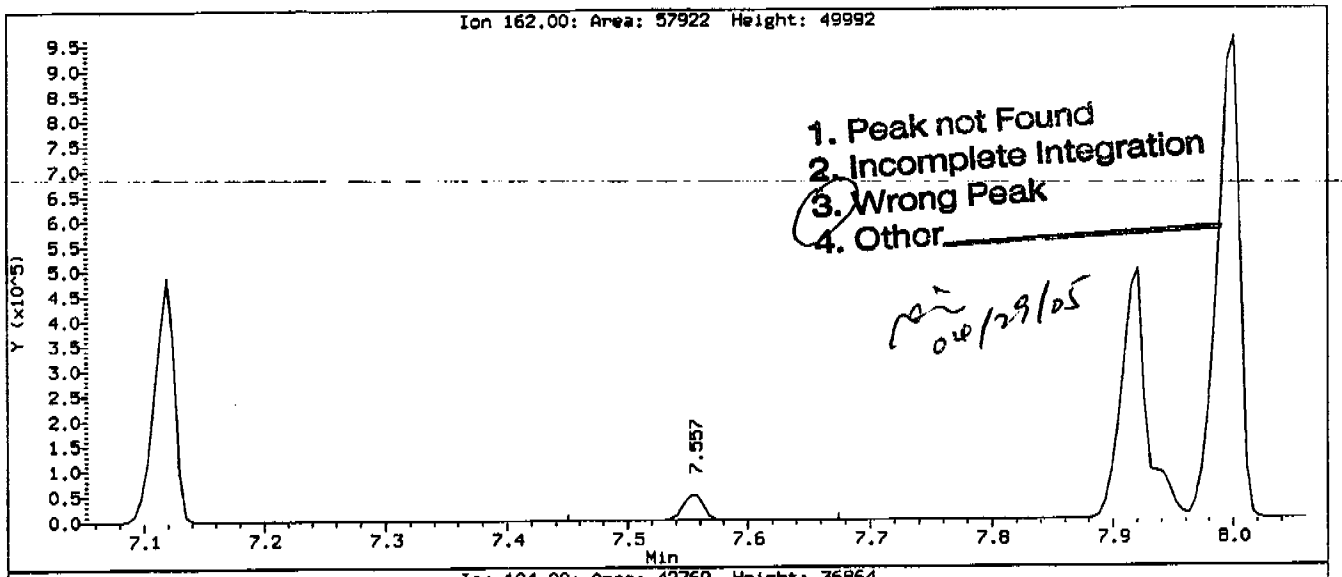
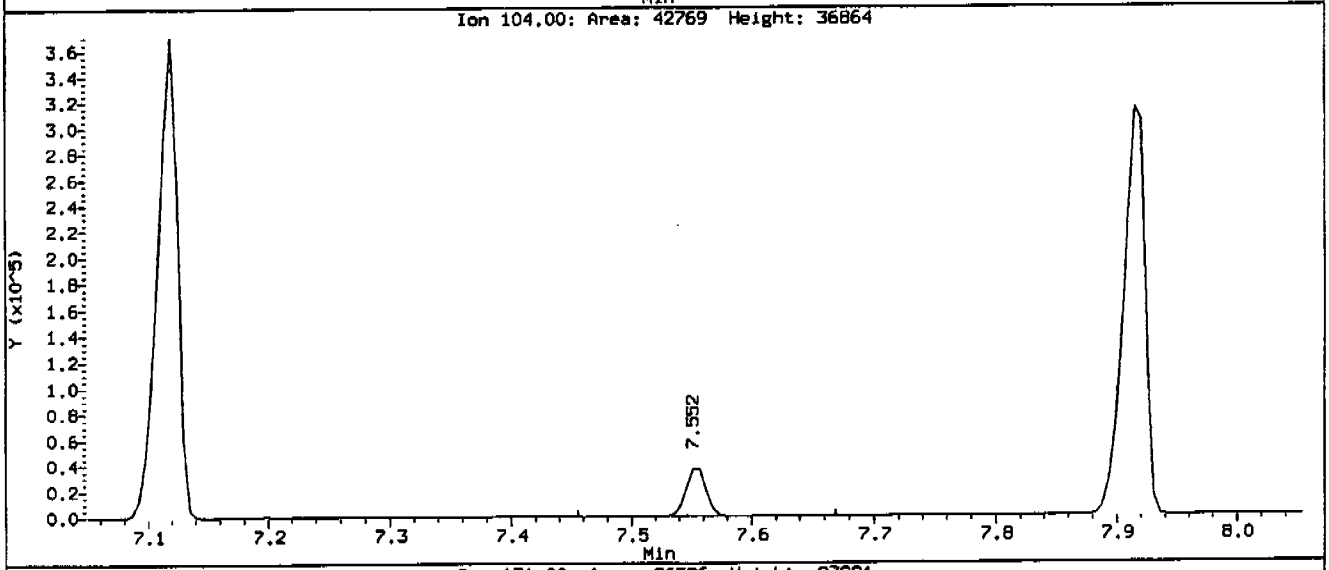
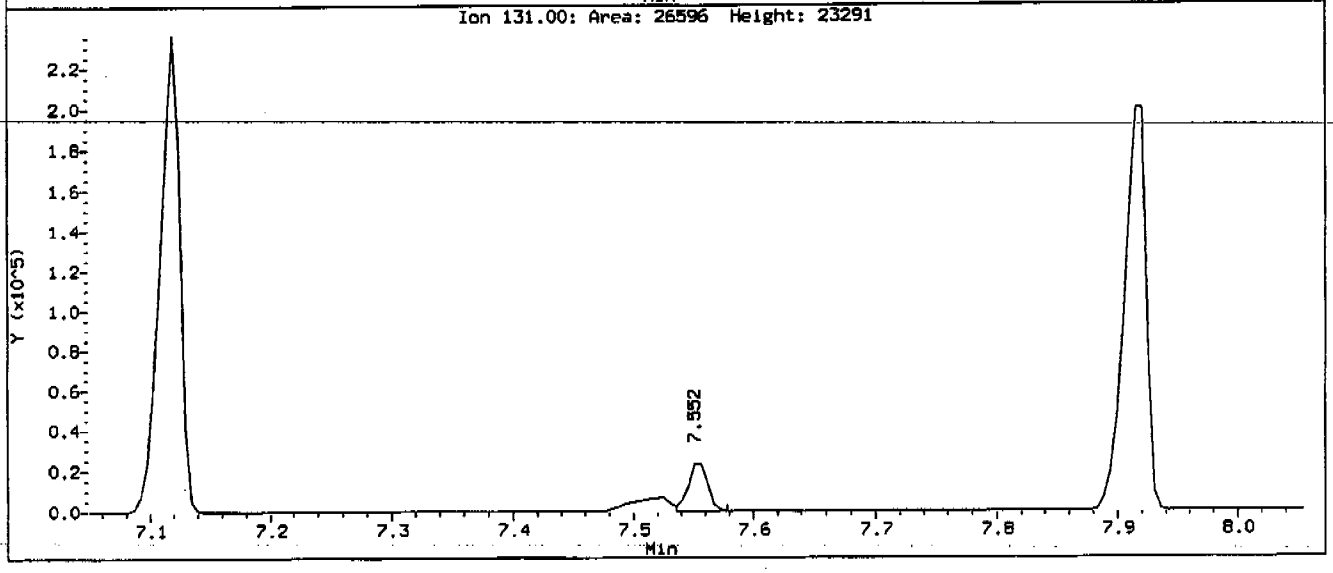
Injection Date: 28-APR-2005 13:24
Instrument: MSK.i
Client Sample ID: SSTD120APPIX

Compound: cis-Isosafrole
CAS Number: 120-58-1

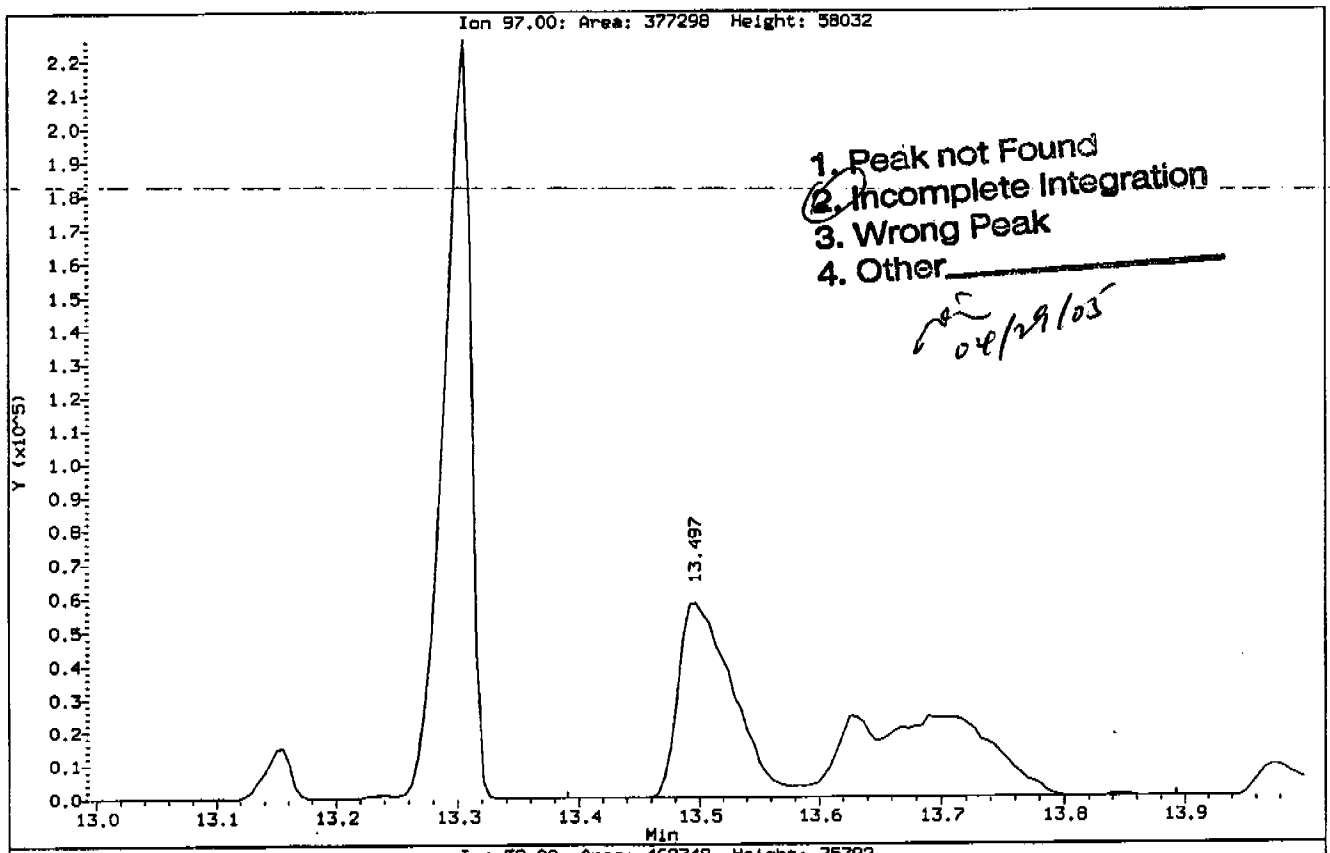






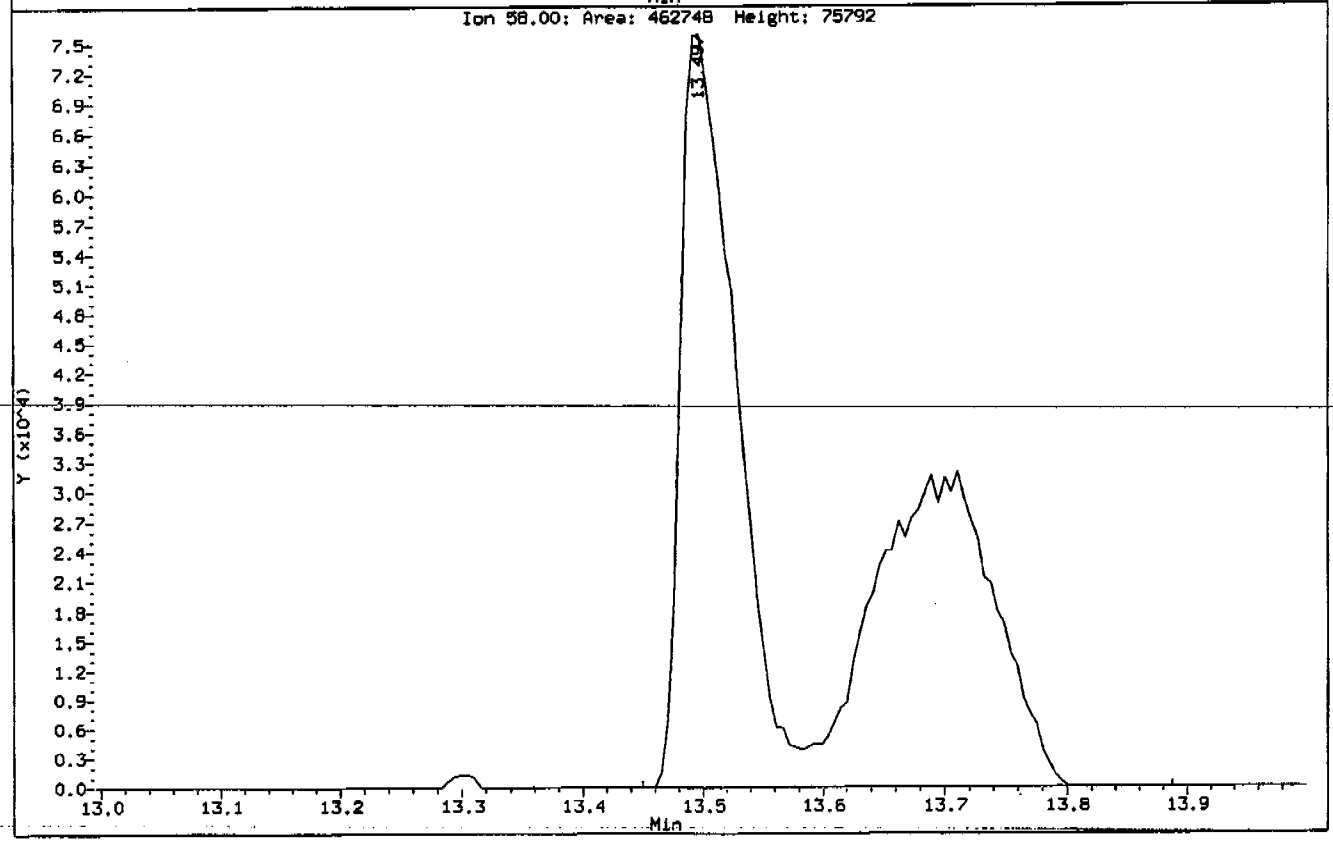
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2582.D
Injection Date: 28-APR-2005 13:24
Instrument: MSK.i
Client Sample ID: 5STD120APPIX

Compound: Methapyrilene
CAS Number: 91-80-5



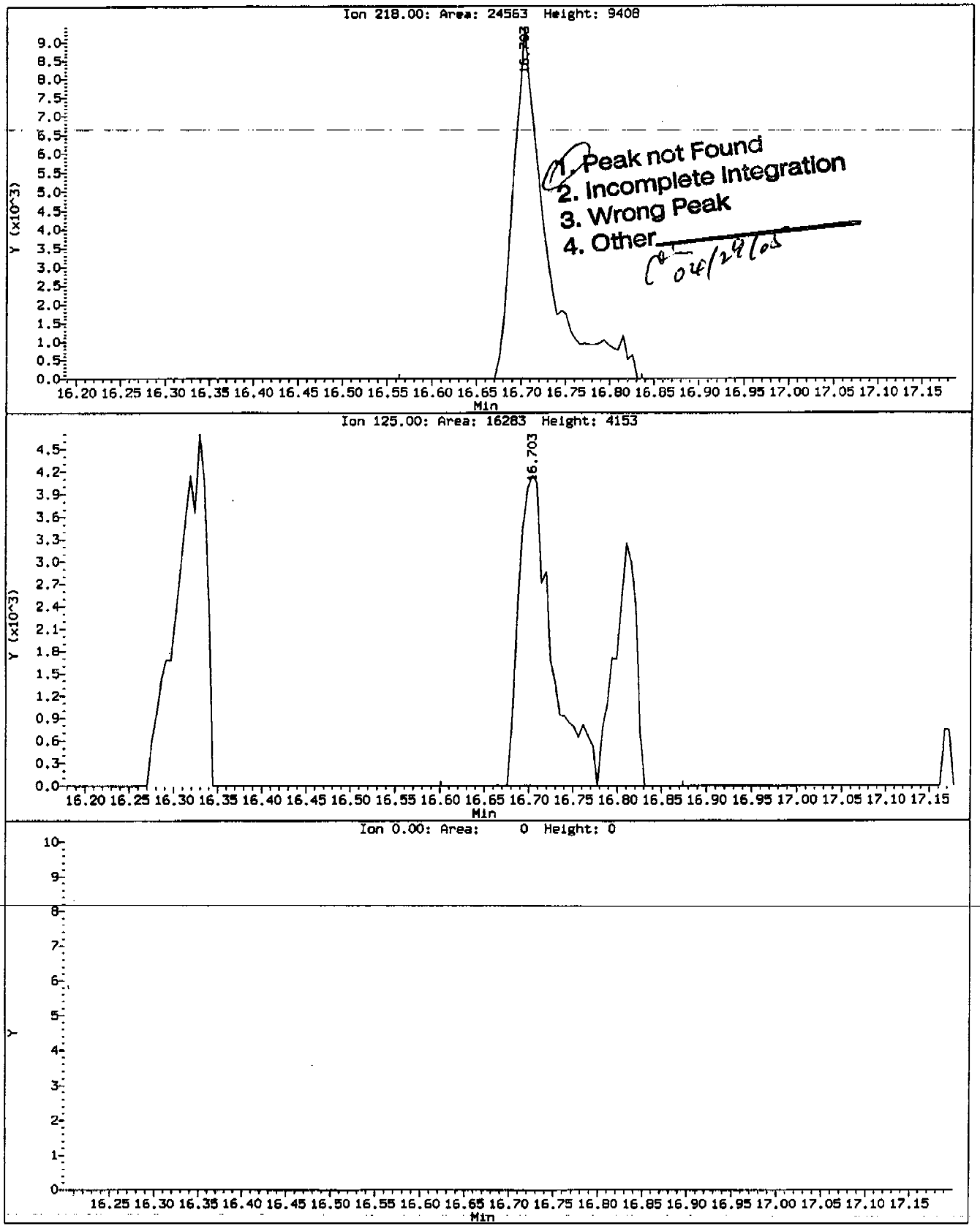
1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other _____

04/29/05



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2582.D
Injection Date: 28-APR-2005 13:24
Instrument: MSK.i
Client Sample ID: SSTD120APPIX

Compound: Famphur
CAS Number: 52-85-7



STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2583.D
Lab Smp Id: SSTD080APPIX Client Smp ID: SSTD080APPIX
Inj Date : 28-APR-2005 13:59
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD080APPIX
Misc Info : SV0186-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Meth Date : 29-Apr-2005 08:42 hongs Quant Type: ISTD
Cal Date : 28-APR-2005 13:59 Cal File: KCAL2583.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIX.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
7	2-Picoline	93	2.529	2.529	(0.549)	542817	80.0000	83.38
8	N-Nitrosomethylethylamine	88	2.727	2.727	(0.592)	249649	80.0000	85.29(M)
9	Methyl methanesulfonate	80	3.090	3.090	(0.671)	190976	80.0000	85.39
12	N-Nitrosodiethylamine	102	3.485	3.485	(0.757)	290922	80.0000	84.24
13	Ethyl Methanesulfonate	79	3.870	3.870	(0.840)	487207	80.0000	82.88
18	Pentachloroethane	117	4.265	4.265	(0.926)	223939	80.0000	81.50
* 22	1,4-Dichlorobenzene-d4	152	4.607	4.607	(1.000)	206973	40.0000	
30	Acetophenone	105	5.152	5.152	(0.832)	903227	80.0000	81.52
31	N-Nitrosopyrrolidine	100	5.195	5.195	(0.839)	289442	80.0000	80.16
33	N-Nitrosomorpholine	116	5.216	5.216	(0.842)	134677	80.0000	84.23
34	O-Toluidine	106	5.227	5.227	(0.844)	952376	80.0000	82.33
38	N-Nitrosopiperidine	114	5.564	5.564	(0.898)	271976	80.0000	81.54
43	o,o,o-Triethyl-Phosphorothioa	198	5.980	5.980	(0.966)	382674	80.0000	83.27
* 48	Naphthalene-d8	136	6.194	6.194	(1.000)	751488	40.0000	
46	a,a-Dimethyl-phenethylamine	58	6.071	6.071	(0.980)	1215241	80.0000	85.09(M)
52	2,6-Dichlorophenol	162	6.386	6.386	(1.031)	445156	80.0000	83.91
53	Hexachloropropene	213	6.376	6.376	(1.029)	540244	80.0000	81.96(M)
55	Benzothiazole	135	6.589	6.589	(1.064)	798146	80.0000	81.50
58	p-Phenylenediamine	108	6.888	6.888	(1.112)	431852	80.0000	81.71
57	n-Nitrosodi-n-butylamine	84	6.883	6.883	(1.111)	480097	80.0000	80.20
61	Safrole	162	7.113	7.113	(1.148)	465364	80.0000	82.18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
65	1,2,4,5-Tetrachlorobenzene	216	7.519	7.519	(0.846)	1289990	80.0000	81.27
64	cis-Isosafrole	162	7.551	7.551	(0.849)	48813	80.0000	79.71(M)
70	trans-Isosafrole	162	7.909	7.909	(0.889)	523046	80.0000	78.32
74	1,4-Naphthoquinone	158	8.261	8.261	(0.929)	184181	80.0000	65.96
75	1,4-Dinitrobenzene	168	8.438	8.438	(1.362)	196025	80.0000	85.78
77	1,3-Dinitrobenzene	168	8.630	8.630	(0.971)	211623	80.0000	84.49
* 82	Acenaphthene-d10	164	8.892	8.892	(1.000)	437854	40.0000	
87	Pentachlorobenzene	250	9.276	9.276	(1.043)	618369	80.0000	80.21
89	1-Naphthylamine	143	9.415	9.415	(1.059)	922915	80.0000	77.47
90	2-Naphthylamine	143	9.554	9.554	(1.074)	777503	80.0000	72.07
92	2,3,4,6-Tetrachlorophenol	232	9.592	9.592	(1.079)	360302	80.0000	92.30
96	Thionazin	107	10.024	10.024	(1.127)	249899	80.0000	85.13
97	5-Nitro-o-toluidine	152	10.035	10.035	(0.867)	348398	80.0000	84.74
101	tri-n-butylphosphate	99	10.307	10.307	(1.159)	1595987	80.0000	83.20
105	Sulfotepp	97	10.708	10.708	(0.925)	260012	80.0000	83.87
106	Diallate (peak 1)	86	10.767	10.767	(0.930)	504111	80.0000	81.98
108	Phorate	75	10.788	10.788	(0.932)	923069	80.0000	83.02
111	Diallate (peak 2)	86	10.900	10.900	(0.941)	105163	80.0000	80.21
107	1,3,5-Trinitrobenzene	213	10.879	10.879	(0.940)	171358	80.0000	90.42
110	Phenacetin	108	10.954	10.954	(0.946)	688956	80.0000	81.10
113	Dimethoate	87	11.173	11.173	(0.965)	354688	80.0000	71.40
116	4-Aminobiphenyl	169	11.333	11.333	(0.979)	1253532	80.0000	81.87
115	tris(2-chloroethyl)phosphate	63	11.408	11.408	(0.985)	354305	80.0000	78.66
119	Pentachloronitrobenzene	237	11.536	11.536	(0.996)	219429	80.0000	83.20
118	Pronamide	173	11.606	11.606	(1.002)	611165	80.0000	79.64
* 121	Phenanthrene-d10	188	11.579	11.579	(1.000)	810464	40.0000	
123	Disulfoton	88	11.776	11.776	(1.017)	640017	80.0000	81.83
125	Dinoseb	211	11.825	11.825	(1.021)	426638	80.0000	91.05
128	Methyl Parathion	109	12.503	12.503	(1.080)	327207	80.0000	73.86
131	4-Nitroquinoline-1-oxide	190	13.230	13.230	(1.143)	138460	80.0000	85.08
130	Parathion	97	13.294	13.294	(1.148)	297494	80.0000	83.10
132	Methapyrilene	97	13.486	13.486	(1.165)	351070	80.0000	64.04(M)
133	Isodrin	193	13.619	13.619	(1.176)	225244	80.0000	79.24
141	Kepone	272	14.773	14.773	(0.884)	10335	80.0000	96.10
140	Aramite (peak 1)	185	14.864	14.864	(0.889)	104338	80.0000	84.42
142	Aramite (peak 2)	185	15.024	15.024	(0.899)	161918	80.0000	86.22
143	p-(Dimethylamino)azobenzene	120	15.099	15.099	(0.903)	483880	80.0000	82.62
144	Chlorobenzilate	251	15.238	15.238	(0.911)	696198	80.0000	84.26
148	2-Acetylaminofluorene	181	16.317	16.317	(0.976)	781046	80.0000	84.54
149	Famphur	218	16.691	16.691	(0.998)	26526	80.0000	78.35(M)
* 153	Chrysene-d12	240	16.718	16.718	(1.000)	708894	40.0000	
151	4,4'-Methylenebis(2-Chloroani	266	16.809	16.809	(1.005)	165025	80.0000	80.99
162	7,12-Dimethylbenz(a)anthracen	256	18.753	18.753	(0.970)	932901	80.0000	85.84
163	Hexachlorophene	196	19.042	19.042	(0.985)	10398	80.0000	27.58(H)
* 166	Perylene-d12	264	19.341	19.341	(1.000)	589528	40.0000	
169	3-methylcholanthrene	268	19.897	19.897	(1.029)	933604	80.0000	84.18

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2583.D Page 3
Report Date: 29-Apr-2005 08:42

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

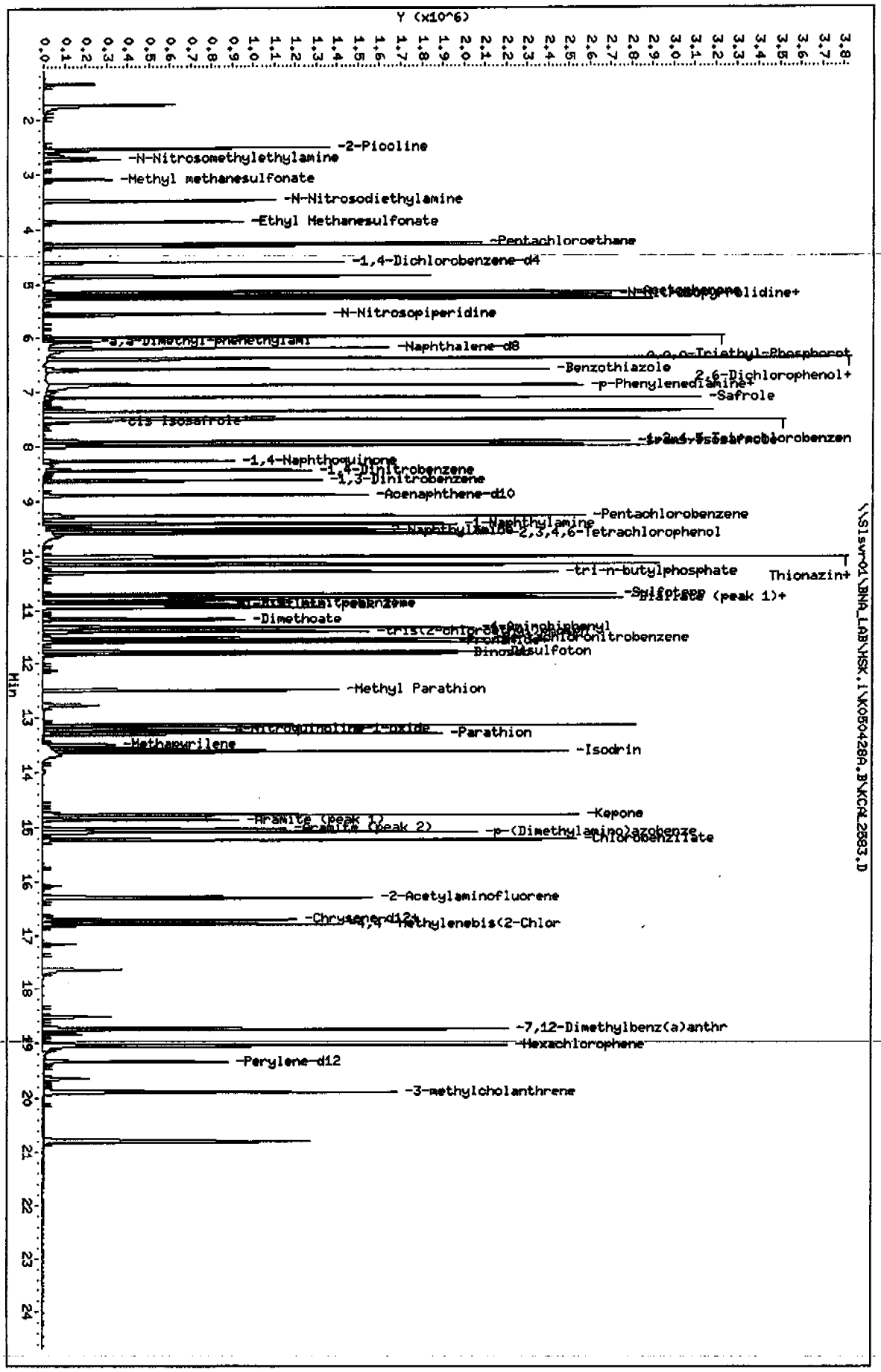
Instrument ID: MSK.i
Lab File ID: KCAL2583.D
Lab Smp Id: SSTD080APPIX
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Misc Info: SV0186-05

Calibration Date: 28-APR-2005
Calibration Time: 11:41
Client Smp ID: SSTD080APPIX
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	162145	81073	324290	206973	27.65
48 Naphthalene-d8	535939	267970	1071878	751488	40.22
82 Acenaphthene-d10	307602	153801	615204	437854	42.34
121 Phenanthrene-d10	574409	287205	1148818	810464	41.10
153 Chrysene-d12	519397	259699	1038794	708894	36.48
166 Perylene-d12	440492	220246	880984	589528	33.83

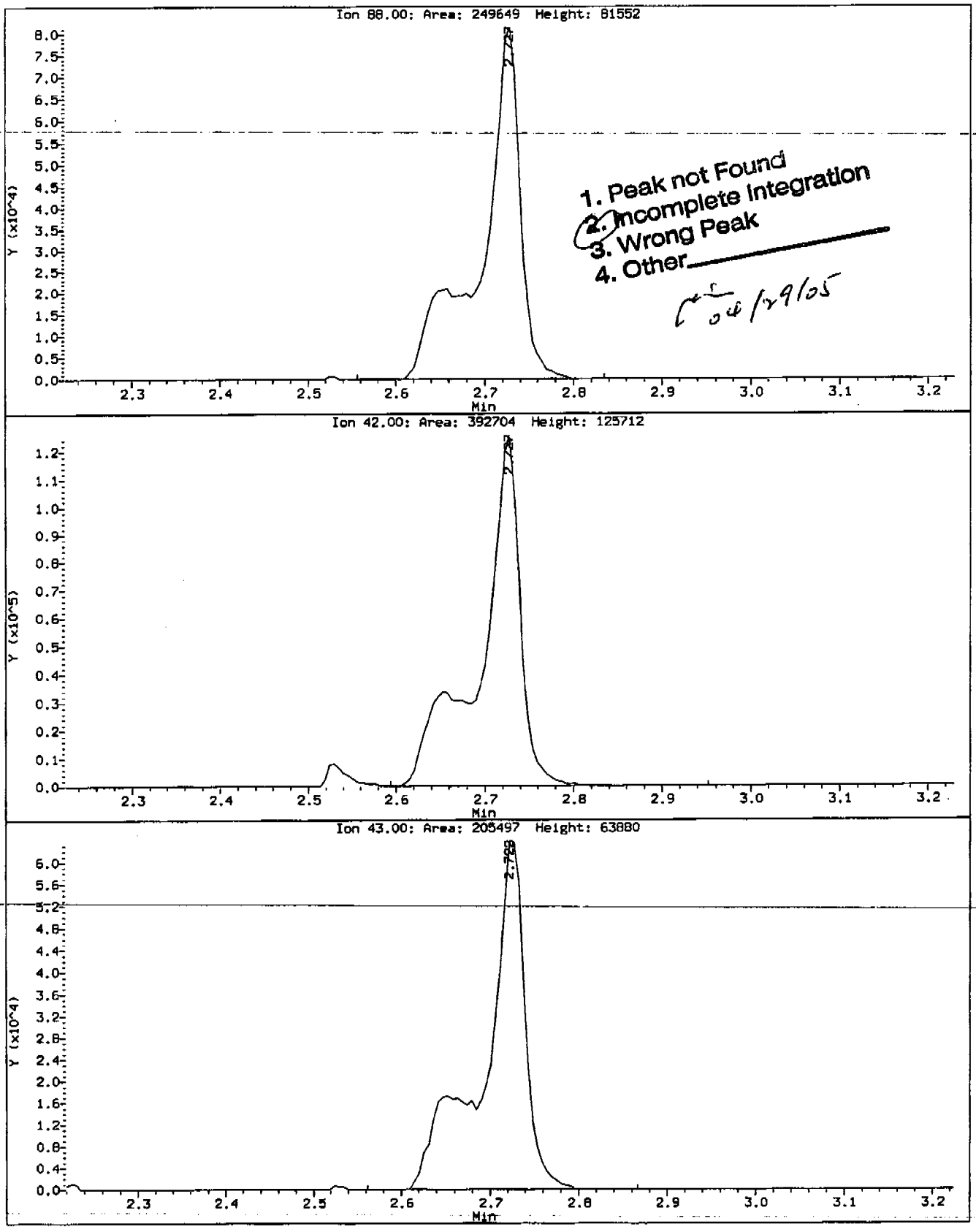
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.62	4.12	5.12	4.61	-0.25
48 Naphthalene-d8	6.21	5.71	6.71	6.19	-0.19
82 Acenaphthene-d10	8.91	8.41	9.41	8.89	-0.19
121 Phenanthrene-d10	11.58	11.08	12.08	11.58	-0.01
153 Chrysene-d12	16.74	16.24	17.24	16.72	-0.10
166 Perylene-d12	19.35	18.85	19.85	19.34	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^6)
Min
-2-Picoline
-N-Nitrosomethylethylamine
-Methyl methanesulfonate
-N-Nitrosodiethylamine
-Ethyl Methanesulfonate
-Pentachloroethane
-1,4-Dichlorobenzene-d4
-N-Nitrosopiperidine
-Naphthalene-d8
-Benzothiazole
-p-Phenylenediamine+
2,6-Dichlorophenol+
-Safrole
-1,4-Naphthoquinone
-1,3-Dinitrobenzene
-Acenaphthene-d10
-Pentachlorobenzene
1-Naphthylamine
2,3,4,6-Tetrachlorophenol
Thionazin+
-tri-n-butylphosphate
-Dimethoate
-Methyl Parathion
-Parathion
-Isodrin
-Kepone
-p-(Dimethylamino)azobenze
-2-Acetylaminofluorene
-7,12-Dimethylbenz(a)anthr
-Hexachlorophene
-Perylene-d12
-3-methylcholanthrene
\\Slsvr01\BNA_LAB\HSK.i\K050428A.B\KCAL2883.D
Data File: \\Slsvr01\BNA_LAB\HSK.i\K050428A.B\KCAL2883.D
Date : 28-APR-2005 13:59
Client ID: SSTD080APPIX
Sample Info: SSTD080APPIX
Volume Injected (uL): 1.0
Column phase:
Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slavr01\BNA_LAB\MSK.i\K050428A.B\KCAL2583.D
Injection Date: 28-APR-2005 13:59
Instrument: MSK.i
Client Sample ID: SSTD080APPIX

Compound: N-Nitrosomethylethylamine
CAS Number: 10595-95-6



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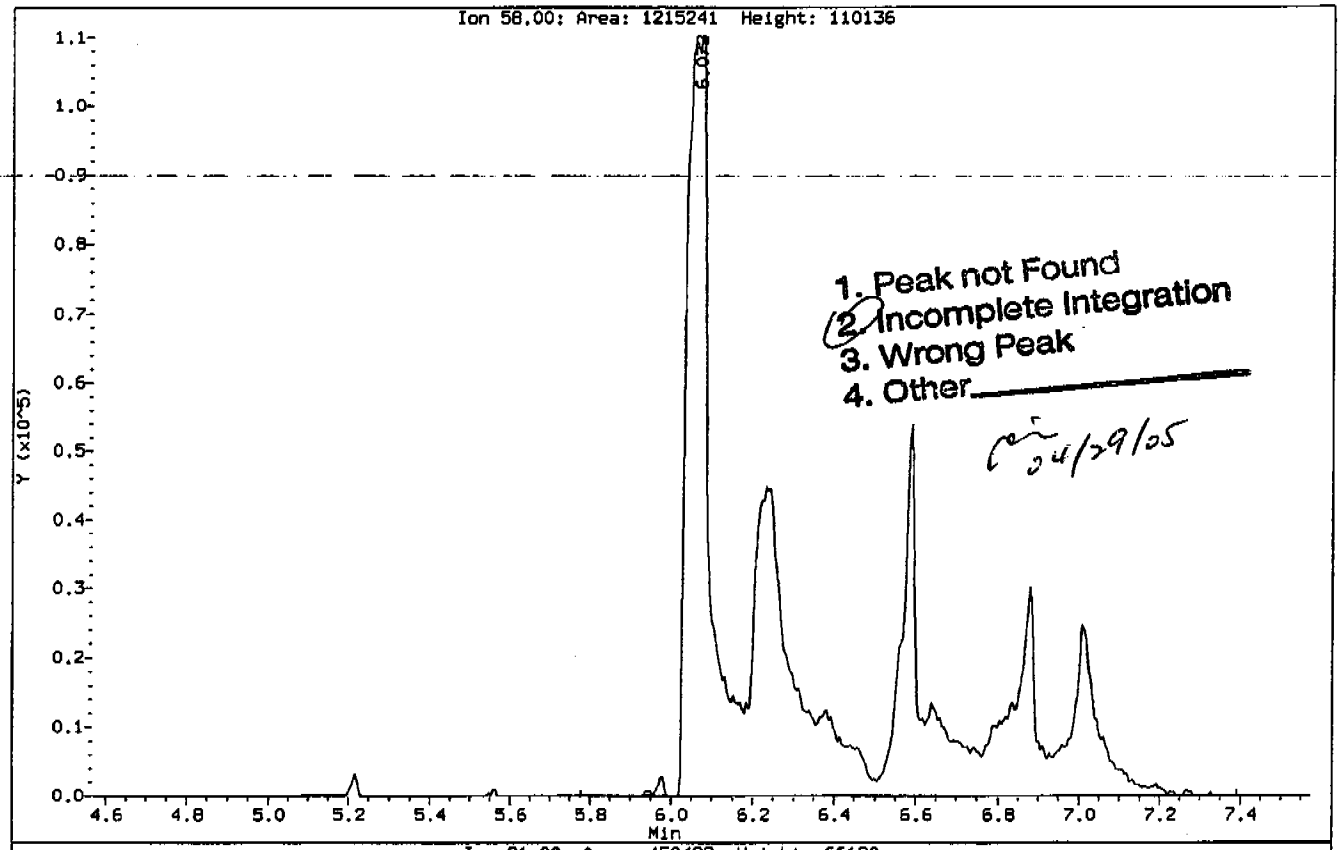
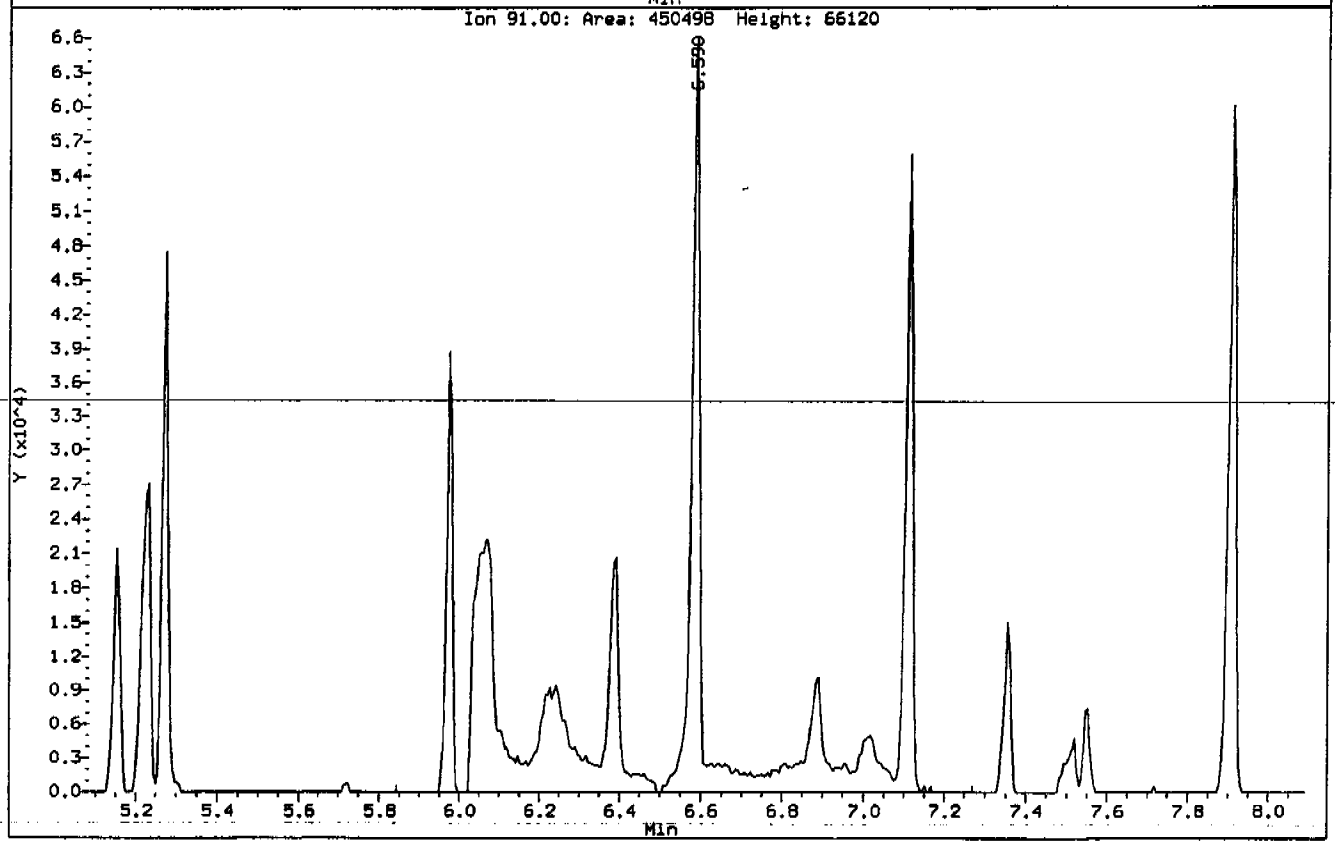
Injection Date: 28-APR-2005 13:59
Instrument: MSK.i
Client Sample ID: SSTD080APPIX

Compound: a,a-Dimethyl-phenethylamine
CAS Number: 122-09-8





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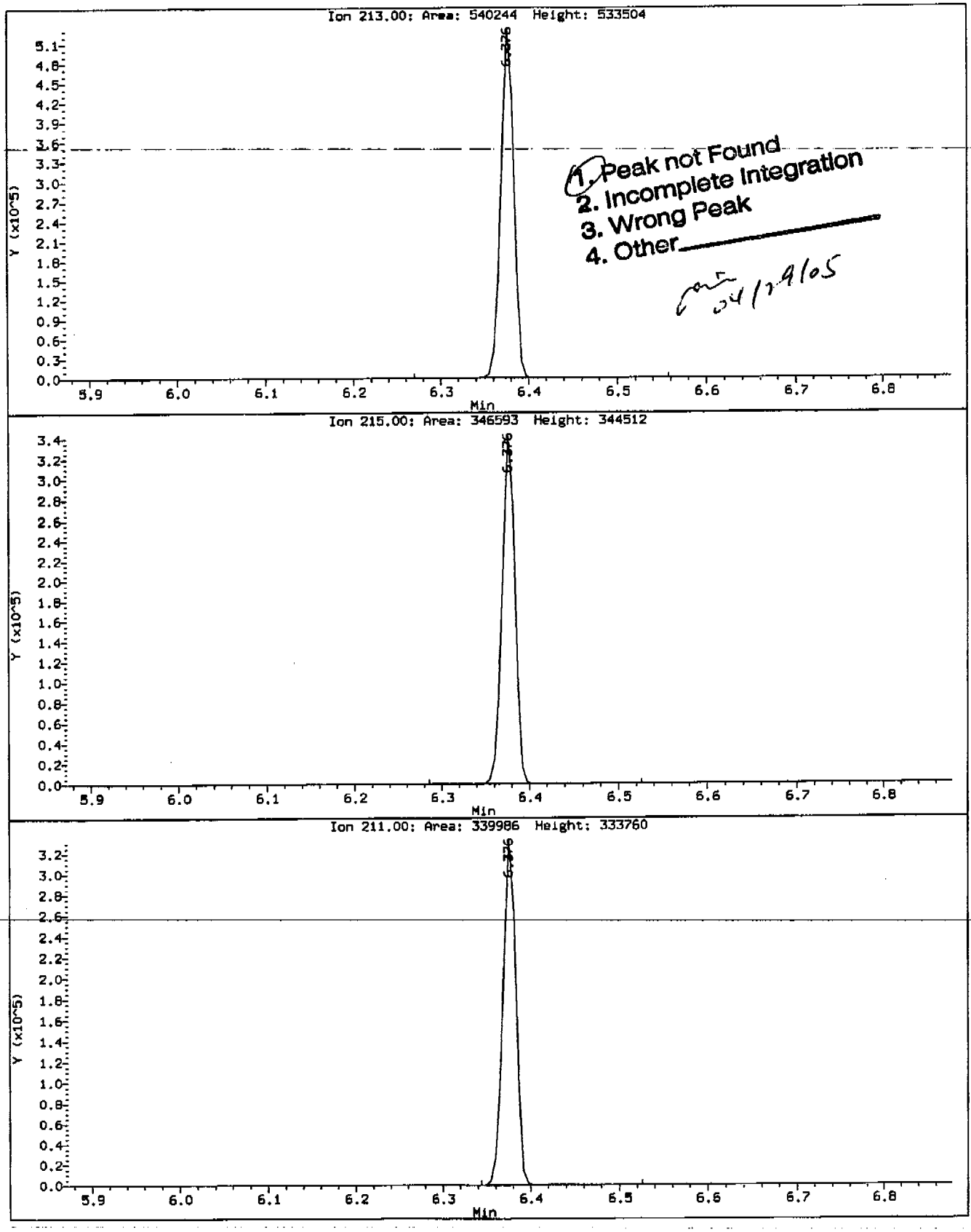
Injection Date: 28-APR-2005 13:59
Instrument: MSK.i
Client Sample ID: SSTD080APPIX

Compound: Hexachloropropene
CAS Number: 1888-71-7



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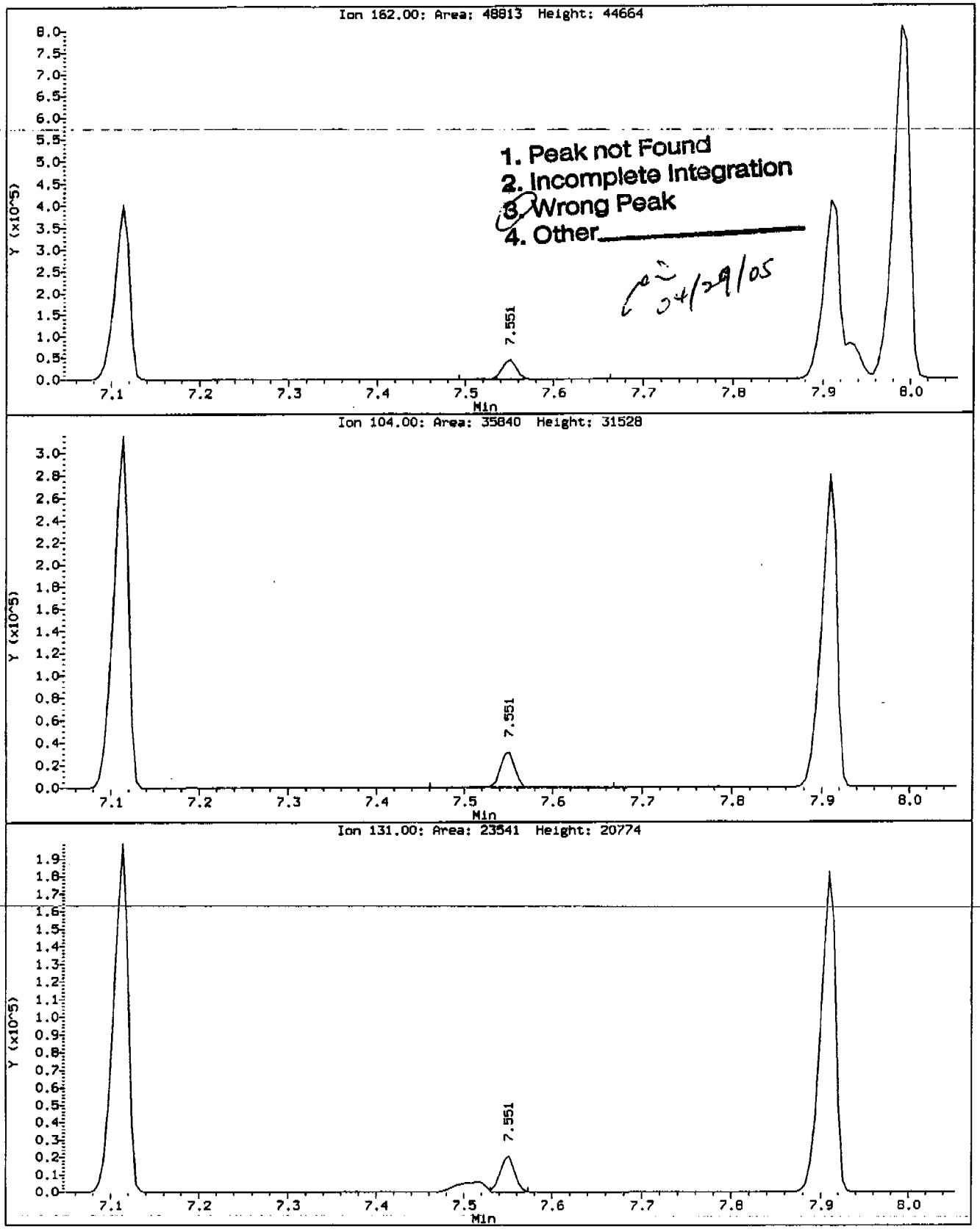
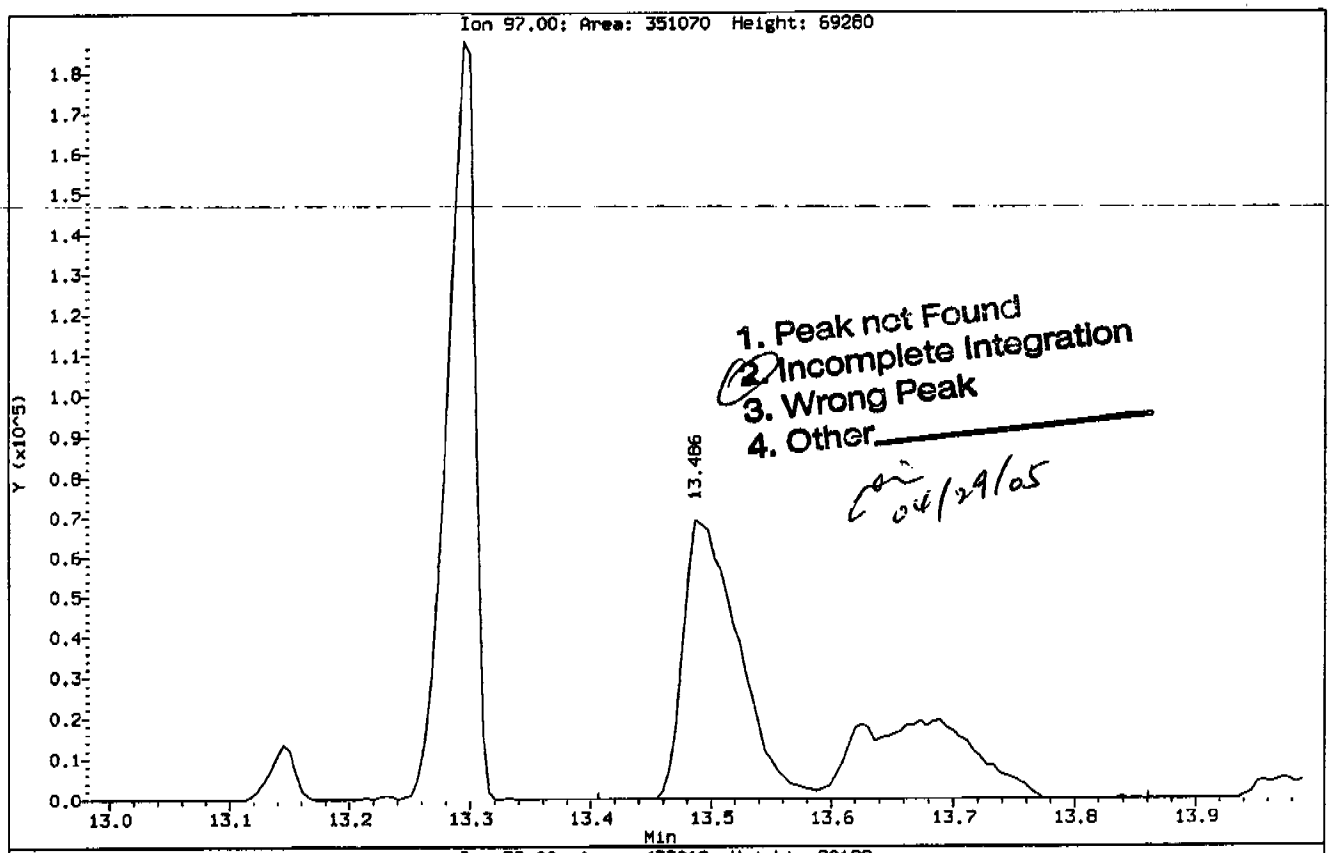
Injection Date: 28-APR-2005 13:59
Instrument: MSK.i
Client Sample ID: SSTD080APPIX

Compound: cis-Isosafrole
CAS Number: 120-58-1



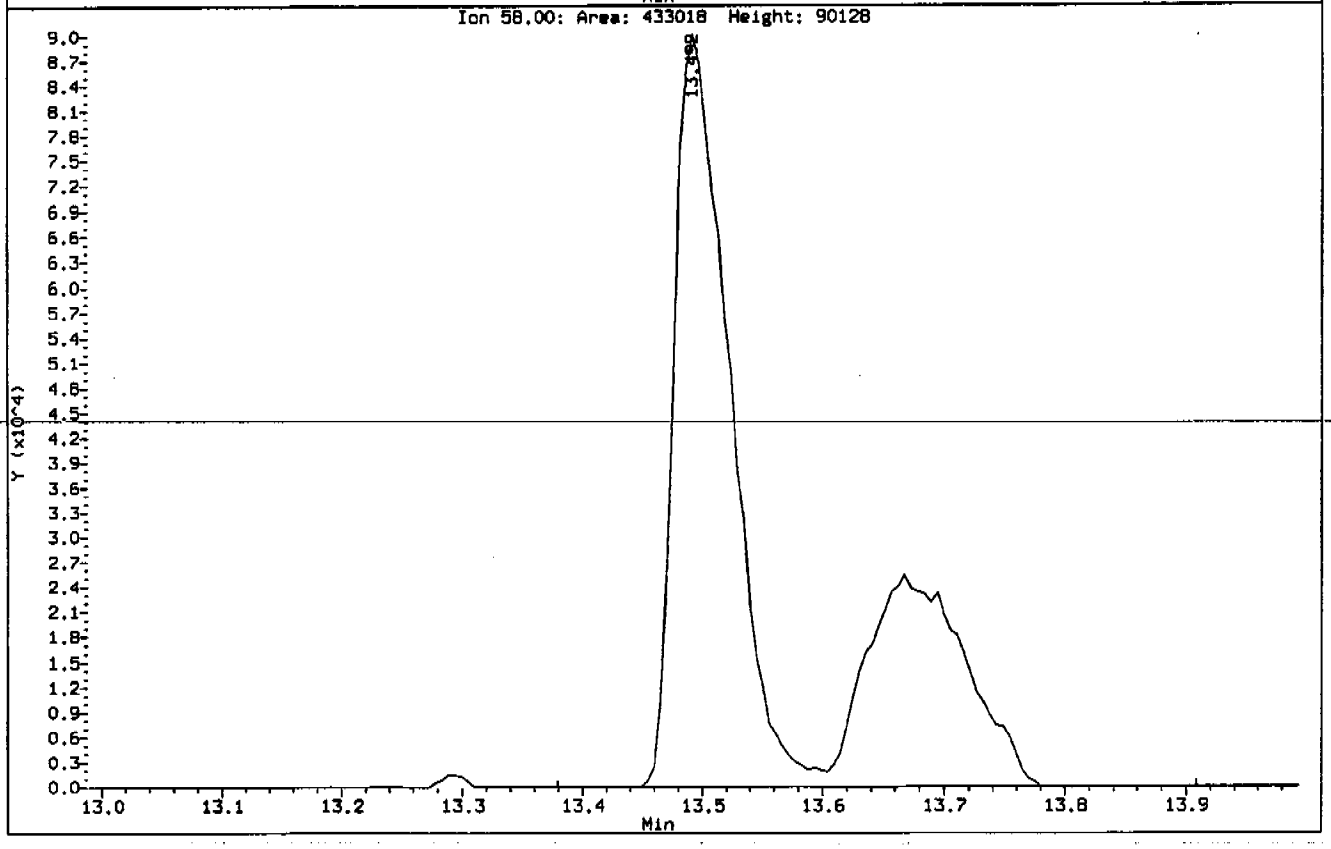
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2583.D
Injection Date: 28-APR-2005 13:59
Instrument: MSK.i
Client Sample ID: SSTD080APPIX

Compound: Methapyrilene
CAS Number: 91-80-5



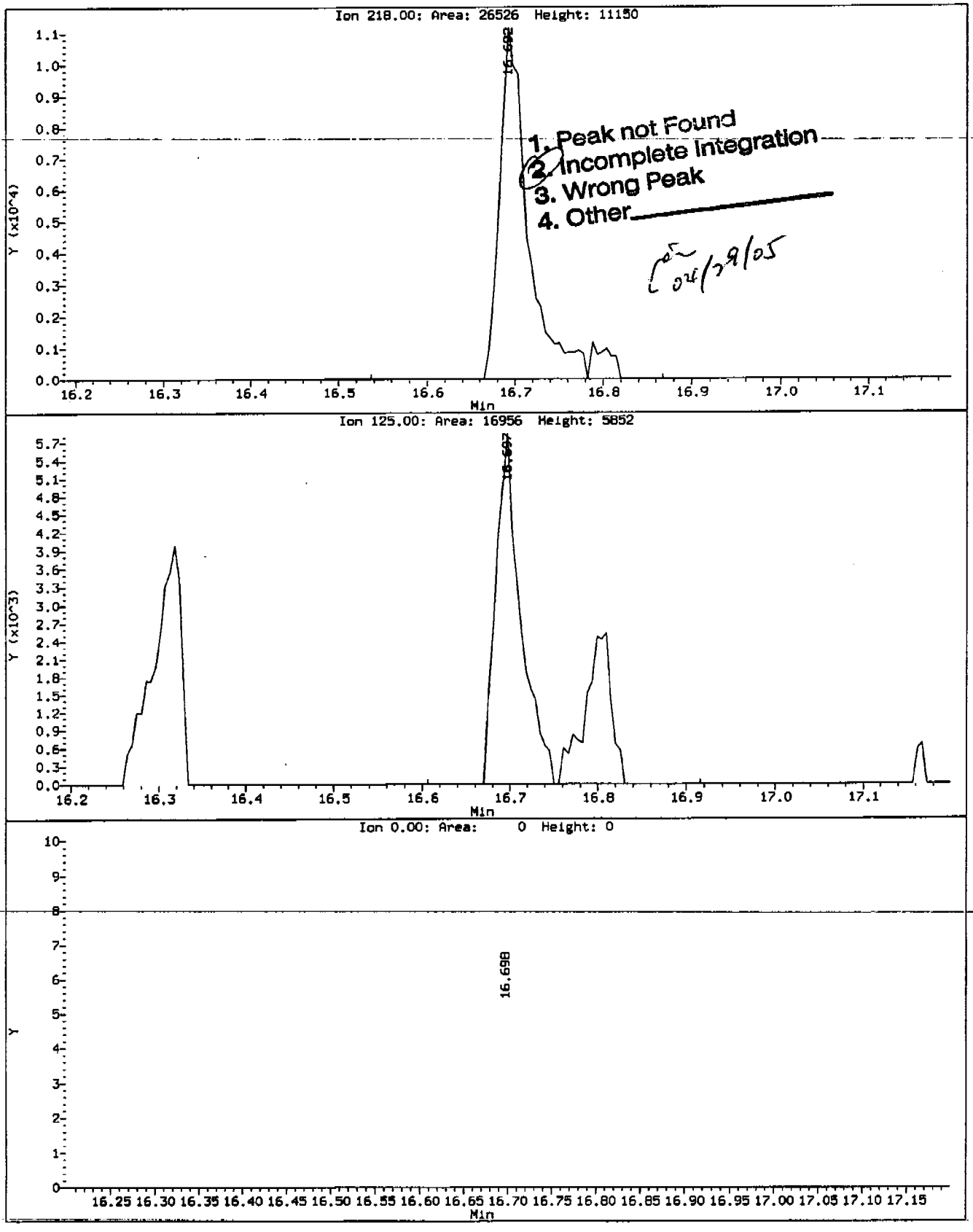
1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

04/29/05



Data File: \\Slavr01\BNA_LAB\MSK.i\K050428A.B\KCAL2583.D
Injection Date: 28-APR-2005 13:59
Instrument: MSK.i
Client Sample ID: SSTD080APPIX

Compound: Famphur
CAS Number: 52-85-7



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2584.D Page 1
Report Date: 29-Apr-2005 08:43

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2584.D
Lab Smp Id: SSTD020APPIX Client Smp ID: SSTD020APPIX
Inj Date : 28-APR-2005 14:33
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD020APPIX
Misc Info : SV0184-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Meth Date : 29-Apr-2005 08:42 hongs Quant Type: ISTD
Cal Date : 28-APR-2005 14:33 Cal File: KCAL2584.D
Als bottle: 8 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIX.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	7 2-Picoline	93	2.553	2.553	(0.553)	81734	20.0000	19.57
	8 N-Nitrosomethylethylamine	88	2.735	2.735	(0.593)	37774	20.0000	20.12(M)
	9 Methyl methanesulfonate	80	3.098	3.098	(0.671)	27281	20.0000	19.02
	12 N-Nitrosodiethylamine	102	3.488	3.488	(0.756)	41490	20.0000	18.73
	13 Ethyl Methanesulfonate	79	3.862	3.862	(0.837)	73348	20.0000	19.46
	18 Pentachloroethane	117	4.273	4.273	(0.926)	33542	20.0000	19.03
*	22 1,4-Dichlorobenzene-d4	152	4.615	4.615	(1.000)	132745	40.0000	
	30 Acetophenone	105	5.155	5.155	(0.832)	133053	20.0000	18.92
	31 N-Nitrosopyrrolidine	100	5.171	5.171	(0.834)	43456	20.0000	18.96
	33 N-Nitrosomorpholine	116	5.197	5.197	(0.839)	18421	20.0000	18.16
	34 O-Toluidine	106	5.219	5.219	(0.842)	134064	20.0000	18.26
	38 N-Nitrosopiperidine	114	5.550	5.550	(0.896)	40721	20.0000	19.24
	43 o,o,o-Triethyl-Phosphorothioa	198	5.977	5.977	(0.965)	53818	20.0000	18.46
*	48 Naphthalene-d8	136	6.196	6.196	(1.000)	476866	40.0000	
	46 a,a-Dimethyl-phenethylamine	58	6.581	6.581	(1.062)	184361	20.0000	20.34(M)
	52 2,6-Dichlorophenol	162	6.378	6.378	(1.029)	61609	20.0000	18.30
	53 Hexachloropropene	213	6.383	6.383	(1.030)	79579	20.0000	19.03(M)
	55 Benzothiazole	135	6.586	6.586	(1.063)	115955	20.0000	18.66
	58 p-Phenylenediamine	108	6.869	6.869	(1.109)	68841	20.0000	20.53
	57 n-Nitrosodi-n-butylamine	84	6.869	6.869	(1.109)	71767	20.0000	18.89
	61 Safrole	162	7.115	7.115	(1.148)	69479	20.0000	19.34

cal 5/4/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
65	1,2,4,5-Tetrachlorobenzene	216	7.510	7.510	(0.844)	186190	20.0000	18.23
64	cis-Isosafrole	162	7.559	7.559	(0.849)	7963	20.0000	20.21(M)
70	trans-Isosafrole	162	7.906	7.906	(0.888)	76191	20.0000	17.73
74	1,4-Naphthoquinone	158	8.269	8.269	(0.929)	53100	20.0000	29.56
75	1,4-Dinitrobenzene	168	8.435	8.435	(1.361)	28885	20.0000	19.92
77	1,3-Dinitrobenzene	168	8.622	8.622	(0.969)	32427	20.0000	20.12
* 82	Acenaphthene-d10	164	8.899	8.899	(1.000)	281668	40.0000	
87	Pentachlorobenzene	250	9.273	9.273	(1.042)	93864	20.0000	18.92
89	1-Naphthylamine	143	9.407	9.407	(1.057)	147169	20.0000	19.20
90	2-Naphthylamine	143	9.540	9.540	(1.072)	133074	20.0000	19.18
92	2,3,4,6-Tetrachlorophenol	232	9.594	9.594	(1.078)	45577	20.0000	18.15
96	Thionazin	107	10.000	10.000	(1.124)	36425	20.0000	19.29
97	5-Nitro-o-toluidine	152	10.005	10.005	(0.865)	51440	20.0000	19.59
101	tri-n-butylphosphate	99	10.294	10.294	(1.157)	232419	20.0000	18.84
105	Sulfotepp	97	10.694	10.694	(0.925)	39009	20.0000	19.70
106	Diallate (peak 1)	86	10.764	10.764	(0.931)	75374	20.0000	19.19
108	Phorate	75	10.780	10.780	(0.932)	131374	20.0000	18.50
111	Diallate (peak 2)	86	10.908	10.908	(0.943)	16276	20.0000	19.44
107	1,3,5-Trinitrobenzene	213	10.865	10.865	(0.939)	25075	20.0000	20.72
110	Phenacetin	108	10.892	10.892	(0.942)	109395	20.0000	20.16
113	Dimethoate	87	11.132	11.132	(0.963)	74605	20.0000	23.51
116	4-Aminobiphenyl	169	11.314	11.314	(0.978)	176174	20.0000	18.02
115	tris(2-chloroethyl)phosphate	63	11.367	11.367	(0.983)	57727	20.0000	20.07
119	Pentachloronitrobenzene	237	11.528	11.528	(0.997)	33084	20.0000	19.64
118	Pronamide	173	11.576	11.576	(1.001)	96589	20.0000	19.71
* 121	Phenanthrene-d10	188	11.565	11.565	(1.000)	517629	40.0000	
123	Disulfoton	88	11.774	11.774	(1.018)	94837	20.0000	18.99
125	Dinoseb	211	11.811	11.811	(1.021)	59961	20.0000	20.04
128	Methyl Parathion	109	12.495	12.495	(1.080)	66269	20.0000	23.42
131	4-Nitroquinoline-1-oxide	190	13.216	13.216	(1.143)	20651	20.0000	19.87
130	Parathion	97	13.285	13.285	(1.149)	47136	20.0000	20.61
132	Methapyrilene	97	13.478	13.478	(1.165)	86566	20.0000	24.72(M)
133	Isodrin	193	13.627	13.627	(1.178)	35352	20.0000	19.47
141	Kepone	272	14.781	14.781	(0.884)	1123	20.0000	14.94
140	Aramite (peak 1)	185	14.867	14.867	(0.889)	18807	20.0000	21.78
142	Aramite (peak 2)	185	15.022	15.022	(0.898)	27049	20.0000	20.61
143	p-(Dimethylamino)azobenzene	120	15.091	15.091	(0.902)	83312	20.0000	20.36
144	Chlorobenzilate	251	15.235	15.235	(0.911)	109981	20.0000	19.05
148	2-Acetylaminofluorene	181	16.282	16.282	(0.973)	127850	20.0000	19.80
149	Famphur	218	16.688	16.688	(0.998)	8362	20.0000	35.35(M)
* 153	Chrysene-d12	240	16.726	16.726	(1.000)	495300	40.0000	
151	4,4'-Methylenebis(2-chloroani	266	16.800	16.800	(1.004)	27789	20.0000	19.52
162	7,12-Dimethylbenz(a)anthracen	256	18.740	18.740	(0.969)	149973	20.0000	19.06
163	Hexachlorophene	196	19.044	19.044	(0.985)	1981	20.0000	7.259
* 166	Perylene-d12	264	19.338	19.338	(1.000)	426799	40.0000	
169	3-methylcholanthrene	268	19.872	19.872	(1.028)	145954	20.0000	18.18

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2584.D Page 3
Report Date: 29-Apr-2005 08:43

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

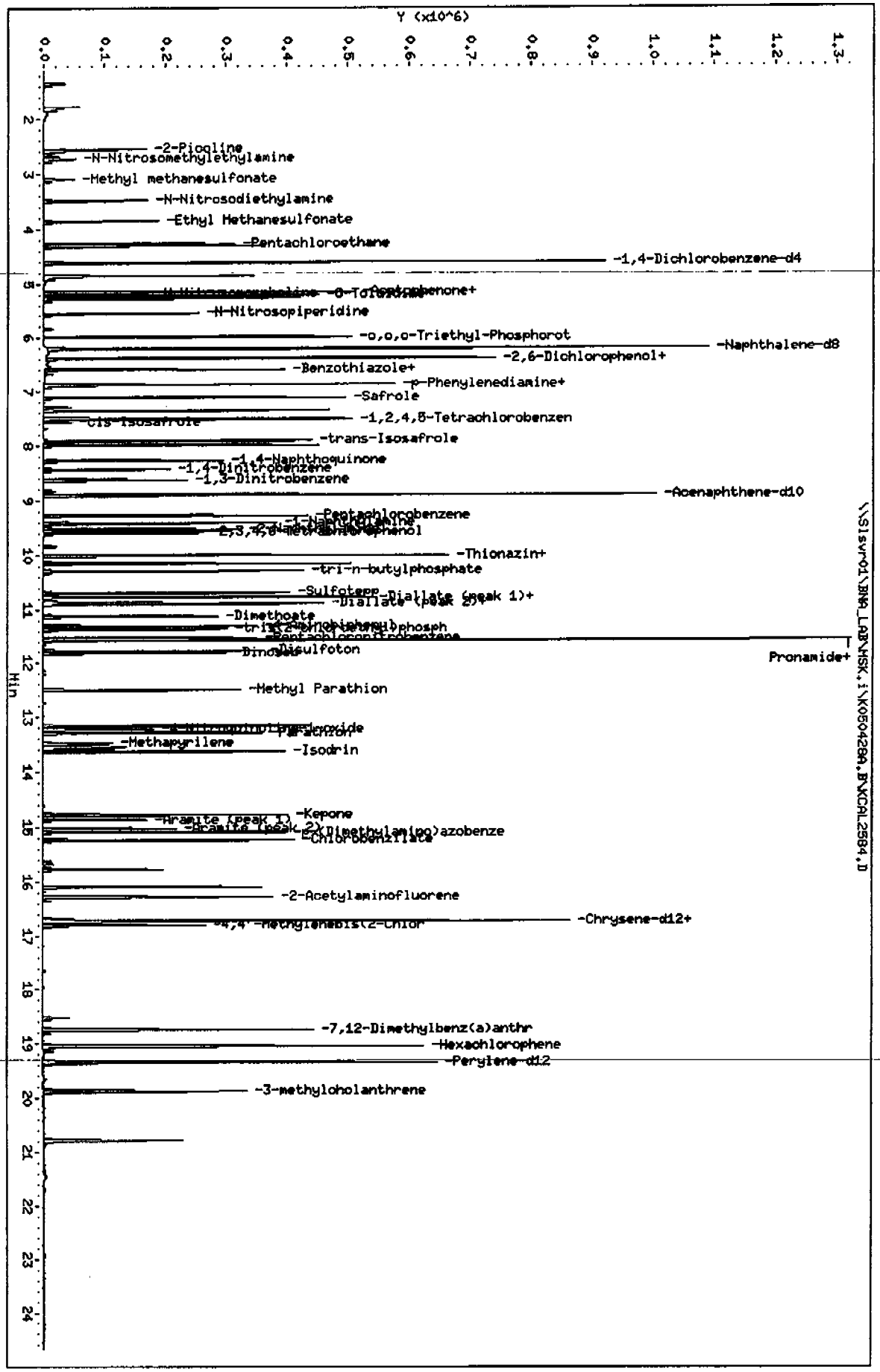
Instrument ID: MSK.i
Lab File ID: KCAL2584.D
Lab Smp Id: SSTD020APPIX
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Misc Info: SV0184-05

Calibration Date: 28-APR-2005
Calibration Time: 11:41
Client Smp ID: SSTD020APPIX
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	162145	81073	324290	132745	-18.13
48 Naphthalene-d8	535939	267970	1071878	476866	-11.02
82 Acenaphthene-d10	307602	153801	615204	281668	-8.43
121 Phenanthrene-d10	574409	287205	1148818	517629	-9.88
153 Chrysene-d12	519397	259699	1038794	495300	-4.64
166 Perylene-d12	440492	220246	880984	426799	-3.11

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.62	4.12	5.12	4.62	-0.09
48 Naphthalene-d8	6.21	5.71	6.71	6.20	-0.15
82 Acenaphthene-d10	8.91	8.41	9.41	8.90	-0.10
121 Phenanthrene-d10	11.58	11.08	12.08	11.57	-0.13
153 Chrysene-d12	16.74	16.24	17.24	16.73	-0.06
166 Perylene-d12	19.35	18.85	19.85	19.34	-0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

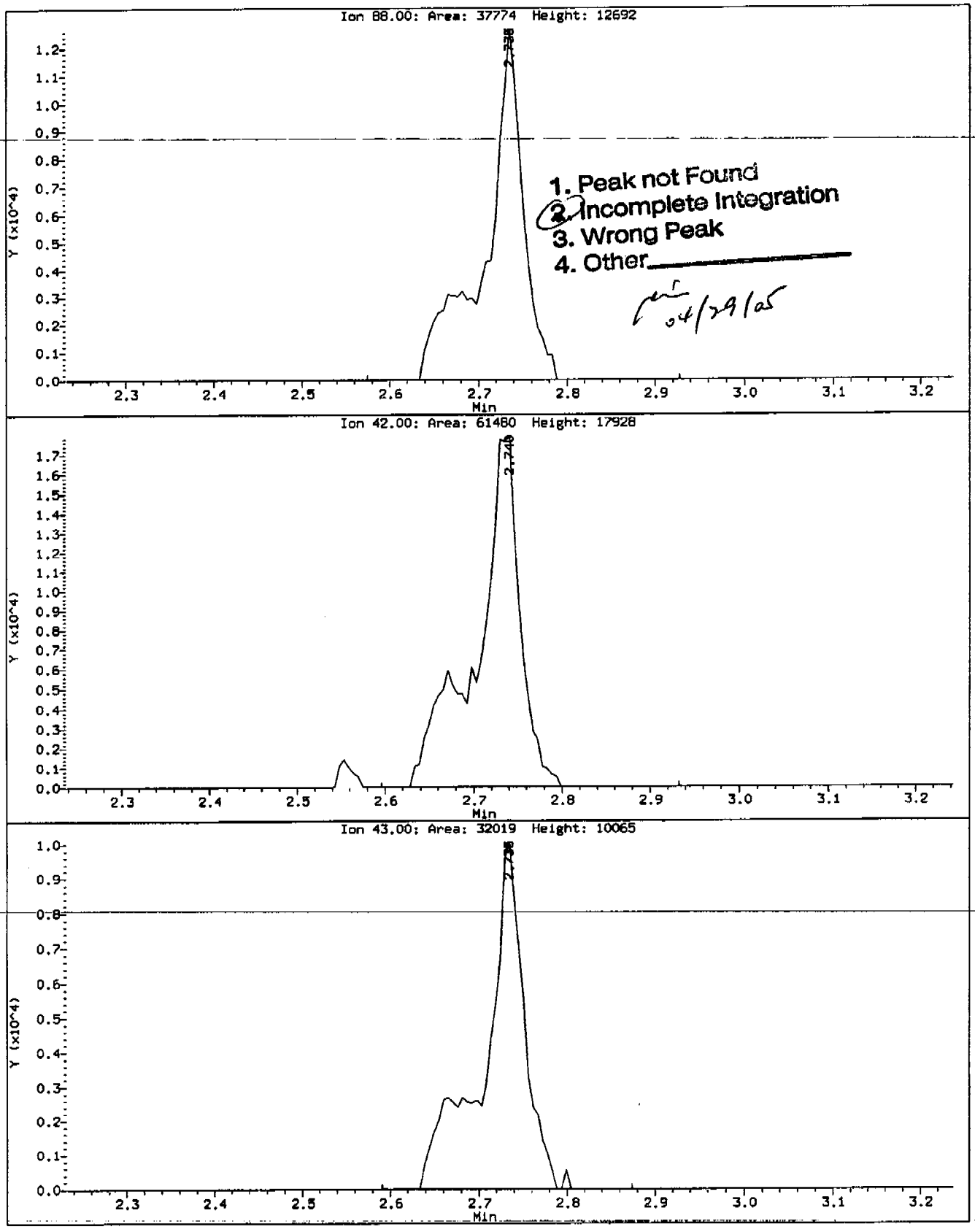


Data File: \\Slsvr01\BNA_LAB\HSK.i\K050428A.B\KCAL2584.D
Date : 28-APR-2005 14:33
Client ID: SSTD020APPIX
Sample Info: SSTD020APPIX
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2584.D
Injection Date: 28-APR-2005 14:33
Instrument: MSK.i
Client Sample ID: SSTD020APPIX

Compound: N-Nitrosomethylethylamine
CAS Number: 10595-95-6



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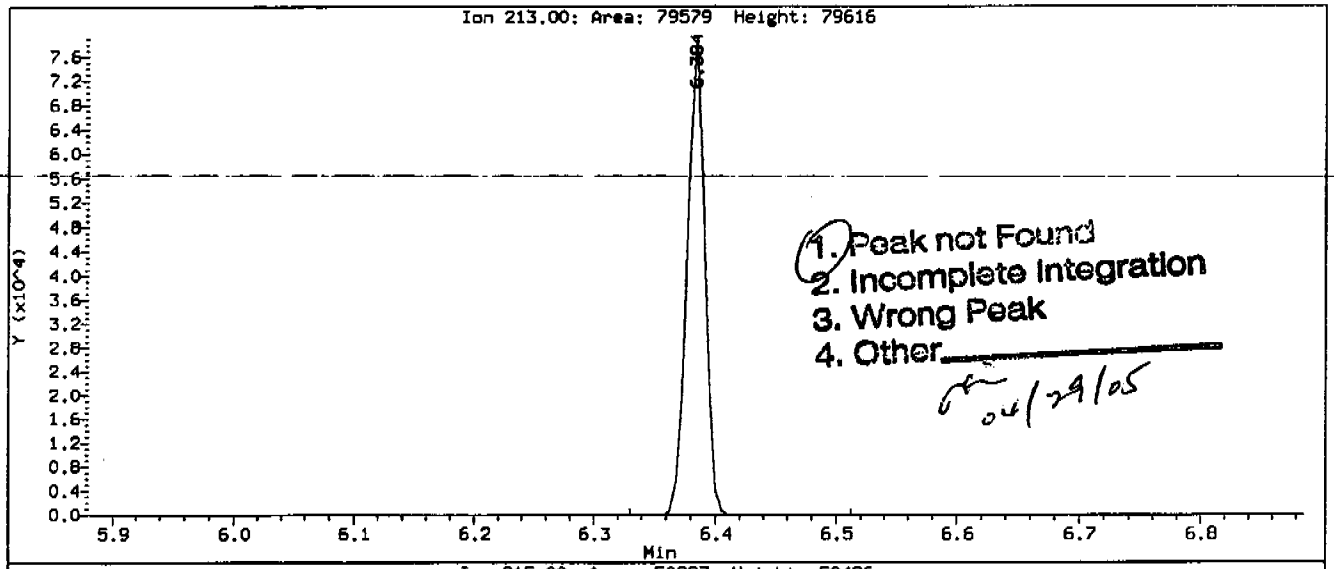
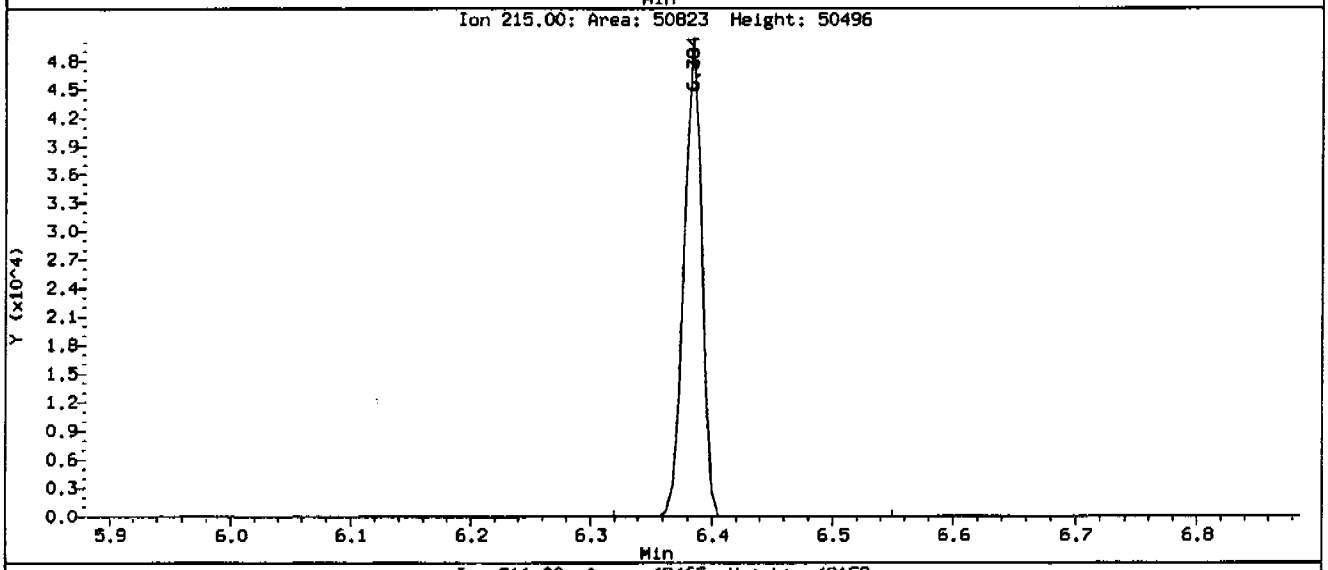
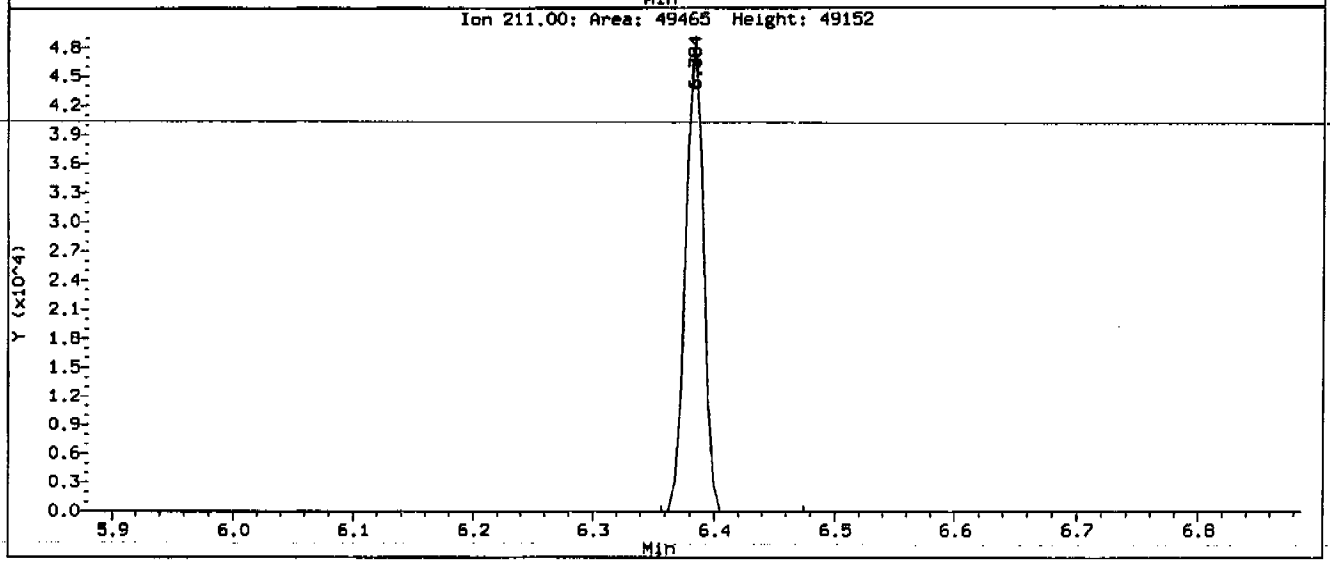
Injection Date: 28-APR-2005 14:33
Instrument: MSK.i
Client Sample ID: SSTD020APPIX

Compound: Hexachloropropene
CAS Number: 1888-71-7







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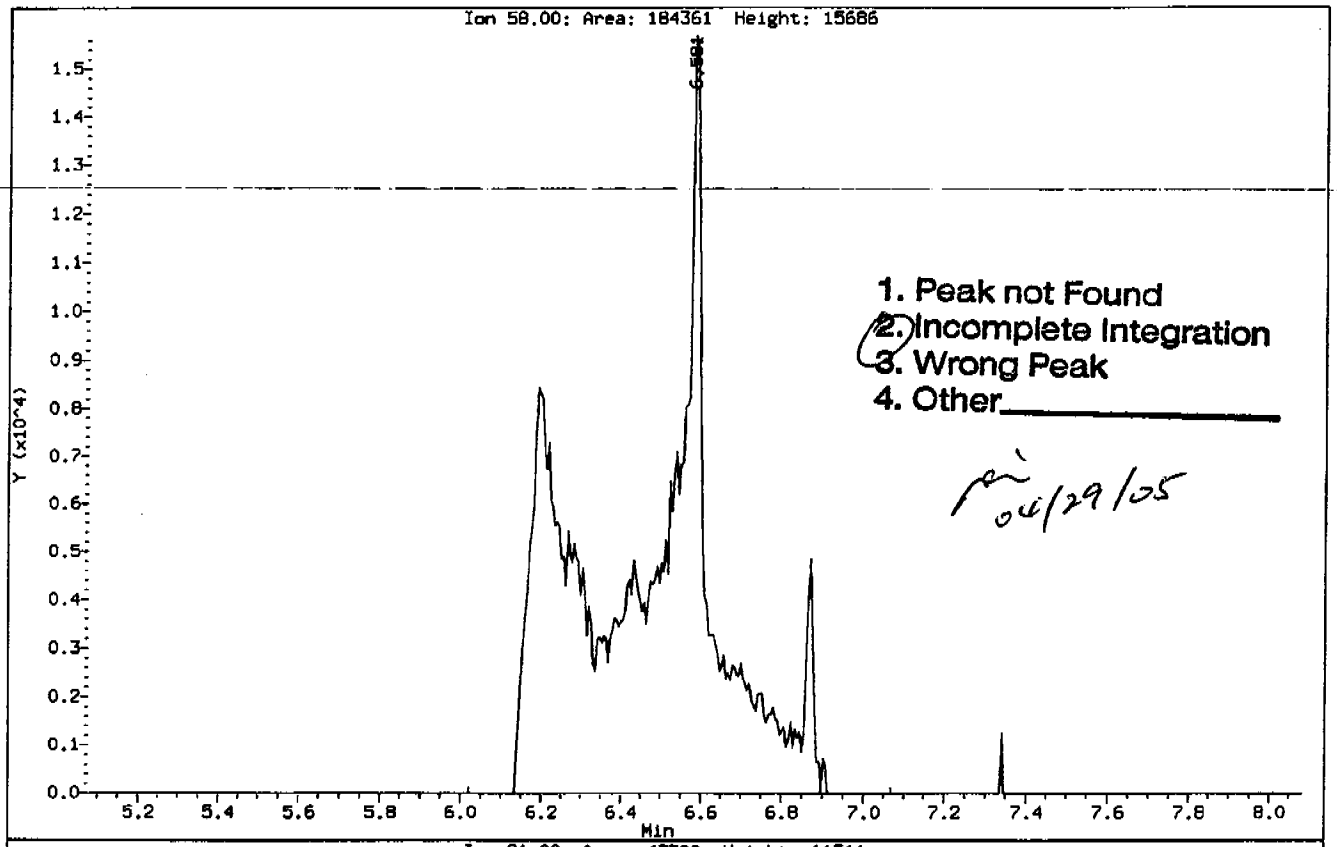
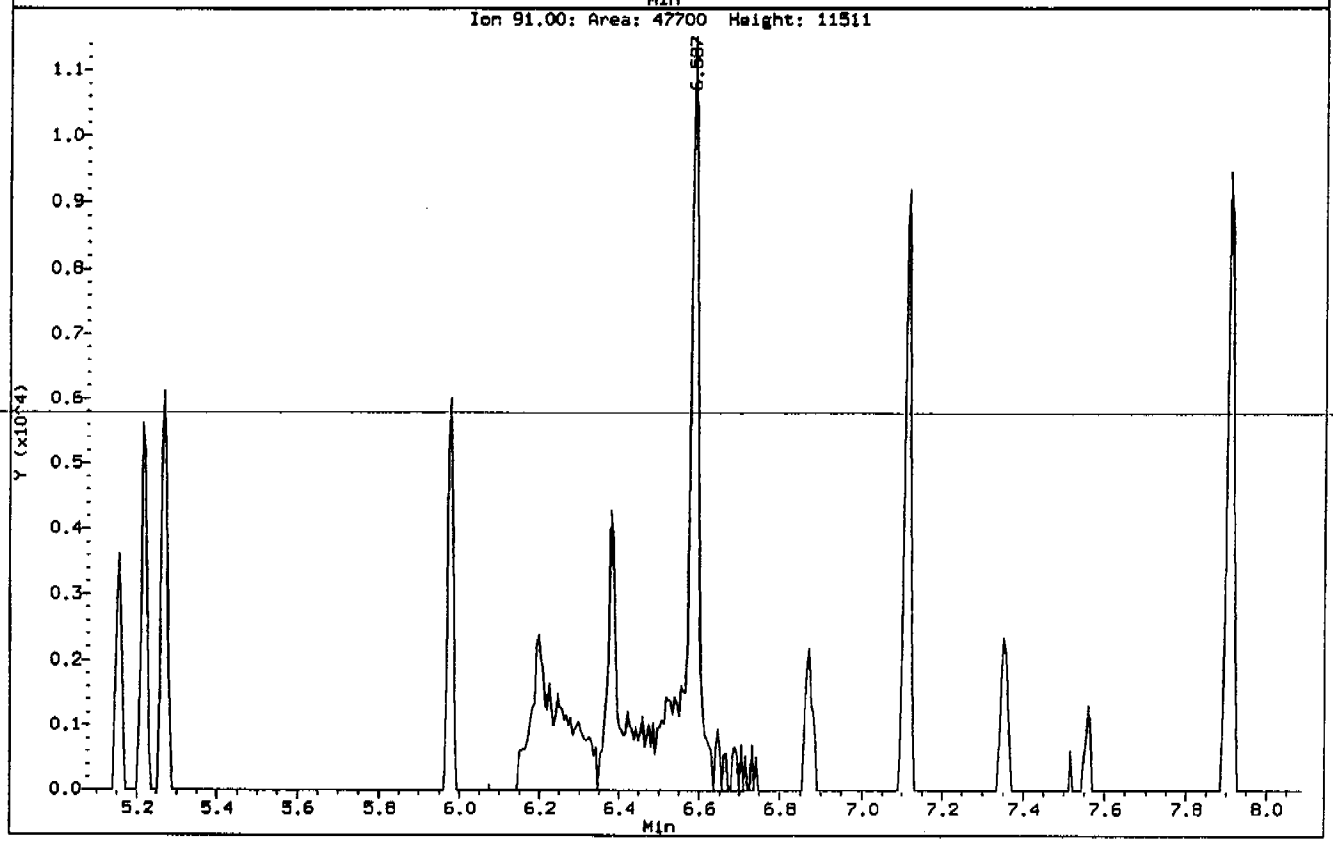
Injection Date: 28-APR-2005 14:33
Instrument: MSK.i
Client Sample ID: SSTD020APPIX

Compound: a,a-Dimethyl-phenethylamine
CAS Number: 122-09-8



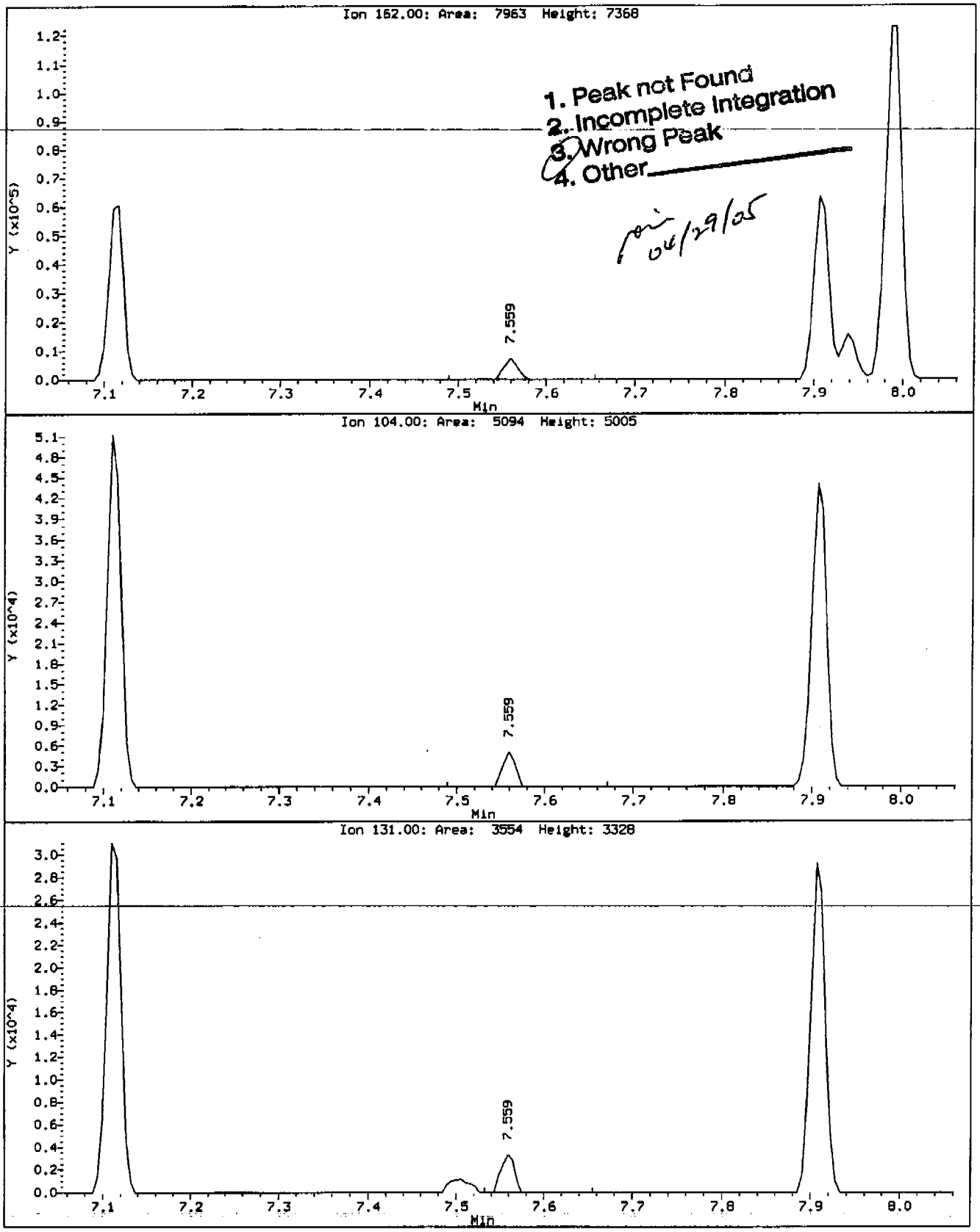
1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

04/29/05



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2584.D
Injection Date: 28-APR-2005 14:33
Instrument: MSK.i
Client Sample ID: SSTD020APPIX

Compound: cis-Isosafrole
CAS Number: 120-58-1

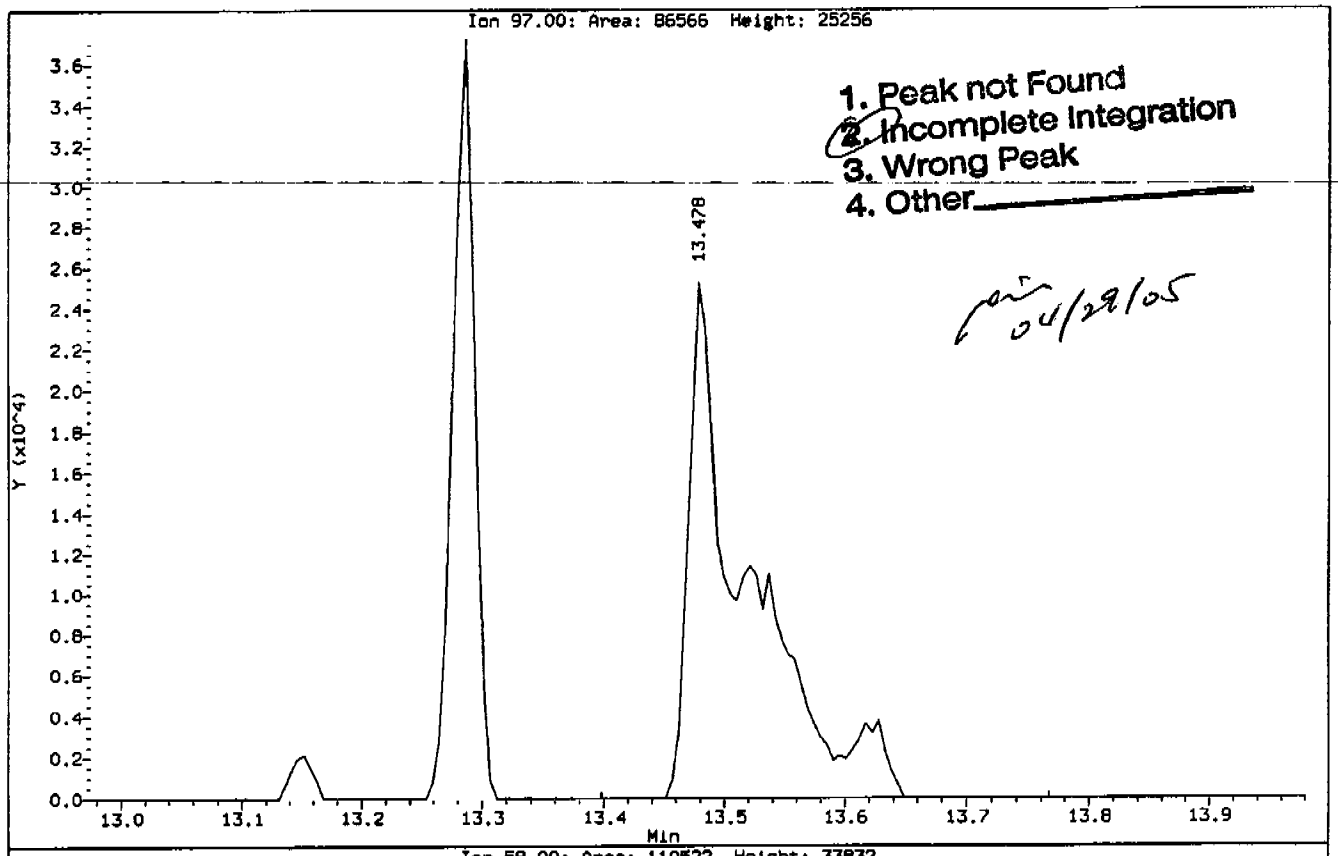


1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

04/29/05

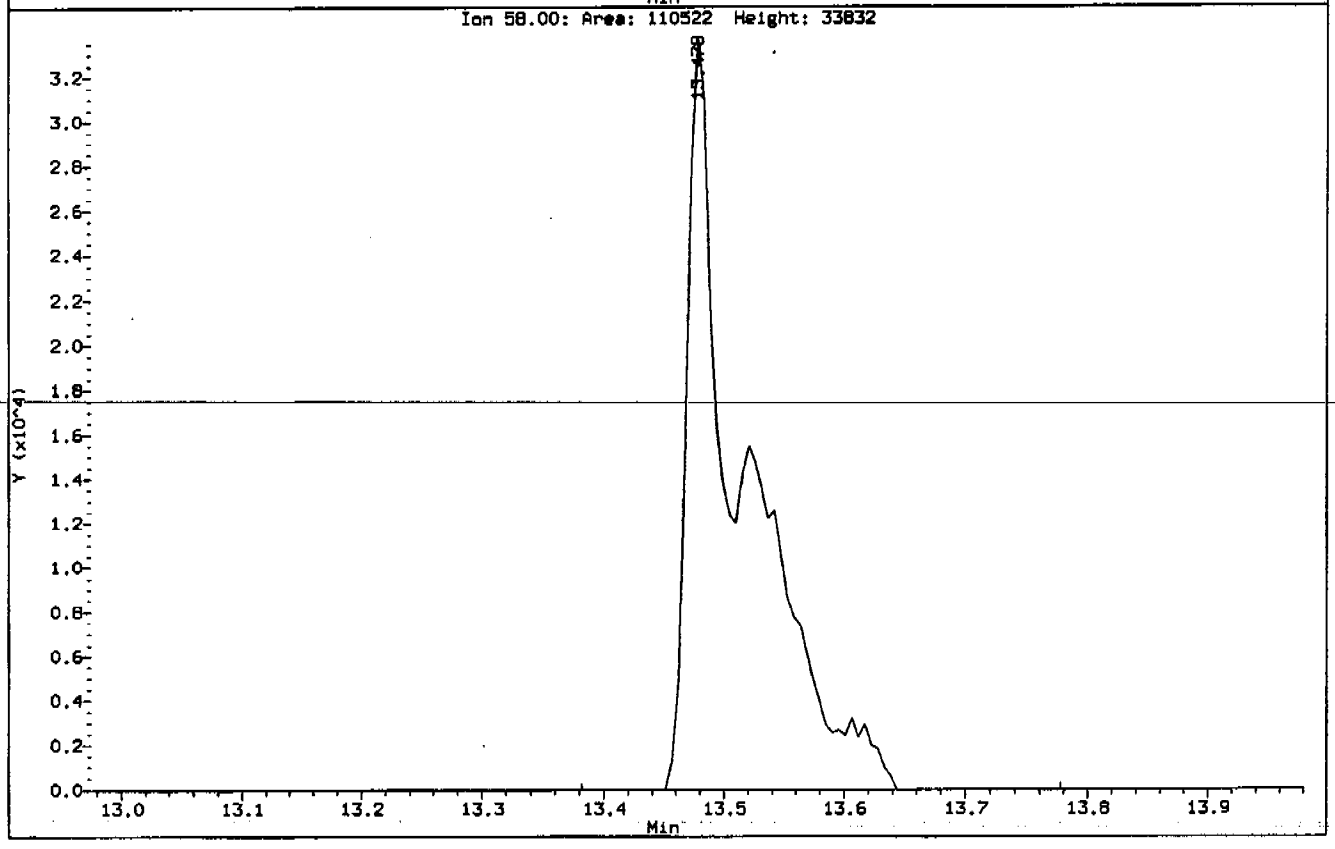
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2584.D
Injection Date: 28-APR-2005 14:33
Instrument: MSK.i
Client Sample ID: SSTD020APPIX

Compound: Methapyrilene
CAS Number: 91-80-5



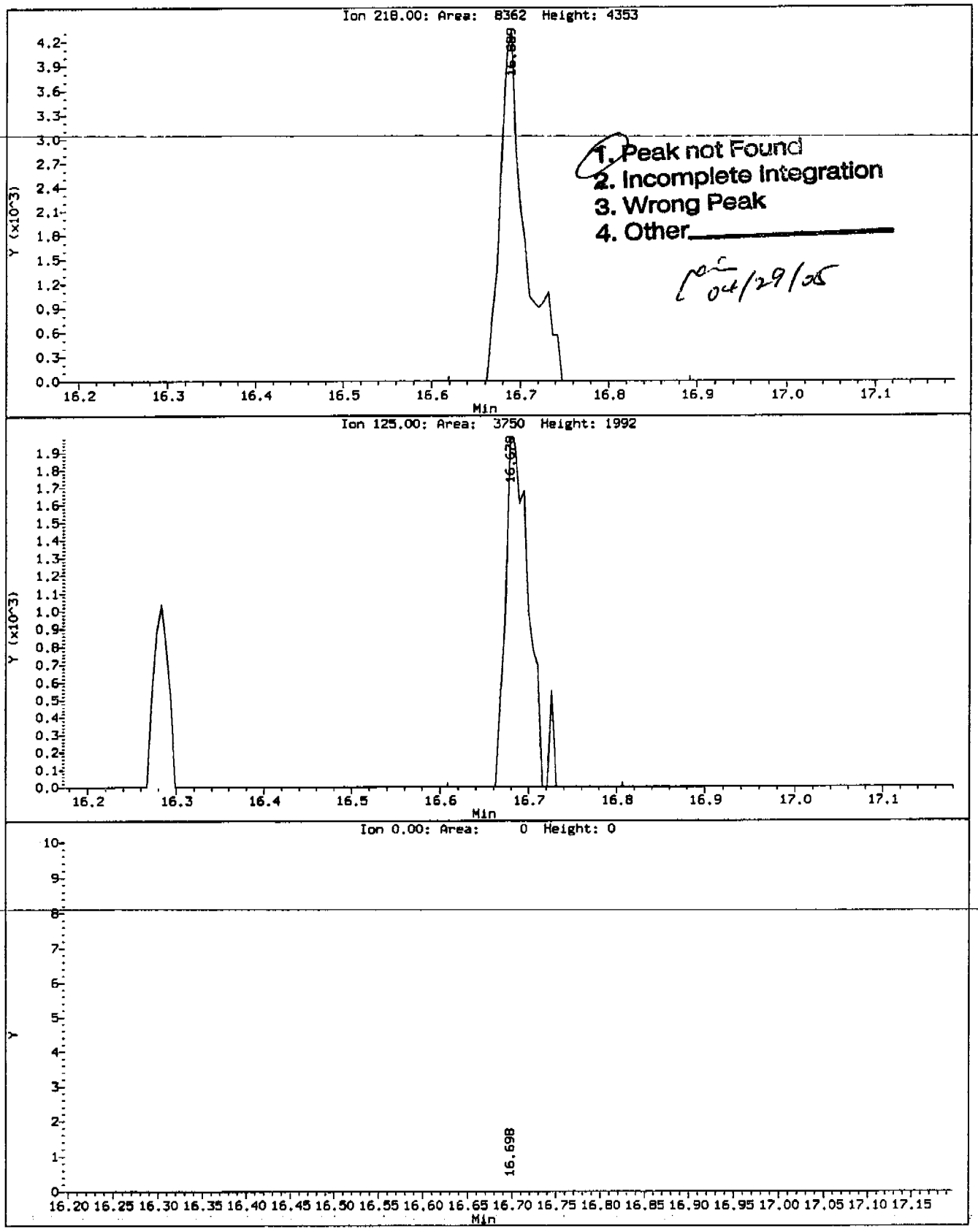
1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

04/29/05



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2584.D
Injection Date: 28-APR-2005 14:33
Instrument: MSK.i
Client Sample ID: SSTD020APPIX

Compound: Famphur
CAS Number: 52-85-7



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2585.D
Report Date: 29-Apr-2005 08:43

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2585.D
Lab Smp Id: SSTD010APPIX Client Smp ID: SSTD010APPIX
Inj Date : 28-APR-2005 15:08
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD010APPIX
Misc Info : SV0183-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Meth Date : 29-Apr-2005 08:43 hongs Quant Type: ISTD
Cal Date : 28-APR-2005 15:08 Cal File: KCAL2585.D
Als bottle: 9 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIX.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
7	2-Picoline	93	2.563	2.563	(0.555)	41702	10.0000	9.476(a)
8	N-Nitrosomethylethylamine	88	2.740	2.740	(0.594)	20216	10.0000	10.22(M)
9	Methyl methanesulfonate	80	3.103	3.103	(0.672)	14394	10.0000	9.521
12	N-Nitrosodiethylamine	102	3.487	3.487	(0.756)	22465	10.0000	9.622
13	Ethyl Methanesulfonate	79	3.861	3.861	(0.837)	37570	10.0000	9.455
18	Pentachloroethane	117	4.273	4.273	(0.926)	17038	10.0000	9.173
* 22	1,4-Dichlorobenzene-d4	152	4.615	4.615	(1.000)	139914	40.0000	
30	Acetophenone	105	5.149	5.149	(0.831)	69882	10.0000	9.375
31	N-Nitrosopyrrolidine	100	5.159	5.159	(0.833)	23217	10.0000	9.558
33	N-Nitrosomorpholine	116	5.192	5.192	(0.838)	9662	10.0000	8.982
34	O-Toluidine	106	5.213	5.213	(0.841)	70372	10.0000	9.043
38	N-Nitrosopiperidine	114	5.549	5.549	(0.896)	21337	10.0000	9.510
43	o,o,o-Triethyl-Phosphorothioa	198	5.971	5.971	(0.964)	28433	10.0000	9.197
* 48	Naphthalene-d8	136	6.196	6.196	(1.000)	505544	40.0000	
46	a,a-Dimethyl-phenethylamine	58	6.436	6.436	(1.039)	96444	10.0000	10.04(M)
52	2,6-Dichlorophenol	162	6.377	6.377	(1.029)	30702	10.0000	8.603
53	Hexachloropropene	213	6.377	6.377	(1.029)	41102	10.0000	9.269(M)
55	Benzothiazole	135	6.580	6.580	(1.062)	58740	10.0000	8.916(a)
58	p-Phenylenediamine	108	6.864	6.864	(1.108)	37382	10.0000	10.51
57	n-Nitrosodi-n-butylamine	84	6.864	6.864	(1.108)	37600	10.0000	9.337
61	Safrole	162	7.109	7.109	(1.147)	35341	10.0000	9.277

5d 4/29/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
65	1,2,4,5-Tetrachlorobenzene	216	7.505	7.505	(0.844)	98617	10.0000	9.053
64	cis-Isosafrole	162	7.553	7.553	(0.849)	4377	10.0000	10.41
70	trans-Isosafrole	162	7.900	7.900	(0.888)	40689	10.0000	8.878
74	1,4-Naphthoquinone	158	8.263	8.263	(0.929)	27713	10.0000	14.46
75	1,4-Dinitrobenzene	168	8.424	8.424	(1.360)	15633	10.0000	10.17
77	1,3-Dinitrobenzene	168	8.616	8.616	(0.969)	17237	10.0000	10.03
* 82	Acenaphthene-d10	164	8.894	8.894	(1.000)	300491	40.0000	
87	Pentachlorobenzene	250	9.268	9.268	(1.042)	49290	10.0000	9.316
89	1-Naphthylamine	143	9.401	9.401	(1.057)	80074	10.0000	9.794
90	2-Naphthylamine	143	9.535	9.535	(1.072)	73897	10.0000	9.981
92	2,3,4,6-Tetrachlorophenol	232	9.588	9.588	(1.078)	21743	10.0000	8.116
96	Thionazin	107	9.989	9.989	(1.123)	18961	10.0000	9.412(a)
97	5-Nitro-o-toluidine	152	9.994	9.994	(0.865)	28198	10.0000	9.873
101	tri-n-butylphosphate	99	10.283	10.283	(1.156)	122515	10.0000	9.307
105	Sulfotepp	97	10.689	10.689	(0.925)	20173	10.0000	9.367
106	Diallate (peak 1)	86	10.758	10.758	(0.931)	39897	10.0000	9.340
108	Phorate	75	10.769	10.769	(0.932)	71003	10.0000	9.193
111	Diallate (peak 2)	86	10.902	10.902	(0.943)	8451	10.0000	9.279
107	1,3,5-Trinitrobenzene	213	10.865	10.865	(0.940)	12101	10.0000	9.192(a)
110	Phenacetin	108	10.876	10.876	(0.941)	58189	10.0000	9.860(a)
113	Dimethoate	87	11.116	11.116	(0.962)	40747	10.0000	11.81
116	4-Aminobiphenyl	169	11.303	11.303	(0.978)	94306	10.0000	8.866
115	tris(2-chloroethyl)phosphate	63	11.356	11.356	(0.982)	30567	10.0000	9.769
119	Pentachloronitrobenzene	237	11.522	11.522	(0.997)	17560	10.0000	9.584
118	Pronamide	173	11.565	11.565	(1.000)	52043	10.0000	9.762
* 121	Phenanthrene-d10	188	11.559	11.559	(1.000)	563013	40.0000	
123	Disulfoton	88	11.762	11.762	(1.018)	50823	10.0000	9.354
125	Dinoseb	211	11.805	11.805	(1.021)	28558	10.0000	8.773
128	Methyl Parathion	109	12.489	12.489	(1.080)	35573	10.0000	11.56
131	4-Nitroquinoline-1-oxide	190	13.205	13.205	(1.142)	9460	10.0000	8.367
130	Parathion	97	13.274	13.274	(1.148)	25722	10.0000	10.34
132	Methapyrilene	97	13.477	13.477	(1.166)	49062	10.0000	12.88(M)
133	Isodrin	193	13.616	13.616	(1.178)	18398	10.0000	9.317
141	Kepone	272	14.775	14.775	(0.884)	495	10.0000	5.875
140	Aramite (peak 1)	185	14.855	14.855	(0.888)	9551	10.0000	9.864
142	Aramite (peak 2)	185	15.010	15.010	(0.898)	14213	10.0000	9.660
143	p-(Dimethylamino)azobenzene	120	15.080	15.080	(0.902)	45427	10.0000	9.900
144	Chlorobenzilate	251	15.224	15.224	(0.911)	59272	10.0000	9.156
148	2-Acetylaminofluorene	181	16.271	16.271	(0.973)	69387	10.0000	9.586
149	Famphur	218	16.677	16.677	(0.997)	3050	10.0000	11.50(M)
* 153	Chrysene-d12	240	16.720	16.720	(1.000)	555393	40.0000	
151	4,4'-Methylenebis(2-Chloroani	266	16.795	16.795	(1.004)	14144	10.0000	8.860(a)
162	7,12-Dimethylbenz(a)anthracen	256	18.729	18.729	(0.969)	81942	10.0000	9.106
163	Hexachlorophene	196	19.033	19.033	(0.985)	725	10.0000	2.323(M)
* 166	Perylene-d12	264	19.332	19.332	(1.000)	488134	40.0000	
169	3-methylcholanthrene	268	19.861	19.861	(1.027)	83423	10.0000	9.085

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2585.D Page 3
Report Date: 29-Apr-2005 08:43

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

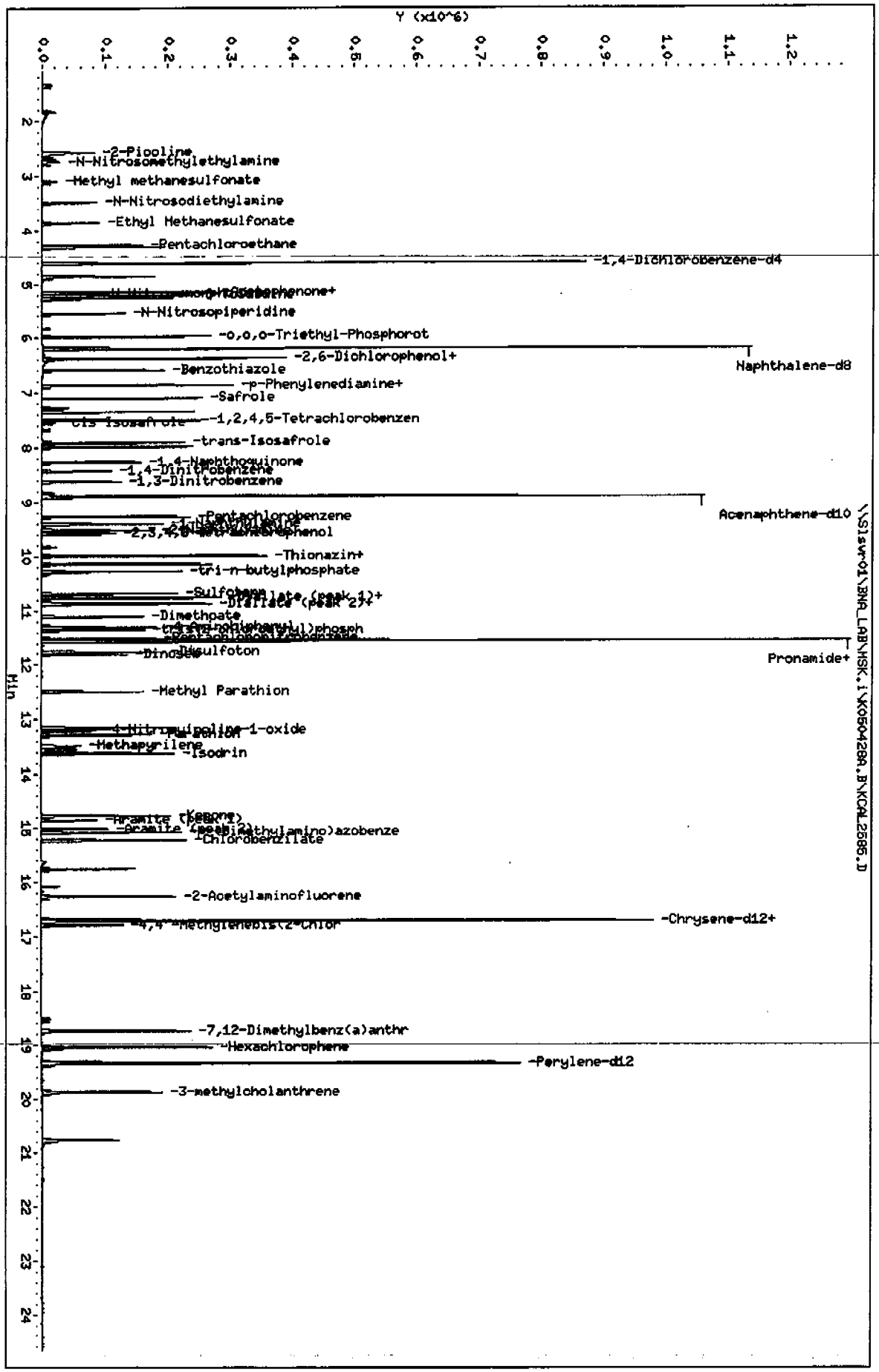
Instrument ID: MSK.i
Lab File ID: KCAL2585.D
Lab Smp Id: SSTD010APPIX
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Misc Info: SV0183-05

Calibration Date: 28-APR-2005
Calibration Time: 11:41
Client Smp ID: SSTD010APPIX
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	162145	81073	324290	139914	-13.71
48 Naphthalene-d8	535939	267970	1071878	505544	-5.67
82 Acenaphthene-d10	307602	153801	615204	300491	-2.31
121 Phenanthrene-d10	574409	287205	1148818	563013	-1.98
153 Chrysene-d12	519397	259699	1038794	555393	6.93
166 Perylene-d12	440492	220246	880984	488134	10.82

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.62	4.12	5.12	4.62	-0.10
48 Naphthalene-d8	6.21	5.71	6.71	6.20	-0.16
82 Acenaphthene-d10	8.91	8.41	9.41	8.89	-0.17
121 Phenanthrene-d10	11.58	11.08	12.08	11.56	-0.18
153 Chrysene-d12	16.74	16.24	17.24	16.72	-0.09
166 Perylene-d12	19.35	18.85	19.85	19.33	-0.08

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.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0.7
0.8
0.9
1.0
1.1
1.2
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17
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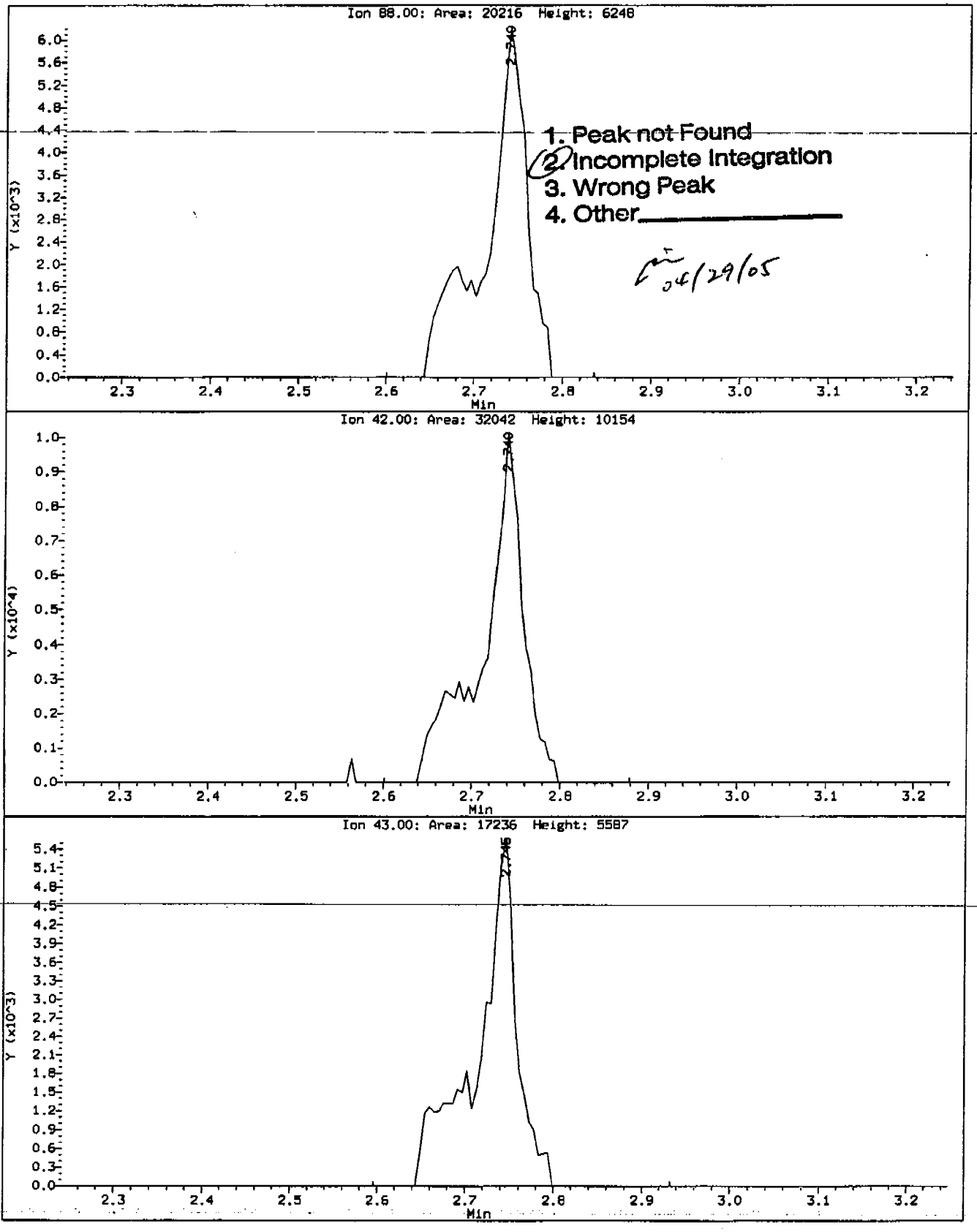
19
20
21
22
23
24
-2-Picoline
-N-Nitrosomethylethylamine
-Methyl methanesulfonate
-N-Nitrosodiethylamine
-Ethyl Methanesulfonate
-Pentachloroethane
-1,4-Dichlorobenzene-d4
-N-Nitrosopiperidine
-o,o,o-Triethyl-Phosphorot
-2,6-Dichlorophenol+
Naphthalene-d8
-Benzothiazole
-p-Phenylenediamine+
-Safrole
-1,2,4,5-Tetrachlorobenzen
-trans-Isosafrole
-1,4-Dinitrobenzene
-1,3-Dinitrobenzene
Acenaphthene-d10
-Thionazin+
-tri-n-butylphosphate
-Dimethoate
Pronamide+
-Methyl Parathion
-Isodrin
-Chlorobenzilate
-2-Acetylaminofluorene
-Chrysene-d12+
-7,12-Dimethylbenz(a)anthr
-Hexachlorophene
-Perylene-d12
-3-methylcholanthrene
Data File: \\Slsvr01\BNA_LAB\MSK.i\KO504280.B\KCAL2585.D
Date : 28-APR-2005 15:08
Client ID: SSTD010APPIX
Sample Info: SSTD010APPIX
Volume Injected (uL): 1.0
Column phase:
\\Slsvr01\BNA_LAB\MSK.i\KO504280.B\KCAL2585.D
Instrument: MSK.i
Operator: XIA
Column diameter: 2.00

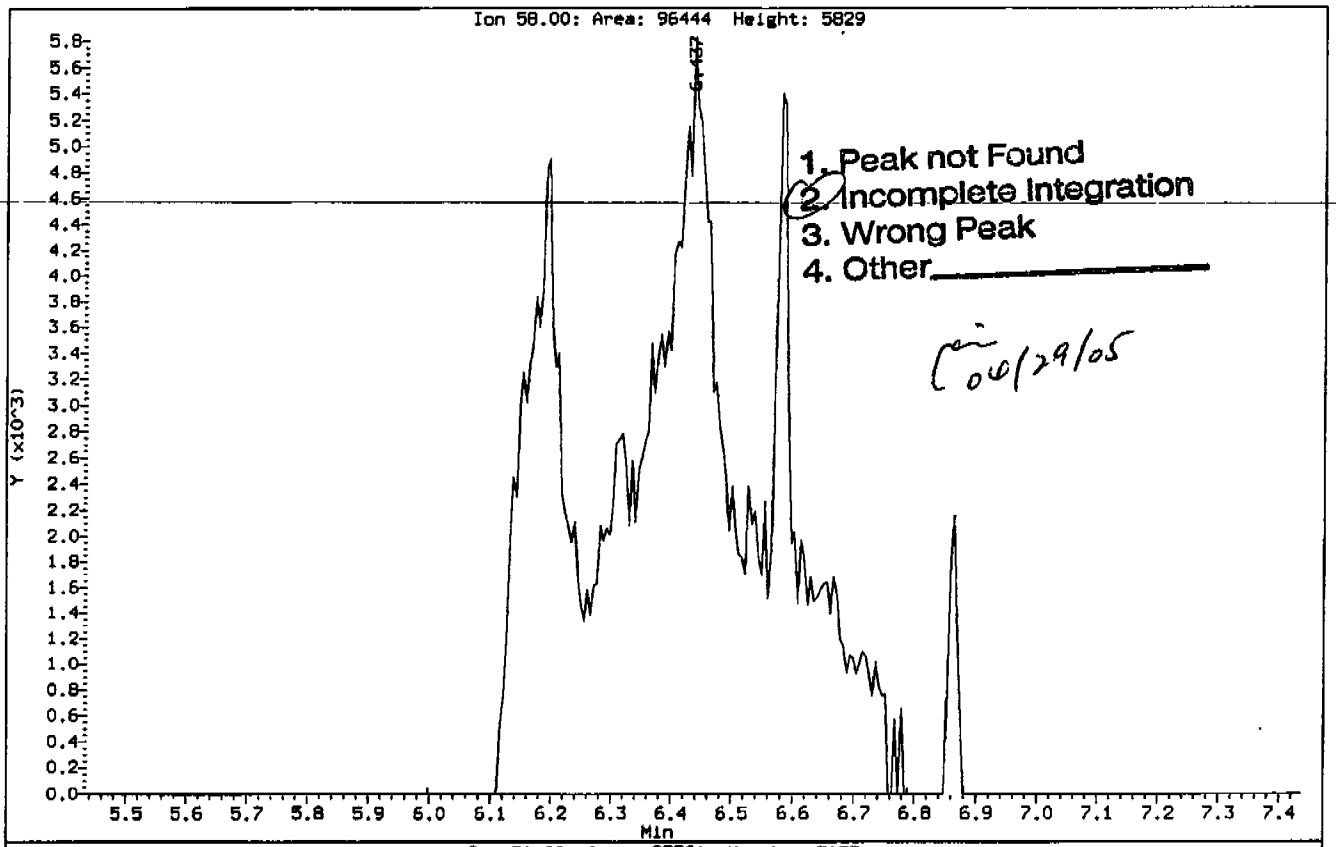
Data File: \\Slmvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2585.D
Injection Date: 28-APR-2005 15:08
Instrument: MSK.i
Client Sample ID: SSTD010APPIX

Compound: N-Nitrosomethylethylamine
CAS Number: 10595-95-6

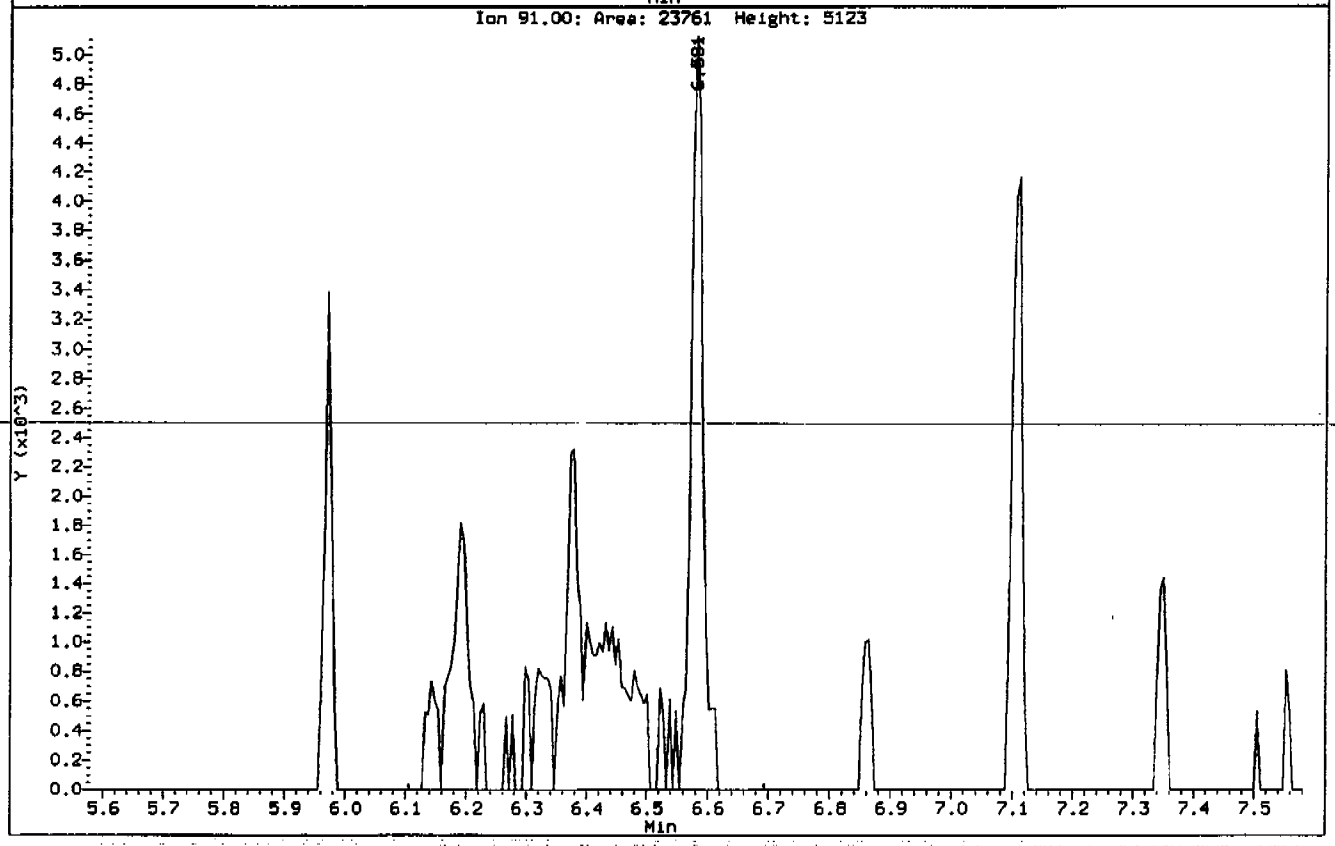


Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2585.D
Injection Date: 28-APR-2005 15:08
Instrument: MSK.i
Client Sample ID: SSTD010APPIX

Compound: a,a-Dimethyl-phenethylamine
CAS Number: 122-09-8

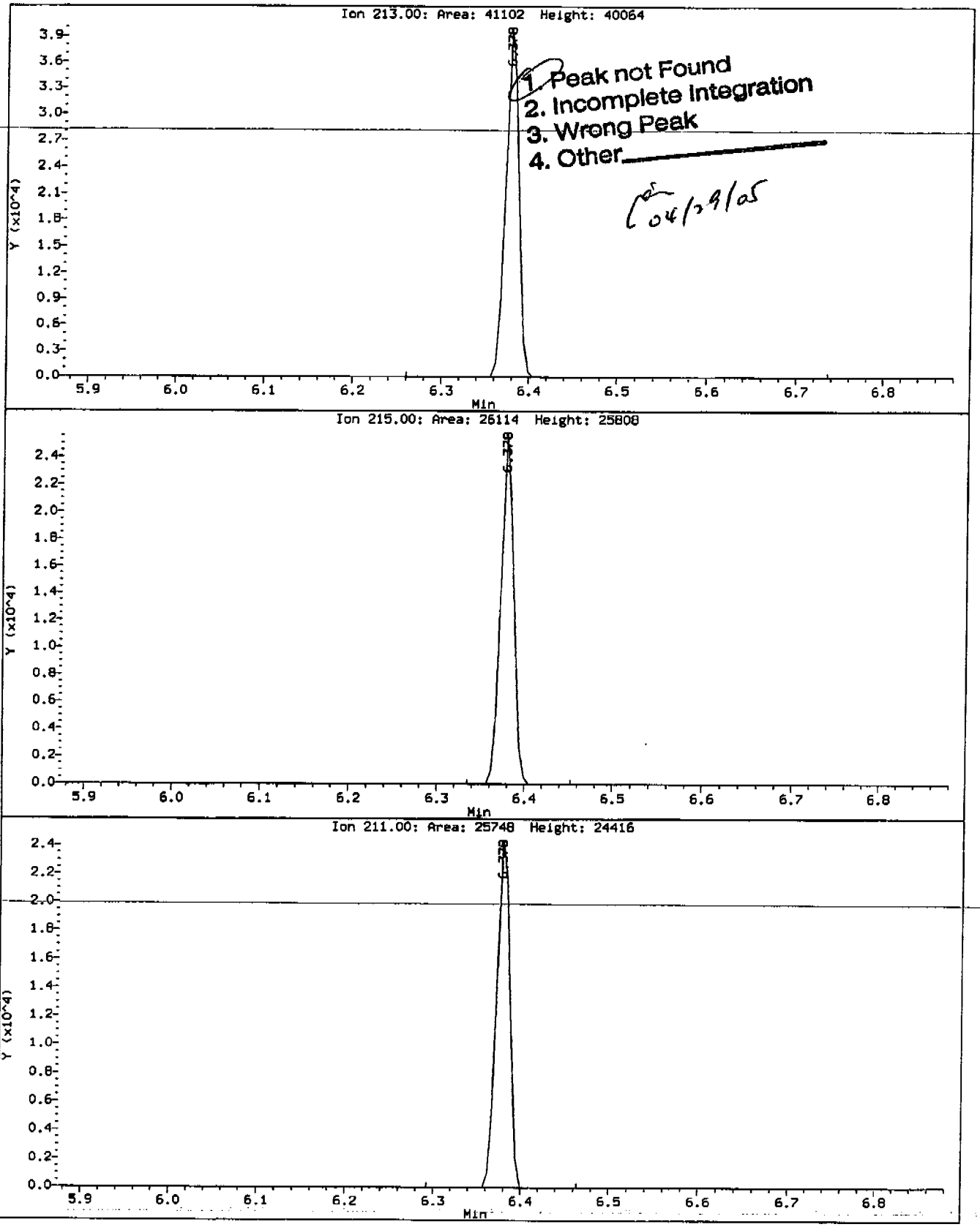


[illegible] 10/29/05



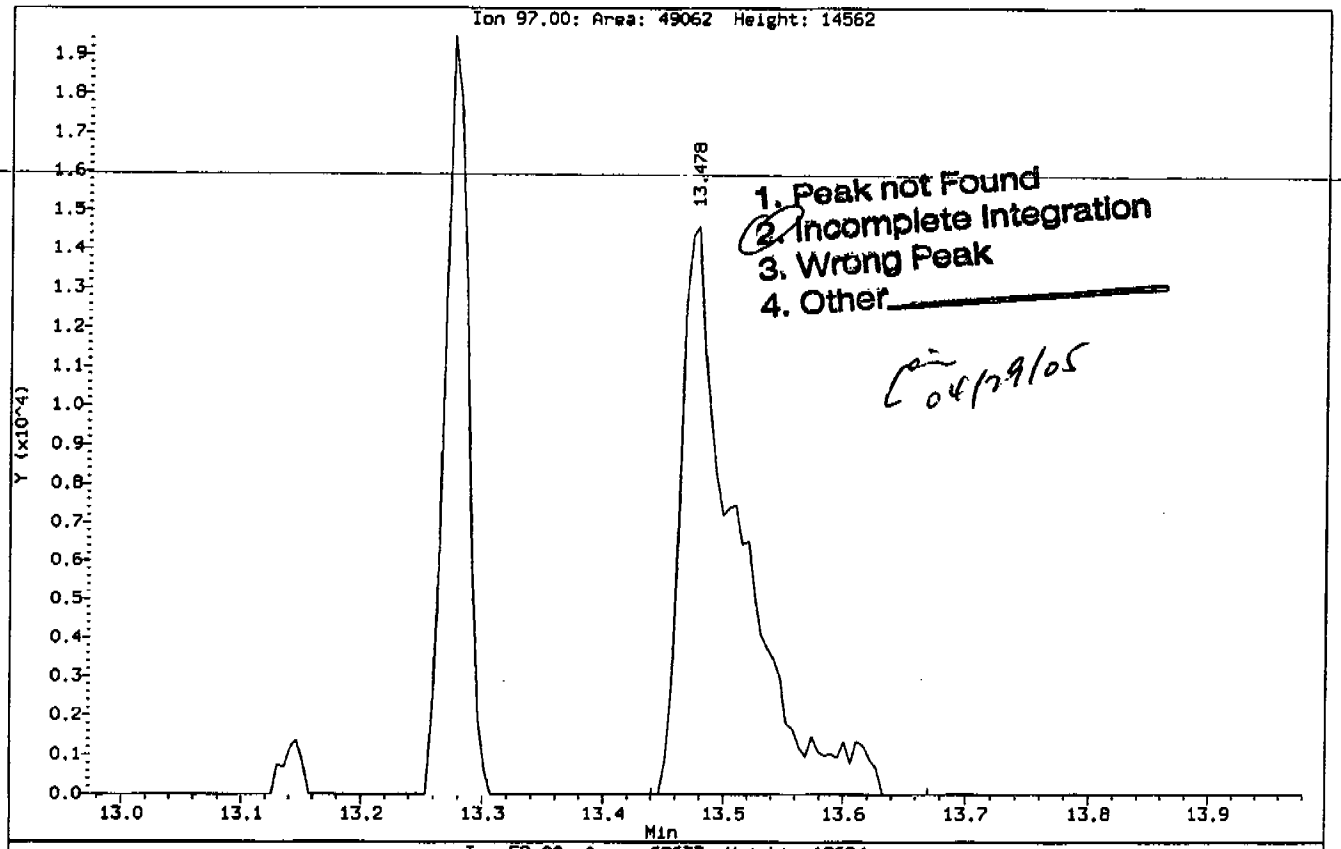
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2585.D
Injection Date: 28-APR-2005 15:08
Instrument: MSK.i
Client Sample ID: SSTD010APPIX

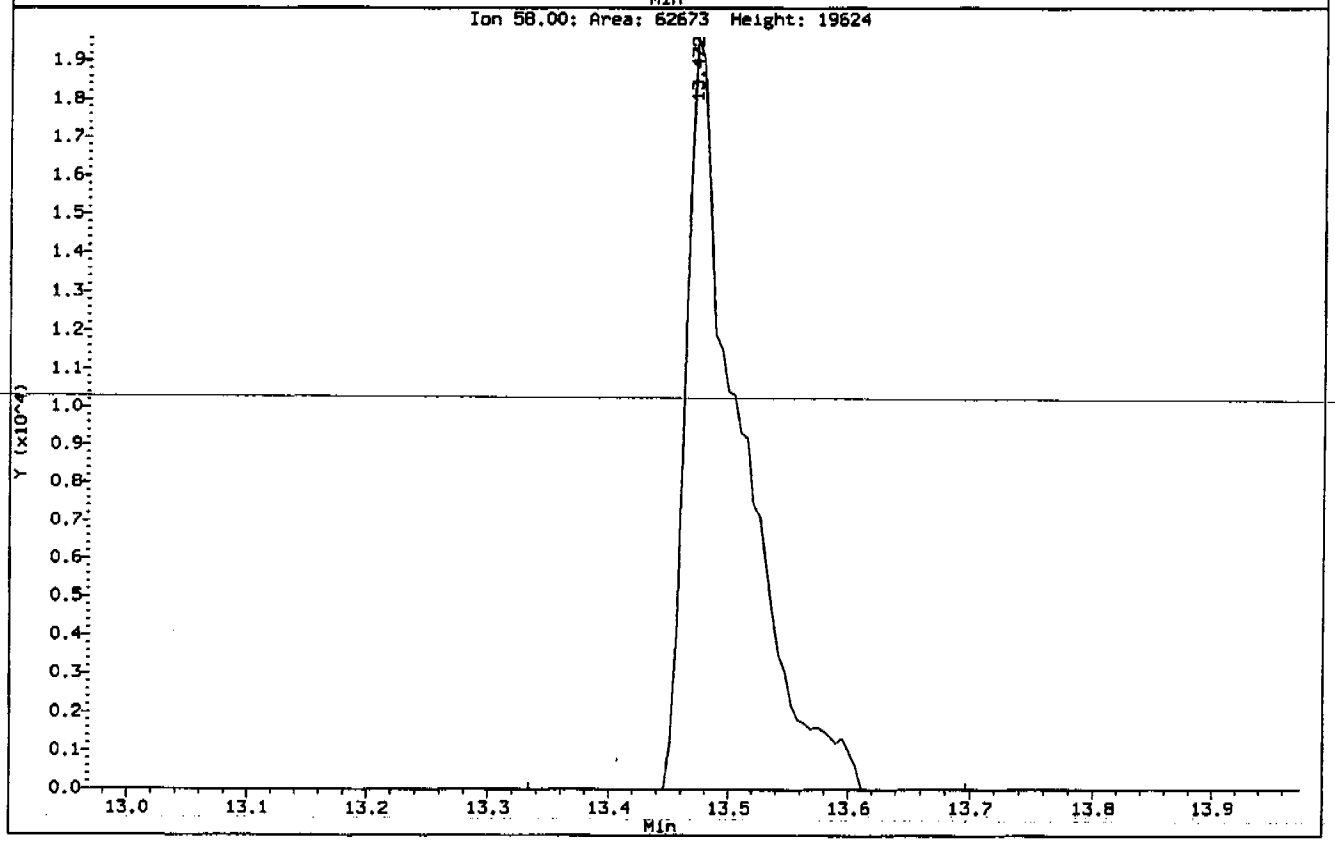
Compound: Hexachloropropene
CAS Number: 1888-71-7



Data File: \\Slavr01\BNA_LAB\MSK.i\K050428A.B\KCAL2585.D
Injection Date: 28-APR-2005 15:08
Instrument: MSK.i
Client Sample ID: SSTD010APPIX

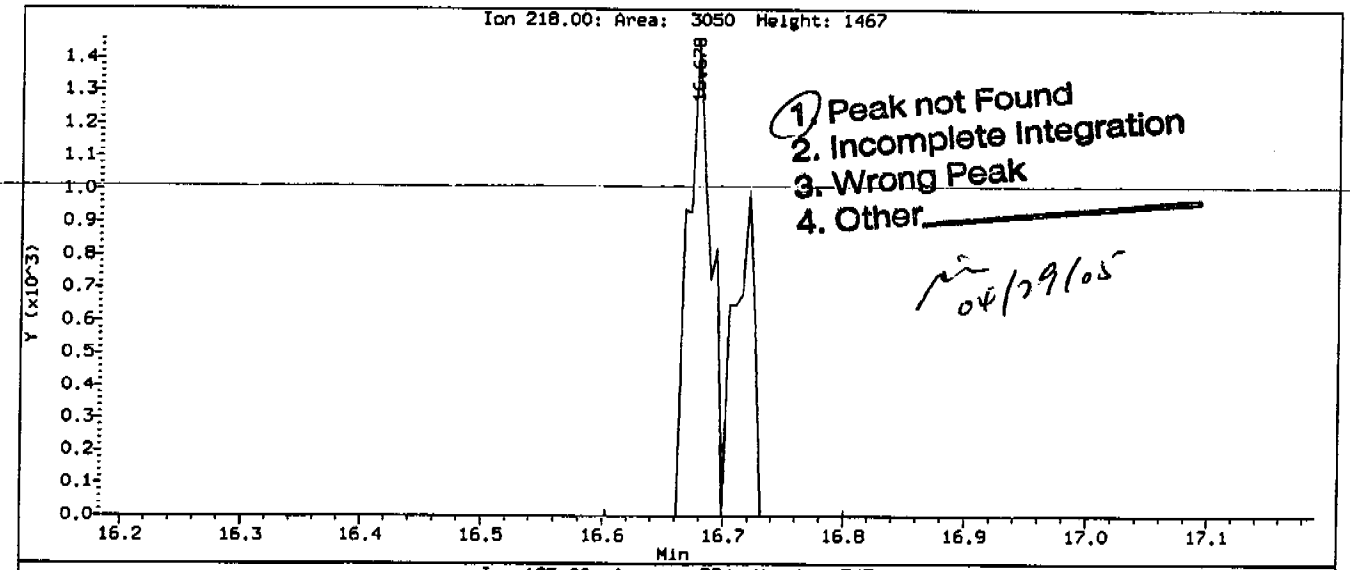
Compound: Methapyrilene
CAS Number: 91-80-5





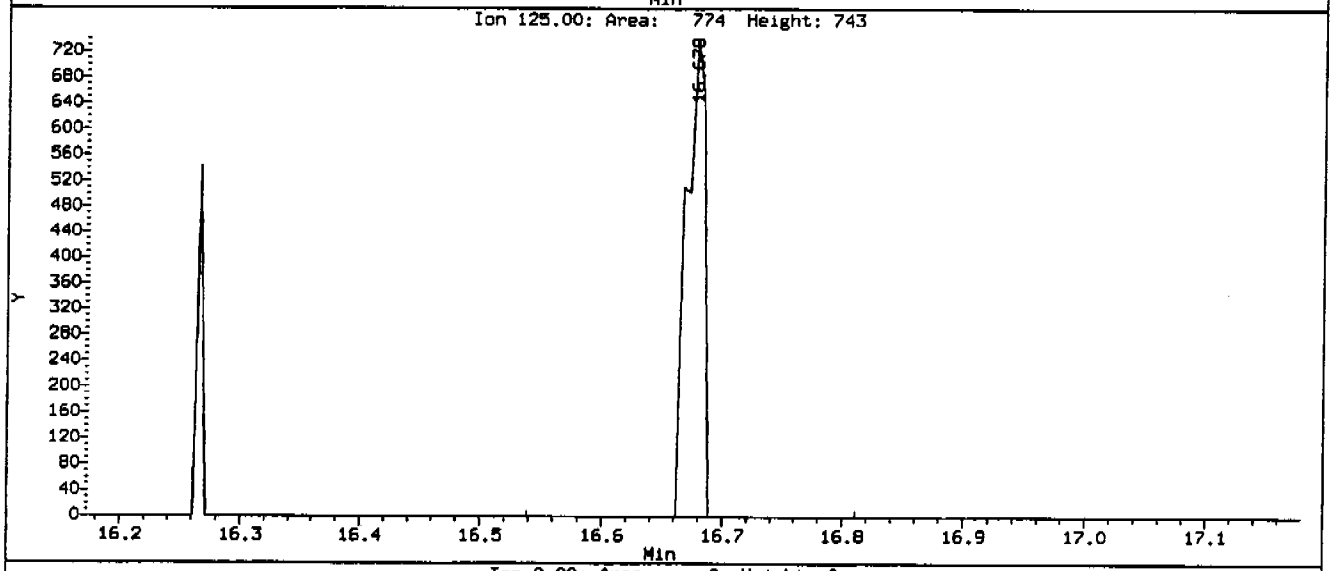
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2585.D
Injection Date: 28-APR-2005 15:08
Instrument: MSK.i
Client Sample ID: SSTD010APPIX

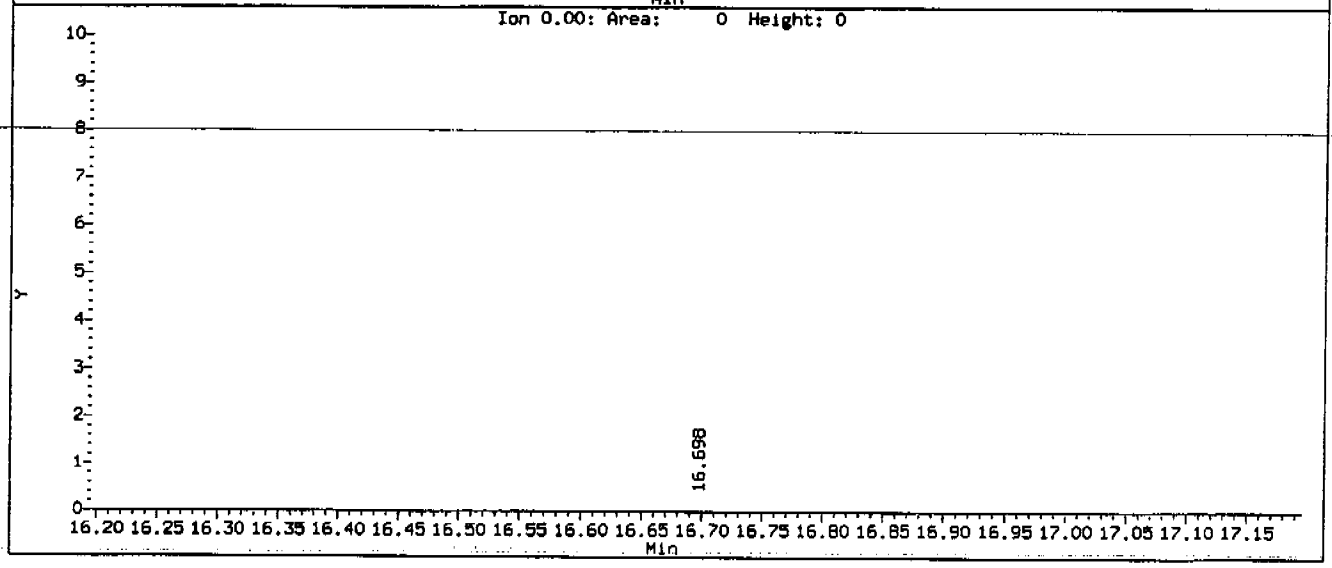
Compound: Famphur
CAS Number: 52-85-7



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

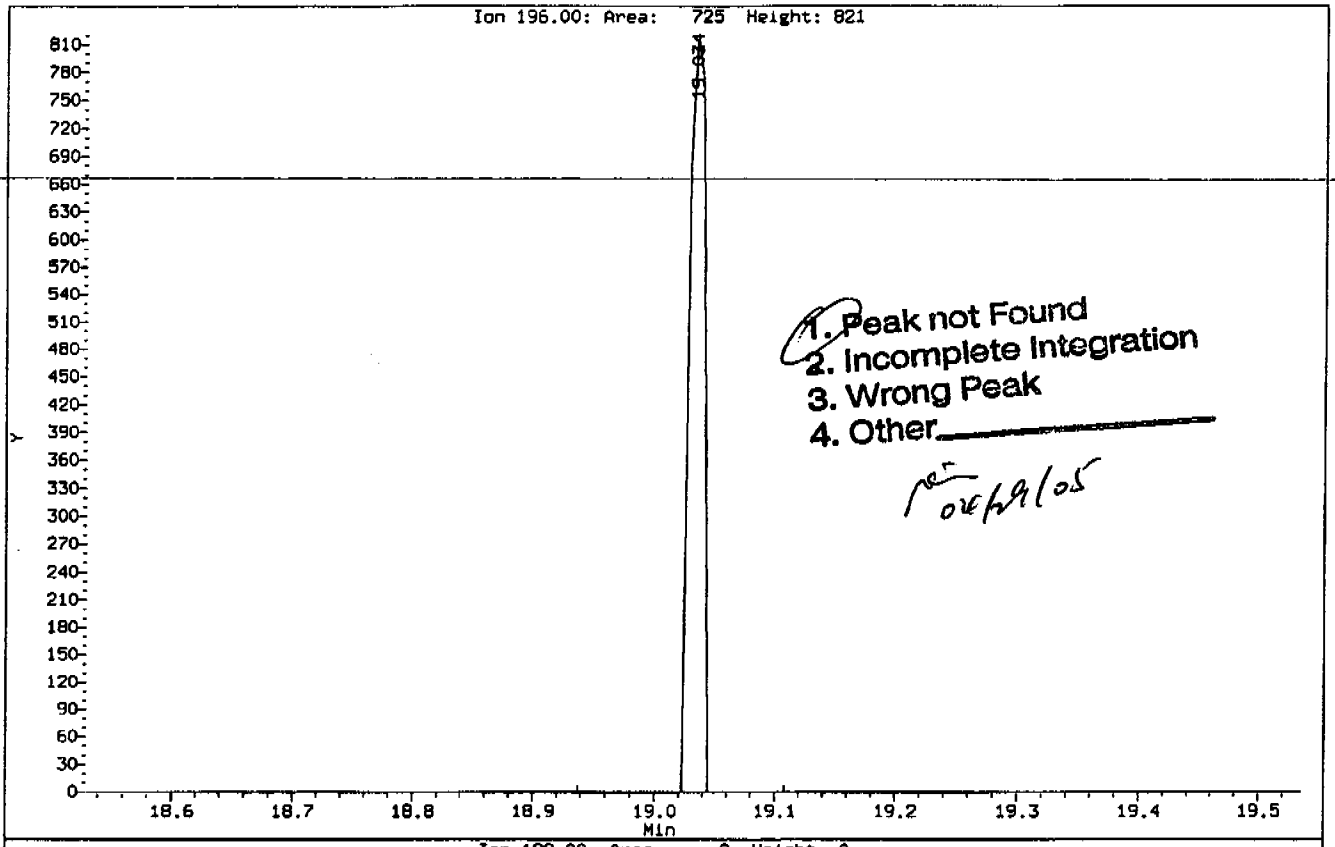
04/29/05





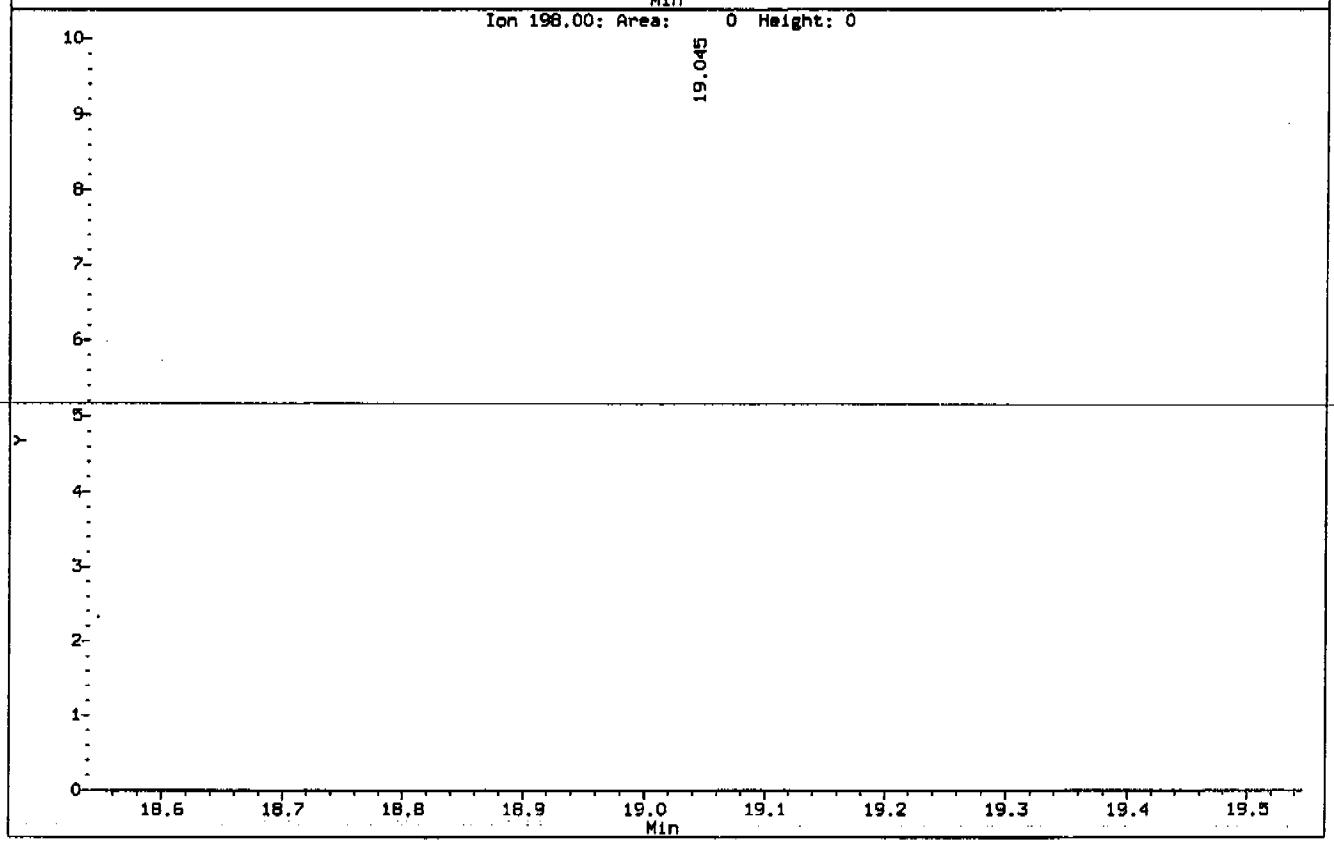
Data File: \\Slavr01\BNA_LAB\MSK.i\K050428A.B\KCAL2585.D
Injection Date: 28-APR-2005 15:08
Instrument: MSK.i
Client Sample ID: SSTD010APPIX

Compound: Hexachlorophene
CAS Number: 70-30-7



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

5/9/05



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D
Report Date: 29-Apr-2005 08:43

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D
Lab Smp Id: SSTD002APPIX Client Smp ID: SSTD002APPIX
Inj Date : 28-APR-2005 15:42
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD002APPIX
Misc Info : SV0182-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Meth Date : 29-Apr-2005 08:43 hongs Quant Type: ISTD
Cal Date : 28-APR-2005 15:42 Cal File: KCAL2586.D
Als bottle: 10 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIX.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
7	2-Picoline	93	2.597	2.597	(0.563)	7038	2.00000	1.775(a)
8	N-Nitrosomethylethylamine	88	2.747	2.747	(0.596)	2959	2.00000	1.660(aM)
9	Methyl methanesulfonate	80	3.110	3.110	(0.674)	2236	2.00000	1.642(aM)
12	N-Nitrosodiethylamine	102	3.495	3.495	(0.758)	3845	2.00000	1.828(a)
13	Ethyl Methanesulfonate	79	3.863	3.863	(0.838)	6944	2.00000	1.940(a)
18	Pentachloroethane	117	4.269	4.269	(0.926)	3225	2.00000	1.927(a)
* 22	1,4-Dichlorobenzene-d4	152	4.611	4.611	(1.000)	126048	40.0000	
30	Acetophenone	105	5.151	5.151	(0.832)	12525	2.00000	1.867(a)
31	N-Nitrosopyrrolidine	100	5.162	5.162	(0.834)	4059	2.00000	1.857(a)
33	N-Nitrosomorpholine	116	5.194	5.194	(0.839)	1541	2.00000	1.592(a)
34	O-Toluidine	106	5.210	5.210	(0.841)	12793	2.00000	1.826(a)
38	N-Nitrosopiperidine	114	5.552	5.552	(0.896)	3738	2.00000	1.851(a)
43	o,o,o-Triethyl-Phosphorothioa	198	5.974	5.974	(0.965)	4899	2.00000	1.761(a)
* 48	Naphthalene-d8	136	6.193	6.193	(1.000)	454977	40.0000	
46	a,a-Dimethyl-phenethylamine	58	6.267	6.267	(1.012)	11635	2.00000	1.346(aM)
52	2,6-Dichlorophenol	162	6.374	6.374	(1.029)	5794	2.00000	1.804(a)
53	Hexachloropropene	213	6.380	6.380	(1.030)	7219	2.00000	1.809(aM)
55	Benzothiazole	135	6.583	6.583	(1.063)	11406	2.00000	1.924(a)
58	p-Phenylenediamine	108	6.871	6.871	(1.110)	4976	2.00000	1.555(a)
57	n-Nitrosodi-n-butylamine	84	6.860	6.860	(1.108)	7130	2.00000	1.967(a)
61	Safrole	162	7.106	7.106	(1.148)	5801	2.00000	1.692(a)

04/29/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
65	1,2,4,5-Tetrachlorobenzene	216	7.501	7.501	(0.844)	18303	2.00000	1.971(aM)
64	cis-Isosafrole	162	7.560	7.560	(0.850)	608	2.00000	1.697(aM)
70	trans-Isosafrole	162	7.902	7.902	(0.889)	7254	2.00000	1.857(a)
74	1,4-Naphthoquinone	158	8.265	8.265	(0.930)	3480	2.00000	2.130
75	1,4-Dinitrobenzene	168	8.426	8.426	(1.361)	1766	2.00000	1.276(a)
77	1,3-Dinitrobenzene	168	8.618	8.618	(0.969)	2124	2.00000	1.450(a)
* 82	Acenaphthene-d10	164	8.890	8.890	(1.000)	256109	40.0000	
87	Pentachlorobenzene	250	9.270	9.270	(1.043)	9057	2.00000	2.008
89	1-Naphthylamine	143	9.398	9.398	(1.057)	13292	2.00000	1.908(a)
90	2-Naphthylamine	143	9.531	9.531	(1.072)	12508	2.00000	1.982(a)
92	2,3,4,6-Tetrachlorophenol	232	9.585	9.585	(1.078)	2921	2.00000	1.279(a)
96	Thionazin	107	9.991	9.991	(1.124)	2963	2.00000	1.726(a)
97	5-Nitro-o-toluidine	152	9.996	9.996	(0.865)	3662	2.00000	1.576(a)
101	tri-n-butylphosphate	99	10.285	10.285	(1.157)	19484	2.00000	1.737(a)
105	Sulfotepp	97	10.685	10.685	(0.925)	2989	2.00000	1.706(a)
106	Diallate (peak 1)	86	10.755	10.755	(0.931)	6389	2.00000	1.839(a)
108	Phorate	75	10.771	10.771	(0.932)	11435	2.00000	1.820(a)
111	Diallate (peak 2)	86	10.894	10.894	(0.943)	1530	2.00000	2.066
107	1,3,5-Trinitrobenzene	213	10.862	10.862	(0.940)	1250	2.00000	1.167(aM)
110	Phenacetin	108	10.862	10.862	(0.940)	8843	2.00000	1.842(a)
113	Dimethoate	87	11.107	11.107	(0.961)	6224	2.00000	2.218
116	4-Aminobiphenyl	169	11.300	11.300	(0.978)	16255	2.00000	1.879(a)
115	tris(2-chloroethyl)phosphate	63	11.353	11.353	(0.982)	5180	2.00000	2.035
119	Pentachloronitrobenzene	237	11.519	11.519	(0.997)	2691	2.00000	1.806(a)
118	Pronamide	173	11.561	11.561	(1.000)	8644	2.00000	1.994(a)
* 121	Phenanthrene-d10	188	11.556	11.556	(1.000)	457899	40.0000	
123	Disulfoton	88	11.759	11.759	(1.018)	8182	2.00000	1.852(a)
125	Dinoseb	211	11.802	11.802	(1.021)	3003	2.00000	1.134(a)
128	Methyl Parathion	109	12.486	12.486	(1.080)	5145	2.00000	2.056
130	Parathion	97	13.276	13.276	(1.149)	3141	2.00000	1.553(a)
132	Methapyrilene	97	13.485	13.485	(1.167)	7801	2.00000	2.519
133	Isodrin	193	13.613	13.613	(1.178)	3420	2.00000	2.129
140	Aramite (peak 1)	185	14.858	14.858	(0.889)	1208	2.00000	1.542(a)
142	Aramite (peak 2)	185	15.013	15.013	(0.898)	1971	2.00000	1.655(a)
143	p-(Dimethylamino)azobenzene	120	15.077	15.077	(0.902)	6528	2.00000	1.758(a)
144	Chlorobenzilate	251	15.221	15.221	(0.911)	9079	2.00000	1.733(a)
148	2-Acetylaminofluorene	181	16.263	16.263	(0.973)	9906	2.00000	1.691(a)
* 153	Chrysene-d12	240	16.717	16.717	(1.000)	449472	40.0000	
151	4,4'-Methylenebis(2-Chloroani	266	16.797	16.797	(1.005)	2316	2.00000	1.793(a)
162	7,12-Dimethylbenz(a)anthracen	256	18.731	18.731	(0.969)	13129	2.00000	1.714(a)
* 166	Perylene-d12	264	19.329	19.329	(1.000)	415435	40.0000	
169	3-methylcholanthrene	268	19.858	19.858	(1.027)	13968	2.00000	1.787(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D Page 3
Report Date: 29-Apr-2005 08:43

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

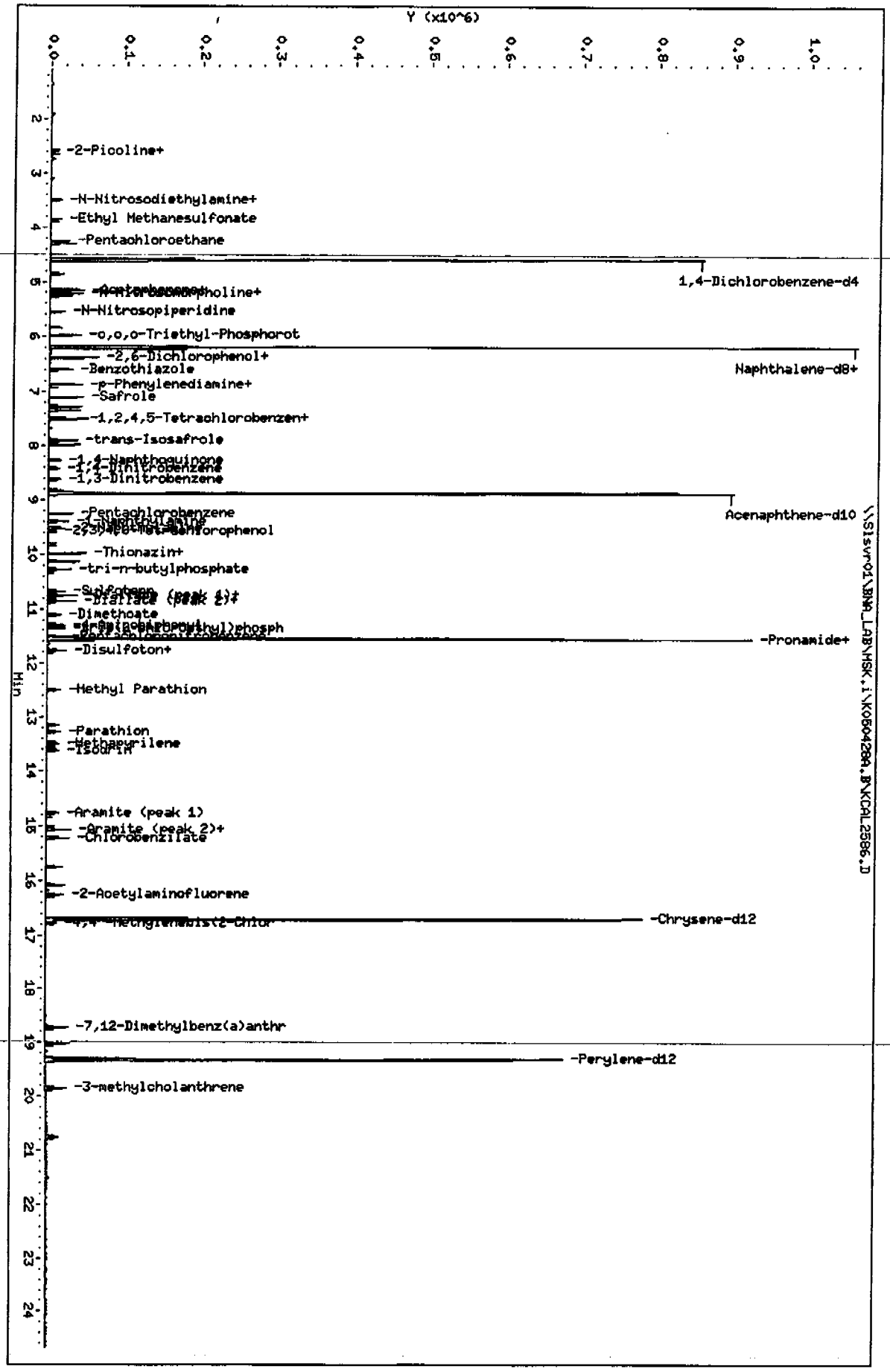
Instrument ID: MSK.i
Lab File ID: KCAL2586.D
Lab Smp Id: SSTD002APPIX
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Misc Info: SV0182-05

Calibration Date: 28-APR-2005
Calibration Time: 11:41
Client Smp ID: SSTD002APPIX
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	162145	81073	324290	126048	-22.26
48 Naphthalene-d8	535939	267970	1071878	454977	-15.11
82 Acenaphthene-d10	307602	153801	615204	256109	-16.74
121 Phenanthrene-d10	574409	287205	1148818	457899	-20.28
153 Chrysene-d12	519397	259699	1038794	449472	-13.46
166 Perylene-d12	440492	220246	880984	415435	-5.69

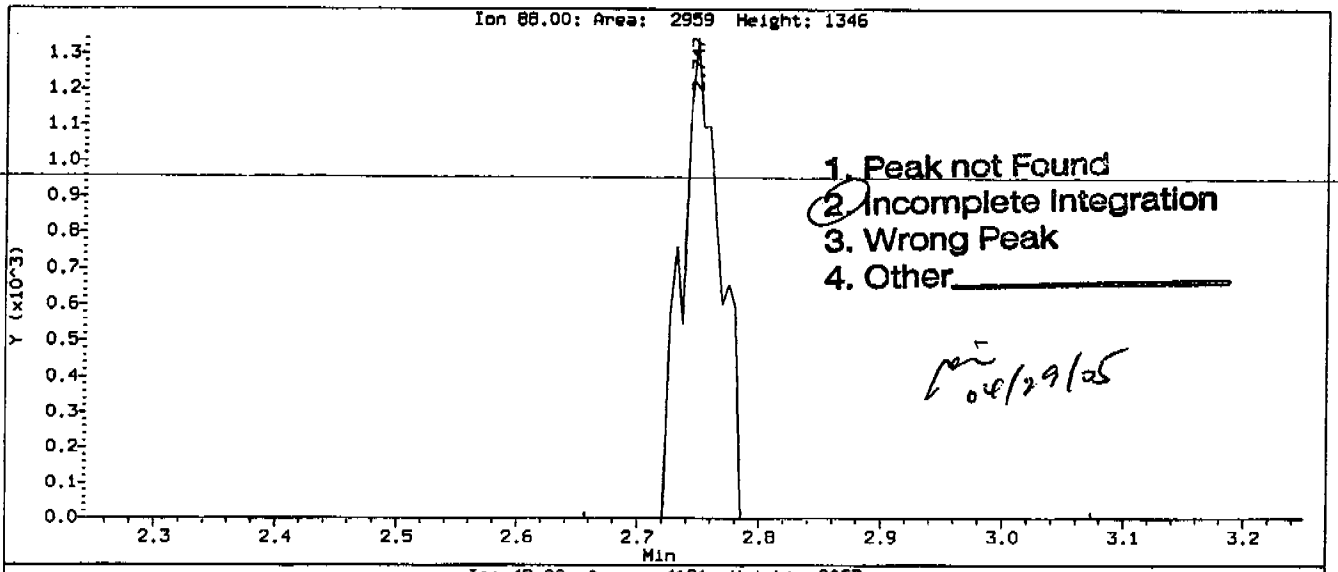
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.62	4.12	5.12	4.61	-0.17
48 Naphthalene-d8	6.21	5.71	6.71	6.19	-0.21
82 Acenaphthene-d10	8.91	8.41	9.41	8.89	-0.21
121 Phenanthrene-d10	11.58	11.08	12.08	11.56	-0.20
153 Chrysene-d12	16.74	16.24	17.24	16.72	-0.11
166 Perylene-d12	19.35	18.85	19.85	19.33	-0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^6)
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Min
-2-Picoline+
-N-Nitrosodiethylamine+
-Ethyl Methanesulfonate
-Pentachloroethane
1,4-Dichlorobenzene-d4
-N-Nitrosopiperidine
-o,o,o-Triethyl-Phosphorot
-2,6-Dichlorophenol+
-Benzothiazole
Naphthalene-d8+
-p-Phenylenediamine+
-Safrole
-1,2,4,5-Tetrachlorobenzen+
-trans-Isosafrole
-1,4-Naphthoquinone
-1,3-Dinitrobenzene
-Pentachlorobenzene
Acenaphthene-d10
-Thionazin+
-tri-n-butylphosphate
-Dimethoate
-Pronamide+
-Disulfoton+
-Methyl Parathion
-Parathion
-Aramite (peak 1)
-Aramite (peak 2)+
-Chlorobenzilate
-2-Acetylaminofluorene
-Chrysene-d12
-7,12-Dimethylbenz(a)anthr
-Perylene-d12
-3-methylcholanthrene
Data File: \\Sisvr01\BNA_LAB\HSK.i\K0504284.B\KCAL2586.D
Date : 28-APR-2005 15:42
Client ID: SSTD002APPIX
Sample Info: SSTD002APPIX
Volume Injected (uL): 1.0
Column phase:
\\Sisvr01\BNA_LAB\HSK.i\K0504284.B\KCAL2586.D
Instrument: HSK.i
Operator: XIA
Column diameter: 2.00
Page 4

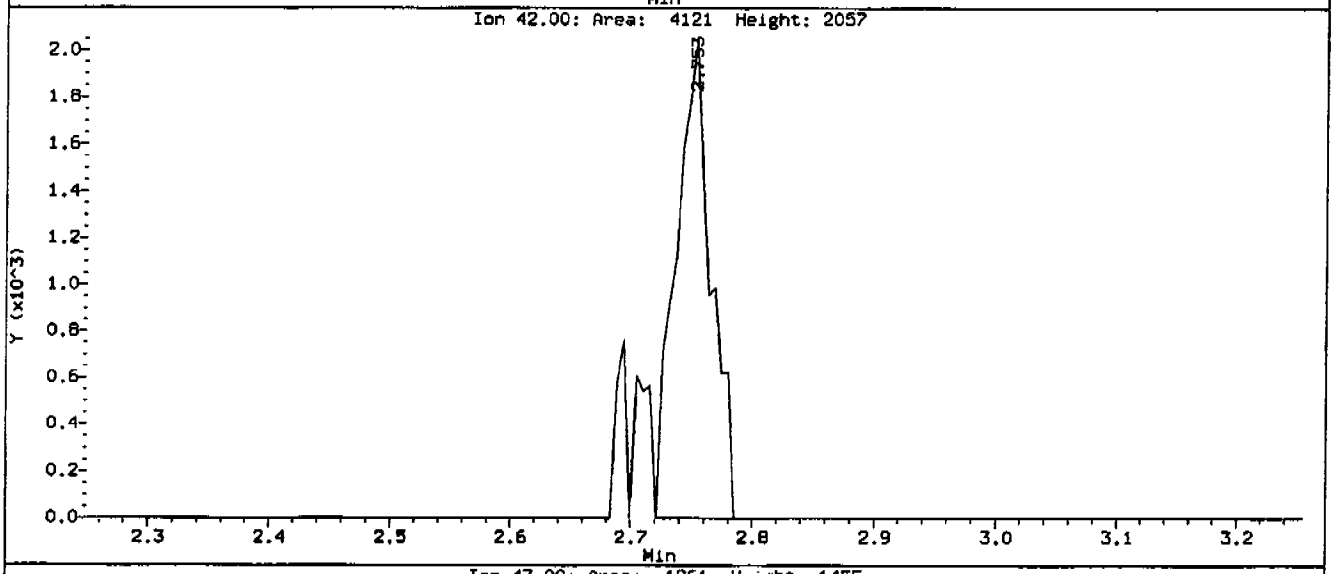
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D
Injection Date: 28-APR-2005 15:42
Instrument: MSK.i
Client Sample ID: SSTD002APPIX

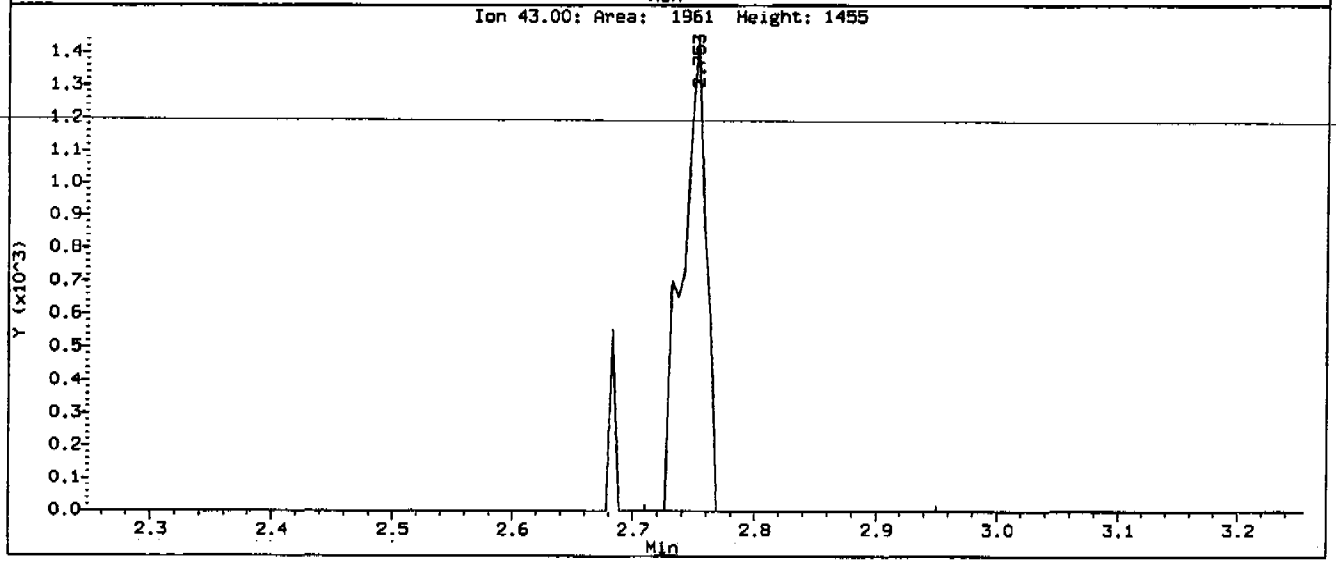
Compound: N-Nitrosomethylethylamine
CAS Number: 10595-95-6



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

04/29/05





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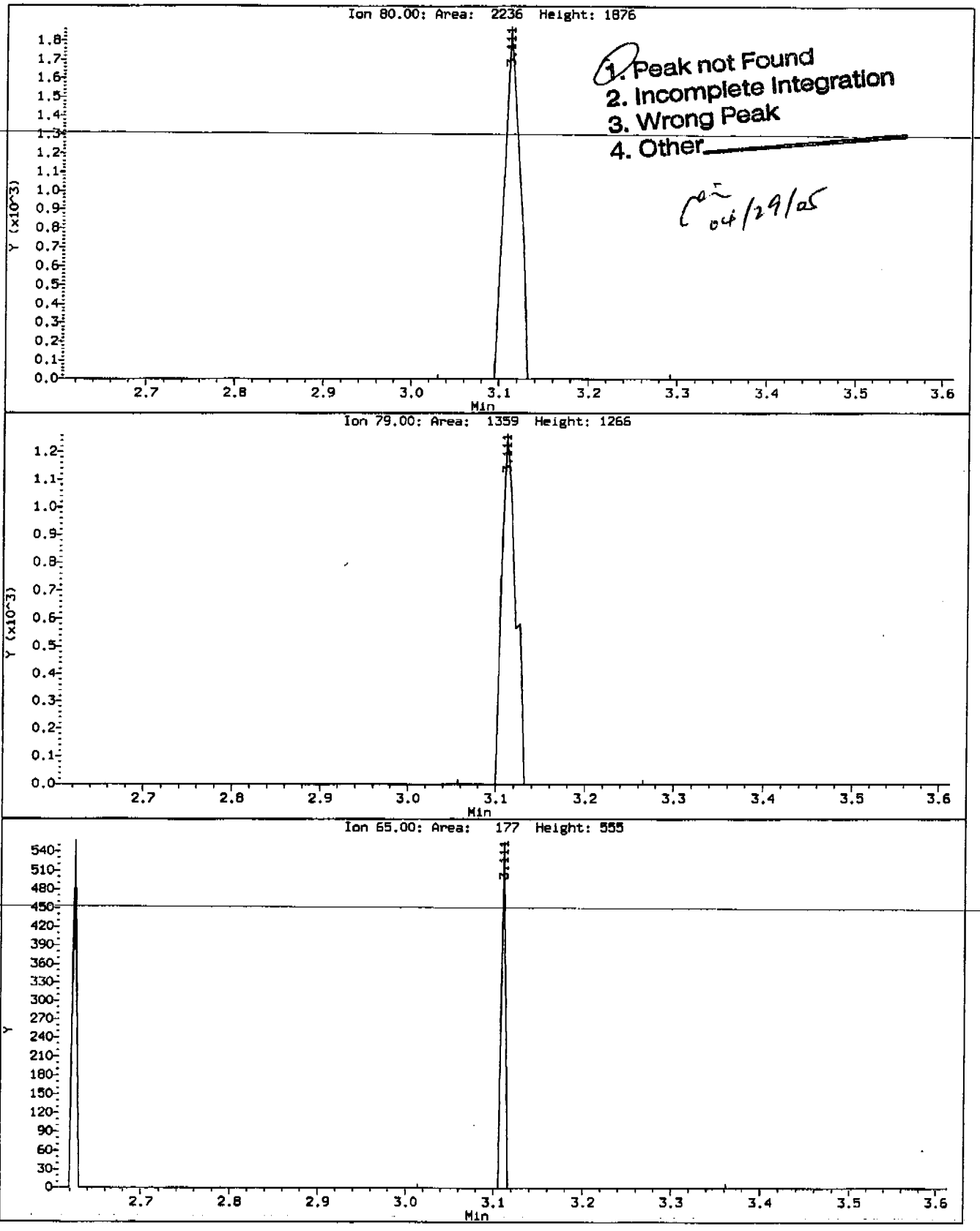
Injection Date: 28-APR-2005 15:42
Instrument: MSK.i
Client Sample ID: SSTD002APPIX

Compound: Methyl methanesulfonate
CAS Number: 66-27-3

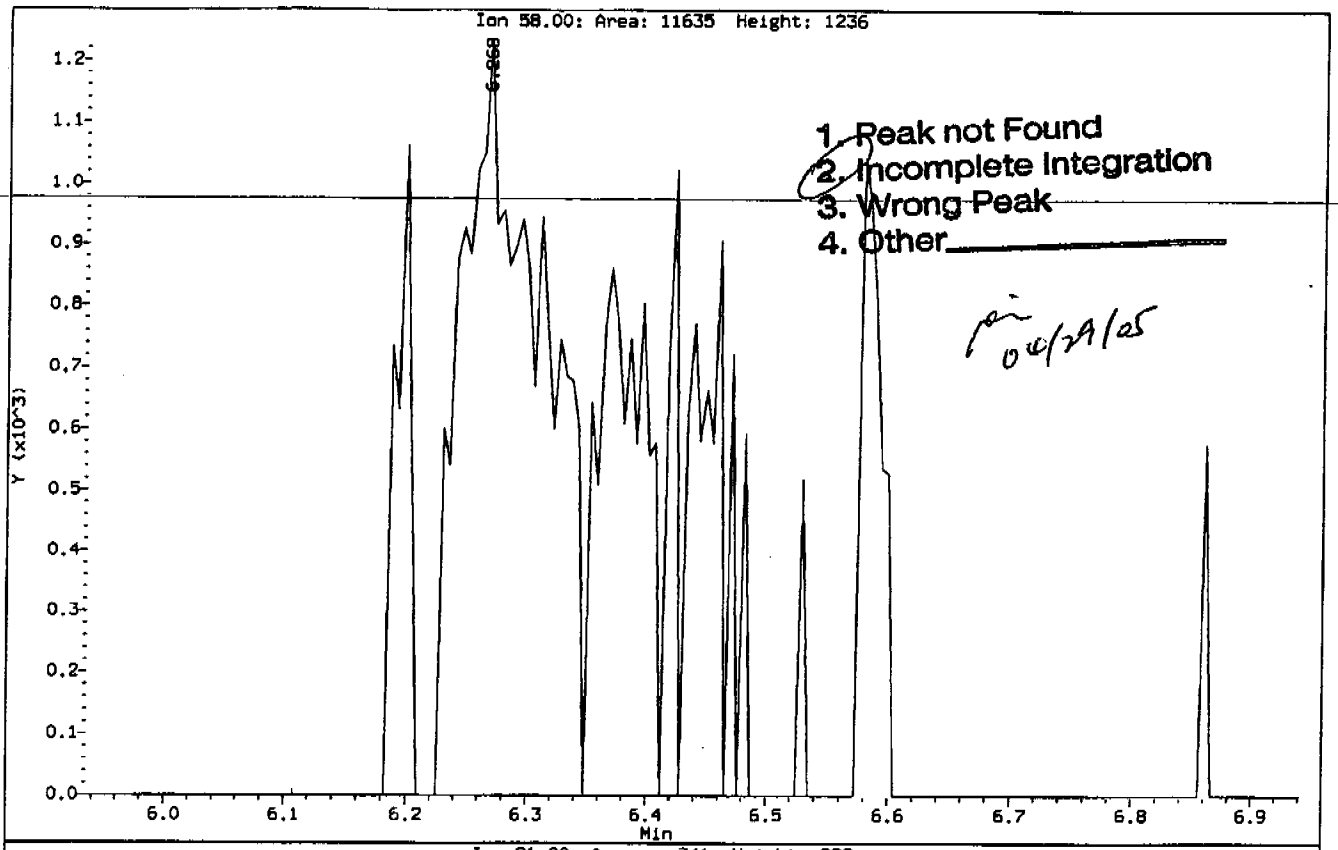


1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

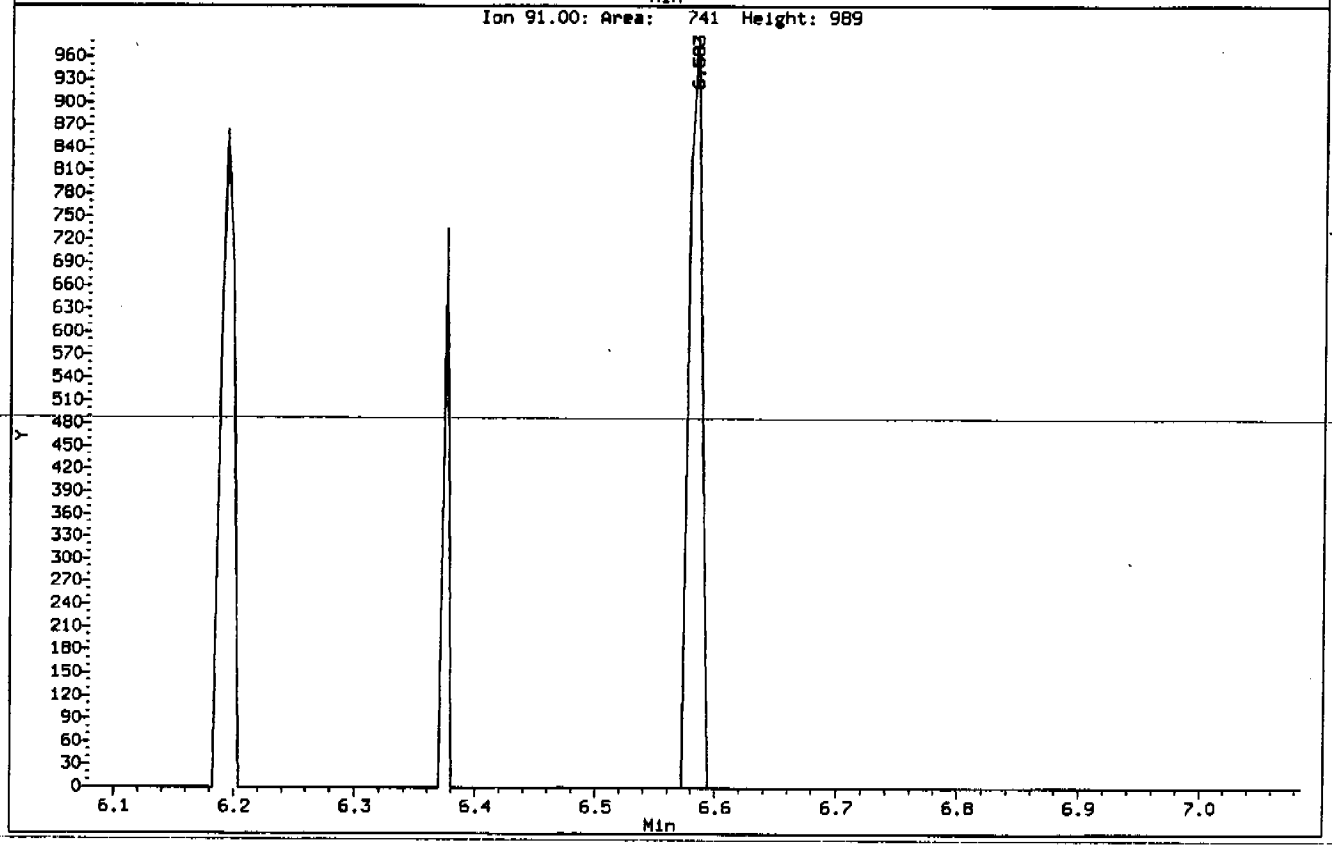
CE 04/29/05

Data File: \\Slavr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D
Injection Date: 28-APR-2005 15:42
Instrument: MSK.i
Client Sample ID: SSTD002APPIX

Compound: a,a-Dimethyl-phenethylamine
CAS Number: 122-09-8

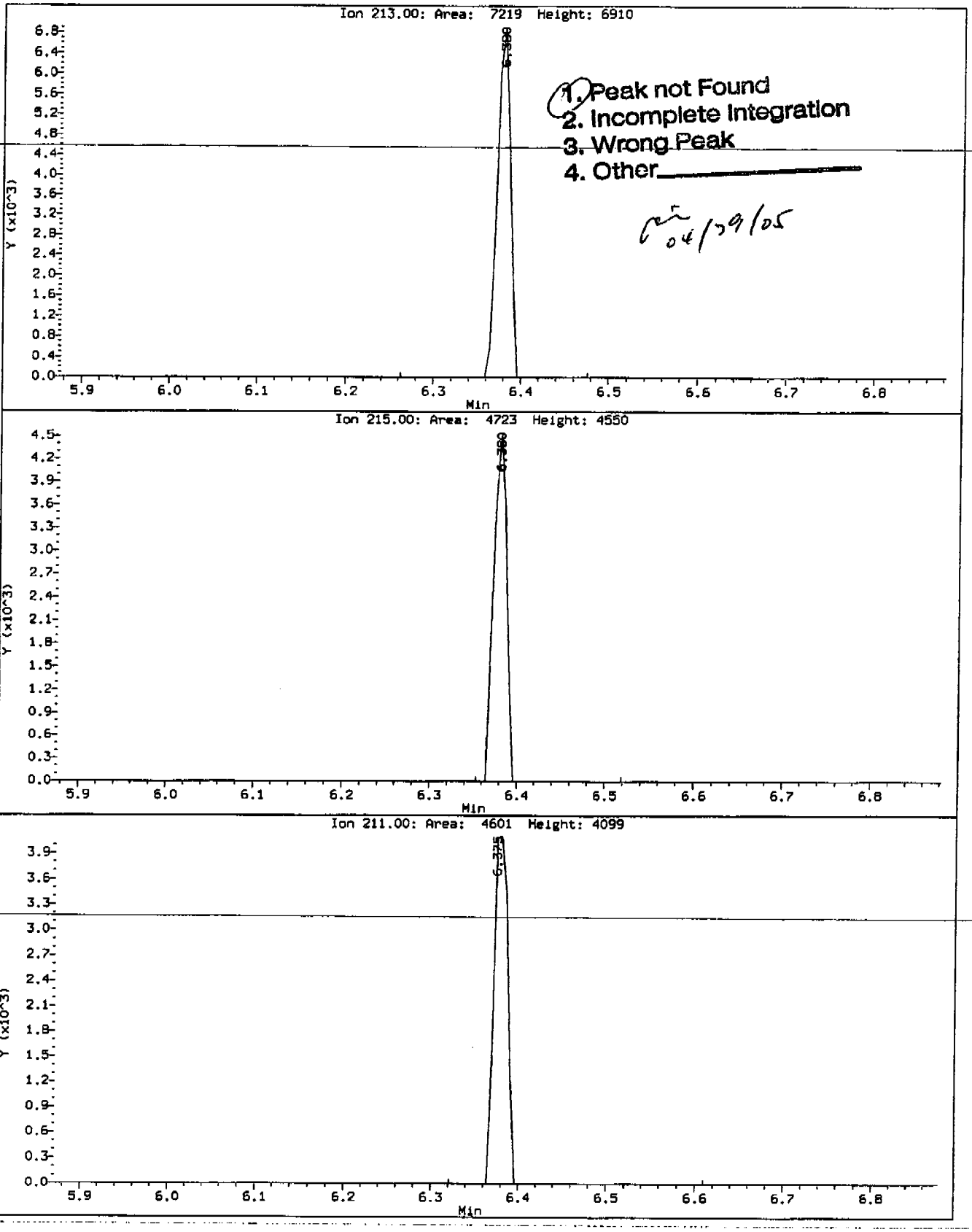


pa 04/29/05



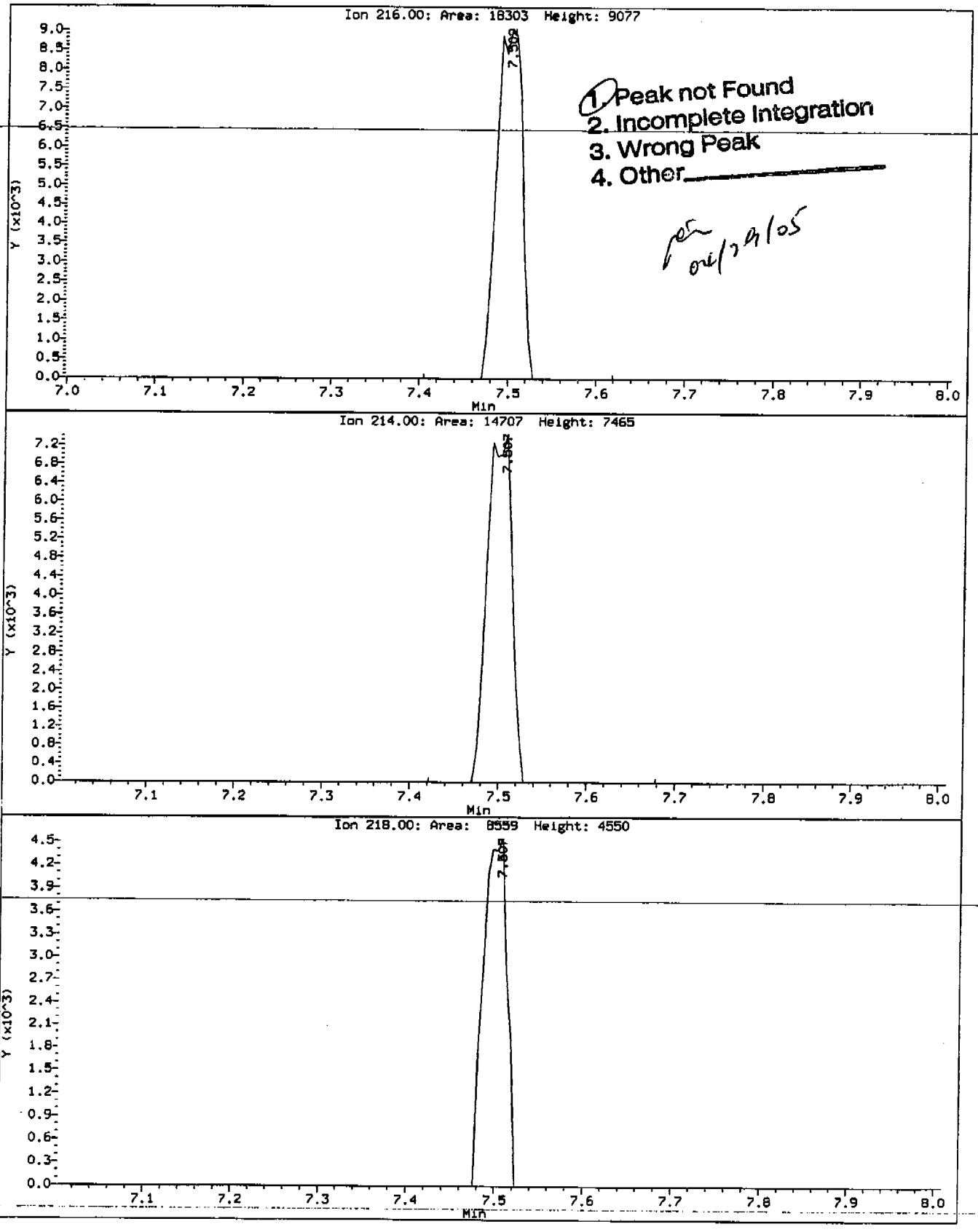
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D
Injection Date: 28-APR-2005 15:42
Instrument: MSK.i
Client Sample ID: SSTD002APPIX

Compound: Hexachloropropene
CAS Number: 1888-71-7



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D
Injection Date: 28-APR-2005 15:42
Instrument: MSK.i
Client Sample ID: SSTD002APPIX

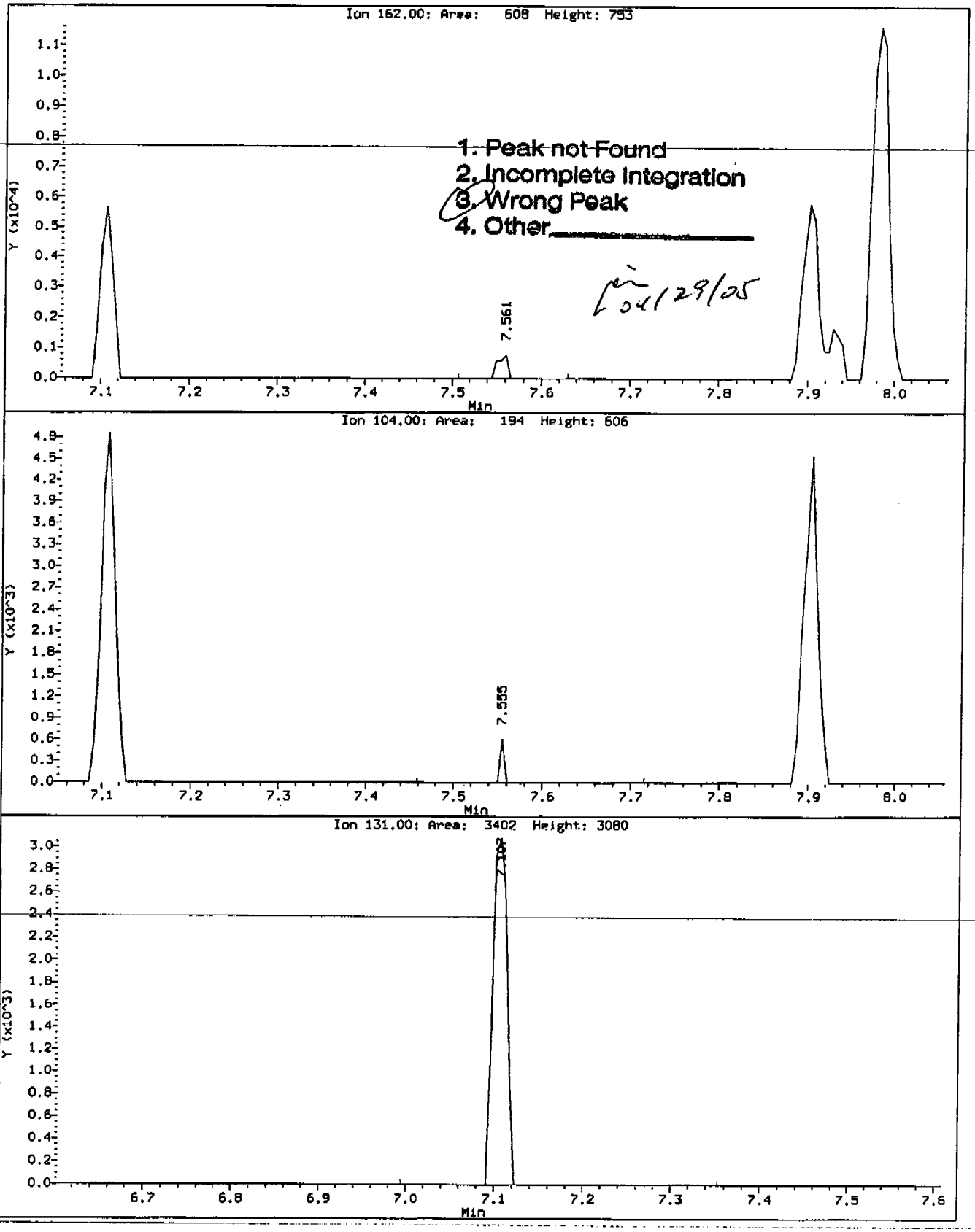
Compound: 1,2,4,5-Tetrachlorobenzene
CAS Number: 95-94-3



per 04/29/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D
Injection Date: 28-APR-2005 15:42
Instrument: MSK.i
Client Sample ID: SSTD002APPIX

Compound: cis-Isosafrole
CAS Number: 120-58-1

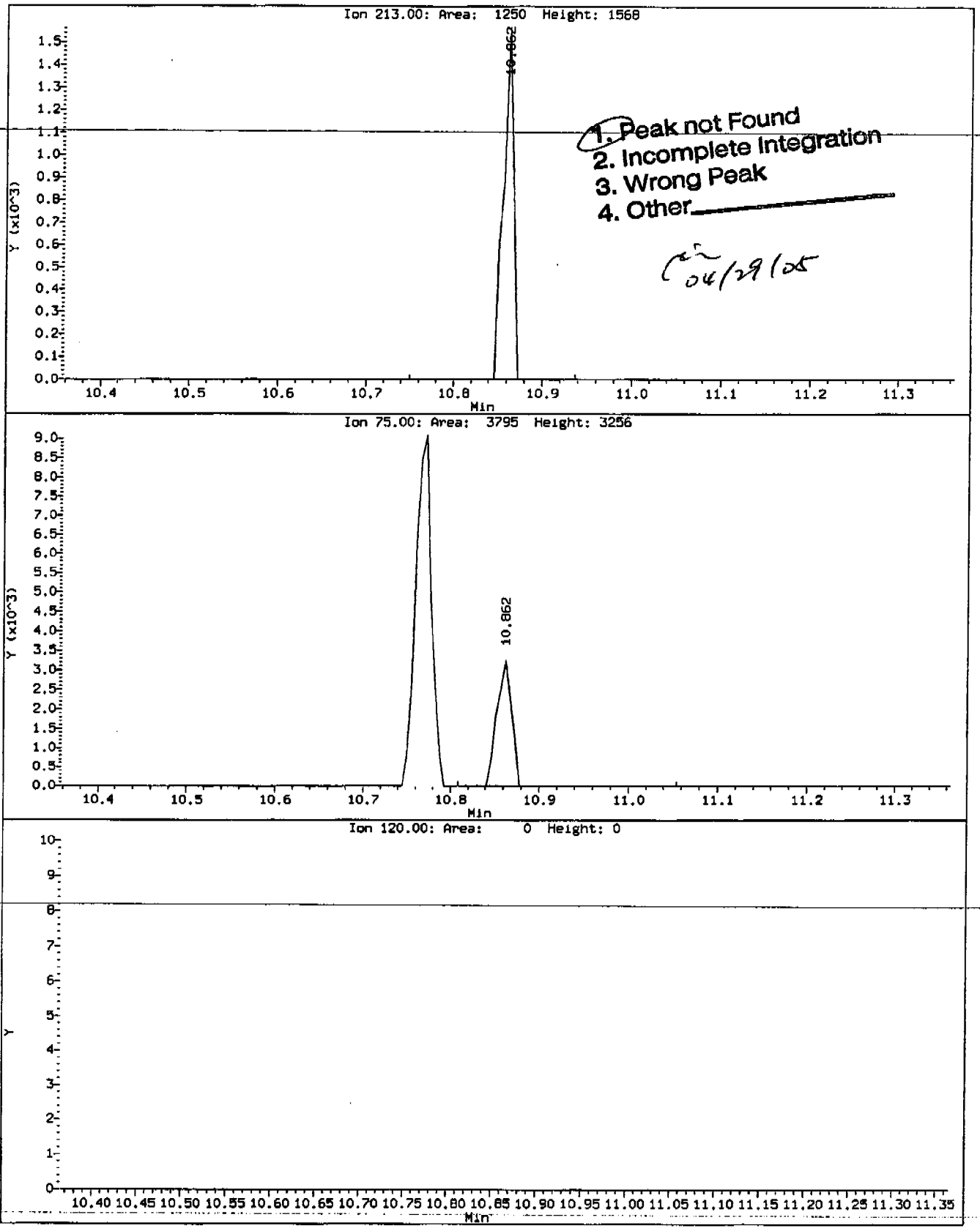


1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other _____

04/29/05

Data File: \\Slavr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D
Injection Date: 28-APR-2005 15:42
Instrument: MSK.i
Client Sample ID: SSTD002APPIX

Compound: 1,3,5-Trinitrobenzene
CAS Number: 99-35-4



DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	38.74		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	46.50		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	44.05		PASS
197	0 - 1% of mass 198	0.18		PASS
199	5 - 9% of mass 198	6.80		PASS
275	10 - 30% of mass 198	27.16		PASS
365	Greater than 1% of mass 198	3.59		PASS
441	Present, but less than mass 443	11.87	(84.65)	PASS
442	Greater than 40% of mass 198	73.56		PASS
443	17 - 23% of mass 442	14.02	(19.06)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.3459959	5.000	PASS
Benzidine	0.9351935	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	449845			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	805	0.2	15.0	PASS
4,4-DDD + DDE	805	0.2	15.0	PASS

****
Tuning Sample, //Slsvr01/BNA_LAB/MSK.i/K050507B.B/KDFT2953.D/KDFT2953.D,*** PASSED
****

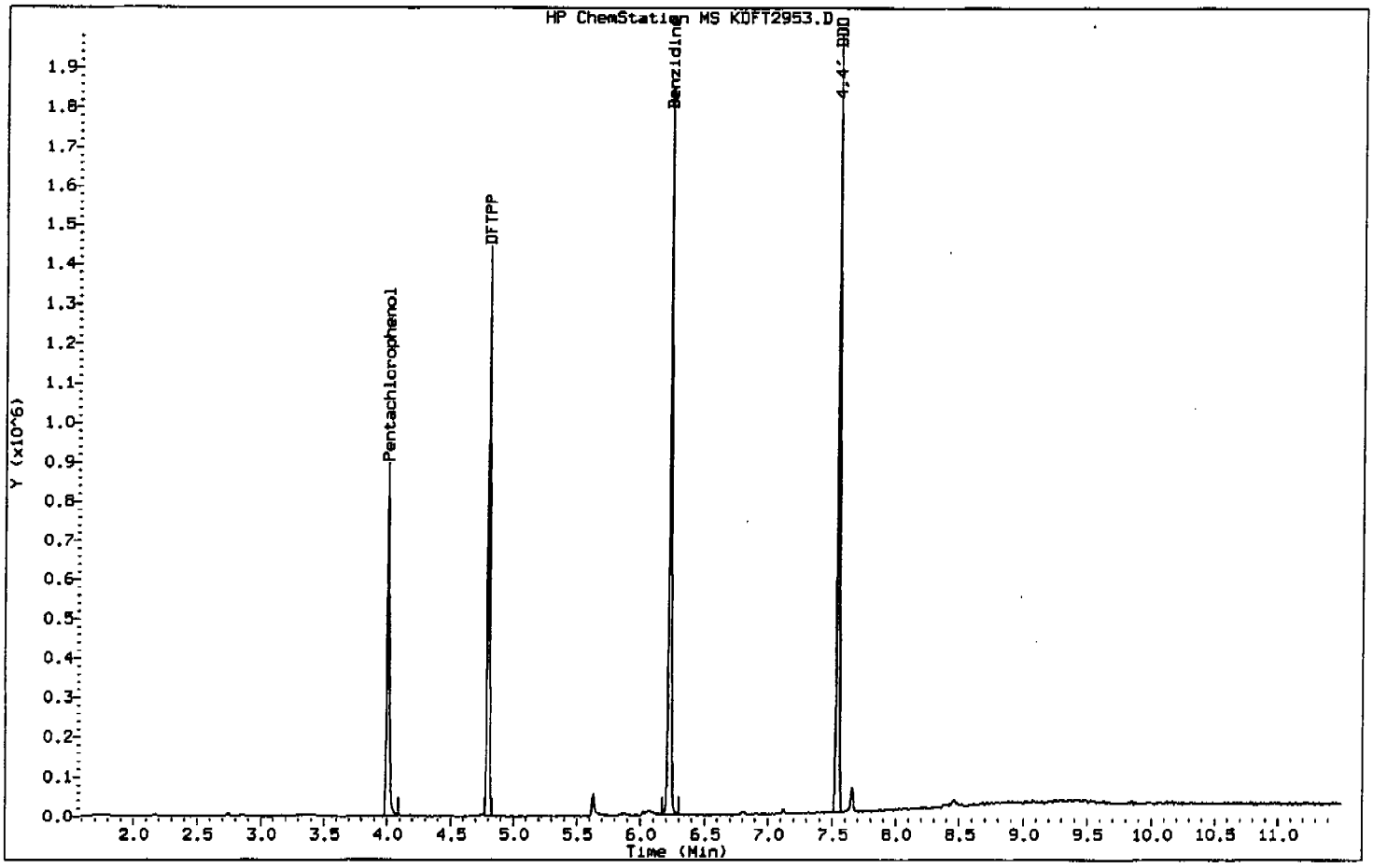
05/09/05

STL ST LOUIS

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 05/09/2005 10:40

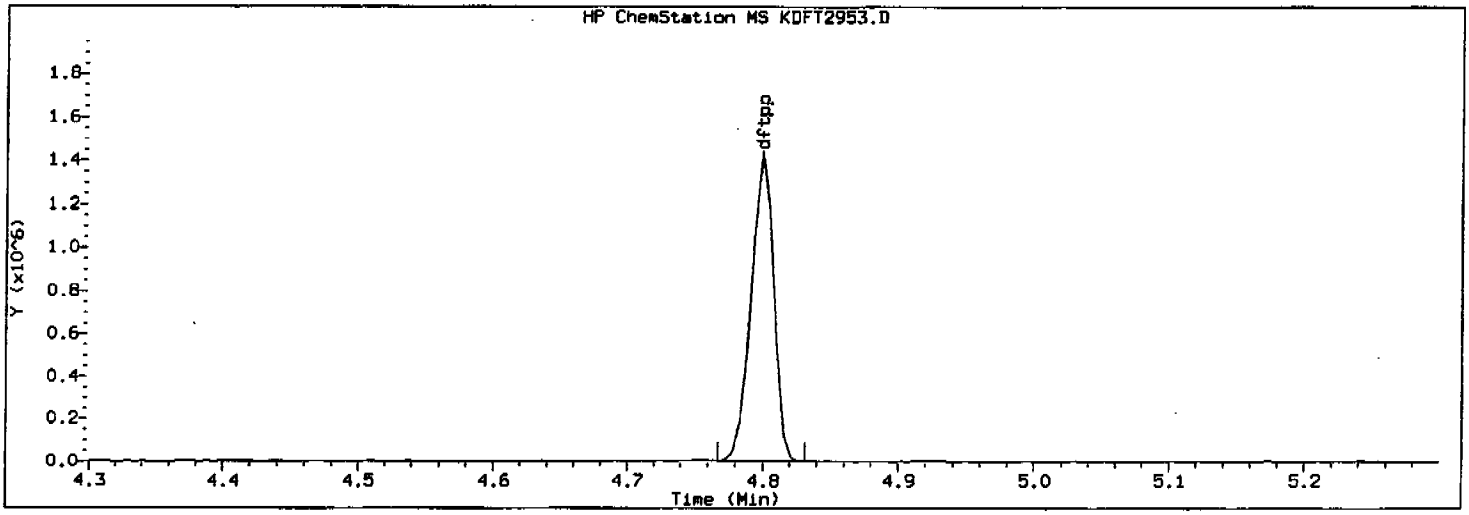
Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050507B.B/KDFT2953.D/KDFT2953.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050507B.B\sw846tun.m Inst: MSK
Injection Date: 07-MAY-2005 16:44 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0193-05 (50NG)

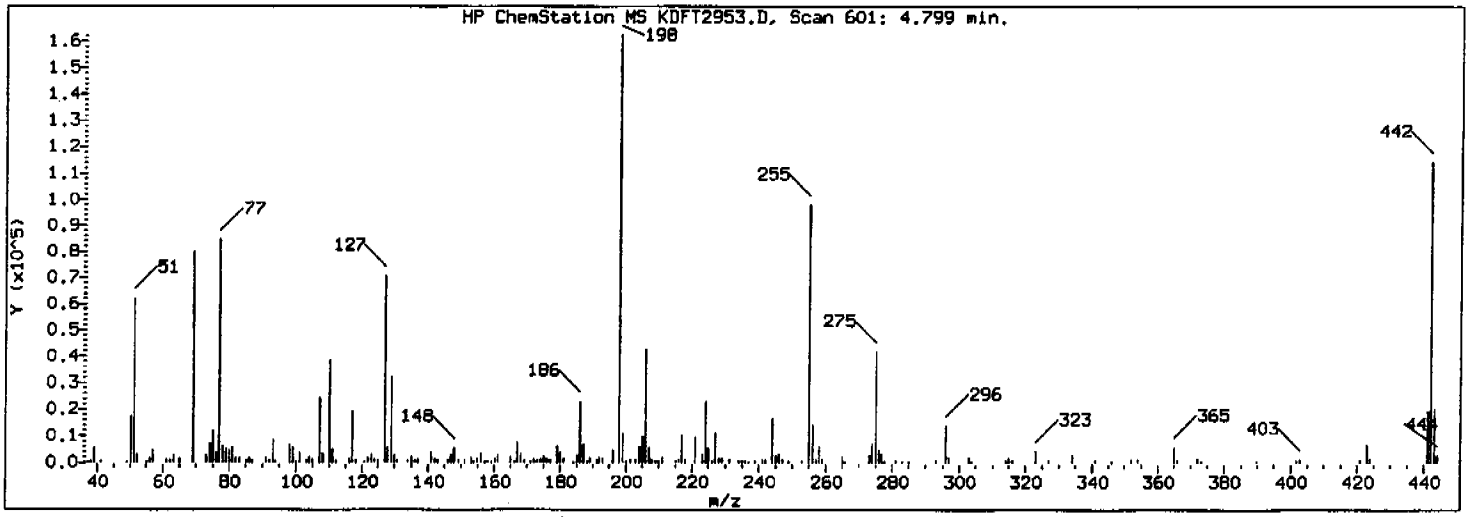


STL ST LOUIS

Report Date: 05/09/2005 10:40

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050507B.B/KDFT2953.D/KDFT2953.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050507B.B\sw846tun.m Inst: MSK
Injection Date: 07-MAY-2005 16:44 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0193-05 (50NG)



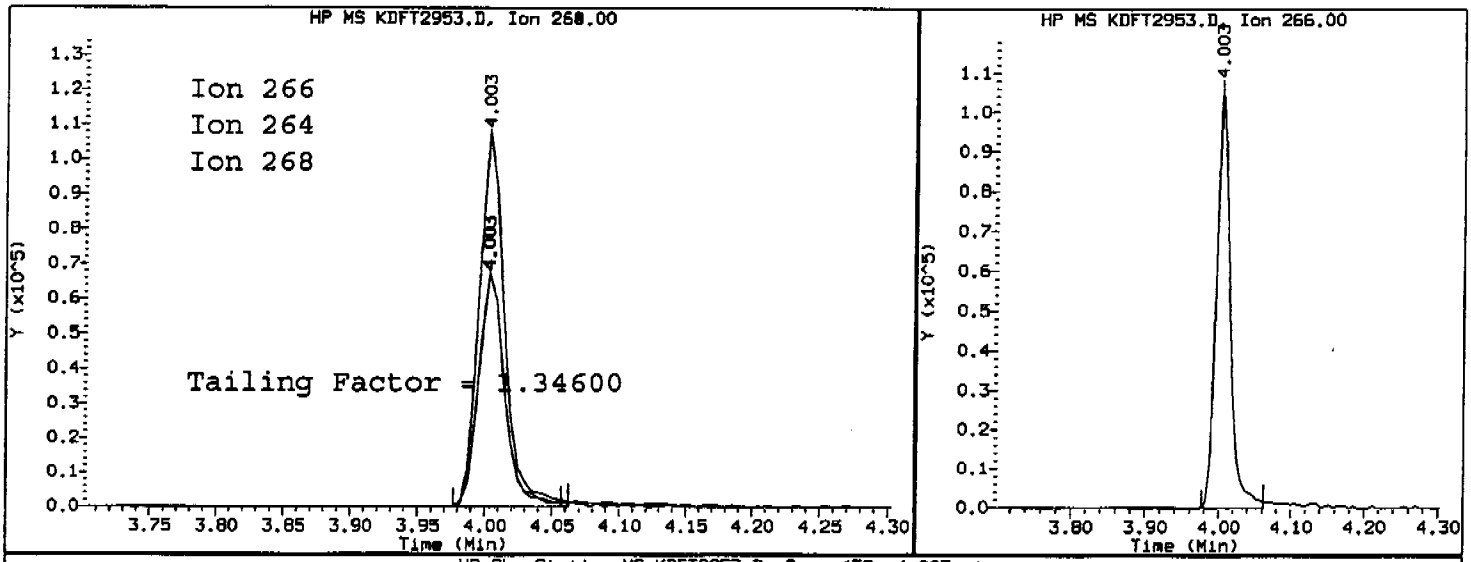


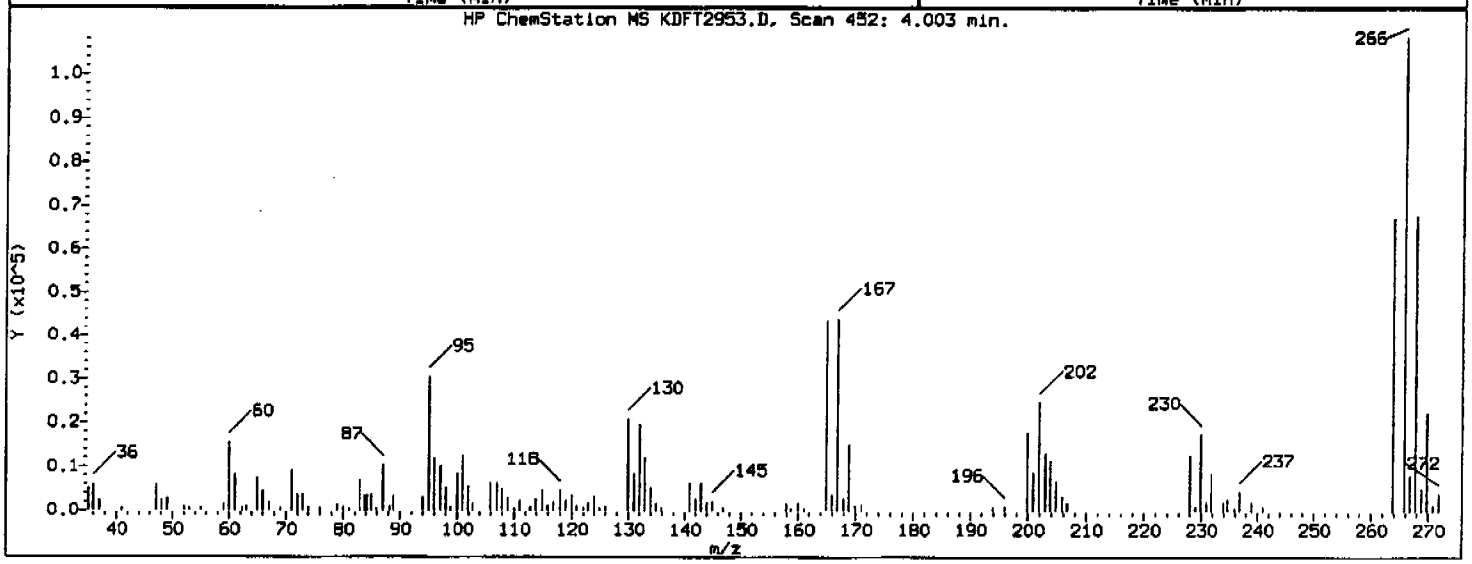
DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	38.74		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	46.50		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	44.05		PASS
197	0 - 1% of mass 198	0.18		PASS
199	5 - 9% of mass 198	6.80		PASS
275	10 - 30% of mass 198	27.16		PASS
365	Greater than 1% of mass 198	3.59		PASS
441	Present, but less than mass 443	11.87	(84.65)	PASS
442	Greater than 40% of mass 198	73.56		PASS
443	17 - 23% of mass 442	14.02	(19.06)	PASS

STL ST LOUIS
Report Date: 05/09/2005 10:40

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050507B.B/KDFT2953.D/KDFT2953.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050507B.B\sw846tun.m\resolut.m Inst:
Injection Date: 07-MAY-2005 16:44 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)





Pentachlorophenol
==========
Exp. RT = 4.003
Found RT = 4.003

Mass	Area	Ratio
266	143717	100.00
264	91343	63.56
268	91284	63.52

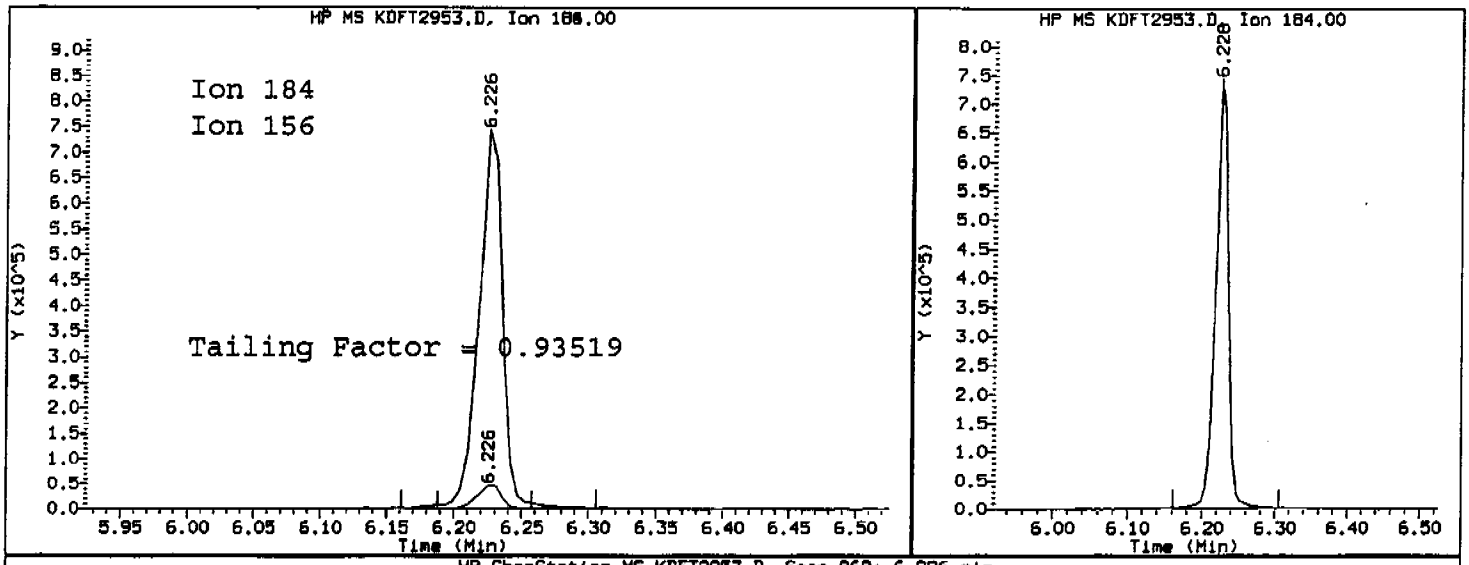
Tailing factor for Pentachlorophenol OK

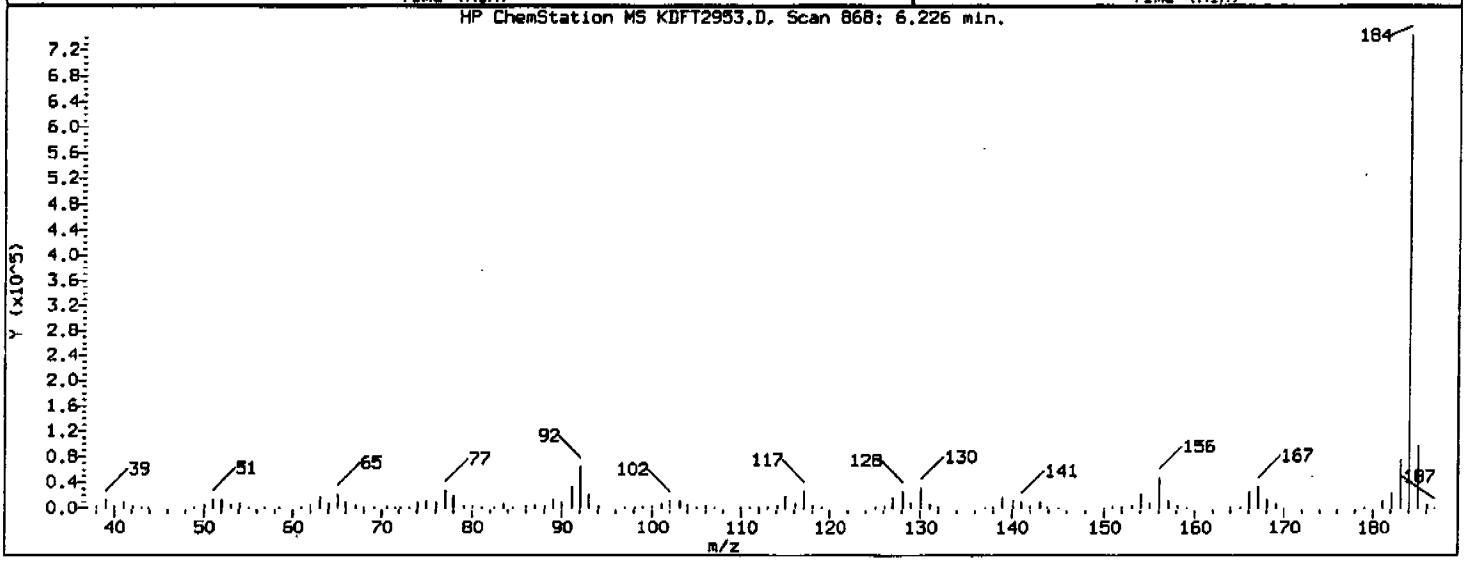
Tail Factor = 1.346 Maximum Allowed = 5.0

STL ST LOUIS

Report Date: 05/09/2005 10:40

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050507B.B/KDFT2953.D/KDFT2953.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050507B.B\sw846tun.m\resolut.m Inst:
Injection Date: 07-MAY-2005 16:44 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)





Benzidine
=========
Exp. RT = 6.226
Found RT = 6.226

Mass	Area	Ratio
184	913986	100.00
156	60661	6.64

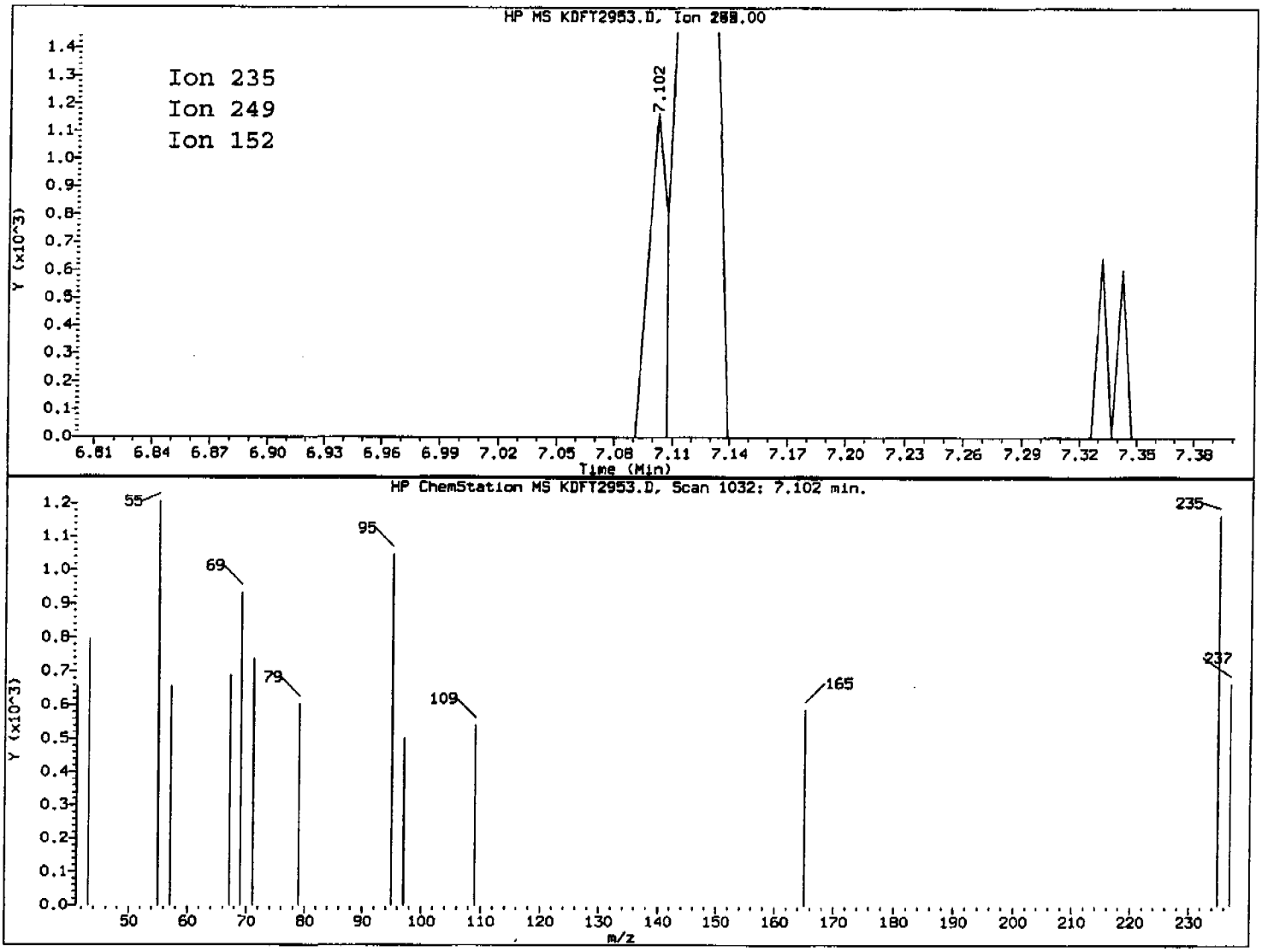
Tailing factor for Benzidine OK

Tail Factor = 0.935 Maximum Allowed = 3.0

STL ST LOUIS

Report Date: 05/09/2005 10:40

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050507B.B/KDFT2953.D/KDFT2953.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050507B.B\sw846tun.m\resolut.m Inst:
Injection Date: 07-MAY-2005 16:44 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)



4,4'-DDD

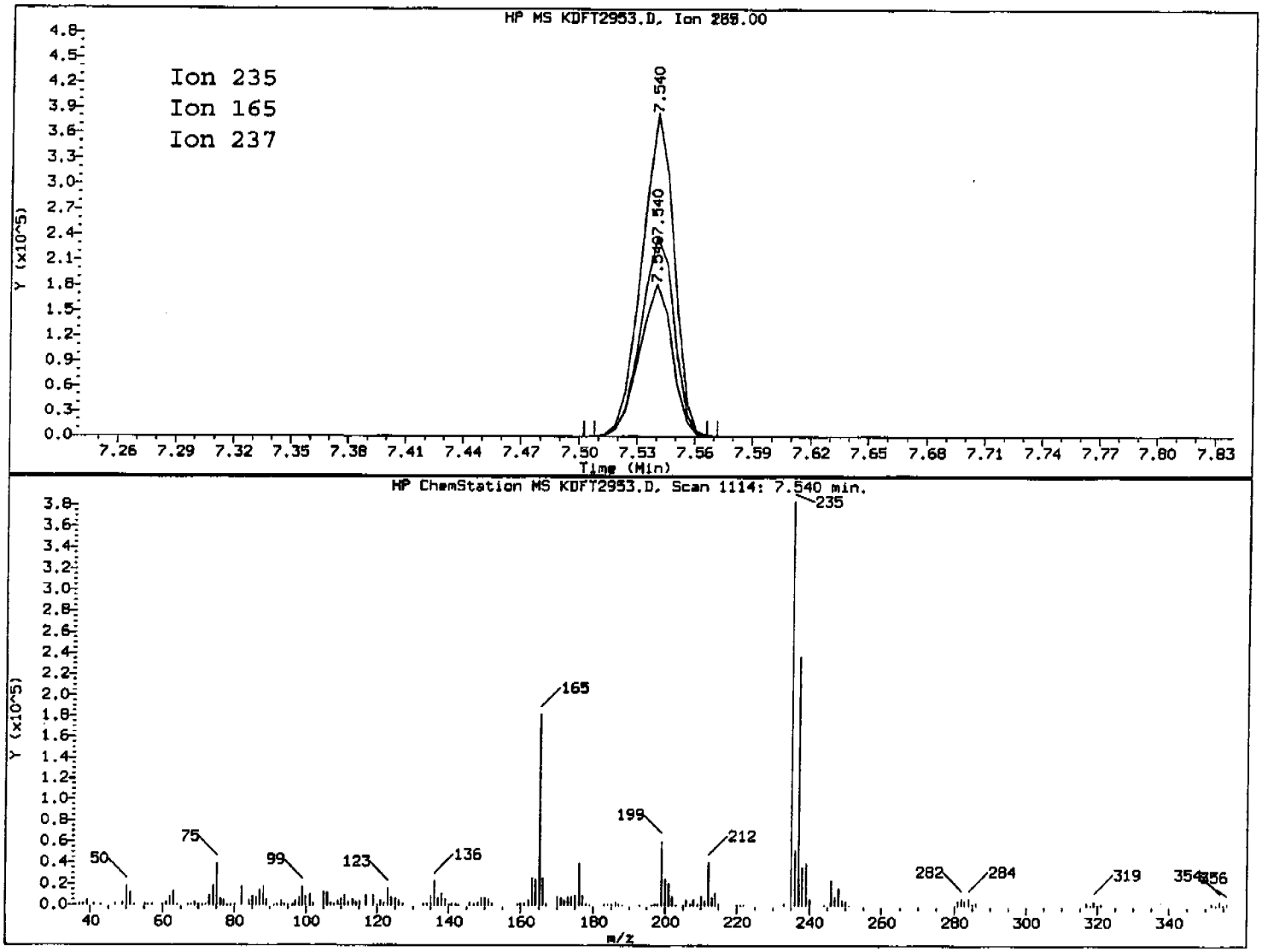
Exp. RT = 6.734
Found RT = 7.102

Mass	Area	Ratio
235	805	100.00
249	0	0.00
152	0	0.00

STL ST LOUIS

Report Date: 05/09/2005 10:40

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050507B.B/KDFT2953.D/KDFT2953.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050507B.B\sw846tun.m\resolut.m Inst:
Injection Date: 07-MAY-2005 16:44 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)



4,4'-DDT

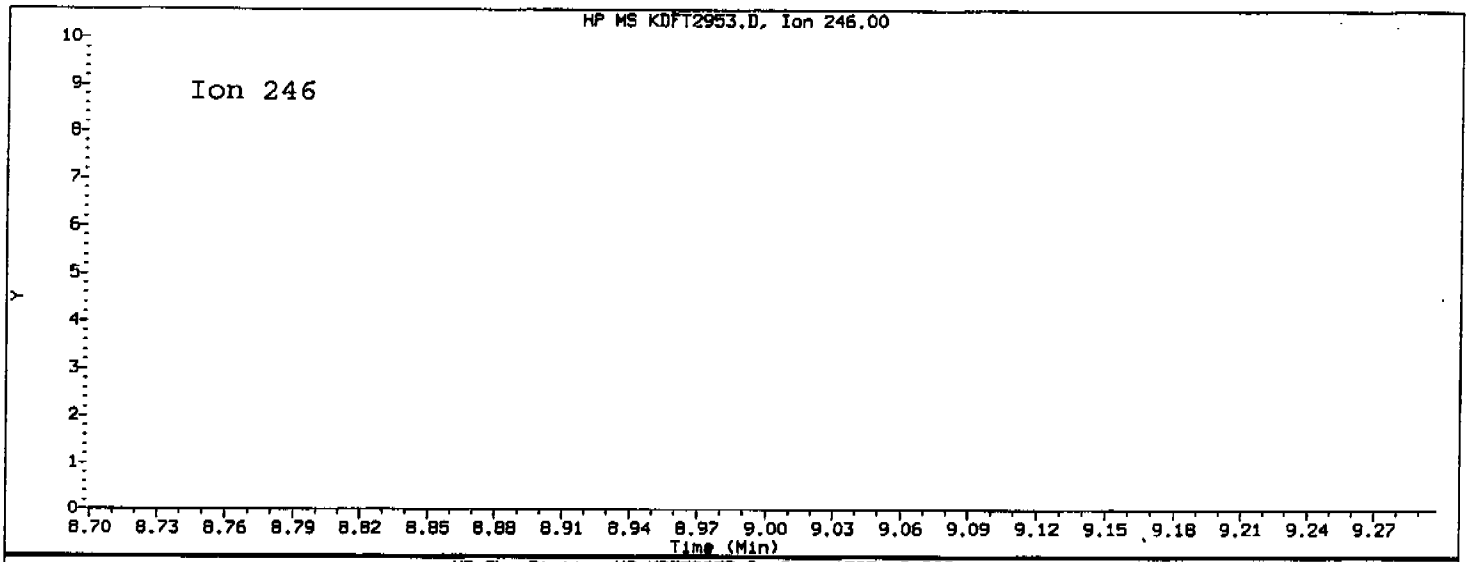
Exp. RT = 7.540
Found RT = 7.540

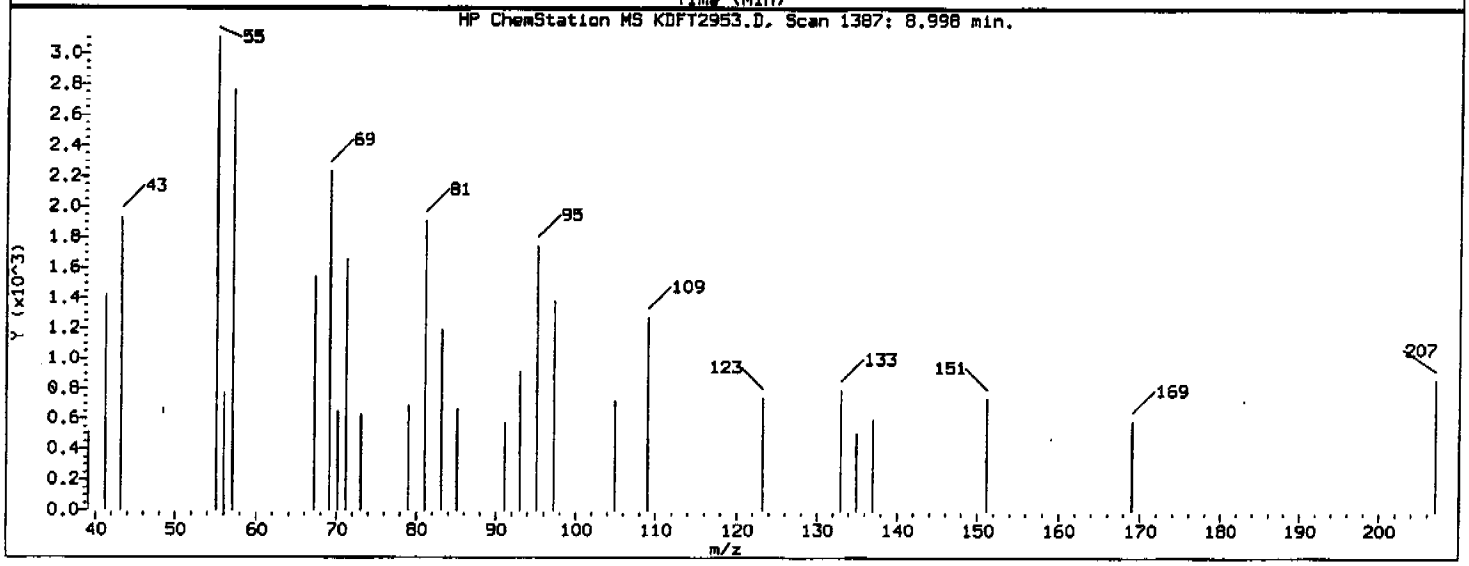
Mass	Area	Ratio
235	449845	100.00
165	218337	48.54
237	286460	63.68

STL ST LOUIS

Report Date: 05/09/2005 10:40

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050507B.B/KDFT2953.D/KDFT2953.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050507B.B\sw846tun.m\resolut.m Inst:
Injection Date: 07-MAY-2005 16:44 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)



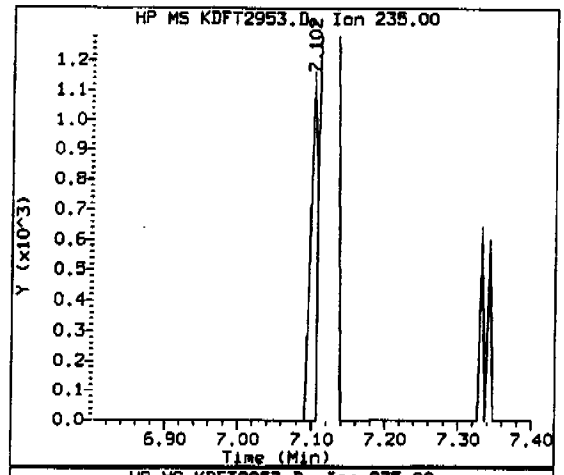


4,4'-DDE
========
Exp. RT = 9.000
Found RT = 0.000

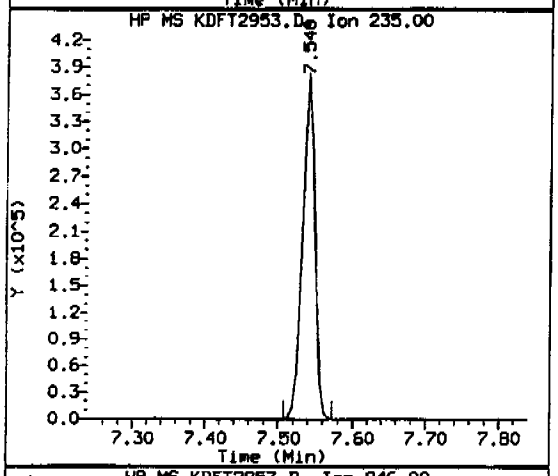
Mass	Area	Ratio
246	0	0.00

LOT #F5D220218

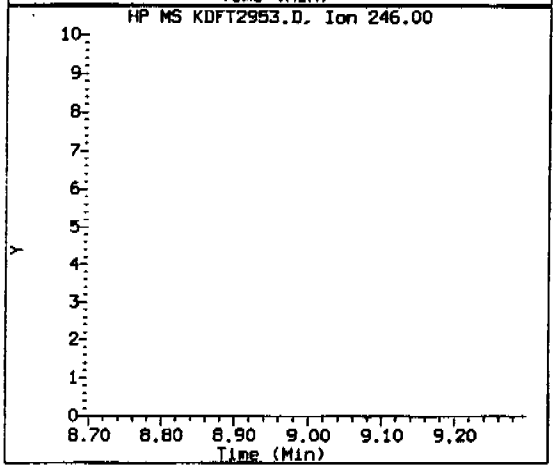
STL ST LOUIS



Compound: 4,4'-DDD
Quant Mass: 235
RT: 7.102
Area: 805



Compound: 4,4'-DDT
Quant Mass: 235
RT: 7.540
Area: 449845



Compound: 4,4'-DDE
Quant Mass: 246
RT: 0.000
Area: 0

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	449845			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	805	0.2	15.0	PASS
4,4-DDD + DDE	805	0.2	15.0	PASS

****

TUNE SAMPLE *** PASSED *** DDT BREAKDOWN TEST

****

Report Date : 09-May-2005 11:05 Page 1

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 08-MAY-2005 01:27
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\8270K.m
Cal Date : 09-May-2005 11:05 hongs
Curve Type : Average

Calibration File Names:
Level 1: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2969.D
Level 2: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2968.D
Level 3: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2967.D
Level 4: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2963.D
Level 5: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2966.D
Level 6: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2965.D
Level 7: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2964.D

05/09/05

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
1 1,4-Dioxane	0.17298	0.19729	0.19073	0.19904	0.18986	0.19320	+++++	0.19052	4.888	<-
2 Methyl methacrylate	0.39326	0.35373	0.33429	0.32307	0.34005	0.34871	0.35814	0.35018	6.411	
3 Pyridine	+++++	0.86157	0.76336	0.88909	0.86998	0.93939	+++++	0.86468	7.424	<-
4 N-Nitrosodimethylamine	0.42046	0.45791	0.45678	0.47286	0.46003	0.50317	+++++	0.46187	5.799	<-
5 Dimethylformamide	0.72494	0.74595	0.73449	0.76998	0.72019	0.74911	+++++	0.74078	2.462	<-
6 Ethyl methacrylate	1.06706	1.00921	1.00424	1.00134	1.03952	1.06985	1.11023	1.04307	3.955	
7 2-Picoline	1.11672	1.19222	1.23144	1.30096	1.31132	1.30450	1.39292	1.26430	7.204	
8 N-Nitrosomethylethylamine	0.46950	0.57796	0.56912	0.57845	0.60310	0.58248	0.59178	0.56748	7.853	
9 Methyl methanesulfonate	0.35479	0.41151	0.41103	0.41324	0.46135	0.46437	0.49021	0.42950	10.596	
11 Cyclohexanol	1.38718	1.41576	1.32722	1.32977	1.36804	1.43362	+++++	1.37693	3.182	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 08-MAY-2005 01:27
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\8270K.m
Cal Date : 09-May-2005 11:05 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
12 N-Nitrosodiethylamine	0.61009	0.64225	0.62511	0.63051	0.70280	0.70476			
	0.71974						0.66218	6.828	
13 Ethyl Methanesulfonate	1.10180	1.07409	1.10510	1.05473	1.17698	1.15933			
	1.19896						1.12443	4.846	
14 Benzaldehyde	1.16166	1.23901	1.24283	1.29144	1.30102	1.36353			
	1.39704						1.28522	6.202	
16 Phenol	1.74597	1.79349	1.73677	1.81990	1.84990	2.03081			
	+++++						1.82947	5.882	<-
17 Aniline	2.13357	2.23234	2.14906	2.17784	2.15923	2.19461			
	+++++						2.17444	1.635	<-
18 Pentachloroethane	0.51171	0.48710	0.50536	0.53152	0.54099	0.55718			
	0.58367						0.53108	6.205	
19 Bis(2-chloroethyl)ether	1.26463	1.41138	1.46906	1.53550	1.53797	1.64544			
	+++++						1.47733	8.825	<-
20 2-Chlorophenol	1.37071	1.34918	1.33083	1.36171	1.39523	1.47968			
	+++++						1.38123	3.824	<-
21 1,3-Dichlorobenzene	1.42542	1.47098	1.49204	1.53177	1.54614	1.64238			
	+++++						1.51812	4.921	<-
23 1,4-Dichlorobenzene	1.56420	1.58417	1.57411	1.61302	1.63660	1.75875			
	+++++						1.62181	4.451	<-
24 Benzenethiol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
25 Benzyl Alcohol	0.87290	0.73951	0.91748	0.79109	0.90848	0.93935			
	+++++						0.86147	9.195	<-
26 1,2-Dichlorobenzene	1.45154	1.42230	1.44367	1.52025	1.52210	1.66557			
	+++++						1.50424	5.928	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 08-MAY-2005 01:27
Quant Method : ISTD
Origin- : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\8270K.m
Cal Date : 09-May-2005 11:05 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
27 2-Methylphenol	1.22235	1.23052	1.20167	1.22759	1.23447	1.27741			
	+++++						1.23234	2.021	<-
28 2,2-oxybis(1-Chloropropane)	1.63743	1.51372	1.55976	1.55063	1.53555	1.60389			
	+++++						1.56683	2.921	<-
29 3 and 4-Methylphenol	1.26629	1.30726	1.29866	1.34866	1.38320	1.46307			
	+++++						1.34452	5.278	<-
30 Acetophenone	0.52107	0.53512	0.55618	0.57812	0.59620	0.62523			
	0.65259						0.58065	8.209	
31 N-Nitrosopyrrolidine	0.17843	0.18370	0.18226	0.18768	0.19258	0.19901			
	0.21721						0.19155	6.907	
32 N-Nitrosodinpropylamine	1.25220	1.22274	1.22824	1.30887	1.30585	1.24496			
	+++++						1.26047	3.005	<-
33 N-Nitrosomorpholine	0.06774	0.07645	0.07726	0.08065	0.08961	0.09511			
	0.10449						0.08447	14.906	
34 O-Toluidine	0.56236	0.55680	0.56227	0.60066	0.63366	0.66229			
	0.71711						0.61359	9.900	
35 Hexachloroethane	0.69850	0.68805	0.68049	0.71759	0.72263	0.73495			
	+++++						0.70703	3.015	<-
37 Nitrobenzene	0.57781	0.54476	0.52004	0.55270	0.54051	0.56532			
	+++++						0.55019	3.662	<-
38 N-Nitrosopiperidine	0.16432	0.16882	0.17079	0.17616	0.18096	0.18588			
	0.19442						0.17733	5.933	
39 Isophorone	0.76706	0.74783	0.71301	0.75240	0.74886	0.74920			
	+++++						0.74639	2.392	<-
40 2-Nitrophenol	0.19450	0.19494	0.19725	0.20502	0.20638	0.21320			
	+++++						0.20188	3.721	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 08-MAY-2005 01:27
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\8270K.m
Cal Date : 09-May-2005 11:05 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
41 2,4-Dimethylphenol	0.41455	0.41823	0.41903	0.44139	0.44136	0.46357			
	+++++						0.43302	4.416	<-
42 Bis(2-chloroethoxy)methane	0.45407	0.45952	0.45147	0.47242	0.48740	0.51268			
	+++++						0.47293	4.991	<-
43 o,o,o-Triethyl-Phosphorothioa	0.21535	0.22497	0.22572	0.23460	0.25461	0.26744			
	0.27953						0.24317	9.968	
44 Benzoic Acid	+++++	0.13751	0.16482	0.19801	0.20754	0.22158			
	+++++						0.18589	18.388	<-
45 2,4-Dichlorophenol	0.29616	0.32094	0.30874	0.31752	0.32605	0.34149			
	+++++						0.31848	4.838	<-
46 a,a-Dimethyl-phenethylamine	0.51145	0.76309	0.77322	0.78410	0.80856	0.82953			
	0.87545						0.76363	15.399	
47 1,2,4-Trichlorobenzene	0.34792	0.37075	0.36215	0.37229	0.37929	0.39740			
	+++++						0.37163	4.464	<-
49 4-Chlorobenzenethiol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
50 Naphthalene	1.04983	1.04267	1.03461	1.09666	1.13198	1.26903			
	+++++						1.10413	8.058	<-
51 4-Chloroaniline	0.42293	0.42978	0.41617	0.45040	0.47838	0.51431			
	+++++						0.45199	8.398	<-
52 2,6-Dichlorophenol	0.25469	0.24292	0.25839	0.31185	0.29618	0.31378			
	0.32831						0.28659	11.858	
53 Hexachloropropene	0.31733	0.32521	0.33376	0.35006	0.35945	0.38047			
	0.38884						0.35073	7.781	
54 Hexachlorobutadiene	0.25898	0.24688	0.25211	0.25458	0.25945	0.26968			
	+++++						0.25695	3.029	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 08-MAY-2005 01:27
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\8270K.m
Cal Date : 09-May-2005 11:05 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
55 Benzothiazole	0.50139	0.46477	0.48632	0.49913	0.53104	0.55241			
	0.59151						0.51808	8.350	
56 Caprolactam	0.10983	0.13715	0.14068	0.13986	0.07457	0.14270			
	0.14775						0.12751	20.686	
57 n-Nitrosodi-n-butylamine	0.31342	0.29750	0.30099	0.31842	0.31943	0.33002			
	0.35040						0.31860	5.621	
58 p-Phenylenediamine	0.21874	0.29578	0.28872	0.36365	0.28733	0.27992			
	0.31741						0.29308	14.829	
59 4-Chloro-3-Methylphenol	0.34788	0.34764	0.35346	0.37414	0.37801	0.38956			
	+++++						0.36512	4.874	<-
60 p-Chlorophenyl methyl sulfide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
61 Safrole	0.25500	0.27963	0.29140	0.29580	0.30963	0.32648			
	0.34629						0.30061	10.041	
62 2-Methylnaphthalene	0.99264	0.80383	0.75825	0.78864	0.80109	0.84139			
	+++++						0.83097	10.062	<-
63 Phthalic anhydride	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
64 cis-Isosafrole	0.04748	0.05826	0.05654	0.05553	0.05574	0.05770			
	0.05995						0.05589	7.184	
65 1,2,4,5-Tetrachlorobenzene	1.42931	1.31274	1.32205	1.39168	1.47308	1.54004			
	1.62334						1.44175	7.870	
66 Hexachlorocyclopentadiene	0.16175	0.28796	0.35577	0.40346	0.43462	0.47400			
	+++++						0.35293	32.223	<-
67 2,4,6-Trichlorophenol	0.44442	0.45149	0.44101	0.46710	0.47396	0.49702			
	+++++						0.46250	4.591	<-

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Start Cal Date : 28-APR-2005 11:41
End Cal Date : 08-MAY-2005 01:27
Quant Method : ISTD
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Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\8270K.m
Cal Date : 09-May-2005 11:05 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
68 2,4,5-Trichlorophenol	0.42805	0.46056	0.48195	0.50836	0.53301	0.56315			
	+++++						0.49585	9.922	<-
70 trans-Isosafrole	0.56648	0.54163	0.54100	0.56420	0.59728	0.65850			
	0.75581						0.60356	12.995	
71 Biphenyl	1.54419	1.44874	1.47932	1.53624	1.66716	1.76228			
	1.79160						1.60422	8.519	
72 2-Chloronaphthalene	1.31484	1.25425	1.26036	1.31628	1.32789	1.41797			
	+++++						1.31527	4.491	<-
73 2-Nitroaniline	0.47843	0.52660	0.53133	0.56359	0.54753	0.55057			
	+++++						0.53301	5.614	<-
74 1,4-Naphthoquinone	0.27176	0.36890	0.37704	0.33375	0.21032	0.17342			
	0.12916						0.26634	36.895	<-
75 1,4-Dinitrobenzene	0.07763	0.12369	0.12115	0.12521	0.13042	0.13540			
	0.14150						0.12214	17.086	
76 Dimethylphthalate	1.42717	1.43084	1.41866	1.52145	1.51771	1.57892			
	+++++						1.48246	4.460	<-
77 1,3-Dinitrobenzene	0.16587	0.22945	0.23025	0.24388	0.24166	0.24971			
	0.25601						0.23098	13.109	
78 N-(hydroxymethyl) phthalimide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
79 Acenaphthylene	1.85647	1.84218	1.86584	1.96054	2.00638	2.17314			
	+++++						1.95076	6.506	<-
80 2,6-Dinitrotoluene	0.30168	0.32253	0.32365	0.33926	0.33950	0.34400			
	+++++						0.32844	4.825	<-
81 3-Nitroaniline	0.27163	0.32518	0.32228	0.35148	0.33926	0.34536			
	+++++						0.32587	8.862	<-

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Cal Date : 09-May-2005 11:05 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	___ RRF	% RSD	
83 Acenaphthene	1.21341	1.16835	1.17792	1.24414	1.26217	1.33521	+++++	1.23353	5.000	<-
84 2,4-Dinitrophenol	+++++	0.11562	0.15870	0.20392	0.21327	0.23326	+++++	0.18496	25.633	<-
85 4-Nitrophenol	+++++	0.21337	0.25573	0.28530	0.27546	0.27464	+++++	0.26090	10.979	<-
86 Dibenzofuran	1.78508	1.76427	1.76655	1.85881	1.87909	1.96232	+++++	1.83602	4.281	<-
87 Pentachlorobenzene	0.70728	0.65613	0.66649	0.68327	0.70614	0.73519	0.75466	0.70131	5.086	
88 2,4-Dinitrotoluene	0.35963	0.42347	0.41880	0.45949	0.44365	0.43995	+++++	0.42417	8.215	<-
89 1-Naphthylamine	1.03800	1.06591	1.04498	1.10302	1.05391	1.16285	1.16394	1.09037	4.961	
90 2-Naphthylamine	0.97677	0.98368	0.94490	1.00433	0.88786	1.05261	1.06727	0.98820	6.232	
91 Phenyl sulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
92 2,3,4,6-Tetrachlorophenol	0.22811	0.28943	0.32362	0.39276	0.41144	0.42643	0.46069	0.36178	23.112	
93 Diethylphthalate	1.77884	1.52198	1.46634	1.55875	1.51288	1.60452	+++++	1.57388	7.027	<-
94 Fluorene	1.39602	1.41787	1.43806	1.52499	1.52507	1.59949	+++++	1.48358	5.301	<-
95 4-Chlorophenyl-phenylether	0.72839	0.77489	0.77169	0.80701	0.81143	0.86875	+++++	0.79369	5.970	<-

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Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
96 Thionazin	0.23139	0.25240	0.25864	0.26567	0.28537	0.29086			
	0.29032						0.26781	8.348	
97 5-Nitro-o-toluidine	0.15995	0.20034	0.19875	0.21045	0.21494	0.21816			
	0.22533						0.20399	10.587	
98 4-Nitroaniline	0.26783	0.31168	0.31274	0.34633	0.33242	0.32480			
	+++++						0.31596	8.512	<-
99 4,6-Dinitro-2-methylphenol	0.09741	0.14416	0.15832	0.17618	0.18330	0.20391			
	+++++						0.16055	23.143	<-
100 N-Nitrosodiphenylamine	0.54702	0.56108	0.56186	0.58755	0.62553	0.69773			
	+++++						0.59680	9.500	<-
101 tri-n-butylphosphate	1.52154	1.63086	1.65030	1.71460	1.82251	1.87783			
	2.01075						1.74692	9.553	
102 Azobenzene	1.16524	1.19535	1.17557	1.27446	1.32802	1.46229			
	+++++						1.26682	9.053	<-
103 Benzal Chloride	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
105 Sulfotepp	0.13055	0.14332	0.15072	0.15105	0.16041	0.16417			
	0.16883						0.15272	8.604	
106 Diallate (peak 1)	0.27906	0.28345	0.29123	0.30014	0.31100	0.32036			
	0.33572						0.30299	6.788	
107 1,3,5-Trinitrobenzene	0.05460	0.08597	0.09688	0.10024	0.10572	0.10753			
	0.11048						0.09449	20.515	
108 Phorate	0.49946	0.50445	0.50760	0.53049	0.56947	0.58636			
	0.62513						0.54614	8.860	
109 4-Bromophenyl-phenylether	0.24597	0.26492	0.25896	0.27663	0.28636	0.30131			
	+++++						0.27236	7.314	<-

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Cal Date : 09-May-2005 11:05 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
110 Phenacetin	0.38624	0.41341	0.42268	0.42532	0.42504	0.42869			
	0.43971						0.42015	4.015	
111 Diallate (peak 2)	0.06683	0.06004	0.06289	0.06373	0.06488	0.06546			
	0.06814						0.06457	4.135	
112 Hexachlorobenzene	0.27213	0.27529	0.26713	0.27963	0.29196	0.30103			
	+++++						0.28120	4.572	<-
113 Dimethoate	0.27185	0.28949	0.28826	0.27480	0.21882	0.21567			
	0.18694						0.24940	16.564	
114 Atrazine	0.22048	0.24204	0.23940	0.24289	0.25564	0.25595			
	0.26658						0.24614	6.060	
115 tris(2-chloroethyl)phosphate	0.22625	0.21717	0.22304	0.21944	0.21858	0.22085			
	0.22796						0.22190	1.817	
116 4-Aminobiphenyl	0.70998	0.67001	0.68070	0.79368	0.77334	0.82627			
	0.87380						0.76111	10.111	
117 Pentachlorophenol	+++++	0.09330	0.12414	0.15654	0.16662	0.18045			
	+++++						0.14421	24.425	<-
118 Pronamide	0.37755	0.36975	0.37320	0.37153	0.37705	0.38333			
	0.39158						0.37771	2.012	
119 Pentachloronitrobenzene	0.11754	0.12476	0.12783	0.13205	0.13537	0.13783			
	0.13768						0.13044	5.767	
120 Phenyl disulfide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
122 Phenanthrene	1.21014	1.19093	1.18101	1.22737	1.25980	1.32453			
	+++++						1.23230	4.312	<-
123 Disulfoton	0.35737	0.36108	0.36643	0.37668	0.39485	0.40708			
	0.42916						0.38466	6.946	

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Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
124 Anthracene	1.14066	1.17999	1.17138	1.20713	1.22885	1.28332			
	+++++						1.20189	4.168	<-
125 Dinoseb	0.13116	0.20289	0.23168	0.24451	0.26321	0.27373			
	0.28489						0.23315	22.611	
126 Carbazole	0.99712	1.01634	0.99685	1.03379	1.02771	1.05724			
	+++++						1.02151	2.273	<-
127 Phenyl sulfone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
128 Methyl Parathion	0.22472	0.25273	0.25605	0.24165	0.20186	0.19848			
	0.17806						0.22194	13.501	
129 Di-n-Butylphthalate	1.24723	1.28140	1.26276	1.34190	1.32948	1.37911			
	+++++						1.30698	3.918	<-
130 Parathion	0.13719	0.18275	0.18212	0.18480	0.18353	0.18558			
	0.18900						0.17785	10.162	
131 4-Nitroquinoline-1-oxide	+++++	0.06721	0.07979	0.10710	0.08542	0.08685			
	0.08235						0.08479	15.310	<-
132 Methapyrilene	0.34073	0.34857	0.33447	0.27766	0.21659	0.20104			
	0.18189						0.27156	26.360	
133 Isodrin	0.14938	0.13071	0.13659	0.12878	0.13896	0.13984			
	0.14629						0.13865	5.427	
134 Fluoranthene	1.19232	1.28264	1.24538	1.31747	1.29158	1.27525			
	+++++						1.26744	3.440	<-
135 Benzidine	0.45079	0.53525	0.59006	0.58739	0.62283	0.68489			
	+++++						0.57853	13.758	<-
136 Bis (4-chlorophenyl) disulfid	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-

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Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
137 Pyrene	1.58305	1.59222	1.60703	1.62693	1.76314	1.97079			
	*****						1.69053	9.012	<-
138 4-chlorophenyl sulfone	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-
140 Aramite (peak 1)	0.05375	0.06879	0.07594	0.07526	0.07359	0.07265			
	0.07371						0.07053	10.986	
141 Kepone	*****	0.00357	0.00453	0.00668	0.00729	0.00747			
	0.00748						0.00617	27.492	<-
142 Aramite (peak 2)	0.08770	0.10236	0.10922	0.11671	0.11420	0.11097			
	0.11134						0.10750	9.129	
143 p-(Dimethylamino)azobenzene	0.29047	0.32717	0.33641	0.34730	0.34129	0.34067			
	0.34674						0.33286	5.977	
144 Chlorobenzilate	0.40399	0.42688	0.44410	0.45660	0.49105	0.50109			
	0.53020						0.46484	9.587	
145 3,3-Dimethylbenzidine	0.61347	0.68749	0.69382	0.67100	0.67701	0.71325			
	*****						0.67601	5.027	<-
146 Butylbenzylphthalate	0.63103	0.63514	0.64399	0.65383	0.67169	0.72800			
	*****						0.66061	5.462	<-
147 Acrylamide	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-
148 2-Acetylaminofluorene(1)	0.44078	0.49973	0.51625	0.54235	0.55089	0.55882			
	0.56140						0.52432	8.256	
(2)	0.35522	0.39267	0.39584	0.41786	0.42490	0.43100			
	0.43659						0.40773	7.007	
149 Famphur	*****	0.02197	0.03377	0.05429	0.01871	0.01486			
	0.00621						0.02497	67.953	<-

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Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
150 Benzo(a)Anthracene	1.35094	1.35813	1.33985	1.38286	1.40869	1.47838	+++++	1.38648	3.705	<-
151 4,4'-Methylenebis(2-Chloroani	0.10305	0.10187	0.11221	0.12299	0.11640	0.12512	0.13117	0.11611	9.589	
152 3,3'-Dichlorobenzidine	0.45278	0.42155	0.47500	0.50875	0.55084	0.62871	+++++	0.50627	14.781	<-
154 Chrysene	1.20777	1.25181	1.24279	1.29756	1.34597	1.44928	+++++	1.29920	6.754	<-
155 bis(2-ethylhexyl)Phthalate	0.74184	0.76605	0.75168	0.78452	0.80943	0.87214	+++++	0.78761	6.084	<-
M 156 Toluenediamine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
157 Triethylamine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
158 Di-n-octylphthalate	1.86283	1.85642	1.79170	1.93922	2.06655	2.34444	+++++	1.97686	10.277	<-
159 1,2-Dinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
160 Benzo(b)fluoranthene	1.74301	1.67781	1.64807	1.77324	1.96209	2.13563	+++++	1.82331	10.338	<-
161 Benzo(k)fluoranthene	1.73350	1.67781	1.55118	1.78045	1.89989	2.20669	+++++	1.80825	12.528	<-
162 7,12-Dimethylbenz(a)anthracen	0.63206	0.67147	0.70278	0.74963	0.79123	0.82571	0.80112	0.73914	9.807	
163 Hexachlorophene	+++++	0.00594	0.00928	0.01407	0.00882	0.00689	0.09695	0.02366	152.219	<-

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164 N,N-Dimethylamine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
165 Benzo(a)pyrene	1.28853	1.28556	1.32531	1.40649	1.54674	1.53021	+++++	1.39714	8.443	<-
167 Carbofuran Phenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
168 2,3- and 3,5-Diaminotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
169 3-methylcholanthrene	0.67245	0.68361	0.68395	0.73820	0.79182	0.82758	0.85552	0.75045	10.005	
170 2,6- and 2,4-Diaminotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
171 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
172 n-Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
173 Indeno(1,2,3-cd)pyrene	0.73882	0.70252	0.71065	0.80175	0.89725	0.98778	+++++	0.80646	14.214	<-
174 Dibenzo(a,h)anthracene	0.77176	0.75286	0.77297	0.84764	0.92667	1.06407	+++++	0.85599	14.115	<-
175 Dibenz(e,a) Pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
176 n-tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
177 Benzo(g,h,i)perylene	0.68184	0.64901	0.65688	0.74685	0.79292	0.91601	+++++	0.74058	13.823	<-

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Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
179 Phthalic Acid	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
180 n-Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
M 181 Isosafrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
$ 10 2-Fluorophenol	1.00804	1.14054	1.13177	1.15897	1.18574	1.26798	+++++	1.14884	7.370	<-
$ 15 Phenol-d5	1.54860	1.60490	1.66798	1.73474	1.77000	1.88957	+++++	1.70263	7.193	<-
$ 36 Nitrobenzene-d5	0.51532	0.51669	0.51633	0.52997	0.52449	0.53918	+++++	0.52366	1.818	<-
$ 69 2-Fluorobiphenyl	1.50214	1.44581	1.45417	1.56913	1.62116	1.76722	+++++	1.55994	7.817	<-
$ 104 2,4,6-Tribromophenol	0.19617	0.21935	0.22640	0.23943	0.23817	0.24340	+++++	0.22715	7.770	<-
$ 139 Terphenyl-d14	1.13800	1.22502	1.24557	1.26605	1.36447	1.52273	+++++	1.29364	10.343	<-
$ 178 2,4,6-Trichlorophenol-d2	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2963.D
Report Date: 09-May-2005 10:41

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2963.D
Lab Smp Id: SSTD050APPIXB Client Smp ID: SSTD050APPIXB
Inj Date : 07-MAY-2005 22:18
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD050APPIXB
Misc Info : SV0148-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\8270K.m
Meth Date : 09-May-2005 10:41 hongs Quant Type: ISTD
Cal Date : 08-MAY-2005 01:27 Cal File: KCAL2969.D
Als bottle: 12 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIXB.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
2 Methyl methacrylate	69	1.317	1.317	(0.289)	105296	50.0000	46.13
6 Ethyl methacrylate	69	2.151	2.151	(0.472)	326358	50.0000	48.00
* 22 1,4-Dichlorobenzene-d4	152	4.560	4.560	(1.000)	260737	40.0000	
* 48 Naphthalene-d8	136	6.141	6.141	(1.000)	997386	40.0000	
* 82 Acenaphthene-d10	164	8.828	8.828	(1.000)	549459	40.0000	
* 121 Phenanthrene-d10	188	11.494	11.494	(1.000)	957388	40.0000	
* 153 Chrysene-d12	240	16.660	16.660	(1.000)	810451	40.0000	
* 166 Perylene-d12	264	19.272	19.272	(1.000)	570318	40.0000	

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Data File: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2963.D
Report Date: 09-May-2005 10:41

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

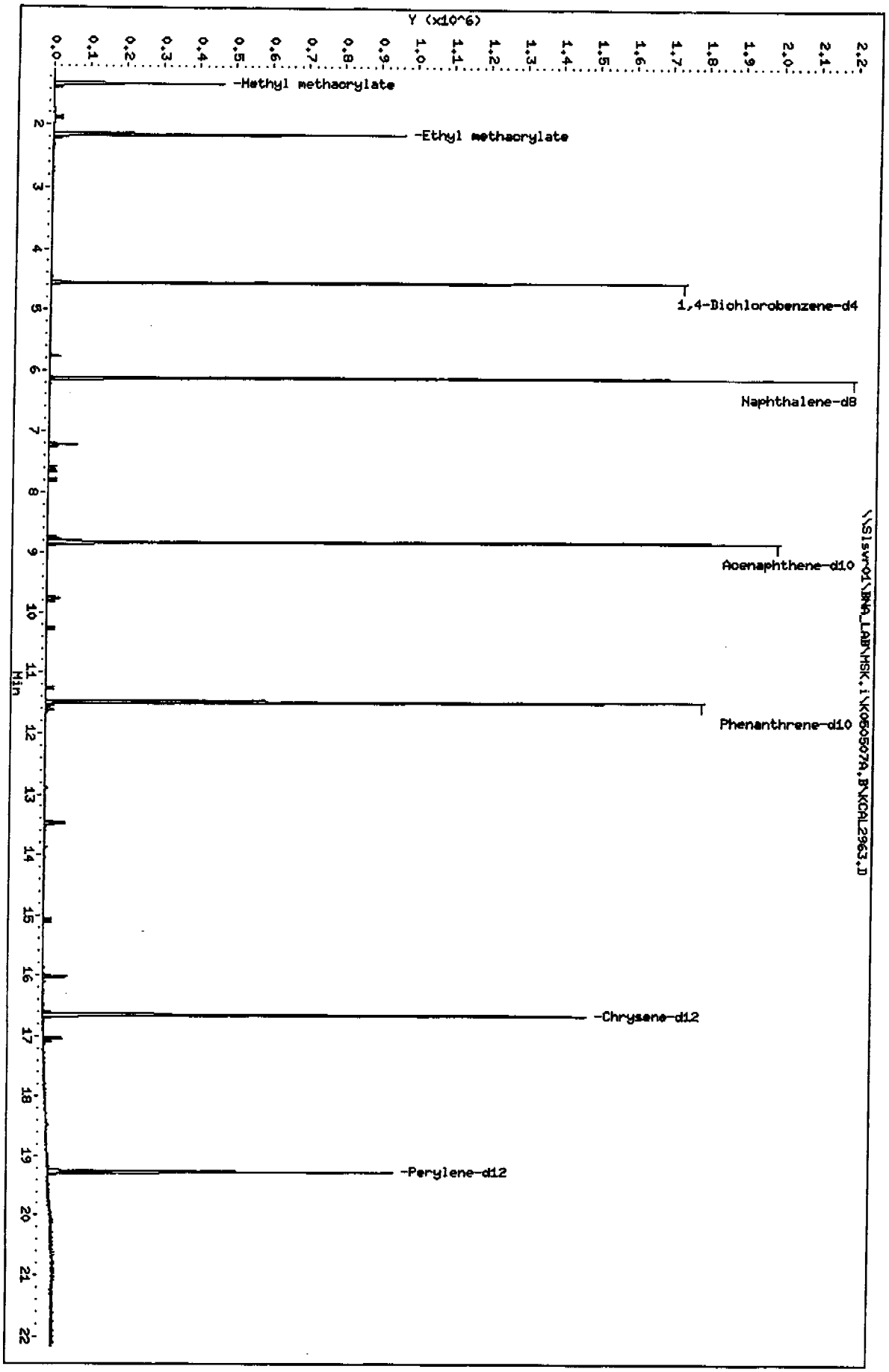
Instrument ID: MSK.i
Lab File ID: KCAL2963.D
Lab Smp Id: SSTD050APPIXB
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\8270K.m
Misc Info: SV0148-05

Calibration Date: 07-MAY-2005
Calibration Time: 22:18
Client Smp ID: SSTD050APPIXB
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	260737	130369	521474	260737	0.00
48 Naphthalene-d8	997386	498693	1994772	997386	0.00
82 Acenaphthene-d10	549459	274730	1098918	549459	0.00
121 Phenanthrene-d10	957388	478694	1914776	957388	0.00
153 Chrysene-d12	810451	405226	1620902	810451	0.00
166 Perylene-d12	570318	285159	1140636	570318	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.56	0.00
48 Naphthalene-d8	6.14	5.64	6.64	6.14	0.00
82 Acenaphthene-d10	8.83	8.33	9.33	8.83	0.00
121 Phenanthrene-d10	11.49	10.99	11.99	11.49	0.00
153 Chrysene-d12	16.66	16.16	17.16	16.66	0.00
166 Perylene-d12	19.27	18.77	19.77	19.27	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Data File: \\Slsvr01\BNA_LAB\HSK.i\K060507A.B\KCAL2963.D
Date : 07-MAY-2006 22:18
Client ID: SSTD060APPIXB
Sample Info: SSTD060APPIXB
Volume Injected (uL): 1.0
Column phase:
Instrument: HSK.i
Operator: XIA
Column diameter: 2.00
Y (x10^6)
-Methyl methacrylate
-Ethyl methacrylate
1,4-Dichlorobenzene-d4
Naphthalene-d8
Acenaphthene-d10
Phenanthrene-d10
-Chrysene-d12
-Perylene-d12
Min
\\Slsvr01\BNA_LAB\HSK.i\K060507A.B\KCAL2963.D

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2964.D
Report Date: 09-May-2005 10:41

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2964.D
Lab Smp Id: SSTD160APPIXB Client Smp ID: SSTD160APPIXB
Inj Date : 07-MAY-2005 22:49
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD160APPIXB
Misc Info : SV0151-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\8270K.m
Meth Date : 09-May-2005 10:41 hongs Quant Type: ISTD
Cal Date : 08-MAY-2005 01:27 Cal File: KCAL2969.D
Als bottle: 13 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIXB.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
2 Methyl methacrylate	69	1.311	1.317	(0.288)	354330	160.000	163.6(A)
6 Ethyl methacrylate	69	2.150	2.151	(0.472)	1098411	160.000	170.3(A)
* 22 1,4-Dichlorobenzene-d4	152	4.559	4.560	(1.000)	247338	40.0000	
* 48 Naphthalene-d8	136	6.141	6.141	(1.000)	968706	40.0000	
* 82 Acenaphthene-d10	164	8.828	8.828	(1.000)	538079	40.0000	
* 121 Phenanthrene-d10	188	11.488	11.494	(1.000)	919997	40.0000	
* 153 Chrysene-d12	240	16.659	16.660	(1.000)	802684	40.0000	
* 166 Perylene-d12	264	19.272	19.272	(1.000)	583863	40.0000	

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QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2964.D Page 2
Report Date: 09-May-2005 10:41

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

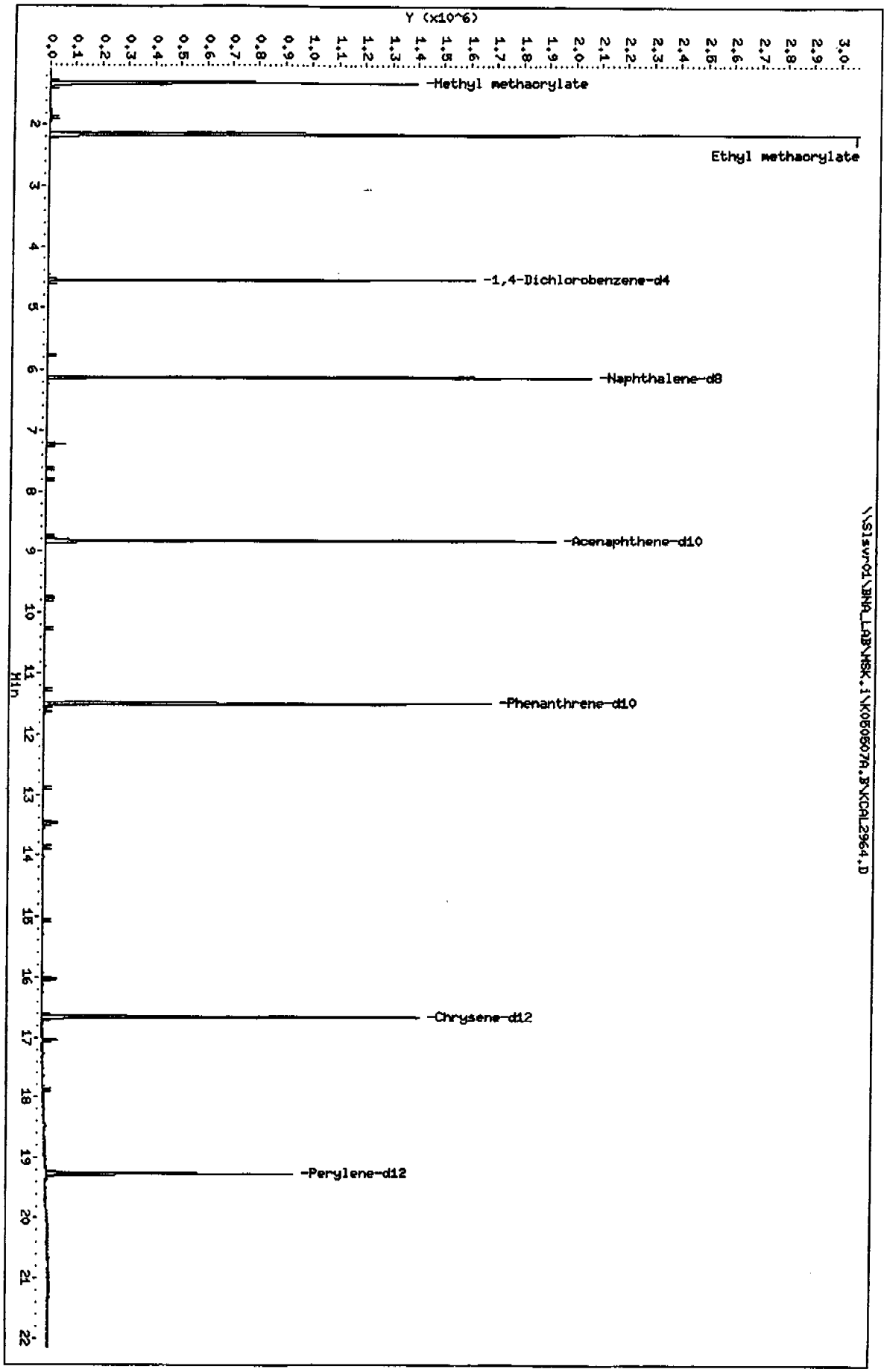
Instrument ID: MSK.i
Lab File ID: KCAL2964.D
Lab Smp Id: SSTD160APPIXB
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\8270K.m
Misc Info: SV0151-05

Calibration Date: 07-MAY-2005
Calibration Time: 22:18
Client Smp ID: SSTD160APPIXB
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	260737	130369	521474	247338	-5.14
48 Naphthalene-d8	997386	498693	1994772	968706	-2.88
82 Acenaphthene-d10	549459	274730	1098918	538079	-2.07
121 Phenanthrene-d10	957388	478694	1914776	919997	-3.91
153 Chrysene-d12	810451	405226	1620902	802684	-0.96
166 Perylene-d12	570318	285159	1140636	583863	2.37

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.56	-0.01
48 Naphthalene-d8	6.14	5.64	6.64	6.14	-0.01
82 Acenaphthene-d10	8.83	8.33	9.33	8.83	-0.01
121 Phenanthrene-d10	11.49	10.99	11.99	11.49	-0.05
153 Chrysene-d12	16.66	16.16	17.16	16.66	-0.00
166 Perylene-d12	19.27	18.77	19.77	19.27	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2964.D
Date : 07-MAY-2005 22:49
Client ID: SSTDI60APPIXB
Sample Info: SSTDI60APPIXB
Volume Injected (uL): 1.0
Column phase:

Instrument: MSK.i
Operator: KIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2965.D
Report Date: 09-May-2005 10:41

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2965.D
Lab Smp Id: SSTD120APPIXB Client Smp ID: SSTD120APPIXB
Inj Date : 07-MAY-2005 23:21
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD120APPIXB
Misc Info : SV0150-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\8270K.m
Meth Date : 09-May-2005 10:41 hongs Quant Type: ISTD
Cal Date : 08-MAY-2005 01:27 Cal File: KCAL2969.D
Als bottle: 14 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIXB.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
2 Methyl methacrylate	69	1.311	1.317	(0.288)	275352	120.000	119.5
6 Ethyl methacrylate	69	2.150	2.151	(0.472)	844787	120.000	123.1
* 22 1,4-Dichlorobenzene-d4	152	4.559	4.560	(1.000)	263210	40.0000	
* 48 Naphthalene-d8	136	6.141	6.141	(1.000)	1005768	40.0000	
* 82 Acenaphthene-d10	164	8.833	8.828	(1.000)	551318	40.0000	
* 121 Phenanthrene-d10	188	11.493	11.494	(1.000)	965797	40.0000	
* 153 Chrysene-d12	240	16.665	16.660	(1.000)	831260	40.0000	
* 166 Perylene-d12	264	19.277	19.272	(1.000)	619268	40.0000	

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Data File: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2965.D
Report Date: 09-May-2005 10:41

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

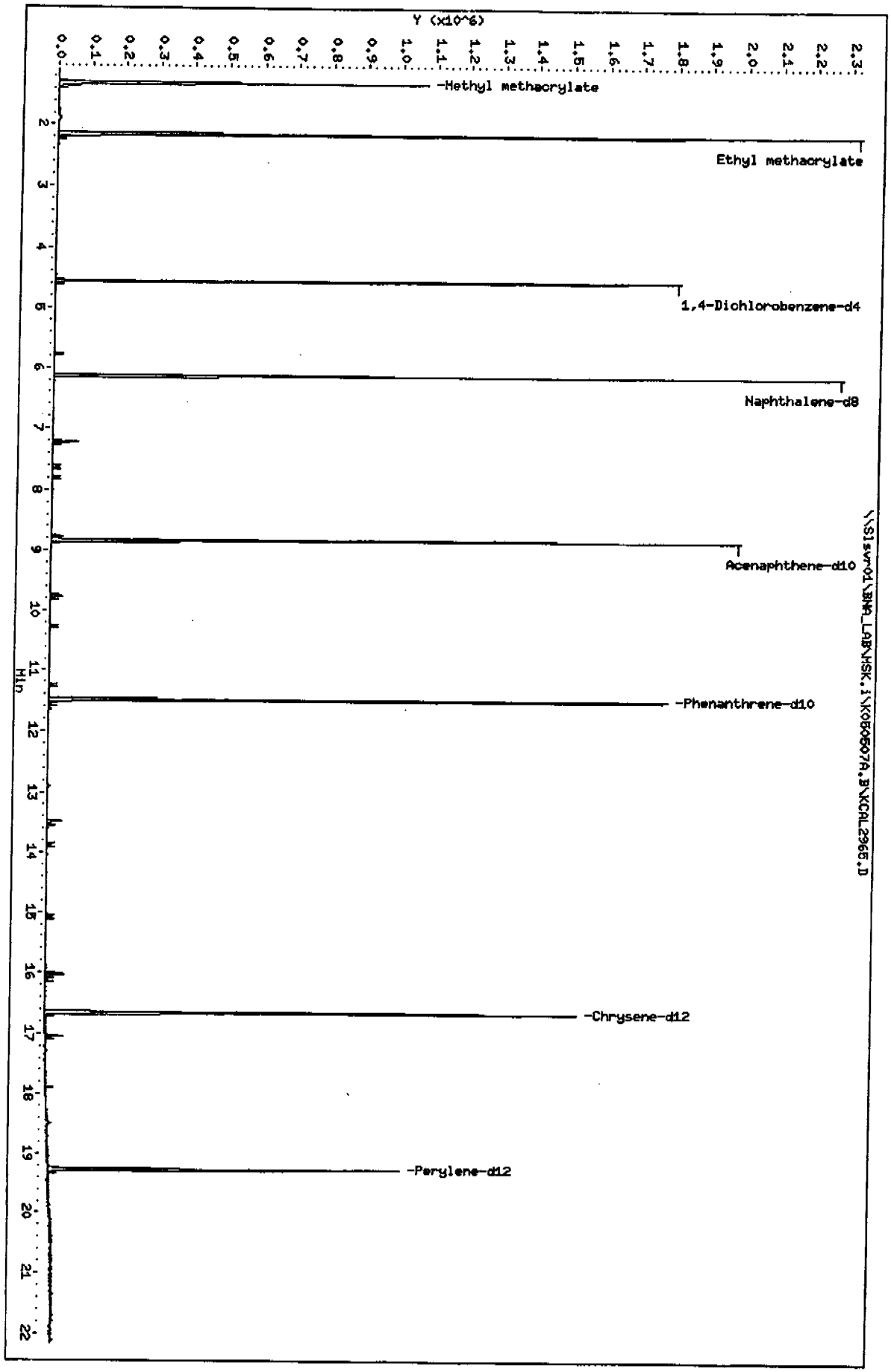
Instrument ID: MSK.i
Lab File ID: KCAL2965.D
Lab Smp Id: SSTD120APPIXB
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\8270K.m
Misc Info: SV0150-05

Calibration Date: 07-MAY-2005
Calibration Time: 22:18
Client Smp ID: SSTD120APPIXB
Level: LOW
Sample Type: WATER

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	260737	130369	521474	263210	0.95
48 Naphthalene-d8	997386	498693	1994772	1005768	0.84
82 Acenaphthene-d10	549459	274730	1098918	551318	0.34
121 Phenanthrene-d10	957388	478694	1914776	965797	0.88
153 Chrysene-d12	810451	405226	1620902	831260	2.57
166 Perylene-d12	570318	285159	1140636	619268	8.58

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.56	-0.01
48 Naphthalene-d8	6.14	5.64	6.64	6.14	-0.01
82 Acenaphthene-d10	8.83	8.33	9.33	8.83	0.05
121 Phenanthrene-d10	11.49	10.99	11.99	11.49	-0.01
153 Chrysene-d12	16.66	16.16	17.16	16.67	0.03
166 Perylene-d12	19.27	18.77	19.77	19.28	0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



Data File: \\Slsvr01\BNA_LAB\HSK.i\K050507A.B\KCAL2965.D
Date : 07-MAY-2005 23:21
Client ID: SSTD120APPIXB
Sample Info: SSTD120APPIXB
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: KIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2966.D Page 1
Report Date: 09-May-2005 10:41

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2966.D
Lab Smp Id: SSTD080APPIXB Client Smp ID: SSTD080APPIXB
Inj Date : 07-MAY-2005 23:52
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD080APPIXB
Misc Info : SV0149-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\8270K.m
Meth Date : 09-May-2005 10:41 hongs Quant Type: ISTD
Cal Date : 08-MAY-2005 01:27 Cal File: KCAL2969.D
Als bottle: 15 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIXB.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
2 Methyl methacrylate	69	1.312	1.317	(0.288)	189519	80.0000	77.68
6 Ethyl methacrylate	69	2.145	2.151	(0.472)	579351	80.0000	79.73
* 22 1,4-Dichlorobenzene-d4	152	4.549	4.560	(1.000)	278663	40.0000	
* 48 Naphthalene-d8	136	6.131	6.141	(1.000)	1066499	40.0000	
* 82 Acenaphthene-d10	164	8.818	8.828	(1.000)	578330	40.0000	
* 121 Phenanthrene-d10	188	11.478	11.494	(1.000)	1008915	40.0000	
* 153 Chrysene-d12	240	16.644	16.660	(1.000)	862374	40.0000	
* 166 Perylene-d12	264	19.262	19.272	(1.000)	675655	40.0000	

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Data File: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2966.D Page 2
Report Date: 09-May-2005 10:41

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

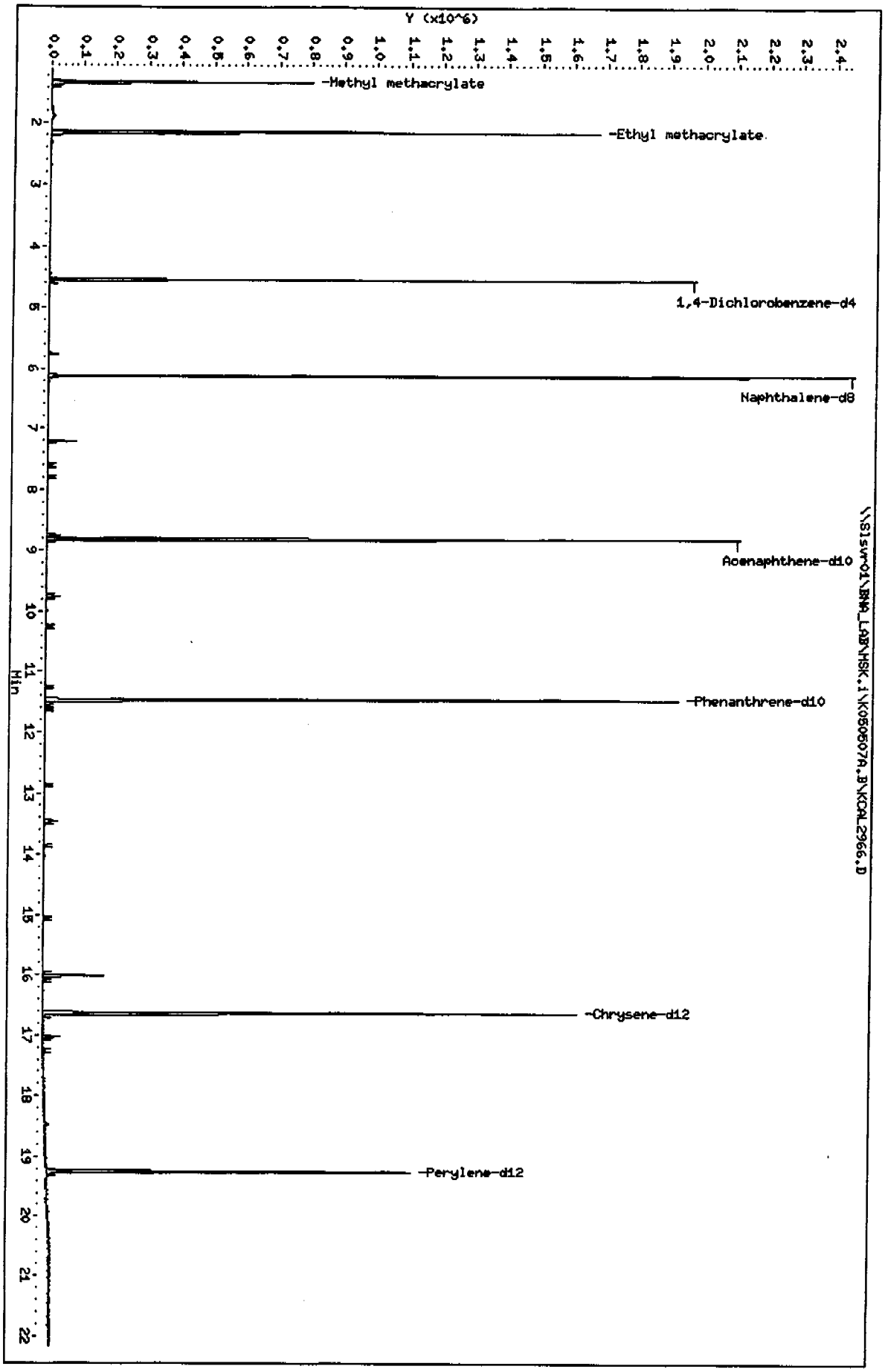
Instrument ID: MSK.i
Lab File ID: KCAL2966.D
Lab Smp Id: SSTD080APPIXB
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\8270K.m
Misc Info: SV0149-05

Calibration Date: 07-MAY-2005
Calibration Time: 22:18
Client Smp ID: SSTD080APPIXB
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	260737	130369	521474	278663	6.88
48 Naphthalene-d8	997386	498693	1994772	1066499	6.93
82 Acenaphthene-d10	549459	274730	1098918	578330	5.25
121 Phenanthrene-d10	957388	478694	1914776	1008915	5.38
153 Chrysene-d12	810451	405226	1620902	862374	6.41
166 Perylene-d12	570318	285159	1140636	675655	18.47

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.55	-0.23
48 Naphthalene-d8	6.14	5.64	6.64	6.13	-0.17
82 Acenaphthene-d10	8.83	8.33	9.33	8.82	-0.12
121 Phenanthrene-d10	11.49	10.99	11.99	11.48	-0.14
153 Chrysene-d12	16.66	16.16	17.16	16.64	-0.10
166 Perylene-d12	19.27	18.77	19.77	19.26	-0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



Data File: \\Slsvr01\BNA_LAB\HSK.i\K050607A.B\KCAL2966.D
Date : 07-MAY-2005 23:52
Client ID: SSTD080APPIXB
Sample Info: SSTD080APPIXB
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2967.D
Report Date: 09-May-2005 10:42

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2967.D
Lab Smp Id: SSTD020APPIXB Client Smp ID: SSTD020APPIXB
Inj Date : 08-MAY-2005 00:24
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD020APPIXB
Misc Info : SV0147-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\8270K.m
Meth Date : 09-May-2005 10:41 hongs Quant Type: ISTD
Cal Date : 08-MAY-2005 01:27 Cal File: KCAL2969.D
Als bottle: 16 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIXB.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
2 Methyl methacrylate	69	1.323	1.317	(0.290)	42512	20.0000	19.09
6 Ethyl methacrylate	69	2.156	2.151	(0.472)	127710	20.0000	19.26
* 22 1,4-Dichlorobenzene-d4	152	4.565	4.560	(1.000)	254341	40.0000	
* 48 Naphthalene-d8	136	6.146	6.141	(1.000)	954730	40.0000	
* 82 Acenaphthene-d10	164	8.834	8.828	(1.000)	525375	40.0000	
* 121 Phenanthrene-d10	188	11.499	11.494	(1.000)	922400	40.0000	
* 153 Chrysene-d12	240	16.665	16.660	(1.000)	804926	40.0000	
* 166 Perylene-d12	264	19.283	19.272	(1.000)	627468	40.0000	

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Data File: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2967.D
Report Date: 09-May-2005 10:42

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

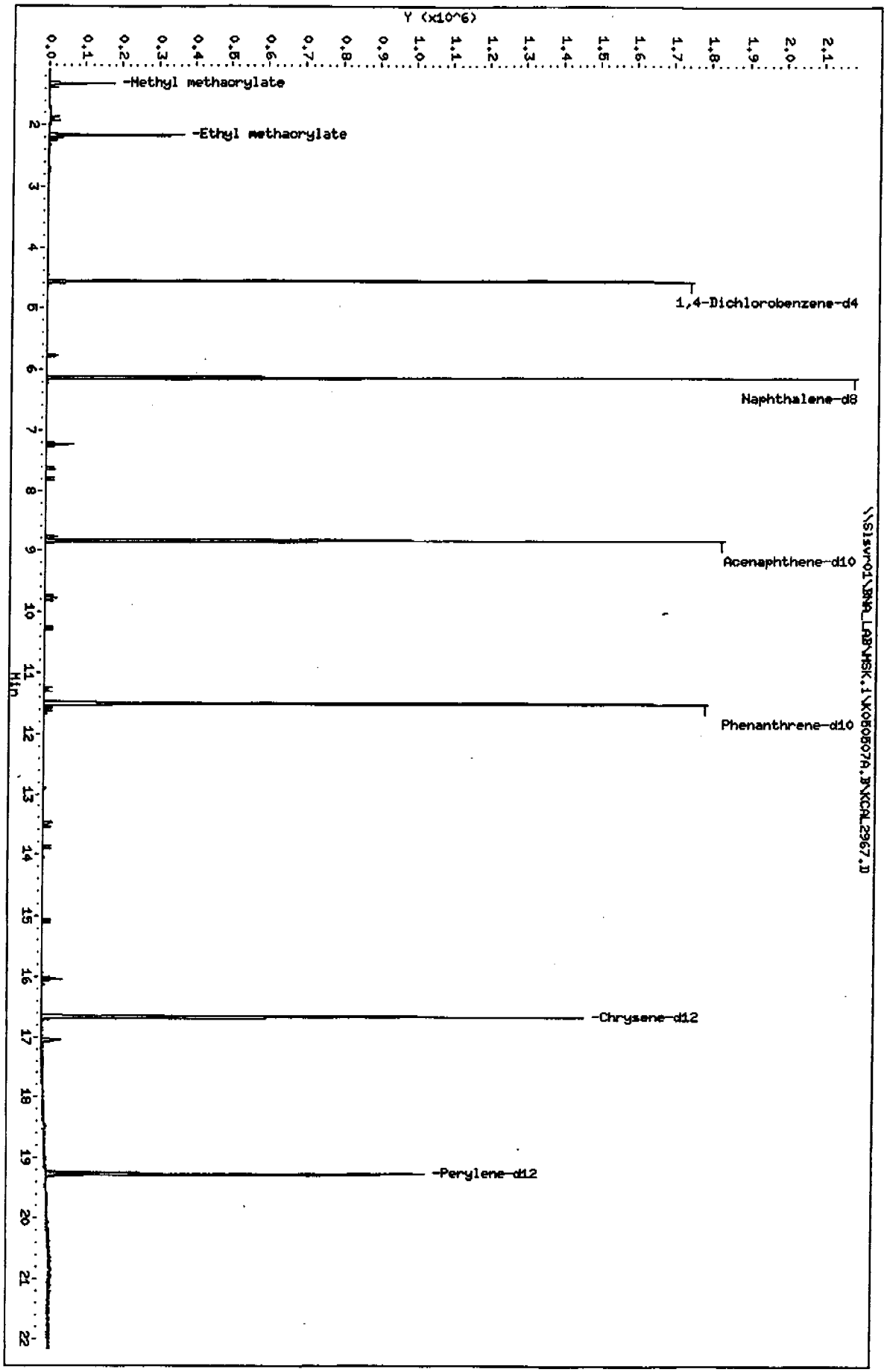
Instrument ID: MSK.i
Lab File ID: KCAL2967.D
Lab Smp Id: SSTD020APPIXB
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\8270K.m
Misc Info: SV0147-05

Calibration Date: 07-MAY-2005
Calibration Time: 22:18
Client Smp ID: SSTD020APPIXB
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	260737	130369	521474	254341	-2.45
48 Naphthalene-d8	997386	498693	1994772	954730	-4.28
82 Acenaphthene-d10	549459	274730	1098918	525375	-4.38
121 Phenanthrene-d10	957388	478694	1914776	922400	-3.65
153 Chrysene-d12	810451	405226	1620902	804926	-0.68
166 Perylene-d12	570318	285159	1140636	627468	10.02

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.57	0.12
48 Naphthalene-d8	6.14	5.64	6.64	6.15	0.09
82 Acenaphthene-d10	8.83	8.33	9.33	8.83	0.06
121 Phenanthrene-d10	11.49	10.99	11.99	11.50	0.05
153 Chrysene-d12	16.66	16.16	17.16	16.67	0.03
166 Perylene-d12	19.27	18.77	19.77	19.28	0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^6)
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0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
1.8
1.9
2.0
2.1
-Methyl methacrylate
-Ethyl methacrylate
1,4-Dichlorobenzene-d4
Naphthalene-d8
Acenaphthene-d10
Phenanthrene-d10
-Chrysene-d12
-Perylene-d12
Min
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
Data File: \\Slsvr01\BNA_LAB\HSK.i\K060607A.B\KCAL2967.D
Date : 08-MAY-2006 00:24
Client ID: SSTD020APPIXB
Sample Info: SSTD020APPIXB
Volume Injected (uL): 1.0
Column phase:
\\Slsvr01\BNA_LAB\HSK.i\K060607A.B\KCAL2967.D
Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2968.D Page 1
Report Date: 09-May-2005 10:42

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2968.D
Lab Smp Id: SSTD010APPIXB Client Smp ID: SSTD010APPIXB
Inj Date : 08-MAY-2005 00:55
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD010APPIXB
Misc Info : SV0146-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\8270K.m
Meth Date : 09-May-2005 10:41 hongs Quant Type: ISTD
Cal Date : 08-MAY-2005 01:27 Cal File: KCAL2969.D
Als bottle: 17 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIXB.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
2 Methyl methacrylate	69	1.315	1.317	(0.288)	20067	10.0000	10.10
6 Ethyl methacrylate	69	2.153	2.151	(0.472)	57253	10.0000	9.675(a)
* 22 1,4-Dichlorobenzene-d4	152	4.563	4.560	(1.000)	226921	40.0000	
* 48 Naphthalene-d8	136	6.144	6.141	(1.000)	863639	40.0000	
* 82 Acenaphthene-d10	164	8.836	8.828	(1.000)	479190	40.0000	
* 121 Phenanthrene-d10	188	11.497	11.494	(1.000)	832376	40.0000	
* 153 Chrysene-d12	240	16.668	16.660	(1.000)	737129	40.0000	
* 166 Perylene-d12	264	19.280	19.272	(1.000)	586240	40.0000	

05/09/05

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2968.D
Report Date: 09-May-2005 10:42

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

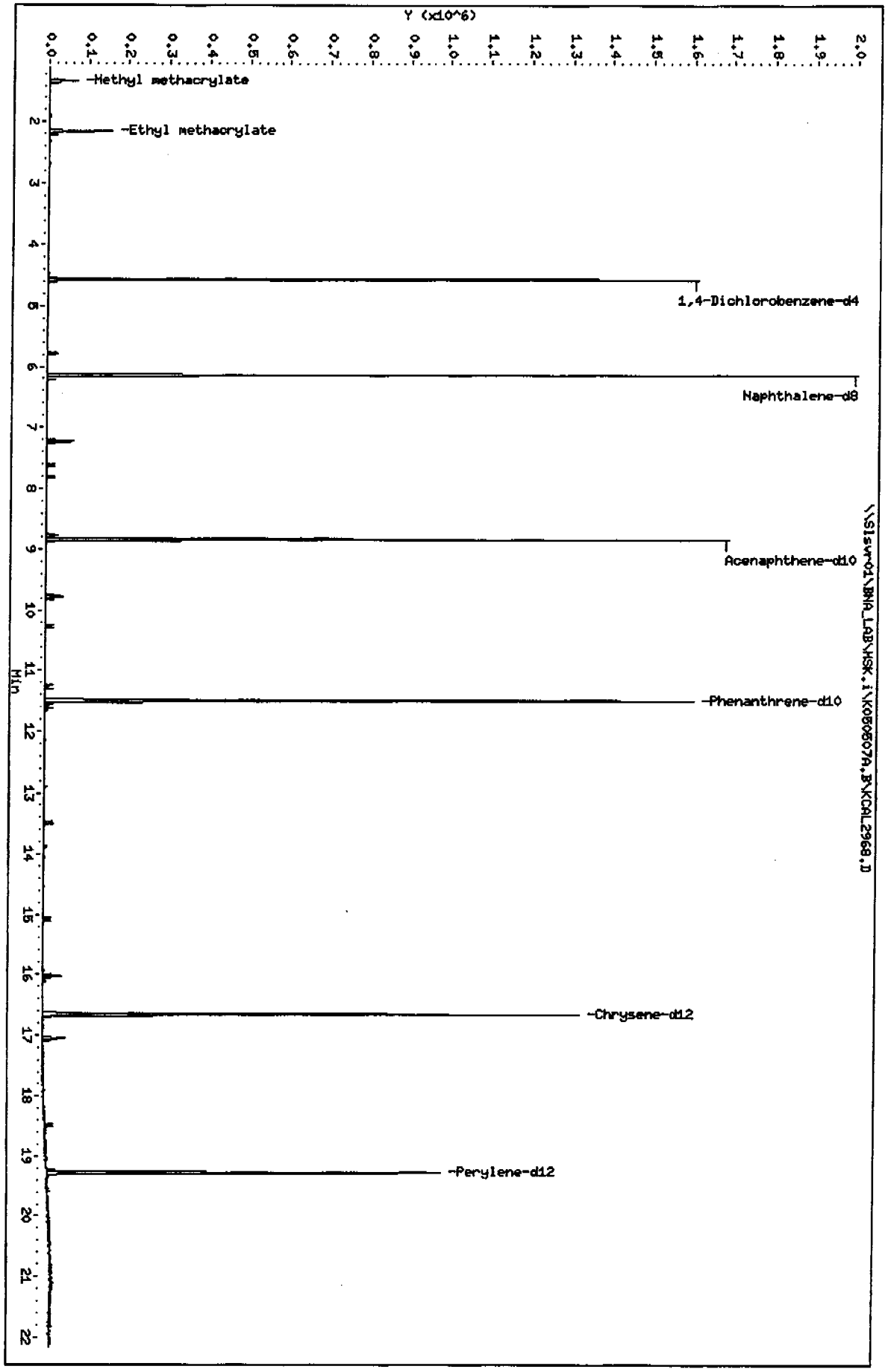
Instrument ID: MSK.i
Lab File ID: KCAL2968.D
Lab Smp Id: SSTD010APPIXB
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\8270K.m
Misc Info: SV0146-05

Calibration Date: 07-MAY-2005
Calibration Time: 22:18
Client Smp ID: SSTD010APPIXB
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	260737	130369	521474	226921	-12.97
48 Naphthalene-d8	997386	498693	1994772	863639	-13.41
82 Acenaphthene-d10	549459	274730	1098918	479190	-12.79
121 Phenanthrene-d10	957388	478694	1914776	832376	-13.06
153 Chrysene-d12	810451	405226	1620902	737129	-9.05
166 Perylene-d12	570318	285159	1140636	586240	2.79

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.56	0.06
48 Naphthalene-d8	6.14	5.64	6.64	6.14	0.05
82 Acenaphthene-d10	8.83	8.33	9.33	8.84	0.09
121 Phenanthrene-d10	11.49	10.99	11.99	11.50	0.02
153 Chrysene-d12	16.66	16.16	17.16	16.67	0.05
166 Perylene-d12	19.27	18.77	19.77	19.28	0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



Data File: \\Slsvr01\BNA_LAB\MSK.i\K060607A.B\KCAL2968.D
Date : 08-MAY-2005 00:55
Client ID: SSTD010APPIXB
Sample Info: SSTD010APPIXB
Volume Injected (uL): 1.0
Column phase:

Instrument: MSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2969.D Page 1
Report Date: 09-May-2005 10:42

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2969.D
Lab Smp Id: SSTD002APPIXB Client Smp ID: SSTD002APPIXB
Inj Date : 08-MAY-2005 01:27
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD002APPIXB
Misc Info : SV0145-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\8270K.m
Meth Date : 09-May-2005 10:41 hongs Quant Type: ISTD
Cal Date : 08-MAY-2005 01:27 Cal File: KCAL2969.D
Als bottle: 18 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIXB.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
2 Methyl methacrylate	69	1.326	1.317	(0.291)	4378	2.00000	2.246(a)
6 Ethyl methacrylate	69	2.154	2.151	(0.473)	11879	2.00000	2.046(a)
* 22 1,4-Dichlorobenzene-d4	152	4.558	4.560	(1.000)	222650	40.0000	
* 48 Naphthalene-d8	136	6.140	6.141	(1.000)	848885	40.0000	
* 82 Acenaphthene-d10	164	8.827	8.828	(1.000)	473280	40.0000	
* 121 Phenanthrene-d10	188	11.492	11.494	(1.000)	831368	40.0000	
* 153 Chrysene-d12	240	16.658	16.660	(1.000)	731218	40.0000	
* 166 Perylene-d12	264	19.276	19.272	(1.000)	594552	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

05/09/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\KCAL2969.D Page 2
Report Date: 09-May-2005 10:42

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

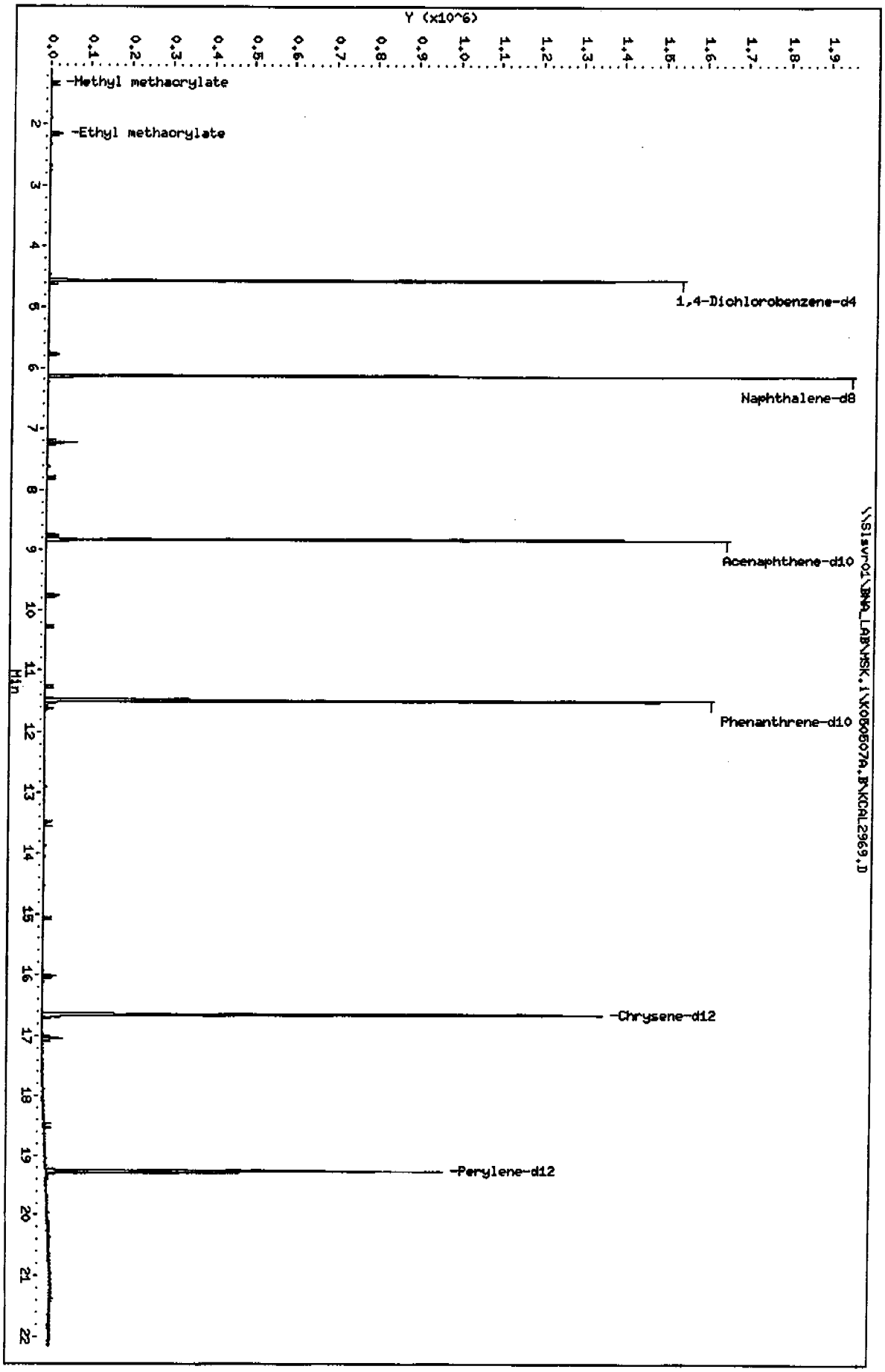
Instrument ID: MSK.i
Lab File ID: KCAL2969.D
Lab Smp Id: SSTD002APPIXB
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050507A.B\8270K.m
Misc Info: SV0145-05

Calibration Date: 07-MAY-2005
Calibration Time: 22:18
Client Smp ID: SSTD002APPIXB
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	260737	130369	521474	222650	-14.61
48 Naphthalene-d8	997386	498693	1994772	848885	-14.89
82 Acenaphthene-d10	549459	274730	1098918	473280	-13.86
121 Phenanthrene-d10	957388	478694	1914776	831368	-13.16
153 Chrysene-d12	810451	405226	1620902	731218	-9.78
166 Perylene-d12	570318	285159	1140636	594552	4.25

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.56	-0.04
48 Naphthalene-d8	6.14	5.64	6.64	6.14	-0.03
82 Acenaphthene-d10	8.83	8.33	9.33	8.83	-0.02
121 Phenanthrene-d10	11.49	10.99	11.99	11.49	-0.01
153 Chrysene-d12	16.66	16.16	17.16	16.66	-0.01
166 Perylene-d12	19.27	18.77	19.77	19.28	0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



Data File: \\Slsvr01\BNA_LAB\MSK.i\K060507A.B\KCAL2969.D
Date : 08-MAY-2005 01:27
Client ID: SSTD002&PPIXB
Sample Info: SSTD002&PPIXB
Volume Injected (uL): 1.0
Column phase:

Instrument: MSK.i
Operator: XIA
Column diameter: 2.00

STL ST LOUIS

DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	46.77		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	55.18		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	48.39		PASS
197	0 - 1% of mass 198	0.43		PASS
199	5 - 9% of mass 198	6.30		PASS
275	10 - 30% of mass 198	25.11		PASS
365	Greater than 1% of mass 198	3.20		PASS
441	Present, but less than mass 443	10.10	(83.21)	PASS
442	Greater than 40% of mass 198	59.38		PASS
443	17 - 23% of mass 442	12.13	(20.43)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.6370614	5.000	PASS
Benzidine	0.7718855	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	251287			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	3331	1.3	15.0	PASS
4,4-DDD + DDE	3331	1.3	15.0	PASS

****

Tuning Sample, //Slsvr01/BNA_LAB/MSK.i/K050509B.B/KDFT2993.D/KDFT2993.D,*** PASSED

****

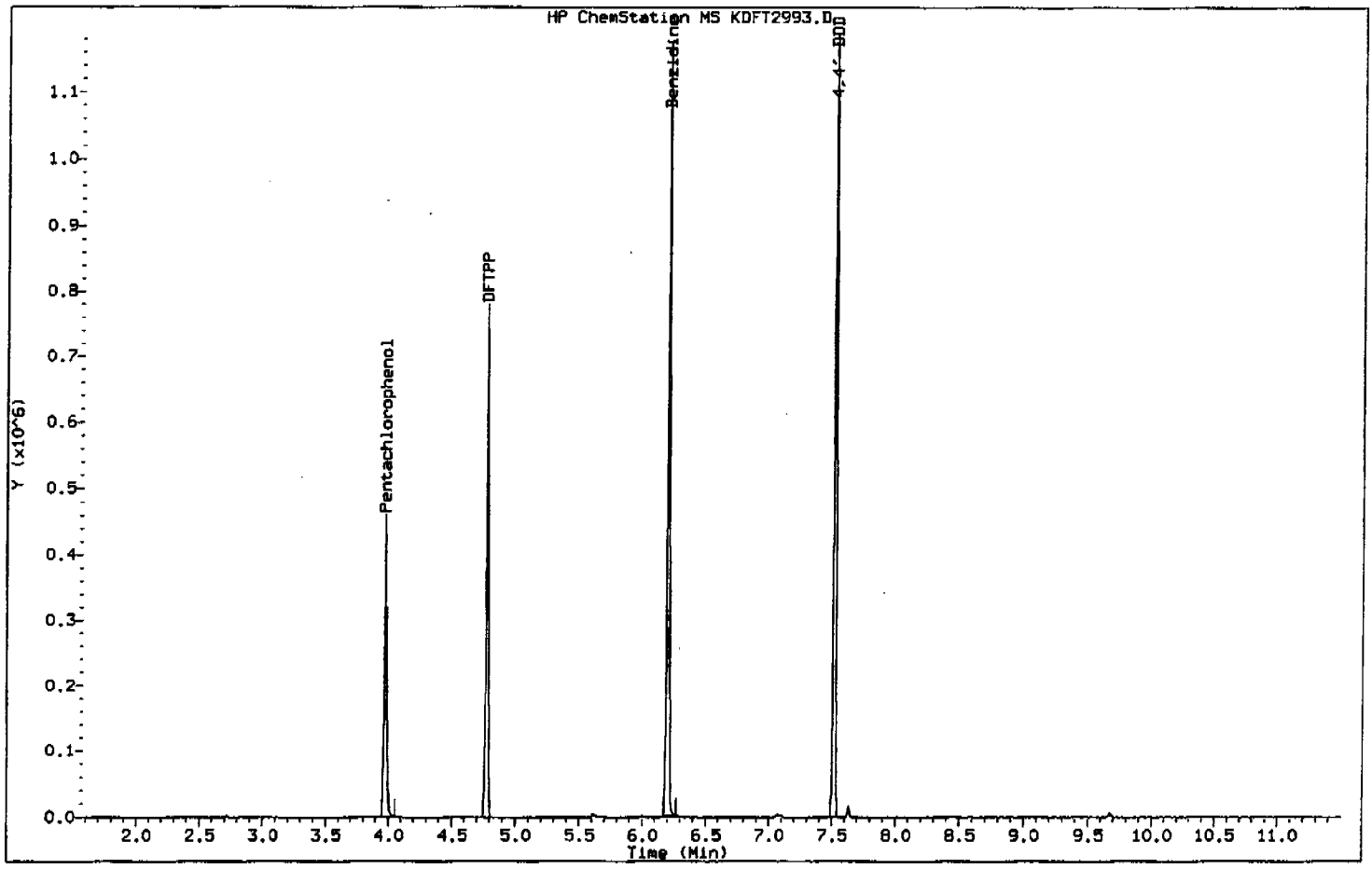
05/10/05

STL ST LOUIS

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

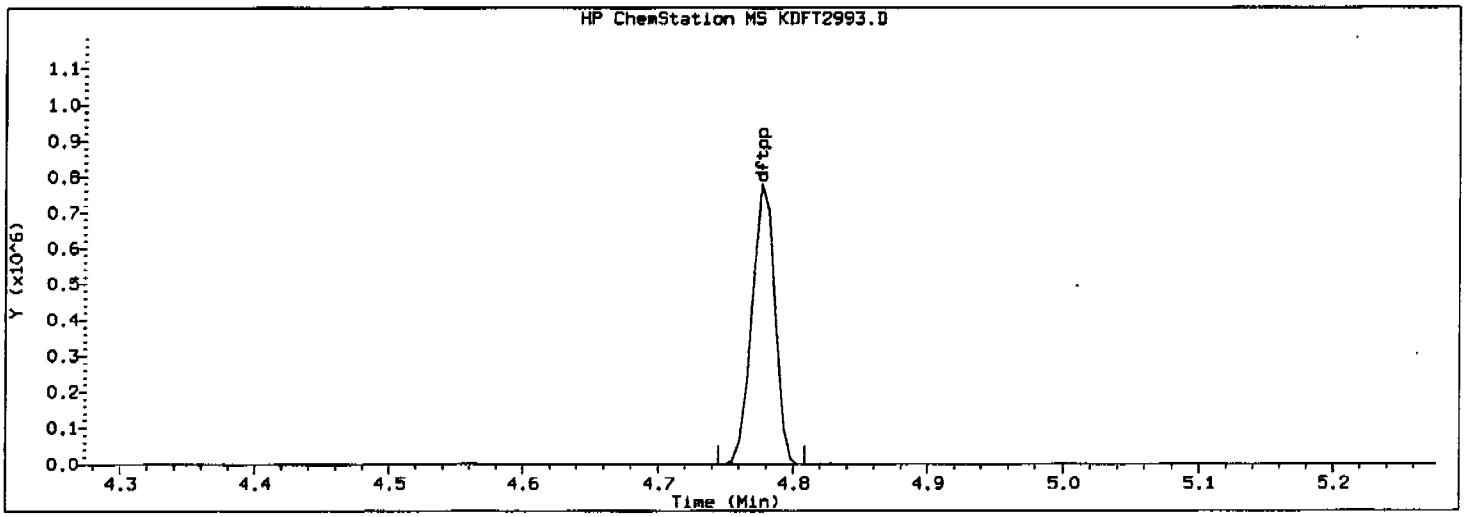
Report Date: 05/09/2005 18:48

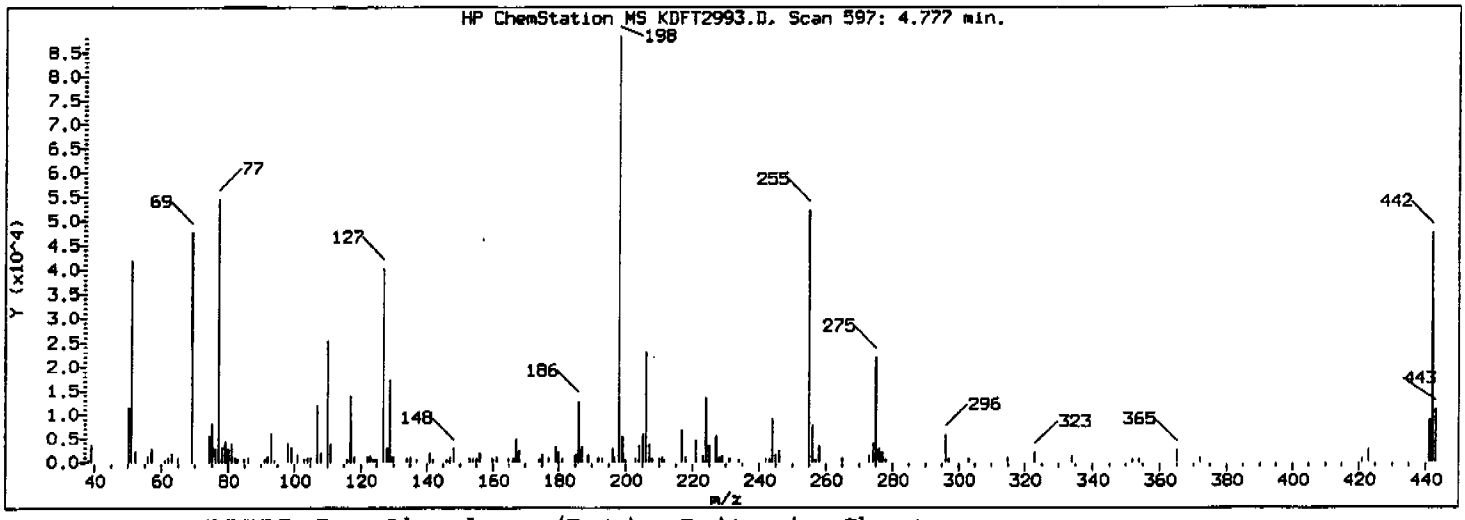
Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509B.B/KDFT2993.D/KDFT2993.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509B.B\sw846tun.m Inst: MSK
Injection Date: 09-MAY-2005 11:40 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0193-05 (50NG)



STL ST LOUIS
Report Date: 05/09/2005 18:48

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509B.B/KDFT2993.D/KDFT2993.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509B.B\sw846tun.m Inst: MSK
Injection Date: 09-MAY-2005 11:40 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0193-05 (50NG)



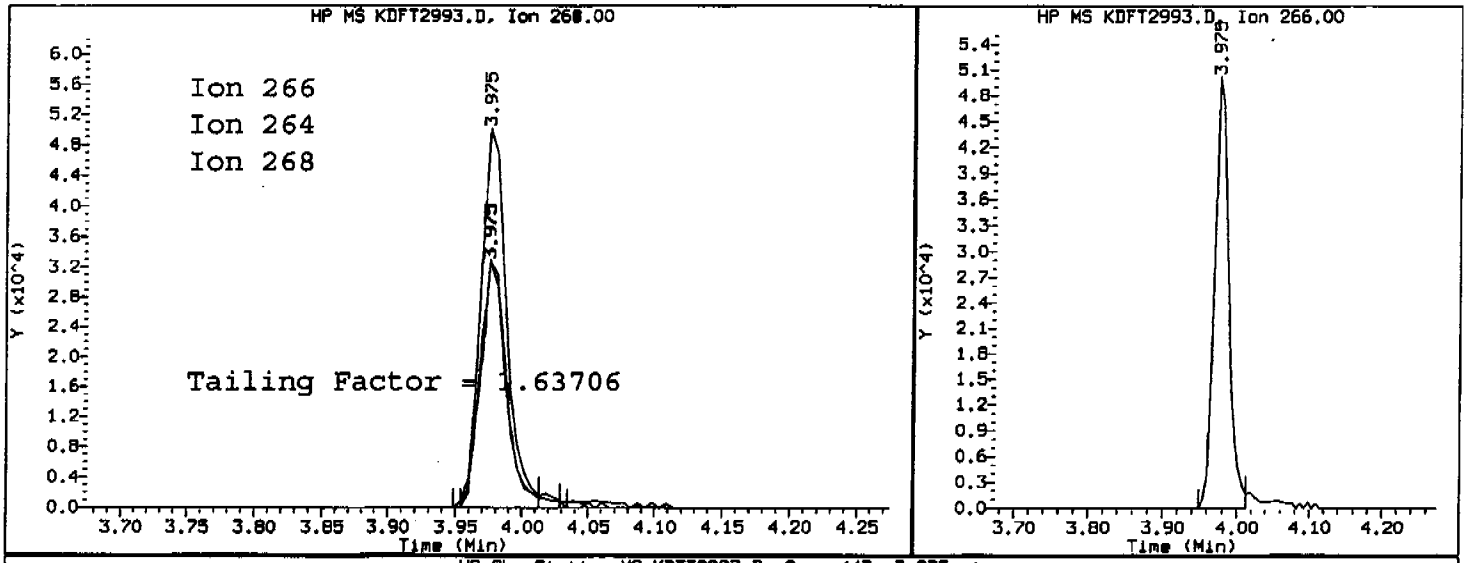


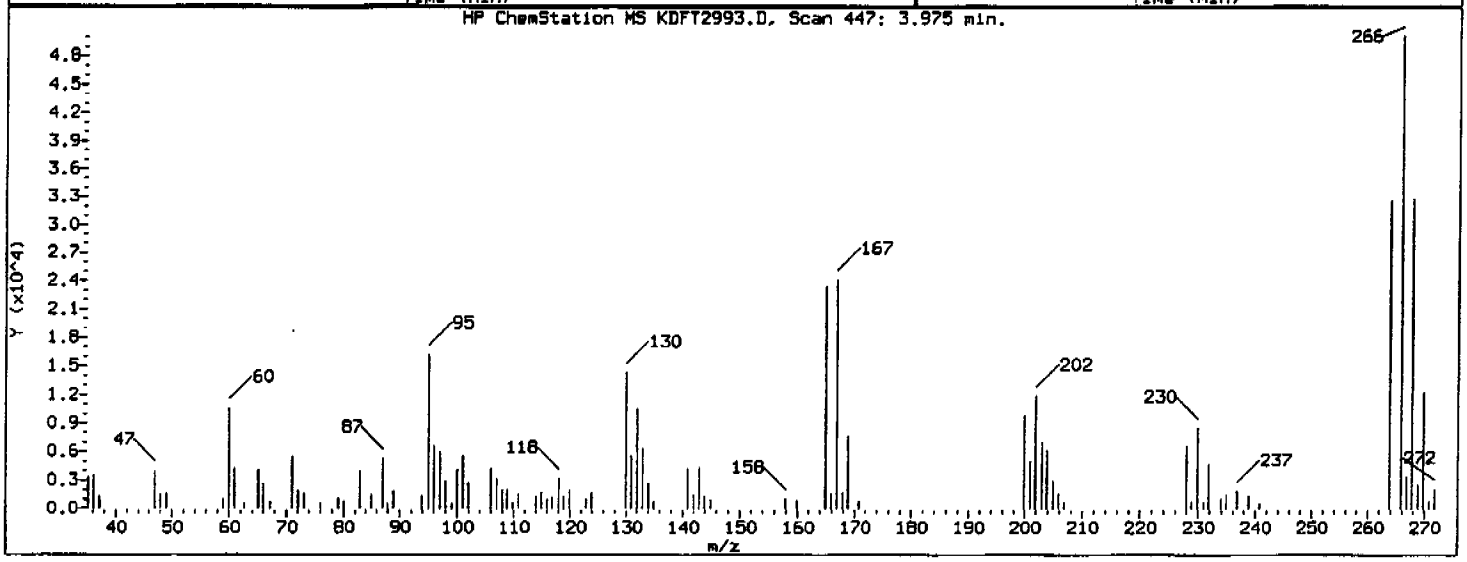
DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	46.77		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	55.18		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	48.39		PASS
197	0 - 1% of mass 198	0.43		PASS
199	5 - 9% of mass 198	6.30		PASS
275	10 - 30% of mass 198	25.11		PASS
365	Greater than 1% of mass 198	3.20		PASS
441	Present, but less than mass 443	10.10	(83.21)	PASS
442	Greater than 40% of mass 198	59.38		PASS
443	17 - 23% of mass 442	12.13	(20.43)	PASS

STL ST LOUIS
Report Date: 05/09/2005 18:48

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509B.B/KDFT2993.D/KDFT2993.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509B.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 11:40 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)





Pentachlorophenol
==========
Exp. RT = 3.975
Found RT = 3.975

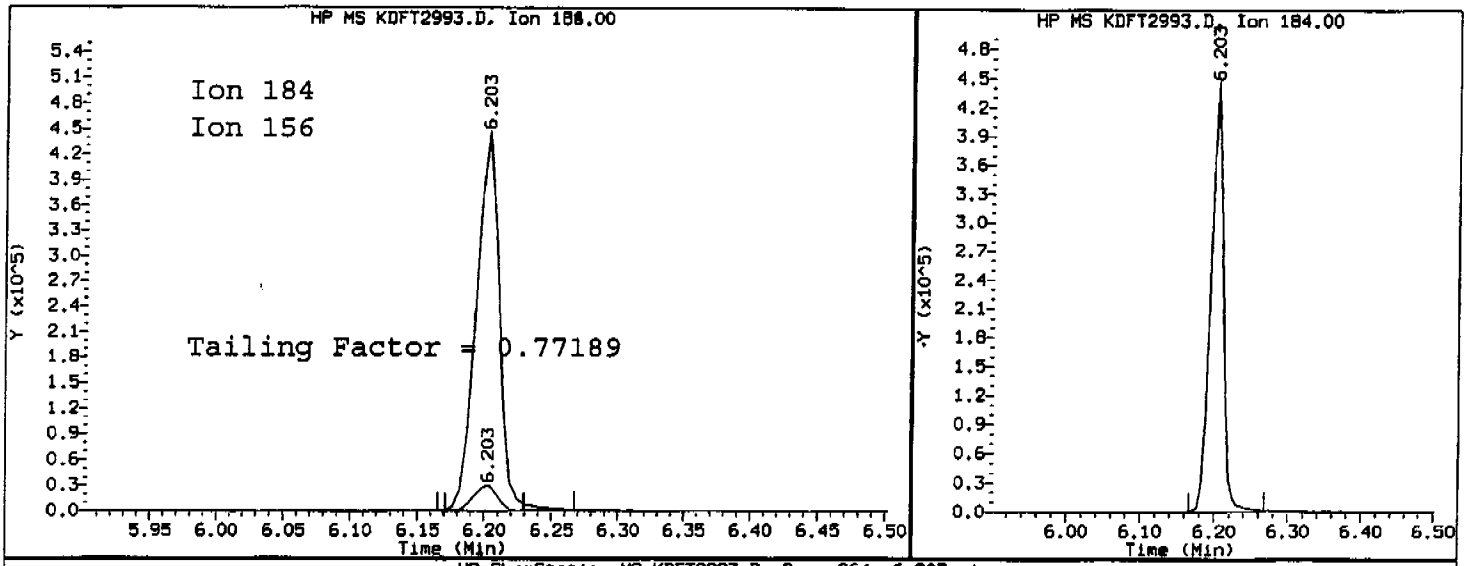
Mass	Area	Ratio
266	68571	100.00
264	43740	63.79
268	46831	68.30

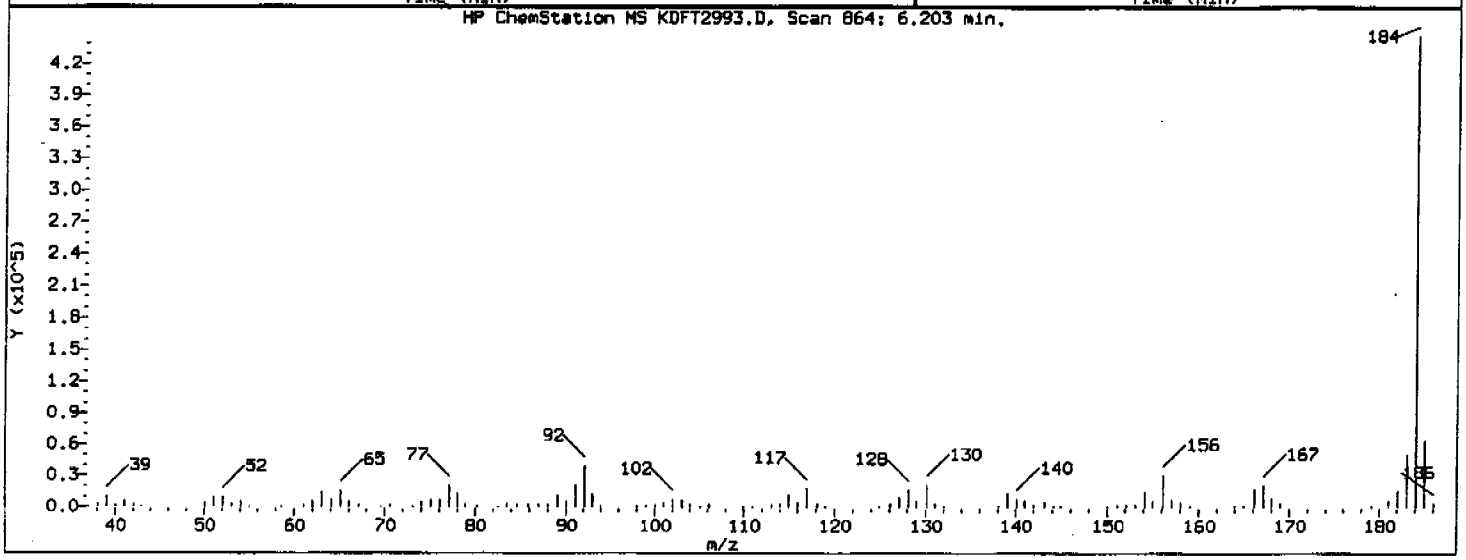
Tailing factor for Pentachlorophenol OK

Tail Factor = 1.637 Maximum Allowed = 5.0

STL ST LOUIS
Report Date: 05/09/2005 18:48

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509B.B/KDFT2993.D/KDFT2993.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509B.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 11:40 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)





Benzidine
=========
Exp. RT = 6.203
Found RT = 6.203

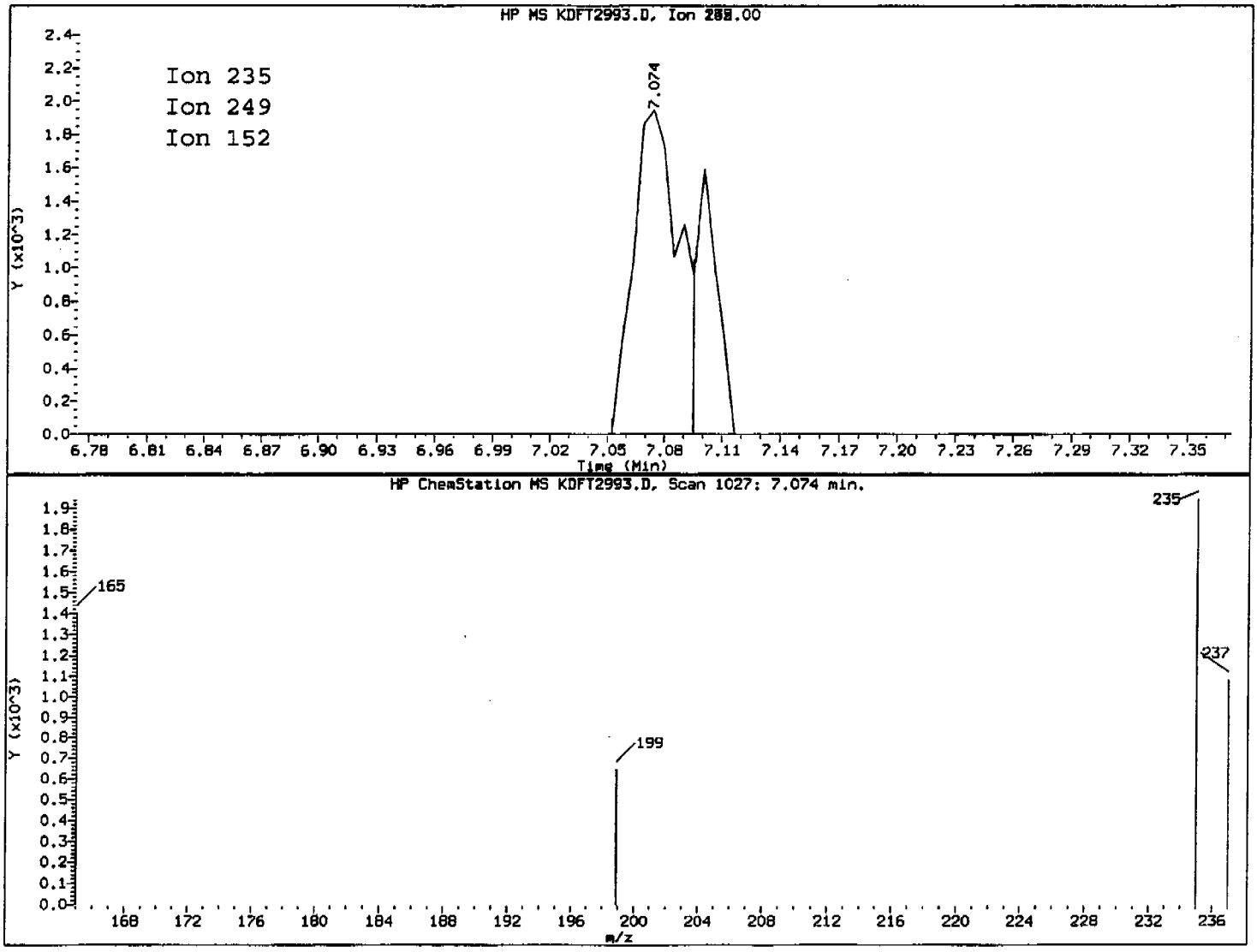
Mass	Area	Ratio
184	536527	100.00
156	37459	6.98

Tailing factor for Benzidine OK

Tail Factor = 0.772 Maximum Allowed = 3.0

STL ST LOUIS
Report Date: 05/09/2005 18:48

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509B.B/KDFT2993.D/KDFT2993.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509B.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 11:40 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)

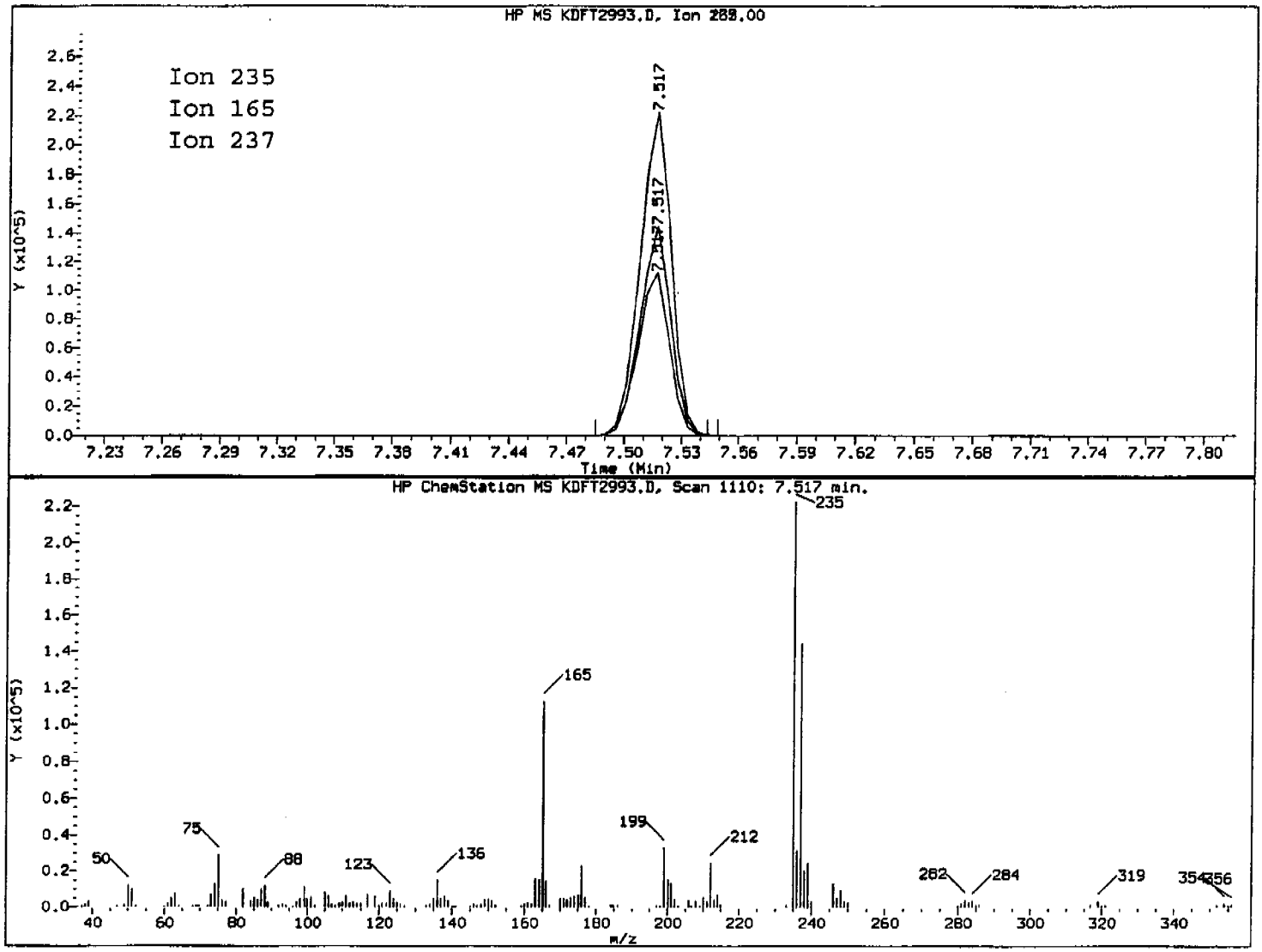


4,4'-DDD
========
Exp. RT = 6.734
Found RT = 7.074

Mass	Area	Ratio
235	3331	100.00
249	0	0.00
152	0	0.00

STL ST LOUIS
Report Date: 05/09/2005 18:48

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509B.B/KDFT2993.D/KDFT2993.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509B.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 11:40 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)

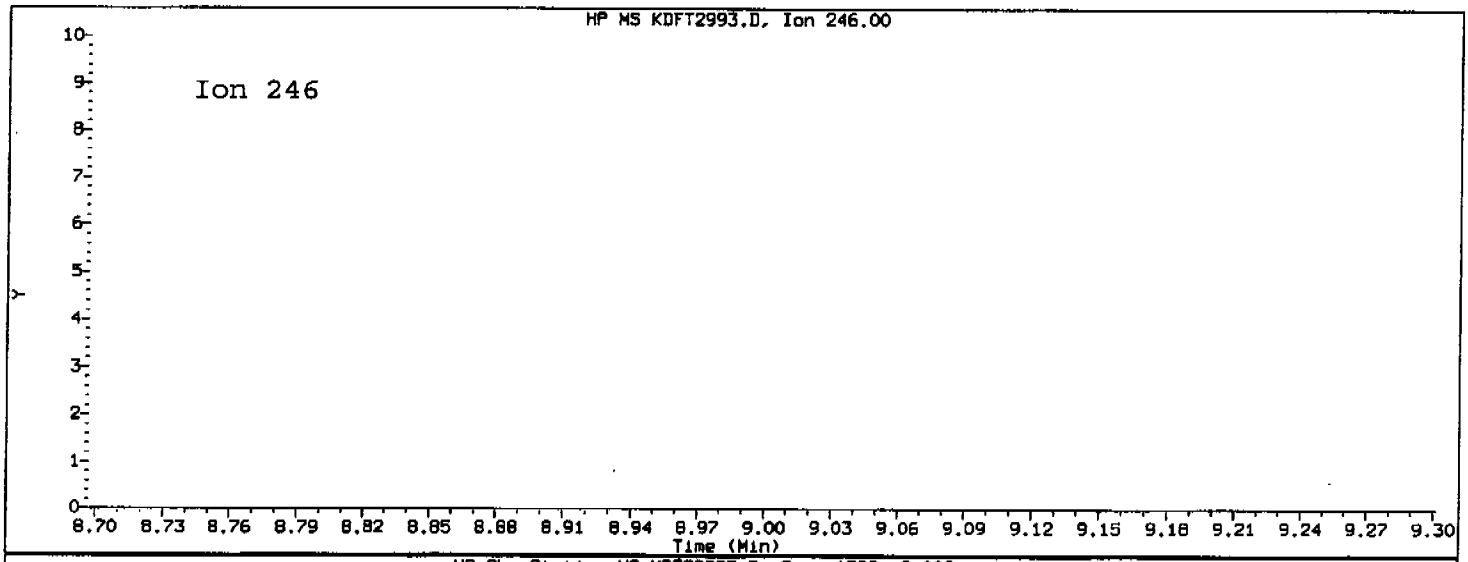


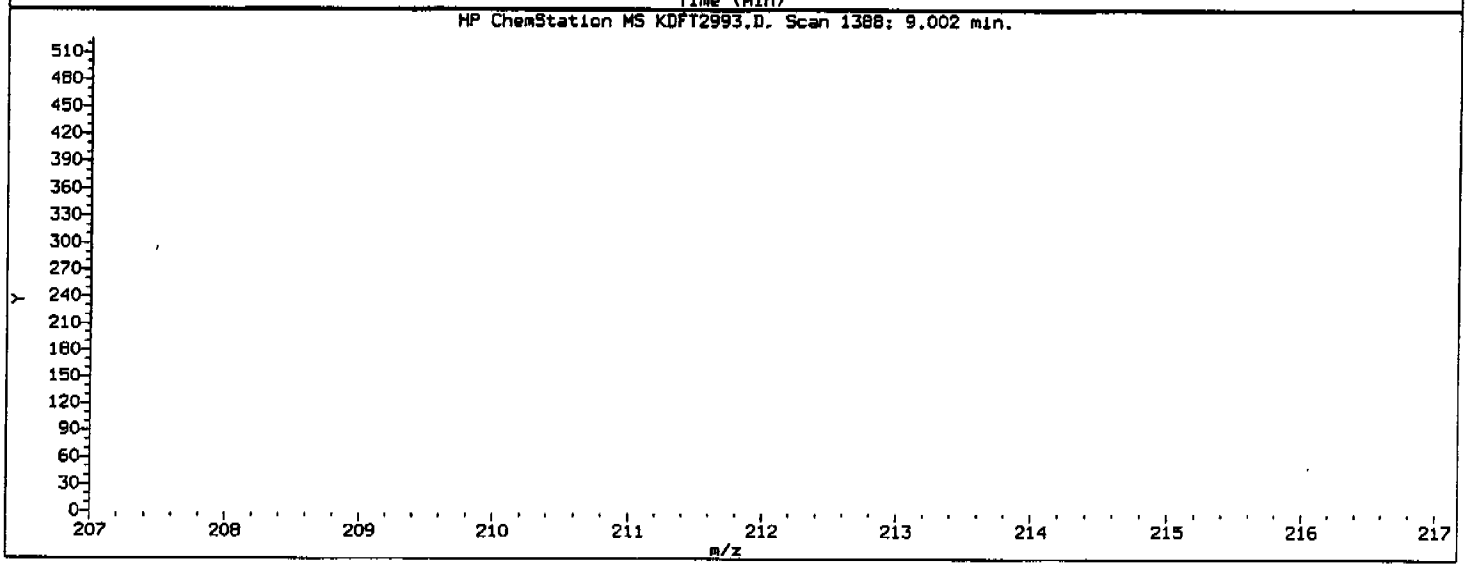
4,4'-DDT
========
Exp. RT = 7.517
Found RT = 7.517

Mass	Area	Ratio
235	251287	100.00
165	128167	51.00
237	161136	64.12

STL ST LOUIS
Report Date: 05/09/2005 18:48

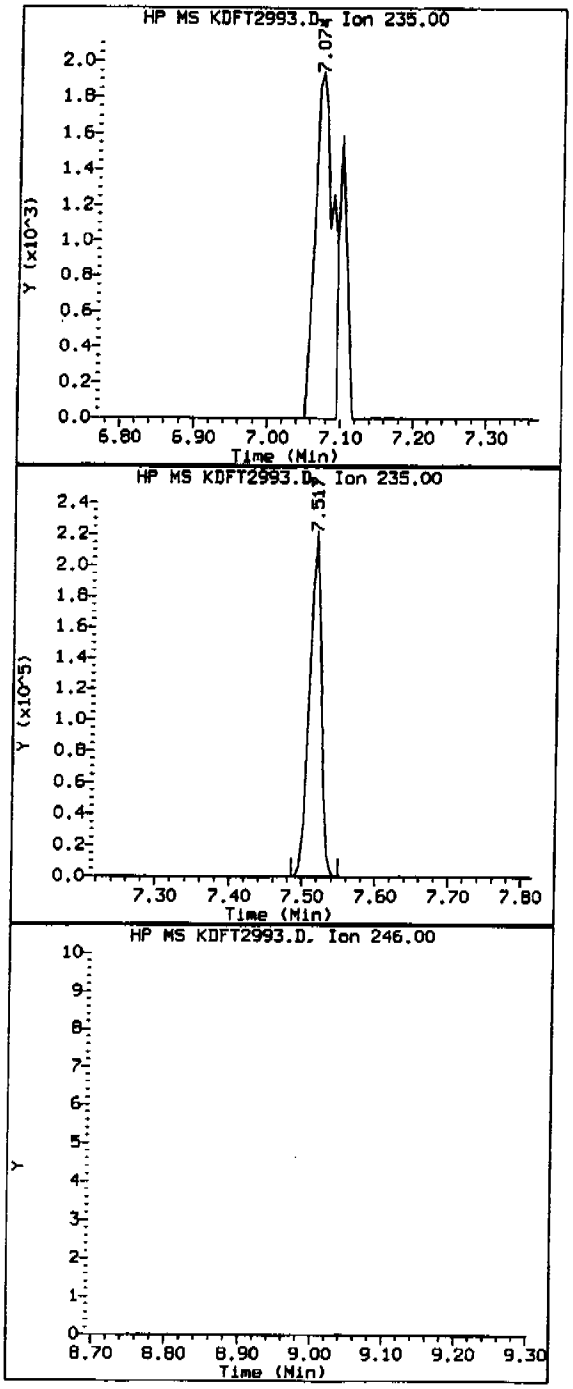
Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509B.B/KDFT2993.D/KDFT2993.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509B.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 11:40 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)





4,4'-DDE
========
Exp. RT = 9.000
Found RT = 0.000

Mass	Area	Ratio
246	0	0.00



Compound: 4,4'-DDD
Quant Mass: 235
RT: 7.074
Area: 3331

Compound: 4,4'-DDT
Quant Mass: 235
RT: 7.517
Area: 251287

Compound: 4,4'-DDE
Quant Mass: 246
RT: 0.000
Area: 0

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	251287			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	3331	1.3	15.0	PASS
4,4-DDD + DDE	3331	1.3	15.0	PASS

****

TUNE SAMPLE *** PASSED *** DDT BREAKDOWN TEST

****

Report Date : 10-May-2005 11:11

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 09-MAY-2005 15:12
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Calibration File Names:
Level 1: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3000.D
Level 2: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2999.D
Level 3: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2998.D
Level 4: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2994.D
Level 5: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2997.D
Level 6: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2996.D
Level 7: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D

05/10/05

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
1 1,4-Dioxane	0.32546	0.33816	0.32341	0.50359	0.35085	0.35544			
	0.35011						0.36386	17.282	
2 Methyl methacrylate	0.39326	0.35373	0.33429	0.32307	0.34005	0.34871			
	0.35814						0.35018	6.411	
3 Pyridine	+++++	1.11948	1.14510	1.48184	1.03085	1.12933			
	1.19771						1.18405	13.139	<- ✓
4 N-Nitrosodimethylamine	0.61845	0.66640	0.64576	0.81336	0.63292	0.65133			
	0.66872						0.67099	9.721	
5 Dimethylformamide	0.83086	0.96586	0.87552	0.95582	0.87657	0.84417			
	0.86133						0.88716	5.972	
6 Ethyl methacrylate	1.06706	1.00921	1.00424	1.00134	1.03952	1.06985			
	1.11023						1.04307	3.955	
7 2-Picoline	1.11672	1.19222	1.23144	1.30096	1.31132	1.30450			
	1.39292						1.26430	7.204	
8 N-Nitrosomethylethylamine	0.46950	0.57796	0.56912	0.57845	0.60310	0.58248			
	0.59178						0.56748	7.853	
9 Methyl methanesulfonate	0.35479	0.41151	0.41103	0.41324	0.46135	0.46437			
	0.49021						0.42950	10.596	
11 Cyclohexanol	1.05566	1.27759	1.36047	1.55265	1.46743	1.45101			
	1.51047						1.38218	12.376	

STL St. Louis

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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
12 N-Nitrosodiethylamine	0.61009	0.64225	0.62511	0.63051	0.70280	0.70476			
	0.71974						0.66218	6.828	
13 Ethyl Methanesulfonate	1.10180	1.07409	1.10510	1.05473	1.17698	1.15933			
	1.19896						1.12443	4.846	
14 Benzaldehyde	1.16166	1.23901	1.24283	1.29144	1.30102	1.36353			
	1.39704						1.28522	6.202	
16 Phenol	1.75195	1.80726	1.80491	1.85564	1.92061	1.93297			
	2.03172						1.87215	5.112	
17 Aniline	2.24940	2.24921	2.20195	2.21999	2.19252	2.09327			
	2.16052						2.19527	2.503	
18 Pentachloroethane	0.51171	0.48710	0.50536	0.53152	0.54099	0.55718			
	0.58367						0.53108	6.205	
19 Bis(2-chloroethyl)ether	1.42232	1.47518	1.46771	1.55891	1.62362	1.63312			
	1.69518						1.55372	6.546	
20 2-Chlorophenol	1.28515	1.30101	1.32448	1.34175	1.38475	1.38970			
	1.44860						1.35363	4.237	
21 1,3-Dichlorobenzene	1.52181	1.46761	1.48915	1.52485	1.59798	1.57360			
	1.66128						1.54804	4.344	
23 1,4-Dichlorobenzene	1.55923	1.55572	1.56936	1.62612	1.67774	1.73057			
	1.78914						1.64398	5.584	
24 Benzenethiol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
25 Benzyl Alcohol	+++++	0.49127	0.58220	0.78070	0.64756	0.69172			
	0.79794						0.66523	17.674	<- ✓
26 1,2-Dichlorobenzene	1.43601	1.42040	1.42896	1.48191	1.57067	1.60879			
	1.69602						1.52039	7.010	

STL St. Louis

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD
	160.000 Level 7							
27 2-Methylphenol	1.34278	1.17468	1.16266	1.18079	1.19779	1.12644		
	1.20617						1.19876	5.722
28 2,2-oxybis(1-Chloropropane)	1.67111	1.59997	1.59493	1.59685	1.59156	1.56857		
	1.62414						1.60673	2.035
29 3 and 4-Methylphenol	1.21193	1.26835	1.25588	1.26547	1.29313	1.29765		
	1.35632						1.27839	3.477
30 Acetophenone	0.52107	0.53512	0.55618	0.57812	0.59620	0.62523		
	0.65259						0.58065	8.209
31 N-Nitrosopyrrolidine	0.17843	0.18370	0.18226	0.18768	0.19258	0.19901		
	0.21721						0.19155	6.907
32 N-Nitrosodinpropylamine	1.38412	1.32641	1.26395	1.26954	1.26179	1.14049		
	1.16971						1.25943	6.672
33 N-Nitrosomorpholine	0.06774	0.07645	0.07726	0.08065	0.08961	0.09511		
	0.10449						0.08447	14.906
34 O-Toluidine	0.56236	0.55680	0.56227	0.60066	0.63366	0.66229		
	0.71711						0.61359	9.900
35 Hexachloroethane	0.70621	0.69185	0.70131	0.71315	0.73556	0.73034		
	0.75336						0.71883	3.022
37 Nitrobenzene	0.63400	0.57304	0.55569	0.57990	0.56649	0.57833		
	0.58613						0.58194	4.297
38 N-Nitrosopiperidine	0.16432	0.16882	0.17079	0.17616	0.18096	0.18588		
	0.19442						0.17733	5.933
39 Isophorone	0.79023	0.78961	0.74316	0.78684	0.73887	0.73151		
	0.73022						0.75864	3.777
40 2-Nitrophenol	0.17199	0.19185	0.20165	0.21063	0.20833	0.21370		
	0.21316						0.20162	7.519

STL St. Louis

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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
41 2,4-Dimethylphenol	0.39464	0.37840	0.42507	0.44929	0.44026	0.45231			
	0.45507						0.42786	7.082	
42 Bis(2-chloroethoxy)methane	0.46580	0.48169	0.45850	0.48935	0.48546	0.49802			
	0.50632						0.48359	3.492	
43 o,o,o-Triethyl-Phosphorothioa	0.21535	0.22497	0.22572	0.23460	0.25461	0.26744			
	0.27953						0.24317	9.968	
44 Benzoic Acid	+++++	0.14938	0.18186	0.21149	0.21321	0.21904			
	0.22206						0.19951	14.257	
45 2,4-Dichlorophenol	0.30283	0.30485	0.29951	0.31953	0.31683	0.32533			
	0.33330						0.31460	4.011	
46 a,a-Dimethyl-phenethylamine	0.51145	0.76309	0.77322	0.78410	0.80856	0.82953			
	0.87545						0.76363	15.399	
47 1,2,4-Trichlorobenzene	0.34185	0.35746	0.35339	0.37615	0.38417	0.40103			
	0.40951						0.37479	6.739	
49 4-Chlorobenzenethiol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
50 Naphthalene	1.08753	1.03581	1.04396	1.10589	1.13745	1.25732			
	1.25971						1.13252	8.197	
51 4-Chloroaniline	0.42703	0.43777	0.42550	0.46414	0.46498	0.49216			
	0.49838						0.45857	6.485	
52 2,6-Dichlorophenol	0.25469	0.24292	0.25839	0.31185	0.29618	0.31378			
	0.32831						0.28659	11.858	
53 Hexachloropropene	0.31733	0.32521	0.33376	0.35006	0.35945	0.38047			
	0.38884						0.35073	7.781	
54 Hexachlorobutadiene	0.24195	0.24282	0.24506	0.25838	0.26695	0.28293			
	0.28415						0.26032	7.019	

STL St. Louis

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Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
55 Benzothiazole	0.50139	0.46477	0.48632	0.49913	0.53104	0.55241			
	0.59151						0.51808	8.350	
56 Caprolactam	0.10983	0.13715	0.14068	0.13986	0.07457	0.14270			
	0.14775						0.12751	20.686	
57 n-Nitrosodi-n-butylamine	0.31342	0.29750	0.30099	0.31842	0.31943	0.33002			
	0.35040						0.31860	5.621	
58 p-Phenylenediamine	0.21874	0.29578	0.28872	0.36365	0.28733	0.27992			
	0.31741						0.29308	14.829	
59 4-Chloro-3-Methylphenol	0.35913	0.37813	0.35270	0.37066	0.36191	0.36373			
	0.37227						0.36550	2.376	
60 p-Chlorophenyl methyl sulfide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
61 Safrole	0.25500	0.27963	0.29140	0.29580	0.30963	0.32648			
	0.34629						0.30061	10.041	
62 2-Methylnaphthalene	0.88794	0.77032	0.78270	0.76612	0.79672	0.83407			
	0.83285						0.81010	5.427	
63 Phthalic anhydride	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
64 cis-Isosafrole	0.04748	0.05826	0.05654	0.05553	0.05574	0.05770			
	0.05995						0.05589	7.184	
65 1,2,4,5-Tetrachlorobenzene	1.42931	1.31274	1.32205	1.39168	1.47308	1.54004			
	1.62334						1.44175	7.870	
66 Hexachlorocyclopentadiene	+++++	0.29082	0.35057	0.42042	0.45653	0.51871			
	0.52918						0.42770	21.970	<-
67 2,4,6-Trichlorophenol	0.40366	0.42817	0.43253	0.47073	0.47695	0.50392			
	0.51562						0.46165	8.996	

STL St. Louis

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Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
68 2,4,5-Trichlorophenol	0.36126	0.43572	0.45465	0.50975	0.52709	0.55460	0.57227	0.48790	15.302	
70 trans-Isosafrole	0.56648	0.54163	0.54100	0.56420	0.59728	0.65850	0.75581	0.60356	12.995	
71 Biphenyl	1.54419	1.44874	1.47932	1.53624	1.66716	1.76228	1.79160	1.60422	8.519	
72 2-Chloronaphthalene	1.28459	1.25429	1.24868	1.32305	1.37165	1.45131	1.49304	1.34666	7.145	
73 2-Nitroaniline	0.56068	0.59450	0.57200	0.58974	0.57864	0.58108	0.58409	0.58010	1.943	
74 1,4-Naphthoquinone	0.27176	0.36890	0.37704	0.33375	0.21032	0.17342	0.12916	0.26634	36.895	<-
75 1,4-Dinitrobenzene	0.07763	0.12369	0.12115	0.12521	0.13042	0.13540	0.14150	0.12214	17.086	
76 Dimethylphthalate	1.57249	1.50395	1.43024	1.51359	1.54841	1.59042	1.63647	1.54223	4.349	
77 1,3-Dinitrobenzene	0.16587	0.22945	0.23025	0.24388	0.24166	0.24971	0.25601	0.23098	13.109	
78 N-(hydroxymethyl) phthalimide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
79 Acenaphthylene	1.78264	1.85350	1.83334	1.95068	2.03538	2.19201	2.25001	1.98537	9.151	
80 2,6-Dinitrotoluene	0.30857	0.32443	0.31805	0.33652	0.33313	0.34221	0.34386	0.32954	3.966	
81 3-Nitroaniline	0.25688	0.31276	0.31966	0.34362	0.33774	0.34638	0.34913	0.32374	10.054	

STL St. Louis

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Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
83 Acenaphthene	1.19257	1.18915	1.16644	1.23299	1.27111	1.34989			
	1.37401						1.25374	6.511	
84 2,4-Dinitrophenol	+++++	0.13442	0.15447	0.20910	0.21489	0.22765			
	0.24059						0.19685	21.590	<- ✓
85 4-Nitrophenol	0.15488	0.28040	0.26095	0.29424	0.29900	0.29630			
	0.30603						0.27026	19.615	
86 Dibenzofuran	1.78899	1.75960	1.76044	1.83238	1.86554	1.95736			
	2.00179						1.85230	5.169	
87 Pentachlorobenzene	0.70728	0.65613	0.66649	0.68327	0.70614	0.73519			
	0.75466						0.70131	5.086	
88 2,4-Dinitrotoluene	0.38300	0.41425	0.42398	0.43887	0.43395	0.42886			
	0.44351						0.42378	4.817	
89 1-Naphthylamine	1.03800	1.06591	1.04498	1.10302	1.05391	1.16285			
	1.16394						1.09037	4.961	
90 2-Naphthylamine	0.97677	0.98368	0.94490	1.00433	0.88786	1.05261			
	1.06727						0.98820	6.232	
91 Phenyl sulfide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
92 2,3,4,6-Tetrachlorophenol	0.22811	0.28943	0.32362	0.39276	0.41144	0.42643			
	0.46069						0.36178	23.112	
93 Diethylphthalate	1.56646	1.51584	1.44594	1.50369	1.52783	1.59118			
	1.65448						1.54363	4.364	
94 Fluorene	1.39067	1.44170	1.39895	1.46920	1.50943	1.57478			
	1.59250						1.48246	5.410	
95 4-Chlorophenyl-phenylether	0.73220	0.77757	0.74123	0.78963	0.80878	0.85753			
	0.89151						0.79978	7.294	

STL St. Louis

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Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
96 Thionazin	0.23139	0.25240	0.25864	0.26567	0.28537	0.29086	0.29032	0.26781	8.348	
97 5-Nitro-o-toluidine	0.15995	0.20034	0.19875	0.21045	0.21494	0.21816	0.22533	0.20399	10.587	
98 4-Nitroaniline	0.25531	0.32144	0.31357	0.34297	0.32244	0.32011	0.33335	0.31560	8.966	
99 4,6-Dinitro-2-methylphenol	0.07096	0.14315	0.16182	0.17810	0.19059	0.20299	0.21255	0.16574	28.998	
100 N-Nitrosodiphenylamine	0.54502	0.54591	0.55655	0.59577	0.63362	0.68390	0.70231	0.60901	10.793	
101 tri-n-butylphosphate	1.52154	1.63086	1.65030	1.71460	1.82251	1.87783	2.01075	1.74692	9.553	
102 Azobenzene	1.28418	1.25396	1.25360	1.32115	1.40244	1.51255	1.53490	1.36611	8.724	
103 Benzal Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
105 Sulfotepp	0.13055	0.14332	0.15072	0.15105	0.16041	0.16417	0.16883	0.15272	8.604	
106 Diallate (peak 1)	0.27906	0.28345	0.29123	0.30014	0.31100	0.32036	0.33572	0.30299	6.788	
107 1,3,5-Trinitrobenzene	0.05460	0.08597	0.09688	0.10024	0.10572	0.10753	0.11048	0.09449	20.515	
108 Phorate	0.49946	0.50445	0.50760	0.53049	0.56947	0.58636	0.62513	0.54614	8.860	
109 4-Bromophenyl-phenylether	0.25905	0.25934	0.26729	0.27474	0.28488	0.30609	0.30705	0.27978	7.282	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 09-MAY-2005 15:12
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
110 Phenacetin	0.38624	0.41341	0.42268	0.42532	0.42504	0.42869			
	0.43971						0.42015	4.015	
111 Diallate (peak 2)	0.06683	0.06004	0.06289	0.06373	0.06488	0.06546			
	0.06814						0.06457	4.135	
112 Hexachlorobenzene	0.25197	0.27497	0.27003	0.28362	0.29496	0.31040			
	0.31347						0.28563	7.789	
113 Dimethoate	0.27185	0.28949	0.28826	0.27480	0.21882	0.21567			
	0.18694						0.24940	16.564	
114 Atrazine	0.22048	0.24204	0.23940	0.24289	0.25564	0.25595			
	0.26658						0.24614	6.060	
115 tris(2-chloroethyl)phosphate	0.22625	0.21717	0.22304	0.21944	0.21858	0.22085			
	0.22796						0.22190	1.817	
116 4-Aminobiphenyl	0.70998	0.67001	0.68070	0.79368	0.77334	0.82627			
	0.87380						0.76111	10.111	
117 Pentachlorophenol	+++++	0.09961	0.13222	0.16057	0.17722	0.19094			
	0.19524						0.15930	23.341	<- ✓
118 Pronamide	0.37755	0.36975	0.37320	0.37153	0.37705	0.38333			
	0.39158						0.37771	2.012	
119 Pentachloronitrobenzene	0.11754	0.12476	0.12783	0.13205	0.13537	0.13783			
	0.13768						0.13044	5.767	
120 Phenyl disulfide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
122 Phenanthrene	1.21323	1.16781	1.16800	1.21492	1.25092	1.29887			
	1.33464						1.23548	5.134	
123 Disulfoton	0.35737	0.36108	0.36643	0.37668	0.39485	0.40708			
	0.42916						0.38466	6.946	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
124 Anthracene	1.13256	1.14117	1.14674	1.19216	1.20907	1.25945			
	1.27953						1.19438	4.909	
125 Dinoseb	0.13116	0.20289	0.23168	0.24451	0.26321	0.27373			
	0.28489						0.23315	22.611	
126 Carbazole	1.00112	0.99272	0.98565	1.01718	1.02179	1.05115			
	1.07363						1.02046	3.134	
127 Phenyl sulfone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
128 Methyl Parathion	0.22472	0.25273	0.25605	0.24165	0.20186	0.19848			
	0.17806						0.22194	13.501	
129 Di-n-Butylphthalate	1.23844	1.28428	1.29851	1.34131	1.36909	1.40220			
	1.42548						1.33705	5.027	
130 Parathion	0.13719	0.18275	0.18212	0.18480	0.18353	0.18558			
	0.18900						0.17785	10.162	
131 4-Nitroquinoline-1-oxide	+++++	0.06721	0.07979	0.10710	0.08542	0.08685			
	0.08235						0.08479	15.310	<- ✓
132 Methapyrilene	0.34073	0.34857	0.33447	0.27766	0.21659	0.20104			
	0.18189						0.27156	26.360	
133 Isodrin	0.14938	0.13071	0.13659	0.12878	0.13896	0.13984			
	0.14629						0.13865	5.427	
134 Fluoranthene	1.21184	1.25632	1.24105	1.28408	1.28872	1.31276			
	1.34336						1.27688	3.478	
135 Benzidine	+++++	0.56417	0.62359	0.60667	0.62876	0.61166			
	0.60503						0.60665	3.765	<- ✓
136 Bis (4-chlorophenyl) disulfid	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-

STL St. Louis

INITIAL CALIBRATION DATA

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Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
137 Pyrene	1.44013	1.49471	1.52186	1.60419	1.69360	1.79125			
	1.83598						1.62596	9.363	
138 4-chlorophenyl sulfone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
140 Aramite (peak 1)	0.05375	0.06879	0.07594	0.07526	0.07359	0.07265			
	0.07371						0.07053	10.986	
141 Kepone	+++++	0.00357	0.00453	0.00668	0.00729	0.00747			
	0.00748						0.00617	27.492	<-
142 Aramite (peak 2)	0.08770	0.10236	0.10922	0.11671	0.11420	0.11097			
	0.11134						0.10750	9.129	
143 p-(Dimethylamino)azobenzene	0.29047	0.32717	0.33641	0.34730	0.34129	0.34067			
	0.34674						0.33286	5.977	
144 Chlorobenzilate	0.40399	0.42688	0.44410	0.45660	0.49105	0.50109			
	0.53020						0.46484	9.587	
145 3,3-Dimethylbenzidine	0.51683	0.65871	0.66384	0.65632	0.68561	0.66412			
	0.66962						0.64501	8.888	
146 Butylbenzylphthalate	0.61722	0.65246	0.65102	0.67786	0.68656	0.70064			
	0.72090						0.67238	5.180	
147 Acrylamide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
148 2-Acetylaminofluorene(1)	0.44078	0.49973	0.51625	0.54235	0.55089	0.55882			
	0.56140						0.52432	8.256	
(2)	0.35522	0.39267	0.39584	0.41786	0.42490	0.43100			
	0.43659						0.40773	7.007	
149 Famphur	+++++	0.02197	0.03377	0.05429	0.01871	0.01486			
	0.00621						0.02497	67.953	<-

STL St. Louis

INITIAL CALIBRATION DATA

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Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

	Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
		160.000 Level 7								
	150 Benzo(a)Anthracene	1.33032	1.33059	1.34078	1.40754	1.43063	1.45272			
		1.51202						1.40066	5.006	
	151 4,4'-Methylenebis(2-Chloroani	0.10305	0.10187	0.11221	0.12299	0.11640	0.12512			
		0.13117						0.11611	9.589	
	152 3,3'-Dichlorobenzidine	0.38645	0.46904	0.50749	0.55099	0.58964	0.62806			
		0.64364						0.53933	17.052	
	154 Chrysene	1.24032	1.23554	1.25004	1.31476	1.36190	1.43672			
		1.49079						1.33287	7.614	
	155 bis(2-ethylhexyl)Phthalate	0.77256	0.78002	0.79798	0.83297	0.86561	0.89738			
		0.94556						0.84173	7.673	
M	156 Toluenediamine	+++++	+++++	+++++	+++++	+++++	+++++			
		+++++						+++++	+++++	<-
	157 Triethylamine	+++++	+++++	+++++	+++++	+++++	+++++			
		+++++						+++++	+++++	<-
	158 Di-n-octylphthalate	1.48067	1.57388	1.62112	1.70384	1.73235	1.85490			
		1.96432						1.70444	9.730	
	159 1,2-Dinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
		+++++						+++++	+++++	<-
	160 Benzo(b)fluoranthene	1.39885	1.41621	1.46035	1.50973	1.61109	1.70381			
		1.77235						1.55320	9.373	
	161 Benzo(k)fluoranthene	1.44545	1.46282	1.50254	1.54138	1.54230	1.60109			
		1.70323						1.54269	5.715	
	162 7,12-Dimethylbenz(a)anthracen	0.63206	0.67147	0.70278	0.74963	0.79123	0.82571			
		0.80112						0.73914	9.807	
	163 Hexachlorophene	+++++	0.00594	0.00928	0.01407	0.00882	0.00689			
		0.09695						0.02366	152.219	<-

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INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
164 N,N-Dimethylamine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
165 Benzo(a)pyrene	1.23142	1.31720	1.35705	1.40635	1.45618	1.49417	1.55026	1.40180	7.800	
167 Carbofuran Phenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
168 2,3- and 3,5-Diaminotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
169 3-methylcholanthrene	0.67245	0.68361	0.68395	0.73820	0.79182	0.82758	0.85552	0.75045	10.005	
170 2,6- and 2,4-Diaminotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
171 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
172 n-Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
173 Indeno(1,2,3-cd)pyrene	1.20009	1.14841	1.17194	1.21828	1.41867	1.44023	1.49853	1.29945	11.293	
174 Dibenzo(a,h)anthracene	1.08721	1.10761	1.17629	1.24035	1.36991	1.39823	1.44700	1.26094	11.521	
175 Dibenz(e,a) Pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
176 n-tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
177 Benzo(g,h,i)perylene	1.08831	1.11124	1.08242	1.09329	1.22378	1.25186	1.26999	1.16013	7.262	

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INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
179 Phthalic Acid	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
180 n-Dodecane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
M 181 Isosafrole	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
$ 10 2-Fluorophenol	0.96999	1.19014	1.19591	1.29262	1.25592	1.24397			
	1.30984						1.20834	9.450	
$ 15 Phenol-d5	1.43393	1.65988	1.64749	1.73098	1.76944	1.74661			
	1.85043						1.69125	7.830	
$ 36 Nitrobenzene-d5	0.52895	0.54117	0.53680	0.56299	0.54978	0.55813			
	0.56579						0.54909	2.547	
$ 69 2-Fluorobiphenyl	1.47081	1.43281	1.46322	1.59566	1.67063	1.80245			
	1.83885						1.61063	10.315	
$ 104 2,4,6-Tribromophenol	0.19056	0.22276	0.21223	0.22962	0.22832	0.23715			
	0.24461						0.22361	7.970	
$ 139 Terphenyl-d14	1.09963	1.13587	1.18869	1.25768	1.32471	1.39043			
	1.44767						1.26353	10.347	
$ 178 2,4,6-Trichlorophenol-d2	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-

Report Date : 10-May-2005 11:32

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INITIAL CALIBRATION DATA

Start Cal Date : 09-MAY-2005 12:01
End Cal Date : 09-MAY-2005 15:12
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\8270K.m
Cal Date : 10-May-2005 11:31 hongs
Curve Type : Average

Calibration File Names:
Level 1: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\KCAL3000.D
Level 2: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\KCAL2999.D
Level 3: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\KCAL2998.D
Level 4: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\KCAL2994.D
Level 5: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\KCAL2997.D
Level 6: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\KCAL2996.D
Level 7: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\KCAL2995.D

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3		.000 Level 6	RRF	% RSD	
	160.000 Level 7							
1 1,4-Dioxane	0.32546	0.33816	0.3		35544			
	0.35011					0.36386	17.282	
2 Methyl methacrylate	+++++	+++++	+++++		+++++	+++++		
	+++++					+++++	+++++	<-
3 Pyridine	+++++	1.11948	1.14510	1.48184	1.03085	1.12933		
	1.19771					1.18405	13.139	<-
4 N-Nitrosodimethylamine	0.61845	0.66640	0.64576	0.81336	0.63292	0.65133		
	0.66872					0.67099	9.721	
5 Dimethylformamide	0.83086	0.96586	0.87552	0.95582	0.87657	0.84417		
	0.86133					0.88716	5.972	
6 Ethyl methacrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++					+++++	+++++	<-
7 2-Picoline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++					+++++	+++++	<-
8 N-Nitrosomethylethylamine	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++					+++++	+++++	<-
9 Methyl methanesulfonate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++					+++++	+++++	<-
11 Cyclohexanol	1.05566	1.27759	1.36047	1.55265	1.46743	1.45101		
	1.51047					1.38218	12.376	

8270 only

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INITIAL CALIBRATION DATA

Start Cal Date : 09-MAY-2005 12:01
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Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\8270K.m
Cal Date : 10-May-2005 11:31 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
12 N-Nitrosodiethylamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
13 Ethyl Methanesulfonate	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
14 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
16 Phenol	1.75195	1.80726	1.80491	1.85564	1.92061	1.93297			
	2.03172						1.87215	5.112	
17 Aniline	2.24940	2.24921	2.20195	2.21999	2.19252	2.09327			
	2.16052						2.19527	2.503	
18 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
19 Bis(2-chloroethyl)ether	1.42232	1.47518	1.46771	1.55891	1.62362	1.63312			
	1.69518						1.55372	6.546	
20 2-Chlorophenol	1.28515	1.30101	1.32448	1.34175	1.38475	1.38970			
	1.44860						1.35363	4.237	
21 1,3-Dichlorobenzene	1.52181	1.46761	1.48915	1.52485	1.59798	1.57360			
	1.66128						1.54804	4.344	
23 1,4-Dichlorobenzene	1.55923	1.55572	1.56936	1.62612	1.67774	1.73057			
	1.78914						1.64398	5.584	
24 Benzenethiol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
25 Benzyl Alcohol	+++++	0.49127	0.58220	0.78070	0.64756	0.69172			
	0.79794						0.66523	17.674	<-
26 1,2-Dichlorobenzene	1.43601	1.42040	1.42896	1.48191	1.57067	1.60879			
	1.69602						1.52039	7.010	

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Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
27 2-Methylphenol	1.34278	1.17468	1.16266	1.18079	1.19779	1.12644			
	1.20617						1.19876	5.722	
28 2,2-oxybis(1-Chloropropane)	1.67111	1.59997	1.59493	1.59685	1.59156	1.56857			
	1.62414						1.60673	2.035	
29 3 and 4-Methylphenol	1.21193	1.26835	1.25588	1.26547	1.29313	1.29765			
	1.35632						1.27839	3.477	
30 Acetophenone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
31 N-Nitrosopyrrolidine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
32 N-Nitrosodinpropylamine	1.38412	1.32641	1.26395	1.26954	1.26179	1.14049			
	1.16971						1.25943	6.672	
33 N-Nitrosomorpholine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
34 O-Toluidine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
35 Hexachloroethane	0.70621	0.69185	0.70131	0.71315	0.73556	0.73034			
	0.75336						0.71883	3.022	
37 Nitrobenzene	0.63400	0.57304	0.55569	0.57990	0.56649	0.57833			
	0.58613						0.58194	4.297	
38 N-Nitrosopiperidine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
39 Isophorone	0.79023	0.78961	0.74316	0.78684	0.73887	0.73151			
	0.73022						0.75864	3.777	
40 2-Nitrophenol	0.17199	0.19185	0.20165	0.21063	0.20833	0.21370			
	0.21316						0.20162	7.519	

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Cal Date : 10-May-2005 11:31 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
41 2,4-Dimethylphenol	0.39464	0.37840	0.42507	0.44929	0.44026	0.45231	0.45507	0.42786	7.082	
42 Bis(2-chloroethoxy)methane	0.46580	0.48169	0.45850	0.48935	0.48546	0.49802	0.50632	0.48359	3.492	
43 o,o,o-Triethyl-Phosphorothioa	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
44 Benzoic Acid	+++++	0.14938	0.18186	0.21149	0.21321	0.21904	0.22206	0.19951	14.257	
45 2,4-Dichlorophenol	0.30283	0.30485	0.29951	0.31953	0.31683	0.32533	0.33330	0.31460	4.011	
46 a,a-Dimethyl-phenethylamine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
47 1,2,4-Trichlorobenzene	0.34185	0.35746	0.35339	0.37615	0.38417	0.40103	0.40951	0.37479	6.739	
49 4-Chlorobenzenethiol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
50 Naphthalene	1.08753	1.03581	1.04396	1.10589	1.13745	1.25732	1.25971	1.13252	8.197	
51 4-Chloroaniline	0.42703	0.43777	0.42550	0.46414	0.46498	0.49216	0.49838	0.45857	6.485	
52 2,6-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
53 Hexachloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
54 Hexachlorobutadiene	0.24195	0.24282	0.24506	0.25838	0.26695	0.28293	0.28415	0.26032	7.019	

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INITIAL CALIBRATION DATA

Start Cal Date : 09-MAY-2005 12:01
End Cal Date : 09-MAY-2005 15:12
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\8270K.m
Cal Date : 10-May-2005 11:31 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
55 Benzothiazole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
56 Caprolactam	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
57 n-Nitrosodi-n-butylamine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
58 p-Phenylenediamine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
59 4-Chloro-3-Methylphenol	0.35913	0.37813	0.35270	0.37066	0.36191	0.36373	0.37227	0.36550	2.376	
60 p-Chlorophenyl methyl sulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
61 Safrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
62 2-Methylnaphthalene	0.88794	0.77032	0.78270	0.76612	0.79672	0.83407	0.83285	0.81010	5.427	
63 Phthalic anhydride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
64 cis-Isosafrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
65 1,2,4,5-Tetrachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
66 Hexachlorocyclopentadiene	+++++	0.29082	0.35057	0.42042	0.45653	0.51871	0.52918	0.42770	21.970	<-
67 2,4,6-Trichlorophenol	0.40366	0.42817	0.43253	0.47073	0.47695	0.50392	0.51562	0.46165	8.996	

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Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
68 2,4,5-Trichlorophenol	0.36126	0.43572	0.45465	0.50975	0.52709	0.55460			
	0.57227						0.48790	15.302	
70 trans-Isosafrole	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
71 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
72 2-Chloronaphthalene	1.28459	1.25429	1.24868	1.32305	1.37165	1.45131			
	1.49304						1.34666	7.145	
73 2-Nitroaniline	0.56068	0.59450	0.57200	0.58974	0.57864	0.58108			
	0.58409						0.58010	1.943	
74 1,4-Naphthoquinone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
75 1,4-Dinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
76 Dimethylphthalate	1.57249	1.50395	1.43024	1.51359	1.54841	1.59042			
	1.63647						1.54223	4.349	
77 1,3-Dinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
78 N-(hydroxymethyl) phthalimide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
79 Acenaphthylene	1.78264	1.85350	1.83334	1.95068	2.03538	2.19201			
	2.25001						1.98537	9.151	
80 2,6-Dinitrotoluene	0.30857	0.32443	0.31805	0.33652	0.33313	0.34221			
	0.34386						0.32954	3.966	
81 3-Nitroaniline	0.25688	0.31276	0.31966	0.34362	0.33774	0.34638			
	0.34913						0.32374	10.054	

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Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
83 Acenaphthene	1.19257	1.18915	1.16644	1.23299	1.27111	1.34989			
	1.37401						1.25374	6.511	
84 2,4-Dinitrophenol	+++++	0.13442	0.15447	0.20910	0.21489	0.22765			
	0.24059						0.19685	21.590	<-
85 4-Nitrophenol	0.15488	0.28040	0.26095	0.29424	0.29900	0.29630			
	0.30603						0.27026	19.615	
86 Dibenzofuran	1.78899	1.75960	1.76044	1.83238	1.86554	1.95736			
	2.00179						1.85230	5.169	
87 Pentachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
88 2,4-Dinitrotoluene	0.38300	0.41425	0.42398	0.43887	0.43395	0.42886			
	0.44351						0.42378	4.817	
89 1-Naphthylamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
90 2-Naphthylamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
91 Phenyl sulfide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
92 2,3,4,6-Tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
93 Diethylphthalate	1.56646	1.51584	1.44594	1.50369	1.52783	1.59118			
	1.65448						1.54363	4.364	
94 Fluorene	1.39067	1.44170	1.39895	1.46920	1.50943	1.57478			
	1.59250						1.48246	5.410	
95 4-Chlorophenyl-phenylether	0.73220	0.77757	0.74123	0.78963	0.80878	0.85753			
	0.89151						0.79978	7.294	

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Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
96 Thionazin	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
97 5-Nitro-o-toluidine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
98 4-Nitroaniline	0.25531	0.32144	0.31357	0.34297	0.32244	0.32011			
	0.33335						0.31560	8.966	
99 4,6-Dinitro-2-methylphenol	0.07096	0.14315	0.16182	0.17810	0.19059	0.20299			
	0.21255						0.16574	28.998	
100 N-Nitrosodiphenylamine	0.54502	0.54591	0.55655	0.59577	0.63362	0.68390			
	0.70231						0.60901	10.793	
101 tri-n-butylphosphate	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
102 Azobenzene	1.28418	1.25396	1.25360	1.32115	1.40244	1.51255			
	1.53490						1.36611	8.724	
103 Benzal Chloride	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
105 Sulfotepp	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
106 Diallate (peak 1)	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
107 1,3,5-Trinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
108 Phorate	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
109 4-Bromophenyl-phenylether	0.25905	0.25934	0.26729	0.27474	0.28488	0.30609			
	0.30705						0.27978	7.282	

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Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
110 Phenacetin	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
111 Diallate (peak 2)	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
112 Hexachlorobenzene	0.25197	0.27497	0.27003	0.28362	0.29496	0.31040			
	0.31347						0.28563	7.789	
113 Dimethoate	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
114 Atrazine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
115 tris(2-chloroethyl)phosphate	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
116 4-Aminobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
117 Pentachlorophenol	+++++	0.09961	0.13222	0.16057	0.17722	0.19094			
	0.19524						0.15930	23.341	<-
118 Pronamide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
119 Pentachloronitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
120 Phenyl disulfide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
122 Phenanthrene	1.21323	1.16781	1.16800	1.21492	1.25092	1.29887			
	1.33464						1.23548	5.134	
123 Disulfoton	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-

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Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
124 Anthracene	1.13256	1.14117	1.14674	1.19216	1.20907	1.25945			
	1.27953						1.19438	4.909	
125 Dinoseb	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
126 Carbazole	1.00112	0.99272	0.98565	1.01718	1.02179	1.05115			
	1.07363						1.02046	3.134	
127 Phenyl sulfone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
128 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
129 Di-n-Butylphthalate	1.23844	1.28428	1.29851	1.34131	1.36909	1.40220			
	1.42548						1.33705	5.027	
130 Parathion	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
131 4-Nitroquinoline-1-oxide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
132 Methapyrilene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
133 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
134 Fluoranthene	1.21184	1.25632	1.24105	1.28408	1.28872	1.31276			
	1.34336						1.27688	3.478	
135 Benzidine	+++++	0.56417	0.62359	0.60667	0.62876	0.61166			
	0.60503						0.60665	3.765	<-
136 Bis (4-chlorophenyl) disulfid	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-

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Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
137 Pyrene	1.44013	1.49471	1.52186	1.60419	1.69360	1.79125			
	1.83598						1.62596	9.363	
138 4-chlorophenyl sulfone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
140 Aramite (peak 1)	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
141 Kepone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
142 Aramite (peak 2)	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
143 p-(Dimethylamino)azobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
144 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
145 3,3-Dimethylbenzidine	0.51683	0.65871	0.66384	0.65632	0.68561	0.66412			
	0.66962						0.64501	8.888	
146 Butylbenzylphthalate	0.61722	0.65246	0.65102	0.67786	0.68656	0.70064			
	0.72090						0.67238	5.180	
147 Acrylamide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
148 2-Acetylaminofluorene(1)	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
(2)	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
149 Famphur	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-

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Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
150 Benzo(a)Anthracene	1.33032	1.33059	1.34078	1.40754	1.43063	1.45272			
	1.51202						1.40066	5.006	
151 4,4'-Methylenebis(2-Chloroani	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
152 3,3'-Dichlorobenzidine	0.38645	0.46904	0.50749	0.55099	0.58964	0.62806			
	0.64364						0.53933	17.052	
154 Chrysene	1.24032	1.23554	1.25004	1.31476	1.36190	1.43672			
	1.49079						1.33287	7.614	
155 bis(2-ethylhexyl)Phthalate	0.77256	0.78002	0.79798	0.83297	0.86561	0.89738			
	0.94556						0.84173	7.673	
M 156 Toluenediamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
157 Triethylamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
158 Di-n-octylphthalate	1.48067	1.57388	1.62112	1.70384	1.73235	1.85490			
	1.96432						1.70444	9.730	
159 1,2-Dinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
160 Benzo(b)fluoranthene	1.39885	1.41621	1.46035	1.50973	1.61109	1.70381			
	1.77235						1.55320	9.373	
161 Benzo(k)fluoranthene	1.44545	1.46282	1.50254	1.54138	1.54230	1.60109			
	1.70323						1.54269	5.715	
162 7,12-Dimethylbenz(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
163 Hexachlorophene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-

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164 N,N-Dimethylamine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
165 Benzo(a)pyrene	1.23142	1.31720	1.35705	1.40635	1.45618	1.49417	1.55026	1.40180	7.800	
167 Carbofuran Phenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
168 2,3- and 3,5-Diaminotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
169 3-methylcholanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
170 2,6- and 2,4-Diaminotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
171 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
172 n-Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
173 Indeno(1,2,3-cd)pyrene	1.20009	1.14841	1.17194	1.21828	1.41867	1.44023	1.49853	1.29945	11.293	
174 Dibenzo(a,h)anthracene	1.08721	1.10761	1.17629	1.24035	1.36991	1.39823	1.44700	1.26094	11.521	
175 Dibenz(e,a) Pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
176 n-tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
177 Benzo(g,h,i)perylene	1.08831	1.11124	1.08242	1.09329	1.22378	1.25186	1.26999	1.16013	7.262	

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Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\8270K.m
Cal Date : 10-May-2005 11:31 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
179 Phthalic Acid	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
180 n-Dodecane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
M 181 Isosafrole	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
$ 10 2-Fluorophenol	0.96999	1.19014	1.19591	1.29262	1.25592	1.24397			
	1.30984						1.20834	9.450	
$ 15 Phenol-d5	1.43393	1.65988	1.64749	1.73098	1.76944	1.74661			
	1.85043						1.69125	7.830	
$ 36 Nitrobenzene-d5	0.52895	0.54117	0.53680	0.56299	0.54978	0.55813			
	0.56579						0.54909	2.547	
$ 69 2-Fluorobiphenyl	1.47081	1.43281	1.46322	1.59566	1.67063	1.80245			
	1.83885						1.61063	10.315	
$ 104 2,4,6-Tribromophenol	0.19056	0.22276	0.21223	0.22962	0.22832	0.23715			
	0.24461						0.22361	7.970	
$ 139 Terphenyl-d14	1.09963	1.13587	1.18869	1.25768	1.32471	1.39043			
	1.44767						1.26353	10.347	
$ 178 2,4,6-Trichlorophenol-d2	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B/KCAL2994.D
Report Date: 05/10/2005

INITIAL CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL2994.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 12:01
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270

COMPOUND	%RSD
1,4-Dioxane	17.3
Pyridine	13.1
N-Nitrosodimethylamine	9.7
Dimethylformamide	6.0
2-Fluorophenol	9.5
Cyclohexanol	12.4
Anilina	2.5
Phenol-d5	7.8
Bis(2-chloroethyl)ether	6.5
Phenol	5.1
2-Chlorophenol	4.2
1,3-Dichlorobenzene	4.3
1,4-Dichlorobenzene	5.6
1,2-Dichlorobenzene	7.0
Benzyl Alcohol	17.7
2,2-oxybis(1-Chloropropane)	2.0
2-Methylphenol	5.7
N-Nitrosodinpropylamine	6.7
Hexachloroethane	3.0
3 and 4-Methylphenol	3.5
Nitrobenzene-d5	2.5
Nitrobenzene	4.3
Isophorone	3.8
2-Nitrophenol	7.5
2,4-Dimethylphenol	7.1
Bis(2-chloroethoxy)methane	3.5
2,4-Dichlorophenol	4.0
1,2,4-Trichlorobenzene	6.7
Benzoic Acid	14.3
Naphthalene	8.2
4-Chloroaniline	6.5
Hexachlorobutadiene	7.0
4-Chloro-3-Methylphenol	2.4
2-Methylnaphthalene	5.4
Hexachlorocyclopentadiene	22.0
2,4,6-Trichlorophenol	9.0
2,4,5-Trichlorophenol	15.3
2-Fluorobiphenyl	10.3
2-Chloronaphthalene	7.1

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B/KCAL2994.D
Report Date: 05/10/2005

INITIAL CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL2994.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 12:01
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A

COMPOUND	%RSD
2-Nitroaniline	1.9
Dimethylphthalate	4.3
Acenaphthylene	9.2
2,6-Dinitrotoluene	4.0
Acenaphthene	6.5
3-Nitroaniline	10.1
2,4-Dinitrophenol	21.6
Dibenzofuran	5.2
2,4-Dinitrotoluene	4.8
4-Nitrophenol	19.6
Fluorene	5.4
Diethylphthalate	4.4
4-Chlorophenyl-phenylether	7.3
4-Nitroaniline	9.0
4,6-Dinitro-2-methylphenol	29.0
N-Nitrosodiphenylamine	10.8
Azobenzene	8.7
2,4,6-Tribromophenol	8.0
4-Bromophenyl-phenylether	7.3
Hexachlorobenzene	7.8
Pentachlorophenol	23.3
Phenanthrene	5.1
Anthracene	4.9
Carbazole	3.1
Di-n-Butylphthalate	5.0
Fluoranthene	3.5
Benzidine	3.8
Pyrene	9.4
Terphenyl-d14	10.3
3,3-Dimethylbenzidine	8.9
Butylbenzylphthalate	5.2
Benzo(a)Anthracene	5.0
Chrysene	7.6
3,3'-Dichlorobenzidine	17.1
bis(2-ethylhexyl)Phthalate	7.7
Di-n-octylphthalate	9.7
Benzo(b)fluoranthene	9.4
Benzo(k)fluoranthene	5.7
Benzo(a)pyrene	7.8

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Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B/KCAL2994.D
Report Date: 05/10/2005

INITIAL CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL2994.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 12:01
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A

COMPOUND	%RSD
Indeno(1,2,3-cd)pyrene	11.3
Dibenzo(a,h)anthracene	11.5
Benzo(g,h,i)perylene	7.3
Dibenz(e,a) Pyrene	0.0

The average of all %RSD's in the initial calibration is 8.1

05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2994.D Page 1
Report Date: 10-May-2005 09:44

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2994.D
Lab Smp Id: SSTD050 Client Smp ID: SSTD050
Inj Date : 09-MAY-2005 12:01
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD050
Misc Info : SV0220-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Meth Date : 10-May-2005 09:44 hongs Quant Type: ISTD
Cal Date : 07-MAY-2005 22:18 Cal File: KCAL2963.D
Als bottle: 3 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	1.260	1.260	(0.277)	121671	50.0000	69.20
4	N-Nitrosodimethylamine	74	1.693	1.693	(0.372)	196514	50.0000	60.61
3	Pyridine	79	1.672	1.672	(0.367)	358024	50.0000	62.58
5	Dimethylformamide	44	2.136	2.136	(0.469)	230934	50.0000	53.87(M)
$ 10	2-Fluorophenol	112	3.237	3.237	(0.710)	312307	50.0000	53.49
11	Cyclohexanol	57	3.258	3.258	(0.715)	375133	50.0000	56.17
17	Aniline	93	4.252	4.252	(0.933)	536367	50.0000	50.56
19	Bis(2-chloroethyl)ether	93	4.327	4.327	(0.950)	376645	50.0000	50.17
$ 15	Phenol-d5	99	4.321	4.321	(0.948)	418217	50.0000	51.17
16	Phenol	94	4.332	4.332	(0.951)	448336	50.0000	49.56
20	2-Chlorophenol	128	4.385	4.385	(0.962)	324176	50.0000	49.56
21	1,3-Dichlorobenzene	146	4.508	4.508	(0.989)	368416	50.0000	49.25
* 22	1,4-Dichlorobenzene-d4	152	4.556	4.556	(1.000)	193286	40.0000	
23	1,4-Dichlorobenzene	146	4.578	4.578	(1.005)	392882	50.0000	49.46
26	1,2-Dichlorobenzene	146	4.797	4.797	(1.053)	358040	50.0000	48.73
25	Benzyl Alcohol	108	4.807	4.807	(1.055)	188623	50.0000	58.68
28	2,2-oxybis(1-Chloropropane)	45	4.968	4.968	(1.090)	385812	50.0000	49.69
27	2-Methylphenol	108	5.010	5.010	(1.100)	285287	50.0000	49.25
35	Hexachloroethane	117	5.155	5.155	(1.131)	172303	50.0000	49.60
32	N-Nitrosodinpropylamine	70	5.155	5.155	(1.131)	306731	50.0000	50.40
29	3 and 4-Methylphenol	108	5.203	5.203	(1.142)	611494	100.000	98.99

05/10/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.283	5.283	(0.860)	462544	50.0000	51.26
	37 Nitrobenzene	77	5.304	5.304	(0.863)	476435	50.0000	49.82
	39 Isophorone	82	5.598	5.598	(0.911)	646454	50.0000	51.86
	40 2-Nitrophenol	139	5.705	5.705	(0.929)	173054	50.0000	52.24
	41 2,4-Dimethylphenol	107	5.833	5.833	(0.950)	369130	50.0000	52.50
	42 Bis(2-chloroethoxy)methane	93	5.913	5.913	(0.963)	402042	50.0000	50.60
	45 2,4-Dichlorophenol	162	6.041	6.041	(0.983)	262524	50.0000	50.78
	47 1,2,4-Trichlorobenzene	180	6.095	6.095	(0.992)	309040	50.0000	50.18
*	48 Naphthalene-d8	136	6.143	6.143	(1.000)	657267	40.0000	
	44 Benzoic Acid	122	6.111	6.111	(0.995)	173756	50.0000	53.00
	50 Naphthalene	128	6.164	6.164	(1.003)	908585	50.0000	48.82
	51 4-Chloroaniline	127	6.319	6.319	(1.029)	381333	50.0000	50.61
	54 Hexachlorobutadiene	225	6.415	6.415	(1.044)	212280	50.0000	49.63
	62 2-Methylnaphthalene	142	7.131	7.131	(1.161)	629429	50.0000	47.28
	59 4-Chloro-3-Methylphenol	107	7.083	7.083	(1.153)	304532	50.0000	50.70
	66 Hexachlorocyclopentadiene	237	7.473	7.473	(0.847)	184654	50.0000	49.15
	67 2,4,6-Trichlorophenol	196	7.660	7.660	(0.868)	206752	50.0000	50.98
	68 2,4,5-Trichlorophenol	196	7.746	7.746	(0.878)	223889	50.0000	52.24
$	69 2-Fluorobiphenyl	172	7.756	7.756	(0.879)	700840	50.0000	49.54
	72 2-Chloronaphthalene	162	7.874	7.874	(0.892)	581107	50.0000	49.12
	73 2-Nitroaniline	65	8.168	8.168	(0.926)	259023	50.0000	50.83
	76 Dimethylphthalate	163	8.536	8.536	(0.967)	664795	50.0000	49.07
	79 Acenaphthylene	152	8.558	8.558	(0.970)	856771	50.0000	49.13
	80 2,6-Dinitrotoluene	165	8.654	8.654	(0.981)	147807	50.0000	51.06
*	82 Acenaphthene-d10	164	8.825	8.825	(1.000)	351374	40.0000	
	83 Acenaphthene	153	8.883	8.883	(1.007)	541550	50.0000	49.17
	81 3-Nitroaniline	138	8.889	8.889	(1.007)	150922	50.0000	53.07
	84 2,4-Dinitrophenol	184	9.070	9.070	(1.028)	91839	50.0000	53.11
	86 Dibenzofuran	168	9.161	9.161	(1.038)	804815	50.0000	49.46
	88 2,4-Dinitrotoluene	165	9.332	9.332	(1.058)	192761	50.0000	51.78
	85 4-Nitrophenol	109	9.380	9.380	(1.063)	129235	50.0000	50.82
	93 Diethylphthalate	149	9.802	9.802	(1.111)	660447	50.0000	48.71
	94 Fluorene	166	9.776	9.776	(1.108)	645297	50.0000	49.55
	95 4-Chlorophenyl-phenylether	204	9.824	9.824	(1.113)	346818	50.0000	49.36
	98 4-Nitroaniline	138	10.011	10.011	(1.134)	150637	50.0000	54.34
	99 4,6-Dinitro-2-methylphenol	198	10.064	10.064	(0.876)	136357	50.0000	53.73
	100 N-Nitrosodiphenylamine	169	10.091	10.091	(0.878)	456129	50.0000	48.91
	102 Azobenzene	77	10.107	10.107	(0.880)	1011491	50.0000	48.35
$	104 2,4,6-Tribromophenol	330	10.278	10.278	(1.165)	100852	50.0000	51.34
	109 4-Bromophenyl-phenylether	248	10.705	10.705	(0.932)	210343	50.0000	49.10
	112 Hexachlorobenzene	284	10.935	10.935	(0.952)	217142	50.0000	49.65
	117 Pentachlorophenol	266	11.341	11.341	(0.987)	122937	50.0000	50.40
*	121 Phenanthrene-d10	188	11.490	11.490	(1.000)	612492	40.0000	
	122 Phenanthrene	178	11.533	11.533	(1.004)	930158	50.0000	49.17
	124 Anthracene	178	11.619	11.619	(1.011)	912739	50.0000	49.91
	126 Carbazole	167	12.019	12.019	(1.046)	778766	50.0000	49.84
	129 Di-n-Butylphthalate	149	12.906	12.906	(1.123)	1026929	50.0000	50.16
	134 Fluoranthene	202	13.830	13.830	(1.204)	983110	50.0000	50.28
	135 Benzidine	184	14.226	14.226	(0.854)	375164	50.0000	50.00
	137 Pyrene	202	14.247	14.247	(0.855)	992029	50.0000	49.33
$	139 Terphenyl-d14	244	14.690	14.690	(0.882)	777748	50.0000	49.77
	145 3,3-Dimethylbenzidine	212	15.689	15.689	(0.942)	405868	50.0000	50.88
	146 Butylbenzylphthalate	149	15.812	15.812	(0.949)	419190	50.0000	50.41
	150 Benzo(a)Anthracene	228	16.624	16.624	(0.998)	870421	50.0000	50.24

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.656	16.656	(1.000)	494718	40.0000	
152 3,3'-Dichlorobenzidine	252	16.720	16.720	(1.004)	340729	50.0000	51.08
154 Chrysene	228	16.710	16.710	(1.003)	813043	50.0000	49.32
155 bis(2-ethylhexyl)Phthalate	149	17.036	17.036	(1.023)	515108	50.0000	49.48
158 Di-n-octylphthalate	149	18.184	18.184	(0.944)	871339	50.0000	49.98
160 Benzo(b)fluoranthene	252	18.628	18.628	(0.967)	772068	50.0000	48.60
161 Benzo(k)fluoranthene	252	18.676	18.676	(0.969)	788255	50.0000	49.96
165 Benzo(a)pyrene	252	19.167	19.167	(0.995)	719204	50.0000	50.16
* 166 Perylene-d12	264	19.269	19.269	(1.000)	409117	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.989	20.989	(1.089)	623024	50.0000	46.88
174 Dibenzo(a,h)anthracene	278	21.031	21.031	(1.091)	634309	50.0000	49.18
177 Benzo(g,h,i)perylene	276	21.443	21.443	(1.113)	559104	50.0000	47.12

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2994.D Page 1
Report Date: 10-May-2005 09:44

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

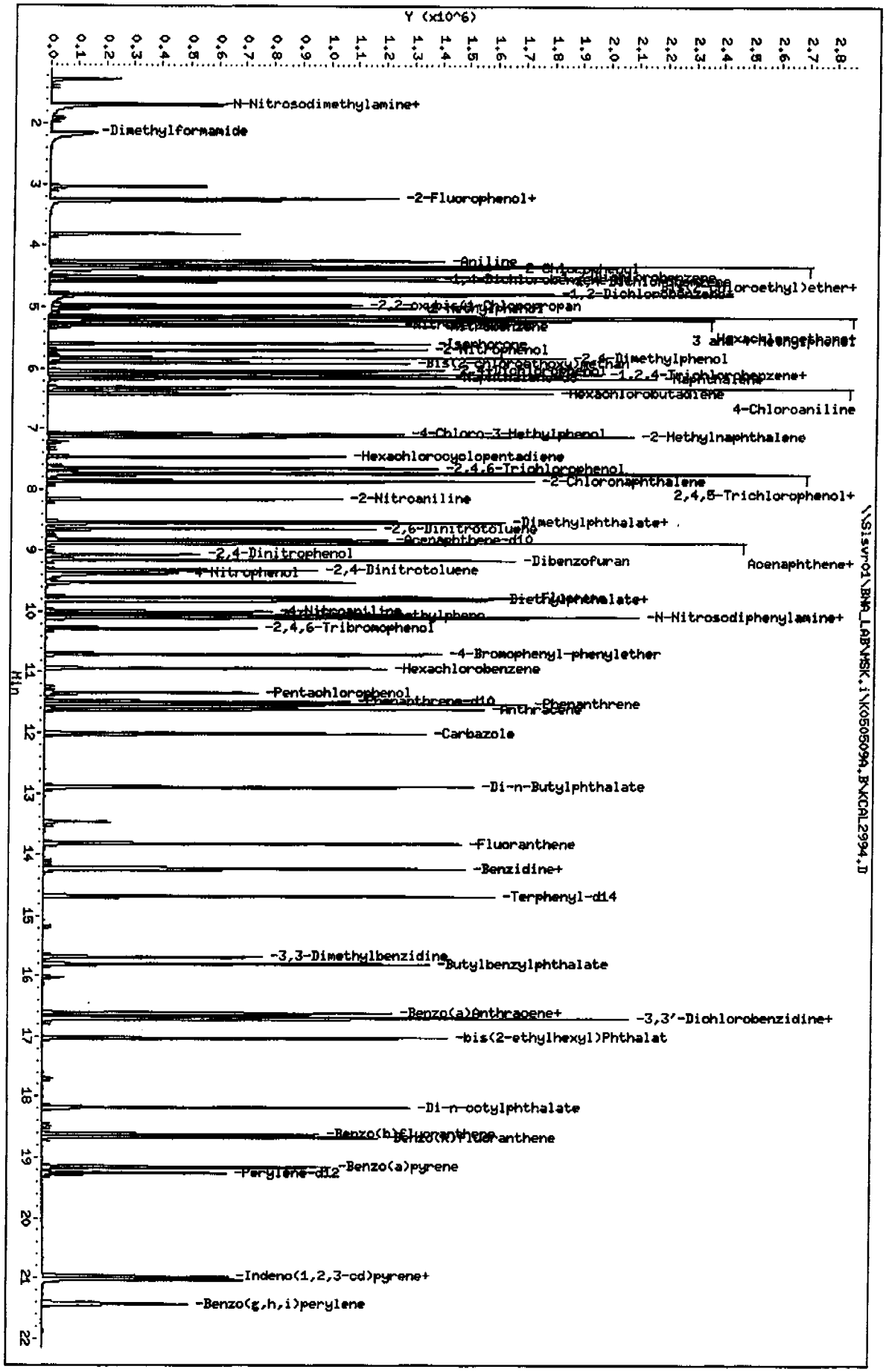
Instrument ID: MSK.i
Lab File ID: KCAL2994.D
Lab Smp Id: SSTD050
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Misc Info: SV0220-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD050
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	193286	0.00
48 Naphthalene-d8	657267	328634	1314534	657267	0.00
82 Acenaphthene-d10	351374	175687	702748	351374	0.00
121 Phenanthrene-d10	612492	306246	1224984	612492	0.00
153 Chrysene-d12	494718	247359	989436	494718	0.00
166 Perylene-d12	409117	204559	818234	409117	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.56	0.00
48 Naphthalene-d8	6.14	5.64	6.64	6.14	0.00
82 Acenaphthene-d10	8.83	8.33	9.33	8.83	0.00
121 Phenanthrene-d10	11.49	10.99	11.99	11.49	0.00
153 Chrysene-d12	16.66	16.16	17.16	16.66	0.00
166 Perylene-d12	19.27	18.77	19.77	19.27	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

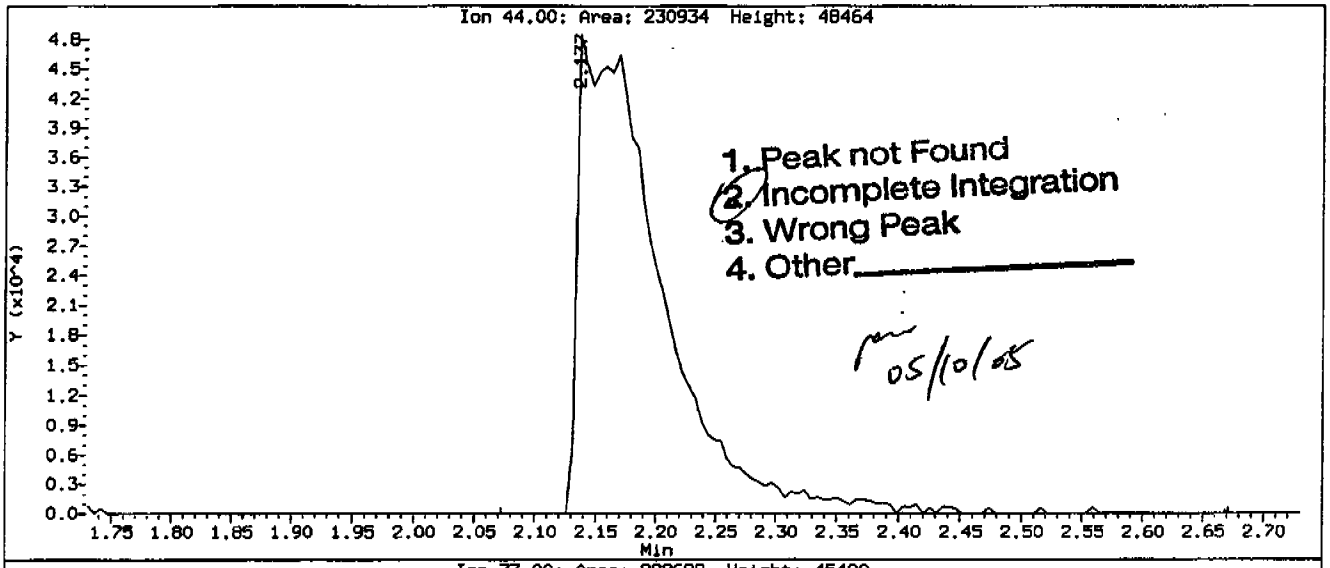


Data File: \\Sisvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2994.D
Date : 09-MAY-2005 12:01
Client ID: SSTD050
Sample Info: SSTD050
Volume Injected (uL): 1.0
Column phase:

Instrument: MSK.i
Operator: XIA
Column diameter: 2.00

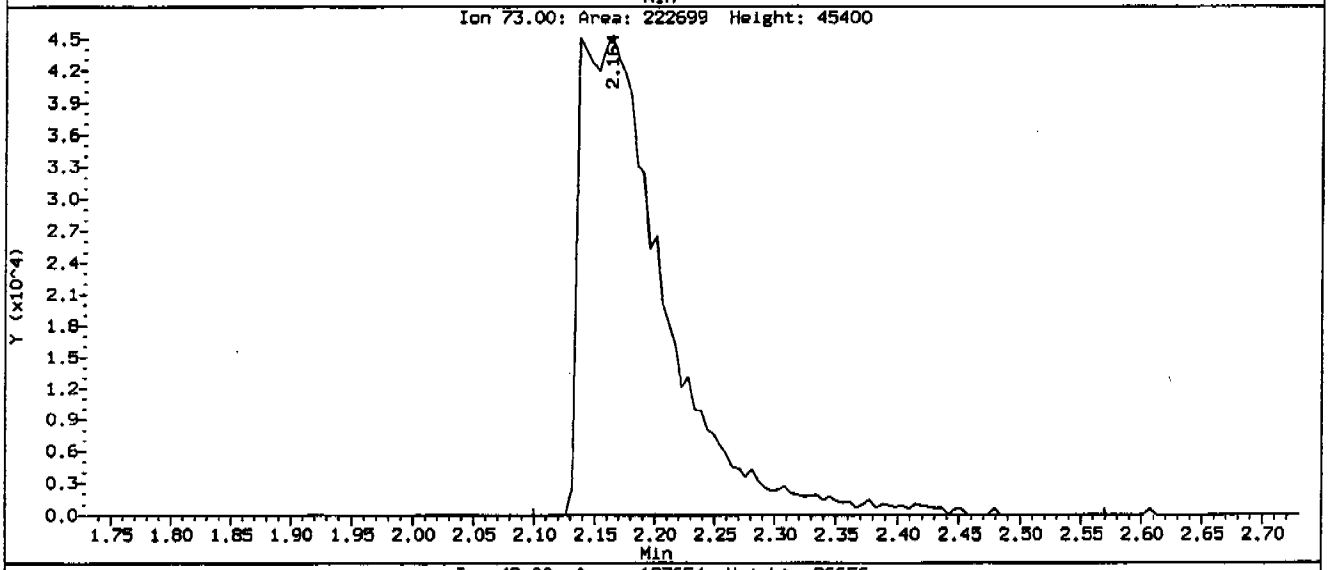
Data File: \\Slavr01\BNA_LAB\MSK.i\K050509A.B\KCAL2994.D
Injection Date: 09-MAY-2005 12:01
Instrument: MSK.i
Client Sample ID: SSTD050

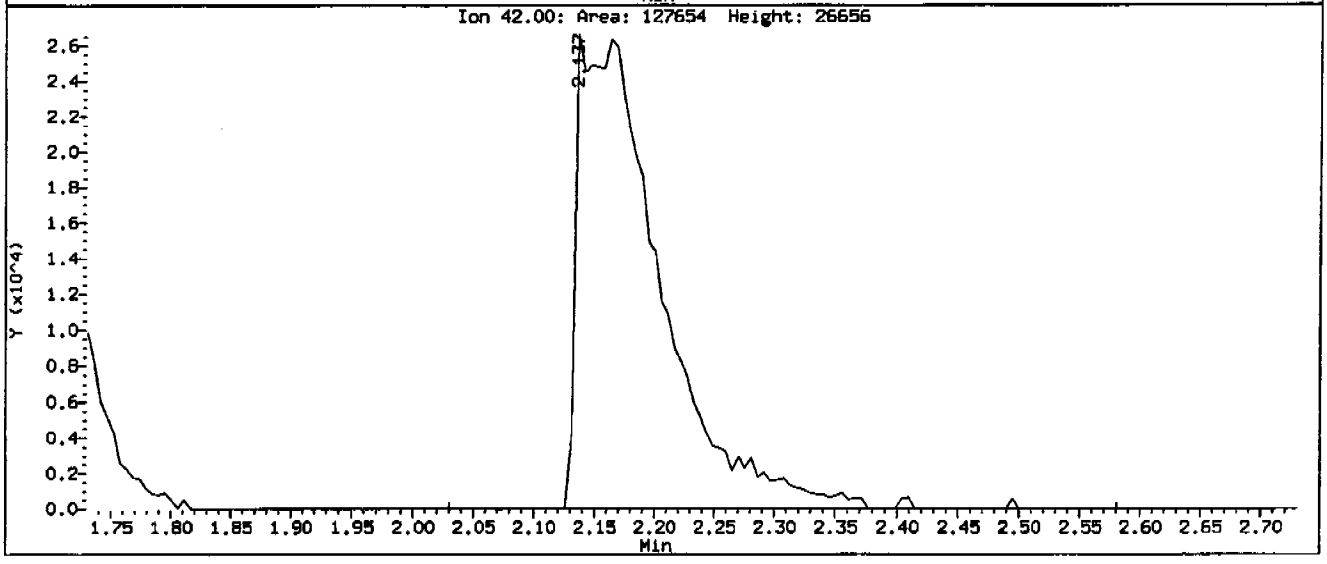
Compound: Dimethylformamide
CAS Number: 68-12-2



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

05/10/05





Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D
Report Date: 10-May-2005 09:41

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D
Lab Smp Id: SSTD160 Client Smp ID: SSTD160
Inj Date : 09-MAY-2005 12:33
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD160
Misc Info : SV0218-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Meth Date : 10-May-2005 09:41 hongs Quant Type: ISTD
Cal Date : 07-MAY-2005 22:49 Cal File: KCAL2964.D
Als bottle: 4 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	1.353	1.353	(0.297)	267010	160.000	174.9(AM)
4	N-Nitrosodimethylamine	74	1.812	1.812	(0.397)	509995	160.000	171.9(AM)
3	Pyridine	79	1.786	1.786	(0.391)	913431	160.000	176.6(AM)
5	Dimethylformamide	44	2.272	2.272	(0.498)	656888	160.000	160.1(AM)
$ 10	2-Fluorophenol	112	3.276	3.276	(0.718)	998948	160.000	176.2(A)
11	Cyclohexanol	57	3.281	3.281	(0.719)	1151960	160.000	179.0(AM)
17	Aniline	93	4.270	4.270	(0.936)	1647716	160.000	157.9
19	Bis(2-chloroethyl)ether	93	4.350	4.350	(0.953)	1292825	160.000	174.9(A)
$ 15	Phenol-d5	99	4.344	4.344	(0.952)	1411227	160.000	175.0(A)
16	Phenol	94	4.355	4.355	(0.954)	1549489	160.000	174.1(A)
20	2-Chlorophenol	128	4.409	4.409	(0.966)	1104771	160.000	170.9(A)
21	1,3-Dichlorobenzene	146	4.521	4.521	(0.991)	1266969	160.000	171.6(A)
* 22	1,4-Dichlorobenzene-d4	152	4.563	4.563	(1.000)	190662	40.0000	
23	1,4-Dichlorobenzene	146	4.585	4.585	(1.005)	1364483	160.000	174.3(A)
26	1,2-Dichlorobenzene	146	4.809	4.809	(1.054)	1293464	160.000	177.8(A)
25	Benzyl Alcohol	108	4.836	4.836	(1.060)	608544	160.000	191.4(A)
28	2,2-oxybis(1-Chloropropane)	45	4.975	4.975	(1.090)	1238647	160.000	162.4(A)
27	2-Methylphenol	108	5.023	5.023	(1.101)	919886	160.000	160.1(A)
35	Hexachloroethane	117	5.156	5.156	(1.130)	574546	160.000	167.5(A)
32	N-Nitrosodinpropylamine	70	5.183	5.183	(1.136)	892076	160.000	147.9
29	3 and 4-Methylphenol	108	5.231	5.231	(1.146)	2068790	320.000	336.4(A)

05/10/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.301	5.301	(0.863)	1461871	160.000	166.3(A)
	37 Nitrobenzene	77	5.327	5.327	(0.867)	1514410	160.000	162.2(A)
	39 Isophorone	82	5.627	5.627	(0.916)	1886717	160.000	155.0
	40 2-Nitrophenol	139	5.717	5.717	(0.930)	550746	160.000	169.8(A)
	41 2,4-Dimethylphenol	107	5.851	5.851	(0.952)	1175775	160.000	170.6(A)
	42 Bis(2-chloroethoxy)methane	93	5.926	5.926	(0.964)	1308198	160.000	168.4(A)
	45 2,4-Dichlorophenol	162	6.049	6.049	(0.984)	861154	160.000	169.7(A)
	47 1,2,4-Trichlorobenzene	180	6.102	6.102	(0.993)	1058079	160.000	175.1(A)
*	48 Naphthalene-d8	136	6.145	6.145	(1.000)	645937	40.0000	
	44 Benzoic Acid	122	6.177	6.177	(1.005)	573755	160.000	180.1(AM)
	50 Naphthalene	128	6.177	6.177	(1.005)	3254779	160.000	178.2(A)
	51 4-Chloroaniline	127	6.337	6.337	(1.031)	1287687	160.000	174.6(A)
	54 Hexachlorobutadiene	225	6.417	6.417	(1.044)	734169	160.000	175.0(A)
	62 2-Methylnaphthalene	142	7.138	7.138	(1.162)	2151870	160.000	163.8(A)
	59 4-Chloro-3-Methylphenol	107	7.090	7.090	(1.154)	961862	160.000	162.7(A)
	66 Hexachlorocyclopentadiene	237	7.475	7.475	(0.847)	686031	160.000	199.3(A)
	67 2,4,6-Trichlorophenol	196	7.667	7.667	(0.869)	668451	160.000	178.9(A)
	68 2,4,5-Trichlorophenol	196	7.747	7.747	(0.878)	741890	160.000	187.7(A)
$	69 2-Fluorobiphenyl	172	7.769	7.769	(0.880)	2383905	160.000	183.1(A)
	72 2-Chloronaphthalene	162	7.886	7.886	(0.893)	1935583	160.000	177.5(A)
	73 2-Nitroaniline	65	8.185	8.185	(0.927)	757215	160.000	162.1(A)
	76 Dimethylphthalate	163	8.559	8.559	(0.970)	2121539	160.000	169.6(A)
	79 Acenaphthylene	152	8.570	8.570	(0.971)	2916936	160.000	181.2(A)
	80 2,6-Dinitrotoluene	165	8.672	8.672	(0.982)	445782	160.000	166.8(A)
*	82 Acenaphthene-d10	164	8.826	8.826	(1.000)	324102	40.0000	
	83 Acenaphthene	153	8.891	8.891	(1.007)	1781284	160.000	175.1(A)
	81 3-Nitroaniline	138	8.912	8.912	(1.010)	452616	160.000	172.0(A)
	84 2,4-Dinitrophenol	184	9.088	9.088	(1.030)	311902	160.000	196.4(A)
	86 Dibenzofuran	168	9.174	9.174	(1.039)	2595137	160.000	172.6(A)
	88 2,4-Dinitrotoluene	165	9.350	9.350	(1.059)	574969	160.000	166.3(A)
	85 4-Nitrophenol	109	9.387	9.387	(1.064)	396744	160.000	170.0(A)
	93 Diethylphthalate	149	9.825	9.825	(1.113)	2144878	160.000	170.6(A)
	94 Fluorene	166	9.788	9.788	(1.109)	2064525	160.000	171.0(A)
	95 4-Chlorophenyl-phenylether	204	9.836	9.836	(1.114)	1155756	160.000	177.8(A)
	98 4-Nitroaniline	138	10.061	10.061	(1.140)	432152	160.000	168.7(A)
	99 4,6-Dinitro-2-methylphenol	198	10.103	10.103	(0.879)	458082	160.000	205.5(A)
	100 N-Nitrosodiphenylamine	169	10.114	10.114	(0.880)	1513586	160.000	184.9(A)
	102 Azobenzene	77	10.119	10.119	(0.881)	3307965	160.000	180.6(A)
$	104 2,4,6-Tribromophenol	330	10.290	10.290	(1.166)	317115	160.000	173.9(A)
	109 4-Bromophenyl-phenylether	248	10.718	10.718	(0.933)	661751	160.000	175.4(A)
	112 Hexachlorobenzene	284	10.947	10.947	(0.953)	675585	160.000	175.9(A)
	117 Pentachlorophenol	266	11.353	11.353	(0.988)	420779	160.000	196.9(A)
*	121 Phenanthrene-d10	188	11.492	11.492	(1.000)	538792	40.0000	
	122 Phenanthrene	178	11.546	11.546	(1.005)	2876383	160.000	172.6(A)
	124 Anthracene	178	11.631	11.631	(1.012)	2757609	160.000	171.1(A)
	126 Carbazole	167	12.037	12.037	(1.047)	2313859	160.000	167.9(A)
	129 Di-n-Butylphthalate	149	12.913	12.913	(1.124)	3072143	160.000	170.6(A)
	134 Fluoranthene	202	13.843	13.843	(1.205)	2895172	160.000	167.7(A)
	135 Benzidine	184	14.233	14.233	(0.854)	948875	160.000	160.4(A)
	137 Pyrene	202	14.259	14.259	(0.856)	2879391	160.000	180.3(A)
$	139 Terphenyl-d14	244	14.697	14.697	(0.882)	2270400	160.000	183.1(A)
	145 3,3-Dimethylbenzidine	212	15.702	15.702	(0.942)	1050179	160.000	165.6(A)
	146 Butylbenzylphthalate	149	15.819	15.819	(0.949)	1130601	160.000	172.4(A)
	150 Benzo(a)Anthracene	228	16.637	16.637	(0.998)	2371324	160.000	173.2(A)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.663	16.663	(1.000)	392079	40.0000	
152 3,3'-Dichlorobenzidine	252	16.728	16.728	(1.004)	1009432	160.000	193.1(A)
154 Chrysene	228	16.722	16.722	(1.004)	2338031	160.000	179.3(A)
155 bis(2-ethylhexyl)Phthalate	149	17.037	17.037	(1.022)	1482940	160.000	181.2(A)
158 Di-n-octylphthalate	149	18.191	18.191	(0.944)	2386651	160.000	180.8(A)
160 Benzo(b)fluoranthene	252	18.645	18.645	(0.968)	2153409	160.000	178.2(A)
161 Benzo(k)fluoranthene	252	18.693	18.693	(0.970)	2069426	160.000	172.8(A)
165 Benzo(a)pyrene	252	19.185	19.185	(0.996)	1883560	160.000	176.9(A)
* 166 Perylene-d12	264	19.265	19.265	(1.000)	303750	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	21.007	21.007	(1.090)	1820713	160.000	193.4(A)
174 Dibenzo(a,h)anthracene	278	21.060	21.060	(1.093)	1758104	160.000	192.2(A)
177 Benzo(g,h,i)perylene	276	21.477	21.477	(1.115)	1543039	160.000	183.0(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D
Report Date: 10-May-2005 09:41

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

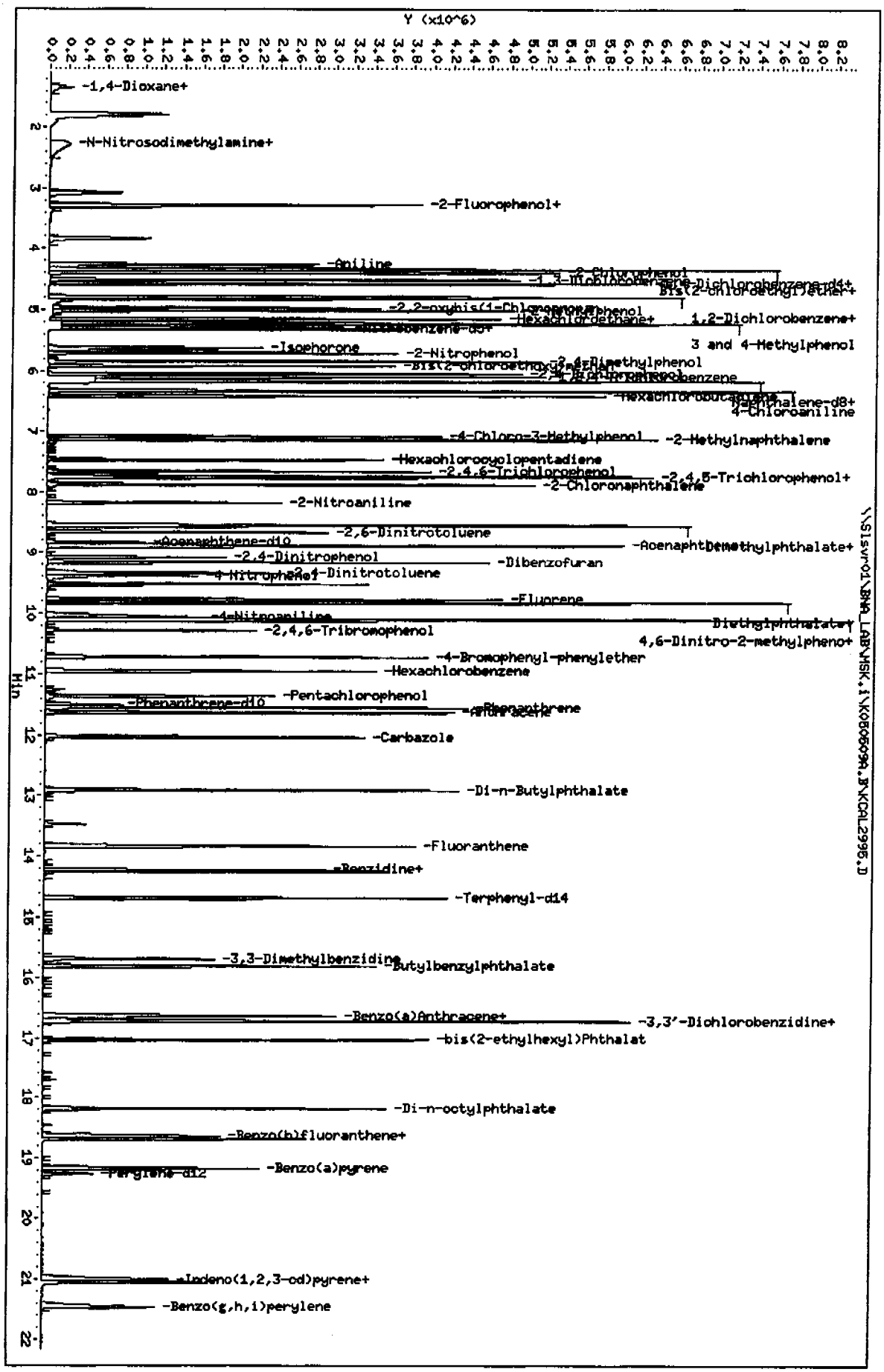
Instrument ID: MSK.i
Lab File ID: KCAL2995.D
Lab Smp Id: SSTD160
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Misc Info: SV0218-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD160
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	190662	-1.36
48 Naphthalene-d8	657267	328634	1314534	645937	-1.72
82 Acenaphthene-d10	351374	175687	702748	324102	-7.76
121 Phenanthrene-d10	612492	306246	1224984	538792	-12.03
153 Chrysene-d12	494718	247359	989436	392079	-20.75
166 Perylene-d12	409117	204559	818234	303750	-25.75

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.56	0.16
48 Naphthalene-d8	6.14	5.64	6.64	6.15	0.03
82 Acenaphthene-d10	8.83	8.33	9.33	8.83	0.02
121 Phenanthrene-d10	11.49	10.99	11.99	11.49	0.02
153 Chrysene-d12	16.66	16.16	17.16	16.66	0.04
166 Perylene-d12	19.27	18.77	19.77	19.27	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

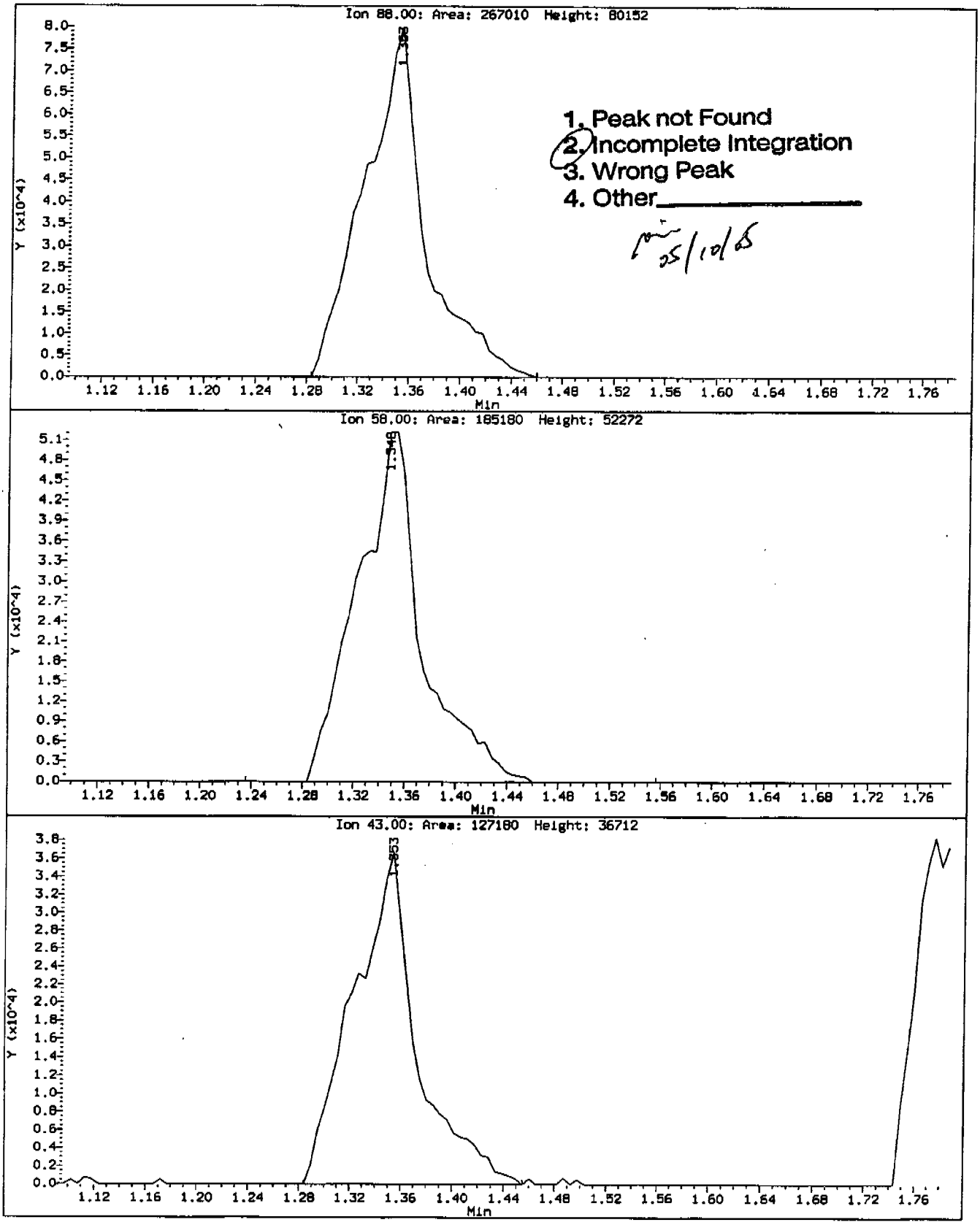


Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D
Date : 09-MAY-2005 12:33
Client ID: SSTD160
Sample Info: SSTD160
Volume Injected (uL): 1.0
Column phase:

Instrument: MSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slavr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D
Injection Date: 09-MAY-2005 12:33
Instrument: MSK.i
Client Sample ID: SSTD160

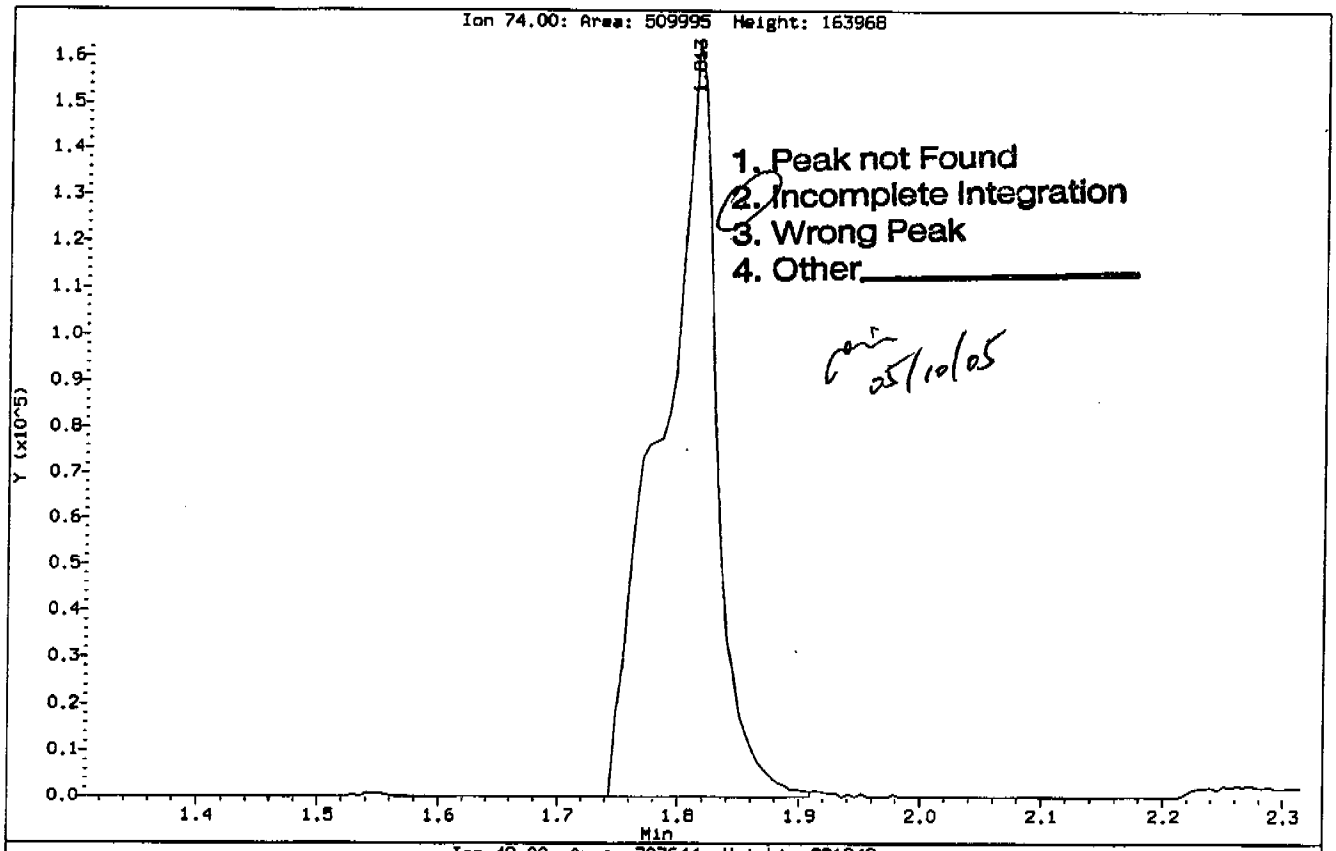
Compound: 1,4-Dioxane
CAS Number:

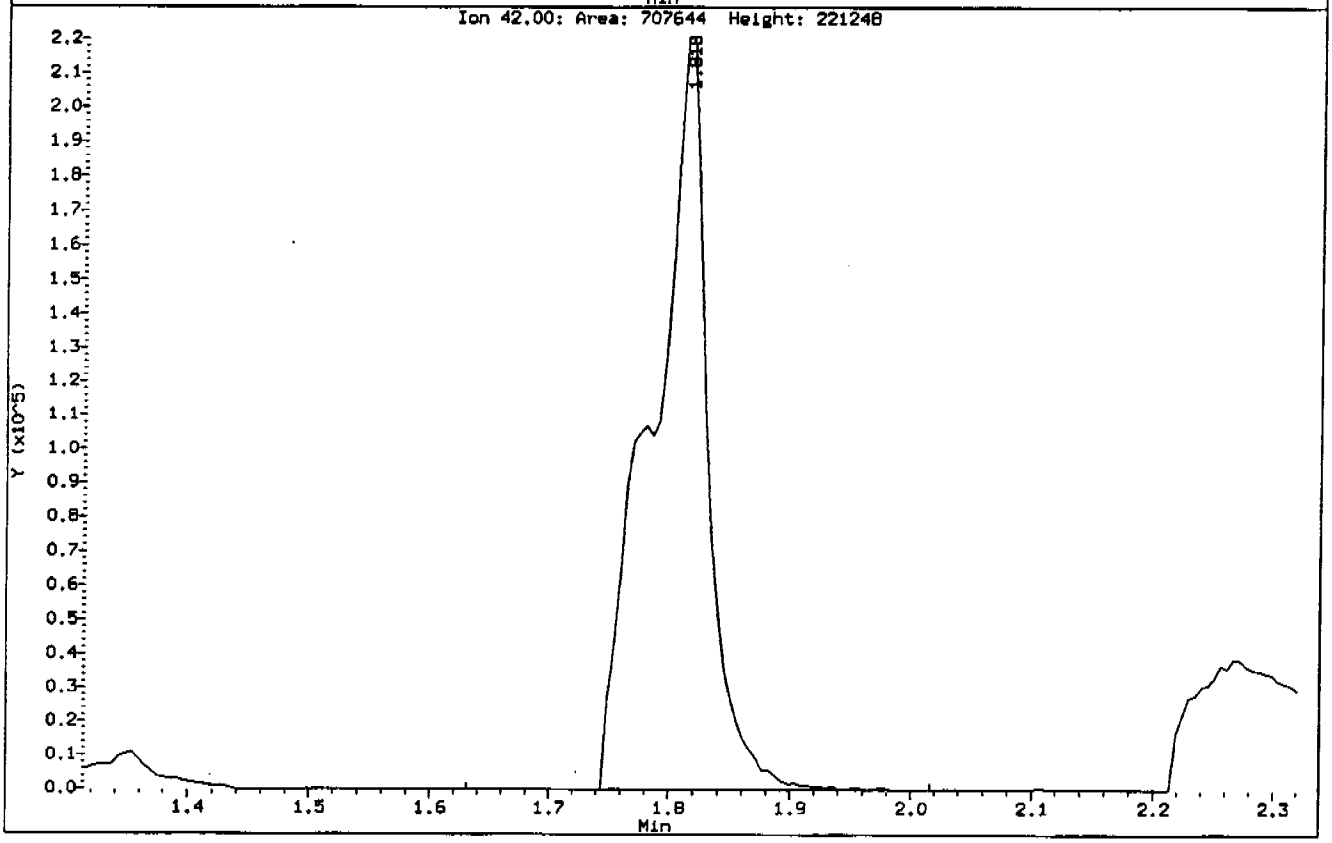


LOT #F5D220218

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D
Injection Date: 09-MAY-2005 12:33
Instrument: MSK.i
Client Sample ID: SSTD160

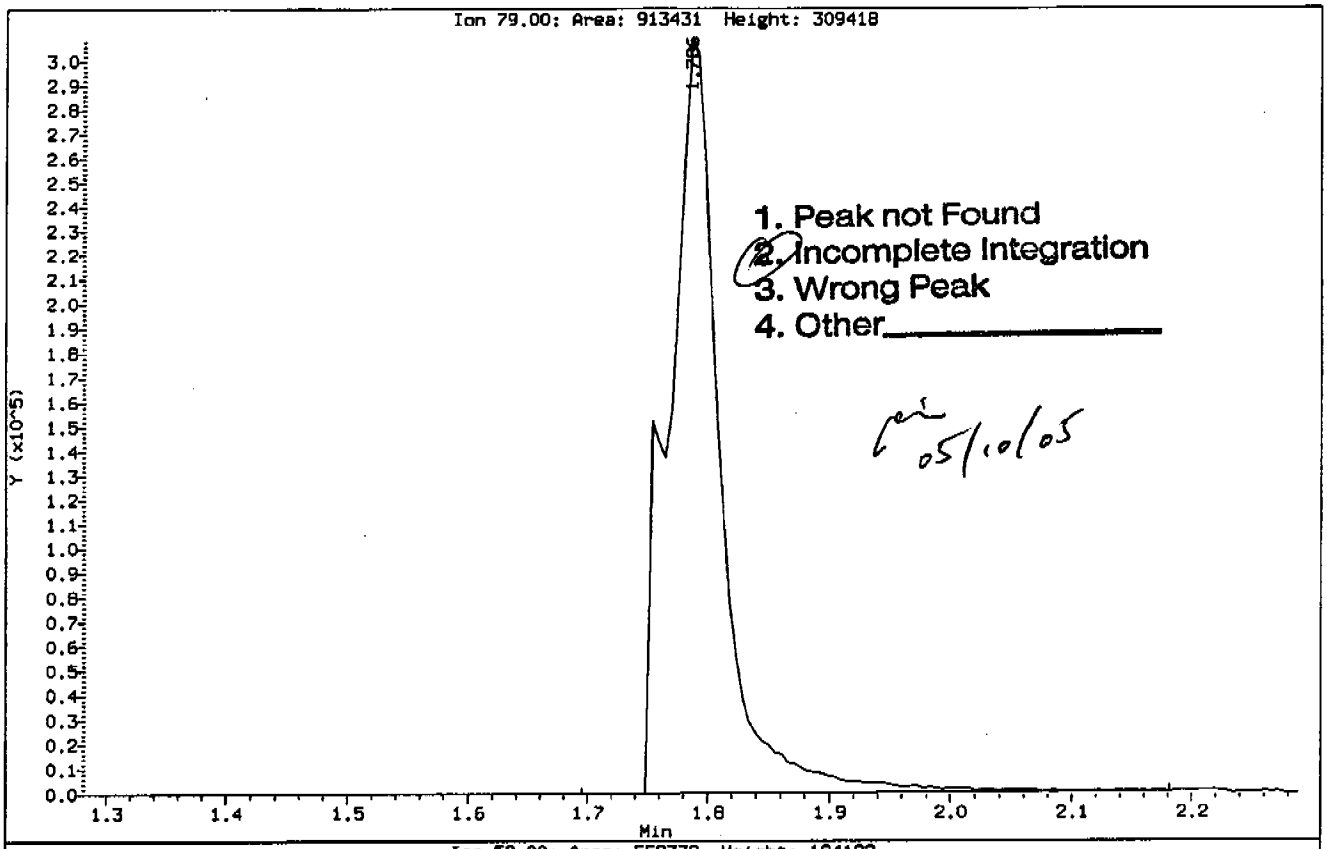
Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9

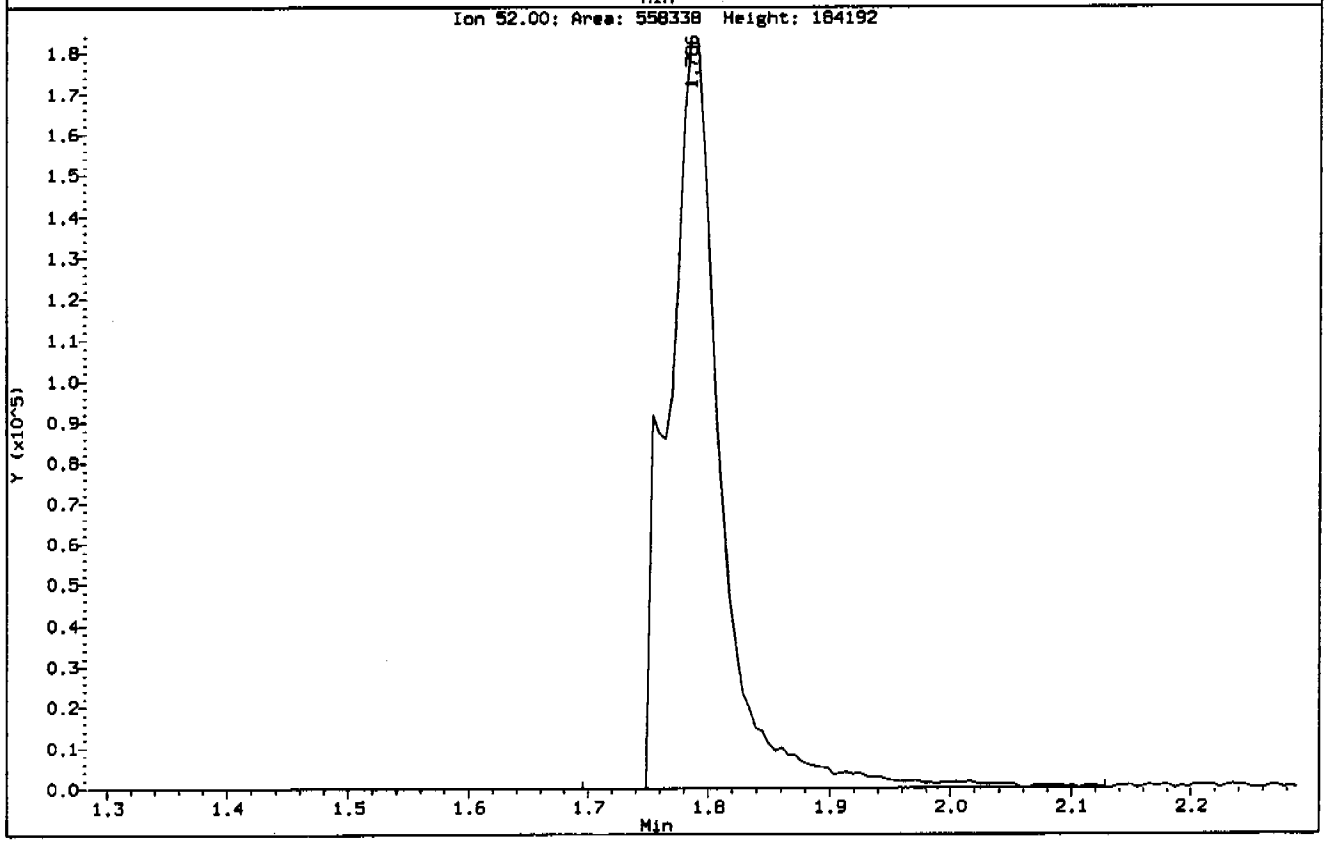




Data File: \\Slevr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D
Injection Date: 09-MAY-2005 12:33
Instrument: MSK.i
Client Sample ID: SSTD160

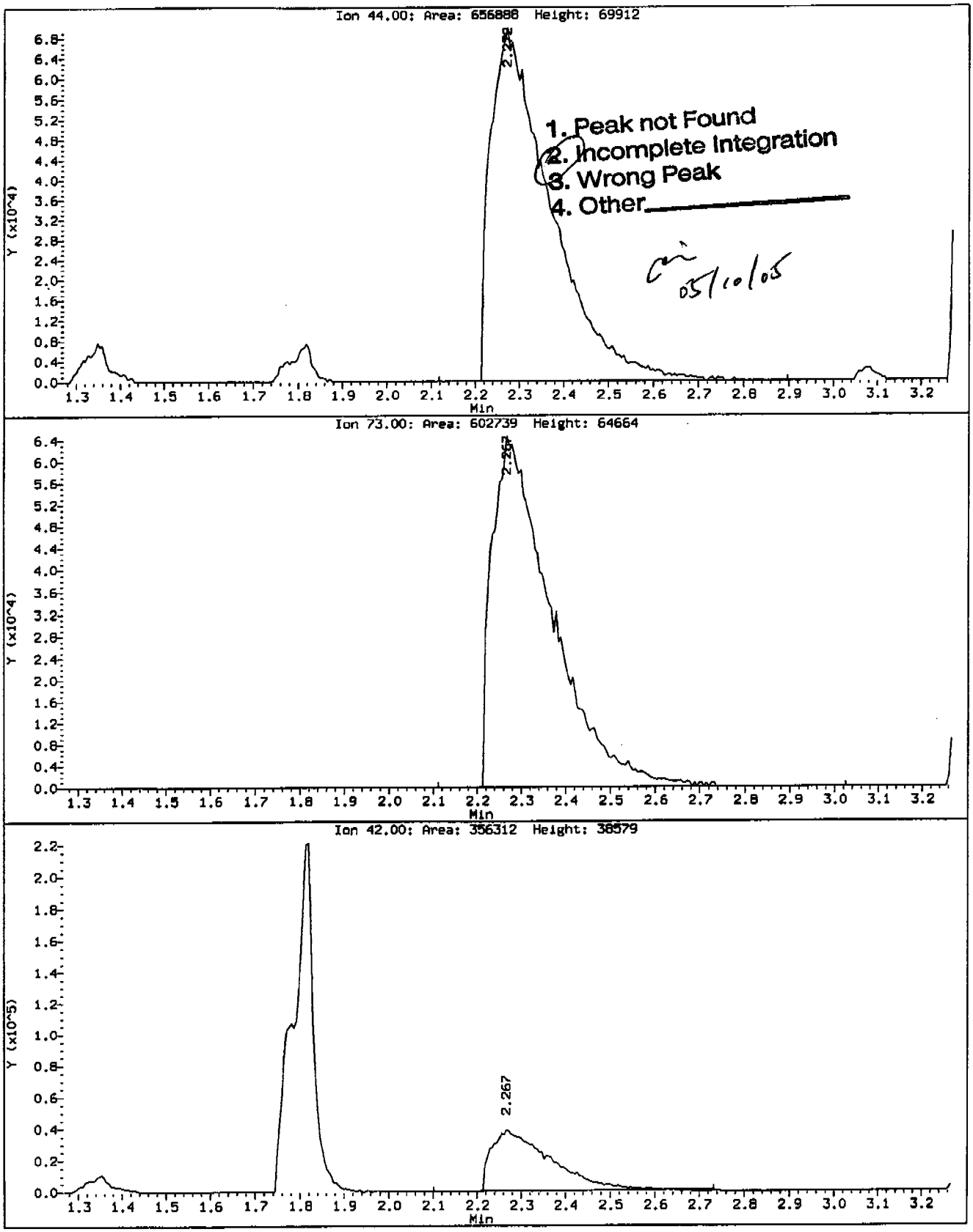
Compound: Pyridine
CAS Number: 110-86-1





Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D
Injection Date: 09-MAY-2005 12:33
Instrument: MSK.i
Client Sample ID: SSTD160

Compound: Dimethylformamide
CAS Number: 68-12-2



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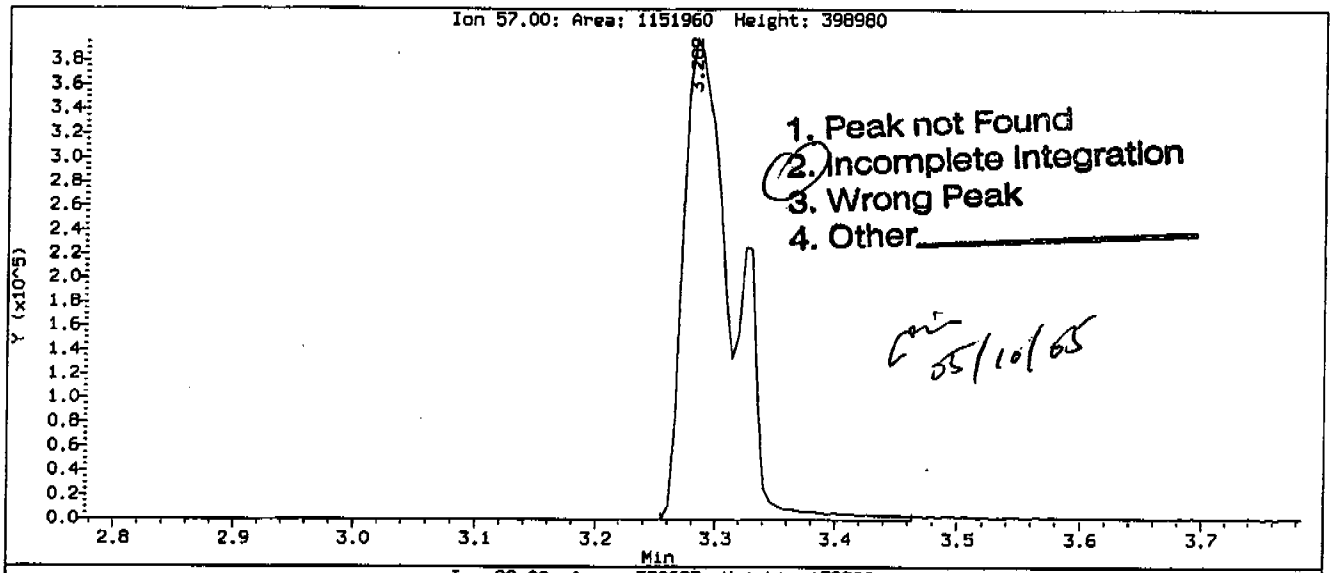
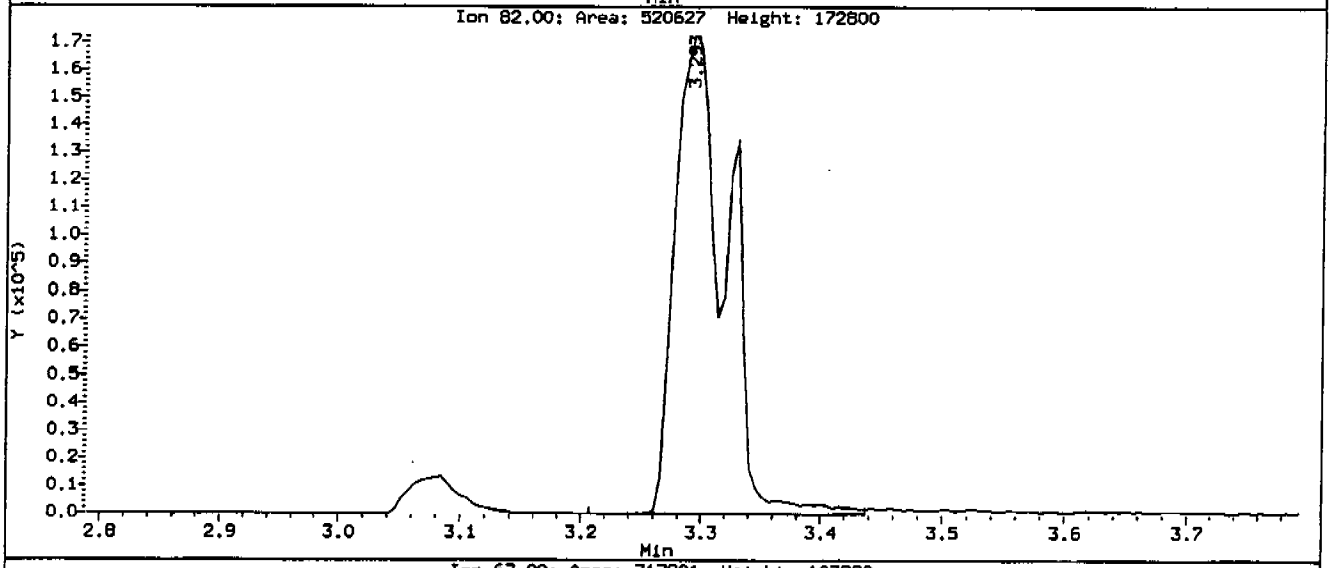
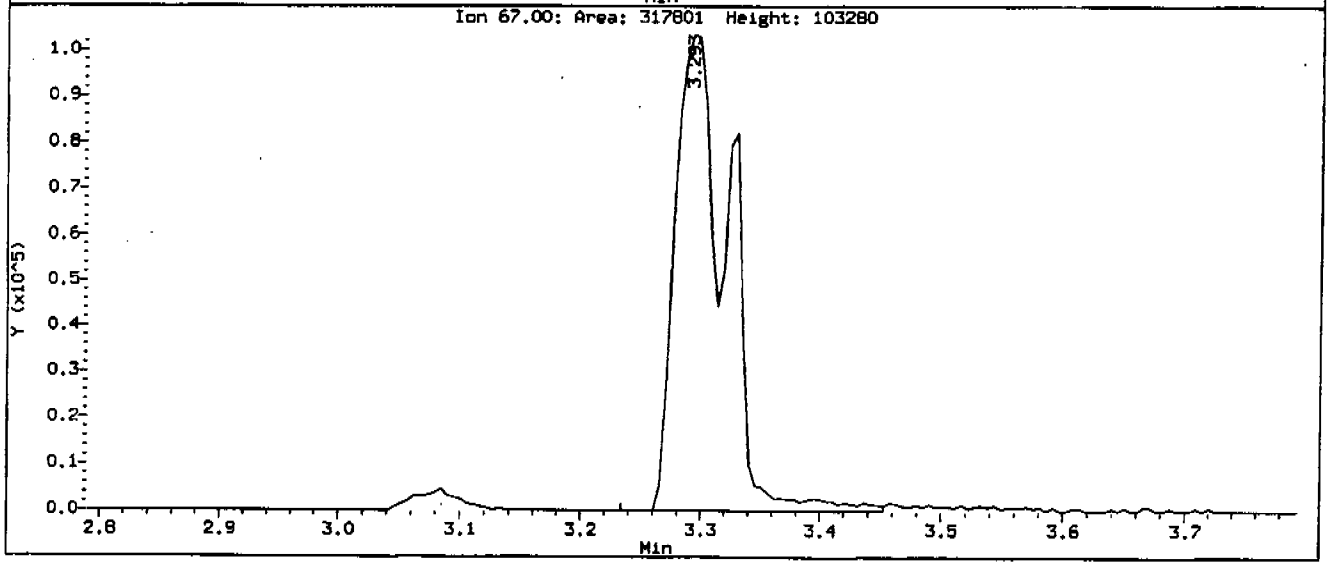
Injection Date: 09-MAY-2005 12:33
Instrument: MSK.i
Client Sample ID: SSTD160

Compound: Cyclohexanol
CAS Number:

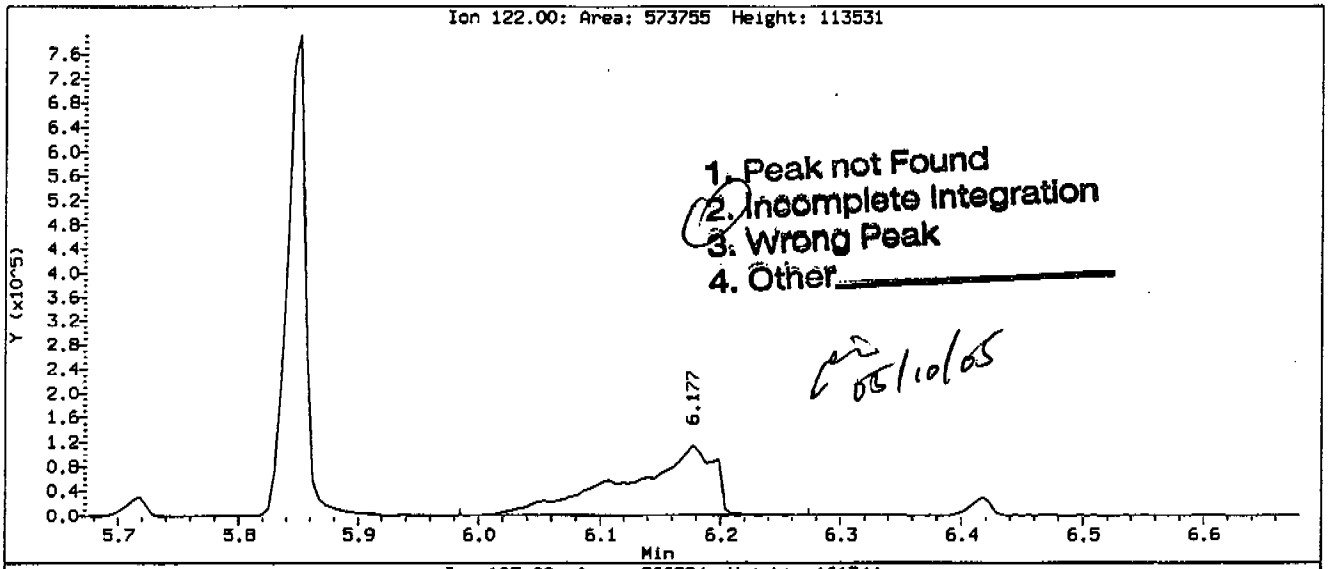






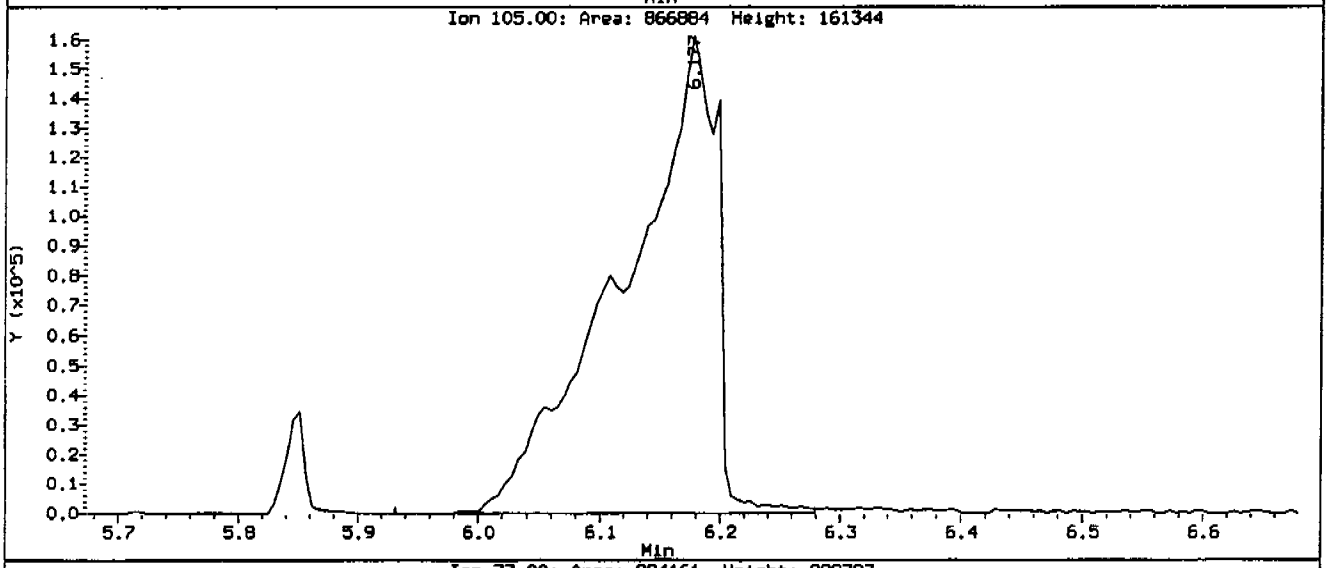
Data File: \\Slevr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D
Injection Date: 09-MAY-2005 12:33
Instrument: MSK.i
Client Sample ID: S5TD160

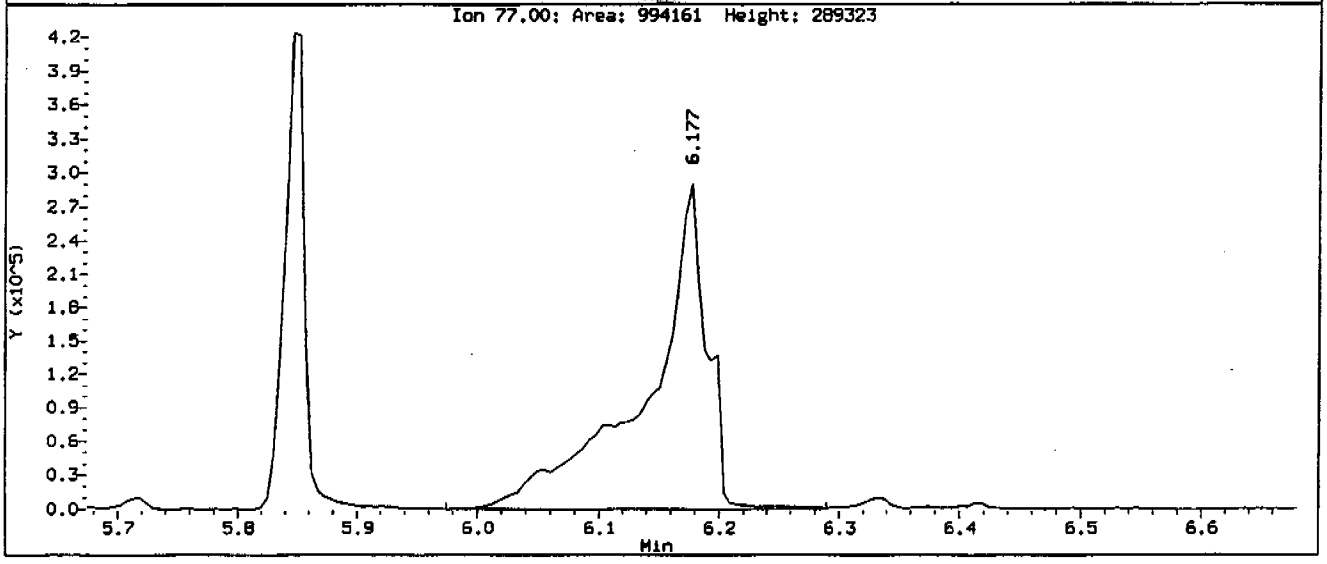
Compound: Benzoic Acid
CAS Number: 65-85-0



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

05/10/05





Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2996.D Page 1
Report Date: 10-May-2005 09:41

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2996.D
Lab Smp Id: SSTD120 Client Smp ID: SSTD120
Inj Date : 09-MAY-2005 13:04
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD120
Misc Info : SV0217-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Meth Date : 10-May-2005 09:41 hongs Quant Type: ISTD
Cal Date : 07-MAY-2005 23:21 Cal File: KCAL2965.D
Als bottle: 5 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	1.347	1.347	(0.295)	256244	120.000	133.1
4	N-Nitrosodimethylamine	74	1.806	1.806	(0.395)	469566	120.000	125.6
3	Pyridine	79	1.774	1.774	(0.388)	814171	120.000	124.9
5	Dimethylformamide	44	2.271	2.271	(0.497)	608591	120.000	117.7(M)
$ 10	2-Fluorophenol	112	3.275	3.275	(0.717)	896818	120.000	125.5
11	Cyclohexanol	57	3.280	3.280	(0.718)	1046076	120.000	128.9(M)
17	Aniline	93	4.274	4.274	(0.936)	1509104	120.000	114.7
19	Bis(2-chloroethyl)ether	93	4.349	4.349	(0.952)	1177364	120.000	126.4
$ 15	Phenol-d5	99	4.343	4.343	(0.951)	1259183	120.000	123.9
16	Phenol	94	4.354	4.354	(0.953)	1393535	120.000	124.2
20	2-Chlorophenol	128	4.408	4.408	(0.965)	1001875	120.000	122.9
21	1,3-Dichlorobenzene	146	4.520	4.520	(0.989)	1134454	120.000	121.9
* 22	1,4-Dichlorobenzene-d4	152	4.568	4.568	(1.000)	240310	40.0000	
23	1,4-Dichlorobenzene	146	4.589	4.589	(1.005)	1247621	120.000	126.5
26	1,2-Dichlorobenzene	146	4.808	4.808	(1.053)	1159824	120.000	126.5
25	Benzyl Alcohol	108	4.835	4.835	(1.058)	498679	120.000	124.4
28	2,2-oxybis(1-Chloropropane)	45	4.974	4.974	(1.089)	1130826	120.000	117.6
27	2-Methylphenol	108	5.022	5.022	(1.099)	812085	120.000	112.1
35	Hexachloroethane	117	5.161	5.161	(1.130)	526521	120.000	121.8
32	N-Nitrosodinpropylamine	70	5.182	5.182	(1.134)	822211	120.000	108.2
29	3 and 4-Methylphenol	108	5.230	5.230	(1.145)	1871029	240.000	241.4(A)

ok 05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2996.D Page 2
Report Date: 10-May-2005 09:41

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.300	5.300	(0.862)	1325489	120.000	123.0
	37 Nitrobenzene	77	5.326	5.326	(0.866)	1373484	120.000	120.0
	39 Isophorone	82	5.626	5.626	(0.915)	1737253	120.000	116.5
	40 2-Nitrophenol	139	5.716	5.716	(0.930)	507512	120.000	127.7
	41 2,4-Dimethylphenol	107	5.850	5.850	(0.951)	1074185	120.000	127.2
	42 Bis(2-chloroethoxy)methane	93	5.925	5.925	(0.964)	1182746	120.000	124.2
	45 2,4-Dichlorophenol	162	6.048	6.048	(0.983)	772628	120.000	124.2
	47 1,2,4-Trichlorobenzene	180	6.101	6.101	(0.992)	952409	120.000	128.6
*	48 Naphthalene-d8	136	6.149	6.149	(1.000)	791632	40.0000	
	44 Benzoic Acid	122	6.181	6.181	(1.005)	520186	120.000	133.2(M)
	50 Naphthalene	128	6.176	6.176	(1.004)	2986007	120.000	133.4
	51 4-Chloroaniline	127	6.336	6.336	(1.030)	1168839	120.000	129.3
	54 Hexachlorobutadiene	225	6.422	6.422	(1.044)	671937	120.000	130.7
	62 2-Methylnaphthalene	142	7.137	7.137	(1.161)	1980827	120.000	123.1
	59 4-Chloro-3-Methylphenol	107	7.089	7.089	(1.153)	863827	120.000	119.2
	66 Hexachlorocyclopentadiene	237	7.474	7.474	(0.847)	619963	120.000	146.5
	67 2,4,6-Trichlorophenol	196	7.666	7.666	(0.869)	602283	120.000	131.1
	68 2,4,5-Trichlorophenol	196	7.746	7.746	(0.878)	662861	120.000	136.4
$	69 2-Fluorobiphenyl	172	7.762	7.762	(0.880)	2154301	120.000	134.6
	72 2-Chloronaphthalene	162	7.885	7.885	(0.893)	1734620	120.000	129.4
	73 2-Nitroaniline	65	8.184	8.184	(0.927)	694512	120.000	121.0
	76 Dimethylphthalate	163	8.553	8.553	(0.969)	1900885	120.000	123.7
	79 Acenaphthylene	152	8.569	8.569	(0.971)	2619906	120.000	132.4
	80 2,6-Dinitrotoluene	165	8.671	8.671	(0.982)	409009	120.000	124.5
*	82 Acenaphthene-d10	164	8.826	8.826	(1.000)	398402	40.0000	
	83 Acenaphthene	153	8.890	8.890	(1.007)	1613401	120.000	129.0
	81 3-Nitroaniline	138	8.911	8.911	(1.010)	414000	120.000	127.9
	84 2,4-Dinitrophenol	184	9.087	9.087	(1.030)	272087	120.000	139.4
	86 Dibenzofuran	168	9.173	9.173	(1.039)	2339446	120.000	126.5
	88 2,4-Dinitrotoluene	165	9.349	9.349	(1.059)	512576	120.000	120.6
	85 4-Nitrophenol	109	9.386	9.386	(1.064)	354145	120.000	123.5
	93 Diethylphthalate	149	9.819	9.819	(1.113)	1901787	120.000	123.1
	94 Fluorene	166	9.787	9.787	(1.109)	1882183	120.000	126.8
	95 4-Chlorophenyl-phenylether	204	9.830	9.830	(1.114)	1024928	120.000	128.3
	98 4-Nitroaniline	138	10.054	10.054	(1.139)	382600	120.000	121.5
	99 4,6-Dinitro-2-methylphenol	198	10.097	10.097	(0.879)	396980	120.000	147.2
	100 N-Nitrosodiphenylamine	169	10.108	10.108	(0.880)	1337473	120.000	135.0
	102 Azobenzene	77	10.118	10.118	(0.881)	2958046	120.000	133.5
$	104 2,4,6-Tribromophenol	330	10.289	10.289	(1.166)	283446	120.000	126.5
	109 4-Bromophenyl-phenylether	248	10.717	10.717	(0.933)	598607	120.000	131.2
	112 Hexachlorobenzene	284	10.946	10.946	(0.953)	607039	120.000	130.7
	117 Pentachlorophenol	266	11.352	11.352	(0.988)	373419	120.000	144.4
*	121 Phenanthrene-d10	188	11.491	11.491	(1.000)	651890	40.0000	
	122 Phenanthrene	178	11.545	11.545	(1.005)	2540162	120.000	126.0
	124 Anthracene	178	11.630	11.630	(1.012)	2463069	120.000	126.3
	126 Carbazole	167	12.031	12.031	(1.047)	2055697	120.000	123.3
	129 Di-n-Butylphthalate	149	12.912	12.912	(1.124)	2742246	120.000	125.8
	134 Fluoranthene	202	13.836	13.836	(1.204)	2567323	120.000	122.9
	135 Benzidine	184	14.232	14.232	(0.854)	879145	120.000	121.6
	137 Pyrene	202	14.258	14.258	(0.856)	2574568	120.000	131.9
$	139 Terphenyl-d14	244	14.697	14.697	(0.882)	1998477	120.000	131.9
	145 3,3-Dimethylbenzidine	212	15.695	15.695	(0.942)	954543	120.000	123.2
	146 Butylbenzylphthalate	149	15.818	15.818	(0.949)	1007040	120.000	125.7
	150 Benzo(a)Anthracene	228	16.636	16.636	(0.998)	2088005	120.000	124.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.662	16.662	(1.000)	479102	40.0000	
152 3,3'-Dichlorobenzidine	252	16.727	16.727	(1.004)	902708	120.000	141.3
154 Chrysene	228	16.721	16.721	(1.004)	2065002	120.000	129.6
155 bis(2-ethylhexyl)Phthalate	149	17.036	17.036	(1.022)	1289803	120.000	129.0
158 Di-n-octylphthalate	149	18.190	18.190	(0.944)	2138603	120.000	128.1
160 Benzo(b)fluoranthene	252	18.644	18.644	(0.968)	1964404	120.000	128.5
161 Benzo(k)fluoranthene	252	18.692	18.692	(0.970)	1845977	120.000	121.8
165 Benzo(a)pyrene	252	19.184	19.184	(0.996)	1722701	120.000	127.9
* 166 Perylene-d12	264	19.269	19.269	(1.000)	384316	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	21.006	21.006	(1.090)	1660507	120.000	139.4
174 Dibenzo(a,h)anthracene	278	21.059	21.059	(1.093)	1612090	120.000	139.3
177 Benzo(g,h,i)perylene	276	21.476	21.476	(1.114)	1443328	120.000	135.2

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2996.D
Report Date: 10-May-2005 09:41

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

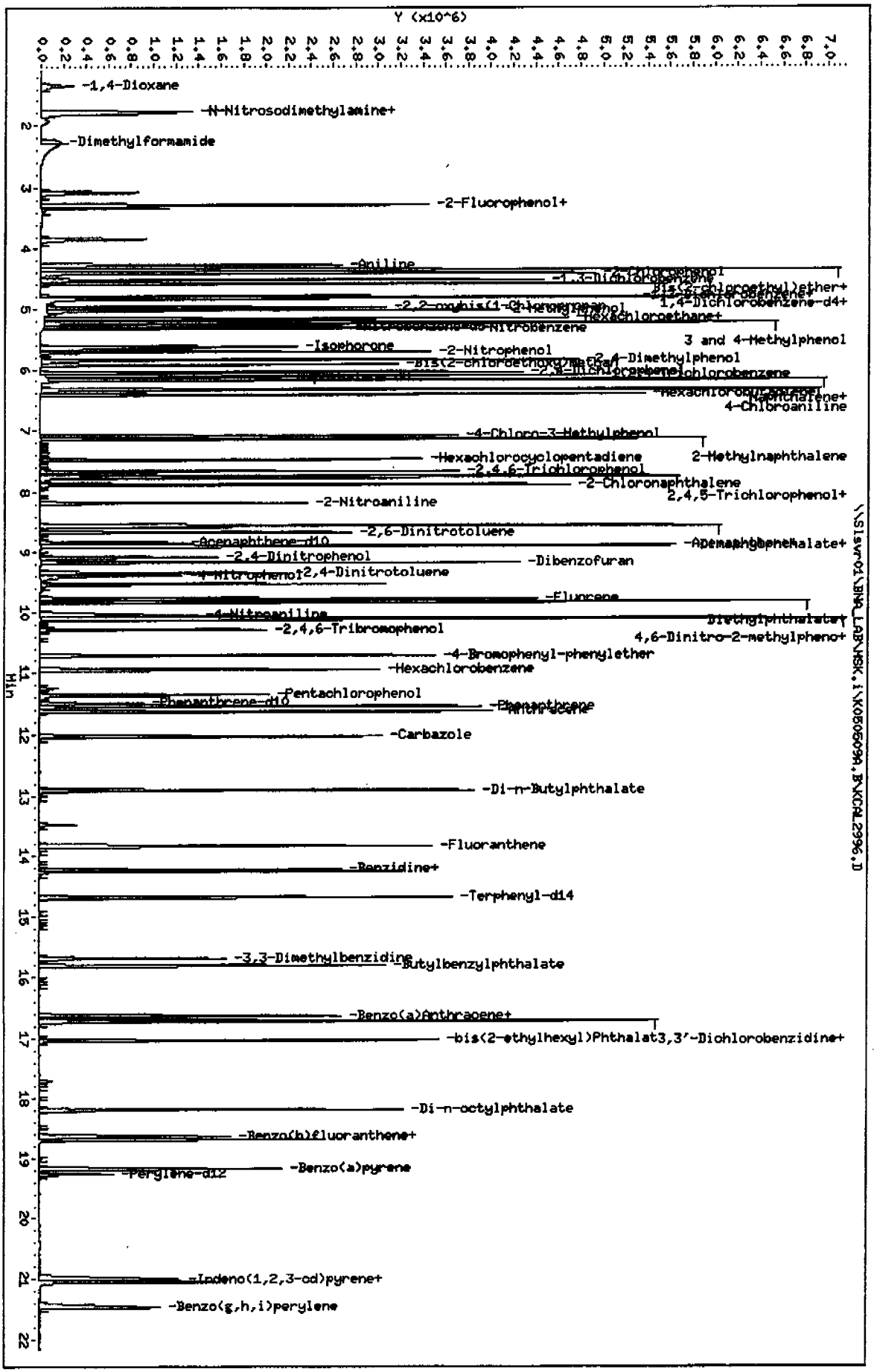
Instrument ID: MSK.i
Lab File ID: KCAL2996.D
Lab Smp Id: SSTD120
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Misc Info: SV0217-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD120
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	240310	24.33
48 Naphthalene-d8	657267	328634	1314534	791632	20.44
82 Acenaphthene-d10	351374	175687	702748	398402	13.38
121 Phenanthrene-d10	612492	306246	1224984	651890	6.43
153 Chrysene-d12	494718	247359	989436	479102	-3.16
166 Perylene-d12	409117	204559	818234	384316	-6.06

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.57	0.25
48 Naphthalene-d8	6.14	5.64	6.64	6.15	0.10
82 Acenaphthene-d10	8.83	8.33	9.33	8.83	0.01
121 Phenanthrene-d10	11.49	10.99	11.99	11.49	0.01
153 Chrysene-d12	16.66	16.16	17.16	16.66	0.04
166 Perylene-d12	19.27	18.77	19.77	19.27	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.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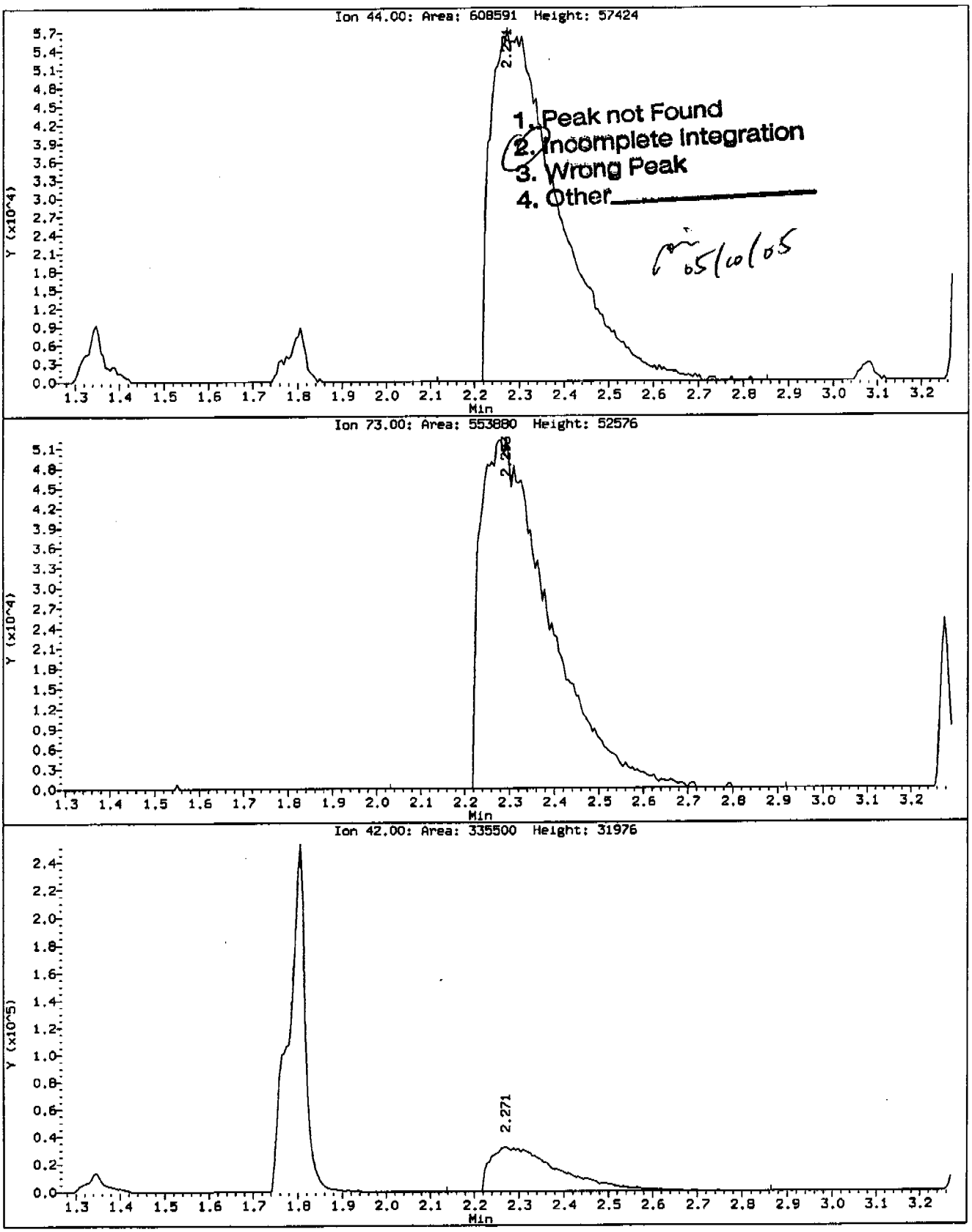
Data File: \\Slavr01\BNA_LAB\HSK.i\K050509A.B\KCAL2996.D
Date : 09-MAY-2005 13:04
Client ID: SSTD120
Sample Info: SSTD120
Volume Injected (uL): 1.0
Column phase:
Instrument: HSK.1
Operator XIA
Column diameter: 2.00
\\Slavr01\BNA_LAB\HSK.i\K050509A.B\KCAL2996.D
Hin
-1,4-Dioxane
-N-Nitrosodimethylamine+
-Dimethylformamide
-2-Fluorophenol+
-Aniline
-1,3-Dichlorobenzene
1,4-Dichlorobenzene-d4+
-Nitrobenzene-d5
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-Hexachlorobutadiene
3 and 4-Methylphenol
-Hexachlorocyclopentadiene
-2,4,6-Trichlorophenol
-2-Chloronaphthalene
2,4,5-Trichlorophenol+
-2-Nitroaniline
-2,6-Dinitrotoluene
-Acenaphthene-d10
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran
-4-Nitrophenol
2,4-Dinitrotoluene
-Fluorene
-4-Nitroaniline
-Diethylphthalate
-2,4,6-Tribromophenol
4,6-Dinitro-2-methylpheno+
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Pentachlorophenol
-Phenanthrene-d10
-Phenanthrene
-Anthracene
-Carbazole
-Di-n-Butylphthalate
-Fluoranthene
-Benzidine+
-Terphenyl-d14
-3,3-Dimethylbenzidine
-Butylbenzylphthalate
-Benzo(a)Anthracene+
-bis(2-ethylhexyl)Phthalat
3,3'-Dichlorobenzidine+
-Di-n-octylphthalate
-Benzo(b)fluoranthene+
-Perylene-d12
-Benzo(a)pyrene
-Indeno(1,2,3-cd)pyrene+
-Benzo(g,h,i)perylene

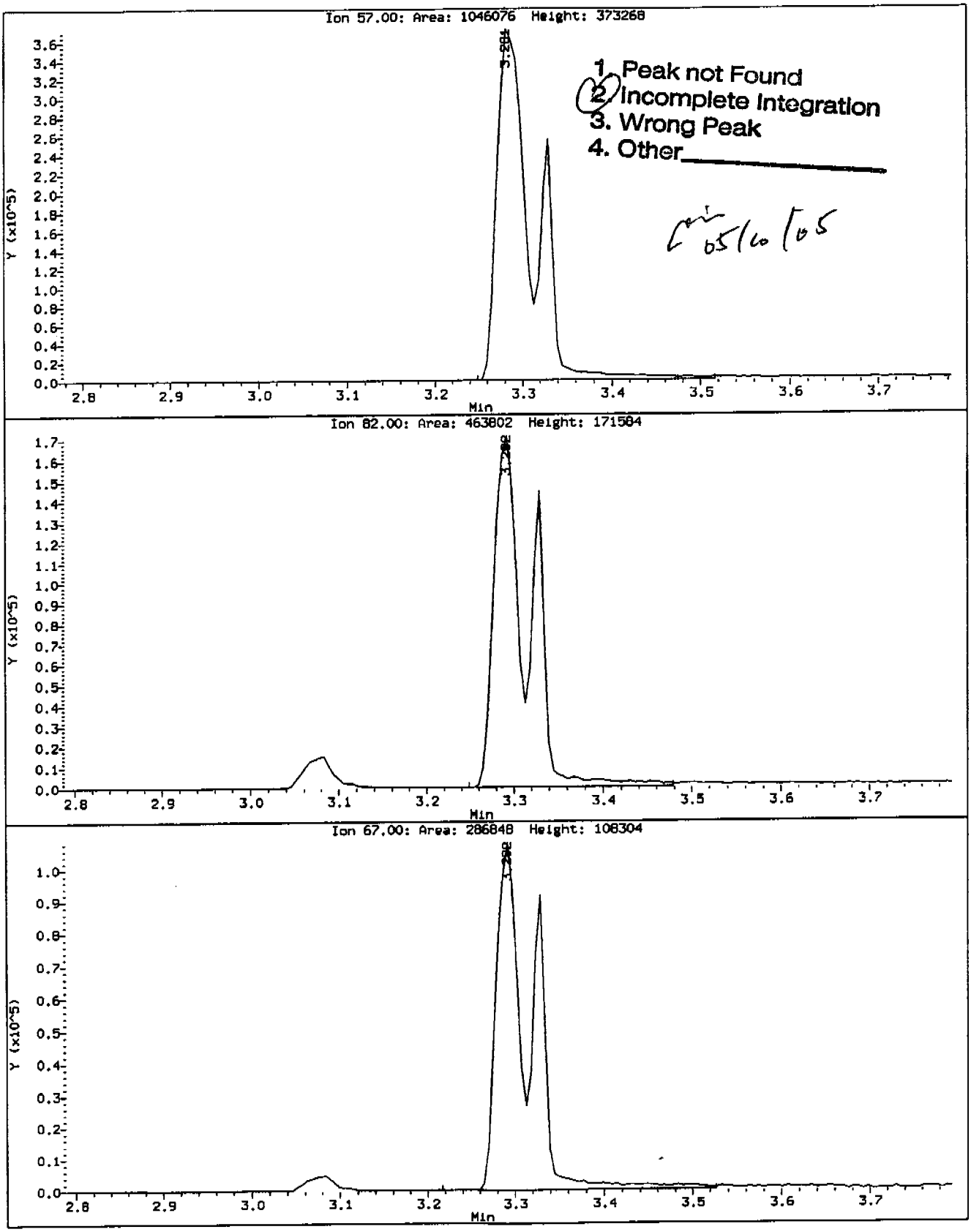
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2996.D
Injection Date: 09-MAY-2005 13:04
Instrument: MSK.i
Client Sample ID: SSTD120

Compound: Dimethylformamide
CAS Number: 68-12-2



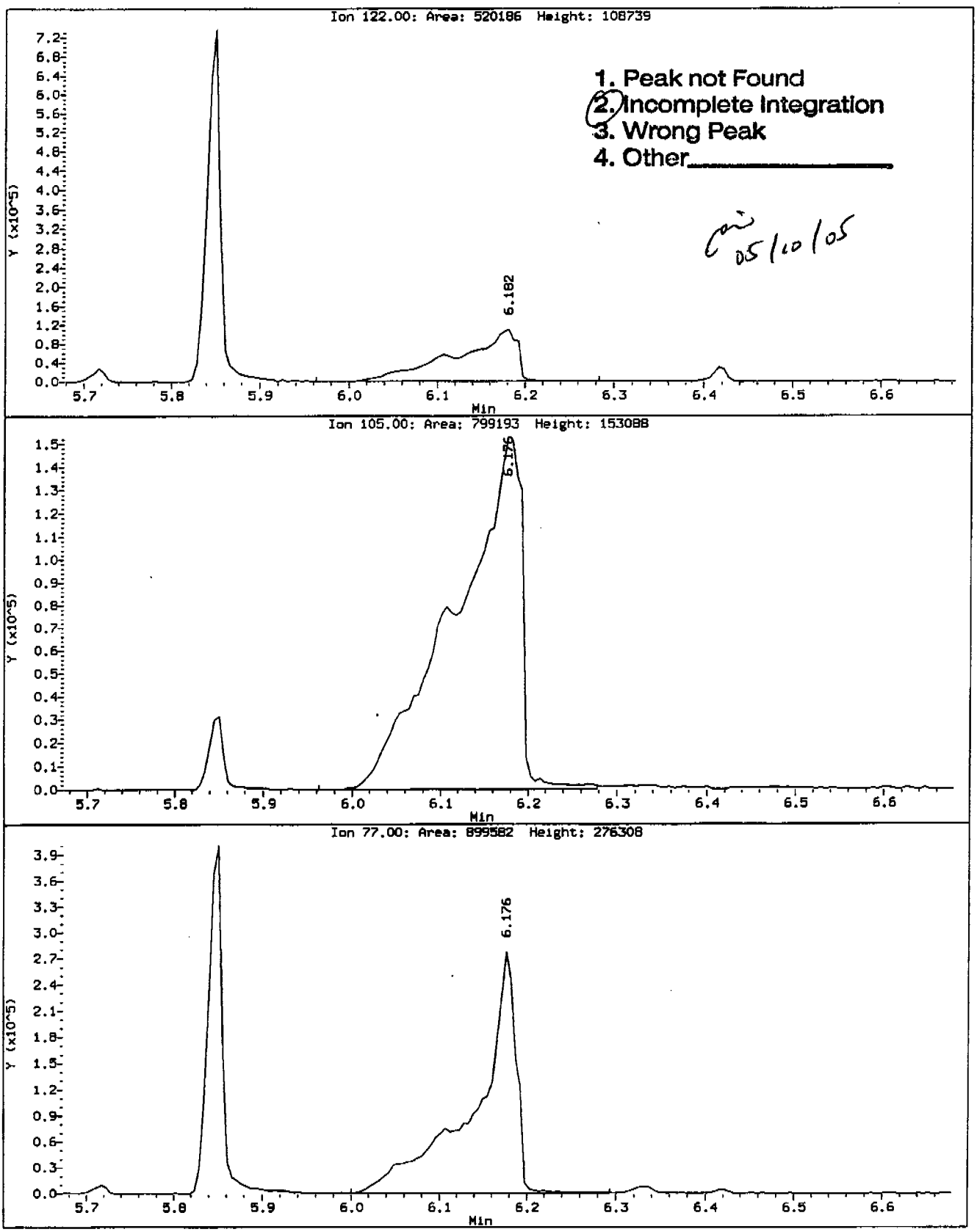
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2996.D
Injection Date: 09-MAY-2005 13:04
Instrument: MSK.i
Client Sample ID: SSTD120

Compound: Cyclohexanol
CAS Number:



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2996.D
Injection Date: 09-MAY-2005 13:04
Instrument: MSK.i
Client Sample ID: SSTD120

Compound: Benzoic Acid
CAS Number: 65-85-0



STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2997.D
Lab Smp Id: SSTD080 Client Smp ID: SSTD080
Inj Date : 09-MAY-2005 13:36
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD080
Misc Info : SV0216-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Meth Date : 10-May-2005 09:41 hongs Quant Type: ISTD
Cal Date : 07-MAY-2005 23:52 Cal File: KCAL2966.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 1,4-Dioxane	88	1.292	1.292	(0.284)	150283	80.0000	87.62
	4 N-Nitrosodimethylamine	74	1.725	1.725	(0.379)	271108	80.0000	81.36
	3 Pyridine	79	1.687	1.687	(0.371)	441556	80.0000	75.99
	5 Dimethylformamide	44	2.211	2.211	(0.486)	375473	80.0000	81.48(M)
$	10 2-Fluorophenol	112	3.247	3.247	(0.714)	537962	80.0000	84.48
	11 Cyclohexanol	57	3.263	3.263	(0.717)	628563	80.0000	86.94(M)
	17 Aniline	93	4.251	4.251	(0.934)	939148	80.0000	80.12
	19 Bis(2-chloroethyl)ether	93	4.326	4.326	(0.951)	695464	80.0000	83.78
$	15 Phenol-d5	99	4.321	4.321	(0.950)	757925	80.0000	83.67
	16 Phenol	94	4.337	4.337	(0.953)	822676	80.0000	82.29
	20 2-Chlorophenol	128	4.385	4.385	(0.964)	593146	80.0000	81.67
	21 1,3-Dichlorobenzene	146	4.508	4.508	(0.991)	684483	80.0000	82.53
*	22 1,4-Dichlorobenzene-d4	152	4.551	4.551	(1.000)	214171	40.0000	
	23 1,4-Dichlorobenzene	146	4.572	4.572	(1.005)	718646	80.0000	81.74
	26 1,2-Dichlorobenzene	146	4.796	4.796	(1.054)	672785	80.0000	82.35
	25 Benzyl Alcohol	108	4.812	4.812	(1.058)	277377	80.0000	77.67
	28 2,2-oxybis(1-Chloropropane)	45	4.962	4.962	(1.090)	681730	80.0000	79.57
	27 2-Methylphenol	108	5.005	5.005	(1.100)	513065	80.0000	79.49
	35 Hexachloroethane	117	5.149	5.149	(1.131)	315071	80.0000	81.79
	32 N-Nitrosodinpropylamine	70	5.154	5.154	(1.133)	540476	80.0000	79.79
	29 3 and 4-Methylphenol	108	5.208	5.208	(1.144)	1107804	160.000	160.4(A)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.282	5.282	(0.861)	827697	80.0000	80.80
	37 Nitrobenzene	77	5.304	5.304	(0.865)	852849	80.0000	78.40
	39 Isophorone	82	5.603	5.603	(0.914)	1112366	80.0000	78.42
	40 2-Nitrophenol	139	5.699	5.699	(0.929)	313638	80.0000	82.99
	41 2,4-Dimethylphenol	107	5.833	5.833	(0.951)	662810	80.0000	82.54
	42 Bis(2-chloroethoxy)methane	93	5.907	5.907	(0.963)	730860	80.0000	80.71
	45 2,4-Dichlorophenol	162	6.036	6.036	(0.984)	476989	80.0000	80.64
	47 1,2,4-Trichlorobenzene	180	6.089	6.089	(0.993)	578366	80.0000	82.12
*	48 Naphthalene-d8	136	6.132	6.132	(1.000)	752750	40.0000	
	44 Benzoic Acid	122	6.142	6.142	(1.002)	320981	80.0000	86.47(M)
	50 Naphthalene	128	6.164	6.164	(1.005)	1712436	80.0000	80.44
	51 4-Chloroaniline	127	6.319	6.319	(1.030)	700021	80.0000	81.47
	54 Hexachlorobutadiene	225	6.404	6.404	(1.044)	401894	80.0000	82.21
	62 2-Methylnaphthalene	142	7.125	7.125	(1.162)	1199456	80.0000	78.37
	59 4-Chloro-3-Methylphenol	107	7.072	7.072	(1.153)	544849	80.0000	79.10
	66 Hexachlorocyclopentadiene	237	7.462	7.462	(0.847)	360749	80.0000	85.96
	67 2,4,6-Trichlorophenol	196	7.654	7.654	(0.868)	376888	80.0000	82.74
	68 2,4,5-Trichlorophenol	196	7.734	7.734	(0.878)	416508	80.0000	86.46
$	69 2-Fluorobiphenyl	172	7.745	7.745	(0.879)	1320142	80.0000	83.18
	72 2-Chloronaphthalene	162	7.868	7.868	(0.893)	1083887	80.0000	81.54
	73 2-Nitroaniline	65	8.167	8.167	(0.927)	457240	80.0000	80.31
	76 Dimethylphthalate	163	8.536	8.536	(0.968)	1223560	80.0000	80.26
	79 Acenaphthylene	152	8.552	8.552	(0.970)	1608365	80.0000	81.96
	80 2,6-Dinitrotoluene	165	8.648	8.648	(0.981)	263240	80.0000	80.78
*	82 Acenaphthene-d10	164	8.814	8.814	(1.000)	395102	40.0000	
	83 Acenaphthene	153	8.872	8.872	(1.007)	1004433	80.0000	81.00
	81 3-Nitroaniline	138	8.888	8.888	(1.008)	266880	80.0000	83.17
	84 2,4-Dinitrophenol	184	9.065	9.065	(1.028)	169807	80.0000	87.72
	86 Dibenzofuran	168	9.155	9.155	(1.039)	1474158	80.0000	80.41
	88 2,4-Dinitrotoluene	165	9.326	9.326	(1.058)	342909	80.0000	81.36
	85 4-Nitrophenol	109	9.369	9.369	(1.063)	236269	80.0000	83.06
	93 Diethylphthalate	149	9.802	9.802	(1.112)	1207295	80.0000	78.78
	94 Fluorene	166	9.764	9.764	(1.108)	1192761	80.0000	81.02
	95 4-Chlorophenyl-phenylether	204	9.813	9.813	(1.113)	639104	80.0000	80.65
	98 4-Nitroaniline	138	10.021	10.021	(1.137)	254791	80.0000	81.61
	99 4,6-Dinitro-2-methylphenol	198	10.069	10.069	(0.877)	256005	80.0000	92.15
	100 N-Nitrosodiphenylamine	169	10.085	10.085	(0.879)	851106	80.0000	83.39
	102 Azobenzene	77	10.101	10.101	(0.880)	1883800	80.0000	82.53
$	104 2,4,6-Tribromophenol	330	10.267	10.267	(1.165)	180419	80.0000	81.18
	109 4-Bromophenyl-phenylether	248	10.699	10.699	(0.932)	382658	80.0000	81.38
	112 Hexachlorobenzene	284	10.924	10.924	(0.952)	396201	80.0000	82.78
	117 Pentachlorophenol	266	11.335	11.335	(0.987)	238053	80.0000	89.38
*	121 Phenanthrene-d10	188	11.479	11.479	(1.000)	671617	40.0000	
	122 Phenanthrene	178	11.527	11.527	(1.004)	1680282	80.0000	80.88
	124 Anthracene	178	11.607	11.607	(1.011)	1624068	80.0000	80.84
	126 Carbazole	167	12.013	12.013	(1.047)	1372503	80.0000	79.92
	129 Di-n-Butylphthalate	149	12.895	12.895	(1.123)	1839014	80.0000	81.91
	134 Fluoranthene	202	13.819	13.819	(1.204)	1731055	80.0000	80.44
	135 Benzidine	184	14.214	14.214	(0.854)	638851	80.0000	83.36
	137 Pyrene	202	14.236	14.236	(0.855)	1720770	80.0000	83.16
$	139 Terphenyl-d14	244	14.679	14.679	(0.882)	1345965	80.0000	83.79
	145 3,3-Dimethylbenzidine	212	15.678	15.678	(0.942)	696606	80.0000	84.76
	146 Butylbenzylphthalate	149	15.801	15.801	(0.949)	697571	80.0000	82.10
	150 Benzo(a)Anthracene	228	16.613	16.613	(0.998)	1453581	80.0000	81.92

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2997.D
Report Date: 10-May-2005 09:41

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.645	16.645	(1.000)	508021	40.0000	
152 3,3'-Dichlorobenzidine	252	16.709	16.709	(1.004)	599098	80.0000	88.45
154 Chrysene	228	16.699	16.699	(1.003)	1383746	80.0000	81.89
155 bis(2-ethylhexyl)Phthalate	149	17.024	17.024	(1.023)	879499	80.0000	82.95
158 Di-n-octylphthalate	149	18.173	18.173	(0.944)	1453848	80.0000	79.74
160 Benzo(b)fluoranthene	252	18.622	18.622	(0.967)	1352082	80.0000	81.02
161 Benzo(k)fluoranthene	252	18.670	18.670	(0.970)	1294351	80.0000	78.25
165 Benzo(a)pyrene	252	19.161	19.161	(0.995)	1222080	80.0000	83.10
* 166 Perylene-d12	264	19.252	19.252	(1.000)	419618	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.978	20.978	(1.090)	1190598	80.0000	91.53
174 Dibenzo(a,h)anthracene	278	21.026	21.026	(1.092)	1149677	80.0000	90.96
177 Benzo(g,h,i)perylene	276	21.437	21.437	(1.113)	1027037	80.0000	88.15

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2997.D
Report Date: 10-May-2005 09:41

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

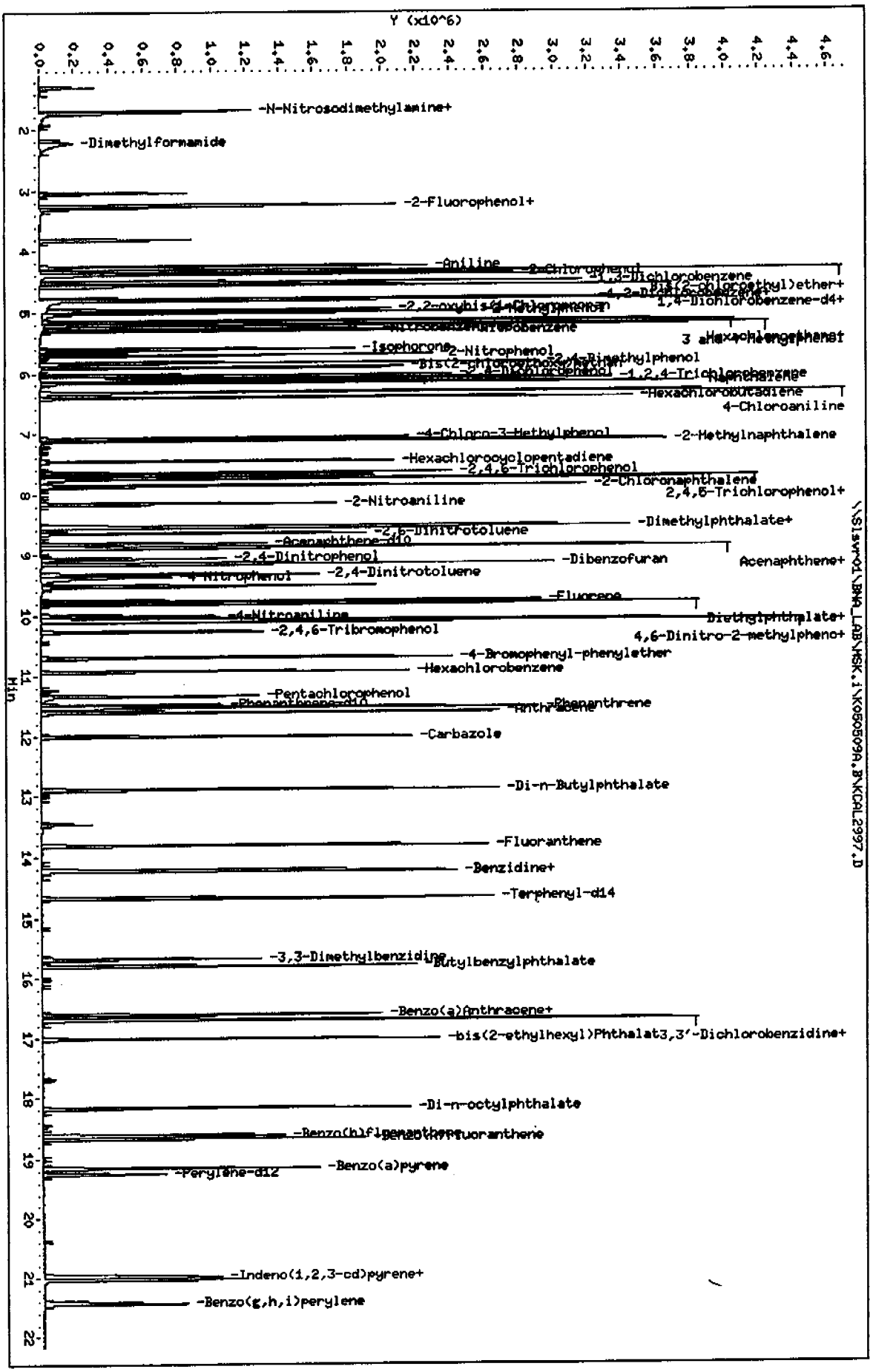
Instrument ID: MSK.i
Lab File ID: KCAL2997.D
Lab Smp Id: SSTD080
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Misc Info: SV0216-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD080
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	214171	10.81
48 Naphthalene-d8	657267	328634	1314534	752750	14.53
82 Acenaphthene-d10	351374	175687	702748	395102	12.44
121 Phenanthrene-d10	612492	306246	1224984	671617	9.65
153 Chrysene-d12	494718	247359	989436	508021	2.69
166 Perylene-d12	409117	204559	818234	419618	2.57

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.55	-0.13
48 Naphthalene-d8	6.14	5.64	6.64	6.13	-0.18
82 Acenaphthene-d10	8.83	8.33	9.33	8.81	-0.13
121 Phenanthrene-d10	11.49	10.99	11.99	11.48	-0.10
153 Chrysene-d12	16.66	16.16	17.16	16.65	-0.07
166 Perylene-d12	19.27	18.77	19.77	19.25	-0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

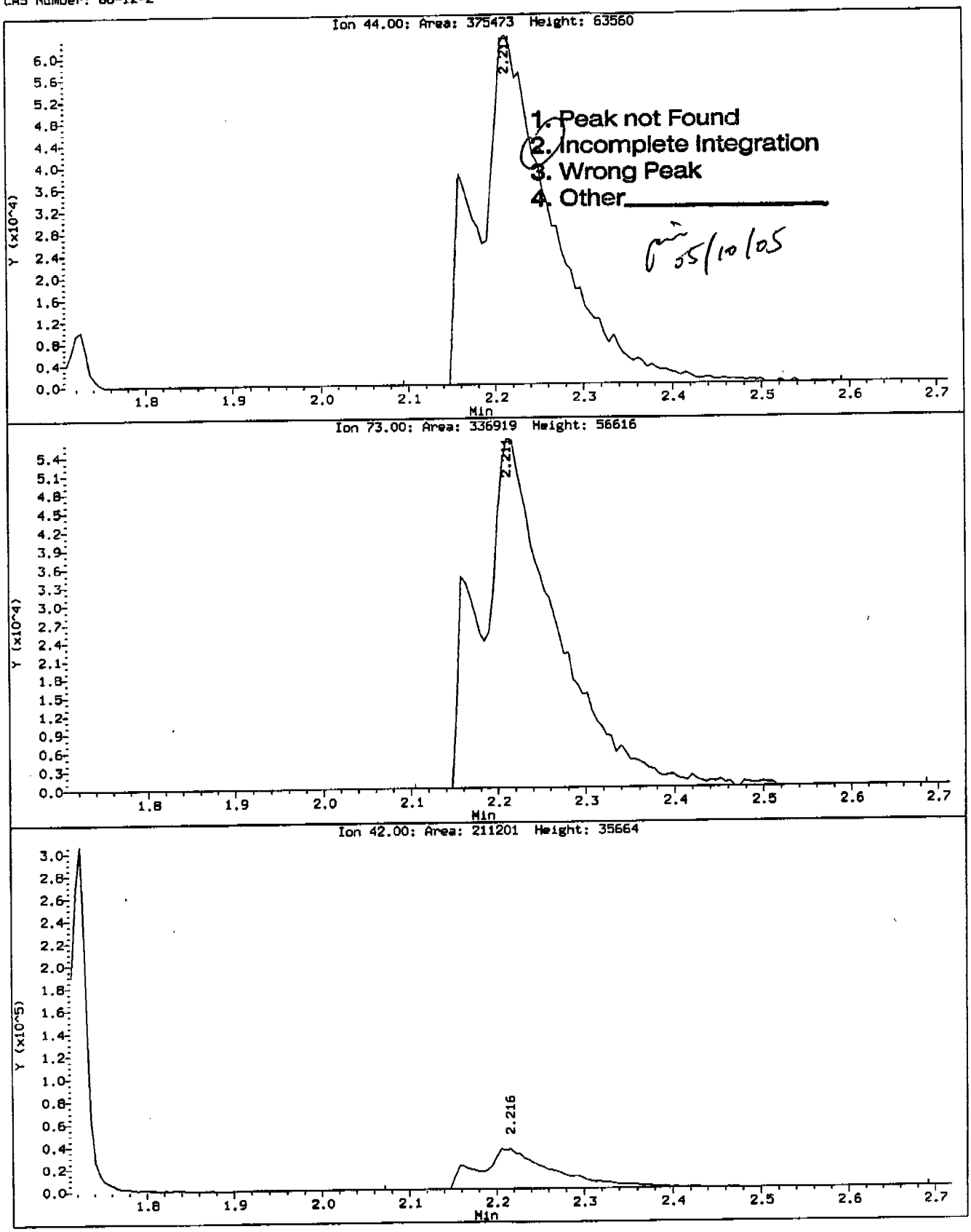


Data File: \\Slavr01\BNA_LAB\HSK.i\K050509A.B\KCAL2997.D
Date : 09-MAY-2005 13:36
Client ID: SSTD080
Sample Info: SSTD080
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

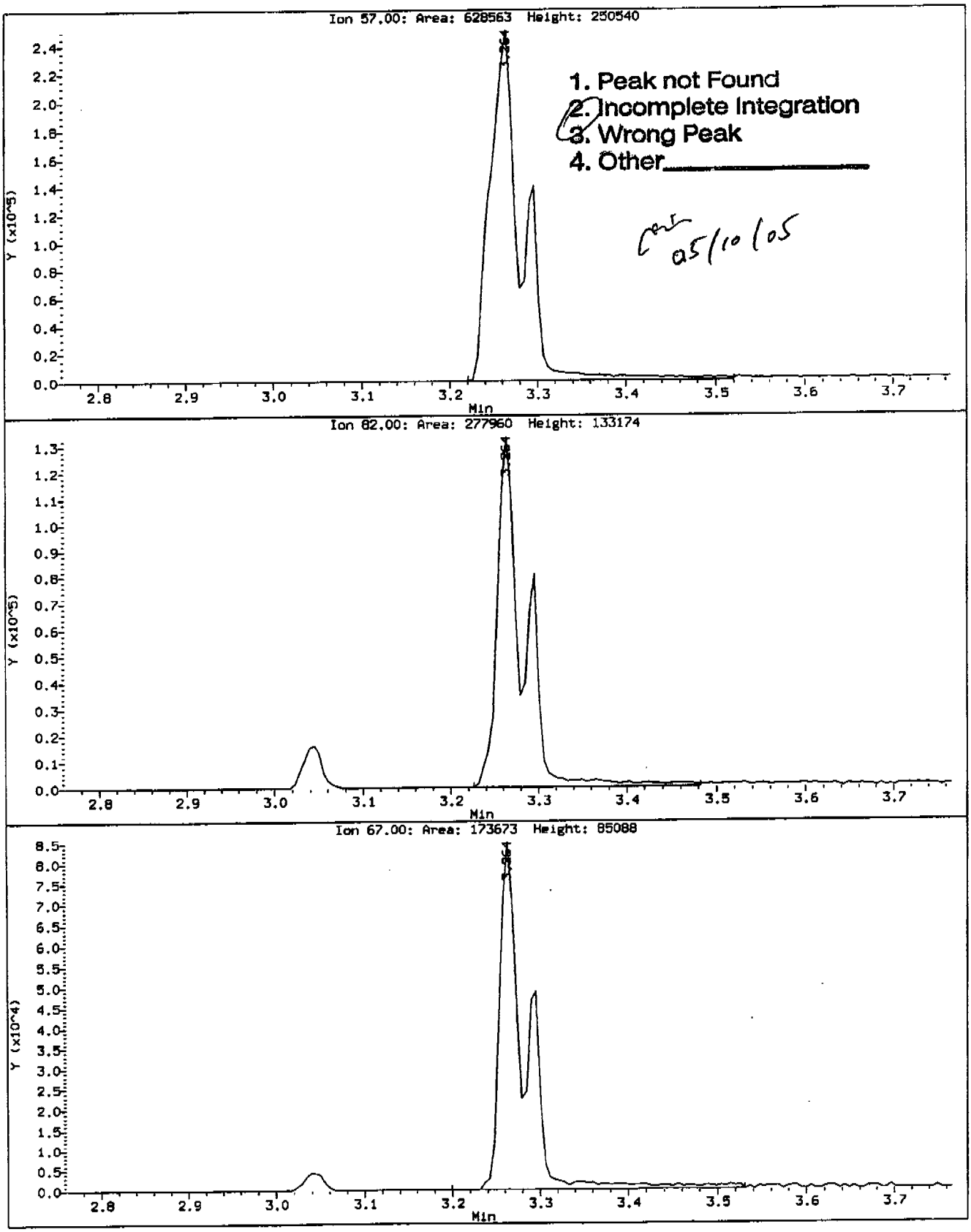
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2997.D
Injection Date: 09-MAY-2005 13:36
Instrument: MSK.i
Client Sample ID: SSTD080

Compound: Dimethylformamide
CAS Number: 68-12-2



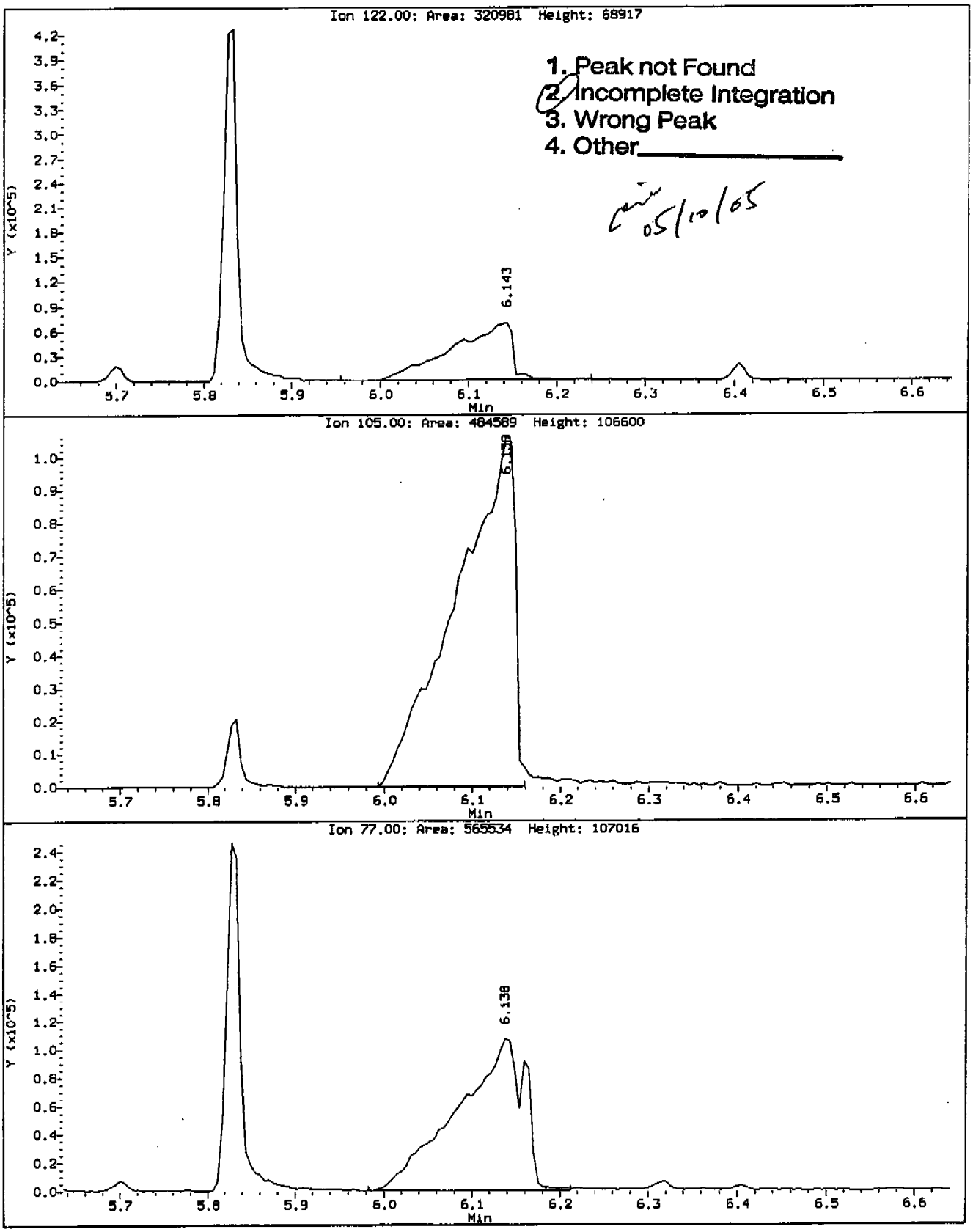
Data File: \\Slmvr01\BNA_LAB\MSK.i\KO50509A.B\KCAL2997.D
Injection Date: 09-MAY-2005 13:36
Instrument: MSK.i
Client Sample ID: SSTD080

Compound: Cyclohexanol
CAS Number:



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2997.D
Injection Date: 09-MAY-2005 13:36
Instrument: MSK.i
Client Sample ID: SSTD080

Compound: Benzoic Acid
CAS Number: 65-85-0



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2998.D
Report Date: 10-May-2005 09:41

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2998.D
Lab Smp Id: SSTD020 Client Smp ID: SSTD020
Inj Date : 09-MAY-2005 14:08
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD020
Misc Info : SV0214-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Meth Date : 10-May-2005 09:41 hongs Quant Type: ISTD
Cal Date : 08-MAY-2005 00:24 Cal File: KCAL2967.D
Als bottle: 7 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 1,4-Dioxane	88	1.269	1.269	(0.279)	29079	20.0000	20.19
	4 N-Nitrosodimethylamine	74	1.691	1.691	(0.372)	58063	20.0000	20.75
	3 Pyridine	79	1.680	1.680	(0.370)	102961	20.0000	21.10(M)
	5 Dimethylformamide	44	2.134	2.134	(0.470)	78722	20.0000	20.35(M)
$	10 2-Fluorophenol	112	3.224	3.224	(0.710)	107530	20.0000	20.11
	11 Cyclohexanol	57	3.245	3.245	(0.714)	122326	20.0000	20.15
	17 Aniline	93	4.239	4.239	(0.933)	197987	20.0000	20.12
	19 Bis(2-chloroethyl)ether	93	4.314	4.314	(0.949)	131968	20.0000	18.93
$	15 Phenol-d5	99	4.308	4.308	(0.948)	148133	20.0000	19.48(a)
	16 Phenol	94	4.324	4.324	(0.952)	162288	20.0000	19.33(a)
	20 2-Chlorophenol	128	4.372	4.372	(0.962)	119090	20.0000	19.53(a)
	21 1,3-Dichlorobenzene	146	4.495	4.495	(0.989)	133896	20.0000	19.23(a)
*	22 1,4-Dichlorobenzene-d4	152	4.543	4.543	(1.000)	179829	40.0000	
	23 1,4-Dichlorobenzene	146	4.565	4.565	(1.005)	141108	20.0000	19.11(a)
	26 1,2-Dichlorobenzene	146	4.784	4.784	(1.053)	128484	20.0000	18.73
	25 Benzyl Alcohol	108	4.789	4.789	(1.054)	52348	20.0000	17.46(a)
	28 2,2-oxybis(1-Chloropropane)	45	4.955	4.955	(1.091)	143407	20.0000	19.93
	27 2-Methylphenol	108	4.997	4.997	(1.100)	104540	20.0000	19.29(a)
	35 Hexachloroethane	117	5.142	5.142	(1.132)	63058	20.0000	19.50(a)
	32 N-Nitrosodinpropylamine	70	5.131	5.131	(1.129)	113647	20.0000	19.98
	29 3 and 4-Methylphenol	108	5.190	5.190	(1.142)	225844	40.0000	38.93

CAM 05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2998.D
Report Date: 10-May-2005 09:41

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.270	5.270	(0.860)	176284	20.0000	19.72(a)
	37 Nitrobenzene	77	5.291	5.291	(0.864)	182487	20.0000	19.23(a)
	39 Isophorone	82	5.580	5.580	(0.911)	244054	20.0000	19.72(a)
	40 2-Nitrophenol	139	5.692	5.692	(0.929)	66222	20.0000	20.08
	41 2,4-Dimethylphenol	107	5.815	5.815	(0.949)	139592	20.0000	19.92(a)
	42 Bis(2-chloroethoxy)methane	93	5.895	5.895	(0.962)	150571	20.0000	19.06(a)
	45 2,4-Dichlorophenol	162	6.028	6.028	(0.984)	98358	20.0000	19.06(a)
	47 1,2,4-Trichlorobenzene	180	6.082	6.082	(0.993)	116052	20.0000	18.88(a)
*	48 Naphthalene-d8	136	6.125	6.125	(1.000)	656798	40.0000	
	44 Benzoic Acid	122	6.050	6.050	(0.988)	59723	20.0000	18.44
	50 Naphthalene	128	6.151	6.151	(1.004)	342835	20.0000	18.46(a)
	51 4-Chloroaniline	127	6.301	6.301	(1.029)	139735	20.0000	18.64(a)
	54 Hexachlorobutadiene	225	6.402	6.402	(1.045)	80479	20.0000	18.87(a)
	62 2-Methylnaphthalene	142	7.113	7.113	(1.161)	257037	20.0000	19.25
	59 4-Chloro-3-Methylphenol	107	7.075	7.075	(1.155)	115826	20.0000	19.27(a)
	66 Hexachlorocyclopentadiene	237	7.460	7.460	(0.847)	63417	20.0000	16.50(a)
	67 2,4,6-Trichlorophenol	196	7.647	7.647	(0.868)	78242	20.0000	18.76(a)
	68 2,4,5-Trichlorophenol	196	7.738	7.738	(0.879)	82243	20.0000	18.64(a)
$	69 2-Fluorobiphenyl	172	7.733	7.733	(0.878)	264688	20.0000	18.21(a)
	72 2-Chloronaphthalene	162	7.855	7.855	(0.892)	225879	20.0000	18.56(a)
	73 2-Nitroaniline	65	8.149	8.149	(0.925)	103471	20.0000	19.85(a)
	76 Dimethylphthalate	163	8.518	8.518	(0.967)	258723	20.0000	18.53(a)
	79 Acenaphthylene	152	8.539	8.539	(0.970)	331641	20.0000	18.46(a)
	80 2,6-Dinitrotoluene	165	8.630	8.630	(0.980)	57534	20.0000	19.28(a)
*	82 Acenaphthene-d10	164	8.806	8.806	(1.000)	361789	40.0000	
	83 Acenaphthene	153	8.860	8.860	(1.006)	211003	20.0000	18.58(a)
	81 3-Nitroaniline	138	8.865	8.865	(1.007)	57825	20.0000	19.68
	84 2,4-Dinitrophenol	184	9.052	9.052	(1.028)	27942	20.0000	15.76(a)
	86 Dibenzofuran	168	9.143	9.143	(1.038)	318454	20.0000	18.97(a)
	88 2,4-Dinitrotoluene	165	9.309	9.309	(1.057)	76696	20.0000	19.87(a)
	85 4-Nitrophenol	109	9.373	9.373	(1.064)	47204	20.0000	18.12
	93 Diethylphthalate	149	9.773	9.773	(1.110)	261563	20.0000	18.64(a)
	94 Fluorene	166	9.752	9.752	(1.107)	253062	20.0000	18.77(a)
	95 4-Chlorophenyl-phenylether	204	9.805	9.805	(1.113)	134085	20.0000	18.48(a)
	98 4-Nitroaniline	138	9.976	9.976	(1.133)	56723	20.0000	19.84(a)
	99 4,6-Dinitro-2-methylphenol	198	10.035	10.035	(0.875)	51467	20.0000	19.56(a)
	100 N-Nitrosodiphenylamine	169	10.062	10.062	(0.877)	177010	20.0000	18.31(a)
	102 Azobenzene	77	10.083	10.083	(0.879)	398707	20.0000	18.44(a)
$	104 2,4,6-Tribromophenol	330	10.254	10.254	(1.164)	38392	20.0000	18.86(a)
	109 4-Bromophenyl-phenylether	248	10.687	10.687	(0.932)	85013	20.0000	19.09(a)
	112 Hexachlorobenzene	284	10.911	10.911	(0.951)	85884	20.0000	18.94(a)
	117 Pentachlorophenol	266	11.322	11.322	(0.987)	42051	20.0000	16.67(a)
*	121 Phenanthrene-d10	188	11.472	11.472	(1.000)	636100	40.0000	
	122 Phenanthrene	178	11.509	11.509	(1.003)	371481	20.0000	18.88(a)
	124 Anthracene	178	11.590	11.590	(1.010)	364721	20.0000	19.17(a)
	126 Carbazole	167	11.996	11.996	(1.046)	313486	20.0000	19.27(a)
	129 Di-n-Butylphthalate	149	12.882	12.882	(1.123)	412990	20.0000	19.42(a)
	134 Fluoranthene	202	13.801	13.801	(1.203)	394716	20.0000	19.37(a)
	135 Benzidine	184	14.202	14.202	(0.854)	163298	20.0000	20.67
	137 Pyrene	202	14.218	14.218	(0.855)	398526	20.0000	18.68(a)
$	139 Terphenyl-d14	244	14.667	14.667	(0.882)	311279	20.0000	18.80(a)
	145 3,3-Dimethylbenzidine	212	15.666	15.666	(0.942)	173839	20.0000	20.52
	146 Butylbenzylphthalate	149	15.789	15.789	(0.949)	170482	20.0000	19.46(a)
	150 Benzo(a)Anthracene	228	16.601	16.601	(0.998)	351106	20.0000	19.19(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.638	16.638	(1.000)	523735	40.0000	
152 3,3'-Dichlorobenzidine	252	16.697	16.697	(1.004)	132894	20.0000	19.03(a)
154 Chrysene	228	16.681	16.681	(1.003)	327346	20.0000	18.79(a)
155 bis(2-ethylhexyl)Phthalate	149	17.017	17.017	(1.023)	208965	20.0000	19.12(a)
158 Di-n-octylphthalate	149	18.160	18.160	(0.944)	352302	20.0000	18.65(a)
160 Benzo(b)fluoranthene	252	18.604	18.604	(0.967)	317363	20.0000	18.36(a)
161 Benzo(k)fluoranthene	252	18.641	18.641	(0.969)	326532	20.0000	19.06(a)
165 Benzo(a)pyrene	252	19.138	19.138	(0.994)	294915	20.0000	19.36(a)
* 166 Perylene-d12	264	19.245	19.245	(1.000)	434641	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.949	20.949	(1.089)	254686	20.0000	18.90(a)
174 Dibenzo(a,h)anthracene	278	20.997	20.997	(1.091)	255631	20.0000	19.53(a)
177 Benzo(g,h,i)perylene	276	21.398	21.398	(1.112)	235233	20.0000	19.49(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2998.D Page 4
Report Date: 10-May-2005 09:41

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

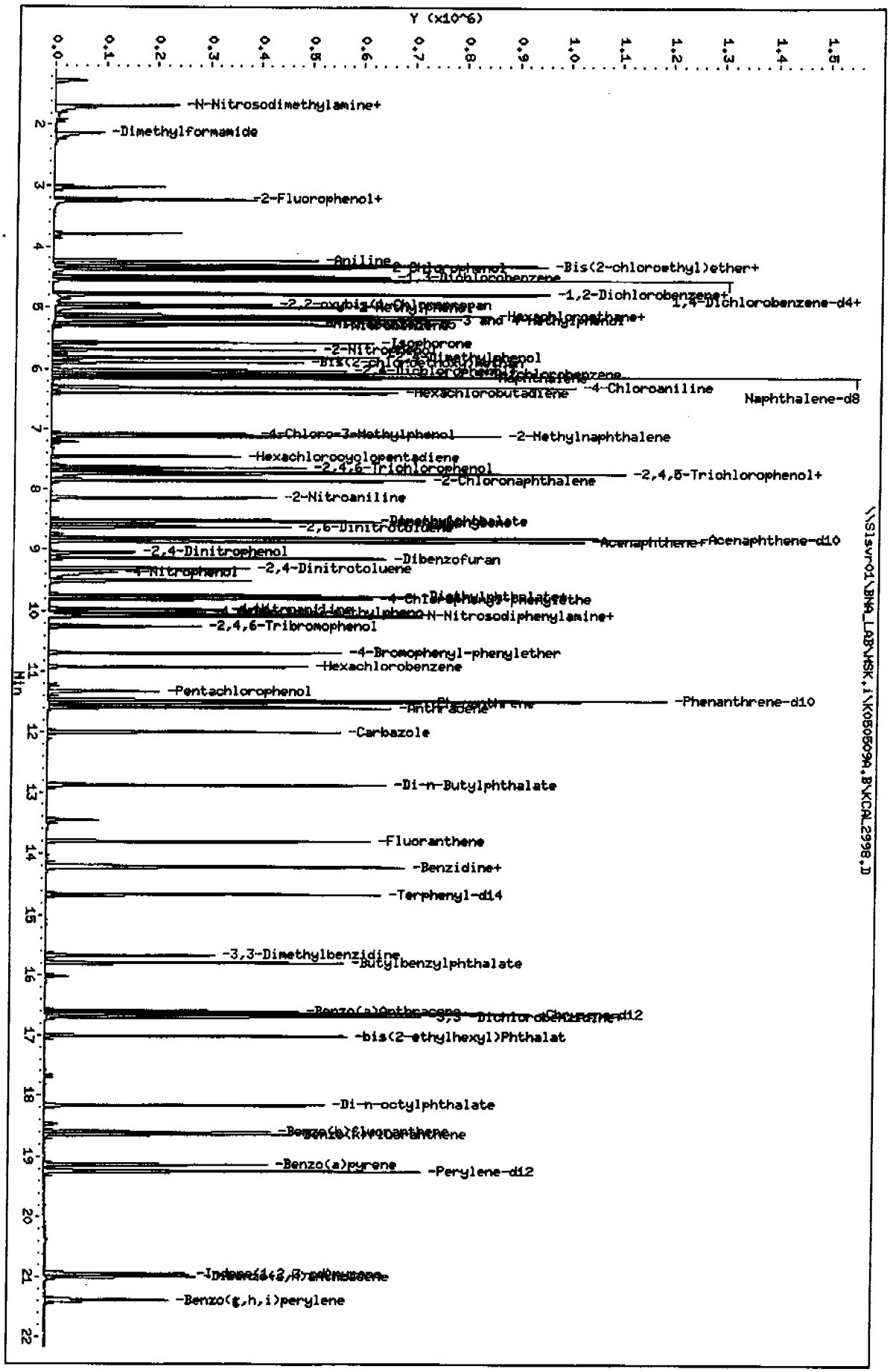
Instrument ID: MSK.i
Lab File ID: KCAL2998.D
Lab Smp Id: SSTD020
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Misc Info: SV0214-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD020
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	179829	-6.96
48 Naphthalene-d8	657267	328634	1314534	656798	-0.07
82 Acenaphthene-d10	351374	175687	702748	361789	2.96
121 Phenanthrene-d10	612492	306246	1224984	636100	3.85
153 Chrysene-d12	494718	247359	989436	523735	5.87
166 Perylene-d12	409117	204559	818234	434641	6.24

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.54	-0.29
48 Naphthalene-d8	6.14	5.64	6.64	6.13	-0.30
82 Acenaphthene-d10	8.83	8.33	9.33	8.81	-0.21
121 Phenanthrene-d10	11.49	10.99	11.99	11.47	-0.16
153 Chrysene-d12	16.66	16.16	17.16	16.64	-0.11
166 Perylene-d12	19.27	18.77	19.77	19.25	-0.12

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

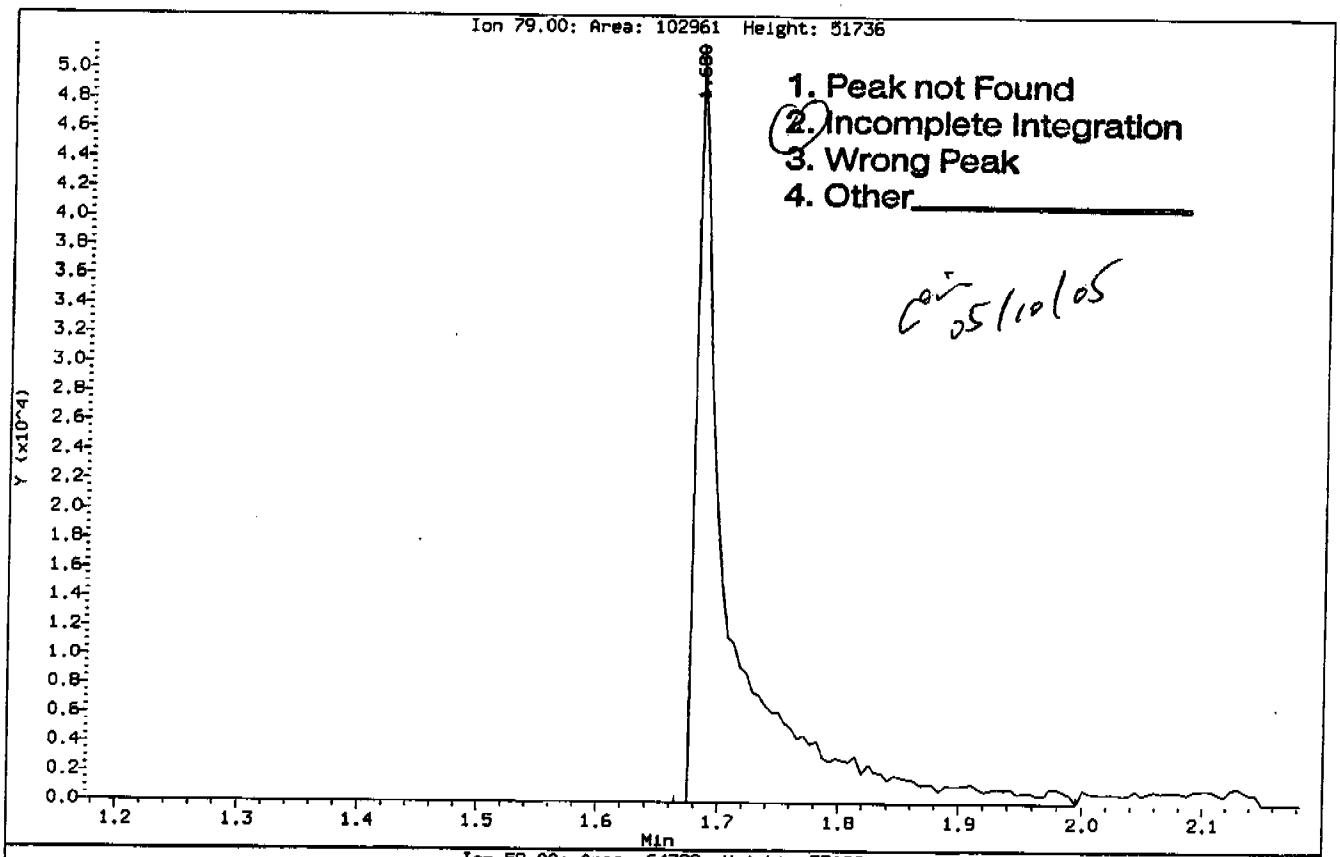


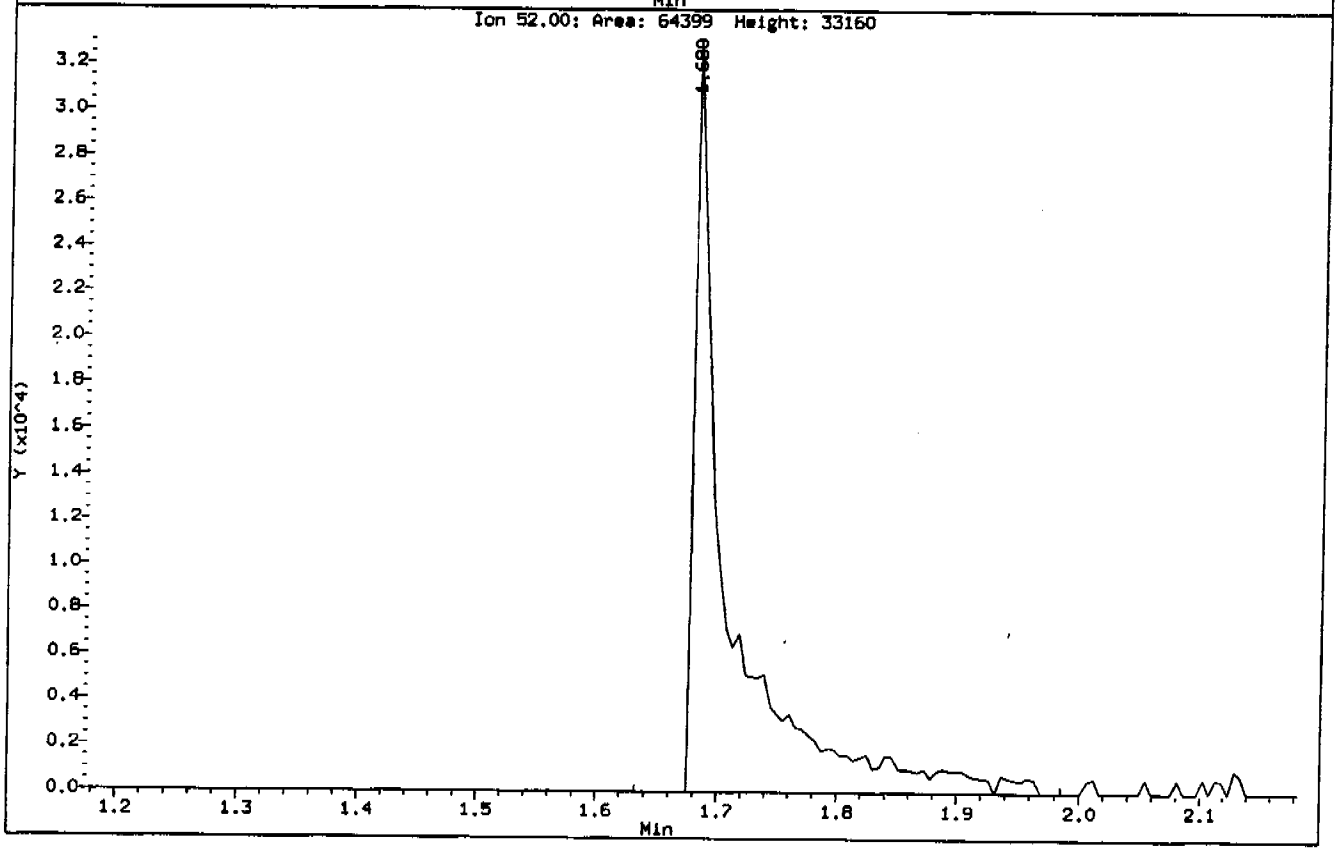
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2998.D
Date : 09-MAY-2005 14:08
Client ID: SSTD020
Sample Info: SSTD020
Volume Injected (uL): 1.0
Column phase:

Instrument: MSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slavr01\BNA_LAB\MSK.i\K050509A.B\KCAL2998.D
Injection Date: 09-MAY-2005 14:08
Instrument: MSK.i
Client Sample ID: SSTD020

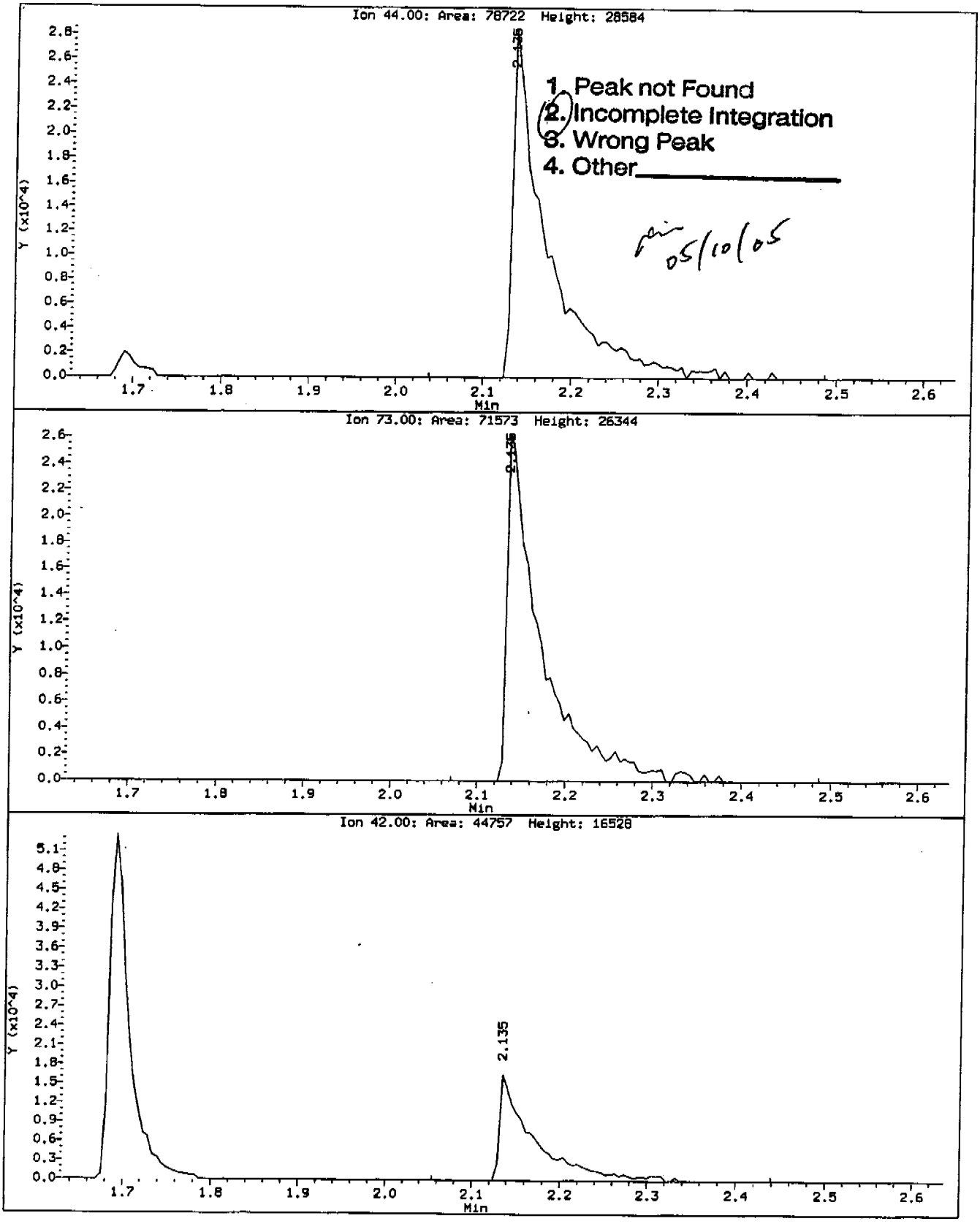
Compound: Pyridine
CAS Number: 110-86-1





Data File: \\Slevr01\BNA_LAB\MSK.i\K050509A.B\KCAL2998.D
Injection Date: 09-MAY-2005 14:08
Instrument: MSK.i
Client Sample ID: SSTD020

Compound: Dimethylformamide
CAS Number: 68-12-2



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2999.D Page 1
Report Date: 10-May-2005 09:41

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GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2999.D
Lab Smp Id: SSTD010 Client Smp ID: SSTD010
Inj Date : 09-MAY-2005 14:40
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD010
Misc Info : SV0213-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Meth Date : 10-May-2005 09:41 hongs Quant Type: ISTD
Cal Date : 08-MAY-2005 00:55 Cal File: KCAL2968.D
Als bottle: 8 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	1.282	1.282	(0.282)	13457	10.0000	10.56
4	N-Nitrosodimethylamine	74	1.704	1.704	(0.375)	26519	10.0000	10.71(a)
3	Pyridine	79	1.720	1.720	(0.379)	44549	10.0000	10.32(M)
5	Dimethylformamide	44	2.158	2.158	(0.475)	38436	10.0000	11.22(aM)
$ 10	2-Fluorophenol	112	3.227	3.227	(0.711)	47361	10.0000	10.01(a)
11	Cyclohexanol	57	3.243	3.243	(0.714)	50841	10.0000	9.461(a)
17	Aniline	93	4.236	4.236	(0.933)	89506	10.0000	10.27
19	Bis(2-chloroethyl)ether	93	4.311	4.311	(0.949)	58704	10.0000	9.515(a)
$ 15	Phenol-d5	99	4.311	4.311	(0.949)	66054	10.0000	9.811(a)
16	Phenol	94	4.322	4.322	(0.952)	71919	10.0000	9.680(a)
20	2-Chlorophenol	128	4.370	4.370	(0.962)	51773	10.0000	9.591(a)
21	1,3-Dichlorobenzene	146	4.493	4.493	(0.989)	58403	10.0000	9.474(a)
* 22	1,4-Dichlorobenzene-d4	152	4.541	4.541	(1.000)	159178	40.0000	
23	1,4-Dichlorobenzene	146	4.562	4.562	(1.005)	61909	10.0000	9.474(a)
26	1,2-Dichlorobenzene	146	4.781	4.781	(1.053)	56524	10.0000	9.309(a)
25	Benzyl Alcohol	108	4.786	4.786	(1.054)	19550	10.0000	7.366(a)
28	2,2-oxybis(1-Chloropropane)	45	4.952	4.952	(1.091)	63670	10.0000	9.999(a)
27	2-Methylphenol	108	4.995	4.995	(1.100)	46746	10.0000	9.745(a)
35	Hexachloroethane	117	5.139	5.139	(1.132)	27532	10.0000	9.616(a)
32	N-Nitrosodinpropylamine	70	5.123	5.123	(1.128)	52784	10.0000	10.48
29	3 and 4-Methylphenol	108	5.182	5.182	(1.141)	100947	20.0000	19.66

05/10/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.262	5.262	(0.860)	79356	10.0000	9.941(a)
	37 Nitrobenzene	77	5.283	5.283	(0.863)	84029	10.0000	9.913(a)
	39 Isophorone	82	5.572	5.572	(0.910)	115786	10.0000	10.48(a)
	40 2-Nitrophenol	139	5.689	5.689	(0.929)	28132	10.0000	9.554(a)
	41 2,4-Dimethylphenol	107	5.812	5.812	(0.949)	55487	10.0000	8.867(a)
	42 Bis(2-chloroethoxy)methane	93	5.892	5.892	(0.962)	70633	10.0000	10.01(a)
	45 2,4-Dichlorophenol	162	6.026	6.026	(0.984)	44702	10.0000	9.699(a)
	47 1,2,4-Trichlorobenzene	180	6.079	6.079	(0.993)	52416	10.0000	9.551(a)
*	48 Naphthalene-d8	136	6.122	6.122	(1.000)	586546	40.0000	
	44 Benzoic Acid	122	6.020	6.020	(0.983)	21905	10.0000	7.573(a)
	50 Naphthalene	128	6.143	6.143	(1.003)	151887	10.0000	9.157(a)
	51 4-Chloroaniline	127	6.298	6.298	(1.029)	64193	10.0000	9.588(a)
	54 Hexachlorobutadiene	225	6.394	6.394	(1.044)	35607	10.0000	9.347(a)
	62 2-Methylnaphthalene	142	7.110	7.110	(1.161)	112957	10.0000	9.471(a)
	59 4-Chloro-3-Methylphenol	107	7.073	7.073	(1.155)	55447	10.0000	10.33(a)
	66 Hexachlorocyclopentadiene	237	7.452	7.452	(0.846)	24292	10.0000	6.845(a)
	67 2,4,6-Trichlorophenol	196	7.639	7.639	(0.868)	35765	10.0000	9.285(a)
	68 2,4,5-Trichlorophenol	196	7.735	7.735	(0.879)	36396	10.0000	8.934(a)
$	69 2-Fluorobiphenyl	172	7.730	7.730	(0.878)	119684	10.0000	8.917(a)
	72 2-Chloronaphthalene	162	7.847	7.847	(0.891)	104772	10.0000	9.321(a)
	73 2-Nitroaniline	65	8.141	8.141	(0.925)	49659	10.0000	10.31(a)
	76 Dimethylphthalate	163	8.510	8.510	(0.967)	125626	10.0000	9.745(a)
	79 Acenaphthylene	152	8.531	8.531	(0.969)	154824	10.0000	9.329(a)
	80 2,6-Dinitrotoluene	165	8.622	8.622	(0.979)	27100	10.0000	9.833(a)
*	82 Acenaphthene-d10	164	8.804	8.804	(1.000)	334123	40.0000	
	83 Acenaphthene	153	8.852	8.852	(1.005)	99331	10.0000	9.473(a)
	81 3-Nitroaniline	138	8.857	8.857	(1.006)	26125	10.0000	9.627(a)
	84 2,4-Dinitrophenol	184	9.044	9.044	(1.027)	11228	10.0000	6.858(a)
	86 Dibenzofuran	168	9.135	9.135	(1.038)	146981	10.0000	9.480(a)
	88 2,4-Dinitrotoluene	165	9.301	9.301	(1.056)	34603	10.0000	9.708(a)
	85 4-Nitrophenol	109	9.381	9.381	(1.066)	23422	10.0000	9.736(aM)
	93 Diethylphthalate	149	9.765	9.765	(1.109)	126619	10.0000	9.770(a)
	94 Fluorene	166	9.744	9.744	(1.107)	120426	10.0000	9.673(a)
	95 4-Chlorophenyl-phenylether	204	9.797	9.797	(1.113)	64951	10.0000	9.692(a)
	98 4-Nitroaniline	138	9.958	9.958	(1.131)	26850	10.0000	10.17(a)
	99 4,6-Dinitro-2-methylphenol	198	10.027	10.027	(0.875)	22033	10.0000	8.652(a)
	100 N-Nitrosodiphenylamine	169	10.054	10.054	(0.877)	84023	10.0000	8.981(a)
	102 Azobenzene	77	10.075	10.075	(0.879)	193002	10.0000	9.224(a)
$	104 2,4,6-Tribromophenol	330	10.246	10.246	(1.164)	18607	10.0000	9.900(a)
	109 4-Bromophenyl-phenylether	248	10.684	10.684	(0.932)	39916	10.0000	9.260(a)
	112 Hexachlorobenzene	284	10.903	10.903	(0.951)	42322	10.0000	9.646(a)
	117 Pentachlorophenol	266	11.315	11.315	(0.987)	15331	10.0000	6.279(a)
*	121 Phenanthrene-d10	188	11.464	11.464	(1.000)	615657	40.0000	
	122 Phenanthrene	178	11.501	11.501	(1.003)	179743	10.0000	9.439(a)
	124 Anthracene	178	11.582	11.582	(1.010)	175642	10.0000	9.537(a)
	126 Carbazole	167	11.988	11.988	(1.046)	152794	10.0000	9.706(a)
	129 Di-n-Butylphthalate	149	12.874	12.874	(1.123)	197669	10.0000	9.605(a)
	134 Fluoranthene	202	13.793	13.793	(1.203)	193365	10.0000	9.802(a)
	135 Benzidine	184	14.194	14.194	(0.854)	74647	10.0000	9.349(a)
	137 Pyrene	202	14.210	14.210	(0.854)	197771	10.0000	9.174(a)
$	139 Terphenyl-d14	244	14.659	14.659	(0.881)	150292	10.0000	8.981(a)
	145 3,3-Dimethylbenzidine	212	15.663	15.663	(0.942)	87156	10.0000	10.18
	146 Butylbenzylphthalate	149	15.781	15.781	(0.949)	86330	10.0000	9.754(a)
	150 Benzo(a)Anthracene	228	16.593	16.593	(0.998)	176056	10.0000	9.524(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.630	16.630	(1.000)	529256	40.0000	
152 3,3'-Dichlorobenzidine	252	16.689	16.689	(1.004)	62060	10.0000	8.795(a)
154 Chrysene	228	16.667	16.667	(1.002)	163479	10.0000	9.287(a)
155 bis(2-ethylhexyl)Phthalate	149	17.009	17.009	(1.023)	103208	10.0000	9.344(a)
158 Di-n-octylphthalate	149	18.152	18.152	(0.944)	178439	10.0000	9.055(a)
160 Benzo(b)fluoranthene	252	18.590	18.590	(0.966)	160563	10.0000	8.902(a)
161 Benzo(k)fluoranthene	252	18.633	18.633	(0.969)	165847	10.0000	9.277(a)
165 Benzo(a)pyrene	252	19.125	19.125	(0.994)	149337	10.0000	9.396(a)
* 166 Perylene-d12	264	19.237	19.237	(1.000)	453500	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.936	20.936	(1.088)	130201	10.0000	9.262(a)
174 Dibenzo(a,h)anthracene	278	20.984	20.984	(1.091)	125575	10.0000	9.193(a)
177 Benzo(g,h,i)perylene	276	21.384	21.384	(1.112)	125987	10.0000	10.00(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2999.D Page 4
Report Date: 10-May-2005 09:41

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

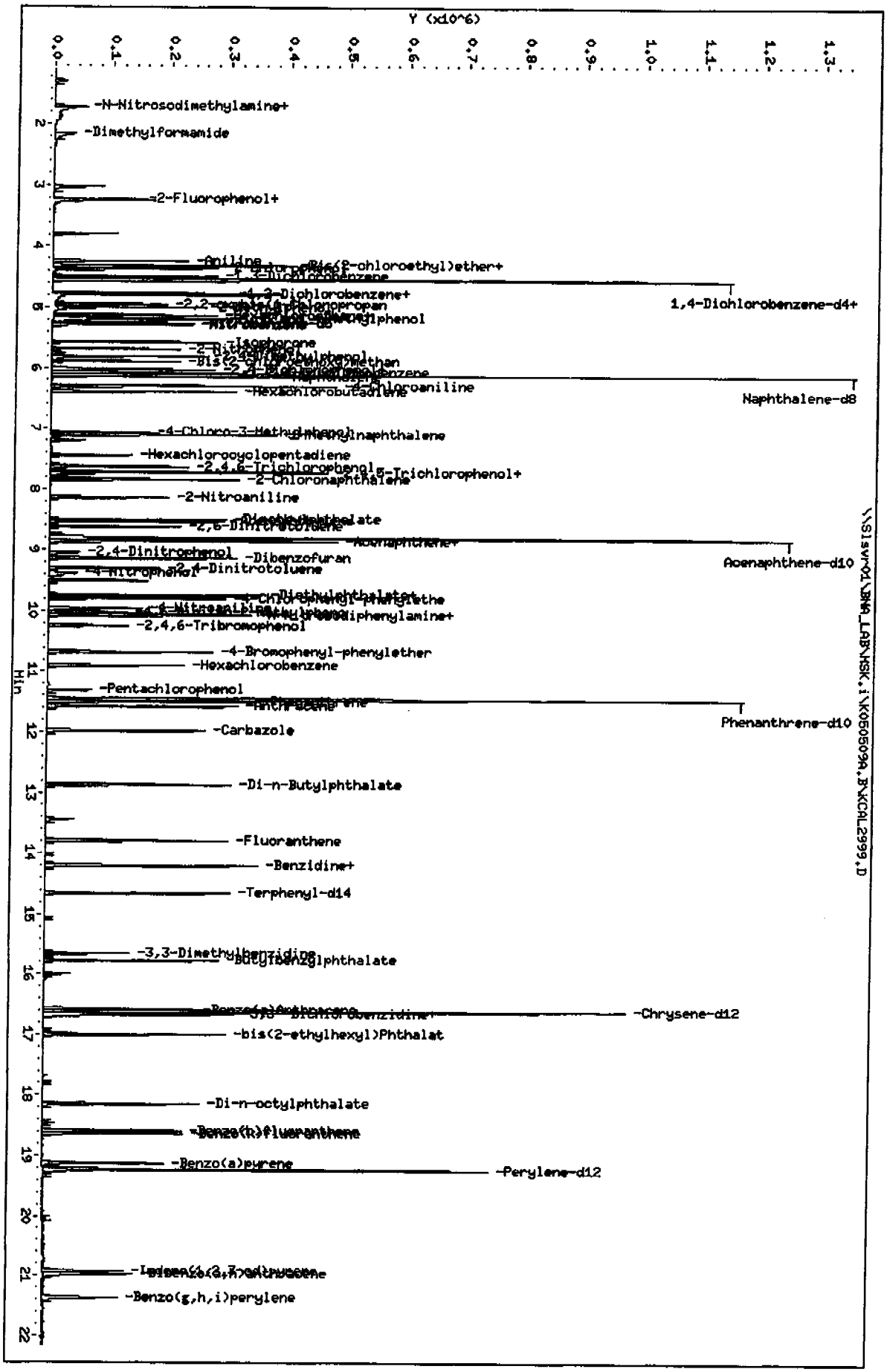
Instrument ID: MSK.i
Lab File ID: KCAL2999.D
Lab Smp Id: SSTD010
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Misc Info: SV0213-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD010
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	159178	-17.65
48 Naphthalene-d8	657267	328634	1314534	586546	-10.76
82 Acenaphthene-d10	351374	175687	702748	334123	-4.91
121 Phenanthrene-d10	612492	306246	1224984	615657	0.52
153 Chrysene-d12	494718	247359	989436	529256	6.98
166 Perylene-d12	409117	204559	818234	453500	10.85

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.54	-0.34
48 Naphthalene-d8	6.14	5.64	6.64	6.12	-0.34
82 Acenaphthene-d10	8.83	8.33	9.33	8.80	-0.24
121 Phenanthrene-d10	11.49	10.99	11.99	11.46	-0.23
153 Chrysene-d12	16.66	16.16	17.16	16.63	-0.16
166 Perylene-d12	19.27	18.77	19.77	19.24	-0.16

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

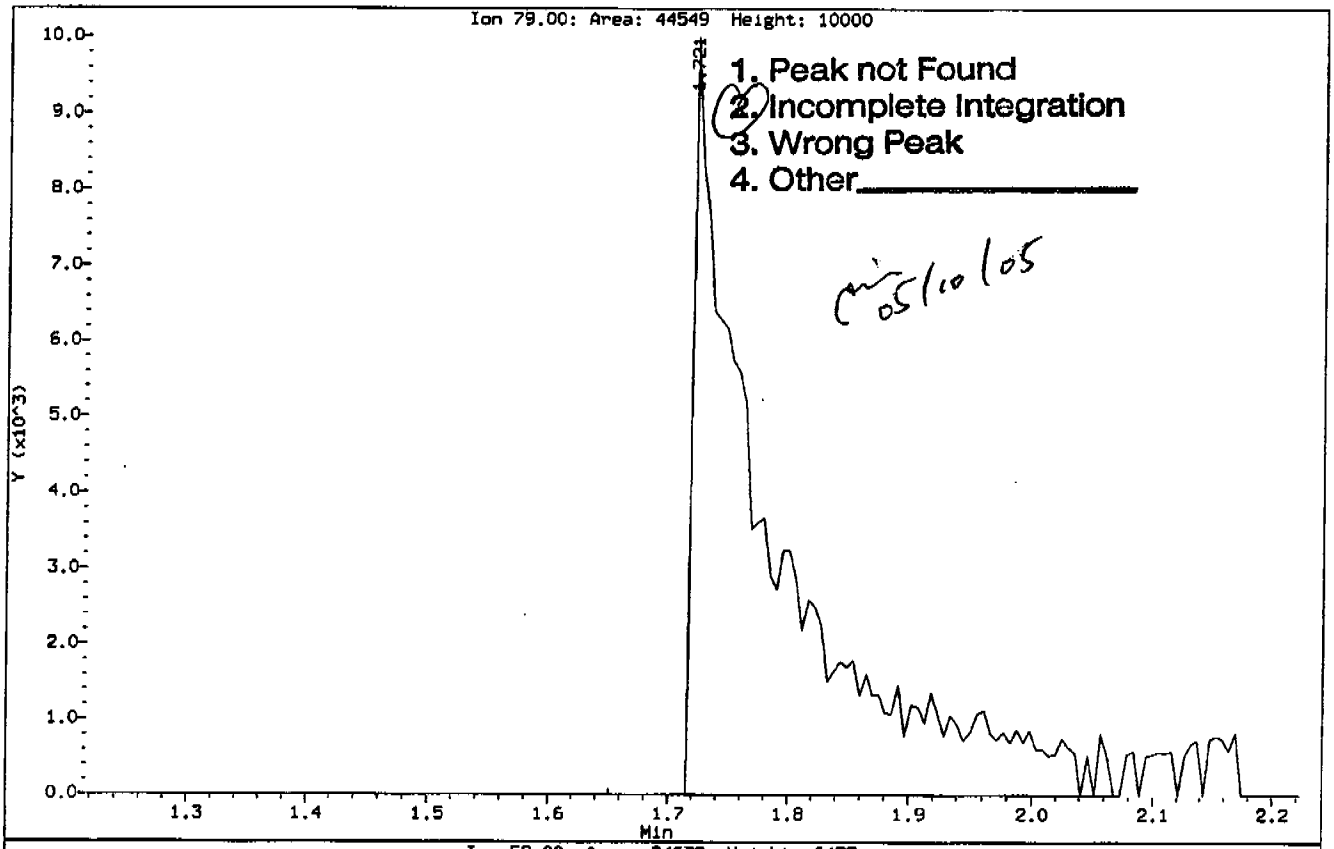


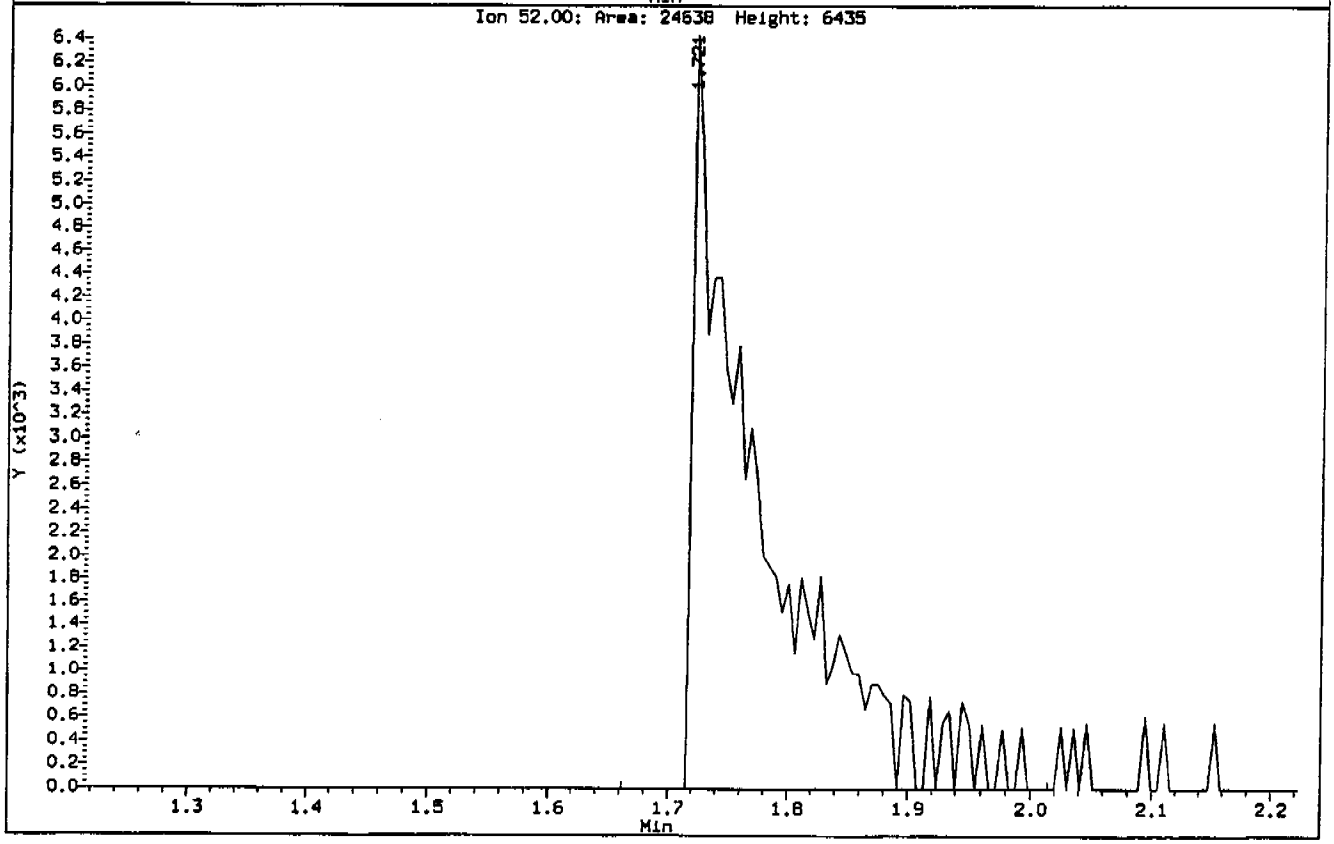
Data File: \\Slsvr01\BNA_LAB\HSK,i\K050509A.B\KCAL2999.D
Date : 09-MAY-2005 14:40
Client ID: SSTD010
Sample Info: SSTD010
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK,i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2999.D
Injection Date: 09-MAY-2005 14:40
Instrument: MSK.i
Client Sample ID: SSTD010

Compound: Pyridine
CAS Number: 110-86-1





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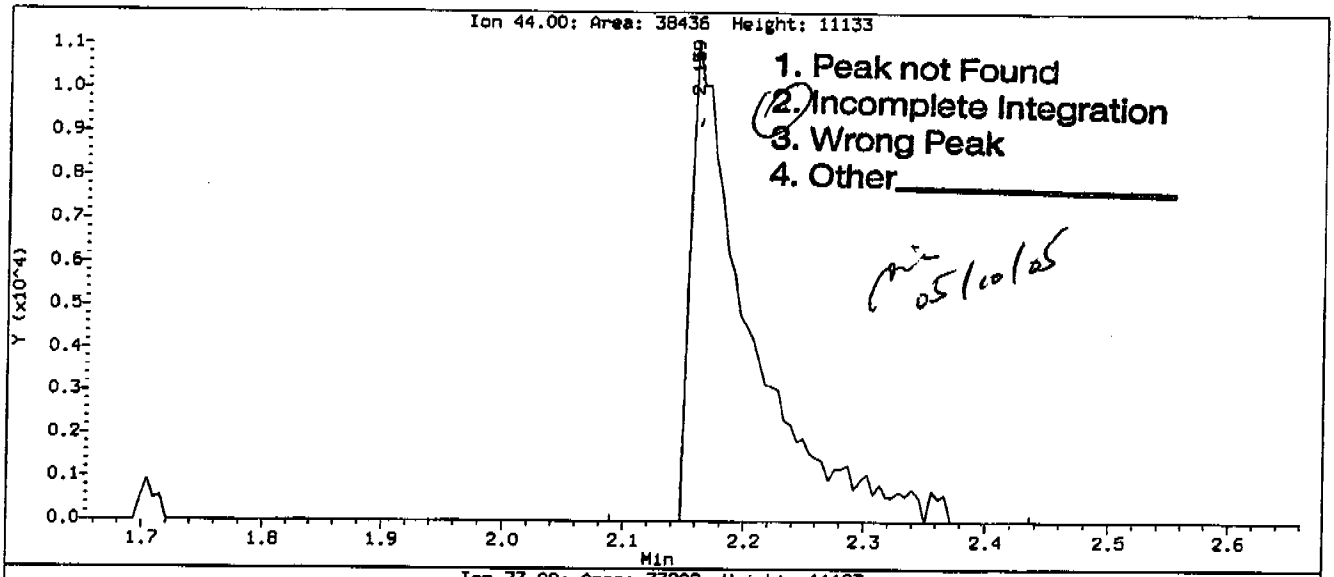
Injection Date: 09-MAY-2005 14:40
Instrument: MSK.i
Client Sample ID: SSTD010

Compound: Dimethylformamide
CAS Number: 68-12-2



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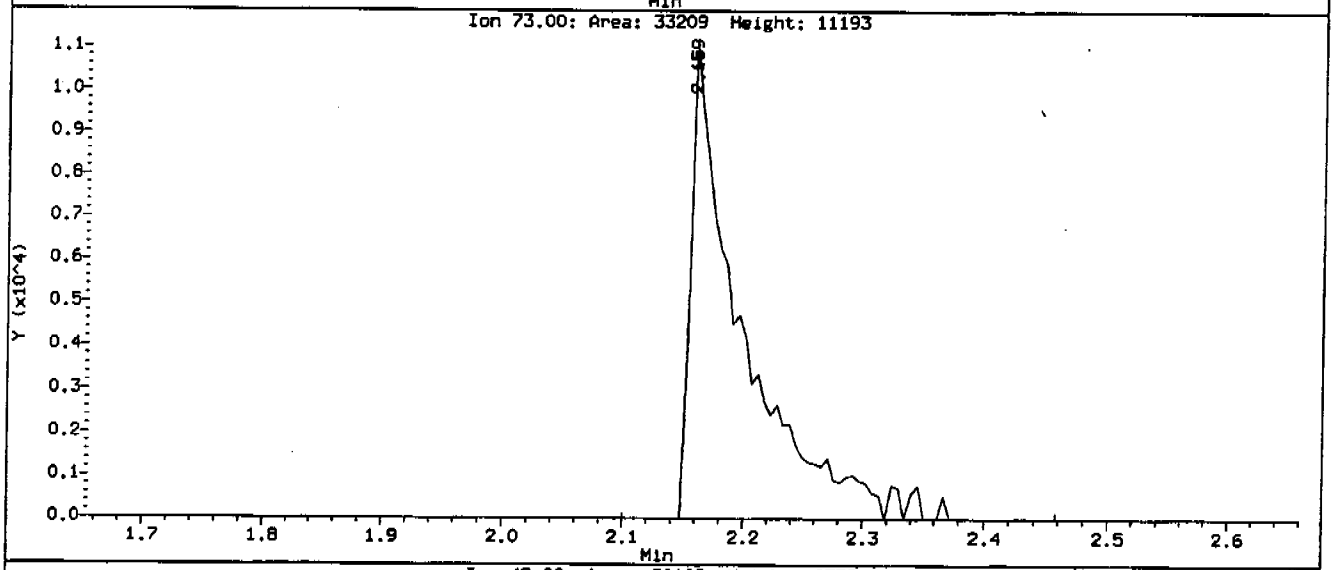
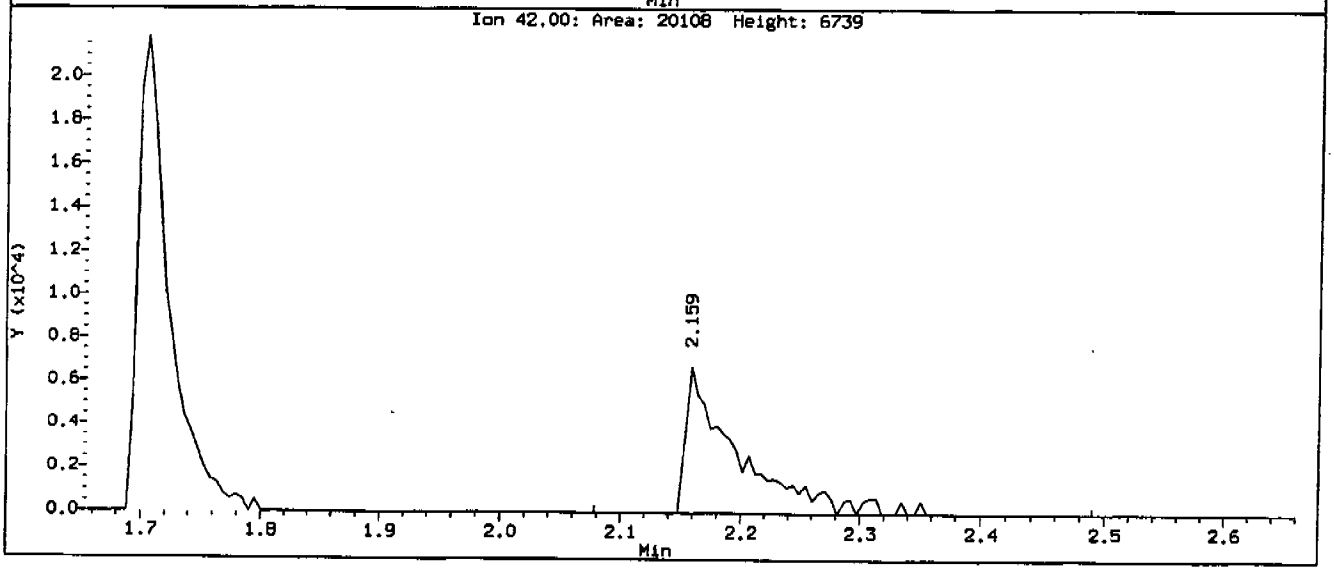
2. Incomplete Integration
3. Wrong Peak
4. Other_____

05/10/05





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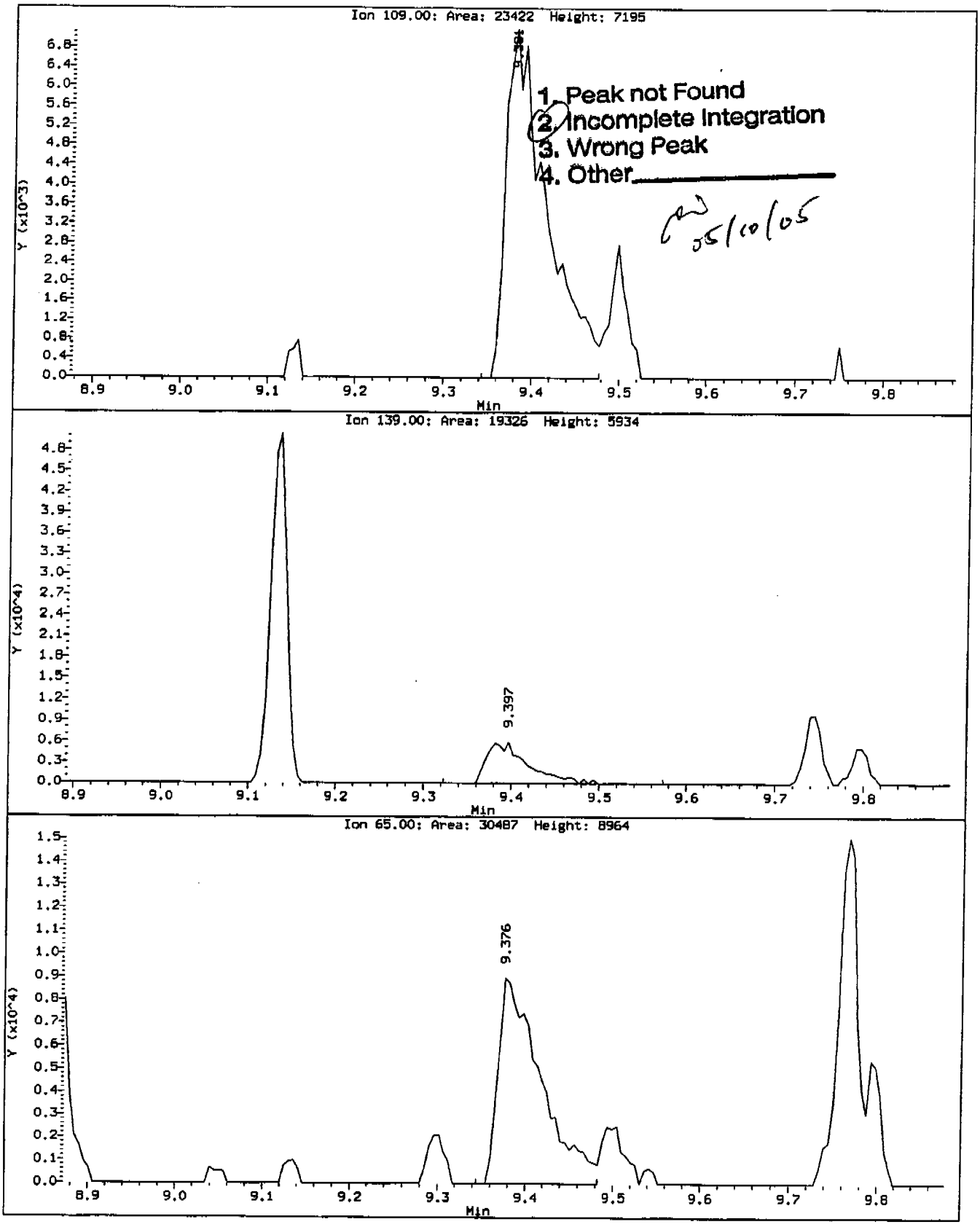
Injection Date: 09-MAY-2005 14:40
Instrument: MSK.i
Client Sample ID: SSTD010

Compound: 4-Nitrophenol
CAS Number: 100-02-7



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3000.D
Report Date: 10-May-2005 09:42

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3000.D
Lab Smp Id: SSTD002 Client Smp ID: SSTD002
Inj Date : 09-MAY-2005 15:12
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD002
Misc Info : SV0212-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Meth Date : 10-May-2005 09:41 hongs Quant Type: ISTD
Cal Date : 08-MAY-2005 01:27 Cal File: KCAL2969.D
Als bottle: 9 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	1.286	1.286	(0.283)	2496	2.00000	2.032(a)
4	N-Nitrosodimethylamine	74	1.724	1.724	(0.379)	4743	2.00000	1.987(a)
5	Dimethylformamide	44	2.232	2.232	(0.491)	6372	2.00000	1.931(aM)
11	Cyclohexanol	57	3.263	3.263	(0.717)	8096	2.00000	1.564(a)
17	Aniline	93	4.251	4.251	(0.934)	17251	2.00000	2.055(a)
19	Bis(2-chloroethyl)ether	93	4.320	4.320	(0.950)	10908	2.00000	1.835(a)
16	Phenol	94	4.342	4.342	(0.954)	13436	2.00000	1.877(a)
20	2-Chlorophenol	128	4.390	4.390	(0.965)	9856	2.00000	1.895(a)
21	1,3-Dichlorobenzene	146	4.502	4.502	(0.989)	11671	2.00000	1.965(a)
* 22	1,4-Dichlorobenzene-d4	152	4.550	4.550	(1.000)	153383	40.0000	
23	1,4-Dichlorobenzene	146	4.566	4.566	(1.004)	11958	2.00000	1.899(a)
26	1,2-Dichlorobenzene	146	4.791	4.791	(1.053)	11013	2.00000	1.882(a)
28	2,2-oxybis(1-Chloropropane)	45	4.962	4.962	(1.090)	12816	2.00000	2.089(a)
27	2-Methylphenol	108	5.010	5.010	(1.101)	10298	2.00000	2.228(a)
35	Hexachloroethane	117	5.148	5.148	(1.131)	5416	2.00000	1.963(a)
32	N-Nitrosodinpropylamine	70	5.138	5.138	(1.129)	10615	2.00000	2.188(aM)
29	3 and 4-Methylphenol	108	5.202	5.202	(1.143)	18589	4.00000	3.757(a)
37	Nitrobenzene	77	5.298	5.298	(0.864)	17871	2.00000	2.194(a)
39	Isophorone	82	5.587	5.587	(0.911)	22275	2.00000	2.097(a)
40	2-Nitrophenol	139	5.704	5.704	(0.930)	4848	2.00000	1.713(a)
41	2,4-Dimethylphenol	107	5.827	5.827	(0.950)	11124	2.00000	1.850(a)

05/10/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	42 Bis(2-chloroethoxy)methane	93	5.902	5.902	(0.963)	13130	2.00000	1.936(a)
	45 2,4-Dichlorophenol	162	6.046	6.046	(0.986)	8536	2.00000	1.927(a)
	47 1,2,4-Trichlorobenzene	180	6.089	6.089	(0.993)	9636	2.00000	1.827(a)
*	48 Naphthalene-d8	136	6.131	6.131	(1.000)	563757	40.0000	
	50 Naphthalene	128	6.153	6.153	(1.003)	30655	2.00000	1.923(a)
	51 4-Chloroaniline	127	6.308	6.308	(1.029)	12037	2.00000	1.870(a)
	54 Hexachlorobutadiene	225	6.409	6.409	(1.045)	6820	2.00000	1.863(a)
	62 2-Methylnaphthalene	142	7.120	7.120	(1.161)	25029	2.00000	2.183(a)
	59 4-Chloro-3-Methylphenol	107	7.098	7.098	(1.158)	10123	2.00000	1.962(aM)
	67 2,4,6-Trichlorophenol	196	7.659	7.659	(0.869)	6427	2.00000	1.751(a)
	68 2,4,5-Trichlorophenol	196	7.761	7.761	(0.880)	5752	2.00000	1.481(a)
$	69 2-Fluorobiphenyl	172	7.739	7.739	(0.878)	23418	2.00000	1.831(a)
	72 2-Chloronaphthalene	162	7.862	7.862	(0.892)	20453	2.00000	1.909(a)
	73 2-Nitroaniline	65	8.161	8.161	(0.925)	8927	2.00000	1.946(a)
	76 Dimethylphthalate	163	8.519	8.519	(0.966)	25037	2.00000	2.038(a)
	79 Acenaphthylene	152	8.546	8.546	(0.969)	28383	2.00000	1.794(a)
	80 2,6-Dinitrotoluene	165	8.637	8.637	(0.979)	4913	2.00000	1.870(a)
*	82 Acenaphthene-d10	164	8.819	8.819	(1.000)	318437	40.0000	
	83 Acenaphthene	153	8.867	8.867	(1.005)	18988	2.00000	1.900(a)
	81 3-Nitroaniline	138	8.872	8.872	(1.006)	4090	2.00000	1.581(a)
	86 Dibenzofuran	168	9.150	9.150	(1.038)	28484	2.00000	1.928(a)
	88 2,4-Dinitrotoluene	165	9.315	9.315	(1.056)	6098	2.00000	1.795(a)
	85 4-Nitrophenol	109	9.465	9.465	(1.073)	2466	2.00000	1.076(aM)
	93 Diethylphthalate	149	9.780	9.780	(1.109)	24941	2.00000	2.019(a)
	94 Fluorene	166	9.759	9.759	(1.107)	22142	2.00000	1.866(a)
	95 4-Chlorophenyl-phenylether	204	9.812	9.812	(1.113)	11658	2.00000	1.825(a)
	98 4-Nitroaniline	138	9.978	9.978	(1.131)	4065	2.00000	1.615(a)
	99 4,6-Dinitro-2-methylphenol	198	10.042	10.042	(0.875)	2054	2.00000	0.8577(a)
	100 N-Nitrosodiphenylamine	169	10.069	10.069	(0.877)	15777	2.00000	1.793(a)
	102 Azobenzene	77	10.085	10.085	(0.879)	37174	2.00000	1.889(a)
	109 4-Bromophenyl-phenylether	248	10.694	10.694	(0.932)	7499	2.00000	1.850(a)
	112 Hexachlorobenzene	284	10.918	10.918	(0.951)	7294	2.00000	1.768(a)
*	121 Phenanthrene-d10	188	11.479	11.479	(1.000)	578952	40.0000	
	122 Phenanthrene	178	11.516	11.516	(1.003)	35120	2.00000	1.961(a)
	124 Anthracene	178	11.596	11.596	(1.010)	32785	2.00000	1.893(a)
	126 Carbazole	167	12.002	12.002	(1.046)	28980	2.00000	1.958(a)
	129 Di-n-Butylphthalate	149	12.889	12.889	(1.123)	35850	2.00000	1.852(a)
	134 Fluoranthene	202	13.813	13.813	(1.203)	35080	2.00000	1.891(a)
	137 Pyrene	202	14.225	14.225	(0.855)	36982	2.00000	1.768(a)
$	139 Terphenyl-d14	244	14.674	14.674	(0.882)	28238	2.00000	1.739(a)
	145 3,3-Dimethylbenzidine	212	15.678	15.678	(0.942)	13272	2.00000	1.597(a)
	146 Butylbenzylphthalate	149	15.790	15.790	(0.949)	15850	2.00000	1.845(a)
	150 Benzo(a)Anthracene	228	16.607	16.607	(0.998)	34162	2.00000	1.904(a)
*	153 Chrysene-d12	240	16.639	16.639	(1.000)	513592	40.0000	
	152 3,3'-Dichlorobenzidine	252	16.704	16.704	(1.004)	9924	2.00000	1.449(a)
	154 Chrysene	228	16.682	16.682	(1.003)	31851	2.00000	1.864(a)
	155 bis(2-ethylhexyl)Phthalate	149	17.019	17.019	(1.023)	19839	2.00000	1.851(a)
	158 Di-n-octylphthalate	149	18.167	18.167	(0.943)	33553	2.00000	1.704(aM)
	160 Benzo(b)fluoranthene	252	18.605	18.605	(0.966)	31699	2.00000	1.759(a)
	161 Benzo(k)fluoranthene	252	18.643	18.643	(0.968)	32755	2.00000	1.833(a)
	165 Benzo(a)pyrene	252	19.145	19.145	(0.994)	27905	2.00000	1.757(a)
*	166 Perylene-d12	264	19.257	19.257	(1.000)	453215	40.0000	
	173 Indeno(1,2,3-cd)pyrene	276	20.951	20.951	(1.088)	27195	2.00000	1.936(a)
	174 Dibenzo(a,h)anthracene	278	21.004	21.004	(1.091)	24637	2.00000	1.805(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
177 Benzo(g,h,i)perylene	276	21.405	21.405	(1.112)	24662	2.00000	1.960(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3000.D
Report Date: 10-May-2005 09:42

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

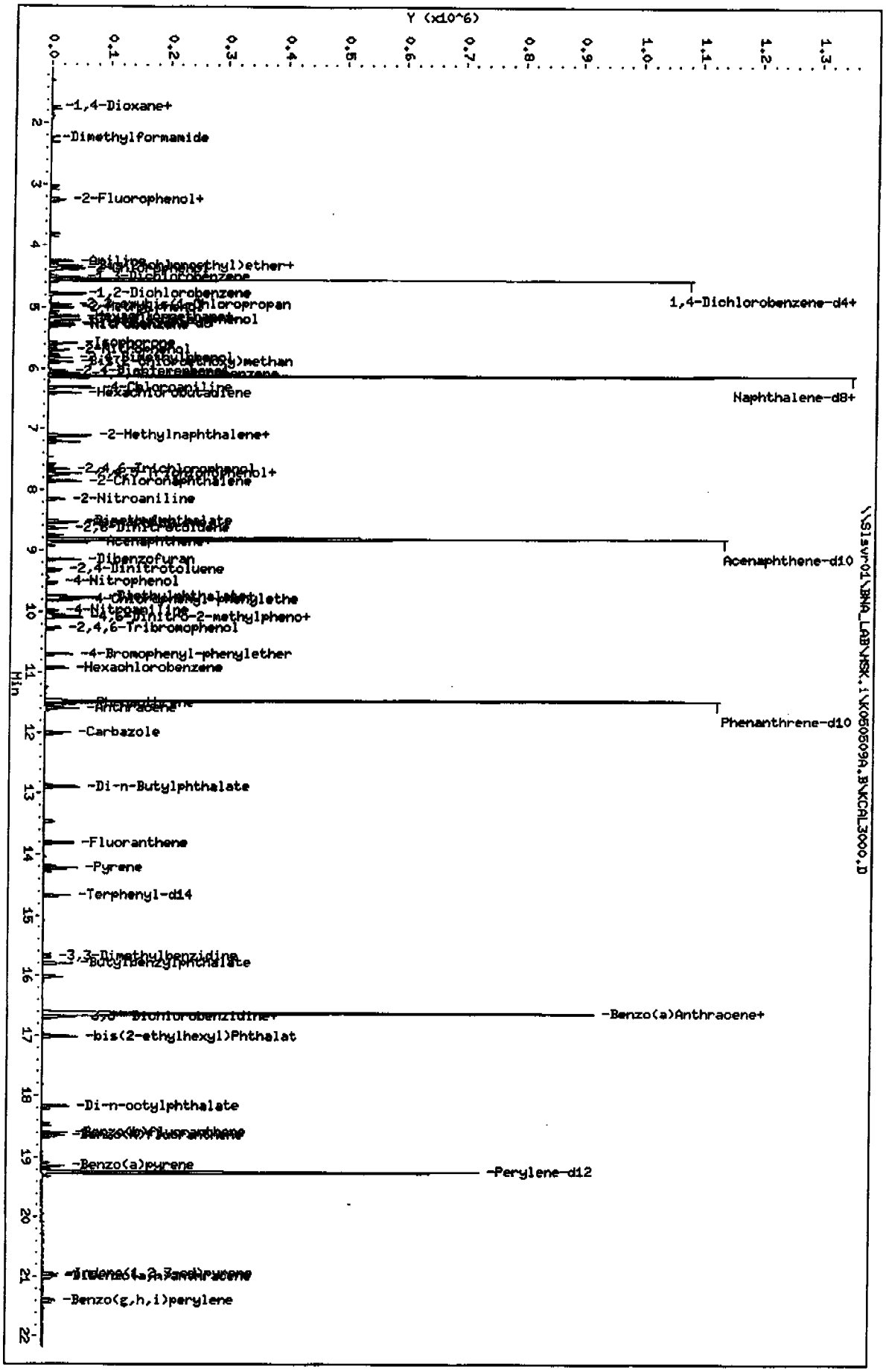
Instrument ID: MSK.i
Lab File ID: KCAL3000.D
Lab Smp Id: SSTD002
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Misc Info: SV0212-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD002
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	153383	-20.64
48 Naphthalene-d8	657267	328634	1314534	563757	-14.23
82 Acenaphthene-d10	351374	175687	702748	318437	-9.37
121 Phenanthrene-d10	612492	306246	1224984	578952	-5.48
153 Chrysene-d12	494718	247359	989436	513592	3.82
166 Perylene-d12	409117	204559	818234	453215	10.78

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.55	-0.14
48 Naphthalene-d8	6.14	5.64	6.64	6.13	-0.19
82 Acenaphthene-d10	8.83	8.33	9.33	8.82	-0.07
121 Phenanthrene-d10	11.49	10.99	11.99	11.48	-0.10
153 Chrysene-d12	16.66	16.16	17.16	16.64	-0.10
166 Perylene-d12	19.27	18.77	19.77	19.26	-0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

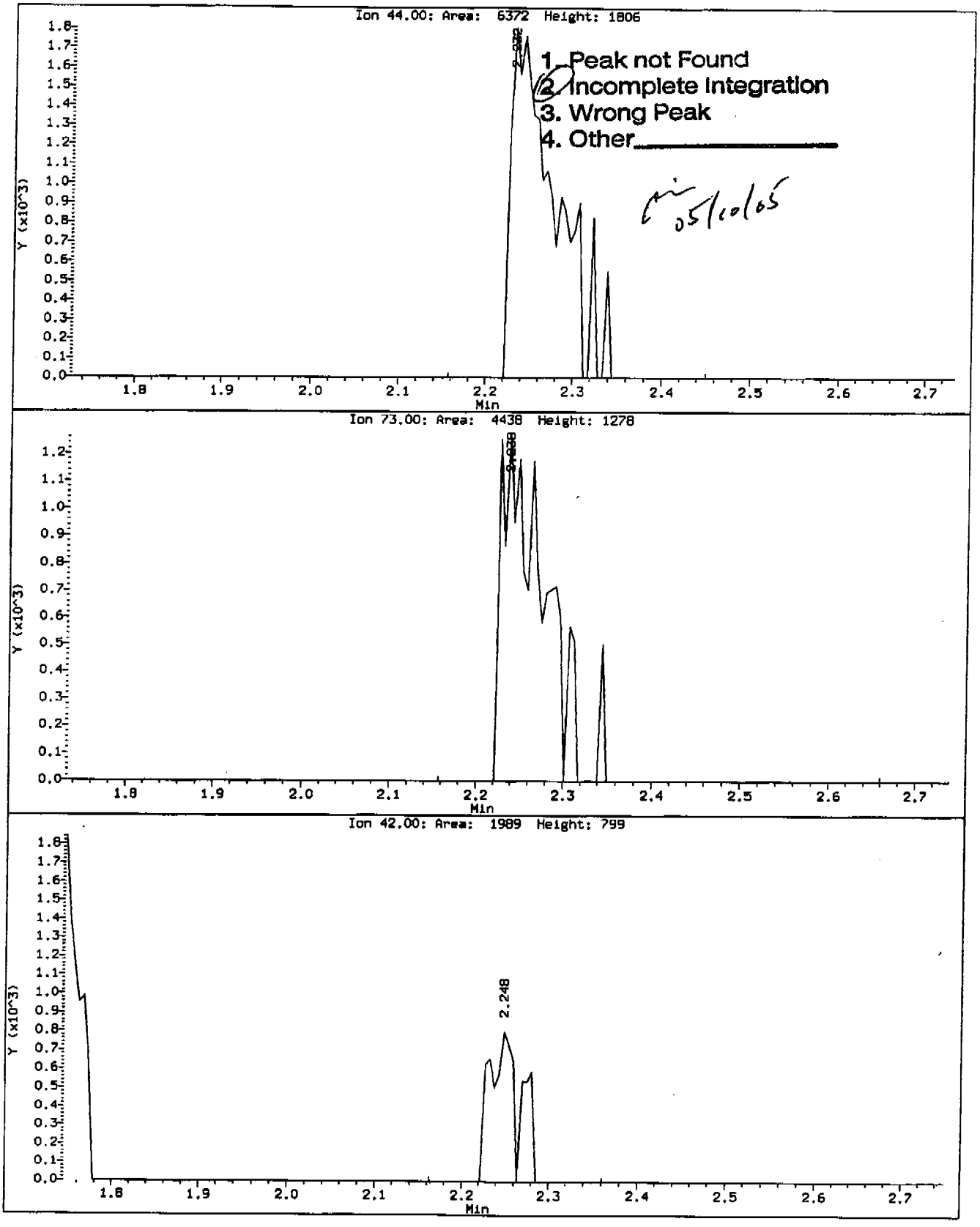


Data File: \\Slsvr01\BNA_LAB\HSK.i\K050509A.B\KCAL3000.D
Date : 09-MAY-2005 15:12
Client ID: SSTD002
Sample Info: SSTD002
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: KIA
Column diameter: 2.00

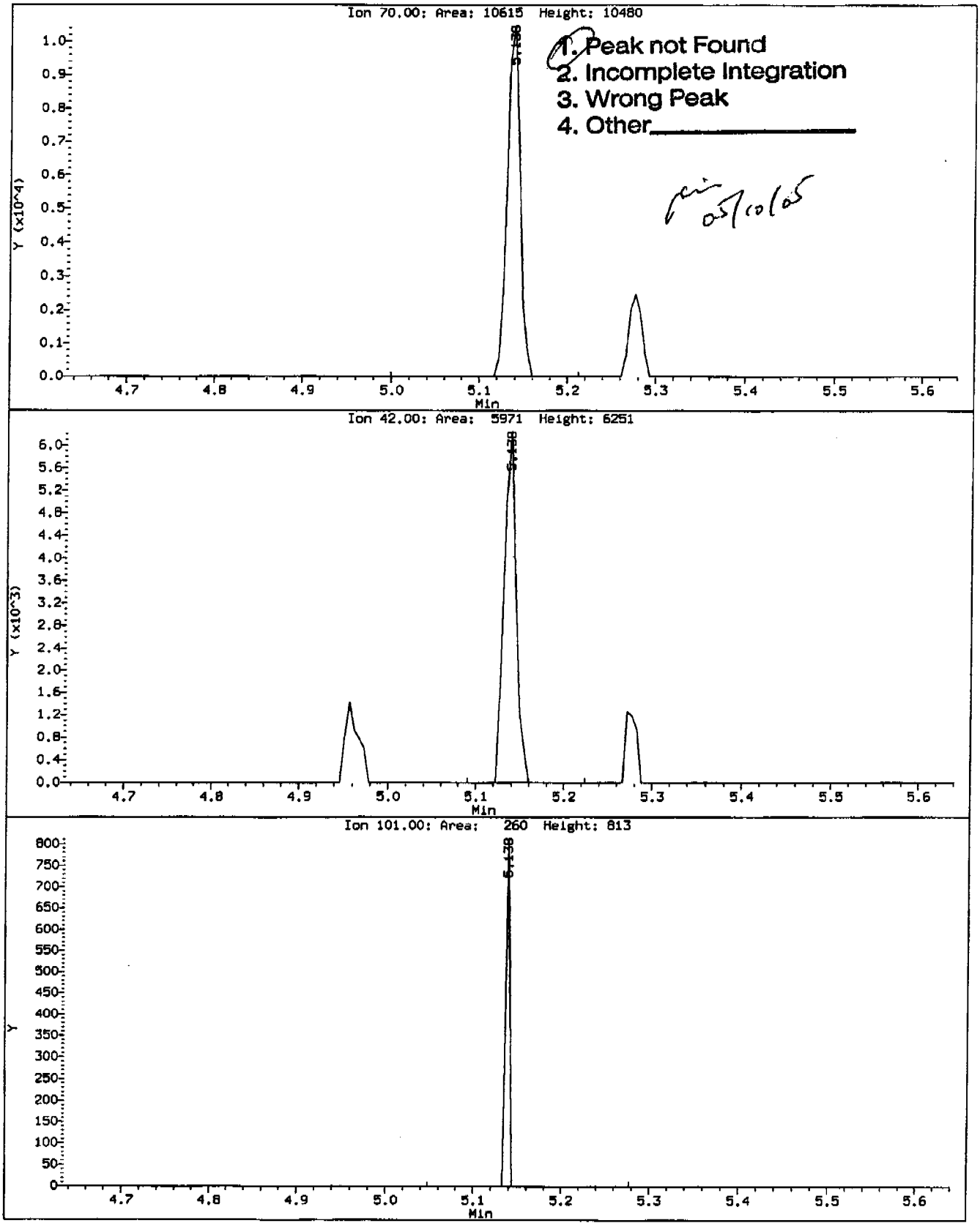
Data File: \\Slsvr01\BNA_LAB\MSK,i\K050509A.B\KCAL3000.D
Injection Date: 09-MAY-2005 15:12
Instrument: MSK.i
Client Sample ID: SSTD002

Compound: Dimethylformamide
CAS Number: 68-12-2



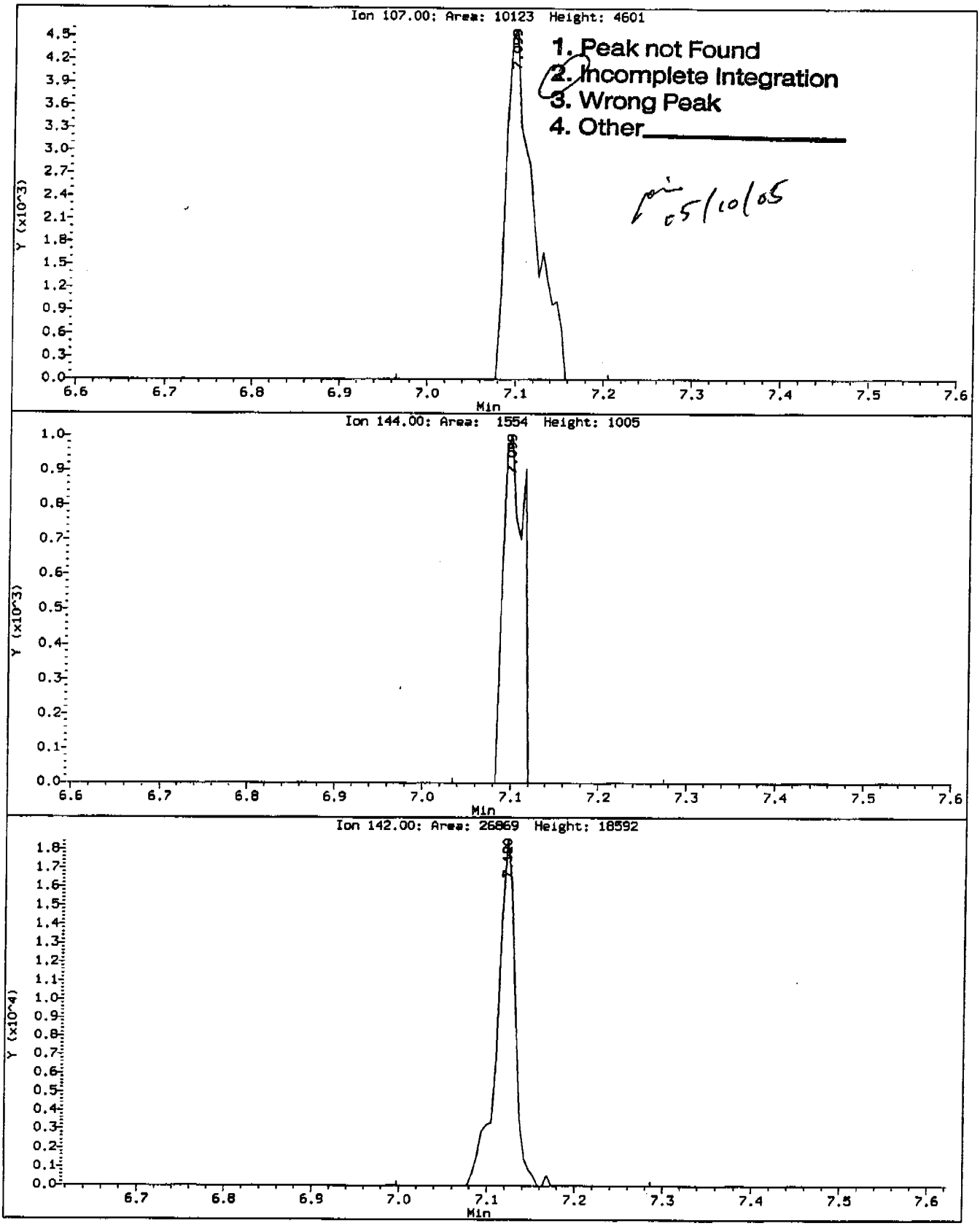
Data File: \\Slevr01\BNA_LAB\MSK.i\K050509A.B\KCAL3000.D
Injection Date: 09-MAY-2005 15:12
Instrument: MSK.i
Client Sample ID: SSTD002

Compound: N-Nitrosodinpropylamine
CAS Number: 621-64-7



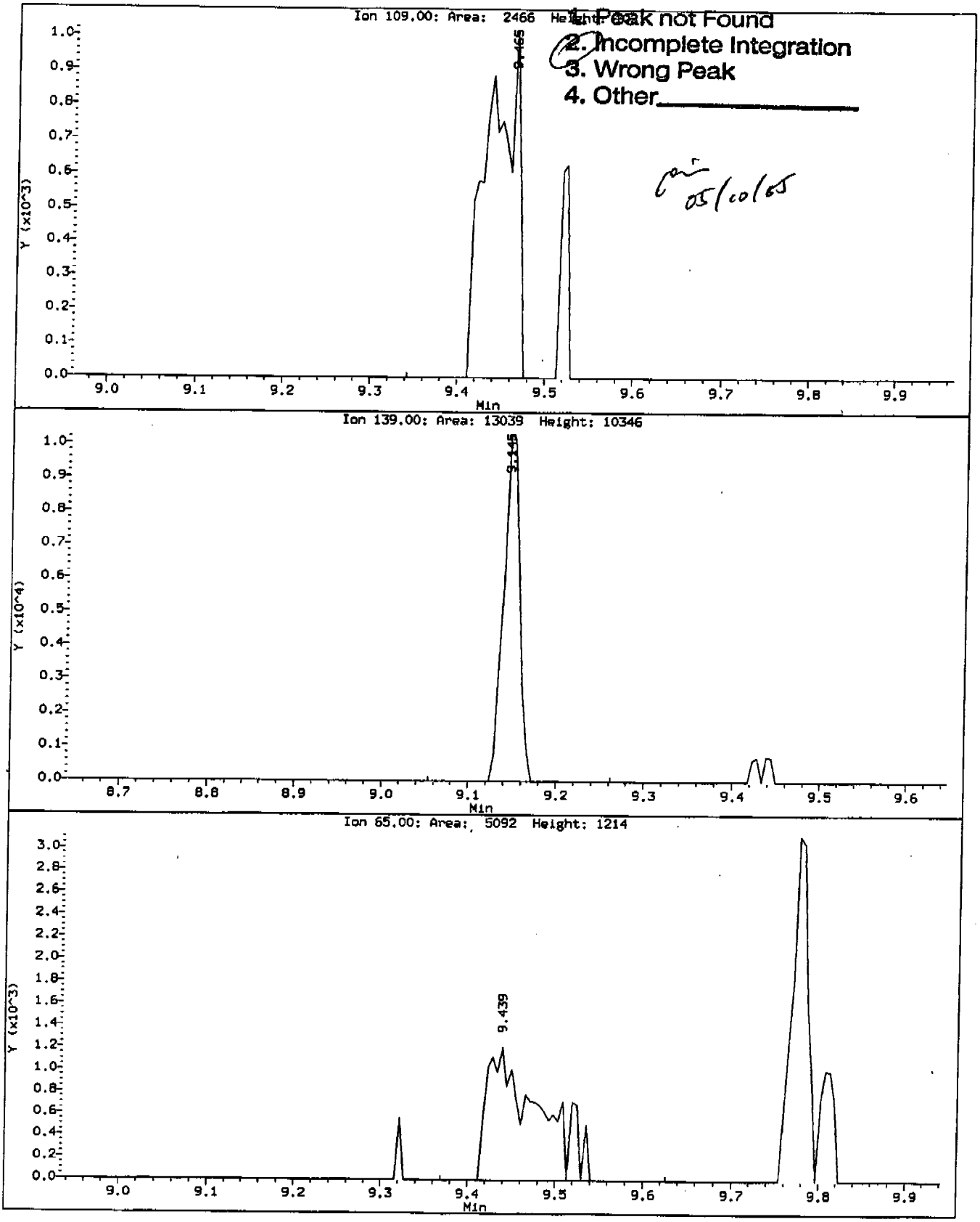
Data File: \\Slavr01\BNA_LAB\MSK.i\K050509A.B\KCAL3000.D
Injection Date: 09-MAY-2005 15:12
Instrument: MSK.i
Client Sample ID: SSTD002

Compound: 4-Chloro-3-Methylphenol
CAS Number: 59-50-7



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3000.D
Injection Date: 09-MAY-2005 15:12
Instrument: MSK.i
Client Sample ID: SSTD002

Compound: 4-Nitrophenol
CAS Number: 100-02-7

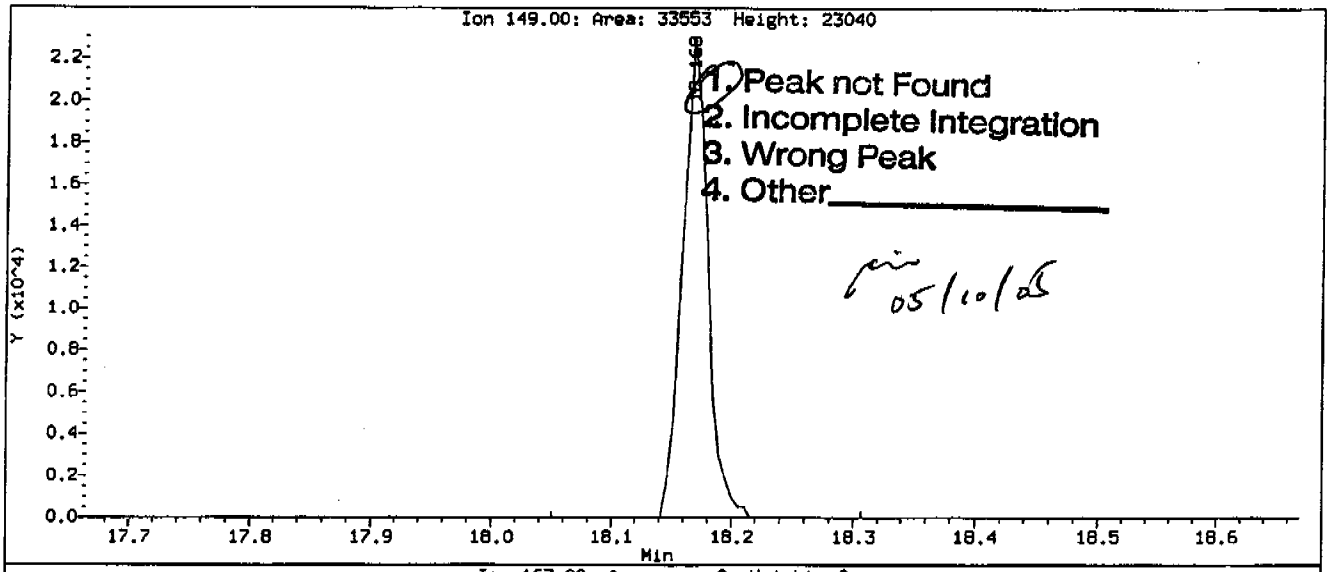


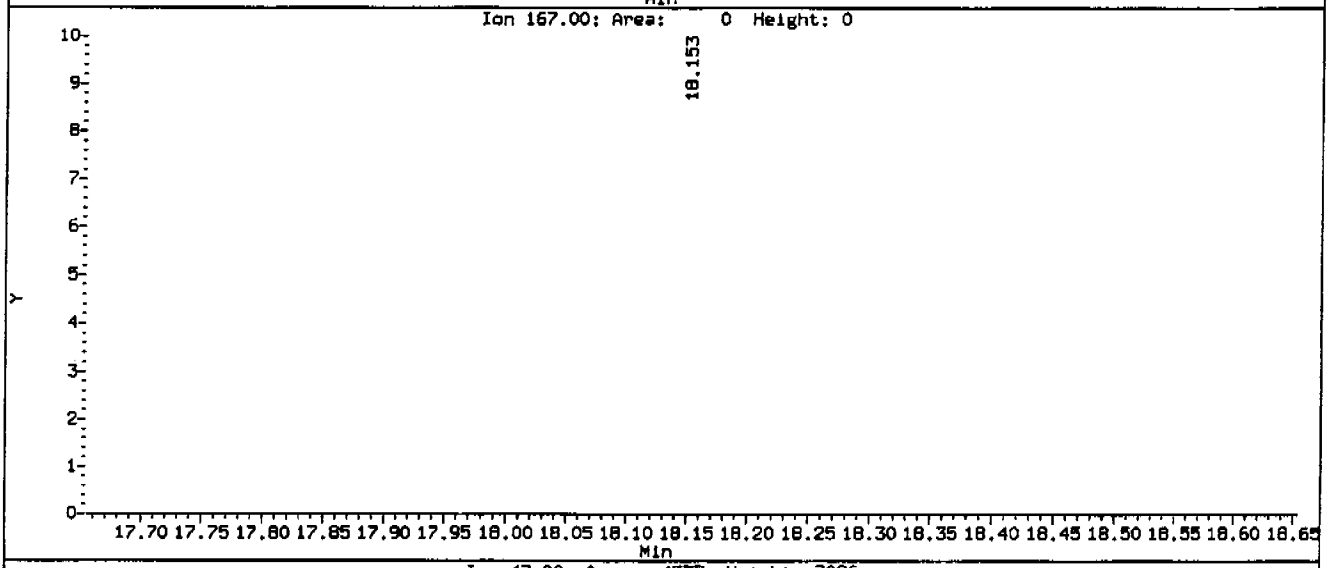
1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

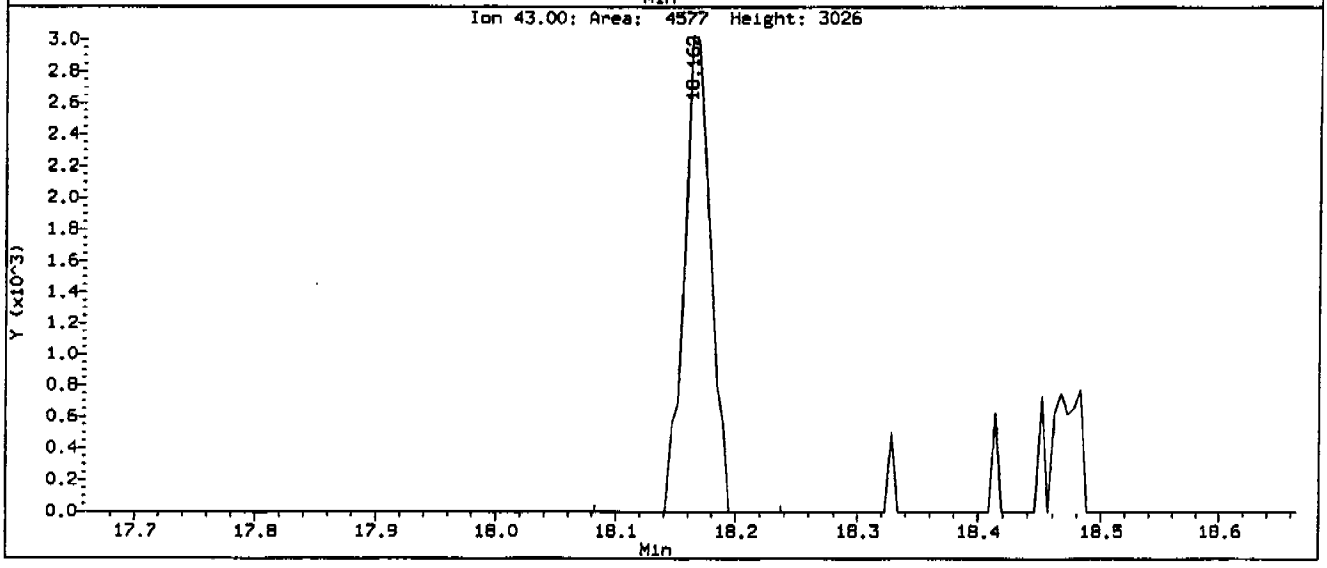
05/10/05

Data File: \\Slevr01\BNA_LAB\MSK.i\K050509A.B\KCAL3000.D
Injection Date: 09-MAY-2005 15:12
Instrument: MSK.i
Client Sample ID: SSTD002

Compound: Di-n-octylphthalate
CAS Number: 117-84-0







Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3001.D
Report Date: 10-May-2005 11:19

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i Injection Date: 09-MAY-2005 15:44
Lab File ID: KCAL3001.D Init. Cal. Date(s): 28-APR-2005 09-MAY-2005
Analysis Type: WATER Init. Cal. Times: 11:41 15:12
Lab Sample ID: SSTD050 ICV Quant Type: ISTD
Method: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m

			MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
3 Pyridine	1.18405	1.06280	0.010	10.24006	60.00000	Averaged
4 N-Nitrosodimethylamine	0.67099	0.66420	0.010	1.01160	60.00000	Averaged
16 Phenol	1.87215	1.67271	0.010	10.65310	20.00000	Averaged
17 Aniline	2.19527	1.64590	0.010	25.02511	60.00000	Averaged
19 Bis(2-chloroethyl)ether	1.55372	1.39051	0.010	10.50411	60.00000	Averaged
20 2-Chlorophenol	1.35363	1.22899	0.010	9.20788	60.00000	Averaged
21 1,3-Dichlorobenzene	1.54804	1.45721	0.010	5.86750	60.00000	Averaged
23 1,4-Dichlorobenzene	1.64398	1.49999	0.010	8.75897	20.00000	Averaged
25 Benzyl Alcohol	0.66523	0.56023	0.010	15.78438	60.00000	Averaged
26 1,2-Dichlorobenzene	1.52039	1.39846	0.010	8.01975	60.00000	Averaged
27 2-Methylphenol	1.19876	1.05197	0.010	12.24528	60.00000	Averaged
28 2,2-oxybis(1-Chloropropane)	1.60673	1.52631	0.010	5.00525	60.00000	Averaged
29 3 and 4-Methylphenol	1.27839	1.19156	0.010	6.79260	60.00000	Averaged
32 N-Nitrosodinpropylamine	1.25943	1.35997	0.010	-7.98337	60.00000	Averaged
35 Hexachloroethane	0.71883	0.67952	0.010	5.46847	60.00000	Averaged
37 Nitrobenzene	0.58194	0.54845	0.010	5.75527	60.00000	Averaged
39 Isophorone	0.75864	0.77508	0.010	-2.16739	60.00000	Averaged
40 2-Nitrophenol	0.20162	0.18658	0.010	7.45577	20.00000	Averaged
41 2,4-Dimethylphenol	0.42786	0.38515	0.010	9.98164	60.00000	Averaged
42 Bis(2-chloroethoxy)methane	0.48359	0.45359	0.010	6.20445	60.00000	Averaged
44 Benzoic Acid	0.19951	0.19718	0.010	1.16556	60.00000	Averaged
45 2,4-Dichlorophenol	0.31460	0.28939	0.010	8.01092	20.00000	Averaged
47 1,2,4-Trichlorobenzene	0.37479	0.34434	0.010	8.12648	60.00000	Averaged
50 Naphthalene	1.13252	1.02520	0.010	9.47687	60.00000	Averaged
51 4-Chloroaniline	0.45857	0.33989	0.010	25.87888	60.00000	Averaged
54 Hexachlorobutadiene	0.26032	0.23890	0.010	8.22692	20.00000	Averaged
59 4-Chloro-3-Methylphenol	0.36550	0.34728	0.010	4.98607	20.00000	Averaged
62 2-Methylnaphthalene	0.81010	0.72506	0.010	10.49802	60.00000	Averaged
66 Hexachlorocyclopentadiene	0.42770	0.43177	0.010	-0.94995	60.00000	Averaged
67 2,4,6-Trichlorophenol	0.46165	0.40974	0.010	11.24484	20.00000	Averaged
68 2,4,5-Trichlorophenol	0.48790	0.43052	0.010	11.76164	60.00000	Averaged
72 2-Chloronaphthalene	1.34666	1.19855	0.010	10.99843	60.00000	Averaged
73 2-Nitroaniline	0.58010	0.52251	0.010	9.92746	60.00000	Averaged
76 Dimethylphthalate	1.54223	1.35328	0.010	12.25155	60.00000	Averaged
79 Acenaphthylene	1.98537	1.89571	0.010	4.51600	60.00000	Averaged
80 2,6-Dinitrotoluene	0.32954	0.30516	0.010	7.39848	60.00000	Averaged
81 3-Nitroaniline	0.32374	0.29251	0.010	9.64753	60.00000	Averaged
83 Acenaphthene	1.25374	1.15247	0.010	8.07772	20.00000	Averaged
84 2,4-Dinitrophenol	0.19685	0.18564	0.010	5.69283	60.00000	Averaged
85 4-Nitrophenol	0.27026	0.26209	0.010	3.02151	60.00000	Averaged
86 Dibenzofuran	1.85230	1.65041	0.010	10.89935	60.00000	Averaged
88 2,4-Dinitrotoluene	0.42378	0.41413	0.010	2.27670	60.00000	Averaged

05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3001.D
Report Date: 10-May-2005 11:19

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i Injection Date: 09-MAY-2005 15:44
Lab File ID: KCAL3001.D Init. Cal. Date(s): 28-APR-2005 09-MAY-2005
Analysis Type: WATER Init. Cal. Times: 11:41 15:12
Lab Sample ID: SSTD050 ICV Quant Type: ISTD
Method: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
93 Diethylphthalate	1.54363	1.43694	0.010	6.91171	60.00000	Averaged
94 Fluorene	1.48246	1.41494	0.010	4.55432	60.00000	Averaged
95 4-Chlorophenyl-phenylether	0.79978	0.73202	0.010	8.47167	60.00000	Averaged
98 4-Nitroaniline	0.31560	0.28998	0.010	8.11578	60.00000	Averaged
99 4,6-Dinitro-2-methylphenol	0.16574	0.16089	0.010	2.92711	60.00000	Averaged
100 N-Nitrosodiphenylamine	0.60901	0.59265	0.010	2.68550	20.00000	Averaged
102 Azobenzene	1.36611	1.20009	0.010	12.15278	60.00000	Averaged
109 4-Bromophenyl-phenylether	0.27978	0.24895	0.010	11.01973	60.00000	Averaged
112 Hexachlorobenzene	0.28563	0.27139	0.010	4.98466	60.00000	Averaged
117 Pentachlorophenol	0.15930	0.13403	0.010	15.86074	20.00000	Averaged
122 Phenanthrene	1.23548	1.10027	0.010	10.94400	60.00000	Averaged
124 Anthracene	1.19438	1.06485	0.010	10.84544	60.00000	Averaged
126 Carbazole	1.02046	0.90651	0.010	11.16721	60.00000	Averaged
129 Di-n-Butylphthalate	1.33705	1.25693	0.010	5.99179	60.00000	Averaged
134 Fluoranthene	1.27688	1.21064	0.010	5.18714	20.00000	Averaged
135 Benzidine	0.60665	0.07765	0.010	87.20027	100	Averaged
137 Pyrene	1.62596	1.37557	0.010	15.39978	60.00000	Averaged
146 Butylbenzylphthalate	0.67238	0.61596	0.010	8.39160	60.00000	Averaged
150 Benzo(a)Anthracene	1.40066	1.26605	0.010	9.61027	60.00000	Averaged
152 3,3'-Dichlorobenzidine	0.53933	0.46193	0.010	14.35060	60.00000	Averaged
154 Chrysene	1.33287	1.15064	0.010	13.67193	60.00000	Averaged
155 bis(2-ethylhexyl)Phthalate	0.84173	0.74134	0.010	11.92668	60.00000	Averaged
158 Di-n-octylphthalate	1.70444	1.61732	0.010	5.11152	20.00000	Averaged
160 Benzo(b)fluoranthene	1.55320	1.52120	0.010	2.06032	60.00000	Averaged
161 Benzo(k)fluoranthene	1.54269	1.43396	0.010	7.04813	60.00000	Averaged
165 Benzo(a)pyrene	1.40180	1.28979	0.010	7.99070	20.00000	Averaged
173 Indeno(1,2,3-cd)pyrene	1.29945	1.15572	0.010	11.06052	60.00000	Averaged
174 Dibenzo(a,h)anthracene	1.26094	1.19655	0.010	5.10626	60.00000	Averaged
177 Benzo(g,h,i)perylene	1.16013	1.07534	0.010	7.30843	60.00000	Averaged

STL ST LOUIS

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B/KCAL3001.D
Report Date: 05/10/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3001.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 15:44
Lab Sample ID: SSTD050 ICV
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270

COMPOUND	%D
Pyridine	10.2
N-Nitrosodimethylamine	1.0
Aniline	25.0
Bis(2-chloroethyl)ether	10.5
Phenol	10.7
2-Chlorophenol	9.2
1,3-Dichlorobenzene	5.9
1,4-Dichlorobenzene	8.8
1,2-Dichlorobenzene	8.0
Benzyl Alcohol	15.8
2,2-oxybis(1-Chloropropane)	5.0
2-Methylphenol	12.2
N-Nitrosodinpropylamine	8.0
Hexachloroethane	5.5
3 and 4-Methylphenol	6.8
Nitrobenzene	5.8
Isophorone	2.2
2-Nitrophenol	7.5
2,4-Dimethylphenol	10.0
Bis(2-chloroethoxy)methane	6.2
2,4-Dichlorophenol	8.0
1,2,4-Trichlorobenzene	8.1
Benzoic Acid	1.2
Naphthalene	9.5
4-Chloroaniline	25.9
Hexachlorobutadiene	8.2
4-Chloro-3-Methylphenol	5.0
2-Methylnaphthalene	10.5
Hexachlorocyclopentadiene	0.9
2,4,6-Trichlorophenol	11.2
2,4,5-Trichlorophenol	11.8
2-Chloronaphthalene	11.0
2-Nitroaniline	9.9
Dimethylphthalate	12.3
Acenaphthylene	4.5
2,6-Dinitrotoluene	7.4
Acenaphthene	8.1
3-Nitroaniline	9.6
2,4-Dinitrophenol	5.7

LOT #F5D220218

STL ST LOUIS

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B/KCAL3001.D
Report Date: 05/10/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3001.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 15:44
Lab Sample ID: SSTD050 ICV
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A

COMPOUND	%D
Dibenzofuran	10.9
2,4-Dinitrotoluene	2.3
4-Nitrophenol	3.0
Fluorene	4.6
Diethylphthalate	6.9
4-Chlorophenyl-phenylether	8.5
4-Nitroaniline	8.1
4,6-Dinitro-2-methylphenol	2.9
N-Nitrosodiphenylamine	2.7
Azobenzene	12.2
4-Bromophenyl-phenylether	11.0
Hexachlorobenzene	5.0
Pentachlorophenol	15.9
Phenanthrene	10.9
Anthracene	10.8
Carbazole	11.2
Di-n-Butylphthalate	6.0
Fluoranthene	5.2
Benzidine	87.2
Pyrene	15.4
Butylbenzylphthalate	8.4
Benzo(a)Anthracene	9.6
Chrysene	13.7
3,3'-Dichlorobenzidine	14.4
bis(2-ethylhexyl)Phthalate	11.9
Di-n-octylphthalate	5.1
Benzo(b)fluoranthene	2.1
Benzo(k)fluoranthene	7.0
Benzo(a)pyrene	8.0
Indeno(1,2,3-cd)pyrene	11.1
Dibenzo(a,h)anthracene	5.1
Benzo(g,h,i)perylene	7.3

The average of %D's in the continuing calibration is 9.7

05/10/05

LOT #F5D220218

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3001.D
Report Date: 10-May-2005 11:19

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3001.D
Lab Smp Id: SSTD050 ICV Client Smp ID: SSTD050 ICV
Inj Date : 09-MAY-2005 15:44
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD050 ICV
Misc Info : OP0052-05 2X
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Meth Date : 10-May-2005 11:19 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12 Cal File: KCAL3000.D
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270ICV.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
3	Pyridine	79	1.724	1.724	(0.379)	192054	50.0000	44.88
4	N-Nitrosodimethylamine	74	1.745	1.745	(0.383)	120025	50.0000	49.49
16	Phenol	94	4.331	4.331	(0.951)	302267	50.0000	44.67
17	Aniline	93	4.251	4.251	(0.933)	297422	50.0000	37.49
19	Bis(2-chloroethyl)ether	93	4.325	4.325	(0.950)	251273	50.0000	44.75
20	2-Chlorophenol	128	4.384	4.384	(0.962)	222085	50.0000	45.40
21	1,3-Dichlorobenzene	146	4.507	4.507	(0.989)	263325	50.0000	47.07
* 22	1,4-Dichlorobenzene-d4	152	4.555	4.555	(1.000)	144564	40.0000	
23	1,4-Dichlorobenzene	146	4.577	4.577	(1.005)	271055	50.0000	45.62
25	Benzyl Alcohol	108	4.801	4.801	(1.054)	101236	50.0000	42.11
26	1,2-Dichlorobenzene	146	4.796	4.796	(1.053)	252709	50.0000	45.99
27	2-Methylphenol	108	5.009	5.009	(1.100)	190096	50.0000	43.88
28	2,2-oxybis(1-Chloropropane)	45	4.961	4.961	(1.089)	275812	50.0000	47.50
29	3 and 4-Methylphenol	108	5.196	5.196	(1.141)	430640	100.000	93.21
32	N-Nitrosodinpropylamine	70	5.148	5.148	(1.130)	245754	50.0000	53.99
35	Hexachloroethane	117	5.148	5.148	(1.130)	122792	50.0000	47.26
37	Nitrobenzene	77	5.298	5.298	(0.864)	356837	50.0000	47.12
39	Isophorone	82	5.592	5.592	(0.912)	504290	50.0000	51.08
40	2-Nitrophenol	139	5.698	5.698	(0.929)	121397	50.0000	46.27
41	2,4-Dimethylphenol	107	5.827	5.827	(0.950)	250593	50.0000	45.01
42	Bis(2-chloroethoxy)methane	93	5.907	5.907	(0.963)	295118	50.0000	46.90

05/10/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	44 Benzoic Acid	122	6.094	6.094	(0.994)	128292	50.0000	49.42
	45 2,4-Dichlorophenol	162	6.035	6.035	(0.984)	188289	50.0000	45.99
	47 1,2,4-Trichlorobenzene	180	6.088	6.088	(0.993)	224036	50.0000	45.94
*	48 Naphthalene-d8	136	6.131	6.131	(1.000)	520505	40.0000	
	50 Naphthalene	128	6.158	6.158	(1.004)	667025	50.0000	45.26
	51 4-Chloroaniline	127	6.307	6.307	(1.029)	221146	50.0000	37.06
	54 Hexachlorobutadiene	225	6.409	6.409	(1.045)	155439	50.0000	45.89
	59 4-Chloro-3-Methylphenol	107	7.077	7.077	(1.154)	225951	50.0000	47.51
	62 2-Methylnaphthalene	142	7.119	7.119	(1.161)	471744	50.0000	44.75
	66 Hexachlorocyclopentadiene	237	7.467	7.467	(0.847)	159938	50.0000	50.47
	67 2,4,6-Trichlorophenol	196	7.648	7.648	(0.868)	151779	50.0000	44.38
	68 2,4,5-Trichlorophenol	196	7.739	7.739	(0.878)	159476	50.0000	44.12
	72 2-Chloronaphthalene	162	7.862	7.862	(0.892)	443975	50.0000	44.50
	73 2-Nitroaniline	65	8.156	8.156	(0.925)	193553	50.0000	45.04
	76 Dimethylphthalate	163	8.530	8.530	(0.968)	501292	50.0000	43.87
	79 Acenaphthylene	152	8.551	8.551	(0.970)	702222	50.0000	47.74
	80 2,6-Dinitrotoluene	165	8.642	8.642	(0.981)	113039	50.0000	46.30
	81 3-Nitroaniline	138	8.877	8.877	(1.007)	108352	50.0000	45.18
*	82 Acenaphthene-d10	164	8.813	8.813	(1.000)	296342	40.0000	
	83 Acenaphthene	153	8.872	8.872	(1.007)	426905	50.0000	45.96
	84 2,4-Dinitrophenol	184	9.059	9.059	(1.028)	68768	50.0000	47.15
	85 4-Nitrophenol	109	9.374	9.374	(1.064)	97086	50.0000	48.49
	86 Dibenzofuran	168	9.149	9.149	(1.038)	611358	50.0000	44.55
	88 2,4-Dinitrotoluene	165	9.315	9.315	(1.057)	153404	50.0000	48.86
	93 Diethylphthalate	149	9.785	9.785	(1.110)	532282	50.0000	46.54
	94 Fluorene	166	9.758	9.758	(1.107)	524134	50.0000	47.72
	95 4-Chlorophenyl-phenylether	204	9.812	9.812	(1.113)	271162	50.0000	45.76
	98 4-Nitroaniline	138	9.993	9.993	(1.134)	107418	50.0000	45.94
	99 4,6-Dinitro-2-methylphenol	198	10.047	10.047	(0.875)	103028	50.0000	48.54
	100 N-Nitrosodiphenylamine	169	10.074	10.074	(0.878)	379525	50.0000	48.66
	102 Azobenzene	77	10.095	10.095	(0.879)	768515	50.0000	43.92
	109 4-Bromophenyl-phenylether	248	10.693	10.693	(0.932)	159421	50.0000	44.49
	112 Hexachlorobenzene	284	10.923	10.923	(0.952)	173796	50.0000	47.51
	117 Pentachlorophenol	266	11.329	11.329	(0.987)	85833	50.0000	42.07
*	121 Phenanthrene-d10	188	11.479	11.479	(1.000)	512305	40.0000	
	122 Phenanthrene	178	11.521	11.521	(1.004)	704594	50.0000	44.53
	124 Anthracene	178	11.601	11.601	(1.011)	681909	50.0000	44.58
	126 Carbazole	167	12.007	12.007	(1.046)	580509	50.0000	44.42
	129 Di-n-Butylphthalate	149	12.894	12.894	(1.123)	804916	50.0000	47.00
	134 Fluoranthene	202	13.813	13.813	(1.203)	775273	50.0000	47.41
	135 Benzidine	184	14.208	14.208	(0.854)	43983	50.0000	6.400(a)
	137 Pyrene	202	14.230	14.230	(0.855)	779165	50.0000	42.30
	146 Butylbenzylphthalate	149	15.795	15.795	(0.949)	348899	50.0000	45.80
	150 Benzo(a)Anthracene	228	16.612	16.612	(0.998)	717132	50.0000	45.19
*	153 Chrysene-d12	240	16.644	16.644	(1.000)	453146	40.0000	
	152 3,3'-Dichlorobenzidine	252	16.703	16.703	(1.004)	261653	50.0000	42.82
	154 Chrysene	228	16.693	16.693	(1.003)	651759	50.0000	43.16
	155 bis(2-ethylhexyl)Phthalate	149	17.024	17.024	(1.023)	419917	50.0000	44.04
	158 Di-n-octylphthalate	149	18.172	18.172	(0.944)	695232	50.0000	47.44
	160 Benzo(b)fluoranthene	252	18.616	18.616	(0.967)	653913	50.0000	48.97
	161 Benzo(k)fluoranthene	252	18.658	18.658	(0.969)	616411	50.0000	46.48
	165 Benzo(a)pyrene	252	19.150	19.150	(0.995)	554439	50.0000	46.00
*	166 Perylene-d12	264	19.251	19.251	(1.000)	343894	40.0000	
	173 Indeno(1,2,3-cd)pyrene	276	20.966	20.966	(1.089)	496808	50.0000	44.47

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
174 Dibenzo(a,h)anthracene	278	21.014	21.014	(1.092)	514360	50.0000	47.45
177 Benzo(g,h,i)perylene	276	21.420	21.420	(1.113)	462254	50.0000	46.34

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3001.D Page 4
Report Date: 10-May-2005 10:45

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

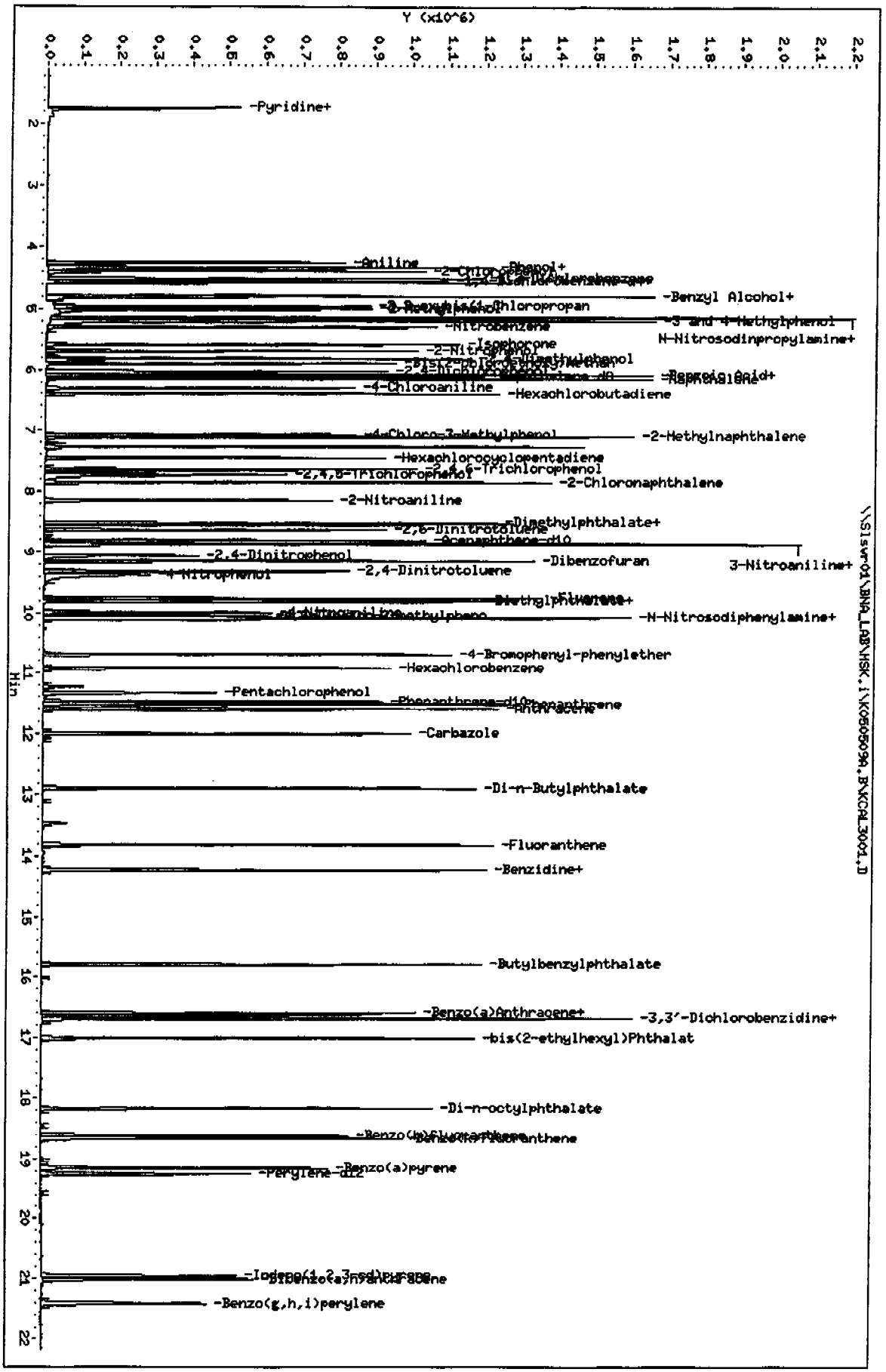
Instrument ID: MSK.i
Lab File ID: KCAL3001.D
Lab Smp Id: SSTD050 ICV
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Misc Info: OP0052-05 2X

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD050 ICV
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	144564	-25.21
48 Naphthalene-d8	657267	328634	1314534	520505	-20.81
82 Acenaphthene-d10	351374	175687	702748	296342	-15.66
121 Phenanthrene-d10	612492	306246	1224984	512305	-16.36
153 Chrysene-d12	494718	247359	989436	453146	-8.40
166 Perylene-d12	409117	204559	818234	343894	-15.94

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.56	-0.03
48 Naphthalene-d8	6.14	5.64	6.64	6.13	-0.19
82 Acenaphthene-d10	8.83	8.33	9.33	8.81	-0.13
121 Phenanthrene-d10	11.49	10.99	11.99	11.48	-0.10
153 Chrysene-d12	16.66	16.16	17.16	16.64	-0.07
166 Perylene-d12	19.27	18.77	19.77	19.25	-0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



Data File: \\Slsvr01\BNA_LAB\HSK.i\K0505094.B\KCAL3001.D
Date : 09-MAY-2005 15:44
Client ID: SSTD050 ICV
Sample Info: SSTD050 ICV
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	46.63		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	53.75		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	49.63		PASS
197	0 - 1% of mass 198	0.20		PASS
199	5 - 9% of mass 198	6.79		PASS
275	10 - 30% of mass 198	27.30		PASS
365	Greater than 1% of mass 198	3.38		PASS
441	Present, but less than mass 443	11.73	(91.21)	PASS
442	Greater than 40% of mass 198	69.63		PASS
443	17 - 23% of mass 442	12.86	(18.47)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.7361894	5.000	PASS
Benzidine	0.8528897	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	308167			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	801	0.3	15.0	PASS
4,4-DDD + DDE	801	0.3	15.0	PASS

****

Tuning Sample, //Slsvr01/BNA_LAB/MSK.i/K050509D.B/KDFT3002.D/KDFT3002.D,*** PASSED

****

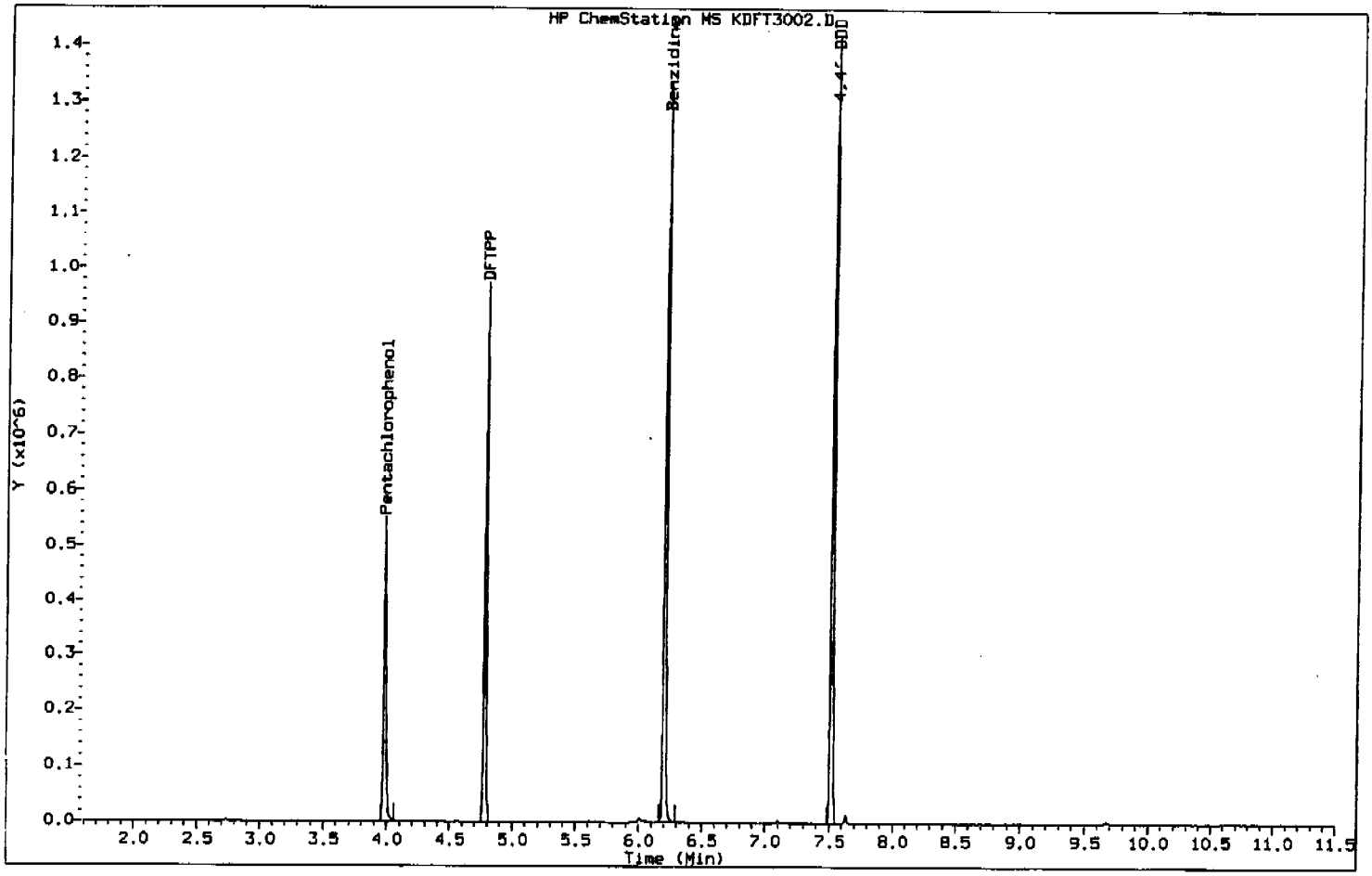
5/10/05

STL ST LOUIS

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 05/09/2005 18:49

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509D.B/KDFT3002.D/KDFT3002.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509D.B\sw846tun.m Inst: MSK
Injection Date: 09-MAY-2005 16:09 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0232-05 (50NG)

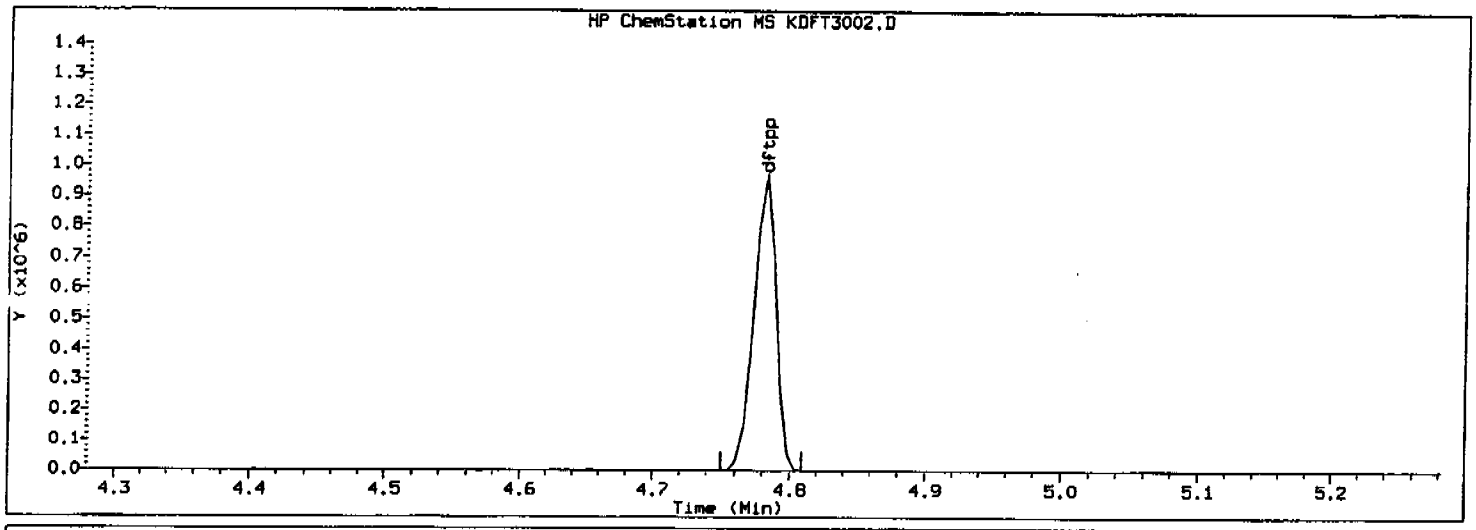


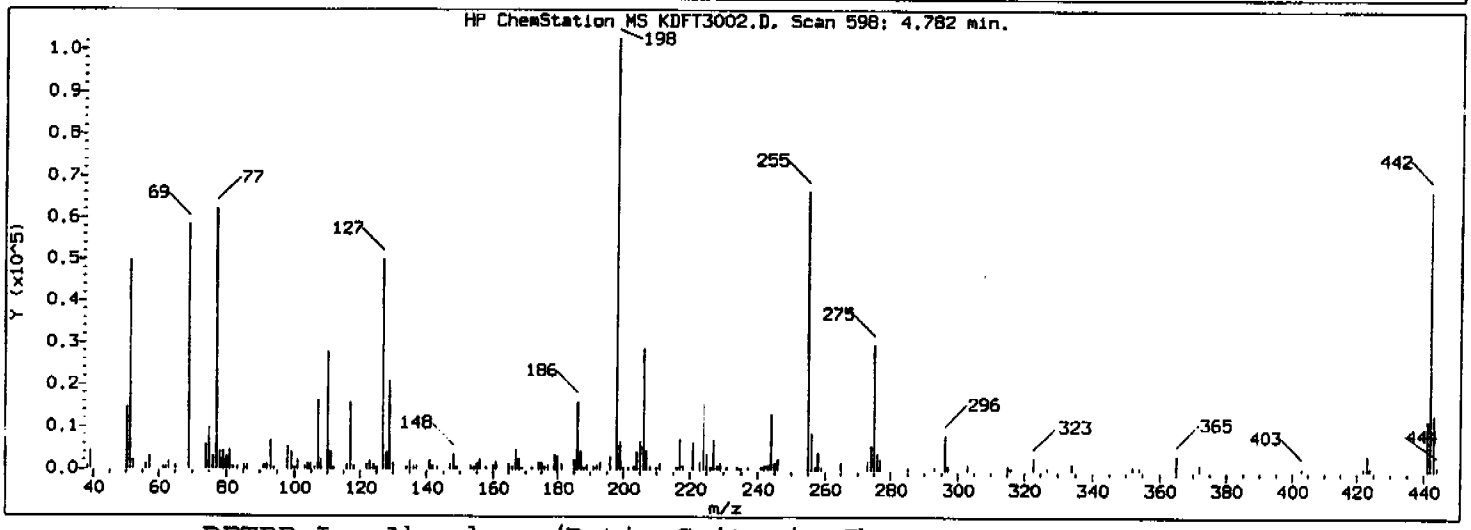
LOT #F5D220218

STL ST LOUIS

Report Date: 05/09/2005 18:49

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509D.B/KDFT3002.D/KDFT3002.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509D.B\sw846tun.m Inst: MSK
Injection Date: 09-MAY-2005 16:09 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0232-05 (50NG)





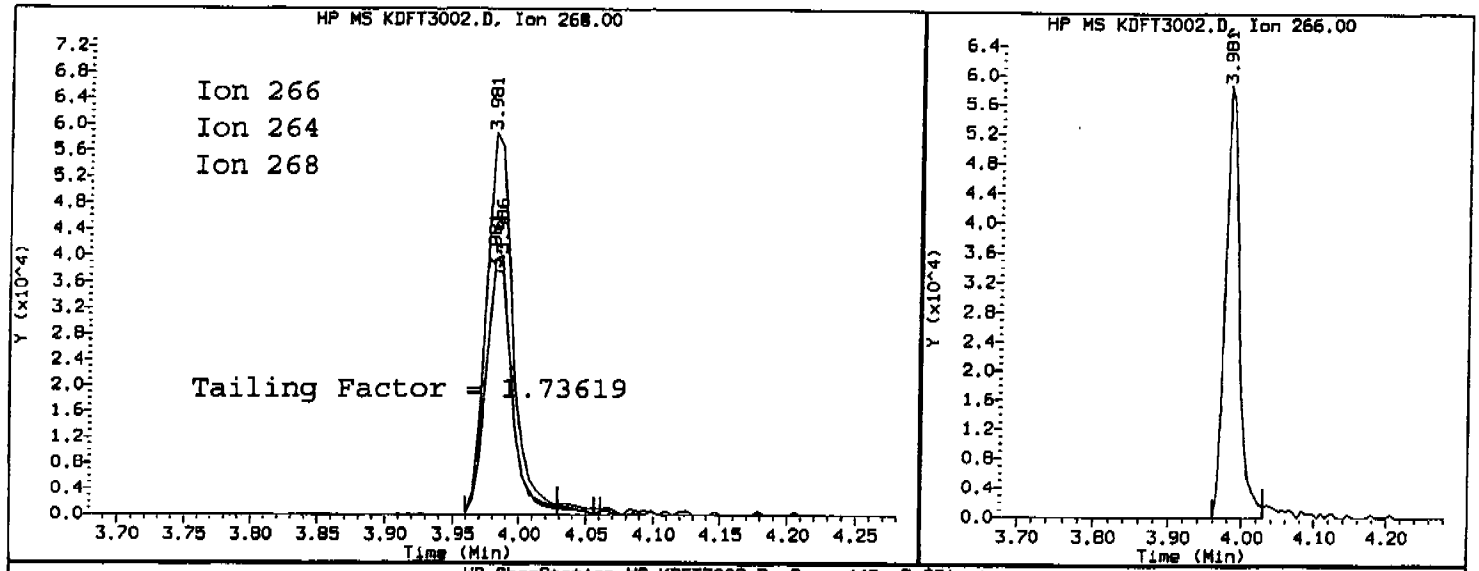
DFTPP Ion Abundance/Ratio Criteria Chart

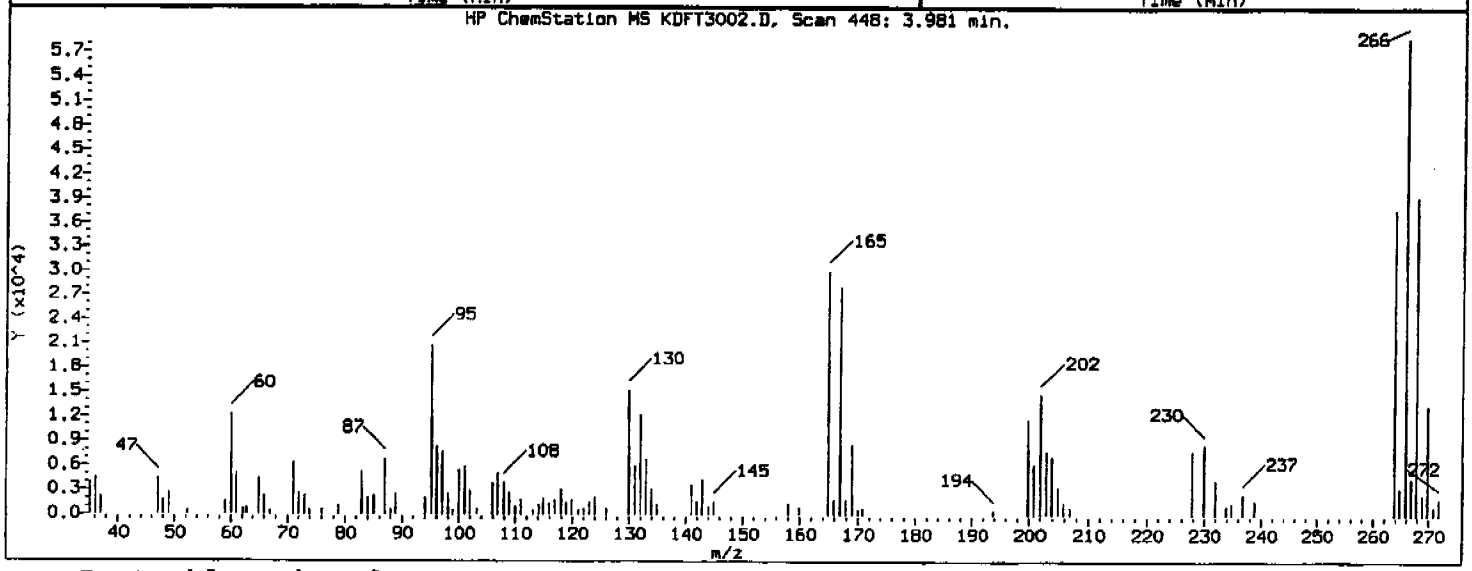
Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	46.63		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	53.75		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	49.63		PASS
197	0 - 1% of mass 198	0.20		PASS
199	5 - 9% of mass 198	6.79		PASS
275	10 - 30% of mass 198	27.30		PASS
365	Greater than 1% of mass 198	3.38		PASS
441	Present, but less than mass 443	11.73	(91.21)	PASS
442	Greater than 40% of mass 198	69.63		PASS
443	17 - 23% of mass 442	12.86	(18.47)	PASS

LOT #F5D220218

STL ST LOUIS
Report Date: 05/09/2005 18:49

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509D.B/KDFT3002.D/KDFT3002.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509D.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 16:09 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)





Pentachlorophenol
==========
Exp. RT = 3.975
Found RT = 3.981

Mass	Area	Ratio
266	82286	100.00
264	53687	65.25
268	56009	68.07

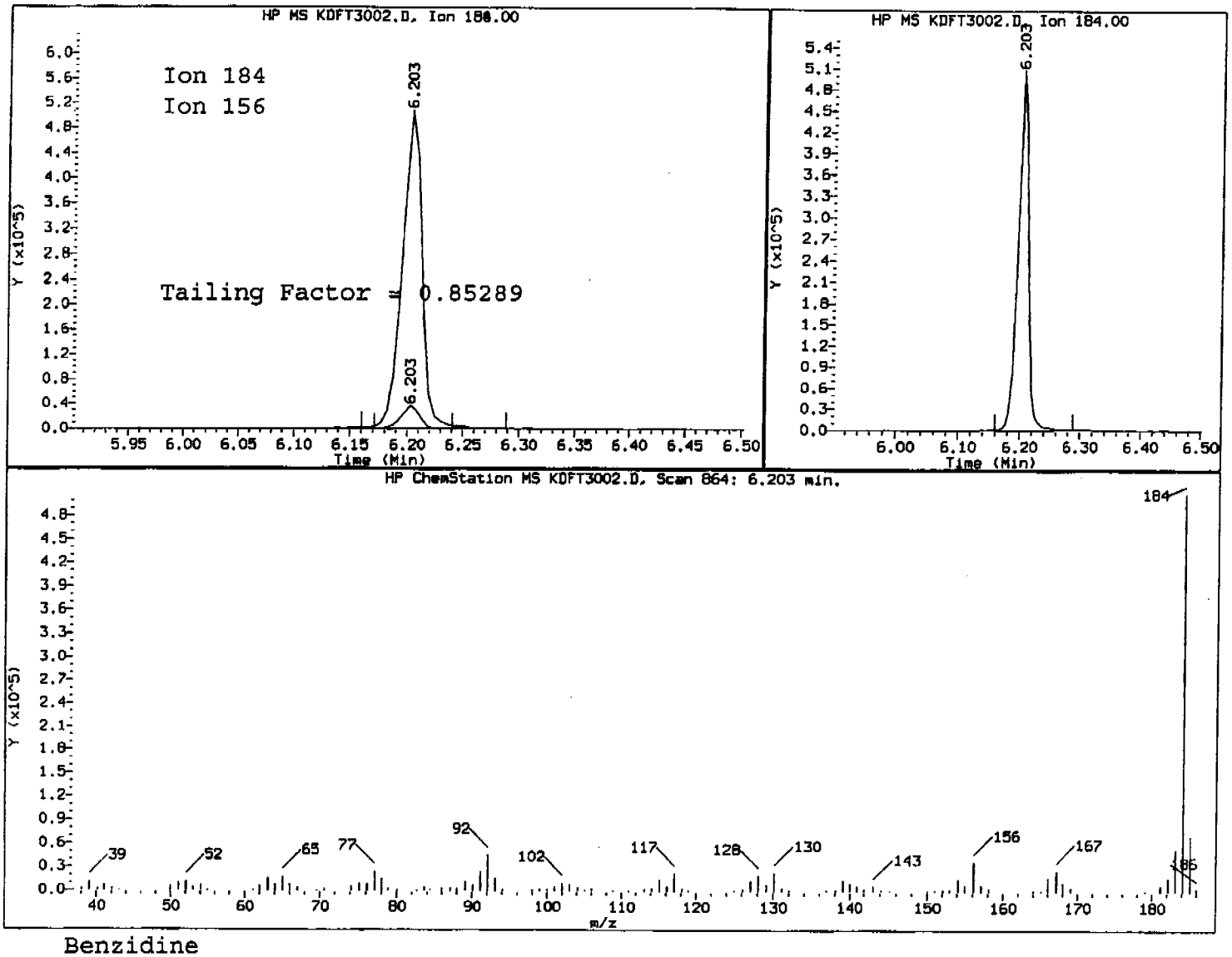
Tailing factor for Pentachlorophenol OK

Tail Factor = 1.736 Maximum Allowed = 5.0

STL ST LOUIS

Report Date: 05/09/2005 18:49

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509D.B/KDFT3002.D/KDFT3002.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509D.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 16:09 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



Benzidine
=========
Exp. RT = 6.203
Found RT = 6.203

Mass	Area	Ratio
184	614002	100.00
156	42723	6.96

Tailing factor for Benzidine OK

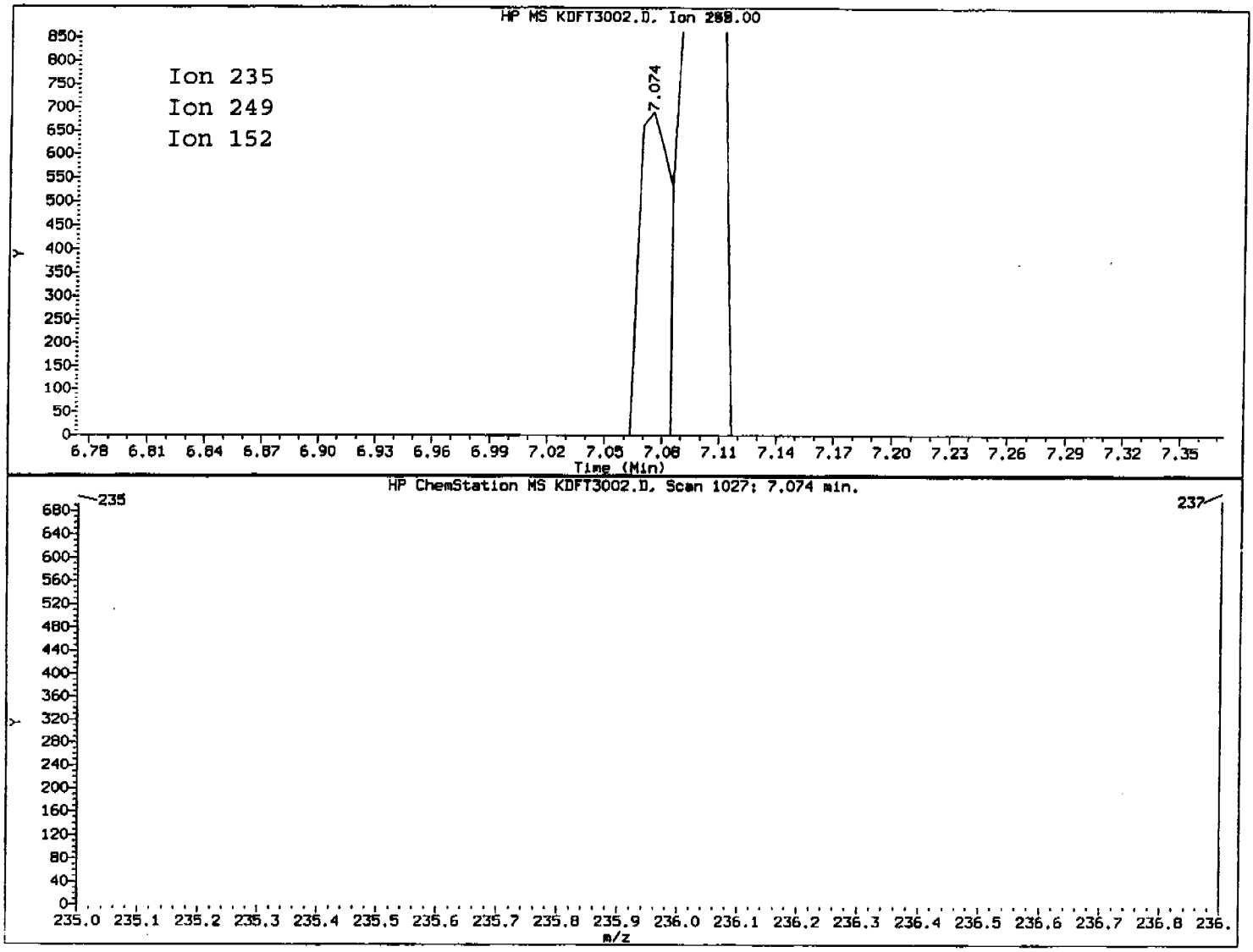
Tail Factor = 0.853 Maximum Allowed = 3.0

LOT #F5D220218

STL ST LOUIS

Report Date: 05/09/2005 18:49

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509D.B/KDFT3002.D/KDFT3002.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509D.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 16:09 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



4,4'-DDD

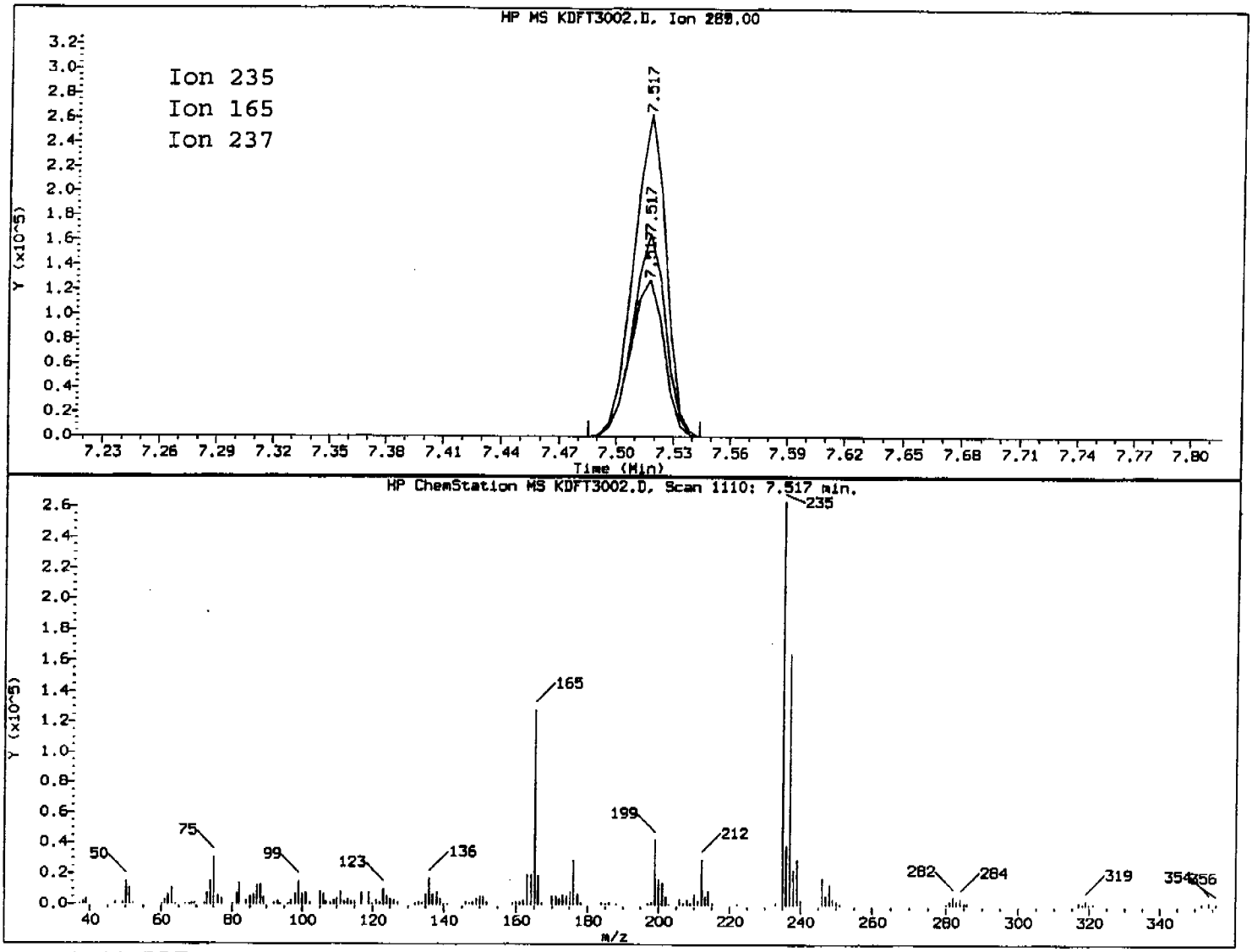
Exp. RT = 6.734
Found RT = 7.074

Mass	Area	Ratio
235	801	100.00
249	0	0.00
152	0	0.00

LOT #F5D220218

STL ST LOUIS
Report Date: 05/09/2005 18:49

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509D.B/KDFT3002.D/KDFT3002.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509D.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 16:09 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



4,4'-DDT
========
Exp. RT = 7.517
Found RT = 7.517

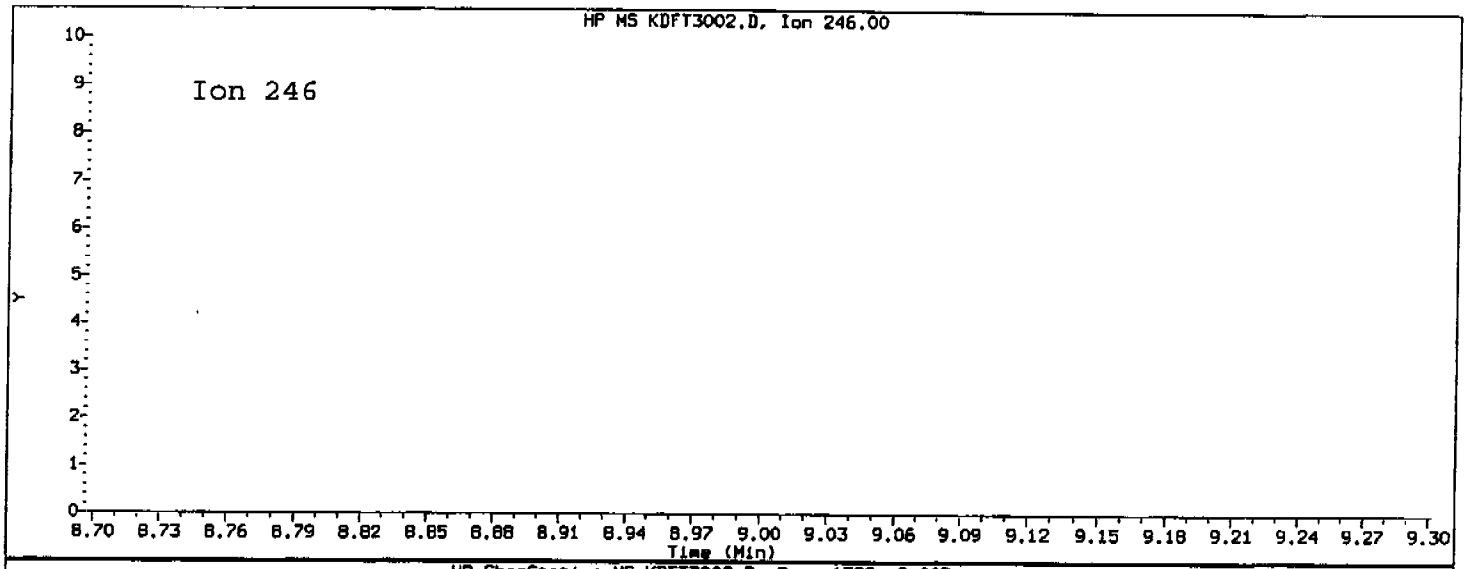
Mass	Area	Ratio
235	308167	100.00
165	156087	50.65
237	194611	63.15

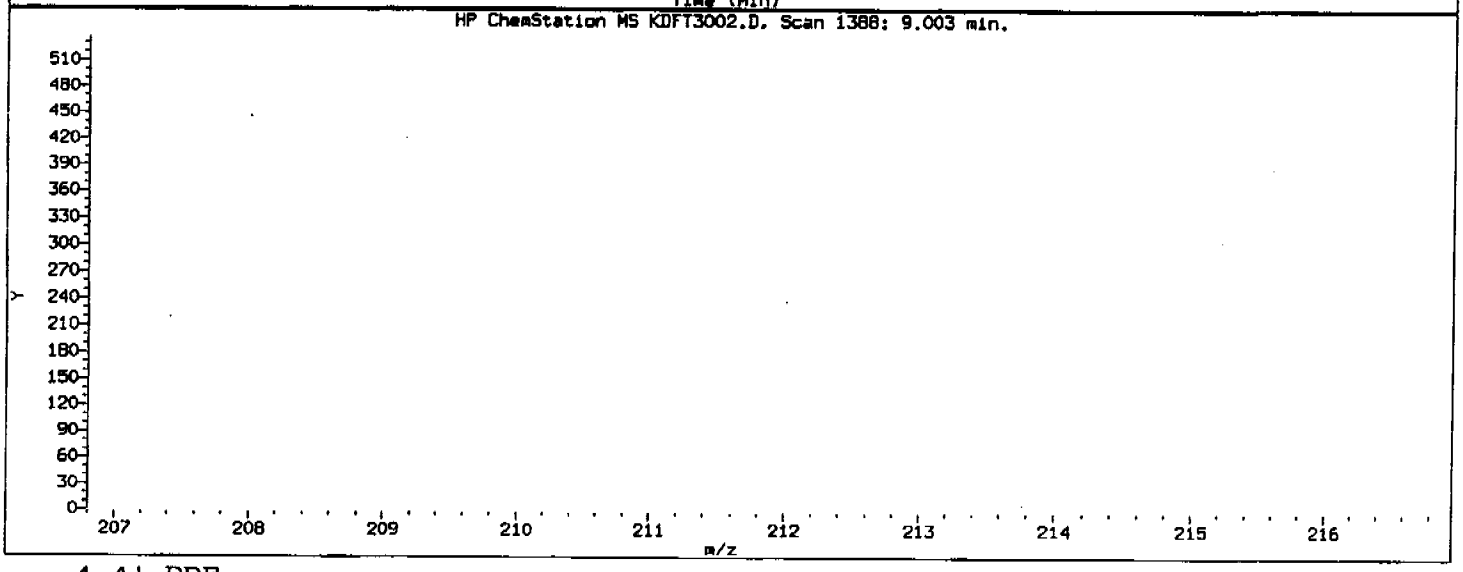
LOT #F5D220218

STL ST LOUIS

Report Date: 05/09/2005 18:49

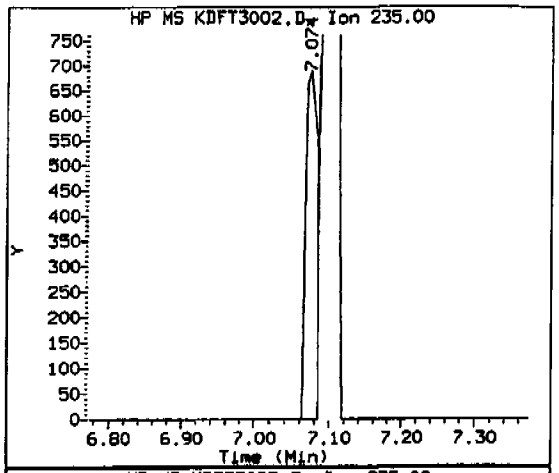
Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509D.B/KDFT3002.D/KDFT3002.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509D.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 16:09 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



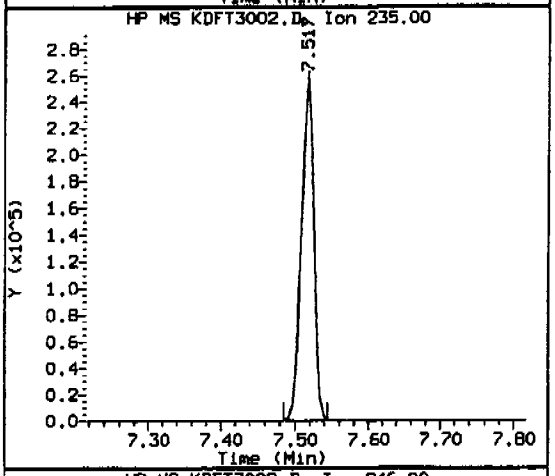


4,4'-DDE
========
Exp. RT = 9.000
Found RT = 0.000

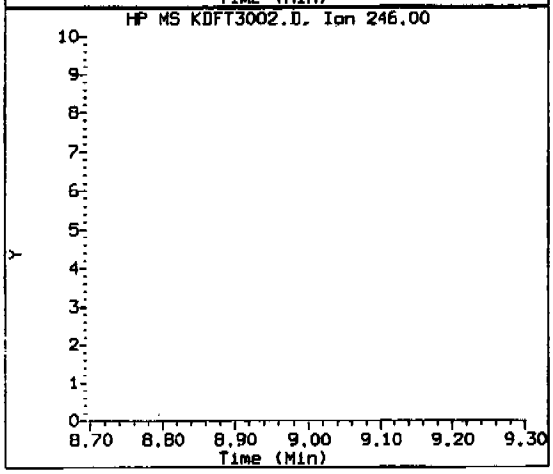
Mass	Area	Ratio
246	0	0.00



Compound: 4,4'-DDD
Quant Mass: 235
RT: 7.074
Area: 801



Compound: 4,4'-DDT
Quant Mass: 235
RT: 7.517
Area: 308167



Compound: 4,4'-DDE
Quant Mass: 246
RT: 0.000
Area: 0

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	308167			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	801	0.3	15.0	PASS
4,4-DDD + DDE	801	0.3	15.0	PASS

****
TUNE SAMPLE *** PASSED *** DDT BREAKDOWN TEST
****

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3003.D
Report Date: 10-May-2005 11:12

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i
Lab File ID: KCAL3003.D
Analysis Type: WATER
Lab Sample ID: SSTD050
Method: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m

Injection Date: 09-MAY-2005 16:30
Init. Cal. Date(s): 28-APR-2005 09-MAY-2005
Init. Cal. Times: 11:41 15:12
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	1 1,4-Dioxane	0.36386	0.50663	0.010	-39.23785	60.00000	Averaged
	4 N-Nitrosodimethylamine	0.67099	0.83858	0.010	-24.97558	60.00000	Averaged
	3 Pyridine	1.18405	1.34863	0.010	-13.89987	60.00000	Averaged
	5 Dimethylformamide	0.88716	1.03657	0.010	-16.84088	60.00000	Averaged
$	10 2-Fluorophenol	1.20834	1.28294	0.010	-6.17335	40.00000	Averaged
	11 Cyclohexanol	1.38218	1.52736	0.010	-10.50307	60.00000	Averaged
	17 Aniline	2.19527	2.27159	0.010	-3.47688	60.00000	Averaged
	19 Bis(2-chloroethyl)ether	1.55372	1.54112	0.010	0.81089	60.00000	Averaged
$	15 Phenol-d5	1.69125	1.73291	0.010	-2.46358	40.00000	Averaged
	16 Phenol	1.87215	1.88299	0.010	-0.57912	20.00000	Averaged
	20 2-Chlorophenol	1.35363	1.36577	0.010	-0.89695	60.00000	Averaged
	21 1,3-Dichlorobenzene	1.54804	1.52239	0.010	1.65683	60.00000	Averaged
	23 1,4-Dichlorobenzene	1.64398	1.60727	0.010	2.23336	20.00000	Averaged
	26 1,2-Dichlorobenzene	1.52039	1.47987	0.010	2.66503	60.00000	Averaged
	25 Benzyl Alcohol	0.66523	0.74125	0.010	-11.42801	60.00000	Averaged
	28 2,2-oxybis(1-Chloropropane)	1.60673	1.63313	0.010	-1.64284	60.00000	Averaged
	27 2-Methylphenol	1.19876	1.23079	0.010	-2.67169	60.00000	Averaged
	35 Hexachloroethane	0.71883	0.70023	0.010	2.58685	60.00000	Averaged
	32 N-Nitrosodinpropylamine	1.25943	1.33482	0.010	-5.98634	60.00000	Averaged
	29 3 and 4-Methylphenol	1.27839	1.30207	0.010	-1.85221	60.00000	Averaged
$	36 Nitrobenzene-d5	0.54909	0.56874	0.010	-3.57902	40.00000	Averaged
	37 Nitrobenzene	0.58194	0.57972	0.010	0.38182	60.00000	Averaged
	39 Isophorone	0.75864	0.80201	0.010	-5.71685	60.00000	Averaged
	40 2-Nitrophenol	0.20162	0.20832	0.010	-3.32746	20.00000	Averaged
	41 2,4-Dimethylphenol	0.42786	0.44536	0.010	-4.08872	60.00000	Averaged
	42 Bis(2-chloroethoxy)methane	0.48359	0.48404	0.010	-0.09202	60.00000	Averaged
	45 2,4-Dichlorophenol	0.31460	0.32447	0.010	-3.13836	20.00000	Averaged
	47 1,2,4-Trichlorobenzene	0.37479	0.37174	0.010	0.81541	60.00000	Averaged
	44 Benzoic Acid	0.19951	0.22097	0.010	-10.75894	60.00000	Averaged
	50 Naphthalene	1.13252	1.07973	0.010	4.66168	60.00000	Averaged
	51 4-Chloroaniline	0.45857	0.46054	0.010	-0.43080	60.00000	Averaged
	54 Hexachlorobutadiene	0.26032	0.25642	0.010	1.49849	20.00000	Averaged
	62 2-Methylnaphthalene	0.81010	0.79832	0.010	1.45448	60.00000	Averaged
	59 4-Chloro-3-Methylphenol	0.36550	0.38676	0.010	-5.81566	20.00000	Averaged
	66 Hexachlorocyclopentadiene	0.42770	0.38659	0.010	9.61316	60.00000	Averaged
	67 2,4,6-Trichlorophenol	0.46165	0.46748	0.010	-1.26175	20.00000	Averaged
	68 2,4,5-Trichlorophenol	0.48790	0.51049	0.010	-4.62929	60.00000	Averaged
$	69 2-Fluorobiphenyl	1.61063	1.52859	0.010	5.09379	40.00000	Averaged
	72 2-Chloronaphthalene	1.34666	1.28880	0.010	4.29645	60.00000	Averaged
	73 2-Nitroaniline	0.58010	0.61700	0.010	-6.36032	60.00000	Averaged
	76 Dimethylphthalate	1.54223	1.55842	0.010	-1.04999	60.00000	Averaged
	79 Acenaphthylene	1.98537	1.92794	0.010	2.89233	60.00000	Averaged

JMS 05/10/05

LOT #F5D220218

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3003.D Page 2
Report Date: 10-May-2005 11:12

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i Injection Date: 09-MAY-2005 16:30
Lab File ID: KCAL3003.D Init. Cal. Date(s): 28-APR-2005 09-MAY-2005
Analysis Type: WATER Init. Cal. Times: 11:41 15:12
Lab Sample ID: SSTD050 Quant Type: ISTD
Method: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	80 2,6-Dinitrotoluene	0.32954	0.33779	0.010	-2.50495	60.00000	Averaged
	83 Acenaphthene	1.25374	1.21995	0.010	2.69513	20.00000	Averaged
	81 3-Nitroaniline	0.32374	0.34996	0.010	-8.09967	60.00000	Averaged
	84 2,4-Dinitrophenol	0.19685	0.22366	0.010	-13.61751	60.00000	Averaged
	86 Dibenzofuran	1.85230	1.82840	0.010	1.29050	60.00000	Averaged
	88 2,4-Dinitrotoluene	0.42378	0.45817	0.010	-8.11681	60.00000	Averaged
	85 4-Nitrophenol	0.27026	0.32435	0.010	-20.01541	60.00000	Averaged
	93 Diethylphthalate	1.54363	1.56163	0.010	-1.16602	60.00000	Averaged
	94 Fluorene	1.48246	1.50068	0.010	-1.22923	60.00000	Averaged
	95 4-Chlorophenyl-phenylether	0.79978	0.80006	0.010	-0.03520	60.00000	Averaged
	98 4-Nitroaniline	0.31560	0.35225	0.010	-11.61243	60.00000	Averaged
	99 4,6-Dinitro-2-methylphenol	0.16574	0.18472	0.010	-11.45589	60.00000	Averaged
	100 N-Nitrosodiphenylamine	0.60901	0.58024	0.010	4.72325	20.00000	Averaged
	102 Azobenzene	1.36611	1.30190	0.010	4.70030	60.00000	Averaged
$	104 2,4,6-Tribromophenol	0.22361	0.23768	0.010	-6.29452	40.00000	Averaged
	109 4-Bromophenyl-phenylether	0.27978	0.27375	0.010	2.15303	60.00000	Averaged
	112 Hexachlorobenzene	0.28563	0.27963	0.010	2.10045	60.00000	Averaged
	117 Pentachlorophenol	0.15930	0.16669	0.010	-4.63974	20.00000	Averaged
	122 Phenanthrene	1.23548	1.22276	0.010	1.02999	60.00000	Averaged
	124 Anthracene	1.19438	1.18909	0.010	0.44340	60.00000	Averaged
	126 Carbazole	1.02046	1.02865	0.010	-0.80196	60.00000	Averaged
	129 Di-n-Butylphthalate	1.33705	1.35998	0.010	-1.71537	60.00000	Averaged
	134 Fluoranthene	1.27688	1.32780	0.010	-3.98786	20.00000	Averaged
	135 Benzidine	0.60665	0.60339	0.010	0.53606	100	Averaged
	137 Pyrene	1.62596	1.52498	0.010	6.21025	60.00000	Averaged
$	139 Terphenyl-d14	1.26353	1.19387	0.010	5.51310	40.00000	Averaged
	145 3,3-Dimethylbenzidine	0.64501	0.66446	0.010	-3.01621	60.00000	Averaged
	146 Butylbenzylphthalate	0.67238	0.65828	0.010	2.09737	60.00000	Averaged
	150 Benzo(a)Anthracene	1.40066	1.38240	0.010	1.30347	60.00000	Averaged
	152 3,3'-Dichlorobenzidine	0.53933	0.55489	0.010	-2.88559	60.00000	Averaged
	154 Chrysene	1.33287	1.27881	0.010	4.05568	60.00000	Averaged
	155 bis(2-ethylhexyl)Phthalate	0.84173	0.81999	0.010	2.58283	60.00000	Averaged
	158 Di-n-octylphthalate	1.70444	1.65468	0.010	2.91940	20.00000	Averaged
	160 Benzo(b)fluoranthene	1.55320	1.56410	0.010	-0.70203	60.00000	Averaged
	161 Benzo(k)fluoranthene	1.54269	1.56410	0.010	-1.38816	60.00000	Averaged
	165 Benzo(a)pyrene	1.40180	1.38181	0.010	1.42611	20.00000	Averaged
	173 Indeno(1,2,3-cd)pyrene	1.29945	1.27426	0.010	1.93863	60.00000	Averaged
	174 Dibenzo(a,h)anthracene	1.26094	1.29028	0.010	-2.32704	60.00000	Averaged
	177 Benzo(g,h,i)perylene	1.16013	1.15239	0.010	0.66722	60.00000	Averaged

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Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B/KCAL3003.D
Report Date: 05/10/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3003.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 16:30
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270

COMPOUND	%D
1,4-Dioxane	39.2
Pyridine	13.9
N-Nitrosodimethylamine	25.0
Dimethylformamide	16.8
2-Fluorophenol	6.2
Cyclohexanol	10.5
Aniline	3.5
Bis(2-chloroethyl)ether	0.8
Phenol-d5	2.5
Phenol	0.6
2-Chlorophenol	0.9
1,3-Dichlorobenzene	1.7
1,4-Dichlorobenzene	2.2
1,2-Dichlorobenzene	2.7
Benzyl Alcohol	11.4
2,2-oxybis(1-Chloropropane)	1.6
2-Methylphenol	2.7
N-Nitrosodinpropylamine	6.0
Hexachloroethane	2.6
3 and 4-Methylphenol	1.9
Nitrobenzene-d5	3.6
Nitrobenzene	0.4
Isophorone	5.7
2-Nitrophenol	3.3
2,4-Dimethylphenol	4.1
Bis(2-chloroethoxy)methane	0.1
2,4-Dichlorophenol	3.1
1,2,4-Trichlorobenzene	0.8
Benzoic Acid	10.8
Naphthalene	4.7
4-Chloroaniline	0.4
Hexachlorobutadiene	1.5
4-Chloro-3-Methylphenol	5.8
2-Methylnaphthalene	1.5
Hexachlorocyclopentadiene	9.6
2,4,6-Trichlorophenol	1.3
2,4,5-Trichlorophenol	4.6
2-Fluorobiphenyl	5.1
2-Chloronaphthalene	4.3

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B/KCAL3003.D
Report Date: 05/10/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3003.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 16:30
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C

COMPOUND	%D
2-Nitroaniline	6.4
Dimethylphthalate	1.0
Acenaphthylene	2.9
2,6-Dinitrotoluene	2.5
Acenaphthene	2.7
3-Nitroaniline	8.1
2,4-Dinitrophenol	13.6
Dibenzofuran	1.3
2,4-Dinitrotoluene	8.1
4-Nitrophenol	20.0
Fluorene	1.2
Diethylphthalate	1.2
4-Chlorophenyl-phenylether	0.0
4-Nitroaniline	11.6
4,6-Dinitro-2-methylphenol	11.5
N-Nitrosodiphenylamine	4.7
Azobenzene	4.7
2,4,6-Tribromophenol	6.3
4-Bromophenyl-phenylether	2.2
Hexachlorobenzene	2.1
Pentachlorophenol	4.6
Phenanthrene	1.0
Anthracene	0.4
Carbazole	0.8
Di-n-Butylphthalate	1.7
Fluoranthene	4.0
Benzidine	0.5
Pyrene	6.2
Terphenyl-d14	5.5
3,3-Dimethylbenzidine	3.0
Butylbenzylphthalate	2.1
Benzo(a)Anthracene	1.3
Chrysene	4.1
3,3'-Dichlorobenzidine	2.9
bis(2-ethylhexyl)Phthalate	2.6
Di-n-octylphthalate	2.9
Benzo(k)fluoranthene	1.4
Benzo(b)fluoranthene	0.7
Benzo(a)pyrene	1.4

LOT #F5D220218

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Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B/KCAL3003.D
Report Date: 05/10/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3003.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 16:30
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C

COMPOUND	%D
Indeno(1,2,3-cd)pyrene	1.9
Dibenzo(a,h)anthracene	2.3
Benzo(g,h,i)perylene	0.7
Dibenz(e,a) Pyrene	100.0

The average of %D's in the continuing calibration is 5.9

05/10/05

LOT #F5D220218

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3003.D Page 1
Report Date: 10-May-2005 11:12

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3003.D
Lab Smp Id: SSTD050 Client Smp ID: SSTD050
Inj Date : 09-MAY-2005 16:30
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD050
Misc Info : SV0220-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Meth Date : 10-May-2005 11:12 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12 Cal File: KCAL3000.D
Als bottle: 12 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 1,4-Dioxane	88	1.279	1.279	(0.281)	87783	50.0000	69.62
	4 N-Nitrosodimethylamine	74	1.706	1.706	(0.374)	145299	50.0000	62.49
	3 Pyridine	79	1.690	1.690	(0.371)	233676	50.0000	56.95
	5 Dimethylformamide	44	2.144	2.144	(0.470)	179605	50.0000	58.42(M)
$	10 2-Fluorophenol	112	3.245	3.245	(0.712)	222293	50.0000	53.09
	11 Cyclohexanol	57	3.261	3.261	(0.715)	264643	50.0000	55.25
	17 Aniline	93	4.254	4.254	(0.933)	393596	50.0000	51.74
	19 Bis(2-chloroethyl)ether	93	4.324	4.324	(0.948)	267028	50.0000	49.59
$	15 Phenol-d5	99	4.324	4.324	(0.948)	300260	50.0000	51.23
	16 Phenol	94	4.334	4.334	(0.951)	326264	50.0000	50.29
	20 2-Chlorophenol	128	4.388	4.388	(0.963)	236646	50.0000	50.45
	21 1,3-Dichlorobenzene	146	4.511	4.511	(0.989)	263783	50.0000	49.17
*	22 1,4-Dichlorobenzene-d4	152	4.559	4.559	(1.000)	138615	40.0000	
	23 1,4-Dichlorobenzene	146	4.575	4.575	(1.004)	278489	50.0000	48.88
	26 1,2-Dichlorobenzene	146	4.799	4.799	(1.053)	256416	50.0000	48.67
	25 Benzyl Alcohol	108	4.804	4.804	(1.054)	128436	50.0000	55.71(H)
	28 2,2-oxybis(1-Chloropropane)	45	4.965	4.965	(1.089)	282970	50.0000	50.82
	27 2-Methylphenol	108	5.013	5.013	(1.100)	213257	50.0000	51.34
	35 Hexachloroethane	117	5.157	5.157	(1.131)	121328	50.0000	48.71
	32 N-Nitrosodinpropylamine	70	5.152	5.152	(1.130)	231283	50.0000	52.99
	29 3 and 4-Methylphenol	108	5.205	5.205	(1.142)	451216	100.000	101.8

05/10/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.285	5.285	(0.861)	350233	50.0000	51.79
	37 Nitrobenzene	77	5.307	5.307	(0.864)	356993	50.0000	49.81
	39 Isophorone	82	5.595	5.595	(0.911)	493879	50.0000	52.86
	40 2-Nitrophenol	139	5.702	5.702	(0.929)	128287	50.0000	51.66
	41 2,4-Dimethylphenol	107	5.830	5.830	(0.950)	274252	50.0000	52.04
	42 Bis(2-chloroethoxy)methane	93	5.910	5.910	(0.963)	298072	50.0000	50.05
	45 2,4-Dichlorophenol	162	6.038	6.038	(0.983)	199810	50.0000	51.57
	47 1,2,4-Trichlorobenzene	180	6.097	6.097	(0.993)	228918	50.0000	49.59
*	48 Naphthalene-d8	136	6.140	6.140	(1.000)	492644	40.0000	
	44 Benzoic Acid	122	6.097	6.097	(0.993)	136075	50.0000	55.38
	50 Naphthalene	128	6.167	6.167	(1.004)	664903	50.0000	47.67
	51 4-Chloroaniline	127	6.316	6.316	(1.029)	283604	50.0000	50.22
	54 Hexachlorobutadiene	225	6.412	6.412	(1.044)	157905	50.0000	49.25
	62 2-Methylnaphthalene	142	7.128	7.128	(1.161)	491608	50.0000	49.27
	59 4-Chloro-3-Methylphenol	107	7.080	7.080	(1.153)	238169	50.0000	52.91
	66 Hexachlorocyclopentadiene	237	7.475	7.475	(0.847)	133779	50.0000	45.19
	67 2,4,6-Trichlorophenol	196	7.662	7.662	(0.868)	161771	50.0000	50.63
	68 2,4,5-Trichlorophenol	196	7.748	7.748	(0.878)	176656	50.0000	52.31
$	69 2-Fluorobiphenyl	172	7.753	7.753	(0.878)	528971	50.0000	47.45
	72 2-Chloronaphthalene	162	7.876	7.876	(0.892)	445991	50.0000	47.85
	73 2-Nitroaniline	65	8.170	8.170	(0.926)	213513	50.0000	53.18
	76 Dimethylphthalate	163	8.539	8.539	(0.967)	539293	50.0000	50.52
	79 Acenaphthylene	152	8.560	8.560	(0.970)	667167	50.0000	48.55
	80 2,6-Dinitrotoluene	165	8.651	8.651	(0.980)	116894	50.0000	51.25
*	82 Acenaphthene-d10	164	8.827	8.827	(1.000)	276841	40.0000	
	83 Acenaphthene	153	8.880	8.880	(1.006)	422165	50.0000	48.65
	81 3-Nitroaniline	138	8.886	8.886	(1.007)	121104	50.0000	54.05
	84 2,4-Dinitrophenol	184	9.067	9.067	(1.027)	77397	50.0000	56.81
	86 Dibenzofuran	168	9.158	9.158	(1.038)	632719	50.0000	49.35
	88 2,4-Dinitrotoluene	165	9.329	9.329	(1.057)	158551	50.0000	54.06
	85 4-Nitrophenol	109	9.377	9.377	(1.062)	112242	50.0000	60.01
	93 Diethylphthalate	149	9.799	9.799	(1.110)	540404	50.0000	50.58
	94 Fluorene	166	9.773	9.773	(1.107)	519313	50.0000	50.61
	95 4-Chlorophenyl-phenylether	204	9.821	9.821	(1.113)	276862	50.0000	50.02
	98 4-Nitroaniline	138	10.008	10.008	(1.134)	121895	50.0000	55.81
	99 4,6-Dinitro-2-methylphenol	198	10.061	10.061	(0.876)	116765	50.0000	55.73
	100 N-Nitrosodiphenylamine	169	10.088	10.088	(0.878)	366777	50.0000	47.64
	102 Azobenzene	77	10.104	10.104	(0.880)	822940	50.0000	47.65
$	104 2,4,6-Tribromophenol	330	10.275	10.275	(1.164)	82250	50.0000	53.15
	109 4-Bromophenyl-phenylether	248	10.707	10.707	(0.932)	173042	50.0000	48.92
	112 Hexachlorobenzene	284	10.932	10.932	(0.952)	176758	50.0000	48.95
	117 Pentachlorophenol	266	11.338	11.338	(0.987)	105367	50.0000	52.32
*	121 Phenanthrene-d10	188	11.487	11.487	(1.000)	505686	40.0000	
	122 Phenanthrene	178	11.530	11.530	(1.004)	772915	50.0000	49.48
	124 Anthracene	178	11.616	11.616	(1.011)	751632	50.0000	49.78
	126 Carbazole	167	12.016	12.016	(1.046)	650215	50.0000	50.40
	129 Di-n-Butylphthalate	149	12.903	12.903	(1.123)	859654	50.0000	50.86
	134 Fluoranthene	202	13.827	13.827	(1.204)	839310	50.0000	51.99
	135 Benzidine	184	14.223	14.223	(0.854)	336146	50.0000	49.73
	137 Pyrene	202	14.244	14.244	(0.855)	849555	50.0000	46.89
$	139 Terphenyl-d14	244	14.687	14.687	(0.882)	665093	50.0000	47.24
	145 3,3-Dimethylbenzidine	212	15.686	15.686	(0.942)	370166	50.0000	51.51
	146 Butylbenzylphthalate	149	15.809	15.809	(0.949)	366722	50.0000	48.95
	150 Benzo(a)Anthracene	228	16.621	16.621	(0.998)	770123	50.0000	49.35

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3003.D Page 3
Report Date: 10-May-2005 11:12

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.653	16.653	(1.000)	445673	40.0000	
152 3,3'-Dichlorobenzidine	252	16.717	16.717	(1.004)	309125	50.0000	51.44
154 Chrysene	228	16.707	16.707	(1.003)	712414	50.0000	47.97
155 bis(2-ethylhexyl)Phthalate	149	17.038	17.038	(1.023)	456807	50.0000	48.71
158 Di-n-octylphthalate	149	18.181	18.181	(0.944)	789115	50.0000	48.54
160 Benzo(b)fluoranthene	252	18.630	18.630	(0.967)	745918	50.0000	50.35
161 Benzo(k)fluoranthene	252	18.630	18.630	(0.967)	745918	50.0000	50.69
165 Benzo(a)pyrene	252	19.164	19.164	(0.995)	658985	50.0000	49.29
* 166 Perylene-d12	264	19.266	19.266	(1.000)	381519	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.986	20.986	(1.089)	607692	50.0000	49.03
174 Dibenzo(a,h)anthracene	278	21.034	21.034	(1.092)	615335	50.0000	51.16
177 Benzo(g,h,i)perylene	276	21.440	21.440	(1.113)	549572	50.0000	49.67

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3003.D Page 1
Report Date: 12-May-2005 08:53

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

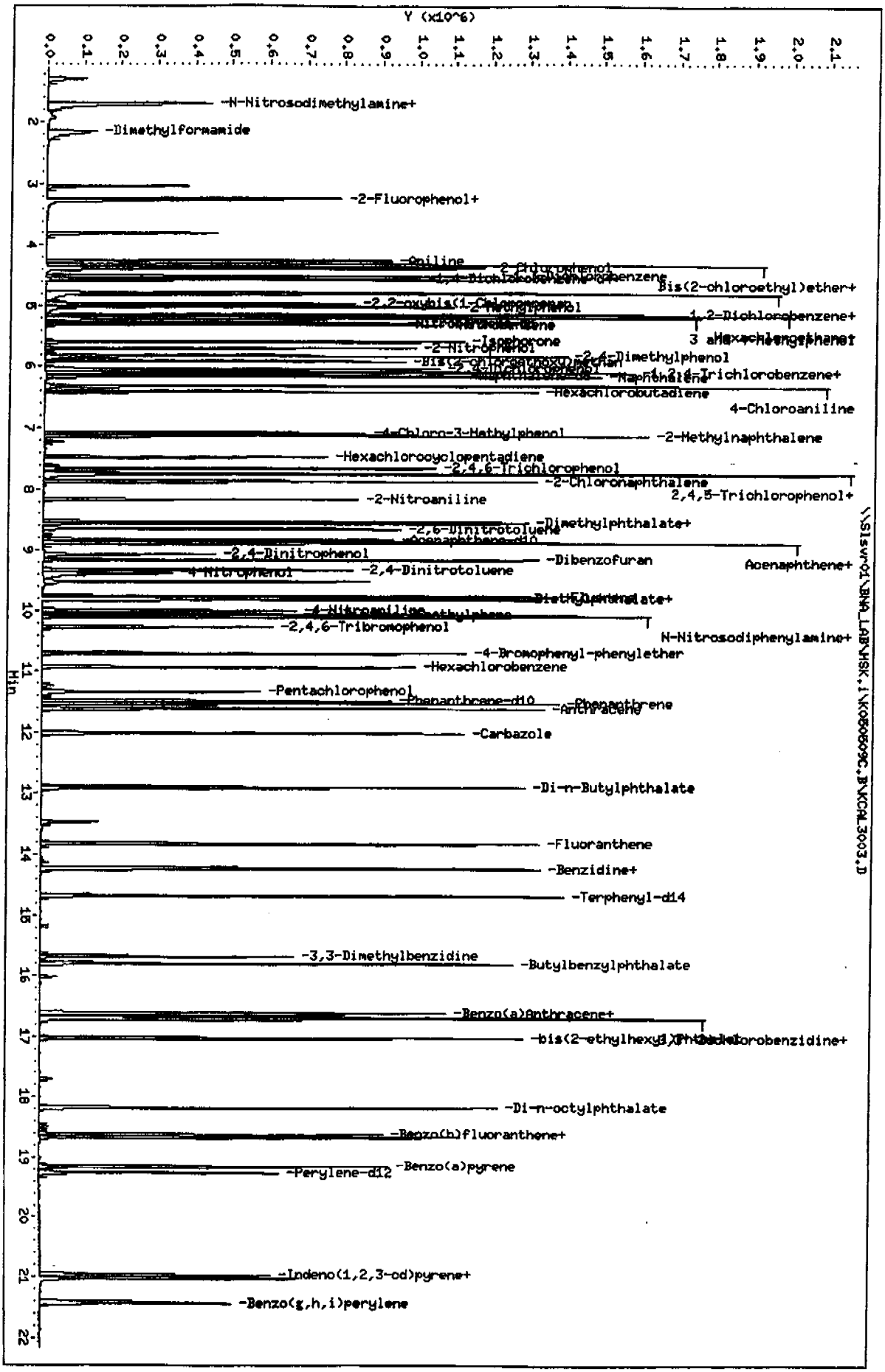
Instrument ID: MSK.i
Lab File ID: KCAL3003.D
Lab Smp Id: SSTD050
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Misc Info: SV0220-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD050
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	138615	-28.29
48 Naphthalene-d8	657267	328634	1314534	492644	-25.05
82 Acenaphthene-d10	351374	175687	702748	276841	-21.21
121 Phenanthrene-d10	612492	306246	1224984	505686	-17.44
153 Chrysene-d12	494718	247359	989436	445673	-9.91
166 Perylene-d12	409117	204559	818234	381519	-6.75

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.56	0.05
48 Naphthalene-d8	6.14	5.64	6.64	6.14	-0.05
82 Acenaphthene-d10	8.83	8.33	9.33	8.83	0.03
121 Phenanthrene-d10	11.49	10.99	11.99	11.49	-0.03
153 Chrysene-d12	16.66	16.16	17.16	16.65	-0.02
166 Perylene-d12	19.27	18.77	19.77	19.27	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.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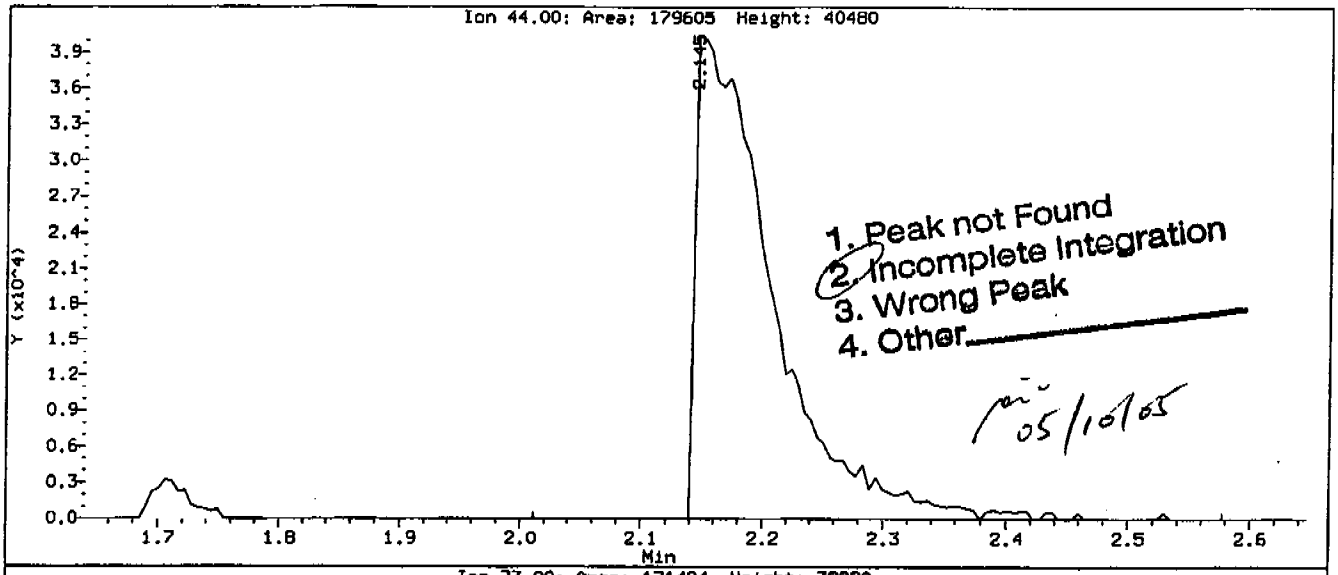
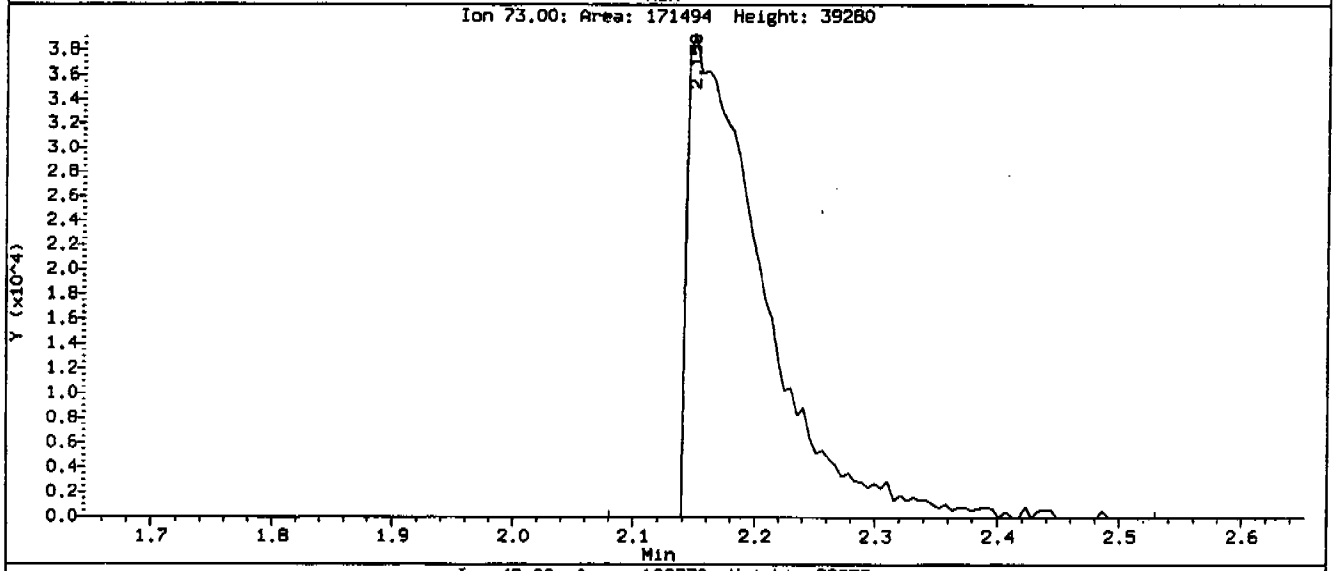
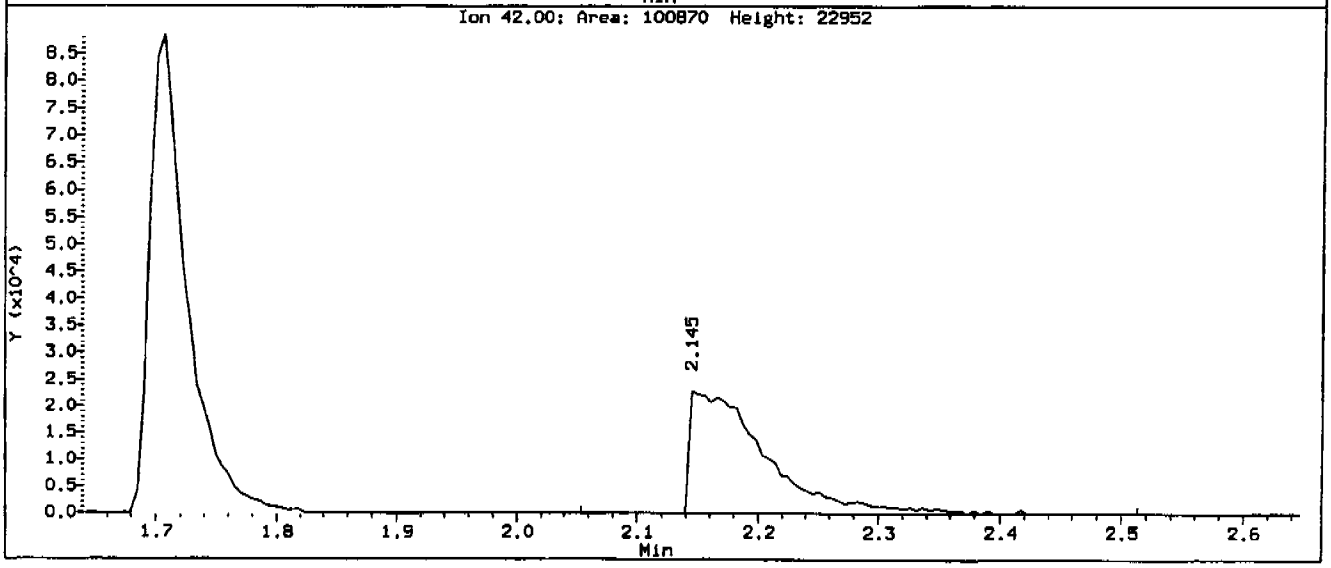
0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2.0 2.1
Min
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
-N-Nitrosodimethylamine+
-Dimethylformamide
-2-Fluorophenol+
-Aniline
-2-Chlorophenol
-1,4-Dichlorobenzene
Bis(2-chloroethyl)ether+
-2,2-oxybis(1-Chloropropane)
-2-Methylphenol
1,2-Dichlorobenzene+
-Nitrosopyrrolidine
3 and 4-Methylphenol
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-Bis(2-chloroethoxy)methane
-Naphthalene-d8
-Naphthalene
1,2,4-Trichlorobenzene+
-Hexachlorobutadiene
4-Chloroaniline
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene
-Hexachlorocyclopentadiene
-2,4,6-Trichlorophenol
-2-Chloronaphthalene
2,4,5-Trichlorophenol+
-2-Nitroaniline
-Dimethylphthalate+
-2,6-Dinitrotoluene
-Acenaphthene-d10
-2,4-Dinitrophenol
-Dibenzofuran
Acenaphthene+
-4-Nitrophenol
-2,4-Dinitrotoluene
-Diethylphthalate+
-4-Nitroaniline
-4-Chlorophenyl-phenylether
-2,4,6-Tribromophenol
N-Nitrosodiphenylamine+
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Pentachlorophenol
-Phenanthrene-d10
-Phenanthrene
-Anthracene
-Carbazole
-Di-n-Butylphthalate
-Fluoranthene
-Benzidine+
-Terphenyl-d14
-3,3-Dimethylbenzidine
-Butylbenzylphthalate
-Benzo(a)Anthracene+
-bis(2-ethylhexyl)Phthalate
-3,3-Dichlorobenzidine+
-Di-n-octylphthalate
-Benzo(b)fluoranthene+
-Benzo(a)pyrene
-Perylene-d12
-Indeno(1,2,3-cd)pyrene+
-Benzo(g,h,i)perylene
Data File: \\Slsvr01\BNA_LAB\HSK.i\K050609C.B\KCAL3003.D
Date : 09-MAY-2006 16:30
Client ID: SSTD050
Sample Info: SSTD050
Volume Injected (uL): 1.0
Column phase:
Instrument: HSK.i
Operator: XIA
Column diameter: 2.00
\\Slsvr01\BNA_LAB\HSK.i\K050609C.B\KCAL3003.D
Page 1

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3003.D
Injection Date: 09-MAY-2005 16:30
Instrument: MSK.i
Client Sample ID: SSTD050

Compound: Dimethylformamide
CAS Number: 68-12-2







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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i Injection Date: 09-MAY-2005 17:02
Lab File ID: KCAL3004.D Init. Cal. Date(s): 28-APR-2005 28-APR-2005
Analysis Type: WATER Init. Cal. Times: 11:41 19:44
Lab Sample ID: SSTD050APPIX Quant Type: ISTD
Method: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX\8270K.m

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
7	2-Picoline	1.26430	1.25278	0.010	0.91105	60.00000	Averaged
8	N-Nitrosomethylethylamine	0.56748	0.59613	0.010	-5.04741	60.00000	Averaged
9	Methyl methanesulfonate	0.42950	0.43359	0.010	-0.95166	60.00000	Averaged
12	N-Nitrosodiethylamine	0.66218	0.65186	0.010	1.55915	60.00000	Averaged
13	Ethyl Methanesulfonate	1.12443	1.16495	0.010	-3.60436	60.00000	Averaged
18	Pentachloroethane	0.53108	0.53142	0.010	-0.06525	60.00000	Averaged
30	Acetophenone	0.57919	0.59435	0.010	-2.61825	60.00000	Averaged
31	N-Nitrosopyrrolidine	0.19155	0.19842	0.010	-3.58405	60.00000	Averaged
33	N-Nitrosomorpholine	0.08447	0.08079	0.010	4.35597	60.00000	Averaged
34	O-Toluidine	0.61359	0.62153	0.010	-1.29307	60.00000	Averaged
38	N-Nitrosopiperidine	0.17733	0.18320	0.010	-3.30667	60.00000	Averaged
43	o,o,o-Triethyl-Phosphorothi	0.24317	0.22688	0.010	6.69931	60.00000	Averaged
46	a,a-Dimethyl-phenethylamine	0.76363	0.85988	0.010	-12.60496	60.00000	Averaged
52	2,6-Dichlorophenol	0.28659	0.30934	0.010	-7.93915	60.00000	Averaged
53	Hexachloropropene	0.35073	0.33545	0.010	4.35656	60.00000	Averaged
55	Benzothiazole	0.51808	0.50766	0.010	2.01143	60.00000	Averaged
58	p-Phenylenediamine	0.29308	0.32257	0.010	-10.06313	60.00000	Averaged
57	n-Nitrosodi-n-butylamine	0.31860	0.33118	0.010	-3.94866	60.00000	Averaged
61	Safrole	0.30061	0.29464	0.010	1.98482	60.00000	Averaged
65	1,2,4,5-Tetrachlorobenzene	1.44175	1.35812	0.010	5.80097	60.00000	Averaged
64	cis-Isosafrole	0.05589	0.05601	0.010	-0.21525	60.00000	Averaged
70	trans-Isosafrole	0.60356	0.58249	0.010	3.49017	60.00000	Averaged
74	1,4-Naphthoquinone	0.26634	0.34721	0.010	-30.36314	60.00000	Averaged
75	1,4-Dinitrobenzene	0.12214	0.12855	0.010	-5.24526	60.00000	Averaged
77	1,3-Dinitrobenzene	0.23098	0.24173	0.010	-4.65728	60.00000	Averaged
87	Pentachlorobenzene	0.70131	0.63686	0.050	9.18921	60.00000	Averaged
89	1-Naphthylamine	1.09037	1.08682	0.050	0.32606	60.00000	Averaged
90	2-Naphthylamine	0.98820	0.94361	0.010	4.51234	60.00000	Averaged
92	2,3,4,6-Tetrachlorophenol	0.36178	0.35716	0.010	1.27856	60.00000	Averaged
96	Thionazin	0.26781	0.28534	0.010	-6.54852	60.00000	Averaged
97	5-Nitro-o-toluidine	0.20399	0.21709	0.010	-6.42346	60.00000	Averaged
101	tri-n-butylphosphate	1.74692	1.88792	0.010	-8.07138	60.00000	Averaged
105	Sulfotepp	0.15272	0.16893	0.010	-10.61648	60.00000	Averaged
106	Diallate (peak 1)	0.30299	0.33021	0.010	-8.98295	60.00000	Averaged
108	Phorate	0.54614	0.59768	0.010	-9.43802	60.00000	Averaged
111	Diallate (peak 2)	0.06457	0.07243	0.010	-12.18188	60.00000	Averaged
107	1,3,5-Trinitrobenzene	0.09449	0.10096	0.010	-6.84396	60.00000	Averaged
110	Phenacetin	0.42015	0.45938	0.010	-9.33687	60.00000	Averaged
113	Dimethoate	0.24940	0.29402	0.010	-17.88836	60.00000	Averaged
116	4-Aminobiphenyl	0.76111	0.79024	0.010	-3.82713	60.00000	Averaged
115	tris(2-chloroethyl)phosphat	0.22190	0.24742	0.010	-11.50121	60.00000	Averaged
119	Pentachloronitrobenzene	0.13044	0.12779	0.010	2.03077	60.00000	Averaged

05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX\KCAL3004.D Page 5
Report Date: 09-May-2005 18:52

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i Injection Date: 09-MAY-2005 17:02
Lab File ID: KCAL3004.D Init. Cal. Date(s): 28-APR-2005 28-APR-2005
Analysis Type: WATER Init. Cal. Times: 11:41 19:44
Lab Sample ID: SSTD050APPIX Quant Type: ISTD
Method: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX\8270K.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
118 Pronamide	0.37771	0.38546	0.010	-2.05086	60.00000	Averaged	
123 Disulfoton	0.38466	0.41321	0.010	-7.42009	60.00000	Averaged	
125 Dinoseb	0.23315	0.24275	0.010	-4.11665	60.00000	Averaged	
128 Methyl Parathion	0.22194	0.25576	0.010	-15.24128	60.00000	Averaged	
131 4-Nitroquinoline-1-oxide	0.08479	0.09277	0.010	-9.41121	60.00000	Averaged	
130 Parathion	0.17785	0.20199	0.010	-13.57219	60.00000	Averaged	
132 Methapyrilene	0.27156	0.32754	0.010	-20.61413	60.00000	Averaged	
133 Isodrin	0.13865	0.13306	0.010	4.03141	60.00000	Averaged	
141 Kepone	0.00617	0.00621	0.010	-0.62094	100	Averaged	<-
140 Aramite (peak 1)	0.07053	0.08044	0.010	-14.05726	60.00000	Averaged	
142 Aramite (peak 2)	0.10750	0.11975	0.010	-11.39577	60.00000	Averaged	
143 p-(Dimethylamino)azobenzene	0.33286	0.38033	0.010	-14.26081	60.00000	Averaged	
144 Chlorobenzilate	0.46484	0.44559	0.010	4.14259	60.00000	Averaged	
148 2-Acetylaminofluorene	0.52432	0.58243	0.010	-11.08395	60.00000	Averaged	
149 Famphur	0.02497	0.04577	0.010	-83.31413	100	Averaged	
151 4,4'-Methylenebis(2-Chloroa	0.11611	0.12194	0.010	-5.01579	60.00000	Averaged	
162 7,12-Dimethylbenz(a)anthrac	0.73914	0.74614	0.010	-0.94645	60.00000	Averaged	
163 Hexachlorophene	0.02366	0.00546	0.010	76.90311	100	Averaged	<-
169 3-methylcholanthrene	0.75045	0.73444	0.010	2.13362	60.00000	Averaged	

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX/KCAL3004.D
Report Date: 05/09/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3004.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 17:02
Lab Sample ID: SSTD050APPIX
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPI

COMPOUND	%D
2-Picoline	0.9
N-Nitrosomethylethylamine	5.0
Methyl methanesulfonate	1.0
N-Nitrosodiethylamine	1.6
Methyl methacrylate	100.0
Ethyl methacrylate	100.0
Ethyl Methanesulfonate	3.6
Pentachloroethane	0.1
Acetophenone	2.6
N-Nitrosopyrrolidine	3.6
N-Nitrosomorpholine	4.4
O-Toluidine	1.3
N-Nitrosopiperidine	3.3
o,o,o-Triethyl-Phosphorothioa	6.7
a,a-Dimethyl-phenethylamine	12.6
Hexachloropropene	4.4
2,6-Dichlorophenol	7.9
Benzothiazole	2.0
p-Phenylenediamine	10.1
n-Nitrosodi-n-butylamine	3.9
Safrole	2.0
1,2,4,5-Tetrachlorobenzene	5.8
cis-Isosafrole	0.2
trans-Isosafrole	3.5
1,4-Naphthoquinone	30.4
1,4-Dinitrobenzene	5.2
1,3-Dinitrobenzene	4.7
Pentachlorobenzene	9.2
1-Naphthylamine	0.3
2-Naphthylamine	4.5
2,3,4,6-Tetrachlorophenol	1.3
Thionazin	6.5
5-Nitro-o-toluidine	6.4
tri-n-butylphosphate	8.1
Sulfotepp	10.6
Diallate (peak 1)	9.0
Phorate	9.4
1,3,5-Trinitrobenzene	6.8
Diallate (peak 2)	12.2

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Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX/KCAL3004.D
Report Date: 05/09/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3004.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 17:02
Lab Sample ID: SSTD050APPIX
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C

COMPOUND	%D
Phenacetin	9.3
Dimethoate	17.9
4-Aminobiphenyl	3.8
tris(2-chloroethyl)phosphate	11.5
Pentachloronitrobenzene	2.0
Pronamide	2.1
Disulfoton	7.4
Dinoseb	4.1
Methyl Parathion	15.2
4-Nitroquinoline-1-oxide	9.4
Parathion	13.6
Methapyrilene	20.6
Isodrin	4.0
Kepone	0.6
Aramite (peak 1)	14.1
Aramite (peak 2)	11.4
p-(Dimethylamino)azobenzene	14.3
Chlorobenzilate	4.1
2-Acetylaminofluorene	11.1
Pamphur	83.3
4,4'-Methylenebis(2-Chloroani	5.0
7,12-Dimethylbenz(a)anthracen	0.9
Hexachlorophene	76.9
3-methylcholanthrene	2.1

The average of %D's in the continuing calibration is 12.0

05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX\KCAL3004.D Page 1
Report Date: 09-May-2005 18:52

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX\KCAL3004.D
Lab Smp Id: SSTD050APPIX Client Smp ID: SSTD050APPIX
Inj Date : 09-MAY-2005 17:02
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD050APPIX
Misc Info : SV0190-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX\8270K.m
Meth Date : 09-May-2005 18:52 hongs Quant Type: ISTD
Cal Date : 28-APR-2005 16:52 Cal File: KCAL2588.D
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIX.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
7	2-Picoline	93	2.467	2.467	(0.543)	279384	50.0000	49.54
8	N-Nitrosomethylethylamine	88	2.670	2.670	(0.587)	132943	50.0000	52.52(M)
9	Methyl methanesulfonate	80	3.028	3.028	(0.666)	96695	50.0000	50.48
12	N-Nitrosodiethylamine	102	3.418	3.418	(0.752)	145371	50.0000	49.22
13	Ethyl Methanesulfonate	79	3.797	3.797	(0.835)	259798	50.0000	51.80
18	Pentachloroethane	117	4.203	4.203	(0.925)	118513	50.0000	50.03
* 22	1,4-Dichlorobenzene-d4	152	4.545	4.545	(1.000)	178409	40.0000	
30	Acetophenone	105	5.084	5.084	(0.831)	466345	50.0000	51.31
31	N-Nitrosopyrrolidine	100	5.106	5.106	(0.834)	155683	50.0000	51.79
33	N-Nitrosomorpholine	116	5.132	5.132	(0.839)	63392	50.0000	47.82
34	O-Toluidine	106	5.154	5.154	(0.842)	487668	50.0000	50.65
38	N-Nitrosopiperidine	114	5.485	5.485	(0.896)	143743	50.0000	51.65
43	o,o,o-Triethyl-Phosphorothioa	198	5.907	5.907	(0.965)	178019	50.0000	46.65
* 48	Naphthalene-d8	136	6.121	6.121	(1.000)	627703	40.0000	
46	a,a-Dimethyl-phenethylamine	58	6.035	6.035	(0.986)	674689	50.0000	56.30(M)
52	2,6-Dichlorophenol	162	6.308	6.308	(1.031)	242720	50.0000	53.97
53	Hexachloropropene	213	6.302	6.302	(1.030)	263205	50.0000	47.82(M)
55	Benzothiazole	135	6.511	6.511	(1.064)	398325	50.0000	48.99
58	p-Phenylenediamine	108	6.794	6.794	(1.110)	253099	50.0000	55.03
57	n-Nitrosodi-n-butylamine	84	6.799	6.799	(1.111)	259852	50.0000	51.97
61	Safrole	162	7.034	7.034	(1.149)	231182	50.0000	49.01

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
65	1,2,4,5-Tetrachlorobenzene	216	7.435	7.435	(0.844)	610247	50.0000	47.10
64	cis-Isosafrole	162	7.478	7.478	(0.849)	25166	50.0000	50.11(M)
70	trans-Isosafrole	162	7.825	7.825	(0.888)	261733	50.0000	48.25(M)
74	1,4-Naphthoquinone	158	8.188	8.188	(0.930)	156011	50.0000	65.18
75	1,4-Dinitrobenzene	168	8.354	8.354	(1.365)	100864	50.0000	52.62
77	1,3-Dinitrobenzene	168	8.546	8.546	(0.970)	108619	50.0000	52.33
* 82	Acenaphthene-d10	164	8.808	8.808	(1.000)	359467	40.0000	
87	Pentachlorobenzene	250	9.187	9.187	(1.043)	286163	50.0000	45.40
89	1-Naphthylamine	143	9.321	9.321	(1.058)	488343	50.0000	49.84
90	2-Naphthylamine	143	9.459	9.459	(1.074)	423996	50.0000	47.74
92	2,3,4,6-Tetrachlorophenol	232	9.502	9.502	(1.079)	160483	50.0000	49.36
96	Thionazin	107	9.919	9.919	(1.126)	128214	50.0000	53.27
97	5-Nitro-o-toluidine	152	9.930	9.930	(0.865)	179164	50.0000	53.21
101	tri-n-butylphosphate	99	10.202	10.202	(1.158)	848304	50.0000	54.04
105	Sulfotepp	97	10.608	10.608	(0.925)	139420	50.0000	55.31
106	Diallate (peak 1)	86	10.677	10.677	(0.931)	272521	50.0000	54.49
108	Phorate	75	10.688	10.688	(0.932)	493259	50.0000	54.72
111	Diallate (peak 2)	86	10.811	10.811	(0.942)	59777	50.0000	56.09
107	1,3,5-Trinitrobenzene	213	10.795	10.795	(0.941)	83318	50.0000	53.42(M)
110	Phenacetin	108	10.832	10.832	(0.944)	379125	50.0000	54.67
113	Dimethoate	87	11.051	11.051	(0.963)	242651	50.0000	58.94
116	4-Aminobiphenyl	169	11.228	11.228	(0.979)	652177	50.0000	51.91
115	tris(2-chloroethyl)phosphate	63	11.292	11.292	(0.984)	204193	50.0000	55.75
119	Pentachloronitrobenzene	237	11.441	11.441	(0.997)	105461	50.0000	48.98
118	Pronamide	173	11.495	11.495	(1.002)	318114	50.0000	51.02
* 121	Phenanthrene-d10	188	11.473	11.473	(1.000)	660232	40.0000	
123	Disulfoton	88	11.682	11.682	(1.018)	341015	50.0000	53.71
125	Dinoseb	211	11.730	11.730	(1.022)	200340	50.0000	52.06
128	Methyl Parathion	109	12.403	12.403	(1.081)	211077	50.0000	57.62
131	4-Nitroquinoline-1-oxide	190	13.135	13.135	(1.145)	76559	50.0000	54.70
130	Parathion	97	13.194	13.194	(1.150)	166701	50.0000	56.79
132	Methapyrilene	97	13.381	13.381	(1.166)	270318	50.0000	60.31(M)
133	Isodrin	193	13.525	13.525	(1.179)	109814	50.0000	47.98
141	Kepone	272	14.679	14.679	(0.883)	4550	50.0000	50.31
140	Aramite (peak 1)	185	14.770	14.770	(0.888)	58945	50.0000	57.03
142	Aramite (peak 2)	185	14.930	14.930	(0.898)	87751	50.0000	55.70
143	p-(Dimethylamino)azobenzene	120	14.999	14.999	(0.902)	278694	50.0000	57.13
144	Chlorobenzilate	251	15.138	15.138	(0.910)	326509	50.0000	47.93
148	2-Acetylaminofluorene	181	16.207	16.207	(0.975)	426784	50.0000	55.54
149	Famphur	218	16.591	16.591	(0.998)	33537	50.0000	91.66(M)
* 153	Chrysene-d12	240	16.629	16.629	(1.000)	586209	40.0000	
151	4,4'-Methylenebis(2-Chloroani	266	16.709	16.709	(1.005)	89352	50.0000	52.51
162	7,12-Dimethylbenz(a)anthracen	256	18.648	18.648	(0.969)	461918	50.0000	50.47
163	Hexachlorophene	196	18.947	18.947	(0.985)	3383	50.0000	11.55
* 166	Perylene-d12	264	19.241	19.241	(1.000)	495262	40.0000	
169	3-methylcholanthrene	268	19.791	19.791	(1.029)	454673	50.0000	48.93

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX\KCAL3004.D Page 3
Report Date: 09-May-2005 18:52

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

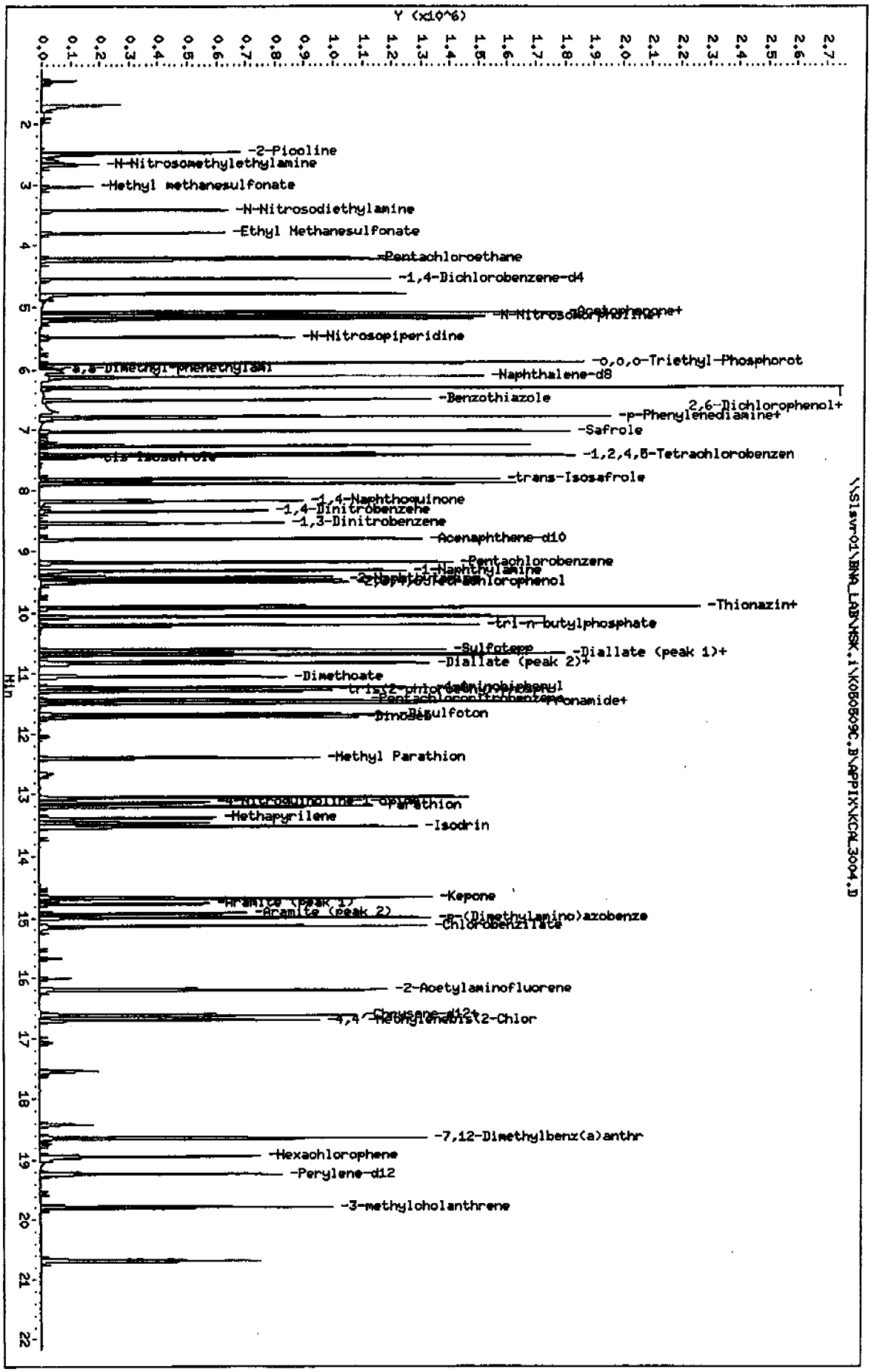
Instrument ID: MSK.i
Lab File ID: KCAL3004.D
Lab Smp Id: SSTD050APPIX
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX\8270K.m
Misc Info: SV0190-05

Calibration Date: 28-APR-2005
Calibration Time: 11:41
Client Smp ID: SSTD050APPIX
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	162145	81073	324290	178409	10.03
48 Naphthalene-d8	535939	267970	1071878	627703	17.12
82 Acenaphthene-d10	307602	153801	615204	359467	16.86
121 Phenanthrene-d10	574409	287205	1148818	660232	14.94
153 Chrysene-d12	519397	259699	1038794	586209	12.86
166 Perylene-d12	440492	220246	880984	495262	12.43

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.62	4.12	5.12	4.55	-1.61
48 Naphthalene-d8	6.21	5.71	6.71	6.12	-1.37
82 Acenaphthene-d10	8.91	8.41	9.41	8.81	-1.13
121 Phenanthrene-d10	11.58	11.08	12.08	11.47	-0.92
153 Chrysene-d12	16.74	16.24	17.24	16.63	-0.64
166 Perylene-d12	19.35	18.85	19.85	19.24	-0.55

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

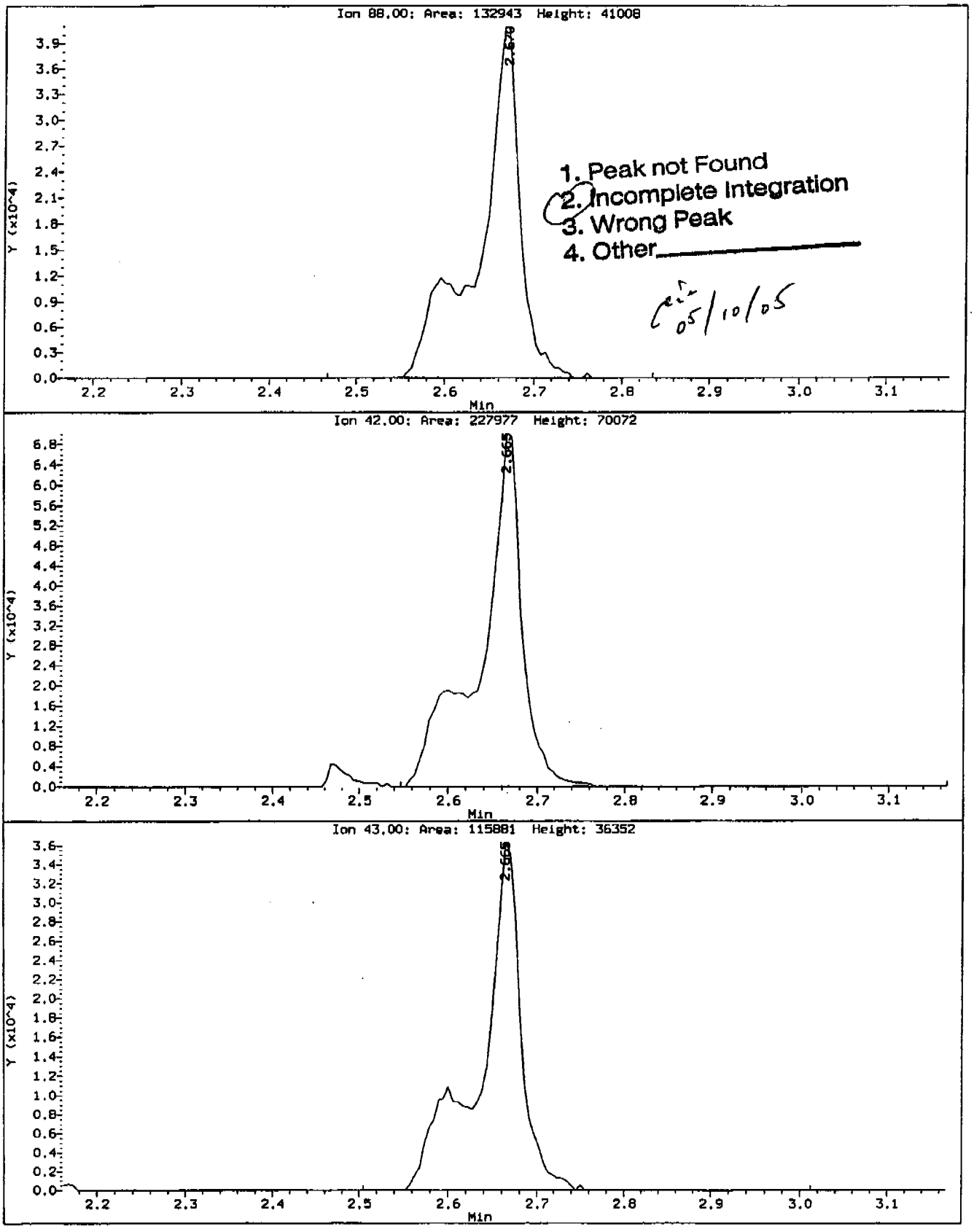


Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX\KCAL3004.D
Date : 09-MAY-2005 17:02
Client ID: SSTD050APPIX
Sample Info: SSTD050APPIX
Volume Injected (uL): 1.0
Column phase:

Instrument: MSK.i
Operator: XIA
Column diameter: 2.00

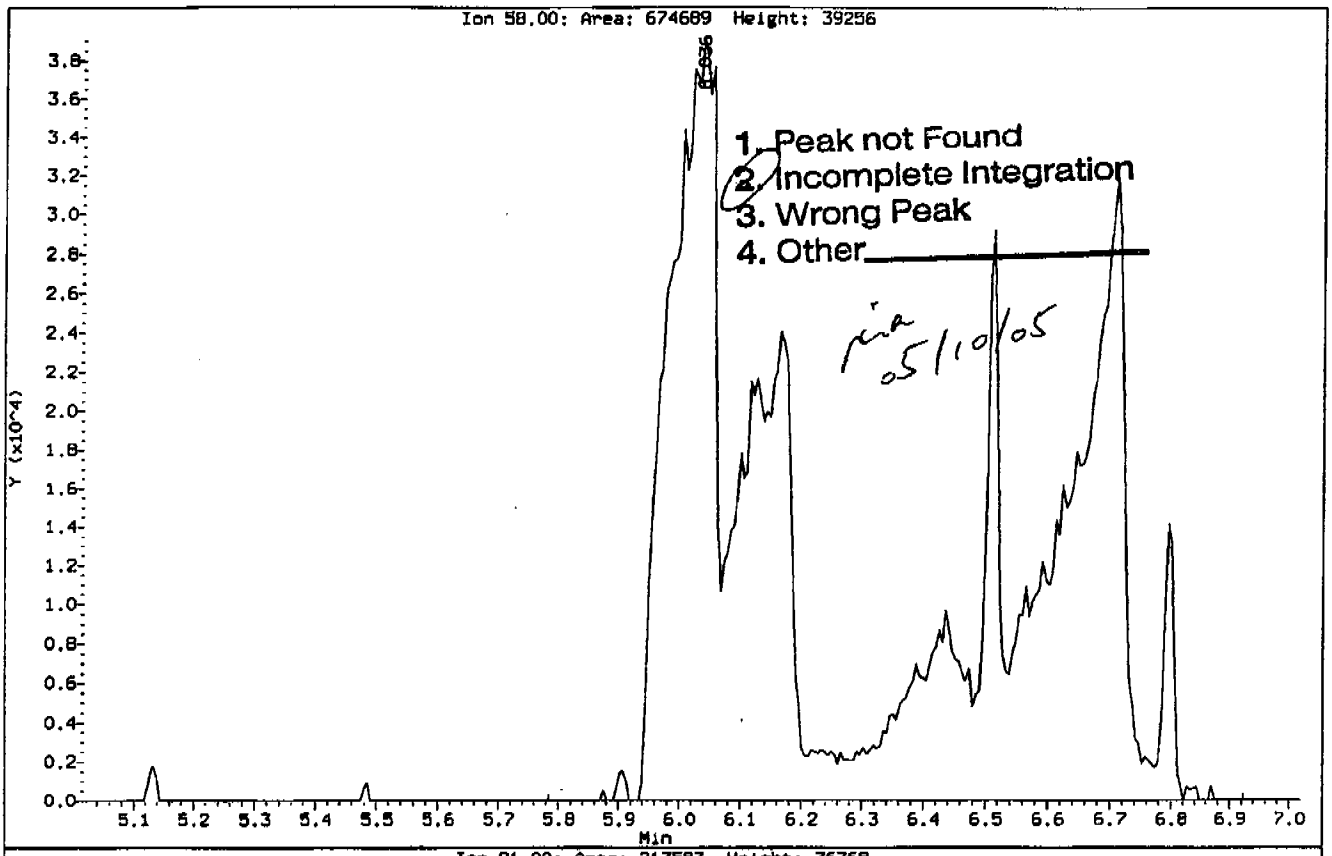
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3004.D
Injection Date: 09-MAY-2005 17:02
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

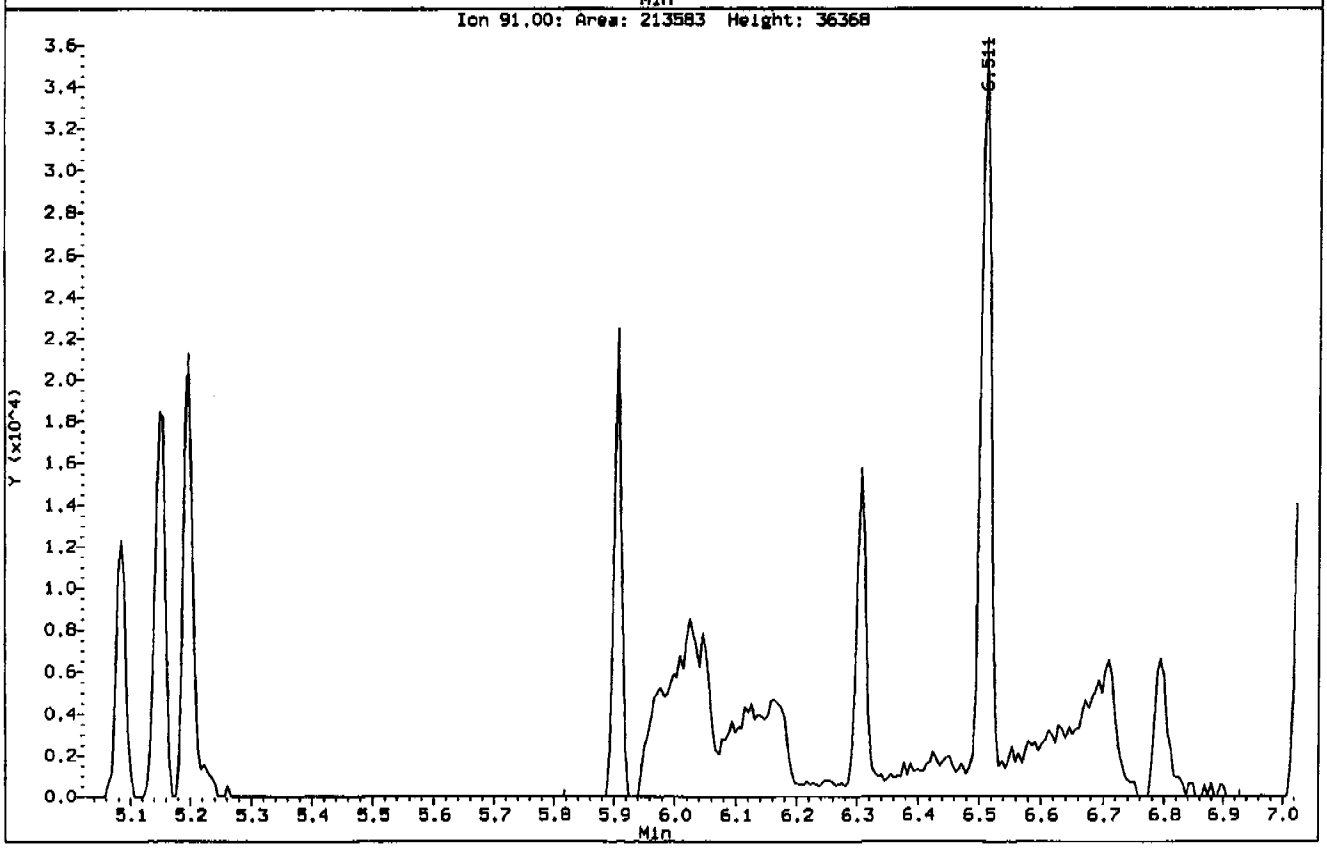
Compound: N-Nitrosomethylethylamine
CAS Number: 10595-95-6



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3004.D
Injection Date: 09-MAY-2005 17:02
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

Compound: a,a-Dimethyl-phenethylamine
CAS Number: 122-09-8





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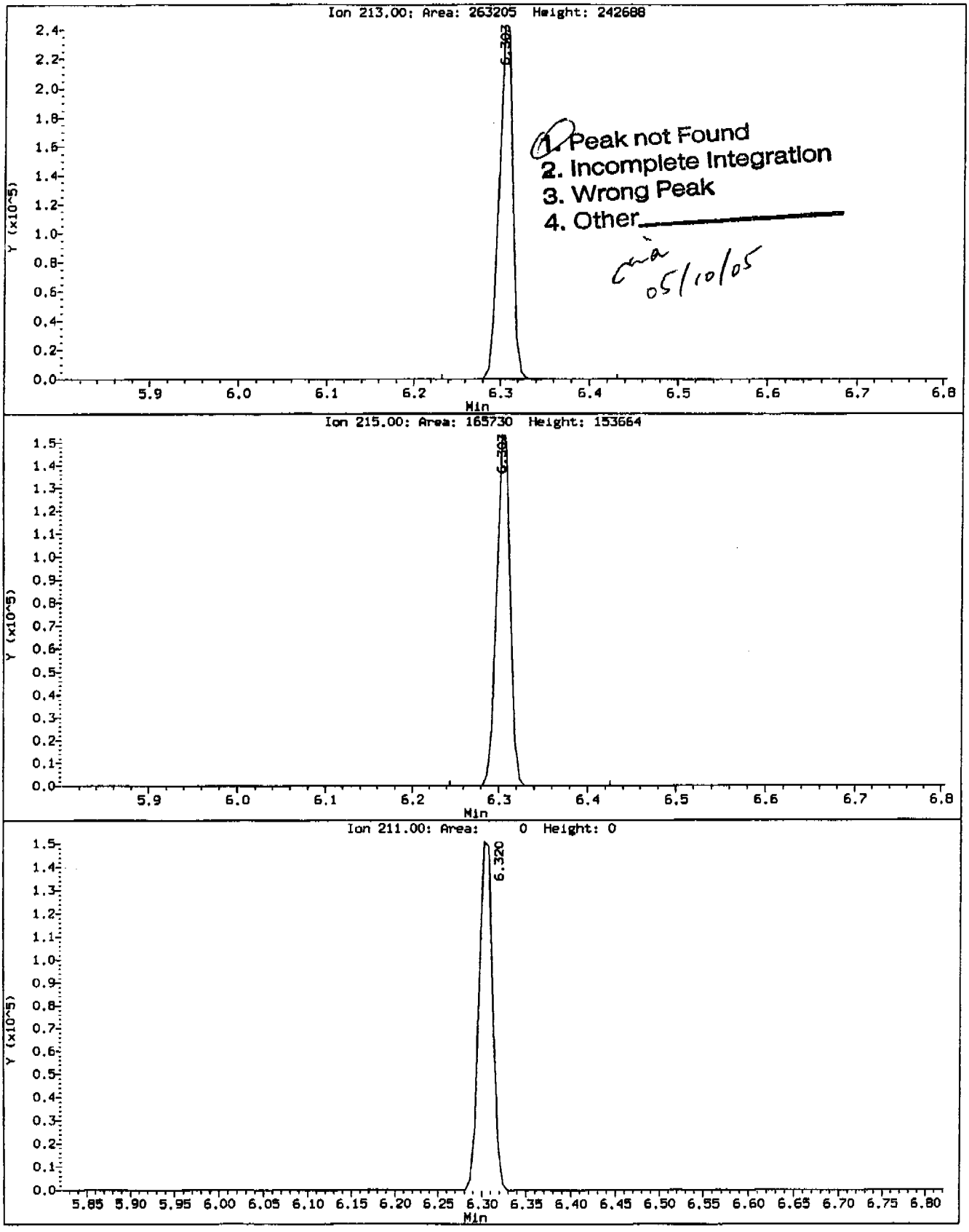
Injection Date: 09-MAY-2005 17:02
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

Compound: Hexachloropropene
CAS Number: 1888-71-7



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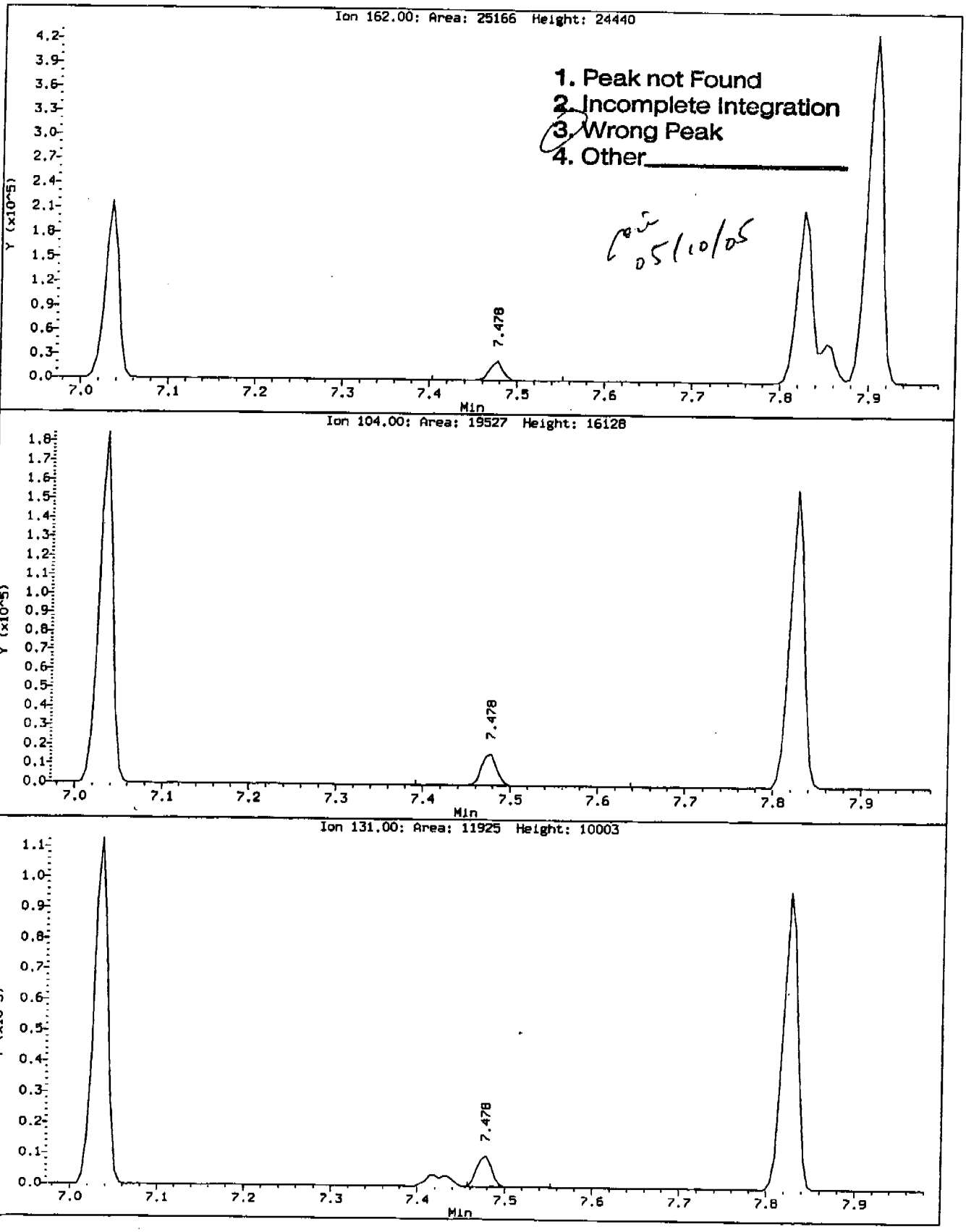
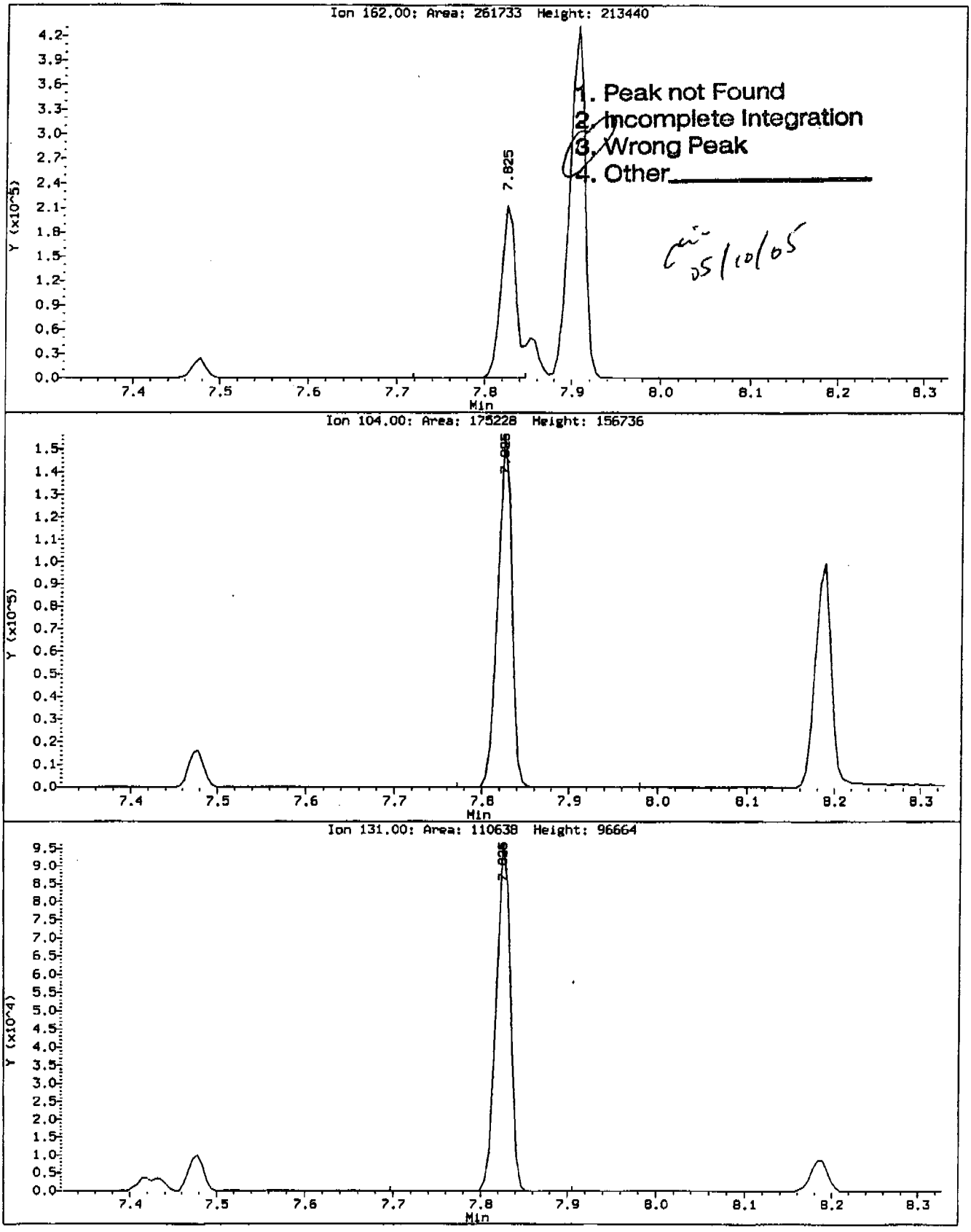
Injection Date: 09-MAY-2005 17:02
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

Compound: cis-Isosafrole
CAS Number: 120-58-1



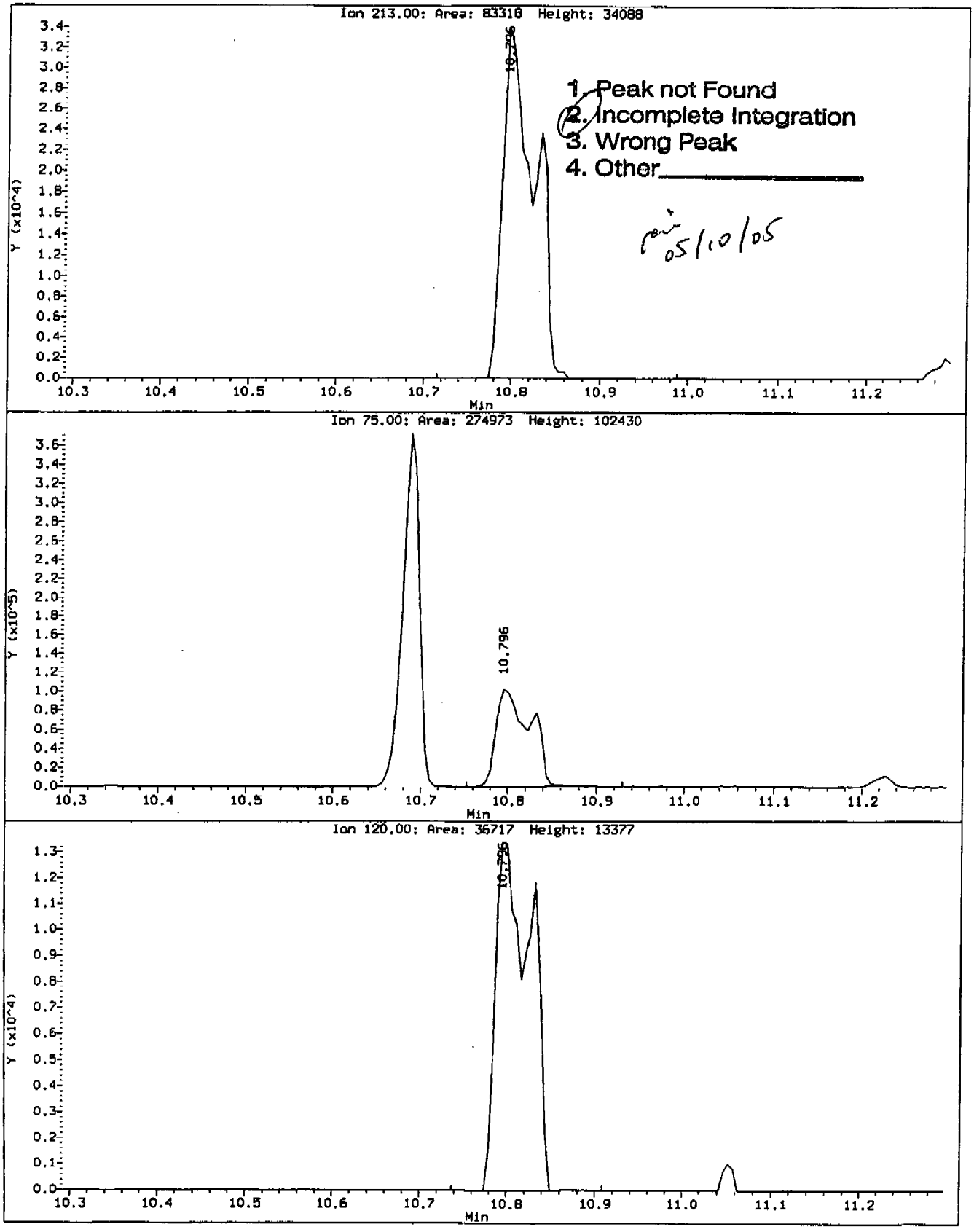
Data File: \\Slavr01\BNA_LAB\MSK.i\K050509C.B\KCAL3004.D
Injection Date: 09-MAY-2005 17:02
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

Compound: trans-Isosafrole
CAS Number: 120-58-1



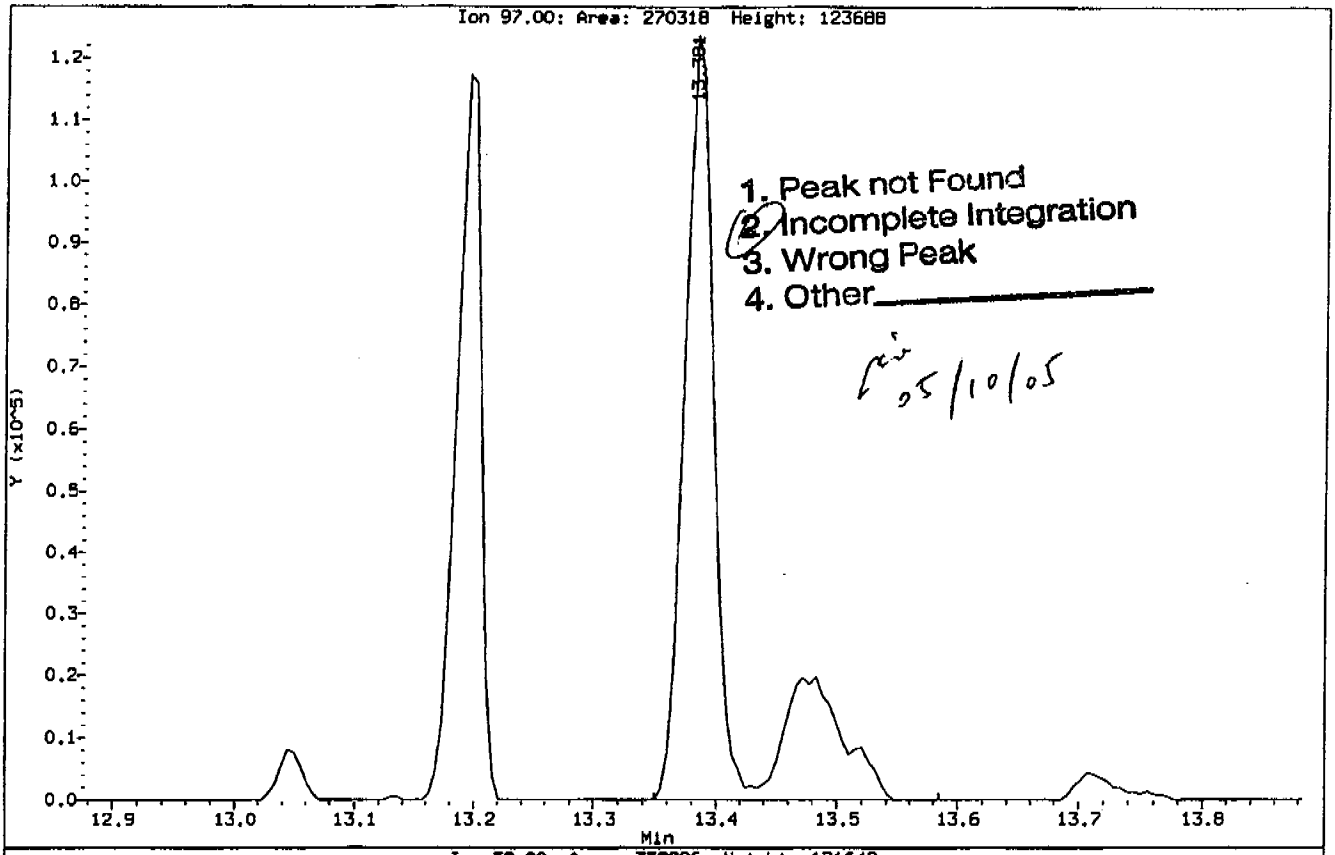
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3004.D
Injection Date: 09-MAY-2005 17:02
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

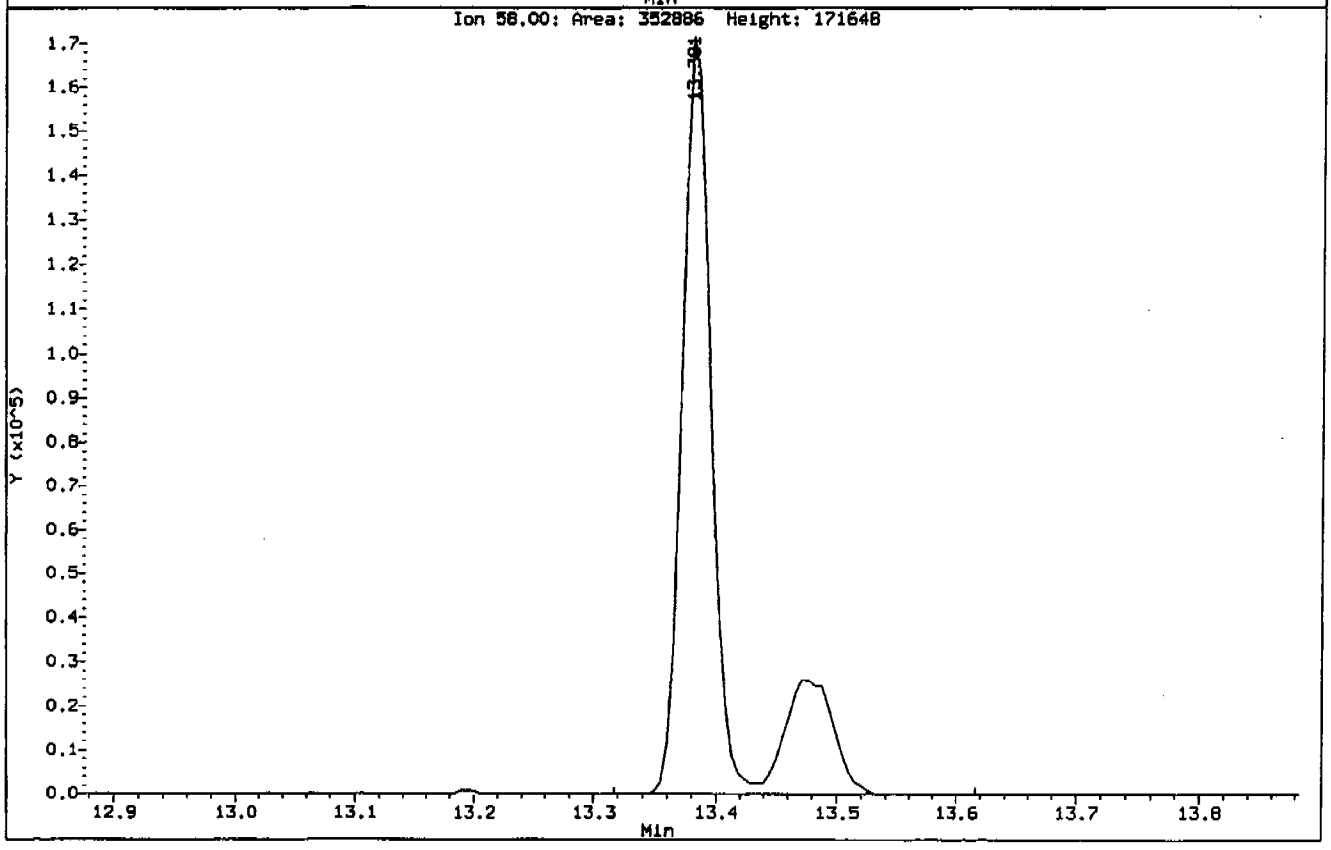
Compound: 1,3,5-Trinitrobenzene
CAS Number: 99-35-4



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3004.D
Injection Date: 09-MAY-2005 17:02
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

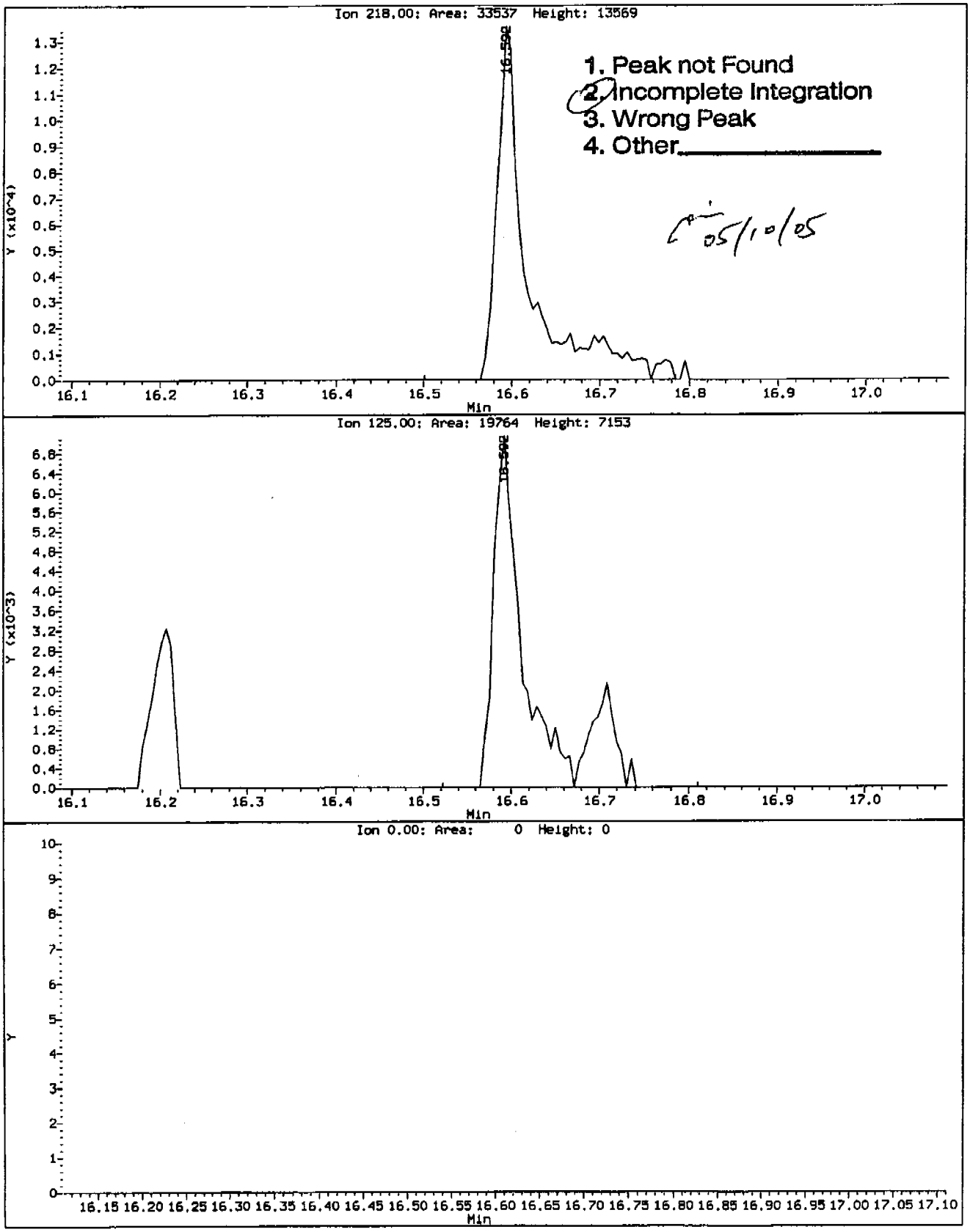
Compound: Methapyrilene
CAS Number: 91-80-5





Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3004.D
Injection Date: 09-MAY-2005 17:02
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

Compound: Famphur
CAS Number: 52-85-7



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIXB\KCAL3006.D Page 1
Report Date: 10-May-2005 11:27

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i Injection Date: 09-MAY-2005 18:06
Lab File ID: KCAL3006.D Init. Cal. Date(s): 28-APR-2005 08-MAY-2005
Analysis Type: WATER Init. Cal. Times: 11:41 01:27
Lab Sample ID: SSTD050APPIXB Quant Type: ISTD
Method: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIXB\8270K.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
2 Methyl methacrylate	0.35018	0.58026	0.010	-65.70390	60.00000	Averaged	<-
6 Ethyl methacrylate	1.04307	1.21734	0.010	-16.70804	60.00000	Averaged	

05/10/05

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GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIXB\KCAL3006.D
Lab Smp Id: SSTD050APPIXB Client Smp ID: SSTD050APPIXB
Inj Date : 09-MAY-2005 18:06
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD050APPIXB
Misc Info : SV0148-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIXB\8270K.m
Meth Date : 10-May-2005 10:55 hongs Quant Type: ISTD
Cal Date : 08-MAY-2005 01:27 Cal File: KCAL2969.D
Als bottle: 15 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIXB.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
2 Methyl methacrylate	69	1.323	1.323	(0.291)	139452	50.0000	82.85
6 Ethyl methacrylate	69	2.151	2.151	(0.473)	292559	50.0000	58.35
* 22 1,4-Dichlorobenzene-d4	152	4.549	4.549	(1.000)	192261	40.0000	
* 48 Naphthalene-d8	136	6.131	6.131	(1.000)	729169	40.0000	
* 82 Acenaphthene-d10	164	8.818	8.818	(1.000)	401274	40.0000	
* 121 Phenanthrene-d10	188	11.478	11.478	(1.000)	709439	40.0000	
* 153 Chrysene-d12	240	16.644	16.644	(1.000)	642617	40.0000	
* 166 Perylene-d12	264	19.256	19.256	(1.000)	569783	40.0000	

05/10/05

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

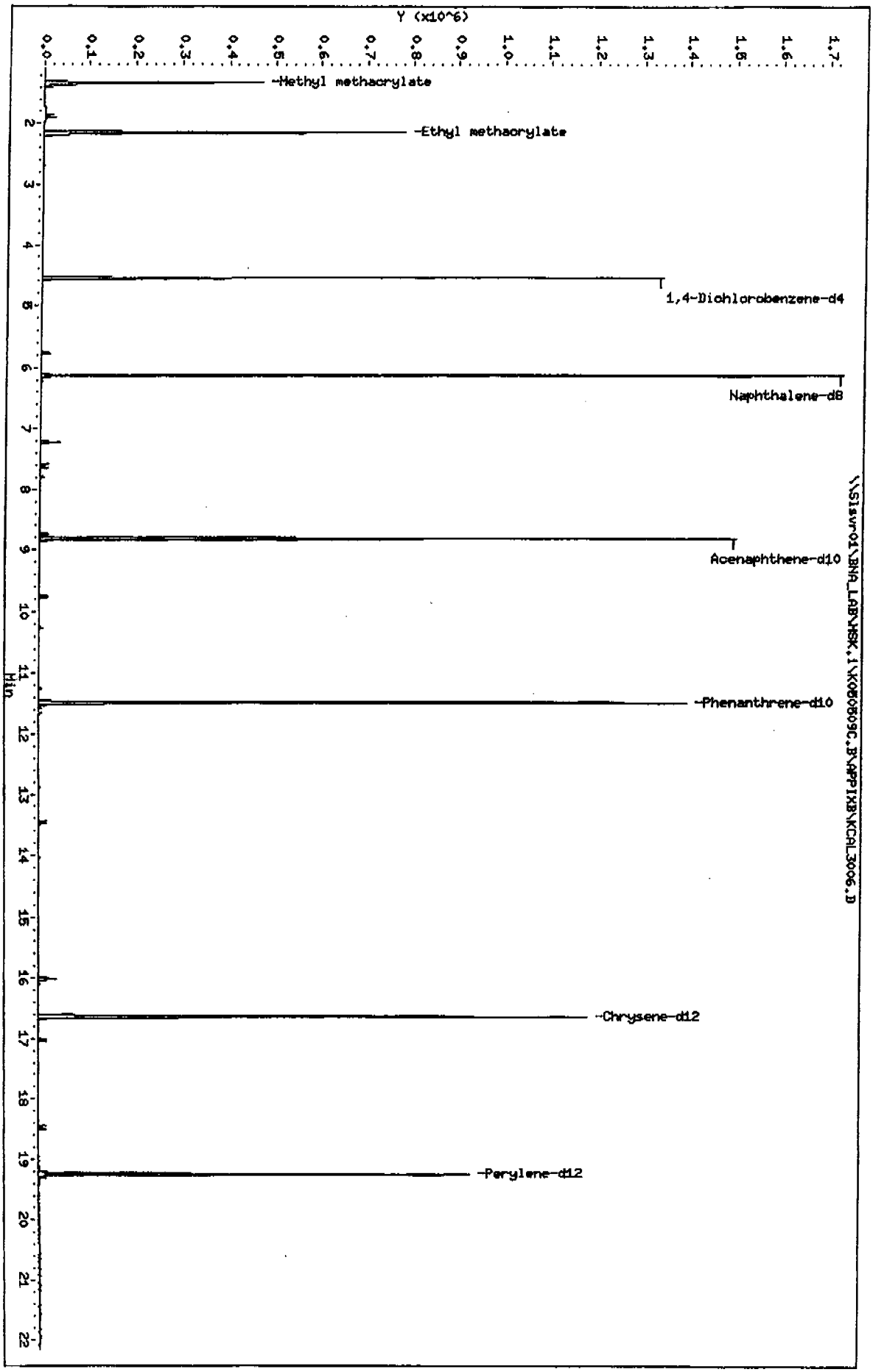
Instrument ID: MSK.i
Lab File ID: KCAL3006.D
Lab Smp Id: SSTD050APPIXB
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIXB\8270K.m
Misc Info: SV0148-05

Calibration Date: 07-MAY-2005
Calibration Time: 22:18
Client Smp ID: SSTD050APPIXB
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	260737	130369	521474	192261	-26.26
48 Naphthalene-d8	997386	498693	1994772	729169	-26.89
82 Acenaphthene-d10	549459	274730	1098918	401274	-26.97
121 Phenanthrene-d10	957388	478694	1914776	709439	-25.90
153 Chrysene-d12	810451	405226	1620902	642617	-20.71
166 Perylene-d12	570318	285159	1140636	569783	-0.09

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.55	-0.23
48 Naphthalene-d8	6.14	5.64	6.64	6.13	-0.17
82 Acenaphthene-d10	8.83	8.33	9.33	8.82	-0.12
121 Phenanthrene-d10	11.49	10.99	11.99	11.48	-0.14
153 Chrysene-d12	16.66	16.16	17.16	16.64	-0.10
166 Perylene-d12	19.27	18.77	19.77	19.26	-0.08

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



Data File: \\Slsvr01\BNA_LAB\HSK.i\K060609C.B\APPIXB\KCAL3006.D
Date : 09-MAY-2006 18:06
Client ID: SSTD050APPIXB
Sample Info: SSTD050APPIXB
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: KIA
Column diameter: 2.00

GC/MS RAW SAMPLE DATA

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3016.D Page 1
Report Date: 10-May-2005 12:46

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3016.D
Lab Smp Id: G800L1AA Client Smp ID: RE73-05-58923
Inj Date : 09-MAY-2005 23:24
Operator : XIA Inst ID: MSK.i
Smp Info : G800L1AA
Misc Info : F5D220218-001 (5117669) APPIX SF
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Meth Date : 10-May-2005 11:13 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12 Cal File: KCAL3000.D
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIXSFMS03.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 10 2-Fluorophenol	112	3.231	3.245	(0.711)	70844	22.7443	22.74
$ 15 Phenol-d5	99	4.315	4.324	(0.949)	67453	15.4722	15.47
* 22 1,4-Dichlorobenzene-d4	152	4.545	4.559	(1.000)	103110	40.0000	
$ 36 Nitrobenzene-d5	82	5.266	5.285	(0.860)	158881	29.8313	29.83
* 48 Naphthalene-d8	136	6.121	6.140	(1.000)	387988	40.0000	
$ 69 2-Fluorobiphenyl	172	7.729	7.753	(0.878)	223911	25.9979	26.00
* 82 Acenaphthene-d10	164	8.803	8.827	(1.000)	213895	40.0000	
$ 104 2,4,6-Tribromophenol	330	10.251	10.275	(1.164)	71704	59.9678	59.97
* 121 Phenanthrene-d10	188	11.458	11.487	(1.000)	375111	40.0000	
$ 139 Terphenyl-d14	244	14.658	14.687	(0.882)	343879	33.5850	33.58
* 153 Chrysene-d12	240	16.618	16.653	(1.000)	324142	40.0000	
* 166 Perylene-d12	264	19.231	19.266	(1.000)	282117	40.0000	

05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3016.D Page 2
Report Date: 10-May-2005 12:46

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSK.i
Lab File ID: KSMP3016.D
Lab Smp Id: G800L1AA
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Misc Info: F5D220218-001 (5117669) APPIX SF

Calibration Date: 09-MAY-2005
Calibration Time: 16:30
Client Smp ID: RE73-05-58923
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	138615	69308	277230	103110	-25.61
48 Naphthalene-d8	492644	246322	985288	387988	-21.24
82 Acenaphthene-d10	276841	138421	553682	213895	-22.74
121 Phenanthrene-d10	505686	252843	1011372	375111	-25.82
153 Chrysene-d12	445673	222837	891346	324142	-27.27
166 Perylene-d12	381519	190760	763038	282117	-26.05

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.55	-0.30
48 Naphthalene-d8	6.14	5.64	6.64	6.12	-0.31
82 Acenaphthene-d10	8.83	8.33	9.33	8.80	-0.27
121 Phenanthrene-d10	11.49	10.99	11.99	11.46	-0.26
153 Chrysene-d12	16.65	16.15	17.15	16.62	-0.21
166 Perylene-d12	19.27	18.77	19.77	19.23	-0.18

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

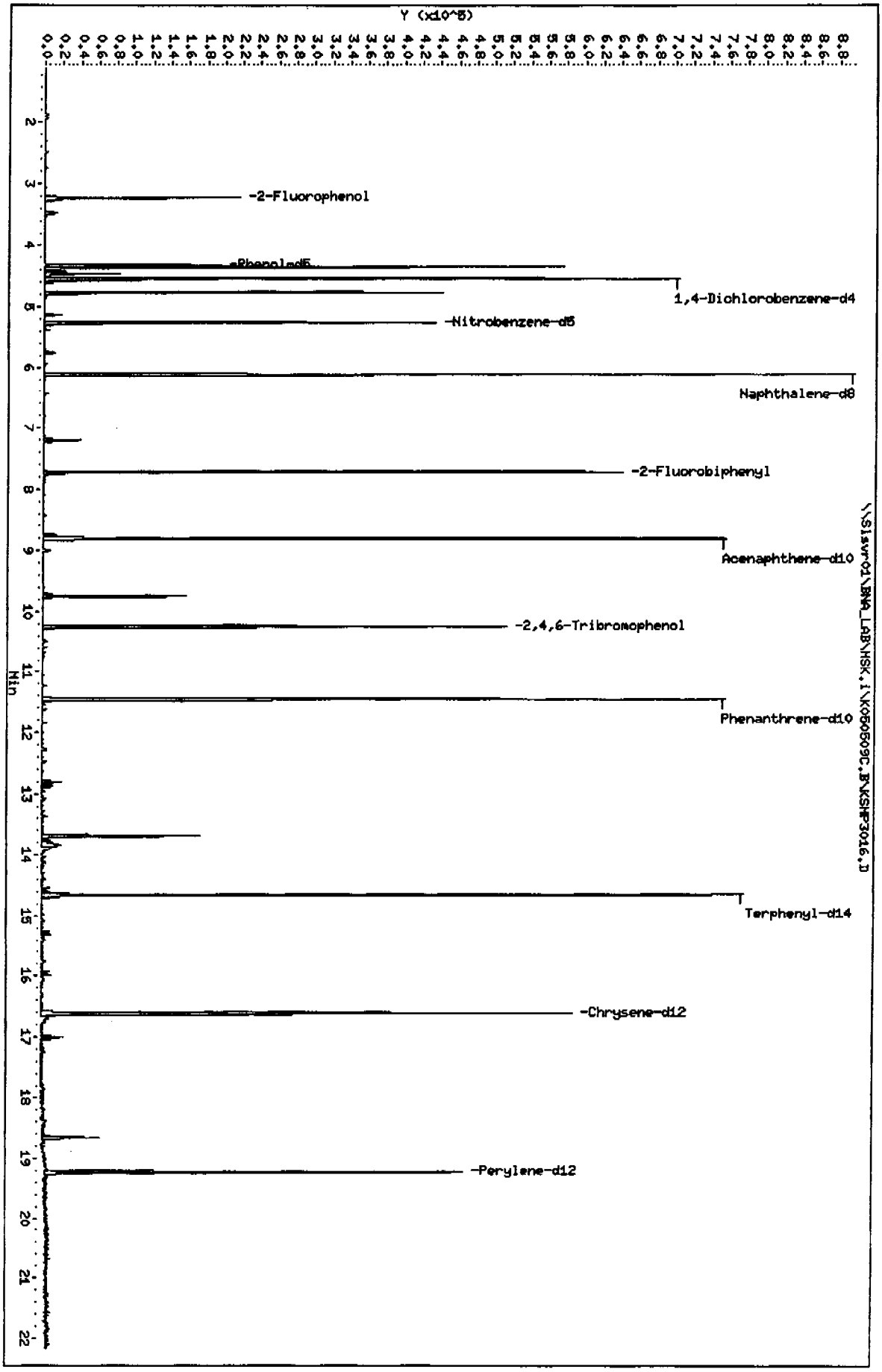
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3016.D Page 3
Report Date: 10-May-2005 12:46

STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 22-APR-2005 00:00 Client SDG: F5D2202
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: G800L1AA Client Smp ID: RE73-05-58923
Level: LOW Operator: XIA
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: Quant Type: ISTD
Sublist File: APPIXSFMS03.sub
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Misc Info: F5D220218-001 (5117669) APPIX SF

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 10 2-Fluorophenol	75.00	22.74	30.33	10-115
$ 15 Phenol-d5	75.00	15.47	20.63	10-115
$ 36 Nitrobenzene-d5	50.00	29.83	59.66	22-115
$ 69 2-Fluorobiphenyl	50.00	26.00	52.00	18-115
$ 104 2,4,6-Tribromophen	75.00	59.97	79.96	10-118
$ 139 Terphenyl-d14	50.00	33.58	67.17	10-115


Y (x10^5)
Min
-2-Fluorophenol
-Phenol-d5
1,4-Dichlorobenzene-d4
-Nitrobenzene-d5
Naphthalene-d8
-2-Fluorobiphenyl
Acenaphthene-d10
-2,4,6-Tribromophenol
Phenanthrene-d10
Terphenyl-d14
-Chrysene-d12
-Perylene-d12
\\Slsvr01\BNA_LAB\HSK.i\K060609C.B\KSHP3016.D
Data File: \\Slsvr01\BNA_LAB\HSK.i\K060609C.B\KSHP3016.D
Date : 09-MAY-2005 23:24
Client ID: RE73-05-58923
Sample Info: C800L1AA
Volume Injected (uL): 1.0
Column phase:
Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3019.D
Report Date: 10-May-2005 13:02

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3019.D
Lab Smp Id: G80091AC Client Smp ID: RE73-05-58924
Inj Date : 10-MAY-2005 00:59
Operator : XIA Inst ID: MSK.i
Smp Info : G80091AC
Misc Info : F5D220218-002 (5117669) APPIX SF
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Meth Date : 10-May-2005 11:13 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12 Cal File: KCAL3000.D
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIXSFMS03.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 10 2-Fluorophenol	112	3.230	3.245	(0.710)	94769	26.0028	26.00
$ 15 Phenol-d5	99	4.320	4.324	(0.950)	84724	16.6090	16.61
* 22 1,4-Dichlorobenzene-d4	152	4.550	4.559	(1.000)	120647	40.0000	
25 Benzyl Alcohol	108	4.801	4.804	(1.055)	6279	3.12941	3.129(a)
$ 36 Nitrobenzene-d5	82	5.271	5.285	(0.860)	199639	32.4550	32.45
* 48 Naphthalene-d8	136	6.126	6.140	(1.000)	448107	40.0000	
$ 69 2-Fluorobiphenyl	172	7.734	7.753	(0.878)	277783	26.5169	26.52
* 82 Acenaphthene-d10	164	8.808	8.827	(1.000)	260163	40.0000	
$ 104 2,4,6-Tribromophenol	330	10.261	10.275	(1.165)	88214	60.6551	60.66
* 121 Phenanthrene-d10	188	11.468	11.487	(1.000)	445217	40.0000	
$ 139 Terphenyl-d14	244	14.673	14.687	(0.882)	421437	35.8641	35.86
* 153 Chrysene-d12	240	16.634	16.653	(1.000)	372005	40.0000	
* 166 Perylene-d12	264	19.246	19.266	(1.000)	321750	40.0000	

05/10/05

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3019.D
Report Date: 10-May-2005 13:02

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSK.i
Lab File ID: KSMP3019.D
Lab Smp Id: G80091AC
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Misc Info: F5D220218-002 (5117669) APPIX SF

Calibration Date: 09-MAY-2005
Calibration Time: 16:30
Client Smp ID: RE73-05-58924
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	138615	69308	277230	120647	-12.96
48 Naphthalene-d8	492644	246322	985288	448107	-9.04
82 Acenaphthene-d10	276841	138421	553682	260163	-6.02
121 Phenanthrene-d10	505686	252843	1011372	445217	-11.96
153 Chrysene-d12	445673	222837	891346	372005	-16.53
166 Perylene-d12	381519	190760	763038	321750	-15.67

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.55	-0.19
48 Naphthalene-d8	6.14	5.64	6.64	6.13	-0.23
82 Acenaphthene-d10	8.83	8.33	9.33	8.81	-0.22
121 Phenanthrene-d10	11.49	10.99	11.99	11.47	-0.17
153 Chrysene-d12	16.65	16.15	17.15	16.63	-0.12
166 Perylene-d12	19.27	18.77	19.77	19.25	-0.10

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

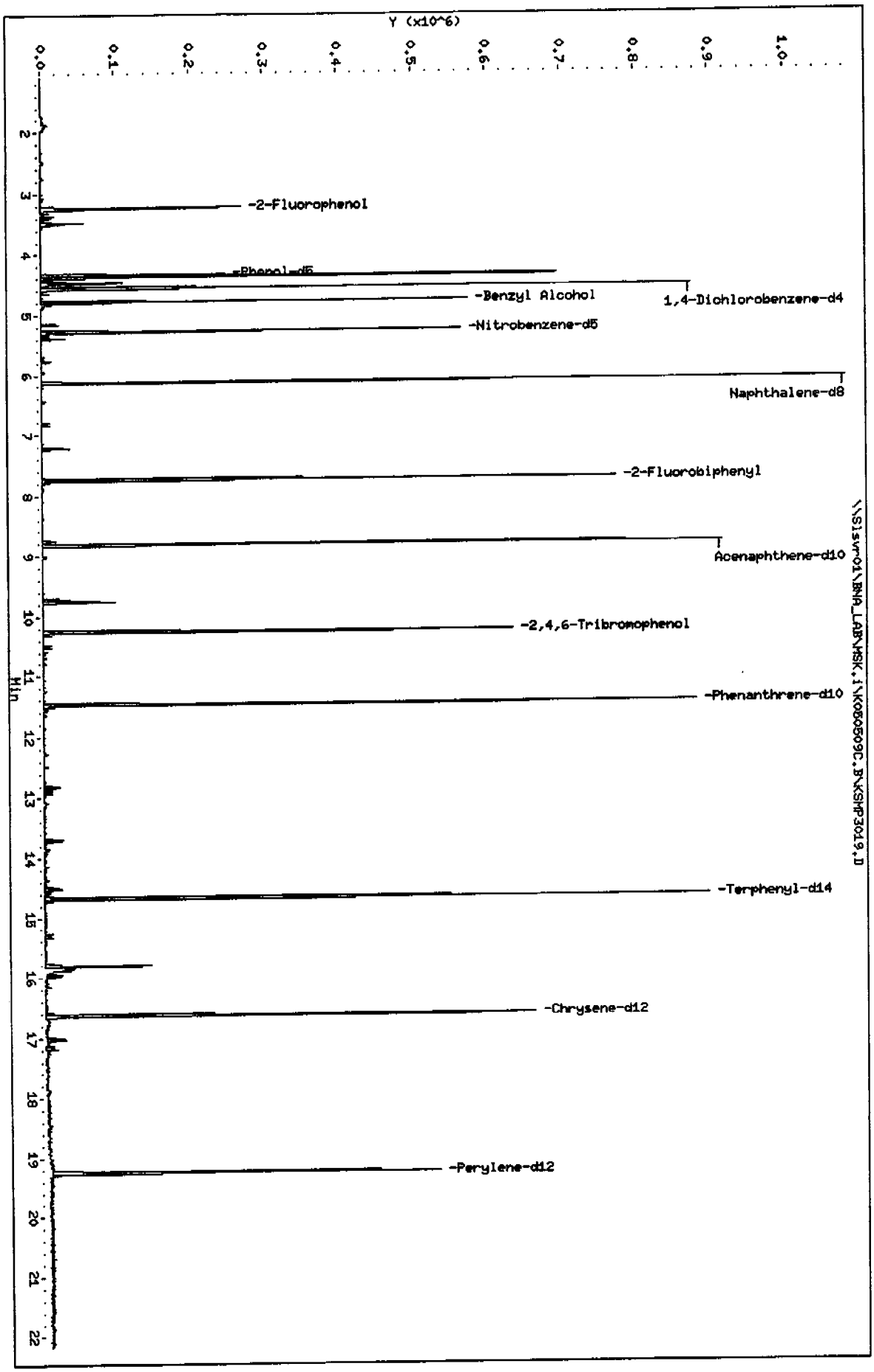
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3019.D Page 3
Report Date: 10-May-2005 13:02

STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 22-APR-2005 00:00 Client SDG: F5D2202
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: G80091AC Client Smp ID: RE73-05-58924
Level: LOW Operator: XIA
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: Quant Type: ISTD
Sublist File: APPIXSFMS03.sub
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Misc Info: F5D220218-002 (5117669) APPIX SF

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 10 2-Fluorophenol	75.00	26.00	34.67	10-115
$ 15 Phenol-d5	75.00	16.61	22.15	10-115
$ 36 Nitrobenzene-d5	50.00	32.45	64.91	22-115
$ 69 2-Fluorobiphenyl	50.00	26.52	53.03	18-115
$ 104 2,4,6-Tribromophen	75.00	60.66	80.87	10-118
$ 139 Terphenyl-d14	50.00	35.86	71.73	10-115



Data File: \\Slsvr01\RNA_LAB\MSK.i\K060609C.B\KSMP3019.D
Date : 10-MAY-2006 00:59
Client ID: RE73-05-88924
Sample Info: G8009140C
Volume Injected (uL): 1.0
Column phase:

Instrument: MSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3019.D

Page 5

Date : 10-MAY-2005 00:59

Client ID: RE73-05-58924

Instrument: MSK.i

Sample Info: G80091AC

Volume Injected (uL): 1.0

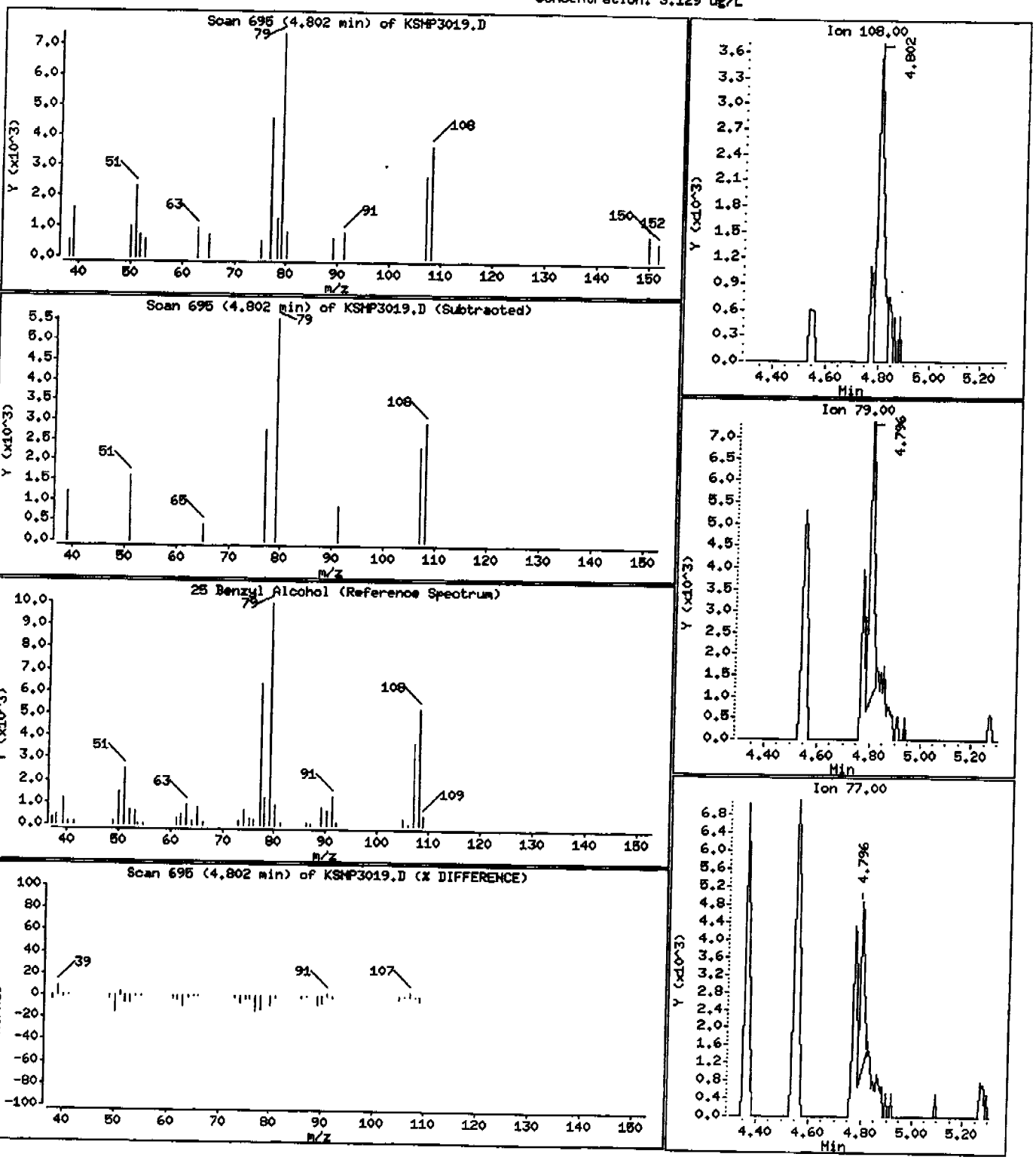
Operator: XIA

Column phase:

Column diameter: 2.00

25 Benzyl Alcohol

Concentration: 3.129 ug/L



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3019.D
Report Date: 10-May-2005 13:02

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3019.D
Lab Smp Id: G80091AC Client Smp ID: RE73-05-58924
Inj Date : 10-MAY-2005 00:59
Operator : XIA Inst ID: MSK.i
Smp Info : G80091AC
Misc Info : F5D220218-002 (5117669) APPIX SF
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Meth Date : 10-May-2005 11:13 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12 Cal File: KCAL3000.D
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIXSFMS03.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 22 1,4-Dichlorobenzene-d4	4.550	987736	40.000
* 82 Acenaphthene-d10	8.808	1198256	40.000
* 153 Chrysene-d12	16.634	1039238	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/mL)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.470	141565	5.73291997	5.733	0		0	22
Unknown				CAS #:			
9.754	127080	4.24216012	4.242	0		0	82
9-Octadecenamide, (Z)-				CAS #: 301-02-0			
15.801	216852	8.34658461	8.346	91	Nist98.1	19657	153

rmb 05/10/05

Data File: \\Slsvr01\BNA_LAB\HSK.i\K050509C.B\KSMP3019.D

Date : 10-MAY-2005 00:59

Client ID: RE73-05-58924

Instrument: HSK.i

Sample Info: G80091AC

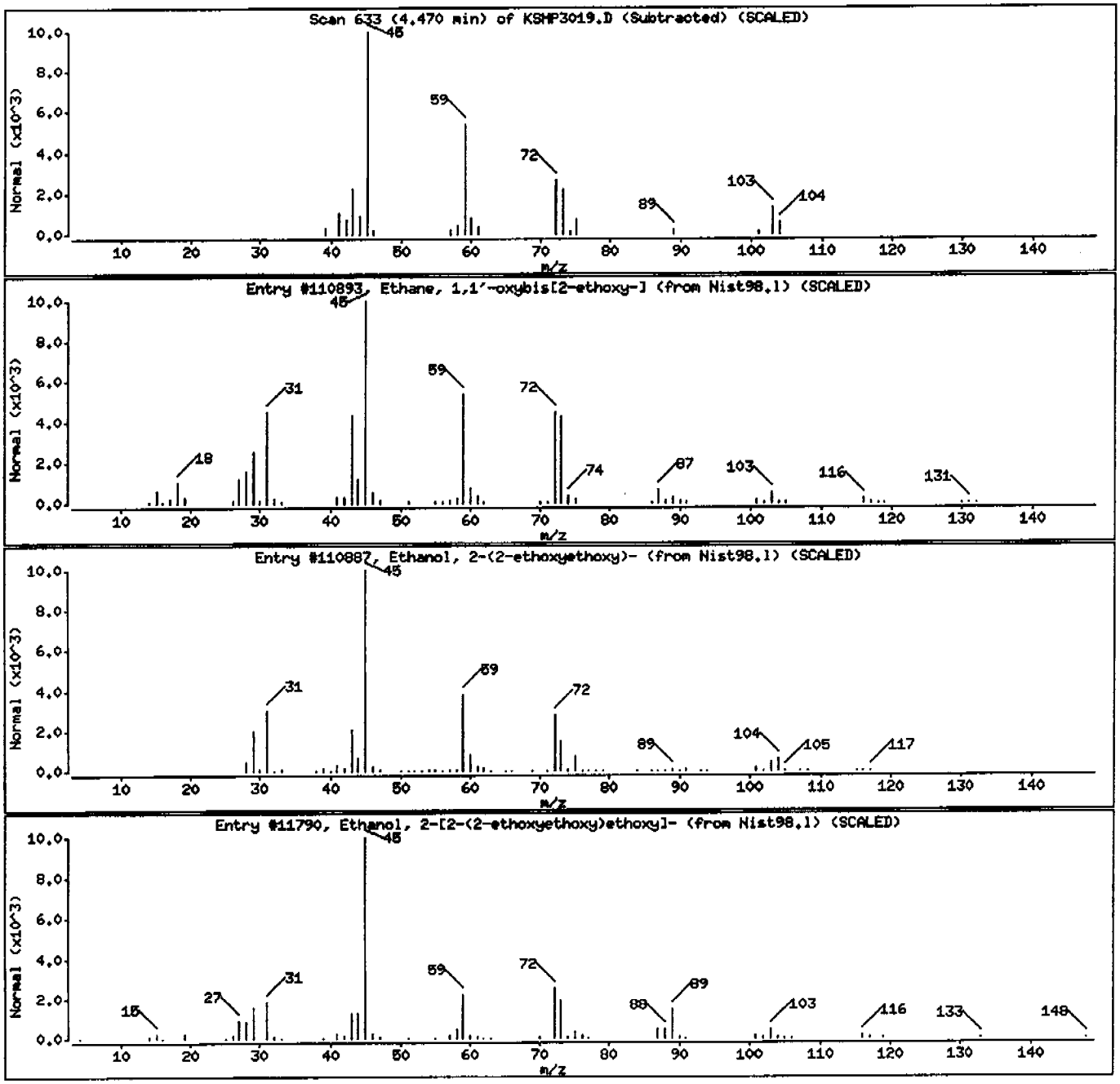
Volume Injected (uL): 1.0

Operator: XIA

Column phase:

Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Ethane, 1,1'-oxybis[2-ethoxy-]	112-36-7	Nist98.l	110893	64	C8H1803	162
Ethanol, 2-(2-ethoxyethoxy)-	111-90-0	Nist98.l	110887	50	C6H1403	134
Ethanol, 2-[2-(2-ethoxyethoxy)ethoxy]-	112-50-5	Nist98.l	11790	45	C8H1804	178



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3019.D

Date : 10-MAY-2005 00:59

Client ID: RE73-05-58924

Instrument: MSK.i

Sample Info: G80091AC

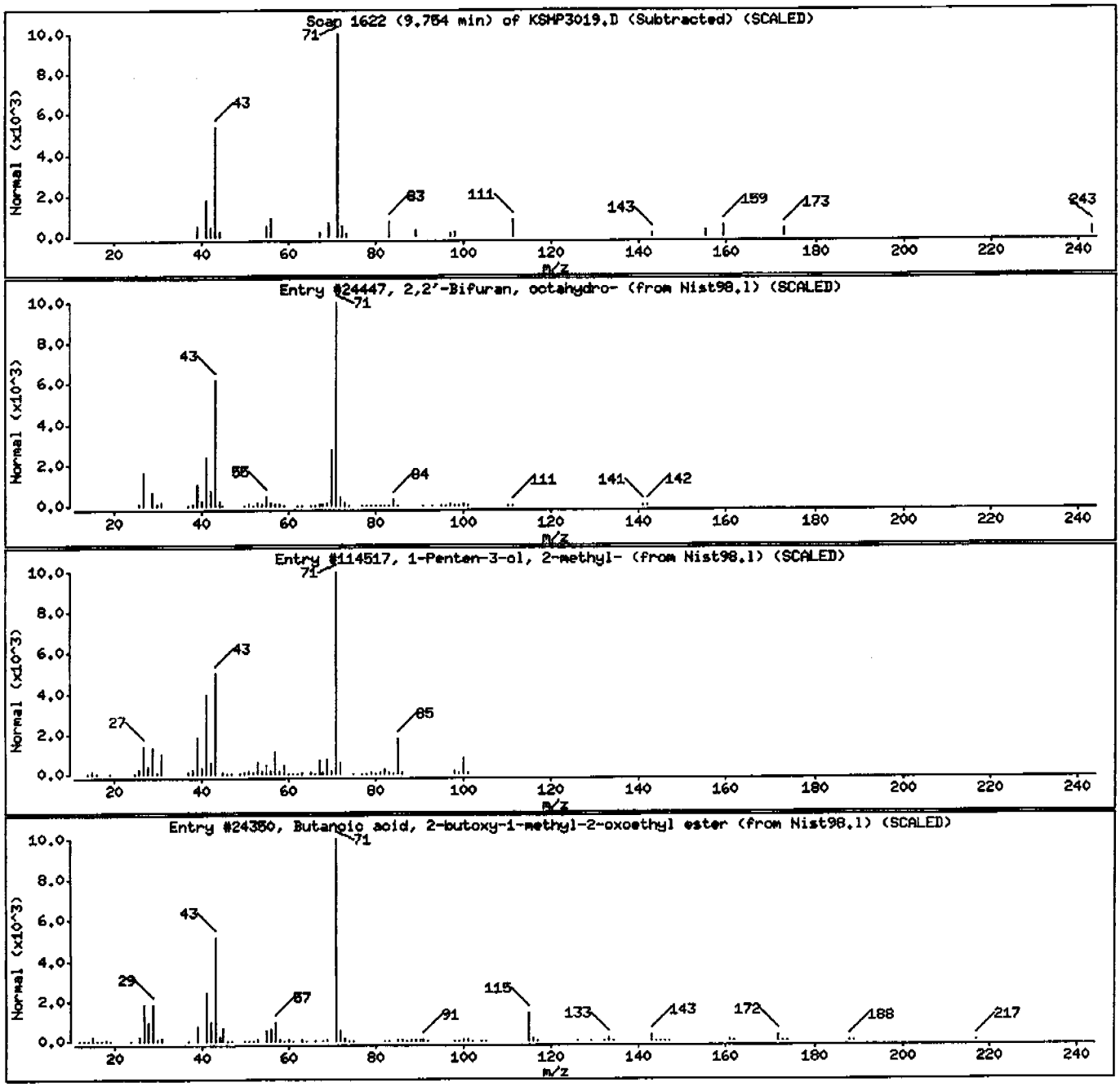
Volume Injected (uL): 1.0

Operator: XIA

Column phase:

Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,2'-Bifuran, octahydro-	1552-33-2	Nist98.l	24447	45	C8H1402	142
1-Penten-3-ol, 2-methyl-	2088-07-5	Nist98.l	114517	45	C6H120	100
Butanoic acid, 2-butoxy-1-methyl-2-oxoet	7492-70-8	Nist98.l	24350	42	C11H2004	216



Data File: \\Slsvr01\BNA_LAB\HSK.i\K050509C.B\KSHP3019.D

Date : 10-MAY-2005 00:59

Client ID: RE73-05-58924

Instrument: HSK.i

Sample Info: G80091AC

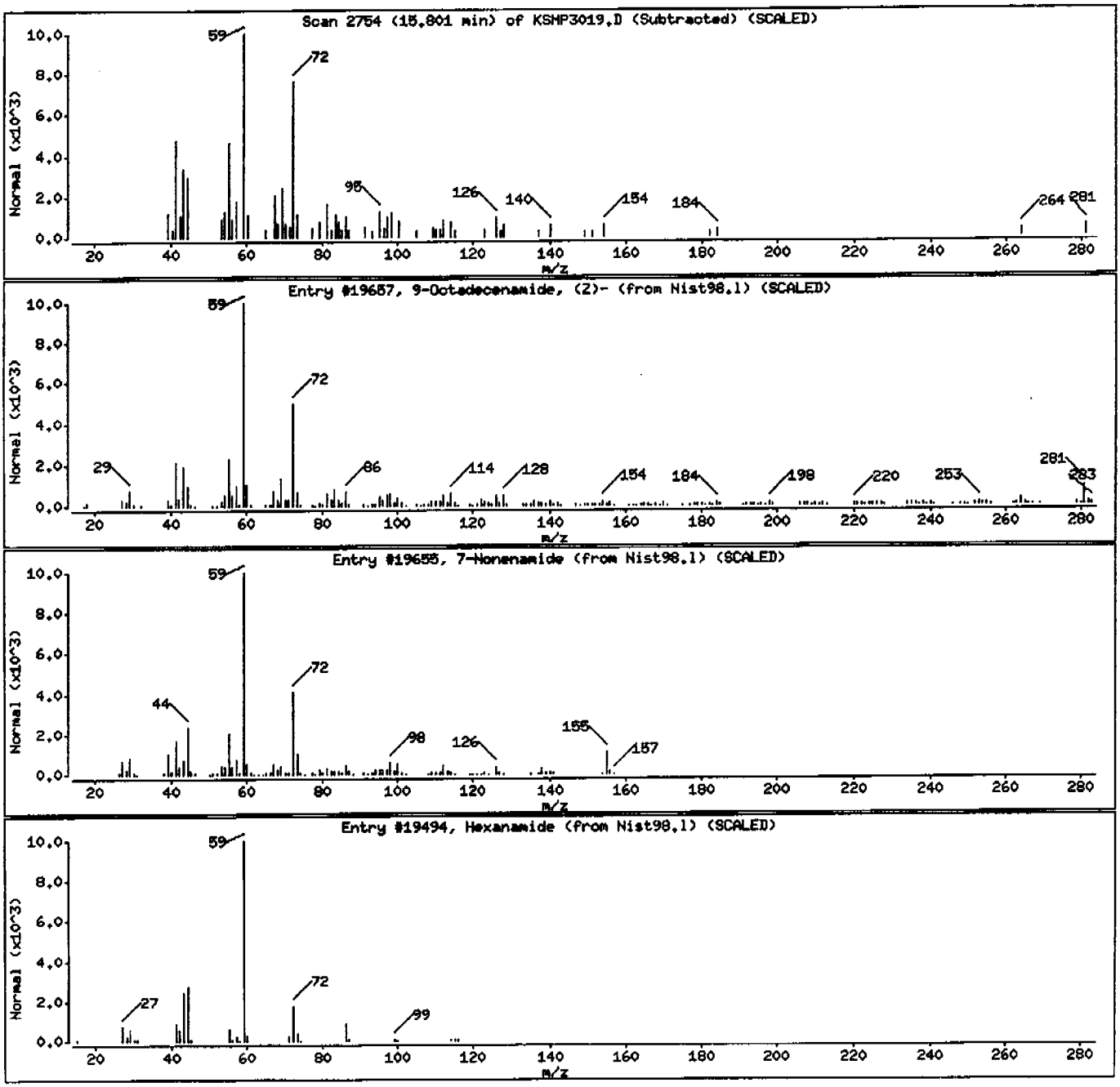
Volume Injected (uL): 1.0

Operator: XIA

Column phase:

Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	Nist98.l	19657	91	C18H35NO	281
7-Nonenamide	90949-53-4	Nist98.l	19655	64	C9H17NO	155
Hexanamide	628-02-4	Nist98.l	19494	35	C6H13NO	115



GC/MS RAW QC DATA

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KBLK3009.D Page 1
Report Date: 10-May-2005 12:25

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KBLK3009.D
Lab Smp Id: G9DL01AA Client Smp ID: SVBLKK129B
Inj Date : 09-MAY-2005 19:41
Operator : XIA Inst ID: MSK.i
Smp Info : G9DL01AA
Misc Info : F5D270000-669B (5117669) APPIX SF
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Meth Date : 10-May-2005 11:13 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12 Cal File: KCAL3000.D
Als bottle: 18 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIXSFLCS04.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
$ 10 2-Fluorophenol	112	3.232	3.245	(0.710)	86933	24.3225	24.32
$ 15 Phenol-d5	99	4.322	4.324	(0.950)	80884	16.1684	16.17
* 22 1,4-Dichlorobenzene-d4	152	4.552	4.559	(1.000)	118317	40.0000	
$ 36 Nitrobenzene-d5	82	5.273	5.285	(0.860)	189839	31.4675	31.47
* 48 Naphthalene-d8	136	6.133	6.140	(1.000)	439482	40.0000	
$ 69 2-Fluorobiphenyl	172	7.741	7.753	(0.878)	269439	27.6873	27.69
* 82 Acenaphthene-d10	164	8.815	8.827	(1.000)	241681	40.0000	
$ 104 2,4,6-Tribromophenol	330	10.263	10.275	(1.164)	65116	48.1971	48.20
* 121 Phenanthrene-d10	188	11.475	11.487	(1.000)	423435	40.0000	
$ 139 Terphenyl-d14	244	14.675	14.687	(0.882)	419013	34.5673	34.57
* 153 Chrysene-d12	240	16.641	16.653	(1.000)	383741	40.0000	
* 166 Perylene-d12	264	19.248	19.266	(1.000)	351470	40.0000	

05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KBLK3009.D Page 2
Report Date: 10-May-2005 12:25

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSK.i
Lab File ID: KBLK3009.D
Lab Smp Id: G9DL01AA
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Misc Info: F5D270000-669B (5117669) APPIX SF

Calibration Date: 09-MAY-2005
Calibration Time: 16:30
Client Smp ID: SVBLKK129B
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	138615	69308	277230	118317	-14.64
48 Naphthalene-d8	492644	246322	985288	439482	-10.79
82 Acenaphthene-d10	276841	138421	553682	241681	-12.70
121 Phenanthrene-d10	505686	252843	1011372	423435	-16.27
153 Chrysene-d12	445673	222837	891346	383741	-13.90
166 Perylene-d12	381519	190760	763038	351470	-7.88

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.55	-0.15
48 Naphthalene-d8	6.14	5.64	6.64	6.13	-0.11
82 Acenaphthene-d10	8.83	8.33	9.33	8.82	-0.14
121 Phenanthrene-d10	11.49	10.99	11.99	11.48	-0.10
153 Chrysene-d12	16.65	16.15	17.15	16.64	-0.07
166 Perylene-d12	19.27	18.77	19.77	19.25	-0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KBLK3009.D Page 3
Report Date: 10-May-2005 12:25

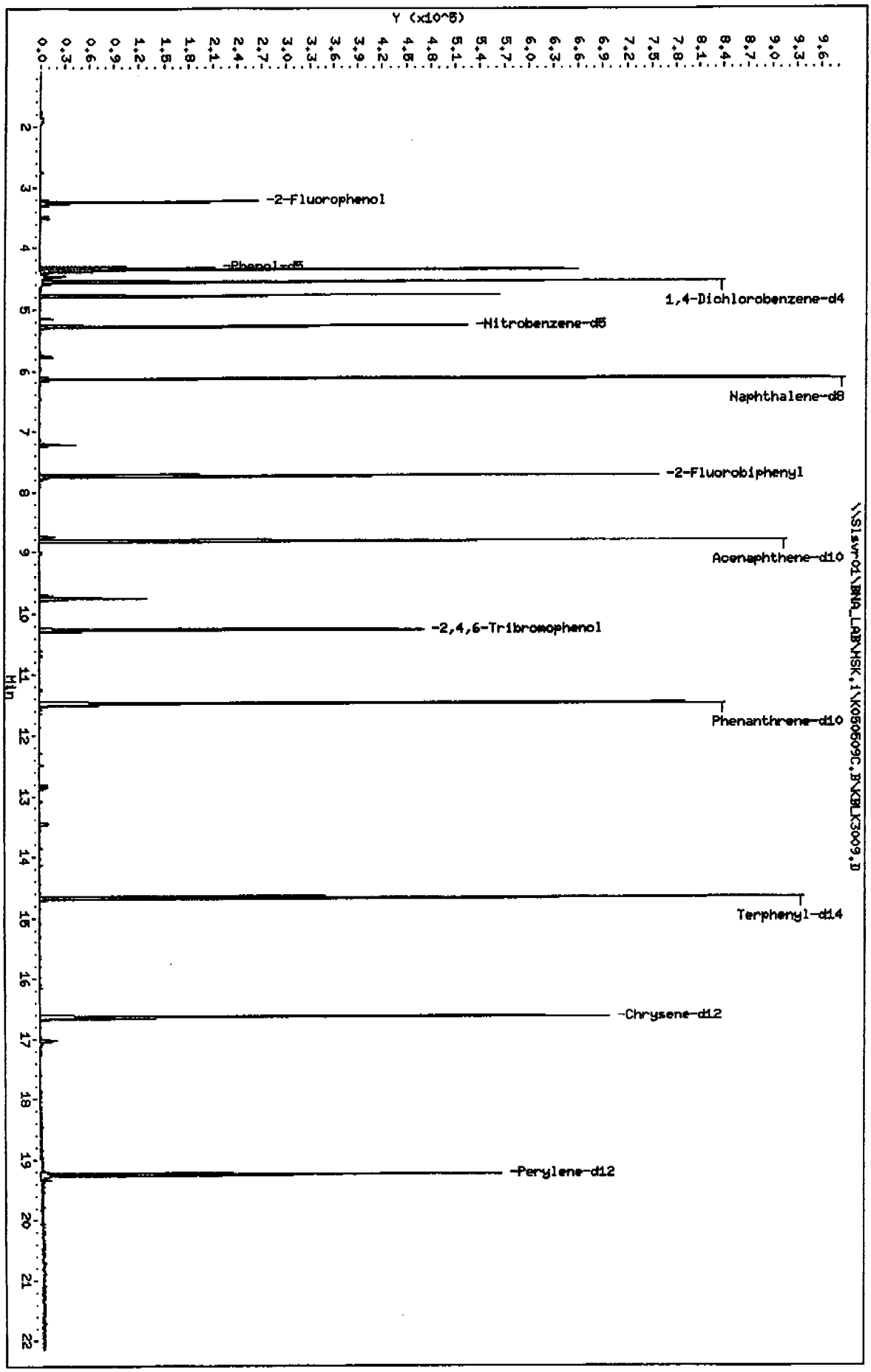
STL St. Louis

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: G9DL01AA
Level: LOW
Data Type: MS DATA
SpikeList File:
Sublist File: APPIXSFLCS04.sub
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Misc Info: F5D270000-669B (5117669) APPIX SF

Client SDG: F5D270000
Fraction: SV
Client Smp ID: SVBLKK129B
Operator: XIA
SampleType: BLANK
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 10 2-Fluorophenol	75.00	24.32	32.43	24-58
$ 15 Phenol-d5	75.00	16.17	21.56	16-41
$ 36 Nitrobenzene-d5	50.00	31.47	62.94	48-103
$ 69 2-Fluorobiphenyl	50.00	27.69	55.37	53-107
$ 104 2,4,6-Tribromophen	75.00	48.20	64.26	57-107
$ 139 Terphenyl-d14	50.00	34.57	69.13	48-102



Data File: \\Slsvr01\BNA_LAB\HSK,i\K050509C.B\KBLK3009.D
Date : 09-MAY-2005 19:41
Client ID: SVBLK01299
Sample Info: G9DL01AA
Volume Injected (ul.): 1.0
Column phase:

Instrument: HSK,i
Operator: KIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KBLK3009.D
Report Date: 10-May-2005 12:25

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KBLK3009.D
Lab Smp Id: G9DL01AA Client Smp ID: SVBLKK129B
Inj Date : 09-MAY-2005 19:41
Operator : XIA Inst ID: MSK.i
Smp Info : G9DL01AA
Misc Info : F5D270000-669B (5117669) APPIX SF
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Meth Date : 10-May-2005 11:13 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12 Cal File: KCAL3000.D
Als bottle: 18 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIXSFLCS04.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 82 Acenaphthene-d10	8.816	1117912	40.000

	CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/mL)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Organic Acid				CAS #:			
9.756	157375	5.63103065	5.631	0		0	82

05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KBLK3009.D

Date : 09-MAY-2005 19:41

Client ID: SVBLKK129B

Instrument: MSK.i

Sample Info: G9DL01AA

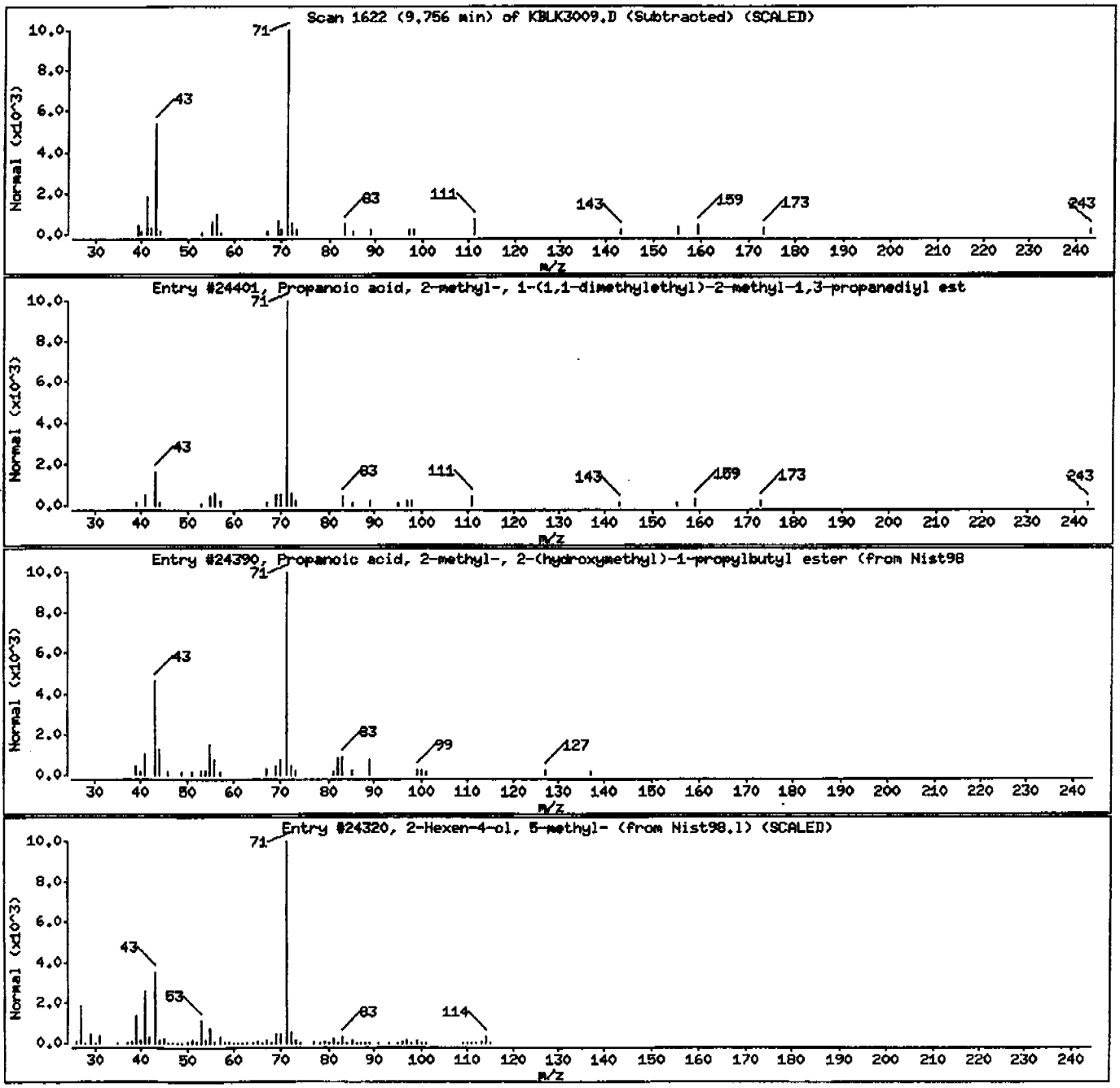
Volume Injected (uL): 1.0

Operator: XIA

Column phase:

Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Organic Acid						
Propanoic acid, 2-methyl-, 1-(1,1-dimeth	74381-40-1	Nist98.l	24401	78	C16H3004	286
Propanoic acid, 2-methyl-, 2-(hydroxymet	74367-32-1	Nist98.l	24390	64	C12H2403	216
2-Hexen-4-ol, 5-methyl-	1000163-48-9	Nist98.l	24320	53	C7H140	114



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KLCS3010.D Page 1
Report Date: 10-May-2005 18:31

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KLCS3010.D
Lab Smp Id: G9DL01AC Client Smp ID: SVLCSK129B
Inj Date : 09-MAY-2005 20:13
Operator : XIA Inst ID: MSK.i
Smp Info : G9DL01AC
Misc Info : F5D270000-669C (5117669) APPIX SF
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Meth Date : 10-May-2005 11:13 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12 Cal File: KCAL3000.D
Als bottle: 19 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIXSFLCS04.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
4	N-Nitrosodimethylamine	74	1.707	1.706	(0.375)	74091	38.8564	38.86
3	Pyridine	79	1.696	1.690	(0.373)	109597	32.5718	32.57(M)
$ 10	2-Fluorophenol	112	3.235	3.245	(0.710)	78671	22.9107	22.91
17	Aniline	93	4.244	4.254	(0.932)	305602	48.9873	48.99
19	Bis(2-chloroethyl)ether	93	4.319	4.324	(0.948)	241470	54.6896	54.69
$ 15	Phenol-d5	99	4.319	4.324	(0.948)	85403	17.7697	17.77
16	Phenol	94	4.330	4.334	(0.951)	129288	24.3014	24.30
20	2-Chlorophenol	128	4.383	4.388	(0.962)	195292	50.7689	50.77
21	1,3-Dichlorobenzene	146	4.506	4.511	(0.989)	192774	43.8208	43.82
* 22	1,4-Dichlorobenzene-d4	152	4.554	4.559	(1.000)	113670	40.0000	
23	1,4-Dichlorobenzene	146	4.570	4.575	(1.004)	204412	43.7546	43.75
26	1,2-Dichlorobenzene	146	4.795	4.799	(1.053)	201473	46.6310	46.63
25	Benzyl Alcohol	108	4.800	4.804	(1.054)	119801	63.3727	63.37
28	2,2-oxybis(1-Chloropropane)	45	4.960	4.965	(1.089)	260970	57.1559	57.16
27	2-Methylphenol	108	5.008	5.013	(1.100)	166539	48.8875	48.89
35	Hexachloroethane	117	5.147	5.157	(1.130)	91548	44.8167	44.82
32	N-Nitrosodinpropylamine	70	5.147	5.152	(1.130)	252839	70.6455	70.64
29	3 and 4-Methylphenol	108	5.190	5.205	(1.140)	168812	46.4680	46.47
$ 36	Nitrobenzene-d5	82	5.275	5.285	(0.860)	178189	31.7619	31.76
37	Nitrobenzene	77	5.302	5.307	(0.864)	362617	60.9870	60.99
39	Isophorone	82	5.591	5.595	(0.911)	599874	77.3916	77.39

05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KLCS3010.D
Report Date: 10-May-2005 18:31

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	40 2-Nitrophenol	139	5.703	5.702	(0.929)	127311	61.8030	61.80
	41 2,4-Dimethylphenol	107	5.826	5.830	(0.950)	275713	63.0698	63.07
	42 Bis(2-chloroethoxy)methane	93	5.906	5.910	(0.963)	311319	63.0078	63.01
	45 2,4-Dichlorophenol	162	6.034	6.038	(0.983)	199735	62.1395	62.14
	47 1,2,4-Trichlorobenzene	180	6.093	6.097	(0.993)	185838	48.5299	48.53
*	48 Naphthalene-d8	136	6.135	6.140	(1.000)	408689	40.0000	
	44 Benzoic Acid	122	6.045	6.097	(0.985)	36372	17.8434	17.84
	50 Naphthalene	128	6.162	6.167	(1.004)	598273	51.7034	51.70
	51 4-Chloroaniline	127	6.312	6.316	(1.029)	281064	59.9888	59.99
	54 Hexachlorobutadiene	225	6.408	6.412	(1.044)	113342	42.6136	42.61
	62 2-Methylnaphthalene	142	7.124	7.128	(1.161)	464583	56.1295	56.13
	59 4-Chloro-3-Methylphenol	107	7.076	7.080	(1.153)	272517	72.9741	72.97
	66 Hexachlorocyclopentadiene	237	7.471	7.475	(0.847)	123512	50.8641	50.86
	67 2,4,6-Trichlorophenol	196	7.653	7.662	(0.868)	201176	76.7549	76.75
$	69 2-Fluorobiphenyl	172	7.743	7.753	(0.878)	318837	34.8672	34.87
	68 2,4,5-Trichlorophenol	196	7.738	7.748	(0.878)	221176	79.8451	79.84
	72 2-Chloronaphthalene	162	7.872	7.876	(0.893)	499365	65.3138	65.31
	73 2-Nitroaniline	65	8.165	8.170	(0.926)	285641	86.7283	86.73
	76 Dimethylphthalate	163	8.534	8.539	(0.968)	767928	87.7036	87.70
	79 Acenaphthylene	152	8.555	8.560	(0.970)	852446	75.6260	75.62
	80 2,6-Dinitrotoluene	165	8.652	8.651	(0.981)	169452	90.5700	90.57
*	82 Acenaphthene-d10	164	8.817	8.827	(1.000)	227099	40.0000	
	83 Acenaphthene	153	8.876	8.880	(1.007)	512889	72.0545	72.05
	81 3-Nitroaniline	138	8.887	8.886	(1.008)	160633	87.3949	87.39
	84 2,4-Dinitrophenol	184	9.063	9.067	(1.028)	89417	80.0067	80.01
	86 Dibenzofuran	168	9.159	9.158	(1.039)	812700	77.2794	77.28
	88 2,4-Dinitrotoluene	165	9.325	9.329	(1.058)	235517	97.8885	97.89
	85 4-Nitrophenol	109	9.383	9.377	(1.064)	56926	37.1003	37.10
	94 Fluorene	166	9.768	9.773	(1.108)	704575	83.7123	83.71
	93 Diethylphthalate	149	9.795	9.799	(1.111)	799920	91.2742	91.27
	95 4-Chlorophenyl-phenylether	204	9.816	9.821	(1.113)	375840	82.7709	82.77
	98 4-Nitroaniline	138	10.014	10.008	(1.136)	166797	93.0894	93.09
	99 4,6-Dinitro-2-methylphenol	198	10.062	10.061	(0.876)	158939	95.0733	95.07
	100 N-Nitrosodiphenylamine	169	10.089	10.088	(0.879)	561016	91.3267	91.33
	102 Azobenzene	77	10.105	10.104	(0.880)	1189469	86.3205	86.32
$	104 2,4,6-Tribromophenol	330	10.270	10.275	(1.165)	87451	68.8850	68.88
	109 4-Bromophenyl-phenylether	248	10.703	10.707	(0.932)	237817	84.2706	84.27
	112 Hexachlorobenzene	284	10.933	10.932	(0.952)	259746	90.1546	90.15
	117 Pentachlorophenol	266	11.339	11.338	(0.987)	118013	73.4445	73.44
*	121 Phenanthrene-d10	188	11.483	11.487	(1.000)	403472	40.0000	
	122 Phenanthrene	178	11.531	11.530	(1.004)	1037588	83.2596	83.26
	124 Anthracene	178	11.611	11.616	(1.011)	1015584	84.2982	84.30
	126 Carbazole	167	12.017	12.016	(1.047)	911995	88.6017	88.60
	129 Di-n-Butylphthalate	149	12.899	12.903	(1.123)	1199490	88.9400	88.94
	134 Fluoranthene	202	13.823	13.827	(1.204)	1078550	83.7410	83.74
	135 Benzidine	184	14.218	14.223	(0.854)	159256	29.8375	29.84
	137 Pyrene	202	14.239	14.244	(0.855)	1110137	77.6013	77.60
$	139 Terphenyl-d14	244	14.678	14.687	(0.882)	399925	35.9747	35.97
	146 Butylbenzylphthalate	149	15.805	15.809	(0.949)	515930	87.2121	87.21
	150 Benzo(a)Anthracene	228	16.622	16.621	(0.998)	1048365	85.0713	85.07
*	153 Chrysene-d12	240	16.649	16.653	(1.000)	351931	40.0000	
	154 Chrysene	228	16.708	16.707	(1.004)	1029331	87.7750	87.77
	152 3,3'-Dichlorobenzidine	252	16.713	16.717	(1.004)	432976	91.2458	91.24
	155 bis(2-ethylhexyl)Phthalate	149	17.028	17.038	(1.023)	646882	87.3487	87.35

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
158 Di-n-octylphthalate	149	18.177	18.181	(0.944)	1061648	88.5560	88.56
160 Benzo(b)fluoranthene	252	18.625	18.630	(0.967)	983135	89.9924	89.99
161 Benzo(k)fluoranthene	252	18.625	18.630	(0.967)	983135	90.6055	90.60
165 Benzo(a)pyrene	252	19.165	19.164	(0.995)	872447	88.4852	88.48
* 166 Perylene-d12	264	19.256	19.266	(1.000)	281346	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.981	20.986	(1.090)	784937	85.8805	85.88
174 Dibenzo(a,h)anthracene	278	21.029	21.034	(1.092)	800611	90.2705	90.27
177 Benzo(g,h,i)perylene	276	21.441	21.440	(1.113)	736694	90.2819	90.28

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KLCS3010.D Page 4
Report Date: 10-May-2005 18:31

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSK.i
Lab File ID: KLCS3010.D
Lab Smp Id: G9DL01AC
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Misc Info: F5D270000-669C (5117669) APPIX SF

Calibration Date: 09-MAY-2005
Calibration Time: 16:30
Client Smp ID: SVLCSK129B
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	138615	69308	277230	113670	-18.00
48 Naphthalene-d8	492644	246322	985288	408689	-17.04
82 Acenaphthene-d10	276841	138421	553682	227099	-17.97
121 Phenanthrene-d10	505686	252843	1011372	403472	-20.21
153 Chrysene-d12	445673	222837	891346	351931	-21.03
166 Perylene-d12	381519	190760	763038	281346	-26.26

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.55	-0.10
48 Naphthalene-d8	6.14	5.64	6.64	6.14	-0.07
82 Acenaphthene-d10	8.83	8.33	9.33	8.82	-0.11
121 Phenanthrene-d10	11.49	10.99	11.99	11.48	-0.04
153 Chrysene-d12	16.65	16.15	17.15	16.65	-0.03
166 Perylene-d12	19.27	18.77	19.77	19.26	-0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KLCS3010.D Page 5
Report Date: 10-May-2005 18:31

STL St. Louis

RECOVERY REPORT

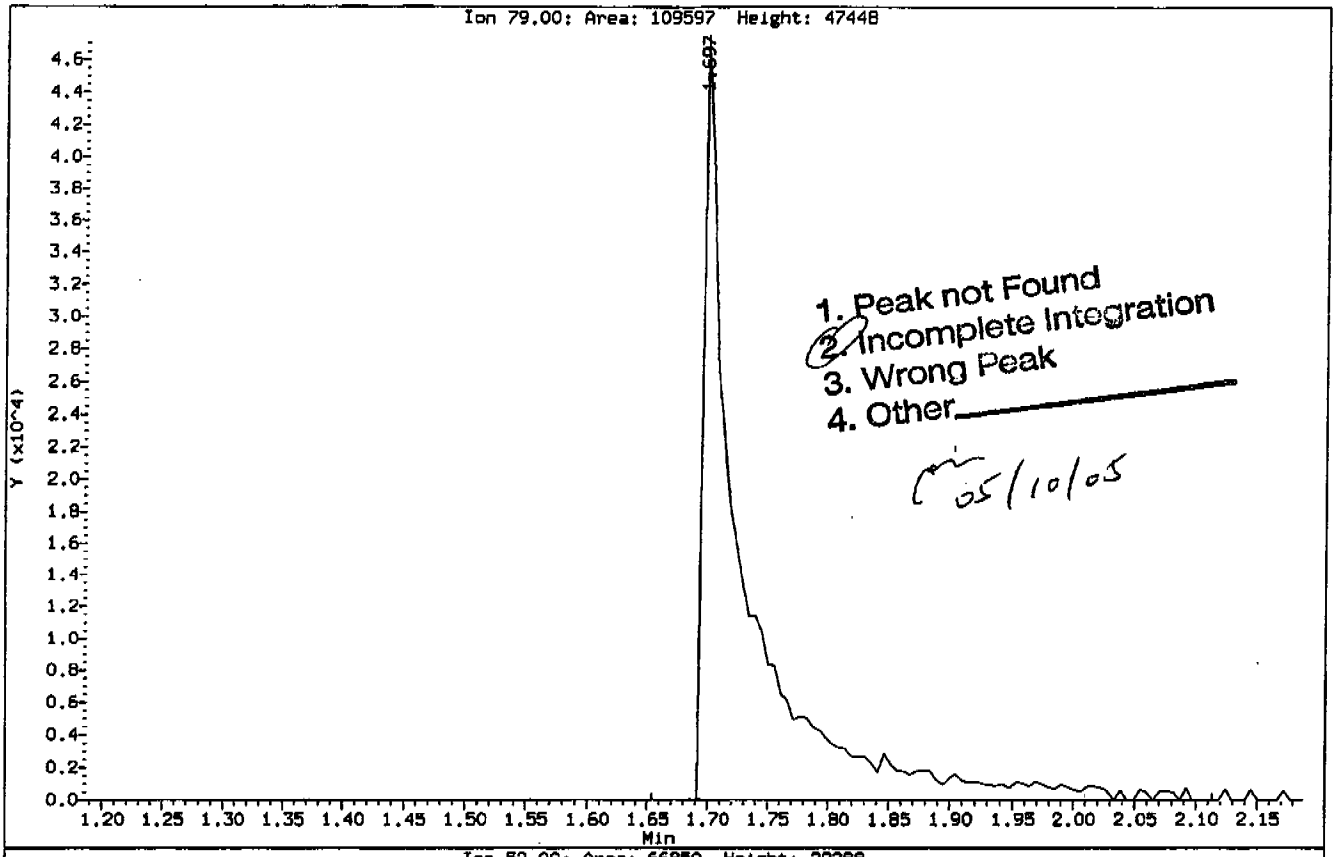
Client Name:
Sample Matrix: LIQUID
Lab Smp Id: G9DL01AC
Level: LOW
Data Type: MS DATA
SpikeList File: SFLCS04.spk
Sublist File: APPIXSFLCS04.sub
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Misc Info: F5D270000-669C (5117669) APPIX SF

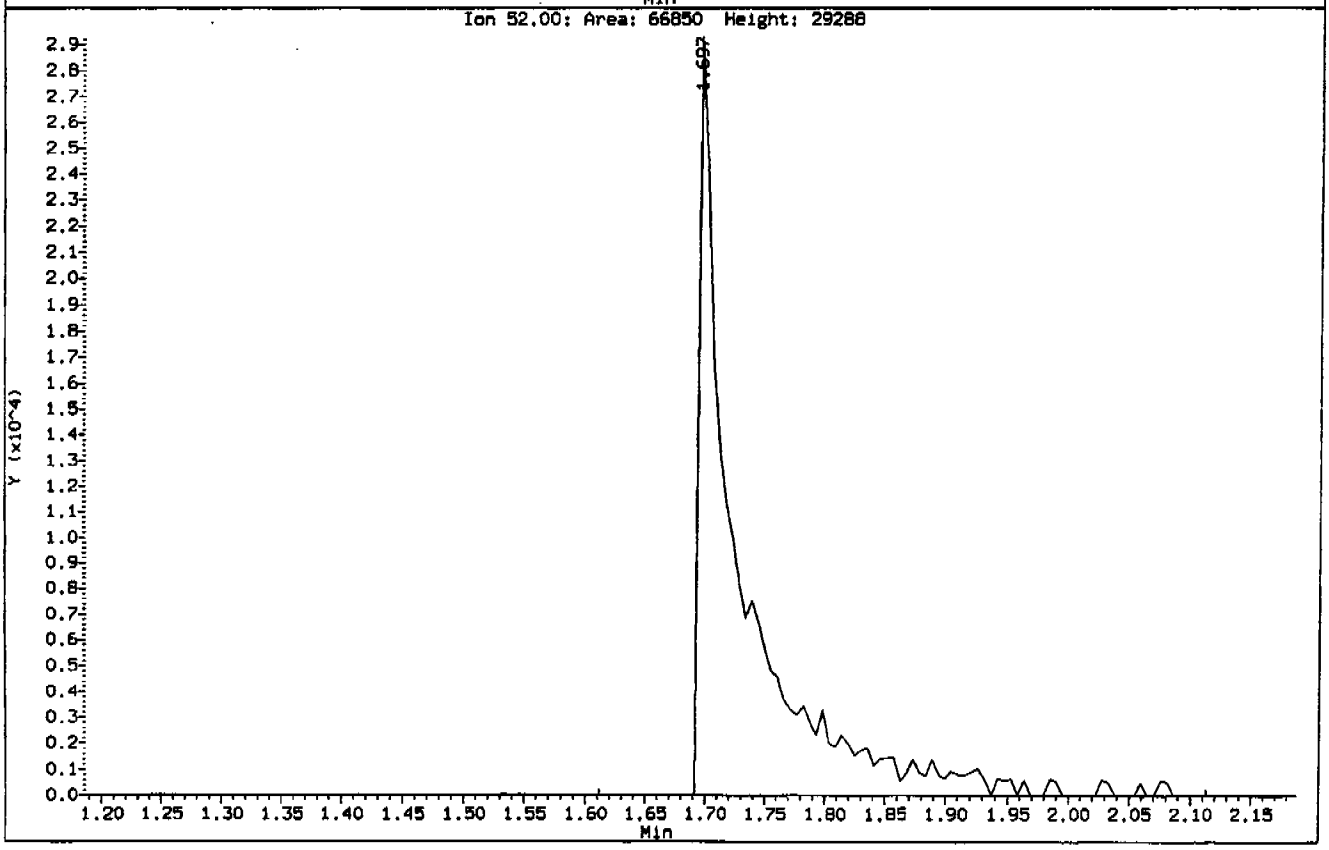
Client SDG: F5D270000
Fraction: SV
Client Smp ID: SVLCSK129B
Operator: XIA
SampleType: LCS
Quant Type: ISTD

SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
83	Acenaphthene	100.0	72.05	72.05	53-100
79	Acenaphthylene	100.0	75.62	75.63	52-100
124	Anthracene	100.0	84.30	84.30	57-102
150	Benzo(a)Anthracene	100.0	85.07	85.07	58-111
160	Benzo(b)fluoranthe	100.0	89.99	89.99	52-111
161	Benzo(k)fluoranthe	100.0	90.60	90.61	57-123
177	Benzo(g,h,i)peryle	100.0	90.28	90.28	42-121
165	Benzo(a)pyrene	100.0	88.48	88.49	55-104
42	Bis(2-chloroethoxy	100.0	63.01	63.01	48-99
19	Bis(2-chloroethyl)	100.0	54.69	54.69	35-92
155	bis(2-ethylhexyl)P	100.0	87.35	87.35	55-112
109	4-Bromophenyl-phen	100.0	84.27	84.27	54-99
146	Butylbenzylphthala	100.0	87.21	87.21	57-112
126	Carbazole	100.0	88.60	88.60	52-109
51	4-Chloroaniline	100.0	59.99	59.99	31-126
59	4-Chloro-3-Methylp	100.0	72.97	72.97	51-93
20	2-Chlorophenol	100.0	50.77	50.77	40-84
95	4-Chlorophenyl-phe	100.0	82.77	82.77	55-99
154	Chrysene	100.0	87.77	87.77	54-115
174	Dibenzo(a,h)anthra	100.0	90.27	90.27	43-128
86	Dibenzofuran	100.0	77.28	77.28	49-102
129	Di-n-Butylphthalat	100.0	88.94	88.94	57-108
152	3,3'-Dichlorobenzi	100.0	91.24	91.25	49-114
45	2,4-Dichlorophenol	100.0	62.14	62.14	45-94
93	Diethylphthalate	100.0	91.27	91.27	58-110
41	2,4-Dimethylphenol	100.0	63.07	63.07	44-90
76	Dimethylphthalate	100.0	87.70	87.70	58-102
99	4,6-Dinitro-2-meth	100.0	95.07	95.07	46-106
84	2,4-Dinitrophenol	100.0	80.01	80.01	24-118
88	2,4-Dinitrotoluene	100.0	97.89	97.89	65-113
80	2,6-Dinitrotoluene	100.0	90.57	90.57	60-104
158	Di-n-octylphthalat	100.0	88.56	88.56	50-106
134	Fluoranthene	100.0	83.74	83.74	57-105
94	Fluorene	100.0	83.71	83.71	58-101
112	Hexachlorobenzene	100.0	90.15	90.15	58-105
54	Hexachlorobutadien	100.0	42.61	42.61	32-78
66	Hexachlorocyclopen	100.0	50.86	50.86	14-89
35	Hexachloroethane	100.0	44.82	44.82	30-79
173	Indeno(1,2,3-cd)py	100.0	85.88	85.88	43-119
39	Isophorone	100.0	77.39	77.39	54-106

Data File: \\Slavr01\BNA_LAB\MSK.i\K050509C.B\KLCS3010.D
Injection Date: 09-MAY-2005 20:13
Instrument: MSK.i
Client Sample ID: SVLCSK1298

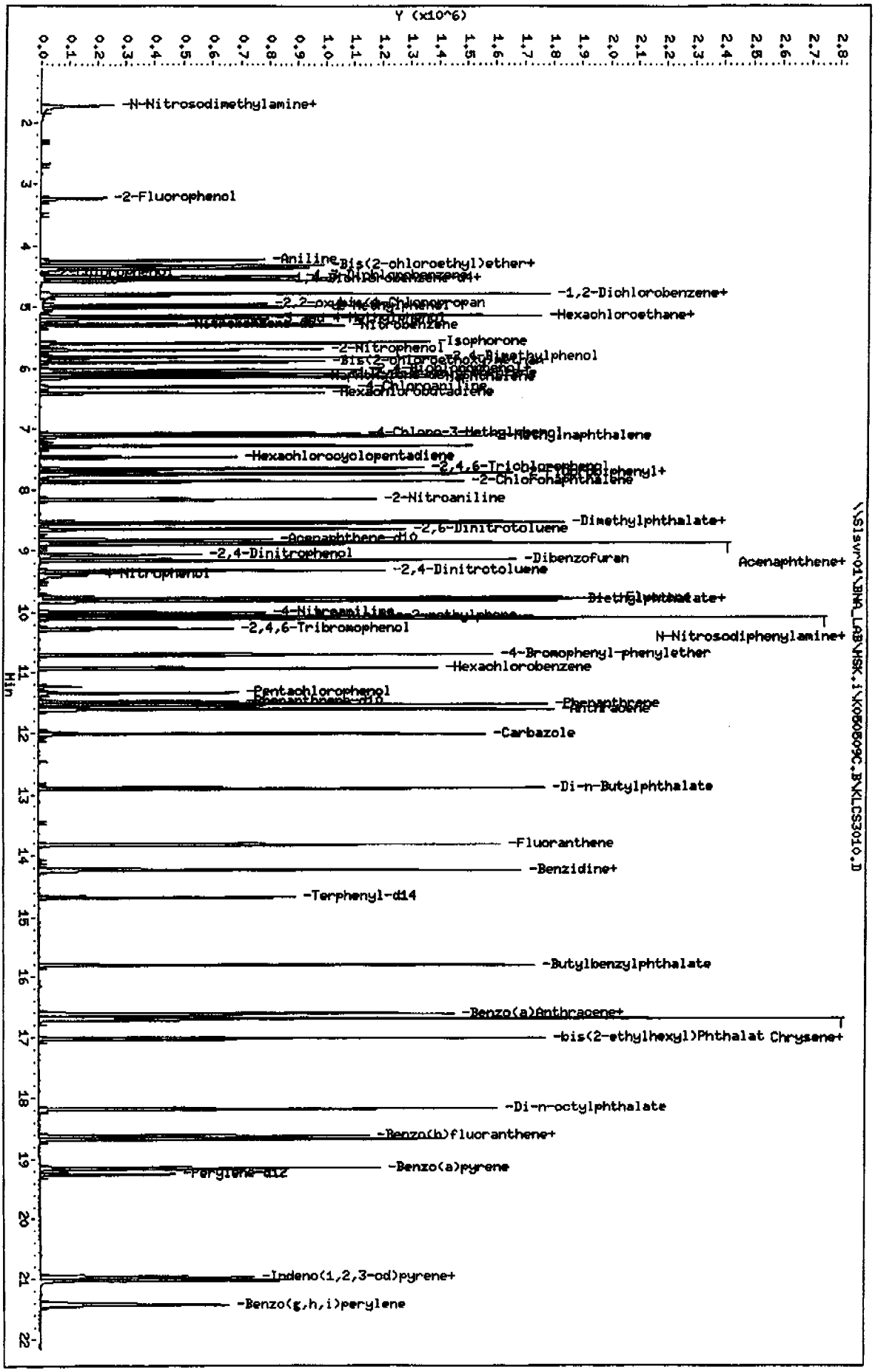
Compound: Pyridine
CAS Number: 110-86-1





	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
62	2-Methylnaphthalen	100.0	56.13	56.13	28-110
27	2-Methylphenol	100.0	48.89	48.89	36-78
29	3 and 4-Methylphen	100.0	46.47	46.47	30-79
50	Naphthalene	100.0	51.70	51.70	45-91
73	2-Nitroaniline	100.0	86.73	86.73	52-110
81	3-Nitroaniline	100.0	87.39	87.39	51-115
98	4-Nitroaniline	100.0	93.09	93.09	53-116
37	Nitrobenzene	100.0	60.99	60.99	46-97
40	2-Nitrophenol	100.0	61.80	61.80	45-95
85	4-Nitrophenol	100.0	37.10	37.10	17-45
100	N-Nitrosodiphenyla	100.0	91.33	91.33	59-110
32	N-Nitrosodinpropyl	100.0	70.64	70.65	52-108
28	2,2-oxybis(1-Chlor	100.0	57.16	57.16	41-99
117	Pentachlorophenol	100.0	73.44	73.44	37-109
122	Phenanthrene	100.0	83.26	83.26	58-104
16	Phenol	100.0	24.30	24.30	18-40
137	Pyrene	100.0	77.60	77.60	56-108
47	1,2,4-Trichloroben	100.0	48.53	48.53	38-84
68	2,4,5-Trichlorophe	100.0	79.84	79.85	49-99
67	2,4,6-Trichlorophe	100.0	76.75	76.75	48-97

	SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 10	2-Fluorophenol	75.00	22.91	30.55	24-58
$ 15	Phenol-d5	75.00	17.77	23.69	16-41
$ 36	Nitrobenzene-d5	50.00	31.76	63.52	48-103
$ 69	2-Fluorobiphenyl	50.00	34.87	69.73	53-107
$ 104	2,4,6-Tribromophen	75.00	68.88	91.85	57-107
$ 139	Terphenyl-d14	50.00	35.97	71.95	48-102

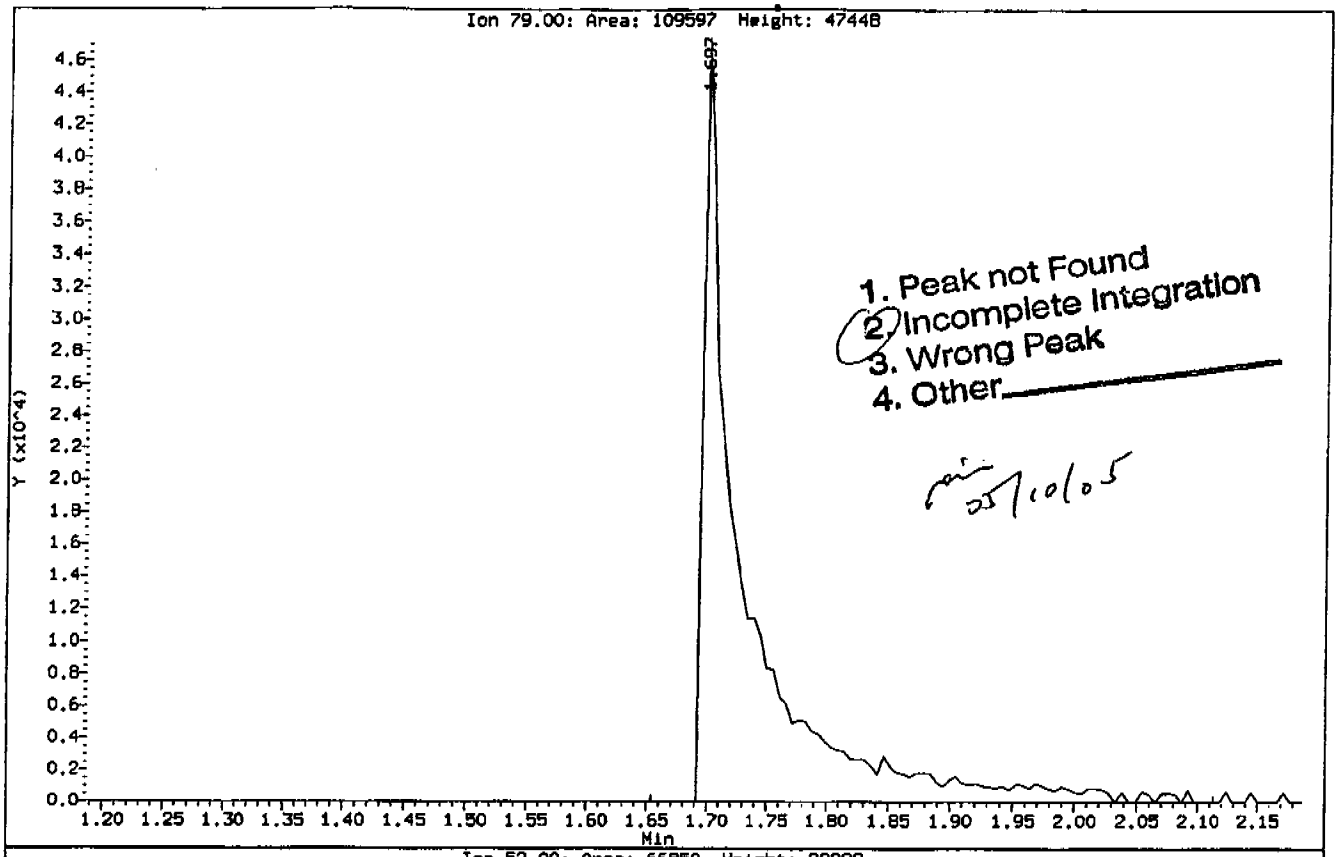


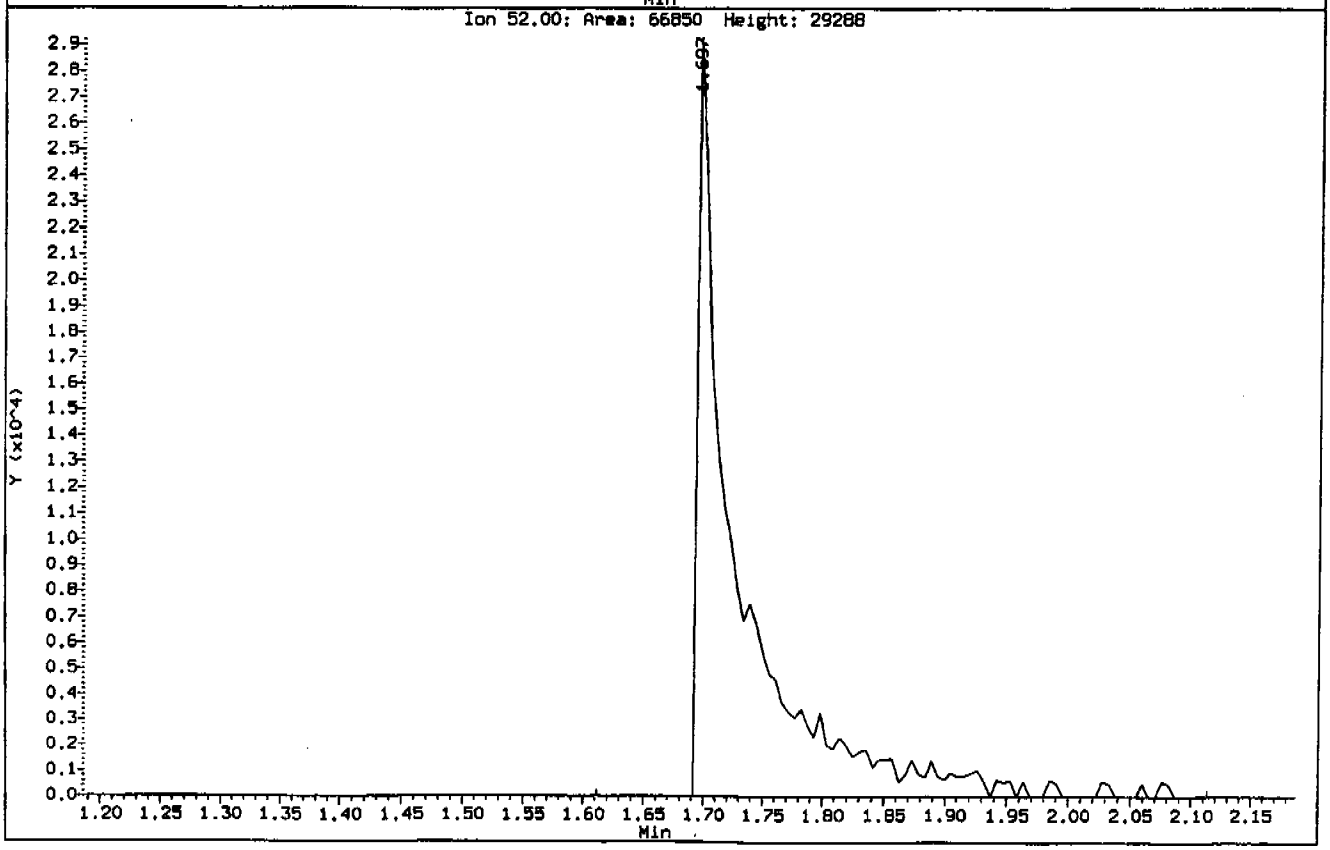
Data File: \\Slsvr01\BNA_LAB\HSK.i\K060809C.B\KLCS3010.D
Date : 09-MAY-2006 20:13
Client ID: SVLCSK129B
Sample Info: C9DL01AC
Volume injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KLCS3010.D
Injection Date: 09-MAY-2005 20:13
Instrument: MSK.i
Client Sample ID: SVLCSK1298

Compound: Pyridine
CAS Number: 110-86-1





Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3017.D Page 1
Report Date: 10-May-2005 17:07

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3017.D
Lab Smp Id: G800L1AL Client Smp ID: RE73-05-58923
Inj Date : 09-MAY-2005 23:55
Operator : XIA Inst ID: MSK.i
Smp Info : G800L1AL
Misc Info : F5D220218-001S (5117669) APPIX SF
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Meth Date : 10-May-2005 11:13 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12 Cal File: KCAL3000.D
Als bottle: 26 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIXSFMS03.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
	4 N-Nitrosodimethylamine	74	1.708	1.706	(0.376)	81156	44.4348	44.43
	3 Pyridine	79	1.697	1.690	(0.374)	118963	36.9115	36.91(M)
$	10 2-Fluorophenol	112	3.231	3.245	(0.711)	83075	25.2581	25.26
	17 Aniline	93	4.240	4.254	(0.933)	337240	56.4380	56.44
	19 Bis(2-chloroethyl)ether	93	4.315	4.324	(0.949)	269870	63.8119	63.81
$	15 Phenol-d5	99	4.310	4.324	(0.948)	82123	17.8393	17.84
	16 Phenol	94	4.326	4.334	(0.952)	133768	26.2501	26.25
	20 2-Chlorophenol	128	4.374	4.388	(0.962)	222604	60.4160	60.42
	21 1,3-Dichlorobenzene	146	4.497	4.511	(0.989)	227474	53.9845	53.98
*	22 1,4-Dichlorobenzene-d4	152	4.545	4.559	(1.000)	108878	40.0000	
	23 1,4-Dichlorobenzene	146	4.561	4.575	(1.004)	241443	53.9557	53.96
	26 1,2-Dichlorobenzene	146	4.785	4.799	(1.053)	233871	56.5119	56.51
	25 Benzyl Alcohol	108	4.790	4.804	(1.054)	142349	78.6144	78.61
	28 2,2-oxybis(1-Chloropropane)	45	4.951	4.965	(1.089)	297641	68.0564	68.06
	27 2-Methylphenol	108	4.999	5.013	(1.100)	177253	54.3227	54.32
	35 Hexachloroethane	117	5.143	5.157	(1.132)	103541	52.9187	52.92
	32 N-Nitrosodinpropylamine	70	5.138	5.152	(1.130)	273892	79.8961	79.90
	29 3 and 4-Methylphenol	108	5.180	5.205	(1.140)	169187	48.6209	48.62
$	36 Nitrobenzene-d5	82	5.266	5.285	(0.860)	189186	34.8622	34.86
	37 Nitrobenzene	77	5.293	5.307	(0.864)	402008	69.8980	69.90
	39 Isophorone	82	5.581	5.595	(0.911)	612118	81.6413	81.64

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Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3017.D Page 2
Report Date: 10-May-2005 17:07

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/L)
	40	2-Nitrophenol	139	5.688	5.702	(0.928)	137570	69.0411	69.04
	41	2,4-Dimethylphenol	107	5.816	5.830	(0.949)	273761	64.7406	64.74
	42	Bis(2-chloroethoxy)methane	93	5.896	5.910	(0.963)	343916	71.9584	71.96
	45	2,4-Dichlorophenol	162	6.024	6.038	(0.983)	214515	68.9941	68.99
	47	1,2,4-Trichlorobenzene	180	6.083	6.097	(0.993)	209399	56.5314	56.53
*	48	Naphthalene-d8	136	6.126	6.140	(1.000)	395323	40.0000	
	44	Benzoic Acid	122	6.035	6.097	(0.985)	41190	20.8902	20.89
	50	Naphthalene	128	6.147	6.167	(1.003)	667615	59.6467	59.65
	51	4-Chloroaniline	127	6.297	6.316	(1.028)	295541	65.2114	65.21
	54	Hexachlorobutadiene	225	6.398	6.412	(1.044)	131264	51.0204	51.02
	62	2-Methylnaphthalene	142	7.114	7.128	(1.161)	472537	59.0208	59.02
	59	4-Chloro-3-Methylphenol	107	7.066	7.080	(1.153)	266919	73.8916	73.89
	66	Hexachlorocyclopentadiene	237	7.456	7.475	(0.847)	128339	52.7108	52.71
	67	2,4,6-Trichlorophenol	196	7.643	7.662	(0.868)	202307	76.9803	76.98
$	69	2-Fluorobiphenyl	172	7.734	7.753	(0.879)	313329	34.1733	34.17
	68	2,4,5-Trichlorophenol	196	7.723	7.748	(0.877)	218784	78.7707	78.77
	72	2-Chloronaphthalene	162	7.857	7.876	(0.893)	492887	64.2944	64.29
	73	2-Nitroaniline	65	8.151	8.170	(0.926)	278076	84.2060	84.20
	76	Dimethylphthalate	163	8.519	8.539	(0.968)	754799	85.9739	85.97
	79	Acenaphthylene	152	8.541	8.560	(0.970)	835648	73.9378	73.94
	80	2,6-Dinitrotoluene	165	8.637	8.651	(0.981)	167923	89.5131	89.51
*	82	Acenaphthene-d10	164	8.802	8.827	(1.000)	227707	40.0000	
	83	Acenaphthene	153	8.861	8.880	(1.007)	506434	70.9577	70.96
	81	3-Nitroaniline	138	8.872	8.886	(1.008)	159328	86.4534	86.45
	84	2,4-Dinitrophenol	184	9.048	9.067	(1.028)	99248	88.5660	88.56
	86	Dibenzofuran	168	9.144	9.158	(1.039)	790438	74.9618	74.96
	88	2,4-Dinitrotoluene	165	9.310	9.329	(1.058)	241915	100.279	100.3
	85	4-Nitrophenol	109	9.369	9.377	(1.064)	58790	38.2128	38.21
	94	Fluorene	166	9.753	9.773	(1.108)	683426	80.9827	80.98
	93	Diethylphthalate	149	9.780	9.799	(1.111)	818318	93.1241	93.12
	95	4-Chlorophenyl-phenylether	204	9.801	9.821	(1.113)	373255	81.9821	81.98
	98	4-Nitroaniline	138	9.999	10.008	(1.136)	170698	95.0122	95.01
	99	4,6-Dinitro-2-methylphenol	198	10.047	10.061	(0.876)	166230	98.9099	98.91
	100	N-Nitrosodiphenylamine	169	10.074	10.088	(0.878)	563159	91.1918	91.19
	102	Azobenzene	77	10.090	10.104	(0.880)	1185547	85.5820	85.58
$	104	2,4,6-Tribromophenol	330	10.255	10.275	(1.165)	90156	70.8262	70.83
	109	4-Bromophenyl-phenylether	248	10.688	10.707	(0.932)	241682	85.1884	85.19
	112	Hexachlorobenzene	284	10.913	10.932	(0.952)	263539	90.9885	90.99
	117	Pentachlorophenol	266	11.319	11.338	(0.987)	135277	83.7445	83.74
*	121	Phenanthrene-d10	188	11.468	11.487	(1.000)	405612	40.0000	
	122	Phenanthrene	178	11.511	11.530	(1.004)	1043313	83.2773	83.28
	124	Anthracene	178	11.596	11.616	(1.011)	1034951	85.4525	85.45
	126	Carbazole	167	12.002	12.016	(1.047)	933226	90.1860	90.18
	129	Di-n-Butylphthalate	149	12.884	12.903	(1.123)	1228754	90.6292	90.63
	134	Fluoranthene	202	13.808	13.827	(1.204)	1063880	82.1662	82.17
	135	Benzidine	184	14.198	14.223	(0.854)	199853	38.0645	38.06
	137	Pyrene	202	14.225	14.244	(0.855)	1102197	78.3240	78.32
$	139	Terphenyl-d14	244	14.663	14.687	(0.881)	375229	34.3129	34.31
	146	Butylbenzylphthalate	149	15.790	15.809	(0.949)	516886	88.8227	88.82
	150	Benzo(a)Anthracene	228	16.602	16.621	(0.998)	1060122	87.4519	87.45
*	153	Chrysene-d12	240	16.634	16.653	(1.000)	346190	40.0000	
	154	Chrysene	228	16.687	16.707	(1.003)	1011897	87.7193	87.72
	152	3,3'-Dichlorobenzidine	252	16.698	16.717	(1.004)	425875	91.2377	91.24
	155	bis(2-ethylhexyl)Phthalate	149	17.013	17.038	(1.023)	626887	86.0526	86.05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
158	Di-n-octylphthalate	149	18.162	18.181	(0.944)	1047787	90.2529	90.25
160	Benzo(b)fluoranthene	252	18.611	18.630	(0.967)	963373	91.0621	91.06
161	Benzo(k)fluoranthene	252	18.611	18.630	(0.967)	963373	91.6826	91.68
165	Benzo(a)pyrene	252	19.150	19.164	(0.995)	870203	91.1388	91.14
* 166	Perylene-d12	264	19.241	19.266	(1.000)	272452	40.0000	
173	Indeno(1,2,3-cd)pyrene	276	20.961	20.986	(1.089)	745525	84.2312	84.23
174	Dibenzo(a,h)anthracene	278	21.009	21.034	(1.092)	794786	92.5391	92.54
177	Benzo(g,h,i)perylene	276	21.421	21.440	(1.113)	738806	93.4963	93.50

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3017.D Page 4
Report Date: 10-May-2005 17:07

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSK.i
Lab File ID: KSMP3017.D
Lab Smp Id: G800L1AL
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Misc Info: F5D220218-001S (5117669) APPIX SF

Calibration Date: 09-MAY-2005
Calibration Time: 16:30
Client Smp ID: RE73-05-58923
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	138615	69308	277230	108878	-21.45
48 Naphthalene-d8	492644	246322	985288	395323	-19.75
82 Acenaphthene-d10	276841	138421	553682	227707	-17.75
121 Phenanthrene-d10	505686	252843	1011372	405612	-19.79
153 Chrysene-d12	445673	222837	891346	346190	-22.32
166 Perylene-d12	381519	190760	763038	272452	-28.59

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.55	-0.31
48 Naphthalene-d8	6.14	5.64	6.64	6.13	-0.23
82 Acenaphthene-d10	8.83	8.33	9.33	8.80	-0.28
121 Phenanthrene-d10	11.49	10.99	11.99	11.47	-0.17
153 Chrysene-d12	16.65	16.15	17.15	16.63	-0.12
166 Perylene-d12	19.27	18.77	19.77	19.24	-0.13

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3017.D Page 5
Report Date: 10-May-2005 17:07

STL St. Louis

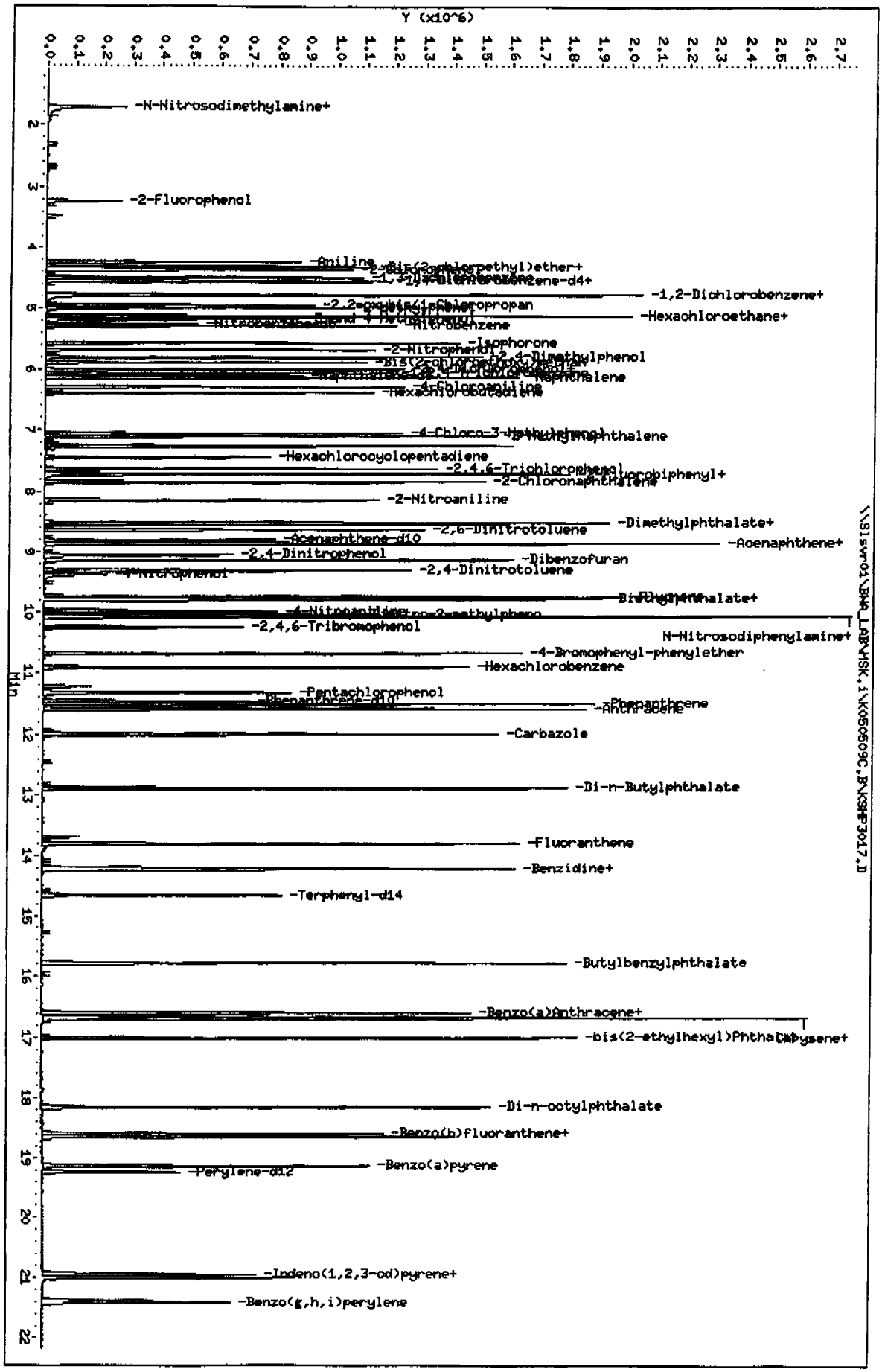
RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 22-APR-2005 00:00 Client SDG: F5D2202
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: G800L1AL Client Smp ID: RE73-05-58923
Level: LOW Operator: XIA
Data Type: MS DATA SampleType: MS
SpikeList File: SFMS03.spk Quant Type: ISTD
Sublist File: APPIXSFMS03.sub
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Misc Info: F5D220218-001S (5117669) APPIX SF

SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
83	Acenaphthene	100.0	70.96	70.96	26-115
79	Acenaphthylene	100.0	73.94	73.94	43-115
124	Anthracene	100.0	85.45	85.45	55-115
150	Benzo(a)Anthracene	100.0	87.45	87.45	56-115
160	Benzo(b)fluoranthe	100.0	91.06	91.06	53-115
161	Benzo(k)fluoranthe	100.0	91.68	91.68	54-115
177	Benzo(g,h,i)peryle	100.0	93.50	93.50	10-150
165	Benzo(a)pyrene	100.0	91.14	91.14	30-126
42	Bis(2-chloroethoxy	100.0	71.96	71.96	32-115
19	Bis(2-chloroethyl)	100.0	63.81	63.81	32-115
155	bis(2-ethylhexyl)P	100.0	86.05	86.05	56-115
109	4-Bromophenyl-phen	100.0	85.19	85.19	51-115
146	Butylbenzylphthala	100.0	88.82	88.82	55-115
126	Carbazole	100.0	90.18	90.19	54-115
51	4-Chloroaniline	100.0	65.21	65.21	17-115
59	4-Chloro-3-Methylp	100.0	73.89	73.89	19-115
20	2-Chlorophenol	100.0	60.42	60.42	21-115
95	4-Chlorophenyl-phe	100.0	81.98	81.98	47-115
154	Chrysene	100.0	87.72	87.72	21-150
174	Dibenzo(a,h)anthra	100.0	92.54	92.54	13-150
86	Dibenzofuran	100.0	74.96	74.96	40-115
129	Di-n-Butylphthalat	100.0	90.63	90.63	60-115
152	3,3'-Dichlorobenzi	100.0	91.24	91.24	29-120
45	2,4-Dichlorophenol	100.0	68.99	68.99	37-115
93	Diethylphthalate	100.0	93.12	93.12	56-117
41	2,4-Dimethylphenol	100.0	64.74	64.74	24-115
76	Dimethylphthalate	100.0	85.97	85.97	53-115
99	4,6-Dinitro-2-meth	100.0	98.91	98.91	50-115
84	2,4-Dinitrophenol	100.0	88.56	88.57	24-134
88	2,4-Dinitrotoluene	100.0	100.3	100.28	11-150
80	2,6-Dinitrotoluene	100.0	89.51	89.51	56-115
158	Di-n-octylphthalat	100.0	90.25	90.25	55-115
134	Fluoranthene	100.0	82.17	82.17	57-115
94	Fluorene	100.0	80.98	80.98	45-115
112	Hexachlorobenzene	100.0	90.99	90.99	50-115
54	Hexachlorobutadien	100.0	51.02	51.02	18-115
66	Hexachlorocyclopen	100.0	52.71	52.71	10-115
35	Hexachloroethane	100.0	52.92	52.92	20-115
173	Indeno(1,2,3-cd)py	100.0	84.23	84.23	17-150
39	Isophorone	100.0	81.64	81.64	23-116

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
62	2-Methylnaphthalen	100.0	59.02	59.02	32-115
27	2-Methylphenol	100.0	54.32	54.32	31-115
29	3 and 4-Methylphen	100.0	48.62	48.62	22-115
50	Naphthalene	100.0	59.65	59.65	32-115
73	2-Nitroaniline	100.0	84.20	84.21	41-115
81	3-Nitroaniline	100.0	86.45	86.45	54-115
98	4-Nitroaniline	100.0	95.01	95.01	54-115
37	Nitrobenzene	100.0	69.90	69.90	34-150
40	2-Nitrophenol	100.0	69.04	69.04	28-115
85	4-Nitrophenol	100.0	38.21	38.21	10-115
100	N-Nitrosodiphenyla	100.0	91.19	91.19	57-115
32	N-Nitrosodinpropyl	100.0	79.90	79.90	29-115
28	2,2-oxybis(1-Chlor	100.0	68.06	68.06	33-115
117	Pentachlorophenol	100.0	83.74	83.74	11-121
122	Phenanthrene	100.0	83.28	83.28	55-115
16	Phenol	100.0	26.25	26.25	10-115
137	Pyrene	100.0	78.32	78.32	43-115
47	1,2,4-Trichloroben	100.0	56.53	56.53	19-115
68	2,4,5-Trichlorophe	100.0	78.77	78.77	41-115
67	2,4,6-Trichlorophe	100.0	76.98	76.98	38-115

	SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 10	2-Fluorophenol	75.00	25.26	33.68	10-115
$ 15	Phenol-d5	75.00	17.84	23.79	10-115
$ 36	Nitrobenzene-d5	50.00	34.86	69.72	22-115
$ 69	2-Fluorobiphenyl	50.00	34.17	68.35	18-115
$ 104	2,4,6-Tribromophen	75.00	70.83	94.43	10-118
$ 139	Terphenyl-d14	50.00	34.31	68.63	10-115

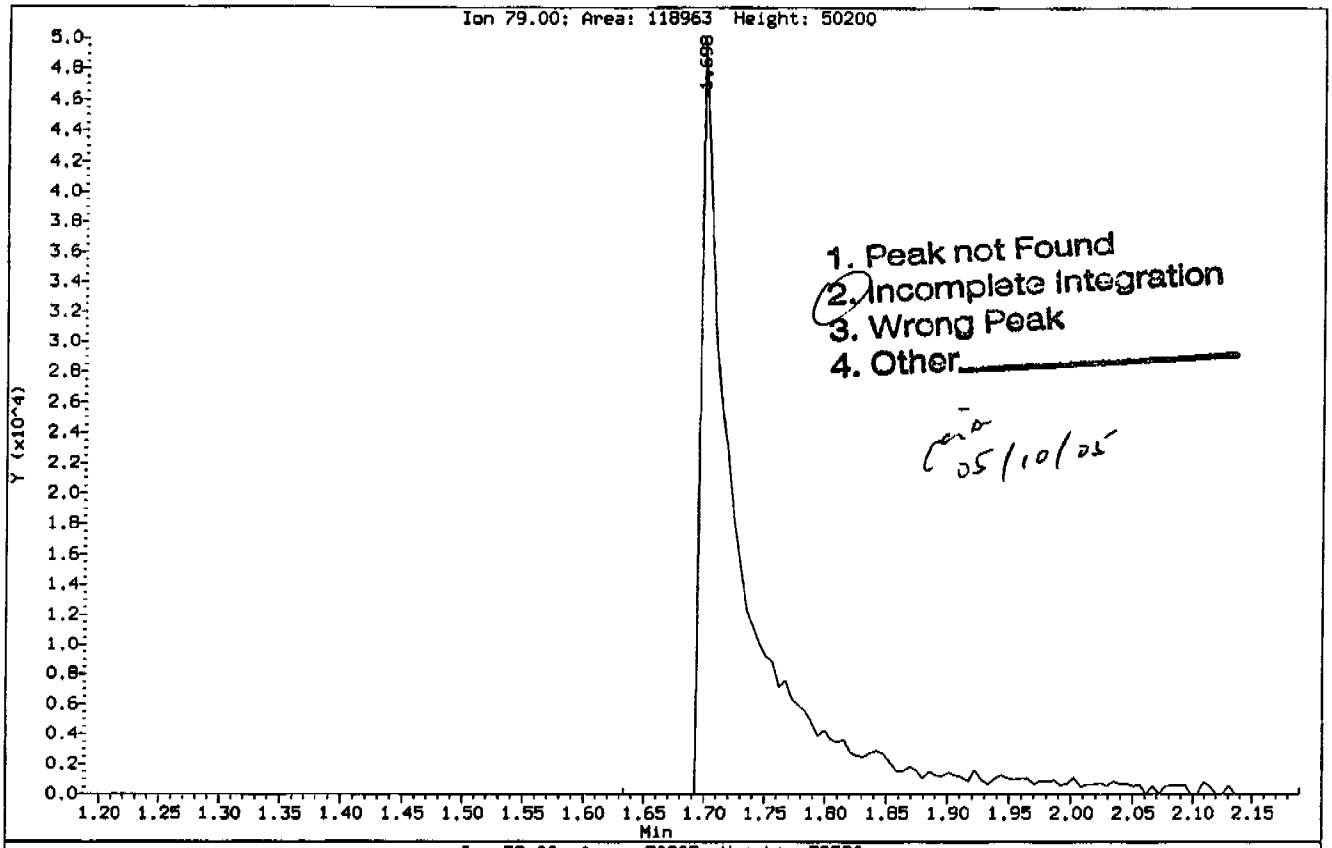


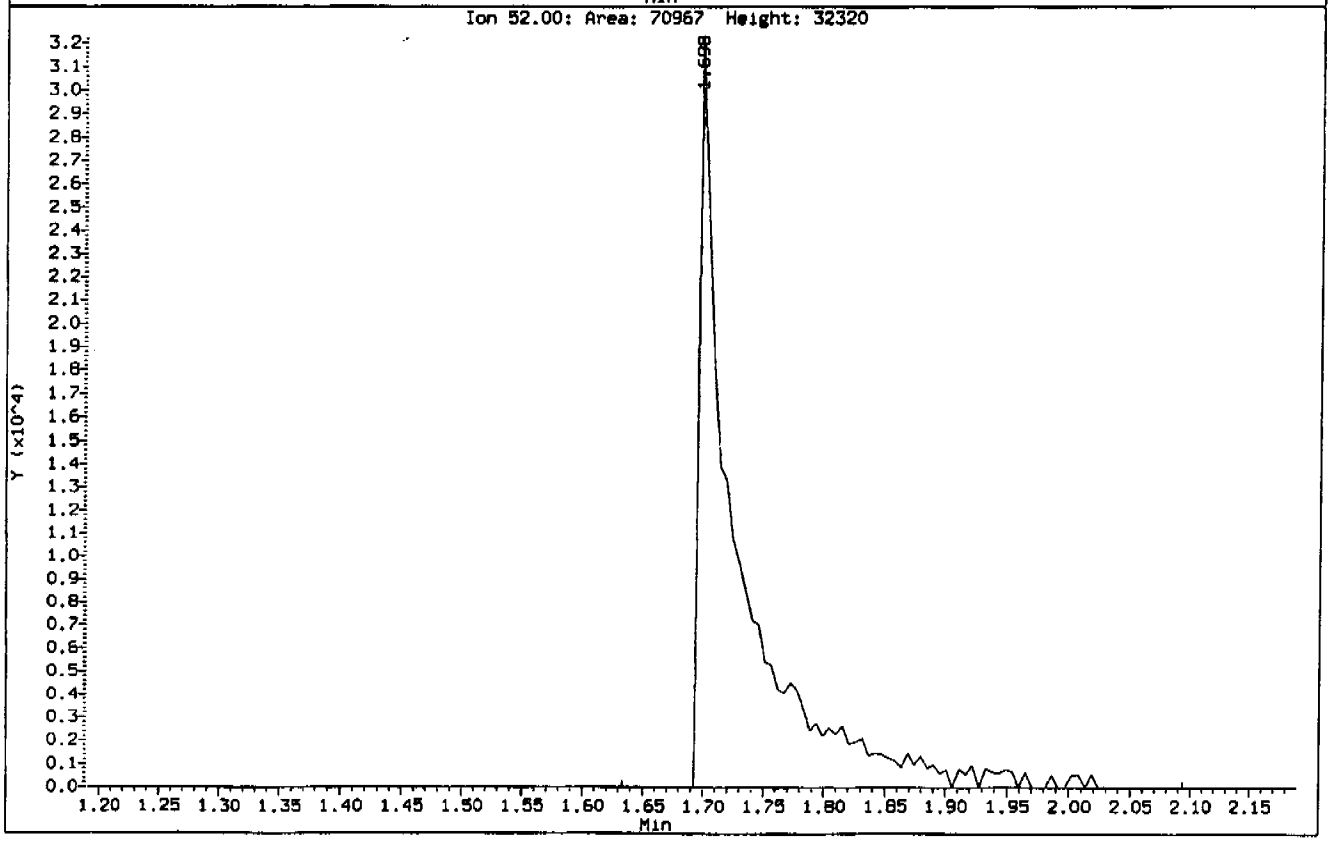
Data File: \\Slsvr01\BNA_LAB\HSK.i\K050609C.B\KSHP3017.D
Date : 09-MAY-2005 23:55
Client ID: RE73-05-58923
Sample Info: GB00L1AL
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3017.D
Injection Date: 09-MAY-2005 23:55
Instrument: MSK.i
Client Sample ID: RE73-05-58923

Compound: Pyridine
CAS Number: 110-86-1





Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3018.D Page 1
Report Date: 10-May-2005 17:07

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3018.D
Lab Smp Id: G800L1AM Client Smp ID: RE73-05-58923
Inj Date : 10-MAY-2005 00:28
Operator : XIA Inst ID: MSK.i
Smp Info : G800L1AM
Misc Info : F5D220218-001D (5117669) APPIX SF
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Meth Date : 10-May-2005 11:13 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12 Cal File: KCAL3000.D
Als bottle: 27 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIXSFMS03.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)	
	4 N-Nitrosodimethylamine	74	1.708	1.706	(0.376)	73190	41.2652	41.26	
	3 Pyridine	79	1.697	1.690	(0.373)	116145	37.1090	37.11	(M)
$	10 2-Fluorophenol	112	3.230	3.245	(0.711)	77024	24.1149	24.11	
	17 Aniline	93	4.240	4.254	(0.933)	306113	52.7526	52.75	
	19 Bis(2-chloroethyl)ether	93	4.315	4.324	(0.949)	242824	59.1246	59.12	
$	15 Phenol-d5	99	4.315	4.324	(0.949)	77125	17.2519	17.25	
	16 Phenol	94	4.325	4.334	(0.952)	120692	24.3886	24.39	
	20 2-Chlorophenol	128	4.373	4.388	(0.962)	206572	57.7325	57.73	
	21 1,3-Dichlorobenzene	146	4.496	4.511	(0.989)	194996	47.6533	47.65	
*	22 1,4-Dichlorobenzene-d4	152	4.544	4.559	(1.000)	105733	40.0000		
	23 1,4-Dichlorobenzene	146	4.566	4.575	(1.005)	206830	47.5955	47.60	
	26 1,2-Dichlorobenzene	146	4.785	4.799	(1.053)	200951	50.0016	50.00	
	25 Benzyl Alcohol	108	4.790	4.804	(1.054)	134008	76.2093	76.21	
	28 2,2-oxybis(1-Chloropropane)	45	4.950	4.965	(1.089)	265488	62.5102	62.51	
	27 2-Methylphenol	108	4.998	5.013	(1.100)	160957	50.7957	50.80	
	35 Hexachloroethane	117	5.143	5.157	(1.132)	91816	48.3220	48.32	
	32 N-Nitrosodinpropylamine	70	5.137	5.152	(1.130)	249996	75.0946	75.09	
	29 3 and 4-Methylphenol	108	5.180	5.205	(1.140)	155421	45.9934	45.99	
$	36 Nitrobenzene-d5	82	5.265	5.285	(0.860)	172871	32.3304	32.33	
	37 Nitrobenzene	77	5.292	5.307	(0.864)	367281	64.8115	64.81	
	39 Isophorone	82	5.581	5.595	(0.911)	557328	75.4413	75.44	

fine 05/10/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	40 2-Nitrophenol	139	5.688	5.702	(0.928)	126550	64.4570	64.46
	41 2,4-Dimethylphenol	107	5.816	5.830	(0.949)	249051	59.7746	59.77
	42 Bis(2-chloroethoxy)methane	93	5.896	5.910	(0.963)	305499	64.8728	64.87
	45 2,4-Dichlorophenol	162	6.024	6.038	(0.983)	194692	63.5515	63.55
	47 1,2,4-Trichlorobenzene	180	6.077	6.097	(0.992)	174007	47.6766	47.68
*	48 Naphthalene-d8	136	6.126	6.140	(1.000)	389519	40.0000	
	44 Benzoic Acid	122	6.040	6.097	(0.986)	38016	19.5678	19.57
	50 Naphthalene	128	6.147	6.167	(1.003)	575260	52.1612	52.16
	51 4-Chloroaniline	127	6.297	6.316	(1.028)	267486	59.9005	59.90
	54 Hexachlorobutadiene	225	6.398	6.412	(1.044)	111580	44.0157	44.02
	62 2-Methylnaphthalene	142	7.109	7.128	(1.160)	393055	49.8248	49.82
	59 4-Chloro-3-Methylphenol	107	7.066	7.080	(1.153)	242322	68.0820	68.08
	66 Hexachlorocyclopentadiene	237	7.456	7.475	(0.847)	96449	41.1295	41.13
	67 2,4,6-Trichlorophenol	196	7.643	7.662	(0.868)	183261	72.4024	72.40
$	69 2-Fluorobiphenyl	172	7.734	7.753	(0.879)	278372	31.5229	31.52
	68 2,4,5-Trichlorophenol	196	7.723	7.748	(0.877)	198407	74.1686	74.17
	72 2-Chloronaphthalene	162	7.856	7.876	(0.893)	411285	55.7035	55.70
	73 2-Nitroaniline	65	8.150	8.170	(0.926)	250375	78.7199	78.72
	76 Dimethylphthalate	163	8.519	8.539	(0.968)	681192	80.5599	80.56
	79 Acenaphthylene	152	8.540	8.560	(0.970)	723462	66.4619	66.46
	80 2,6-Dinitrotoluene	165	8.636	8.651	(0.981)	149592	82.7940	82.79
*	82 Acenaphthene-d10	164	8.802	8.827	(1.000)	219312	40.0000	
	83 Acenaphthene	153	8.861	8.880	(1.007)	422660	61.4867	61.49
	81 3-Nitroaniline	138	8.871	8.886	(1.008)	142591	80.3334	80.33
	84 2,4-Dinitrophenol	184	9.048	9.067	(1.028)	90621	83.9630	83.96
	86 Dibenzofuran	168	9.139	9.158	(1.038)	671989	66.1680	66.17
	88 2,4-Dinitrotoluene	165	9.309	9.329	(1.058)	217004	93.3964	93.40
	85 4-Nitrophenol	109	9.368	9.377	(1.064)	52319	35.3085	35.31
	94 Fluorene	166	9.753	9.773	(1.108)	591842	72.8149	72.81
	93 Diethylphthalate	149	9.780	9.799	(1.111)	727289	85.9332	85.93
	95 4-Chlorophenyl-phenylether	204	9.801	9.821	(1.113)	305244	69.6105	69.61
	98 4-Nitroaniline	138	9.993	10.008	(1.135)	154999	89.5764	89.58
	99 4,6-Dinitro-2-methylphenol	198	10.041	10.061	(0.876)	151392	91.1710	91.17
	100 N-Nitrosodiphenylamine	169	10.073	10.088	(0.879)	512193	83.9425	83.94
	102 Azobenzene	77	10.084	10.104	(0.880)	984823	71.9523	71.95
$	104 2,4,6-Tribromophenol	330	10.255	10.275	(1.165)	80364	65.5503	65.55
	109 4-Bromophenyl-phenylether	248	10.688	10.707	(0.932)	206369	73.6213	73.62
	112 Hexachlorobenzene	284	10.912	10.932	(0.952)	235804	82.3979	82.40
	117 Pentachlorophenol	266	11.318	11.338	(0.987)	118929	74.5149	74.51
*	121 Phenanthrene-d10	188	11.462	11.487	(1.000)	400763	40.0000	
	122 Phenanthrene	178	11.510	11.530	(1.004)	915527	73.9616	73.96
	124 Anthracene	178	11.596	11.616	(1.012)	921431	77.0000	77.00
	126 Carbazole	167	11.997	12.016	(1.047)	842633	82.4164	82.42
	129 Di-n-Butylphthalate	149	12.883	12.903	(1.124)	1091996	81.5168	81.52
	134 Fluoranthene	202	13.802	13.827	(1.204)	946128	73.9560	73.96
	135 Benzidine	184	14.198	14.223	(0.854)	184385	36.8408	36.84
	137 Pyrene	202	14.219	14.244	(0.855)	989773	73.7845	73.78
$	139 Terphenyl-d14	244	14.662	14.687	(0.882)	349333	33.5116	33.51
	146 Butylbenzylphthalate	149	15.789	15.809	(0.950)	450974	81.2970	81.30
	150 Benzo(a)Anthracene	228	16.601	16.621	(0.998)	927846	80.2941	80.29
*	153 Chrysene-d12	240	16.628	16.653	(1.000)	330005	40.0000	
	154 Chrysene	228	16.682	16.707	(1.003)	883773	80.3699	80.37
	152 3,3'-Dichlorobenzidine	252	16.698	16.717	(1.004)	360051	80.9190	80.92
	155 bis(2-ethylhexyl)Phthalate	149	17.013	17.038	(1.023)	535382	77.0961	77.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
158 Di-n-octylphthalate	149	18.161	18.181	(0.944)	865525	79.6293	79.63
160 Benzo(b)fluoranthene	252	18.605	18.630	(0.967)	826118	83.4047	83.40
161 Benzo(k)fluoranthene	252	18.653	18.630	(0.969)	836846	85.0634	85.06(H)
165 Benzo(a)pyrene	252	19.144	19.164	(0.995)	713794	79.8474	79.85
* 166 Perylene-d12	264	19.240	19.266	(1.000)	255085	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.955	20.986	(1.089)	643804	77.6908	77.69
174 Dibenzo(a,h)anthracene	278	21.009	21.034	(1.092)	683731	85.0287	85.03
177 Benzo(g,h,i)perylene	276	21.415	21.440	(1.113)	650200	87.8853	87.88

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3018.D Page 4
Report Date: 10-May-2005 17:07

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSK.i
Lab File ID: KSMP3018.D
Lab Smp Id: G800L1AM
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Misc Info: F5D220218-001D (5117669) APPIX SF

Calibration Date: 09-MAY-2005
Calibration Time: 16:30
Client Smp ID: RE73-05-58923
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	138615	69308	277230	105733	-23.72
48 Naphthalene-d8	492644	246322	985288	389519	-20.93
82 Acenaphthene-d10	276841	138421	553682	219312	-20.78
121 Phenanthrene-d10	505686	252843	1011372	400763	-20.75
153 Chrysene-d12	445673	222837	891346	330005	-25.95
166 Perylene-d12	381519	190760	763038	255085	-33.14

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.54	-0.32
48 Naphthalene-d8	6.14	5.64	6.64	6.13	-0.23
82 Acenaphthene-d10	8.83	8.33	9.33	8.80	-0.28
121 Phenanthrene-d10	11.49	10.99	11.99	11.46	-0.22
153 Chrysene-d12	16.65	16.15	17.15	16.63	-0.15
166 Perylene-d12	19.27	18.77	19.77	19.24	-0.13

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3018.D Page 5
Report Date: 10-May-2005 17:07

STL St. Louis

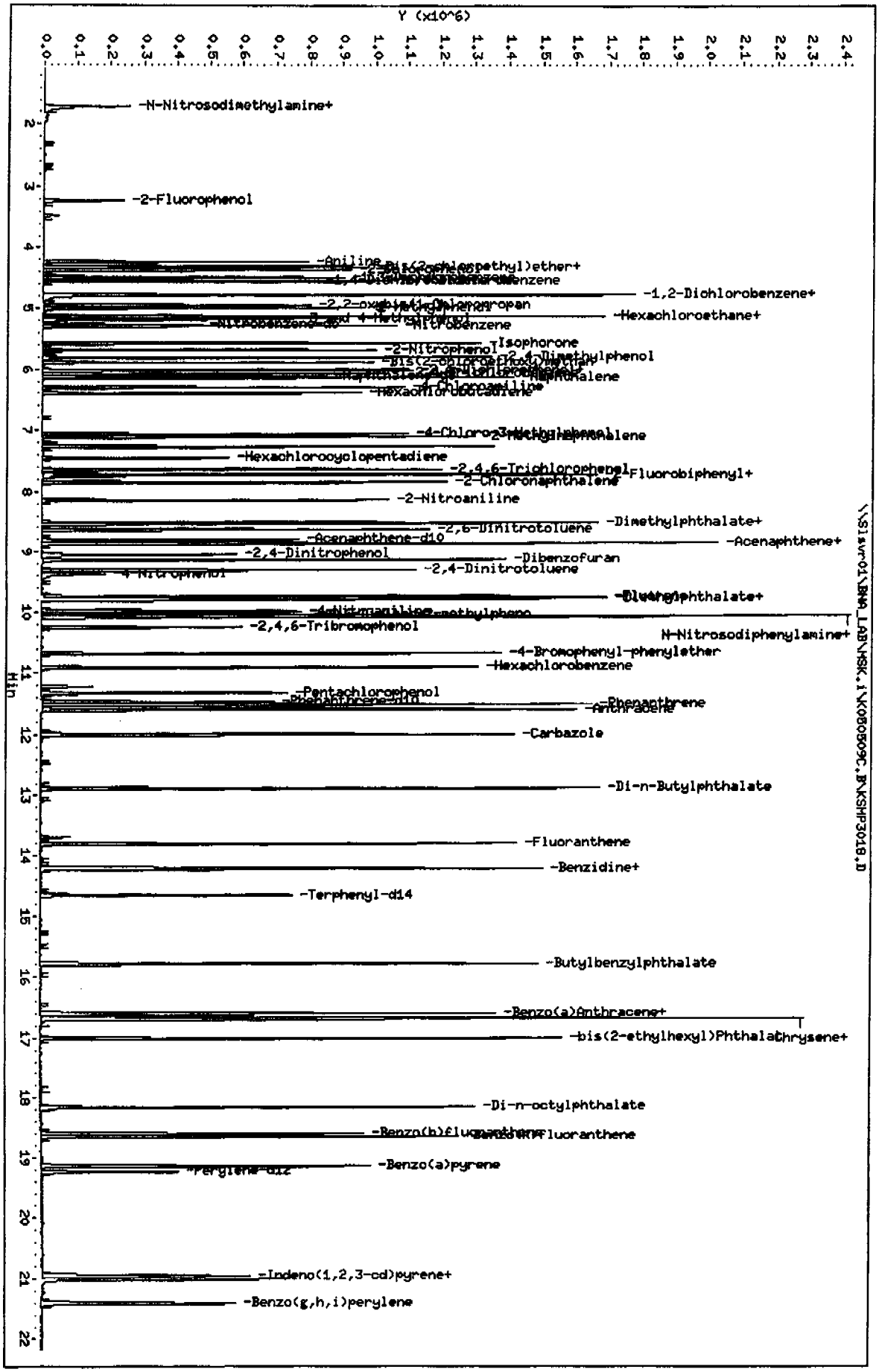
RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 22-APR-2005 00:00 Client SDG: F5D2202
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: G800L1AM Client Smp ID: RE73-05-58923
Level: LOW Operator: XIA
Data Type: MS DATA SampleType: MSD
SpikeList File: SFMS03.spk Quant Type: ISTD
Sublist File: APPIXSFMS03.sub
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Misc Info: F5D220218-001D (5117669) APPIX SF

SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
83	Acenaphthene	100.0	61.49	61.49	26-115
79	Acenaphthylene	100.0	66.46	66.46	43-115
124	Anthracene	100.0	77.00	77.00	55-115
150	Benzo(a)Anthracene	100.0	80.29	80.29	56-115
160	Benzo(b)fluoranthe	100.0	83.40	83.40	53-115
161	Benzo(k)fluoranthe	100.0	85.06	85.06	54-115
177	Benzo(g,h,i)peryle	100.0	87.88	87.89	10-150
165	Benzo(a)pyrene	100.0	79.85	79.85	30-126
42	Bis(2-chloroethoxy	100.0	64.87	64.87	32-115
19	Bis(2-chloroethyl)	100.0	59.12	59.12	32-115
155	bis(2-ethylhexyl)P	100.0	77.10	77.10	56-115
109	4-Bromophenyl-phen	100.0	73.62	73.62	51-115
146	Butylbenzylphthala	100.0	81.30	81.30	55-115
126	Carbazole	100.0	82.42	82.42	54-115
51	4-Chloroaniline	100.0	59.90	59.90	17-115
59	4-Chloro-3-Methylp	100.0	68.08	68.08	19-115
20	2-Chlorophenol	100.0	57.73	57.73	21-115
95	4-Chlorophenyl-phe	100.0	69.61	69.61	47-115
154	Chrysene	100.0	80.37	80.37	21-150
174	Dibenzo(a,h)anthra	100.0	85.03	85.03	13-150
86	Dibenzofuran	100.0	66.17	66.17	40-115
129	Di-n-Butylphthalat	100.0	81.52	81.52	60-115
152	3,3'-Dichlorobenzi	100.0	80.92	80.92	29-120
45	2,4-Dichlorophenol	100.0	63.55	63.55	37-115
93	Diethylphthalate	100.0	85.93	85.93	56-117
41	2,4-Dimethylphenol	100.0	59.77	59.77	24-115
76	Dimethylphthalate	100.0	80.56	80.56	53-115
99	4,6-Dinitro-2-meth	100.0	91.17	91.17	50-115
84	2,4-Dinitrophenol	100.0	83.96	83.96	24-134
88	2,4-Dinitrotoluene	100.0	93.40	93.40	11-150
80	2,6-Dinitrotoluene	100.0	82.79	82.79	56-115
158	Di-n-octylphthalat	100.0	79.63	79.63	55-115
134	Fluoranthene	100.0	73.96	73.96	57-115
94	Fluorene	100.0	72.81	72.81	45-115
112	Hexachlorobenzene	100.0	82.40	82.40	50-115
54	Hexachlorobutadien	100.0	44.02	44.02	18-115
66	Hexachlorocyclopen	100.0	41.13	41.13	10-115
35	Hexachloroethane	100.0	48.32	48.32	20-115
173	Indeno(1,2,3-cd)py	100.0	77.69	77.69	17-150
39	Isophorone	100.0	75.44	75.44	23-116

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
62	2-Methylnaphthalen	100.0	49.82	49.82	32-115
27	2-Methylphenol	100.0	50.80	50.80	31-115
29	3 and 4-Methylphen	100.0	45.99	45.99	22-115
50	Naphthalene	100.0	52.16	52.16	32-115
73	2-Nitroaniline	100.0	78.72	78.72	41-115
81	3-Nitroaniline	100.0	80.33	80.33	54-115
98	4-Nitroaniline	100.0	89.58	89.58	54-115
37	Nitrobenzene	100.0	64.81	64.81	34-150
40	2-Nitrophenol	100.0	64.46	64.46	28-115
85	4-Nitrophenol	100.0	35.31	35.31	10-115
100	N-Nitrosodiphenyla	100.0	83.94	83.94	57-115
32	N-Nitrosodinpropyl	100.0	75.09	75.09	29-115
28	2,2-oxybis(1-Chlor	100.0	62.51	62.51	33-115
117	Pentachlorophenol	100.0	74.51	74.51	11-121
122	Phenanthrene	100.0	73.96	73.96	55-115
16	Phenol	100.0	24.39	24.39	10-115
137	Pyrene	100.0	73.78	73.78	43-115
47	1,2,4-Trichloroben	100.0	47.68	47.68	19-115
68	2,4,5-Trichlorophe	100.0	74.17	74.17	41-115
67	2,4,6-Trichlorophe	100.0	72.40	72.40	38-115

	SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 10	2-Fluorophenol	75.00	24.11	32.15	10-115
$ 15	Phenol-d5	75.00	17.25	23.00	10-115
$ 36	Nitrobenzene-d5	50.00	32.33	64.66	22-115
$ 69	2-Fluorobiphenyl	50.00	31.52	63.05	18-115
$ 104	2,4,6-Tribromophen	75.00	65.55	87.40	10-118
$ 139	Terphenyl-d14	50.00	33.51	67.02	10-115

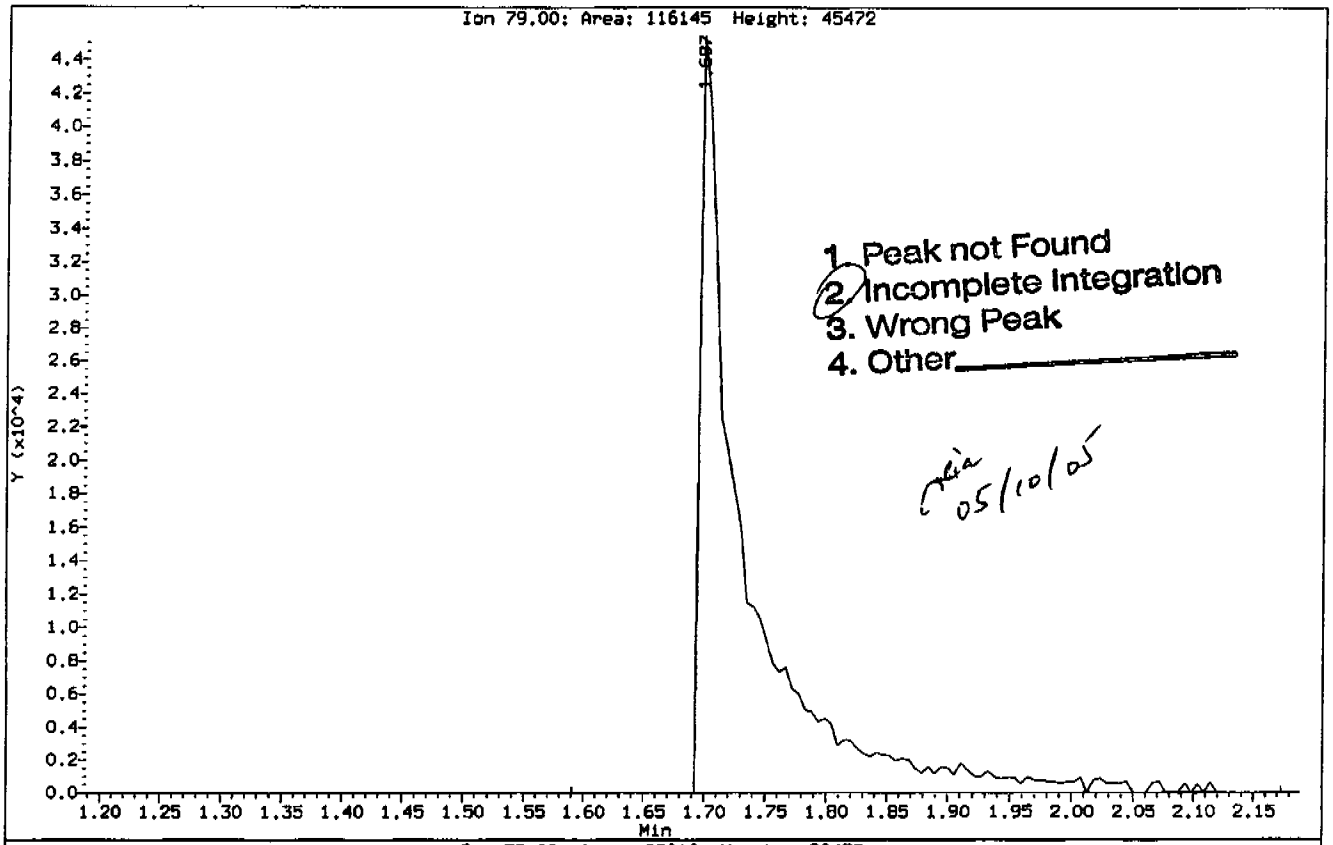


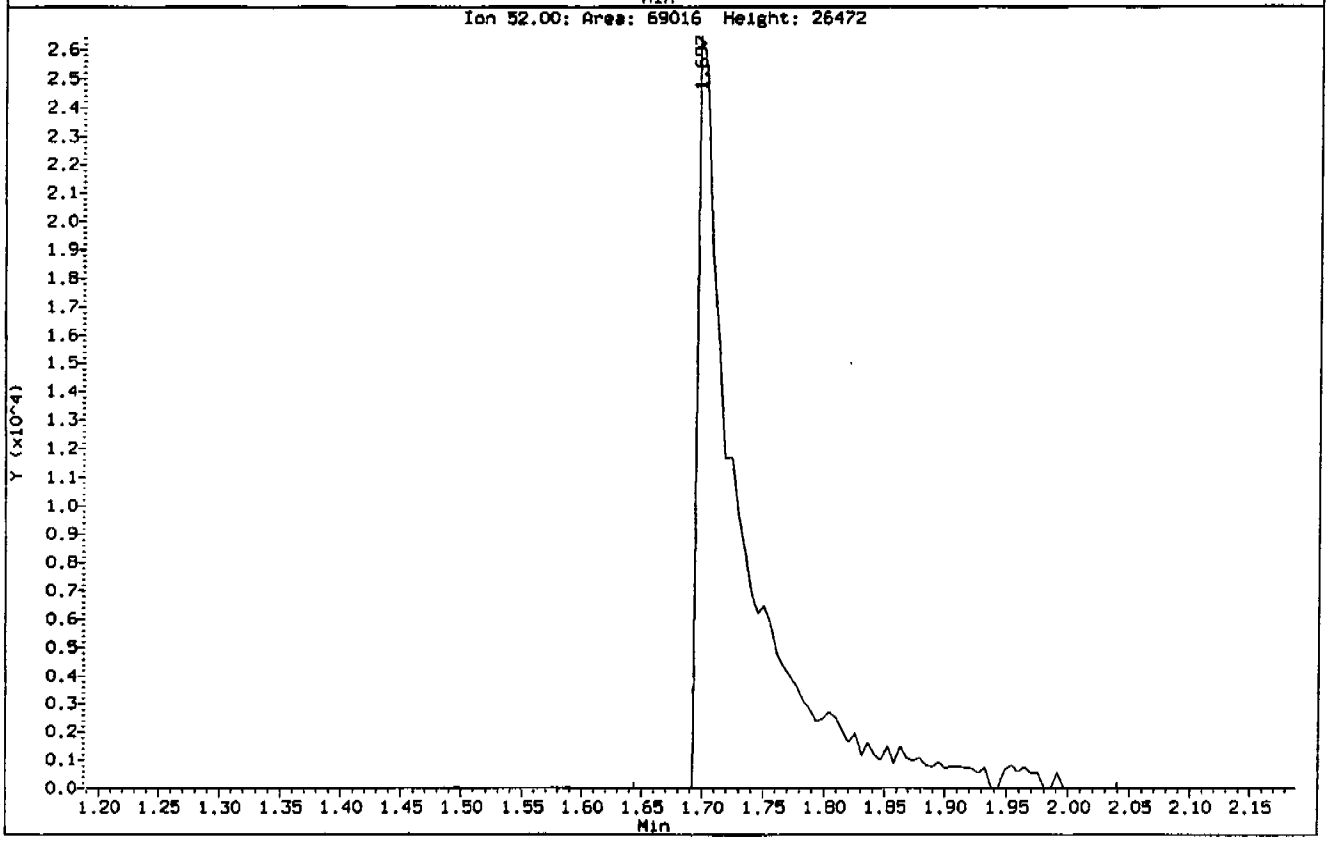
Data File: \\Slsvr01\BNA_LAB\HSK.i\K080509C.B\KSHP3018.D
Date : 10-MAY-2005 00:29
Client ID: RE73-05-58923
Sample Info: CB00L1AM
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slavr01\BNA_LAB\MSK.i\K050509C.B\KSMP3018.D
Injection Date: 10-MAY-2005 00:28
Instrument: MSK.i
Client Sample ID: RE73-05-58923

Compound: Pyridine
CAS Number: 110-86-1





GC/MS MISCELLANEOUS DATA

LOT #F5D220218

STL ST LOUIS

SEVERN TRENT **STL**

Organic Prep Report for Batch #5117669

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Prep Method: SW846 3510C

SOP Number: STL-OP-0002, Rev 4

Prep Description: LIQ/LIQ, SEP FUNNEL (A/B/N) - Acid->Base

Matrix: WATER

Extraction Date: 4/27/2005

		Initials: SF				Initials: SL		Initials:		Initials:	
						Concentration 1		Cleanup 1		Cleanup 2	
Lot Number	WorkOrder No	Wt/Vol	pH 1	pH 2	Extr Unit	Volume	Date	Method	Date	Method	Date
F5D210281-001	G8V3P1AA	1000 mL				1 mL	4/29/05	Appl(x)/.hcs/ethyl/methylmeth			
F5D210281-002	G8V4L1AA	1000 mL	re-ex			1 mL		↓			
F5D220218-001	G800L1AA	1000 mL				1 mL		SGPC/notes			
F5D220218-001D	G800L1AM	1000 mL				1 mL		↓			
F5D220218-001S	G800L1AL	1000 mL				1 mL					
F5D220218-002	G80091AC	1000 mL				1 mL					
F5D220349-001	G81751AA	1000 mL				1 mL					
F5D270000-669B	G9DL01AA	1000 mL				1 mL					
F5D270000-669C	G9DL01AC	1000 mL				1 mL					

Spike Information

Name	Standard ID	Exp Date	Vol Added
BNA SPK.	OP0242-05	10/22/2005	1000 uL
BNA SURR.	OP0241-05	10/22/2005	500 uL

Spiking verified by: JWy SF

Miscellaneous Information

Start: **Stop:**

Extr 1:

Extr 2:

Conc Method: steam bath

Conc Temp C: 89.9

Chemical Lot Information

Chemical	Lot Number
Methylene Chloride	B12E02
Sodium Hydroxide	5032-08
Sodium Sulfate	A51621
Sulfuric Acid	5557A50H02

Comments: Shows B/C w/ 5117666. Shows all QC w/ 5117668, 5117670, 5117671.
Sample 210281-2 went dry on the nitrogen evaporator. SL

Custody Information

Relinquished By: SF **Review/Received By:** MAH **Date of Transfer:** 4/29/05

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.15, updated 10/20/2004

620 of 996

Logbook No.: 2660 STL St. Louis Laboratory Instrument ID No.: MSK

GCMS-Semivolatile Runlog

#	Data File	Clock	Lab I.D.	Dil.	STD#	Date	Oper	Matrix
1	KDFT 2578	11:20	DFTPP		SV193-05	04-28-05	KIA	
2	KCAL 2579	K0428A	SS7D050 APPIXA		SV185-05			
3	2580		SS7D200		SV117-05			
4	2581		SS7D160		SV188-05			
5	2582		SS7D120		SV187-05			
6	2583	m 04/28/05	SS7D080		SV186-05			
7	2584		SS7D020		SV184-05			
8	2585		SS7D010		SV183-05			
9	2586		SS7D002		SV182-05			
10	2587		SS7D050 CLP		SV029-05			
11	2588		SS7D160		SV032-05			
12	2589		SS7D120		SV031-05			
13	2590		SS7D080		SV030-05			
14	2591		SS7D020		SV028-05			
15	2592		SS7D010		SV027-05			
16	2593		SS7D002		SV026-05			
17	KDFT 2594	20:12	DFTPP		SV049-05			
18	KCAL 2595	K0428C	SS7D050		SV219-05			
19	2596		SS7D160		SV218-05			
20	2597		SS7D120		SV217-05			
21	2598		SS7D080		SV216-05			
22	2599		SS7D020		SV214-05			
23	2600		SS7D010		SV213-05			
24	2601		SS7D002		SV212-05			
25	2602		SS7D050 APPIXLCV	2X	DP052-05			
26	2603		SS7D050 TCP APPIX		SV185-05			
27	2604		SS7D050 CLP		SV029-05			
28	KBIK 2605		G7IXRIAB	1X				leach
29	KLCS 2606		G7IXRIAC					
30	KBIK 2607		G7MBUIAD					water
31	KSMP 2608		G7FCW1AC					
32	2609		G7FCW1AK					
33	2610		G7FCW1AL					
34	2611		G7FD01AL					
35	2612		G7FD91AC					

Review documented on next page. Form: SL-ORG-0006, Rev. 5/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Contol Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

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Logbook No.: 2660 STL St. Louis Laboratory Instrument ID No.: MSK

GCMS-Semivolatile Runlog

Batch No.	Comments	#
	ok	1
	ok	2
	ok	3
	ok	4
	ok	5
	ok	6
	ok	7
	ok	8
	ok	9
	ok	10
	ok	11
	ok	12
	ok	13
	ok	14
	ok	15
	ok	16
	ok	17
	ok	18
	ok	19
	ok	20
	ok	21
	ok	22
	ok	23
	ok	24
	ok	25
	ok	26
	IS ↑ not needed. m 04/29/05	27
5096495	F5D060000-495B ok	28
	495C ok	29
5095187	F5D050000-187B ok	30
	F5C310312-002 ok	31
	002S NCM06-52573 ok	32
	002D ok	33
	003 2 acid surr 5ZC050SA KZ783 <0020 NCM06-52574 ok	34
	004 ok	35

Reviewed By: [signature] 04-29-05 Form: SL-ORG-0006, Rev. 5/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Contol Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

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LOT #FSD20218

Logbook No.: 2660 | STL St. Louis Laboratory | Instrument ID No.: MSK

GCMS-Semivolatile Runlog

#	Data File	Clock	Lab I.D.	Dil.	STD#	Date	Oper	Matrix
1	KLC32926	K0506A	G8RJK1AC	1X		05-06-05	K/A	Water
2	↓ 2927	↓	G8RJK1AD			↓	↓	↓
3	KSmp 2928	—	SS7D160Smg					
4	KDFT 2929	(2:41)	DF7PP		SV 5-05			
5	KCAL 2930	K0506C	SS7D050		SV 20-05			
6	↓ 2931		SS7D050 APPIX		SV 10-05			
7	↓ 2932		SS7D050 OLP		SV 0.0025-05			
8	KBLK 2933		G81171AA	1X				Water
9	KLCS 2934		G81171AC					↓
10	↓ 2935		G81171AD					↓
11	KSmp 2936		G81041AF					Soil
12	↓ 2937		G81161AF					↓
13	2938		G81111AF					
14	2939		G813D1AF					
15	2940		G813H1AF					
16	2941		G813N1AF					
17	2942		G813D1AF ~~5/7/05~~					
18	2943		~~G81F3160~~ G813A1AF					
19	2944		G81F31SG ~5/7/05					
20	2945		G81F311G					
21	2946		G81F311H					↓
22	2947		G8H851A3					Water
23	2948		G8RJP1A7					
24	2949		G87A81A9					
25	2950		G8TCG1A7			↓		↓
26	↓ 2951	↓	G783X1C1D	↓		05-07-05	↓	↓
27	KSmp 2952	—	SS7D160Smg			05-07-05	K/A	
28	KDFT 2953	(16:44)	DF7PP		SV 25-05			
29	KCAL 2954	K0507A	SS7D050		SV 20-5			
30	2955		SS7D160		SV 10-05			
31	2956		SS7D120		SV 2.7-05			
32	2957		SS7D080		SV 2.6-05			
33	2958		SS7D070		SV 2.4-05			
34	2959		SS7D060		SV 2.3-05			
35	↓ 2960	↓	SS7D002		SV 2.2-05	↓	↓	↓

Review documented on next page.

Form: SL-ORG-0006, Rev. 5/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

Logbook No.: 2660 | STL St. Louis Laboratory | Instrument ID No.: MSK

GCMS-Semivolatile Runlog

#	Batch No.	Comments
1	5110477	F5D270000-477C Lwcwg program . re-inj
2	↓	↓ 477L 625. OK
3		Conditioning inj
4		OK
5		OK
6		OK
7		OK
8	5112442	F5D270000-442B OK
9	↓	442C NCM06-5312 QC
10		442L OK
11	5112336	F5D270333-001 OK
12		002 IS #153.166.121↓ see K2977 cf NCM06-5311 Re-inj OK
13		003 IS #153.166↓ ↓ 2978 CF OK
14		005 IS #153.166↓ report K2979 OK 5/4/05
15		006 IS #121.151.160↓ see K2980 CF OK
16		007 IS #121.153.166↓ 2981 CF OK
17		008 IS #121.151.166↓ 2982 CF OK
18	~~F5D270333-001~~	F5D270333-004 23S↓ OK
19	F5D270333-001R	~5/7/05 33S↓ NCM06-5315 OK
20		001RS ~5/7/05 43S↓ NCM06511-3 OK
21	↓	001D IS #22.82.121↓ ↓ OK
22	5112442	F5D160137-001 IS #153↓ see K2984 → report re-inj
23	F5D270221-025	IS #121.153.166↓ report K2985 re-inj
24		006 IS #153↓ 2986
25	↓	007 IS #153.166↓ 2987
26	5109480	F5D130145-004D IS #153↓ ↓ 2984 ↓
27		Conditioning inj
28		OK
29		Two cal failed.
30		IS #166↑ not used
31		OK
32		OK
33		OK
34		OK
35		OK

Reviewed By: [signature] 05-09-05

Form: SL-ORG-0006, Rev. 5/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

STL ST LOUIS

Logbook No.: 2660 — STL St. Louis Laboratory — Instrument ID No.: MSK

GCMS-Semivolatile Runlog

#	Data File	Clock	Lab I.D.	Dil.	STD#	Date	Oper	Matrix
1	KCAL 2961	K0507A	SSTD 050	—	SV220-05	05-07-25	K/A	
2	2962		SSTD 050 ICV	2X	SV153-05			
3	2963		SSTD 050 Appix B		SV148-05			
4	2964		SSTD 160		SV131-5			
5	2965		SSTD 120		SV150-05			
6	2966		SSTD 080		SV149-05			
7	2967		SSTD 020		SV147-05			
8	2968		SSTD 010		SV146-05			
9	2969	↓	SSTD 005		SV145-05			
10	K1DFT 2970	K1:52	DFTPP		SV232-05			
11	KCAL 2971	K0507C	SSTD 050		SV220-05			
12	↓ 2972		SSTD 050 Appix		SV150-05			
13	↓ 2973		SSTD 050 Cup		SV00332-05			water
14	K131K 2974		G81171AA	1X				↓
15	KLCS 2975		G8R1K1AC					soil
16	KSMP 2976		G783X10D					
17	↓ 2977		G811W1AF					
18	2978		G8111AF					
19	2979		G813A1AF ~5/9/25					
20	2980		G813H1AF ~5/09/25					
21	2981		G813N1AF					
22	2982		G813P1AF					
23	2983		G813A1AF					↓
24	2984		G8HR51A3					water
25	2985		G8R1J1A7					↓
26	2986		G8TA81A9					
27	2987		G8TCL1A7					
28	2988		G8TCG1AL					↓
29	2989		G8J0L1A9	↓				soil
30	2990		G8J1D2AL	10X				↓
31	↓ 2991	(12:45)	G8JZZ1AL	1X	↓	↓	↓	↓
32	(SMP) 2992	—	SSTD 160 SIM	—	—	05-07-25	K/A	—
33	K1DFT 2993	K11:40	DFTPP		SV232-05			
34	KCAL 2994	K0508A	SSTD 050		SV220-05			
35	↓ 2995	↓	SSTD 160		SV150-05	↓	↓	

Review documented on next page.

Form: SL-ORG-0008, Rev. 5/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Contol Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

Logbook No.: 2660 — STL St. Louis Laboratory — Instrument ID No.: MSK

GCMS-Semivolatile Runlog

Batch No.?	Comments	#
		OK 1
		OK 2
		OK 3
		OK 4
		OK 5
		OK 6
		OK 7
		OK 8
		OK 9
		OK 10
		OK 11
		OK 12
	3 IS ↑. Chrt need, not	OK 13
F5D220000	F5D220000-0425 report 2933	OK 14
F5D220000	F5D220000-0776	OK 15
F5D130145	F5D130145-0040 IS #153,#166 ↓ see K2974→report	OK 16
F5D220333	F5D220333-002 IS #153.166 ↓ report K2937	OK 17
	003 IS #166 ↓ 2938	OK 18
	005	OK 19
	6007 IS #153.166 ↓ report K2940	OK 20
	007 IS #153.166 ↓ 2941	OK 21
	008 IS #153.166 ↓ 2942	OK 22
	004 IS #153 ↓ ↓ 2943	OK 23
F5D160137	F5D160137-001 see K2947	OK 24
F5D220221	F5D220221-005	OK 25
	006	OK 26
	007	OK 27
	008	OK 28
F5D160156	F5D160156-001	OK 29
	002 NCM06-23146	OK 30
	005	OK 31
	Conditioning Begin	OK 32
		OK 33
		OK 34
		OK 35

Reviewed By: [redacted] 5/9/25

Form: SL-ORG-0008, Rev. 5/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Contol Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

Logbook No.: 2660 — STL St. Louis Laboratory — Instrument ID No.: MSK

GCMS-Semivolatile Runlog

#	Data File	Clock	Lab I.D.	Dil.	STD#	Date	Oper	Matrix
1	KCAL2996	KeepAA	SSTD1IW		SV217-05	05-07-05	K/B	
2	2997		SSTD080		SV216-05			
3	2998		SSTD020		SV214-05			
4	2999		SSTD010		SV217-05			
5	3000		SSTD002		SV211-05			
6	3001	✓	SSTD050 ICV	2x	01201-2-05			
7	3002	(16:09)	DFTPP		SV232-05			
8	3003	KeepAC	SSTD120		SV220-05			
9	3004		SSTD050 Appix A		SV190-05			
10	3005		SSTD080 CCP		SV053-05			
11	✓ 3006		SSTD150 Appix B		SV148-05			
12	KBIK 3007		G9MA61AA	1x				soil
13	KLLS 3008		G9MA61AC					↓
14	KBIK 3009		G9DL01AA					water
15	KLLS 3010		G9DL01AC					
16	KBIK 3011		G9MA61AD					
17	KSWP 3012		G8784Z4C					
18	3013		G8788IAC					
19	3014		G8V3P1AA					
20	3015		G8V46IAA					
21	3016		G8U0LIAA					
22	3017	~5/10/05	G8U0LIAL					
23	3018		G8U2LIAM					
24	3018	~5/10/05	G8U09IAC					
25	3019	~5/10/05	G81751AA					✓
26	3020	~5/10/05	G8RE31A9					soil
27	3021	~5/10/05	G8RE31CW					
28	3022	~5/10/05	G8RE31CX					
29	3024	✓	G8WXV1AD					
30	3025	(04:10)	G8WXX1AD					
31	✓ 3026	—	SSTD160 Surr					
32	KOFT 3027	(5:07)	DFTPP		SV232-05			
33	KCAL 3028	→	SSTD050		SV220-05			
34	↓ 3029		SSTD050 Appix		SV053-05	↓	✓	
35	↓ 3030		SSTD160 Surr	—	—	05-10-05	K/B	—

Batch No.	Comments	#
	OK	1
	OK	2
	OK	3
	OK	4
	OK	5
	OK	6
	OK	7
	OK	8
	OK	9
	OK	10
	285 NCIM06-53749 5/10/05 OK	11
5119285	F5D29U002 - 285B OK	12
5119285	↓ 285C (9hi) <100% NCIM06-53749 see reviewed re-inj	13
5117669	F5D27U002 - 669B	14
	↓ 669C NCIM06-53745	15
5119211	F5D29U002 - 211B	16
	F5D260337 - 001	17
	↓ 002	18
5117669	F5D210281 - 001	19
	↓ 002 2-FBP <100% NCIM06-53745 Re-ex	20
	F5D220218 - 001	21
	005 NCIM06-53747 ↓	22
	010	23
	↓ 002	24
	F5D270349 - 001 TS 31.66% NCIM06-53748 2acid surr 2.00% insuf	25
5119285	F5D220213 - 001	26
	005	27
	↓ 010	28
	F5D210380 - 002	29
	↓ 005 002 Re-inj	30
		31
	DDT brak down = 19.8% Failed	32
		33
	Instrument stopped	34
	Conditioning	35

Review documented on next page.

Form: SL-ORG-0006, Rev. 5/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Contol Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate
SOP Reference: STL-MS-0001, current revision

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Reviewed By: [signature] 5/10/05

Form: SL-ORG-0006, Rev. 5/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Contol Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

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STL ST LOUIS

GC/MS SAMPLE AND QC DATA SUMMARY-FORM 1

VOLATILES

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220218 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 04/22/05
Work Order: G800L1AC Date Extracted:04/29/05
Dilution factor: 5 Date Analyzed: 04/29/05
Moisture %:NA

QC Batch: 5121013

Client Sample Id: RE73-05-58923

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
76-13-1	Trichlorotrifluoroethane	5.0	U
67-64-1	Acetone	50	U
75-35-4	1,1-Dichloroethene	5.0	U
74-88-4	Iodomethane	5.0	U
75-09-2	**Methylene chloride**	**5.5**	**B**
75-15-0	**Carbon disulfide**	**2.2**	**J**
75-34-3	1,1-Dichloroethane	5.0	U
78-93-3	2-Butanone	25	U
594-20-7	2,2-Dichloropropane	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
67-66-3	**Chloroform**	**2.1**	**J**
74-97-5	Bromochloromethane	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
74-95-3	Dibromomethane	5.0	U
108-10-1	4-Methyl-2-pentanone	25	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220218 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL
Work Order: G800L1AC
Dilution factor: 5
Moisture %:NA

Date Received: 04/22/05
Date Extracted:04/29/05
Date Analyzed: 04/29/05

QC Batch: 5121013

Client Sample Id: RE73-05-58923

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-88-3	Toluene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
591-78-6	2-Hexanone	25	U
142-28-9	1,3-Dichloropropane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
124-48-1	Chlorodibromomethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylenes (total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
108-86-1	Bromobenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	250	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	p-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220218 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL
Work Order: G800L1AC
Dilution factor: 5
Moisture %:NA

Date Received: 04/22/05
Date Extracted:04/29/05
Date Analyzed: 04/29/05

QC Batch: 5121013

Client Sample Id: RE73-05-58923

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Toluene-d8	88	(75 - 126)
Dibromofluoromethane	95	(60 - 147)
1,2-Dichloroethane-d4	100	(71 - 138)
4-Bromofluorobenzene	91	(71 - 117)

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220218 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 25 / mL Date Received: 04/22/05
Work Order: G800L2AC Date Extracted:05/02/05
Dilution factor: 1 Date Analyzed: 05/02/05
Moisture %:NA

QC Batch: 5123229

Client Sample Id: RE73-05-58923 -RE 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	2.0	U
74-87-3	Chloromethane	2.0	U
75-01-4	Vinyl chloride	2.0	U
74-83-9	Bromomethane	2.0	U
75-00-3	Chloroethane	2.0	U
75-69-4	Trichlorofluoromethane	2.0	U
76-13-1	Trichlorotrifluoroethane	1.0	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	1.0	U
74-88-4	Iodomethane	1.0	U
75-09-2	Methylene chloride	1.0	U
75-15-0	Carbon disulfide	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
594-20-7	2,2-Dichloropropane	1.0	U
540-59-0	1,2-Dichloroethene (total)	1.0	U
67-66-3	**Chloroform**	**1.9**	
74-97-5	Bromochloromethane	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	**Bromodichloromethane**	**0.34**	**J**
74-95-3	Dibromomethane	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220218 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 25 / mL Date Received: 04/22/05
Work Order: G800L2AC Date Extracted:05/02/05
Dilution factor: 1 Date Analyzed: 05/02/05
Moisture %:NA

QC Batch: 5123229

Client Sample Id: RE73-05-58923 -RE 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-88-3	**Toluene**	**0.27**	**J**
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
142-28-9	1,3-Dichloropropane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
124-48-1	**Chlorodibromomethane**	**0.19**	**J**
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
103-65-1	n-Propylbenzene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
108-86-1	Bromobenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	50	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	p-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220218 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 25 / mL Date Received: 04/22/05
Work Order: G800L2AC Date Extracted:05/02/05
Dilution factor: 1 Date Analyzed: 05/02/05
Moisture %:NA

QC Batch: 5123229

Client Sample Id: RE73-05-58923 -RE 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
106-46-7	**1,4-Dichlorobenzene**	**0.14**	**J B**
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Toluene-d8	119	(75 - 126)
Dibromofluoromethane	101	(60 - 147)
1,2-Dichloroethane-d4	106	(71 - 138)
4-Bromofluorobenzene	112	(71 - 117)

LOS ALAMOS NATIONAL LABORATORY
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220218 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 25 / mL Date Received: 04/22/05
Work Order: G800L2AC Date Extracted:05/02/05
Dilution factor: 1 Date Analyzed: 05/02/05
Moisture %:NA

QC Batch: 5123229

Client Sample Id: RE73-05-58923 -RE 1

(ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
	None			

FORM I - TIC

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220218 002
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL
Work Order: G80091AA
Dilution factor: 5
Moisture %:NA

Date Received: 04/22/05
Date Extracted:04/29/05
Date Analyzed: 04/29/05

QC Batch: 5121013

Client Sample Id: RE73-05-58924

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
76-13-1	Trichlorotrifluoroethane	5.0	U
67-64-1	**Acetone**	**3.4**	**J**
75-35-4	1,1-Dichloroethene	5.0	U
74-88-4	Iodomethane	5.0	U
75-09-2	**Methylene chloride**	**6.0**	**B**
75-15-0	Carbon disulfide	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
78-93-3	2-Butanone	25	U
594-20-7	2,2-Dichloropropane	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
67-66-3	**Chloroform**	**2.5**	**J**
74-97-5	Bromochloromethane	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
74-95-3	Dibromomethane	5.0	U
108-10-1	4-Methyl-2-pentanone	25	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220218 002
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 04/22/05
Work Order: G80091AA Date Extracted:04/29/05
Dilution factor: 5 Date Analyzed: 04/29/05
Moisture %:NA

QC Batch: 5121013

Client Sample Id: RE73-05-58924

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-88-3	Toluene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
591-78-6	2-Hexanone	25	U
142-28-9	1,3-Dichloropropane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
124-48-1	**Chlorodibromomethane**	**1.9**	**J**
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylenes (total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
108-86-1	Bromobenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	250	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	p-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220218 002
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 04/22/05
Work Order: G80091AA Date Extracted:04/29/05
Dilution factor: 5 Date Analyzed: 04/29/05
Moisture %:NA

QC Batch: 5121013

Client Sample Id: RE73-05-58924

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Toluene-d8	89	(75 - 126)
Dibromofluoromethane	91	(60 - 147)
1,2-Dichloroethane-d4	95	(71 - 138)
4-Bromofluorobenzene	89	(71 - 117)

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220349 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 04/22/05
Work Order: G81751AC Date Extracted:05/02/05
Dilution factor: 5 Date Analyzed: 05/02/05
Moisture %:NA

QC Batch: 5123229

Client Sample Id: INTRA-LAB QC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	2.0	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
76-13-1	Trichlorotrifluoroethane	5.0	U
67-64-1	**Acetone**	**760**	**E**
75-35-4	1,1-Dichloroethene	5.0	U
75-09-2	Methylene chloride	5.0	U
75-15-0	Carbon disulfide	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
78-93-3	2-Butanone	25	U
594-20-7	2,2-Dichloropropane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	5.0	U
74-97-5	Bromochloromethane	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
136777-61-2	m-Xylene & p-Xylene	10	U
563-58-6	1,1-Dichloropropene	5.0	U
95-47-6	o-Xylene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U

FORM I

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220349 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 04/22/05
Work Order: G81751AC Date Extracted:05/02/05
Dilution factor: 5 Date Analyzed: 05/02/05
Moisture %:NA

QC Batch: 5123229

Client Sample Id: INTRA-LAB QC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-27-4	Bromodichloromethane	5.0	U
108-10-1	**4-Methyl-2-pentanone**	**6.7**	**J D**
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-88-3	Toluene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
591-78-6	2-Hexanone	25	U
142-28-9	1,3-Dichloropropane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
124-48-1	Chlorodibromomethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
107-05-1	Allyl chloride	10	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-94-1	Cyclohexanone	100	U
103-65-1	n-Propylbenzene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
108-86-1	Bromobenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
110-57-6	trans-1,4-Dichloro-2-butene	10	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220349 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 04/22/05
Work Order: G81751AC Date Extracted:05/02/05
Dilution factor: 5 Date Analyzed: 05/02/05
Moisture %:NA

QC Batch: 5123229

Client Sample Id: INTRA-LAB QC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
99-87-6	p-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
97-63-2	Ethyl methacrylate	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
110-54-3	n-Hexane	20	U
80-62-6	Methyl methacrylate	5.0	U
1634-04-4	Methyl tert-butyl ether (MTB	10	U
91-20-3	Naphthalene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Toluene-d8	102	(75 - 126)
Dibromofluoromethane	89	(60 - 147)
1,2-Dichloroethane-d4	90	(71 - 138)
4-Bromofluorobenzene	99	(71 - 117)

FORM I

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5E010000 013
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 25 / mL Date Received: 04/15/05
Work Order: G9LN51AA Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 04/29/05
Moisture %:NA

QC Batch: 5121013

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	2.0	U
74-87-3	Chloromethane	2.0	U
75-01-4	Vinyl chloride	2.0	U
74-83-9	Bromomethane	2.0	U
75-00-3	Chloroethane	2.0	U
75-69-4	Trichlorofluoromethane	2.0	U
76-13-1	Trichlorotrifluoroethane	1.0	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	1.0	U
74-88-4	Iodomethane	1.0	U
75-09-2	Methylene chloride	0.70	
75-15-0	Carbon disulfide	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
594-20-7	2,2-Dichloropropane	1.0	U
540-59-0	1,2-Dichloroethene (total)	1.0	U
67-66-3	Chloroform	1.0	U
74-97-5	Bromochloromethane	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
74-95-3	Dibromomethane	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5E010000 013
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 25 / mL Date Received: 04/15/05
Work Order: G9LN51AA Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 04/29/05
Moisture %:NA

QC Batch: 5121013

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-88-3	Toluene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
142-28-9	1,3-Dichloropropane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
124-48-1	Chlorodibromomethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
103-65-1	n-Propylbenzene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
108-86-1	Bromobenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	50	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	p-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5E010000 013
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 25 / mL Date Received: 04/15/05
Work Order: G9LN51AA Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 04/29/05
Moisture %:NA

QC Batch: 5121013

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Toluene-d8	101	(75 - 126)
Dibromofluoromethane	98	(60 - 147)
1,2-Dichloroethane-d4	95	(71 - 138)
4-Bromofluorobenzene	98	(71 - 117)

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5E030000 229
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 25 / mL Date Received: 04/22/05
Work Order: G9PD41AA Date Extracted:05/02/05
Dilution factor: 1 Date Analyzed: 05/02/05
Moisture %:NA

QC Batch: 5123229

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	2.0	U
74-87-3	Chloromethane	2.0	U
75-01-4	Vinyl chloride	2.0	U
74-83-9	Bromomethane	2.0	U
75-00-3	Chloroethane	2.0	U
75-69-4	Trichlorofluoromethane	2.0	U
76-13-1	Trichlorotrifluoroethane	1.0	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	1.0	U
74-88-4	Iodomethane	1.0	U
75-09-2	Methylene chloride	1.0	U
75-15-0	Carbon disulfide	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
594-20-7	2,2-Dichloropropane	1.0	U
540-59-0	1,2-Dichloroethene (total)	1.0	U
67-66-3	Chloroform	1.0	U
74-97-5	Bromochloromethane	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
74-95-3	Dibromomethane	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U

FORM I

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5E030000 229
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 25 / mL Date Received: 04/22/05
Work Order: G9PD41AA Date Extracted:05/02/05
Dilution factor: 1 Date Analyzed: 05/02/05
Moisture %:NA

QC Batch: 5123229

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-88-3	Toluene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
591-78-6	2-Hexanone	5.0	U
142-28-9	1,3-Dichloropropane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
124-48-1	Chlorodibromomethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylenes (total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
103-65-1	n-Propylbenzene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
108-86-1	Bromobenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	50	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	p-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5E030000 229
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 25 / mL Date Received: 04/22/05
Work Order: G9PD41AA Date Extracted:05/02/05
Dilution factor: 1 Date Analyzed: 05/02/05
Moisture %:NA

QC Batch: 5123229

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
106-46-7	1,4-Dichlorobenzene	0.14	J
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Toluene-d8	93	(75 - 126)
Dibromofluoromethane	86	(60 - 147)
1,2-Dichloroethane-d4	81	(71 - 138)
4-Bromofluorobenzene	99	(71 - 117)

FORM I

LOS ALAMOS NATIONAL LABORATORY
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5E030000 229
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 25 / mL Date Received: 04/22/05
Work Order: G9PD41AA Date Extracted:05/02/05
Dilution factor: 1 Date Analyzed: 05/02/05
Moisture %:NA

QC Batch: 5123229

Client Sample Id: INTRA-LAB BLANK

(ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
	None			

LOS ALAMOS NATIONAL LABORATORY
CHECK SAMPLE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5E010000 013
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 25 / mL Date Received: 04/15/05
Work Order: G9LN51AC Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 04/29/05
Moisture %:NA

QC Batch: 5121013

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	8.76	
74-87-3	Chloromethane	9.50	
75-01-4	Vinyl chloride	10.0	
74-83-9	Bromomethane	8.00	
75-00-3	Chloroethane	9.21	
75-69-4	Trichlorofluoromethane	10.5	
76-13-1	Trichlorotrifluoroethane	11.1	
67-64-1	Acetone	8.81	
75-35-4	1,1-Dichloroethene	10.2	
75-09-2	Methylene chloride	11.1	
75-15-0	Carbon disulfide	9.79	
75-34-3	1,1-Dichloroethane	11.4	
78-93-3	2-Butanone	11.1	
540-59-0	1,2-Dichloroethene (total)	22.2	
67-66-3	Chloroform	10.2	
74-97-5	Bromochloromethane	11.0	
71-55-6	1,1,1-Trichloroethane	10.2	
56-23-5	Carbon tetrachloride	10.7	
107-06-2	1,2-Dichloroethane	9.90	
71-43-2	Benzene	9.95	
79-01-6	Trichloroethene	10.7	
78-87-5	1,2-Dichloropropane	10.9	
75-27-4	Bromodichloromethane	10.9	
108-10-1	4-Methyl-2-pentanone	11.0	
10061-01-5	cis-1,3-Dichloropropene	10.9	
108-88-3	Toluene	9.62	
79-00-5	1,1,2-Trichloroethane	9.90	
591-78-6	2-Hexanone	11.4	

FORM I

LOS ALAMOS NATIONAL LABORATORY
CHECK SAMPLE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5E010000 013
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 25 / mL Date Received: 04/15/05
Work Order: G9LN51AC Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 04/29/05
Moisture %:NA

QC Batch: 5121013

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
127-18-4	Tetrachloroethene	7.90	
124-48-1	Chlorodibromomethane	9.83	
106-93-4	1,2-Dibromoethane	11.0	
108-90-7	Chlorobenzene	10.2	
630-20-6	1,1,1,2-Tetrachloroethane	11.0	
100-41-4	Ethylbenzene	10.1	
100-42-5	Styrene	10.9	
75-25-2	Bromoform	9.70	
98-82-8	Isopropylbenzene	13.5	
79-34-5	1,1,2,2-Tetrachloroethane	11.5	
10061-02-6	trans-1,3-Dichloropropene	10.6	
95-49-8	2-Chlorotoluene	12.0	
108-67-8	1,3,5-Trimethylbenzene	11.8	
106-43-4	4-Chlorotoluene	12.2	
98-06-6	tert-Butylbenzene	11.3	
135-98-8	sec-Butylbenzene	10.9	
541-73-1	1,3-Dichlorobenzene	10.2	
106-46-7	1,4-Dichlorobenzene	10.1	
95-50-1	1,2-Dichlorobenzene	10.4	
96-12-8	1,2-Dibromo-3-chloropropane	9.98	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Toluene-d8	97	(84 - 123)
Dibromofluoromethane	104	(80 - 126)
1,2-Dichloroethane-d4	100	(76 - 133)
4-Bromofluorobenzene	109	(74 - 122)

FORM I

LOS ALAMOS NATIONAL LABORATORY
CHECK SAMPLE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5E030000 229
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 25 / mL Date Received: 04/22/05
Work Order: G9PD41AC Date Extracted:05/02/05
Dilution factor: 1 Date Analyzed: 05/02/05
Moisture %:NA

QC Batch: 5123229

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	8.20	
74-87-3	Chloromethane	7.96	
75-01-4	Vinyl chloride	9.24	
74-83-9	Bromomethane	9.06	
75-00-3	Chloroethane	9.03	
75-69-4	Trichlorofluoromethane	9.30	
76-13-1	Trichlorotrifluoroethane	9.56	
67-64-1	Acetone	8.93	
75-35-4	1,1-Dichloroethene	8.27	
75-09-2	Methylene chloride	10.0	
75-15-0	Carbon disulfide	8.78	
75-34-3	1,1-Dichloroethane	9.36	
78-93-3	2-Butanone	6.37	
594-20-7	2,2-Dichloropropane	10.1	
540-59-0	1,2-Dichloroethene (total)	21.2	
67-66-3	Chloroform	8.56	
74-97-5	Bromochloromethane	8.74	
71-55-6	1,1,1-Trichloroethane	9.42	
563-58-6	1,1-Dichloropropene	9.97	
56-23-5	Carbon tetrachloride	9.41	
107-06-2	1,2-Dichloroethane	7.81	
71-43-2	Benzene	9.62	
79-01-6	Trichloroethene	9.53	
78-87-5	1,2-Dichloropropane	8.94	
75-27-4	Bromodichloromethane	7.90	
108-10-1	4-Methyl-2-pentanone	6.74	
10061-01-5	cis-1,3-Dichloropropene	8.44	
108-88-3	Toluene	10.7	

LOS ALAMOS NATIONAL LABORATORY
CHECK SAMPLE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5E030000 229
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 25 / mL Date Received: 04/22/05
Work Order: G9PD41AC Date Extracted:05/02/05
Dilution factor: 1 Date Analyzed: 05/02/05
Moisture %:NA

QC Batch: 5123229

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-00-5	1,1,2-Trichloroethane	8.79	
591-78-6	2-Hexanone	7.44	
142-28-9	1,3-Dichloropropane	8.60	
127-18-4	Tetrachloroethene	7.23	
124-48-1	Chlorodibromomethane	8.40	
106-93-4	1,2-Dibromoethane	8.96	
108-90-7	Chlorobenzene	9.73	
630-20-6	1,1,1,2-Tetrachloroethane	9.38	
100-41-4	Ethylbenzene	11.0	
100-42-5	Styrene	9.98	
75-25-2	Bromoform	7.95	
98-82-8	Isopropylbenzene	13.0	
79-34-5	1,1,2,2-Tetrachloroethane	8.78	
103-65-1	n-Propylbenzene	11.6	
10061-02-6	trans-1,3-Dichloropropene	9.51	
108-86-1	Bromobenzene	10.1	
95-49-8	2-Chlorotoluene	10.7	
108-67-8	1,3,5-Trimethylbenzene	11.3	
106-43-4	4-Chlorotoluene	10.6	
98-06-6	tert-Butylbenzene	11.8	
135-98-8	sec-Butylbenzene	11.6	a
99-87-6	p-Isopropyltoluene	12.6	
541-73-1	1,3-Dichlorobenzene	10.7	
106-46-7	1,4-Dichlorobenzene	9.88	
104-51-8	n-Butylbenzene	11.8	
95-50-1	1,2-Dichlorobenzene	10.2	
96-12-8	1,2-Dibromo-3-chloropropane	9.09	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Toluene-d8	98	(84 - 123)
Dibromofluoromethane	90	(80 - 126)
1,2-Dichloroethane-d4	87	(76 - 133)
4-Bromofluorobenzene	99	(74 - 122)

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220218 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 04/22/05
Work Order: G800L1AG Date Extracted:04/29/05
Dilution factor: 5 Date Analyzed: 04/29/05
Moisture %:NA

QC Batch: 5121013

Client Sample Id: RE73-05-58923

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	50.4	
74-87-3	Chloromethane	53.9	
75-01-4	Vinyl chloride	68.8	p
74-83-9	Bromomethane	46.2	
75-00-3	Chloroethane	52.7	
75-69-4	Trichlorofluoromethane	56.3	
76-13-1	Trichlorotrifluoroethane	57.0	
67-64-1	Acetone	49.2	
75-35-4	1,1-Dichloroethene	52.5	
75-09-2	Methylene chloride	57.7	
75-15-0	Carbon disulfide	49.9	
75-34-3	1,1-Dichloroethane	56.7	
78-93-3	2-Butanone	55.6	
540-59-0	1,2-Dichloroethene (total)	108	
67-66-3	Chloroform	52.6	
74-97-5	Bromochloromethane	52.0	
71-55-6	1,1,1-Trichloroethane	52.8	
56-23-5	Carbon tetrachloride	56.3	
107-06-2	1,2-Dichloroethane	49.1	
71-43-2	Benzene	51.4	
79-01-6	Trichloroethene	50.5	
78-87-5	1,2-Dichloropropane	52.7	
75-27-4	Bromodichloromethane	53.6	
108-10-1	4-Methyl-2-pentanone	43.4	
10061-01-5	cis-1,3-Dichloropropene	46.6	
108-88-3	Toluene	48.8	
79-00-5	1,1,2-Trichloroethane	46.7	
591-78-6	2-Hexanone	44.8	

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220218 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 04/22/05
Work Order: G800L1AG Date Extracted:04/29/05
Dilution factor: 5 Date Analyzed: 04/29/05
Moisture %:NA

QC Batch: 5121013

Client Sample Id: RE73-05-58923

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
127-18-4	Tetrachloroethene	40.8	
124-48-1	Chlorodibromomethane	47.1	
106-93-4	1,2-Dibromoethane	51.3	
108-90-7	Chlorobenzene	49.2	
630-20-6	1,1,1,2-Tetrachloroethane	52.3	
100-41-4	Ethylbenzene	50.6	
100-42-5	Styrene	52.7	
75-25-2	Bromoform	43.6	
98-82-8	Isopropylbenzene	58.0	
79-34-5	1,1,2,2-Tetrachloroethane	52.8	
103-65-1	n-Propylbenzene	50.5	
10061-02-6	trans-1,3-Dichloropropene	51.1	
95-49-8	2-Chlorotoluene	51.8	
108-67-8	1,3,5-Trimethylbenzene	52.6	
106-43-4	4-Chlorotoluene	52.6	
98-06-6	tert-Butylbenzene	52.1	
135-98-8	sec-Butylbenzene	51.4	
541-73-1	1,3-Dichlorobenzene	49.0	
106-46-7	1,4-Dichlorobenzene	48.0	
95-50-1	1,2-Dichlorobenzene	50.0	
96-12-8	1,2-Dibromo-3-chloropropane	46.3	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Toluene-d8	97	(75 - 126)
Dibromofluoromethane	100	(60 - 147)
1,2-Dichloroethane-d4	98	(71 - 138)
4-Bromofluorobenzene	96	(71 - 117)

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220349 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 04/22/05
Work Order: G81751AE Date Extracted:05/02/05
Dilution factor: 5 Date Analyzed: 05/02/05
Moisture %:NA

QC Batch: 5123229

Client Sample Id: LAB MS/MSD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	38.4	
74-87-3	Chloromethane	44.6	
75-01-4	Vinyl chloride	44.1	
74-83-9	Bromomethane	43.6	p
75-00-3	Chloroethane	44.4	p
75-69-4	Trichlorofluoromethane	45.8	
76-13-1	Trichlorotrifluoroethane	57.4	
67-64-1	Acetone	958	a p
75-35-4	1,1-Dichloroethene	49.2	
75-09-2	Methylene chloride	58.5	
75-15-0	Carbon disulfide	46.7	
75-34-3	1,1-Dichloroethane	54.7	
78-93-3	2-Butanone	40.7	
594-20-7	2,2-Dichloropropane	57.3	
540-59-0	1,2-Dichloroethene (total)	122	
67-66-3	Chloroform	49.5	
74-97-5	Bromochloromethane	57.2	
71-55-6	1,1,1-Trichloroethane	52.3	
563-58-6	1,1-Dichloropropene	55.2	
56-23-5	Carbon tetrachloride	54.8	
107-06-2	1,2-Dichloroethane	43.8	
71-43-2	Benzene	55.4	
79-01-6	Trichloroethene	44.8	
78-87-5	1,2-Dichloropropane	44.3	
75-27-4	Bromodichloromethane	39.2	
108-10-1	4-Methyl-2-pentanone	44.2	
10061-01-5	cis-1,3-Dichloropropene	41.2	
108-88-3	Toluene	52.1	

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220349 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 04/22/05
Work Order: G81751AE Date Extracted:05/02/05
Dilution factor: 5 Date Analyzed: 05/02/05
Moisture %:NA

QC Batch: 5123229

Client Sample Id: LAB MS/MSD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-00-5	1,1,2-Trichloroethane	44.4	
591-78-6	2-Hexanone	47.5	
142-28-9	1,3-Dichloropropane	43.8	
127-18-4	Tetrachloroethene	33.6	
124-48-1	Chlorodibromomethane	41.9	
106-93-4	1,2-Dibromoethane	46.2	
108-90-7	Chlorobenzene	47.4	
630-20-6	1,1,1,2-Tetrachloroethane	48.0	
100-41-4	Ethylbenzene	51.4	
100-42-5	Styrene	46.3	
75-25-2	Bromoform	41.8	
98-82-8	Isopropylbenzene	62.3	
79-34-5	1,1,2,2-Tetrachloroethane	47.3	
103-65-1	n-Propylbenzene	56.8	
10061-02-6	trans-1,3-Dichloropropene	47.7	
108-86-1	Bromobenzene	50.7	
95-49-8	2-Chlorotoluene	52.5	
108-67-8	1,3,5-Trimethylbenzene	54.4	
106-43-4	4-Chlorotoluene	53.0	
98-06-6	tert-Butylbenzene	56.3	
135-98-8	sec-Butylbenzene	56.0	
99-87-6	p-Isopropyltoluene	61.1	
541-73-1	1,3-Dichlorobenzene	52.0	
106-46-7	1,4-Dichlorobenzene	48.6	
104-51-8	n-Butylbenzene	58.3	
95-50-1	1,2-Dichlorobenzene	50.4	
96-12-8	1,2-Dibromo-3-chloropropane	48.7	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Toluene-d8	100	(75 - 126)
Dibromofluoromethane	113	(60 - 147)
1,2-Dichloroethane-d4	103	(71 - 138)
4-Bromofluorobenzene	101	(71 - 117)

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220218 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 04/22/05
Work Order: G800L1AF Date Extracted:04/29/05
Dilution factor: 5 Date Analyzed: 04/29/05
Moisture %:NA

QC Batch: 5121013

Client Sample Id: RE73-05-58923

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	44.0	
74-87-3	Chloromethane	48.4	
75-01-4	Vinyl chloride	55.0	
74-83-9	Bromomethane	46.2	
75-00-3	Chloroethane	51.5	
75-69-4	Trichlorofluoromethane	55.8	
76-13-1	Trichlorotrifluoroethane	56.0	
67-64-1	Acetone	55.1	
75-35-4	1,1-Dichloroethene	50.9	
75-09-2	Methylene chloride	60.3	
75-15-0	Carbon disulfide	50.6	
75-34-3	1,1-Dichloroethane	57.2	
78-93-3	2-Butanone	52.8	
540-59-0	1,2-Dichloroethene (total)	111	
67-66-3	Chloroform	56.3	
74-97-5	Bromochloromethane	55.1	
71-55-6	1,1,1-Trichloroethane	53.8	
56-23-5	Carbon tetrachloride	56.3	
107-06-2	1,2-Dichloroethane	53.8	
71-43-2	Benzene	51.9	
79-01-6	Trichloroethene	51.2	
78-87-5	1,2-Dichloropropane	53.1	
75-27-4	Bromodichloromethane	55.8	
108-10-1	4-Methyl-2-pentanone	46.7	
10061-01-5	cis-1,3-Dichloropropene	48.4	
108-88-3	Toluene	49.0	
79-00-5	1,1,2-Trichloroethane	48.8	
591-78-6	2-Hexanone	49.5	

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220218 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL
Work Order: G800L1AF
Dilution factor: 5
Moisture %:NA

Date Received: 04/22/05
Date Extracted:04/29/05
Date Analyzed: 04/29/05

QC Batch: 5121013

Client Sample Id: RE73-05-58923

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
127-18-4	Tetrachloroethene	40.4	
124-48-1	Chlorodibromomethane	50.2	
106-93-4	1,2-Dibromoethane	54.8	
108-90-7	Chlorobenzene	50.6	
630-20-6	1,1,1,2-Tetrachloroethane	55.2	
100-41-4	Ethylbenzene	49.7	
100-42-5	Styrene	53.9	
75-25-2	Bromoform	47.7	
98-82-8	Isopropylbenzene	60.6	
79-34-5	1,1,2,2-Tetrachloroethane	56.8	
103-65-1	n-Propylbenzene	52.4	
10061-02-6	trans-1,3-Dichloropropene	53.7	
95-49-8	2-Chlorotoluene	54.9	
108-67-8	1,3,5-Trimethylbenzene	54.7	
106-43-4	4-Chlorotoluene	56.0	
98-06-6	tert-Butylbenzene	52.3	
135-98-8	sec-Butylbenzene	50.0	
541-73-1	1,3-Dichlorobenzene	50.8	
106-46-7	1,4-Dichlorobenzene	50.3	
95-50-1	1,2-Dichlorobenzene	52.9	
96-12-8	1,2-Dibromo-3-chloropropane	49.6	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Toluene-d8	97	(75 - 126)
Dibromofluoromethane	105	(60 - 147)
1,2-Dichloroethane-d4	107	(71 - 138)
4-Bromofluorobenzene	102	(71 - 117)

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220349 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 04/22/05
Work Order: G81751AD Date Extracted:05/02/05
Dilution factor: 5 Date Analyzed: 05/02/05
Moisture %:NA

QC Batch: 5123229

Client Sample Id: LAB MS/MSD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	32.5	
74-87-3	Chloromethane	36.9	
75-01-4	Vinyl chloride	38.0	
74-83-9	Bromomethane	34.2	
75-00-3	Chloroethane	35.5	
75-69-4	Trichlorofluoromethane	39.1	
76-13-1	Trichlorotrifluoroethane	48.8	
67-64-1	Acetone	772	
75-35-4	1,1-Dichloroethene	43.7	
75-09-2	Methylene chloride	51.1	
75-15-0	Carbon disulfide	43.6	
75-34-3	1,1-Dichloroethane	47.8	
78-93-3	2-Butanone	34.5	
594-20-7	2,2-Dichloropropane	51.9	
540-59-0	1,2-Dichloroethene (total)	108	
67-66-3	Chloroform	43.3	
74-97-5	Bromochloromethane	48.8	
71-55-6	1,1,1-Trichloroethane	46.8	
563-58-6	1,1-Dichloropropene	49.2	
56-23-5	Carbon tetrachloride	47.5	
107-06-2	1,2-Dichloroethane	39.0	
71-43-2	Benzene	49.6	
79-01-6	Trichloroethene	48.2	
78-87-5	1,2-Dichloropropane	45.0	
75-27-4	Bromodichloromethane	38.2	
108-10-1	4-Methyl-2-pentanone	41.2	
10061-01-5	cis-1,3-Dichloropropene	41.0	
108-88-3	Toluene	57.1	

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220218

Matrix: (soil/water) WATER Lab Sample ID:F5D220349 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 04/22/05
Work Order: G81751AD Date Extracted:05/02/05
Dilution factor: 5 Date Analyzed: 05/02/05
Moisture %:NA

QC Batch: 5123229

Client Sample Id: LAB MS/MSD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-00-5	1,1,2-Trichloroethane	45.7	
591-78-6	2-Hexanone	42.4	
142-28-9	1,3-Dichloropropane	43.4	
127-18-4	Tetrachloroethene	34.5	
124-48-1	Chlorodibromomethane	42.3	
106-93-4	1,2-Dibromoethane	45.4	
108-90-7	Chlorobenzene	46.7	
630-20-6	1,1,1,2-Tetrachloroethane	47.5	
100-41-4	Ethylbenzene	51.7	
100-42-5	Styrene	45.5	
75-25-2	Bromoform	41.7	
98-82-8	Isopropylbenzene	64.2	
79-34-5	1,1,2,2-Tetrachloroethane	47.8	
103-65-1	n-Propylbenzene	58.1	
10061-02-6	trans-1,3-Dichloropropene	48.7	
108-86-1	Bromobenzene	50.8	
95-49-8	2-Chlorotoluene	54.0	
108-67-8	1,3,5-Trimethylbenzene	56.3	
106-43-4	4-Chlorotoluene	53.8	
98-06-6	tert-Butylbenzene	58.0	
135-98-8	sec-Butylbenzene	56.8	
99-87-6	p-Isopropyltoluene	62.3	
541-73-1	1,3-Dichlorobenzene	52.5	
106-46-7	1,4-Dichlorobenzene	49.5	
104-51-8	n-Butylbenzene	58.9	
95-50-1	1,2-Dichlorobenzene	50.4	
96-12-8	1,2-Dibromo-3-chloropropane	46.6	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Toluene-d8	107	(75 - 126)
Dibromofluoromethane	105	(60 - 147)
1,2-Dichloroethane-d4	96	(71 - 138)
4-Bromofluorobenzene	109	(71 - 117)

FORM I

GC/MS ADDITIONAL QC SUMMARY DATA
FORMS 2 THROUGH 4

SW846 8260B SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220218

Lot #: F5D220218

Extraction: XXI25QK01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
01	RE73-05-58923	88	95	100	91	00
02	RE73-05-58923 RE-1	119	101	106	112	00
03	RE73-05-58924	89	91	95	89	00
04	INTRA-LAB QC	102	89	90	99	00
05	METHOD BLK. G9LN51AA	101	98	95	98	00
06	METHOD BLK. G9PD41AA	93	86	81	99	00
07	LCS G9LN51AC	97	104	100	109	00
08	LCS G9PD41AC	98	90	87	99	00
09	RE73-05-58923 D	97	100	98	96	00
10	LAB MS/MSD D	100	113	103	101	00
11	RE73-05-58923 S	97	105	107	102	00
12	LAB MS/MSD S	107	105	96	109	00

SURROGATES		QC LIMITS
SRG01	= Toluene-d8	(75-126)
SRG02	= Dibromofluoromethane	(60-147)
SRG03	= 1,2-Dichloroethane-d4	(71-138)
SRG04	= 4-Bromofluorobenzene	(71-117)

\# Column to be used to flag recovery values
* Values outside of required QC Limits
D System monitoring Compound diluted out

FORM II

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220218

Matrix Spike ID: RE73-05-58923

Lot #: F5D220218 WO #: G800L1AF
BATCH: 5121013

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	MS CONCENT. (ug/L)	MS % REC	LIMITS REC	QUAL
cis-1,3-Dichloropropene	50.0	ND	48.4	97	69- 141	
Chloromethane	50.0	ND	48.4	97	30- 141	
Vinyl chloride	50.0	ND	55.0	110	39- 147	
Bromomethane	50.0	ND	46.2	92	30- 144	
Chloroethane	50.0	ND	51.5	103	50- 150	
Acetone	50.0	ND	55.1	110	30- 150	
1,1-Dichloroethene	50.0	ND	50.9	102	47- 135	
Methylene chloride	50.0	5.5	60.3	110	38- 150	
Carbon disulfide	50.0	2.2	50.6	97	32- 150	
1,1-Dichloroethane	50.0	ND	57.2	114	64- 135	
1,2-Dichloroethene (total	100	ND	111	111	63- 135	
Chloroform	50.0	2.1	56.3	108	67- 129	
1,1,1-Trichloroethane	50.0	ND	53.8	108	60- 140	
Carbon tetrachloride	50.0	ND	56.3	113	40- 150	
1,2-Dichloroethane	50.0	ND	53.8	108	65- 140	
Benzene	50.0	ND	51.9	104	73- 132	
Trichloroethene	50.0	ND	51.2	102	30- 150	
1,2-Dichloropropane	50.0	ND	53.1	106	70- 137	
Bromodichloromethane	50.0	ND	55.8	112	69- 132	
1,1,2-Trichloroethane	50.0	ND	48.8	98	72- 130	
trans-1,3-Dichloropropene	50.0	ND	53.7	107	76- 150	
Toluene	50.0	ND	49.0	98	74- 126	
1,3-Dichlorobenzene	50.0	ND	50.8	102	78- 119	
1,4-Dichlorobenzene	50.0	ND	50.3	101	76- 117	
1,2-Dichlorobenzene	50.0	ND	52.9	106	80- 120	
2-Hexanone	50.0	ND	49.5	99	33- 148	
4-Methyl-2-pentanone	50.0	ND	46.7	93	39- 149	
Chlorobenzene	50.0	ND	50.6	101	77- 123	

(Continued on next page)

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220218

Matrix Spike ID: RE73-05-58923

Lot #: F5D220218 WO #: G800L1AF
BATCH: 5121013

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	MS CONCENT. (ug/L)	MS % REC	LIMITS REC	QUAL
Bromoform	50.0	ND	47.7	95	64 - 130	
Ethylbenzene	50.0	ND	49.7	99	71 - 125	
Styrene	50.0	ND	53.9	108	49 - 145	
1,1,2,2-Tetrachloroethane	50.0	ND	56.8	114	65 - 139	
Tetrachloroethene	50.0	ND	40.4	81	29 - 123	
2-Butanone	50.0	ND	52.8	106	48 - 150	
Chlorodibromomethane	50.0	ND	50.2	100	76 - 132	
Bromochloromethane	50.0	ND	55.1	110	57 - 147	
sec-Butylbenzene	50.0	ND	50.0	100	42 - 150	
tert-Butylbenzene	50.0	ND	52.3	105	32 - 148	
2-Chlorotoluene	50.0	ND	54.9	110	30 - 150	
4-Chlorotoluene	50.0	ND	56.0	112	45 - 150	
1,2-Dibromo-3-chloropropa	50.0	ND	49.6	99	30 - 150	
1,2-Dibromoethane	50.0	ND	54.8	110	50 - 150	
Dichlorodifluoromethane	50.0	ND	44.0	88	30 - 150	
Trichlorotrifluoroethane	50.0	ND	56.0	112	54 - 136	
Isopropylbenzene	50.0	ND	60.6	121	61 - 150	
n-Propylbenzene	50.0	ND	52.4	105	35 - 150	
1,1,1,2-Tetrachloroethane	50.0	ND	55.2	110	55 - 148	
Trichlorofluoromethane	50.0	ND	55.8	112	48 - 145	
1,3,5-Trimethylbenzene	50.0	ND	54.7	109	30 - 150	

NOTES(S):

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 49 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220218

Matrix Spike ID: LAB MS/MSD

Lot #: F5D220349 WO #: G81751AD
BATCH: 5123229

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	MS CONCENT. (ug/L)	MS % REC	LIMITS REC	QUAL
cis-1,3-Dichloropropene	50.0	ND	41.0	82	69- 141	
Chloromethane	50.0	ND	36.9	74	30- 141	
Vinyl chloride	50.0	ND	38.0	76	39- 147	
Bromomethane	50.0	ND	34.2	68	30- 144	
Chloroethane	50.0	ND	35.5	71	50- 150	
Acetone	50.0	760	772	32	30- 150	
1,1-Dichloroethene	50.0	ND	43.7	87	47- 135	
Methylene chloride	50.0	ND	51.1	102	38- 150	
Carbon disulfide	50.0	ND	43.6	87	32- 150	
1,1-Dichloroethane	50.0	ND	47.8	96	64- 135	
1,2-Dichloroethene (total	100	ND	108	108	63- 135	
Chloroform	50.0	ND	43.3	87	67- 129	
1,1,1-Trichloroethane	50.0	ND	46.8	94	60- 140	
Carbon tetrachloride	50.0	ND	47.5	95	40- 150	
1,2-Dichloroethane	50.0	ND	39.0	78	65- 140	
Benzene	50.0	ND	49.6	99	73- 132	
Trichloroethene	50.0	ND	48.2	96	30- 150	
1,2-Dichloropropane	50.0	ND	45.0	90	70- 137	
Bromodichloromethane	50.0	ND	38.2	76	69- 132	
1,1,2-Trichloroethane	50.0	ND	45.7	91	72- 130	
trans-1,3-Dichloropropene	50.0	ND	48.7	97	76- 150	
Toluene	50.0	ND	57.1	114	74- 126	
1,3-Dichlorobenzene	50.0	ND	52.5	105	78- 119	
1,4-Dichlorobenzene	50.0	ND	49.5	99	76- 117	
1,2-Dichlorobenzene	50.0	ND	50.4	101	80- 120	
2-Hexanone	50.0	ND	42.4	85	33- 148	
4-Methyl-2-pentanone	50.0	6.7	41.2	69	39- 149	
Chlorobenzene	50.0	ND	46.7	93	77- 123	

(Continued on next page)

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220218

Matrix Spike ID: LAB MS/MSD

Lot #: F5D220349 WO #: G81751AD
BATCH: 5123229

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	MS CONCENT. (ug/L)	MS % REC	LIMITS REC	QUAL
Bromoform	50.0	ND	41.7	83	64 - 130	
Ethylbenzene	50.0	ND	51.7	103	71 - 125	
Styrene	50.0	ND	45.5	91	49 - 145	
1,1,2,2-Tetrachloroethane	50.0	ND	47.8	96	65 - 139	
Tetrachloroethene	50.0	ND	34.5	69	29 - 123	
2-Butanone	50.0	ND	34.5	69	48 - 150	
Chlorodibromomethane	50.0	ND	42.3	85	76 - 132	
Bromobenzene	50.0	ND	50.8	102	30 - 150	
Bromochloromethane	50.0	ND	48.8	98	57 - 147	
n-Butylbenzene	50.0	ND	58.9	118	34 - 150	
sec-Butylbenzene	50.0	ND	56.8	114	42 - 150	
tert-Butylbenzene	50.0	ND	58.0	116	32 - 148	
2-Chlorotoluene	50.0	ND	54.0	108	30 - 150	
4-Chlorotoluene	50.0	ND	53.8	108	45 - 150	
1,2-Dibromo-3-chloropropa	50.0	ND	46.6	93	30 - 150	
1,2-Dibromoethane	50.0	ND	45.4	91	50 - 150	
Dichlorodifluoromethane	50.0	ND	32.5	65	30 - 150	
1,3-Dichloropropane	50.0	ND	43.4	87	41 - 150	
2,2-Dichloropropane	50.0	ND	51.9	104	51 - 148	
1,1-Dichloropropene	50.0	ND	49.2	98	61 - 139	
Trichlorotrifluoroethane	50.0	ND	48.8	98	54 - 136	
Isopropylbenzene	50.0	ND	64.2	128	61 - 150	
p-Isopropyltoluene	50.0	ND	62.3	125	49 - 150	
n-Propylbenzene	50.0	ND	58.1	116	35 - 150	
1,1,1,2-Tetrachloroethane	50.0	ND	47.5	95	55 - 148	
Trichlorofluoromethane	50.0	ND	39.1	78	48 - 145	
1,3,5-Trimethylbenzene	50.0	ND	56.3	113	30 - 150	

NOTES(S):

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 55 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220218

Matrix Spike ID: RE73-05-58923

Lot #: F5D220218 WO #: G800L1AG
BATCH: 5121013

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENT. (ug/L)	MSD % REC	% RPD		QC LIMITS RPD	QC LIMITS REC	QUAL
cis-1,3-Dichloropropene	50.0	46.6	93	3.7		20	69- 141	
Chloromethane	50.0	53.9	108	11		20	30- 141	
Vinyl chloride	50.0	68.8	138	22	*	20	39- 147	p
Bromomethane	50.0	46.2	92	0.15		20	30- 144	
Chloroethane	50.0	52.7	105	2.3		20	50- 150	
Acetone	50.0	49.2	98	11		20	30- 150	
1,1-Dichloroethene	50.0	52.5	105	3.1		20	47- 135	
Methylene chloride	50.0	57.7	104	4.5		20	38- 150	
Carbon disulfide	50.0	49.9	96	1.4		20	32- 150	
1,1-Dichloroethane	50.0	56.7	113	0.82		20	64- 135	
1,2-Dichloroethene (total	100	108	108	2.8		20	63- 135	
Chloroform	50.0	52.6	101	6.8		20	67- 129	
1,1,1-Trichloroethane	50.0	52.8	106	2.0		20	60- 140	
Carbon tetrachloride	50.0	56.3	113	0.030		20	40- 150	
1,2-Dichloroethane	50.0	49.1	98	9.1		20	65- 140	
Benzene	50.0	51.4	103	0.98		20	73- 132	
Trichloroethene	50.0	50.5	101	1.4		20	30- 150	
1,2-Dichloropropane	50.0	52.7	105	0.75		20	70- 137	
Bromodichloromethane	50.0	53.6	107	4.0		20	69- 132	
1,1,2-Trichloroethane	50.0	46.7	93	4.4		20	72- 130	
trans-1,3-Dichloropropene	50.0	51.1	102	4.9		20	76- 150	
Toluene	50.0	48.8	98	0.45		20	74- 126	
1,3-Dichlorobenzene	50.0	49.0	98	3.7		20	78- 119	
1,4-Dichlorobenzene	50.0	48.0	96	4.6		20	76- 117	
1,2-Dichlorobenzene	50.0	50.0	100	5.6		20	80- 120	
2-Hexanone	50.0	44.8	90	9.9		20	33- 148	
4-Methyl-2-pentanone	50.0	43.4	87	7.4		20	39- 149	
Chlorobenzene	50.0	49.2	98	2.9		20	77- 123	

(Continued on next page)

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220218

Matrix Spike ID: RE73-05-58923

Lot #: F5D220218 WO #: G800L1AG
BATCH: 5121013

COMPOUND	SPIKE ADDED	MSD CONCENT.	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
Bromoform	50.0	43.6	87	9.0	20	64 - 130	
Ethylbenzene	50.0	50.6	101	1.8	20	71 - 125	
Styrene	50.0	52.7	105	2.3	20	49 - 145	
1,1,2,2-Tetrachloroethane	50.0	52.8	106	7.1	20	65 - 139	
Tetrachloroethene	50.0	40.8	82	1.1	20	29 - 123	
2-Butanone	50.0	55.6	111	5.1	20	48 - 150	
Chlorodibromomethane	50.0	47.1	94	6.4	20	76 - 132	
Bromochloromethane	50.0	52.0	104	5.8	20	57 - 147	
sec-Butylbenzene	50.0	51.4	103	2.6	20	42 - 150	
tert-Butylbenzene	50.0	52.1	104	0.38	20	32 - 148	
2-Chlorotoluene	50.0	51.8	104	5.8	20	30 - 150	
4-Chlorotoluene	50.0	52.6	105	6.1	20	45 - 150	
1,2-Dibromo-3-chloropropa	50.0	46.3	93	7.0	20	30 - 150	
1,2-Dibromoethane	50.0	51.3	103	6.7	20	50 - 150	
Dichlorodifluoromethane	50.0	50.4	101	14	20	30 - 150	
Trichlorotrifluoroethane	50.0	57.0	114	1.9	20	54 - 136	
Isopropylbenzene	50.0	58.0	116	4.4	20	61 - 150	
n-Propylbenzene	50.0	50.5	101	3.7	20	35 - 150	
1,1,1,2-Tetrachloroethane	50.0	52.3	105	5.5	20	55 - 148	
Trichlorofluoromethane	50.0	56.3	113	0.94	20	48 - 145	
1,3,5-Trimethylbenzene	50.0	52.6	105	4.0	20	30 - 150	

NOTES(S):

p Relative percent difference (RPD) is outside stated control limits.

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 1 out of 49 outside limits
Spike Recovery: 0 out of 49 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220218

Matrix Spike ID: LAB MS/MSD

Lot #: F5D220349 WO #: G81751AE
BATCH: 5123229

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENT. (ug/L)	MSD % REC	% RPD		QC LIMITS RPD	QC LIMITS REC	QUAL
cis-1,3-Dichloropropene	50.0	41.2	82	0.48		20	69- 141	
Chloromethane	50.0	44.6	89	19		20	30- 141	
Vinyl chloride	50.0	44.1	88	15		20	39- 147	
Bromomethane	50.0	43.6	87	24	*	20	30- 144	p
Chloroethane	50.0	44.4	89	22	*	20	50- 150	p
Acetone	50.0	958	403*	21	*	20	30- 150	a p
1,1-Dichloroethene	50.0	49.2	98	12		20	47- 135	
Methylene chloride	50.0	58.5	117	13		20	38- 150	
Carbon disulfide	50.0	46.7	93	7.0		20	32- 150	
1,1-Dichloroethane	50.0	54.7	109	13		20	64- 135	
1,2-Dichloroethene (total	100	122	122	12		20	63- 135	
Chloroform	50.0	49.5	99	13		20	67- 129	
1,1,1-Trichloroethane	50.0	52.3	105	11		20	60- 140	
Carbon tetrachloride	50.0	54.8	110	14		20	40- 150	
1,2-Dichloroethane	50.0	43.8	88	12		20	65- 140	
Benzene	50.0	55.4	111	11		20	73- 132	
Trichloroethene	50.0	44.8	90	7.3		20	30- 150	
1,2-Dichloropropane	50.0	44.3	89	1.6		20	70- 137	
Bromodichloromethane	50.0	39.2	78	2.5		20	69- 132	
1,1,2-Trichloroethane	50.0	44.4	89	2.9		20	72- 130	
trans-1,3-Dichloropropene	50.0	47.7	95	2.1		20	76- 150	
Toluene	50.0	52.1	104	9.2		20	74- 126	
1,3-Dichlorobenzene	50.0	52.0	104	1.1		20	78- 119	
1,4-Dichlorobenzene	50.0	48.6	97	1.8		20	76- 117	
1,2-Dichlorobenzene	50.0	50.4	101	0.0		20	80- 120	
2-Hexanone	50.0	47.5	95	11		20	33- 148	
4-Methyl-2-pentanone	50.0	44.2	75	7.0		20	39- 149	
Chlorobenzene	50.0	47.4	95	1.5		20	77- 123	

(Continued on next page)

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220218

Matrix Spike ID: LAB MS/MSD

Lot #: F5D220349 WO #: G81751AE
BATCH: 5123229

COMPOUND	SPIKE ADDED	MSD CONCENT.	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
Bromoform	50.0	41.8	84	0.28	20	64 - 130	
Ethylbenzene	50.0	51.4	103	0.73	20	71 - 125	
Styrene	50.0	46.3	93	1.6	20	49 - 145	
1,1,2,2-Tetrachloroethane	50.0	47.3	95	1.0	20	65 - 139	
Tetrachloroethene	50.0	33.6	67	2.6	20	29 - 123	
2-Butanone	50.0	40.7	81	16	20	48 - 150	
Chlorodibromomethane	50.0	41.9	84	0.99	20	76 - 132	
Bromobenzene	50.0	50.7	101	0.17	20	30 - 150	
Bromochloromethane	50.0	57.2	114	16	20	57 - 147	
n-Butylbenzene	50.0	58.3	117	1.0	20	34 - 150	
sec-Butylbenzene	50.0	56.0	112	1.6	20	42 - 150	
tert-Butylbenzene	50.0	56.3	113	3.0	20	32 - 148	
2-Chlorotoluene	50.0	52.5	105	2.9	20	30 - 150	
4-Chlorotoluene	50.0	53.0	106	1.6	20	45 - 150	
1,2-Dibromo-3-chloropropa	50.0	48.7	97	4.4	20	30 - 150	
1,2-Dibromoethane	50.0	46.2	92	1.6	20	50 - 150	
Dichlorodifluoromethane	50.0	38.4	77	17	20	30 - 150	
1,3-Dichloropropane	50.0	43.8	88	0.96	20	41 - 150	
2,2-Dichloropropane	50.0	57.3	115	9.8	20	51 - 148	
1,1-Dichloropropene	50.0	55.2	110	11	20	61 - 139	
Trichlorotrifluoroethane	50.0	57.4	115	16	20	54 - 136	
Isopropylbenzene	50.0	62.3	125	3.0	20	61 - 150	
p-Isopropyltoluene	50.0	61.1	122	1.9	20	49 - 150	
n-Propylbenzene	50.0	56.8	114	2.3	20	35 - 150	
1,1,1,2-Tetrachloroethane	50.0	48.0	96	1.0	20	55 - 148	
Trichlorofluoromethane	50.0	45.8	92	16	20	48 - 145	
1,3,5-Trimethylbenzene	50.0	54.4	109	3.5	20	30 - 150	

NOTES(S):

p Relative percent difference (RPD) is outside stated control limits.

a Spiked analyte recovery is outside stated control limits.

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 3 out of 55 outside limits
Spike Recovery: 1 out of 55 outside limits

COMMENTS:

FORM III

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220218

Lot #: F5E010000 WO #: G9LN51AC
BATCH: 5121013

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
cis-1,3-Dichloropropene	10.0	10.9	109	73- 125	
Chlorodibromomethane	10.0	9.83	98	80- 118	
Chloromethane	10.0	9.50	95	46- 137	
Vinyl chloride	10.0	10.0	100	67- 137	
Bromomethane	10.0	8.00	80	30- 130	
Chloroethane	10.0	9.21	92	78- 148	
Acetone	10.0	8.81	88	30- 150	
1,1-Dichloroethene	10.0	10.2	102	65- 128	
Methylene chloride	10.0	11.1	111	53- 143	
Carbon disulfide	10.0	9.79	98	51- 150	
1,1-Dichloroethane	10.0	11.4	114	78- 123	
2-Butanone	10.0	11.1	111	30- 150	
1,2-Dichloroethene (total	20.0	22.2	111	80- 122	
Chloroform	10.0	10.2	102	76- 120	
1,1,1-Trichloroethane	10.0	10.2	102	80- 124	
Carbon tetrachloride	10.0	10.7	107	79- 127	
1,2-Dichloroethane	10.0	9.90	99	73- 133	
Benzene	10.0	9.95	100	84- 123	
Trichloroethene	10.0	10.7	107	69- 117	
1,2-Dichloropropane	10.0	10.9	109	78- 130	
Bromodichloromethane	10.0	10.9	109	77- 123	
1,1,2-Trichloroethane	10.0	9.90	99	78- 127	
trans-1,3-Dichloropropene	10.0	10.6	106	71- 149	
Toluene	10.0	9.62	96	82- 125	
1,3-Dichlorobenzene	10.0	10.2	102	86- 117	
1,4-Dichlorobenzene	10.0	10.1	101	83- 115	
2-Hexanone	10.0	11.4	114	46- 146	
4-Methyl-2-pentanone	10.0	11.0	110	49- 132	
Chlorobenzene	10.0	10.2	102	83- 121	
Bromoform	10.0	9.70	97	69- 130	
Ethylbenzene	10.0	10.1	101	83- 121	

(Continued on next page)

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220218

Lot #: F5E010000 WO #: G9LN51AC
BATCH: 5121013

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
Styrene	10.0	10.9	109	86- 121	
1,1,2,2-Tetrachloroethane	10.0	11.5	115	68- 136	
Tetrachloroethene	10.0	7.90	79	42- 146	
1,2-Dichlorobenzene	10.0	10.4	104	87- 119	
Bromochloromethane	10.0	11.0	110	77- 122	
sec-Butylbenzene	10.0	10.9	109	76- 115	
tert-Butylbenzene	10.0	11.3	113	53- 123	
2-Chlorotoluene	10.0	12.0	120	65- 127	
4-Chlorotoluene	10.0	12.2	122	67- 130	
1,2-Dibromo-3-chloropropa	10.0	9.98	100	72- 133	
1,2-Dibromoethane	10.0	11.0	110	79- 121	
Dichlorodifluoromethane	10.0	8.76	88	30- 150	
Trichlorotrifluoroethane	10.0	11.1	111	60- 139	
Isopropylbenzene	10.0	13.5	135	80- 143	
1,1,1,2-Tetrachloroethane	10.0	11.0	110	80- 119	
Trichlorofluoromethane	10.0	10.5	105	57- 142	
1,3,5-Trimethylbenzene	10.0	11.8	118	70- 126	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 48 outside limits

COMMENTS:

FORM III

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220218

Lot #: F5E030000 WO #: G9PD41AC
BATCH: 5123229

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
cis-1,3-Dichloropropene	10.0	8.44	84	73 - 125	
Chlorodibromomethane	10.0	8.40	84	80 - 118	
Chloromethane	10.0	7.96	80	46 - 137	
Vinyl chloride	10.0	9.24	92	67 - 137	
Bromomethane	10.0	9.06	91	30 - 130	
Chloroethane	10.0	9.03	90	78 - 148	
Acetone	10.0	8.93	89	30 - 150	
1,1-Dichloroethene	10.0	8.27	83	65 - 128	
Methylene chloride	10.0	10.0	100	53 - 143	
Carbon disulfide	10.0	8.78	88	51 - 150	
1,1-Dichloroethane	10.0	9.36	94	78 - 123	
2-Butanone	10.0	6.37	64	30 - 150	
1,2-Dichloroethene (total	20.0	21.2	106	80 - 122	
Chloroform	10.0	8.56	86	76 - 120	
1,1,1-Trichloroethane	10.0	9.42	94	80 - 124	
Carbon tetrachloride	10.0	9.41	94	79 - 127	
1,2-Dichloroethane	10.0	7.81	78	73 - 133	
Benzene	10.0	9.62	96	84 - 123	
Trichloroethene	10.0	9.53	95	69 - 117	
1,2-Dichloropropane	10.0	8.94	89	78 - 130	
Bromodichloromethane	10.0	7.90	79	77 - 123	
1,1,2-Trichloroethane	10.0	8.79	88	78 - 127	
trans-1,3-Dichloropropene	10.0	9.51	95	71 - 149	
Toluene	10.0	10.7	107	82 - 125	
1,3-Dichlorobenzene	10.0	10.7	107	86 - 117	
1,4-Dichlorobenzene	10.0	9.88	99	83 - 115	
2-Hexanone	10.0	7.44	74	46 - 146	
4-Methyl-2-pentanone	10.0	6.74	67	49 - 132	
Chlorobenzene	10.0	9.73	97	83 - 121	
Bromoform	10.0	7.95	80	69 - 130	
Ethylbenzene	10.0	11.0	110	83 - 121	

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SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220218

Lot #: F5E030000 WO #: G9PD41AC
BATCH: 5123229

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
Styrene	10.0	9.98	100	86 - 121	
1,1,2,2-Tetrachloroethane	10.0	8.78	88	68 - 136	
Tetrachloroethene	10.0	7.23	72	42 - 146	
1,2-Dichlorobenzene	10.0	10.2	102	87 - 119	
Bromobenzene	10.0	10.1	101	75 - 125	
Bromochloromethane	10.0	8.74	87	77 - 122	
n-Butylbenzene	10.0	11.8	118	77 - 128	
sec-Butylbenzene	10.0	11.6	116*	76 - 115	a
tert-Butylbenzene	10.0	11.8	118	53 - 123	
2-Chlorotoluene	10.0	10.7	107	65 - 127	
4-Chlorotoluene	10.0	10.6	106	67 - 130	
1,2-Dibromo-3-chloropropa	10.0	9.09	91	72 - 133	
1,2-Dibromoethane	10.0	8.96	90	79 - 121	
Dichlorodifluoromethane	10.0	8.20	82	30 - 150	
1,3-Dichloropropane	10.0	8.60	86	74 - 122	
2,2-Dichloropropane	10.0	10.1	101	64 - 141	
1,1-Dichloropropene	10.0	9.97	100	77 - 126	
Trichlorotrifluoroethane	10.0	9.56	96	60 - 139	
Isopropylbenzene	10.0	13.0	130	80 - 143	
p-Isopropyltoluene	10.0	12.6	126	80 - 127	
n-Propylbenzene	10.0	11.6	116	69 - 129	
1,1,1,2-Tetrachloroethane	10.0	9.38	94	80 - 119	
Trichlorofluoromethane	10.0	9.30	93	57 - 142	
1,3,5-Trimethylbenzene	10.0	11.3	113	70 - 126	

NOTES (S) :

a Spiked analyte recovery is outside stated control limits.

* Values outside of QC limits

Spike Recovery: 1 out of 55 outside limits

COMMENTS:

FORM III

SW846 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.: G9LN51AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: STLSTL — SDG Number:F5D220218

Lab File ID: BBLK8209 — Lot Number: F5D220218

Date Analyzed: 04/29/05 — Time Analyzed: 13:45

Matrix: WATER — Date Extracted:04/29/05

GC Column: RTX-VMS ID: .25 — Extraction Method: 5030B/8260B

Instrument ID: MSB — Level:(low/med) LOW

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS, LCSD, MS , MSD:

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	RE73-05-58923	G800L1AC	BSMP8213	04/29/05	16:25
02	RE73-05-58923	G800L1AF S	BSMP8214	04/29/05	17:02
03	RE73-05-58923	G800L1AG D	BSMP8215	04/29/05	17:39
04	RE73-05-58924	G80091AA	BSMP8216	04/29/05	18:16
05	CHECK SAMPLE	G9LN51AC C	BLCS8207	04/29/05	12:31
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

FORM IV

SW846 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.: G9PD41AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: STLSTL — SDG Number: F5D220218

Lab File ID: LBLK0587 — Lot Number: F5D220218

Date Analyzed: 05/02/05 — Time Analyzed: 15:44

Matrix: WATER — Date Extracted: 05/02/05

GC Column: RTX-502.2 ID: .53 — Extraction Method: 5030B/8260B

Instrument ID: MSL — Level: (low/med) LOW

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS, LCSD, MS , MSD:

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	RE73-05-58923	G800L2AC	LSMP0600	05/02/05	21:07
02	INTRA-LAB QC	G81751AC	LSMP0590	05/02/05	17:18
03	LAB MS/MSD	G81751AD S	LSMP0591	05/02/05	17:41
04	LAB MS/MSD	G81751AE D	LSMP0592	05/02/05	18:04
05	CHECK SAMPLE	G9PD41AC C	LLCS0585	05/02/05	14:58
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
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COMMENTS:

FORM IV

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220218

Lab File ID: BBFB8018 BFB Injection Date: 04/20/05

Instrument ID: MSB BFB Injection Time: 1103

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.9
75	30.0 - 60.0% of mass 95	46.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	80.6
175	5.0 - 9.0% of mass 174	6.3 (7.8)1
176	Greater than 95.0%, but less than 101.0% of mass 174	77.7 (96.4)1
177	5.0 - 9.0% of mass 176	5.4 (7.0)2

1-Value is % of mass 174 2-Value is % of mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD000.5	VSTD000.5	BCAL8019	04/20/05	1129
02	VSTD001	VSTD001	BCAL8020	04/20/05	1206
03	VSTD002	VSTD002	BCAL8021	04/20/05	1243
04	VSTD004	VSTD004	BCAL8022	04/20/05	1320
05	VSTD010	VSTD010	BCAL8023	04/20/05	1358
06	VSTD020	VSTD020	BCAL8024	04/20/05	1435
07	VSTD030	VSTD030	BCAL8025	04/20/05	1512
08	VLCSB109A	G8TK01AC	BICV8030	04/20/05	1931
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220218

Lab File ID: LBFB0317 BFB Injection Date: 04/25/05

Instrument ID: MSL BFB Injection Time: 0904

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.0
75	30.0 - 60.0% of mass 95	58.6
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	50.2
175	5.0 - 9.0% of mass 174	3.5 (7.0)1
176	Greater than 95.0%, but less than 101.0% of mass 174	47.7 (95.0)1
177	5.0 - 9.0% of mass 176	3.4 (7.1)2

1-Value is % of mass 174 2-Value is % of mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD000.5	VSTD000.5	LCAL0320	04/25/05	1018
02	VSTD001	VSTD001	LCAL0321	04/25/05	1041
03	VSTD002	VSTD002	LCAL0322	04/25/05	1104
04	VSTD004	VSTD004	LCAL0323	04/25/05	1127
05	VSTD010	VSTD010	LCAL0324	04/25/05	1151
06	VSTD030	VSTD030	LCAL0325	04/25/05	1216
07	ICV010	ICV010	LICV0328	04/25/05	1327
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A
VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220218

Lab File ID: BBFB8204 BFB Injection Date: 04/29/05

Instrument ID: MSB BFB Injection Time: 1024

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.7
75	30.0 - 60.0% of mass 95	51.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.8
173	Less than 2.0% of mass 174	0.4 (0.7)1
174	Greater than 50.0% of mass 95	60.4
175	5.0 - 9.0% of mass 174	4.5 (7.5)1
176	Greater than 95.0%, but less than 101.0% of mass 174	58.9 (97.6)1
177	5.0 - 9.0% of mass 176	4.2 (7.1)2

1-Value is % of mass 174 2-Value is % of mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	VSTD010	BCAL8206	04/29/05	1140
02	VLCSB119B	G9LN51AC	BLCS8207	04/29/05	1231
03	VBLKB119B	G9LN51AA	BBLK8209	04/29/05	1345
04	58923	G800L1AC	BSMP8213	04/29/05	1625
05	58923MS	G800L1AF	BSMP8214	04/29/05	1702
06	58923MSD	G800L1AG	BSMP8215	04/29/05	1739
07	58924	G80091AA	BSMP8216	04/29/05	1816
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220218

Lab File ID: LBFB0582 BFB Injection Date: 05/02/05

Instrument ID: MSL BFB Injection Time: 1052

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.2
75	30.0 - 60.0% of mass 95	51.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	55.6
175	5.0 - 9.0% of mass 174	4.2 (7.5)1
176	Greater than 95.0%, but less than 101.0% of mass 174	53.3 (95.8)1
177	5.0 - 9.0% of mass 176	3.8 (7.1)2

1-Value is % of mass 174 2-Value is % of mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	VSTD010	LCAL0584	05/02/05	1413
02	VLCSL122B	G9PD41AC	LLCS0585	05/02/05	1458
03	VBLKL122B	G9PD41AA	LBLK0587	05/02/05	1544
04	58923RE	G800L2AC	LSMP0600	05/02/05	2107
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220218

Lab File ID (Standard): BCAL8206 Date Analyzed: 04/29/05

Instrument ID: MSB Time Analyzed: 1140

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

		IS1 AREA #	RT	IS2(CBZ) AREA #	RT	IS3 AREA #	RT
	12 HOUR STD	8037558	14.20	2283738	20.86	2972629	25.38
	UPPER LIMIT	16075116	14.70	4567476	21.36	5945258	25.88
	LOWER LIMIT	4018779	13.70	1141869	20.36	1486315	24.88
	EPA SAMPLE NO.						
01	VLCSB119B	9029228	14.19	2560295	20.86	3298956	25.37
02	VBLKB119B	8990752	14.20	2135403	20.85	2871629	25.39
03	58923	7556270	14.19	1850280	20.86	2476570	25.37
04	58923MS	7433401	14.20	1828405	20.86	2616114	25.38
05	58923MSD	7920941	14.21	1890214	20.86	2678238	25.38
06	58924	8026122	14.20	1864934	20.86	2602456	25.37
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = Fluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 = 1,4 Dichlorobenzene-d4

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk.

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220218

Lab File ID (Standard): LCAL0584 Date Analyzed: 05/02/05

Instrument ID: MSL Time Analyzed: 1413

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

		IS1 AREA #	RT	IS2(CBZ) AREA #	RT	IS3 AREA #	RT
	12 HOUR STD	1740566	8.96	935569	10.70	342318	11.98
	UPPER LIMIT	3481132	9.46	1871138	11.20	684636	12.48
	LOWER LIMIT	870283	8.46	467785	10.20	171159	11.48
	EPA SAMPLE NO.						
01	VLCSL122B	1701973	8.96	894169	10.70	331148	11.99
02	VBLKL122B	1651662	8.97	830149	10.70	280613	11.99
03	58923RE	1563629	8.96	808311	10.70	281213	11.98
04							
05							
06							
07							
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09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = Fluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 = 1,4 Dichlorobenzene-d4

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk.

GC/MS STANDARDS DATA

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BBFB0018.D

Date : 20-APR-2005 11:03

Client ID: VBFB

Instrument: MSB.i

Sample Info: 50NG BFB;B050420A.b

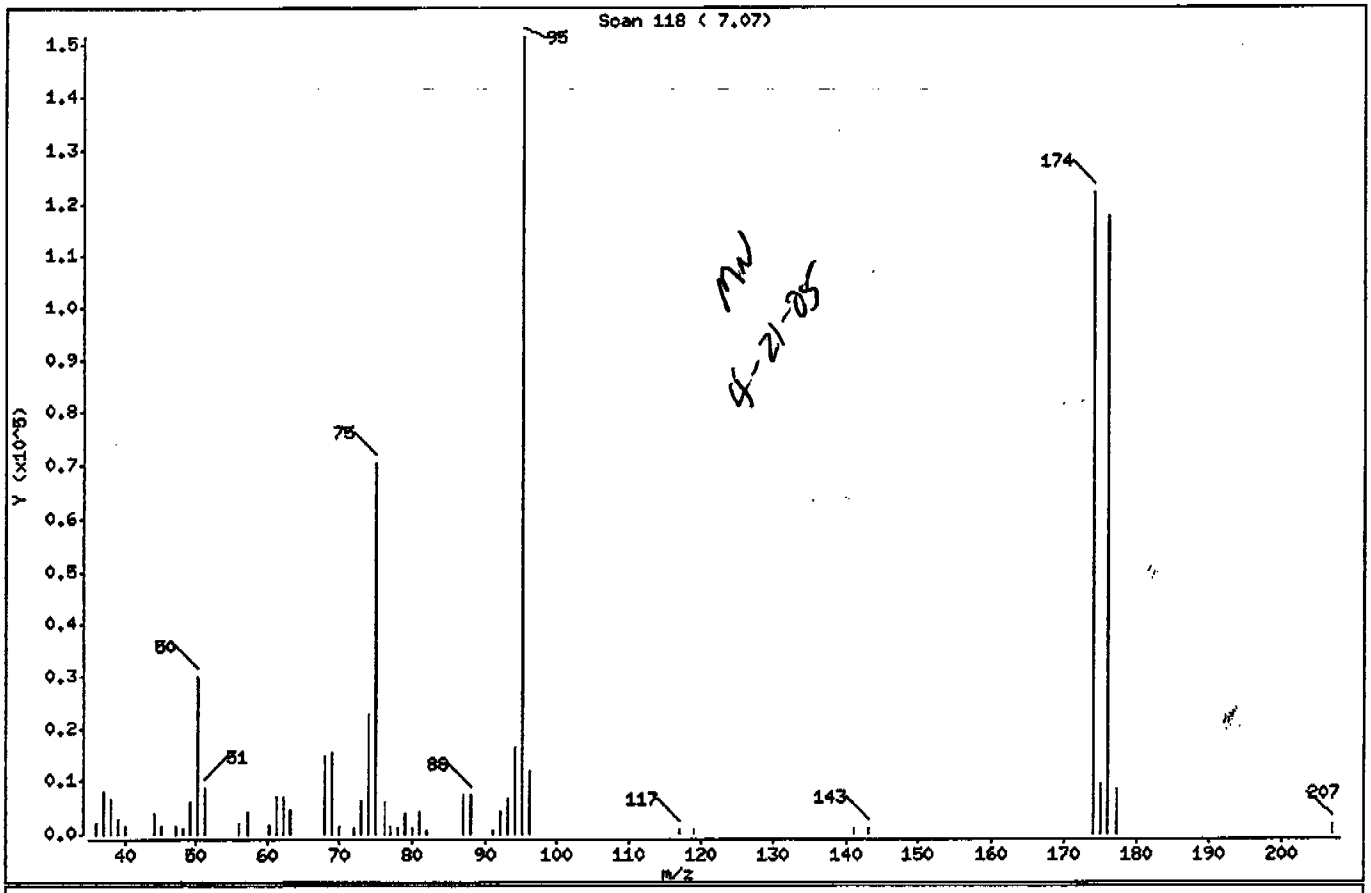
Volume Injected (uL): 2.0

Operator: MN

Column phase: RTX-502.2

Column diameter: 0.53

1 bfb



MN 4-21-05

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.88
75	30.00 - 60.00% of mass 95	46.52
96	5.00 - 9.00% of mass 95	7.80
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	80.62
175	5.00 - 9.00% of mass 174	6.30 (7.81)
176	95.00 - 101.00% of mass 174	77.71 (96.40)
177	5.00 - 9.00% of mass 176	5.45 (7.02)

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BBFB8018.D

Date : 20-APR-2005 11:03

Client ID: VBFB

Instrument: MSB.i

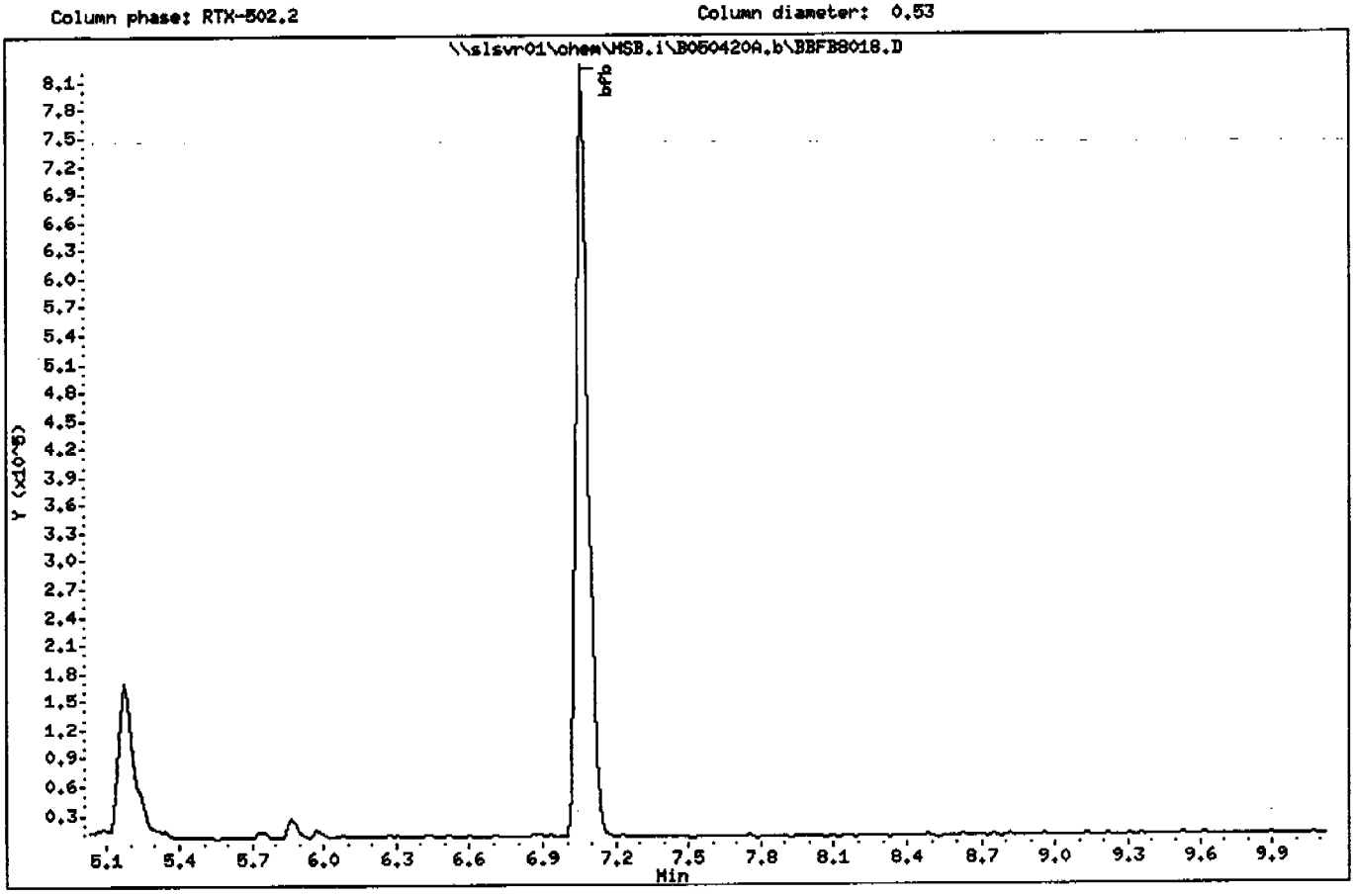
Sample Info: 50NG BFB;B050420A.b

Volume Injected (uL): 2.0

Operator: MN

Column phase: RTX-502.2

Column diameter: 0.53



Data File: \\slsvr01\chem\MSB.i\B050420A.b\BBFB8018.D

Date : 20-APR-2005 11:03

Client ID: VBFB

Instrument: MSB.i

Sample Info: 50NG BFB;B050420A.b

Volume Injected (uL): 2.0

Operator: MN

Column phase: RTX-502.2

Column diameter: 0.53

Data File: BBFB8018.D
Spectrum: Scan 118 (7.07)
Location of Maximum: 95.15
Number of points: 49

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	1998	57.15	4012	77.10	1416	96.10	11800
37.10	7849	60.15	1707	78.10	1148	117.05	762
38.10	6620	61.15	7054	79.00	3961	119.05	752
39.10	2863	62.15	6889	80.05	1185	141.10	1038
40.10	1221	63.15	4675	81.05	4168	143.05	1087
44.10	3794	68.10	14559	81.95	789	174.05	121920
45.10	1481	69.10	15287	87.05	7287	175.05	9521
47.20	1567	70.10	1511	88.05	7349	176.05	117528
48.10	963	72.10	961	91.15	756	177.15	8245
49.05	5757	73.10	6365	92.15	4063	207.15	1804
50.05	30072	74.10	22744	93.15	6511		
51.15	8709	75.10	70352	94.15	16283		
56.05	2131	76.20	5754	95.15	151232		

Report Date : 21-Apr-2005 07:54

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 20-APR-2005 11:29
End Cal Date : 20-APR-2005 15:12
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Cal Date : 20-Apr-2005 20:28 mahmoodt

MJ 4-21-05

Calibration File Names:
Level 1: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8019.D
Level 2: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8020.D
Level 3: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8021.D
Level 4: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8022.D
Level 5: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8023.D
Level 6: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8024.D
Level 7: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8025.D

Compound	0.5000000 Level 1	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	30.0000 Level 7										
1 Dichlorodifluoromethane	0.32425	0.29481	0.29740	0.31596	0.30050	0.27281					
	0.29231						AVRG		0.29972		5.57415
2 Chloromethane	0.28845	0.27543	0.26843	0.27107	0.26614	0.24917					
	0.25367						AVRG		0.26748		4.93309
3 Vinyl Chloride	0.14108	0.12045	0.12092	0.12781	0.12459	0.11684					
	0.12688						AVRG		0.12551		6.27514
4 Bromomethane	107929	178663	323212	563668	1464193	2979072					
	4581810						LINR	-0.03451	0.18908		0.99977

Report Date : 21-Apr-2005 07:54

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 20-APR-2005 11:29
End Cal Date : 20-APR-2005 15:12
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Cal Date : 20-Apr-2005 20:28 mahmoodt

	Compound	0.5000000 Level 1	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	30.0000 Level 7	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2	
5	Chloroethane	0.17950	0.15022	0.14837	0.15544	0.14827	0.13951	0.14276	AVRG		0.15201		8.65948	
6	Acrolein	0.00254	0.00169	0.00216	0.00223	0.00247	0.00244	+++++	AVRG		0.00226		13.85433	
7	Trichlorofluoromethane	0.36575	0.31086	0.34728	0.36251	0.35436	0.33074	0.35868	AVRG		0.34717		5.70374	
8	Acetonitrile	+++++	0.00778	0.00825	0.00681	0.00733	0.00682	0.00729	AVRG		0.00738		7.61093	<-
M 9	1,2-Dichloroethene (total)	0.22898	0.22238	0.24644	0.25114	0.25140	0.23734	0.24279	AVRG		0.24007		4.63269	
10	Acetone	42067	35146	46972	70513	141543	277231	424179	LINR	-0.21925	0.01632		0.99867	
11	1,1-Dichloroethene	0.21083	0.18200	0.20967	0.22452	0.22878	0.21725	0.23418	AVRG		0.21532		8.01694	

Report Date : 21-Apr-2005 07:54

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 20-APR-2005 11:29
End Cal Date : 20-APR-2005 15:12
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Cal Date : 20-Apr-2005 20:28 mahmoodt

Compound	0.5000000 Level 1 / 30.0000 Level 7	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
12 Iodomethane	59377	116181	316078	676714	2030371	4213252					
	7039531						LINR	0.05430	0.29298		0.99843
13 Acrylonitrile	0.01512	0.01303	0.01731	0.01682	0.01843	0.01870					
	0.02053						AVRG		0.01714		14.43533
14 Methylene Chloride	144066	207534	375783	665134	1568250	3156812					
	5218020						LINR	-0.03162	0.21073		0.99829
15 1,1,2-Trichlorofluoroethane	0.25720	0.21464	0.24228	0.25608	0.24248	0.22961					
	0.25059						AVRG		0.24184		6.32794
16 Allyl chloride	0.16240	0.16185	0.17550	0.20703	0.19652	0.19234					
	0.20128						AVRG		0.18527		10.03398
17 Carbon Disulfide	212682	434232	1145817	2291970	6020482	12476746					
	21281699						LINR	0.03897	0.87515		0.99733
18 trans-1,2-Dichloroethene	0.22417	0.22230	0.24662	0.25422	0.25227	0.23984					
	0.25255						AVRG		0.24171		5.59437

Report Date : 21-Apr-2005 07:54

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 20-APR-2005 11:29
End Cal Date : 20-APR-2005 15:12
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Cal Date : 20-Apr-2005 20:28 mahmoodt

Compound	0.5000000 Level 1	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	30.0000 Level 7											
19 1,1-Dichloroethane	0.39220	0.37826	0.41089	0.42636	0.41911	0.40264						
	0.42890						AVRG		0.40834		4.54623	
20 Propionitrile	8749	18407	44008	78650	233043	526449						
	902046						LINR	0.35235	0.00747		0.99621	
21 Vinyl acetate	32037	60771	141061	307203	923247	1994984						
	3665253						LINR	0.09476	0.15084		0.99134	
22 2-Chloro-1,3-butadiene	0.27215	0.27547	0.29927	0.34444	0.32991	0.32234						
	0.34626						AVRG		0.31284		9.88164	
23 2-Butanone	++++++	0.22062	0.24633	0.26023	0.28047	0.25896						
	0.28353						AVRG		0.25836		8.98639	<-
24 Methacrylonitrile	0.03146	0.03115	0.03460	0.03730	0.03754	0.03717						
	0.03892						AVRG		0.03545		8.76771	
25 cis-1,2-Dichloroethene	0.23380	0.22245	0.24627	0.24806	0.25053	0.23483						
	0.23303						AVRG		0.23842		4.26130	

Report Date : 21-Apr-2005 07:54

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 20-APR-2005 11:29
End Cal Date : 20-APR-2005 15:12
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Cal Date : 20-Apr-2005 20:28 mahmoodt

Compound	0.5000000 Level 1	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	30.0000 Level 7	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
26 Bromochloromethane	0.08624	0.08517	0.08344	0.09193	0.09238	0.08885	0.08832	AVRG		0.08805		3.80651
27 Chloroform	0.42059	0.38566	0.40429	0.40588	0.39916	0.37489	0.38136	AVRG		0.39597		4.05618
28 Ethyl Acetate	45609	77854	169333	339584	875617	1848237	3028578	LINR	-0.00782	0.06183		0.99799
30 Isobutanol	70145	55149	113216	234764	582543	1211129	1965255	LINR	-0.20071	0.00402		0.99871
32 1,2-Dichloroethane	0.19830	0.18236	0.19366	0.18931	0.18852	0.17624	0.17604	AVRG		0.18635		4.56528
33 1,1,1-Trichloroethane	0.31684	0.29693	0.34910	0.34952	0.35658	0.34333	0.35554	AVRG		0.33826		6.68876
34 Carbon Tetrachloride	0.23907	0.23414	0.27863	0.28348	0.29359	0.28147	0.29259	AVRG		0.27185		9.10190

Report Date : 21-Apr-2005 07:54

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 20-APR-2005 11:29
End Cal Date : 20-APR-2005 15:12
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Cal Date : 20-Apr-2005 20:28 mahmoodt

Compound	0.5000000 Level 1	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
	30.0000 Level 7										
35 Benzene	1.14204	1.08140	1.12414	1.06396	1.04054	0.96403					
	0.94285						AVRG		1.05128		7.17089
37 Dibromomethane	0.07272	0.07291	0.07906	0.07642	0.07831	0.07844					
	0.07910						AVRG		0.07671		3.65675
38 1,2-Dichloropropane	0.23510	0.22958	0.23830	0.23423	0.23418	0.22575					
	0.23514						AVRG		0.23318		1.78555
39 Trichloroethene	0.29311	0.29376	0.29140	0.29378	0.29090	0.27661					
	0.27416						AVRG		0.28767		2.95353
40 1-Nitropropane	6203	12643	30880	64804	202671	496191					
	835352						LINR	0.09872	0.03504		0.99609
41 Bromodichloromethane	0.19170	0.21127	0.23654	0.24561	0.26520	0.25853					
	0.26414						AVRG		0.23900		11.77903
42 1,4-Dioxane	0.00078	0.00072	0.00062	0.00074	0.00074	0.00076					
	0.00081						AVRG		0.00074		7.94925

Report Date : 21-Apr-2005 07:54

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 20-APR-2005 11:29
End Cal Date : 20-APR-2005 15:12
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Cal Date : 20-Apr-2005 20:28 mahmoodt

	Compound	0.5000000 Level 1	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
		30.0000 Level 7										
	43 Methyl methacrylate	0.04541	0.05025	0.05097	0.05644	0.05760	0.06122					
		0.06400						AVRG		0.05513		11.92220
	44 2-Chloroethyl Vinyl Ether	0.03816	0.02845	0.03702	0.02529	0.03150	0.04526					
		0.05161						AVRG		0.03675		25.40867
	45 cis-1,3-Dichloropropene	65633	163589	357337	772699	2142713	4592784					
		7452665						LINR	0.04031	0.31059		0.99945
	46 4-Methyl-2-pentanone	0.06604	0.06631	0.06561	0.06866	0.07340	0.07303					
		0.08021						AVRG		0.07046		7.63760
	47 trans-1,3-Dichloropropene	40367	99604	220075	477619	1404815	3065407					
		5107907						LINR	0.01655	0.79834		0.99837
M	48 Xylenes (total)	2.48695	2.38283	2.53861	2.42595	2.30879	2.06272					
		1.96785						AVRG		2.31053		9.35857
	49 1,1,2-Trichloroethane	0.47922	0.52268	0.51481	0.51577	0.51523	0.49088					
		0.47047						AVRG		0.50129		4.14448

Report Date : 21-Apr-2005 07:54

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 20-APR-2005 11:29
End Cal Date : 20-APR-2005 15:12
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Cal Date : 20-Apr-2005 20:28 mahmoodt

Compound	0.5000000 Level 1	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	30.0000 Level 7	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
51 Toluene	5.21454	5.30755	5.51721	5.31265	5.15944	4.51814	3.63836	AVRG		4.95256		13.29632
52 Ethyl methacrylate	0.45600	0.53412	0.57992	0.61932	0.65909	0.65751	0.64893	AVRG		0.59356		12.82287
53 2-Hexanone	0.04495	0.04565	0.04422	0.04592	0.05027	0.05153	0.05925	AVRG		0.04883		10.99214
54 Chlorodibromomethane	27870	57771	140438	301369	905435	2017259	3472672	LINR	0.03444	0.53938		0.99955
55 1,2-Dibromoethane	0.36867	0.38791	0.43157	0.42524	0.44618	0.44024	0.43567	AVRG		0.41935		6.99537
56 Tetrachloroethene	1.31585	1.21407	1.40581	1.39319	1.28323	1.21985	0.99567	AVRG		1.26110		11.03720
57 1,1,1,2-Tetrachloroethane	0.65482	0.69044	0.79541	0.80459	0.83912	0.80369	0.80720	AVRG		0.77075		8.97803

Report Date : 21-Apr-2005 07:54

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 20-APR-2005 11:29
End Cal Date : 20-APR-2005 15:12
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Cal Date : 20-Apr-2005 20:28 mahmoodt

Compound	0.5000000 Level 1	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	Coefficients m1	m2	%RSD or R^2
	30.0000 Level 7										
59 Chlorobenzene	3.37638	3.30748	3.46598	3.16403	3.08907	2.78514					
	2.68500						AVRG		3.12473		9.46366
60 Ethylbenzene	2.17861	2.00510	2.13869	2.03696	1.98218	1.81349					
	1.81194						AVRG		1.99528		7.17117
61 m,p-Xylenes	2.50831	2.42791	2.57993	2.47364	2.32591	2.08203					
	1.93783						AVRG		2.33365		10.19597
62 Bromoform	10577	23478	52728	112002	356650	861013					
	1554833						LINR	0.07387	0.24039		0.99885
63 Styrene	3.07618	2.99381	3.25360	3.16902	3.18916	2.95358					
	2.84976						AVRG		3.06930		4.71413
64 1,1,2,2-Tetrachloroethane	0.48012	0.47502	0.48335	0.48557	0.49848	0.46321					
	0.50313						AVRG		0.48413		2.80485
65 o-Xylene	2.44424	2.29266	2.45596	2.33057	2.27456	2.02408					
	2.02789						AVRG		2.26428		7.81775

Report Date : 21-Apr-2005 07:54

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 20-APR-2005 11:29
End Cal Date : 20-APR-2005 15:12
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Cal Date : 20-Apr-2005 20:28 mahmoodt

Compound	0.5000000 Level 1	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
	30.0000 Level 7										
66 1,2,3-Trichloropropane	0.09378	0.08578	0.09290	0.08818	0.08996	0.08736					
	0.09357						AVRG		0.09022		3.59775
67 trans-1,4-dichloro-2-butene	0.06018	0.07348	0.06831	0.07218	0.08181	0.08253					
	0.09350						AVRG		0.07600		14.34514
68 Isopropylbenzene	1.44917	1.26015	1.29271	1.33154	1.28548	1.09560					
	0.97231						AVRG		1.24099		12.73607
70 n-Propylbenzene	2.21369	1.74933	1.79843	1.86428	1.78666	1.35392					
	+++++						AVRG		1.79438		15.29904
71 2-Chlorotoluene	1.12706	1.01345	1.01965	1.03587	1.01689	0.90157					
	0.86448						AVRG		0.99700		8.80832
72 4-Chlorotoluene	1.07641	0.97784	1.00950	1.00644	0.99618	0.89739					
	0.87357						AVRG		0.97676		7.14324
73 1,3,5-Trimethylbenzene	1.26561	1.13312	1.17328	1.22128	1.19170	1.05691					
	0.99209						AVRG		1.14771		8.30990

Report Date : 21-Apr-2005 07:54

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 20-APR-2005 11:29
End Cal Date : 20-APR-2005 15:12
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Cal Date : 20-Apr-2005 20:28 mahmoodt

Compound	0.5000000 Level 1 / 30.0000 Level 7	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
74 Pentachloroethane	0.20127 +++++	0.20852	0.21816	0.20851	0.29359	0.23970	AVRG		0.22829		15.18507
75 t-Butylbenzene	1.15468 0.89730	1.00195	1.03800	1.08613	1.05176	0.92730	AVRG		1.02244		8.72777
76 1,2,4-Trimethylbenzene	1.23891 0.99065	1.11393	1.13178	1.20208	1.17978	1.04648	AVRG		1.12909		7.77034
77 sec-Butylbenzene	1.78280 +++++	1.57811	1.64340	1.73600	1.65537	1.33748	AVRG		1.62219		9.68050
78 1,3-Dichlorobenzene	1.88876 1.52059	1.72589	1.80373	1.72103	1.67964	1.55450	AVRG		1.69916		7.64586
80 1,4-Dichlorobenzene	1.79005 1.46501	1.73167	1.75281	1.72103	1.63165	1.49774	AVRG		1.65571		7.77418
81 1,2-Dichlorobenzene	1.48558 1.24067	1.31360	1.39329	1.33117	1.34297	1.22824	AVRG		1.33365		6.62874

Report Date : 21-Apr-2005 07:54

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 20-APR-2005 11:29
End Cal Date : 20-APR-2005 15:12
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Cal Date : 20-Apr-2005 20:28 mahmoodt

Compound	0.5000000 Level 1	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	30.0000 Level 7	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
82 1,2-Dibromo-3-chloropropane	3140	6182	15719	33154	102616	231628	432193	LINR	0.08009	0.04791		0.99688
83 1,2,4-Trichlorobenzene	0.85176	0.81793	0.91862	0.93382	0.95961	0.89790	0.86724	AVRG		0.89241		5.56171
84 Naphthalene	0.97085	0.87856	0.98672	1.02760	1.08058	1.08030	1.06939	AVRG		1.01343		7.32128
85 Hexachlorobutadiene	0.63164	0.54585	0.66676	0.66627	0.67919	0.64489	0.60361	AVRG		0.63403		7.33467
86 1,2,3-Trichlorobenzene	0.68034	0.65571	0.70511	0.74366	0.76675	0.71443	0.68362	AVRG		0.70709		5.43495
$ 29 Dibromofluoromethane	0.15547	0.18197	0.18390	0.18977	0.19232	0.18572	0.18252	AVRG		0.18167		6.69450
$ 31 1,2-Dichloroethane-d4	0.13437	0.15418	0.15585	0.14772	0.15026	0.14413	0.14137	AVRG		0.14684		5.12949

Report Date : 21-Apr-2005 07:54

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INITIAL CALIBRATION DATA

Start Cal Date : 20-APR-2005 11:29
End Cal Date : 20-APR-2005 15:12
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Cal Date : 20-Apr-2005 20:28 mahmoodt

Compound	0.5000000 Level 1	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	30.0000 Level 7	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
$ 50 Toluene-d8	3.26353	4.33988	4.04922	4.01430	3.93959	3.62195						
	3.15279							AVRG		3.76875		11.61922
$ 69 4-Bromofluorobenzene	1.01916	1.11285	1.01275	0.94094	0.96425	0.89721						
	0.92470							AVRG		0.98169		7.42985

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response

Data File: \\slsvr01\chem\MSB.i\B050420A.b/BCAL8023.D Pa
Report Date: 04/21/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSB.i
Lab File ID: BCAL8023.D
Analysis Type: WATER

Injection Date: 20-APR-2005 13:58
Lab Sample ID: VSTD010
Method File: \\slsvr01\chem\MSB.i\B050420A.b\8260B-2

COMPOUND	%D
Dichlorodifluoromethane	0.3
Chloromethane	0.5
Vinyl Chloride	0.7
Bromomethane	3.8
Chloroethane	2.5
Trichlorofluoromethane	2.1
Acrolein	9.6
Acetonitrile	0.7
1,2-Dichloroethene (total)	4.7
Acetone	1.9
1,1-Dichloroethene	6.3
Iodomethane	1.4
Acrylonitrile	7.6
Methylene Chloride	0.1
1,1,2-Trichlorofluoroethane	0.3
Allyl chloride	6.1
Carbon Disulfide	0.9
trans-1,2-Dichloroethene	4.4
1,1-Dichloroethane	2.6
Propionitrile	6.5
Vinyl acetate	5.8
2-Chloro-1,3-butadiene	5.5
2-Butanone	8.6
Methacrylonitrile	5.9
cis-1,2-Dichloroethene	5.1
Bromochloromethane	4.9
Chloroform	0.8
Ethyl Acetate	2.4
Dibromofluoromethane	5.9
Isobutanol	0.6
1,2-Dichloroethane-d4	2.3
1,2-Dichloroethane	1.2
1,1,1-Trichloroethane	5.4
Carbon Tetrachloride	8.0
Benzene	1.0
Dibromomethane	2.1
1,2-Dichloropropane	0.4
Trichloroethene	1.1
1-Nitropropane	10.0

STL ST LOUIS

Data File: \\slsvr01\chem\MSB.i\B050420A.b/BCAL8023.D
Report Date: 04/21/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSB.i
Lab File ID: BCAL8023.D
Analysis Type: WATER

Injection Date: 20-APR-2005 13:58
Lab Sample ID: VSTD010
Method File: \\slsvr01\chem\MSB.i\B050420A.b\

COMPOUND	%D
Bromodichloromethane	11.0
1,4-Dioxane	0.6
Methyl methacrylate	4.5
2-Chloroethyl Vinyl Ether	14.3
cis-1,3-Dichloropropene	0.5
4-Methyl-2-pentanone	4.2
trans-1,3-Dichloropropene	5.4
Xylenes (total)	0.1
1,1,2-Trichloroethane	2.8
Toluene-d8	4.5
Toluene	4.2
Ethyl methacrylate	11.0
2-Hexanone	3.0
Chlorodibromomethane	2.4
1,2-Dibromoethane	6.4
Tetrachloroethene	1.8
1,1,1,2-Tetrachloroethane	8.9
Chlorobenzene	1.1
Ethylbenzene	0.7
m,p-Xylenes	0.3
Bromoform	5.2
Styrene	3.9
1,1,2,2-Tetrachloroethane	3.0
o-Xylene	0.5
1,2,3-Trichloropropane	0.3
trans-1,4-dichloro-2-butene	7.6
Isopropylbenzene	3.6
4-Bromofluorobenzene	1.8
n-Propylbenzene	0.4
2-Chlorotoluene	2.0
4-Chlorotoluene	2.0
1,3,5-Trimethylbenzene	3.8
Pentachloroethane	28.6
t-Butylbenzene	2.9
1,2,4-Trimethylbenzene	4.5
sec-Butylbenzene	2.0
1,3-Dichlorobenzene	1.1
1,4-Dichlorobenzene	1.5
1,2-Dichlorobenzene	0.7

STL ST LOUIS

Data File: \\slsvr01\chem\MSB.i\B050420A.b/BCAL8023.D
Report Date: 04/21/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSB.i
Lab File ID: BCAL8023.D
Analysis Type: WATER

Injection Date: 20-APR-2005 13:58
Lab Sample ID: VSTD010
Method File: \\slsvr01\chem\MSB.i\B050420A.b\

COMPOUND	%D
1,2-Dibromo-3-chloropropane	4.8
1,2,4-Trichlorobenzene	7.5
Naphthalene	6.6
Hexachlorobutadiene	7.1
1,2,3-Trichlorobenzene	8.4

The average of %D's in the continuing calibration is 4.1

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8019.D
Report Date: 20-Apr-2005 16:28

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSB.i\B050420A.b\BCAL8019.D
Lab Smp Id: VSTD000.5
Inj Date : 20-APR-2005 11:29
Operator : MN Inst ID: MSB.i
Smp Info : VSTD000.5;B050420A.b
Misc Info : VBLKB120A.B;
Comment : NONE
Method : \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Meth Date : 20-Apr-2005 16:26 mahmoodt Quant Type: ISTD
Cal Date : 20-APR-2005 11:29 Cal File: BCAL8019.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLVOA02

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

MN 4-27-05

Name	Value	Description
DF	1.000	Dilution Factor
Vod	25.000	Def Sample Volume (mL)
Vo	25.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	3.727	3.727	(0.263)	118038	0.50000	0.5409(a)
2	Chloromethane	50	3.964	3.964	(0.279)	105007	0.50000	0.5392
3	Vinyl Chloride	62	4.170	4.170	(0.294)	51357	0.50000	0.5556(M)
4	Bromomethane	94	4.683	4.683	(0.330)	107929	0.50000	0.6720
5	Chloroethane	64	4.880	4.880	(0.344)	65343	0.50000	0.5904
6	Acrolein	56	5.668	5.668	(0.399)	4631	2.50000	2.726(M)
7	Trichlorofluoromethane	101	5.668	5.668	(0.399)	133145	0.50000	0.5268
M 9	1,2-Dichloroethene (total)	96				166717	1.00000	0.9540
10	Acetone	43	5.894	5.894	(0.415)	42067	0.50000	1.347
11	1,1-Dichloroethene	96	6.525	6.525	(0.460)	76748	0.50000	0.4896
12	Iodomethane	142	6.574	6.574	(0.463)	59377	0.50000	0.8214
13	Acrylonitrile	53	6.662	6.662	(0.470)	27515	2.50000	2.205
14	Methylene Chloride	84	6.790	6.790	(0.479)	144066	0.50000	0.6227
15	1,1,2-Trichlorofluoroethane	101	6.889	6.889	(0.486)	93630	0.50000	0.5318(aA)
16	Allyl chloride	39	6.958	6.958	(0.490)	59120	0.50000	0.4383
18	trans-1,2-Dichloroethene	96	8.110	8.110	(0.572)	81607	0.50000	0.4637
19	1,1-Dichloroethane	63	8.682	8.682	(0.612)	142776	0.50000	0.4802(a)
20	Propionitrile	54	8.839	8.839	(0.623)	8749	2.50000	2.066(M)
21	Vinyl acetate	43	9.155	9.155	(0.645)	32037	0.50000	0.3928(aM)
22	2-Chloro-1,3-butadiene	53	9.637	9.637	(0.679)	99072	0.50000	0.4350(a)
24	Methacrylonitrile	41	10.179	10.179	(0.717)	57257	2.50000	2.218
25	cis-1,2-Dichloroethene	96	10.208	10.208	(0.720)	85110	0.50000	0.4903(a)

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8019.D
Report Date: 20-Apr-2005 16:28

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	26 Bromochloromethane	130	10.642	10.642	(0.750)	31396	0.50000	0.4898(aA)
	27 Chloroform	83	10.799	10.799	(0.761)	153108	0.50000	0.5311(a)
	28 Ethyl Acetate	43	10.957	10.957	(0.772)	45609	1.00000	0.9350(aAMH)
$	29 Dibromofluoromethane	113	11.115	11.115	(0.783)	56598	0.50000	0.4279(a)
	30 Isobutanol	42	11.686	11.686	(0.824)	70145	10.0000	20.18
$	31 1,2-Dichloroethane-d4	65	12.277	12.277	(0.865)	48915	0.50000	0.4575(a)
	32 1,2-Dichloroethane	62	12.464	12.464	(0.879)	72190	0.50000	0.5321(a)
	33 1,1,1-Trichloroethane	97	12.671	12.671	(0.893)	115341	0.50000	0.4683(a)
	34 Carbon Tetrachloride	117	13.528	13.528	(0.953)	87030	0.50000	0.4397(a)
	35 Benzene	78	13.656	13.656	(0.963)	415742	0.50000	0.5432(a)
*	36 Fluorobenzene	96	14.188	14.188	(1.000)	7280706	10.0000	
	37 Dibromomethane	93	14.937	14.937	(1.053)	26473	0.50000	0.4740(a)
	38 1,2-Dichloropropane	63	15.035	15.035	(1.060)	85586	0.50000	0.5041(a)
	39 Trichloroethene	130	15.134	15.134	(1.067)	106701	0.50000	0.5094(a)
	40 1-Nitropropane	43	15.232	15.232	(1.074)	6203	0.50000	1.230(A)
	41 Bromodichloromethane	83	15.242	15.242	(1.074)	69787	0.50000	0.4010(a)
	43 Methyl methacrylate	69	15.764	15.764	(1.111)	16530	0.50000	0.4118(a)
	44 2-Chloroethyl Vinyl Ether	63	16.296	16.296	(1.149)	13892	0.50000	0.5191(aM)
	45 cis-1,3-Dichloropropene	75	16.690	16.690	(1.176)	65633	0.50000	0.3463(a)
	46 4-Methyl-2-pentanone	43	17.005	17.005	(1.199)	24041	0.50000	0.4686(a)
	47 trans-1,3-Dichloropropene	75	17.596	17.596	(0.844)	40367	0.50000	0.3290(a)
M	48 Xylenes (total)	106				663842	1.50000	1.614
	49 1,1,2-Trichloroethane	97	17.872	17.872	(0.857)	42639	0.50000	0.4780(a)
$	50 Toluene-d8	98	18.108	18.108	(0.869)	290378	0.50000	0.4330(a)
	51 Toluene	91	18.256	18.256	(0.876)	463972	0.50000	0.5264(a)
	52 Ethyl methacrylate	69	18.552	18.552	(0.890)	40573	0.50000	0.3841(a)
	53 2-Hexanone	43	18.768	18.768	(1.323)	16365	0.50000	0.4603(aA)
	54 Chlorodibromomethane	129	18.837	18.837	(0.904)	27870	0.50000	0.3515(a)
	55 1,2-Dibromoethane	107	19.290	19.290	(0.925)	32803	0.50000	0.4396(a)
	56 Tetrachloroethene	164	19.645	19.645	(0.942)	117080	0.50000	0.5217(a)
	57 1,1,1,2-Tetrachloroethane	131	20.778	20.778	(0.997)	58264	0.50000	0.4248(a)
*	58 Chlorobenzene-d5	119	20.847	20.847	(1.000)	1779531	10.0000	
	59 Chlorobenzene	112	20.916	20.916	(1.003)	300419	0.50000	0.5403(a)
	60 Ethylbenzene	106	21.310	21.310	(1.022)	193845	0.50000	0.5459(a)
	61 m,p-Xylenes	106	21.674	21.674	(1.040)	446362	1.00000	1.075
	62 Bromoform	173	21.792	21.792	(1.045)	10577	0.50000	0.9860(a)
	63 Styrene	104	22.245	22.245	(1.067)	273708	0.50000	0.5011(a)
	64 1,1,2,2-Tetrachloroethane	83	22.354	22.354	(1.072)	42719	0.50000	0.4958(a)
	65 o-Xylene	106	22.373	22.373	(1.073)	217480	0.50000	0.5397(a)
	66 1,2,3-Trichloropropane	110	22.610	22.610	(0.891)	11842	0.50000	0.5197(a)
	67 trans-1,4-dichloro-2-butene	53	22.679	22.679	(0.894)	7599	0.50000	0.3959(a)
	68 Isopropylbenzene	105	23.014	23.014	(1.622)	527549	0.50000	0.5839(aA)
$	69 4-Bromofluorobenzene	95	23.063	23.063	(0.909)	128696	0.50000	0.5191(a)
	70 n-Propylbenzene	91	23.782	23.782	(1.676)	805862	0.50000	0.6168(aA)
	71 2-Chlorotoluene	91	23.920	23.920	(1.686)	410290	0.50000	0.5652(aA)
	72 4-Chlorotoluene	91	24.058	24.058	(1.696)	391852	0.50000	0.5510(aA)
	73 1,3,5-Trimethylbenzene	105	24.294	24.294	(1.712)	460726	0.50000	0.5514(aA)
	74 Pentachloroethane	167	24.373	24.373	(0.960)	25416	0.50000	0.4107(a)
	75 t-Butylbenzene	119	24.777	24.777	(1.746)	420345	0.50000	0.5647(aA)
	76 1,2,4-Trimethylbenzene	105	24.994	24.994	(1.762)	451007	0.50000	0.5486(aA)
	77 sec-Butylbenzene	105	25.161	25.161	(1.773)	649003	0.50000	0.5766(aA)
	78 1,3-Dichlorobenzene	146	25.299	25.299	(0.997)	238507	0.50000	0.5558(a)
*	79 1,4 Dichlorobenzene-d4	152	25.378	25.378	(1.000)	2525536	10.0000	
	80 1,4-Dichlorobenzene	146	25.427	25.427	(1.002)	226042	0.50000	0.5406(a)

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8019.D
Report Date: 20-Apr-2005 16:28

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
81 1,2-Dichlorobenzene	146	26.097	26.097	(1.028)	187594	0.50000	0.5570(a)
82 1,2-Dibromo-3-chloropropane	157	27.003	27.003	(1.064)	3140	0.50000	0.3599(aM)
83 1,2,4-Trichlorobenzene	180	29.810	29.810	(1.175)	107557	0.50000	0.4772(a)
84 Naphthalene	128	30.352	30.352	(1.196)	122596	0.50000	0.4834(a)
85 Hexachlorobutadiene	225	30.470	30.470	(1.201)	79762	0.50000	0.4981(a)
86 1,2,3-Trichlorobenzene	180	30.776	30.776	(1.213)	85911	0.50000	0.4811(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8019.D
Report Date: 20-Apr-2005 16:28

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

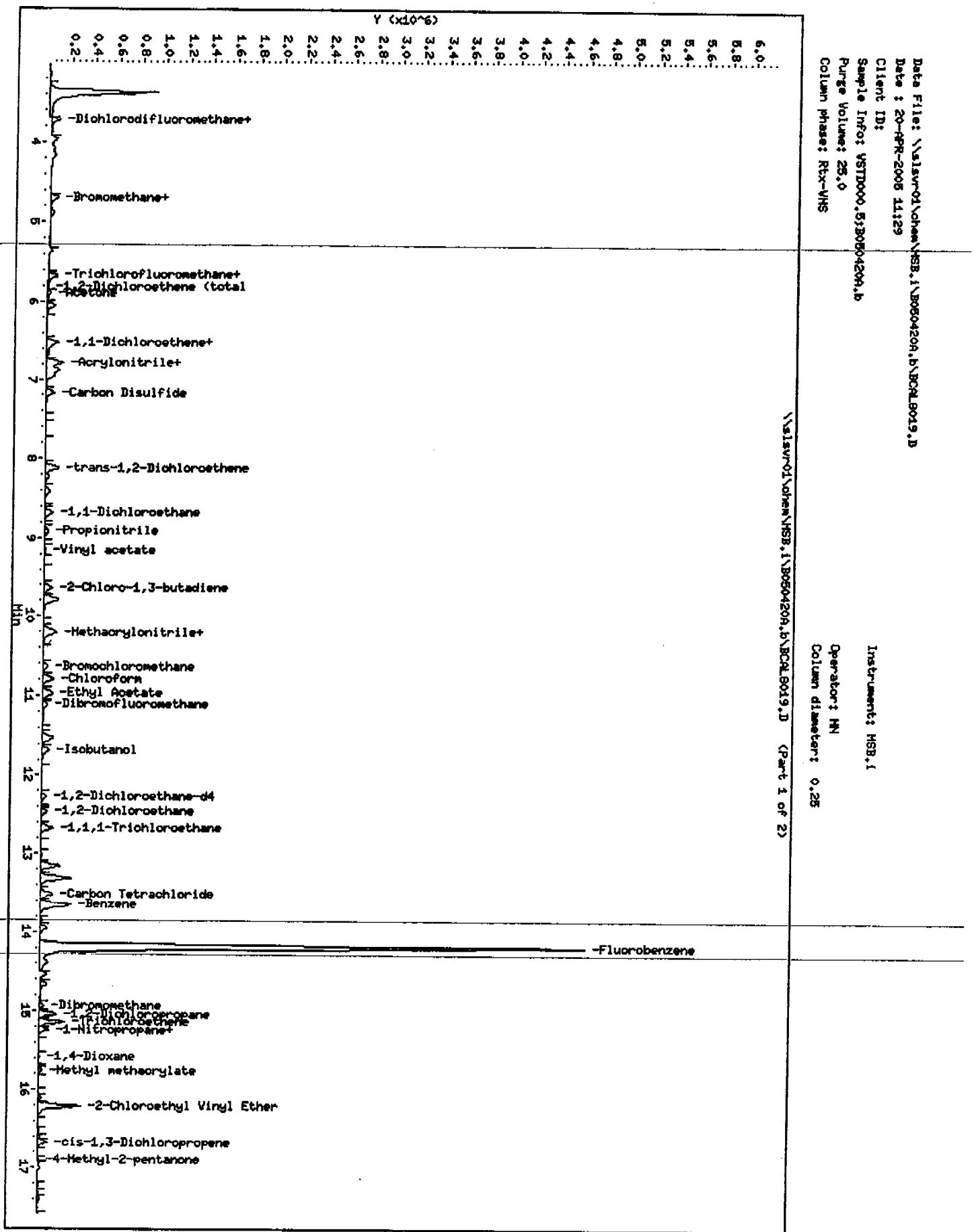
Instrument ID: MSB.i
Lab File ID: BCAL8019.D
Lab Smp Id: VSTD000.5
Analysis Type: VOA
Quant Type: ISTD
Operator: MN
Method File: \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Misc Info: VBLKB120A.B;

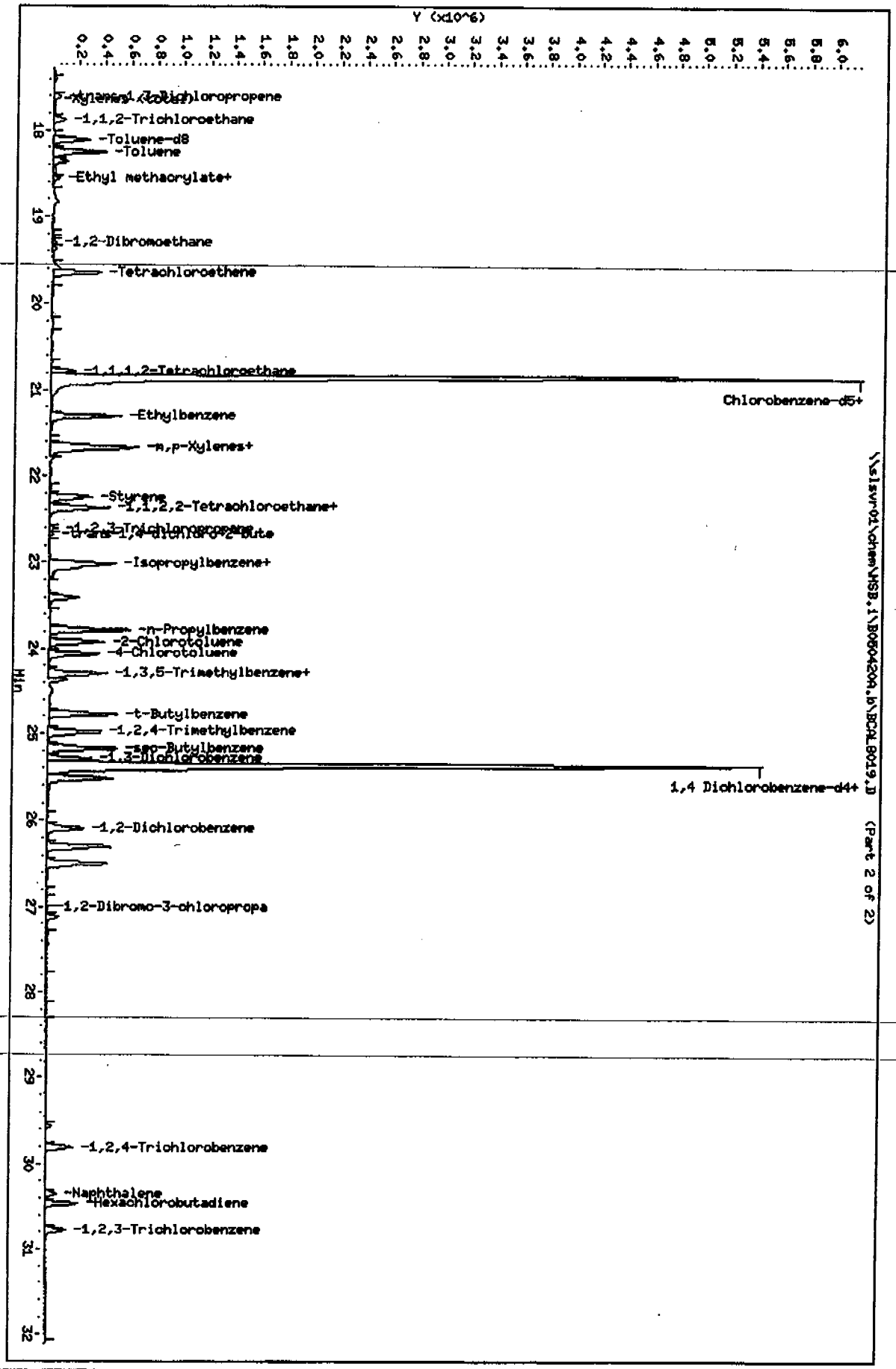
Calibration Date: 20-APR-2005
Calibration Time: 13:58
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	7222687	3611344	14445374	7280706	0.80
58 Chlorobenzene-d5	1696606	848303	3393212	1779531	4.89
79 1,4 Dichlorobenze	2455791	1227896	4911582	2525536	2.84

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	14.20	13.70	14.70	14.19	-0.05
58 Chlorobenzene-d5	20.87	20.37	21.37	20.85	-0.13
79 1,4 Dichlorobenze	25.39	24.89	25.89	25.38	-0.03

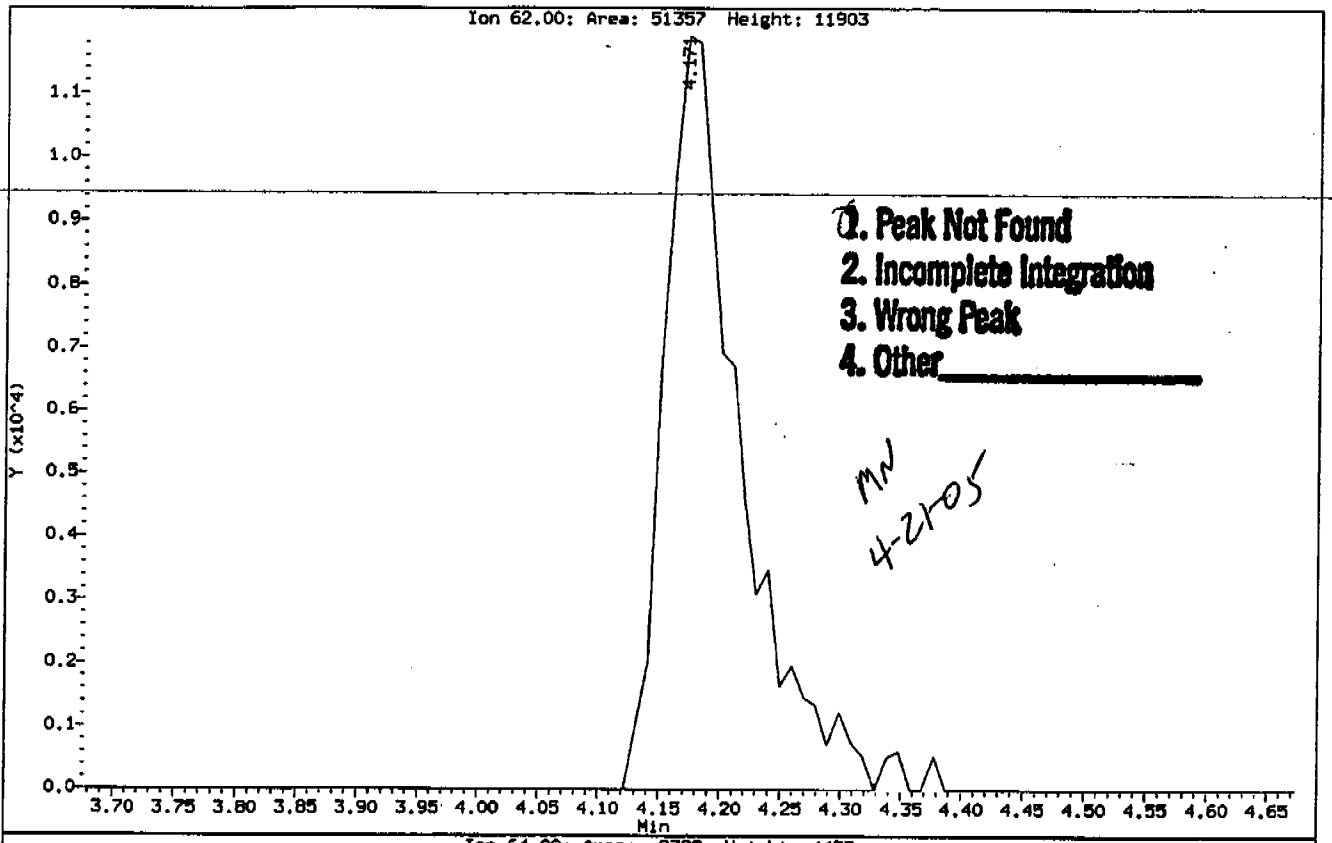
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

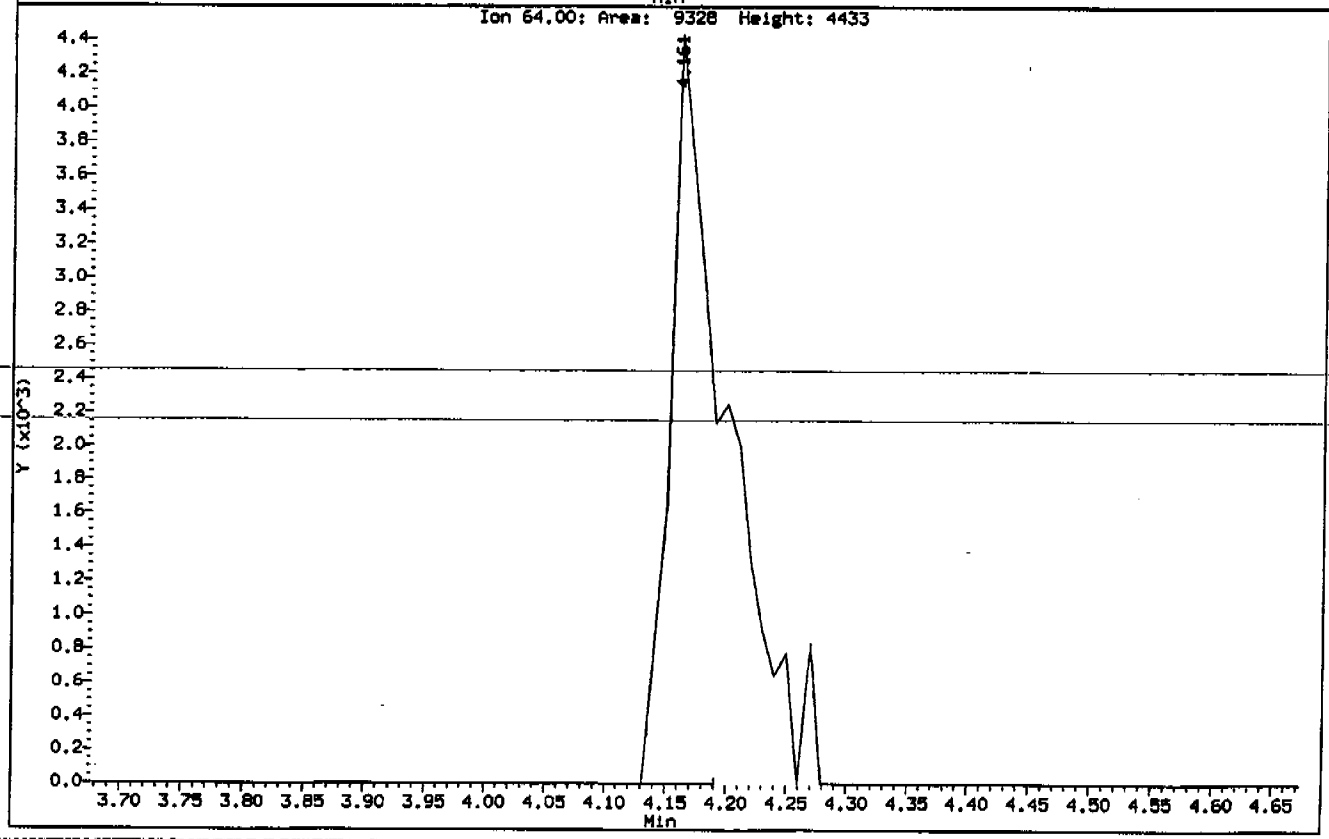

Y (x10^6)
0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0 3.2 3.4 3.6 3.8 4.0 4.2 4.4 4.6 4.8 5.0 5.2 5.4 5.6 5.8 6.0
Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL0019.D
Date : 20-APR-2005 11:29
Client ID:
Sample Info: VSTD000.5;B050420A.b
Purge Volume: 25.0
Column phase: Rtx-VMS
Instrument: MSB.i
Operator: MN
Column diameter: 0.25
\\slsvr01\chem\MSB.i\B050420A.b\BCAL0019.D (Part 1 of 2)
-Dichlorodifluoromethane+
-Bromomethane+
-Trichlorofluoromethane+
-1,2-Dichloroethene (total
-Acetone
-1,1-Dichloroethene+
-Acrylonitrile+
-Carbon Disulfide
-trans-1,2-Dichloroethene
-1,1-Dichloroethane
-Propionitrile
-Vinyl acetate
-2-Chloro-1,3-butadiene
-Methacrylonitrile+
-Bromochloromethane
-Chloroform
-Ethyl Acetate
-Dibromofluoromethane
-Isobutanol
-1,2-Dichloroethane-d4
-1,2-Dichloroethane
-1,1,1-Trichloroethane
-Carbon Tetrachloride
-Benzene
-Fluorobenzene
-Dibromomethane
-1,2-Dichloropropane
-Trichloroethene
-1-Nitropropane+
-1,4-Dioxane
-Methyl methacrylate
-2-Chloroethyl Vinyl Ether
-cis-1,3-Dichloropropene
-4-Methyl-2-pentanone
Min
4 5 6 7 8 9 10 11 12 13 14 15 16 17


Y (x10^6)
0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0 3.2 3.4 3.6 3.8 4.0 4.2 4.4 4.6 4.8 5.0 5.2 5.4 5.6 5.8 6.0
Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL0019.D
Date : 20-APR-2005 11:29
Client ID:
Sample Info: VSTD000.8;B050420A.b
Purge Volume: 25.0
Column phase: Rtx-VMS
Instrument: MSB.i
Operator: MN
Column diameter: 0.25
-Xylenes (total)
-1,1,2-Trichloroethane
-Toluene-d8
-Toluene
-Ethyl methacrylate+
-1,2-Dibromoethane
-Tetrachloroethene
-1,1,1,2-Tetrachloroethane
Chlorobenzene-d5+
-Ethylbenzene
-m,p-Xylenes+
-Styrene
-1,1,2,2-Tetrachloroethane+
-1,2,3-Trichloropropane
-trans-1,4-dichloro-2-bute
-Isopropylbenzene+
-n-Propylbenzene
-2-Chlorotoluene
-4-Chlorotoluene
-1,3,5-Trimethylbenzene+
-t-Butylbenzene
-1,2,4-Trimethylbenzene
-sec-Butylbenzene
-1,3-Dichlorobenzene
1,4 Dichlorobenzene-d4+
-1,2-Dichlorobenzene
1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Naphthalene
-Hexachlorobutadiene
-1,2,3-Trichlorobenzene
Min
18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
\\slsvr01\chem\MSB.i\B050420A.b\BCAL0019.D (Part 2 of 2)

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8019.D
Injection Date: 20-APR-2005 11:29
Instrument: MSB.i
Client Sample ID:

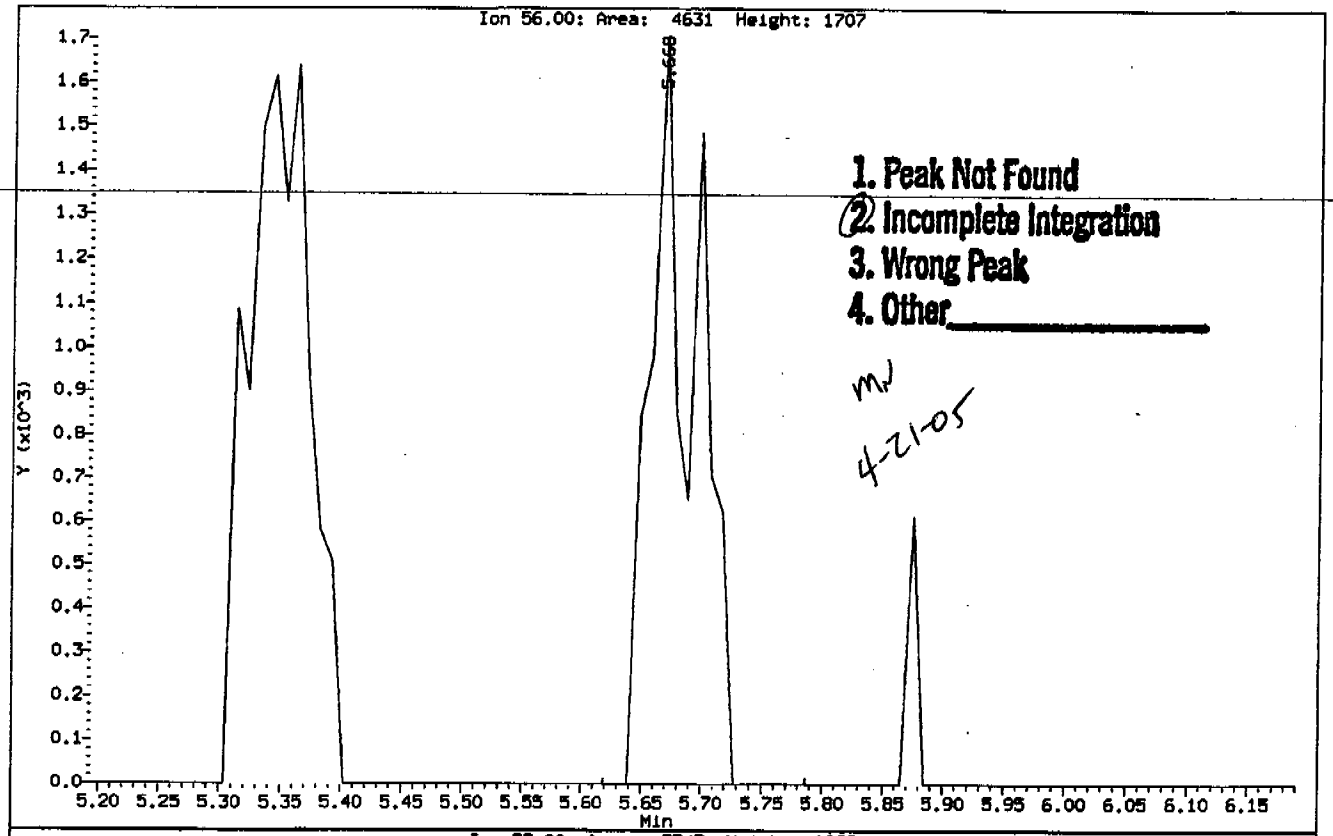
Compound: Vinyl Chloride
CAS Number: 75-01-4





Data File: \\elsvr01\chem\MSB.i\B050420A.b\BCAL8019.D
Injection Date: 20-APR-2005 11:29
Instrument: MSB.i
Client Sample ID:

Compound: Acrolein
CAS Number: 107-02-8



1. Peak Not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

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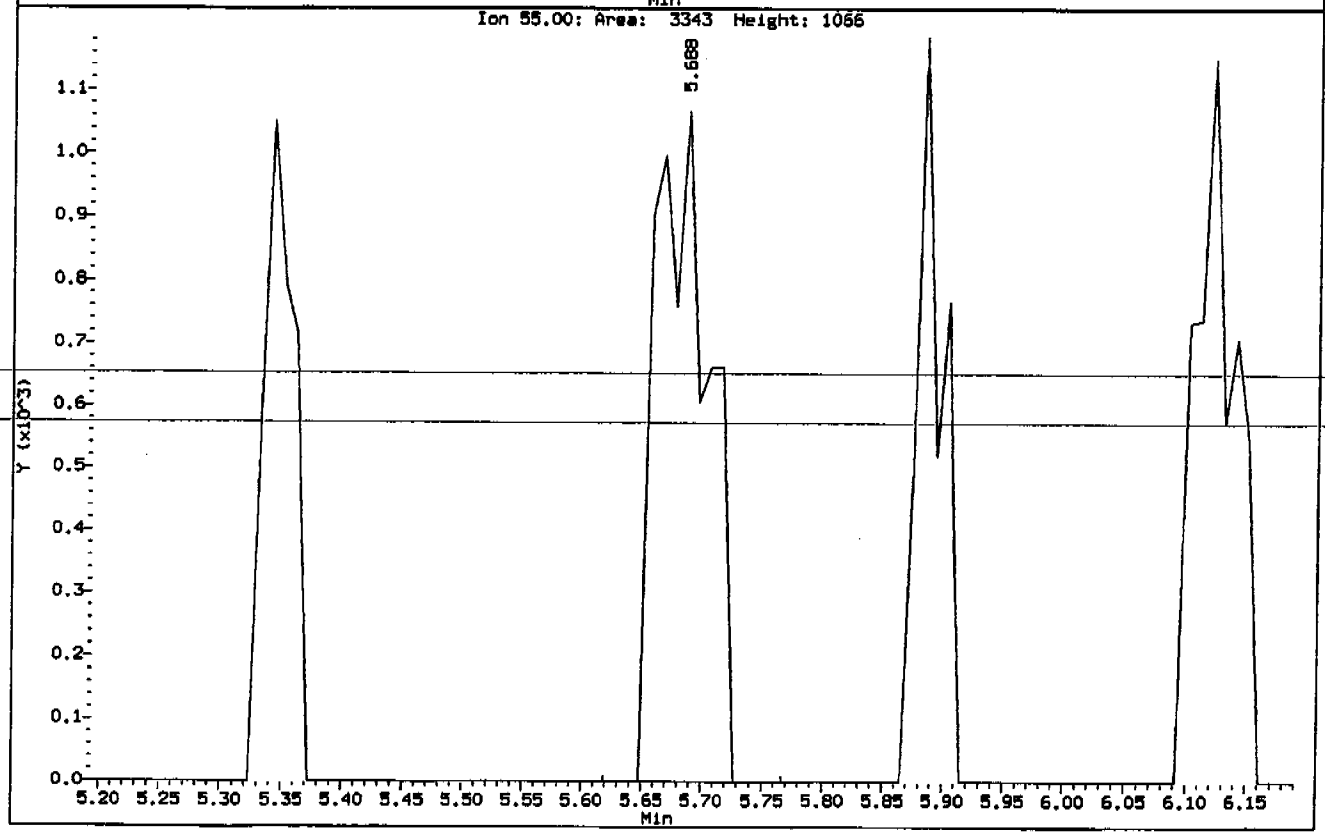
4-21-05



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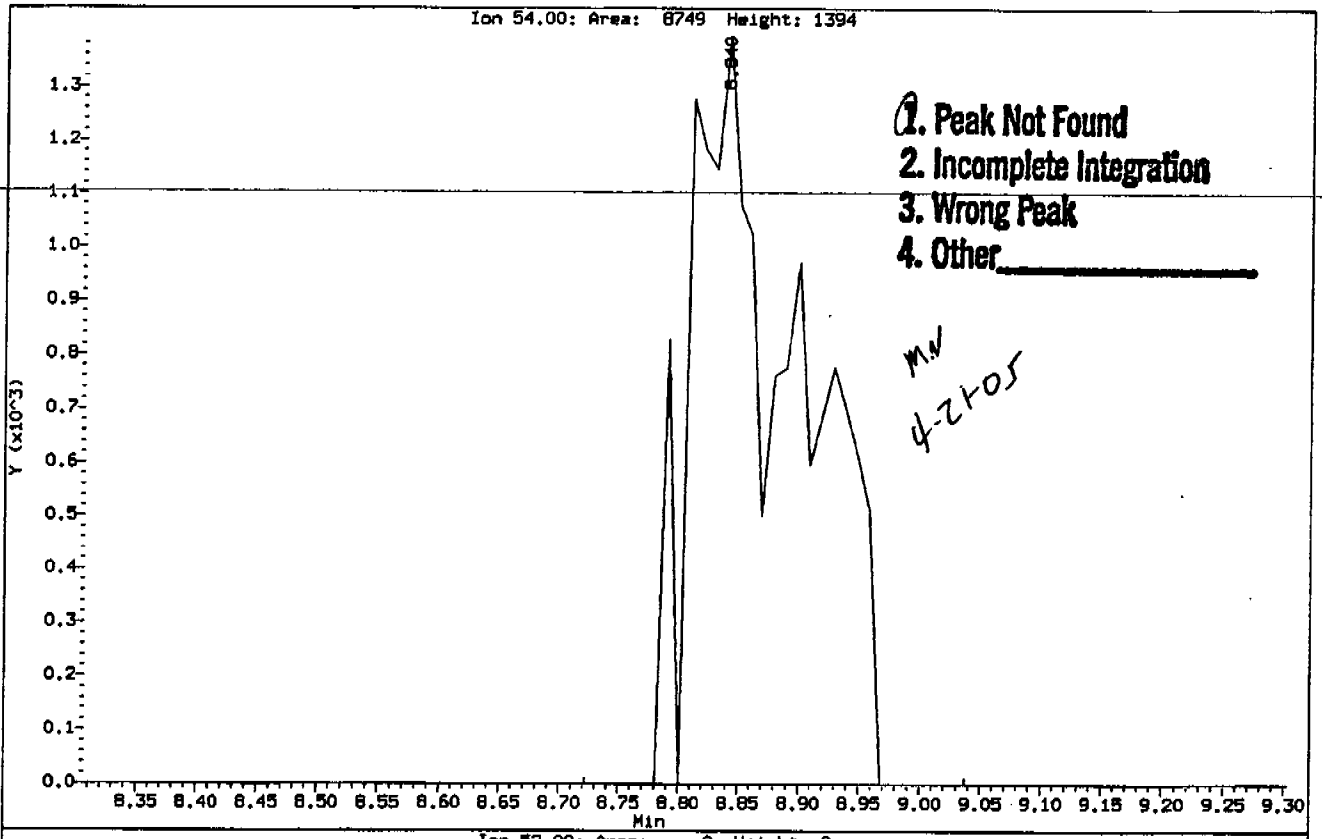
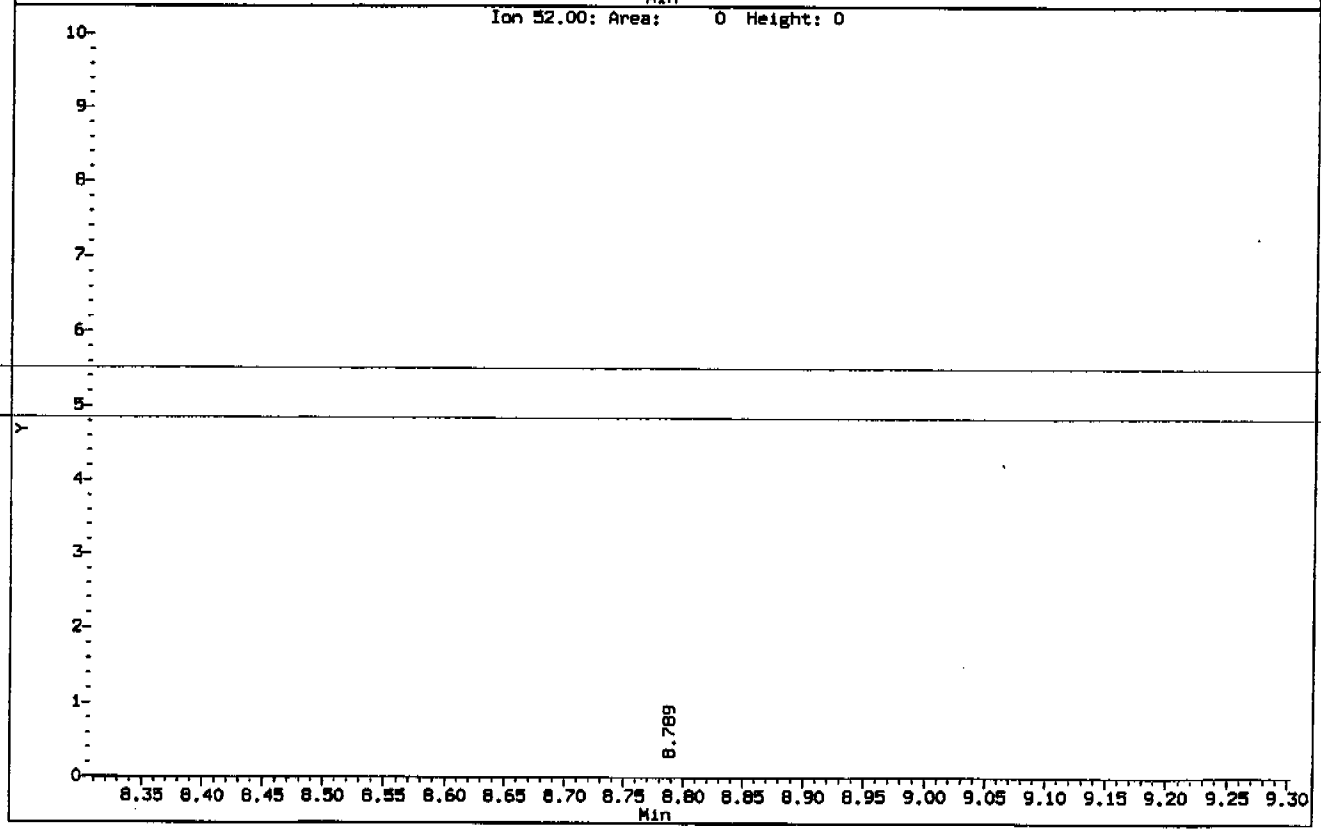
Injection Date: 20-APR-2005 11:29
Instrument: MSB.i
Client Sample ID:

Compound: Propionitrile
CAS Number: 107-12-0





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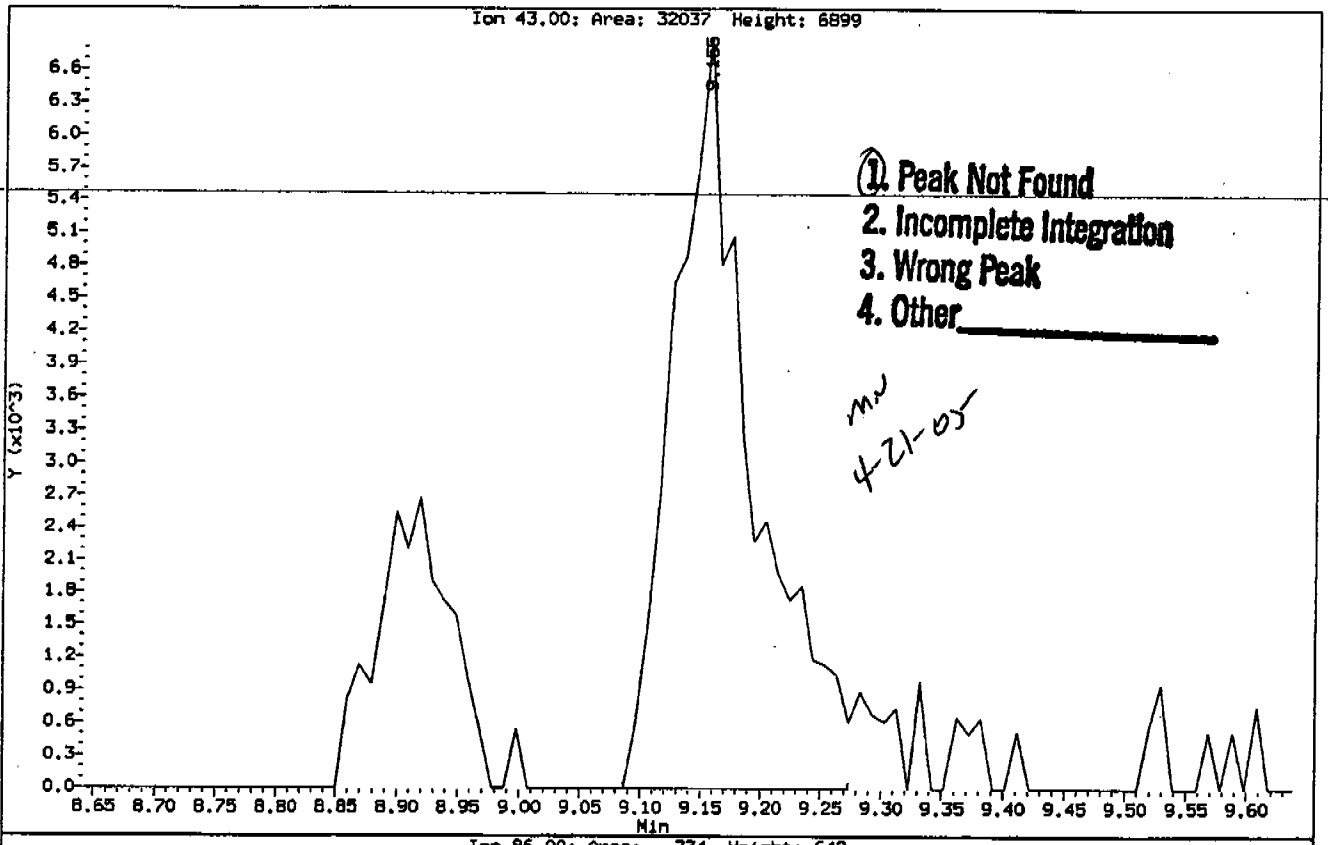
Injection Date: 20-APR-2005 11:29
Instrument: MSB.i
Client Sample ID:

Compound: Vinyl acetate
CAS Number: 108-05-4



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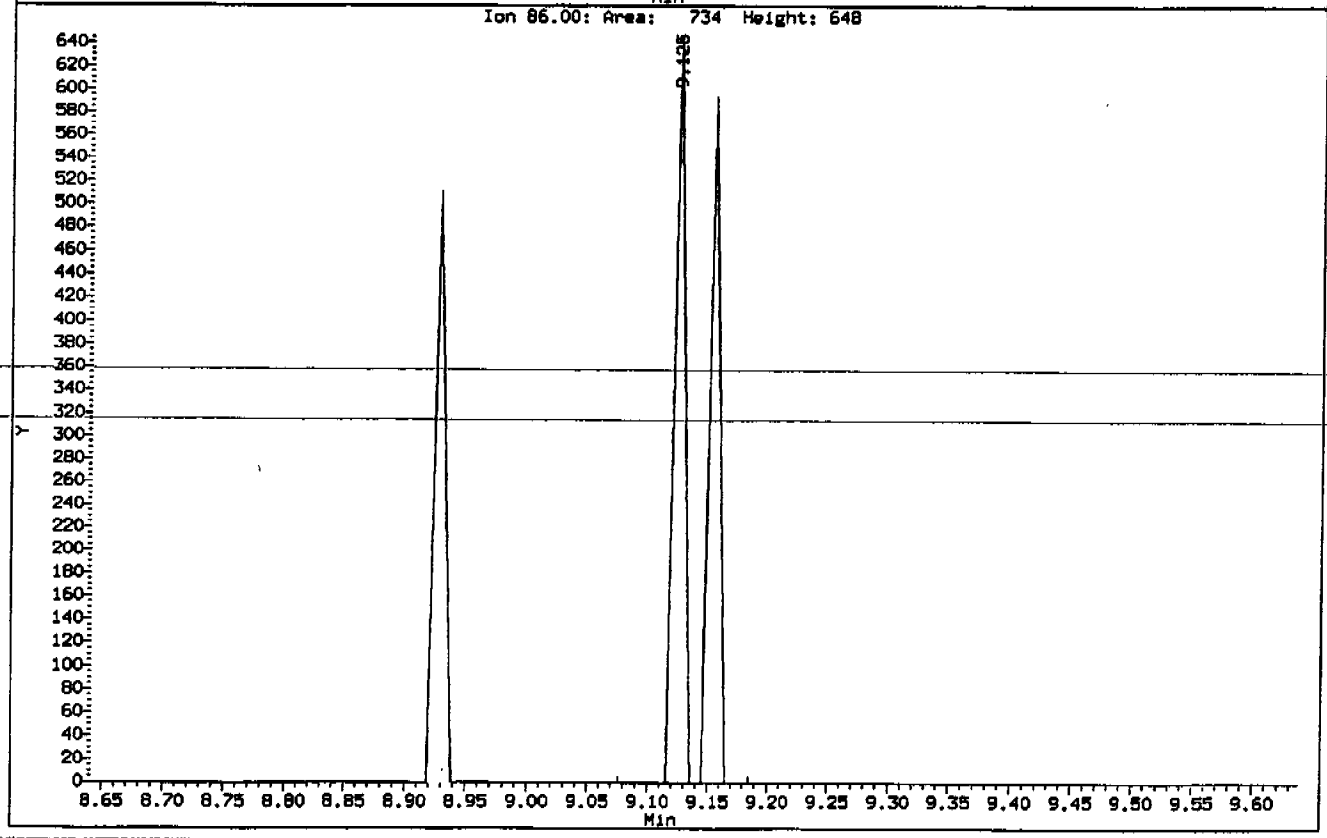

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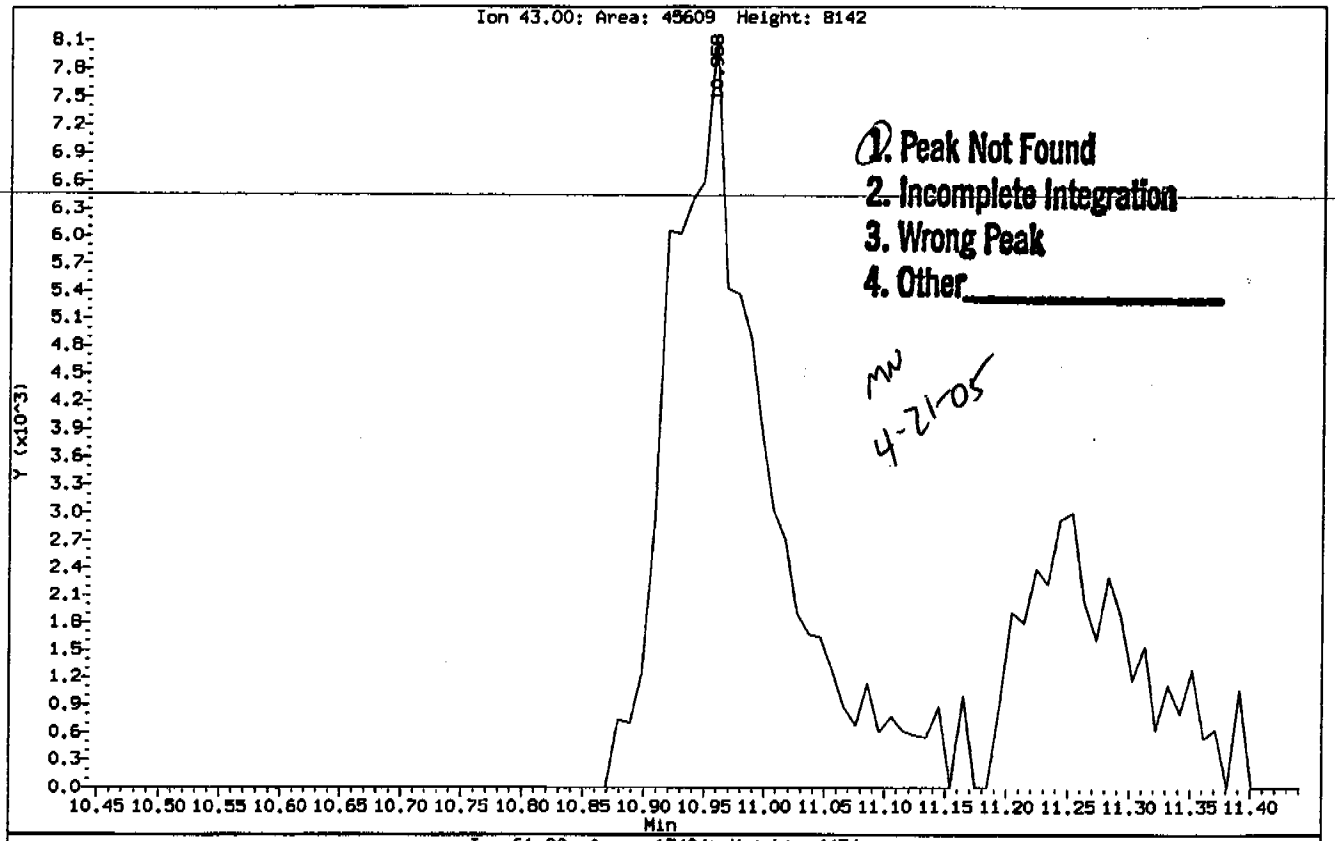
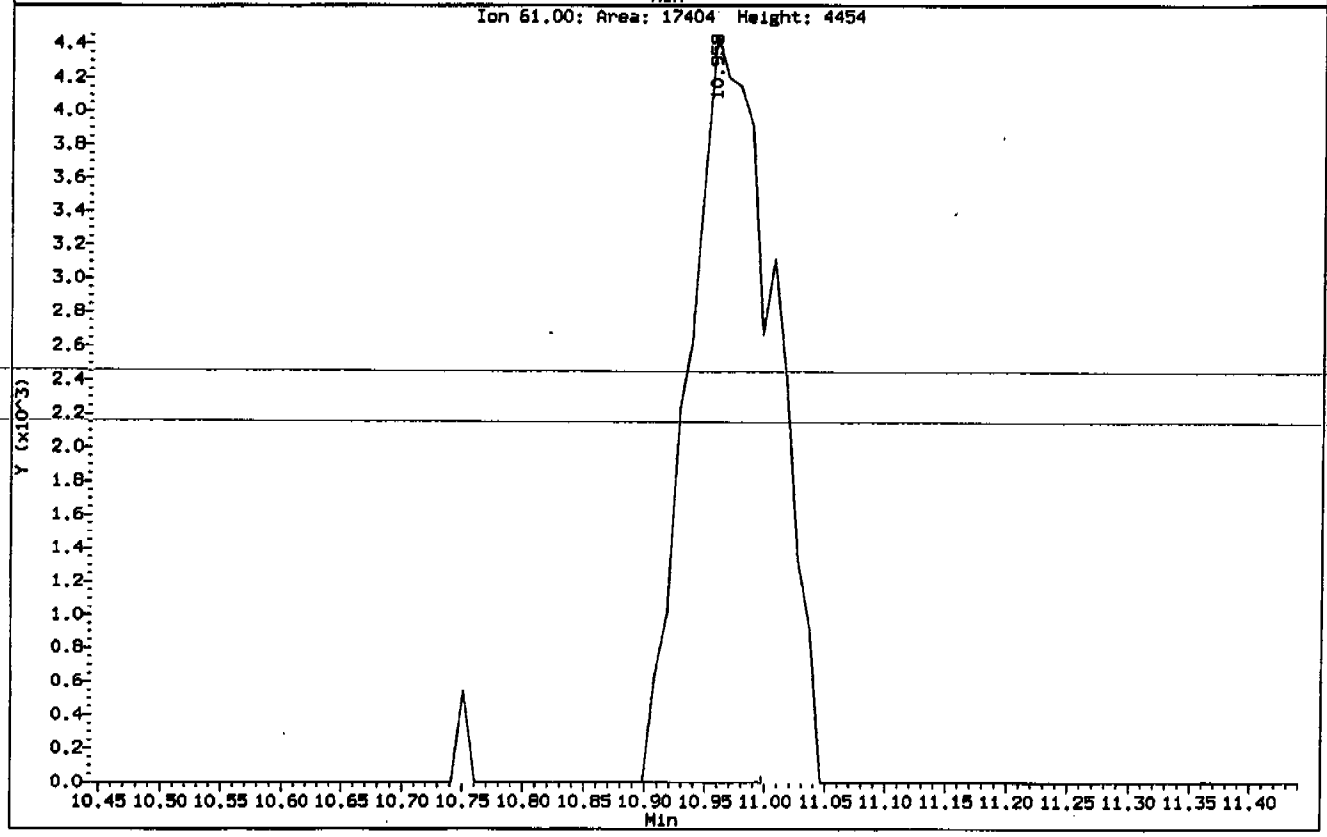
Injection Date: 20-APR-2005 11:29
Instrument: MSB.i
Client Sample ID:

Compound: Ethyl Acetate
CAS Number: 141-78-6





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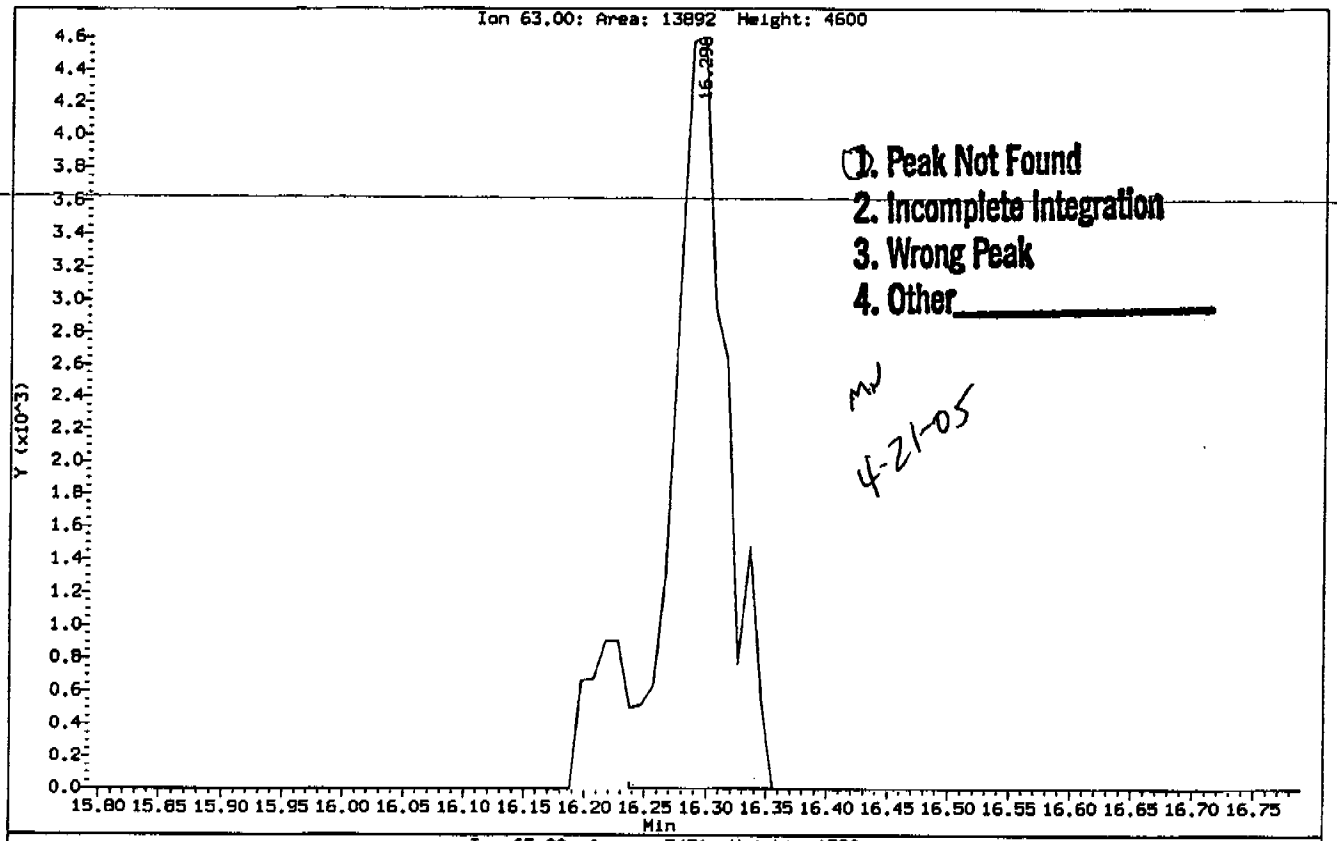
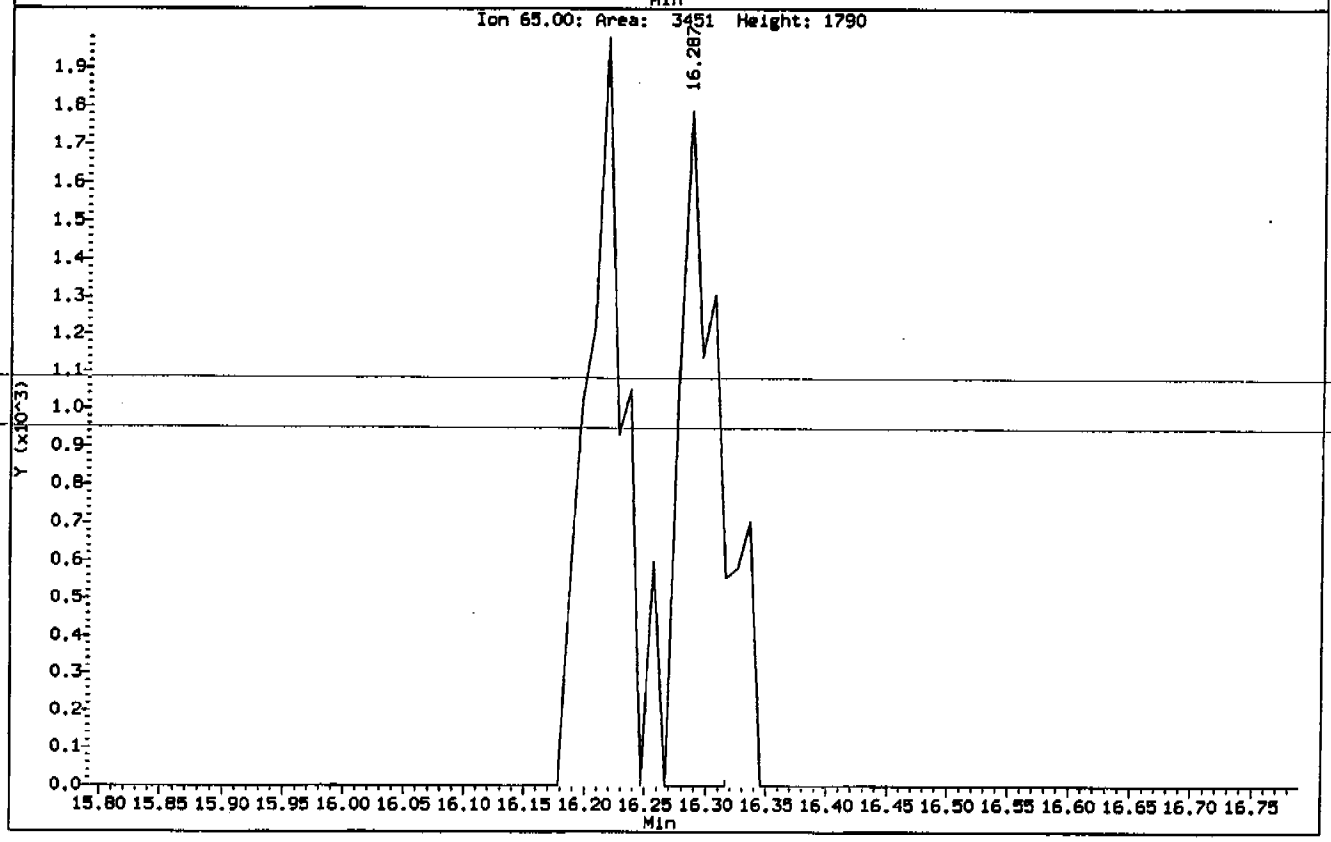
Injection Date: 20-APR-2005 11:29
Instrument: MSB.i
Client Sample ID:

Compound: 2-Chloroethyl Vinyl Ether
CAS Number:





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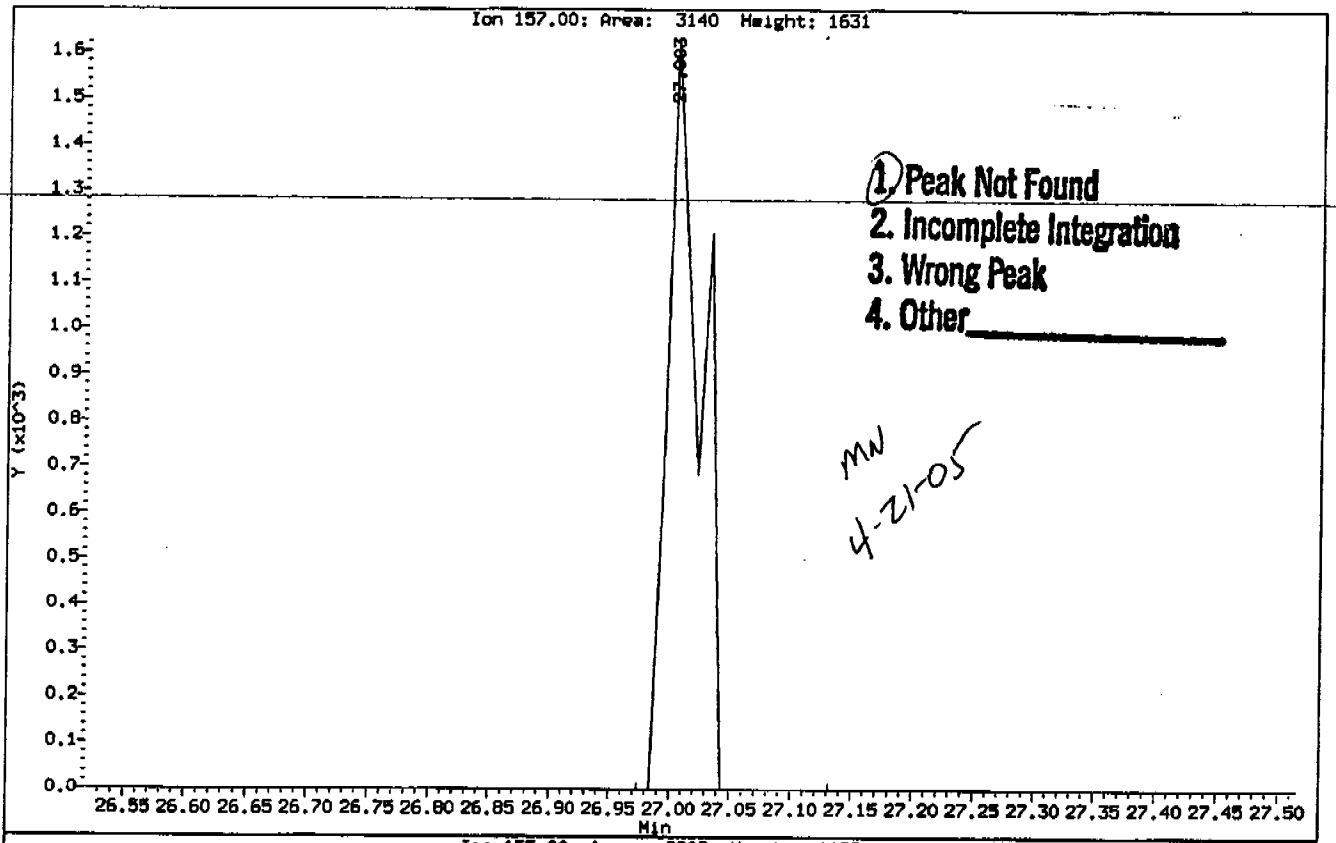
Injection Date: 20-APR-2005 11:29
Instrument: MSB.i
Client Sample ID:

Compound: 1,2-Dibromo-3-chloropropane
CAS Number: 96-12-8



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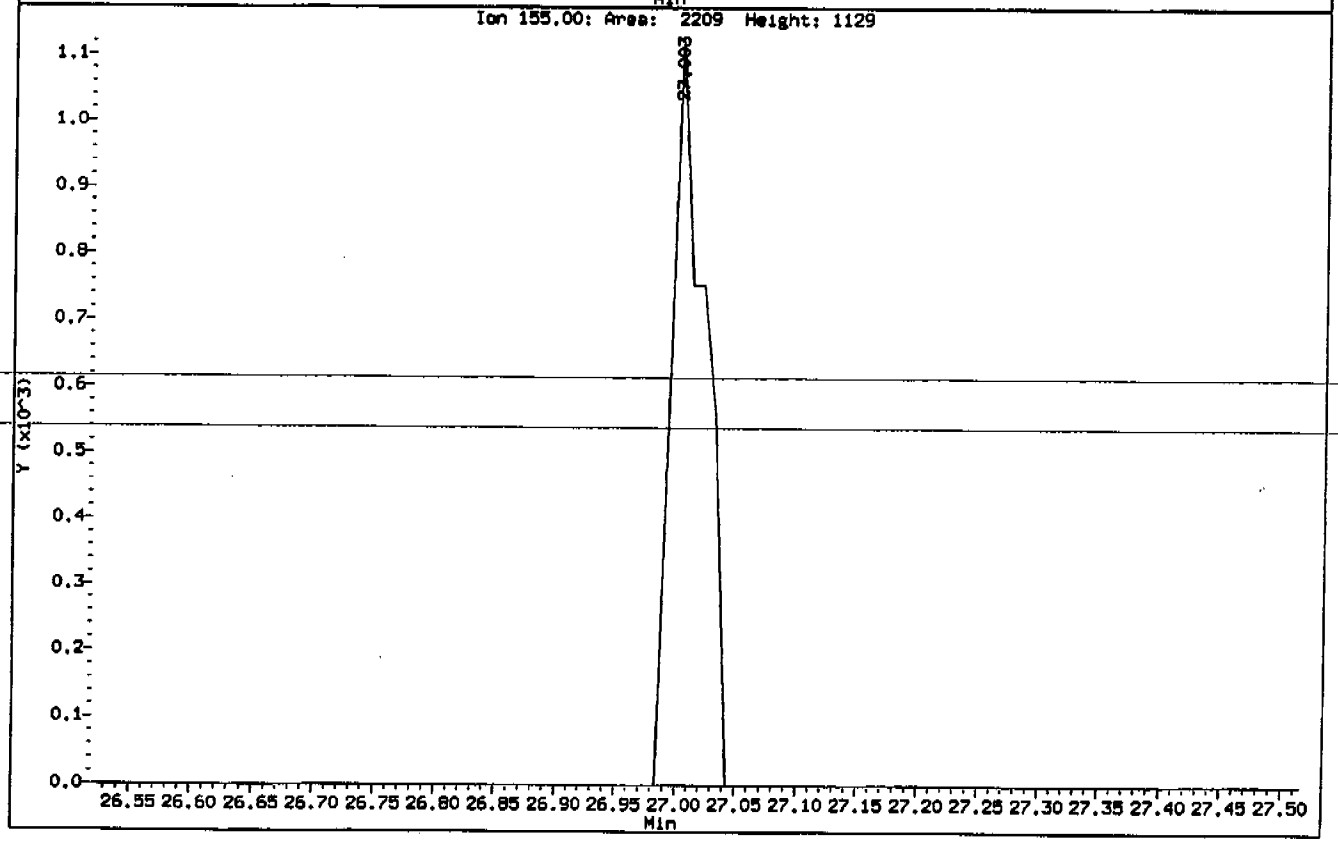


Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8020.D
Report Date: 20-Apr-2005 16:29

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSB.i\B050420A.b\BCAL8020.D
Lab Smp Id: VSTD001
Inj Date : 20-APR-2005 12:06
Operator : MN Inst ID: MSB.i
Smp Info : VSTD001;B050420A.b
Misc Info : VBLKB120A.B;
Comment : NONE
Method : \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Meth Date : 20-Apr-2005 16:26 mahmoodt Quant Type: ISTD
Cal Date : 20-APR-2005 12:06 Cal File: BCAL8020.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLVOA02

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

M.J 4-21-05

Name	Value	Description
DF	1.000	Dilution Factor
Vod	25.000	Def Sample Volume (mL)
Vo	25.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	1 Dichlorodifluoromethane	85	3.731	3.731	(0.263)	216592	1.00000	0.9836(a)
	2 Chloromethane	50	3.967	3.967	(0.280)	202348	1.00000	1.030
	3 Vinyl Chloride	62	4.184	4.184	(0.295)	88491	1.00000	0.9486
	4 Bromomethane	94	4.696	4.696	(0.331)	178663	1.00000	1.102
	5 Chloroethane	64	4.883	4.883	(0.344)	110362	1.00000	0.9882
	6 Acrolein	56	5.691	5.691	(0.401)	6224	5.00000	3.494(M)
	7 Trichlorofluoromethane	101	5.681	5.681	(0.400)	228384	1.00000	0.8954
	8 Acetonitrile	41	5.691	5.691	(0.401)	28564	5.00000	5.461(M)
M	9 1,2-Dichloroethene (total)	96				326752	2.00000	1.853
	10 Acetone	43	5.888	5.888	(0.415)	35146	1.00000	0.7380
	11 1,1-Dichloroethane	96	6.538	6.538	(0.461)	133707	1.00000	0.8452
	12 Iodomethane	142	6.587	6.587	(0.464)	116181	1.00000	1.083
	13 Acrylonitrile	53	6.666	6.666	(0.470)	47875	5.00000	3.803
	14 Methylene Chloride	84	6.794	6.794	(0.479)	207534	1.00000	1.024
	15 1,1,2-Trichlorofluoroethane	101	6.892	6.892	(0.486)	157692	1.00000	0.8875(aA)
	16 Allyl chloride	39	6.961	6.961	(0.491)	118906	1.00000	0.8736
	17 Carbon Disulfide	76	7.178	7.178	(0.506)	434232	1.00000	0.7824
	18 trans-1,2-Dichloroethene	96	8.114	8.114	(0.572)	163321	1.00000	0.9197
	19 1,1-Dichloroethane	63	8.685	8.685	(0.612)	277899	1.00000	0.9263(a)
	20 Propionitrile	54	8.803	8.803	(0.620)	18407	5.00000	4.165(M)
	21 Vinyl acetate	43	9.138	9.138	(0.644)	60771	1.00000	0.7383(a)
	22 2-Chloro-1,3-butadiene	53	9.641	9.641	(0.679)	202381	1.00000	0.8806(a)

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8020.D
Report Date: 20-Apr-2005 16:29

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 2-Butanone	43	9.788	9.788	(0.690)	162083	1.00000	0.8539(a)
	24 Methacrylonitrile	41	10.173	10.173	(0.717)	114424	5.00000	4.394
	25 cis-1,2-Dichloroethene	96	10.212	10.212	(0.720)	163431	1.00000	0.9330(a)
	26 Bromochloromethane	130	10.655	10.655	(0.751)	62569	1.00000	0.9673(aA)
	27 Chloroform	83	10.793	10.793	(0.761)	283334	1.00000	0.9740(a)
	28 Ethyl Acetate	43	10.941	10.941	(0.771)	77854	2.00000	1.636(A)
$	29 Dibromofluoromethane	113	11.118	11.118	(0.783)	133689	1.00000	1.002
	30 Isobutanol	42	11.680	11.680	(0.823)	55149	20.0000	15.73
$	31 1,2-Dichloroethane-d4	65	12.280	12.280	(0.865)	113273	1.00000	1.050
	32 1,2-Dichloroethane	62	12.468	12.468	(0.879)	133973	1.00000	0.9786(a)
	33 1,1,1-Trichloroethane	97	12.674	12.674	(0.893)	218144	1.00000	0.8778(a)
	34 Carbon Tetrachloride	117	13.531	13.531	(0.953)	172015	1.00000	0.8613(a)
	35 Benzene	78	13.659	13.659	(0.963)	794479	1.00000	1.029
*	36 Fluorobenzene	96	14.191	14.191	(1.000)	7346737	10.0000	
	37 Dibromomethane	93	14.930	14.930	(1.052)	53567	1.00000	0.9505(a)
	38 1,2-Dichloropropane	63	15.038	15.038	(1.060)	168666	1.00000	0.9845(a)
	39 Trichloroethene	130	15.147	15.147	(1.067)	215820	1.00000	1.021
	40 1-Nitropropane	43	15.226	15.226	(1.073)	12643	1.00000	1.478(A)
	41 Bromodichloromethane	83	15.245	15.245	(1.074)	155218	1.00000	0.8840(a)
	42 1,4-Dioxane	88	15.580	15.580	(1.098)	10583	20.0000	19.47(M)
	43 Methyl methacrylate	69	15.758	15.758	(1.110)	36920	1.00000	0.9116(a)
	44 2-Chloroethyl Vinyl Ether	63	16.289	16.289	(1.148)	20898	1.00000	0.7739(a)
	45 cis-1,3-Dichloropropene	75	16.683	16.683	(1.176)	163589	1.00000	0.8554(a)
	46 4-Methyl-2-pentanone	43	16.999	16.999	(1.198)	48717	1.00000	0.9410(a)
	47 trans-1,3-Dichloropropene	75	17.600	17.600	(0.844)	99604	1.00000	0.8390(a)
M	48 Xylenes (total)	106				1231021	3.00000	3.093
	49 1,1,2-Trichloroethane	97	17.875	17.875	(0.857)	90009	1.00000	1.043
$	50 Toluene-d8	98	18.112	18.112	(0.868)	747358	1.00000	1.152
	51 Toluene	91	18.259	18.259	(0.875)	913998	1.00000	1.072
	52 Ethyl methacrylate	69	18.555	18.555	(0.890)	91979	1.00000	0.8999(a)
	53 2-Hexanone	43	18.762	18.762	(1.322)	33536	1.00000	0.9349(aA)
	54 Chlorodibromomethane	129	18.831	18.831	(0.903)	57771	1.00000	0.7530(a)
	55 1,2-Dibromoethane	107	19.294	19.294	(0.925)	66800	1.00000	0.9250(a)
	56 Tetrachloroethene	164	19.648	19.648	(0.942)	209071	1.00000	0.9627(a)
	57 1,1,1,2-Tetrachloroethane	131	20.781	20.781	(0.996)	118898	1.00000	0.8958(a)
*	58 Chlorobenzene-d5	119	20.860	20.860	(1.000)	1722071	10.0000	
	59 Chlorobenzene	112	20.919	20.919	(1.003)	569572	1.00000	1.058
	60 Ethylbenzene	106	21.303	21.303	(1.021)	345293	1.00000	1.005
	61 m,p-Xylenes	106	21.668	21.668	(1.039)	836208	2.00000	2.081
	62 Bromoform	173	21.796	21.796	(1.045)	23478	1.00000	1.306
	63 Styrene	104	22.249	22.249	(1.067)	515555	1.00000	0.9754(a)
	64 1,1,2,2-Tetrachloroethane	83	22.357	22.357	(1.072)	81802	1.00000	0.9812(a)
	65 o-Xylene	106	22.367	22.367	(1.072)	394813	1.00000	1.012
	66 1,2,3-Trichloropropane	110	22.603	22.603	(0.891)	20665	1.00000	0.9508(a)
	67 trans-1,4-dichloro-2-butene	53	22.672	22.672	(0.894)	17703	1.00000	0.9669(a)
	68 Isopropylbenzene	105	23.017	23.017	(1.622)	925799	1.00000	1.015(A)
$	69 4-Bromofluorobenzene	95	23.056	23.056	(0.909)	268096	1.00000	1.134
	70 n-Propylbenzene	91	23.785	23.785	(1.676)	1285190	1.00000	0.9749(aA)
	71 2-Chlorotoluene	91	23.923	23.923	(1.686)	744557	1.00000	1.016(A)
	72 4-Chlorotoluene	91	24.061	24.061	(1.695)	718396	1.00000	1.001(A)
	73 1,3,5-Trimethylbenzene	105	24.288	24.288	(1.711)	832473	1.00000	0.9873(aA)
	74 Pentachloroethane	167	24.376	24.376	(0.961)	50235	1.00000	0.8510(a)
	75 t-Butylbenzene	119	24.770	24.770	(1.745)	736105	1.00000	0.9800(aA)
	76 1,2,4-Trimethylbenzene	105	24.977	24.977	(1.760)	818375	1.00000	0.9866(aA)

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8020.D
Report Date: 20-Apr-2005 16:29

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77	sec-Butylbenzene	105	25.174	25.174	(1.774)	1159396	1.00000	1.021(A)
78	1,3-Dichlorobenzene	146	25.292	25.292	(0.997)	415783	1.00000	1.016
* 79	1,4 Dichlorobenzene-d4	152	25.371	25.371	(1.000)	2409099	10.0000	
80	1,4-Dichlorobenzene	146	25.421	25.421	(1.002)	417176	1.00000	1.046
81	1,2-Dichlorobenzene	146	26.090	26.090	(1.028)	316459	1.00000	0.9850(a)
82	1,2-Dibromo-3-chloropropane	157	27.006	27.006	(1.064)	6182	1.00000	0.7429(a)
83	1,2,4-Trichlorobenzene	180	29.814	29.814	(1.175)	197048	1.00000	0.9165(a)
84	Naphthalene	128	30.355	30.355	(1.196)	211653	1.00000	0.8750(a)
85	Hexachlorobutadiene	225	30.474	30.474	(1.201)	131500	1.00000	0.8609(a)
86	1,2,3-Trichlorobenzene	180	30.779	30.779	(1.213)	157966	1.00000	0.9273(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8020.D
Report Date: 20-Apr-2005 16:29

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

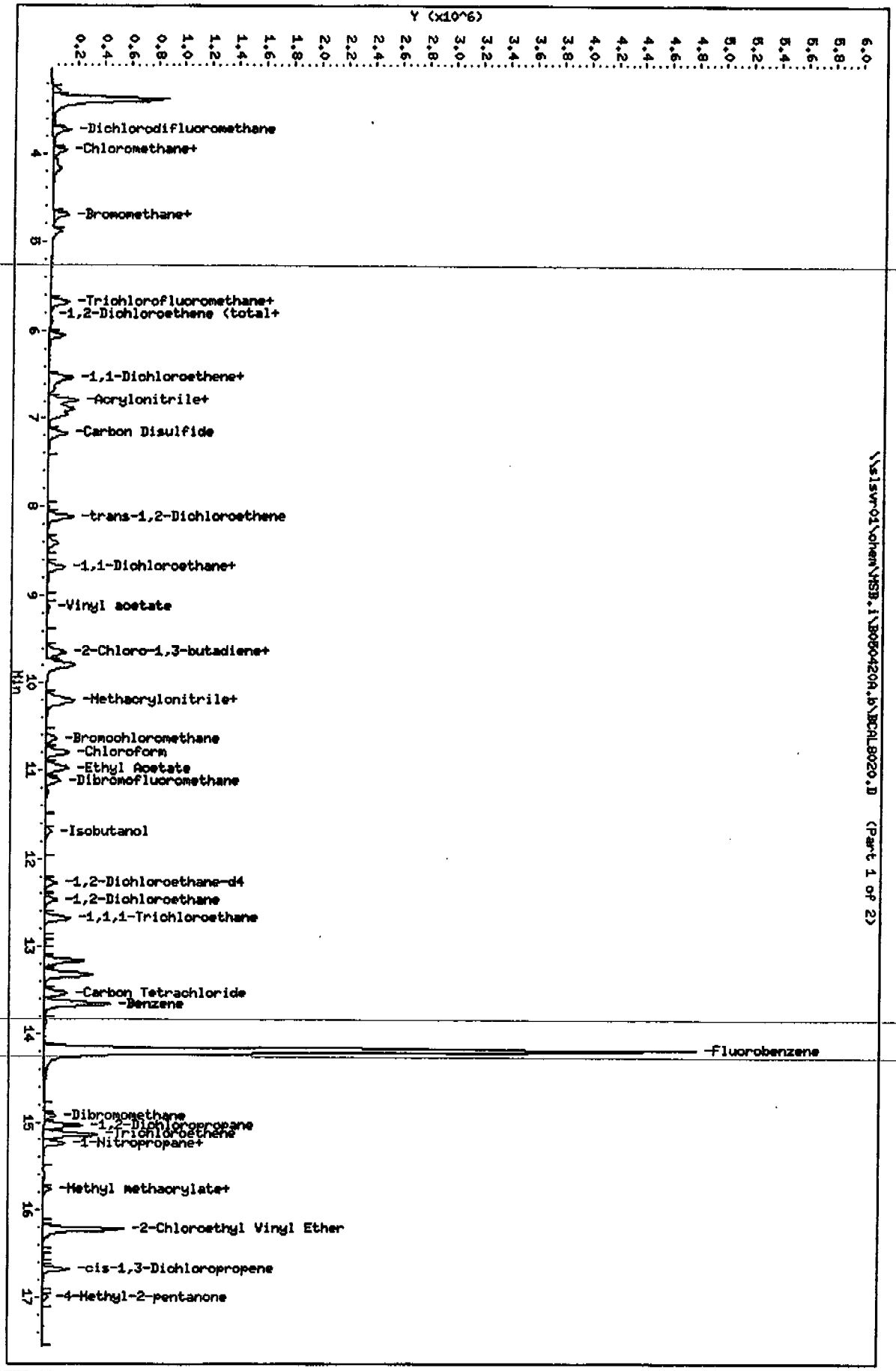
Instrument ID: MSB.i
Lab File ID: BCAL8020.D
Lab Smp Id: VSTD001
Analysis Type: VOA
Quant Type: ISTD
Operator: MN
Method File: \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Misc Info: VBLKB120A.B;

Calibration Date: 20-APR-2005
Calibration Time: 13:58
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	7222687	3611344	14445374	7346737	1.72
58 Chlorobenzene-d5	1696606	848303	3393212	1722071	1.50
79 1,4 Dichlorobenze	2455791	1227896	4911582	2409099	-1.90

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	14.20	13.70	14.70	14.19	-0.03
58 Chlorobenzene-d5	20.87	20.37	21.37	20.86	-0.07
79 1,4 Dichlorobenze	25.39	24.89	25.89	25.37	-0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.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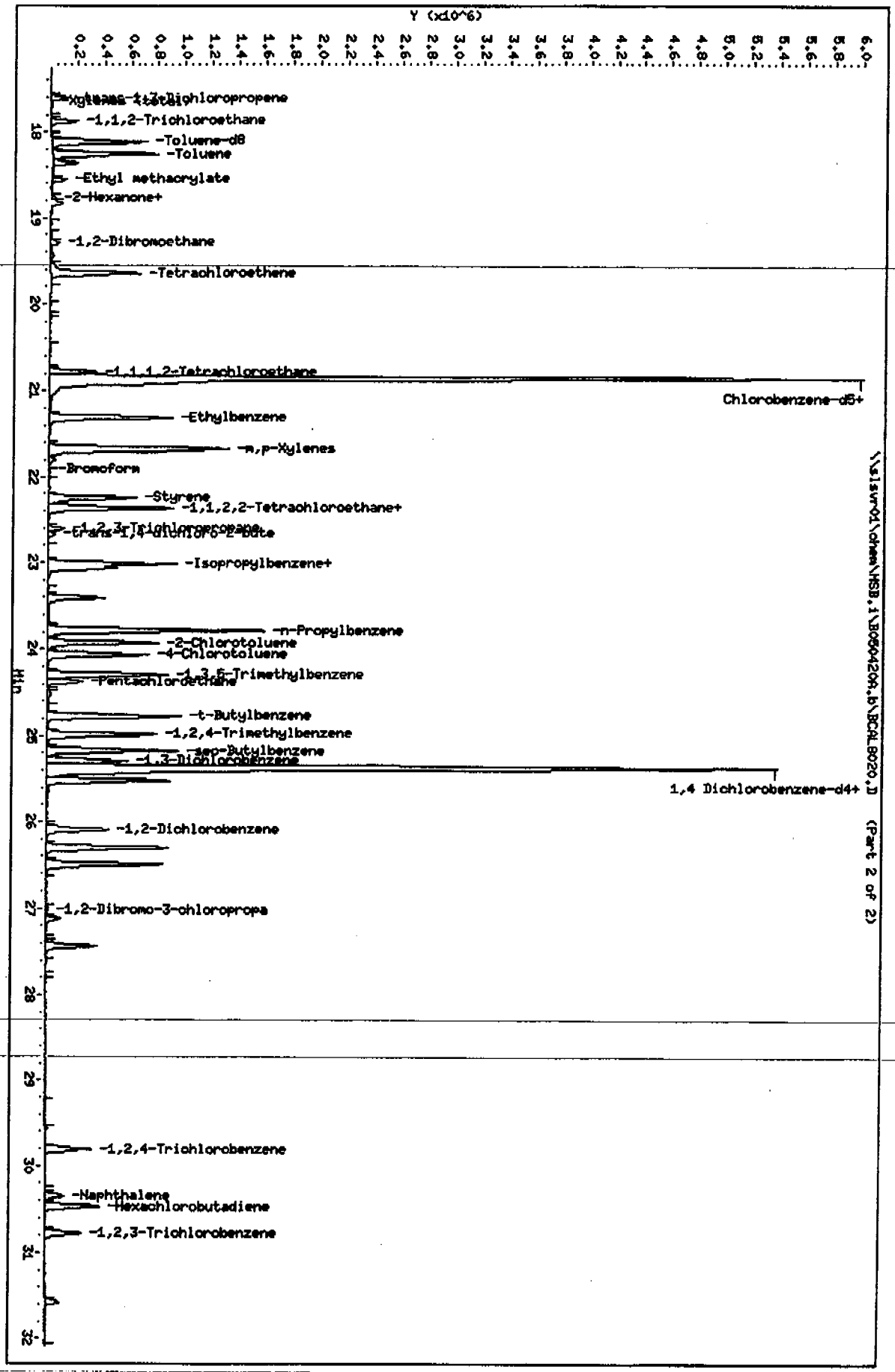
Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8020.D
Date : 20-APR-2005 12:06
Client ID:
Sample Info: VSTD001;B050420A.b
Purge Volume: 25.0
Column phase: Rtx-VMS
Instrument: MSB.i
Operator: MM
Column diameter: 0.25
\\slsvr01\chem\MSB.i\B050420A.b\BCAL8020.D (Part 1 of 2)
-Dichlorodifluoromethane
-Chloromethane+
-Bromomethane+
-Trichlorofluoromethane+
-1,2-Dichloroethene (total+
-1,1-Dichloroethene+
-Acrylonitrile+
-Carbon Disulfide
-trans-1,2-Dichloroethene
-1,1-Dichloroethane+
-Vinyl acetate
-2-Chloro-1,3-butadiene+
-Methacrylonitrile+
-Bromochloromethane
-Chloroform
-Ethyl Acetate
-Dibromofluoromethane
-Isobutanol
-1,2-Dichloroethane-d4
-1,2-Dichloroethane
-1,1,1-Trichloroethane
-Carbon Tetrachloride
-Benzene
-fluorobenzene
-Dibromomethane
-1,2-Dichloropropane
-Trichloroethene
-1-Nitropropane+
-Methyl methacrylate+
-2-Chloroethyl Vinyl Ether
-cis-1,3-Dichloropropene
-4-Methyl-2-pentanone
Min
4 5 6 7 8 9 10 11 12 13 14 15 16 17


Y (x10^6)
0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0 3.2 3.4 3.6 3.8 4.0 4.2 4.4 4.6 4.8 5.0 5.2 5.4 5.6 5.8 6.0
Min
18
19
20
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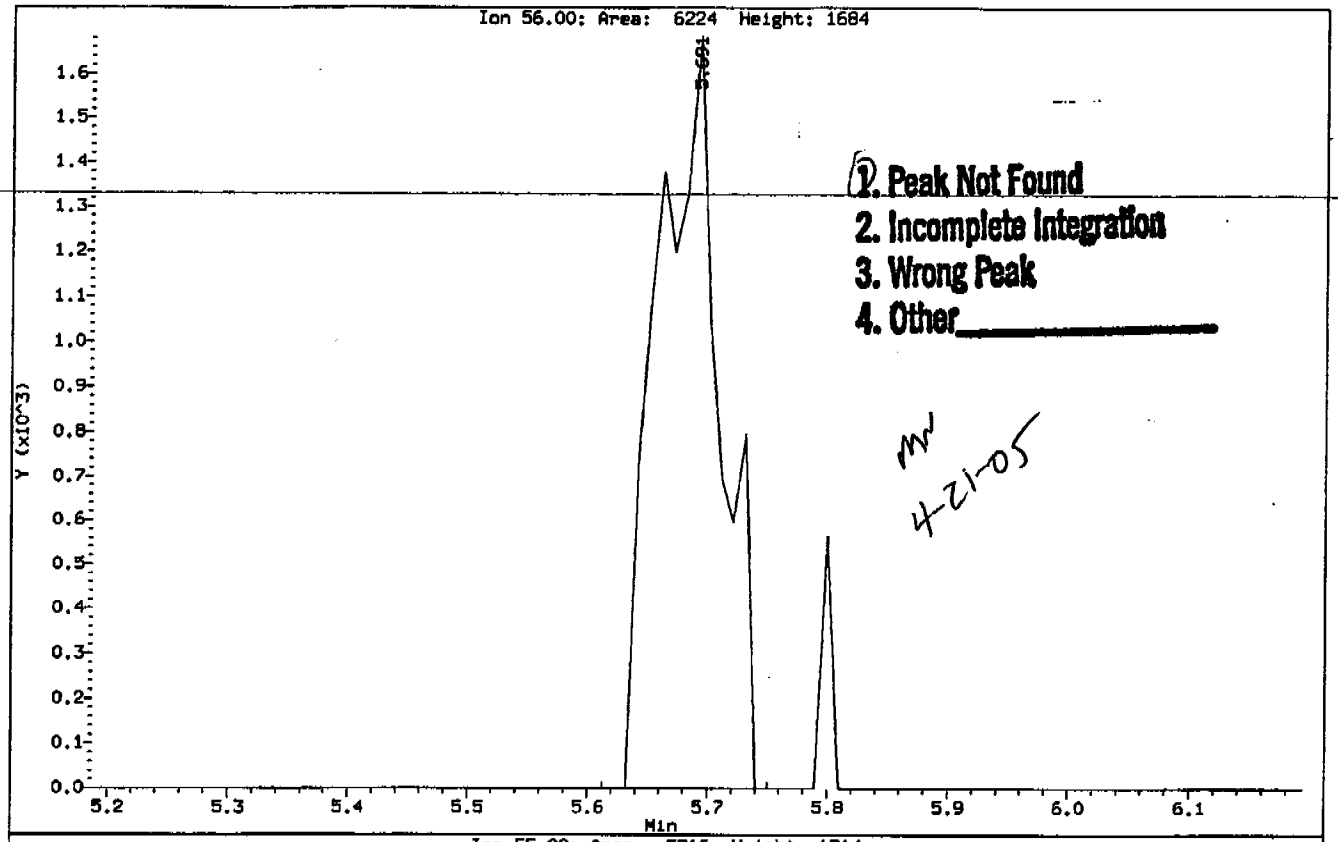
31
32
-trans-1,3-Dichloropropene
-1,1,2-Trichloroethane
-Toluene-d8
-Toluene
-Ethyl methacrylate
-2-Hexanone+
-1,2-Dibromoethane
-Tetrachloroethene
-1,1,1,2-Tetrachloroethane
Chlorobenzene-d5+
-Ethylbenzene
-m,p-Xylenes
-Bromoform
-Styrene
-1,1,2,2-Tetrachloroethane+
-1,2,3-Trichloropropane
-trans-1,4-dichloro-2-Bute
-Isopropylbenzene+
-n-Propylbenzene
-2-Chlorotoluene
-4-Chlorotoluene
-1,3,5-Trimethylbenzene
-Pentachloroethane
-t-Butylbenzene
-1,2,4-Trimethylbenzene
-sec-Butylbenzene
-1,3-Dichlorobenzene
1,4 Dichlorobenzene-d4+
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Naphthalene
-Hexachlorobutadiene
-1,2,3-Trichlorobenzene
Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL0020.D
Date : 20-APR-2005 12:06
Client ID:
Sample Info: VSTD001;B050420A.b
Purge Volume: 25.0
Column phase: Rtx-VMS
Instrument: MSB.i
Operator: MN
Column diameter: 0.25
\\slsvr01\chem\MSB.i\B050420A.b\BCAL0020.D (Part 2 of 2)

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8020.D
Injection Date: 20-APR-2005 12:06
Instrument: MSB.i
Client Sample ID:

Compound: Acrolein
CAS Number: 107-02-8



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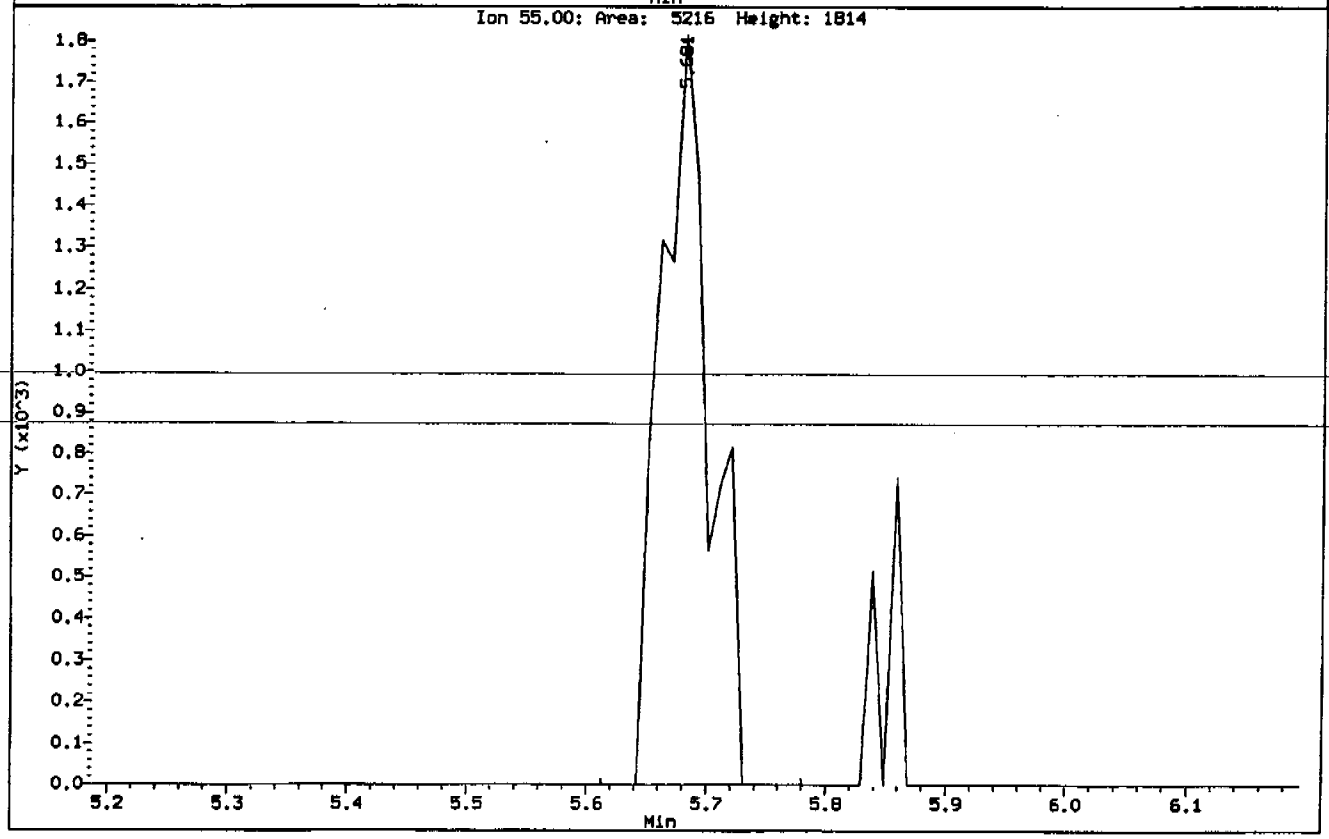

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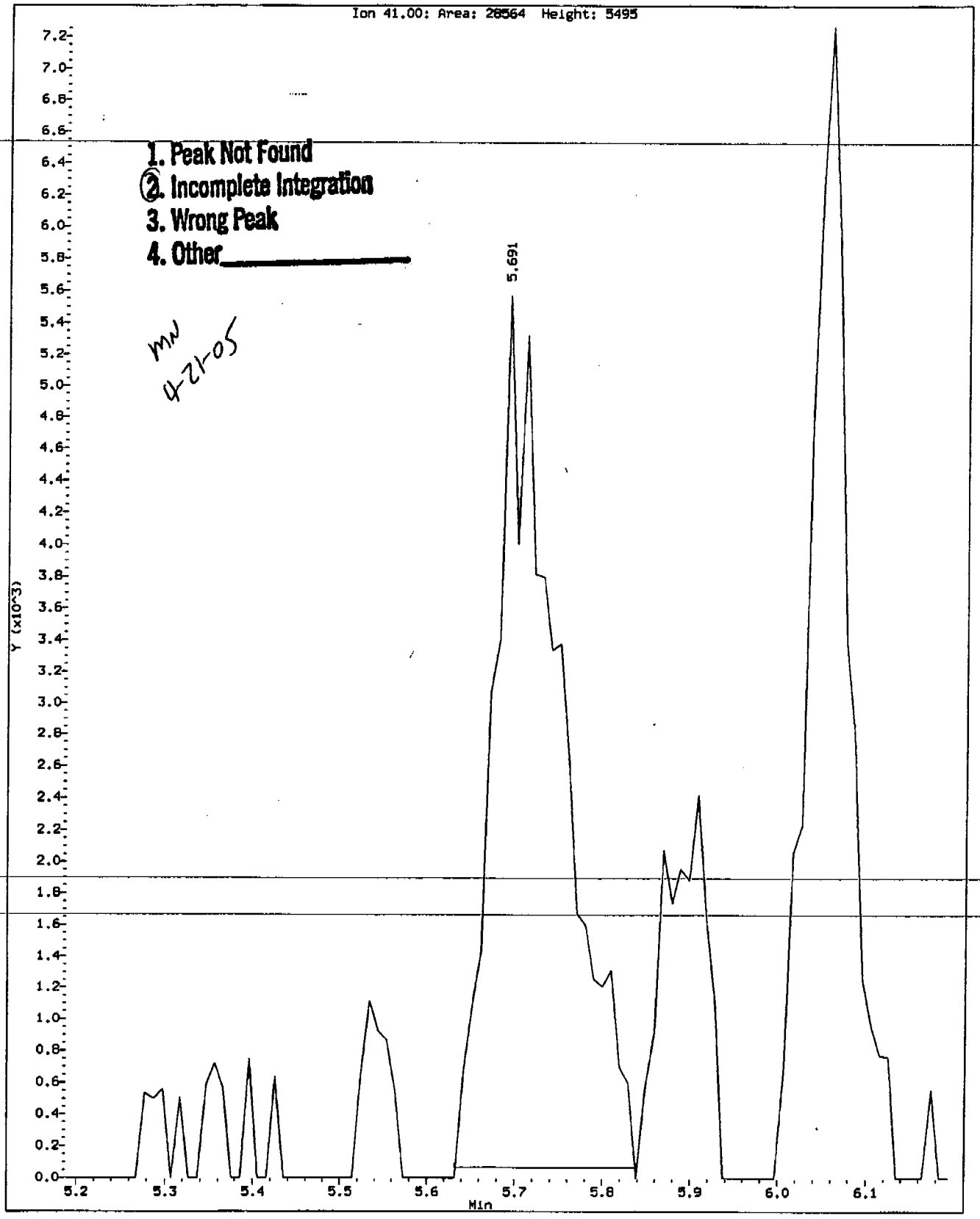
Injection Date: 20-APR-2005 12:06
Instrument: MSB.i
Client Sample ID:

Compound: Acetonitrile
CAS Number: 75-05-8



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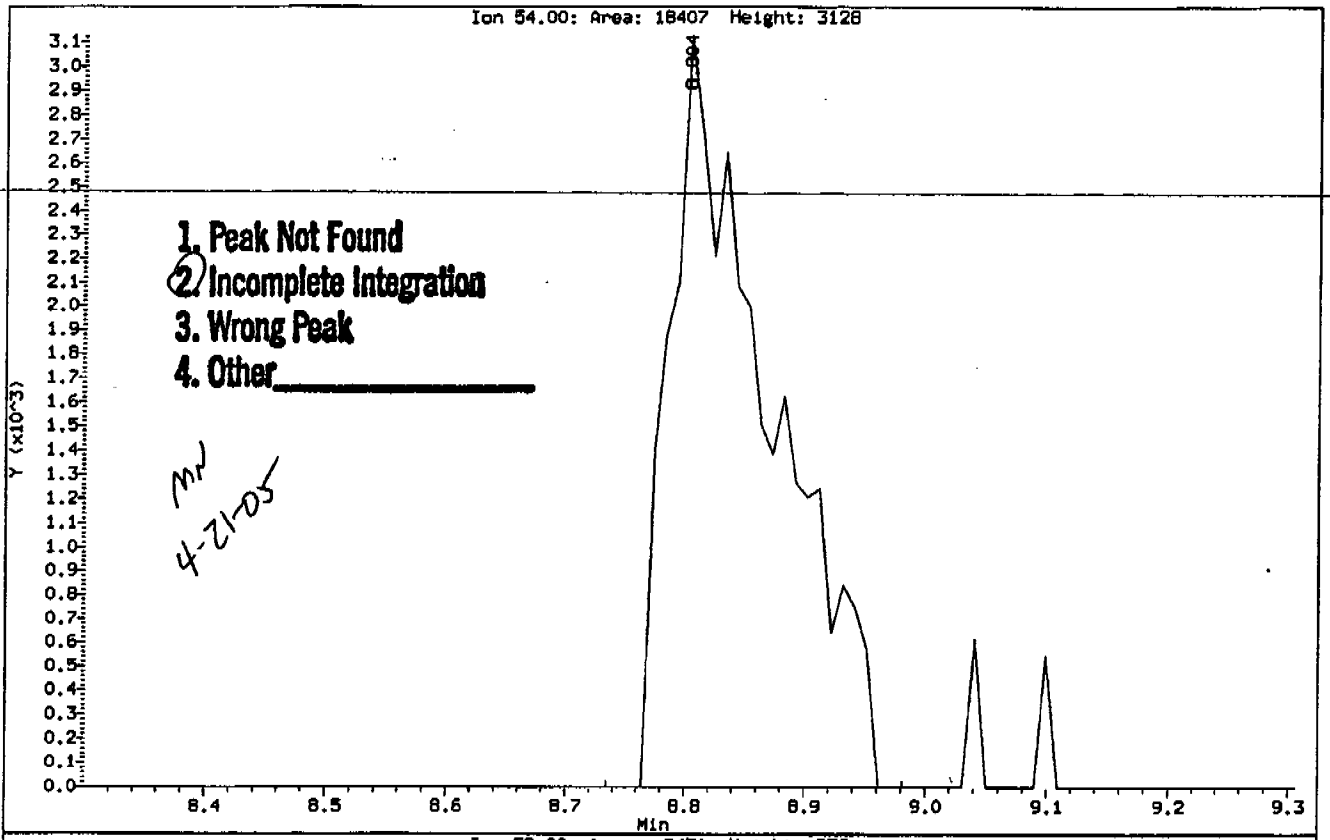
Injection Date: 20-APR-2005 12:06
Instrument: MSB.i
Client Sample ID:

Compound: Propionitrile
CAS Number: 107-12-0



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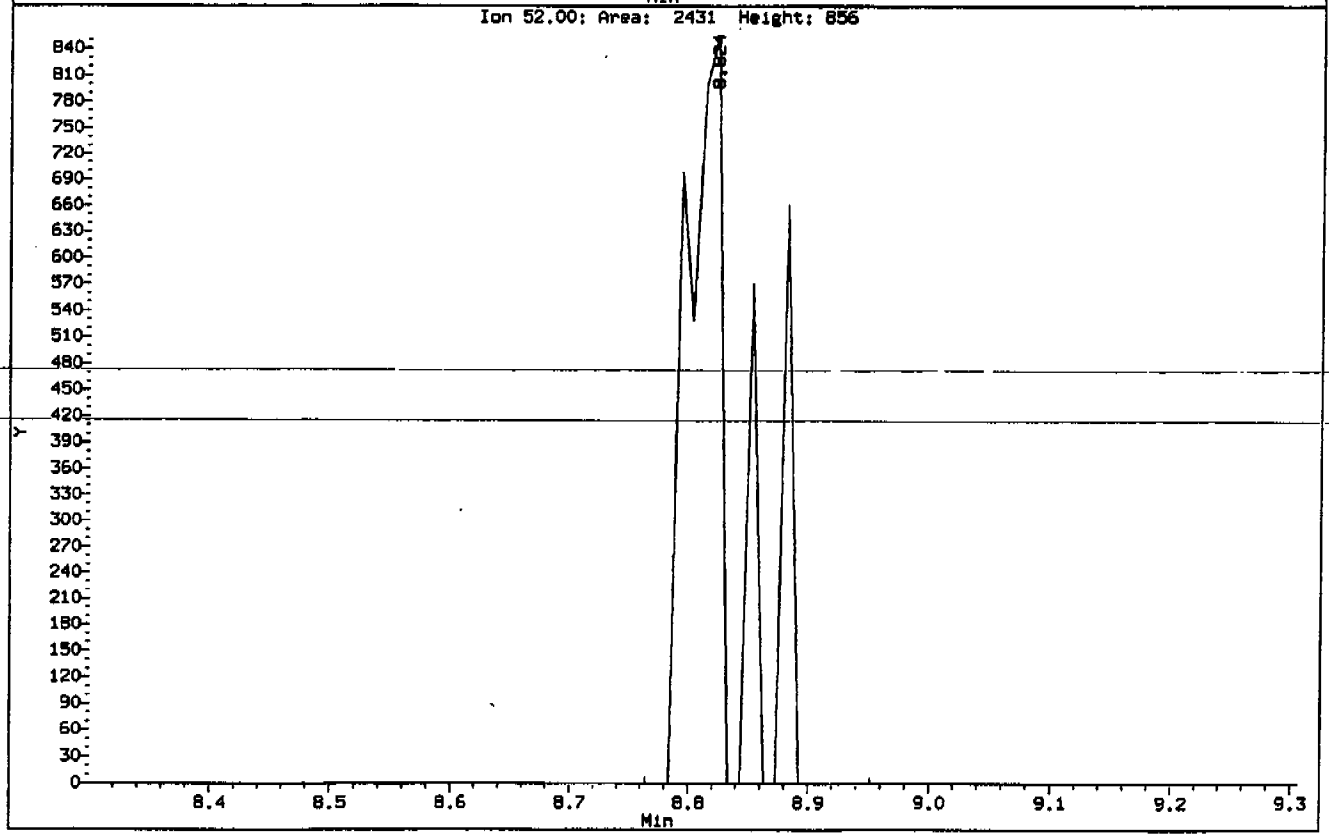
2. Incomplete Integration
3. Wrong Peak
4. Other_____

MV
4-21-05



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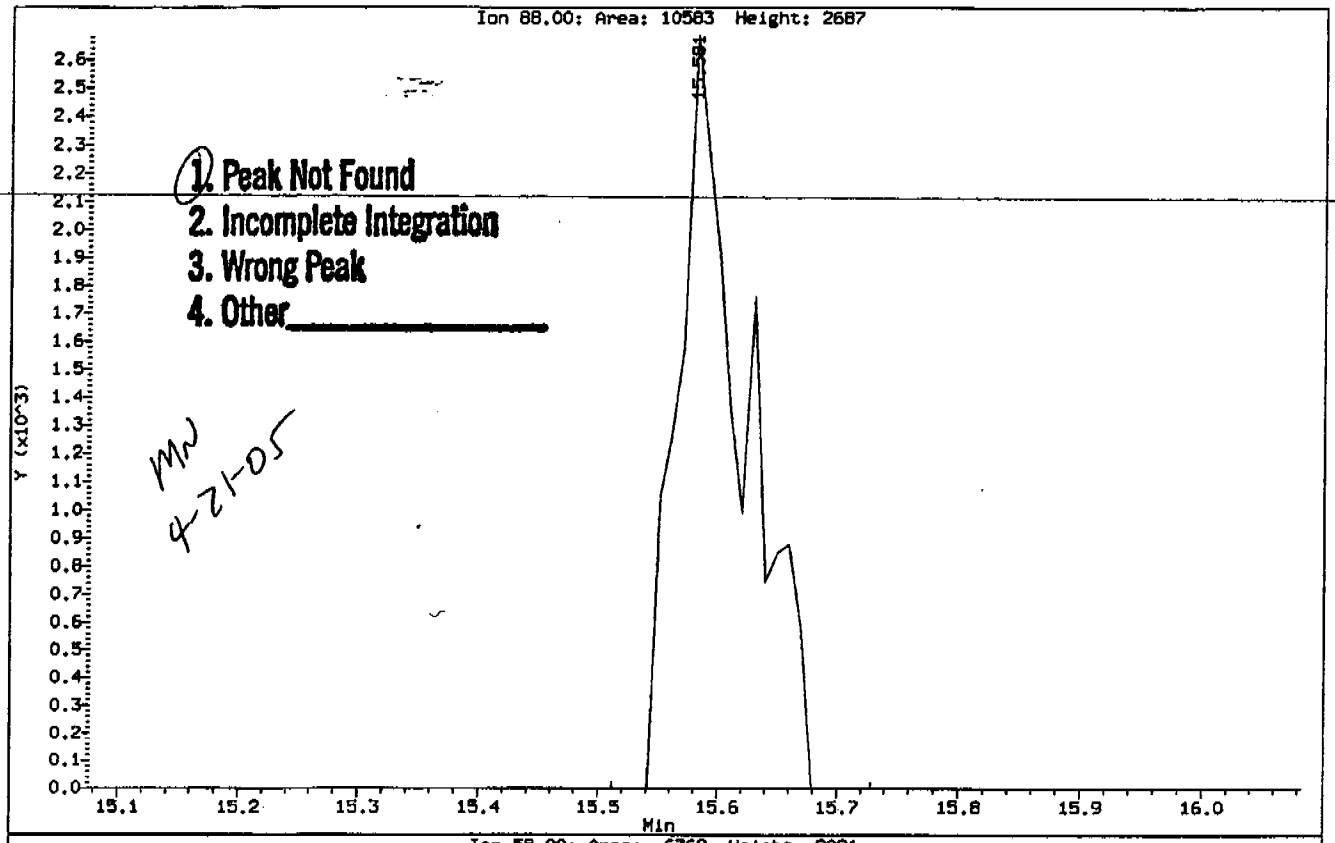
Injection Date: 20-APR-2005 12:06
Instrument: MSB.i
Client Sample ID:

Compound: 1,4-Dioxane
CAS Number: 123-91-1



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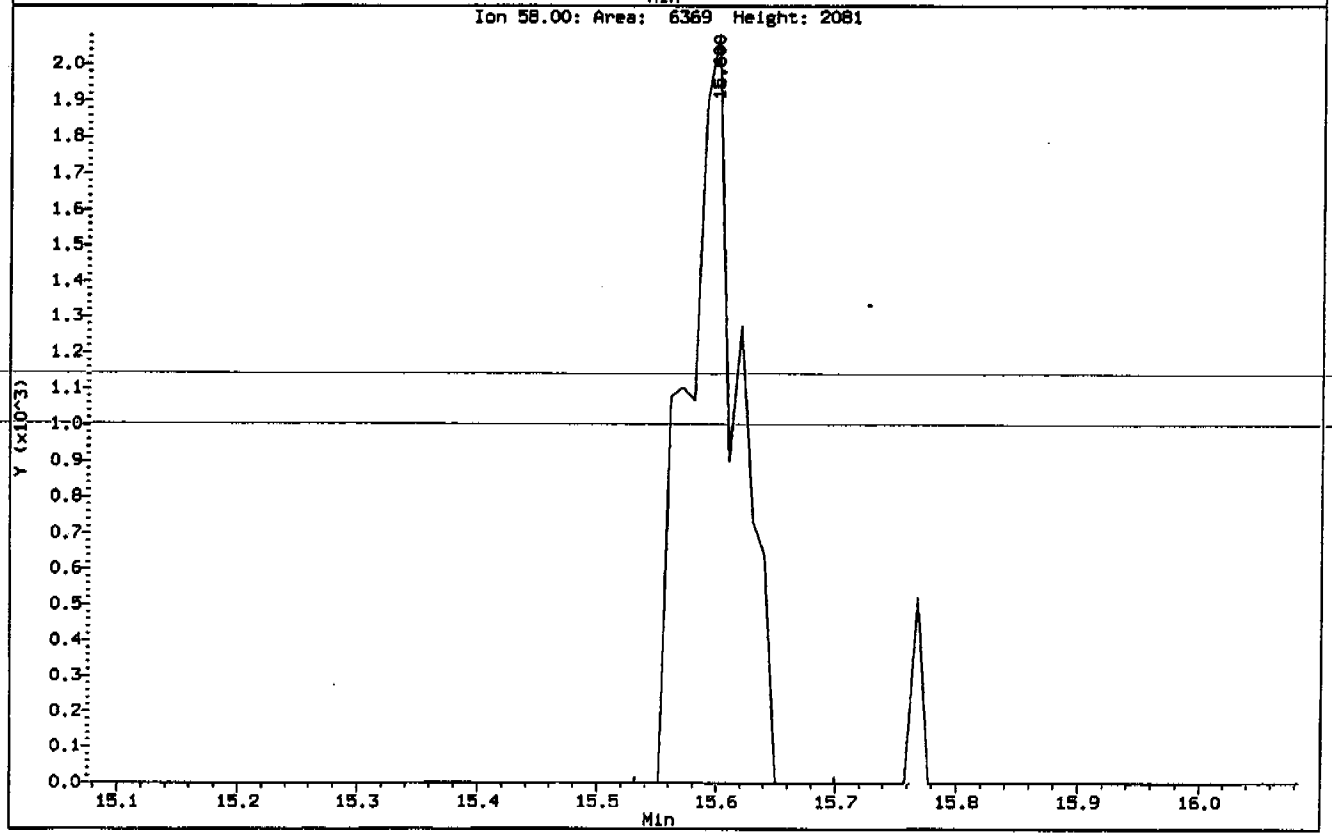


Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8021.D
Report Date: 20-Apr-2005 16:26

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSB.i\B050420A.b\BCAL8021.D
Lab Smp Id: VSTD002
Inj Date : 20-APR-2005 12:43
Operator : MN Inst ID: MSB.i
Smp Info : VSTD002;B050420A.b
Misc Info : VBLKB120A.B;
Comment : NONE
Method : \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Meth Date : 20-Apr-2005 16:26 mahmoodt Quant Type: ISTD
Cal Date : 20-APR-2005 12:43 Cal File: BCAL8021.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLVOA02

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

MN 4-27-05

Name	Value	Description
DF	1.000	Dilution Factor
Vod	25.000	Def Sample Volume (mL)
Vo	25.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	3.735	3.735	(0.263)	438997	2.00000	1.955
2	Chloromethane	50	3.962	3.962	(0.279)	396239	2.00000	1.955
3	Vinyl Chloride	62	4.178	4.178	(0.294)	178492	2.00000	1.908
4	Bromomethane	94	4.701	4.701	(0.331)	323212	2.00000	1.822
5	Chloroethane	64	4.888	4.888	(0.344)	219006	2.00000	1.895
6	Acrolein	56	5.666	5.666	(0.399)	15959	10.0000	11.82
7	Trichlorofluoromethane	101	5.676	5.676	(0.400)	512622	2.00000	2.016
8	Acetonitrile	41	5.695	5.695	(0.401)	60919	10.0000	10.56(M)
M 9	1,2-Dichloroethene (total)	96				727547	4.00000	4.154
10	Acetone	43	5.892	5.892	(0.415)	46972	2.00000	1.627
11	1,1-Dichloroethene	96	6.533	6.533	(0.460)	309491	2.00000	2.018
12	Iodomethane	142	6.592	6.592	(0.464)	316078	2.00000	1.864
13	Acrylonitrile	53	6.651	6.651	(0.469)	127736	10.0000	10.84
14	Methylene Chloride	84	6.789	6.789	(0.478)	375783	2.00000	2.027
15	1,1,2-Trichlorofluoroethane	101	6.887	6.887	(0.485)	357630	2.00000	2.026(A)
16	Allyl chloride	39	6.966	6.966	(0.491)	259050	2.00000	2.016
17	Carbon Disulfide	76	7.173	7.173	(0.505)	1145817	2.00000	2.230
18	trans-1,2-Dichloroethene	96	8.128	8.128	(0.573)	364033	2.00000	2.087
19	1,1-Dichloroethane	63	8.690	8.690	(0.612)	606515	2.00000	2.054
20	Propionitrile	54	8.798	8.798	(0.620)	44008	10.0000	11.60(M)
21	Vinyl acetate	43	9.143	9.143	(0.644)	141061	2.00000	1.940
22	2-Chloro-1,3-butadiene	53	9.655	9.655	(0.680)	441754	2.00000	2.034

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8021.D
Report Date: 20-Apr-2005 16:26

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 2-Butanone	43	9.793	9.793	(0.690)	363614	2.00000	1.977
	24 Methacrylonitrile	41	10.177	10.177	(0.717)	255384	10.0000	10.27
	25 cis-1,2-Dichloroethene	96	10.217	10.217	(0.720)	363514	2.00000	2.067
	26 Bromochloromethane	130	10.650	10.650	(0.750)	123166	2.00000	1.922(A)
	27 Chloroform	83	10.808	10.808	(0.761)	596770	2.00000	2.009
	28 Ethyl Acetate	43	10.946	10.946	(0.771)	169333	2.00000	3.345(A)
$	29 Dibromofluoromethane	113	11.133	11.133	(0.784)	271460	2.00000	2.061
	30 Isobutanol	42	11.684	11.684	(0.823)	113216	40.0000	28.87
$	31 1,2-Dichloroethane-d4	65	12.285	12.285	(0.865)	230052	2.00000	2.097
	32 1,2-Dichloroethane	62	12.472	12.472	(0.879)	285863	2.00000	2.031
	33 1,1,1-Trichloroethane	97	12.689	12.689	(0.894)	515310	2.00000	2.117
	34 Carbon Tetrachloride	117	13.536	13.536	(0.954)	411285	2.00000	2.132
	35 Benzene	78	13.664	13.664	(0.963)	1659357	2.00000	2.049
*	36 Fluorobenzene	96	14.196	14.196	(1.000)	7380541	10.0000	
	37 Dibromomethane	93	14.935	14.935	(1.052)	116705	2.00000	2.087
	38 1,2-Dichloropropane	63	15.043	15.043	(1.060)	351760	2.00000	2.034
	39 Trichloroethene	130	15.152	15.152	(1.067)	430133	2.00000	1.994
	40 1-Nitropropane	43	15.240	15.240	(1.074)	30880	2.00000	1.822(A)
	41 Bromodichloromethane	83	15.250	15.250	(1.074)	349164	2.00000	2.092
	42 1,4-Dioxane	88	15.595	15.595	(1.099)	18385	40.0000	46.76
	43 Methyl methacrylate	69	15.772	15.772	(1.111)	75237	2.00000	1.996
	44 2-Chloroethyl Vinyl Ether	63	16.294	16.294	(1.148)	54640	2.00000	2.192(M)
	45 cis-1,3-Dichloropropene	75	16.688	16.688	(1.176)	357337	2.00000	2.056
	46 4-Methyl-2-pentanone	43	17.003	17.003	(1.198)	96841	2.00000	1.934
	47 trans-1,3-Dichloropropene	75	17.614	17.614	(0.844)	220075	2.00000	2.068
M	48 Xylenes (total)	106				2584017	6.00000	6.269
	49 1,1,2-Trichloroethane	97	17.890	17.890	(0.857)	174673	2.00000	2.027
$	50 Toluene-d8	98	18.126	18.126	(0.869)	1373883	2.00000	2.078
	51 Toluene	91	18.264	18.264	(0.875)	1871966	2.00000	2.082
	52 Ethyl methacrylate	69	18.560	18.560	(0.890)	196764	2.00000	2.081
	53 2-Hexanone	43	18.767	18.767	(1.322)	65271	2.00000	1.911(A)
	54 Chlorodibromomethane	129	18.845	18.845	(0.903)	140438	2.00000	2.074
	55 1,2-Dibromoethane	107	19.308	19.308	(0.925)	146429	2.00000	2.112
	56 Tetrachloroethene	164	19.653	19.653	(0.942)	476986	2.00000	2.155
	57 1,1,1,2-Tetrachloroethane	131	20.786	20.786	(0.996)	269880	2.00000	2.135
*	58 Chlorobenzene-d5	119	20.865	20.865	(1.000)	1696480	10.0000	
	59 Chlorobenzene	112	20.924	20.924	(1.003)	1175994	2.00000	2.094
	60 Ethylbenzene	106	21.308	21.308	(1.021)	725649	2.00000	2.060
	61 m,p-Xylenes	106	21.682	21.682	(1.039)	1750721	4.00000	4.194
	62 Bromoform	173	21.800	21.800	(1.045)	52728	2.00000	1.810
	63 Styrene	104	22.253	22.253	(1.067)	1103934	2.00000	2.080
	64 1,1,2,2-Tetrachloroethane	83	22.362	22.362	(1.072)	163998	2.00000	1.996
	65 o-Xylene	106	22.372	22.372	(1.072)	833296	2.00000	2.075
	66 1,2,3-Trichloropropane	110	22.618	22.618	(0.891)	44041	2.00000	2.051
	67 trans-1,4-dichloro-2-butene	53	22.687	22.687	(0.894)	32383	2.00000	1.926
	68 Isopropylbenzene	105	23.022	23.022	(1.622)	1908180	2.00000	1.956(A)
$	69 4-Bromofluorobenzene	95	23.071	23.071	(0.909)	480105	2.00000	1.972
	70 n-Propylbenzene	91	23.780	23.780	(1.675)	2654670	2.00000	1.906(A)
	71 2-Chlorotoluene	91	23.928	23.928	(1.686)	1505115	2.00000	1.953(A)
	72 4-Chlorotoluene	91	24.066	24.066	(1.695)	1490127	2.00000	1.989(A)
	73 1,3,5-Trimethylbenzene	105	24.292	24.292	(1.711)	1731881	2.00000	1.970(A)
	74 Pentachloroethane	167	24.381	24.381	(0.961)	103419	2.00000	1.894
	75 t-Butylbenzene	119	24.775	24.775	(1.745)	1532194	2.00000	1.956(A)
	76 1,2,4-Trimethylbenzene	105	24.992	24.992	(1.760)	1670626	2.00000	1.941(A)

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8021.D
Report Date: 20-Apr-2005 16:26

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77	sec-Butylbenzene	105	25.169	25.169	(1.773)	2425829	2.00000	1.974(A)
78	1,3-Dichlorobenzene	146	25.297	25.297	(0.997)	855077	2.00000	2.033
* 79	1,4 Dichlorobenzene-d4	152	25.376	25.376	(1.000)	2370303	10.0000	
80	1,4-Dichlorobenzene	146	25.425	25.425	(1.002)	830938	2.00000	2.030
81	1,2-Dichlorobenzene	146	26.095	26.095	(1.028)	660506	2.00000	2.014
82	1,2-Dibromo-3-chloropropane	157	27.011	27.011	(1.064)	15719	2.00000	2.214
83	1,2,4-Trichlorobenzene	180	29.818	29.818	(1.175)	435480	2.00000	2.071
84	Naphthalene	128	30.350	30.350	(1.196)	467765	2.00000	2.015
85	Hexachlorobutadiene	225	30.488	30.488	(1.201)	316086	2.00000	2.114
86	1,2,3-Trichlorobenzene	180	30.784	30.784	(1.213)	334267	2.00000	2.009

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8021.D
Report Date: 20-Apr-2005 16:26

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

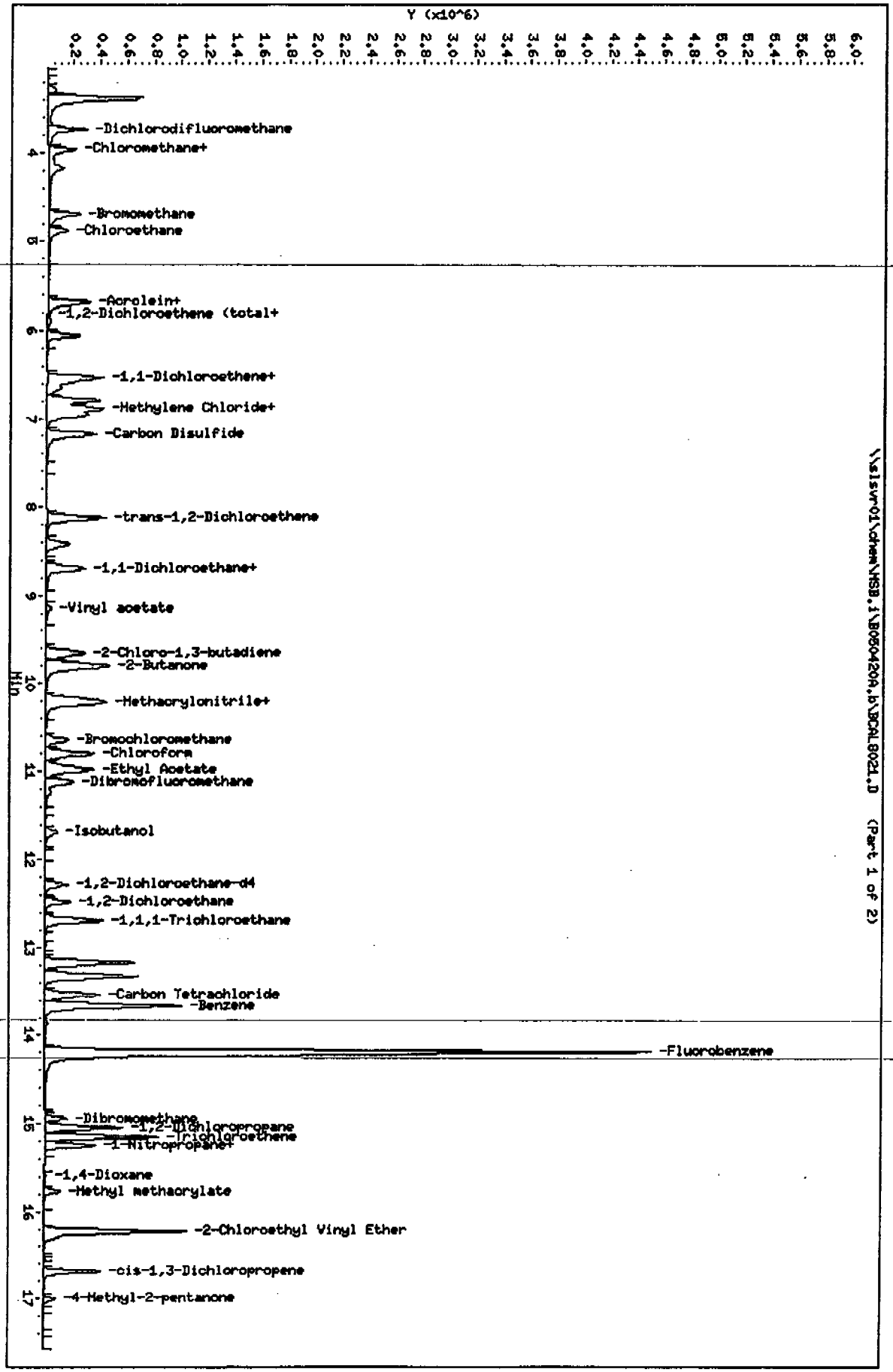
Instrument ID: MSB.i
Lab File ID: BCAL8021.D
Lab Smp Id: VSTD002
Analysis Type: VOA
Quant Type: ISTD
Operator: MN
Method File: \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Misc Info: VBLKB120A.B;

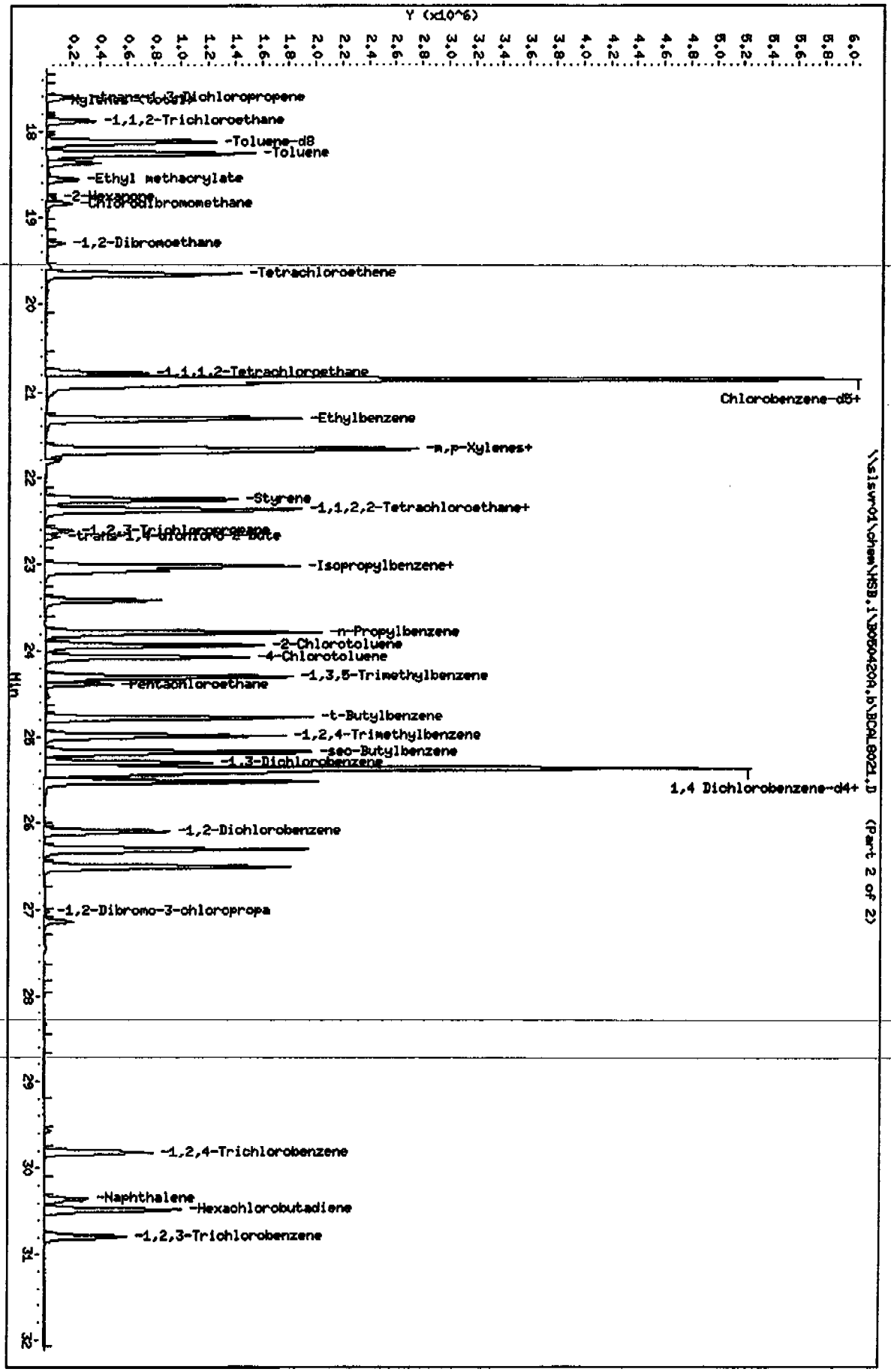
Calibration Date: 20-APR-2005
Calibration Time: 13:58
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	7222687	3611344	14445374	7380541	2.19
58 Chlorobenzene-d5	1696606	848303	3393212	1696480	-0.01
79 1,4 Dichlorobenze	2455791	1227896	4911582	2370303	-3.48

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	14.20	13.70	14.70	14.20	0.00
58 Chlorobenzene-d5	20.87	20.37	21.37	20.87	-0.05
79 1,4 Dichlorobenze	25.39	24.89	25.89	25.38	-0.04

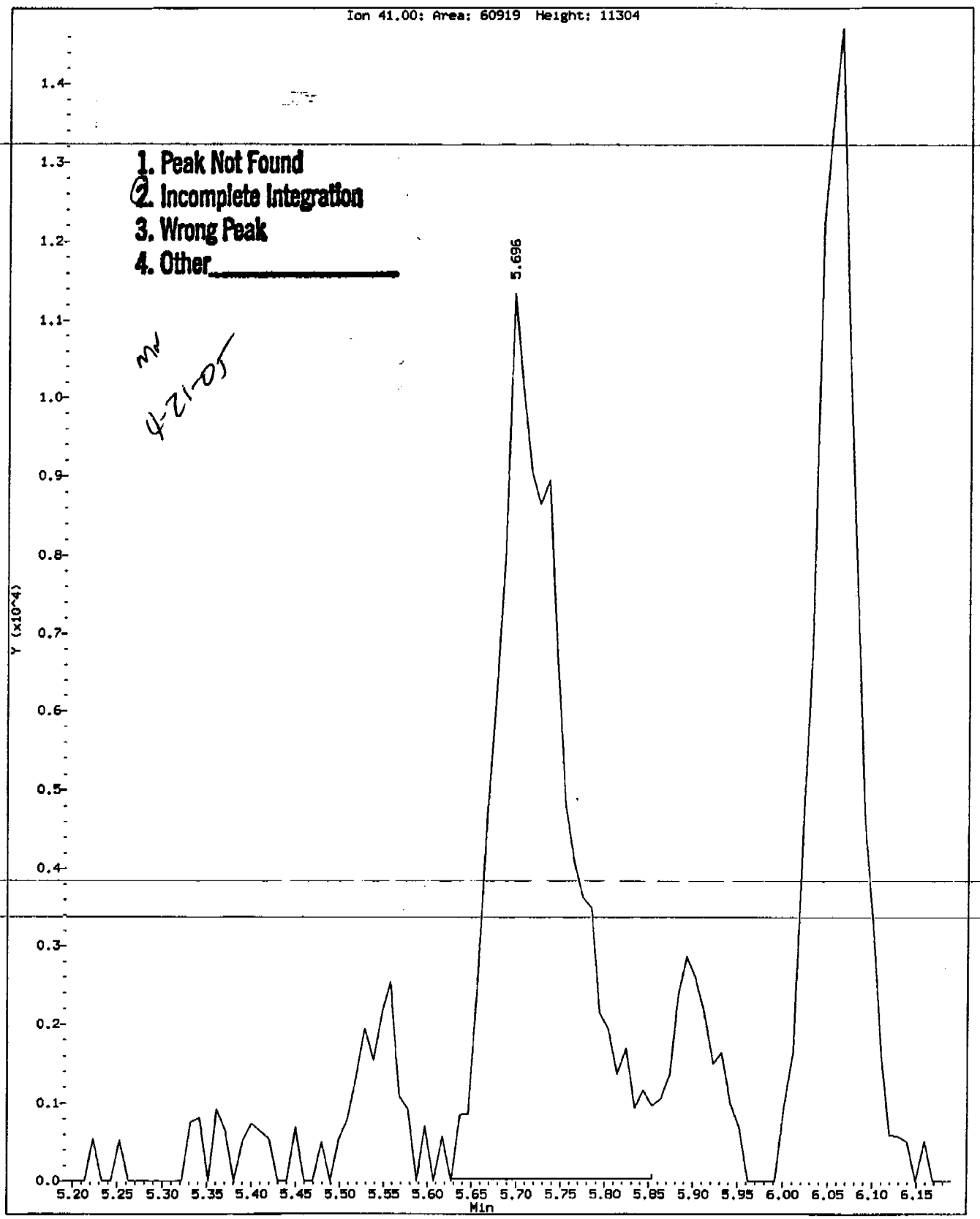
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^6)
0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0 3.2 3.4 3.6 3.8 4.0 4.2 4.4 4.6 4.8 5.0 5.2 5.4 5.6 5.8 6.0
Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8021.D
Date : 20-APR-2005 12:43
Client ID:
Sample Info: VSTD002;B050420A.b
Purge Volume: 25.0
Column phase: Rtx-VMS
Instrument: MSB.i
Operator: MN
Column diameter: 0.25
\\slsvr01\chem\MSB.i\B050420A.b\BCAL8021.D (Part 1 of 2)
Min
4
5
6
7
8
9
10
11
12
13
14
15
16
17
-Dichlorodifluoromethane
-Chloromethane+
-Bromomethane
-Chloroethane
-Acrolein+
-1,2-Dichloroethene (total+
-1,1-Dichloroethene+
-Methylene Chloride+
-Carbon Disulfide
-trans-1,2-Dichloroethene
-1,1-Dichloroethane+
-Vinyl acetate
-2-Chloro-1,3-butadiene
-2-Butanone
-Methacrylonitrile+
-Bromochloromethane
-Chloroform
-Ethyl Acetate
-Dibromofluoromethane
-Isobutanol
-1,2-Dichloroethane-d4
-1,2-Dichloroethane
-1,1,1-Trichloroethane
-Carbon Tetrachloride
-Benzene
-Fluorobenzene
-Dibromomethane
-1,2-Dichloropropane
-Trichloroethene
-1-Nitropropane+
-1,4-Dioxane
-Methyl methacrylate
-2-Chloroethyl Vinyl Ether
-cis-1,3-Dichloropropene
-4-Methyl-2-pentanone


Y (x10^6)
Min
-1,1,1,2-Tetrachloroethane
Chlorobenzene-d5+
-Ethylbenzene
-m,p-Xylenes+
-Styrene
-1,1,2,2-Tetrachloroethane+
-Isopropylbenzene+
-n-Propylbenzene
-2-Chlorotoluene
-4-Chlorotoluene
-1,3,5-Trimethylbenzene
-Pentachloroethane
-t-Butylbenzene
-1,2,4-Trimethylbenzene
-sec-Butylbenzene
-1,3-Dichlorobenzene
1,4 Dichlorobenzene-d4+
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Naphthalene
-Hexachlorobutadiene
-1,2,3-Trichlorobenzene
\\slsvr01\chem\HSB.i\B050420A.b\BCAL8021.D (Part 2 of 2)
Data File: \\slsvr01\chem\HSB.i\B050420A.b\BCAL8021.D
Date : 20-APR-2005 12:43
Client ID:
Sample Info: VSTD002;B050420A.b
Purge Volume: 25.0
Column phase: Rtx-VMS
Instrument: HSB.i
Operator: MN
Column diameter: 0.25

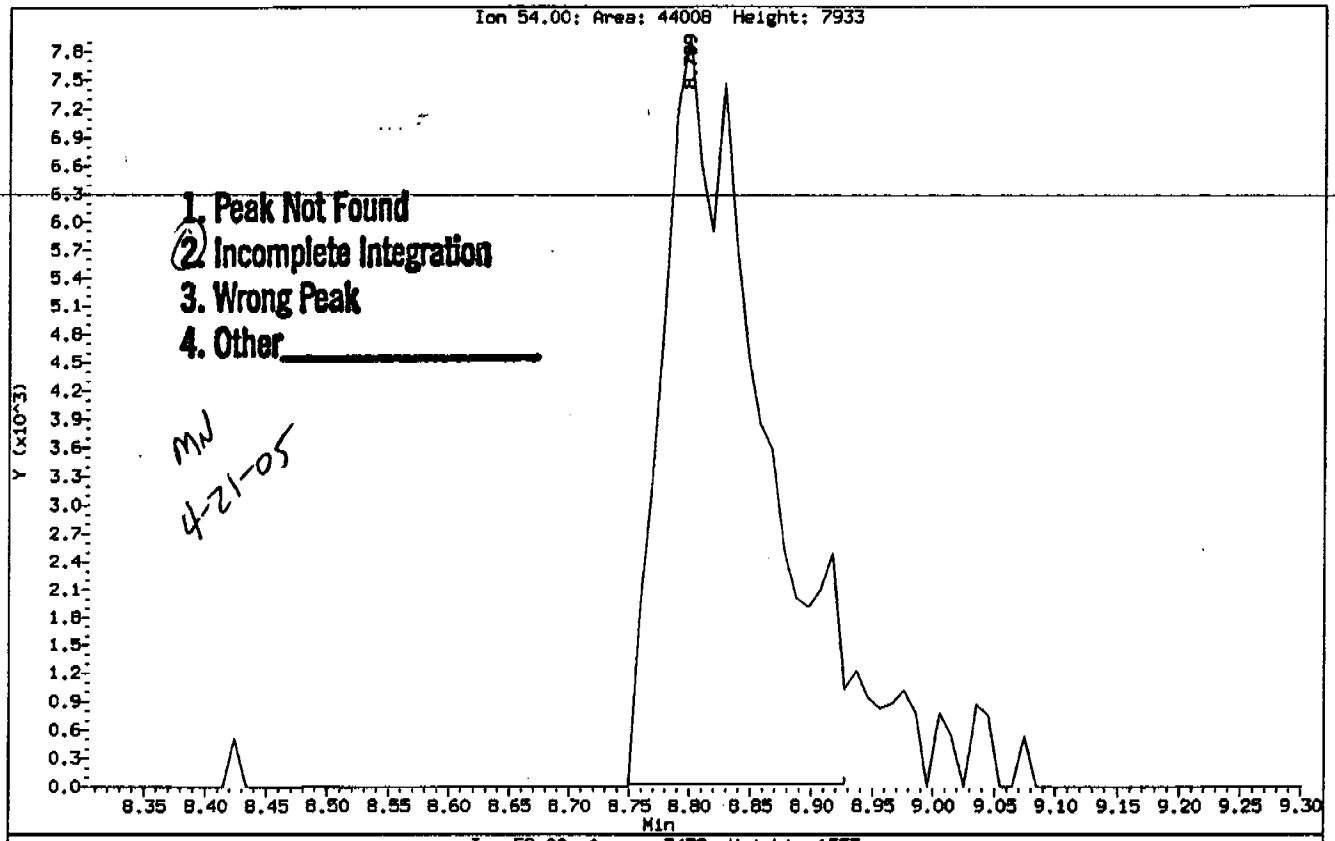
Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8021.D
Injection Date: 20-APR-2005 12:43
Instrument: MSB.i
Client Sample ID:

Compound: Acetonitrile
CAS Number: 75-05-8



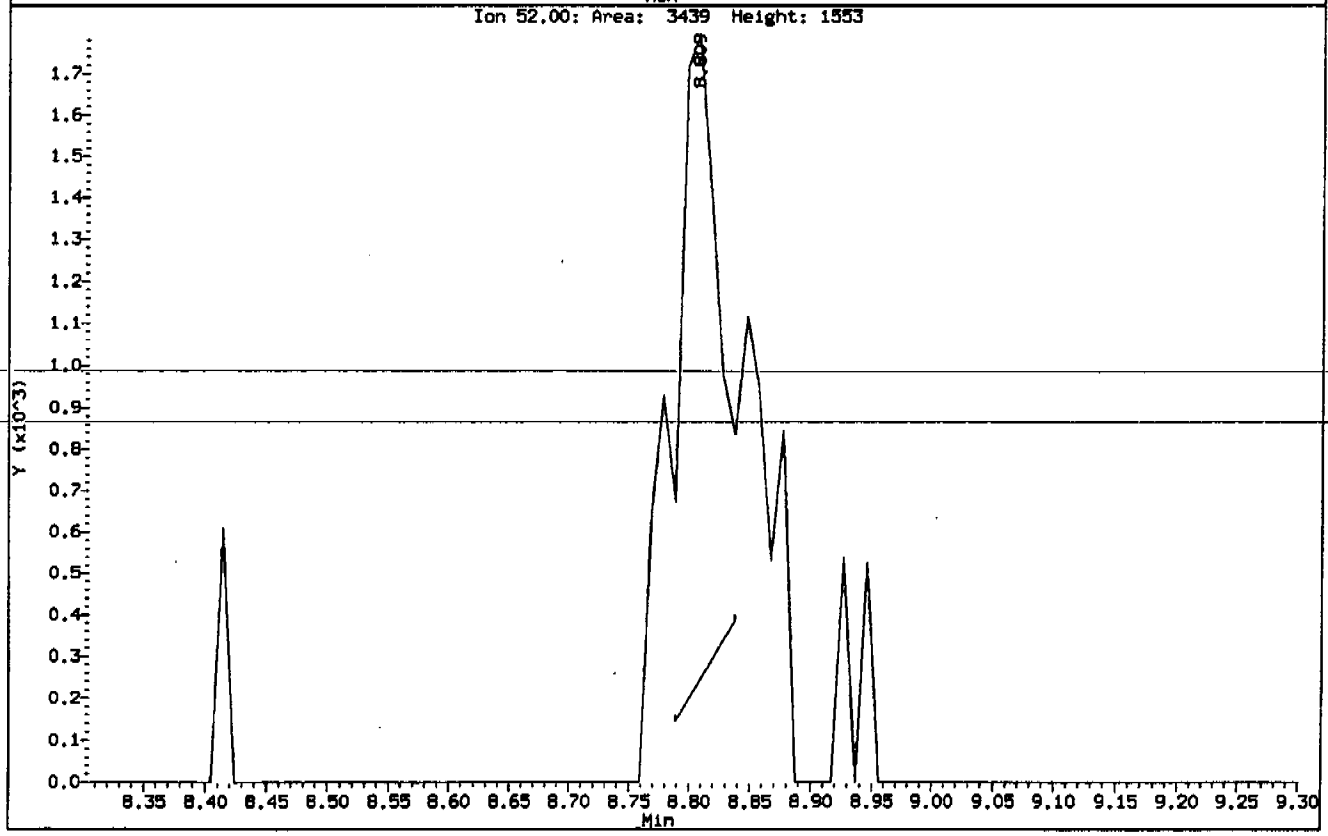
Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8021.D
Injection Date: 20-APR-2005 12:43
Instrument: MSB.i
Client Sample ID:

Compound: Propionitrile
CAS Number: 107-12-0



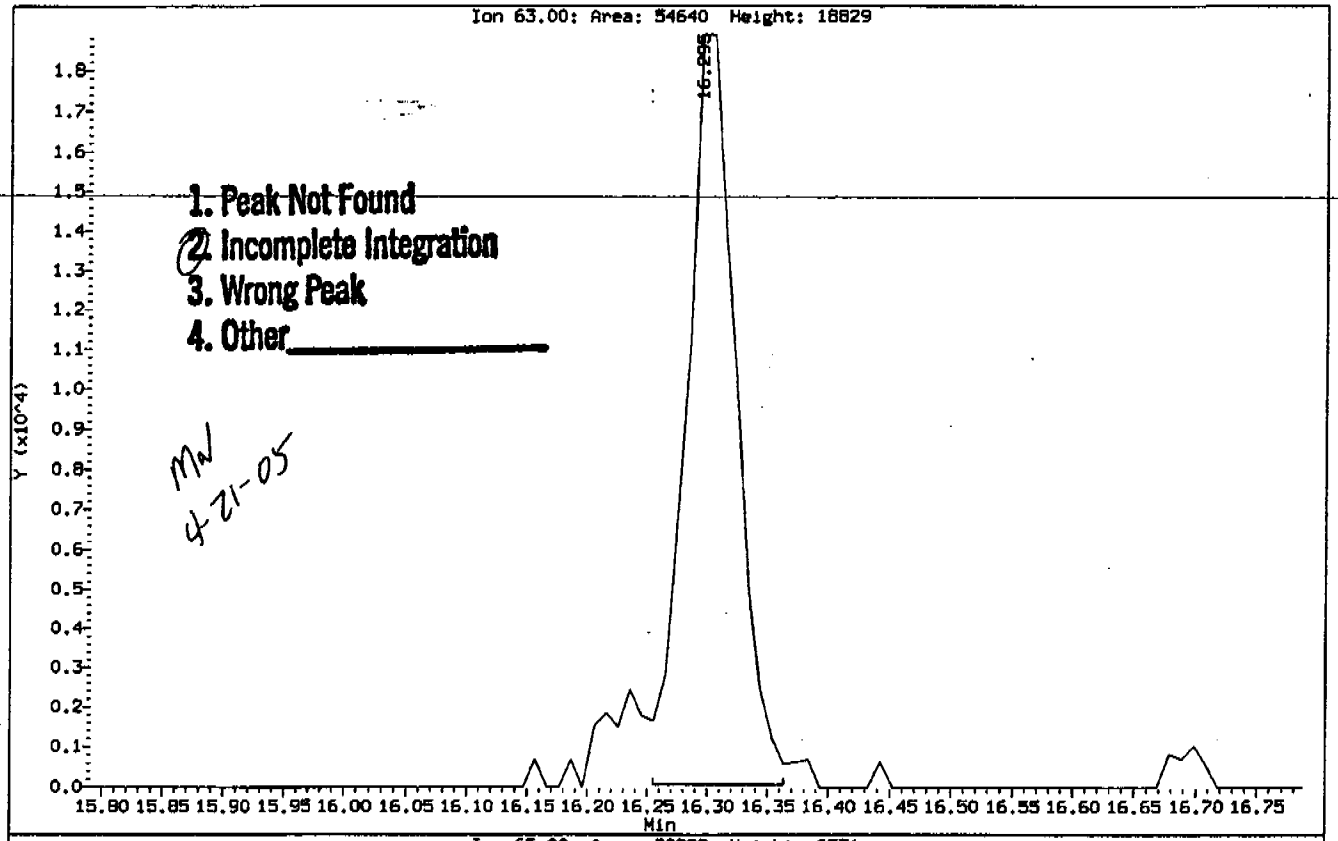
1. Peak Not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

MN
4-21-05



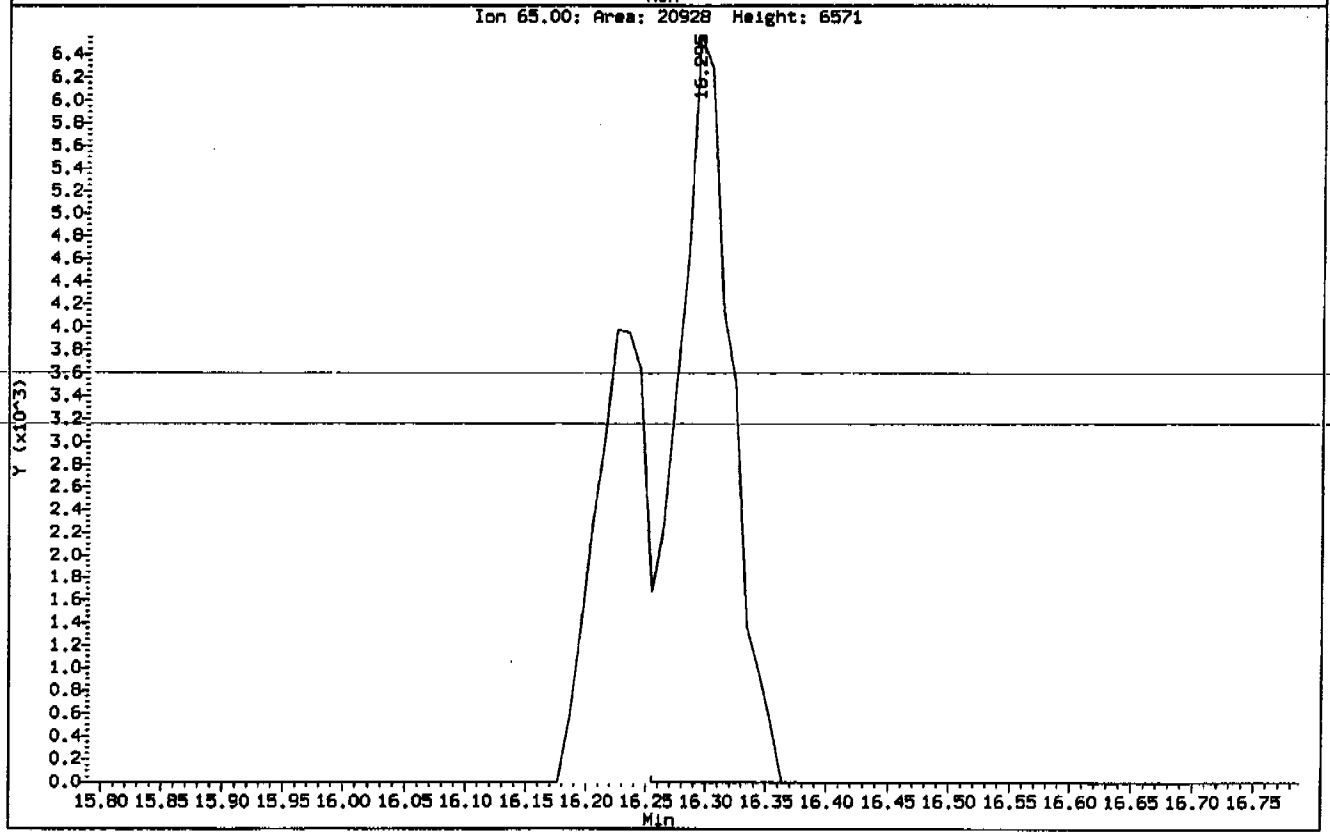
Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8021.D
Injection Date: 20-APR-2005 12:43
Instrument: MSB.i
Client Sample ID:

Compound: 2-Chloroethyl Vinyl Ether
CAS Number:



1. Peak Not Found
2. Incomplete Integration
3. Wrong Peak
4. Other _____

MW
4-21-05



Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8022.D
Report Date: 20-Apr-2005 16:30

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSB.i\B050420A.b\BCAL8022.D
Lab Smp Id: VSTD004
Inj Date : 20-APR-2005 13:20
Operator : MN Inst ID: MSB.i
Smp Info : VSTD004;B050420A.b
Misc Info : VBLKB120A.B;
Comment : NONE
Method : \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Meth Date : 20-Apr-2005 16:26 mahmoodt Quant Type: ISTD
Cal Date : 20-APR-2005 13:20 Cal File: BCAL8022.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLVOA02

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

MN 4-21-05

Name	Value	Description
DF	1.000	Dilution Factor
Vod	25.000	Def Sample Volume (mL)
Vo	25.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	3.736	3.731	(0.263)	891512	4.00000	4.122
2	Chloromethane	50	3.963	3.967	(0.279)	764873	4.00000	3.959
3	Vinyl Chloride	62	4.179	4.184	(0.294)	360632	4.00000	4.026
4	Bromomethane	94	4.692	4.696	(0.330)	563668	4.00000	3.441
5	Chloroethane	64	4.889	4.883	(0.344)	438606	4.00000	3.976
6	Acrolein	56	5.677	5.691	(0.400)	31418	20.0000	23.33
7	Trichlorofluoromethane	101	5.677	5.681	(0.400)	1022873	4.00000	4.165
8	Acetonitrile	41	5.706	5.691	(0.402)	96069	20.0000	18.52
M 9	1,2-Dichloroethene (total)	96				1417240	8.00000	8.369
10	Acetone	43	5.903	5.888	(0.416)	70513	4.00000	3.938
11	1,1-Dichloroethene	96	6.533	6.538	(0.460)	633511	4.00000	4.253
12	Iodomethane	142	6.583	6.587	(0.463)	676714	4.00000	3.746
13	Acrylonitrile	53	6.662	6.666	(0.469)	237353	20.0000	20.84
14	Methylene Chloride	84	6.799	6.794	(0.479)	665134	4.00000	4.085
15	1,1,2-Trichlorofluoroethane	101	6.888	6.892	(0.485)	722576	4.00000	4.223(A)
16	Allyl chloride	39	6.957	6.961	(0.490)	584173	4.00000	4.584
17	Carbon Disulfide	76	7.174	7.178	(0.505)	2291970	4.00000	4.516
18	trans-1,2-Dichloroethene	96	8.129	8.114	(0.572)	717314	4.00000	4.238
19	1,1-Dichloroethane	63	8.691	8.685	(0.612)	1203038	4.00000	4.207
20	Propionitrile	54	8.789	8.803	(0.619)	78650	20.0000	21.32
21	Vinyl acetate	43	9.144	9.138	(0.644)	307203	4.00000	4.329
22	2-Chloro-1,3-butadiene	53	9.656	9.641	(0.680)	971887	4.00000	4.528

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8022.D
Report Date: 20-Apr-2005 16:30

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 2-Butanone	43	9.794	9.788	(0.689)	734275	4.00000	4.132
	24 Methacrylonitrile	41	10.168	10.173	(0.716)	526192	20.0000	21.68
	25 cis-1,2-Dichloroethene	96	10.227	10.212	(0.720)	699926	4.00000	4.130
	26 Bromochloromethane	130	10.641	10.655	(0.749)	259398	4.00000	4.187(A)
	27 Chloroform	83	10.808	10.793	(0.761)	1145249	4.00000	4.027
	28 Ethyl Acetate	43	10.936	10.941	(0.770)	339584	8.00000	7.659(A)
$	29 Dibromofluoromethane	113	11.124	11.118	(0.783)	535460	4.00000	4.201
	30 Isobutanol	42	11.685	11.680	(0.823)	234764	80.0000	65.47
$	31 1,2-Dichloroethane-d4	65	12.276	12.280	(0.864)	416803	4.00000	3.980
	32 1,2-Dichloroethane	62	12.473	12.468	(0.878)	534176	4.00000	3.976
	33 1,1,1-Trichloroethane	97	12.680	12.674	(0.893)	986224	4.00000	4.188
	34 Carbon Tetrachloride	117	13.537	13.531	(0.953)	799891	4.00000	4.266
	35 Benzene	78	13.665	13.659	(0.962)	3002102	4.00000	3.903
*	36 Fluorobenzene	96	14.207	14.191	(1.000)	7054095	10.0000	
	37 Dibromomethane	93	14.936	14.930	(1.051)	215616	4.00000	4.028
	38 1,2-Dichloropropane	63	15.044	15.038	(1.059)	660918	4.00000	3.999
	39 Trichloroethene	130	15.142	15.147	(1.066)	828939	4.00000	4.016
	40 1-Nitropropane	43	15.241	15.226	(1.073)	64804	4.00000	3.633(A)
	41 Bromodichloromethane	83	15.251	15.245	(1.073)	693015	4.00000	4.270
	42 1,4-Dioxane	88	15.586	15.580	(1.097)	41776	80.0000	103.1
	43 Methyl methacrylate	69	15.763	15.758	(1.110)	159251	4.00000	4.330
	44 2-Chloroethyl Vinyl Ether	63	16.295	16.289	(1.147)	71355	4.00000	3.153
	45 cis-1,3-Dichloropropene	75	16.689	16.683	(1.175)	772699	4.00000	4.506
	46 4-Methyl-2-pentanone	43	17.004	16.999	(1.197)	193744	4.00000	4.039
	47 trans-1,3-Dichloropropene	75	17.615	17.600	(0.844)	477619	4.00000	4.465
M	48 Xylenes (total)	106				4820520	12.0000	11.98
	49 1,1,2-Trichloroethane	97	17.881	17.875	(0.857)	341623	4.00000	4.049
$	50 Toluene-d8	98	18.117	18.112	(0.868)	2658896	4.00000	4.095
	51 Toluene	91	18.255	18.259	(0.875)	3518868	4.00000	4.008
	52 Ethyl methacrylate	69	18.570	18.555	(0.890)	410213	4.00000	4.348
	53 2-Hexanone	43	18.767	18.762	(1.321)	129577	4.00000	3.976(A)
	54 Chlorodibromomethane	129	18.836	18.831	(0.903)	301369	4.00000	4.436
	55 1,2-Dibromoethane	107	19.299	19.294	(0.925)	281659	4.00000	4.129
	56 Tetrachloroethene	164	19.654	19.648	(0.942)	922785	4.00000	4.214
	57 1,1,1,2-Tetrachloroethane	131	20.787	20.781	(0.996)	532923	4.00000	4.252
*	58 Chlorobenzene-d5	119	20.865	20.860	(1.000)	1655890	10.0000	
	59 Chlorobenzene	112	20.925	20.919	(1.003)	2095714	4.00000	3.858
	60 Ethylbenzene	106	21.309	21.303	(1.021)	1349190	4.00000	3.939
	61 m,p-Xylenes	106	21.673	21.668	(1.039)	3276855	8.00000	8.034
	62 Bromoform	173	21.801	21.796	(1.045)	112002	4.00000	3.589
	63 Styrene	104	22.254	22.249	(1.067)	2099020	4.00000	4.042
	64 1,1,2,2-Tetrachloroethane	83	22.363	22.357	(1.072)	321621	4.00000	4.009
	65 o-Xylene	106	22.372	22.367	(1.072)	1543665	4.00000	3.951
	66 1,2,3-Trichloropropane	110	22.619	22.603	(0.891)	86166	4.00000	3.914
	67 trans-1,4-dichloro-2-butene	53	22.678	22.672	(0.894)	70535	4.00000	4.056
	68 Isopropylbenzene	105	23.013	23.017	(1.620)	3757123	4.00000	4.023(A)
$	69 4-Bromofluorobenzene	95	23.072	23.056	(0.909)	919470	4.00000	3.726
	70 n-Propylbenzene	91	23.781	23.785	(1.674)	5260320	4.00000	3.961(A)
	71 2-Chlorotoluene	91	23.929	23.923	(1.684)	2922857	4.00000	3.974(A)
	72 4-Chlorotoluene	91	24.057	24.061	(1.693)	2839801	4.00000	3.973(A)
	73 1,3,5-Trimethylbenzene	105	24.293	24.288	(1.710)	3445998	4.00000	4.081(A)
	74 Pentachloroethane	167	24.382	24.376	(0.961)	203751	4.00000	3.690
	75 t-Butylbenzene	119	24.776	24.770	(1.744)	3064668	4.00000	4.074(A)
	76 1,2,4-Trimethylbenzene	105	24.983	24.977	(1.758)	3391825	4.00000	4.098(A)

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8022.D
Report Date: 20-Apr-2005 16:30

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77	sec-Butylbenzene	105	25.180	25.174	(1.772)	4898364	4.00000	4.135(A)
78	1,3-Dichlorobenzene	146	25.298	25.292	(0.997)	1681767	4.00000	3.903
* 79	1,4 Dichlorobenzene-d4	152	25.377	25.371	(1.000)	2442961	10.0000	
80	1,4-Dichlorobenzene	146	25.298	25.421	(0.997)	1681767	4.00000	3.990
81	1,2-Dichlorobenzene	146	26.096	26.090	(1.028)	1300803	4.00000	3.877
82	1,2-Dibromo-3-chloropropane	157	27.022	27.006	(1.065)	33154	4.00000	4.413
83	1,2,4-Trichlorobenzene	180	29.819	29.814	(1.175)	912513	4.00000	4.167
84	Naphthalene	128	30.361	30.355	(1.196)	1004155	4.00000	4.157
85	Hexachlorobutadiene	225	30.479	30.474	(1.201)	651071	4.00000	4.178
86	1,2,3-Trichlorobenzene	180	30.785	30.779	(1.213)	726689	4.00000	4.188

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8022.D
Report Date: 20-Apr-2005 16:30

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

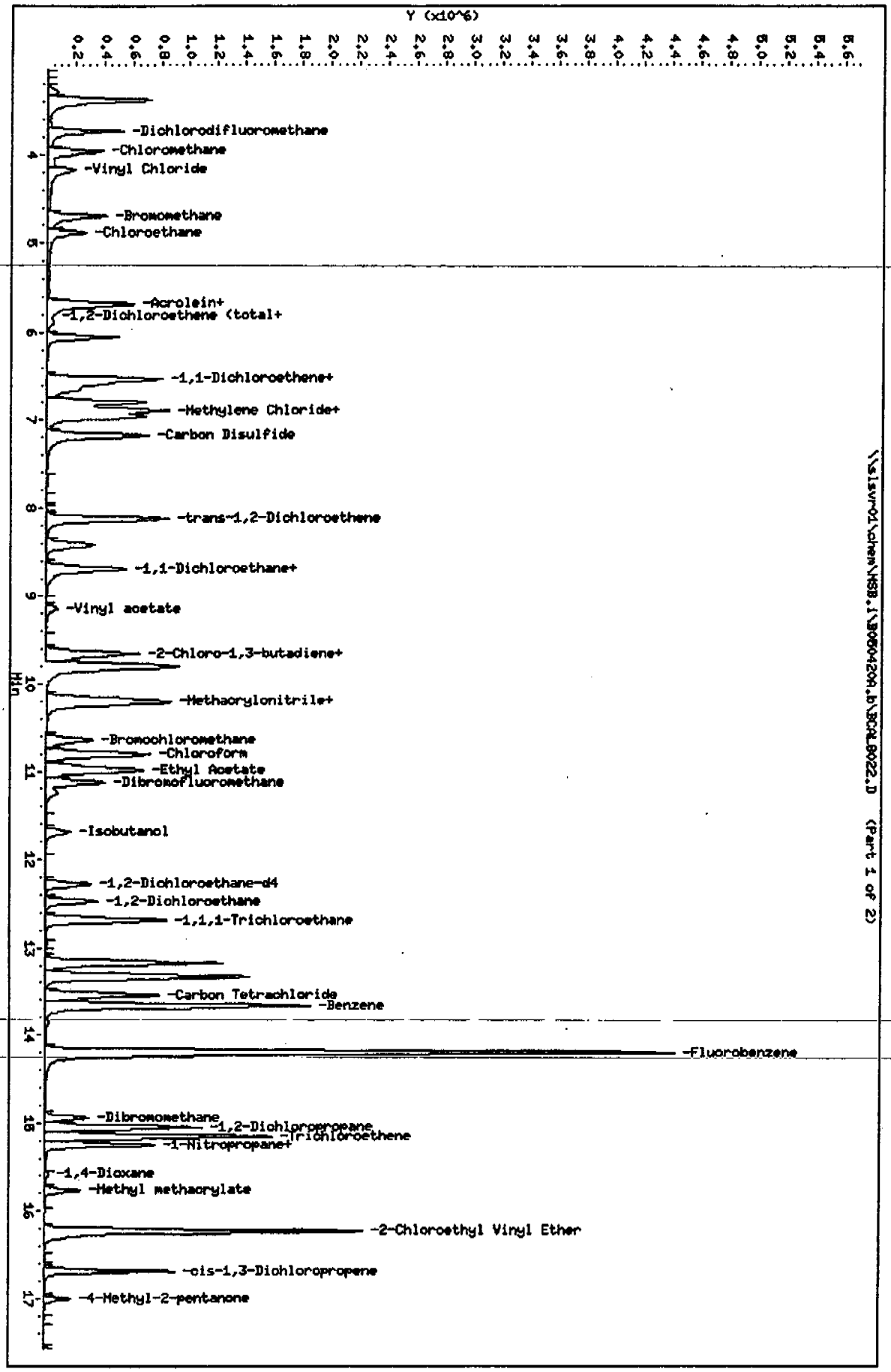
Instrument ID: MSB.i
Lab File ID: BCAL8022.D
Lab Smp Id: VSTD004
Analysis Type: VOA
Quant Type: ISTD
Operator: MN
Method File: \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Misc Info: VBLKB120A.B;

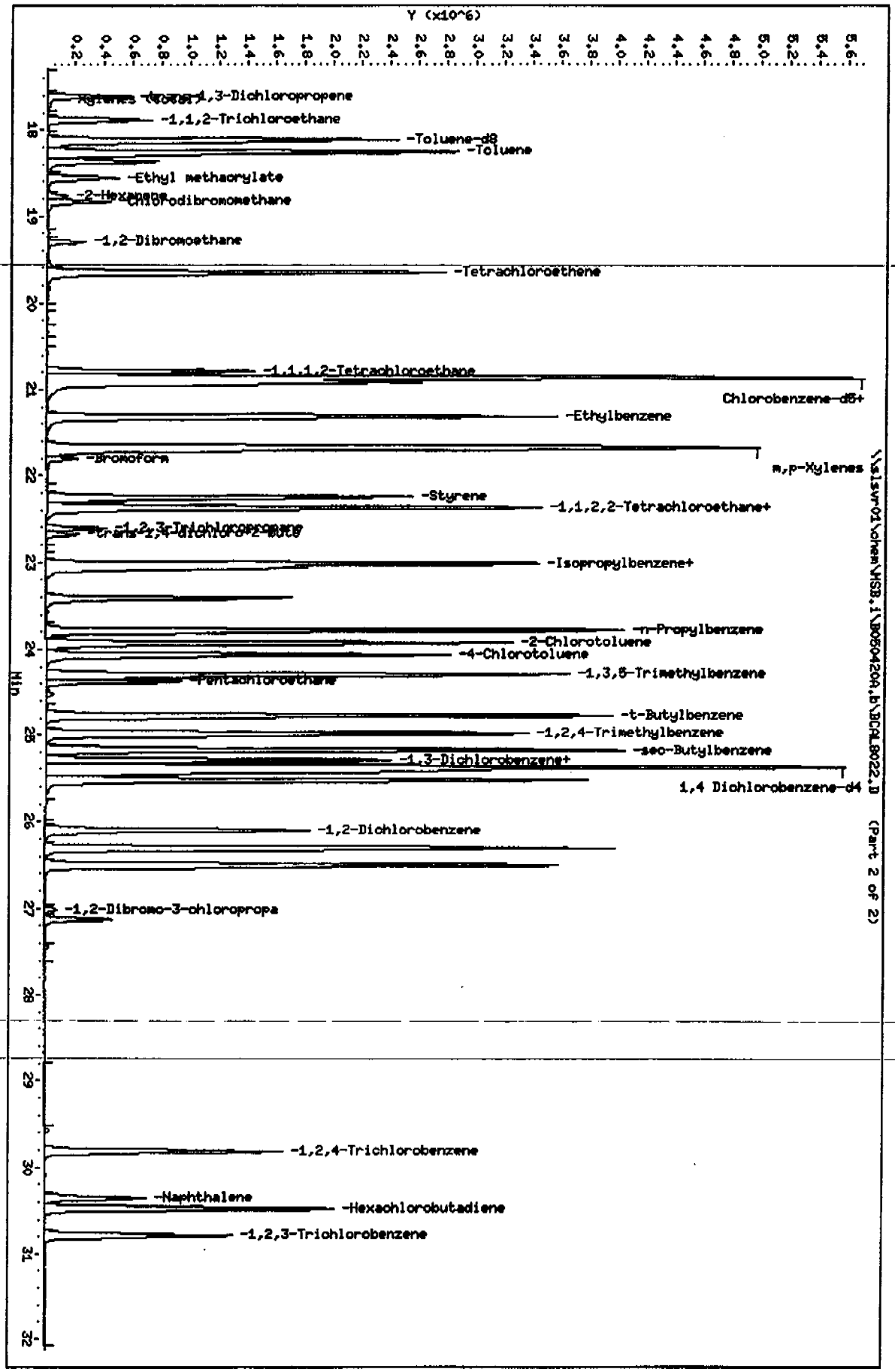
Calibration Date: 20-APR-2005
Calibration Time: 13:58
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	7222687	3611344	14445374	7054095	-2.33
58 Chlorobenzene-d5	1696606	848303	3393212	1655890	-2.40
79 1,4 Dichlorobenze	2455791	1227896	4911582	2442961	-0.52

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	14.20	13.70	14.70	14.21	0.08
58 Chlorobenzene-d5	20.87	20.37	21.37	20.87	-0.04
79 1,4 Dichlorobenze	25.39	24.89	25.89	25.38	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^6)
Data File: \\slsvr01\chem\HSB.i\B0604204.b\BCAL8022.D
Date : 20-APR-2006 13:20
Client ID:
Sample Info: VSTD004;B0604204.b
Purge Volume: 25.0
Column phase: Rtx-VMS
Instrument: HSB.i
Operator: HN
Column diameter: 0.25
\\slsvr01\chem\HSB.i\B0604204.b\BCAL8022.D (Part 1 of 2)
Min
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Acrolein+
-1,2-Dichloroethene (total+
-1,1-Dichloroethene+
-Methylene Chloride+
-Carbon Disulfide
-trans-1,2-Dichloroethene
-1,1-Dichloroethane+
-Vinyl acetate
-2-Chloro-1,3-butadiene+
-Methacrylonitrile+
-Bromochloromethane
-Chloroform
-Ethyl Acetate
-Dibromofluoromethane
-Isobutanol
-1,2-Dichloroethane-d4
-1,2-Dichloroethane
-1,1,1-Trichloroethane
-Carbon Tetrachloride
-Benzene
-Fluorobenzene
-Dibromomethane
-1,2-Dichloropropane
-Trichloroethene
-1-Nitropropane+
-1,4-Dioxane
-Methyl methacrylate
-2-Chloroethyl Vinyl Ether
-cis-1,3-Dichloropropene
-4-Methyl-2-pentanone


Y (x10^6)
0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0 3.2 3.4 3.6 3.8 4.0 4.2 4.4 4.6 4.8 5.0 5.2 5.4 5.6
-Xylenes (total)
-trans-1,3-Dichloropropene
-1,1,2-Trichloroethane
-Toluene-d8
-Toluene
-Ethyl methacrylate
-2-Hexanone
-Chlorodibromomethane
-1,2-Dibromoethane
-Tetrachloroethene
-1,1,1,2-Tetrachloroethane
Chlorobenzene-d5+
-Ethylbenzene
-Bromoform
m,p-Xylenes
-Styrene
-1,1,2,2-Tetrachloroethane+
-1,2,3-Trichloropropane
-trans-1,4-dichloro-2-butene
-Isopropylbenzene+
-n-Propylbenzene
-2-Chlorotoluene
-4-Chlorotoluene
-1,3,5-Trimethylbenzene
-Pentachloroethane
-t-Butylbenzene
-1,2,4-Trimethylbenzene
-sec-Butylbenzene
-1,3-Dichlorobenzene+
1,4 Dichlorobenzene-d4
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Naphthalene
-Hexachlorobutadiene
-1,2,3-Trichlorobenzene
Min
18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
\\slsvr01\chem\HSB.i\B050420A.b\BCAL8022.D (Part 2 of 2)
Data File: \\slsvr01\chem\HSB.i\B050420A.b\BCAL8022.D
Date : 20-APR-2005 13:20
Client ID:
Sample Info: VSTD004;B050420A.b
Purge Volume: 25.0
Column phase: Rtx-VMS
Instrument: HSB.i
Operator: HN
Column diameter: 0.25

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8023.D
Report Date: 20-Apr-2005 16:31

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSB.i\B050420A.b\BCAL8023.D
Lab Smp Id: VSTD010
Inj Date : 20-APR-2005 13:58
Operator : MN Inst ID: MSB.i
Smp Info : VSTD010;B050420A.b
Misc Info : VBLKB120A.B;
Comment : NONE
Method : \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Meth Date : 20-Apr-2005 16:26 mahmoodt Quant Type: ISTD
Cal Date : 20-APR-2005 13:58 Cal File: BCAL8023.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLVOA02

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

MN 4-21-05

Name	Value	Description
DF	1.000	Dilution Factor
Vod	25.000	Def Sample Volume (mL)
Vo	25.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	3.735	3.731	(0.263)	2170423	10.0000	10.03
2	Chloromethane	50	3.961	3.967	(0.279)	1922221	10.0000	9.950
3	Vinyl Chloride	62	4.178	4.184	(0.294)	899860	10.0000	9.812
4	Bromomethane	94	4.700	4.696	(0.331)	1464193	10.0000	9.190
5	Chloroethane	64	4.878	4.883	(0.344)	1070943	10.0000	9.754
6	Acrolein	56	5.685	5.691	(0.401)	89303	50.0000	56.14
7	Trichlorofluoromethane	101	5.685	5.681	(0.401)	2559408	10.0000	10.21
8	Acetonitrile	41	5.705	5.691	(0.402)	264574	50.0000	51.16(M)
M 9	1,2-Dichloroethene (total)	96				3631547	20.0000	20.94
10	Acetone	43	5.882	5.888	(0.414)	141543	10.0000	9.812
11	1,1-Dichloroethene	96	6.532	6.538	(0.460)	1652381	10.0000	10.62
12	Iodomethane	142	6.591	6.587	(0.464)	2030371	10.0000	10.14
13	Acrylonitrile	53	6.651	6.666	(0.469)	665743	50.0000	53.79
14	Methylene Chloride	84	6.798	6.794	(0.479)	1568250	10.0000	9.987
15	1,1,2-Trichlorofluoroethane	101	6.887	6.892	(0.485)	1751393	10.0000	10.03(A)
16	Allyl chloride	39	6.966	6.961	(0.491)	1419430	10.0000	10.61
17	Carbon Disulfide	76	7.173	7.178	(0.505)	6020482	10.0000	11.03
18	trans-1,2-Dichloroethene	96	8.128	8.114	(0.573)	1822041	10.0000	10.44
19	1,1-Dichloroethane	63	8.690	8.685	(0.612)	3027126	10.0000	10.26
20	Propionitrile	54	8.788	8.803	(0.619)	233043	50.0000	55.84(A)
21	Vinyl acetate	43	9.133	9.138	(0.643)	923247	10.0000	11.41
22	2-Chloro-1,3-butadiene	53	9.645	9.641	(0.679)	2382823	10.0000	10.54

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8023.D
Report Date: 20-Apr-2005 16:31

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	23 2-Butanone	43	9.793	9.788	(0.690)	2025741	10.0000	10.86
	24 Methacrylonitrile	41	10.167	10.173	(0.716)	1355602	50.0000	52.95
	25 cis-1,2-Dichloroethene	96	10.216	10.212	(0.720)	1809506	10.0000	10.51
	26 Bromochloromethane	130	10.650	10.655	(0.750)	667265	10.0000	10.49(A)
	27 Chloroform	83	10.807	10.793	(0.761)	2883012	10.0000	10.08
	28 Ethyl Acetate	43	10.926	10.941	(0.770)	875617	20.0000	19.53(A)
$	29 Dibromofluoromethane	113	11.123	11.118	(0.784)	1389062	10.0000	10.59
	30 Isobutanol	42	11.674	11.680	(0.822)	582543	200.000	169.0
$	31 1,2-Dichloroethane-d4	65	12.285	12.280	(0.865)	1085304	10.0000	10.23
	32 1,2-Dichloroethane	62	12.472	12.468	(0.879)	1361611	10.0000	10.12
	33 1,1,1-Trichloroethane	97	12.689	12.674	(0.894)	2575463	10.0000	10.54
	34 Carbon Tetrachloride	117	13.546	13.531	(0.954)	2120519	10.0000	10.80
	35 Benzene	78	13.664	13.659	(0.963)	7515479	10.0000	9.898
*	36 Fluorobenzene	96	14.196	14.191	(1.000)	7222687	10.0000	
	37 Dibromomethane	93	14.935	14.930	(1.052)	565640	10.0000	10.21
	38 1,2-Dichloropropane	63	15.043	15.038	(1.060)	1691378	10.0000	10.04
	39 Trichloroethene	130	15.151	15.147	(1.067)	2101071	10.0000	10.11
	40 1-Nitropropane	43	15.240	15.226	(1.074)	202671	10.0000	8.995(A)
	41 Bromodichloromethane	83	15.250	15.245	(1.074)	1915447	10.0000	11.10
	42 1,4-Dioxane	88	15.575	15.580	(1.097)	107501	200.000	234.6
	43 Methyl methacrylate	69	15.762	15.758	(1.110)	416035	10.0000	10.45
	44 2-Chloroethyl Vinyl Ether	63	16.304	16.289	(1.148)	227503	10.0000	8.570
	45 cis-1,3-Dichloropropene	75	16.688	16.683	(1.176)	2142713	10.0000	11.40
	46 4-Methyl-2-pentanone	43	17.003	16.999	(1.198)	530149	10.0000	10.42
	47 trans-1,3-Dichloropropene	75	17.614	17.600	(0.844)	1404815	10.0000	12.01
M	48 Xylenes (total)	106				11751323	30.0000	29.98
	49 1,1,2-Trichloroethane	97	17.880	17.875	(0.857)	874139	10.0000	10.28
$	50 Toluene-d8	98	18.126	18.112	(0.868)	6683932	10.0000	10.45
	51 Toluene	91	18.264	18.259	(0.875)	8753535	10.0000	10.42
	52 Ethyl methacrylate	69	18.559	18.555	(0.889)	1118220	10.0000	11.10
	53 2-Hexanone	43	18.766	18.762	(1.322)	363074	10.0000	10.30(A)
	54 Chlorodibromomethane	129	18.835	18.831	(0.902)	905435	10.0000	11.98
	55 1,2-Dibromoethane	107	19.308	19.294	(0.925)	756985	10.0000	10.64
	56 Tetrachloroethene	164	19.653	19.648	(0.941)	2177142	10.0000	10.18
	57 1,1,1,2-Tetrachloroethane	131	20.795	20.781	(0.996)	1423664	10.0000	10.89
*	58 Chlorobenzene-d5	119	20.874	20.860	(1.000)	1696606	10.0000	
	59 Chlorobenzene	112	20.923	20.919	(1.002)	5240935	10.0000	9.886
	60 Ethylbenzene	106	21.317	21.303	(1.021)	3362971	10.0000	9.934
	61 m,p-Xylenes	106	21.682	21.668	(1.039)	7892294	20.0000	19.93
	62 Bromoform	173	21.800	21.796	(1.044)	356650	10.0000	9.483
	63 Styrene	104	22.253	22.249	(1.066)	5410749	10.0000	10.39
	64 1,1,2,2-Tetrachloroethane	83	22.362	22.357	(1.071)	845729	10.0000	10.30
	65 o-Xylene	106	22.381	22.367	(1.072)	3859029	10.0000	10.04
	66 1,2,3-Trichloropropane	110	22.618	22.603	(0.891)	220914	10.0000	9.971
	67 trans-1,4-dichloro-2-butene	53	22.687	22.672	(0.894)	200906	10.0000	10.76
	68 Isopropylbenzene	105	23.021	23.017	(1.622)	9284604	10.0000	10.36(A)
$	69 4-Bromofluorobenzene	95	23.071	23.056	(0.909)	2368003	10.0000	9.822
	70 n-Propylbenzene	91	23.780	23.785	(1.675)	12904466	10.0000	9.957(A)
	71 2-Chlorotoluene	91	23.928	23.923	(1.686)	7344671	10.0000	10.20(A)
	72 4-Chlorotoluene	91	24.066	24.061	(1.695)	7195101	10.0000	10.20(A)
	73 1,3,5-Trimethylbenzene	105	24.292	24.288	(1.711)	8607273	10.0000	10.38(A)
	74 Pentachloroethane	167	24.381	24.376	(0.960)	720989	10.0000	11.98
	75 t-Butylbenzene	119	24.775	24.770	(1.745)	7596541	10.0000	10.29(A)
	76 1,2,4-Trimethylbenzene	105	24.991	24.977	(1.760)	8521155	10.0000	10.45(A)

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8023.D
Report Date: 20-Apr-2005 16:31

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77	sec-Butylbenzene	105	25.179	25.174	(1.774)	11956205	10.0000	10.71(A)
78	1,3-Dichlorobenzene	146	25.307	25.292	(0.997)	4124854	10.0000	9.885
* 79	1,4 Dichlorobenzene-d4	152	25.386	25.371	(1.000)	2455791	10.0000	
80	1,4-Dichlorobenzene	146	25.435	25.421	(1.002)	4006989	10.0000	9.855
81	1,2-Dichlorobenzene	146	26.095	26.090	(1.028)	3298059	10.0000	10.07
82	1,2-Dibromo-3-chloropropane	157	27.021	27.006	(1.064)	102616	10.0000	12.44
83	1,2,4-Trichlorobenzene	180	29.818	29.814	(1.175)	2356609	10.0000	10.75
84	Naphthalene	128	30.360	30.355	(1.196)	2653688	10.0000	10.76
85	Hexachlorobutadiene	225	30.478	30.474	(1.201)	1667950	10.0000	10.71
86	1,2,3-Trichlorobenzene	180	30.793	30.779	(1.213)	1882980	10.0000	10.84

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8023.D
Report Date: 20-Apr-2005 16:31

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

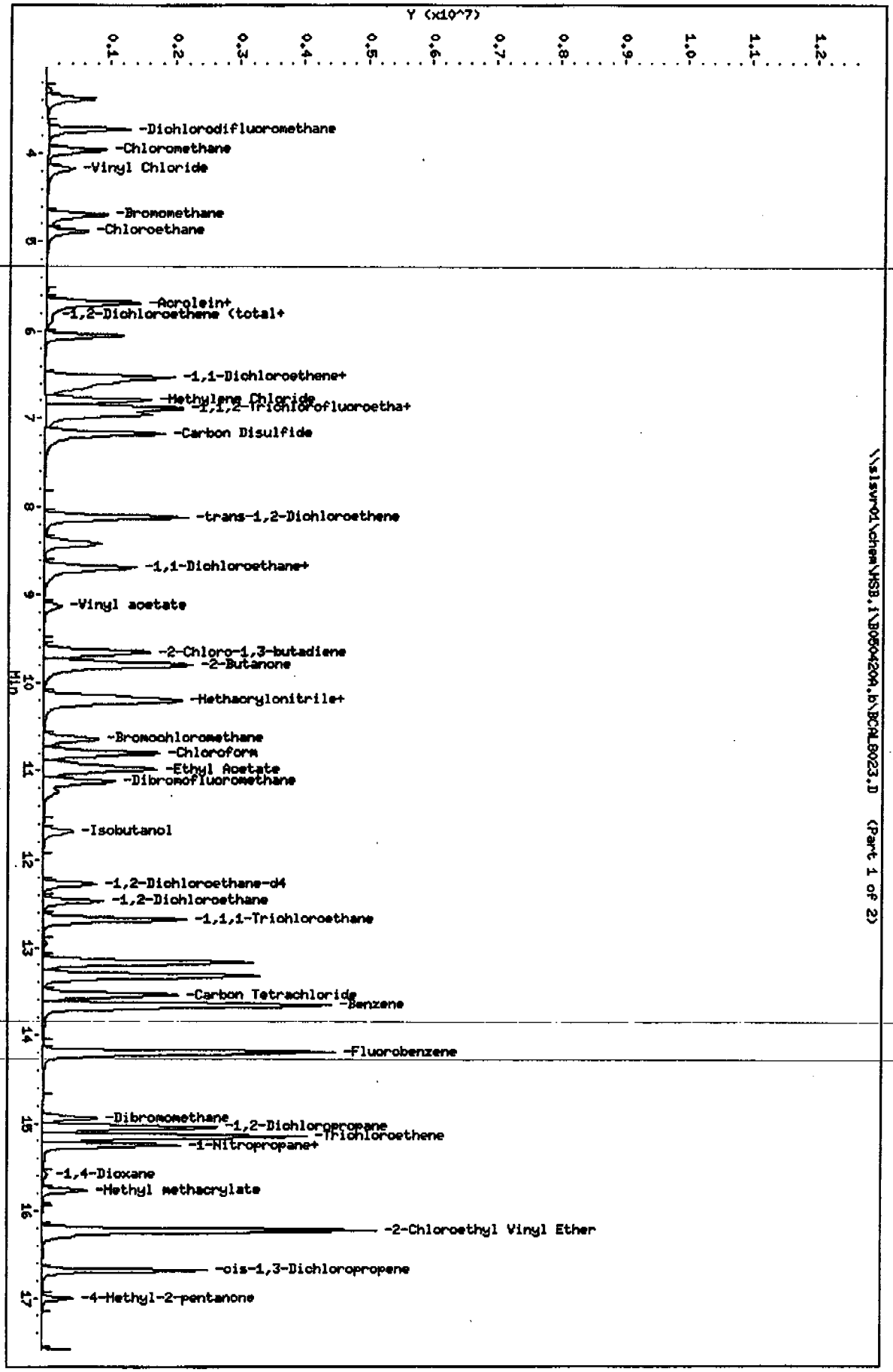
Instrument ID: MSB.i
Lab File ID: BCAL8023.D
Lab Smp Id: VSTD010
Analysis Type: VOA
Quant Type: ISTD
Operator: MN
Method File: \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Misc Info: VBLKB120A.B;

Calibration Date: 20-APR-2005
Calibration Time: 13:58
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	7222687	3611344	14445374	7222687	0.00
58 Chlorobenzene-d5	1696606	848303	3393212	1696606	0.00
79 1,4 Dichlorobenze	2455791	1227896	4911582	2455791	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	14.20	13.70	14.70	14.20	0.00
58 Chlorobenzene-d5	20.87	20.37	21.37	20.87	0.00
79 1,4 Dichlorobenze	25.39	24.89	25.89	25.39	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^7)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
Min
4
5
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7
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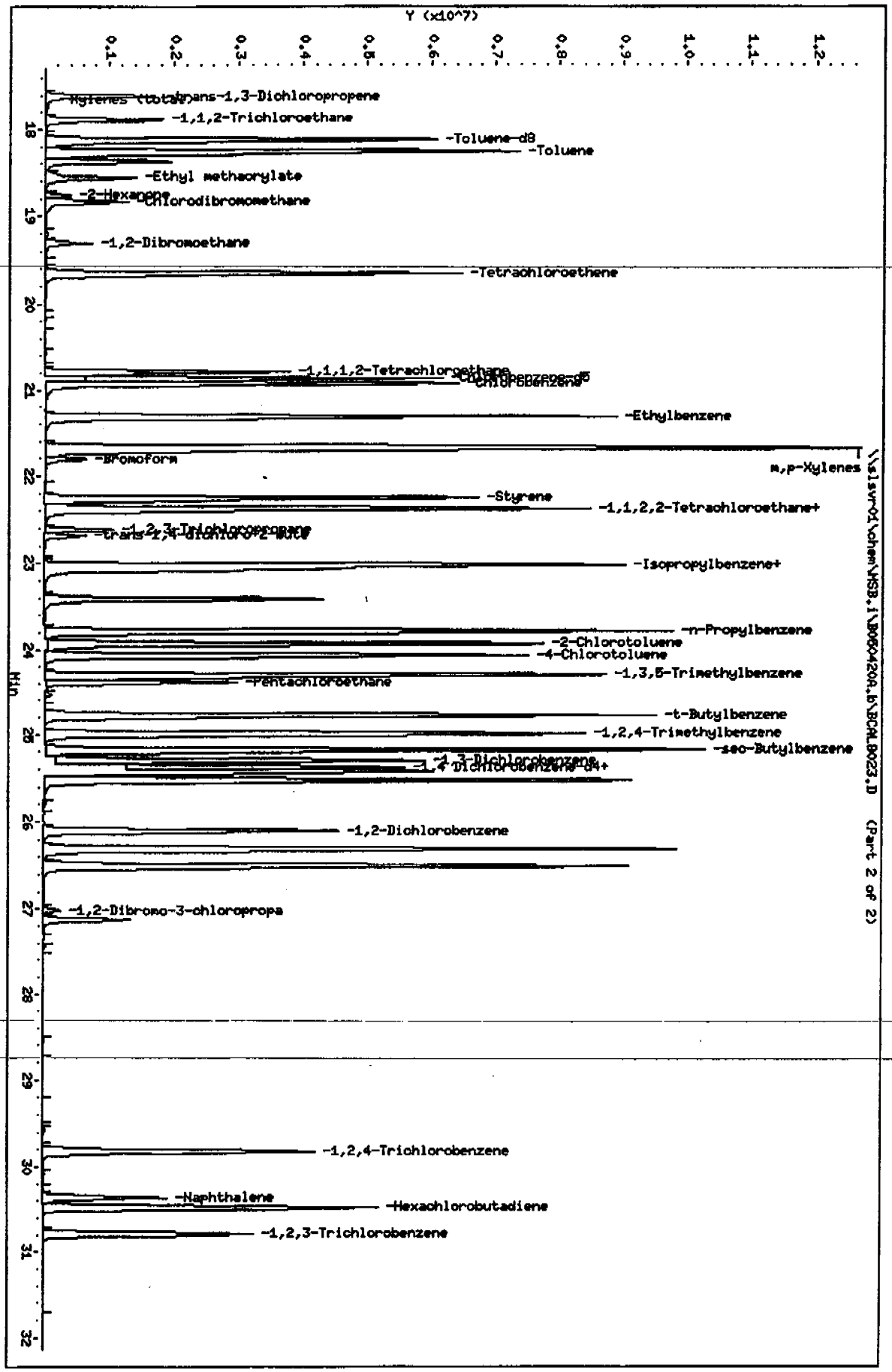
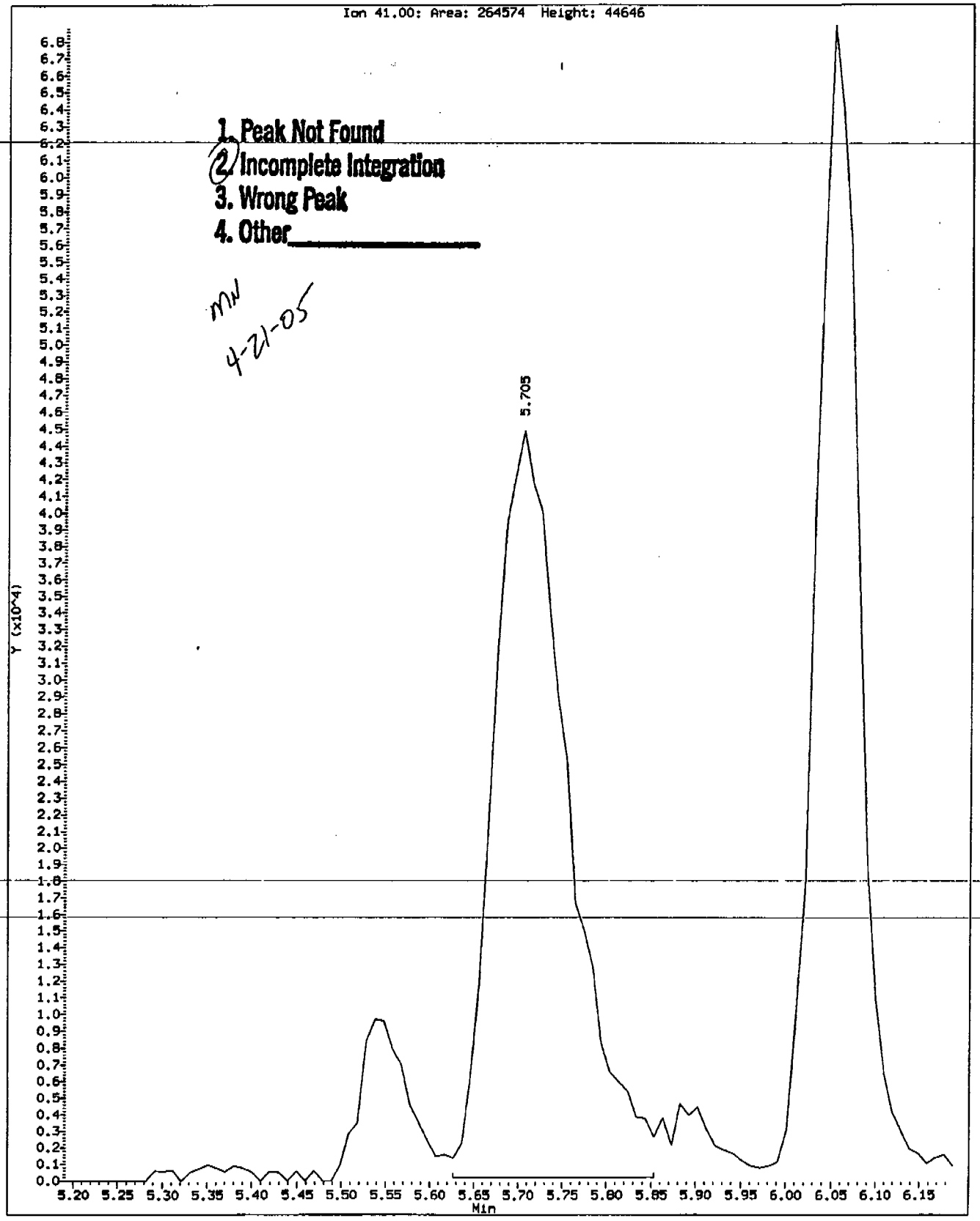
10
11
12
13
14
15
16
17
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Acrolein+
-1,2-Dichloroethene (total+
-1,1-Dichloroethene+
-Methylene Chloride
-1,1,2-Trichlorofluoroetha+
-Carbon Disulfide
-trans-1,2-Dichloroethene
-1,1-Dichloroethane+
-Vinyl acetate
-2-Chloro-1,3-butadiene
-2-Butanone
-Methacrylonitrile+
-Bromochloromethane
-Chloroform
-Ethyl Acetate
-Dibromofluoromethane
-Isobutanol
-1,2-Dichloroethane-d4
-1,2-Dichloroethane
-1,1,1-Trichloroethane
-Carbon Tetrachloride
-Benzene
-Fluorobenzene
-Dibromomethane
-1,2-Dichloropropane
-Trichloroethene
-1-Nitropropane+
-1,4-Dioxane
-Methyl methacrylate
-2-Chloroethyl Vinyl Ether
-cis-1,3-Dichloropropene
-4-Methyl-2-pentanone
\\slsvr01\chem\MSB.i\B050420A.b\BCAL0023.D (Part 1 of 2)
Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL0023.D
Date : 20-APR-2005 13:58
Client ID:
Sample Info: VSTD010;B050420A.b
Purge Volume: 25.0
Column Phase: Rtx-VMS
Instrument: MSB.i
Operator: MN
Column diameter: 0.25


Y (x10^7)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
Min
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
Xylenes (total)
trans-1,3-Dichloropropene
-1,1,2-Trichloroethane
-Toluene-d8
-Toluene
-Ethyl methacrylate
-2-Hexanone
Chlorodibromomethane
-1,2-Dibromoethane
-Tetrachloroethene
-1,1,1,2-Tetrachloroethane
Chlorobenzene-d5
Chlorobenzene
-Ethylbenzene
-Bromoform
m,p-Xylenes
-Styrene
-1,1,2,2-Tetrachloroethane+
-1,2,3-Trichloropropane
trans-1,4-dichloro-2-butene
-Isopropylbenzene+
-n-Propylbenzene
-2-Chlorotoluene
-4-Chlorotoluene
-1,3,5-Trimethylbenzene
-Pentachloroethane
-t-Butylbenzene
-1,2,4-Trimethylbenzene
-sec-Butylbenzene
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-d4+
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Naphthalene
-Hexachlorobutadiene
-1,2,3-Trichlorobenzene
Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8023.D
Date : 20-APR-2005 13:08
Client ID:
Sample Info: VSTD010;B050420A.b
Purge Volume: 25.0
Column phase: Rtx-VMS
Instrument: MSB.i
Operator: MN
Column diameter: 0.25
\\slsvr01\chem\MSB.i\B050420A.b\BCAL8023.D (Part 2 of 2)

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8023.D
Injection Date: 20-APR-2005 13:58
Instrument: MSB.i
Client Sample ID:

Compound: Acetonitrile
CAS Number: 75-05-8



Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8024.D
Report Date: 20-Apr-2005 16:31

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSB.i\B050420A.b\BCAL8024.D
Lab Smp Id: VSTD020
Inj Date : 20-APR-2005 14:35
Operator : MN Inst ID: MSB.i
Smp Info : VSTD020;B050420A.b
Misc Info : VBLKB120A.B;
Comment : NONE
Method : \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Meth Date : 20-Apr-2005 16:26 mahmoodt Quant Type: ISTD
Cal Date : 20-APR-2005 14:35 Cal File: BCAL8024.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLVOA02

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

MN 4-21-05

Name	Value	Description
DF	1.000	Dilution Factor
Vod	25.000	Def Sample Volume (mL)
Vo	25.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	3.738	3.731	(0.263)	4224152	20.0000	18.13
2	Chloromethane	50	3.964	3.967	(0.279)	3858141	20.0000	18.47
3	Vinyl Chloride	62	4.181	4.184	(0.294)	1809177	20.0000	18.40
4	Bromomethane	94	4.703	4.696	(0.331)	2979072	20.0000	17.06
5	Chloroethane	64	4.890	4.883	(0.344)	2160132	20.0000	18.17
6	Acrolein	56	5.678	5.691	(0.400)	188842	100.000	122.1
7	Trichlorofluoromethane	101	5.678	5.681	(0.400)	5121271	20.0000	19.16
8	Acetonitrile	41	5.708	5.691	(0.402)	527645	100.000	98.89(M)
M 9	1,2-Dichloroethene (total)	96				7349920	40.0000	39.62
10	Acetone	43	5.885	5.888	(0.414)	277231	20.0000	20.04
11	1,1-Dichloroethene	96	6.535	6.538	(0.460)	3363989	20.0000	20.48
12	Iodomethane	142	6.594	6.587	(0.464)	4213252	20.0000	19.83
13	Acrylonitrile	53	6.653	6.666	(0.468)	1448064	100.000	112.9
14	Methylene Chloride	84	6.791	6.794	(0.478)	3156812	20.0000	19.83
15	1,1,2-Trichlorofluoroethane	101	6.899	6.892	(0.486)	3555386	20.0000	19.10(A)
16	Allyl chloride	39	6.968	6.961	(0.490)	2978203	20.0000	21.06
17	Carbon Disulfide	76	7.175	7.178	(0.505)	12476746	20.0000	21.96
18	trans-1,2-Dichloroethene	96	8.121	8.114	(0.572)	3713721	20.0000	19.99
19	1,1-Dichloroethane	63	8.692	8.685	(0.612)	6234463	20.0000	19.89
20	Propionitrile	54	8.781	8.803	(0.618)	526449	100.000	123.8(A)
21	Vinyl acetate	43	9.126	9.138	(0.642)	1994984	20.0000	24.47
22	2-Chloro-1,3-butadiene	53	9.657	9.641	(0.680)	4991215	20.0000	20.98

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8024.D
Report Date: 20-Apr-2005 16:31

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
23	2-Butanone	43	9.805	9.788	(0.690)	4009703	20.0000	20.44
24	Methacrylonitrile	41	10.160	10.173	(0.715)	2877800	100.000	106.6
25	cis-1,2-Dichloroethene	96	10.219	10.212	(0.719)	3636199	20.0000	19.62
26	Bromochloromethane	130	10.652	10.655	(0.750)	1375694	20.0000	20.19(A)
27	Chloroform	83	10.800	10.793	(0.760)	5804810	20.0000	18.82
28	Ethyl Acetate	43	10.918	10.941	(0.768)	1848237	40.0000	39.94(A)
$ 29	Dibromofluoromethane	113	11.125	11.118	(0.783)	2875739	20.0000	20.46
30	Isobutanol	42	11.677	11.680	(0.822)	1211129	400.000	320.0
$ 31	1,2-Dichloroethane-d4	65	12.278	12.280	(0.864)	2231757	20.0000	19.51
32	1,2-Dichloroethane	62	12.475	12.468	(0.878)	2728985	20.0000	18.74
33	1,1,1-Trichloroethane	97	12.691	12.674	(0.893)	5316205	20.0000	20.47
34	Carbon Tetrachloride	117	13.538	13.531	(0.953)	4358321	20.0000	20.97
35	Benzene	78	13.666	13.659	(0.962)	14927209	20.0000	18.03
* 36	Fluorobenzene	96	14.208	14.191	(1.000)	7742072	10.0000	
37	Dibromomethane	93	14.937	14.930	(1.051)	1214548	20.0000	20.56
38	1,2-Dichloropropane	63	15.055	15.038	(1.060)	3495595	20.0000	19.39
39	Trichloroethene	130	15.154	15.147	(1.067)	4283025	20.0000	19.08
40	1-Nitropropane	43	15.242	15.226	(1.073)	496191	20.0000	20.35(A)
41	Bromodichloromethane	83	15.252	15.245	(1.073)	4003182	20.0000	22.02
42	1,4-Dioxane	88	15.577	15.580	(1.096)	236254	400.000	503.8
43	Methyl methacrylate	69	15.765	15.758	(1.110)	947962	20.0000	22.82
44	2-Chloroethyl Vinyl Ether	63	16.296	16.289	(1.147)	700880	20.0000	26.41
45	cis-1,3-Dichloropropene	75	16.690	16.683	(1.175)	4592784	20.0000	23.54
46	4-Methyl-2-pentanone	43	17.006	16.999	(1.197)	1130736	20.0000	21.22
47	trans-1,3-Dichloropropene	75	17.607	17.600	(0.844)	3065407	20.0000	24.27
M 48	Xylenes (total)	106				23163287	60.0000	52.28
49	1,1,2-Trichloroethane	97	17.882	17.875	(0.857)	1837456	20.0000	19.38
$ 50	Toluene-d8	98	18.119	18.112	(0.868)	13557563	20.0000	18.71
51	Toluene	91	18.257	18.259	(0.875)	16912166	20.0000	17.47
52	Ethyl methacrylate	69	18.552	18.555	(0.889)	2461182	20.0000	22.50
53	2-Hexanone	43	18.759	18.762	(1.320)	797850	20.0000	21.88(A)
54	Chlorodibromomethane	129	18.838	18.831	(0.903)	2017259	20.0000	24.97
55	1,2-Dibromoethane	107	19.301	19.294	(0.925)	1647884	20.0000	21.13
56	Tetrachloroethene	164	19.655	19.648	(0.942)	4566102	20.0000	18.69
57	1,1,1,2-Tetrachloroethane	131	20.778	20.781	(0.996)	3008332	20.0000	21.02
* 58	Chlorobenzene-d5	119	20.867	20.860	(1.000)	1871585	10.0000	
59	Chlorobenzene	112	20.916	20.919	(1.002)	10425240	20.0000	17.42
60	Ethylbenzene	106	21.310	21.303	(1.021)	6788217	20.0000	17.90
61	m,p-Xylenes	106	21.675	21.668	(1.039)	15586802	40.0000	34.71
62	Bromoform	173	21.803	21.796	(1.045)	861013	20.0000	20.24
63	Styrene	104	22.246	22.249	(1.066)	11055767	20.0000	19.02
64	1,1,2,2-Tetrachloroethane	83	22.364	22.357	(1.072)	1733876	20.0000	19.26
65	o-Xylene	106	22.374	22.367	(1.072)	7576485	20.0000	17.57
66	1,2,3-Trichloropropane	110	22.610	22.603	(0.891)	464190	20.0000	19.49
67	trans-1,4-dichloro-2-butene	53	22.679	22.672	(0.894)	438518	20.0000	22.58
68	Isopropylbenzene	105	23.014	23.017	(1.620)	16964437	20.0000	17.04(A)
$ 69	4-Bromofluorobenzene	95	23.073	23.056	(0.909)	4767252	20.0000	18.10
70	n-Propylbenzene	91	23.783	23.785	(1.674)	20964329	20.0000	15.09(A)
71	2-Chlorotoluene	91	23.920	23.923	(1.684)	13960107	20.0000	17.69(A)
72	4-Chlorotoluene	91	24.068	24.061	(1.694)	13895308	20.0000	18.06(A)
73	1,3,5-Trimethylbenzene	105	24.295	24.288	(1.710)	16365281	20.0000	18.01(A)
74	Pentachloroethane	167	24.374	24.376	(0.960)	1273633	20.0000	21.00
75	t-Butylbenzene	119	24.777	24.770	(1.744)	14358390	20.0000	17.78(A)
76	1,2,4-Trimethylbenzene	105	24.984	24.977	(1.758)	16203795	20.0000	18.16(A)

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8024.D
Report Date: 20-Apr-2005 16:31

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77	sec-Butylbenzene	105	25.171	25.174	(1.772)	20709738	20.0000	16.49(A)
78	1,3-Dichlorobenzene	146	25.299	25.292	(0.997)	8259739	20.0000	17.98
* 79	1,4 Dichlorobenzene-d4	152	25.378	25.371	(1.000)	2656712	10.0000	
80	1,4-Dichlorobenzene	146	25.428	25.421	(1.002)	7958153	20.0000	17.75
81	1,2-Dichlorobenzene	146	26.097	26.090	(1.028)	6526152	20.0000	18.21
82	1,2-Dibromo-3-chloropropane	157	27.023	27.006	(1.065)	231628	20.0000	28.35
83	1,2,4-Trichlorobenzene	180	29.821	29.814	(1.175)	4770904	20.0000	20.03
84	Naphthalene	128	30.353	30.355	(1.196)	5740083	20.0000	21.52
85	Hexachlorobutadiene	225	30.481	30.474	(1.201)	3426548	20.0000	20.18
86	1,2,3-Trichlorobenzene	180	30.786	30.779	(1.213)	3796066	20.0000	20.10

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8024.D
Report Date: 20-Apr-2005 16:31

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

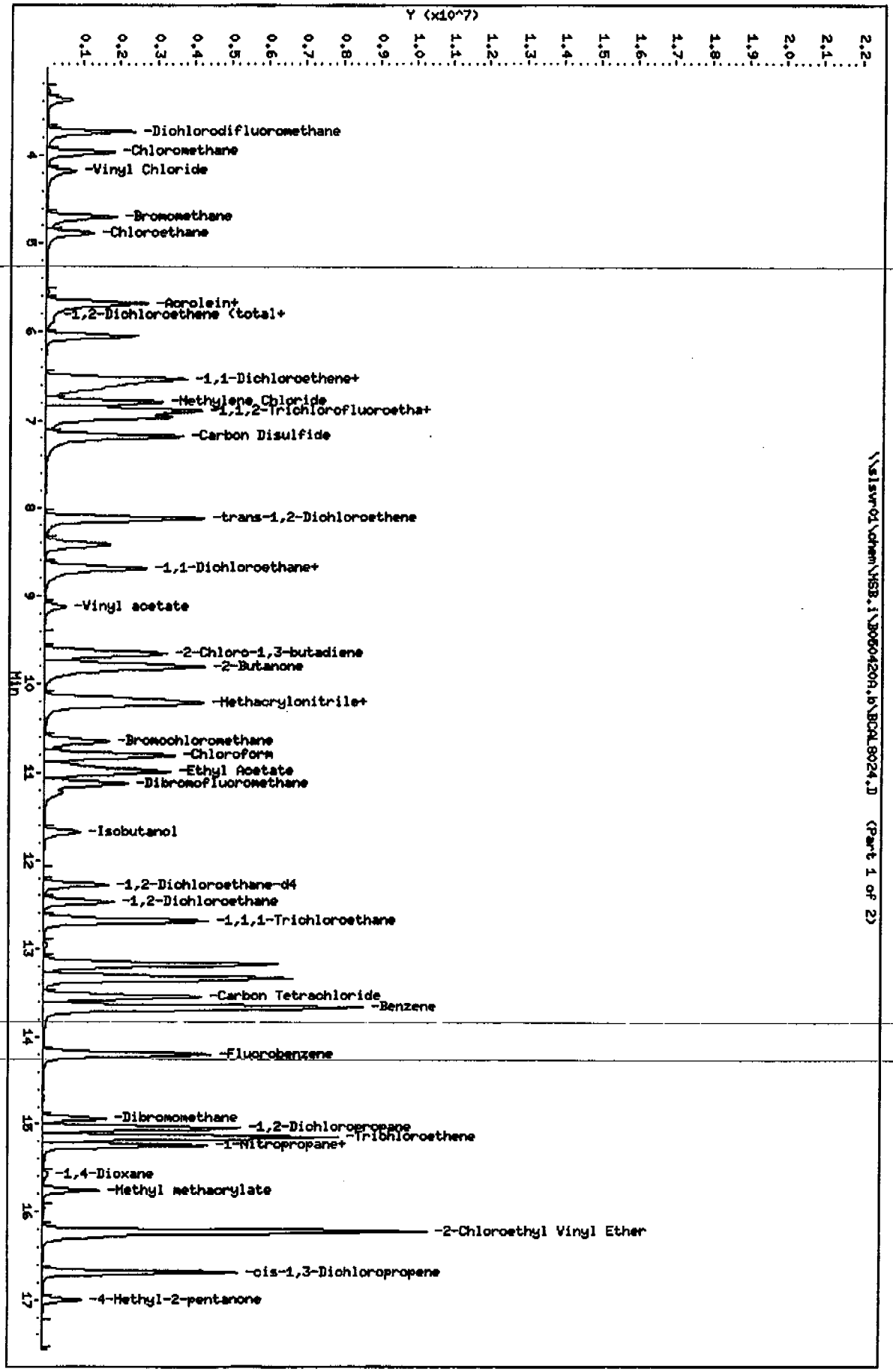
Instrument ID: MSB.i
Lab File ID: BCAL8024.D
Lab Smp Id: VSTD020
Analysis Type: VOA
Quant Type: ISTD
Operator: MN
Method File: \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Misc Info: VBLKB120A.B;

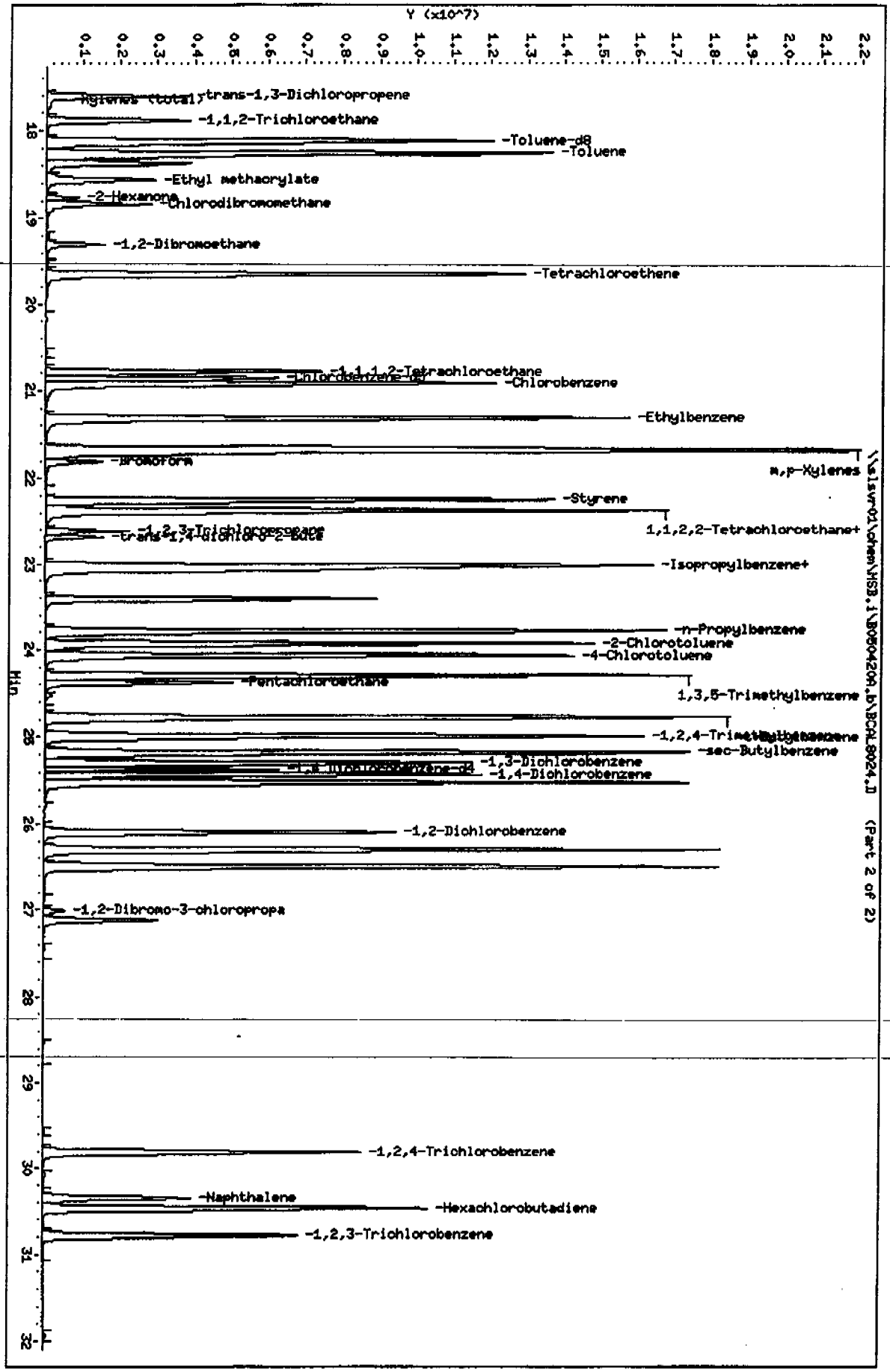
Calibration Date: 20-APR-2005
Calibration Time: 13:58
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	7222687	3611344	14445374	7742072	7.19
58 Chlorobenzene-d5	1696606	848303	3393212	1871585	10.31
79 1,4 Dichlorobenze	2455791	1227896	4911582	2656712	8.18

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	14.20	13.70	14.70	14.21	0.09
58 Chlorobenzene-d5	20.87	20.37	21.37	20.87	-0.03
79 1,4 Dichlorobenze	25.39	24.89	25.89	25.38	-0.03

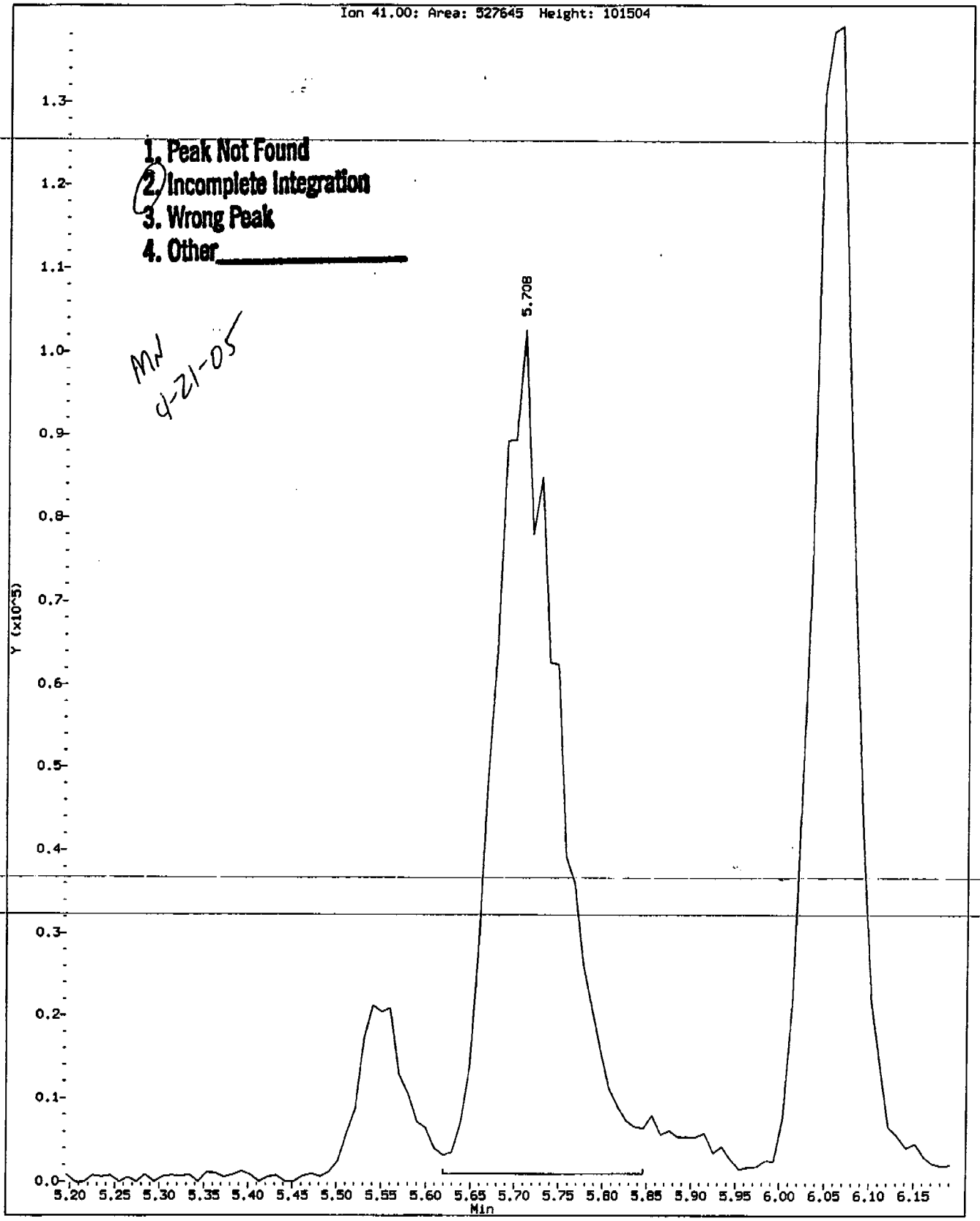
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^7)
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2.0 2.1 2.2
Data File: \\slsvr01\chem\HSB.i\B060420A.b\BCAL8024.D
Date : 20-APR-2006 14:36
Client ID:
Sample Info: VSTD020;B060420A.b
Purge Volume: 25.0
Column phase: Rtx-VMS
Instrument: HSB.i
Operator: MN
Column diameter: 0.25
\\slsvr01\chem\HSB.i\B060420A.b\BCAL8024.D (Part 1 of 2)
Min
4
5
6
7
8
9
10
11
12
13
14
15
16
17
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Acrolein+
-1,2-Dichloroethene (total+
-1,1-Dichloroethene+
-Methylene Chloride
-1,1,2-Trichlorofluoroetha+
-Carbon Disulfide
-trans-1,2-Dichloroethene
-1,1-Dichloroethane+
-Vinyl acetate
-2-Chloro-1,3-butadiene
-2-Butanone
-Methacrylonitrile+
-Bromochloromethane
-Chloroform
-Ethyl Acetate
-Dibromofluoromethane
-Isobutanol
-1,2-Dichloroethane-d4
-1,2-Dichloroethane
-1,1,1-Trichloroethane
-Carbon Tetrachloride
-Benzene
-Fluorobenzene
-Dibromomethane
-1,2-Dichloropropane
-Trichloroethene
-1-Nitropropane+
-1,4-Dioxane
-Methyl methacrylate
-2-Chloroethyl Vinyl Ether
-cis-1,3-Dichloropropene
-4-Methyl-2-pentanone


Y (x10^7)
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2.0 2.1 2.2
Xylenes (total)
trans-1,3-Dichloropropene
-1,1,2-Trichloroethane
-Toluene-d8
-Toluene
-Ethyl methacrylate
-2-Hexanone
-Chlorodibromomethane
-1,2-Dibromoethane
-Tetrachloroethene
-1,1,1,2-Tetrachloroethane
-Chlorobenzene-d5
-Chlorobenzene
-Ethylbenzene
-BROMOFORM
m,p-Xylenes
-Styrene
1,1,2,2-Tetrachloroethane+
-1,2,3-Trichloropropane
-trans-1,4-dichloro-2-Bute
-Isopropylbenzene+
-n-Propylbenzene
-2-Chlorotoluene
-4-Chlorotoluene
-Pentachloroethane
1,3,5-Trimethylbenzene
-1,2,4-Trimethylbenzene
-sec-Butylbenzene
-1,3-Dichlorobenzene-d4
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloroprop
-1,2,4-Trichlorobenzene
-Naphthalene
-Hexachlorobutadiene
-1,2,3-Trichlorobenzene
Min
18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
\\slsvr01\chem\MSB.i\B050420A.b\BCAL8024.D (Part 2 of 2)
Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8024.D
Date : 20-APR-2005 14:35
Client ID:
Sample Info: VSTD020;B050420A.b
Purge Volume: 25.0
Column phase: Rtx-VMS
Instrument: MSB.i
Operator: MN
Column diameter: 0.25

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8024.D
Injection Date: 20-APR-2005 14:35
Instrument: MSB.i
Client Sample ID:

Compound: Acetonitrile
CAS Number: 75-05-8



Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8025.D
Report Date: 20-Apr-2005 16:33

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSB.i\B050420A.b\BCAL8025.D
Lab Smp Id: VSTD030
Inj Date : 20-APR-2005 15:12
Operator : MN Inst ID: MSB.i
Smp Info : VSTD030;B050420A.b
Misc Info : VBLKB120A.B;
Comment : NONE
Method : \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Meth Date : 20-Apr-2005 16:26 mahmoodt Quant Type: ISTD
Cal Date : 20-APR-2005 15:12 Cal File: BCAL8025.D
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLVOA02

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

MW 4-21-05

Name	Value	Description
DF	1.000	Dilution Factor
Vod	25.000	Def Sample Volume (mL)
Vo	25.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	3.738	3.731	(0.263)	7029315	30.0000	29.26
2	Chloromethane	50	3.964	3.967	(0.279)	6100253	30.0000	28.45
3	Vinyl Chloride	62	4.181	4.184	(0.294)	3051213	30.0000	29.98
4	Bromomethane	94	4.703	4.696	(0.331)	4581810	30.0000	25.91
5	Chloroethane	64	4.881	4.883	(0.344)	3433072	30.0000	28.17
6	Acrolein	56	5.678	5.691	(0.400)	412959	150.000	233.9(A)
7	Trichlorofluoromethane	101	5.688	5.681	(0.400)	8625585	30.0000	31.00
8	Acetonitrile	41	5.708	5.691	(0.402)	876190	150.000	152.6
M 9	1,2-Dichloroethene (total)	96				11677013	60.0000	60.67
10	Acetone	43	5.885	5.888	(0.414)	424179	30.0000	30.22
11	1,1-Dichloroethene	96	6.535	6.538	(0.460)	5631507	30.0000	32.63
12	Iodomethane	142	6.594	6.587	(0.464)	7039531	30.0000	30.52
13	Acrylonitrile	53	6.654	6.666	(0.468)	2468672	150.000	179.7
14	Methylene Chloride	84	6.801	6.794	(0.479)	5218020	30.0000	30.57
15	1,1,2-Trichlorofluoroethane	101	6.900	6.892	(0.486)	6026187	30.0000	31.08(A)
16	Allyl chloride	39	6.969	6.961	(0.490)	4840336	30.0000	32.59
17	Carbon Disulfide	76	7.176	7.178	(0.505)	21281699	30.0000	35.14
18	trans-1,2-Dichloroethene	96	8.131	8.114	(0.572)	6073256	30.0000	31.34
19	1,1-Dichloroethane	63	8.702	8.685	(0.612)	10314145	30.0000	31.51
20	Propionitrile	54	8.781	8.803	(0.618)	902046	150.000	194.8(A)
21	Vinyl acetate	43	9.136	9.138	(0.643)	3665253	30.0000	40.81(A)
22	2-Chloro-1,3-butadiene	53	9.658	9.641	(0.680)	8326901	30.0000	33.20

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8025.D
Report Date: 20-Apr-2005 16:33

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	23 2-Butanone	43	9.815	9.788	(0.691)	6818225	30.0000	32.92
	24 Methacrylonitrile	41	10.180	10.173	(0.716)	4680236	150.000	164.7
	25 cis-1,2-Dichloroethene	96	10.229	10.212	(0.720)	5603757	30.0000	29.32
	26 Bromochloromethane	130	10.653	10.655	(0.750)	2123928	30.0000	30.09(A)
	27 Chloroform	83	10.810	10.793	(0.761)	9170806	30.0000	28.89
	28 Ethyl Acetate	43	10.929	10.941	(0.769)	3028578	60.0000	61.03(A)
$	29 Dibromofluoromethane	113	11.135	11.118	(0.784)	4389315	30.0000	30.14
	30 Isobutanol	42	11.687	11.680	(0.823)	1965255	600.000	513.6
$	31 1,2-Dichloroethane-d4	65	12.288	12.280	(0.865)	3399548	30.0000	28.88
	32 1,2-Dichloroethane	62	12.485	12.468	(0.879)	4233347	30.0000	28.34
	33 1,1,1-Trichloroethane	97	12.692	12.674	(0.893)	8549927	30.0000	31.53
	34 Carbon Tetrachloride	117	13.549	13.531	(0.954)	7036242	30.0000	32.29
	35 Benzene	78	13.677	13.659	(0.963)	22673539	30.0000	26.90
*	36 Fluorobenzene	96	14.209	14.191	(1.000)	8015944	10.0000	
	37 Dibromomethane	93	14.947	14.930	(1.052)	1902098	30.0000	30.93
	38 1,2-Dichloropropane	63	15.056	15.038	(1.060)	5654703	30.0000	30.25
	39 Trichloroethene	130	15.164	15.147	(1.067)	6593021	30.0000	28.59
	40 1-Nitropropane	43	15.253	15.226	(1.073)	835352	30.0000	30.73(A)
	41 Bromodichloromethane	83	15.253	15.245	(1.073)	6351946	30.0000	33.16
	42 1,4-Dioxane	88	15.578	15.580	(1.096)	387642	600.000	762.4
	43 Methyl methacrylate	69	15.765	15.758	(1.110)	1539013	30.0000	34.83
	44 2-Chloroethyl Vinyl Ether	63	16.307	16.289	(1.148)	1241111	30.0000	42.12(A)
	45 cis-1,3-Dichloropropene	75	16.691	16.683	(1.175)	7452665	30.0000	35.72
	46 4-Methyl-2-pentanone	43	17.006	16.999	(1.197)	1928821	30.0000	34.15
	47 trans-1,3-Dichloropropene	75	17.617	17.600	(0.844)	5107907	30.0000	33.82
M	48 Xylenes (total)	106				38796763	90.0000	76.69
	49 1,1,2-Trichloroethane	97	17.893	17.875	(0.857)	3091800	30.0000	28.16
$	50 Toluene-d8	98	18.129	18.112	(0.869)	20719400	30.0000	25.10
	51 Toluene	91	18.267	18.259	(0.875)	23910462	30.0000	22.04
	52 Ethyl methacrylate	69	18.572	18.555	(0.890)	4264628	30.0000	32.80
	53 2-Hexanone	43	18.769	18.762	(1.321)	1424892	30.0000	36.40(A)
	54 Chlorodibromomethane	129	18.848	18.831	(0.903)	3472672	30.0000	35.58
	55 1,2-Dibromoethane	107	19.311	19.294	(0.925)	2863102	30.0000	31.17
	56 Tetrachloroethene	164	19.666	19.648	(0.942)	6543317	30.0000	23.68
	57 1,1,1,2-Tetrachloroethane	131	20.798	20.781	(0.997)	5304719	30.0000	31.42
*	58 Chlorobenzene-d5	119	20.867	20.860	(1.000)	2190591	10.0000	
	59 Chlorobenzene	112	20.936	20.919	(1.003)	17645243	30.0000	25.78
	60 Ethylbenzene	106	21.320	21.303	(1.022)	11907667	30.0000	27.24
	61 m,p-Xylenes	106	21.695	21.668	(1.040)	25469956	60.0000	49.82
	62 Bromoform	173	21.813	21.796	(1.045)	1554833	30.0000	30.26
	63 Styrene	104	22.256	22.249	(1.067)	18727969	30.0000	27.85
	64 1,1,2,2-Tetrachloroethane	83	22.374	22.357	(1.072)	3306444	30.0000	31.18
	65 o-Xylene	106	22.384	22.367	(1.073)	13326807	30.0000	26.87
	66 1,2,3-Trichloropropane	110	22.621	22.603	(0.891)	845222	30.0000	31.11
	67 trans-1,4-dichloro-2-butene	53	22.690	22.672	(0.894)	844609	30.0000	36.91
	68 Isopropylbenzene	105	23.024	23.017	(1.620)	23381955	30.0000	23.50(A)
$	69 4-Bromofluorobenzene	95	23.074	23.056	(0.909)	8352821	30.0000	28.26
	70 n-Propylbenzene	91	23.941	23.785	(1.685)	20705784	30.0000	14.40(A)
	71 2-Chlorotoluene	91	23.941	23.923	(1.685)	20788968	30.0000	26.01(A)
	72 4-Chlorotoluene	91	24.078	24.061	(1.695)	21007470	30.0000	26.83(A)
	73 1,3,5-Trimethylbenzene	105	24.305	24.288	(1.711)	23857593	30.0000	25.93(A)
	74 Pentachloroethane	167	24.384	24.376	(0.960)	3120870	30.0000	42.30(A)
	75 t-Butylbenzene	119	24.788	24.770	(1.745)	21578063	30.0000	26.33(A)
	76 1,2,4-Trimethylbenzene	105	24.995	24.977	(1.759)	23823065	30.0000	26.32(A)

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8025.D
Report Date: 20-Apr-2005 16:33

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	77 sec-Butylbenzene	105	25.192	25.174	(1.773)	26169565	30.0000	21.12(A)
	78 1,3-Dichlorobenzene	146	25.310	25.292	(0.997)	13735473	30.0000	26.85
*	79 1,4 Dichlorobenzene-d4	152	25.389	25.371	(1.000)	3010987	10.0000	
	80 1,4-Dichlorobenzene	146	25.438	25.421	(1.002)	13233411	30.0000	26.54
	81 1,2-Dichlorobenzene	146	26.108	26.090	(1.028)	11206917	30.0000	27.91
	82 1,2-Dibromo-3-chloropropane	157	27.034	27.006	(1.065)	432193	30.0000	42.72(A)
	83 1,2,4-Trichlorobenzene	180	29.831	29.814	(1.175)	7833788	30.0000	29.15
	84 Naphthalene	128	30.363	30.355	(1.196)	9659734	30.0000	31.95
	85 Hexachlorobutadiene	225	30.491	30.474	(1.201)	5452364	30.0000	28.56
	86 1,2,3-Trichlorobenzene	180	30.796	30.779	(1.213)	6175101	30.0000	29.00

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8025.D
Report Date: 20-Apr-2005 16:33

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

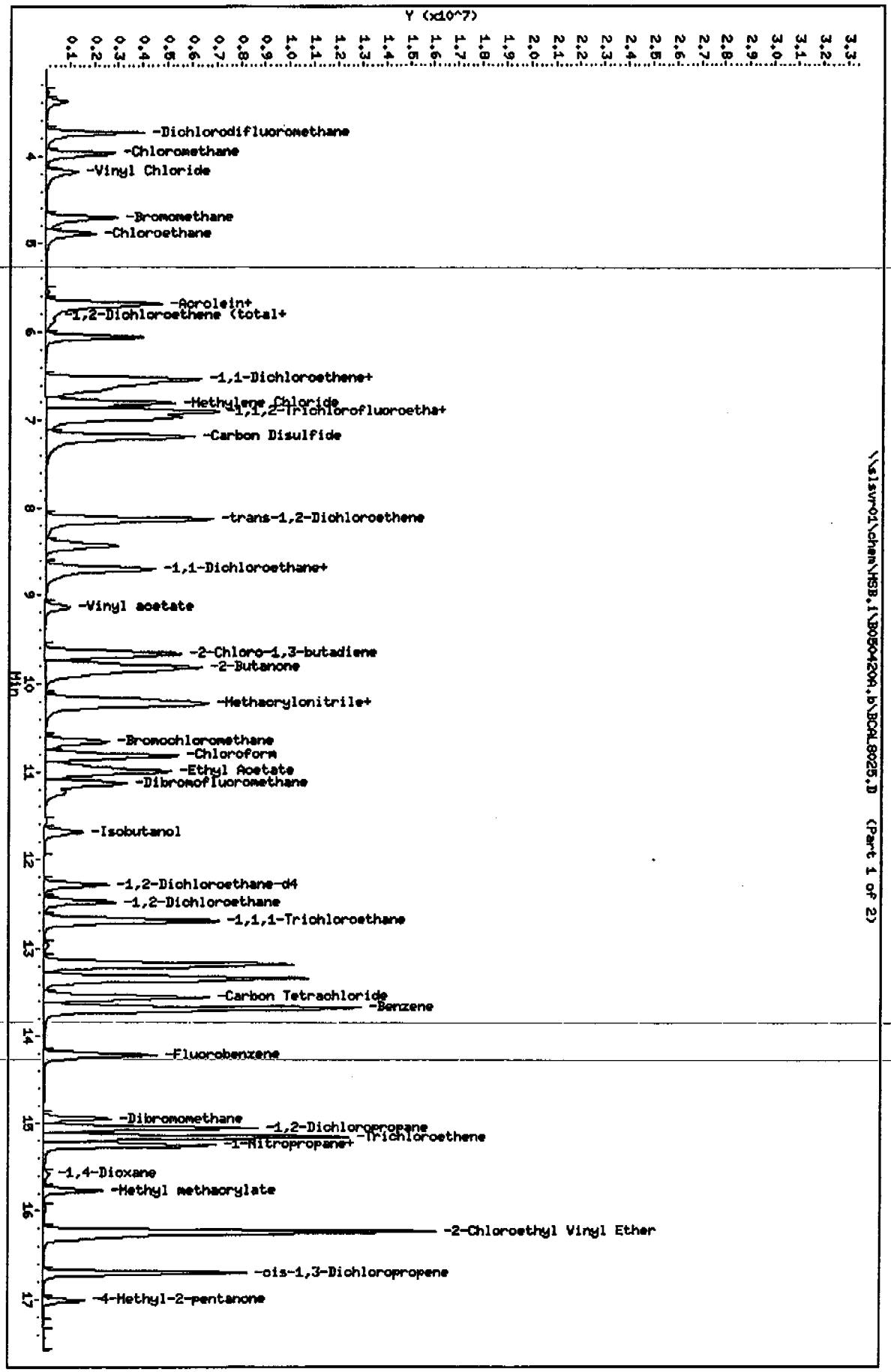
Instrument ID: MSB.i
Lab File ID: BCAL8025.D
Lab Smp Id: VSTD030
Analysis Type: VOA
Quant Type: ISTD
Operator: MN
Method File: \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Misc Info: VBLKB120A.B;

Calibration Date: 20-APR-2005
Calibration Time: 13:58
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	7222687	3611344	14445374	8015944	10.98
58 Chlorobenzene-d5	1696606	848303	3393212	2190591	29.12
79 1,4 Dichlorobenze	2455791	1227896	4911582	3010987	22.61

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	14.20	13.70	14.70	14.21	0.09
58 Chlorobenzene-d5	20.87	20.37	21.37	20.87	-0.03
79 1,4 Dichlorobenze	25.39	24.89	25.89	25.39	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.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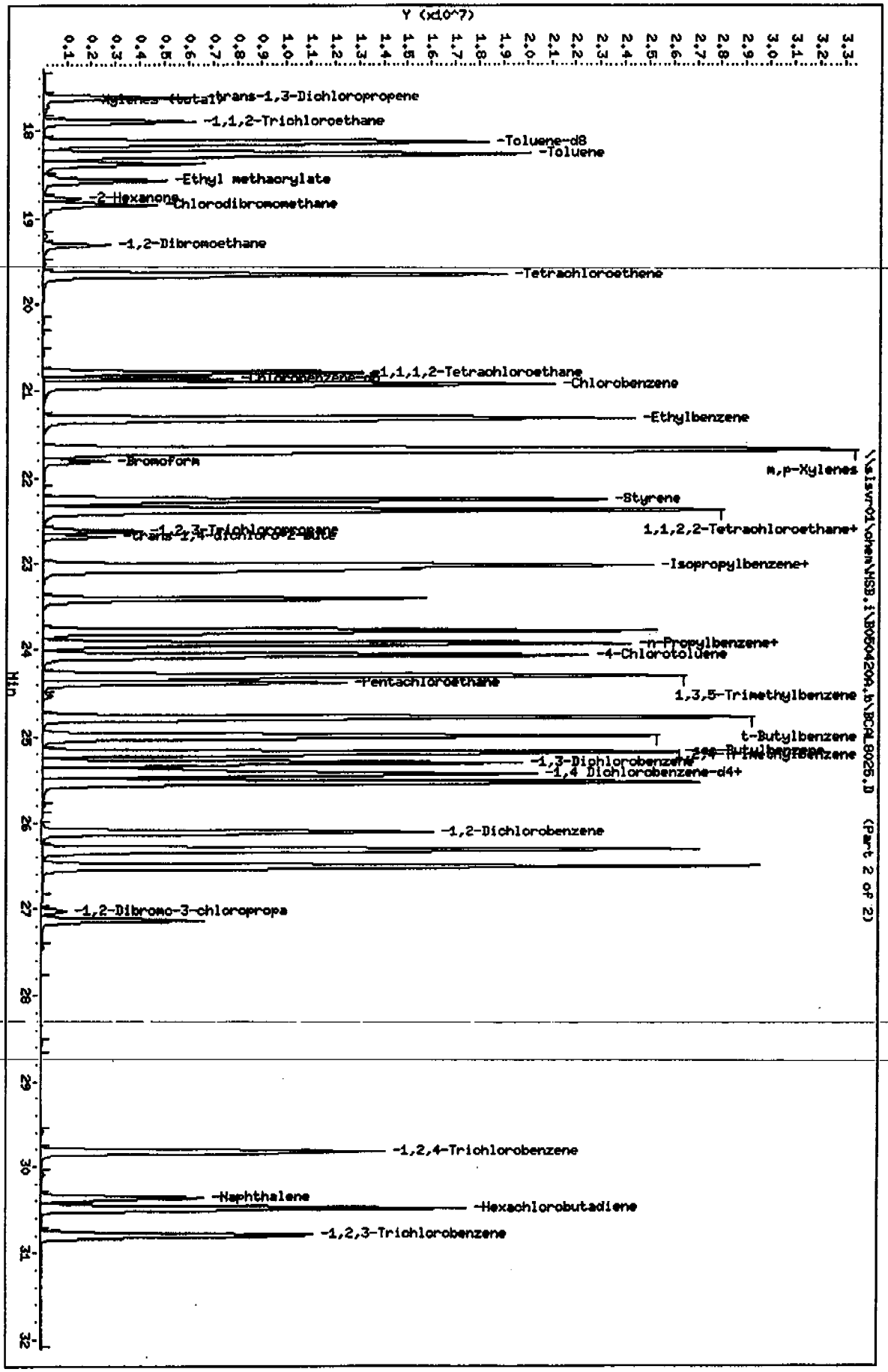
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2.0 2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 3.0 3.1 3.2 3.3
Data File: \\slsvr01\chem\HSB.i\B050420A.b\BCAL8025.D
Date : 20-APR-2005 15:12
Client ID:
Sample Info: VSTD030;B050420A.b
Purge Volume: 25.0
Column phase: Rtx-VMS
Instrument: HSB.i
Operator: HN
Column diameter: 0.25
\\slsvr01\chem\HSB.i\B050420A.b\BCAL8025.D (Part 1 of 2)
Min
4
5
6
7
8
9
10
11
12
13
14
15
16
17
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Acrolein+
-1,2-Dichloroethene (total+
-1,1-Dichloroethene+
-Methylene Chloride
-1,1,2-Trichlorofluoroetha+
-Carbon Disulfide
-trans-1,2-Dichloroethene
-1,1-Dichloroethane+
-Vinyl acetate
-2-Chloro-1,3-butadiene
-2-Butanone
-Methacrylonitrile+
-Bromochloromethane
-Chloroform
-Ethyl Acetate
-Dibromofluoromethane
-Isobutanol
-1,2-Dichloroethane-d4
-1,2-Dichloroethane
-1,1,1-Trichloroethane
-Carbon Tetrachloride
-Benzene
-Fluorobenzene
-Dibromomethane
-1,2-Dichloropropane
-Trichloroethene
-1-Nitropropane+
-1,4-Dioxane
-Methyl methacrylate
-2-Chloroethyl Vinyl Ether
-cis-1,3-Dichloropropene
-4-Methyl-2-pentanone


Y (x10^7)
Min
trans-1,3-Dichloropropene
-1,1,2-Trichloroethane
-Toluene-d8
-Toluene
-Ethyl methacrylate
-2-Hexanone
-Chlorodibromomethane
-1,2-Dibromoethane
-Tetrachloroethene
-1,1,1,2-Tetrachloroethane
-Chlorobenzene
-Ethylbenzene
-Bromoform
m,p-Xylenes
-Styrene
1,1,2,2-Tetrachloroethane+
-Isopropylbenzene+
-n-Propylbenzene+
-4-Chlorotoluene
-Pentachloroethane
1,3,5-Trimethylbenzene
t-Butylbenzene
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-d4+
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Naphthalene
-Hexachlorobutadiene
-1,2,3-Trichlorobenzene
\\slsvr01\chem\MSB.i\B050420A.b\BCAL8025.D (Part 2 of 2)
Data File: \\slsvr01\chem\MSB.i\B050420A.b\BCAL8025.D
Date : 20-APR-2005 15:12
Client ID:
Sample Info: VSTD030;B050420A.b
Purge Volume: 25.0
Column phase: Rtx-VMS
Instrument: MSB.i
Operator: MN
Column diameter: 0.25

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BLCS8030.D
Report Date: 20-Apr-2005 20:28

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

MW 4-21-05

Instrument ID: MSB.i
Lab File ID: BLCS8030.D
Analysis Type: WATER
Lab Sample ID: QCLCS
Method: \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m

Injection Date: 20-APR-2005 19:31
Init. Cal. Date(s): 20-APR-2005 20-APR-2005
Init. Cal. Times: 11:29 15:12
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	1 Dichlorodifluoromethane	0.29972	0.19140	0.19140	0.000	36.14149	60.00000	Averaged
	2 Chloromethane	0.26748	0.19916	0.19916	0.100	25.54266	60.00000	Averaged
	3 Vinyl Chloride	0.12551	0.12824	0.12824	0.000	-2.17257	20.00000	Averaged
	4 Bromomethane	10.00000	8.24350	0.16239	0.000	17.56505	0.000e+000	Linear <-
	5 Chloroethane	0.15201	0.13518	0.13518	0.000	11.06962	60.00000	Averaged
	7 Trichlorofluoromethane	0.34717	0.35118	0.35118	0.000	-1.15617	60.00000	Averaged
M	9 1,2-Dichloroethene (total)	0.24007	0.23337	0.23337	0.000	2.78804	120	Averaged
	10 Acetone	10.00000	10.18195	0.02020	0.000	-1.81947	0.000e+000	Linear <-
	11 1,1-Dichloroethene	0.21532	0.20698	0.20698	0.000	3.87255	20.00000	Averaged
	14 Methylene Chloride	10.00000	10.34813	0.22473	0.000	-3.48126	0.000e+000	Linear <-
	16 Allyl chloride	0.18527	0.22879	0.22879	0.000	-23.48767	60.00000	Averaged
	17 Carbon Disulfide	10.00000	9.22869	0.77354	0.000	7.71310	0.000e+000	Linear <-
	18 trans-1,2-Dichloroethene	0.24171	0.23604	0.23604	0.000	2.34398	60.00000	Averaged
	19 1,1-Dichloroethane	0.40834	0.38909	0.38909	0.100	4.71318	60.00000	Averaged
	23 2-Butanone	0.25836	0.25512	0.25512	0.000	1.25279	60.00000	Averaged
	25 cis-1,2-Dichloroethene	0.23842	0.23070	0.23070	0.000	3.23821	60.00000	Averaged
	26 Bromochloromethane	0.08805	0.08688	0.08688	0.000	1.32915	100	Averaged
	27 Chloroform	0.39597	0.37054	0.37054	0.000	6.42317	20.00000	Averaged
$	29 Dibromofluoromethane	0.18167	0.17022	0.17022	0.000	6.29925	60.00000	Averaged
$	31 1,2-Dichloroethane-d4	0.14684	0.12578	0.12578	0.000	14.34486	60.00000	Averaged
	32 1,2-Dichloroethane	0.18635	0.16780	0.16780	0.000	9.95297	60.00000	Averaged
	33 1,1,1-Trichloroethane	0.33826	0.36923	0.36923	0.000	-9.15486	60.00000	Averaged
	34 Carbon Tetrachloride	0.27185	0.30291	0.30291	0.000	-11.42250	60.00000	Averaged
	35 Benzene	1.05128	1.09229	1.09229	0.000	-3.90109	60.00000	Averaged
	37 Dibromomethane	0.07671	0.07546	0.07546	0.000	1.62681	60.00000	Averaged
	38 1,2-Dichloropropane	0.23318	0.22567	0.22567	0.000	3.22245	20.00000	Averaged
	39 Trichloroethene	0.28767	0.29348	0.29348	0.000	-2.01926	60.00000	Averaged
	41 Bromodichloromethane	0.23900	0.23327	0.23327	0.000	2.39653	60.00000	Averaged
	43 Methyl methacrylate	0.05513	0.05314	0.05314	0.000	3.60920	60.00000	Averaged
	45 cis-1,3-Dichloropropene	10.00000	9.13725	0.27128	0.000	8.62755	0.000e+000	Linear <-
	46 4-Methyl-2-pentanone	0.07046	0.05533	0.05533	0.000	21.48338	60.00000	Averaged
	47 trans-1,3-Dichloropropene	10.00000	9.50119	0.74531	0.000	4.98811	0.000e+000	Linear <-
M	48 Xylenes (total)	2.31053	2.42935	2.42935	0.000	-5.14276	180	Averaged
	49 1,1,2-Trichloroethane	0.50129	0.43424	0.43424	0.000	13.37596	60.00000	Averaged
$	50 Toluene-d8	3.76875	3.49265	3.49265	0.000	7.32602	60.00000	Averaged
	51 Toluene	4.95256	4.76653	4.76653	0.000	3.75620	20.00000	Averaged
	52 Ethyl methacrylate	0.59356	0.49399	0.49399	0.000	16.77489	60.00000	Averaged
	54 Chlorodibromomethane	10.00000	8.90672	0.46183	0.000	10.93283	0.000e+000	Linear <-
	55 1,2-Dibromoethane	0.41935	0.41617	0.41617	0.000	0.75791	60.00000	Averaged
	56 Tetrachloroethene	1.26110	1.04205	1.04205	0.000	17.36973	60.00000	Averaged
	57 1,1,1,2-Tetrachloroethane	0.77075	0.81744	0.81744	0.000	-6.05709	60.00000	Averaged
	59 Chlorobenzene	3.12473	3.08837	3.08837	0.300	1.16349	60.00000	Averaged
	60 Ethylbenzene	1.99528	2.04330	2.04330	0.000	-2.40650	20.00000	Averaged

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BLCS8030.D
Report Date: 20-Apr-2005 20:28

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSB.i
Lab File ID: BLCS8030.D
Analysis Type: WATER
Lab Sample ID: QCLCS
Method: \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m

Injection Date: 20-APR-2005 19:31
Init. Cal. Date(s): 20-APR-2005 20-APR-2005
Init. Cal. Times: 11:29 15:12
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	61 m,p-Xylenes	2.33365	2.47722	2.47722	0.000	-6.15211	60.00000	Averaged	
	62 Bromoform	10.00000	8.96885	0.19785	0.100	10.31152	0.000e+000	Linear	<-
	63 Styrene	3.06930	3.31927	3.31927	0.000	-8.14416	60.00000	Averaged	
	64 1,1,2,2-Tetrachloroethane	0.48413	0.50133	0.50133	0.300	-3.55284	60.00000	Averaged	
	65 o-Xylene	2.26428	2.33362	2.33362	0.000	-3.06222	60.00000	Averaged	
	66 1,2,3-Trichloropropane	0.09022	0.08912	0.08912	0.000	1.21669	60.00000	Averaged	
	67 trans-1,4-dichloro-2-butene	0.07600	0.06704	0.06704	0.000	11.79085	60.00000	Averaged	
$	69 4-Bromofluorobenzene	0.98169	0.94956	0.94956	0.000	3.27348	60.00000	Averaged	
	78 1,3-Dichlorobenzene	1.69916	1.74444	1.74444	0.000	-2.66457	60.00000	Averaged	
	80 1,4-Dichlorobenzene	1.65571	1.63389	1.63389	0.000	1.31765	60.00000	Averaged	
	81 1,2-Dichlorobenzene	1.33365	1.34197	1.34197	0.000	-0.62419	60.00000	Averaged	
	82 1,2-Dibromo-3-chloropropane	10.00000	8.54360	0.03709	0.000	14.56399	0.000e+000	Linear	<-
	83 1,2,4-Trichlorobenzene	0.89241	0.83112	0.83112	0.000	6.86792	60.00000	Averaged	
	84 Naphthalene	1.01343	0.92483	0.92483	0.000	8.74250	60.00000	Averaged	
	85 Hexachlorobutadiene	0.63403	0.66844	0.66844	0.000	-5.42694	60.00000	Averaged	
	86 1,2,3-Trichlorobenzene	0.70709	0.63407	0.63407	0.000	10.32595	60.00000	Averaged	

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BLCS8030.D
Report Date: 20-Apr-2005 20:28

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSB.i\B050420A.b\BLCS8030.D
Lab Smp Id: QCLCS
Inj Date : 20-APR-2005 19:31
Operator : MN Inst ID: MSB.i
Smp Info : QCLCS;B050420A.b
Misc Info : VBLKB109A.B;
Comment : NONE
Method : \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Meth Date : 20-Apr-2005 20:28 mahmoodt Quant Type: ISTD
Cal Date : 20-APR-2005 12:06 Cal File: BCAL8020.D
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICV.sub
Target Version: 4.10
Processing Host: SLVOA02

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

MN 4-21-05

Name	Value	Description
DF	1.000	Dilution Factor
Vod	25.000	Def Sample Volume (mL)
Vo	25.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	1 Dichlorodifluoromethane	85	3.734	3.734	(0.263)	1478428	10.0000	6.386
	2 Chloromethane	50	3.960	3.960	(0.279)	1538392	10.0000	7.446
	3 Vinyl Chloride	62	4.177	4.177	(0.294)	990554	10.0000	10.22
	4 Bromomethane	94	4.699	4.699	(0.331)	1254373	10.0000	8.243
	5 Chloroethane	64	4.876	4.876	(0.343)	1044212	10.0000	8.893
	7 Trichlorofluoromethane	101	5.674	5.674	(0.399)	2712698	10.0000	10.12
M	9 1,2-Dichloroethene (total)	96				3605360	20.0000	19.44
	10 Acetone	43	5.881	5.881	(0.414)	156039	10.0000	10.18
	11 1,1-Dichloroethene	96	6.531	6.531	(0.460)	1598794	10.0000	9.613
	14 Methylene Chloride	84	6.787	6.787	(0.478)	1735913	10.0000	10.35
	16 Allyl chloride	39	6.955	6.955	(0.490)	1767285	10.0000	12.35
	17 Carbon Disulfide	76	7.171	7.171	(0.505)	5975175	10.0000	9.229
	18 trans-1,2-Dichloroethene	96	8.117	8.117	(0.571)	1823311	10.0000	9.766
	19 1,1-Dichloroethane	63	8.688	8.688	(0.612)	3005523	10.0000	9.529
	23 2-Butanone	43	9.801	9.801	(0.690)	1970654	10.0000	9.875
	25 cis-1,2-Dichloroethene	96	10.215	10.215	(0.719)	1782049	10.0000	9.676
	26 Bromochloromethane	130	10.648	10.648	(0.750)	671078	10.0000	9.867(A)
	27 Chloroform	83	10.806	10.806	(0.761)	2862216	10.0000	9.358
$	29 Dibromofluoromethane	113	11.121	11.121	(0.783)	1314894	10.0000	9.370
$	31 1,2-Dichloroethane-d4	65	12.274	12.274	(0.864)	971549	10.0000	8.566
	32 1,2-Dichloroethane	62	12.471	12.471	(0.878)	1296170	10.0000	9.005
	33 1,1,1-Trichloroethane	97	12.687	12.687	(0.893)	2852100	10.0000	10.92

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BLCS8030.D
Report Date: 20-Apr-2005 20:28

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	34 Carbon Tetrachloride	117	13.544	13.544	(0.954)	2339783	10.0000	11.14
	35 Benzene	78	13.663	13.663	(0.962)	8437355	10.0000	10.39
*	36 Fluorobenzene	96	14.204	14.204	(1.000)	7724450	10.0000	
	37 Dibromomethane	93	14.933	14.933	(1.051)	582892	10.0000	9.837
	38 1,2-Dichloropropane	63	15.051	15.051	(1.060)	1743177	10.0000	9.678
	39 Trichloroethene	130	15.150	15.150	(1.067)	2266989	10.0000	10.20
	41 Bromodichloromethane	83	15.248	15.248	(1.074)	1801901	10.0000	9.760
	43 Methyl methacrylate	69	15.761	15.761	(1.110)	410458	10.0000	9.639
	45 cis-1,3-Dichloropropene	75	16.687	16.687	(1.175)	2095453	10.0000	9.137
	46 4-Methyl-2-pentanone	43	17.002	17.002	(1.197)	427368	10.0000	7.852
	47 trans-1,3-Dichloropropene	75	17.612	17.612	(0.844)	1454034	10.0000	9.501
M	48 Xylenes (total)	106				14218425	30.0000	31.54
	49 1,1,2-Trichloroethane	97	17.878	17.878	(0.857)	847168	10.0000	8.662
$	50 Toluene-d8	98	18.115	18.115	(0.868)	6813886	10.0000	9.267
	51 Toluene	91	18.263	18.263	(0.875)	9299120	10.0000	9.624
	52 Ethyl methacrylate	69	18.558	18.558	(0.890)	963731	10.0000	8.322
	54 Chlorodibromomethane	129	18.834	18.834	(0.903)	900998	10.0000	8.907
	55 1,2-Dibromoethane	107	19.297	19.297	(0.925)	811921	10.0000	9.924
	56 Tetrachloroethene	164	19.651	19.651	(0.942)	2032950	10.0000	8.263
	57 1,1,1,2-Tetrachloroethane	131	20.784	20.784	(0.996)	1594756	10.0000	10.60
*	58 Chlorobenzene-d5	119	20.863	20.863	(1.000)	1950921	10.0000	
	59 Chlorobenzene	112	20.922	20.922	(1.003)	6025168	10.0000	9.884
	60 Ethylbenzene	106	21.316	21.316	(1.022)	3986312	10.0000	10.24
	61 m,p-Xylenes	106	21.681	21.681	(1.039)	9665724	20.0000	21.23
	62 Bromoform	173	21.809	21.809	(1.045)	385980	10.0000	8.969
	63 Styrene	104	22.252	22.252	(1.067)	6475636	10.0000	10.81
	64 1,1,2,2-Tetrachloroethane	83	22.360	22.360	(1.072)	978046	10.0000	10.36
	65 o-Xylene	106	22.380	22.380	(1.073)	4552701	10.0000	10.31
	66 1,2,3-Trichloropropane	110	22.616	22.616	(0.891)	239472	10.0000	9.878
	67 trans-1,4-dichloro-2-butene	53	22.685	22.685	(0.894)	180136	10.0000	8.821
$	69 4-Bromofluorobenzene	95	23.069	23.069	(0.909)	2551531	10.0000	9.673
	78 1,3-Dichlorobenzene	146	25.296	25.296	(0.997)	4687434	10.0000	10.27
*	79 1,4 Dichlorobenzene-d4	152	25.374	25.374	(1.000)	2687070	10.0000	
	80 1,4-Dichlorobenzene	146	25.424	25.424	(1.002)	4390387	10.0000	9.868
	81 1,2-Dichlorobenzene	146	26.103	26.103	(1.029)	3605971	10.0000	10.06
	82 1,2-Dibromo-3-chloropropane	157	27.019	27.019	(1.065)	99674	10.0000	8.544
	83 1,2,4-Trichlorobenzene	180	29.817	29.817	(1.175)	2233280	10.0000	9.313
	84 Naphthalene	128	30.359	30.359	(1.196)	2485081	10.0000	9.126
	85 Hexachlorobutadiene	225	30.477	30.477	(1.201)	1796141	10.0000	10.54
	86 1,2,3-Trichlorobenzene	180	30.792	30.792	(1.214)	1703802	10.0000	8.967

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\slsvr01\chem\MSB.i\B050420A.b\BLCS8030.D
Report Date: 20-Apr-2005 20:28

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

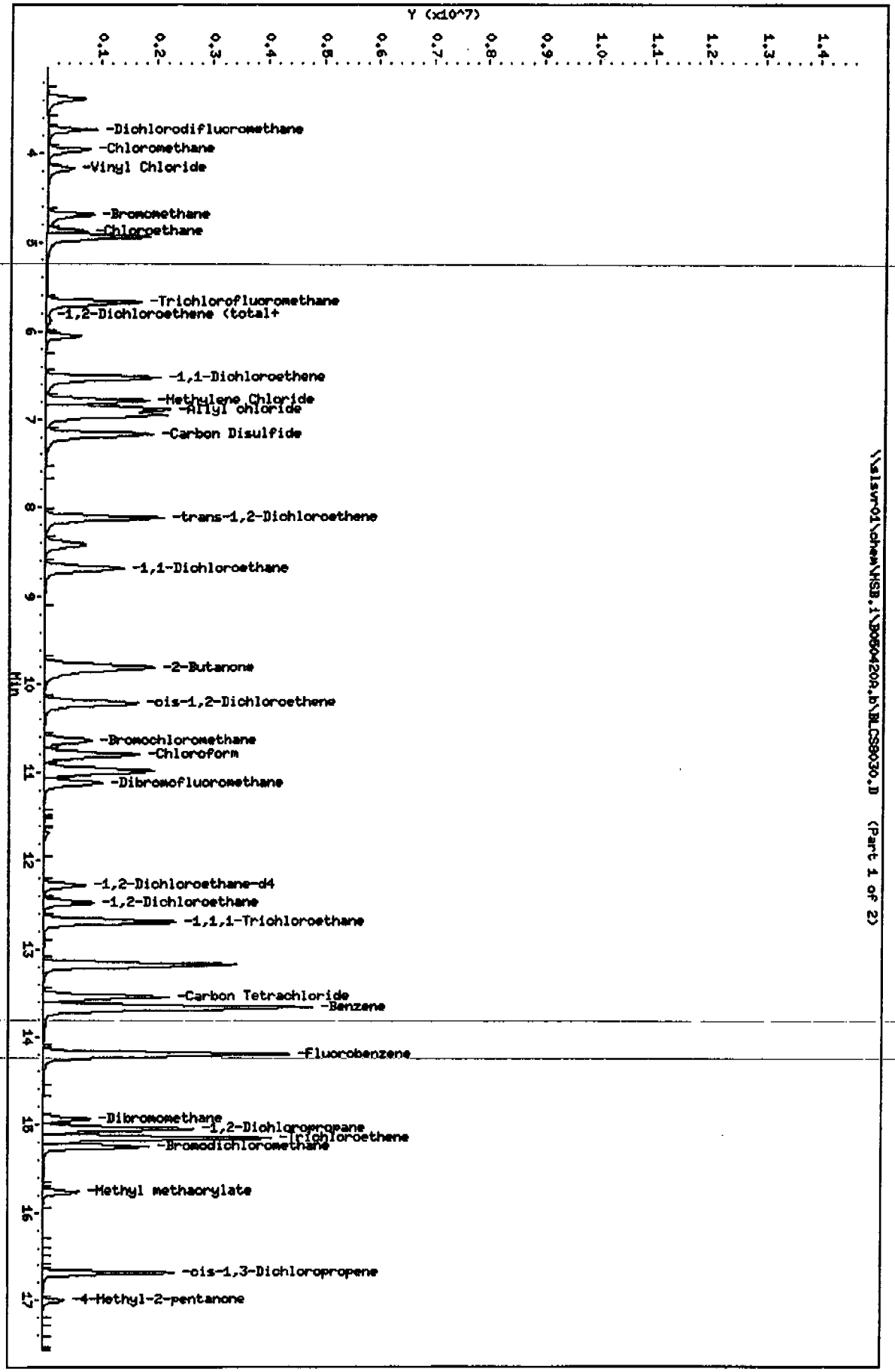
Instrument ID: MSB.i
Lab File ID: BLCS8030.D
Lab Smp Id: QCLCS
Analysis Type: VOA
Quant Type: ISTD
Operator: MN
Method File: \\slsvr01\chem\MSB.i\B050420A.b\8260B-25LLW25.m
Misc Info: VBLKB109A.B;

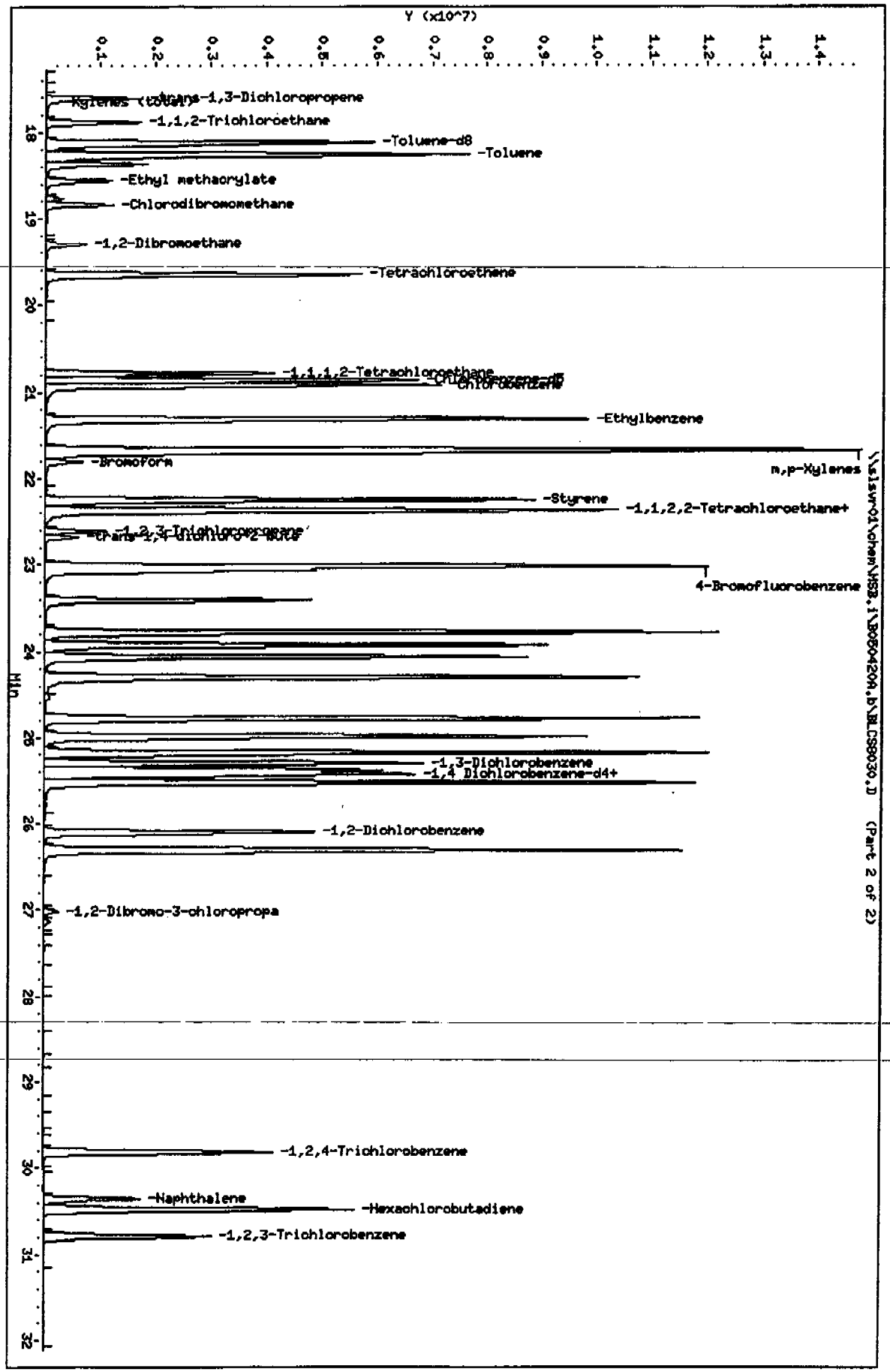
Calibration Date: 20-APR-2005
Calibration Time: 18:30
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	7940106	3970053	15880212	7724450	-2.72
58 Chlorobenzene-d5	1861267	930634	3722534	1950921	4.82
79 1,4 Dichlorobenze	2450866	1225433	4901732	2687070	9.64

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	14.19	13.69	14.69	14.20	0.10
58 Chlorobenzene-d5	20.86	20.36	21.36	20.86	0.02
79 1,4 Dichlorobenze	25.37	24.87	25.87	25.37	0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^7)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
Min
4
5
6
7
8
9
10
11
12
13
14
15
16
17
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-1,2-Dichloroethene (total+
-1,1-Dichloroethene
-Methylene Chloride
-Allyl chloride
-Carbon Disulfide
-trans-1,2-Dichloroethene
-1,1-Dichloroethane
-2-Butanone
-cis-1,2-Dichloroethene
-Bromochloromethane
-Chloroform
-Dibromofluoromethane
-1,2-Dichloroethane-d4
-1,2-Dichloroethane
-1,1,1-Trichloroethane
-Carbon Tetrachloride
-Benzene
-Fluorobenzene
-Dibromomethane
-1,2-Dichloropropane
-Trichloroethene
-Bromodichloromethane
-Methyl methacrylate
-cis-1,3-Dichloropropene
-4-Methyl-2-pentanone
Data File: \\slsvr01\chem\MSB.i\B060420A.b\BLCS8030.D
Date : 20-APR-2006 19:31
Client ID:
Sample Info: QCLCS;B060420A.b
Purge Volume: 25.0
Column phase: Rtx-VMS
Instrument: MSB.i
Operator: MN
Column diameter: 0.25
\\slsvr01\chem\MSB.i\B060420A.b\BLCS8030.D (Part 1 of 2)


Y (x10^7)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
Min
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
Xylenes (total)
-trans-1,3-Dichloropropene
-1,1,2-Trichloroethane
-Toluene-d8
-Toluene
-Ethyl methacrylate
-Chlorodibromomethane
-1,2-Dibromoethane
-Tetrachloroethene
-1,1,1,2-Tetrachloroethane
-Chlorobenzene-d5
-Chlorobenzene
-Ethylbenzene
-Bromoform
m,p-Xylenes
-Styrene
-1,1,2,2-Tetrachloroethane+
-1,2,3-Trichloropropane
trans-1,4-dichloro-2-butene
4-Bromofluorobenzene
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-d4+
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Naphthalene
-Hexachlorobutadiene
-1,2,3-Trichlorobenzene
Data File: \\slsvr01\chem\HSB.i\B050420A.b\BLCS8030.D
Date : 20-APR-2005 19:31
Client ID:
Sample Info: QCLCS:B050420A.b
Purge Volume: 25.0
Column phase: Rtx-VMS
Instrument: HSB.i
Operator: HN
Column diameter: 0.25
\\slsvr01\chem\HSB.i\B050420A.b\BLCS8030.D (Part 2 of 2)

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LBFB0317.D

Date : 25-APR-2005 09:04

Client ID: VBFB

Instrument: MSL.i

Sample Info: 25ng BFB

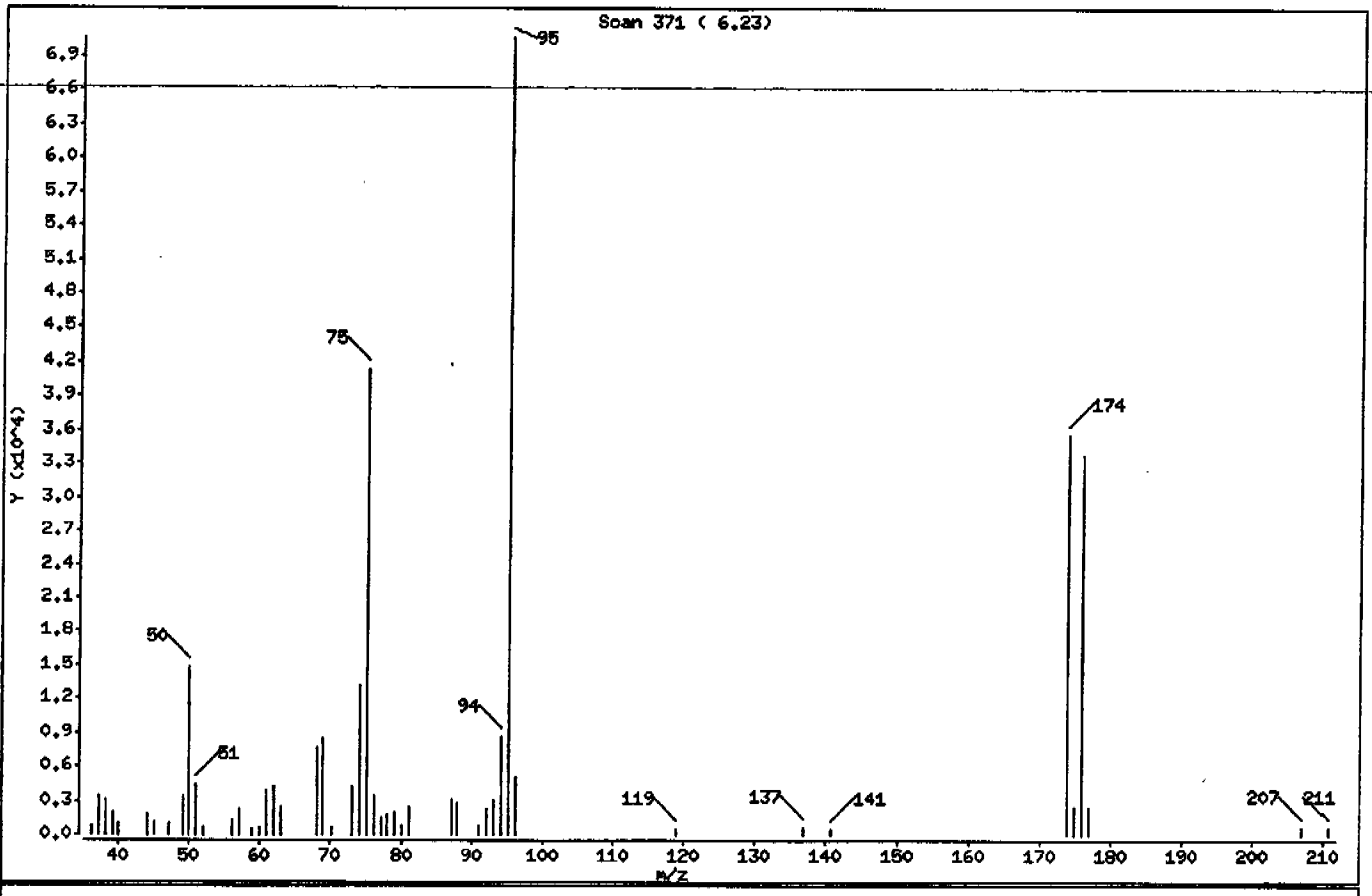
Volume Injected (uL): 2.0

Operator: MN/TM

Column phase: RTX-502.2

Column diameter: 0.53

1 BFB



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.99
75	30.00 - 60.00% of mass 95	58.60
96	5.00 - 9.00% of mass 95	7.19
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	80.23
175	5.00 - 9.00% of mass 174	3.84 (7.05)
176	95.00 - 101.00% of mass 174	47.73 (95.02)
177	5.00 - 9.00% of mass 176	3.38 (7.07)

4/25/05

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LBFB0317.D

Date : 25-APR-2005 09:04

Client ID: VBFB

Instrument: MSL.i

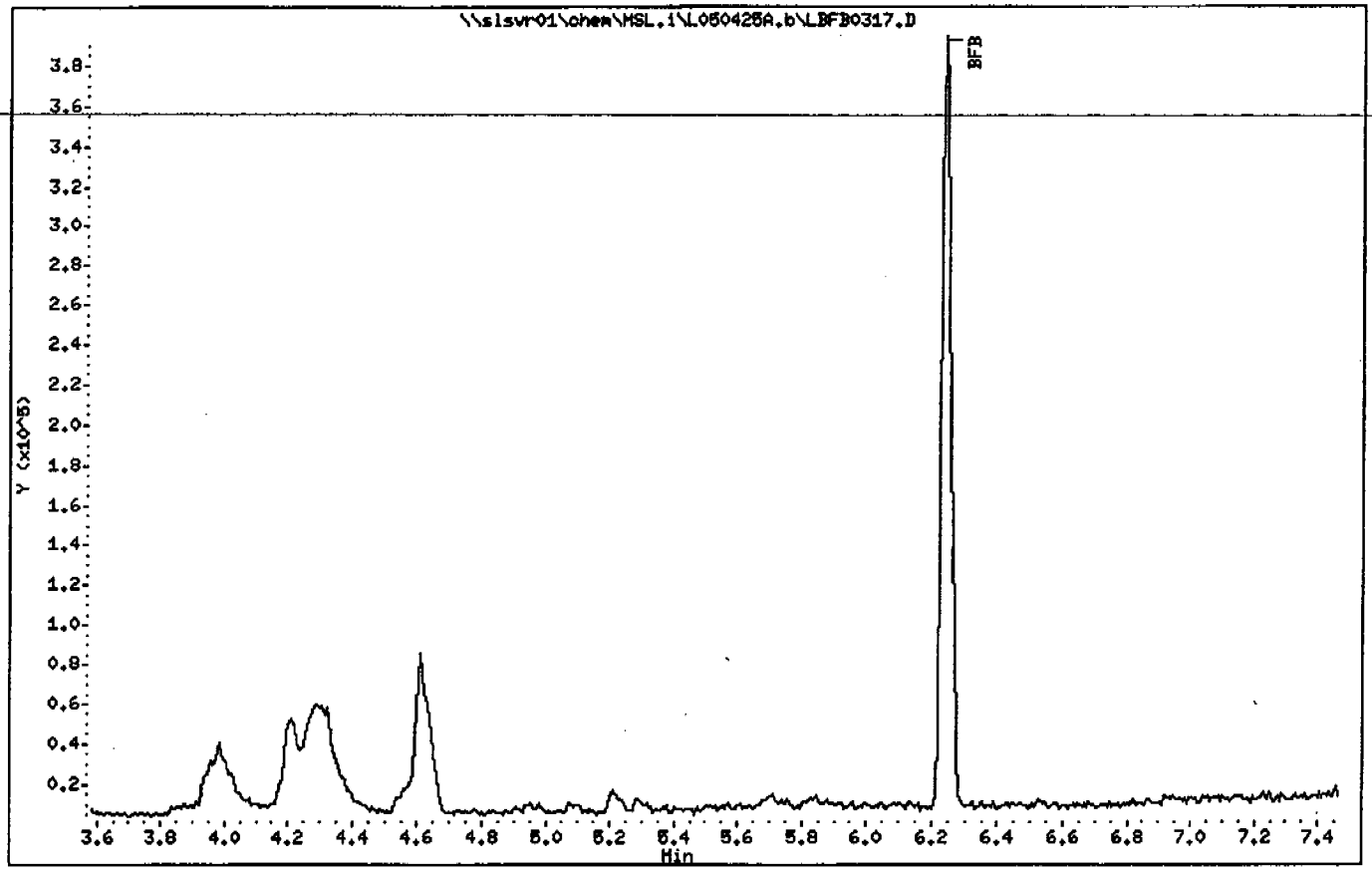
Sample Info: 25ng BFB

Volume Injected (uL): 2.0

Operator: MN/TM

Column phase: RTX-502.2

Column diameter: 0.53



Data File: \\slsvr01\chem\MSL.i\L050425A.b\LBFB0317.D

Date : 25-APR-2005 09:04

Client ID: VBFB

Instrument: MSL.i

Sample Info: 25ng BFB

Volume Injected (uL): 2.0

Operator: HN/TH

Column phase: RTX-502.2

Column diameter: 0.53

Data File: LBFB0317.D

Spectrum: Scan 371 (6.23)

Location of Maximum: 95.00

Number of points: 48

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	882	57.00	2242	77.00	1491	119.00	531
37.00	3440	59.00	516	78.00	1823	137.00	597
38.00	3059	60.00	662	78.90	1991	140.90	508
39.00	1914	61.00	3867	80.00	840	173.90	35480
40.00	938	62.00	4208	80.90	2361	175.00	2503
44.00	1858	63.10	2491	87.00	3116	175.90	33712
45.00	1173	68.00	7604	88.00	2822	176.90	2385
47.10	1046	69.00	8440	91.00	757	207.00	609
49.00	3375	70.10	684	92.00	2280	210.90	582
50.00	14825	73.00	4256	93.00	3160		
51.00	4427	74.00	13265	94.00	8676		
52.00	722	75.00	41392	95.00	70632		
56.00	1275	76.00	3379	96.00	5080		

Report Date : 28-Apr-2005 16:37

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 25-APR-2005 10:18
End Cal Date : 25-APR-2005 12:39
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Cal Date : 28-Apr-2005 16:37 mahmoodt

Calibration File Names:
Level 1: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0320.D
Level 2: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0321.D
Level 3: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0322.D
Level 4: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0323.D
Level 5: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0324.D
Level 6: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0326.D
Level 7: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0325.D

Compound	0.5000000 Level 1	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	30.0000 Level 7										
1 Dichlorodifluoromethane	0.41791	0.49146	0.44465	0.43365	0.44106	0.46283					
	0.46073						AVRG		0.45033		5.28934
2 Chloromethane	0.43973	0.47217	0.42542	0.41616	0.40415	0.43982					
	0.44885						AVRG		0.43519		5.15342
3 Vinyl Chloride	0.45826	0.50077	0.45297	0.46421	0.46038	0.47020					
	0.46081						AVRG		0.46680		3.40258
4 Bromomethane	23066	46004	84283	162785	374048	645988					
	892235						LINR	-0.11875	0.18993		0.99187

4-28-05

Report Date : 28-Apr-2005 16:37

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 25-APR-2005 10:18
End Cal Date : 25-APR-2005 12:39
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Cal Date : 28-Apr-2005 16:37 mahmoodt

Compound	0.5000000 Level 1 / 30.0000 Level 7	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
5 Chloroethane	0.30228	0.35586	0.31099	0.30695	0.31686	0.30224					
	0.29830						AVRG		0.31335		6.29998
6 Trichlorofluoromethane	0.58633	0.67251	0.60257	0.59050	0.61280	0.63708					
	0.63065						AVRG		0.61892		4.89787
7 Diethyl ether	0.15134	0.16412	0.15202	0.14372	0.14871	0.15678					
	0.15853						AVRG		0.15360		4.40149
8 1,1,2-Trichlorofluoroethane	0.39264	0.42440	0.37503	0.36033	0.38832	0.39695					
	0.39905						AVRG		0.39096		5.13863
9 1,1-Dichloroethene	0.39807	0.42300	0.39478	0.38749	0.40065	0.42221					
	0.41856						AVRG		0.40640		3.57766
10 Carbon Disulfide	1.54023	1.55678	1.47201	1.44873	1.32019	1.51428					
	1.53020						AVRG		1.48320		5.48616
11 Iodomethane	0.27858	0.26121	0.22473	0.21644	0.20549	0.31607					
	0.25138						AVRG		0.25056		15.50430

Report Date : 28-Apr-2005 16:37

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 25-APR-2005 10:18
End Cal Date : 25-APR-2005 12:39
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Cal Date : 28-Apr-2005 16:37 mahmoodt

Compound	0.5000000 Level 1	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	30.0000 Level 7											
12 Acrolein	5440	8985	15964	25980	61062	150025						
	224288						LINR	0.07093	0.00953		0.99674	
13 Allyl chloride	0.16981	0.20450	0.22005	0.14761	0.18929	0.18198						
	0.17918						AVRG		0.18463		12.69736	
14 Methylene Chloride	29269	56465	86327	161720	394795	839146						
	1244806						LINR	-0.01995	0.26325		0.99981	
15 Acetone	4095	5357	9844	17938	34198	77875						
	115280						LINR	-0.05251	0.02402		0.99805	
16 Methyl Acetate	+++++	2289	4872	5722	17572	44485						
	64980						LINR	0.05484	0.01414		0.99476	<-
17 n-Hexane	0.44205	0.55176	0.58009	0.55865	0.58218	0.52940						
	0.53972						AVRG		0.54055		8.79990	
18 trans-1,2-Dichloroethene	0.34615	0.35672	0.33349	0.33107	0.34188	0.36389						
	0.37485						AVRG		0.34972		4.62061	

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STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 25-APR-2005 10:18
End Cal Date : 25-APR-2005 12:39
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Cal Date : 28-Apr-2005 16:37 mahmoodt

	Compound	0.5000000 Level 1	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
		30.0000 Level 7											
	19 MTBE	21258	61861	129285	156853	546427	1270046						
		1865344						LINR	0.04197	0.40412		0.99718	
M	20 1,2-Dichloroethene (total)	0.32842	0.35222	0.31445	0.31858	0.32561	0.34906						
		0.35752						AVRG		0.33512		5.20408	
	21 Acetonitrile	+++++	10024	12398	24202	55598	138050						
		209359						LINR	0.18716	0.00894		0.99579	<-
	22 2-Chloro-1,3-butadiene	0.36174	0.37248	0.41599	0.25911	0.36871	0.37878						
		0.38794						AVRG		0.36353		13.56655	
	23 1,1-Dichloroethane	0.57323	0.64166	0.59186	0.56829	0.57300	0.58448						
		0.59969						AVRG		0.59032		4.28387	
	24 Acrylonitrile	0.02807	0.03018	0.02799	0.02862	0.03221	0.03329						
		0.03305						AVRG		0.03049		7.69250	
	25 Vinyl acetate	0.13743	0.16455	0.16229	0.14898	0.14711	+++++						
		+++++						AVRG		0.15207		7.41561	

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INITIAL CALIBRATION DATA

Start Cal Date : 25-APR-2005 10:18
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Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Cal Date : 28-Apr-2005 16:37 mahmoodt

	Compound	0.5000000 Level 1	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
		30.0000 Level 7										
26	cis-1,2-Dichloroethene	0.31069	0.34772	0.29541	0.30609	0.30933	0.33424					
		0.34019						AVRG		0.32052		6.20819
27	2,2-Dichloropropane	0.52049	0.57103	0.50518	0.49610	0.49004	0.49138					
		0.50865						AVRG		0.51184		5.51064
28	Cyclohexane	0.29218	0.33392	0.35666	0.22962	0.32136	0.33492					
		0.34124						AVRG		0.31570		13.57908
29	Chloroform	0.54389	0.57776	0.54189	0.52142	0.52828	0.56440					
		0.58331						AVRG		0.55157		4.35492
30	Bromochloromethane	0.07530	0.07815	0.06976	0.06764	0.07318	0.08085					
		0.08084						AVRG		0.07510		6.94436
31	Ethyl acetate	0.06907	0.08066	0.07418	0.06987	0.07367	0.07634					
		0.07789						AVRG		0.07452		5.60154
32	Tetrahydrofuran	3475	8025	13507	26384	69100	168349					
		248676						LINR	0.21737	0.01074		0.99788

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INITIAL CALIBRATION DATA

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Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Cal Date : 28-Apr-2005 16:37 mahmoodt

	Compound	0.5000000 Level 1	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
		30.0000 Level 7											
33	Carbon Tetrachloride	0.40645	0.47488	0.42983	0.42247	0.43141	0.46626						
		0.47344						AVRG		0.44353		6.20690	
35	1,1,1-Trichloroethane	0.51777	0.57898	0.50672	0.51256	0.51109	0.53951						
		0.54729						AVRG		0.53056		4.95062	
36	2-Butanone	+++++	0.04512	0.03227	0.03633	0.03423	0.03745						
		0.03632						AVRG		0.03695		11.92500	<-
37	1,1-Dichloropropene	0.47658	0.51870	0.47201	0.45218	0.46612	0.49310						
		0.49728						AVRG		0.48228		4.61628	
38	Propionitrile	3706	8117	17498	21983	76733	170666						
		254903						LINR	0.18054	0.01098		0.99788	
39	Methacrylonitrile	0.05259	0.05392	0.06003	0.03937	0.05439	0.05815						
		0.05984						AVRG		0.05404		13.16720	
40	Isobutanol	0.00468	0.00514	0.00499	0.00488	0.00496	0.00540						
		0.00555						AVRG		0.00508		5.94517	

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INITIAL CALIBRATION DATA

Start Cal Date : 25-APR-2005 10:18
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Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Cal Date : 28-Apr-2005 16:37 mahmoodt

	Compound	0.5000000 Level 1	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
		30.0000 Level 7											
41	Benzene	1.34699	1.47079	1.29628	1.29673	1.33450	1.42090						
		1.48805						AVRG		1.37918		5.82224	
43	1,2-Dichloroethane	0.22734	0.25784	0.23019	0.22597	0.22858	0.23485						
		0.23571						AVRG		0.23435		4.68622	
45	Methylcyclohexane	0.32949	0.35384	0.36291	0.23787	0.32920	0.33217						
		0.34007						AVRG		0.32651		12.60389	
46	Trichloroethene	0.30807	0.33156	0.28725	0.28769	0.29827	0.33347						
		0.33421						AVRG		0.31150		6.86343	
47	n-Butanol	+++++	0.00270	0.00220	0.00233	0.00241	0.00271						
		0.00279						AVRG		0.00252		9.64560	<-
48	Dibromomethane	0.07478	0.08810	0.07687	0.07459	0.07554	0.08229						
		0.08359						AVRG		0.07940		6.65243	
49	1,2-Dichloropropane	0.25358	0.28385	0.25127	0.24968	0.24184	0.25663						
		0.26010						AVRG		0.25671		5.17302	

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Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Cal Date : 28-Apr-2005 16:37 mahmoodt

Compound	0.5000000 Level 1 / 30.0000 Level 7	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2	
50 Bromodichloromethane	0.28357	0.33221	0.29929	0.29238	0.30951	0.32902						
	0.33477						AVRG		0.31153		6.65122	
51 Methyl methacrylate	4635	10193	23200	27843	103887	244016						
	357128						LINR	0.05237	0.07776		0.99680	
52 1,4-Dioxane	+++++	3113	5629	6994	26559	57551						
	89729						LINR	1.25677	0.00097		0.99671	<-
53 2-chloroethyl vinyl ether	+++++	+++++	+++++	+++++	0.00334	0.00860						
	0.01085						AVRG		0.00760		50.68053	<-
54 cis-1,3-Dichloropropene	0.35783	0.34635	0.34369	0.31640	0.32395	0.35020						
	0.35464						AVRG		0.34186		4.59453	
56 Toluene	2.62554	2.86552	2.49499	2.39651	2.32357	2.36996						
	2.33958						AVRG		2.48795		7.91822	
57 2-Nitro-Propane	2502	5450	12143	15061	57090	134221						
	199647						LINR	0.06096	0.04338		0.99686	

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Method file : \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Cal Date : 28-Apr-2005 16:37 mahmoodt

	Compound	0.5000000 Level 1 / 30.0000 Level 7	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
58	4-Methyl-2-pentanone	0.07757	0.08961	0.07412	0.07420	0.07871	0.08459					
		0.08369						AVRG		0.08036		7.21899
59	trans-1,3-Dichloropropene	0.41585	0.48218	0.41707	0.40534	0.38096	0.39019					
		0.37451						AVRG		0.40944		8.81119
60	Ethyl methacrylate	0.26523	0.26887	0.29781	0.19606	0.25825	0.28554					
		0.27179						AVRG		0.26336		12.34197
61	Tetrachloroethene	0.53535	0.61425	0.50178	0.45378	0.52765	0.59684					
		0.53912						AVRG		0.53840		10.11527
62	1,1,2-Trichloroethane	0.20593	0.23417	0.20616	0.19612	0.18720	0.19084					
		0.17817						AVRG		0.19980		9.09221
M 63	Xylenes (total)	0.97182	1.09253	0.97755	0.96280	0.97970	1.06992					
		1.10031						AVRG		1.02209		6.08268
64	Chlorodibromomethane	0.19184	0.22219	0.18976	0.19108	0.18440	0.19591					
		0.18918						AVRG		0.19491		6.41956

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Cal Date : 28-Apr-2005 16:37 mahmoodt

	Compound	0.5000000 Level 1	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
		30.0000 Level 7										
65	1,3-Dichloropropane	0.42087	0.47022	0.40702	0.38765	0.36847	0.36819					
		0.34885						AVRG		0.39590		10.34982
66	2-Hexanone	4003	9956	14267	25829	69069	162299					
		235676						LINR	-0.04473	0.07475		0.99786
67	1,2-Dibromoethane	0.16199	0.18127	0.17101	0.15882	0.15340	0.15694					
		0.14782						AVRG		0.16161		6.97389
68	Ethylbenzene	0.76524	0.89943	0.76761	0.77449	0.74982	0.79932					
		0.79816						AVRG		0.79344		6.30501
70	Chlorobenzene	1.47067	1.52097	1.29654	1.21832	1.19688	1.27746					
		1.26259						AVRG		1.32049		9.49109
71	1,1,1,2-Tetrachloroethane	0.33769	0.37026	0.34631	0.32436	0.33603	0.36858					
		0.37125						AVRG		0.35064		5.48758
72	m,p-Xylenes	1.02024	1.13837	1.03004	1.01466	1.03962	1.15020					
		1.20094						AVRG		1.08487		7.01624

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Cal Date : 28-Apr-2005 16:37 mahmoodt

	Compound	0.5000000 Level 1	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
		30.0000 Level 7										
73	o-Xylene	0.87498	1.00084	0.87256	0.85908	0.85985	0.90937					
		0.89904						AVRG		0.89653		5.54706
74	Styrene	1.35316	1.43882	1.28643	1.27158	1.29719	1.40417					
		1.37595						AVRG		1.34676		4.73641
75	Bromoform	0.16829	0.20356	0.19683	0.19491	0.19994	0.22524					
		0.22040						AVRG		0.20131		9.28290
76	Isopropylbenzene	5.97651	6.50008	5.87775	5.90300	5.88702	6.23584					
		6.32851						AVRG		6.10124		4.12226
78	n-Propylbenzene	8.66066	9.27404	8.39011	8.32763	8.37935	8.89137					
		8.95474						AVRG		8.69684		4.11921
79	1,1,2,2-Tetrachloroethane	0.53546	0.59081	0.54404	0.48973	0.47320	0.47970					
		0.46315						AVRG		0.51087		9.18487
80	1,3,5-Trimethylbenzene	5.50633	6.03625	5.46215	5.47358	5.52362	5.94628					
		6.00304						AVRG		5.70732		4.75357

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Method file : \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Cal Date : 28-Apr-2005 16:37 mahmoodt

Compound	0.5000000 Level 1	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	30.0000 Level 7										
81 Bromobenzene	0.83523	0.95160	0.87017	0.85156	0.86256	0.93766					
	0.91168						AVRG		0.88864		5.06318
82 trans-1,4-dichloro-2-butene	2360	5497	10922	14368	51277	118946					
	178769						LINR	0.00159	0.14899		0.99798
83 2-Chlorotoluene	4.74630	4.95218	4.64494	4.56421	4.52435	4.72640					
	4.67735						AVRG		4.69082		2.99830
84 4-Chlorotoluene	4.39538	4.90655	4.39001	4.43665	4.36475	4.56986					
	4.50963						AVRG		4.51040		4.19537
85 t-Butylbenzene	4.85831	5.45374	4.97270	5.07708	5.07019	5.31210					
	5.36392						AVRG		5.15829		4.27687
86 1,2,4-Trimethylbenzene	5.26538	6.00041	5.27894	5.42820	5.38405	5.71297					
	5.70927						AVRG		5.53989		4.94861
87 Pentachloroethane	0.22088	0.14692	0.29762	0.15605	0.14637	0.09828					
	0.18392						AVRG		0.17858		36.13511

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Cal Date : 28-Apr-2005 16:37 mahmoodt

Compound	0.5000000 Level 1	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	30.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2	
88 sec-Butylbenzene	7.13574	8.00110	7.16114	7.36023	7.33701	7.61166	7.79480	AVRG		7.48595		4.37202	
89 4-Isopropyltoluene	5.23116	5.79911	5.40653	5.51578	5.48604	5.75296	5.83628	AVRG		5.57541		4.06496	
90 Cyclohexanone	+++++	6202	9624	15410	35011	70089	104495	LINR	-0.19855	0.03120		0.99895	<-
91 1,3-Dichlorobenzene	2.06953	2.21376	1.99948	2.01187	2.00945	2.15873	2.08394	AVRG		2.07811		3.94341	
93 1,4-Dichlorobenzene	2.14677	2.39735	2.10723	1.98699	1.95483	2.14259	2.04174	AVRG		2.11107		6.94165	
94 n-Butylbenzene	6.14951	6.64065	6.15045	6.02011	5.90696	6.06855	6.01547	AVRG		6.13596		3.87972	
95 1,2,3-Trichloropropane	1198	2314	3584	8775	20305	49491	72424	LINR	-0.02277	0.06026		0.99803	

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Integrator : HP RTE
Method file : \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Cal Date : 28-Apr-2005 16:37 mahmoodt

	Compound	0.5000000 Level 1	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
		30.0000 Level 7										
96	1,2-Dichlorobenzene	1.55906	1.77632	1.56247	1.51867	1.53750	1.63127					
		1.56561						AVRG		1.59313		5.52328
97	1,2-Dibromo-3-chloropropane	0.06468	0.06655	0.05568	0.05537	0.05574	0.06092					
		0.05709						AVRG		0.05943		7.83464
98	Hexachlorobutadiene	0.57433	0.64689	0.57595	0.55934	0.55987	0.59246					
		0.56909						AVRG		0.58256		5.23626
99	1,2,4-Trichlorobenzene	0.99635	1.08891	0.94485	0.91253	0.91876	1.01064					
		0.93578						AVRG		0.97255		6.52651
100	Naphthalene	1.34583	1.51126	1.33265	1.28857	1.29997	1.49012					
		1.33169						AVRG		1.37144		6.61294
101	1,2,3-Trichlorobenzene	0.77028	0.80282	0.71700	0.66592	0.67297	0.74841					
		0.69135						AVRG		0.72411		7.14086
$ 34	Dibromofluoromethane	0.18116	0.19921	0.18958	0.18432	0.19415	0.20168					
		0.22119						AVRG		0.19590		6.84288

Report Date : 28-Apr-2005 16:37

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INITIAL CALIBRATION DATA

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Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Cal Date : 28-Apr-2005 16:37 mahmoodt

Compound	0.5000000 Level 1	1.0000 Level 2	2.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	30.0000 Level 7										
$ 42 1,2-Dichloroethane-d4	0.17262	0.18804	0.17689	0.16992	0.17883	0.17076					
	0.18055						AVRG		0.17680		3.62115
$ 55 Toluene-d8	0.94456	0.94748	0.91653	0.89778	0.96835	0.99209					
	1.10696						AVRG		0.96768		7.11469
$ 77 4-Bromofluorobenzene	1.49882	1.47430	1.43480	1.40178	1.40793	1.40690					
	1.50310						AVRG		1.44680		3.07901

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Method file : \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Cal Date : 28-Apr-2005 16:37 mahmoodt

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

STL ST LOUIS

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0320.D
Report Date: 28-Apr-2005 13:22

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSL.i\L050425A.b\LCAL0320.D
Lab Smp Id: VSTD000.5
Inj Date : 25-APR-2005 10:18
Operator : MN/TM Inst ID: MSL.i
Smp Info : VSTD000.5
Misc Info : VBLK115A;
Comment : NONE
Method : \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Meth Date : 26-Apr-2005 07:31 mahmoodt Quant Type: ISTD
Cal Date : 25-APR-2005 10:18 Cal File: LCAL0320.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLVOA02

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	25.000	DefSampleVolume
Vo	25.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	3.528	3.528	(0.394)	30925	0.50000	0.4640
2	Chloromethane	50	3.962	3.962	(0.442)	32540	0.50000	0.5052
3	Vinyl Chloride	62	4.134	4.134	(0.461)	33911	0.50000	0.4908
5	Chloroethane	64	5.002	5.002	(0.558)	22369	0.50000	0.4823
6	Trichlorofluoromethane	101	5.230	5.230	(0.583)	43388	0.50000	0.4737
7	Diethyl ether	59	5.754	5.754	(0.642)	22399	1.00000	0.9853
8	1,1,2-Trichlorofluoroethane	101	6.099	6.099	(0.680)	29055	0.50000	0.5021(M)
9	1,1-Dichloroethene	96	6.121	6.121	(0.683)	29457	0.50000	0.4898
10	Carbon Disulfide	76	6.289	6.289	(0.702)	113977	0.50000	0.5192
11	Iodomethane	142	6.405	6.405	(0.714)	20615	0.50000	0.5474(M)
12	Acrolein	56	6.566	6.566	(0.732)	5440	2.50000	4.566
13	Allyl chloride	39	6.750	6.750	(0.753)	12566	0.50000	0.4599
14	Methylene Chloride	84	6.888	6.888	(0.768)	29269	0.50000	0.5517
15	Acetone	43	6.899	6.899	(0.770)	4395	0.50000	0.7114
17	n-Hexane	57	7.064	7.064	(0.788)	32712	0.50000	0.4089
18	trans-1,2-Dichloroethene	96	7.072	7.072	(0.789)	25615	0.50000	0.4949
19	MTBE	73	7.105	7.105	(0.793)	21258	0.50000	0.7752
M 20	1,2-Dichloroethene (total)	96				48606	1.00000	0.9796
22	2-Chloro-1,3-butadiene	53	7.622	7.622	(0.850)	26769	0.50000	0.4975
23	1,1-Dichloroethane	63	7.652	7.652	(0.853)	42419	0.50000	0.4855
24	Acrylonitrile	53	7.670	7.670	(0.856)	10386	2.50000	2.302(M)
25	Vinyl acetate	43	7.805	7.805	(0.871)	10170	0.50000	0.4519

TM 4-28-05

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	26 cis-1,2-Dichloroethene	96	8.101	8.101	(0.904)	22991	0.50000	0.4847
	27 2,2-Dichloropropane	77	8.161	8.161	(0.910)	38516	0.50000	0.5084
	28 Cyclohexane	84	8.254	8.254	(0.921)	21621	0.50000	0.4627
	29 Chloroform	83	8.280	8.280	(0.924)	40248	0.50000	0.4930
	30 Bromochloromethane	128	8.288	8.288	(0.924)	5572	0.50000	0.5013
	31 Ethyl acetate	43	8.306	8.306	(0.927)	10222	1.00000	0.9268
	32 Tetrahydrofuran	71	8.430	8.430	(0.940)	3475	2.50000	4.322(M)
	33 Carbon Tetrachloride	117	8.426	8.426	(0.940)	30077	0.50000	0.4582
$	34 Dibromofluoromethane	113	8.430	8.430	(0.940)	13406	0.50000	0.4624(a)
	35 1,1,1-Trichloroethane	97	8.452	8.452	(0.943)	38315	0.50000	0.4879
	37 1,1-Dichloropropene	75	8.535	8.535	(0.952)	35267	0.50000	0.4941
	38 Propionitrile	54	8.699	8.699	(0.970)	3706	2.50000	4.086(M)
	39 Methacrylonitrile	41	8.707	8.707	(0.971)	19460	2.50000	2.433
	40 Isobutanol	42	8.426	8.426	(0.940)	6925	10.0000	9.202
	41 Benzene	78	8.726	8.726	(0.973)	99677	0.50000	0.4883
$	42 1,2-Dichloroethane-d4	65	8.804	8.804	(0.982)	12774	0.50000	0.4882(aM)
	43 1,2-Dichloroethane	62	8.857	8.857	(0.988)	16823	0.50000	0.4850
*	44 Fluorobenzene	96	8.965	8.965	(1.000)	1479997	10.0000	
	45 Methylcyclohexane	55	9.062	9.062	(1.011)	24382	0.50000	0.5046
	46 Trichloroethene	130	9.081	9.081	(1.013)	22797	0.50000	0.4945
	48 Dibromomethane	93	9.384	9.384	(1.047)	5534	0.50000	0.4710
	49 1,2-Dichloropropane	63	9.399	9.399	(1.048)	18765	0.50000	0.4939
	50 Bromodichloromethane	83	9.433	9.433	(1.052)	20984	0.50000	0.4551
	51 Methyl methacrylate	69	9.440	9.440	(1.053)	4635	0.50000	0.9264
	54 cis-1,3-Dichloropropene	75	9.773	9.773	(1.090)	26479	0.50000	0.5233
$	55 Toluene-d8	98	9.871	9.871	(1.101)	69897	0.50000	0.4880(a)
	56 Toluene	91	9.901	9.901	(0.925)	101348	0.50000	0.5276
	57 2-Nitro-Propane	43	9.998	9.998	(1.115)	2502	0.50000	0.9992
	58 4-Methyl-2-pentanone	43	10.024	10.024	(1.118)	5740	0.50000	0.4826
	59 trans-1,3-Dichloropropene	75	10.103	10.103	(0.944)	16052	0.50000	0.5078
	60 Ethyl methacrylate	69	10.099	10.099	(0.944)	10238	0.50000	0.5035
	61 Tetrachloroethene	164	10.121	10.121	(0.946)	20665	0.50000	0.4972
	62 1,1,2-Trichloroethane	97	10.204	10.204	(0.953)	7949	0.50000	0.5153
M	63 Xylenes (total)	106				112539	1.50000	1.428(a)
	64 Chlorodibromomethane	129	10.342	10.342	(0.966)	7405	0.50000	0.4921
	65 1,3-Dichloropropane	76	10.346	10.346	(0.967)	16246	0.50000	0.5315
	66 2-Hexanone	43	10.447	10.447	(0.976)	4003	0.50000	0.2464
	67 1,2-Dibromoethane	107	10.492	10.492	(0.980)	6253	0.50000	0.5012
	68 Ethylbenzene	106	10.679	10.679	(0.998)	29539	0.50000	0.4822
*	69 Chlorobenzene-d5	117	10.702	10.702	(1.000)	772015	10.0000	(M)
	70 Chlorobenzene	112	10.713	10.713	(1.001)	56769	0.50000	0.5569
	71 1,1,1,2-Tetrachloroethane	131	10.728	10.728	(1.002)	13035	0.50000	0.4815
	72 m,p-Xylenes	106	10.739	10.739	(1.003)	78764	1.00000	0.9404
	73 o-Xylene	106	10.978	10.978	(1.026)	33775	0.50000	0.4880
	74 Styrene	104	11.008	11.008	(1.029)	52233	0.50000	0.5024
	75 Bromoform	173	11.124	11.124	(0.928)	2464	0.50000	0.4180(M)
	76 Isopropylbenzene	105	11.117	11.117	(0.928)	87505	0.50000	0.4898
$	77 4-Bromofluorobenzene	95	11.326	11.326	(0.945)	21945	0.50000	0.5180(a)
	78 n-Propylbenzene	91	11.334	11.334	(0.946)	126805	0.50000	0.4979
	79 1,1,2,2-Tetrachloroethane	83	11.383	11.383	(0.950)	7840	0.50000	0.5241
	80 1,3,5-Trimethylbenzene	105	11.409	11.409	(0.952)	80621	0.50000	0.4824
	81 Bromobenzene	156	11.428	11.428	(0.953)	12229	0.50000	0.4700
	82 trans-1,4-dichloro-2-butene	53	11.480	11.480	(0.958)	2360	0.50000	0.5568(M)
	83 2-Chlorotoluene	91	11.484	11.484	(0.958)	69493	0.50000	0.5059

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
84	4-Chlorotoluene	91	11.566	11.566	(0.965)	64355	0.50000	0.4872
85	t-Butylbenzene	119	11.615	11.615	(0.969)	71133	0.50000	0.4709
86	1,2,4-Trimethylbenzene	105	11.652	11.652	(0.972)	77093	0.50000	0.4752
87	Pentachloroethane	167	11.701	11.701	(0.976)	3234	0.50000	0.6184(a)
88	sec-Butylbenzene	105	11.716	11.716	(0.978)	104478	0.50000	0.4766
89	4-Isopropyltoluene	119	11.776	11.776	(0.983)	76592	0.50000	0.4691
91	1,3-Dichlorobenzene	146	11.948	11.948	(0.997)	30301	0.50000	0.4979
* 92	1,4 Dichlorobenzene-d4	152	11.985	11.985	(1.000)	292830	10.0000	
93	1,4-Dichlorobenzene	146	12.000	12.000	(1.001)	31432	0.50000	0.5084
94	n-Butylbenzene	91	12.041	12.041	(1.005)	90038	0.50000	0.5011
95	1,2,3-Trichloropropane	110	12.296	12.296	(1.026)	1198	0.50000	0.4512(M)
96	1,2-Dichlorobenzene	146	12.288	12.288	(1.025)	22827	0.50000	0.4893(M)
97	1,2-Dibromo-3-chloropropane	157	12.887	12.887	(1.075)	947	0.50000	0.5441(M)
98	Hexachlorobutadiene	225	13.336	13.336	(1.113)	8409	0.50000	0.4929
99	1,2,4-Trichlorobenzene	180	13.463	13.463	(1.123)	14588	0.50000	0.5122
100	Naphthalene	128	13.838	13.838	(1.155)	19705	0.50000	0.4907(M)
101	1,2,3-Trichlorobenzene	180	14.032	14.032	(1.171)	11278	0.50000	0.5319

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0320.D
Report Date: 28-Apr-2005 13:22

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

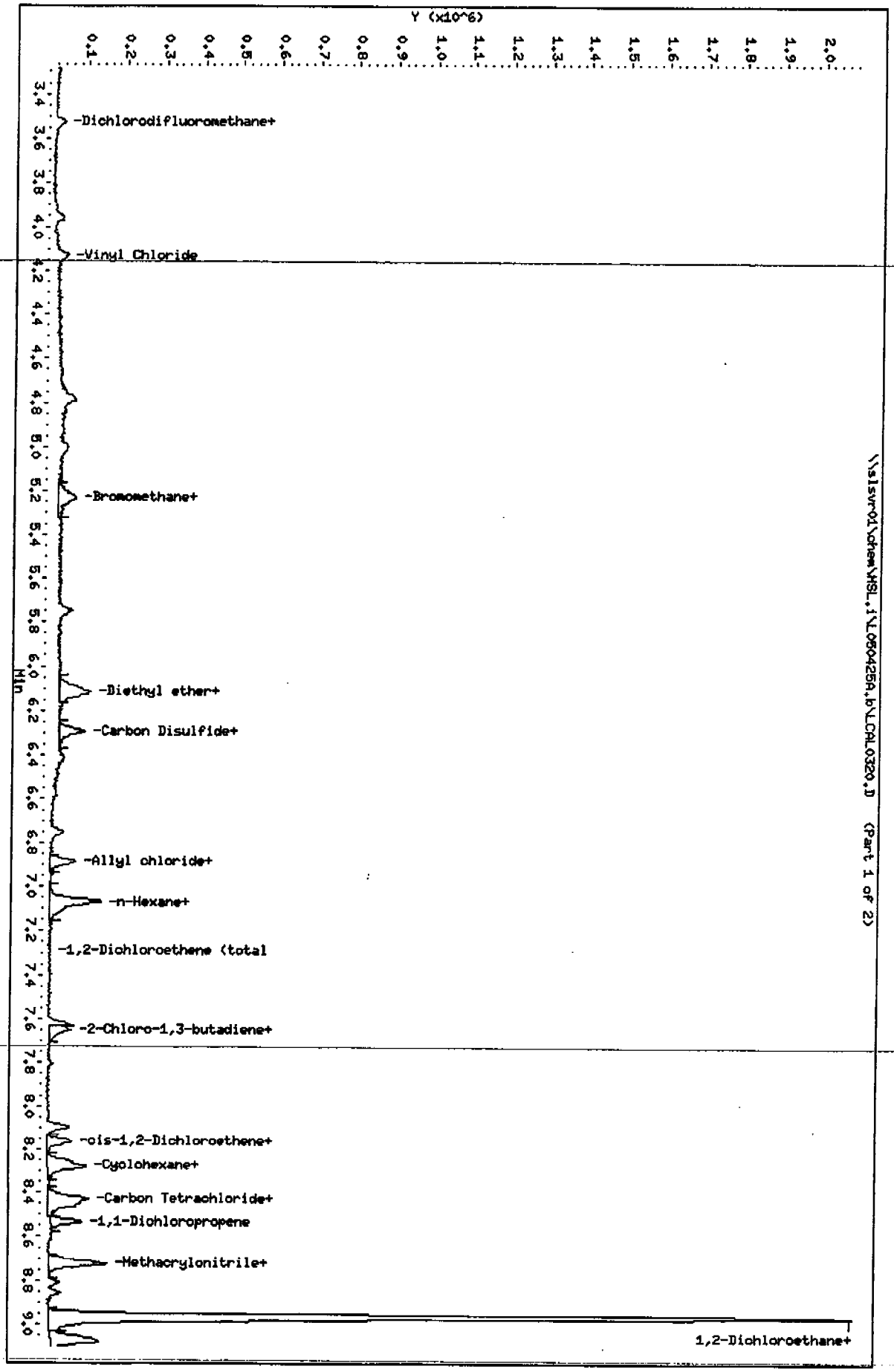
Instrument ID: MSL.i
Lab File ID: LCAL0320.D
Lab Smp Id: VSTD000.5
Analysis Type: VOA
Quant Type: ISTD
Operator: MN/TM
Method File: \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Misc Info: VBLK115A;

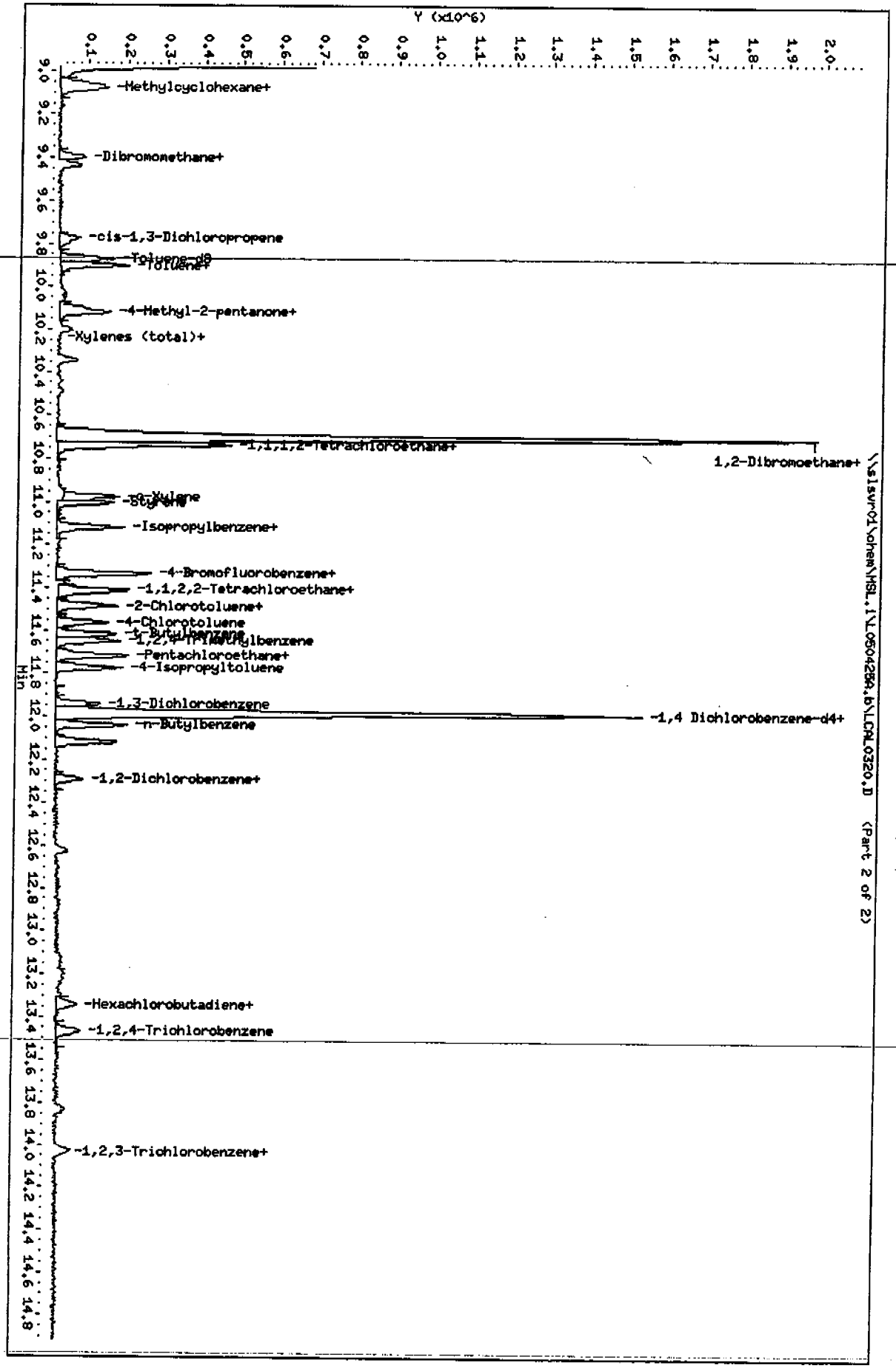
Calibration Date: 25-APR-2005
Calibration Time: 11:51
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
44 Fluorobenzene	1508429	754215	3016858	1479997	-1.88
69 Chlorobenzene-d5	892585	446293	1785170	772015	-13.51
92 1,4 Dichlorobenze	346814	173407	693628	292830	-15.57

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
44 Fluorobenzene	8.97	8.47	9.47	8.97	-0.00
69 Chlorobenzene-d5	10.70	10.20	11.20	10.70	-0.00
92 1,4 Dichlorobenze	11.99	11.49	12.49	11.99	-0.00

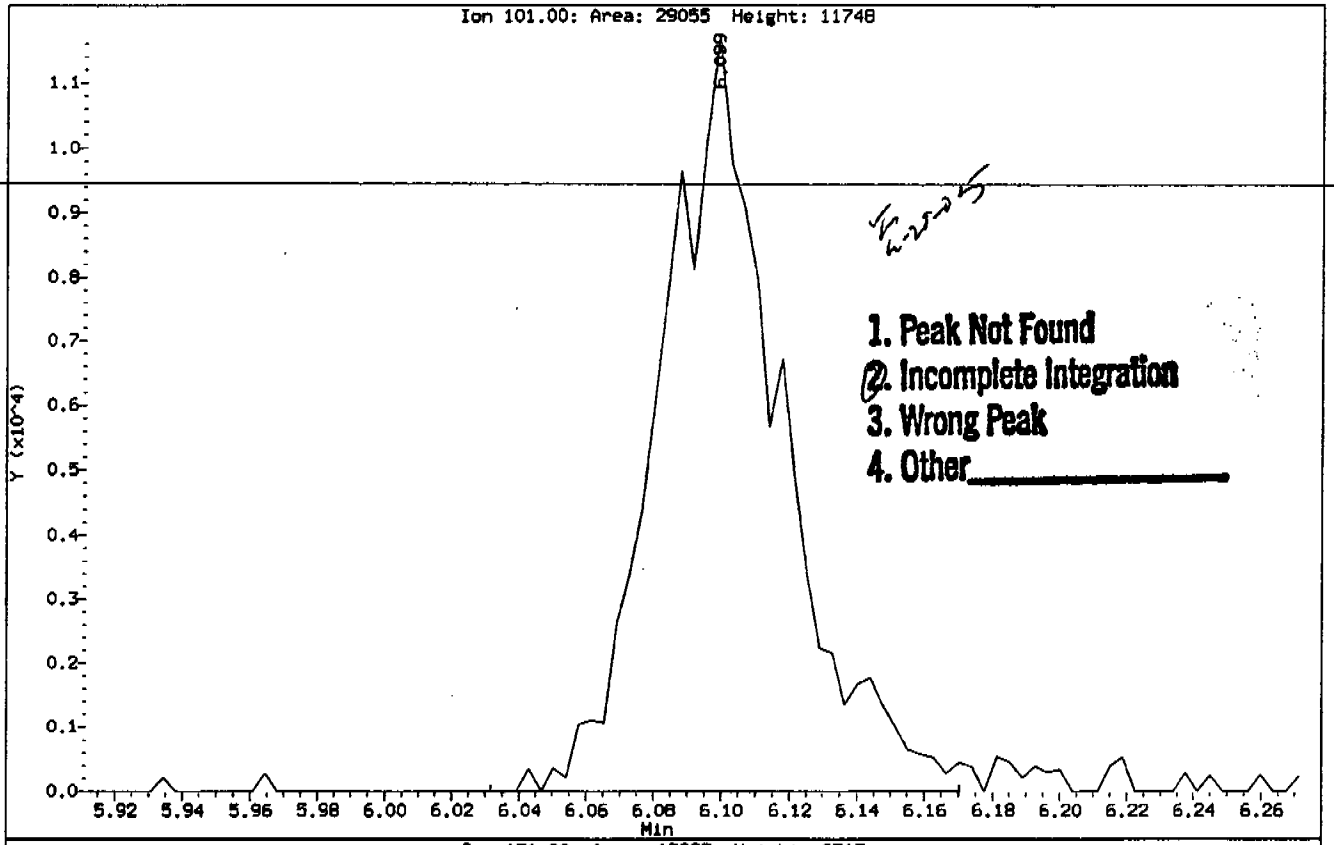
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

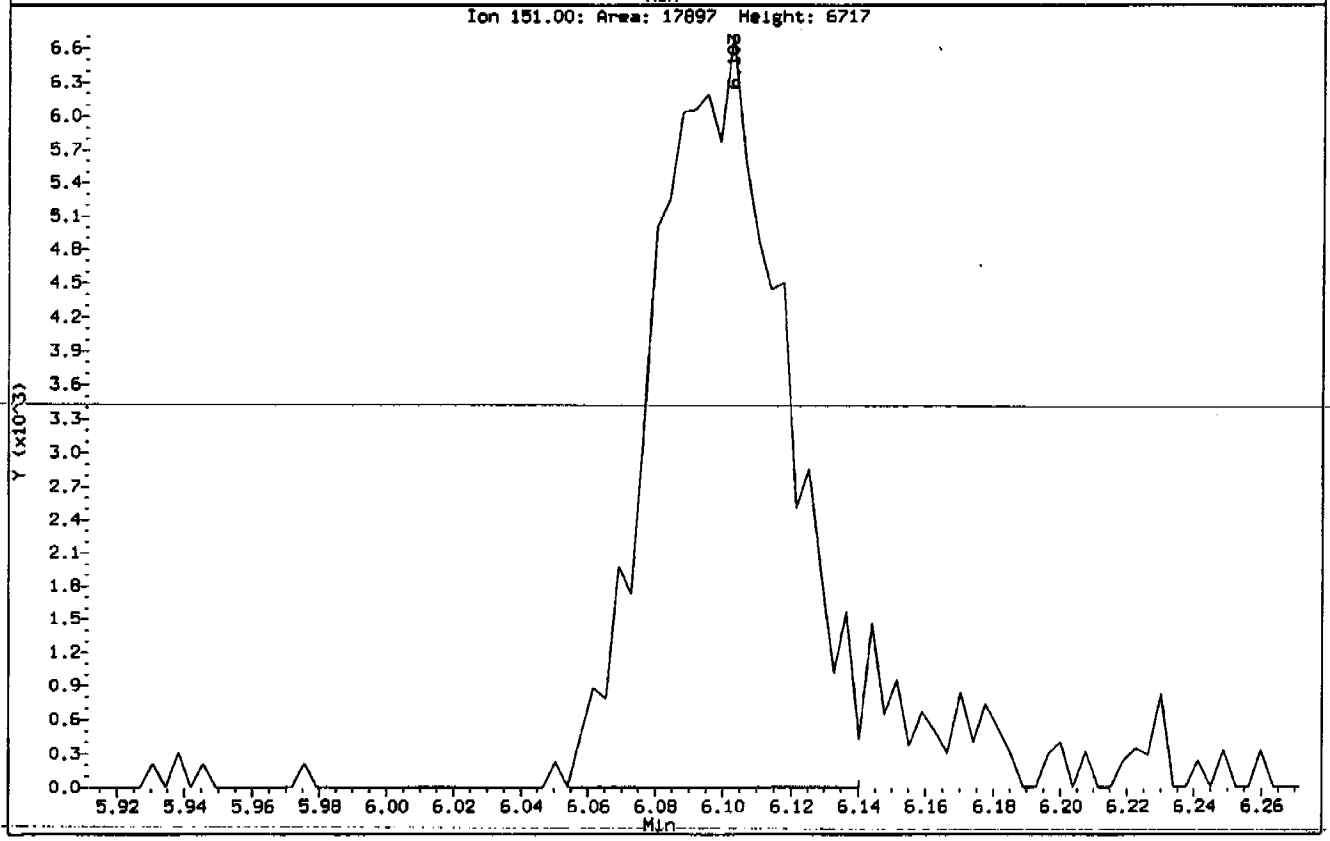

Y (x10^6)
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2.0
Min
3.4 3.6 3.8 4.0 4.2 4.4 4.6 4.8 5.0 5.2 5.4 5.6 5.8 6.0 6.2 6.4 6.6 6.8 7.0 7.2 7.4 7.6 7.8 8.0 8.2 8.4 8.6 8.8 9.0
-Dichlorodifluoromethane+
-Vinyl Chloride
-Bromomethane+
-Diethyl ether+
-Carbon Disulfide+
-Allyl chloride+
-n-Hexane+
-1,2-Dichloroethene (total
-2-Chloro-1,3-butadiene+
-cis-1,2-Dichloroethene+
-Cyclohexane+
-Carbon Tetrachloride+
-1,1-Dichloropropene
-Methacrylonitrile+
1,2-Dichloroethane+
Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0320.D
Date : 25-APR-2005 10:18
Client ID:
Sample Info: VSTD000.5
Purge Volume: 25.0
Column phase: RTX-502.2
Instrument: MSL.i
Operator: MN/TH
Column diameter: 0.25
\\slsvr01\chem\MSL.i\L050425A.b\LCAL0320.D (Part 1 of 2)


Y (x10^6)
Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0320.D
Date : 25-APR-2005 10:18
Client ID:
Sample Info: VSTD000.5
Purge Volume: 25.0
Column phase: RTX-502.2
Instrument: MSL.1
Operator: MM/TH
Column diameter: 0.25
\\slsvr01\chem\MSL.i\L050425A.b\LCAL0320.D (Part 2 of 2)
Min
-Methylcyclohexane+
-Dibromomethane+
-cis-1,3-Dichloropropene
Toluene-d8
Toluene+
-4-Methyl-2-pentanone+
-Xylenes (total)+
-1,1,1,2-Tetrachloroethane+
1,2-Dibromoethane+
-o-Xylene
-Styrene
-Isopropylbenzene+
-4-Bromofluorobenzene+
-1,1,2,2-Tetrachloroethane+
-2-Chlorotoluene+
-4-Chlorotoluene
-n-Butylbenzene
-1,2,4-Trimethylbenzene
-Pentachloroethane+
-4-Isopropyltoluene
-1,3-Dichlorobenzene
-1,4 Dichlorobenzene-d4+
-n-Butylbenzene
-1,2-Dichlorobenzene+
-Hexachlorobutadiene+
-1,2,4-Trichlorobenzene
-1,2,3-Trichlorobenzene+

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0320.D
Injection Date: 25-APR-2005 10:18
Instrument: MSL.i
Client Sample ID:

Compound: 1,1,2-Trichlorofluoroethane
CAS Number: 76-13-1





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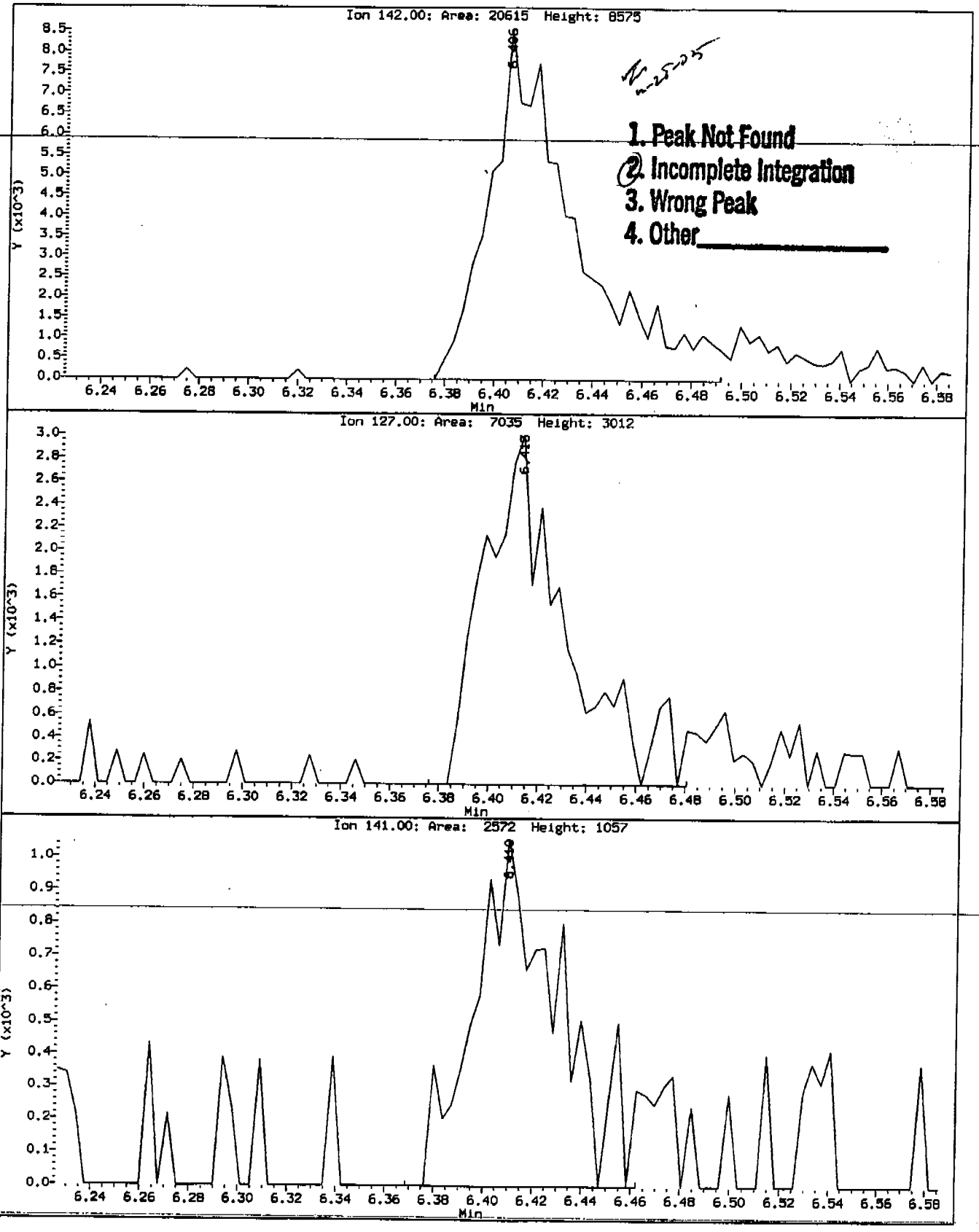
Injection Date: 25-APR-2005 10:18
Instrument: MSL.i
Client Sample ID:

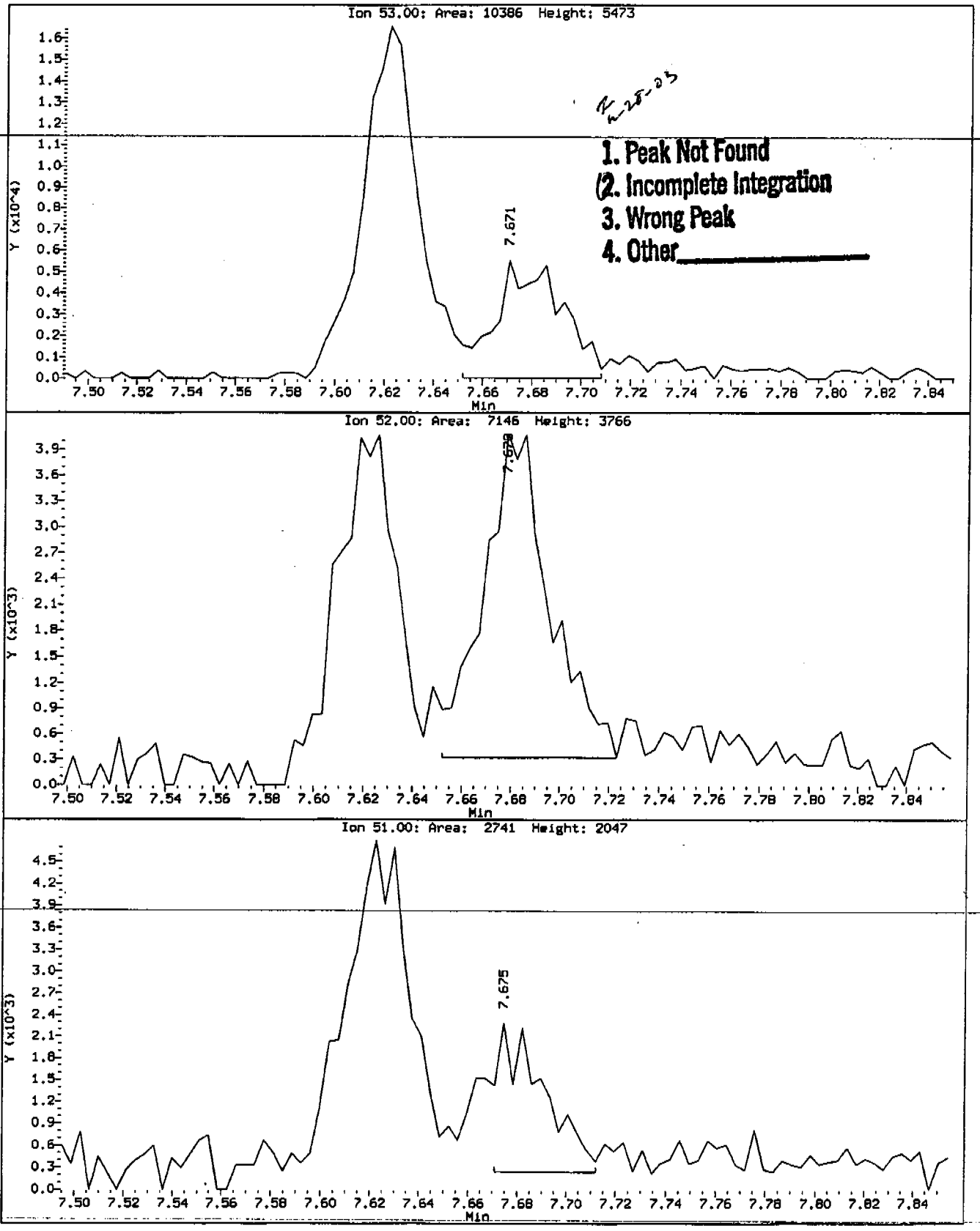
Compound: Iodomethane
CAS Number: 74-88-4



1. Peak Not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

Data File: \\slavr01\chem\MSL.i\L050425A.b\LCAL0320.D
Injection Date: 25-APR-2005 10:18
Instrument: MSL.i
Client Sample ID:

Compound: Acrylonitrile
CAS Number: 107-13-1



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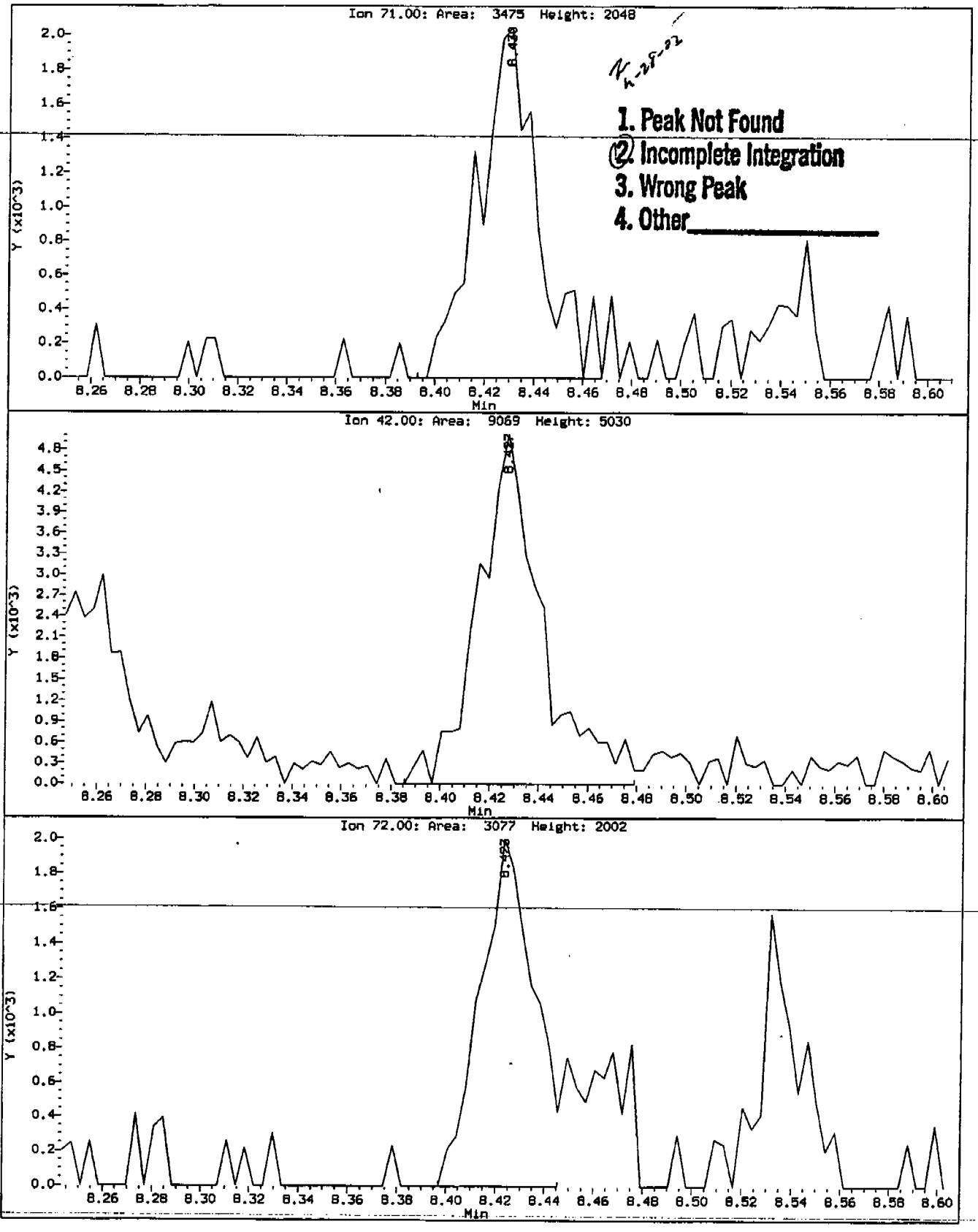
Injection Date: 25-APR-2005 10:18
Instrument: MSL.i
Client Sample ID:

Compound: Tetrahydrofuran
CAS Number: 109-99-9



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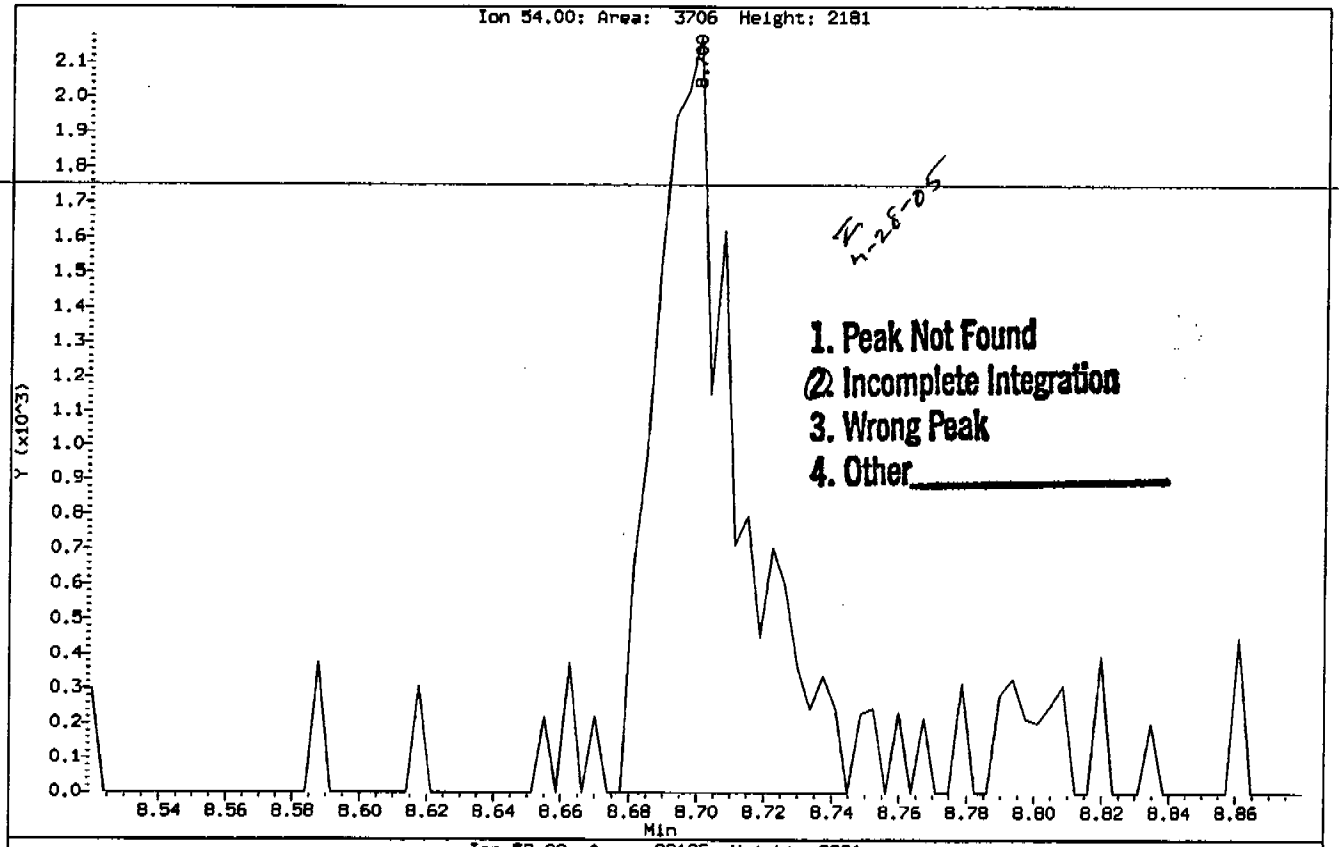
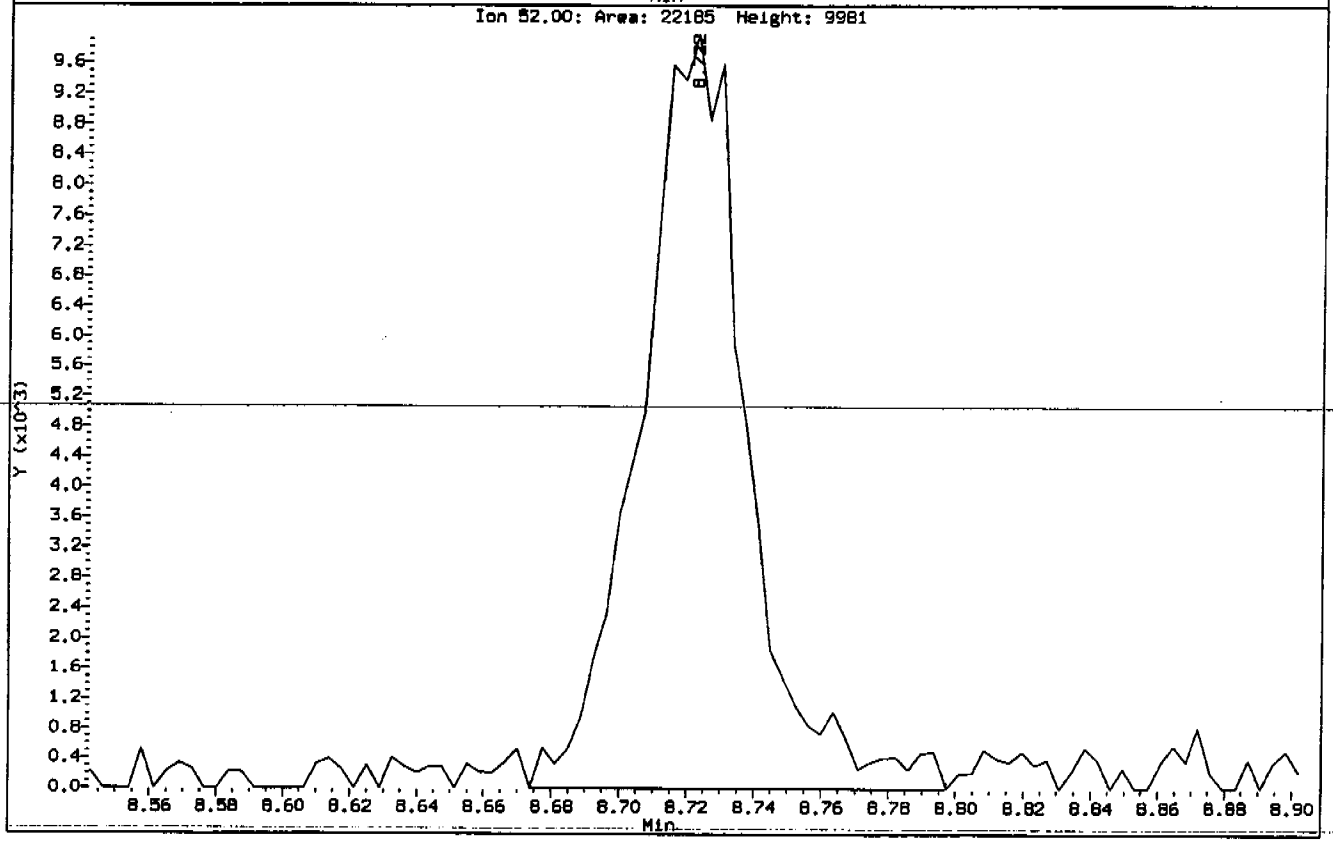
Injection Date: 25-APR-2005 10:18
Instrument: MSL.i
Client Sample ID:

Compound: Propionitrile
CAS Number: 107-12-0





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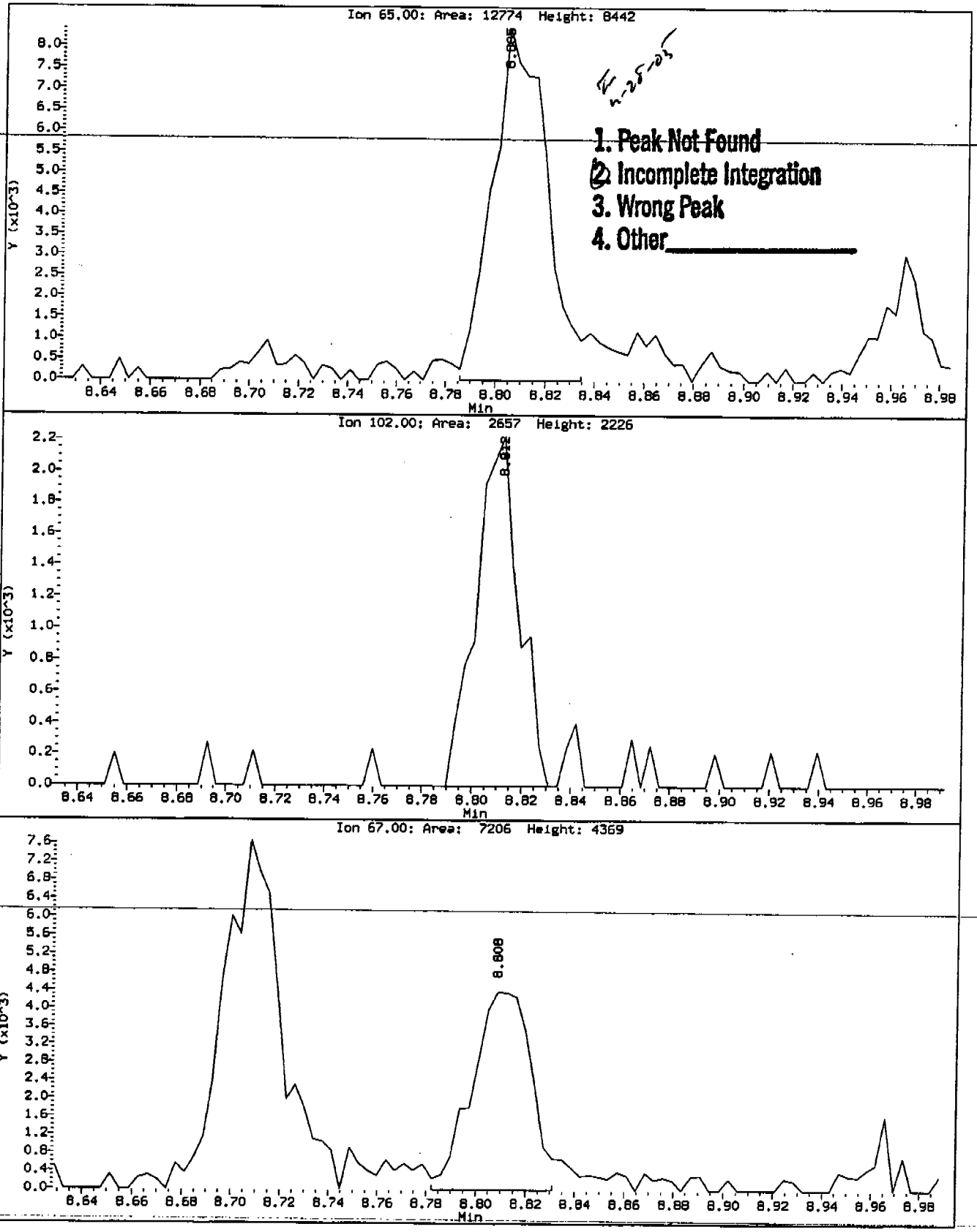
Injection Date: 25-APR-2005 10:18
Instrument: MSL.i
Client Sample ID:

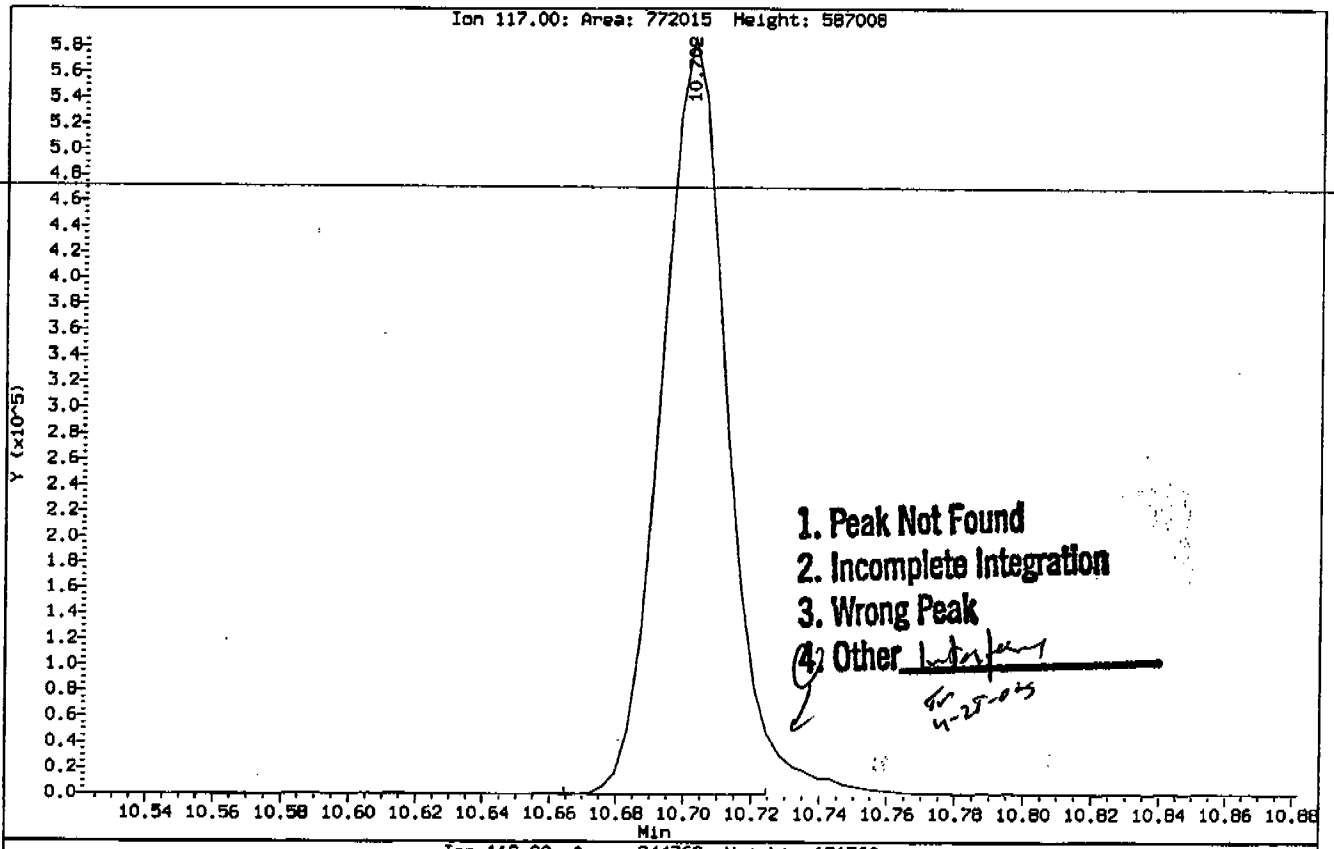
Compound: 1,2-Dichloroethane-d4
CAS Number: 17060-07-0

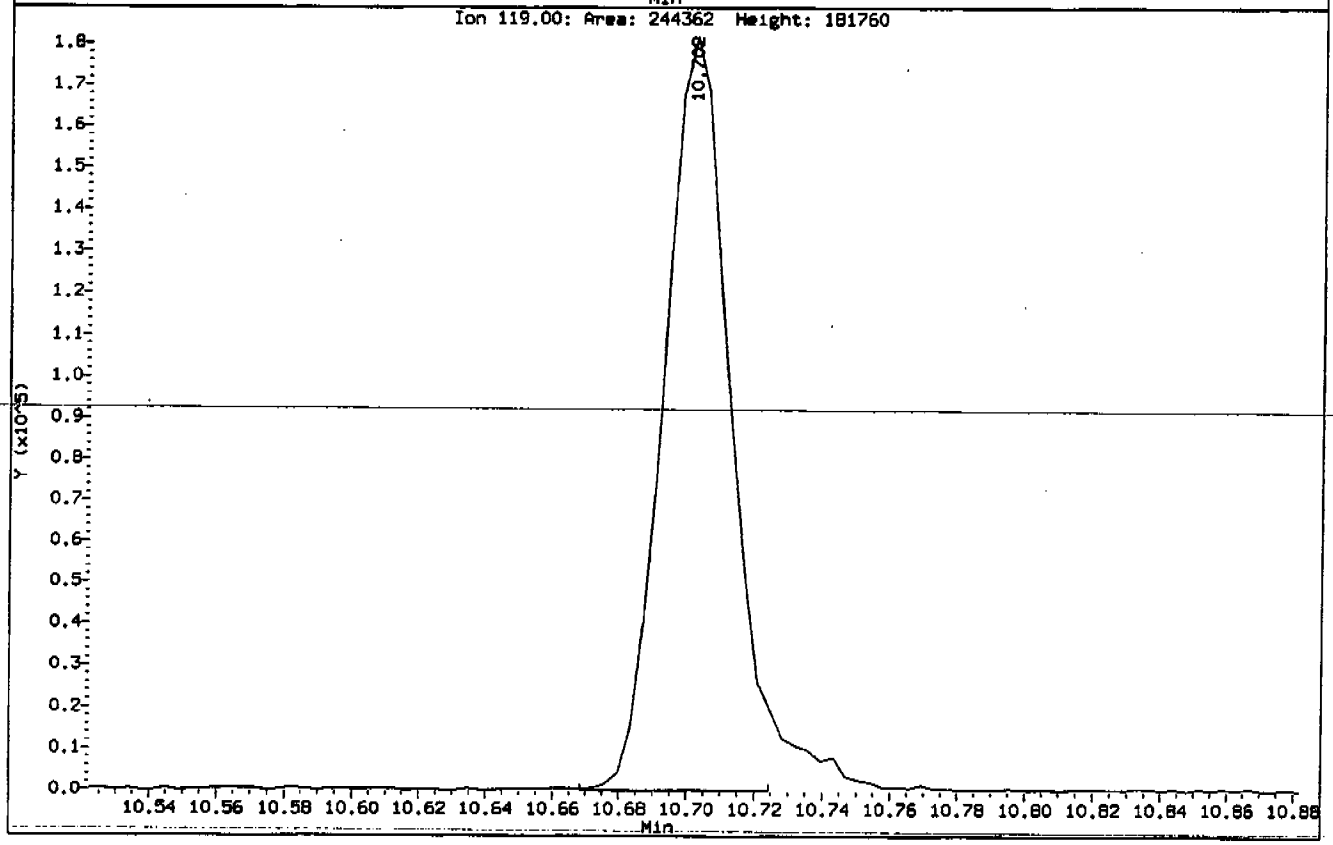


1. Peak Not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0320.D
Injection Date: 25-APR-2005 10:18
Instrument: MSL.i
Client Sample ID:

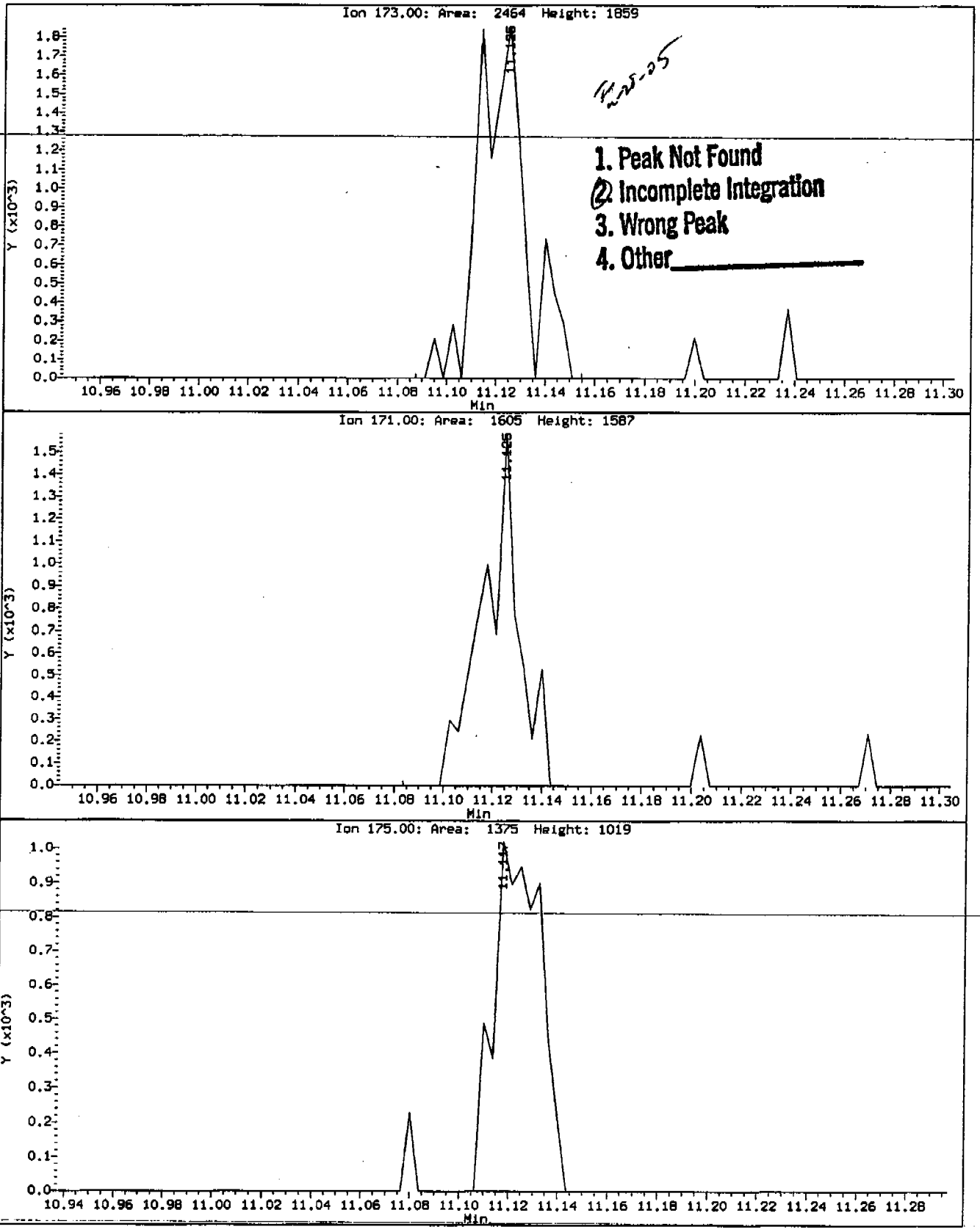
Compound: Chlorobenzene-d5
CAS Number: 3114-55-4





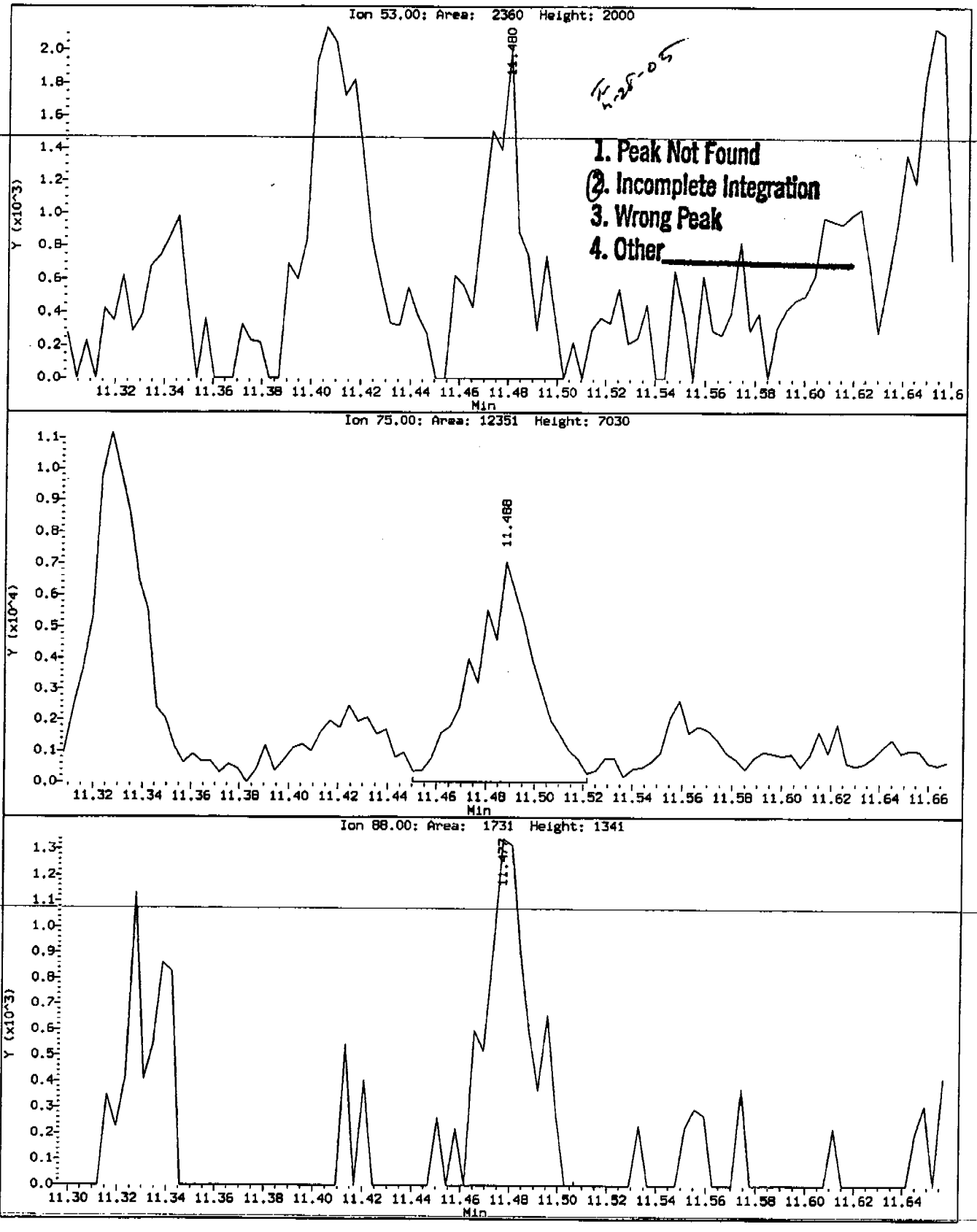
Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0320.D
Injection Date: 25-APR-2005 10:18
Instrument: MSL.i
Client Sample ID:

Compound: Bromoform
CAS Number: 75-25-2



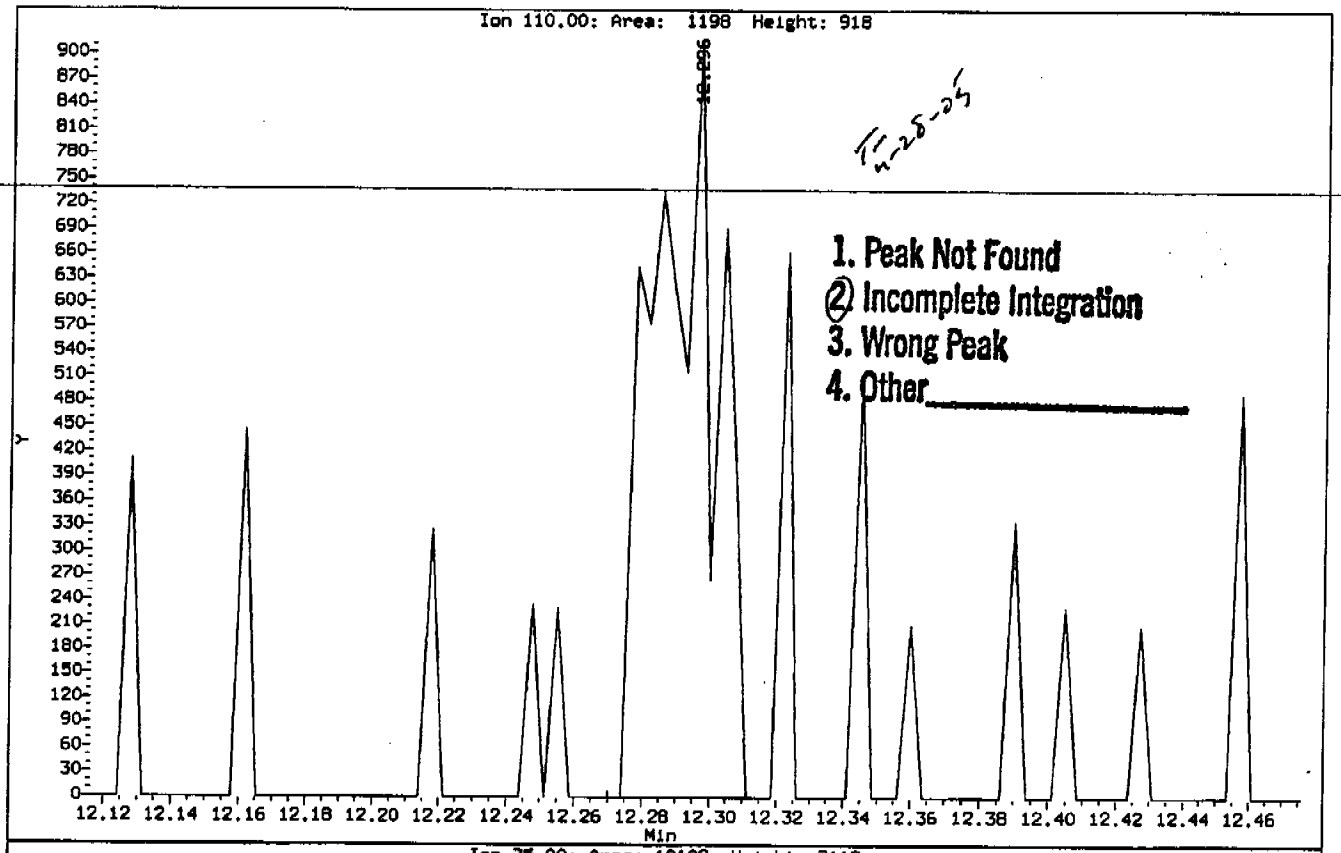
Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0320.D
Injection Date: 25-APR-2005 10:18
Instrument: MSL.i
Client Sample ID:

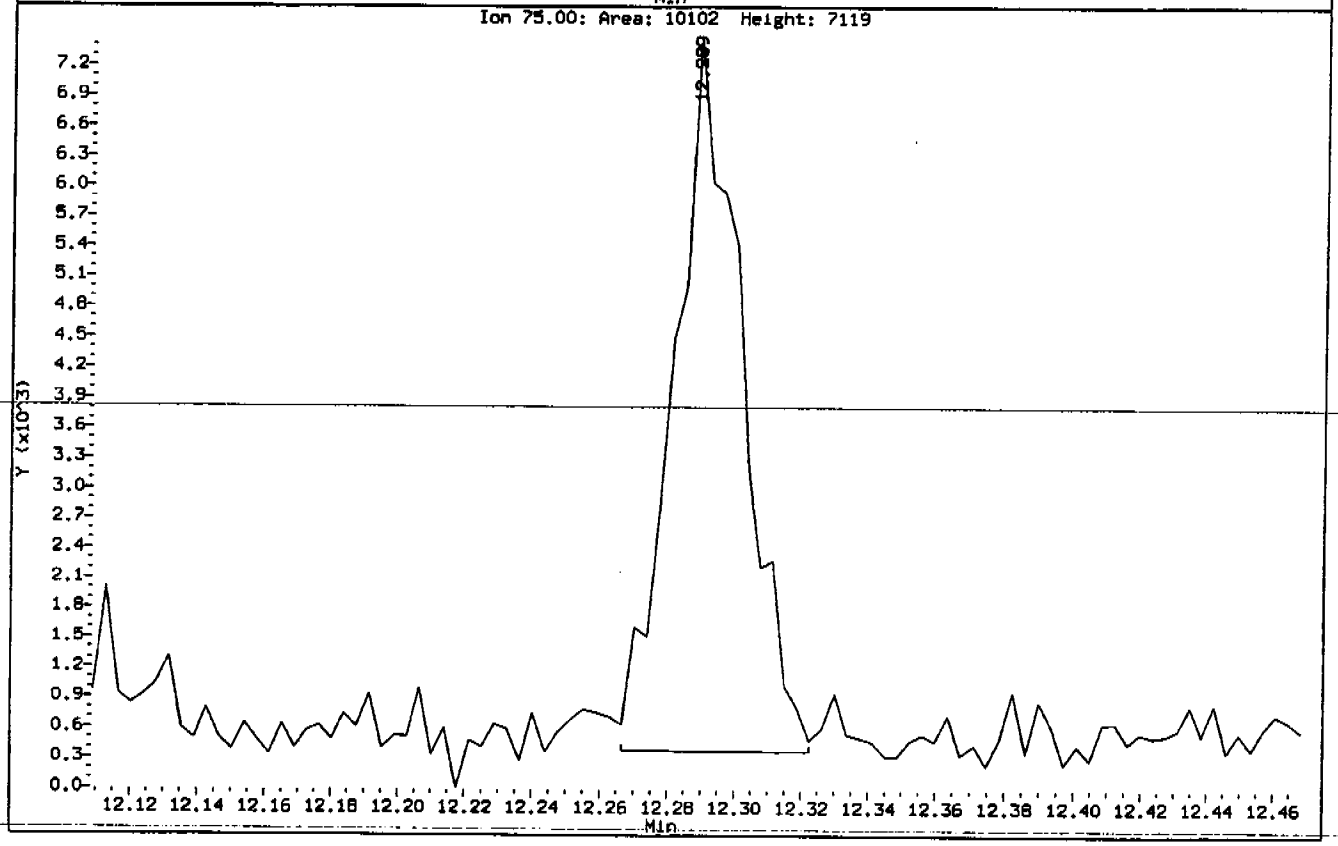
Compound: trans-1,4-dichloro-2-butene
CAS Number: 110-57-6



Data File: \\mlsvr01\chem\MSL.i\L050425A.b\LCAL0320.D
Injection Date: 25-APR-2005 10:18
Instrument: MSL.i
Client Sample ID:

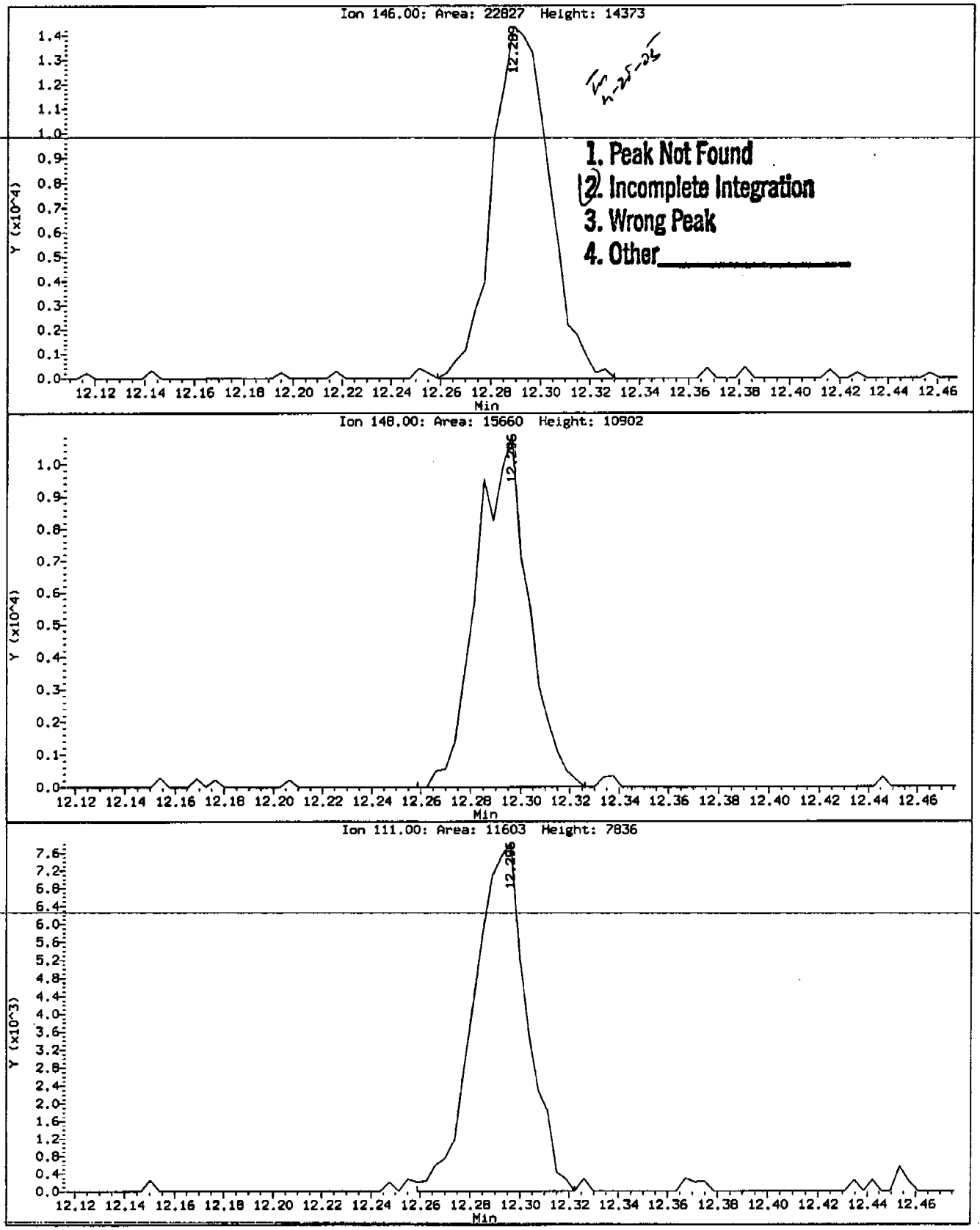
Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





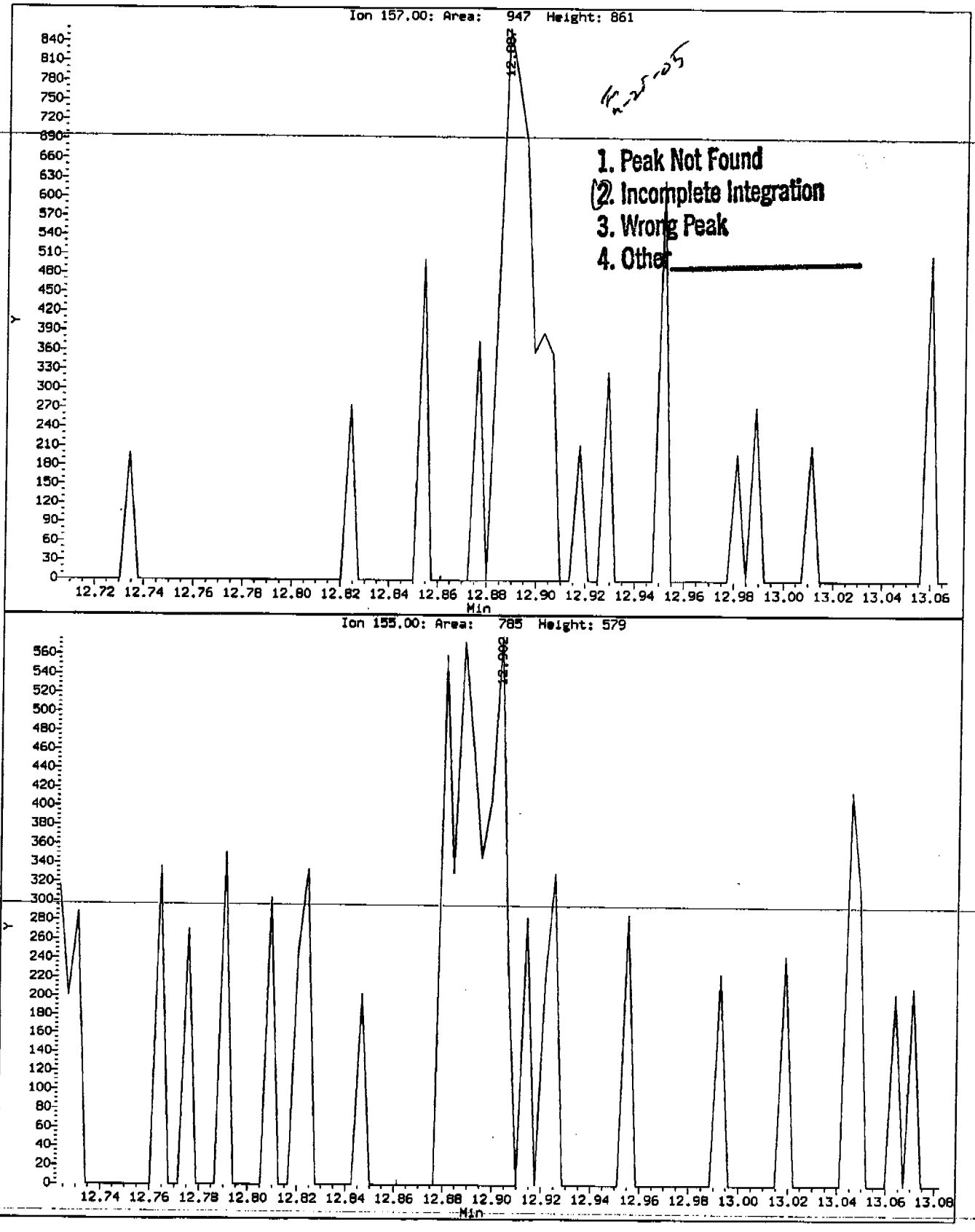
Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0320.D
Injection Date: 25-APR-2005 10:18
Instrument: MSL.i
Client Sample ID:

Compound: 1,2-Dichlorobenzene
CAS Number: 95-50-1



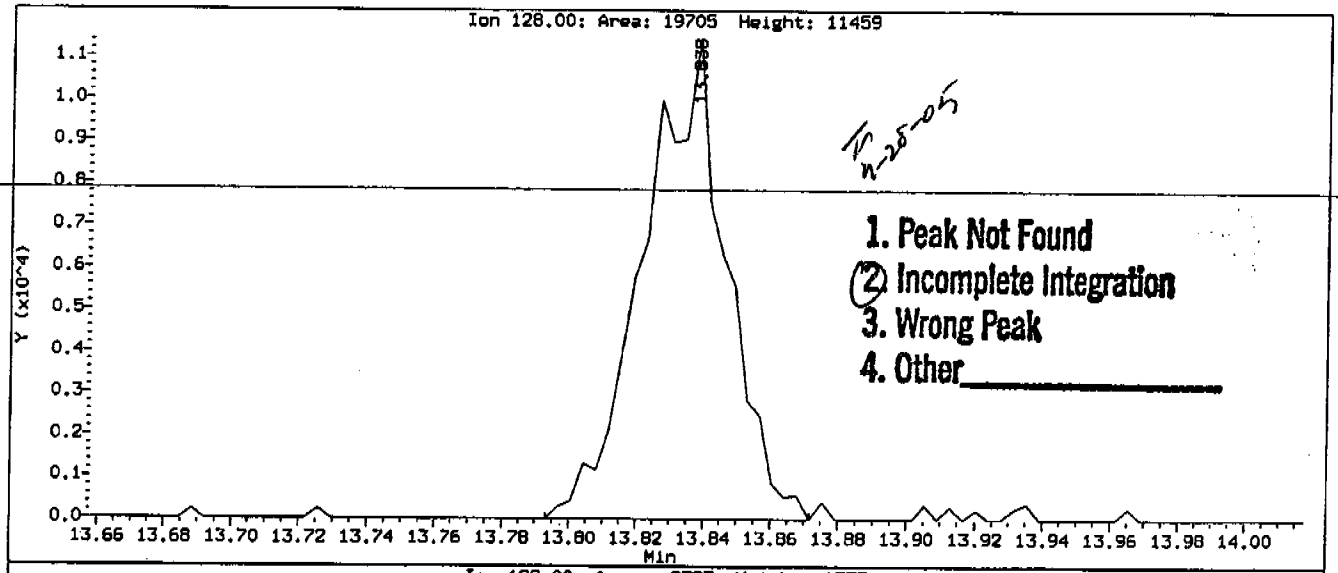
Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0320.D
Injection Date: 25-APR-2005 10:18
Instrument: MSL.i
Client Sample ID:

Compound: 1,2-Dibromo-3-chloropropane
CAS Number: 96-12-8

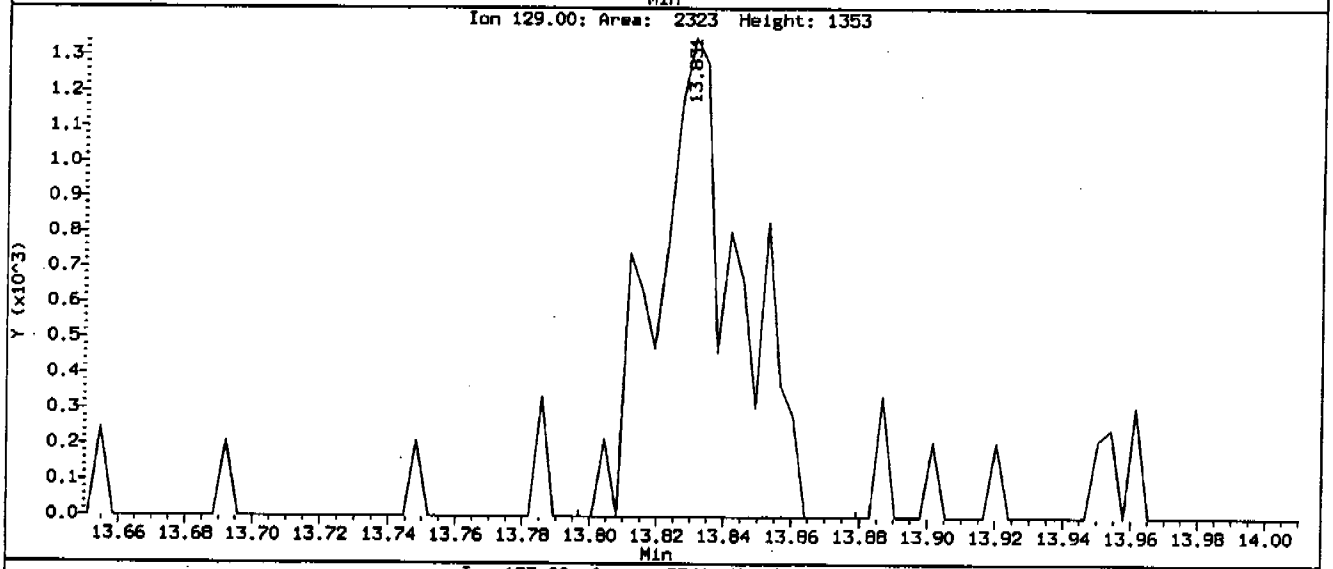


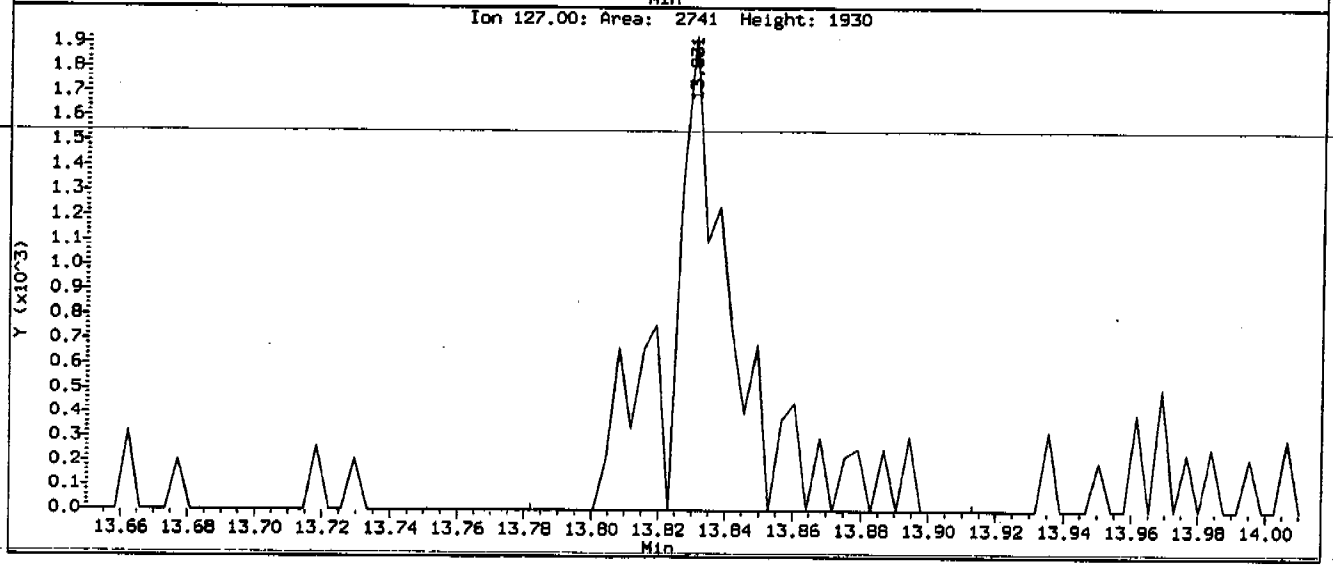
Data File: \\elsvr01\chem\MSL.i\L050425A.b\LCAL0320.D
Injection Date: 25-APR-2005 10:18
Instrument: MSL.i
Client Sample ID:

Compound: Naphthalene
CAS Number: 91-20-3



1. Peak Not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____





Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0321.D
Report Date: 28-Apr-2005 13:22

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSL.i\L050425A.b\LCAL0321.D
Lab Smp Id: VSTD001
Inj Date : 25-APR-2005 10:41
Operator : MN/TM Inst ID: MSL.i
Smp Info : VSTD001
Misc Info : VBLK115A;
Comment : NONE
Method : \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Meth Date : 26-Apr-2005 07:31 mahmoodt Quant Type: ISTD
Cal Date : 25-APR-2005 10:41 Cal File: LCAL0321.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLVOA02

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	25.000	DefSampleVolume
Vo	25.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	3.528	3.528	(0.394)	74348	1.00000	1.091
2	Chloromethane	50	3.958	3.958	(0.442)	71430	1.00000	1.085
3	Vinyl Chloride	62	4.134	4.134	(0.461)	75756	1.00000	1.073
4	Bromomethane	94	4.785	4.785	(0.534)	46004	1.00000	0.4137(a)
5	Chloroethane	64	5.002	5.002	(0.558)	53834	1.00000	1.136
6	Trichlorofluoromethane	101	5.238	5.238	(0.584)	101736	1.00000	1.086
7	Diethyl ether	59	5.755	5.755	(0.642)	49655	2.00000	2.137
8	1,1,2-Trichlorofluoroethane	101	6.103	6.103	(0.681)	64203	1.00000	1.086
9	1,1-Dichloroethene	96	6.129	6.129	(0.684)	63991	1.00000	1.041
10	Carbon Disulfide	76	6.297	6.297	(0.702)	235508	1.00000	1.050
11	Iodomethane	142	6.421	6.421	(0.716)	43633	1.00000	1.134(M)
12	Acrolein	56	6.582	6.582	(0.734)	8985	5.00000	6.942
13	Allyl chloride	39	6.754	6.754	(0.753)	30936	1.00000	1.108
14	Methylene Chloride	84	6.889	6.889	(0.768)	56465	1.00000	1.218
15	Acetone	43	6.885	6.885	(0.768)	5357	1.00000	0.9494
16	Methyl Acetate	74	7.008	7.008	(0.782)	2289	1.00000	1.618(M)
17	n-Hexane	57	7.068	7.068	(0.788)	83469	1.00000	1.021
18	trans-1,2-Dichloroethene	96	7.072	7.072	(0.789)	53964	1.00000	1.020
19	MTBE	73	7.109	7.109	(0.793)	61861	1.00000	1.432(M)
M 20	1,2-Dichloroethene (total)	96				106567	2.00000	2.105
21	Acetonitrile	41	7.401	7.401	(0.826)	10024	5.00000	9.281(M)
22	2-Chloro-1,3-butadiene	53	7.626	7.626	(0.851)	56348	1.00000	1.025

4-28-05

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0321.D
Report Date: 28-Apr-2005 13:22

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	7.652	7.652	(0.853)	97069	1.00000	1.087
	24 Acrylonitrile	53	7.678	7.678	(0.856)	22831	5.00000	4.950
	25 Vinyl acetate	43	7.805	7.805	(0.871)	24893	1.00000	1.082
	26 cis-1,2-Dichloroethene	96	8.101	8.101	(0.904)	52603	1.00000	1.085
	27 2,2-Dichloropropane	77	8.165	8.165	(0.911)	86384	1.00000	1.116
	28 Cyclohexane	84	8.262	8.262	(0.922)	50515	1.00000	1.058
	29 Chloroform	83	8.284	8.284	(0.924)	87403	1.00000	1.047
	30 Bromochloromethane	128	8.284	8.284	(0.924)	11822	1.00000	1.040
	31 Ethyl acetate	43	8.311	8.311	(0.927)	24404	2.00000	2.165
	32 Tetrahydrofuran	71	8.430	8.430	(0.940)	8291	5.00000	7.240(M)
	33 Carbon Tetrachloride	117	8.430	8.430	(0.940)	71839	1.00000	1.071
$	34 Dibromofluoromethane	113	8.427	8.427	(0.940)	30136	1.00000	1.017(a)
	35 1,1,1-Trichloroethane	97	8.457	8.457	(0.943)	87587	1.00000	1.091
	36 2-Butanone	43	8.468	8.468	(0.944)	6826	1.00000	1.221
	37 1,1-Dichloropropene	75	8.535	8.535	(0.952)	78469	1.00000	1.076
	38 Propionitrile	54	8.700	8.700	(0.970)	8117	5.00000	6.693
	39 Methacrylonitrile	41	8.707	8.707	(0.971)	40784	5.00000	4.988
	40 Isobutanol	42	8.423	8.423	(0.939)	15550	20.0000	20.22
	41 Benzene	78	8.722	8.722	(0.973)	222499	1.00000	1.066
$	42 1,2-Dichloroethane-d4	65	8.808	8.808	(0.982)	28447	1.00000	1.064(aM)
	43 1,2-Dichloroethane	62	8.853	8.853	(0.987)	39005	1.00000	1.100
*	44 Fluorobenzene	96	8.965	8.965	(1.000)	1512787	10.0000	
	45 Methylcyclohexane	55	9.066	9.066	(1.011)	53528	1.00000	1.084
	46 Trichloroethene	130	9.081	9.081	(1.013)	50158	1.00000	1.064
	47 n-Butanol	56	9.156	9.156	(1.021)	4088	10.0000	10.70
	48 Dibromomethane	93	9.388	9.388	(1.047)	13328	1.00000	1.110
	49 1,2-Dichloropropane	63	9.400	9.400	(1.048)	42941	1.00000	1.106
	50 Bromodichloromethane	83	9.433	9.433	(1.052)	50256	1.00000	1.066
	51 Methyl methacrylate	69	9.441	9.441	(1.053)	10193	1.00000	1.390
	52 1,4-Dioxane	88	9.534	9.534	(1.063)	3113	20.0000	33.88(M)
	54 cis-1,3-Dichloropropene	75	9.770	9.770	(1.090)	52395	1.00000	1.013
$	55 Toluene-d8	98	9.867	9.867	(1.101)	143333	1.00000	0.9791(a)
	56 Toluene	91	9.901	9.901	(0.925)	224556	1.00000	1.158
	57 2-Nitro-Propane	43	9.998	9.998	(1.115)	5450	1.00000	1.440
	58 4-Methyl-2-pentanone	43	10.021	10.021	(1.118)	13556	1.00000	1.115
	59 trans-1,3-Dichloropropene	75	10.099	10.099	(0.944)	37786	1.00000	1.184
	60 Ethyl methacrylate	69	10.099	10.099	(0.944)	21070	1.00000	1.026
	61 Tetrachloroethene	164	10.122	10.122	(0.946)	48136	1.00000	1.146
	62 1,1,2-Trichloroethane	97	10.204	10.204	(0.953)	18351	1.00000	1.178
M	63 Xylenes (total)	106				256848	3.00000	3.230(a)
	64 Chlorodibromomethane	129	10.339	10.339	(0.966)	17412	1.00000	1.146
	65 1,3-Dichloropropane	76	10.346	10.346	(0.967)	36849	1.00000	1.194
	66 2-Hexanone	43	10.447	10.447	(0.976)	9956	1.00000	1.258
	67 1,2-Dibromoethane	107	10.492	10.492	(0.980)	14205	1.00000	1.127
	68 Ethylbenzene	106	10.679	10.679	(0.998)	70484	1.00000	1.139
*	69 Chlorobenzene-d5	117	10.702	10.702	(1.000)	783649	10.0000	(M)
	70 Chlorobenzene	112	10.713	10.713	(1.001)	119191	1.00000	1.158
	71 1,1,1,2-Tetrachloroethane	131	10.728	10.728	(1.002)	29015	1.00000	1.061
	72 m,p-Xylenes	106	10.739	10.739	(1.003)	178417	2.00000	2.108
	73 o-Xylene	106	10.975	10.975	(1.026)	78431	1.00000	1.122
	74 Styrene	104	11.009	11.009	(1.029)	112753	1.00000	1.074
	75 Bromoform	173	11.121	11.121	(0.928)	6124	1.00000	1.011
	76 Isopropylbenzene	105	11.117	11.117	(0.928)	195549	1.00000	1.065
$	77 4-Bromofluorobenzene	95	11.331	11.331	(0.945)	44353	1.00000	1.019(a)

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0321.D
Report Date: 28-Apr-2005 13:22

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
78	n-Propylbenzene	91	11.338	11.338	(0.946)	279001	1.00000	1.066
79	1,1,2,2-Tetrachloroethane	83	11.379	11.379	(0.949)	17774	1.00000	1.156
80	1,3,5-Trimethylbenzene	105	11.413	11.413	(0.952)	181595	1.00000	1.058
81	Bromobenzene	156	11.428	11.428	(0.953)	28628	1.00000	1.071
82	trans-1,4-dichloro-2-butene	53	11.473	11.473	(0.957)	5497	1.00000	1.242
83	2-Chlorotoluene	91	11.484	11.484	(0.958)	148982	1.00000	1.056
84	4-Chlorotoluene	91	11.566	11.566	(0.965)	147609	1.00000	1.088
85	t-Butylbenzene	119	11.615	11.615	(0.969)	164071	1.00000	1.057
86	1,2,4-Trimethylbenzene	105	11.649	11.649	(0.972)	180517	1.00000	1.083
87	Pentachloroethane	167	11.705	11.705	(0.977)	4420	1.00000	0.8227(a)
88	sec-Butylbenzene	105	11.720	11.720	(0.978)	240706	1.00000	1.069
89	4-Isopropyltoluene	119	11.772	11.772	(0.982)	174461	1.00000	1.040
90	Cyclohexanone	55	12.000	12.000	(1.121)	6202	1.00000	0.6909(M)
91	1,3-Dichlorobenzene	146	11.944	11.944	(0.997)	66599	1.00000	1.065
* 92	1,4 Dichlorobenzene-d4	152	11.985	11.985	(1.000)	300841	10.0000	
93	1,4-Dichlorobenzene	146	12.000	12.000	(1.001)	72122	1.00000	1.136
94	n-Butylbenzene	91	12.042	12.042	(1.005)	199778	1.00000	1.082
95	1,2,3-Trichloropropane	110	12.296	12.296	(1.026)	2314	1.00000	1.049(M)
96	1,2-Dichlorobenzene	146	12.292	12.292	(1.026)	53439	1.00000	1.115
97	1,2-Dibromo-3-chloropropane	157	12.895	12.895	(1.076)	2002	1.00000	1.120(M)
98	Hexachlorobutadiene	225	13.348	13.348	(1.114)	19461	1.00000	1.110
99	1,2,4-Trichlorobenzene	180	13.471	13.471	(1.124)	32759	1.00000	1.120(M)
100	Naphthalene	128	13.830	13.830	(1.154)	45465	1.00000	1.102(M)
101	1,2,3-Trichlorobenzene	180	14.032	14.032	(1.171)	24152	1.00000	1.109

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0321.D
Report Date: 28-Apr-2005 13:22

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

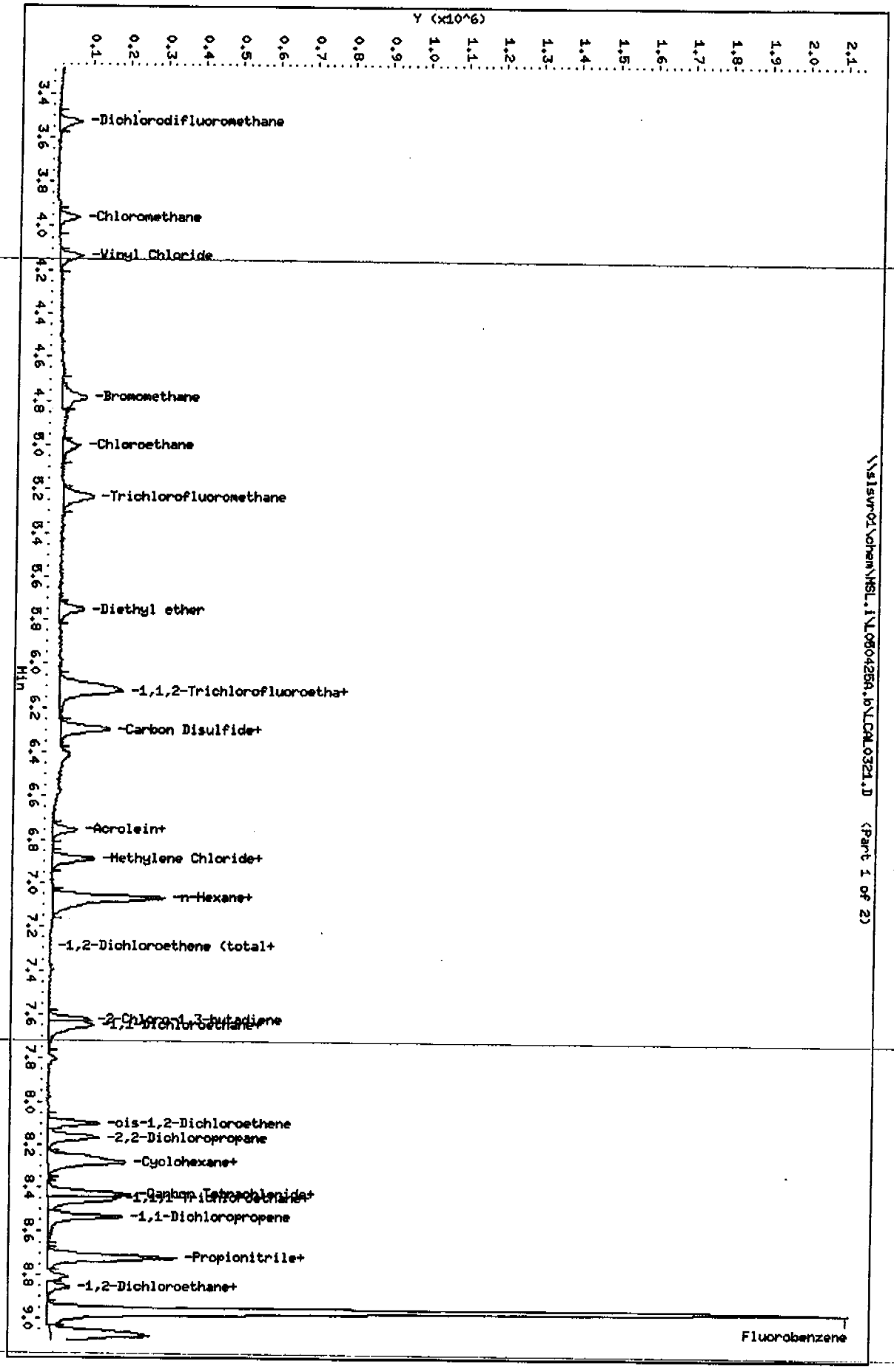
Instrument ID: MSL.i
Lab File ID: LCAL0321.D
Lab Smp Id: VSTD001
Analysis Type: VOA
Quant Type: ISTD
Operator: MN/TM
Method File: \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Misc Info: VBLK115A;

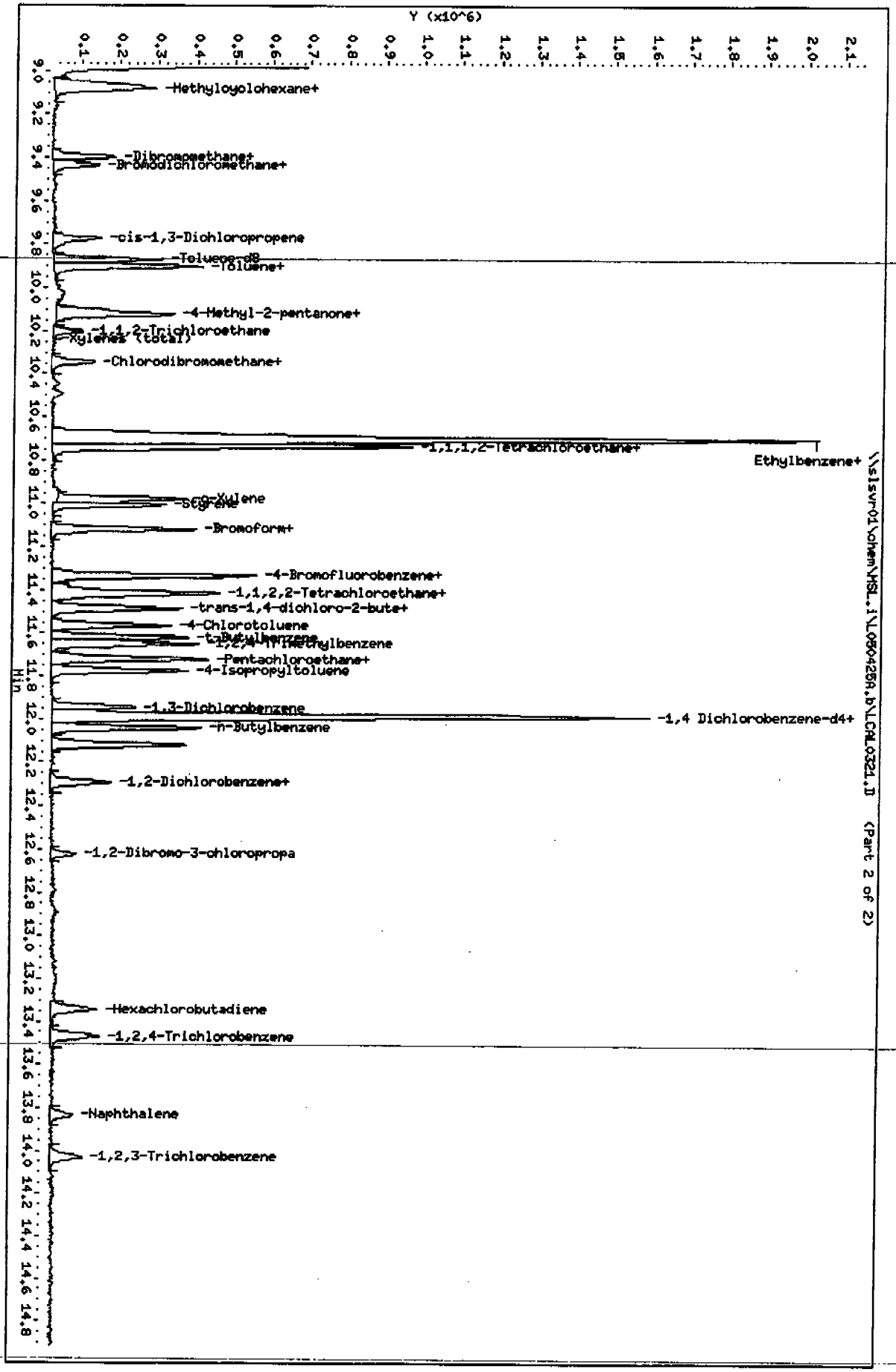
Calibration Date: 25-APR-2005
Calibration Time: 11:51
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
44 Fluorobenzene	1508429	754215	3016858	1512787	0.29
69 Chlorobenzene-d5	892585	446293	1785170	783649	-12.20
92 1,4 Dichlorobenze	346814	173407	693628	300841	-13.26

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
44 Fluorobenzene	8.97	8.47	9.47	8.97	0.00
69 Chlorobenzene-d5	10.70	10.20	11.20	10.70	0.00
92 1,4 Dichlorobenze	11.99	11.49	12.49	11.99	0.00

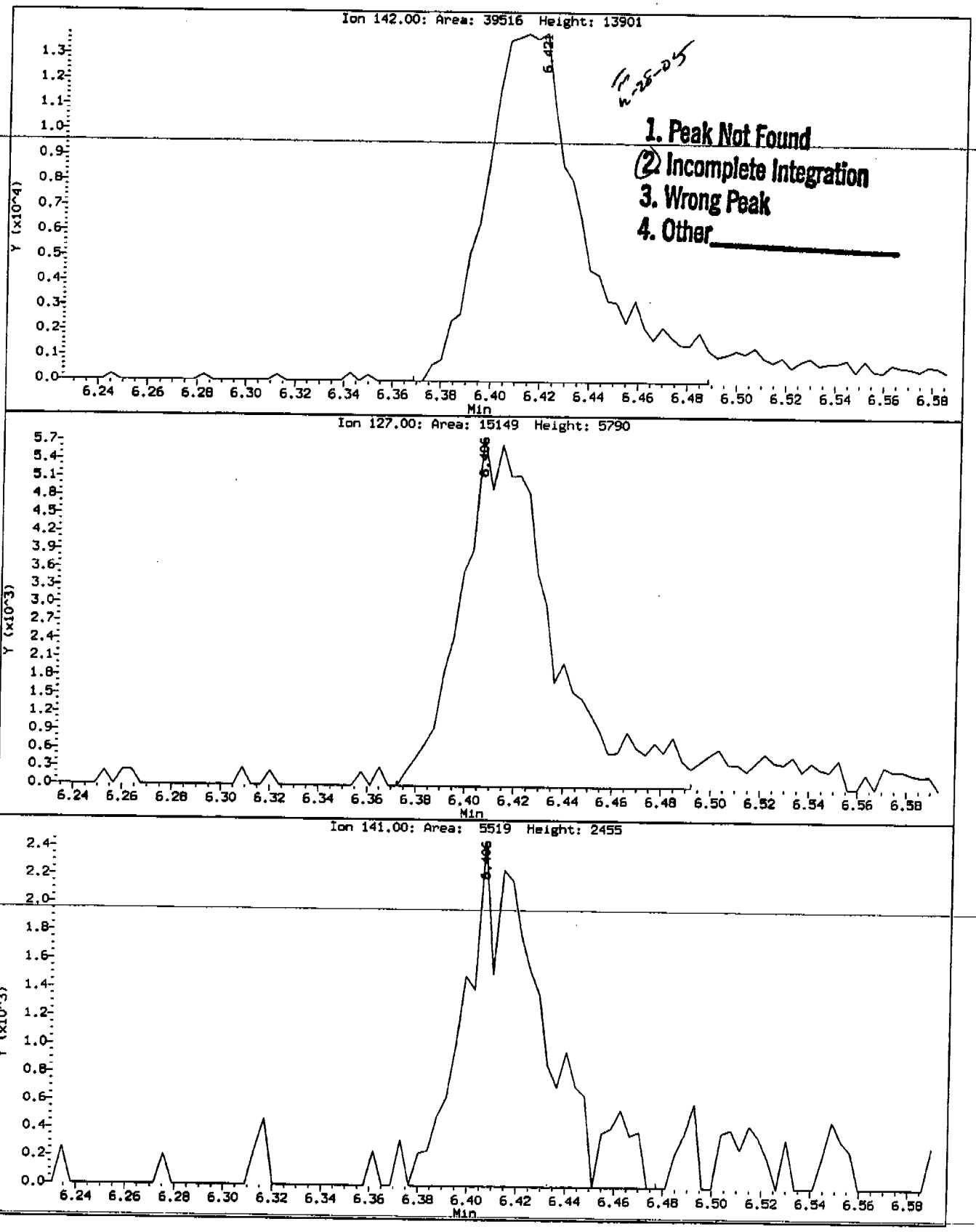
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^6)
Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0321.D
Date : 25-APR-2005 10:41
Client ID:
Sample Info: VSTD00L
Purge Volume: 25.0
Column phase: RTX-502.2
Instrument: MSL.i
Operator: MM/TH
Column diameter: 0.25
\\slsvr01\chem\MSL.i\L050425A.b\LCAL0321.D (Part 1 of 2)
Min
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-Diethyl ether
-1,1,2-Trichlorofluoroetha+
-Carbon Disulfide+
-Acrolein+
-Methylene Chloride+
-n-Hexane+
-1,2-Dichloroethene (total+
-2-Chloro-1,3-butadiene
-1,1-Dichloroethane+
-cis-1,2-Dichloroethene
-2,2-Dichloropropane
-Cyclohexane+
-Carbon Tetrachloride+
-1,1,1-Trichloroethane+
-1,1-Dichloropropene
-Propionitrile+
-1,2-Dichloroethane+
Fluorobenzene


Y (x10^6)
Data File: \\slsvr01\chem\HSL.i\L050425A.b\LCAL0321.D
Date : 25-APR-2005 10:41
Client ID:
Sample Info: VSTD001
Purge Volume: 25.0
Column phase: RTX-502.2
Instrument: HSL.i
Operator: MM/TH
Column diameter: 0.25
\\slsvr01\chem\HSL.i\L050425A.b\LCAL0321.D (Part 2 of 2)
Min
-Methyloycolohexane+
-Dibromomethane+
-Bromodichloromethane+
-cis-1,3-Dichloropropene
-Toluene-d8
-Toluene+
-4-Methyl-2-pentanone+
-1,1,2-Trichloroethane
Xylenes (total)
-Chlorodibromomethane+
-1,1,1,2-Tetrachloroethane+
Ethylbenzene+
o-Xylene
-Styrene
-Bromoform+
-4-Bromofluorobenzene+
-1,1,2,2-Tetrachloroethane+
-trans-1,4-dichloro-2-bute+
-4-Chlorotoluene
-t-Butylbenzene
-1,2,4-Trimethylbenzene
-Pentachloroethane+
-4-Isopropyltoluene
-1,3-Dichlorobenzene
-1,4 Dichlorobenzene-d4+
-n-Butylbenzene
-1,2-Dichlorobenzene+
-1,2-Dibromo-3-chloropropa
-Hexachlorobutadiene
-1,2,4-Trichlorobenzene
-Naphthalene
-1,2,3-Trichlorobenzene

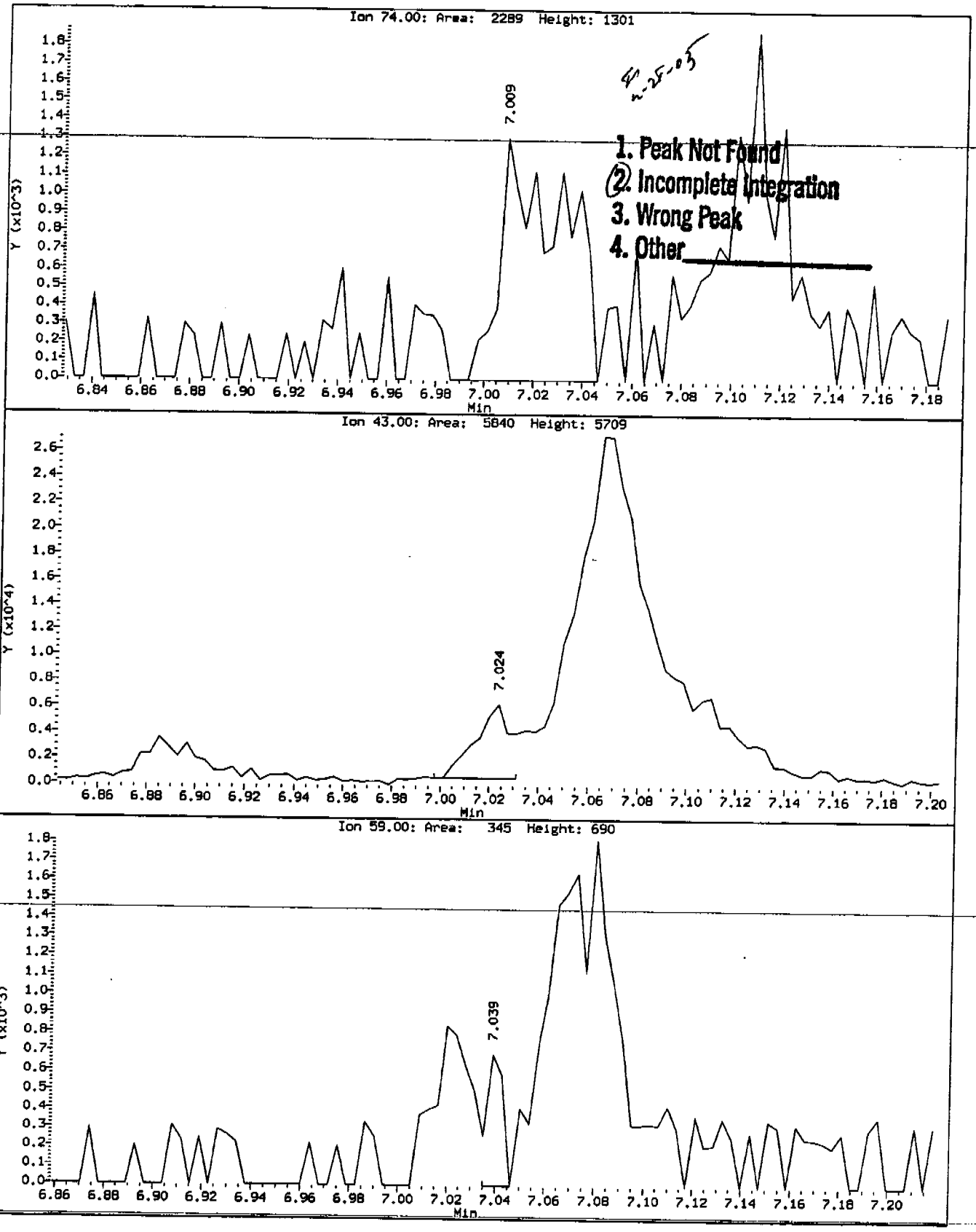
Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0321.D
Injection Date: 25-APR-2005 10:41
Instrument: MSL.i
Client Sample ID:

Compound: Iodomethane
CAS Number: 74-88-4



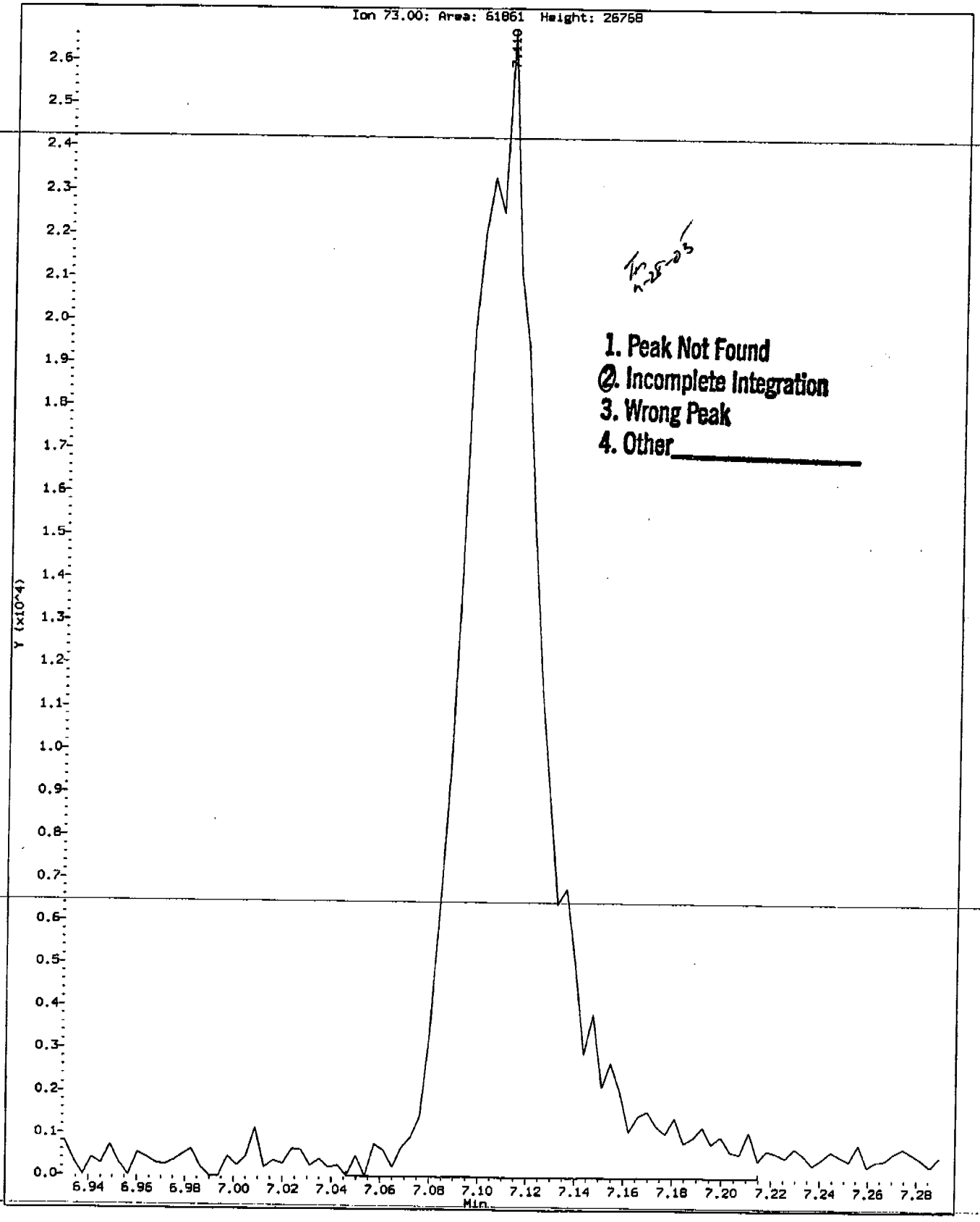
Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0321.D
Injection Date: 25-APR-2005 10:41
Instrument: MSL.i
Client Sample ID:

Compound: Methyl Acetate
CAS Number:



Data File: \\slsvr01\chem\MSL.1\L050425A.b\LCAL0321.D
Injection Date: 25-APR-2005 10:41
Instrument: MSL.1
Client Sample ID:

Compound: MTBE
CAS Number: 1634-04-4

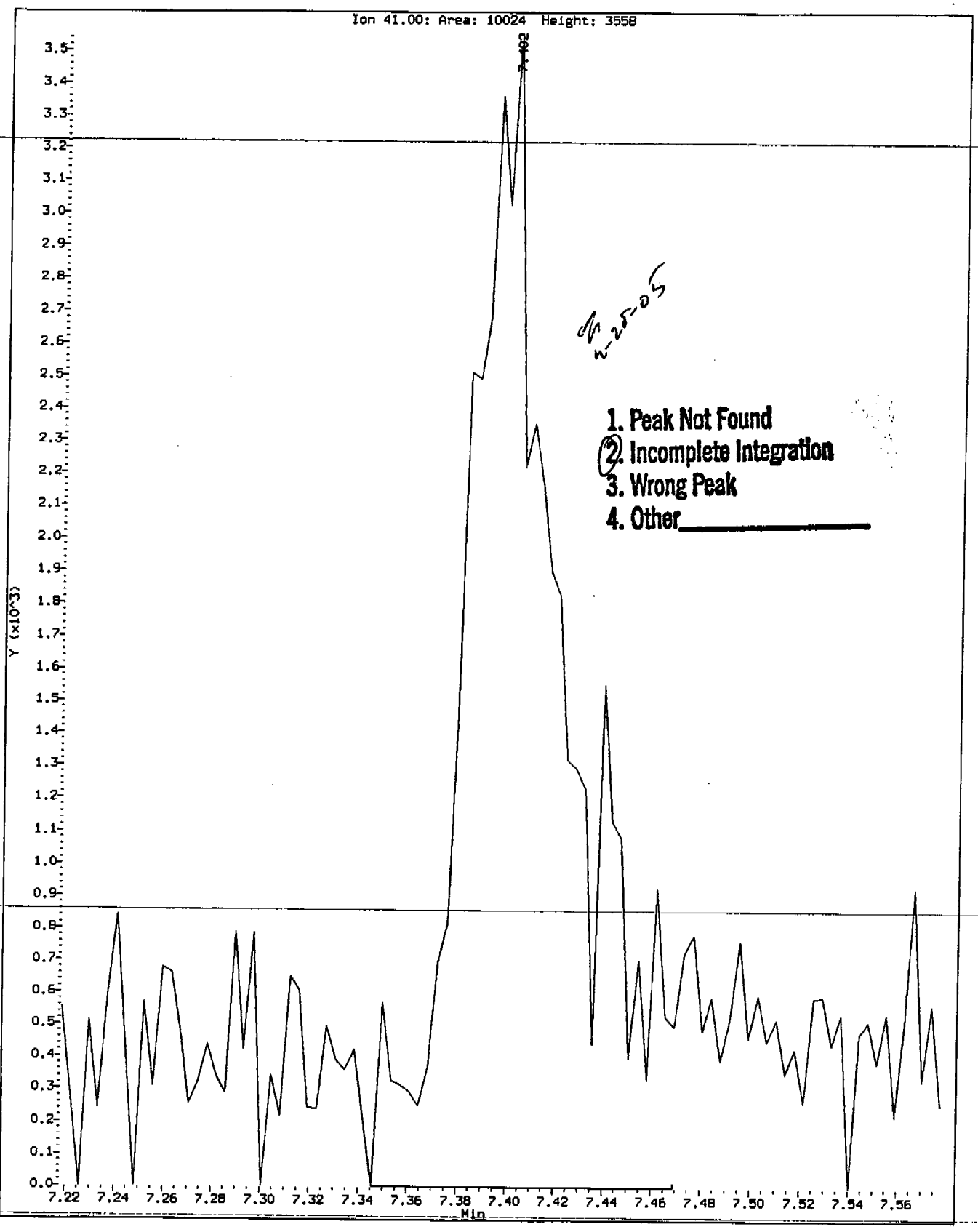


Tm 4-28-05

1. Peak Not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

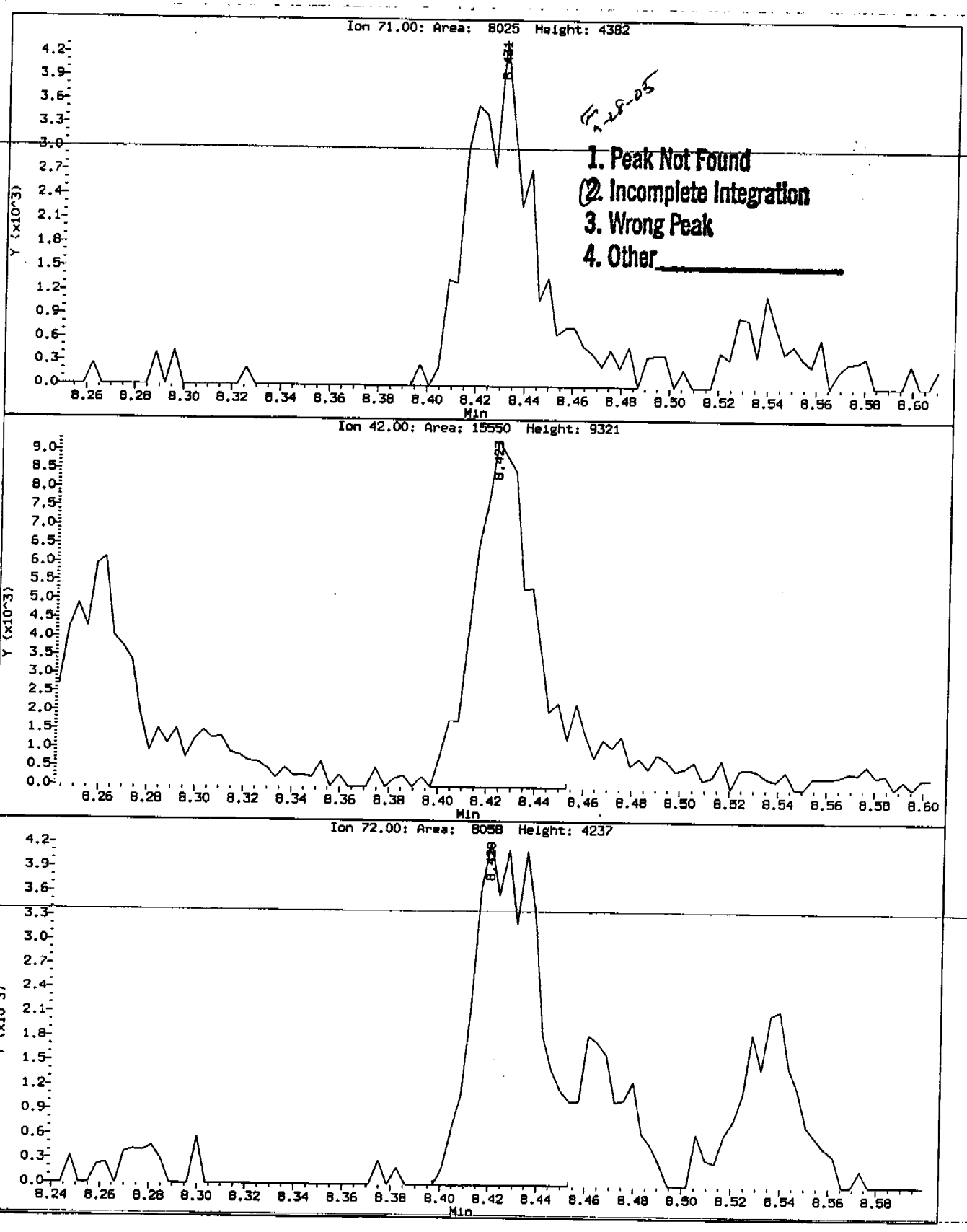
Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0321.D
Injection Date: 25-APR-2005 10:41
Instrument: MSL.i
Client Sample ID:

Compound: Acetonitrile
CAS Number: 75-05-8



Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0321.D
Injection Date: 25-APR-2005 10:41
Instrument: MSL.i
Client Sample ID:

Compound: Tetrahydrofuran
CAS Number: 109-99-9

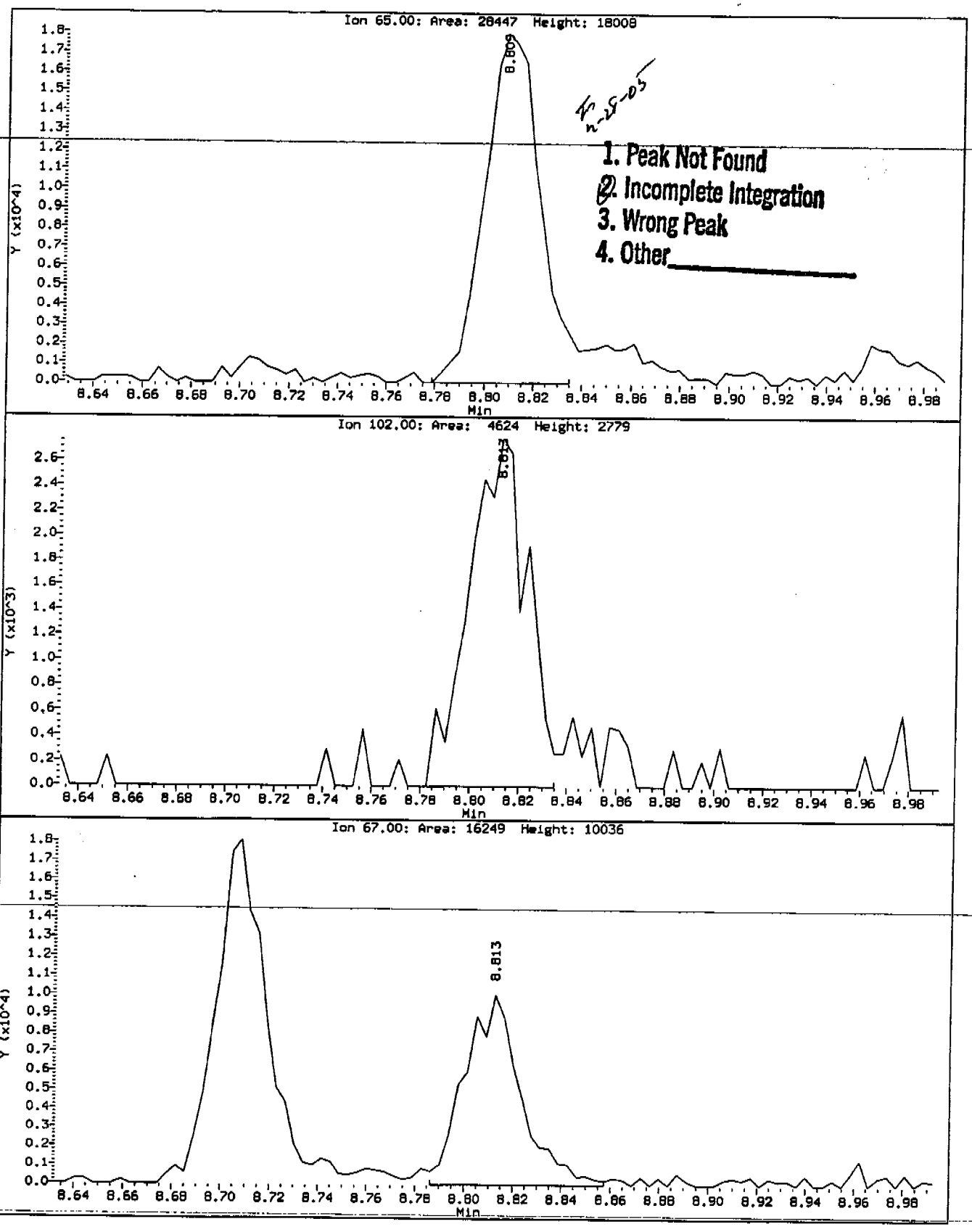


4-28-05

1. Peak Not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0321.D
Injection Date: 25-APR-2005 10:41
Instrument: MSL.i
Client Sample ID:

Compound: 1,2-Dichloroethane-d4
CAS Number: 17060-07-0



5-05

1. Peak Not Found
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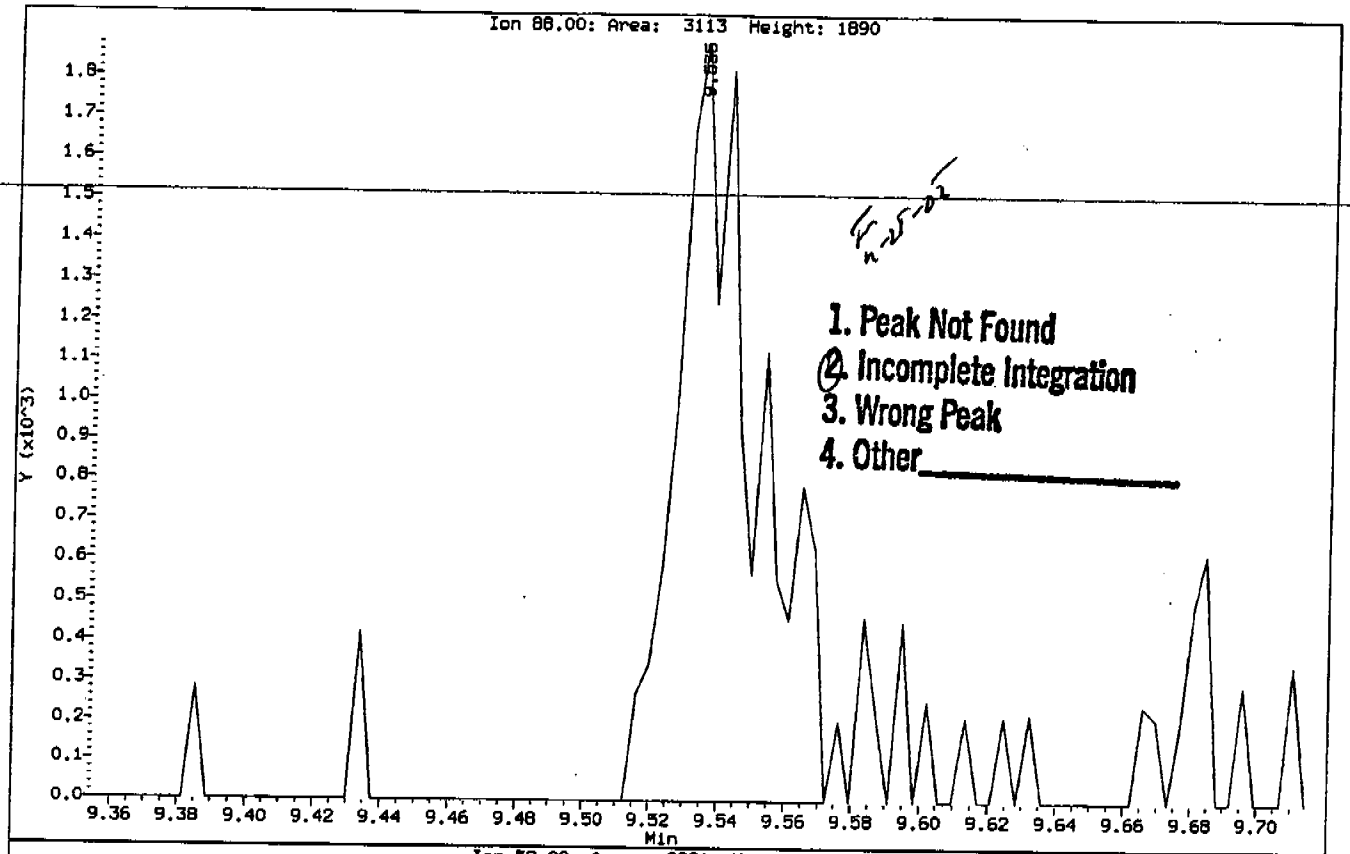
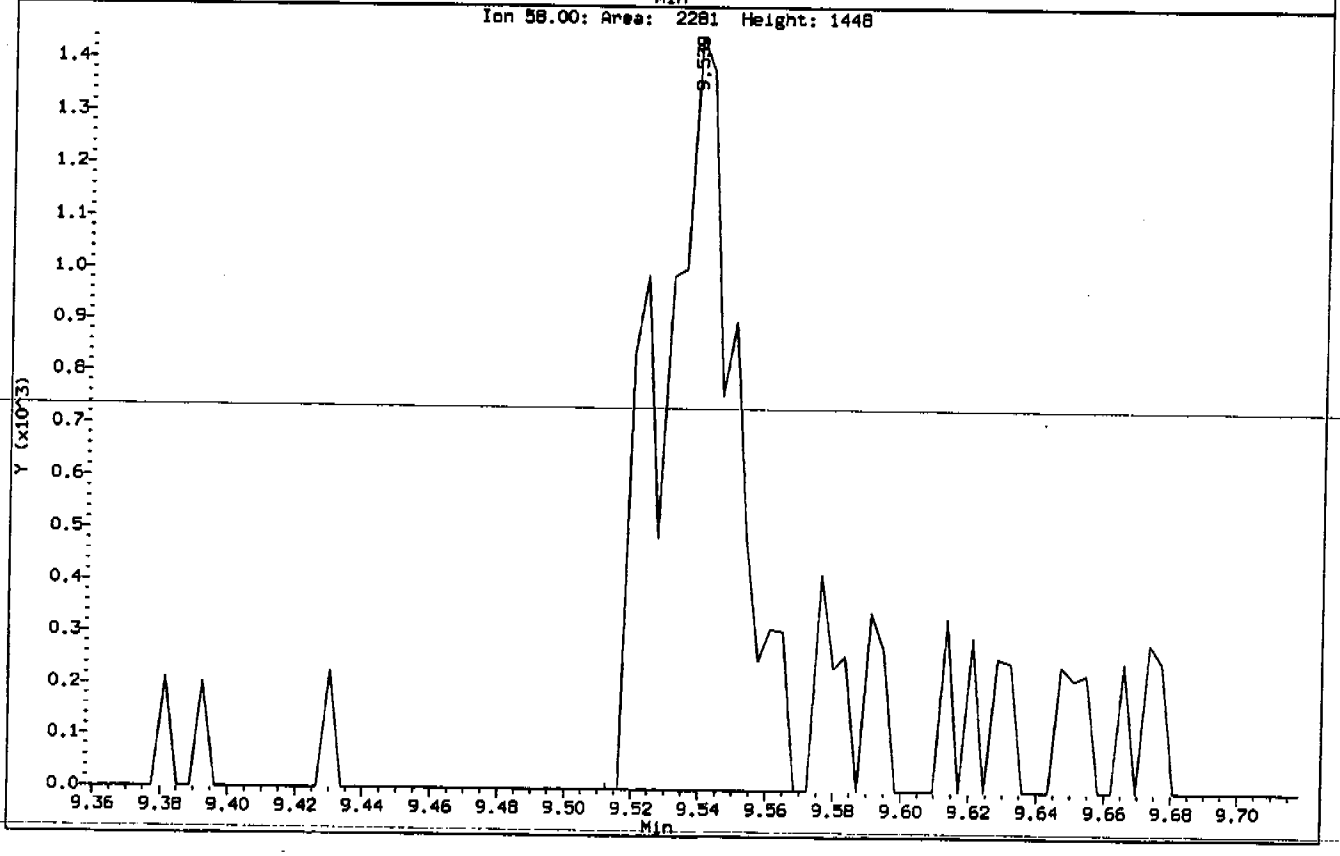
3. Wrong Peak
4. Other_____

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0321.D
Injection Date: 25-APR-2005 10:41
Instrument: MSL.i
Client Sample ID:

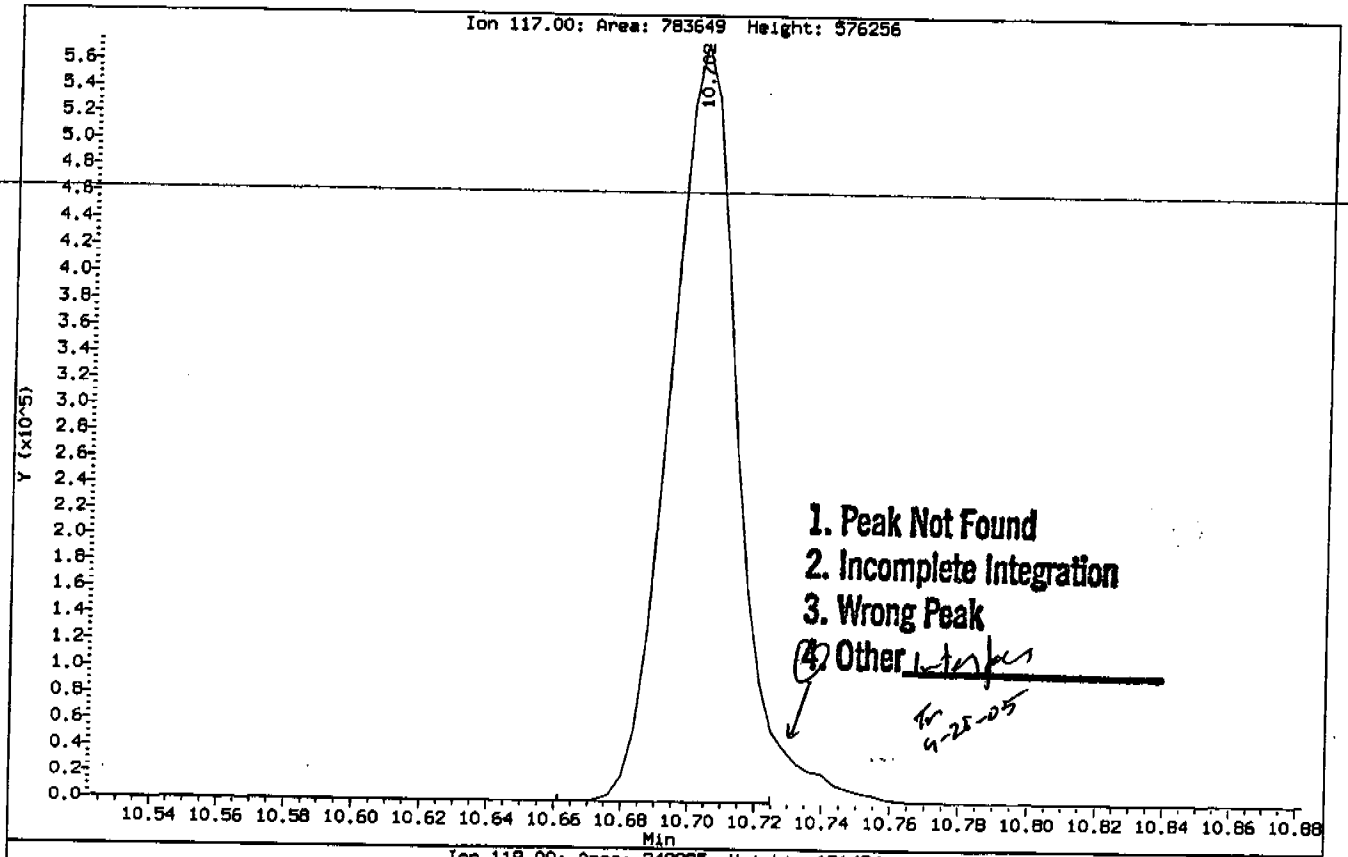
Compound: 1,4-Dioxane
CAS Number: 123-91-1

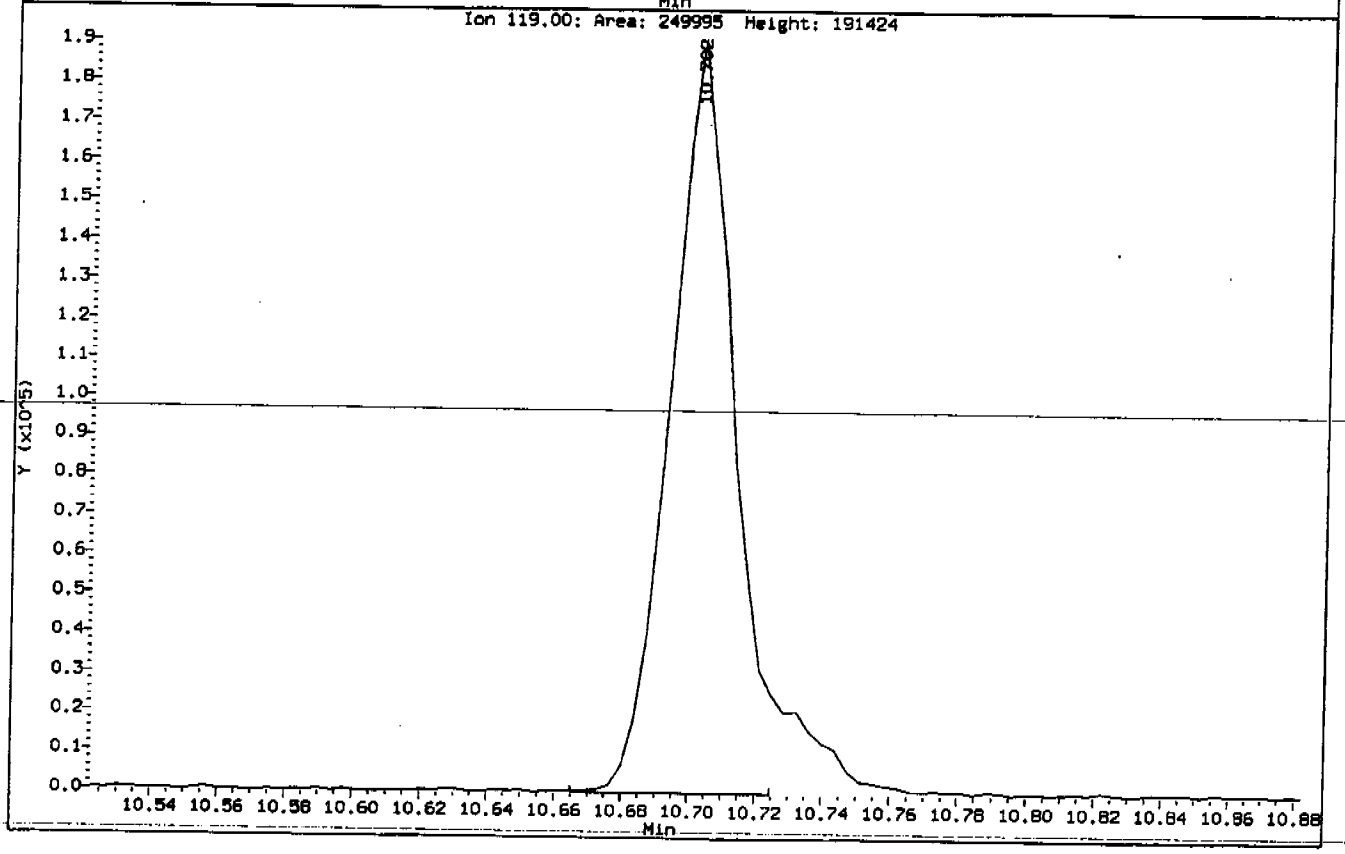




Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0321.D
Injection Date: 25-APR-2005 10:41
Instrument: MSL.i
Client Sample ID:

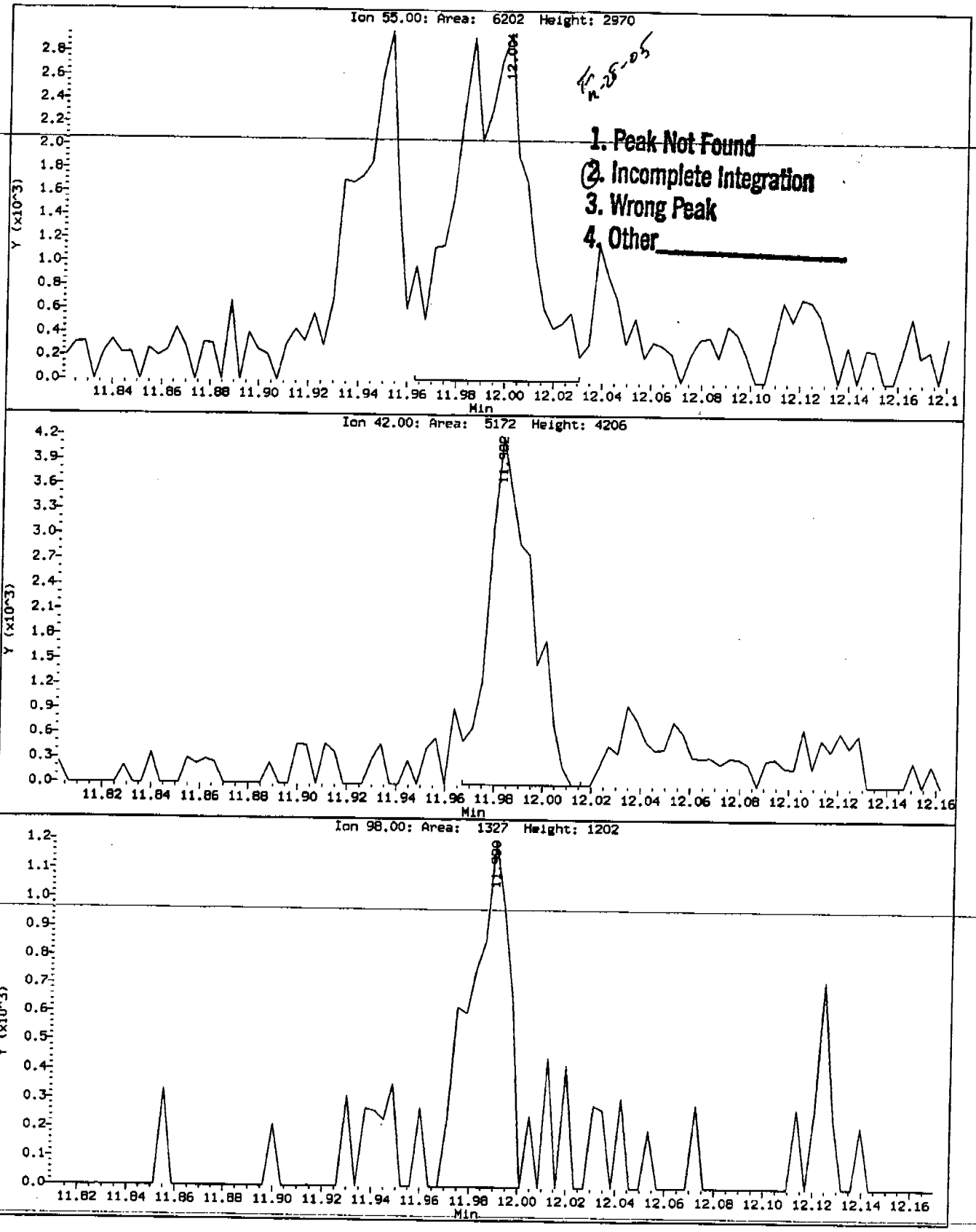
Compound: Chlorobenzene-d5
CAS Number: 3114-55-4





Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0321.D
Injection Date: 25-APR-2005 10:41
Instrument: MSL.i
Client Sample ID:

Compound: Cyclohexanone
CAS Number: 108-94-1

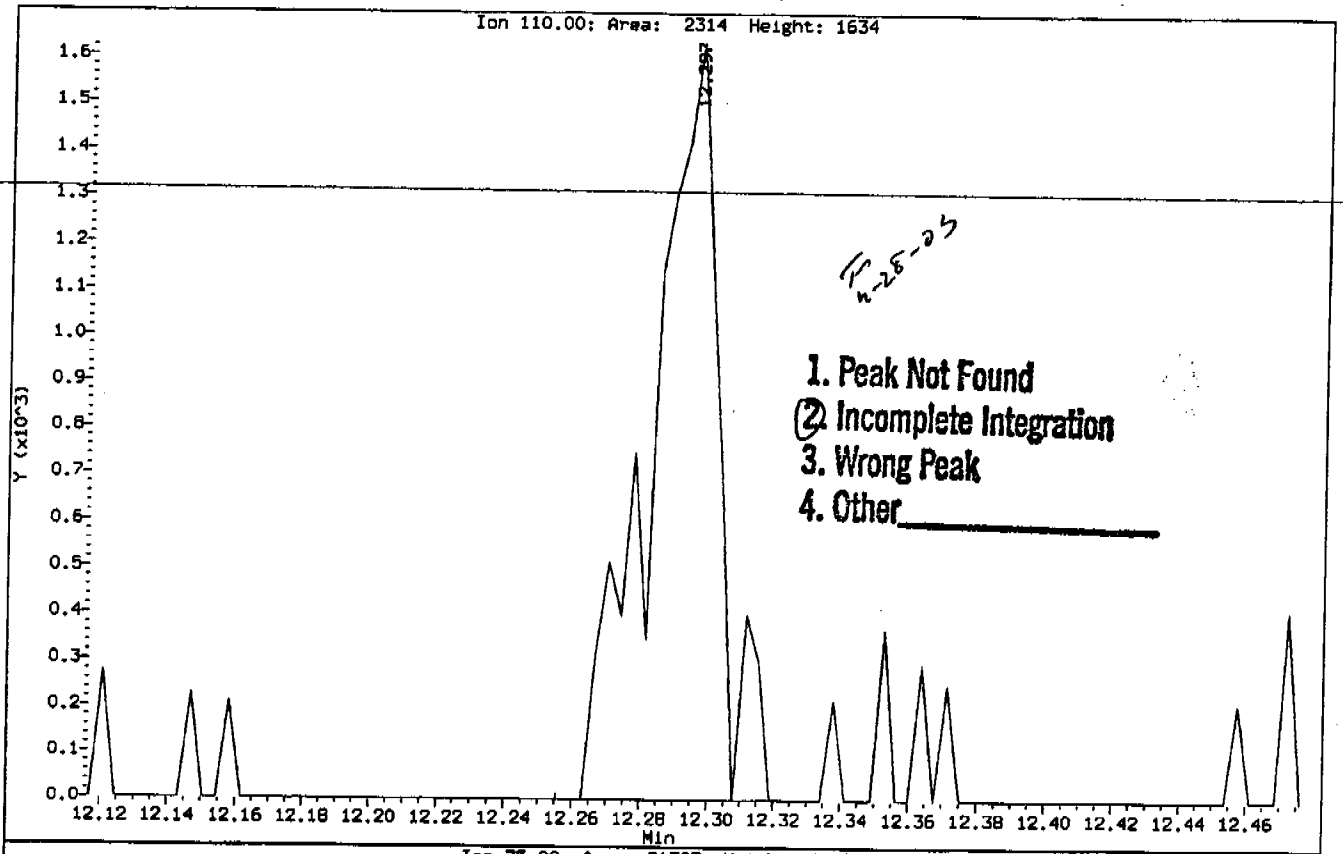


4-25-05

1. Peak Not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

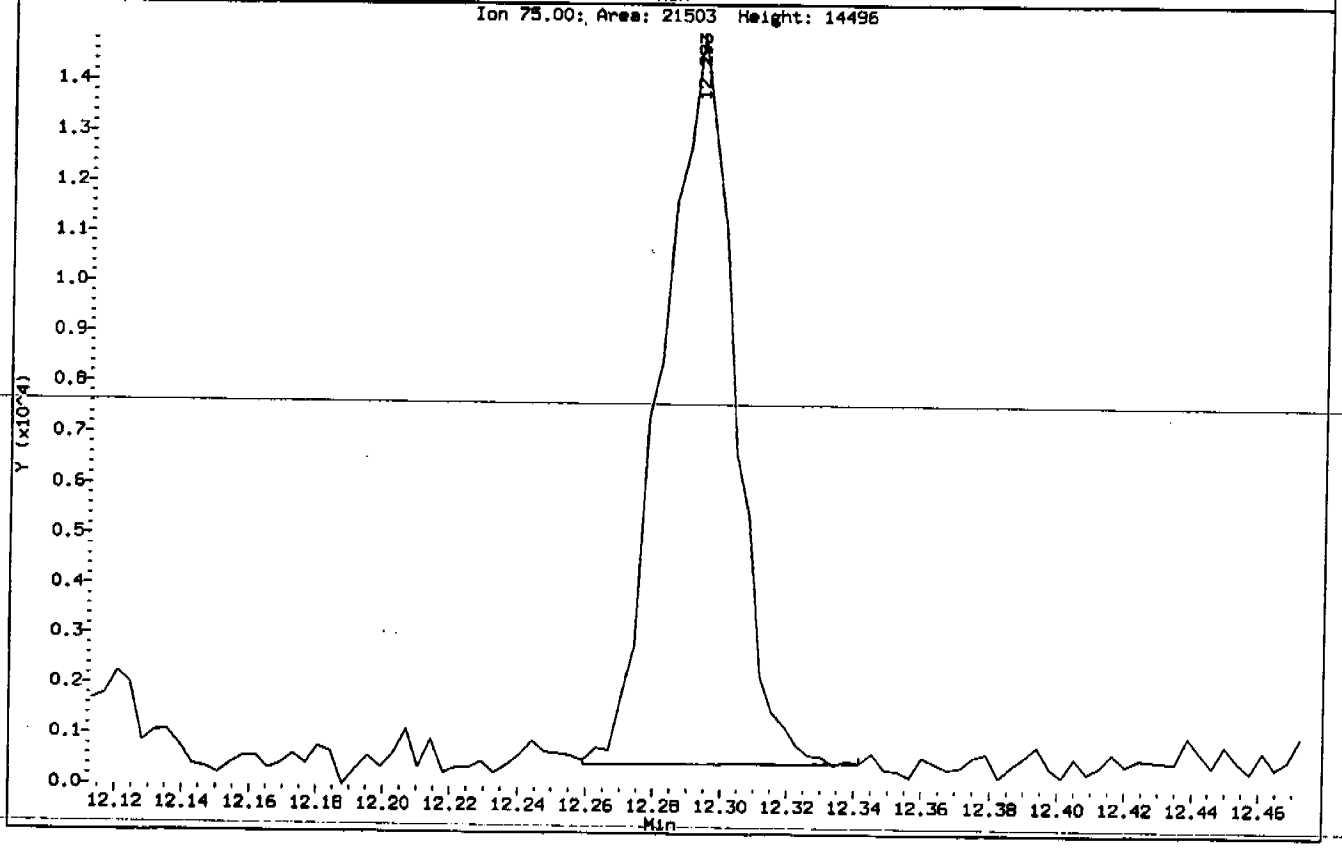
Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0321.D
Injection Date: 25-APR-2005 10:41
Instrument: MSL.i
Client Sample ID:

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4



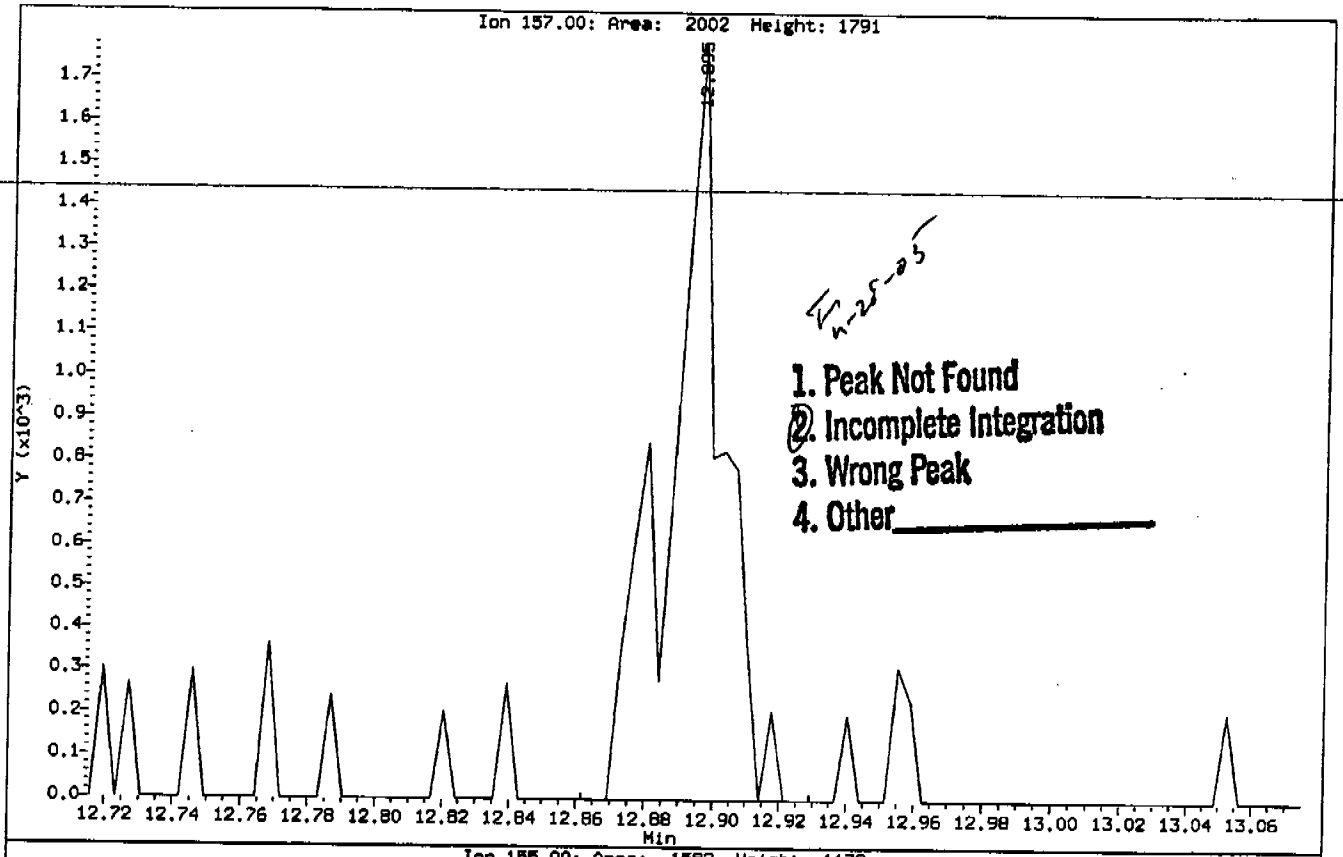
Tr 4-28-05

1. Peak Not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____



Data File: \\mlevr01\chem\MSL.i\L050425A.b\LCAL0321.D
Injection Date: 25-APR-2005 10:41
Instrument: MSL.i
Client Sample ID:

Compound: 1,2-Dibromo-3-chloropropane
CAS Number: 96-12-8



Fri-25-05

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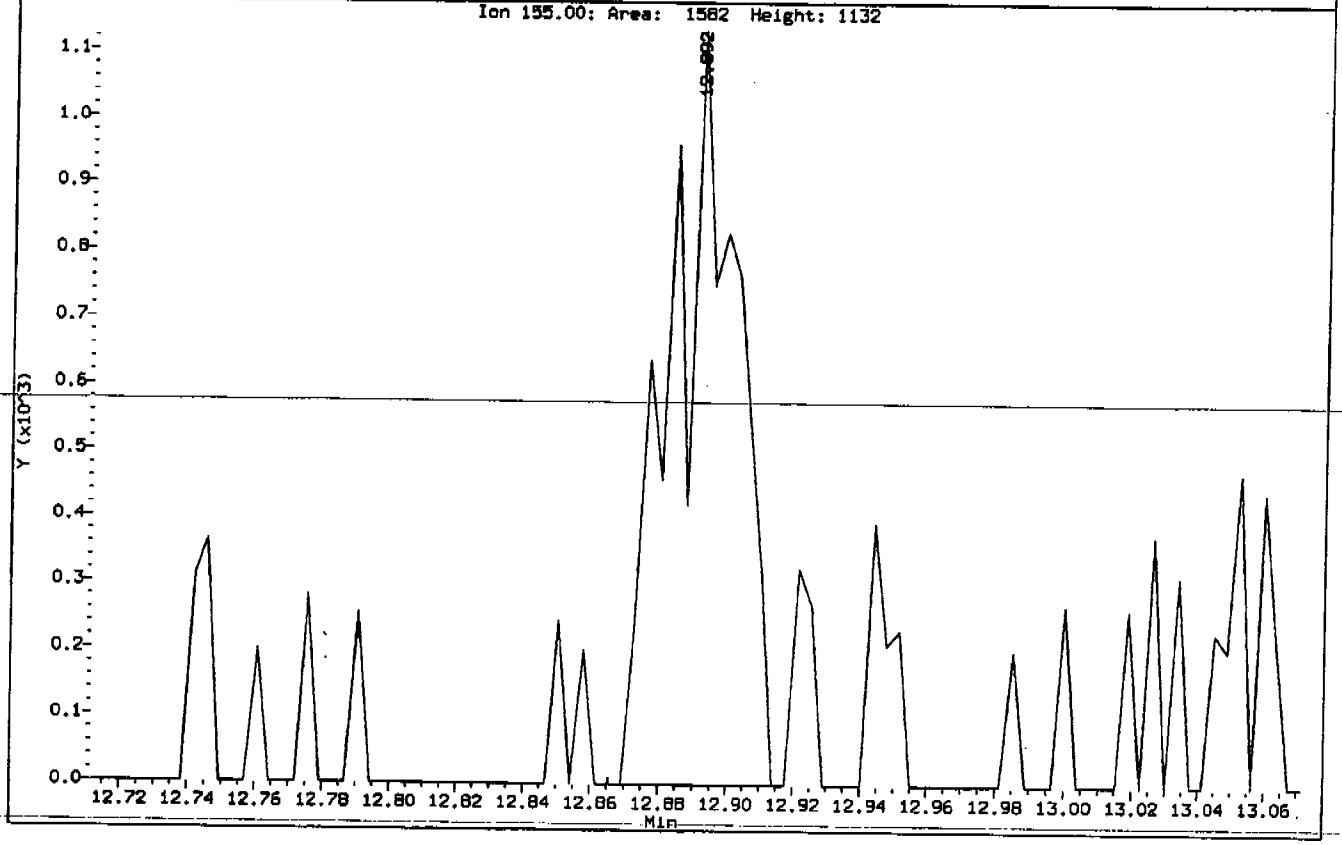
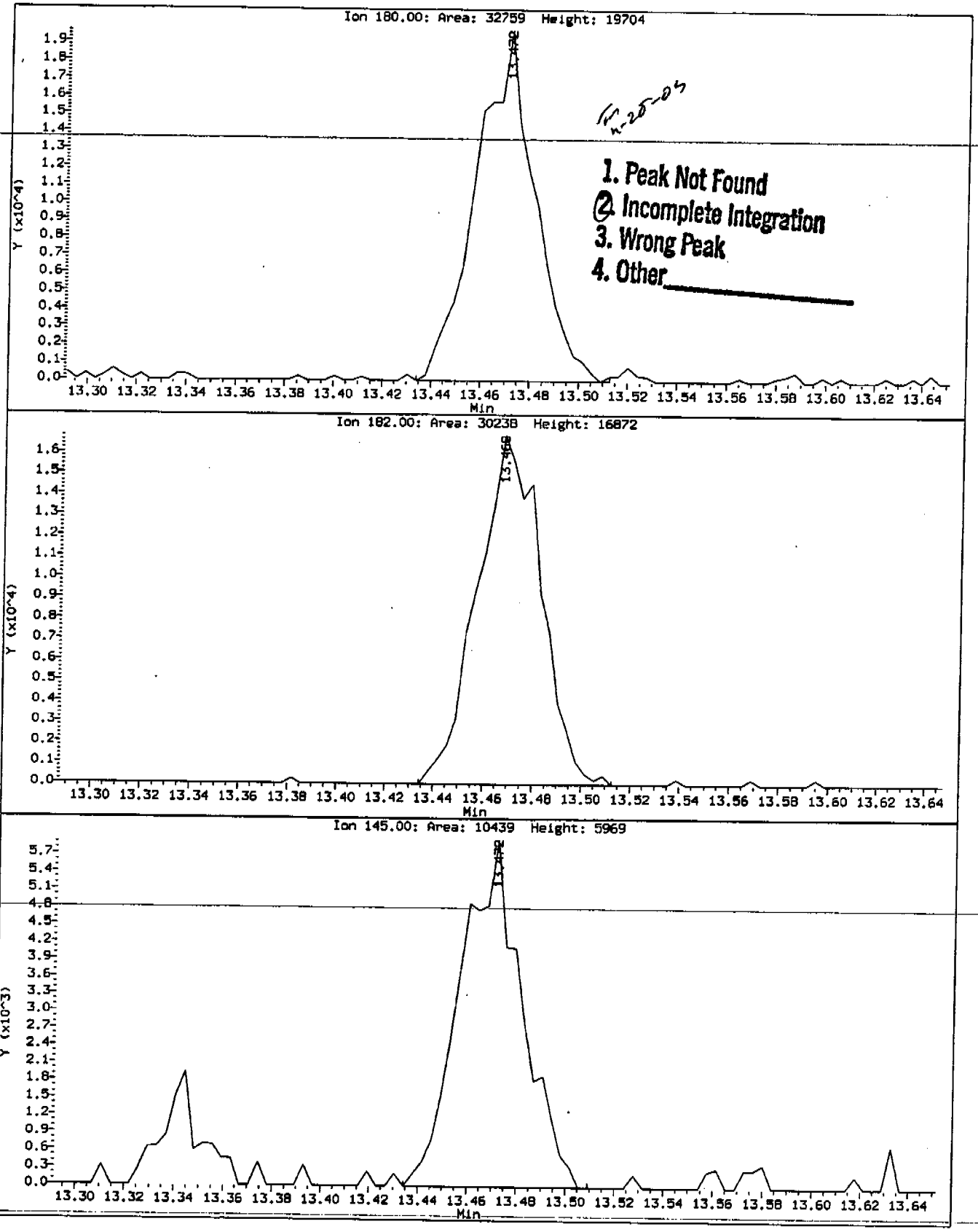
3. Wrong Peak
4. Other_____



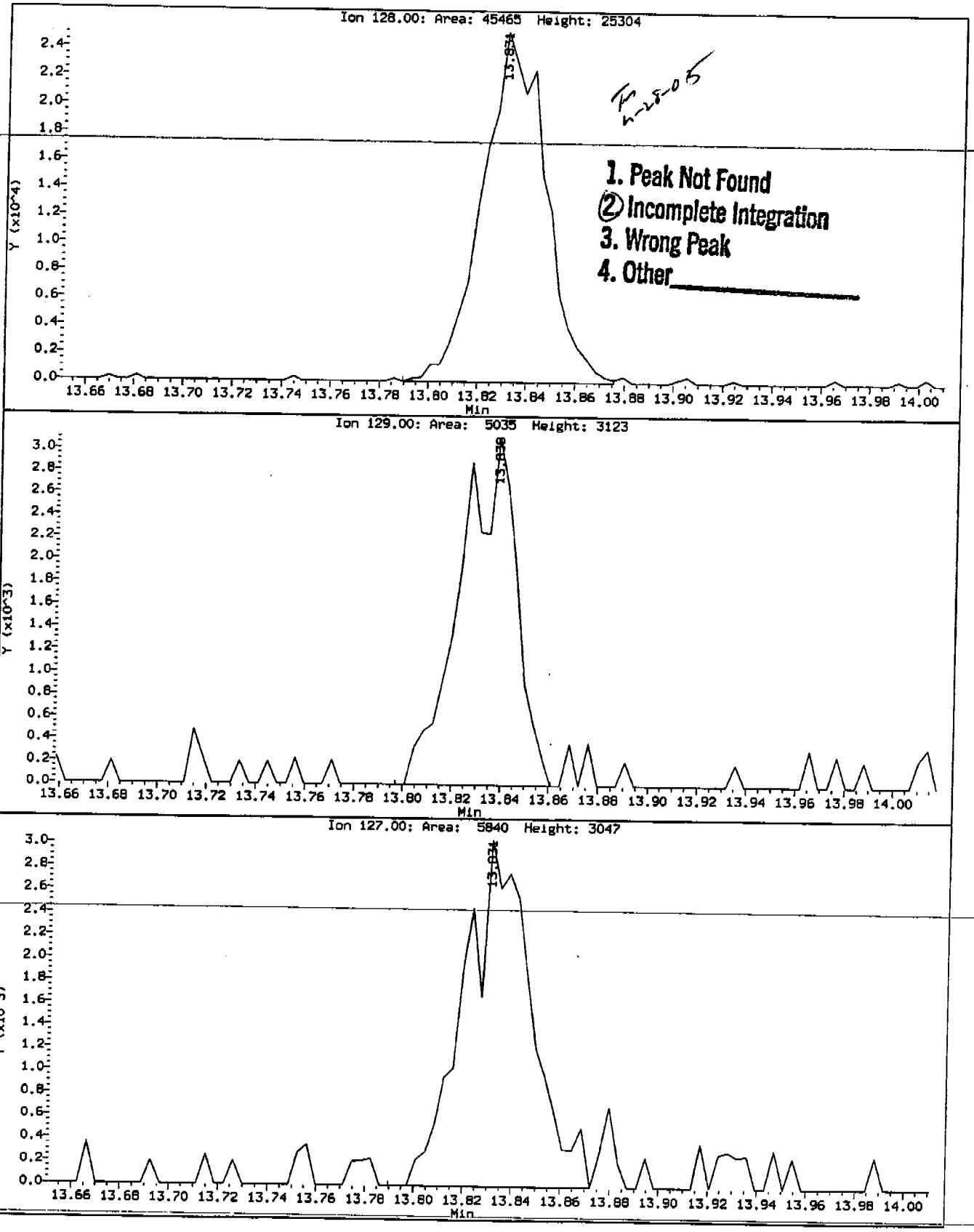
Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0321.D
Injection Date: 25-APR-2005 10:41
Instrument: MSL.i
Client Sample ID:

Compound: 1,2,4-Trichlorobenzene
CAS Number: 120-82-1



Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0321.D
Injection Date: 25-APR-2005 10:41
Instrument: MSL.i
Client Sample ID:

Compound: Naphthalene
CAS Number: 91-20-3



Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0322.D
Report Date: 28-Apr-2005 13:22

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSL.i\L050425A.b\LCAL0322.D
Lab Smp Id: VSTD002
Inj Date : 25-APR-2005 11:04
Operator : MN/TM Inst ID: MSL.i
Smp Info : VSTD002
Misc Info : VBLK115A;
Comment : NONE
Method : \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Meth Date : 26-Apr-2005 07:31 mahmoodt Quant Type: ISTD
Cal Date : 25-APR-2005 11:04 Cal File: LCAL0322.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLVOA02

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	25.000	DefSampleVolume
Vo	25.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	3.531	3.531	(0.394)	130969	2.00000	1.975
2	Chloromethane	50	3.962	3.962	(0.442)	125304	2.00000	1.955
3	Vinyl Chloride	62	4.138	4.138	(0.462)	133419	2.00000	1.941
4	Bromomethane	94	4.789	4.789	(0.534)	84283	2.00000	1.826
5	Chloroethane	64	5.006	5.006	(0.558)	91599	2.00000	1.985
6	Trichlorofluoromethane	101	5.242	5.242	(0.585)	177483	2.00000	1.947
7	Diethyl ether	59	5.758	5.758	(0.642)	89551	4.00000	3.959
8	1,1,2-Trichlorofluoroethane	101	6.099	6.099	(0.680)	110462	2.00000	1.918
9	1,1-Dichloroethene	96	6.125	6.125	(0.683)	116281	2.00000	1.943
10	Carbon Disulfide	76	6.293	6.293	(0.702)	433572	2.00000	1.985
11	Iodomethane	142	6.417	6.417	(0.716)	66192	2.00000	1.766
12	Acrolein	56	6.570	6.570	(0.733)	15964	10.0000	12.08
13	Allyl chloride	39	6.754	6.754	(0.753)	64813	2.00000	2.384
14	Methylene Chloride	84	6.888	6.888	(0.768)	86327	2.00000	2.027
15	Acetone	43	6.896	6.896	(0.769)	9844	2.00000	2.258(M)
16	Methyl Acetate	74	7.030	7.030	(0.784)	4872	2.00000	2.888(M)
17	n-Hexane	57	7.068	7.068	(0.788)	170863	2.00000	2.146
18	trans-1,2-Dichloroethene	96	7.072	7.072	(0.789)	98227	2.00000	1.907
19	MTBE	73	7.105	7.105	(0.793)	129285	2.00000	2.592
M 20	1,2-Dichloroethene (total)	96				185237	4.00000	3.750
21	Acetonitrile	41	7.397	7.397	(0.825)	12398	10.0000	11.28
22	2-Chloro-1,3-butadiene	53	7.622	7.622	(0.850)	122528	2.00000	2.288

4-28-05

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0322.D
Report Date: 28-Apr-2005 13:22

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	23 1,1-Dichloroethane	63	7.652	7.652	(0.853)	174330	2.00000	2.005
	24 Acrylonitrile	53	7.682	7.682	(0.857)	41220	10.0000	9.181
	25 Vinyl acetate	43	7.805	7.805	(0.871)	47803	2.00000	2.134
	26 cis-1,2-Dichloroethene	96	8.101	8.101	(0.904)	87010	2.00000	1.843
	27 2,2-Dichloropropane	77	8.168	8.168	(0.911)	148798	2.00000	1.974
	28 Cyclohexane	84	8.258	8.258	(0.921)	105053	2.00000	2.260
	29 Chloroform	83	8.280	8.280	(0.924)	159611	2.00000	1.965
	30 Bromochloromethane	128	8.284	8.284	(0.924)	20546	2.00000	1.858
	31 Ethyl acetate	43	8.307	8.307	(0.927)	43698	4.00000	3.981
	32 Tetrahydrofuran	71	8.423	8.423	(0.939)	13507	10.0000	10.68
	33 Carbon Tetrachloride	117	8.430	8.430	(0.940)	126605	2.00000	1.938
$	34 Dibromofluoromethane	113	8.426	8.426	(0.940)	55839	2.00000	1.935(a)
	35 1,1,1-Trichloroethane	97	8.456	8.456	(0.943)	149250	2.00000	1.910
	36 2-Butanone	43	8.464	8.464	(0.944)	9505	2.00000	1.746
	37 1,1-Dichloropropene	75	8.535	8.535	(0.952)	139028	2.00000	1.957
	38 Propionitrile	54	8.696	8.696	(0.970)	17498	10.0000	12.63
	39 Methacrylonitrile	41	8.707	8.707	(0.971)	88413	10.0000	11.11
	40 Isobutanol	42	8.423	8.423	(0.939)	29422	40.0000	39.29
	41 Benzene	78	8.722	8.722	(0.973)	381811	2.00000	1.880
$	42 1,2-Dichloroethane-d4	65	8.808	8.808	(0.982)	52102	2.00000	2.001(aM)
	43 1,2-Dichloroethane	62	8.857	8.857	(0.988)	67800	2.00000	1.964
*	44 Fluorobenzene	96	8.965	8.965	(1.000)	1472720	10.0000	
	45 Methylcyclohexane	55	9.059	9.059	(1.010)	106893	2.00000	2.223
	46 Trichloroethene	130	9.081	9.081	(1.013)	84609	2.00000	1.844
	47 n-Butanol	56	9.164	9.164	(1.022)	6467	20.0000	17.39
	48 Dibromomethane	93	9.388	9.388	(1.047)	22643	2.00000	1.936
	49 1,2-Dichloropropane	63	9.396	9.396	(1.048)	74009	2.00000	1.958
	50 Bromodichloromethane	83	9.433	9.433	(1.052)	88154	2.00000	1.921
	51 Methyl methacrylate	69	9.440	9.440	(1.053)	23200	2.00000	2.550
	52 1,4-Dioxane	88	9.530	9.530	(1.063)	5629	40.0000	52.16
	54 cis-1,3-Dichloropropene	75	9.774	9.774	(1.090)	101232	2.00000	2.011
$	55 Toluene-d8	98	9.871	9.871	(1.101)	269958	2.00000	1.894(a)
	56 Toluene	91	9.901	9.901	(0.925)	386776	2.00000	2.032
	57 2-Nitro-Propane	43	9.998	9.998	(1.115)	12143	2.00000	2.510
	58 4-Methyl-2-pentanone	43	10.024	10.024	(1.118)	21832	2.00000	1.845
	59 trans-1,3-Dichloropropene	75	10.103	10.103	(0.944)	64655	2.00000	2.064
	60 Ethyl methacrylate	69	10.099	10.099	(0.944)	46166	2.00000	2.288
	61 Tetrachloroethene	164	10.122	10.122	(0.946)	77787	2.00000	1.888
	62 1,1,2-Trichloroethane	97	10.204	10.204	(0.953)	31959	2.00000	2.090
M	63 Xylenes (total)	106				454621	6.00000	5.813
	64 Chlorodibromomethane	129	10.342	10.342	(0.966)	29416	2.00000	1.972
	65 1,3-Dichloropropane	76	10.346	10.346	(0.967)	63097	2.00000	2.084
	66 2-Hexanone	43	10.443	10.443	(0.976)	14267	2.00000	2.038
	67 1,2-Dibromoethane	107	10.492	10.492	(0.980)	26510	2.00000	2.143
	68 Ethylbenzene	106	10.679	10.679	(0.998)	118995	2.00000	1.959
*	69 Chlorobenzene-d5	117	10.702	10.702	(1.000)	775104	10.0000	(M)
	70 Chlorobenzene	112	10.713	10.713	(1.001)	200990	2.00000	1.990
	71 1,1,1,2-Tetrachloroethane	131	10.728	10.728	(1.002)	53686	2.00000	1.999
	72 m,p-Xylenes	106	10.739	10.739	(1.003)	319356	4.00000	3.842
	73 o-Xylene	106	10.975	10.975	(1.026)	135265	2.00000	1.971
	74 Styrene	104	11.005	11.005	(1.028)	199423	2.00000	1.934
	75 Bromoform	173	11.121	11.121	(0.928)	11789	2.00000	1.955
	76 Isopropylbenzene	105	11.117	11.117	(0.928)	352043	2.00000	1.927
$	77 4-Bromofluorobenzene	95	11.327	11.327	(0.945)	85936	2.00000	1.983(a)

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0322.D
Report Date: 28-Apr-2005 13:22

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
78	n-Propylbenzene	91	11.334	11.334	(0.946)	502519	2.00000	1.929
79	1,1,2,2-Tetrachloroethane	83	11.379	11.379	(0.949)	32585	2.00000	2.130
80	1,3,5-Trimethylbenzene	105	11.413	11.413	(0.952)	327151	2.00000	1.914
81	Bromobenzene	156	11.428	11.428	(0.953)	52118	2.00000	1.958
82	trans-1,4-dichloro-2-butene	53	11.476	11.476	(0.958)	10922	2.00000	2.464
83	2-Chlorotoluene	91	11.484	11.484	(0.958)	278205	2.00000	1.980
84	4-Chlorotoluene	91	11.566	11.566	(0.965)	262936	2.00000	1.947
85	t-Butylbenzene	119	11.615	11.615	(0.969)	297836	2.00000	1.928
86	1,2,4-Trimethylbenzene	105	11.648	11.648	(0.972)	316178	2.00000	1.906
87	Pentachloroethane	167	11.708	11.708	(0.977)	17826	2.00000	3.333(a)
88	sec-Butylbenzene	105	11.716	11.716	(0.978)	428911	2.00000	1.913
89	4-Isopropyltoluene	119	11.772	11.772	(0.982)	323820	2.00000	1.939
90	Cyclohexanone	55	11.996	11.996	(1.121)	9624	2.00000	2.157(M)
91	1,3-Dichlorobenzene	146	11.948	11.948	(0.997)	119757	2.00000	1.924
* 92	1,4 Dichlorobenzene-d4	152	11.985	11.985	(1.000)	299471	10.0000	
93	1,4-Dichlorobenzene	146	12.000	12.000	(1.001)	126211	2.00000	1.996
94	n-Butylbenzene	91	12.041	12.041	(1.005)	368376	2.00000	2.005
95	1,2,3-Trichloropropane	110	12.292	12.292	(1.026)	3584	2.00000	1.758(M)
96	1,2-Dichlorobenzene	146	12.292	12.292	(1.026)	93583	2.00000	1.962
97	1,2-Dibromo-3-chloropropane	157	12.883	12.883	(1.075)	3335	2.00000	1.874(M)
98	Hexachlorobutadiene	225	13.344	13.344	(1.113)	34496	2.00000	1.977
99	1,2,4-Trichlorobenzene	180	13.471	13.471	(1.124)	56591	2.00000	1.943
100	Naphthalene	128	13.830	13.830	(1.154)	79818	2.00000	1.943
101	1,2,3-Trichlorobenzene	180	14.021	14.021	(1.170)	42944	2.00000	1.980

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0322.D
Report Date: 28-Apr-2005 13:22

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

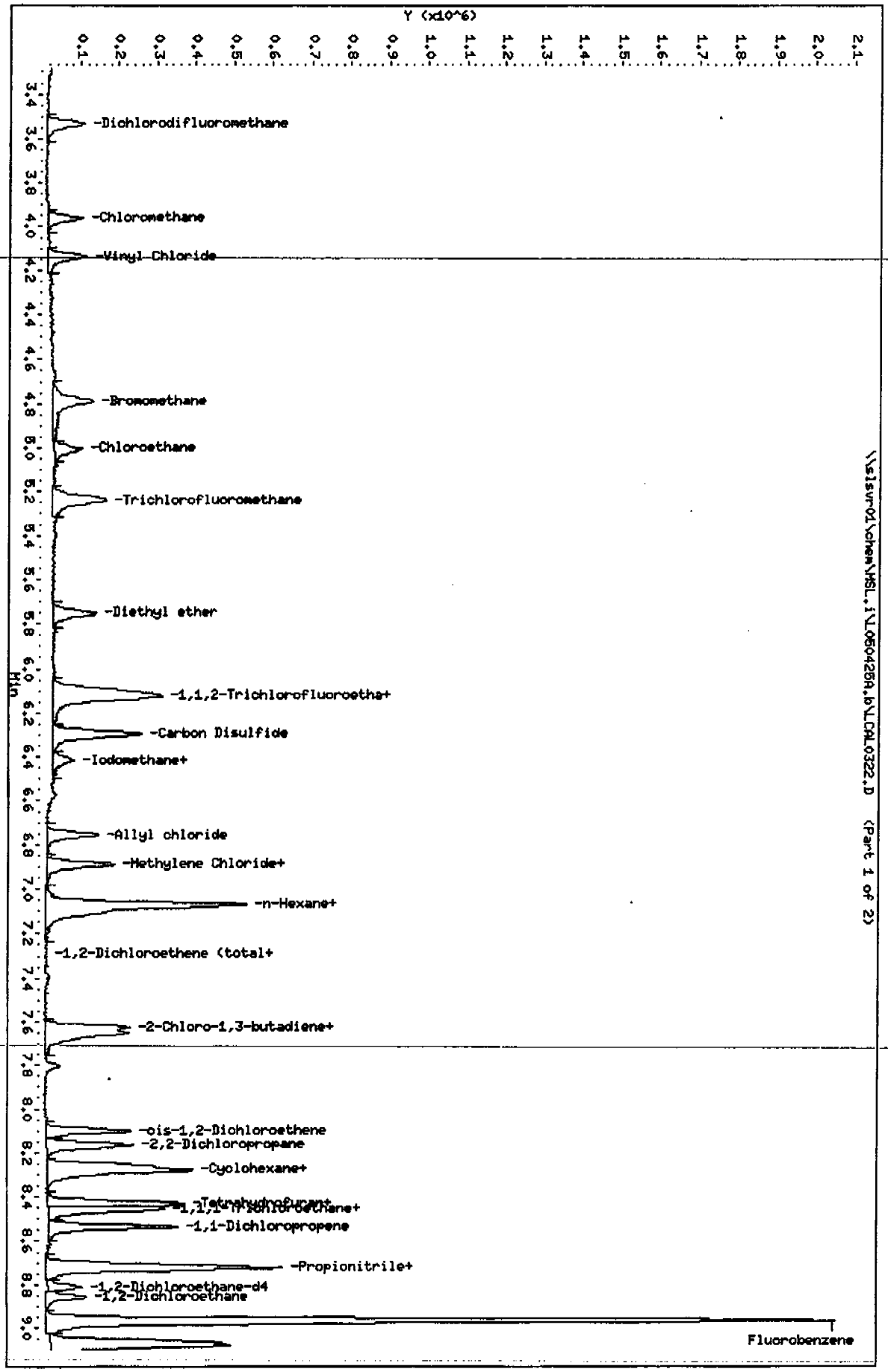
Instrument ID: MSL.i
Lab File ID: LCAL0322.D
Lab Smp Id: VSTD002
Analysis Type: VOA
Quant Type: ISTD
Operator: MN/TM
Method File: \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Misc Info: VBLK115A;

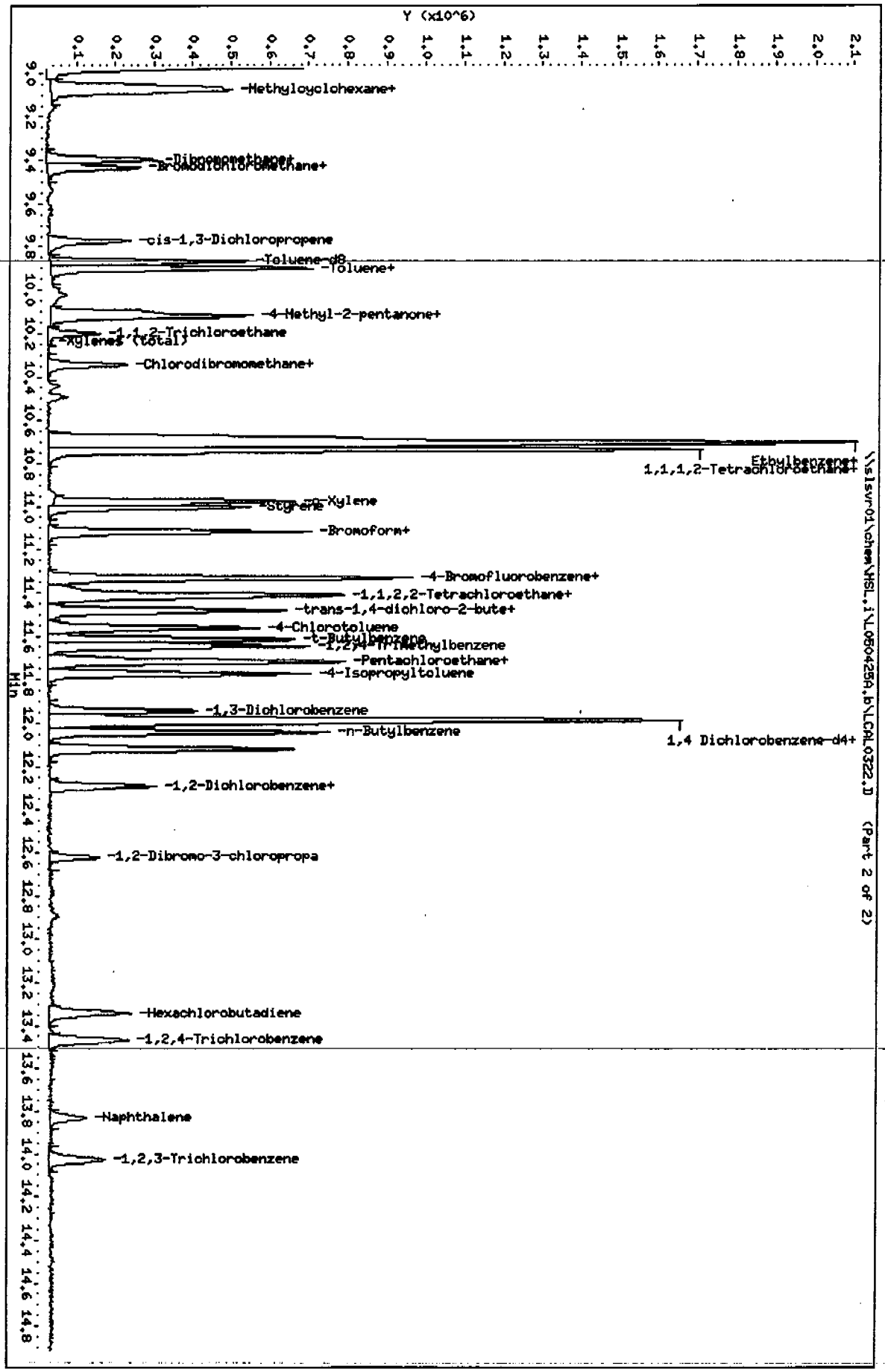
Calibration Date: 25-APR-2005
Calibration Time: 11:51
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
44 Fluorobenzene	1508429	754215	3016858	1472720	-2.37
69 Chlorobenzene-d5	892585	446293	1785170	775104	-13.16
92 1,4 Dichlorobenze	346814	173407	693628	299471	-13.65

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
44 Fluorobenzene	8.97	8.47	9.47	8.97	-0.00
69 Chlorobenzene-d5	10.70	10.20	11.20	10.70	-0.00
92 1,4 Dichlorobenze	11.99	11.49	12.49	11.99	-0.00

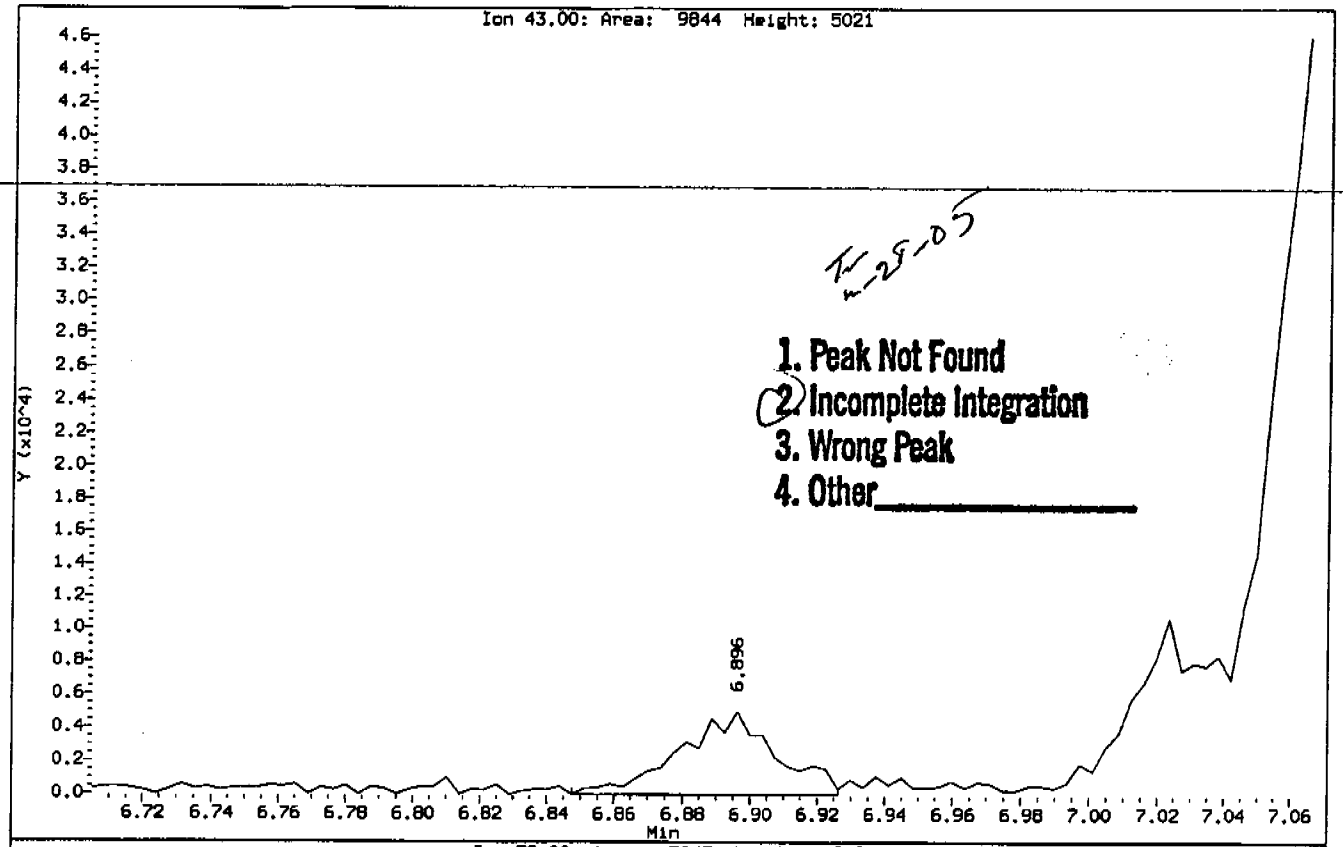
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^6)
Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0322.D
Date : 25-APR-2005 11:04
Client ID:
Sample Info: VSTD002
Purge Volume: 25.0
Column phase: RTX-502.2
Instrument: MSL.i
Operator: MN/TH
Column diameter: 0.25
\\slsvr01\chem\MSL.i\L050425A.b\LCAL0322.D (Part 1 of 2)
Min
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-Diethyl ether
-1,1,2-Trichlorofluoroetha+
-Carbon Disulfide
-Iodomethane+
-Allyl chloride
-Methylene Chloride+
-n-Hexane+
-1,2-Dichloroethene (total+
-2-Chloro-1,3-butadiene+
-cis-1,2-Dichloroethene
-2,2-Dichloropropane
-Cyclohexane+
-Tetrahydrofuran+
-1,1,1-Trichloroethane+
-1,1-Dichloropropene
-Propionitrile+
-1,2-Dichloroethane-d4
-1,2-Dichloroethane
Fluorobenzene


Y (x10^6)
Min
-Methylcyclohexane+
-Dibromomethane+
-Bromodichloromethane+
-cis-1,3-Dichloropropene
-Toluene-d8
-Toluene+
-4-Methyl-2-pentanone+
-1,1,2-Trichloroethane
-Xylenes (total)
-Chlorodibromomethane+
Ethylbenzene+
1,1,1,2-Tetrachloroethane+
-Xylene
-Styrene
-Bromoform+
-4-Bromofluorobenzene+
-1,1,2,2-Tetrachloroethane+
-trans-1,4-dichloro-2-bute+
-4-Chlorotoluene
-t-Butylbenzene
-1,2,4-Trimethylbenzene
-Pentachloroethane+
-4-Isopropyltoluene
-1,3-Dichlorobenzene
-n-Butylbenzene
1,4 Dichlorobenzene-d4+
-1,2-Dichlorobenzene+
-1,2-Dibromo-3-chloropropa
-Hexachlorobutadiene
-1,2,4-Trichlorobenzene
-Naphthalene
-1,2,3-Trichlorobenzene
Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0322.D
Date : 25-APR-2005 11:04
Client ID:
Sample Info: VSTD002
Purge Volume: 25.0
Column phase: RTX-502.2
Instrument: MSL.i
Operator: MW/TH
Column diameter: 0.25
\\slsvr01\chem\MSL.i\L050425A.b\LCAL0322.D (Part 2 of 2)

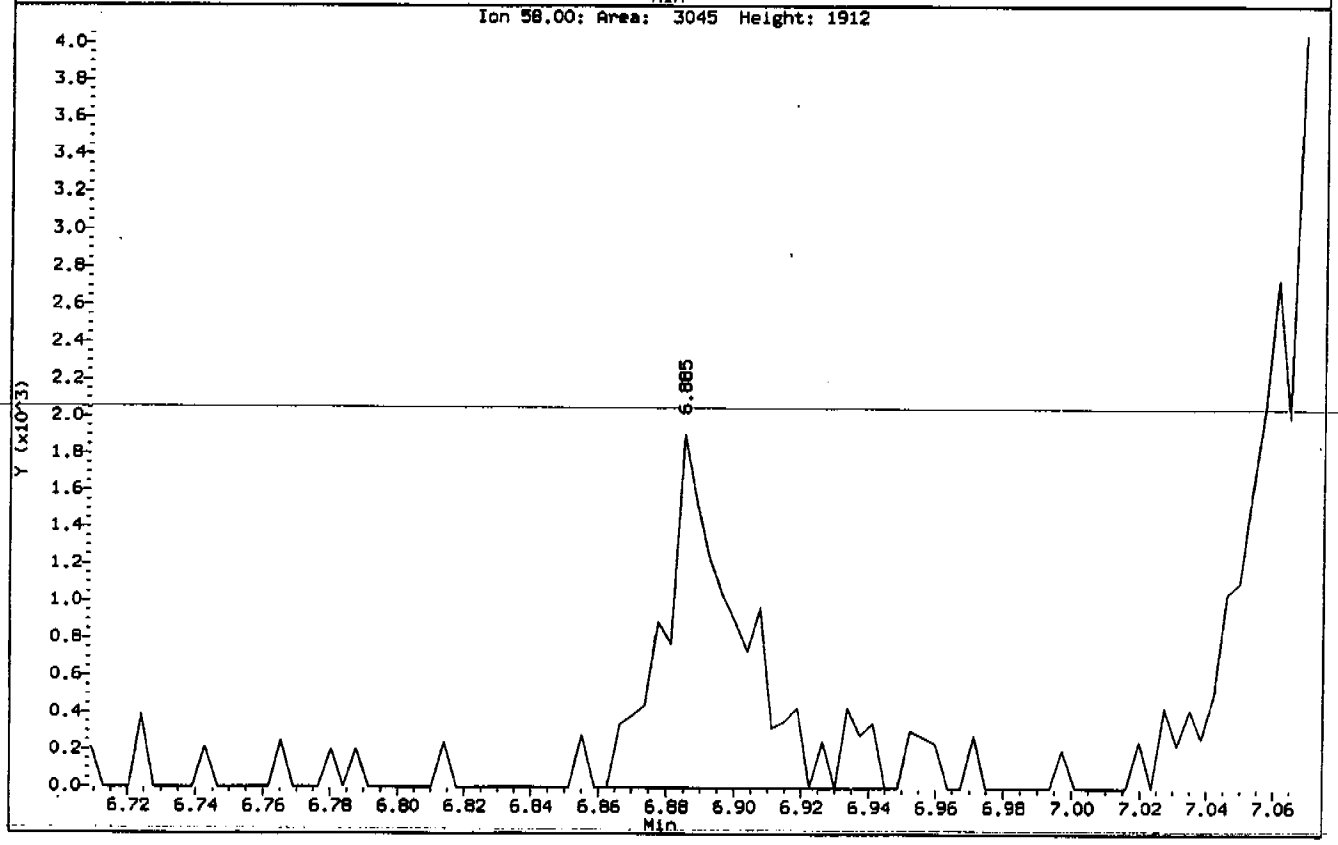
Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0322.D
Injection Date: 25-APR-2005 11:04
Instrument: MSL.i
Client Sample ID:

Compound: Acetone
CAS Number: 67-64-1



T 4-25-05

1. Peak Not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____



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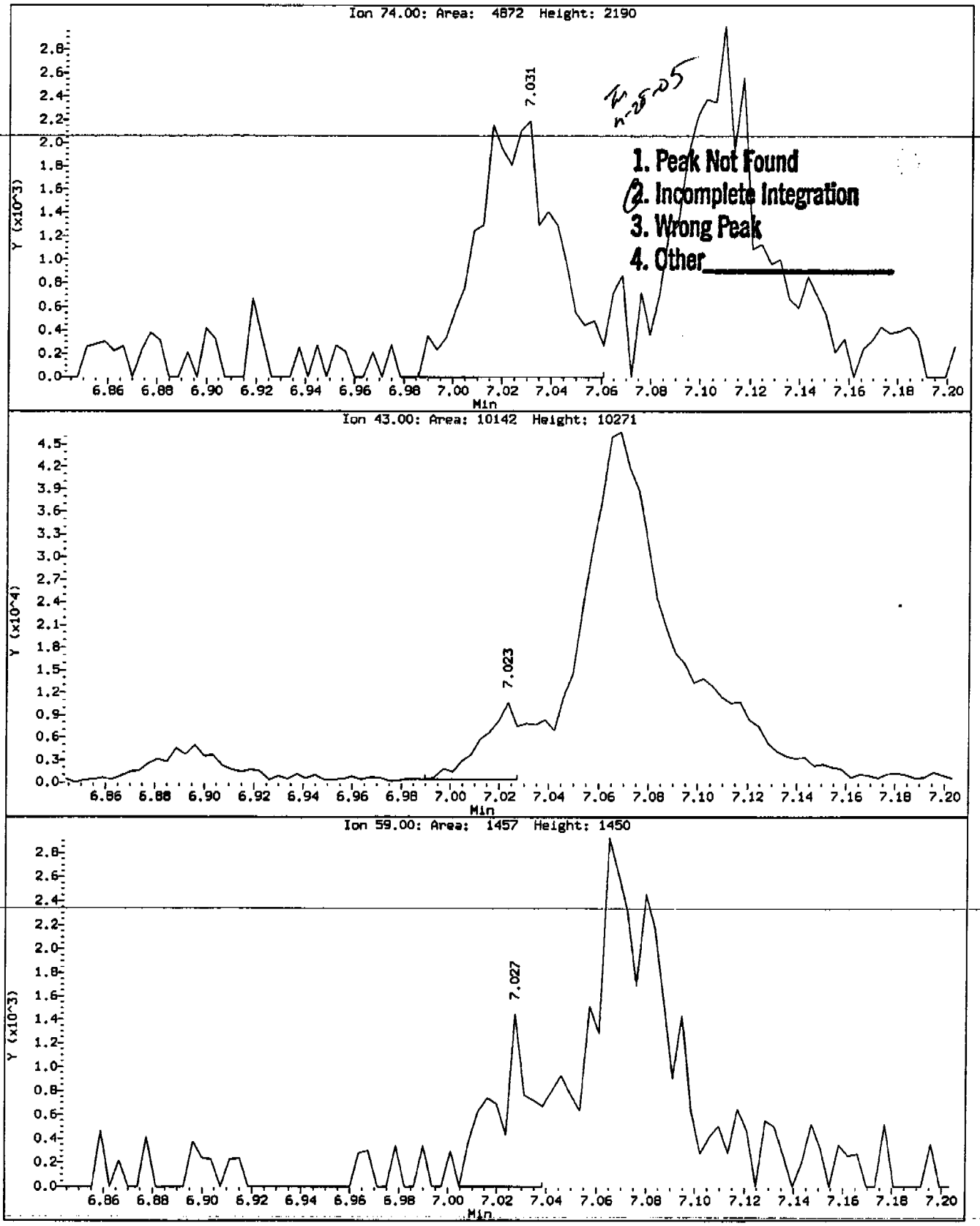
Injection Date: 25-APR-2005 11:04
Instrument: MSL.i
Client Sample ID:

Compound: Methyl Acetate
CAS Number:



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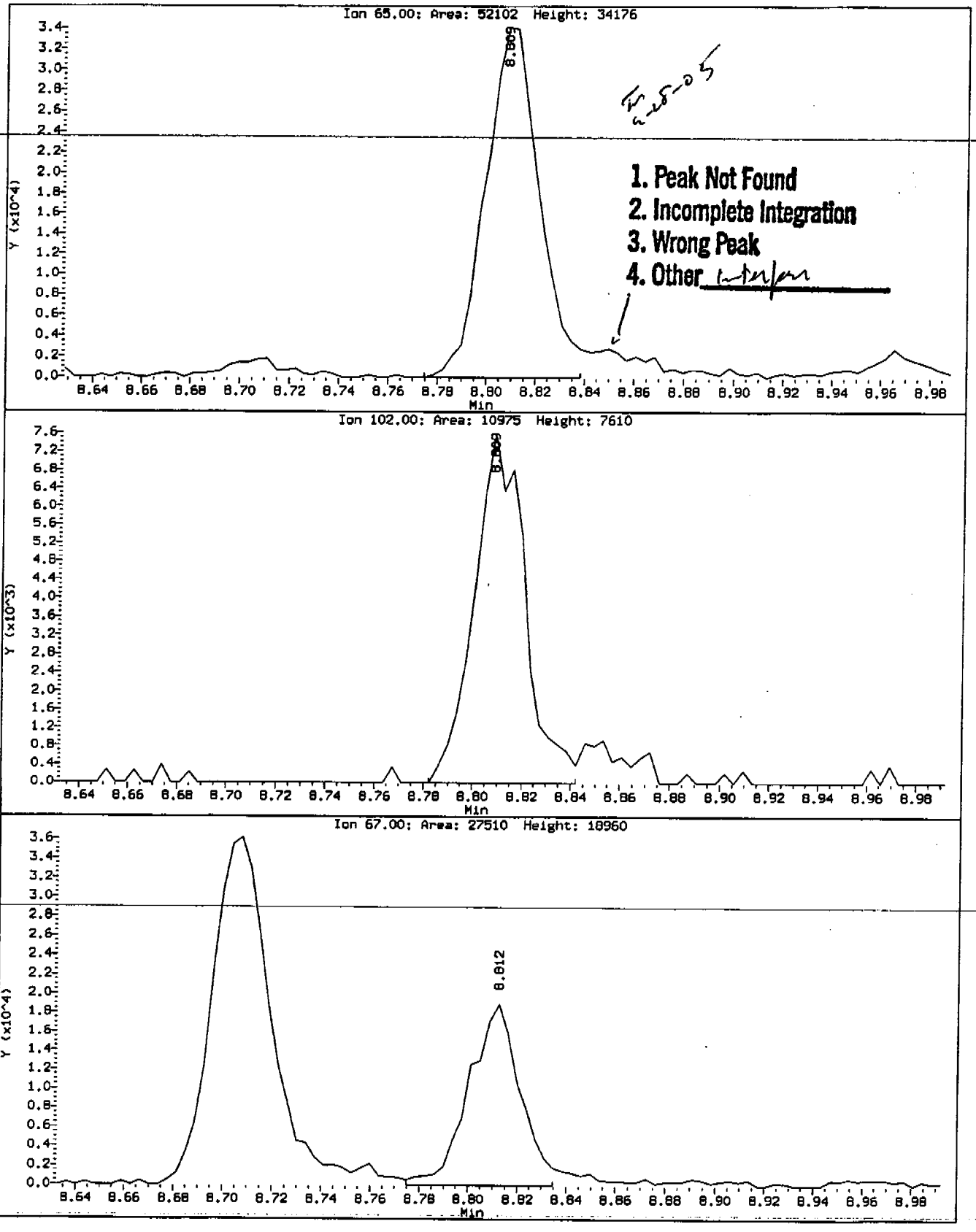
Injection Date: 25-APR-2005 11:04
Instrument: MSL.i
Client Sample ID:

Compound: 1,2-Dichloroethane-d4
CAS Number: 17060-07-0



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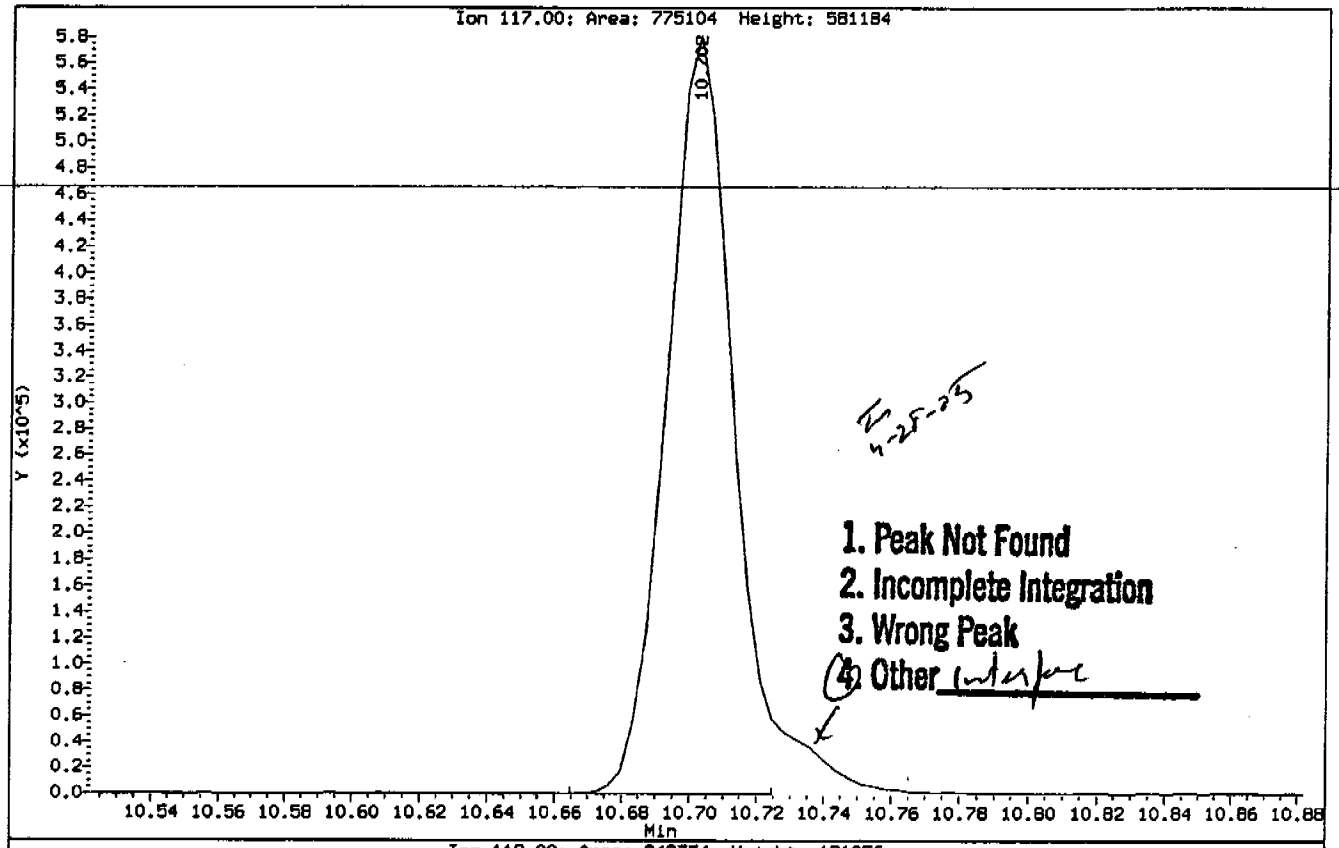
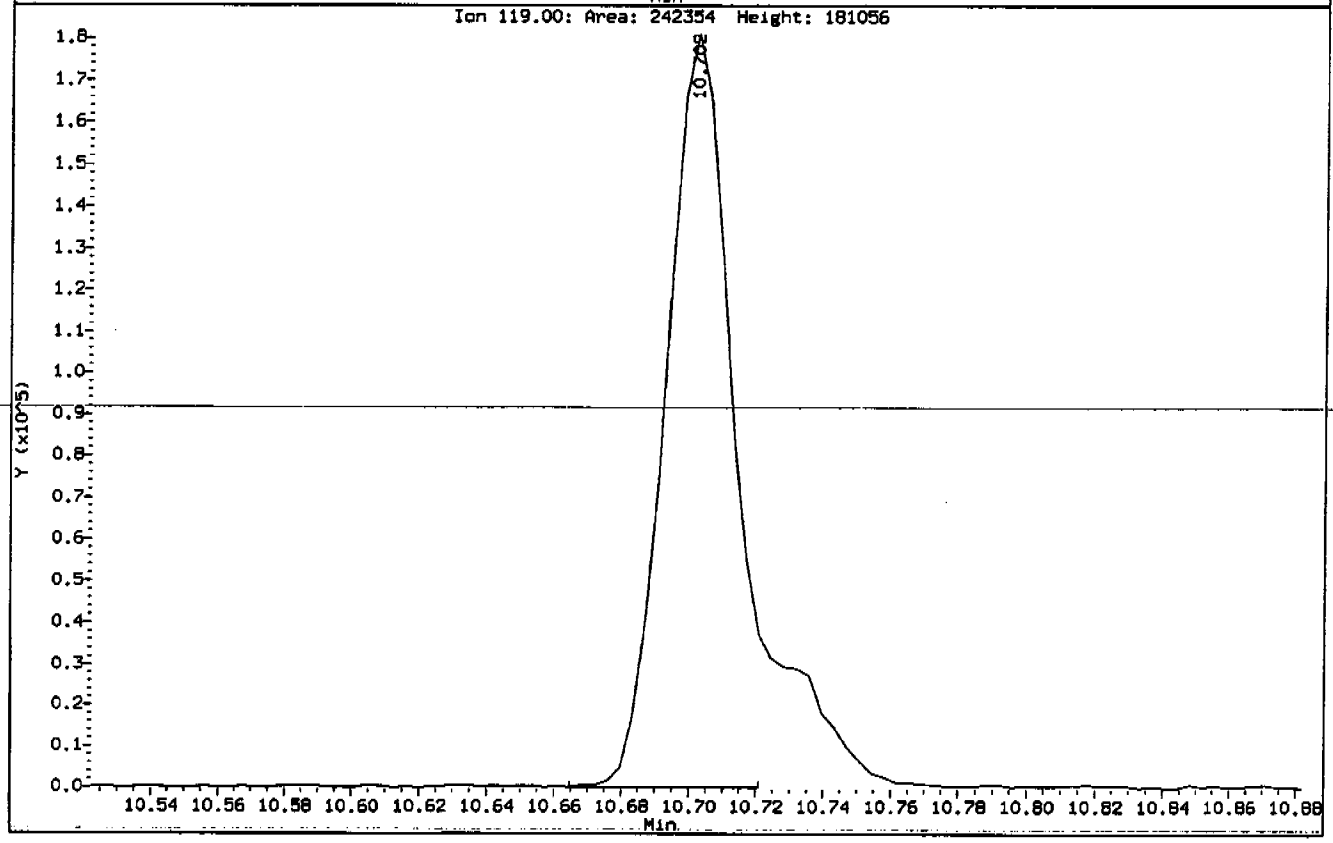
Injection Date: 25-APR-2005 11:04
Instrument: MSL.i
Client Sample ID:

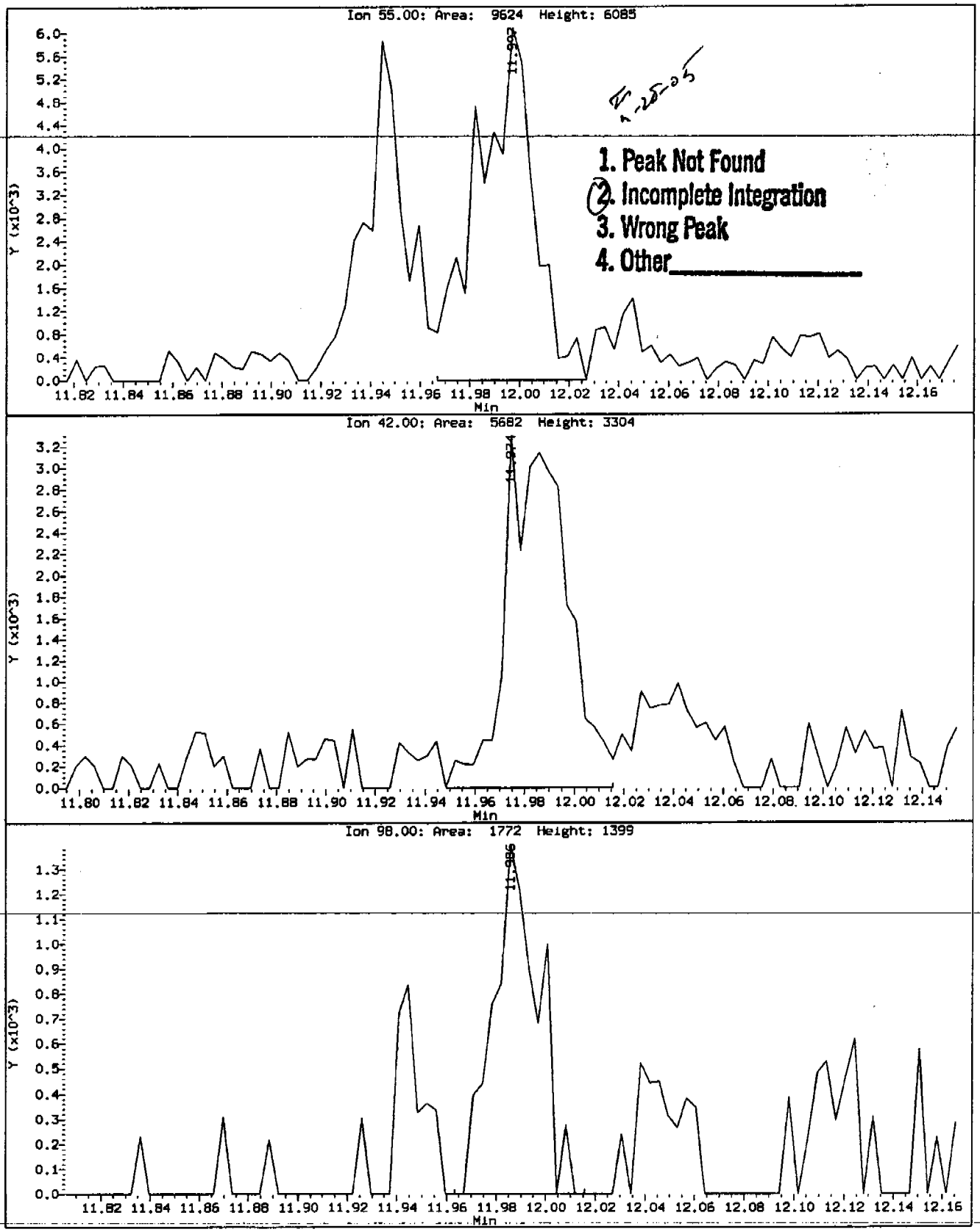
Compound: Chlorobenzene-d5
CAS Number: 3114-55-4





Data File: \\elavr01\chem\MSL.i\L050425A.b\LCAL0322.D
Injection Date: 25-APR-2005 11:04
Instrument: MSL.i
Client Sample ID:

Compound: Cyclohexanone
CAS Number: 108-94-1

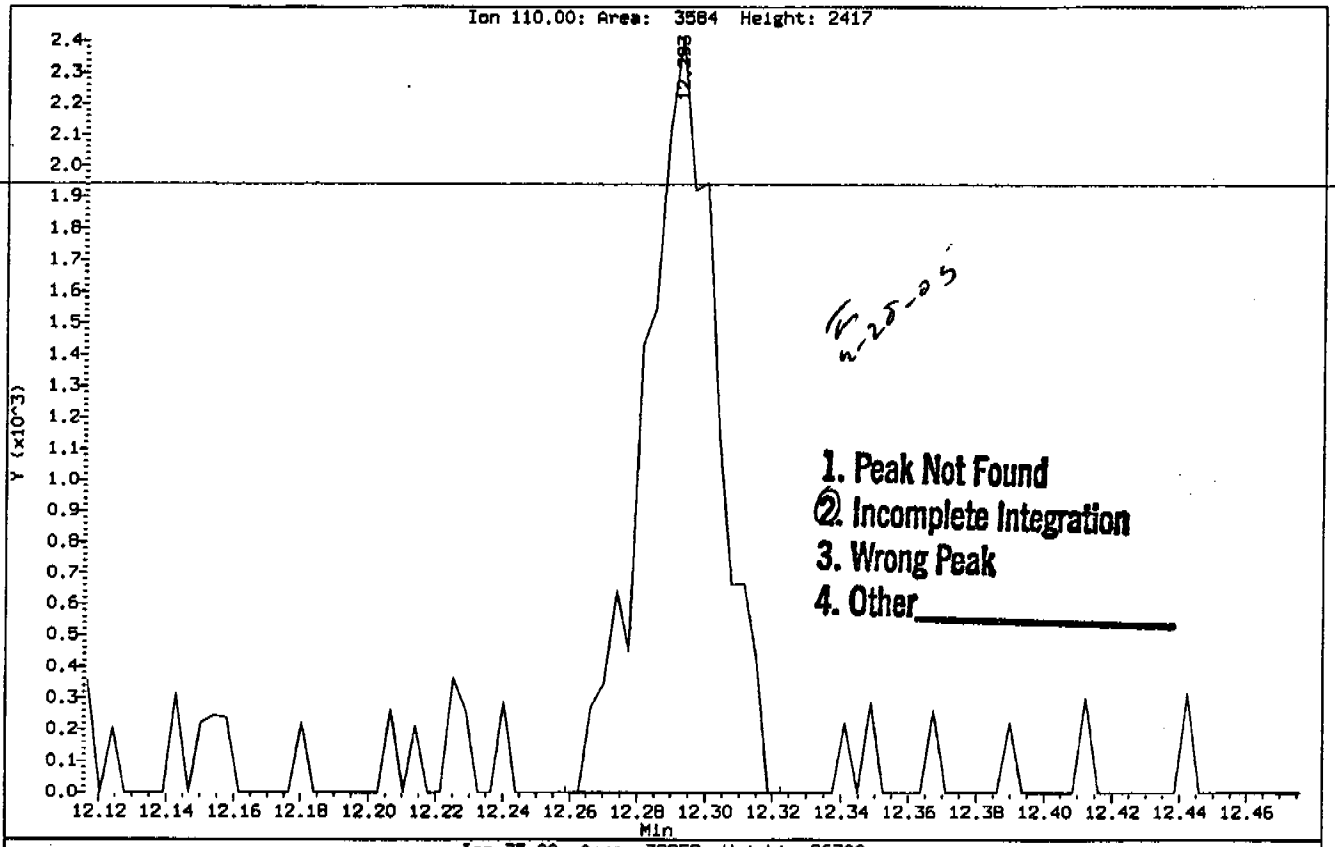


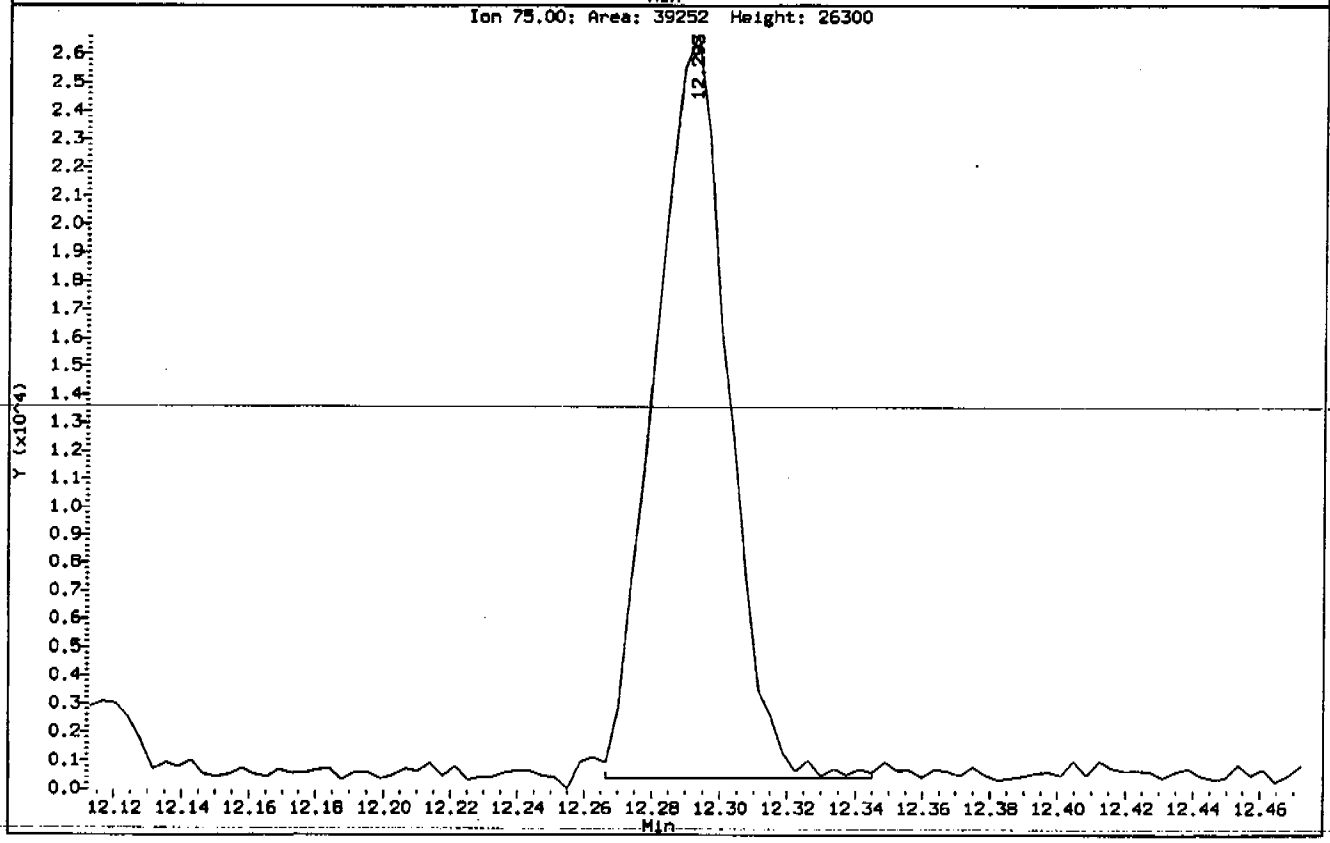
4-25-05

1. Peak Not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0322.D
Injection Date: 25-APR-2005 11:04
Instrument: MSL.i
Client Sample ID:

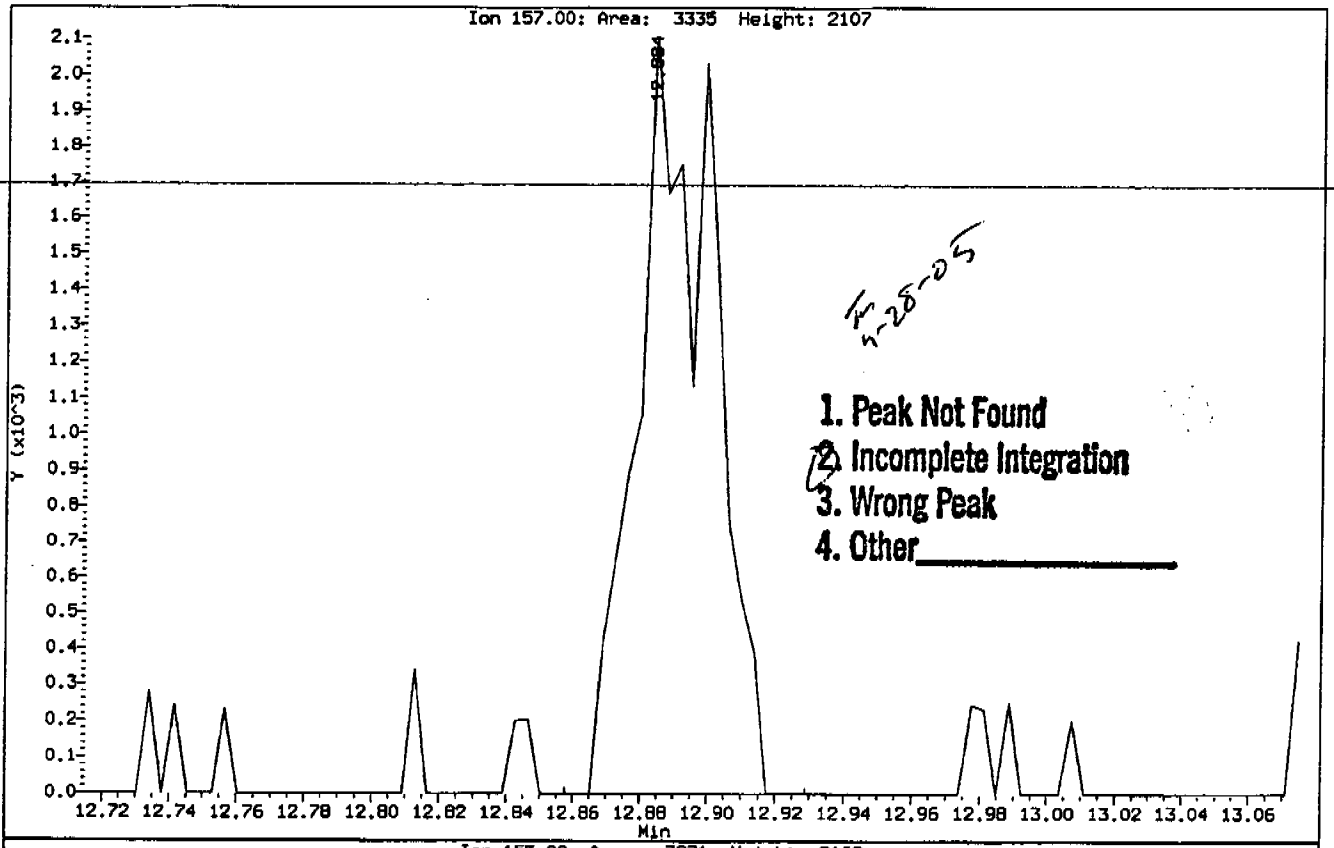
Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





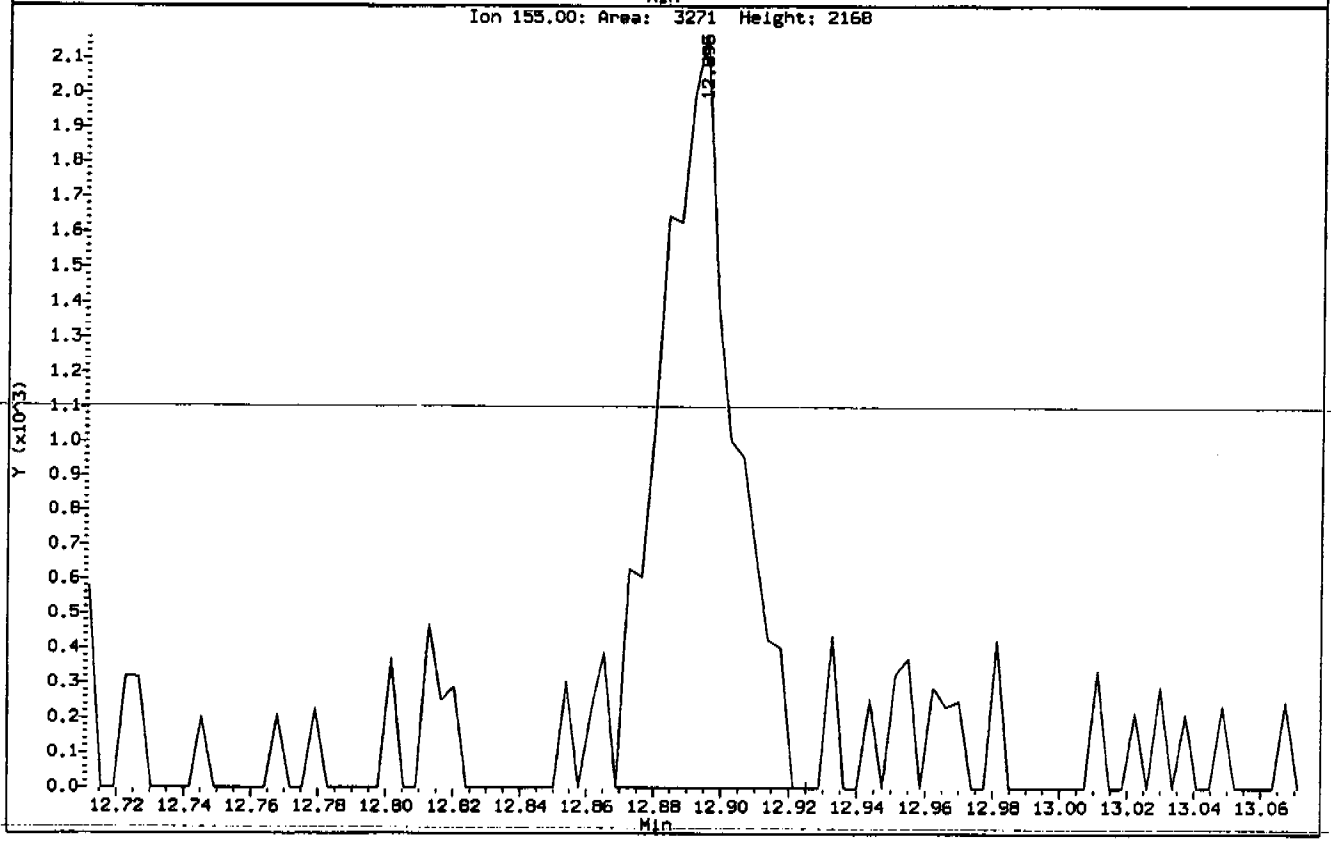
Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0322.D
Injection Date: 25-APR-2005 11:04
Instrument: MSL.i
Client Sample ID:

Compound: 1,2-Dibromo-3-chloropropane
CAS Number: 96-12-8



4-28-05

1. Peak Not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____



Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0323.D
Report Date: 28-Apr-2005 13:21

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSL.i\L050425A.b\LCAL0323.D
Lab Smp Id: VSTD004
Inj Date : 25-APR-2005 11:27
Operator : MN/TM Inst ID: MSL.i
Smp Info : VSTD004
Misc Info : VBLK115A;
Comment : NONE
Method : \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Meth Date : 26-Apr-2005 07:31 mahmoodt Quant Type: ISTD
Cal Date : 25-APR-2005 11:27 Cal File: LCAL0323.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLVOA02

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	25.000	DefSampleVolume
Vo	25.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	1 Dichlorodifluoromethane	85	3.532	3.532	(0.394)	262727	4.00000	3.852
	2 Chloromethane	50	3.962	3.962	(0.442)	252132	4.00000	3.825
	3 Vinyl Chloride	62	4.134	4.134	(0.461)	281245	4.00000	3.978
	4 Bromomethane	94	4.785	4.785	(0.534)	162785	4.00000	4.471
	5 Chloroethane	64	4.999	4.999	(0.558)	185967	4.00000	3.918
	6 Trichlorofluoromethane	101	5.234	5.234	(0.584)	357759	4.00000	3.816
	7 Diethyl ether	59	5.747	5.747	(0.641)	174141	8.00000	7.485
	8 1,1,2-Trichlorofluoroethane	101	6.099	6.099	(0.680)	218307	4.00000	3.687
	9 1,1-Dichloroethene	96	6.125	6.125	(0.683)	234762	4.00000	3.814
	10 Carbon Disulfide	76	6.293	6.293	(0.702)	877719	4.00000	3.907
	11 Iodomethane	142	6.406	6.406	(0.715)	131130	4.00000	3.402
	12 Acrolein	56	6.578	6.578	(0.734)	25980	20.0000	18.71
	13 Allyl chloride	39	6.754	6.754	(0.753)	89430	4.00000	3.198
	14 Methylene Chloride	84	6.888	6.888	(0.768)	161720	4.00000	3.856
	15 Acetone	43	6.892	6.892	(0.769)	17938	4.00000	4.406
	16 Methyl Acetate	74	7.019	7.019	(0.783)	5722	4.00000	3.220(M)
	17 n-Hexane	57	7.068	7.068	(0.788)	338462	4.00000	4.134
	18 trans-1,2-Dichloroethene	96	7.076	7.076	(0.789)	200579	4.00000	3.787
	19 MTBE	73	7.106	7.106	(0.793)	156853	4.00000	2.982
M	20 1,2-Dichloroethene (total)	96				386022	8.00000	7.606
	21 Acetonitrile	41	7.390	7.390	(0.824)	24202	20.0000	19.74(M)
	22 2-Chloro-1,3-butadiene	53	7.622	7.622	(0.850)	156982	4.00000	2.851

TM 4-28-05

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0323.D
Report Date: 28-Apr-2005 13:21

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	23 1,1-Dichloroethane	63	7.652	7.652	(0.853)	344300	4.00000	3.851
	24 Acrylonitrile	53	7.678	7.678	(0.856)	86703	20.0000	18.78
	25 Vinyl acetate	43	7.802	7.802	(0.870)	90263	4.00000	3.919
	26 cis-1,2-Dichloroethene	96	8.097	8.097	(0.903)	185443	4.00000	3.820
	27 2,2-Dichloropropane	77	8.165	8.165	(0.911)	300566	4.00000	3.877
	28 Cyclohexane	84	8.258	8.258	(0.921)	139117	4.00000	2.909
	29 Chloroform	83	8.281	8.281	(0.924)	315907	4.00000	3.781
	30 Bromochloromethane	128	8.281	8.281	(0.924)	40982	4.00000	3.603
	31 Ethyl acetate	43	8.307	8.307	(0.927)	84656	8.00000	7.500
	32 Tetrahydrofuran	71	8.427	8.427	(0.940)	26384	20.0000	18.36
	33 Carbon Tetrachloride	117	8.430	8.430	(0.940)	255954	4.00000	3.810
$	34 Dibromofluoromethane	113	8.430	8.430	(0.940)	111672	4.00000	3.764(a)
	35 1,1,1-Trichloroethane	97	8.456	8.456	(0.943)	310536	4.00000	3.864
	36 2-Butanone	43	8.468	8.468	(0.944)	22011	4.00000	3.932(H)
	37 1,1-Dichloropropene	75	8.535	8.535	(0.952)	273954	4.00000	3.750
	38 Propionitrile	54	8.696	8.696	(0.970)	21983	20.0000	15.03
	39 Methacrylonitrile	41	8.707	8.707	(0.971)	119275	20.0000	14.57
	40 Isobutanol	42	8.423	8.423	(0.939)	59078	80.0000	76.71
	41 Benzene	78	8.722	8.722	(0.973)	785630	4.00000	3.761
$	42 1,2-Dichloroethane-d4	65	8.808	8.808	(0.982)	102945	4.00000	3.844(aM)
	43 1,2-Dichloroethane	62	8.853	8.853	(0.987)	136906	4.00000	3.857
*	44 Fluorobenzene	96	8.965	8.965	(1.000)	1514634	10.0000	
	45 Methylcyclohexane	55	9.063	9.063	(1.011)	144113	4.00000	2.914
	46 Trichloroethene	130	9.081	9.081	(1.013)	174298	4.00000	3.694
	47 n-Butanol	56	9.156	9.156	(1.021)	14122	40.0000	36.93
	48 Dibromomethane	93	9.388	9.388	(1.047)	45189	4.00000	3.758
	49 1,2-Dichloropropane	63	9.400	9.400	(1.048)	151272	4.00000	3.890
	50 Bromodichloromethane	83	9.433	9.433	(1.052)	177137	4.00000	3.754
	51 Methyl methacrylate	69	9.437	9.437	(1.053)	27843	4.00000	2.888
	52 1,4-Dioxane	88	9.534	9.534	(1.063)	6994	80.0000	60.40
	54 cis-1,3-Dichloropropene	75	9.774	9.774	(1.090)	191691	4.00000	3.702
$	55 Toluene-d8	98	9.871	9.871	(1.101)	543922	4.00000	3.711(a)
	56 Toluene	91	9.901	9.901	(0.925)	790772	4.00000	3.936
	57 2-Nitro-Propane	43	9.998	9.998	(1.115)	15061	4.00000	2.902
	58 4-Methyl-2-pentanone	43	10.021	10.021	(1.118)	44956	4.00000	3.694
	59 trans-1,3-Dichloropropene	75	10.099	10.099	(0.944)	133751	4.00000	4.046
	60 Ethyl methacrylate	69	10.099	10.099	(0.944)	64693	4.00000	3.042
	61 Tetrachloroethene	164	10.125	10.125	(0.946)	149734	4.00000	3.441
	62 1,1,2-Trichloroethane	97	10.197	10.197	(0.953)	64713	4.00000	4.012
M	63 Xylenes (total)	106				953081	12.0000	11.54
	64 Chlorodibromomethane	129	10.339	10.339	(0.966)	63052	4.00000	4.004
	65 1,3-Dichloropropane	76	10.346	10.346	(0.967)	127913	4.00000	4.003
	66 2-Hexanone	43	10.440	10.440	(0.976)	25829	4.00000	3.791
	67 1,2-Dibromoethane	107	10.492	10.492	(0.980)	52404	4.00000	4.016
	68 Ethylbenzene	106	10.679	10.679	(0.998)	255558	4.00000	3.985
*	69 Chlorobenzene-d5	117	10.702	10.702	(1.000)	824921	10.0000	(M)
	70 Chlorobenzene	112	10.713	10.713	(1.001)	402007	4.00000	3.771
	71 1,1,1,2-Tetrachloroethane	131	10.732	10.732	(1.003)	107030	4.00000	3.776
	72 m,p-Xylenes	106	10.735	10.735	(1.003)	669611	8.00000	7.631
	73 o-Xylene	106	10.979	10.979	(1.026)	283470	4.00000	3.912
	74 Styrene	104	11.005	11.005	(1.028)	419582	4.00000	3.854
	75 Bromoform	173	11.121	11.121	(0.928)	24684	4.00000	3.873
	76 Isopropylbenzene	105	11.117	11.117	(0.928)	747572	4.00000	3.870
$	77 4-Bromofluorobenzene	95	11.327	11.327	(0.945)	177525	4.00000	3.876(a)

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0323.D
Report Date: 28-Apr-2005 13:21

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
78	n-Propylbenzene	91	11.334	11.334	(0.946)	1054634	4.00000	3.830
79	1,1,2,2-Tetrachloroethane	83	11.379	11.379	(0.949)	62021	4.00000	3.834
80	1,3,5-Trimethylbenzene	105	11.409	11.409	(0.952)	693190	4.00000	3.836
81	Bromobenzene	156	11.428	11.428	(0.953)	107844	4.00000	3.833
82	trans-1,4-dichloro-2-butene	53	11.473	11.473	(0.957)	14368	4.00000	3.062
83	2-Chlorotoluene	91	11.484	11.484	(0.958)	578024	4.00000	3.892
84	4-Chlorotoluene	91	11.566	11.566	(0.965)	561870	4.00000	3.934
85	t-Butylbenzene	119	11.619	11.619	(0.969)	642975	4.00000	3.937
86	1,2,4-Trimethylbenzene	105	11.649	11.649	(0.972)	687442	4.00000	3.919
87	Pentachloroethane	167	11.701	11.701	(0.976)	19763	4.00000	3.495(a)
88	sec-Butylbenzene	105	11.720	11.720	(0.978)	932120	4.00000	3.933
89	4-Isopropyltoluene	119	11.772	11.772	(0.982)	698534	4.00000	3.957
90	Cyclohexanone	55	11.989	11.989	(1.120)	15410	4.00000	4.202
91	1,3-Dichlorobenzene	146	11.944	11.944	(0.997)	254789	4.00000	3.872
* 92	1,4 Dichlorobenzene-d4	152	11.985	11.985	(1.000)	316607	10.0000	
93	1,4-Dichlorobenzene	146	12.000	12.000	(1.001)	251638	4.00000	3.765
94	n-Butylbenzene	91	12.042	12.042	(1.005)	762404	4.00000	3.924
95	1,2,3-Trichloropropane	110	12.292	12.292	(1.026)	8775	4.00000	4.371
96	1,2-Dichlorobenzene	146	12.292	12.292	(1.026)	192328	4.00000	3.813
97	1,2-Dibromo-3-chloropropane	157	12.887	12.887	(1.075)	7012	4.00000	3.726
98	Hexachlorobutadiene	225	13.344	13.344	(1.113)	70836	4.00000	3.840
99	1,2,4-Trichlorobenzene	180	13.471	13.471	(1.124)	115565	4.00000	3.753
100	Naphthalene	128	13.834	13.834	(1.154)	163188	4.00000	3.758
101	1,2,3-Trichlorobenzene	180	14.025	14.025	(1.170)	84334	4.00000	3.678

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0323.D
Report Date: 28-Apr-2005 13:21

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

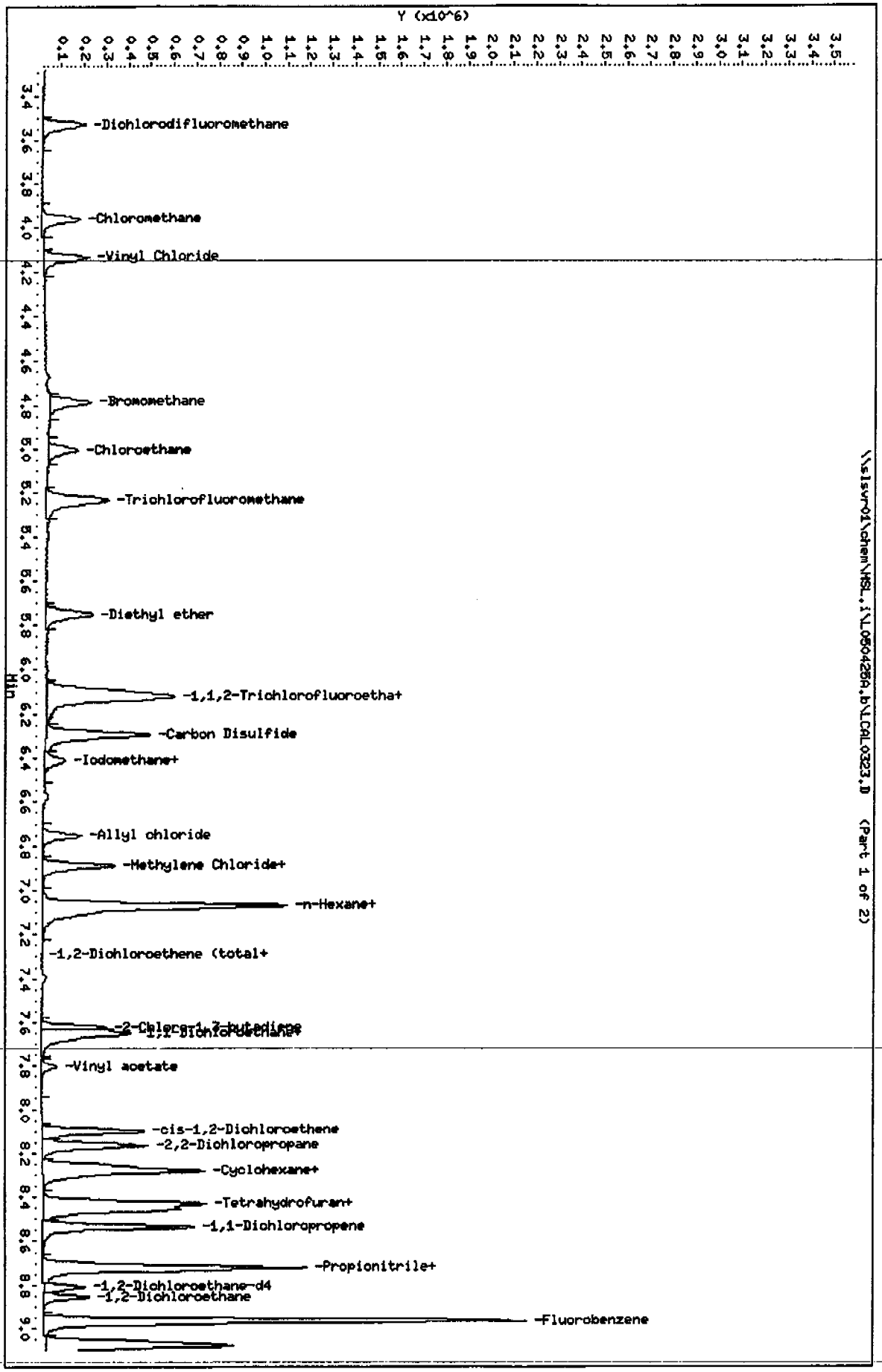
Instrument ID: MSL.i
Lab File ID: LCAL0323.D
Lab Smp Id: VSTD004
Analysis Type: VOA
Quant Type: ISTD
Operator: MN/TM
Method File: \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Misc Info: VBLK115A;

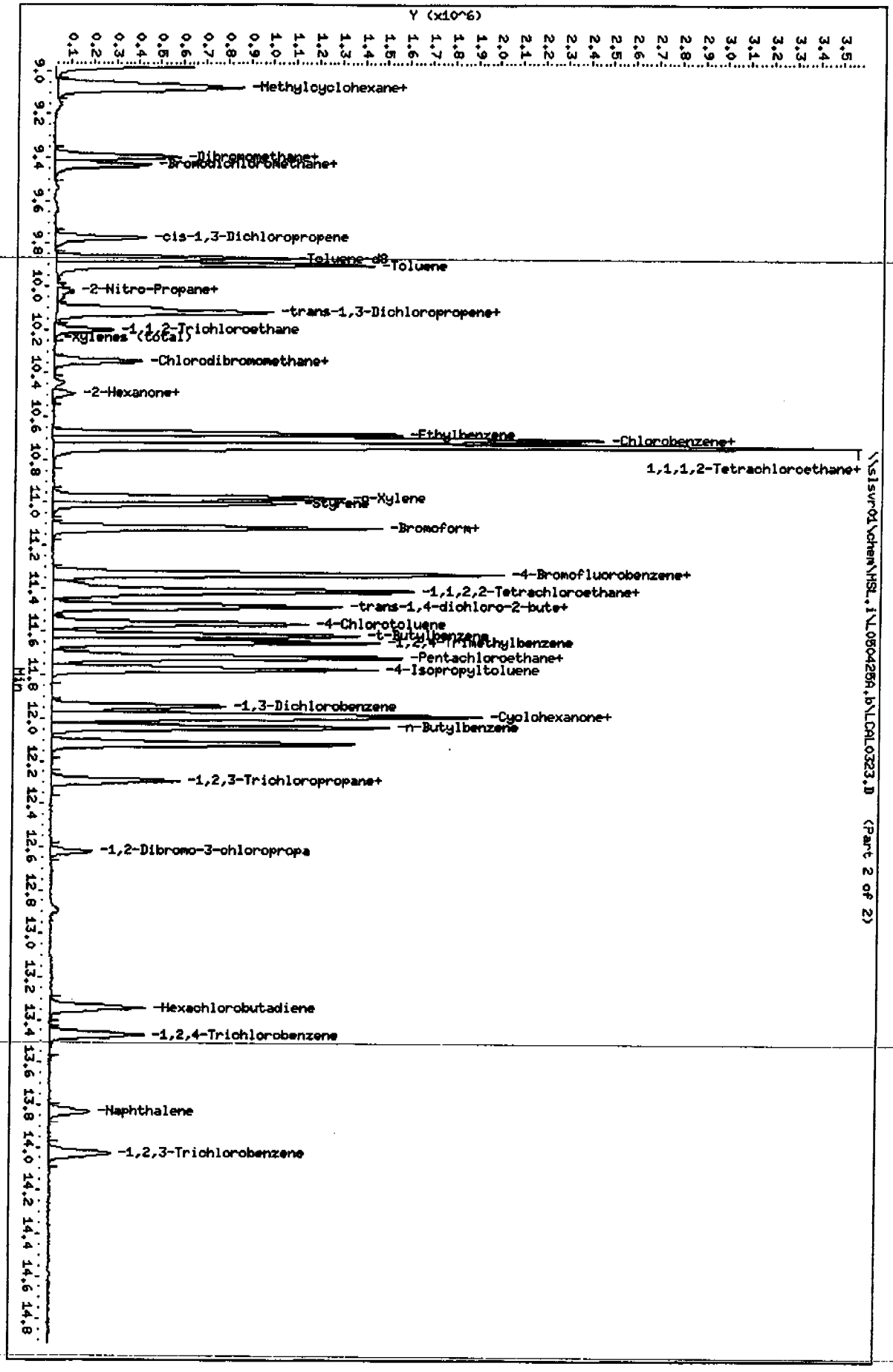
Calibration Date: 25-APR-2005
Calibration Time: 11:51
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
44 Fluorobenzene	1508429	754215	3016858	1514634	0.41
69 Chlorobenzene-d5	892585	446293	1785170	824921	-7.58
92 1,4 Dichlorobenze	346814	173407	693628	316607	-8.71

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
44 Fluorobenzene	8.97	8.47	9.47	8.97	0.00
69 Chlorobenzene-d5	10.70	10.20	11.20	10.70	0.00
92 1,4 Dichlorobenze	11.99	11.49	12.49	11.99	0.00

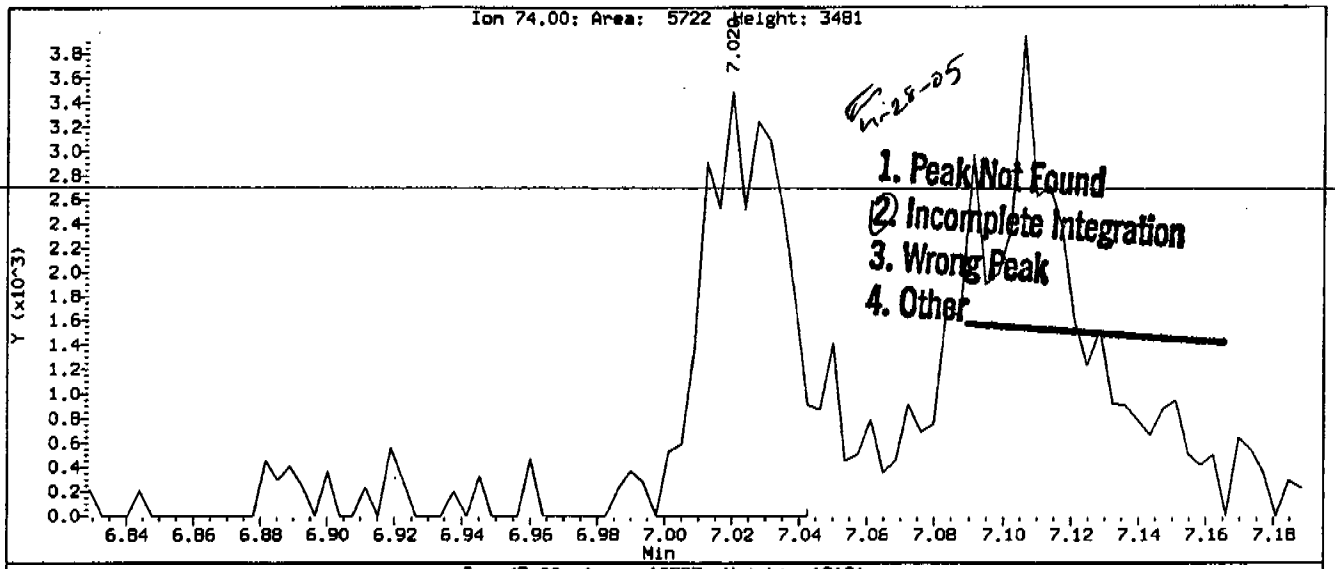
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

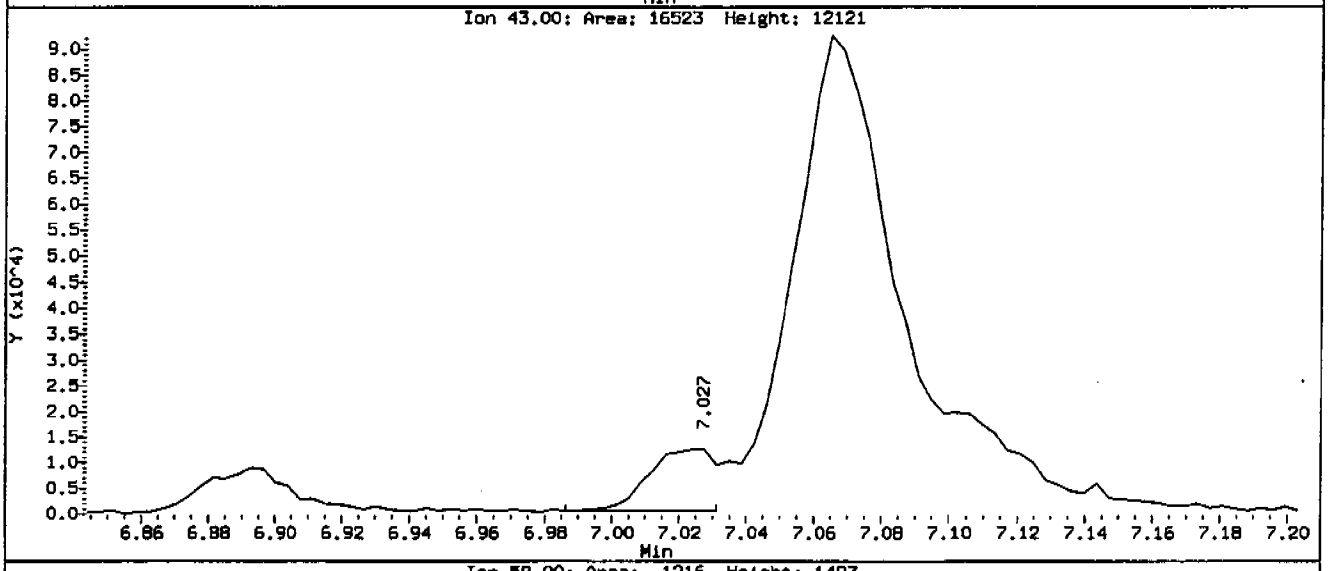

Y (x10^6)
Min
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-Diethyl ether
-1,1,2-Trichlorofluoroetha+
-Carbon Disulfide
-Iodomethane+
-Allyl chloride
-Methylene Chloride+
-n-Hexane+
-1,2-Dichloroethene (total+
-2-Chloro-1,3-butadiene
-1,1-Dichloroethane
-Vinyl acetate
-cis-1,2-Dichloroethene
-2,2-Dichloropropane
-Cyclohexane+
-Tetrahydrofuran+
-1,1-Dichloropropene
-Propionitrile+
-1,2-Dichloroethane-d4
-1,2-Dichloroethane
-Fluorobenzene
Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0323.D
Date : 25-APR-2005 11:27
Client ID:
Sample Info: VSTD004
Purge Volume: 25.0
Column phase: RTX-502.2
Instrument: MSL.i
Operator: MN/TM
Column diameter: 0.25
\\slsvr01\chem\MSL.i\L050425A.b\LCAL0323.D (Part 1 of 2)

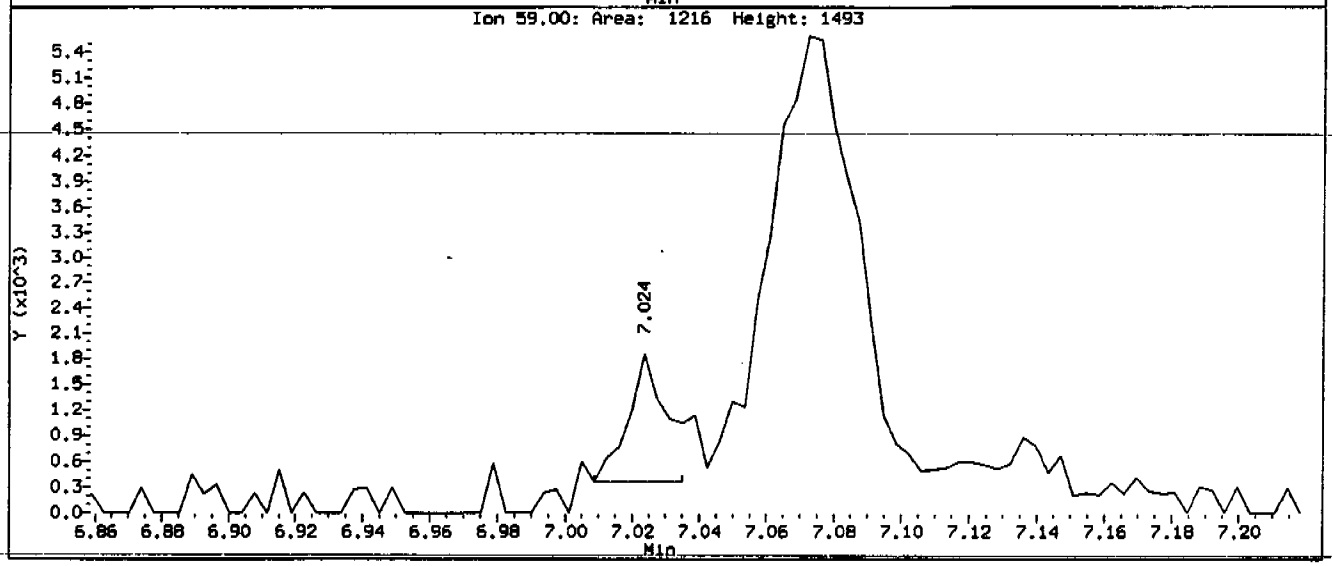

Y (x10^6)
Min
-Methylcyclohexane+
-Dibromomethane+
-Bromodichloromethane+
-cis-1,3-Dichloropropene
-Toluene
-2-Nitro-Propane+
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane
-Xylenes (total)
-Chlorodibromomethane+
-2-Hexanone+
-Ethylbenzene
-Chlorobenzene+
1,1,1,2-Tetrachloroethane+
-Styrene
-Bromoform+
-4-Bromofluorobenzene+
-1,1,2,2-Tetrachloroethane+
-trans-1,4-dichloro-2-bute+
-4-Chlorotoluene
-t-Butylbenzene
-Pentachloroethane+
-4-Isopropyltoluene
-1,3-Dichlorobenzene
-Cyclohexanone+
-n-Butylbenzene
-1,2,3-Trichloropropane+
-1,2-Dibromo-3-chloropropa
-Hexachlorobutadiene
-1,2,4-Trichlorobenzene
-Naphthalene
-1,2,3-Trichlorobenzene
\\slsvr01\chem\HSL.i\L050425A.b\LCAL0323.D (Part 2 of 2)
Data File: \\slsvr01\chem\HSL.i\L050425A.b\LCAL0323.D
Date : 25-APR-2005 11:27
Client ID:
Sample Info: VSTD004
Purge Volume: 25.0
Column phase: RTX-502.2
Instrument: HSL.i
Operator: HN/TH
Column diameter: 0.25

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0323.D
Injection Date: 25-APR-2005 11:27
Instrument: MSL.i
Client Sample ID:

Compound: Methyl Acetate
CAS Number:

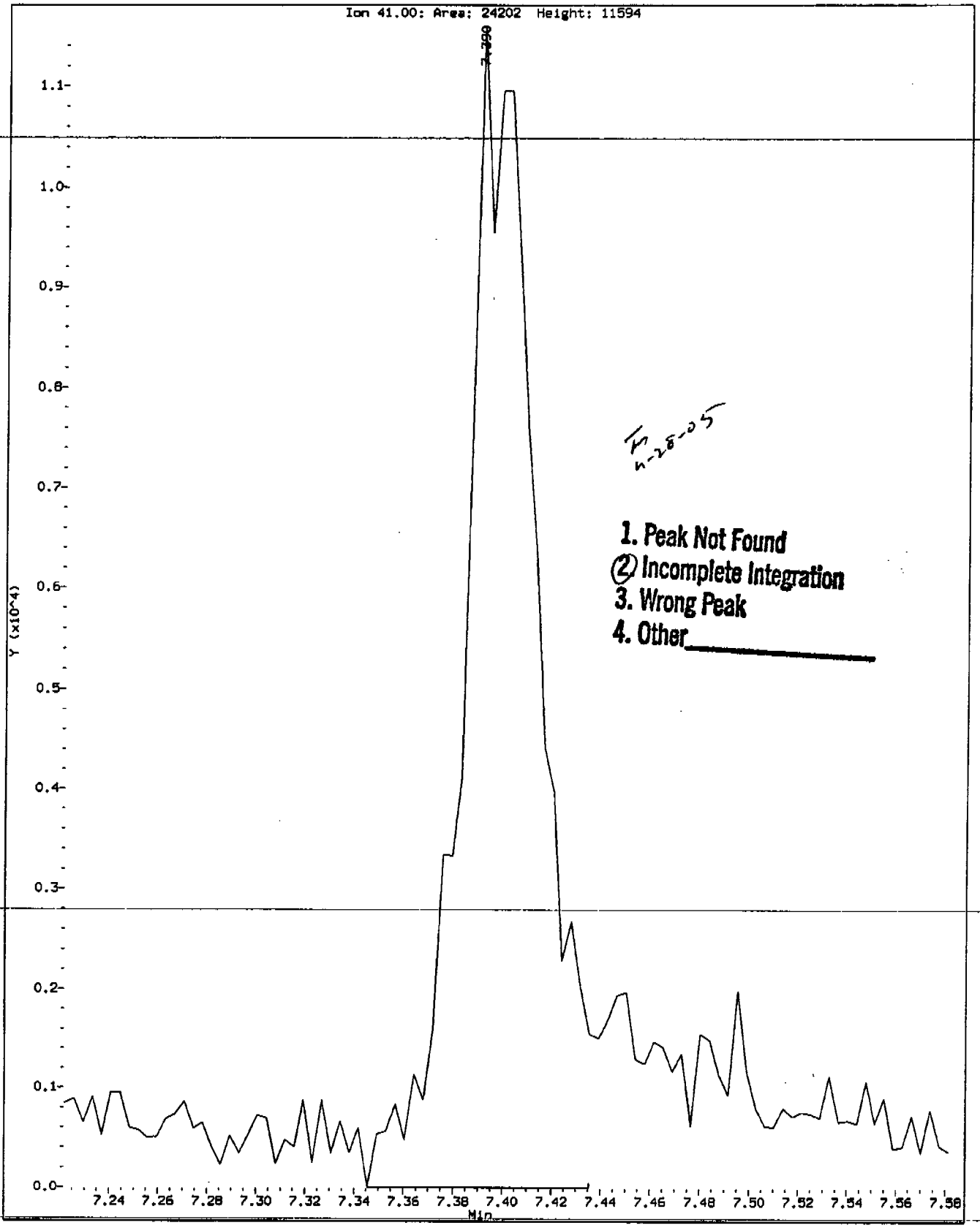






Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0323.D
Injection Date: 25-APR-2005 11:27
Instrument: MSL.i
Client Sample ID:

Compound: Acetonitrile
CAS Number: 75-05-8

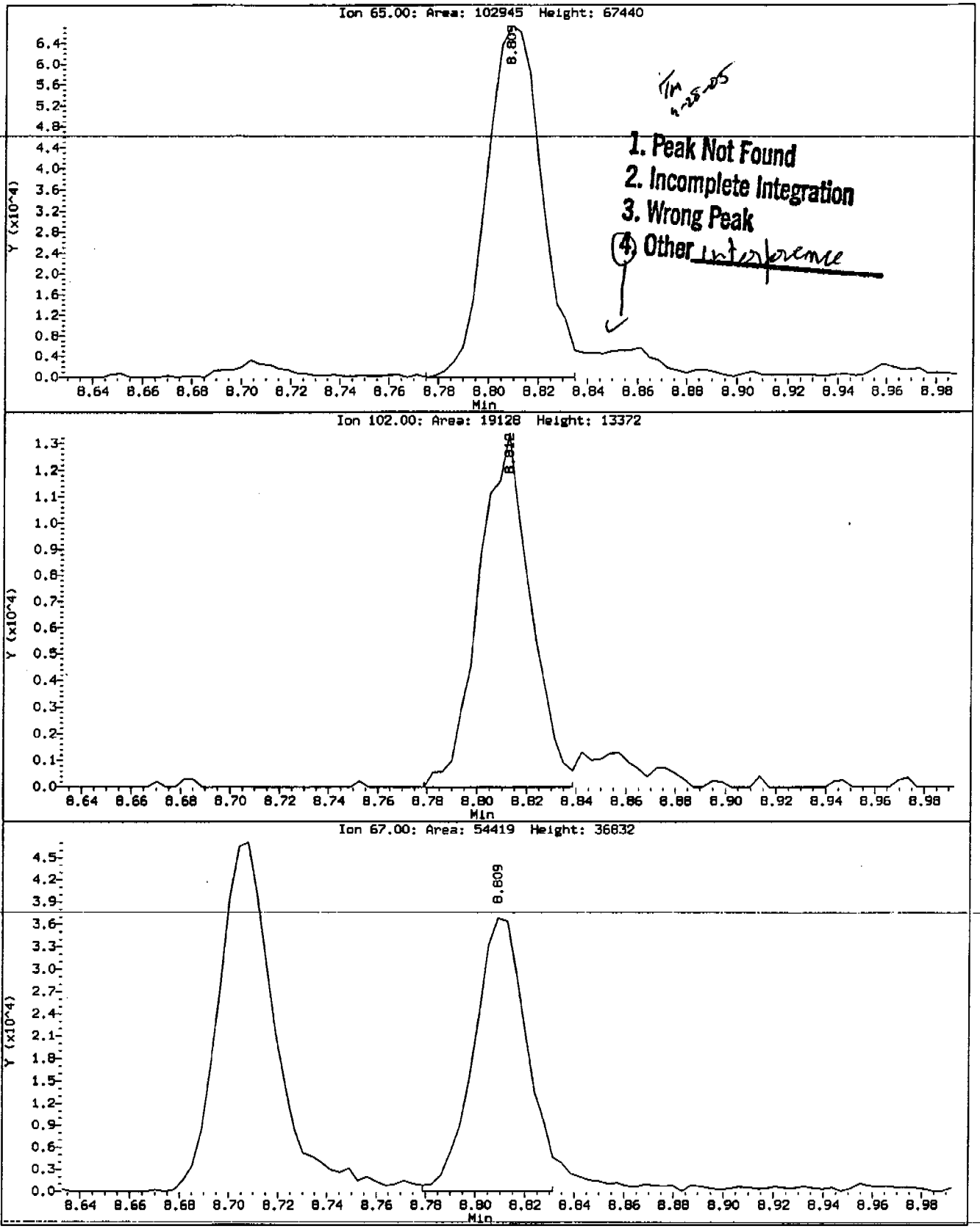


TH 4-28-05

1. Peak Not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

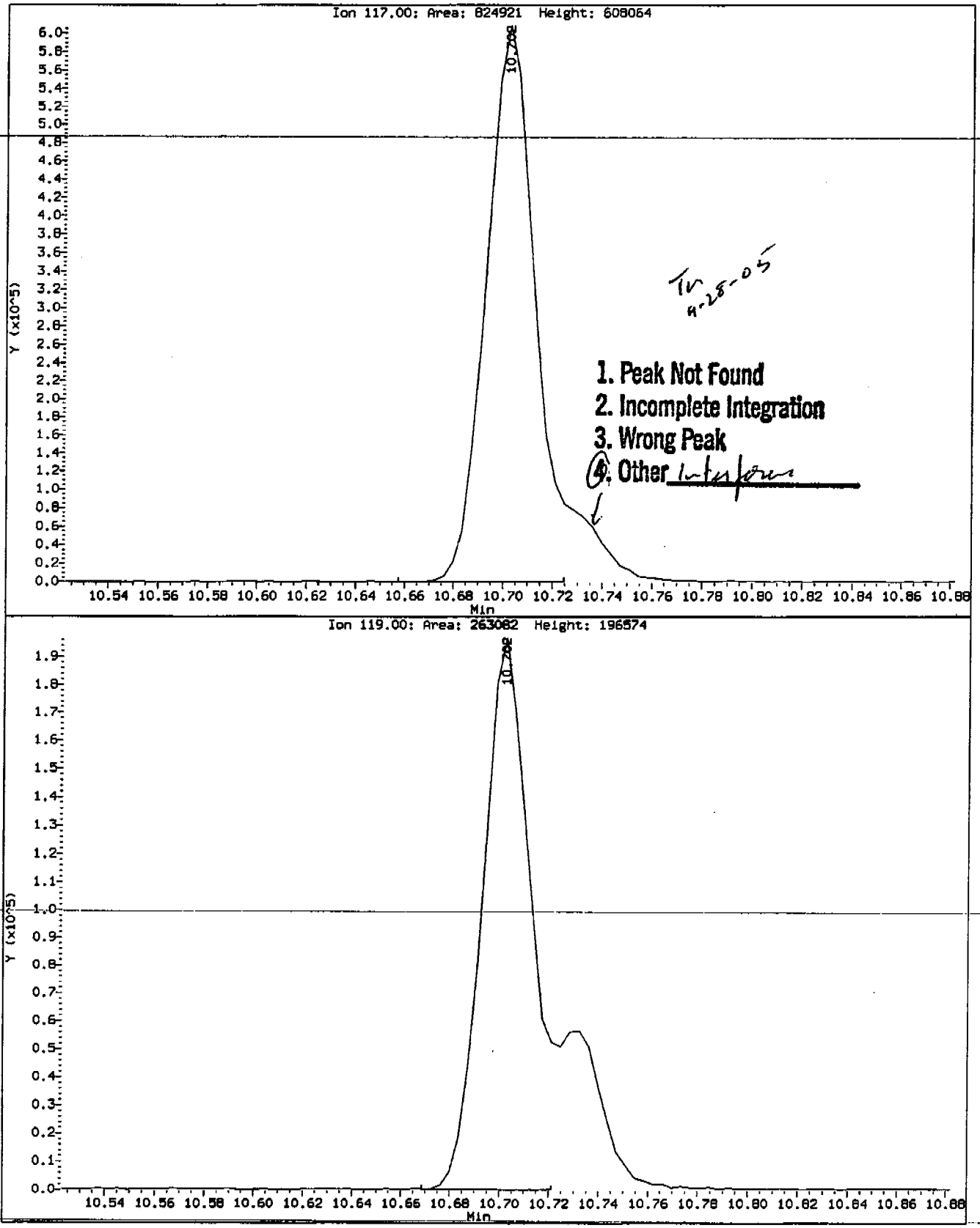
Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0323.D
Injection Date: 25-APR-2005 11:27
Instrument: MSL.i
Client Sample ID:

Compound: 1,2-Dichloroethane-d4
CAS Number: 17060-07-0



Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0323.D
Injection Date: 25-APR-2005 11:27
Instrument: MSL.i
Client Sample ID:

Compound: Chlorobenzene-d5
CAS Number: 3114-55-4



TV 4-28-05

1. Peak Not Found
2. Incomplete Integration
3. Wrong Peak
4. Other Interference

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0324.D
Report Date: 28-Apr-2005 13:23

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSL.i\L050425A.b\LCAL0324.D
Lab Smp Id: VSTD010
Inj Date : 25-APR-2005 11:51
Operator : MN/TM Inst ID: MSL.i
Smp Info : VSTD010
Misc Info : VBLK115A;
Comment : NONE
Method : \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Meth Date : 28-Apr-2005 13:23 mahmoodt Quant Type: ISTD
Cal Date : 25-APR-2005 11:51 Cal File: LCAL0324.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLVOA02

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	25.000	DefSampleVolume
Vo	25.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	1 Dichlorodifluoromethane	85	3.524	3.524	(0.393)	665310	10.0000	9.794
	2 Chloromethane	50	3.958	3.958	(0.442)	609630	10.0000	9.287
	3 Vinyl Chloride	62	4.130	4.130	(0.461)	694455	10.0000	9.862
	4 Bromomethane	94	4.778	4.778	(0.533)	374048	10.0000	11.87
	5 Chloroethane	64	4.998	4.998	(0.558)	477956	10.0000	10.11
	6 Trichlorofluoromethane	101	5.234	5.234	(0.584)	924367	10.0000	9.901
	7 Diethyl ether	59	5.747	5.747	(0.641)	448644	20.0000	19.36
	8 1,1,2-Trichlorofluoroethane	101	6.091	6.091	(0.679)	585748	10.0000	9.932
	9 1,1-Dichloroethene	96	6.121	6.121	(0.683)	604358	10.0000	9.859
	10 Carbon Disulfide	76	6.290	6.290	(0.702)	1991412	10.0000	8.901
	11 Iodomethane	142	6.409	6.409	(0.715)	309964	10.0000	8.076
	12 Acrolein	56	6.570	6.570	(0.733)	61062	50.0000	43.19
	13 Allyl chloride	39	6.754	6.754	(0.753)	285527	10.0000	10.25
	14 Methylene Chloride	84	6.888	6.888	(0.768)	394795	10.0000	9.742
	15 Acetone	43	6.888	6.888	(0.768)	34198	10.0000	8.915
	16 Methyl Acetate	74	7.023	7.023	(0.783)	17572	10.0000	8.787
	17 n-Hexane	57	7.060	7.060	(0.788)	878177	10.0000	10.77
	18 trans-1,2-Dichloroethene	96	7.068	7.068	(0.788)	515697	10.0000	9.776
	19 MTBE	73	7.102	7.102	(0.792)	546427	10.0000	9.384
M	20 1,2-Dichloroethene (total)	96				982305	20.0000	19.43
	21 Acetonitrile	41	7.397	7.397	(0.825)	55598	50.0000	43.09
	22 2-Chloro-1,3-butadiene	53	7.622	7.622	(0.850)	556166	10.0000	10.14

TM 4-28-05

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0324.D
Report Date: 28-Apr-2005 13:23

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	23 1,1-Dichloroethane	63	7.648	7.648	(0.853)	864336	10.0000	9.707
	24 Acrylonitrile	53	7.674	7.674	(0.856)	242898	50.0000	52.82
	25 Vinyl acetate	43	7.801	7.801	(0.870)	221902	10.0000	9.673
	26 cis-1,2-Dichloroethene	96	8.097	8.097	(0.903)	466608	10.0000	9.651
	27 2,2-Dichloropropane	77	8.164	8.164	(0.911)	739198	10.0000	9.574
	28 Cyclohexane	84	8.254	8.254	(0.921)	484755	10.0000	10.18
	29 Chloroform	83	8.280	8.280	(0.924)	796877	10.0000	9.578
	30 Bromochloromethane	128	8.284	8.284	(0.924)	110382	10.0000	9.744
	31 Ethyl acetate	43	8.307	8.307	(0.927)	222266	20.0000	19.77
	32 Tetrahydrofuran	71	8.423	8.423	(0.939)	69100	50.0000	44.81
	33 Carbon Tetrachloride	117	8.426	8.426	(0.940)	650746	10.0000	9.726
$	34 Dibromofluoromethane	113	8.426	8.426	(0.940)	292861	10.0000	9.911
	35 1,1,1-Trichloroethane	97	8.453	8.453	(0.943)	770942	10.0000	9.633
	36 2-Butanone	43	8.464	8.464	(0.944)	51637	10.0000	9.263(H)
	37 1,1-Dichloropropene	75	8.531	8.531	(0.952)	703107	10.0000	9.665
	38 Propionitrile	54	8.696	8.696	(0.970)	76733	50.0000	48.14
	39 Methacrylonitrile	41	8.703	8.703	(0.971)	410224	50.0000	50.32
	40 Isobutanol	42	8.423	8.423	(0.939)	149568	200.000	195.0(H)
	41 Benzene	78	8.722	8.722	(0.973)	2013006	10.0000	9.676
$	42 1,2-Dichloroethane-d4	65	8.808	8.808	(0.982)	269756	10.0000	10.11
	43 1,2-Dichloroethane	62	8.853	8.853	(0.987)	344794	10.0000	9.754
*	44 Fluorobenzene	96	8.965	8.965	(1.000)	1508429	10.0000	
	45 Methylcyclohexane	55	9.059	9.059	(1.010)	496568	10.0000	10.08
	46 Trichloroethene	130	9.081	9.081	(1.013)	449920	10.0000	9.575
	47 n-Butanol	56	9.152	9.152	(1.021)	36415	100.000	95.62
	48 Dibromomethane	93	9.384	9.384	(1.047)	113947	10.0000	9.514
	49 1,2-Dichloropropane	63	9.396	9.396	(1.048)	364802	10.0000	9.421
	50 Bromodichloromethane	83	9.433	9.433	(1.052)	466875	10.0000	9.935
	51 Methyl methacrylate	69	9.437	9.437	(1.053)	103887	10.0000	9.380
	52 1,4-Dioxane	88	9.534	9.534	(1.063)	26559	200.000	195.0
	53 2-chloroethyl vinyl ether	63	9.687	9.687	(1.081)	5045	10.0000	4.402
	54 cis-1,3-Dichloropropene	75	9.770	9.770	(1.090)	488656	10.0000	9.476
$	55 Toluene-d8	98	9.867	9.867	(1.101)	1460682	10.0000	10.01
	56 Toluene	91	9.901	9.901	(0.925)	2073983	10.0000	9.339
	57 2-Nitro-Propane	43	9.998	9.998	(1.115)	57090	10.0000	9.333
	58 4-Methyl-2-pentanone	43	10.021	10.021	(1.118)	118733	10.0000	9.795
	59 trans-1,3-Dichloropropene	75	10.099	10.099	(0.944)	340036	10.0000	9.304
	60 Ethyl methacrylate	69	10.099	10.099	(0.944)	230508	10.0000	9.806
	61 Tetrachloroethene	164	10.122	10.122	(0.946)	470972	10.0000	9.800
	62 1,1,2-Trichloroethane	97	10.200	10.200	(0.953)	167088	10.0000	9.369
M	63 Xylenes (total)	106				2623392	30.0000	28.76
	64 Chlorodibromomethane	129	10.339	10.339	(0.966)	164590	10.0000	9.461
	65 1,3-Dichloropropane	76	10.346	10.346	(0.967)	328887	10.0000	9.307
	66 2-Hexanone	43	10.440	10.440	(0.976)	69069	10.0000	9.904
	67 1,2-Dibromoethane	107	10.488	10.488	(0.980)	136927	10.0000	9.492
	68 Ethylbenzene	106	10.675	10.675	(0.998)	669275	10.0000	9.450
*	69 Chlorobenzene-d5	117	10.702	10.702	(1.000)	892585	10.0000	(M)
	70 Chlorobenzene	112	10.713	10.713	(1.001)	1068316	10.0000	9.064
	71 1,1,1,2-Tetrachloroethane	131	10.732	10.732	(1.003)	299936	10.0000	9.583
	72 m,p-Xylenes	106	10.735	10.735	(1.003)	1855904	20.0000	19.16
	73 o-Xylene	106	10.975	10.975	(1.026)	767488	10.0000	9.591
	74 Styrene	104	11.001	11.001	(1.028)	1157848	10.0000	9.632
	75 Bromoform	173	11.121	11.121	(0.928)	69342	10.0000	9.932
	76 Isopropylbenzene	105	11.117	11.117	(0.928)	2041700	10.0000	9.649

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0324.D
Report Date: 28-Apr-2005 13:23

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	77	4-Bromofluorobenzene	95	11.327	11.327	(0.945)	488291	10.0000	9.731
	78	n-Propylbenzene	91	11.334	11.334	(0.946)	2906076	10.0000	9.635
	79	1,1,2,2-Tetrachloroethane	83	11.379	11.379	(0.949)	164113	10.0000	9.263
	80	1,3,5-Trimethylbenzene	105	11.409	11.409	(0.952)	1915670	10.0000	9.678
	81	Bromobenzene	156	11.424	11.424	(0.953)	299147	10.0000	9.706
	82	trans-1,4-dichloro-2-butene	53	11.476	11.476	(0.958)	51277	10.0000	9.940
	83	2-Chlorotoluene	91	11.484	11.484	(0.958)	1569107	10.0000	9.645
	84	4-Chlorotoluene	91	11.562	11.562	(0.965)	1513755	10.0000	9.677
	85	t-Butylbenzene	119	11.615	11.615	(0.969)	1758414	10.0000	9.829
	86	1,2,4-Trimethylbenzene	105	11.648	11.648	(0.972)	1867264	10.0000	9.719
	87	Pentachloroethane	167	11.705	11.705	(0.977)	50764	10.0000	8.196
	88	sec-Butylbenzene	105	11.716	11.716	(0.978)	2544578	10.0000	9.801
	89	4-Isopropyltoluene	119	11.772	11.772	(0.982)	1902636	10.0000	9.840
	90	Cyclohexanone	55	11.940	11.940	(1.116)	32707	10.0000	9.814
	91	1,3-Dichlorobenzene	146	11.944	11.944	(0.997)	696906	10.0000	9.670
*	92	1,4 Dichlorobenzene-d4	152	11.985	11.985	(1.000)	346814	10.0000	
	93	1,4-Dichlorobenzene	146	11.996	11.996	(1.001)	677964	10.0000	9.260
	94	n-Butylbenzene	91	12.041	12.041	(1.005)	2048616	10.0000	9.627
	95	1,2,3-Trichloropropane	110	12.292	12.292	(1.026)	20305	10.0000	9.487
	96	1,2-Dichlorobenzene	146	12.292	12.292	(1.026)	533228	10.0000	9.651
	97	1,2-Dibromo-3-chloropropane	157	12.891	12.891	(1.076)	19330	10.0000	9.378
	98	Hexachlorobutadiene	225	13.344	13.344	(1.113)	194171	10.0000	9.610
	99	1,2,4-Trichlorobenzene	180	13.471	13.471	(1.124)	318639	10.0000	9.447
	100	Naphthalene	128	13.830	13.830	(1.154)	450848	10.0000	9.479
	101	1,2,3-Trichlorobenzene	180	14.028	14.028	(1.170)	233394	10.0000	9.294

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0324.D
Report Date: 28-Apr-2005 13:23

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

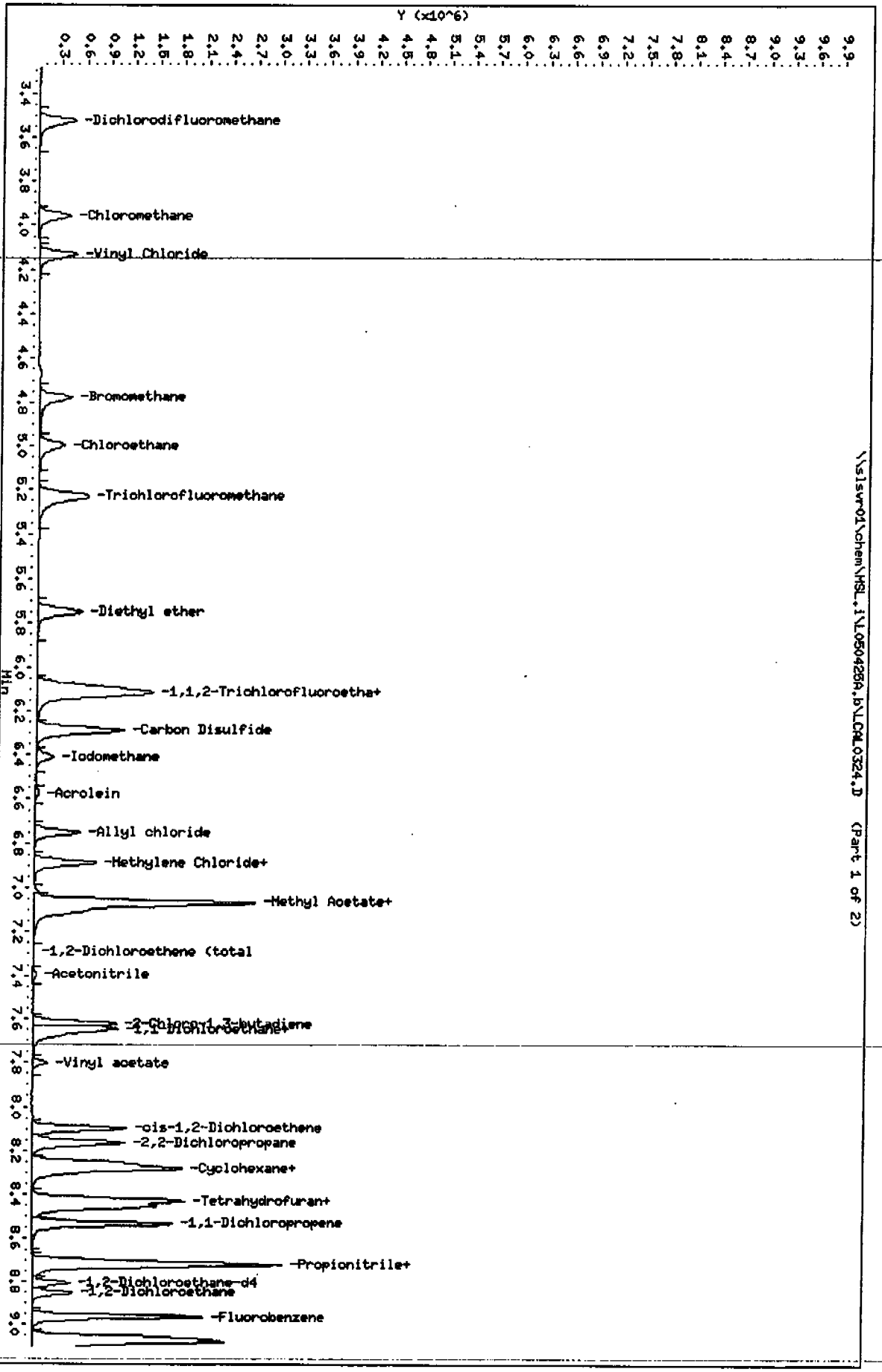
Instrument ID: MSL.i
Lab File ID: LCAL0324.D
Lab Smp Id: VSTD010
Analysis Type: VOA
Quant Type: ISTD
Operator: MN/TM
Method File: \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Misc Info: VBLK115A;

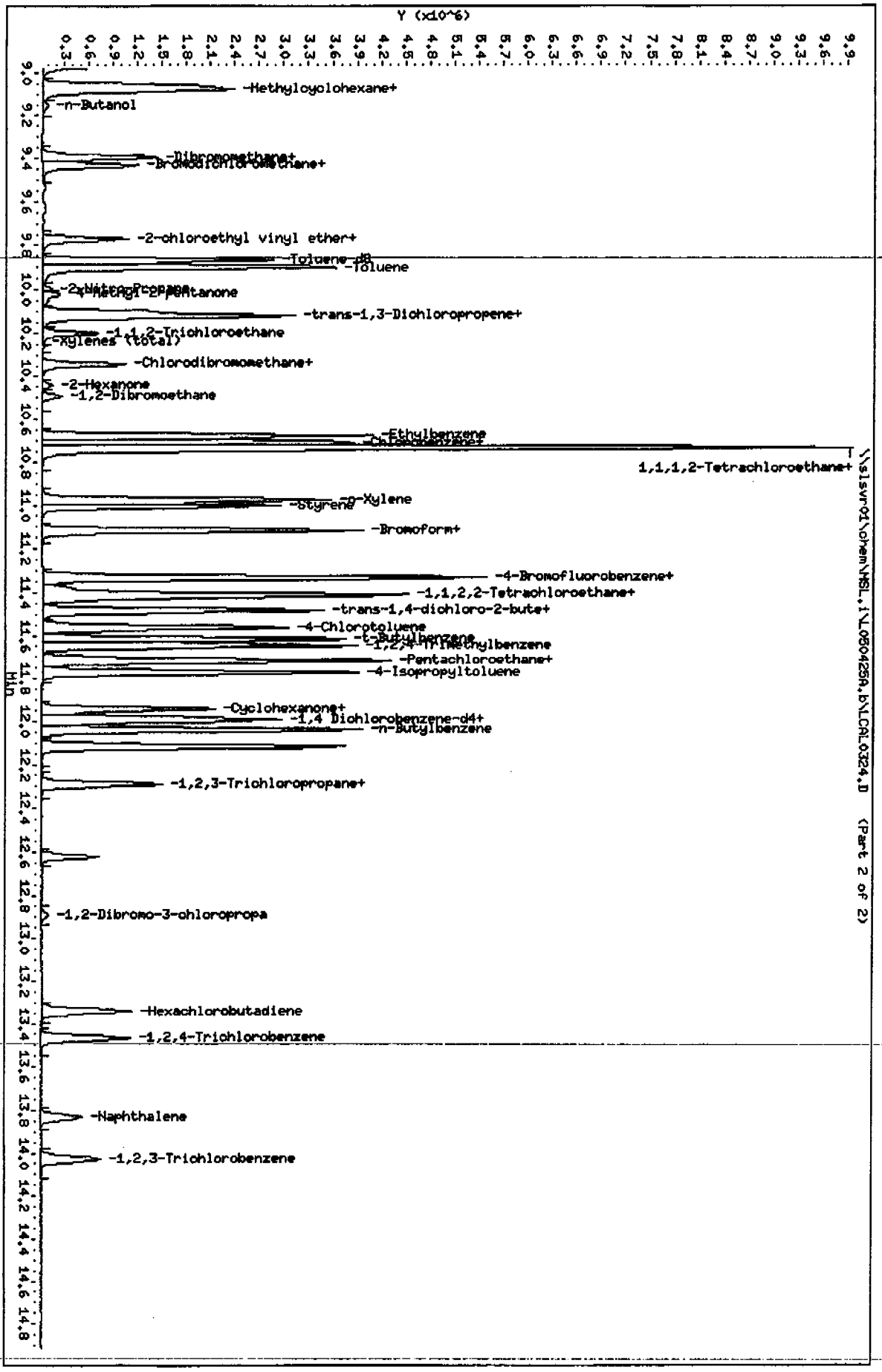
Calibration Date: 25-APR-2005
Calibration Time: 11:51
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
44 Fluorobenzene	1508429	754215	3016858	1508429	0.00
69 Chlorobenzene-d5	892585	446293	1785170	892585	0.00
92 1,4 Dichlorobenze	346814	173407	693628	346814	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
44 Fluorobenzene	8.97	8.47	9.47	8.97	0.00
69 Chlorobenzene-d5	10.70	10.20	11.20	10.70	0.00
92 1,4 Dichlorobenze	11.99	11.49	12.49	11.99	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^6)
Min
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-Diethyl ether
-1,1,2-Trichlorofluoroetha+
-Carbon Disulfide
-Iodomethane
-Acrolein
-Allyl chloride
-Methylene Chloride+
-Methyl Acetate+
-1,2-Dichloroethene (total
-Acetonitrile
-2-Chloro-1,3-butadiene
-1,1-Dichloroethane+
-Vinyl acetate
-cis-1,2-Dichloroethene
-2,2-Dichloropropane
-Cyclohexane+
-Tetrahydrofuran+
-1,1-Dichloropropene
-Propionitrile+
-1,2-Dichloroethane-d4
-1,2-Dichloroethane
-Fluorobenzene
Data File: \\slsvr01\chem\HSL.i\L0504258.b\LCAL0324.D
Date : 25-APR-2005 11:51
Client ID:
Sample Info: VSTD010
Purge Volume: 25.0
Column phase: RTX-502.2
Instrument: HSL.i
Operator: MN/TH
Column diameter: 0.25
\\slsvr01\chem\HSL.i\L0504258.b\LCAL0324.D (Part 1 of 2)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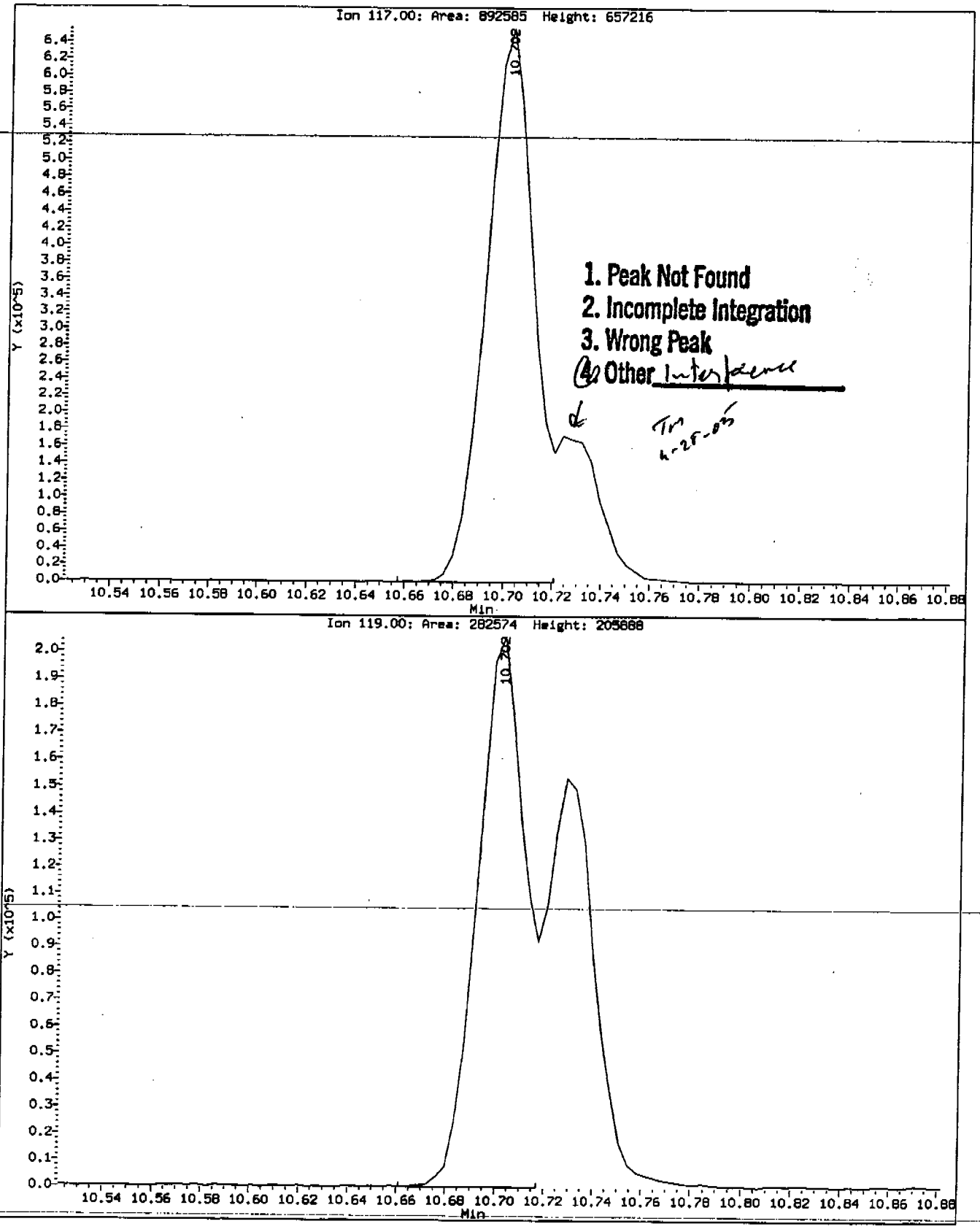
Data File: \\slsvr01\chem\MSL.i\L050428A.b\LCAL0324.D
Date : 25-APR-2005 11:51
Client ID:
Sample Info: VSTD010
Purge Volume: 25.0
Column phase: RTX-502.2
Instrument: MSL.i
Operator: MN/TH
Column diameter: 0.25
\\slsvr01\chem\MSL.i\L050428A.b\LCAL0324.D (Part 2 of 2)
Methylcyclohexane+
n-Butanol
Dibromomethane+
Bromodichloromethane+
2-chloroethyl vinyl ether+
Toluene-d8
Toluene
trans-1,3-Dichloropropene+
1,1,2-Trichloroethane
Xylenes (total)
Chlorodibromomethane+
2-Hexanone
1,2-Dibromoethane
Ethylbenzene
Chlorobenzene+
1,1,1,2-Tetrachloroethane+
m,p-Xylene
Styrene
Bromoform+
4-Bromofluorobenzene+
1,1,2,2-Tetrachloroethane+
trans-1,4-dichloro-2-bute+
4-Chlorotoluene
t-Butylbenzene
1,2,4-Trimethylbenzene
Pentachloroethane+
4-Isopropyltoluene
Cyclohexanone+
1,4 Dichlorobenzene-d4+
n-Butylbenzene
1,2,3-Trichloropropane+
1,2-Dibromo-3-chloropropa
Hexachlorobutadiene
1,2,4-Trichlorobenzene
Naphthalene
1,2,3-Trichlorobenzene
Min

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0324.D
Injection Date: 25-APR-2005 11:51
Instrument: MSL.i
Client Sample ID:

Compound: Chlorobenzene-d5
CAS Number: 3114-55-4



Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0325.D
Report Date: 28-Apr-2005 14:37

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSL.i\L050425A.b\LCAL0325.D
Lab Smp Id: VSTD030
Inj Date : 25-APR-2005 12:16
Operator : MN/TM Inst ID: MSL.i
Smp Info : VSTD030
Misc Info : VBLK115A;
Comment : NONE
Method : \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Meth Date : 28-Apr-2005 13:23 mahmoodt Quant Type: ISTD
Cal Date : 25-APR-2005 12:16 Cal File: LCAL0325.D
Als bottle: 8 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	25.000	DefSampleVolume
Vo	25.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	1 Dichlorodifluoromethane	85	3.524	3.524	(0.393)	2159694	30.0000	30.69(A)
	2 Chloromethane	50	3.951	3.951	(0.441)	2104016	30.0000	30.94(A)
	3 Vinyl Chloride	62	4.130	4.130	(0.461)	2160055	30.0000	29.61
	4 Bromomethane	94	4.778	4.778	(0.533)	892235	30.0000	28.88
	5 Chloroethane	64	4.980	4.980	(0.556)	1398292	30.0000	28.56
	6 Trichlorofluoromethane	101	5.219	5.219	(0.582)	2956196	30.0000	30.57(A)
	7 Diethyl ether	59	5.747	5.747	(0.641)	1486245	60.0000	61.92(A)
	8 1,1,2-Trichlorofluoroethane	101	6.091	6.091	(0.680)	1870577	30.0000	30.62(A)
	9 1,1-Dichloroethene	96	6.118	6.118	(0.683)	1962027	30.0000	30.90(A)
	10 Carbon Disulfide	76	6.286	6.286	(0.701)	7172855	30.0000	30.95(A)
	11 Iodomethane	142	6.406	6.406	(0.715)	1178348	30.0000	29.64
	12 Acrolein	56	6.570	6.570	(0.733)	224288	150.000	151.3(A)
	13 Allyl chloride	39	6.746	6.746	(0.753)	839910	30.0000	29.11
	14 Methylene Chloride	84	6.885	6.885	(0.768)	1244806	30.0000	30.06(A)
	15 Acetone	43	6.888	6.888	(0.769)	115280	30.0000	27.71(H)
	16 Methyl Acetate	74	7.019	7.019	(0.783)	64980	30.0000	29.96
	17 n-Hexane	57	7.061	7.061	(0.788)	2529936	30.0000	29.95
	18 trans-1,2-Dichloroethene	96	7.068	7.068	(0.789)	1757111	30.0000	32.16(A)
	19 MTBE	73	7.105	7.105	(0.793)	1865344	30.0000	29.96
M	20 1,2-Dichloroethene (total)	96				3351742	60.0000	64.00
	21 Acetonitrile	41	7.394	7.394	(0.825)	209359	150.000	151.7(A)
	22 2-Chloro-1,3-butadiene	53	7.618	7.618	(0.850)	1818461	30.0000	32.01(A)
	23 1,1-Dichloroethane	63	7.648	7.648	(0.853)	2811068	30.0000	30.48(A)

5-28-05

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0325.D
Report Date: 28-Apr-2005 14:37

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	24 Acrylonitrile	53	7.674	7.674	(0.856)	774536	150.000	162.6(A)
	25 Vinyl acetate	43	7.802	7.802	(0.871)	766383	30.0000	32.25(A)
	26 cis-1,2-Dichloroethene	96	8.097	8.097	(0.904)	1594631	30.0000	31.84(A)
	27 2,2-Dichloropropane	77	8.161	8.161	(0.911)	2384296	30.0000	29.81
	28 Cyclohexane	84	8.254	8.254	(0.921)	1599591	30.0000	32.43(A)
	29 Chloroform	83	8.281	8.281	(0.924)	2734298	30.0000	31.73(A)
	30 Bromochloromethane	128	8.281	8.281	(0.924)	378923	30.0000	32.29(A)
	31 Ethyl acetate	43	8.307	8.307	(0.927)	730202	60.0000	62.71(A)
	32 Tetrahydrofuran	71	8.419	8.419	(0.939)	248676	150.000	150.4(A)
	33 Carbon Tetrachloride	117	8.426	8.426	(0.940)	2219254	30.0000	32.02(A)
$	34 Dibromofluoromethane	113	8.426	8.426	(0.940)	1036830	30.0000	33.87(A)
	35 1,1,1-Trichloroethane	97	8.453	8.453	(0.943)	2565419	30.0000	30.94(A)
	36 2-Butanone	43	8.460	8.460	(0.944)	170251	30.0000	29.48
	37 1,1-Dichloropropene	75	8.531	8.531	(0.952)	2331022	30.0000	30.93(A)
	38 Propionitrile	54	8.692	8.692	(0.970)	254903	150.000	150.4(A)
	39 Methacrylonitrile	41	8.703	8.703	(0.971)	1402625	150.000	166.1(A)
	40 Isobutanol	42	8.419	8.419	(0.939)	519917	600.000	654.4(A)
	41 Benzene	78	8.722	8.722	(0.973)	6975278	30.0000	32.37(A)
$	42 1,2-Dichloroethane-d4	65	8.808	8.808	(0.983)	846312	30.0000	30.64(AM)
	43 1,2-Dichloroethane	62	8.853	8.853	(0.988)	1104895	30.0000	30.17(A)
*	44 Fluorobenzene	96	8.962	8.962	(1.000)	1562511	10.0000	
	45 Methylcyclohexane	55	9.059	9.059	(1.011)	1594071	30.0000	31.25(A)
	46 Trichloroethene	130	9.081	9.081	(1.013)	1566639	30.0000	32.19(A)
	47 n-Butanol	56	9.156	9.156	(1.022)	130870	300.000	331.8(A)
	48 Dibromomethane	93	9.384	9.384	(1.047)	391837	30.0000	31.58(A)
	49 1,2-Dichloropropane	63	9.396	9.396	(1.048)	1219209	30.0000	30.40(A)
	50 Bromodichloromethane	83	9.433	9.433	(1.053)	1569240	30.0000	32.24(A)
	51 Methyl methacrylate	69	9.433	9.433	(1.053)	357128	30.0000	29.92
	52 1,4-Dioxane	88	9.534	9.534	(1.064)	89729	600.000	607.4(A)
	53 2-chloroethyl vinyl ether	63	9.691	9.691	(1.081)	50845	30.0000	42.83(AH)
	54 cis-1,3-Dichloropropene	75	9.770	9.770	(1.090)	1662371	30.0000	31.12(A)
$	55 Toluene-d8	98	9.867	9.867	(1.101)	5188893	30.0000	34.32(A)
	56 Toluene	91	9.901	9.901	(0.925)	7429388	30.0000	28.21
	57 2-Nitro-Propane	43	9.994	9.994	(1.115)	199647	30.0000	30.06(A)
	58 4-Methyl-2-pentanone	43	10.021	10.021	(1.118)	392307	30.0000	31.24(A)
	59 trans-1,3-Dichloropropene	75	10.099	10.099	(0.944)	1189260	30.0000	27.44
	60 Ethyl methacrylate	69	10.099	10.099	(0.944)	863067	30.0000	30.96(A)
	61 Tetrachloroethene	164	10.122	10.122	(0.946)	1711994	30.0000	30.04(A)
	62 1,1,2-Trichloroethane	97	10.200	10.200	(0.953)	565795	30.0000	26.75
M	63 Xylenes (total)	106				10482171	90.0000	96.50
	64 Chlorodibromomethane	129	10.339	10.339	(0.966)	600733	30.0000	29.12
	65 1,3-Dichloropropane	76	10.346	10.346	(0.967)	1107777	30.0000	26.43
	66 2-Hexanone	43	10.440	10.440	(0.976)	235676	30.0000	29.34
	67 1,2-Dibromoethane	107	10.492	10.492	(0.980)	469393	30.0000	27.44
	68 Ethylbenzene	106	10.676	10.676	(0.998)	2534591	30.0000	30.18(A)
*	69 Chlorobenzene-d5	117	10.702	10.702	(1.000)	1058509	10.0000	
	70 Chlorobenzene	112	10.713	10.713	(1.001)	4009403	30.0000	28.68
	71 1,1,1,2-Tetrachloroethane	131	10.732	10.732	(1.003)	1178908	30.0000	31.76(A)
	72 m,p-Xylenes	106	10.735	10.735	(1.003)	7627239	60.0000	66.42(A)
	73 o-Xylene	106	10.975	10.975	(1.026)	2854932	30.0000	30.08(A)
	74 Styrene	104	11.005	11.005	(1.028)	4369364	30.0000	30.65(A)
	75 Bromoform	173	11.121	11.121	(0.928)	267370	30.0000	32.84(A)
	76 Isopropylbenzene	105	11.117	11.117	(0.928)	7677256	30.0000	31.12(A)
$	77 4-Bromofluorobenzene	95	11.327	11.327	(0.945)	1823448	30.0000	31.17(A)

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0325.D
Report Date: 28-Apr-2005 14:37

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
78	n-Propylbenzene	91	11.334	11.334	(0.946)	10863190	30.0000	30.89(A)
79	1,1,2,2-Tetrachloroethane	83	11.383	11.383	(0.950)	561852	30.0000	27.20
80	1,3,5-Trimethylbenzene	105	11.409	11.409	(0.952)	7282425	30.0000	31.55(A)
81	Bromobenzene	156	11.424	11.424	(0.953)	1105974	30.0000	30.78(A)
82	trans-1,4-dichloro-2-butene	53	11.476	11.476	(0.958)	178769	30.0000	29.69
83	2-Chlorotoluene	91	11.484	11.484	(0.958)	5674201	30.0000	29.91
84	4-Chlorotoluene	91	11.566	11.566	(0.965)	5470729	30.0000	29.99
85	t-Butylbenzene	119	11.619	11.619	(0.969)	6507091	30.0000	31.20(A)
86	1,2,4-Trimethylbenzene	105	11.649	11.649	(0.972)	6926047	30.0000	30.92(A)
87	Pentachloroethane	167	11.708	11.708	(0.977)	223118	30.0000	30.90(A)
88	sec-Butylbenzene	105	11.716	11.716	(0.978)	9456038	30.0000	31.24(A)
89	4-Isopropyltoluene	119	11.772	11.772	(0.982)	7080117	30.0000	31.40(A)
90	Cyclohexanone	55	11.997	11.997	(1.121)	104495	30.0000	29.53
91	1,3-Dichlorobenzene	146	11.944	11.944	(0.997)	2528068	30.0000	30.08(A)
* 92	1,4 Dichlorobenzene-d4	152	11.985	11.985	(1.000)	404374	10.0000	
93	1,4-Dichlorobenzene	146	12.000	12.000	(1.001)	2476875	30.0000	29.01
94	n-Butylbenzene	91	12.041	12.041	(1.005)	7297502	30.0000	29.41
95	1,2,3-Trichloropropane	110	12.292	12.292	(1.026)	72424	30.0000	29.49
96	1,2-Dichlorobenzene	146	12.292	12.292	(1.026)	1900484	30.0000	29.50
97	1,2-Dibromo-3-chloropropane	157	12.895	12.895	(1.076)	69258	30.0000	28.82
98	Hexachlorobutadiene	225	13.344	13.344	(1.113)	690371	30.0000	29.31
99	1,2,4-Trichlorobenzene	180	13.467	13.467	(1.124)	1135214	30.0000	28.86
100	Naphthalene	128	13.834	13.834	(1.154)	1615505	30.0000	29.13
101	1,2,3-Trichlorobenzene	180	14.029	14.029	(1.170)	838696	30.0000	28.64

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0325.D
Report Date: 28-Apr-2005 14:37

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

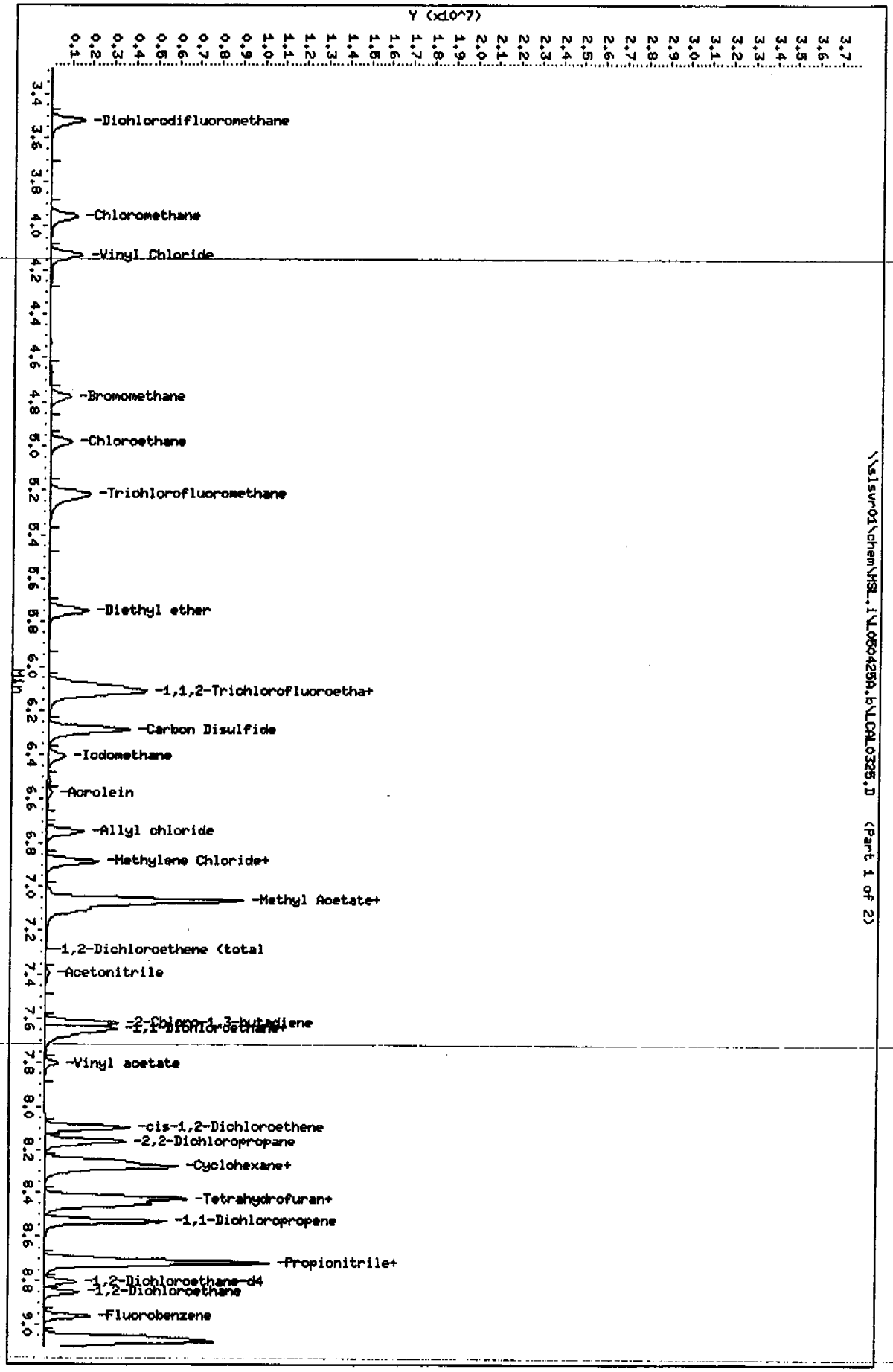
Instrument ID: MSL.i
Lab File ID: LCAL0325.D
Lab Smp Id: VSTD030
Analysis Type: VOA
Quant Type: ISTD
Operator: MN/TM
Method File: \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Misc Info: VBLK115A;

Calibration Date: 25-APR-2005
Calibration Time: 11:51
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
44 Fluorobenzene	1508429	754215	3016858	1562511	3.59
69 Chlorobenzene-d5	892585	446293	1785170	1058509	18.59
92 1,4 Dichlorobenze	346814	173407	693628	404374	16.60

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
44 Fluorobenzene	8.97	8.47	9.47	8.96	-0.04
69 Chlorobenzene-d5	10.70	10.20	11.20	10.70	0.00
92 1,4 Dichlorobenze	11.99	11.49	12.49	11.99	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.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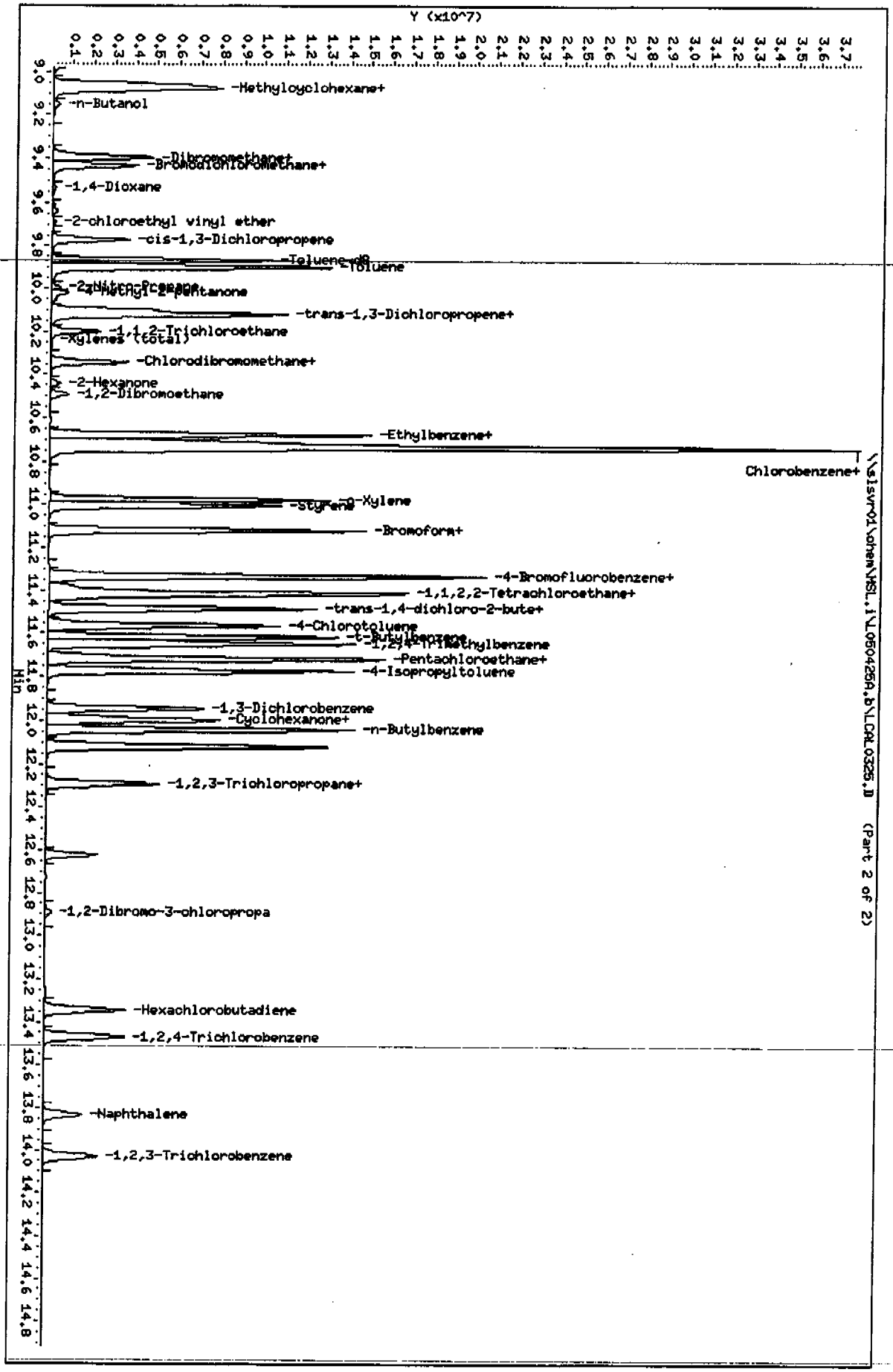
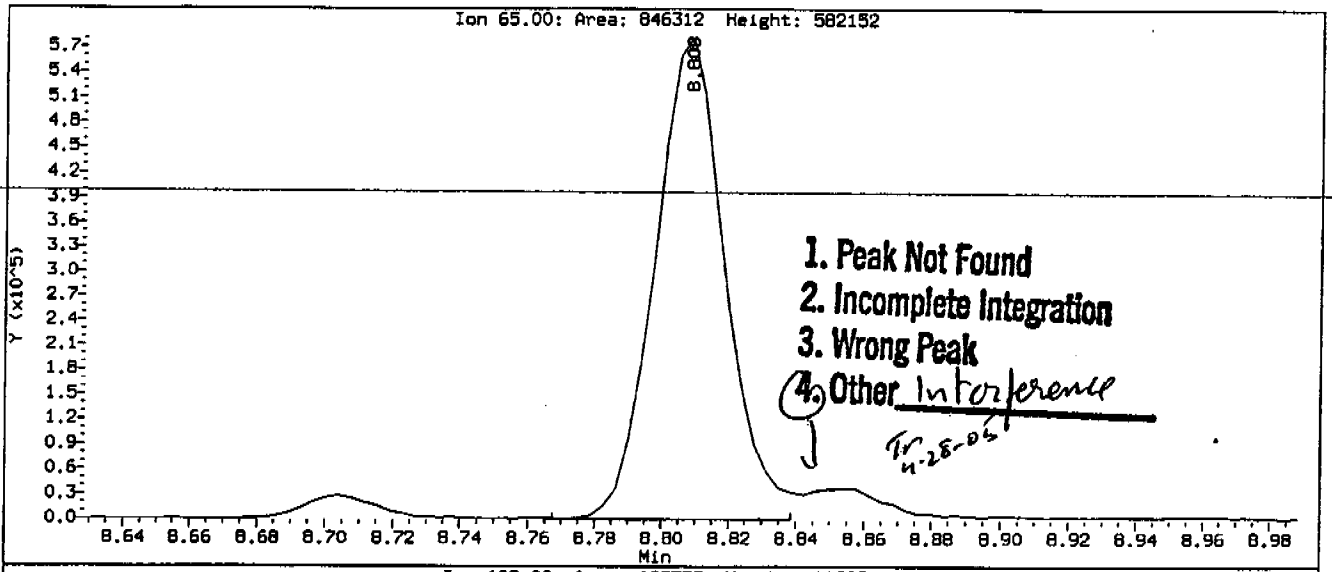
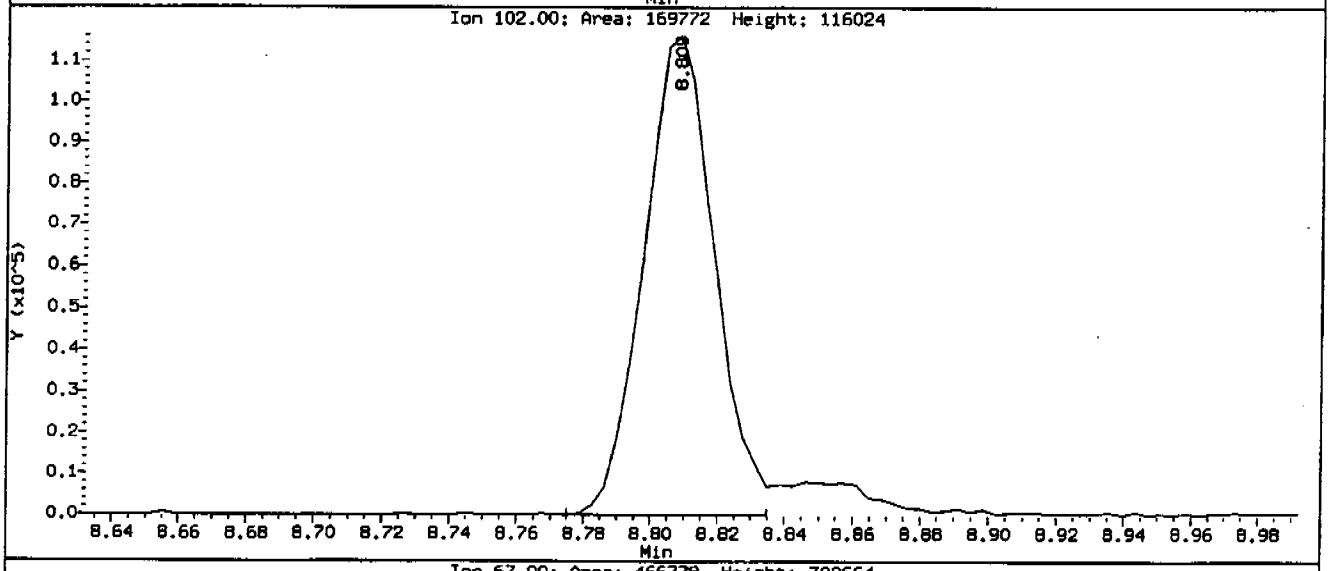
Data File: \\slsvr01\chem\MSL.i\L0504280.b\LCAL0328.D
Date : 25-APR-2005 12:16
Client ID:
Sample Info: VSTD030
Purge Volume: 25.0
Column phase: RTX-502.2
Instrument: MSL.i
Operator: MN/TH
Column diameter: 0.25
\\slsvr01\chem\MSL.i\L0504280.b\LCAL0328.D (Part 1 of 2)
Min
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-Diethyl ether
-1,1,2-Trichlorofluoroetha+
-Carbon Disulfide
-Iodomethane
-Acrolein
-Allyl chloride
-Methylene Chloride+
-Methyl Acetate+
-1,2-Dichloroethene (total
-Acetonitrile
-2-Chloro-1,3-butadiene
-1,1-Dichloroethane+
-Vinyl acetate
-cis-1,2-Dichloroethene
-2,2-Dichloropropane
-Cyclohexane+
-Tetrahydrofuran+
-1,1-Dichloropropene
-Propionitrile+
-1,2-Dichloroethane-d4
-1,2-Dichloroethane
-Fluorobenzene

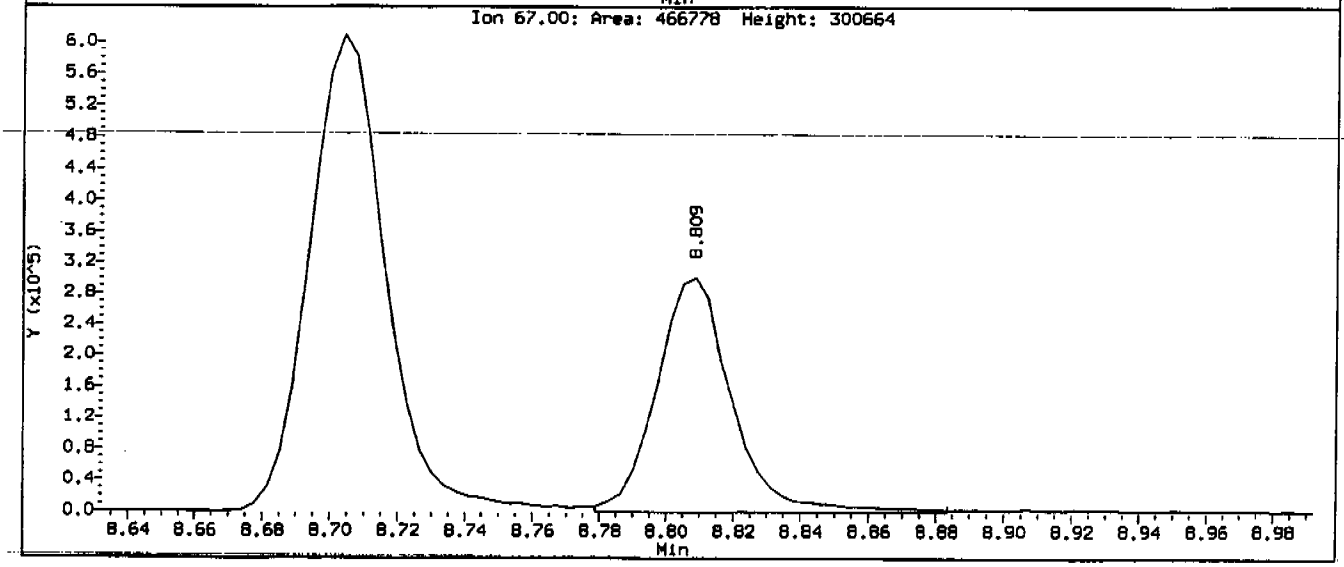

Y (x10^7)
Data File: \\slsvr01\ohem\HSL.i\L050426A.b\LCAL0325.D
Date : 25-APR-2005 12:16
Client ID:
Sample Info: VSTD030
Purge Volume: 25.0
Column phase: RTX-502.2
Instrument: HSL.i
Operator: MW/TM
Column diameter: 0.25
\\slsvr01\ohem\HSL.i\L050425A.b\LCAL0325.D (Part 2 of 2)
Hin
-Methylcyclohexane+
-n-Butanol
-Dibromomethane+
-Bromodichloromethane+
-1,4-Dioxane
-2-chloroethyl vinyl ether
-cis-1,3-Dichloropropene
-Toluene-d8
-Toluene
-2-Nitropropane
-4-Methyl-2-pentanone
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane
-Xylenes (total)
-Chlorodibromomethane+
-2-Hexanone
-1,2-Dibromoethane
-Ethylbenzene+
Chlorobenzene+
-Styrene
-o-Xylene
-Bromoform+
-4-Bromofluorobenzene+
-1,1,2,2-Tetrachloroethane+
-trans-1,4-dichloro-2-bute+
-4-Chlorotoluene
-t-Butylbenzene
-1,2,4-Trimethylbenzene
-Pentachloroethane+
-4-Isopropyltoluene
-1,3-Dichlorobenzene
-Cyclohexanone+
-n-Butylbenzene
-1,2,3-Trichloropropane+
-1,2-Dibromo-3-chloropropa
-Hexachlorobutadiene
-1,2,4-Trichlorobenzene
-Naphthalene
-1,2,3-Trichlorobenzene

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0325.D
Injection Date: 25-APR-2005 12:16
Instrument: MSL.i
Client Sample ID:

Compound: 1,2-Dichloroethane-d4
CAS Number: 17060-07-0







Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0326.D
Report Date: 25-Apr-2005 18:01

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GC/MS VOLATILES

Data file : \\slsvr01\chem\MSL.i\L050425A.b\LCAL0326.D
Lab Smp Id: VSTD020
Inj Date : 25-APR-2005 12:39
Operator : MN/TM Inst ID: MSL.i
Smp Info : VSTD020
Misc Info : VBLK115A;
Comment : NONE
Method : \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Meth Date : 25-Apr-2005 18:00 mahmoodt Quant Type: ISTD
Cal Date : 25-APR-2005 12:39 Cal File: LCAL0326.D
Als bottle: 9 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLVOA02

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	25.000	DefSampleVolume
Vo	25.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	3.528	3.528	(0.394)	1457800	20.0000	20.56
2	Chloromethane	50	3.958	3.958	(0.442)	1385321	20.0000	20.21
3	Vinyl Chloride	62	4.134	4.134	(0.461)	1481022	20.0000	20.14
4	Bromomethane	94	4.778	4.778	(0.533)	645988	20.0000	20.41
5	Chloroethane	64	4.991	4.991	(0.557)	951984	20.0000	19.29
6	Trichlorofluoromethane	101	5.227	5.227	(0.583)	2006644	20.0000	20.59
7	Diethyl ether	59	5.751	5.751	(0.642)	987649	40.0000	40.83
8	1,1,2-Trichlorofluoroethane	101	6.091	6.091	(0.680)	1250300	20.0000	20.31
9	1,1-Dichloroethene	96	6.121	6.121	(0.683)	1329852	20.0000	20.78
10	Carbon Disulfide	76	6.290	6.290	(0.702)	4769607	20.0000	20.42
11	Iodomethane	142	6.409	6.409	(0.715)	995559	20.0000	24.84
12	Acrolein	56	6.574	6.574	(0.734)	150025	100.000	100.7
13	Allyl chloride	39	6.750	6.750	(0.753)	573178	20.0000	19.71
14	Methylene Chloride	84	6.888	6.888	(0.769)	839146	20.0000	20.04
15	Acetone	43	6.888	6.888	(0.769)	77875	20.0000	20.06
16	Methyl Acetate	74	7.019	7.019	(0.783)	44485	20.0000	20.52
17	n-Hexane	57	7.064	7.064	(0.788)	1667494	20.0000	19.59
18	trans-1,2-Dichloroethene	96	7.068	7.068	(0.789)	1146159	20.0000	20.81
19	MTBE	73	7.102	7.102	(0.792)	1270046	20.0000	20.37
M 20	1,2-Dichloroethene (total)	96				2198930	40.0000	41.67
21	Acetonitrile	41	7.397	7.397	(0.825)	138050	100.000	99.90
22	2-Chloro-1,3-butadiene	53	7.618	7.618	(0.850)	1193060	20.0000	20.84

4-25-05

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	7.648	7.648	(0.853)	1840969	20.0000	19.80
	24 Acrylonitrile	53	7.678	7.678	(0.857)	524239	100.000	109.2
	25 Vinyl acetate	43	7.802	7.802	(0.871)	460552	20.0000	19.23
	26 cis-1,2-Dichloroethene	96	8.097	8.097	(0.904)	1052771	20.0000	20.86
	27 2,2-Dichloropropane	77	8.161	8.161	(0.911)	1547745	20.0000	19.20
	28 Cyclohexane	84	8.258	8.258	(0.921)	1054904	20.0000	21.22
	29 Chloroform	83	8.281	8.281	(0.924)	1777725	20.0000	20.46
	30 Bromochloromethane	128	8.281	8.281	(0.924)	254669	20.0000	21.53
	31 Ethyl acetate	43	8.307	8.307	(0.927)	480890	40.0000	40.97
	32 Tetrahydrofuran	71	8.423	8.423	(0.940)	168349	100.000	101.7
	33 Carbon Tetrachloride	117	8.426	8.426	(0.940)	1468618	20.0000	21.02
$	34 Dibromofluoromethane	113	8.430	8.430	(0.941)	635249	20.0000	20.59
	35 1,1,1-Trichloroethane	97	8.453	8.453	(0.943)	1699336	20.0000	20.34
	36 2-Butanone	43	8.468	8.468	(0.945)	117965	20.0000	20.02
	37 1,1-Dichloropropene	75	8.531	8.531	(0.952)	1553132	20.0000	20.45
	38 Propionitrile	54	8.696	8.696	(0.970)	170666	100.000	100.5
	39 Methacrylonitrile	41	8.703	8.703	(0.971)	915802	100.000	107.6
	40 Isobutanol	42	8.419	8.419	(0.939)	340255	400.000	461.9
	41 Benzene	78	8.722	8.722	(0.973)	4475502	20.0000	20.60
$	42 1,2-Dichloroethane-d4	65	8.808	8.808	(0.983)	537844	20.0000	18.26
	43 1,2-Dichloroethane	62	8.853	8.853	(0.988)	739717	20.0000	20.04
*	44 Fluorobenzene	96	8.962	8.962	(1.000)	1574881	10.0000	
	45 Methylcyclohexane	55	9.059	9.059	(1.011)	1046264	20.0000	20.35
	46 Trichloroethene	130	9.081	9.081	(1.013)	1050351	20.0000	21.41
	47 n-Butanol	56	9.152	9.152	(1.021)	85456	200.000	214.9
	48 Dibromomethane	93	9.384	9.384	(1.047)	259186	20.0000	20.73
	49 1,2-Dichloropropane	63	9.396	9.396	(1.048)	808324	20.0000	19.99
	50 Bromodichloromethane	83	9.433	9.433	(1.053)	1036330	20.0000	21.12
	51 Methyl methacrylate	69	9.433	9.433	(1.053)	244016	20.0000	20.45
	52 1,4-Dioxane	88	9.534	9.534	(1.064)	57551	400.000	391.1
	53 2-chloroethyl vinyl ether	63	9.688	9.688	(1.081)	27098	20.0000	2.539(H)
	54 cis-1,3-Dichloropropene	75	9.770	9.770	(1.090)	1103054	20.0000	20.49
$	55 Toluene-d8	98	9.867	9.867	(1.101)	3124834	20.0000	20.50
	56 Toluene	91	9.897	9.897	(0.925)	4797625	20.0000	19.70
	57 2-Nitro-Propane	43	9.994	9.994	(1.115)	134221	20.0000	20.25
	58 4-Methyl-2-pentanone	43	10.021	10.021	(1.118)	266446	20.0000	21.05
	59 trans-1,3-Dichloropropene	75	10.099	10.099	(0.944)	789886	20.0000	19.71
	60 Ethyl methacrylate	69	10.099	10.099	(0.944)	578039	20.0000	22.36
	61 Tetrachloroethene	164	10.122	10.122	(0.946)	1208216	20.0000	22.86
	62 1,1,2-Trichloroethane	97	10.200	10.200	(0.953)	386318	20.0000	19.76
M	63 Xylenes (total)	106				6497677	60.0000	64.70
	64 Chlorodibromomethane	129	10.339	10.339	(0.966)	396587	20.0000	20.77
	65 1,3-Dichloropropane	76	10.346	10.346	(0.967)	745350	20.0000	19.24
	66 2-Hexanone	43	10.440	10.440	(0.976)	162299	20.0000	21.03
	67 1,2-Dibromoethane	107	10.492	10.492	(0.980)	317704	20.0000	20.08
	68 Ethylbenzene	106	10.676	10.676	(0.998)	1618103	20.0000	20.81
*	69 Chlorobenzene-d5	117	10.702	10.702	(1.000)	1012173	10.0000	
	70 Chlorobenzene	112	10.713	10.713	(1.001)	2586022	20.0000	20.00
	71 1,1,1,2-Tetrachloroethane	131	10.732	10.732	(1.003)	746125	20.0000	21.70
	72 m,p-Xylenes	106	10.735	10.735	(1.003)	4656795	40.0000	43.75
	73 o-Xylene	106	10.975	10.975	(1.026)	1840882	20.0000	20.95
	74 Styrene	104	11.001	11.001	(1.028)	2842527	20.0000	21.53
	75 Bromoform	173	11.121	11.121	(0.928)	175164	20.0000	22.38
	76 Isopropylbenzene	105	11.117	11.117	(0.928)	4849501	20.0000	20.44

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 77	4-Bromofluorobenzene	95	11.327	11.327	(0.945)	1094117	20.0000	19.45
78	n-Propylbenzene	91	11.334	11.334	(0.946)	6914661	20.0000	20.45
79	1,1,2,2-Tetrachloroethane	83	11.379	11.379	(0.949)	373056	20.0000	18.78
80	1,3,5-Trimethylbenzene	105	11.409	11.409	(0.952)	4624316	20.0000	20.84
81	Bromobenzene	156	11.424	11.424	(0.953)	729199	20.0000	21.10
82	trans-1,4-dichloro-2-butene	53	11.476	11.476	(0.958)	118946	20.0000	20.55
83	2-Chlorotoluene	91	11.484	11.484	(0.958)	3675635	20.0000	20.15
84	4-Chlorotoluene	91	11.562	11.562	(0.965)	3553895	20.0000	20.26
85	t-Butylbenzene	119	11.615	11.615	(0.969)	4131127	20.0000	20.60
86	1,2,4-Trimethylbenzene	105	11.649	11.649	(0.972)	4442873	20.0000	20.62
87	Pentachloroethane	167	11.705	11.705	(0.977)	76431	20.0000	11.01
88	sec-Butylbenzene	105	11.716	11.716	(0.978)	5919448	20.0000	20.34
89	4-Isopropyltoluene	119	11.772	11.772	(0.982)	4473973	20.0000	20.64
90	Cyclohexanone	55	11.944	11.944	(1.116)	71903	20.0000	20.78(H)
91	1,3-Dichlorobenzene	146	11.944	11.944	(0.997)	1678805	20.0000	20.78
* 92	1,4 Dichlorobenzene-d4	152	11.985	11.985	(1.000)	388841	10.0000	
93	1,4-Dichlorobenzene	146	11.997	11.997	(1.001)	1666252	20.0000	20.30
94	n-Butylbenzene	91	12.041	12.041	(1.005)	4719405	20.0000	19.78
95	1,2,3-Trichloropropane	110	12.288	12.288	(1.025)	49491	20.0000	20.89
96	1,2-Dichlorobenzene	146	12.292	12.292	(1.026)	1268608	20.0000	20.48
97	1,2-Dibromo-3-chloropropane	157	12.891	12.891	(1.076)	47375	20.0000	20.10
98	Hexachlorobutadiene	225	13.340	13.340	(1.113)	460746	20.0000	20.34
99	1,2,4-Trichlorobenzene	180	13.467	13.467	(1.124)	785956	20.0000	20.74
100	Naphthalene	128	13.830	13.830	(1.154)	1158838	20.0000	21.73
101	1,2,3-Trichlorobenzene	180	14.025	14.025	(1.170)	582027	20.0000	20.67

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LCAL0326.D
Report Date: 25-Apr-2005 18:01

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

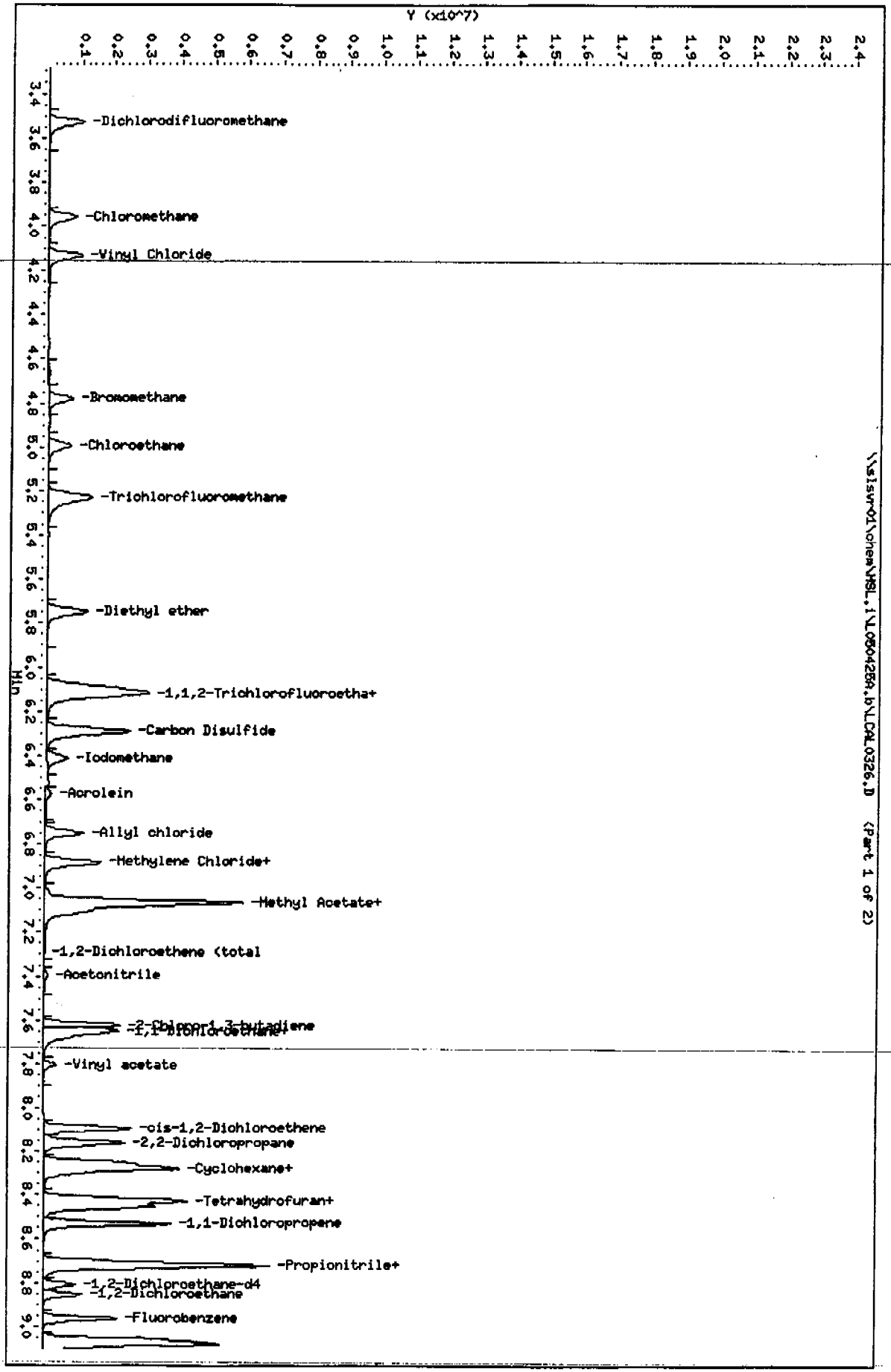
Instrument ID: MSL.i
Lab File ID: LCAL0326.D
Lab Smp Id: VSTD020
Analysis Type: VOA
Quant Type: ISTD
Operator: MN/TM
Method File: \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Misc Info: VBLK115A;

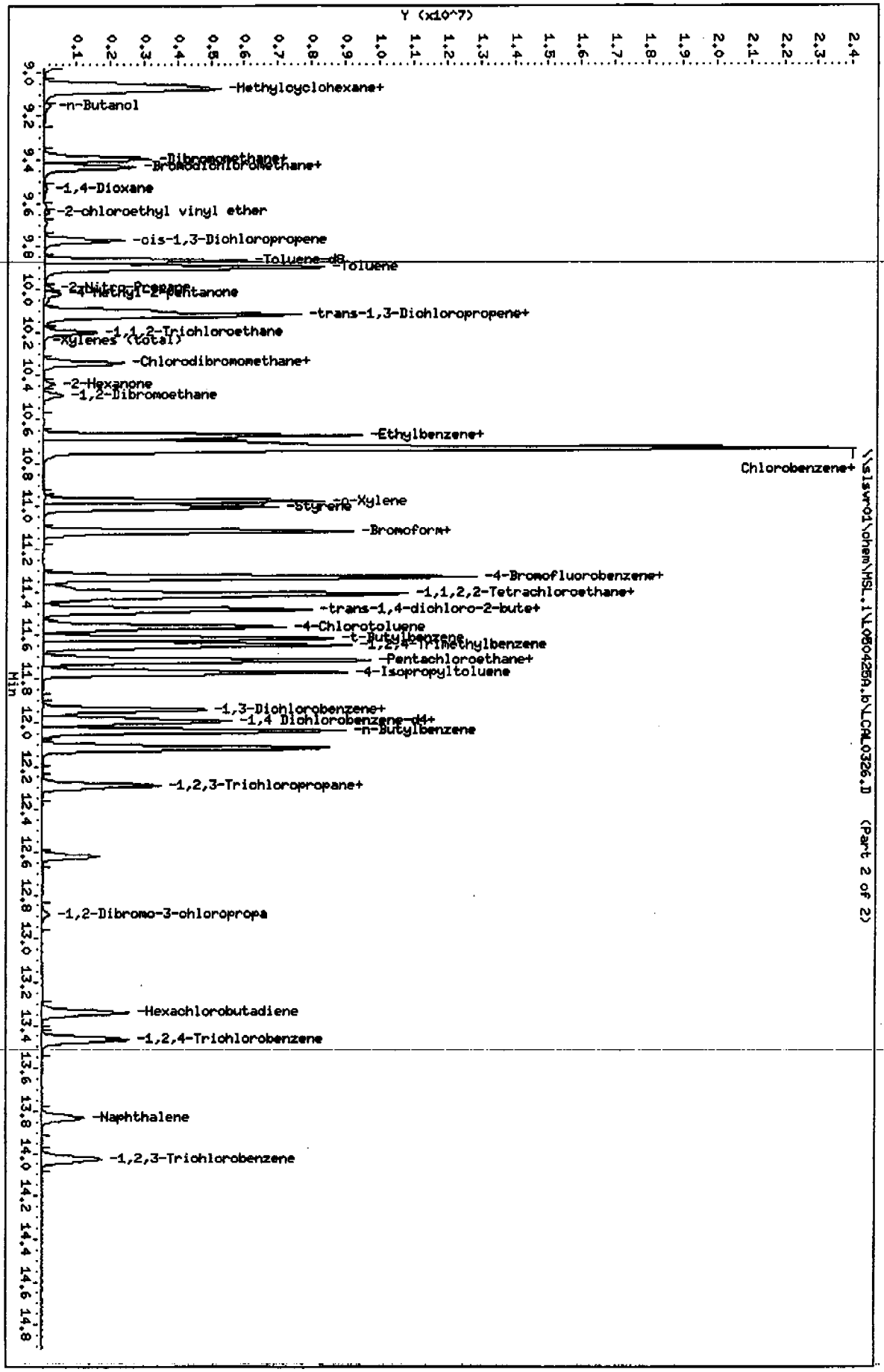
Calibration Date: 25-APR-2005
Calibration Time: 11:51
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
44 Fluorobenzene	1508429	754215	3016858	1574881	4.41
69 Chlorobenzene-d5	892585	446293	1785170	1012173	13.40
92 1,4 Dichlorobenze	346814	173407	693628	388841	12.12

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
44 Fluorobenzene	8.97	8.47	9.47	8.96	-0.04
69 Chlorobenzene-d5	10.70	10.20	11.20	10.70	0.00
92 1,4 Dichlorobenze	11.99	11.49	12.49	11.99	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^7)
Data File: \\slsvr01\chem\MSL.i\L0804250.b\LCAL0326.D
Date : 25-APR-2005 12:39
Client ID:
Sample Info: VSTD020
Purge Volume: 25.0
Column phase: RTX-502.2
Instrument: MSL.i
Operator: MN/TH
Column diameter: 0.25
\\slsvr01\chem\MSL.i\L0804250.b\LCAL0326.D (Part 1 of 2)
Min
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-Diethyl ether
-1,1,2-Trichlorofluoroetha+
-Carbon Disulfide
-Iodomethane
-Acrolein
-Allyl chloride
-Methylene Chloride+
-Methyl Acetate+
-1,2-Dichloroethene (total
-Acetonitrile
-2-Chloro-1,3-butadiene
-1,1-Dichloroethane+
-Vinyl acetate
-cis-1,2-Dichloroethene
-2,2-Dichloropropane
-Cyclohexane+
-Tetrahydrofuran+
-1,1-Dichloropropene
-Propionitrile+
-1,2-Dichloroethane-d4
-1,2-Dichloroethane
-Fluorobenzene


Y (x10^7)
Data File: \\slsvr01\chem\MSL.i\L080425A.b\LCAL0326.D
Date : 25-APR-2008 12:39
Client ID:
Sample Info: VSTD020
Purge Volume: 25.0
Column phase: RTX-502.2
Instrument: MSL.i
Operator: MN/TH
Column diameter: 0.25
\\slsvr01\chem\MSL.i\L080425A.b\LCAL0326.D (Part 2 of 2)
Min
-Methylcyclohexane+
-n-Butanol
-Dibromomethane+
-Bromodichloromethane+
-1,4-Dioxane
-2-chloroethyl vinyl ether
-cis-1,3-Dichloropropene
-Toluene-d8
-Toluene
-2-Nitro-Propane
-4-Methyl-2-pentanone
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane
-Xylenes (total)
-Chlorodibromomethane+
-2-Hexanone
-1,2-Dibromoethane
-Ethylbenzene+
Chlorobenzene+
-o-Xylene
-Styrene
-Bromoform+
-4-Bromofluorobenzene+
-1,1,2,2-Tetrachloroethane+
-trans-1,4-dichloro-2-bute+
-4-Chlorotoluene
-t-Butylbenzene
-1,2,4-Trimethylbenzene
-Pentachloroethane+
-4-Isopropyltoluene
-1,3-Dichlorobenzene+
-1,4 Dichlorobenzene-d4+
-n-Butylbenzene
-1,2,3-Trichloropropane+
-1,2-Dibromo-3-chloropropa
-Hexachlorobutadiene
-1,2,4-Trichlorobenzene
-Naphthalene
-1,2,3-Trichlorobenzene

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Report Date: 28-Apr-2005 16:45

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSL.i
Lab File ID: LICV0328.D
Analysis Type: WATER
Lab Sample ID: ICV010
Method: \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m

Injection Date: 25-APR-2005 13:27
Init. Cal. Date(s): 25-APR-2005 25-APR-2005
Init. Cal. Times: 10:18 12:39
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	1 Dichlorodifluoromethane	0.45033	0.28165	0.28165	0.000	37.45657	60.00000	Averaged	
	2 Chloromethane	0.43519	0.32770	0.32770	0.100	24.69798	60.00000	Averaged	
	3 Vinyl Chloride	0.46680	0.38683	0.38683	0.000	17.13180	20.00000	Averaged	
	4 Bromomethane	10.00000	7.09787	0.15736	0.000	29.02129	0.000e+000	Linear	<-
	5 Chloroethane	0.31335	0.27753	0.27753	0.000	11.43153	60.00000	Averaged	
	6 Trichlorofluoromethane	0.61892	0.58677	0.58677	0.000	5.19452	60.00000	Averaged	
	7 Diethyl ether	0.15360	0.07961	0.07961	0.000	[illegible]	60.00000	Averaged	
	9 1,1-Dichloroethene	0.40640	0.35644	0.35644	0.000	12.29117	20.00000	Averaged	
	8 1,1,2-Trichlorofluoroethane	0.39096	0.38254	0.38254	0.000	2.15454	60.00000	Averaged	
	10 Carbon Disulfide	1.48320	1.35771	1.35771	0.000	8.46084	60.00000	Averaged	
	13 Allyl chloride	0.18463	0.29057	0.29057	0.000	-57.38026	60.00000	Averaged	
	14 Methylene Chloride	10.00000	9.77467	0.26257	0.000	2.25331	0.000e+000	Linear	<-
	15 Acetone	10.00000	9.10520	0.02313	0.000	8.94803	0.000e+000	Linear	<-
	18 trans-1,2-Dichloroethene	0.34972	0.35098	0.35098	0.000	-0.35964	60.00000	Averaged	
	17 n-Hexane	0.54055	0.53440	0.53440	0.000	1.13852	60.00000	Averaged	
	19 MTBE	10.00000	11.28115	0.43894	0.000	-12.81148	0.000e+000	Linear	<-
	23 1,1-Dichloroethane	0.59032	0.57432	0.57432	0.100	2.70933	60.00000	Averaged	
M	20 1,2-Dichloroethene (total)	0.33512	0.33488	0.33488	0.000	0.07077	60.00000	Averaged	
	26 cis-1,2-Dichloroethene	0.32052	0.31879	0.31879	0.000	0.54038	60.00000	Averaged	
	27 2,2-Dichloropropane	0.51184	0.47702	0.47702	0.000	6.80186	60.00000	Averaged	
	30 Bromochloromethane	0.07510	0.07515	0.07515	0.000	-0.06030	60.00000	Averaged	
	29 Chloroform	0.55157	0.52600	0.52600	0.000	4.63466	20.00000	Averaged	
	33 Carbon Tetrachloride	0.44353	0.43498	0.43498	0.000	1.92857	60.00000	Averaged	
$	34 Dibromofluoromethane	0.19590	0.20097	0.20097	0.000	-2.58700	60.00000	Averaged	
	32 Tetrahydrofuran	50.00000	11.34766	0.00197	0.000	[illegible]	0.000e+000	Linear	<-
	35 1,1,1-Trichloroethane	0.53056	0.52014	0.52014	0.000	1.96390	60.00000	Averaged	
	36 2-Butanone	0.03695	0.03410	0.03410	0.000	7.72235	60.00000	Averaged	
	37 1,1-Dichloropropene	0.48228	0.47275	0.47275	0.000	1.97535	60.00000	Averaged	
	41 Benzene	1.37918	1.34004	1.34004	0.000	2.83790	60.00000	Averaged	
$	42 1,2-Dichloroethane-d4	0.17680	0.18217	0.18217	0.000	-3.03658	60.00000	Averaged	
	43 1,2-Dichloroethane	0.23435	0.23343	0.23343	0.000	0.39353	60.00000	Averaged	
	46 Trichloroethene	0.31150	0.29597	0.29597	0.000	4.98796	60.00000	Averaged	
	48 Dibromomethane	0.07940	0.08015	0.08015	0.000	-0.95151	60.00000	Averaged	
	49 1,2-Dichloropropane	0.25671	0.24792	0.24792	0.000	3.42411	20.00000	Averaged	
	50 Bromodichloromethane	0.31153	0.30286	0.30286	0.000	2.78586	60.00000	Averaged	
	51 Methyl methacrylate	10.00000	9.59382	0.07053	0.000	4.06177	0.000e+000	Linear	<-
	54 cis-1,3-Dichloropropene	0.34186	0.33284	0.33284	0.000	2.63874	60.00000	Averaged	
$	55 Toluene-d8	0.96768	0.98406	0.98406	0.000	-1.69338	60.00000	Averaged	
	56 Toluene	2.48795	2.37240	2.37240	0.000	4.64449	20.00000	Averaged	
	57 2-Nitro-Propane	10.00000	5.53225	0.02136	0.000	[illegible]	0.000e+000	Linear	<-
	58 4-Methyl-2-pentanone	0.08036	0.07540	0.07540	0.000	6.16943	60.00000	Averaged	
	59 trans-1,3-Dichloropropene	0.40944	0.42701	0.42701	0.000	-4.29150	60.00000	Averaged	

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Report Date: 28-Apr-2005 16:45

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSL.i
Lab File ID: LICV0328.D
Analysis Type: WATER
Lab Sample ID: ICV010
Method: \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m

Injection Date: 25-APR-2005 13:27
Init. Cal. Date(s): 25-APR-2005 25-APR-2005
Init. Cal. Times: 10:18 12:39
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	61 Tetrachloroethene	0.53840	0.33076	0.33076	0.000	38.56534	60.00000	Averaged	
	60 Ethyl methacrylate	0.26336	0.25858	0.25858	0.000	1.81596	60.00000	Averaged	
	62 1,1,2-Trichloroethane	0.19980	0.19533	0.19533	0.000	2.23385	60.00000	Averaged	
	64 Chlorodibromomethane	0.19491	0.19279	0.19279	0.000	1.08628	60.00000	Averaged	
	65 1,3-Dichloropropane	0.39590	0.38395	0.38395	0.000	3.01797	60.00000	Averaged	
	67 1,2-Dibromoethane	0.16161	0.15786	0.15786	0.000	2.31648	60.00000	Averaged	
	66 2-Hexanone	10.00000	9.84359	0.07693	0.000	1.56408	0.000e+000	Linear	<-
	68 Ethylbenzene	0.79344	0.76093	0.76093	0.000	4.09671	20.00000	Averaged	
	70 Chlorobenzene	1.32049	1.23478	1.23478	0.300	6.49098	60.00000	Averaged	
	71 1,1,1,2-Tetrachloroethane	0.35064	0.34317	0.34317	0.000	2.13002	60.00000	Averaged	
	72 m,p-Xylenes	1.08487	1.07949	1.07949	0.000	0.49612	60.00000	Averaged	
M	63 Xylenes (total)	1.02209	1.01640	1.01640	0.000	0.55707	60.00000	Averaged	
	73 o-Xylene	0.89653	0.89022	0.89022	0.000	0.70458	60.00000	Averaged	
	74 Styrene	1.34676	1.35764	1.35764	0.000	-0.80818	60.00000	Averaged	
	75 Bromoform	0.20131	0.20347	0.20347	0.100	-1.07438	60.00000	Averaged	
	76 Isopropylbenzene	6.10124	6.61959	6.61959	0.000	-8.49584	60.00000	Averaged	
$	77 4-Bromofluorobenzene	1.44680	1.41233	1.41233	0.000	2.38248	60.00000	Averaged	
	78 n-Propylbenzene	8.69684	8.43314	8.43314	0.000	3.03211	60.00000	Averaged	
	79 1,1,2,2-Tetrachloroethane	0.51087	0.47849	0.47849	0.300	6.33867	60.00000	Averaged	
	81 Bromobenzene	0.88864	0.88137	0.88137	0.000	0.81796	60.00000	Averaged	
	80 1,3,5-Trimethylbenzene	5.70732	5.61802	5.61802	0.000	1.56471	60.00000	Averaged	
	82 trans-1,4-dichloro-2-butene	10.00000	8.33919	0.12401	0.000	16.60811	0.000e+000	Linear	<-
	83 2-Chlorotoluene	4.69082	4.52193	4.52193	0.000	3.60043	60.00000	Averaged	
	95 1,2,3-Trichloropropane	10.00000	10.71170	0.06593	0.000	-7.11700	0.000e+000	Linear	<-
	90 Cyclohexanone	10.00000	10.54914	0.03911	0.000	-5.49141	0.000e+000	Linear	<-
	84 4-Chlorotoluene	4.51040	4.49624	4.49624	0.000	0.31393	60.00000	Averaged	
	85 t-Butylbenzene	5.15829	5.10836	5.10836	0.000	0.96798	60.00000	Averaged	
	86 1,2,4-Trimethylbenzene	5.53989	5.48261	5.48261	0.000	1.03400	60.00000	Averaged	
	88 sec-Butylbenzene	7.48595	7.07024	7.07024	0.000	5.55321	60.00000	Averaged	
	89 4-Isopropyltoluene	5.57541	5.83836	5.83836	0.000	-4.71628	60.00000	Averaged	
	91 1,3-Dichlorobenzene	2.07811	2.07357	2.07357	0.000	0.21853	60.00000	Averaged	
	93 1,4-Dichlorobenzene	2.11107	2.04623	2.04623	0.000	3.07170	60.00000	Averaged	
	94 n-Butylbenzene	6.13596	6.00005	6.00005	0.000	2.21494	60.00000	Averaged	
	96 1,2-Dichlorobenzene	1.59313	1.62017	1.62017	0.000	-1.69770	60.00000	Averaged	
	97 1,2-Dibromo-3-chloropropane	0.05943	0.06323	0.06323	0.000	-6.38502	60.00000	Averaged	
	98 Hexachlorobutadiene	0.58256	0.55794	0.55794	0.000	4.22574	60.00000	Averaged	
	99 1,2,4-Trichlorobenzene	0.97255	0.96616	0.96616	0.000	0.65664	60.00000	Averaged	
	100 Naphthalene	1.37144	1.43948	1.43948	0.000	-4.96138	60.00000	Averaged	
	101 1,2,3-Trichlorobenzene	0.72411	0.72067	0.72067	0.000	0.47435	60.00000	Averaged	

Data File: \\slsvr01\chem\MSL.i\L050425A.b/LICV0328.D Pa
Report Date: 04/28/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSL.i
Lab File ID: LICV0328.D
Analysis Type: WATER

Injection Date: 25-APR-2005 13:27
Lab Sample ID: ICV010
Method File: \\slsvr01\chem\MSL.i\L050425A.b\8260B-2

COMPOUND	%D
Dichlorodifluoromethane	37.5
Chloromethane	24.7
Vinyl Chloride	17.1
Bromomethane	29.0
Chloroethane	11.4
Trichlorofluoromethane	5.2
Diethyl ether	48.2
1,1,2-Trichlorofluoroethane	2.2
1,1-Dichloroethene	12.3
Carbon Disulfide	8.5
Allyl chloride	57.4
Methylene Chloride	2.3
Acetone	8.9
n-Hexane	1.1
trans-1,2-Dichloroethene	0.4
MTBE	12.8
1,2-Dichloroethene (total)	0.1
1,1-Dichloroethane	2.7
cis-1,2-Dichloroethene	0.5
2,2-Dichloropropane	6.8
Chloroform	4.6
Bromochloromethane	0.1
Tetrahydrofuran	77.3
Carbon Tetrachloride	1.9
Dibromofluoromethane	2.6
1,1,1-Trichloroethane	2.0
2-Butanone	7.7
1,1-Dichloropropene	2.0
Benzene	2.8
1,2-Dichloroethane-d4	3.0
1,2-Dichloroethane	0.4
Trichloroethene	5.0
Dibromomethane	1.0
1,2-Dichloropropane	3.4
Bromodichloromethane	2.8
Methyl methacrylate	4.1
cis-1,3-Dichloropropene	2.6
Toluene-d8	1.7
Toluene	4.6

Data File: \\slsvr01\chem\MSL.i\L050425A.b/LICV0328.D
Report Date: 04/28/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSL.i
Lab File ID: LICV0328.D
Analysis Type: WATER

Injection Date: 25-APR-2005 13:27
Lab Sample ID: ICV010
Method File: \\slsvr01\chem\MSL.i\L050425A.b\

COMPOUND	%D
2-Nitro-Propane	44.7
4-Methyl-2-pentanone	6.2
trans-1,3-Dichloropropene	4.3
Ethyl methacrylate	1.8
Tetrachloroethene	38.6
1,1,2-Trichloroethane	2.2
Xylenes (total)	0.6
Chlorodibromomethane	1.1
1,3-Dichloropropane	3.0
2-Hexanone	1.6
1,2-Dibromoethane	2.3
Ethylbenzene	4.1
Chlorobenzene	6.5
1,1,1,2-Tetrachloroethane	2.1
m,p-Xylenes	0.5
o-Xylene	0.7
Styrene	0.8
Isopropylbenzene	8.5
Bromoform	1.1
4-Bromofluorobenzene	2.4
n-Propylbenzene	3.0
1,1,2,2-Tetrachloroethane	6.3
1,3,5-Trimethylbenzene	1.6
Bromobenzene	0.8
trans-1,4-dichloro-2-butene	16.6
2-Chlorotoluene	3.6
4-Chlorotoluene	0.3
t-Butylbenzene	1.0
1,2,4-Trimethylbenzene	1.0
sec-Butylbenzene	5.6
4-Isopropyltoluene	4.7
Cyclohexanone	5.5
1,3-Dichlorobenzene	0.2
1,4-Dichlorobenzene	3.1
n-Butylbenzene	2.2
1,2,3-Trichloropropane	7.1
1,2-Dichlorobenzene	1.7
1,2-Dibromo-3-chloropropane	6.4
Hexachlorobutadiene	4.2

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Data File: \\slsvr01\chem\MSL.i\L050425A.b/LICV0328.D
Report Date: 04/28/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSL.i
Lab File ID: LICV0328.D
Analysis Type: WATER

Injection Date: 25-APR-2005 13:27
Lab Sample ID: ICV010
Method File: \\slsvr01\chem\MSL.i\L050425A.b\

COMPOUND	%D
1,2,4-Trichlorobenzene	0.7
Naphthalene	5.0
1,2,3-Trichlorobenzene	0.5

The average of %D's in the continuing calibration is 7.8

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LICV0328.D
Report Date: 28-Apr-2005 16:45

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSL.i
Lab File ID: LICV0328.D
Lab Smp Id: ICV010
Analysis Type: VOA
Quant Type: ISTD
Operator: MN/TM
Method File: \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Misc Info: VBLK115A;

Calibration Date: 25-APR-2005
Calibration Time: 11:51
Client Smp ID: ICV010
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
44 Fluorobenzene	1508429	754215	3016858	1535743	1.81
69 Chlorobenzene-d5	892585	446293	1785170	913140	2.30
92 1,4 Dichlorobenze	346814	173407	693628	363346	4.77

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
44 Fluorobenzene	8.97	8.47	9.47	8.97	0.00
69 Chlorobenzene-d5	10.70	10.20	11.20	10.70	0.00
92 1,4 Dichlorobenze	11.99	11.49	12.49	11.99	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LICV0328.D
Report Date: 28-Apr-2005 16:45

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSL.i\L050425A.b\LICV0328.D
Lab Smp Id: ICV010 Client Smp ID: ICV010
Inj Date : 25-APR-2005 13:27
Operator : MN/TM Inst ID: MSL.i
Smp Info : ICV010
Misc Info : VBLK115A;
Comment : NONE
Method : \\slsvr01\chem\MSL.i\L050425A.b\8260B-25LLW30.m
Meth Date : 28-Apr-2005 16:43 mahmoodt Quant Type: ISTD
Cal Date : 25-APR-2005 11:51 Cal File: LCAL0324.D
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICV.sub
Target Version: 4.10
Processing Host: SLVOA02

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	25.000	DefSampleVolume
Vo	25.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	3.524	3.524	(0.393)	432542	10.0000	6.254
2	Chloromethane	50	3.958	3.958	(0.442)	503269	10.0000	7.530
3	Vinyl Chloride	62	4.130	4.130	(0.461)	594070	10.0000	8.287
4	Bromomethane	94	4.782	4.782	(0.533)	241666	10.0000	7.098
5	Chloroethane	64	4.999	4.999	(0.558)	426219	10.0000	8.857
6	Trichlorofluoromethane	101	5.231	5.231	(0.583)	901127	10.0000	9.480
7	Diethyl ether	59	5.743	5.743	(0.641)	244520	20.0000	10.36
9	1,1-Dichloroethene	96	6.121	6.121	(0.683)	547407	10.0000	8.771
8	1,1,2-Trichlorofluoroethane	101	6.095	6.095	(0.680)	587477	10.0000	9.784
10	Carbon Disulfide	76	6.290	6.290	(0.702)	2085096	10.0000	9.154
13	Allyl chloride	39	6.750	6.750	(0.753)	446241	10.0000	15.74
14	Methylene Chloride	84	6.888	6.888	(0.768)	403244	10.0000	9.775
15	Acetone	43	6.888	6.888	(0.768)	35519	10.0000	9.105
18	trans-1,2-Dichloroethene	96	7.068	7.068	(0.788)	539011	10.0000	10.04
17	n-Hexane	57	7.064	7.064	(0.788)	820696	10.0000	9.886
19	MTBE	73	7.106	7.106	(0.793)	674093	10.0000	11.28
23	1,1-Dichloroethane	63	7.648	7.648	(0.853)	882012	10.0000	9.729
M 20	1,2-Dichloroethene (total)	96				1028592	20.0000	19.98
26	cis-1,2-Dichloroethene	96	8.097	8.097	(0.903)	489581	10.0000	9.946
27	2,2-Dichloropropane	77	8.165	8.165	(0.911)	732587	10.0000	9.320
30	Bromochloromethane	128	8.281	8.281	(0.924)	115406	10.0000	10.01
29	Chloroform	83	8.281	8.281	(0.924)	807806	10.0000	9.536

5-28-24

Data File: \\slsvr01\chem\MSL.i\L050425A.b\LICV0328.D
Report Date: 28-Apr-2005 16:45

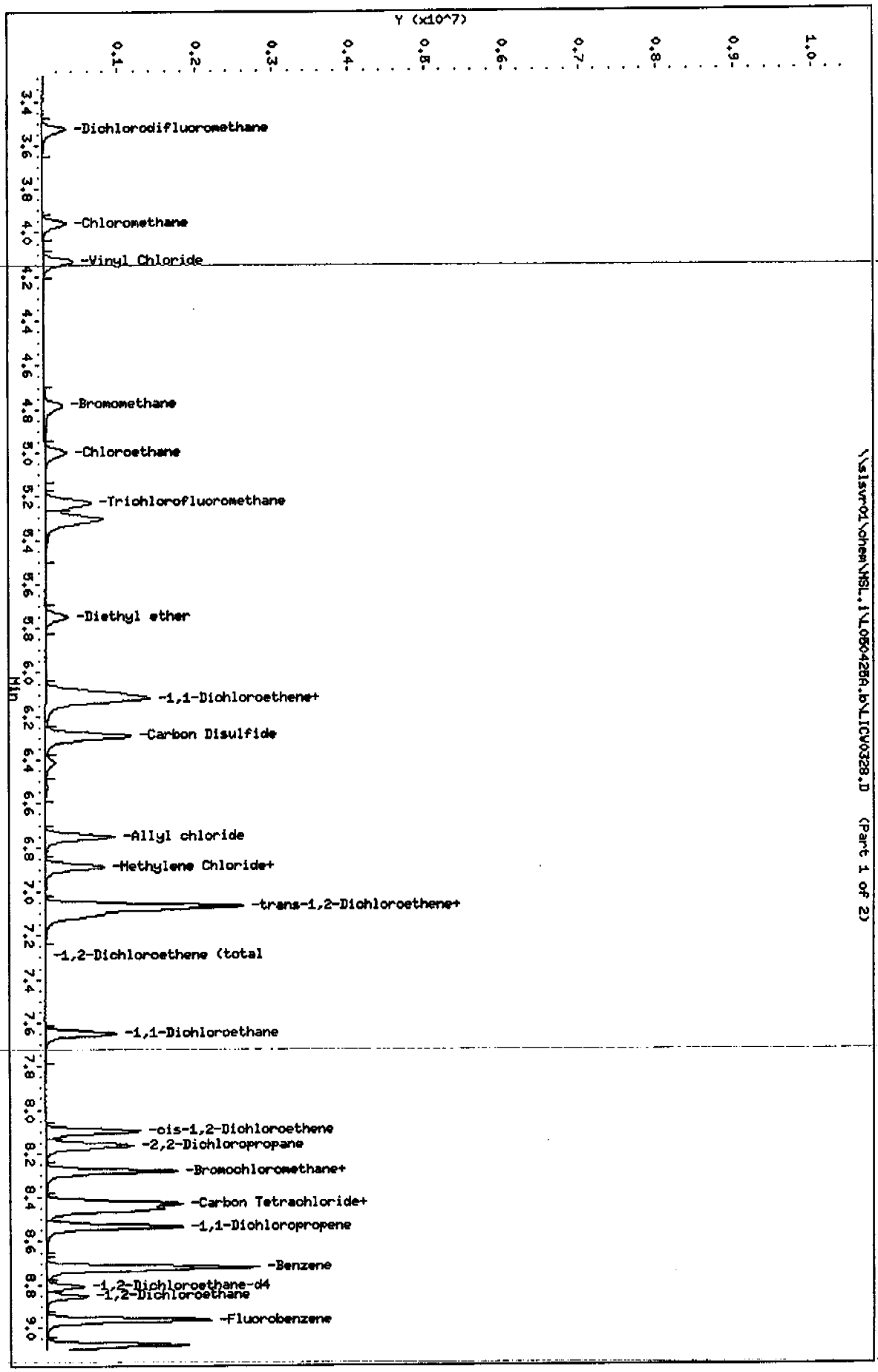
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	33 Carbon Tetrachloride	117	8.427	8.427	(0.940)	668017	10.0000	9.807
$	34 Dibromofluoromethane	113	8.427	8.427	(0.940)	308633	10.0000	10.26
	32 Tetrahydrofuran	71	8.423	8.423	(0.939)	15130	50.0000	11.35
	35 1,1,1-Trichloroethane	97	8.453	8.453	(0.943)	798800	10.0000	9.804
	36 2-Butanone	43	8.468	8.468	(0.944)	52370	10.0000	9.228
	37 1,1-Dichloropropene	75	8.535	8.535	(0.952)	726030	10.0000	9.802
	41 Benzene	78	8.722	8.722	(0.973)	2057954	10.0000	9.716
$	42 1,2-Dichloroethane-d4	65	8.808	8.808	(0.982)	279766	10.0000	10.30(M)
	43 1,2-Dichloroethane	62	8.853	8.853	(0.987)	358489	10.0000	9.961
*	44 Fluorobenzene	96	8.965	8.965	(1.000)	1535743	10.0000	
	46 Trichloroethene	130	9.081	9.081	(1.013)	454528	10.0000	9.501
	48 Dibromomethane	93	9.385	9.385	(1.047)	123091	10.0000	10.10
	49 1,2-Dichloropropane	63	9.396	9.396	(1.048)	380738	10.0000	9.658
	50 Bromodichloromethane	83	9.433	9.433	(1.052)	465108	10.0000	9.721
	51 Methyl methacrylate	69	9.437	9.437	(1.053)	108316	10.0000	9.594
	54 cis-1,3-Dichloropropene	75	9.770	9.770	(1.090)	511162	10.0000	9.736
$	55 Toluene-d8	98	9.867	9.867	(1.101)	1511266	10.0000	10.17
	56 Toluene	91	9.901	9.901	(0.925)	2166334	10.0000	9.536
	57 2-Nitro-Propane	43	9.998	9.998	(1.115)	32798	10.0000	5.532
	58 4-Methyl-2-pentanone	43	10.021	10.021	(1.118)	115794	10.0000	9.383
	59 trans-1,3-Dichloropropene	75	10.099	10.099	(0.944)	389924	10.0000	10.43
	61 Tetrachloroethene	164	10.122	10.122	(0.946)	302033	10.0000	6.143
	60 Ethyl methacrylate	69	10.099	10.099	(0.944)	236120	10.0000	9.818
	62 1,1,2-Trichloroethane	97	10.200	10.200	(0.953)	178368	10.0000	9.777
	64 Chlorodibromomethane	129	10.339	10.339	(0.966)	176044	10.0000	9.891
	65 1,3-Dichloropropane	76	10.346	10.346	(0.967)	350599	10.0000	9.698
	67 1,2-Dibromoethane	107	10.492	10.492	(0.980)	144151	10.0000	9.768
	66 2-Hexanone	43	10.444	10.444	(0.976)	70245	10.0000	9.844
	68 Ethylbenzene	106	10.676	10.676	(0.998)	694840	10.0000	9.590
*	69 Chlorobenzene-d5	117	10.702	10.702	(1.000)	913140	10.0000	(M)
	70 Chlorobenzene	112	10.713	10.713	(1.001)	1127525	10.0000	9.351
	71 1,1,1,2-Tetrachloroethane	131	10.732	10.732	(1.003)	313363	10.0000	9.787
	72 m,p-Xylenes	106	10.736	10.736	(1.003)	1971443	20.0000	19.90
M	63 Xylenes (total)	106				2784335	30.0000	29.83
	73 o-Xylene	106	10.975	10.975	(1.026)	812892	10.0000	9.930
	74 Styrene	104	11.001	11.001	(1.028)	1239716	10.0000	10.08
	75 Bromoform	173	11.121	11.121	(0.928)	73931	10.0000	10.11
	76 Isopropylbenzene	105	11.117	11.117	(0.928)	2405203	10.0000	10.85
$	77 4-Bromofluorobenzene	95	11.327	11.327	(0.945)	513166	10.0000	9.762
	78 n-Propylbenzene	91	11.334	11.334	(0.946)	3064149	10.0000	9.697
	79 1,1,2,2-Tetrachloroethane	83	11.379	11.379	(0.949)	173857	10.0000	9.366
	81 Bromobenzene	156	11.424	11.424	(0.953)	320241	10.0000	9.918
	80 1,3,5-Trimethylbenzene	105	11.409	11.409	(0.952)	2041285	10.0000	9.844
	82 trans-1,4-dichloro-2-butene	53	11.473	11.473	(0.957)	45058	10.0000	8.339
	83 2-Chlorotoluene	91	11.484	11.484	(0.958)	1643025	10.0000	9.640
	95 1,2,3-Trichloropropane	110	12.292	12.292	(1.026)	23954	10.0000	10.71
	90 Cyclohexanone	55	11.941	11.941	(1.116)	35710	10.0000	10.55
	84 4-Chlorotoluene	91	11.563	11.563	(0.965)	1633692	10.0000	9.969
	85 t-Butylbenzene	119	11.615	11.615	(0.969)	1856103	10.0000	9.903
	86 1,2,4-Trimethylbenzene	105	11.649	11.649	(0.972)	1992083	10.0000	9.896
	88 sec-Butylbenzene	105	11.716	11.716	(0.978)	2568945	10.0000	9.445
	89 4-Isopropyltoluene	119	11.772	11.772	(0.982)	2121345	10.0000	10.47
	91 1,3-Dichlorobenzene	146	11.944	11.944	(0.997)	753422	10.0000	9.978
*	92 1,4 Dichlorobenzene-d4	152	11.985	11.985	(1.000)	363346	10.0000	

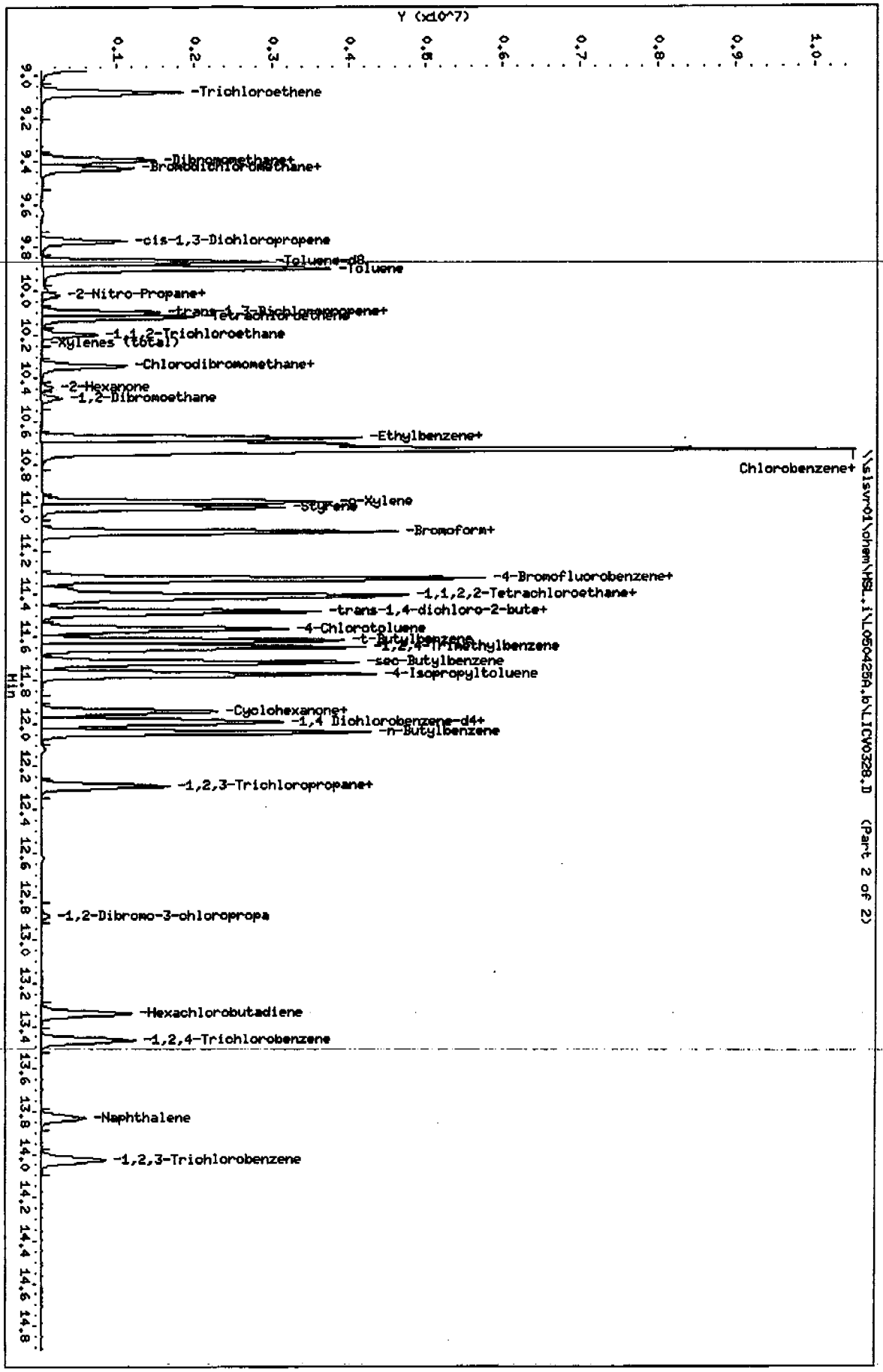
Data File: \\slsvr01\chem\MSL.i\L050425A.b\LICV0328.D
Report Date: 28-Apr-2005 16:45

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
93 1,4-Dichlorobenzene	146	12.000	12.000	(1.001)	743488	10.0000	9.693
94 n-Butylbenzene	91	12.042	12.042	(1.005)	2180094	10.0000	9.778
96 1,2-Dichlorobenzene	146	12.292	12.292	(1.026)	588684	10.0000	10.17
97 1,2-Dibromo-3-chloropropane	157	12.891	12.891	(1.076)	22973	10.0000	10.64
98 Hexachlorobutadiene	225	13.344	13.344	(1.113)	202726	10.0000	9.577
99 1,2,4-Trichlorobenzene	180	13.467	13.467	(1.124)	351050	10.0000	9.934
100 Naphthalene	128	13.834	13.834	(1.154)	523031	10.0000	10.50
101 1,2,3-Trichlorobenzene	180	14.025	14.025	(1.170)	261853	10.0000	9.952

QC Flag Legend

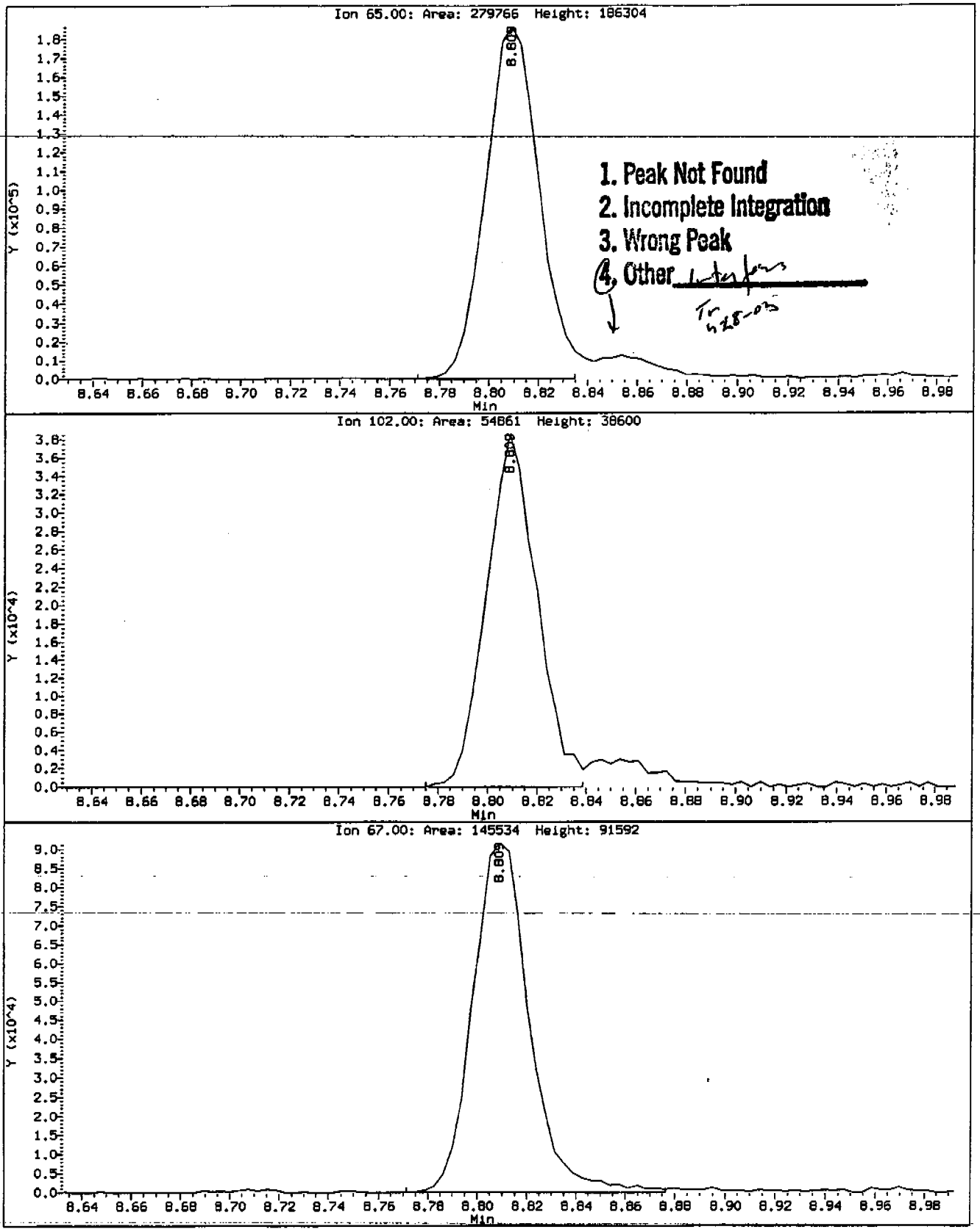
M - Compound response manually integrated.


Y (x10^7)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Min
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-Diethyl ether
-1,1-Dichloroethene+
-Carbon Disulfide
-Allyl chloride
-Methylene Chloride+
-trans-1,2-Dichloroethene+
-1,2-Dichloroethene (total
-1,1-Dichloroethane
-cis-1,2-Dichloroethene
-2,2-Dichloropropane
-Bromochloromethane+
-Carbon Tetrachloride+
-1,1-Dichloropropene
-Benzene
-1,2-Dichloroethane-d4
-1,2-Dichloroethane
-Fluorobenzene
Data File: \\slsvr01\chem\MSL.i\L050425A.b\LICV0328.D
Date : 25-APR-2005 13:27
Client ID: ICV010
Sample Info: ICV010
Purge Volume: 25.0
Column phase: RTX-502.2
\\slsvr01\chem\MSL.i\L050425A.b\LICV0328.D (Part 1 of 2)
Instrument: MSL.i
Operator: MK/TN
Column diameter: 0.25


Y (x10^7)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Data File: \\slsvr01\chem\MSL.i\L050425A.b\LICV0328.D
Date : 25-APR-2005 13:27
Client ID: ICV010
Sample Info: ICV010
Purge Volume: 25.0
Column phase: RTX-502.2
Instrument: MSL.i
Operator: MM/TH
Column diameter: 0.25
\\slsvr01\chem\MSL.i\L050425A.b\LICV0328.D (Part 2 of 2)
-Trichloroethene
-Dibromomethane+
-Bromodichloromethane+
-cis-1,3-Dichloropropene
-Toluene-d8
-Toluene
-2-Nitro-Propane+
-trans-1,3-Dichloropropene+
-Tetrachloroethene
-1,1,2-Trichloroethane
-Xylenes (total)
-Chlorodibromomethane+
-2-Hexanone
-1,2-Dibromoethane
-Ethylbenzene+
Chlorobenzene+
-Styrene
-o-Xylene
-Bromoform+
-4-Bromofluorobenzene+
-1,1,2,2-Tetrachloroethane+
-trans-1,4-dichloro-2-bute+
-4-Chlorotoluene
-t-Butylbenzene
-1,2,4-Trimethylbenzene
-sec-Butylbenzene
-4-Isopropyltoluene
-Cyclohexanone+
-1,4 Dichlorobenzene-d4+
-n-Butylbenzene
-1,2,3-Trichloropropane+
-1,2-Dibromo-3-chloropropa
-Hexachlorobutadiene
-1,2,4-Trichlorobenzene
-Naphthalene
-1,2,3-Trichlorobenzene
Min
9.0
9.2
9.4
9.6
9.8
10.0
10.2
10.4
10.6
10.8
11.0
11.2
11.4
11.6
11.8
12.0
12.2
12.4
12.6
12.8
13.0
13.2
13.4
13.6
13.8
14.0
14.2
14.4
14.6
14.8

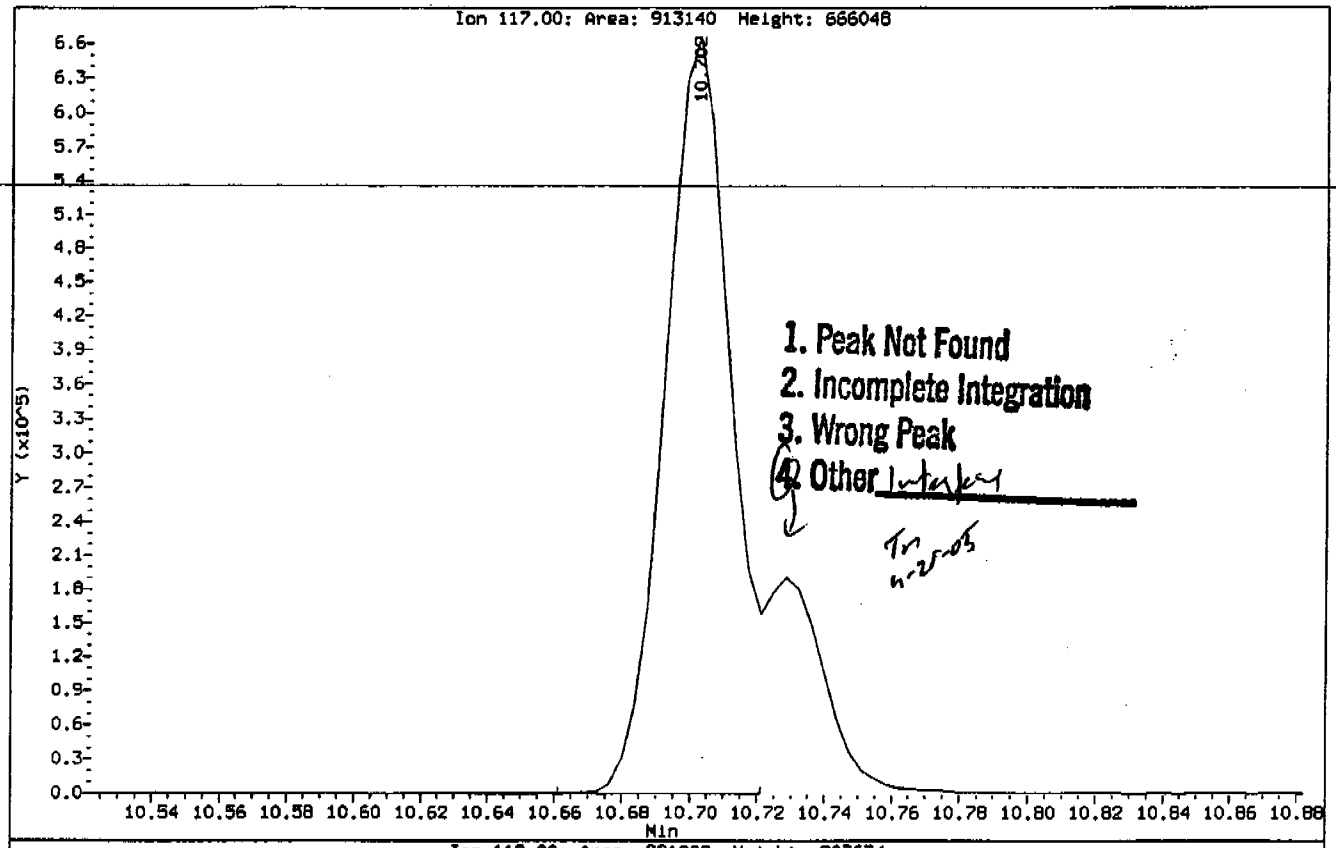
Data File: \\slsvr01\chem\MSL.i\L050425A.b\LICV0328.D
Injection Date: 25-APR-2005 13:27
Instrument: MSL.i
Client Sample ID: ICV010

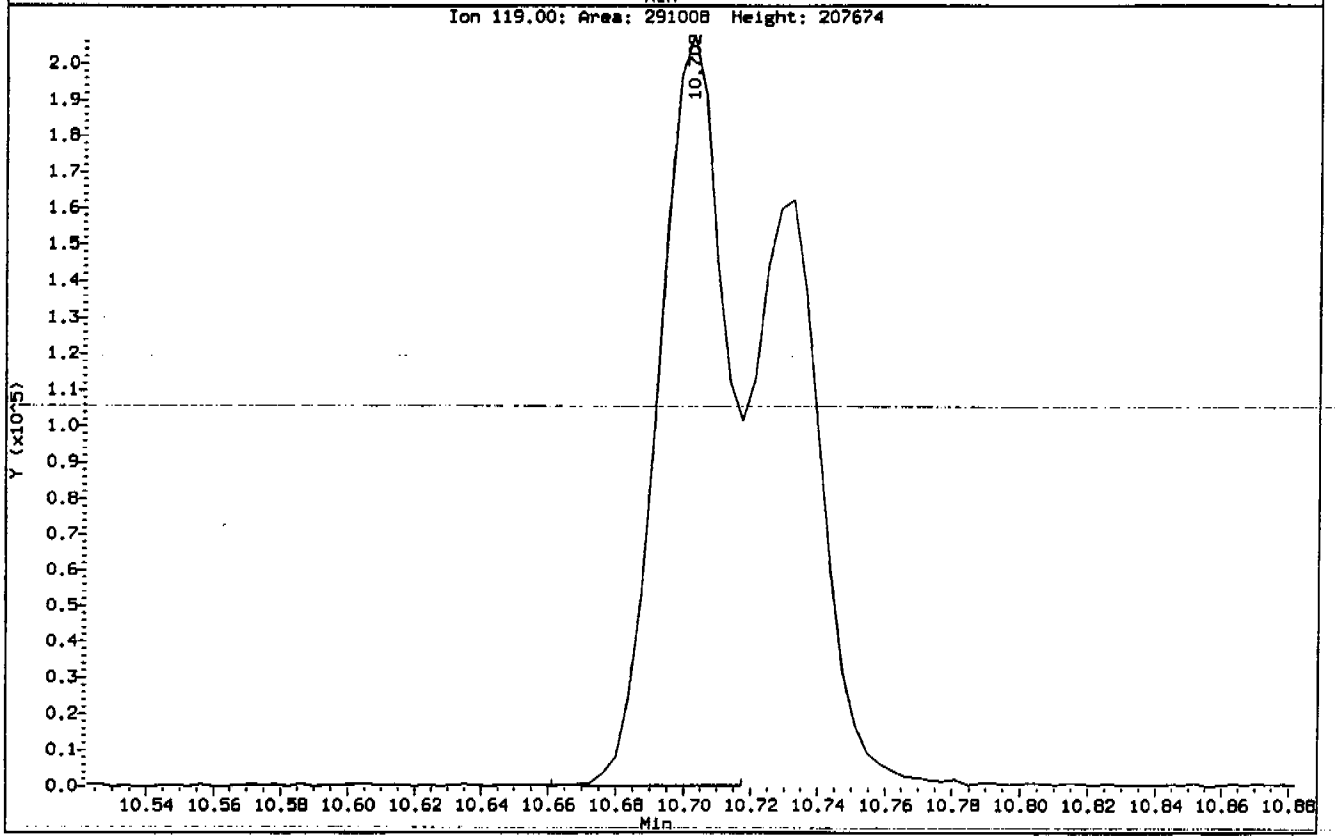
Compound: 1,2-Dichloroethane-d4
CAS Number: 17060-07-0



Data File: \\slsvr01\chem\MSL.i\L050425A.b\LICV0328.D
Injection Date: 25-APR-2005 13:27
Instrument: MSL.i
Client Sample ID: ICV010

Compound: Chlorobenzene-d5
CAS Number: 3114-55-4





Data File: \\slsvr01\chem\MSB.i\B050429B.b\BBFB8204.D

Date : 29-APR-2005 10:24

Client ID: VBFB

Instrument: MSB.i

Sample Info: 50NG BFB;B050429B.b

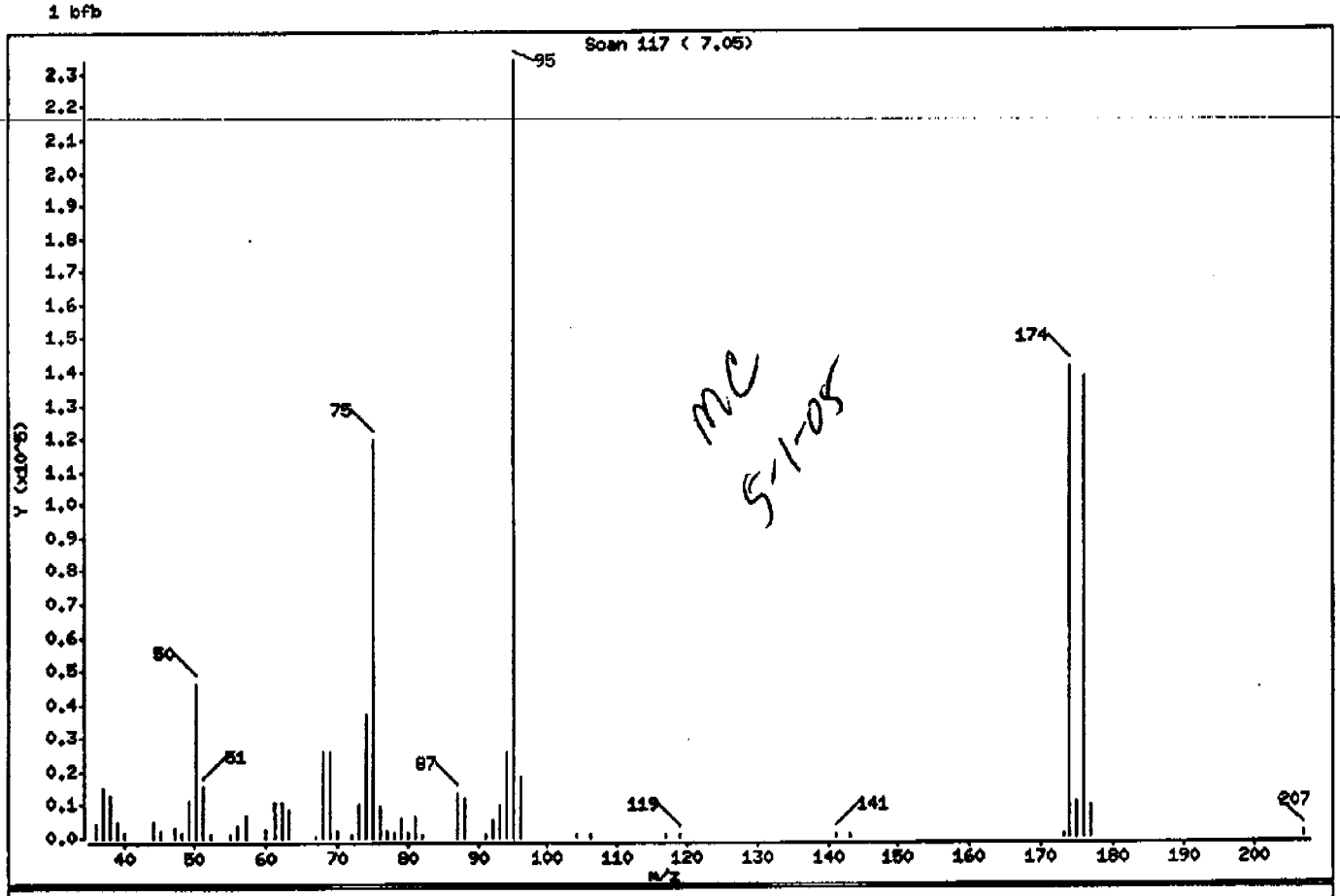
Volume Injected (uL): 2.0

Operator: MN

Column phase: RTX-502.2

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.72
75	30.00 - 60.00% of mass 95	51.21
96	5.00 - 9.00% of mass 95	7.85
173	Less than 2.00% of mass 174	0.45 (0.74)
174	Greater than 50.00% of mass 95	60.37
175	5.00 - 9.00% of mass 174	4.51 (7.48)
176	95.00 - 101.00% of mass 174	58.92 (97.60)
177	5.00 - 9.00% of mass 176	4.19 (7.11)

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BBFB8204.D

Date : 29-APR-2005 10:24

Client ID: VBFB

Instrument: MSB.i

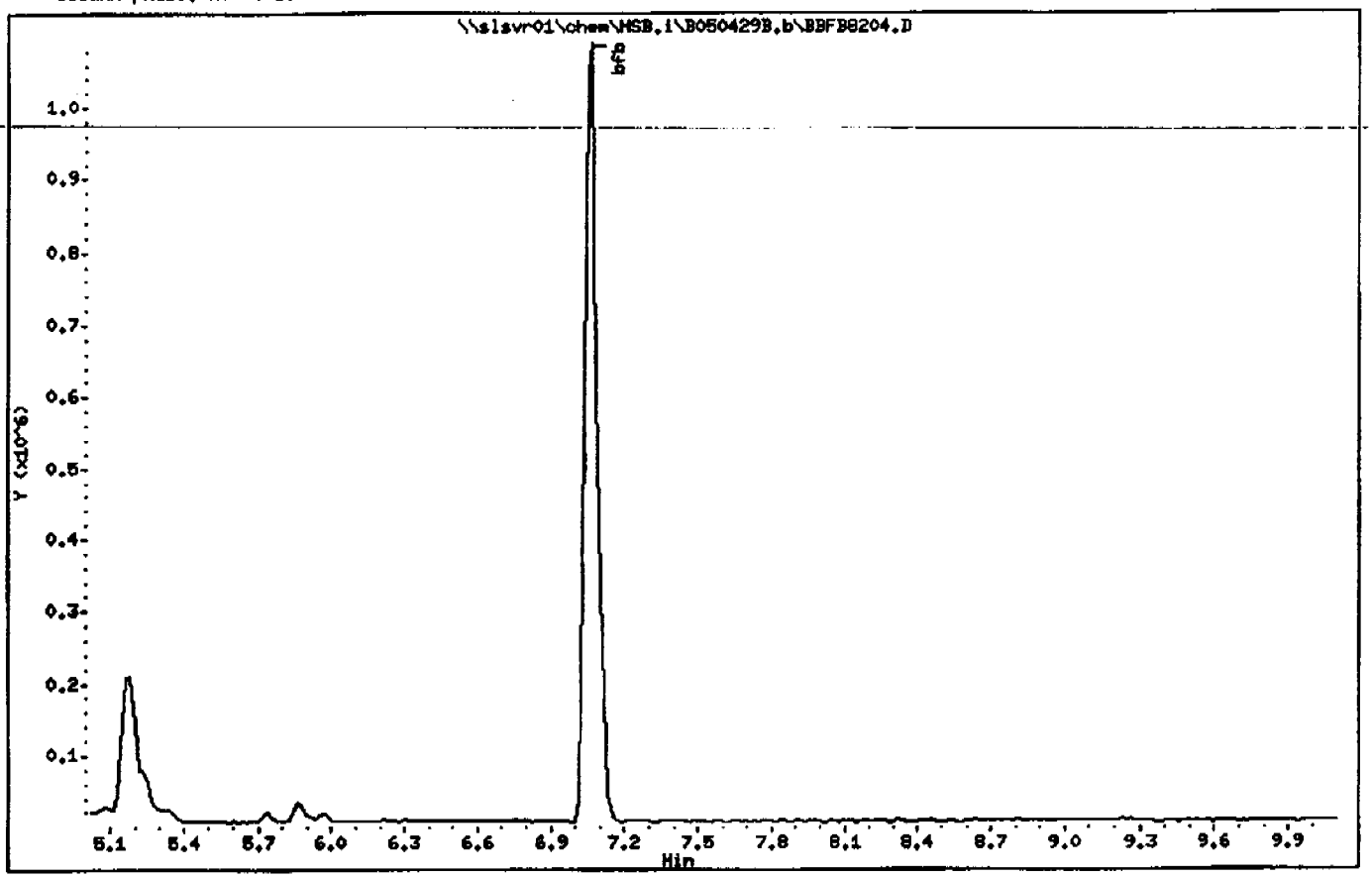
Sample Info: 50NG BFB;B050429B.b

Volume Injected (uL): 2.0

Operator: MN

Column phase: RTX-502.2

Column diameter: 0.53



Data File: \\slsvr01\chem\MSB.i\B050429B.b\BBFB8204.D

Date : 29-APR-2005 10:24

Client ID: VBFB

Instrument: MSB.i

Sample Info: 50NG BFB;B050429B.b

Volume Injected (uL): 2.0

Operator: MN

Column phase: RTX-502.2

Column diameter: 0.53

Data File: BBFB8204.D
Spectrum: Scan 117 (7.05)
Location of Maximum: 96.15
Number of points: 55

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	4086	56.05	3862	76.10	9810	96.10	18336
37.10	14907	57.15	6859	77.10	2087	104.10	916
38.10	12733	60.05	2589	78.10	1556	106.10	1011
39.10	4836	61.15	10882	79.00	8969	117.05	869
40.00	1613	62.15	11014	79.95	1689	119.05	1182
44.10	4677	63.15	8377	80.95	6230	141.10	1288
45.10	2373	67.10	789	82.05	1235	143.05	1077
47.10	3347	68.10	26096	87.05	13650	173.15	1043
48.10	1433	69.10	25952	88.05	12112	174.05	141056
49.05	11508	70.10	2018	91.05	1253	175.05	10544
50.05	46072	72.00	1157	92.15	5433	176.05	137664
51.15	15383	73.10	10390	93.15	9828	177.05	9785
52.15	953	74.10	37176	94.15	25624	207.15	1783
55.05	1194	75.10	119664	95.15	233664		

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BCAL8206.D
Report Date: 29-Apr-2005 12:40

STL St. Louis

MC 5-1-05

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSB.i
Lab File ID: BCAL8206.D
Analysis Type: WATER
Lab Sample ID: VSTD010
Method: \\slsvr01\chem\MSB.i\B050429B.b\8260B-25LLW25.m

Injection Date: 29-APR-2005 11:40
Init. Cal. Date(s): 20-APR-2005 20-APR-2005
Init. Cal. Times: 11:29 15:12
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	1 Dichlorodifluoromethane	0.29972	0.19003	0.19003	0.000	36.59849	60.00000	Averaged	
	2 Chloromethane	0.26748	0.22775	0.22775	0.100	14.85471	60.00000	Averaged	
	3 Vinyl Chloride	0.12551	0.12973	0.12973	0.000	-3.36069	20.00000	Averaged	
	4 Bromomethane	10.00000	9.68251	0.18960	0.000	3.17487	0.000e+000	Linear	<-
	5 Chloroethane	0.15201	0.14448	0.14448	0.000	4.95426	60.00000	Averaged	
	6 Acrolein	0.00226	0.00255	0.00255	0.000	-13.01257	60.00000	Averaged	
	7 Trichlorofluoromethane	0.34717	0.32989	0.32989	0.000	4.97755	60.00000	Averaged	
	8 Acetonitrile	0.00738	0.00589	0.00589	0.000	20.19570	60.00000	Averaged	
M	9 1,2-Dichloroethene (total)	0.24007	0.26157	0.26157	0.000	-8.95531	120	Averaged	
	10 Acetone	10.00000	7.02469	0.01505	0.000	29.75310	0.000e+000	Linear	<-
	11 1,1-Dichloroethene	0.21532	0.22199	0.22199	0.000	-3.09851	20.00000	Averaged	
	12 Iodomethane	10.00000	9.48314	0.26193	0.000	5.16859	0.000e+000	Linear	<-
	13 Acrylonitrile	0.01714	0.01805	0.01805	0.000	-5.32963	60.00000	Averaged	
	14 Methylene Chloride	10.00000	10.73136	0.23281	0.000	-7.31355	0.000e+000	Linear	<-
	15 1,1,2-Trichlorofluoroethane	0.24184	0.24707	0.24707	0.000	-2.16119	60.00000	Averaged	
	16 Allyl chloride	0.18527	0.23305	0.23305	0.000	-25.78583	60.00000	Averaged	
	17 Carbon Disulfide	10.00000	9.40918	0.78934	0.000	5.90822	0.000e+000	Linear	<-
	18 trans-1,2-Dichloroethene	0.24171	0.26546	0.26546	0.000	-9.82575	60.00000	Averaged	
	19 1,1-Dichloroethane	0.40834	0.44030	0.44030	0.100	-7.82768	60.00000	Averaged	
	20 Propionitrile	50.00000	45.21258	0.00623	0.000	9.57483	0.000e+000	Linear	<-
	21 Vinyl acetate	10.00000	9.14505	0.12365	0.000	8.54949	0.000e+000	Linear	<-
	22 2-Chloro-1,3-butadiene	0.31284	0.40798	0.40798	0.000	-30.41458	60.00000	Averaged	
	23 2-Butanone	0.25836	0.28812	0.28812	0.000	-11.51990	60.00000	Averaged	
	24 Methacrylonitrile	0.03545	0.03781	0.03781	0.000	-6.67613	60.00000	Averaged	
	25 cis-1,2-Dichloroethene	0.23842	0.25767	0.25767	0.000	-8.07286	60.00000	Averaged	
	26 Bromochloromethane	0.08805	0.09126	0.09126	0.000	-3.64736	100	Averaged	
	27 Chloroform	0.39597	0.40539	0.40539	0.000	-2.37681	20.00000	Averaged	
	28 Ethyl Acetate	20.00000	19.00311	0.05899	0.000	4.98444	0.000e+000	Linear	<-
$	29 Dibromofluoromethane	0.18167	0.18784	0.18784	0.000	-3.39726	60.00000	Averaged	
	30 Isobutanol	200	190	0.00385	0.000	5.13603	0.000e+000	Linear	<-
$	31 1,2-Dichloroethane-d4	0.14684	0.14091	0.14091	0.000	4.03595	60.00000	Averaged	
	32 1,2-Dichloroethane	0.18635	0.17588	0.17588	0.000	5.61602	60.00000	Averaged	
	33 1,1,1-Trichloroethane	0.33826	0.37264	0.37264	0.000	-10.16212	60.00000	Averaged	
	34 Carbon Tetrachloride	0.27185	0.30741	0.30741	0.000	-13.08055	60.00000	Averaged	
	35 Benzene	1.05128	1.08875	1.08875	0.000	-3.56418	60.00000	Averaged	
	37 Dibromomethane	0.07671	0.07448	0.07448	0.000	2.90942	60.00000	Averaged	
	38 1,2-Dichloropropane	0.23318	0.23323	0.23323	0.000	-0.01915	20.00000	Averaged	
	39 Trichloroethene	0.28767	0.30182	0.30182	0.000	-4.91625	60.00000	Averaged	
	40 1-Nitropropane	10.00000	7.95490	0.02441	0.000	20.45104	0.000e+000	Linear	<-
	41 Bromodichloromethane	0.23900	0.24853	0.24853	0.000	-3.98715	60.00000	Averaged	
	42 1,4-Dioxane	0.00074	0.00070	0.00070	0.000	5.71318	100	Averaged	
	43 Methyl methacrylate	0.05513	0.05571	0.05571	0.000	-1.05357	60.00000	Averaged	
	44 2-Chloroethyl Vinyl Ether	0.03675	0.03977	0.03977	0.000	-8.20993	100	Averaged	

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BCAL8206.D
Report Date: 29-Apr-2005 12:40

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSB.i
Lab File ID: BCAL8206.D
Analysis Type: WATER
Lab Sample ID: VSTD010
Method: \\slsvr01\chem\MSB.i\B050429B.b\8260B-25LLW25.m

Injection Date: 29-APR-2005 11:40
Init. Cal. Date(s): 20-APR-2005 20-APR-2005
Init. Cal. Times: 11:29 15:12
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	45 cis-1,3-Dichloropropene	10.00000	10.45617	0.31224	0.000	-4.56173	0.000e+000	Linear	<-
	46 4-Methyl-2-pentanone	0.07046	0.06879	0.06879	0.000	2.38007	60.00000	Averaged	
	47 trans-1,3-Dichloropropene	10.00000	8.73356	0.68402	0.000	12.66442	0.000e+000	Linear	<-
M	48 Xylenes (total)	2.31053	2.36161	2.36161	0.000	-2.21090	180	Averaged	
	49 1,1,2-Trichloroethane	0.50129	0.43471	0.43471	0.000	13.28272	60.00000	Averaged	
$	50 Toluene-d8	3.76875	3.62046	3.62046	0.000	3.93467	60.00000	Averaged	
	51 Toluene	4.95256	4.72556	4.72556	0.000	4.58341	20.00000	Averaged	
	52 Ethyl methacrylate	0.59356	0.55813	0.55813	0.000	5.96780	60.00000	Averaged	
	53 2-Hexanone	0.04883	0.04922	0.04922	0.000	-0.80882	60.00000	Averaged	
	54 Chlorodibromomethane	10.00000	8.67040	0.44909	0.000	13.29601	0.000e+000	Linear	<-
	55 1,2-Dibromoethane	0.41935	0.39335	0.39335	0.000	6.20025	60.00000	Averaged	
	56 Tetrachloroethene	1.26110	1.08092	1.08092	0.000	14.28713	60.00000	Averaged	
	57 1,1,1,2-Tetrachloroethane	0.77075	0.80544	0.80544	0.000	-4.50030	60.00000	Averaged	
	59 Chlorobenzene	3.12473	3.05553	3.05553	0.300	2.21449	60.00000	Averaged	
	60 Ethylbenzene	1.99528	2.03186	2.03186	0.000	-1.83332	20.00000	Averaged	
	61 m,p-Xylenes	2.33365	2.40975	2.40975	0.000	-3.26096	60.00000	Averaged	
	62 Bromoform	10.00000	8.38246	0.18375	0.100	16.17540	0.000e+000	Linear	<-
	63 Styrene	3.06930	3.16063	3.16063	0.000	-2.97540	60.00000	Averaged	
	64 1,1,2,2-Tetrachloroethane	0.48413	0.46050	0.46050	0.300	4.87983	60.00000	Averaged	
	65 o-Xylene	2.26428	2.26533	2.26533	0.000	-0.04643	60.00000	Averaged	
	66 1,2,3-Trichloropropane	0.09022	0.09317	0.09317	0.000	-3.27342	60.00000	Averaged	
	67 trans-1,4-dichloro-2-butene	0.07600	0.08761	0.08761	0.000	-15.27228	60.00000	Averaged	
	68 Isopropylbenzene	1.24099	1.56619	1.56619	0.000	-26.20482	60.00000	Averaged	
$	69 4-Bromofluorobenzene	0.98169	1.01496	1.01496	0.000	-3.38872	60.00000	Averaged	
	70 n-Propylbenzene	1.79438	2.09525	2.09525	0.000	-16.76688	60.00000	Averaged	
	71 2-Chlorotoluene	0.99700	1.21341	1.21341	0.000	-21.70671	60.00000	Averaged	
	72 4-Chlorotoluene	0.97676	1.18119	1.18119	0.000	-20.92932	60.00000	Averaged	
	73 1,3,5-Trimethylbenzene	1.14771	1.42130	1.42130	0.000	-23.83792	60.00000	Averaged	
	74 Pentachloroethane	0.22829	0.35105	0.35105	0.000	-53.77285	60.00000	Averaged	
	75 t-Butylbenzene	1.02244	1.29633	1.29633	0.000	-26.78733	60.00000	Averaged	
	76 1,2,4-Trimethylbenzene	1.12909	1.37346	1.37346	0.000	-21.64371	60.00000	Averaged	
	77 sec-Butylbenzene	1.62219	2.00790	2.00790	0.000	-23.77693	60.00000	Averaged	
	78 1,3-Dichlorobenzene	1.69916	1.77102	1.77102	0.000	-4.22882	60.00000	Averaged	
	80 1,4-Dichlorobenzene	1.65571	1.67896	1.67896	0.000	-1.40430	60.00000	Averaged	
	81 1,2-Dichlorobenzene	1.33365	1.33876	1.33876	0.000	-0.38367	60.00000	Averaged	
	82 1,2-Dibromo-3-chloropropane	10.00000	7.79174	0.03349	0.000	22.08255	0.000e+000	Linear	<-
	83 1,2,4-Trichlorobenzene	0.89241	0.83921	0.83921	0.000	5.96158	60.00000	Averaged	
	84 Naphthalene	1.01343	0.93828	0.93828	0.000	7.41538	60.00000	Averaged	
	85 Hexachlorobutadiene	0.63403	0.67127	0.67127	0.000	-5.87291	60.00000	Averaged	
	86 1,2,3-Trichlorobenzene	0.70709	0.65213	0.65213	0.000	7.77279	60.00000	Averaged	

CONTINUING CALIBRATION REPORT

Instrument ID: MSB.i
Lab File ID: BCAL8206.D
Analysis Type: WATER

Injection Date: 29-APR-2005 11:40
Lab Sample ID: VSTD010
Method File: \\slsvr01\chem\MSB.i\B050429B.b\8260B-2

COMPOUND	%D
Dichlorodifluoromethane	36.6
Chloromethane	14.9
Vinyl Chloride	3.4
Bromomethane	3.2
Chloroethane	5.0
Trichlorofluoromethane	5.0
Acrolein	13.0
1,2-Dichloroethene (total)	8.9
Acetone	29.8
Acetonitrile	20.2
1,1-Dichloroethene	3.1
Iodomethane	5.2
Acrylonitrile	5.3
Methylene Chloride	7.3
1,1,2-Trichlorofluoroethane	2.2
Allyl chloride	25.8
Carbon Disulfide	5.9
trans-1,2-Dichloroethene	9.8
1,1-Dichloroethane	7.8
Propionitrile	9.6
Vinyl acetate	8.5
2-Chloro-1,3-butadiene	30.4
2-Butanone	11.5
Methacrylonitrile	6.7
cis-1,2-Dichloroethene	8.1
Bromochloromethane	3.6
Chloroform	2.4
Ethyl Acetate	5.0
Dibromofluoromethane	3.4
Isobutanol	5.1
1,2-Dichloroethane-d4	4.0
1,2-Dichloroethane	5.6
1,1,1-Trichloroethane	10.2
Carbon Tetrachloride	13.1
Benzene	3.6
Dibromomethane	2.9
1,2-Dichloropropane	0.0
Trichloroethene	4.9
1-Nitropropane	20.5

STL ST LOUIS
Data File: \\slsvr01\chem\MSB.i\B050429B.b/BCAL8206.D
Report Date: 04/29/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSB.i
Lab File ID: BCAL8206.D
Analysis Type: WATER

Injection Date: 29-APR-2005 11:40
Lab Sample ID: VSTD010
Method File: \\slsvr01\chem\MSB.i\B050429B.b\

COMPOUND	%D
Bromodichloromethane	4.0
1,4-Dioxane	5.7
Methyl methacrylate	1.1
2-Chloroethyl Vinyl Ether	8.2
cis-1,3-Dichloropropene	4.6
4-Methyl-2-pentanone	2.4
trans-1,3-Dichloropropene	12.7
Xylenes (total)	2.2
1,1,2-Trichloroethane	13.3
Toluene-d8	3.9
Toluene	4.6
Ethyl methacrylate	6.0
2-Hexanone	0.8
Chlorodibromomethane	13.3
1,2-Dibromoethane	6.2
Tetrachloroethene	14.3
1,1,1,2-Tetrachloroethane	4.5
Chlorobenzene	2.2
Ethylbenzene	1.8
m,p-Xylenes	3.3
Bromoform	16.2
Styrene	3.0
1,1,2,2-Tetrachloroethane	4.9
o-Xylene	0.0
1,2,3-Trichloropropane	3.3
trans-1,4-dichloro-2-butene	15.3
Isopropylbenzene	26.2
4-Bromofluorobenzene	3.4
n-Propylbenzene	16.8
2-Chlorotoluene	21.7
4-Chlorotoluene	20.9
1,3,5-Trimethylbenzene	23.8
Pentachloroethane	53.8
t-Butylbenzene	26.8
1,2,4-Trimethylbenzene	21.6
sec-Butylbenzene	23.8
1,3-Dichlorobenzene	4.2
1,4-Dichlorobenzene	1.4
1,2-Dichlorobenzene	0.4

STL ST LOUIS
Data File: \\slsvr01\chem\MSB.i\B050429B.b/BCAL8206.D
Report Date: 04/29/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSB.i
Lab File ID: BCAL8206.D
Analysis Type: WATER

Injection Date: 29-APR-2005 11:40
Lab Sample ID: VSTD010
Method File: \\slsvr01\chem\MSB.i\B050429B.b\

COMPOUND	%D
1,2-Dibromo-3-chloropropane	22.1
1,2,4-Trichlorobenzene	6.0
Naphthalene	7.4
Hexachlorobutadiene	5.9
1,2,3-Trichlorobenzene	7.8

The average of %D's in the continuing calibration is 9.9

MC 5-1-05

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BCAL8206.D
Report Date: 29-Apr-2005 12:40

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSB.i\B050429B.b\BCAL8206.D
Lab Smp Id: VSTD010
Inj Date : 29-APR-2005 11:40
Operator : MN Inst ID: MSB.i
Smp Info : VSTD010;B050429B.b
Misc Info : VBLKB119B.B;
Comment : NONE
Method : \\slsvr01\chem\MSB.i\B050429B.b\8260B-25LLW25.m
Meth Date : 29-Apr-2005 12:40 nuttm Quant Type: ISTD
Cal Date : 20-APR-2005 12:06 Cal File: BCAL8020.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLGC01

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

MC 5-1-05

Name	Value	Description
DF	1.000	Dilution Factor
Vod	25.000	Def Sample Volume (mL)
Vo	25.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	3.735	3.735	(0.263)	1527346	10.0000	6.340
2	Chloromethane	50	3.961	3.961	(0.279)	1830529	10.0000	8.514
3	Vinyl Chloride	62	4.178	4.178	(0.294)	1042691	10.0000	10.34
4	Bromomethane	94	4.690	4.690	(0.330)	1523908	10.0000	9.682
5	Chloroethane	64	4.877	4.877	(0.344)	1161255	10.0000	9.504
6	Acrolein	56	5.685	5.685	(0.401)	102490	50.0000	56.50
7	Trichlorofluoromethane	101	5.675	5.675	(0.400)	2651501	10.0000	9.502
8	Acetonitrile	41	6.050	6.050	(0.426)	236623	50.0000	39.90
M 9	1,2-Dichloroethene (total)	96				4204690	20.0000	21.79
10	Acetone	43	5.882	5.882	(0.414)	120938	10.0000	7.025
11	1,1-Dichloroethene	96	6.532	6.532	(0.460)	1784243	10.0000	10.31
12	Iodomethane	142	6.582	6.582	(0.464)	2105238	10.0000	9.483
13	Acrylonitrile	53	6.641	6.641	(0.468)	725352	50.0000	52.66
14	Methylene Chloride	84	6.788	6.788	(0.478)	1871187	10.0000	10.73
15	1,1,2-Trichlorofluoroethane	101	6.887	6.887	(0.485)	1985832	10.0000	10.22
16	Allyl chloride	39	6.956	6.956	(0.490)	1873145	10.0000	12.58
17	Carbon Disulfide	76	7.173	7.173	(0.505)	6344332	10.0000	9.409
18	trans-1,2-Dichloroethene	96	8.118	8.118	(0.572)	2133647	10.0000	10.98
19	1,1-Dichloroethane	63	8.689	8.689	(0.612)	3538947	10.0000	10.78
20	Propionitrile	54	8.778	8.778	(0.618)	250225	50.0000	45.21(A)
21	Vinyl acetate	43	9.123	9.123	(0.643)	993816	10.0000	9.145
22	2-Chloro-1,3-butadiene	53	9.645	9.645	(0.679)	3279184	10.0000	13.04

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BCAL8206.D
Report Date: 29-Apr-2005 12:40

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23	2-Butanone	43	9.793	9.793	(0.690)	2315765	10.0000	11.15
	24	Methacrylonitrile	41	10.157	10.157	(0.716)	1519697	50.0000	53.34
	25	cis-1,2-Dichloroethene	96	10.216	10.216	(0.720)	2071043	10.0000	10.81
	26	Bromochloromethane	130	10.640	10.640	(0.750)	733498	10.0000	10.36
	27	Chloroform	83	10.797	10.797	(0.761)	3258308	10.0000	10.24
	28	Ethyl Acetate	43	10.916	10.916	(0.769)	948267	20.0000	19.00(A)
$	29	Dibromofluoromethane	113	11.122	11.122	(0.784)	1509779	10.0000	10.34
	30	Isobutanol	42	11.674	11.674	(0.822)	619143	200.000	189.7
$	31	1,2-Dichloroethane-d4	65	12.275	12.275	(0.865)	1132599	10.0000	9.596
	32	1,2-Dichloroethane	62	12.462	12.462	(0.878)	1413668	10.0000	9.438
	33	1,1,1-Trichloroethane	97	12.679	12.679	(0.893)	2995094	10.0000	11.02
	34	Carbon Tetrachloride	117	13.536	13.536	(0.954)	2470855	10.0000	11.31
	35	Benzene	78	13.664	13.664	(0.963)	8750892	10.0000	10.36
*	36	Fluorobenzene	96	14.196	14.196	(1.000)	8037558	10.0000	
	37	Dibromomethane	93	14.925	14.925	(1.051)	598612	10.0000	9.709
	38	1,2-Dichloropropane	63	15.043	15.043	(1.060)	1874591	10.0000	10.00
	39	Trichloroethene	130	15.141	15.141	(1.067)	2425865	10.0000	10.49
	40	1-Nitropropane	43	15.230	15.230	(1.073)	196235	10.0000	7.955
	41	Bromodichloromethane	83	15.240	15.240	(1.074)	1997569	10.0000	10.40
	42	1,4-Dioxane	88	15.585	15.585	(1.098)	112110	200.000	188.6
	43	Methyl methacrylate	69	15.762	15.762	(1.110)	447756	10.0000	10.10
	44	2-Chloroethyl Vinyl Ether	63	16.294	16.294	(1.148)	319673	10.0000	10.82
	45	cis-1,3-Dichloropropene	75	16.688	16.688	(1.176)	2509650	10.0000	10.46
	46	4-Methyl-2-pentanone	43	17.003	17.003	(1.198)	552885	10.0000	9.762
	47	trans-1,3-Dichloropropene	75	17.604	17.604	(0.844)	1562130	10.0000	8.734
M	48	Xylenes (total)	106				16179905	30.0000	30.66
	49	1,1,2-Trichloroethane	97	17.880	17.880	(0.857)	992758	10.0000	8.672
$	50	Toluene-d8	98	18.116	18.116	(0.868)	8268190	10.0000	9.606
	51	Toluene	91	18.254	18.254	(0.875)	10791943	10.0000	9.542
	52	Ethyl methacrylate	69	18.559	18.559	(0.890)	1274632	10.0000	9.403
	53	2-Hexanone	43	18.756	18.756	(1.321)	395626	10.0000	10.08
	54	Chlorodibromomethane	129	18.835	18.835	(0.903)	1025594	10.0000	8.670
	55	1,2-Dibromoethane	107	19.298	19.298	(0.925)	898310	10.0000	9.380
	56	Tetrachloroethene	164	19.653	19.653	(0.942)	2468541	10.0000	8.571
	57	1,1,1,2-Tetrachloroethane	131	20.785	20.785	(0.996)	1839411	10.0000	10.45
*	58	Chlorobenzene-d5	119	20.864	20.864	(1.000)	2283738	10.0000	
	59	Chlorobenzene	112	20.913	20.913	(1.002)	6978032	10.0000	9.778
	60	Ethylbenzene	106	21.307	21.307	(1.021)	4640239	10.0000	10.18
	61	m,p-Xylenes	106	21.672	21.672	(1.039)	11006483	20.0000	20.65
	62	Bromoform	173	21.800	21.800	(1.045)	419634	10.0000	8.382
	63	Styrene	104	22.243	22.243	(1.066)	7218044	10.0000	10.30
	64	1,1,2,2-Tetrachloroethane	83	22.361	22.361	(1.072)	1051663	10.0000	9.512
	65	o-Xylene	106	22.371	22.371	(1.072)	5173422	10.0000	10.00
	66	1,2,3-Trichloropropane	110	22.608	22.608	(0.891)	276963	10.0000	10.33
	67	trans-1,4-dichloro-2-butene	53	22.677	22.677	(0.894)	260420	10.0000	11.53
	68	Isopropylbenzene	105	23.012	23.012	(1.621)	12588378	10.0000	12.62
$	69	4-Bromofluorobenzene	95	23.061	23.061	(0.909)	3017103	10.0000	10.34
	70	n-Propylbenzene	91	23.780	23.780	(1.675)	16840673	10.0000	11.68
	71	2-Chlorotoluene	91	23.928	23.928	(1.686)	9752879	10.0000	12.17
	72	4-Chlorotoluene	91	24.056	24.056	(1.695)	9493891	10.0000	12.09
	73	1,3,5-Trimethylbenzene	105	24.292	24.292	(1.711)	11423787	10.0000	12.38
	74	Pentachloroethane	167	24.381	24.381	(0.961)	1043540	10.0000	15.38
	75	t-Butylbenzene	119	24.775	24.775	(1.745)	10419329	10.0000	12.68
	76	1,2,4-Trimethylbenzene	105	24.982	24.982	(1.760)	11039280	10.0000	12.16

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BCAL8206.D
Report Date: 29-Apr-2005 12:40

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77	sec-Butylbenzene	105	25.169	25.169	(1.773)	16138616	10.0000	12.38(A)
78	1,3-Dichlorobenzene	146	25.297	25.297	(0.997)	5264584	10.0000	10.42
* 79	1,4 Dichlorobenzene-d4	152	25.376	25.376	(1.000)	2972629	10.0000	
80	1,4-Dichlorobenzene	146	25.425	25.425	(1.002)	4990929	10.0000	10.14
81	1,2-Dichlorobenzene	146	26.095	26.095	(1.028)	3979647	10.0000	10.04
82	1,2-Dibromo-3-chloropropane	157	27.021	27.021	(1.065)	99559	10.0000	7.792
83	1,2,4-Trichlorobenzene	180	29.818	29.818	(1.175)	2494658	10.0000	9.404
84	Naphthalene	128	30.350	30.350	(1.196)	2789154	10.0000	9.258
85	Hexachlorobutadiene	225	30.478	30.478	(1.201)	1995425	10.0000	10.59
86	1,2,3-Trichlorobenzene	180	30.783	30.783	(1.213)	1938532	10.0000	9.223

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BCAL8206.D
Report Date: 29-Apr-2005 12:40

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

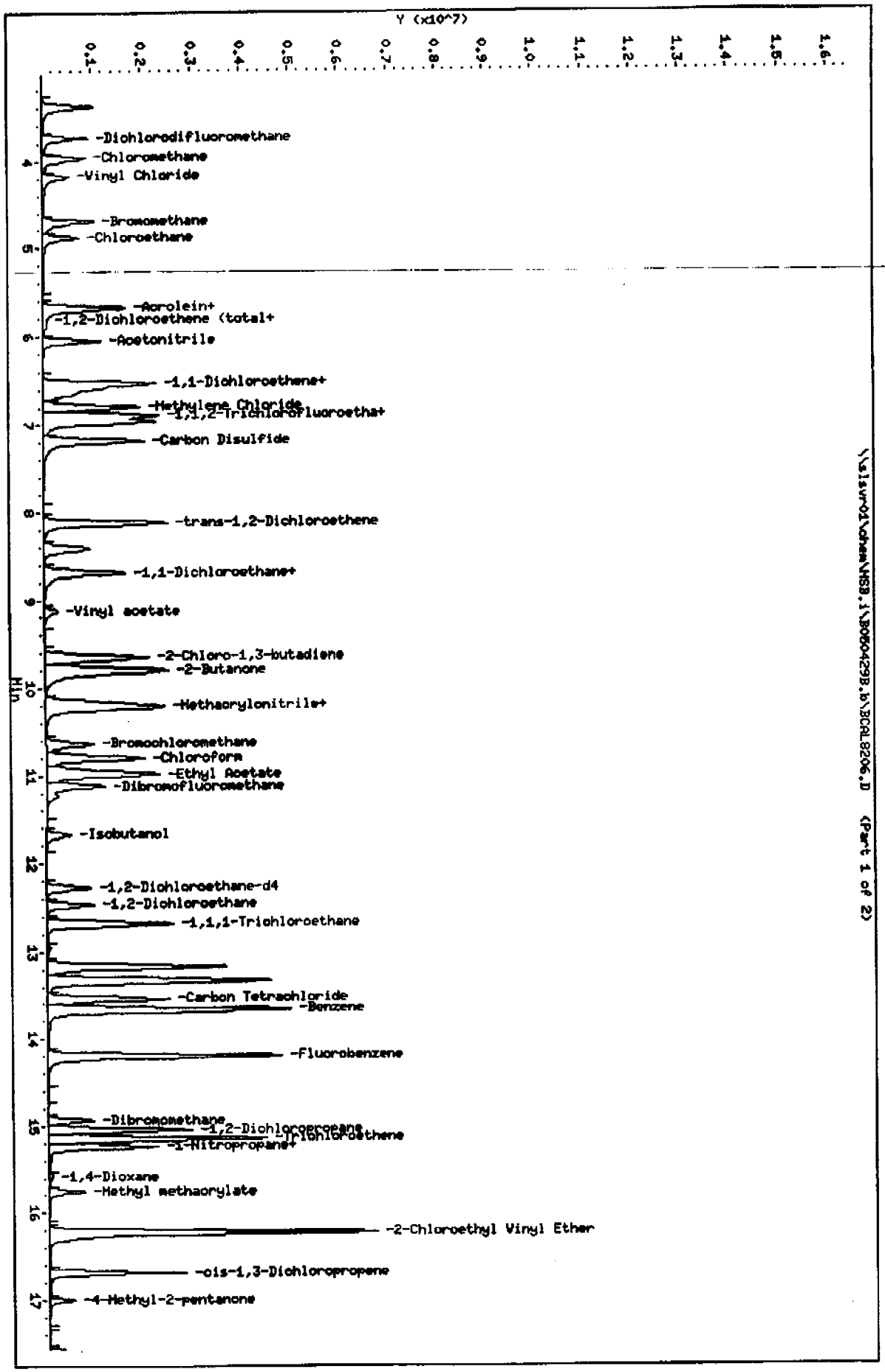
Instrument ID: MSB.i
Lab File ID: BCAL8206.D
Lab Smp Id: VSTD010
Analysis Type: VOA
Quant Type: ISTD
Operator: MN
Method File: \\slsvr01\chem\MSB.i\B050429B.b\8260B-25LLW25.m
Misc Info: VBLKB119B.B;

Calibration Date: 20-APR-2005
Calibration Time: 19:31
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	7724450	3862225	15448900	8037558	4.05
58 Chlorobenzene-d5	1950921	975461	3901842	2283738	17.06
79 1,4 Dichlorobenze	2687070	1343535	5374140	2972629	10.63

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	14.20	13.70	14.70	14.20	-0.06
58 Chlorobenzene-d5	20.86	20.36	21.36	20.86	0.01
79 1,4 Dichlorobenze	25.37	24.87	25.87	25.38	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^7)
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0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
Min
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8
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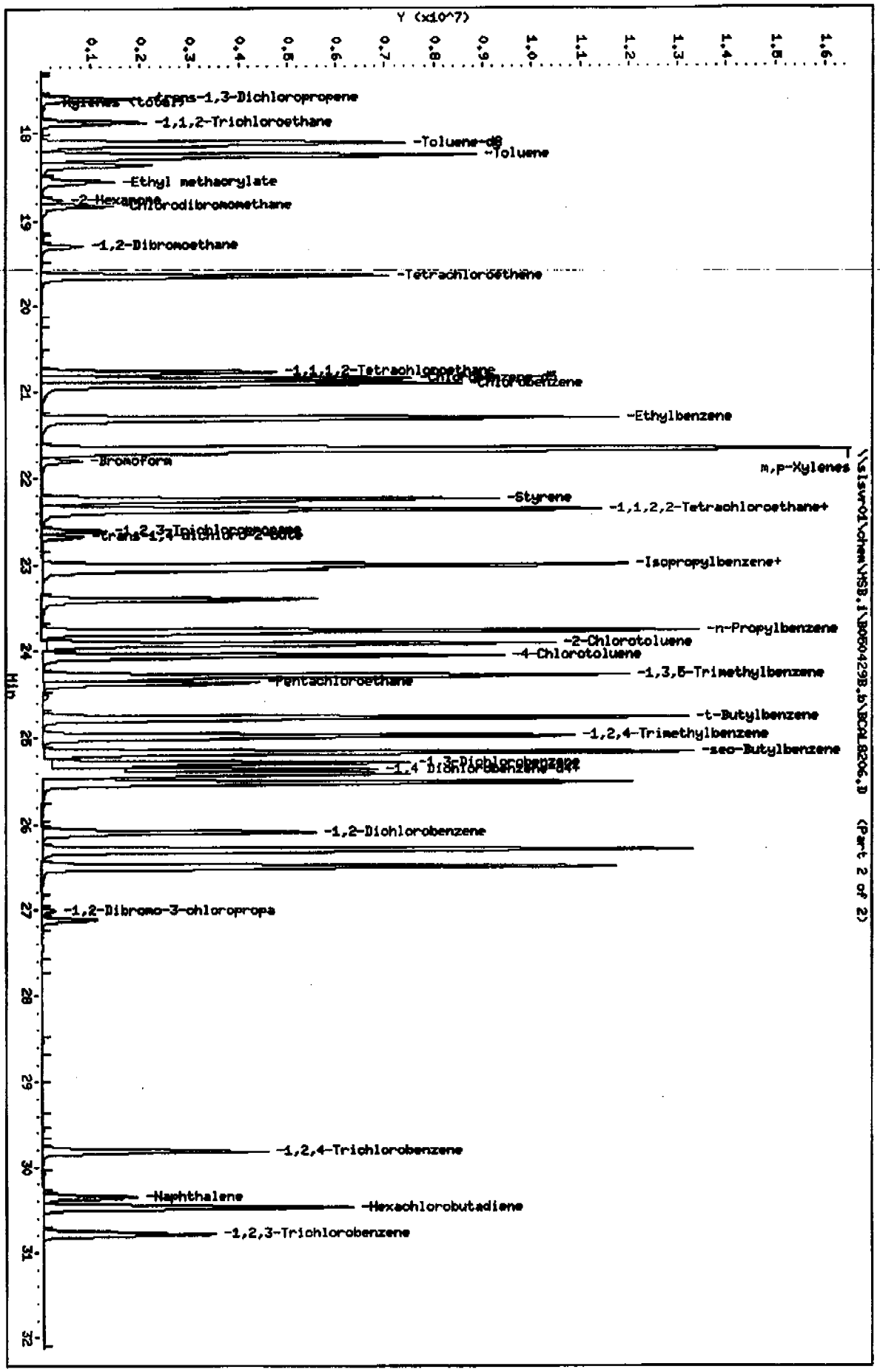
10
11
12
13
14
15
16
17
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Acrolein+
-1,2-Dichloroethene (total+
-Acetonitrile
-1,1-Dichloroethene+
-Methylene Chloride
-1,1,2-Trichlorofluoroetha+
-Carbon Disulfide
-trans-1,2-Dichloroethene
-1,1-Dichloroethane+
-Vinyl acetate
-2-Chloro-1,3-butadiene
-2-Butanone
-Methacrylonitrile+
-Bromochloromethane
-Chloroform
-Ethyl Acetate
-Dibromofluoromethane
-Isobutanol
-1,2-Dichloroethane-d4
-1,2-Dichloroethane
-1,1,1-Trichloroethane
-Carbon Tetrachloride
-Benzene
-Fluorobenzene
-Dibromomethane
-1,2-Dichloropropane
-Trichloroethene
-1-Nitropropane+
-1,4-Dioxane
-Methyl methacrylate
-2-Chloroethyl Vinyl Ether
-cis-1,3-Dichloropropene
-4-Methyl-2-pentanone
Data File: \\slsvr01\chem\MSB.i\B050429B.b\BCAL8206.D
Date : 29-APR-2005 11:40
Client ID:
Sample Info: VSTD010;B050429B.b
Purge Volume: 25.0
Column phase: Rtx-VMS
Instrument: MSB.i
Operator: MN
Column diameter: 0.25
\\slsvr01\chem\MSB.i\B050429B.b\BCAL8206.D (Part 1 of 2)


Y (x10^7)
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0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
trans-1,3-Dichloropropene
-1,1,2-Trichloroethane
-Toluene-d8
-Toluene
-Ethyl methacrylate
-2-Hexanone
Chlorodibromomethane
-1,2-Dibromoethane
-Tetrachloroethene
-1,1,1,2-Tetrachloroethane
-Ethylbenzene
-Bromoform
m,p-Xylenes
-Styrene
-1,1,2,2-Tetrachloroethane+
-Isopropylbenzene+
-n-Propylbenzene
-2-Chlorotoluene
-4-Chlorotoluene
-1,3,5-Trimethylbenzene
-Pentachloroethane
-t-Butylbenzene
-1,2,4-Trimethylbenzene
-sec-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloroprope
-1,2,4-Trichlorobenzene
-Naphthalene
-Hexachlorobutadiene
-1,2,3-Trichlorobenzene
Min
18
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\\slsvr01\chem\HSB.i\B0604298.b\BCAL8206.D (Part 2 of 2)
Data File: \\slsvr01\chem\HSB.i\B0604298.b\BCAL8206.D
Date : 29-APR-2006 11:40
Client ID:
Sample Info: VSTD010;B0604298.b
Purge Volume: 25.0
Column phase: Rtx-VMS
Instrument: HSB.i
Operator: MN
Column diameter: 0.25

Data File: \\slsvr01\chem\MSL.i\L050502B.b\LBFB0502.D

Date : 02-MAY-2005 10:52

Client ID: VBFB

Instrument: MSL.i

Sample Info: 50ng BFB

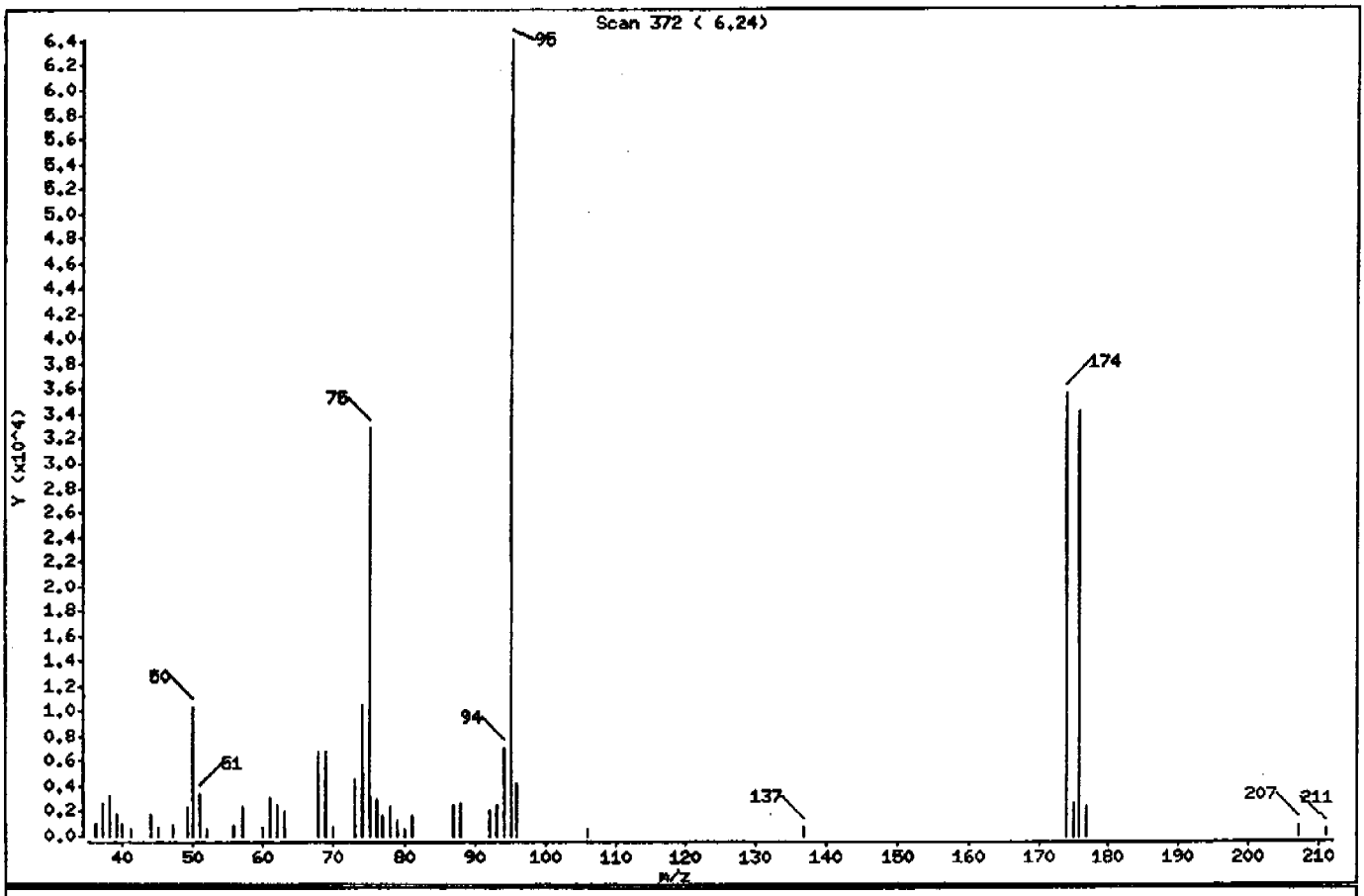
Volume Injected (uL): 2.0

Operator: MN

Column phase: RTX-502.2

Column diameter: 0.53

1 BFB



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.17
75	30.00 - 60.00% of mass 95	51.18
96	5.00 - 9.00% of mass 95	6.69
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	55.59
175	5.00 - 9.00% of mass 174	4.17 (7.50)
176	95.00 - 101.00% of mass 174	53.27 (95.83)
177	5.00 - 9.00% of mass 176	3.79 (7.11)

5-4-05

Data File: \\slsvr01\chem\MSL.i\L050502B.b\LBFB0582.D

Date : 02-MAY-2005 10:52

Client ID: VBFB

Instrument: MSL.i

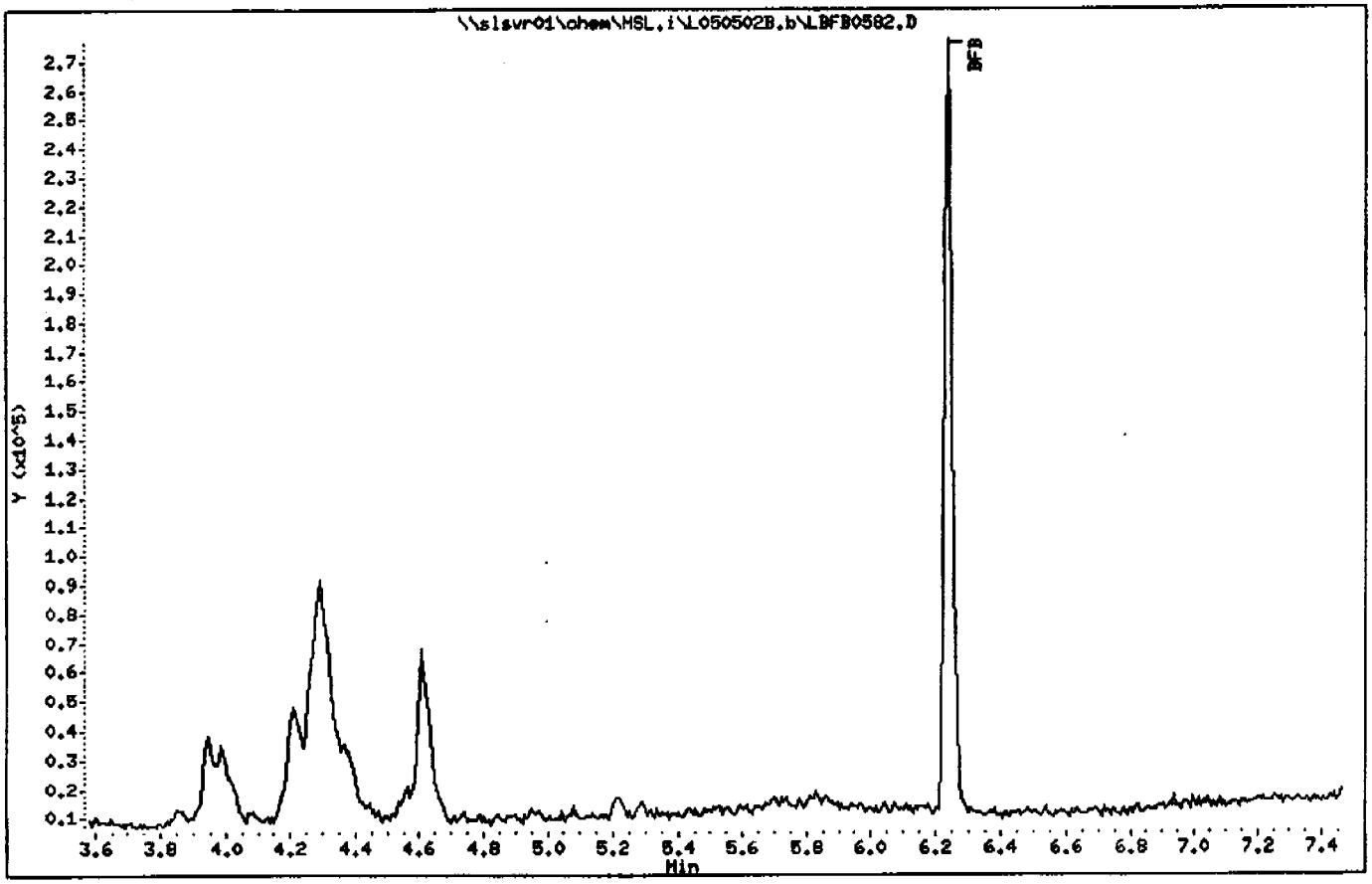
Sample Info: 50ng BFB

Volume Injected (uL): 2.0

Operator: MN

Column phase: RTX-502.2

Column diameter: 0.53



Data File: \\slsvr01\chem\MSL.i\L050502B.b\LBFB0582.D

Date : 02-MAY-2005 10:52

Client ID: VBFB

Instrument: MSL.i

Sample Info: 50ng BFB

Volume Injected (uL): 2.0

Operator: MN

Column phase: RTX-502.2

Column diameter: 0.53

Data File: LBFB0582.D
Spectrum: Scan 372 (6.24)
Location of Maximum: 95.00
Number of points: 46

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	987	51.90	530	75.00	32824	95.00	64136
37.00	2631	55.90	833	76.00	2948	96.00	4293
38.00	3219	57.00	2401	77.00	1605	105.90	525
39.00	1700	60.00	694	78.00	2322	136.90	704
40.00	1029	61.00	3178	78.90	1372	173.90	35656
41.10	599	62.00	2466	80.00	524	174.90	2675
44.00	1743	63.00	2084	80.90	1692	175.90	34168
45.00	811	68.00	6753	86.90	2442	176.90	2429
47.00	942	69.00	6824	87.90	2722	207.00	823
49.10	2432	70.00	670	92.00	2014	211.00	592
50.00	10372	73.00	4542	93.00	2540		
51.00	3438	74.00	10424	94.00	7099		

Data File: \\slsvr01\chem\MSL.i\L050502B.b\LCAL0584.D
Report Date: 04-May-2005 13:34

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSL.i
Lab File ID: LCAL0584.D
Analysis Type: WATER
Lab Sample ID: VSTD010
Method: \\slsvr01\chem\MSL.i\L050502B.b\8260B-25LLW30.m

Injection Date: 02-MAY-2005 14:13
Init. Cal. Date(s): 25-APR-2005 25-APR-2005
Init. Cal. Times: 10:18 12:39
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	1 Dichlorodifluoromethane	0.45033	0.38795	0.38795	0.000	13.85170	60.00000	Averaged
	2 Chloromethane	0.43519	0.37909	0.37909	0.100	12.89121	60.00000	Averaged
	3 Vinyl Chloride	0.46680	0.43638	0.43638	0.000	6.51655	20.00000	Averaged
	4 Bromomethane	10.00000	12.89742	0.26751	0.000	-28.97421	0.000e+000	Linear <-
	5 Chloroethane	0.31335	0.28085	0.28085	0.000	10.37326	60.00000	Averaged
	6 Trichlorofluoromethane	0.61892	0.52501	0.52501	0.000	15.17390	60.00000	Averaged
	7 Diethyl ether	0.15360	0.10409	0.10409	0.000	32.23526	60.00000	Averaged
	8 1,1,2-Trichlorofluoroethane	0.39096	0.35214	0.35214	0.000	9.92837	60.00000	Averaged
	9 1,1-Dichloroethene	0.40640	0.36569	0.36569	0.000	10.01552	20.00000	Averaged
	10 Carbon Disulfide	1.48320	1.33435	1.33435	0.000	10.03584	60.00000	Averaged
	11 Iodomethane	0.25056	0.24587	0.24587	0.000	1.87193	60.00000	Averaged
	12 Acrolein	50.00000	42.71594	0.00801	0.000	14.56812	0.000e+000	Linear <-
	13 Allyl chloride	0.18463	0.23820	0.23820	0.000	-29.01283	60.00000	Averaged
	14 Methylene Chloride	10.00000	9.73565	0.26155	0.000	2.64350	0.000e+000	Linear <-
	16 Methyl Acetate	10.00000	9.88299	0.01320	0.000	1.17013	0.000e+000	Linear <-
	18 trans-1,2-Dichloroethene	0.34972	0.39382	0.39382	0.000	-12.61010	60.00000	Averaged
	15 Acetone	10.00000	11.06298	0.02783	0.000	-10.62980	0.000e+000	Linear <-
	17 n-Hexane	0.54055	0.64969	0.64969	0.000	-20.19115	60.00000	Averaged
	19 MTBE	10.00000	8.28484	0.31785	0.000	17.15162	0.000e+000	Linear <-
M	20 1,2-Dichloroethene (total)	0.33512	0.33856	0.33856	0.000	-1.02575	60.00000	Averaged
	21 Acetonitrile	50.00000	33.66703	0.00569	0.000	32.66594	0.000e+000	Linear <-
	22 2-Chloro-1,3-butadiene	0.36353	0.42268	0.42268	0.000	-16.26885	60.00000	Averaged
	23 1,1-Dichloroethane	0.59032	0.52439	0.52439	0.100	11.16732	60.00000	Averaged
	24 Acrylonitrile	0.03049	0.02529	0.02529	0.000	17.04818	60.00000	Averaged
	26 cis-1,2-Dichloroethene	0.32052	0.28330	0.28330	0.000	11.61381	60.00000	Averaged
	25 Vinyl acetate	0.15207	0.13320	0.13320	0.000	12.41436	60.00000	Averaged
	27 2,2-Dichloropropane	0.51184	0.50111	0.50111	0.000	2.09528	60.00000	Averaged
	28 Cyclohexane	0.31570	0.43149	0.43149	0.000	-36.67845	100	Averaged
	30 Bromochloromethane	0.07510	0.06174	0.06174	0.000	17.79616	60.00000	Averaged
	29 Chloroform	0.55157	0.47760	0.47760	0.000	13.41052	20.00000	Averaged
	31 Ethyl acetate	0.07452	0.05137	0.05137	0.000	31.07138	60.00000	Averaged
	32 Tetrahydrofuran	50.00000	33.32939	0.00669	0.000	33.34121	0.000e+000	Linear <-
	33 Carbon Tetrachloride	0.44353	0.40337	0.40337	0.000	9.05485	60.00000	Averaged
$	34 Dibromofluoromethane	0.19590	0.17839	0.17839	0.000	8.93925	60.00000	Averaged
	35 1,1,1-Trichloroethane	0.53056	0.47792	0.47792	0.000	9.92109	60.00000	Averaged
	36 2-Butanone	0.03695	0.02593	0.02593	0.000	29.83558	60.00000	Averaged
	37 1,1-Dichloropropene	0.48228	0.45710	0.45710	0.000	5.22108	60.00000	Averaged
	38 Propionitrile	50.00000	33.25946	0.00691	0.000	33.48108	0.000e+000	Linear <-
	39 Methacrylonitrile	0.05404	0.03980	0.03980	0.000	26.36241	60.00000	Averaged
	40 Isobutanol	0.00508	0.00360	0.00360	0.000	29.11218	100	Averaged
	41 Benzene	1.37918	1.27259	1.27259	0.000	7.72831	60.00000	Averaged
$	42 1,2-Dichloroethane-d4	0.17680	0.14544	0.14544	0.000	17.74034	60.00000	Averaged
	43 1,2-Dichloroethane	0.23435	0.17546	0.17546	0.000	25.13082	60.00000	Averaged

5-4-05

Data File: \\slsvr01\chem\MSL.i\L050502B.b\LCAL0584.D
Report Date: 04-May-2005 13:34

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSL.i
Lab File ID: LCAL0584.D
Analysis Type: WATER
Lab Sample ID: VSTD010
Method: \\slsvr01\chem\MSL.i\L050502B.b\8260B-25LLW30.m

Injection Date: 02-MAY-2005 14:13
Init. Cal. Date(s): 25-APR-2005 25-APR-2005
Init. Cal. Times: 10:18 12:39
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	45 Methylcyclohexane	0.32651	0.37805	0.37805	0.000	-15.78685	100	Averaged	
	46 Trichloroethene	0.31150	0.29442	0.29442	0.000	5.48477	60.00000	Averaged	
	47 n-Butanol	0.00252	0.00190	0.00190	0.000	24.60944	100	Averaged	
	48 Dibromomethane	0.07940	0.06281	0.06281	0.000	20.89458	60.00000	Averaged	
	49 1,2-Dichloropropane	0.25671	0.21441	0.21441	0.000	16.47852	20.00000	Averaged	
	50 Bromodichloromethane	0.31153	0.24349	0.24349	0.000	21.84285	60.00000	Averaged	
	51 Methyl methacrylate	10.00000	6.68996	0.04795	0.000	33.10036	0.000e+000	Linear	<-
	52 1,4-Dioxane	200	157	0.00070	0.000	21.70706	0.000e+000	Linear	<-
	54 cis-1,3-Dichloropropene	0.34186	0.27643	0.27643	0.000	19.14157	60.00000	Averaged	
$	55 Toluene-d8	0.96768	1.02817	1.02817	0.000	-6.25174	60.00000	Averaged	
	56 Toluene	2.48795	2.47135	2.47135	0.000	0.66733	20.00000	Averaged	
	58 4-Methyl-2-pentanone	0.08036	0.05123	0.05123	0.000	36.25278	60.00000	Averaged	
	59 trans-1,3-Dichloropropene	0.40944	0.32925	0.32925	0.000	19.58646	60.00000	Averaged	
	60 Ethyl methacrylate	0.26336	0.20905	0.20905	0.000	20.62433	60.00000	Averaged	
	61 Tetrachloroethene	0.53840	0.37874	0.37874	0.000	29.65378	60.00000	Averaged	
	62 1,1,2-Trichloroethane	0.19980	0.16412	0.16412	0.000	17.85519	60.00000	Averaged	
M	63 Xylenes (total)	1.02209	1.02991	1.02991	0.000	-0.76526	60.00000	Averaged	
	64 Chlorodibromomethane	0.19491	0.15458	0.15458	0.000	20.69215	60.00000	Averaged	
	65 1,3-Dichloropropane	0.39590	0.32316	0.32316	0.000	18.37335	60.00000	Averaged	
	57 2-Nitro-Propane	10.00000	6.89702	0.02728	0.000	31.02982	0.000e+000	Linear	<-
	66 2-Hexanone	10.00000	7.69387	0.06086	0.000	23.06134	0.000e+000	Linear	<-
	67 1,2-Dibromoethane	0.16161	0.13700	0.13700	0.000	15.22552	60.00000	Averaged	
	68 Ethylbenzene	0.79344	0.82664	0.82664	0.000	-4.18451	20.00000	Averaged	
	70 Chlorobenzene	1.32049	1.20289	1.20289	0.300	8.90596	60.00000	Averaged	
	71 1,1,1,2-Tetrachloroethane	0.35064	0.30357	0.30357	0.000	13.42259	60.00000	Averaged	
	72 m,p-Xylenes	1.08487	1.10638	1.10638	0.000	-1.98294	60.00000	Averaged	
	73 o-Xylene	0.89653	0.87697	0.87697	0.000	2.18171	60.00000	Averaged	
	74 Styrene	1.34676	1.25229	1.25229	0.000	7.01418	60.00000	Averaged	
	75 Bromoform	0.20131	0.14705	0.14705	0.100	26.95176	60.00000	Averaged	
	76 Isopropylbenzene	6.10124	6.72187	6.72187	0.000	-10.17220	60.00000	Averaged	
$	77 4-Bromofluorobenzene	1.44680	1.44943	1.44943	0.000	-0.18130	60.00000	Averaged	
	78 n-Propylbenzene	8.69684	9.53306	9.53306	0.000	-9.61519	60.00000	Averaged	
	79 1,1,2,2-Tetrachloroethane	0.51087	0.42558	0.42558	0.300	16.69623	60.00000	Averaged	
	80 1,3,5-Trimethylbenzene	5.70732	6.06620	6.06620	0.000	-6.28799	60.00000	Averaged	
	81 Bromobenzene	0.88864	0.85589	0.85589	0.000	3.68474	60.00000	Averaged	
	83 2-Chlorotoluene	4.69082	4.79227	4.79227	0.000	-2.16279	60.00000	Averaged	
	90 Cyclohexanone	10.00000	9.71487	0.03650	0.000	2.85126	0.000e+000	Linear	<-
	84 4-Chlorotoluene	4.51040	4.54463	4.54463	0.000	-0.75888	60.00000	Averaged	
	85 t-Butylbenzene	5.15829	5.71964	5.71964	0.000	-10.88248	60.00000	Averaged	
	86 1,2,4-Trimethylbenzene	5.53989	5.74309	5.74309	0.000	-3.66802	60.00000	Averaged	
	82 trans-1,4-dichloro-2-butene	10.00000	7.08191	0.10528	0.000	29.18095	0.000e+000	Linear	<-
	88 sec-Butylbenzene	7.48595	8.61603	8.61603	0.000	-15.09589	60.00000	Averaged	

Data File: \\slsvr01\chem\MSL.i\L050502B.b\LCAL0584.D
Report Date: 04-May-2005 13:34

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSL.i
Lab File ID: LCAL0584.D
Analysis Type: WATER
Lab Sample ID: VSTD010
Method: \\slsvr01\chem\MSL.i\L050502B.b\8260B-25LLW30.m

Injection Date: 02-MAY-2005 14:13
Init. Cal. Date(s): 25-APR-2005 25-APR-2005
Init. Cal. Times: 10:18 12:39
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
89	4-Isopropyltoluene	5.57541	6.31878	6.31878	0.000	-13.33298	60.00000	Averaged	
91	1,3-Dichlorobenzene	2.07811	2.04875	2.04875	0.000	1.41256	60.00000	Averaged	
93	1,4-Dichlorobenzene	2.11107	2.01334	2.01334	0.000	4.62969	60.00000	Averaged	
94	n-Butylbenzene	6.13596	6.87839	6.87839	0.000	-12.09962	60.00000	Averaged	
96	1,2-Dichlorobenzene	1.59313	1.49931	1.49931	0.000	5.88908	60.00000	Averaged	
95	1,2,3-Trichloropropane	10.00000	9.49612	0.05860	0.000	5.03877	0.000e+000	Linear	<-
97	1,2-Dibromo-3-chloropropane	0.05943	0.04642	0.04642	0.000	21.89527	60.00000	Averaged	
98	Hexachlorobutadiene	0.58256	0.67836	0.67836	0.000	-16.44484	60.00000	Averaged	
99	1,2,4-Trichlorobenzene	0.97255	0.89004	0.89004	0.000	8.48363	60.00000	Averaged	
100	Naphthalene	1.37144	1.17048	1.17048	0.000	14.65343	60.00000	Averaged	
101	1,2,3-Trichlorobenzene	0.72411	0.65129	0.65129	0.000	10.05611	60.00000	Averaged	

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CONTINUING CALIBRATION REPORT

Instrument ID: MSL.i
Lab File ID: LCAL0584.D
Analysis Type: WATER

Injection Date: 02-MAY-2005 14:13
Lab Sample ID: VSTD010
Method File: \\slsvr01\chem\MSL.i\L050502B.b\8260B-2

COMPOUND	%D
Dichlorodifluoromethane	13.9
Chloromethane	12.9
Vinyl Chloride	6.5
Bromomethane	29.0
Chloroethane	10.4
Trichlorofluoromethane	15.2
Diethyl ether	32.2
1,1,2-Trichlorofluoroethane	9.9
1,1-Dichloroethene	10.0
Carbon Disulfide	10.0
Iodomethane	1.9
Acrolein	14.6
Allyl chloride	29.0
Methylene Chloride	2.6
Acetone	10.6
Methyl Acetate	1.2
n-Hexane	20.2
trans-1,2-Dichloroethene	12.6
MTBE	17.2
1,2-Dichloroethene (total)	0.5
Acetonitrile	32.7
2-Chloro-1,3-butadiene	16.3
1,1-Dichloroethane	11.2
Acrylonitrile	17.0
Vinyl acetate	12.4
cis-1,2-Dichloroethene	11.6
2,2-Dichloropropane	2.1
Cyclohexane	36.7
Bromochloromethane	17.8
Chloroform	13.4
Ethyl acetate	31.1
Isobutanol	29.1
Tetrahydrofuran	33.3
Carbon Tetrachloride	9.1
Dibromofluoromethane	8.9
1,1,1-Trichloroethane	9.9
2-Butanone	29.8
1,1-Dichloropropene	5.2
Propionitrile	33.5

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Data File: \\slsvr01\chem\MSL.i\L050502B.b/LCAL0584.D
Report Date: 05/04/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSL.i
Lab File ID: LCAL0584.D
Analysis Type: WATER

Injection Date: 02-MAY-2005 14:13
Lab Sample ID: VSTD010
Method File: \\slsvr01\chem\MSL.i\L050502B.b\

COMPOUND	%D
Methacrylonitrile	26.4
Benzene	7.7
1,2-Dichloroethane-d4	17.7
1,2-Dichloroethane	25.1
Methylcyclohexane	15.8
Trichloroethene	5.5
n-Butanol	24.6
Dibromomethane	20.9
1,2-Dichloropropane	16.5
Bromodichloromethane	21.8
Methyl methacrylate	33.1
1,4-Dioxane	21.7
cis-1,3-Dichloropropene	19.1
Toluene-d8	6.3
Toluene	0.7
2-Nitro-Propane	31.0
4-Methyl-2-pentanone	36.3
Ethyl methacrylate	20.6
trans-1,3-Dichloropropene	19.6
Tetrachloroethene	29.7
1,1,2-Trichloroethane	17.9
Xylenes (total)	0.6
Chlorodibromomethane	20.7
1,3-Dichloropropane	18.4
2-Hexanone	23.1
1,2-Dibromoethane	15.2
Ethylbenzene	4.2
Chlorobenzene	8.9
1,1,1,2-Tetrachloroethane	13.4
m,p-Xylenes	2.0
o-Xylene	2.2
Styrene	7.0
Isopropylbenzene	10.2
Bromoform	27.0
4-Bromofluorobenzene	0.2
n-Propylbenzene	9.6
1,1,2,2-Tetrachloroethane	16.7
1,3,5-Trimethylbenzene	6.3
Bromobenzene	3.7

LOT #F5D220218

STL ST LOUIS

Data File: \\slsvr01\chem\MSL.i\L050502B.b/LCAL0584.D
Report Date: 05/04/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSL.i
Lab File ID: LCAL0584.D
Analysis Type: WATER

Injection Date: 02-MAY-2005 14:13
Lab Sample ID: VSTD010
Method File: \\slsvr01\chem\MSL.i\L050502B.b\

COMPOUND	%D
trans-1,4-dichloro-2-butene	29.2
2-Chlorotoluene	2.2
4-Chlorotoluene	0.8
t-Butylbenzene	10.9
1,2,4-Trimethylbenzene	3.7
sec-Butylbenzene	15.1
4-Isopropyltoluene	13.3
1,3-Dichlorobenzene	1.4
1,4-Dichlorobenzene	4.6
Cyclohexanone	2.9
n-Butylbenzene	12.1
1,2-Dichlorobenzene	5.9
1,2,3-Trichloropropane	5.0
1,2-Dibromo-3-chloropropane	21.9
Hexachlorobutadiene	16.4
1,2,4-Trichlorobenzene	8.5
Naphthalene	14.7
1,2,3-Trichlorobenzene	10.1

The average of %D's in the continuing calibration is 14.7

LOT #F5D220218

Data File: \\slsvr01\chem\MSL.i\L050502B.b\LCAL0584.D
Report Date: 04-May-2005 13:34

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSL.i
Lab File ID: LCAL0584.D
Lab Smp Id: VSTD010
Analysis Type: VOA
Quant Type: ISTD
Operator: MN/LS
Method File: \\slsvr01\chem\MSL.i\L050502B.b\8260B-25LLW30.m
Misc Info: VBLK122B;

Calibration Date: 25-APR-2005
Calibration Time: 11:51

Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
44 Fluorobenzene	1508429	754215	3016858	1740566	15.39
69 Chlorobenzene-d5	892585	446293	1785170	935569	4.82
92 1,4 Dichlorobenze	346814	173407	693628	342318	-1.30

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
44 Fluorobenzene	8.97	8.47	9.47	8.96	-0.04
69 Chlorobenzene-d5	10.70	10.20	11.20	10.70	-0.04
92 1,4 Dichlorobenze	11.99	11.49	12.49	11.98	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\slsvr01\chem\MSL.i\L050502B.b\LCAL0584.D
Report Date: 04-May-2005 13:34

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSL.i\L050502B.b\LCAL0584.D
Lab Smp Id: VSTD010
Inj Date : 02-MAY-2005 14:13
Operator : MN/LS Inst ID: MSL.i
Smp Info : VSTD010
Misc Info : VBLK122B;
Comment : NONE
Method : \\slsvr01\chem\MSL.i\L050502B.b\8260B-25LLW30.m
Meth Date : 04-May-2005 13:34 mahmoodt Quant Type: ISTD
Cal Date : 25-APR-2005 11:04 Cal File: LCAL0322.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ccal.sub
Target Version: 4.10
Processing Host: SLVOA02

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	25.000	DefSampleVolume
Vo	25.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	3.528	3.528	(0.394)	675251	10.0000	8.615
2	Chloromethane	50	3.962	3.962	(0.442)	659823	10.0000	8.711
3	Vinyl Chloride	62	4.138	4.138	(0.462)	759550	10.0000	9.348
4	Bromomethane	94	4.789	4.789	(0.534)	465619	10.0000	12.90
5	Chloroethane	64	5.002	5.002	(0.558)	488836	10.0000	8.963
6	Trichlorofluoromethane	101	5.238	5.238	(0.585)	913806	10.0000	8.483
7	Diethyl ether	59	5.747	5.747	(0.641)	362346	20.0000	13.55
8	1,1,2-Trichlorofluoroethane	101	6.099	6.099	(0.681)	612929	10.0000	9.007
9	1,1-Dichloroethene	96	6.125	6.125	(0.683)	636512	10.0000	8.998
10	Carbon Disulfide	76	6.293	6.293	(0.702)	2322526	10.0000	8.996
11	Iodomethane	142	6.409	6.409	(0.715)	427948	10.0000	9.813
12	Acrolein	56	6.570	6.570	(0.733)	69676	50.0000	42.72
13	Allyl chloride	39	6.750	6.750	(0.753)	414595	10.0000	12.90
14	Methylene Chloride	84	6.885	6.885	(0.768)	455237	10.0000	9.736
16	Methyl Acetate	74	7.015	7.015	(0.783)	22973	10.0000	9.883
18	trans-1,2-Dichloroethene	96	7.068	7.068	(0.789)	685469	10.0000	11.26
15	Acetone	43	6.888	6.888	(0.769)	48440	10.0000	11.06
17	n-Hexane	57	7.064	7.064	(0.788)	1130836	10.0000	12.02
19	MTBE	73	7.102	7.102	(0.792)	553235	10.0000	8.285
M 20	1,2-Dichloroethene (total)	96				1178568	20.0000	20.10
21	Acetonitrile	41	7.393	7.393	(0.825)	49489	50.0000	33.67
22	2-Chloro-1,3-butadiene	53	7.618	7.618	(0.850)	735698	10.0000	11.63

F 5-4-05

Data File: \\slsvr01\chem\MSL.i\L050502B.b\LCAL0584.D
Report Date: 04-May-2005 13:34

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	7.648	7.648	(0.853)	912742	10.0000	8.883
	24 Acrylonitrile	53	7.678	7.678	(0.857)	220086	50.0000	41.48
	26 cis-1,2-Dichloroethene	96	8.097	8.097	(0.904)	493099	10.0000	8.839
	25 Vinyl acetate	43	7.798	7.798	(0.870)	231835	10.0000	8.758
	27 2,2-Dichloropropane	77	8.161	8.161	(0.911)	872223	10.0000	9.790
	28 Cyclohexane	84	8.254	8.254	(0.921)	751045	10.0000	13.67
	30 Bromochloromethane	128	8.280	8.280	(0.924)	107456	10.0000	8.220
	29 Chloroform	83	8.280	8.280	(0.924)	831292	10.0000	8.659
	31 Ethyl acetate	43	8.303	8.303	(0.926)	178821	20.0000	13.78
	32 Tetrahydrofuran	71	8.423	8.423	(0.940)	58236	50.0000	33.33
	33 Carbon Tetrachloride	117	8.423	8.423	(0.940)	702096	10.0000	9.094
$	34 Dibromofluoromethane	113	8.423	8.423	(0.940)	310494	10.0000	9.106
	35 1,1,1-Trichloroethane	97	8.453	8.453	(0.943)	831854	10.0000	9.008
	36 2-Butanone	43	8.464	8.464	(0.944)	45131	10.0000	7.016
	37 1,1-Dichloropropene	75	8.531	8.531	(0.952)	795615	10.0000	9.478
	38 Propionitrile	54	8.692	8.692	(0.970)	60103	50.0000	33.26
	39 Methacrylonitrile	41	8.703	8.703	(0.971)	346344	50.0000	36.82
	40 Isobutanol	42	8.423	8.423	(0.940)	125477	200.000	141.8
	41 Benzene	78	8.722	8.722	(0.973)	2215028	10.0000	9.227
$	42 1,2-Dichloroethane-d4	65	8.808	8.808	(0.983)	253141	10.0000	8.226
	43 1,2-Dichloroethane	62	8.849	8.849	(0.987)	305396	10.0000	7.487
*	44 Fluorobenzene	96	8.961	8.961	(1.000)	1740566	10.0000	
	45 Methylcyclohexane	55	9.059	9.059	(1.011)	658021	10.0000	11.58
	46 Trichloroethene	130	9.077	9.077	(1.013)	512455	10.0000	9.452
	47 n-Butanol	56	9.152	9.152	(1.021)	33129	100.000	75.39
	48 Dibromomethane	93	9.384	9.384	(1.047)	109318	10.0000	7.910
	49 1,2-Dichloropropane	63	9.392	9.392	(1.048)	373188	10.0000	8.352
	50 Bromodichloromethane	83	9.429	9.429	(1.052)	423804	10.0000	7.816
	51 Methyl methacrylate	69	9.433	9.433	(1.053)	83459	10.0000	6.690
	52 1,4-Dioxane	88	9.538	9.538	(1.064)	24198	200.000	156.6
	54 cis-1,3-Dichloropropene	75	9.770	9.770	(1.090)	481138	10.0000	8.086
$	55 Toluene-d8	98	9.867	9.867	(1.101)	1789601	10.0000	10.62
	56 Toluene	91	9.897	9.897	(0.925)	2312119	10.0000	9.933
	58 4-Methyl-2-pentanone	43	10.021	10.021	(1.118)	89161	10.0000	6.375
	59 trans-1,3-Dichloropropene	75	10.099	10.099	(0.944)	308034	10.0000	8.041
	60 Ethyl methacrylate	69	10.095	10.095	(0.944)	195577	10.0000	7.938
	61 Tetrachloroethene	164	10.122	10.122	(0.946)	354340	10.0000	7.035
	62 1,1,2-Trichloroethane	97	10.200	10.200	(0.953)	153549	10.0000	8.214
M	63 Xylenes (total)	106				2890659	30.0000	30.18
	64 Chlorodibromomethane	129	10.339	10.339	(0.966)	144617	10.0000	7.931
	65 1,3-Dichloropropane	76	10.342	10.342	(0.967)	302336	10.0000	8.163
	57 2-Nitro-Propane	43	9.994	9.994	(1.115)	47478	10.0000	6.897
	66 2-Hexanone	43	10.440	10.440	(0.976)	56936	10.0000	7.694
	67 1,2-Dibromoethane	107	10.488	10.488	(0.980)	128174	10.0000	8.477
	68 Ethylbenzene	106	10.675	10.675	(0.998)	773380	10.0000	10.42
*	69 Chlorobenzene-d5	117	10.698	10.698	(1.000)	935569	10.0000	(M)
	70 Chlorobenzene	112	10.709	10.709	(1.001)	1125385	10.0000	9.109
	71 1,1,1,2-Tetrachloroethane	131	10.728	10.728	(1.003)	284015	10.0000	8.658
	72 m,p-Xylenes	106	10.735	10.735	(1.003)	2070190	20.0000	20.40
	73 o-Xylene	106	10.975	10.975	(1.026)	820469	10.0000	9.782
	74 Styrene	104	11.001	11.001	(1.028)	1171606	10.0000	9.298
	75 Bromoform	173	11.117	11.117	(0.928)	50339	10.0000	7.305
	76 Isopropylbenzene	105	11.113	11.113	(0.928)	2301018	10.0000	11.02
$	77 4-Bromofluorobenzene	95	11.327	11.327	(0.945)	496165	10.0000	10.02

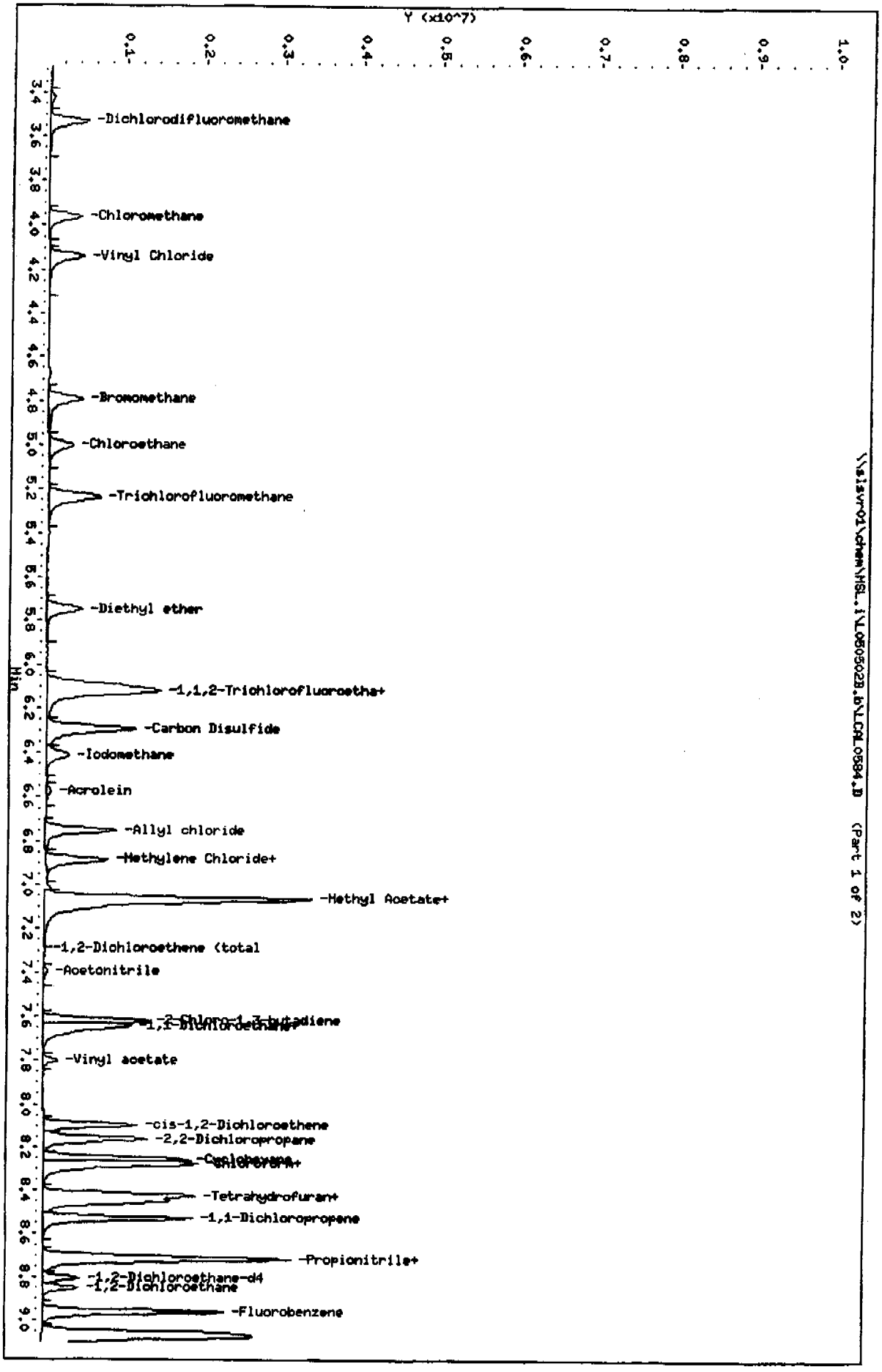
LOT #F5D220218

Data File: \\slsvr01\chem\MSL.i\L050502B.b\LCAL0584.D
Report Date: 04-May-2005 13:34

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
78	n-Propylbenzene	91	11.334	11.334	(0.946)	3263338	10.0000	10.96
79	1,1,2,2-Tetrachloroethane	83	11.379	11.379	(0.950)	145682	10.0000	8.330
80	1,3,5-Trimethylbenzene	105	11.405	11.405	(0.952)	2076569	10.0000	10.63
81	Bromobenzene	156	11.424	11.424	(0.953)	292987	10.0000	9.632
83	2-Chlorotoluene	91	11.480	11.480	(0.958)	1640481	10.0000	10.22
90	Cyclohexanone	55	11.996	11.996	(1.121)	34152	10.0000	9.715
84	4-Chlorotoluene	91	11.562	11.562	(0.965)	1555709	10.0000	10.08
85	t-Butylbenzene	119	11.615	11.615	(0.969)	1957937	10.0000	11.09
86	1,2,4-Trimethylbenzene	105	11.648	11.648	(0.972)	1965964	10.0000	10.37
82	trans-1,4-dichloro-2-butene	53	11.476	11.476	(0.958)	36038	10.0000	7.082
88	sec-Butylbenzene	105	11.716	11.716	(0.978)	2949421	10.0000	11.51
89	4-Isopropyltoluene	119	11.772	11.772	(0.983)	2163031	10.0000	11.33
91	1,3-Dichlorobenzene	146	11.944	11.944	(0.997)	701325	10.0000	9.859
* 92	1,4 Dichlorobenzene-d4	152	11.981	11.981	(1.000)	342318	10.0000	
93	1,4-Dichlorobenzene	146	11.996	11.996	(1.001)	689201	10.0000	9.537
94	n-Butylbenzene	91	12.038	12.038	(1.005)	2354595	10.0000	11.21
96	1,2-Dichlorobenzene	146	12.288	12.288	(1.026)	513240	10.0000	9.411
95	1,2,3-Trichloropropane	110	12.292	12.292	(1.026)	20060	10.0000	9.496
97	1,2-Dibromo-3-chloropropane	157	12.887	12.887	(1.076)	15890	10.0000	7.810
98	Hexachlorobutadiene	225	13.340	13.340	(1.113)	232215	10.0000	11.64
99	1,2,4-Trichlorobenzene	180	13.467	13.467	(1.124)	304676	10.0000	9.152
100	Naphthalene	128	13.830	13.830	(1.154)	400676	10.0000	8.535
101	1,2,3-Trichlorobenzene	180	14.028	14.028	(1.171)	222948	10.0000	8.994

QC Flag Legend

M - Compound response manually integrated.


Y (x10^7)
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0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Min
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-Diethyl ether
-1,1,2-Trichlorofluoroetha+
-Carbon Disulfide
-Iodomethane
-Acrolein
-Allyl chloride
-Methylene Chloride+
-Methyl Acetate+
-1,2-Dichloroethene (total
-Acetonitrile
-Vinyl acetate
-cis-1,2-Dichloroethene
-2,2-Dichloropropane
-Tetrahydrofuran+
-1,1-Dichloropropene
-Propionitrile+
-1,2-Dichloroethane-d4
-1,2-Dichloroethane
-Fluorobenzene
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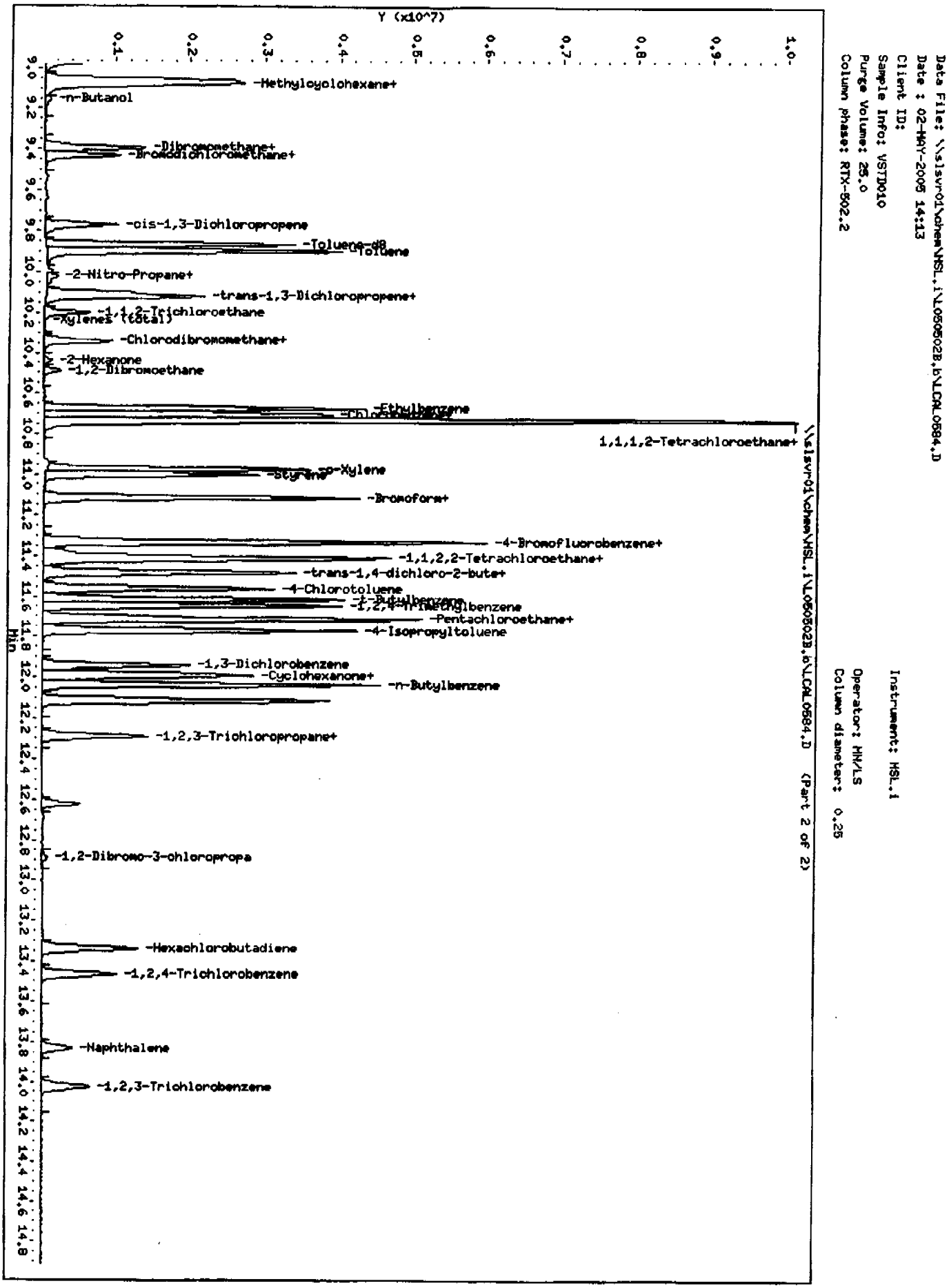
Data File: \\slsvr01\chem\MSL.i\L050502B.b\LCAL0584.D
Date : 02-MAY-2005 14:13
Client ID:
Sample Info: VSTD010
Purge Volume: 25.0
Column phase: RTX-502.2
Instrument: MSL.i
Operator: MN/LS
Column diameter: 0.25


Y (x10^7)
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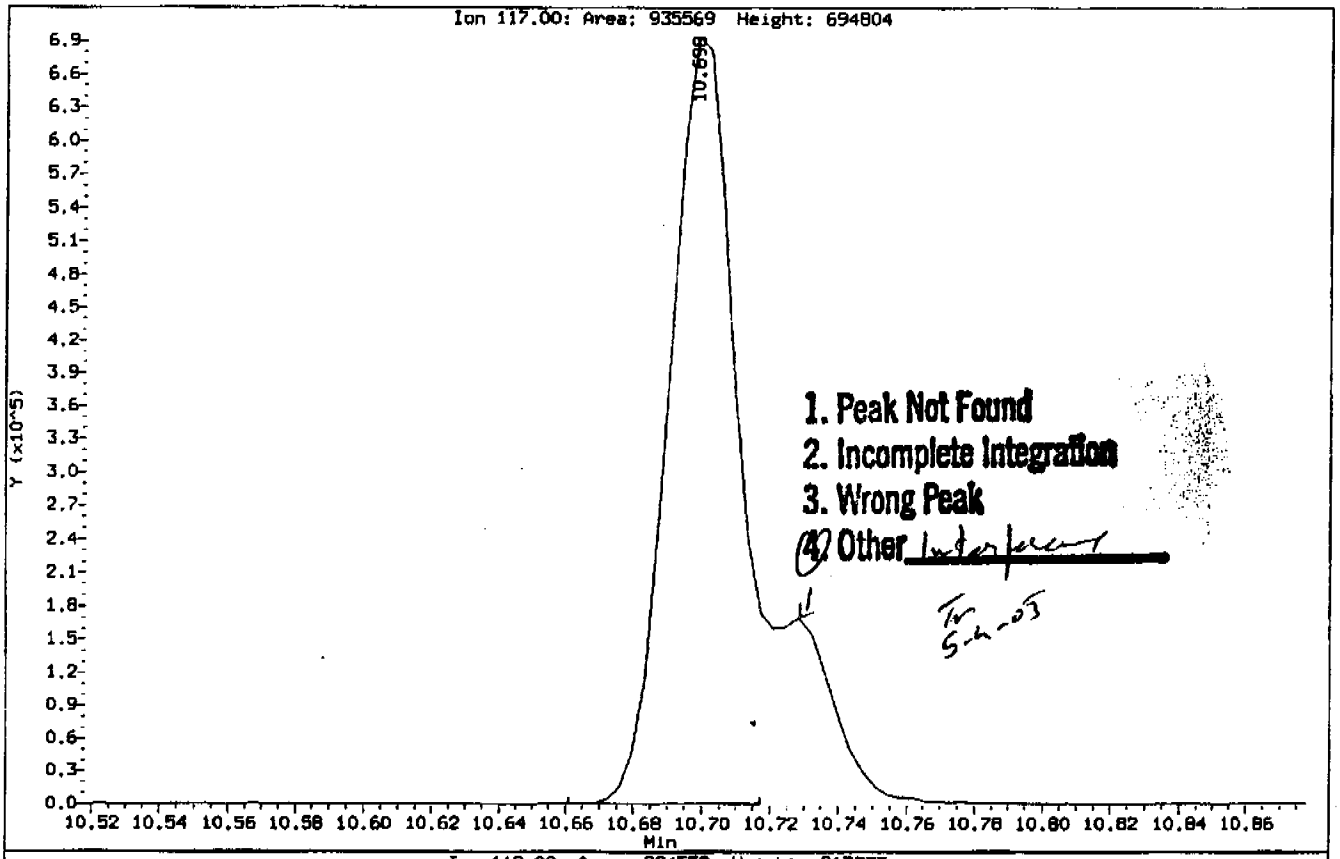
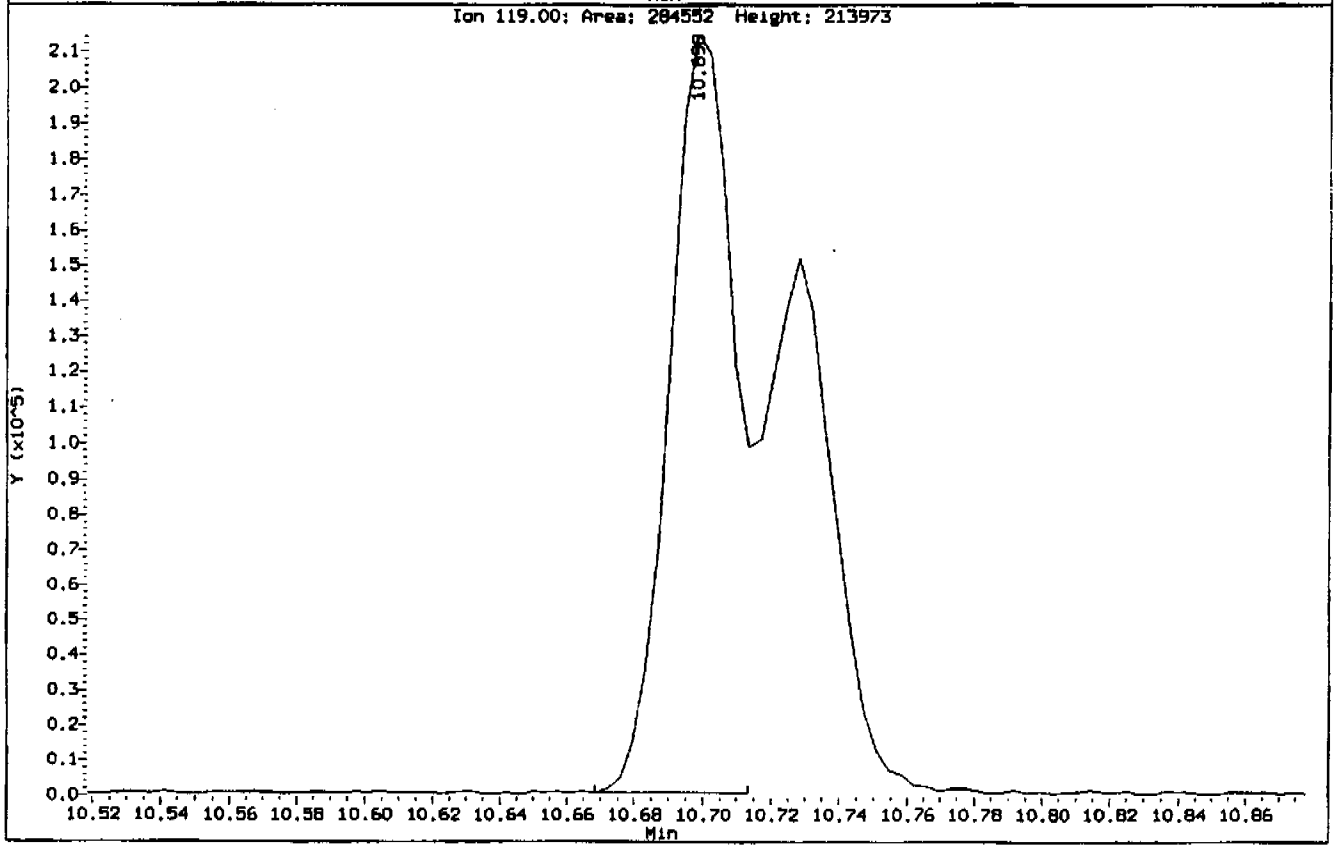
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Min
9.0
9.2
9.4
9.6
9.8
10.0
10.2
10.4
10.6
10.8
11.0
11.2
11.4
11.6
11.8
12.0
12.2
12.4
12.6
12.8
13.0
13.2
13.4
13.6
13.8
14.0
14.2
14.4
14.6
14.8
-Methylcyclohexane+
-n-Butanol
-Dibromomethane+
-Bromodichloromethane+
-cis-1,3-Dichloropropene
-Toluene-d8
-Toluene
-2-Nitro-Propane+
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane
-Xylenes (total)
-Chlorodibromomethane+
-2-Hexanone
-1,2-Dibromoethane
-Ethylbenzene
1,1,1,2-Tetrachloroethane+
-Styrene
-p-Xylene
-Bromoform+
-4-Bromofluorobenzene+
-1,1,2,2-Tetrachloroethane+
-trans-1,4-dichloro-2-bute+
-4-Chlorotoluene
-t-Butylbenzene
-1,2,4-Trimethylbenzene
-Pentachloroethane+
-4-Isopropyltoluene
-1,3-Dichlorobenzene
-Cyclohexanone+
-n-Butylbenzene
-1,2,3-Trichloropropane+
-1,2-Dibromo-3-chloropropa
-Hexachlorobutadiene
-1,2,4-Trichlorobenzene
-Naphthalene
-1,2,3-Trichlorobenzene
\\slsvr01\chem\HSL.i\L050502B.b\LCAL0584.D (Part 2 of 2)
Data File: \\slsvr01\chem\HSL.i\L050502B.b\LCAL0584.D
Date : 02-MAY-2005 14:13
Client ID:
Sample Info: VSTD010
Purge Volume: 25.0
Column phase: RTX-502.2
Instrument: HSL.i
Operator: HM/LS
Column diameter: 0.25

Data File: \\elsvr01\chem\MSL.i\L050502B.b\LCAL0584.D
Injection Date: 02-MAY-2005 14:13
Instrument: MSL.i
Client Sample ID:

Compound: Chlorobenzene-d5
CAS Number: 3114-55-4





GC/MS RAW SAMPLE DATA

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BSMP8213.D
Report Date: 01-May-2005 09:00

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSB.i\B050429B.b\BSMP8213.D
Lab Smp Id: G800L1AC Client Smp ID: RE73-05-58923
Inj Date : 29-APR-2005 16:25
Operator : MN Inst ID: MSB.i
Smp Info : G800L1AC;B050429B.b
Misc Info : VBLKB119B.B; F5D220218-001; 5X
Comment : NONE
Method : \\slsvr01\chem\MSB.i\B050429B.b\8260B-25LLW25.m
Meth Date : 01-May-2005 08:07 nuttm Quant Type: ISTD
Cal Date : 20-APR-2005 12:06 Cal File: BCAL8020.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

MC 5/1-05

Name	Value	Description
DF	1.000	Dilution Factor
Vod	25.000	Def Sample Volume (mL)
Vo	5.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	14 Methylene Chloride	84	6.794	6.788	(0.479)	226192	1.10427	5.521
	17 Carbon Disulfide	76	7.178	7.173	(0.506)	29511	0.43432	2.172
	27 Chloroform	83	10.803	10.797	(0.761)	127858	0.42732	2.137(a)
$	29 Dibromofluoromethane	113	11.128	11.122	(0.784)	1310012	9.54306	47.72
$	31 1,2-Dichloroethane-d4	65	12.281	12.275	(0.865)	1112054	10.0225	50.11
*	36 Fluorobenzene	96	14.192	14.196	(1.000)	7556270	10.0000	
$	50 Toluene-d8	98	18.112	18.116	(0.868)	6158482	8.83159	44.16
*	58 Chlorobenzene-d5	119	20.860	20.864	(1.000)	1850280	10.0000	
$	69 4-Bromofluorobenzene	95	23.067	23.061	(0.909)	2217918	9.12260	45.61
*	79 1,4 Dichlorobenzene-d4	152	25.372	25.376	(1.000)	2476570	10.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BSMP8213.D
Report Date: 01-May-2005 09:00

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSB.i
Lab File ID: BSMP8213.D
Lab Smp Id: G800L1AC
Analysis Type: VOA
Quant Type: ISTD
Operator: MN
Calibration Date: 29-APR-2005
Calibration Time: 11:40
Client Smp ID: RE73-05-58923
Level: LOW
Sample Type: WATER
Method File: \\slsvr01\chem\MSB.i\B050429B.b\8260B-25LLW25.m
Misc Info: VBLKB119B.B; F5D220218-001; 5X

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	8037558	4018779	16075116	7556270	-5.99
58 Chlorobenzene-d5	2283738	1141869	4567476	1850280	-18.98
79 1,4 Dichlorobenze	2972629	1486315	5945258	2476570	-16.69

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	14.20	13.70	14.70	14.19	-0.03
58 Chlorobenzene-d5	20.86	20.36	21.36	20.86	-0.02
79 1,4 Dichlorobenze	25.38	24.88	25.88	25.37	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

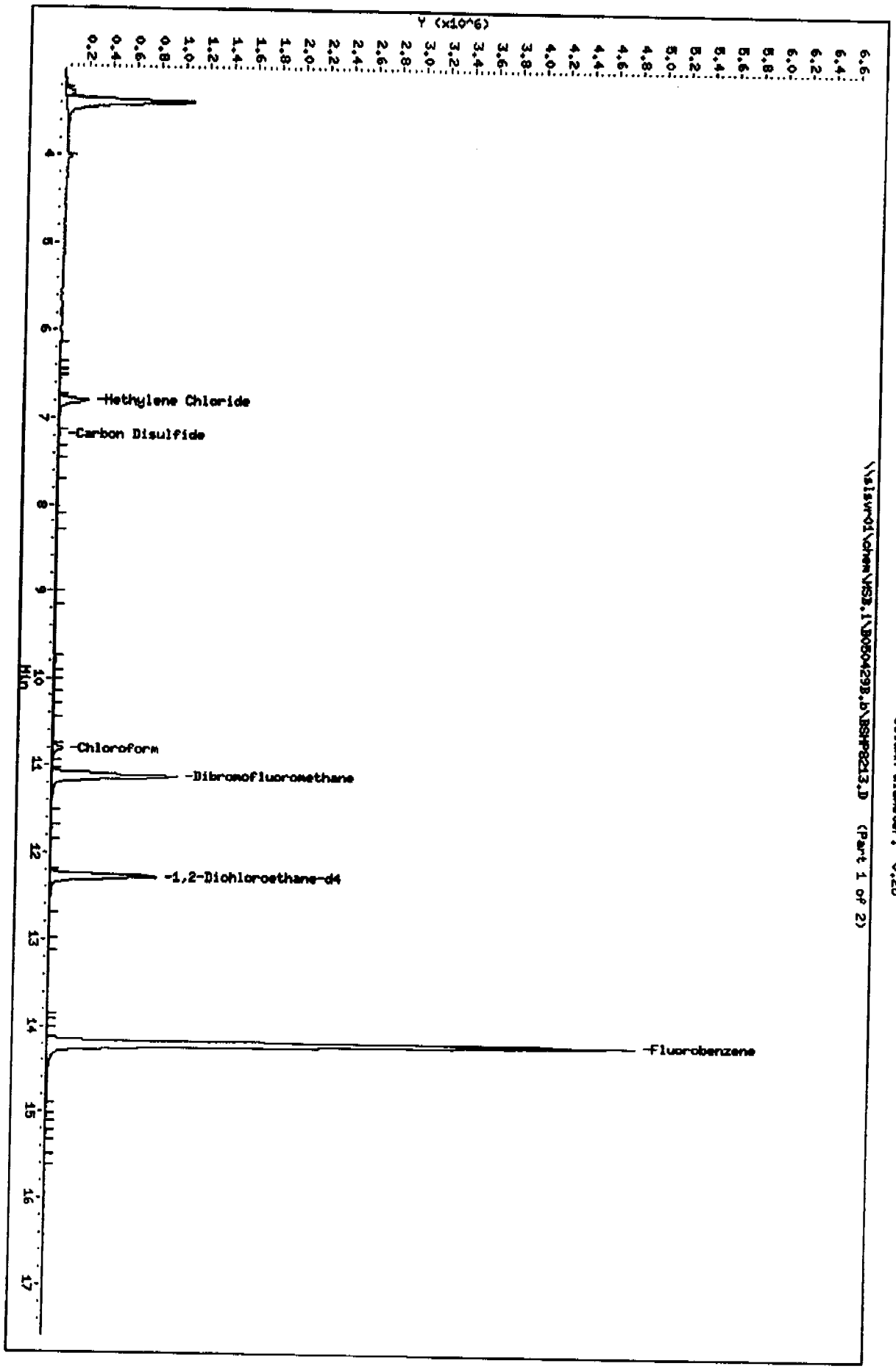
Data File: \\slsvr01\chem\MSB.i\B050429B.b\BSMP8213.D
Report Date: 01-May-2005 09:00

STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 22-APR-2005 00:00 Client SDG: F5D2202
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: G800L1AC Client Smp ID: RE73-05-58923
Level: LOW Operator: MN
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: H20MS.spk Quant Type: ISTD
Sublist File: all.sub
Method File: \\slsvr01\chem\MSB.i\B050429B.b\8260B-25LLW25.m
Misc Info: VBLKB119B.B; F5D220218-001; 5X

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 29 Dibromofluorometha	50.00	47.72	95.43	60-147
$ 31 1,2-Dichloroethane	50.00	50.11	100.22	71-138
$ 50 Toluene-d8	50.00	44.16	88.32	75-126
$ 69 4-Bromofluorobenze	50.00	45.61	91.23	71-117


Y (x10^6)
Min
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-Carbon Disulfide
-Chloroform
-Dibromofluoromethane
-1,2-Dichloroethane-d4
-Fluorobenzene
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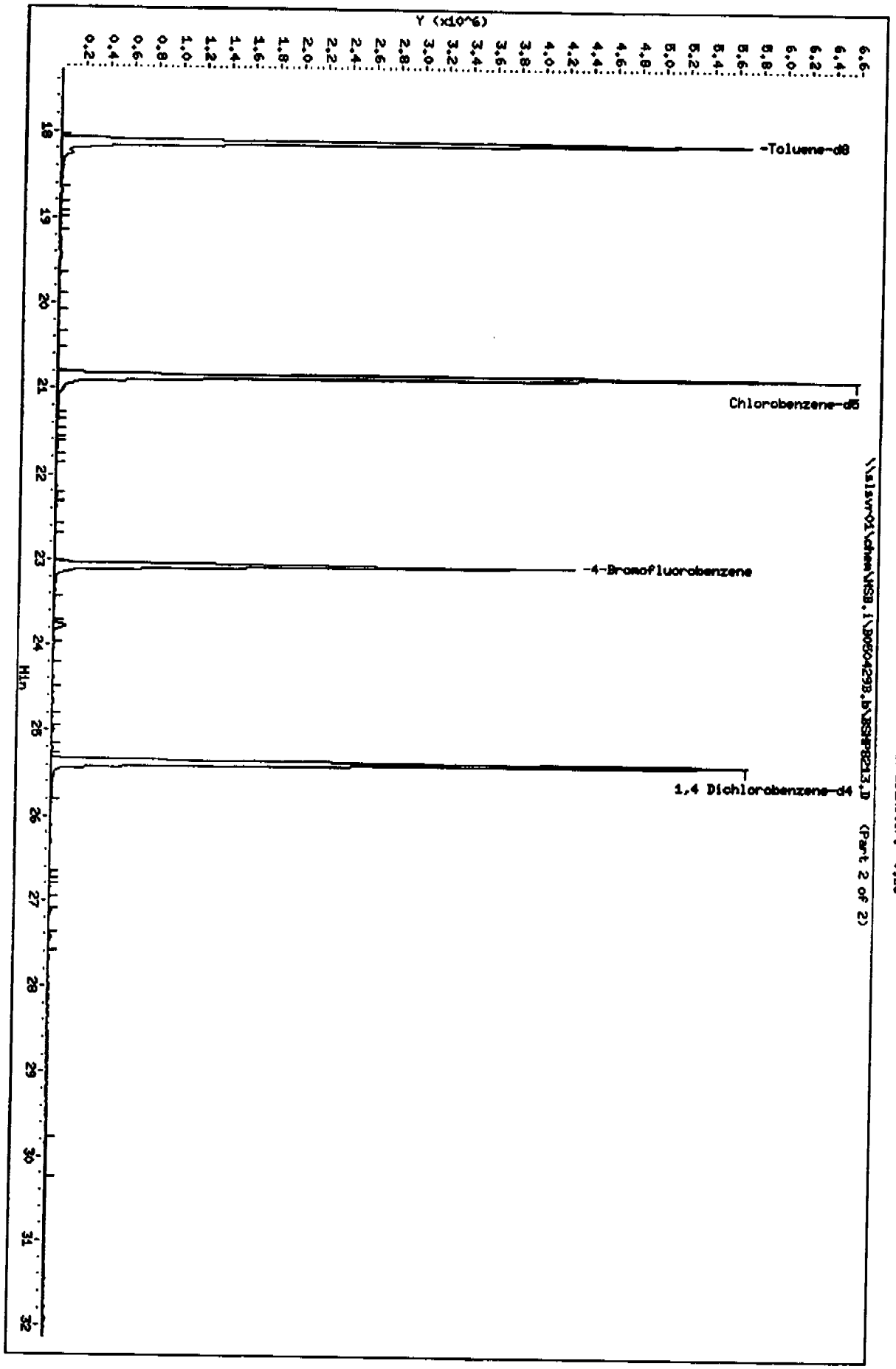
Data File: \\slsvr01\chem\MSB.i\B0504298.b\BSHP8213.D
Date : 29-APR-2005 16:25
Client ID: RE73-05-58923
Sample Info: C800L1AC;B0504298.b
Purge Volume: 5.0
Column phase: Rtx-VMS
Instrument: MSB.i
Operator: MN
Column diameter: 0.25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Date : 29-APR-2005 16:25
Client ID: RE73-05-58923
Sample Info: G800L1AC;B0604298.b
Purge Volume: 5.0
Column phase: Rtx-VMS
Instrument: MSB.i
Operator: HN
Column diameter: 0.25
Y (x10^6)
-Toluene-d8
Chlorobenzene-d5
-4-Bromofluorobenzene
1,4 Dichlorobenzene-d4
\\slsvr01\chem\MSB.i\B0604298.b\BSHP0213.D (Part 2 of 2)
Min

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BSMP8213.D

Date : 29-APR-2005 16:26

Client ID: RE73-05-68923

Instrument: MSB.i

Sample Info: GB00L1AC;B050429B.b

Purge Volume: 5.0

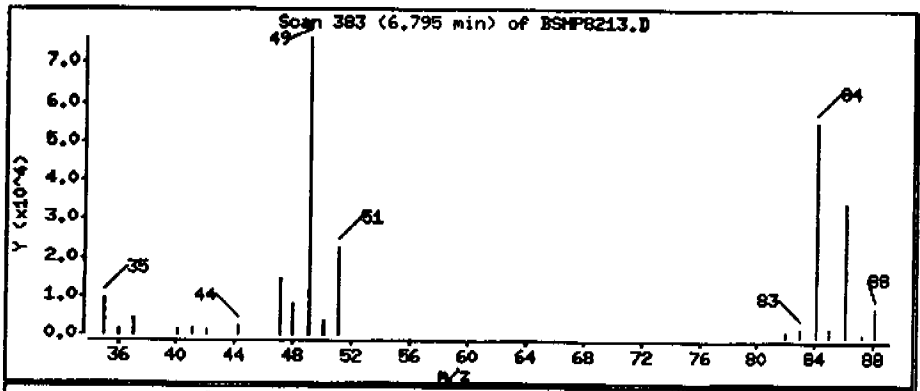
Operator: HN

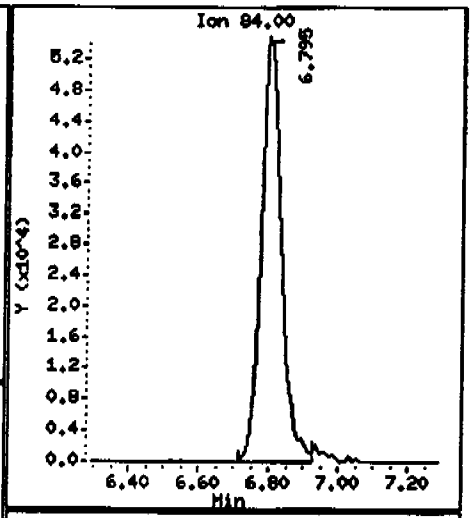
Column phase: Rtx-VMS

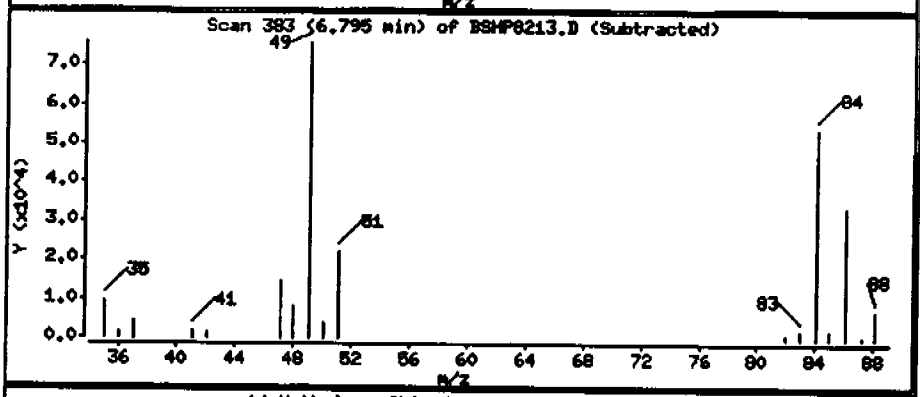
Column diameter: 0.25

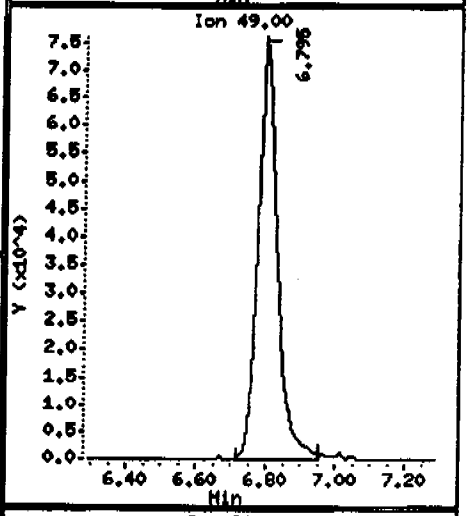
14 Methylene Chloride

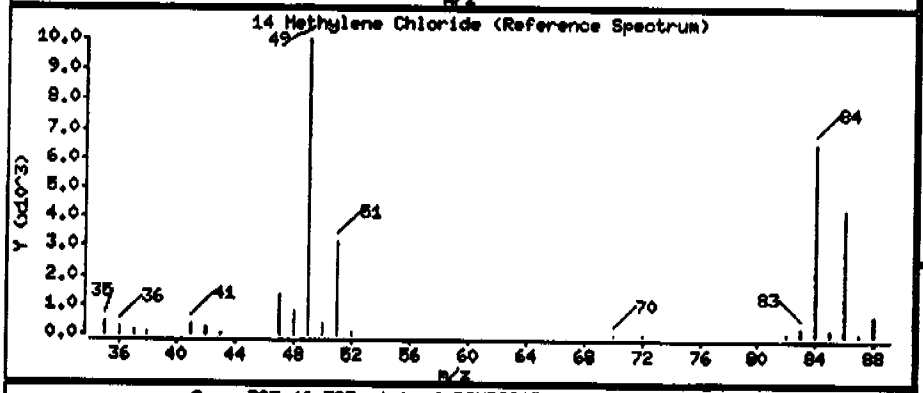
Concentration: 5.521 ug/L

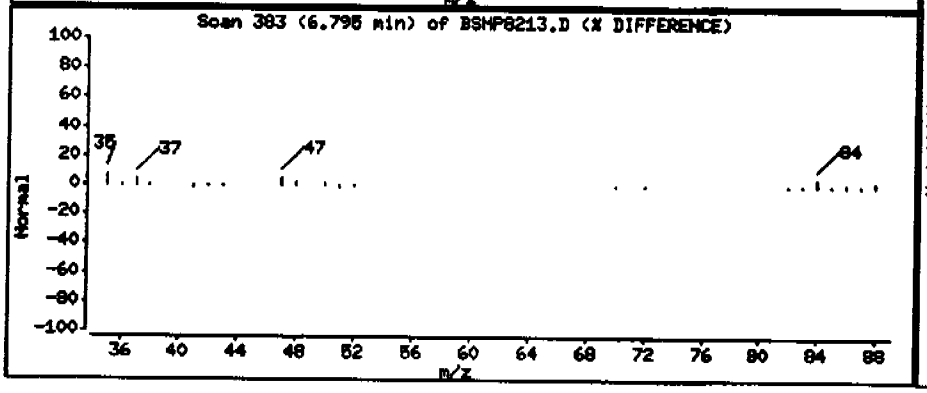


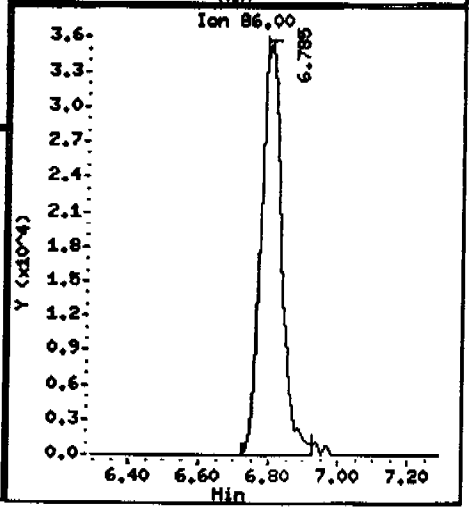












Data File: \\slsvr01\chem\MSB.i\B050429B.b\BSMP8213.D

Date : 29-APR-2005 16:25

Client ID: RE73-05-58923

Instrument: MSB.i

Sample Info: G800L1AC;B050429B.b

Purge Volume: 5.0

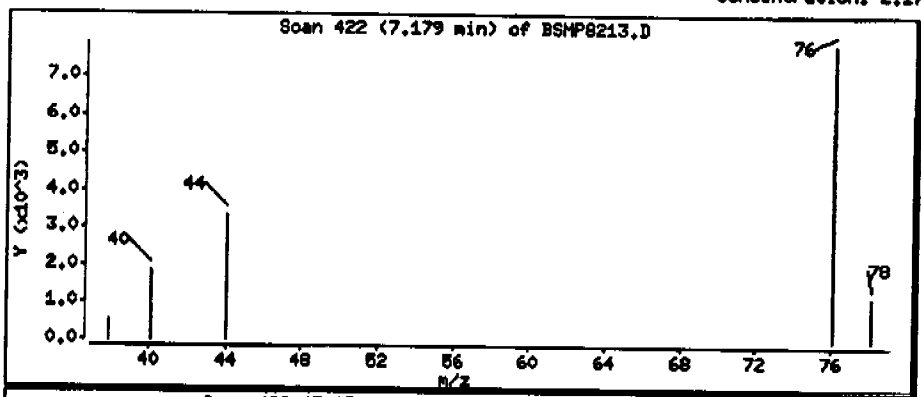
Operator: MN

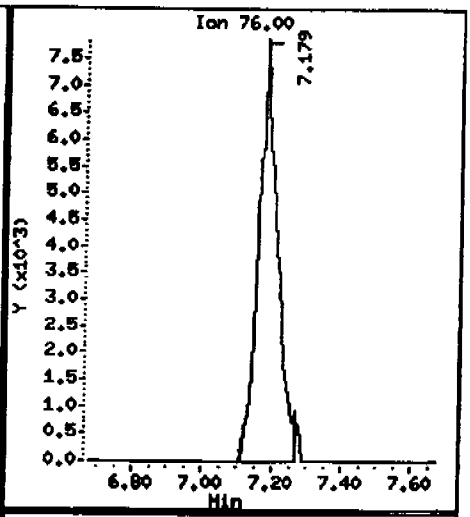
Column phase: Rtx-VMS

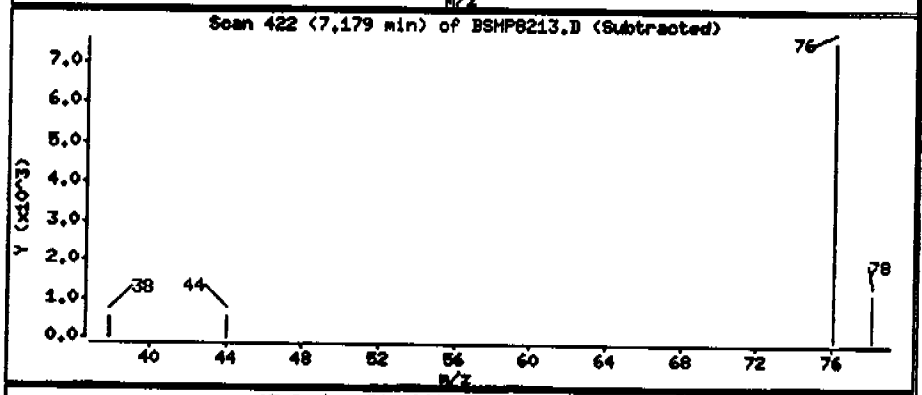
Column diameter: 0.25

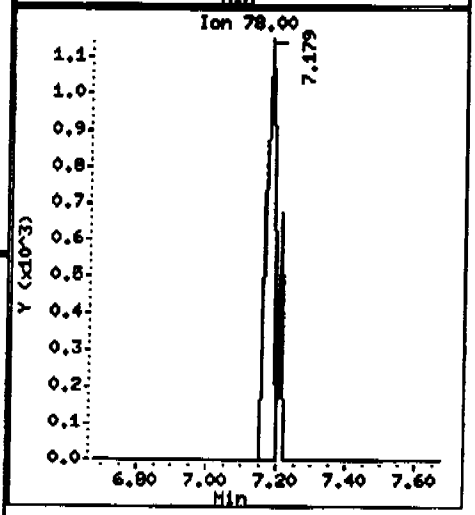
17 Carbon Disulfide

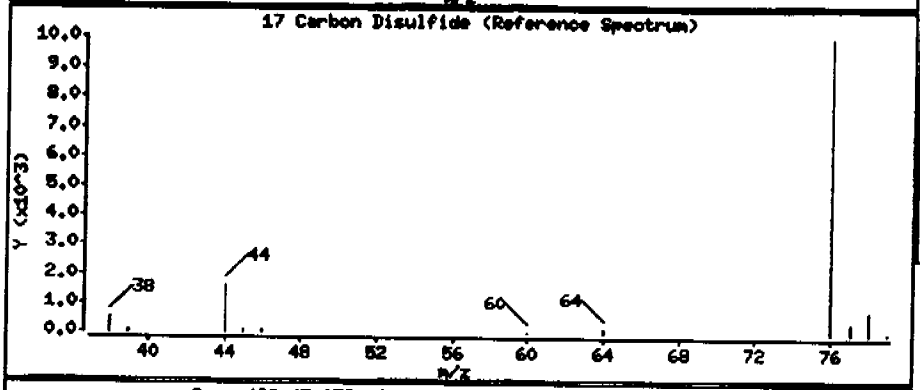
Concentration: 2.172 ug/L

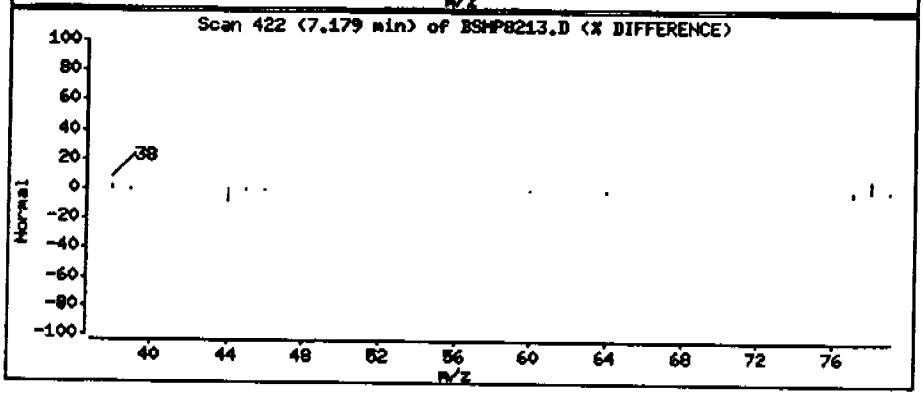












Data File: \\slsvr01\chem\MSB.i\B050429B.b\BSMP8213.D

Date : 29-APR-2005 16:25

Client ID: RE73-05-58923

Instrument: MSB.i

Sample Info: C900L1AC;B050429B.b

Purge Volume: 5.0

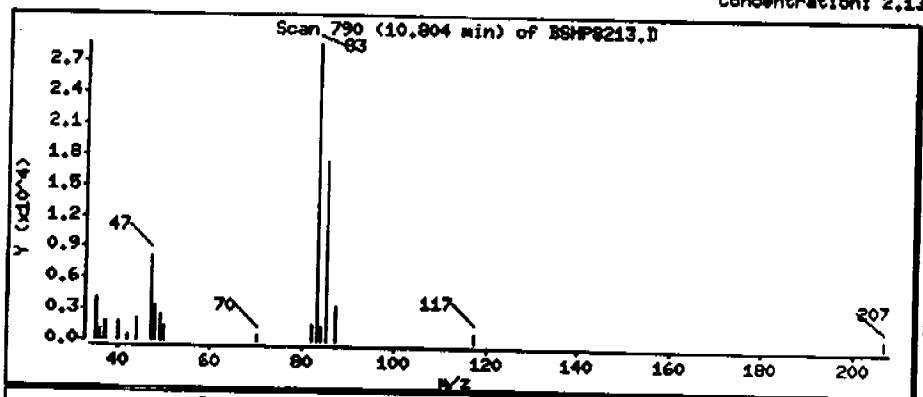
Operator: MN

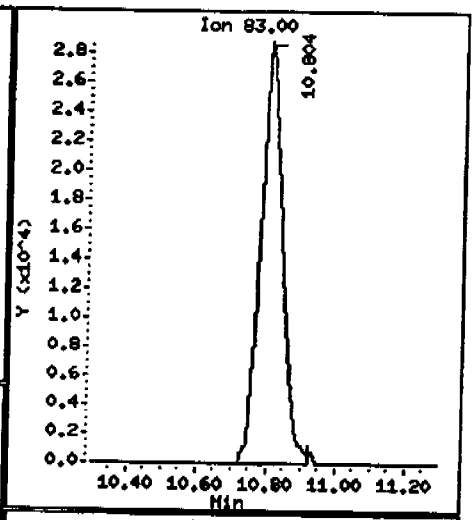
Column phase: Rtx-VMS

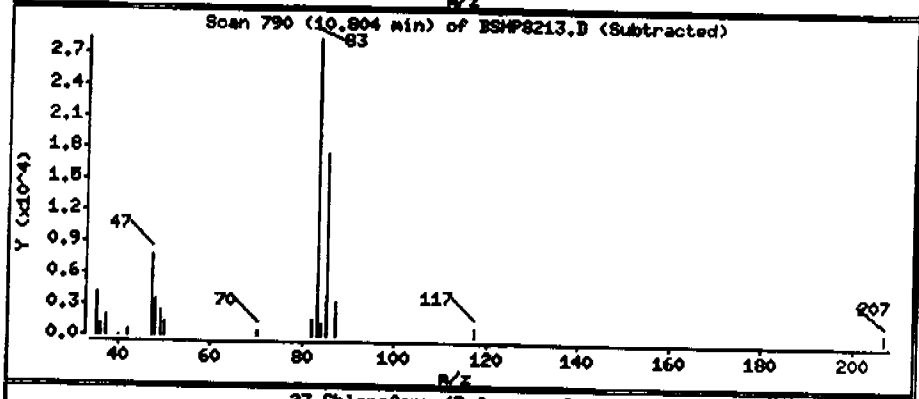
Column diameter: 0.25

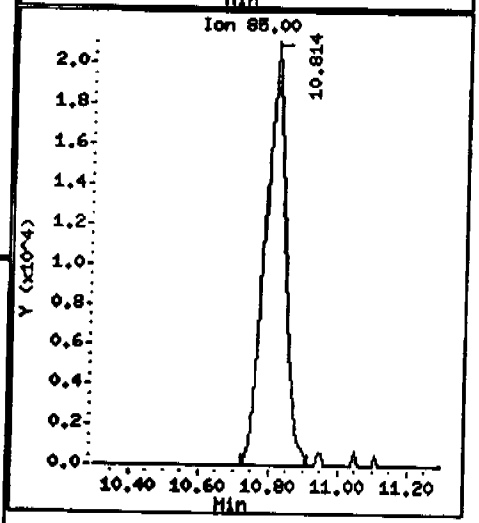
27 Chloroform

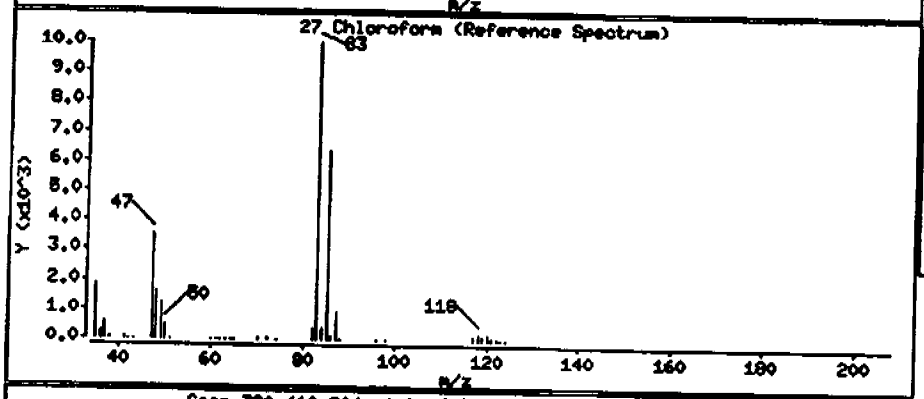
Concentration: 2.137 ug/L

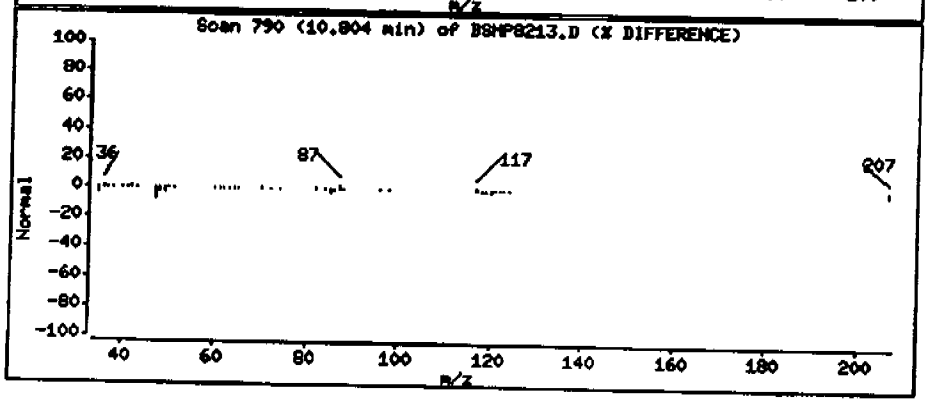












LOT #F5D220218

Data File: \\slsvr01\chem\MSL.i\L050502B.b\LSMP0600.D
Report Date: 04-May-2005 12:58

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSL.i\L050502B.b\LSMP0600.D
Lab Smp Id: G800L2AC Client Smp ID: RE73-05-58923
Inj Date : 02-MAY-2005 21:07
Operator : MN/LS Inst ID: MSL.i
Smp Info : G800L2AC
Misc Info : VBLK122B;F5D220218-001;
Comment : NONE
Method : \\slsvr01\chem\MSL.i\L050502B.b\8260B-25LLW30.m
Meth Date : 02-May-2005 14:40 mahmoodt Quant Type: ISTD
Cal Date : 25-APR-2005 11:04 Cal File: LCAL0322.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLVOA02

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	25.000	DefSampleVolume
Vo	25.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	29 Chloroform	83	8.276	8.280	(0.924)	164967	1.91278	1.913
$	34 Dibromofluoromethane	113	8.426	8.423	(0.940)	309166	10.0931	10.09
$	42 1,2-Dichloroethane-d4	65	8.808	8.808	(0.983)	292030	10.5635	10.56
*	44 Fluorobenzene	96	8.961	8.961	(1.000)	1563629	10.0000	
	50 Bromodichloromethane	83	9.433	9.429	(1.053)	16675	0.34232	0.3423
$	55 Toluene-d8	98	9.867	9.867	(1.101)	1800728	11.9010	11.90
	56 Toluene	91	9.897	9.897	(0.925)	53807	0.26756	0.2676
	64 Chlorodibromomethane	129	10.338	10.339	(0.966)	3047	0.19340	0.1934
*	69 Chlorobenzene-d5	117	10.698	10.698	(1.000)	808311	10.0000	
$	77 4-Bromofluorobenzene	95	11.326	11.327	(0.945)	457833	11.2528	11.25
*	92 1,4 Dichlorobenzene-d4	152	11.981	11.981	(1.000)	281213	10.0000	
	93 1,4-Dichlorobenzene	146	12.000	11.996	(1.002)	8217	0.13841	0.1384

5-5-05

Data File: \\slsvr01\chem\MSL.i\L050502B.b\LSMP0600.D
Report Date: 04-May-2005 12:58

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSL.i
Lab File ID: LSMP0600.D
Lab Smp Id: G800L2AC
Analysis Type: VOA
Quant Type: ISTD
Operator: MN/LS
Calibration Date: 02-MAY-2005
Calibration Time: 14:13
Client Smp ID: RE73-05-58923
Level: LOW
Sample Type: WATER
Method File: \\slsvr01\chem\MSL.i\L050502B.b\8260B-25LLW30.m
Misc Info: VBLK122B;F5D220218-001;

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
44 Fluorobenzene	1740566	870283	3481132	1563629	-10.17
69 Chlorobenzene-d5	935569	467785	1871138	808311	-13.60
92 1,4 Dichlorobenze	342318	171159	684636	281213	-17.85

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
44 Fluorobenzene	8.96	8.46	9.46	8.96	-0.00
69 Chlorobenzene-d5	10.70	10.20	11.20	10.70	-0.00
92 1,4 Dichlorobenze	11.98	11.48	12.48	11.98	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

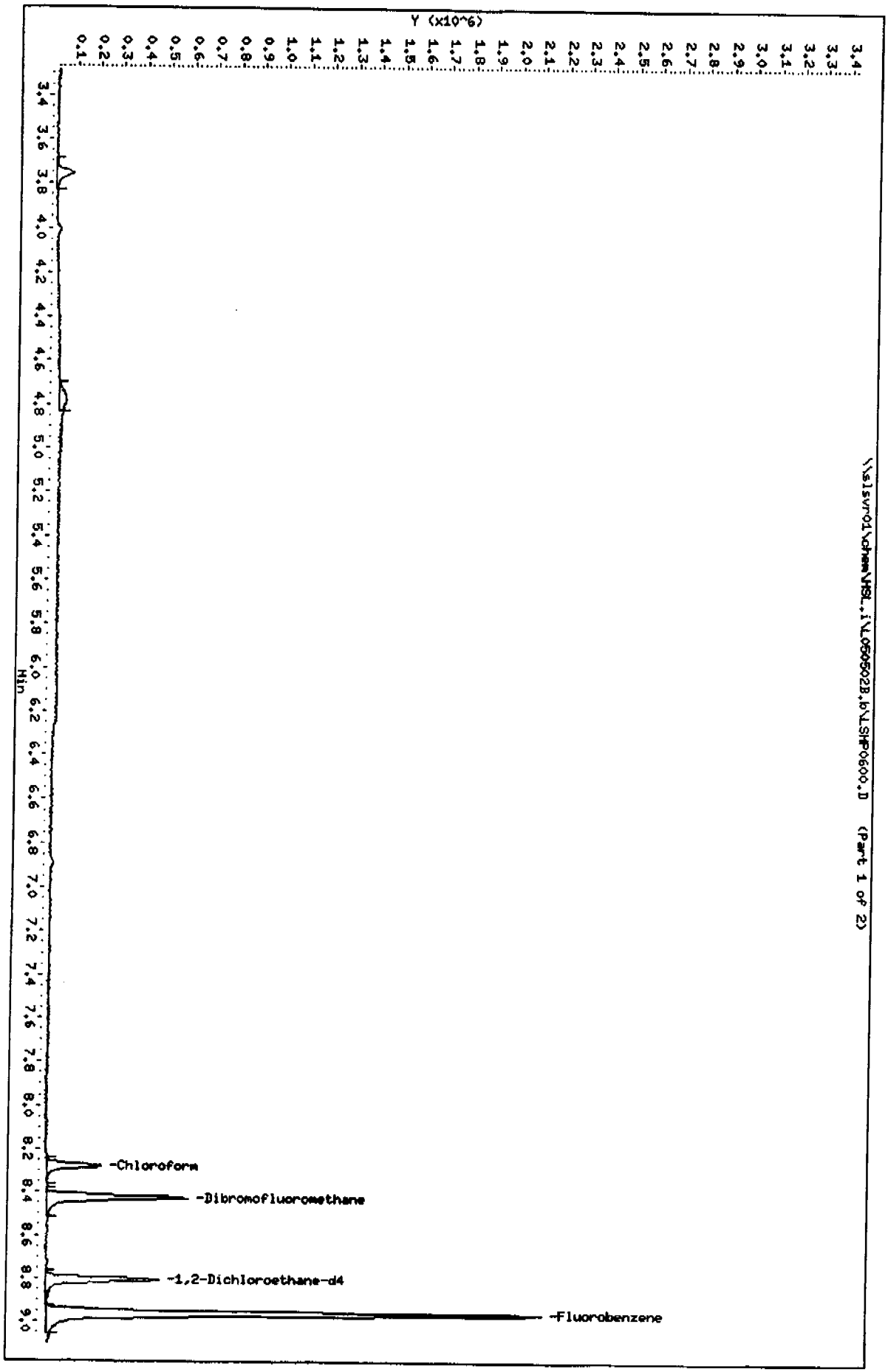
Data File: \\slsvr01\chem\MSL.i\L050502B.b\LSMP0600.D
Report Date: 04-May-2005 12:58

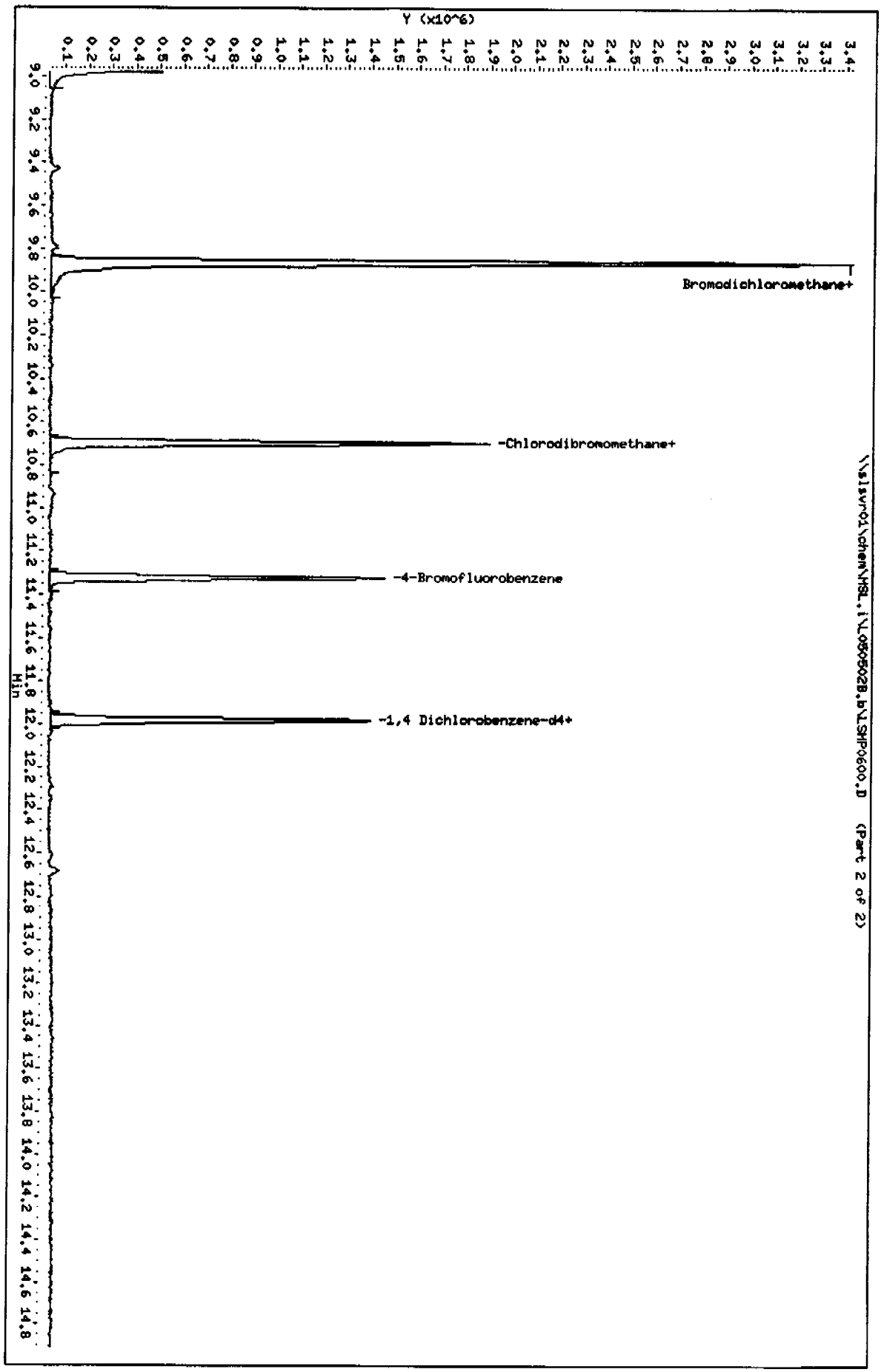
STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 22-APR-2005 00:00 Client SDG: F5D2202
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: G800L2AC Client Smp ID: RE73-05-58923
Level: LOW Operator: MN/LS
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: soilms.spk Quant Type: ISTD
Sublist File: all.sub
Method File: \\slsvr01\chem\MSL.i\L050502B.b\8260B-25LLW30.m
Misc Info: VBLK122B;F5D220218-001;

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 34 Dibromofluorometha	10.00	10.09	100.93	60-147
$ 42 1,2-Dichloroethane	10.00	10.56	105.64	71-138
$ 55 Toluene-d8	10.00	11.90	119.01	75-126
$ 77 4-Bromofluorobenze	10.00	11.25	112.53	71-117


Data File: \\slsvr01\chem\MSL.i\L050502B.b\LSHP0600.D
Date : 02-MAY-2005 21:07
Client ID: RE73-05-58923
Sample Info: C800L2AC
Purge Volume: 25.0
Column phase: RTX-502.2
Instrument: MSL.i
Operator: MN/LS
Column diameter: 0.25
\\slsvr01\chem\MSL.i\L050502B.b\LSHP0600.D (Part 1 of 2)
Y (x10^6)
Min
-Chloroform
-Dibromofluoromethane
-1,2-Dichloroethane-d4
-Fluorobenzene


Data File: \\slsvr01\chem\MSL.i\L0505028.b\LSHP0600.D
Date : 02-MAY-2005 21:07
Client ID: RE73-05-58923
Sample Info: G800L2RC
Purge Volume: 25.0
Column phase: RTX-502.2
Instrument: MSL.i
Operator: HN/LS
Column diameter: 0.25
Y (x10^6)
Bromodichloromethane+
-Chlorodibromomethane+
-4-Bromofluorobenzene
-1,4 Dichlorobenzene-d4+
Min
\\slsvr01\chem\MSL.i\L0505028.b\LSHP0600.D (Part 2 of 2)

Data File: \\slsvr01\chem\HSL.i\L050502B.b\LSHP0600.D

Date : 02-MAY-2005 21:07

Client ID: RE73-05-58923

Instrument: HSL.i

Sample Info: G800L2AC

Purge Volume: 25.0

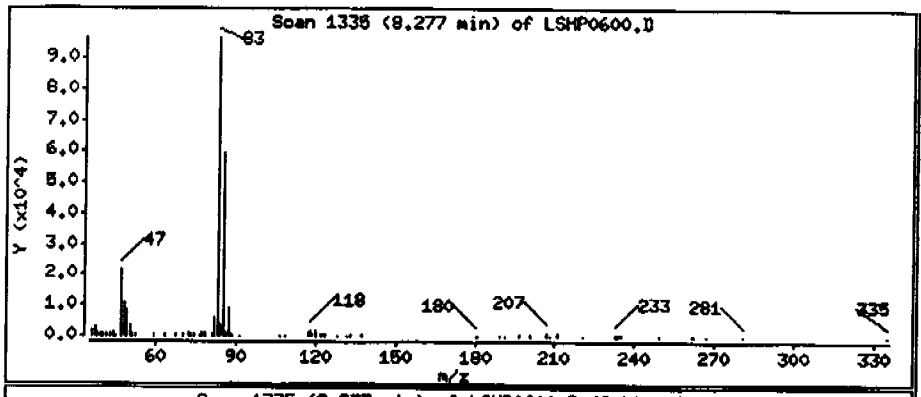
Operator: MN/LS

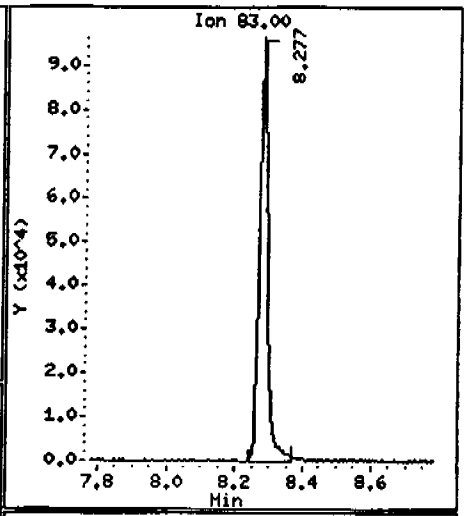
Column phase: RTX-502.2

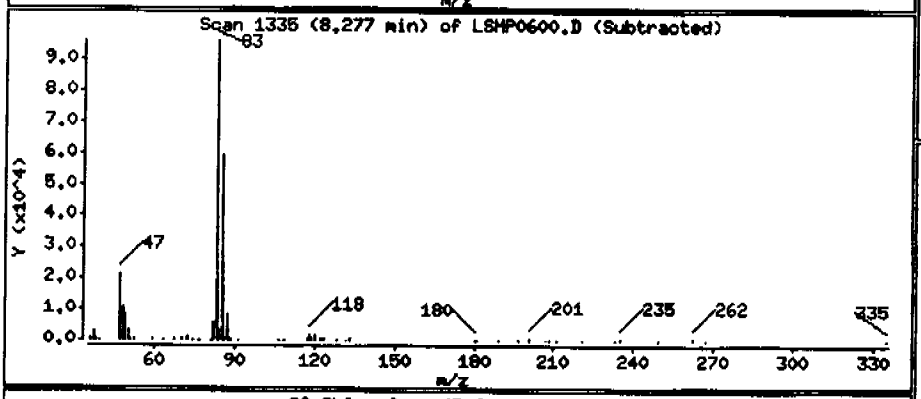
Column diameter: 0.25

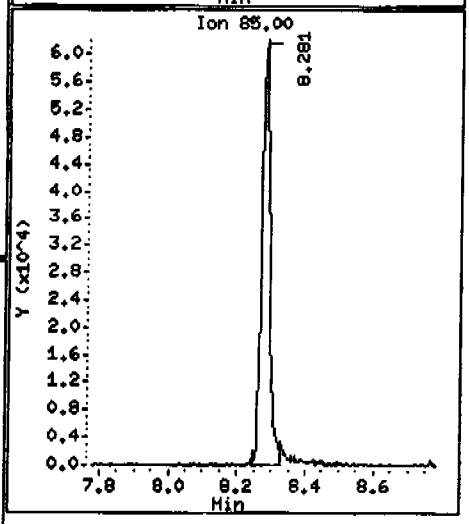
29 Chloroform

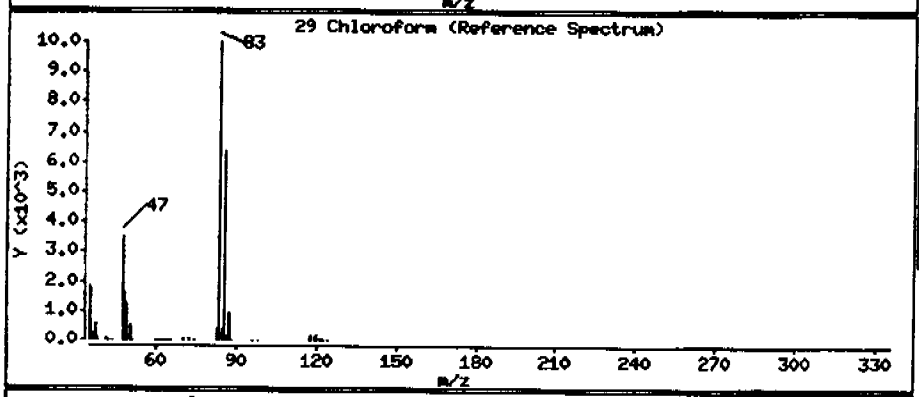
Concentration: 1.913 ug/L

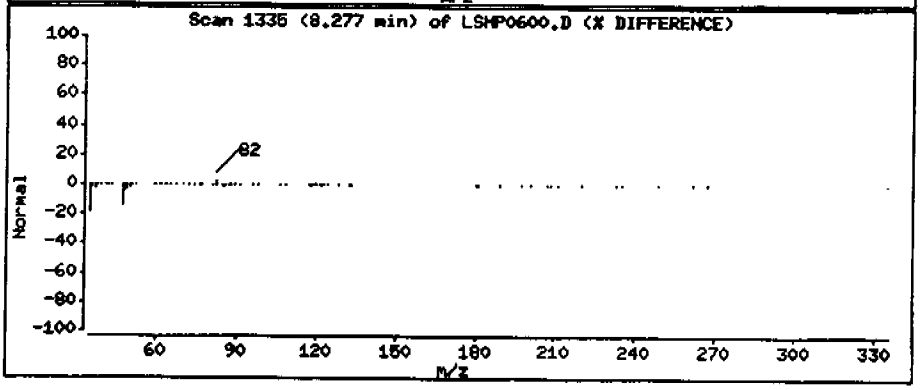












Data File: \\slsvr01\chem\MSL.i\L050502B.b\LSMP0600.D

Date : 02-MAY-2005 21:07

Client ID: RE73-05-58923

Instrument: MSL.i

Sample Info: G800L2AC

Purge Volume: 25.0

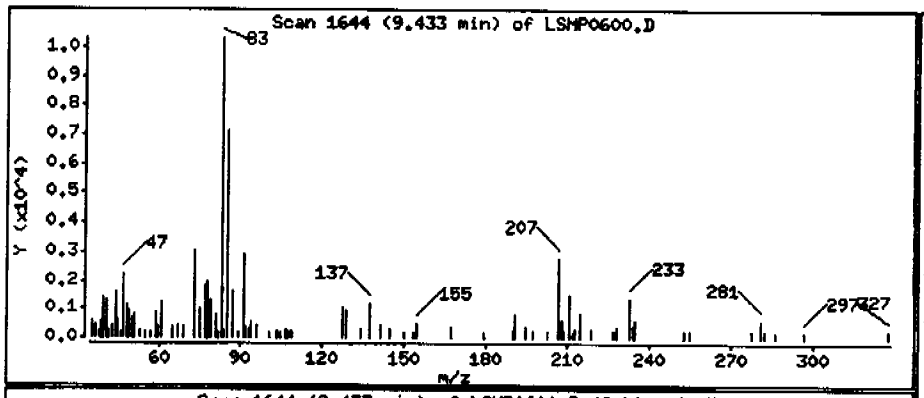
Operator: MN/LS

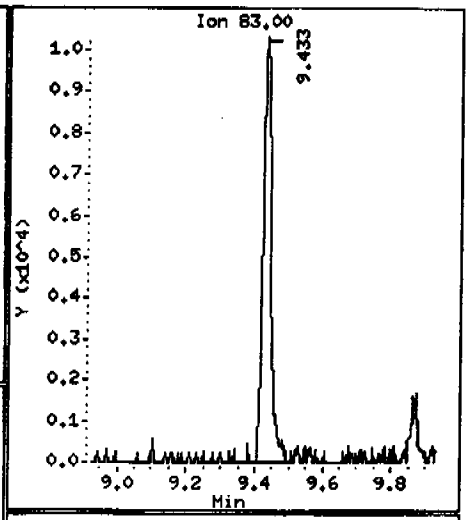
Column phase: RTX-502.2

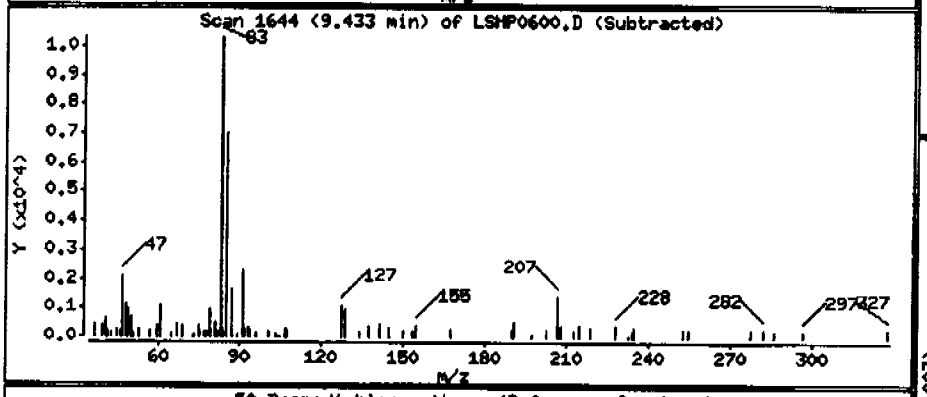
Column diameter: 0.25

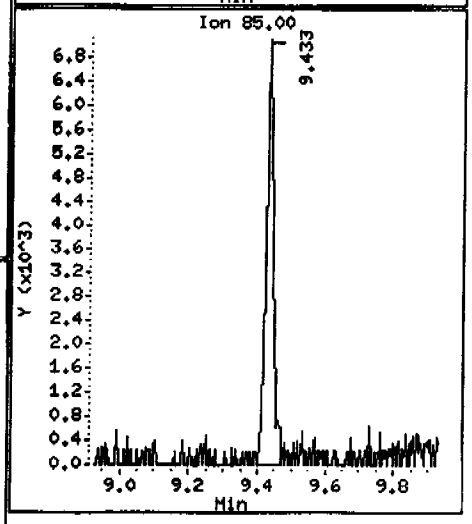
50 Bromodichloromethane

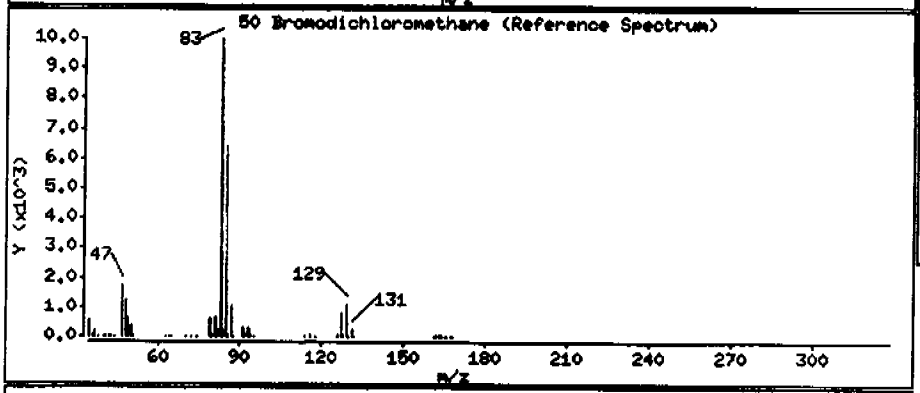
Concentration: 0.3423 ug/L

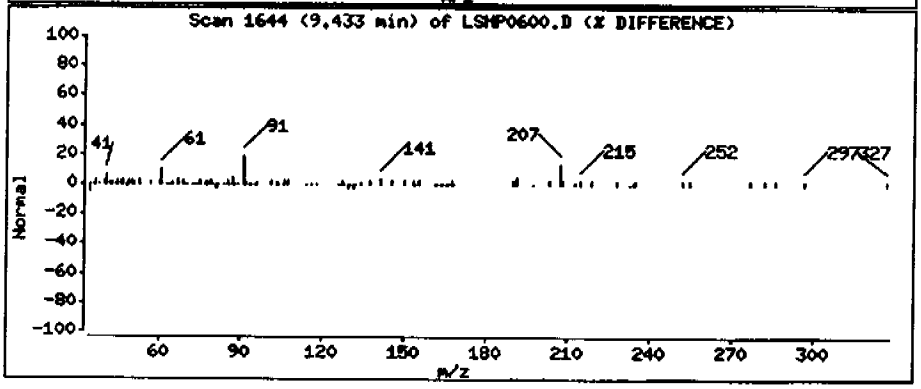












Data File: \\slsvr01\chem\MSL.i\L050502B.b\LSMP0600.D

Date : 02-MAY-2005 21:07

Client ID: RE73-05-68923

Instrument: MSL.i

Sample Info: C800L2AC

Purge Volume: 25.0

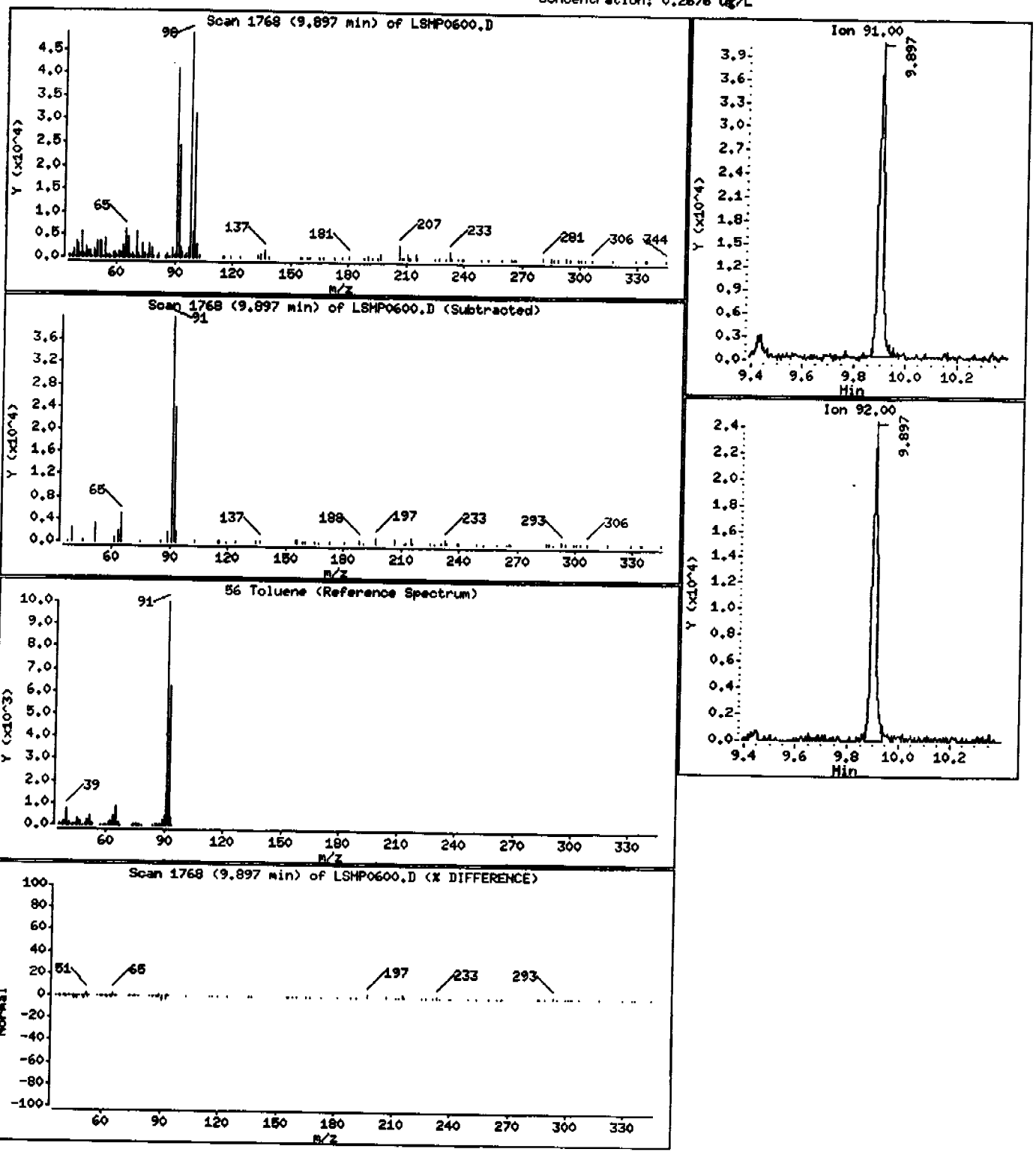
Operator: MN/LS

Column phase: RTX-502.2

Column diameter: 0.25

56 Toluene

Concentration: 0.2676 ug/L



Data File: \\slsvr01\chem\MSL.i\L050502B.b\LSMP0600.D

Date : 02-MAY-2005 21:07

Client ID: RE73-05-58923

Instrument: MSL.i

Sample Info: G800L2AC

Purge Volume: 25.0

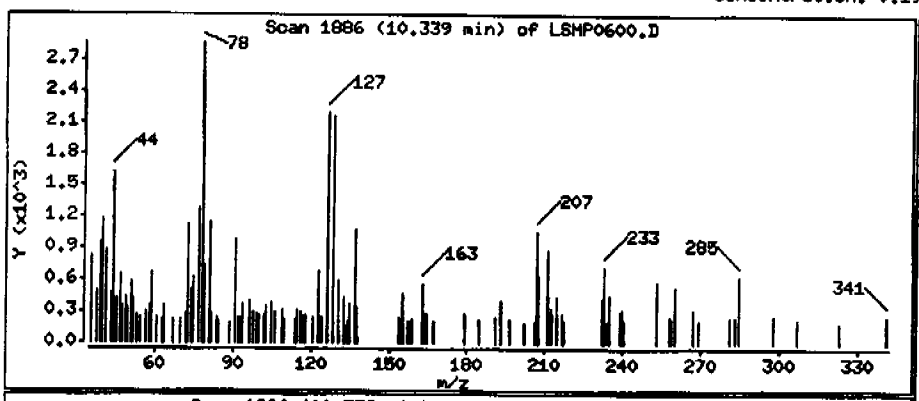
Operator: MN/LS

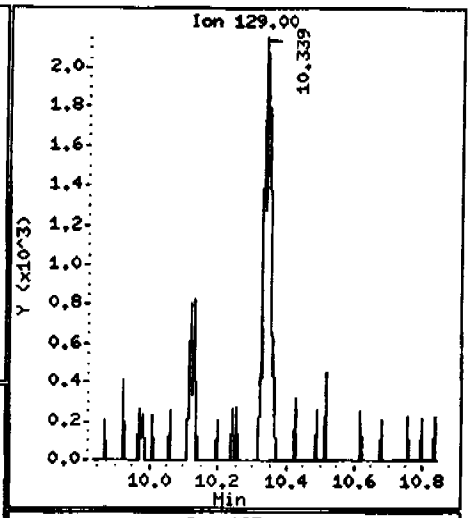
Column phase: RTX-502.2

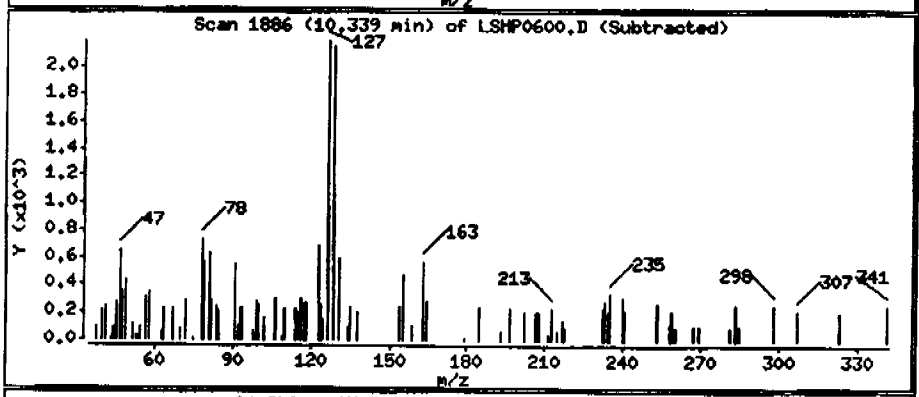
Column diameter: 0.25

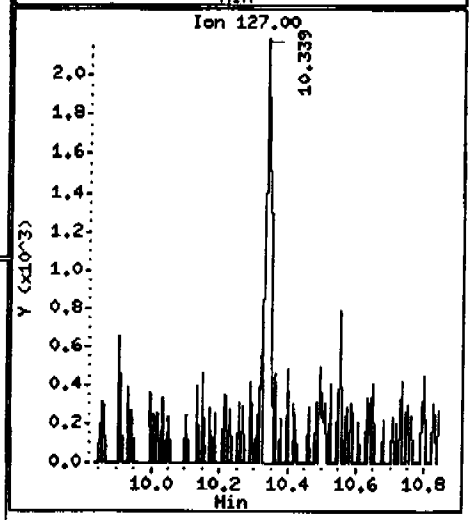
64 Chlorodibromomethane

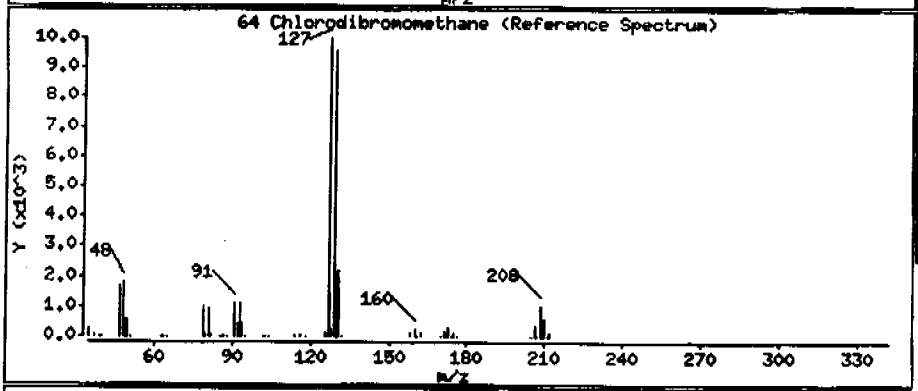
Concentration: 0.1934 ug/L

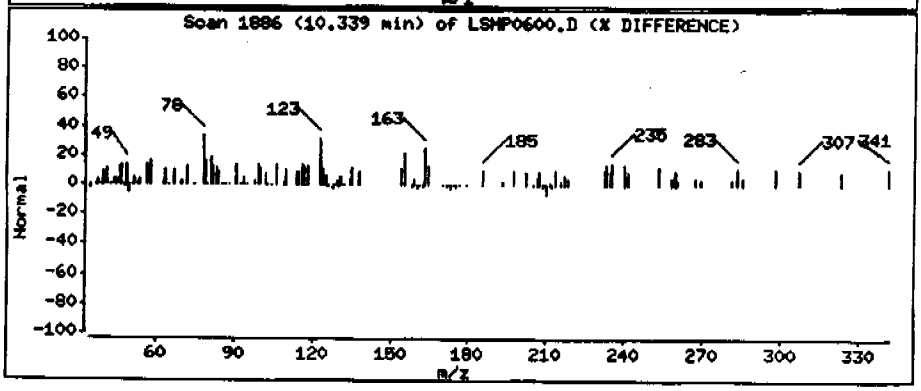












Data File: \\slsvr01\chem\MSL.i\L050502B.b\LSMP0600.D

Date : 02-MAY-2005 21:07

Client ID: RE73-05-58923

Instrument: MSL.i

Sample Info: C800L2AC

Purge Volume: 25.0

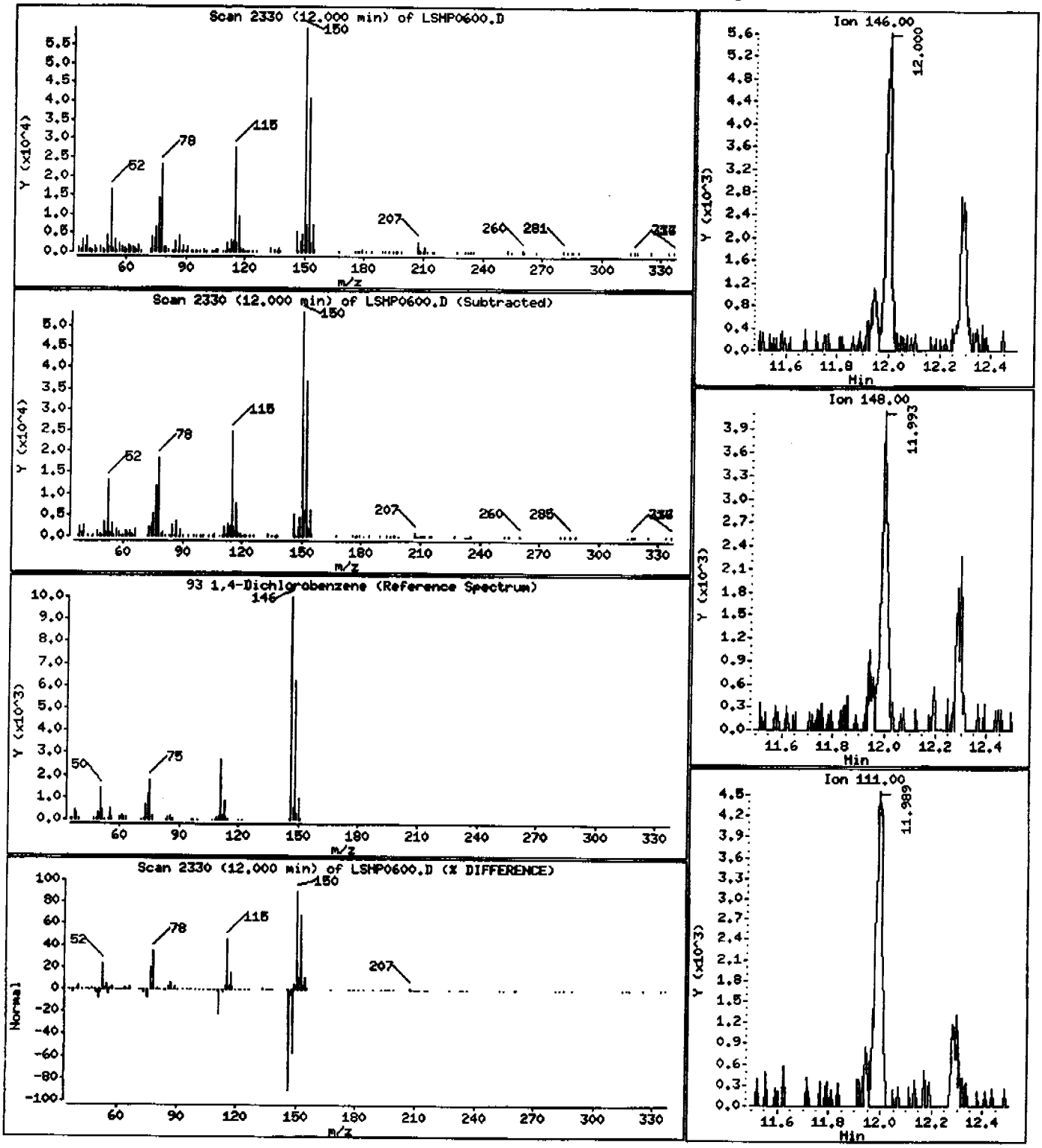
Operator: MN/LS

Column phase: RTX-502.2

Column diameter: 0.25

93 1,4-Dichlorobenzene

Concentration: 0.1384 ug/L



Data File: \\slsvr01\chem\MSL.i\L050502B.b\LSMP0600.D
Report Date: 04-May-2005 12:58

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSL.i\L050502B.b\LSMP0600.D
Lab Smp Id: G800L2AC Client Smp ID: RE73-05-58923
Inj Date : 02-MAY-2005 21:07
Operator : MN/LS Inst ID: MSL.i
Smp Info : G800L2AC
Misc Info : VBLK122B;F5D220218-001;
Comment : NONE
Method : \\slsvr01\chem\MSL.i\L050502B.b\8260B-25LLW30.m
Meth Date : 02-May-2005 14:40 mahmoodt Quant Type: ISTD
Cal Date : 25-APR-2005 11:04 Cal File: LCAL0322.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLVOA02

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BSMP8216.D
Report Date: 01-May-2005 09:05

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSB.i\B050429B.b\BSMP8216.D
Lab Smp Id: G80091AA
Inj Date : 29-APR-2005 18:16
Operator : MN Inst ID: MSB.i
Smp Info : G80091AA;B050429B.b
Misc Info : VBLKB119B.B;F5D220218-002;5121013
Comment : NONE
Method : \\slsvr01\chem\MSB.i\B050429B.b\8260B-25LLW25.m
Meth Date : 01-May-2005 08:07 nuttm Quant Type: ISTD
Cal Date : 20-APR-2005 12:06 Cal File: BCAL8020.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLGC01

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

MC 5-1-05

Name	Value	Description
DF	1.000	Dilution Factor
Vod	25.000	Def Sample Volume (mL)
Vo	5.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	10 Acetone	43	5.901	5.882	(0.416)	37704	0.68516	3.426
	14 Methylene Chloride	84	6.788	6.788	(0.478)	255808	1.19621	5.981
	27 Chloroform	83	10.797	10.797	(0.761)	159461	0.50174	2.509(a)
$	29 Dibromofluoromethane	113	11.122	11.122	(0.784)	1324974	9.08702	45.44
$	31 1,2-Dichloroethane-d4	65	12.274	12.275	(0.865)	1124006	9.53716	47.68
*	36 Fluorobenzene	96	14.195	14.196	(1.000)	8026122	10.0000	
$	50 Toluene-d8	98	18.116	18.116	(0.868)	6276920	8.93070	44.65
	54 Chlorodibromomethane	129	18.825	18.835	(0.902)	3388	0.37808	1.890(a)
*	58 Chlorobenzene-d5	119	20.864	20.864	(1.000)	1864934	10.0000	
$	69 4-Bromofluorobenzene	95	23.060	23.061	(0.909)	2280370	8.92577	44.63
*	79 1,4 Dichlorobenzene-d4	152	25.365	25.376	(1.000)	2602456	10.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BSMP8216.D
Report Date: 01-May-2005 09:05

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSB.i
Lab File ID: BSMP8216.D
Lab Smp Id: G80091AA
Analysis Type: VOA
Quant Type: ISTD
Operator: MN
Method File: \\slsvr01\chem\MSB.i\B050429B.b\8260B-25LLW25.m
Misc Info: VBLKB119B.B;F5D220218-002;5121013

Calibration Date: 29-APR-2005
Calibration Time: 11:40

Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	8037558	4018779	16075116	8026122	-0.14
58 Chlorobenzene-d5	2283738	1141869	4567476	1864934	-18.34
79 1,4 Dichlorobenze	2972629	1486315	5945258	2602456	-12.45

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	14.20	13.70	14.70	14.20	-0.00
58 Chlorobenzene-d5	20.86	20.36	21.36	20.86	-0.00
79 1,4 Dichlorobenze	25.38	24.88	25.88	25.37	-0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

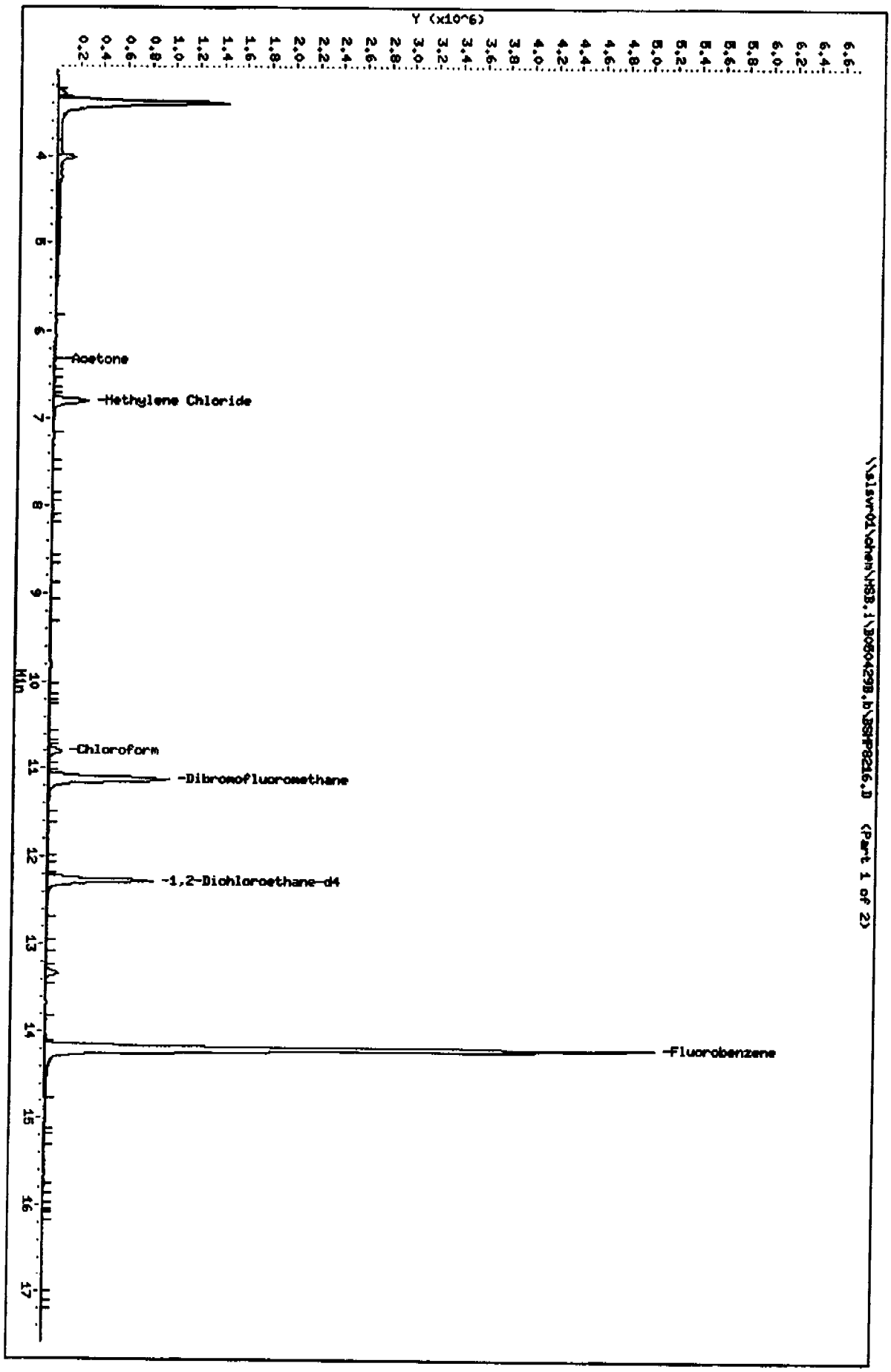
Data File: \\slsvr01\chem\MSB.i\B050429B.b\BSMP8216.D
Report Date: 01-May-2005 09:05

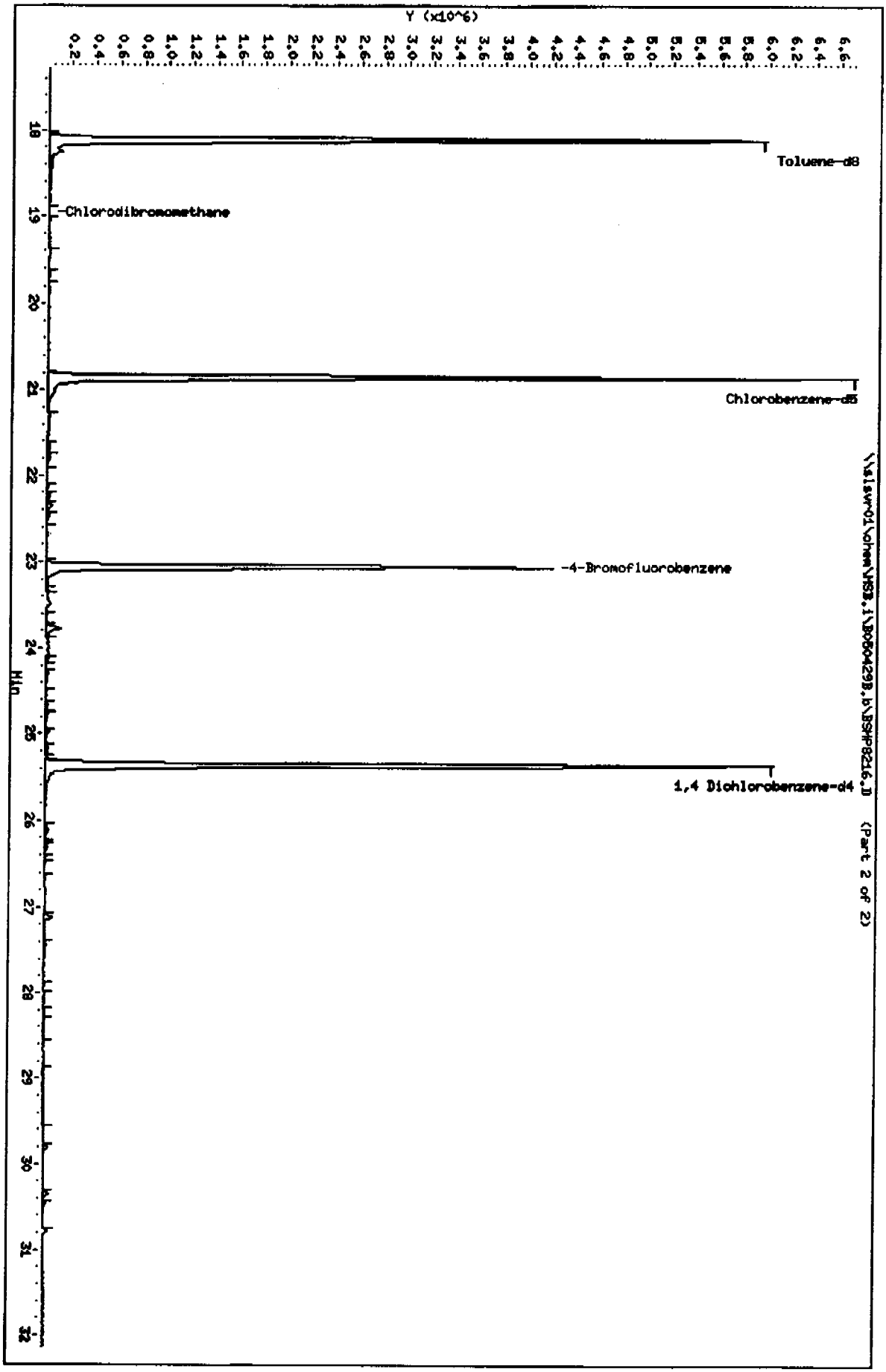
STL St. Louis

RECOVERY REPORT

Client Name:
Client SDG: G990217B.B
Sample Matrix: LIQUID
Fraction: VOA
Lab Smp Id: G80091AA
Level: LOW
Operator: MN
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: H20MS.spk
Quant Type: ISTD
Sublist File: all.sub
Method File: \\slsvr01\chem\MSB.i\B050429B.b\8260B-25LLW25.m
Misc Info: VBLKB119B.B;F5D220218-002;5121013

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 29 Dibromofluorometha	50.00	45.44	90.87	60-147
$ 31 1,2-Dichloroethane	50.00	47.68	95.37	71-138
$ 50 Toluene-d8	50.00	44.65	89.31	75-126
$ 69 4-Bromofluorobenze	50.00	44.63	89.26	71-117


Y (x10^6)
Min
Acetone
Methylene Chloride
Chloroform
Dibromofluoromethane
1,2-Dichloroethane-d4
Fluorobenzene
\\slsvr01\chem\HSB.i\B0804298.b\BSHP8216.D (Part 1 of 2)
Data File: \\slsvr01\chem\HSB.i\B0804298.b\BSHP8216.D
Date : 29-APR-2005 18:16
Client ID:
Sample Info: G8009LAA;B0804298.b
Purge Volume: 5.0
Column phase: Rtx-VMS
Instrument: HSB.i
Operator: MN
Column diameter: 0.25


Data File: \\slsvr01\chem\VSB.i\B0504298.b\BSWP8216.D
Date : 29-APR-2005 18:16
Client ID:
Sample Info: C000916A;B0504298.b
Purge Volume: 5.0
Column phase: Rtx-VMS
Instrument: VSB.i
Operator: HN
Column diameter: 0.25
Y (x10^6)
Toluene-d8
Chlorodibromomethane
Chlorobenzene-d5
4-Bromofluorobenzene
1,4 Dichlorobenzene-d4
\\slsvr01\chem\VSB.i\B0504298.b\BSWP8216.D (Part 2 of 2)
Min

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BSHP8216.D

Date : 29-APR-2005 18:16

Client ID:

Instrument: MSB.i

Sample Info: C80091AA;B050429B.b

Purge Volume: 5.0

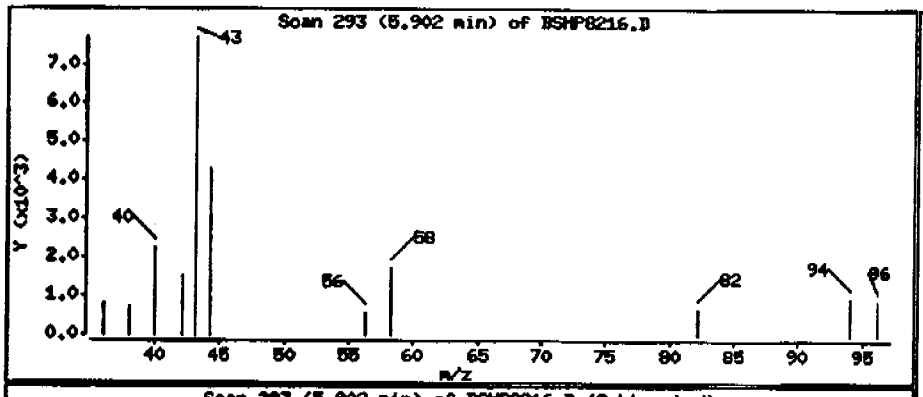
Operator: MN

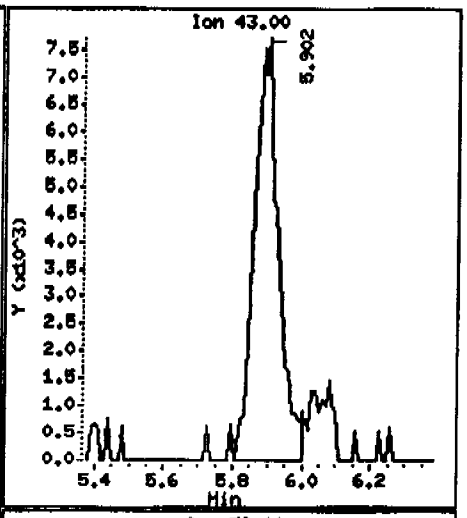
Column phase: Rtx-VMS

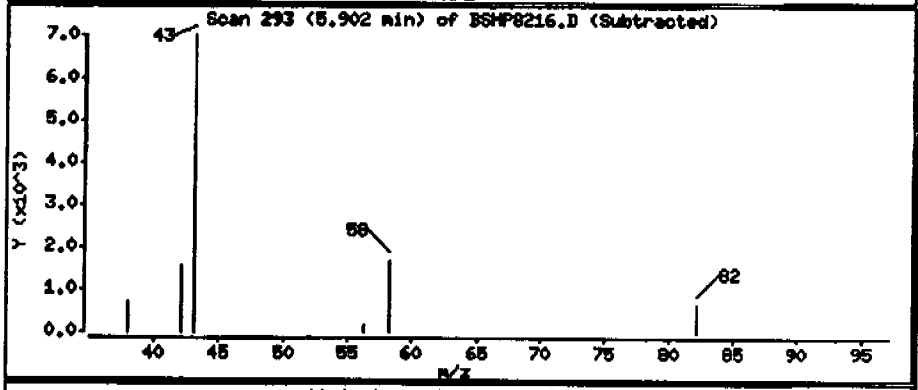
Column diameter: 0.25

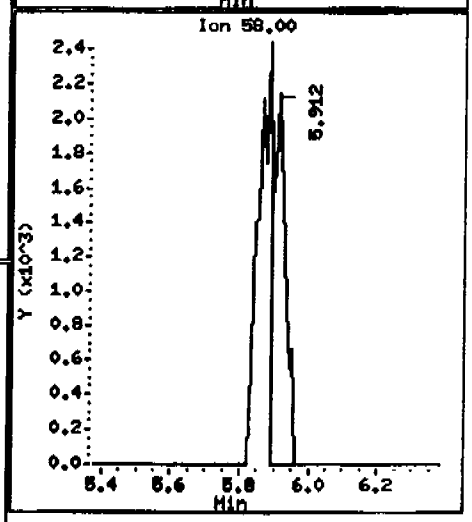
10 Acetone

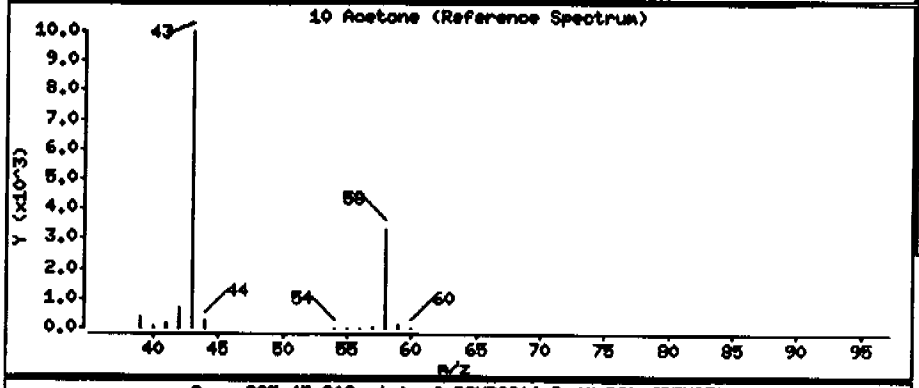
Concentration: 3.426 ug/L

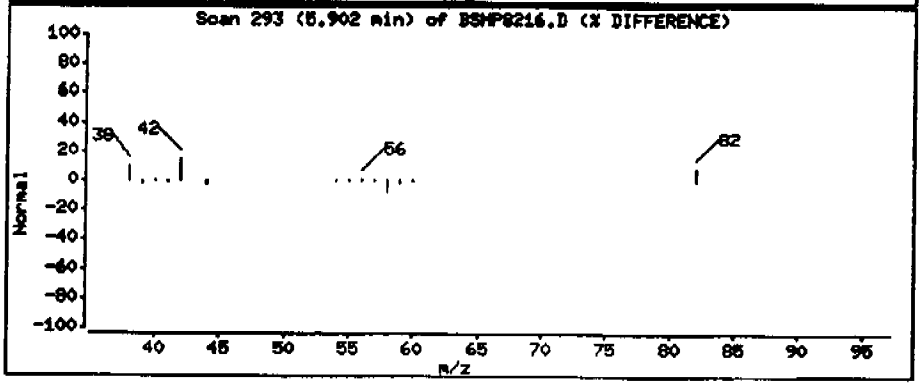












Data File: \\slsvr01\chem\MSB.i\B050429B.b\BSMP8216.D

Date : 29-APR-2005 18:16

Client ID:

Instrument: MSB.i

Sample Info: CB0091AA;B050429B.b

Purge Volume: 5.0

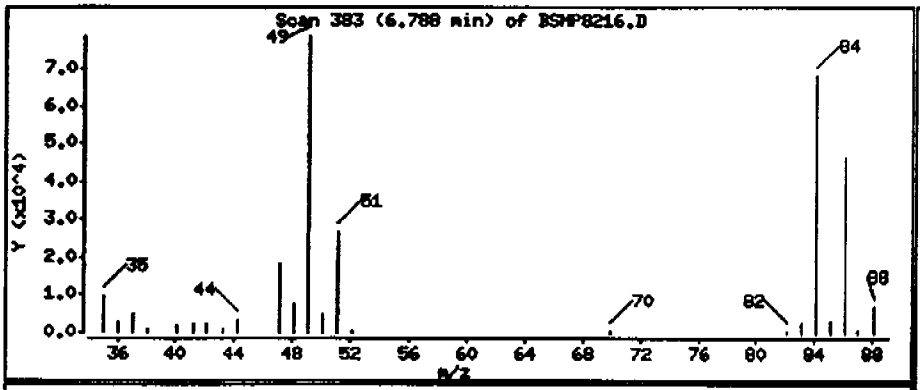
Operator: MN

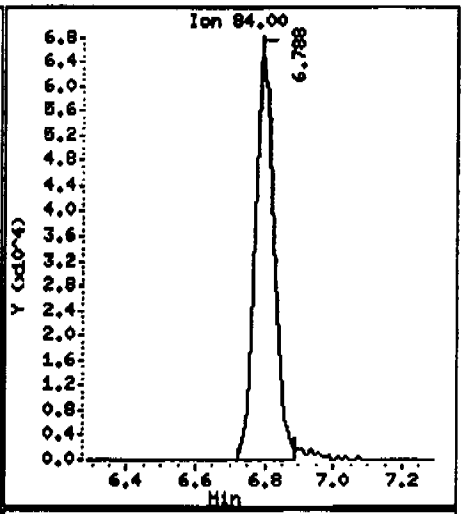
Column phase: Rtx-VMS

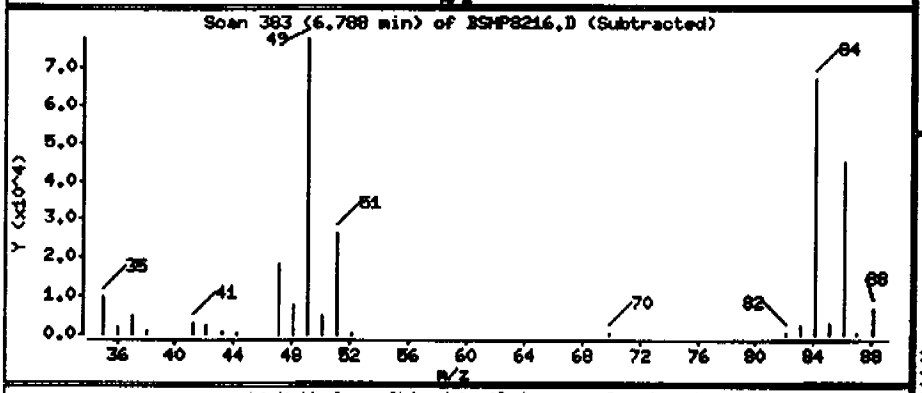
Column diameter: 0.25

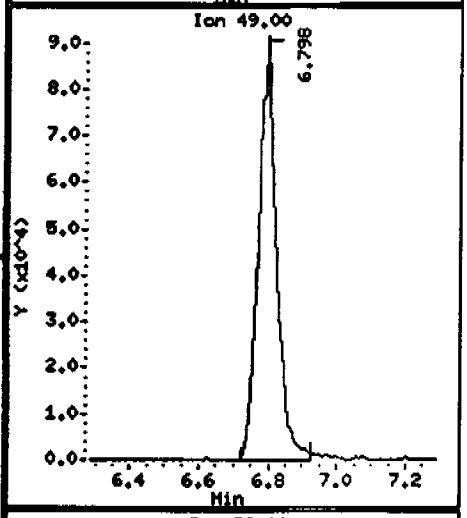
14 Methylene Chloride

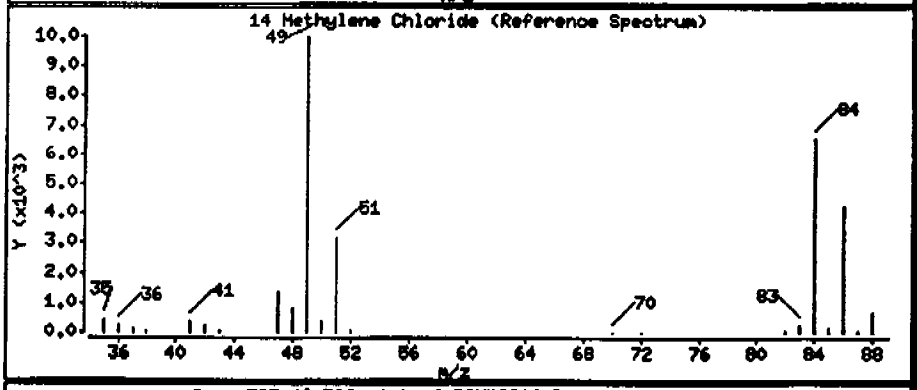
Concentration: 5.981 ug/L

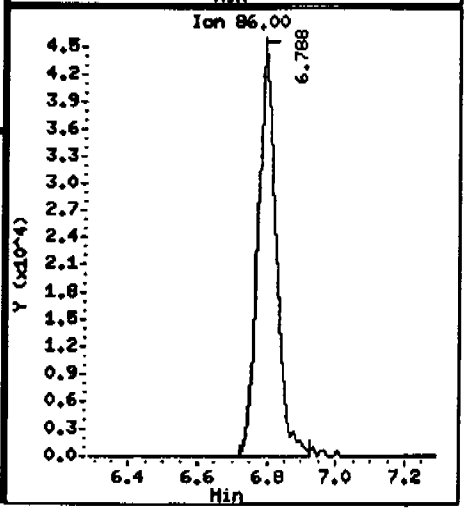


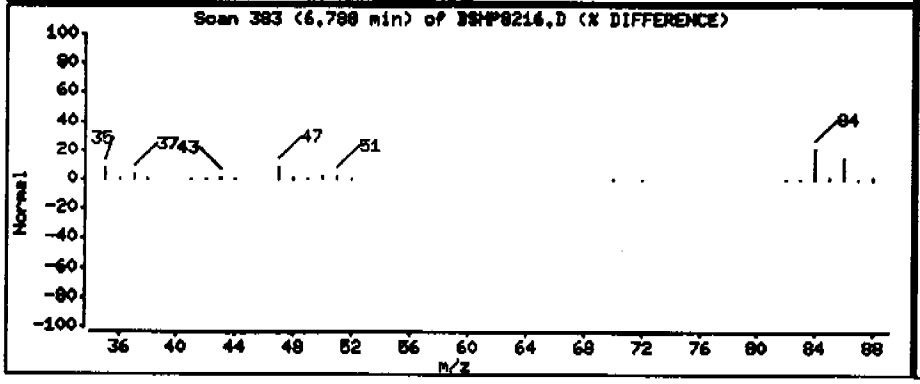












Data File: \\slsvr01\chem\MSB.i\B050429B.b\BSMP8216.D

Date : 29-APR-2005 18:16

Client ID:

Instrument: MSB.i

Sample Info: G80091AA;B050429B.b

Purge Volume: 5.0

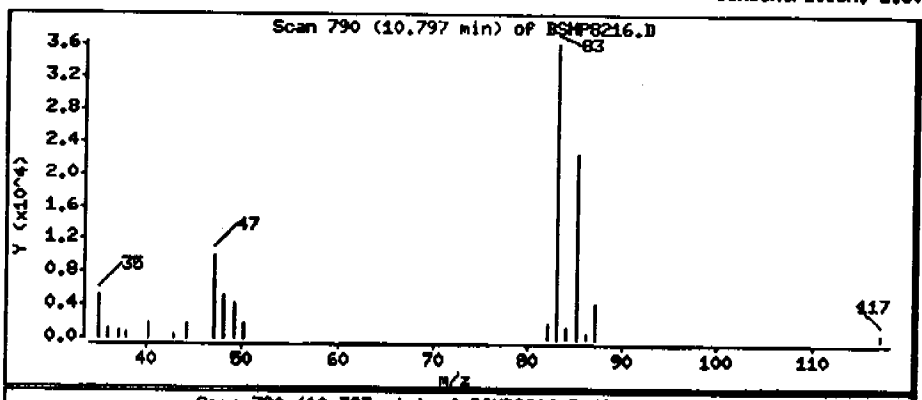
Operator: MN

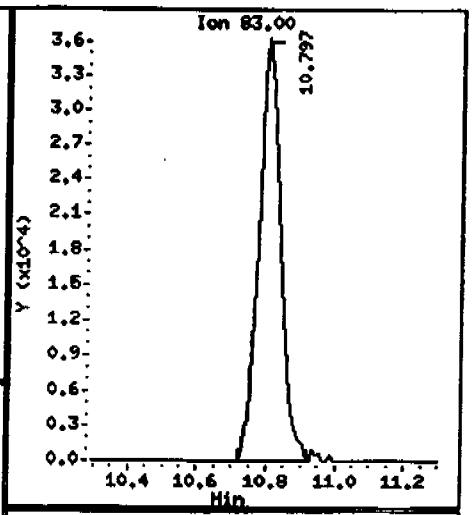
Column phase: Rtx-VMS

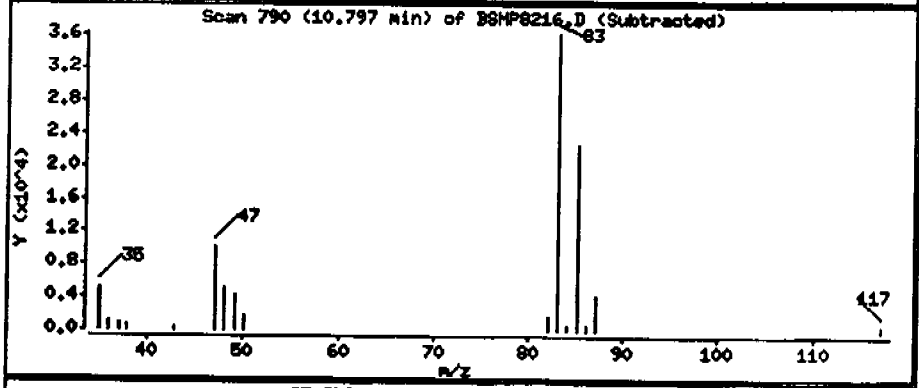
Column diameter: 0.25

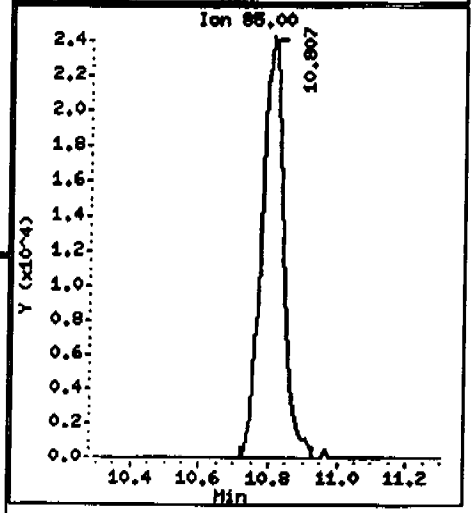
27 Chloroform

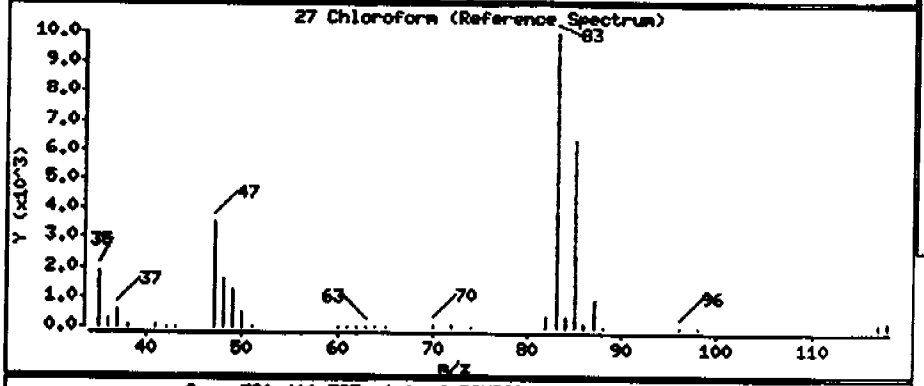
Concentration: 2.509 ug/L

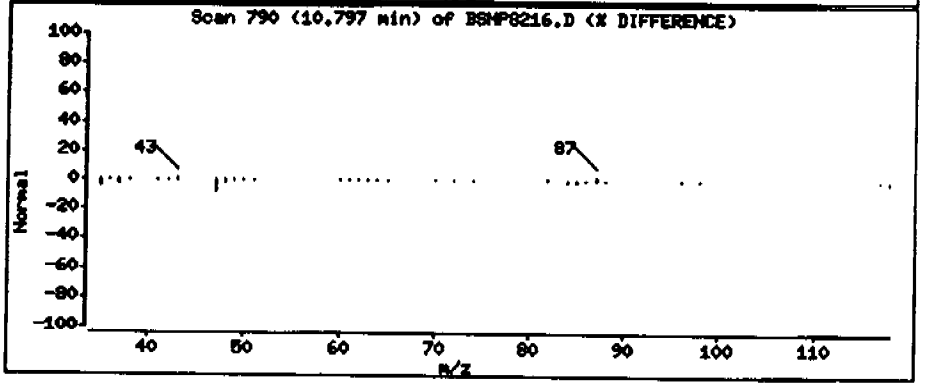












Data File: \\slsvr01\chem\MSB.i\B050429B.b\BSMP8216.D

Date : 29-APR-2005 18:16

Client ID:

Instrument: MSB.i

Sample Info: G80091AA;B050429B.b

Purge Volume: 5.0

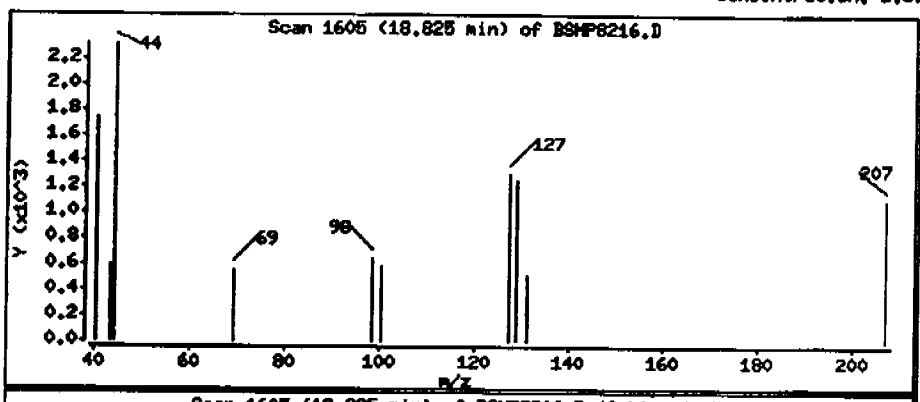
Operator: MN

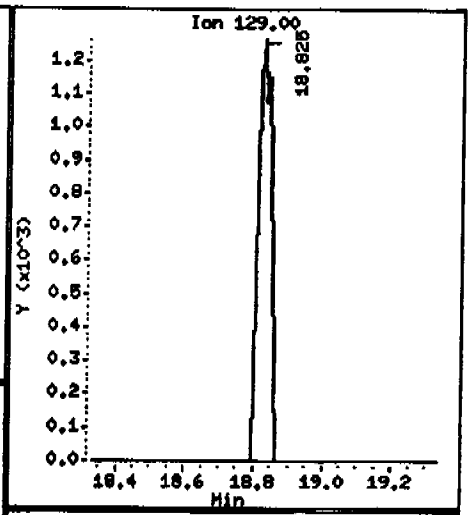
Column phase: Rtx-VMS

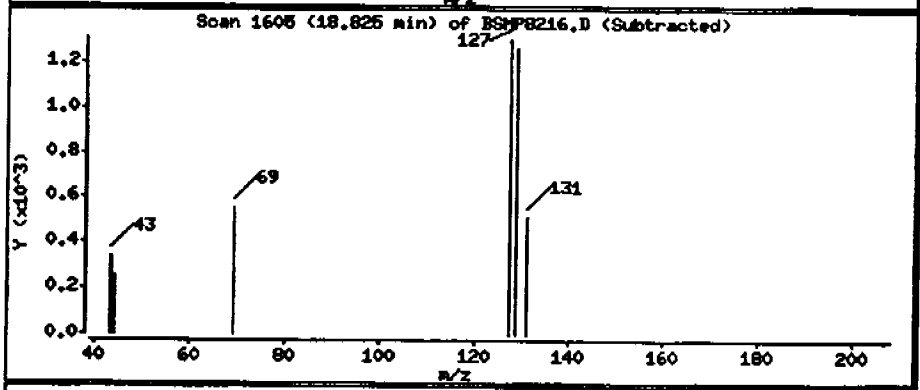
Column diameter: 0.25

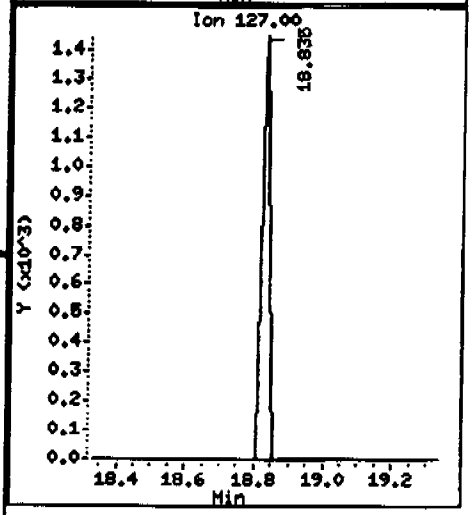
54 Chlorodibromomethane

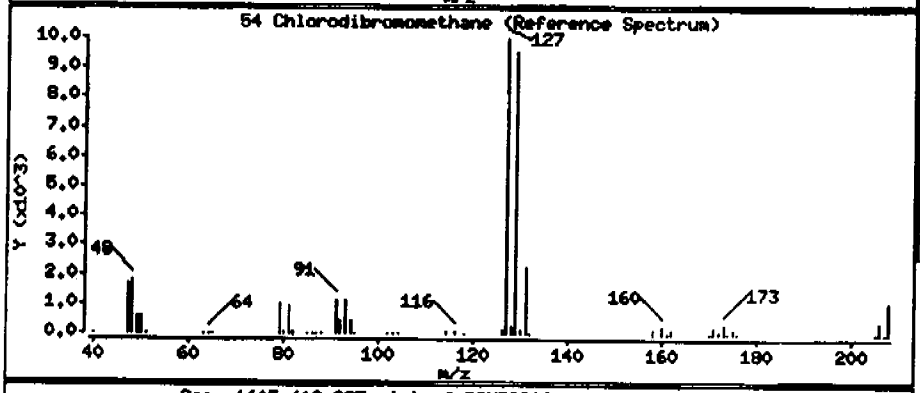
Concentration: 1.890 ug/L

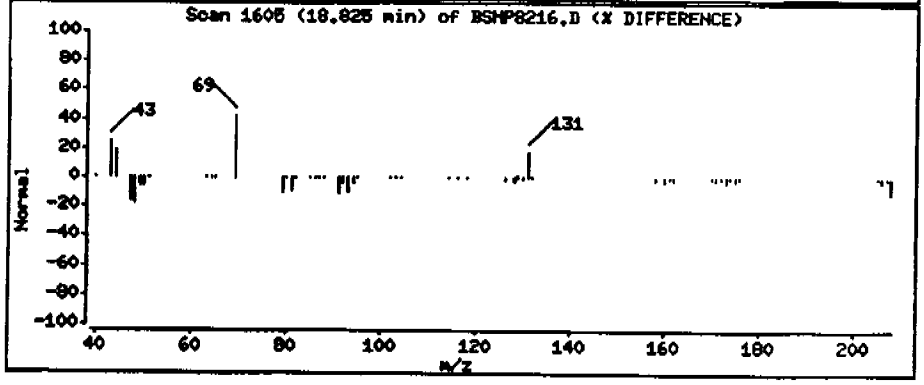












GC/MS RAW QC DATA

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BBLK8209.D
Report Date: 01-May-2005 09:18

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSB.i\B050429B.b\BBLK8209.D
Lab Smp Id: G9LN51AA Client Smp ID: VBLKB119B.B
Inj Date : 29-APR-2005 13:45
Operator : MN Inst ID: MSB.i
Smp Info : G9LN51AA;B050429B.b
Misc Info : VBLKB119B.B;F5E010000-013B;5121013
Comment : NONE
Method : \\slsvr01\chem\MSB.i\B050429B.b\8260B-25LLW25.m
Meth Date : 01-May-2005 08:07 nuttm Quant Type: ISTD
Cal Date : 20-APR-2005 12:06 Cal File: BCAL8020.D
Als bottle: 3 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLGC01

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

MC 5-1-05

Name	Value	Description
DF	1.000	Dilution Factor
Vod	25.000	Def Sample Volume (mL)
Vo	25.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	14 Methylene Chloride	84	6.798	6.788	(0.479)	193371	0.70439	0.7044
	15 1,1,2-Trichlorofluoroethane	101	6.886	6.887	(0.485)	24027	0.11050	0.1105(a)
$	29 Dibromofluoromethane	113	11.122	11.122	(0.784)	1601579	9.80555	9.806
$	31 1,2-Dichloroethane-d4	65	12.274	12.275	(0.865)	1257389	9.52423	9.524
*	36 Fluorobenzene	96	14.195	14.196	(1.000)	8990752	10.0000	
$	50 Toluene-d8	98	18.116	18.116	(0.869)	8141925	10.1170	10.12
*	58 Chlorobenzene-d5	119	20.854	20.864	(1.000)	2135403	10.0000	
$	69 4-Bromofluorobenzene	95	23.070	23.061	(0.909)	2762222	9.79837	9.798
*	79 1,4 Dichlorobenzene-d4	152	25.385	25.376	(1.000)	2871629	10.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BBLK8209.D
Report Date: 01-May-2005 09:18

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSB.i
Lab File ID: BBLK8209.D
Lab Smp Id: G9LN51AA
Analysis Type: VOA
Quant Type: ISTD
Operator: MN
Method File: \\slsvr01\chem\MSB.i\B050429B.b\8260B-25LLW25.m
Misc Info: VBLKB119B.B;F5E010000-013B;5121013

Calibration Date: 29-APR-2005
Calibration Time: 11:40
Client Smp ID: VBLKB119B.B
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	8037558	4018779	16075116	8990752	11.86
58 Chlorobenzene-d5	2283738	1141869	4567476	2135403	-6.50
79 1,4 Dichlorobenze	2972629	1486315	5945258	2871629	-3.40

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	14.20	13.70	14.70	14.20	-0.00
58 Chlorobenzene-d5	20.86	20.36	21.36	20.85	-0.05
79 1,4 Dichlorobenze	25.38	24.88	25.88	25.39	0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BBLK8209.D
Report Date: 01-May-2005 09:18

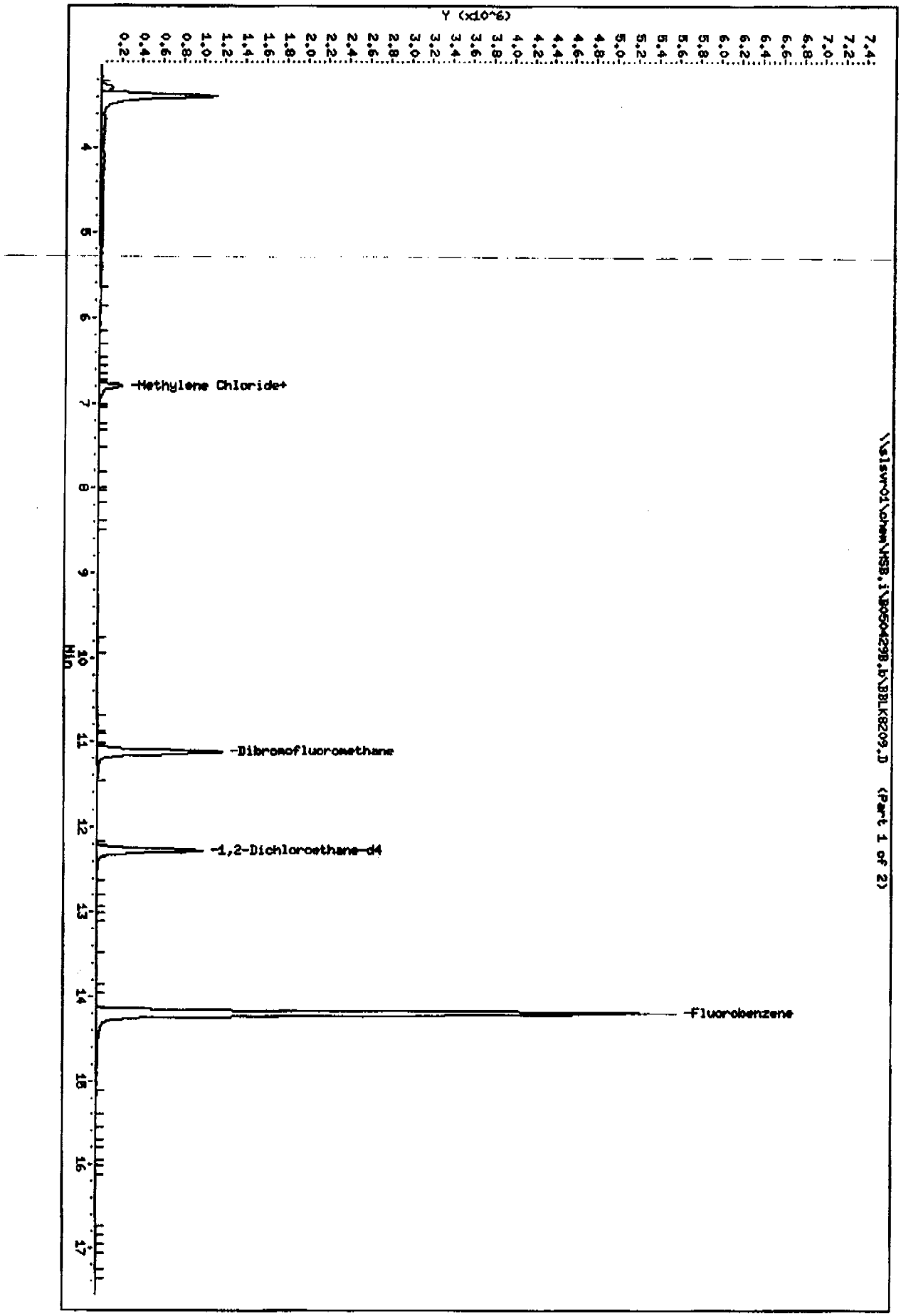
STL St. Louis

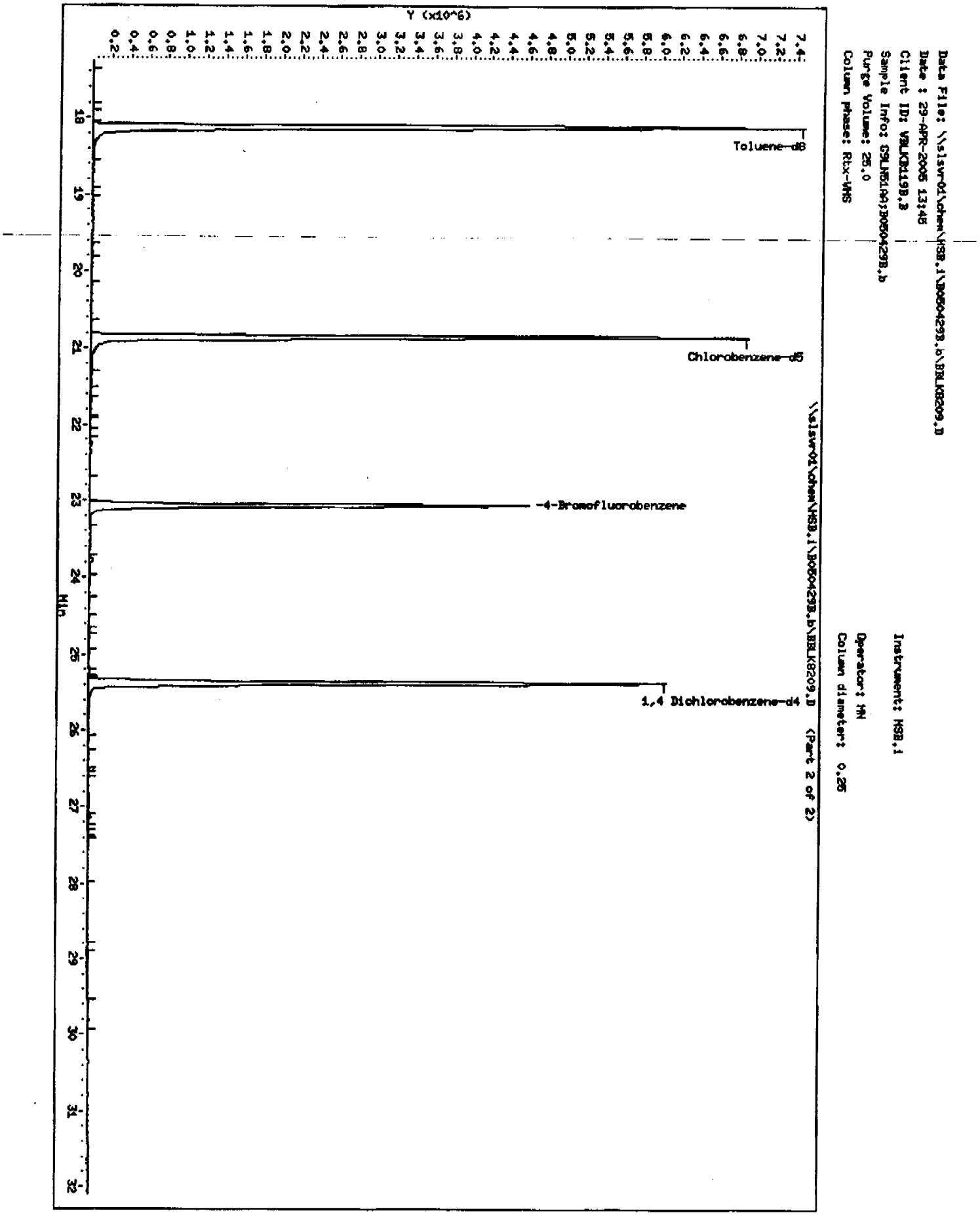
RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: G9LN51AA
Level: LOW
Data Type: MS DATA
SpikeList File: H20MS.spk
Sublist File: all.sub
Method File: \\slsvr01\chem\MSB.i\B050429B.b\8260B-25LLW25.m
Misc Info: VBLKB119B.B;F5E010000-013B;5121013

Client SDG: G990217B.B
Fraction: VOA
Client Smp ID: VBLKB119B.B
Operator: MN
SampleType: BLANK
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 29 Dibromofluorometha	10.00	9.806	98.06	60-147
$ 31 1,2-Dichloroethane	10.00	9.524	95.24	71-138
$ 50 Toluene-d8	10.00	10.12	101.17	75-126
$ 69 4-Bromofluorobenze	10.00	9.798	97.98	71-117


Y (x10^6)
Data File: \\slsvr01\chem\HSB.i\B0504298.b\BBLK8209.D
Date : 29-APR-2005 13:45
Client ID: VBLKB119B.B
Sample Info: G9LHEAA;B0504298.b
Purge Volume: 25.0
Column phase: Rtx-VMS
Instrument: HSB.i
Operator: MN
Column diameter: 0.25
\\slsvr01\chem\HSB.i\B0504298.b\BBLK8209.D (Part 1 of 2)
Methylene Chloride
Dibromofluoromethane
1,2-Dichloroethane-d4
Fluorobenzene
Min


Data File: \\slsvr01\chem\MSB.i\B050429B.b\EBLK8209.D
Date : 29-APR-2005 13:45
Client ID: VBLKB119B.B
Sample Info: GSLNSLMA;B050429B,b
Purge Volume: 25.0
Column Phase: Rtx-VMS
Instrument: MSB.i
Operator: MN
Column diameter: 0.25
Y (x10^6)
Toluene-d8
Chlorobenzene-d5
-4-Bromofluorobenzene
1,4 Dichlorobenzene-d4
\\slsvr01\chem\MSB.i\B050429B.b\EBLK8209.D (Part 2 of 2)
Min

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BBLK8209.D

Date : 29-APR-2005 13:45

Client ID: VBLKB119B.B

Instrument: MSB.i

Sample Info: G9LN51AA;B050429B.b

Purge Volume: 25.0

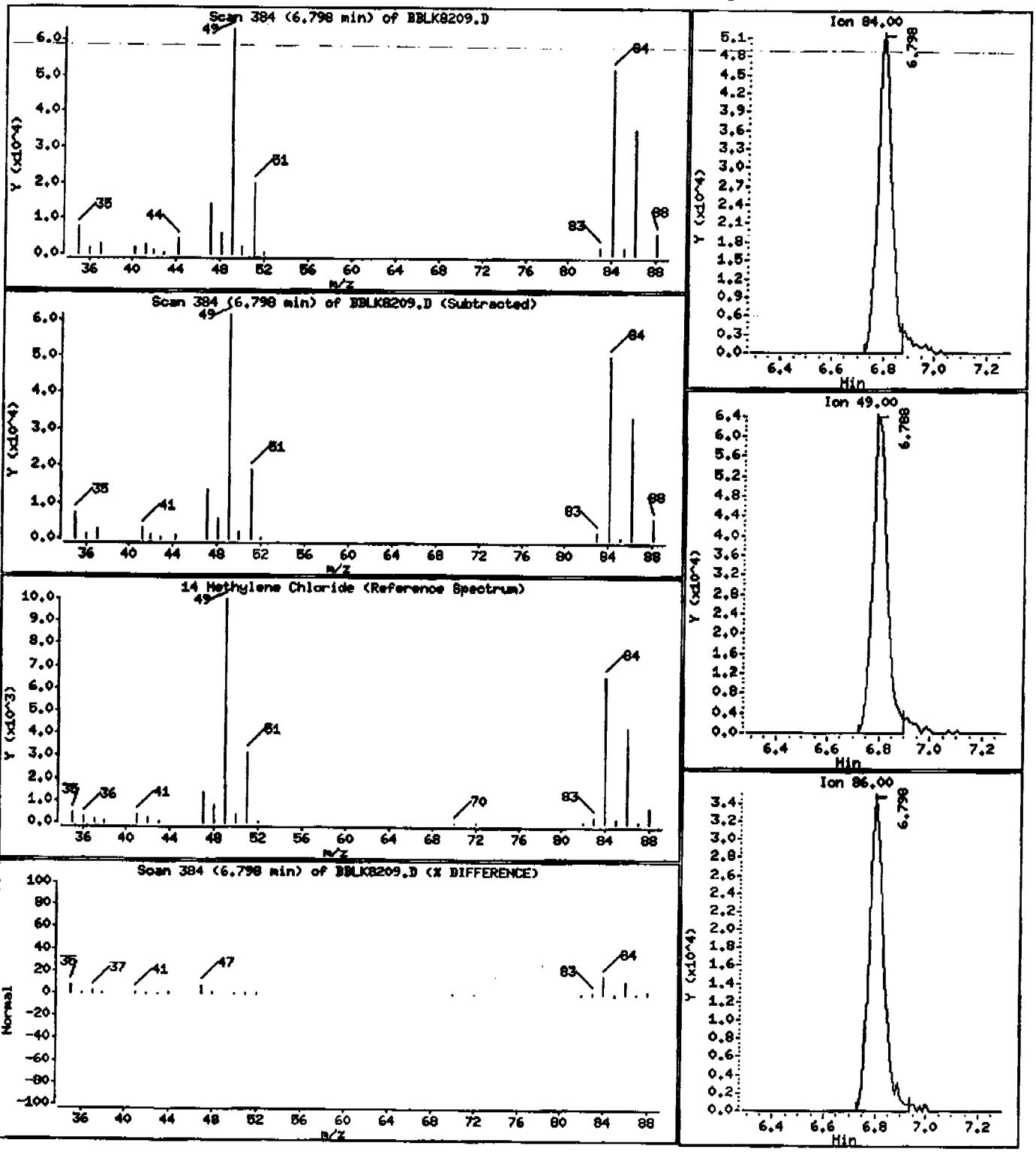
Operator: MN

Column phase: Rtx-VMS

Column diameter: 0.25

14 Methylene Chloride

Concentration: 0.7044 ug/L



Data File: \\slsvr01\chem\MSB.i\B050429B.b\BBLK8209.D

Date : 29-APR-2005 13:45

Client ID: VBLKB119B.B

Instrument: MSB.i

Sample Info: C9LN61AA;B050429B.b

Purge Volume: 25.0

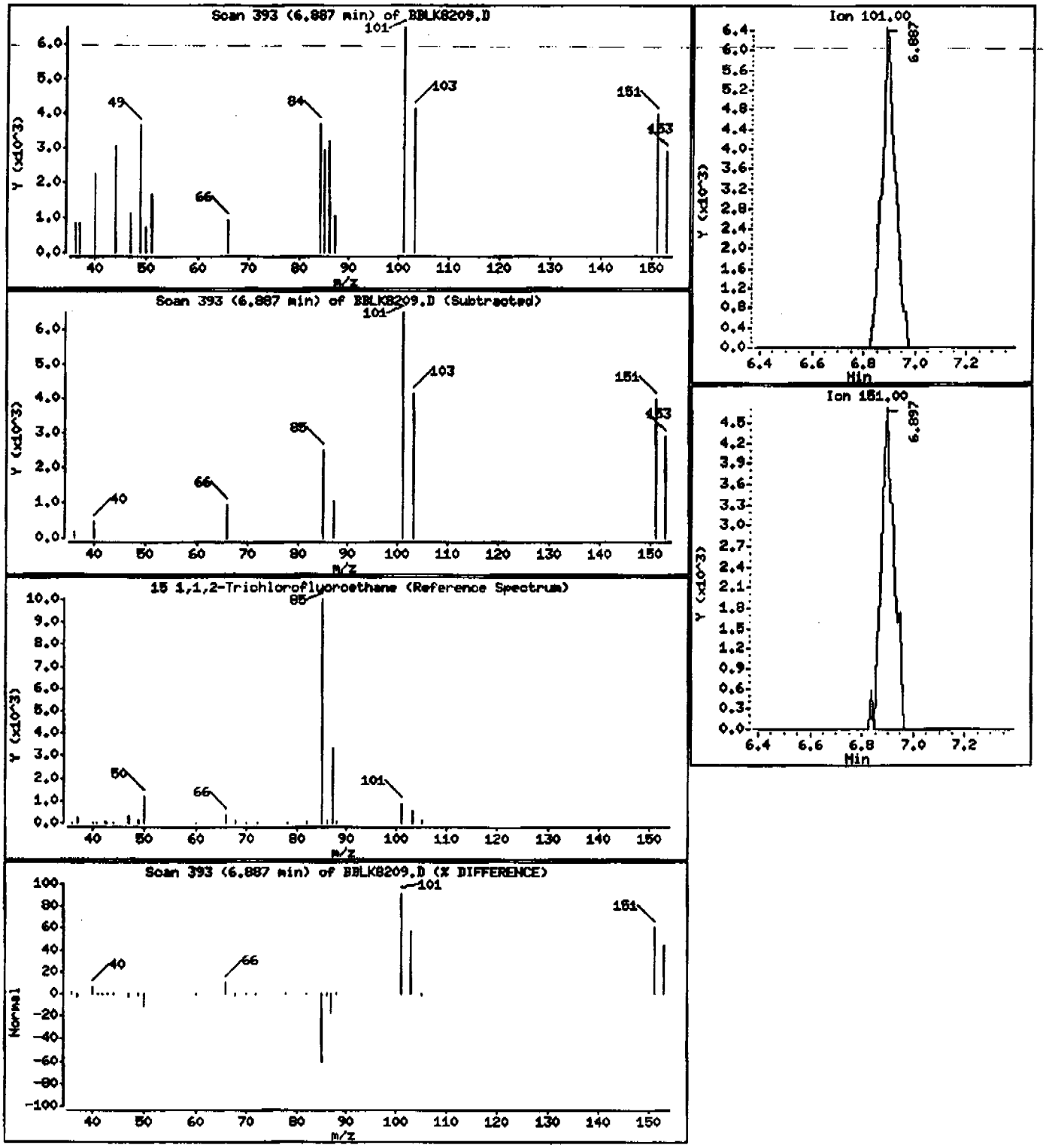
Operator: MN

Column phase: Rtx-VMS

Column diameter: 0.25

15 1,1,2-Trichlorofluoroethane

Concentration: 0.1105 ug/L



Data File: \\slsvr01\chem\MSB.i\B050429B.b\BBLK8209.D
Report Date: 01-May-2005 09:18

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSB.i\B050429B.b\BBLK8209.D
Lab Smp Id: G9LN51AA Client Smp ID: VBLKB119B.B
Inj Date : 29-APR-2005 13:45
Operator : MN Inst ID: MSB.i
Smp Info : G9LN51AA;B050429B.b
Misc Info : VBLKB119B.B;F5E010000-013B;5121013
Comment : NONE
Method : \\slsvr01\chem\MSB.i\B050429B.b\8260B-25LLW25.m
Meth Date : 01-May-2005 08:07 nuttm Quant Type: ISTD
Cal Date : 20-APR-2005 12:06 Cal File: BCAL8020.D
Als bottle: 3 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLGC01

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\slsvr01\chem\MSL.i\L050502B.b\LBLK0587.D
Report Date: 04-May-2005 13:21

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSL.i\L050502B.b\LBLK0587.D
Lab Smp Id: G9PD41AA Client Smp ID: G9PD41AA
Inj Date : 02-MAY-2005 15:44
Operator : MN/LS Inst ID: MSL.i
Smp Info : G9PD41AA
Misc Info : VBLK122B;F5E300000-229B
Comment : NONE
Method : \\slsvr01\chem\MSL.i\L050502B.b\8260B-25LLW30.m
Meth Date : 02-May-2005 14:40 mahmoodt Quant Type: ISTD
Cal Date : 25-APR-2005 11:04 Cal File: LCAL0322.D
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: QC-all.sub
Target Version: 4.10
Processing Host: SLVOA02

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	25.000	DefSampleVolume
Vo	25.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 34 Dibromofluoromethane	113	8.426	8.423	(0.940)	277889	8.58853	8.588
$ 42 1,2-Dichloroethane-d4	65	8.808	8.808	(0.982)	235505	8.06481	8.065
* 44 Fluorobenzene	96	8.965	8.961	(1.000)	1651662	10.0000	
$ 55 Toluene-d8	98	9.867	9.867	(1.101)	1480626	9.26391	9.264
* 69 Chlorobenzene-d5	117	10.702	10.698	(1.000)	830149	10.0000	
$ 77 4-Bromofluorobenzene	95	11.323	11.327	(0.945)	400735	9.87051	9.870
* 92 1,4 Dichlorobenzene-d4	152	11.985	11.981	(1.000)	280613	10.0000	
93 1,4-Dichlorobenzene	146	11.993	11.996	(1.001)	8334	0.14068	0.1407

5-4-05

Data File: \\slsvr01\chem\MSL.i\L050502B.b\LBLK0587.D
Report Date: 04-May-2005 13:21

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSL.i
Lab File ID: LBLK0587.D
Lab Smp Id: G9PD41AA
Analysis Type: VOA
Quant Type: ISTD
Operator: MN/LS
Calibration Date: 02-MAY-2005
Calibration Time: 14:13
Client Smp ID: G9PD41AA
Level: LOW
Sample Type: WATER
Method File: \\slsvr01\chem\MSL.i\L050502B.b\8260B-25LLW30.m
Misc Info: VBLK122B;F5E300000-229B

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
44 Fluorobenzene	1740566	870283	3481132	1651662	-5.11
69 Chlorobenzene-d5	935569	467785	1871138	830149	-11.27
92 1,4 Dichlorobenze	342318	171159	684636	280613	-18.03

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
44 Fluorobenzene	8.96	8.46	9.46	8.97	0.04
69 Chlorobenzene-d5	10.70	10.20	11.20	10.70	0.04
92 1,4 Dichlorobenze	11.98	11.48	12.48	11.99	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

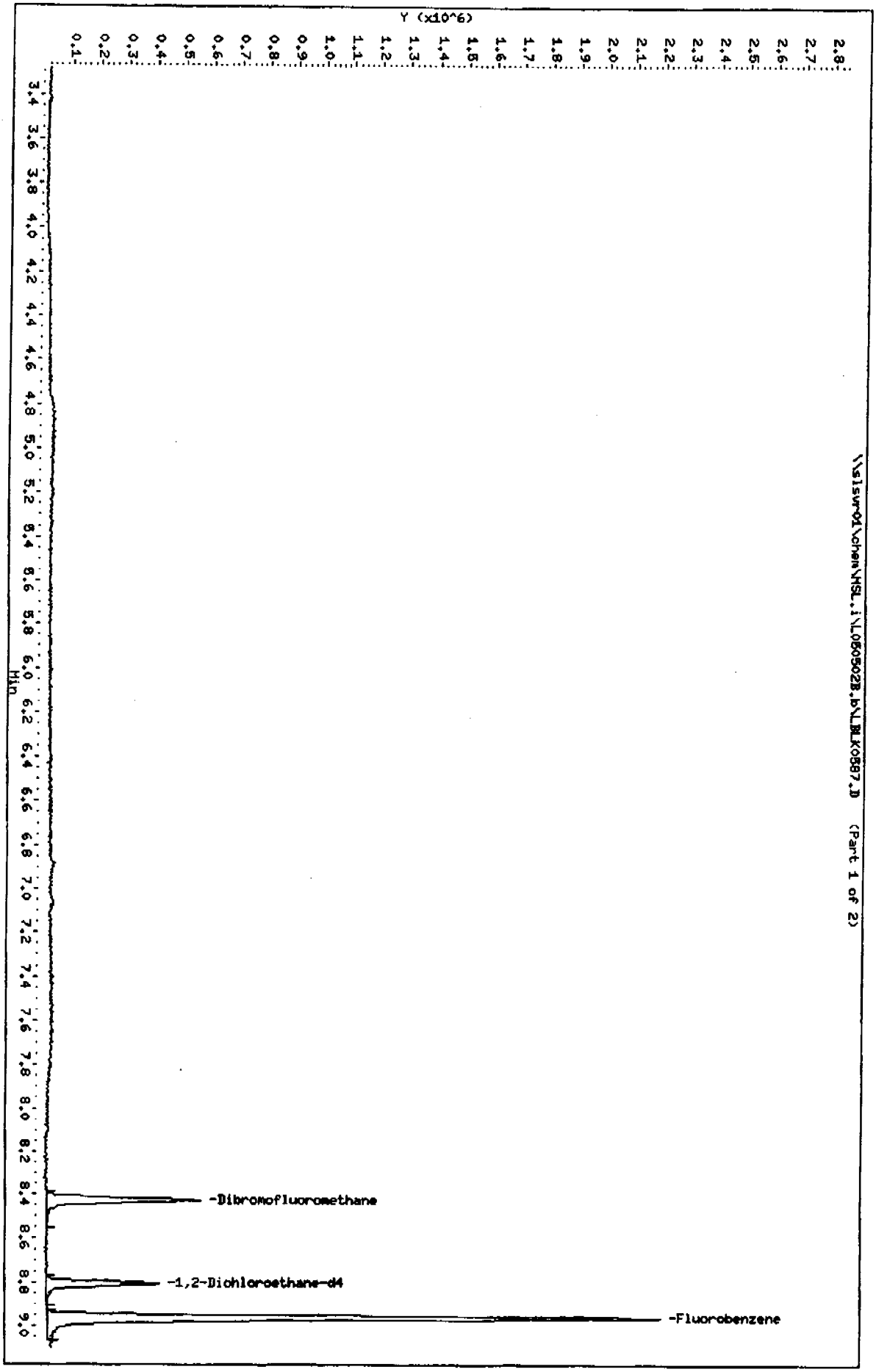
Data File: \\slsvr01\chem\MSL.i\L050502B.b\LBLK0587.D
Report Date: 04-May-2005 13:21

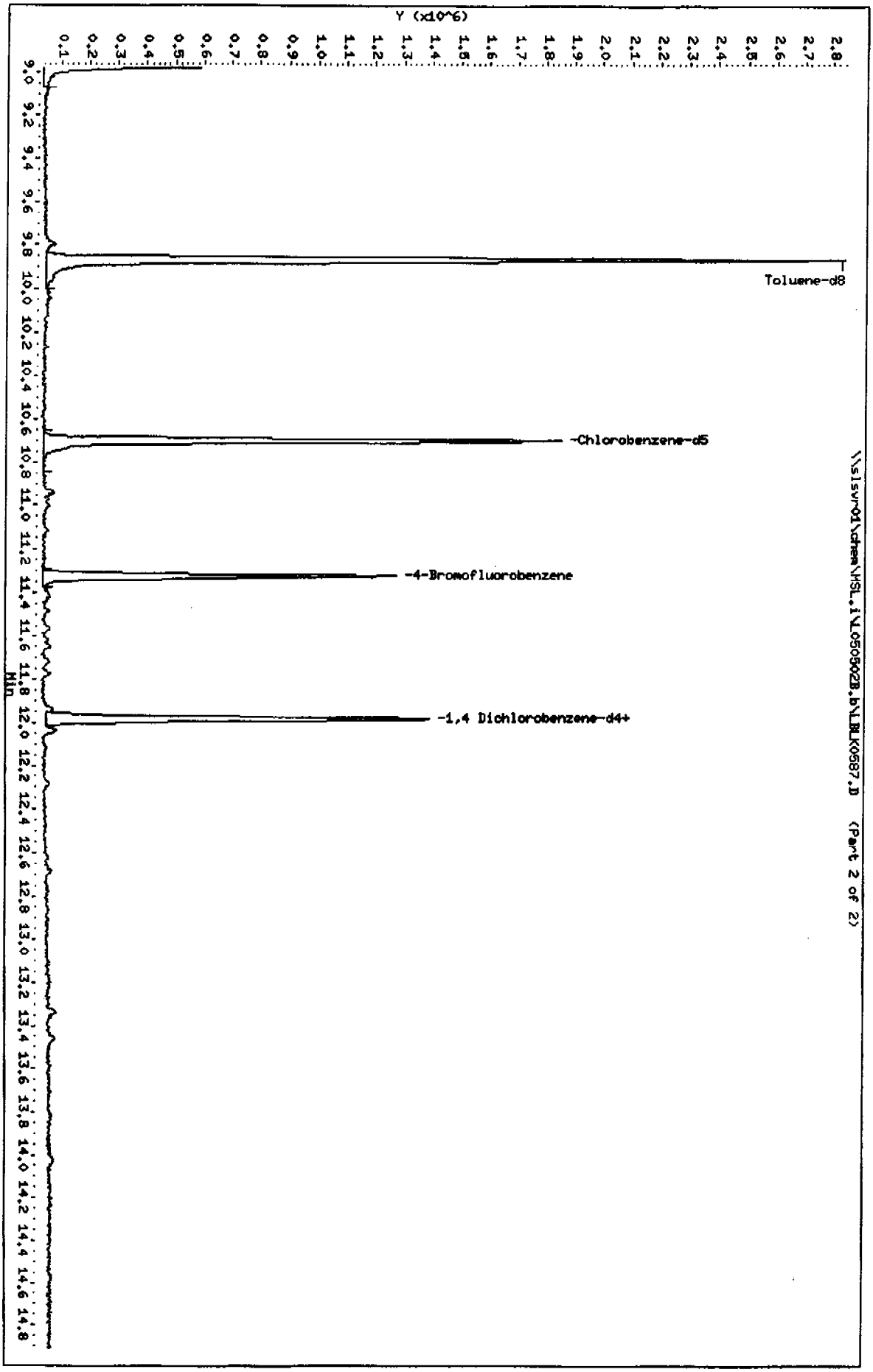
STL St. Louis

RECOVERY REPORT

Client Name:
Client SDG: E971118A.B
Sample Matrix: LIQUID
Fraction: VOA
Lab Smp Id: G9PD41AA
Client Smp ID: G9PD41AA
Level: LOW
Operator: MN/LS
Data Type: MS DATA
SampleType: BLANK
SpikeList File: soilms.spk
Quant Type: ISTD
Sublist File: QC-all.sub
Method File: \\slsvr01\chem\MSL.i\L050502B.b\8260B-25LLW30.m
Misc Info: VBLK122B;F5E300000-229B

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 34 Dibromofluorometha	10.00	8.588	85.89	72-136
$ 42 1,2-Dichloroethane	10.00	8.065	80.65	78-125
$ 55 Toluene-d8	10.00	9.264	92.64	85-117
$ 77 4-Bromofluorobenze	10.00	9.870	98.71	79-120


Data File: \\slsvr01\chem\HSL.i\L050502B.b\LBLK0587.D
Date : 02-MAY-2005 15:44
Client ID: G9PD41AA
Sample Info: G9PD41AA
Purge Volume: 25.0
Column Phase: RTX-502.2
Instrument: HSL.i
Operator: HN/LS
Column diameter: 0.25
\\slsvr01\chem\HSL.i\L050502B.b\LBLK0587.D (Part 1 of 2)
Y (x10^6)
Min
-Dibromofluoromethane
-1,2-Dichloroethane-d4
-Fluorobenzene


Data File: \\slsvr01\chem\MSL.i\L050502B.b\LBLK0587.D
Date : 02-MAY-2005 15:44
Client ID: G9PD41AA
Sample Info: G9PD41AA
Purge Volume: 25.0
Column phase: RTX-502.2
Instrument: MSL.i
Operator: MM/LS
Column diameter: 0.25
Y (x10^6)
Toluene-d8
-Chlorobenzene-d5
-4-Bromofluorobenzene
-1,4 Dichlorobenzene-d4+
\\slsvr01\chem\MSL.i\L050502B.b\LBLK0587.D (Part 2 of 2)
Min

Data File: \\slsvr01\chem\MSL.i\L050502B.b\LBLK0587.D

Date : 02-MAY-2005 15:44

Client ID: G9PD41AA

Instrument: MSL.i

Sample Info: G9PD41AA

Purge Volume: 25.0

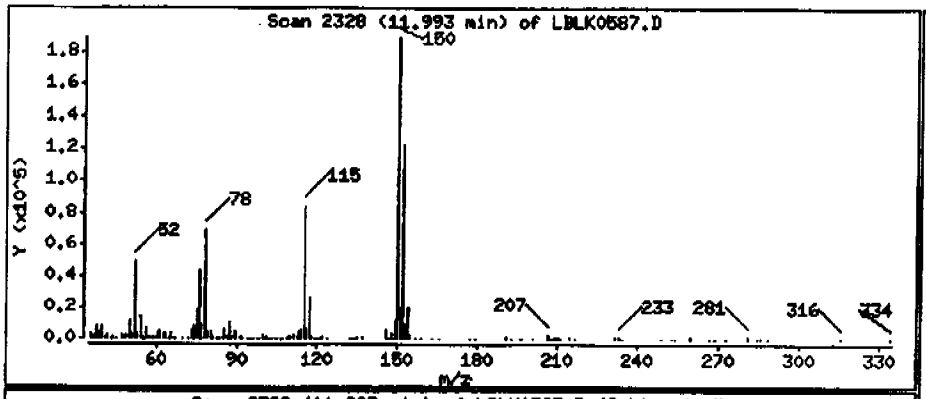
Operator: HN/LS

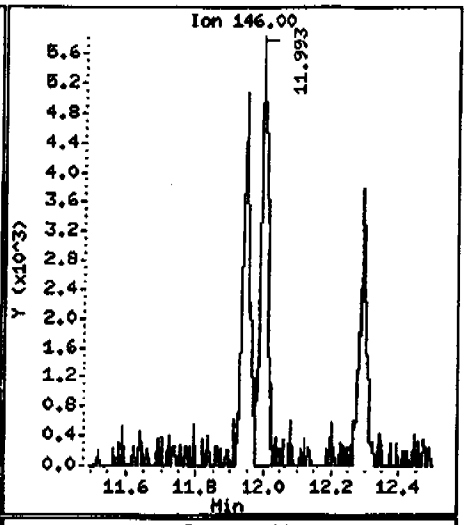
Column phase: RTX-502.2

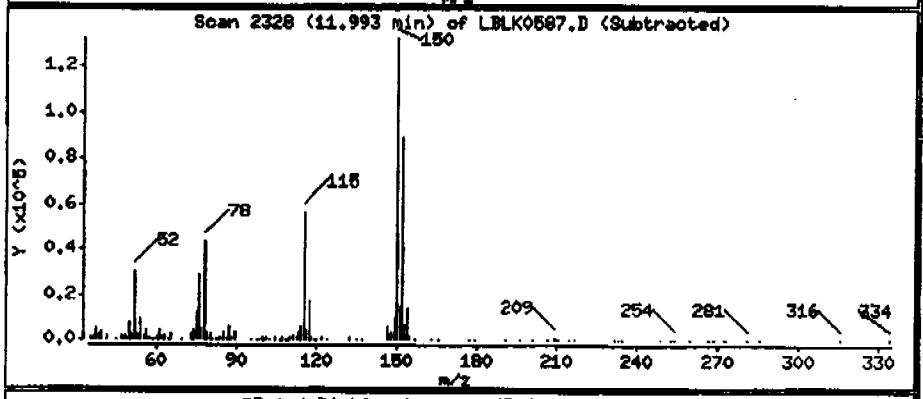
Column diameter: 0.25

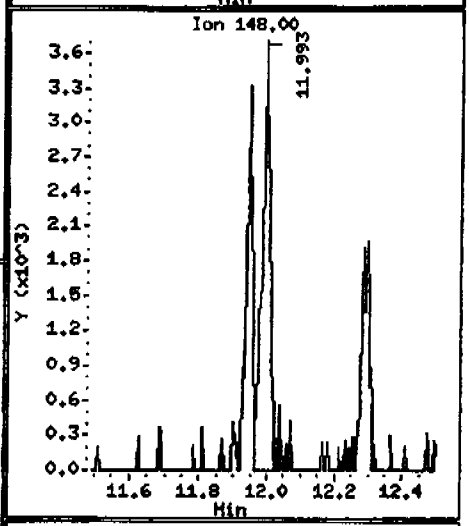
93 1,4-Dichlorobenzene

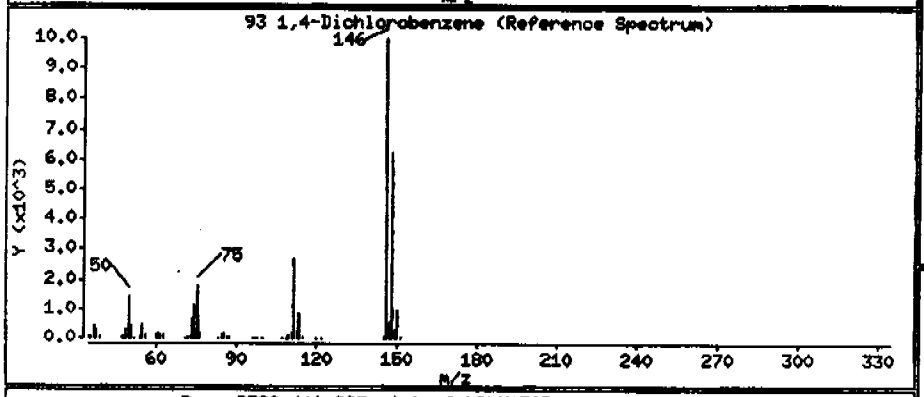
Concentration: 0.1407 ug/L

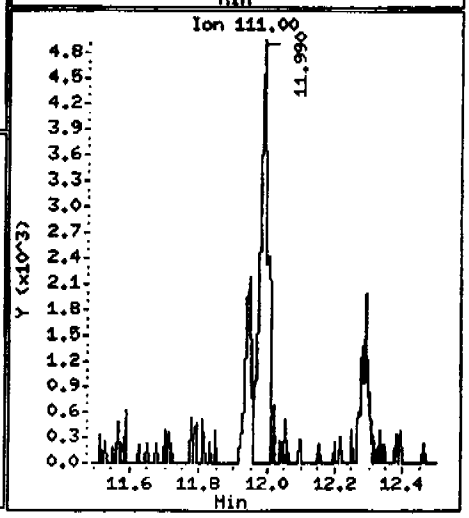


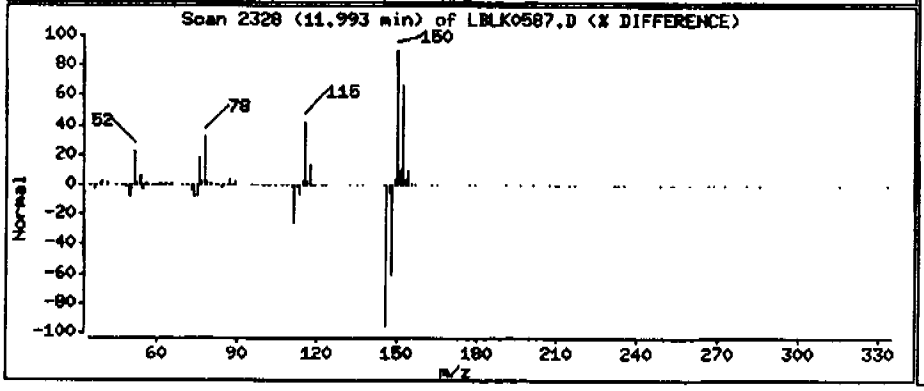












Data File: \\slsvr01\chem\MSL.i\L050502B.b\LBLK0587.D
Report Date: 04-May-2005 13:21

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSL.i\L050502B.b\LBLK0587.D
Lab Smp Id: G9PD41AA Client Smp ID: G9PD41AA
Inj Date : 02-MAY-2005 15:44
Operator : MN/LS Inst ID: MSL.i
Smp Info : G9PD41AA
Misc Info : VBLK122B;F5E300000-229B
Comment : NONE
Method : \\slsvr01\chem\MSL.i\L050502B.b\8260B-25LLW30.m
Meth Date : 02-May-2005 14:40 mahmoodt Quant Type: ISTD
Cal Date : 25-APR-2005 11:04 Cal File: LCAL0322.D
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: QC-all.sub
Target Version: 4.10
Processing Host: SLVOA02

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BLCS8207.D
Report Date: 01-May-2005 09:17

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSB.i\B050429B.b\BLCS8207.D
Lab Smp Id: G9LN51AC Client Smp ID: VLCSB119B.B
Inj Date : 29-APR-2005 12:31
Operator : MN Inst ID: MSB.i
Smp Info : G9LN51AC;B050429B.b
Misc Info : VBLKB119B.B;F5E010000-013C;5121013
Comment : NONE
Method : \\slsvr01\chem\MSB.i\B050429B.b\8260B-25LLW25.m
Meth Date : 01-May-2005 08:07 nuttm Quant Type: ISTD
Cal Date : 20-APR-2005 12:06 Cal File: BCAL8020.D
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLGC01

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

MC 5-10-05

Name	Value	Description
DF	1.000	Dilution Factor
Vod	25.000	Def Sample Volume (mL)
Vo	25.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1	Dichlorodifluoromethane	85	3.730	3.735	(0.263)	2370092	8.75791	8.758
2	Chloromethane	50	3.966	3.961	(0.280)	2294303	9.49966	9.500
3	Vinyl Chloride	62	4.183	4.178	(0.295)	1133705	10.0040	10.00
4	Bromomethane	94	4.695	4.690	(0.331)	1424393	7.99828	7.998
5	Chloroethane	64	4.882	4.877	(0.344)	1263687	9.20699	9.207
7	Trichlorofluoromethane	101	5.680	5.675	(0.400)	3278044	10.4574	10.46
M 9	1,2-Dichloroethene (total)	96				4822448	22.2428	22.24
10	Acetone	43	5.877	5.882	(0.414)	162186	8.81080	8.811
11	1,1-Dichloroethene	96	6.527	6.532	(0.460)	1974241	10.1548	10.15
14	Methylene Chloride	84	6.793	6.788	(0.479)	2175483	11.1173	11.12
15	1,1,2-Trichlorofluoroethane	101	6.882	6.887	(0.485)	2433223	11.1429	11.14
16	Allyl chloride	39	6.961	6.956	(0.491)	2131406	12.7409	12.74
17	Carbon Disulfide	76	7.167	7.173	(0.505)	7430836	9.79357	9.794
18	trans-1,2-Dichloroethene	96	8.113	8.118	(0.572)	2505551	11.4804	11.48
19	1,1-Dichloroethane	63	8.684	8.689	(0.612)	4212695	11.4259	11.42
23	2-Butanone	43	9.788	9.793	(0.690)	2594856	11.1236	11.12
25	cis-1,2-Dichloroethene	96	10.211	10.216	(0.720)	2316897	10.7624	10.76
26	Bromochloromethane	130	10.635	10.640	(0.749)	876488	11.0250	11.02
27	Chloroform	83	10.792	10.797	(0.761)	3639367	10.1791	10.18
$ 29	Dibromofluoromethane	113	11.117	11.122	(0.783)	1704405	10.3906	10.39
$ 31	1,2-Dichloroethane-d4	65	12.270	12.275	(0.865)	1320242	9.95771	9.958
32	1,2-Dichloroethane	62	12.467	12.462	(0.879)	1664949	9.89521	9.895

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BLCS8207.D
Report Date: 01-May-2005 09:17

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	33 1,1,1-Trichloroethane	97	12.674	12.679	(0.893)	3129468	10.2463	10.25
	34 Carbon Tetrachloride	117	13.531	13.536	(0.953)	2632088	10.7230	10.72
	35 Benzene	78	13.659	13.664	(0.963)	9446168	9.95145	9.951
*	36 Fluorobenzene	96	14.191	14.196	(1.000)	9029228	10.0000	
	37 Dibromomethane	93	14.929	14.925	(1.052)	769499	11.1100	11.11
	38 1,2-Dichloropropane	63	15.038	15.043	(1.060)	2299670	10.9223	10.92
	39 Trichloroethene	130	15.146	15.141	(1.067)	2774626	10.6820	10.68
	40 1-Nitropropane	43	15.235	15.230	(1.074)	129501	5.08036	5.080
	41 Bromodichloromethane	83	15.245	15.240	(1.074)	2356185	10.9184	10.92
	43 Methyl methacrylate	69	15.757	15.762	(1.110)	591613	11.8856	11.88
	45 cis-1,3-Dichloropropene	75	16.683	16.688	(1.176)	2954927	10.9398	10.94
	46 4-Methyl-2-pentanone	43	16.998	17.003	(1.198)	702672	11.0441	11.04
	47 trans-1,3-Dichloropropene	75	17.599	17.604	(0.844)	2128179	10.5774	10.58
M	48 Xylenes (total)	106				18327281	30.9772	30.98
	49 1,1,2-Trichloroethane	97	17.875	17.880	(0.857)	1271154	9.90413	9.904
$	50 Toluene-d8	98	18.111	18.116	(0.868)	9371142	9.71192	9.712
	51 Toluene	91	18.249	18.254	(0.875)	12204352	9.62488	9.625
	52 Ethyl methacrylate	69	18.554	18.559	(0.890)	1472832	9.69173	9.692
	53 2-Hexanone	43	18.761	18.756	(1.322)	504477	11.4427	11.44
	54 Chlorodibromomethane	129	18.830	18.835	(0.903)	1310548	9.83448	9.834
	55 1,2-Dibromoethane	107	19.293	19.298	(0.925)	1178754	10.9788	10.98
	56 Tetrachloroethene	164	19.648	19.653	(0.942)	2551958	7.90379	7.904
	57 1,1,1,2-Tetrachloroethane	131	20.780	20.785	(0.996)	2170181	10.9974	11.00
*	58 Chlorobenzene-d5	119	20.859	20.864	(1.000)	2560295	10.0000	
	59 Chlorobenzene	112	20.918	20.913	(1.003)	8161510	10.2016	10.20
	60 Ethylbenzene	106	21.312	21.307	(1.022)	5169159	10.1187	10.12
	61 m,p-Xylenes	106	21.677	21.672	(1.039)	12416285	20.7810	20.78
	62 Bromoform	173	21.805	21.800	(1.045)	551611	9.70112	9.701
	63 Styrene	104	22.248	22.243	(1.067)	8573697	10.9103	10.91
	64 1,1,2,2-Tetrachloroethane	83	22.356	22.361	(1.072)	1430908	11.5442	11.54
	65 o-Xylene	106	22.376	22.371	(1.073)	5910996	10.1963	10.20
	66 1,2,3-Trichloropropane	110	22.612	22.608	(0.891)	360410	12.1095	12.11
	67 trans-1,4-dichloro-2-butene	53	22.672	22.677	(0.894)	262719	10.4786	10.48
	68 Isopropylbenzene	105	23.016	23.012	(1.622)	15164149	13.5331	13.53
$	69 4-Bromofluorobenzene	95	23.066	23.061	(0.909)	3535715	10.9175	10.92
	70 n-Propylbenzene	91	23.785	23.780	(1.676)	18422700	11.3707	11.37
	71 2-Chlorotoluene	91	23.923	23.928	(1.686)	10808574	12.0067	12.01
	72 4-Chlorotoluene	91	24.060	24.056	(1.695)	10750883	12.1900	12.19
	73 1,3,5-Trimethylbenzene	105	24.297	24.292	(1.712)	12233315	11.8049	11.80
	74 Pentachloroethane	167	24.376	24.381	(0.961)	23345	0.30998	0.3100(a)
	75 t-Butylbenzene	119	24.779	24.775	(1.746)	10465177	11.3359	11.34
	76 1,2,4-Trimethylbenzene	105	24.986	24.982	(1.761)	11665951	11.4431	11.44
	77 sec-Butylbenzene	105	25.173	25.169	(1.774)	15906150	10.8596	10.86(A)
	78 1,3-Dichlorobenzene	146	25.292	25.297	(0.997)	5706807	10.1808	10.18
*	79 1,4 Dichlorobenzene-d4	152	25.370	25.376	(1.000)	3298956	10.0000	
	80 1,4-Dichlorobenzene	146	25.430	25.425	(1.002)	5496530	10.0630	10.06
	81 1,2-Dichlorobenzene	146	26.099	26.095	(1.029)	4587823	10.4277	10.43
	82 1,2-Dibromo-3-chloropropane	157	27.015	27.021	(1.065)	144999	9.97530	9.975
	83 1,2,4-Trichlorobenzene	180	29.813	29.818	(1.175)	2927513	9.94391	9.944
	84 Naphthalene	128	30.355	30.350	(1.196)	3419832	10.2290	10.23
	85 Hexachlorobutadiene	225	30.473	30.478	(1.201)	2033292	9.72106	9.721
	86 1,2,3-Trichlorobenzene	180	30.788	30.783	(1.214)	2218585	9.51100	9.511

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BLCS8207.D
Report Date: 01-May-2005 09:17

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BLCS8207.D
Report Date: 01-May-2005 09:17

STL St. Louis

RECOVERY REPORT

Client Name:
Client SDG: G990217B.B
Sample Matrix: LIQUID
Fraction: VOA
Lab Smp Id: G9LN51AC
Client Smp ID: VLCSB119B.B
Level: LOW
Operator: MN
Data Type: MS DATA
SampleType: LCS
SpikeList File: H20lcs.spk
Quant Type: ISTD
Sublist File: all.sub
Method File: \\slsvr01\chem\MSB.i\B050429B.b\8260B-25LLW25.m
Misc Info: VBLKB119B.B;F5E010000-013C;5121013

	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	10	Acetone	10.00	8.811	88.11	25-150
	35	Benzene	10.00	9.951	99.51	85-115
	41	Bromodichlorometha	10.00	10.92	109.18	85-123
	62	Bromoform	10.00	9.701	97.01	73-135
	4	Bromomethane	10.00	7.998	79.98	10-150
	23	2-Butanone	10.00	11.12	111.24	53-137
	17	Carbon Disulfide	10.00	9.794	97.94	47-150
	34	Carbon Tetrachlori	10.00	10.72	107.23	75-137
	59	Chlorobenzene	10.00	10.20	102.02	85-115
	54	Chlorodibromometha	10.00	9.834	98.34	85-124
	5	Chloroethane	10.00	9.207	92.07	46-150
	27	Chloroform	10.00	10.18	101.79	85-117
	2	Chloromethane	10.00	9.500	95.00	10-150
	81	1,2-Dichlorobenzen	10.00	10.43	104.28	85-115
	78	1,3-Dichlorobenzen	10.00	10.18	101.81	85-115
	80	1,4-Dichlorobenzen	10.00	10.06	100.63	85-115
	19	1,1-Dichloroethane	10.00	11.42	114.26	80-116
	32	1,2-Dichloroethane	10.00	9.895	98.95	78-116
	11	1,1-Dichloroethene	10.00	10.15	101.55	57-146
M	9	1,2-Dichloroethene	20.00	22.24	111.21	84-120
	38	1,2-Dichloropropan	10.00	10.92	109.22	80-118
	45	cis-1,3-Dichloropr	10.00	10.94	109.40	76-119
	47	trans-1,3-Dichloro	10.00	10.58	105.77	83-131
	60	Ethylbenzene	10.00	10.12	101.19	85-116
	53	2-Hexanone	10.00	11.44	114.43	50-150
	14	Methylene Chloride	10.00	11.12	111.17	21-135
	46	4-Methyl-2-pentano	10.00	11.04	110.44	46-147
	63	Styrene	10.00	10.91	109.10	85-118
	64	1,1,2,2-Tetrachlor	10.00	11.54	115.44	74-123
	56	Tetrachloroethene	10.00	7.904	79.04	72-118
	51	Toluene	10.00	9.625	96.25	85-115
	33	1,1,1-Trichloroeth	10.00	10.25	102.46	82-128
	49	1,1,2-Trichloroeth	10.00	9.904	99.04	80-115
	39	Trichloroethene	10.00	10.68	106.82	76-118
	3	Vinyl Chloride	10.00	10.00	100.04	10-150
	61	m,p-Xylenes	20.00	20.78	103.90	85-117
	65	o-Xylene	10.00	10.20	101.96	85-117

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BLCS8207.D
Report Date: 01-May-2005 09:17

STL St. Louis

RECOVERY REPORT

Client Name:
Client SDG: G990217B.B
Sample Matrix: LIQUID
Fraction: VOA
Lab Smp Id: G9LN51AC
Client Smp ID: VLCSB119B.B
Level: LOW
Operator: MN
Data Type: MS DATA
SampleType: LCS
SpikeList File: H201cs.spk
Quant Type: ISTD
Sublist File: all.sub
Method File: \\slsvr01\chem\MSB.i\B050429B.b\8260B-25LLW25.m
Misc Info: VBLKB119B.B;F5E010000-013C;5121013

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 29 Dibromofluorometha	10.00	10.39	103.91	60-147
$ 31 1,2-Dichloroethane	10.00	9.958	99.58	71-138
$ 50 Toluene-d8	10.00	9.712	97.12	75-126
$ 69 4-Bromofluorobenze	10.00	10.92	109.18	71-117

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BLCS8207.D
Report Date: 01-May-2005 09:17

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

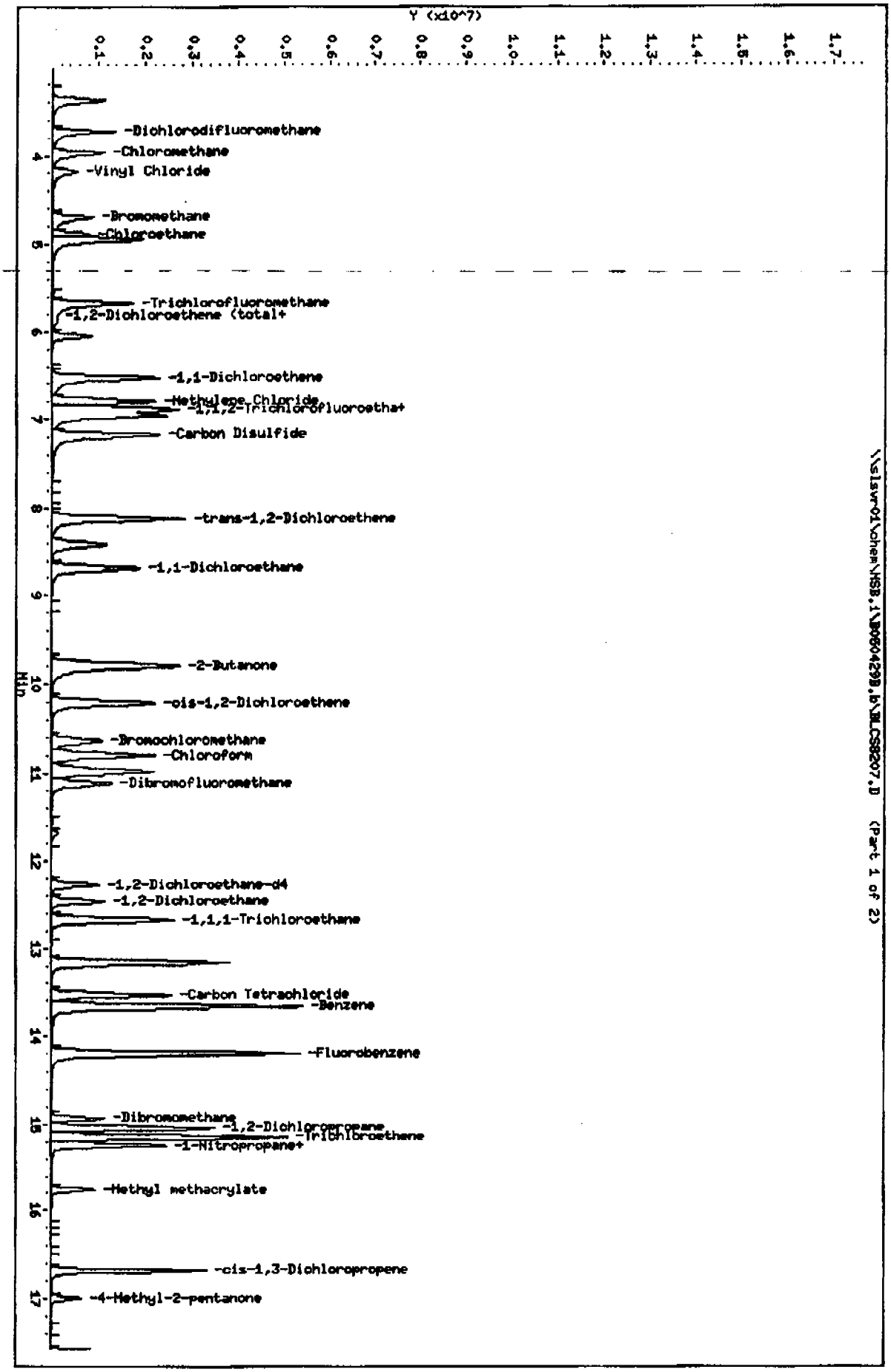
Instrument ID: MSB.i
Lab File ID: BLCS8207.D
Lab Smp Id: G9LN51AC
Analysis Type: VOA
Quant Type: ISTD
Operator: MN
Method File: \\slsvr01\chem\MSB.i\B050429B.b\8260B-25LLW25.m
Misc Info: VBLKB119B.B;F5E010000-013C;5121013

Calibration Date: 29-APR-2005
Calibration Time: 11:40
Client Smp ID: VLCSB119B.B
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	8037558	4018779	16075116	9029228	12.34
58 Chlorobenzene-d5	2283738	1141869	4567476	2560295	12.11
79 1,4 Dichlorobenze	2972629	1486315	5945258	3298956	10.98

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	14.20	13.70	14.70	14.19	-0.04
58 Chlorobenzene-d5	20.86	20.36	21.36	20.86	-0.02
79 1,4 Dichlorobenze	25.38	24.88	25.88	25.37	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.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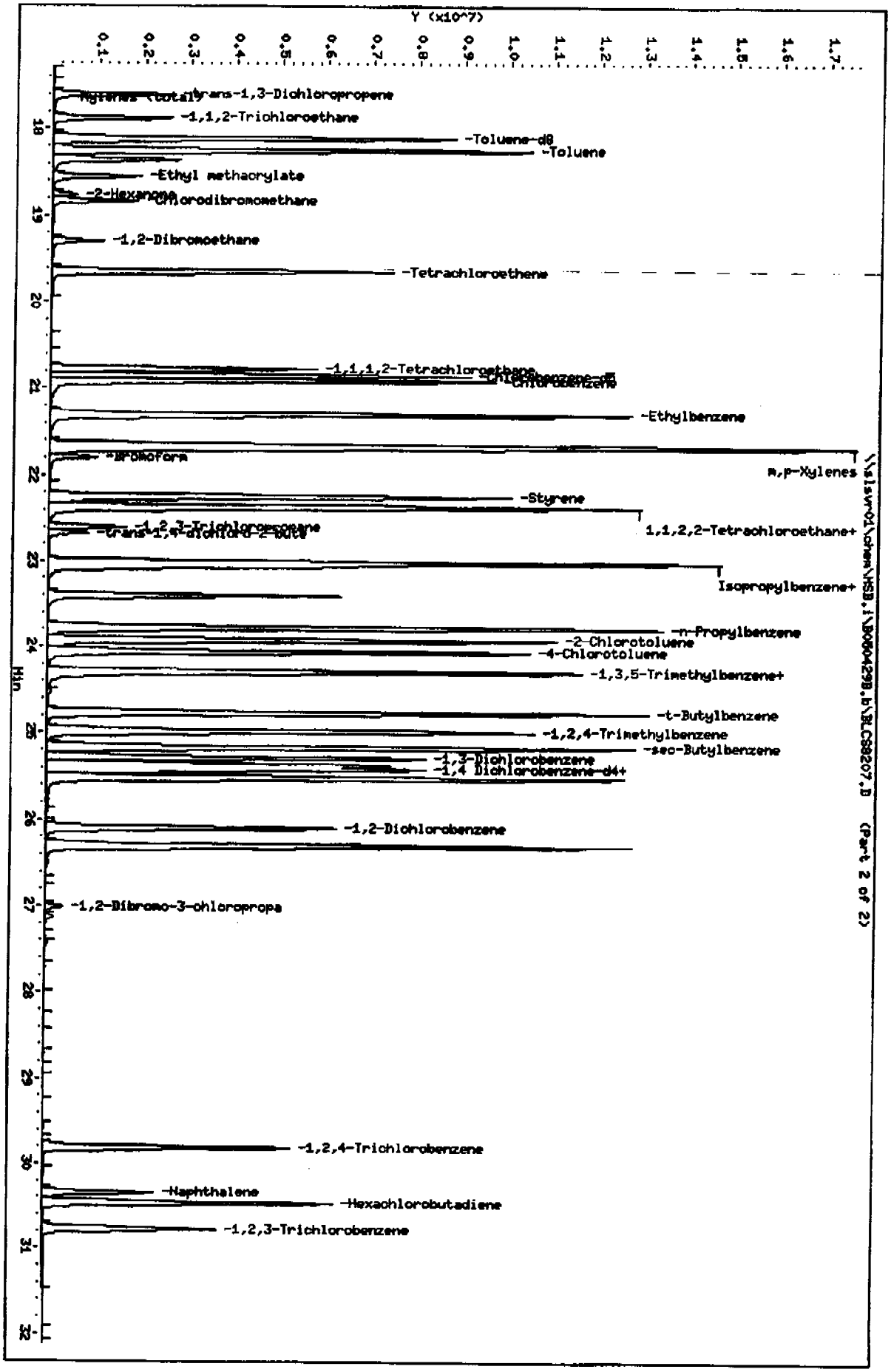
17
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-1,2-Dichloroethene (total+
-1,1-Dichloroethene
-Methylene Chloride
-1,1,2-Trichlorofluoretha+
-Carbon Disulfide
-trans-1,2-Dichloroethene
-1,1-Dichloroethane
-2-Butanone
-cis-1,2-Dichloroethene
-Bromochloromethane
-Chloroform
-Dibromofluoromethane
-1,2-Dichloroethane-d4
-1,2-Dichloroethane
-1,1,1-Trichloroethane
-Carbon Tetrachloride
-Benzene
-Fluorobenzene
-Dibromomethane
-1,2-Dichloropropane
-Trichloroethene
-1-Nitropropane+
-Methyl methacrylate
-cis-1,3-Dichloropropene
-4-Methyl-2-pentanone
\\slsvr01\chem\HSB.i\B0604298.b\MLCS8207.D (Part 1 of 2)
Data File: \\slsvr01\chem\HSB.i\B0604298.b\MLCS8207.D
Date : 29-APR-2006 12:31
Client ID: MLCSB1198,B
Sample Info: C5LMS1AC;B0604298.b
Purge Volume: 25.0
Column phase: Rtx-VMS
Instrument: HSB.i
Operator: HN
Column diameter: 0.25



Data File: \\slsvr01\chem\HSB.i\B0604298.b\BLCS8207.D
Date : 29-APR-2006 12:31
Client ID: VLCS8119B,B
Sample Info: C9LN51AC;B0604298,b
Purge Volume: 25.0
Column phase: Rtx-VMS

Instrument: HSB.i
Operator: MN
Column diameter: 0.25

Data File: \\slsvr01\chem\MSL.i\L050502B.b\LLCS0585.D
Report Date: 04-May-2005 13:20

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSL.i\L050502B.b\LLCS0585.D
Lab Smp Id: G9PD41AC Client Smp ID: G9PD41AC
Inj Date : 02-MAY-2005 14:58
Operator : MN/LS Inst ID: MSL.i
Smp Info : G9PD41AC
Misc Info : VBLK122B;F5E030000-229C
Comment : NONE
Method : \\slsvr01\chem\MSL.i\L050502B.b\8260B-25LLW30.m
Meth Date : 02-May-2005 14:40 mahmoodt Quant Type: ISTD
Cal Date : 25-APR-2005 11:04 Cal File: LCAL0322.D
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLVOA02

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	25.000	DefSampleVolume
Vo	25.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1	Dichlorodifluoromethane	85	3.531	3.528	(0.394)	628161	8.19578	8.196
2	Chloromethane	50	3.962	3.962	(0.442)	589358	7.95704	7.957
3	Vinyl Chloride	62	4.134	4.138	(0.461)	733709	9.23507	9.235
4	Bromomethane	94	4.793	4.789	(0.535)	331155	9.05706	9.057
5	Chloroethane	64	5.002	5.002	(0.558)	481692	9.03195	9.032
6	Trichlorofluoromethane	101	5.234	5.238	(0.584)	979556	9.29914	9.299
7	Diethyl ether	59	5.747	5.747	(0.641)	202197	7.73433	7.734
8	1,1,2-Trichlorofluoroethane	101	6.095	6.099	(0.680)	636136	9.56017	9.560
9	1,1-Dichloroethene	96	6.125	6.125	(0.683)	572325	8.27450	8.274
10	Carbon Disulfide	76	6.293	6.293	(0.702)	2216846	8.78177	8.782
11	Iodomethane	142	6.417	6.409	(0.716)	95561	2.24089	2.241
12	Acrolein	56	6.578	6.570	(0.734)	4590	3.53926	3.539
13	Allyl chloride	39	6.750	6.750	(0.753)	487449	15.5123	15.51
14	Methylene Chloride	84	6.885	6.885	(0.768)	458989	10.0447	10.04
15	Acetone	43	6.892	6.888	(0.769)	38632	8.92621	8.926
16	Methyl Acetate	74	7.098	7.015	(0.792)	14435	6.54675	6.547
17	n-Hexane	57	7.064	7.064	(0.788)	1053683	11.4530	11.45
18	trans-1,2-Dichloroethene	96	7.068	7.068	(0.789)	702467	11.8019	11.80
19	MTBE	73	7.102	7.102	(0.792)	577092	8.81004	8.810
M 20	1,2-Dichloroethene (total)	96				1215338	21.2034	21.20
23	1,1-Dichloroethane	63	7.648	7.648	(0.853)	940413	9.36012	9.360
26	cis-1,2-Dichloroethene	96	8.097	8.097	(0.904)	512871	9.40148	9.401

5-4-05

Data File: \\slsvr01\chem\MSL.i\L050502B.b\LLCS0585.D
Report Date: 04-May-2005 13:20

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	27 2,2-Dichloropropane	77	8.161	8.161	(0.911)	883206	10.1386	10.14
	29 Chloroform	83	8.277	8.280	(0.924)	803689	8.56125	8.561
	30 Bromochloromethane	128	8.280	8.280	(0.924)	111726	8.74085	8.741
	33 Carbon Tetrachloride	117	8.426	8.423	(0.940)	710013	9.40561	9.406
$	34 Dibromofluoromethane	113	8.426	8.423	(0.940)	298486	8.95241	8.952
	35 1,1,1-Trichloroethane	97	8.453	8.453	(0.943)	850533	9.41900	9.419
	36 2-Butanone	43	8.464	8.464	(0.944)	40080	6.37247	6.372(R)
	37 1,1-Dichloropropene	75	8.531	8.531	(0.952)	818673	9.97372	9.974
	40 Isobutanol	42	8.426	8.423	(0.940)	25365	29.3096	29.31
	41 Benzene	78	8.722	8.722	(0.973)	2258945	9.62349	9.623
$	42 1,2-Dichloroethane-d4	65	8.808	8.808	(0.983)	261430	8.68796	8.688
	43 1,2-Dichloroethane	62	8.853	8.849	(0.988)	311538	7.81068	7.811(R)
*	44 Fluorobenzene	96	8.961	8.961	(1.000)	1701973	10.0000	
	46 Trichloroethene	130	9.077	9.077	(1.013)	505483	9.53434	9.534
	48 Dibromomethane	93	9.384	9.384	(1.047)	112009	8.28906	8.289
	49 1,2-Dichloropropane	63	9.396	9.392	(1.048)	390782	8.94423	8.944
	50 Bromodichloromethane	83	9.429	9.429	(1.052)	418855	7.89960	7.900(R)
	51 Methyl methacrylate	69	9.433	9.433	(1.053)	86667	7.07218	7.072
	53 2-chloroethyl vinyl ether	63	9.897	9.897	(1.104)	178678	138.168	138.2(A)
	54 cis-1,3-Dichloropropene	75	9.770	9.770	(1.090)	490950	8.43783	8.438
$	55 Toluene-d8	98	9.867	9.867	(1.101)	1607931	9.76304	9.763
	56 Toluene	91	9.897	9.897	(0.925)	2374284	10.6726	10.67
	57 2-Nitro-Propane	43	9.994	9.994	(1.115)	16603	2.85814	2.858
	58 4-Methyl-2-pentanone	43	10.021	10.021	(1.118)	92115	6.73526	6.735
	59 trans-1,3-Dichloropropene	75	10.099	10.099	(0.944)	348131	9.50888	9.509
	60 Ethyl methacrylate	69	10.099	10.095	(0.944)	182072	7.73159	7.732
	61 Tetrachloroethene	164	10.122	10.122	(0.946)	348146	7.23166	7.232
	62 1,1,2-Trichloroethane	97	10.200	10.200	(0.953)	156962	8.78585	8.786
M	63 Xylenes (total)	106				2942934	32.1540	32.15
	64 Chlorodibromomethane	129	10.339	10.339	(0.966)	146416	8.40121	8.401(R)
	65 1,3-Dichloropropane	76	10.342	10.342	(0.966)	304377	8.59825	8.598
	66 2-Hexanone	43	10.440	10.440	(0.976)	52698	7.43676	7.437
	67 1,2-Dibromoethane	107	10.488	10.488	(0.980)	129518	8.96296	8.963
	68 Ethylbenzene	106	10.675	10.675	(0.998)	780012	10.9943	10.99
*	69 Chlorobenzene-d5	117	10.702	10.698	(1.000)	894169	10.0000	(M)
	70 Chlorobenzene	112	10.709	10.709	(1.001)	1149052	9.73161	9.732
	71 1,1,1,2-Tetrachloroethane	131	10.728	10.728	(1.002)	293930	9.37483	9.375
	72 m,p-Xylenes	106	10.735	10.735	(1.003)	2104236	21.6919	21.69
	73 o-Xylene	106	10.975	10.975	(1.026)	838698	10.4621	10.46
	74 Styrene	104	11.001	11.001	(1.028)	1201757	9.97948	9.979
	75 Bromoform	173	11.121	11.117	(0.928)	52997	7.94994	7.950(R)
	76 Isopropylbenzene	105	11.113	11.113	(0.927)	2633695	13.0354	13.04
$	77 4-Bromofluorobenzene	95	11.327	11.327	(0.945)	476485	9.94529	9.945
	78 n-Propylbenzene	91	11.334	11.334	(0.946)	3328200	11.5565	11.56
	79 1,1,2,2-Tetrachloroethane	83	11.379	11.379	(0.949)	148476	8.77653	8.776
	80 1,3,5-Trimethylbenzene	105	11.405	11.405	(0.952)	2142324	11.3352	11.34
	81 Bromobenzene	156	11.424	11.424	(0.953)	297334	10.1041	10.10
	82 trans-1,4-dichloro-2-butene	53	11.476	11.476	(0.958)	31408	6.38182	6.382
	83 2-Chlorotoluene	91	11.480	11.480	(0.958)	1657302	10.6692	10.67
	84 4-Chlorotoluene	91	11.562	11.562	(0.965)	1585260	10.6136	10.61
	85 t-Butylbenzene	119	11.615	11.615	(0.969)	2020863	11.8307	11.83
	86 1,2,4-Trimethylbenzene	105	11.645	11.648	(0.972)	2003409	10.9206	10.92
	88 sec-Butylbenzene	105	11.716	11.716	(0.978)	2867718	11.5682	11.57
	89 4-Isopropyltoluene	119	11.772	11.772	(0.982)	2335819	12.6515	12.65

Data File: \\slsvr01\chem\MSL.i\L050502B.b\LLCS0585.D
Report Date: 04-May-2005 13:20

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	90 Cyclohexanone	55	11.993	11.996	(1.121)	32023	9.49344	9.493
	91 1,3-Dichlorobenzene	146	11.944	11.944	(0.997)	733886	10.6644	10.66
*	92 1,4 Dichlorobenzene-d4	152	11.985	11.981	(1.000)	331148	10.0000	
	93 1,4-Dichlorobenzene	146	11.996	11.996	(1.001)	690445	9.87652	9.876
	94 n-Butylbenzene	91	12.038	12.038	(1.004)	2392979	11.7770	11.78
	95 1,2,3-Trichloropropane	110	12.292	12.292	(1.026)	20460	10.0246	10.02
	96 1,2-Dichlorobenzene	146	12.288	12.288	(1.025)	537227	10.1832	10.18
	97 1,2-Dibromo-3-chloropropane	157	12.887	12.887	(1.075)	17897	9.09371	9.094
	98 Hexachlorobutadiene	225	13.340	13.340	(1.113)	231002	11.9744	11.97
	99 1,2,4-Trichlorobenzene	180	13.463	13.467	(1.123)	305623	9.48974	9.490
	100 Naphthalene	128	13.826	13.830	(1.154)	402269	8.85762	8.858
	101 1,2,3-Trichlorobenzene	180	14.028	14.028	(1.170)	216291	9.02016	9.020

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\slsvr01\chem\MSL.i\L050502B.b\LLCS0585.D
Report Date: 04-May-2005 13:20

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSL.i
Lab File ID: LLCS0585.D
Lab Smp Id: G9PD41AC
Analysis Type: VOA
Quant Type: ISTD
Operator: MN/LS
Calibration Date: 02-MAY-2005
Calibration Time: 14:13
Client Smp ID: G9PD41AC
Level: LOW
Sample Type: WATER
Method File: \\slsvr01\chem\MSL.i\L050502B.b\8260B-25LLW30.m
Misc Info: VBLK122B;F5E030000-229C

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
44 Fluorobenzene	1740566	870283	3481132	1701973	-2.22
69 Chlorobenzene-d5	935569	467785	1871138	894169	-4.43
92 1,4 Dichlorobenze	342318	171159	684636	331148	-3.26

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
44 Fluorobenzene	8.96	8.46	9.46	8.96	0.00
69 Chlorobenzene-d5	10.70	10.20	11.20	10.70	0.04
92 1,4 Dichlorobenze	11.98	11.48	12.48	11.99	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\slsvr01\chem\MSL.i\L050502B.b\LLCS0585.D
Report Date: 04-May-2005 13:20

STL St. Louis

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: G9PD41AC
Level: LOW
Data Type: MS DATA
SpikeList File: H20lcs.spk
Sublist File: all.sub
Method File: \\slsvr01\chem\MSL.i\L050502B.b\8260B-25LLW30.m
Misc Info: VBLK122B;F5E030000-229C

Client SDG: E971118A.B
Fraction: VOA
Client Smp ID: G9PD41AC
Operator: MN/LS
SampleType: LCS
Quant Type: ISTD

	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	15	Acetone	10.00	8.926	89.26	44-131
	41	Benzene	10.00	9.623	96.23	85-115
	50	Bromodichlorometha	10.00	7.900	79.00*	85-115
	75	Bromoform	10.00	7.950	79.50*	81-120
	4	Bromomethane	10.00	9.057	90.57	40-150
	36	2-Butanone	10.00	6.372	63.72*	69-150
	10	Carbon Disulfide	10.00	8.782	87.82	70-130
	70	Chlorobenzene	10.00	9.732	97.32	85-116
	64	Chlorodibromometha	10.00	8.401	84.01*	85-115
	5	Chloroethane	10.00	9.032	90.32	47-150
	29	Chloroform	10.00	8.561	85.61	85-119
	2	Chloromethane	10.00	7.957	79.57	40-170
	96	1,2-Dichlorobenzen	10.00	10.18	101.83	85-119
	91	1,3-Dichlorobenzen	10.00	10.66	106.64	85-115
	93	1,4-Dichlorobenzen	10.00	9.876	98.77	86-115
	23	1,1-Dichloroethane	10.00	9.360	93.60	83-116
	43	1,2-Dichloroethane	10.00	7.811	78.11*	81-115
	9	1,1-Dichloroethene	10.00	8.274	82.74	74-133
M	20	1,2-Dichloroethene	20.00	21.20	106.02	81-119
	49	1,2-Dichloropropan	10.00	8.944	89.44	70-130
	54	cis-1,3-Dichloropr	10.00	8.438	84.38	83-115
	59	trans-1,3-Dichloro	10.00	9.509	95.09	84-119
	68	Ethylbenzene	10.00	10.99	109.94	88-115
	66	2-Hexanone	10.00	7.437	74.37	66-141
	14	Methylene Chloride	10.00	10.04	100.45	63-115
	58	4-Methyl-2-pentano	10.00	6.735	67.35	60-115
	74	Styrene	10.00	9.979	99.79	85-117
	79	1,1,2,2-Tetrachlor	10.00	8.776	87.77	75-124
	61	Tetrachloroethene	10.00	7.232	72.32	71-115
	56	Toluene	10.00	10.67	106.73	85-115
	35	1,1,1-Trichloroeth	10.00	9.419	94.19	84-118
	62	1,1,2-Trichloroeth	10.00	8.786	87.86	82-115
	46	Trichloroethene	10.00	9.534	95.34	80-115
	3	Vinyl Chloride	10.00	9.235	92.35	40-170
	72	m,p-Xylenes	20.00	21.69	108.46	85-115
	73	o-Xylene	10.00	10.46	104.62	85-118

F 5-4-05

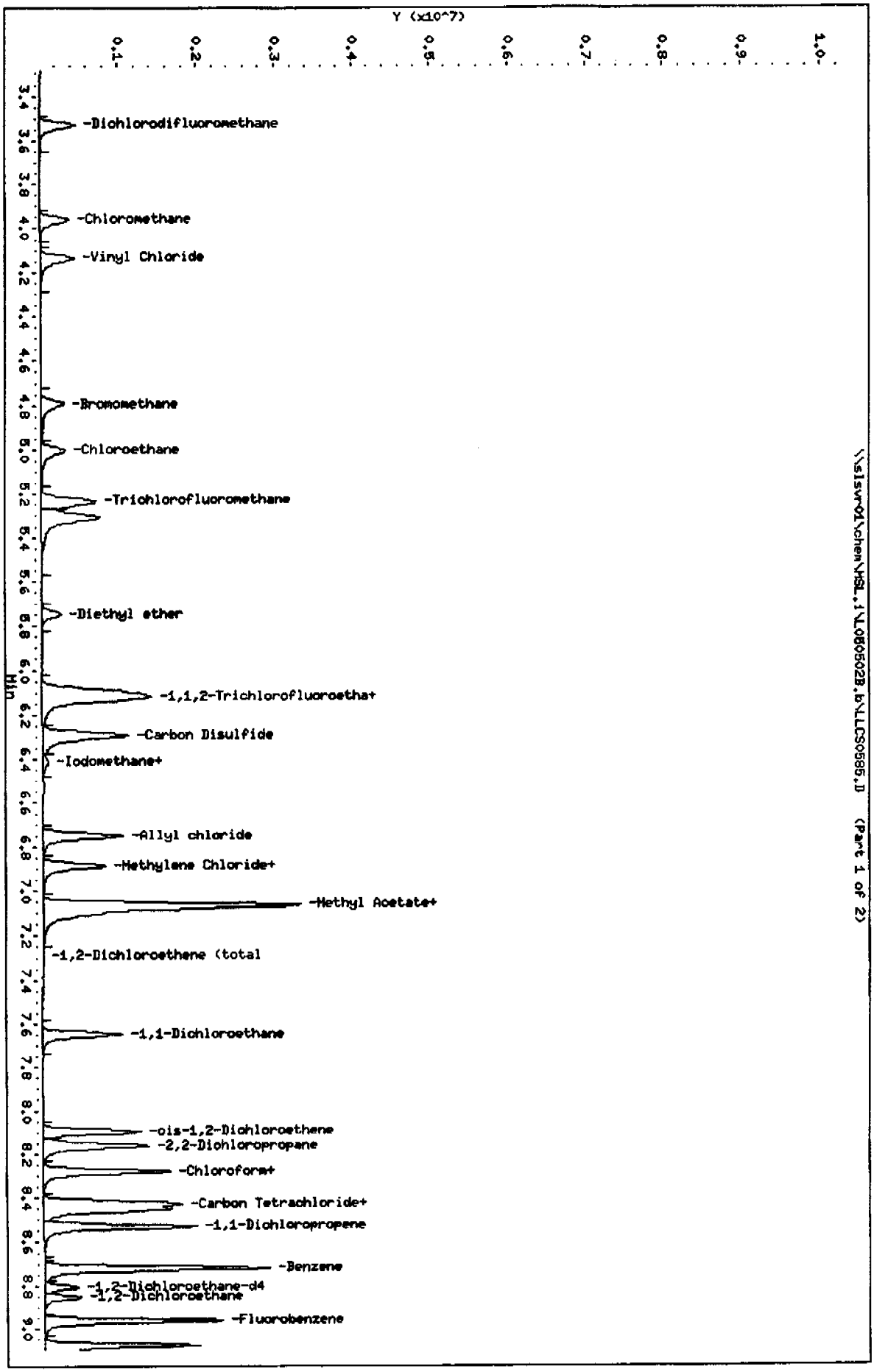
Data File: \\slsvr01\chem\MSL.i\L050502B.b\LLCS0585.D
Report Date: 04-May-2005 13:20

STL St. Louis

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: G9PD41AC
Level: LOW
Data Type: MS DATA
SpikeList File: H20lcs.spk
Sublist File: all.sub
Client SDG: E971118A.B
Fraction: VOA
Client Smp ID: G9PD41AC
Operator: MN/LS
SampleType: LCS
Quant Type: ISTD
Method File: \\slsvr01\chem\MSL.i\L050502B.b\8260B-25LLW30.m
Misc Info: VBLK122B;F5E030000-229C

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 34 Dibromofluorometha	10.00	8.952	89.52	60-147
$ 42 1,2-Dichloroethane	10.00	8.688	86.88	71-138
$ 55 Toluene-d8	10.00	9.763	97.63	75-126
$ 77 4-Bromofluorobenze	10.00	9.945	99.45	71-117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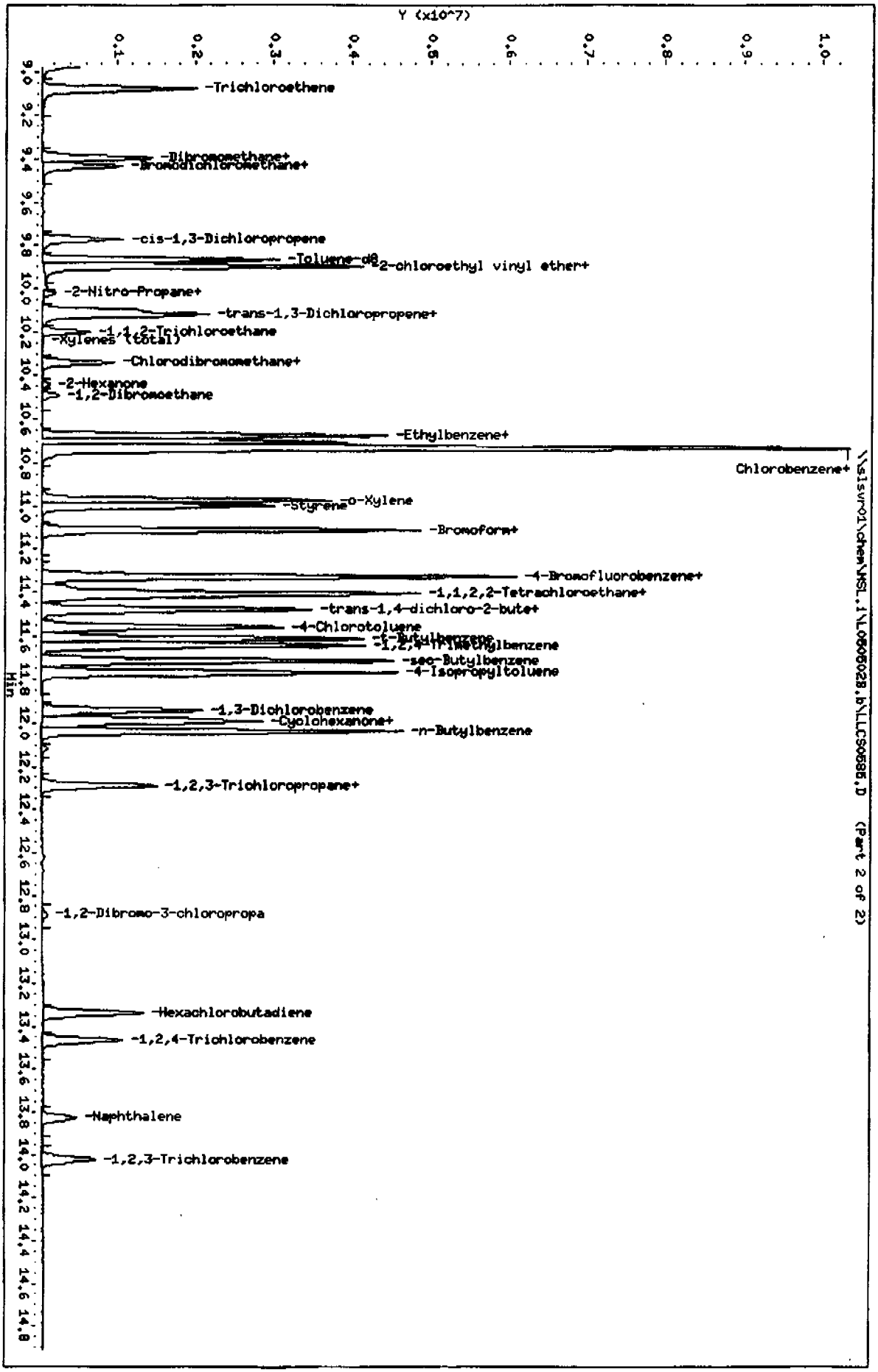
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Min
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-Diethyl ether
-1,1,2-Trichlorofluoroetha+
-Carbon Disulfide
-Iodomethane+
-Allyl chloride
-Methylene Chloride+
-Methyl Acetate+
-1,2-Dichloroethene (total
-1,1-Dichloroethane
-cis-1,2-Dichloroethene
-2,2-Dichloropropane
-Chloroform+
-Carbon Tetrachloride+
-1,1-Dichloropropene
-Benzene
-1,2-Dichloroethane-d4
-1,2-Dichloroethane
-Fluorobenzene
Data File: \\slsvr01\chem\MSL.i\L060502B.b\LLCS0595.D
Date : 02-MAY-2006 14:58
Client ID: G9PD41AC
Sample Info: G9PD41AC
Purge Volume: 25.0
Column phase: RTX-502.2
Instrument: MSL.i
Operator: MN/LS
Column diameter: 0.25
\\slsvr01\chem\MSL.i\L060502B.b\LLCS0595.D (Part 1 of 2)


Y (x10^7)
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0.3
0.4
0.5
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0.8
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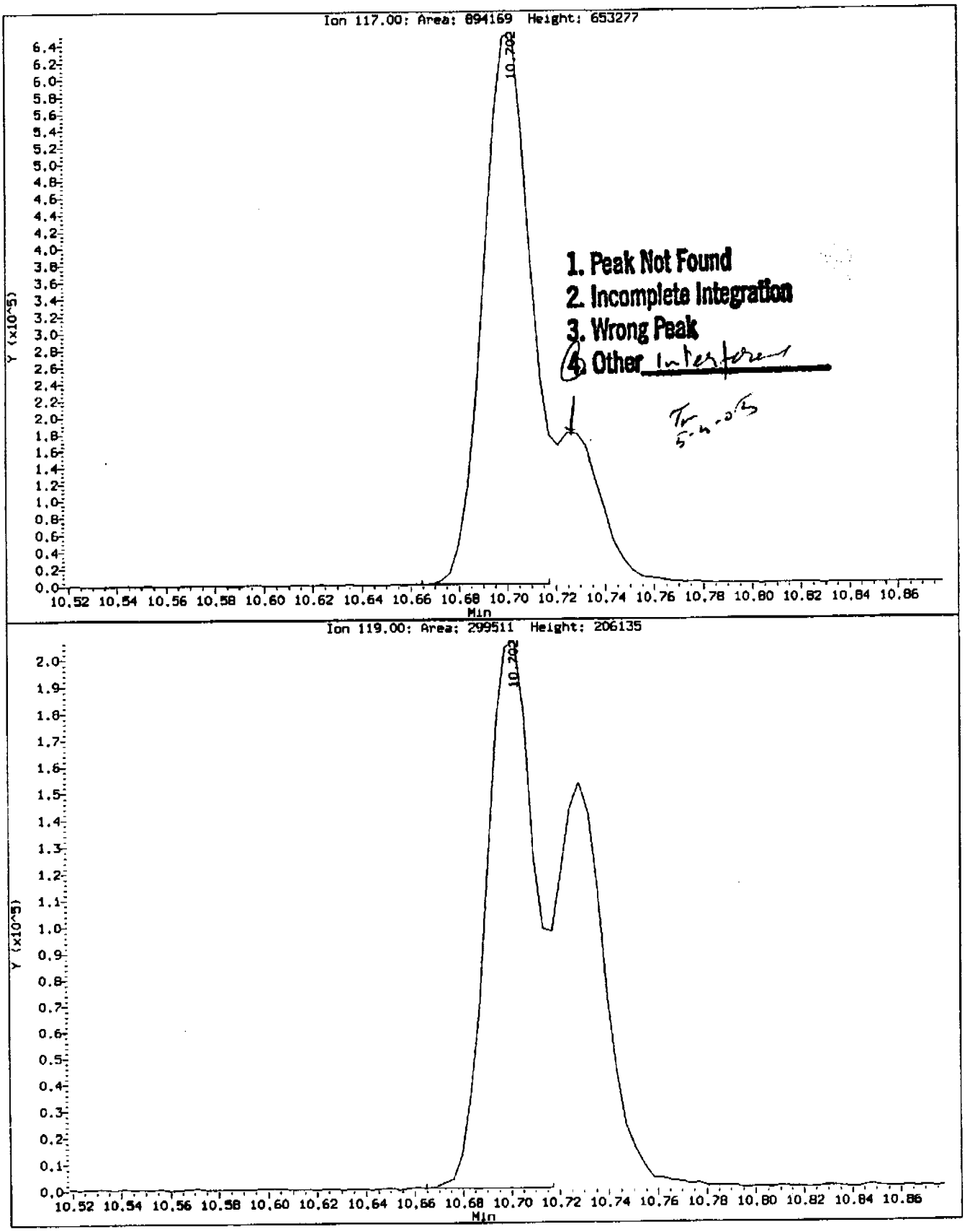
1.0
Min
9.0
9.2
9.4
9.6
9.8
10.0
10.2
10.4
10.6
10.8
11.0
11.2
11.4
11.6
11.8
12.0
12.2
12.4
12.6
12.8
13.0
13.2
13.4
13.6
13.8
14.0
14.2
14.4
14.6
14.8
-Trichloroethene
-Dibromomethane+
-Bromodichloromethane+
-cis-1,3-Dichloropropene
-Toluene-d8
-2-chloroethyl vinyl ether+
-2-Nitro-Propane+
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane
-Xylenes (total)
-Chlorodibromomethane+
-2-Hexanone
-1,2-Dibromoethane
-Ethylbenzene+
Chlorobenzene+
-Styrene
o-Xylene
-Bromoform+
-4-Bromofluorobenzene+
-1,1,2,2-Tetrachloroethane+
-trans-1,4-dichloro-2-bute+
-4-Chlorotoluene
-t-Butylbenzene
-1,2,4-Trimethylbenzene
-sec-Butylbenzene
-4-Isopropyltoluene
-1,3-Dichlorobenzene
-Cyclohexanone+
-n-Butylbenzene
-1,2,3-Trichloropropane+
-1,2-Dibromo-3-chloropropa
-Hexachlorobutadiene
-1,2,4-Trichlorobenzene
-Naphthalene
-1,2,3-Trichlorobenzene
\\slsvr01\chem\HSL.i\LO505028.b\LLCS0585.D (Part 2 of 2)
Data File: \\slsvr01\chem\HSL.i\LO505028.b\LLCS0585.D
Date : 02-MAY-2005 14:58
Client ID: G9PD41AC
Sample Info: G9PD41AC
Purge Volume: 25.0
Column phase: RTX-502.2
Instrument: HSL.i
Operator: HN/LS
Column diameter: 0.25

Data File: \\elsvr01\chem\MSL.i\L050502B.b\LLCS0585.D
Injection Date: 02-MAY-2005 14:58
Instrument: MSL.i
Client Sample ID: G9PD41AC

Compound: Chlorobenzene-d5
CAS Number: 3114-55-4



Data File: \\slsvr01\chem\MSB.i\B050429B.b\BSMP8214.D
Report Date: 01-May-2005 09:02

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSB.i\B050429B.b\BSMP8214.D
Lab Smp Id: G800L1AF Client Smp ID: RE73-05-58923
Inj Date : 29-APR-2005 17:02
Operator : MN Inst ID: MSB.i
Smp Info : G800L1AF;B050429B.b
Misc Info : VBLKB119B.B; F5D220218-001S; 5X
Comment : NONE
Method : \\slsvr01\chem\MSB.i\B050429B.b\8260B-25LLW25.m
Meth Date : 01-May-2005 08:07 nuttm Quant Type: ISTD
Cal Date : 20-APR-2005 12:06 Cal File: BCAL8020.D
Als bottle: 8 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

MC 5-1-05

Name	Value	Description
DF	1.000	Dilution Factor
Vod	25.000	Def Sample Volume (mL)
Vo	5.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	1 Dichlorodifluoromethane	85	3.735	3.735	(0.263)	1961134	8.80250	44.01
	2 Chloromethane	50	3.962	3.961	(0.279)	1923507	9.67418	48.37
	3 Vinyl Chloride	62	4.179	4.178	(0.294)	1025370	10.9905	54.95
	4 Bromomethane	94	4.701	4.690	(0.331)	1346109	9.23248	46.16
	5 Chloroethane	64	4.878	4.877	(0.344)	1164158	10.3028	51.51
	7 Trichlorofluoromethane	101	5.676	5.675	(0.400)	2878037	11.1524	55.76
M	9 1,2-Dichloroethene (total)	96				3972303	22.2584	111.3
	10 Acetone	43	5.873	5.882	(0.414)	160293	11.0170	55.08
	11 1,1-Dichloroethene	96	6.533	6.532	(0.460)	1628787	10.1765	50.88
	14 Methylene Chloride	84	6.789	6.788	(0.478)	1939743	12.0669	60.33
	15 1,1,2-Trichlorofluoroethane	101	6.887	6.887	(0.485)	2013209	11.1987	55.99
	16 Allyl chloride	39	6.956	6.956	(0.490)	1840203	13.3617	66.81
	17 Carbon Disulfide	76	7.173	7.173	(0.505)	6331656	10.1228	50.61
	18 trans-1,2-Dichloroethene	96	8.128	8.118	(0.573)	2019924	11.2422	56.21
	19 1,1-Dichloroethane	63	8.690	8.689	(0.612)	3473302	11.4429	57.21
	23 2-Butanone	43	9.793	9.793	(0.690)	2028472	10.5624	52.81
	25 cis-1,2-Dichloroethene	96	10.217	10.216	(0.720)	1952379	11.0161	55.08
	26 Bromochloromethane	130	10.640	10.640	(0.750)	721248	11.0200	55.10
	27 Chloroform	83	10.798	10.797	(0.761)	3313072	11.2558	56.28
$	29 Dibromofluoromethane	113	11.123	11.122	(0.784)	1422770	10.5358	52.68
$	31 1,2-Dichloroethane-d4	65	12.265	12.275	(0.864)	1164196	10.6658	53.33
	32 1,2-Dichloroethane	62	12.472	12.462	(0.879)	1489824	10.7553	53.78
	33 1,1,1-Trichloroethane	97	12.679	12.679	(0.893)	2708230	10.7707	53.85

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BSMP8214.D
Report Date: 01-May-2005 09:02

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	34	Carbon Tetrachloride	117	13.536	13.536	(0.954)	2275598	11.2609	56.30
	35	Benzene	78	13.664	13.664	(0.963)	8108550	10.3762	51.88
*	36	Fluorobenzene	96	14.196	14.196	(1.000)	7433401	10.0000	
	37	Dibromomethane	93	14.935	14.925	(1.052)	637205	11.1750	55.87
	38	1,2-Dichloropropane	63	15.043	15.043	(1.060)	1839600	10.6130	53.06
	39	Trichloroethene	130	15.142	15.141	(1.067)	2188734	10.2354	51.18
	40	1-Nitropropane	43	15.240	15.230	(1.074)	101835	4.89692	24.48
	41	Bromodichloromethane	83	15.240	15.240	(1.074)	1981951	11.1560	55.78
	43	Methyl methacrylate	69	15.762	15.762	(1.110)	408328	9.96449	49.82
	45	cis-1,3-Dichloropropene	75	16.688	16.688	(1.176)	2141297	9.67779	48.39
	46	4-Methyl-2-pentanone	43	17.003	17.003	(1.198)	489661	9.34835	46.74
	47	trans-1,3-Dichloropropene	75	17.604	17.604	(0.844)	1543140	10.7372	53.68
M	48	Xylenes (total)	106				13112414	31.0370	155.2
	49	1,1,2-Trichloroethane	97	17.880	17.880	(0.857)	895411	9.76918	48.84
$	50	Toluene-d8	98	18.116	18.116	(0.869)	6685916	9.70267	48.51
	51	Toluene	91	18.254	18.254	(0.875)	8881062	9.80761	49.04
	52	Ethyl methacrylate	69	18.560	18.559	(0.890)	1025688	9.45107	47.26
	53	2-Hexanone	43	18.757	18.756	(1.321)	359279	9.89879	49.49
	54	Chlorodibromomethane	129	18.836	18.835	(0.903)	955949	10.0377	50.19
	55	1,2-Dibromoethane	107	19.298	19.298	(0.925)	840723	10.9648	54.82
	56	Tetrachloroethene	164	19.653	19.653	(0.942)	1863156	8.08032	40.40
	57	1,1,1,2-Tetrachloroethane	131	20.776	20.785	(0.996)	1557059	11.0489	55.24
*	58	Chlorobenzene-d5	119	20.855	20.864	(1.000)	1828405	10.0000	
	59	Chlorobenzene	112	20.914	20.913	(1.003)	5786476	10.1281	50.64
	60	Ethylbenzene	106	21.308	21.307	(1.022)	3625939	9.93903	49.70
	61	m,p-Xylenes	106	21.672	21.672	(1.039)	8848119	20.7368	103.7
	62	Bromoform	173	21.800	21.800	(1.045)	386726	9.53730	47.69
	63	Styrene	104	22.254	22.243	(1.067)	6051777	10.7838	53.92
	64	1,1,2,2-Tetrachloroethane	83	22.362	22.361	(1.072)	1004825	11.3517	56.76
	65	o-Xylene	106	22.372	22.371	(1.073)	4264295	10.3002	51.50
	66	1,2,3-Trichloropropane	110	22.608	22.608	(0.891)	264197	11.1938	55.97
	67	trans-1,4-dichloro-2-butene	53	22.677	22.677	(0.894)	184414	9.27529	46.38
	68	Isopropylbenzene	105	23.012	23.012	(1.621)	11189379	12.1297	60.65
$	69	4-Bromofluorobenzene	95	23.061	23.061	(0.909)	2608949	10.1586	50.79
	70	n-Propylbenzene	91	23.780	23.780	(1.675)	13973259	10.4760	52.38
	71	2-Chlorotoluene	91	23.928	23.928	(1.686)	8133926	10.9754	54.88
	72	4-Chlorotoluene	91	24.066	24.056	(1.695)	8124814	11.1902	55.95
	73	1,3,5-Trimethylbenzene	105	24.292	24.292	(1.711)	9333184	10.9398	54.70
	74	Pentachloroethane	167	24.371	24.381	(0.960)	20821	0.34862	1.743(a)
	75	t-Butylbenzene	119	24.775	24.775	(1.745)	7944700	10.4532	52.27
	76	1,2,4-Trimethylbenzene	105	24.992	24.982	(1.760)	8928615	10.6382	53.19
	77	sec-Butylbenzene	105	25.179	25.169	(1.774)	12069903	10.0095	50.05(A)
	78	1,3-Dichlorobenzene	146	25.297	25.297	(0.997)	4519626	10.1674	50.84
*	79	1,4 Dichlorobenzene-d4	152	25.376	25.376	(1.000)	2616114	10.0000	
	80	1,4-Dichlorobenzene	146	25.425	25.425	(1.002)	4358041	10.0612	50.31
	81	1,2-Dichlorobenzene	146	26.095	26.095	(1.028)	3692675	10.5839	52.92
	82	1,2-Dibromo-3-chloropropane	157	27.021	27.021	(1.065)	114325	9.92256	49.61
	83	1,2,4-Trichlorobenzene	180	29.818	29.818	(1.175)	2350847	10.0694	50.35
	84	Naphthalene	128	30.350	30.350	(1.196)	2699018	10.1802	50.90
	85	Hexachlorobutadiene	225	30.469	30.478	(1.201)	1548440	9.33529	46.68
	86	1,2,3-Trichlorobenzene	180	30.784	30.783	(1.213)	1881588	10.1717	50.86

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BSMP8214.D
Report Date: 01-May-2005 09:02

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BSMP8214.D
Report Date: 01-May-2005 09:02

STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 22-APR-2005 00:00 Client SDG: F5D2202
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: G800L1AF Client Smp ID: RE73-05-58923
Level: LOW Operator: MN
Data Type: MS DATA SampleType: MS
SpikeList File: H20MS.spk Quant Type: ISTD
Sublist File: all.sub
Method File: \\slsvr01\chem\MSB.i\B050429B.b\8260B-25LLW25.m
Misc Info: VBLKB119B.B; F5D220218-001S; 5X

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 29 Dibromofluorometha	50.00	52.68	105.36	60-147
$ 31 1,2-Dichloroethane	50.00	53.33	106.66	71-138
$ 50 Toluene-d8	50.00	48.51	97.03	75-126
$ 69 4-Bromofluorobenze	50.00	50.79	101.59	71-117

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BSMP8214.D
Report Date: 01-May-2005 09:02

STL St. Louis

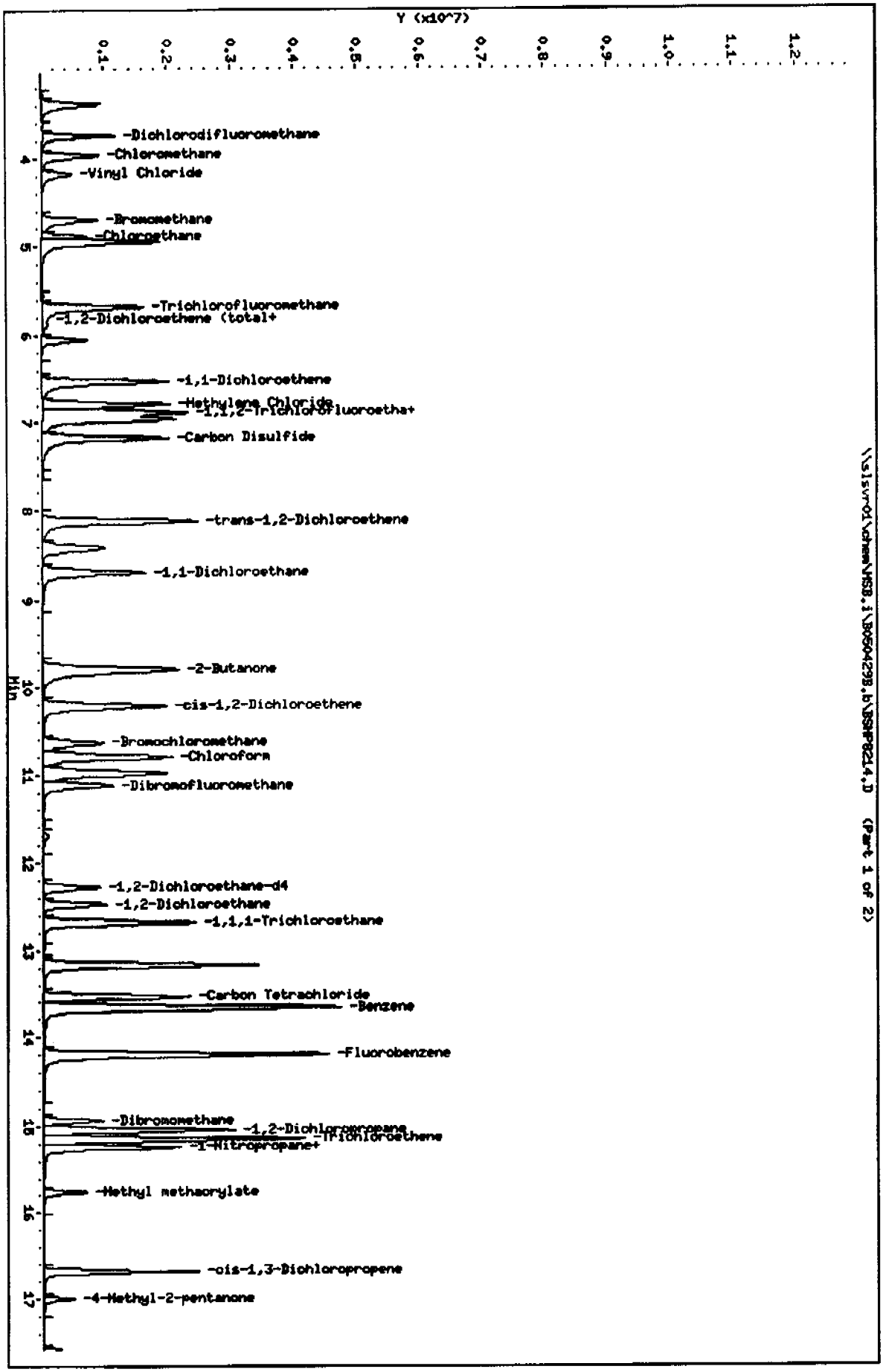
INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSB.i
Lab File ID: BSMP8214.D
Lab Smp Id: G800L1AF
Analysis Type: VOA
Quant Type: ISTD
Operator: MN
Calibration Date: 29-APR-2005
Calibration Time: 11:40
Client Smp ID: RE73-05-58923
Level: LOW
Sample Type: WATER
Method File: \\slsvr01\chem\MSB.i\B050429B.b\8260B-25LLW25.m
Misc Info: VBLKB119B.B; F5D220218-001S; 5X

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	8037558	4018779	16075116	7433401	-7.52
58 Chlorobenzene-d5	2283738	1141869	4567476	1828405	-19.94
79 1,4 Dichlorobenze	2972629	1486315	5945258	2616114	-11.99

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
36 Fluorobenzene	14.20	13.70	14.70	14.20	0.00
58 Chlorobenzene-d5	20.86	20.36	21.36	20.86	-0.05
79 1,4 Dichlorobenze	25.38	24.88	25.88	25.38	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^7)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
Min
4
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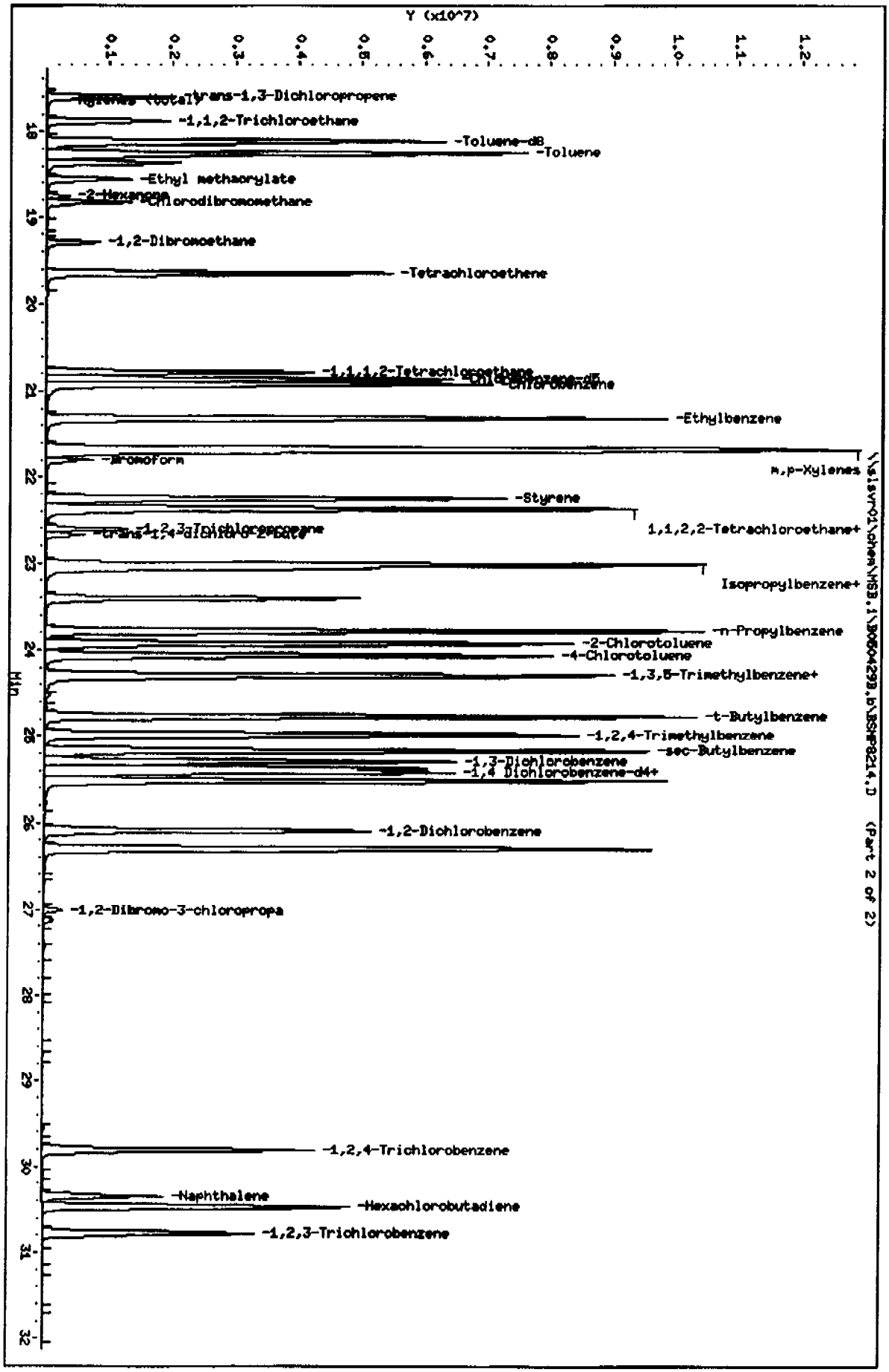
10
11
12
13
14
15
16
17
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-1,2-Dichloroethene (total+
-1,1-Dichloroethene
-Methylene Chloride
-1,1,2-Trichlorofluoroetha+
-Carbon Disulfide
-trans-1,2-Dichloroethene
-1,1-Dichloroethane
-2-Butanone
-cis-1,2-Dichloroethene
-Bromochloromethane
-Chloroform
-Dibromofluoromethane
-1,2-Dichloroethane-d4
-1,2-Dichloroethane
-1,1,1-Trichloroethane
-Carbon Tetrachloride
-Benzene
-Fluorobenzene
-Dibromomethane
-1,2-Dichloropropane
-Trichloroethene
-1-Nitropropane+
-Methyl methacrylate
-cis-1,3-Dichloropropene
-4-Methyl-2-pentanone
\\slsvr01\chem\MSB.i\B0504298.b\BSWP0214.D (Part 1 of 2)
Data File: \\slsvr01\chem\MSB.i\B0504298.b\BSWP0214.D
Date : 29-APR-2005 17:02
Client ID: RE73-05-58923
Sample Info: C800L1AF;B0504298.b
Purge Volume: 5.0
Column phase: Rtx-VMS
Instrument: MSB.i
Operator: MN
Column diameter: 0.25


Y (x10^7)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
trans-1,3-Dichloropropene
-1,1,2-Trichloroethane
-Toluene-d8
-Toluene
-Ethyl methacrylate
-2-Hexanone
-Chlorodibromomethane
-1,2-Dibromoethane
-Tetrachloroethene
-1,1,1,2-Tetrachloroethane
-Ethylbenzene
-Bromoform
m,p-Xylenes
-Styrene
1,1,2,2-Tetrachloroethane+
Isopropylbenzene+
-n-Propylbenzene
-2-Chlorotoluene
-4-Chlorotoluene
-1,3,5-Trimethylbenzene+
-t-Butylbenzene
-1,2,4-Trimethylbenzene
-sec-Butylbenzene
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-d4+
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Naphthalene
-Hexachlorobutadiene
-1,2,3-Trichlorobenzene
Min
\\slsvr01\chem\MSB.i\B050429B.b\BSHP8214.D (Part 2 of 2)
Data File: \\slsvr01\chem\MSB.i\B050429B.b\BSHP8214.D
Date : 29-APR-2005 17:02
Client ID: RE73-05-88923
Sample Info: C800L1AF;B050429B,b
Purge Volume: 5.0
Column phase: Rtx-VMS
Instrument: MSB.i
Operator: HN
Column diameter: 0.25

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BSMP8215.D
Report Date: 01-May-2005 09:03

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSB.i\B050429B.b\BSMP8215.D
Lab Smp Id: G800L1AG Client Smp ID: RE73-05-58923
Inj Date : 29-APR-2005 17:39
Operator : MN Inst ID: MSB.i
Smp Info : G800L1AG;B050429B.b
Misc Info : VBLKB119B.B; F5D220218-001D; 5X
Comment : NONE
Method : \\slsvr01\chem\MSB.i\B050429B.b\8260B-25LLW25.m
Meth Date : 01-May-2005 08:07 nuttm Quant Type: ISTD
Cal Date : 20-APR-2005 12:06 Cal File: BCAL8020.D
Als bottle: 9 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

MC 5-1-05

Name	Value	Description
DF	1.000	Dilution Factor
Vod	25.000	Def Sample Volume (mL)
Vo	5.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	1 Dichlorodifluoromethane	85	3.735	3.735	(0.263)	2394049	10.0842	50.42
	2 Chloromethane	50	3.971	3.961	(0.280)	2282740	10.7743	53.87
	3 Vinyl Chloride	62	4.178	4.178	(0.294)	1367569	13.7561	68.78
	4 Bromomethane	94	4.700	4.690	(0.331)	1436566	9.24696	46.23
	5 Chloroethane	64	4.887	4.877	(0.344)	1268796	10.5377	52.69
	7 Trichlorofluoromethane	101	5.685	5.675	(0.400)	3095725	11.2576	56.29
M	9 1,2-Dichloroethene (total)	96				4116404	21.6438	108.2
	10 Acetone	43	5.882	5.882	(0.414)	155633	9.84358	49.22
	11 1,1-Dichloroethene	96	6.532	6.532	(0.460)	1790231	10.4967	52.48
	14 Methylene Chloride	84	6.789	6.788	(0.478)	1978261	11.5355	57.68
	15 1,1,2-Trichlorofluoroethane	101	6.897	6.887	(0.486)	2185643	11.4096	57.05
	16 Allyl chloride	39	6.956	6.956	(0.490)	1964618	13.3871	66.94
	17 Carbon Disulfide	76	7.173	7.173	(0.505)	6652210	9.98611	49.93
	18 trans-1,2-Dichloroethene	96	8.118	8.118	(0.571)	2125302	11.1007	55.50
	19 1,1-Dichloroethane	63	8.690	8.689	(0.612)	3670594	11.3485	56.74
	23 2-Butanone	43	9.803	9.793	(0.690)	2274429	11.1142	55.57
	25 cis-1,2-Dichloroethene	96	10.206	10.216	(0.718)	1991102	10.5431	52.72
	26 Bromochloromethane	130	10.640	10.640	(0.749)	725075	10.3965	51.98
	27 Chloroform	83	10.798	10.797	(0.760)	3299738	10.5205	52.60
$	29 Dibromofluoromethane	113	11.123	11.122	(0.783)	1446277	10.0507	50.25
$	31 1,2-Dichloroethane-d4	65	12.275	12.275	(0.864)	1145654	9.84993	49.25
	32 1,2-Dichloroethane	62	12.472	12.462	(0.878)	1448900	9.81604	49.08
	33 1,1,1-Trichloroethane	97	12.689	12.679	(0.893)	2830100	10.5626	52.81

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BSMP8215.D
Report Date: 01-May-2005 09:03

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	34 Carbon Tetrachloride	117	13.536	13.536	(0.953)	2423807	11.2561	56.28
	35 Benzene	78	13.674	13.664	(0.963)	8555154	10.2738	51.37
*	36 Fluorobenzene	96	14.206	14.196	(1.000)	7920941	10.0000	
	37 Dibromomethane	93	14.935	14.925	(1.051)	627615	10.3293	51.65
	38 1,2-Dichloropropane	63	15.043	15.043	(1.059)	1945366	10.5323	52.66
	39 Trichloroethene	130	15.151	15.141	(1.067)	2300557	10.0962	50.48
	40 1-Nitropropane	43	15.240	15.230	(1.073)	95058	4.41210	22.06
	41 Bromodichloromethane	83	15.250	15.240	(1.073)	2029929	10.7227	53.61
	43 Methyl methacrylate	69	15.762	15.762	(1.110)	432534	9.90551	49.53
	45 cis-1,3-Dichloropropene	75	16.688	16.688	(1.175)	2195805	9.32849	46.64
	46 4-Methyl-2-pentanone	43	17.003	17.003	(1.197)	484248	8.67597	43.38
	47 trans-1,3-Dichloropropene	75	17.604	17.604	(0.844)	1517767	10.2234	51.12
M	48 Xylenes (total)	106				13478089	30.8560	154.3
	49 1,1,2-Trichloroethane	97	17.880	17.880	(0.857)	885557	9.34574	46.73
$	50 Toluene-d8	98	18.116	18.116	(0.868)	6903472	9.69079	48.45
	51 Toluene	91	18.264	18.254	(0.875)	9141241	9.76483	48.82
	52 Ethyl methacrylate	69	18.559	18.559	(0.890)	964360	8.59540	42.98
	53 2-Hexanone	43	18.766	18.756	(1.321)	346548	8.96034	44.80
	54 Chlorodibromomethane	129	18.835	18.835	(0.903)	925312	9.42019	47.10
	55 1,2-Dibromoethane	107	19.298	19.298	(0.925)	813021	10.2568	51.28
	56 Tetrachloroethene	164	19.653	19.653	(0.942)	1947412	8.16956	40.85
	57 1,1,1,2-Tetrachloroethane	131	20.776	20.785	(0.996)	1523745	10.4589	52.29
*	58 Chlorobenzene-d5	119	20.864	20.864	(1.000)	1890214	10.0000	
	59 Chlorobenzene	112	20.923	20.913	(1.003)	5809332	9.83565	49.18
	60 Ethylbenzene	106	21.308	21.307	(1.021)	3818410	10.1244	50.62
	61 m,p-Xylenes	106	21.672	21.672	(1.039)	9143521	20.7284	103.6
	62 Bromoform	173	21.800	21.800	(1.045)	362452	8.71538	43.58
	63 Styrene	104	22.243	22.243	(1.066)	6115740	10.5414	52.71
	64 1,1,2,2-Tetrachloroethane	83	22.362	22.361	(1.072)	967274	10.5701	52.85
	65 o-Xylene	106	22.371	22.371	(1.072)	4334568	10.1276	50.64
	66 1,2,3-Trichloropropane	110	22.618	22.608	(0.891)	240112	9.93738	49.69
	67 trans-1,4-dichloro-2-butene	53	22.677	22.677	(0.894)	181270	8.90568	44.53
	68 Isopropylbenzene	105	23.022	23.012	(1.621)	11404636	11.6021	58.01
$	69 4-Bromofluorobenzene	95	23.061	23.061	(0.909)	2528500	9.61695	48.08
	70 n-Propylbenzene	91	23.780	23.780	(1.674)	14350793	10.0968	50.48
	71 2-Chlorotoluene	91	23.918	23.928	(1.684)	8181359	10.3599	51.80
	72 4-Chlorotoluene	91	24.066	24.056	(1.694)	8146049	10.5289	52.64
	73 1,3,5-Trimethylbenzene	105	24.292	24.292	(1.710)	9556027	10.5116	52.56
	74 Pentachloroethane	167	24.381	24.381	(0.961)	20226	0.33080	1.654(a)
	75 t-Butylbenzene	119	24.775	24.775	(1.744)	8434500	10.4146	52.07
	76 1,2,4-Trimethylbenzene	105	24.982	24.982	(1.759)	9297213	10.3956	51.98
	77 sec-Butylbenzene	105	25.169	25.169	(1.772)	13197790	10.2712	51.36(A)
	78 1,3-Dichlorobenzene	146	25.287	25.297	(0.997)	4457683	9.79545	48.98
*	79 1,4 Dichlorobenzene-d4	152	25.376	25.376	(1.000)	2678238	10.0000	
	80 1,4-Dichlorobenzene	146	25.425	25.425	(1.002)	4261006	9.60901	48.04
	81 1,2-Dichlorobenzene	146	26.095	26.095	(1.028)	3575335	10.0098	50.05
	82 1,2-Dibromo-3-chloropropane	157	27.021	27.021	(1.065)	108432	9.25170	46.26
	83 1,2,4-Trichlorobenzene	180	29.808	29.818	(1.175)	2357045	9.86174	49.31
	84 Naphthalene	128	30.350	30.350	(1.196)	2918000	10.7509	53.75
	85 Hexachlorobutadiene	225	30.468	30.478	(1.201)	1744923	10.2758	51.38
	86 1,2,3-Trichlorobenzene	180	30.783	30.783	(1.213)	1851363	9.77618	48.88

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BSMP8215.D
Report Date: 01-May-2005 09:03

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.

Data File: \\slsvr01\chem\MSB.i\B050429B.b\BSMP8215.D
Report Date: 01-May-2005 09:03

STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 22-APR-2005 00:00 Client SDG: F5D2202
Sample Matrix: LIQUID Fraction: VOA
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Level: LOW Operator: MN
Data Type: MS DATA SampleType: MSD
SpikeList File: H20MS.spk Quant Type: ISTD
Sublist File: all.sub
Method File: \\slsvr01\chem\MSB.i\B050429B.b\8260B-25LLW25.m
Misc Info: VBLKB119B.B; F5D220218-001D; 5X

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STL St. Louis

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Quant Type: ISTD
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Level: LOW
Sample Type: WATER
Method File: \\slsvr01\chem\MSB.i\B050429B.b\8260B-25LLW25.m
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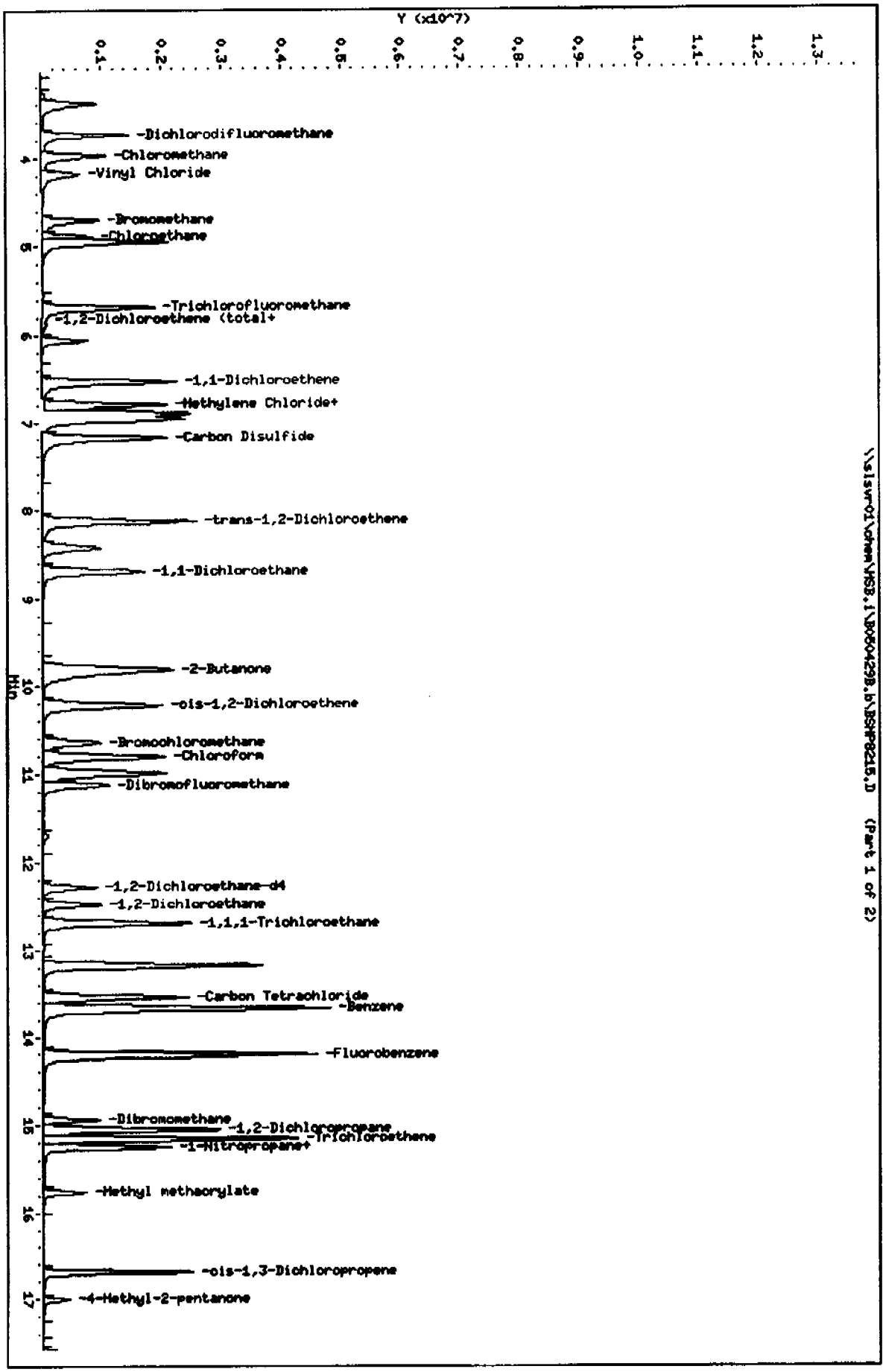
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^7)
0.1
0.2
0.3
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0.5
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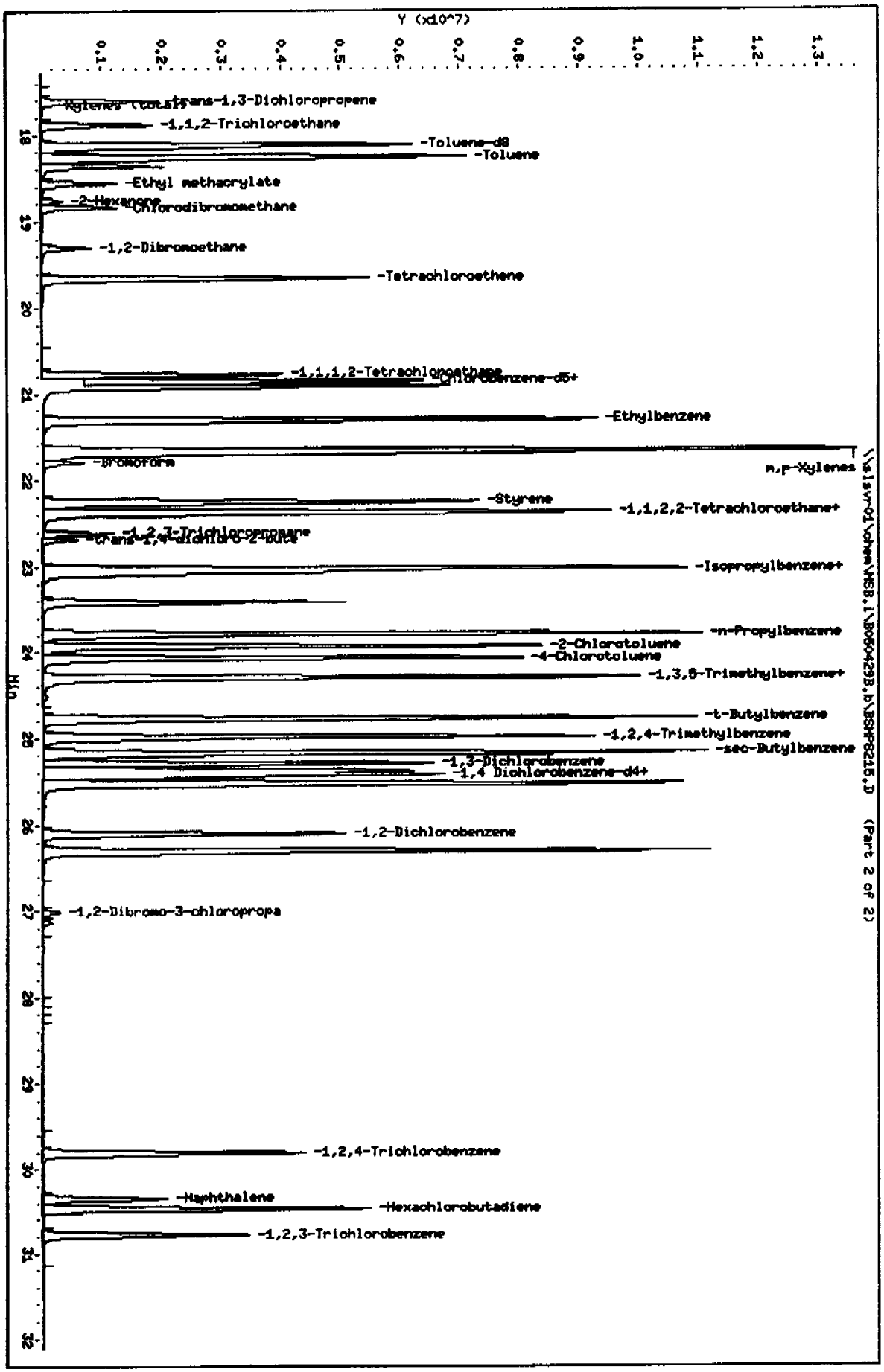
17
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-1,2-Dichloroethene (total+
-1,1-Dichloroethene
-Methylene Chloride+
-Carbon Disulfide
-trans-1,2-Dichloroethene
-1,1-Dichloroethane
-2-Butanone
-cis-1,2-Dichloroethene
-Bromochloromethane
-Chloroform
-Dibromofluoromethane
-1,2-Dichloroethane-d4
-1,2-Dichloroethane
-1,1,1-Trichloroethane
-Carbon Tetrachloride
-Benzene
-Fluorobenzene
-Dibromomethane
-1,2-Dichloropropane
-Trichloroethene
-1-Nitropropane+
-Methyl methacrylate
-cis-1,3-Dichloropropene
-4-Methyl-2-pentanone
\\slsvr01\chem\HSB.i\B0604298.b\BSHP8215.D (Part 1 of 2)
Data File: \\slsvr01\chem\HSB.i\B0604298.b\BSHP8215.D
Date : 29-APR-2008 17:39
Client ID: RE73-05-58923
Sample Info: C8OOL1AG;B0604298.b
Purge Volume: 5.0
Column phase: Rtx-VMS
Instrument: HSB.i
Operator: HN
Column diameter: 0.25



Data File: \\slavr01\chem\MSB.i\B050429B.b\BSHF8215.D
Date : 29-APR-2005 17:39
Client ID: RE73-05-58923
Sample Info: C800L1NC;B050429B.b
Purge Volume: 5.0
Column phase: Rtx-VMS

Instrument: MSB.i
Operator: HN
Column diameter: 0.25

GC/MS MISCELLANEOUS DATA

STL St. Louis GC/MS Volatiles Runlog

Instrument: MSB Date: 4-20-05 A Operator: MN Batch #: Logbook No.: 2642

Data File	Time	Pos.	Lot Number	Method	Lab ID	Matrix	pH	Wt/Vol g/ml	MeOH Vol.	Dil. Factor	Comments
BBFB8017					50 ng BFB				NA		last RR
8018	11:03				50 ng BFB						OK 288 + 390
BCAL8019	Cont	3		8260B	VSTD000.5				73.75 µl		
8020		4			VSTD001				72.5 µl		
8021		5			VSTD002				70 µl		
8022		6			VSTD004				65 µl		
8023		7			VSTD0010				50 µl		
8024		8			VSTD020				25 µl		ICAL Good MN 4-21-05
8025		1			VSTD030				NA		
BSMP 8026		2			S. BLK						
BLCS 8027		3			QC LCS						Vinyl Cl T No MeOH Added
8028		4			QC LCS						" "
8029		5			QC LCS						" "
8030		6			QC LCS ICV				0.030 mL	45 µl MN 4-21-05	OK
BBLK8031		7		624	QC BLK						JS+ Not spiked
BSMP8032		8	CSD70124 -1	624	G7V181A1	H_2O	CL	25 mL	NA	1X	OK
8037		9	FSD130108 -1	8260B	G782W1AA						Benzene 32.9 RR 2X+1X
8034		10	-2		G7821AA						RR 1X OK
BLCS8035	22:54	11		8260	QC LCS				0.030 mL		OK
8036		12		624	QC LCS				NA		OK
8037	00:09	13			QC LCS						2 CLBrEt OK
BSMP8038		14			S. BLK						
BBLK8039	1:25	15			QC BLK						OK
						4-21-05 MN					

IS	VA0261-05	BFB	VA0281-05
Custom	VA0272-05	CAL	VA0284-05
LCS/MS/MSD/QC Check	VA0279-05	SURR	VA0256-05
Other	NA	Other	NA

Note: Concentrations for standards can be found in the standards log.
Form: SL-ORG-0021, Rev. 3/7/05; SOP Reference: STL-MS-0002, current revision
Definitions: QCLCS or LCS – Laboratory Control Sample; QCBLK or BLK – Method Blank;
MeOH Lot#: ICV 20% for 4-Methyl-2-Pentanone

QC Reviewed By/Date: Tariq Mahmood 4-21-05 Spiking Verified By: T— Clock Review Assigned To: MN

LOT #F5D220218

ST LOUIS

STL St. Louis GC/MS Volatiles Runlog

Instrument: MSB Date: 4-29-05 B Operator: MN Batch #: 572 1013 Logbook No.: 2642

Data File	Time	Pos.	Lot Number	Method	Lab ID	Matrix	pH	Wt/Vol g/ml	MeOH Vol.	Dil. Factor	Comments
BBLK8204	10:24				5Dng BFB						OK
BVAL8205	Cont	1		8260B	VSTD010						Vinyl Cl ?
8206		1			VSTD010						OK
BLCS8207		2	FSE010000-013C		QCLCS G9LN5AC						OK
BBLK8208		3			5,BLK						
BSMP8209		4	FSE010000-013B		QCBLK G9LN5AA						OK
8210		5	FSD220133-6		G8X3T1AC	H_2O	LZ	25mL	NA	1X	OK
8211		6	-7		G8X321AC						OK
8212		7	-8		G8X341AC						OK
8213		8	FSD220218-1		G8QQL1AC			5mL		5X	Too dill RR 1X
8214		9	-15		1AF					5X	OK
8215		10	-10		1AG					5X	OK
8216		11	FSD220218-2		G8QQ11AA			5mL		5X	OK
8217		12	FSD150103-3		G8E5V3AA			.25mL		100X	OK
8218		13	-4		G8E5Q2AA			25mL		1X	OK
8219		14	FSD220296-1		G81NH1AD						OK
8220	20:43	15	-2		G81N71AD						PCE 124 RR 10X

mc 5-1-05

IS	VA0294-05	BFB	VA0281-05
Custom	VA0292-05	CAL	VA0293-05
LCS/MS/MSD/QC Check	VA0296-05	SURR	VA0291-05
Other	NA	Other	NA

Note: Concentrations for standards can be found in the standards log.
Form: SL-ORG-0021, Rev. 3/7/05; SOP Reference: STL-MS-0002, current revision
Definitions: QCLCS or LCS – Laboratory Control Sample; QCBLK or BLK – Method Blank; MeOH Lot#:

QC Reviewed By/Date: Farley-Wadmond 5-1-05 Spiking Verified By: Tm Clock Review Assigned To: MC

STL St. Louis GC/MS Volatiles Runlog

Instrument: MSL Date: 4-25-05 (5) Operator: TM/MN Batch #: 05117448/05117454 Logbook No.: 2643

Data File	Time	Pos.	Lot Number	Method	Lab ID	Matrix	pH	Wt/Vol g/ml	MeOH Vol.	Dil. Factor	Comments
LSMP0315				8260B	S.BLK	H_2O	NA				
0316						I					
LBFB0317	9:04				50ng BFB	—					
LSMP0318	cont'd				S.BLK	H_2O	ND	25mL	NA		
0319											
LCAL0320					VSTD000.5						
0321					VSTD001						
0322					VSTD002						
0323					VSTD004						
0324					VSTD010						
0325					VSTD020						
0326					~~S.BLK~~ VSTD030						
LSMP0327					~~ICV010~~ S.BLK						
LCS0328					~~S.BLK~~ ICV010						
BLK LSMP0329 LBLK0330					QC BLK						
SMP LBLK0330		1	F5D150200-1	8260B	G8F0P1AA	H_2O	12	25mL	N/A	1X	OK
LSMP0331		2	F5D140242-2		G8DPW2AE		72				OK
0332		3	F5D150190-3		G8FXF2AA		12				OK
0333		4	F5D130189-1		G79ET2AE		72			2X	OK
0334		5	" -2		G79GG2AQ					"	OK
0335		6	F5D140342-1		G8DEP2AE					80X	OK
0336		7	F5D210139-1		G8TPE1A2		12	25mL		1X	PC#31.40 RR2.5X
0337		8	" -2		G8TQL1A2						PC#64 OK
0338		9	" -2S		G8TQL1CT						
0339		10	" -2D		G8TQL1CU						

IS VAO 280-05
Custom VAO 272-05
LCS/MS/MSD/QC check VAO 279-05
Other N/A

BFB VAO 281-05
CAL VAO 281-05
SURR VAO 281-05
Other N/A

Note: Concentrations for standards can be found in the standards log.
Form: SL-ORG-0021, Rev. 3/7/05; SOP Reference: STL-MS-0002, current revision
Definitions: QCLCS or LCS – Laboratory Control Sample; QCBLK or BLK – Method Blank
MeOH Lot#:

3-Vials, used for MS/MSD

QC Reviewed By/Date: Tariq Mahmood 4-25-05 Spiking Verified By: TM Clock Review Assigned To: TM

STL St. Louis GC/MS Volatiles Runlog

Instrument: MSL Date: Operator: Batch #: Logbook No.: 2643

Data File	Time	Pos.	Lot Number	Method	Lab ID	Matrix	pH	Wt/Vol g/ml	MeOH Vol.	Dil. Factor	Comments
0340		11	FSD150190-1	8260(2)	G8FVW2AE	H2O	7Z		N/A	50X	DK
03482		12	" -2	"	G8FW92A2	"	"		"	"	CB Range 33.99 mL/L RR 100X
03483	2045	13	FSD210139-3	(1)	G8TQX1A2	"	4Z	25mL	"	1X	PCE=224 RR 20X
03484		14	" -4	"	G8TQ31A2	"	"	"	"	"	Removed from on 1-27-05 1.92
03485		15	" -5	"	G8TQ41A2	"	"	"	"	"	
0346		16	" -6	"	G8TQ51A2	"	"	"	"	"	

IS	VA0280-05	BFB	VA0281-05
Custom	VA0272-05	CAL	VA0284-05
LCS/MS/MSD/QC Check	VA0279-05	SURR	VA0291-05
Other	NA	Other	NA

Note: Concentrations for standards can be found in the standards log.
Form: SL-ORG-0021, Rev. 3/7/05; SOP Reference: STL-MS-0002, current revision
Definitions: QCLCS or LCS – Laboratory Control Sample; QCBLK or BLK – Method Blank;
MeOH Lot#:

QC Reviewed By/Date: Spiking Verified By: Clock Review Assigned To:

LOT #FSD220218

ST LOUIS

STL St. Louis GC/MS Volatiles Runlog

Instrument: MSL Date: 5-2-05B Operator: LS / TM Batch #: ①5123229 ②5123231 Logbook No.: 2663

Data File	Time	Pos	Lot Number	Meth	Lab ID	Matrix	pH	Wt/Vol g/ml	MeOH Vol.	Dil. Fact.	IS	Sur	Comments
LBFB 0581					50ng BFB								Failed RR
↓ 0582	10:52				↓								OK
LCAL 0583		1		8260D	VSTD010								VCT ↓ RR
↓ 0584		1	FSE030502-229		↓								OK
LLCS 0585		2	FSE030502-231		RCLCS G4PDM1AC G4PEE1AV								OK
LBLK 0586		3			S. BLK								—
LBLK 0587		4	FSE030502-229 ↓ -231		QC BLK G4PDM1AA G4PEE1AA								OK
LCAL 0588		5			VSTD010 (BFB)								
LSIM 0589		6			S. BLK								5-4-05
0590		7	FSD220349-1	①	G8175IAC +H2O		<2	5mL	N/A	5X		5X	Acetone 151 (solid) BK RR 25X
0591		8	↓ -IS		G8175IIAD			↓		↓		↓	OK
0592		9	-ID		G8175IIAE								OK
0593		10	↓ -1		G8175IAC 5-4-05			1mL		25X		25X	OK
0594		11	FSD220296-2		G8IN72AD			2.5mL		10X		10X	5121013 OK
0595		12	FSD220296-12		G8IP31AA			25mL 25mL		1X			OK
0596		13	FSD210324-1	②	G8WEQIAA								OK
0597		14	↓ -2		G8WETIAE								CH_2Cl_2 35.3 RR 25X
0598		15	↓ -3		G8WFRIAQ								" 277 RR 25X
0599		16	FSD220156-1	①	G8X9XIAA								" 0.95 Freezable Cosystem RR1X
0600		17	FSD220218-1		G800LZAC		>2						5121013 OK
0601		18	FSD300120-1		G9KNDIAA		<2						OK
0602		19	↓ -2		G9K3HIAA			↓	↓	↓			OK
0603		20	FSD150190-2	②	G8FW93AQ			500ul		50X		50X	CS Benzene 30.8 (solid) 5110703 RR 100X
0604	22:39	21	FSD210139-8	①	G8TQ92A2			5mL		5X		5X	5122064 OK
↓ 0605	23:08	22	FSD190195-1	②	G8MQ52AE	↓	↓	5ml	↓	5000X		5000X	OOC 5122063 BK RR 5000X

IS VAO 240-05
Custom VAO 292-05
LCS/MS/MSD/QC Check VAO 296-05
Other NA

BFB VAO281-05
CAL VAO297-05
SURR VAO 307-05
Other NA

Note: Concentrations for standards can be found in the standards log.
Form: SL-ORG-0021, Rev. 4/20/05; SOP Reference: STL-MS-0002, current revision
Definitions: QCLCS or LCS – Laboratory Control Sample; QCBLK or BLK – Method Blank;
MeOH Lot#:

QC Reviewed By/Date: Tariq Mahmood 5-4-05

Spiking Verified By: —

Clock Review Assigned To: —

F5D220218

CLIENT ANALYSIS SUMMARY

Storage Loc: A87,V90

Project Manager: EK | Quote #: 44975 | SDG: F5D220218

Date Received: 2005-04-22

Project: 3166S | Los Alamos Non-Rad

Analytical Due Date: 2005-05-10

PO#: 126310021 | Report to: Joylene Valdez or Keith

Report Due Date: 2005-05-12

Client: 108581 LOS ALAMOS NATIONAL LABORATORY | #SMPS in LOT: 2

Report Type: D Expanded Deliverable

EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	
1	RE73-05-58923	2005-04-20 / 0	G800L	WATER

SAMPLE COMMENTS:

	XX	QH	SW846 8082	PCBs (8082)	60	LIQ/LIQ, SEP FUNNEL w/ACID STRIP (PCB) - Nominal	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	XX	QL	SW846 8270C	Base/Neutrals and Acids (8270C)	49	LIQ/LIQ, CONT (A/B/N) - Acid->Base	01	STANDARD TEST SET	PROT: B	WRK LOC	06	TIC: N	
	XX	QK	SW846 8260B	Volatile Organics, GC/MS (8260B)	25	PURGE AND TRAP - 25 mL purge (Waters)	01	STANDARD TEST SET	PROT: B	WRK LOC	06	TIC: N	
D	XX	QH	SW846 8082	PCBs (8082)	60	LIQ/LIQ, SEP FUNNEL w/ACID STRIP (PCB) - Nominal	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
D	XX	QL	SW846 8270C	Base/Neutrals and Acids (8270C)	49	LIQ/LIQ, CONT (A/B/N) - Acid->Base	01	STANDARD TEST SET	PROT: B	WRK LOC	06	TIC: N	
D	XX	QK	SW846 8260B	Volatile Organics, GC/MS (8260B)	25	PURGE AND TRAP - 25 mL purge (Waters)	01	STANDARD TEST SET	PROT: B	WRK LOC	06	TIC: N	
S	XX	QH	SW846 8082	PCBs (8082)	60	LIQ/LIQ, SEP FUNNEL w/ACID STRIP (PCB) - Nominal	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
S	XX	QL	SW846 8270C	Base/Neutrals and Acids (8270C)	49	LIQ/LIQ, CONT (A/B/N) - Acid->Base	01	STANDARD TEST SET	PROT: B	WRK LOC	06	TIC: N	
S	XX	QK	SW846 8260B	Volatile Organics, GC/MS (8260B)	25	PURGE AND TRAP - 25 mL purge (Waters)	01	STANDARD TEST SET	PROT: B	WRK LOC	06	TIC: N	

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	
2	RE73-05-58924	2005-04-20 / 0	G8009	WATER

SAMPLE COMMENTS:

	XX	QH	SW846 8082	PCBs (8082)	60	LIQ/LIQ, SEP FUNNEL w/ACID STRIP (PCB) - Nominal	01	STANDARD TEST SET	PROT: B	WRK LOC	06		
	XX	QL	SW846 8270C	Base/Neutrals and Acids (8270C)	49	LIQ/LIQ, CONT (A/B/N) - Acid->Base	01	STANDARD TEST SET	PROT: B	WRK LOC	06	TIC: N	
	XX	QK	SW846 8260B	Volatile Organics, GC/MS (8260B)	25	PURGE AND TRAP - 25 mL purge (Waters)	01	STANDARD TEST SET	PROT: B	WRK LOC	06	TIC: N	

F5D220218

CLIENT COMMENTS SUMMARY

Storage Loc: A87,V90

Project Manager: EK Quote #: 44975 SDG: F5D220218

Date Received: 2005-04-22

Project: 3166S Los Alamos Non-Rad

Analytical Due Date: 2005-05-10

PO#: 126310021 Report to: Joylene Valdez or Keith

Report Due Date: 2005-05-12

Client: 108581 LOS ALAMOS NATIONAL LABORATORY

Report Type: D Expanded Deliverable

#SMPS in LOT: 2 EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMEN
Enter COC NUMBER on sample sample header in the COC Fi
SDG = "Lot Number"
Project Name = "Request number"

********** METALS AND WETCHEMISTRY **********
Can batch multiple Lots together and report Client specific
Batch QC: Matrix Spike and Sample Duplicate
Met Prep: GFAA Spike Level and Standard Spike Level
Sb spike at 100 ppb
Pb - Spike Solids at 100 ppb, spike Waters at 20
- Perform analytical spike when matrix spike is swamped with
indigenous analyte.
********** GC/MS ORGANICS **********
Can batch multiple Lots together and report Client specific
Batch QC MS and MSD
Clouseau observations for:
- Dilutions and elevated detection limits
- Unknown aldol condensate in TIC report
USE GPC for sample extracts as required.
Put client ID on all raw data
Client requires qualifiers
********** GC/HPLC **********
Can batch multiple Lots together and report Client specific
Batch QC
USE GPC for sample extracts as required.
Client requires Qualifiers for both GC and HPLC
- No averaging of CCV compounds
- Include Form Xs in data packages
********** Radiochemistry **********
Rad Chem with no tracers require MS (spk <= 100 pCi/L or g)
and sample duplicate ..... Gamma does not require MS.
Radium 228 requires MS and Sample Duplicate
Radiological: "Do not include control chart, standard certif
certificates, or calibration data as part of data package"
- Tracers need to be added at a level to yield at least 400
- Report 1 sigma uncertainty
Gross Alpha/Beta requires a total digestion.

STL ST LOUIS
Thursday, April 21, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3166SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3166S
ANALYSIS TYPE: ORGANIC

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58923	1	1 L AMBER GLASS	8270C	ICE	W
RE73-05-58923	2	1 L AMBER GLASS	8270C	ICE	W
RE73-05-58923	3	1 L AMBER GLASS	8082	ICE	W
RE73-05-58923	4	1 L AMBER GLASS	8082	ICE	W
RE73-05-58923	5	40 ML SEPTUM AMBER GLASS	8260B	HCL	W
RE73-05-58923	6	40 ML SEPTUM AMBER GLASS	8260B	HCL	W
RE73-05-58924	1	1 L AMBER GLASS	8270C	ICE	W
RE73-05-58924	2	1 L AMBER GLASS	8270C	ICE	W
RE73-05-58924	3	1 L AMBER GLASS	8082	ICE	W
RE73-05-58924	4	1 L AMBER GLASS	8082	ICE	W
RE73-05-58924	5	40 ML SEPTUM AMBER GLASS	8260B	HCL	W
RE73-05-58924	6	40 ML SEPTUM AMBER GLASS	8260B	HCL	W

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3166S

Page 1

Head up mon pack opened

Relinquished By:		Date	Time	Received By:		Date	Time
		4/21/05	2:30	Sue Wilson	Sue Wilson	4.22.05	0930
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		

Received for DISPOSAL By:		Date	Time	Remarks:
PRINTED NAME	SIGNATURE			

LOT #TED220218

STL ST LOUIS
Thursday, April 21, 2005

REQUEST NUMBER: 3166S
ANALYSIS TYPE: ORGANIC

Los Alamos
NATIONAL LABORATORY

wr 6193

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

SHIP DATE: 04/21/2005
REPORT DUE: 05/06/2005
TURN AROUND REQ'D: 15

RAD SCREENING: NOT REQ
COMMENTS:

These samples are on:

LANL Request Number: 3166S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:8270C	RE73-05-58923	1	W	04/20/2005	
SW-846:8270C	RE73-05-58923	2	W	04/20/2005	
SW-846:8082	RE73-05-58923	3	W	04/20/2005	
SW-846:8082	RE73-05-58923	4	W	04/20/2005	
SW-846:8260B	RE73-05-58923	5	W	04/20/2005	
SW-846:8260B	RE73-05-58923	6	W	04/20/2005	
SW-846:8270C	RE73-05-58924	1	W	04/20/2005	
SW-846:8270C	RE73-05-58924	2	W	04/20/2005	
SW-846:8082	RE73-05-58924	3	W	04/20/2005	
SW-846:8082	RE73-05-58924	4	W	04/20/2005	
SW-846:8260B	RE73-05-58924	5	W	04/20/2005	
SW-846:8260B	RE73-05-58924	6	W	04/20/2005	

Final Page of REQUEST NUMBER 3166S

LOT #F5D220218

SEVERN TRENT **STL**

Lot No: F5D220218

Condition Upon Receipt Form
St. Louis Laboratory

Client: LANL

Date: 4.22.05 Time: 0900

Quote No: 44975

Initiated by: SV

Shipper/No: FedX 6954 7789 2939

COC/RFA Numbers: below

Condition/Variance (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	(Y) N	Sample received in undamaged condition?	7.	(Y) N	Sample received with Chain of Custody?
2.	(Y) N	Sample received within 4°C ± 2°C* ?	8.	(Y) N	Chain of Custody matches sample IDs on containers?
		Record _____	9.	(Y) N N/A	Custody seal received intact on cooler.?
3.	(Y) N N/A	Sample received with proper pH ¹?	10.	(Y) N N/A	Custody seal tamper evident on cooler.?
4.	Y N	If N/A - Was pH taken by original STL lab?	11.	(Y) N N/A	Custody seal on bottles received intact?
5.	(Y) N	Sample received in proper containers?	12.	(Y) N N/A	Custody seal tamper evident on bottles?
6.	(Y) N	Sample volume sufficient for analysis?	13.	Y N	Was CUR (equivalent) rec' d from original STL lab?

* Temperature Variance Does Not Affect the Following Analyses: _____

¹For DOE-AL (Pantex, LANL, Sandia) sites, verify pH all containers received, except for VOA, TOX, and soils.

Notes: 2861SC, 3163SC thru 68SC.

Chain 3163SC - containers received were different than c-o-c.

Corrective Action:

☐ Client's Name: _____ Informed by: _____ By: _____

☐ Sample(s) processed "as is". _____

☐ Sample(s) on hold until: _____ If released, notify: _____

Project Management Review: Jenny Lilley Date: 4/22/05

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED
IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIALS AND THE DATE NEXT TO THAT ITEM

Thursday, April 21, 2005

REQUEST NUMBER: 3165S

Los Alamos
NATIONAL LABORATORY

ANALYSIS TYPE: RAD

ATTN: Mark Loeb
Severn Trent Laboraties, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

SHIP DATE: 04/21/2005
REPORT DUE: 05/06/2005
TURN AROUND REQ'D: 15

RAD SCREENING: NOT REQ
COMMENTS:

These samples are on:

LANL Request Number: 3165S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
EPA:901.1	RE73-05-58842	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58842	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58842	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58842	2	S	04/20/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58843	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58843	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58843	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58843	2	S	04/20/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58844	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58844	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58844	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58844	2	S	04/20/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58845	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58845	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58845	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58845	2	S	04/20/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58846	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58846	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58846	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58846	2	S	04/20/2005	Analyze for Gross A/B/G also

Final Page of REQUEST NUMBER 3165S

Thursday, April 21, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3165SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3165S

ANALYSIS TYPE: RAD

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58842	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58843	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58844	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58845	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58846	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3165S

Relinquished By:	Date	Time	Received By:	Date	Time
PRINTED NAME SIGNATURE	4/21/05	2 30	PRINTED NAME SIGNATURE		
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		

Received for DISPOSAL By:	Date	Time	Remarks:
PRINTED NAME SIGNATURE			

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218682 Event ID:4802

SAMPLE ID: RE73-05-58878

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
1	8260B	125 SEPTUM AMBER GLASS	Ice	Y		

RELINQUISHED BY (printed name): K Lewis (signature):	Date/Time: 4.20.05 1520	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/20/05 1520	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218862 Event ID:4802

SAMPLE ID: RE73-05-58844

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4-2-05 1520	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 42005 1520	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

EVENT NAME: TA-73 Ash Pile

FIELD CHAIN OF CUSTODY

COC ID: 218852 Event ID:4802

SAMPLE ID: RE73-05-58843
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.20.05 1520	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/20/05 1520	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

EVENT NAME: TA-73 Ash Pile

FIELD CHAIN OF CUSTODY

COC ID: 218872 Event ID:4802

SAMPLE ID: RE73-05-58845
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.20.05 1530	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/20/05 1530	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

EVENT NAME: TA-73 Ash Pile

FIELD CHAIN OF CUSTODY

COC ID: 218882 Event ID:4802

SAMPLE ID: RE73-05-58846
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.20.05 1530	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/20/05 1530	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

EVENT NAME: TA-73 Ash Pile

FIELD CHAIN OF CUSTODY

COC ID: 218842 Event ID:4802

SAMPLE ID: RE73-05-58842
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): K Lowry (signature):	Date/Time: 4-20-05 1530	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/20/05 1530	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 219172 **Event ID:**4802

SAMPLE ID: RE73-05-58879 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	8260B	~~125 SEPTUM AMBER GLASS~~ 2"x6" SS TUBE	Ice	Y		
1	8270C+8082	250 ML AMBER GLASS	Ice	Y		
3	8290	125 ML GLASS	Ice	Y		
4	8290	125 ML GLASS	Ice	Y		
5	PSDA+PROP-DBS	~~PROTECORE BAG~~ 2"x6" SS TUBE	Ice	Y		
6	RC+RS+ph+PF+I	500 ML POLY	Ice	Y		

RELINQUISHED BY (printed name): (signature):	Date/Time: 4-20-05 1530	**RELINQUISHED BY** (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/20/05 1530	**RECEIVED BY** (printed name): (signature):	Date/Time:

Rad Screening Data Release Form

The Following samples were received at the Field Support Facility (FSF) without screening data (list sample number):

These samples will not be shipped until radiological screening data documentation arrives at the FSF. I understand that it is my responsibility to ensure this information arrives at the FSF in a timely manner. If holding times are missed because screening data does not arrive, I will pick up the samples.

The following samples do not require rad screening data for the reasons stated (list sample numbers):

~~SAMPLES WERE~~ ALL

RE73-05-58842
-58843
-58844
-58845
-58846
-58879
-58878

Reason: SAMPLES WERE SCREENED IN THE FIELD READINGS RECORDED ON SCL.

Print Last Name LEONARD Signature [signature] Date 4/20/05

Data-Validation Cover Sheet

☐ Rejected Data

Section I

Request Number: 3165S Validation Date: 26-May-05 Lab Code: GEL

Contract Laboratory Name: _____

Validator: Clifford Deiner Organization: ENV-ECR

Analytical Suite (check all that apply):
☐ Volatile Organics
☐ Semivolatile Organics
☐ Organochlorine Pesticides/Polychlorinated Biphenyls
☐ High Explosives
☐ Inorganics
☒ Radiochemistry

Other (describe): _____

Section II—Completeness Check

Yes	No	n/a	(check one)	Yes	No	n/a	(check one)
☒	☐	☐	1. Chain-of-custody form(s)	☒	☐	☐	6. Raw/BSS data
☒	☐	☐	2. Case narrative	☒	☐	☐	7. Quality control forms
☒	☐	☐	3. Sample result forms	☒	☐	☐	8. Quantitation reports
☐	☐	☒	4. Sample chromatograms	☐	☐	☒	9. TICs forms
☐	☐	☒	5. Standard chromatograms	☐	☐	☒	10. TICs mass spectra

Identify any samples in the assigned Request Number that are missing:

_____ _____ _____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____ _____ _____

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

Am-241, Isotopic Plutonium, Isotopic Uranium:

Some sample results were less than the MDC and were qualified U,R5. One sample result for Am-241 was less than 3x the TPU and was qualified U,R11. All other QCs were within acceptance limits.

Gamma Spec:

Some sample results were less than 3x the TPU and were qualified U,R11. Some sample results were less than the MDC and were qualified U,R5. All other QCs were within acceptance limits.

Validator's signature: Clifford Deiner Date: 5-26-05

(Attach additional comment sheets as necessary.)

Attachment D: RAD Checklist

Yes	No	N/A	(check one)	Assign qualifier listed below if criteria = Yes	
				Detected analyte	Undetected analyte
☐	☒	☐	1. The MDC and/or TPU were not stated for each radionuclide in each batch for each sample.	(See note)[a]	(See note)[a]
☒	☐	☐	2. The sample result is less than or equal to the MDC.	U, R5	U, R5
☒	☐	☐	3. The sample result is less than or equal to three times the TPU calculation.	U, R11	N/A
☐	☒	☐	4. Required blank information is missing.	R, R4	R, R4
☐	☒	☐	5. The analyte detected is shown in the blank and sample result for analyte is less than or equal to the amount in blank.	U, R4a	N/A
☐	☒	☐	6. The duplicate analysis information is not present.	J, R7	UJ, R7
☐	☐	☒	7. The duplicate analysis was performed in lieu of a preparation duplicate.	J, R7a	N/A
☐	☐	☒	8. The DER for detected analytes is greater than but less than or equal to four.	J, R7b	N/A
☐	☐	☒	9. The DER for detected analytes is greater than four.	R, R7c	N/A
☐	☒	☐	10. The tracer/carrier information is not present.	R, R1	R, R1
☐	☒	☐	11. The tracer/carrier %R is greater than the UAL.	J+, R1d	N/A
☐	☒	☐	12. The tracer/carrier %R is less than 30 but greater than or equal to 10%.	J-, R1b	UJ, R1c
☐	☒	☐	13. The tracer/carrier %R is less than 10%.	R, R1a	R, R1a
☐	☒	☐	14. The LCS information is not present.	R, R6	R, R6
☐	☒	☐	15. The LCS %R is greater than 120%.	J+, R6a	N/A
☐	☒	☐	16. The LCS %R is less than 80 but greater than or equal to 10%.	J-, R6c	UJ, R6d
☐	☒	☐	17. The LCS %R is less than 10%.	R, R6b	R, R6b
☐	☐	☒	18. The matrix spike information is not present.	R, R3	R, R3
☐	☐	☒	19. The matrix spike %R is greater than 125%.	J+, R3c	N/A
☐	☐	☒	20. The matrix spike %R is less than 75% but greater than or equal to 10%.	J-, R3d	UJ, R3e
☐	☐	☒	21. The matrix spike %R is less than 10%.	R, R3a	R, R3b
☐	☒	☐	22. The sample was extracted after the appropriate holding time was exceeded.	J-, R9	UJ, R9
☐	☒	☐	23. The sample was extracted after a period double the appropriate holding time was exceeded.	R, R9a	R, R9a
☐	☒	☐	24. Other obvious data quality issues are identified.	__, R19	__, R19

Gamma Spectroscopy Data-Validation Checklist

Yes	No	n/a	(check one)	Assign qualifier listed below if criteria = Yes: Detected analyte	Assign qualifier listed below if criteria = Yes: Undetected analyte
☐	☒	☐	1. MDC and/or TPU were not stated for each radionuclide in each batch for each sample.	a	a
☒	☐	☐	2. Sample result is ≤MDC.	U, R5	U, R5
☒	☐	☐	3. Sample result is ≤3 times the TPU calculation.	U, R11	N/A
☐	☒	☐	4. Sample results are tentative because of spectral interference.	R, R5b	R, R5b
☐	☒	☐	5. Preparation/method blank is not reported.	R, R4	R, R4
☐	☒	☐	6. Analyte detected in blank and sample result for analyte ≤5x the amount in blank	U, R4a	N/A
☐	☒	☐	7. Duplicate analysis information is not present.	J, R7	UJ, R7
☐	☐	☒	8. DER for detected analytes is ≥2 but ≤4.	J, R7b	N/A
☐	☐	☒	9. DER for detected analytes is >4.	R, R7c	N/A
☐	☒	☐	10. Laboratory Control Sample (LCS) information is not present.	R, R6	R, R6
☐	☒	☐	11. LCS % recovery is >120%.	J+, R6a	N/A
☐	☒	☐	12. LCS % recovery is <80 but ≥10%.	J-, R6c	UJ, R6d
☐	☒	☐	13. LCS % recovery is <10%.	R, R6b	R, R6b
☐	☒	☐	14. Sample was extracted outside of the appropriate hold time.	J-, R9	UJ, R9
☐	☒	☐	15. Sample was extracted >2 times the appropriate holding time.	R, R9a	R, R9a
☐	☒	☐	16. Other obvious data quality issues identified.	__, R19	__, R19

[a] If the laboratory cannot provide the missing MDC, an estimated MDC can be calculated using 3 times the TPU.

CD

STL ST. LOUIS
Thursday, April 21, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3165SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3165S

ANALYSIS TYPE: RAD

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58842	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58843	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58844	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58845	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58846	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3165S Page 1

Relinquished By:		Date	Time	Received By:		Date	Time
		4/21/05	2:30	Sue Wilson		4-22-05	0900
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		

Received for DISPOSAL By:		Date	Time	Remarks:
PRINTED NAME	SIGNATURE			

LOT# RED220356

STL ST. LOUIS

Thursday, April 21, 2005

cwl 6163

REQUEST NUMBER: 3165S

ANALYSIS TYPE: RAD

Los Alamos
NATIONAL LABORATORY

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

SHIP DATE: 04/21/2005
REPORT DUE: 05/06/2005
TURN AROUND REQ'D: 15

RAD SCREENING: NOT REQ
COMMENTS:

These samples are on:

LANL Request Number: 3165S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

LANL ER SMO CONTACT:
Signature:

Page 1

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
EPA:901.1	RE73-05-58842	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58842	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58842	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58842	2	S	04/20/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58843	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58843	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58843	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58843	2	S	04/20/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58844	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58844	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58844	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58844	2	S	04/20/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58845	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58845	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58845	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58845	2	S	04/20/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58846	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58846	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58846	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58846	2	S	04/20/2005	Analyze for Gross A/B/G also

Final Page of REQUEST NUMBER 3165S

Page 1

LOT# F5D220356

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58842

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D220356-001
Work Order: G8159
Matrix: SOLID

Date Collected: 04/20/05 0000
Date Received: 04/22/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				pCi/g		RP-730 MOD			
Americium 241 U,RS	0.035		0.032	0.10	0.049	04/27/05	04/27/05	5117412	
Bismuth 211 (assumes	**1.09**		**0.20**	**0.72**	**0.35**	**04/27/05**	**04/27/05**	**5117412**	
Bismuth 214	**0.264**		**0.056**	**0.24**	**0.12**	**04/27/05**	**04/27/05**	**5117412**	
Cadmium 109 U,RS	-0.24	U	0.33	1.1	0.51	04/27/05	04/27/05	5117412	
Cerium 139	0.013	U	0.013	0.042	0.020	04/27/05	04/27/05	5117412	
Cesium 134	-0.028	U	0.020	0.062	0.028	04/27/05	04/27/05	5117412	
Cesium 137	0.029	U	0.024	0.095	0.043	04/27/05	04/27/05	5117412	
Cobalt 60	0.002	U	0.023	0.093	0.039	04/27/05	04/27/05	5117412	
Europium 152	0.032	U	0.078	0.36	0.14	04/27/05	04/27/05	5117412	
Lead 212	**0.253**		**0.048**	**0.12**	**0.059**	**04/27/05**	**04/27/05**	**5117412**	
Lead 214	**0.456**		**0.060**	**0.13**	**0.058**	**04/27/05**	**04/27/05**	**5117412**	
Mercury 203 U,RS	0.002	U	0.016	0.057	0.027	04/27/05	04/27/05	5117412	
Potassium 40	**6.80**		**0.89**	**0.69**	**0.27**	**04/27/05**	**04/27/05**	**5117412**	
Radium (226)	**5.15**		**0.63**	**1.0**	**0.48**	**04/27/05**	**04/27/05**	**5117412**	
Radium 228 U,RS	0.41	U	0.11	0.46	0.22	04/27/05	04/27/05	5117412	
Radium 223 (assumes e	0.07 U,RS	U	0.17	0.63	0.30	04/27/05	04/27/05	5117412	
Radium 224 U,R11	**2.44**		**0.83**	**1.6**	**0.79**	**04/27/05**	**04/27/05**	**5117412**	
Ruthenium 106 U,RS	-0.10	U	0.16	0.56	0.25	04/27/05	04/27/05	5117412	
Sodium 22	0.036	U	0.026	0.11	0.050	04/27/05	04/27/05	5117412	
Strontium 85	-0.028	U	0.023	0.075	0.035	04/27/05	04/27/05	5117412	
Thallium 208	0.048	U	0.024	0.097	0.045	04/27/05	04/27/05	5117412	
Thorium 227	0.15	U	0.12	0.40	0.19	04/27/05	04/27/05	5117412	
Thorium 231	0.39	U	0.17	0.63	0.30	04/27/05	04/27/05	5117412	
Thorium 234	**2.80**		**0.34**	**0.98**	**0.47**	**04/27/05**	**04/27/05**	**5117412**	
Tin 113 U,RS	-0.025	U	0.019	0.065	0.029	04/27/05	04/27/05	5117412	
Uranium 235	0.340	U	0.042	0.41	0.20	04/27/05	04/27/05	5117412	
Yttrium 88	0.008	U	0.017	0.084	0.032	04/27/05	04/27/05	5117412	
Iso PLUTONIUM (LONG CT) DOE A-01-R MOD				pCi/g		A-01-R MOD			
Plutonium 238 U,RS	-0.0056	U	-0.0088	0.034	0.016	04/25/05	04/28/05	5115432	90
Plutonium 239/40	**1.07**		**0.075**	**0.020**	**0.007**	**04/25/05**	**04/28/05**	**5115432**	**90**
Iso URANIUM (LONG CT) DOE A-01-R MOD				pCi/g		A-01-R MOD			
Uranium 234	**8.98**		**0.38**	**0.02**	**0.07**	**04/25/05**	**05/03/05**	**5115433**	**60**
Uranium 235	**0.360**		**0.040**	**0.021**	**0.006**	**04/25/05**	**05/03/05**	**5115433**	**60**
Uranium 238	**7.14**		**0.31**	**0.008**	**0.0**	**04/25/05**	**05/03/05**	**5115433**	**60**
Iso AMERICIUM (LONG CT) HAS & DOE MOD				pCi/g		3006/RP-725			
Americium 241	**0.0358**		**0.0086**	**0.015**	**0.0058**	**04/25/05**	**04/29/05**	**5115429**	**73**

LOS ALAMOS NATIONAL LABORATORY

Client Samole ID: RE73-05-58843

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D220356-002
Work Order: G816E
Matrix: SOLID

Date Collected: 04/20/05 0000
Date Received: 04/22/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				pCi/g		RP-730 MOD			
Americium 241 U,R5	0.047	U	0.033	0.11	0.053	04/27/05	04/27/05	5117412	
Bismuth 211 (assumes	**1.28**		**0.21**	**0.76**	**0.37**	**04/27/05**	**04/27/05**	**5117412**	
Bismuth 214	**0.376**		**0.082**	**0.30**	**0.14**	**04/27/05**	**04/27/05**	**5117412**	
Cadmium 109 U,R5	-0.69	U	0.33	1.1	0.51	04/27/05	04/27/05	5117412	
Cerium 139	-0.010	U	0.013	0.043	0.020	04/27/05	04/27/05	5117412	
Cesium 134	0.01	U	0.021	0.074	0.034	04/27/05	04/27/05	5117412	
Cesium 137	0.053	U	0.033	0.13	0.063	04/27/05	04/27/05	5117412	
Cobalt 60	-0.006	U	0.026	0.10	0.045	04/27/05	04/27/05	5117412	
Europium 152	-0.11	U	0.12	0.41	0.17	04/27/05	04/27/05	5117412	
Lead 212	**0.342**		**0.054**	**0.11**	**0.052**	**04/27/05**	**04/27/05**	**5117412**	
Lead 214	**0.518**		**0.062**	**0.13**	**0.060**	**04/27/05**	**04/27/05**	**5117412**	
Mercury 203 U,R5	0.008	U	0.016	0.059	0.028	04/27/05	04/27/05	5117412	
Potassium 40	**9.42**		**0.99**	**0.94**	**0.39**	**04/27/05**	**04/27/05**	**5117412**	
Radium (226)	**6.24**		**0.75**	**1.1**	**0.50**	**04/27/05**	**04/27/05**	**5117412**	
Radium 228	**0.49**		**0.12**	**0.47**	**0.22**	**04/27/05**	**04/27/05**	**5117412**	
Radium 223 (assumes ε	0.12 U,R5	U	0.17	0.61	0.29	04/27/05	04/27/05	5117412	
Radium 224 U,R5	0.97	U	0.53	1.5	0.71	04/27/05	04/27/05	5117412	
Ruthenium 106	-0.03	U	0.16	0.59	0.26	04/27/05	04/27/05	5117412	
Sodium 22	0.045	U	0.025	0.11	0.050	04/27/05	04/27/05	5117412	
Strontium 85	-0.093	U	0.028	0.080	0.038	04/27/05	04/27/05	5117412	
Thallium 208	**0.128**		**0.034**	**0.072**	**0.032**	**04/27/05**	**04/27/05**	**5117412**	
Thorium 227 U,R5	0.11	U	0.11	0.35	0.16	04/27/05	04/27/05	5117412	
Thorium 231 U,R5	0.28	U	0.19	0.66	0.32	04/27/05	04/27/05	5117412	
Thorium 234	**5.05**		**0.51**	**1.0**	**0.48**	**04/27/05**	**04/27/05**	**5117412**	
Tin 113 U,R5	-0.015	U	0.023	0.079	0.036	04/27/05	04/27/05	5117412	
Uranium 235	0.412	U	0.050	0.43	0.21	04/27/05	04/27/05	5117412	
Yttrium 88	0.029	U	0.027	0.12	0.052	04/27/05	04/27/05	5117412	
Iso PLUTONIUM (LONG CT) DOE A-01-R MOD				pCi/g		A-01-R MOD			
Plutonium 238 U,R5	0.0064	U	0.0090	0.031	0.012	04/25/05	04/28/05	5115432	81
Plutonium 239/40	**0.367**		**0.044**	**0.024**	**0.008**	**04/25/05**	**04/28/05**	**5115432**	**81**
Iso URANIUM (LONG CT) DOE A-01-R MOD				pCi/g		A-01-R MOD			
Uranium 234	**9.09**		**0.48**	**0.03**	**0.009**	**04/25/05**	**04/28/05**	**5115433**	**71**
Uranium 235	**0.360**		**0.050**	**0.016**	**0.0**	**04/25/05**	**04/28/05**	**5115433**	**71**
Uranium 238	**7.16**		**0.38**	**0.01**	**0.0**	**04/25/05**	**04/28/05**	**5115433**	**71**
Iso AMERICIUM (LONG CT) HAS & DOE MOD				pCi/g		3006/RP-725			
Americium 241	**0.0190**		**0.0063**	**0.013**	**0.0047**	**04/25/05**	**04/29/05**	**5115429**	**82**

CP

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58844

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D220356-003
Work Order: G816L
Matrix: SOLID

Date Collected: 04/20/05 0000
Date Received: 04/22/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Nits by DOE RP-730 MOD				**pCi/g**		**RP-730 MOD**			
Americium 241 U, RS	0.021	U	0.025	0.089	0.042	04/27/05	04/27/05	5117412	
Bismuth 211 (assumes	**1.13**		**0.22**	**0.81**	**0.39**	**04/27/05**	**04/27/05**	**5117412**	
Bismuth 214	**0.409**		**0.087**	**0.31**	**0.15**	**04/27/05**	**04/27/05**	**5117412**	
Cadmium 109 U, RS	0.53	U	0.33	1.1	0.52	04/27/05	04/27/05	5117412	
Cerium 139	-0.019	U	0.013	0.041	0.019	04/27/05	04/27/05	5117412	
Cesium 134	0.004	U	0.017	0.059	0.026	04/27/05	04/27/05	5117412	
Cesium 137	0.125	U	0.030	0.13	0.060	04/27/05	04/27/05	5117412	
Cobalt 60	0.006	U	0.023	0.095	0.040	04/27/05	04/27/05	5117412	
Europium 152	-0.11	U	0.13	0.48	0.20	04/27/05	04/27/05	5117412	
Lead 212	**0.264**		**0.050**	**0.097**	**0.045**	**04/27/05**	**04/27/05**	**5117412**	
Lead 214	**0.427**		**0.062**	**0.16**	**0.072**	**04/27/05**	**04/27/05**	**5117412**	
Mercury 203 U, RS	-0.007	U	0.015	0.053	0.024	04/27/05	04/27/05	5117412	
Potassium 40	**6.54**		**0.97**	**1.0**	**0.45**	**04/27/05**	**04/27/05**	**5117412**	
Radium (226)	**1.95**		**0.48**	**0.94**	**0.43**	**04/27/05**	**04/27/05**	**5117412**	
Radium 228 U, RS	0.208	U	0.094	0.42	0.19	04/27/05	04/27/05	5117412	
Radium 223 (assumes e	0.31 U, RS	U	0.18	0.67	0.32	04/27/05	04/27/05	5117412	
Radium 224 U, RS	1.23	U	0.50	1.3	0.63	04/27/05	04/27/05	5117412	
Ruthenium 106	0.06	U	0.16	0.63	0.28	04/27/05	04/27/05	5117412	
Sodium 22	-0.015	U	0.026	0.094	0.040	04/27/05	04/27/05	5117412	
Strontium 85	-0.113	U	0.029	0.074	0.034	04/27/05	04/27/05	5117412	
Thallium 208	0.068	U	0.028	0.078	0.035	04/27/05	04/27/05	5117412	
Thorium 227	-0.22	U	0.12	0.31	0.14	04/27/05	04/27/05	5117412	
Thorium 231	0.39	U	0.16	0.61	0.29	04/27/05	04/27/05	5117412	
Thorium 234	0.81	U	0.32	1.2	0.59	04/27/05	04/27/05	5117412	
Tin 113	-0.003	U	0.018	0.068	0.030	04/27/05	04/27/05	5117412	
Uranium 235	0.129	U	0.032	0.35	0.17	04/27/05	04/27/05	5117412	
Yttrium 88	-0.001	U	0.020	0.088	0.033	04/27/05	04/27/05	5117412	
Iso PLUTONIUM (LONG CT) DOE A-01-R MOD				**pCi/g**		**A-01-R MOD**			
Plutonium 238 U, RS	0.0073	U	0.0055	0.016	0.0057	04/25/05	04/29/05	5115432	77
Plutonium 239/40	**0.137**		**0.019**	**0.007**	**0.0**	**04/25/05**	**04/29/05**	**5115432**	**77**
Iso URANIUM (LONG CT) DOE A-01-R MOD				**pCi/g**		**A-01-R MOD**			
Uranium 234	**1.19**		**0.073**	**0.013**	**0.004**	**04/25/05**	**04/28/05**	**5115433**	**104**
Uranium 235	**0.045**		**0.013**	**0.009**	**0.0**	**04/25/05**	**04/28/05**	**5115433**	**104**
Uranium 238	**0.807**		**0.056**	**0.013**	**0.004**	**04/25/05**	**04/28/05**	**5115433**	**104**
Iso AMERICIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3006/RP-725**			
Americium 241	**0.0292**		**0.0072**	**0.010**	**0.0032**	**04/25/05**	**04/29/05**	**5115429**	**72**

CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58845

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D220356-004
Work Order: G816P
Matrix: SOLID

Date Collected: 04/20/05 0000
Date Received: 04/22/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				pCi/g		RP-730 MOD			
Americium 241 U,RS	0.004	U	0.022	0.075	0.035	04/27/05	04/27/05	5117412	
Bismuth 211 (assumes	**0.99**		**0.16**	**0.58**	**0.28**	**04/27/05**	**04/27/05**	**5117412**	
Bismuth 214	**0.377**		**0.066**	**0.23**	**0.11**	**04/27/05**	**04/27/05**	**5117412**	
Cadmium 109 U,RS	0.43	U	0.23	0.83	0.40	04/27/05	04/27/05	5117412	
Cerium 139	-0.0008	U	0.010	0.036	0.017	04/27/05	04/27/05	5117412	
Cesium 134	-0.030	U	0.021	0.057	0.026	04/27/05	04/27/05	5117412	
Cesium 137	**0.138**		**0.031**	**0.060**	**0.027**	**04/27/05**	**04/27/05**	**5117412**	
Cobalt 60 U,RS	0.021	U	0.021	0.088	0.039	04/27/05	04/27/05	5117412	
Europium 152 U,RS	-0.027	U	0.078	0.30	0.12	04/27/05	04/27/05	5117412	
Lead 212	**0.231**		**0.039**	**0.099**	**0.047**	**04/27/05**	**04/27/05**	**5117412**	
Lead 214	**0.358**		**0.047**	**0.10**	**0.048**	**04/27/05**	**04/27/05**	**5117412**	
Mercury 203 U,RS	0.005	U	0.012	0.042	0.020	04/27/05	04/27/05	5117412	
Potassium 40	**7.19**		**0.87**	**0.55**	**0.22**	**04/27/05**	**04/27/05**	**5117412**	
Radium (226)	**1.35**		**0.38**	**0.83**	**0.39**	**04/27/05**	**04/27/05**	**5117412**	
Radium 228 U,RS	0.229	U	0.076	0.32	0.15	04/27/05	04/27/05	5117412	
Radium 223 (assumes e	0.14 U,RS	U	0.13	0.48	0.23	04/27/05	04/27/05	5117412	
Radium 224 U,R11	**2.19**		**0.74**	**1.4**	**0.68**	**04/27/05**	**04/27/05**	**5117412**	
Ruthenium 106 U,RS	-0.07	U	0.15	0.55	0.25	04/27/05	04/27/05	5117412	
Sodium 22 U,RS	-0.0007	U	0.022	0.085	0.037	04/27/05	04/27/05	5117412	
Strontium 85 U,RS	-0.028	U	0.019	0.064	0.030	04/27/05	04/27/05	5117412	
Thallium 208 U,R11	**0.080**		**0.029**	**0.063**	**0.029**	**04/27/05**	**04/27/05**	**5117412**	
Thorium 227 U,RS	0.07	U	0.10	0.32	0.15	04/27/05	04/27/05	5117412	
Thorium 231	0.15	U	0.12	0.44	0.21	04/27/05	04/27/05	5117412	
Thorium 234	0.64	U	0.15	0.67	0.32	04/27/05	04/27/05	5117412	
Tin 113	0.016	U	0.016	0.062	0.029	04/27/05	04/27/05	5117412	
Uranium 235	0.089	U	0.025	0.28	0.13	04/27/05	04/27/05	5117412	
Yttrium 88	-0.018	U	0.020	0.073	0.029	04/27/05	04/27/05	5117412	
Iso PLUTONIUM (LONG CT) DOE A-01-R MOD				pCi/g		A-01-R MOD			
Plutonium 238 U,RS	0.0024	U	0.0093	0.034	0.014	04/25/05	04/28/05	5115432	77
Plutonium 239/40	**0.143**		**0.026**	**0.027**	**0.010**	**04/25/05**	**04/28/05**	**5115432**	**77**
Iso URANIUM (LONG CT) DOE A-01-R MOD				pCi/g		A-01-R MOD			
Uranium 234	**1.70**		**0.11**	**0.02**	**0.006**	**04/25/05**	**04/28/05**	**5115433**	**88**
Uranium 235	**0.081**		**0.020**	**0.025**	**0.008**	**04/25/05**	**04/28/05**	**5115433**	**88**
Uranium 238	**1.36**		**0.090**	**0.017**	**0.004**	**04/25/05**	**04/28/05**	**5115433**	**88**
Iso AMERICIUM (LONG CT) HAS & DOE MOD				pCi/g		3006/RP-725			
Americium 241 U,R11	**0.0236**		**0.0090**	**0.023**	**0.0099**	**04/25/05**	**04/29/05**	**5115429**	**68**

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58846

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D220356-005
Work Order: G816T
Matrix: SOLID

Date Collected: 04/20/05 0000
Date Received: 04/22/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				pCi/g		RP-730 MOD			
Americium 241 U,RS	0.027	U	0.027	0.085	0.040	04/27/05	04/27/05	5117412	
Bismuth 211 (assumes	**1.12**		**0.17**	**0.64**	**0.31**	**04/27/05**	**04/27/05**	**5117412**	
Bismuth 214	**0.306**		**0.067**	**0.24**	**0.12**	**04/27/05**	**04/27/05**	**5117412**	
Cadmium 109 U,RS	0.07	U	0.27	0.91	0.44	04/27/05	04/27/05	5117412	
Cerium 139	0.003	U	0.011	0.039	0.019	04/27/05	04/27/05	5117412	
Cesium 134	-0.003	U	0.019	0.063	0.029	04/27/05	04/27/05	5117412	
Cesium 137	0.044	U	0.022	0.092	0.042	04/27/05	04/27/05	5117412	
Cobalt 60	-0.009	U	0.016	0.064	0.025	04/27/05	04/27/05	5117412	
Europium 152	0.03	U	0.10	0.42	0.18	04/27/05	04/27/05	5117412	
Lead 212	**0.166**		**0.038**	**0.14**	**0.070**	**04/27/05**	**04/27/05**	**5117412**	
Lead 214	**0.357**		**0.050**	**0.097**	**0.044**	**04/27/05**	**04/27/05**	**5117412**	
Mercury 203 U,RS	0.012	U	0.013	0.049	0.023	04/27/05	04/27/05	5117412	
Potassium 40	**5.99**		**0.70**	**0.64**	**0.25**	**04/27/05**	**04/27/05**	**5117412**	
Radium (226)	**2.06**		**0.51**	**0.84**	**0.40**	**04/27/05**	**04/27/05**	**5117412**	
Radium 228	**0.411**		**0.088**	**0.39**	**0.18**	**04/27/05**	**04/27/05**	**5117412**	
Radium 223 (assumes e	0.26 U,RS	U	0.15	0.57	0.27	04/27/05	04/27/05	5117412	
Radium 224 U,RS	-0.61	U	0.46	1.4	0.66	04/27/05	04/27/05	5117412	
Ruthenium 106	-0.27	U	0.16	0.50	0.22	04/27/05	04/27/05	5117412	
Sodium 22	-0.015	U	0.020	0.074	0.031	04/27/05	04/27/05	5117412	
Strontium 85	-0.066	U	0.024	0.070	0.032	04/27/05	04/27/05	5117412	
Thallium 208	**0.090**		**0.021**	**0.053**	**0.023**	**04/27/05**	**04/27/05**	**5117412**	
Thorium 227 U,RS	-0.75	U	0.14	0.35	0.17	04/27/05	04/27/05	5117412	
Thorium 231 U,RS	-0.22	U	0.15	0.47	0.23	04/27/05	04/27/05	5117412	
Thorium 234	**1.34**		**0.25**	**0.74**	**0.38**	**04/27/05**	**04/27/05**	**5117412**	
Tin 113 U,RS	-0.003	U	0.017	0.060	0.027	04/27/05	04/27/05	5117412	
Uranium 235	0.136	U	0.034	0.33	0.16	04/27/05	04/27/05	5117412	
Yttrium 88	0.0004	U	0.014	0.065	0.023	04/27/05	04/27/05	5117412	
Iso PLUTONIUM (LONG CT) DOE A-01-R MOD				pCi/g		A-01-R MOD			
Plutonium 238 U,RS	-0.0012	U	-0.0097	0.037	0.016	04/25/05	04/28/05	5115432	76
Plutonium 239/40	**0.296**		**0.037**	**0.018**	**0.005**	**04/25/05**	**04/28/05**	**5115432**	**76**
Iso URANIUM (LONG CT) DOE A-01-R MOD				pCi/g		A-01-R MOD			
Uranium 234	**3.29**		**0.18**	**0.02**	**0.005**	**04/25/05**	**04/29/05**	**5115433**	**82**
Uranium 235	**0.157**		**0.029**	**0.031**	**0.011**	**04/25/05**	**04/29/05**	**5115433**	**82**
Uranium 238	**2.77**		**0.16**	**0.02**	**0.005**	**04/25/05**	**04/29/05**	**5115433**	**82**
Iso AMERICIUM (LONG CT) HAS & DOE MOD				pCi/g		3006/RP-725			
Americium 241 U,RS	0.0108	U	0.0052	0.013	0.0048	04/25/05	04/29/05	5115429	77

UD

DATA VALIDATION COVER SHEET (Example)

SECTION I.

REQUEST NUMBER: 31655 COST CODE: _____

VALIDATION DATE: _____

LAB NAME: STL LAB CODE: _____

VALIDATOR: _____ ORGANIZATION: _____

ANALYTICAL SUITE: ___ VOLATILES ___ HIGH EXPLOSIVES

___ SEMIVOLATILES ___ INORGANICS

___ PESTICIDES/AROCLORS ___ RADIOCHEMISTRY

OTHER (describe) _____

SECTION II. COMPLETENESS CHECKLIST

Item	Present? (Y/N/NA)	Item	Present? (Y/N/NA)
1. COC form(s)		2. Case Narrative	
3. Sample Results		4. Sample Chromatograms	
5. Standard Chromatograms		6. Quantitation Reports	
7. QC Forms			

Identify any samples in the assigned Request Number that are missing:

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

Comments: Include information about requests to the laboratory and agreed upon date of resolution and lab contact: (Attach additional comment sheets as necessary)

_____

_____

_____

Signature/1st validation: _____ Date/1st validation: _____

Signature/2nd validation: _____ Date/2nd validation: _____

SEVERN TRENT STL

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RECD MAY 2005

ANALYTICAL REPORT

REVISED

PROJECT NO. 31655

Los Alamos Non-Rad

Lot #: F5D220356

Joylene Valdez or Keith Greene

Los Alamos National Laboratory
SMO TA-00 Bldg 1237
DP: 03U; MS: 707
Los Alamos, NM 87545

SEVERN TRENT LABORATORIES, INC.

Ed Kao
Project Manager

May 21, 2005

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MARCH 2005 ALPHAVISION	720
CLIENT CHAIN OF CUSTODY	933
TOTAL NUMBER OF PAGES IN PACKAGE	**938**

Revised
Case Narrative
LOT NUMBER: **F5D220356**
LANL Request Number: **3165S**

This report was revised to include gross alpha/beta results.

This report contains the analytical results for the five samples received under chain of custody number by STL St. Louis on April 22, 2005. These samples are associated with your Los Alamos Non-Rad project.

All applicable quality control procedures met method-specified acceptance criteria except as noted on the following page.

This report is incomplete without the case narrative. All chemical analysis results are based upon dry weight correction as required per the statement of work. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances

Sample Receiving

Samples were received ambient. No problems were noted at the time of sample receipt.

Gamma Spec Method RP-730

QC Batch: 5117412
The Method Blank shows no contamination below the reporting limit.

The LCS is in control for spike compounds.

The Batch QC Duplicate was performed on F5D220356-001. The RPD/RER values are inside stated limits.

The gamma Radium-226 is reported from 186.10 keV. U-235 has an energy line at 185.72 keV (abn. 54%). The presence of U-235 may cause a high bias in the Ra-226 results.

Actinides by Method A-01-R

Amercium
QC Batch:5115429
The Method Blank shows no contamination below the reporting limit. Tracer recovery is within laboratory stated limits.

The LCS is in control for spike and tracer compounds.

The Batch QC Matrix Spike and Duplicate was performed on F5D220356-004. The Matrix Spike recoveries and Duplicate RPD values are inside stated limits. Tracer recoveries are in control for both the MS and Duplicate.

Plutonium
QC Batch: 5115432
The Method Blank shows no contamination below the reporting limit. Tracer recovery is within laboratory stated limits.

The LCS is in control for spike and tracer compounds.

The Batch QC Matrix Spike and Duplicate was performed on F5D220356-004. The Matrix Spike recoveries and Duplicate RPD values are inside stated limits. Tracer recoveries are in control for both the MS and Duplicate.

Uranium
QC Batch: 5115433
The Method Blank shows contamination below the reporting limit. Tracer recovery is within laboratory stated limits.

The LCS is in control for spike and tracer compounds.

The Batch QC Matrix Spike and Duplicate was performed on F5D220356-004. The Matrix Spike recoveries and Duplicate RPD values are inside stated limits. Tracer recoveries are in control for both the MS and Duplicate.

I certify that this data is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the signature on the front page, has authorized release of the data contained in this hardcopy.

METHODS SUMMARY

F5D220356

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Cs-137 & Hits By Gamma GAMMA SPEC MULTI ISO CAL	DOE RP-730 MOD	
Gross Alpha/Beta by GFPC	SW846 9310 MOD	
Isotopic AM by Alpha Spec Alpha Spectroscopy	NAS/DOE 3006/RP	
Isotopic Plutonium by Alpha Spectroscopy	EML A-01-R MOD	
Isotopic Uranium by Alpha Spectroscopy	EML A-01-R MOD	

References:

DOE "DOE METHODS FOR EVALUATING ENVIRONMENTAL AND WASTE MANAGEMENT SAMPLES" OCTOBER 1994 US DEPARTMENT OF ENERGY

EML "ENVIRONMENTAL MEASUREMENTS LABORATORY PROCEDURES MANUAL" HASL-300 28TH EDITION, VOLUME I and II DEPARTMENT OF ENERGY

NAS/DOE NATIONAL ACADEMY OF SCIENCES. "DOE METHODS FOR EVALUATING ENVIRONMENTL AND WASTE MANGEMENT SAMPLE" OCTOBER 1994 US DEPARTMENT OF ENERGY.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

F5D220356

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
G8159	001	RE73-05-58842	04/20/05	
G816E	002	RE73-05-58843	04/20/05	
G816L	003	RE73-05-58844	04/20/05	
G816P	004	RE73-05-58845	04/20/05	
G816T	005	RE73-05-58846	04/20/05	

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58842

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D220356-001
Work Order: G8159
Matrix: SOLID

Date Collected: 04/20/05 0000
Date Received: 04/22/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				pCi/g		RP-730 MOD			
Americium 241	0.035	U	0.032	0.10	0.049	04/27/05	04/27/05	5117412	
Bismuth 211 (assumes	**1.09**		**0.20**	**0.72**	**0.35**	**04/27/05**	**04/27/05**	**5117412**	
Bismuth 214	**0.264**		**0.056**	**0.24**	**0.12**	**04/27/05**	**04/27/05**	**5117412**	
Cadmium 109	-0.24	U	0.33	1.1	0.51	04/27/05	04/27/05	5117412	
Cerium 139	0.013	U	0.013	0.042	0.020	04/27/05	04/27/05	5117412	
Cesium 134	-0.028	U	0.020	0.062	0.028	04/27/05	04/27/05	5117412	
Cesium 137	0.029	U	0.024	0.095	0.043	04/27/05	04/27/05	5117412	
Cobalt 60	0.002	U	0.023	0.093	0.039	04/27/05	04/27/05	5117412	
Europium 152	0.032	U	0.078	0.36	0.14	04/27/05	04/27/05	5117412	
Lead 212	**0.253**		**0.048**	**0.12**	**0.059**	**04/27/05**	**04/27/05**	**5117412**	
Lead 214	**0.456**		**0.060**	**0.13**	**0.058**	**04/27/05**	**04/27/05**	**5117412**	
Mercury 203	0.002	U	0.016	0.057	0.027	04/27/05	04/27/05	5117412	
Potassium 40	**6.80**		**0.89**	**0.69**	**0.27**	**04/27/05**	**04/27/05**	**5117412**	
Radium (226)	**5.15**		**0.63**	**1.0**	**0.48**	**04/27/05**	**04/27/05**	**5117412**	
Radium 228	0.41	U	0.11	0.46	0.22	04/27/05	04/27/05	5117412	
Radium 223 (assumes ε	0.07	U	0.17	0.63	0.30	04/27/05	04/27/05	5117412	
Radium 224	**2.44**		**0.83**	**1.6**	**0.79**	**04/27/05**	**04/27/05**	**5117412**	
Ruthenium 106	-0.10	U	0.16	0.56	0.25	04/27/05	04/27/05	5117412	
Sodium 22	0.036	U	0.026	0.11	0.050	04/27/05	04/27/05	5117412	
Strontium 85	-0.028	U	0.023	0.075	0.035	04/27/05	04/27/05	5117412	
Thallium 208	0.048	U	0.024	0.097	0.045	04/27/05	04/27/05	5117412	
Thorium 227	0.15	U	0.12	0.40	0.19	04/27/05	04/27/05	5117412	
Thorium 231	0.39	U	0.17	0.63	0.30	04/27/05	04/27/05	5117412	
Thorium 234	**2.80**		**0.34**	**0.98**	**0.47**	**04/27/05**	**04/27/05**	**5117412**	
Tin 113	-0.025	U	0.019	0.065	0.029	04/27/05	04/27/05	5117412	
Uranium 235	0.340	U	0.042	0.41	0.20	04/27/05	04/27/05	5117412	
Yttrium 88	0.008	U	0.017	0.084	0.032	04/27/05	04/27/05	5117412	
Iso PLUTONIUM (LONG CT) DOE A-01-R MOD				pCi/g		A-01-R MOD			
Plutonium 238	-0.0056	U	-0.0088	0.034	0.016	04/25/05	04/28/05	5115432	90
Plutonium 239/40	**1.07**		**0.075**	**0.020**	**0.007**	**04/25/05**	**04/28/05**	**5115432**	**90**
Iso URANIUM (LONG CT) DOE A-01-R MOD				pCi/g		A-01-R MOD			
Uranium 234	**8.98**		**0.38**	**0.02**	**0.07**	**04/25/05**	**05/03/05**	**5115433**	**60**
Uranium 235	**0.360**		**0.040**	**0.021**	**0.006**	**04/25/05**	**05/03/05**	**5115433**	**60**
Uranium 238	**7.14**		**0.31**	**0.008**	**0.0**	**04/25/05**	**05/03/05**	**5115433**	**60**
Iso AMERICIUM (LONG CT) HASL & DOE MOD				pCi/g		3006/RP-725			
Americium 241	**0.0358**		**0.0086**	**0.015**	**0.0058**	**04/25/05**	**04/29/05**	**5115429**	**73**
GROSS A/B BY GFPC SW846 9310 MOD				pCi/g		9310 MOD			
Gross Alpha	**19.8**		**1.6**	**1.7**	**0.8**	**05/19/05**	**05/19/05**	**5139111**	
Gross Beta	**20.0**		**1.2**	**1.7**	**0.8**	**05/19/05**	**05/19/05**	**5139111**	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC
U Result is less than the sample detection limit.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58842 DUP

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D220356-001X
Work Order: G8159
Matrix: SOLID

Date Collected: 04/20/05 0000
Date Received: 04/22/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				**pCi/g**		**RP-730 MOD**			
Americium 241	0.066	U	0.035	0.12	0.056	04/27/05	04/27/05	5117412	
Bismuth 211 (assumes	**1.18**		**0.21**	**0.79**	**0.38**	**04/27/05**	**04/27/05**	**5117412**	
Bismuth 214	**0.424**		**0.078**	**0.30**	**0.14**	**04/27/05**	**04/27/05**	**5117412**	
Cadmium 109	0.58	U	0.32	1.2	0.57	04/27/05	04/27/05	5117412	
Cerium 139	-0.016	U	0.013	0.041	0.019	04/27/05	04/27/05	5117412	
Cesium 134	0.014	U	0.016	0.064	0.028	04/27/05	04/27/05	5117412	
Cesium 137	0.040	U	0.023	0.096	0.043	04/27/05	04/27/05	5117412	
Cobalt 60	-0.007	U	0.015	0.060	0.022	04/27/05	04/27/05	5117412	
Europium 152	-0.137	U	0.083	0.24	0.078	04/27/05	04/27/05	5117412	
Lead 212	**0.256**		**0.060**	**0.11**	**0.053**	**04/27/05**	**04/27/05**	**5117412**	
Lead 214	**0.425**		**0.069**	**0.26**	**0.13**	**04/27/05**	**04/27/05**	**5117412**	
Mercury 203	-0.028	U	0.016	0.049	0.022	04/27/05	04/27/05	5117412	
Potassium 40	**6.50**		**0.89**	**0.75**	**0.29**	**04/27/05**	**04/27/05**	**5117412**	
Radium (226)	**4.02**		**0.63**	**2.2**	**1.1**	**04/27/05**	**04/27/05**	**5117412**	
Radium 228	0.28	U	0.10	0.44	0.20	04/27/05	04/27/05	5117412	
Radium 223 (assumes ∈	0.20	U	0.18	0.65	0.31	04/27/05	04/27/05	5117412	
Radium 224	-0.002	U	0.42	1.3	0.61	04/27/05	04/27/05	5117412	
Ruthenium 106	-0.05	U	0.16	0.60	0.26	04/27/05	04/27/05	5117412	
Sodium 22	0.006	U	0.021	0.088	0.036	04/27/05	04/27/05	5117412	
Strontium 85	-0.067	U	0.024	0.068	0.031	04/27/05	04/27/05	5117412	
Thallium 208	**0.188**		**0.042**	**0.079**	**0.035**	**04/27/05**	**04/27/05**	**5117412**	
Thorium 227	-0.05	U	0.13	0.38	0.18	04/27/05	04/27/05	5117412	
Thorium 231	**0.91**		**0.20**	**0.76**	**0.37**	**04/27/05**	**04/27/05**	**5117412**	
Thorium 234	**2.72**		**0.41**	**1.1**	**0.52**	**04/27/05**	**04/27/05**	**5117412**	
Tin 113	0.007	U	0.022	0.083	0.038	04/27/05	04/27/05	5117412	
Uranium 235	0.273	U	0.039	0.34	0.16	04/27/05	04/27/05	5117412	
Yttrium 88	-0.010	U	0.026	0.10	0.040	04/27/05	04/27/05	5117412	
GROSS A/B BY GFPC SW846 9310 MOD				**pCi/g**		**9310 MOD**			
Gross Alpha	**23.6**		**1.8**	**1.9**	**0.9**	**05/19/05**	**05/19/05**	**5139111**	
Gross Beta	**22.5**		**1.4**	**1.9**	**0.9**	**05/19/05**	**05/19/05**	**5139111**	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC
U Result is less than the sample detection limit.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58843

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D220356-002
Work Order: G816E
Matrix: SOLID

Date Collected: 04/20/05 0000
Date Received: 04/22/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				**pCi/g**		**RP-730 MOD**			
Americium 241	0.047	U	0.033	0.11	0.053	04/27/05	04/27/05	5117412	
Bismuth 211 (assumes	**1.28**		**0.21**	**0.76**	**0.37**	**04/27/05**	**04/27/05**	**5117412**	
Bismuth 214	**0.376**		**0.082**	**0.30**	**0.14**	**04/27/05**	**04/27/05**	**5117412**	
Cadmium 109	-0.69	U	0.33	1.1	0.51	04/27/05	04/27/05	5117412	
Cerium 139	-0.010	U	0.013	0.043	0.020	04/27/05	04/27/05	5117412	
Cesium 134	0.01	U	0.021	0.074	0.034	04/27/05	04/27/05	5117412	
Cesium 137	0.053	U	0.033	0.13	0.063	04/27/05	04/27/05	5117412	
Cobalt 60	-0.006	U	0.026	0.10	0.045	04/27/05	04/27/05	5117412	
Europium 152	-0.11	U	0.12	0.41	0.17	04/27/05	04/27/05	5117412	
Lead 212	**0.342**		**0.054**	**0.11**	**0.052**	**04/27/05**	**04/27/05**	**5117412**	
Lead 214	**0.518**		**0.062**	**0.13**	**0.060**	**04/27/05**	**04/27/05**	**5117412**	
Mercury 203	0.008	U	0.016	0.059	0.028	04/27/05	04/27/05	5117412	
Potassium 40	**9.42**		**0.99**	**0.94**	**0.39**	**04/27/05**	**04/27/05**	**5117412**	
Radium (226)	**6.24**		**0.75**	**1.1**	**0.50**	**04/27/05**	**04/27/05**	**5117412**	
Radium 228	**0.49**		**0.12**	**0.47**	**0.22**	**04/27/05**	**04/27/05**	**5117412**	
Radium 223 (assumes e	0.12	U	0.17	0.61	0.29	04/27/05	04/27/05	5117412	
Radium 224	0.97	U	0.53	1.5	0.71	04/27/05	04/27/05	5117412	
Ruthenium 106	-0.03	U	0.16	0.59	0.26	04/27/05	04/27/05	5117412	
Sodium 22	0.045	U	0.025	0.11	0.050	04/27/05	04/27/05	5117412	
Strontium 85	-0.093	U	0.028	0.080	0.038	04/27/05	04/27/05	5117412	
Thallium 208	**0.128**		**0.034**	**0.072**	**0.032**	**04/27/05**	**04/27/05**	**5117412**	
Thorium 227	0.11	U	0.11	0.35	0.16	04/27/05	04/27/05	5117412	
Thorium 231	0.28	U	0.19	0.66	0.32	04/27/05	04/27/05	5117412	
Thorium 234	**5.05**		**0.51**	**1.0**	**0.48**	**04/27/05**	**04/27/05**	**5117412**	
Tin 113	-0.015	U	0.023	0.079	0.036	04/27/05	04/27/05	5117412	
Uranium 235	0.412	U	0.050	0.43	0.21	04/27/05	04/27/05	5117412	
Yttrium 88	0.029	U	0.027	0.12	0.052	04/27/05	04/27/05	5117412	
Iso PLUTONIUM (LONG CT) DOE A-01-R MOD				**pCi/g**		**A-01-R MOD**			
Plutonium 238	0.0064	U	0.0090	0.031	0.012	04/25/05	04/28/05	5115432	81
Plutonium 239/40	**0.367**		**0.044**	**0.024**	**0.008**	**04/25/05**	**04/28/05**	**5115432**	**81**
Iso URANIUM (LONG CT) DOE A-01-R MOD				**pCi/g**		**A-01-R MOD**			
Uranium 234	**9.09**		**0.48**	**0.03**	**0.009**	**04/25/05**	**04/28/05**	**5115433**	**71**
Uranium 235	**0.360**		**0.050**	**0.016**	**0.0**	**04/25/05**	**04/28/05**	**5115433**	**71**
Uranium 238	**7.16**		**0.38**	**0.01**	**0.0**	**04/25/05**	**04/28/05**	**5115433**	**71**
Iso AMERICIUM (LONG CT) MAS & DOE MOD				**pCi/g**		**3006/RP-725**			
Americium 241	**0.0190**		**0.0063**	**0.013**	**0.0047**	**04/25/05**	**04/29/05**	**5115429**	**82**
GROSS A/B BY GFPC SW846 9310 MOD				**pCi/g**		**9310 MOD**			
Gross Alpha	**11.2**		**0.996**	**1.4**	**0.64**	**05/19/05**	**05/19/05**	**5139111**	
Gross Beta	**13.9**		**0.92**	**1.5**	**0.75**	**05/19/05**	**05/19/05**	**5139111**	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC
U Result is less than the sample detection limit.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58844

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D220356-003
Work Order: G816L
Matrix: SOLID

Date Collected: 04/20/05 0000
Date Received: 04/22/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				**pCi/g**		**RP-730 MOD**			
Americium 241	0.021	U	0.025	0.089	0.042	04/27/05	04/27/05	5117412	
Bismuth 211 (assumes	**1.13**		**0.22**	**0.81**	**0.39**	**04/27/05**	**04/27/05**	**5117412**	
Bismuth 214	**0.409**		**0.087**	**0.31**	**0.15**	**04/27/05**	**04/27/05**	**5117412**	
Cadmium 109	0.53	U	0.33	1.1	0.52	04/27/05	04/27/05	5117412	
Cerium 139	-0.019	U	0.013	0.041	0.019	04/27/05	04/27/05	5117412	
Cesium 134	0.004	U	0.017	0.059	0.026	04/27/05	04/27/05	5117412	
Cesium 137	0.125	U	0.030	0.13	0.060	04/27/05	04/27/05	5117412	
Cobalt 60	0.006	U	0.023	0.095	0.040	04/27/05	04/27/05	5117412	
Europium 152	-0.11	U	0.13	0.48	0.20	04/27/05	04/27/05	5117412	
Lead 212	**0.264**		**0.050**	**0.097**	**0.045**	**04/27/05**	**04/27/05**	**5117412**	
Lead 214	**0.427**		**0.062**	**0.16**	**0.072**	**04/27/05**	**04/27/05**	**5117412**	
Mercury 203	-0.007	U	0.015	0.053	0.024	04/27/05	04/27/05	5117412	
Potassium 40	**6.54**		**0.97**	**1.0**	**0.45**	**04/27/05**	**04/27/05**	**5117412**	
Radium (226)	**1.95**		**0.48**	**0.94**	**0.43**	**04/27/05**	**04/27/05**	**5117412**	
Radium 228	0.208	U	0.094	0.42	0.19	04/27/05	04/27/05	5117412	
Radium 223 (assumes ε	0.31	U	0.18	0.67	0.32	04/27/05	04/27/05	5117412	
Radium 224	1.23	U	0.50	1.3	0.63	04/27/05	04/27/05	5117412	
Ruthenium 106	0.06	U	0.16	0.63	0.28	04/27/05	04/27/05	5117412	
Sodium 22	-0.015	U	0.026	0.094	0.040	04/27/05	04/27/05	5117412	
Strontium 85	-0.113	U	0.029	0.074	0.034	04/27/05	04/27/05	5117412	
Thallium 208	0.068	U	0.028	0.078	0.035	04/27/05	04/27/05	5117412	
Thorium 227	-0.22	U	0.12	0.31	0.14	04/27/05	04/27/05	5117412	
Thorium 231	0.39	U	0.16	0.61	0.29	04/27/05	04/27/05	5117412	
Thorium 234	0.81	U	0.32	1.2	0.59	04/27/05	04/27/05	5117412	
Tin 113	-0.003	U	0.018	0.068	0.030	04/27/05	04/27/05	5117412	
Uranium 235	0.129	U	0.032	0.35	0.17	04/27/05	04/27/05	5117412	
Yttrium 88	-0.001	U	0.020	0.088	0.033	04/27/05	04/27/05	5117412	
Iso PLUTONIUM (LONG CT) DOE A-01-R MOD				**pCi/g**		**A-01-R MOD**			
Plutonium 238	0.0073	U	0.0055	0.016	0.0057	04/25/05	04/29/05	5115432	77
Plutonium 239/40	**0.137**		**0.019**	**0.007**	**0.0**	**04/25/05**	**04/29/05**	**5115432**	**77**
Iso URANIUM (LONG CT) DOE A-01-R MOD				**pCi/g**		**A-01-R MOD**			
Uranium 234	**1.19**		**0.073**	**0.013**	**0.004**	**04/25/05**	**04/28/05**	**5115433**	**104**
Uranium 235	**0.045**		**0.013**	**0.009**	**0.0**	**04/25/05**	**04/28/05**	**5115433**	**104**
Uranium 238	**0.807**		**0.056**	**0.013**	**0.004**	**04/25/05**	**04/28/05**	**5115433**	**104**
Iso AMERICIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3006/RP-725**			
Americium 241	**0.0292**		**0.0072**	**0.010**	**0.0032**	**04/25/05**	**04/29/05**	**5115429**	**72**
GROSS A/B BY GFPC SW846 9310 MOD				**pCi/g**		**9310 MOD**			
Gross Alpha	**2.95**		**0.65**	**1.8**	**0.83**	**05/19/05**	**05/19/05**	**5139111**	
Gross Beta	**2.48**		**0.46**	**1.4**	**0.68**	**05/19/05**	**05/19/05**	**5139111**	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC
U Result is less than the sample detection limit.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58845

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D220356-004
Work Order: G816P
Matrix: SOLID

Date Collected: 04/20/05 0000
Date Received: 04/22/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				**pCi/g**		**RP-730 MOD**			
Americium 241	0.004	U	0.022	0.075	0.035	04/27/05	04/27/05	5117412	
Bismuth 211 (assumes	**0.99**		**0.16**	**0.58**	**0.28**	**04/27/05**	**04/27/05**	**5117412**	
Bismuth 214	**0.377**		**0.066**	**0.23**	**0.11**	**04/27/05**	**04/27/05**	**5117412**	
Cadmium 109	0.43	U	0.23	0.83	0.40	04/27/05	04/27/05	5117412	
Cerium 139	-0.0008	U	0.010	0.036	0.017	04/27/05	04/27/05	5117412	
Cesium 134	-0.030	U	0.021	0.057	0.026	04/27/05	04/27/05	5117412	
Cesium 137	**0.138**		**0.031**	**0.060**	**0.027**	**04/27/05**	**04/27/05**	**5117412**	
Cobalt 60	0.021	U	0.021	0.088	0.039	04/27/05	04/27/05	5117412	
Europium 152	-0.027	U	0.078	0.30	0.12	04/27/05	04/27/05	5117412	
Lead 212	**0.231**		**0.039**	**0.099**	**0.047**	**04/27/05**	**04/27/05**	**5117412**	
Lead 214	**0.358**		**0.047**	**0.10**	**0.048**	**04/27/05**	**04/27/05**	**5117412**	
Mercury 203	0.005	U	0.012	0.042	0.020	04/27/05	04/27/05	5117412	
Potassium 40	**7.19**		**0.87**	**0.55**	**0.22**	**04/27/05**	**04/27/05**	**5117412**	
Radium (226)	**1.35**		**0.38**	**0.83**	**0.39**	**04/27/05**	**04/27/05**	**5117412**	
Radium 228	0.229	U	0.076	0.32	0.15	04/27/05	04/27/05	5117412	
Radium 223 (assumes ∈	0.14	U	0.13	0.48	0.23	04/27/05	04/27/05	5117412	
Radium 224	**2.19**		**0.74**	**1.4**	**0.68**	**04/27/05**	**04/27/05**	**5117412**	
Ruthenium 106	-0.07	U	0.15	0.55	0.25	04/27/05	04/27/05	5117412	
Sodium 22	-0.0007	U	0.022	0.085	0.037	04/27/05	04/27/05	5117412	
Strontium 85	-0.028	U	0.019	0.064	0.030	04/27/05	04/27/05	5117412	
Thallium 208	**0.080**		**0.029**	**0.063**	**0.029**	**04/27/05**	**04/27/05**	**5117412**	
Thorium 227	0.07	U	0.10	0.32	0.15	04/27/05	04/27/05	5117412	
Thorium 231	0.15	U	0.12	0.44	0.21	04/27/05	04/27/05	5117412	
Thorium 234	0.64	U	0.15	0.67	0.32	04/27/05	04/27/05	5117412	
Tin 113	0.016	U	0.016	0.062	0.029	04/27/05	04/27/05	5117412	
Uranium 235	0.089	U	0.025	0.28	0.13	04/27/05	04/27/05	5117412	
Yttrium 88	-0.018	U	0.020	0.073	0.029	04/27/05	04/27/05	5117412	
Iso PLUTONIUM (LONG CT) DOE A-01-R MOD				**pCi/g**		**A-01-R MOD**			
Plutonium 238	0.0024	U	0.0093	0.034	0.014	04/25/05	04/28/05	5115432	77
Plutonium 239/40	**0.143**		**0.026**	**0.027**	**0.010**	**04/25/05**	**04/28/05**	**5115432**	**77**
Iso URANIUM (LONG CT) DOE A-01-R MOD				**pCi/g**		**A-01-R MOD**			
Uranium 234	**1.70**		**0.11**	**0.02**	**0.006**	**04/25/05**	**04/28/05**	**5115433**	**88**
Uranium 235	**0.081**		**0.020**	**0.025**	**0.008**	**04/25/05**	**04/28/05**	**5115433**	**88**
Uranium 238	**1.36**		**0.090**	**0.017**	**0.004**	**04/25/05**	**04/28/05**	**5115433**	**88**
Iso AMERICIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3006/RP-725**			
Americium 241	**0.0236**		**0.0090**	**0.023**	**0.0099**	**04/25/05**	**04/29/05**	**5115429**	**68**
GROSS A/B BY GFPC SW846 9310 MOD				**pCi/g**		**9310 MOD**			
Gross Alpha	**3.09**		**0.57**	**1.5**	**0.70**	**05/19/05**	**05/19/05**	**5139111**	
Gross Beta	**9.78**		**0.83**	**1.9**	**0.94**	**05/19/05**	**05/19/05**	**5139111**	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC
U Result is less than the sample detection limit.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58845 DUP

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D220356-004X
Work Order: G816P
Matrix: SOLID

Date Collected: 04/20/05 0000
Date Received: 04/22/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Iso AMERICIUM (LONG CT) NAS & DOE MOD				**pCi/g**		**3006/RP-725**			
Americium 241	**0.053**		**0.011**	**0.015**	**0.006**	**04/25/05**	**04/29/05**	**5115429**	**72**
Iso PLUTONIUM (LONG CT) DOE A-01-R MOD				**pCi/g**		**A-01-R MOD**			
Plutonium 238	0.016	U	0.013	0.038	0.020	04/25/05	04/28/05	5115432	76
Plutonium 239/40	**0.173**		**0.030**	**0.025**	**0.008**	**04/25/05**	**04/28/05**	**5115432**	**76**
Iso URANIUM (LONG CT) DOE A-01-R MOD				**pCi/g**		**A-01-R MOD**			
Uranium 234	**1.66**		**0.11**	**0.04**	**0.02**	**04/25/05**	**04/28/05**	**5115433**	**77**
Uranium 235	**0.101**		**0.024**	**0.035**	**0.013**	**04/25/05**	**04/28/05**	**5115433**	**77**
Uranium 238	**1.31**		**0.093**	**0.032**	**0.018**	**04/25/05**	**04/28/05**	**5115433**	**77**

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC
U Result is less than the sample detection limit.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58846

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D220356-005
Work Order: G816T
Matrix: SOLID

Date Collected: 04/20/05 0000
Date Received: 04/22/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				**pCi/g**		**RP-730 MOD**			
Americium 241	0.027	U	0.027	0.085	0.040	04/27/05	04/27/05	5117412	
Bismuth 211 (assumes	**1.12**		**0.17**	**0.64**	**0.31**	**04/27/05**	**04/27/05**	**5117412**	
Bismuth 214	**0.306**		**0.067**	**0.24**	**0.12**	**04/27/05**	**04/27/05**	**5117412**	
Cadmium 109	0.07	U	0.27	0.91	0.44	04/27/05	04/27/05	5117412	
Cerium 139	0.003	U	0.011	0.039	0.019	04/27/05	04/27/05	5117412	
Cesium 134	-0.003	U	0.019	0.063	0.029	04/27/05	04/27/05	5117412	
Cesium 137	0.044	U	0.022	0.092	0.042	04/27/05	04/27/05	5117412	
Cobalt 60	-0.009	U	0.016	0.064	0.025	04/27/05	04/27/05	5117412	
Europium 152	0.03	U	0.10	0.42	0.18	04/27/05	04/27/05	5117412	
Lead 212	**0.166**		**0.038**	**0.14**	**0.070**	**04/27/05**	**04/27/05**	**5117412**	
Lead 214	**0.357**		**0.050**	**0.097**	**0.044**	**04/27/05**	**04/27/05**	**5117412**	
Mercury 203	0.012	U	0.013	0.049	0.023	04/27/05	04/27/05	5117412	
Potassium 40	**5.99**		**0.70**	**0.64**	**0.25**	**04/27/05**	**04/27/05**	**5117412**	
Radium (226)	**2.06**		**0.51**	**0.84**	**0.40**	**04/27/05**	**04/27/05**	**5117412**	
Radium 228	**0.411**		**0.088**	**0.39**	**0.18**	**04/27/05**	**04/27/05**	**5117412**	
Radium 223 (assumes e	0.26	U	0.15	0.57	0.27	04/27/05	04/27/05	5117412	
Radium 224	-0.61	U	0.46	1.4	0.66	04/27/05	04/27/05	5117412	
Ruthenium 106	-0.27	U	0.16	0.50	0.22	04/27/05	04/27/05	5117412	
Sodium 22	-0.015	U	0.020	0.074	0.031	04/27/05	04/27/05	5117412	
Strontium 85	-0.066	U	0.024	0.070	0.032	04/27/05	04/27/05	5117412	
Thallium 208	**0.090**		**0.021**	**0.053**	**0.023**	**04/27/05**	**04/27/05**	**5117412**	
Thorium 227	-0.75	U	0.14	0.35	0.17	04/27/05	04/27/05	5117412	
Thorium 231	-0.22	U	0.15	0.47	0.23	04/27/05	04/27/05	5117412	
Thorium 234	**1.34**		**0.25**	**0.74**	**0.35**	**04/27/05**	**04/27/05**	**5117412**	
Tin 113	-0.003	U	0.017	0.060	0.027	04/27/05	04/27/05	5117412	
Uranium 235	0.136	U	0.034	0.33	0.16	04/27/05	04/27/05	5117412	
Yttrium 88	0.0004	U	0.014	0.065	0.023	04/27/05	04/27/05	5117412	
Iso PLUTONIUM (LONG CT) DOE A-01-R MOD				**pCi/g**		**A-01-R MOD**			
Plutonium 238	-0.0012	U	-0.0097	0.037	0.016	04/25/05	04/28/05	5115432	76
Plutonium 239/40	**0.296**		**0.037**	**0.018**	**0.005**	**04/25/05**	**04/28/05**	**5115432**	**76**
Iso URANIUM (LONG CT) DOE A-01-R MOD				**pCi/g**		**A-01-R MOD**			
Uranium 234	**3.29**		**0.18**	**0.02**	**0.005**	**04/25/05**	**04/29/05**	**5115433**	**82**
Uranium 235	**0.157**		**0.029**	**0.031**	**0.011**	**04/25/05**	**04/29/05**	**5115433**	**82**
Uranium 238	**2.77**		**0.16**	**0.02**	**0.005**	**04/25/05**	**04/29/05**	**5115433**	**82**
Iso AMERICIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3006/RP-725**			
Americium 241	0.0108	U	0.0052	0.013	0.0048	04/25/05	04/29/05	5115429	77
GROSS A/B BY GFPC SW846 9310 MOD				**pCi/g**		**9310 MOD**			
Gross Alpha	**2.35**		**0.54**	**1.5**	**0.69**	**05/19/05**	**05/19/05**	**5139111**	
Gross Beta	**4.89**		**0.62**	**1.7**	**0.85**	**05/19/05**	**05/19/05**	**5139111**	

NOTE(S)

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MDC is determined by instrument performance only.
Bold results are greater than the MDC
U Result is less than the sample detection limit.

DUPLICATE EVALUATION REPORT

Severn Trent Laboratories - Radiochemistry

Client Lot ID: F5D220356 Date Sampled: 04/20/05
Matrix: SOLID Date Received: 04/22/05

Parameter	SAMPLE Result		Total Uncert. (1σ +/-)	% Yld	DUPLICATE Result		Total Uncert. (1 σ +/-)	% Yld	QC Sample ID Precision	
Gamma Cs-137 & Hits by DOE RP-730 MOD			**pCi/g**		**RP-730 MOD**				**F5D220356-001**	
Americium 241	0.035	U	0.032		0.066	U	0.035		0.2	RER
Bismuth 211 (assumes e	**1.09**		**0.20**		**1.18**		**0.21**		0.1	RER
Bismuth 214	**0.264**		**0.056**		**0.424**		**0.078**		0.6	RER
Cadmium 109	-0.24	U	0.33		0.58	U	0.32		0.6	RER
Cerium 139	0.013	U	0.013		-0.016	U	0.013		0.6	RER
Cesium 134	-0.028	U	0.020		0.014	U	0.016		0.6	RER
Cesium 137	0.029	U	0.024		0.040	U	0.023		0.1	RER
Cobalt 60	0.002	U	0.023		-0.007	U	0.015		0.1	RER
Europium 152	0.032	U	0.078		-0.137	U	0.083		0.5	RER
Lead 212	**0.253**		**0.048**		**0.256**		**0.060**		0.01	RER
Lead 214	**0.456**		**0.060**		**0.425**		**0.069**		0.1	RER
Mercury 203	0.002	U	0.016		-0.028	U	0.016		0.5	RER
Potassium 40	**6.80**		**0.89**		**6.50**		**0.89**		0.08	RER
Radium (226)	**5.15**		**0.63**		**4.02**		**0.63**		0.5	RER
Radium 223 (assumes eq	0.07	U	0.17		0.20	U	0.18		0.2	RER
Radium 224	**2.44**		**0.83**		-0.002	U	0.42		1	RER
Radium 228	0.41	U	0.11		0.28	U	0.10		0.3	RER
Ruthenium 106	-0.10	U	0.16		-0.05	U	0.16		0.09	RER
Sodium 22	0.036	U	0.026		0.006	U	0.021		0.3	RER
Strontium 85	-0.028	U	0.023		-0.067	U	0.024		0.4	RER
Thallium 208	0.048	U	0.024		**0.188**		**0.042**		1	RER
Thorium 227	0.15	U	0.12		-0.05	U	0.13		0.4	RER
Thorium 231	0.39	U	0.17		**0.91**		**0.20**		0.7	RER
Thorium 234	**2.80**		**0.34**		**2.72**		**0.41**		0.05	RER
Tin 113	-0.025	U	0.019		0.007	U	0.022		0.4	RER
Uranium 235	0.340	U	0.042		0.273	U	0.039		0.4	RER
Yttrium 88	0.008	U	0.017		-0.010	U	0.026		0.2	RER
	Batch #:		5117412 (Sample)		5117412 (Duplicate)					
GROSS A/B BY GFPC SW846 9310 MOD			**pCi/g**		**9310 MOD**				**F5D220356-001**	
Gross Alpha	**19.8**		**1.6**		**23.6**		**1.8**		0.6	RER
Gross Beta	**20.0**		**1.2**		**22.5**		**1.4**		0.5	RER
	Batch #:		5139111 (Sample)		5139111 (Duplicate)					
Iso AMERICIUM (LONG CT) HASL & DOE MOD			**pCi/g**		**3006/RP-725**				**F5D220356-004**	
Americium 241	**0.0236**		**0.0090**	68	**0.053**		**0.011**	72	0.8	RER
	Batch #:		5115429 (Sample)		5115429 (Duplicate)					
Iso PLUTONIUM (LONG CT) DOE A-01-R MOD			**pCi/g**		**A-01-R MOD**				**F5D220356-004**	
Plutonium 238	0.0024	U	0.0093	77	0.016	U	0.013	76	0.3	RER
Plutonium 239/40	**0.143**		**0.026**	77	**0.173**		**0.030**	76	0.3	RER
	Batch #:		5115432 (Sample)		5115432 (Duplicate)					

DUPLICATE EVALUATION REPORT

Severn Trent Laboratories - Radiochemistry

Client Lot ID: F5D220356
Matrix: SOLID
Date Sampled: 04/20/05
Date Received: 04/22/05

Parameter	SAMPLE Result	Total Uncert. (1σ +/-)	% Yld	DUPLICATE Result	Total Uncert. (1 σ +/-)	% Yld	QC Sample ID Precision	
Iso URANIUM (LONG CT) DOE A-01-R MOD		**pCi/g**		**A-01-R MOD**			**F5D220356-004**	
Uranium 234	**1.70**	**0.11**	88	**1.66**	**0.11**	77	0.09	RER
Uranium 235	**0.081**	**0.020**	88	**0.101**	**0.024**	77	0.2	RER
Uranium 238	**1.36**	**0.090**	88	**1.31**	**0.093**	77	0.1	RER
	Batch #:	5115433 (Sample)		5115433 (Duplicate)				

NOTE(S)

Data are incomplete without the case narrative.
Calculations are performed before rounding to avoid round-off error in calculated results

U Result is less than the sample detection limit.

MATRIX SPIKE REPORT

Severn Trent Laboratories - Radiochemistry

Client Lot Id: F5D220356
Matrix: SOLID

Date Sampled: 04/20/05
Date Received: 04/22/05

Parameter	Sample Result	Spike Amount	Spike Result	Total Uncert. (1σ +/-)	MDC	DLC	QC Sample ID Spike Yld.	%Rec	QC Control Limits
GROSS A/B BY GFPC SW846 9310 MOD			**pCi/g**	**9310 MOD**			**F5D220356-001**		
Gross Beta	20.0	212	183	9.4	2.3	1.1		77	(42 - 150)
Gross Alpha	19.8	93.7	121	6.6	2.1	1		108	(30 - 150)
	Batch #: 5139111			Analysis Date: 05/19/05					
Iso PLUTONIUM (LONG CT) DOE A-01-R MOD			**pCi/g**	**A-01-R MOD**			**F5D220356-004**		
Plutonium 238	0.0024	0.661	0.608	0.057	0.039	0.015	82	92	(50 - 150)
Plutonium 239/40	0.143	0.640	0.762	0.065	0.021	0.007	82	97	(50 - 150)
	Batch #: 5115432			Analysis Date: 04/28/05					
Iso URANIUM (LONG CT) DOE A-01-R MOD			**pCi/g**	**A-01-R MOD**			**F5D220356-004**		
Uranium 234	1.70	2.38	3.02	0.15	0.008	0.0	104	55	(50 - 150)
Uranium 238	1.36	2.38	2.70	0.14	0.02	0.006	104	56	(50 - 150)
	Batch #: 5115433			Analysis Date: 04/28/05					
Iso AMERICIUM (LONG CT) HASL & DOE MOD			**pCi/g**	**3006/RP-725**			**F5D220356-004**		
Americium 241	0.0236	1.71	1.73	0.081	0.015	0.006	83	100	(63 - 111)
	Batch #: 5115429			Analysis Date: 04/29/05					

NOTE(S)

Data are incomplete without the case narrative.

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

Severn Trent Laboratories - Radiochemistry

Client Lot ID: F5D220356
Matrix: SOLID

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Lab Sample ID Batch #	Yld %
Iso URANIUM (LONG CT) DOE A-01-R MOD			**pCi/g**		**A-01-R MOD**			**F5D250000-433B**	
Uranium 234	0.021	U	0.012	0.032	0.011	04/25/05	04/28/05	5115433	69
Uranium 235	-0.0019	U	-0.0071	0.030	0.0079	04/25/05	04/28/05	5115433	69
Uranium 238	0.0055	U	0.0086	0.031	0.011	04/25/05	04/28/05	5115433	69
Iso AMERICIUM (LONG CT) HAS & DOE MOD			**pCi/g**		**3006/RP-725**			**F5D250000-429B**	
Americium 241	-0.0014	U	-0.0043	0.022	0.0078	04/25/05	04/29/05	5115429	52
Iso PLUTONIUM (LONG CT) DOE A-01-R MOD			**pCi/g**		**A-01-R MOD**			**F5D250000-432B**	
Plutonium 238	0.0058	U	0.0082	0.028	0.011	04/25/05	04/28/05	5115432	91
Plutonium 239/40	-0.0012	U	-0.0044	0.018	0.0049	04/25/05	04/28/05	5115432	91
Gamma Cs-137 & Hits by DOE RP-730 MOD			**pCi/g**		**RP-730 MOD**			**F5D270000-412B**	
Americium 241	0.012	U	0.019	0.075	0.035	04/27/05	04/27/05	5117412	
Bismuth 211 (assumes	0.39	U	0.11	0.46	0.21	04/27/05	04/27/05	5117412	
Bismuth 214	0.028	U	0.040	0.15	0.069	04/27/05	04/27/05	5117412	
Cadmium 109	0.17	U	0.17	0.64	0.30	04/27/05	04/27/05	5117412	
Cerium 139	-0.0045	U	0.0080	0.029	0.013	04/27/05	04/27/05	5117412	
Cesium 134	0.019	U	0.015	0.063	0.028	04/27/05	04/27/05	5117412	
Cesium 137	0.041	U	0.023	0.10	0.047	04/27/05	04/27/05	5117412	
Cobalt 60	0.004	U	0.021	0.096	0.040	04/27/05	04/27/05	5117412	
Europium 152	0.059	U	0.099	0.44	0.18	04/27/05	04/27/05	5117412	
Lead 212	-0.009	U	0.024	0.087	0.040	04/27/05	04/27/05	5117412	
Lead 214	0.114	U	0.036	0.16	0.073	04/27/05	04/27/05	5117412	
Mercury 203	0.010	U	0.011	0.045	0.020	04/27/05	04/27/05	5117412	
Potassium 40	0.67	U	0.29	1.3	0.59	04/27/05	04/27/05	5117412	
Radium (226)	0.25	U	0.25	1.0	0.47	04/27/05	04/27/05	5117412	
Radium 228	-0.077	U	0.062	0.21	0.088	04/27/05	04/27/05	5117412	
Radium 223 (assumes ε	0.06	U	0.13	0.50	0.23	04/27/05	04/27/05	5117412	
Radium 224	-0.30	U	0.29	0.92	0.42	04/27/05	04/27/05	5117412	
Ruthenium 106	-0.16	U	0.14	0.47	0.20	04/27/05	04/27/05	5117412	
Sodium 22	-0.041	U	0.016	0.016	0.0	04/27/05	04/27/05	5117412	
Strontium 85	-0.081	U	0.024	0.066	0.030	04/27/05	04/27/05	5117412	
Thallium 208	0.01	U	0.020	0.076	0.034	04/27/05	04/27/05	5117412	
Thorium 227	-0.079	U	0.086	0.29	0.13	04/27/05	04/27/05	5117412	
Thorium 231	0.142	U	0.097	0.37	0.17	04/27/05	04/27/05	5117412	
Thorium 234	-0.02	U	0.20	0.80	0.38	04/27/05	04/27/05	5117412	
Tin 113	-0.017	U	0.018	0.062	0.027	04/27/05	04/27/05	5117412	
Uranium 235	-0.008	U	0.064	0.24	0.11	04/27/05	04/27/05	5117412	
Yttrium 88	0.032	U	0.020	0.11	0.043	04/27/05	04/27/05	5117412	
GROSS A/B BY GFPC SW846 9310 MOD			**pCi/g**		**9310 MOD**			**F5E190000-111B**	
Gross Alpha	0.014	U	0.026	0.090	0.042	05/19/05	05/19/05	5139111	
Gross Beta	-0.056	U	0.053	0.18	0.088	05/19/05	05/19/05	5139111	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined using instrument performance only
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Laboratory Control Sample Report

Severn Trent Laboratories - Radiochemistry

Client Lot ID: F5D220356
Matrix: SOLID

Parameter	Spike Amount	Result	Total Uncert. (1 σ+/-)	MDC	% Yld	% Rec	Lab Sample ID / QC Control Limits
Iso AMERICIUM (LONG CT) NAS & DOE MOD		**pCi/g**		**3006/RP-725**			**F5D250000-429C**
Americium 241	1.93	1.96	0.087	0.004	94	102	(80 - 120)
	Batch #:	5115429		**Analysis Date:**	04/29/05		
Iso PLUTONIUM (LONG CT) DOE A-01-R MOD		**pCi/g**		**A-01-R MOD**			**F5D250000-432C**
Plutonium 238	8.02	6.91	0.56	0.22	99	86	(73 - 125)
Plutonium 239/40	41.0	38.2	2.0	0.2	99	93	(72 - 120)
	Batch #:	5115432		**Analysis Date:**	04/28/05		
Iso URANIUM (LONG CT) DOE A-01-R MOD		**pCi/g**		**A-01-R MOD**			**F5D250000-433C**
Uranium 234	19.6	19.0	1.3	0.3	98	97	(67 - 117)
Uranium 238	19.6	16.3	1.2	0.3	98	83	(70 - 130)
	Batch #:	5115433		**Analysis Date:**	04/28/05		
Gamma Cs-137 & Hits by DOE RP-730 MOD		**pCi/g**		**RP-730 MOD**			**F5D270000-412C**
Americium 241	70.0	72.0	5.5	0.5		103	(80 - 120)
Cesium 137	29.5	31.1	2.3	0.3		105	(80 - 120)
Cobalt 60	42.4	44.2	2.7	0.4		104	(80 - 120)
	Batch #:	5117412		**Analysis Date:**	04/27/05		
GROSS A/B BY GFPC SW846 9310 MOD		**pCi/g**		**9310 MOD**			**F5E190000-111C**
Gross Beta	20.9	18.2	0.92	0.18		87	(73 - 115)
	Batch #:	5139111		**Analysis Date:**	05/19/05		
GROSS A/B BY GFPC SW846 9310 MOD		**pCi/g**		**9310 MOD**			**F5E190000-111C**
Gross Alpha	10.3	9.81	0.53	0.13		95	(52 - 150)
	Batch #:	5139111		**Analysis Date:**	05/19/05		

NOTE(S)

MDC is determined by instrument performance only
Calculations are performed before rounding to avoid round-off error in calculated results

SEVERN TRENT STL

Alpha Spectroscopy Americium

SEVERN TRENT STL

ALPHA SPECTROSCOPY

Data Reports
Results Reports
Channel by Channel Report

Calibration Data

Instrument Checks

Batch Summary Sheets
Run Logs
Yield Summary(ies)
Batch Yield Plot(s)

Raw Data
Prep Data Sheet(s)
QC Acceptance Sheet(s)
LCS Standard Sheet(s)
Tracer Standard Sheets

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:53:07AM 4/30/2005

Analyst: 60040

Sample

Sample Name: F5D220356-001
SampleType: Sample
WRKNO: G81591AE
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.3495g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115429
:
Description:

Client Name: Undefined
Client Contact:

Tracer

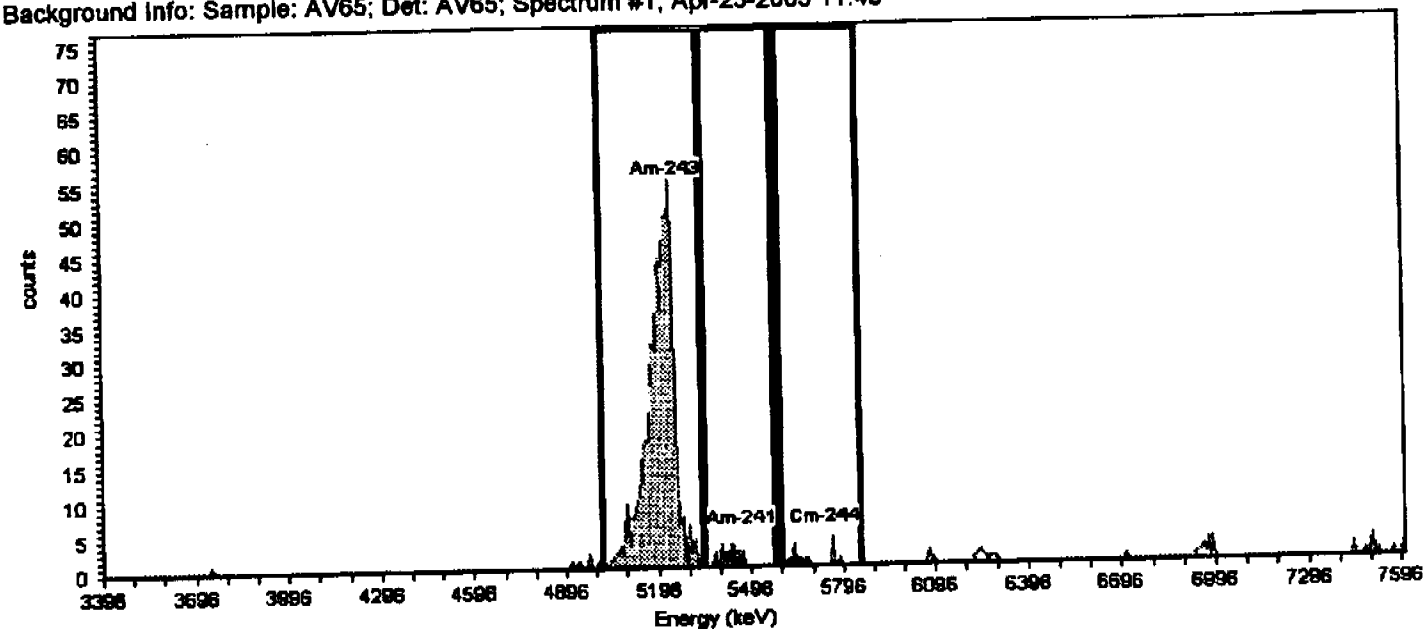
Tracer Name: Rad04-0040_Am243
Tracer Activity: 55.60 DPM/mL x (Vol.)0.10 mL = 5.56 DPM
Tracer Ref. Date: 6/17/1994 12:00:36PM

Tracer Nuclide: Am-243
Tracer Recovery: 73.14%

Acquisition

Detector: AV65
Serial Number:
Acquisition Start Date: 4/29/2005 10:51:23PM
Live Time: 600.00 min.
Real Time: 600.03 min.
Background Date: 4/25/2005 11:48:28AM
Background Info: Sample: AV65; Det: AV65; Spectrum #1; Apr-25-2005 11:48

Calibration Name: Apr2005_AV65
Calibration Date: 4/28/2005 12:22:27AM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.05% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = AmROI
Decay Correction: 4/29/2005 10:46:11PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Americium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Am-243	5232.950	5015.156	5341.847	84.700	100.0	660.00	0.7500	659	7.798E-001	3.069E-002	3.047E-003	1.047E-002
Am-241	5465.263	5349.106	5574.160	76.330	98.0	24.00	2.2500	22	3.585E-002	8.564E-003	5.380E-003	1.522E-002
Cm-244	5733.876	5595.940	5857.292	48.966	100.0	15.00	9.7500	5	8.480E-003	8.043E-003	1.098E-002	2.632E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:52:40AM 4/30/2005

Analyst: 60040

Sample

Sample Name: F5D220356-002
SampleType: Sample
WRKNO: G816E1AE
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.0493g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115429
:
Description:

Client Name: Undefined
Client Contact:

Tracer

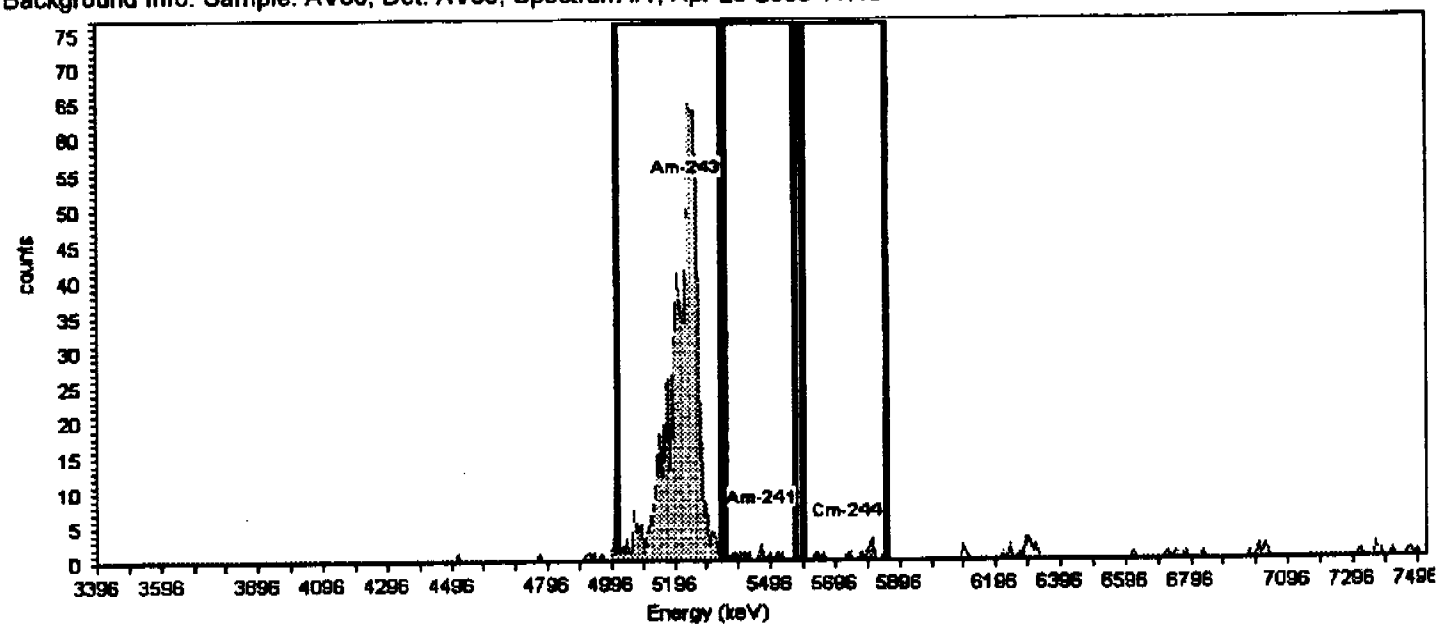
Tracer Name: Rad04-0040_Am243
Tracer Activity: 55.60 DPM/mL x (Vol.)0.10 mL = 5.56 DPM
Tracer Ref. Date: 6/17/1994 12:00:36PM

Tracer Nuclide: Am-243
Tracer Recovery: 82.30%

Acquisition

Detector: AV66
Serial Number:
Acquisition Start Date: 4/29/2005 10:51:24PM
Live Time: 600.00 min.
Real Time: 600.03 min.
Background Date: 4/25/2005 11:48:29AM
Background Info: Sample: AV66; Det: AV66; Spectrum #1; Apr-25-2005 11:48

Calibration Name: Apr2005_AV66
Calibration Date: 4/28/2005 12:22:36AM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.55% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = AmROI
Decay Correction: 4/29/2005 10:46:11PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Americium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Am-243	5232.950	5015.156	5341.847	83.948	100.0	757.00	1.5000	756	1.006E+000	3.701E-002	4.311E-003	1.300E-002
Am-241	5465.263	5349.106	5574.160	96.011	98.0	13.00	1.5000	12	1.896E-002	6.318E-003	4.395E-003	1.325E-002
Cm-244	5733.876	5595.940	5857.292	69.755	100.0	12.00	9.0000	3	4.848E-003	7.408E-003	1.055E-002	2.547E-002

SEVERN TRENT **STL**

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:52:34AM 4/30/2005

Analyst: 60040

Sample

Sample Name: F5D220356-003
SampleType: Sample
WRKNO: G816L1AE
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.2578g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115429
:
Description:

Client Name: Undefined
Client Contact:

Tracer

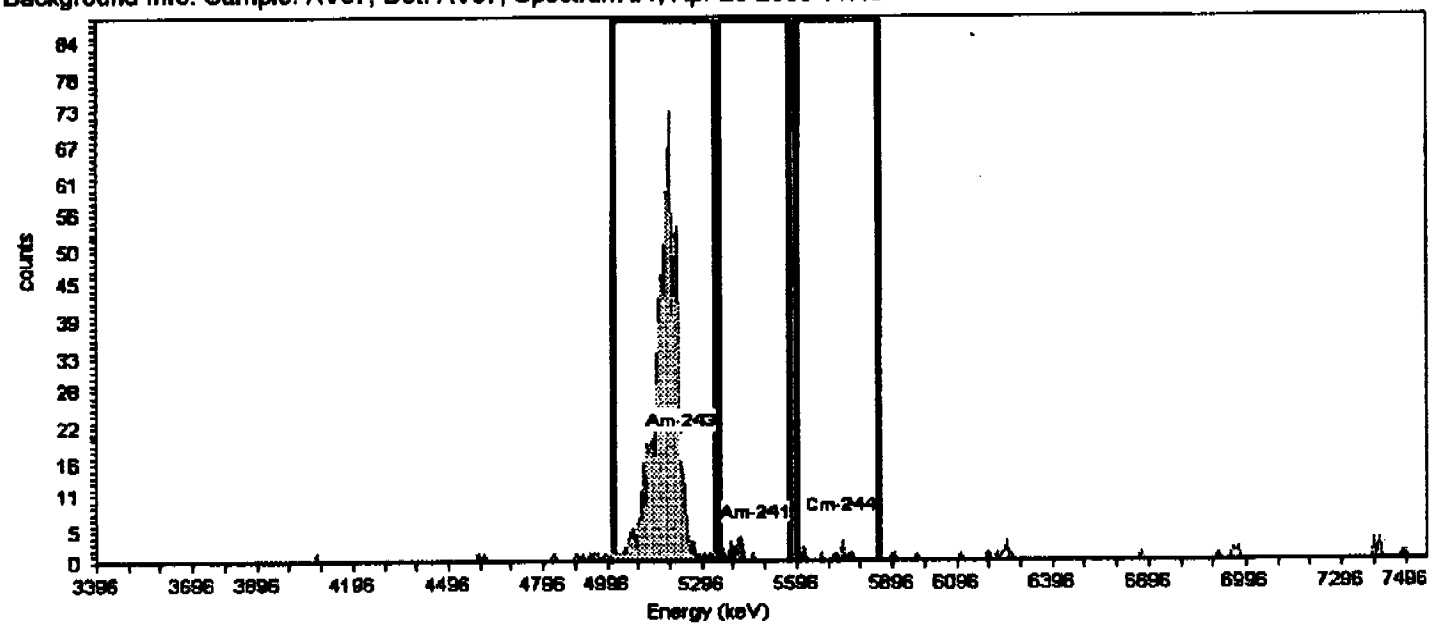
Tracer Name: Rad04-0040_Am243
Tracer Activity: 55.60 DPM/mL x (Vol.)0.10 mL = 5.56 DPM
Tracer Ref. Date: 6/17/1994 12:00:36PM

Tracer Nuclide: Am-243
Tracer Recovery: 72.32%

Acquisition

Detector: AV67
Serial Number:
Acquisition Start Date: 4/29/2005 10:51:25PM
Live Time: 600.00 min.
Real Time: 600.02 min.
Background Date: 4/25/2005 11:48:30AM
Background Info: Sample: AV67; Det: AV67; Spectrum #1; Apr-25-2005 11:48

Calibration Name: April2005_AV67
Calibration Date: 4/27/2005 9:54:01PM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 29.35% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = AmROI
Decay Correction: 4/29/2005 10:46:11PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Americium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Am-243	5232.950	5015.156	5341.847	72.602	100.0	706.00	0.7500	707	8.022E-001	3.043E-002	2.956E-003	1.016E-002
Am-241	5465.263	5349.106	5574.160	21.702	98.0	19.00	0.7500	18	2.918E-002	7.192E-003	3.013E-003	1.035E-002
Cm-244	5733.876	5595.940	5857.292	49.484	100.0	12.00	14.2500	-2	-3.525E-003	-8.029E-003	1.287E-002	2.998E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:52:44AM 4/30/2005

Analyst: 60040

Sample

Sample Name: F5D220356-004
SampleType: Sample
WRKNO: G816P1AE
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.2737g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115429
:
Description:

Client Name: Undefined
Client Contact:

Tracer

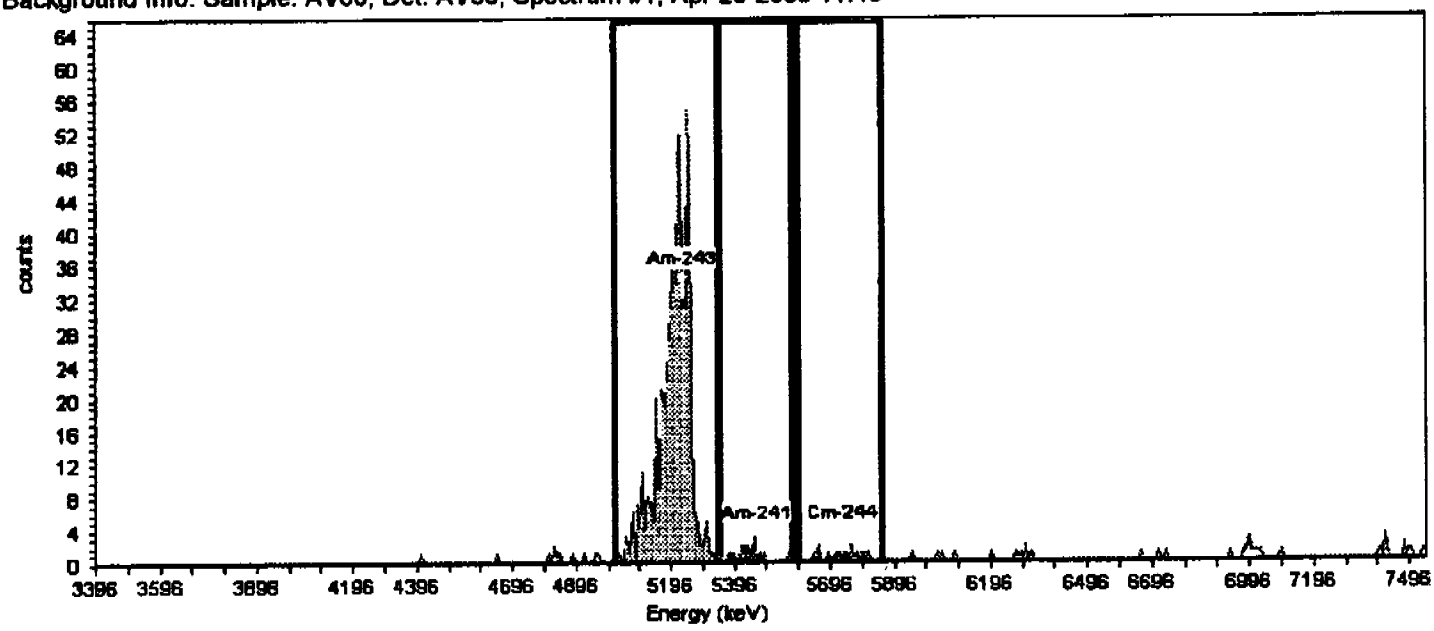
Tracer Name: Rad04-0040_Am243
Tracer Activity: 55.60 DPM/mL x (Vol.)0.10 mL = 5.56 DPM
Tracer Ref. Date: 6/17/1994 12:00:36PM

Tracer Nuclide: Am-243
Tracer Recovery: 67.97%

Acquisition

Detector: AV68
Serial Number:
Acquisition Start Date: 4/29/2005 10:51:27PM
Live Time: 600.00 min.
Real Time: 600.02 min.
Background Date: 4/25/2005 11:48:31AM
Background Info: Sample: AV68; Det: AV68; Spectrum #1; Apr-25-2005 11:48

Calibration Name: April2005_AV68
Calibration Date: 4/27/2005 9:54:10PM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.76% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = AmROI
Decay Correction: 4/29/2005 10:46:11PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Americium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Am-243	5232.950	5015.156	5341.847	79.000	100.0	607.00	0.7500	606	7.487E-001	3.070E-002	3.424E-003	1.176E-002
Am-241	5465.263	5349.106	5574.160	54.903	98.0	18.00	5.2500	13	2.361E-002	8.984E-003	9.235E-003	2.348E-002
Cm-244	5733.876	5595.940	5857.292	183.565	100.0	18.00	15.7500	2	4.084E-003	1.055E-002	1.568E-002	3.626E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:52:50AM 4/30/2005

Analyst: 60040

Sample

Sample Name: F5D220356-004X
SampleType: Sample
WRKNO: G816P1AF
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.0440g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115429
:
Description:

Client Name: Undefined
Client Contact:

Tracer

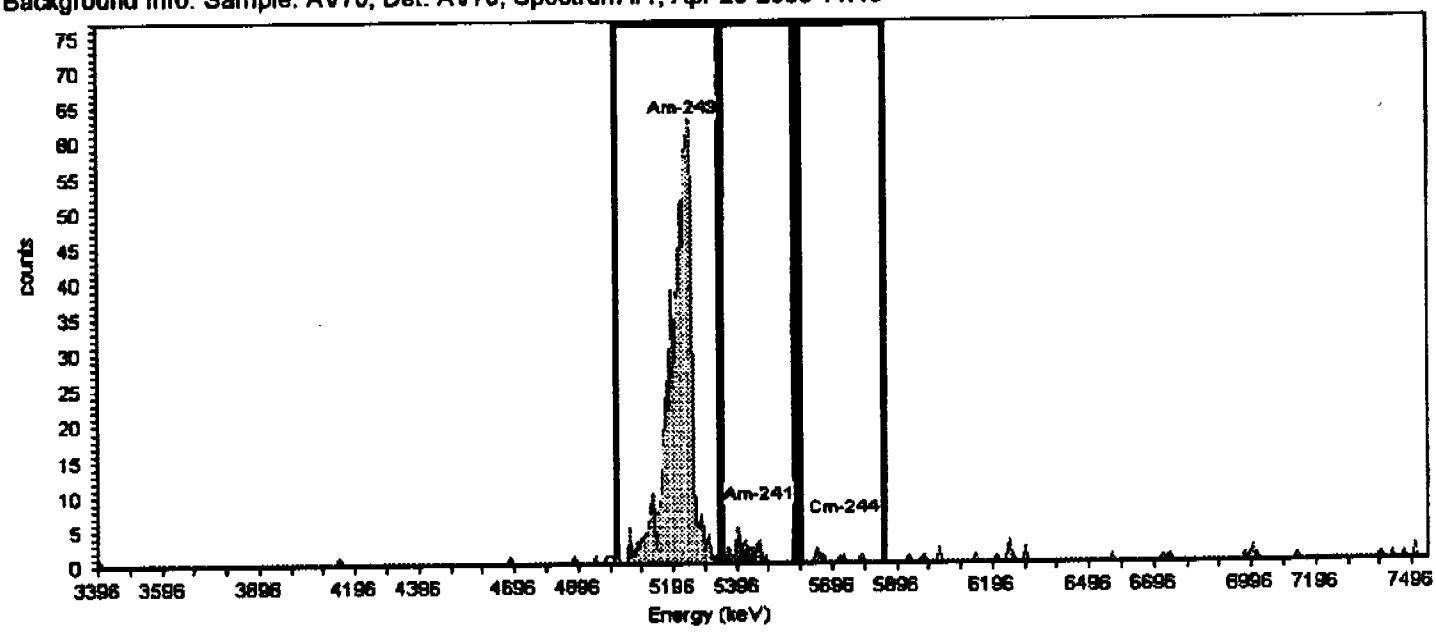
Tracer Name: Rad04-0040_Am243
Tracer Activity: 55.60 DPM/mL x (Vol.)0.10 mL = 5.56 DPM
Tracer Ref. Date: 6/17/1994 12:00:36PM

Tracer Nuclide: Am-243
Tracer Recovery: 71.66%

Acquisition

Detector: AV70
Serial Number:
Acquisition Start Date: 4/29/2005 10:51:30PM
Live Time: 600.00 min.
Real Time: 600.02 min.
Background Date: 4/25/2005 11:48:33AM
Background Info: Sample: AV70; Det: AV70; Spectrum #1; Apr-25-2005 11:48

Calibration Name: April2005_AV70
Calibration Date: 4/27/2005 9:54:26PM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.30% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = AmROI
Decay Correction: 4/29/2005 10:46:11PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Americium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Am-243	5232.950	5015.156	5341.847	73.243	100.0	652.00	0.0000	652	8.781E-001	3.470E-002	0.000E+000	5.085E-003
Am-241	5465.263	5349.106	5574.160	19.578	98.0	29.00	1.5000	28	5.268E-002	1.079E-002	5.106E-003	1.540E-002
Cm-244	5733.876	5595.940	5857.292	41.200	100.0	9.00	6.7500	2	4.224E-003	7.453E-003	1.061E-002	2.631E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:30:01AM 5/2/2005

Analyst: 60040

Sample

Sample Name: F5D220356-004S
SampleType: Sample
WRKNO: G816P1AG
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.2541g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115429
:
Description:

Client Name: Undefined
Client Contact:

Tracer

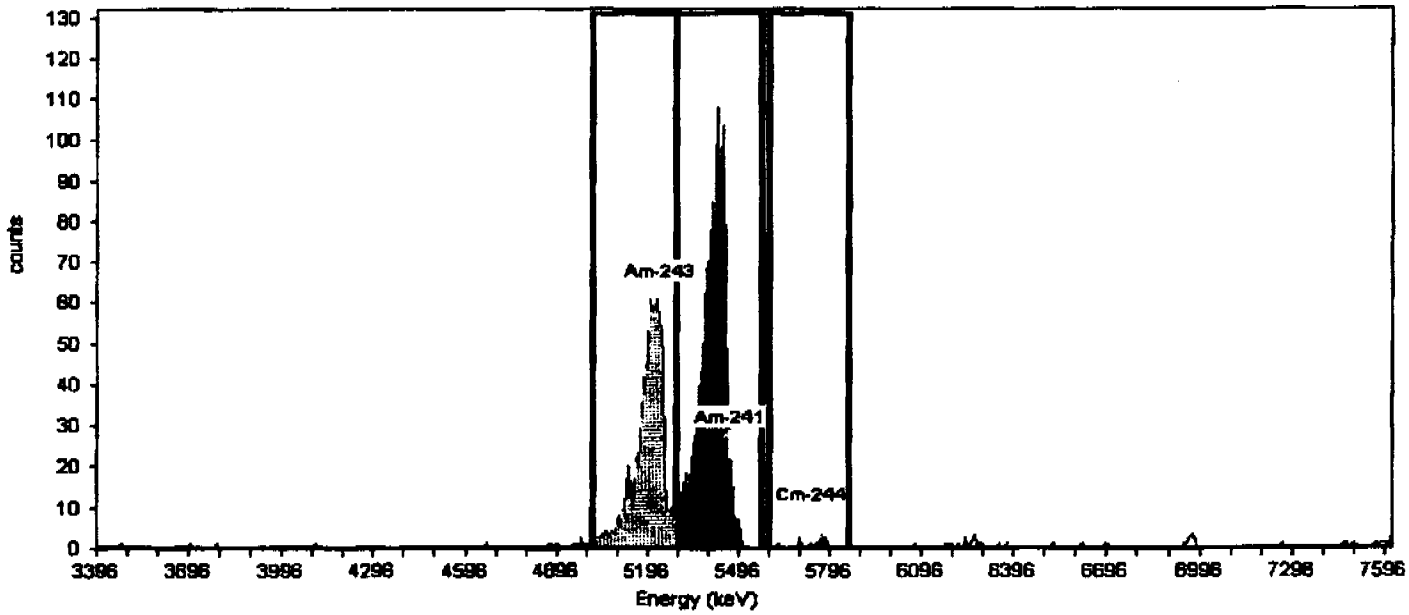
Tracer Name: Rad04-0040_Am243
Tracer Activity: 55.60 DPM/mL x (Vol.)0.10 mL = 5.56 DPM
Tracer Ref. Date: 6/17/1994 12:00:36PM

Tracer Nuclide: Am-243
Tracer Recovery: 83.34%

Acquisition

Detector: AV69
Serial Number:
Acquisition Start Date: 4/29/2005 10:51:28PM
Live Time: 600.00 min.
Real Time: 600.02 min.
Background Date: 4/25/2005 11:48:32AM
Background Info: Sample: AV69; Det: AV69; Spectrum #1; Apr-25-2005 11:48

Calibration Name: April2005_AV69
Calibration Date: 4/27/2005 9:54:18PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.98% +/- 0.30% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = AmROI
Decay Correction: 4/29/2005 10:46:11PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Americium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Am-243	5232.950	5015.156	5291.028	84.693	100.0	778.00	0.7500	777	9.260E-001	3.361E-002	2.694E-003	9.256E-003
Am-241	5465.263	5291.028	5574.160	81.763	98.0	1,189.00	3.0000	1,186	1.728E+000	8.093E-002	5.492E-003	1.493E-002
Cm-244	5733.876	5595.940	5857.292	44.134	100.0	14.00	17.2500	-3	-4.641E-003	-7.985E-003	1.291E-002	2.968E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 8:52:54AM 4/30/2005

Sample

Sample Name: F5D220356-005
SampleType: Sample
WRKNO: G816T1AE
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.2049g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115429
:
Description:

Client Name: Undefined
Client Contact:

Tracer

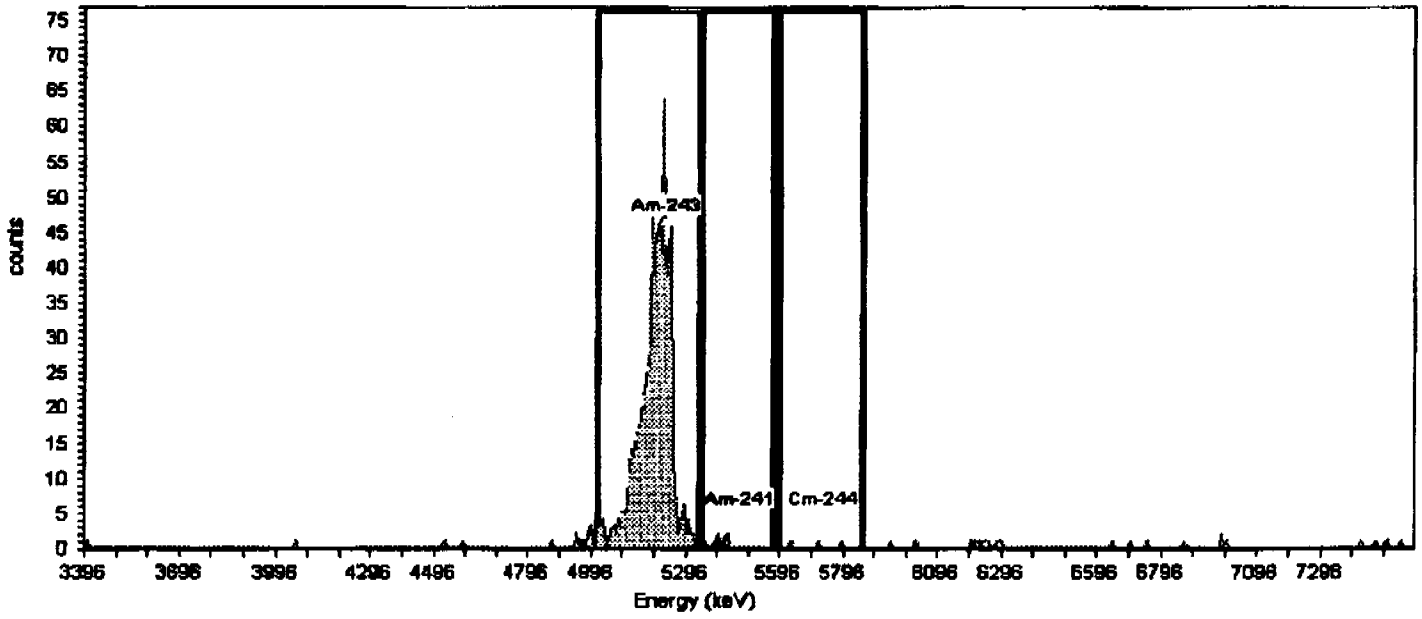
Tracer Name: Rad04-0040_Am243
Tracer Activity: 55.60 DPM/mL x (Vol.)0.10 mL = 5.56 DPM
Tracer Ref. Date: 6/17/1994 12:00:36PM

Tracer Nuclide: Am-243
Tracer Recovery: 76.76%

Acquisition

Detector: AV71
Serial Number:
Acquisition Start Date: 4/29/2005 10:51:31PM
Live Time: 600.00 min.
Real Time: 600.02 min.
Background Date: 4/28/2005 9:18:33AM
Background Info: Sample: AV71; Det: AV71; Spectrum #1; Apr-28-2005 09:18

Calibration Name: April2005_AV71a
Calibration Date: 4/27/2005 6:27:17PM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.10% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = AmROI
Decay Correction: 4/29/2005 10:46:11PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Americium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Am-243	5232.950	5015.156	5341.847	83.835	100.0	694.00	0.7500	693	8.720E-001	3.343E-002	3.088E-003	1.061E-002
Am-241	5465.263	5349.106	5574.160	17.624	96.0	8.00	1.5000	7	1.086E-002	5.165E-003	4.451E-003	1.342E-002
Cm-244	5733.676	5595.940	5857.292	36.587	100.0	3.00	4.5000	-2	-2.455E-003	-4.484E-003	7.556E-003	1.954E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:52:57AM 4/30/2005

Analyst: 60040

Sample

Sample Name: F5D250000-429B
SampleType: Blank
WRKNO: G85JH1AA
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.0000g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115429
:
Description:

Client Name: Undefined
Client Contact:

Tracer

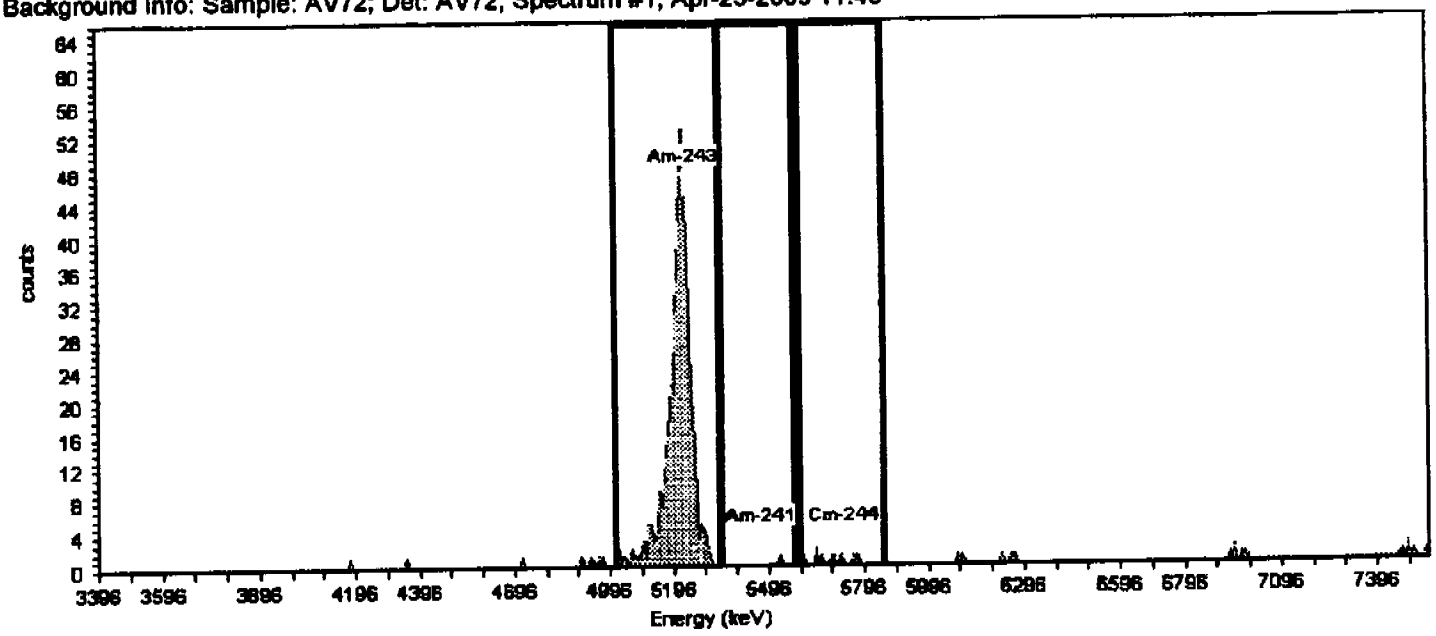
Tracer Name: Rad04-0040_Am243
Tracer Activity: 55.60 DPM/mL x (Vol.)0.10 mL = 5.56 DPM
Tracer Ref. Date: 6/17/1994 12:00:36PM

Tracer Nuclide: Am-243
Tracer Recovery: 51.76%

Acquisition

Detector: AV72
Serial Number:
Acquisition Start Date: 4/29/2005 10:51:33PM
Live Time: 600.00 min.
Real Time: 600.02 min.
Background Date: 4/25/2005 11:48:36AM
Background Info: Sample: AV72; Det: AV72; Spectrum #1; Apr-25-2005 11:48

Calibration Name: April2005_AV72
Calibration Date: 4/27/2005 6:27:31PM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.07% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = AmROI
Decay Correction: 4/29/2005 10:46:11PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Americium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Am-243	5232.950	5015.156	5341.847	62.457	100.0	467.00	0.0000	467	6.482E-001	3.022E-002	0.000E+000	7.256E-003
Am-241	5465.263	5349.106	5574.160	17.776	98.0	1.00	1.5000	-1	-1.367E-003	-4.322E-003	7.285E-003	2.197E-002
Cm-244	5733.876	5595.940	5857.292	76.295	100.0	10.00	4.5000	6	1.473E-002	1.022E-002	1.237E-002	3.198E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:53:01AM 4/30/2005

Analyst: 60040

Sample

Sample Name: F5D250000-429C
SampleType: Control
WRKNO: G85JH1AD
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.0000g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115429
:
Description:

Client Name: Undefined
Client Contact:

Tracer

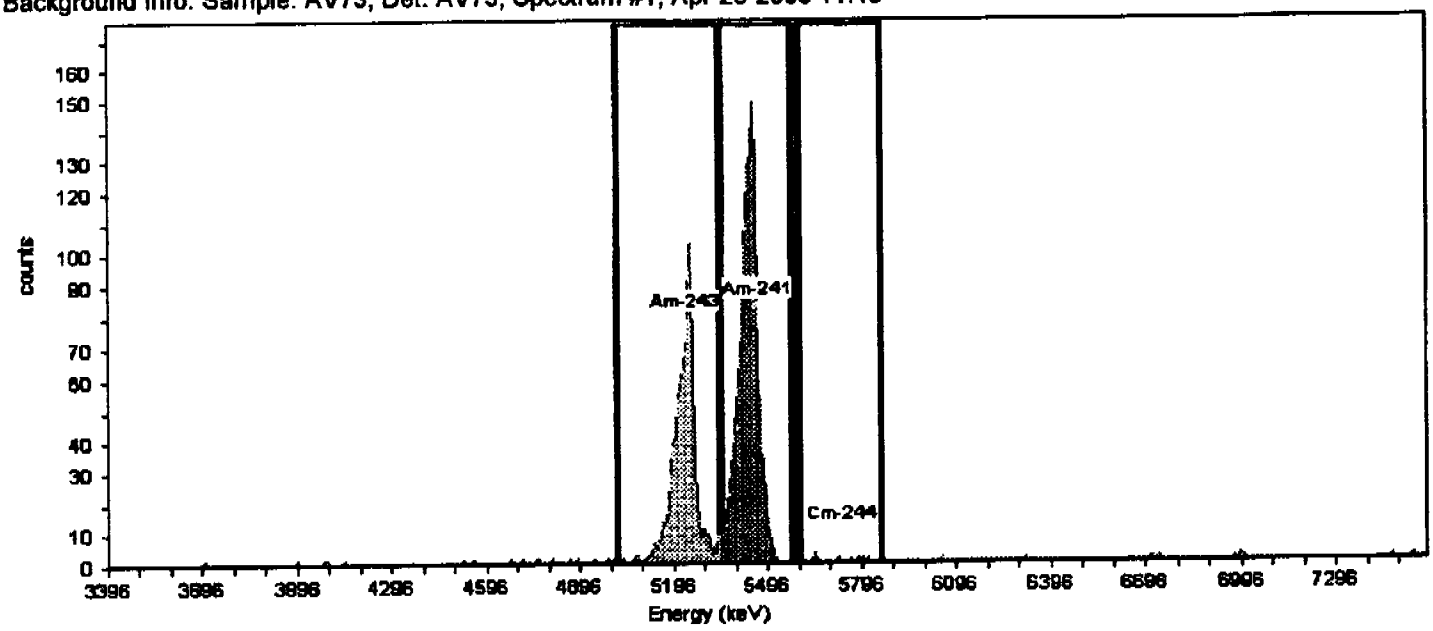
Tracer Name: Rad04-0040_Am243
Tracer Activity: 55.60 DPM/mL x (Vol.)0.10 mL = 5.56 DPM
Tracer Ref. Date: 6/17/1994 12:00:36PM

Tracer Nuclide: Am-243
Tracer Recovery: 94.10%

Acquisition

Detector: AV73
Serial Number:
Acquisition Start Date: 4/29/2005 10:51:34PM
Live Time: 600.00 min.
Real Time: 600.02 min.
Background Date: 4/25/2005 11:48:38AM
Background Info: Sample: AV73; Det: AV73; Spectrum #1; Apr-25-2005 11:48

Calibration Name: April2005_AV73a
Calibration Date: 4/27/2005 6:27:41PM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.32% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = AmROI
Decay Correction: 4/29/2005 10:46:11PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Americium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Am-243	5232.950	5015.156	5341.847	70.103	100.0	859.00	2.2500	857	1.178E+000	4.086E-002	4.771E-003	1.350E-002
Am-241	5465.263	5349.106	5574.160	55.413	98.0	1,313.00	0.0000	1,313	1.956E+000	8.734E-002	0.000E+000	4.032E-003
Cm-244	5733.876	5595.940	5857.292	41.266	100.0	9.00	4.5000	5	6.571E-003	5.370E-003	6.740E-003	1.743E-002

SEVERN TRENT **STL**

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:30:49AM 5/2/2005

Analyst: 60040

Sample

Sample Name: F5D250000-429L
SampleType: Control
WRKNO: G85JH1AE
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 0.2429g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115429
:
Description:

Client Name: Undefined
Client Contact:

Tracer

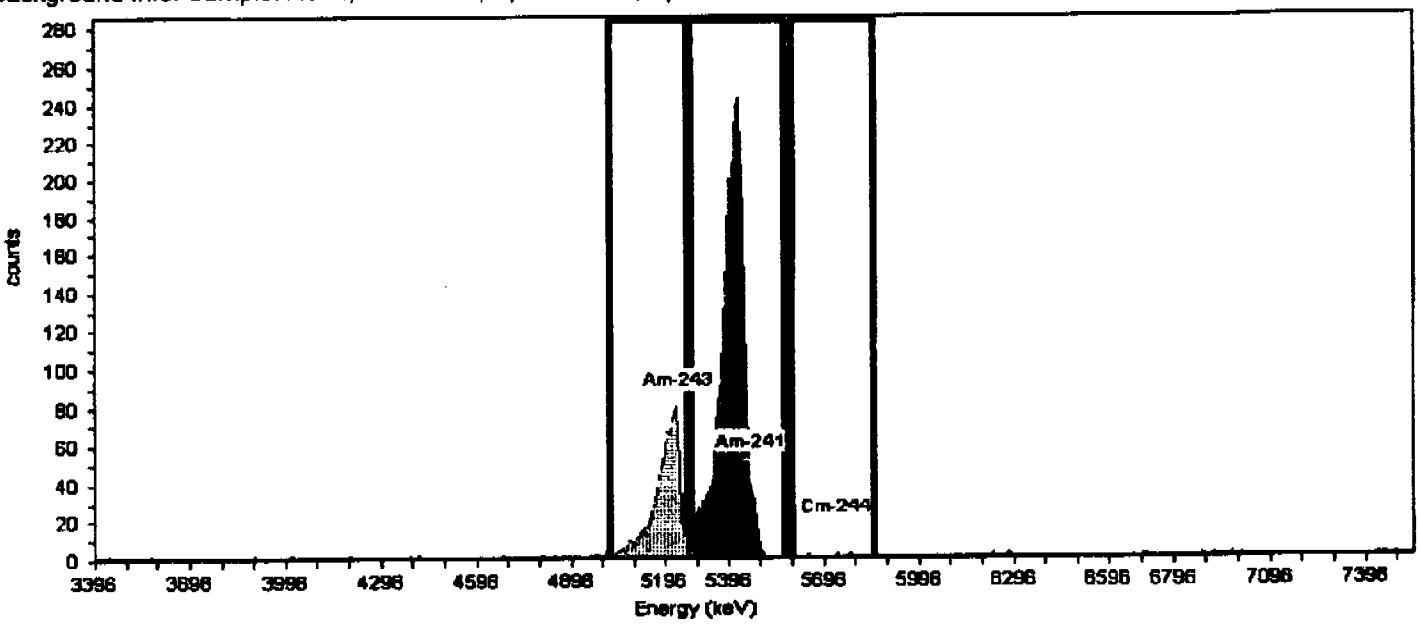
Tracer Name: Rad04-0040_Am243
Tracer Activity: 55.60 DPM/mL x (Vol.)0.10 mL = 5.56 DPM
Tracer Ref. Date: 6/17/1994 12:00:36PM

Tracer Nuclide: Am-243
Tracer Recovery: 95.64%

Acquisition

Detector: AV74
Serial Number:
Acquisition Start Date: 4/29/2005 10:51:36PM
Live Time: 600.00 min.
Real Time: 600.02 min.
Background Date: 4/25/2005 11:48:41AM
Background Info: Sample: AV74; Det: AV74; Spectrum #1; Apr-25-2005 11:48

Calibration Name: April2005_AV74a
Calibration Date: 4/27/2005 6:27:51PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.66% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = AmROI
Decay Correction: 4/29/2005 10:46:13PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Americium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Am-243	5232.950	5015.156	5261.989	24.331	100.0	883.00	1.5000	882	9.861E+000	3.364E-001	3.117E-002	9.400E-002
Am-241	5465.263	5276.509	5574.160	72.590	98.0	2,640.00	3.7500	2,636	3.143E+001	1.245E+000	5.025E-002	1.328E-001
Cm-244	5733.876	5595.940	5857.292	51.019	100.0	6.00	8.2500	-2	-2.629E-002	-4.412E-002	7.304E-002	1.777E-001

STL St. Louis

Isotopic Actinide DLC calculation when decay and ingrowth calculations are not required.

Sample ID	Isotope	Total Bkgd Cts	L/g Sample Volume	decimal det. eff.	minutes ct. length	decimal yield	decimal abundance	DLC
F5D220356-001	Am241	2.25	2.3495	0.2705	600	0.7314	0.98	0.0058
F5D220356-002	Am241	1.5	2.0493	0.2755	600	0.823	0.98	0.0047
F5D220356-003	Am241	0.75	2.2578	0.2935	600	0.7232	0.98	0.0032
F5D220356-004	Am241	5.25	2.2737	0.2676	600	0.6797	0.98	0.0099
F5D220356-004S	Am241	3	2.2541	0.2798	600	0.8334	0.98	0.0059
F5D220356-004X	Am241	1.5	2.044	0.273	600	0.7166	0.98	0.0055
F5D220356-005	Am241	1.5	2.2049	0.271	600	0.7676	0.98	0.0048
F5D250000-429B	Am241	1.5	2	0.2707	600	0.5176	0.98	0.0078
F5D250000-429C	Am241	0	2	0.2732	600	0.941	0.98	0.0000

Calculated by: 2R Date: 5/3/05

Reviewed by: [signature] Date: 5/4/05

SEVERN TRENT STL

DAILY PULSERS

LOT# F5D220356

STL ST. LOUIS

Daily Pulser Check - Severn Trent Lab

Pulser Date: 4/29/2005

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria	P/F	FWHM (keV) Result	FWHM (keV) Criteria	P/F	Pulser Center Result	Pulser Center Criteria	P/F	Energy (keV) Result	Energy (keV) Criteria	P/F
AV1	04/29/2005 9:10	7407	7218.7 +/-5%	Pass	14.0	5-50	Pass	227.0	229.0 +/-5%	Pass	5037	5051.1 +/-25%	Pass
AV2	04/29/2005 9:10	7405	7468.7 +/-5%	Pass	14.7	5-50	Pass	226.9	222.9 +/-5%	Pass	5036	5007.5 +/-25%	Pass
AV3	04/29/2005 9:10	7398	7484.9 +/-5%	Pass	13.2	5-50	Pass	229.1	225.9 +/-5%	Pass	5052	5028.8 +/-25%	Pass
AV4	04/29/2005 9:10	7394	7413.7 +/-5%	Pass	13.4	5-50	Pass	226.1	224.9 +/-5%	Pass	5030	5021.6 +/-25%	Pass
AV6	04/29/2005 9:10	7395	7476.7 +/-5%	Pass	13.9	5-50	Pass	227.0	224.0 +/-5%	Pass	5037	5015.3 +/-25%	Pass
AV7	04/29/2005 9:10	7352	7477.0 +/-5%	Pass	15.7	5-50	Pass	228.1	224.9 +/-5%	Pass	5045	5021.9 +/-25%	Pass
AV8	04/29/2005 9:10	7385	7327.4 +/-5%	Pass	13.3	5-50	Pass	228.1	228.0 +/-5%	Pass	5045	5044.6 +/-25%	Pass
AV9	04/29/2005 11:12	7616	7519.3 +/-5%	Pass	16.1	5-50	Pass	221.1	227.9 +/-5%	Pass	4994	5043.3 +/-25%	Pass
AV10	04/29/2005 11:12	7664	7749.6 +/-5%	Pass	14.0	5-50	Pass	219.0	226.1 +/-5%	Pass	4979	5030.3 +/-25%	Pass
AV11	04/29/2005 11:12	7656	7666.2 +/-5%	Pass	13.9	5-50	Pass	222.9	225.0 +/-5%	Pass	5007	5022.1 +/-25%	Pass
AV12	04/29/2005 11:12	7647	7588.7 +/-5%	Pass	14.7	5-50	Pass	229.1	230.0 +/-5%	Pass	5052	5058.4 +/-25%	Pass
AV13	04/29/2005 9:10	7554	7584.6 +/-5%	Pass	16.7	5-50	Pass	227.0	228.0 +/-5%	Pass	5037	5044.1 +/-25%	Pass
AV15	04/29/2005 9:10	7611	7770.5 +/-5%	Pass	14.0	5-50	Pass	227.0	226.9 +/-5%	Pass	5037	5036.6 +/-25%	Pass
AV16	04/29/2005 9:10	7373	7456.0 +/-5%	Pass	12.7	5-50	Pass	225.0	226.9 +/-5%	Pass	5022	5036.2 +/-25%	Pass
AV17	04/29/2005 9:10	7735	7619.1 +/-5%	Pass	14.1	5-50	Pass	225.9	229.9 +/-5%	Pass	5029	5058.3 +/-25%	Pass
AV18	04/29/2005 9:10	7732	7714.5 +/-5%	Pass	14.1	5-50	Pass	228.1	226.9 +/-5%	Pass	5045	5036.4 +/-25%	Pass
AV19	04/29/2005 9:10	7498	7269.8 +/-5%	Pass	12.8	5-50	Pass	221.0	227.7 +/-5%	Pass	4993	5041.9 +/-25%	Pass
AV20	04/29/2005 9:10	7731	7503.6 +/-5%	Pass	13.5	5-50	Pass	227.0	226.0 +/-5%	Pass	5037	5029.9 +/-25%	Pass
AV21	04/29/2005 9:10	7724	7550.9 +/-5%	Pass	13.1	5-50	Pass	225.0	226.0 +/-5%	Pass	5022	5029.6 +/-25%	Pass
AV22	04/29/2005 9:10	7715	7691.4 +/-5%	Pass	14.7	5-50	Pass	224.0	225.0 +/-5%	Pass	5015	5022.4 +/-25%	Pass
AV23	04/29/2005 9:10	7713	7665.3 +/-5%	Pass	14.6	5-50	Pass	229.9	229.8 +/-5%	Pass	5058	5057.0 +/-25%	Pass
AV24	04/29/2005 9:10	7718	7354.0 +/-5%	Pass	13.3	5-50	Pass	228.9	226.9 +/-5%	Pass	5051	5036.4 +/-25%	Pass
AV25	04/29/2005 9:10	5131	5122.1 +/-5%	Pass	14.4	5-50	Pass	223.9	224.0 +/-5%	Pass	5015	5015.1 +/-25%	Pass
AV26	04/29/2005 9:10	5078	5069.9 +/-5%	Pass	18.1	5-50	Pass	224.0	226.9 +/-5%	Pass	5015	5036.5 +/-25%	Pass
AV27	04/29/2005 9:10	5016	4919.2 +/-5%	Pass	14.7	5-50	Pass	221.9	225.0 +/-5%	Pass	5000	5022.5 +/-25%	Pass
AV29	04/29/2005 9:10	4979	5047.7 +/-5%	Pass	25.0	5-50	Pass	225.0	223.3 +/-5%	Pass	5023	5010.1 +/-25%	Pass
AV29	04/29/2005 9:10	4979	5005.4 +/-5%	Pass	25.0	5-50	Pass	225.0	223.8 +/-5%	Pass	5023	5014.0 +/-25%	Pass
AV33	04/29/2005 9:10	5061	4977.0 +/-5%	Pass	10.9	5-50	Pass	209.0	218.0 +/-5%	Pass	4906	4971.5 +/-25%	Pass
AV34	04/29/2005 9:10	5193	5045.5 +/-5%	Pass	18.4	5-50	Pass	224.0	219.0 +/-5%	Pass	5015	4978.8 +/-25%	Pass
AV35	04/29/2005 9:10	4956	4932.6 +/-5%	Pass	12.2	5-50	Pass	274.9	275.0 +/-5%	Pass	5385	5385.6 +/-25%	Pass
AV37	04/29/2005 9:10	5005	5082.9 +/-5%	Pass	20.1	5-50	Pass	236.1	236.1 +/-5%	Pass	5103	5103.2 +/-25%	Pass
AV38	04/29/2005 9:10	5286	5419.4 +/-5%	Pass	17.0	5-50	Pass	219.0	217.9 +/-5%	Pass	4979	4448.6 +/-25%	Pass

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria		Gross Counts P/F	FWHM (keV) Result	FWHM (keV) Criteria	FWHM (keV) P/F	Pulser Center Result	Pulser Center Criteria		Pulser Center P/F	Energy (keV) Result	Energy (keV) Criteria		Energy (keV) P/F
AV39	04/29/2005 9:11	5288	5316.2	+/- 5%	Pass	16.5	5 - 50	Pass	227.9	224.2	+/- 5%	Pass	5043	5016.3	+/- 25%	Pass
AV40	04/29/2005 9:11	4915	4755.8	+/- 5%	Pass	13.2	5 - 50	Pass	225.9	226.0	+/- 5%	Pass	5029	5029.5	+/- 25%	Pass
AV41	04/29/2005 9:11	4970	4990.8	+/- 5%	Pass	12.0	5 - 50	Pass	228.9	229.0	+/- 5%	Pass	5051	5051.6	+/- 25%	Pass
AV42	04/29/2005 9:11	4949	4977.0	+/- 5%	Pass	12.6	5 - 50	Pass	237.0	228.1	+/- 5%	Pass	5109	5044.9	+/- 25%	Pass
AV43	04/29/2005 9:11	7648	7162.4	+/- 5%	FAIL	13.0	5 - 50	Pass	222.0	224.1	+/- 5%	Pass	5001	5015.9	+/- 25%	Pass
AV45	04/29/2005 9:11	7605	7593.5	+/- 5%	Pass	15.5	5 - 50	Pass	228.2	225.6	+/- 5%	Pass	5045	5026.9	+/- 25%	Pass
AV46	04/29/2005 9:11	7641	7722.7	+/- 5%	Pass	13.9	5 - 50	Pass	224.1	225.8	+/- 5%	Pass	5016	5028.0	+/- 25%	Pass
AV47	04/29/2005 9:11	7638	7532.5	+/- 5%	Pass	14.0	5 - 50	Pass	220.0	226.0	+/- 5%	Pass	4986	5029.6	+/- 25%	Pass
AV48	04/29/2005 9:11	7624	7717.5	+/- 5%	Pass	15.6	5 - 50	Pass	226.1	224.0	+/- 5%	Pass	5030	5015.2	+/- 25%	Pass
AV49	04/29/2005 9:11	7635	7703.4	+/- 5%	Pass	13.8	5 - 50	Pass	232.0	226.0	+/- 5%	Pass	5073	5029.5	+/- 25%	Pass
AV50	04/29/2005 9:11	7633	7660.9	+/- 5%	Pass	13.5	5 - 50	Pass	225.0	227.0	+/- 5%	Pass	5022	5037.2	+/- 25%	Pass
AV51	04/29/2005 9:11	7350	7070.5	+/- 5%	Pass	13.7	5 - 50	Pass	219.9	223.0	+/- 5%	Pass	4986	5007.6	+/- 25%	Pass
AV52	04/29/2005 9:11	7350	7156.4	+/- 5%	Pass	13.0	5 - 50	Pass	225.0	225.0	+/- 5%	Pass	5023	5022.4	+/- 25%	Pass
AV53	04/29/2005 9:11	7161	7144.1	+/- 5%	Pass	12.8	5 - 50	Pass	223.0	223.0	+/- 5%	Pass	5008	5007.8	+/- 25%	Pass
AV54	04/29/2005 9:11	7342	7313.1	+/- 5%	Pass	14.0	5 - 50	Pass	229.1	226.0	+/- 5%	Pass	5052	5029.5	+/- 25%	Pass
AV55	04/29/2005 9:11	7238	7132.9	+/- 5%	Pass	12.7	5 - 50	Pass	227.0	226.0	+/- 5%	Pass	5037	5029.7	+/- 25%	Pass
AV56	04/29/2005 9:11	7341	7163.7	+/- 5%	Pass	13.2	5 - 50	Pass	221.0	222.0	+/- 5%	Pass	4994	5000.7	+/- 25%	Pass
AV57	04/29/2005 9:11	7336	7309.5	+/- 5%	Pass	14.2	5 - 50	Pass	222.0	222.0	+/- 5%	Pass	5000	5000.6	+/- 25%	Pass
AV58	04/29/2005 9:11	7334	7249.2	+/- 5%	Pass	13.3	5 - 50	Pass	225.0	223.0	+/- 5%	Pass	5022	5008.0	+/- 25%	Pass
AV59	04/29/2005 9:11	7121	7141.4	+/- 5%	Pass	12.6	5 - 50	Pass	285.0	284.0	+/- 5%	Pass	5458	5450.6	+/- 25%	Pass
AV60	04/29/2005 9:11	6842	7019.7	+/- 5%	Pass	13.2	5 - 50	Pass	222.9	223.0	+/- 5%	Pass	5007	5007.5	+/- 25%	Pass
AV61	04/29/2005 9:11	6871	7078.3	+/- 5%	Pass	13.2	5 - 50	Pass	223.9	225.0	+/- 5%	Pass	5014	5022.2	+/- 25%	Pass
AV62	04/29/2005 9:11	7277	7083.5	+/- 5%	Pass	14.3	5 - 50	Pass	222.0	222.0	+/- 5%	Pass	5000	5000.7	+/- 25%	Pass
AV63	04/29/2005 9:11	7273	7120.8	+/- 5%	Pass	13.3	5 - 50	Pass	223.1	223.0	+/- 5%	Pass	5009	5007.9	+/- 25%	Pass
AV64	04/29/2005 9:58	7188	7153.7	+/- 5%	Pass	13.1	5 - 50	Pass	223.0	224.0	+/- 5%	Pass	5008	5015.3	+/- 25%	Pass
AV65	04/29/2005 9:58	7175	7233.4	+/- 5%	Pass	14.1	5 - 50	Pass	222.9	224.0	+/- 5%	Pass	5007	5015.3	+/- 25%	Pass
AV66	04/29/2005 9:10	7138	7165.5	+/- 5%	Pass	12.1	5 - 50	Pass	221.0	222.0	+/- 5%	Pass	4993	5000.5	+/- 25%	Pass
AV67	04/29/2005 9:10	7422	7128.1	+/- 5%	Pass	16.1	5 - 50	Pass	221.0	224.1	+/- 5%	Pass	4993	5015.6	+/- 25%	Pass
AV68	04/29/2005 9:10	7444	7259.5	+/- 5%	Pass	13.0	5 - 50	Pass	221.0	222.0	+/- 5%	Pass	4993	5000.8	+/- 25%	Pass
AV69	04/29/2005 9:10	7284	7305.4	+/- 5%	Pass	12.4	5 - 50	Pass	221.0	222.0	+/- 5%	Pass	4993	5000.6	+/- 25%	Pass
AV70	04/29/2005 9:10	7440	7406.5	+/- 5%	Pass	12.8	5 - 50	Pass	221.0	222.6	+/- 5%	Pass	4993	5004.7	+/- 25%	Pass
AV71	04/29/2005 9:10	7437	7187.3	+/- 5%	Pass	12.9	5 - 50	Pass	221.0	225.0	+/- 5%	Pass	4993	5022.7	+/- 25%	Pass
AV72	04/29/2005 9:10	7279	7090.0	+/- 5%	Pass	12.8	5 - 50	Pass	220.0	223.9	+/- 5%	Pass	4986	5014.6	+/- 25%	Pass
AV73	04/29/2005 9:10	7035	7251.3	+/- 5%	Pass	13.0	5 - 50	Pass	224.1	225.0	+/- 5%	Pass	5016	5022.4	+/- 25%	Pass
AV74	04/29/2005 9:10	7425	7227.1	+/- 5%	Pass	13.2	5 - 50	Pass	220.0	224.0	+/- 5%	Pass	4986	5015.0	+/- 25%	Pass

SEVERN TRENT STL

Run Log

Alphavision
4/29/05

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	4/28	5115429	FSD220356-004X	46	240	Am	[illegible]	RR
2			-005	49				
3			FSD250000-4296	50				
4			429C	56				
5			429L	60				
6	4-29-5	Daily Pulser ✓		1.74	1 MIN	QA	[illegible]	—
7		5112200	FSD200213-002X	26	180	Th	[illegible]	RR
8		5117200	FSD110121-001	1	400	TH		RR
9			-001S	2				
10			-003	3				
11			-004	4				
12			-005	6 69				stopped
13			-006	7 [illegible]				RR
14			-007	8				
15			-008	13 46				
16			-009	15 49				
17			-010	16 50				
18			-011	17 51				
19			FSD270000-200B	18 52				
20			-200C	19 53				
21			-200L	20 54				
22	4/29	5115433	FSD220356-005 RC	52	240	LL	RR	RR
23		5117432	FSD220356-003 RC	47	400	Pu		
24	4/29	5117200	FSD110121-005 RC	9	1	Th	RR	
25	4/29	5117632	FSD140271-001	11	180	UU	RR	
26			-001X	12				
27			-002	45				
28			-003	60				
29			-004	61				

Reviewed By: RR Date: 4/29/08

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	4/29	5117632	F5D140271-005	63	180	UU	PR	PR
2			-006	64				
3			-007	68				
4			-008	69				
5			-009	73				
6			-010	74				
7			-011	48				
8			-012	55				
9			-013	57				
10			-014	58				
11			-015	59				
12			-016	65				
13			-017	66				
14			-018	67				
15			-019	67				
16			-020	70				
17			F5D270000-632B	71				
18			" -632C	72				
19	4/29	5117632	F5D140271-016 RC	11	180			
20	"	"	" -017 RC	12	"	PR 4/29		
21	4/29	5113048	F5D220187-001	13		TKM	PR	PR
22			-001V	15				
23			-002	16				
24			-003	17				
25			-004	18				
26			-005	19				
27			-006	20				
28			-007	48				
29			-008	55				

Reviewed By: PR Date: 4/29/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	4/29	5113048	FSD220187-009	57	180	Th	RL	RL
2			-010	58				
3			-011	59				
4			-012	60				
5			-013	61				
6			-014	62				
7			-015	63				
8			-016	64				
9			-017	65				
10			-018	66				
11			-019	67				
12			-020	68				
13			FSD230000-048B	69				
14			-048C	70				
15	4/29	5118421	FSD270338-001	1	180	Th	kw	RL
16			-001x	2				
17			FSD280000-421B	3				
18			421C	4				
19	4/29	5118282	FSD250199-001	7	400	Am	kw	RL
20			-001x	8				
21			FSD280000-282B	9				
22			-282C	11				
23	4/29	5117236	FSD260235-001	24	180	Th	kw	RL
24			-001x	27				
25			FSD270000-236B	29				
26			236C	34				
27	4/29	5113065	FSD220172-001	12	240	U	kw	
28			-001x	13				
29			FSD220173-001	15				

Reviewed By: RL Date: 5/2/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	4/29/05	5113065	FSD220178 -002	16	240	U	[illegible]	
2			-003	17				
3			-004	18				
4			FSD230000-0656	19				
5			-065C	20				
6	4/29/05	5113049	FSD220187 -001	21	240	Th	[illegible]	[illegible]
7			-001x	22				
8			-002	23				
9			-003	24				
10			-004	45				
11			-005	46				
12			-006	47				
13			-007	48				
14			-008	49				
15			-009	50				
16			-010	51				
17			-011	52				
18			-012	53				
19			-013	54				
20			-014	55				
21			-015	56				
22			-016	57				
23			-017	58				
24			-018	59				
25			-019	60				
26			-020	61				
27			FSD 230000 -0498	62				
28			-049C	63				
29	4/29	5113064	FSD220172-001	64	240	Th	[illegible]	

Reviewed By: RR Date: 5/2/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	4/24	5115452	FSD190191-002	25	180	Th		
2			+ -002x	35				
3			FSD250000-452B	37				
4	—	—	+ 452C	38				
5	4/24	5115454	FSD190191-002	39	180	U		RR
6			+ -002x	40				
7			FSD250000-454B	41				
8			+ 454C	42				
9	4-30-5	Daily Pulser ✓		1-74	1 MIN	QA		
10		5117236	FSD270000-236B	25	180	Th		
11		5113064	FSD220172-01x	45	240			RR
12			FSD220173-01	47				
13			02	48				
14			03	54				
15			04	55				
16			FSD230000-64B	57				
17			64C	58				
18	4/30	5117193	FSD250160-01	1	400	Pu		
19			01x	2				
20			02	3				
21			03	4				
22			04	66				
23			05	7				
24			06	8				
25			07	9				
26			08	11				
27			09	12				
28			10	13				
29			11	15				

Reviewed By: RGN Date: 4/30/5

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

LL Neptune

STL

Radiochemistry Prep Report

Alpha Spectroscopy

Batch # 5115429

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

~~180~~ 240

Sr or Pantex

General Prep Information

Method	Tracer ID	Aliquot	Isotope	Reference Date	Activity	Units	Analyst
Iso AMERICIUM (LONG CT) NAS & DOE MOD							
	Rad04-0040	0.1	Am-243	6/7/1994	5.56E+01	dpm/mL	400586

Weights

RC all @ 600 min.

Lot ID	Work Order #	Geometry	Aliquot	Dilution	Adj Aliquot
F5D220356-001	G81591AE	Planchette, 44mm	2.3495	1 RC 65	2.3495 g 6
F5D220356-002	G816E1AE	Planchette, 44mm	2.0493	1 RC 66	2.0493 g 7
F5D220356-003	G816L1AE	Planchette, 44mm	2.2578	1 RC 67	2.2578 g 8
F5D220356-004	G816P1AE	Planchette, 44mm	2.2737	1 RC 68	2.2737 g 23
F5D220356-004S	G816P1AG	Planchette, 44mm	2.2541	1 RC 69	2.2541 g 24
F5D220356-004X	G816P1AF	Planchette, 44mm	2.044	1 RC 70	2.044 g 46
F5D220356-005	G816T1AE	Planchette, 44mm	2.2049	1 RC 71	2.2049 g 49
F5D250000-429B	G85JH1AA	Planchette, 44mm	2	1 RC 72	2 g 50
F5D250000-429C	G85JH1AD	Planchette, 44mm	2	1 RC 73	2 g 56
F5D250000-429L	G85JH1AE	Planchette, 44mm	0.2429	1 RC 74	0.2429 g 60

Spike Information

Lot ID	Work Order #	Standard ID	Aliquot	Isotope	Reference Date	Activity	Units
F5D220356-004S	G816P1AG	Rad04-0006	0.1	Am-241	4/18/1996	1.71E+00	pCi/g
F5D250000-429C	G85JH1AD	Rad04-0006	0.1	Am-241	4/18/1996	1.93E+00	pCi/g
F5D250000-429L	G85JH1AE	PEM-1 Am-241	0.2429	Am-241	4/12/2002	3.25E+01	pCi/g

Standard Operating Procedures

	SOP Number	Rev	Title
☐	STL-RC-0002	3	Planchet Preparation For Radiochemistry And Radiological Screening Analysis
☑	STL-RC-0003	5	Drying And Grinding Of Soil And Solid Samples
☑	STL-RC-0004	7	Preparation Of Soil, Sludge, And Filter Paper Samples For Radiochemical Analysis
☐	STL-RC-0090	4	Preparation Of Samples For Sequential Determination Of Isotopic Americium, Curium, Neptunium, Plutonium, Thorium, And Uranium In Aqueous Samples
☑	STL-RC-0100	7	Actinide Coprecipitation
☑	STL-RC-0240	3	Isotopic Americium, Curium, Plutonium, Thorium, and Uranium In Water, Soil, Sludge and Filters by Elchrome Separation Resin
☐	STL-RC-0241	1	Isotopic Americium, Plutonium, Curium, and Uranium in Water, Soil, Sludge and Filters by Eichrome Uteva and Tru Resins

Coprecipitated By	Precip Date	Spiked By	Spike Verified By	Spike Date
4-28-04 MFM per KH			KH	04-25-05
Analyst's Signature	Date		Reviewed By	Date
4-28-05				5-2-5

SEVERN TRENT **STL**

Radiochemistry Prep Report

Alpha Spectroscopy

Batch # 5115429

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

☐ STL-RD-0201	2	Daily Operations Of An Alpha Spectroscopy System
☐ STL-RD-0203	1	Calibration And Maintenance Of A Alpha Spectroscopy System

(Check all that apply)

Coprecipitated By	Precip Date	MFM per KH	KH	04-25-05
		Spiked By	Spike Verified By	Spike Date
James M. Wilson	4-28-05			5-2-5
Analyst's Signature	Date		Reviewed By	Date

St. Louis Laboratory
13715 Rider Trail North
Earth City, MO 63045-1205

Alpha Spectroscopy Quality Assurance Worksheet

Batch: 5115429

F5D250000-429C Recovery Summary			
Isotope	Certified Activity	Observed Activity	% Recovery
Am-241	1.93E+00	1.96E+00	101%

F5D220356-004 Duplicate Summary				
Isotope	Sample Activity	Duplicate Activity	RPD	RER
Am-241	2.36E-02	5.27E-02	76%	1.47

F5D220356-004 Spike Summary				
Isotope	Spike Activity	Sample Activity	Spike Added	% Recovery
Am-241	1.73E+00	2.36E-02	1.71E+00	100%

Calculated By: RE/DW DATE: 5/4/2005

Reviewed By: DWL DATE: 5/4/05

SEVERN TRENT STL

Gas Proportional Counting Gross Alpha and Beta

SEVERN TRENT STL

GAS FLOW PROPORTIONAL COUNTING

Data and Results Reports

Instrument Checks
Daily Instrument Check
Monthly Background

Batch Summary Sheets
Run Logs

Raw Data
Prep Data Sheet(s)
Instrument Printouts
QC Acceptance Sheet(s)
Certificate/Standard Sheets

SEVERN TRENT **STL**

Analysis Report for Gross Alpha/Beta

Batch: 5139111 **Operator:** 60040

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Sample ID / WRKNO	Aliquot Mass	Instr ID / CountTime	Cnt Dur / Dilution	Sigma		Sample Counts	BkgCPM	SampCPM	Eff	Activity	UncTot	UncCnt	MDA	DLC
F5D210345-001	1.021E-001 g	RedA1	800.00	1.00	*Alpha*	231	5.300E-002	2.888E-001	0.1385	**7.512E+000**pCi/g	7.581E-001	6.585E-001	1.314E+000	6.033E-001
G8WNH1AT	0.0461 g	5/19/05 17:46	1.00		*Beta*	1983	1.058E+000	2.479E+000	0.4562	**1.374E+001**pCi/g	9.409E-001	6.430E-001	1.668E+000	8.181E-001
F5D210345-002	1.180E-001 g	RedA2	800.00	1.00	*Alpha*	210	9.700E-002	2.625E-001	0.1478	**4.274E+000**pCi/g	5.877E-001	5.475E-001	1.410E+000	6.818E-001
G8WNN1AF	0.0417 g	5/19/05 17:46	1.00		*Beta*	1463	1.119E+000	1.829E+000	0.4407	**6.148E+000**pCi/g	8.090E-001	5.258E-001	1.538E+000	7.536E-001
F5D210345-003	1.213E-001 g	RedA3	800.00	1.00	*Alpha*	257	6.700E-002	3.212E-001	0.1012	**9.326E+000**pCi/g	9.330E-001	8.081E-001	1.685E+000	7.809E-001
G8WNQ1AF	0.0646 g	5/19/05 17:46	1.00		*Beta*	2105	1.036E+000	2.631E+000	0.4372	**1.355E+001**pCi/g	9.886E-001	5.750E-001	1.450E+000	7.110E-001
F5D210345-004	1.216E-001 g	RedA4	800.00	1.00	*Alpha*	392	4.800E-002	4.900E-001	0.0945	**1.740E+001**pCi/g	1.338E+000	1.014E+000	1.515E+000	6.913E-001
G8WNR1AF	0.0705 g	5/19/05 17:46	1.00		*Beta*	2795	1.016E+000	3.494E+000	0.4310	**2.129E+001**pCi/g	1.245E+000	6.453E-001	1.453E+000	7.125E-001
F5D210345-005	9.270E-002 g	RedB1	800.00	1.00	*Alpha*	546	2.800E-002	6.825E-001	0.1430	**2.230E+001**pCi/g	1.505E+000	1.011E+000	1.016E+000	4.506E-001
G8WNV1AF	0.0446 g	5/19/05 17:47	1.00		*Beta*	2177	1.615E+000	2.721E+000	0.4439	**1.211E+001**pCi/g	1.008E+000	8.060E-001	2.324E+000	1.144E+000
F5D210345-006	9.240E-002 g	RedB2	800.00	1.00	*Alpha*	236	5.600E-002	2.950E-001	0.1337	**8.711E+000**pCi/g	8.790E-001	7.635E-001	1.542E+000	7.095E-001
G8WNW1AF	0.0488 g	5/19/05 17:47	1.00		*Beta*	1935	1.139E+000	2.419E+000	0.4515	**1.382E+001**pCi/g	9.978E-001	7.200E-001	1.931E+000	9.477E-001
F5D210345-007	9.540E-002 g	RedB3	800.00	1.00	*Alpha*	410	4.100E-002	5.125E-001	0.0771	**2.887E+001**pCi/g	2.162E+000	1.610E+000	2.245E+000	1.020E+000
G8WN01AF	0.0843 g	5/19/05 17:47	1.00		*Beta*	3071	1.114E+000	3.839E+000	0.4315	**2.981E+001**pCi/g	1.721E+000	8.609E-001	1.936E+000	9.499E-001
F5D210345-008	1.059E-001 g	RedB4	800.00	1.00	*Alpha*	195	7.400E-002	2.437E-001	0.1256	**5.747E+000**pCi/g	7.334E-001	6.747E-001	1.629E+000	7.575E-001
G8WN11AF	0.0537 g	5/19/05 17:47	1.00		*Beta*	1763	1.092E+000	2.204E+000	0.4548	**1.040E+001**pCi/g	7.942E-001	6.003E-001	1.639E+000	8.039E-001
F5D210345-009	1.007E-001 g	RedC3	800.00	1.00	*Alpha*	127	4.600E-002	1.588E-001	0.1400	**3.602E+000**pCi/g	5.419E-001	5.111E-001	1.235E+000	5.635E-001
G8WN21AF	0.0481 g	5/19/05 17:46	1.00		*Beta*	1439	1.181E+000	1.799E+000	0.4483	**5.164E+000**pCi/g	6.825E-001	6.089E-001	1.816E+000	8.919E-001
F5D210345-010	9.570E-002 g	RedC4	800.00	1.00	*Alpha*	122	8.200E-002	1.525E-001	0.1505	**2.206E+000**pCi/g	5.467E-001	5.355E-001	1.578E+000	7.367E-001
G8WN31AF	0.0410 g	5/19/05 17:46	1.00		*Beta*	1353	1.232E+000	1.691E+000	0.4589	**4.710E+000**pCi/g	6.632E-001	6.200E-001	1.906E+000	9.364E-001
F5D210345-011	1.174E-001 g	RedD1	800.00	1.00	*Alpha*	91	5.500E-002	1.138E-001	0.1358	**1.660E+000**pCi/g	4.186E-001	4.103E-001	1.185E+000	5.450E-001
G8WN41AF	0.0491 g	5/19/05 17:47	1.00		*Beta*	1087	1.081E+000	1.359E+000	0.4560	**2.337E+000**pCi/g	4.791E-001	4.647E-001	1.467E+000	7.196E-001
F5D210345-012	1.021E-001 g	RedD2	800.00	1.00	*Alpha*	67	4.800E-002	8.375E-002	0.1155	**1.365E+000**pCi/g	4.947E-001	4.900E-001	1.505E+000	6.881E-001
G8WN51AF	0.0606 g	5/19/05 17:47	1.00		*Beta*	1160	1.100E+000	1.450E+000	0.4399	**3.510E+000**pCi/g	5.928E-001	5.663E-001	1.763E+000	8.652E-001
F5D210345-013	1.007E-001 g	RedD3	800.00	1.00	*Alpha*	731	5.400E-002	9.137E-001	0.0885	**4.344E+001**pCi/g	2.794E+000	1.757E+000	2.101E+000	9.657E-001
G8WN71AF	0.0752 g	5/19/05 17:47	1.00		*Beta*	4581	1.085E+000	5.728E+000	0.4365	**4.758E+001**pCi/g	2.559E+000	9.456E-001	1.790E+000	8.780E-001
F5D210345-014	9.590E-002 g	RedD4	800.00	1.00	*Alpha*	303	6.500E-002	3.787E-001	0.1379	**1.069E+001**pCi/g	9.640E-001	8.023E-001	1.543E+000	7.144E-001
G8WN91AJ	0.0448 g	5/19/05 17:47	1.00		*Beta*	1768	1.272E+000	2.210E+000	0.4558	**9.666E+000**pCi/g	8.342E-001	6.799E-001	1.946E+000	9.560E-001
F5D210345-015	9.250E-002 g	BlueA1	800.00	1.00	*Alpha*	181	7.800E-002	2.263E-001	0.1368	**5.277E+000**pCi/g	7.427E-001	6.942E-001	1.755E+000	8.177E-001
G8WPC1AF	0.0456 g	5/19/05 17:47	1.00		*Beta*	1470	1.067E+000	1.837E+000	0.4596	**8.164E+000**pCi/g	7.578E-001	8.384E-001	1.835E+000	9.002E-001

Sample ID / WRKNQ	Aliquot Mass	Instr ID / CountTime	Cnt Dur / Dilution	Sigma		Sample Counts	BkgCPM	SampCPM	Eff	Activity	UncTot	UncCnt	MDA	DLC
F5D220356-001	1.061E-001 g	BlueA2	800.00	1.00	*Alpha*	351	3.700E-002	4.387E-001	0.0861	1.981E+001pCi/g	1.558E+000	1.202E+000	1.726E+000	7.800E-001
G81591AH	0.0794 g	5/19/05 17:47	1.00		*Beta*	2487	1.059E+000	3.109E+000	0.4357	1.997E+001pCi/g	1.221E+000	7.032E-001	1.681E+000	8.247E-001
F5D220356-001Sa	1.098E-001 g	BlueA4	800.00	1.00	*Alpha*	2082	6.200E-002	2.603E+000	0.0862	1.209E+002pCi/g	6.640E+000	2.746E+000	2.109E+000	9.746E-001
G81591AL	0.0749 g	5/19/05 17:47	1.00		*Beta*	3116	9.570E-001	3.895E+000	0.4461	2.702E+001pCi/g	1.529E+000	7.163E-001	1.510E+000	7.400E-001
F5D220356-001Sb	9.820E-002 g	BlueB1	541.11	1.00	*Alpha*	322	5.400E-002	5.951E-001	0.0730	3.398E+001pCi/g	2.760E+000	2.175E+000	3.232E+000	1.460E+000
G81591AJ	0.0846 g	5/19/05 17:47	1.00		*Beta*	10000	1.105E+000	1.848E+001	0.4364	1.831E+002pCi/g	9.370E+000	2.004E+000	2.267E+000	1.108E+000
F5D220356-001X	9.550E-002 g	BlueB2	800.00	1.00	*Alpha*	405	4.300E-002	5.062E-001	0.0928	2.359E+001pCi/g	1.781E+000	1.334E+000	1.909E+000	8.685E-001
G81591AK	0.0706 g	5/19/05 17:48	1.00		*Beta*	2611	1.151E+000	3.264E+000	0.4436	2.247E+001pCi/g	1.373E+000	7.900E-001	1.912E+000	9.384E-001
F5D220356-002	1.104E-001 g	BlueB4	800.00	1.00	*Alpha*	267	4.100E-002	3.337E-001	0.1070	1.116E+001pCi/g	9.964E-001	8.254E-001	1.399E+000	6.351E-001
G816E1AF	0.0586 g	5/19/05 17:48	1.00		*Beta*	1978	9.690E-001	2.473E+000	0.4424	1.387E+001pCi/g	9.200E-001	6.049E-001	1.524E+000	7.467E-001
F5D220356-003	1.215E-001 g	BlueC2	800.00	1.00	*Alpha*	108	6.200E-002	1.350E-001	0.0916	2.954E+000pCi/g	6.519E-001	6.349E-001	1.793E+000	8.288E-001
G816L1AF	0.0741 g	5/19/05 17:48	1.00		*Beta*	1030	9.890E-001	1.268E+000	0.4466	2.478E+000pCi/g	4.599E-001	4.429E-001	1.385E+000	6.791E-001
F5D220356-004	1.049E-001 g	BlueC3	800.00	1.00	*Alpha*	133	7.000E-002	1.663E-001	0.1336	3.093E+000pCi/g	5.736E-001	5.523E-001	1.507E+000	6.994E-001
G816P1AM	0.0434 g	5/19/05 17:48	1.00		*Beta*	1978	1.446E+000	2.473E+000	0.4505	9.783E+000pCi/g	8.271E-001	6.670E-001	1.916E+000	9.426E-001
F5D220356-005	9.730E-002 g	BlueC4	800.00	1.00	*Alpha*	108	6.400E-002	1.350E-001	0.1398	2.351E+000pCi/g	5.364E-001	5.223E-001	1.490E+000	6.891E-001
G816T1AF	0.0448 g	5/19/05 17:48	1.00		*Beta*	1208	1.028E+000	1.510E+000	0.4563	4.890E+000pCi/g	6.215E-001	5.714E-001	1.725E+000	8.460E-001
F5E190000-111B	1.000E+000 g	YellowA1	800.00	1.00	*Alpha*	70	8.000E-002	8.750E-002	0.2494	1.354E-002pCi/g	2.614E-002	2.613E-002	9.009E-002	4.201E-002
HATWN1AA	0.0003 g	5/19/05 17:49	1.00		*Beta*	930	1.220E+000	1.163E+000	0.4630	-5.594E-002pCi/g	5.317E-002	5.310E-002	1.900E-001	8.839E-002
F5E190000-111Ca	1.000E+000 g	YellowA2 ✓	800.00	1.00	*Alpha*	2913	7.000E-002	3.641E+000	0.1639	9.814E+000pCi/g	5.252E-001	1.872E-001	1.288E-001	5.980E-002
HATWN1AD	0.0323 g	5/19/05 17:49	1.00		*Beta*	1732	1.170E+000	2.185E+000	0.4458	1.006E+000pCi/g	8.239E-002	6.527E-002	1.832E-001	8.993E-002
F5E190000-111Cb	1.000E+000 g	YellowA3	800.00	1.00	*Alpha*	261	6.000E-002	3.262E-001	0.1616	7.420E-001pCi/g	7.160E-002	6.124E-002	1.217E-001	5.615E-002
HATWN1AC	0.0325 g	5/19/05 17:49	1.00		*Beta*	15816	1.200E+000	1.977E+001	0.4592	1.822E+001pCi/g	9.246E-001	1.588E-001	1.800E-001	8.838E-002

Laboratory Control Sample Information

SampID	WRKNQ	Analyte	Activity	StdAdded	Recovery
F5E190000-111Ca	HATWN1AD	Gross Alpha	9.814E+000pCi/g	1.029E+001pCi/g	95.39% ✓
F5E190000-111Cb	HATWN1AC	Gross Beta	1.822E+001pCi/g	2.086E+001pCi/g	87.31% ✓

Sample Duplicate Information

Sample ID	Dup Sample ID		Sample Activity	Dup Activity	RPD	RER
F5D220356-001	F5D220356-001X	*Alpha:*	1.981E+001	2.359E+001	17.44%	1.133E+000
		Beta:	1.997E+001	2.247E+001	11.76%	9.620E-001

Sample ID / WRKNO	Aliquot Mass	Instr ID / CountTime	Cnt Dur / Dilution	Sigma	Sample Counts	BkgCPM	SampCPM	Eff	Activity	UncTot	UncCnt	MDA	DLC

Matrix Spike Information

SampID	SampMSID	Sample Activity	MS Activity	StdAdded	MSRecovery
F5D220356-001	F5D220356-001Sa	1.981E+001pCi/g	1.209E+002pCi/g	9.370E+001	107.89%
F5D220356-001	F5D220356-001Sb	1.997E+001pCi/g	1.831E+002pCi/g	2.125E+002	76.78%

SEVERN TRENT STL

Instrument Checks

SEVERN TRENT **STL**

Gas Proportional Counter Daily Quality Control Checks

Thursday, May 19, 2005

Instrument: ***Protean***

Detector ID	Check Type	Alpha CPM	Alpha Mean	Alpha Std. Dev.	Alpha Deviation	Alpha Flag	Beta CPM	Beta Mean	Beta Std. Dev.	Beta Deviation	Beta Flag
0	Efficiency	12555.50	12559.35	68.88	-3.85	Pass	40853.66	41184.40	151.97	-330.74	WARNING
	Background	0.067	0.063	0.055	0.003	Pass	0.433	0.643	0.189	-0.210	Pass
1	Efficiency	11137.00	11226.75	102.68	-89.75	Pass	42647.13	42754.43	146.49	-107.30	Pass
	Background	0.067	0.022	0.029	0.045	Pass	0.900	0.493	0.192	0.407	Pass
10	Efficiency	11622.50	11749.83	74.07	-127.33	Pass	28615.22	28619.05	135.18	-3.83	Pass
	Background	0.133	0.027	0.034	0.107	FAIL	0.567	0.390	0.183	0.177	Pass
11	Efficiency	11751.00	11782.92	88.72	-31.92	Pass	36833.76	36990.70	166.73	-156.94	Pass
	Background	0.167	0.045	0.031	0.122	FAIL	0.733	0.470	0.142	0.263	Pass
12	Efficiency	12058.00	12262.05	64.21	-204.05	FAIL	32401.98	32548.70	121.53	-146.72	Pass
	Background	0.067	0.033	0.029	0.033	Pass	0.400	0.432	0.112	-0.032	Pass
13	Efficiency	11714.00	12082.75	59.85	-368.75	FAIL	28451.14	28999.40	97.30	-548.26	FAIL
	Background	0.133	0.040	0.035	0.093	Pass	0.400	0.378	0.143	0.022	Pass
14	Efficiency										
	Background	0.400	0.033	0.037	0.367	FAIL	0.667	0.345	0.097	0.322	FAIL
15	Efficiency										
	Background	0.200	0.030	0.042	0.170	FAIL	0.767	0.445	0.120	0.322	Pass
2	Efficiency	11929.50	11981.23	68.71	-51.73	Pass	29249.43	29179.72	137.91	69.71	Pass
	Background	0.100	0.030	0.047	0.070	Pass	0.400	0.553	0.126	-0.153	Pass
3	Efficiency	11942.00	11948.73	85.58	-6.73	Pass	38253.93	38443.78	165.07	-189.85	Pass
	Background	0.067	0.017	0.020	0.050	Pass	0.333	0.513	0.184	-0.180	Pass
4	Efficiency	12244.00	12441.33	69.85	-197.33	WARNING	31024.00	33032.35	125.88	-2008.35	FAIL
	Background	0.033	0.042	0.030	-0.008	Pass	0.467	0.418	0.159	0.048	Pass
5	Efficiency	12094.00	12208.20	69.90	-114.20	Pass	29170.22	29318.10	90.79	-147.88	Pass
	Background	0.033	0.028	0.029	0.005	Pass	0.200	0.478	0.181	-0.278	Pass
6	Efficiency										
	Background	0.033	0.038	0.029	-0.005	Pass	0.300	0.435	0.134	-0.135	Pass
7	Efficiency	12678.00	12712.42	66.23	-34.42	Pass	34703.26	35123.97	172.19	-420.72	WARNING
	Background	0.167	0.043	0.042	0.123	Pass	0.400	0.565	0.146	-0.165	Pass
8	Efficiency	12407.00	12519.67	93.66	-112.67	Pass	40921.43	41196.50	117.84	-275.07	WARNING
	Background	0.033	0.038	0.029	-0.005	Pass	0.333	0.443	0.164	-0.110	Pass
9	Efficiency	11136.00	11159.50	63.97	-23.50	Pass	42144.59	42504.65	209.38	-360.06	Pass
	Background	0.033	0.033	0.031	0.000	Pass	0.400	0.345	0.108	0.055	Pass

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IQC version 2.2, updated 3/16/2004

SEVERN TRENT **STL**

Gas Proportional Counter Daily Quality Control Checks

Thursday, May 19, 2005

Instrument: ***BLUE***

Detector ID	Check Type	Alpha CPM	Alpha Mean	Alpha Std. Dev.	Alpha Deviation	Alpha Flag	Beta CPM	Beta Mean	Beta Std. Dev.	Beta Deviation	Beta Flag
A1	Efficiency	13682.50	13817.48	92.26	-134.98	Pass	46256.82	46464.18	220.26	-207.36	Pass
	Background	0.133	0.080	0.060	0.053	Pass	0.900	1.112	0.210	-0.212	Pass
A2	Efficiency	12175.00	12297.53	90.44	-122.52	Pass	46989.55	46874.55	204.49	115.00	Pass
	Background	0.033	0.053	0.055	-0.020	Pass	0.967	1.025	0.224	-0.058	Pass
A3	Efficiency	8196.50	12874.63	89.97	-4678.13	FAIL	21859.01	31733.17	173.49	-9874.17	FAIL
	Background	0.133	0.040	0.041	0.093	Pass	1.300	13.282	11.420	-11.982	Pass
A4	Efficiency	13049.00	12974.10	89.70	74.90	Pass	42033.80	42018.38	147.34	15.43	Pass
	Background	0.033	0.082	0.057	-0.048	Pass	1.033	0.990	0.250	0.043	Pass
B1	Efficiency	13067.50	13115.48	67.45	-47.98	Pass	35286.78	35343.20	131.28	-56.42	Pass
	Background	0.067	0.073	0.059	-0.007	Pass	1.067	1.057	0.185	0.010	Pass
B2	Efficiency	12985.50	13134.85	84.21	-149.35	Pass	31584.37	31623.00	108.52	-38.63	Pass
	Background	0.167	0.083	0.060	0.083	Pass	1.100	1.118	0.175	-0.018	Pass
B3	Efficiency	7132.50	12929.85	95.67	-5797.35	FAIL	25385.49	39254.85	337.77	-13869.36	FAIL
	Background	0.233	0.058	0.044	0.175	FAIL	38.400	8.063	12.526	30.337	Pass
B4	Efficiency	13635.00	13513.28	116.46	121.73	Pass	38213.62	37659.47	269.72	554.14	WARNING
	Background	0.067	0.067	0.055	0.000	Pass	1.067	0.893	0.132	0.173	Pass
C1	Efficiency						7987.01	48531.29	191.74	-40544.28	FAIL
	Background	0.000	0.117	0.055	-0.117	Pass	0.167	1.183	0.352	-1.017	Pass
C2	Efficiency	12248.00	12289.40	86.44	-41.40	Pass	47573.89	47696.78	168.01	-122.88	Pass
	Background	0.100	0.078	0.050	0.022	Pass	0.833	1.020	0.168	-0.187	Pass
C3	Efficiency	12407.50	12564.40	101.69	-156.90	Pass	31609.36	31302.33	174.07	307.03	Pass
	Background	0.033	0.117	0.064	-0.083	Pass	1.600	1.567	0.221	0.033	Pass
C4	Efficiency	12971.00	12969.85	102.01	1.15	Pass	42273.46	42241.28	173.11	32.18	Pass
	Background	0.067	0.077	0.048	-0.010	Pass	1.367	0.952	0.140	0.415	Pass

STL Gas Proportional Counter Daily Quality Control Checks

Thursday, May 19, 2005

Instrument: Red

Detector ID	Check Type	Alpha CPM	Alpha Mean	Alpha Std. Dev.	Alpha Deviation	Alpha Flag	Beta CPM	Beta Mean	Beta Std. Dev.	Beta Deviation	Beta Flag
A1	Efficiency	13961.00	13698.98	630.17	262.02	Pass	46934.99	45903.78	1841.17	1031.22	Pass
	Background	0.100	0.052	0.035	0.048	Pass	1.200	1.073	0.251	0.127	Pass
A2	Efficiency	12188.50	12064.65	505.85	123.85	Pass	46272.00	45258.00	1880.66	1014.00	Pass
	Background	0.167	0.075	0.042	0.092	Pass	1.233	1.132	0.202	0.102	Pass
A3	Efficiency	13012.50	12762.15	497.04	250.35	Pass	31896.67	31389.55	989.25	507.12	Pass
	Background	0.067	0.090	0.060	-0.023	Pass	1.367	1.063	0.201	0.303	Pass
A4	Efficiency	13043.00	12782.88	436.45	260.13	Pass	41963.86	41685.82	826.32	278.03	Pass
	Background	0.033	0.028	0.027	0.005	Pass	1.233	1.038	0.161	0.195	Pass
B1	Efficiency	13297.50	13396.90	219.47	-99.40	Pass	32787.24	35204.15	1085.35	-2416.91	WARNING
	Background	0.100	0.045	0.045	0.055	Pass	1.867	1.187	0.156	0.680	~~FAIL~~ pass
B2	Efficiency	13348.50	13479.88	88.68	-131.38	Pass	31720.05	31941.70	133.11	-221.65	Pass
	Background	0.000	0.048	0.041	-0.048	Pass	1.200	1.132	0.181	0.068	Pass
B3	Efficiency	12876.00	13070.20	87.82	-194.20	WARNING	39529.09	39537.75	146.59	-8.66	Pass
	Background	0.033	0.052	0.040	-0.018	Pass	1.567	1.143	0.211	0.423	Pass
B4	Efficiency	14271.00	14333.85	71.77	-62.85	Pass	38981.05	39240.13	139.73	-259.07	Pass
	Background	0.067	0.067	0.046	0.000	Pass	1.300	1.117	0.150	0.183	Pass
C1	Efficiency	13267.00	13905.73	92.11	-638.73	FAIL	44395.76	46157.45	200.99	-1761.69	FAIL
	Background	0.033	0.070	0.043	-0.037	Pass	1.200	1.173	0.190	0.027	Pass
C2	Efficiency	12318.00	12279.17	107.34	38.83	Pass	46175.86	46752.82	161.77	-576.96	FAIL
	Background	0.033	0.065	0.041	-0.032	Pass	1.400	1.232	0.179	0.168	Pass
C3	Efficiency	12828.00	12936.25	81.82	-108.25	Pass	31410.11	31665.83	120.61	-255.71	WARNING
	Background	0.067	0.038	0.027	0.028	Pass	1.033	1.183	0.239	-0.150	Pass
C4	Efficiency	13059.50	13278.28	95.76	-218.77	WARNING	42318.04	42485.05	196.23	-167.01	Pass
	Background	0.133	0.090	0.034	0.043	Pass	1.233	1.248	0.156	-0.015	Pass
D1	Efficiency	13669.50	13793.98	92.56	-124.48	Pass	36542.59	36465.80	167.13	76.79	Pass
	Background	0.033	0.052	0.044	-0.018	Pass	1.300	1.150	0.197	0.150	Pass
D2	Efficiency	13201.00	13401.85	90.37	-200.85	WARNING	31371.12	31534.90	129.15	-163.78	Pass
	Background	0.100	0.062	0.056	0.038	Pass	1.067	1.058	0.216	0.008	Pass
D3	Efficiency	13185.00	13170.65	93.09	14.35	Pass	39903.18	39840.40	138.20	62.78	Pass
	Background	0.033	0.052	0.044	-0.018	Pass	1.067	1.088	0.163	-0.022	Pass
D4	Efficiency	13962.00	14070.85	91.88	-108.85	Pass	38918.96	38889.10	220.93	29.86	Pass
	Background	0.033	0.063	0.049	-0.030	Pass	1.367	1.085	0.173	0.282	Pass

C1

C2

5/19/2005 8:59:58 AM

IQC version 2.2, updated 3/16/2004

5/17/05

SEVERN TRENT **STL**

Gas Proportional Counter Daily Quality Control Checks

Thursday, May 19, 2005

Instrument: ***Yellow***

Detector ID	Check Type	Alpha CPM	Alpha Mean	Alpha Std. Dev.	Alpha Deviation	Alpha Flag	Beta CPM	Beta Mean	Beta Std. Dev.	Beta Deviation	Beta Flag
A1	Efficiency	13595.00	13809.35	123.54	-214.35	Pass	45648.46	45279.15	397.53	369.31	Pass
	Background	0.100	0.060	0.043	0.040	Pass	0.900	1.010	0.146	-0.110	Pass
A2	Efficiency	12017.50	12010.33	96.30	7.17	Pass	45810.48	45555.15	501.53	255.33	Pass
	Background	0.000	0.057	0.043	-0.057	Pass	1.067	1.032	0.140	0.035	Pass
A3	Efficiency	13064.00	12997.25	116.67	66.75	Pass	32054.79	32243.75	1655.20	-188.96	Pass
	Background	0.067	0.050	0.056	0.017	Pass	0.867	1.153	0.380	-0.287	Pass
A4	Efficiency	12798.50	12924.90	86.33	-126.40	Pass	41825.69	41324.97	917.62	500.71	Pass
	Background	0.033	0.022	0.036	0.012	Pass	1.167	1.042	0.161	0.125	Pass
B1	Efficiency	13480.50	13467.66	78.10	12.84	Pass	35732.51	36207.43	2300.03	-474.92	Pass
	Background	0.100	0.042	0.036	0.058	Pass	1.167	1.073	0.198	0.093	Pass
B2	Efficiency	12490.00	12363.80	63.06	126.20	WARNING	30261.19	30007.10	149.45	254.09	Pass
	Background	0.133	0.048	0.057	0.085	Pass	1.233	1.068	0.181	0.165	Pass
B3	Efficiency	12040.50	12150.69	69.41	-110.19	Pass	37506.55	37455.75	130.69	50.80	Pass
	Background	0.100	0.055	0.041	0.045	Pass	1.500	1.168	0.270	0.332	Pass
B4	Efficiency	12743.00	12792.91	77.50	-49.91	Pass	35835.38	35971.13	129.55	-135.75	Pass
	Background	0.133	0.080	0.041	0.053	Pass	1.333	1.018	0.148	0.315	Pass
C1	Efficiency										
	Background										
C2	Efficiency										
	Background										
C3	Efficiency										
	Background										
C4	Efficiency										
	Background										
D1	Efficiency	11212.00	11345.20	145.73	-133.20	Pass	30834.71	30586.05	152.88	248.66	Pass
	Background	0.067	0.065	0.048	0.002	Pass	0.500	0.863	0.211	-0.363	Pass
D2	Efficiency	10195.00	10283.86	92.90	-88.86	Pass	25484.27	25594.86	174.10	-110.59	Pass
	Background	0.067	0.045	0.046	0.022	Pass	0.900	0.963	0.165	-0.063	Pass
D3	Efficiency	10262.00	10251.48	66.21	10.52	Pass	31950.88	31865.03	209.38	85.86	Pass
	Background	0.067	0.027	0.034	0.040	Pass	1.167	0.783	0.161	0.383	Pass
D4	Efficiency	11724.50	11562.35	101.38	162.15	Pass	32850.51	32469.02	317.88	381.49	Pass
	Background	0.133	0.035	0.031	0.098	FAIL	0.667	0.885	0.208	-0.218	Pass

5/19/2005 8:08:42 AM

IQC version 2.2, updated 3/16/2004

CW 5/19/05

Monthly Background

SEVERN TRENT STL

Long Backgrounds – Red
April 2005

Detector ID	Sample ID	Alpha	Beta	Guard	Count Count Time	Event	Voltage	TOD
A1	A1-01	53	1058	539991	1000	0	1410	38474.19
A2	A2-01	97	1119	539991	1000	0	1410	38474.19
A3	A3-01	67	1036	539990	1000	0	1410	38474.19
A4	A4-01	46	1016	539989	1000	0	1410	38474.19
B1	B1-01	26	1615	1139825	1000	0	1410	38474.19
B2	B2-01	56	1139	1139800	1000	0	1410	38474.19
B3	B3-01	41	1114	1139783	1000	0	1410	38474.19
B4	B4-01	74	1092	1139773	1000	0	1410	38474.19
C1	C1-01	88	1159	541346	1000	0	1410	38474.19
C2	C2-01	119	1236	541345	1000	0	1410	38474.19
C3	C3-01	46	1181	541345	1000	0	1410	38474.19
C4	C4-01	82	1232	541348	1000	0	1410	38474.19
D1	D1-01	55	1081	535081	1000	0	1410	38474.19
D2	D2-01	48	1100	535083	1000	0	1410	38474.19
D3	D3-01	54	1085	535082	1000	0	1410	38474.19
D4	D4-01	65	1272	535082	1000	0	1410	38474.19

SEVERN TRENT STL

Long Backgrounds – Blue
April 2005

Detector ID	Sample ID	Alpha	Beta	Guard	Count Count Time	Event	Voltage	TOD
A1	A1-01	78	1067	546890	1000	0	1470	38469.08
A2	A2-01	37	1059	546888	1000	0	1470	38469.08
A3	A3-01	67	1240	546888	1000	0	1470	38469.08
A4	A4-01	62	957	546882	1000	0	1470	38469.08
B1	B1-01	54	1105	545902	1000	0	1470	38469.09
B2	B2-01	43	1151	545899	1000	0	1470	38469.09
B3	B3-01	101	1537	545894	1000	0	1470	38469.09
B4	B4-01	41	969	545895	1000	0	1470	38469.09
C1	C1-01	0	52	604716	1000	0	1500	38469.09
C2	C2-01	62	989	604709	1000	0	1500	38469.09
C3	C3-01	70	1446	604707	1000	0	1500	38469.09
C4	C4-01	64	1028	604703	1000	0	1500	38469.09

STL

Backgrounds
Yellow -April 2005

Group A	I.ID.	Time	Counts α	Counts β	BKG α	BKG β
1	BKG	1000	76	1218	0.08	1.22
2	BKG	1000	68	1174	0.07	1.17
3	BKG	1000	56	1204	0.06	1.20
4	BKG	1000	56	1117	0.06	1.12
Group B						
1	BKG	1000	60	1226	0.06	1.23
2	BKG	1000	65	1212	0.07	1.21
3	BKG	1000	64	1242	0.06	1.24
4	BKG	1000	43	1473	0.04	1.47
Group C						
1	BKG	1000	0	0	0.00	0.00
2	BKG	1000	0	0	0.00	0.00
3	BKG	1000	0	0	0.00	0.00
4	BKG	1000	0	0	0.00	0.00
Group D						
1	BKG	1000	49	929	0.05	0.93
2	BKG	1000	58	1120	0.06	1.12
3	BKG	1000	71	906	0.07	0.91
4	BKG	1000	62	982	0.06	0.98

SEVERN TRENT STL

Run Log

Logbook No.: 2649

STL
St. Louis Laboratory

Gas Proportional Counter Runlog
(Yellow)

Date	Time	Batch #	Filename	Sample #	Det.	Count Time	Analysis	Initials
5/18/05	23:52	5130396	051805D	FSE 100000-396C	A4	200	NP	CH
		5137109		FSE130151-002	B1			
				" -002X	2			
				FSE170000-109B	3			
				" -109C	4			
		5132153		FSE110160-002	D1			
				" -002C	2			
				FSE120000-153B	3			
				" 153C	4			
5/19/5	—		DA-7615	Daily ✓	—	30m	QA	✓
	—		DBC 1273	"	—	2m	"	
	—		DBC 1274	"	—	2m		
	10:54	5116339	051905A	FS0250133-015	A1	200m	Ra228	
				-016	2			
				-017	3			
				-018	4			
				-019	B1			
				-020	2			
				-021	3			
				-022	4			
				-023	D1			
				-024	2			
				-025	3			
			qw 5/19/05	-026	4			
	17:49	5139111	051905RD	FSE 190000-[illegible]118	A1	80min	ABT	✓
				-119C2	A2			
				-114CB	A3			

Reviewed By: _____ Date: 5-19-5

SOP References: STL-RD-0403, current revision
Form: SL-RAD-0053, Revised 12/19/03
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2672

STL
St. Louis Laboratory

Gas Proportional Counter Runlog

Date	Batch #	Sample #	Detector	Count Time	Analysis	Initials
5-19-5	5139111	F5D220355-011	Rad D1	800min	A, BL	—
		-012	D2			
		-013	D3			
		-014	D4			
		-015	Blank1			
		F5D220355-001	12			
		-001 α	19			
		-001 β	B1			
		-001X	B2			
		-002	B4			
		-003	C2			
		-004	C3			
		-005	C4			
5/20/5	Daily	Bkg + Source	Rad/Blank	30+2min	α	JW
5-20-5	5186338	F5D220133 -001	Rad A2	200min	Ra-228	—
		-002	B			
		-003	14			
		-004	B1			
		-005	B2			
		-006	B3			
		-007	B4			
		-008	C2			
		-009	C4			
		-010	D1			
		-011	D2			
		-012	D3			
		-013	D4			

Reviewed By: _____ Date: 5-20-5

SOP References: STL-RD-0403, current revision
Form: SL-RAD-0025, Revised 5/29/03
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2672

STL
St. Louis Laboratory

Gas Proportional Counter Runlog

Date	Batch #	Sample #	Detector	Count Time	Analysis	Initials
5/9-5	5116337	F5D450183-015	Red B4	200min	Ra-226	✓
		-016	C2			
		-017	C4			
		-018	B1			
		-019	B2			
		-020	B3			
		-021	Blue B4			
		-022	C2			
		-023	C3			
		-024	C4			
		-025	Red A1			
		-026	A2			
		-027	A3			
		-028	A4			
		F5D2600UU-332B	B1			
		-337C	B2			
		-337L	B3			
5-19-5	5-139,111	F5D210345-001	Red A1	800min	ABL	✓
		-002	A2			
		-003	A3			
		-004	A4			
		-005	B1			
		-006	B2			
		-007	B3			
		-008	B4			
		-009	C3			
		-010	C4			

Reviewed By: _____ Date: 5-19-5

SOP References: STL-RD-0403, current revision
Form: SL-RAD-0025, Revised 5/29/03
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

STL

Prep Report for Gross Alpha/Beta

Batch: 5139111 **Prep Analyst:** 401929

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

SampID	WRKNQ	Aliquot	Gross	Tare	Mass	Dilution
F5D210345-001	G8WNH1AT	1.021E-001 g	8.6634 g	8.6173 g	0.0461 g	1.00
F5D210345-002	G8WNN1AF	1.180E-001 g	8.6527 g	8.6110 g	0.0417 g	1.00
F5D210345-003	G8WNQ1AF	1.213E-001 g	8.7383 g	8.6737 g	0.0646 g	1.00
F5D210345-004	G8WNR1AF	1.216E-001 g	8.7113 g	8.6408 g	0.0705 g	1.00
F5D210345-005	G8WNV1AF	9.270E-002 g	8.6836 g	8.6390 g	0.0446 g	1.00
F5D210345-006	G8WNW1AF	9.240E-002 g	8.7055 g	8.6567 g	0.0488 g	1.00
F5D210345-007	G8WN01AF	9.540E-002 g	8.7066 g	8.6223 g	0.0843 g	1.00
F5D210345-008	G8WN11AF	1.059E-001 g	8.6953 g	8.6416 g	0.0537 g	1.00
F5D210345-009	G8WN21AF	1.007E-001 g	8.6939 g	8.6458 g	0.0481 g	1.00
F5D210345-010	G8WN31AF	9.570E-002 g	8.6560 g	8.6150 g	0.0410 g	1.00
F5D210345-011	G8WN41AF	1.174E-001 g	8.7380 g	8.6889 g	0.0491 g	1.00
F5D210345-012	G8WN51AF	1.021E-001 g	8.6830 g	8.6224 g	0.0606 g	1.00
F5D210345-013	G8WN71AF	1.007E-001 g	8.7107 g	8.6355 g	0.0752 g	1.00
F5D210345-014	G8WN91AJ	9.590E-002 g	8.6762 g	8.6314 g	0.0448 g	1.00
F5D210345-015	G8WPC1AF	9.250E-002 g	8.6820 g	8.6364 g	0.0456 g	1.00
F5D220356-001	G81591AH	1.061E-001 g	8.7264 g	8.6470 g	0.0794 g	1.00
F5D220356-001Sa	G81591AL	1.098E-001 g	8.7110 g	8.6361 g	0.0749 g	1.00

Reprint for correction
5/20/05

SampID	WRKNO	Aliquot	Gross	Tare	Mass	Dilution
F5D220356-001Sb	G81591AJ	9.820E-002 g	8.7452 g	8.6606 g	0.0846 g	1.00
		Blue B1				
F5D220356-001X	G81591AK	9.550E-002 g	8.7056 g	8.6350 g	0.0706 g	1.00
		B2				
F5D220356-002	G816E1AF	1.104E-001 g	8.7154 g	8.6568 g	0.0586 g	1.00
		B4				
F5D220356-003	G816L1AF	1.215E-001 g	8.7258 g	8.6517 g	0.0741 g	1.00
		C2				
F5D220356-004	G816P1AM	1.049E-001 g	8.7129 g	8.6695 g	0.0434 g	1.00
		C3				
F5D220356-005	G816T1AF	9.730E-002 g	8.6935 g	8.6487 g	0.0448 g	1.00
		C4				
F5E190000-111B	HATWN1AA	1.000E+000 g	8.7051 g	8.7048 g	0.0003 g	1.00
		4+1 (17:49)				
F5E190000-111Ca	HATWN1AD	1.000E+000 g	8.7021 g	8.6698 g	0.0323 g	1.00
		+2				
F5E190000-111Cb	HATWN1AC	1.000E+000 g	8.6637 g	8.6312 g	0.0325 g	1.00
		+3				

Spike Information

Sample ID	Standard ID	Analyte	Std Conc		Aliquot		Ref Date	StdAdded	
F5D220356-001Sb	Rad05-0019	Gross Beta	4.632E+001	Dpm/m	1.00	mL	8/7/2001 12:00:00AM	2.125E+002	pCi/g
F5D220356-001Sa	rad05-0033	Gross Alpha	2.284E+001	dpm/mL	1.00	mL	12/19/2002 12:00:00A	9.370E+001	pCi/g
F5E190000-111Cb	Rad05-0019	Gross Beta	4.632E+001	Dpm/m	1.00	mL	8/7/2001 12:00:00AM	2.085E+001	pCi/g
F5E190000-111Ca	rad05-0033	Gross Alpha	2.284E+001	dpm/mL	1.00	mL	12/19/2002 12:00:00A	1.029E+001	pCi/g

JAD — Spiked By

BC — Spike Verified By

5-18-05 — Spike Date

Standard Operating Procedures

SOPNumber	Title	Revision
☐ STL-RC-0002	Planchet Preparation For Radiochemistry And Radiological Screening Analysis	3.00
☐ STL-RC-0003	Drying And Grinding Of Soil And Solid Samples	5.00
☐ STL-RC-0004	Preparation Of Soil, Sludge, And Filter Paper Samples For Radiochemical Analysis	7.00
☐ STL-RC-0041	Radium 228 In Water	2.00

RR — Reviewed By

5-20-05 — Review Date

JAD — Analyst/Relenquished By

5-19-05 — Release Date

ER — Received By

5-19-05 — Receipt Date

STL ST. LOUIS

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Red
Data file name: 5139111

Reviewed By: DR

Batch ID: ABL 05/19/05 IV

Date: ~~5-19-05~~ 5-20-05
RR 5/20/05

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	CalType	Net CPM Alpha	Net CPM Beta
F5D210345-001	Red	A1	5/19/2005 17:46	800	231	1983	1000	53	1058	1	0.24	1.42
F5D210345-002	Red	A2	5/19/2005 17:46	800	210	1463	1000	97	1119	1	0.17	0.71
F5D210345-003	Red	A3	5/19/2005 17:46	800	257	2105	1000	67	1036	1	0.25	1.60
F5D210345-004	Red	A4	5/19/2005 17:46	800	392	2795	1000	46	1016	1	0.44	2.48
F5D210345-005	Red	B1	5/19/2005 17:47	800	546	2177	1000	26	1615	1	0.66	1.11
F5D210345-006	Red	B2	5/19/2005 17:47	800	236	1935	1000	56	1139	1	0.24	1.28
F5D210345-007	Red	B3	5/19/2005 17:47	800	410	3071	1000	41	1114	1	0.47	2.72
F5D210345-008	Red	B4	5/19/2005 17:47	800	195	1763	1000	74	1092	1	0.17	1.11
F5D210345-009	Red	C3	5/19/2005 17:46	800	127	1439	1000	46	1181	1	0.11	0.62
F5D210345-010	Red	C4	5/19/2005 17:46	800	122	1353	1000	82	1232	1	0.07	0.46
F5D210345-011	Red	D1	5/19/2005 17:47	800	91	1087	1000	55	1081	1	0.06	0.28
F5D210345-012	Red	D2	5/19/2005 17:47	800	67	1160	1000	48	1100	1	0.04	0.35
F5D210345-013	Red	D3	5/19/2005 17:47	800	731	4581	1000	54	1085	1	0.86	4.64
F5D210345-014	Red	D4	5/19/2005 17:47	800	303	1768	1000	65	1272	1	0.31	0.94

LOT# F5D220356

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: 5139111

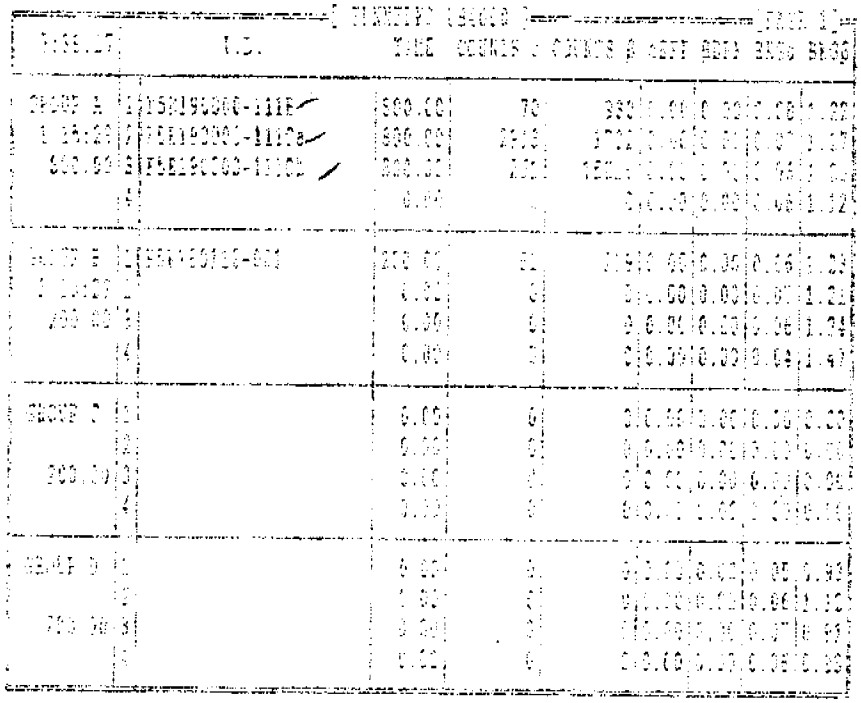
Reviewed By: RR

Batch ID: ABL 05/19/05 IV

Date: 5-20-05

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta		Net CPM Alpha	Net CPM Beta
F5D210345-015	Blue	A1	5/19/2005 17:47	800	181	1470	1000	78	1067	1	0.15	0.77
F5D220356-001	Blue	A2	5/19/2005 17:47	800	351	2487	1000	37	1059	1	0.40	2.05
F5D220356-001Sa	Blue	A4	5/19/2005 17:47	800	2082	3116	1000	62	957	1	2.54	2.94
F5D220356-001Sb	Blue	B1	5/19/2005 17:47	541	322	10000	1000	54	1105	1	0.54	17.38
F5D220356-001X	Blue	B2	5/19/2005 17:48	800	405	2611	1000	43	1151	1	0.46	2.11
F5D220356-002	Blue	B4	5/19/2005 17:48	800	267	1978	1000	41	969	1	0.29	1.50
F5D220356-003	Blue	C2	5/19/2005 17:48	800	108	1030	1000	62	989	1	0.07	0.30
F5D220356-004	Blue	C3	5/19/2005 17:48	800	133	1978	1000	70	1446	1	0.10	1.03
F5D220356-005	Blue	C4	5/19/2005 17:48	800	108	1208	1000	64	1028	1	0.07	0.48

STL ST. LOUIS



YELLOW

Filename 051905D

Date 5/20/05

Analyst CH

Nuclide RaDA, ABT

Batch 513V148

513711

SEVERN TRENT STL

Gamma Spectroscopy

SEVERN TRENT STL

GAMMA SPECTROSCOPY

Data and Results Reports

Calibration Data

Instrument Checks

Daily Instrument Check
Background

Batch Summary Sheets

Run Logs

Raw Data

Prep Data Sheet(s)
QC Acceptance Sheet(s)
Certificate/Standard Sheets

VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:21:11
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G81591AA_GE4_SOLID100ML_57813.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5117412
Project Number : F5D220356-001
Sample ID : G81591AA

Sample Quantity : 1.68100E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 27-APR-2005 18:18:38
Acquisition date : 27-APR-2005 18:18:38
Decay time : 0 00:00:00.00
Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.60
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE4
Counting geometry: SOLID_100ML

Energy cal. time : 16-MAR-2005 08:34:49
Effic. cal. time : 18-JAN-2005 00:15:12
Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000
End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE4__57454.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G81591AA Acquisition date : 27-APR-2005 18:18:38

---- Energy, FWHM, and Efficiency Curves ----

```
*****************************************************************************
*                                                                           *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)           *
*                            A = 1.10653E-01                                *
*                            B = 2.49919E-01                                *
*                            C = 1.94892E-08                                *
*                                                                           *
*                                                                           *
*                       FWHM(keV) = A + (B * SQRT(Energy))                  *
*                            A = 8.02351E-01                                *
*                            B = 2.65421E-02                                *
*                                                                           *
*                                                                           *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                           *
*     a1=9.41250E+02   a2=-4.55854E+00 a3=9.62044E-01                       *
*     a4=7.38134E-02   a5=-4.50301E-02 a6=-9.56656E-03   a7=0.00000E+00     *
*                                                                           *
*****************************************************************************
```

Post-NID Peak Search Report
Sample ID : G81591AA

Acquisition date : 27-APR-2005 18:18:38

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.37*	119	96	0.83	253.12	247	12	17.4		TH-234
7	74.96	57	103	0.98	299.47	296	20	20.7	9.46E-01	
7	77.17	72	127	0.99	308.32	296	20	17.8		
0	92.64*	241	164	1.20	370.23	363	16	12.3		TH-234
0	163.56	19	40	0.32	653.96	649	10	58.6		
0	185.77*	189	40	1.01	742.85	736	17	10.1		U-235
										RA-226
0	238.71*	96	56	0.71	954.64	949	12	17.4		PB-212
0	295.43	62	47	0.97	1181.54	1173	20	26.4		PB-214
0	352.02	105	20	1.00	1407.94	1401	15	12.6		PB-214
0	609.61*	44	9	1.04	2438.32	2434	13	19.7		
0	1461.45	113	11	1.81	5844.60	5834	21	11.2		K-40

Summary of Nuclide Activity
Sample ID : G81591AA

Acquisition date : 27-APR-2005 18:18:38

Total number of lines in spectrum	11	
Number of unidentified lines	3	
Number of lines tentatively identified by NID	8	72.73%

Nuclide Type : natural

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	6.799E+00	6.799E+00	0.892E+00	13.12	
Total Activity :			6.799E+00	6.799E+00			

Nuclide Type : Th Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
PB-212	1.91Y	1.00	2.529E-01	2.529E-01	0.478E-01	18.89	
Total Activity :			2.529E-01	2.529E-01			

Nuclide Type : U Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
PB-214	1600.00Y	1.00	4.564E-01	4.564E-01	0.598E-01	13.11	
RA-226	1600.00Y	1.00	5.147E+00	5.147E+00	0.626E+00	12.17	
TH-234	4.47E+09Y	1.00	2.797E+00	2.797E+00	0.342E+00	12.23	
Total Activity :			8.401E+00	8.401E+00			

Nuclide Type : Ac Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
U-235	7.04E+08Y	1.00	3.399E-01	3.399E-01	0.416E-01	12.24	
Total Activity :			3.399E-01	3.399E-01			

Grand Total Activity :	1.579E+01	1.579E+01

Flags: "K" = Keyline not found
"E" = Manually edited
"M" = Manually accepted
"A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G81591AA

Acquisition date : 27-APR-2005 18:18:38

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	6.799E+00	8.919E-01	6.930E-01	3.241E-02	9.811
PB-212	2.529E-01	4.778E-02	1.239E-01	6.772E-03	2.042
PB-214	4.564E-01	5.983E-02	1.254E-01	6.266E-03	3.639
RA-226	5.147E+00	6.262E-01	1.023E+00	4.735E-02	5.030
TH-234	2.797E+00	3.420E-01	9.832E-01	9.413E-02	2.845
U-235	3.399E-01	4.160E-02	4.076E-01	3.768E-02	0.834

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-1.440E-02		1.416E-01	5.143E-01	2.573E-02	-0.028
NA-22	3.603E-02		2.625E-02	1.139E-01	5.166E-03	0.316
CR-51	2.523E-02		1.188E-01	4.406E-01	2.208E-02	0.057
MN-54	-3.504E-02		2.415E-02	7.823E-02	4.198E-03	-0.448
CO-57	-1.283E-02		1.066E-02	3.613E-02	2.116E-03	-0.355
FE-59	1.764E-02		3.525E-02	1.462E-01	8.075E-03	0.121
CO-60	1.582E-03		2.318E-02	9.344E-02	4.239E-03	0.017
ZN-65	-1.515E-01		6.150E-02	1.789E-01	8.545E-03	-0.847
SE-75	-2.487E-02		2.052E-02	6.740E-02	3.316E-03	-0.369
SR-85	-2.785E-02		2.275E-02	7.478E-02	3.612E-03	-0.372
Y-88	8.269E-03		1.725E-02	8.394E-02	3.572E-03	0.099
NB-95	1.211E-02		2.118E-02	8.185E-02	4.339E-03	0.148
ZR-95	-2.248E-03		3.380E-02	1.269E-01	7.181E-03	-0.018
MO-99	7.704E-03		1.319E-01	5.061E-01	4.134E-02	0.015
TC-99M	-2.905E-02		1.255E-02	4.023E-02	2.149E-03	-0.722
RU-103	-3.137E-03		1.470E-02	5.375E-02	2.918E-03	-0.058
RH-105	-4.252E-01		2.282E-01	7.416E-01	3.598E-02	-0.573
RH-106	-1.167E-01		1.181E-01	4.921E-01	2.373E-02	-0.237
RU-106	-1.029E-01		1.567E-01	5.639E-01	4.050E-02	-0.182
CD-109	-2.414E-01		3.347E-01	1.057E+00	6.156E-02	-0.228
SN-113	-2.460E-02		1.940E-02	6.504E-02	2.861E-03	-0.378
SB-124	-1.486E-02		1.833E-02	6.443E-02	3.244E-03	-0.231
SB-125	1.965E-02		4.417E-02	1.675E-01	7.613E-03	0.117
I-131	-4.546E-03		1.524E-02	5.491E-02	2.596E-03	-0.083
I-132	-1.814E-02		2.206E-02	7.719E-02	3.926E-03	-0.235
TE-132	-1.428E-02		1.250E-02	4.154E-02	2.001E-03	-0.344
BA-133	-3.769E-04		2.456E-02	7.631E-02	5.183E-03	-0.005
I-133	-1.106E-02		1.619E-02	5.657E-02	2.760E-03	-0.195
CS-134	-2.763E-02		1.970E-02	6.179E-02	3.118E-03	-0.447
CS-137	2.859E-02		2.399E-02	9.499E-02	4.821E-03	0.301
CE-139	1.348E-02		1.300E-02	4.226E-02	1.907E-03	0.319
BA-140	-1.025E-01		6.117E-02	1.922E-01	3.216E-02	-0.533
LA-140	7.376E-03		2.429E-02	1.027E-01	4.634E-03	0.072
CE-141	-9.866E-04		2.215E-02	7.800E-02	4.097E-03	-0.013
CE-144	-8.488E-02		7.515E-02	2.552E-01	1.686E-02	-0.333
ND-147	8.883E-02		1.105E-01	4.300E-01	2.100E-02	0.207
EU-152	3.158E-02		7.849E-02	3.588E-01	1.852E-02	0.088

Combined Activity-MDA Report (continued)
Sample ID : G81591AA Acquisition date : 27-APR-2005 18:18:38

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-154	6.582E-02		1.413E-01	5.879E-01	4.064E-02	0.112
EU-155	4.503E-02		4.844E-02	1.711E-01	9.192E-03	0.263
HG-203	1.933E-03		1.609E-02	5.698E-02	2.851E-03	0.034
TL-208	4.763E-02		2.354E-02	9.695E-02	5.914E-03	0.491
BI-211	1.090E+00		1.979E-01	7.174E-01	3.323E-02	1.519
PB-211	7.213E-01		7.537E-01	3.021E+00	1.621E-01	0.239
BI-212	2.287E-01		2.871E-01	1.138E+00	5.955E-02	0.201
BI-214	2.644E-01	+	5.554E-02	2.441E-01	1.298E-02	1.083
RN-219	1.973E-01		1.249E-01	4.710E-01	2.318E-02	0.419
RA-223	6.870E-02		1.738E-01	6.263E-01	3.314E-02	0.110
RA-224	2.442E+00		8.277E-01	1.632E+00	4.670E-01	1.497
TH-227	1.515E-01		1.243E-01	4.008E-01	1.941E-02	0.378
AC-228	3.045E-01		1.367E-01	4.883E-01	9.344E-02	0.624
RA-228	4.062E-01		1.079E-01	4.628E-01	2.476E-02	0.878
PA-231	-1.207E-01		5.275E-01	1.900E+00	1.239E-01	-0.064
TH-231	3.938E-01		1.747E-01	6.269E-01	4.250E-02	0.628
TH-232	7.647E-01		5.179E-01	2.132E+00	1.145E-01	0.359
PA-233	2.696E-02		3.325E-02	1.253E-01	6.197E-03	0.215
PA-234M	1.242E+01		4.350E+00	1.891E+01	9.789E-01	0.657
NP-237	2.890E-02		3.565E-02	1.344E-01	6.497E-03	0.215
NP-239	-3.641E-02		5.988E-02	2.013E-01	1.054E-02	-0.181
AM-241	3.515E-02		3.151E-02	1.031E-01	5.931E-03	0.341
ANN RAD	-2.690E-02		2.441E-02	1.011E-01	4.872E-03	-0.266

Nuclide Line Activity Report
Sample ID : G81591AA Acquisition date : 27-APR-2005 18:18:38

Nuclide Type: natural

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
K-40	1460.83	10.67*	6.987E-01	6.797E+00	6.797E+00	13.12	OK

Final Mean for 1 Valid Peaks = 6.799E+00+/- 8.919E-01 (13.12%)

Nuclide Type: Th Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
PB-212	238.58	43.60*	3.880E+00	2.528E-01	2.528E-01	18.89	OK
	300.03	3.34	3.188E+00	----- Line Not Found		-----	Absent

Final Mean for 1 Valid Peaks = 2.529E-01+/- 4.778E-02 (18.89%)

Nuclide Type: U Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
PB-214	241.92	7.46	3.836E+00	----- Line Not Found		-----	Absent
	295.09	19.20	3.236E+00	4.452E-01	4.452E-01	27.43	OK
	351.87	37.10*	2.753E+00	4.591E-01	4.591E-01	14.46	OK

Final Mean for 2 Valid Peaks = 4.564E-01+/- 5.983E-02 (13.11%)

RA-226	186.21	3.50*	4.673E+00	5.155E+00	5.155E+00	12.17	OK

Final Mean for 1 Valid Peaks = 5.147E+00+/- 6.262E-01 (12.17%)

TH-234	63.29	3.80*	5.976E+00	2.348E+00	2.348E+00	20.44	OK
	92.59	5.41	6.273E+00	3.167E+00	3.167E+00	14.20	OK

Final Mean for 2 Valid Peaks = 2.797E+00+/- 3.420E-01 (12.23%)

Nuclide Type: Ac Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
U-235	143.79	10.50*	5.457E+00	----- Line Not Found		-----	Absent
	185.74	53.00	4.681E+00	3.399E-01	3.399E-01	12.24	OK

Final Mean for 1 Valid Peaks = 3.399E-01+/- 4.160E-02 (12.24%)

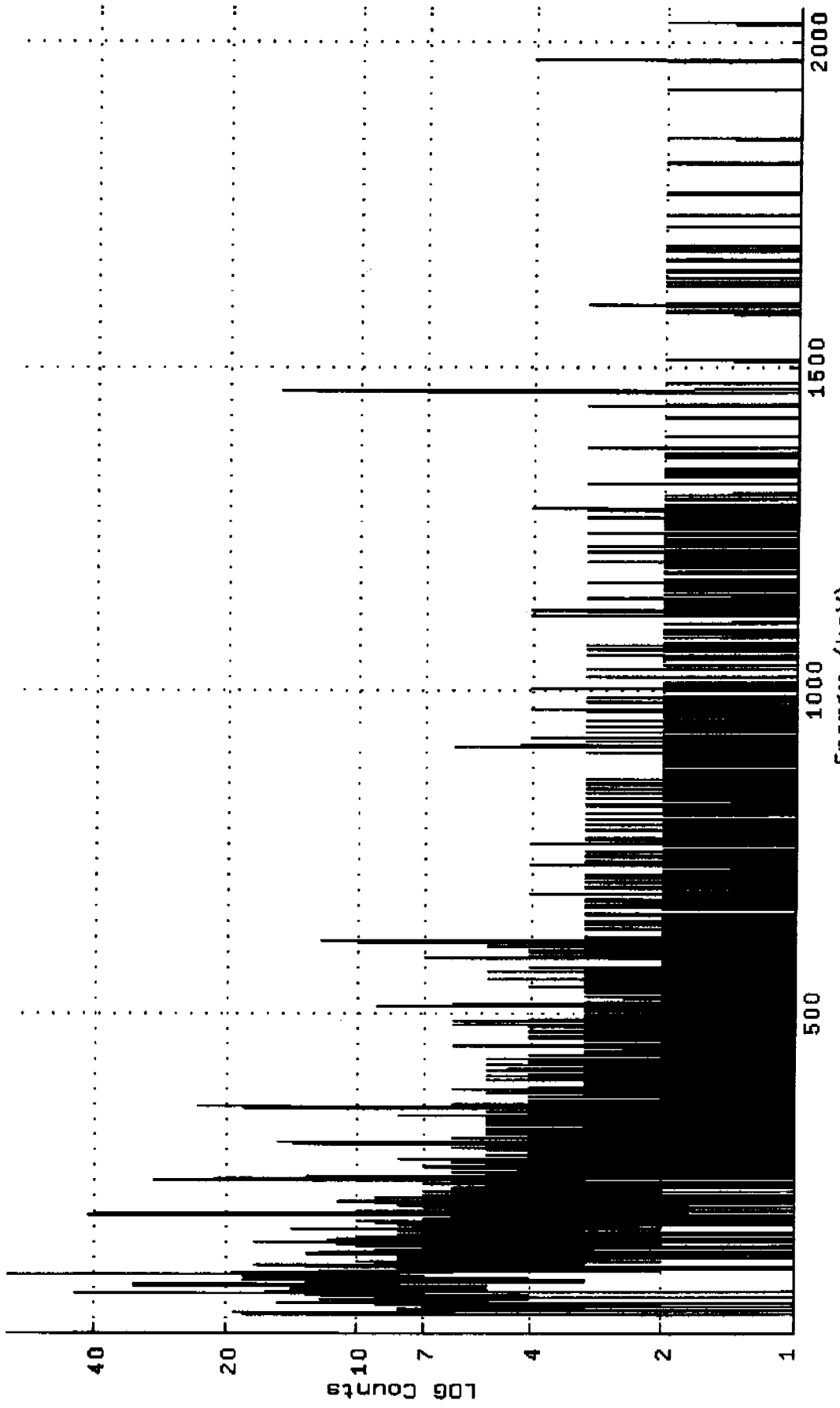
Flag: "*" = Keyline

Rejected Report
Sample ID : G81591AA Acquisition date : 27-APR-2005 18:18:38

Nuclide	Half-life	Half-Life Ratio	Energy	%Abund	Activity (pCi/G)	1-Sigma %Error	Rejected by
RU-103	39.25D	0.00	497.05*	88.70	--- Not Found ---		Abun.
			610.30	5.64	2.166E+00	21.18	
		% Abundances	Found =	5.98			
BI-214	1600.00Y	0.00	609.31*	46.10	2.644E-01	21.00	Abun.
			768.35	4.88	--- Not Found ---		
			1120.27	15.00	--- Not Found ---		
		% Abundances	Found =	69.87			

Flag: "*" = Keyline

Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G81591AA_GE4_SOLID100ML_57813.CNF;1
Title :
Sample Title: F5D220356-001
Start Time: 27-APR-2005 18:18 Sample Time: 27-APR-2005 18:18 Energy Offset: 1.10653E-01
Real Time : 0 01:00:00.60 Sample ID : G81591AA Energy Slope : 2.49919E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : 1.94892E-08



VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:21:32
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G81591AG_GE6_SOLID100ML_57820.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5117412
Project Number : F5D220356-001X
Sample ID : G81591AG

Sample Quantity : 1.68100E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 27-APR-2005 19:36:33
Acquisition date : 27-APR-2005 19:36:33
Decay time : 0 00:00:00.00
Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.52
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE6
Counting geometry: SOLID_100ML

Energy cal. time : 3-MAR-2004 08:43:53.
Effic. cal. time : 18-JAN-2005 22:11:47
Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000
End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE6__57456.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G81591AG Acquisition date : 27-APR-2005 19:36:33

---- Energy, FWHM, and Efficiency Curves ----

```
*****************************************************************************
*                                                                           *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)           *
*                          A = 1.54285E-01                                  *
*                          B = 2.49832E-01                                  *
*                          C = 1.86799E-08                                  *
*                                                                           *
*                                                                           *
*                    FWHM(keV) = A + (B * SQRT(Energy))                     *
*                          A = 4.67797E-01                                  *
*                          B = 3.35494E-02                                  *
*                                                                           *
*                                                                           *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                           *
*     a1=9.41250E+02   a2=-4.68519E+00 a3=8.82578E-01                       *
*     a4=8.83148E-02   a5=-2.58765E-02 a6=-1.60802E-02   a7=0.00000E+00     *
*                                                                           *
*****************************************************************************
```

Post-NID Peak Search Report
Sample ID : G81591AG

Acquisition date : 27-APR-2005 19:36:33

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.33*	88	171	0.89	252.85	241	21	33.7		TH-234
6	75.04*	74	60	0.77	299.74	296	21	17.2	1.05E+00	
6	77.22	84	62	0.77	308.48	296	21	13.3		
0	92.65*	186	125	1.14	370.22	365	18	14.7		TH-234
0	143.79*	35	28	0.63	574.88	571	8	30.1		U-235
0	185.86*	123	50	0.87	743.28	737	13	14.1		U-235
0	238.60*	81	65	0.85	954.36	947	15	22.4		PB-212
0	338.21	33	22	0.90	1352.99	1348	12	30.0		AC-228
0	351.83*	81	16	1.41	1407.50	1401	12	14.3		
0	583.05	52	15	1.00	2332.73	2326	18	20.7		TL-208
0	609.16*	60	6	0.95	2437.20	2431	16	16.3		
0	1460.49*	99	8	0.63	5842.72	5829	23	12.0		K-40

Summary of Nuclide Activity
Sample ID : G81591AG Acquisition date : 27-APR-2005 19:36:33

Total number of lines in spectrum 12
Number of unidentified lines 2
Number of lines tentatively identified by NID 10 83.33%

Nuclide Type : natural

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	6.499E+00	6.499E+00	0.892E+00	13.73	
	Total Activity :		6.499E+00	6.499E+00			

Nuclide Type : Th Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
TL-208	1.91Y	1.00	1.875E-01	1.875E-01	0.421E-01	22.48	
PB-212	1.91Y	1.00	2.556E-01	2.556E-01	0.603E-01	23.60	
AC-228	5.75Y	1.00	4.997E-01	4.997E-01	1.798E-01	35.97	
	Total Activity :		9.428E-01	9.428E-01			

Nuclide Type : U Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
TH-234	4.47E+09Y	1.00	2.722E+00	2.722E+00	0.413E+00	15.16	
	Total Activity :		2.722E+00	2.722E+00			

Nuclide Type : Ac Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
U-235	7.04E+08Y	1.00	2.732E-01	2.732E-01	0.393E-01	14.40	
	Total Activity :		2.732E-01	2.732E-01			

Grand Total Activity : 1.044E+01 1.044E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G81591AG

Acquisition date : 27-APR-2005 19:36:33

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	6.499E+00	8.924E-01	7.482E-01	3.312E-02	8.687
TL-208	1.875E-01	4.215E-02	7.942E-02	5.783E-03	2.361
PB-212	2.556E-01	6.032E-02	1.120E-01	6.153E-03	2.282
AC-228	4.997E-01	1.798E-01	3.925E-01	7.547E-02	1.273
TH-234	2.722E+00	4.128E-01	1.079E+00	1.026E-01	2.523
U-235	2.732E-01	3.934E-02	3.416E-01	3.129E-02	0.800

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-1.248E-01		1.373E-01	4.741E-01	2.774E-02	-0.263
NA-22	6.271E-03		2.080E-02	8.838E-02	3.827E-03	0.071
CR-51	-9.676E-02		1.390E-01	4.754E-01	2.508E-02	-0.204
MN-54	-1.286E-02		1.514E-02	5.564E-02	3.306E-03	-0.231
CO-57	-1.228E-02		1.044E-02	3.488E-02	1.979E-03	-0.352
FE-59	2.622E-02		3.884E-02	1.632E-01	8.910E-03	0.161
CO-60	-6.816E-03		1.469E-02	6.032E-02	2.563E-03	-0.113
ZN-65	-9.145E-02		4.703E-02	1.455E-01	6.846E-03	-0.628
SE-75	-9.106E-03		1.809E-02	6.388E-02	3.206E-03	-0.143
SR-85	-6.657E-02		2.376E-02	6.759E-02	3.976E-03	-0.985
Y-88	-1.008E-02		2.578E-02	1.009E-01	4.227E-03	-0.100
NB-95	2.871E-02		2.395E-02	9.621E-02	6.205E-03	0.298
ZR-95	-1.544E-02		3.845E-02	1.396E-01	9.509E-03	-0.111
MO-99	-5.246E-02		1.673E-01	6.111E-01	5.554E-02	-0.086
TC-99M	8.939E-03		1.314E-02	4.488E-02	2.327E-03	0.199
RU-103	3.978E-03		1.800E-02	6.784E-02	4.279E-03	0.059
RH-105	2.628E-01		2.517E-01	9.550E-01	4.851E-02	0.275
RH-106	4.749E-01		1.332E-01	5.295E-01	3.106E-02	0.897
RU-106	-4.618E-02		1.582E-01	5.979E-01	5.012E-02	-0.077
CD-109	5.796E-01		3.200E-01	1.184E+00	6.937E-02	0.490
SN-113	6.600E-03		2.192E-02	8.310E-02	4.121E-03	0.079
SB-124	-7.718E-03		1.747E-02	6.435E-02	4.200E-03	-0.120
SB-125	6.413E-02		5.841E-02	2.269E-01	1.188E-02	0.283
I-131	-1.662E-02		1.666E-02	5.794E-02	2.990E-03	-0.287
I-132	8.164E-03		2.342E-02	9.046E-02	6.223E-03	0.090
TE-132	-1.342E-02		1.216E-02	4.142E-02	1.998E-03	-0.324
BA-133	-7.133E-02		2.390E-02	6.215E-02	4.399E-03	-1.148
I-133	-1.324E-02		1.714E-02	5.973E-02	3.585E-03	-0.222
CS-134	1.396E-02		1.645E-02	6.371E-02	4.171E-03	0.219
CS-137	4.009E-02		2.273E-02	9.629E-02	6.644E-03	0.416
CE-139	-1.612E-02		1.251E-02	4.064E-02	1.787E-03	-0.397
BA-140	-1.868E-02		6.723E-02	2.427E-01	4.153E-02	-0.077
LA-140	-7.475E-05		2.203E-02	9.388E-02	4.046E-03	-0.001
CE-141	2.552E-02		2.080E-02	6.948E-02	3.547E-03	0.367
CE-144	-6.778E-02		9.220E-02	3.128E-01	2.023E-02	-0.217
ND-147	-2.172E-01		1.158E-01	3.510E-01	2.111E-02	-0.619
EU-152	-1.373E-01		8.344E-02	2.414E-01	1.188E-02	-0.569

Combined Activity-MDA Report (continued)
Sample ID : G81591AG Acquisition date : 27-APR-2005 19:36:33

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-154	-1.438E-01		1.821E-01	6.554E-01	4.640E-02	-0.219
EU-155	-3.444E-02		4.042E-02	1.389E-01	7.361E-03	-0.248
HG-203	-2.844E-02		1.554E-02	4.902E-02	2.521E-03	-0.580
BI-211	1.184E+00		2.075E-01	7.933E-01	3.988E-02	1.493
PB-211	6.906E-02		6.081E-01	2.467E+00	1.472E-01	0.028
BI-212	2.708E-01		2.925E-01	1.194E+00	7.950E-02	0.227
BI-214	4.245E-01	+	7.787E-02	3.030E-01	2.055E-02	1.401
PB-214	4.253E-01	+	6.852E-02	2.637E-01	1.415E-02	1.613
RN-219	1.121E-01		1.313E-01	4.922E-01	2.480E-02	0.228
RA-223	1.956E-01		1.768E-01	6.536E-01	3.376E-02	0.299
RA-224	-1.687E-03		4.245E-01	1.298E+00	3.717E-01	-0.001
RA-226	4.025E+00	+	6.305E-01	2.170E+00	9.863E-02	1.855
TH-227	-5.370E-02		1.276E-01	3.823E-01	1.860E-02	-0.140
RA-228	2.764E-01		1.028E-01	4.421E-01	2.349E-02	0.625
PA-231	-7.406E-02		6.260E-01	2.216E+00	1.481E-01	-0.033
TH-231	9.057E-01		2.032E-01	7.555E-01	5.129E-02	1.199
TH-232	9.819E-01		5.206E-01	2.280E+00	1.302E-01	0.431
PA-233	-3.988E-02		3.134E-02	1.028E-01	5.332E-03	-0.388
PA-234M	5.083E+00		3.611E+00	1.560E+01	7.982E-01	0.326
NP-237	-4.276E-02		3.360E-02	1.102E-01	5.601E-03	-0.388
NP-239	1.083E-01		5.962E-02	2.278E-01	1.184E-02	0.475
AM-241	6.553E-02		3.525E-02	1.166E-01	6.557E-03	0.562
ANN RAD	-4.769E-02		2.808E-02	1.172E-01	6.870E-03	-0.407

Nuclide Line Activity Report
Sample ID : G81591AG Acquisition date : 27-APR-2005 19:36:33

Nuclide Type: natural

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
K-40	1460.83	10.67*	6.381E-01	6.500E+00	6.500E+00	13.73	OK

Final Mean for 1 Valid Peaks = 6.499E+00+/- 8.924E-01 (13.73%)

Nuclide Type: Th Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
TL-208	583.02	86.00*	1.432E+00	1.875E-01	1.875E-01	22.48	OK

Final Mean for 1 Valid Peaks = 1.875E-01+/- 4.215E-02 (22.48%)

PB-212	238.58	43.60*	3.234E+00	2.556E-01	2.556E-01	23.60	OK
	300.03	3.34	2.660E+00	----- Line Not Found		-----	Absent

Final Mean for 1 Valid Peaks = 2.556E-01+/- 6.032E-02 (23.60%)

AC-228	338.42	12.40*	2.387E+00	5.000E-01	5.000E-01	35.97	OK

Final Mean for 1 Valid Peaks = 4.997E-01+/- 1.798E-01 (35.97%)

Nuclide Type: U Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
TH-234	63.29	3.80*	4.870E+00	2.131E+00	2.131E+00	35.40	OK
	92.59	5.41	5.227E+00	2.943E+00	2.943E+00	16.31	OK

Final Mean for 2 Valid Peaks = 2.722E+00+/- 4.128E-01 (15.16%)

Nuclide Type: Ac Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
U-235	143.79	10.50*	4.563E+00	3.245E-01	3.245E-01	31.84	OK
	185.74	53.00	3.907E+00	2.653E-01	2.653E-01	15.72	OK

Final Mean for 2 Valid Peaks = 2.732E-01+/- 3.934E-02 (14.40%)

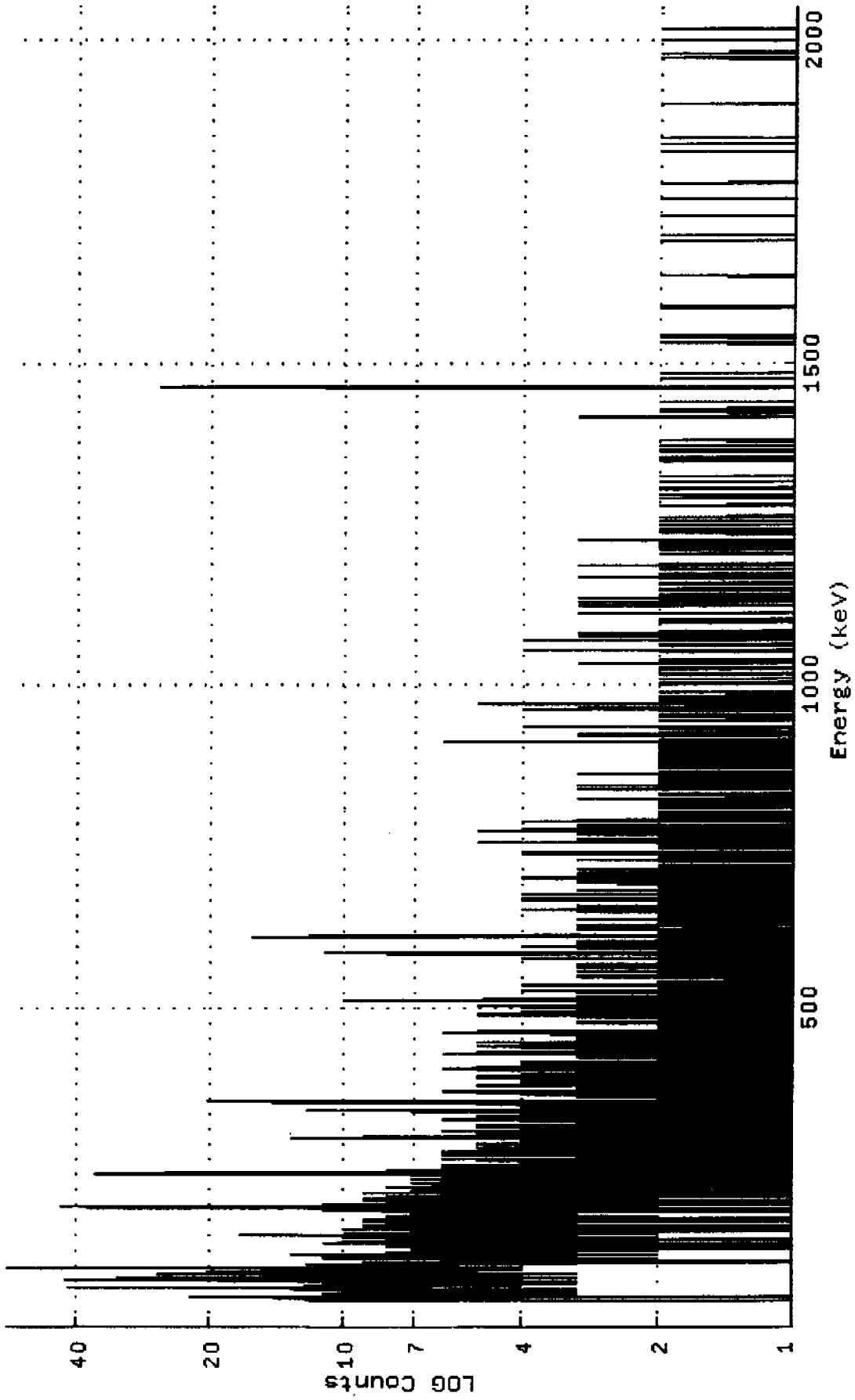
Flag: "*" = Keyline

Rejected Report
Sample ID : G81591AG Acquisition date : 27-APR-2005 19:36:33

Nuclide	Half-life	Half-Life Ratio	Energy	%Abund	Activity (pCi/G)	1-Sigma %Error	Rejected by
BI-214	1600.00Y	0.00	609.31*	46.10	4.245E-01	18.35	Abun.
			768.35	4.88	--- Not Found ---		
			1120.27	15.00	--- Not Found ---		
		% Abundances Found =		69.87			
PB-214	1600.00Y	0.00	241.92	7.46	--- Not Found ---		Abun.
			295.09	19.20	--- Not Found ---		
			351.87*	37.10	4.253E-01	16.11	
		% Abundances Found =		58.19			
RA-226	1600.00Y	0.00	186.21*	3.50	4.025E+00	15.67	Interf Abun
		% Abundances Found =		100.00	(Abn. Limit = 75.00%)		

Flag: "*" = Keyline

Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G81591AG_GE6_SOLID100ML_57820.CNF;1
Title :
Sample Title: F5D220356-001X
Start Time: 27-APR-2005 19:36 Sample Time: 27-APR-2005 19:36 Energy Offset: 1.54285E-01
Real Time : 0 01:00:00.52 Sample ID : G81591AG Energy Slope : 2.49832E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : 1.86799E-08



VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:21:56
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G816E1AA_GE5_SOLID100ML_57814.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5117412
Project Number : F5D220356-002
Sample ID : G816E1AA

Sample Quantity : 1.51100E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 27-APR-2005 18:20:22
Acquisition date : 27-APR-2005 18:20:22
Decay time : 0 00:00:00.00
Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.99
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE5
Counting geometry: SOLID_100ML

Energy cal. time : 9-MAR-2005 09:18:16.
Effic. cal. time : 18-JAN-2005 09:43:11
Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000
End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE5__57455.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G816E1AA Acquisition date : 27-APR-2005 18:20:22

---- Energy, FWHM, and Efficiency Curves ----

```
*****************************************************************************
*                                                                           *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)           *
*                            A = -7.14002E-03                               *
*                            B = 2.49998E-01                                *
*                            C = -1.90945E-09                               *
*                                                                           *
*                                                                           *
*                      FWHM(keV) = A + (B * SQRT(Energy))                   *
*                            A = 5.02556E-01                                *
*                            B = 3.66242E-02                                *
*                                                                           *
*                                                                           *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                           *
*     a1=9.41250E+02   a2=-4.46457E+00 a3=9.42586E-01                       *
*     a4=5.97186E-02   a5=-3.91387E-02 a6=-9.36517E-03   a7=0.00000E+00     *
*                                                                           *
*****************************************************************************
```

Post-NID Peak Search Report
Sample ID : G816E1AA

Acquisition date : 27-APR-2005 18:20:22

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.28*	207	176	0.87	253.14	244	17	14.6		TH-234
6	74.88	74	93	0.55	299.57	295	22	15.7	6.05E-01	
6	77.19*	83	90	0.55	308.78	295	22	14.6		
0	92.64*	395	155	1.26	370.61	364	21	8.5		TH-234
0	185.88*	217	65	0.86	743.56	737	13	9.7		U-235
										RA-226
0	238.75*	123	49	1.07	955.06	948	13	13.9		PB-212
0	295.37	84	37	1.19	1181.51	1173	23	19.6		PB-214
0	338.59	30	30	0.57	1354.41	1344	16	39.5		AC-228
0	352.12*	108	15	1.12	1408.52	1401	13	11.8		PB-214
0	583.64	40	17	0.58	2334.65	2323	17	25.1		TL-208
0	609.54	61	28	1.39	2438.24	2432	13	20.1		
0	911.78	34	6	0.83	3647.27	3638	18	22.4		
0	1461.49	156	0	0.67	5846.31	5835	24	8.0		K-40

Summary of Nuclide Activity
Sample ID : G816E1AA

Acquisition date : 27-APR-2005 18:20:22

Total number of lines in spectrum 13
Number of unidentified lines 2
Number of lines tentatively identified by NID 11 84.62%

Nuclide Type : natural

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	9.417E+00	9.417E+00	0.992E+00	10.53	
	Total Activity :		9.417E+00	9.417E+00			

Nuclide Type : Th Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
TL-208	1.91Y	1.00	1.283E-01	1.283E-01	0.341E-01	26.56	
PB-212	1.91Y	1.00	3.424E-01	3.424E-01	0.542E-01	15.82	
AC-228	5.75Y	1.00	3.934E-01	3.934E-01	1.737E-01	44.16	
	Total Activity :		8.641E-01	8.641E-01			

Nuclide Type : U Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
PB-214	1600.00Y	1.00	5.179E-01	5.179E-01	0.624E-01	12.04	
RA-226	1600.00Y	1.00	6.242E+00	6.242E+00	0.746E+00	11.94	
TH-234	4.47E+09Y	1.00	5.049E+00	5.049E+00	0.507E+00	10.04	
	Total Activity :		1.181E+01	1.181E+01			

Nuclide Type : Ac Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
U-235	7.04E+08Y	1.00	4.122E-01	4.122E-01	0.495E-01	12.02	
	Total Activity :		4.122E-01	4.122E-01			

Grand Total Activity : 2.250E+01 2.250E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G816E1AA

Acquisition date : 27-APR-2005 18:20:22

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	9.417E+00	9.916E-01	9.371E-01	4.373E-02	10.049
TL-208	1.283E-01	3.408E-02	7.190E-02	5.049E-03	1.784
PB-212	3.424E-01	5.418E-02	1.100E-01	6.263E-03	3.114
PB-214	5.179E-01	6.238E-02	1.312E-01	6.703E-03	3.947
RA-226	6.242E+00	7.456E-01	1.057E+00	5.195E-02	5.907
AC-228	3.934E-01	1.737E-01	3.984E-01	7.639E-02	0.987
TH-234	5.049E+00	5.068E-01	9.950E-01	9.586E-02	5.074
U-235	4.122E-01	4.954E-02	4.317E-01	4.140E-02	0.955

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	1.032E-01		1.143E-01	4.659E-01	2.521E-02	0.221
NA-22	4.491E-02		2.549E-02	1.140E-01	5.123E-03	0.394
CR-51	-1.368E-01		1.346E-01	4.577E-01	2.367E-02	-0.299
MN-54	-5.126E-02		2.335E-02	6.882E-02	4.526E-03	-0.745
CO-57	-6.759E-03		1.146E-02	3.840E-02	2.567E-03	-0.176
FE-59	6.172E-03		4.106E-02	1.601E-01	9.143E-03	0.039
CO-60	-5.618E-03		2.571E-02	1.045E-01	4.746E-03	-0.054
ZN-65	-8.573E-02		5.234E-02	1.659E-01	8.164E-03	-0.517
SE-75	-1.782E-02		1.804E-02	6.248E-02	3.218E-03	-0.285
SR-85	-9.286E-02		2.789E-02	8.045E-02	4.397E-03	-1.154
Y-88	2.861E-02		2.739E-02	1.233E-01	5.162E-03	0.232
NB-95	3.314E-02		2.371E-02	9.470E-02	6.397E-03	0.350
ZR-95	-1.922E-02		3.489E-02	1.258E-01	8.884E-03	-0.153
MO-99	-4.024E-01		1.648E-01	4.695E-01	4.333E-02	-0.857
TC-99M	-5.316E-03		1.251E-02	4.386E-02	2.618E-03	-0.121
RU-103	1.916E-02		1.561E-02	6.340E-02	3.746E-03	0.302
RH-105	-2.312E-01		2.404E-01	8.229E-01	4.145E-02	-0.281
RH-106	8.589E-02		1.366E-01	5.845E-01	3.183E-02	0.147
RU-106	-2.564E-02		1.615E-01	5.948E-01	4.886E-02	-0.043
CD-109	-6.930E-01		3.325E-01	1.056E+00	6.152E-02	-0.656
SN-113	-1.510E-02		2.296E-02	7.890E-02	3.513E-03	-0.191
SB-124	-3.284E-03		1.956E-02	7.046E-02	4.418E-03	-0.047
SB-125	9.323E-03		5.748E-02	2.121E-01	1.005E-02	0.044
I-131	2.532E-02		1.730E-02	6.706E-02	3.235E-03	0.378
I-132	5.055E-02		2.453E-02	1.013E-01	6.877E-03	0.499
TE-132	-3.669E-03		1.216E-02	4.234E-02	2.152E-03	-0.087
BA-133	1.280E-02		2.078E-02	7.319E-02	5.028E-03	0.175
I-133	-3.519E-02		1.663E-02	5.022E-02	2.817E-03	-0.701
CS-134	9.761E-03		2.126E-02	7.427E-02	4.675E-03	0.131
CS-137	5.276E-02		3.305E-02	1.328E-01	9.016E-03	0.397
CE-139	-1.032E-02		1.260E-02	4.323E-02	2.079E-03	-0.239
BA-140	4.958E-02		7.169E-02	2.718E-01	4.614E-02	0.182
LA-140	-1.951E-03		2.243E-02	9.274E-02	4.158E-03	-0.021
CE-141	-1.491E-02		2.326E-02	8.049E-02	4.680E-03	-0.185
CE-144	8.234E-02		8.696E-02	3.217E-01	2.319E-02	0.256

Combined Activity-MDA Report (continued)
Sample ID : G816E1AA Acquisition date : 27-APR-2005 18:20:22

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
ND-147	-1.499E-02		9.335E-02	3.511E-01	1.974E-02	-0.043
EU-152	-1.080E-01		1.171E-01	4.137E-01	2.133E-02	-0.261
EU-154	-1.202E-02		1.705E-01	6.581E-01	5.104E-02	-0.018
EU-155	-1.258E-02		4.461E-02	1.529E-01	8.842E-03	-0.082
HG-203	7.722E-03		1.603E-02	5.944E-02	3.101E-03	0.130
BI-211	1.276E+00		2.082E-01	7.589E-01	3.607E-02	1.682
PB-211	-1.073E+00		8.351E-01	2.756E+00	1.815E-01	-0.389
BI-212	5.110E-01		3.229E-01	1.316E+00	8.950E-02	0.388
BI-214	3.761E-01	+	8.162E-02	3.003E-01	1.967E-02	1.252
RN-219	2.779E-02		1.318E-01	4.803E-01	2.473E-02	0.058
RA-223	1.157E-01		1.663E-01	6.129E-01	3.504E-02	0.189
RA-224	9.682E-01		5.267E-01	1.475E+00	4.228E-01	0.656
TH-227	1.064E-01		1.061E-01	3.478E-01	1.774E-02	0.306
RA-228	4.908E-01	+	1.168E-01	4.683E-01	2.926E-02	1.048
PA-231	-2.189E-01		5.796E-01	2.050E+00	1.366E-01	-0.107
TH-231	2.836E-01		1.858E-01	6.636E-01	4.509E-02	0.427
TH-232	-2.525E-01		5.690E-01	2.024E+00	1.311E-01	-0.125
PA-233	2.499E-02		3.355E-02	1.258E-01	6.441E-03	0.199
PA-234M	1.200E+01		4.907E+00	2.042E+01	1.180E+00	0.588
NP-237	2.680E-02		3.598E-02	1.349E-01	6.763E-03	0.199
NP-239	1.012E-01		6.157E-02	2.263E-01	1.246E-02	0.447
AM-241	4.669E-02		3.275E-02	1.101E-01	6.458E-03	0.424
ANN RAD	1.209E-02		2.825E-02	1.200E-01	6.527E-03	0.101

Nuclide Line Activity Report
Sample ID : G816E1AA

Acquisition date : 27-APR-2005 18:20:22

Nuclide Type: natural

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
K-40	1460.83	10.67*	7.717E-01	9.414E+00	9.414E+00	10.53	OK

Final Mean for 1 Valid Peaks = 9.417E+00+/- 9.916E-01 (10.53%)

Nuclide Type: Th Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
TL-208	583.02	86.00*	1.824E+00	1.282E-01	1.282E-01	26.56	OK

Final Mean for 1 Valid Peaks = 1.283E-01+/- 3.408E-02 (26.56%)

PB-212	238.58	43.60*	4.106E+00	3.422E-01	3.422E-01	15.82	OK
	300.03	3.34	3.393E+00	----- Line Not Found		-----	Absent

Final Mean for 1 Valid Peaks = 3.424E-01+/- 5.418E-02 (15.82%)

AC-228	338.42	12.40*	3.050E+00	3.932E-01	3.933E-01	44.16	OK

Final Mean for 1 Valid Peaks = 3.934E-01+/- 1.737E-01 (44.16%)

Nuclide Type: U Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
PB-214	241.92	7.46	4.061E+00	----- Line Not Found		-----	Absent
	295.09	19.20	3.443E+00	6.346E-01	6.346E-01	21.00	OK
	351.87	37.10*	2.944E+00	4.898E-01	4.898E-01	13.82	OK

Final Mean for 2 Valid Peaks = 5.179E-01+/- 6.238E-02 (12.04%)

RA-226	186.21	3.50*	4.922E+00	6.250E+00	6.250E+00	11.95	OK

Final Mean for 1 Valid Peaks = 6.242E+00+/- 7.456E-01 (11.94%)

TH-234	63.29	3.80*	6.379E+00	4.233E+00	4.233E+00	18.20	OK
	92.59	5.41	6.611E+00	5.491E+00	5.491E+00	11.13	OK

Final Mean for 2 Valid Peaks = 5.049E+00+/- 5.068E-01 (10.04%)

Nuclide Type: Ac Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
U-235	143.79	10.50*	5.732E+00	----- Line Not Found		-----	Absent
	185.74	53.00	4.930E+00	4.120E-01	4.120E-01	12.02	OK

Final Mean for 1 Valid Peaks = 4.122E-01+/- 4.954E-02 (12.02%)

Nuclide Line Activity Report (continued) Page : 8
Sample ID : G816E1AA Acquisition date : 27-APR-2005 18:20:22

Flag: "*" = Keyline

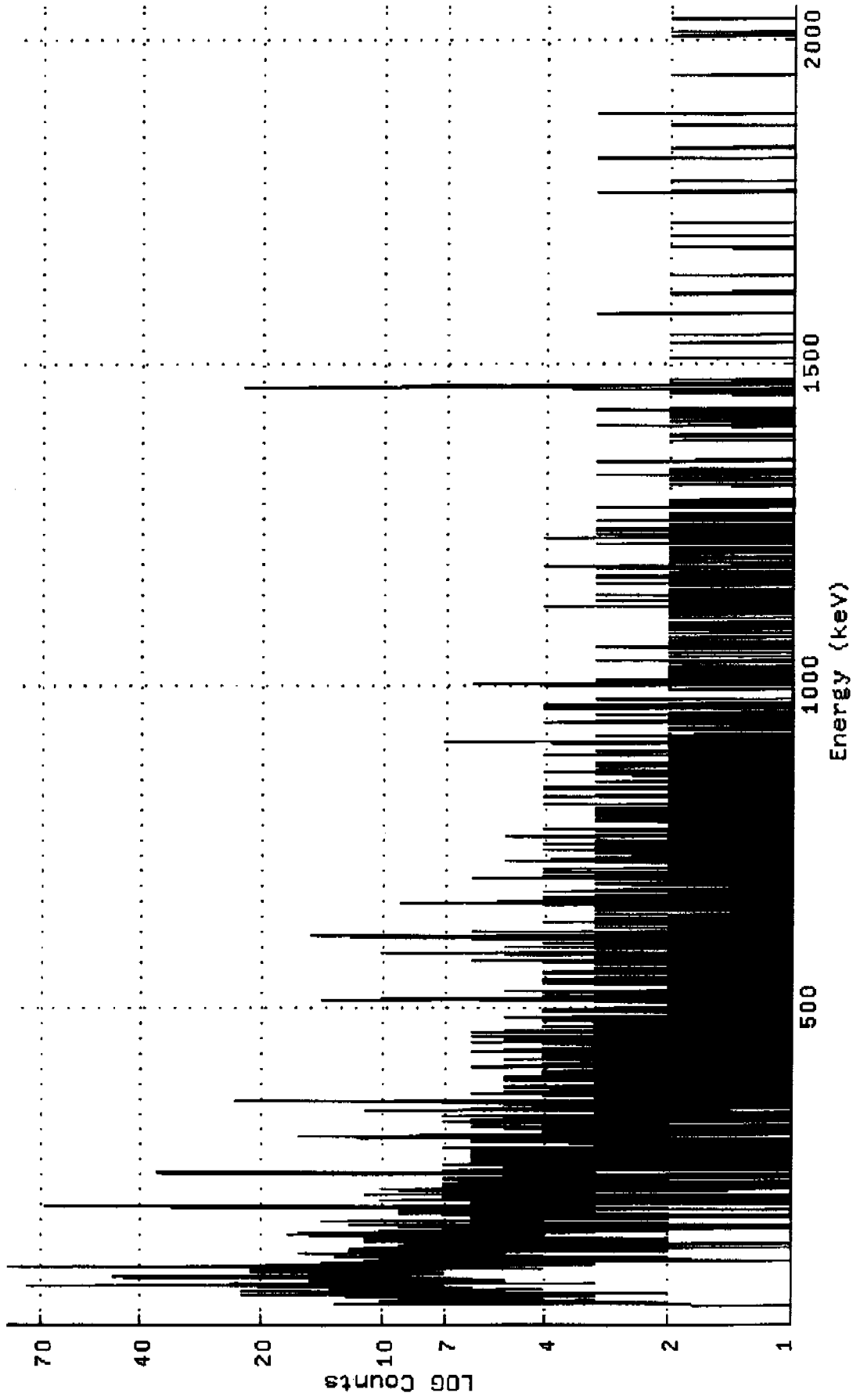
Rejected Report
Sample ID : G816E1AA

Acquisition date : 27-APR-2005 18:20:22

Nuclide	Half-life	Half-Life Ratio	Energy	%Abund	Activity (pCi/G)	1-Sigma %Error	Rejected by
RU-103	39.25D	0.00	497.05*	88.70	--- Not Found ---		Abun.
			610.30	5.64	3.080E+00	21.87	
		% Abundances Found =		5.98			
BI-214	1600.00Y	0.00	609.31*	46.10	3.761E-01	21.70	Abun.
			768.35	4.88	--- Not Found ---		
			1120.27	15.00	--- Not Found ---		
		% Abundances Found =		69.87			
RA-228	5.75Y	0.00	911.16*	29.00	4.908E-01	23.79	Abun.
			968.97	17.40	--- Not Found ---		
		% Abundances Found =		62.50			

Flag: "*" = Keyline

Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G816E1AA_GE5_SOLID100ML_57814.CNF;1
Title :
Sample Title: F5D220356-002
Start Time: 27-APR-2005 18:20 Sample Time: 27-APR-2005 18:20 Energy Offset: -7.14002E-03
Real Time : 0 01:00:00.99 Sample ID : G816E1AA Energy Slope : 2.49998E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : -1.90945E-09



VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:22:17
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G816L1AA_GE6_SOLID100ML_57815.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5117412
Project Number : F5D220356-003
Sample ID : G816L1AA

Sample Quantity : 1.72900E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 27-APR-2005 18:21:20
Acquisition date : 27-APR-2005 18:21:20
Decay time : 0 00:00:00.00
Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.48
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE6
Counting geometry: SOLID_100ML

Energy cal. time : 3-MAR-2004 08:43:53.
Effic. cal. time : 18-JAN-2005 22:11:47
Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000
End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE6__57456.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G816L1AA Acquisition date : 27-APR-2005 18:21:20

---- Energy, FWHM, and Efficiency Curves ----

```
*********************************************************************************
*                                                                               *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)               *
*                            A = 1.54285E-01                                    *
*                            B = 2.49832E-01                                    *
*                            C = 1.86799E-08                                    *
*                                                                               *
*                                                                               *
*                     FWHM(keV) = A + (B * SQRT(Energy))                        *
*                            A = 4.67797E-01                                    *
*                            B = 3.35494E-02                                    *
*                                                                               *
*                                                                               *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                               *
*     a1=9.41250E+02   a2=-4.68519E+00 a3=8.82578E-01                           *
*     a4=8.83148E-02   a5=-2.58765E-02 a6=-1.60802E-02   a7=0.00000E+00         *
*                                                                               *
*********************************************************************************
```

Post-NID Peak Search Report
Sample ID : G816L1AA

Acquisition date : 27-APR-2005 18:21:20

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	92.57*	93	124	1.08	369.91	357	24	29.6		
0	185.89*	61	40	0.84	743.39	736	14	23.8		U-235 RA-226
0	238.50*	86	36	1.09	953.96	949	12	17.2		PB-212
0	295.16*	52	29	0.72	1180.71	1169	20	25.8		PB-214
0	338.32	40	30	0.57	1353.42	1343	20	32.7		AC-228
0	351.82*	83	19	0.97	1407.46	1403	13	14.8		PB-214
0	583.38	19	14	0.56	2334.06	2329	11	39.6		TL-208
0	609.23*	60	16	0.95	2437.50	2428	19	19.6		
0	910.96	13	8	0.54	3644.67	3640	10	44.7		
0	1460.44*	102	15	1.50	5842.51	5832	22	13.2		K-40

Summary of Nuclide Activity
Sample ID : G816L1AA Acquisition date : 27-APR-2005 18:21:20

Total number of lines in spectrum 10
Number of unidentified lines 0
Number of lines tentatively identified by NID 10 100.00%

Nuclide Type : natural

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	6.536E+00	6.536E+00	0.966E+00	14.78	
	Total Activity :		6.536E+00	6.536E+00			

Nuclide Type : Th Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
TL-208	1.91Y	1.00	6.830E-02	6.830E-02	2.770E-02	40.56	
PB-212	1.91Y	1.00	2.645E-01	2.645E-01	0.495E-01	18.72	
AC-228	5.75Y	1.00	5.862E-01	5.862E-01	2.241E-01	38.23	
	Total Activity :		9.190E-01	9.190E-01			

Nuclide Type : U Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
PB-214	1600.00Y	1.00	4.274E-01	4.274E-01	0.617E-01	14.44	
RA-226	1600.00Y	1.00	1.953E+00	1.953E+00	0.482E+00	24.70	
	Total Activity :		2.380E+00	2.380E+00			

Nuclide Type : Ac Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
U-235	7.04E+08Y	1.00	1.290E-01	1.290E-01	0.319E-01	24.73	
	Total Activity :		1.290E-01	1.290E-01			

Grand Total Activity : 9.964E+00 9.964E+00

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G816L1AA

Acquisition date : 27-APR-2005 18:21:20

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	6.536E+00	9.660E-01	1.050E+00	4.648E-02	6.225
TL-208	6.830E-02	2.770E-02	7.763E-02	5.653E-03	0.880
PB-212	2.645E-01	4.951E-02	9.715E-02	5.337E-03	2.722
PB-214	4.274E-01	6.170E-02	1.560E-01	8.371E-03	2.740
RA-226	1.953E+00	4.823E-01	9.401E-01	4.273E-02	2.078
AC-228	5.862E-01	2.241E-01	3.553E-01	6.831E-02	1.650
U-235	1.290E-01	3.190E-02	3.537E-01	3.240E-02	0.365

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-1.141E-01		1.511E-01	5.257E-01	3.077E-02	-0.217
NA-22	-1.511E-02		2.554E-02	9.424E-02	4.081E-03	-0.160
CR-51	1.210E-03		1.256E-01	4.540E-01	2.395E-02	0.003
MN-54	-4.011E-03		2.048E-02	7.812E-02	4.642E-03	-0.051
CO-57	1.896E-02		9.305E-03	3.632E-02	2.060E-03	0.522
FE-59	-5.126E-02		3.004E-02	8.842E-02	4.827E-03	-0.580
CO-60	5.708E-03		2.296E-02	9.485E-02	4.030E-03	0.060
ZN-65	-1.708E-01		5.505E-02	1.416E-01	6.659E-03	-1.206
SE-75	-4.062E-03		1.890E-02	6.767E-02	3.396E-03	-0.060
SR-85	-1.128E-01		2.864E-02	7.397E-02	4.352E-03	-1.525
Y-88	-9.803E-04		2.042E-02	8.788E-02	3.683E-03	-0.011
NB-95	4.265E-03		2.401E-02	8.976E-02	5.789E-03	0.048
ZR-95	-6.880E-02		3.554E-02	1.064E-01	7.248E-03	-0.646
MO-99	-1.338E-01		1.493E-01	5.173E-01	4.702E-02	-0.259
TC-99M	1.982E-02		1.081E-02	4.126E-02	2.139E-03	0.480
RU-103	8.233E-03		1.787E-02	6.830E-02	4.308E-03	0.121
RH-105	6.001E-02		2.029E-01	7.566E-01	3.843E-02	0.079
RH-106	6.206E-01		1.498E-01	5.844E-01	3.429E-02	1.062
RU-106	6.228E-02		1.584E-01	6.327E-01	5.304E-02	0.098
CD-109	5.335E-01		3.307E-01	1.092E+00	6.398E-02	0.489
SN-113	-2.928E-03		1.805E-02	6.760E-02	3.352E-03	-0.043
SB-124	-7.602E-03		1.639E-02	6.047E-02	3.947E-03	-0.126
SB-125	-1.970E-02		4.710E-02	1.704E-01	8.922E-03	-0.116
I-131	1.257E-02		1.496E-02	5.931E-02	3.061E-03	0.212
I-132	-8.137E-03		2.053E-02	7.563E-02	5.203E-03	-0.108
TE-132	1.463E-02		1.068E-02	4.228E-02	2.040E-03	0.346
BA-133	-1.005E-02		2.431E-02	7.756E-02	5.490E-03	-0.130
I-133	5.561E-03		1.566E-02	6.130E-02	3.680E-03	0.091
CS-134	3.776E-03		1.743E-02	5.943E-02	3.891E-03	0.064
CS-137	1.251E-01		3.007E-02	1.290E-01	8.904E-03	0.969
CE-139	-1.873E-02		1.276E-02	4.098E-02	1.802E-03	-0.457
BA-140	-5.234E-02		6.296E-02	2.147E-01	3.673E-02	-0.244
LA-140	-9.242E-03		2.487E-02	9.791E-02	4.220E-03	-0.094
CE-141	6.374E-03		1.955E-02	6.996E-02	3.571E-03	0.091
CE-144	1.405E-01		7.926E-02	3.022E-01	1.954E-02	0.465
ND-147	-7.898E-02		1.025E-01	3.583E-01	2.155E-02	-0.220

Combined Activity-MDA Report (continued) Page : 6
Sample ID : G816L1AA Acquisition date : 27-APR-2005 18:21:20

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-152	-1.075E-01		1.347E-01	4.790E-01	2.357E-02	-0.224
EU-154	-3.913E-02		1.716E-01	6.571E-01	4.652E-02	-0.060
EU-155	-2.516E-02		4.282E-02	1.487E-01	7.878E-03	-0.169
HG-203	-6.732E-03		1.500E-02	5.278E-02	2.714E-03	-0.128
BI-211	1.131E+00		2.177E-01	8.064E-01	4.053E-02	1.403
PB-211	3.939E-01		6.648E-01	2.751E+00	1.642E-01	0.143
BI-212	6.236E-02		2.752E-01	1.071E+00	7.130E-02	0.058
BI-214	4.086E-01	+	8.717E-02	3.070E-01	2.083E-02	1.331
RN-219	-5.735E-02		1.211E-01	4.247E-01	2.140E-02	-0.135
RA-223	3.143E-01		1.791E-01	6.745E-01	3.484E-02	0.466
RA-224	1.226E+00		4.963E-01	1.333E+00	3.817E-01	0.919
TH-227	-2.190E-01		1.194E-01	3.107E-01	1.512E-02	-0.705
RA-228	2.079E-01	+	9.414E-02	4.215E-01	2.240E-02	0.493
PA-231	-1.459E-01		5.262E-01	1.867E+00	1.248E-01	-0.078
TH-231	3.891E-01		1.617E-01	6.099E-01	4.140E-02	0.638
TH-232	3.434E-01		5.356E-01	2.146E+00	1.226E-01	0.160
PA-233	-3.172E-02		3.226E-02	1.083E-01	5.618E-03	-0.293
PA-234M	3.711E+00		3.366E+00	1.437E+01	7.352E-01	0.258
TH-234	8.078E-01		3.245E-01	1.223E+00	1.162E-01	0.661
NP-237	-3.401E-02		3.458E-02	1.162E-01	5.902E-03	-0.293
NP-239	1.539E-01		5.627E-02	2.216E-01	1.152E-02	0.695
AM-241	2.064E-02		2.452E-02	8.941E-02	5.025E-03	0.231
ANN RAD	-5.450E-03		3.007E-02	1.273E-01	7.459E-03	-0.043

Nuclide Line Activity Report
Sample ID : G816L1AA

Acquisition date : 27-APR-2005 18:21:20

Nuclide Type: natural

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
K-40	1460.83	10.67*	6.381E-01	6.537E+00	6.537E+00	14.78	OK

Final Mean for 1 Valid Peaks = 6.536E+00+/- 9.660E-01 (14.78%)

Nuclide Type: Th Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
TL-208	583.02	86.00*	1.432E+00	6.826E-02	6.826E-02	40.56	OK

Final Mean for 1 Valid Peaks = 6.830E-02+/- 2.770E-02 (40.56%)

PB-212	238.58	43.60*	3.234E+00	2.646E-01	2.646E-01	18.72	OK
	300.03	3.34	2.660E+00	----- Line Not Found		-----	Absent

Final Mean for 1 Valid Peaks = 2.645E-01+/- 4.951E-02 (18.72%)

AC-228	338.42	12.40*	2.387E+00	5.864E-01	5.864E-01	38.23	OK

Final Mean for 1 Valid Peaks = 5.862E-01+/- 2.241E-01 (38.23%)

Nuclide Type: U Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
PB-214	241.92	7.46	3.198E+00	----- Line Not Found		-----	Absent
	295.09	19.20	2.699E+00	4.383E-01	4.383E-01	26.86	OK
	351.87	37.10*	2.303E+00	4.237E-01	4.237E-01	16.55	OK

Final Mean for 2 Valid Peaks = 4.274E-01+/- 6.170E-02 (14.44%)

RA-226	186.21	3.50*	3.900E+00	1.955E+00	1.955E+00	24.70	OK

Final Mean for 1 Valid Peaks = 1.953E+00+/- 4.823E-01 (24.70%)

Nuclide Type: Ac Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
U-235	143.79	10.50*	4.563E+00	----- Line Not Found		-----	Absent
	185.74	53.00	3.907E+00	1.289E-01	1.289E-01	24.73	OK

Final Mean for 1 Valid Peaks = 1.290E-01+/- 3.190E-02 (24.73%)

Flag: "*" = Keyline

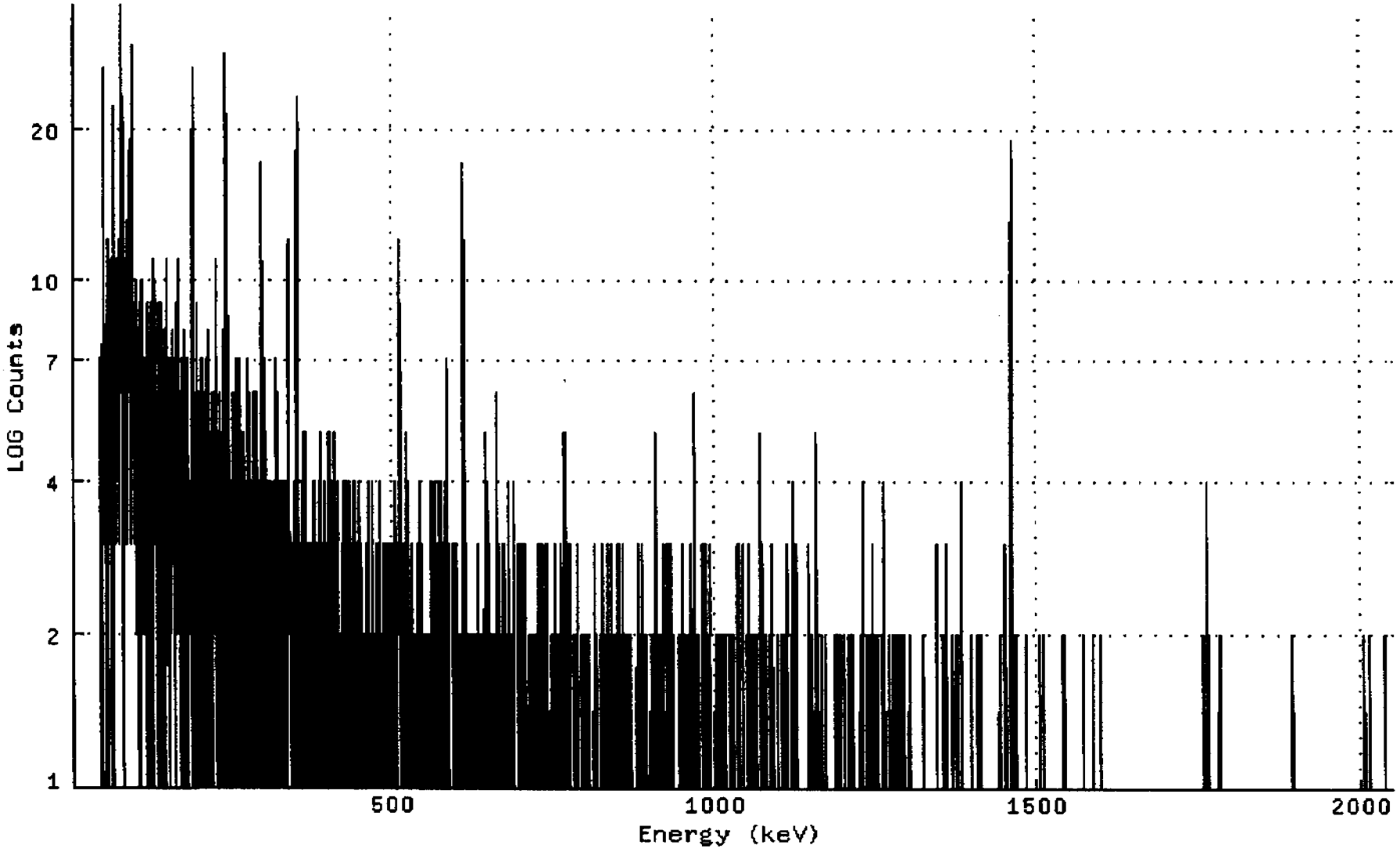
Rejected Report
Sample ID : G816L1AA Acquisition date : 27-APR-2005 18:21:20

Nuclide	Half-life	Half-Life Ratio	Energy	%Abund	Activity (pCi/G)	1-Sigma %Error	Rejected by
BI-214	1600.00Y	0.00	609.31*	46.10	4.086E-01	21.33	Abun.
			768.35	4.88	--- Not Found ---		
			1120.27	15.00	--- Not Found ---		
		% Abundances	Found =	69.87			
RA-228	5.75Y	0.00	911.16*	29.00	2.079E-01	45.28	Abun.
			968.97	17.40	--- Not Found ---		
		% Abundances	Found =	62.50			
TH-234	4.47E+09Y	0.00	63.29*	3.80	--- Not Found ---		Abun.
			92.59	5.41	1.423E+00	30.47	
		% Abundances	Found =	58.74			

Flag: "*" = Keyline

Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G816L1AA_GE6_SOLID100ML_57815.CNF;1
Title :
Sample Title: F5D220356-003

Start Time: 27-APR-2005 18:21	Sample Time: 27-APR-2005 18:21	Energy Offset: 1.54285E-01
Real Time : 0 01:00:00.48	Sample ID : G816L1AA	Energy Slope : 2.49832E-01
Live Time : 0 01:00:00.00	Sample Type: SOLID	Energy Quad : 1.86799E-08



VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:22:37
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G816P1AA_GE7_SOLID100ML_57816.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5117412
Project Number : F5D220356-004
Sample ID : G816P1AA

Sample Quantity : 1.83300E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 27-APR-2005 18:23:22
Acquisition date : 27-APR-2005 18:23:22
Decay time : 0 00:00:00.00
Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.44
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE7
Counting geometry: SOLID_100ML

Energy cal. time : 25-FEB-2005 09:11:05
Effic. cal. time : 19-JAN-2005 01:25:36
Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000
End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE7__57457.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

---- Energy, FWHM, and Efficiency Curves ----

```
*************************************************************************
*                                                                       *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)       *
*                          A = 7.85538E-02                              *
*                          B = 2.50061E-01                              *
*                          C = -1.56700E-08                             *
*                                                                       *
*                                                                       *
*                                                                       *
*                    FWHM(keV) = A + (B * SQRT(Energy))                 *
*                          A = 5.33118E-01                              *
*                          B = 4.95085E-02                              *
*                                                                       *
*                                                                       *
*                                                                       *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                       *
*     a1=9.41250E+02   a2=-4.39222E+00 a3=9.59385E-01                   *
*     a4=7.48354E-02   a5=-4.49953E-02 a6=-1.06506E-02   a7=0.00000E+00 *
*                                                                       *
*************************************************************************
```

Post-NID Peak Search Report
Sample ID : G816P1AA

Acquisition date : 27-APR-2005 18:23:22

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.31*	51	51	0.96	252.87	249	8	28.4		TH-234
6	74.75*	76	103	1.11	298.61	286	35	16.2	9.01E-01	
6	77.06*	108	100	1.11	307.86	286	35	13.0		
0	92.54*	52	70	1.15	369.78	365	10	33.1		TH-234
0	185.98*	63	56	0.93	743.45	734	16	27.2		U-235
										RA-226
0	238.69*	112	52	1.05	954.27	948	12	14.9		PB-212
0	295.42	79	33	0.87	1181.17	1173	18	18.3		PB-214
0	351.93	96	31	1.04	1407.18	1401	14	14.9		PB-214
0	583.35	33	27	0.47	2332.86	2323	18	35.9		TL-208
0	609.37	80	18	1.00	2436.97	2426	21	15.7		
0	661.97	50	15	0.63	2647.38	2638	19	21.5		CS-137
0	1461.15	155	12	1.04	5845.01	5823	37	10.1		K-40

Summary of Nuclide Activity
Sample ID : G816P1AA Acquisition date : 27-APR-2005 18:23:22

Total number of lines in spectrum 12
Number of unidentified lines 2
Number of lines tentatively identified by NID 10 83.33%

Nuclide Type : natural

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	7.187E+00	7.187E+00	0.870E+00	12.11	
	Total Activity :		7.187E+00	7.187E+00			

Nuclide Type : fission

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
CS-137	30.20Y	1.00	1.375E-01	1.375E-01	0.314E-01	22.84	
	Total Activity :		1.375E-01	1.375E-01			

Nuclide Type : Th Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
TL-208	1.91Y	1.00	8.007E-02	8.007E-02	2.949E-02	36.83	
PB-212	1.91Y	1.00	2.313E-01	2.313E-01	0.385E-01	16.65	
	Total Activity :		3.114E-01	3.114E-01			

Nuclide Type : U Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
PB-214	1600.00Y	1.00	3.576E-01	3.576E-01	0.475E-01	13.27	
RA-226	1600.00Y	1.00	1.350E+00	1.350E+00	0.378E+00	28.01	
TH-234	4.47E+09Y	1.00	6.448E-01	6.448E-01	1.503E-01	23.30	
	Total Activity :		2.352E+00	2.352E+00			

Nuclide Type : Ac Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
U-235	7.04E+08Y	1.00	8.913E-02	8.913E-02	2.499E-02	28.04	
	Total Activity :		8.913E-02	8.913E-02			

Grand Total Activity : 1.008E+01 1.008E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G816P1AA

Acquisition date : 27-APR-2005 18:23:22

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	7.187E+00	8.702E-01	5.511E-01	2.444E-02	13.041
CS-137	1.375E-01	3.141E-02	5.984E-02	3.619E-03	2.298
TL-208	8.007E-02	2.949E-02	6.338E-02	4.223E-03	1.263
PB-212	2.313E-01	3.851E-02	9.872E-02	5.451E-03	2.343
PB-214	3.576E-01	4.745E-02	1.029E-01	5.257E-03	3.474
RA-226	1.350E+00	3.780E-01	8.273E-01	3.874E-02	1.631
TH-234	6.448E-01	1.503E-01	6.661E-01	6.229E-02	0.968
U-235	8.913E-02	2.499E-02	2.758E-01	2.570E-02	0.323

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-1.551E-01		1.236E-01	4.177E-01	2.225E-02	-0.371
NA-22	-6.721E-04		2.210E-02	8.459E-02	3.575E-03	-0.008
CR-51	-1.363E-01		8.907E-02	2.969E-01	1.515E-02	-0.459
MN-54	3.199E-03		1.673E-02	6.414E-02	3.327E-03	0.050
CO-57	-5.319E-03		8.306E-03	2.786E-02	1.685E-03	-0.191
FE-59	-4.308E-02		3.463E-02	1.167E-01	5.959E-03	-0.369
CO-60	2.146E-02		2.088E-02	8.817E-02	3.747E-03	0.243
ZN-65	3.096E-02		4.757E-02	1.847E-01	7.986E-03	0.168
SE-75	-8.872E-03		1.529E-02	5.303E-02	2.646E-03	-0.167
SR-85	-2.839E-02		1.931E-02	6.359E-02	3.356E-03	-0.446
Y-88	-1.794E-02		2.003E-02	7.259E-02	3.037E-03	-0.247
NB-95	5.332E-03		1.672E-02	6.323E-02	3.572E-03	0.084
ZR-95	1.911E-02		3.012E-02	1.165E-01	7.044E-03	0.164
MO-99	-3.005E-02		1.158E-01	4.249E-01	3.618E-02	-0.071
TC-99M	-1.564E-02		8.466E-03	2.755E-02	1.509E-03	-0.568
RU-103	-4.914E-03		1.488E-02	5.342E-02	3.090E-03	-0.092
RH-105	1.188E-01		1.733E-01	6.416E-01	3.170E-02	0.185
RH-106	-2.160E-01		1.021E-01	4.106E-01	2.161E-02	-0.526
RU-106	-7.477E-02		1.525E-01	5.482E-01	4.263E-02	-0.136
CD-109	4.344E-01		2.275E-01	8.288E-01	4.884E-02	0.524
SN-113	1.621E-02		1.618E-02	6.224E-02	2.828E-03	0.260
SB-124	1.113E-02		1.812E-02	6.202E-02	3.584E-03	0.180
SB-125	4.677E-03		4.095E-02	1.484E-01	7.072E-03	0.032
I-131	1.106E-02		1.247E-02	4.768E-02	2.312E-03	0.232
I-132	2.717E-02		2.132E-02	7.571E-02	4.565E-03	0.359
TE-132	-4.822E-03		1.006E-02	3.531E-02	1.722E-03	-0.137
BA-133	-1.842E-02		2.166E-02	6.158E-02	4.233E-03	-0.299
I-133	-2.829E-02		1.451E-02	4.538E-02	2.438E-03	-0.624
CS-134	-2.965E-02		2.123E-02	5.698E-02	3.302E-03	-0.520
CE-139	-8.249E-04		1.017E-02	3.564E-02	1.629E-03	-0.023
BA-140	-7.567E-03		4.673E-02	1.718E-01	2.903E-02	-0.044
LA-140	-2.701E-02		1.893E-02	6.196E-02	2.677E-03	-0.436
CE-141	2.073E-02		1.611E-02	5.950E-02	3.195E-03	0.348
CE-144	-3.256E-02		5.812E-02	2.036E-01	1.372E-02	-0.160
ND-147	2.800E-02		9.081E-02	3.430E-01	1.846E-02	0.082

Combined Activity-MDA Report (continued)
Sample ID : G816P1AA Acquisition date : 27-APR-2005 18:23:22

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-152	-2.736E-02		7.784E-02	3.029E-01	1.493E-02	-0.090
EU-154	-7.950E-02		1.339E-01	4.853E-01	3.164E-02	-0.164
EU-155	1.085E-02		3.077E-02	1.094E-01	6.018E-03	0.099
HG-203	4.553E-03		1.153E-02	4.216E-02	2.141E-03	0.108
BI-211	9.884E-01	+	1.626E-01	5.778E-01	2.745E-02	1.711
PB-211	-2.160E-01		6.527E-01	2.383E+00	1.242E-01	-0.091
BI-212	5.704E-01		2.591E-01	1.074E+00	6.269E-02	0.531
BI-214	3.769E-01	+	6.614E-02	2.299E-01	1.391E-02	1.640
RN-219	8.156E-02		9.673E-02	3.577E-01	1.787E-02	0.228
RA-223	1.441E-01		1.300E-01	4.811E-01	2.587E-02	0.300
RA-224	2.186E+00		7.359E-01	1.399E+00	4.005E-01	1.563
TH-227	6.677E-02		1.004E-01	3.165E-01	1.552E-02	0.211
AC-228	3.954E-01		1.336E-01	4.392E-01	8.417E-02	0.900
RA-228	2.291E-01		7.600E-02	3.249E-01	1.501E-02	0.705
PA-231	-6.667E-01		4.430E-01	1.429E+00	9.417E-02	-0.466
TH-231	1.469E-01		1.234E-01	4.449E-01	3.018E-02	0.330
TH-232	7.821E-01		4.420E-01	1.827E+00	9.092E-02	0.428
PA-233	-1.177E-02		2.485E-02	8.606E-02	4.333E-03	-0.137
PA-234M	5.237E+00		3.209E+00	1.355E+01	6.164E-01	0.386
NP-237	-1.262E-02		2.665E-02	9.228E-02	4.547E-03	-0.137
NP-239	7.362E-02		4.285E-02	1.599E-01	8.549E-03	0.460
AM-241	4.082E-03		2.154E-02	7.455E-02	3.938E-03	0.055
ANN RAD	-3.813E-02		2.119E-02	8.597E-02	4.521E-03	-0.444

Nuclide Line Activity Report
Sample ID : G816P1AA

Acquisition date : 27-APR-2005 18:23:22

Nuclide Type: natural

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
K-40	1460.83	10.67*	8.262E-01	7.186E+00	7.186E+00	12.11	OK

Final Mean for 1 Valid Peaks = 7.187E+00+/- 8.702E-01 (12.11%)

Nuclide Type: fission

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
CS-137	661.65	85.12*	1.748E+00	1.375E-01	1.375E-01	22.84	OK

Final Mean for 1 Valid Peaks = 1.375E-01+/- 3.141E-02 (22.84%)

Nuclide Type: Th Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
TL-208	583.02	86.00*	1.982E+00	8.003E-02	8.003E-02	36.83	OK

Final Mean for 1 Valid Peaks = 8.007E-02+/- 2.949E-02 (36.83%)

PB-212	238.58	43.60*	4.557E+00	2.312E-01	2.312E-01	16.65	OK
	300.03	3.34	3.752E+00	----- Line Not Found		-----	Absent

Final Mean for 1 Valid Peaks = 2.313E-01+/- 3.851E-02 (16.65%)

Nuclide Type: U Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
PB-214	241.92	7.46	4.506E+00	----- Line Not Found		-----	Absent
	295.09	19.20	3.807E+00	4.439E-01	4.439E-01	19.72	OK
	351.87	37.10*	3.243E+00	3.257E-01	3.257E-01	16.55	OK

Final Mean for 2 Valid Peaks = 3.576E-01+/- 4.745E-02 (13.27%)

RA-226	186.21	3.50*	5.469E+00	1.351E+00	1.351E+00	28.01	OK

Final Mean for 1 Valid Peaks = 1.350E+00+/- 3.780E-01 (28.01%)

TH-234	63.29	3.80*	6.669E+00	8.216E-01	8.216E-01	30.30	OK
	92.59	5.41	7.178E+00	5.466E-01	5.466E-01	33.86	OK

Final Mean for 2 Valid Peaks = 6.448E-01+/- 1.503E-01 (23.30%)

Nuclide Line Activity Report (continued)
Sample ID : G816P1AA Acquisition date : 27-APR-2005 18:23:22

Nuclide Type: Ac Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
U-235	143.79	10.50*	6.350E+00	----- Line Not Found		-----	Absent
	185.74	53.00	5.478E+00	8.905E-02	8.905E-02	28.04	OK

Final Mean for 1 Valid Peaks = 8.913E-02+/- 2.499E-02 (28.04%)

Flag: "*" = Keyline

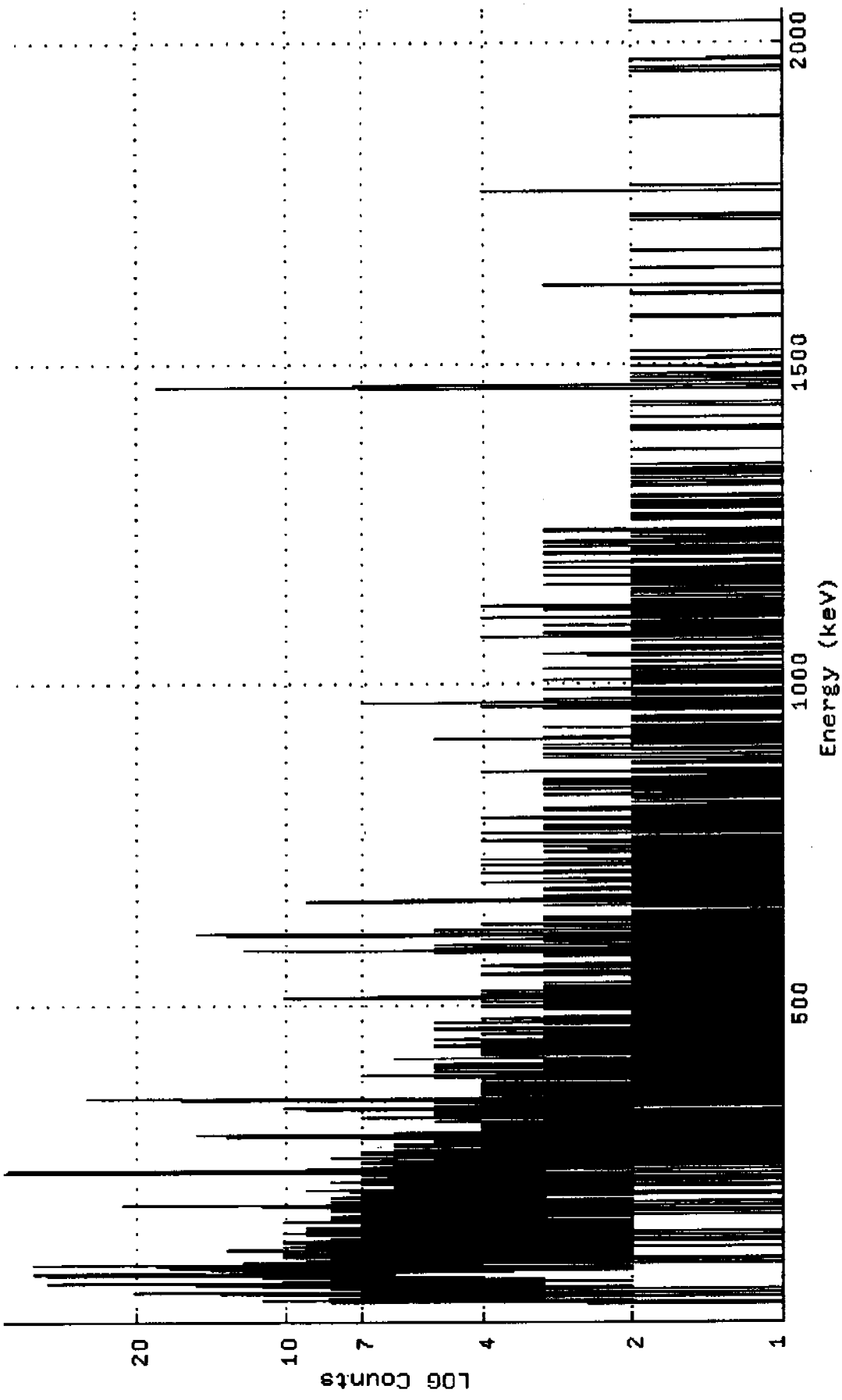
Rejected Report

Sample ID : G816P1AA
Acquisition date : 27-APR-2005 18:23:22

Nuclide	Half-life	Half-Life Ratio	Energy	%Abund	Activity (pCi/G)	1-Sigma %Error	Rejected by
RU-103	39.25D	0.00	497.05*	88.70	--- Not Found ---		Abun.
			610.30	5.64	3.087E+00	17.76	
		% Abundances Found =		5.98			
BI-211	21.77Y	0.00	351.10*	12.20	9.884E-01	16.45	Abun.
			404.80	4.10	--- Not Found ---		
			426.90	1.90	--- Not Found ---		
			831.80	3.30	--- Not Found ---		
		% Abundances Found =		56.74			
BI-214	1600.00Y	0.00	609.31*	46.10	3.769E-01	17.55	Abun.
			768.35	4.88	--- Not Found ---		
			1120.27	15.00	--- Not Found ---		
		% Abundances Found =		69.87			

Flag: "*" = Keyline

Spectrum : OKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G816P1AA_GE7_SOLID100ML_57816.CNF;1
Title :
Sample Title: F5D220356-004
Start Time: 27-APR-2005 18:23 Sample Time: 27-APR-2005 18:23 Energy Offset: 7.85538E-02
Real Time : 0 01:00:00.44 Sample ID : G816P1AA Energy Slope : 2.50061E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : -1.56700E-08



VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:23:02
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G816T1AA_GE4_SOLID100ML_57818.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5117412
Project Number : F5D220356-005
Sample ID : G816T1AA

Sample Quantity : 1.88300E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 27-APR-2005 19:34:51
Acquisition date : 27-APR-2005 19:34:51
Decay time : 0 00:00:00.00

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.55
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE4

Counting geometry: SOLID_100ML

Energy cal. time : 16-MAR-2005 08:34:49
Effic. cal. time : 18-JAN-2005 00:15:12

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE4__57454.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G816T1AA Acquisition date : 27-APR-2005 19:34:51

---- Energy, FWHM, and Efficiency Curves ----

```
*************************************************************************
*                                                                       *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)       *
*                            A = 1.10653E-01                            *
*                            B = 2.49919E-01                            *
*                            C = 1.94892E-08                            *
*                                                                       *
*                                                                       *
*                       FWHM(keV) = A + (B * SQRT(Energy))              *
*                            A = 8.02351E-01                            *
*                            B = 2.65421E-02                            *
*                                                                       *
*                                                                       *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                       *
*     a1=9.41250E+02   a2=-4.55854E+00 a3=9.62044E-01                   *
*     a4=7.38134E-02   a5=-4.50301E-02 a6=-9.56656E-03   a7=0.00000E+00 *
*                                                                       *
*************************************************************************
```

Post-NID Peak Search Report
Sample ID : G816T1AA

Acquisition date : 27-APR-2005 19:34:51

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.37*	90	102	0.58	253.10	243	18	25.3		TH-234
5	75.00	70	112	1.04	299.65	294	22	17.8	7.94E-01	
5	77.28	116	122	1.05	308.76	294	22	12.5		
0	92.68*	106	121	1.16	370.37	364	15	22.5		TH-234
0	185.88*	85	79	0.99	743.26	733	17	23.7		U-235
										RA-226
0	295.31	36	48	0.53	1181.06	1175	14	39.0		PB-214
0	351.92	103	19	1.37	1407.53	1399	16	12.7		PB-214
0	583.28*	33	4	0.93	2333.01	2327	14	21.7		TL-208
0	609.65*	57	21	0.53	2438.47	2432	15	20.5		
0	911.91	32	3	0.49	3647.34	3639	17	20.2		
0	1461.42	112	0	1.07	5844.50	5829	27	9.4		K-40

Summary of Nuclide Activity
Sample ID : G816T1AA Acquisition date : 27-APR-2005 19:34:51

Total number of lines in spectrum 11
Number of unidentified lines 2
Number of lines tentatively identified by NID 9 81.82%

Nuclide Type : natural

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	5.992E+00	5.992E+00	0.699E+00	11.67	
	Total Activity :		5.992E+00	5.992E+00			

Nuclide Type : Th Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
TL-208	1.91Y	1.00	9.043E-02	9.043E-02	2.085E-02	23.06	
	Total Activity :		9.043E-02	9.043E-02			

Nuclide Type : U Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
PB-214	1600.00Y	1.00	3.572E-01	3.572E-01	0.504E-01	14.10	
RA-226	1600.00Y	1.00	2.058E+00	2.058E+00	0.507E+00	24.63	
TH-234	4.47E+09Y	1.00	1.345E+00	1.345E+00	0.247E+00	18.36	
	Total Activity :		3.761E+00	3.761E+00			

Nuclide Type : Ac Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
U-235	7.04E+08Y	1.00	1.359E-01	1.359E-01	0.335E-01	24.67	
	Total Activity :		1.359E-01	1.359E-01			

Grand Total Activity : 9.979E+00 9.979E+00

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G816T1AA

Acquisition date : 27-APR-2005 19:34:51

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	5.992E+00	6.991E-01	6.397E-01	2.992E-02	9.366
TL-208	9.043E-02	2.085E-02	5.284E-02	3.223E-03	1.711
PB-214	3.572E-01	5.036E-02	9.672E-02	4.833E-03	3.693
RA-226	2.058E+00	5.070E-01	8.445E-01	3.908E-02	2.437
TH-234	1.345E+00	2.470E-01	7.450E-01	7.133E-02	1.806
U-235	1.359E-01	3.353E-02	3.270E-01	3.023E-02	0.416

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-3.972E-02		1.215E-01	4.356E-01	2.179E-02	-0.091
NA-22	-1.466E-02		2.010E-02	7.430E-02	3.371E-03	-0.197
CR-51	-1.083E-01		1.092E-01	3.765E-01	1.887E-02	-0.288
MN-54	6.202E-04		1.861E-02	6.983E-02	3.748E-03	0.009
CO-57	-6.798E-04		8.749E-03	3.126E-02	1.831E-03	-0.022
FE-59	5.594E-02		2.873E-02	1.370E-01	7.567E-03	0.408
CO-60	-8.731E-03		1.643E-02	6.399E-02	2.903E-03	-0.136
ZN-65	-7.215E-02		4.008E-02	1.241E-01	5.931E-03	-0.581
SE-75	1.547E-03		1.549E-02	5.559E-02	2.735E-03	0.028
SR-85	-6.607E-02		2.356E-02	6.956E-02	3.360E-03	-0.950
Y-88	4.161E-04		1.373E-02	6.464E-02	2.751E-03	0.006
NB-95	6.549E-03		1.742E-02	6.725E-02	3.565E-03	0.097
ZR-95	2.345E-02		2.932E-02	1.182E-01	6.691E-03	0.198
MO-99	-2.002E-01		1.180E-01	3.702E-01	3.023E-02	-0.541
TC-99M	-2.149E-03		1.045E-02	3.701E-02	1.977E-03	-0.058
RU-103	-8.826E-03		1.346E-02	4.724E-02	2.565E-03	-0.187
RH-105	-4.122E-02		1.824E-01	6.625E-01	3.214E-02	-0.062
RH-106	1.131E-02		1.145E-01	4.793E-01	2.312E-02	0.024
RU-106	-2.666E-01		1.567E-01	5.046E-01	3.624E-02	-0.528
CD-109	6.929E-02		2.694E-01	9.088E-01	5.291E-02	0.076
SN-113	-2.559E-03		1.652E-02	6.042E-02	2.658E-03	-0.042
SB-124	-1.177E-02		1.753E-02	6.201E-02	3.122E-03	-0.190
SB-125	3.045E-02		4.043E-02	1.557E-01	7.074E-03	0.196
I-131	-2.134E-02		1.349E-02	4.421E-02	2.090E-03	-0.483
I-132	7.134E-03		1.847E-02	7.138E-02	3.631E-03	0.100
TE-132	-1.763E-02		1.118E-02	3.616E-02	1.742E-03	-0.487
BA-133	2.634E-02		1.801E-02	6.494E-02	4.410E-03	0.406
I-133	-3.470E-03		1.587E-02	5.725E-02	2.793E-03	-0.061
CS-134	-2.986E-03		1.878E-02	6.305E-02	3.181E-03	-0.047
CS-137	4.447E-02		2.248E-02	9.159E-02	4.649E-03	0.486
CE-139	2.582E-03		1.093E-02	3.915E-02	1.767E-03	0.066
BA-140	-2.058E-02		5.153E-02	1.894E-01	3.170E-02	-0.109
LA-140	-3.950E-02		1.872E-02	4.749E-02	2.144E-03	-0.832
CE-141	2.666E-02		1.881E-02	6.957E-02	3.655E-03	0.383
CE-144	-8.346E-02		7.422E-02	2.515E-01	1.662E-02	-0.332
ND-147	7.549E-02		1.039E-01	3.989E-01	1.948E-02	0.189
EU-152	3.019E-02		1.025E-01	4.231E-01	2.183E-02	0.071

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-154	1.478E-01		1.236E-01	5.473E-01	3.782E-02	0.270
EU-155	2.756E-02		3.896E-02	1.379E-01	7.408E-03	0.200
HG-203	1.168E-02		1.309E-02	4.862E-02	2.433E-03	0.240
BI-211	1.123E+00		1.707E-01	6.375E-01	2.953E-02	1.762
PB-211	-1.208E+00		6.955E-01	2.175E+00	1.167E-01	-0.555
BI-212	3.035E-01		2.653E-01	1.068E+00	5.588E-02	0.284
PB-212	1.662E-01		3.844E-02	1.435E-01	7.842E-03	1.158
BI-214	3.058E-01	+	6.659E-02	2.439E-01	1.297E-02	1.253
RN-219	2.097E-01		1.027E-01	3.991E-01	1.965E-02	0.525
RA-223	2.625E-01		1.503E-01	5.675E-01	3.003E-02	0.463
RA-224	-6.132E-01		4.551E-01	1.367E+00	3.913E-01	-0.448
TH-227	-7.538E-01		1.415E-01	3.530E-01	1.709E-02	-2.135
AC-228	2.770E-01		1.256E-01	4.471E-01	8.557E-02	0.620
RA-228	4.109E-01	+	8.817E-02	3.904E-01	2.089E-02	1.053
PA-231	-4.846E-01		4.312E-01	1.477E+00	9.633E-02	-0.328
TH-231	-2.182E-01		1.465E-01	4.732E-01	3.208E-02	-0.461
TH-232	-3.089E-01		3.999E-01	1.402E+00	7.534E-02	-0.220
PA-233	-1.048E-02		2.946E-02	1.051E-01	5.197E-03	-0.100
PA-234M	4.259E+00		3.208E+00	1.349E+01	6.980E-01	0.316
NP-237	-1.124E-02		3.159E-02	1.127E-01	5.449E-03	-0.100
NP-239	6.144E-02		5.281E-02	1.902E-01	9.954E-03	0.323
AM-241	2.701E-02		2.672E-02	8.479E-02	4.877E-03	0.319
ANN RAD	7.239E-03		2.318E-02	9.818E-02	4.732E-03	0.074

Nuclide Line Activity Report
Sample ID : G816T1AA

Acquisition date : 27-APR-2005 19:34:51

Nuclide Type: natural

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
K-40	1460.83	10.67*	6.987E-01	5.990E+00	5.990E+00	11.67	OK

Final Mean for 1 Valid Peaks = 5.992E+00+/- 6.991E-01 (11.67%)

Nuclide Type: Th Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
TL-208	583.02	86.00*	1.680E+00	9.040E-02	9.040E-02	23.06	OK

Final Mean for 1 Valid Peaks = 9.043E-02+/- 2.085E-02 (23.06%)

Nuclide Type: U Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
PB-214	241.92	7.46	3.836E+00	----- Line Not Found		-----	Absent
	295.09	19.20	3.236E+00	2.309E-01	2.309E-01	39.67	OK
	351.87	37.10*	2.753E+00	4.034E-01	4.034E-01	14.53	OK

Final Mean for 2 Valid Peaks = 3.572E-01+/- 5.036E-02 (14.10%)

RA-226	186.21	3.50*	4.673E+00	2.061E+00	2.061E+00	24.63	OK

Final Mean for 1 Valid Peaks = 2.058E+00+/- 5.070E-01 (24.63%)

TH-234	63.29	3.80*	5.976E+00	1.582E+00	1.582E+00	27.51	OK
	92.59	5.41	6.273E+00	1.240E+00	1.240E+00	23.59	OK

Final Mean for 2 Valid Peaks = 1.345E+00+/- 2.470E-01 (18.36%)

Nuclide Type: Ac Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
U-235	143.79	10.50*	5.457E+00	----- Line Not Found		-----	Absent
	185.74	53.00	4.681E+00	1.358E-01	1.358E-01	24.67	OK

Final Mean for 1 Valid Peaks = 1.359E-01+/- 3.353E-02 (24.67%)

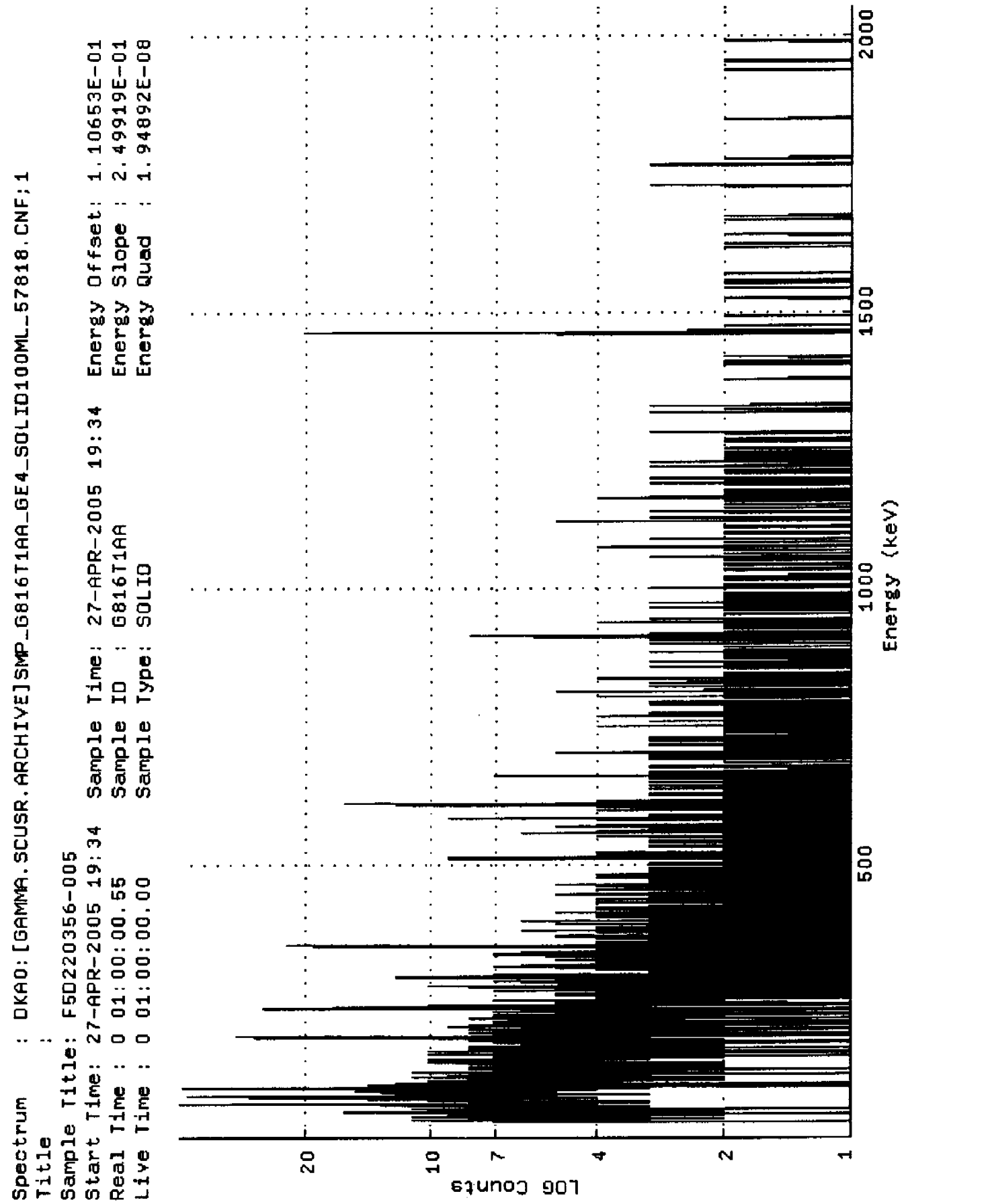
Flag: "*" = Keyline

Rejected Report
Sample ID : G816T1AA

Acquisition date : 27-APR-2005 19:34:51

Nuclide	Half-life	Half-Life Ratio	Energy	%Abund	Activity (pCi/G)	1-Sigma %Error	Rejected by
RU-103	39.25D	0.00	497.05*	88.70	--- Not Found ---		Abun.
			610.30	5.64	2.504E+00	21.95	
		% Abundances Found =		5.98			
BI-214	1600.00Y	0.00	609.31*	46.10	3.058E-01	21.78	Abun.
			768.35	4.88	--- Not Found ---		
			1120.27	15.00	--- Not Found ---		
		% Abundances Found =		69.87			
RA-228	5.75Y	0.00	911.16*	29.00	4.109E-01	21.46	Abun.
			968.97	17.40	--- Not Found ---		
		% Abundances Found =		62.50			

Flag: "*" = Keyline


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G816T1AA_GE4_SOLID100ML_57818.CNF;1
Title :
Sample Title: F5D220356-005
Start Time: 27-APR-2005 19:34 Sample Time: 27-APR-2005 19:34 Energy Offset: 1.10653E-01
Real Time : 0 01:00:00.55 Sample ID : G816T1AA Energy Slope : 2.49919E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : 1.94892E-08
Log Counts
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:23:22
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G9ANW1AA_GE5_SOLID100ML_57819.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5117412
Project Number : F5D270000-412B
Sample ID : G9ANW1AA

Sample Quantity : 1.47200E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 27-APR-2005 19:35:50
Acquisition date : 27-APR-2005 19:35:50
Decay time : 0 00:00:00.00
Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.66
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE5
Counting geometry: SOLID_100ML

Energy cal. time : 9-MAR-2005 09:18:16.
Effic. cal. time : 18-JAN-2005 09:43:11
Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000
End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE5__57455.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G9ANW1AA

Acquisition date : 27-APR-2005 19:35:50

---- Energy, FWHM, and Efficiency Curves ----

```
*************************************************************************
*                                                                       *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)       *
*                            A = -7.14002E-03                           *
*                            B = 2.49998E-01                            *
*                            C = -1.90945E-09                           *
*                                                                       *
*                                                                       *
*                       FWHM(keV) = A + (B * SQRT(Energy))              *
*                            A = 5.02556E-01                            *
*                            B = 3.66242E-02                            *
*                                                                       *
*                                                                       *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                       *
*     a1=9.41250E+02   a2=-4.46457E+00 a3=9.42586E-01                   *
*     a4=5.97186E-02   a5=-3.91387E-02 a6=-9.36517E-03   a7=0.00000E+00 *
*                                                                       *
*************************************************************************
```

Post-NID Peak Search Report
Sample ID : G9ANW1AA

Acquisition date : 27-APR-2005 19:35:50

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	92.51*	30	41	0.59	370.08	363	21	53.3		

Summary of Nuclide Activity
Sample ID : G9ANW1AA Acquisition date : 27-APR-2005 19:35:50

Total number of lines in spectrum	1	
Number of unidentified lines	0	
Number of lines tentatively identified by NID	1	100.00%

**** There are no nuclides meeting summary criteria ****

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G9ANW1AA

Acquisition date : 27-APR-2005 19:35:50

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	6.042E-02		9.943E-02	4.094E-01	2.215E-02	0.148
NA-22	-4.051E-02		1.555E-02	1.584E-02	7.117E-04	-2.557
K-40	6.697E-01		2.901E-01	1.320E+00	6.157E-02	0.508
CR-51	9.447E-02		9.399E-02	3.782E-01	1.956E-02	0.250
MN-54	-1.395E-02		1.944E-02	6.885E-02	4.528E-03	-0.203
CO-57	1.802E-03		6.499E-03	2.399E-02	1.604E-03	0.075
FE-59	-2.059E-02		3.692E-02	1.361E-01	7.770E-03	-0.151
CO-60	3.978E-03		2.138E-02	9.581E-02	4.354E-03	0.042
ZN-65	2.960E-02		3.112E-02	1.442E-01	7.092E-03	0.205
SE-75	1.834E-02		1.387E-02	5.669E-02	2.920E-03	0.324
SR-85	-8.132E-02		2.382E-02	6.631E-02	3.625E-03	-1.226
Y-88	3.200E-02		2.000E-02	1.057E-01	4.428E-03	0.303
NB-95	-2.224E-02		1.288E-02	3.925E-02	2.651E-03	-0.567
ZR-95	-3.540E-04		2.651E-02	1.047E-01	7.397E-03	-0.003
MO-99	-1.103E-01		1.111E-01	3.896E-01	3.596E-02	-0.283
TC-99M	-8.574E-03		7.412E-03	2.551E-02	1.523E-03	-0.336
RU-103	-2.264E-02		1.515E-02	4.977E-02	2.941E-03	-0.455
RH-105	5.997E-02		1.637E-01	6.340E-01	3.194E-02	0.095
RH-106	-8.177E-02		1.227E-01	5.327E-01	2.901E-02	-0.153
RU-106	-1.607E-01		1.400E-01	4.676E-01	3.842E-02	-0.344
CD-109	1.678E-01		1.675E-01	6.361E-01	3.705E-02	0.264
SN-113	-1.661E-02		1.809E-02	6.175E-02	2.749E-03	-0.269
SB-124	-2.013E-02		1.561E-02	5.137E-02	3.221E-03	-0.392
SB-125	1.083E-02		4.278E-02	1.646E-01	7.798E-03	0.066
I-131	4.282E-03		1.314E-02	5.002E-02	2.413E-03	0.086
I-132	-9.398E-03		1.829E-02	6.750E-02	4.584E-03	-0.139
TE-132	-4.317E-03		8.407E-03	2.970E-02	1.510E-03	-0.145
BA-133	-1.412E-02		2.002E-02	6.968E-02	4.787E-03	-0.203
I-133	2.280E-02		1.631E-02	6.771E-02	3.797E-03	0.337
CS-134	1.881E-02		1.515E-02	6.290E-02	3.959E-03	0.299
CS-137	4.103E-02		2.280E-02	1.026E-01	6.968E-03	0.400
CE-139	-4.502E-03		7.985E-03	2.853E-02	1.372E-03	-0.158
BA-140	-1.164E-01		5.616E-02	1.553E-01	2.636E-02	-0.749
LA-140	5.101E-04		2.098E-02	8.978E-02	4.026E-03	0.006
CE-141	1.113E-02		1.427E-02	5.471E-02	3.181E-03	0.203
CE-144	1.959E-02		4.895E-02	1.896E-01	1.367E-02	0.103
ND-147	-1.268E-02		1.102E-01	4.091E-01	2.300E-02	-0.031
EU-152	5.890E-02		9.879E-02	4.357E-01	2.247E-02	0.135
EU-154	-1.924E-01		1.403E-01	4.738E-01	3.675E-02	-0.406
EU-155	2.706E-03		2.936E-02	1.062E-01	6.138E-03	0.025
HG-203	1.034E-02		1.121E-02	4.472E-02	2.333E-03	0.231
TL-208	9.755E-03		1.978E-02	7.580E-02	5.322E-03	0.129
BI-211	3.892E-01		1.077E-01	4.587E-01	2.181E-02	0.848
PB-211	-5.404E-01		5.511E-01	1.917E+00	1.263E-01	-0.282
BI-212	-1.525E-01		2.265E-01	8.258E-01	5.615E-02	-0.185
PB-212	-9.079E-03		2.352E-02	8.709E-02	4.960E-03	-0.104
BI-214	2.784E-02		3.964E-02	1.529E-01	1.001E-02	0.182
PB-214	1.141E-01		3.636E-02	1.555E-01	7.941E-03	0.734

Combined Activity-MDA Report (continued)
Sample ID : G9ANW1AA Acquisition date : 27-APR-2005 19:35:50

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
RN-219	-5.878E-02		9.417E-02	3.370E-01	1.735E-02	-0.174
RA-223	6.282E-02		1.320E-01	4.953E-01	2.832E-02	0.127
RA-224	-2.984E-01		2.910E-01	9.226E-01	2.644E-01	-0.323
RA-226	2.508E-01		2.475E-01	1.003E+00	4.930E-02	0.250
TH-227	-7.866E-02		8.610E-02	2.898E-01	1.478E-02	-0.271
AC-228	-8.932E-02		9.119E-02	3.068E-01	5.882E-02	-0.291
RA-228	-7.749E-02		6.233E-02	2.137E-01	1.335E-02	-0.363
PA-231	5.216E-02		4.032E-01	1.525E+00	1.016E-01	0.034
TH-231	1.424E-01		9.705E-02	3.747E-01	2.546E-02	0.380
TH-232	9.657E-02		2.934E-01	1.259E+00	8.156E-02	0.077
PA-233	-1.001E-02		2.440E-02	8.863E-02	4.536E-03	-0.113
PA-234M	7.932E-01		2.176E+00	9.529E+00	5.506E-01	0.083
TH-234	-2.258E-02		2.039E-01	8.023E-01	7.730E-02	-0.028
U-235	-8.149E-03		6.429E-02	2.357E-01	2.261E-02	-0.035
NP-237	-1.074E-02		2.616E-02	9.504E-02	4.763E-03	-0.113
NP-239	-2.604E-02		3.846E-02	1.329E-01	7.318E-03	-0.196
AM-241	1.198E-02		1.904E-02	7.461E-02	4.376E-03	0.161
ANN RAD	-7.277E-03		2.544E-02	1.114E-01	6.057E-03	-0.065

Nuclide Line Activity Report
Sample ID : G9ANW1AA

Acquisition date : 27-APR-2005 19:35:50

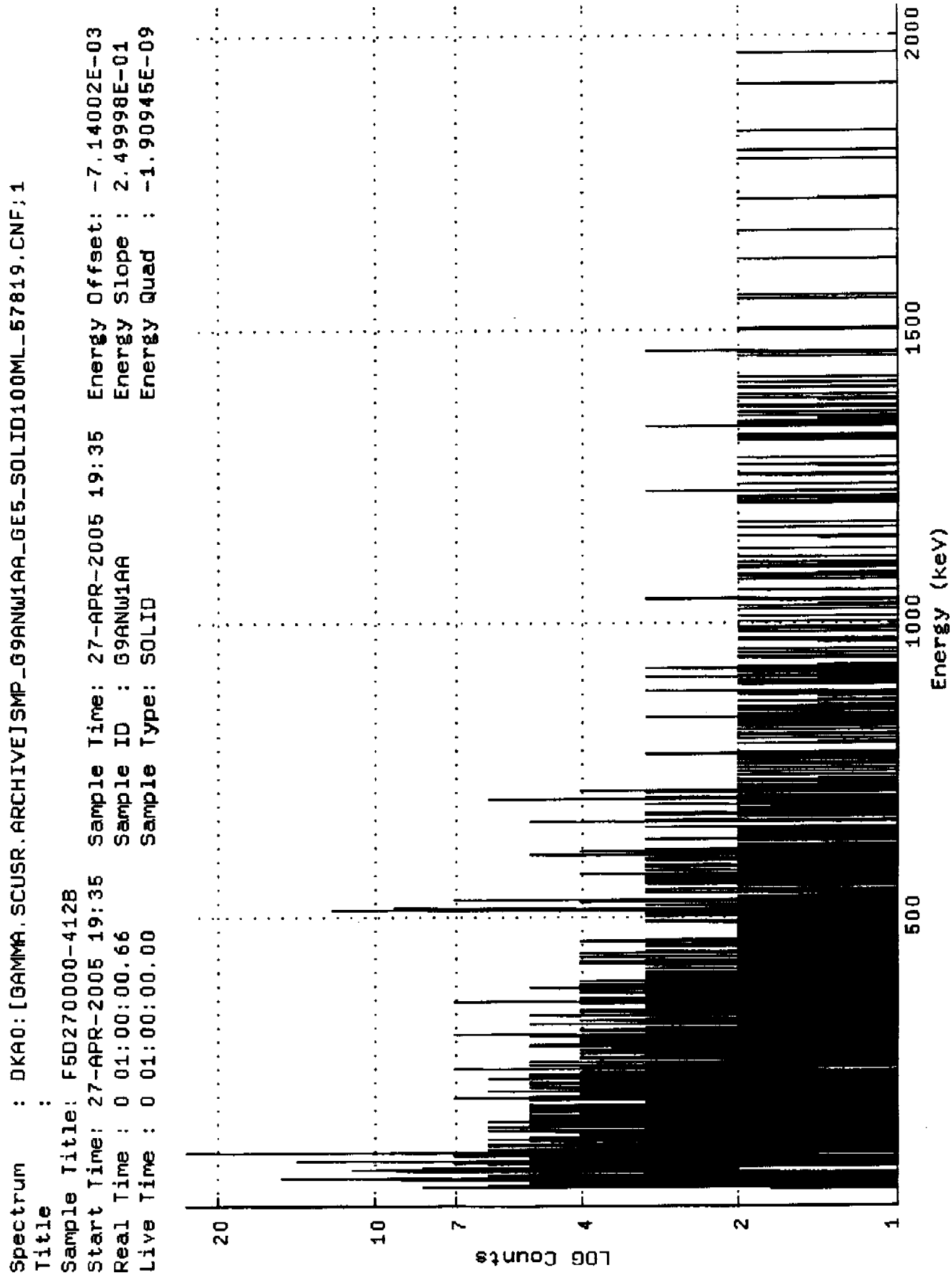
Flag: "*" = Keyline

Rejected Report
Sample ID : G9ANW1AA

Acquisition date : 27-APR-2005 19:35:50

Nuclide	Half-life	Half-Life Ratio	Energy	%Abund	Activity (pCi/G)	1-Sigma %Error	Rejected by
TH-234	4.47E+09Y	0.00	63.29*	3.80	--- Not Found ---		Abun.
			92.59	5.41	4.331E-01	53.83	
		% Abundances Found =		58.74			

Flag: "*" = Keyline


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G9ANW1AA_GE5_SOLID100ML_67819.CNF;1
Title :
Sample Title: F5D270000-412B
Start Time: 27-APR-2005 19:35 Sample Time: 27-APR-2005 19:35 Energy Offset: -7.14002E-03
Real Time : 0 01:00:00.66 Sample ID : G9ANW1AA Energy Slope : 2.49998E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : -1.90945E-09
Log Counts
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:23:48
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G9ANW1AC_GE4_SOLID100ML_57821.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5117412
Project Number : F5D270000-412C
Sample ID : G9ANW1AC

Sample Quantity : 1.59200E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 1-JAN-2000 12:00:00.
Acquisition date : 27-APR-2005 21:15:02
Decay time : 1943 09:15:02.13

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:07.32
% dead time : 0.2%

---- Detector Parameters ----

Detector name : GE4

Counting geometry: SOLID_100ML

Energy cal. time : 16-MAR-2005 08:34:49
Effic. cal. time : 18-JAN-2005 00:15:12

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE4__57454.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G9ANW1AC Acquisition date : 27-APR-2005 21:15:02

---- Energy, FWHM, and Efficiency Curves ----

```
*************************************************************************
*                                                                       *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)       *
*                          A = 1.10653E-01                              *
*                          B = 2.49919E-01                              *
*                          C = 1.94892E-08                              *
*                                                                       *
*                                                                       *
*                    FWHM(keV) = A + (B * SQRT(Energy))                 *
*                          A = 8.02351E-01                              *
*                          B = 2.65421E-02                              *
*                                                                       *
*                                                                       *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                       *
*     a1=9.41250E+02   a2=-4.55854E+00 a3=9.62044E-01                   *
*     a4=7.38134E-02   a5=-4.50301E-02 a6=-9.56656E-03   a7=0.00000E+00 *
*                                                                       *
*************************************************************************
```

Post-NID Peak Search Report
Sample ID : G9ANW1AC

Acquisition date : 27-APR-2005 21:15:02

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	46.63*	32936	9174	1.07	186.15	170	23	0.9		
0	59.63	31491	5793	1.10	238.14	222	26	0.8		AM-241
0	88.10	2687	1261	1.17	352.08	345	20	3.4		CD-109
8	122.12	179	428	0.78	488.17	474	34	13.5	1.20E+00	CO-57
8	125.25	59	439	0.78	500.70	474	34	31.2		
0	238.70*	181	419	0.85	954.58	948	12	21.1		PB-212
0	351.95	101	389	1.22	1407.68	1397	17	39.4		
0	661.85	7359	252	1.51	2647.28	2637	24	1.3		CS-137
0	1173.58	3897	130	1.75	4693.70	4682	27	1.7		CO-60
0	1332.93	3590	38	1.90	5330.78	5317	31	1.7		CO-60
0	1461.37	47	11	0.41	5844.28	5835	22	21.8		K-40

Summary of Nuclide Activity
Sample ID : G9ANW1AC Acquisition date : 27-APR-2005 21:15:02

Total number of lines in spectrum 11
Number of unidentified lines 2
Number of lines tentatively identified by NID 9 81.82%

Nuclide Type : natural

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.945E+00	2.945E+00	0.672E+00	22.81	
	Total Activity :		2.945E+00	2.945E+00			

Nuclide Type : fission

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
CO-57	271.00D	144.	1.684E-01	2.427E+01	0.378E+01	15.57	
CS-137	30.20Y	1.13	2.754E+01	3.111E+01	0.225E+01	7.24	
	Total Activity :		2.770E+01	5.539E+01			

Nuclide Type : activation

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
CO-60	5.27Y	2.01	2.197E+01	4.423E+01	0.268E+01	6.06	
CD-109	464.00D	18.2	5.409E+01	9.862E+02	0.829E+02	8.41	
	Total Activity :		7.606E+01	1.030E+03			

Nuclide Type : Th Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
PB-212	1.91Y	6.90	5.052E-01	3.484E+00	0.778E+00	22.32	
	Total Activity :		5.052E-01	3.484E+00			

Nuclide Type : Np Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
AM-241	432.70Y	1.01	7.137E+01	7.198E+01	0.551E+01	7.66	
	Total Activity :		7.137E+01	7.198E+01			

Grand Total Activity : 1.786E+02 1.164E+03

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G9ANW1AC

Acquisition date : 27-APR-2005 21:15:02

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	2.945E+00	6.718E-01	1.058E+00	4.946E-02	2.785
CO-57	2.427E+01	3.778E+00	1.522E+01	9.070E-01	1.595
CO-60	4.423E+01	2.679E+00	3.775E-01	1.713E-02	117.181
CD-109	9.862E+02	8.290E+01	5.148E+01	3.015E+00	19.155
CS-137	3.111E+01	2.251E+00	2.975E-01	1.510E-02	104.568
PB-212	3.484E+00	7.776E-01	2.146E+00	1.173E-01	1.623
AM-241	7.198E+01	5.514E+00	5.390E-01	3.100E-02	133.541

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	2.628E+04		5.587E+04	Half-Life too short		
NA-22	-1.557E-01		1.777E-01	6.213E-01	2.820E-02	-0.251
CR-51	1.390E+13		5.573E+14	Half-Life too short		
MN-54	-2.485E+00		6.024E+00	2.017E+01	1.086E+00	-0.123
FE-59	1.271E+06		2.653E+06	Half-Life too short		
ZN-65	-9.561E+01		5.173E+01	1.669E+02	8.010E+00	-0.573
SE-75	1.240E-03		5.105E-03	Half-Life too short		
SR-85	-2.432E+02		6.908E+01	Half-Life too short		
Y-88	-4.690E-03		7.042E-03	Half-Life too short		
NB-95	-2.526E+09		3.410E+09	Half-Life too short		
ZR-95	-5.813E+01		1.794E+02	Half-Life too short		
MO-99	-1.000E+35		9.215E+35	Half-Life too short		
TC-99M	-1.000E+35		1.788E+36	Half-Life too short		
RU-103	3.524E+07		5.161E+07	Half-Life too short		
RH-105	1.000E+35		1.007E+35	Half-Life too short		
RH-106	1.753E+01		1.151E+01	4.134E+01	1.994E+00	0.424
RU-106	-1.068E+00		2.349E+01	8.081E+01	5.883E+00	-0.013
SN-113	-5.941E-03		9.645E-03	Half-Life too short		
SB-124	-5.944E+02		3.010E+02	Half-Life too short		
SB-125	-1.534E+00		7.717E-01	2.485E+00	1.226E-01	-0.617
I-131	-1.000E+35		2.567E+35	Half-Life too short		
I-132	1.000E+35		2.378E+36	Half-Life too short		
TE-132	1.000E+35		1.974E+35	Half-Life too short		
BA-133	-5.144E-02		1.251E-01	3.704E-01	2.519E-02	-0.139
I-133	-1.000E+35		8.830E+34	Half-Life too short		
CS-134	-9.118E-01		3.618E-01	1.152E+00	5.832E-02	-0.792
CE-139	3.600E-04		6.531E-04	Half-Life too short		
BA-140	-1.000E+35		7.835E+34	Half-Life too short		
LA-140	1.000E+35		6.297E+34	Half-Life too short		
CE-141	-2.569E+09		5.986E+10	Half-Life too short		
CE-144	1.689E+00		2.933E+01	1.000E+02	6.615E+00	0.017
ND-147	1.000E+35		1.024E+36	Half-Life too short		
EU-152	-4.917E-02		1.948E-01	7.383E-01	3.821E-02	-0.067
EU-154	-1.044E+00		1.128E+00	3.808E+00	2.638E-01	-0.274
EU-155	-9.725E-02		2.856E-01	9.381E-01	5.040E-02	-0.104
HG-203	-3.225E+04		1.870E+05	Half-Life too short		

Combined Activity-MDA Report (continued)
Sample ID : G9ANW1AC Acquisition date : 27-APR-2005 21:15:02

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
TL-208	1.004E+00		4.727E-01	1.688E+00	1.030E-01	0.595
BI-211	1.168E+00		5.663E-01	1.704E+00	7.892E-02	0.686
PB-211	-4.196E+00		3.377E+00	1.103E+01	5.916E-01	-0.381
BI-212	-2.944E+00		6.774E+00	2.291E+01	1.199E+00	-0.129
BI-214	3.758E-01		1.370E-01	4.907E-01	2.609E-02	0.766
PB-214	4.690E-01	+	1.877E-01	4.817E-01	2.406E-02	0.974
RN-219	7.181E-01		4.794E-01	1.629E+00	8.123E-02	0.441
RA-223	9.645E-01		6.084E-01	2.102E+00	1.112E-01	0.459
RA-224	2.556E+01		1.106E+01	2.493E+01	7.134E+00	1.025
RA-226	8.188E-01		9.683E-01	3.310E+00	1.532E-01	0.247
TH-227	-2.057E-01		4.967E-01	1.397E+00	6.856E-02	-0.147
AC-228	1.785E+00		7.771E-01	2.465E+00	4.718E-01	0.724
RA-228	1.020E+00		6.540E-01	2.304E+00	1.233E-01	0.443
PA-231	9.857E-01		1.716E+00	5.943E+00	3.876E-01	0.166
TH-231	6.682E-01		5.874E-01	1.689E+00	1.145E-01	0.396
TH-232	6.850E-03		2.090E+00	7.038E+00	3.782E-01	0.001
PA-233	-6.863E-02		1.091E-01	3.694E-01	1.826E-02	-0.186
PA-234M	-1.361E+01		1.523E+01	5.104E+01	2.642E+00	-0.267
TH-234	1.021E+00		1.106E+00	3.210E+00	3.073E-01	0.318
U-235	1.145E-01		2.701E-01	9.237E-01	8.541E-02	0.124
NP-237	-7.358E-02		1.170E-01	3.961E-01	1.915E-02	-0.186
NP-239	2.165E-01		1.940E-01	6.486E-01	3.395E-02	0.334
ANN RAD	5.890E-02		6.266E-02	2.226E-01	1.073E-02	0.265

Nuclide Line Activity Report
Sample ID : G9ANW1AC

Acquisition date : 27-APR-2005 21:15:02

Nuclide Type: natural

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
K-40	1460.83	10.67*	6.987E-01	2.944E+00	2.944E+00	22.81	OK

Final Mean for 1 Valid Peaks = 2.945E+00+/- 6.718E-01 (22.81%)

Nuclide Type: fission

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
CO-57	122.06	85.51*	5.867E+00	1.684E-01	2.427E+01	15.56	OK
	136.48	10.60	5.598E+00	----- Line Not Found		-----	Absent

Final Mean for 1 Valid Peaks = 2.427E+01+/- 3.778E+00 (15.57%)

CS-137	661.65	85.12*	1.481E+00	2.753E+01	3.110E+01	7.24	OK

Final Mean for 1 Valid Peaks = 3.111E+01+/- 2.251E+00 (7.24%)

Nuclide Type: activation

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
CO-60	1173.24	99.90	8.511E-01	2.162E+01	4.352E+01	6.95	OK
	1332.50	99.98*	7.580E-01	2.234E+01	4.497E+01	6.97	OK

Final Mean for 2 Valid Peaks = 4.423E+01+/- 2.679E+00 (6.06%)

CD-109	88.03	3.72*	6.297E+00	5.409E+01	9.861E+02	8.41	OK

Final Mean for 1 Valid Peaks = 9.862E+02+/- 8.290E+01 (8.41%)

Nuclide Type: Th Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
PB-212	238.58	43.60*	3.880E+00	5.050E-01	3.482E+00	22.32	OK
	300.03	3.34	3.188E+00	----- Line Not Found		-----	Absent

Final Mean for 1 Valid Peaks = 3.484E+00+/- 7.776E-01 (22.32%)

Nuclide Type: Np Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
AM-241	59.54	35.70*	5.824E+00	7.142E+01	7.204E+01	7.66	OK

Final Mean for 1 Valid Peaks = 7.198E+01+/- 5.514E+00 (7.66%)

Nuclide Line Activity Report (continued)
Sample ID : G9ANW1AC Acquisition date : 27-APR-2005 21:15:02

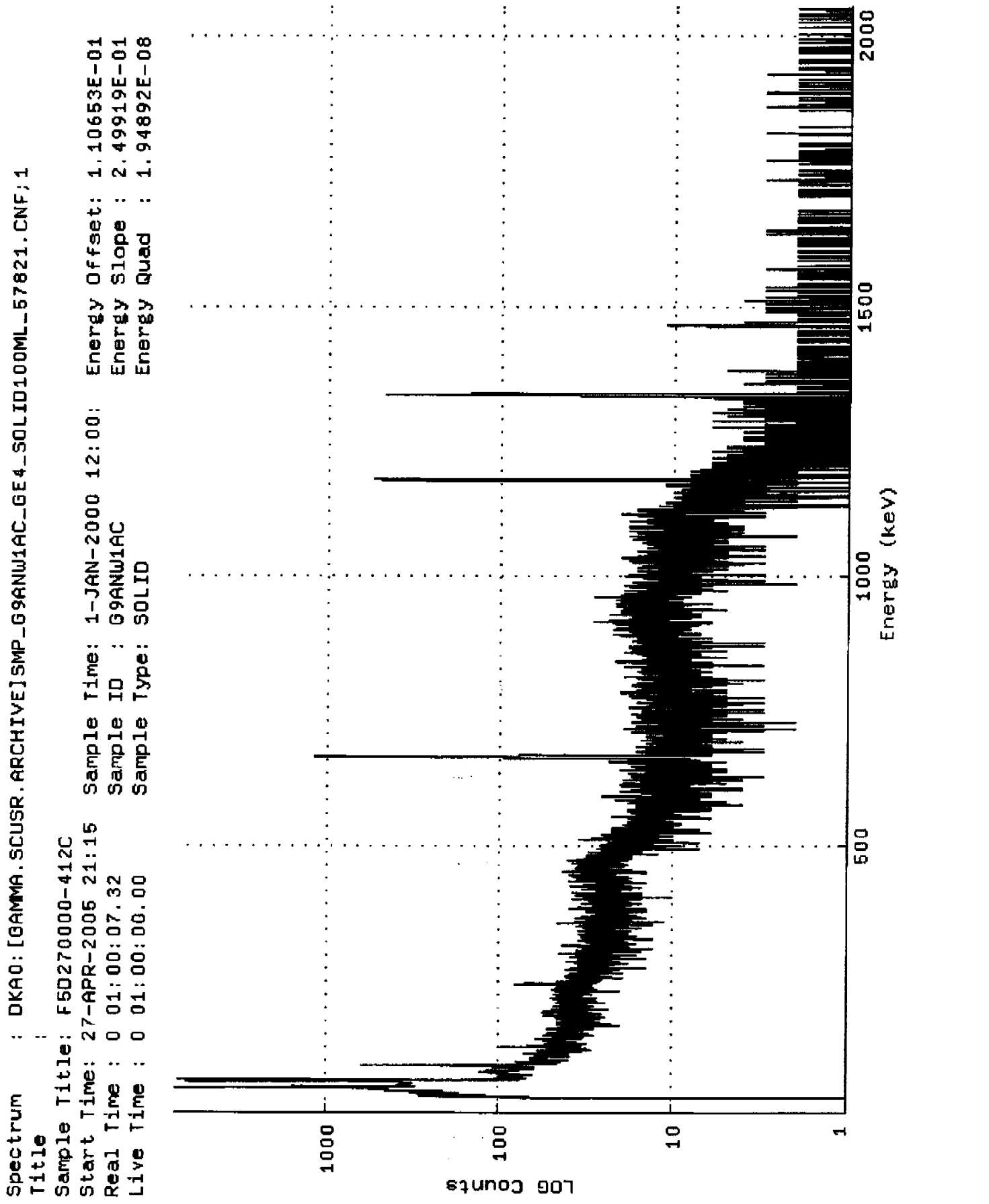
Flag: "*" = Keyline

Rejected Report
Sample ID : G9ANW1AC

Acquisition date : 27-APR-2005 21:15:02

Nuclide	Half-life	Half-Life Ratio	Energy	%Abund	Activity (pCi/G)	1-Sigma %Error	Rejected by
EU-152	13.60Y	0.39	121.78	28.40	6.643E-01	15.72	Abun.
			344.27	26.50	--- Not Found ---		
			778.89	12.74	--- Not Found ---		
			964.01	14.40	--- Not Found ---		
			1085.78	10.00	--- Not Found ---		
			1112.02	13.30	--- Not Found ---		
			1407.95*	20.70	--- Not Found ---		
		% Abundances	Found =	22.53			
PB-214	1600.00Y	0.00	241.92	7.46	--- Not Found ---		Abun.
			295.09	19.20	--- Not Found ---		
			351.87*	37.10	4.690E-01	40.03	
		% Abundances	Found =	58.19			

Flag: "*" = Keyline


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G9ANW1AC_GE4_SOLID100ML_57821.CNF;1
Title : :
Sample Title: F5D270000-412C
Start Time: 27-APR-2005 21:15 Sample Time: 1-JAN-2000 12:00: Energy Offset: 1.10653E-01
Real Time : 0 01:00:07.32 Sample ID : G9ANW1AC Energy Slope : 2.49919E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : 1.94892E-08
Log Counts
1000
100
10
1
500
1000
1500
2000
Energy (keV)

SEVERN TRENT STL

MLcC

VMS Gamma Spectroscopy Report generated 8-MAY-2005 21:10:08
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G81591AA_GE4_SOLID100ML_57813.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5117412
Project Number : F5D220356-001
Sample ID : G81591AA

Sample Quantity : 1.68100E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 27-APR-2005 18:18:38
Acquisition date : 27-APR-2005 18:18:38
Decay time : 0 00:00:00.00
Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.60
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE4
Counting geometry: SOLID_100ML

Energy cal. time : 16-MAR-2005 08:34:49
Effic. cal. time : 18-JAN-2005 00:15:12
Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000
End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE4__57454.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G81591AA Acquisition date : 27-APR-2005 18:18:38

---- Energy, FWHM, and Efficiency Curves ----

```
**************************************************************************
*                                                                        *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)        *
*                          A = 1.10653E-01                               *
*                          B = 2.49919E-01                               *
*                          C = 1.94892E-08                               *
*                                                                        *
*                                                                        *
*                     FWHM(keV) = A + (B * SQRT(Energy))                 *
*                          A = 8.02351E-01                               *
*                          B = 2.65421E-02                               *
*                                                                        *
*                                                                        *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                        *
*     a1=9.41250E+02   a2=-4.55854E+00 a3=9.62044E-01                    *
*     a4=7.38134E-02   a5=-4.50301E-02 a6=-9.56656E-03   a7=0.00000E+00  *
*                                                                        *
**************************************************************************
```

Combined Activity-MDA Report
Sample ID : G81591AA

Acquisition date : 27-APR-2005 18:18:38

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	6.799E+00	8.919E-01	2.700E-01	1.263E-02	25.185
PB-212	2.529E-01	4.778E-02	5.935E-02	3.244E-03	4.261
PB-214	4.564E-01	5.983E-02	5.774E-02	2.885E-03	7.904
RA-226	5.147E+00	6.262E-01	4.827E-01	2.233E-02	10.663
TH-234	2.797E+00	3.420E-01	4.728E-01	4.526E-02	5.917
U-235	3.399E-01	4.160E-02	1.965E-01	1.817E-02	1.730

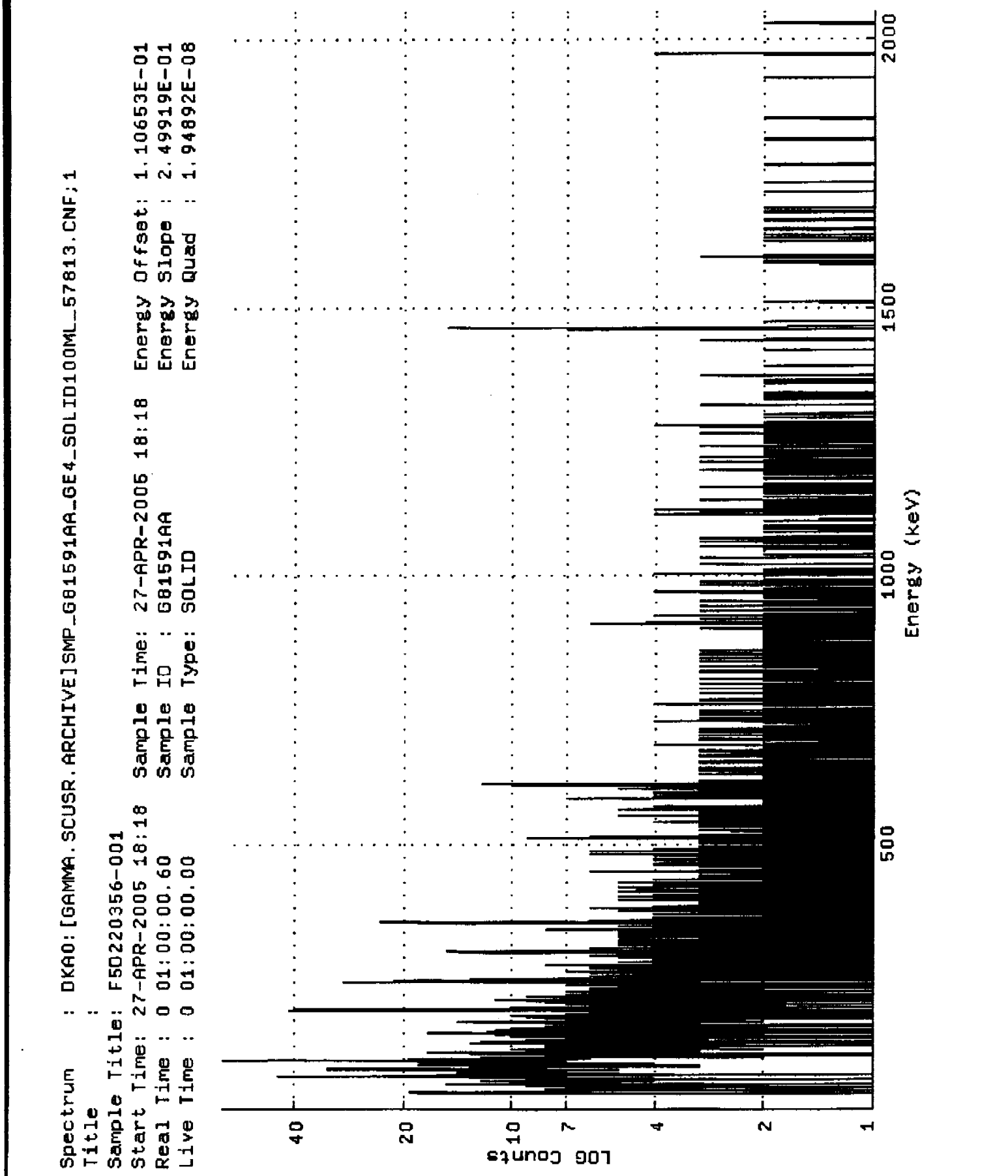
---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-1.440E-02		1.416E-01	2.327E-01	1.164E-02	-0.062
NA-22	3.603E-02		2.625E-02	5.010E-02	2.273E-03	0.719
CR-51	2.523E-02		1.188E-01	2.032E-01	1.018E-02	0.124
MN-54	-3.504E-02		2.415E-02	3.455E-02	1.854E-03	-1.014
CO-57	-1.283E-02		1.066E-02	1.714E-02	1.004E-03	-0.748
FE-59	1.764E-02		3.525E-02	6.231E-02	3.441E-03	0.283
CO-60	1.582E-03		2.318E-02	3.940E-02	1.788E-03	0.040
ZN-65	-1.515E-01		6.150E-02	7.736E-02	3.696E-03	-1.958
SE-75	-2.487E-02		2.052E-02	3.138E-02	1.544E-03	-0.793
SR-85	-2.785E-02		2.275E-02	3.477E-02	1.679E-03	-0.801
Y-88	8.269E-03		1.725E-02	3.195E-02	1.360E-03	0.259
NB-95	1.211E-02		2.118E-02	3.681E-02	1.951E-03	0.329
ZR-95	-2.248E-03		3.380E-02	5.583E-02	3.159E-03	-0.040
MO-99	7.704E-03		1.319E-01	2.209E-01	1.804E-02	0.035
TC-99M	-2.905E-02		1.255E-02	1.913E-02	1.022E-03	-1.519
RU-103	-3.137E-03		1.470E-02	2.381E-02	1.293E-03	-0.132
RH-105	-4.252E-01		2.282E-01	3.406E-01	1.652E-02	-1.248
RH-106	-1.167E-01		1.181E-01	2.346E-01	1.131E-02	-0.498
RU-106	-1.029E-01		1.567E-01	2.469E-01	1.773E-02	-0.417
CD-109	-2.414E-01		3.347E-01	5.113E-01	2.977E-02	-0.472
SN-113	-2.460E-02		1.940E-02	2.926E-02	1.287E-03	-0.841
SB-124	-1.486E-02		1.833E-02	2.889E-02	1.455E-03	-0.514
SB-125	1.965E-02		4.417E-02	7.600E-02	3.454E-03	0.258
I-131	-4.546E-03		1.524E-02	2.507E-02	1.185E-03	-0.181
I-132	-1.814E-02		2.206E-02	3.436E-02	1.747E-03	-0.528
TE-132	-1.428E-02		1.250E-02	1.939E-02	9.340E-04	-0.737
BA-133	-3.769E-04		2.456E-02	3.504E-02	2.380E-03	-0.011
I-133	-1.106E-02		1.619E-02	2.490E-02	1.215E-03	-0.444
CS-134	-2.763E-02		1.970E-02	2.753E-02	1.389E-03	-1.004
CS-137	2.859E-02		2.399E-02	4.342E-02	2.204E-03	0.658
CE-139	1.348E-02		1.300E-02	1.997E-02	9.009E-04	0.675
BA-140	-1.025E-01		6.117E-02	8.423E-02	1.409E-02	-1.217
LA-140	7.376E-03		2.429E-02	4.225E-02	1.907E-03	0.175
CE-141	-9.866E-04		2.215E-02	3.731E-02	1.960E-03	-0.026
CE-144	-8.488E-02		7.515E-02	1.199E-01	7.923E-03	-0.708
ND-147	8.883E-02		1.105E-01	1.939E-01	9.468E-03	0.458
EU-152	3.158E-02		7.849E-02	1.413E-01	7.293E-03	0.223

Combined Activity-MDA Report (continued)
Sample ID : G81591AA Acquisition date : 27-APR-2005 18:18:38

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-154	6.582E-02		1.413E-01	2.515E-01	1.738E-02	0.262
EU-155	4.503E-02		4.844E-02	8.214E-02	4.413E-03	0.548
HG-203	1.933E-03		1.609E-02	2.663E-02	1.333E-03	0.073
TL-208	4.763E-02		2.354E-02	4.504E-02	2.747E-03	1.058
BI-211	1.090E+00		1.979E-01	3.464E-01	1.605E-02	3.146
PB-211	7.213E-01		7.537E-01	1.350E+00	7.243E-02	0.534
BI-212	2.287E-01		2.871E-01	5.100E-01	2.669E-02	0.448
BI-214	2.644E-01	+	5.554E-02	1.158E-01	6.159E-03	2.283
RN-219	1.973E-01		1.249E-01	2.216E-01	1.091E-02	0.890
RA-223	6.870E-02		1.738E-01	2.975E-01	1.574E-02	0.231
RA-224	2.442E+00		8.277E-01	7.885E-01	2.257E-01	3.097
TH-227	1.515E-01		1.243E-01	1.898E-01	9.188E-03	0.798
AC-228	3.045E-01		1.367E-01	2.309E-01	4.419E-02	1.319
RA-228	4.062E-01		1.079E-01	2.157E-01	1.154E-02	1.883
PA-231	-1.207E-01		5.275E-01	8.817E-01	5.750E-02	-0.137
TH-231	3.938E-01		1.747E-01	3.039E-01	2.061E-02	1.296
TH-232	7.647E-01		5.179E-01	9.591E-01	5.153E-02	0.797
PA-233	2.696E-02		3.325E-02	5.855E-02	2.895E-03	0.460
PA-234M	1.242E+01		4.350E+00	8.658E+00	4.481E-01	1.435
NP-237	2.890E-02		3.565E-02	6.278E-02	3.035E-03	0.460
NP-239	-3.641E-02		5.988E-02	9.575E-02	5.012E-03	-0.380
AM-241	3.515E-02		3.151E-02	4.948E-02	2.845E-03	0.711
ANN RAD	-2.690E-02		2.441E-02	4.819E-02	2.322E-03	-0.558


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G81591AA_GE4_SOLID100ML_57813.CNF;1
Title :
Sample Title: F5D220356-001
Start Time: 27-APR-2005 18:18 Sample Time: 27-APR-2005 18:18 Energy Offset: 1.10653E-01
Real Time : 0 01:00:00.60 Sample ID : G81591AA Energy Slope : 2.49919E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : 1.94892E-08
Log Counts
40
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 8-MAY-2005 21:10:46
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G81591AG_GE6_SOLID100ML_57820.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5117412
Project Number : F5D220356-001X
Sample ID : G81591AG

Sample Quantity : 1.68100E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date	: 27-APR-2005 19:36:33	Elapsed live time:	0 01:00:00.00
Acquisition date	: 27-APR-2005 19:36:33	Elapsed real time:	0 01:00:00.52
Decay time	: 0 00:00:00.00	% dead time :	0.0%

---- Detector Parameters ----

Detector name	: GE6	Counting geometry:	SOLID_100ML
Energy cal. time	: 3-MAR-2004 08:43:53.	Energy cal. type :	Poly
Effic. cal. time	: 18-JAN-2005 22:11:47	FWHM cal. type :	Sqrt

---- Processing Parameters ----

Start channel	: 150	End channel :	8100
Sensitivity	: 3.00000	Gaussian Sens. :	15.00000
Critical level?	: Yes	Propagate Errors?:	Yes
Empirical Eff?	: No	Library-based eff:	Yes
Energy tolerance	: 1.25000	Half life ratio :	8.00000
Abundance limit	: 70.00000	WTM error limit :	3.00000
MDA Width (FWHM)	: 3.00000	MDA Confid Level :	5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE6__57456.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G81591AG

Acquisition date : 27-APR-2005 19:36:33

---- Energy, FWHM, and Efficiency Curves ----

```
**************************************************************************
*                                                                        *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)        *
*                          A = 1.54285E-01                               *
*                          B = 2.49832E-01                               *
*                          C = 1.86799E-08                               *
*                                                                        *
*                                                                        *
*                    FWHM(keV) = A + (B * SQRT(Energy))                  *
*                          A = 4.67797E-01                               *
*                          B = 3.35494E-02                               *
*                                                                        *
*                                                                        *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                        *
*     a1=9.41250E+02   a2=-4.68519E+00 a3=8.82578E-01                    *
*     a4=8.83148E-02   a5=-2.58765E-02 a6=-1.60802E-02   a7=0.00000E+00  *
*                                                                        *
**************************************************************************
```

Combined Activity-MDA Report
Sample ID : G81591AG

Acquisition date : 27-APR-2005 19:36:33

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	6.499E+00	8.924E-01	2.902E-01	1.285E-02	22.395
TL-208	1.875E-01	4.215E-02	3.539E-02	2.577E-03	5.299
PB-212	2.556E-01	6.032E-02	5.259E-02	2.889E-03	4.860
AC-228	4.997E-01	1.798E-01	1.788E-01	3.438E-02	2.795
TH-234	2.722E+00	4.128E-01	5.153E-01	4.899E-02	5.282
U-235	2.732E-01	3.934E-02	1.608E-01	1.473E-02	1.698

---- Non-Identified Nuclides ----

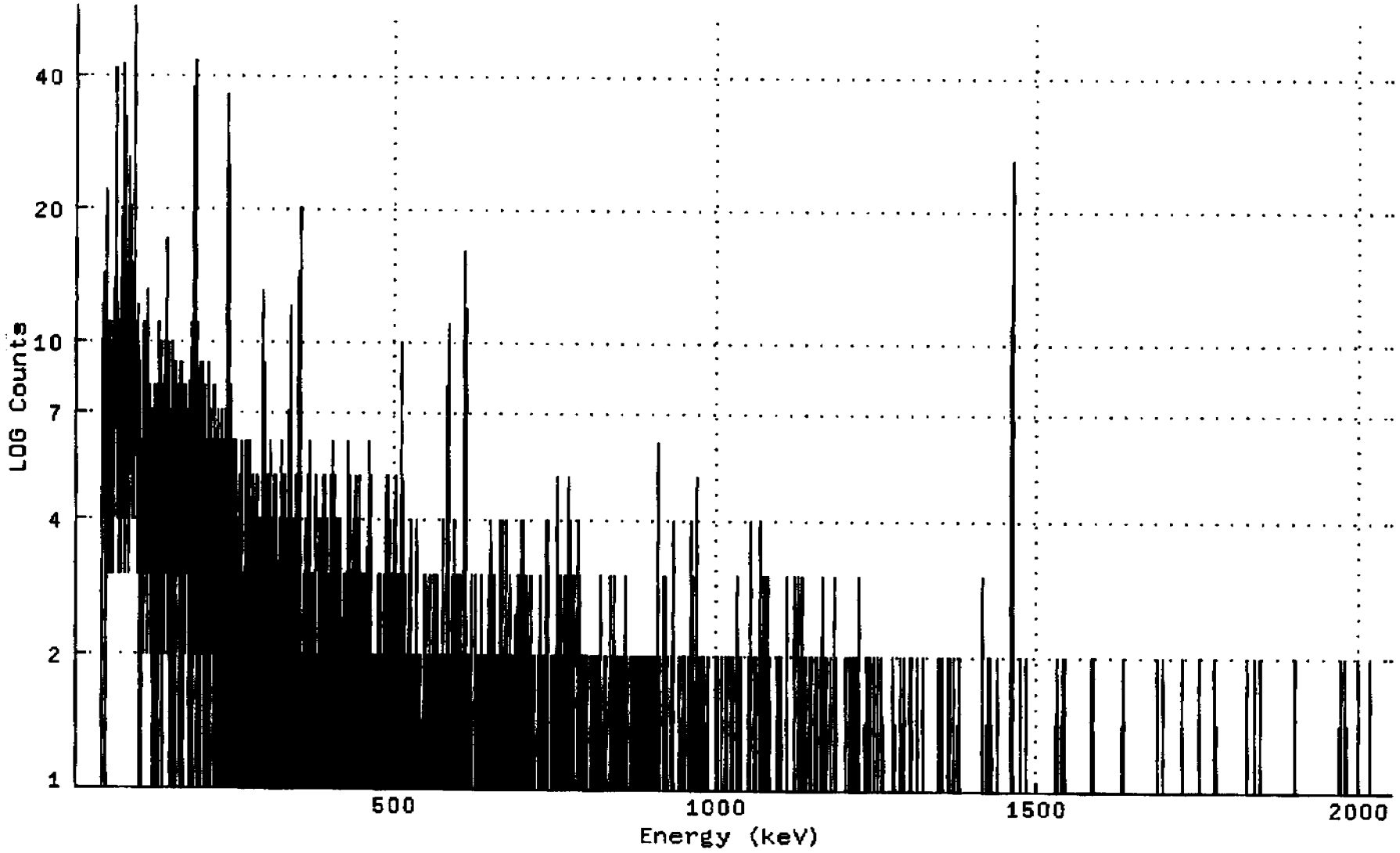
Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-1.248E-01		1.373E-01	2.069E-01	1.211E-02	-0.603
NA-22	6.271E-03		2.080E-02	3.631E-02	1.572E-03	0.173
CR-51	-9.676E-02		1.390E-01	2.168E-01	1.144E-02	-0.446
MN-54	-1.286E-02		1.514E-02	2.231E-02	1.326E-03	-0.576
CO-57	-1.228E-02		1.044E-02	1.627E-02	9.230E-04	-0.755
FE-59	2.622E-02		3.884E-02	6.951E-02	3.794E-03	0.377
CO-60	-6.816E-03		1.469E-02	2.173E-02	9.235E-04	-0.314
ZN-65	-9.145E-02		4.703E-02	5.881E-02	2.766E-03	-1.555
SE-75	-9.106E-03		1.809E-02	2.901E-02	1.456E-03	-0.314
SR-85	-6.657E-02		2.376E-02	3.053E-02	1.796E-03	-2.181
Y-88	-1.008E-02		2.578E-02	3.973E-02	1.665E-03	-0.254
NB-95	2.871E-02		2.395E-02	4.337E-02	2.797E-03	0.662
ZR-95	-1.544E-02		3.845E-02	6.096E-02	4.151E-03	-0.253
MO-99	-5.246E-02		1.673E-01	2.686E-01	2.441E-02	-0.195
TC-99M	8.939E-03		1.314E-02	2.124E-02	1.101E-03	0.421
RU-103	3.978E-03		1.800E-02	3.033E-02	1.913E-03	0.131
RH-105	2.628E-01		2.517E-01	4.419E-01	2.244E-02	0.595
RH-106	4.749E-01		1.332E-01	2.508E-01	1.471E-02	1.894
RU-106	-4.618E-02		1.582E-01	2.575E-01	2.158E-02	-0.179
CD-109	5.796E-01		3.200E-01	5.703E-01	3.342E-02	1.016
SN-113	6.600E-03		2.192E-02	3.771E-02	1.870E-03	0.175
SB-124	-7.718E-03		1.747E-02	2.819E-02	1.840E-03	-0.274
SB-125	6.413E-02		5.841E-02	1.044E-01	5.468E-03	0.614
I-131	-1.662E-02		1.666E-02	2.606E-02	1.345E-03	-0.638
I-132	8.164E-03		2.342E-02	4.030E-02	2.773E-03	0.203
TE-132	-1.342E-02		1.216E-02	1.898E-02	9.153E-04	-0.707
BA-133	-7.133E-02		2.390E-02	2.710E-02	1.919E-03	-2.632
I-133	-1.324E-02		1.714E-02	2.581E-02	1.550E-03	-0.513
CS-134	1.396E-02		1.645E-02	2.784E-02	1.823E-03	0.502
CS-137	4.009E-02		2.273E-02	4.328E-02	2.987E-03	0.926
CE-139	-1.612E-02		1.251E-02	1.885E-02	8.285E-04	-0.856
BA-140	-1.868E-02		6.723E-02	1.075E-01	1.839E-02	-0.174
LA-140	-7.475E-05		2.203E-02	3.691E-02	1.591E-03	-0.002
CE-141	2.552E-02		2.080E-02	3.253E-02	1.660E-03	0.785
CE-144	-6.778E-02		9.220E-02	1.473E-01	9.526E-03	-0.460
ND-147	-2.172E-01		1.158E-01	1.493E-01	8.981E-03	-1.454
EU-152	-1.373E-01		8.344E-02	7.761E-02	3.820E-03	-1.770

Combined Activity-MDA Report (continued)
Sample ID : G81591AG Acquisition date : 27-APR-2005 19:36:33

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-154	-1.438E-01		1.821E-01	2.791E-01	1.976E-02	-0.515
EU-155	-3.444E-02		4.042E-02	6.485E-02	3.436E-03	-0.531
HG-203	-2.844E-02		1.554E-02	2.212E-02	1.137E-03	-1.286
BI-211	1.184E+00		2.075E-01	3.815E-01	1.918E-02	3.105
PB-211	6.906E-02		6.081E-01	1.041E+00	6.214E-02	0.066
BI-212	2.708E-01		2.925E-01	5.276E-01	3.514E-02	0.513
BI-214	4.245E-01	+	7.787E-02	1.443E-01	9.791E-03	2.941
PB-214	4.253E-01	+	6.852E-02	1.269E-01	6.809E-03	3.352
RN-219	1.121E-01		1.313E-01	2.289E-01	1.153E-02	0.490
RA-223	1.956E-01		1.768E-01	3.073E-01	1.587E-02	0.636
RA-224	-1.687E-03		4.245E-01	6.111E-01	1.749E-01	-0.003
RA-226	4.025E+00	+	6.305E-01	1.058E+00	4.810E-02	3.804
TH-227	-5.370E-02		1.276E-01	1.776E-01	8.641E-03	-0.302
RA-228	2.764E-01		1.028E-01	2.024E-01	1.076E-02	1.365
PA-231	-7.406E-02		6.260E-01	1.025E+00	6.853E-02	-0.072
TH-231	9.057E-01		2.032E-01	3.663E-01	2.486E-02	2.473
TH-232	9.819E-01		5.206E-01	1.017E+00	5.806E-02	0.966
PA-233	-3.988E-02		3.134E-02	4.608E-02	2.389E-03	-0.866
PA-234M	5.083E+00		3.611E+00	6.853E+00	3.505E-01	0.742
NP-237	-4.276E-02		3.360E-02	4.941E-02	2.510E-03	-0.866
NP-239	1.083E-01		5.962E-02	1.079E-01	5.609E-03	1.003
AM-241	6.553E-02		3.525E-02	5.565E-02	3.128E-03	1.177
ANN RAD	-4.769E-02		2.808E-02	5.581E-02	3.270E-03	-0.854

Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G81591AG_GE6_SOLID100ML_57820.CNF;1
Title :
Sample Title: F5D220356-001X
Start Time: 27-APR-2005 19:36 Sample Time: 27-APR-2005 19:36 Energy Offset: 1.54285E-01
Real Time : 0 01:00:00.52 Sample ID : G81591AG Energy Slope : 2.49832E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : 1.86799E-08



VMS Gamma Spectroscopy Report generated 8-MAY-2005 21:11:19
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G816E1AA_GE5_SOLID100ML_57814.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5117412
Project Number : F5D220356-002
Sample ID : G816E1AA

Sample Quantity : 1.51100E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 27-APR-2005 18:20:22
Acquisition date : 27-APR-2005 18:20:22
Decay time : 0 00:00:00.00

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.99
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE5

Counting geometry: SOLID_100ML

Energy cal. time : 9-MAR-2005 09:18:16.
Effic. cal. time : 18-JAN-2005 09:43:11

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE5__57455.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G816E1AA Acquisition date : 27-APR-2005 18:20:22

---- Energy, FWHM, and Efficiency Curves ----

```
*************************************************************************
*                                                                       *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)       *
*                          A = -7.14002E-03                             *
*                          B = 2.49998E-01                              *
*                          C = -1.90945E-09                             *
*                                                                       *
*                                                                       *
*                    FWHM(keV) = A + (B * SQRT(Energy))                 *
*                          A = 5.02556E-01                              *
*                          B = 3.66242E-02                              *
*                                                                       *
*                                                                       *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                       *
*     a1=9.41250E+02   a2=-4.46457E+00 a3=9.42586E-01                   *
*     a4=5.97186E-02   a5=-3.91387E-02 a6=-9.36517E-03   a7=0.00000E+00 *
*                                                                       *
*************************************************************************
```

Combined Activity-MDA Report
Sample ID : G816E1AA

Acquisition date : 27-APR-2005 18:20:22

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	9.417E+00	9.916E-01	3.935E-01	1.836E-02	23.934
TL-208	1.283E-01	3.408E-02	3.220E-02	2.261E-03	3.985
PB-212	3.424E-01	5.418E-02	5.209E-02	2.967E-03	6.574
PB-214	5.179E-01	6.238E-02	6.045E-02	3.088E-03	8.568
RA-226	6.242E+00	7.456E-01	4.976E-01	2.446E-02	12.545
AC-228	3.934E-01	1.737E-01	1.845E-01	3.537E-02	2.133
TH-234	5.049E+00	5.068E-01	4.776E-01	4.602E-02	10.571
U-235	4.122E-01	4.954E-02	2.081E-01	1.996E-02	1.981

---- Non-Identified Nuclides ----

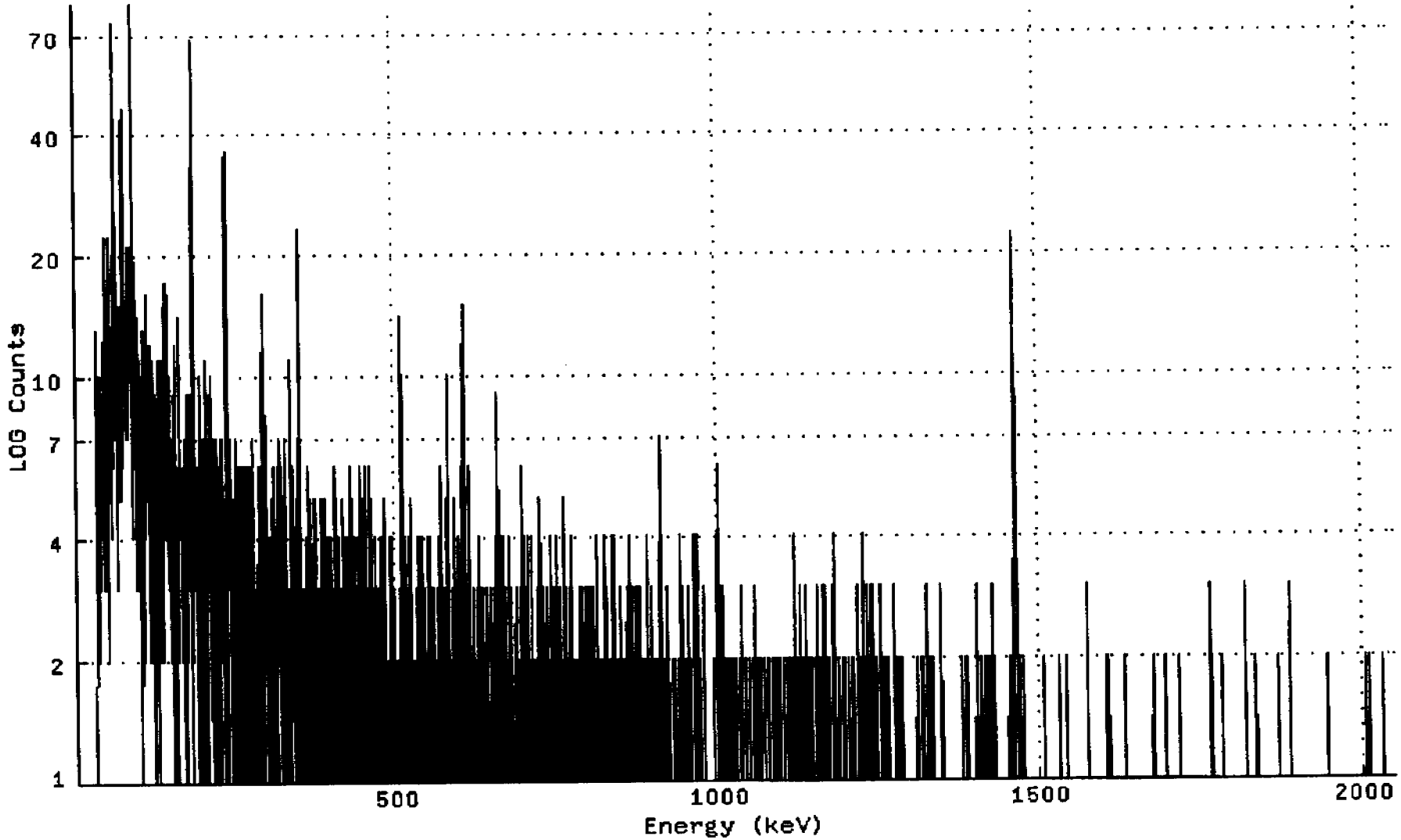
Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	1.032E-01		1.143E-01	2.072E-01	1.121E-02	0.498
NA-22	4.491E-02		2.549E-02	5.013E-02	2.252E-03	0.896
CR-51	-1.368E-01		1.346E-01	2.110E-01	1.091E-02	-0.648
MN-54	-5.126E-02		2.335E-02	2.969E-02	1.953E-03	-1.727
CO-57	-6.759E-03		1.146E-02	1.822E-02	1.218E-03	-0.371
FE-59	6.172E-03		4.106E-02	6.925E-02	3.955E-03	0.089
CO-60	-5.618E-03		2.571E-02	4.494E-02	2.042E-03	-0.125
ZN-65	-8.573E-02		5.234E-02	7.066E-02	3.477E-03	-1.213
SE-75	-1.782E-02		1.804E-02	2.873E-02	1.480E-03	-0.620
SR-85	-9.286E-02		2.789E-02	3.756E-02	2.053E-03	-2.472
Y-88	2.861E-02		2.739E-02	5.185E-02	2.172E-03	0.552
NB-95	3.314E-02		2.371E-02	4.326E-02	2.922E-03	0.766
ZR-95	-1.922E-02		3.489E-02	5.509E-02	3.892E-03	-0.349
MO-99	-4.024E-01		1.648E-01	2.017E-01	1.861E-02	-1.995
TC-99M	-5.316E-03		1.251E-02	2.090E-02	1.247E-03	-0.254
RU-103	1.916E-02		1.561E-02	2.861E-02	1.691E-03	0.669
RH-105	-2.312E-01		2.404E-01	3.803E-01	1.916E-02	-0.608
RH-106	8.589E-02		1.366E-01	2.811E-01	1.531E-02	0.306
RU-106	-2.564E-02		1.615E-01	2.617E-01	2.150E-02	-0.098
CD-109	-6.930E-01		3.325E-01	5.093E-01	2.966E-02	-1.361
SN-113	-1.510E-02		2.296E-02	3.617E-02	1.610E-03	-0.418
SB-124	-3.284E-03		1.956E-02	3.187E-02	1.998E-03	-0.103
SB-125	9.323E-03		5.748E-02	9.831E-02	4.659E-03	0.095
I-131	2.532E-02		1.730E-02	3.114E-02	1.502E-03	0.813
I-132	5.055E-02		2.453E-02	4.649E-02	3.157E-03	1.087
TE-132	-3.669E-03		1.216E-02	1.970E-02	1.001E-03	-0.186
BA-133	1.280E-02		2.078E-02	3.330E-02	2.288E-03	0.384
I-133	-3.519E-02		1.663E-02	2.157E-02	1.209E-03	-1.632
CS-134	9.761E-03		2.126E-02	3.378E-02	2.126E-03	0.289
CS-137	5.276E-02		3.305E-02	6.253E-02	4.246E-03	0.844
CE-139	-1.032E-02		1.260E-02	2.037E-02	9.795E-04	-0.507
BA-140	4.958E-02		7.169E-02	1.243E-01	2.111E-02	0.399
LA-140	-1.951E-03		2.243E-02	3.713E-02	1.665E-03	-0.053
CE-141	-1.491E-02		2.326E-02	3.844E-02	2.235E-03	-0.388
CE-144	8.234E-02		8.696E-02	1.532E-01	1.104E-02	0.538

Combined Activity-MDA Report (continued)
Sample ID : G816E1AA Acquisition date : 27-APR-2005 18:20:22

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
ND-147	-1.499E-02		9.335E-02	1.531E-01	8.609E-03	-0.098
EU-152	-1.080E-01		1.171E-01	1.689E-01	8.710E-03	-0.639
EU-154	-1.202E-02		1.705E-01	2.865E-01	2.222E-02	-0.042
EU-155	-1.258E-02		4.461E-02	7.264E-02	4.200E-03	-0.173
HG-203	7.722E-03		1.603E-02	2.777E-02	1.449E-03	0.278
BI-211	1.276E+00		2.082E-01	3.668E-01	1.744E-02	3.480
PB-211	-1.073E+00		8.351E-01	1.213E+00	7.987E-02	-0.885
BI-212	5.110E-01		3.229E-01	5.994E-01	4.076E-02	0.853
BI-214	3.761E-01	+	8.162E-02	1.442E-01	9.445E-03	2.608
RN-219	2.779E-02		1.318E-01	2.255E-01	1.161E-02	0.123
RA-223	1.157E-01		1.663E-01	2.894E-01	1.655E-02	0.400
RA-224	9.682E-01		5.267E-01	7.069E-01	2.026E-01	1.370
TH-227	1.064E-01		1.061E-01	1.621E-01	8.269E-03	0.657
RA-228	4.908E-01	+	1.168E-01	2.182E-01	1.364E-02	2.249
PA-231	-2.189E-01		5.796E-01	9.538E-01	6.357E-02	-0.230
TH-231	2.836E-01		1.858E-01	3.218E-01	2.186E-02	0.881
TH-232	-2.525E-01		5.690E-01	9.024E-01	5.846E-02	-0.280
PA-233	2.499E-02		3.355E-02	5.858E-02	2.998E-03	0.427
PA-234M	1.200E+01		4.907E+00	9.411E+00	5.438E-01	1.275
NP-237	2.680E-02		3.598E-02	6.281E-02	3.148E-03	0.427
NP-239	1.012E-01		6.157E-02	1.081E-01	5.950E-03	0.937
AM-241	4.669E-02		3.275E-02	5.291E-02	3.103E-03	0.882
ANN RAD	1.209E-02		2.825E-02	5.772E-02	3.139E-03	0.209

Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G816E1AA_GE5_SOLID100ML_57814.CNF;1
Title :
Sample Title: F5D220356-002
Start Time: 27-APR-2005 18:20 Sample Time: 27-APR-2005 18:20 Energy Offset: -7.14002E-03
Real Time : 0 01:00:00.99 Sample ID : G816E1AA Energy Slope : 2.49998E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : -1.90945E-09



VMS Gamma Spectroscopy Report generated 8-MAY-2005 21:11:49
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G816L1AA_GE6_SOLID100ML_57815.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5117412
Project Number : F5D220356-003
Sample ID : G816L1AA

Sample Quantity : 1.72900E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 27-APR-2005 18:21:20
Acquisition date : 27-APR-2005 18:21:20
Decay time : 0 00:00:00.00

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.48
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE6

Counting geometry: SOLID_100ML

Energy cal. time : 3-MAR-2004 08:43:53.
Effic. cal. time : 18-JAN-2005 22:11:47

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE6__57456.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G816L1AA

Acquisition date : 27-APR-2005 18:21:20

---- Energy, FWHM, and Efficiency Curves ----

```
**********************************************************************************
*                                                                                *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)                *
*                          A = 1.54285E-01                                       *
*                          B = 2.49832E-01                                       *
*                          C = 1.86799E-08                                       *
*                                                                                *
*                                                                                *
*                    FWHM(keV) = A + (B * SQRT(Energy))                          *
*                          A = 4.67797E-01                                       *
*                          B = 3.35494E-02                                       *
*                                                                                *
*                                                                                *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                                *
*     a1=9.41250E+02   a2=-4.68519E+00 a3=8.82578E-01                            *
*     a4=8.83148E-02   a5=-2.58765E-02 a6=-1.60802E-02   a7=0.00000E+00          *
*                                                                                *
**********************************************************************************
```

Combined Activity-MDA Report
Sample ID : G816L1AA

Acquisition date : 27-APR-2005 18:21:20

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	6.536E+00	9.660E-01	4.461E-01	1.975E-02	14.651
TL-208	6.830E-02	2.770E-02	3.462E-02	2.521E-03	1.973
PB-212	2.645E-01	4.951E-02	4.516E-02	2.481E-03	5.857
PB-214	4.274E-01	6.170E-02	7.231E-02	3.881E-03	5.910
RA-226	1.953E+00	4.823E-01	4.342E-01	1.974E-02	4.498
AC-228	5.862E-01	2.241E-01	1.605E-01	3.085E-02	3.654
U-235	1.290E-01	3.190E-02	1.673E-01	1.533E-02	0.771

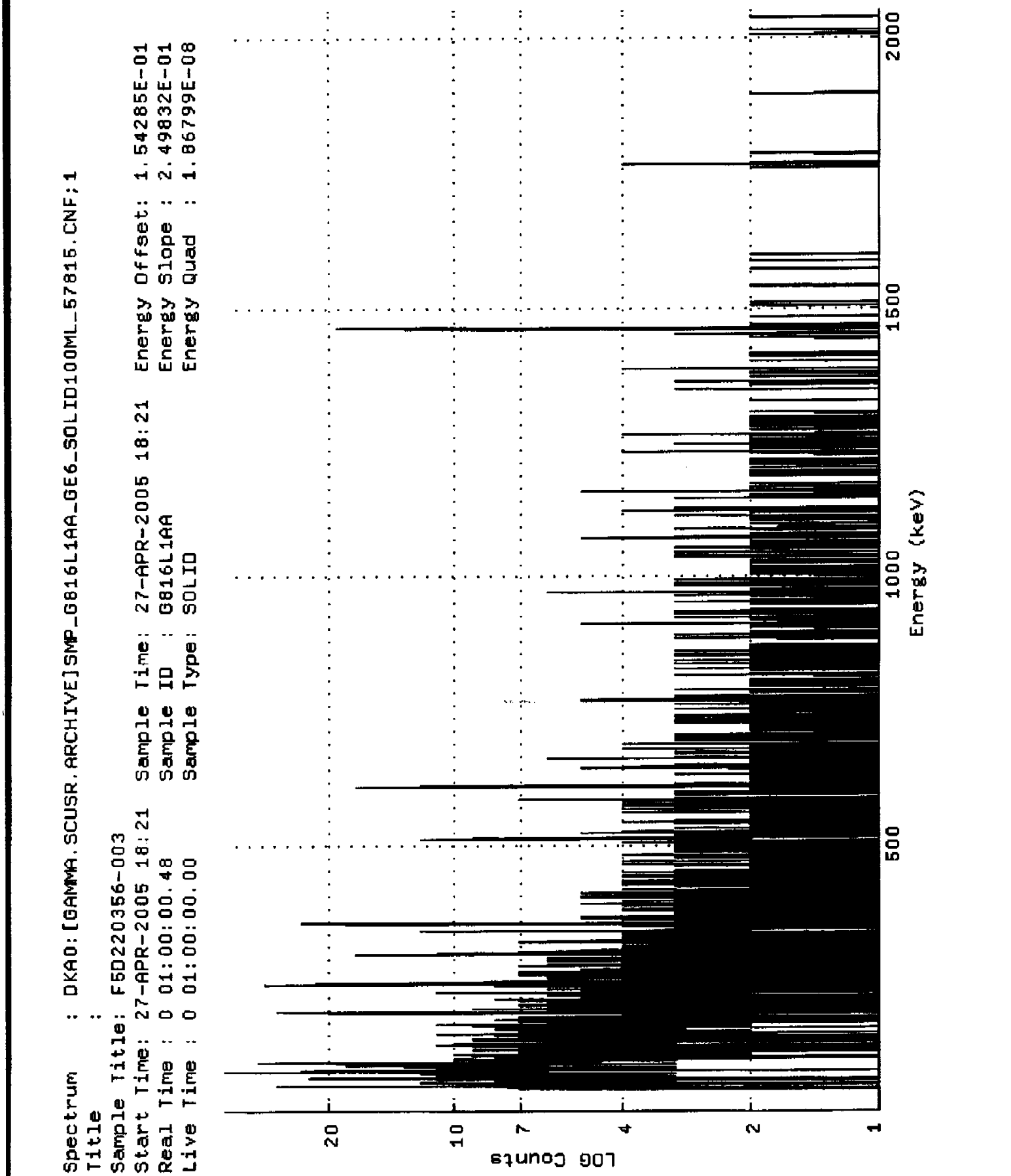
---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-1.141E-01		1.511E-01	2.342E-01	1.370E-02	-0.487
NA-22	-1.511E-02		2.554E-02	3.953E-02	1.712E-03	-0.382
CR-51	1.210E-03		1.256E-01	2.066E-01	1.090E-02	0.006
MN-54	-4.011E-03		2.048E-02	3.391E-02	2.014E-03	-0.118
CO-57	1.896E-02		9.305E-03	1.704E-02	9.667E-04	1.113
FE-59	-5.126E-02		3.004E-02	3.186E-02	1.739E-03	-1.609
CO-60	5.708E-03		2.296E-02	3.953E-02	1.680E-03	0.144
ZN-65	-1.708E-01		5.505E-02	5.721E-02	2.691E-03	-2.985
SE-75	-4.062E-03		1.890E-02	3.103E-02	1.557E-03	-0.131
SR-85	-1.128E-01		2.864E-02	3.388E-02	1.993E-03	-3.330
Y-88	-9.803E-04		2.042E-02	3.345E-02	1.402E-03	-0.029
NB-95	4.265E-03		2.401E-02	4.025E-02	2.596E-03	0.106
ZR-95	-6.880E-02		3.554E-02	4.436E-02	3.021E-03	-1.551
MO-99	-1.338E-01		1.493E-01	2.222E-01	2.019E-02	-0.602
TC-99M	1.982E-02		1.081E-02	1.944E-02	1.008E-03	1.020
RU-103	8.233E-03		1.787E-02	3.068E-02	1.935E-03	0.268
RH-105	6.001E-02		2.029E-01	3.422E-01	1.738E-02	0.175
RH-106	6.206E-01		1.498E-01	2.792E-01	1.638E-02	2.222
RU-106	6.228E-02		1.584E-01	2.765E-01	2.318E-02	0.225
CD-109	5.335E-01		3.307E-01	5.244E-01	3.073E-02	1.017
SN-113	-2.928E-03		1.805E-02	2.995E-02	1.485E-03	-0.098
SB-124	-7.602E-03		1.639E-02	2.635E-02	1.720E-03	-0.289
SB-125	-1.970E-02		4.710E-02	7.602E-02	3.980E-03	-0.259
I-131	1.257E-02		1.496E-02	2.685E-02	1.386E-03	0.468
I-132	-8.137E-03		2.053E-02	3.292E-02	2.265E-03	-0.247
TE-132	1.463E-02		1.068E-02	1.948E-02	9.394E-04	0.751
BA-133	-1.005E-02		2.431E-02	3.506E-02	2.482E-03	-0.287
I-133	5.561E-03		1.566E-02	2.674E-02	1.605E-03	0.208
CS-134	3.776E-03		1.743E-02	2.580E-02	1.689E-03	0.146
CS-137	1.251E-01		3.007E-02	6.008E-02	4.146E-03	2.082
CE-139	-1.873E-02		1.276E-02	1.907E-02	8.382E-04	-0.982
BA-140	-5.234E-02		6.296E-02	9.368E-02	1.603E-02	-0.559
LA-140	-9.242E-03		2.487E-02	3.926E-02	1.692E-03	-0.235
CE-141	6.374E-03		1.955E-02	3.285E-02	1.676E-03	0.194
CE-144	1.405E-01		7.926E-02	1.423E-01	9.198E-03	0.987
ND-147	-7.898E-02		1.025E-01	1.539E-01	9.255E-03	-0.513

Combined Activity-MDA Report (continued)
Sample ID : G816L1AA Acquisition date : 27-APR-2005 18:21:20

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-152	-1.075E-01		1.347E-01	1.996E-01	9.825E-03	-0.538
EU-154	-3.913E-02		1.716E-01	2.815E-01	1.993E-02	-0.139
EU-155	-2.516E-02		4.282E-02	6.996E-02	3.707E-03	-0.360
HG-203	-6.732E-03		1.500E-02	2.411E-02	1.240E-03	-0.279
BI-211	1.131E+00		2.177E-01	3.887E-01	1.954E-02	2.910
PB-211	3.939E-01		6.648E-01	1.192E+00	7.113E-02	0.330
BI-212	6.236E-02		2.752E-01	4.672E-01	3.112E-02	0.133
BI-214	4.086E-01	+	8.717E-02	1.467E-01	9.949E-03	2.786
RN-219	-5.735E-02		1.211E-01	1.951E-01	9.834E-03	-0.294
RA-223	3.143E-01		1.791E-01	3.186E-01	1.646E-02	0.986
RA-224	1.226E+00		4.963E-01	6.302E-01	1.804E-01	1.945
TH-227	-2.190E-01		1.194E-01	1.416E-01	6.891E-03	-1.547
RA-228	2.079E-01	+	9.414E-02	1.926E-01	1.024E-02	1.079
PA-231	-1.459E-01		5.262E-01	8.507E-01	5.686E-02	-0.172
TH-231	3.891E-01		1.617E-01	2.928E-01	1.987E-02	1.329
TH-232	3.434E-01		5.356E-01	9.525E-01	5.441E-02	0.361
PA-233	-3.172E-02		3.226E-02	4.906E-02	2.544E-03	-0.647
PA-234M	3.711E+00		3.366E+00	6.256E+00	3.200E-01	0.593
TH-234	8.078E-01		3.245E-01	5.894E-01	5.602E-02	1.371
NP-237	-3.401E-02		3.458E-02	5.260E-02	2.673E-03	-0.647
NP-239	1.539E-01		5.627E-02	1.050E-01	5.455E-03	1.467
AM-241	2.064E-02		2.452E-02	4.191E-02	2.355E-03	0.492
ANN RAD	-5.450E-03		3.007E-02	6.103E-02	3.576E-03	-0.089


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G816L1AA_GE6_SOLID100ML_57815.CNF;1
Title :
Sample Title: F5D220356-003
Start Time: 27-APR-2005 18:21 Sample Time: 27-APR-2005 18:21 Energy Offset: 1.54285E-01
Real Time : 0 01:00:00.48 Sample ID : G816L1AA Energy Slope : 2.49832E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : 1.86799E-08
Log Counts
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 8-MAY-2005 21:12:24
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G816P1AA_GE7_SOLID100ML_57816.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5117412
Project Number : F5D220356-004
Sample ID : G816P1AA

Sample Quantity : 1.83300E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 27-APR-2005 18:23:22
Acquisition date : 27-APR-2005 18:23:22
Decay time : 0 00:00:00.00

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.44
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE7

Counting geometry: SOLID_100ML

Energy cal. time : 25-FEB-2005 09:11:05
Effic. cal. time : 19-JAN-2005 01:25:36

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE7__57457.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G816P1AA Acquisition date : 27-APR-2005 18:23:22

---- Energy, FWHM, and Efficiency Curves ----

```
**********************************************************************************
*                                                                                *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)                *
*                          A = 7.85538E-02                                       *
*                          B = 2.50061E-01                                       *
*                          C = -1.56700E-08                                      *
*                                                                                *
*                                                                                *
*                     FWHM(keV) = A + (B * SQRT(Energy))                         *
*                          A = 5.33118E-01                                       *
*                          B = 4.95085E-02                                       *
*                                                                                *
*                                                                                *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                                *
*     a1=9.41250E+02   a2=-4.39222E+00 a3=9.59385E-01                           *
*     a4=7.48354E-02   a5=-4.49953E-02 a6=-1.06506E-02   a7=0.00000E+00         *
*                                                                                *
**********************************************************************************
```

Combined Activity-MDA Report
Sample ID : G816P1AA

Acquisition date : 27-APR-2005 18:23:22

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	7.187E+00	8.702E-01	2.163E-01	9.595E-03	33.225
CS-137	1.375E-01	3.141E-02	2.663E-02	1.611E-03	5.163
TL-208	8.007E-02	2.949E-02	2.892E-02	1.927E-03	2.769
PB-212	2.313E-01	3.851E-02	4.735E-02	2.614E-03	4.885
PB-214	3.576E-01	4.745E-02	4.765E-02	2.433E-03	7.505
RA-226	1.350E+00	3.780E-01	3.912E-01	1.832E-02	3.450
TH-234	6.448E-01	1.503E-01	3.164E-01	2.959E-02	2.038
U-235	8.913E-02	2.499E-02	1.318E-01	1.228E-02	0.676

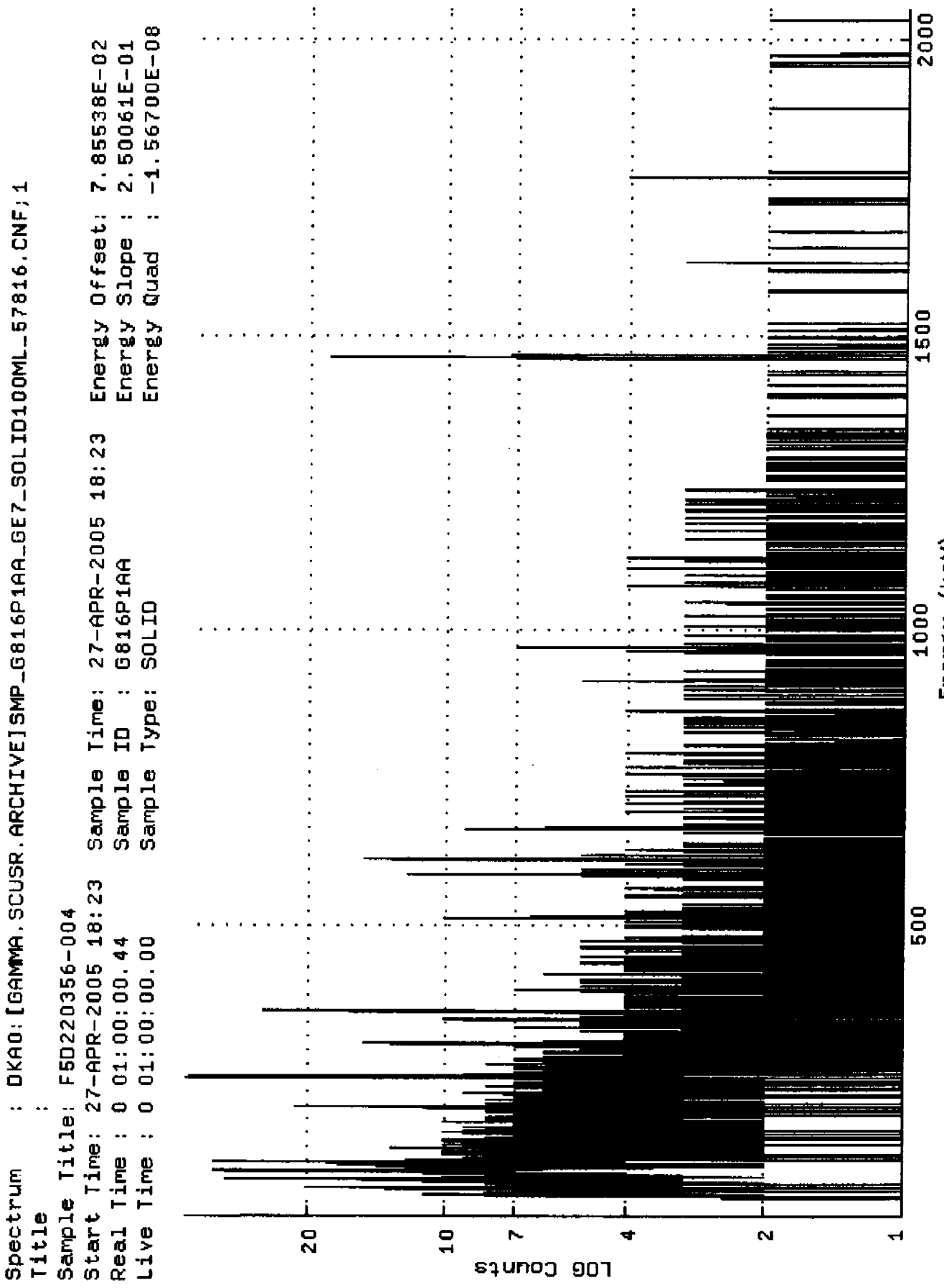
---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-1.551E-01		1.236E-01	1.899E-01	1.012E-02	-0.817
NA-22	-6.721E-04		2.210E-02	3.696E-02	1.562E-03	-0.018
CR-51	-1.363E-01		8.907E-02	1.347E-01	6.877E-03	-1.012
MN-54	3.199E-03		1.673E-02	2.855E-02	1.481E-03	0.112
CO-57	-5.319E-03		8.306E-03	1.319E-02	7.982E-04	-0.403
FE-59	-4.308E-02		3.463E-02	5.000E-02	2.553E-03	-0.862
CO-60	2.146E-02		2.088E-02	3.854E-02	1.638E-03	0.557
ZN-65	3.096E-02		4.757E-02	8.335E-02	3.605E-03	0.371
SE-75	-8.872E-03		1.529E-02	2.471E-02	1.233E-03	-0.359
SR-85	-2.839E-02		1.931E-02	2.980E-02	1.573E-03	-0.952
Y-88	-1.794E-02		2.003E-02	2.859E-02	1.196E-03	-0.627
NB-95	5.332E-03		1.672E-02	2.841E-02	1.605E-03	0.188
ZR-95	1.911E-02		3.012E-02	5.248E-02	3.173E-03	0.364
MO-99	-3.005E-02		1.158E-01	1.878E-01	1.599E-02	-0.160
TC-99M	-1.564E-02		8.466E-03	1.296E-02	7.098E-04	-1.207
RU-103	-4.914E-03		1.488E-02	2.443E-02	1.413E-03	-0.201
RH-105	1.188E-01		1.733E-01	2.978E-01	1.472E-02	0.399
RH-106	-2.160E-01		1.021E-01	1.966E-01	1.035E-02	-1.099
RU-106	-7.477E-02		1.525E-01	2.478E-01	1.927E-02	-0.302
CD-109	4.344E-01		2.275E-01	4.003E-01	2.359E-02	1.085
SN-113	1.621E-02		1.618E-02	2.868E-02	1.303E-03	0.565
SB-124	1.113E-02		1.812E-02	2.853E-02	1.648E-03	0.390
SB-125	4.677E-03		4.095E-02	6.832E-02	3.255E-03	0.068
I-131	1.106E-02		1.247E-02	2.202E-02	1.068E-03	0.502
I-132	2.717E-02		2.132E-02	3.469E-02	2.092E-03	0.783
TE-132	-4.822E-03		1.006E-02	1.659E-02	8.094E-04	-0.291
BA-133	-1.842E-02		2.166E-02	2.838E-02	1.951E-03	-0.649
I-133	-2.829E-02		1.451E-02	2.007E-02	1.078E-03	-1.410
CS-134	-2.965E-02		2.123E-02	2.595E-02	1.504E-03	-1.142
CE-139	-8.249E-04		1.017E-02	1.693E-02	7.738E-04	-0.049
BA-140	-7.567E-03		4.673E-02	7.686E-02	1.298E-02	-0.098
LA-140	-2.701E-02		1.893E-02	2.379E-02	1.028E-03	-1.136
CE-141	2.073E-02		1.611E-02	2.841E-02	1.525E-03	0.730
CE-144	-3.256E-02		5.812E-02	9.578E-02	6.452E-03	-0.340
ND-147	2.800E-02		9.081E-02	1.552E-01	8.351E-03	0.180

Combined Activity-MDA Report (continued) Page : 4
Sample ID : G816P1AA Acquisition date : 27-APR-2005 18:23:22

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-152	-2.736E-02		7.784E-02	1.221E-01	6.019E-03	-0.224
EU-154	-7.950E-02		1.339E-01	2.099E-01	1.369E-02	-0.379
EU-155	1.085E-02		3.077E-02	5.175E-02	2.848E-03	0.210
HG-203	4.553E-03		1.153E-02	1.961E-02	9.960E-04	0.232
BI-211	9.884E-01	+	1.626E-01	2.795E-01	1.328E-02	3.536
PB-211	-2.160E-01		6.527E-01	1.067E+00	5.560E-02	-0.202
BI-212	5.704E-01		2.591E-01	4.927E-01	2.876E-02	1.158
BI-214	3.769E-01	+	6.614E-02	1.104E-01	6.682E-03	3.413
RN-219	8.156E-02		9.673E-02	1.680E-01	8.392E-03	0.486
RA-223	1.441E-01		1.300E-01	2.281E-01	1.227E-02	0.632
RA-224	2.186E+00		7.359E-01	6.792E-01	1.945E-01	3.219
TH-227	6.677E-02		1.004E-01	1.500E-01	7.354E-03	0.445
AC-228	3.954E-01		1.336E-01	2.098E-01	4.020E-02	1.885
RA-228	2.291E-01		7.600E-02	1.499E-01	6.928E-03	1.528
PA-231	-6.667E-01		4.430E-01	6.609E-01	4.354E-02	-1.009
TH-231	1.469E-01		1.234E-01	2.143E-01	1.454E-02	0.685
TH-232	7.821E-01		4.420E-01	8.322E-01	4.141E-02	0.940
PA-233	-1.177E-02		2.485E-02	3.973E-02	2.000E-03	-0.296
PA-234M	5.237E+00		3.209E+00	6.148E+00	2.796E-01	0.852
NP-237	-1.262E-02		2.665E-02	4.259E-02	2.099E-03	-0.296
NP-239	7.362E-02		4.285E-02	7.602E-02	4.065E-03	0.968
AM-241	4.082E-03		2.154E-02	3.546E-02	1.873E-03	0.115
ANN RAD	-3.813E-02		2.119E-02	4.121E-02	2.167E-03	-0.925


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G816P1AA_GE7_SOLID100ML_57816.CNF;1
Title :
Sample Title: F5D220356-004
Start Time: 27-APR-2005 18:23 Sample Time: 27-APR-2005 18:23 Energy Offset: 7.85538E-02
Real Time : 0 01:00:00.44 Sample ID : G816P1AA Energy Slope : 2.50061E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : -1.56700E-08
Log Counts
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 8-MAY-2005 21:12:49
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G816T1AA_GE4_SOLID100ML_57818.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5117412
Project Number : F5D220356-005
Sample ID : G816T1AA

Sample Quantity : 1.88300E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 27-APR-2005 19:34:51
Acquisition date : 27-APR-2005 19:34:51
Decay time : 0 00:00:00.00
Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.55
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE4
Counting geometry: SOLID_100ML

Energy cal. time : 16-MAR-2005 08:34:49
Effic. cal. time : 18-JAN-2005 00:15:12
Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000
End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE4__57454.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G816T1AA Acquisition date : 27-APR-2005 19:34:51

---- Energy, FWHM, and Efficiency Curves ----

```
*********************************************************************************
*                                                                               *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)               *
*                          A = 1.10653E-01                                      *
*                          B = 2.49919E-01                                      *
*                          C = 1.94892E-08                                      *
*                                                                               *
*                                                                               *
*                     FWHM(keV) = A + (B * SQRT(Energy))                        *
*                          A = 8.02351E-01                                      *
*                          B = 2.65421E-02                                      *
*                                                                               *
*                                                                               *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                               *
*     a1=9.41250E+02   a2=-4.55854E+00 a3=9.62044E-01                           *
*     a4=7.38134E-02   a5=-4.50301E-02 a6=-9.56656E-03   a7=0.00000E+00         *
*                                                                               *
*********************************************************************************
```

Combined Activity-MDA Report
Sample ID : G816T1AA

Acquisition date : 27-APR-2005 19:34:51

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	5.992E+00	6.991E-01	2.517E-01	1.177E-02	23.803
TL-208	9.043E-02	2.085E-02	2.307E-02	1.407E-03	3.920
PB-214	3.572E-01	5.036E-02	4.381E-02	2.189E-03	8.153
RA-226	2.058E+00	5.070E-01	3.958E-01	1.831E-02	5.200
TH-234	1.345E+00	2.470E-01	3.546E-01	3.395E-02	3.794
U-235	1.359E-01	3.353E-02	1.567E-01	1.448E-02	0.868

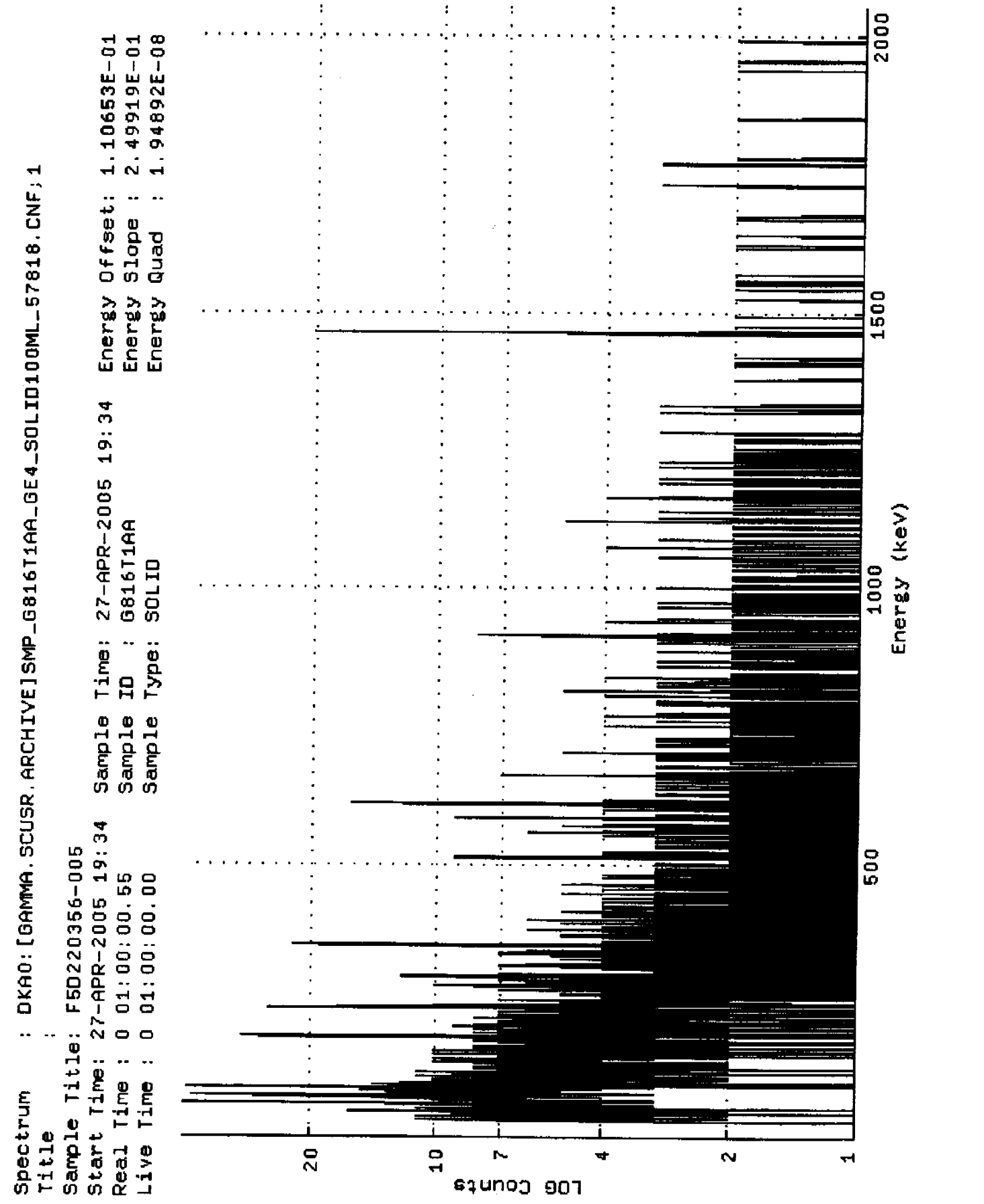
---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-3.972E-02		1.215E-01	1.958E-01	9.792E-03	-0.203
NA-22	-1.466E-02		2.010E-02	3.082E-02	1.399E-03	-0.476
CR-51	-1.083E-01		1.092E-01	1.729E-01	8.661E-03	-0.626
MN-54	6.202E-04		1.861E-02	3.084E-02	1.655E-03	0.020
CO-57	-6.798E-04		8.749E-03	1.480E-02	8.668E-04	-0.046
FE-59	5.594E-02		2.873E-02	5.892E-02	3.254E-03	0.949
CO-60	-8.731E-03		1.643E-02	2.530E-02	1.148E-03	-0.345
ZN-65	-7.215E-02		4.008E-02	5.101E-02	2.437E-03	-1.415
SE-75	1.547E-03		1.549E-02	2.569E-02	1.264E-03	0.060
SR-85	-6.607E-02		2.356E-02	3.246E-02	1.568E-03	-2.035
Y-88	4.161E-04		1.373E-02	2.329E-02	9.910E-04	0.018
NB-95	6.549E-03		1.742E-02	2.990E-02	1.585E-03	0.219
ZR-95	2.345E-02		2.932E-02	5.235E-02	2.962E-03	0.448
MO-99	-2.002E-01		1.180E-01	1.557E-01	1.272E-02	-1.286
TC-99M	-2.149E-03		1.045E-02	1.764E-02	9.422E-04	-0.122
RU-103	-8.826E-03		1.346E-02	2.088E-02	1.133E-03	-0.423
RH-105	-4.122E-02		1.824E-01	3.043E-01	1.476E-02	-0.135
RH-106	1.131E-02		1.145E-01	2.298E-01	1.108E-02	0.049
RU-106	-2.666E-01		1.567E-01	2.210E-01	1.587E-02	-1.206
CD-109	6.929E-02		2.694E-01	4.386E-01	2.554E-02	0.158
SN-113	-2.559E-03		1.652E-02	2.732E-02	1.202E-03	-0.094
SB-124	-1.177E-02		1.753E-02	2.808E-02	1.414E-03	-0.419
SB-125	3.045E-02		4.043E-02	7.094E-02	3.224E-03	0.429
I-131	-2.134E-02		1.349E-02	1.994E-02	9.424E-04	-1.071
I-132	7.134E-03		1.847E-02	3.193E-02	1.624E-03	0.223
TE-132	-1.763E-02		1.118E-02	1.684E-02	8.111E-04	-1.047
BA-133	2.634E-02		1.801E-02	2.966E-02	2.014E-03	0.888
I-133	-3.470E-03		1.587E-02	2.566E-02	1.252E-03	-0.135
CS-134	-2.986E-03		1.878E-02	2.858E-02	1.442E-03	-0.104
CS-137	4.447E-02		2.248E-02	4.221E-02	2.143E-03	1.053
CE-139	2.582E-03		1.093E-02	1.855E-02	8.371E-04	0.139
BA-140	-2.058E-02		5.153E-02	8.426E-02	1.410E-02	-0.244
LA-140	-3.950E-02		1.872E-02	1.527E-02	6.892E-04	-2.587
CE-141	2.666E-02		1.881E-02	3.328E-02	1.748E-03	0.801
CE-144	-8.346E-02		7.422E-02	1.191E-01	7.870E-03	-0.700
ND-147	7.549E-02		1.039E-01	1.808E-01	8.826E-03	0.418
EU-152	3.019E-02		1.025E-01	1.784E-01	9.207E-03	0.169

Combined Activity-MDA Report (continued)
Sample ID : G816T1AA Acquisition date : 27-APR-2005 19:34:51

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-154	1.478E-01		1.236E-01	2.359E-01	1.631E-02	0.627
EU-155	2.756E-02		3.896E-02	6.578E-02	3.534E-03	0.419
HG-203	1.168E-02		1.309E-02	2.263E-02	1.132E-03	0.516
BI-211	1.123E+00		1.707E-01	3.078E-01	1.426E-02	3.650
PB-211	-1.208E+00		6.955E-01	9.402E-01	5.045E-02	-1.285
BI-212	3.035E-01		2.653E-01	4.817E-01	2.521E-02	0.630
PB-212	1.662E-01		3.844E-02	6.969E-02	3.809E-03	2.385
BI-214	3.058E-01	+	6.659E-02	1.166E-01	6.202E-03	2.622
RN-219	2.097E-01		1.027E-01	1.870E-01	9.205E-03	1.121
RA-223	2.625E-01		1.503E-01	2.698E-01	1.428E-02	0.973
RA-224	-6.132E-01		4.551E-01	6.586E-01	1.885E-01	-0.931
TH-227	-7.538E-01		1.415E-01	1.670E-01	8.084E-03	-4.515
AC-228	2.770E-01		1.256E-01	2.118E-01	4.054E-02	1.308
RA-228	4.109E-01	+	8.817E-02	1.810E-01	9.684E-03	2.271
PA-231	-4.846E-01		4.312E-01	6.756E-01	4.406E-02	-0.717
TH-231	-2.182E-01		1.465E-01	2.274E-01	1.542E-02	-0.960
TH-232	-3.089E-01		3.999E-01	6.015E-01	3.232E-02	-0.514
PA-233	-1.048E-02		2.946E-02	4.883E-02	2.414E-03	-0.215
PA-234M	4.259E+00		3.208E+00	6.003E+00	3.107E-01	0.710
NP-237	-1.124E-02		3.159E-02	5.236E-02	2.531E-03	-0.215
NP-239	6.144E-02		5.281E-02	9.079E-02	4.752E-03	0.677
AM-241	2.701E-02		2.672E-02	4.047E-02	2.327E-03	0.668
ANN RAD	7.239E-03		2.318E-02	4.705E-02	2.268E-03	0.154


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G816T1AA_GE4_SOLID100ML_57818.CNF;1
Title :
Sample Title: F5D220356-005
Start Time: 27-APR-2005 19:34 Sample Time: 27-APR-2005 19:34 Energy Offset: 1.10653E-01
Real Time : 0 01:00:00.55 Sample ID : G816T1AA Energy Slope : 2.49919E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : 1.94892E-08
Log Counts
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 8-MAY-2005 21:13:20
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G9ANW1AA_GE5_SOLID100ML_57819.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5117412
Project Number : F5D270000-412B
Sample ID : G9ANW1AA

Sample Quantity : 1.47200E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 27-APR-2005 19:35:50
Acquisition date : 27-APR-2005 19:35:50
Decay time : 0 00:00:00.00
Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.66
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE5
Counting geometry: SOLID_100ML

Energy cal. time : 9-MAR-2005 09:18:16.
Effic. cal. time : 18-JAN-2005 09:43:11
Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000
End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE5__57455.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G9ANW1AA Acquisition date : 27-APR-2005 19:35:50

---- Energy, FWHM, and Efficiency Curves ----

```
**********************************************************************************
*                                                                                *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)                *
*                          A = -7.14002E-03                                      *
*                          B = 2.49998E-01                                       *
*                          C = -1.90945E-09                                      *
*                                                                                *
*                                                                                *
*                     FWHM(keV) = A + (B * SQRT(Energy))                         *
*                          A = 5.02556E-01                                       *
*                          B = 3.66242E-02                                       *
*                                                                                *
*                                                                                *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                                *
*     a1=9.41250E+02   a2=-4.46457E+00 a3=9.42586E-01                           *
*     a4=5.97186E-02   a5=-3.91387E-02 a6=-9.36517E-03   a7=0.00000E+00         *
*                                                                                *
**********************************************************************************
```

Combined Activity-MDA Report
Sample ID : G9ANW1AA

Acquisition date : 27-APR-2005 19:35:50

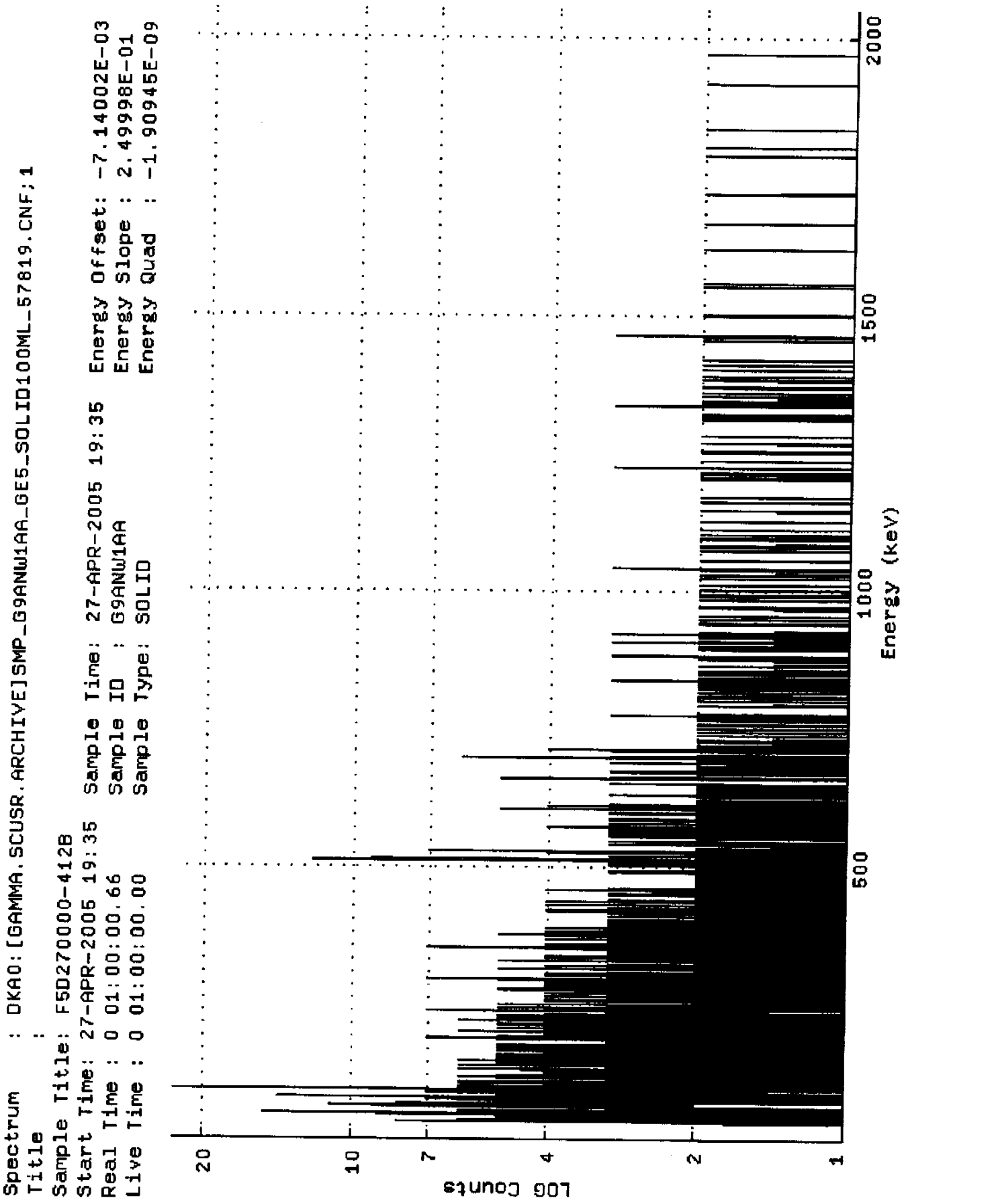
---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	6.042E-02		9.943E-02	1.777E-01	9.616E-03	0.340
NA-22	-4.051E-02		1.555E-02	MDA could not be calculated		
K-40	6.697E-01		2.901E-01	5.857E-01	2.733E-02	1.143
CR-51	9.447E-02		9.399E-02	1.700E-01	8.791E-03	0.556
MN-54	-1.395E-02		1.944E-02	2.957E-02	1.944E-03	-0.472
CO-57	1.802E-03		6.499E-03	1.086E-02	7.263E-04	0.166
FE-59	-2.059E-02		3.692E-02	5.670E-02	3.239E-03	-0.363
CO-60	3.978E-03		2.138E-02	4.033E-02	1.832E-03	0.099
ZN-65	2.960E-02		3.112E-02	5.923E-02	2.914E-03	0.500
SE-75	1.834E-02		1.387E-02	2.571E-02	1.325E-03	0.713
SR-85	-8.132E-02		2.382E-02	3.028E-02	1.655E-03	-2.685
Y-88	3.200E-02		2.000E-02	4.266E-02	1.787E-03	0.750
NB-95	-2.224E-02		1.288E-02	1.494E-02	1.009E-03	-1.489
ZR-95	-3.540E-04		2.651E-02	4.416E-02	3.119E-03	-0.008
MO-99	-1.103E-01		1.111E-01	1.601E-01	1.477E-02	-0.689
TC-99M	-8.574E-03		7.412E-03	1.153E-02	6.884E-04	-0.743
RU-103	-2.264E-02		1.515E-02	2.159E-02	1.275E-03	-1.049
RH-105	5.997E-02		1.637E-01	2.833E-01	1.427E-02	0.212
RH-106	-8.177E-02		1.227E-01	2.544E-01	1.385E-02	-0.321
RU-106	-1.607E-01		1.400E-01	1.960E-01	1.610E-02	-0.820
CD-109	1.678E-01		1.675E-01	2.950E-01	1.718E-02	0.569
SN-113	-1.661E-02		1.809E-02	2.734E-02	1.217E-03	-0.607
SB-124	-2.013E-02		1.561E-02	2.206E-02	1.383E-03	-0.912
SB-125	1.083E-02		4.278E-02	7.392E-02	3.503E-03	0.146
I-131	4.282E-03		1.314E-02	2.239E-02	1.080E-03	0.191
I-132	-9.398E-03		1.829E-02	2.920E-02	1.983E-03	-0.322
TE-132	-4.317E-03		8.407E-03	1.323E-02	6.724E-04	-0.326
BA-133	-1.412E-02		2.002E-02	3.141E-02	2.158E-03	-0.450
I-133	2.280E-02		1.631E-02	3.035E-02	1.702E-03	0.751
CS-134	1.881E-02		1.515E-02	2.790E-02	1.756E-03	0.674
CS-137	4.103E-02		2.280E-02	4.706E-02	3.196E-03	0.872
CE-139	-4.502E-03		7.985E-03	1.286E-02	6.182E-04	-0.350
BA-140	-1.164E-01		5.616E-02	6.471E-02	1.099E-02	-1.798
LA-140	5.101E-04		2.098E-02	3.536E-02	1.586E-03	0.014
CE-141	1.113E-02		1.427E-02	2.527E-02	1.469E-03	0.441
CE-144	1.959E-02		4.895E-02	8.574E-02	6.182E-03	0.228
ND-147	-1.268E-02		1.102E-01	1.819E-01	1.023E-02	-0.070
EU-152	5.890E-02		9.879E-02	1.790E-01	9.232E-03	0.329
EU-154	-1.924E-01		1.403E-01	1.916E-01	1.486E-02	-1.004
EU-155	2.706E-03		2.936E-02	4.873E-02	2.817E-03	0.056
HG-203	1.034E-02		1.121E-02	2.022E-02	1.055E-03	0.511
TL-208	9.755E-03		1.978E-02	3.406E-02	2.392E-03	0.286
BI-211	3.892E-01		1.077E-01	2.137E-01	1.016E-02	1.821
PB-211	-5.404E-01		5.511E-01	7.811E-01	5.145E-02	-0.692
BI-212	-1.525E-01		2.265E-01	3.482E-01	2.368E-02	-0.438
PB-212	-9.079E-03		2.352E-02	4.035E-02	2.298E-03	-0.225
BI-214	2.784E-02		3.964E-02	6.903E-02	4.521E-03	0.403
PB-214	1.141E-01		3.636E-02	7.261E-02	3.709E-03	1.571

Combined Activity-MDA Report (continued) Page : 4
Sample ID : G9ANW1AA Acquisition date : 27-APR-2005 19:35:50

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
RN-219	-5.878E-02		9.417E-02	1.522E-01	7.835E-03	-0.386
RA-223	6.282E-02		1.320E-01	2.291E-01	1.310E-02	0.274
RA-224	-2.984E-01		2.910E-01	4.249E-01	1.218E-01	-0.702
RA-226	2.508E-01		2.475E-01	4.691E-01	2.306E-02	0.535
TH-227	-7.866E-02		8.610E-02	1.322E-01	6.744E-03	-0.595
AC-228	-8.932E-02		9.119E-02	1.374E-01	2.635E-02	-0.650
RA-228	-7.749E-02		6.233E-02	8.826E-02	5.515E-03	-0.878
PA-231	5.216E-02		4.032E-01	6.847E-01	4.564E-02	0.076
TH-231	1.424E-01		9.705E-02	1.745E-01	1.186E-02	0.816
TH-232	9.657E-02		2.934E-01	5.103E-01	3.306E-02	0.189
PA-233	-1.001E-02		2.440E-02	3.952E-02	2.023E-03	-0.253
PA-234M	7.932E-01		2.176E+00	3.851E+00	2.225E-01	0.206
TH-234	-2.258E-02		2.039E-01	3.789E-01	3.651E-02	-0.060
U-235	-8.149E-03		6.429E-02	1.082E-01	1.038E-02	-0.075
NP-237	-1.074E-02		2.616E-02	4.238E-02	2.124E-03	-0.253
NP-239	-2.604E-02		3.846E-02	6.044E-02	3.326E-03	-0.431
AM-241	1.198E-02		1.904E-02	3.478E-02	2.040E-03	0.344
ANN RAD	-7.277E-03		2.544E-02	5.324E-02	2.895E-03	-0.137


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G9ANW1AA_GE5_SOLID100ML_57819.CNF;1
Title :
Sample Title: F5D270000-412B
Start Time: 27-APR-2005 19:35
Real Time : 0 01:00:00.66
Live Time : 0 01:00:00.00
Sample Time: 27-APR-2005 19:35
Sample ID : G9ANW1AA
Sample Type: SOLID
Energy Offset: -7.14002E-03
Energy Slope : 2.49998E-01
Energy Quad : -1.90945E-09
Log Counts
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 8-MAY-2005 22:12:21
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G9ANW1AC_GE4_SOLID100ML_57821.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5117412
Project Number : F5D270000-412C
Sample ID : G9ANW1AC

Sample Quantity : 1.59200E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 1-JAN-2000 12:00:00.
Acquisition date : 27-APR-2005 21:15:02
Decay time : 1943 09:15:02.13

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:07.32
% dead time : 0.2%

---- Detector Parameters ----

Detector name : GE4

Counting geometry: SOLID_100ML

Energy cal. time : 16-MAR-2005 08:34:49
Effic. cal. time : 18-JAN-2005 00:15:12

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE4__57454.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G9ANW1AC

Acquisition date : 27-APR-2005 21:15:02

---- Energy, FWHM, and Efficiency Curves ----

```
*************************************************************************
*                                                                       *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)       *
*                            A = 1.10653E-01                            *
*                            B = 2.49919E-01                            *
*                            C = 1.94892E-08                            *
*                                                                       *
*                                                                       *
*                       FWHM(keV) = A + (B * SQRT(Energy))              *
*                            A = 8.02351E-01                            *
*                            B = 2.65421E-02                            *
*                                                                       *
*                                                                       *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                       *
*     a1=9.41250E+02   a2=-4.55854E+00 a3=9.62044E-01                   *
*     a4=7.38134E-02   a5=-4.50301E-02 a6=-9.56656E-03   a7=0.00000E+00 *
*                                                                       *
*************************************************************************
```

Combined Activity-MDA Report
Sample ID : G9ANW1AC

Acquisition date : 27-APR-2005 21:15:02

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	2.945E+00	6.718E-01	4.507E-01	2.108E-02	6.534
CO-57	2.427E+01	3.778E+00	7.552E+00	4.500E-01	3.214
CO-60	4.423E+01	2.679E+00	1.747E-01	7.925E-03	253.230
CD-109	9.862E+02	8.290E+01	2.567E+01	1.503E+00	38.422
CS-137	3.111E+01	2.251E+00	1.454E-01	7.382E-03	213.917
PB-212	3.484E+00	7.776E-01	1.065E+00	5.821E-02	3.272
AM-241	7.198E+01	5.514E+00	2.709E-01	1.558E-02	265.745

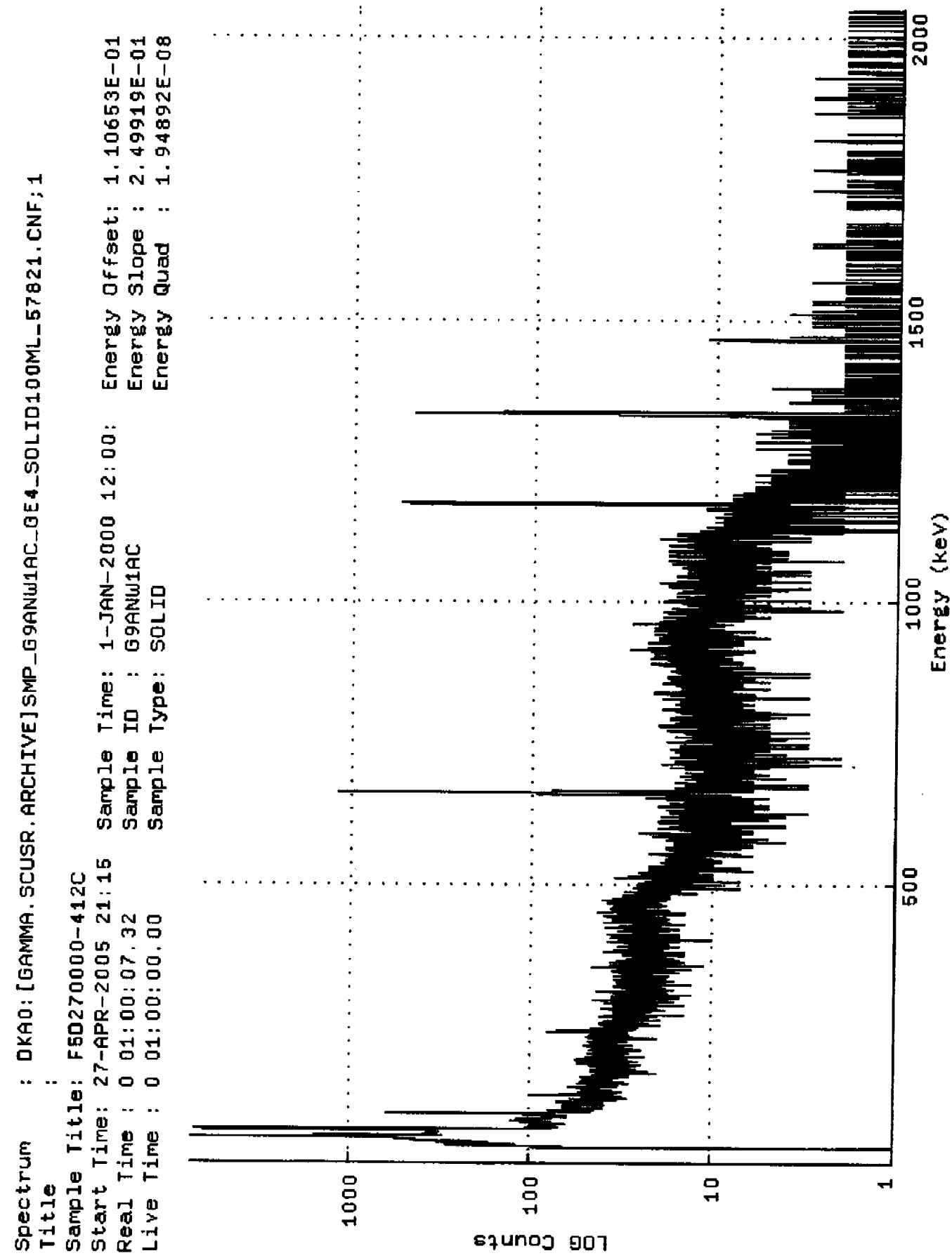
---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	2.628E+04		5.587E+04	Half-Life too short		
NA-22	-1.557E-01		1.777E-01	2.819E-01	1.280E-02	-0.552
CR-51	1.390E+13		5.573E+14	Half-Life too short		
MN-54	-2.485E+00		6.024E+00	9.843E+00	5.298E-01	-0.252
FE-59	1.271E+06		2.653E+06	Half-Life too short		
ZN-65	-9.561E+01		5.173E+01	8.131E+01	3.902E+00	-1.176
SE-75	1.240E-03		5.105E-03	Half-Life too short		
SR-85	-2.432E+02		6.908E+01	Half-Life too short		
Y-88	-4.690E-03		7.042E-03	Half-Life too short		
NB-95	-2.526E+09		3.410E+09	Half-Life too short		
ZR-95	-5.813E+01		1.794E+02	Half-Life too short		
MO-99	-1.000E+35		9.215E+35	Half-Life too short		
TC-99M	-1.000E+35		1.788E+36	Half-Life too short		
RU-103	3.524E+07		5.161E+07	Half-Life too short		
RH-105	1.000E+35		1.007E+35	Half-Life too short		
RH-106	1.753E+01		1.151E+01	2.038E+01	9.827E-01	0.860
RU-106	-1.068E+00		2.349E+01	3.945E+01	2.872E+00	-0.027
SN-113	-5.941E-03		9.645E-03	Half-Life too short		
SB-124	-5.944E+02		3.010E+02	Half-Life too short		
SB-125	-1.534E+00		7.717E-01	1.227E+00	6.053E-02	-1.251
I-131	-1.000E+35		2.567E+35	Half-Life too short		
I-132	1.000E+35		2.378E+36	Half-Life too short		
TE-132	1.000E+35		1.974E+35	Half-Life too short		
BA-133	-5.144E-02		1.251E-01	1.826E-01	1.242E-02	-0.282
I-133	-1.000E+35		8.830E+34	Half-Life too short		
CS-134	-9.118E-01		3.618E-01	5.608E-01	2.840E-02	-1.626
CE-139	3.600E-04		6.531E-04	Half-Life too short		
BA-140	-1.000E+35		7.835E+34	Half-Life too short		
LA-140	1.000E+35		6.297E+34	Half-Life too short		
CE-141	-2.569E+09		5.986E+10	Half-Life too short		
CE-144	1.689E+00		2.933E+01	4.967E+01	3.286E+00	0.034
ND-147	1.000E+35		1.024E+36	Half-Life too short		
EU-152	-4.917E-02		1.948E-01	3.184E-01	1.648E-02	-0.154
EU-154	-1.044E+00		1.128E+00	1.860E+00	1.288E-01	-0.562
EU-155	-9.725E-02		2.856E-01	4.662E-01	2.505E-02	-0.209
HG-203	-3.225E+04		1.870E+05	Half-Life too short		

Combined Activity-MDA Report (continued) Page : 4
Sample ID : G9ANW1AC Acquisition date : 27-APR-2005 21:15:02

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
TL-208	1.004E+00		4.727E-01	8.275E-01	5.048E-02	1.214
BI-211	1.168E+00		5.663E-01	8.434E-01	3.906E-02	1.385
PB-211	-4.196E+00		3.377E+00	5.373E+00	2.883E-01	-0.781
BI-212	-2.944E+00		6.774E+00	1.115E+01	5.834E-01	-0.264
BI-214	3.758E-01		1.370E-01	2.407E-01	1.280E-02	1.561
PB-214	4.690E-01	+	1.877E-01	2.385E-01	1.192E-02	1.967
RN-219	7.181E-01		4.794E-01	8.056E-01	4.018E-02	0.891
RA-223	9.645E-01		6.084E-01	1.042E+00	5.515E-02	0.925
RA-224	2.556E+01		1.106E+01	1.237E+01	3.541E+00	2.065
RA-226	8.188E-01		9.683E-01	1.643E+00	7.602E-02	0.498
TH-227	-2.057E-01		4.967E-01	6.926E-01	3.399E-02	-0.297
AC-228	1.785E+00		7.771E-01	1.218E+00	2.332E-01	1.465
RA-228	1.020E+00		6.540E-01	1.132E+00	6.058E-02	0.901
PA-231	9.857E-01		1.716E+00	2.932E+00	1.912E-01	0.336
TH-231	6.682E-01		5.874E-01	8.432E-01	5.717E-02	0.792
TH-232	6.850E-03		2.090E+00	3.446E+00	1.852E-01	0.002
PA-233	-6.863E-02		1.091E-01	1.823E-01	9.014E-03	-0.376
PA-234M	-1.361E+01		1.523E+01	2.494E+01	1.291E+00	-0.546
TH-234	1.021E+00		1.106E+00	1.603E+00	1.535E-01	0.637
U-235	1.145E-01		2.701E-01	4.583E-01	4.237E-02	0.250
NP-237	-7.358E-02		1.170E-01	1.955E-01	9.450E-03	-0.376
NP-239	2.165E-01		1.940E-01	3.228E-01	1.690E-02	0.671
ANN RAD	5.890E-02		6.266E-02	1.098E-01	5.291E-03	0.537


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G9ANW1AC_GE4_SOLID100ML_57821.CNF;1
Title :
Sample Title: F5D270000-412C
Start Time: 27-APR-2005 21:15 Sample Time: 1-JAN-2000 12:00: Energy Offset: 1.10653E-01
Real Time : 0 01:00:07.32 Sample ID : G9ANW1AC Energy Slope : 2.49919E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : 1.94892E-08
Log Counts
1000
100
10
1
500
1000
1500
2000
Energy (keV)

SEVERN TRENT STL

Instrument Checks

STL ST. LOUIS

QA filename : DKA0:[GAMMA.SCUSR.QA]QCB_GE4.QAF;1

Sample ID : Bkgrnd Check Sample quantity : 1.00 EACH
Sample date : 27-APR-2005 06:37:18 Acquisition date : 27-APR-2005 06:37:18
Elapsed live time: 0 00:20:00.00 Elapsed real time: 0 00:20:00.12

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*Background Rate GE4 [1.25639+/-0.04128]	1.3350E+00	1.90	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 4 / 27 / 05

STL ST. LOUIS

QA filename : DKA0:[GAMMA.SCUSR.QA]QCB_GE5.QAF;1

Sample ID : Bkgrnd Check Sample quantity : 1.00 EACH
Sample date : 27-APR-2005 06:37:34 Acquisition date : 27-APR-2005 06:37:34
Elapsed live time: 0 00:20:00.00 Elapsed real time: 0 00:20:00.22

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*Background Rate GE5 [1.40558+/-0.04394]	1.4225E+00	0.39	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 4/27/5

STL ST. LOUIS

QA filename : DKA0:[GAMMA.SCUSR.QA]QCB_GE6.QAF;1

Sample ID : Bkgrnd Check Sample quantity : 1.00 EACH
Sample date : 27-APR-2005 06:37:41 Acquisition date : 27-APR-2005 06:37:41
Elapsed live time: 0 00:20:00.00 Elapsed real time: 0 00:20:00.11

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*Background Rate GE6 [1.34312+/-0.03885]	1.3442E+00	0.03	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 4/27/5

QA filename : DKA0:[GAMMA.SCUSR.QA]QCB_GE7.QAF;1

Sample ID : Bkgrnd Check Sample quantity : 1.00 EACH
Sample date : 27-APR-2005 06:37:48 Acquisition date : 27-APR-2005 06:37:48
Elapsed live time: 0 00:20:00.00 Elapsed real time: 0 00:20:00.09

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*Background Rate GE7 [1.25481+/-0.09021]	1.3150E+00	0.67	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 4/27/5

QA filename : DKA0:[GAMMA.SCUSR.QA]QCC_GE4_PETRI060.QAF;1

Sample ID : Calib Check
Sample quantity : 1.00 EACH
Sample date : 1-OCT-1997 12:00:00
Acquisition date : 27-APR-2005 07:12:16
Elapsed live time: 0 00:10:00.00
Elapsed real time: 0 00:10:00.96

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*GE4 Peak Energy 59.5 keV [59.4764+/-0.1698]	5.9646E+01	1.00	
*GE4 Peak Energy 661.6 keV [661.6334+/-0.2657]	6.6187E+02	0.90	
*GE4 Peak Energy 1332 keV [1332.5521+/-0.3975]	1.3329E+03	0.88	
*GE4 Peak FWHM 59.5 keV [0.83552+/-0.08187]	1.0280E+00	2.35	Investigate
*GE4 Peak FWHM 661.6 keV [1.3472+/-0.1464]	1.5021E+00	1.06	
*GE4 Peak FWHM 1332 keV [1.7541+/-0.2243]	1.6009E+00	-0.68	
*GE4 Am-241 Activity, 59.5 keV [0.0051037+/-2.5863E-04]	5.1117E-03	0.03	
*GE4 Cs-137 Activity, 661.6 keV [0.0019680+/-1.1842E-04]	1.9671E-03	-0.01	
*GE4 Co-60 Activity, 1332 keV [0.0031155+/-2.7348E-04]	2.9652E-03	-0.55	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*GE4 Peak Centroid 59.5 keV	2.3200E+02	2.4400E+02	2.3822E+02	
*GE4 Peak Centroid 661 keV	2.6380E+03	2.6500E+03	2.6474E+03	
*GE4 Peak Centroid 1332 keV	5.3220E+03	5.3340E+03	5.3307E+03	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 4 / 27 / 5

STL ST. LOUIS

QA filename : DKA0:[GAMMA.SCUSR.QA]QCC_GE5_PETRI060.QAF;1

Sample ID : Calib Check
Sample quantity : 1.00 EACH
Sample date : 1-OCT-1997 12:00:00
Acquisition date : 27-APR-2005 07:12:33
Elapsed live time: 0 00:10:00.00
Elapsed real time: 0 00:10:01.11

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*GE5 Peak Energy 59.5 keV [59.51143+/-0.03576]	5.9528E+01	0.47	
*GE5 Peak Energy 661.6 keV [661.6370+/-0.2149]	6.6192E+02	1.31	
*GE5 Peak Energy 1332 keV [1332.4376+/-0.3451]	1.3331E+03	1.87	
*GE5 Peak FWHM 59.5 keV [0.79683+/-0.01892]	8.0197E-01	0.27	
*GE5 Peak FWHM 661 KEV [1.34206+/-0.08835]	1.3573E+00	0.17	
*GE5 Peak FWHM 1332 keV [1.7736+/-0.2140]	2.0818E+00	1.44	
*GE5 Am-241 Activity, 59.5 keV [0.00537092+/-9.5029E-05]	5.3809E-03	0.10	
*GE5 Cs-137 Activity, 661.6 keV [0.00198257+/-7.2602E-05]	2.0205E-03	0.52	
*GE5 Co-60 Activity, 1332 keV [0.0031156+/-1.4953E-04]	3.2678E-03	1.02	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*GE5 Peak Centroid 59.5 keV	2.3500E+02	2.4100E+02	2.3814E+02	
*GE5 Peak Centroid 661 keV	2.6406E+03	2.6526E+03	2.6478E+03	
*GE5 Peak Centroid 1332 keV	5.3239E+03	5.3359E+03	5.3326E+03	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 4 / 27 / 5

STL ST. LOUIS

QA filename : DKA0:[GAMMA.SCUSR.QA]QCC_GE6_PETRI060.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-OCT-1997 12:00:00 Acquisition date : 27-APR-2005 07:12:57
Elapsed live time: 0 00:10:00.00 Elapsed real time: 0 00:10:00.70

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*GE-6 Peak Energy 59.5 keV [59.57895+/-0.06881]	5.9632E+01	0.77	
*GE-6 Peak Energy 661.6 keV [661.6124+/-0.1401]	6.6151E+02	-0.74	
*Ge-6 Peak Energy 1332 keV [1332.4098+/-0.2469]	1.3322E+03	-0.96	
*GE-6 Peak FWHM 59.5 keV [0.74419+/-0.01982]	8.0390E-01	3.01	Action
*GE-6 Peak FWHM 661.6 keV [1.24488+/-0.09401]	1.1013E+00	-1.53	
*GE-6 Peak FWHM 1332 keV [1.6124+/-0.2106]	1.6600E+00	0.23	
GE-6 Am-241 Activity, 59.5 keV [0.0044729+/-1.0326E-04]	4.4461E-03	-0.26	
GE-6 Cs-137 Activity, 661.6 keV [0.00178314+/-7.5930E-05]	1.7096E-03	-0.97	
GE-6 Co-60 Activity, 1332 keV [0.0037600+/-2.1368E-04]	3.7664E-03	0.03	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*GE-6 Peak Centroid 59.5	2.3200E+02	2.4400E+02	2.3807E+02	
*GE-6 Peak Centroid 661 keV	2.6380E+03	2.6500E+03	2.6467E+03	
*GE-6 Peak Centroid 1332 keV	5.3220E+03	5.3340E+03	5.3295E+03	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 4/27/5

STL ST. LOUIS

QA filename : DKA0:[GAMMA.SCUSR.QA]QCC_GE7_PETRI060.QAF;1

Sample ID : Calib Check
Sample quantity : 1.00 EACH
Sample date : 1-OCT-1997 12:00:00
Acquisition date : 27-APR-2005 07:13:16
Elapsed live time: 0 00:10:00.00
Elapsed real time: 0 00:10:00.76

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*GE7 Peak Energy 59.5 keV [59.48854+/-0.07971]	5.9546E+01	0.72	
*GE7 Peak Energy 661.6 keV [661.4800+/-0.2331]	6.6174E+02	1.10	
*GE7 Peak Energy 1332 keV [1332.2655+/-0.4909]	1.3327E+03	0.86	
*GE7 Peak FWHM 59.5 keV [0.96014+/-0.02820]	1.0029E+00	1.52	
*GE7 Peak FWHM 661.6 keV [1.6034+/-0.1178]	1.6499E+00	0.39	
*GE7 Peak FWHM 1332 keV [2.1455+/-0.2865]	2.0346E+00	-0.39	
*GE7 Am-241 Activity, 59.5 keV [0.0062991+/-1.1998E-04]	6.2829E-03	-0.14	
*GE7 Cs-137 Activity, 661.6 keV [0.00261233+/-8.7429E-05]	2.5940E-03	-0.21	
*GE7 Co-60 Activity, 1332 keV [0.0040824+/-1.9734E-04]	4.0744E-03	-0.04	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*GE7 Peak Centroid 59.5 keV	2.3200E+02	2.4400E+02	2.3782E+02	
*GE7 Peak Centroid 661 keV	2.6380E+03	2.6500E+03	2.6464E+03	
*GE7 Peak Centroid 1332 keV	5.3220E+03	5.3340E+03	5.3309E+03	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: JW Approval Date: 4/27/5

SEVERN TRENT STL

Monthly Background

April 17, 2005

VMS Gamma Spectroscopy Report generated 18-APR-2005 09:26:03
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE4__57454.CNF;1

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number :
Project Number : MONTHLY BKG
Sample ID : LNGBKG_4-17-05

Sample Quantity : 1.00000E+00 EA
Sample Type : Empty
Sample Analyst : 400214

---- Sample Decay/Count Information ----

Sample Date	: 17-APR-2005 21:26:02	Elapsed live time:	0 12:00:00.00
Acquisition date	: 17-APR-2005 21:26:02	Elapsed real time:	0 12:00:04.27
Decay time	: 0 00:00:00.00	% dead time :	0.0%

---- Detector Parameters ----

Detector name : GE4 Counting geometry:

Energy cal. time	: 16-MAR-2005 08:34:49	Energy cal. type	: Poly
Effic. cal. time	: 6-APR-2004 13:53:47.	FWHM cal. type	: Sqrt

---- Processing Parameters ----

Start channel	: 150	End channel	: 8192
Sensitivity	: 3.00000	Gaussian Sens.	: 15.00000
Critical level?	: Yes	Propagate Errors?	: Yes
Empirical Eff?	: No	Library-based eff	: Yes
Energy tolerance	: 1.50000	Half life ratio	: 8.00000
Abundance limit	: 50.00000	WTM error limit	: 3.00000
MDA Width (FWHM)	: 3.00000	MDA Confid Level	: 5.00000 %

Bkgd File :

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]MAIN.NLB;

Sample ID : LNGBKG_4-17-05 Acquisition date : 17-APR-2005 21:26:02

---- Energy, FWHM, and Efficiency Curves ----

```
*****************************************************************************
*                                                                           *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)           *
*                            A = 1.10653E-01                                *
*                            B = 2.49919E-01                                *
*                            C = 1.94892E-08                                *
*                                                                           *
*                                                                           *
*                      FWHM(keV) = A + (B * SQRT(Energy))                   *
*                            A = 8.02351E-01                                *
*                            B = 2.65421E-02                                *
*                                                                           *
*                                                                           *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                           *
*     a1=9.47750E+02   a2=-4.92113E+00 a3=9.16377E-01                       *
*     a4=5.88282E-02   a5=-2.51537E-02 a6=-1.56778E-02   a7=0.00000E+00     *
*                                                                           *
*****************************************************************************
```

Post-NID Peak Search Report
Sample ID : LNGBKG_4-17-05

Acquisition date : 17-APR-2005 21:26:02

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
6	46.59	264	366	1.08	185.98	180	14	18.7	1.11E+00	PB-210
5	63.38	215	367	0.95	253.17	246	13	21.7	6.97E-01	TH-234
5	92.64	332	420	1.22	370.23	365	13	16.6	8.56E-01	TH-234
19	139.95	52	254	0.84	559.50	555	11	65.2	6.50E-01	TC-99M
5	185.76	142	287	1.10	742.79	733	14	30.0	7.29E-01	U-235
										RA-226
7	238.68	108	258	0.89	954.53	948	13	34.2	5.61E-01	PB-212
5	511.13	766	264	2.64	2044.40	2025	38	8.3	9.54E-01	TL-208
										ANN RAD
5	583.64	52	87	1.06	2334.47	2328	13	45.0	9.92E-01	TL-208
5	609.43	42	85	0.82	2437.61	2430	13	50.4	1.41E+00	
32	969.27	22	35	0.98	3876.72	3871	12	59.8	8.84E-01	

Unidentified Energy Lines
Sample ID : LNGBKG_4-17-05

Acquisition date : 17-APR-2005 21:26:02

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
5	609.43	42	85	0.82	2437.61	2430	13	9.81E-04	50.4	1.10E+00	T
32	969.27	22	35	0.98	3876.72	3871	12	5.01E-04	59.8	7.14E-01	T

Flags: "T" = Tentatively associated

STL ST. LOUIS

QA filename : DKA0:[GAMMA.SCUSR.QA]LBC_GE4.QAF;1

Sample ID : LNGBKG_4-17-05 Sample quantity : 1.00 EA
Sample date : 17-APR-2005 21:26:02 Acquisition date : 17-APR-2005 21:26:02
Elapsed live time: 0 12:00:00.00 Elapsed real time: 0 12:00:04.27

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*Background Rate [1.11477+/-0.01667]	1.1942E+00	4.76	Action

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: CH Approval Date: 4 / 18 / 05

Energy lines were compared to previous Backgrounds on GE4. The "Value" and previous energy lines were comparable. the background will be subtracted during sample analysis.

CH

VMS Gamma Spectroscopy Report generated 18-APR-2005 09:30:24
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE5__57455.CNF;1

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number :
Project Number : MONTHLY BKG
Sample ID : LNGBKG_4-17-05

Sample Quantity : 1.00000E+00 EA
Sample Type : Empty
Sample Analyst : 400214

---- Sample Decay/Count Information ----

Sample Date	: 17-APR-2005 21:30:17	Elapsed live time:	0 12:00:00.00
Acquisition date	: 17-APR-2005 21:30:17	Elapsed real time:	0 12:00:07.87
Decay time	: 0 00:00:00.00	% dead time :	0.0%

---- Detector Parameters ----

Detector name : GE5 Counting geometry:

Energy cal. time	: 9-MAR-2005 09:18:16.	Energy cal. type	: Poly
Effic. cal. time	: 15-DEC-2004 23:41:28	FWHM cal. type	: Sqrt

---- Processing Parameters ----

Start channel	: 150	End channel	: 8192
Sensitivity	: 3.00000	Gaussian Sens.	: 15.00000
Critical level?	: Yes	Propagate Errors?	: Yes
Empirical Eff?	: No	Library-based eff	: Yes
Energy tolerance	: 1.50000	Half life ratio	: 8.00000
Abundance limit	: 50.00000	WTM error limit	: 3.00000
MDA Width (FWHM)	: 3.00000	MDA Confid Level	: 5.00000 %

Bkgd File :

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]MAIN.NLB;

Sample ID : LNGBKG_4-17-05 Acquisition date : 17-APR-2005 21:30:17

---- Energy, FWHM, and Efficiency Curves ----

```
*************************************************************************
*                                                                       *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)       *
*                          A = -7.14002E-03                             *
*                          B = 2.49998E-01                              *
*                          C = -1.90945E-09                             *
*                                                                       *
*                                                                       *
*                    FWHM(keV) = A + (B * SQRT(Energy))                 *
*                          A = 5.02556E-01                              *
*                          B = 3.66242E-02                              *
*                                                                       *
*                                                                       *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                       *
*     a1=9.41250E+02   a2=-4.61703E+00 a3=8.62748E-01                   *
*     a4=8.21586E-02   a5=3.49412E-03  a6=-3.05292E-02   a7=0.00000E+00 *
*                                                                       *
*************************************************************************
```

Post-NID Peak Search Report
Sample ID : LNGBKG_4-17-05

Acquisition date : 17-APR-2005 21:30:17

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
5	46.51	444	286	0.75	186.07	178	15	12.1	8.12E-01	PB-210
15	59.27	127	394	1.55	237.12	229	16	36.4	1.43E+00	AM-241
4	63.20	309	304	0.81	252.83	245	14	15.6	1.32E+00	TH-234
32	77.08	69	327	0.79	308.37	304	11	47.6	1.55E+00	PB-214
										PB-212
4	92.62	501	341	1.06	370.53	364	21	11.6	1.17E+00	TH-234
6	185.80	173	215	0.77	743.23	732	23	21.8	9.30E-01	U-235
										RA-226
4	238.65	136	210	0.97	954.63	950	10	27.9	1.06E+00	PB-212
6	352.13	79	215	1.26	1408.58	1401	20	41.0	9.18E-01	PB-214
5	511.16	860	295	2.69	2044.72	2029	31	7.9	5.74E-01	ANN RAD
5	661.95	131	112	1.07	2647.92	2637	19	23.1	8.46E-01	CS-137
7	779.16	32	38	1.30	3116.79	3111	11	55.4	1.04E+00	
8	803.23	45	67	1.19	3213.05	3203	17	46.0	7.24E-01	
9	1173.53	56	54	1.38	4694.35	4687	16	37.8	1.03E+00	CO-60
15	1333.00	38	30	0.96	5332.28	5326	15	41.9	1.21E+00	CO-60

Unidentified Energy Lines
Sample ID : LNGBKG_4-17-05

Acquisition date : 17-APR-2005 21:30:17

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
7	779.16	32	38	1.30	3116.79	3111	11	7.48E-04	55.4	1.17E+00	T
8	803.23	45	67	1.19	3213.05	3203	17	1.03E-03	46.0	1.14E+00	

Flags: "T" = Tentatively associated

QA filename : DKA0:[GAMMA.SCUSR.QA]LBC_GE5.QAF;1

Sample ID : LNGBKG_4-17-05 Sample quantity : 1.00 EA
Sample date : 17-APR-2005 21:30:17 Acquisition date : 17-APR-2005 21:30:17
Elapsed live time: 0 12:00:00.00 Elapsed real time: 0 12:00:07.87

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*Background Rate [1.22039+/-0.01247]	1.2126E+00	-0.63	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: RR Approval Date: 4 / 18 / 05

VMS Gamma Spectroscopy Report generated 18-APR-2005 09:30:59
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE6__57456.CNF;1

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number :
Project Number : MONTHLY BKG
Sample ID : LNGBKG_4-17-05

Sample Quantity : 1.00000E+00 EA
Sample Type : Empty
Sample Analyst : 400214

---- Sample Decay/Count Information ----

Sample Date	: 17-APR-2005 21:30:59	Elapsed live time:	0 12:00:00.00
Acquisition date	: 17-APR-2005 21:30:59	Elapsed real time:	0 12:00:03.81
Decay time	: 0 00:00:00.00	% dead time :	0.0%

---- Detector Parameters ----

Detector name : GE6 Counting geometry:

Energy cal. time	: 3-MAR-2004 08:43:53.	Energy cal. type	: Poly
Effic. cal. time	: 8-JUL-2004 17:41:15.	FWHM cal. type	: Sqrt

---- Processing Parameters ----

Start channel	: 150	End channel	: 8192
Sensitivity	: 3.00000	Gaussian Sens.	: 15.00000
Critical level?	: Yes	Propagate Errors?	: Yes
Empirical Eff?	: No	Library-based eff	: Yes
Energy tolerance	: 1.50000	Half life ratio	: 8.00000
Abundance limit	: 50.00000	WTM error limit	: 3.00000
MDA Width (FWHM)	: 3.00000	MDA Confid Level	: 5.00000 %

Bkgd File :

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]MAIN.NLB;

---- Energy, FWHM, and Efficiency Curves ----

```
**************************************************************************
*                                                                        *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)        *
*                          A = 1.54285E-01                               *
*                          B = 2.49832E-01                               *
*                          C = 1.86799E-08                               *
*                                                                        *
*                                                                        *
*                    FWHM(keV) = A + (B * SQRT(Energy))                  *
*                          A = 4.67797E-01                               *
*                          B = 3.35494E-02                               *
*                                                                        *
*                                                                        *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                        *
*     a1=9.47750E+02   a2=-4.64127E+00 a3=9.31555E-01                    *
*     a4=8.26639E-02   a5=-4.44934E-02 a6=-8.73174E-03   a7=0.00000E+00  *
*                                                                        *
**************************************************************************
```

Post-NID Peak Search Report
Sample ID : LNGBKG_4-17-05

Acquisition date : 17-APR-2005 21:30:59

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
6	40.86	325	234	1.03	162.93	158	13	13.8	2.20E+00	
4	46.57	410	269	0.80	185.78	182	9	12.9	9.47E-01	PB-210
4	63.34	280	317	0.74	252.90	246	14	16.8	4.26E-01	TH-234
5	72.88	183	375	0.71	291.10	285	21	22.0	2.11E+00	
5	74.97	385	401	0.72	299.47	285	21	14.2		PB-214
										PB-212
5	84.78	350	464	1.16	338.73	331	14	16.1	1.09E+00	
5	92.73	452	360	1.02	370.53	363	21	12.5	6.94E-01	TH-234
8	143.66	88	259	1.02	574.39	570	14	41.5	9.95E-01	U-235
4	185.70	189	286	0.95	742.65	737	12	22.3	6.75E-01	U-235
										RA-226
5	238.53	184	232	1.03	954.09	949	11	22.4	1.21E+00	PB-212
14	295.32	57	155	0.87	1181.37	1177	12	49.9	8.25E-01	PB-214
19	351.91	69	178	0.97	1407.83	1395	18	44.2	1.14E+00	PB-214
5	510.99	851	265	2.68	2044.41	2024	38	7.8	6.90E-01	ANN RAD
6	609.49	103	135	1.69	2438.52	2431	18	29.9	8.53E-01	
4	1460.75	51	29	1.83	5843.77	5837	18	35.0	7.88E-01	K-40

Unidentified Energy Lines
Sample ID : LNGBKG_4-17-05

Acquisition date : 17-APR-2005 21:30:59

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
6	40.86	325	234	1.03	162.93	158	13	7.53E-03	13.8	4.37E+00	
5	72.88	183	375	0.71	291.10	285	21	4.24E-03	22.0	5.86E+00	T
5	84.78	350	464	1.16	338.73	331	14	8.10E-03	16.1	5.88E+00	T
6	609.49	103	135	1.69	2438.52	2431	18	2.39E-03	29.9	1.47E+00	T

Flags: "T" = Tentatively associated

STL ST. LOUIS

QA filename : DKA0:[GAMMA.SCUSR.QA]LBC_GE6.QAF;1

Sample ID : LNGBKG_4-17-05 Sample quantity : 1.00 EA
Sample date : 17-APR-2005 21:30:59 Acquisition date : 17-APR-2005 21:30:59
Elapsed live time: 0 12:00:00.00 Elapsed real time: 0 12:00:03.81

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*Background Rate [1.5258+/-0.2127]	1.1626E+00	-1.71	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: PL Approval Date: 4 / 18 / 05

VMS Gamma Spectroscopy Report generated 18-APR-2005 09:31:33
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE7__57457.CNF;1

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number :
Project Number : MONTHLY BKG
Sample ID : LNGBKG_4-17-05

Sample Quantity : 1.00000E+00 EA
Sample Type : Empty
Sample Analyst : 400214

---- Sample Decay/Count Information ----

Sample Date : 17-APR-2005 21:31:33
Acquisition date : 17-APR-2005 21:31:33
Decay time : 0 00:00:00.00
Elapsed live time: 0 12:00:00.00
Elapsed real time: 0 12:00:03.12
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE7
Counting geometry:

Energy cal. time : 25-FEB-2005 09:11:05
Effic. cal. time : 8-JUL-2004 20:41:38.
Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.50000
Abundance limit : 50.00000
MDA Width (FWHM) : 3.00000
End channel : 8192
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File :

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]MAIN.NLB;

Sample ID : LNGBKG_4-17-05 Acquisition date : 17-APR-2005 21:31:33

---- Energy, FWHM, and Efficiency Curves ----

```
*****************************************************************************
*                                                                           *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)           *
*                            A = 7.85538E-02                                *
*                            B = 2.50061E-01                                *
*                            C = -1.56700E-08                               *
*                                                                           *
*                                                                           *
*                      FWHM(keV) = A + (B * SQRT(Energy))                   *
*                            A = 5.33118E-01                                *
*                            B = 4.95085E-02                                *
*                                                                           *
*                                                                           *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                           *
*     a1=9.47750E+02   a2=-4.36268E+00 a3=9.88960E-01                       *
*     a4=5.56421E-02   a5=-4.27284E-02 a6=-7.82275E-03   a7=0.00000E+00     *
*                                                                           *
*****************************************************************************
```

Post-NID Peak Search Report
Sample ID : LNGBKG_4-17-05

Acquisition date : 17-APR-2005 21:31:33

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
4	46.40	474	364	0.90	185.24	176	18	12.1	6.20E-01	PB-210
4	63.16	399	329	0.82	252.25	247	11	13.3	1.29E+00	TH-234
5	74.82	70	327	0.86	298.89	294	20	48.4	6.13E-01	PB-212
5	76.95	98	302	0.86	307.43	294	20	37.3		PB-212
4	92.52	576	392	1.14	369.70	363	16	10.7	8.91E-01	TH-234
4	185.76	264	308	1.13	742.58	734	16	17.5	7.93E-01	U-235
										RA-226
5	238.62	110	259	0.86	954.00	948	12	32.5	4.88E-01	PB-212
32	360.07	29	109	1.00	1439.74	1435	11	39.7	2.59E+00	
5	511.10	958	263	3.12	2043.87	2025	38	7.3	9.21E-01	ANN RAD
21	637.77	24	58	0.82	2550.55	2545	12	71.7	2.50E-01	
21	1001.38	22	44	1.00	4005.24	3998	15	69.9	6.39E-01	

Unidentified Energy Lines
Sample ID : LNGBKG_4-17-05

Acquisition date : 17-APR-2005 21:31:33

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
32	360.07	29	109	1.00	1439.74	1435	11	6.68E-04	39.7	3.34E+00	
21	637.77	24	58	0.82	2550.55	2545	12	5.54E-04	71.7	1.90E+00	T
21	1001.38	22	44	1.00	4005.24	3998	15	5.15E-04	69.9	1.21E+00	T

Flags: "T" = Tentatively associated

QA filename : DKA0:[GAMMA.SCUSR.QA]LBC_GE7.QAF;1

Sample ID : LNGBKG_4-17-05 Sample quantity : 1.00 EA
Sample date : 17-APR-2005 21:31:33 Acquisition date : 17-APR-2005 21:31:33
Elapsed live time: 0 12:00:00.00 Elapsed real time: 0 12:00:03.12

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*Background Rate [1.15490+/-0.06361]	1.0968E+00	-0.91	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: PR Approval Date: 4 / 18 / 05

SEVERN TRENT STL

Run Log

Logbook No.: 2615

STL
St. Louis

Gamma Counting Runlog

Date	Batch #	Sample #	Detector	Count Time	Geometry	Initials
4/26/5	5115703	G80TRIAA	4	2hr	1 Count	JW
4-26-5		G80R3IAA-RL	6			
		G84FJIAC	7			
		G80T2IAA	4			
		G84FJIAA	6			
		G80R3IAF	7			
		G80T7IAA	4			
4/26/05	5115705	G8WFRIA3-RC	7	1hr	1L Mar	CH
4/27/5	Daily	BKG + Source	4-7	10+20MIN	QA	JW
	5116446	G7J5TIAJ	4	30min	Tuna	
		G7J6CIAH	5			
		G7J6FIAH	6			
		G7J6KIAH	7			
		G7J5TIAP	5			
		G8736IAA	6			
		G8736IAC	7			
4-27-5	5117372	G84XNIAC	4	2hr 30min	Thin Lan	
		G84X1IAC	5			
		G84X3IAC	6			
		G84X5IAC	7			
4/27	5117372	G84X6IAC	4	30min	Juice Can	King
		G84XNIAE	5			
		G84X7IAC	6			
		G84X9IAC	7			
4/27/5	5117372	G840CIAC	4	30min	Thin Can	
		G840DIAC	5			
		G840EIAC	6		100mL GLd	

Reviewed By: _____ Date: 4-27-5

SOP Reference: STL-RD-0101, Current Revision
Form No.: SL-RAD-0026, Revised 1/2/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2615

STL
St. Louis

Gamma Counting Runlog

Date	Batch #	Sample #	Detector	Count Time	Geometry	Initials
4-27-5	5117372	G840F1AC	7	30min	TunaCan	~
		G840H1AC	4		Tuna Can	Kri
		G840K1AC	5			
		G840L1AC	6			
		G840P1AC	7	100 min	Solid 100 mL	Kri
		G840Q1AC	4	30min	TunaCan	Kri
		G840T1AC	5			
		G840W1AC	6			
		G840001AC	4			
		G840011AC	5			
		G9AA31AA	6			
		G9AA31AC	7			
	5117412	G8159 1AA	4	1hr	Solid 100	CH
		G816E1AA	5			
		G816L1AA	6			
		G816P1AA	7			
		G816T1AA	4			
		G9ANW1AA	5			
		G8159 1AG	6			
		G9ANW1AC	4			
4/28/5	Daily	BKG + Source	4-7	20x10min	QA	gw
	5118112	G88131AA	4	30min	solid 100 ml	
		G88141AA	5		solid 100 D=1	
		G88151AA	6		Solid 100ml	
		G88161AA	7			
4-28-5	5118112	G8817 1AA	4			~
		G8819 1AA	5			

Reviewed By: _____ Date: 4-28-5

SOP Reference: STL-RD-0101, Current Revision
Form No.: SL-RAD-0026, Revised 1/2/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

5/4 - Los Alamos: Sigma

STL

Prep Report for:
Gamma Spectroscopy

Batch: 5117412 **Prep Analyst:** 402441

STL St. Louis 1hr-watch dead time
13715 Rider Trail North
Earth City, MO 63045

SampID	WRKNO	Aliquot	Dilution	Adjusted Aliquot	GeometryDesc
F5D220356-001	G81591AA	1.6810E+002 g	1.00	1.6810E+002 g	Solid 100mL
F5D220356-001X	G81591AG	1.6810E+002 g	1.00	1.6810E+002 g	Solid 100mL
F5D220356-002	G816E1AA	1.5110E+002 g	1.00	1.5110E+002 g	Solid 100mL
F5D220356-003	G816L1AA	1.7290E+002 g	1.00	1.7290E+002 g	Solid 100mL
F5D220356-004	G816P1AA	1.8330E+002 g	1.00	1.8330E+002 g	Solid 100mL
F5D220356-005	G816T1AA	1.8830E+002 g	1.00	1.8830E+002 g	Solid 100mL
F5D270000-412B	G8ANW1AA	1.4719E+002 g	1.00	1.4719E+002 g	Solid 100mL
F5D270000-412C	G9ANW1AC	1.5919E+002 g	1.00	1.5919E+002 g	Solid 100mL

Spike Information

Sample ID	Standard ID	Analyte	Std Conc	Aliquot	Ref Date	StdAdded

— Spiked By — Spike Verified By — Spike Date

Standard Operating Procedures

SOPNumber	Title	Revision
☐ STL-RC-0025	Preparation Of Samples For Gamma Spectroscopy	3.00
☑ STL-RD-0101	Daily Operations Of A Germanium Spectroscopy System	3.00
☑ STL-RD-0103	Maintenance Of The Germanium Spectroscopy System	0.00

Reviewed By — 5/1/05 Review Date

JM Analyst/Relenquished By — 4/27/05 Release Date — DR Received By — 4-27-05 Receipt Date

St. Louis Laboratory
13715 Rider Trail North
Earth City, MO 63045-1205

Gamma Spectroscopy Quality Assurance Worksheet

Batch: 5117412

F5D270000-412 C Recovery Summary			
Isotope	Certified Activity	Observed Activity	% Recovery
Am-241	70	7.20E+01	103%
Cs-137	29.5	3.11E+01	105%
Co-60	42.4	4.42E+01	104%

F5D220356-001 Duplicate Summary						
Isotope	Sample Activity	Sample Uncertainty	Duplicate Activity	Duplicate Uncertainty	RPD	RER
K-40	6.80E+00	8.92E-01	6.50E+00	8.92E-01	5%	0.17
Pb-212	2.53E-01	4.77E-02	2.56E-01	6.03E-02	1%	0.02
Pb-214	4.56E-01	5.98E-02	4.25E-01	6.85E-02	7%	0.24
Ra-226	5.15E+00	6.26E-01	4.03E+00	6.31E-01	24%	0.89
Th-234	2.80E+00	3.42E-01	2.72E+00	4.13E-01	3%	0.10
Tl-208	<MDA	NA	1.88E-01	4.22E-02	N/A	N/A

Comments:

Calculated By: CH DATE: 5/8/2005

Reviewed By: DJ DATE: 5/9/05

SEVERN TRENT STL

Alpha Spectroscopy Plutonium

SEVERN TRENT STL

ALPHA SPECTROSCOPY

Data Reports
Results Reports
Channel by Channel Report

Calibration Data

Instrument Checks

Batch Summary Sheets
Run Logs
Yield Summary(ies)
Batch Yield Plot(s)

Raw Data
Prep Data Sheet(s)
QC Acceptance Sheet(s)
LCS Standard Sheet(s)
Tracer Standard Sheets

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 8:45:26PM 4/28/2005

Sample

Sample Name: F5D220356-001
SampleType: Sample
WRKNO: G81591AC
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.3495g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115432
:
Description:

Client Name: Undefined
Client Contact:

Tracer

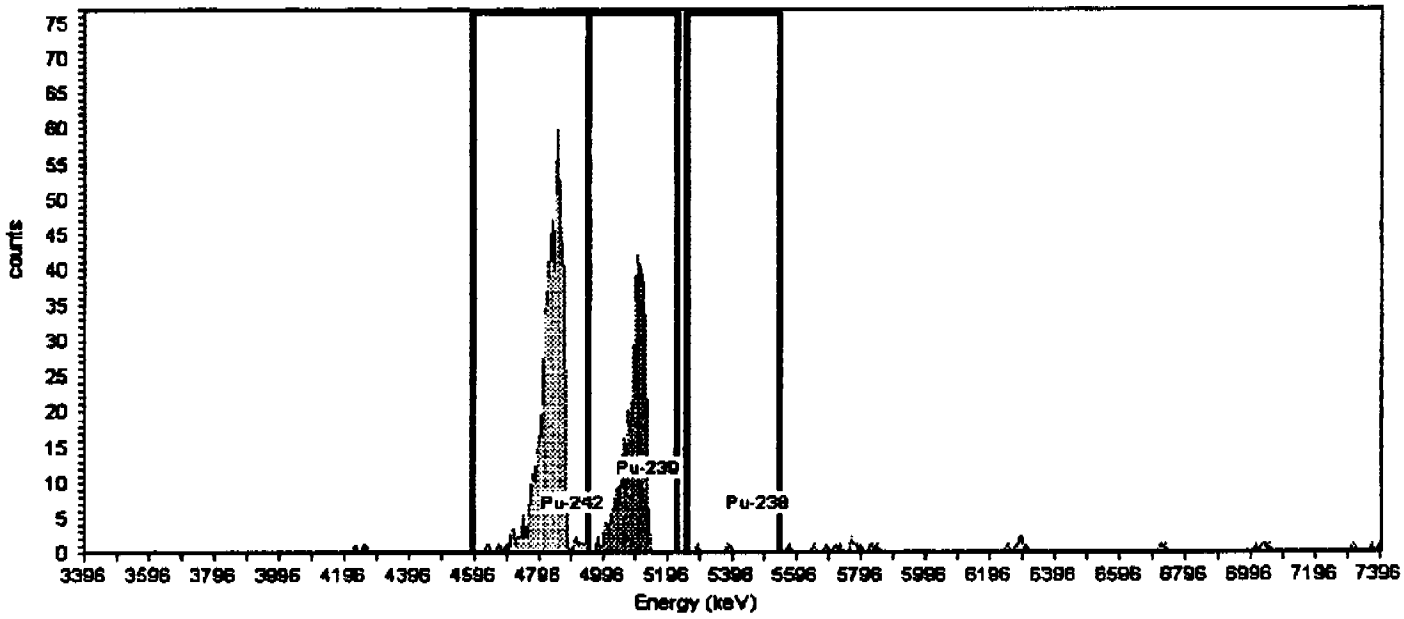
Tracer Name: Rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:48PM

Tracer Nuclide: Pu-242
Tracer Recovery: 90.22%

Acquisition

Detector: AV8
Serial Number: 41-158X1
Acquisition Start Date: 4/28/2005 4:44:50PM
Live Time: 240.00 min.
Real Time: 240.05 min.
Background Date: 4/26/2005 10:37:46AM
Background Info: Sample: AV8; Det: AV8; Spectrum #1; Apr-26-2005 10:37

Calibration Name: March2005_AV8
Calibration Date: 3/16/2005 10:54:19PM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 28.25% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = PuROI
Decay Correction: 4/28/2005 4:41:51PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4898.999	4586.828	4949.818	67.663	99.0	512.00	0.3000	512	1.462E+000	6.506E-002	3.252E-003	1.507E-002
Pu-239	5138.573	4949.818	5225.690	54.345	99.9	343.00	0.9000	342	1.073E+000	7.547E-002	5.583E-003	1.966E-002
Pu-238	5479.783	5254.729	5545.121	126.041	100.0	3.00	4.8000	-2	-5.642E-003	-8.757E-003	1.288E-002	3.424E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:44:43PM 4/28/2005

Analyst: 60040

Sample

Sample Name: F5D220356-002
SampleType: Sample
WRKNO: G816E1AC
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.0493g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115432
:
Description:

Client Name: Undefined
Client Contact:

Tracer

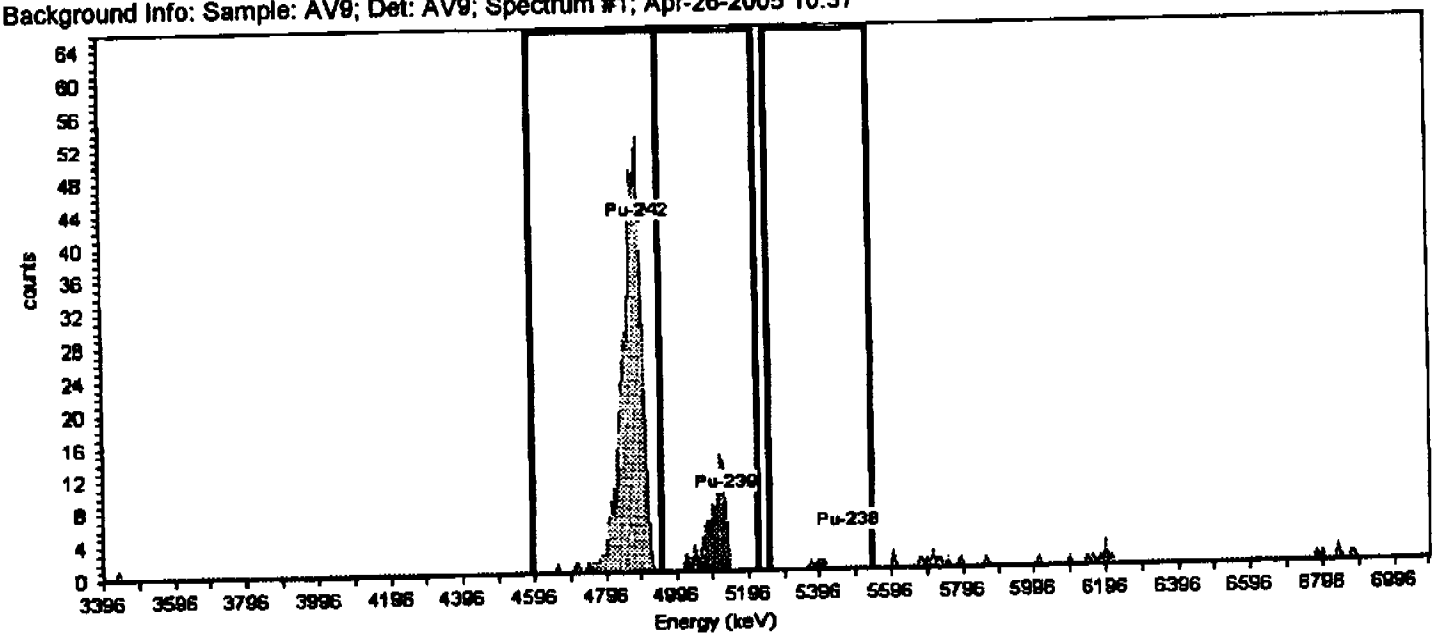
Tracer Name: Rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:48PM

Tracer Nuclide: Pu-242
Tracer Recovery: 81.28%

Acquisition

Detector: AV9
Serial Number: 41-172R1
Acquisition Start Date: 4/28/2005 4:44:51PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 4/26/2005 10:37:48AM
Background Info: Sample: AV9; Det: AV9; Spectrum #1; Apr-26-2005 10:37

Calibration Name: March2005_AV9#2
Calibration Date: 3/21/2005 8:25:56PM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.56% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = PuROI
Decay Correction: 4/28/2005 4:41:51PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4898.999	4586.828	4949.818	68.297	99.0	434.00	0.6000	433	1.510E+000	7.300E-002	6.226E-003	2.405E-002
Pu-239	5138.573	4949.818	5225.690	54.368	99.9	87.00	0.6000	86	3.669E-001	4.357E-002	6.170E-003	2.383E-002
Pu-238	5479.783	5254.729	5545.121	47.768	100.0	3.00	1.5000	2	6.364E-003	9.005E-003	9.746E-003	3.097E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:23:07AM 4/30/2005

Analyst: 60040

Sample

Sample Name: F5D220356-003
SampleType: Sample
WRKNO: G816L1AC
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.2578g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115432
:
Description:

Client Name: Undefined
Client Contact:

Tracer

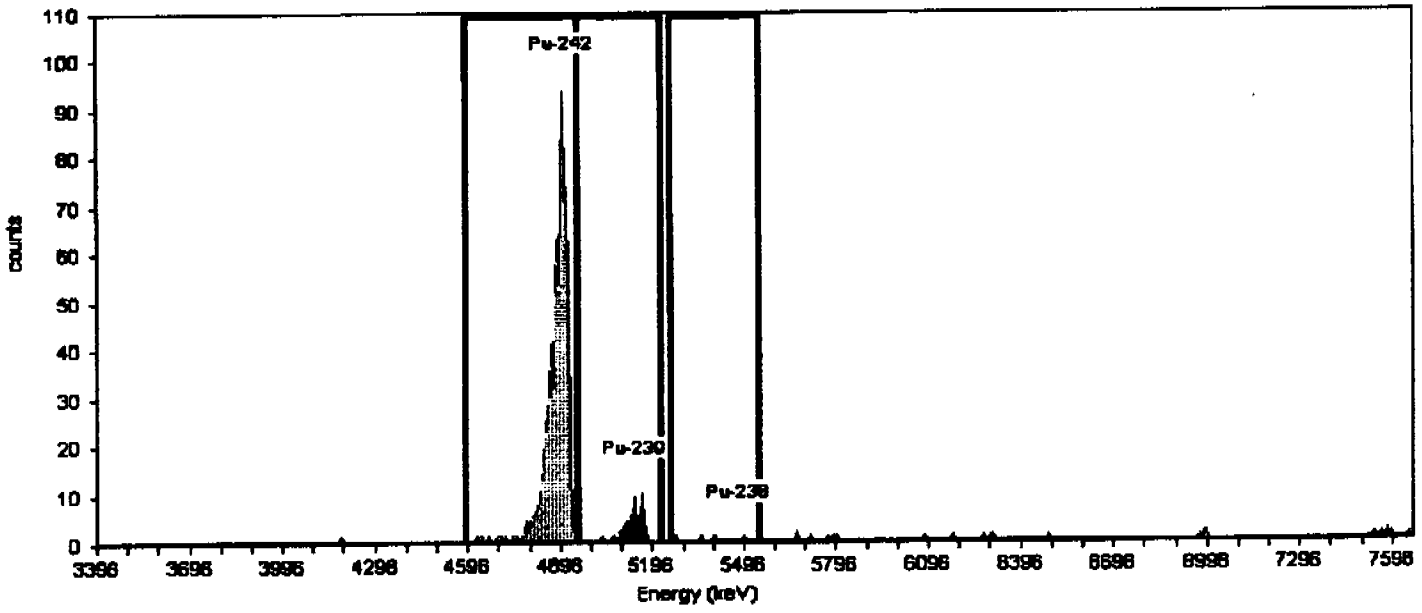
Tracer Name: rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:00AM

Tracer Nuclide: Pu-242
Tracer Recovery: 76.69%

Acquisition

Detector: AV47
Serial Number: AV47
Acquisition Start Date: 4/29/2005 10:52:49AM
Live Time: 400.00 min.
Real Time: 400.02 min.
Background Date: 4/25/2005 11:48:42AM
Background Info: Sample: AV47; Det: AV47; Spectrum #1; Apr-25-2005 11:48

Calibration Name: April2005_AV47
Calibration Date: 4/28/2005 3:02:16PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.56% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PuROI
Decay Correction: 4/29/2005 10:51:34AM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4898.999	4586.828	4949.818	34.842	99.0	682.00	0.5000	682	1.293E+000	4.997E-002	3.524E-003	1.374E-002
Pu-239	5138.573	4949.818	5225.690	66.735	99.9	56.00	0.0000	56	1.373E-001	1.927E-002	0.000E+000	6.634E-003
Pu-238	5479.783	5254.729	5545.121	22.939	100.0	4.00	1.0000	3	7.347E-003	5.484E-003	4.934E-003	1.649E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:45:05PM 4/28/2005

Analyst: 60040

Sample

Sample Name: F5D220356-004
SampleType: Sample
WRKNO: G816P1AC
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.2737g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115432
:
Description:

Client Name: Undefined
Client Contact:

Tracer

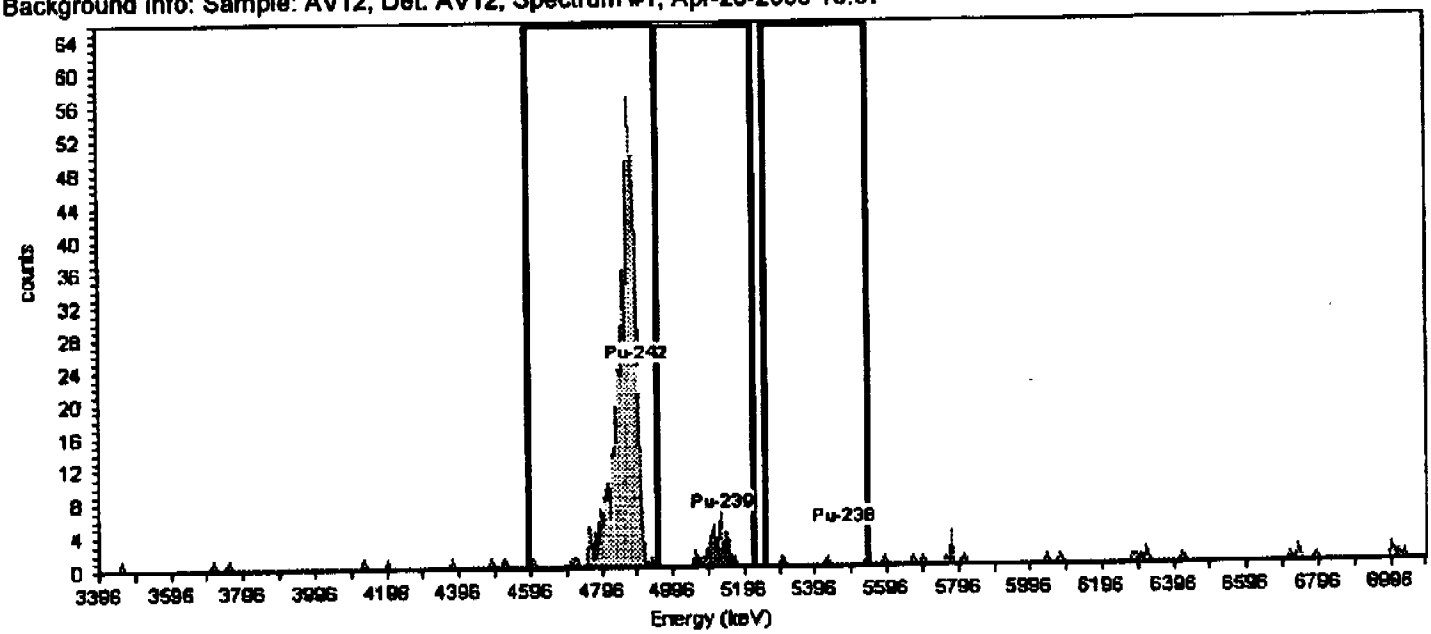
Tracer Name: Rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:48PM

Tracer Nuclide: Pu-242
Tracer Recovery: 77.02%

Acquisition

Detector: AV12
Serial Number: 41-172Q2
Acquisition Start Date: 4/28/2005 4:44:57PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 4/26/2005 10:37:53AM
Background Info: Sample: AV12; Det: AV12; Spectrum #1; Apr-26-2005 10:37

Calibration Name: March2005_AV12
Calibration Date: 3/16/2005 5:27:57PM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.80% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = PuROI
Decay Correction: 4/28/2005 4:41:51PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4898.999	4586.828	4949.618	55.801	99.0	415.00	0.6000	414	1.289E+000	6.377E-002	5.869E-003	2.267E-002
Pu-239	5138.573	4949.618	5225.690	60.849	99.9	37.00	1.2000	36	1.433E-001	2.575E-002	8.225E-003	2.728E-002
Pu-238	5479.783	5254.729	5545.121	10.002	100.0	3.00	2.4000	1	2.400E-003	9.294E-003	1.162E-002	3.406E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:45:12PM 4/28/2005

Analyst: 60040

Sample

Sample Name: F5D220356-004X
SampleType: Sample
WRKNO: G816P1AJ
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.0440g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115432
:
Description:

Client Name: Undefined
Client Contact:

Tracer

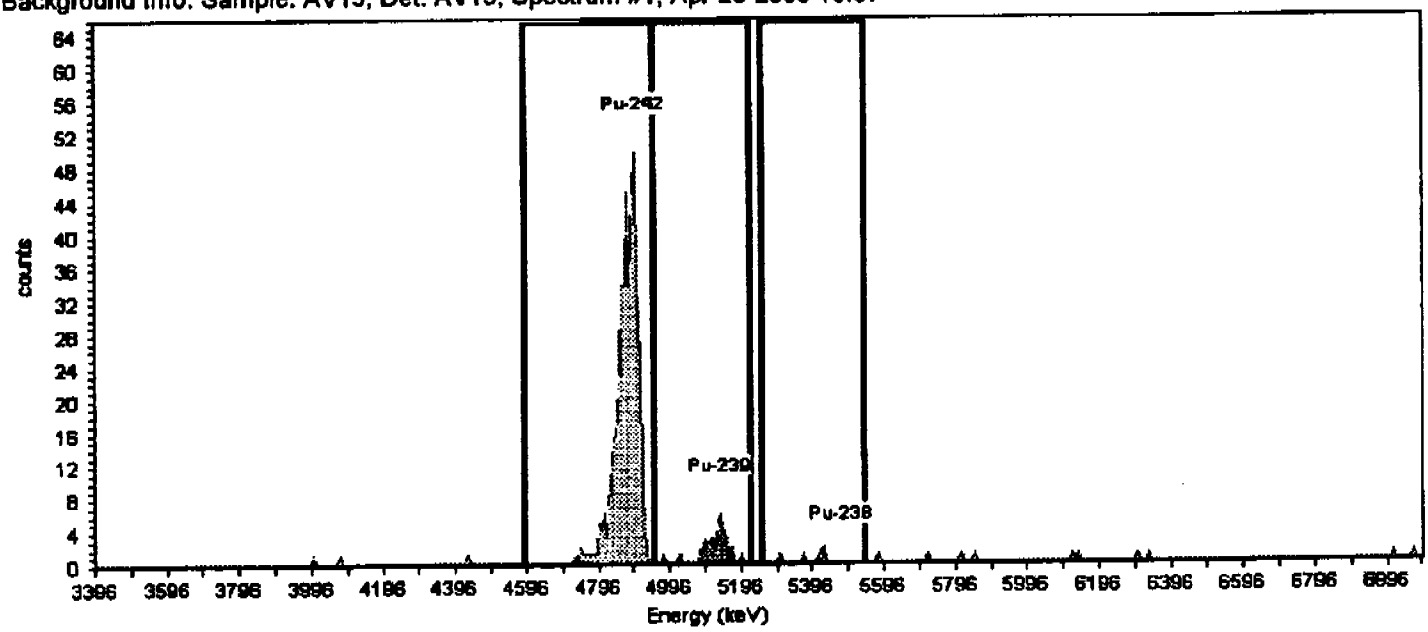
Tracer Name: Rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:48PM

Tracer Nuclide: Pu-242
Tracer Recovery: 76.10%

Acquisition

Detector: AV15
Serial Number: 41-172C5
Acquisition Start Date: 4/28/2005 4:45:00PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 4/26/2005 10:37:57AM
Background Info: Sample: AV15; Det: AV15; Spectrum #1; Apr-26-2005 10:37

Calibration Name: March2005_AV15
Calibration Date: 3/16/2005 1:21:55PM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 26.84% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = PuROI
Decay Correction: 4/28/2005 4:41:51PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4898.999	4586.828	4949.818	67.005	99.0	411.00	0.9000	410	1.417E+000	7.055E-002	8.080E-003	2.845E-002
Pu-239	5138.573	4949.818	5225.690	65.384	99.9	39.00	0.6000	38	1.728E-001	2.961E-002	6.538E-003	2.525E-002
Pu-238	5479.783	5254.729	5545.121	41.608	100.0	6.00	2.4000	4	1.618E-002	1.305E-002	1.306E-002	3.829E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:45:09PM 4/28/2005

Analyst: 60040

Sample

Sample Name: F5D220356-004S
SampleType: Sample
WRKNO: G816P1AH
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.2541g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115432
:
Description:

Client Name: Undefined
Client Contact:

Tracer

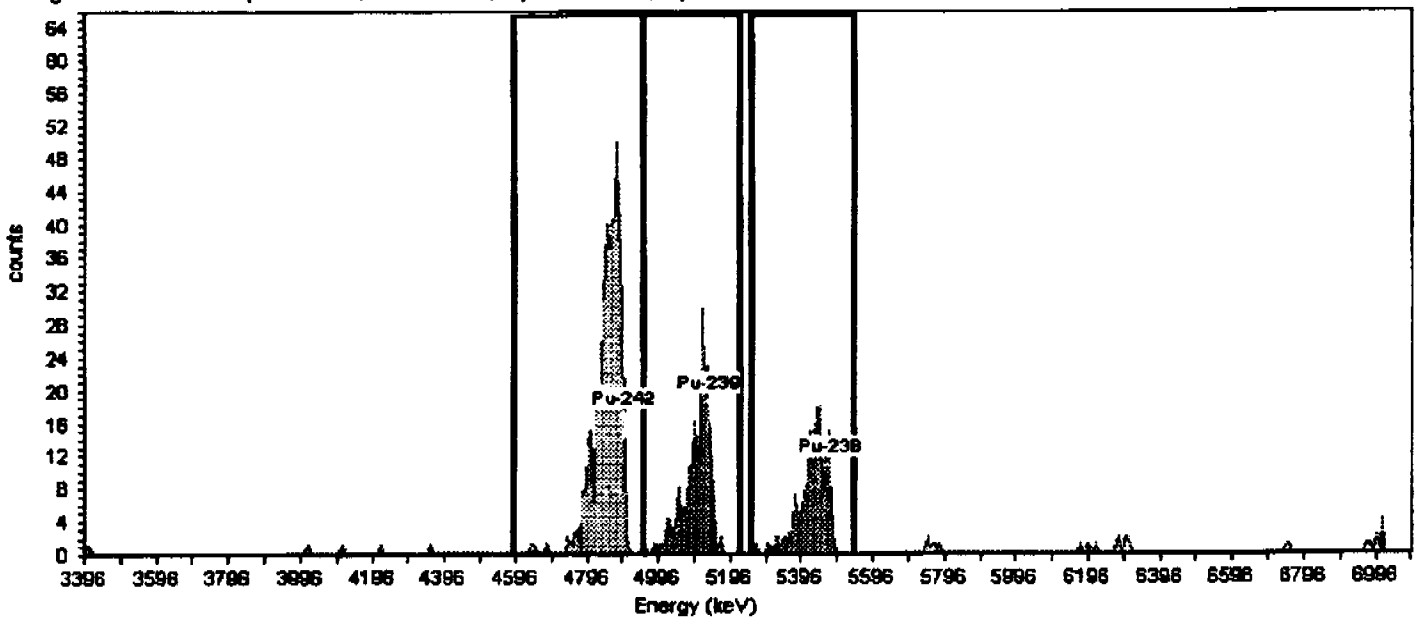
Tracer Name: Rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:48PM

Tracer Nuclide: Pu-242
Tracer Recovery: 82.47%

Acquisition

Detector: AV13
Serial Number: 41-172Q1
Acquisition Start Date: 4/28/2005 4:44:58PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 4/26/2005 10:37:55AM
Background Info: Sample: AV13; Det: AV13; Spectrum #1; Apr-26-2005 10:37

Calibration Name: March2005_AV13
Calibration Date: 3/16/2005 1:21:34PM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.86% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = PuROI
Decay Correction: 4/28/2005 4:41:51PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4898.999	4586.828	4949.818	65.560	99.0	445.00	0.3000	445	1.393E+000	6.643E-002	3.901E-003	1.808E-002
Pu-239	5138.573	4949.818	5225.690	58.202	99.9	203.00	0.6000	202	7.616E-001	6.484E-002	5.467E-003	2.112E-002
Pu-238	5479.783	5264.729	5545.121	75.021	100.0	166.00	4.2000	162	6.082E-001	5.706E-002	1.445E-002	3.907E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:45:16PM 4/28/2005

Analyst: 60040

Sample

Sample Name: F5D220356-005
SampleType: Sample
WRKNO: G816T1AC
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.2049g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115432
:
Description:

Client Name: Undefined
Client Contact:

Tracer

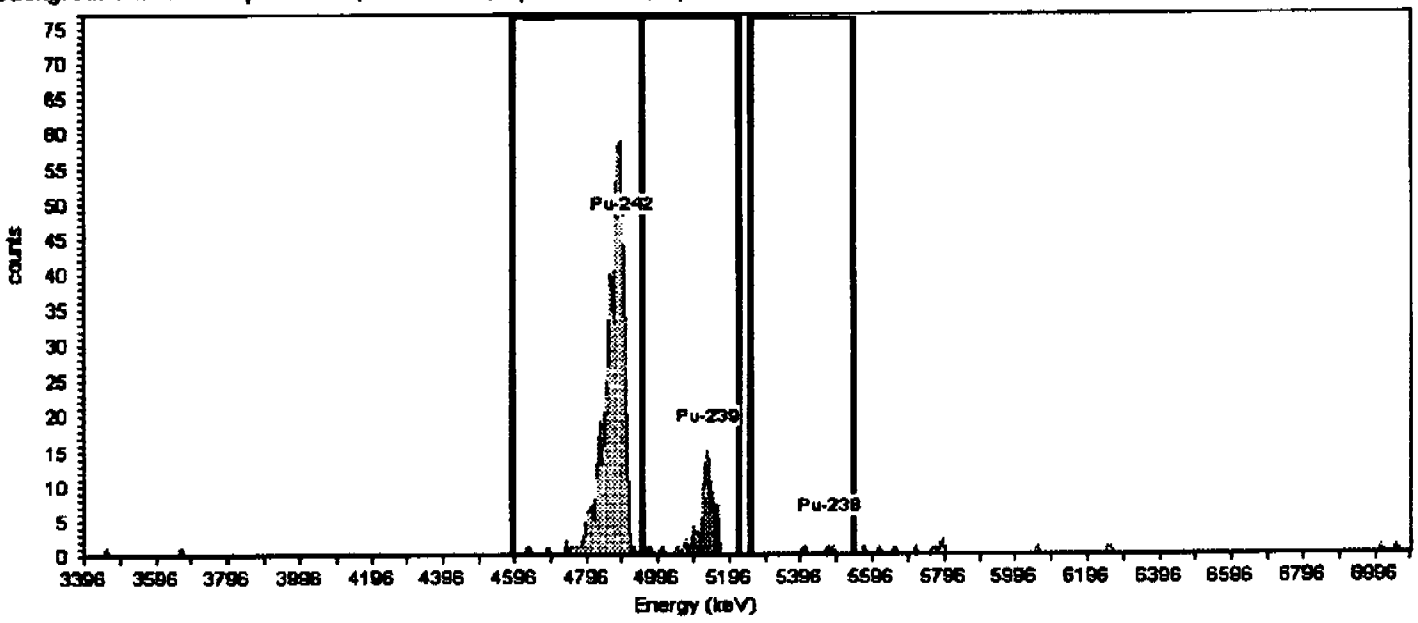
Tracer Name: Rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:48PM

Tracer Nuclide: Pu-242
Tracer Recovery: 76.47%

Acquisition

Detector: AV16
Serial Number: 41-172Q7
Acquisition Start Date: 4/28/2005 4:45:01PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 4/26/2005 10:37:58AM
Background Info: Sample: AV16; Det: AV16; Spectrum #1; Apr-26-2005 10:37

Calibration Name: March2005_AV16
Calibration Date: 3/16/2005 1:22:01PM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 28.82% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = PuROI
Decay Correction: 4/28/2005 4:41:51PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4898.999	4586.828	4949.818	58.407	99.0	443.00	0.6000	442	1.320E+000	6.318E-002	5.669E-003	2.190E-002
Pu-239	5138.573	4949.818	5225.690	46.536	99.9	77.00	0.3000	77	2.966E-001	3.687E-002	3.973E-003	1.841E-002
Pu-238	5479.783	5254.729	5545.121	100.953	100.0	3.00	3.3000	0	-1.159E-003	-9.696E-003	1.316E-002	3.678E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:45:19PM 4/28/2005

Analyst: 60040

Sample

Sample Name: F5D250000-432B
SampleType: Blank
WRKNO: G85JR1AA
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.0000g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115432
:
Description:

Client Name: Undefined
Client Contact:

Tracer

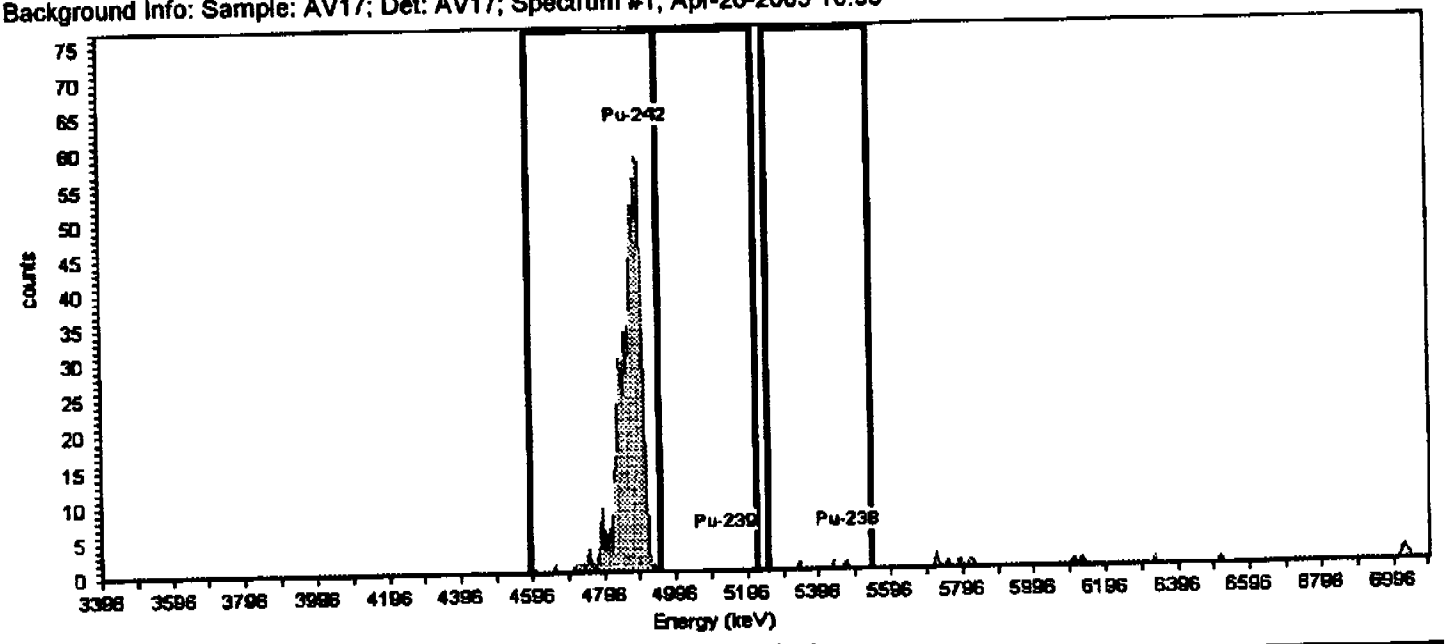
Tracer Name: Rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:48PM

Tracer Nuclide: Pu-242
Tracer Recovery: 90.92%

Acquisition

Detector: AV17
Serial Number: 41-172Q4
Acquisition Start Date: 4/28/2005 4:45:03PM
Live Time: 240.00 min.
Real Time: 240.01 min.
Background Date: 4/26/2005 10:38:00AM
Background Info: Sample: AV17; Det: AV17; Spectrum #1; Apr-26-2005 10:38

Calibration Name: Mar2005_AV17
Calibration Date: 3/16/2005 5:28:41PM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.69% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = PuROI
Decay Correction: 4/28/2005 4:41:51PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4898.999	4586.826	4949.818	70.035	99.0	486.00	0.9000	467	1.730E+000	7.901E-002	6.952E-003	2.448E-002
Pu-239	5138.573	4949.818	5225.690	.000	99.9	0.00	0.3000	0	-1.162E-003	-4.415E-003	3.978E-003	1.843E-002
Pu-238	5479.783	5254.729	5545.121	147.064	100.0	3.00	1.5000	2	5.802E-003	8.210E-003	8.885E-003	2.824E-002

STL ST. LOUIS
STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:45:23PM 4/28/2005

Analyst: 60040

Sample

Sample Name: F5D250000-432C
SampleType: Control
WRKNO: G85JR1AC
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 0.2429g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115432
:
Description:

Client Name: Undefined
Client Contact:

Tracer

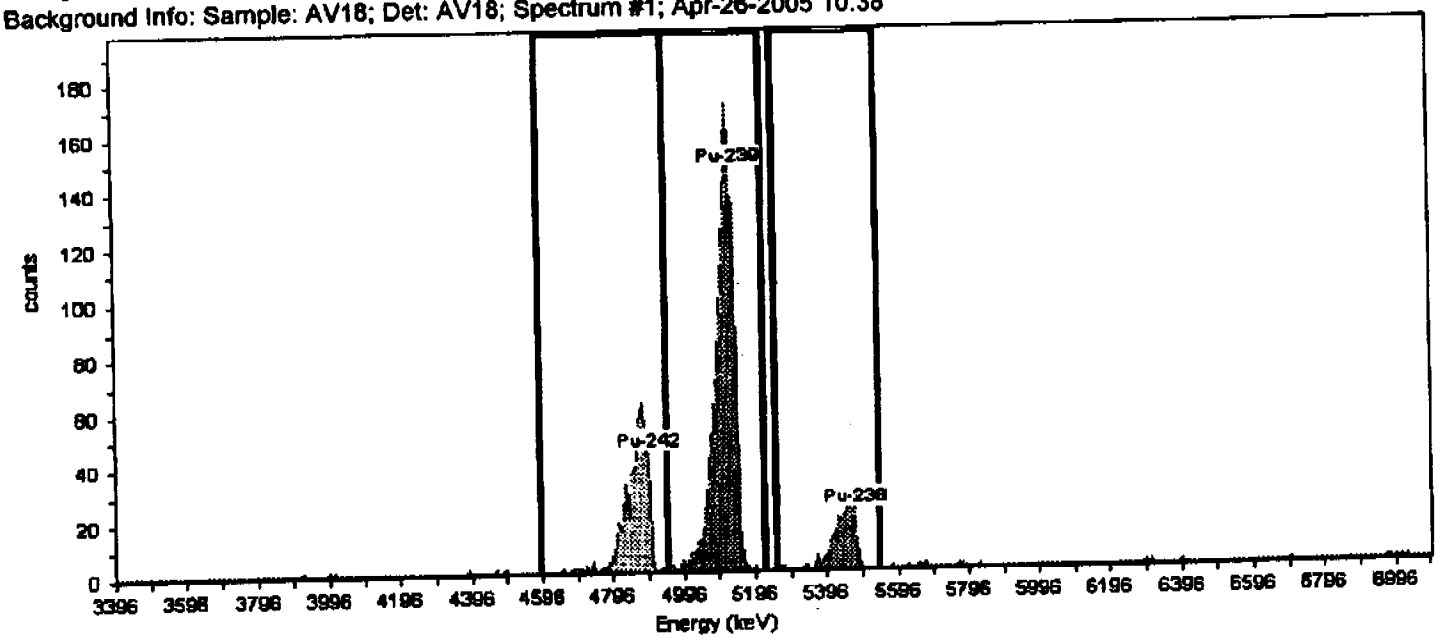
Tracer Name: Rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:48PM

Tracer Nuclide: Pu-242
Tracer Recovery: 98.70%

Acquisition

Detector: AV18
Serial Number: 41-172C6
Acquisition Start Date: 4/28/2005 4:45:04PM
Live Time: 240.00 min.
Real Time: 240.01 min.
Background Date: 4/26/2005 10:38:01AM
Background Info: Sample: AV18; Det: AV18; Spectrum #1; Apr-26-2005 10:38

Calibration Name: Mar2005_AV18
Calibration Date: 3/16/2005 5:28:55PM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 25.79% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = PuROI
Decay Correction: 4/28/2005 4:41:51PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4896.999	4586.828	4949.818	60.865	99.0	511.00	0.0000	511	1.547E+001	6.898E-001	0.000E+000	8.298E-002
Pu-239	5138.573	4949.818	5225.690	56.405	99.9	1,259.00	0.9000	1,258	3.823E+001	2.028E+000	5.407E-002	1.904E-001
Pu-238	5479.783	5254.729	5545.121	62.751	100.0	229.00	1.5000	228	6.907E+000	5.556E-001	6.974E-002	2.216E-001

STL St. Louis

Isotopic Actinide DLC calculation when decay and ingrowth calculations are not required.

Sample ID	Isotope	Total Bkgd Cts	L/g Sample Volume	decimal det. eff.	minutes ct. length	decimal yield	decimal abundance	DLC
F5D220356-001	Pu238	4.8	2.3495	0.2825	240	0.9022	0.999	0.0160
F5D220356-001	Pu239/240	0.9	2.3495	0.2825	240	0.9022	0.999	0.0069
F5D220356-002	Pu238	1.5	2.0493	0.2656	240	0.8128	0.999	0.0121
F5D220356-002	Pu239/240	0.6	2.0493	0.2656	240	0.8128	0.999	0.0077
F5D220356-003	Pu238	1	2.2578	0.2656	400	0.7669	0.999	0.0057
F5D220356-003	Pu239/240	0	2.2578	0.2656	400	0.7669	0.999	0.0000
F5D220356-004	Pu238	2.4	2.2737	0.268	240	0.7702	0.999	0.0144
F5D220356-004	Pu239/240	1.2	2.2737	0.268	240	0.7702	0.999	0.0102
F5D220356-004S	Pu238	2.4	2.2541	0.2684	240	0.761	0.999	0.0147
F5D220356-004S	Pu239/240	0.6	2.2541	0.2684	240	0.761	0.999	0.0074
F5D220356-004X	Pu238	4.2	2.044	0.2686	240	0.8247	0.999	0.0198
F5D220356-004X	Pu239/240	0.6	2.044	0.2686	240	0.8247	0.999	0.0075
F5D220356-005	Pu238	3.3	2.2049	0.2882	240	0.7647	0.999	0.0163
F5D220356-005	Pu239/240	0.3	2.2049	0.2882	240	0.7647	0.999	0.0049
F5D250000-432B	Pu238	1.5	2	0.2669	240	0.9092	0.999	0.0110
F5D250000-432B	Pu239/240	0.3	2	0.2669	240	0.9092	0.999	0.0049
F5D250000-432C	Pu238	1.5	0.2429	0.2579	240	0.987	0.999	0.0866
F5D250000-432C	Pu239/240	0.9	0.2429	0.2579	240	0.987	0.999	0.0671

Calculated by: RR Date: 5/3/05

Reviewed by: [signature] Date: 5/4/05

SEVERN TRENT STL

DAILY PULSERS

LOT# F5D220356

STL ST. LOUIS

Daily Pulser Check - Severn Trent Lab

Pulser Date: 4/28/2005

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria		Gross Counts P/F	FWHM (keV) Result	FWHM (keV) Criteria	FWHM (keV) P/F	Pulser Center Result	Pulser Center Criteria		Pulser Center P/F	Energy (keV) Result	Energy (keV) Criteria		Energy (keV) P/F
AV1	04/28/2005 8:26	7331	7218.7	+/-5%	Pass	14.5	5 - 50	Pass	227.1	229.0	+/-5%	Pass	5037	5051.1	+/-25%	Pass
AV2	04/28/2005 8:26	7327	7468.7	+/-5%	Pass	14.1	5 - 50	Pass	227.0	222.9	+/-5%	Pass	5037	5007.5	+/-25%	Pass
AV3	04/28/2005 8:25	7166	7484.9	+/-5%	Pass	12.8	5 - 50	Pass	229.0	225.9	+/-5%	Pass	5052	5028.8	+/-25%	Pass
AV4	04/28/2005 7:16	7336	7413.7	+/-5%	Pass	13.4	5 - 50	Pass	224.9	224.9	+/-5%	Pass	5022	5021.6	+/-25%	Pass
AV6	04/28/2005 7:16	7333	7476.7	+/-5%	Pass	13.5	5 - 50	Pass	227.0	224.0	+/-5%	Pass	5037	5015.3	+/-25%	Pass
AV7	04/28/2005 7:16	7275	7477.0	+/-5%	Pass	15.5	5 - 50	Pass	226.9	224.9	+/-5%	Pass	5036	5021.9	+/-25%	Pass
AV8	04/28/2005 7:16	7327	7327.4	+/-5%	Pass	13.5	5 - 50	Pass	228.0	228.0	+/-5%	Pass	5044	5044.6	+/-25%	Pass
AV9	04/28/2005 7:16	7657	7519.3	+/-5%	Pass	16.8	5 - 50	Pass	221.1	227.9	+/-5%	Pass	4994	5043.3	+/-25%	Pass
AV10	04/28/2005 8:25	8571	7749.6	+/-5%	FAIL	4312.7	5 - 50	FAIL	37.4	226.1	+/-5%	FAIL	3660	5030.3	+/-25%	FAIL
AV10 OK	04/28/2005 8:54	7566	7749.6	+/-5%	Pass	16.4	5 - 50	Pass	219.0	226.1	+/-5%	Pass	4979	5030.3	+/-25%	Pass
AV11	04/28/2005 7:16	7692	7666.2	+/-5%	Pass	13.8	5 - 50	Pass	224.0	225.0	+/-5%	Pass	5015	5022.1	+/-25%	Pass
AV12	04/28/2005 7:16	7693	7588.7	+/-5%	Pass	13.7	5 - 50	Pass	227.8	230.0	+/-5%	Pass	5043	5058.4	+/-25%	Pass
AV13	04/28/2005 7:16	7691	7584.6	+/-5%	Pass	18.3	5 - 50	Pass	227.0	228.0	+/-5%	Pass	5037	5044.1	+/-25%	Pass
AV15	04/28/2005 7:16	7700	7770.5	+/-5%	Pass	14.1	5 - 50	Pass	227.0	226.9	+/-5%	Pass	5037	5036.6	+/-25%	Pass
AV16	04/28/2005 7:16	7521	7456.0	+/-5%	Pass	12.8	5 - 50	Pass	225.0	226.9	+/-5%	Pass	5023	5036.2	+/-25%	Pass
AV17	04/28/2005 7:16	7725	7619.1	+/-5%	Pass	13.6	5 - 50	Pass	227.0	229.9	+/-5%	Pass	5037	5058.3	+/-25%	Pass
AV18	04/28/2005 7:16	7732	7714.5	+/-5%	Pass	13.8	5 - 50	Pass	228.0	226.9	+/-5%	Pass	5044	5036.4	+/-25%	Pass
AV19	04/28/2005 7:16	7361	7269.8	+/-5%	Pass	12.8	5 - 50	Pass	219.9	227.7	+/-5%	Pass	4986	5041.9	+/-25%	Pass
AV20	04/28/2005 7:16	7726	7503.6	+/-5%	Pass	13.4	5 - 50	Pass	227.0	226.0	+/-5%	Pass	5037	5029.9	+/-25%	Pass
AV21	04/28/2005 7:16	7724	7550.9	+/-5%	Pass	13.1	5 - 50	Pass	225.0	226.0	+/-5%	Pass	5022	5029.6	+/-25%	Pass
AV22	04/28/2005 7:16	7703	7691.4	+/-5%	Pass	15.9	5 - 50	Pass	222.9	225.0	+/-5%	Pass	5007	5022.4	+/-25%	Pass
AV23	04/28/2005 7:16	7714	7665.3	+/-5%	Pass	14.3	5 - 50	Pass	229.9	229.8	+/-5%	Pass	5058	5057.0	+/-25%	Pass
AV24	04/28/2005 7:16	7704	7354.0	+/-5%	Pass	13.6	5 - 50	Pass	228.9	226.9	+/-5%	Pass	5051	5036.4	+/-25%	Pass
X AV25	04/28/2005 7:16	4693	5122.1	+/-5%	FAIL	13.2	5 - 50	Pass	223.8	224.0	+/-5%	Pass	5014	5015.1	+/-25%	Pass
X AV25 OK	04/28/2005 8:25	4799	5122.1	+/-5%	FAIL	12.9	5 - 50	Pass	223.8	224.0	+/-5%	Pass	5014	5015.1	+/-25%	Pass
AV26	04/28/2005 7:16	5069	5069.9	+/-5%	Pass	23.3	5 - 50	Pass	222.8	226.9	+/-5%	Pass	5007	5036.5	+/-25%	Pass
AV27	04/28/2005 7:16	5005	4919.2	+/-5%	Pass	14.7	5 - 50	Pass	221.9	225.0	+/-5%	Pass	5000	5022.5	+/-25%	Pass
AV29	04/28/2005 7:16	4971	5047.7	+/-5%	Pass	21.4	5 - 50	Pass	224.9	223.3	+/-5%	Pass	5022	5010.1	+/-25%	Pass
AV29	04/28/2005 7:16	4971	5005.4	+/-5%	Pass	21.4	5 - 50	Pass	224.9	223.8	+/-5%	Pass	5022	5014.0	+/-25%	Pass
AV33	04/28/2005 7:16	5051	4977.0	+/-5%	Pass	11.3	5 - 50	Pass	209.0	218.0	+/-5%	Pass	4906	4971.5	+/-25%	Pass
AV34	04/28/2005 8:25	5335	5045.5	+/-5%	FAIL	19.5	5 - 50	Pass	225.1	219.0	+/-5%	Pass	5023	4978.8	+/-25%	Pass
AV34 OK	04/28/2005 8:49	5272	5045.5	+/-5%	Pass	18.3	5 - 50	Pass	224.1	219.0	+/-5%	Pass	5016	4978.8	+/-25%	Pass

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria	Gross Counts P/F	FWHM (keV) Result	FWHM (keV) Criteria	FWHM (keV) P/F	Pulser Center Result	Pulser Center Criteria	Pulser Center P/F	Energy (keV) Result	Energy (keV) Criteria	Energy (keV) P/F
AV35	04/28/2005 7:16	4965	4932.6 +/-5%	Pass	12.1	5 - 50	Pass	275.0	275.0 +/-5%	Pass	5385	5385.6 +/-25%	Pass
AV37	04/28/2005 7:16	5024	5082.9 +/-5%	Pass	19.7	5 - 50	Pass	236.0	236.1 +/-5%	Pass	5103	5103.2 +/-25%	Pass
AV38	04/28/2005 7:16	5279	5419.4 +/-5%	Pass	16.8	5 - 50	Pass	219.0	217.9 +/-5%	Pass	4979	4448.6 +/-25%	Pass
AV39	04/28/2005 7:16	5238	5316.2 +/-5%	Pass	15.6	5 - 50	Pass	228.0	224.2 +/-5%	Pass	5044	5016.3 +/-25%	Pass
AV40	04/28/2005 7:16	4631	4755.8 +/-5%	Pass	13.0	5 - 50	Pass	227.1	226.0 +/-5%	Pass	5037	5029.5 +/-25%	Pass
AV41	04/28/2005 7:17	4954	4990.8 +/-5%	Pass	12.1	5 - 50	Pass	228.9	229.0 +/-5%	Pass	5051	5051.6 +/-25%	Pass
AV42	04/28/2005 7:17	4943	4977.0 +/-5%	Pass	12.0	5 - 50	Pass	237.0	228.1 +/-5%	Pass	5109	5044.9 +/-25%	Pass
AV43	04/28/2005 8:25	7534	7162.4 +/-5%	FAIL	13.1	5 - 50	Pass	224.1	224.1 +/-5%	Pass	5016	5015.9 +/-25%	Pass
AV45	04/28/2005 7:17	7603	7593.5 +/-5%	Pass	15.2	5 - 50	Pass	226.9	225.6 +/-5%	Pass	5037	5026.9 +/-25%	Pass
AV46	04/28/2005 7:17	7621	7722.7 +/-5%	Pass	14.0	5 - 50	Pass	224.0	225.8 +/-5%	Pass	5015	5028.0 +/-25%	Pass
AV47	04/28/2005 7:17	7621	7532.5 +/-5%	Pass	13.7	5 - 50	Pass	217.0	226.0 +/-5%	Pass	4964	5029.6 +/-25%	Pass
AV48	04/28/2005 7:17	7613	7717.5 +/-5%	Pass	15.1	5 - 50	Pass	225.0	224.0 +/-5%	Pass	5022	5015.2 +/-25%	Pass
AV49	04/28/2005 7:17	7614	7703.4 +/-5%	Pass	13.9	5 - 50	Pass	232.0	226.0 +/-5%	Pass	5073	5029.5 +/-25%	Pass
AV50	04/28/2005 7:17	7613	7660.9 +/-5%	Pass	13.6	5 - 50	Pass	225.0	227.0 +/-5%	Pass	5023	5037.2 +/-25%	Pass
AV51	04/28/2005 7:17	7349	7070.5 +/-5%	Pass	12.9	5 - 50	Pass	220.0	223.0 +/-5%	Pass	4986	5007.6 +/-25%	Pass
AV52	04/28/2005 7:17	7041	7156.4 +/-5%	Pass	12.6	5 - 50	Pass	225.0	225.0 +/-5%	Pass	5023	5022.4 +/-25%	Pass
AV53	04/28/2005 7:17	7143	7144.1 +/-5%	Pass	12.6	5 - 50	Pass	223.0	223.0 +/-5%	Pass	5008	5007.8 +/-25%	Pass
AV54	04/28/2005 7:17	7342	7313.1 +/-5%	Pass	13.4	5 - 50	Pass	229.0	226.0 +/-5%	Pass	5052	5029.5 +/-25%	Pass
AV55	04/28/2005 7:17	7339	7132.9 +/-5%	Pass	12.9	5 - 50	Pass	227.0	226.0 +/-5%	Pass	5037	5029.7 +/-25%	Pass
AV56	04/28/2005 7:17	7022	7163.7 +/-5%	Pass	12.7	5 - 50	Pass	221.0	222.0 +/-5%	Pass	4994	5000.7 +/-25%	Pass
AV57	04/28/2005 7:17	7331	7309.5 +/-5%	Pass	14.1	5 - 50	Pass	222.0	222.0 +/-5%	Pass	5000	5000.6 +/-25%	Pass
AV58	04/28/2005 7:17	7332	7249.2 +/-5%	Pass	13.4	5 - 50	Pass	225.0	223.0 +/-5%	Pass	5022	5008.0 +/-25%	Pass
AV59	04/28/2005 7:17	7145	7141.4 +/-5%	Pass	12.6	5 - 50	Pass	285.0	284.0 +/-5%	Pass	5458	5450.6 +/-25%	Pass
AV60	04/28/2005 7:17	7004	7019.7 +/-5%	Pass	12.7	5 - 50	Pass	223.0	223.0 +/-5%	Pass	5008	5007.5 +/-25%	Pass
AV61	04/28/2005 7:17	7005	7078.3 +/-5%	Pass	12.6	5 - 50	Pass	223.9	225.0 +/-5%	Pass	5015	5022.2 +/-25%	Pass
AV62	04/28/2005 7:17	7273	7083.5 +/-5%	Pass	13.8	5 - 50	Pass	222.0	222.0 +/-5%	Pass	5001	5000.7 +/-25%	Pass
AV63	04/28/2005 8:25	6827	7120.8 +/-5%	Pass	13.0	5 - 50	Pass	221.9	223.0 +/-5%	Pass	5000	5007.9 +/-25%	Pass
AV64	04/28/2005 8:25	7210	7153.7 +/-5%	Pass	13.2	5 - 50	Pass	223.0	224.0 +/-5%	Pass	5008	5015.3 +/-25%	Pass
AV65	04/28/2005 8:25	7207	7233.4 +/-5%	Pass	13.3	5 - 50	Pass	223.0	224.0 +/-5%	Pass	5008	5015.3 +/-25%	Pass
AV66	04/28/2005 8:25	7077	7165.5 +/-5%	Pass	12.1	5 - 50	Pass	221.0	222.0 +/-5%	Pass	4993	5000.5 +/-25%	Pass
AV67	04/28/2005 8:25	7414	7128.1 +/-5%	Pass	15.9	5 - 50	Pass	221.0	224.1 +/-5%	Pass	4994	5015.6 +/-25%	Pass
AV68	04/28/2005 8:25	7290	7259.5 +/-5%	Pass	12.8	5 - 50	Pass	221.0	222.0 +/-5%	Pass	4993	5000.8 +/-25%	Pass
AV69	04/28/2005 8:25	7257	7305.4 +/-5%	Pass	12.5	5 - 50	Pass	221.0	222.0 +/-5%	Pass	4994	5000.6 +/-25%	Pass
AV70	04/28/2005 8:25	7151	7406.5 +/-5%	Pass	12.7	5 - 50	Pass	221.0	222.6 +/-5%	Pass	4994	5004.7 +/-25%	Pass
AV71	04/28/2005 8:26	7436	7187.3 +/-5%	Pass	13.3	5 - 50	Pass	220.9	225.0 +/-5%	Pass	4993	5022.7 +/-25%	Pass
AV72	04/28/2005 8:26	7068	7090.0 +/-5%	Pass	12.8	5 - 50	Pass	220.1	223.9 +/-5%	Pass	4987	5014.6 +/-25%	Pass

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria	Gross Counts P/F	FWHM (keV) Result	FWHM (keV) Criteria	FWHM (keV) P/F	Pulser Center Result	Pulser Center Criteria	Pulser Center P/F	Energy (keV) Result	Energy (keV) Criteria	Energy (keV) P/F
AV73	04/28/2005 8:26	7027	7251.3 +/-5%	Pass	12.9	5 - 50	Pass	224.1	225.0 +/-5%	Pass	5016	5022.4 +/-25%	Pass
AV74	04/28/2005 8:26	7422	7227.1 +/-5%	Pass	14.1	5 - 50	Pass	218.8	224.0 +/-5%	Pass	4978	5015.0 +/-25%	Pass

Daily Pulser Check - Severn Trent Lab

Pulser Date: 4/29/2005

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria	P/F	FWHM (keV) Result	FWHM (keV) Criteria	P/F	Pulser Center Result	Pulser Center Criteria	P/F	Energy (keV) Result	Energy (keV) Criteria	P/F
AV1	04/29/2005 9:10	7407	7218.7 +/-5%	Pass	14.0	5-50	Pass	227.0	229.0 +/-5%	Pass	5037	5051.1 +/-25%	Pass
AV2	04/29/2005 9:10	7405	7468.7 +/-5%	Pass	14.7	5-50	Pass	226.9	222.9 +/-5%	Pass	5036	5007.5 +/-25%	Pass
AV3	04/29/2005 9:10	7398	7484.9 +/-5%	Pass	13.2	5-50	Pass	229.1	225.9 +/-5%	Pass	5052	5028.8 +/-25%	Pass
AV4	04/29/2005 9:10	7394	7413.7 +/-5%	Pass	13.4	5-50	Pass	226.1	224.9 +/-5%	Pass	5030	5021.6 +/-25%	Pass
AV6	04/29/2005 9:10	7395	7476.7 +/-5%	Pass	13.9	5-50	Pass	227.0	224.0 +/-5%	Pass	5037	5015.3 +/-25%	Pass
AV7	04/29/2005 9:10	7352	7477.0 +/-5%	Pass	15.7	5-50	Pass	228.1	224.9 +/-5%	Pass	5045	5021.9 +/-25%	Pass
AV8	04/29/2005 9:10	7385	7327.4 +/-5%	Pass	13.3	5-50	Pass	228.1	228.0 +/-5%	Pass	5045	5044.6 +/-25%	Pass
AV9	04/29/2005 11:12	7616	7519.3 +/-5%	Pass	16.1	5-50	Pass	221.1	227.9 +/-5%	Pass	4994	5043.3 +/-25%	Pass
AV10	04/29/2005 11:12	7664	7749.6 +/-5%	Pass	14.0	5-50	Pass	219.0	226.1 +/-5%	Pass	4979	5030.3 +/-25%	Pass
AV11	04/29/2005 11:12	7656	7666.2 +/-5%	Pass	13.9	5-50	Pass	222.9	225.0 +/-5%	Pass	5007	5022.1 +/-25%	Pass
AV12	04/29/2005 11:12	7647	7588.7 +/-5%	Pass	14.7	5-50	Pass	229.1	230.0 +/-5%	Pass	5052	5058.4 +/-25%	Pass
AV13	04/29/2005 9:10	7554	7584.6 +/-5%	Pass	16.7	5-50	Pass	227.0	228.0 +/-5%	Pass	5037	5044.1 +/-25%	Pass
AV15	04/29/2005 9:10	7611	7770.5 +/-5%	Pass	14.0	5-50	Pass	227.0	226.9 +/-5%	Pass	5037	5036.6 +/-25%	Pass
AV16	04/29/2005 9:10	7373	7456.0 +/-5%	Pass	12.7	5-50	Pass	225.0	226.9 +/-5%	Pass	5022	5036.2 +/-25%	Pass
AV17	04/29/2005 9:10	7735	7619.1 +/-5%	Pass	14.1	5-50	Pass	225.9	229.9 +/-5%	Pass	5029	5058.3 +/-25%	Pass
AV18	04/29/2005 9:10	7732	7714.5 +/-5%	Pass	14.1	5-50	Pass	228.1	226.9 +/-5%	Pass	5045	5036.4 +/-25%	Pass
AV19	04/29/2005 9:10	7498	7269.8 +/-5%	Pass	12.8	5-50	Pass	221.0	227.7 +/-5%	Pass	4993	5041.9 +/-25%	Pass
AV20	04/29/2005 9:10	7731	7503.6 +/-5%	Pass	13.5	5-50	Pass	227.0	226.0 +/-5%	Pass	5037	5029.9 +/-25%	Pass
AV21	04/29/2005 9:10	7724	7550.9 +/-5%	Pass	13.1	5-50	Pass	225.0	226.0 +/-5%	Pass	5022	5029.6 +/-25%	Pass
AV22	04/29/2005 9:10	7715	7691.4 +/-5%	Pass	14.7	5-50	Pass	224.0	225.0 +/-5%	Pass	5015	5022.4 +/-25%	Pass
AV23	04/29/2005 9:10	7713	7665.3 +/-5%	Pass	14.6	5-50	Pass	229.9	229.8 +/-5%	Pass	5058	5057.0 +/-25%	Pass
AV24	04/29/2005 9:10	7718	7354.0 +/-5%	Pass	13.3	5-50	Pass	228.9	226.9 +/-5%	Pass	5051	5036.4 +/-25%	Pass
AV25	04/29/2005 9:10	5131	5122.1 +/-5%	Pass	14.4	5-50	Pass	223.9	224.0 +/-5%	Pass	5015	5015.1 +/-25%	Pass
AV26	04/29/2005 9:10	5078	5069.9 +/-5%	Pass	18.1	5-50	Pass	224.0	226.9 +/-5%	Pass	5015	5036.5 +/-25%	Pass
AV27	04/29/2005 9:10	5016	4919.2 +/-5%	Pass	14.7	5-50	Pass	221.9	225.0 +/-5%	Pass	5000	5022.5 +/-25%	Pass
AV29	04/29/2005 9:10	4979	5047.7 +/-5%	Pass	25.0	5-50	Pass	225.0	223.3 +/-5%	Pass	5023	5010.1 +/-25%	Pass
AV29	04/29/2005 9:10	4979	5005.4 +/-5%	Pass	25.0	5-50	Pass	225.0	223.8 +/-5%	Pass	5023	5014.0 +/-25%	Pass
AV33	04/29/2005 9:10	5061	4977.0 +/-5%	Pass	10.9	5-50	Pass	209.0	218.0 +/-5%	Pass	4906	4971.5 +/-25%	Pass
AV34	04/29/2005 9:10	5193	5045.5 +/-5%	Pass	18.4	5-50	Pass	224.0	219.0 +/-5%	Pass	5015	4978.8 +/-25%	Pass
AV35	04/29/2005 9:10	4956	4932.6 +/-5%	Pass	12.2	5-50	Pass	274.9	275.0 +/-5%	Pass	5385	5385.6 +/-25%	Pass
AV37	04/29/2005 9:10	5005	5082.9 +/-5%	Pass	20.1	5-50	Pass	236.1	236.1 +/-5%	Pass	5103	5103.2 +/-25%	Pass
AV38	04/29/2005 9:10	5286	5419.4 +/-5%	Pass	17.0	5-50	Pass	219.0	217.9 +/-5%	Pass	4979	4448.6 +/-25%	Pass

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria	P/F	FWHM (keV) Result	FWHM (keV) Criteria	P/F	Pulser Center Result	Pulser Center Criteria	P/F	Energy (keV) Result	Energy (keV) Criteria	P/F
AV39	04/29/2005 9:11	5288	5316.2 +/-5%	Pass	16.5	5 - 50	Pass	227.9	224.2 +/-5%	Pass	5043	5016.3 +/-25%	Pass
AV40	04/29/2005 9:11	4915	4755.8 +/-5%	Pass	13.2	5 - 50	Pass	225.9	226.0 +/-5%	Pass	5029	5029.5 +/-25%	Pass
AV41	04/29/2005 9:11	4970	4990.8 +/-5%	Pass	12.0	5 - 50	Pass	228.9	229.0 +/-5%	Pass	5051	5051.6 +/-25%	Pass
AV42	04/29/2005 9:11	4949	4977.0 +/-5%	Pass	12.6	5 - 50	Pass	237.0	228.1 +/-5%	Pass	5109	5044.9 +/-25%	Pass
AV43	04/29/2005 9:11	7648	7162.4 +/-5%	FAIL	13.0	5 - 50	Pass	222.0	224.1 +/-5%	Pass	5001	5015.9 +/-25%	Pass
AV45	04/29/2005 9:11	7605	7593.5 +/-5%	Pass	15.5	5 - 50	Pass	228.2	225.6 +/-5%	Pass	5045	5026.9 +/-25%	Pass
AV46	04/29/2005 9:11	7641	7722.7 +/-5%	Pass	13.9	5 - 50	Pass	224.1	225.8 +/-5%	Pass	5016	5028.0 +/-25%	Pass
AV47	04/29/2005 9:11	7638	7532.5 +/-5%	Pass	14.0	5 - 50	Pass	220.0	226.0 +/-5%	Pass	4986	5029.6 +/-25%	Pass
AV48	04/29/2005 9:11	7624	7717.5 +/-5%	Pass	15.6	5 - 50	Pass	226.1	224.0 +/-5%	Pass	5030	5015.2 +/-25%	Pass
AV49	04/29/2005 9:11	7635	7703.4 +/-5%	Pass	13.8	5 - 50	Pass	232.0	226.0 +/-5%	Pass	5073	5029.5 +/-25%	Pass
AV50	04/29/2005 9:11	7633	7660.9 +/-5%	Pass	13.5	5 - 50	Pass	225.0	227.0 +/-5%	Pass	5022	5037.2 +/-25%	Pass
AV51	04/29/2005 9:11	7350	7070.5 +/-5%	Pass	13.7	5 - 50	Pass	219.9	223.0 +/-5%	Pass	4986	5007.6 +/-25%	Pass
AV52	04/29/2005 9:11	7350	7156.4 +/-5%	Pass	13.0	5 - 50	Pass	225.0	225.0 +/-5%	Pass	5023	5022.4 +/-25%	Pass
AV53	04/29/2005 9:11	7161	7144.1 +/-5%	Pass	12.8	5 - 50	Pass	223.0	223.0 +/-5%	Pass	5008	5007.8 +/-25%	Pass
AV54	04/29/2005 9:11	7342	7313.1 +/-5%	Pass	14.0	5 - 50	Pass	229.1	226.0 +/-5%	Pass	5052	5029.5 +/-25%	Pass
AV55	04/29/2005 9:11	7238	7132.9 +/-5%	Pass	12.7	5 - 50	Pass	227.0	226.0 +/-5%	Pass	5037	5029.7 +/-25%	Pass
AV56	04/29/2005 9:11	7341	7163.7 +/-5%	Pass	13.2	5 - 50	Pass	221.0	222.0 +/-5%	Pass	4994	5000.7 +/-25%	Pass
AV57	04/29/2005 9:11	7336	7309.5 +/-5%	Pass	14.2	5 - 50	Pass	222.0	222.0 +/-5%	Pass	5000	5000.6 +/-25%	Pass
AV58	04/29/2005 9:11	7334	7249.2 +/-5%	Pass	13.3	5 - 50	Pass	225.0	223.0 +/-5%	Pass	5022	5008.0 +/-25%	Pass
AV59	04/29/2005 9:11	7121	7141.4 +/-5%	Pass	12.6	5 - 50	Pass	285.0	284.0 +/-5%	Pass	5458	5450.6 +/-25%	Pass
AV60	04/29/2005 9:11	6842	7019.7 +/-5%	Pass	13.2	5 - 50	Pass	222.9	223.0 +/-5%	Pass	5007	5007.5 +/-25%	Pass
AV61	04/29/2005 9:11	6871	7078.3 +/-5%	Pass	13.2	5 - 50	Pass	223.9	225.0 +/-5%	Pass	5014	5022.2 +/-25%	Pass
AV62	04/29/2005 9:11	7277	7083.5 +/-5%	Pass	14.3	5 - 50	Pass	222.0	222.0 +/-5%	Pass	5000	5000.7 +/-25%	Pass
AV63	04/29/2005 9:11	7273	7120.8 +/-5%	Pass	13.3	5 - 50	Pass	223.1	223.0 +/-5%	Pass	5009	5007.9 +/-25%	Pass
AV64	04/29/2005 9:58	7188	7153.7 +/-5%	Pass	13.1	5 - 50	Pass	223.0	224.0 +/-5%	Pass	5008	5015.3 +/-25%	Pass
AV65	04/29/2005 9:58	7175	7233.4 +/-5%	Pass	14.1	5 - 50	Pass	222.9	224.0 +/-5%	Pass	5007	5015.3 +/-25%	Pass
AV66	04/29/2005 9:10	7138	7165.5 +/-5%	Pass	12.1	5 - 50	Pass	221.0	222.0 +/-5%	Pass	4993	5000.5 +/-25%	Pass
AV67	04/29/2005 9:10	7422	7128.1 +/-5%	Pass	16.1	5 - 50	Pass	221.0	224.1 +/-5%	Pass	4993	5015.6 +/-25%	Pass
AV68	04/29/2005 9:10	7444	7259.5 +/-5%	Pass	13.0	5 - 50	Pass	221.0	222.0 +/-5%	Pass	4993	5000.8 +/-25%	Pass
AV69	04/29/2005 9:10	7284	7305.4 +/-5%	Pass	12.4	5 - 50	Pass	221.0	222.0 +/-5%	Pass	4993	5000.6 +/-25%	Pass
AV70	04/29/2005 9:10	7440	7406.5 +/-5%	Pass	12.8	5 - 50	Pass	221.0	222.6 +/-5%	Pass	4993	5004.7 +/-25%	Pass
AV71	04/29/2005 9:10	7437	7187.3 +/-5%	Pass	12.9	5 - 50	Pass	221.0	225.0 +/-5%	Pass	4993	5022.7 +/-25%	Pass
AV72	04/29/2005 9:10	7279	7090.0 +/-5%	Pass	12.8	5 - 50	Pass	220.0	223.9 +/-5%	Pass	4986	5014.6 +/-25%	Pass
AV73	04/29/2005 9:10	7035	7251.3 +/-5%	Pass	13.0	5 - 50	Pass	224.1	225.0 +/-5%	Pass	5016	5022.4 +/-25%	Pass
AV74	04/29/2005 9:10	7425	7227.1 +/-5%	Pass	13.2	5 - 50	Pass	220.0	224.0 +/-5%	Pass	4986	5015.0 +/-25%	Pass

SEVERN TRENT STL

Run Log

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	4/27	5116444	FSD210122-002	11	240	~~Am~~ U	KM	RR
2			FSD240000-444B	12				
3			-444C	13				
4	4/27	5116097	FSD250199-001	15	400	Am	KM	RR
5			-001L	16				
6			FSD240000-097B	17				
7			-097C	18				
8	4/27	5115344	FSD020143-002	19	180	Pu	KM	RR
9			-002X	20				
10			-0011	21				
11			-019	22				
12			-017	23				
13			FSD250000-344B	24				
14			-344C	46				
15	4/27	5116093	FSD250199-001	50	180	Pu	KM	
16			-001X	51				
17			-043B	52				
18			-043C	53				
19	4/27	5116044	-044C	56	180	Pu-241		
20	4/27	5112198	FSD210389-009	25	180	U	KM	RR
21			-009X	26				
22			-010	27				
23			FSD220000-198B	29				
24			-198C	33				
25	4/28/26	Daily	Pulsers	1-74	1min	QA	JW	—
26	4/28	5112203	FSD200213-002	1	180	Np	RR	RR
27			-002X	2				
28			FSD220000-203B	3				
29			-203C	4				

Reviewed By: RR Date: 4/28/26

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	4/28	5110162	F5D160154-003	6	180	Np	RK	RK
2			-003X	7				
3			-006	8				
4			F5D200000-162B	9				
5			-162C	11				
6		5116269	F5D020143-002	12				
7			-002X	13				
8			-011	15				
9			-014	16				
10			-017	17				
11			F5D260000-269B	18				
12			-269C	19				
13		5116265	F5D020143-002	20	180	Th	RK	RK
14			-002X	21				
15			-011	22				
16			-014	23				
17			-017	24				
18			F5D260000-265B	46				
19			-265C	49				
20		5116267	F5D020143-002	50		U		RK
21			-002X	51				
22			-011	52				
23			-014	53				
24			-017	74				
25			F5D260000-267B	60				
26			-267C	61				
27		5116263	F5D020143-002	63		Am		
28			-002X	64				
29			-011	68				

Reviewed By: RK Date: 4/28/07

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
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Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	4/28	5116263	FSD220143-014	69	180	Th	RR	RR
2			-017	73				
3			FSD260000-263B	72				
4			-263C	67				
5	~~4/28~~	5110165	FSD160154-00					DR 4/28
6	4/28	5110165	FSD200000-1165B RE	24	180	Uu	RR	RR
7	1	1	-1165C RE	87	1	1	1	1
8	4/28	5116444	FSD260000-444C RE	54	240	Uu	1	1
9	4/28	5112198	FSD210389-009X RE	59	180	1	1	1
10	4-28-5	5116265	FSD220143-002-RE	20	180	Th	—	RR
11		5110162	FSD160154-003X-RE	7	180	Np	—	1
12			~~-003B-RE~~	8				
13			FSD200000-162B-RE	9				
14			-162C-RE	11				
15	4-28-5	5112203	FSD220000-203B-RE	3	180	Np	—	1
16			-203C-RE	4				
17	4-28-5	5116269	FSD220143-002-RE	12	180	Np	—	1
18	4-28-5	5113047	FSD220176-001	1		Uu	—	RR
19			-001X	2				
20			-002	63				
21			-003	64				
22			-004	6				
23			-005	51				
24			-006	52				
25			-007	53				
26			-008	56				
27			-009	60				
28			-010	13				
29			-011	15				

Reviewed By: DD Date: 4-28-05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	4-28-5	5113047	F5D220176-012	16	180min	Th		
2			-013	17				
3			-014	18				
4			-015	19				
5			-016	61				
6			-017	21				
7			-018	22				
8			-019	23				
9			-020	24				
10			F5D230000-047B	45				
11			-047C	46				
12	4/28	5111184	F5D140343-012 RC	74	180	Th	RL	JW
13	4/28	5112200	F5D200213-002	26	180	Th	KW	JW
14			F5D220000-002X	27				
15			F5D230000-200B	29				
16			-200C	33				
17	4/28	5112201	F5D200213-002	34	180	U	KW	
18			-002X	35				
19			F5D220000-201B	37				
20			-201C	38				
21	4/28	5113046	F5D220176-001	54	240	Th	KW	
22			-001X	55				
23			-002	57				
24			-003	58				
25			-004	59				
26			-005	62				
27			-006	65				
28			-007	66				
29			-008	67				

Reviewed By: JW Date: 4/29/5

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	4/28	5113046	FSD220176 -009	68	240	Th	km	gw
2			-010	69				
3			-011	70				
4			-012	72				
5			-013	73				
6	4/28	5111180	FSD190345-013 RE	6	240	U	km	RE
7			-014 RE	7				
8	4/28	5113046	FSD220176-014	45	240	Th	km	gw
9			-015	46				
10			-016	51				
11			-017	52				
12			-018	53				
13			-019	56				
14			-020	60				
15			FSD230000-046B	61				
16			-046C	62				
17	4/28	5115432	FSD220356-001	8	240	Pu	km	gw
18			-002	9				
19			-003	11				
20			-004	12				
21			-004MS	13				
22			-004X	15				
23			-005	16				
24			FSD230000-432B	17				
25			432C	18				
26	4/28	5116252	FSD220296-001	19	180	U	km	gw
27			-001X	20				
28			-002	21				
29			-005	22				

Reviewed By: gw Date: 4/29/5

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	4/28	~~S116252~~	~~FSD260~~ Kin	4/28				
2	4/28	S116252	FSD260000-252B	23	180	U	Kin	gw
3	〃	〃	〃 -252C	24	〃	〃	〃	〃
4	4/28	S116281	FSD220296-001	47	180	Th	Kin	ER
5	〃	〃	-001x	48	〃	〃	〃	〃
6	〃	〃	-002	49	〃	〃	〃	〃
7	〃	〃	〃 -003	50	〃	〃	〃	〃
8	〃	〃	FSD260000-251B	64	〃	〃	〃	〃
9	〃	〃	〃 251C	1	〃	〃	〃	〃
10	4/28	S116251	FSD150277-001	2	240	Am	Kin	gw
11	〃	〃	FSD150277-001x	3	〃	〃	〃	〃
12	〃	〃	-002	4	〃	〃	〃	〃
13	〃	〃	〃 -003	9	〃	〃	〃	〃
14	〃	〃	FSD270000-698B	11	〃	〃	〃	〃
15	〃	〃	〃 698C	12	〃	〃	〃	〃
16	4/28	S115433	FSD220356-001	13	240	U	Kin	gw
17	〃	〃	-002	15	〃	〃	〃	〃
18	〃	〃	-003	16	〃	〃	〃	〃
19	〃	〃	-004	17	〃	〃	〃	〃
20	〃	〃	-004MS	18	〃	〃	〃	〃
21	〃	〃	-004X	19	〃	〃	〃	〃
22	〃	〃	〃 -005	20	〃	〃	〃	〃
23	〃	〃	FSD250000-433B	21	〃	〃	〃	〃
24	〃	〃	〃 433C	22	〃	〃	〃	〃
25	4/28	S115429	FSD220356-001	6	240	Am	Kin	ER
26	〃	〃	-002	7	〃	〃	〃	〃
27	〃	〃	-003	8	〃	〃	〃	〃
28	〃	〃	-004	23	〃	〃	〃	〃
29	〃	〃	〃 -004MS	24	〃	〃	〃	〃

Reviewed By: GW Date: 4/29/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	4/28	5115429	F5D220356-004X	46	240	Am	[illegible]	RR
2			-005	49				
3			F5D250000-4296	50				
4			429C	56				
5			429L	60				
6	4-29-8	Daily Pulse ✓		1.74	1 min	QA	[illegible]	—
7		5112200	F5D200213-002X	26	180	Th	gw	RR
8		5117200	F5D110121-001	1	400	TH		RR
9			-001S	2				
10			-003	3				
11			-004	4				
12			-005	6 69				stopped
13			-006	7 [illegible]				RR
14			-007	8				
15			-008	13 46				
16			-009	15 49				
17			-010	16 50				
18			-011	17 51				
19			F5D270000-200B	18 52				
20			-200C	19 53				
21			-200L	20 54				
22	4/29	5115433	F5D220356-005 RC	5	240	LL	RR	RR
23		5115432	F5D220356-003 RC	47	400	Pu		
24	4/29	5117200	F5D110121-005 RC	9	1	Th	RR	
25	4/29	5117632	F5D140271-001	11	180	UU	RR	
26			-001X	12				
27			-002	45				
28			-003	60				
29			-004	61				

Reviewed By: RR Date: 4/29/08

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	4/29	5117632	F5D140271-005	63	180	U	PR	PR
2			-006	64				
3			-007	68				
4			-008	69				
5			-009	73				
6			-010	74				
7			-011	48				
8			-012	55				
9			-013	57				
10			-014	58				
11			-015	59				
12			-016	65				
13			-017	66				
14			-018	67				
15			-019	67				
16			-020	70				
17			F5D270000-632B	71				
18			" -632C	72				
19	4/29	5117632	F5D140271-016 RC	11	180			
20	"	"	" -017 RC	12	"	PR A/B		
21	4/29	5113048	F5D220187-001	13		TH U	PR	PR
22			-001V	15				
23			-002	16				
24			-003	17				
25			-004	18				
26			-005	19				
27			-006	20				
28			-007	78				
29			-008	55				

Reviewed By: PR Date: 4/29/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	4/29	5113048	FSD220187-009	57	180	Th	KK	RR
2			-010	58				
3			-011	59				
4			-012	60				
5			-013	61				
6			-014	62				
7			-015	63				
8			-016	64				
9			-017	65				
10			-018	66				
11			-019	67				
12			-020	68				
13			FSD230000-048B	69				
14			" -048C	10				
15	4/29	5118421	FSD270338-001	1	180	Th	KK	RR
16	"	"	" -001x	2	"	"	"	"
17	"	"	FSD280000-421B	3	"	"	"	"
18	"	"	" 421C	4	"	"	"	"
19	4/29	5118282	FSD250199-001	7	400	Am	KK	RR
20	"	"	" -001x	8	"	"	"	"
21	"	"	FSD280000-282B	9	"	"	"	"
22	"	"	" -282C	11	"	"	"	"
23	4/29	5117236	FSD260235-001	26	180	Th	KK	RR
24	"	"	" -001x	27	"	"	"	"
25	"	"	FSD270000-236B	29	"	"	"	"
26	"	"	" 236C	34	"	"	"	"
27	4/29	5113065	FSD220172-001	12	240	U	KK	
28			-001x	13	"	"	"	
29			FSD220173-001	15	"	"	"	

Reviewed By: RR Date: 5/2/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	4/29/05	S113065	FSD220173 -002	16	240	U	[illegible]	
2			-003	17				
3			-004	18				
4			FSD230000-0656	19				
5			-065C	20				
6	4/29/05	S113049	FSD220187 -001	21	240	Th	[illegible]	[illegible]
7			-001x	22				
8			-002	23				
9			-003	24				
10			-004	45				
11			-005	46				
12			-006	47				
13			-007	48				
14			-008	49				
15			-009	50				
16			-010	51				
17			-011	52				
18			-012	53				
19			-013	54				
20			-014	55				
21			-015	56				
22			-016	57				
23			-017	58				
24			-018	59				
25			-019	60				
26			-020	61				
27			FSD 230000 -049B	62				
28			-049C	63				
29	4/29	S113064	FSD220172-001	64	240	Th	[illegible]	

Reviewed By: RR Date: 5/2/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	4/24	5115452	FSD190191-002	25	180	Th		
2			+ -002x	35				
3			FSD250000-452B	37				
4	—	—	+ 452C	38				
5	4/29	5115454	FSD190191-002	39	180	U		RR
6			+ -002x	40				
7			FSD250000-454B	41				
8			+ 454C	42				
9	4-30-5	Daily Pulser ✓		1-79	1 min	QA	QA	
10		5117236	FSD270000-236B	25	180	Th	RAW	
11		5113064	FSD220172-01x	45	240			RR
12			FSD220173-01	47				
13			02	48				
14			03	54				
15			04	55				
16			FSD230000-64B	57				
17			+ 64C	58				
18	4/30	5117193	FSD250160-01	1	400	Pu	RAW	
19			01x	2				
20			02	3				
21			03	4				
22			04	66				
23			05	7				
24			06	8				
25			07	9				
26			08	11				
27			09	12				
28			10	13				
29			11	15				

Reviewed By: RAW Date: 4/30/5

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Los Alamos - 240 (watch activity) ff.

SEVERN TRENT **STL**

Radiochemistry Prep Report

Alpha Spectroscopy

Batch # 5115432

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

General Prep Information

Method	Tracer ID	Aliquot	Isotope	Reference Date	Activity	Units	Analyst
PLUTONIUM (LONG CT) DOE A-01-R MOD							
	Rad04-0062	0.1	Pu-242	8/1/1999	8.45E+01	dpm/mL	400586

Weights

Lot ID	Work Order #	Geometry	Aliquot	Dilution	Adj Aliquot	
F5D220356-001	G81591AC	Planchette, 44mm	2.3495	1	2.3495 g	8
F5D220356-002	G816E1AC	Planchette, 44mm	2.0493	1	2.0493 g	9
F5D220356-003	G816L1AC	Planchette, 44mm	2.2578	1	2.2578 g	11
		RC=97 (400min)				
F5D220356-004	G816P1AC	Planchette, 44mm	2.2737	1	2.2737 g	+t 12
F5D220356-004S	G816P1AH	Planchette, 44mm	2.2541	1	2.2541 g	+2 13
F5D220356-004X	G816P1AJ	Planchette, 44mm	2.044	1	2.044 g	13 15
F5D220356-005	G816T1AC	Planchette, 44mm	2.2049	1	2.2049 g	15 16
F5D250000-432B	G85JR1AA	Planchette, 44mm	2	1	2 g	16 17
F5D250000-432C	G85JR1AC	Planchette, 44mm	0.2429	1	0.2429 g	17 18

KH 4/20

Spike Information

Lot ID	Work Order #	Standard ID	Aliquot	Isotope	Reference Date	Activity	Units
F5D220356-004S	G816P1AH	RAD03-0069	0.1	Pu-239/40	9/11/2003	6.40E-01	pCi/g
F5D220356-004S	G816P1AH	RAD03-0069	0.1	Pu-238	9/11/2003	6.61E-01	pCi/g
F5D250000-432C	G85JR1AC	PEM-1 Iso-Pu	0.2429	Pu-239/40	4/12/2002	4.10E+01	pCi/g
F5D250000-432C	G85JR1AC	PEM-1 Iso-Pu	0.2429	Pu-238	4/12/2002	8.02E+00	pCi/g

Standard Operating Procedures

	SOP Number	Rev	Title
☐	STL-RC-0002	3	Planchet Preparation For Radiochemistry And Radiological Screening Analysis
☑	STL-RC-0003	5	Drying And Grinding Of Soil And Solid Samples
☑	STL-RC-0004	7	Preparation Of Soil, Sludge, And Filter Paper Samples For Radiochemical Analysis
☐	STL-RC-0090	4	Preparation Of Samples For Sequential Determination Of Isotopic Americium, Currium, Neptunium, Plutonium, Thorium, And Uranium In Aqueous Samples
☑	STL-RC-0100	7	Actinide Coprecipitation
☐	STL-RC-0232	4	Isotopic Thorium And/oR Neptunium in Water, Soil, Sludge, and Filters by Eichrom TEVA Separation Resins
☐	STL-RC-0238	3	Isotopic Uranium By Eichrom UTEVA Resin for Water, Soil, Sludge and Filters
☑	STL-RC-0240	3	Isotopic Americium, Curium, Plutonium, Thorium, and Uranium in Water, Soil, Sludge and Filters by Eichrome Separation Resin

MFM	4-28-05	MFM	KH	04-25-05	
Coprecipitated By	Precip Date	Spiked By	Spike Verified By	Spike Date	
James R. Wilson	4-28-05	LRR		4-29-05	
Analyst's Signature	Date		Reviewed By	Date	

SEVERN TRENT **STL**

Radiochemistry Prep Report

Alpha Spectroscopy

Batch # 5115432

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

☐ STL-RC-0241	1	Isotopic Americium, Plutonium, Curium, and Uranium in Water, Soil, Sludge and Filters by Eichrome Uteva and Tru Resins
☐ STL-RC-0242	3	Isotopic Thorium, Plutonium and Uranium in Water, Soil, Sludge and Filters by Eichrome Separation Resin

(Check all that apply)

Coprecipitated By	Precip Date	Spiked By	Spike Verified By	Spike Date
4-28-05			KH	04-25-05
Analyst's Signature	Date		Reviewed By	Date
Jamie M. Walker	4-28-05	UPR		4-29-05

SEVERN TRENT SERVICES

St. Louis Laboratory
13715 Rider Trail North
Earth City, MO 63045-1205

Alpha Spectroscopy Quality Assurance Worksheet

Batch: 5115432

F5D250000-432C Recovery Summary			
Isotope	Certified Activity	Observed Activity	% Recovery
Pu-238	8.02E+00	6.91E+00	86%
Pu-239	4.10E+01	3.82E+01	93%

F5D220356-004 Duplicate Summary			
Isotope	Sample Activity	Duplicate Activity	RER
Pu-238	<MDA	<MDA	N/A
Pu-239	1.43E-01	1.73E-01	0.53

F5D220356-004 Spike Summary				
Isotope	Spike Activity	Sample Activity	Spike Added	% Recovery
Pu-238	6.08E-01	2.40E-03	6.61E-01	92%
Pu-239	7.62E-01	1.43E-01	6.40E-01	97%

Comments: _____

Calculated By: RR DATE: 5/3/2005

Reviewed By: DLL DATE: 5/4/05

STL

Alpha Spectroscopy Uranium

ALPHA SPECTROSCOPY

Data Reports
Results Reports
Channel by Channel Report

Calibration Data

Instrument Checks

Batch Summary Sheets
Run Logs
Yield Summary(ies)
Batch Yield Plot(s)

Raw Data
Prep Data Sheet(s)
QC Acceptance Sheet(s)
LCS Standard Sheet(s)
Tracer Standard Sheets

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:22:43AM 5/4/2005

Analyst: 60040

Sample

Sample Name: F5D220356-001
SampleType: Sample
WRKNO: G81591AD
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #2 Analysis #1
Sample Weight : 2.3495g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115433
:
Description:

Client Name: Undefined
Client Contact:

Tracer

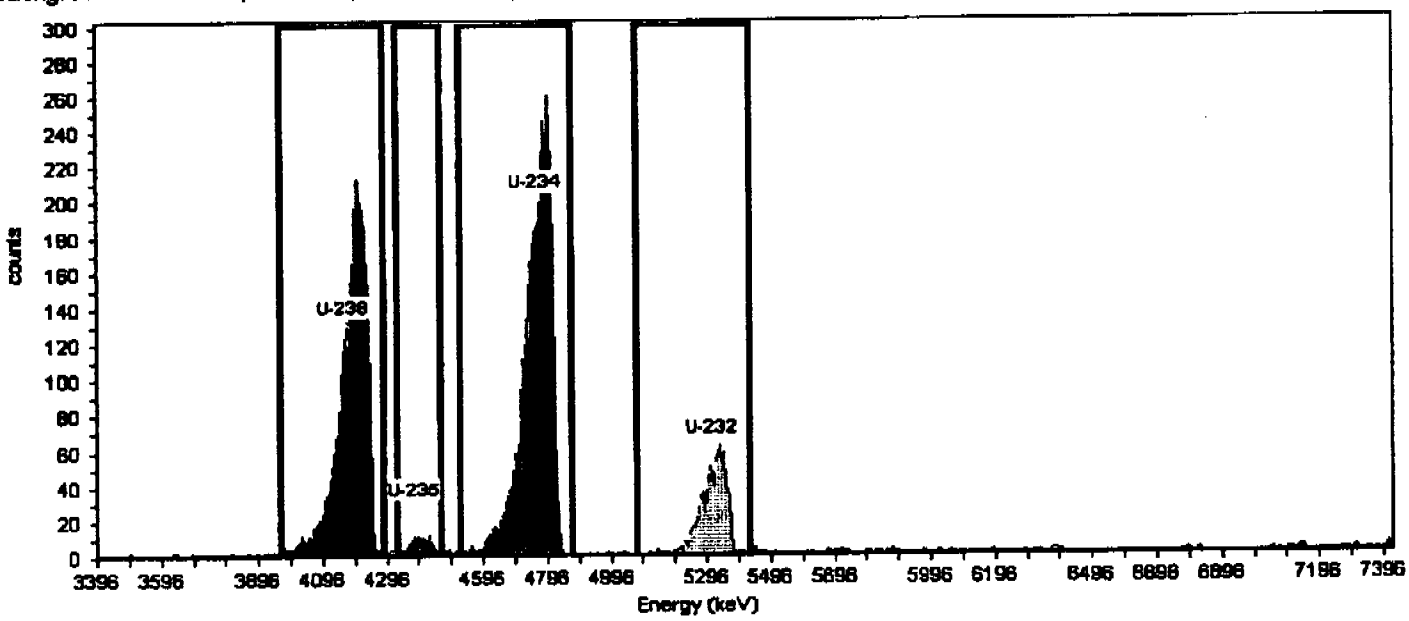
Tracer Name: U232_RAD04-0051
Tracer Activity: 110.00 DPM/mL x (Vol.)0.10 mL = 11.00 DPM
Tracer Ref. Date: 9/16/1997 12:00:08PM

Tracer Nuclide: U-232
Tracer Recovery: 60.38%

Acquisition

Detector: AV45
Serial Number: AV45
Acquisition Start Date: 5/3/2005 8:51:36AM
Live Time: 400.00 min.
Real Time: 400.00 min.
Background Date: 4/26/2005 12:34:24PM
Background Info: Sample: AV45; Det: AV45; Spectrum #1; Apr-26-2005 12:34

Calibration Name: April2005_AV45
Calibration Date: 4/29/2005 9:26:13PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.85% +/- 0.30% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 5/2/2005 4:24:47PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
U-238	4158.500	3962.485	4281.917	80.193	100.0	2,504.00	0.0000	2,504	7.138E+000	3.123E-001	0.000E+000	7.714E-003
U-235	4376.294	4325.475	4463.412	74.476	75.6	96.00	0.5000	96	3.601E-001	3.960E-002	5.372E-003	2.095E-002
U-234	4761.063	4521.490	4869.960	90.886	99.8	3,147.00	1.0000	3,146	8.986E+000	3.847E-001	5.755E-003	1.924E-002
U-232	5312.808	5073.234	5428.964	87.096	100.1	689.00	1.0000	688	1.273E+000	4.909E-002	6.176E-003	2.065E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
4:38:06AM 4/29/2005

Analyst: 60040

Sample

Sample Name: F5D220356-002
SampleType: Sample
WRKNO: G816E1AD
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.0493g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115433
:
Description:

Client Name: Undefined
Client Contact:

Tracer

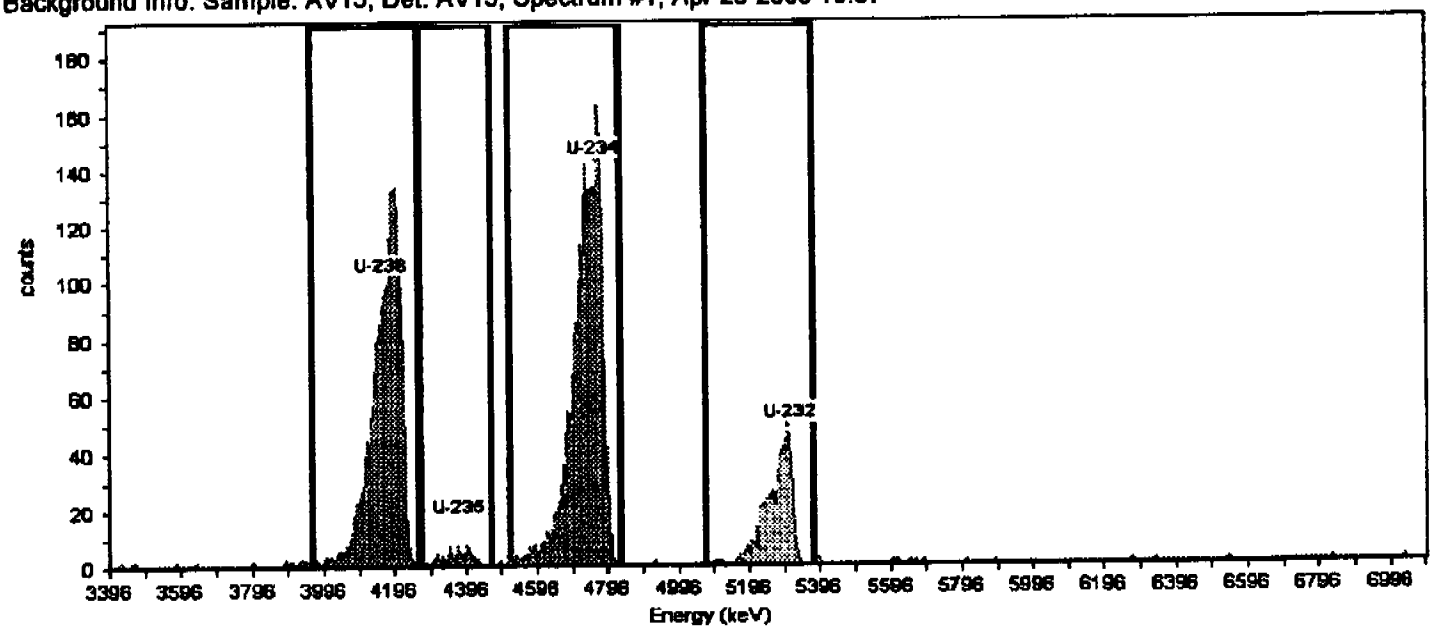
Tracer Name: U232_RAD04-0051
Tracer Activity: 110.00 DPM/mL x (Vol.)0.10 mL = 11.00 DPM
Tracer Ref. Date: 9/16/1997 12:00:08PM

Tracer Nuclide: U-232
Tracer Recovery: 70.98%

Acquisition

Detector: AV15
Serial Number: 41-172C5
Acquisition Start Date: 4/28/2005 11:58:28PM
Live Time: 240.00 min.
Real Time: 240.01 min.
Background Date: 4/26/2005 10:37:57AM
Background Info: Sample: AV15; Det: AV15; Spectrum #1; Apr-26-2005 10:37

Calibration Name: March2005_AV15
Calibration Date: 3/16/2005 1:21:55PM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.84% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 4/28/2005 11:54:30PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
U-238	4158.500	3962.485	4260.137	88.898	100.0	1,489.00	0.0000	1,489	7.158E+000	3.841E-001	0.000E+000	1.301E-002
U-235	4376.294	4267.397	4463.412	43.217	80.2	60.00	0.0000	60	3.596E-001	4.977E-002	0.000E+000	1.622E-002
U-234	4761.063	4521.490	4833.661	85.673	99.8	1,887.00	0.6000	1,886	9.086E+000	4.754E-001	6.998E-003	2.703E-002
U-232	5312.808	5073.234	5378.146	80.501	100.1	469.00	1.2000	468	1.716E+000	8.009E-002	1.062E-002	3.523E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
4:38:10AM 4/29/2005

Analyst: 60040

Sample

Sample Name: F5D220356-003
SampleType: Sample
WRKNO: G816L1AD
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.2578g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115433
:
Description:

Client Name: Undefined
Client Contact:

Tracer

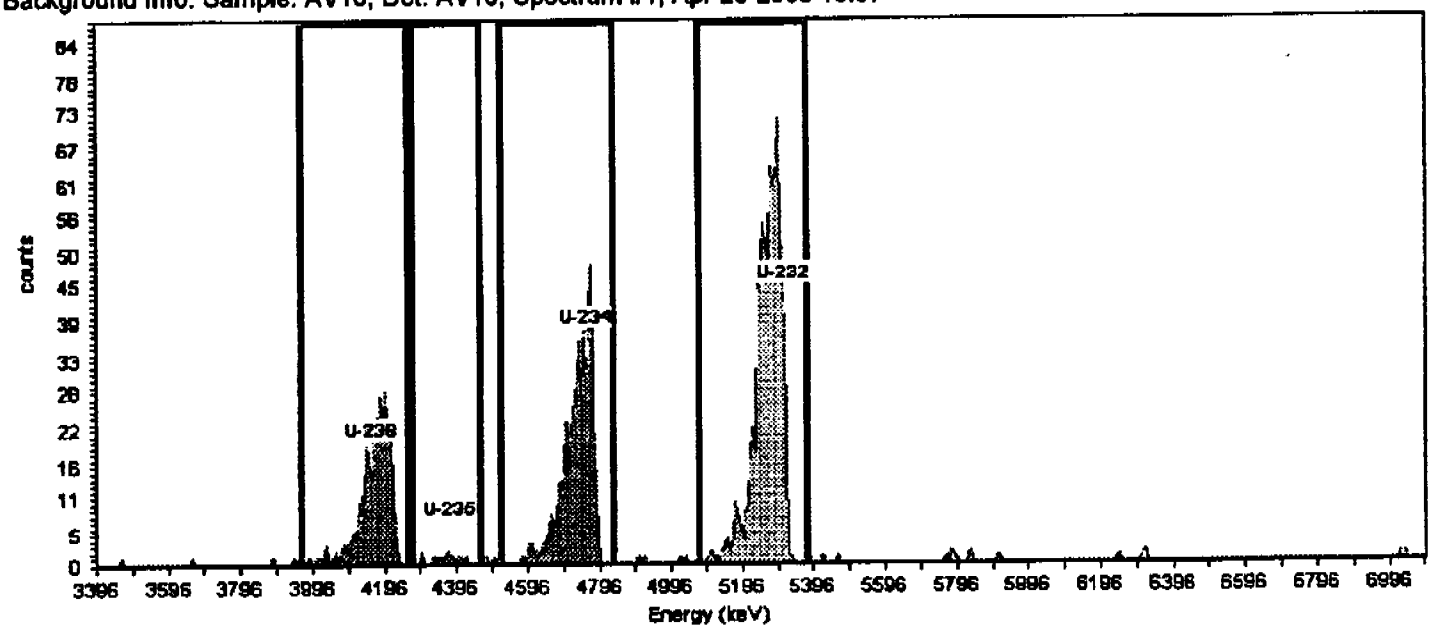
Tracer Name: U232_RAD04-0051
Tracer Activity: 110.00 DPM/mL x (Vol.)0.10 mL = 11.00 DPM
Tracer Ref. Date: 9/16/1997 12:00:08PM

Tracer Nuclide: U-232
Tracer Recovery: 104.28%

Acquisition

Detector: AV16
Serial Number: 41-172Q7
Acquisition Start Date: 4/28/2005 11:56:29PM
Live Time: 240.00 min.
Real Time: 240.01 min.
Background Date: 4/26/2005 10:37:58AM
Background Info: Sample: AV16; Det: AV16; Spectrum #1; Apr-26-2005 10:37

Calibration Name: March2005_AV16
Calibration Date: 3/16/2005 1:22:01PM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 28.82% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 4/28/2005 11:54:30PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
U-238	4158.500	3962.485	4260.137	73.577	100.0	292.00	0.3000	292	8.070E-001	5.616E-002	2.842E-003	1.317E-002
U-235	4376.294	4267.397	4463.412	90.538	80.2	13.00	0.0000	13	4.484E-002	1.302E-002	0.000E+000	9.334E-003
U-234	4761.063	4521.490	4833.661	76.295	99.8	431.00	0.3000	431	1.194E+000	7.295E-002	2.848E-003	1.320E-002
U-232	5312.808	5073.234	5378.146	79.238	100.1	739.00	1.2000	738	2.289E+000	8.514E-002	6.111E-003	2.027E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 4:38:13AM 4/29/2005

Sample

Sample Name: F5D220356-004
SampleType: Sample
WRKNO: G816P1AD
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.2737g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115433
:
Description:

Client Name: Undefined
Client Contact:

Tracer

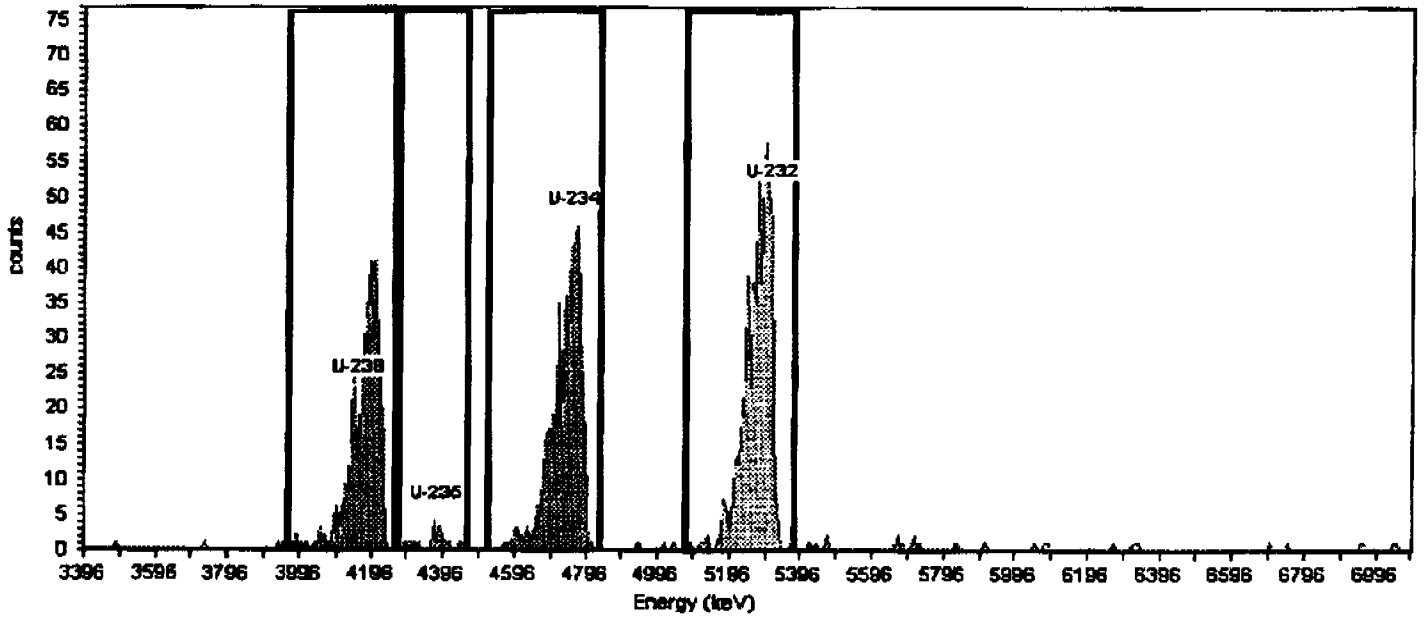
Tracer Name: U232_RAD04-0051
Tracer Activity: 110.00 DPM/mL x (Vol.)0.10 mL = 11.00 DPM
Tracer Ref. Date: 9/16/1997 12:00:08PM

Tracer Nuclide: U-232
Tracer Recovery: 87.86%

Acquisition

Detector: AV17
Serial Number: 41-172Q4
Acquisition Start Date: 4/28/2005 11:56:31PM
Live Time: 240.00 min.
Real Time: 240.01 min.
Background Date: 4/26/2005 10:38:00AM
Background Info: Sample: AV17; Det: AV17; Spectrum #1; Apr-26-2005 10:38

Calibration Name: Mar2005_AV17
Calibration Date: 3/16/2005 5:28:41PM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 26.69% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 4/28/2005 11:54:30PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
U-238	4158.500	3962.485	4260.137	75.918	100.0	386.00	0.3000	386	1.358E+000	8.991E-002	3.617E-003	1.676E-002
U-235	4376.294	4267.397	4463.412	34.467	80.2	19.00	0.6000	18	8.077E-002	1.973E-002	6.378E-003	2.463E-002
U-234	4761.063	4521.490	4833.661	79.775	99.8	484.00	0.6000	483	1.705E+000	1.060E-001	5.125E-003	1.980E-002
U-232	5312.608	5073.234	5378.146	75.113	100.1	576.00	0.3000	576	1.915E+000	8.040E-002	3.889E-003	1.802E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 4:38:17AM 4/29/2005

Sample

Sample Name: F5D220356-004S
SampleType: Sample
WRKNO: G816P1AK
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.2541g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115433
:
Description:

Client Name: Undefined
Client Contact:

Tracer

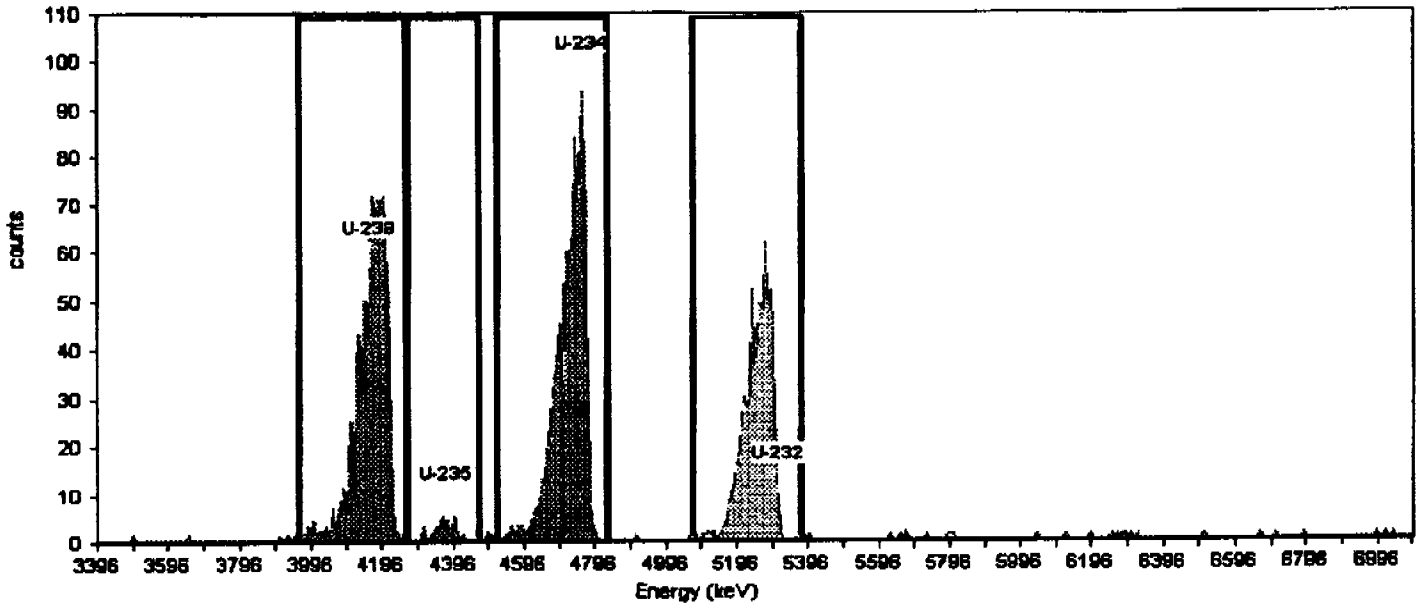
Tracer Name: U232_RAD04-0051
Tracer Activity: 110.00 DPM/mL x (Vol.)0.10 mL = 11.00 DPM
Tracer Ref. Date: 9/16/1997 12:00:08PM

Tracer Nuclide: U-232
Tracer Recovery: 104.25%

Acquisition

Detector: AV18
Serial Number: 41-172C6
Acquisition Start Date: 4/28/2005 11:56:33PM
Live Time: 240.00 min.
Real Time: 240.01 min.
Background Date: 4/26/2005 10:38:01AM
Background Info: Sample: AV18; Det: AV18; Spectrum #1; Apr-26-2005 10:38

Calibration Name: Mar2005_AV18
Calibration Date: 3/16/2005 5:28:55PM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 25.79% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 4/28/2005 11:54:30PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
U-238	4158.500	3962.485	4260.137	78.719	100.0	873.00	0.6000	872	2.702E+000	1.410E-001	4.500E-003	1.738E-002
U-235	4376.294	4267.397	4463.412	30.866	80.2	34.00	0.3000	34	1.301E-001	2.320E-002	3.967E-003	1.838E-002
U-234	4761.063	4521.490	4833.661	80.792	99.8	975.00	0.0000	975	3.026E+000	1.544E-001	0.000E+000	8.398E-003
U-232	5312.808	5073.234	5378.146	88.372	100.1	661.00	0.9000	660	2.292E+000	9.015E-002	5.925E-003	2.086E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 4:38:20AM 4/29/2005

Sample

Sample Name: F5D220356-004X
SampleType: Sample
WRKNO: G816P1AL
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.0440g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115433
:
Description:

Client Name: Undefined
Client Contact:

Tracer

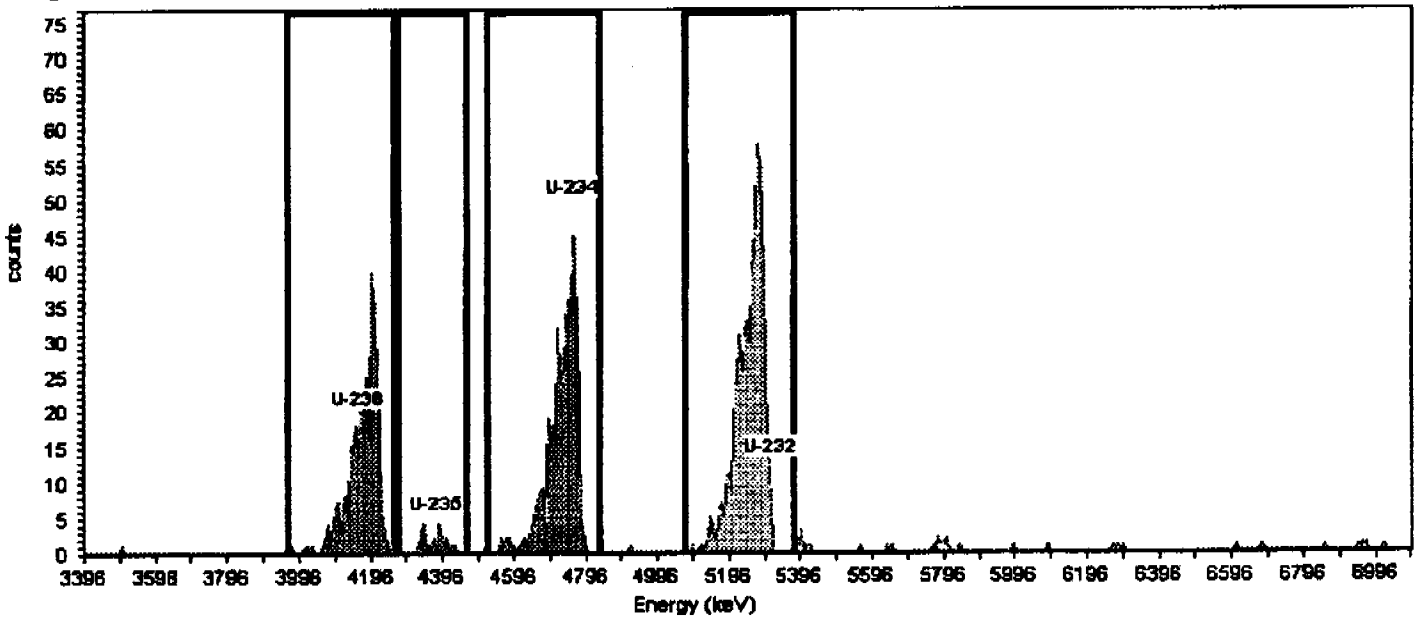
Tracer Name: U232_RAD04-0051
Tracer Activity: 110.00 DPM/mL x (Vol.)0.10 mL = 11.00 DPM
Tracer Ref. Date: 9/16/1997 12:00:08PM

Tracer Nuclide: U-232
Tracer Recovery: 77.36%

Acquisition

Detector: AV19
Serial Number: 41-172Q6
Acquisition Start Date: 4/28/2005 11:56:34PM
Live Time: 240.00 min.
Real Time: 240.01 min.
Background Date: 4/26/2005 10:38:03AM
Background Info: Sample: AV19; Det: AV19; Spectrum #1; Apr-26-2005 10:38

Calibration Name: Mar2005_AV19
Calibration Date: 3/16/2005 5:29:03PM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 28.94% +/- 0.30% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 4/28/2005 11:54:30PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
U-238	4158.500	3962.485	4260.137	79.575	100.0	321.00	1.8000	319	1.309E+000	9.302E-002	1.032E-002	3.173E-002
U-235	4376.294	4267.397	4463.412	18.983	80.2	21.00	1.2000	20	1.012E-001	2.449E-002	1.051E-002	3.485E-002
U-234	4761.063	4521.490	4833.661	73.364	99.8	409.00	3.6000	405	1.666E+000	1.104E-001	1.462E-002	4.036E-002
U-232	5312.808	5073.234	5378.146	82.461	100.1	551.00	1.2000	550	1.875E+000	8.076E-002	9.059E-003	3.005E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
5:01:54PM 4/29/2005

Analyst: 60040

Sample

Sample Name: F5D220356-005
SampleType: Sample
WRKNO: G816T1AD
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #3 Analysis #1
Sample Weight : 2.2049g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115433
:
Description:

Client Name: Undefined
Client Contact:

Tracer

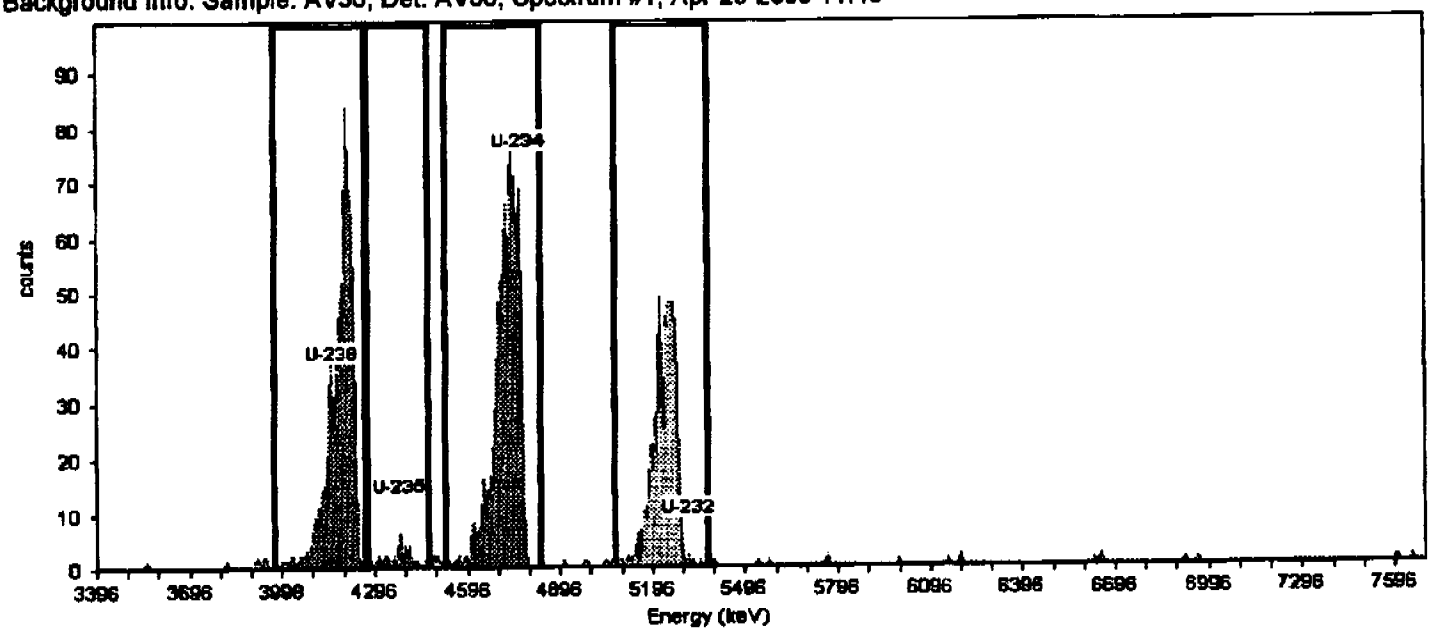
Tracer Name: U232_RAD04-0051
Tracer Activity: 110.00 DPM/mL x (Vol.)0.10 mL = 11.00 DPM
Tracer Ref. Date: 9/16/1997 12:00:08PM

Tracer Nuclide: U-232
Tracer Recovery: 81.70%

Acquisition

Detector: AV56
Serial Number:
Acquisition Start Date: 4/29/2005 1:01:31PM
Live Time: 240.00 min.
Real Time: 240.00 min.
Background Date: 4/25/2005 11:48:57AM
Background Info: Sample: AV56; Det: AV56; Spectrum #1; Apr-25-2005 11:48

Calibration Name: April2005_AV56
Calibration Date: 4/28/2005 11:52:35AM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.48% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 4/28/2005 11:54:30PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
U-238	4158.500	3962.485	4260.137	53.413	100.0	704.00	0.3000	704	2.769E+000	1.608E-001	4.042E-003	1.873E-002
U-235	4376.294	4267.397	4463.412	82.505	80.2	33.00	0.9000	32	1.575E-001	2.940E-002	8.729E-003	3.073E-002
U-234	4761.063	4521.490	4833.661	79.568	99.8	836.00	0.3000	836	3.295E+000	1.849E-001	4.050E-003	1.877E-002
U-232	5312.808	5073.234	5378.146	84.601	100.1	533.00	1.8000	531	1.836E+000	8.051E-002	1.065E-002	3.274E-002

SEVERN TRENT **STL**

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
4:37:56AM 4/29/2005

Analyst: 60040

Sample

Sample Name: F5D250000-433B
SampleType: Blank
WRKNO: G85J61AA
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.0000g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115433
:
Description:

Client Name: Undefined
Client Contact:

Tracer

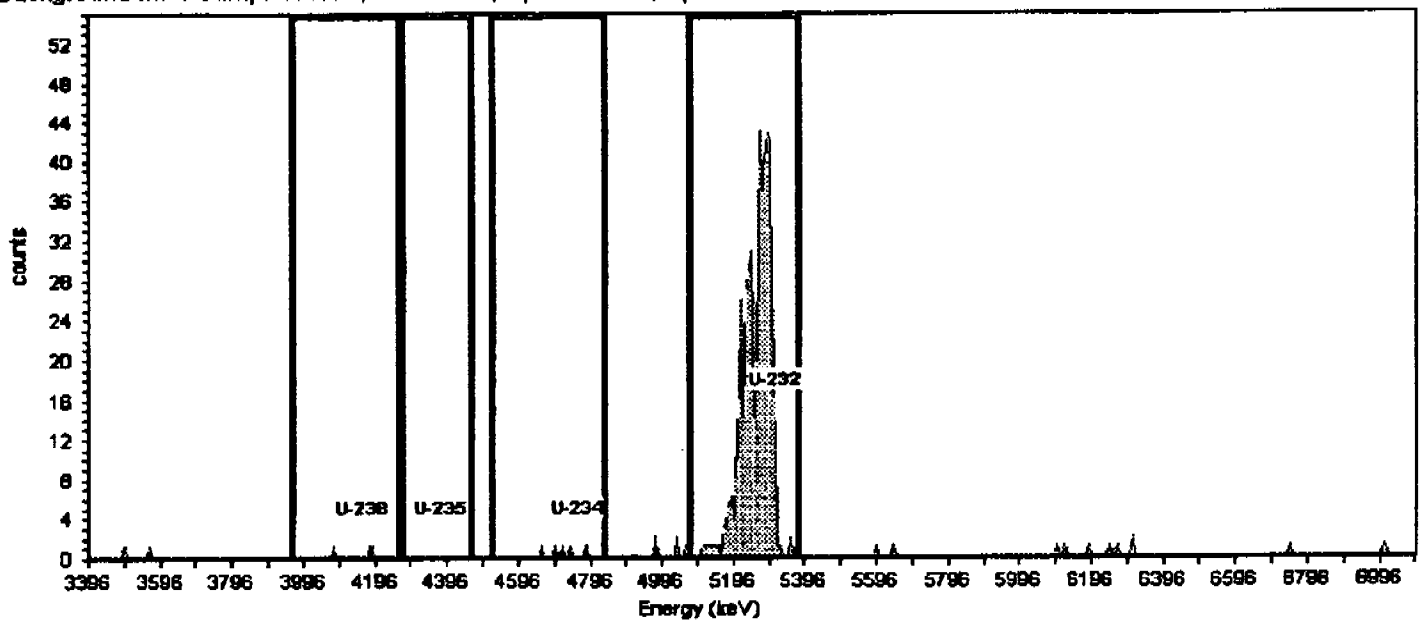
Tracer Name: U232_RAD04-0051
Tracer Activity: 110.00 DPM/mL x (Vol.)0.10 mL = 11.00 DPM
Tracer Ref. Date: 9/16/1997 12:00:08PM

Tracer Nuclide: U-232
Tracer Recovery: 69.06%

Acquisition

Detector: AV21
Serial Number: 41-172C7
Acquisition Start Date: 4/28/2005 11:56:37PM
Live Time: 240.00 min.
Real Time: 240.01 min.
Background Date: 4/26/2005 10:38:07AM
Background Info: Sample: AV21; Det: AV21; Spectrum #1; Apr-26-2005 10:38

Calibration Name: March2005_AV21
Calibration Date: 3/16/2005 12:47:04AM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.06% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 4/28/2005 11:54:30PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
U-238	4158.500	3962.485	4260.137	43.286	100.0	2.00	0.9000	1	5.524E-003	8.556E-003	8.936E-003	3.146E-002
U-235	4376.294	4267.397	4463.412	.000	80.2	0.00	0.3000	0	-1.879E-003	-7.140E-003	6.433E-003	2.981E-002
U-234	4761.063	4521.490	4833.661	77.764	99.8	5.00	0.9000	4	2.063E-002	1.226E-002	8.954E-003	3.153E-002
U-232	5312.808	5073.234	5378.146	89.668	100.1	460.00	1.2000	459	1.711E+000	8.052E-002	1.109E-002	3.680E-002

SEVERN TRENT **STL**

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
4:37:59AM 4/29/2005

Analyst: 60040

Sample

Sample Name: F5D250000-433C
SampleType: Control
WRKNO: G85J61AC
Sample Collection Date: 4/20/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 0.1286g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5115433
:
Description:

Client Name: Undefined
Client Contact:

Tracer

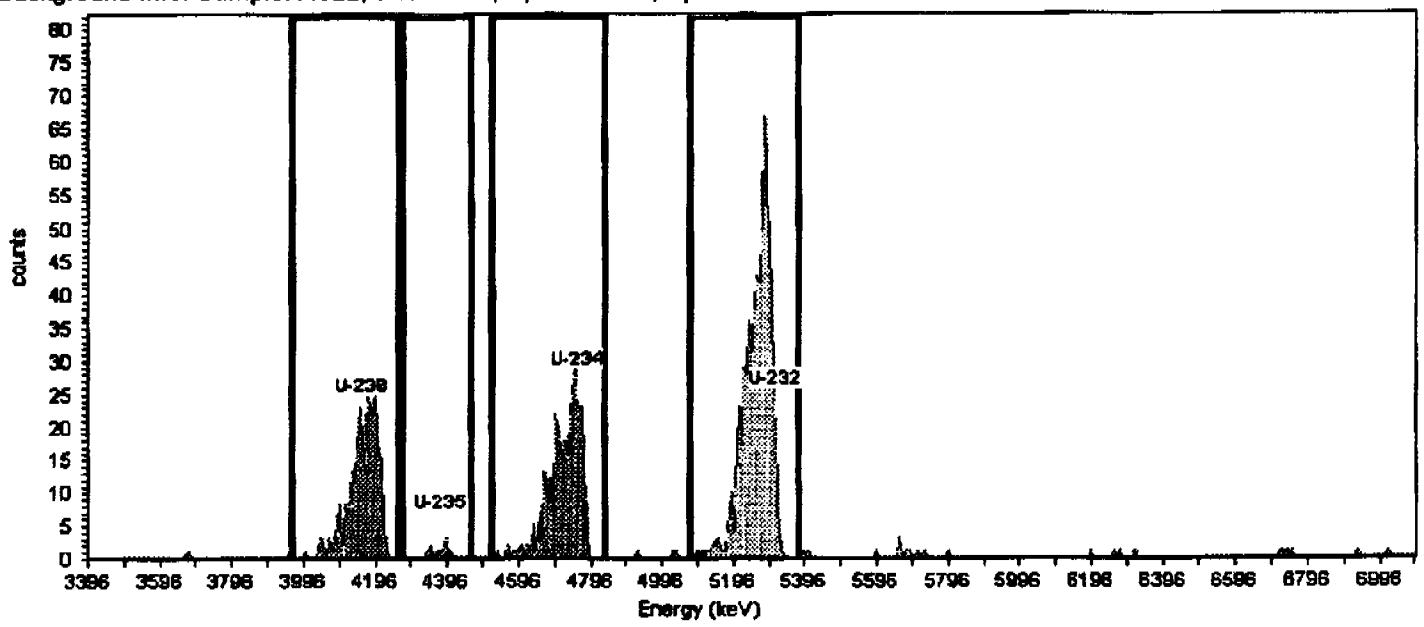
Tracer Name: U232_RAD04-0051
Tracer Activity: 110.00 DPM/mL x (Vol.)0.10 mL = 11.00 DPM
Tracer Ref. Date: 9/16/1997 12:00:08PM

Tracer Nuclide: U-232
Tracer Recovery: 97.60%

Acquisition

Detector: AV22
Serial Number: 41-172Q5
Acquisition Start Date: 4/28/2005 11:56:39PM
Live Time: 240.00 min.
Real Time: 240.01 min.
Background Date: 4/26/2005 10:38:09AM
Background Info: Sample: AV22; Det: AV22; Spectrum #1; Apr-26-2005 10:38

Calibration Name: March2005_AV22
Calibration Date: 3/16/2005 12:47:13AM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 25.61% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 4/28/2005 11:54:30PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
U-238	4158.500	3962.485	4260.137	82.162	100.0	280.00	0.3000	280	1.633E+001	1.186E+000	5.999E-002	2.780E-001
U-235	4376.294	4267.397	4463.412	62.517	80.2	10.00	0.6000	9	6.844E-001	2.387E-001	1.058E-001	4.086E-001
U-234	4761.063	4521.490	4833.661	97.298	99.8	325.00	0.6000	324	1.898E+001	1.313E+000	8.500E-002	3.283E-001
U-232	5312.808	5073.234	5378.146	81.532	100.1	614.00	0.3000	614	3.761E+001	1.532E+000	6.450E-002	2.989E-001

STL St. Louis

Isotopic Actinide DLC calculation when decay and ingrowth calculations are not required.

Sample ID	Isotope	Total Bkgd Cts	L/g Sample Volume	decimal det. eff.	minutes ct. length	decimal yield	decimal abundance	DLC
F5D220356-001	U234	1	2.3495	0.2785	400	0.6038	0.998	0.0066
F5D220356-001	U235	0.5	2.3495	0.2785	400	0.6038	0.809	0.0058
F5D220356-001	U238	0	2.3495	0.2785	400	0.6038	1	0.0000
F5D220356-002	U234	0.6	2.0493	0.2684	240	0.7098	0.998	0.0087
F5D220356-002	U235	0	2.0493	0.2684	240	0.7098	0.809	0.0000
F5D220356-002	U238	0	2.0493	0.2684	240	0.7098	1	0.0000
F5D220356-003	U234	0.3	2.2578	0.2882	240	1.0428	0.998	0.0035
F5D220356-003	U235	0	2.2578	0.2882	240	1.0428	0.809	0.0000
F5D220356-003	U238	0.3	2.2578	0.2882	240	1.0428	1	0.0035
F5D220356-004	U234	0.6	2.2737	0.2669	240	0.8786	0.998	0.0064
F5D220356-004	U235	0.6	2.2737	0.2669	240	0.8786	0.809	0.0078
F5D220356-004	U238	0.3	2.2737	0.2669	240	0.8786	1	0.0045
F5D220356-004S	U234	0	2.2541	0.2579	240	1.0425	0.998	0.0000
F5D220356-004S	U235	0.3	2.2541	0.2579	240	1.0425	0.809	0.0049
F5D220356-004S	U238	0.6	2.2541	0.2579	240	1.0425	1	0.0056
F5D220356-004X	U234	3.6	2.044	0.2894	240	0.7736	0.998	0.0181
F5D220356-004X	U235	1.2	2.044	0.2894	240	0.7736	0.809	0.0129
F5D220356-004X	U238	1.8	2.044	0.2894	240	0.7736	1	0.0128
F5D220356-005	U234	0.3	2.2049	0.2684	240	0.817	0.998	0.0050
F5D220356-005	U235	0.9	2.2049	0.2684	240	0.817	0.809	0.0106
F5D220356-005	U238	0.3	2.2049	0.2684	240	0.817	1	0.0049
F5D250000-433B	U234	0.9	2	0.2706	240	0.6906	0.998	0.0111
F5D250000-433B	U235	0.3	2	0.2706	240	0.6906	0.809	0.0079
F5D250000-433B	U238	0.9	2	0.2706	240	0.6906	1	0.0111
F5D250000-433C	U234	0.6	0.1286	0.2561	240	0.976	0.998	0.1054
F5D250000-433C	U238	0.3	0.1286	0.2561	240	0.976	1	0.0744

Calculated by: RE Date: 5/4/05

Reviewed by: [signature] Date: 5/4/05

SEVERN TRENT STL

DAILY PULSERS

Daily Pulser Check - Severn Trent Lab

Pulser Date: 5/3/2005

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria	P/F	FWHM (keV) Result	FWHM (keV) Criteria	P/F	Pulser Center Result	Pulser Center Criteria	P/F	Energy (keV) Result	Energy (keV) Criteria	P/F
AV1	05/03/2005 7:14	7420	7218.7 +/-5%	Pass	13.8	5 - 50	Pass	226.0	229.0 +/-5%	Pass	5029	5051.1 +/-25%	Pass
AV2	05/03/2005 7:14	7384	7468.7 +/-5%	Pass	14.1	5 - 50	Pass	227.0	222.9 +/-5%	Pass	5037	5007.5 +/-25%	Pass
AV3	05/03/2005 7:14	6947	7484.9 +/-5%	FAIL	13.0	5 - 50	Pass	227.9	225.9 +/-5%	Pass	5044	5028.8 +/-25%	Pass
AV3	05/03/2005 7:48	6860	7484.9 +/-5%	FAIL	13.1	5 - 50	Pass	229.1	225.9 +/-5%	Pass	5052	5028.8 +/-25%	Pass
AV4	05/03/2005 7:13	7384	7413.7 +/-5%	Pass	14.3	5 - 50	Pass	226.1	224.9 +/-5%	Pass	5030	5021.6 +/-25%	Pass
AV6	05/03/2005 7:13	7392	7476.7 +/-5%	Pass	13.7	5 - 50	Pass	228.1	224.0 +/-5%	Pass	5045	5015.3 +/-25%	Pass
AV7	05/03/2005 8:10	7268	7477.0 +/-5%	Pass	15.6	5 - 50	Pass	226.9	224.9 +/-5%	Pass	5036	5021.9 +/-25%	Pass
AV7	05/03/2005 7:13	7354	7477.0 +/-5%	Pass	4389.5	5 - 50	FAIL	46.9	224.9 +/-5%	FAIL	3729	5021.9 +/-25%	FAIL
AV8	05/03/2005 7:13	7377	7327.4 +/-5%	Pass	13.1	5 - 50	Pass	228.0	228.0 +/-5%	Pass	5044	5044.6 +/-25%	Pass
AV8	05/03/2005 7:48	7316	7327.4 +/-5%	Pass	13.5	5 - 50	Pass	228.0	228.0 +/-5%	Pass	5044	5044.6 +/-25%	Pass
AV9	05/03/2005 7:13	7676	7519.3 +/-5%	Pass	15.8	5 - 50	Pass	221.1	227.9 +/-5%	Pass	4994	5043.3 +/-25%	Pass
AV10	05/03/2005 7:13	7711	7749.6 +/-5%	Pass	15.2	5 - 50	Pass	219.0	226.1 +/-5%	Pass	4979	5030.3 +/-25%	Pass
AV11	05/03/2005 7:13	7731	7666.2 +/-5%	Pass	13.6	5 - 50	Pass	221.9	225.0 +/-5%	Pass	5000	5022.1 +/-25%	Pass
AV12	05/03/2005 7:13	7699	7588.7 +/-5%	Pass	14.9	5 - 50	Pass	229.1	230.0 +/-5%	Pass	5052	5058.4 +/-25%	Pass
AV13	05/03/2005 7:13	7710	7584.6 +/-5%	Pass	23.8	5 - 50	Pass	227.0	228.0 +/-5%	Pass	5037	5044.1 +/-25%	Pass
AV15	05/03/2005 7:13	7706	7770.5 +/-5%	Pass	14.1	5 - 50	Pass	227.0	226.9 +/-5%	Pass	5037	5036.6 +/-25%	Pass
AV16	05/03/2005 7:13	7485	7456.0 +/-5%	Pass	12.6	5 - 50	Pass	225.0	226.9 +/-5%	Pass	5022	5036.2 +/-25%	Pass
AV17	05/03/2005 7:13	7728	7619.1 +/-5%	Pass	14.1	5 - 50	Pass	225.9	229.9 +/-5%	Pass	5029	5058.3 +/-25%	Pass
AV18	05/03/2005 7:13	7718	7714.5 +/-5%	Pass	14.3	5 - 50	Pass	228.1	226.9 +/-5%	Pass	5045	5036.4 +/-25%	Pass
AV19	05/03/2005 7:13	7475	7269.8 +/-5%	Pass	12.5	5 - 50	Pass	222.0	227.7 +/-5%	Pass	5000	5041.9 +/-25%	Pass
AV20	05/03/2005 7:14	7725	7503.6 +/-5%	Pass	13.2	5 - 50	Pass	227.0	226.0 +/-5%	Pass	5037	5029.9 +/-25%	Pass
AV21	05/03/2005 7:14	7719	7550.9 +/-5%	Pass	13.4	5 - 50	Pass	225.0	226.0 +/-5%	Pass	5022	5029.6 +/-25%	Pass
AV22	05/03/2005 7:14	7704	7691.4 +/-5%	Pass	14.6	5 - 50	Pass	224.1	225.0 +/-5%	Pass	5016	5022.4 +/-25%	Pass
AV23	05/03/2005 7:14	7710	7665.3 +/-5%	Pass	15.0	5 - 50	Pass	229.9	229.8 +/-5%	Pass	5058	5057.0 +/-25%	Pass
AV24	05/03/2005 7:14	7714	7354.0 +/-5%	Pass	13.4	5 - 50	Pass	228.9	226.9 +/-5%	Pass	5051	5036.4 +/-25%	Pass
AV25	05/03/2005 7:14	5103	5122.1 +/-5%	Pass	14.0	5 - 50	Pass	225.2	224.0 +/-5%	Pass	5024	5015.1 +/-25%	Pass
AV26	05/03/2005 7:14	5048	5069.9 +/-5%	Pass	21.1	5 - 50	Pass	224.2	226.9 +/-5%	Pass	5016	5036.5 +/-25%	Pass
AV27	05/03/2005 7:14	5021	4919.2 +/-5%	Pass	14.9	5 - 50	Pass	221.8	225.0 +/-5%	Pass	4999	5022.5 +/-25%	Pass
AV29	05/03/2005 7:14	5073	5005.4 +/-5%	Pass	22.0	5 - 50	Pass	225.0	223.8 +/-5%	Pass	5022	5014.0 +/-25%	Pass
AV29	05/03/2005 7:14	5073	5047.7 +/-5%	Pass	22.0	5 - 50	Pass	225.0	223.3 +/-5%	Pass	5022	5010.1 +/-25%	Pass
AV33	05/03/2005 7:14	5026	4977.0 +/-5%	Pass	11.3	5 - 50	Pass	209.0	218.0 +/-5%	Pass	4906	4971.5 +/-25%	Pass
AV34	05/03/2005 7:14	5218	5045.5 +/-5%	Pass	17.4	5 - 50	Pass	224.0	219.0 +/-5%	Pass	5015	4978.8 +/-25%	Pass

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria	P/F	FWHM (keV) Result	FWHM (keV) Criteria	P/F	Pulser Center Result	Pulser Center Criteria	P/F	Energy (keV) Result	Energy (keV) Criteria	P/F
AV35	05/03/2005 7:14	4926	4932.6 +/-5%	Pass	12.7	5 - 50	Pass	274.9	275.0 +/-5%	Pass	5385	5385.6 +/-25%	Pass
AV37	05/03/2005 7:14	5044	5082.9 +/-5%	Pass	20.2	5 - 50	Pass	236.0	236.1 +/-5%	Pass	5102	5103.2 +/-25%	Pass
AV38	05/03/2005 7:14	5328	5419.4 +/-5%	Pass	16.5	5 - 50	Pass	219.0	217.9 +/-5%	Pass	4979	4448.6 +/-25%	Pass
AV39	05/03/2005 7:14	5305	5316.2 +/-5%	Pass	14.7	5 - 50	Pass	228.0	224.2 +/-5%	Pass	5044	5016.3 +/-25%	Pass
AV40	05/03/2005 7:14	4797	4755.8 +/-5%	Pass	12.3	5 - 50	Pass	227.0	226.0 +/-5%	Pass	5037	5029.5 +/-25%	Pass
AV41	05/03/2005 7:14	4990	4990.8 +/-5%	Pass	12.0	5 - 50	Pass	229.0	229.0 +/-5%	Pass	5051	5051.6 +/-25%	Pass
AV42	05/03/2005 7:14	4952	4977.0 +/-5%	Pass	12.2	5 - 50	Pass	237.0	228.1 +/-5%	Pass	5109	5044.9 +/-25%	Pass
AV43	05/03/2005 7:14	7661	7162.4 +/-5%	FAIL	13.1	5 - 50	Pass	222.0	224.1 +/-5%	Pass	5001	5015.9 +/-25%	Pass
AV45	05/03/2005 7:14	7614	7593.5 +/-5%	Pass	15.9	5 - 50	Pass	228.2	225.6 +/-5%	Pass	5045	5026.9 +/-25%	Pass
AV46	05/03/2005 7:14	7653	7722.7 +/-5%	Pass	14.0	5 - 50	Pass	224.1	225.8 +/-5%	Pass	5016	5028.0 +/-25%	Pass
AV46	05/03/2005 7:48	7527	7722.7 +/-5%	Pass	14.1	5 - 50	Pass	224.1	225.8 +/-5%	Pass	5016	5028.0 +/-25%	Pass
AV47	05/03/2005 7:14	7648	7532.5 +/-5%	Pass	14.1	5 - 50	Pass	210.1	226.0 +/-5%	FAIL	4914	5029.6 +/-25%	Pass
AV48	05/03/2005 7:14	7636	7717.5 +/-5%	Pass	15.3	5 - 50	Pass	217.0	224.0 +/-5%	Pass	4965	5015.2 +/-25%	Pass
AV49	05/03/2005 7:14	7645	7703.4 +/-5%	Pass	13.9	5 - 50	Pass	232.0	226.0 +/-5%	Pass	5073	5029.5 +/-25%	Pass
AV50	05/03/2005 7:14	7644	7660.9 +/-5%	Pass	14.2	5 - 50	Pass	225.1	227.0 +/-5%	Pass	5023	5037.2 +/-25%	Pass
AV51	05/03/2005 7:14	6980	7070.5 +/-5%	Pass	12.9	5 - 50	Pass	221.1	223.0 +/-5%	Pass	4994	5007.6 +/-25%	Pass
AV52	05/03/2005 7:13	6956	7156.4 +/-5%	Pass	13.1	5 - 50	Pass	225.1	225.0 +/-5%	Pass	5023	5022.4 +/-25%	Pass
AV53	05/03/2005 7:13	7137	7144.1 +/-5%	Pass	12.7	5 - 50	Pass	223.0	223.0 +/-5%	Pass	5008	5007.8 +/-25%	Pass
AV54	05/03/2005 7:13	7338	7313.1 +/-5%	Pass	14.4	5 - 50	Pass	229.1	226.0 +/-5%	Pass	5052	5029.5 +/-25%	Pass
AV55	05/03/2005 7:13	7140	7132.9 +/-5%	Pass	12.9	5 - 50	Pass	227.0	226.0 +/-5%	Pass	5037	5029.7 +/-25%	Pass
AV56	05/03/2005 7:13	6960	7163.7 +/-5%	Pass	13.0	5 - 50	Pass	221.1	222.0 +/-5%	Pass	4994	5000.7 +/-25%	Pass
AV57	05/03/2005 7:13	7332	7309.5 +/-5%	Pass	14.0	5 - 50	Pass	222.0	222.0 +/-5%	Pass	5001	5000.6 +/-25%	Pass
AV58	05/03/2005 7:13	7324	7249.2 +/-5%	Pass	14.6	5 - 50	Pass	222.9	223.0 +/-5%	Pass	5007	5008.0 +/-25%	Pass
AV59	05/03/2005 7:13	7170	7141.4 +/-5%	Pass	11.9	5 - 50	Pass	285.0	284.0 +/-5%	Pass	5458	5450.6 +/-25%	Pass
AV60	05/03/2005 7:13	7050	7019.7 +/-5%	Pass	12.3	5 - 50	Pass	223.0	223.0 +/-5%	Pass	5008	5007.5 +/-25%	Pass
AV61	05/03/2005 7:13	7273	7078.3 +/-5%	Pass	13.1	5 - 50	Pass	224.0	225.0 +/-5%	Pass	5015	5022.2 +/-25%	Pass
AV62	05/03/2005 7:13	7269	7083.5 +/-5%	Pass	13.9	5 - 50	Pass	222.0	222.0 +/-5%	Pass	5001	5000.7 +/-25%	Pass
AV63	05/03/2005 7:13	7255	7120.8 +/-5%	Pass	15.0	5 - 50	Pass	221.9	223.0 +/-5%	Pass	5000	5007.9 +/-25%	Pass
AV64	05/03/2005 7:13	7266	7153.7 +/-5%	Pass	13.3	5 - 50	Pass	223.0	224.0 +/-5%	Pass	5008	5015.3 +/-25%	Pass
AV65	05/03/2005 7:13	7263	7233.4 +/-5%	Pass	13.4	5 - 50	Pass	223.0	224.0 +/-5%	Pass	5008	5015.3 +/-25%	Pass
AV66	05/03/2005 7:14	7122	7165.5 +/-5%	Pass	12.2	5 - 50	Pass	221.0	222.0 +/-5%	Pass	4993	5000.5 +/-25%	Pass
AV67	05/03/2005 7:14	7398	7128.1 +/-5%	Pass	16.4	5 - 50	Pass	221.1	224.1 +/-5%	Pass	4994	5015.6 +/-25%	Pass
AV68	05/03/2005 7:14	7227	7259.5 +/-5%	Pass	12.7	5 - 50	Pass	221.0	222.0 +/-5%	Pass	4993	5000.8 +/-25%	Pass
AV69	05/03/2005 7:14	7270	7305.4 +/-5%	Pass	12.2	5 - 50	Pass	221.0	222.0 +/-5%	Pass	4994	5000.6 +/-25%	Pass
AV70	05/03/2005 7:14	7299	7406.5 +/-5%	Pass	12.8	5 - 50	Pass	221.0	222.6 +/-5%	Pass	4993	5004.7 +/-25%	Pass
AV71	05/03/2005 7:14	7157	7187.3 +/-5%	Pass	12.6	5 - 50	Pass	221.0	225.0 +/-5%	Pass	4993	5022.7 +/-25%	Pass

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria	Gross Counts P/F	FWHM (keV) Result	FWHM (keV) Criteria	FWHM (keV) P/F	Pulser Center Result	Pulser Center Criteria	Pulser Center P/F	Energy (keV) Result	Energy (keV) Criteria	Energy (keV) P/F
AV72	05/03/2005 7:14	7429	7090.0 +/- 5%	Pass	13.6	5 - 50	Pass	219.1	223.9 +/- 5%	Pass	4979	5014.6 +/- 25%	Pass
AV73	05/03/2005 7:14	7203	7251.3 +/- 5%	Pass	12.9	5 - 50	Pass	224.0	225.0 +/- 5%	Pass	5015	5022.4 +/- 25%	Pass
AV74	05/03/2005 7:14	7406	7227.1 +/- 5%	Pass	13.1	5 - 50	Pass	220.0	224.0 +/- 5%	Pass	4986	5015.0 +/- 25%	Pass

SEVERN TRENT STL

DAILY PULSERS

Daily Pulser Check - Severn Trent Lab

Pulser Date: 4/28/2005

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria	Gross Counts P/F	FWHM (keV) Result	FWHM (keV) Criteria	FWHM (keV) P/F	Pulser Center Result	Pulser Center Criteria	Pulser Center P/F	Energy (keV) Result	Energy (keV) Criteria	Energy (keV) P/F
AV1	04/28/2005 8:26	7331	7218.7 +/-5%	Pass	14.5	5 - 50	Pass	227.1	229.0 +/-5%	Pass	5037	5051.1 +/-25%	Pass
AV2	04/28/2005 8:26	7327	7468.7 +/-5%	Pass	14.1	5 - 50	Pass	227.0	222.9 +/-5%	Pass	5037	5007.5 +/-25%	Pass
AV3	04/28/2005 8:25	7166	7484.9 +/-5%	Pass	12.8	5 - 50	Pass	229.0	225.9 +/-5%	Pass	5052	5028.8 +/-25%	Pass
AV4	04/28/2005 7:16	7336	7413.7 +/-5%	Pass	13.4	5 - 50	Pass	224.9	224.9 +/-5%	Pass	5022	5021.6 +/-25%	Pass
AV6	04/28/2005 7:16	7333	7476.7 +/-5%	Pass	13.5	5 - 50	Pass	227.0	224.0 +/-5%	Pass	5037	5015.3 +/-25%	Pass
AV7	04/28/2005 7:16	7275	7477.0 +/-5%	Pass	15.5	5 - 50	Pass	226.9	224.9 +/-5%	Pass	5036	5021.9 +/-25%	Pass
AV8	04/28/2005 7:16	7327	7327.4 +/-5%	Pass	13.5	5 - 50	Pass	228.0	228.0 +/-5%	Pass	5044	5044.6 +/-25%	Pass
AV9	04/28/2005 7:16	7657	7519.3 +/-5%	Pass	16.8	5 - 50	Pass	221.1	227.9 +/-5%	Pass	4994	5043.3 +/-25%	Pass
AV10	04/28/2005 8:25	8571	7749.6 +/-5%	FAIL	4312.7	5 - 50	FAIL	37.4	226.1 +/-5%	FAIL	3660	5030.3 +/-25%	FAIL
AV10 OK	04/28/2005 8:54	7566	7749.6 +/-5%	Pass	16.4	5 - 50	Pass	219.0	226.1 +/-5%	Pass	4979	5030.3 +/-25%	Pass
AV11	04/28/2005 7:16	7692	7666.2 +/-5%	Pass	13.8	5 - 50	Pass	224.0	225.0 +/-5%	Pass	5015	5022.1 +/-25%	Pass
AV12	04/28/2005 7:16	7693	7588.7 +/-5%	Pass	13.7	5 - 50	Pass	227.8	230.0 +/-5%	Pass	5043	5058.4 +/-25%	Pass
AV13	04/28/2005 7:16	7691	7584.6 +/-5%	Pass	18.3	5 - 50	Pass	227.0	228.0 +/-5%	Pass	5037	5044.1 +/-25%	Pass
AV15	04/28/2005 7:16	7700	7770.5 +/-5%	Pass	14.1	5 - 50	Pass	227.0	226.9 +/-5%	Pass	5037	5036.6 +/-25%	Pass
AV16	04/28/2005 7:16	7521	7456.0 +/-5%	Pass	12.8	5 - 50	Pass	225.0	226.9 +/-5%	Pass	5023	5036.2 +/-25%	Pass
AV17	04/28/2005 7:16	7725	7619.1 +/-5%	Pass	13.6	5 - 50	Pass	227.0	229.9 +/-5%	Pass	5037	5058.3 +/-25%	Pass
AV18	04/28/2005 7:16	7732	7714.5 +/-5%	Pass	13.8	5 - 50	Pass	228.0	226.9 +/-5%	Pass	5044	5036.4 +/-25%	Pass
AV19	04/28/2005 7:16	7361	7269.8 +/-5%	Pass	12.8	5 - 50	Pass	219.9	227.7 +/-5%	Pass	4986	5041.9 +/-25%	Pass
AV20	04/28/2005 7:16	7726	7503.6 +/-5%	Pass	13.4	5 - 50	Pass	227.0	226.0 +/-5%	Pass	5037	5029.9 +/-25%	Pass
AV21	04/28/2005 7:16	7724	7550.9 +/-5%	Pass	13.1	5 - 50	Pass	225.0	226.0 +/-5%	Pass	5022	5029.6 +/-25%	Pass
AV22	04/28/2005 7:16	7703	7691.4 +/-5%	Pass	15.9	5 - 50	Pass	222.9	225.0 +/-5%	Pass	5007	5022.4 +/-25%	Pass
AV23	04/28/2005 7:16	7714	7665.3 +/-5%	Pass	14.3	5 - 50	Pass	229.9	229.8 +/-5%	Pass	5058	5057.0 +/-25%	Pass
AV24	04/28/2005 7:16	7704	7354.0 +/-5%	Pass	13.6	5 - 50	Pass	228.9	226.9 +/-5%	Pass	5051	5036.4 +/-25%	Pass
X AV25 DOS	04/28/2005 7:16	4693	5122.1 +/-5%	FAIL	13.2	5 - 50	Pass	223.8	224.0 +/-5%	Pass	5014	5015.1 +/-25%	Pass
X AV25	04/28/2005 8:25	4799	5122.1 +/-5%	FAIL	12.9	5 - 50	Pass	223.8	224.0 +/-5%	Pass	5014	5015.1 +/-25%	Pass
AV26	04/28/2005 7:16	5069	5069.9 +/-5%	Pass	23.3	5 - 50	Pass	222.8	226.9 +/-5%	Pass	5007	5036.5 +/-25%	Pass
AV27	04/28/2005 7:16	5005	4919.2 +/-5%	Pass	14.7	5 - 50	Pass	221.9	225.0 +/-5%	Pass	5000	5022.5 +/-25%	Pass
AV29	04/28/2005 7:16	4971	5047.7 +/-5%	Pass	21.4	5 - 50	Pass	224.9	223.3 +/-5%	Pass	5022	5010.1 +/-25%	Pass
AV29	04/28/2005 7:16	4971	5005.4 +/-5%	Pass	21.4	5 - 50	Pass	224.9	223.8 +/-5%	Pass	5022	5014.0 +/-25%	Pass
AV33	04/28/2005 7:16	5051	4977.0 +/-5%	Pass	11.3	5 - 50	Pass	209.0	218.0 +/-5%	Pass	4906	4971.5 +/-25%	Pass
AV34	04/28/2005 8:25	5335	5045.5 +/-5%	FAIL	19.5	5 - 50	Pass	225.1	219.0 +/-5%	Pass	5023	4978.8 +/-25%	Pass
AV34 OK	04/28/2005 8:49	5272	5045.5 +/-5%	Pass	18.3	5 - 50	Pass	224.1	219.0 +/-5%	Pass	5016	4978.8 +/-25%	Pass

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria	Gross Counts P/F	FWHM (keV) Result	FWHM (keV) Criteria	FWHM (keV) P/F	Pulser Center Result	Pulser Center Criteria	Pulser Center P/F	Energy (keV) Result	Energy (keV) Criteria	Energy (keV) P/F
AV35	04/28/2005 7:16	4965	4932.6 +/- 5%	Pass	12.1	5 - 50	Pass	275.0	275.0 +/- 5%	Pass	5385	5385.6 +/- 25%	Pass
AV37	04/28/2005 7:16	5024	5082.9 +/- 5%	Pass	19.7	5 - 50	Pass	236.0	236.1 +/- 5%	Pass	5103	5103.2 +/- 25%	Pass
AV38	04/28/2005 7:16	5279	5419.4 +/- 5%	Pass	16.8	5 - 50	Pass	219.0	217.9 +/- 5%	Pass	4979	4448.6 +/- 25%	Pass
AV39	04/28/2005 7:16	5238	5316.2 +/- 5%	Pass	15.6	5 - 50	Pass	228.0	224.2 +/- 5%	Pass	5044	5016.3 +/- 25%	Pass
AV40	04/28/2005 7:16	4631	4755.8 +/- 5%	Pass	13.0	5 - 50	Pass	227.1	226.0 +/- 5%	Pass	5037	5029.5 +/- 25%	Pass
AV41	04/28/2005 7:17	4954	4990.8 +/- 5%	Pass	12.1	5 - 50	Pass	228.9	229.0 +/- 5%	Pass	5051	5051.6 +/- 25%	Pass
AV42	04/28/2005 7:17	4943	4977.0 +/- 5%	Pass	12.0	5 - 50	Pass	237.0	228.1 +/- 5%	Pass	5109	5044.9 +/- 25%	Pass
AV43	04/28/2005 8:25	7534	7162.4 +/- 5%	FAIL	13.1	5 - 50	Pass	224.1	224.1 +/- 5%	Pass	5016	5015.9 +/- 25%	Pass
AV45	04/28/2005 7:17	7603	7593.5 +/- 5%	Pass	15.2	5 - 50	Pass	226.9	225.6 +/- 5%	Pass	5037	5026.9 +/- 25%	Pass
AV46	04/28/2005 7:17	7621	7722.7 +/- 5%	Pass	14.0	5 - 50	Pass	224.0	225.8 +/- 5%	Pass	5015	5028.0 +/- 25%	Pass
AV47	04/28/2005 7:17	7621	7532.5 +/- 5%	Pass	13.7	5 - 50	Pass	217.0	226.0 +/- 5%	Pass	4964	5029.6 +/- 25%	Pass
AV48	04/28/2005 7:17	7613	7717.5 +/- 5%	Pass	15.1	5 - 50	Pass	225.0	224.0 +/- 5%	Pass	5022	5015.2 +/- 25%	Pass
AV49	04/28/2005 7:17	7614	7703.4 +/- 5%	Pass	13.9	5 - 50	Pass	232.0	226.0 +/- 5%	Pass	5073	5029.5 +/- 25%	Pass
AV50	04/28/2005 7:17	7613	7660.9 +/- 5%	Pass	13.6	5 - 50	Pass	225.0	227.0 +/- 5%	Pass	5023	5037.2 +/- 25%	Pass
AV51	04/28/2005 7:17	7349	7070.5 +/- 5%	Pass	12.9	5 - 50	Pass	220.0	223.0 +/- 5%	Pass	4986	5007.6 +/- 25%	Pass
AV52	04/28/2005 7:17	7041	7156.4 +/- 5%	Pass	12.6	5 - 50	Pass	225.0	225.0 +/- 5%	Pass	5023	5022.4 +/- 25%	Pass
AV53	04/28/2005 7:17	7143	7144.1 +/- 5%	Pass	12.6	5 - 50	Pass	223.0	223.0 +/- 5%	Pass	5008	5007.8 +/- 25%	Pass
AV54	04/28/2005 7:17	7342	7313.1 +/- 5%	Pass	13.4	5 - 50	Pass	229.0	226.0 +/- 5%	Pass	5052	5029.5 +/- 25%	Pass
AV55	04/28/2005 7:17	7339	7132.9 +/- 5%	Pass	12.9	5 - 50	Pass	227.0	226.0 +/- 5%	Pass	5037	5029.7 +/- 25%	Pass
AV56	04/28/2005 7:17	7022	7163.7 +/- 5%	Pass	12.7	5 - 50	Pass	221.0	222.0 +/- 5%	Pass	4994	5000.7 +/- 25%	Pass
AV57	04/28/2005 7:17	7331	7309.5 +/- 5%	Pass	14.1	5 - 50	Pass	222.0	222.0 +/- 5%	Pass	5000	5000.6 +/- 25%	Pass
AV58	04/28/2005 7:17	7332	7249.2 +/- 5%	Pass	13.4	5 - 50	Pass	225.0	223.0 +/- 5%	Pass	5022	5008.0 +/- 25%	Pass
AV59	04/28/2005 7:17	7145	7141.4 +/- 5%	Pass	12.6	5 - 50	Pass	285.0	284.0 +/- 5%	Pass	5458	5450.6 +/- 25%	Pass
AV60	04/28/2005 7:17	7004	7019.7 +/- 5%	Pass	12.7	5 - 50	Pass	223.0	223.0 +/- 5%	Pass	5008	5007.5 +/- 25%	Pass
AV61	04/28/2005 7:17	7005	7078.3 +/- 5%	Pass	12.6	5 - 50	Pass	223.9	225.0 +/- 5%	Pass	5015	5022.2 +/- 25%	Pass
AV62	04/28/2005 7:17	7273	7083.5 +/- 5%	Pass	13.8	5 - 50	Pass	222.0	222.0 +/- 5%	Pass	5001	5000.7 +/- 25%	Pass
AV63	04/28/2005 8:25	6827	7120.8 +/- 5%	Pass	13.0	5 - 50	Pass	221.9	223.0 +/- 5%	Pass	5000	5007.9 +/- 25%	Pass
AV64	04/28/2005 8:25	7210	7153.7 +/- 5%	Pass	13.2	5 - 50	Pass	223.0	224.0 +/- 5%	Pass	5008	5015.3 +/- 25%	Pass
AV65	04/28/2005 8:25	7207	7233.4 +/- 5%	Pass	13.3	5 - 50	Pass	223.0	224.0 +/- 5%	Pass	5008	5015.3 +/- 25%	Pass
AV66	04/28/2005 8:25	7077	7165.5 +/- 5%	Pass	12.1	5 - 50	Pass	221.0	222.0 +/- 5%	Pass	4993	5000.5 +/- 25%	Pass
AV67	04/28/2005 8:25	7414	7128.1 +/- 5%	Pass	15.9	5 - 50	Pass	221.0	224.1 +/- 5%	Pass	4994	5015.6 +/- 25%	Pass
AV68	04/28/2005 8:25	7290	7259.5 +/- 5%	Pass	12.8	5 - 50	Pass	221.0	222.0 +/- 5%	Pass	4993	5000.8 +/- 25%	Pass
AV69	04/28/2005 8:25	7257	7305.4 +/- 5%	Pass	12.5	5 - 50	Pass	221.0	222.0 +/- 5%	Pass	4994	5000.6 +/- 25%	Pass
AV70	04/28/2005 8:25	7151	7406.5 +/- 5%	Pass	12.7	5 - 50	Pass	221.0	222.6 +/- 5%	Pass	4994	5004.7 +/- 25%	Pass
AV71	04/28/2005 8:26	7436	7187.3 +/- 5%	Pass	13.3	5 - 50	Pass	220.9	225.0 +/- 5%	Pass	4993	5022.7 +/- 25%	Pass
AV72	04/28/2005 8:26	7068	7090.0 +/- 5%	Pass	12.8	5 - 50	Pass	220.1	223.9 +/- 5%	Pass	4987	5014.6 +/- 25%	Pass

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria	Gross Counts P/F	FWHM (keV) Result	FWHM (keV) Criteria	FWHM (keV) P/F	Pulser Center Result	Pulser Center Criteria	Pulser Center P/F	Energy (keV) Result	Energy (keV) Criteria	Energy (keV) P/F
AV73	04/28/2005 8:26	7027	7251.3 +/-5%	Pass	12.9	5 - 50	Pass	224.1	225.0 +/-5%	Pass	5016	5022.4 +/-25%	Pass
AV74	04/28/2005 8:26	7422	7227.1 +/-5%	Pass	14.1	5 - 50	Pass	218.8	224.0 +/-5%	Pass	4978	5015.0 +/-25%	Pass

SEVERN TRENT STL

Run Log

Alphavision
4/28/05

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	4/27	5116444	FSD210122-002	11	240	~~Th~~ U	KW	RR
2	"	"	FSD260000-444B	12	"	"	"	"
3	"	"	" -444C	13	"	"	"	"
4	4/27	5116097	FSD250199-001	15	400	Am	KW	RR
5	"	"	-001L	16	"	"	"	"
6	"	"	FSD260000-097B	17	"	"	"	"
7	"	"	-097C	18	"	"	"	"
8	4/27	5115344	FSD020143-002	19	180	Pu	KW	RR
9	"	"	-002X	20	"	"	"	"
10	"	"	-0011	21	"	"	"	"
11	"	"	-014	22	"	"	"	"
12	"	"	" -017	23	"	"	"	"
13	"	"	FSD250000-344B	24	"	"	"	"
14	"	"	" -344C	44	"	"	"	"
15	4/27	5116093	FSD250199-001	50	180	Pu	KW	
16	"	"	-001X	51	"	"	"	"
17	"	"	-043B	52	"	"	"	"
18	"	"	-043C	53	"	"	"	"
19	4/27	5116044	" -044C	56	180	Pu-241	"	"
20	4/27	5112198	FSD210389-009	25	180	U	KW	RR
21	"	"	-009X	26	"	"	"	"
22	"	"	" -010	27	"	"	"	"
23	"	"	FSD220000-198B	29	"	"	"	"
24	"	"	" -198C	33	"	"	"	"
25	4/28/	Daily	Pulsers	1-74	1mv	QA	JW	—
26	4/28	5112283	FSD200213-002	1	180	NP	RR	RR
27	"	"	" -002X	2	"	"	"	"
28	"	"	FSD220000-203B	3	"	"	"	"
29	"	"	" -203C	4	"	"	"	"

Reviewed By: RR Date: 4/28/2C

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Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	4/28	5110162	F5D160[illegible]-003	6	180	Np	RK	RK
2			-003X	7				
3			-006	8				
4			F5D200000-162B	9				
5			-162C	11				
6		5116269	F5D020143-002	12				
7			-002X	13				
8			-011	15				
9			-014	16				
10			-017	17				
11			F5D260000-261B	18				
12			-261C	19				
13		5116265	F5D020143-002	20	180	Th	RK	RK
14			-002X	21				
15			-011	22				
16			-014	23				
17			-017	24				
18			F5D260000-265B	46				
19			-265C	49				
20		5116267	F5D020143-002	50		U		RK
21			-002X	51				
22			-011	52				
23			-014	53				
24			-017	74				
25			F5D260000-267B	60				
26			-267C	61				
27		5116263	F5D020143-002	63		Am		
28			-002X	64				
29			-011	68				

Reviewed By: RK Date: 4/28/05

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Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	4/28	5116263	FSD220143-014	69	180	TH	RK	RK
2			-017	73				
3			FSD2160000-2163B	72				
4			-2163C	67				
5	~~4/28~~	~~5110165~~	~~FSD160154-001~~					DK 4/28
6	4/28	5110165	FSD2000000-1165B RE	24	180	UU	RK	RK
7	1	1	1 -1165C RE	71	1	1		
8	4/28	5116444	FSD2160000-444C RE	54	240	UU		
9	4/28	5112198	FSD210389-009X RE	59	180	1		
10	4-28-5	5116265	FSD2019+3-002-RE	20	180	TH	~	RR
11		5110162	FSD160154-001X-RE	7	180	NP	~	
12			~~-002B-RE~~	8				
13			FSD2000000-162B-RE	9				
14			-1625-RE	11				
15	4-28-5	5112203	FSD220000-203B-RE	3	180	NP	~	
16			-203C-RE	4				
17	4-28-5	5116269	FSD220143-002 RE	12	180	NP	~	
18	4-28-5	5113047	FSD220126-001	1		UU	~	RR
19			-001X	2				
20			-002	63				
21			-003	64				
22			-004	6				
23			-005	51				
24			-006	52				
25			-007	53				
26			-008	56				
27			-009	60				
28			-010	13				
29			-011	15				

Reviewed By: DD Date: 4-28-05

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Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	4-28-5	5113047	FSD220176-012	16	180min	Th		
2			-013	17				
3			-014	18				
4			-015	19				
5			-016	61				
6			-017	21				
7			-018	22				
8			-019	23				
9			-020	24				
10			FSD230000-047B	45				
11			-047C	46				
12	4/28	5111184	FSD190343-012FC	74	180	Th	RL	JW
13	4/28	5112200	FSD200213-002	26	180	Th	KW	JW
14			KW ~~FSD220000-002x~~ 4/29	27				
15			FSD220000-200B	29				
16			-200C	33				
17	4/28	5112201	FSD200213-002	34	180	U	KW	
18			-002x	35				
19			FSD220000-201B	37				
20			-201C	38				
21	4/28	5113046	FSD220176-001	54	240	Th	KW	
22			-001x	55				
23			-002	57				
24			-003	58				
25			-004	59				
26			-005	62				
27			-006	65				
28			-007	66				
29			-008	67				

Reviewed By: JW Date: 4/29/5

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Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	4/28	5113046	FSD220176-009	68	240	Th	km	gw
2			-010	69				
3			-011	70				
4			-012	72				
5			-013	73				
6	4/28	5111180	FSD190345-013 RE	6	240	U	km	RE
7			-014 RE	7				
8	4/28	5113046	FSD220176-014	45	240	Th	km	gw
9			-015	46				
10			-016	51				
11			-017	52				
12			-018	53				
13			-019	56				
14			-020	60				
15			FSB230000-046B	61				
16			-046C	62				
17	4/28	5115432	FSD220356-001	8	240	Pu	km	gw
18			-002	9				
19			-003	11				
20			-004	12				
21			-004MS	13				
22			-004X	15				
23			-005	16				
24			FSD250000-432B	17				
25			432C	18				
26	4/28	5116252	FSD220296-001	19	180	U	km	gw
27			-001X	20				
28			-002	21				
29			-003	22				

Reviewed By: gw Date: 4/29/5

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Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	~~4/28~~	~~S116252~~	~~FSD260~~ King	4/28				
2	4/28	S116252	FSD260000-252B	23	180	U	Kry	gw
3	〃	〃	〃 -252C	24	〃	〃	〃	〃
4	4/28	S116281	FSD220296-001	47	180	Th	Kry	ER
5	〃	〃	-001x	48	〃	〃	〃	〃
6	〃	〃	-002	49	〃	〃	〃	〃
7	〃	〃	〃 -003	50	〃	〃	〃	〃
8	〃	〃	FSD260000-251B	64	〃	〃	〃	〃
9	〃	〃	〃 251C	1	〃	〃	〃	〃
10	4/28	S116251	FSD220296 (FSD150277) -001	2	240	Am	Kry	gw
11	〃	〃	FSD150277-001x	3	〃	〃	〃	〃
12	〃	〃	-002	4	〃	〃	〃	〃
13	〃	〃	〃 -003	9	〃	〃	〃	〃
14	〃	〃	FSD270000-693B	11	〃	〃	〃	〃
15	〃	〃	〃 693C	12	〃	〃	〃	〃
16	4/28	S115483	FSD220356-001	13	240	U	Kry	gw
17	〃	〃	-002	15	〃	〃	〃	〃
18	〃	〃	-003	16	〃	〃	〃	〃
19	〃	〃	-004	17	〃	〃	〃	〃
20	〃	〃	-004MS	18	〃	〃	〃	〃
21	〃	〃	-004X	19	〃	〃	〃	〃
22	〃	〃	〃 -005	20	〃	〃	〃	〃
23	〃	〃	FSD250000-433B	21	〃	〃	〃	〃
24	〃	〃	〃 433C	22	〃	〃	〃	〃
25	4/28	S115429	FSD220356-001	6	240	Am	Kry	ER
26	〃	〃	-002	7	〃	〃	〃	〃
27	〃	〃	-003	8	〃	〃	〃	〃
28	〃	〃	-004	23	〃	〃	〃	〃
29	〃	〃	〃 -004MS	24	〃	〃	〃	〃

Reviewed By: gw Date: 4/29/08

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Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	4/28	5115429	FSD220356-004X	46	240	Am	[illegible]	DR
2			-005	49				
3			FSD250000-429B	50				
4			429C	56				
5			429L	60				
6	4-29-5	Daily Pulse ✓		1-74	1 min	CA	[illegible]	—
7		5112200	FSD200213-002X	26	180	Th	JW	DR
8		5117200	FSD110121-001	1	400	TH		DR
9			-001S	2				
10			-003	3				
11			-004	4				
12			-005	6				stopped
13			-006	7				DR
14			-007	8				
15			-008	13 46				
16			-009	15 49				
17			-010	16 50				
18			-011	17 51				
19			FSD270000-200B	18 52				
20			-200C	19 53				
21			-200L	20 54				
22	4/29	5115433	FSD220356-005 RC	52	240	LL	DR	DR
23		5115432	FSD220356-003 RC	47	400	Pu		
24	4/29	5117200	FSD110121-005 RC	9	1	Th	DR	
25	4/29	5117632	FSD140271-001	11	180	UU	DR	
26			-001X	12				
27			-002	45				
28			-003	60				
29			-004	61				

Reviewed By: DR Date: 4/29/08

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SEVERN TRENT STL

Run Log

Alphavision
5/3/05

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5/2/05	5117495	F5D250136-003	34	180	Pu	RP	RP
2			-003X	35				
3			-010	37				
4			-015	38				
5			-021	39				
6			F5D270000-495B	65				
7			-495C	66				
8		5117498	F5D252136-003	40		Um		RP
9			-003X	41				
10			-010	42				
11			F5D270000-498B	67				
12			-498C	68				
13		5117498	F5D252136-015	25	180	U	CH	
14			-021	26	1	1	1	
15	5/3/5	Daily	Pulses	1-24	1min	QA	RP	—
16	5/3/05	5119118	F5D270288-001	25	180	TH	RP	RP
17			-001X	26				
18			-002	27				
19			-003	29				
20			-004	33				
21			-005	34				
22			-006	35				
23			-007	37				
24			-008	38				
25			-009	39				
26			-010	40				
27			-011	41				
28			-012	42				
29			-013	1				

Reviewed By: RP Date: 5/3/05

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Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5/3/05	5119118	F5D230000-118B	3	180	Th	RR	RR
2	1	1	1 -118C	4	1	1	1	1
3	5/3/05	5113069	F5D230345-001	6	400	LLL	RR	RR
4			-001S	7				
5			-001X	8				
6			-002	9				
7			-003	11				
8			-004	12				
9			-005	13				
10			-006	15				
11			-007	16				
12			-008	17				
13			-009	18				
14			-010	19				
15			-011	20				
16			-012	21				
17			-013	22				
18			-014	23				
19			-015	24				
20			F5D230000-069B	47				
21			1 -069C	48				
22		5113067	F5D230000-067B	57	600	Th		
23		1	1 -067C	58	1	1		
24		5115433	F5D220356-001 R2	45	400	LLL +3	RR	RR
25	5/3/05	5119119	F5D220228-001	46	180	Th LLL		
26			-001X	49				
27			-002	50				
28			-003	51				
29			-004	52				

Reviewed By: RR Date: 5/3/05

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STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5/3/05	5119119	F5D270224-005	53	180	Th-U	RR	RR
2			-006	56		U		
3			-007	60				
4			-008	41				
5			-009	63				
6			-010	64				
7			-011	108				
8			-012	69				
9			-013	73				
10			F5D290000119B	71				
11			-119C	72				
12		5119191	F5D270262-001	25			JW	RR
13			-001X	26				
14			F5D280184-001	27				
15			-002	29				
16			F5D290000-191B	33				
17			-191C	34				
18		5117498	F5D270000-498C	1				
19	5-3-05	5117286	F5D250138-001	2	180min	Pu	T	RR
20			-001X	4				
21			-002	35				
22			-003	37				
23			-004	38				
24			-005	39				
25			-006	40				
26			-007	41				
27			-008	42				
28			-009	50				
29			-010	51				

Reviewed By: RR Date: 5/11/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5-3-5	5117286	F5D250130-011	51	180min	Pu	~	RR
2			-012	52				
3			-013	53				
4			-014	60				
5			-015	61				
6			-016	63				
7			-017	64				
8			-018	68				
9			-019	69				
10			-020	73				
11			F5D270000-288B	10				
12			-288C	54				
13	5-3-5	5117294	F5D270000-294C	65	180min	Pu	—	
14	5-3-5	5117281	F5D250131-001	74	180min	Am	~	RR
15			F5D220000-281B	59				
16			-281C	62				
17	5-3-5	5120056	F5D300000-056B	55	180min	U	~	
18			-056C	52				
19		5140126	F5D300000-126B	67	180min	U	~	RR
20			-126C	70				1
21	5-3-05	5117281	F5D250130-001X	27	180min	Am	RR	RR
22			-002	24				
23			-003	33				
24			-004	34				
25			-005	6				
26			-006	7				
27			-007	8				
28			-008	9				
29			-009	11				

Reviewed By: RR Date: 5/4/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5/3/05	5117791	FSD250130-010	12	180	Um	RR.	RR
2			-011	13				
3			-012	15				
4			-013	16				
5			-014	17				
6			-015	18				
7			-016	19				
8			-017	20				
9			-018	21				
10			-019	22				
11			-020	23				
12		5120056	FSD290305-001	24		Uu		
13			-001X	46				
14		5120126	FSD290249-002	25				
15			-002X	26				
16		5113068	FSD210345-011 RE	47	240	Pu	RR	
17	5/3	5120056	FSD290305-002	2	180	U	KH	RR
18			-003	4				
19			FSD290307-001	1				
20			-002	7				
21	5/3	5113067	FSD210345-001	6	600	Am	KH	RR
22			-001MS	8				
23			-001X	9				
24			-002	11				
25			-003	12				
26			-004	13				
27			-005	15				
28			-006	16				
29			-007	17				

Reviewed By: RR Date: 5/4/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5/3	5113067	FSD210345-008	18	600	Am	km	RC
2			-009	19				
3			-010	20				
4			-011	21				
5			-012	22				
6			-013	23				
7			-014	24				
8			-015	46				
9	5/3	5117493	FSD250136-003	10	180	Np	km	PP
10			-003x	45				
11			-010	47				
12			-015	48				
13			-021	54				
14			FSD270000-493B	55				
15			493C	57				
16	5/3	5120R6	FSD290249-002	58	180	Np	km	
17			-002x	59				
18			FSD300000-128B	62				
19			-128C	65				
20	5/3	5117288	FSD250130-001	25	180	Th	km	PP
21			-001x	26				
22			-002	27				
23			-005	29				
24			-004	33				
25			-005	34				
26			-006	35				
27			-007	37				
28			-008	38				
29			-009	39				

Reviewed By: PP Date: 5/4/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5/3	5117298	FSD250130 - 010	40	180	Th	[illegible]	RL
2			-011	41				
3			-012	42				
4			-013	49				
5			-014	50				
6			-015	51				
7			-016	52				
8			-017	53				
9			-018	56				
10			-019	60				
11			-020	61				
12			FSD270000 -288B	66				
13			-288C	67				
14	5/3	5117290	FSD250130-001	63	180	U	[illegible]	RL
15			-001X	64				
16			-002	68				
17			-003	69				
18			-004	73				
19			-005	74				
20			FSD270000 -290B	70				
21			-290C	71				
22			FSD250130 - 006	25				
23			- 007	26				
24			- 008	27				
25			- 009	29				
26			- 010	33				
27			- 011	34				
28			- 012	35				
29			- 013	37				

Reviewed By: RL Date: 5/4/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	05-03-05	5117290	FSD250130 - 014	38	180	U	KY	DR
2			- 015	39				
3			- 016	40				
4			- 017	41				
5			- 018	42				
6			- 019	49				
7			- 020	50				
8	05-04-05	5117497	FSD250136 - 003	1	180	Th		DR
9			- 003x	2				
10			- 010	4				
11			- 015	7				
12			- 021	51				
13			FSD270000 - 497 B	47				
14			" " C	48				
15		5120055	FSD290305 - 001	10	240	Th	KY	DR
16			- 001x	54				
17			- 002	55				
18			- 003	57				
19			FSD290307 - 001	58				
20			" - 002	59				
21			FSD 300000 - 055 B	62				
22			" " C	65				
23		5119189	FSD270262 - 001	52	180	Th		DR
24			" - 001x	53				
25			FSD 280184 - 001	56				
26			" - 002	60				
27			FSD290000 - 189 B	61				
28			" " C	63				
29								

line stripped RR 5/4/05

Reviewed By: DR Date: 5-4-05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

no pantex

STL

Radiochemistry Prep Report

Alpha Spectroscopy

Batch # 5115433

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

~~180~~ 240

General Prep Information

Method	Tracer ID	Aliquot	Isotope	Reference Date	Activity	Units	Analyst
Iso URANIUM (LONG CT) DOE ONLY MOD							
	Rad04-0051	0.1	U-232	9/16/1997	1.10E+02	dpm/mL	400586

Weights

Lot ID	Work Order #	Geometry	Aliquot	Dilution	Adj Aliquot	
F5D220356-001	G81591AD	Planchette, 44mm	2.3495	RC-45	2.3495 g	13
F5D220356-002	G816E1AD	Planchette, 44mm	2.0493	1	2.0493 g	15
F5D220356-003	G816L1AD	Planchette, 44mm	2.2578	1	2.2578 g	16
F5D220356-004	G816P1AD	Planchette, 44mm	2.2737	1	2.2737 g	17
F5D220356-004S	G816P1AK	Planchette, 44mm	2.2541	1	2.2541 g	18
F5D220356-004X	G816P1AL	Planchette, 44mm	2.044	1	2.044 g	19
F5D220356-005	G816T1AD	Planchette, 44mm	2.2049	1	2.2049 g	20
F5D250000-433B	G85J61AA	Planchette, 44mm	2	RC=5c 1	2 g	21
F5D250000-433C	G85J61AC	Planchette, 44mm	0.1286	1	0.1286 g	22

Spike Information

Lot ID	Work Order #	Standard ID	Aliquot	Isotope	Reference Date	Activity	Units
F5D220356-004S	G816P1AK	Rad04-0056	0.1	U-234	5/1/1989	2.38E+00	pCi/g
F5D220356-004S	G816P1AK	Rad04-0056	0.1	U-238	5/1/1989	2.38E+00	pCi/g
F5D250000-433C	G85J61AC	TRM-3 Iso-U	0.1286	U-238	5/29/2003	1.96E+01	pCi/g
F5D250000-433C	G85J61AC	TRM-3 Iso-U	0.1286	U-234	5/29/2003	1.96E+01	pCi/g

Standard Operating Procedures

	SOP Number	Rev	Title
☐	STL-RC-0002	3	Planchet Preparation For Radiochemistry And Radiological Screening Analysis
☑	STL-RC-0003	5	Drying And Grinding Of Soil And Solid Samples
☑	STL-RC-0004	7	Preparation Of Soil, Sludge, And Filter Paper Samples For Radiochemical Analysis
☐	STL-RC-0090	4	Preparation Of Samples For Sequential Determination Of Isotopic Americium, Currium, Neptunium, Plutonium, Thorium, And Uranium In Aqueous Samples
☑	STL-RC-0100	7	Actinide Coprecipitation
☐	STL-RC-0232	4	Isotopic Thorium And/oR Neptunium In Water, Soil, Sludge, and Filters by Eichrom TEVA Separation Resins
☐	STL-RC-0238	3	Isotopic Uranium By Eichrom UTEVA Resin for Water, Soil, Sludge and Filters
☑	STL-RC-0240	3	Isotopic Americium, Curium, Plutonium, Thorium, and Uranium in Water, Soil, Sludge and Filters by Eichrome Separation Resin

Coprecipitated By	Precip Date	Spiked By	Spike Verified By	Spike Date
	4-28-05		KH	04-25-05
Analyst's Signature	Date		Reviewed By	Date
	4-28-05			5/2/05

SEVERN TRENT **STL**

Radiochemistry Prep Report

Alpha Spectroscopy

Batch # 5115433

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

☐	STL-RC-0241	1	Isotopic Americium, Plutonium, Curium, and Uranium In Water, Soil, Sludge and Filters by Eichrome Uteva and Tru Resins
☐	STL-RC-0242	3	Isotopic Thorium, Plutonium and Uranium in Water, Soil, Sludge and Filters by Eichrome Separation Resin
☑	STL-RD-0201	2	Daily Operations Of An Alpha Spectroscopy System
☑	STL-RD-0203	1	Calibration And Maintenance Of A Alpha Spectroscopy System

(Check all that apply)

4-22-05		KH	04-25-05	
Coprecipitated By	Precip Date	Spiked By	Spike Verified By	Spike Date
Analyst's Signature	4-28-05 Date		Reviewed By	5/2/08 Date

SEVERN TRENT SERVICES

St. Louis Laboratory
13715 Rider Trail North
Earth City, MO 63045-1205

Alpha Spectroscopy Quality Assurance Worksheet

Batch: 5115433

F5D250000-433C Recovery Summary			
Isotope	Certified Activity	Observed Activity	% Recovery
U-234	1.96E+01	1.90E+01	97%
U-238	1.96E+01	1.63E+01	83%

F5D220356-004 Duplicate Summary			
Isotope	Sample Activity	Duplicate Activity	RER
U-234	1.71E+00	1.67E+00	0.18
U-235	8.08E-02	1.01E-01	0.46
U-238	1.36E+00	1.31E+00	0.27

F5D220356-004 Spike Summary				
Isotope	Spike Activity	Sample Activity	Spike Added	% Recovery
U-234	3.03E+00	1.71E+00	2.38E+00	55%
U-238	2.70E+00	1.36E+00	2.38E+00	56%

Comments:

Calculated By: RR DATE: 5/2/2005

Reviewed By: [signature] DATE: 5/4/05

SEVERN TRENT STL

Calibration for LB4100

Red

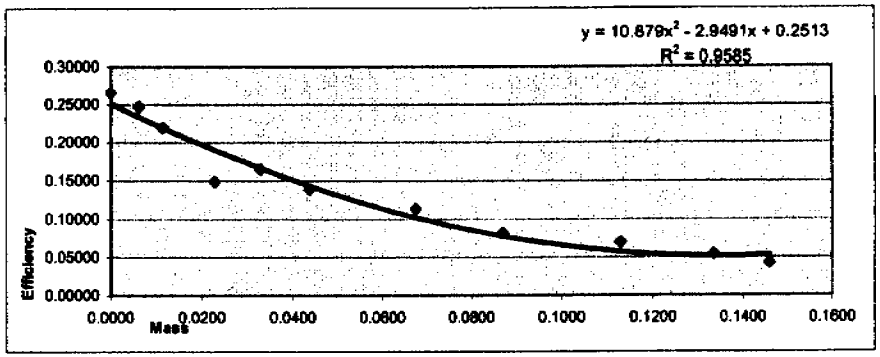
Alpha Th-230

SEVERN TRENT STL

Detector Efficiency Curves

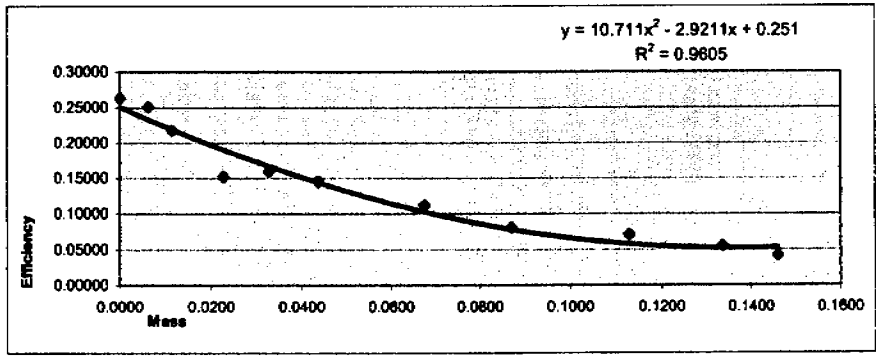
Alpha Attenuation Red A1 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
A1	0.0000	10.59	12361	1167.233	0.26568
A1	0.0063	11.37	12361	1087.159	0.24745
A1	0.0115	12.84	12358	962.461	0.21907
A1	0.0228	18.90	12353	653.598	0.14877
A1	0.0328	17.10	12367	723.216	0.16461
A1	0.0437	20.25	12355	610.123	0.13887
A1	0.0675	24.82	12352	497.663	0.11328
A1	0.0870	34.82	12347	354.595	0.08071
A1	0.1129	40.85	12348	302.277	0.06880
A1	0.1335	52.41	12348	235.604	0.05363
A1	0.1460	60.00	10918	181.967	0.04142



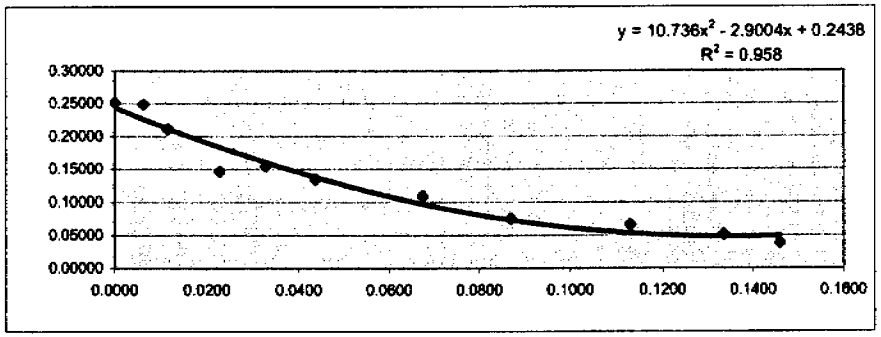
Alpha Attenuation Red A2 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
A2	0.0000	10.69	12362	1156.408	0.26321
A2	0.0063	11.22	12364	1101.961	0.25082
A2	0.0115	12.95	12356	954.131	0.21717
A2	0.0228	16.51	12353	667.369	0.15190
A2	0.0328	17.60	12357	702.102	0.15981
A2	0.0437	19.43	12363	636.284	0.14483
A2	0.0675	25.13	12358	491.763	0.11193
A2	0.0870	34.92	12347	353.580	0.08048
A2	0.1129	39.67	12350	311.318	0.07086
A2	0.1335	51.51	12349	239.740	0.05457
A2	0.1460	60.00	10849	180.817	0.04116



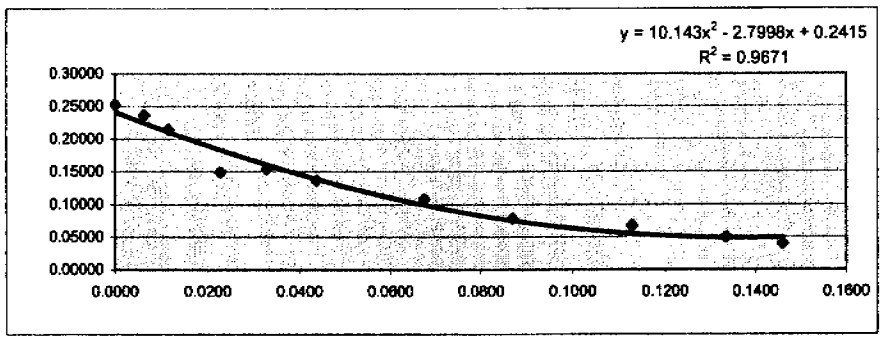
Alpha Attenuation Red A3 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
A3	0.0000	11.20	12366	1104.107	0.25131
A3	0.0063	11.33	12358	1090.733	0.24827
A3	0.0115	13.31	12355	928.249	0.21128
A3	0.0228	19.29	12355	640.487	0.14578
A3	0.0328	18.23	12359	677.948	0.15431
A3	0.0437	21.00	12362	588.667	0.13399
A3	0.0675	25.82	12353	478.428	0.10890
A3	0.0870	37.79	12350	326.806	0.07439
A3	0.1129	42.76	12347	288.751	0.06572
A3	0.1335	55.28	12347	223.354	0.05084
A3	0.1460	60.00	9892	164.867	0.03753



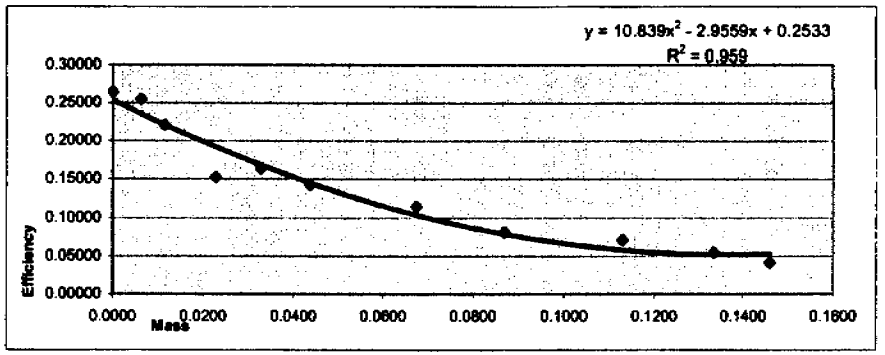
Alpha Attenuation Red A4 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
A4	0.0000	11.15	12357	1108.251	0.25225
A4	0.0063	11.89	12357	1039.277	0.23655
A4	0.0115	13.10	12360	943.511	0.21476
A4	0.0228	18.90	12347	653.280	0.14870
A4	0.0328	18.26	12353	676.506	0.15398
A4	0.0437	20.55	12352	601.071	0.13681
A4	0.0675	26.07	12351	473.763	0.10784
A4	0.0870	36.17	12347	341.360	0.07770
A4	0.1129	41.90	12346	294.654	0.06707
A4	0.1335	56.79	12346	217.397	0.04948
A4	0.1460	60.00	10286	171.433	0.03902



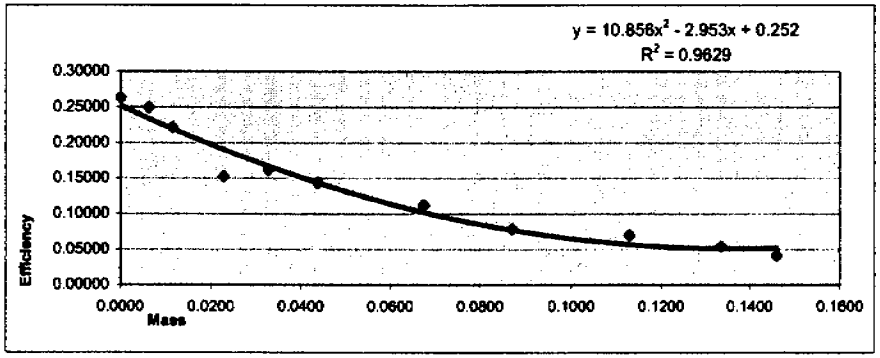
Alpha Attenuation Red B1 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
B1	0.0000	10.66	12370	1160.413	0.26413
B1	0.0063	11.07	12368	1117.254	0.25430
B1	0.0115	12.76	12355	968.260	0.22039
B1	0.0228	16.52	12355	667.117	0.15185
B1	0.0328	17.22	12347	717.015	0.16320
B1	0.0437	19.74	12355	625.887	0.14246
B1	0.0675	24.58	12351	502.482	0.11437
B1	0.0870	34.88	12347	353.985	0.08057
B1	0.1129	39.74	12346	310.669	0.07071
B1	0.1335	51.80	12349	238.398	0.05426
B1	0.1460	60.00	10868	181.133	0.04123



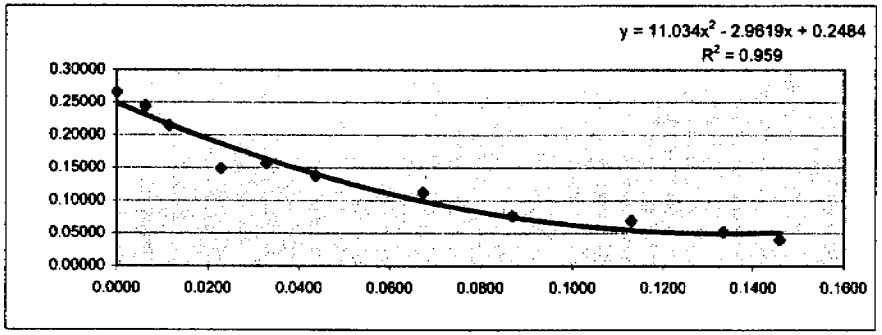
Alpha Attenuation Red B2 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
B2	0.0000	10.70	12368	1155.888	0.26310
B2	0.0063	11.28	12353	1095.124	0.24927
B2	0.0115	12.70	12357	972.992	0.22147
B2	0.0228	16.48	12351	668.344	0.15212
B2	0.0328	17.41	12348	709.248	0.16143
B2	0.0437	19.65	12348	628.397	0.14303
B2	0.0675	25.00	12349	493.960	0.11243
B2	0.0870	35.76	12346	345.246	0.07858
B2	0.1129	40.26	12350	306.756	0.06982
B2	0.1335	52.15	12347	236.759	0.05389
B2	0.1460	60.00	10797	179.950	0.04096



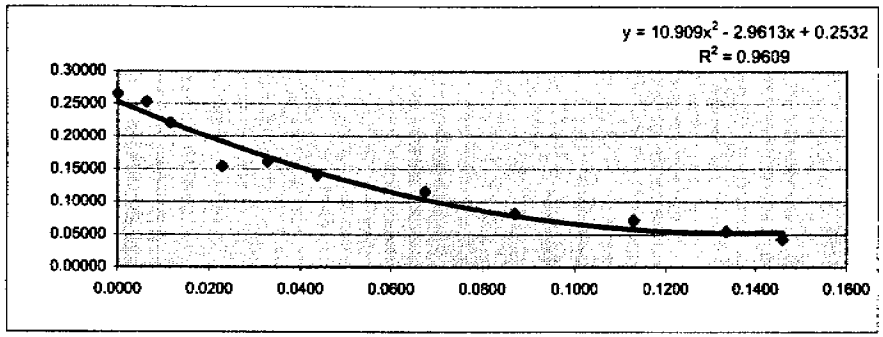
Alpha Attenuation Red B3 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
B3	0.0000	10.63	12359	1162.653	0.26464
B3	0.0063	11.53	12350	1071.119	0.24380
B3	0.0115	13.11	12353	942.258	0.21447
B3	0.0228	18.93	12346	652.192	0.14845
B3	0.0328	17.97	12349	687.201	0.15642
B3	0.0437	20.44	12355	604.452	0.13758
B3	0.0675	25.14	12352	491.329	0.11183
B3	0.0870	36.97	12348	334.001	0.07602
B3	0.1129	41.10	12350	300.487	0.06840
B3	0.1335	54.62	12345	226.016	0.05144
B3	0.1460	60.00	10398	173.300	0.03945



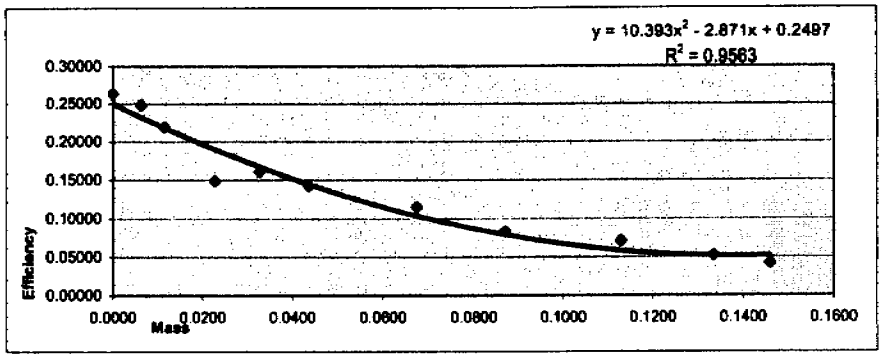
Alpha Attenuation Red B4 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
B4	0.0000	10.63	12366	1163.311	0.26479
B4	0.0063	11.13	12363	1110.782	0.25283
B4	0.0115	12.74	12350	969.388	0.22065
B4	0.0228	18.30	12351	674.918	0.15362
B4	0.0328	17.46	12359	707.847	0.16112
B4	0.0437	19.97	12353	618.578	0.14080
B4	0.0675	24.40	12350	506.148	0.11521
B4	0.0870	34.65	12349	356.392	0.08112
B4	0.1129	39.58	12346	311.925	0.07100
B4	0.1335	52.07	12347	237.123	0.05397
B4	0.1460	60.00	11071	184.517	0.04200



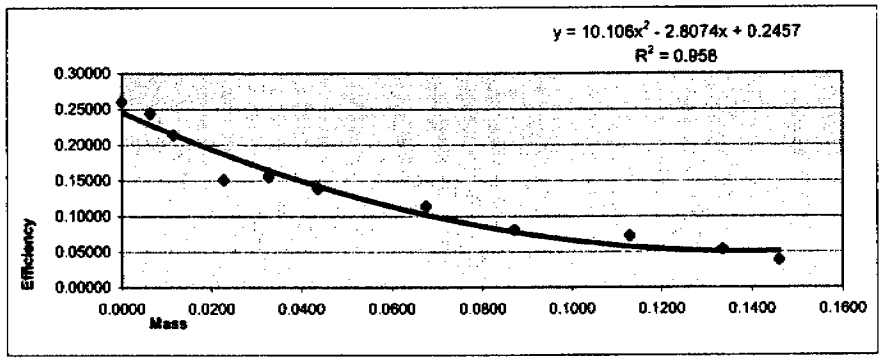
Alpha Attenuation Red C1 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
C1	0.0000	10.68	12356	1156.929	0.26333
C1	0.0063	11.33	12354	1090.380	0.24819
C1	0.0115	12.84	12359	962.539	0.21909
C1	0.0228	18.96	12350	651.371	0.14826
C1	0.0328	17.47	12356	707.270	0.16098
C1	0.0437	19.77	12345	624.431	0.14213
C1	0.0675	24.49	12352	504.369	0.11480
C1	0.0870	33.89	12347	364.326	0.08293
C1	0.1129	39.76	12347	310.538	0.07068
C1	0.1335	54.09	12345	228.231	0.05195
C1	0.1460	60.00	11011	183.517	0.04177



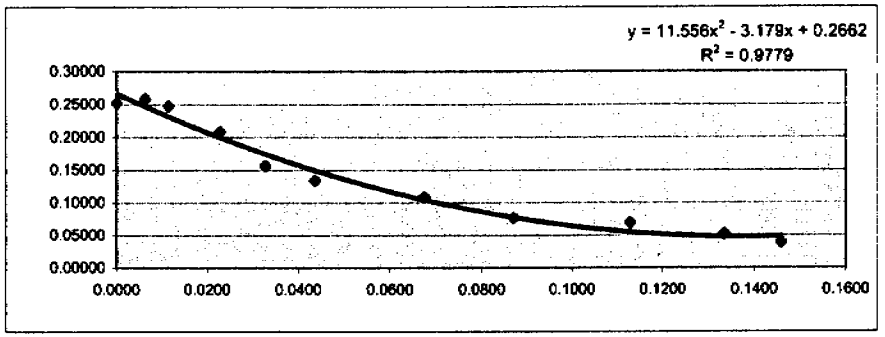
Alpha Attenuation Red C2 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
C2	0.0000	10.80	12357	1144.167	0.26043
C2	0.0063	11.53	12359	1071.899	0.24398
C2	0.0115	13.15	12355	939.544	0.21385
C2	0.0228	18.66	12352	661.951	0.15067
C2	0.0328	18.07	12347	683.287	0.15553
C2	0.0437	20.26	12348	609.477	0.13873
C2	0.0675	24.58	12350	502.441	0.11436
C2	0.0870	34.77	12347	355.105	0.08083
C2	0.1129	38.77	12347	318.468	0.07249
C2	0.1335	52.55	12346	234.938	0.05348
C2	0.1460	60.00	10088	168.133	0.03827



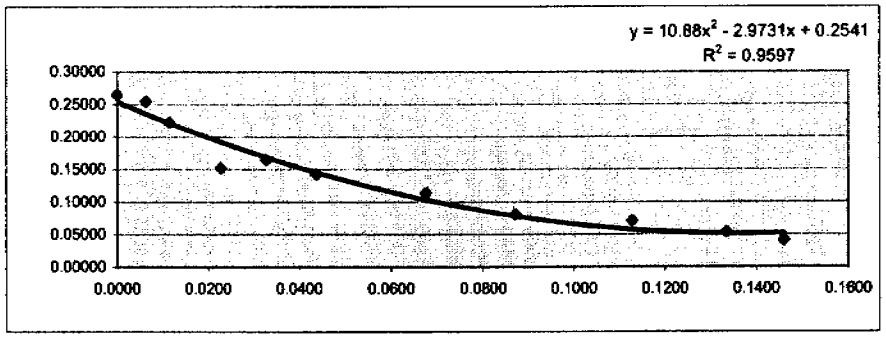
Alpha Attenuation Red C3 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
C3	0.0000	11.16	12358	1107.348	0.25205
C3	0.0063	10.88	12358	1135.846	0.25853
C3	0.0115	11.38	12359	1086.028	0.24720
C3	0.0228	13.47	12353	917.075	0.20874
C3	0.0328	17.98	12351	686.930	0.15635
C3	0.0437	21.01	12348	587.720	0.13377
C3	0.0675	25.97	12349	475.510	0.10823
C3	0.0870	36.70	12345	336.376	0.07656
C3	0.1129	41.05	12348	300.804	0.06847
C3	0.1335	54.55	12347	226.343	0.05152
C3	0.1460	60.00	10097	168.283	0.03830



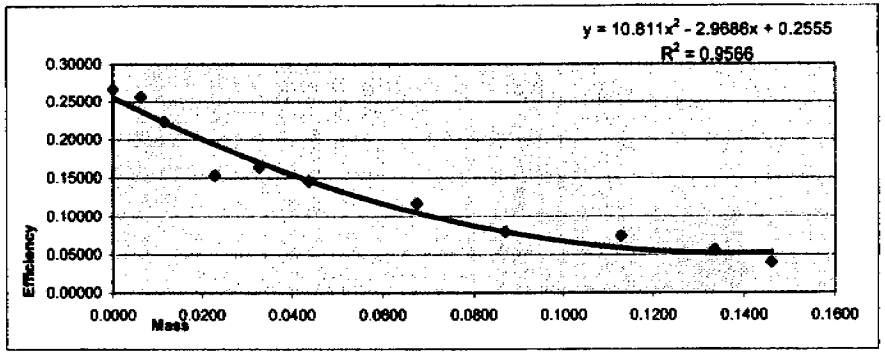
Alpha Attenuation Red C4 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
C4	0.0000	10.64	12365	1162.124	0.26452
C4	0.0063	11.06	12362	1117.722	0.25441
C4	0.0115	12.65	12348	976.126	0.22218
C4	0.0228	18.51	12349	667.153	0.15185
C4	0.0328	17.10	12350	722.222	0.16439
C4	0.0437	19.81	12354	623.624	0.14195
C4	0.0675	24.77	12352	498.668	0.11350
C4	0.0870	34.98	12352	353.116	0.08037
C4	0.1129	39.81	12346	310.123	0.07059
C4	0.1335	52.96	12345	233.100	0.05306
C4	0.1460	60.00	10662	177.700	0.04045



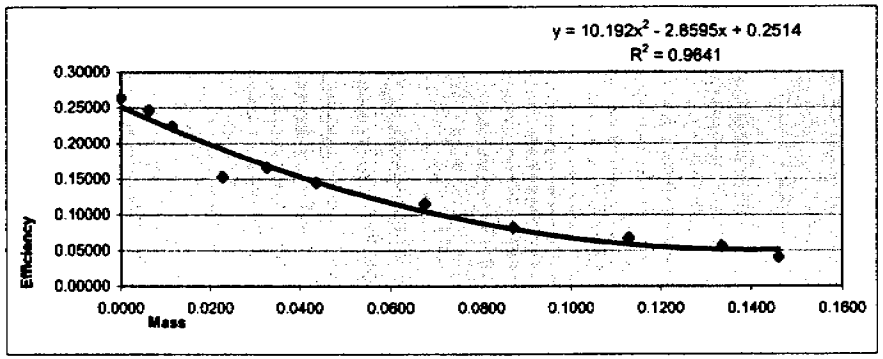
Alpha Attenuation Red D1 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
D1	0.0000	10.55	12349	1170.521	0.26643
D1	0.0063	10.97	12354	1126.162	0.25633
D1	0.0115	12.57	12350	982.498	0.22363
D1	0.0228	18.39	12348	671.452	0.15283
D1	0.0328	17.24	12360	716.937	0.16319
D1	0.0437	19.34	12355	638.831	0.14541
D1	0.0675	24.16	12351	511.217	0.11636
D1	0.0870	35.73	12349	345.620	0.07867
D1	0.1129	38.22	12348	323.077	0.07354
D1	0.1335	50.74	12345	243.299	0.05538
D1	0.1460	60.00	10373	172.883	0.03935



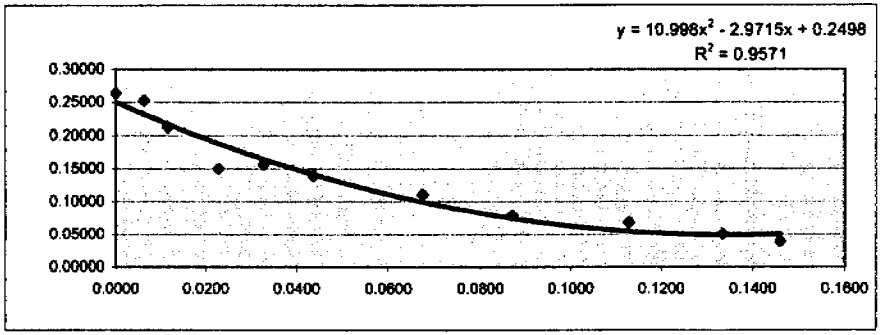
Alpha Attenuation Red D2 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
D2	0.0000	10.70	12376	1156.636	0.26327
D2	0.0063	11.45	12373	1080.611	0.24596
D2	0.0115	12.57	12350	982.498	0.22363
D2	0.0228	18.43	12348	669.995	0.15250
D2	0.0328	16.95	12353	728.791	0.16588
D2	0.0437	19.42	12350	635.942	0.14475
D2	0.0675	24.31	12351	508.063	0.11564
D2	0.0870	34.29	12348	360.105	0.08196
D2	0.1129	41.64	12346	296.494	0.06749
D2	0.1335	50.53	12347	244.350	0.05562
D2	0.1460	60.00	10639	177.317	0.04036



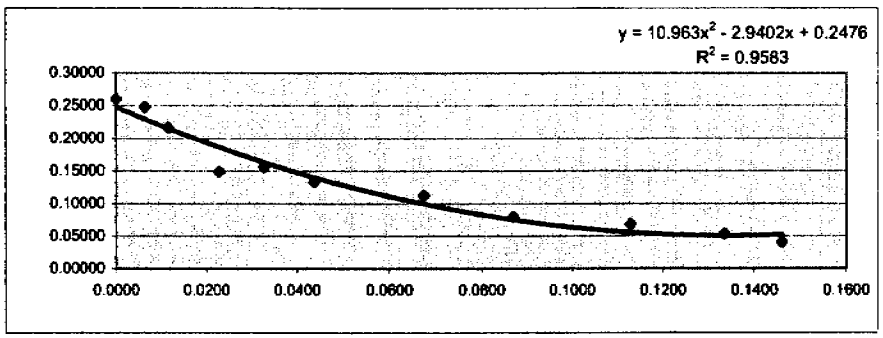
Alpha Attenuation Red D3 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
D3	0.0000	10.68	12360	1157.303	0.26342
D3	0.0063	11.16	12357	1107.258	0.25203
D3	0.0115	13.24	12350	932.779	0.21231
D3	0.0228	18.81	12349	656.512	0.14943
D3	0.0328	18.04	12348	684.479	0.15580
D3	0.0437	20.16	12350	612.599	0.13944
D3	0.0675	25.38	12349	486.564	0.11075
D3	0.0870	35.66	12347	346.242	0.07881
D3	0.1129	41.24	12349	299.442	0.06816
D3	0.1335	56.34	12347	219.152	0.04988
D3	0.1460	60.00	10309	171.817	0.03911



Alpha Attenuation Red D4 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
D4	0.0000	10.85	12355	1138.710	0.25919
D4	0.0063	11.37	12360	1087.071	0.24743
D4	0.0115	12.98	12350	951.464	0.21657
D4	0.0228	18.92	12354	652.960	0.14862
D4	0.0328	18.02	12352	685.461	0.15602
D4	0.0437	21.08	12359	586.290	0.13345
D4	0.0675	24.96	12350	494.792	0.11262
D4	0.0870	35.45	12346	348.265	0.07927
D4	0.1129	41.61	12346	296.708	0.06753
D4	0.1335	53.05	12345	232.705	0.05297
D4	0.1460	60.00	10576	176.267	0.04012

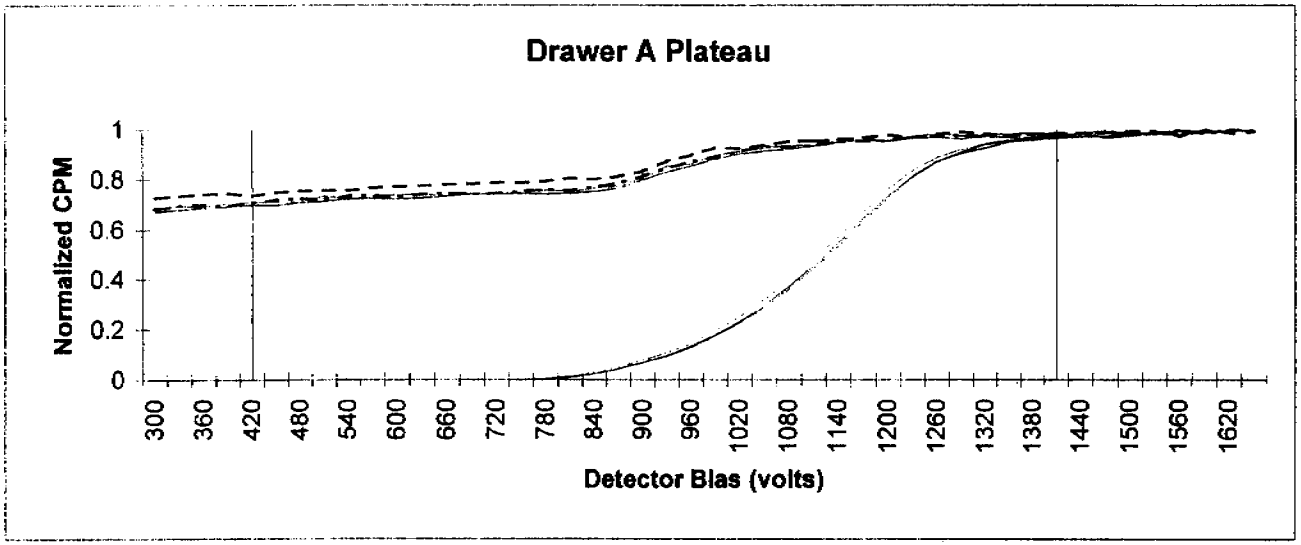


SEVERN TRENT STL

Voltage Plateaus

Unit Type: LB4100/W
Date Performed: 3/25/04 11:59
FileName: PLAT000
Batch ID: RED PLATEAUS 03/25/04 IV

Unit Id: Red
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

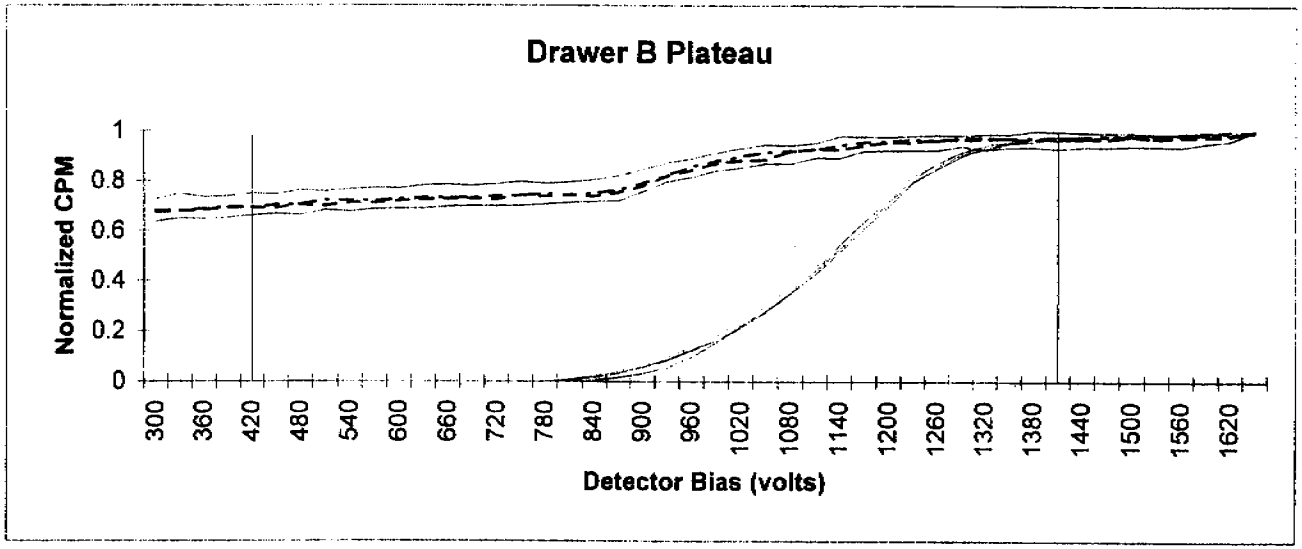
Optimum alpha only operating voltage: 420

	A1	A2	A3	A4
Beta slope at beta voltage	2.02%	2.37%	2.37%	1.15%
Alpha slope at beta voltage	0.88%	1.01%	0.57%	0.87%
Alpha slope at alpha voltage	1.70%	1.39%	2.26%	3.25%

Printed 3/26/2004 12:59 PM

Unit Type: LB4100/W
Date Performed: 3/25/04 11:59
FileName: PLAT000
Batch ID: RED PLATEAUS 03/25/04 IV

Unit Id: Red
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

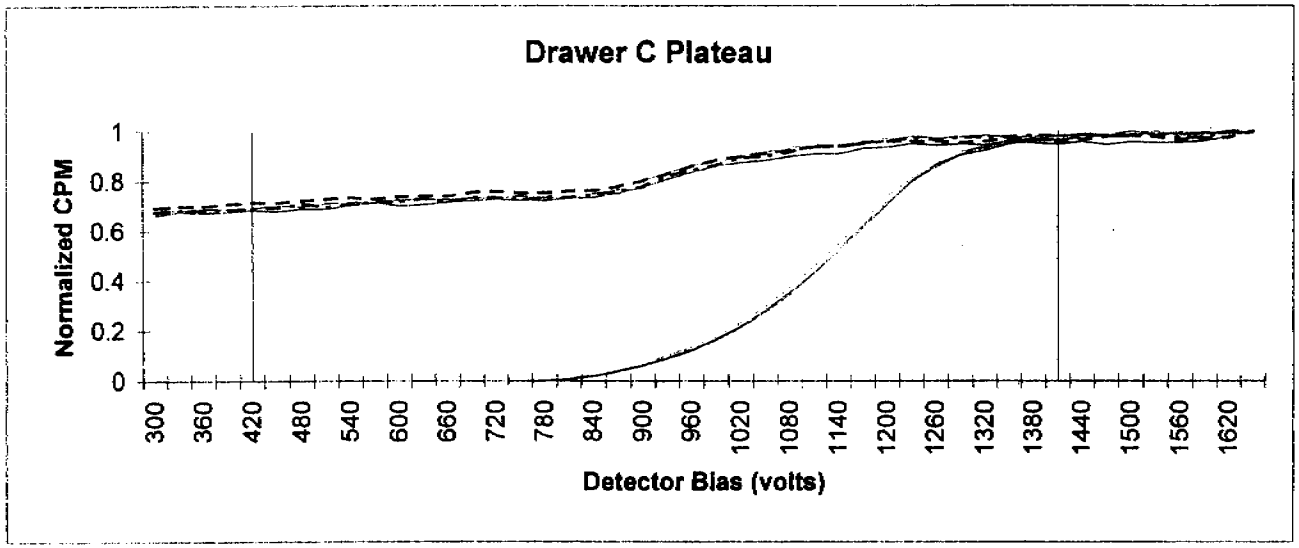
Optimum alpha only operating voltage: 420

	B1	B2	B3	B4
Beta slope at beta voltage	2.01%	2.51%	3.24%	1.41%
Alpha slope at beta voltage	0.31%	-0.08%	0.14%	0.96%
Alpha slope at alpha voltage	2.73%	2.06%	2.42%	2.08%

Printed 3/26/2004 12:59 PM

Unit Type: LB4100/W
Date Performed: 3/25/04 11:59
FileName: PLAT000
Batch ID: RED PLATEAUS 03/25/04 IV

Unit Id: Red
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

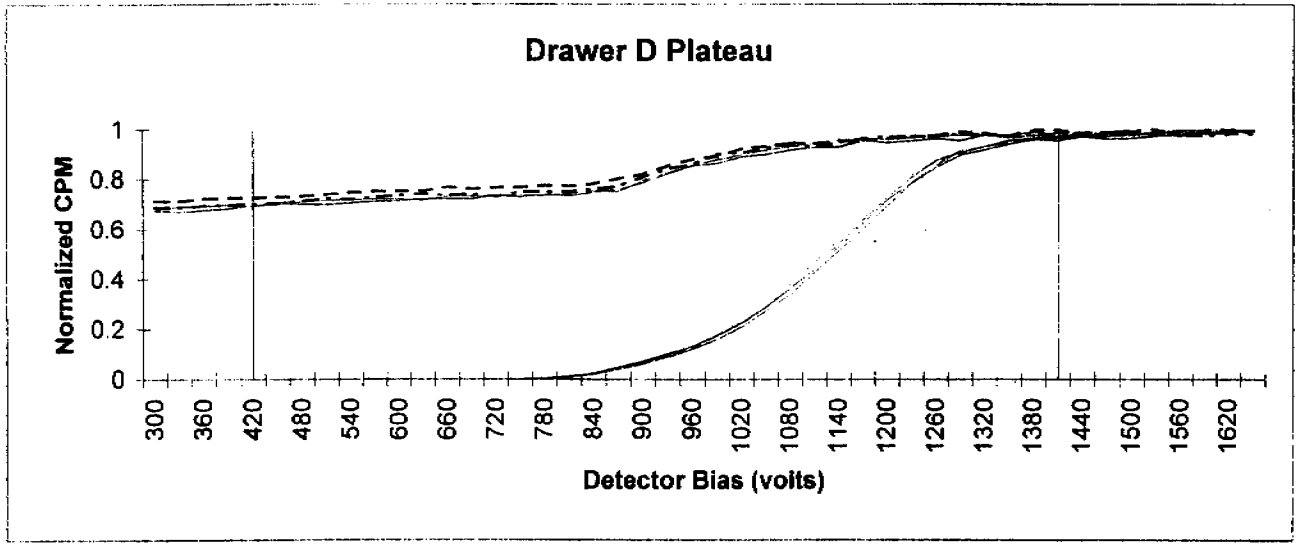
Optimum alpha only operating voltage: 420

	C1	C2	C3	C4
Beta slope at beta voltage	1.87%	3.12%	2.82%	2.97%
Alpha slope at beta voltage	0.82%	0.39%	-0.79%	0.31%
Alpha slope at alpha voltage	1.36%	2.31%	1.73%	2.98%

Printed 3/26/2004 1:00 PM

Unit Type: LB4100/W
Date Performed: 3/25/04 11:59
FileName: PLAT000
Batch ID: RED PLATEAUS 03/25/04 IV

Unit Id: Red
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

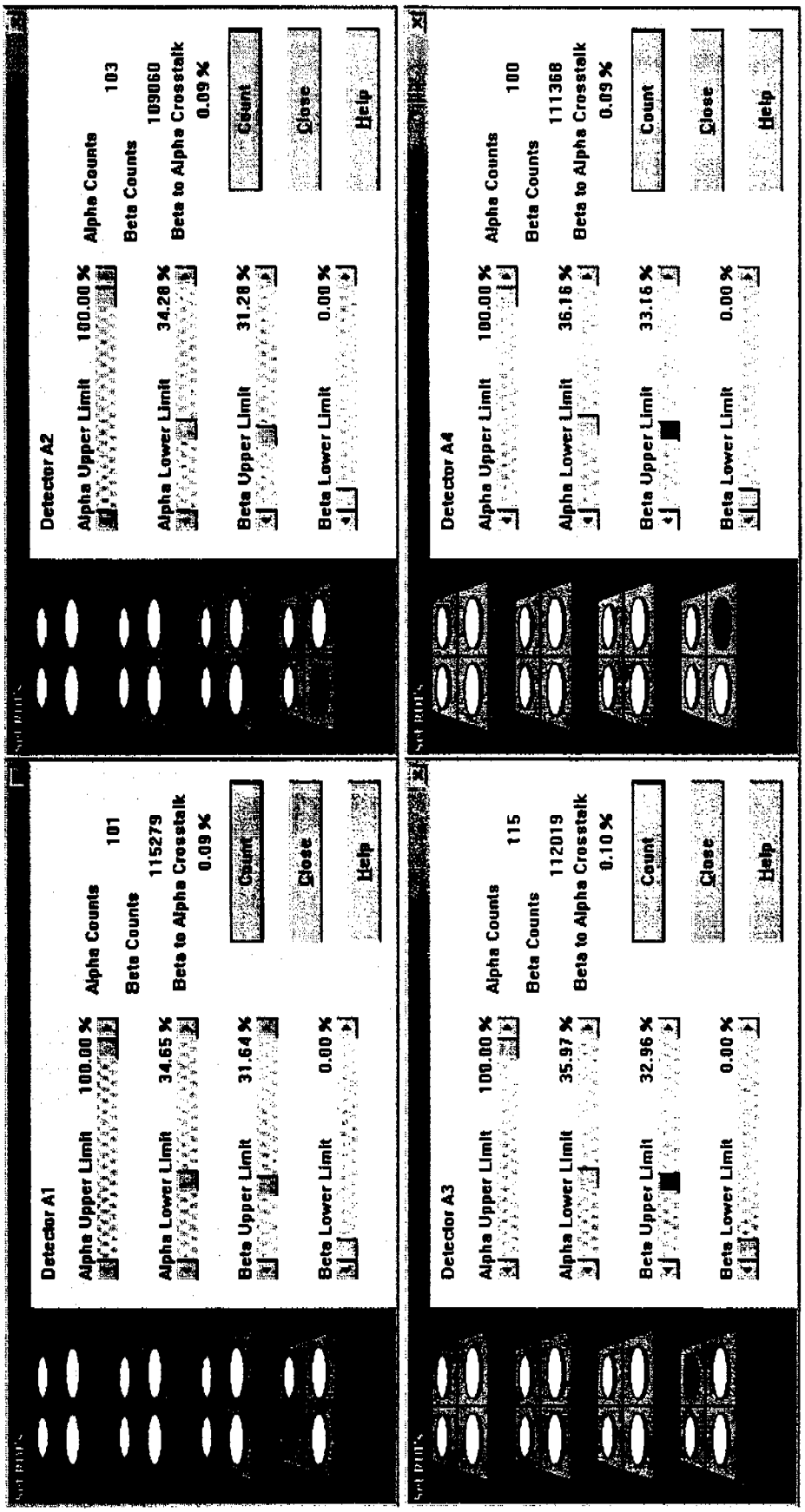
Optimum alpha only operating voltage: 420

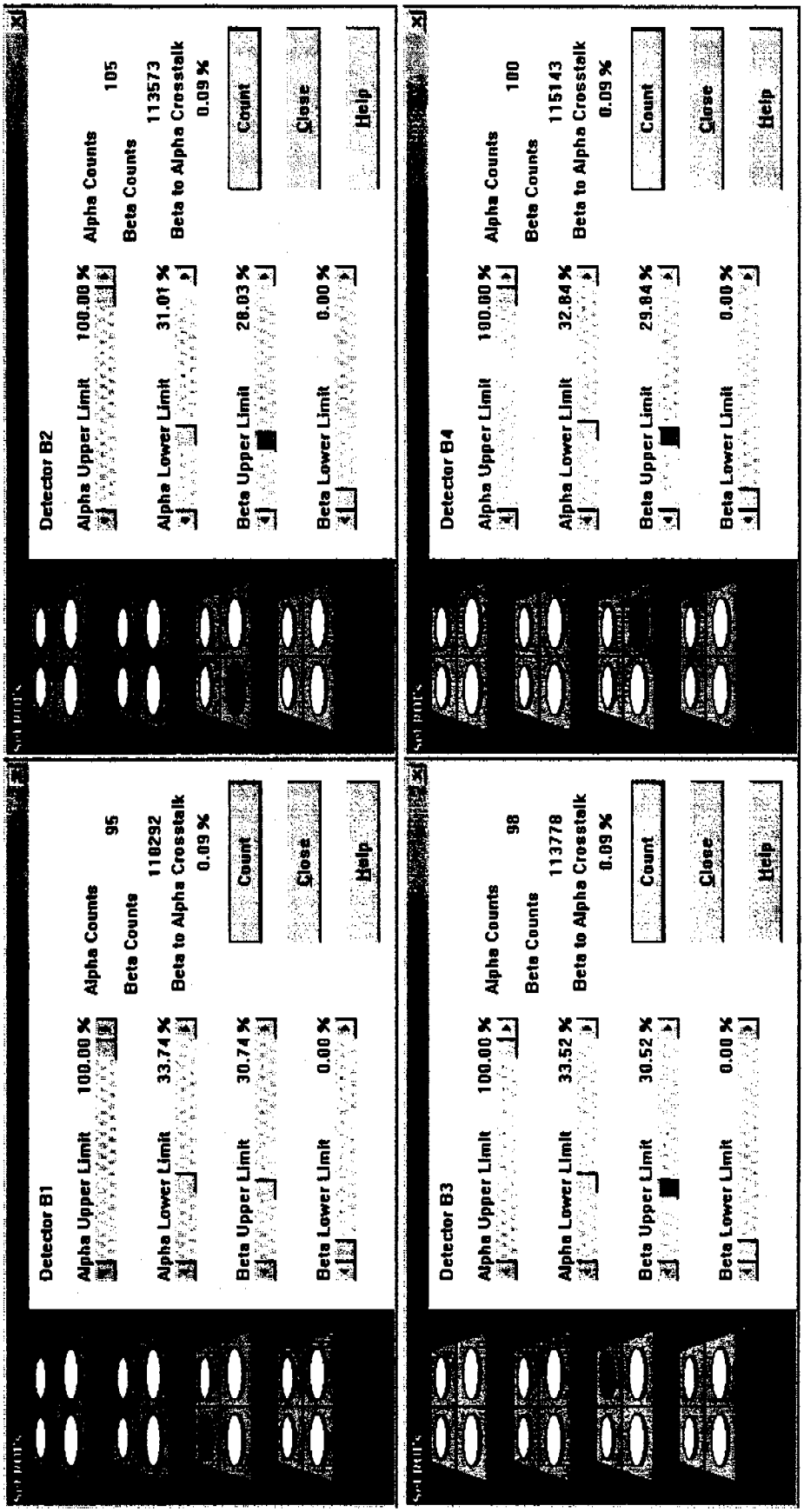
	D1	D2	D3	D4
Beta slope at beta voltage	2.60%	2.22%	2.90%	2.29%
Alpha slope at beta voltage	0.31%	0.50%	-0.50%	1.10%
Alpha slope at alpha voltage	1.96%	0.99%	3.11%	2.04%

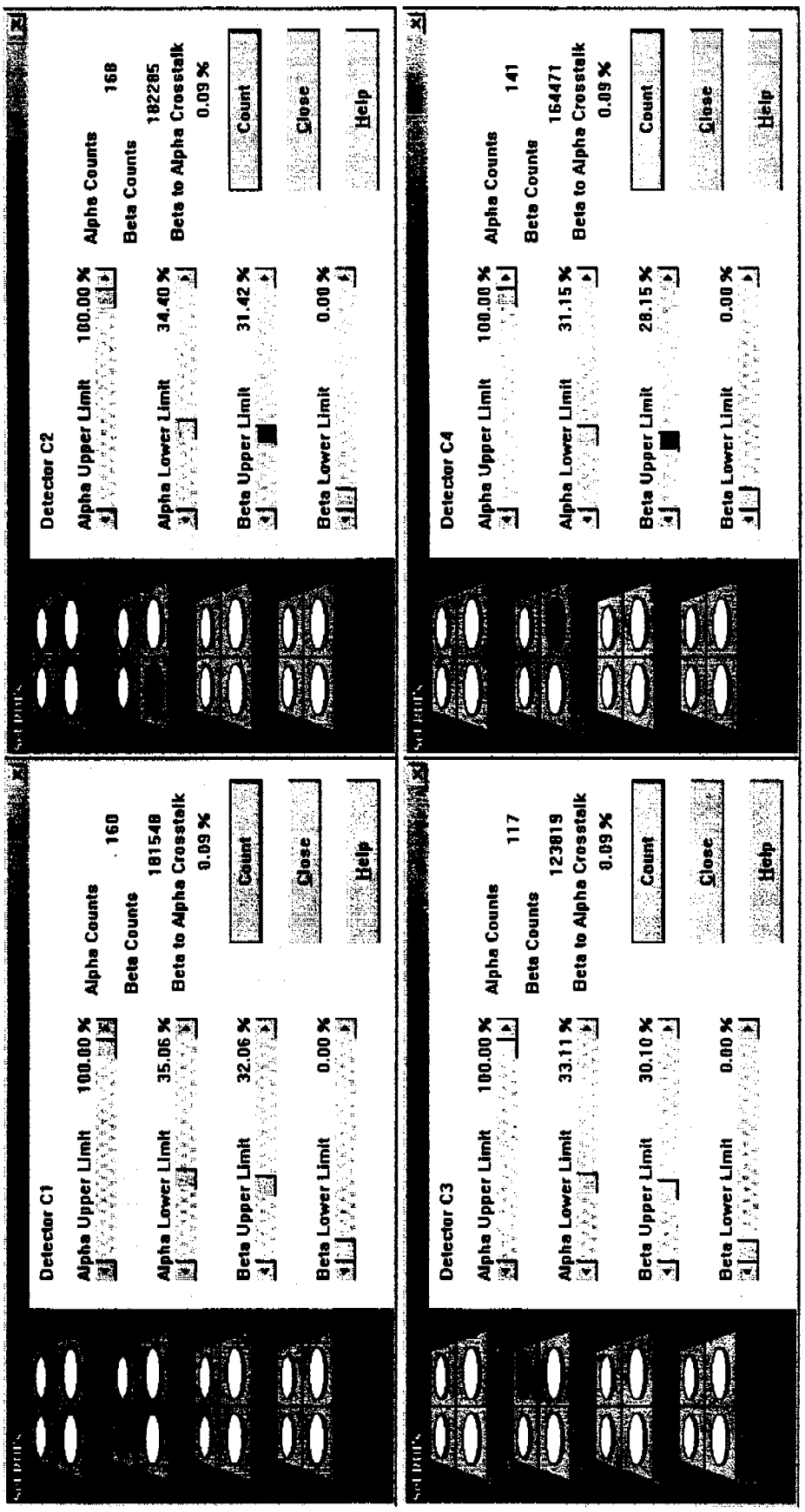
Printed 3/26/2004 1:00 PM

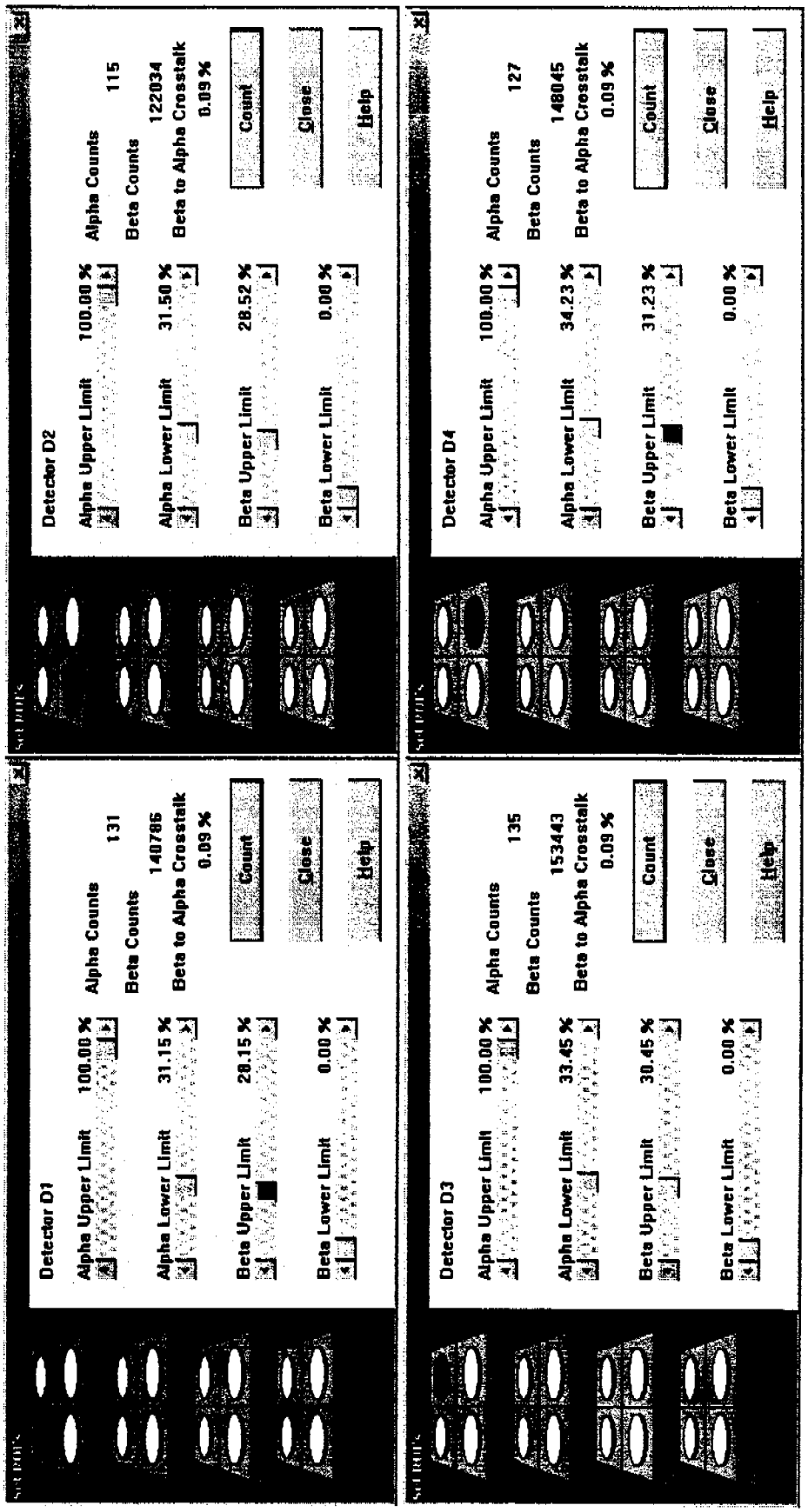
SEVERN TRENT STL

Discriminator Settings


Detector A1
Alpha Upper Limit 100.00 %
Alpha Lower Limit 34.65 %
Beta Upper Limit 31.64 %
Beta Lower Limit 0.00 %
Alpha Counts 101
Beta Counts 115279
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector A2
Alpha Upper Limit 100.00 %
Alpha Lower Limit 34.28 %
Beta Upper Limit 31.28 %
Beta Lower Limit 0.00 %
Alpha Counts 103
Beta Counts 109060
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector A3
Alpha Upper Limit 100.00 %
Alpha Lower Limit 35.97 %
Beta Upper Limit 32.96 %
Beta Lower Limit 0.00 %
Alpha Counts 115
Beta Counts 112019
Beta to Alpha Crosstalk 0.10 %
Count
Close
Help
Detector A4
Alpha Upper Limit 100.00 %
Alpha Lower Limit 36.16 %
Beta Upper Limit 33.16 %
Beta Lower Limit 0.00 %
Alpha Counts 100
Beta Counts 111368
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help


Detector B1
Alpha Upper Limit 100.00 %
Alpha Lower Limit 33.74 %
Beta Upper Limit 30.74 %
Beta Lower Limit 0.00 %
Alpha Counts 95
Beta Counts 118292
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector B2
Alpha Upper Limit 100.00 %
Alpha Lower Limit 31.01 %
Beta Upper Limit 28.03 %
Beta Lower Limit 0.00 %
Alpha Counts 105
Beta Counts 113573
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector B3
Alpha Upper Limit 100.00 %
Alpha Lower Limit 33.52 %
Beta Upper Limit 30.52 %
Beta Lower Limit 0.00 %
Alpha Counts 98
Beta Counts 113778
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector B4
Alpha Upper Limit 100.00 %
Alpha Lower Limit 32.84 %
Beta Upper Limit 29.84 %
Beta Lower Limit 0.00 %
Alpha Counts 100
Beta Counts 115143
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help


Detector C1
Alpha Upper Limit 100.00 %
Alpha Lower Limit 35.06 %
Beta Upper Limit 32.06 %
Beta Lower Limit 0.00 %
Alpha Counts 168
Beta Counts 181548
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector C2
Alpha Upper Limit 100.00 %
Alpha Lower Limit 34.40 %
Beta Upper Limit 31.42 %
Beta Lower Limit 0.00 %
Alpha Counts 168
Beta Counts 182285
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector C3
Alpha Upper Limit 100.00 %
Alpha Lower Limit 33.11 %
Beta Upper Limit 30.10 %
Beta Lower Limit 0.00 %
Alpha Counts 117
Beta Counts 123819
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector C4
Alpha Upper Limit 100.00 %
Alpha Lower Limit 31.15 %
Beta Upper Limit 28.15 %
Beta Lower Limit 0.00 %
Alpha Counts 141
Beta Counts 164471
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help


Detector D1
Alpha Upper Limit 100.00 %
Alpha Lower Limit 31.15 %
Beta Upper Limit 28.15 %
Beta Lower Limit 0.00 %
Alpha Counts 131
Beta Counts 140786
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector D2
Alpha Upper Limit 100.00 %
Alpha Lower Limit 31.50 %
Beta Upper Limit 28.52 %
Beta Lower Limit 0.00 %
Alpha Counts 115
Beta Counts 122034
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector D3
Alpha Upper Limit 100.00 %
Alpha Lower Limit 33.45 %
Beta Upper Limit 30.45 %
Beta Lower Limit 0.00 %
Alpha Counts 135
Beta Counts 153443
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector D4
Alpha Upper Limit 100.00 %
Alpha Lower Limit 34.23 %
Beta Upper Limit 31.23 %
Beta Lower Limit 0.00 %
Alpha Counts 127
Beta Counts 148045
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help

SEVERN TRENT STL

Calibration Standards and Certificates

Red

Alpha Th-230

Alpha Calibration Standards
11/14/2003 reprep 11/17/03
Alpha standard, 02-047, 2196.7 dpm/mL Th-230, 4393.4 dpm/ standard

Std #	mLs, 02-047	mLs salt solution	gross mass (g)	tare mass (g)	net mass (g)	projected mass
1	2	0	8.4532	8.4525	0.0007	0
2	2	0.25	8.4245	8.4182	0.0063	5.75
3	2	0.5	8.4418	8.4303	0.0115	11
4	2	1	8.4154	8.3926	0.0228	23
5	2	1.5	8.4875	8.4547	0.0328	34
6	2	2	8.4561	8.4124	0.0437	46
7	2	3	8.4552	8.3877	0.0675	69
8	2	4	8.5208	8.4338	0.0870	92
9	2	5	8.5345	8.4216	0.1129	115
10	2	6	8.5468	8.4133	0.1335	138
11	2	7	8.5682	8.4222	0.1460	161

1-reprep	2	0	*	*	0

* See Calibration Narrative.

ANALYTICS

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318 · U.S.A.

Phone (404) 352-8677
Fax (404) 352-2837

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

65090-334

Th-230 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated by liquid scintillation counting.

Radionuclide purity and calibration were checked by germanium gamma-ray spectrometry and liquid scintillation counting. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

ISOTOPE:	Th-230
ACTIVITY (dps):	7.654 E3
HALF-LIFE:	7.538 E4 Years
CALIBRATION DATE:	December 19, 2002 12:00 EST
TOTAL UNCERTAINTY*:	3.5%
SYSTEMATIC:	2.6%
RANDOM:	0.9%

*99% Confidence Level

Impurities: γ-impurities <0.1%, α-impurities <0.05%

5.17738 grams 0.5M HNO_3 solution.

P O NUMBER 1614557-000 OP, Item 3

SOURCE PREPARED BY: M. Taskaeva
M. Taskaeva, Radiochemist

Q A APPROVED: 12-19-02

SEVERN TRENT SERVICES

Logbook: 2060

Radiochemistry
Standards Preparation Logbook

Date Prep'd	Expir. Date	Standard ID Number	Isotope	Parent ID Number	Parent Activity	Parent Ref. Date	Aliquot	Dilution Volume	Change in Time	T ½	Final Activity	Solvent/ Lot #	Prep'd Initials	Cal. Ver. Initials	Comments
9-11-03	9-11-07	03-069 03-069 MC 9-22-03	Pu-238	02-026	132.98	2-23-01	9.5ml	↓	1356 days	32033.4 9.75	66.20 33.0 66.4	K9-15-03 ml	MFM		re-certification of 03-031, 03-03 blend 66.20
↓	↓	↓	Pu-239	02-025	128.06	2-23-01	4.5ml	150ml		0.0235 24110y	62.025 dpm/ml	62.025 dpm/ml	MFM		62.025 dpm/ml
9-11-03	9-11-08	03-070 03-070 MC 9-22-03	Am243	98-011	1161 dpm/g	2-28-98	15g 16g	200ml		7.37 E+3 y	87.075 9.2.93 dpm/ml		MFM		
10-6-03	10-6-08	03-071	Th230	65090-334	7,654 dps	12-19-02	5.1498g	100mL	N/A	7.538E4	4,567.9 dpm/mL	0.5M HNO3	BH	BBF	
10-6-03	10-6-08	03-072	Th230	03-071	4,567.9 dpm/mL	12-19-02	1mL	200mL	N/A	7.538E4	22.84 dpm/mL	0.5M HNO3	BH	BBF	
10-11-03	10-11-0	03-073	dum U-232	047-105	10994 dpm/ml	9-16-97	10ml	1000L		70 yr	163.85 dpm/L	P I H2O 2M H2SO4 KOH pH 11.5	MFM BBF		Rad 03-0078 in Rad Capture
10/31/03	10/31/08	03-074	I-129	681-78-4	1.059 uCi	1-1-2000	1mL	100mL	N/A	1.57E+07	10.54 nCi/mL	0.1M NaOH	BH	BBF	
10/31/03	10/31/04	03-075	I-129	03-074	10.54 nCi/mL	1-1-2000	1mL	100mL	N/A	1.57E7	105.4 pCi/mL	0.1M NaOH	BH	BBF	
10/31/03	10/31/04	03-076	Ra228	01012	1,018 dpm/mL	2/16/01	2mL	100mL	NA	5.75y	20.36 dpm/mL	0.5M HNO3	BH	BBF	
10/31/03	10/31/04	03-081	Pu-242	92-242-5-1	129.636 Bq/g	12/18/89	5.0723	500mL	N/A	3.73 X 10^5 y	78.9027	.5M HNO3	MFM	MO	
11/3/03	11/3/04	SR19	SH SR carrier	Sr(NO3)2	N/A	N/A	120.77g	1 Liter	N/A	N/A		di H2O	[illegible]	BBF	Reported in Rad capture
11-5-03	11-5-04	RAD03-0032	Th-229	02-006	2134.75 dpm/ml	1-28-02	17.5mL	500mL	N/A	7.3e+3	74.716 dpm/mL	.5M HNO3	MFM	JMW	

Additional Comments:

SEVERN TRENT STL

Calibration for LB4100

Red

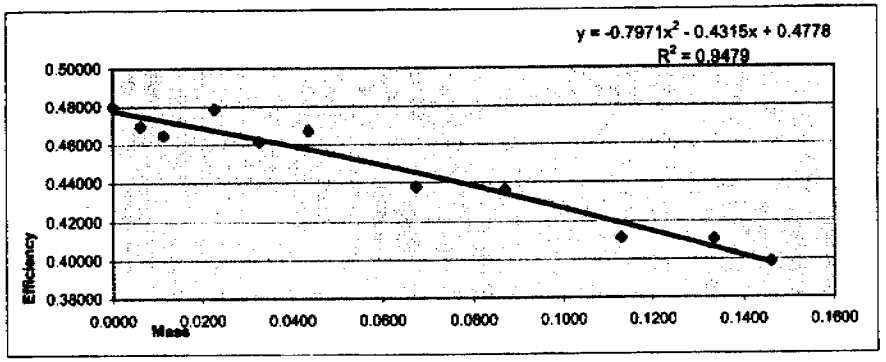
Beta Sr-90

SEVERN TRENT STL

Detector Efficiency Curves

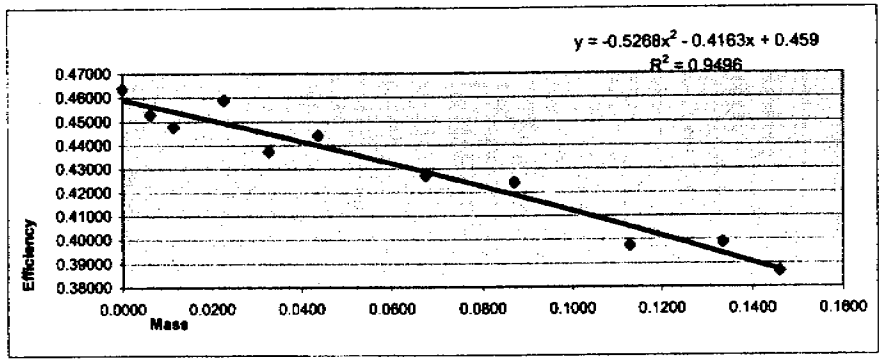
Beta Attenuation Red A1 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
A1	0.0000	9.81	20446	2084.200	0.48001
A1	0.0063	10.02	20436	2039.521	0.46972
A1	0.0115	10.13	20441	2017.868	0.46473
A1	0.0228	9.83	20422	2077.518	0.47847
A1	0.0328	10.20	20428	2002.745	0.46125
A1	0.0437	10.07	20423	2028.103	0.46709
A1	0.0675	10.75	20431	1900.558	0.43771
A1	0.0870	10.79	20426	1893.049	0.43599
A1	0.1129	11.44	20418	1784.790	0.41105
A1	0.1335	11.46	20430	1782.723	0.41058
A1	0.1460	11.80	20421	1730.593	0.39857



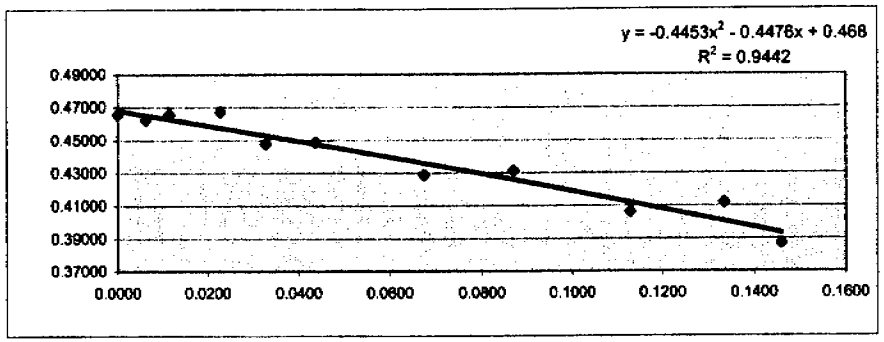
Beta Attenuation Red A2 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
A2	0.0000	10.17	20465	2012.291	0.46345
A2	0.0063	10.39	20430	1966.314	0.45286
A2	0.0115	10.51	20428	1943.673	0.44764
A2	0.0228	10.26	20439	1992.105	0.45880
A2	0.0328	10.76	20434	1899.071	0.43737
A2	0.0437	10.60	20434	1927.736	0.44397
A2	0.0675	11.02	20426	1853.539	0.42689
A2	0.0870	11.09	20418	1841.116	0.42403
A2	0.1129	11.84	20421	1724.747	0.39722
A2	0.1335	11.80	20426	1731.017	0.39867
A2	0.1460	12.17	20414	1677.403	0.38632



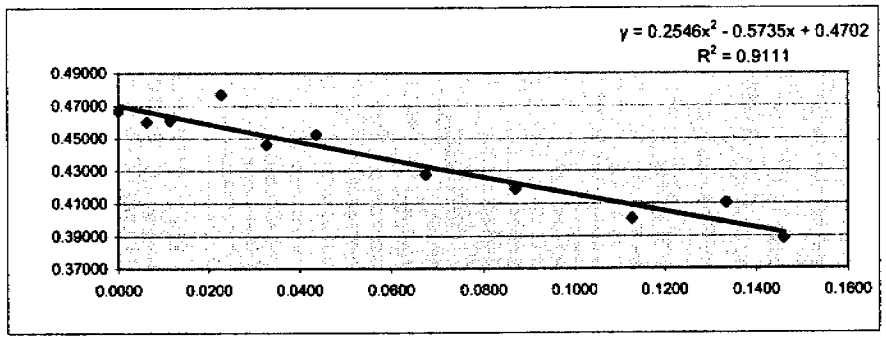
Beta Attenuation Red A3 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
A3	0.0000	10.12	20457	2021.443	0.46556
A3	0.0063	10.18	20443	2008.153	0.46249
A3	0.0115	10.11	20438	2021.563	0.46558
A3	0.0228	10.07	20426	2028.401	0.46716
A3	0.0328	10.51	20428	1943.673	0.44764
A3	0.0437	10.50	20444	1947.048	0.44842
A3	0.0675	10.98	20431	1860.747	0.42855
A3	0.0870	10.92	20445	1872.253	0.43120
A3	0.1129	11.58	20420	1763.385	0.40612
A3	0.1335	11.43	20432	1787.577	0.41169
A3	0.1460	12.16	20417	1679.030	0.38669



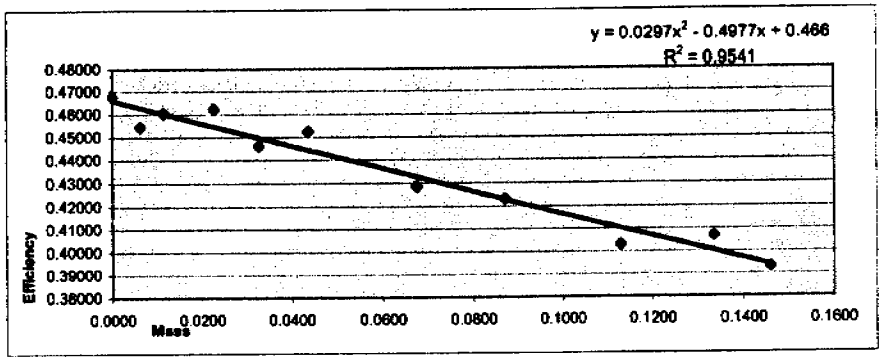
Beta Attenuation Red A4 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
A4	0.0000	10.08	20434	2027.183	0.46688
A4	0.0063	10.23	20435	1997.556	0.46005
A4	0.0115	10.20	20418	2001.765	0.46102
A4	0.0228	9.88	20455	2070.344	0.47682
A4	0.0328	10.55	20431	1936.588	0.44601
A4	0.0437	10.40	20437	1965.096	0.45258
A4	0.0675	11.00	20428	1857.091	0.42770
A4	0.0870	11.24	20436	1818.149	0.41874
A4	0.1129	11.74	20420	1739.353	0.40059
A4	0.1335	11.48	20436	1780.139	0.40998
A4	0.1460	12.11	20425	1686.623	0.38844



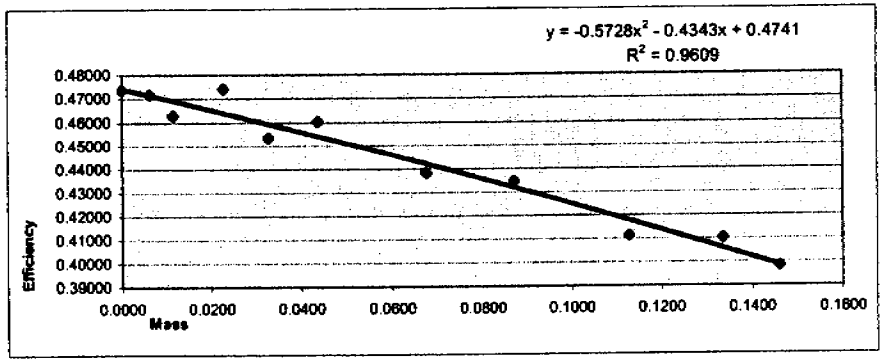
Beta Attenuation Red B1 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
B1	0.0000	10.06	20429	2030.716	0.46769
B1	0.0063	10.36	20446	1973.552	0.45453
B1	0.0115	10.22	20430	1999.022	0.46039
B1	0.0228	10.18	20431	2006.974	0.46222
B1	0.0328	10.55	20431	1936.588	0.44601
B1	0.0437	10.41	20447	1964.169	0.45237
B1	0.0675	10.98	20423	1860.018	0.42838
B1	0.0870	11.12	20432	1837.410	0.42317
B1	0.1129	11.68	20427	1748.887	0.40278
B1	0.1335	11.57	20424	1765.255	0.40655
B1	0.1460	11.97	20423	1706.182	0.39295



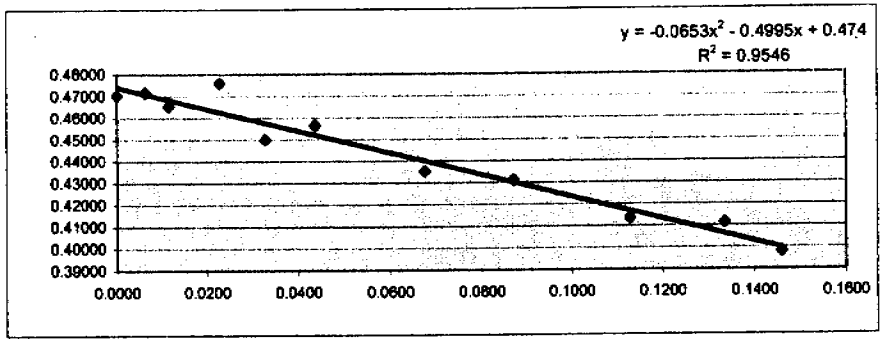
Beta Attenuation Red B2 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
B2	0.0000	9.93	20414	2055.791	0.47347
B2	0.0063	9.97	20417	2047.844	0.47164
B2	0.0115	10.18	20453	2009.136	0.46272
B2	0.0228	9.94	20458	2058.149	0.47401
B2	0.0328	10.38	20431	1968.304	0.45332
B2	0.0437	10.22	20423	1998.337	0.46023
B2	0.0675	10.73	20413	1902.423	0.43814
B2	0.0870	10.82	20415	1886.784	0.43454
B2	0.1129	11.43	20413	1785.914	0.41131
B2	0.1335	11.47	20432	1781.343	0.41026
B2	0.1460	11.81	20417	1728.789	0.39816



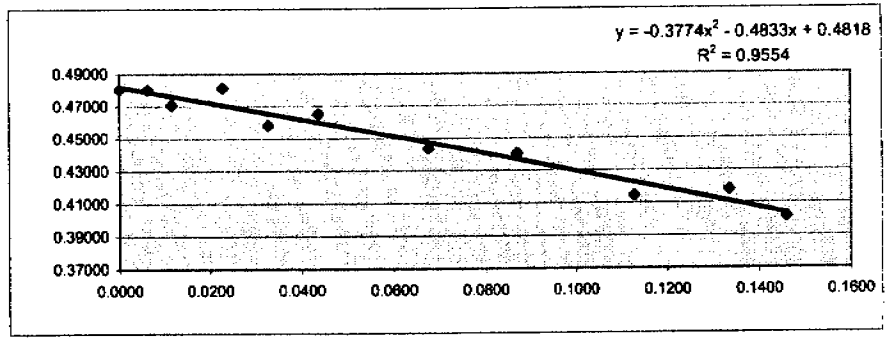
Beta Attenuation Red B3 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
B3	0.0000	10.00	20414	2041.400	0.47015
B3	0.0063	9.97	20412	2047.342	0.47152
B3	0.0115	10.11	20427	2020.475	0.46533
B3	0.0228	9.91	20471	2065.691	0.47575
B3	0.0328	10.45	20414	1953.493	0.44991
B3	0.0437	10.31	20438	1982.347	0.45655
B3	0.0675	10.81	20426	1889.547	0.43518
B3	0.0870	10.91	20413	1871.036	0.43092
B3	0.1129	11.38	20424	1794.728	0.41334
B3	0.1335	11.44	20424	1785.315	0.41117
B3	0.1460	11.82	20419	1727.496	0.39786



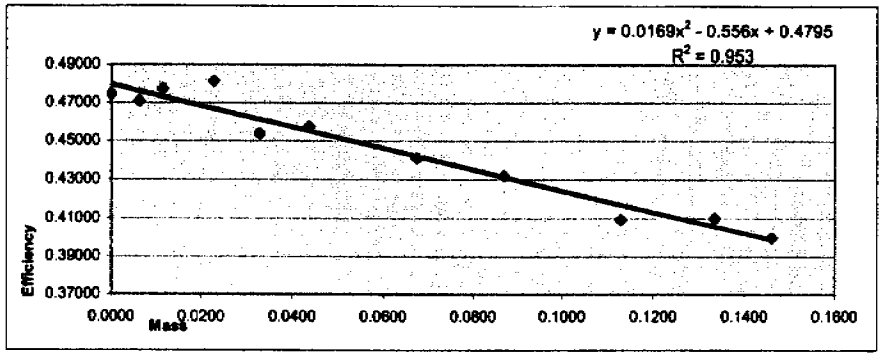
Beta Attenuation Red B4 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
B4	0.0000	9.81	20452	2084.811	0.48015
B4	0.0063	9.82	20466	2084.114	0.47999
B4	0.0115	9.99	20424	2044.444	0.47085
B4	0.0228	9.78	20430	2088.957	0.48110
B4	0.0328	10.27	20438	1990.068	0.45833
B4	0.0437	10.12	20437	2019.466	0.46510
B4	0.0675	10.60	20417	1926.132	0.44360
B4	0.0870	10.68	20430	1912.921	0.44056
B4	0.1129	11.35	20418	1798.943	0.41431
B4	0.1335	11.26	20424	1813.854	0.41775
B4	0.1460	11.72	20411	1741.553	0.40109



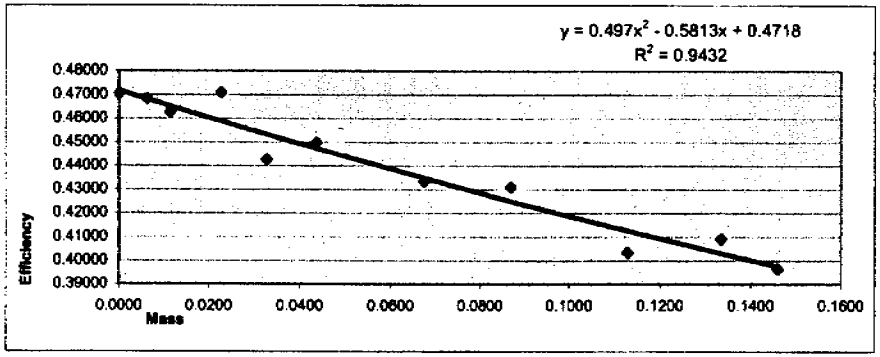
Beta Attenuation Red C1 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
C1	0.0000	9.93	20458	2060.222	0.47449
C1	0.0063	10.00	20444	2044.400	0.47084
C1	0.0115	9.86	20428	2071.805	0.47715
C1	0.0228	9.78	20433	2089.264	0.48118
C1	0.0328	10.38	20450	1970.135	0.45374
C1	0.0437	10.29	20440	1986.395	0.45748
C1	0.0675	10.68	20449	1914.700	0.44097
C1	0.0870	10.90	20439	1875.138	0.43186
C1	0.1129	11.50	20429	1776.435	0.40913
C1	0.1335	11.48	20431	1779.704	0.40988
C1	0.1460	11.77	20418	1734.749	0.39953



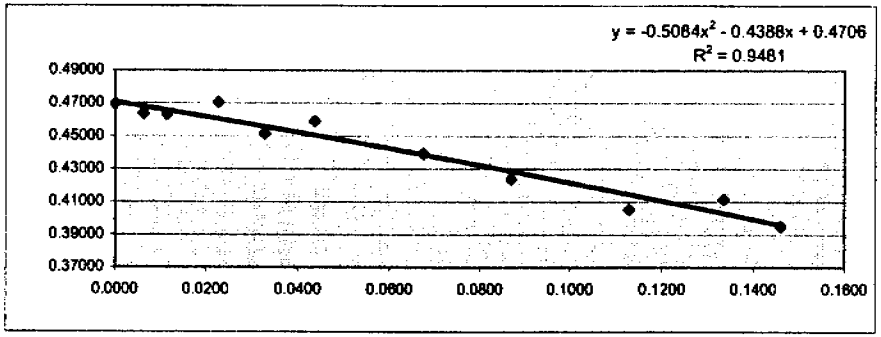
Beta Attenuation Red C2 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
C2	0.0000	10.02	20459	2041.816	0.47025
C2	0.0063	10.05	20430	2032.836	0.46818
C2	0.0115	10.17	20432	2009.046	0.46270
C2	0.0228	9.99	20427	2044.745	0.47092
C2	0.0328	10.63	20426	1921.543	0.44255
C2	0.0437	10.46	20432	1953.346	0.44987
C2	0.0675	10.85	20415	1881.567	0.43334
C2	0.0870	10.92	20429	1870.788	0.43086
C2	0.1129	11.66	20418	1751.115	0.40330
C2	0.1335	11.50	20417	1775.391	0.40889
C2	0.1460	11.87	20427	1720.893	0.39634



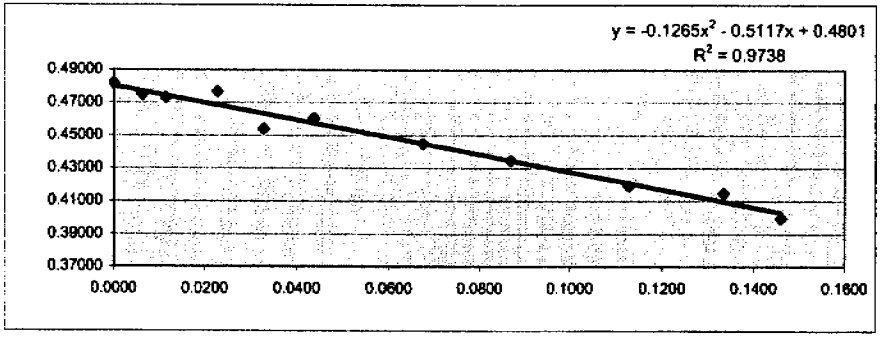
Beta Attenuation Red C3 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
C3	0.0000	10.04	20459	2037.749	0.46931
C3	0.0063	10.15	20418	2011.626	0.46329
C3	0.0115	10.17	20444	2010.226	0.46297
C3	0.0228	10.01	20438	2041.758	0.47023
C3	0.0328	10.42	20418	1959.501	0.45129
C3	0.0437	10.25	20420	1992.195	0.45882
C3	0.0675	10.72	20448	1907.463	0.43931
C3	0.0870	11.09	20413	1840.667	0.42392
C3	0.1129	11.61	20430	1759.690	0.40527
C3	0.1335	11.44	20434	1786.189	0.41137
C3	0.1460	11.91	20426	1715.029	0.39499



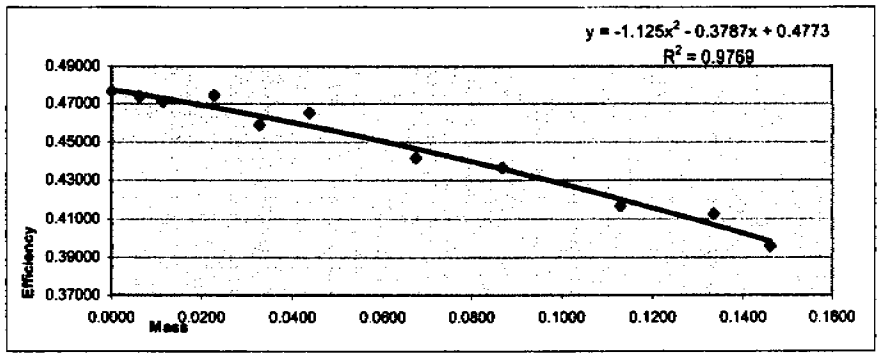
Beta Attenuation Red C4 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
C4	0.0000	9.77	20431	2091.198	0.48162
C4	0.0063	9.91	20426	2061.150	0.47470
C4	0.0115	9.95	20430	2053.266	0.47288
C4	0.0228	9.88	20443	2069.130	0.47654
C4	0.0328	10.36	20418	1970.849	0.45390
C4	0.0437	10.22	20432	1999.217	0.46044
C4	0.0675	10.57	20417	1931.599	0.44486
C4	0.0870	10.82	20424	1887.616	0.43473
C4	0.1129	11.22	20421	1820.053	0.41917
C4	0.1335	11.35	20430	1800.000	0.41456
C4	0.1460	11.77	20414	1734.410	0.39945



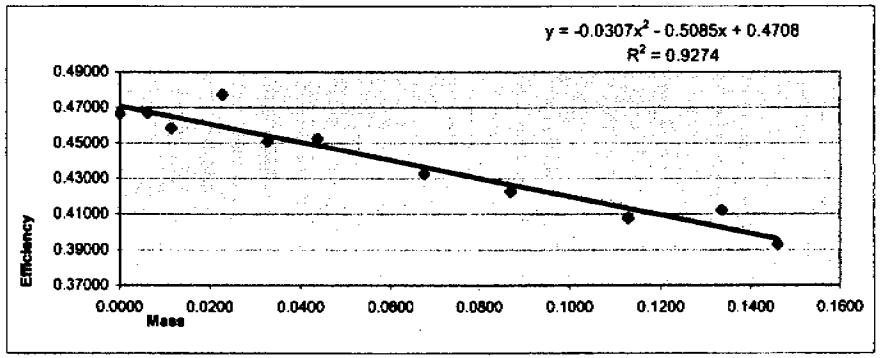
Beta Attenuation Red D1 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
D1	0.0000	9.86	20434	2068.219	0.47633
D1	0.0063	9.93	20425	2056.898	0.47372
D1	0.0115	10.00	20448	2044.800	0.47094
D1	0.0228	9.93	20453	2059.718	0.47437
D1	0.0328	10.25	20424	1992.585	0.45891
D1	0.0437	10.11	20427	2020.475	0.46533
D1	0.0675	10.65	20422	1917.559	0.44163
D1	0.0870	10.78	20424	1894.620	0.43635
D1	0.1129	11.29	20426	1809.212	0.41668
D1	0.1335	11.40	20421	1791.316	0.41258
D1	0.1460	11.89	20419	1717.325	0.39551



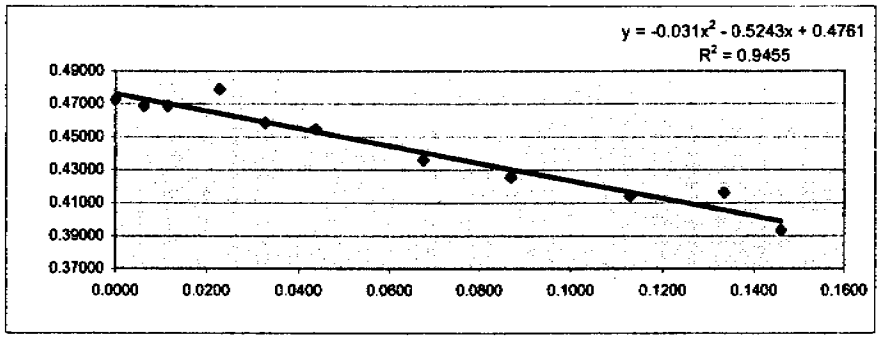
Beta Attenuation Red D2 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
D2	0.0000	10.08	20415	2025.298	0.46644
D2	0.0063	10.07	20413	2027.110	0.46686
D2	0.0115	10.26	20419	1990.156	0.45835
D2	0.0228	9.87	20445	2071.429	0.47707
D2	0.0328	10.43	20413	1957.143	0.45075
D2	0.0437	10.40	20432	1964.615	0.45247
D2	0.0675	10.67	20419	1878.473	0.43263
D2	0.0870	11.13	20416	1834.322	0.42246
D2	0.1129	11.54	20421	1769.584	0.40755
D2	0.1335	11.42	20426	1788.616	0.41193
D2	0.1460	11.97	20417	1705.681	0.39283



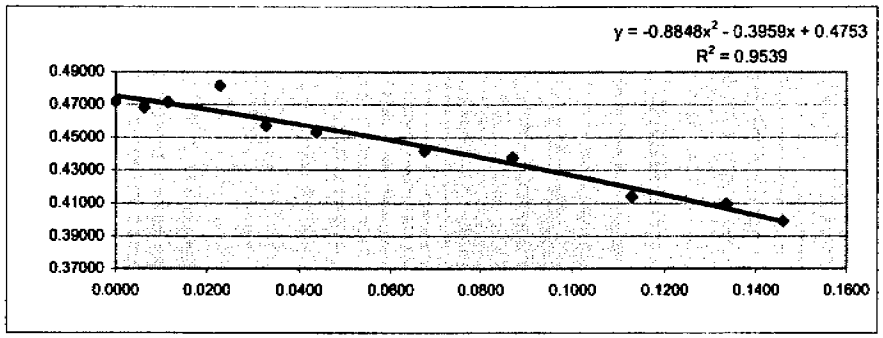
Beta Attenuation Red D3 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
D3	0.0000	9.95	20413	2051.558	0.47249
D3	0.0063	10.04	20429	2034.761	0.46862
D3	0.0115	10.04	20423	2034.163	0.46849
D3	0.0228	9.82	20411	2078.513	0.47870
D3	0.0328	10.26	20416	1989.864	0.45828
D3	0.0437	10.36	20450	1973.938	0.45461
D3	0.0675	10.80	20431	1891.759	0.43569
D3	0.0870	11.06	20431	1847.288	0.42545
D3	0.1129	11.35	20420	1799.119	0.41435
D3	0.1335	11.30	20424	1807.434	0.41627
D3	0.1460	11.95	20411	1708.033	0.39337



Beta Attenuation Red D4 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
D4	0.0000	9.97	20422	2048.345	0.47175
D4	0.0063	10.04	20418	2033.665	0.46837
D4	0.0115	9.97	20415	2047.643	0.47159
D4	0.0228	9.77	20425	2090.583	0.48148
D4	0.0328	10.29	20425	1984.937	0.45715
D4	0.0437	10.38	20429	1968.112	0.45327
D4	0.0675	10.66	20435	1916.979	0.44150
D4	0.0870	10.75	20432	1900.651	0.43774
D4	0.1129	11.36	20414	1797.007	0.41387
D4	0.1335	11.49	20430	1778.068	0.40950
D4	0.1460	11.79	20421	1732.061	0.39891

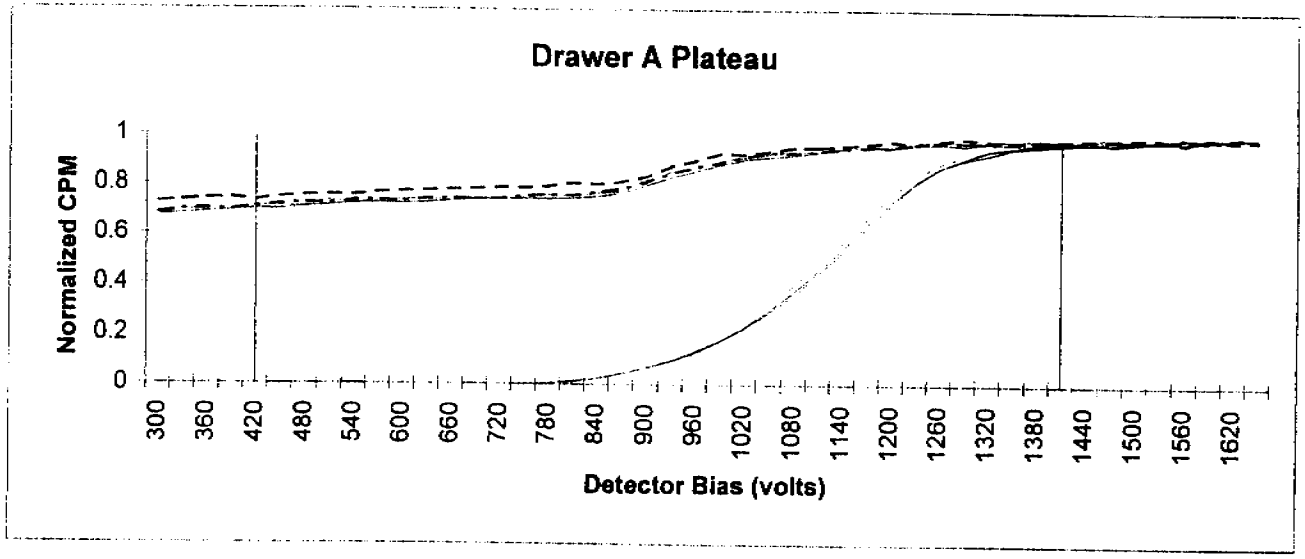


SEVERN TRENT STL

Voltage Plateaus

Unit Type: LB4100/W
Date Performed: 3/25/04 11:59
FileName: PLAT000
Batch ID: RED PLATEAUS 03/25/04 IV

Unit Id: Red
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

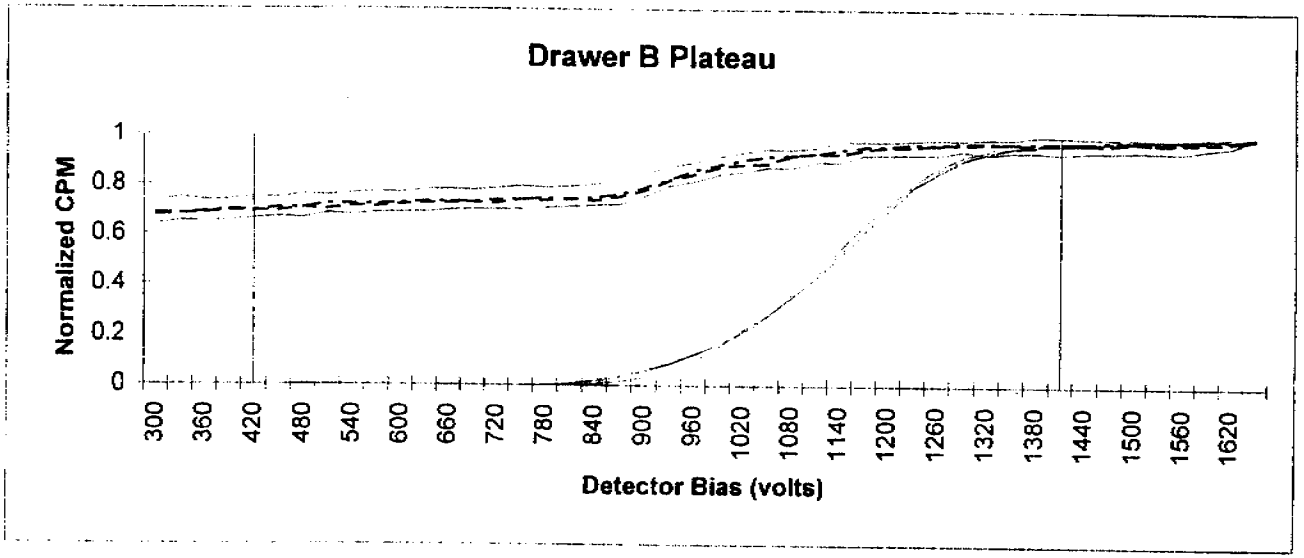
Optimum alpha only operating voltage: 420

	A1	A2	A3	A4
Beta slope at beta voltage	2.02%	2.37%	2.37%	1.15%
Alpha slope at beta voltage	0.88%	1.01%	0.57%	0.87%
Alpha slope at alpha voltage	1.70%	1.39%	2.26%	3.25%

Printed 3/26/2004 12:59 PM

Unit Type: LB4100/W
Date Performed: 3/25/04 11:59
FileName: PLAT000
Batch ID: RED PLATEAUS 03/25/04 IV

Unit Id: Red
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

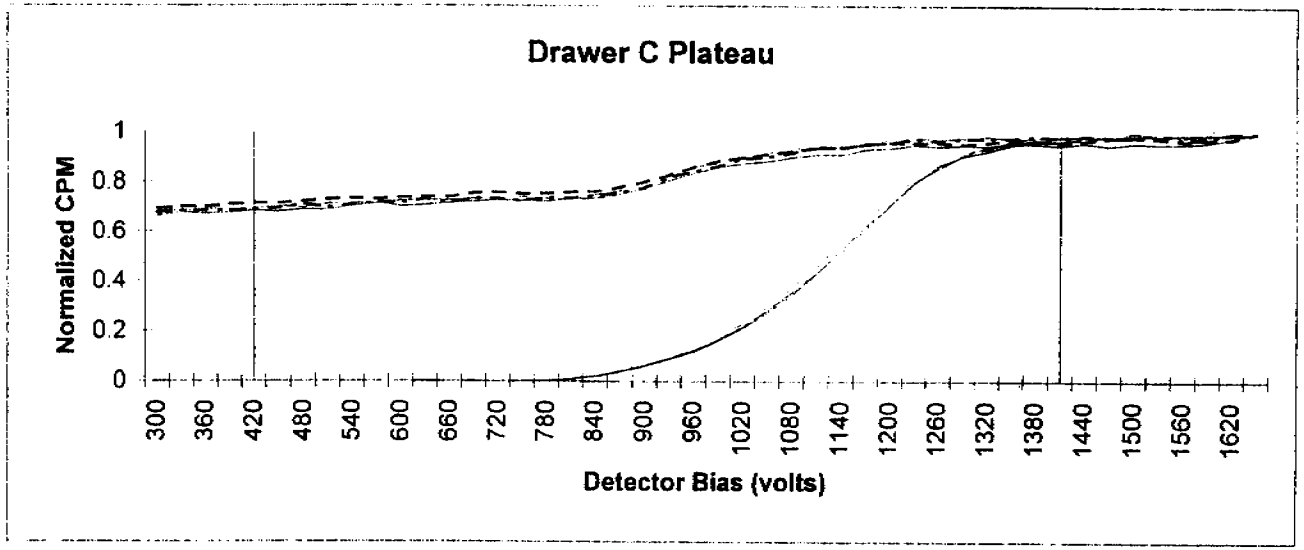
Optimum alpha only operating voltage: 420

	B1	B2	B3	B4
Beta slope at beta voltage	2.01%	2.51%	3.24%	1.41%
Alpha slope at beta voltage	0.31%	-0.08%	0.14%	0.96%
Alpha slope at alpha voltage	2.73%	2.06%	2.42%	2.08%

Printed 3/26/2004 12:59 PM

Unit Type: LB4100/W
Date Performed: 3/25/04 11:59
FileName: PLAT000
Batch ID: RED PLATEAUS 03/25/04 IV

Unit Id: Red
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

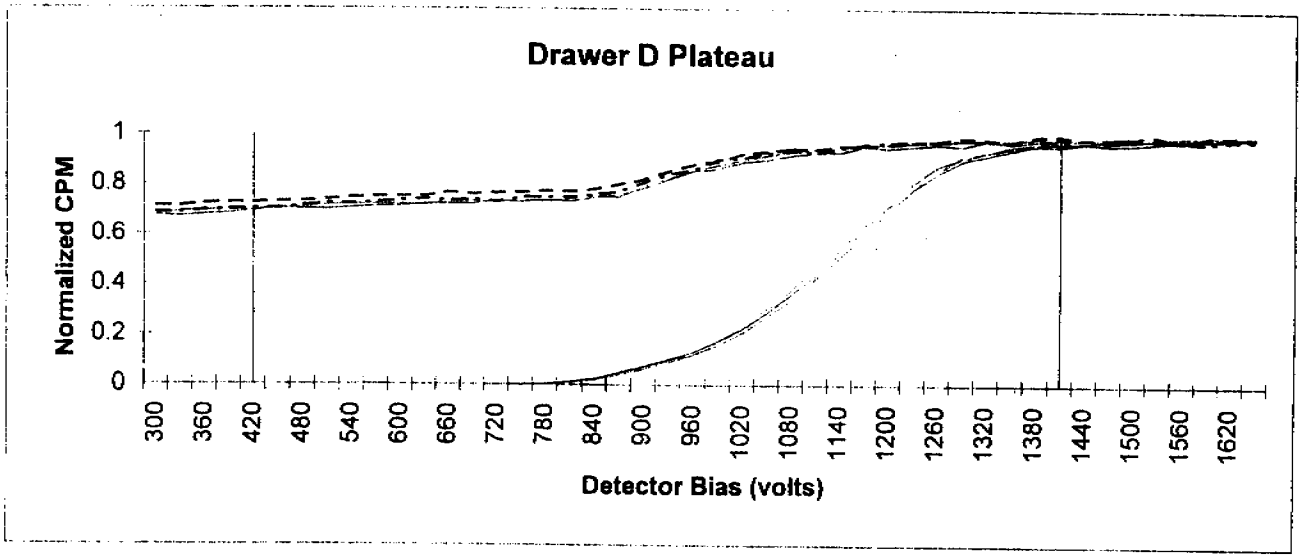
Optimum alpha only operating voltage: 420

	C1	C2	C3	C4
Beta slope at beta voltage	1.87%	3.12%	2.82%	2.97%
Alpha slope at beta voltage	0.82%	0.39%	-0.79%	0.31%
Alpha slope at alpha voltage	1.36%	2.31%	1.73%	2.98%

Printed 3/26/2004 1:00 PM

Unit Type: LB4100/W
Date Performed: 3/25/04 11:59
FileName: PLAT000
Batch ID: RED PLATEAUS 03/25/04 IV

Unit Id: Red
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

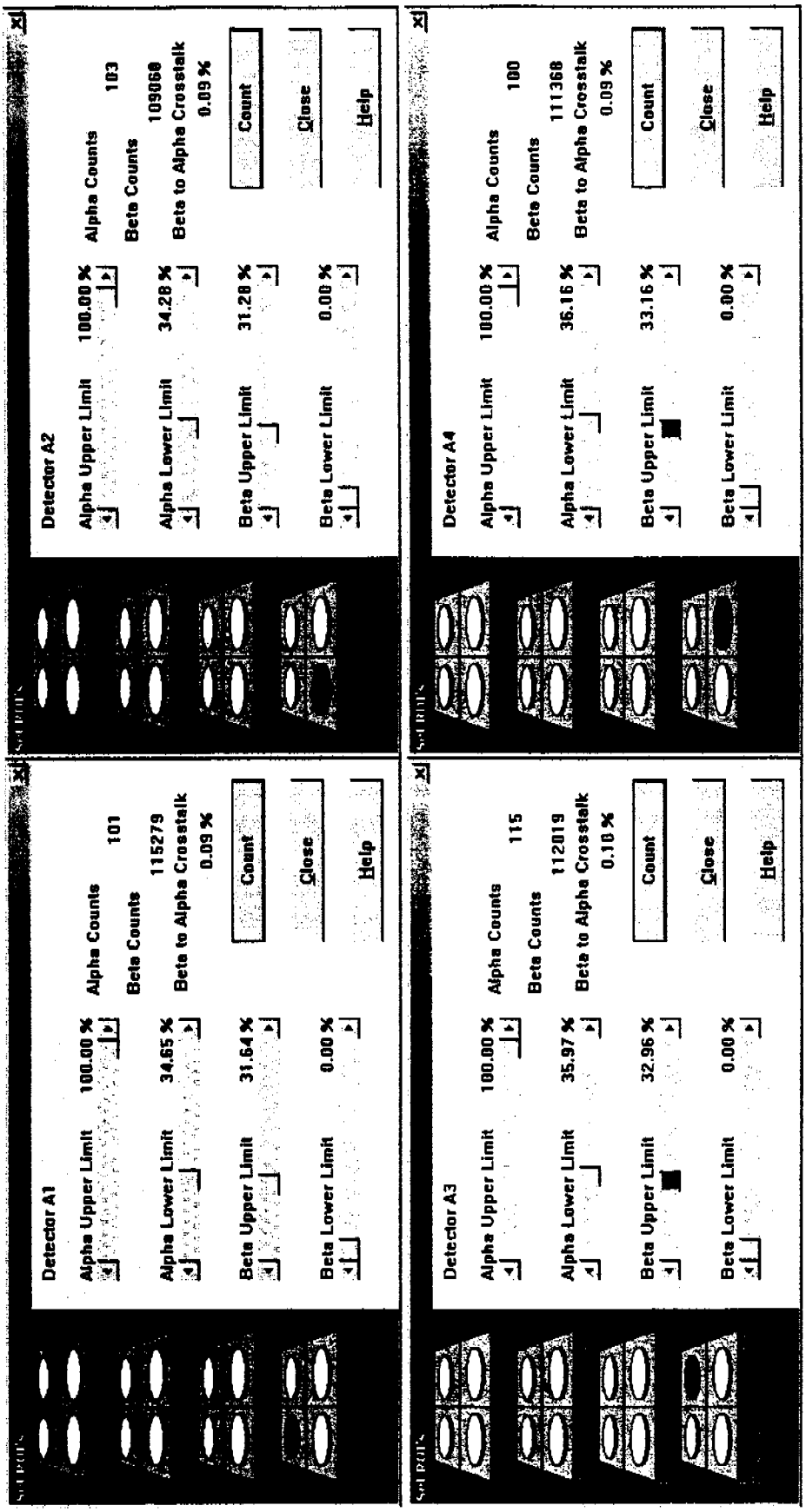
Optimum alpha only operating voltage: 420

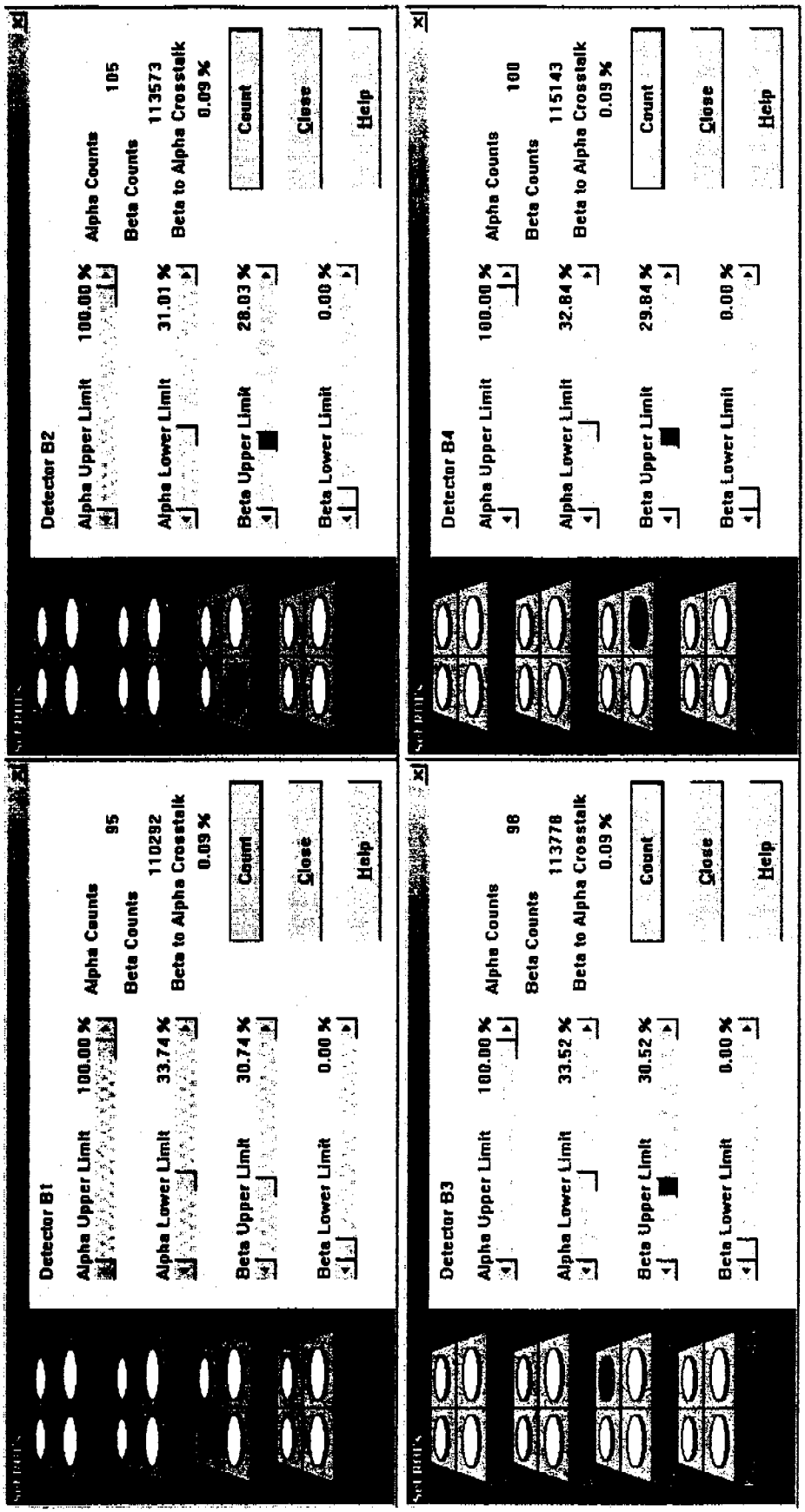
	D1	D2	D3	D4
Beta slope at beta voltage	2.60%	2.22%	2.90%	2.29%
Alpha slope at beta voltage	0.31%	0.50%	-0.50%	1.10%
Alpha slope at alpha voltage	1.96%	0.99%	3.11%	2.04%

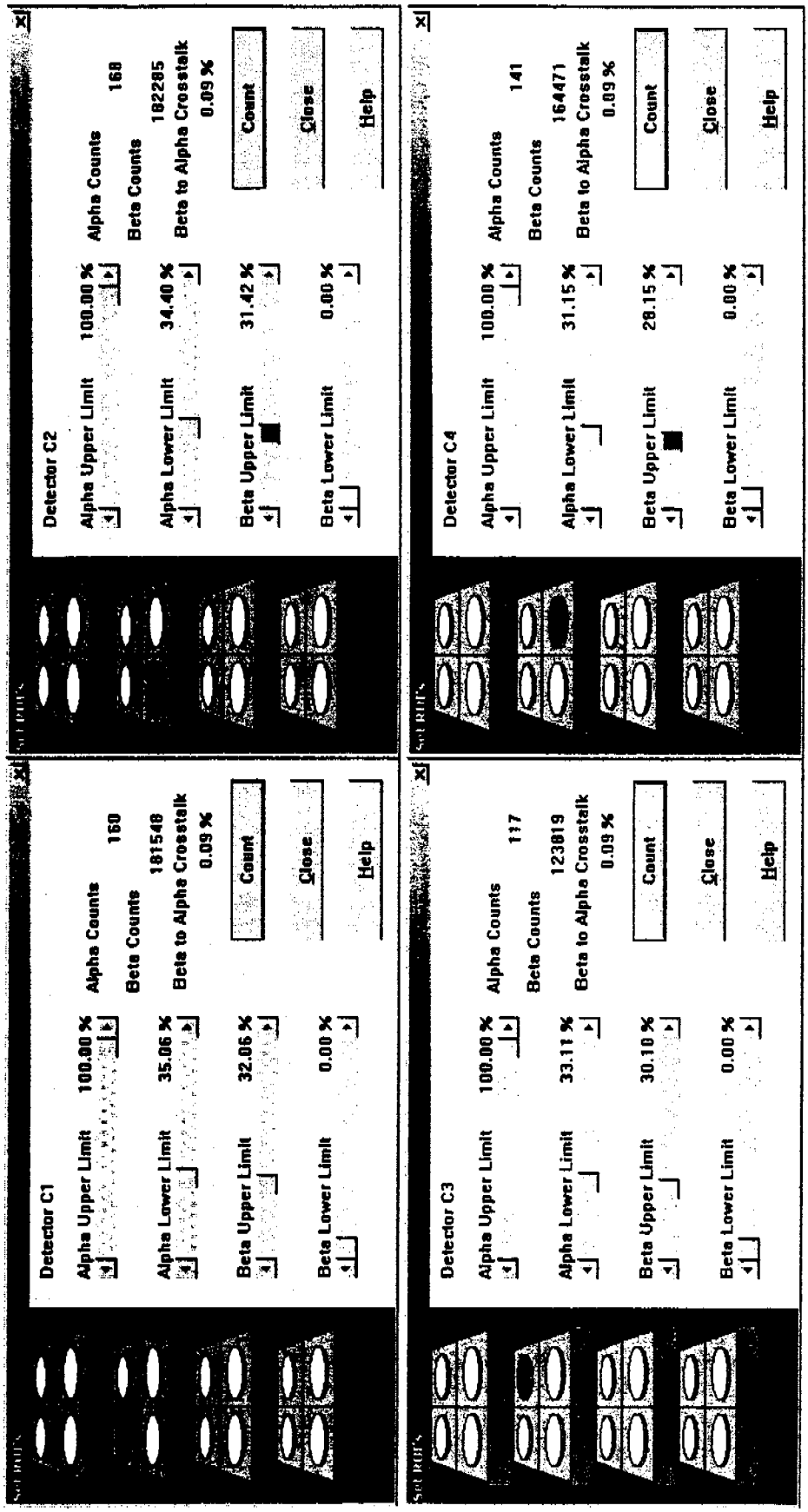
Printed 3/26/2004 1:00 PM

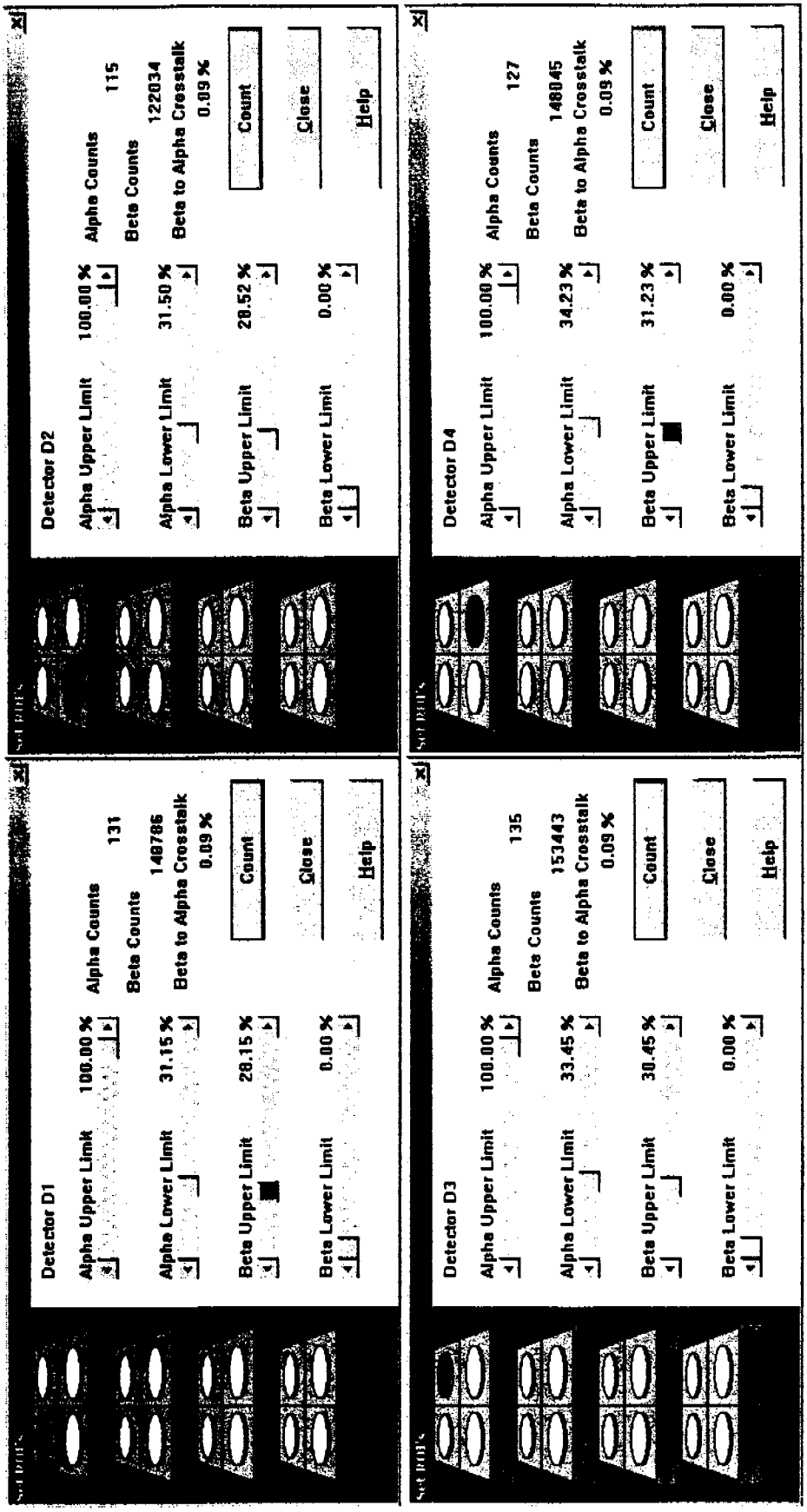
SEVERN TRENT STL

Discriminator Settings


Detector A1
Alpha Upper Limit 100.00 %
Alpha Counts 101
Beta Counts 115279
Alpha Lower Limit 34.65 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 31.64 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector A2
Alpha Upper Limit 100.00 %
Alpha Counts 103
Beta Counts 109068
Alpha Lower Limit 34.28 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 31.28 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector A3
Alpha Upper Limit 100.00 %
Alpha Counts 115
Beta Counts 112019
Alpha Lower Limit 35.97 %
Beta to Alpha Crosstalk 0.10 %
Beta Upper Limit 32.96 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector A4
Alpha Upper Limit 100.00 %
Alpha Counts 100
Beta Counts 111368
Alpha Lower Limit 35.16 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 33.16 %
Count
Close
Beta Lower Limit 0.00 %
Help


Detector B1
Alpha Upper Limit 100.00 %
Alpha Lower Limit 33.74 %
Beta Upper Limit 30.74 %
Beta Lower Limit 0.00 %
Alpha Counts 95
Beta Counts 110292
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector B2
Alpha Upper Limit 100.00 %
Alpha Lower Limit 31.01 %
Beta Upper Limit 28.03 %
Beta Lower Limit 0.00 %
Alpha Counts 105
Beta Counts 113573
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector B3
Alpha Upper Limit 100.00 %
Alpha Lower Limit 33.52 %
Beta Upper Limit 30.52 %
Beta Lower Limit 0.00 %
Alpha Counts 98
Beta Counts 113778
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector B4
Alpha Upper Limit 100.00 %
Alpha Lower Limit 32.84 %
Beta Upper Limit 29.84 %
Beta Lower Limit 0.00 %
Alpha Counts 100
Beta Counts 115143
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help


Detector C1
Alpha Upper Limit 100.00 %
Alpha Counts 160
Beta Counts 181548
Alpha Lower Limit 35.06 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 32.06 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector C2
Alpha Upper Limit 100.00 %
Alpha Counts 168
Beta Counts 182285
Alpha Lower Limit 34.40 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 31.42 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector C3
Alpha Upper Limit 100.00 %
Alpha Counts 117
Beta Counts 123819
Alpha Lower Limit 33.11 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 30.10 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector C4
Alpha Upper Limit 100.00 %
Alpha Counts 141
Beta Counts 164471
Alpha Lower Limit 31.15 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 28.15 %
Count
Close
Beta Lower Limit 0.00 %
Help


Detector D1
Alpha Upper Limit
100.00 %
Alpha Counts
131
Beta Counts
148786
Alpha Lower Limit
31.15 %
Beta to Alpha Crosstalk
0.09 %
Beta Upper Limit
28.15 %
Count
Beta Lower Limit
0.00 %
Close
Help
Detector D2
Alpha Upper Limit
100.00 %
Alpha Counts
115
Beta Counts
122034
Alpha Lower Limit
31.50 %
Beta to Alpha Crosstalk
0.09 %
Beta Upper Limit
28.52 %
Count
Beta Lower Limit
0.00 %
Close
Help
Detector D3
Alpha Upper Limit
100.00 %
Alpha Counts
135
Beta Counts
153443
Alpha Lower Limit
33.45 %
Beta to Alpha Crosstalk
0.09 %
Beta Upper Limit
30.45 %
Count
Beta Lower Limit
0.00 %
Close
Help
Detector D4
Alpha Upper Limit
100.00 %
Alpha Counts
127
Beta Counts
148045
Alpha Lower Limit
34.23 %
Beta to Alpha Crosstalk
0.09 %
Beta Upper Limit
31.23 %
Count
Beta Lower Limit
0.00 %
Close
Help

SEVERN TRENT STL

Calibration Standards and Certificates

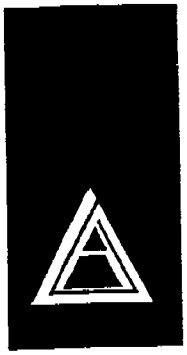
Red

Alpha Th-230

Beta Standards 1/22/04

Strontium 90 standard 01093
10,435 pCi/mL
Reference date: 9/19/01
0.1 ml ADDED TO EACH STANDARD

STD #	TARE	GROSS	MASS	SALT mL
1	8.4539	8.454	0.0001	0
2	8.512	8.5145	0.0025	0.1
3	8.5133	8.5179	0.0046	0.2
4	8.4823	8.4906	0.0083	0.375
5	8.4135	8.4279	0.0144	0.625
6	8.4015	8.426	0.0245	1.1
7	8.5081	8.5359	0.0278	1.25
8	8.4565	8.4992	0.0427	1.9
9	8.4036	8.459	0.0554	2.5
10	8.4005	8.4844	0.0839	3.75
11	8.4275	8.5471	0.1196	5.5
12	8.394	8.5664	0.1724	8
13	8.4041	8.592	0.1879	10
14	8.4168	8.6704	0.2536	12



ANALYTICS

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318 · U.S.A.

Phone (404) 352-8677
Fax (404) 352-2837

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

62204-334

Sr-90 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated by liquid scintillation counting.

Radionuclide purity and calibration were checked by germanium gamma-ray spectrometry and liquid scintillation counting. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

ISOTOPE:	Sr-90
ACTIVITY (dps):	3.897 E4
HALF-LIFE:	28.79 years
CALIBRATION DATE:	August 7, 2001 12:00 EST
TOTAL UNCERTAINTY*:	4.0%
SYSTEMATIC:	3.5%
RANDOM:	0.5%

*99% Confidence Level

Impurities: γ-impurities <0.1%

4.99897 grams 0.1M HCl solution with 30 µg/g Sr carrier.

P O NUMBER 1097166, Item 1

SOURCE PREPARED BY: M. D. Currie

M. D. Currie, Radiochemist

Q A APPROVED: 8-8-01

SEVERN TRENT SERVICES

Logbook: 2060

Radiochemistry
Standards Preparation Logbook

Date Prep'd	Expir. Date	Standard ID Number	Isotope	Parent ID Number	Parent Activity	Parent Ref. Date	Aliquot	Dilution Volume	Change in Time	T ½	Final Activity	Solvent/ Lot #	Prep'd Initials	Cal. Ver. Initials	Comments
9/18/01	12/18/01	01-087	UNAT CAL STD	01085	10 µg/mL	9/18/01	1.5 mL	100 mL	N/A	N/A	150 ng/mL	.8 M HNO_3	BMW	JTC	nanograms/mL
		01-088					1.0 mL				100 ng/mL			JTC	
		01-089					0.5 mL				50 ng/mL			JTC	
		01-090		01086	100 ng/mL		10 mL	100 mL			10 ng/mL			JTC	
		01-091		01-089	50 ng/mL		10 mL	100.0 mL			5 ng/mL			JTC	
		01-092		01-088	100 ng/mL		1.0 mL	100.0 mL			1 ng/mL			JTC	
9/19/01	9/19/02	01-093	SR-90	ampule C2201-334	38,897 dps	8/7/01	4.7531 g	100.0 mL	N/A	28.7 YR	~~10435 pCi~~ 104.3 pCi/mL 231.66 dpm/mL	.8 M HNO_3	BMW	JTC	
9/19/01	9/19/02	01-094	SR90	01093	10435.9 pCi/mL	9/19/01	1.0 mL	100.0 mL	N/A	28.7 YR	104.3 pCi/mL 231.66 dpm/mL	.8 M HNO_3	BMW	JTC	
9/26/01	9/26/02	Ba-38	STD. Barium Carrier	Merck $BaCl_2$	N/A	3/23/98	28.46 g	1000.0 mL	N/A	N/A	27.2 mg/mL	Reagent H2O	BMW	JTC	See Rad explosive weight sheet.
10/4/01	~~10/4/02~~ 10/4/02 ema 3-10-03	01-095	U-232	97-105	10,994 dpm/mL	9-6-97	1 mL	500 mL	—	70 yr	21.99 dpm/mL	1M HNO_3	CMA	JTC	
10/12/01	10/12/02	01-096	Ra226	98-006	1316 dpm/mL	9/13/98	1.0 mL	100.0 mL	—	1600 yr	13.16 dpm/mL	1M HNO_3	AM	JTC	
10/18/01	~~10/18/02~~ 10/18/02 ema 3-10-03	01-097	(ABT) SR90 Y90	01032	1,765.4 dpm/mL	3/28/00	2.0 mL	100.0 mL	N/A	28.5 yr	(35.31) total ~~23.99~~ dpm/mL	1M HNO_3	BMW	AW	Decay Correct = 1699.65 dpm/mL

Additional Comments:

decay corrected 34.083 JTC 10-29-01

SEVERN TRENT STL

Calibration for LB4100

Red

Alpha Th-230 BaSO4 for Ra-226

LOT# F5D220356

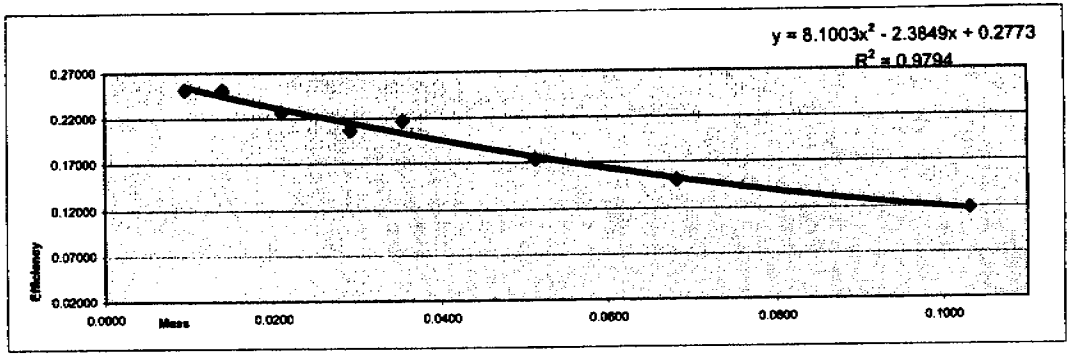
SEVERN TRENT STL

Detector Efficiency Curves

Alpha Attenuation Red A1
4/15/2004

Th-230 BaSO4 for Ra-226

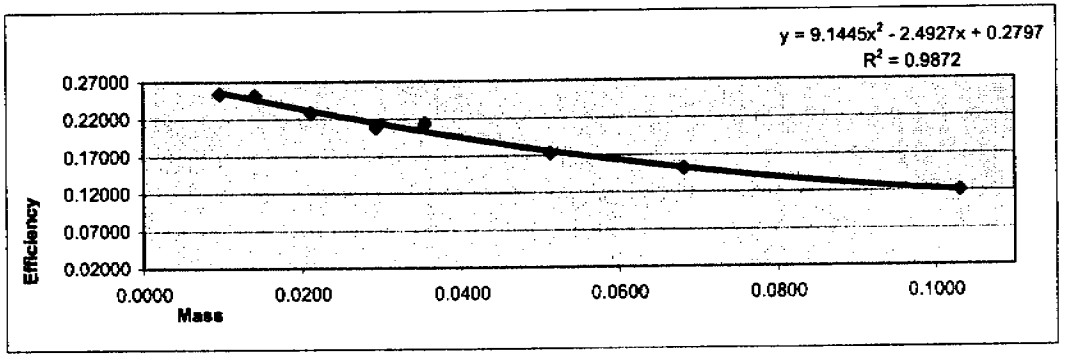
Detector ID	Sample Wt	Alpha	Count Time	DPM 4567.9 CPM	Th230 Eff
A1	0.0097	20435	17.77	1149.972	0.25175
A1	0.0141	20412	17.76	1149.324	0.25161
A1	0.0211	20415	19.74	1034.195	0.22640
A1	0.0292	20411	21.71	940.166	0.20582
A1	0.0354	20408	20.65	988.281	0.21635
A1	0.0514	20420	25.77	792.394	0.17347
A1	0.0681	20419	29.69	687.740	0.15056
A1	0.1031	20412	37.83	539.572	0.11812



Alpha Attenuation Red A2
4/15/2004

Th-230 BaSO4 for Ra-226

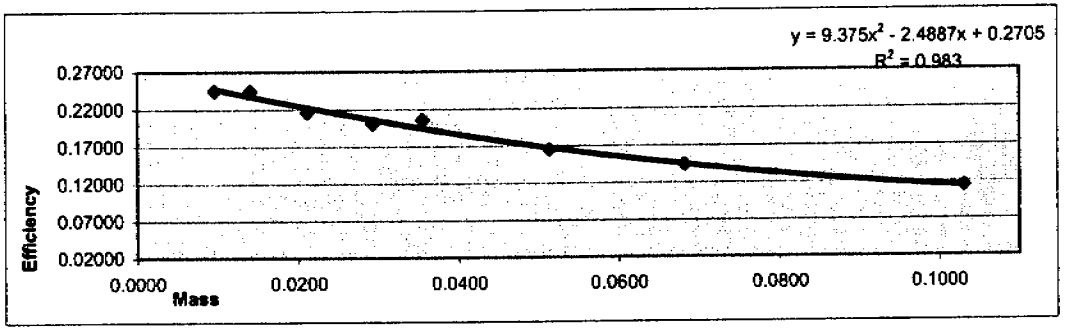
Detector ID	Sample Wt	Alpha	Count Time	DPM 4567.9 CPM	Th230 Eff
A2	0.0097	20420	17.63	1158.253	0.25356
A2	0.0141	20421	17.77	1149.184	0.25158
A2	0.0211	20410	19.59	1041.858	0.22808
A2	0.0292	20419	21.47	951.048	0.20820
A2	0.0354	20415	20.95	974.463	0.21333
A2	0.0514	20417	25.89	788.606	0.17264
A2	0.0681	20412	29.47	692.637	0.15163
A2	0.1031	20411	37.15	549.421	0.12028



Alpha Attenuation Red A3
4/15/2004

Th-230 BaSO4 for Ra-226

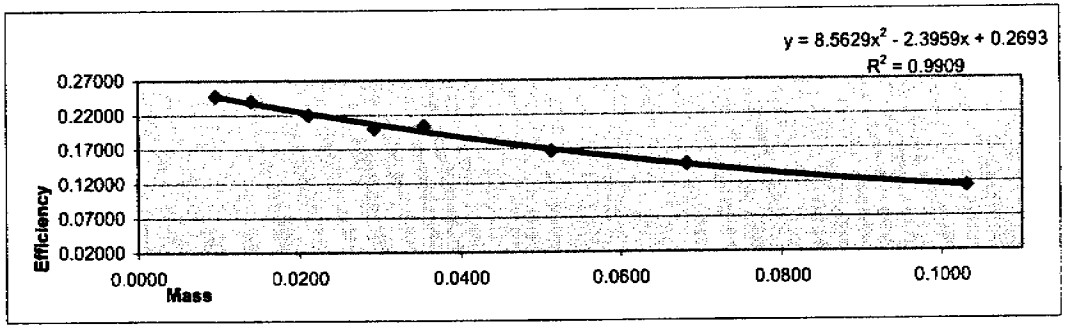
Detector ID	Sample Wt	Alpha	Count Time	DPM 4567.9 CPM	Th230 Eff
A3	0.0097	20417	18.25	1118.740	0.24491
A3	0.0141	20417	18.30	1115.683	0.24424
A3	0.0211	20421	20.76	983.671	0.21534
A3	0.0292	20416	22.34	913.876	0.20006
A3	0.0354	20410	21.77	937.529	0.20524
A3	0.0514	20419	27.12	752.913	0.16483
A3	0.0681	20411	31.11	656.091	0.14363
A3	0.1031	20412	39.22	520.449	0.11394



Alpha Attenuation Red A4
4/15/2004

Th-230 BaSO4 for Ra-226

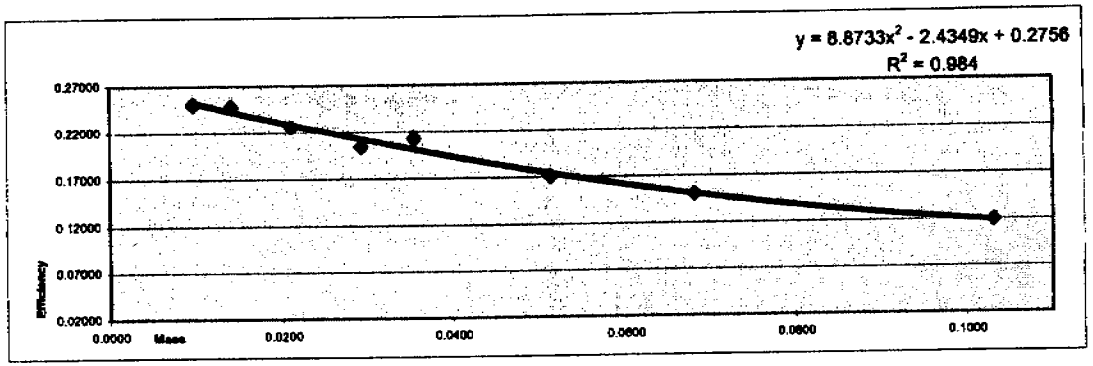
Detector ID	Sample Wt	Alpha	Count Time	DPM 4567.9 CPM	Th230 Eff
A4	0.0097	20441	18.11	1128.713	0.24710
A4	0.0141	20417	18.62	1096.509	0.24005
A4	0.0211	20428	20.34	1004.326	0.21987
A4	0.0292	20420	22.38	912.422	0.19975
A4	0.0354	20423	21.97	929.586	0.20350
A4	0.0514	20417	26.85	760.410	0.16647
A4	0.0681	20412	30.40	671.447	0.14699
A4	0.1031	20414	39.51	516.679	0.11311



Alpha Attenuation Red B1
4/15/2004

Th-230 BaSO4 for Ra-226

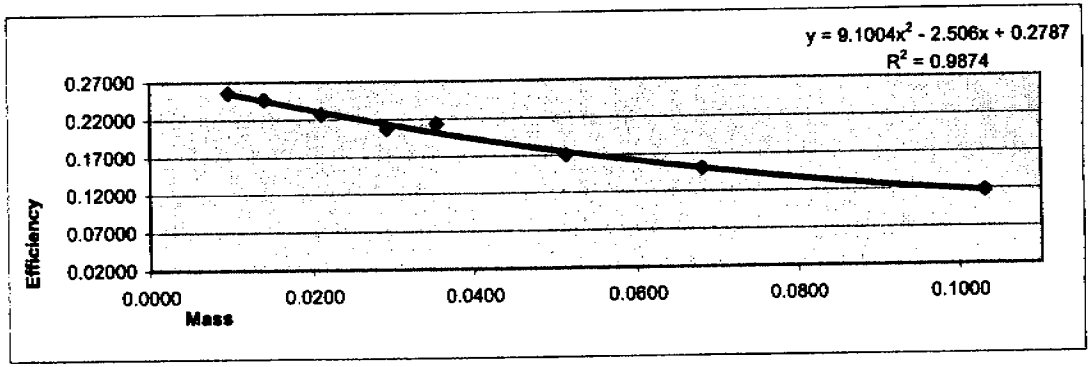
Detector ID	Sample Wt	Alpha	Count Time	DPM 4567.9 CPM	Th230 Eff
B1	0.0097	20429	17.84	1145.123	0.25069
B1	0.0141	20419	18.05	1131.247	0.24765
B1	0.0211	20414	19.80	1031.010	0.22571
B1	0.0292	20417	21.96	929.736	0.20354
B1	0.0354	20414	21.08	968.406	0.21200
B1	0.0514	20414	26.19	779.458	0.17064
B1	0.0681	20414	29.66	688.267	0.15067
B1	0.1031	20416	37.53	543.991	0.11909



Alpha Attenuation Red B2
4/15/2004

Th-230 BaSO4 for Ra-226

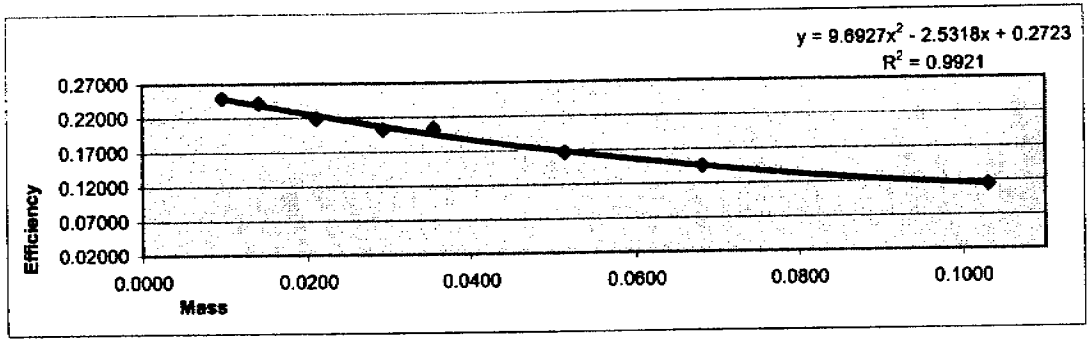
Detector ID	Sample Wt	Alpha	Count Time	DPM 4567.9 CPM	Th230 Eff
B2	0.0097	20419	17.50	1166.800	0.25543
B2	0.0141	20418	18.13	1126.200	0.24655
B2	0.0211	20413	19.71	1035.667	0.22673
B2	0.0292	20415	21.60	945.139	0.20691
B2	0.0354	20409	20.97	973.247	0.21306
B2	0.0514	20416	26.32	775.684	0.16981
B2	0.0681	20413	29.75	686.151	0.15021
B2	0.1031	20413	38.10	535.774	0.11729



Alpha Attenuation Red B3
4/15/2004

Th-230 BaSO4 for Ra-226

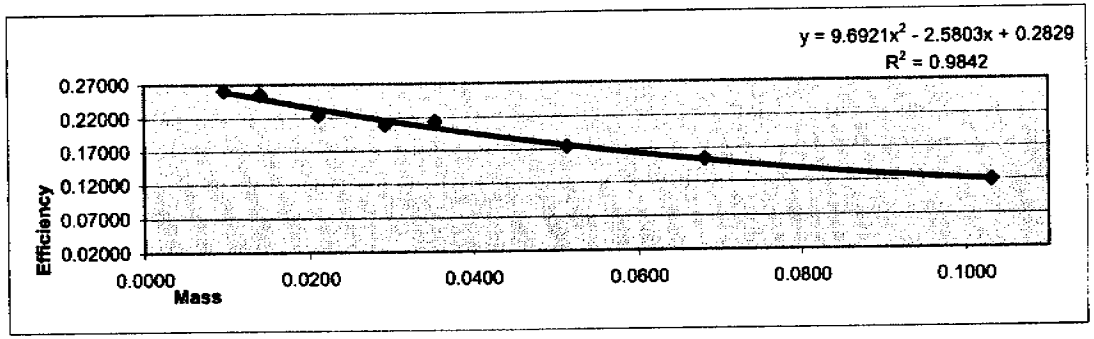
Detector ID	Sample Wt	Alpha	Count Time	DPM 4567.9 CPM	Th230 Eff
B3	0.0097	20422	17.97	1136.450	0.24879
B3	0.0141	20415	18.50	1103.514	0.24158
B3	0.0211	20416	20.49	996.388	0.21813
B3	0.0292	20422	22.12	923.237	0.20211
B3	0.0354	20414	22.03	926.645	0.20286
B3	0.0514	20410	26.90	758.736	0.16610
B3	0.0681	20424	30.94	660.116	0.14451
B3	0.1031	20413	39.08	522.339	0.11435



Alpha Attenuation Red B4
4/15/2004

Th-230 BaSO4 for Ra-226

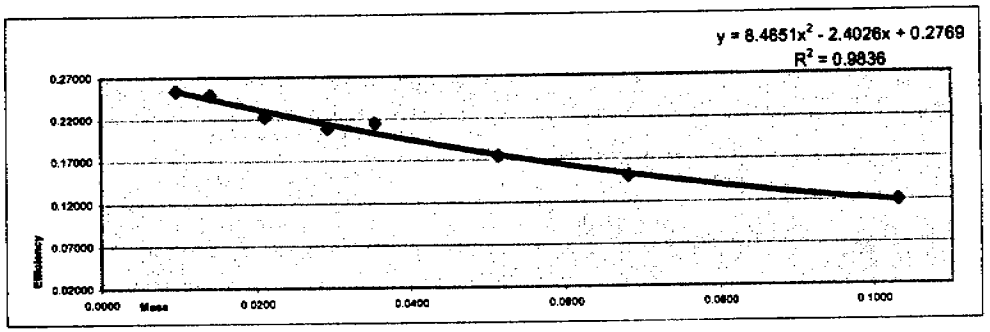
Detector ID	Sample Wt	Alpha	Count Time	DPM 4567.9 CPM	Th230 Eff
B4	0.0097	20410	17.19	1187.3182	0.25993
B4	0.0141	20424	17.61	1159.7956	0.25390
B4	0.0211	20425	19.95	1023.8095	0.22413
B4	0.0292	20414	21.41	953.4797	0.20873
B4	0.0354	20427	20.92	976.4340	0.21376
B4	0.0514	20417	25.73	793.5095	0.17371
B4	0.0681	20422	29.11	701.5459	0.15358
B4	0.1031	20412	37.44	545.1923	0.11935



Alpha Attenuation Red C1
4/15/2004

Th-230 BaSO4 for Ra-226

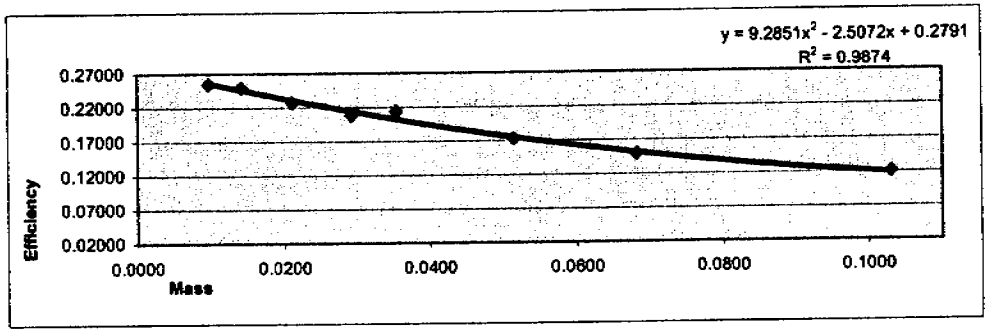
Detector ID	Sample Wt	Alpha	Count Time	DPM 4567.9 CPM	Th230 Eff
C1	0.0097	20426	17.62	1159.2509	0.25378
C1	0.0141	20439	17.96	1138.0290	0.24914
C1	0.0211	20430	20.08	1017.4303	0.22273
C1	0.0292	20416	21.44	952.2388	0.20846
C1	0.0354	20422	20.84	979.9424	0.21453
C1	0.0514	20416	25.67	795.3253	0.17411
C1	0.0681	20413	29.74	686.3820	0.15026
C1	0.1031	20409	37.30	547.1582	0.11978



Alpha Attenuation Red C2
4/15/2004

Th-230 BaSO4 for Ra-226

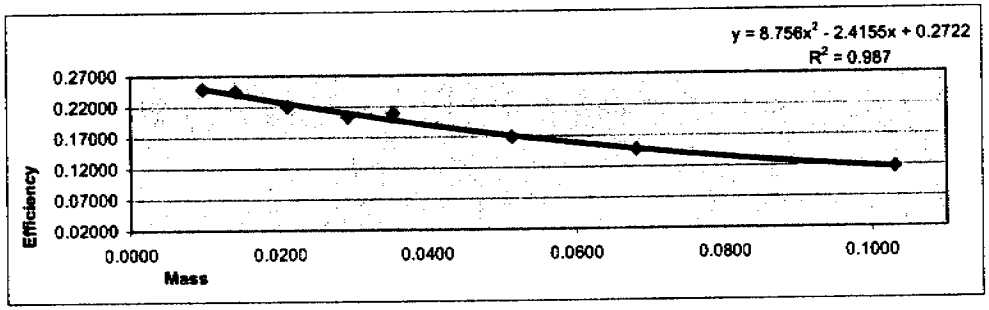
Detector ID	Sample Wt	Alpha	Count Time	DPM 4567.9 CPM	Th230 Eff
C2	0.0097	20411	17.56	1162.3576	0.25446
C2	0.0141	20420	17.98	1135.7063	0.24863
C2	0.0211	20418	19.72	1035.3955	0.22667
C2	0.0292	20423	21.53	948.5834	0.20766
C2	0.0354	20419	20.95	974.6539	0.21337
C2	0.0514	20412	25.88	788.7172	0.17267
C2	0.0681	20411	29.93	681.9579	0.14929
C2	0.1031	20409	37.24	548.0397	0.11998



Alpha Attenuation Red C3
4/15/2004

Th-230 BaSO4 for Ra-226

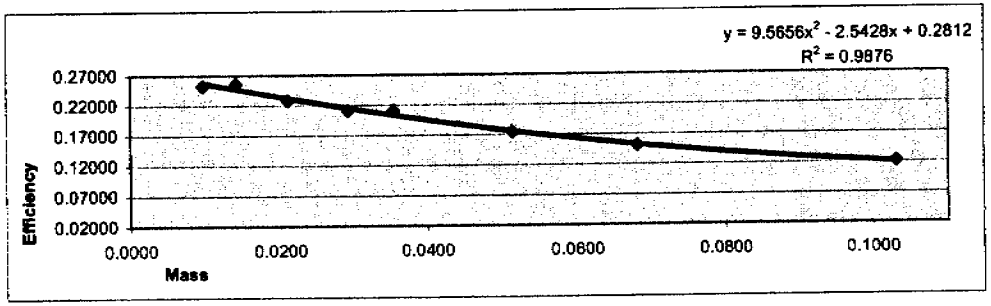
Detector ID	Sample Wt	Alpha	Count Time	DPM 4567.9 CPM	Th230 Eff
C3	0.0097	20415	18.02	1132.9079	0.24802
C3	0.0141	20423	18.29	1116.6211	0.24445
C3	0.0211	20413	20.28	1006.5582	0.22035
C3	0.0292	20416	21.97	929.2672	0.20343
C3	0.0354	20416	21.46	951.3514	0.20827
C3	0.0514	20415	26.50	770.3774	0.16865
C3	0.0681	20413	30.35	672.5865	0.14724
C3	0.1031	20413	38.31	532.8374	0.11665



Alpha Attenuation Yellow C4
4/15/2004

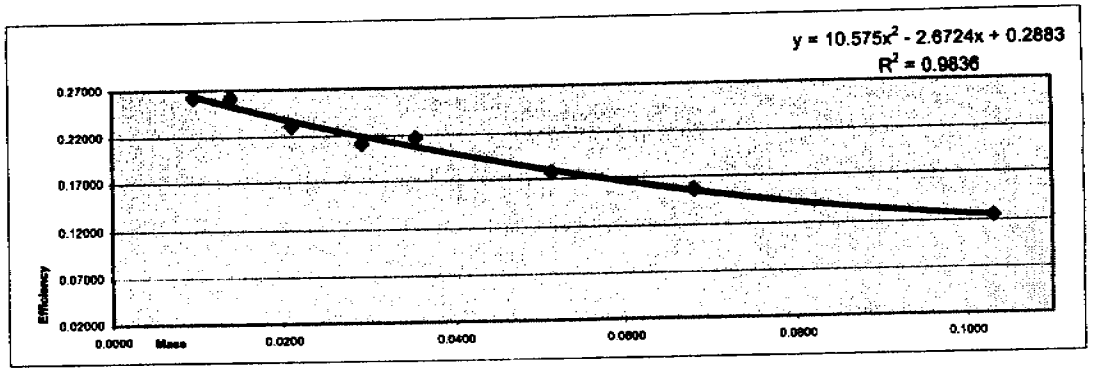
Th-230 BaSO4 for Ra-226

Detector ID	Sample Wt	Alpha	Count Time	DPM 4567.9 CPM	Th230 Eff
C4	0.0097	20435	17.73	1152.5663	0.25232
C4	0.0141	20422	17.48	1168.3066	0.25576
C4	0.0211	20426	19.63	1040.5502	0.22780
C4	0.0292	20413	21.25	960.6118	0.21030
C4	0.0354	20411	21.20	962.7830	0.21077
C4	0.0514	20419	25.62	796.9945	0.17448
C4	0.0681	20413	29.64	688.6977	0.15077
C4	0.1031	20413	36.86	553.7982	0.12124



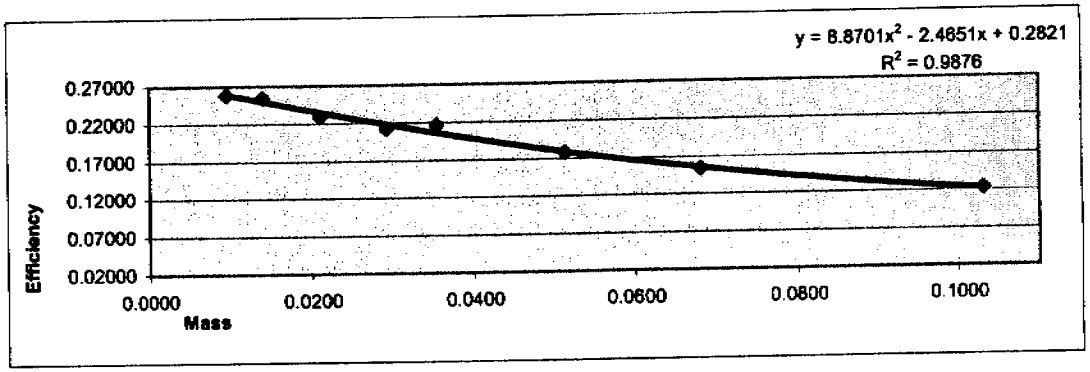
Alpha Attenuation Red D1
4/15/2004

Detector ID	Sample Wt	Alpha	Th-230 BaSO4 for Ra-226 DPM Count Time	4567.9 CPM	Th230 Eff
D1	0.0097	20419	17.10	1194.0936	0.26141
D1	0.0141	20439	17.17	1190.3902	0.26060
D1	0.0211	20425	19.37	1054.4657	0.23084
D1	0.0292	20412	21.22	961.9227	0.21058
D1	0.0354	20420	20.64	989.3411	0.21659
D1	0.0514	20413	25.29	807.1570	0.17670
D1	0.0681	20418	28.55	715.1664	0.15656
D1	0.1031	20414	35.81	570.0642	0.12480



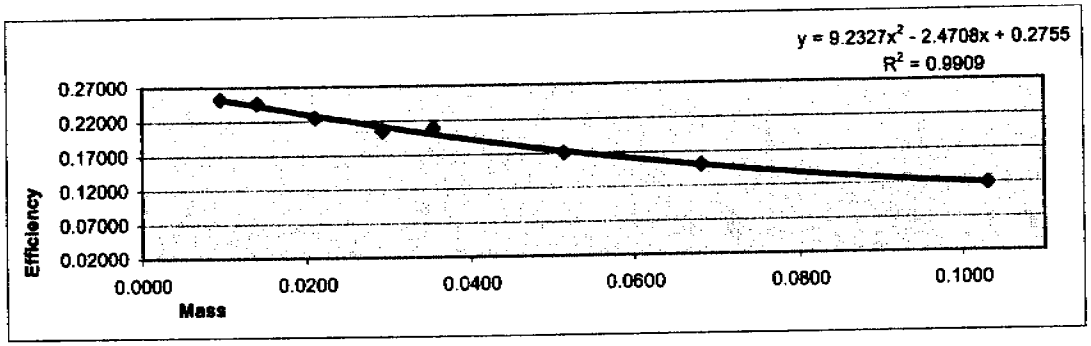
Alpha Attenuation Red D2
4/15/2004

Detector ID	Sample Wt	Alpha	Th-230 BaSO4 for Ra-226 DPM Count Time	4567.9 CPM	Th230 Eff
D2	0.0097	20453	17.36	1178.1682	0.25792
D2	0.0141	20422	17.60	1160.3409	0.25402
D2	0.0211	20432	19.60	1042.4490	0.22821
D2	0.0292	20413	21.08	968.3586	0.21199
D2	0.0354	20412	20.68	987.0406	0.21608
D2	0.0514	20408	25.15	811.4513	0.17764
D2	0.0681	20412	29.06	702.4088	0.15377
D2	0.1031	20413	36.43	560.3349	0.12267



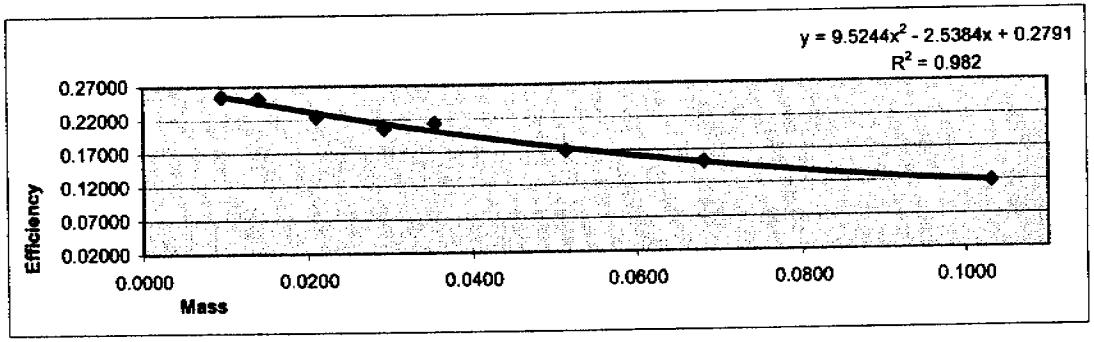
Alpha Attenuation Red D3
4/15/2004

Detector ID	Sample Wt	Alpha	Th-230 BaSO4 for Ra-226 DPM Count Time	4567.9 CPM	Th230 Eff
D3	0.0097	20412	17.72	1151.9187	0.25218
D3	0.0141	20432	18.21	1122.0209	0.24563
D3	0.0211	20421	19.93	1024.6362	0.22431
D3	0.0292	20417	21.82	935.7012	0.20484
D3	0.0354	20421	21.48	950.6983	0.20813
D3	0.0514	20413	26.22	778.5278	0.17043
D3	0.0681	20411	29.64	688.6302	0.15075
D3	0.1031	20415	37.62	542.6635	0.11880



Alpha Attenuation Red D4
4/15/2004

Detector ID	Sample Wt	Alpha	Th-230 BaSO4 for Ra-226 DPM Count Time	4567.9 CPM	Th230 Eff
D4	0.0097	20439	17.60	1161.3068	0.25423
D4	0.0141	20415	17.78	1148.2002	0.25136
D4	0.0211	20428	19.98	1022.4224	0.22383
D4	0.0292	20409	21.78	937.0523	0.20514
D4	0.0354	20419	20.99	972.7966	0.21296
D4	0.0514	20411	26.26	777.2658	0.17016
D4	0.0681	20410	29.50	691.8644	0.15146
D4	0.1031	20409	37.70	541.3528	0.11851

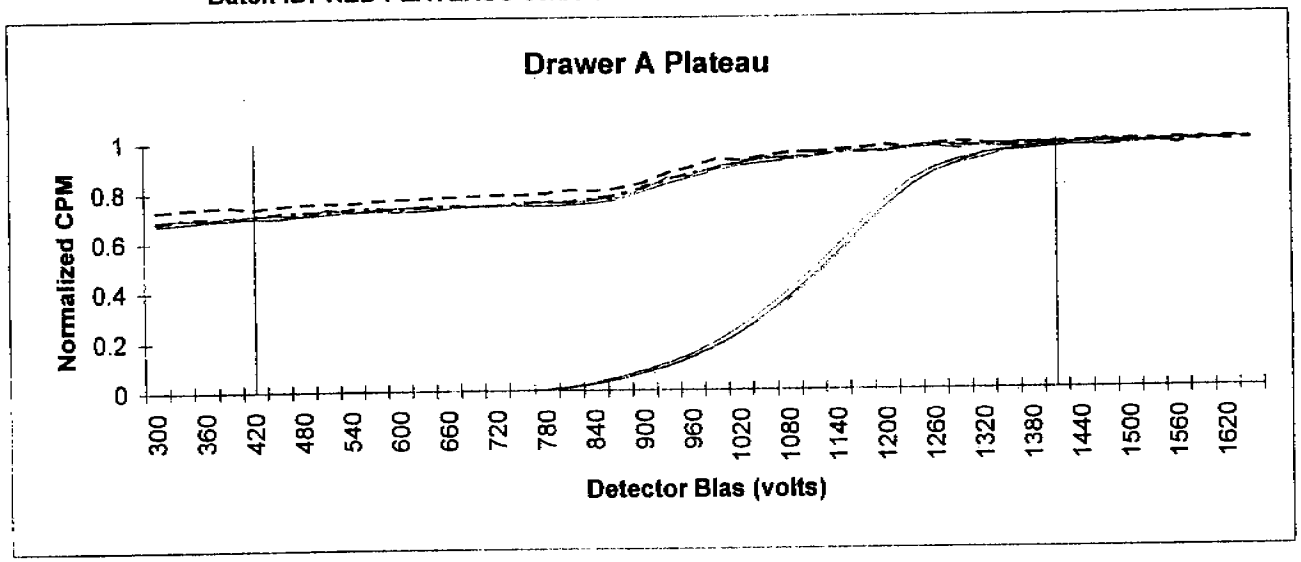


SEVERN TRENT STL

Voltage Platueas

Unit Type: LB4100/W
Date Performed: 3/25/04 11:59
FileName: PLAT000
Batch ID: RED PLATEAUS 03/25/04 IV

Unit Id: Red
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

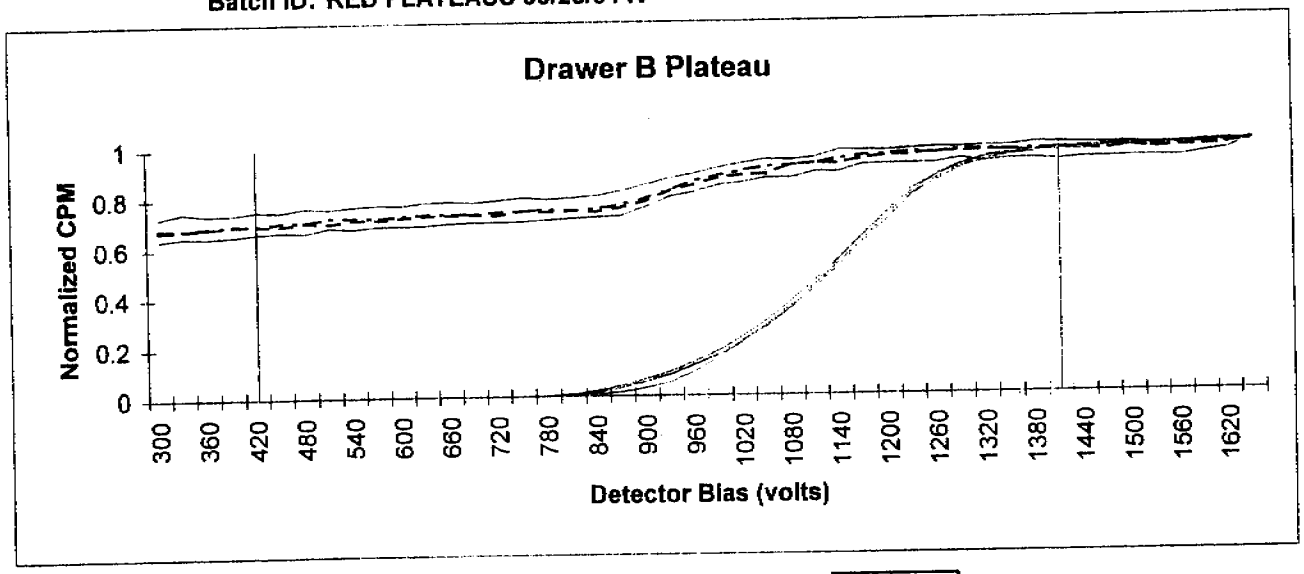
Optimum alpha only operating voltage: 420

	A1	A2	A3	A4
Beta slope at beta voltage	2.02%	2.37%	2.37%	1.15%
Alpha slope at beta voltage	0.88%	1.01%	0.57%	0.87%
Alpha slope at alpha voltage	1.70%	1.39%	2.26%	3.25%

Printed 3/26/2004 12:59 PM

Unit Type: LB4100/W
Date Performed: 3/25/04 11:59
FileName: PLAT000
Batch ID: RED PLATEAUS 03/25/04 IV

Unit Id: Red
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

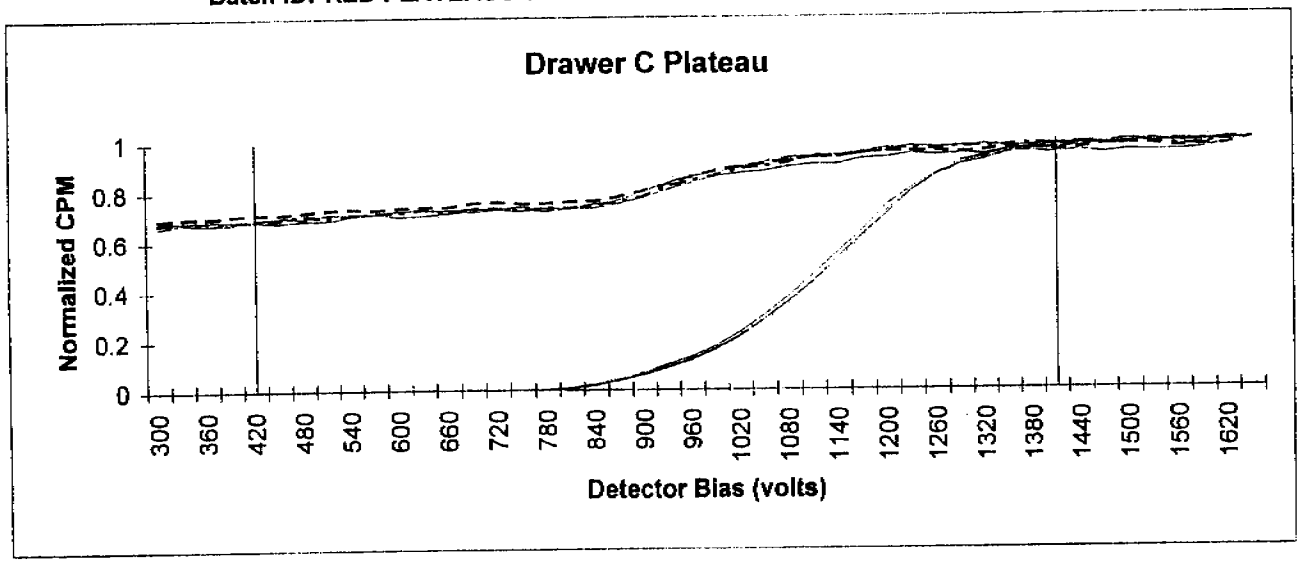
Optimum alpha only operating voltage: 420

	B1	B2	B3	B4
Beta slope at beta voltage	2.01%	2.51%	3.24%	1.41%
Alpha slope at beta voltage	0.31%	-0.08%	0.14%	0.96%
Alpha slope at alpha voltage	2.73%	2.06%	2.42%	2.08%

Printed 3/26/2004 12:59 PM

Unit Type: LB4100/W
Date Performed: 3/25/04 11:59
FileName: PLAT000
Batch ID: RED PLATEAUS 03/25/04 IV

Unit Id: Red
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

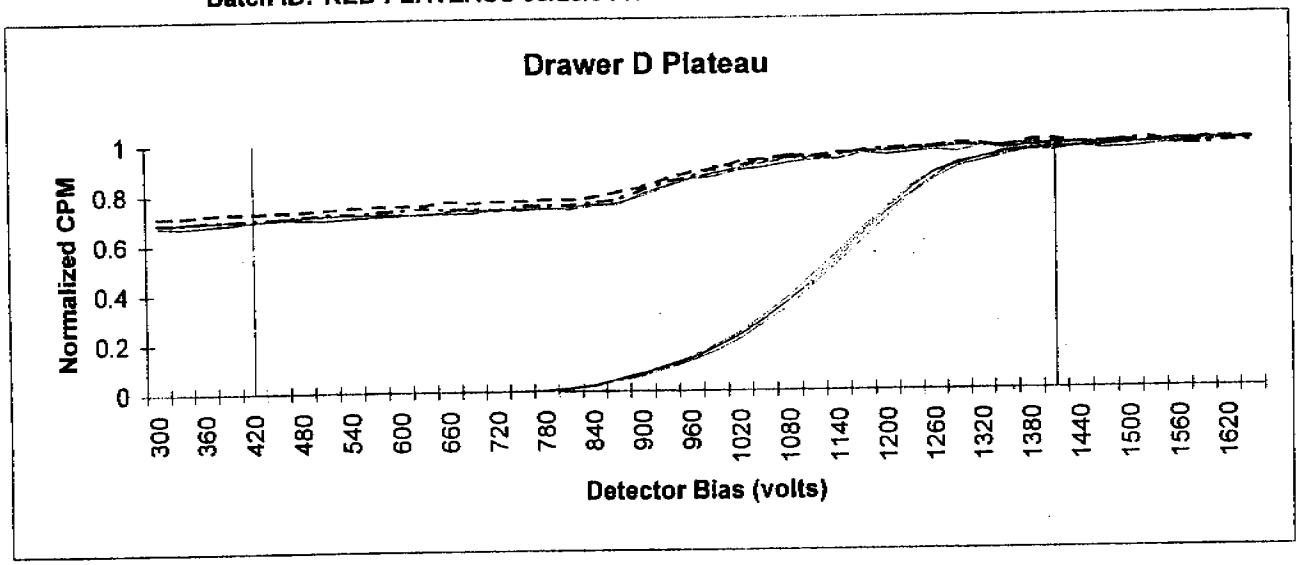
Optimum alpha only operating voltage: 420

	C1	C2	C3	C4
Beta slope at beta voltage	1.87%	3.12%	2.82%	2.97%
Alpha slope at beta voltage	0.82%	0.39%	-0.79%	0.31%
Alpha slope at alpha voltage	1.36%	2.31%	1.73%	2.98%

Printed 3/26/2004 1:00 PM

Unit Type: LB4100/W
Date Performed: 3/25/04 11:59
FileName: PLAT000
Batch ID: RED PLATEAUS 03/25/04 IV

Unit Id: Red
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

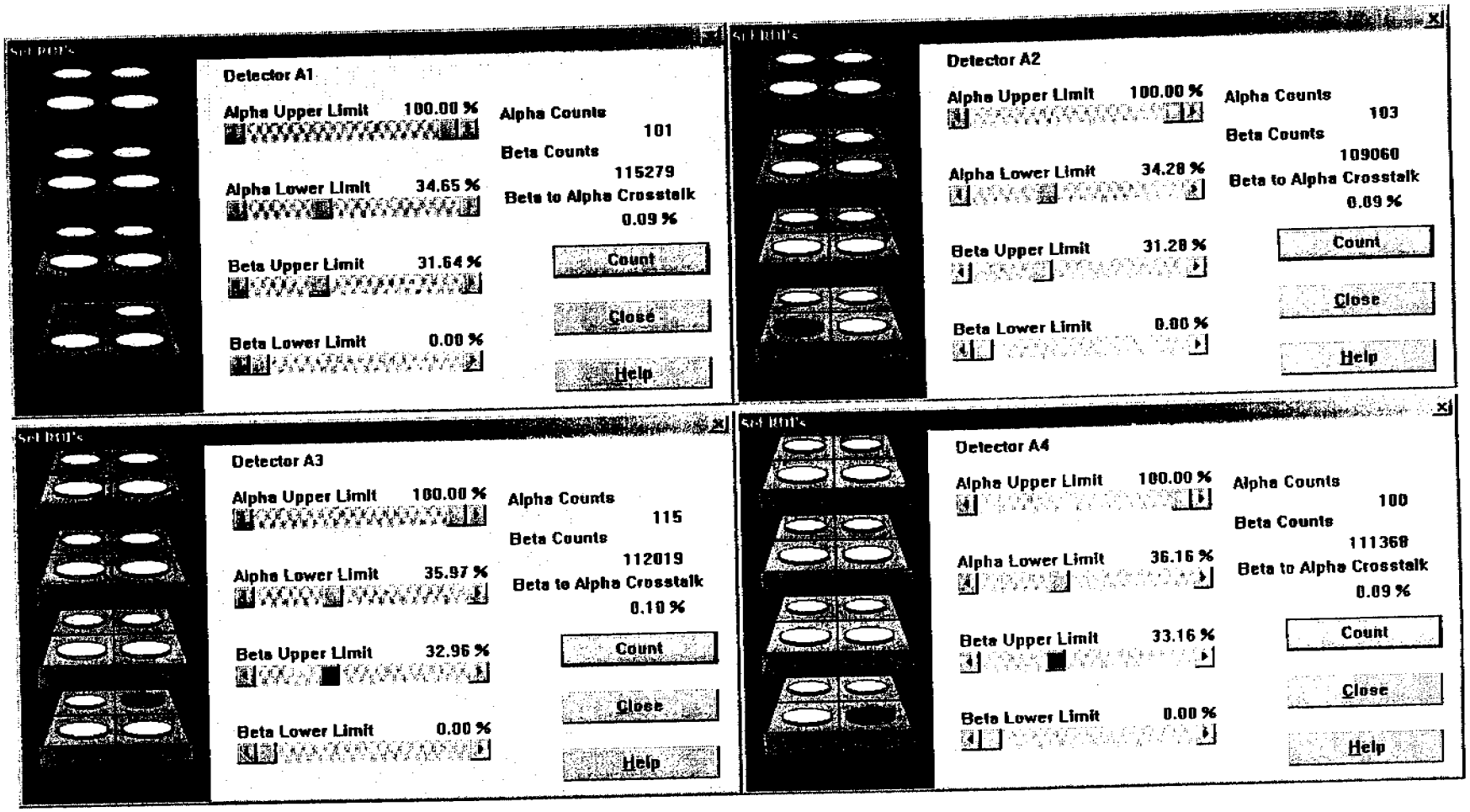
Optimum alpha only operating voltage: 420

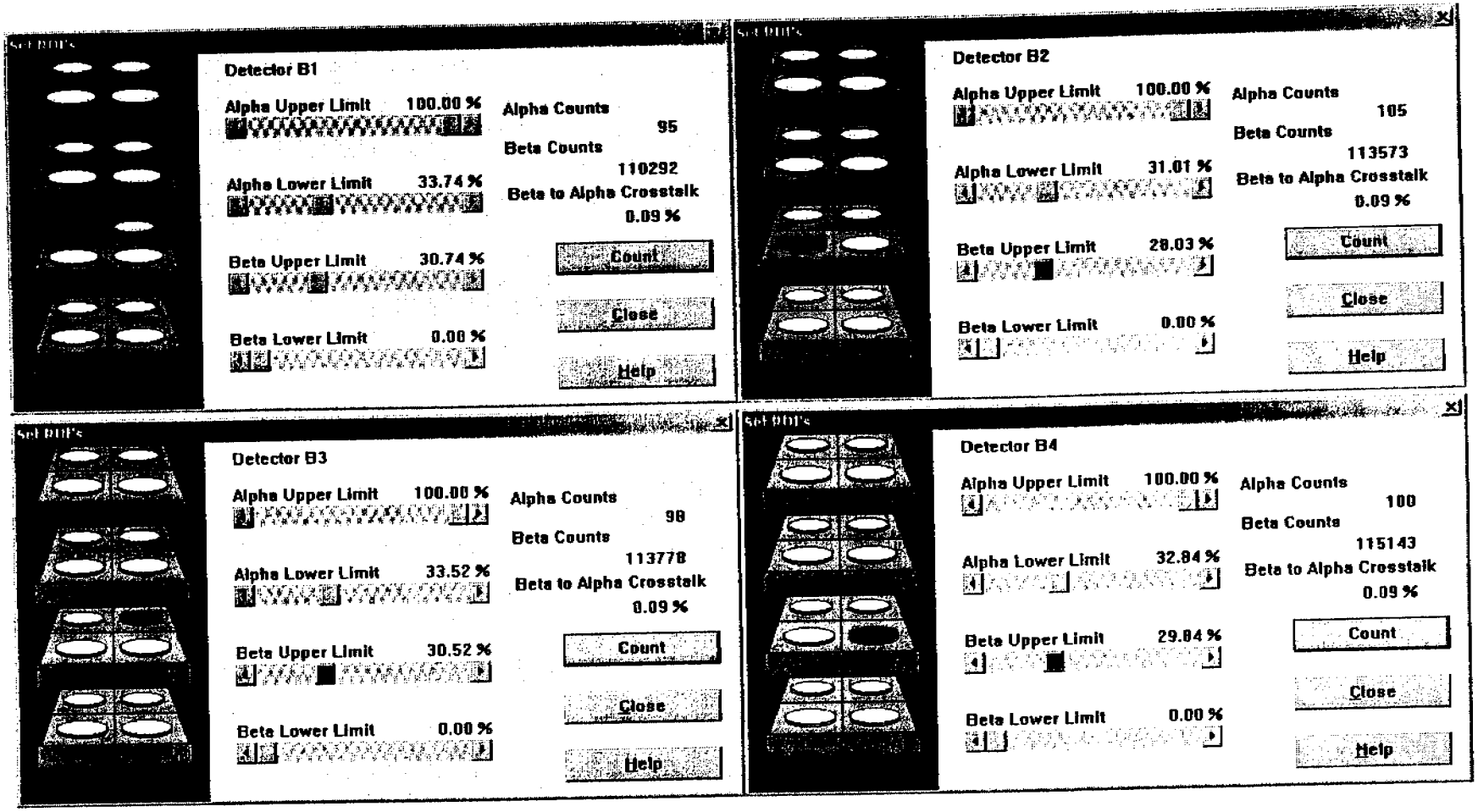
	D1	D2	D3	D4
Beta slope at beta voltage	2.60%	2.22%	2.90%	2.29%
Alpha slope at beta voltage	0.31%	0.60%	-0.50%	1.10%
Alpha slope at alpha voltage	1.96%	0.99%	3.11%	2.04%

Printed 3/26/2004 1:00 PM

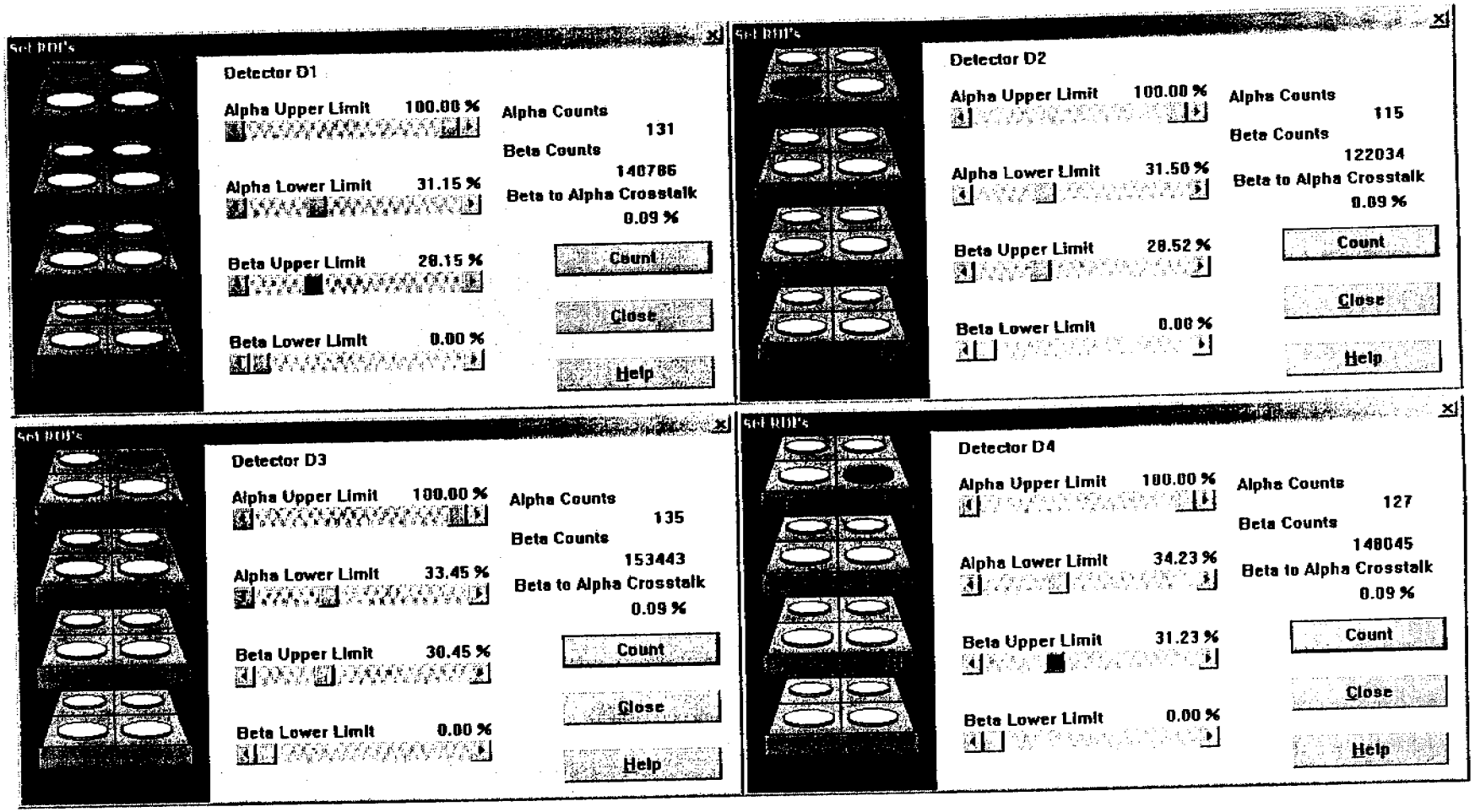
SEVERN TRENT STL

Discriminator Settings


Detector A1
Alpha Upper Limit 100.00 %
Alpha Lower Limit 34.65 %
Beta Upper Limit 31.64 %
Beta Lower Limit 0.00 %
Alpha Counts 101
Beta Counts 115279
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector A2
Alpha Upper Limit 100.00 %
Alpha Lower Limit 34.28 %
Beta Upper Limit 31.28 %
Beta Lower Limit 0.00 %
Alpha Counts 103
Beta Counts 109060
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector A3
Alpha Upper Limit 100.00 %
Alpha Lower Limit 35.97 %
Beta Upper Limit 32.96 %
Beta Lower Limit 0.00 %
Alpha Counts 115
Beta Counts 112019
Beta to Alpha Crosstalk 0.10 %
Count
Close
Help
Detector A4
Alpha Upper Limit 100.00 %
Alpha Lower Limit 36.16 %
Beta Upper Limit 33.16 %
Beta Lower Limit 0.00 %
Alpha Counts 100
Beta Counts 111368
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help


Detector B1
Alpha Upper Limit 100.00 %
Alpha Lower Limit 33.74 %
Beta Upper Limit 30.74 %
Beta Lower Limit 0.00 %
Alpha Counts 95
Beta Counts 110292
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector B2
Alpha Upper Limit 100.00 %
Alpha Lower Limit 31.01 %
Beta Upper Limit 28.03 %
Beta Lower Limit 0.00 %
Alpha Counts 105
Beta Counts 113573
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector B3
Alpha Upper Limit 100.00 %
Alpha Lower Limit 33.52 %
Beta Upper Limit 30.52 %
Beta Lower Limit 0.00 %
Alpha Counts 98
Beta Counts 113778
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector B4
Alpha Upper Limit 100.00 %
Alpha Lower Limit 32.84 %
Beta Upper Limit 29.84 %
Beta Lower Limit 0.00 %
Alpha Counts 100
Beta Counts 115143
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help

Detector C1
Alpha Upper Limit 100.00 %
Alpha Counts 160
Beta Counts 181548
Alpha Lower Limit 35.06 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 32.06 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector C2
Alpha Upper Limit 100.00 %
Alpha Counts 168
Beta Counts 182285
Alpha Lower Limit 34.40 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 31.42 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector C3
Alpha Upper Limit 100.00 %
Alpha Counts 117
Beta Counts 123819
Alpha Lower Limit 33.11 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 30.10 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector C4
Alpha Upper Limit 100.00 %
Alpha Counts 141
Beta Counts 154471
Alpha Lower Limit 31.15 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 28.15 %
Count
Close
Beta Lower Limit 0.00 %
Help


Set ROI's
Detector D1
Alpha Upper Limit 100.00 %
Alpha Lower Limit 31.15 %
Beta Upper Limit 28.15 %
Beta Lower Limit 0.00 %
Alpha Counts 131
Beta Counts 140786
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Set ROI's
Detector D2
Alpha Upper Limit 100.00 %
Alpha Lower Limit 31.50 %
Beta Upper Limit 28.52 %
Beta Lower Limit 0.00 %
Alpha Counts 115
Beta Counts 122034
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Set ROI's
Detector D3
Alpha Upper Limit 100.00 %
Alpha Lower Limit 33.45 %
Beta Upper Limit 30.45 %
Beta Lower Limit 0.00 %
Alpha Counts 135
Beta Counts 153443
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Set ROI's
Detector D4
Alpha Upper Limit 100.00 %
Alpha Lower Limit 34.23 %
Beta Upper Limit 31.23 %
Beta Lower Limit 0.00 %
Alpha Counts 127
Beta Counts 148045
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help

SEVERN TRENT STL

Calibration Standards and Certificates

Alpha Th-230 BaSO4 for Ra-226 Analysis

LOT# F5D220356

Alpha Calibration Standards for Ra-226

Standard used: 1mL of Th-230 03-071 4567.9 dpm/mL 12/24/03

Std #	mL Ba Carrier	Gross wt	Tare Wt	Mass BaSO4
1	0.25	8.4779	8.4682	0.0097
2	0.4	8.3925	8.3784	0.0141
3	0.6	8.4768	8.4557	0.0211
4	0.8	8.4605	8.4313	0.0292
5	1	8.4726	8.4372	0.0354
6	1.5	8.4687	8.4173	0.0514
7	2	8.5100	8.4419	0.0681
8	3	8.5684	8.4653	0.1031

ANALYTICS

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318 · U.S.A.

Phone (404) 352-8677
Fax (404) 352-2837

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

65090-334

Th-230 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated by liquid scintillation counting.

Radionuclide purity and calibration were checked by germanium gamma-ray spectrometry and liquid scintillation counting. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

ISOTOPE:	Th-230
ACTIVITY (dps):	7.654 E3
HALF-LIFE:	7.538 E4 Years
CALIBRATION DATE:	December 19, 2002 12:00 EST
TOTAL UNCERTAINTY*:	3.5%
SYSTEMATIC:	2.6%
RANDOM:	0.9%

*99% Confidence Level

Impurities: γ-impurities <0.1%, α-impurities <0.05%

5.17738 grams 0.5M HNO_3 solution.

P O NUMBER 1614557-000 OP, Item 3

SOURCE PREPARED BY: M. Taskaeva, Radiochemist

Q A APPROVED: 12-19-02

LOT# F5D220356

SEVERN TRENT SERVICES

Logbook: 2060

Radiochemistry
Standards Preparation Logbook

Date Prep'd	Expir. Date	Standard ID Number	Isotope	Parent ID Number	Parent Activity	Parent Ref. Date	Aliquot	Dilution Volume	Change in Time	T ½	Final Activity	Solvent/ Lot #	Prep'd Initials	Cal. Ver. Initials	Comments
~~9-11-03~~	~~9-11-08~~	03-069 ~~03-0169~~ MC 9-22-03	Pu 238	02-026	132.98	2-23-01	4.5ml	↓	1356 days	32022 y 87.75	~~33.60~~ ~~66.4~~ 66.20 dpm/ml	7K9-1558	MFM		re-certification of 03-031, 03-03- blend 66.20 dpm/ml
↓	↓	↓	~~Pu 239~~	~~02-025~~	~~128.05~~	2-23-01	~~4.5ml~~	~~150ml~~	11-16-03 MC	24110 y	~~62.025 dpm/ml~~	62.025 dpm/ml	MFM		62.025 dpm/ml
9-11-03	9-11-08	03-070 ~~03-0070~~ MC 9-22-03	Am243	98-011	1161 dpm/g	2-28-98	15g ~~16g~~	200ml		7.37 E+3 y	87.075 ~~92.98~~ dpm/ml		MFM		
10-6-03	10-6-08	03-071	Th230	65090-334	7,654 dps	12-19-02	5.1498g	100mL	N/A	7.538E4	4,567.9 dpm/mL	0.5M HNO3	BH	BBF	
10-6-03	10-6-08	03-072	Th230	03-071	4,567.9 dpm/mL	12-19-02	1mL	200mL	N/A	7.539E4	22.84 dpm/mL	0.5M HNO3	BH	BBF	
10-11-03	10-11-0	03-073	clean U-235	047-105	10994 dpm/ml	9-16-97	10ml	1000L		70 y	103.85 dpm/L	PI H2O 2M H2SO4 KOH pH1.5	MFM BBF		Rad 03-0078 in Rad Capture
10/31/03	10/31/08	03-074	I-129	681-78-4	1.059 uCi	1-1-2000	1mL	100mL	N/A	1.57E+07	10.54 nCi/mL	0.1M NaOH	BH	BBF	
10/31/03	10/31/04	03-075	I-129	03-074	10.54 nCi/mL	1-1-2000	1mL	100mL	N/A	1.57E7	105.4 pCi/mL	0.1M NaOH	BH	BBF	
10/31/03	10/31/04	03-076	Ra 228	01012	1,018 dpm/mL	2/16/01	2mL	100mL	NA	5.75y	20.36 dpm/mL	0.5M HNO3	BH	BBF	
10/31/03	10/31/04	03-081	Pu-242	92-242-5-1	129.636 dps/g	12/11/89	5.0723	500mL	NA	3.73 x 10^5 y	78.9027	.5M HNO3	MFM	MO	
11/3/03	11/3/04	SR19	Std SR carrier	(B)(NO3)2	N/A	N/A	120.77g	1Liter	N/A	N/A		diH2O	[illegible]	BBF	Reported in Rad capture
11-5-03	11-5-04	RAD03-032	Th-229	02-006	2134.75 dpm/ml	1-28-02	17.5mL	500mL	N/A	7.3e+3	74.716 dpm/mL	.5M HNO3	MFM	JMW	

Additional Comments:

28

SL-RAD-044, revised 3/2/01
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SEVERN TRENT SERVICES

CALIBRATION FOR LB4100 BLUE

SEVERN TRENT SERVICES

The following calibration of the LB4100 'Blue' gas flow proportional counter was begin on April 1, 2002 and completed on May 8, 2002. The following procedures were used to perform the calibration:

STL-13019 Rev. 2: Calibration of the Low Background Gas Flow Proportional Counting System

SL 13012 Rev. 2: Evaluation of Sample Transmission Factor

This instrument calibration was implemented on May 10, 2002.

Analyst: _____ Date: 5-13-02

Rad Group Leader: _____ Date: 5-14-02

SEVERN TRENT SERVICES

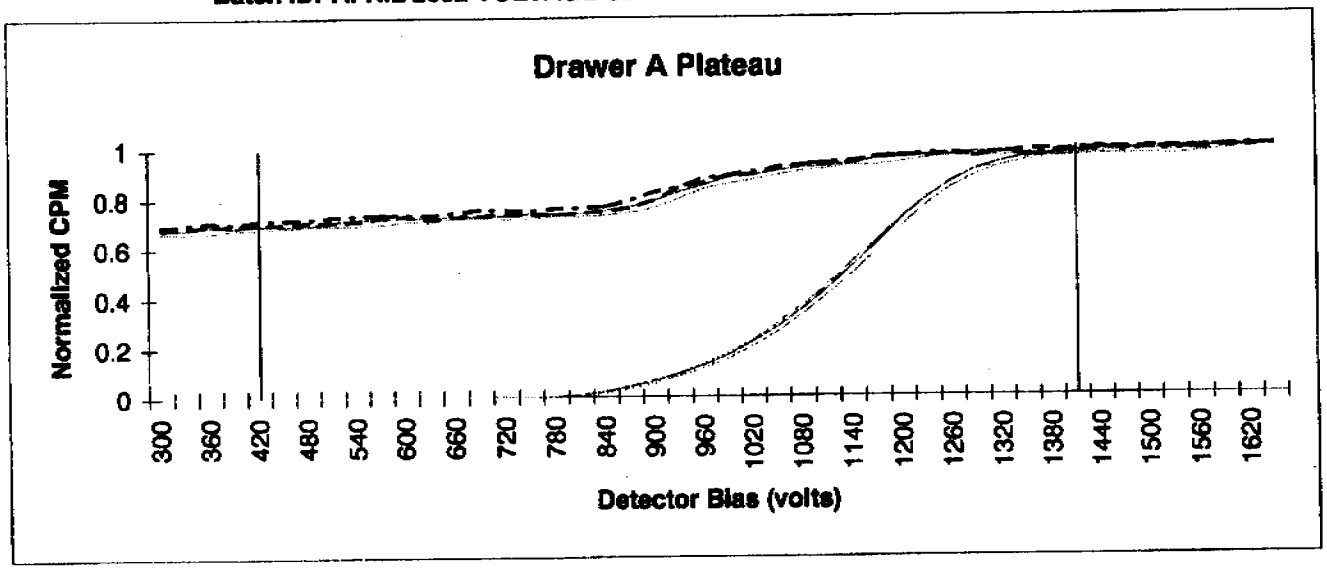
VOLTAGE PLATEAUS

LOT# F5D220356

STL ST. LOUIS

Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit Id: Blue
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

Optimum alpha only operating voltage: 420

	A1	A2	A3	A4
Beta slope at beta voltage	2.01%	2.90%	3.42%	2.81%
Alpha slope at beta voltage	0.73%	0.54%	-0.09%	1.16%
Alpha slope at alpha voltage	0.46%	1.38%	2.93%	1.83%

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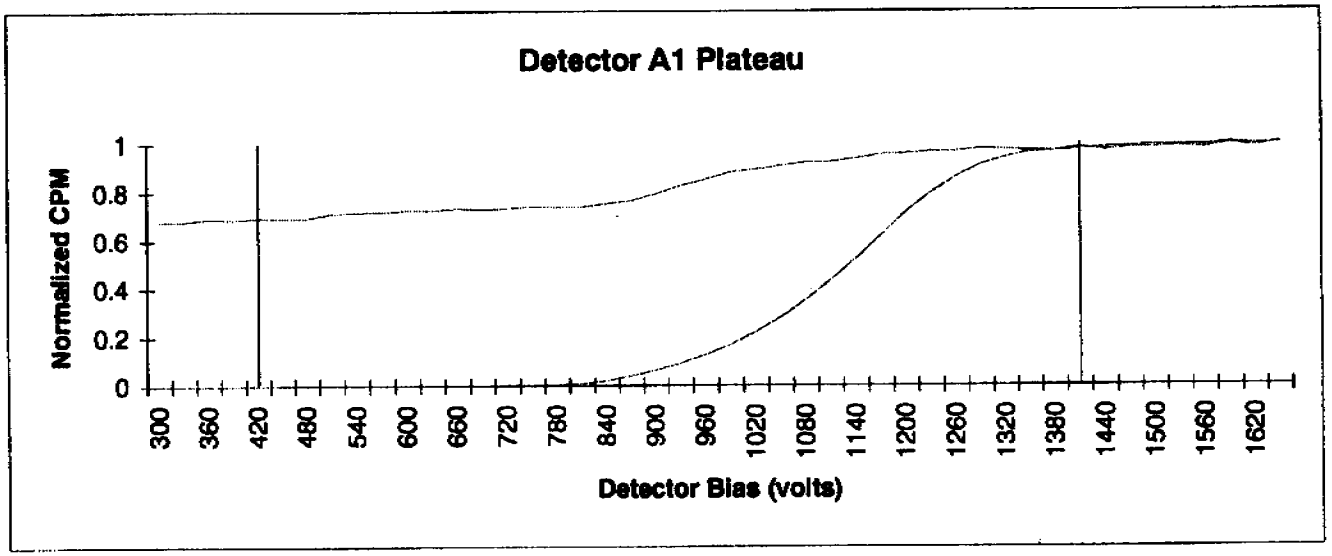
LOT# F5D220356

STL ST. LOUIS

Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit Id: Blue
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

Optimum alpha only operating voltage: 420

	A1
Beta slope at beta voltage	2.01%
Alpha slope at beta voltage	0.73%
Alpha slope at alpha voltage	0.46%

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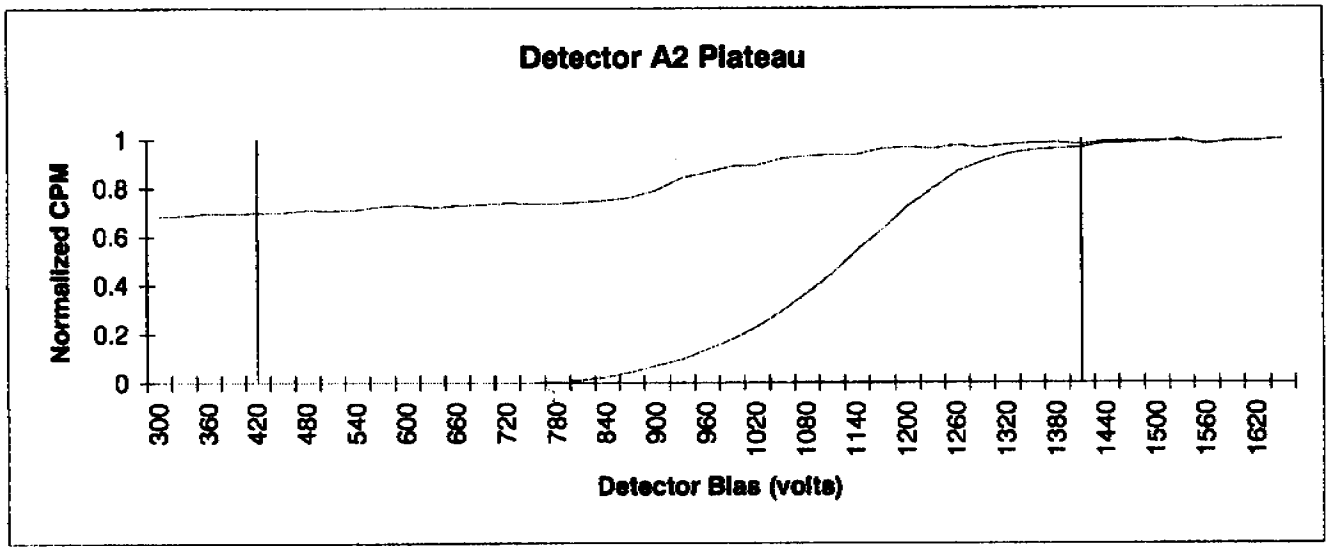
Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit Id: Blue
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

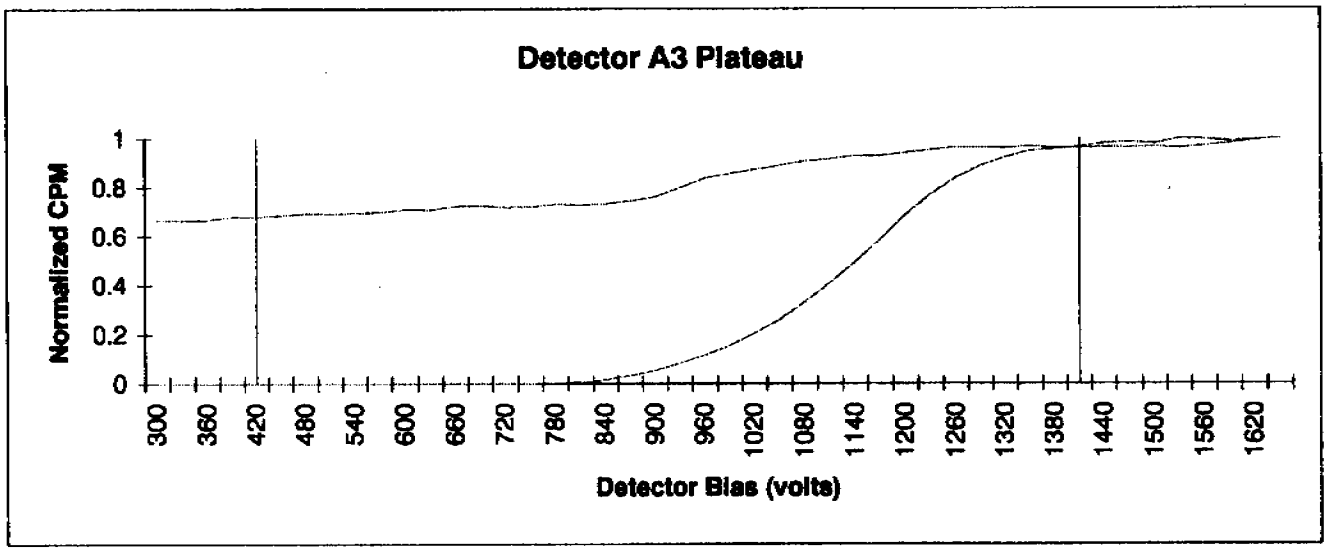
Optimum alpha only operating voltage: 420

	A2
Beta slope at beta voltage	2.90%
Alpha slope at beta voltage	0.54%
Alpha slope at alpha voltage	1.38%

Printed 4/2/2002 12:40 PM

Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit Id: Blue
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

Optimum alpha only operating voltage: 420

	A3
Beta slope at beta voltage	3.42%
Alpha slope at beta voltage	-0.09%
Alpha slope at alpha voltage	2.93%

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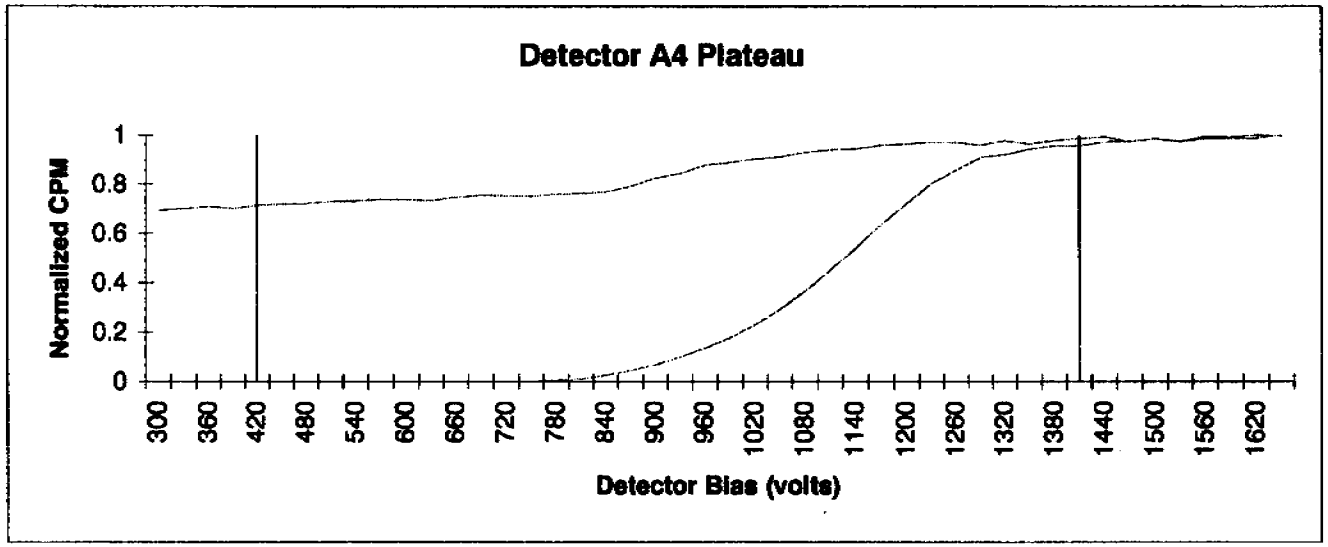
Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit Id: Blue
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

Optimum alpha only operating voltage: 420

	A4
Beta slope at beta voltage	2.81%
Alpha slope at beta voltage	1.16%
Alpha slope at alpha voltage	1.83%

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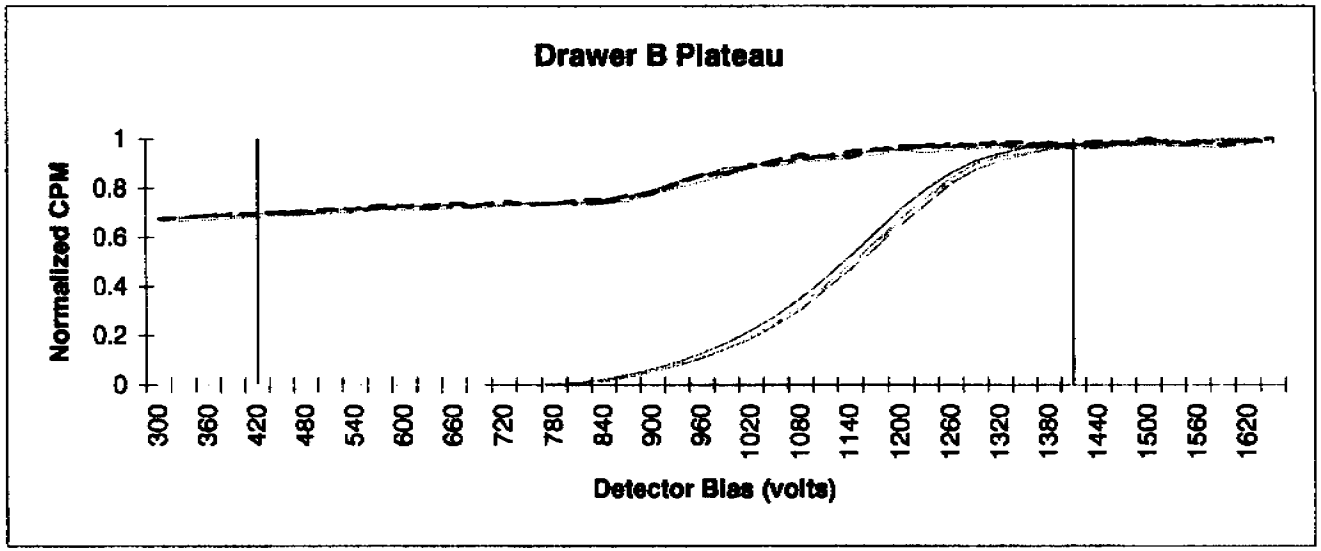
Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit Id: Blue
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

Optimum alpha only operating voltage: 420

	B1	B2	B3	B4
Beta slope at beta voltage	---	3.00%	3.39%	3.40%
Alpha slope at beta voltage	---	0.66%	0.92%	0.34%
Alpha slope at alpha voltage	---	2.28%	2.47%	1.26%

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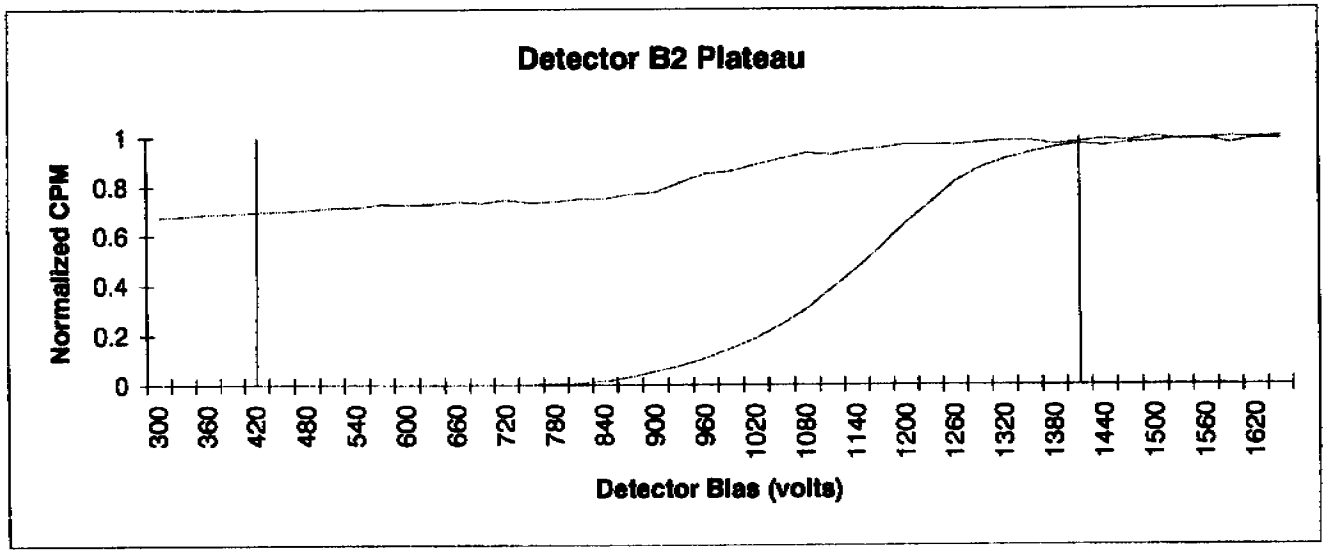
Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit Id: Blue
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

Optimum alpha only operating voltage: 420

	B2
Beta slope at beta voltage	2.90%
Alpha slope at beta voltage	0.54%
Alpha slope at alpha voltage	1.38%

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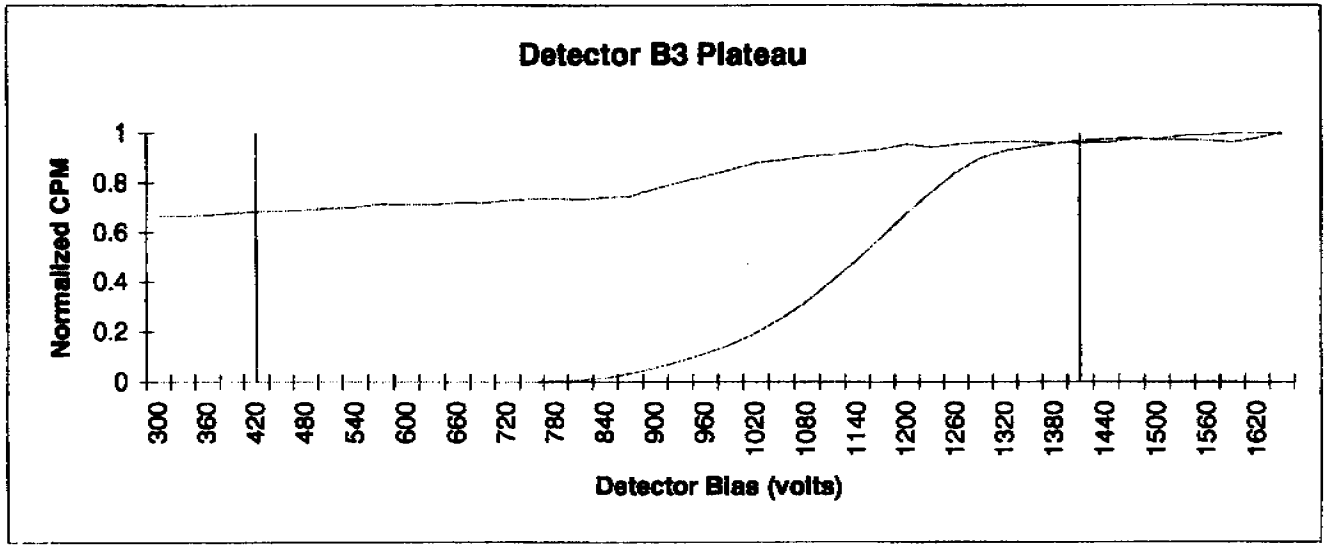
LOT# F5D220356

STL ST. LOUIS

Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit Id: Blue
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

Optimum alpha only operating voltage: 420

	B3
Beta slope at beta voltage	3.42%
Alpha slope at beta voltage	-0.09%
Alpha slope at alpha voltage	2.93%

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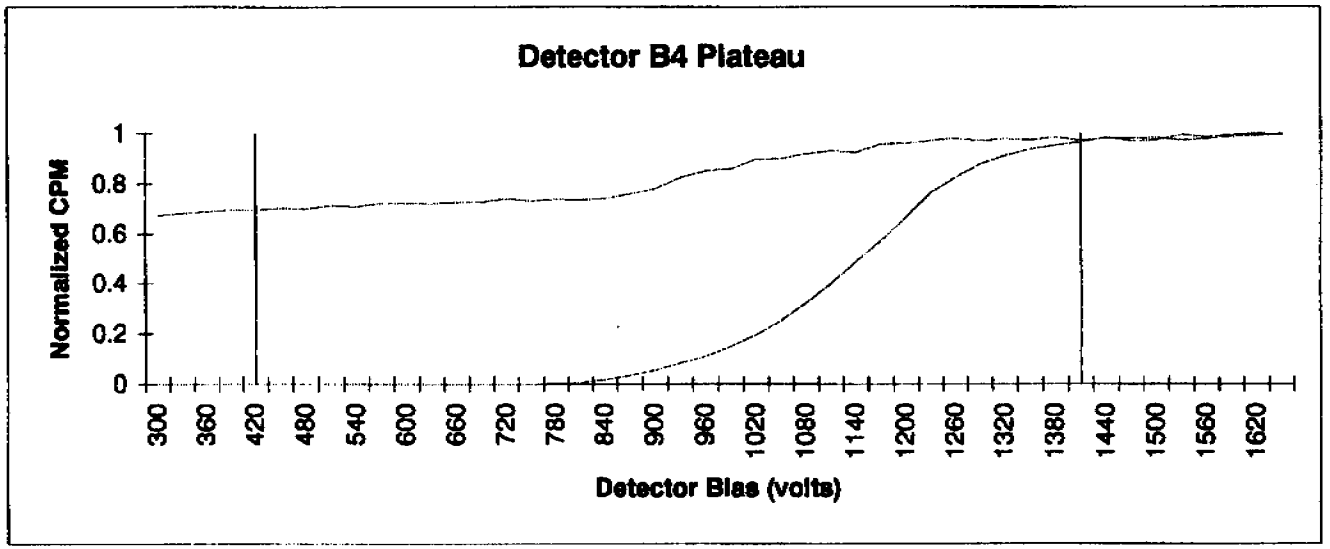
Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit Id: Blue
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

Optimum alpha only operating voltage: 420

	B4
Beta slope at beta voltage	2.81%
Alpha slope at beta voltage	1.16%
Alpha slope at alpha voltage	1.83%

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Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit Id: Blue
Application Revision: 2
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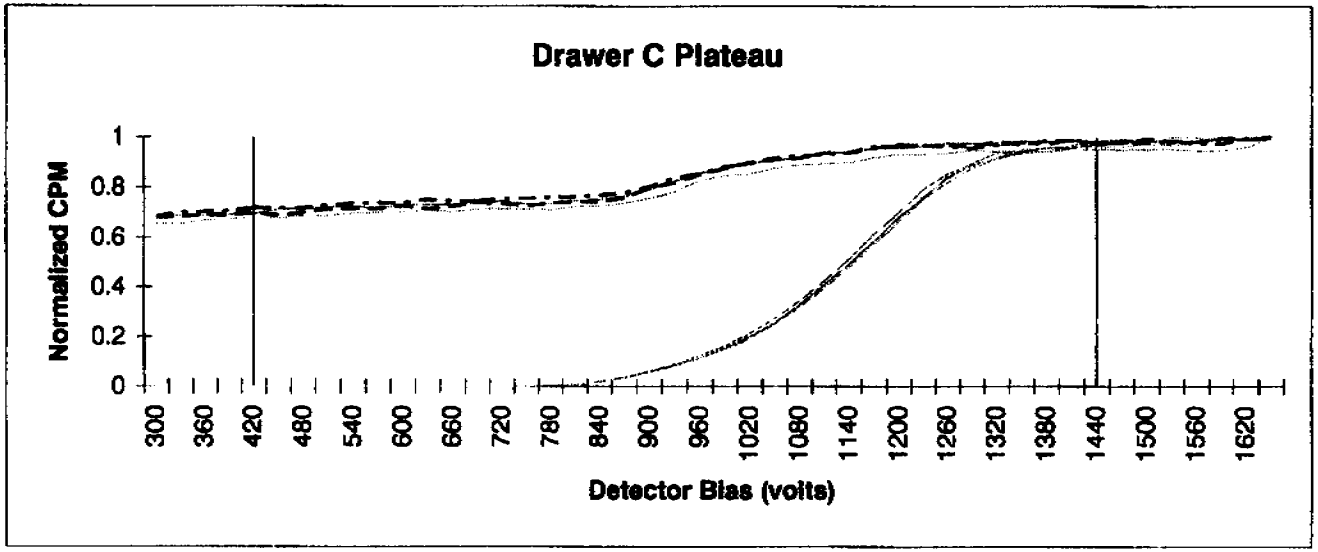

Optimum alpha beta simultaneous operating voltage: 1440

Optimum alpha only operating voltage: 420

	C1	C2	C3	C4
Beta slope at beta voltage	2.43%	2.69%	2.11%	2.63%
Alpha slope at beta voltage	0.28%	0.21%	0.54%	-0.27%
Alpha slope at alpha voltage	3.43%	0.91%	1.95%	1.81%

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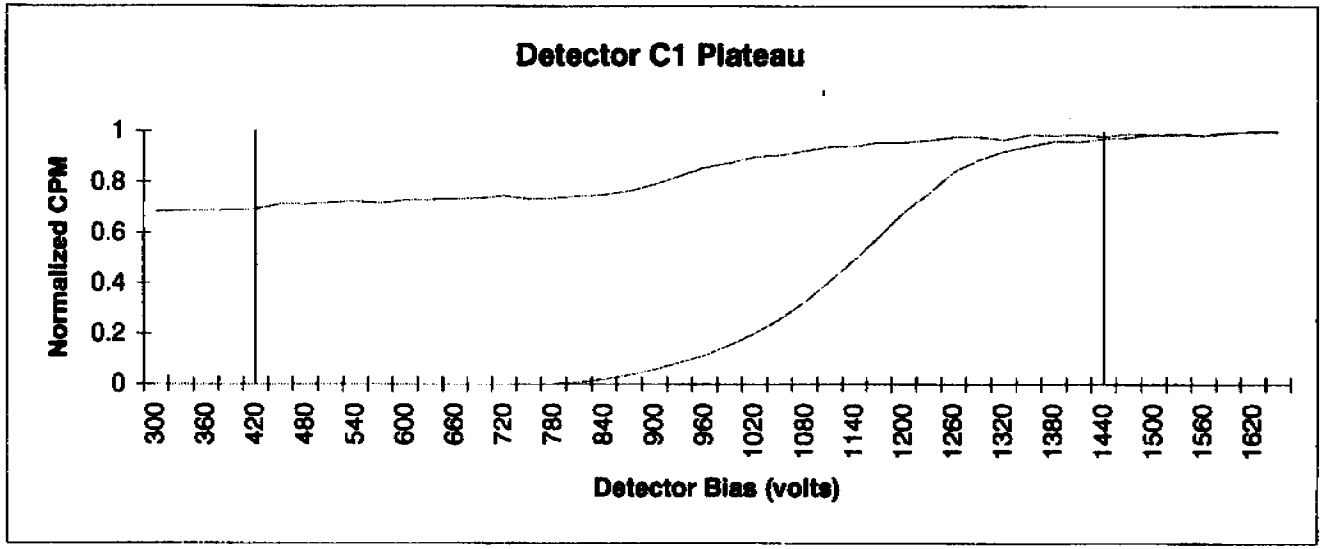
Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit Id: Blue
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1440

Optimum alpha only operating voltage: 420

	C1
Beta slope at beta voltage	2.01%
Alpha slope at beta voltage	0.73%
Alpha slope at alpha voltage	0.46%

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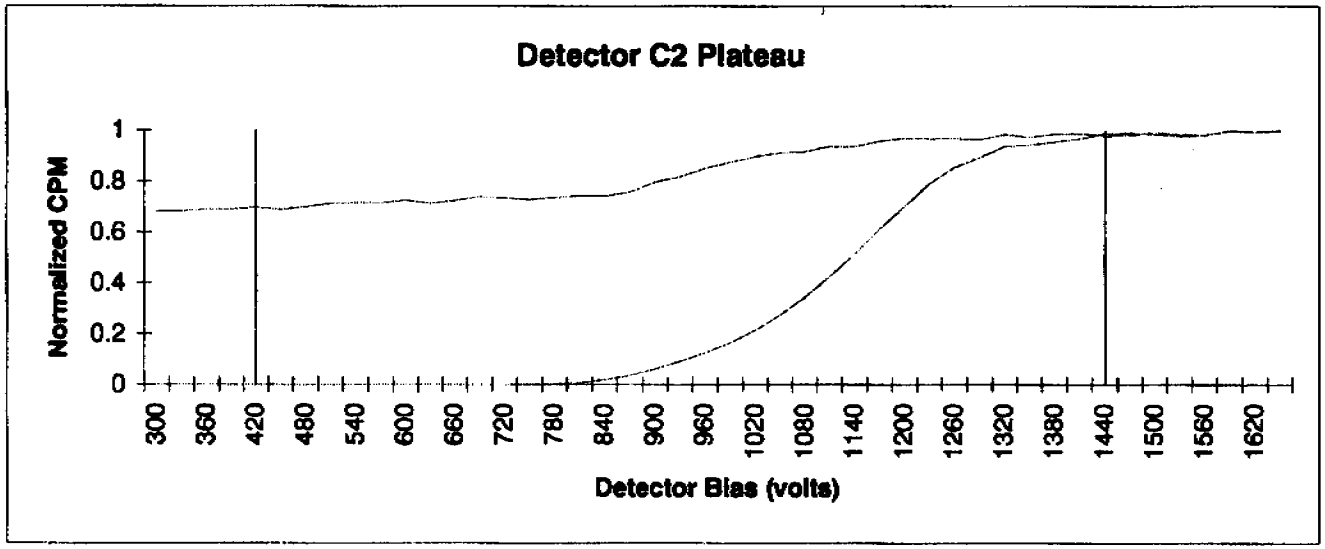
LOT# F5D220356

STL ST. LOUIS

Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit Id: Blue
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1440

Optimum alpha only operating voltage: 420

	C2
Beta slope at beta voltage	2.90%
Alpha slope at beta voltage	0.54%
Alpha slope at alpha voltage	1.38%

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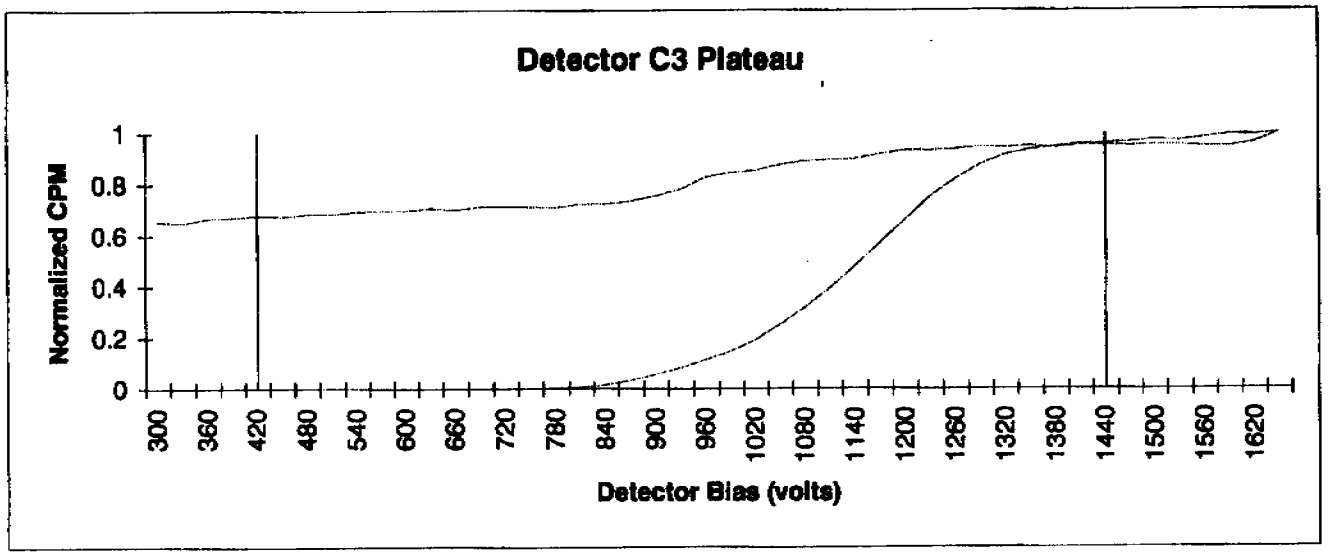
Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit Id: Blue
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1440

Optimum alpha only operating voltage: 420

	C3
Beta slope at beta voltage	3.42%
Alpha slope at beta voltage	-0.09%
Alpha slope at alpha voltage	2.93%

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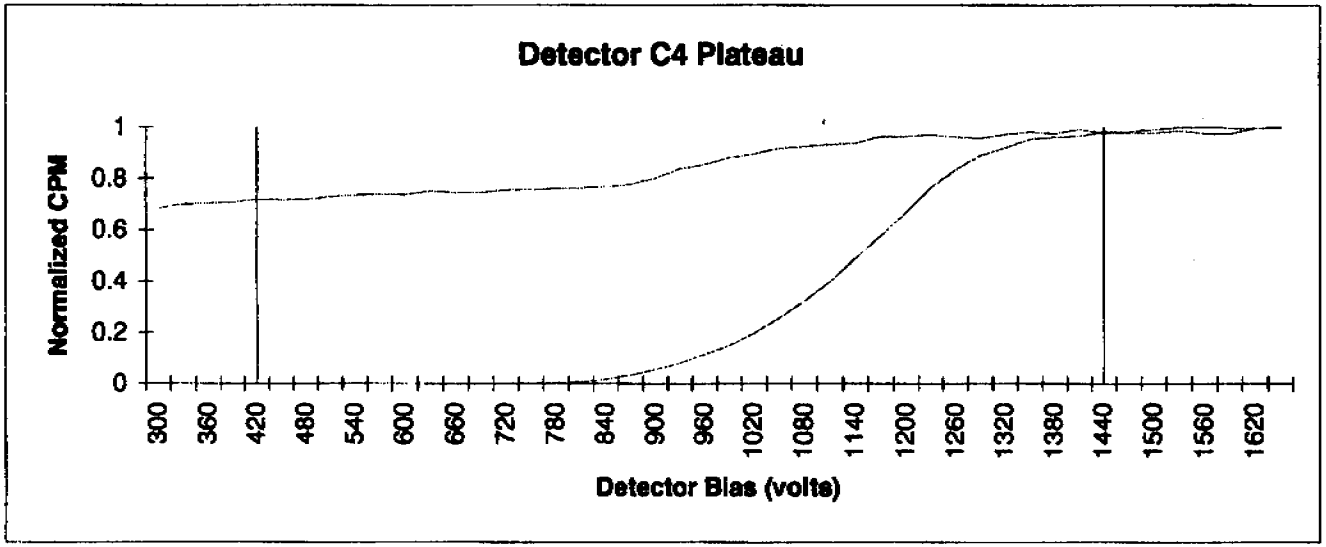
Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit Id: Blue
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1440

Optimum alpha only operating voltage: 420

	C4
Beta slope at beta voltage	2.81%
Alpha slope at beta voltage	1.16%
Alpha slope at alpha voltage	1.83%

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
A1	ALPHA	26090	2	300	0.680443	#VALUE!	0
A1	ALPHA	26084	2	330	0.680286	#VALUE!	0
A1	ALPHA	26537	2	360	0.692101	0.018795	0
A1	ALPHA	26380	2	390	0.688006	0.014992	0
A1	ALPHA	26685	2	420	0.695961	0.00458	1
A1	ALPHA	26605	2	450	0.693874	0.02201	0
A1	ALPHA	26607	2	480	0.693927	0.02932	0
A1	ALPHA	27301	2	510	0.712026	0.034432	0
A1	ALPHA	27522	2	540	0.71779	0.032904	0
A1	ALPHA	27548	2	570	0.718468	0.01522	0
A1	ALPHA	27834	2	600	0.725927	0.015772	0
A1	ALPHA	27775	2	630	0.724389	0.012609	0
A1	ALPHA	28065	2	660	0.731952	0.008064	0
A1	ALPHA	27959	2	690	0.729188	0.015432	0
A1	ALPHA	28080	2	720	0.732343	0.011809	0
A1	ALPHA	28417	2	750	0.741132	0.013375	0
A1	ALPHA	28335	2	780	0.738994	0.018495	0
A1	ALPHA	28398	2	810	0.740637	0.027842	0
A1	ALPHA	28878	2	840	0.753156	0.057417	0
A1	ALPHA	29343	2	870	0.765283	0.090189	0
A1	ALPHA	30062	1.98	900	0.791955	0.108223	0
A1	ALPHA	30251	1.91	930	0.826141	0.118535	0
A1	ALPHA	30226	1.85	960	0.852229	0.100196	0
A1	ALPHA	30252	1.79	990	0.881553	0.07693	0
A1	ALPHA	30091	1.76	1020	0.891808	0.061481	0
A1	ALPHA	30254	1.74	1050	0.906945	0.041498	0
A1	ALPHA	30039	1.7	1080	0.921688	0.038604	0
A1	ALPHA	30080	1.7	1110	0.922946	0.038207	0
A1	ALPHA	30174	1.68	1140	0.936852	0.035423	0
A1	ALPHA	30132	1.65	1170	0.952558	0.03751	0
A1	ALPHA	30264	1.65	1200	0.956731	0.025815	0
A1	ALPHA	30196	1.63	1230	0.966294	0.02056	0
A1	ALPHA	30218	1.63	1260	0.966998	0.015561	0
A1	ALPHA	30348	1.62	1290	0.977153	0.004764	0
A1	ALPHA	30247	1.62	1320	0.973901	-0.00209	0
A1	ALPHA	30119	1.62	1350	0.96978	8.16E-05	0
A1	ALPHA	30238	1.63	1380	0.967638	0.000906	0
A1	ALPHA	30261	1.61	1410	0.980404	0.007339	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
A1	ALPHA	30309	1.63	1440	0.96991	0.007549	0
A1	ALPHA	30041	1.6	1470	0.979359	0.006096	0
A1	ALPHA	30224	1.61	1500	0.979205	0.00681	0
A1	ALPHA	30205	1.6	1530	0.984706	0.01069	0
A1	ALPHA	30163	1.61	1560	0.977229	0.008029	0
A1	ALPHA	30364	1.59	1590	0.996115	0.013054	0
A1	ALPHA	30225	1.6	1620	0.985358	#VALUE!	0
A1	ALPHA	30099	1.57	1650	1	#VALUE!	0
A1	BETA	0	0.11	300	0	#VALUE!	0
A1	BETA	0	0.11	330	0	#VALUE!	0
A1	BETA	1	0.11	360	0.000184	1.31E-15	0
A1	BETA	0	0.11	390	0	-1.66667	0
A1	BETA	0	0.12	420	0	-3.33333	0
A1	BETA	0	0.11	450	0	#VALUE!	0
A1	BETA	0	0.11	480	0	3.333333	0
A1	BETA	0	0.11	510	0	1.666667	0
A1	BETA	1	0.11	540	0.000184	2.222222	0
A1	BETA	0	0.11	570	0	1.666667	0
A1	BETA	2	0.11	600	0.000368	0.555556	0
A1	BETA	2	0.11	630	0.000368	0.277778	0
A1	BETA	1	0.11	660	0.000184	0.5	0
A1	BETA	1	0.11	690	0.000184	1.234568	0
A1	BETA	4	0.11	720	0.000737	2.145754	0
A1	BETA	6	0.12	750	0.001013	2.367456	0
A1	BETA	314	2	780	0.003182	2.339819	0
A1	BETA	884	2	810	0.008957	2.155034	0
A1	BETA	2157	2	840	0.021856	1.85076	0
A1	BETA	3995	2	870	0.04048	1.527654	0
A1	BETA	6384	2	900	0.064687	1.269561	0
A1	BETA	9084	2	930	0.092045	1.082383	0
A1	BETA	12674	2	960	0.128422	0.963603	0
A1	BETA	16712	2	990	0.169338	0.878999	0
A1	BETA	21854	2	1020	0.22144	0.809945	0
A1	BETA	27708	2	1050	0.280757	0.754715	0
A1	BETA	30119	1.73	1080	0.352817	0.694452	0
A1	BETA	30182	1.41	1110	0.433795	0.637354	0
A1	BETA	30150	1.17	1140	0.522224	0.574841	0
A1	BETA	30505	1	1170	0.618196	0.495746	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
A1	BETA	30406	0.86	1200	0.7165	0.405957	0
A1	BETA	30625	0.78	1230	0.795677	0.311924	0
A1	BETA	30606	0.72	1260	0.861449	0.221868	0
A1	BETA	30566	0.68	1290	0.91093	0.153454	0
A1	BETA	30152	0.65	1320	0.940066	0.094314	0
A1	BETA	30386	0.64	1350	0.962164	0.053593	0
A1	BETA	30544	0.64	1380	0.967167	0.032446	0
A1	BETA	30754	0.64	1410	0.973816	0.020083	1
A1	BETA	30503	0.63	1440	0.9812	0.020057	0
A1	BETA	30605	0.63	1470	0.984481	0.01498	0
A1	BETA	30328	0.62	1500	0.991305	0.007027	0
A1	BETA	30804	0.63	1530	0.990882	0.009464	0
A1	BETA	30727	0.63	1560	0.988405	0.003167	0
A1	BETA	30594	0.62	1590	1	0.00506	0
A1	BETA	30822	0.63	1620	0.991461	#VALUE!	0
A1	BETA	30499	0.62	1650	0.996895	#VALUE!	0
A2	ALPHA	23238	2	300	0.682858	#VALUE!	0
A2	ALPHA	23379	2	330	0.687001	#VALUE!	0
A2	ALPHA	23718	2	360	0.696963	0.019385	0
A2	ALPHA	23679	2	390	0.695817	0.012997	0
A2	ALPHA	23773	2	420	0.698579	0.013795	1
A2	ALPHA	23813	2	450	0.699754	0.016084	0
A2	ALPHA	24144	2	480	0.709481	0.016757	0
A2	ALPHA	24070	2	510	0.707307	0.024615	0
A2	ALPHA	24248	2	540	0.712537	0.027465	0
A2	ALPHA	24654	2	570	0.724468	0.018172	0
A2	ALPHA	24857	2	600	0.730433	0.012033	0
A2	ALPHA	24432	2	630	0.717944	0.006119	0
A2	ALPHA	24803	2	660	0.728846	0.013134	0
A2	ALPHA	24908	2	690	0.731931	0.020342	0
A2	ALPHA	25108	2	720	0.737809	0.008113	0
A2	ALPHA	25038	2	750	0.735752	0.008085	0
A2	ALPHA	25042	2	780	0.735869	0.012298	0
A2	ALPHA	25245	2	810	0.741834	0.029392	0
A2	ALPHA	25469	2	840	0.748417	0.057729	0
A2	ALPHA	25942	2	870	0.762316	0.103944	0
A2	ALPHA	26921	2	900	0.791084	0.128259	0
A2	ALPHA	28642	2	930	0.841657	0.130719	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
A2	ALPHA	29365	2	960	0.862902	0.098025	0
A2	ALPHA	30103	1.99	990	0.889034	0.071448	0
A2	ALPHA	30092	1.98	1020	0.893197	0.061816	0
A2	ALPHA	30088	1.92	1050	0.920987	0.048363	0
A2	ALPHA	30076	1.9	1080	0.930311	0.037721	0
A2	ALPHA	30126	1.89	1110	0.936788	0.031352	0
A2	ALPHA	30151	1.89	1140	0.937565	0.034491	0
A2	ALPHA	30101	1.84	1170	0.961445	0.027534	0
A2	ALPHA	30109	1.83	1200	0.966956	0.025526	0
A2	ALPHA	30101	1.84	1230	0.961445	0.004532	0
A2	ALPHA	30173	1.82	1260	0.974336	0.008051	0
A2	ALPHA	30191	1.84	1290	0.96432	0.016422	0
A2	ALPHA	30096	1.81	1320	0.977219	0.014663	0
A2	ALPHA	30136	1.8	1350	0.983954	0.013159	0
A2	ALPHA	30199	1.8	1380	0.986011	0.007737	0
A2	ALPHA	30158	1.81	1410	0.979232	0.005446	0
A2	ALPHA	30183	1.79	1440	0.990994	0.006806	0
A2	ALPHA	30138	1.79	1470	0.989516	0.009067	0
A2	ALPHA	30013	1.78	1500	0.990948	-0.00482	0
A2	ALPHA	30235	1.79	1530	0.992701	-0.00373	0
A2	ALPHA	30084	1.8	1560	0.982256	-0.00074	0
A2	ALPHA	30270	1.8	1590	0.988329	0.0082	0
A2	ALPHA	30046	1.78	1620	0.992038	#VALUE!	0
A2	ALPHA	30117	1.77	1650	1	#VALUE!	0
A2	BETA	1	0.11	300	0.000176	#VALUE!	0
A2	BETA	1	0.11	330	0.000176	#VALUE!	0
A2	BETA	1	0.11	360	0.000176	-0.49645	0
A2	BETA	0	0.11	390	0	-1.19048	0
A2	BETA	1	0.12	420	0.000162	-1.73913	0
A2	BETA	0	0.11	450	0	-1.66667	0
A2	BETA	0	0.11	480	0	-3.33333	0
A2	BETA	0	0.11	510	0	#VALUE!	0
A2	BETA	0	0.11	540	0	#VALUE!	0
A2	BETA	0	0.11	570	0	3.333333	0
A2	BETA	0	0.11	600	0	2.777778	0
A2	BETA	1	0.11	630	0.000176	2	0
A2	BETA	2	0.11	660	0.000353	1.190476	0
A2	BETA	2	0.11	690	0.000353	0.598291	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
A2	BETA	2	0.11	720	0.000353	2.131271	0
A2	BETA	3	0.12	750	0.000485	2.580958	0
A2	BETA	364	2	780	0.003531	2.441206	0
A2	BETA	1105	2	810	0.010719	2.165227	0
A2	BETA	2421	2	840	0.023484	1.8311	0
A2	BETA	4511	2	870	0.043757	1.484742	0
A2	BETA	7269	2	900	0.07051	1.253817	0
A2	BETA	9915	2	930	0.096177	1.060785	0
A2	BETA	14090	2	960	0.136675	0.93336	0
A2	BETA	18318	2	990	0.177687	0.872088	0
A2	BETA	23547	2	1020	0.228409	0.800088	0
A2	BETA	30212	1.99	1050	0.294533	0.741048	0
A2	BETA	30302	1.6	1080	0.367416	0.690867	0
A2	BETA	30239	1.32	1110	0.444427	0.614004	0
A2	BETA	30204	1.08	1140	0.54256	0.550837	0
A2	BETA	30332	0.94	1170	0.626008	0.470011	0
A2	BETA	30578	0.82	1200	0.72344	0.383108	0
A2	BETA	30758	0.75	1230	0.795617	0.299822	0
A2	BETA	30808	0.69	1260	0.866207	0.213042	0
A2	BETA	30391	0.65	1290	0.907066	0.145936	0
A2	BETA	30947	0.64	1320	0.938092	0.085668	0
A2	BETA	30521	0.62	1350	0.955024	0.04916	0
A2	BETA	30717	0.62	1380	0.961157	0.036432	0
A2	BETA	30350	0.61	1410	0.965241	0.028988	1
A2	BETA	30479	0.6	1440	0.9855	0.025024	0
A2	BETA	30465	0.6	1470	0.985047	0.023137	0
A2	BETA	30554	0.6	1500	0.987925	-0.00015	0
A2	BETA	30357	0.59	1530	0.998192	0.002409	0
A2	BETA	30269	0.6	1560	0.97871	0.000724	0
A2	BETA	30718	0.6	1590	0.993227	0.005505	0
A2	BETA	30664	0.6	1620	0.991481	#VALUE!	0
A2	BETA	30412	0.59	1650	1	#VALUE!	0
A3	ALPHA	24336	2	300	0.665293	#VALUE!	0
A3	ALPHA	24319	2	330	0.664828	#VALUE!	0
A3	ALPHA	24400	2	360	0.667042	0.022946	0
A3	ALPHA	24854	2	390	0.679454	0.027542	0
A3	ALPHA	24914	2	420	0.681094	0.029273	1
A3	ALPHA	25083	2	450	0.685714	0.019086	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
A3	ALPHA	25380	2	480	0.693833	0.016794	0
A3	ALPHA	25340	2	510	0.69274	0.013473	0
A3	ALPHA	25421	2	540	0.694954	0.01834	0
A3	ALPHA	25575	2	570	0.699164	0.021736	0
A3	ALPHA	25965	2	600	0.709826	0.030611	0
A3	ALPHA	25904	2	630	0.708158	0.02977	0
A3	ALPHA	26444	2	660	0.722921	0.016422	0
A3	ALPHA	26500	2	690	0.724452	0.009897	0
A3	ALPHA	26313	2	720	0.719339	0.005767	0
A3	ALPHA	26360	2	750	0.720624	0.009855	0
A3	ALPHA	26743	2	780	0.731095	0.016565	0
A3	ALPHA	26677	2	810	0.72929	0.022072	0
A3	ALPHA	26815	2	840	0.733063	0.034279	0
A3	ALPHA	27210	2	870	0.743861	0.074445	0
A3	ALPHA	27868	2	900	0.76185	0.113702	0
A3	ALPHA	29228	2	930	0.799029	0.125318	0
A3	ALPHA	30182	1.97	960	0.837674	0.112389	0
A3	ALPHA	30226	1.93	990	0.856282	0.084476	0
A3	ALPHA	30156	1.89	1020	0.872379	0.066479	0
A3	ALPHA	30260	1.86	1050	0.889507	0.057739	0
A3	ALPHA	30228	1.82	1080	0.908095	0.050276	0
A3	ALPHA	30135	1.8	1110	0.915361	0.035887	0
A3	ALPHA	30196	1.78	1140	0.927519	0.028282	0
A3	ALPHA	30074	1.77	1170	0.928991	0.031583	0
A3	ALPHA	30274	1.76	1200	0.940482	0.032983	0
A3	ALPHA	30331	1.74	1230	0.953084	0.031305	0
A3	ALPHA	30266	1.72	1260	0.9621	0.017016	0
A3	ALPHA	30287	1.72	1290	0.962767	0.008046	0
A3	ALPHA	30201	1.72	1320	0.960033	0.000731	0
A3	ALPHA	30203	1.71	1350	0.965712	-0.00049	0
A3	ALPHA	30077	1.71	1380	0.961683	0.001422	0
A3	ALPHA	30063	1.71	1410	0.961235	-0.00088	0
A3	ALPHA	30336	1.72	1440	0.964325	0.002557	0
A3	ALPHA	30122	1.71	1470	0.963122	-0.00121	0
A3	ALPHA	30163	1.71	1500	0.964433	0.001898	0
A3	ALPHA	30182	1.72	1530	0.959429	0.011904	0
A3	ALPHA	30126	1.7	1560	0.968916	0.025108	0
A3	ALPHA	30234	1.69	1590	0.978143	0.035363	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
A3	ALPHA	30109	1.66	1620	0.991703	#VALUE!	0
A3	ALPHA	30178	1.65	1650	1	#VALUE!	0
A3	BETA	1	0.11	300	0.000262	#VALUE!	0
A3	BETA	0	0.11	330	0	#VALUE!	0
A3	BETA	0	0.11	360	0	0.52381	0
A3	BETA	1	0.12	390	0.00024	0.869565	0
A3	BETA	1	0.11	420	0.000262	-0.7971	0
A3	BETA	0	0.11	450	0	-2.46377	0
A3	BETA	0	0.11	480	0	-7.4E-16	0
A3	BETA	0	0.12	510	0	1.666667	0
A3	BETA	1	0.11	540	0.000262	-9.2E-17	0
A3	BETA	0	0.12	570	0	0.833333	0
A3	BETA	0	0.11	600	0	0.555556	0
A3	BETA	1	0.11	630	0.000262	1.619048	0
A3	BETA	1	0.11	660	0.000262	1.327684	0
A3	BETA	1	0.12	690	0.00024	0.28169	0
A3	BETA	2	0.11	720	0.000523	1.358543	0
A3	BETA	1	0.11	750	0.000262	2.387761	0
A3	BETA	5	0.11	780	0.001308	2.571187	0
A3	BETA	372	2	810	0.00535	2.376098	0
A3	BETA	1131	2	840	0.016267	2.013797	0
A3	BETA	2254	2	870	0.032419	1.687252	0
A3	BETA	3725	2	900	0.053577	1.377782	0
A3	BETA	5796	2	930	0.083364	1.160572	0
A3	BETA	8002	2	960	0.115093	1.018259	0
A3	BETA	10741	2	990	0.154488	0.901772	0
A3	BETA	14235	2	1020	0.204742	0.843013	0
A3	BETA	18053	2	1050	0.259657	0.779792	0
A3	BETA	23092	2	1080	0.332133	0.712147	0
A3	BETA	28432	2	1110	0.408938	0.651215	0
A3	BETA	30161	1.76	1140	0.492962	0.58795	0
A3	BETA	30120	1.48	1170	0.585428	0.518454	0
A3	BETA	30038	1.26	1200	0.685773	0.433513	0
A3	BETA	30261	1.13	1230	0.770344	0.335462	0
A3	BETA	30343	1.04	1260	0.839277	0.239345	0
A3	BETA	30251	0.98	1290	0.887961	0.166422	0
A3	BETA	30440	0.95	1320	0.921724	0.107456	0
A3	BETA	30291	0.92	1350	0.947122	0.06709	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
A3	BETA	30257	0.91	1380	0.956455	0.046938	0
A3	BETA	30184	0.9	1410	0.964749	0.034208	1
A3	BETA	30323	0.89	1440	0.980081	0.022385	0
A3	BETA	30130	0.88	1470	0.98491	0.02314	0
A3	BETA	30291	0.89	1500	0.979047	0.015518	0
A3	BETA	30224	0.87	1530	0.999339	0.007361	0
A3	BETA	30465	0.88	1560	0.995861	0.005413	0
A3	BETA	30207	0.88	1590	0.987427	-0.0005	0
A3	BETA	30379	0.88	1620	0.993049	#VALUE!	0
A3	BETA	30244	0.87	1650	1	#VALUE!	0
A4	ALPHA	24380	2	300	0.692591	#VALUE!	0
A4	ALPHA	24646	2	330	0.700147	#VALUE!	0
A4	ALPHA	24969	2	360	0.709323	0.02169	0
A4	ALPHA	24724	2	390	0.702363	0.020113	0
A4	ALPHA	25147	2	420	0.71438	0.018298	1
A4	ALPHA	25310	2	450	0.71901	0.028831	0
A4	ALPHA	25365	2	480	0.720573	0.021979	0
A4	ALPHA	25707	2	510	0.730288	0.023729	0
A4	ALPHA	25788	2	540	0.732589	0.019585	0
A4	ALPHA	26011	2	570	0.738924	0.006083	0
A4	ALPHA	25970	2	600	0.73776	0.010201	0
A4	ALPHA	25852	2	630	0.734407	0.019342	0
A4	ALPHA	26265	2	660	0.74614	0.024859	0
A4	ALPHA	26622	2	690	0.756282	0.018761	0
A4	ALPHA	26564	2	720	0.754634	0.009976	0
A4	ALPHA	26444	2	750	0.751225	0.008044	0
A4	ALPHA	26751	2	780	0.759946	0.017282	0
A4	ALPHA	26850	2	810	0.762759	0.038886	0
A4	ALPHA	27054	2	840	0.768554	0.067431	0
A4	ALPHA	27867	2	870	0.79165	0.09033	0
A4	ALPHA	29025	2	900	0.824546	0.109732	0
A4	ALPHA	29671	2	930	0.842898	0.098472	0
A4	ALPHA	30137	1.95	960	0.878089	0.079438	0
A4	ALPHA	30224	1.93	990	0.889749	0.06216	0
A4	ALPHA	30249	1.9	1020	0.904545	0.046941	0
A4	ALPHA	30185	1.88	1050	0.912234	0.045908	0
A4	ALPHA	30132	1.84	1080	0.930429	0.038266	0
A4	ALPHA	30106	1.82	1110	0.939841	0.038079	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
A4	ALPHA	30070	1.81	1140	0.943904	0.030627	0
A4	ALPHA	30214	1.79	1170	0.959021	0.028994	0
A4	ALPHA	30043	1.77	1200	0.964368	0.022819	0
A4	ALPHA	30084	1.76	1230	0.971171	0.002311	0
A4	ALPHA	30071	1.76	1260	0.970752	0.005088	0
A4	ALPHA	30050	1.78	1290	0.959174	-0.00273	0
A4	ALPHA	30116	1.75	1320	0.97776	0.006977	0
A4	ALPHA	30192	1.78	1350	0.963706	0.019223	0
A4	ALPHA	30143	1.75	1380	0.978636	0.017891	0
A4	ALPHA	30047	1.73	1410	0.986797	0.011631	0
A4	ALPHA	30221	1.73	1440	0.992512	0.000819	0
A4	ALPHA	30167	1.76	1470	0.973851	-0.01001	0
A4	ALPHA	30206	1.74	1500	0.986318	0.000923	0
A4	ALPHA	30207	1.76	1530	0.975142	0.014294	0
A4	ALPHA	30068	1.72	1560	0.993228	0.014731	0
A4	ALPHA	30190	1.73	1590	0.991494	0.016706	0
A4	ALPHA	30097	1.71	1620	1	#VALUE!	0
A4	ALPHA	30170	1.72	1650	0.996597	#VALUE!	0
A4	BETA	0	0.11	300	0	#VALUE!	0
A4	BETA	0	0.11	330	0	#VALUE!	0
A4	BETA	2	0.11	360	0.0004	1.111111	0
A4	BETA	0	0.12	390	0	-0.55556	0
A4	BETA	1	0.11	420	0.0002	-0.83333	0
A4	BETA	0	0.11	450	0	-1.1E-15	0
A4	BETA	1	0.11	480	0.0002	1.29E-15	0
A4	BETA	0	0.11	510	0	9.04E-17	0
A4	BETA	1	0.11	540	0.0002	4.02E-15	0
A4	BETA	0	0.12	570	0	1.111111	0
A4	BETA	1	0.11	600	0.0002	-0.55556	0
A4	BETA	1	0.11	630	0.0002	1.15942	0
A4	BETA	0	0.11	660	0	0.287356	0
A4	BETA	2	0.12	690	0.000366	1.698113	0
A4	BETA	1	0.11	720	0.0002	2.637575	0
A4	BETA	5	0.11	750	0.000999	2.529193	0
A4	BETA	402	2	780	0.004418	2.391522	0
A4	BETA	1055	2	810	0.011595	2.077129	0
A4	BETA	2335	2	840	0.025663	1.739755	0
A4	BETA	4097	2	870	0.045028	1.453522	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
A4	BETA	6272	2	900	0.068932	1.225959	0
A4	BETA	9019	2	930	0.099123	1.050162	0
A4	BETA	12438	2	960	0.136699	0.941522	0
A4	BETA	16119	2	990	0.177155	0.858138	0
A4	BETA	21054	2	1020	0.231393	0.797294	0
A4	BETA	26671	2	1050	0.293126	0.750218	0
A4	BETA	30223	1.81	1080	0.367033	0.683832	0
A4	BETA	30193	1.47	1110	0.451476	0.625098	0
A4	BETA	30113	1.23	1140	0.538139	0.547554	0
A4	BETA	30394	1.05	1170	0.636274	0.468243	0
A4	BETA	30149	0.92	1200	0.720329	0.3774	0
A4	BETA	30676	0.84	1230	0.802722	0.289986	0
A4	BETA	30425	0.78	1260	0.857396	0.200265	0
A4	BETA	30198	0.73	1290	0.909287	0.12847	0
A4	BETA	30134	0.72	1320	0.919962	0.084854	0
A4	BETA	30435	0.71	1350	0.942238	0.047321	0
A4	BETA	30498	0.7	1380	0.957677	0.041826	0
A4	BETA	30475	0.7	1410	0.956954	0.028051	1
A4	BETA	30518	0.69	1440	0.972193	0.024917	0
A4	BETA	30619	0.69	1470	0.975411	0.016229	0
A4	BETA	30462	0.68	1500	0.98468	0.009238	0
A4	BETA	30587	0.69	1530	0.974391	0.007319	0
A4	BETA	30511	0.68	1560	0.986264	0.006083	0
A4	BETA	30484	0.68	1590	0.985391	0.017939	0
A4	BETA	30120	0.67	1620	0.988157	#VALUE!	0
A4	BETA	30481	0.67	1650	1	#VALUE!	0
B2	ALPHA	24882	2	300	0.675492	#VALUE!	0
B2	ALPHA	25053	2	330	0.680134	#VALUE!	0
B2	ALPHA	25381	2	360	0.689039	0.028007	0
B2	ALPHA	25455	2	390	0.691048	0.025585	0
B2	ALPHA	25744	2	420	0.698894	0.022842	1
B2	ALPHA	25850	2	450	0.701771	0.026244	0
B2	ALPHA	26064	2	480	0.707581	0.021663	0
B2	ALPHA	26314	2	510	0.714368	0.029931	0
B2	ALPHA	26359	2	540	0.715589	0.025663	0
B2	ALPHA	26883	2	570	0.729815	0.01964	0
B2	ALPHA	26799	2	600	0.727535	0.020901	0
B2	ALPHA	26879	2	630	0.729706	0.007483	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
B2	ALPHA	27202	2	660	0.738475	0.018041	0
B2	ALPHA	26984	2	690	0.732557	0.008148	0
B2	ALPHA	27479	2	720	0.745995	0.001152	0
B2	ALPHA	27072	2	750	0.734946	0.013075	0
B2	ALPHA	27205	2	780	0.738557	0.011793	0
B2	ALPHA	27656	2	810	0.7508	0.036187	0
B2	ALPHA	27672	2	840	0.751235	0.041986	0
B2	ALPHA	28336	2	870	0.769261	0.068702	0
B2	ALPHA	28622	2	900	0.777025	0.104891	0
B2	ALPHA	30116	2	930	0.817584	0.106629	0
B2	ALPHA	30125	1.92	960	0.851904	0.10691	0
B2	ALPHA	30174	1.9	990	0.862272	0.087603	0
B2	ALPHA	30138	1.84	1020	0.889327	0.081627	0
B2	ALPHA	30260	1.8	1050	0.91277	0.06573	0
B2	ALPHA	30330	1.76	1080	0.935674	0.047666	0
B2	ALPHA	30265	1.77	1110	0.928394	0.034182	0
B2	ALPHA	30364	1.74	1140	0.94749	0.033037	0
B2	ALPHA	30248	1.72	1170	0.954846	0.036944	0
B2	ALPHA	30173	1.69	1200	0.969386	0.019135	0
B2	ALPHA	30202	1.69	1230	0.970318	0.014541	0
B2	ALPHA	30110	1.69	1260	0.967362	0.012784	0
B2	ALPHA	30229	1.68	1290	0.976966	0.015931	0
B2	ALPHA	30288	1.67	1320	0.984734	0.003602	0
B2	ALPHA	30114	1.66	1350	0.984975	-0.00381	0
B2	ALPHA	30328	1.7	1380	0.968634	0.001692	0
B2	ALPHA	30305	1.68	1410	0.979422	0.006635	0
B2	ALPHA	30450	1.67	1440	0.990001	0.022811	0
B2	ALPHA	30086	1.66	1470	0.98406	0.008158	0
B2	ALPHA	30205	1.64	1500	1	0.000679	0
B2	ALPHA	30161	1.66	1530	0.986513	-0.01107	0
B2	ALPHA	30261	1.66	1560	0.989783	-0.01097	0
B2	ALPHA	30279	1.69	1590	0.972792	0.001272	0
B2	ALPHA	30286	1.66	1620	0.990601	#VALUE!	0
B2	ALPHA	30206	1.66	1650	0.987985	#VALUE!	0
B2	BETA	0	0.12	300	0	#VALUE!	0
B2	BETA	0	0.11	330	0	#VALUE!	0
B2	BETA	0	0.11	360	0	#VALUE!	0
B2	BETA	0	0.11	390	0	#VALUE!	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
B2	BETA	0	0.11	420	0	3.333333	0
B2	BETA	0	0.12	450	0	1.666667	0
B2	BETA	1	0.11	480	0.000262	1.666667	0
B2	BETA	0	0.11	510	0	-1.8E-15	0
B2	BETA	1	0.11	540	0.000262	-0.18018	0
B2	BETA	0	0.11	570	0	-0.13889	0
B2	BETA	1	0.13	600	0.000221	-1.3E-15	0
B2	BETA	0	0.11	630	0	0.138889	0
B2	BETA	1	0.11	660	0.000262	-1.52778	0
B2	BETA	0	0.11	690	0	-1.66667	0
B2	BETA	0	0.11	720	0	2.434457	0
B2	BETA	0	0.12	750	0	2.918445	0
B2	BETA	7	0.12	780	0.001679	2.674916	0
B2	BETA	352	2	810	0.005066	2.388894	0
B2	BETA	1013	2	840	0.014579	2.04305	0
B2	BETA	2166	2	870	0.031173	1.689913	0
B2	BETA	3734	2	900	0.05374	1.356522	0
B2	BETA	5425	2	930	0.078077	1.134687	0
B2	BETA	7427	2	960	0.10689	0.9819	0
B2	BETA	10162	2	990	0.146252	0.897402	0
B2	BETA	13105	2	1020	0.188608	0.829089	0
B2	BETA	16845	2	1050	0.242434	0.785323	0
B2	BETA	21177	2	1080	0.304781	0.735469	0
B2	BETA	26904	2	1110	0.387204	0.671424	0
B2	BETA	30181	1.86	1140	0.467061	0.607486	0
B2	BETA	30298	1.57	1170	0.555478	0.524786	0
B2	BETA	30349	1.34	1200	0.651917	0.455102	0
B2	BETA	30390	1.19	1230	0.735084	0.3682	0
B2	BETA	30120	1.06	1260	0.817903	0.273892	0
B2	BETA	30058	0.99	1290	0.873932	0.192372	0
B2	BETA	30359	0.96	1320	0.910268	0.125588	0
B2	BETA	30550	0.94	1350	0.935484	0.086109	0
B2	BETA	30570	0.92	1380	0.956446	0.049575	0
B2	BETA	30357	0.9	1410	0.970888	0.029965	1
B2	BETA	30445	0.91	1440	0.963003	0.01791	0
B2	BETA	30497	0.9	1470	0.975366	0.019951	0
B2	BETA	30309	0.89	1500	0.980245	0.02498	0
B2	BETA	30312	0.88	1530	0.991482	0.019247	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
B2	BETA	30318	0.88	1560	0.991678	0.011475	0
B2	BETA	30516	0.88	1590	0.998155	0.006474	0
B2	BETA	30388	0.88	1620	0.993968	#VALUE!	0
B2	BETA	30225	0.87	1650	1	#VALUE!	0
B3	ALPHA	24032	2	300	0.667644	#VALUE!	0
B3	ALPHA	23985	2	330	0.666338	#VALUE!	0
B3	ALPHA	24165	2	360	0.671339	0.021578	0
B3	ALPHA	24398	2	390	0.677812	0.02654	0
B3	ALPHA	24610	2	420	0.683702	0.024658	1
B3	ALPHA	24733	2	450	0.687119	0.023618	0
B3	ALPHA	24906	2	480	0.691925	0.024139	0
B3	ALPHA	25127	2	510	0.698065	0.031558	0
B3	ALPHA	25316	2	540	0.703315	0.027253	0
B3	ALPHA	25719	2	570	0.714511	0.018279	0
B3	ALPHA	25646	2	600	0.712483	0.015021	0
B3	ALPHA	25661	2	630	0.7129	0.007439	0
B3	ALPHA	25923	2	660	0.720179	0.017438	0
B3	ALPHA	25868	2	690	0.718651	0.025249	0
B3	ALPHA	26219	2	720	0.728402	0.022253	0
B3	ALPHA	26499	2	750	0.736181	0.015511	0
B3	ALPHA	26482	2	780	0.735708	0.008335	0
B3	ALPHA	26348	2	810	0.731986	0.010805	0
B3	ALPHA	26625	2	840	0.739681	0.041821	0
B3	ALPHA	26858	2	870	0.746154	0.077441	0
B3	ALPHA	27911	2	900	0.775408	0.097316	0
B3	ALPHA	28879	2	930	0.802301	0.108218	0
B3	ALPHA	29701	2	960	0.825137	0.104145	0
B3	ALPHA	30178	1.97	990	0.851156	0.090594	0
B3	ALPHA	30097	1.9	1020	0.880146	0.076482	0
B3	ALPHA	30123	1.88	1050	0.890277	0.055063	0
B3	ALPHA	30147	1.85	1080	0.905435	0.040411	0
B3	ALPHA	30196	1.84	1110	0.911836	0.038308	0
B3	ALPHA	30102	1.81	1140	0.924063	0.042417	0
B3	ALPHA	30239	1.8	1170	0.933426	0.032312	0
B3	ALPHA	30204	1.76	1200	0.953535	0.023533	0
B3	ALPHA	30188	1.78	1230	0.942322	0.018813	0
B3	ALPHA	30182	1.76	1260	0.952841	0.01317	0
B3	ALPHA	30253	1.75	1290	0.96054	0.018116	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
B3	ALPHA	30166	1.74	1320	0.963282	0.004514	0
B3	ALPHA	30160	1.74	1350	0.96309	-0.00226	0
B3	ALPHA	30175	1.75	1380	0.958063	-0.00319	0
B3	ALPHA	30060	1.74	1410	0.959897	0.009188	0
B3	ALPHA	30072	1.74	1440	0.96028	0.016218	0
B3	ALPHA	30190	1.72	1470	0.975258	0.013628	0
B3	ALPHA	30147	1.72	1500	0.973869	0.005277	0
B3	ALPHA	30117	1.72	1530	0.9729	-0.01042	0
B3	ALPHA	30175	1.73	1560	0.969139	-0.00015	0
B3	ALPHA	30140	1.74	1590	0.962452	0.021823	0
B3	ALPHA	30126	1.71	1620	0.978882	#VALUE!	0
B3	ALPHA	30236	1.68	1650	1	#VALUE!	0
B3	BETA	0	0.12	300	0	#VALUE!	0
B3	BETA	2	0.11	330	0.000427	#VALUE!	0
B3	BETA	1	0.11	360	0.000214	-0.41667	0
B3	BETA	1	0.11	390	0.000214	-2.08333	0
B3	BETA	0	0.11	420	0	-0.66667	0
B3	BETA	0	0.12	450	0	-0.94203	0
B3	BETA	1	0.12	480	0.000196	2.285714	0
B3	BETA	0	0.11	510	0	0.619048	0
B3	BETA	2	0.11	540	0.000427	0.070922	0
B3	BETA	0	0.11	570	0	0.416667	0
B3	BETA	1	0.11	600	0.000214	-0.33333	0
B3	BETA	1	0.11	630	0.000214	1.333333	0
B3	BETA	1	0.11	660	0.000214	0.714286	0
B3	BETA	2	0.11	690	0.000427	-0.27778	0
B3	BETA	2	0.11	720	0.000427	1.441441	0
B3	BETA	0	0.12	750	0	2.425455	0
B3	BETA	8	0.12	780	0.001567	2.586419	0
B3	BETA	506	2	810	0.005946	2.383016	0
B3	BETA	1373	2	840	0.016133	2.006597	0
B3	BETA	2872	2	870	0.033747	1.649665	0
B3	BETA	4750	2	900	0.055815	1.337407	0
B3	BETA	6968	2	930	0.081877	1.102458	0
B3	BETA	9569	2	960	0.112441	0.968576	0
B3	BETA	12630	2	990	0.148409	0.895012	0
B3	BETA	16597	2	1020	0.195023	0.844221	0
B3	BETA	21520	2	1050	0.252871	0.801759	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
B3	BETA	27319	2	1080	0.321012	0.738341	0
B3	BETA	30351	1.77	1110	0.402982	0.671041	0
B3	BETA	30288	1.46	1140	0.487533	0.600025	0
B3	BETA	30433	1.23	1170	0.581468	0.518032	0
B3	BETA	30502	1.06	1200	0.676252	0.440542	0
B3	BETA	30103	0.93	1230	0.760699	0.353913	0
B3	BETA	30387	0.85	1260	0.840147	0.260355	0
B3	BETA	30583	0.8	1290	0.898414	0.171022	0
B3	BETA	30797	0.78	1320	0.927898	0.100103	0
B3	BETA	30429	0.76	1350	0.940937	0.060081	0
B3	BETA	30507	0.75	1380	0.955926	0.042479	0
B3	BETA	30511	0.74	1410	0.968971	0.033898	1
B3	BETA	30275	0.73	1440	0.974647	0.016007	0
B3	BETA	30460	0.73	1470	0.980603	0.013043	0
B3	BETA	30651	0.74	1500	0.973418	0.013807	0
B3	BETA	30291	0.72	1530	0.988706	0.017857	0
B3	BETA	30359	0.72	1560	0.990926	0.021115	0
B3	BETA	30584	0.72	1590	0.99827	0.009009	0
B3	BETA	30637	0.72	1620	1	#VALUE!	0
B3	BETA	30564	0.72	1650	0.997617	#VALUE!	0
B4	ALPHA	25578	2	300	0.673618	#VALUE!	0
B4	ALPHA	25882	2	330	0.681624	#VALUE!	0
B4	ALPHA	26170	2	360	0.689209	0.028407	0
B4	ALPHA	26444	2	390	0.696425	0.022538	0
B4	ALPHA	26409	2	420	0.695503	0.012628	1
B4	ALPHA	26652	2	450	0.701903	0.017277	0
B4	ALPHA	26567	2	480	0.699664	0.016808	0
B4	ALPHA	27055	2	510	0.712516	0.022739	0
B4	ALPHA	26881	2	540	0.707934	0.025296	0
B4	ALPHA	27413	2	570	0.721944	0.014031	0
B4	ALPHA	27415	2	600	0.721997	0.015251	0
B4	ALPHA	27361	2	630	0.720575	0.006734	0
B4	ALPHA	27532	2	660	0.725078	0.020101	0
B4	ALPHA	27632	2	690	0.727712	0.016978	0
B4	ALPHA	28112	2	720	0.740353	0.013494	0
B4	ALPHA	27776	2	750	0.731504	0.005176	0
B4	ALPHA	28023	2	780	0.738009	0.002322	0
B4	ALPHA	27893	2	810	0.734586	0.02668	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
B4	ALPHA	28151	2	840	0.74138	0.047133	0
B4	ALPHA	28838	2	870	0.759473	0.094424	0
B4	ALPHA	29565	2	900	0.778619	0.119818	0
B4	ALPHA	30219	1.93	930	0.824708	0.110287	0
B4	ALPHA	30049	1.86	960	0.850931	0.106229	0
B4	ALPHA	30137	1.85	990	0.858036	0.074587	0
B4	ALPHA	30282	1.78	1020	0.89607	0.065885	0
B4	ALPHA	30381	1.78	1050	0.898999	0.061837	0
B4	ALPHA	30321	1.74	1080	0.917849	0.03206	0
B4	ALPHA	30214	1.71	1110	0.930656	0.044209	0
B4	ALPHA	30179	1.72	1140	0.924174	0.039171	0
B4	ALPHA	30168	1.66	1170	0.957228	0.040822	0
B4	ALPHA	30245	1.66	1200	0.959672	0.043006	0
B4	ALPHA	30233	1.64	1230	0.97099	0.015863	0
B4	ALPHA	30114	1.62	1260	0.979108	0.012242	0
B4	ALPHA	30403	1.65	1290	0.970532	0.001269	0
B4	ALPHA	30072	1.62	1320	0.977742	0.004483	0
B4	ALPHA	30312	1.64	1350	0.973527	0.002886	0
B4	ALPHA	30270	1.62	1380	0.98418	0.000762	0
B4	ALPHA	30250	1.64	1410	0.971536	0.003368	0
B4	ALPHA	30323	1.63	1440	0.979855	0.00243	0
B4	ALPHA	30347	1.63	1470	0.98063	0.001571	0
B4	ALPHA	30240	1.62	1500	0.983205	-0.00357	0
B4	ALPHA	30085	1.63	1530	0.972164	0.003309	0
B4	ALPHA	30106	1.62	1560	0.978848	0.010496	0
B4	ALPHA	30190	1.61	1590	0.987676	0.022903	0
B4	ALPHA	30101	1.6	1620	0.990919	#VALUE!	0
B4	ALPHA	30187	1.59	1650	1	#VALUE!	0
B4	BETA	0	0.11	300	0	#VALUE!	0
B4	BETA	1	0.11	330	0.00022	#VALUE!	0
B4	BETA	1	0.11	360	0.00022	0.833333	0
B4	BETA	1	0.11	390	0.00022	-0.83333	0
B4	BETA	1	0.11	420	0.00022	-1.66667	0
B4	BETA	0	0.11	450	0	-2.5	0
B4	BETA	0	0.12	480	0	0.980392	0
B4	BETA	0	0.11	510	0	1.666667	0
B4	BETA	2	0.12	540	0.000404	1.73913	0
B4	BETA	0	0.11	570	0	0.747126	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
B4	BETA	2	0.11	600	0.00044	-0.19048	0
B4	BETA	1	0.11	630	0.00022	-0.41667	0
B4	BETA	1	0.11	660	0.00022	-1	0
B4	BETA	0	0.11	690	0	5.83E-15	0
B4	BETA	1	0.11	720	0.00022	2.361111	0
B4	BETA	1	0.11	750	0.00022	2.758479	0
B4	BETA	9	0.11	780	0.001982	2.563918	0
B4	BETA	538	2	810	0.006515	2.300802	0
B4	BETA	1412	2	840	0.017099	1.939257	0
B4	BETA	2794	2	870	0.033836	1.628006	0
B4	BETA	4521	2	900	0.05475	1.306956	0
B4	BETA	6858	2	930	0.083051	1.108472	0
B4	BETA	9032	2	960	0.109378	0.980212	0
B4	BETA	12368	2	990	0.149778	0.894583	0
B4	BETA	16156	2	1020	0.195651	0.854834	0
B4	BETA	20797	2	1050	0.251854	0.789301	0
B4	BETA	26605	2	1080	0.322189	0.734295	0
B4	BETA	30283	1.84	1110	0.39862	0.660974	0
B4	BETA	30355	1.51	1140	0.48689	0.587047	0
B4	BETA	30252	1.28	1170	0.572429	0.523808	0
B4	BETA	30252	1.1	1200	0.6661	0.435088	0
B4	BETA	30228	0.96	1230	0.762634	0.344889	0
B4	BETA	30283	0.89	1260	0.824113	0.248951	0
B4	BETA	30396	0.84	1290	0.876426	0.168108	0
B4	BETA	30465	0.81	1320	0.910949	0.117344	0
B4	BETA	30550	0.79	1350	0.936617	0.078011	0
B4	BETA	30280	0.77	1380	0.952452	0.060984	0
B4	BETA	30258	0.76	1410	0.964283	0.033962	1
B4	BETA	30470	0.75	1440	0.983986	0.016363	0
B4	BETA	30432	0.76	1470	0.969828	0.017024	0
B4	BETA	30144	0.75	1500	0.973459	0.009258	0
B4	BETA	30385	0.74	1530	0.994501	0.020152	0
B4	BETA	30510	0.75	1560	0.985278	0.017595	0
B4	BETA	30769	0.75	1590	0.993642	0.004171	0
B4	BETA	30553	0.74	1620	1	#VALUE!	0
B4	BETA	30350	0.74	1650	0.993356	#VALUE!	0
C1	ALPHA	25995	2	300	0.682646	#VALUE!	0
C1	ALPHA	26120	2	330	0.685929	#VALUE!	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
C1	ALPHA	26134	2	360	0.686297	0.011663	0
C1	ALPHA	26272	2	390	0.689921	0.028341	0
C1	ALPHA	26377	2	420	0.692678	0.034278	1
C1	ALPHA	27121	2	450	0.712216	0.037042	0
C1	ALPHA	27077	2	480	0.71106	0.033108	0
C1	ALPHA	27414	2	510	0.71991	0.01038	0
C1	ALPHA	27577	2	540	0.724191	0.015846	0
C1	ALPHA	27296	2	570	0.716811	0.011955	0
C1	ALPHA	27788	2	600	0.729732	0.013864	0
C1	ALPHA	27803	2	630	0.730126	0.019817	0
C1	ALPHA	27899	2	660	0.732647	0.017684	0
C1	ALPHA	28066	2	690	0.737032	0.008851	0
C1	ALPHA	28399	2	720	0.745777	0.001342	0
C1	ALPHA	27925	2	750	0.733329	0.002853	0
C1	ALPHA	28026	2	780	0.735982	0.009389	0
C1	ALPHA	28373	2	810	0.745094	0.034421	0
C1	ALPHA	28573	2	840	0.750346	0.056966	0
C1	ALPHA	29118	2	870	0.764658	0.085587	0
C1	ALPHA	30118	2	900	0.790919	0.114378	0
C1	ALPHA	30134	1.92	930	0.824312	0.116809	0
C1	ALPHA	30199	1.85	960	0.857347	0.103929	0
C1	ALPHA	30174	1.81	990	0.875569	0.077297	0
C1	ALPHA	30252	1.77	1020	0.89767	0.060045	0
C1	ALPHA	30163	1.75	1050	0.905258	0.055451	0
C1	ALPHA	30221	1.72	1080	0.922819	0.043312	0
C1	ALPHA	30199	1.69	1110	0.938516	0.04289	0
C1	ALPHA	30275	1.69	1140	0.940878	0.029958	0
C1	ALPHA	30223	1.66	1170	0.956237	0.022749	0
C1	ALPHA	30226	1.66	1200	0.956332	0.027482	0
C1	ALPHA	30261	1.65	1230	0.963242	0.021134	0
C1	ALPHA	30132	1.62	1260	0.976897	0.011323	0
C1	ALPHA	30122	1.62	1290	0.976573	0.011196	0
C1	ALPHA	30167	1.64	1320	0.966105	0.006985	0
C1	ALPHA	30194	1.61	1350	0.984987	0.013251	0
C1	ALPHA	30131	1.61	1380	0.982932	0.010157	0
C1	ALPHA	30087	1.6	1410	0.987631	0.002501	0
C1	ALPHA	30219	1.62	1440	0.979718	0.002842	0
C1	ALPHA	30168	1.6	1470	0.99029	0.002678	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
C1	ALPHA	30219	1.61	1500	0.985803	0.00227	0
C1	ALPHA	30115	1.6	1530	0.98855	0.003972	0
C1	ALPHA	30162	1.61	1560	0.983944	0.010848	0
C1	ALPHA	30186	1.59	1590	0.997113	0.012279	0
C1	ALPHA	30202	1.59	1620	0.997642	#VALUE!	0
C1	ALPHA	30083	1.58	1650	1	#VALUE!	0
C1	BETA	56	2	300	0.000558	#VALUE!	0
C1	BETA	1	0.11	330	0.000181	#VALUE!	0
C1	BETA	1	0.11	360	0.000181	-1.41447	0
C1	BETA	0	0.11	390	0	0.666667	0
C1	BETA	1	0.11	420	0.000181	0.666667	0
C1	BETA	2	0.11	450	0.000363	-1.2E-15	0
C1	BETA	1	0.11	480	0.000181	-0.66667	0
C1	BETA	0	0.11	510	0	-1.66667	0
C1	BETA	1	0.11	540	0.000181	-1.66667	0
C1	BETA	0	0.11	570	0	-1.66667	0
C1	BETA	0	0.11	600	0	-1.6E-15	0
C1	BETA	0	0.11	630	0	2.5	0
C1	BETA	1	0.11	660	0.000181	0.833333	0
C1	BETA	1	0.11	690	0.000181	2.291667	0
C1	BETA	0	0.11	720	0	2.12963	0
C1	BETA	6	0.11	750	0.001088	2.595682	0
C1	BETA	10	0.11	780	0.001813	2.52511	0
C1	BETA	759	2	810	0.007567	2.209256	0
C1	BETA	1940	2	840	0.019342	1.918688	0
C1	BETA	3593	2	870	0.035822	1.574943	0
C1	BETA	5870	2	900	0.058523	1.276722	0
C1	BETA	8607	2	930	0.085811	1.087618	0
C1	BETA	11503	2	960	0.114684	0.96282	0
C1	BETA	15475	2	990	0.154285	0.880311	0
C1	BETA	20263	2	1020	0.202021	0.837272	0
C1	BETA	25786	2	1050	0.257085	0.786138	0
C1	BETA	30170	1.83	1080	0.328735	0.723559	0
C1	BETA	30208	1.47	1110	0.409757	0.659167	0
C1	BETA	30137	1.22	1140	0.492563	0.588217	0
C1	BETA	30227	1.03	1170	0.585167	0.502734	0
C1	BETA	30434	0.89	1200	0.681853	0.431383	0
C1	BETA	30346	0.8	1230	0.756368	0.339651	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
C1	BETA	30384	0.72	1260	0.841462	0.247307	0
C1	BETA	30274	0.68	1290	0.887734	0.171202	0
C1	BETA	30431	0.66	1320	0.919378	0.105906	0
C1	BETA	30190	0.64	1350	0.9406	0.065421	0
C1	BETA	30317	0.63	1380	0.95955	0.042837	0
C1	BETA	30307	0.63	1410	0.959234	0.027975	0
C1	BETA	30195	0.62	1440	0.971103	0.024343	1
C1	BETA	30321	0.62	1470	0.975155	0.023439	0
C1	BETA	30690	0.62	1500	0.987023	0.011657	0
C1	BETA	30645	0.62	1530	0.985576	0.010452	0
C1	BETA	30566	0.62	1560	0.983035	0.011104	0
C1	BETA	30863	0.62	1590	0.992587	0.014363	0
C1	BETA	30592	0.61	1620	1	#VALUE!	0
C1	BETA	30545	0.61	1650	0.998464	#VALUE!	0
C2	ALPHA	23542	2	300	0.680812	#VALUE!	0
C2	ALPHA	23600	2	330	0.682489	#VALUE!	0
C2	ALPHA	23839	2	360	0.689401	0.019562	0
C2	ALPHA	23830	2	390	0.68914	0.00976	0
C2	ALPHA	24125	2	420	0.697672	0.009128	1
C2	ALPHA	23806	2	450	0.688446	0.022809	0
C2	ALPHA	24179	2	480	0.699233	0.028344	0
C2	ALPHA	24628	2	510	0.712218	0.03244	0
C2	ALPHA	24747	2	540	0.715659	0.025752	0
C2	ALPHA	24710	2	570	0.714589	0.005437	0
C2	ALPHA	25091	2	600	0.725607	0.007832	0
C2	ALPHA	24658	2	630	0.713085	0.022728	0
C2	ALPHA	25065	2	660	0.724855	0.021273	0
C2	ALPHA	25576	2	690	0.739633	0.018401	0
C2	ALPHA	25435	2	720	0.735555	0.005314	0
C2	ALPHA	25168	2	750	0.727834	0.002749	0
C2	ALPHA	25471	2	780	0.736597	0.01265	0
C2	ALPHA	25663	2	810	0.742149	0.029955	0
C2	ALPHA	25671	2	840	0.74238	0.060959	0
C2	ALPHA	26220	2	870	0.758257	0.090169	0
C2	ALPHA	27581	2	900	0.797616	0.117053	0
C2	ALPHA	28318	2	930	0.818929	0.117209	0
C2	ALPHA	29441	2	960	0.851405	0.100754	0
C2	ALPHA	30126	1.99	990	0.875593	0.088832	0

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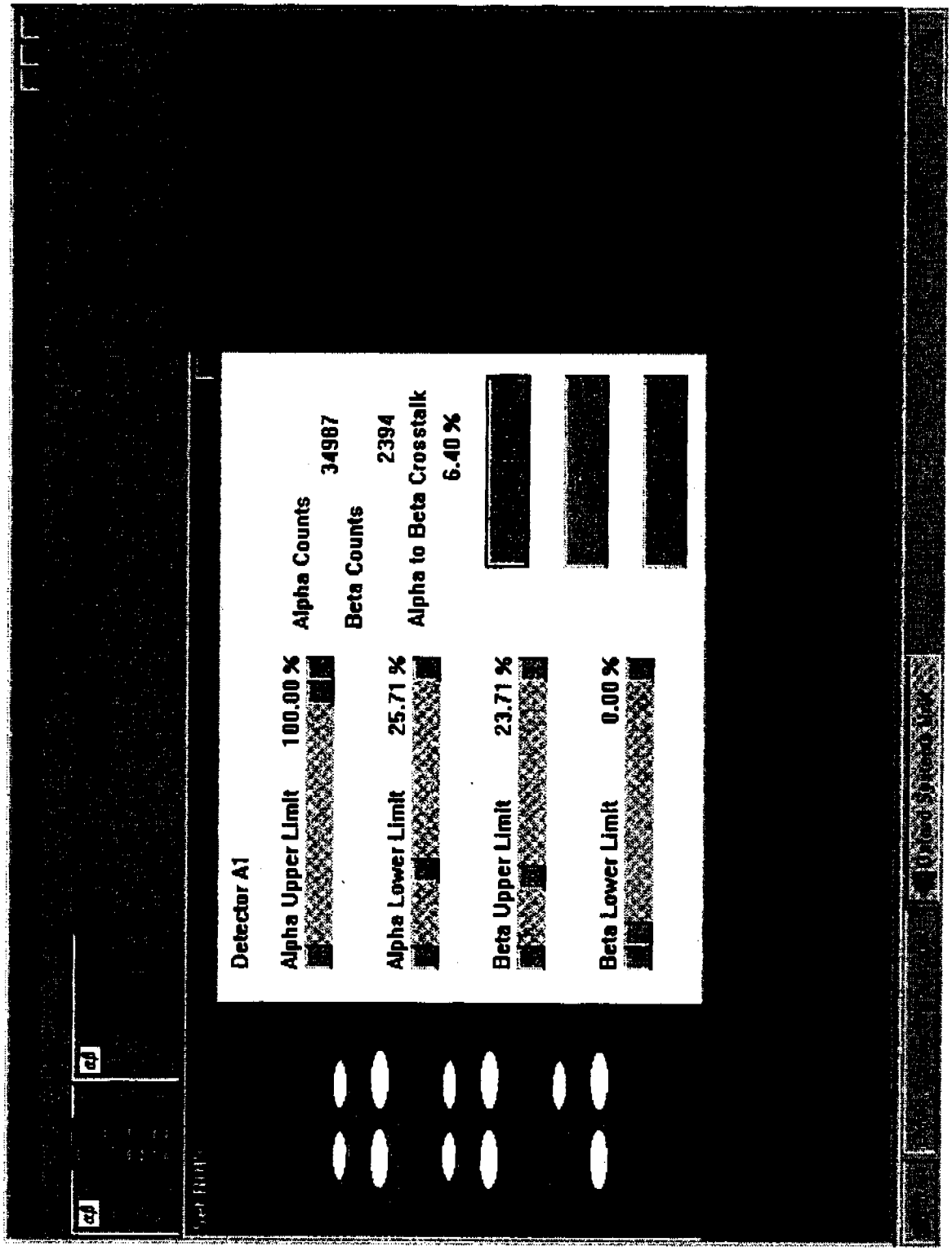
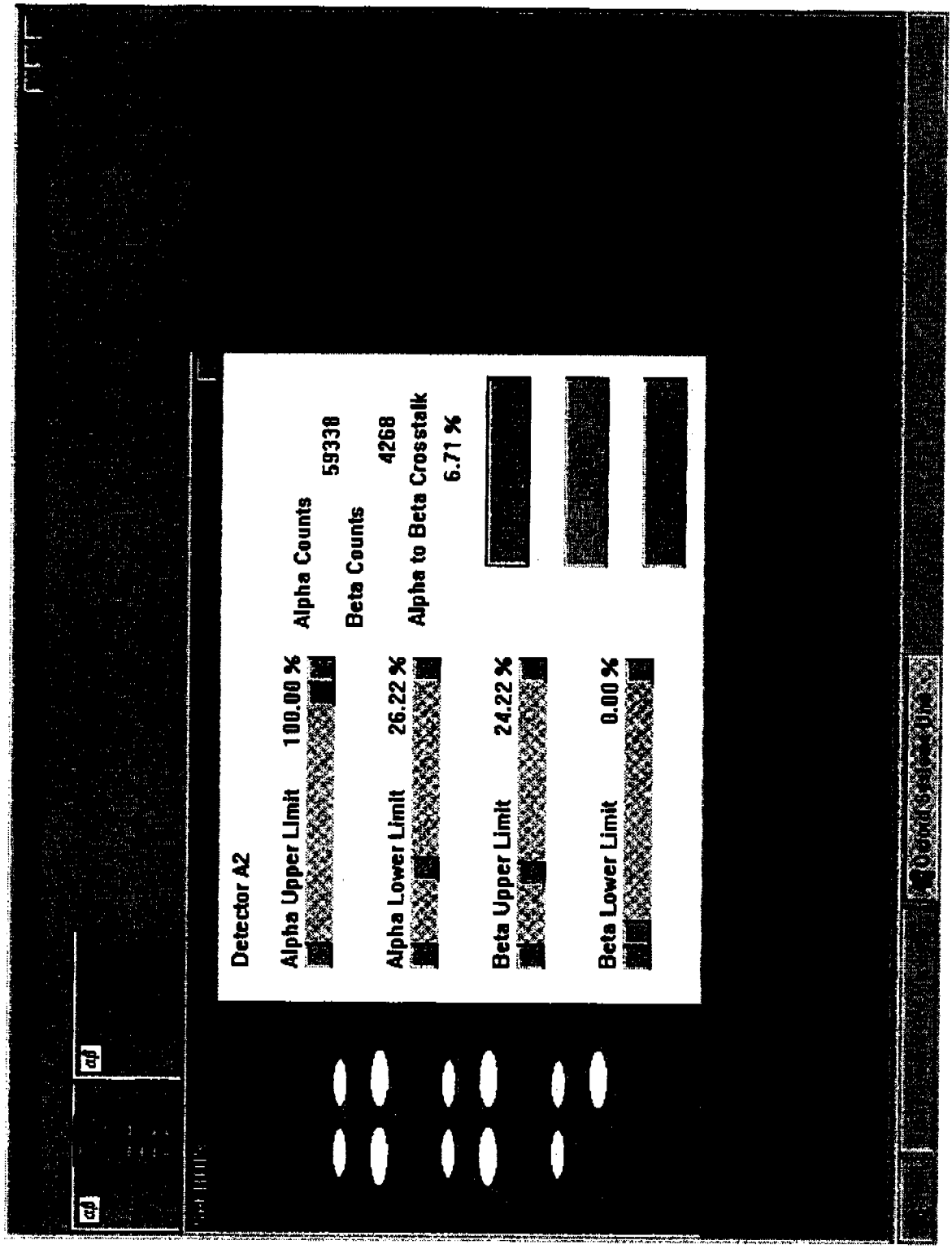
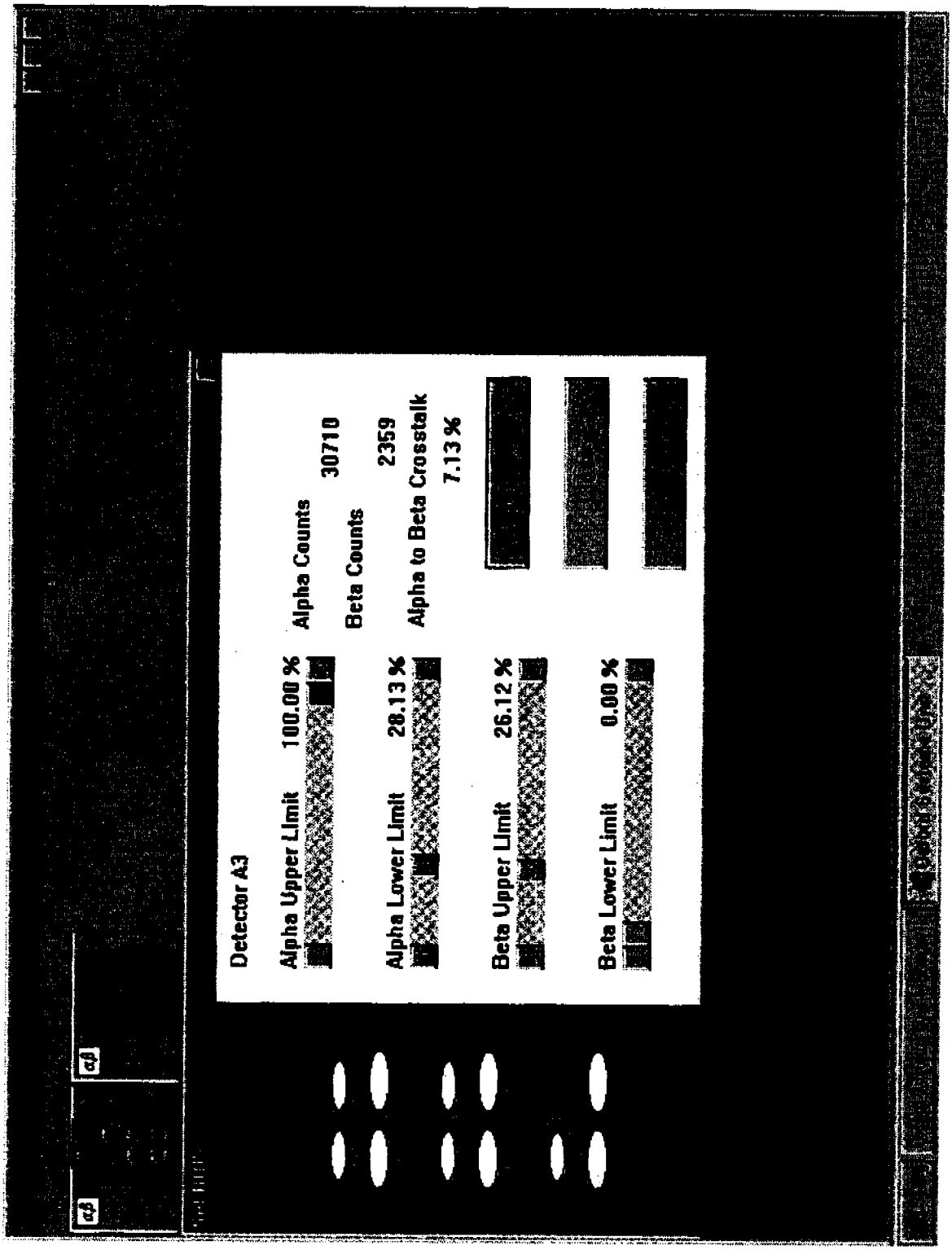
SEVERN TRENT SERVICES

DETECTOR CROSSTALK / DISCRIMINATOR SETTINGS


Detector A1
Alpha Upper Limit 100.00 %
Alpha Lower Limit 25.71 %
Beta Upper Limit 23.71 %
Beta Lower Limit 0.00 %
Alpha Counts 34987
Beta Counts 2394
Alpha to Beta Crosstalk 6.40 %


Detector A2
Alpha Upper Limit 100.00 %
Alpha Lower Limit 26.22 %
Beta Upper Limit 24.22 %
Beta Lower Limit 0.00 %
Alpha Counts 59338
Beta Counts 4268
Alpha to Beta Crosstalk 6.71 %


Detector A3
Alpha Upper Limit 100.00 %
Alpha Lower Limit 28.13 %
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Beta Lower Limit 0.00 %
Alpha Counts 30710
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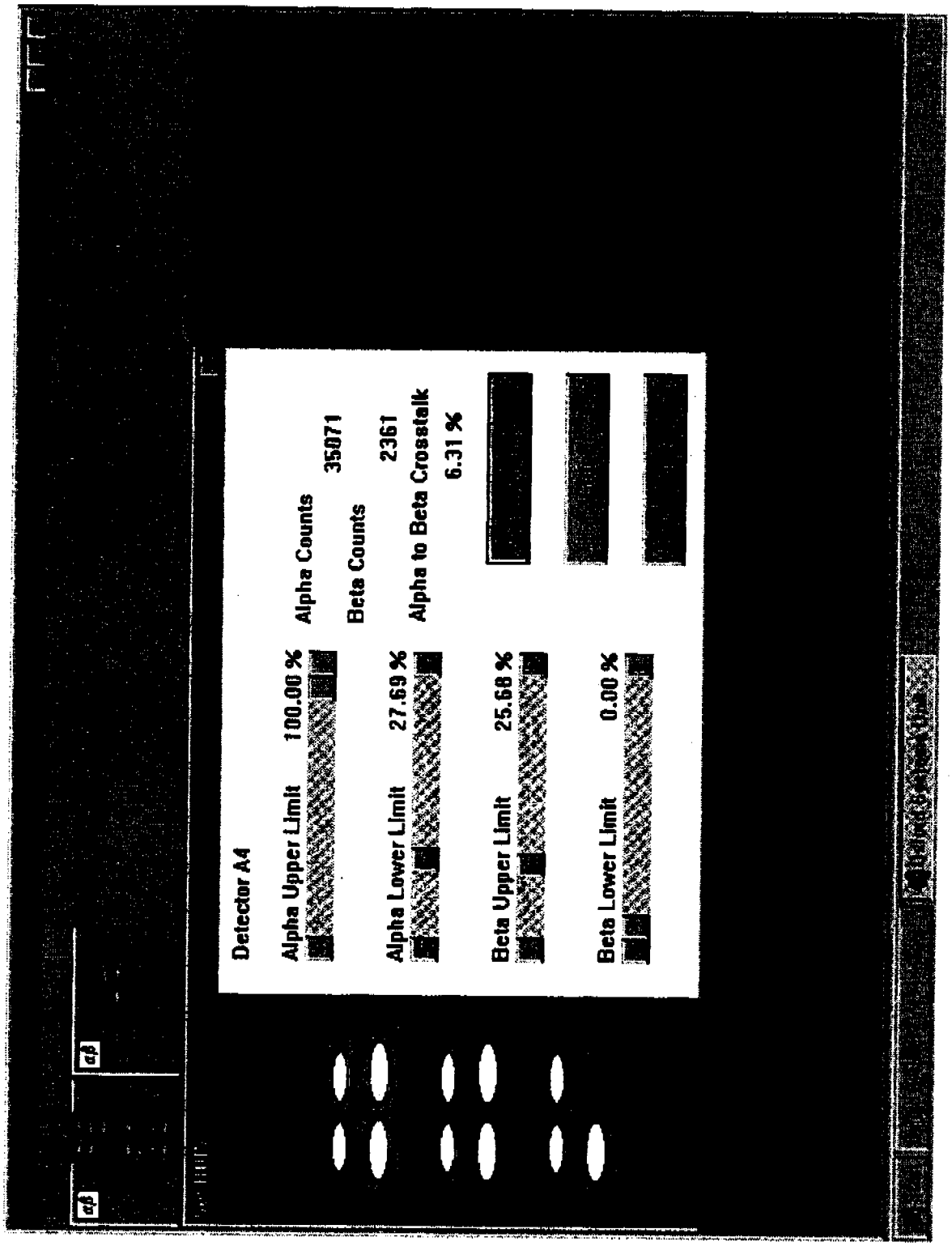
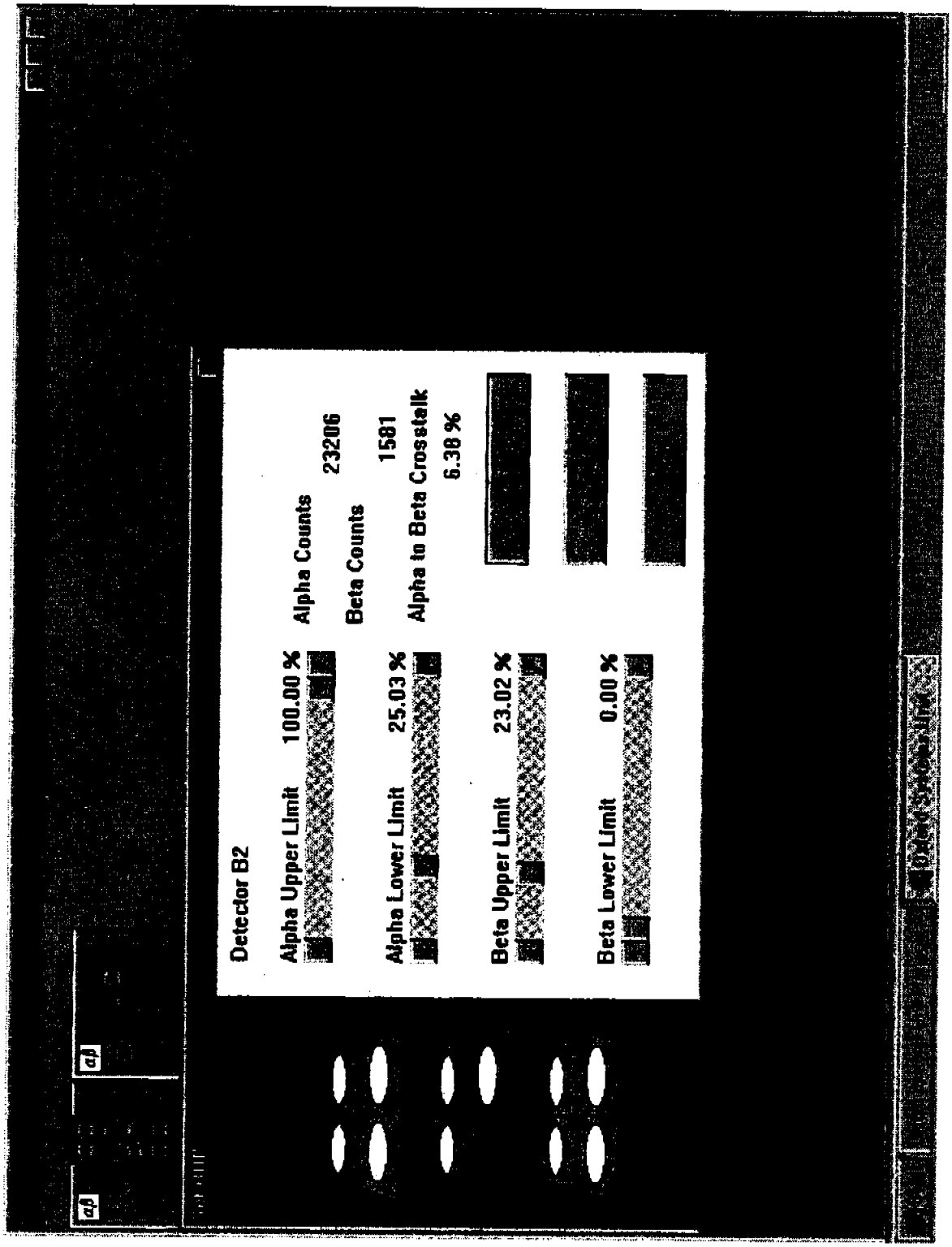
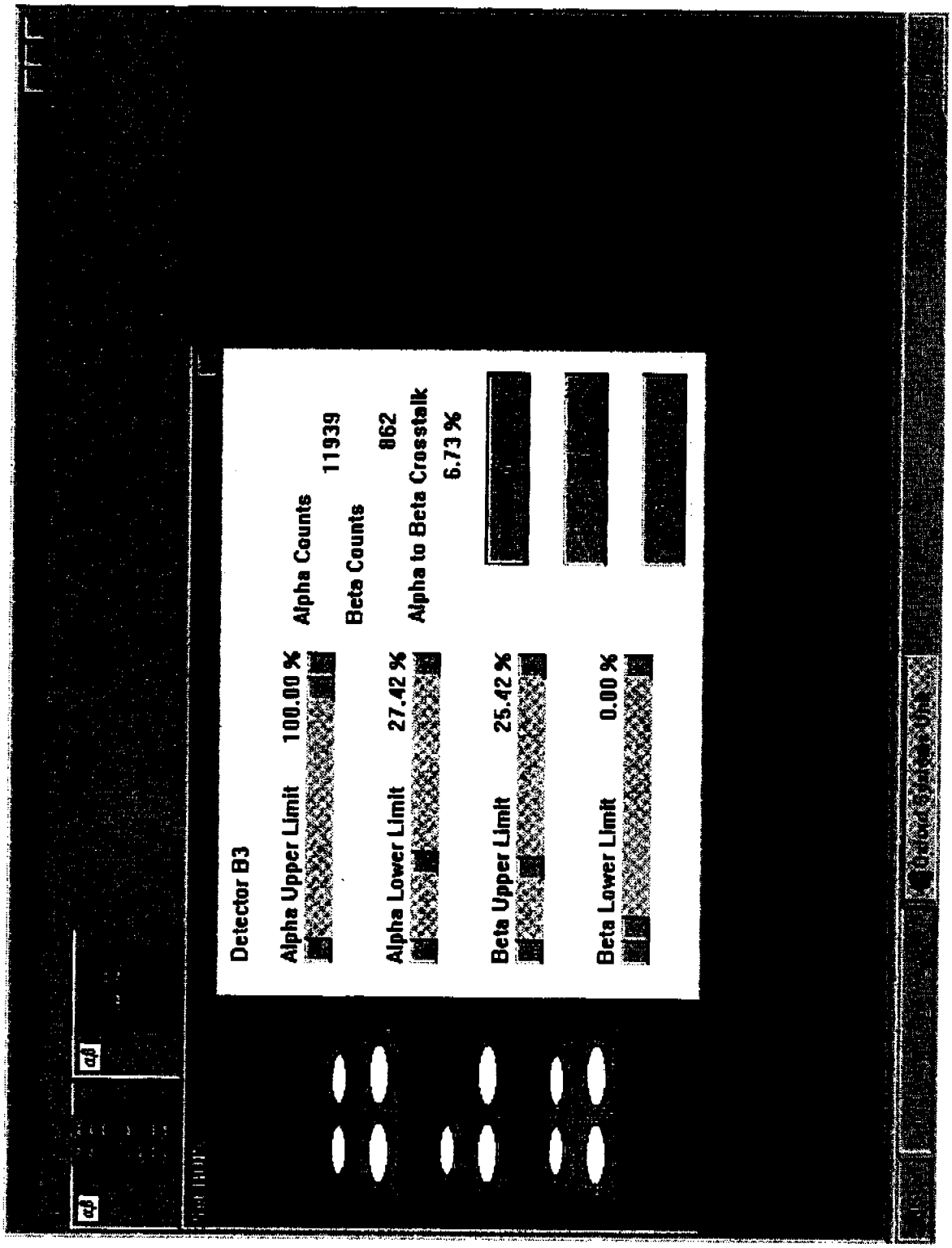
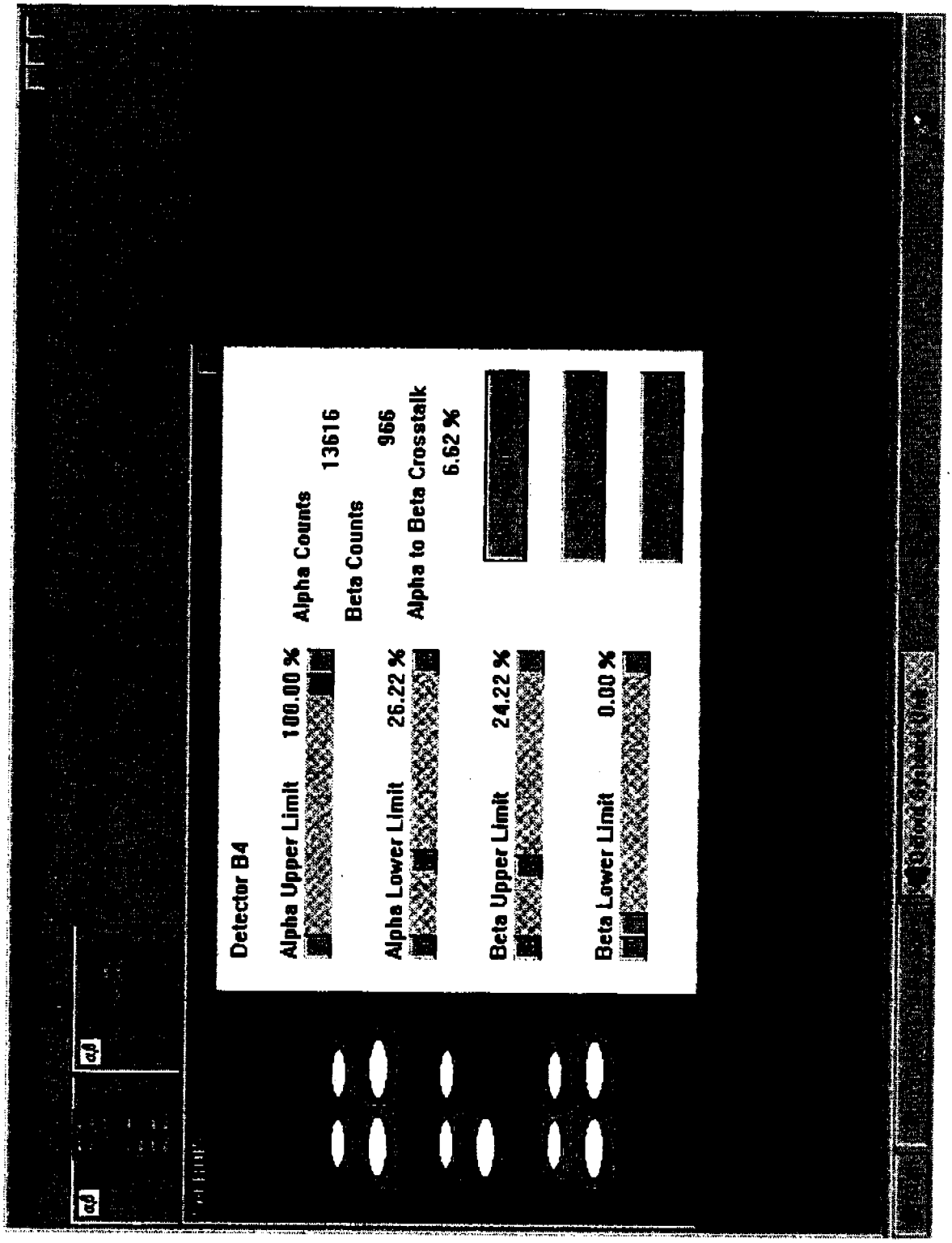
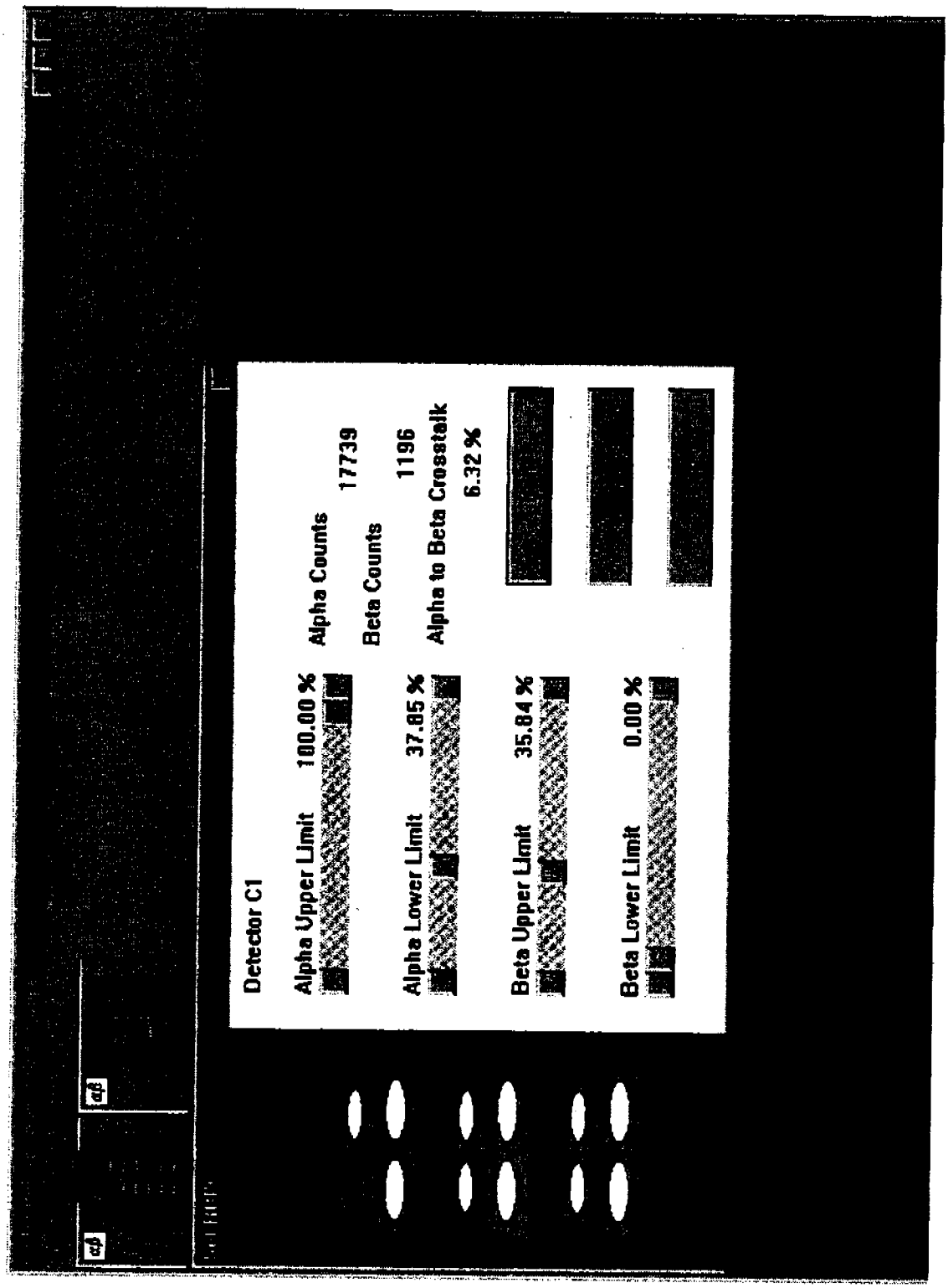
Alpha to Beta Crosstalk 7.13 %

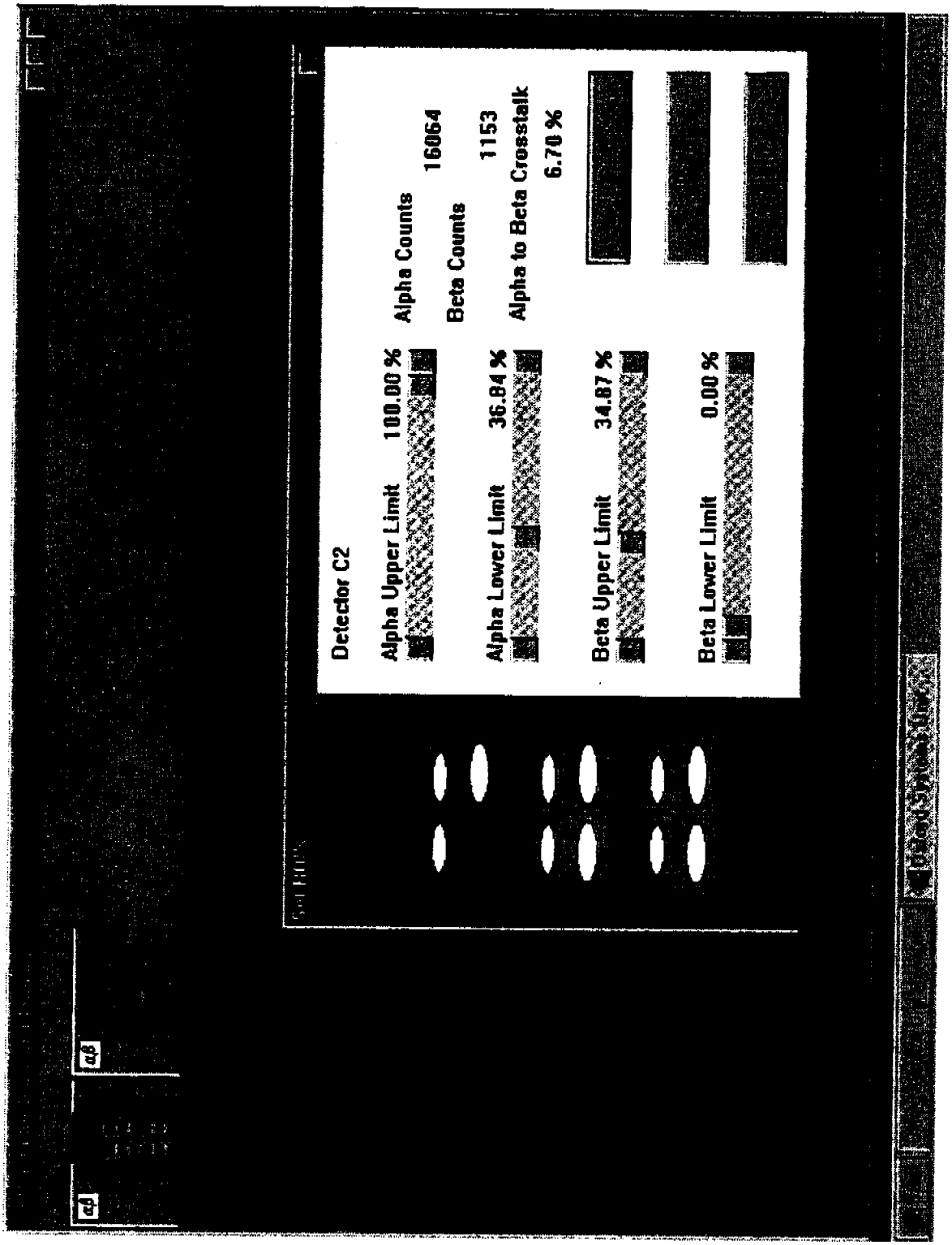

Detector A4
Alpha Upper Limit 100.00 %
Alpha Lower Limit 27.69 %
Beta Upper Limit 25.68 %
Beta Lower Limit 0.00 %
Alpha Counts 35071
Beta Counts 2361
Alpha to Beta Crosstalk 6.31 %

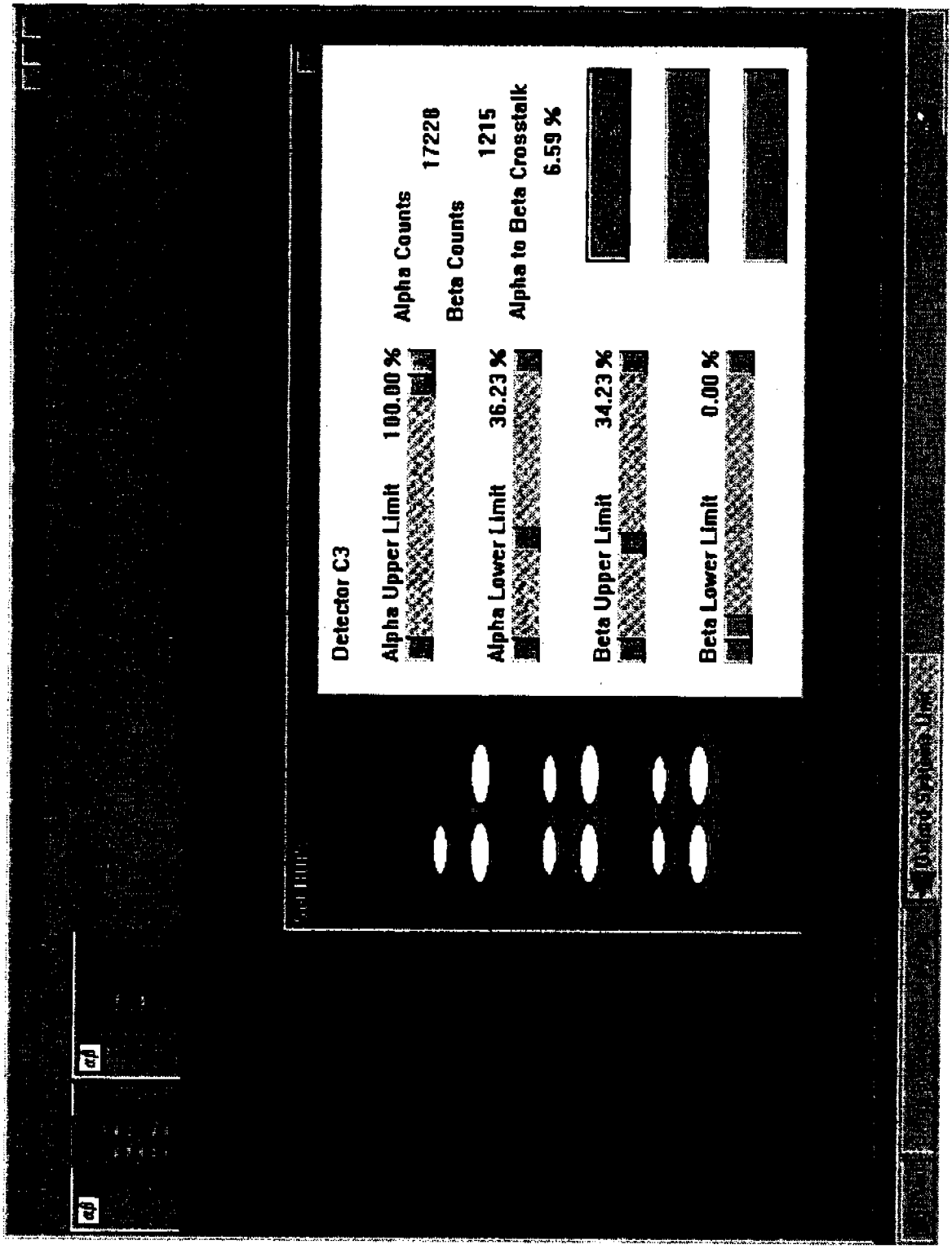

Detector B2
Alpha Upper Limit 100.00 %
Alpha Lower Limit 25.03 %
Beta Upper Limit 23.02 %
Beta Lower Limit 0.00 %
Alpha Counts 23206
Beta Counts 1581
Alpha to Beta Crosstalk 6.38 %

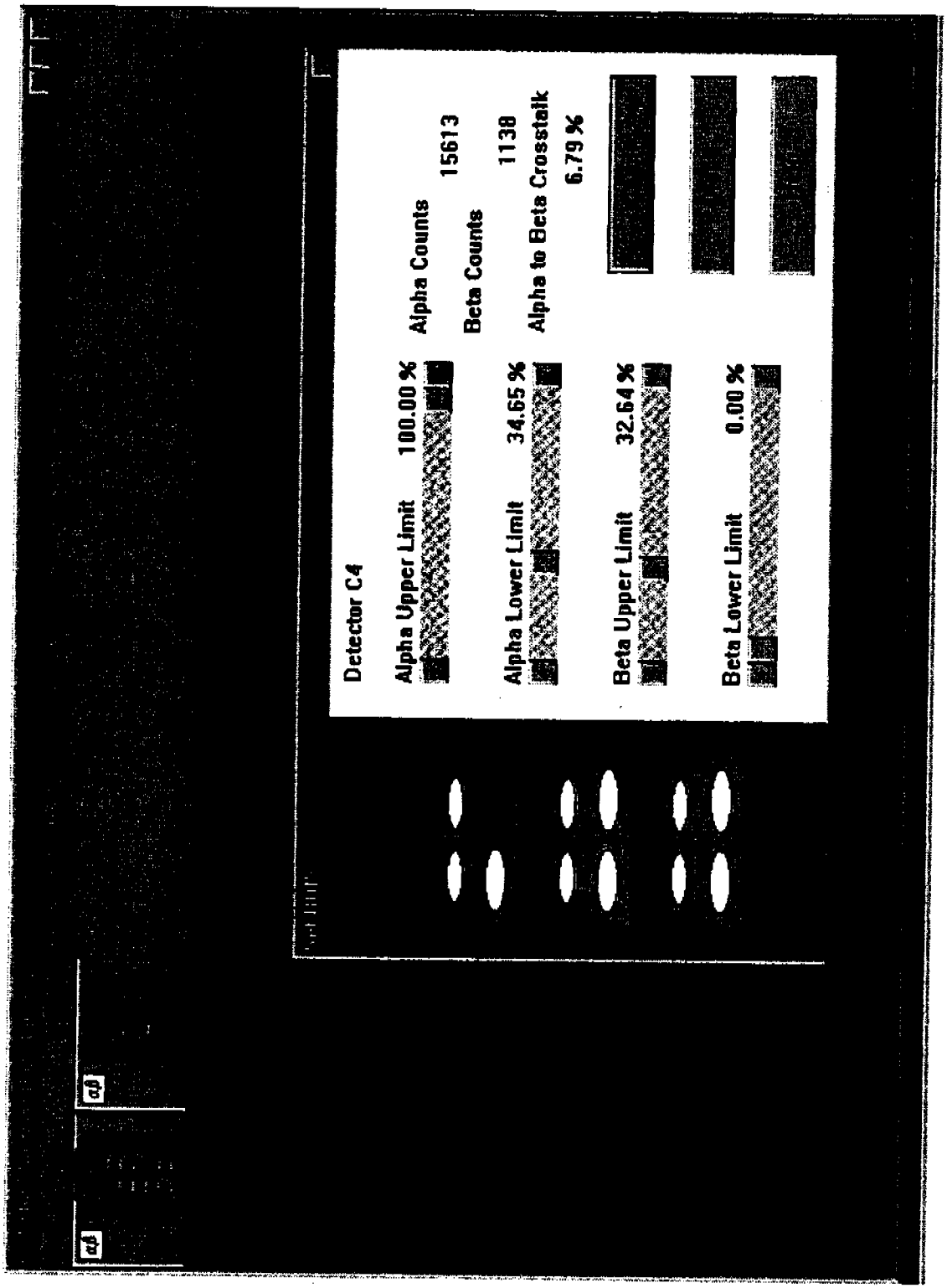

Detector B3
Alpha Upper Limit 100.00 %
Alpha Lower Limit 27.42 %
Beta Upper Limit 25.42 %
Beta Lower Limit 0.00 %
Alpha Counts 11939
Beta Counts 862
Alpha to Beta Crosstalk 6.73 %

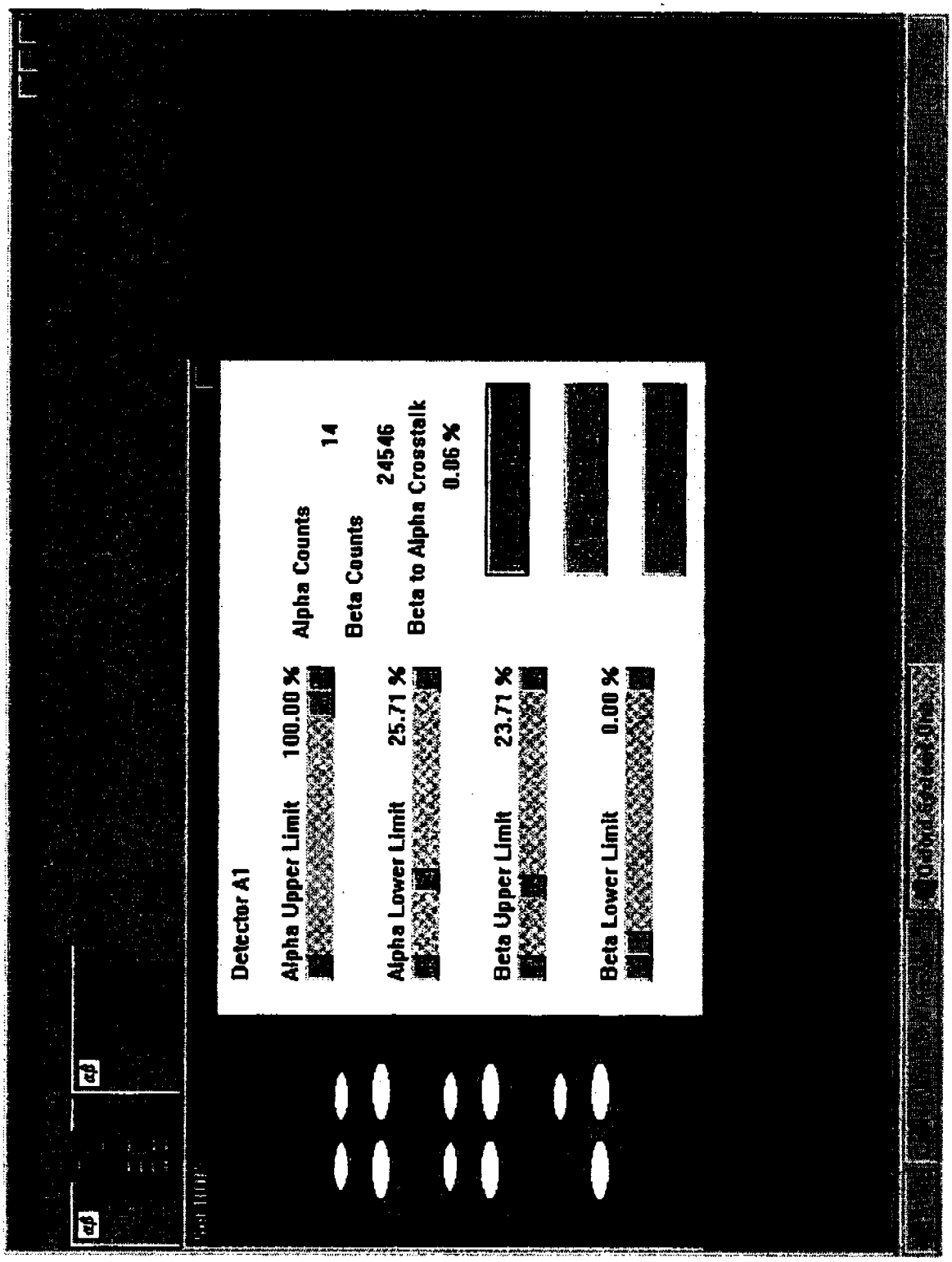

Detector B4
Alpha Upper Limit 100.00 %
Alpha Lower Limit 26.22 %
Beta Upper Limit 24.22 %
Beta Lower Limit 0.00 %
Alpha Counts 13616
Beta Counts 966
Alpha to Beta Crosstalk 6.62 %

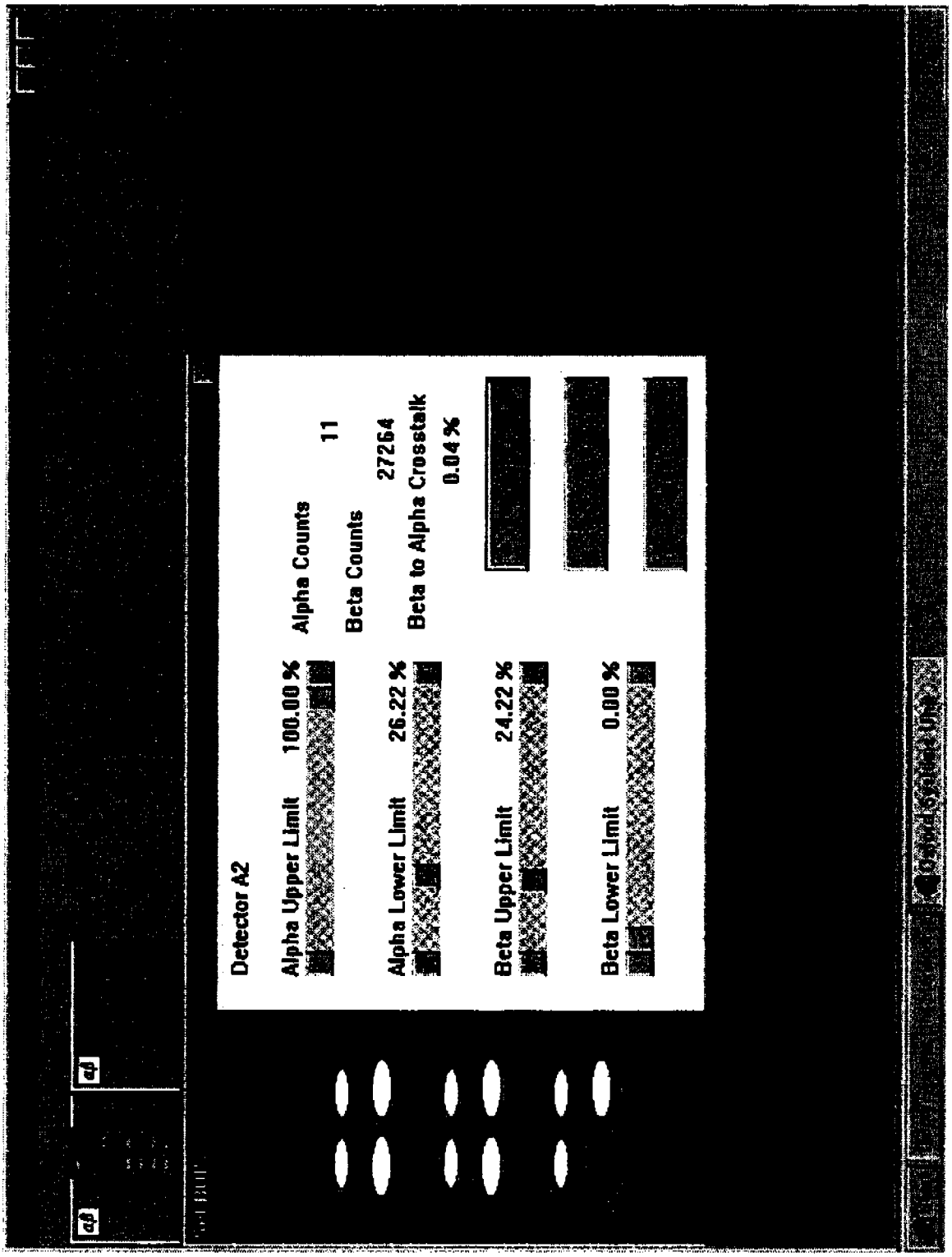

Detector C1
Alpha Upper Limit 100.00 %
Alpha Lower Limit 37.85 %
Beta Upper Limit 35.84 %
Beta Lower Limit 0.00 %
Alpha Counts 17739
Beta Counts 1196
Alpha to Beta Crosstalk 6.32 %

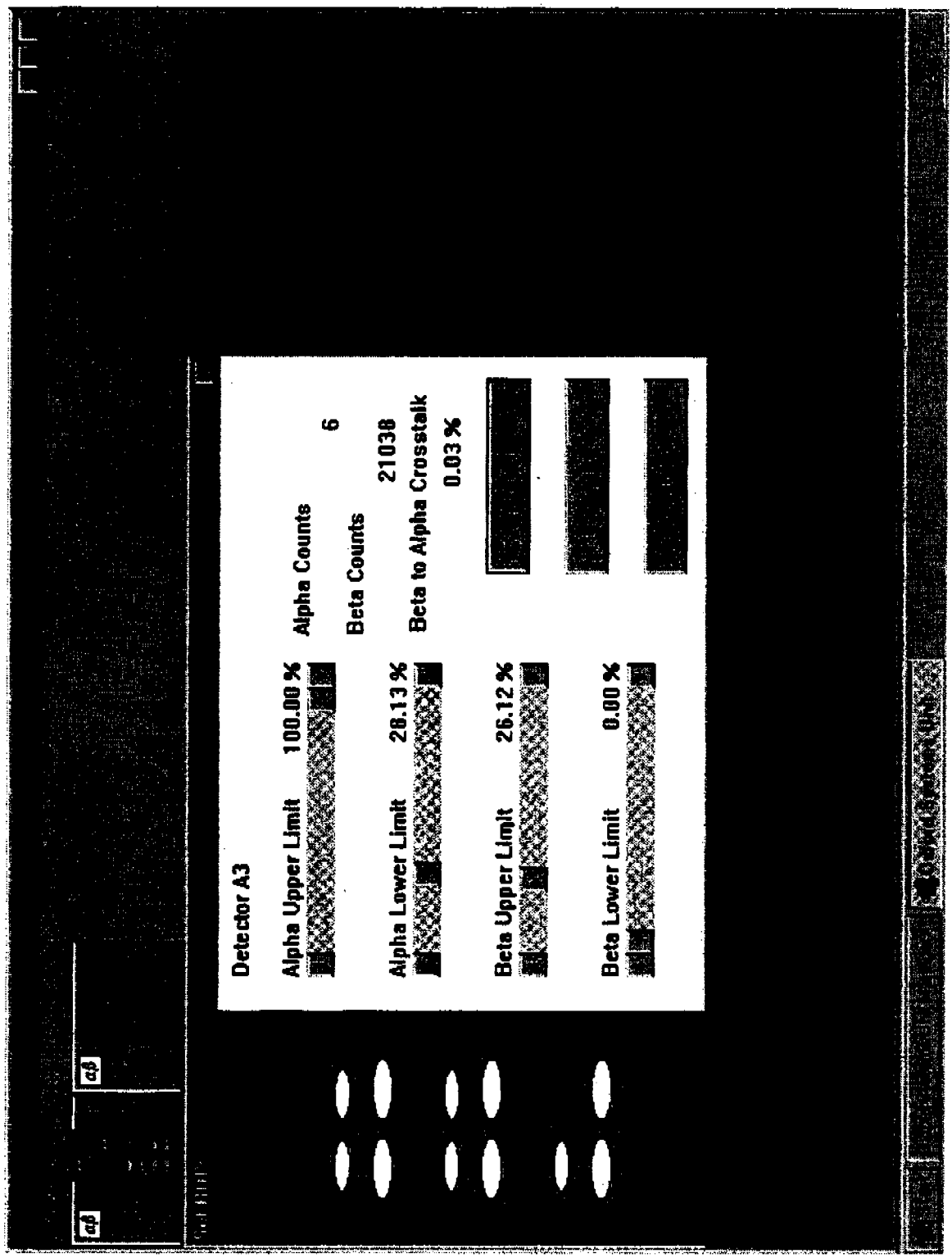

Detector C2
Alpha Upper Limit 100.00 %
Alpha Counts 16064
Beta Counts 1153
Alpha Lower Limit 36.84 %
Alpha to Beta Crosstalk 6.70 %
Beta Upper Limit 34.87 %
Beta Lower Limit 0.00 %

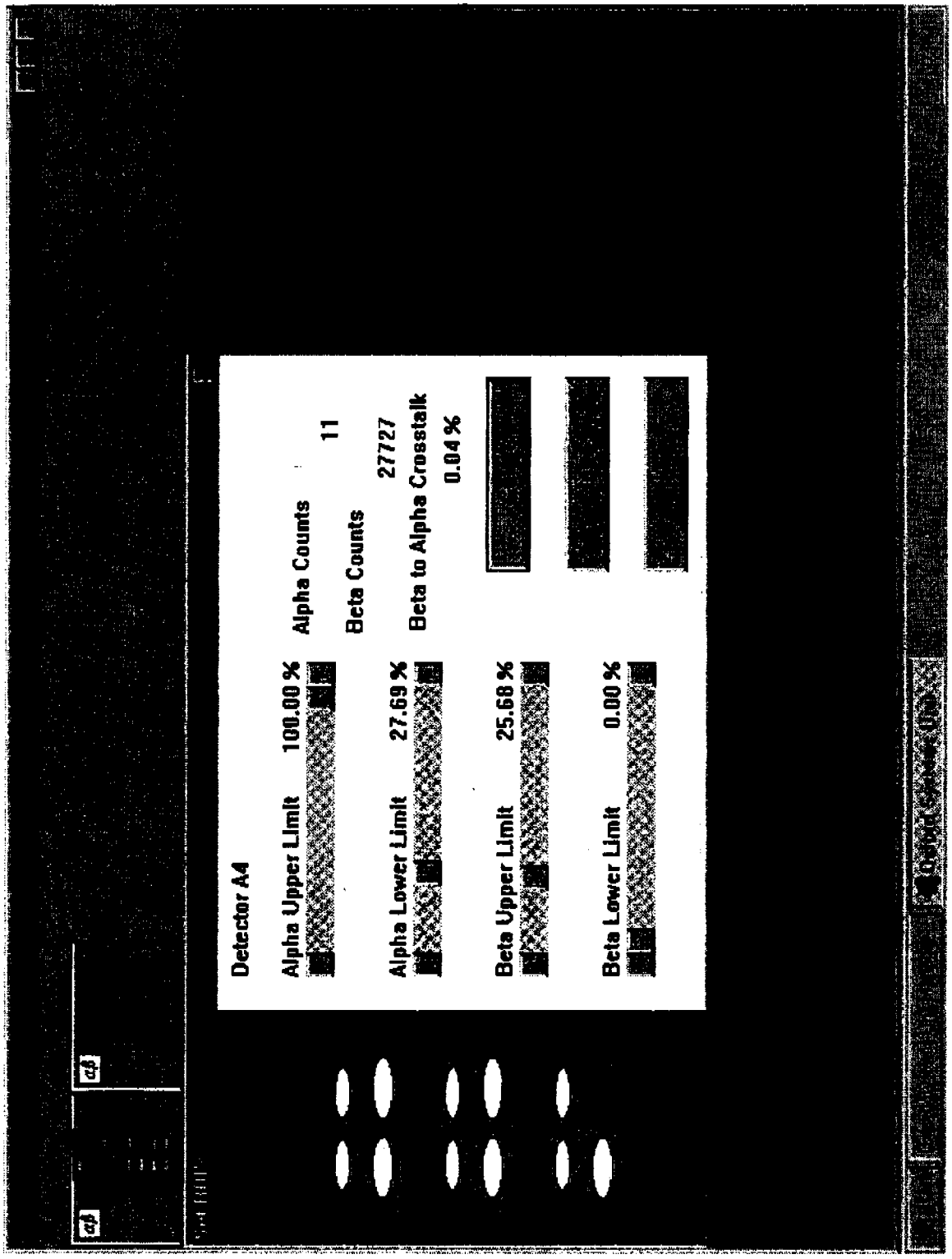

Detector C3
Alpha Upper Limit 100.00 %
Alpha Counts 17228
Beta Counts 1215
Alpha to Beta Crosstalk 6.59 %
Alpha Lower Limit 36.23 %
Beta Upper Limit 34.23 %
Beta Lower Limit 0.00 %

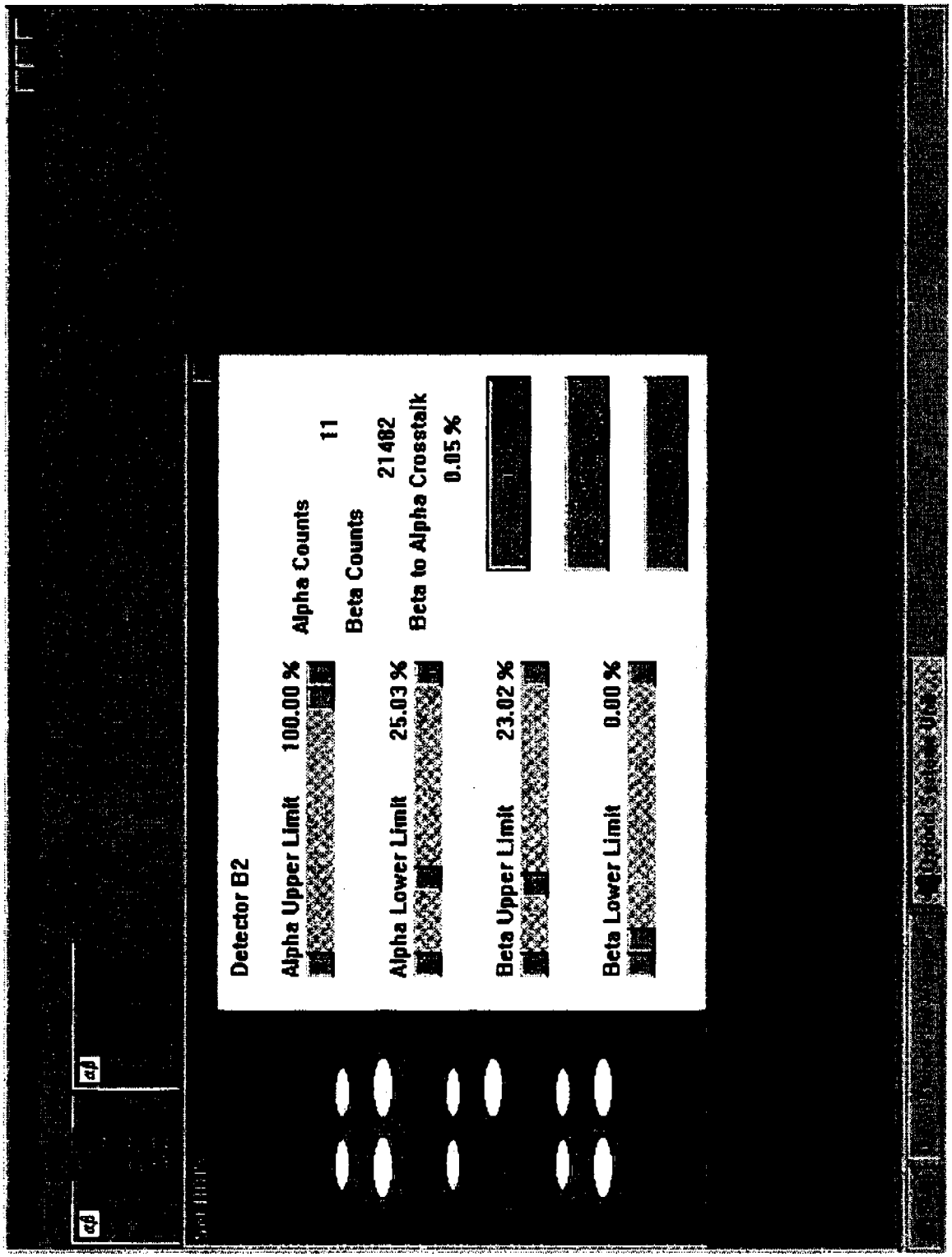

Detector C4
Alpha Upper Limit 100.00 %
Alpha Lower Limit 34.65 %
Beta Upper Limit 32.64 %
Beta Lower Limit 0.00 %
Alpha Counts 15613
Beta Counts 1138
Alpha to Beta Crosstalk 6.79 %

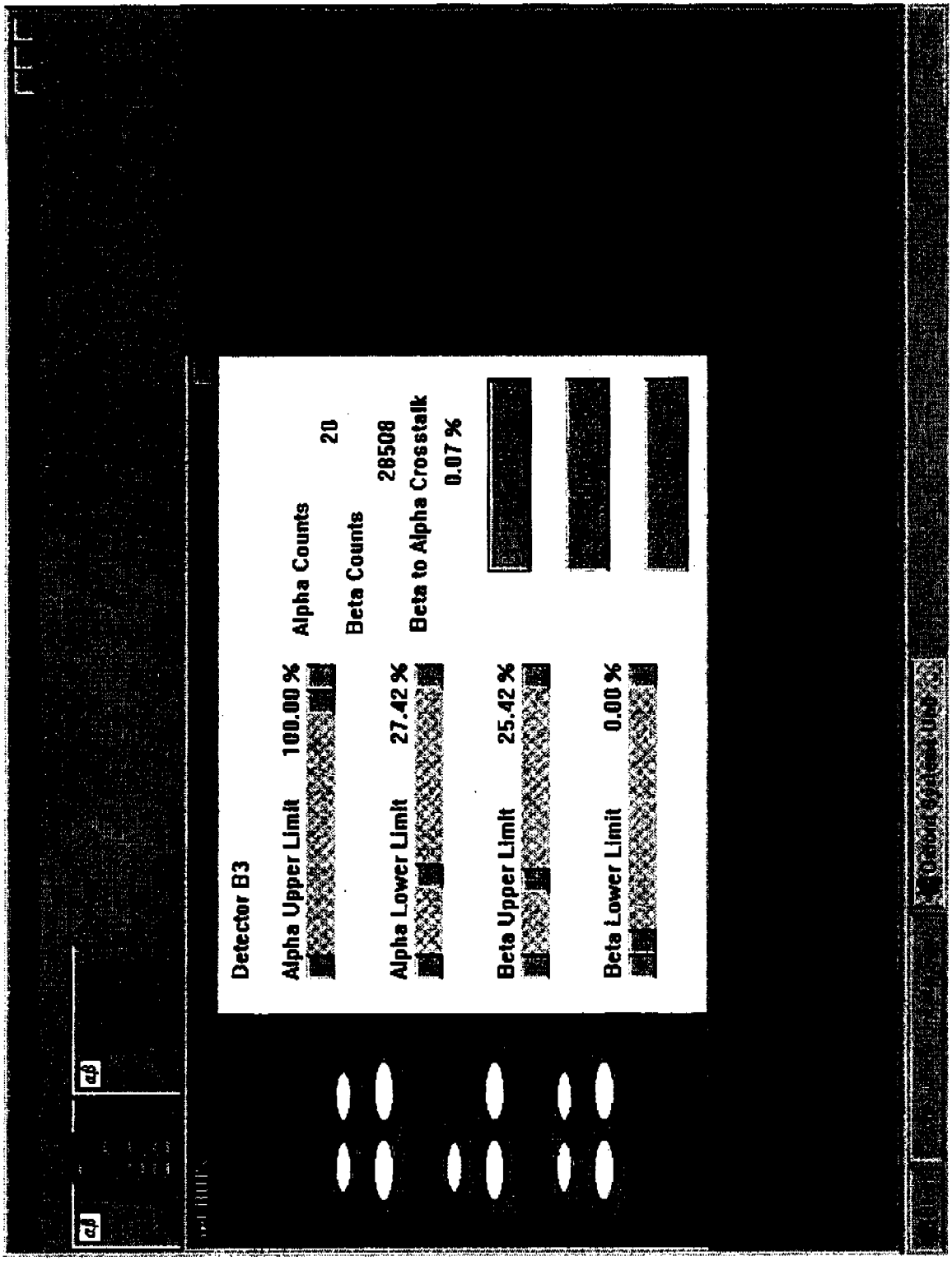

Detector A1
Alpha Upper Limit 100.00 %
Alpha Lower Limit 25.71 %
Beta Upper Limit 23.71 %
Beta Lower Limit 0.00 %
Alpha Counts 14
Beta Counts 24546
Beta to Alpha Crosstalk 0.06 %

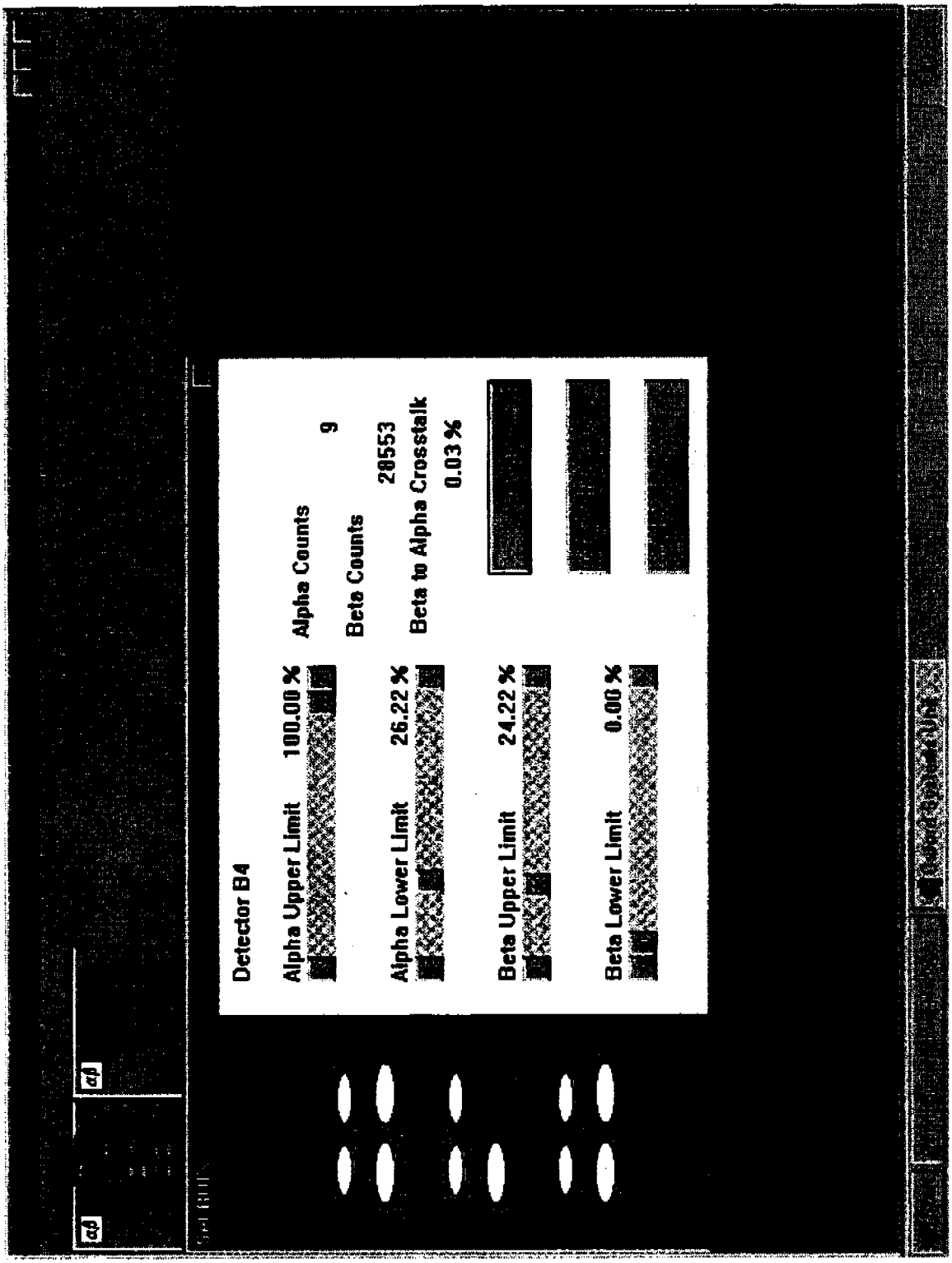

Detector A2
Alpha Upper Limit 100.00 %
Alpha Lower Limit 26.22 %
Beta Upper Limit 24.22 %
Beta Lower Limit 0.00 %
Alpha Counts 11
Beta Counts 27264
Beta to Alpha Crosstalk 0.04 %

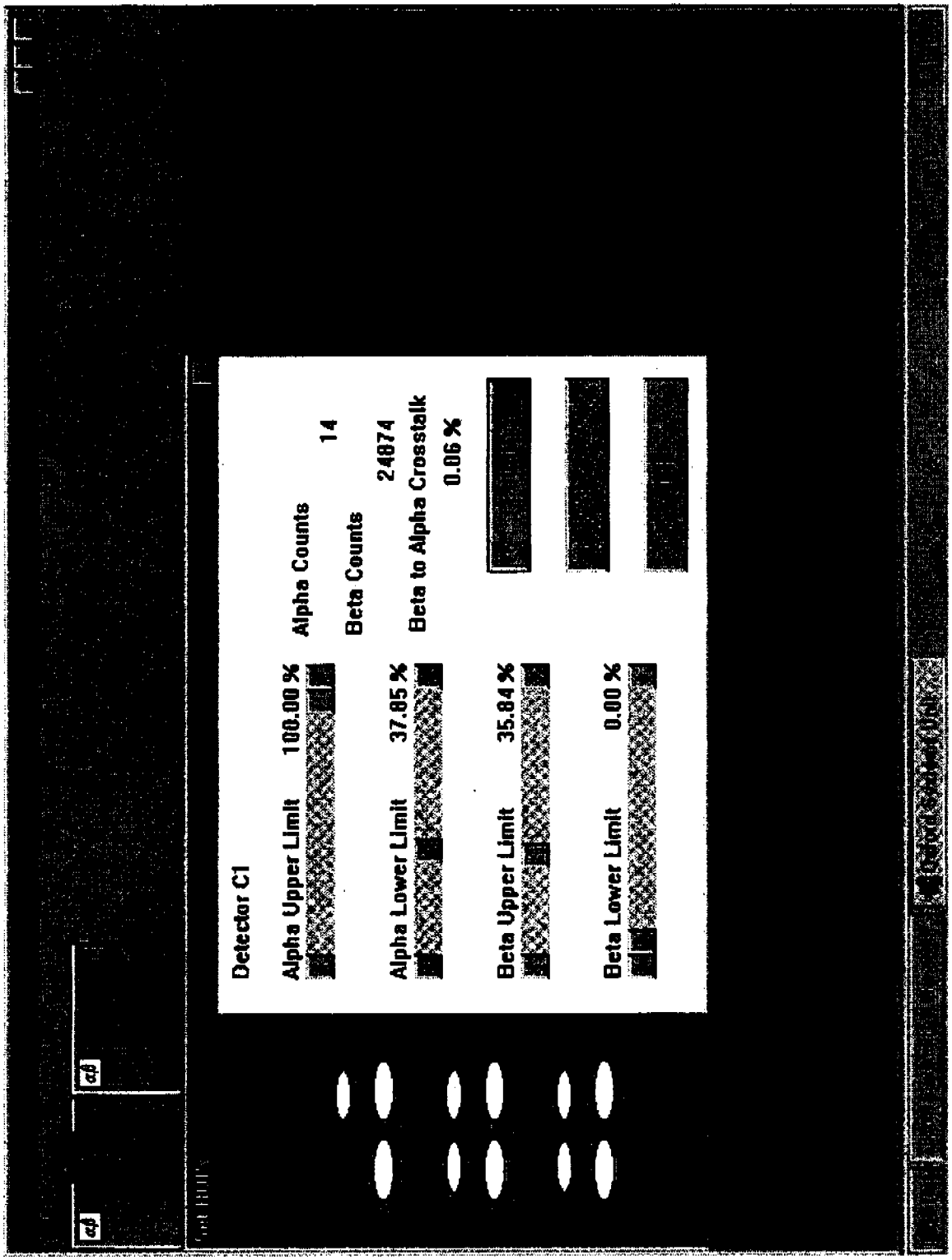

Detector A3
Alpha Upper Limit 100.00 %
Alpha Lower Limit 28.13 %
Beta Upper Limit 26.12 %
Beta Lower Limit 0.00 %
Alpha Counts 6
Beta Counts 21038
Beta to Alpha Crosstalk 0.03 %

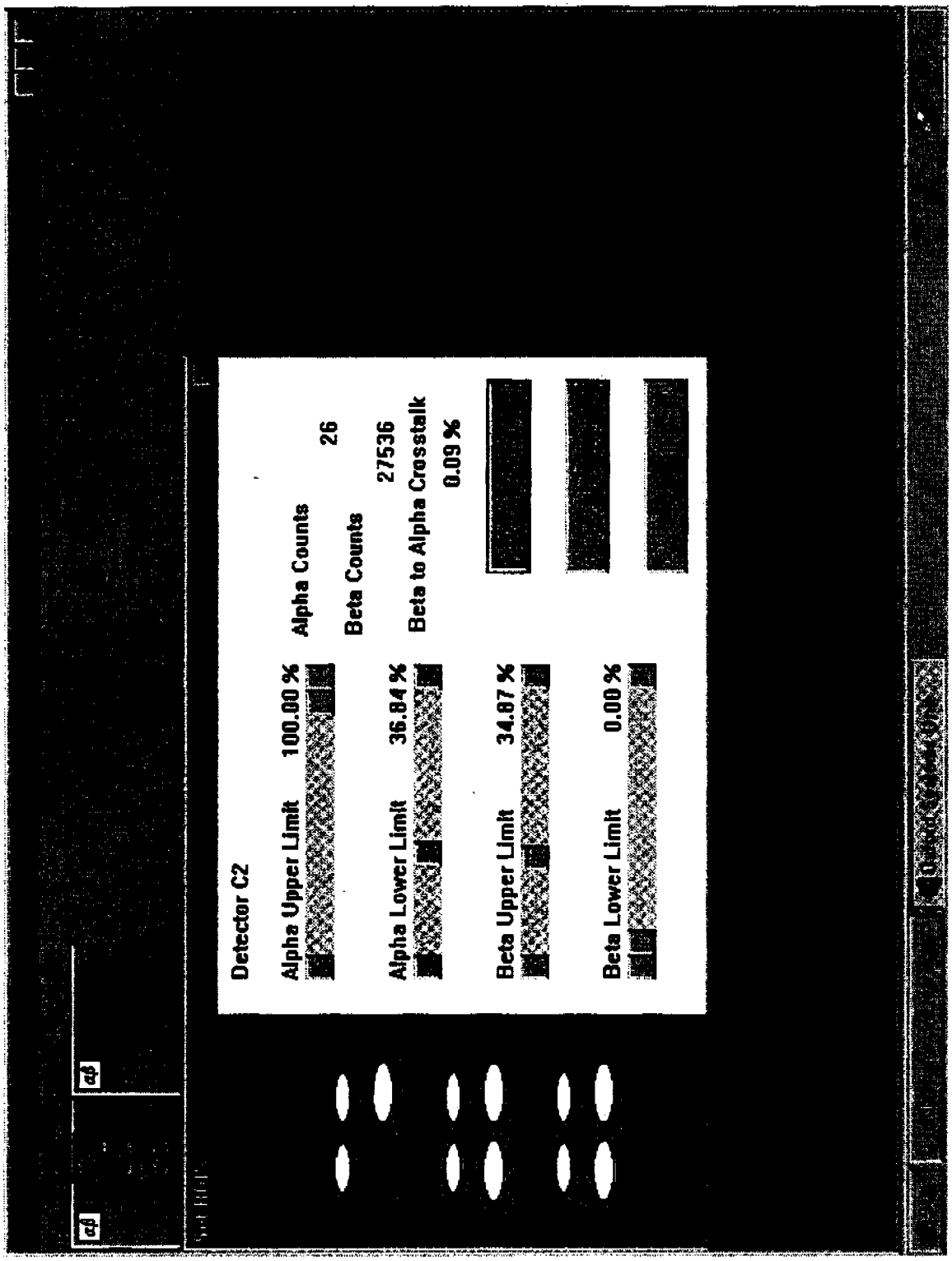

Detector A4
Alpha Upper Limit 100.00 %
Alpha Lower Limit 27.69 %
Beta Upper Limit 25.68 %
Beta Lower Limit 0.00 %
Alpha Counts 11
Beta Counts 27727
Beta to Alpha Crosstalk 0.04 %

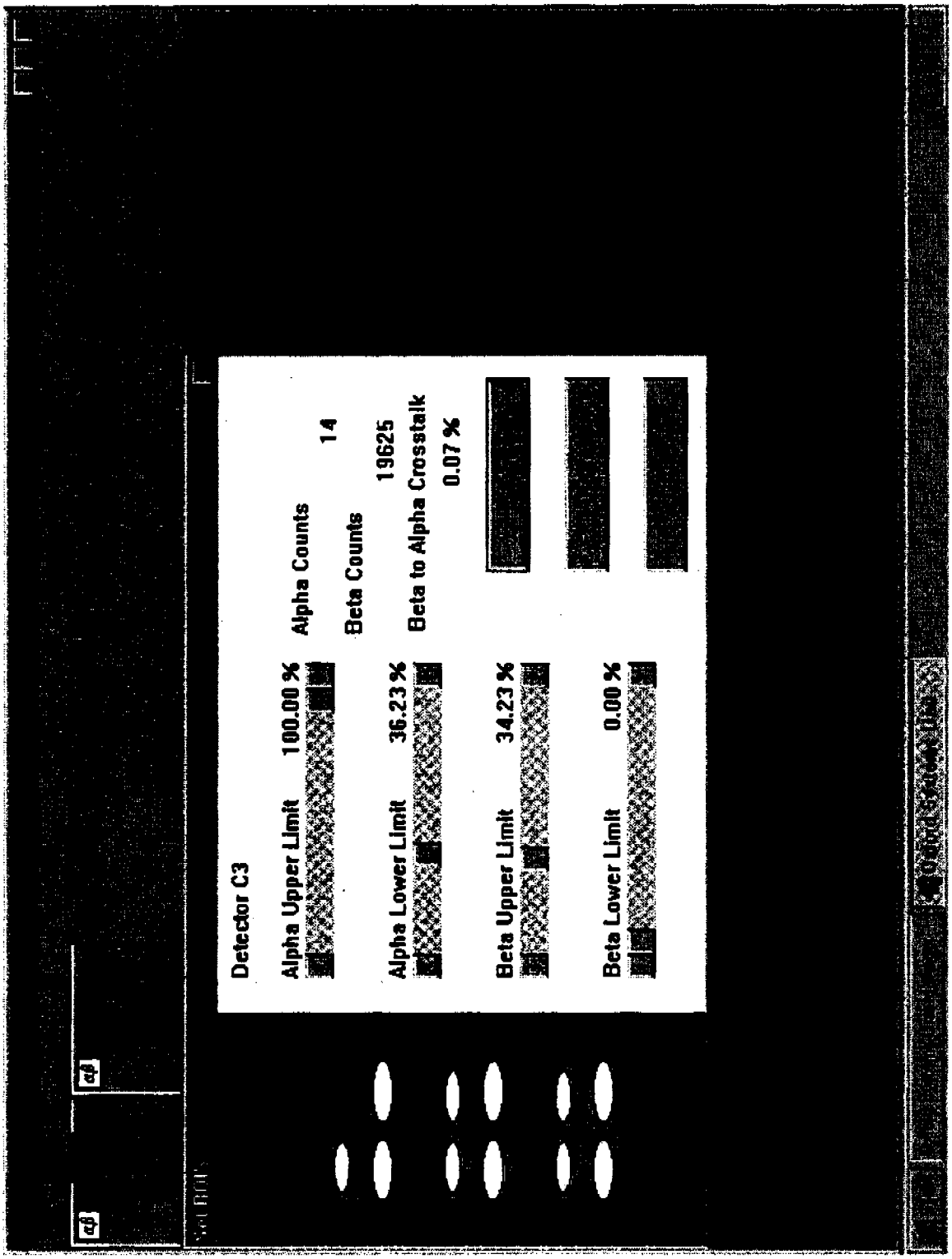

Detector B2
Alpha Upper Limit 100.00 %
Alpha Lower Limit 25.03 %
Beta Upper Limit 23.02 %
Beta Lower Limit 0.00 %
Alpha Counts 11
Beta Counts 21482
Beta to Alpha Crosstalk 0.05 %

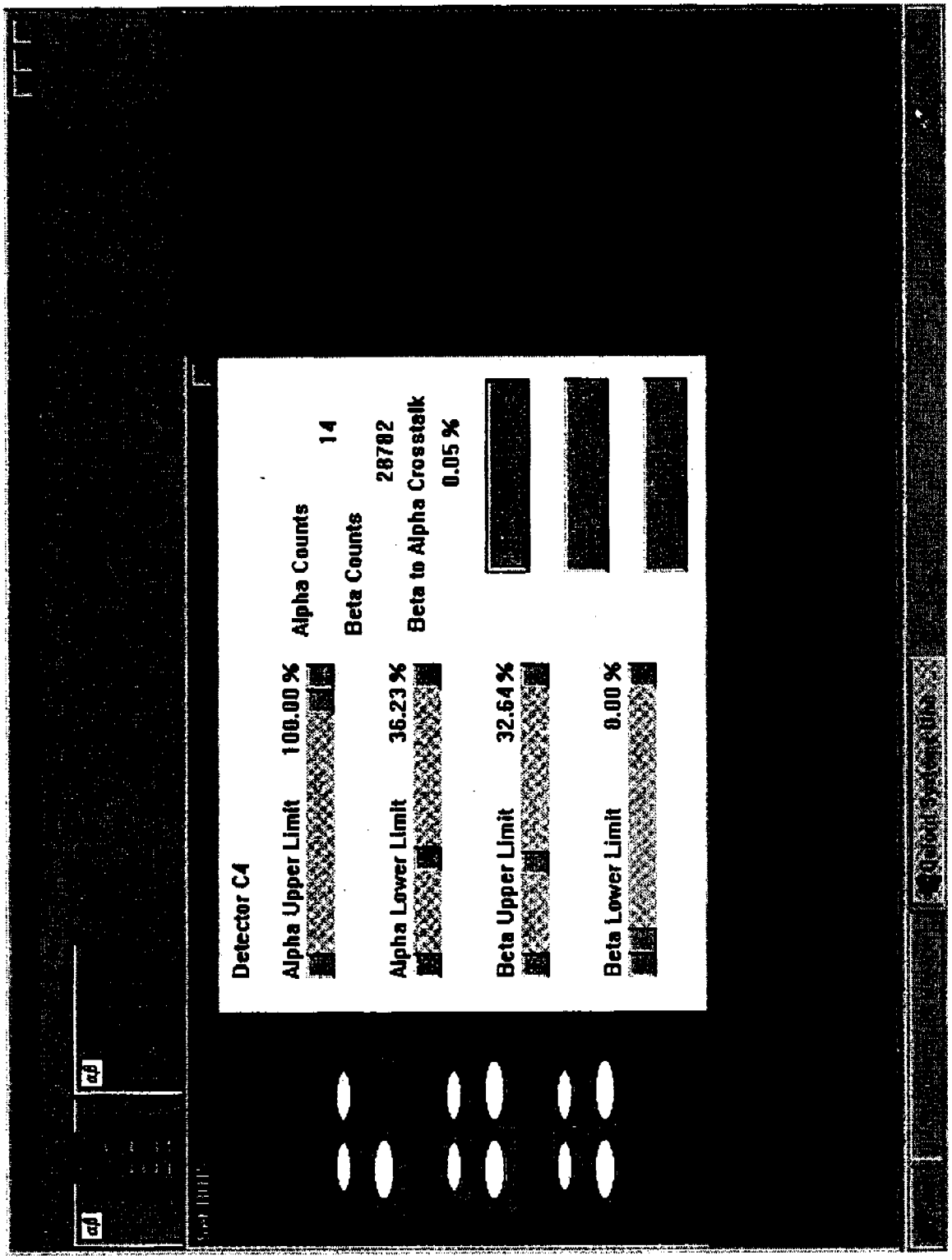

Detector B3
Alpha Upper Limit 100.00 %
Alpha Lower Limit 27.42 %
Beta Upper Limit 25.42 %
Beta Lower Limit 0.00 %
Alpha Counts 20
Beta Counts 28508
Beta to Alpha Crosstalk 0.07 %


Detector B4
Alpha Upper Limit 100.00 %
Alpha Lower Limit 26.22 %
Beta Upper Limit 24.22 %
Beta Lower Limit 0.00 %
Alpha Counts 9
Beta Counts 28553
Beta to Alpha Crosstalk 0.03 %


Detector C1
Alpha Upper Limit 100.00 %
Alpha Lower Limit 37.85 %
Beta Upper Limit 35.84 %
Beta Lower Limit 0.00 %
Alpha Counts 14
Beta Counts 24874
Beta to Alpha Crosstalk 0.06 %


Detector C2
Alpha Upper Limit 100.00 %
Alpha Lower Limit 36.84 %
Beta Upper Limit 34.87 %
Beta Lower Limit 0.00 %
Alpha Counts 26
Beta Counts 27536
Beta to Alpha Crosstalk 0.09 %


Detector C3
Alpha Upper Limit 100.00 %
Alpha Lower Limit 36.23 %
Beta Upper Limit 34.23 %
Beta Lower Limit 0.00 %
Alpha Counts 14
Beta Counts 19625
Beta to Alpha Crosstalk 0.07 %


Detector C4
Alpha Upper Limit 100.00 %
Alpha Lower Limit 36.23 %
Beta Upper Limit 32.64 %
Beta Lower Limit 0.00 %
Alpha Counts 14
Beta Counts 28782
Beta to Alpha Crosstalk 0.05 %

SEVERN TRENT SERVICES

Source Certificates For Plateau and Discriminator/Crosstalk Settings

11 October 1994 Men/wo
Page 1 of 2 pages, Issue 8/94

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D-38001 Braunschweig
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Fax (05307) 930-293
Fax-Zentrale 930-237

Amersham
The Health Science Group

CERTIFICATE

No. 6088-17

for a Sealed Radioactive Source

Source Type: Beta Wide Area Reference Source

Product Code	SIR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 936
Nuclide	Strontium-90

Measurement Data

Activity	1.10 kBq
Overall Uncertainty*	± 10 %
Beta Surface Emission Rate	1.39E03 s^{-1} ± 10 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	1
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

Amersham Buchler

i. A.

(Production Manager)

11 October 1994 Men/wo
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Amersham
The Health Science Group

CERTIFICATE

No. 6088-18

for a Sealed Radioactive Source

Source Type: Beta Wide Area Reference Source

Product Code	SIR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 937
Nuclide	Strontium-90

Measurement Data

Activity	1.13 kBq
Overall Uncertainty*	± 10 %
Beta Surface Emission Rate	1.43E03 s^{-1} ± 10 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

Amersham Buchler

(Production Manager)

11 October 1994 Men/wo
Page 1 of 2 pages, Issue 8/94

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Fax (05307) 930-293
Fax-Zentrale 930-237

Amersham
The Health Science Group

CERTIFICATE

No. 6088-19

for a Sealed Radioactive Source

Source Type: Beta Wide Area Reference Source

Product Code	SIR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 938
Nuclide	Strontium-90

Measurement Data

Activity	754 Bq
Overall Uncertainty*	± 10 %
Beta Surface Emission Rate	954 s^{-1} ± 10 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

Amersham Buchler

i.A. Mennl

(Production Manager)

11 October 1994 Men/wo
Page 1 of 2 pages, Issue 8/94

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GmbH & Co KG
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Amersham
The Health Science Group

CERTIFICATE

No. 6088-20

for a Sealed Radioactive Source

Source Type: Beta Wide Area Reference Source

Product Code	SIR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 939
Nuclide	Strontium-90

Measurement Data

Activity	990 Bq
Overall Uncertainty*	± 10 %
Beta Surface Emission Rate	1.25E03 s^{-1} ± 10 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

Amersham Buchler

i.A. Mann

(Production Manager)

11 October 1994 Men/wo
Page 1 of 2 pages, Issue 8/94

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The Health Science Group

CERTIFICATE

No. 6088-21

for a Sealed Radioactive Source

Source Type: Beta Wide Area Reference Source

Product Code	SIR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 940
Nuclide	Strontium-90

Measurement Data

Activity	852 Bq
Overall Uncertainty*	± 10 %
Beta Surface Emission Rate	1.08E03 s^{-1} ± 10 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

Amersham Buchler

i. A. Mennl

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11 October 1994 Men/wo
Page 1 of 2 pages, Issue 8/94

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CERTIFICATE

No. 6088-22

for a Sealed Radioactive Source

Source Type: Beta Wide Area Reference Source

Product Code	SIR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 941
Nuclide	Strontium-90

Measurement Data

Activity	770 Bq
Overall Uncertainty*	± 10 %
Beta Surface Emission Rate	974 s^{-1} ± 10 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

Amersham Buchler

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11 October 1994 Men/wo
Page 1 of 2 pages, Issue 8/94

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CERTIFICATE

No. 6088-23

for a Sealed Radioactive Source

Source Type: Beta Wide Area Reference Source

Product Code	SIR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 942
Nuclide	Strontium-90

Measurement Data

Activity	942 Bq
Overall Uncertainty*	± 10 %
Beta Surface Emission Rate	1.19E03 s^{-1} ± 10 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

Amersham Buchler

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11 October 1994 Men/wo
Page 1 of 2 pages, Issue 8/94

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CERTIFICATE

No. 6088-24

for a Sealed Radioactive Source

Source Type: Beta Wide Area Reference Source

Product Code	SIR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 943
Nuclide	Strontium-90

Measurement Data

Activity	919 Bq
Overall Uncertainty*	± 10 %
Beta Surface Emission Rate	1.16E03 s^{-1} ± 10 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

Amersham Buchler

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11 October 1994 Men/wo
Page 1 of 2 pages, Issue 8/94

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CERTIFICATE

No. 6088-25

for a Sealed Radioactive Source

Source Type: Alpha Wide Area Reference Source

Product Code	AMR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 944
Nuclide	Americium-241

Measurement Data

Activity	840 Bq
Overall Uncertainty*	± 10 %
Alpha Surface Emission Rate	400 s^{-1} ± 5 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

Amersham Buchler

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11 October 1994 Men/wo
Page 1 of 2 pages, Issue 8/94

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CERTIFICATE

No. 6088-26

for a Sealed Radioactive Source

Source Type: Alpha Wide Area Reference Source

Product Code	AMR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 945
Nuclide	Americium-241

Measurement Data

Activity	734 Bq
Overall Uncertainty*	± 10 %
Alpha Surface Emission Rate	350 s^{-1} ± 5 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

Amersham Buchler

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11 October 1994 Men/wo
Page 1 of 2 pages, Issue 8/94

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CERTIFICATE

No. 6088-27

for a Sealed Radioactive Source

Source Type: Alpha Wide Area Reference Source

Product Code	AMR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 946
Nuclide	Americium-241

Measurement Data

Activity	769 Bq
Overall Uncertainty*	± 10 %
Alpha Surface Emission Rate	366 s^{-1} ± 5 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

Amersham Buchler

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11 October 1994 Men/wo
Page 1 of 2 pages, Issue 8/94

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CERTIFICATE

No. 6088-28

for a Sealed Radioactive Source

Source Type: Alpha Wide Area Reference Source

Product Code	AMR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 947
Nuclide	Americium-241

Measurement Data

Activity	771 Bq
Overall Uncertainty*	± 10 %
Alpha Surface Emission Rate	367 s^{-1} ± 5 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

Amersham Buchler

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Page 1 of 2 pages, Issue 8/94

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CERTIFICATE

No. 6088-30

for a Sealed Radioactive Source

Source Type: Alpha Wide Area Reference Source

Product Code	AMR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 949
Nuclide	Americium-241

Measurement Data

Activity	794 Bq
Overall Uncertainty*	± 10 %
Alpha Surface Emission Rate	378 s^{-1} ± 5 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

Amersham Buchler

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11 October 1994 Men/wo

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CERTIFICATE

No. 6088-29

for a Sealed Radioactive Source

Source Type: Alpha Wide Area Reference Source

Product Code	AMR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 948
Nuclide	Americium-241

Measurement Data

Activity	791 Bq
Overall Uncertainty*	± 10 %
Alpha Surface Emission Rate	377 s^{-1} ± 5 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

Amersham Buchler

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(Production Manager)

LOT# F5D220356

11 October 1994 Men/wo
Page 1 of 2 pages, Issue 8/94

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Amersham
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CERTIFICATE

No. 6088-31

for a Sealed Radioactive Source

Source Type: Alpha Wide Area Reference Source

Product Code	AMR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 950
Nuclide	Americium-241

Measurement Data

Activity	775 Bq
Overall Uncertainty*	± 10 %
Alpha Surface Emission Rate	369 s^{-1} ± 5 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

Amersham Buchler

(Production Manager)

11 October 1994 Men/wo
Page 1 of 2 pages, Issue 8/94

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Amersham
The Health Science Group

CERTIFICATE

No. 6088-32

for a Sealed Radioactive Source

Source Type: Alpha Wide Area Reference Source

Product Code	AMR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 951
Nuclide	Americium-241

Measurement Data

Activity	823 Bq
Overall Uncertainty*	± 10 %
Alpha Surface Emission Rate	392 s^{-1} ± 5 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

Amersham Buchler

i. A.

(Production Manager)

STL ST. LOUIS

TMA
Thermo Analytical Inc.

TMA/Eberline Albuquerque Laboratory
7021 Pan American Hwy. NE
Albuquerque, NM 87109
(505) 345-3461 • FAX # (505) 761-5416

CERTIFICATE OF CALIBRATION

Electroplated Alpha Standard

S.O.# S-02900
P.O.# 130552

Description of Standard:

Model No. DNS-10 Serial No. 1928-94 Isotope Plutonium-239

Electroplated on polished Stainless Steel disc, 0.79 mm thick.

Total diameter of 2.23 cm and an active diameter of 1.91 cm.

The radioactive material is permanently fixed to the disc by heat treatment without any covering over the active surface.

Measurement Method:

The 2 pi alpha emission rate was measured using an internal gas flow proportional chamber. Absolute counting of alpha particles emitted in the hemisphere above the active surface was verified by counting above, below and at the operative voltage. The calibration is traceable to NIST by reference to an NIST calibrated alpha source S/N 2393/91.

Measurement Result:

The observed alpha particles emitted from the surface of the disc per minute (cpm) on the calibration date was

1,880 ± 56

The total disintegration rate (dpm) assuming 1.5% backscatter of alpha particles from the surface of the disc, was

3,770 ± 113 (0.00170 μCi)

The uncertainty of the measurement is 3 % which is the sum of random counting error at the 99% confidence level, and the estimated upper limit of systematic error in this measurement.

Calibrated by: Arlene Gutierrez Reviewed by: [signature]

Calibration technician: [signature] Q.A. Representative: [signature]

Calibration date: 9/27/94 Reviewed date: 10-18-94

LOT# F5D220356

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CERTIFICATE OF CALIBRATION

Electroplated Alpha Standard

S.O.# S-02900
P.O.# 130552

Description of Standard:

Model No. DNS-10 Serial No. 1929-94 Isotope Plutonium-239

Electroplated on polished Stainless Steel disc, 0.79 mm thick.

Total diameter of 2.23 cm and an active diameter of 1.91 cm.

The radioactive material is permanently fixed to the disc by heat treatment without any covering over the active surface.

Measurement Method:

The 2 pi alpha emission rate was measured using an internal gas flow proportional chamber. Absolute counting of alpha particles emitted in the hemisphere above the active surface was verified by counting above, below and at the operative voltage. The calibration is traceable to NIST by reference to an NIST calibrated alpha source S/N 2393/91.

Measurement Result:

The observed alpha particles emitted from the surface of the disc per minute (cpm) on the calibration date was

2,130 ± 64

The total disintegration rate (dpm) assuming 1.5% backscatter of alpha particles from the surface of the disc, was

4,250 ± 128 (0.00192 μCi)

The uncertainty of the measurement is 3 % which is the sum of random counting error at the 99% confidence level, and the estimated upper limit of systematic error in this measurement.

Calibrated by: Arlene Gutierrez Reviewed by: [signature]

Calibration technician: [signature] QA Representative: [signature]

Calibration date: 9/30/94 Reviewed date: 10-18-94

LOT# F5D220356

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CERTIFICATE OF CALIBRATION

Electroplated Alpha Standard

S.O.# S-02900
P.O.# 130552

Description of Standard:

Model No. DNS-10 Serial No. 1922-94 Isotope Plutonium-239

Electroplated on polished Stainless Steel disc, 0.79 mm thick.

Total diameter of 2.23 cm and an active diameter of 1.91 cm.

The radioactive material is permanently fixed to the disc by heat treatment without any covering over the active surface.

Measurement Method:

The 2 pi alpha emission rate was measured using an internal gas flow proportional chamber. Absolute counting of alpha particles emitted in the hemisphere above the active surface was verified by counting above, below and at the operative voltage. The calibration is traceable to NIST by reference to an NIST calibrated alpha source S/N 2393/91.

Measurement Result:

The observed alpha particles emitted from the surface of the disc per minute (cpm) on the calibration date was

2,140 ± 107

The total disintegration rate (dpm) assuming 1.5% backscatter of alpha particles from the surface of the disc, was

4,270 ± 214 (0.00193 μCi)

The uncertainty of the measurement is 5 % which is the sum of random counting error at the 99% confidence level, and the estimated upper limit of systematic error in this measurement.

Calibrated by: Arlene Gutierrez Reviewed by: Art Reyes

Calibration technician: Arlene Gutierrez QA Representative: Kathy Burnham

Calibration date: 9/27/94 Reviewed date: 10-18-94

LOT# F5D220356

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CERTIFICATE OF CALIBRATION

Electroplated Alpha Standard

S.O.# S-02900
P.O.# 130552

Description of Standard:

Model No. DNS-10 Serial No. 1923-94 Isotope Plutonium-239

Electroplated on polished Stainless Steel disc, 0.79 mm thick.

Total diameter of 2.23 cm and an active diameter of 1.91 cm.

The radioactive material is permanently fixed to the disc by heat treatment without any covering over the active surface.

Measurement Method:

The 2 pi alpha emission rate was measured using an internal gas flow proportional chamber. Absolute counting of alpha particles emitted in the hemisphere above the active surface was verified by counting above, below and at the operative voltage. The calibration is traceable to NIST by reference to an NIST calibrated alpha source S/N 2393/91.

Measurement Result:

The observed alpha particles emitted from the surface of the disc per minute (cpm) on the calibration date was

3,630 ± 109

The total disintegration rate (dpm) assuming 1.5% backscatter of alpha particles from the surface of the disc, was

7,250 ± 218 (0.00327 μCi)

The uncertainty of the measurement is 3 % which is the sum of random counting error at the 99% confidence level, and the estimated upper limit of systematic error in this measurement.

Calibrated by: Arlene Gutierrez Reviewed by: Art Reust

Calibration technician: Arlene Gutierrez Q.A. Representative: Kathy Burnham

Calibration date: 9/27/94 Reviewed date: 10-18-94

LOT# F5D220356

SEVERN TRENT SERVICES

DETECTOR BACKGROUNDS
At Time of Calibration

LOT# F5D220356

STL ST. LOUIS

LB4100-W(Blue) Detector Background Data

Background	Date/Time	Official	Alpha Bkg.	error	Beta Bkg.	error
A1	4/3/2002 6:16	TRUE	0.03800	0.00616	1.15500	0.03399
A2	4/3/2002 6:16	TRUE	0.02600	0.00510	1.05300	0.03245
A3	4/3/2002 6:16	TRUE	0.03800	0.00616	1.09000	0.03302
A4	4/3/2002 6:16	TRUE	0.04800	0.00693	1.18600	0.03444
B1	2/16/2002 10:54	TRUE	0.07900	0.00889	0.10900	0.01044
B2	4/3/2002 6:16	TRUE	0.03300	0.00574	1.10800	0.03329
B3	4/3/2002 6:16	TRUE	0.04800	0.00693	1.10000	0.03317
B4	4/3/2002 6:16	TRUE	0.05700	0.00755	1.00100	0.03164
C1	4/3/2002 6:16	TRUE	0.06200	0.00906	0.96400	0.03105
C2	4/3/2002 6:16	TRUE	0.04900	0.00700	1.32000	0.03633
C3	4/3/2002 6:16	TRUE	0.04000	0.00632	1.05600	0.03250
C4	4/3/2002 6:16	TRUE	0.06200	0.00787	1.09400	0.03308
D1	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
D2	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
D3	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
D4	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!

B1 out of service

Background Count Time = 1000 min.

440 of 938

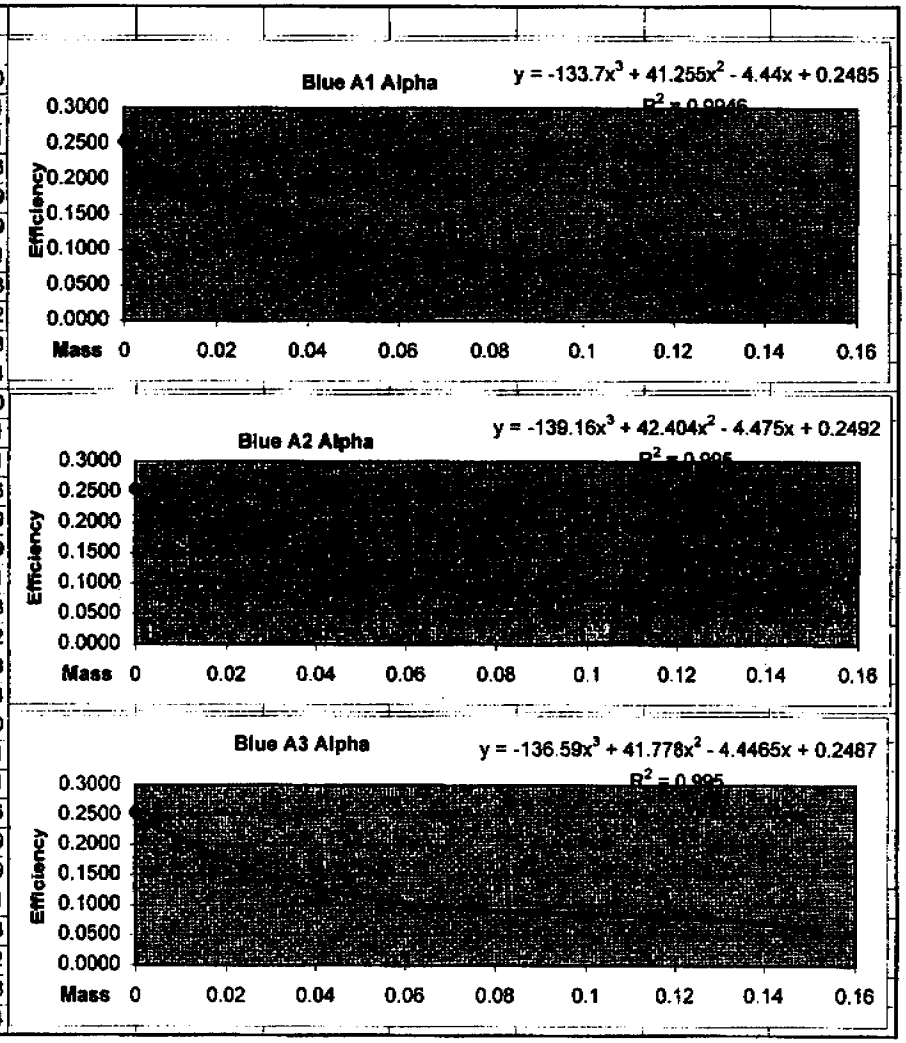
Detector ID	Sample ID	Alpha	Beta	Guard	Count Count Time	Event	Voltage	TOD
A1	A1-01	38	1155	512596	1000	0	1410	37349.26
A2	A2-01	26	1053	512596	1000	0	1410	37349.26
A3	A3-01	38	1090	512596	1000	0	1410	37349.26
A4	A4-01	48	1186	512595	1000	0	1410	37349.26
B2	B2-01	33	1108	523051	1000	0	1410	37349.26
B3	B3-01	48	1100	523051	1000	0	1410	37349.26
B4	B4-01	57	1001	523048	1000	0	1410	37349.26
C1	C1-01	82	964	571841	1000	0	1440	37349.26
C2	C2-01	49	1320	571839	1000	0	1440	37349.26
C3	C3-01	40	1056	571840	1000	0	1440	37349.26
C4	C4-01	62	1094	571840	1000	0	1440	37349.26

SEVERN TRENT SERVICES

Efficiency/Attenuation CALIBRATION

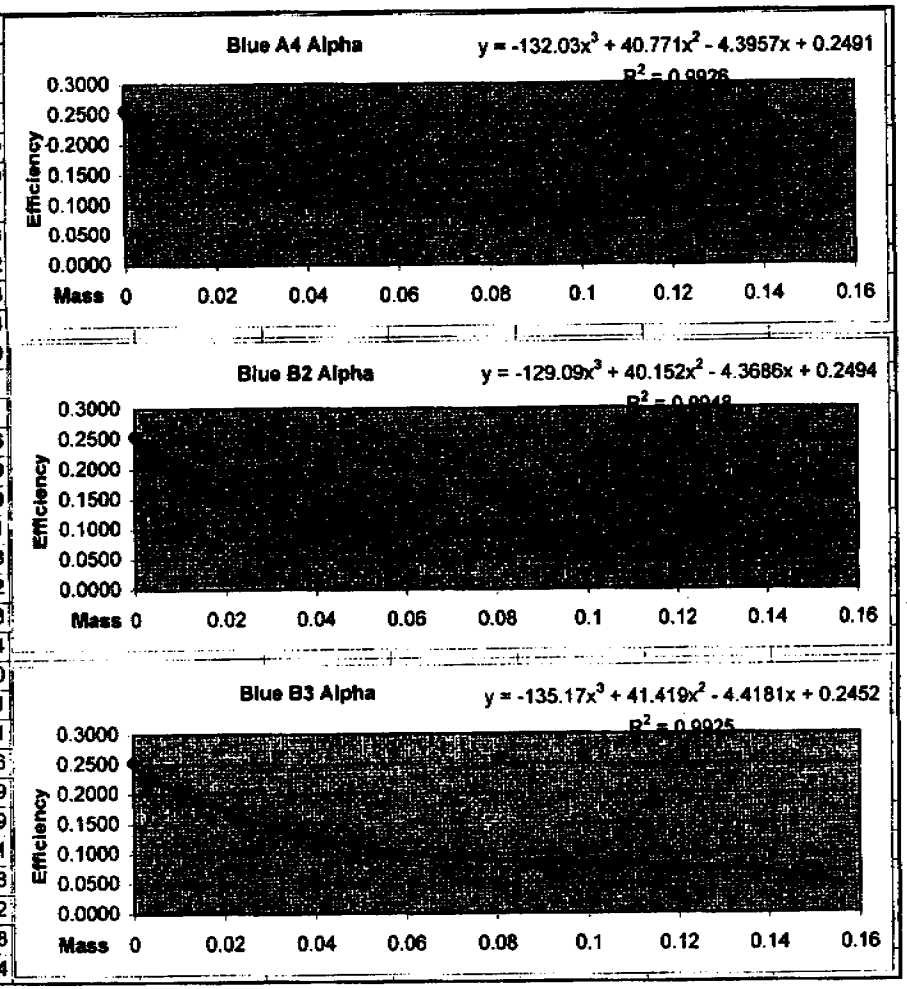
regress_data _blue_Alpha

Det ID	Sample ID	Alpha	Beta	Count Time	CPM	Std. 01-050 Activity	Efficiency CPM/Act	Mass
A1	0	10016	3056	8.88	1127.9	4452	0.2534	0
A1	0.0021	10004	2928	9.62	1039.9	4452	0.2336	0.0021
A1	0.0041	10010	2976	9.4	1064.9	4452	0.2392	0.0041
A1	0.0096	10007	3020	10.96	913.0	4452	0.2051	0.0096
A1	0.0149	10004	3046	12.09	827.5	4452	0.1859	0.0149
A1	0.0239	10007	3121	13.83	723.6	4452	0.1625	0.0239
A1	0.0411	10007	3211	18.08	553.5	4452	0.1243	0.0411
A1	0.0488	10007	3313	18.64	536.9	4452	0.1206	0.0488
A1	0.0762	10005	3553	23.83	419.8	4452	0.0943	0.0762
A1	0.0988	10003	3609	28.52	350.7	4452	0.0788	0.0988
A1	0.1514	10003	3815	38.36	260.8	4452	0.0586	0.1514
A2	0	10009	3084	8.8	1137.4	4452	0.2555	0
A2	0.0021	10009	2959	9.65	1037.2	4452	0.2330	0.0021
A2	0.0041	10006	2960	9.49	1054.4	4452	0.2368	0.0041
A2	0.0096	10006	2986	10.8	926.5	4452	0.2081	0.0096
A2	0.0149	10013	3019	11.97	836.5	4452	0.1879	0.0149
A2	0.0239	10008	3249	13.86	722.1	4452	0.1622	0.0239
A2	0.0411	10005	3321	18.1	552.8	4452	0.1242	0.0411
A2	0.0488	10002	3268	18.5	540.6	4452	0.1214	0.0488
A2	0.0762	10002	3400	23.05	433.9	4452	0.0975	0.0762
A2	0.0988	10002	3593	27.51	363.6	4452	0.0817	0.0988
A2	0.1514	10000	3660	36.6	273.2	4452	0.0614	0.1514
A3	0	10015	2979	8.83	1134.2	4452	0.2548	0
A3	0.0021	10021	2890	9.69	1034.2	4452	0.2323	0.0021
A3	0.0041	10015	2938	9.45	1059.8	4452	0.2380	0.0041
A3	0.0096	10000	2888	10.81	925.1	4452	0.2078	0.0096
A3	0.0149	10007	2988	12.15	823.6	4452	0.1850	0.0149
A3	0.0239	10003	3204	13.77	726.4	4452	0.1632	0.0239
A3	0.0411	10003	3225	17.79	562.3	4452	0.1263	0.0411
A3	0.0488	10003	3309	18.74	533.8	4452	0.1199	0.0488
A3	0.0762	10003	3388	23.54	424.9	4452	0.0954	0.0762
A3	0.0988	9999	3510	27.67	361.4	4452	0.0812	0.0988
A3	0.1514	9999	3803	37.6	265.9	4452	0.0597	0.1514



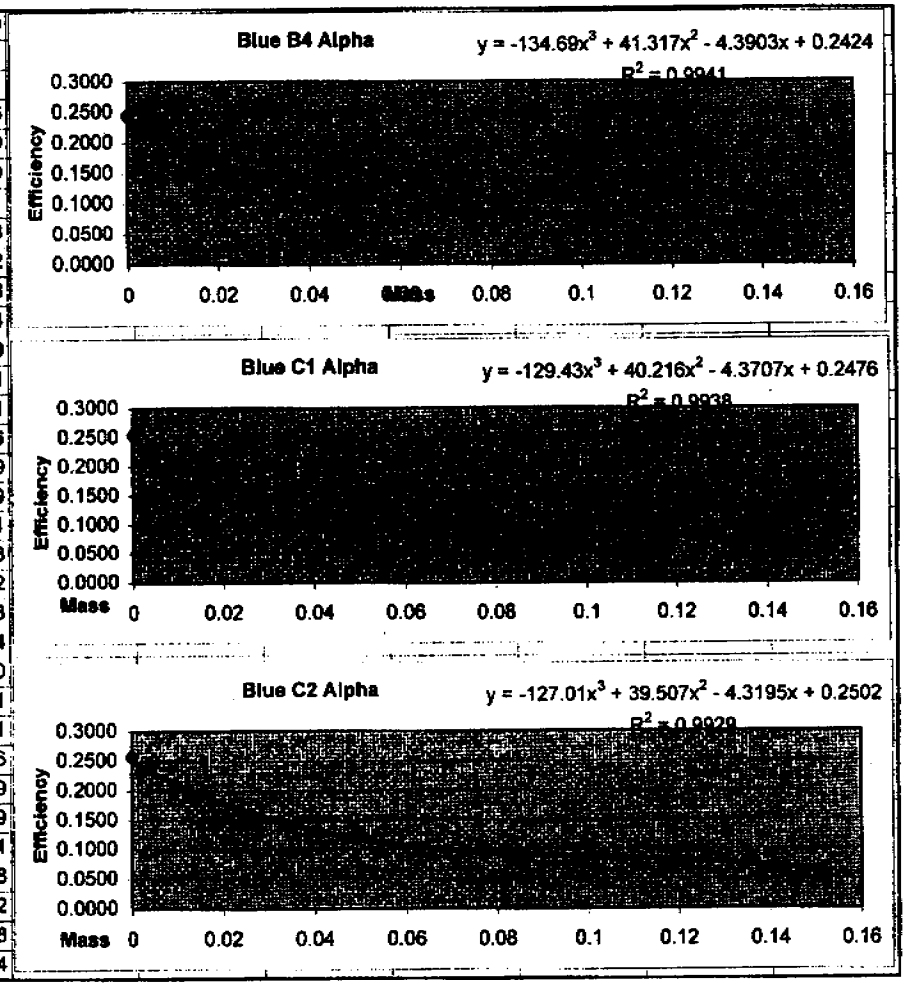
regress_data _blue_Alpha

A4	0	10009	2978	8.75	1143.9	4452	0.2569	0
A4	0.0021	10001	2901	9.79	1021.6	4452	0.2295	0.0021
A4	0.0041	10015	2754	9.38	1067.7	4452	0.2398	0.0041
A4	0.0096	10009	2757	10.8	926.8	4452	0.2082	0.0096
A4	0.0149	10005	2913	12.01	833.1	4452	0.1871	0.0149
A4	0.0239	10003	2951	13.61	735.0	4452	0.1651	0.0239
A4	0.0411	10005	3053	17.96	557.1	4452	0.1251	0.0411
A4	0.0488	9999	3072	18.32	545.8	4452	0.1226	0.0488
A4	0.0762	10002	3202	23.57	424.4	4452	0.0953	0.0762
A4	0.0988	9999	3364	27.52	363.3	4452	0.0816	0.0988
A4	0.1514	9999	3564	37.1	269.5	4452	0.0605	0.1514
B2	0	10005	4157	8.83	1133.1	4452	0.2545	0
B2	0.0021	10001	4353	9.71	1030.0	4452	0.2313	0.0021
B2	0.0041	10017	2926	9.4	1065.6	4452	0.2394	0.0041
B2	0.0096	10001	2983	10.77	928.6	4452	0.2086	0.0096
B2	0.0149	10003	3059	11.64	859.4	4452	0.1930	0.0149
B2	0.0239	10003	3105	13.72	729.1	4452	0.1638	0.0239
B2	0.0411	10002	3248	18.04	554.4	4452	0.1245	0.0411
B2	0.0488	10000	6474	18.37	544.4	4452	0.1223	0.0488
B2	0.0762	10002	9192	23.45	426.5	4452	0.0958	0.0762
B2	0.0988	10000	9394	27.46	364.2	4452	0.0818	0.0988
B2	0.1514	9999	6622	36.91	270.9	4452	0.0608	0.1514
B3	0	10007	3123	8.87	1128.2	4452	0.2534	0
B3	0.0021	10014	2962	9.9	1011.5	4452	0.2272	0.0021
B3	0.0041	10013	2942	9.72	1030.1	4452	0.2314	0.0041
B3	0.0096	10005	2829	10.83	923.8	4452	0.2075	0.0096
B3	0.0149	10004	2873	12.18	821.3	4452	0.1845	0.0149
B3	0.0239	10010	3180	14.35	697.6	4452	0.1567	0.0239
B3	0.0411	10004	3238	18.81	531.8	4452	0.1195	0.0411
B3	0.0488	10004	3105	18.39	544.0	4452	0.1222	0.0488
B3	0.0762	10002	3403	24.34	410.9	4452	0.0923	0.0762
B3	0.0988	10001	3592	28.85	346.7	4452	0.0779	0.0988
B3	0.1514	10000	3840	39.21	255.0	4452	0.0573	0.1514



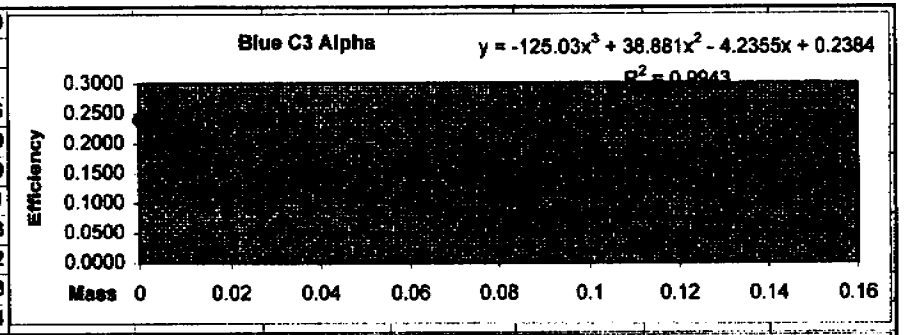
regress_data _blue_Alpha

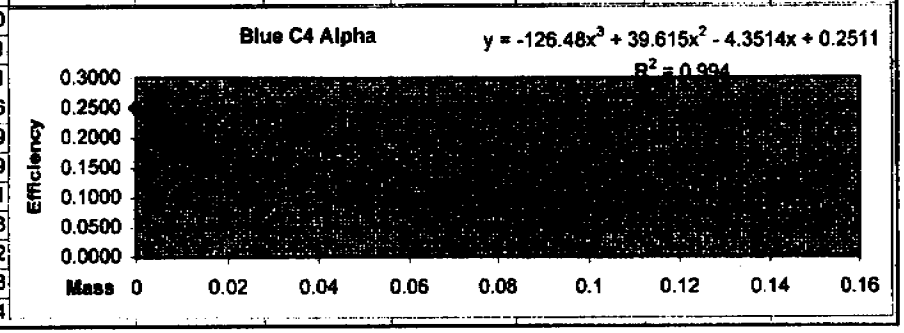
B4	0	10007	3115	9.19	1088.9	4452	0.2446	0
B4	0.0021	10016	3100	9.92	1009.7	4452	0.2268	0.0021
B4	0.0041	10010	3039	9.57	1046.0	4452	0.2349	0.0041
B4	0.0096	10003	2974	11.03	906.9	4452	0.2037	0.0096
B4	0.0149	10007	3015	12.4	807.0	4452	0.1813	0.0149
B4	0.0239	10002	3288	14.62	684.1	4452	0.1537	0.0239
B4	0.0411	10003	3328	18.53	539.8	4452	0.1213	0.0411
B4	0.0488	10000	3231	19.09	523.8	4452	0.1177	0.0488
B4	0.0762	10001	3736	24.84	402.6	4452	0.0904	0.0762
B4	0.0988	10002	3679	28.68	348.7	4452	0.0783	0.0988
B4	0.1514	10005	3995	38.8	257.9	4452	0.0579	0.1514
C1	0	10012	3052	8.84	1132.6	4452	0.2544	0
C1	0.0021	10006	3176	9.82	1018.9	4452	0.2289	0.0021
C1	0.0041	10002	2970	9.43	1060.7	4452	0.2382	0.0041
C1	0.0096	10004	3141	10.8	926.3	4452	0.2081	0.0096
C1	0.0149	10005	3055	12.13	824.6	4452	0.1853	0.0149
C1	0.0239	10002	3195	13.75	727.4	4452	0.1634	0.0239
C1	0.0411	10004	3197	17.93	557.9	4452	0.1253	0.0411
C1	0.0488	10005	3451	18.72	534.5	4452	0.1200	0.0488
C1	0.0762	10000	3468	23.97	417.2	4452	0.0937	0.0762
C1	0.0988	10002	3800	28.15	355.3	4452	0.0798	0.0988
C1	0.1514	9999	4101	37.98	263.3	4452	0.0591	0.1514
C2	0	10007	3110	8.73	1146.3	4452	0.2575	0
C2	0.0021	10000	2989	9.71	1029.9	4452	0.2313	0.0021
C2	0.0041	10005	3057	9.35	1070.1	4452	0.2404	0.0041
C2	0.0096	10005	2922	10.63	941.2	4452	0.2114	0.0096
C2	0.0149	10002	2939	11.8	847.6	4452	0.1904	0.0149
C2	0.0239	10003	3205	13.68	731.2	4452	0.1642	0.0239
C2	0.0411	10006	3179	17.56	569.8	4452	0.1280	0.0411
C2	0.0488	10005	3183	18.05	554.3	4452	0.1245	0.0488
C2	0.0762	10003	3299	22.59	442.8	4452	0.0995	0.0762
C2	0.0988	10000	3814	27.71	360.9	4452	0.0811	0.0988
C2	0.1514	9999	3792	36.35	275.1	4452	0.0618	0.1514



regress_data _blue_Alpha

C3	0	10009	3149	9.39	1065.9	4452	0.2394	0
C3	0.0021	10007	3122	10.17	984.0	4452	0.2210	0.0021
C3	0.0041	10010	2995	9.7	1032.0	4452	0.2318	0.0041
C3	0.0096	10007	2955	11.07	904.0	4452	0.2030	0.0096
C3	0.0149	10002	3035	12.41	806.0	4452	0.1810	0.0149
C3	0.0239	9999	3447	14.64	683.0	4452	0.1534	0.0239
C3	0.0411	10002	3363	18.94	528.1	4452	0.1186	0.0411
C3	0.0488	10001	3399	19.51	512.6	4452	0.1151	0.0488
C3	0.0762	10000	3777	25.63	390.2	4452	0.0876	0.0762
C3	0.0988	10002	3624	29.32	341.1	4452	0.0766	0.0988
C3	0.1514	9999	4145	41	243.9	4452	0.0548	0.1514
C4	0	10010	3030	8.96	1117.2	4452	0.2509	0
C4	0.0021	10016	2771	9.49	1055.4	4452	0.2371	0.0021
C4	0.0041	10001	2799	9.19	1088.2	4452	0.2444	0.0041
C4	0.0096	10009	2682	10.5	953.2	4452	0.2141	0.0096
C4	0.0149	10001	2794	11.88	841.8	4452	0.1891	0.0149
C4	0.0239	10008	3062	13.78	726.3	4452	0.1631	0.0239
C4	0.0411	10002	3075	17.62	567.7	4452	0.1275	0.0411
C4	0.0488	10007	3051	17.93	558.1	4452	0.1254	0.0488
C4	0.0762	10004	3279	23.1	433.1	4452	0.0973	0.0762
C4	0.0988	10001	3435	27.58	362.6	4452	0.0815	0.0988
C4	0.1514	10000	3531	36.21	276.2	4452	0.0620	0.1514





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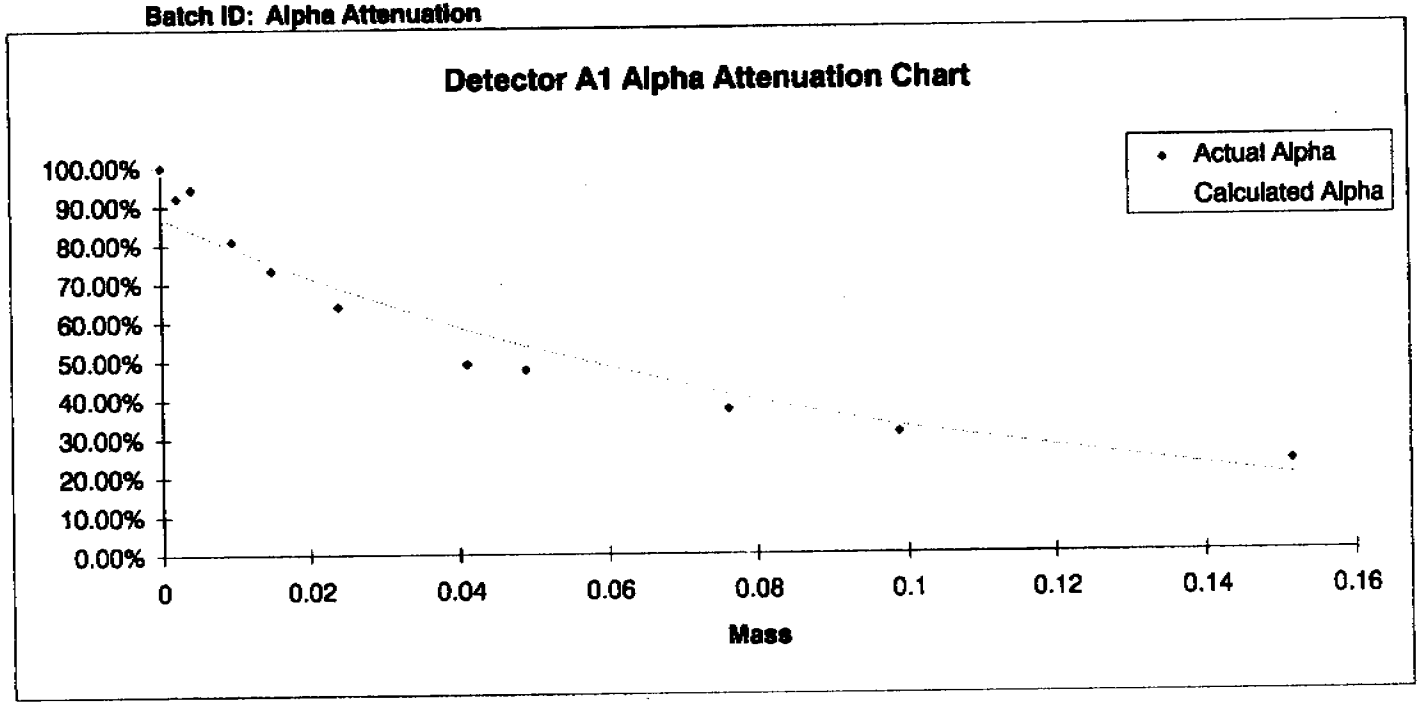
Date Performed: 4/8/02 14:08
FileName: ATTEN000
Batch ID: Alpha Attenuation

Unit Id: Blue
Application Revision: 2
Application Version: Standard



$\alpha r^2 =$ 0.946392

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Unit Type: LB4100/W
Date Performed: 4/8/02 14:08
FileName: ATTEN000
Batch ID: Alpha Attenuation

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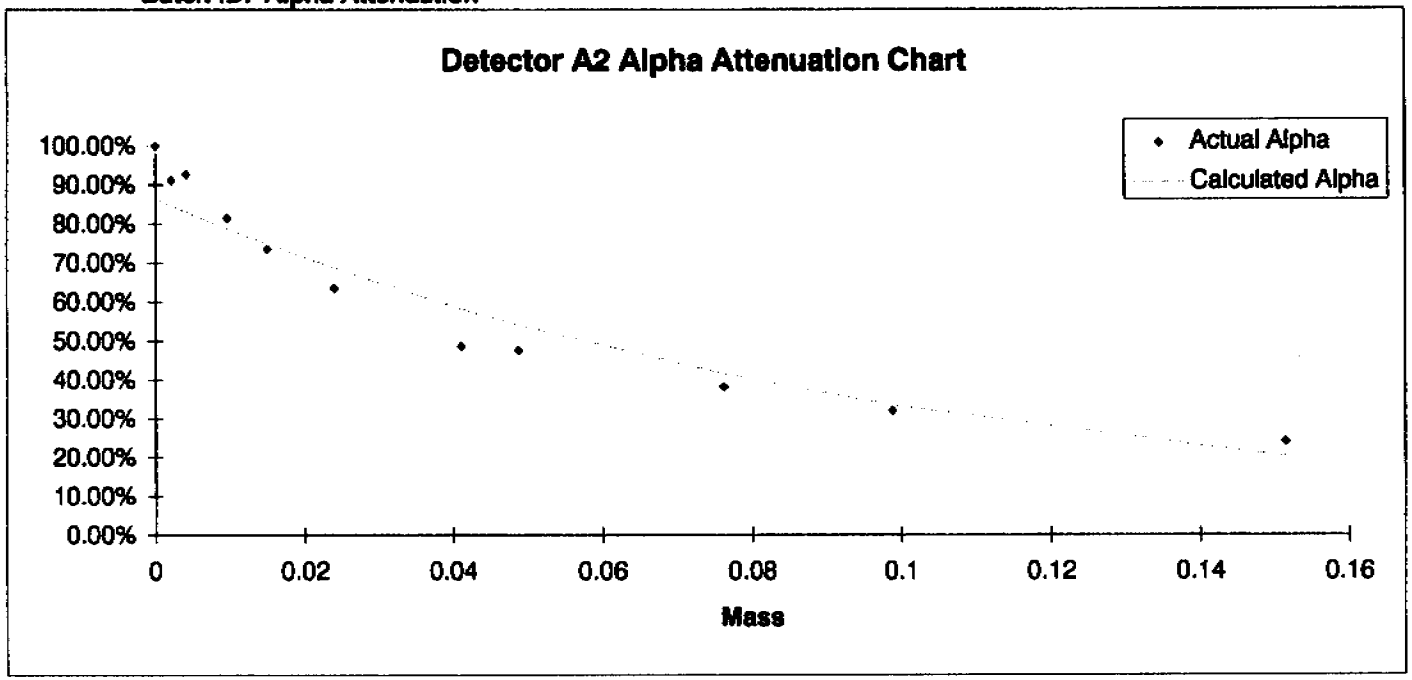

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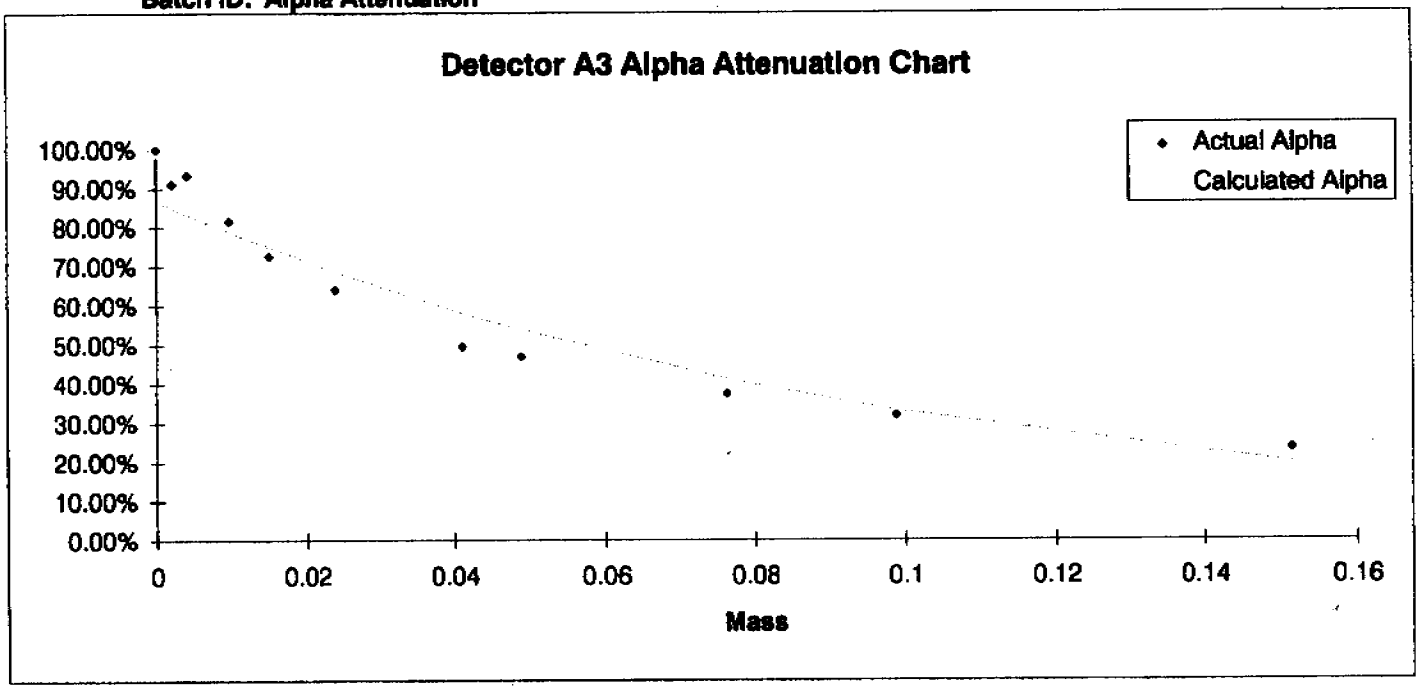

$\alpha r^2 =$ 0.945394

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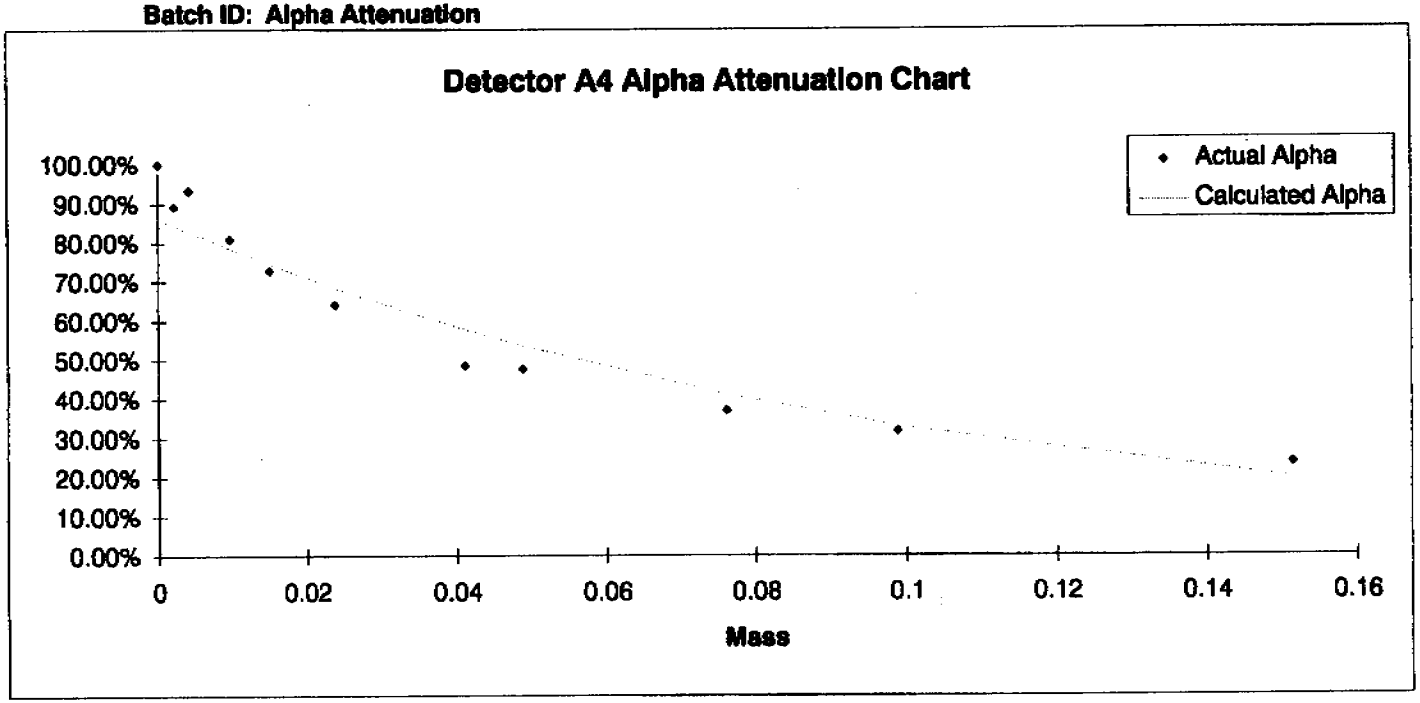

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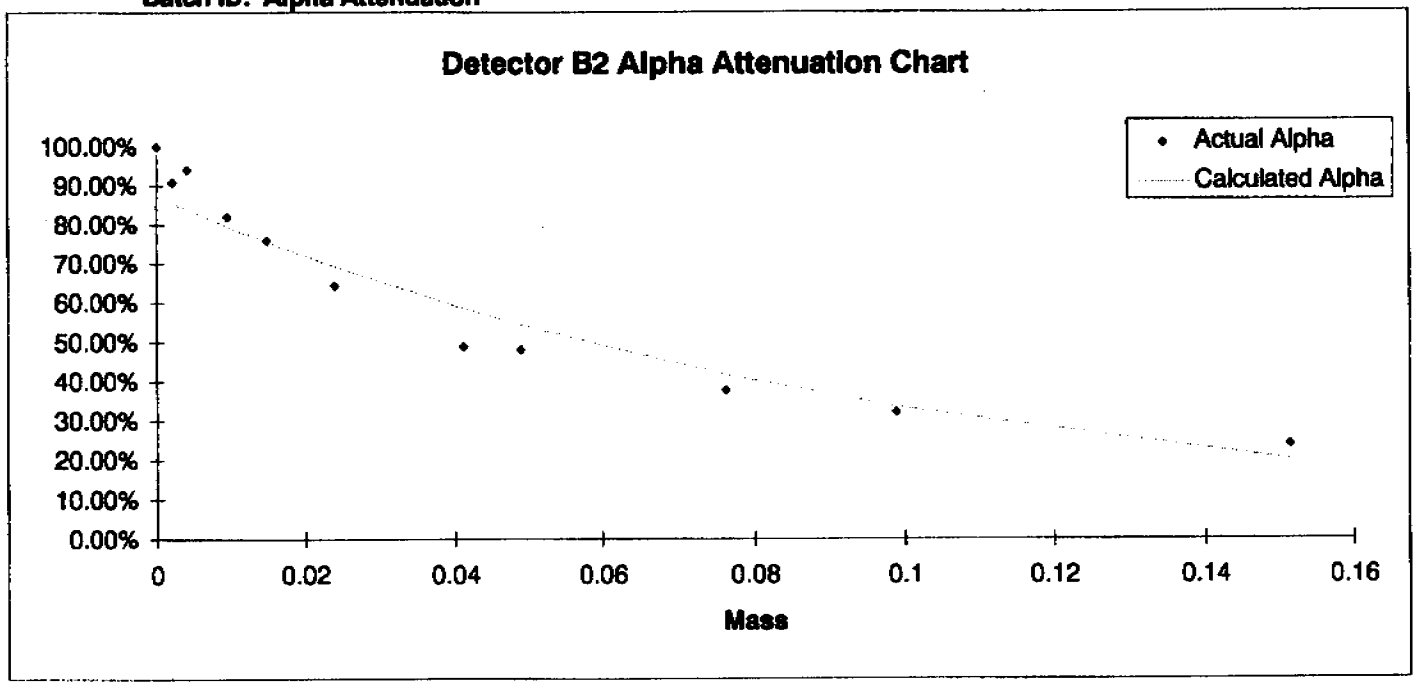

$\alpha r^2 =$ 0.943312

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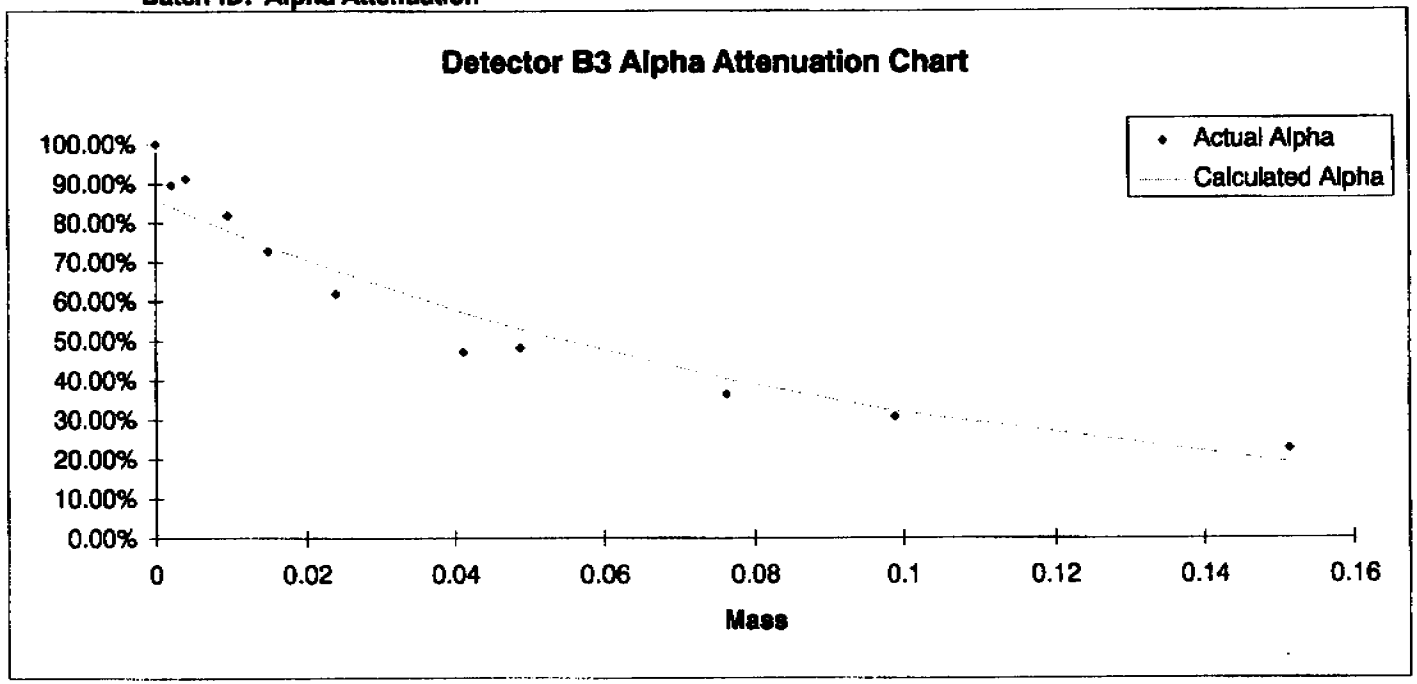

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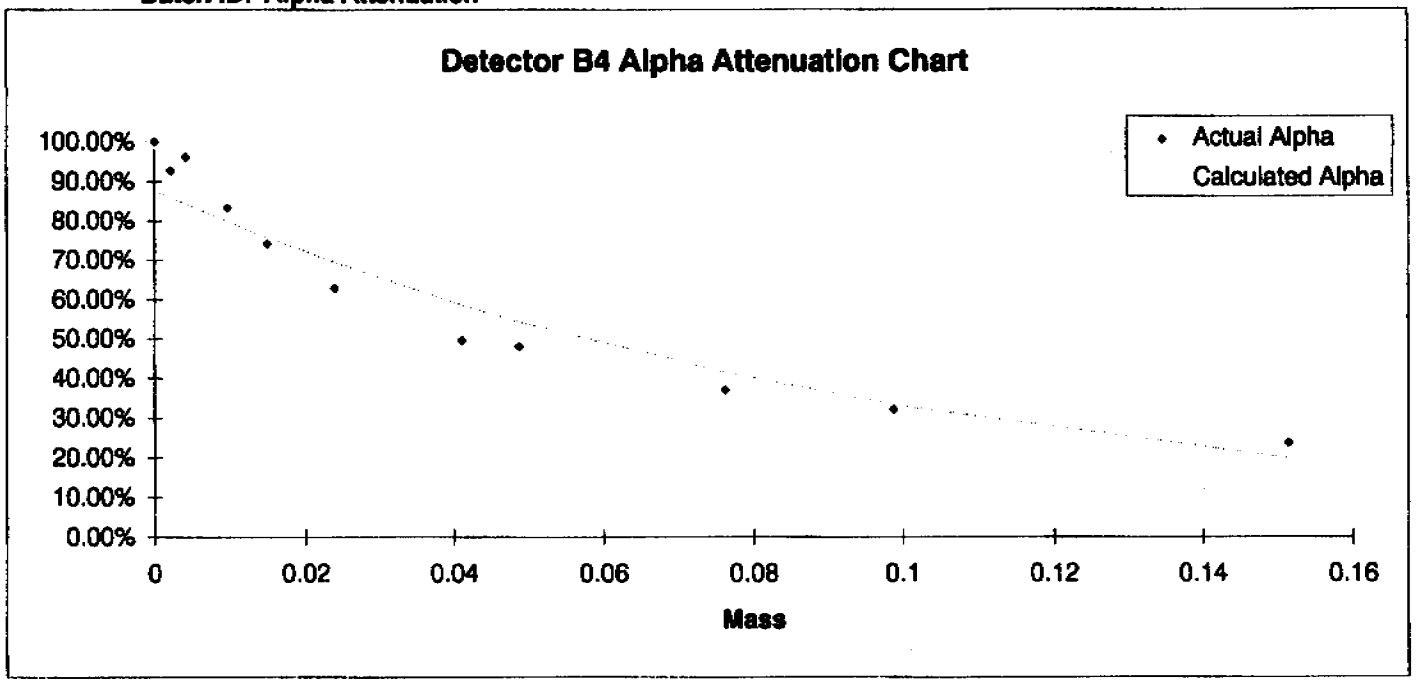

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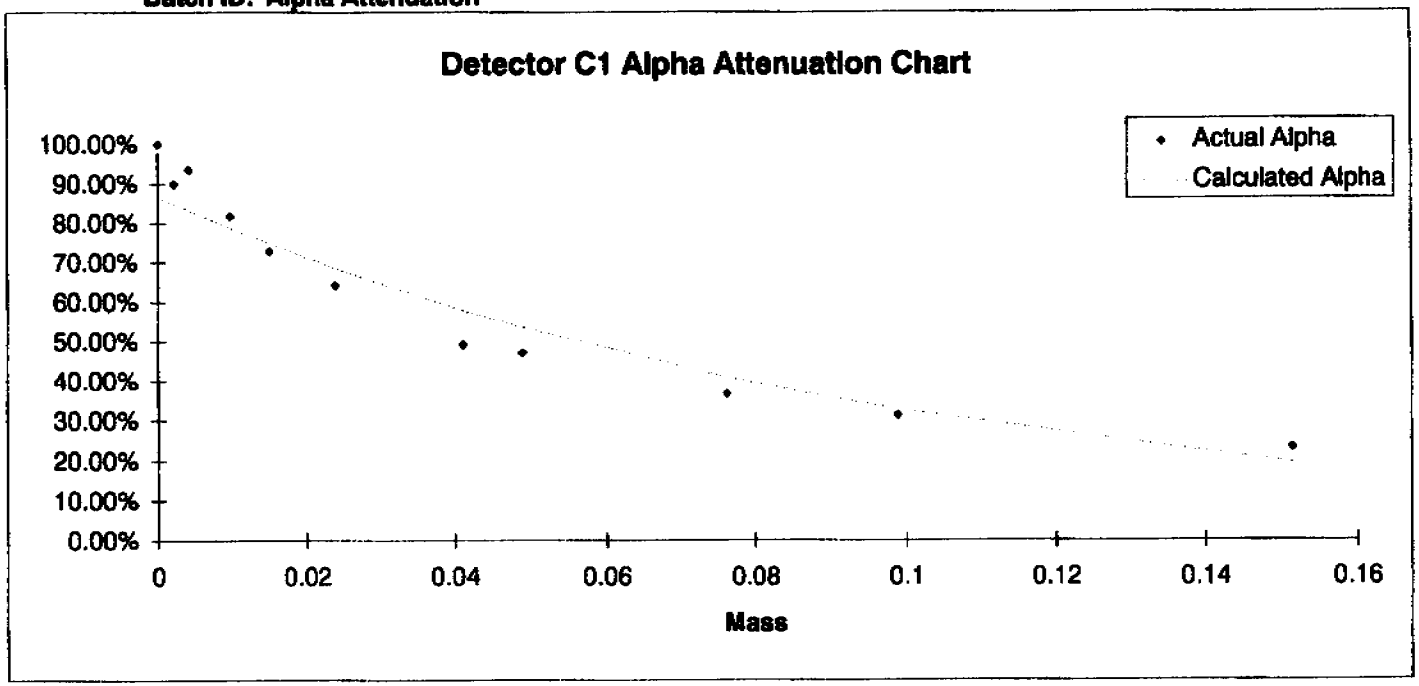

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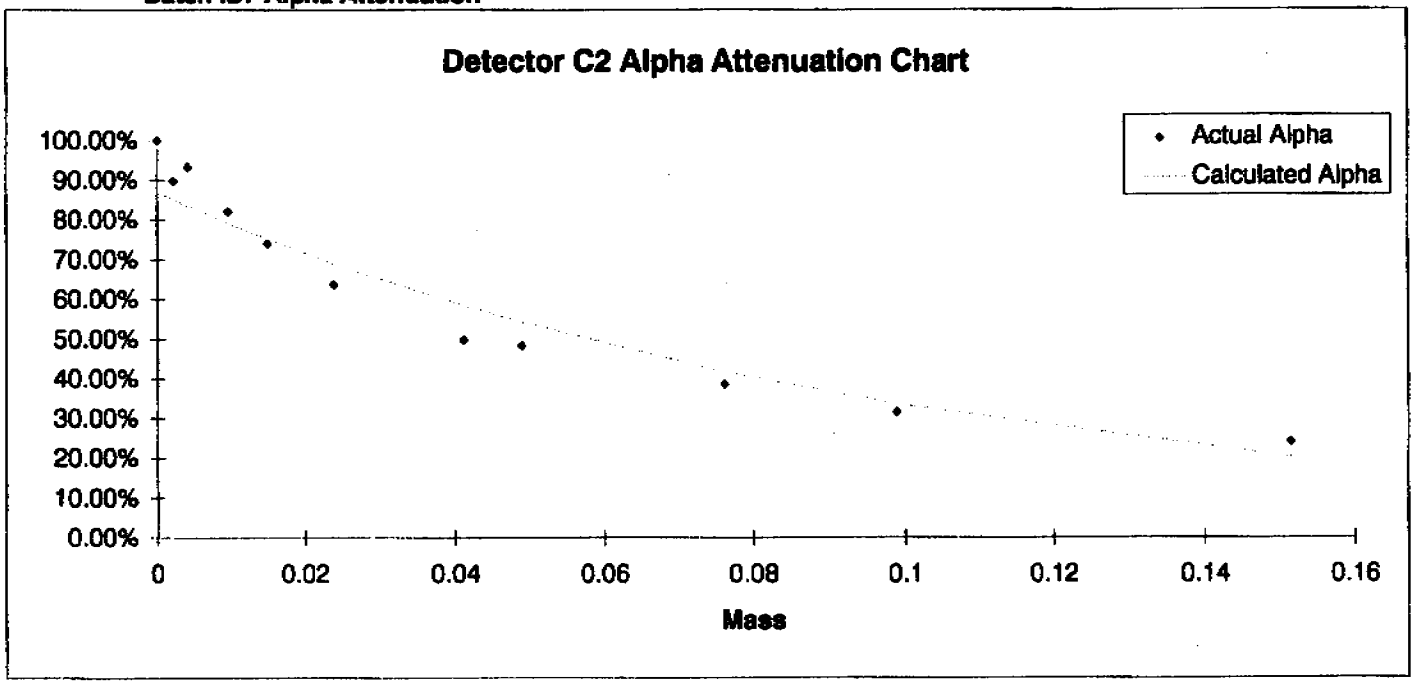

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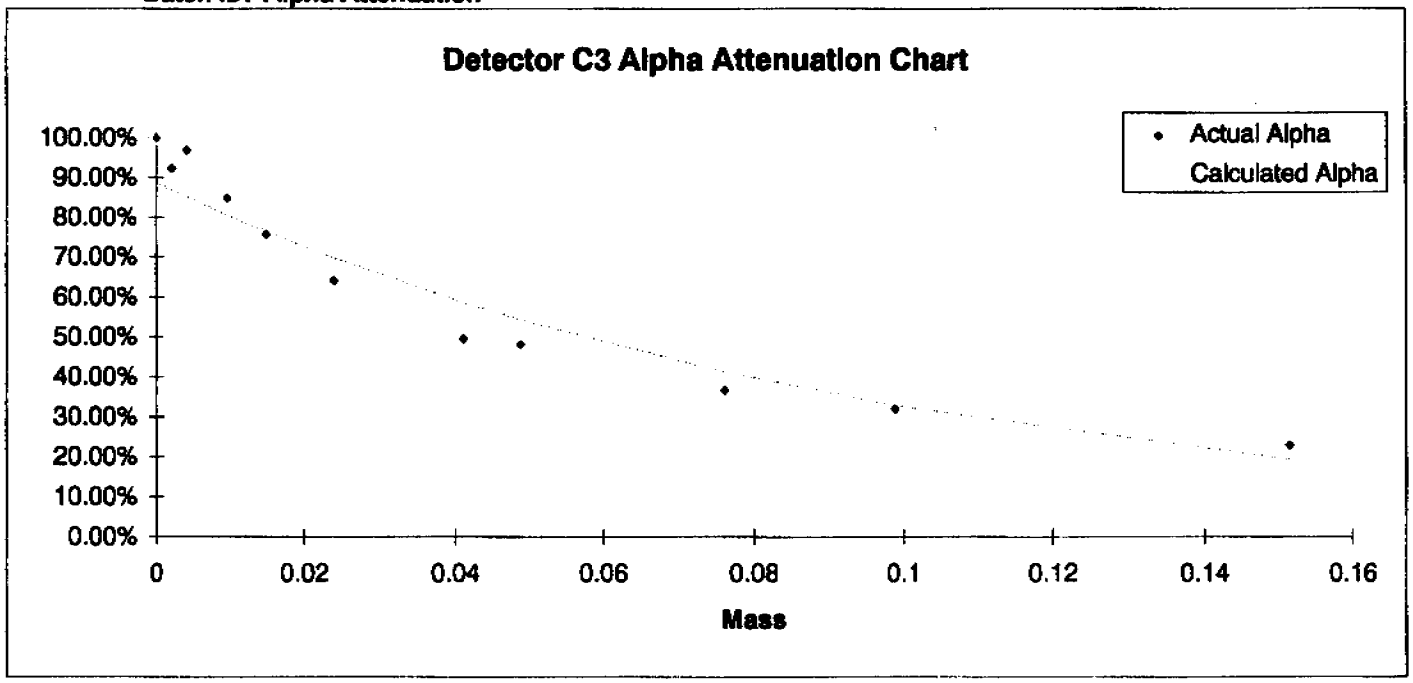

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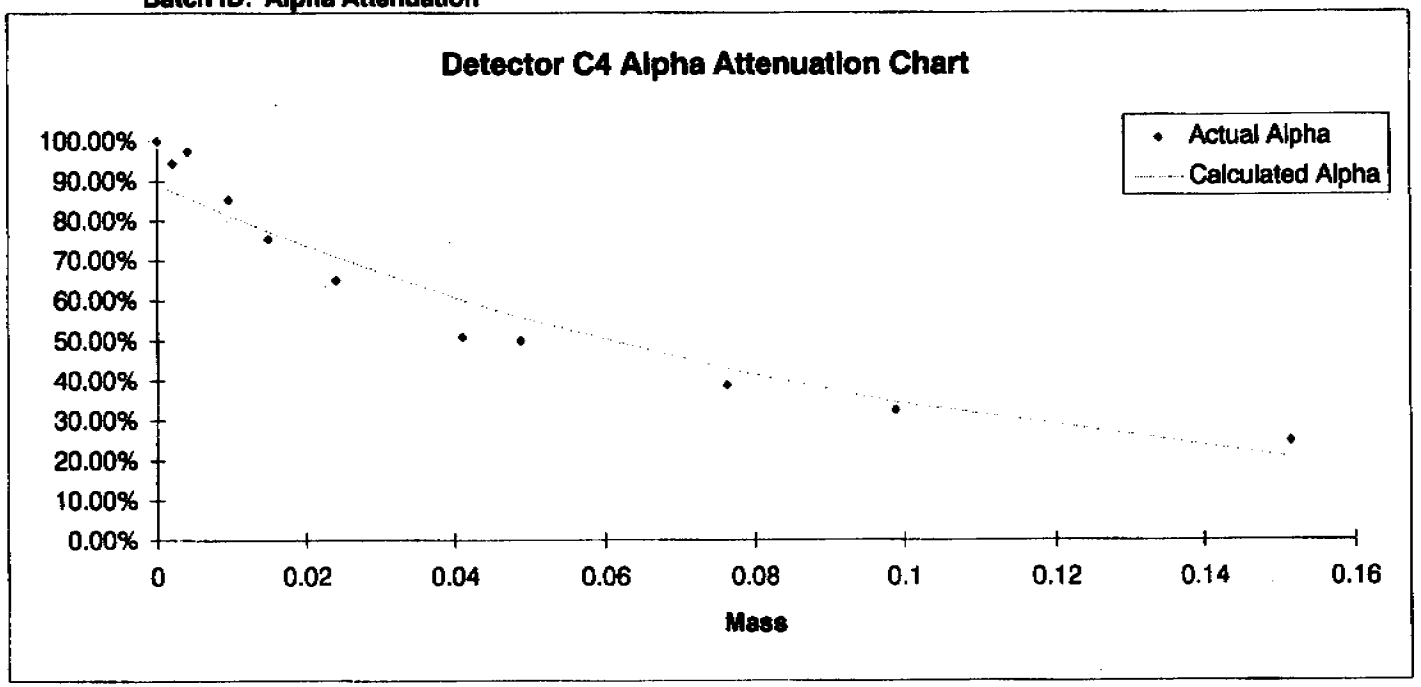

$\alpha r^2 =$ 0.943579

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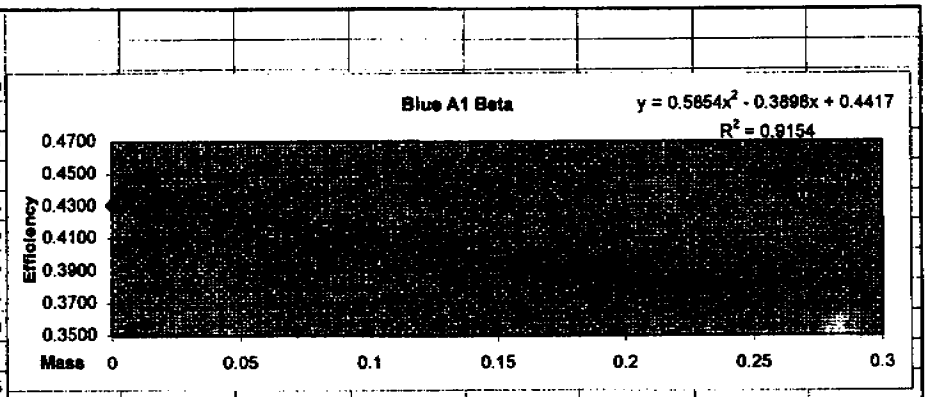
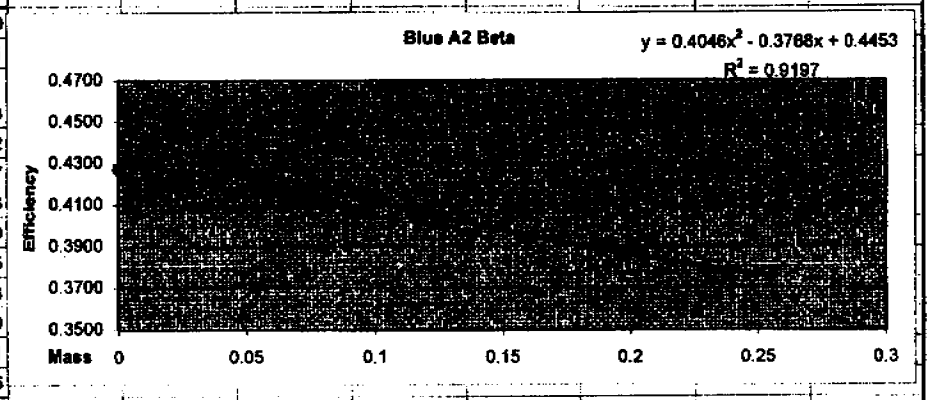
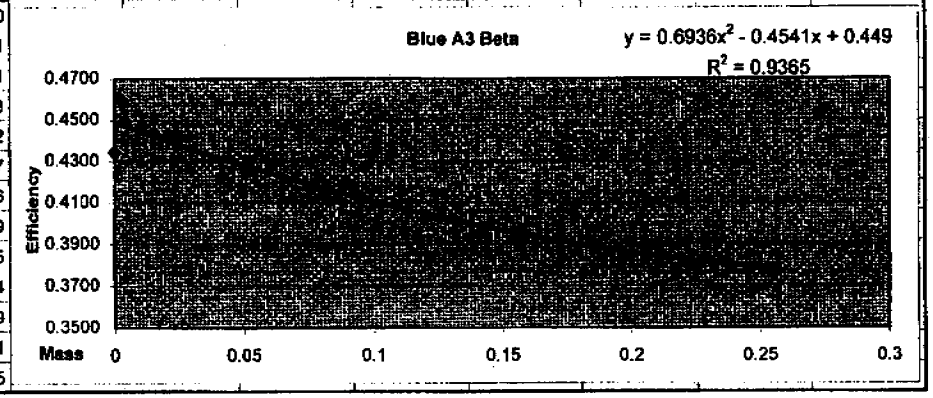
regress_data_blue_BETA

Det ID	Sample ID	Counts Beta	Count Time	CPM	STD 01051 Activity	Efficiency	Mass
A1	0	10011	2.85	3512.6	8151.5	0.4309	0
A1	0.0108	10013	2.75	3641.1	8151.5	0.4467	0.0108
A1	0.0152	10067	2.78	3621.2	8151.5	0.4442	0.0152
A1	0.0247	10034	2.86	3508.4	8151.5	0.4304	0.0247
A1	0.0416	10011	2.9	3452.1	8151.5	0.4235	0.0416
A1	0.0509	10001	2.92	3425.0	8151.5	0.4202	0.0509
A1	0.0755	10039	3	3346.3	8151.5	0.4105	0.0755
A1	0.0954	10017	2.93	3418.8	8151.5	0.4194	0.0954
A1	0.1569	10027	3.14	3193.3	8151.5	0.3917	0.1569
A1	0.2051	10047	3.2	3139.7	8151.5	0.3852	0.2051
A1	0.255	10016	3.22	3110.6	8151.5	0.3816	0.255
A2	0	10026	2.88	3480.9	8151.5	0.4270	0
A2	0.0021	10063	2.71	3713.3	8151.5	0.4555	0.0021
A2	0.0041	10066	2.73	3687.2	8151.5	0.4523	0.0041
A2	0.0108	10035	2.78	3609.7	8151.5	0.4428	0.0108
A2	0.0152	10029	2.79	3594.6	8151.5	0.4410	0.0152
A2	0.0247	10075	2.87	3510.5	8151.5	0.4307	0.0247
A2	0.0416	10016	2.86	3502.1	8151.5	0.4296	0.0416
A2	0.0509	10022	2.85	3516.5	8151.5	0.4314	0.0509
A2	0.0755	10032	2.95	3400.7	8151.5	0.4172	0.0755
A2	0.0954	10015	2.97	3372.1	8151.5	0.4137	0.0954
A2	0.1569	10001	3.11	3215.8	8151.5	0.3945	0.1569
A2	0.2051	10019	3.18	3150.6	8151.5	0.3865	0.2051
A2	0.255	10002	3.27	3058.7	8151.5	0.3752	0.255
A3	0	10056	2.84	3540.8	8151.5	0.4344	0
A3	0.0021	10057	2.68	3752.8	8151.5	0.4604	0.0021
A3	0.0041	10037	2.74	3663.1	8151.5	0.4494	0.0041
A3	0.0108	10060	2.76	3644.9	8151.5	0.4471	0.0108
A3	0.0152	10054	2.78	3616.5	8151.5	0.4437	0.0152
A3	0.0247	10033	2.78	3609.0	8151.5	0.4427	0.0247
A3	0.0416	10031	2.91	3447.1	8151.5	0.4229	0.0416
A3	0.0509	10042	2.89	3474.7	8151.5	0.4263	0.0509
A3	0.0755	10029	2.95	3399.7	8151.5	0.4171	0.0755
A3	0.0954	10041	2.99	3358.2	8151.5	0.4120	0.0954
A3	0.1569	10024	3.1	3233.5	8151.5	0.3967	0.1569
A3	0.2051	10010	3.16	3167.7	8151.5	0.3886	0.2051
A3	0.255	10014	3.27	3062.4	8151.5	0.3757	0.255

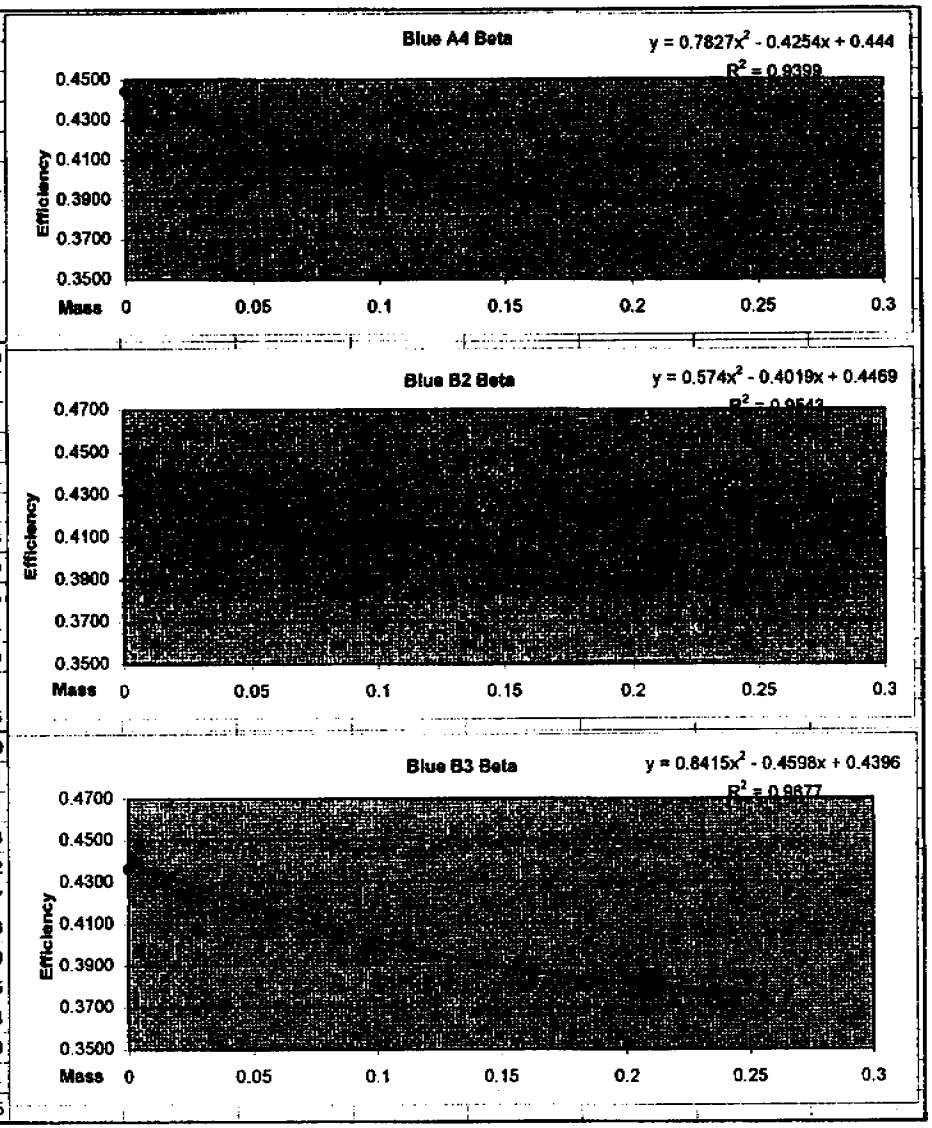






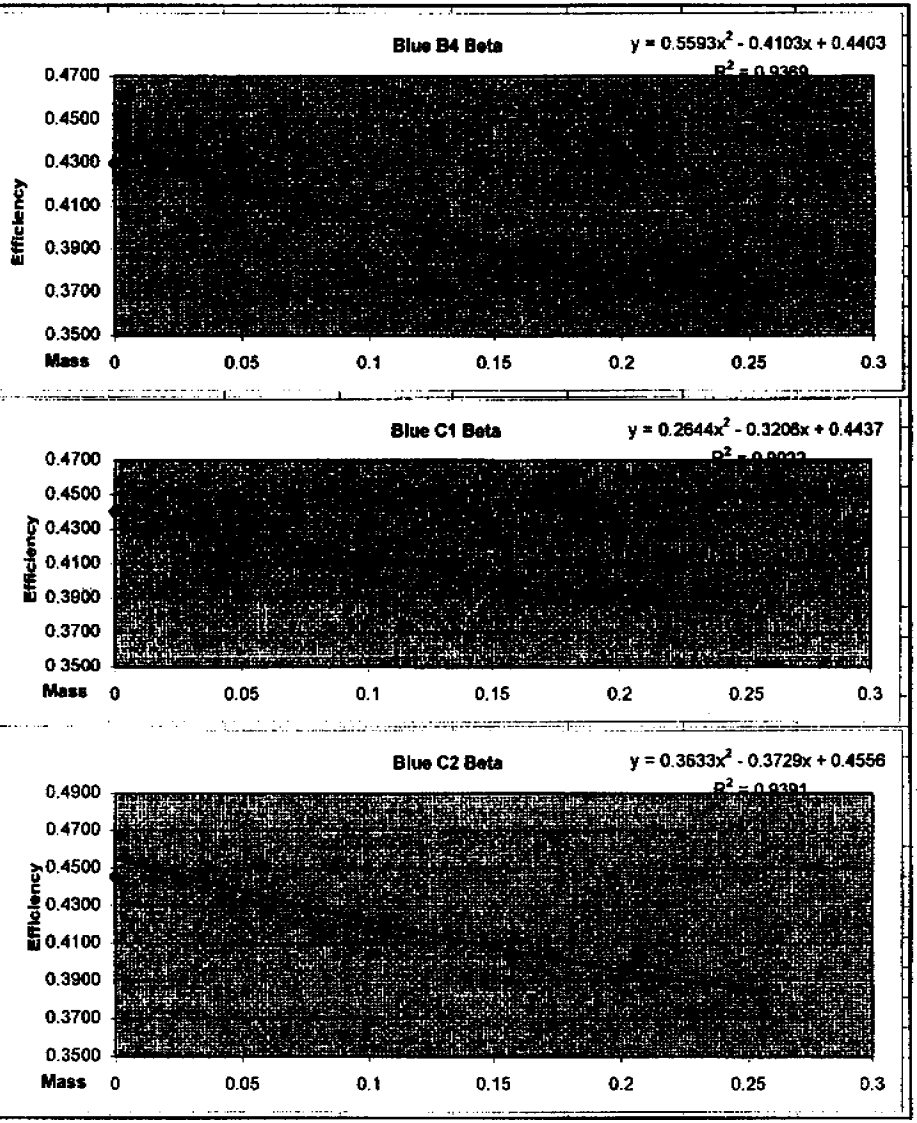
regress_data_blue_BETA

A4	0	10031	2.77	3621.3	8151.5	0.4442	0
A4	0.0041	10018	2.77	3616.6	8151.5	0.4437	0.0041
A4	0.0152	10022	2.83	3541.3	8151.5	0.4344	0.0152
A4	0.0247	10041	2.8	3586.1	8151.5	0.4399	0.0247
A4	0.0416	10022	2.93	3420.5	8151.5	0.4196	0.0416
A4	0.0509	10019	2.87	3490.9	8151.5	0.4283	0.0509
A4	0.0755	10028	2.95	3399.3	8151.5	0.4170	0.0755
A4	0.0954	10020	3	3340.0	8151.5	0.4097	0.0954
A4	0.1569	10030	3.15	3184.1	8151.5	0.3906	0.1569
A4	0.2051	10031	3.08	3256.8	8151.5	0.3995	0.2051
A4	0.255	10004	3.21	3116.5	8151.5	0.3823	0.255
B2	0	10017	2.84	3527.1	8151.5	0.4327	0
B2	0.0021	10059	2.75	3657.8	8151.5	0.4487	0.0021
B2	0.0041	10060	2.74	3671.5	8151.5	0.4504	0.0041
B2	0.0108	10032	2.82	3557.4	8151.5	0.4364	0.0108
B2	0.0152	10025	2.8	3580.4	8151.5	0.4392	0.0152
B2	0.0247	10016	2.8	3577.1	8151.5	0.4388	0.0247
B2	0.0416	10031	2.86	3507.3	8151.5	0.4303	0.0416
B2	0.0509	10030	2.87	3494.8	8151.5	0.4287	0.0509
B2	0.0755	10011	2.98	3382.1	8151.5	0.4149	0.0755
B2	0.0954	10050	2.96	3395.3	8151.5	0.4165	0.0954
B2	0.1569	10025	3.13	3202.9	8151.5	0.3929	0.1569
B2	0.2051	10020	3.08	3253.2	8151.5	0.3991	0.2051
B2	0.255	10014	3.26	3071.8	8151.5	0.3768	0.255
B3	0	10029	2.82	3566.4	8151.5	0.4363	0
B3	0.0021	10057	2.8	3591.8	8151.5	0.4406	0.0021
B3	0.0041	10029	2.75	3646.9	8151.5	0.4474	0.0041
B3	0.0108	10032	2.83	3544.9	8151.5	0.4349	0.0108
B3	0.0152	10050	2.87	3501.7	8151.5	0.4296	0.0152
B3	0.0247	10004	2.89	3461.6	8151.5	0.4247	0.0247
B3	0.0416	10008	2.94	3404.1	8151.5	0.4176	0.0416
B3	0.0509	10003	2.93	3414.0	8151.5	0.4188	0.0509
B3	0.0755	10035	2.98	3367.4	8151.5	0.4131	0.0755
B3	0.0954	10023	3.08	3254.2	8151.5	0.3992	0.0954
B3	0.1569	10023	3.14	3192.0	8151.5	0.3916	0.1569
B3	0.2051	10013	3.21	3119.3	8151.5	0.3827	0.2051
B3	0.255	10023	3.28	3055.8	8151.5	0.3749	0.255



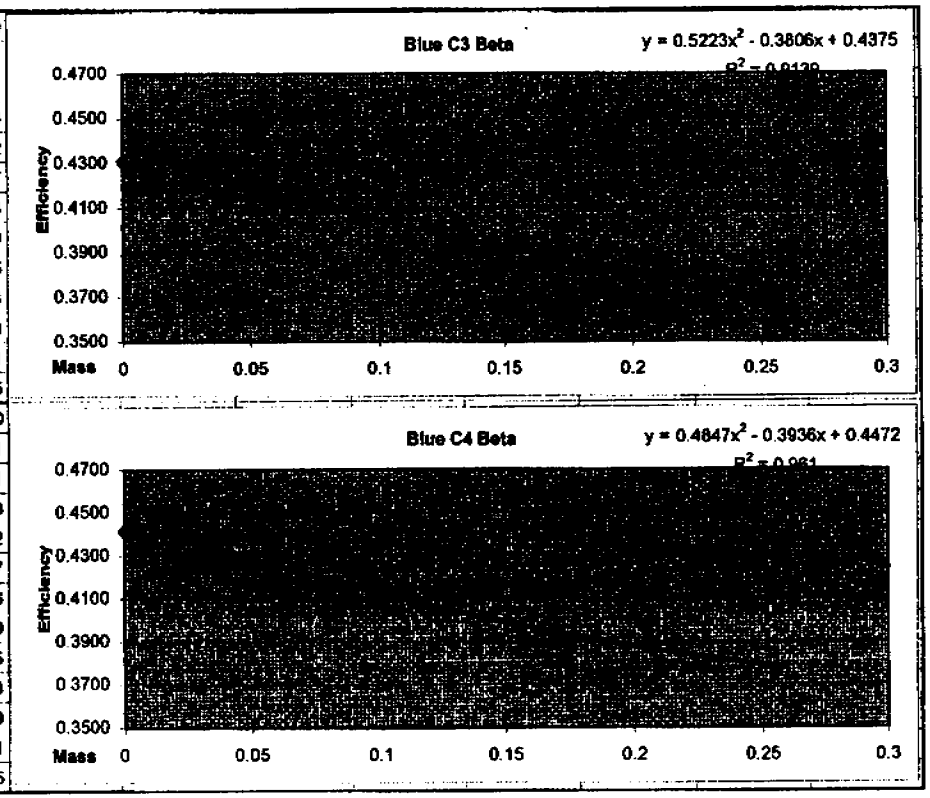
regress_data_blue_BETA

B4	0	10055	2.87	3503.5	8151.5	0.4298	0
B4	0.0021	10026	2.75	3645.8	8151.5	0.4473	0.0021
B4	0.0041	10058	2.8	3592.1	8151.5	0.4407	0.0041
B4	0.0108	10040	2.77	3624.5	8151.5	0.4446	0.0108
B4	0.0152	10026	2.88	3481.3	8151.5	0.4271	0.0152
B4	0.0247	10034	2.85	3520.7	8151.5	0.4319	0.0247
B4	0.0416	10035	2.95	3401.7	8151.5	0.4173	0.0416
B4	0.0509	10003	2.89	3461.2	8151.5	0.4246	0.0509
B4	0.0755	10023	3	3341.0	8151.5	0.4099	0.0755
B4	0.0954	10037	2.98	3368.1	8151.5	0.4132	0.0954
B4	0.1569	10032	3.2	3135.0	8151.5	0.3846	0.1569
B4	0.2051	10025	3.22	3113.4	8151.5	0.3819	0.2051
B4	0.255	10004	3.3	3031.5	8151.5	0.3719	0.255
C1	0	10009	2.79	3587.5	8151.5	0.4401	0
C1	0.0108	10053	2.75	3655.6	8151.5	0.4485	0.0108
C1	0.0152	10041	2.84	3535.6	8151.5	0.4337	0.0152
C1	0.0247	10015	2.81	3564.1	8151.5	0.4372	0.0247
C1	0.0416	10017	2.93	3418.8	8151.5	0.4194	0.0416
C1	0.0509	10010	2.8	3575.0	8151.5	0.4386	0.0509
C1	0.0755	10025	2.93	3421.5	8151.5	0.4197	0.0755
C1	0.0954	10025	2.91	3445.0	8151.5	0.4226	0.0954
C1	0.1569	10010	3.15	3177.8	8151.5	0.3898	0.1569
C1	0.2051	10040	3.13	3207.7	8151.5	0.3935	0.2051
C1	0.255	10011	3.24	3089.8	8151.5	0.3790	0.255
C2	0	10060	2.77	3631.8	8151.5	0.4455	0
C2	0.0021	10026	2.63	3812.2	8151.5	0.4677	0.0021
C2	0.0041	10033	2.7	3715.9	8151.5	0.4559	0.0041
C2	0.0108	10014	2.71	3695.2	8151.5	0.4533	0.0108
C2	0.0152	10032	2.74	3661.3	8151.5	0.4492	0.0152
C2	0.0247	10017	2.77	3616.2	8151.5	0.4436	0.0247
C2	0.0416	10040	2.79	3598.6	8151.5	0.4415	0.0416
C2	0.0509	10031	2.84	3532.0	8151.5	0.4333	0.0509
C2	0.0755	10034	2.88	3484.0	8151.5	0.4274	0.0755
C2	0.0954	10047	2.9	3464.5	8151.5	0.4250	0.0954
C2	0.1569	10032	3.06	3278.4	8151.5	0.4022	0.1569
C2	0.2051	10030	3.04	3299.3	8151.5	0.4048	0.2051
C2	0.255	10010	3.24	3089.5	8151.5	0.3790	0.255



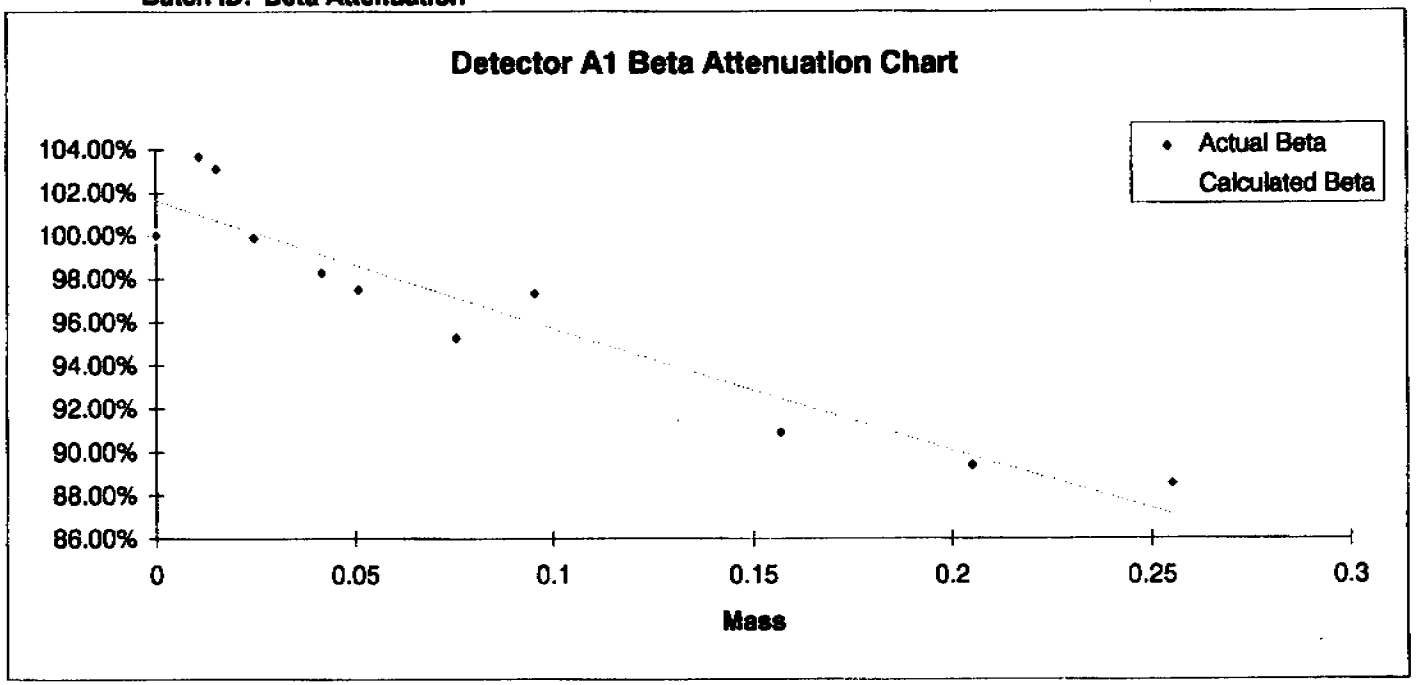
regress_data_blue_BETA

C3	0	10048	2.86	3513.3	8151.5	0.4310	0
C3	0.0021	10038	2.74	3663.5	8151.5	0.4494	0.0021
C3	0.0041	10035	2.77	3622.7	8151.5	0.4444	0.0041
C3	0.0108	10024	2.9	3456.6	8151.5	0.4240	0.0108
C3	0.0152	10014	2.85	3513.7	8151.5	0.4310	0.0152
C3	0.0247	10016	2.86	3502.1	8151.5	0.4296	0.0247
C3	0.0416	10022	2.99	3351.8	8151.5	0.4112	0.0416
C3	0.0509	10040	2.94	3415.0	8151.5	0.4189	0.0509
C3	0.0755	10022	2.95	3397.3	8151.5	0.4168	0.0755
C3	0.0954	10016	3.03	3305.6	8151.5	0.4055	0.0954
C3	0.1569	9999	3.13	3194.6	8151.5	0.3919	0.1569
C3	0.2051	10034	3.2	3135.6	8151.5	0.3847	0.2051
C3	0.255	10033	3.31	3031.1	8151.5	0.3718	0.255
C4	0	10003	2.78	3598.2	8151.5	0.4414	0
C4	0.0021	10047	2.71	3707.4	8151.5	0.4548	0.0021
C4	0.0041	10038	2.75	3650.2	8151.5	0.4478	0.0041
C4	0.0108	10028	2.77	3620.2	8151.5	0.4441	0.0108
C4	0.0152	10012	2.79	3588.5	8151.5	0.4402	0.0152
C4	0.0247	10011	2.85	3512.6	8151.5	0.4309	0.0247
C4	0.0416	10013	2.85	3513.3	8151.5	0.4310	0.0416
C4	0.0509	10021	2.85	3516.1	8151.5	0.4313	0.0509
C4	0.0755	10037	2.95	3402.4	8151.5	0.4174	0.0755
C4	0.0954	10015	2.95	3394.9	8151.5	0.4165	0.0954
C4	0.1569	10021	3.13	3201.6	8151.5	0.3928	0.1569
C4	0.2051	10032	3.12	3215.4	8151.5	0.3945	0.2051
C4	0.255	10025	3.28	3056.4	8151.5	0.3749	0.255



Unit Type: LB4100/W
Date Performed: 4/9/02 11:15
FileName: ATTEN001
Batch ID: Beta Attenuation

Unit Id: Blue
Application Revision: 2
Application Version: Standard



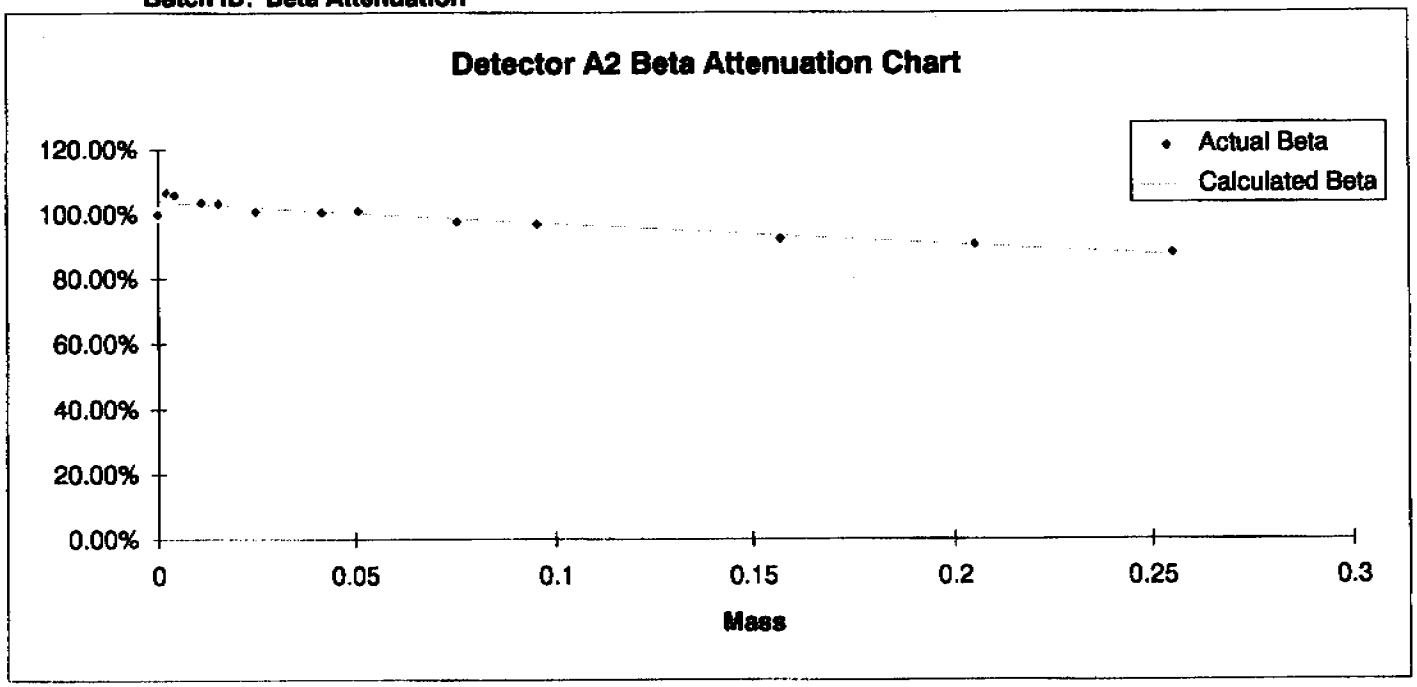
$\beta\ r^2 =$ 0.903898

Archive File

Printed 4/10/2002 9:15 AM

Unit Type: LB4100/W
Date Performed: 4/9/02 11:15
FileName: ATTEN001
Batch ID: Beta Attenuation

Unit Id: Blue
Application Revision: 2
Application Version: Standard



$\beta\ r^2 =$ 0.923569

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Unit Type: LB4100/W
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Batch ID: Beta Attenuation

Unit Id: Blue
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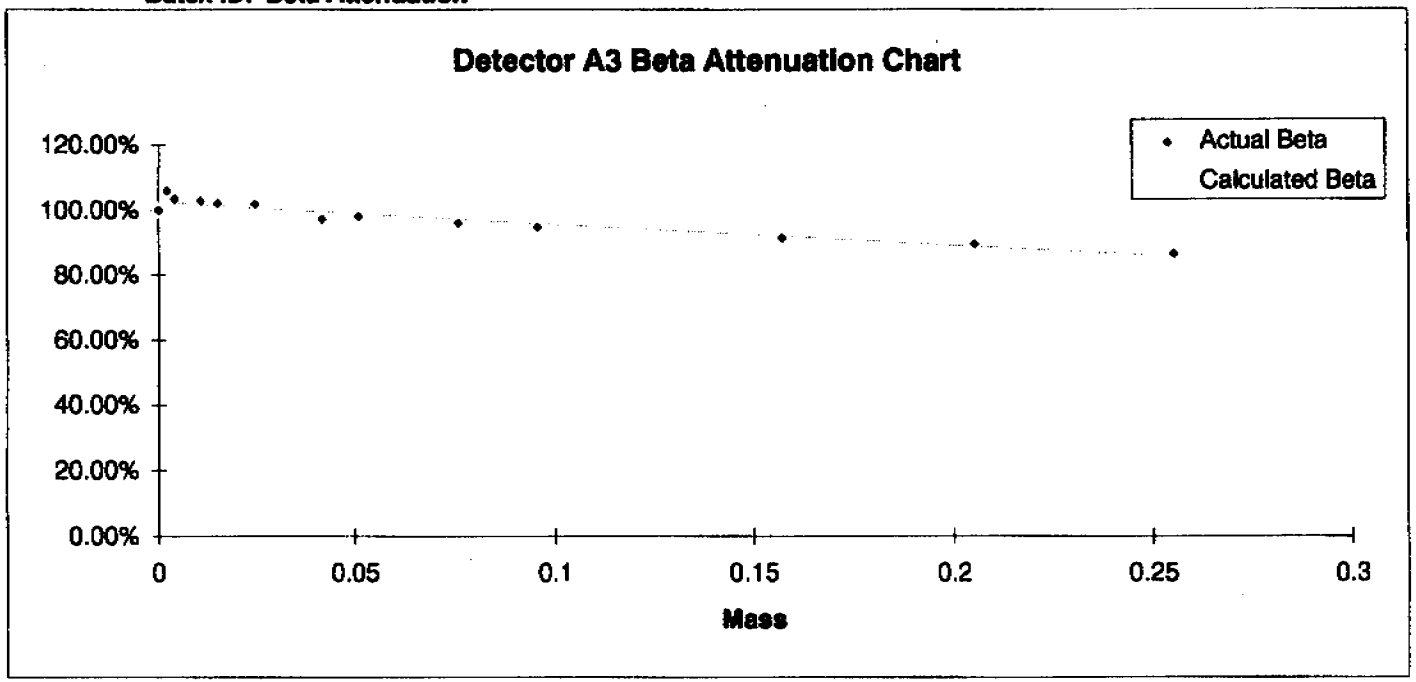
Application Version: Standard



$\beta\ r^2 =$ 0.92731

Archive File

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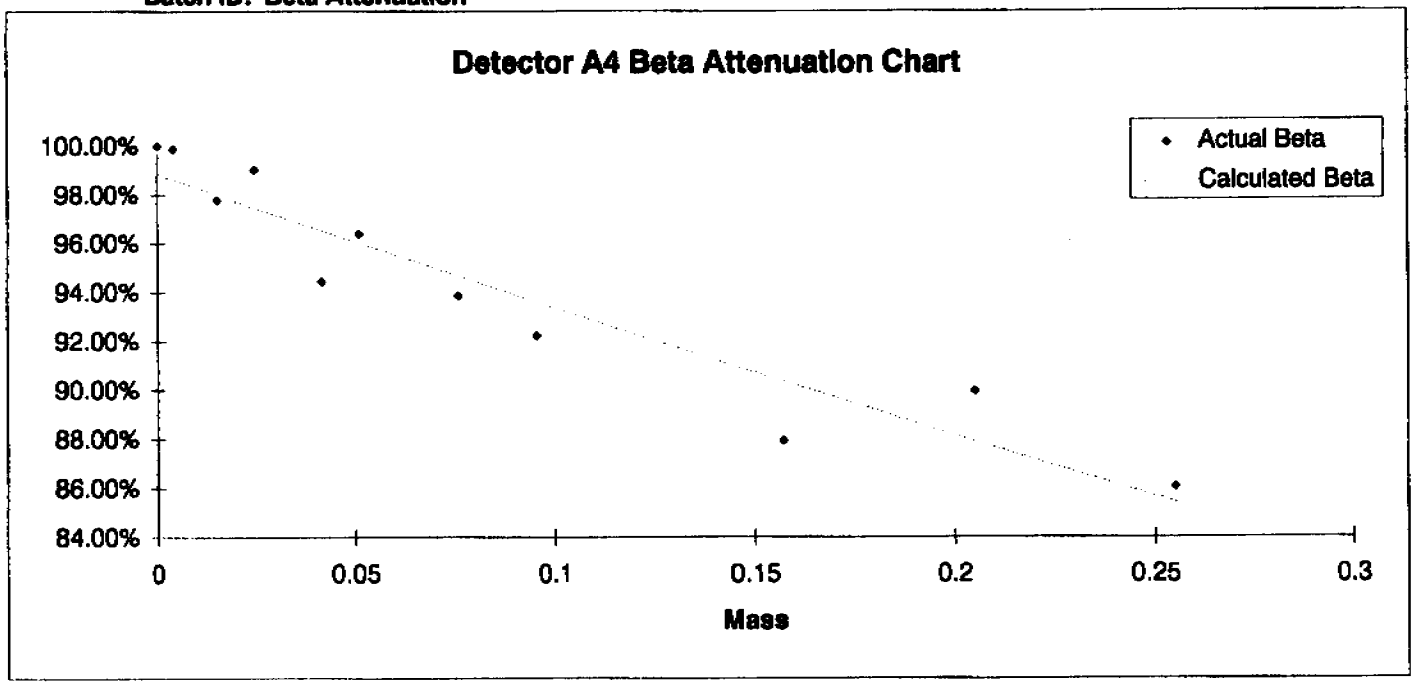
Date Performed: 4/9/02 11:15
FileName: ATTEN001
Batch ID: Beta Attenuation

Unit Id: Blue
Application Revision: 2
Application Version: Standard



$\beta\ r^2 =$ 0.901752

Archive File

Printed 4/10/2002 9:15 AM

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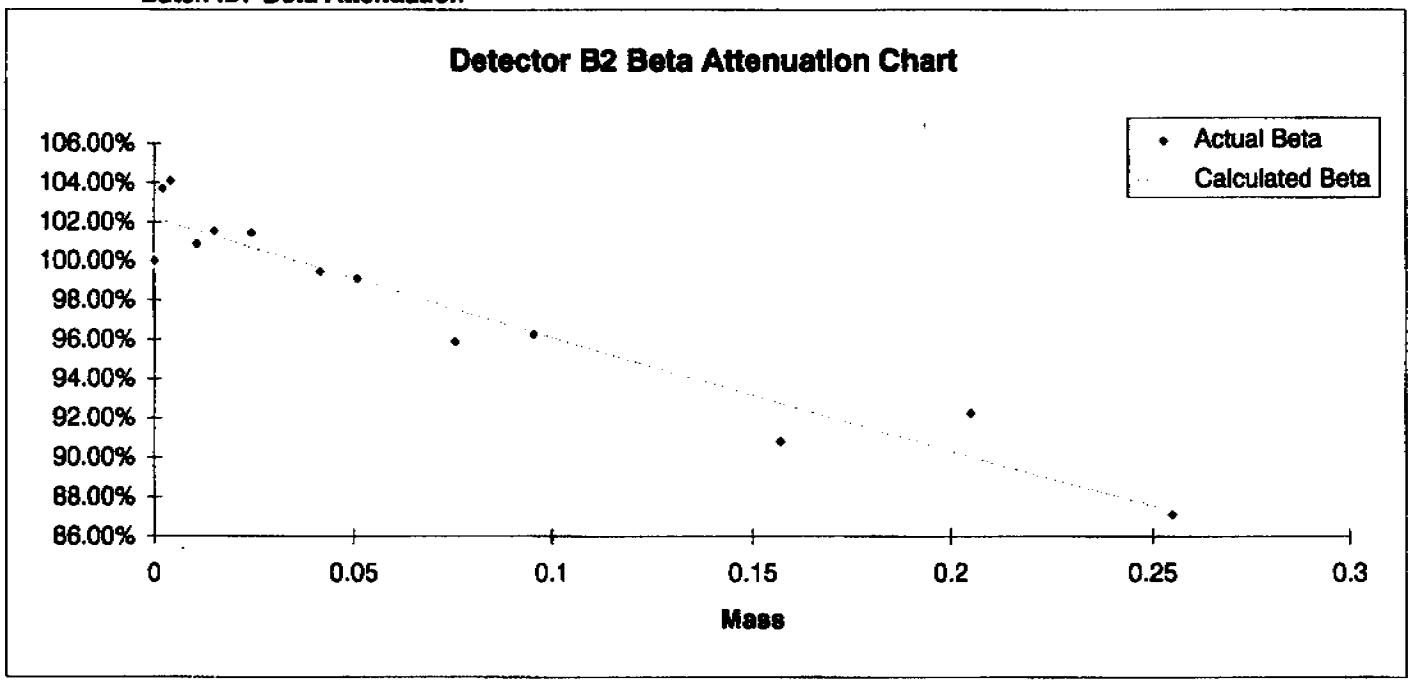
Date Performed: 4/9/02 11:15
FileName: ATTEN001
Batch ID: Beta Attenuation

Unit Id: Blue
Application Revision: 2
Application Version: Standard



$\beta\ r^2 =$ 0.925409

Archive File

Printed 4/10/2002 9:15 AM

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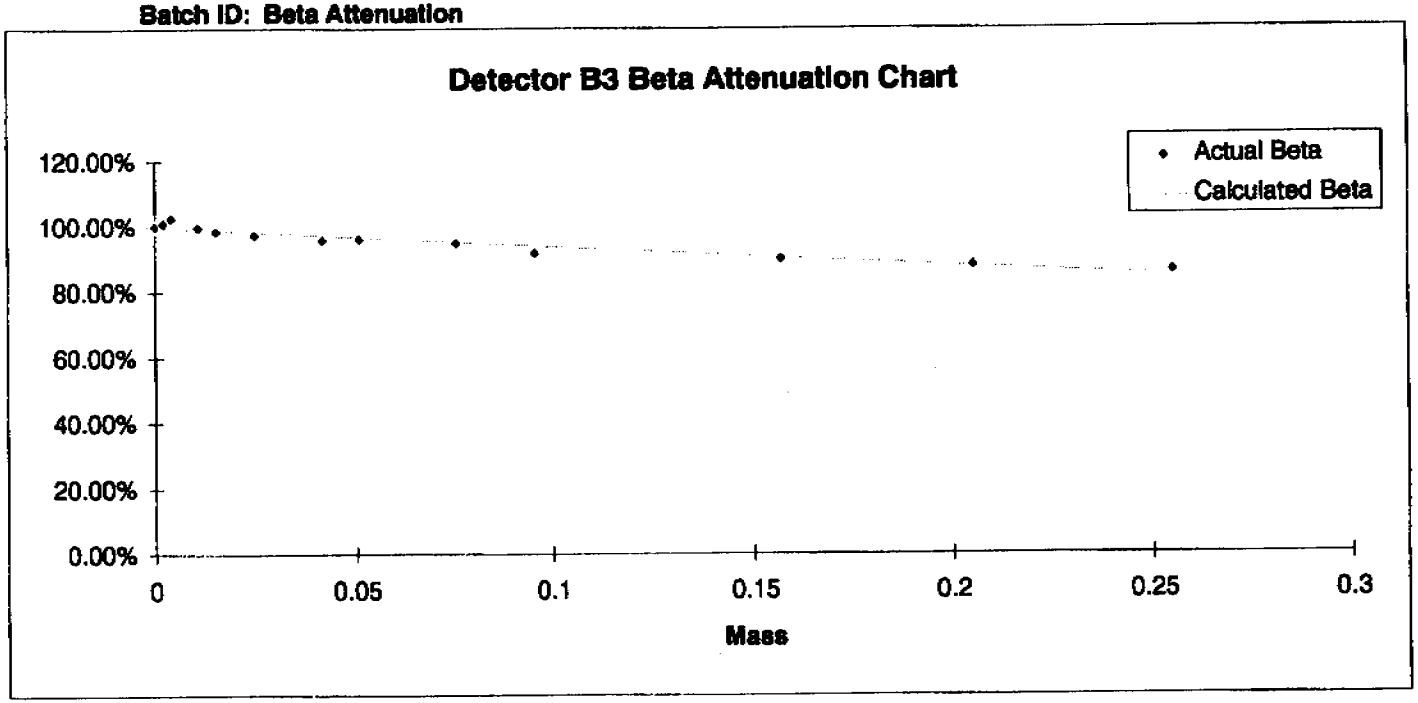
Date Performed: 4/9/02 11:15
FileName: ATTEN001
Batch ID: Beta Attenuation

Unit Id: Blue
Application Revision: 2
Application Version: Standard



$\beta\ r^2 =$ 0.937168

Archive File

Printed 4/10/2002 9:15 AM

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FileName: ATTEN001
Batch ID: Beta Attenuation

Unit Id: Blue
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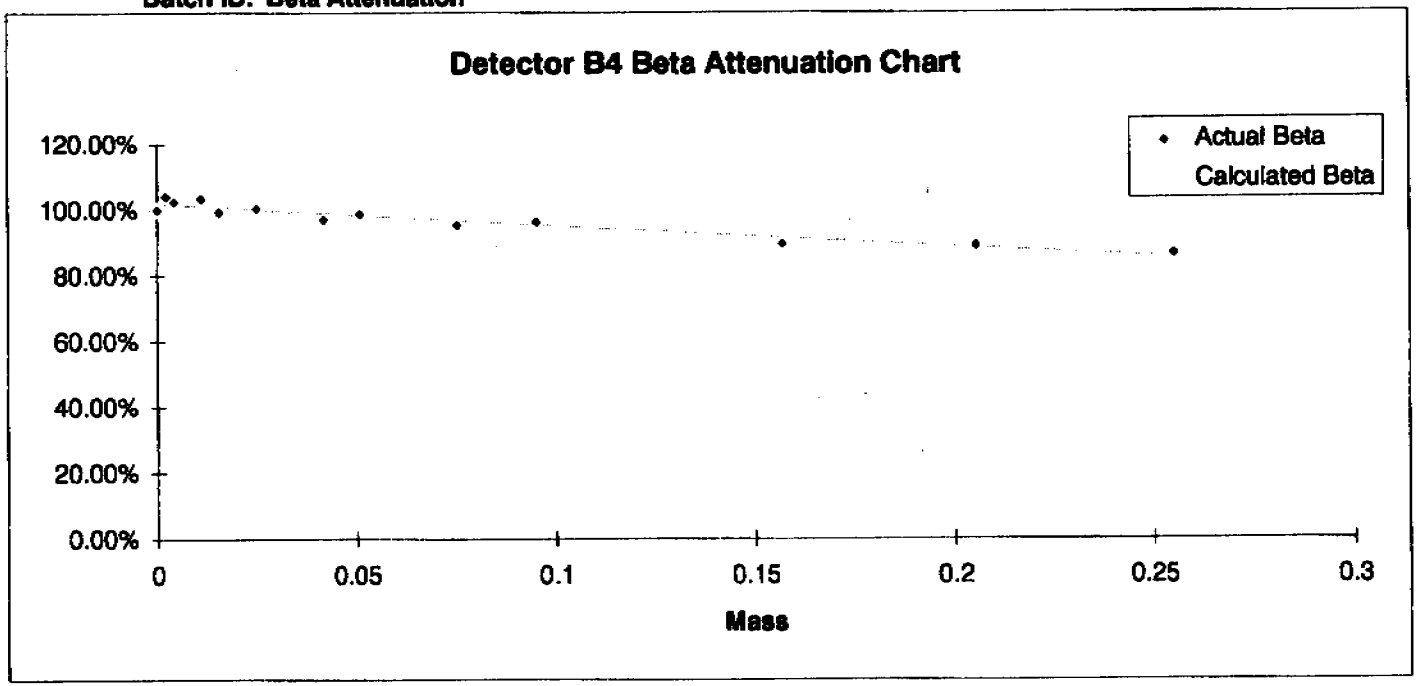
Application Version: Standard



$\beta\ r^2 =$ 0.930399

Archive File

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Date Performed: 4/9/02 11:15
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Batch ID: Beta Attenuation

Unit Id: Blue
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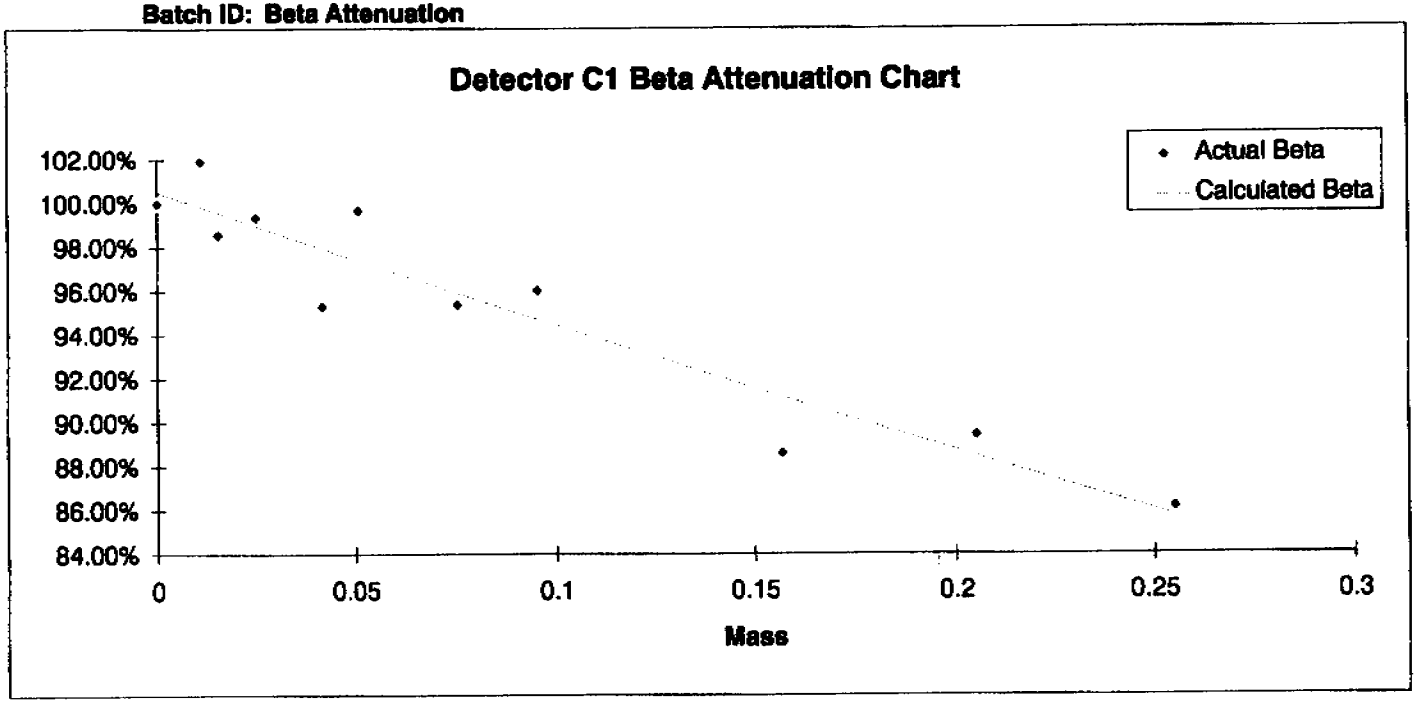
Application Version: Standard



$\beta\ r^2 =$ 0.903696

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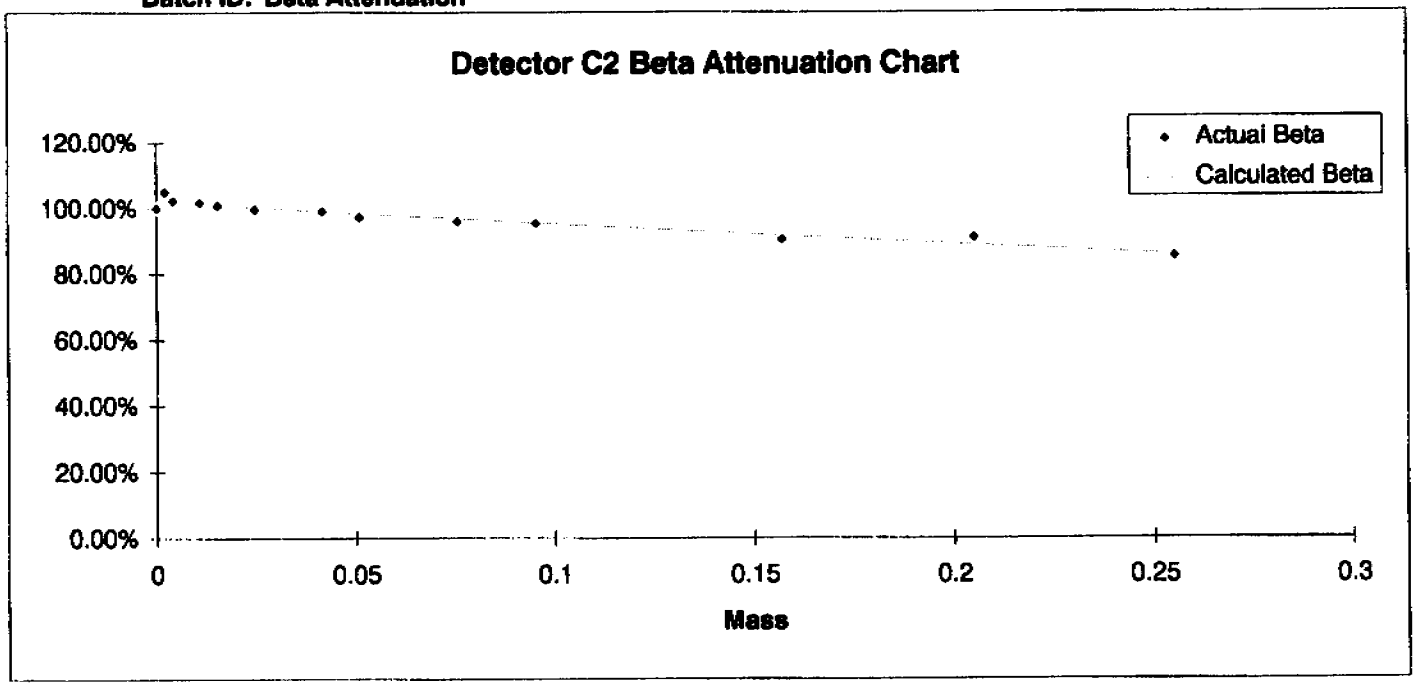
Unit Id: Blue
Application Revision: 2
Application Version: Standard



$\beta\ r^2 =$ 0.939638

Archive File

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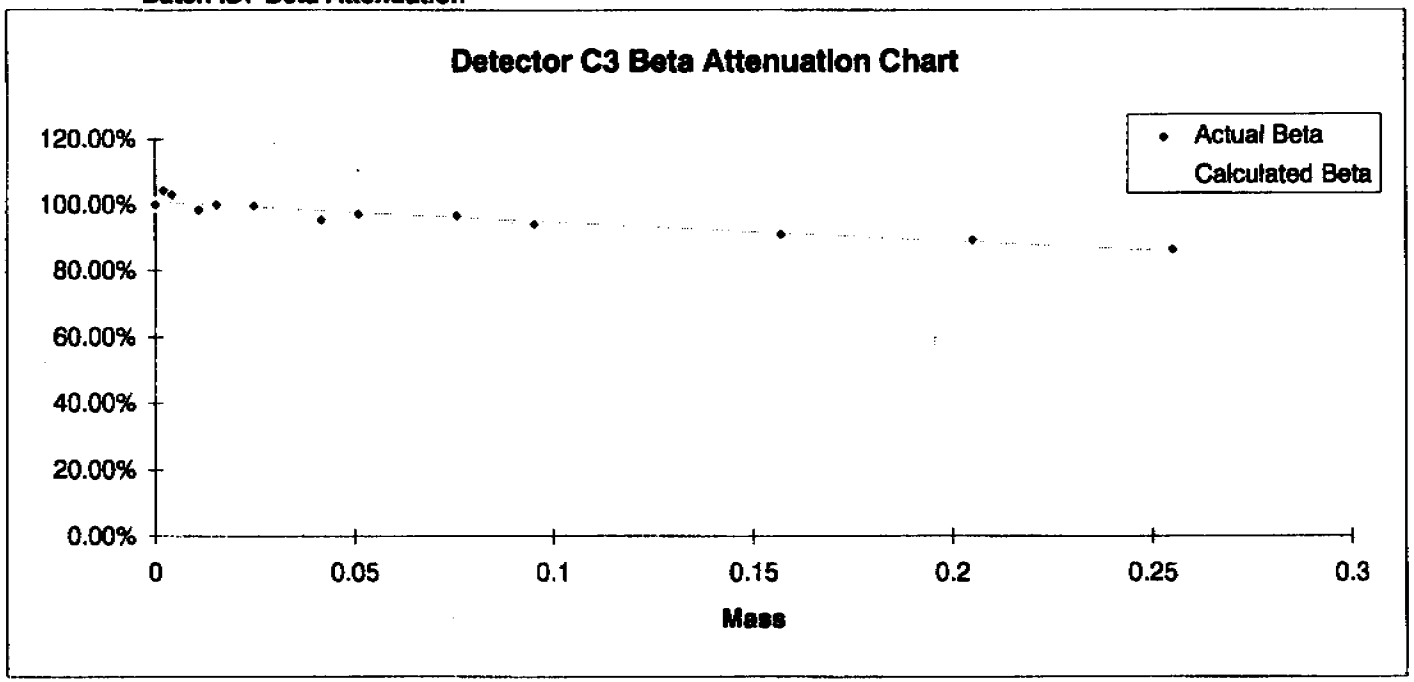
FileName: ATTEN001
Batch ID: Beta Attenuation

Unit Id: Blue
Application Revision: 2
Application Version: Standard



$\beta\ r^2 =$ 0.911309

Archive File

Printed 4/10/2002 9:15 AM

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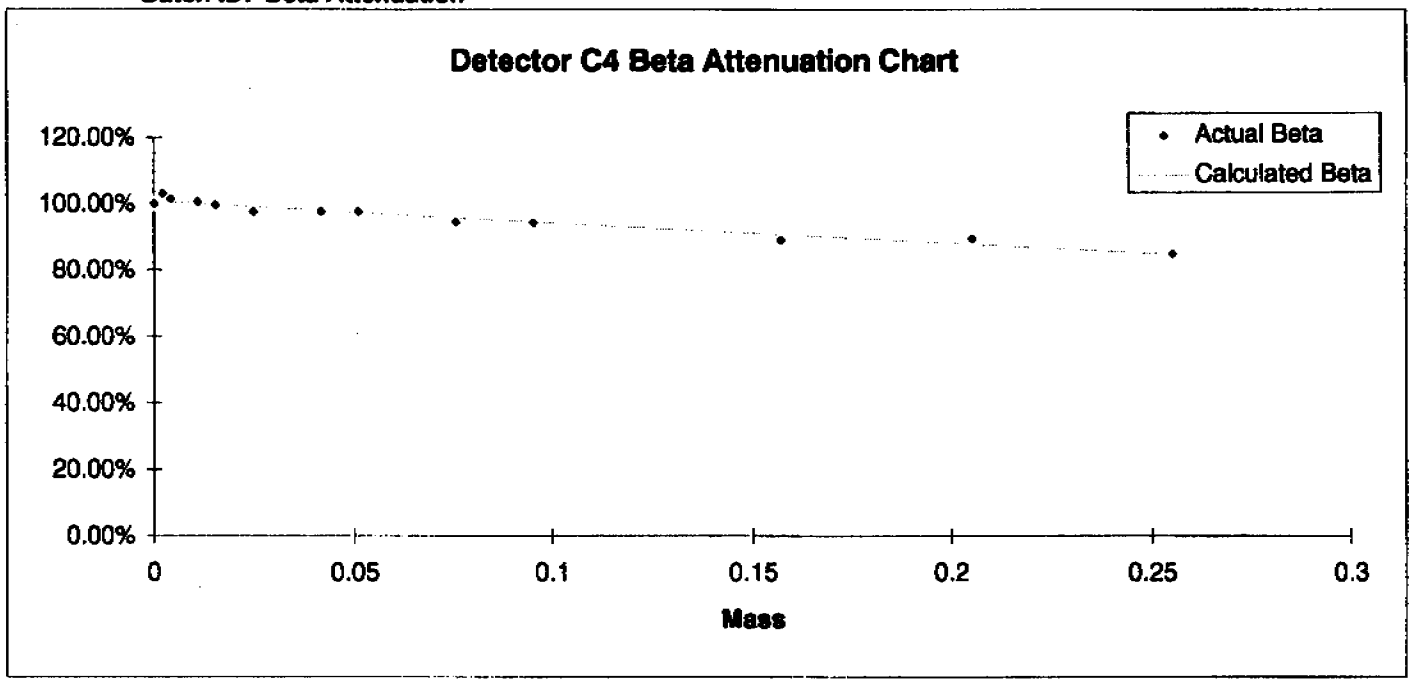
Date Performed: 4/9/02 11:15
FileName: ATTEN001
Batch ID: Beta Attenuation

Unit Id: Blue
Application Revision: 2
Application Version: Standard



$\beta\ r^2 =$ **0.954946**

Archive File

Printed 4/10/2002 9:15 AM

Detector ID	Sample ID	Alpha	Beta	Guard	Count Time	Event	Voltage	TOD
A1	0	10016	3056	5030	8.88	0	1410	37354.5894
A2	0	10009	3084	9382	8.8	0	1410	37354.6224
A3	0	10015	2979	9570	8.83	0	1410	37354.6659
A4	0	10009	2978	29888	8.75	0	1410	37354.6978
B2	0	10005	4157	4679	8.83	0	1410	37354.7458
B3	0	10007	3123	4809	8.87	0	1410	37354.7756
B4	0	10007	3115	4835	9.19	0	1410	37354.8096
C1	0	10012	3052	5114	8.84	0	1440	37354.8533
C2	0	10007	3110	5117	8.73	0	1440	37354.9018
C3	0	10009	3149	5517	9.39	0	1440	37354.9563
C4	0	10010	3030	5365	8.96	0	1440	37354.9957
A1	0.0021	10004	2928	5044	9.62	0	1410	37354.9961
A2	0.0021	10009	2959	5437	9.65	0	1410	37354.5899
A3	0.0021	10021	2890	10408	9.69	0	1410	37354.623
A4	0.0021	10001	2901	10667	9.79	0	1410	37354.6666
B2	0.0021	10001	4353	5184	9.71	0	1410	37354.6984
B3	0.0021	10014	2962	5310	9.9	0	1410	37354.7466
B4	0.0021	10016	3100	5411	9.92	0	1410	37354.7764
C1	0.0021	10006	3176	5740	9.82	0	1440	37354.8101
C2	0.0021	10000	2989	5616	9.71	0	1440	37354.854
C3	0.0021	10007	3122	5944	10.17	0	1440	37354.9028
C4	0.0021	10016	2771	5565	9.49	0	1440	37354.9564
A1	0.0041	10010	2976	4879	9.4	0	1410	37354.9563
A2	0.0041	10006	2960	4970	9.49	0	1410	37354.9961
A3	0.0041	10015	2938	5329	9.45	0	1410	37354.5898
A4	0.0041	10015	2754	10079	9.38	0	1410	37354.6228
B2	0.0041	10017	2926	5083	9.4	0	1410	37354.6663
B3	0.0041	10013	2942	5189	9.72	0	1410	37354.6984
B4	0.0041	10010	3039	5099	9.57	0	1410	37354.7463
C1	0.0041	10002	2970	5604	9.43	0	1440	37354.776
C2	0.0041	10005	3057	5454	9.35	0	1440	37354.8097
C3	0.0041	10010	2995	5606	9.7	0	1440	37354.854
C4	0.0041	10001	2799	5371	9.19	0	1440	37354.9021
A1	0.0096	10007	3020	12381	10.96	0	1410	37354.9034
A2	0.0096	10006	2986	5607	10.8	0	1410	37354.9573

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Detector ID	Sample ID	Alpha	Beta	Guard	Count Time	Event	Voltage	TOD
A3	0.0096	10000	2888	5651	10.81	0	1410	37354.997
A4	0.0096	10009	2757	6070	10.8	0	1410	37354.5907
B2	0.0096	10001	2983	5812	10.77	0	1410	37354.6238
B3	0.0096	10005	2829	5844	10.83	0	1410	37354.6673
B4	0.0096	10003	2974	5860	11.03	0	1410	37354.6993
C1	0.0096	10004	3141	6285	10.8	0	1440	37354.7472
C2	0.0096	10005	2922	6320	10.63	0	1440	37354.7768
C3	0.0096	10007	2955	6470	11.07	0	1440	37354.8109
C4	0.0096	10009	2682	6029	10.5	0	1440	37354.8545
A1	0.0149	10004	3046	53515	12.09	0	1410	37354.8558
A2	0.0149	10013	3019	13687	11.97	0	1410	37354.9041
A3	0.0149	10007	2988	6313	12.15	0	1410	37354.9582
A4	0.0149	10005	2913	6262	12.01	0	1410	37354.9978
B2	0.0149	10003	3059	6253	11.64	0	1410	37354.5913
B3	0.0149	10004	2873	6585	12.18	0	1410	37354.6248
B4	0.0149	10007	3015	6698	12.4	0	1410	37354.6684
C1	0.0149	10005	3055	6989	12.13	0	1440	37354.7001
C2	0.0149	10002	2939	6887	11.8	0	1440	37354.7479
C3	0.0149	10002	3035	7361	12.41	0	1440	37354.7781
C4	0.0149	10001	2794	6948	11.88	0	1440	37354.8115
A1	0.0239	10007	3121	7194	13.83	0	1410	37354.8129
A2	0.0239	10008	3249	61102	13.86	0	1410	37354.8571
A3	0.0239	10003	3204	16049	13.77	0	1410	37354.9053
A4	0.0239	10003	2951	7028	13.61	0	1410	37354.9593
B2	0.0239	10003	3105	7331	13.72	0	1410	37354.999
B3	0.0239	10010	3180	7737	14.35	0	1410	37354.5932
B4	0.0239	10002	3288	7867	14.62	0	1410	37354.6265
C1	0.0239	10002	3195	8114	13.75	0	1440	37354.6693
C2	0.0239	10003	3205	7877	13.68	0	1440	37354.7012
C3	0.0239	9999	3447	8540	14.64	0	1440	37354.7498
C4	0.0239	10008	3062	8170	13.78	0	1440	37354.779
A1	0.0411	10007	3211	68952	18.08	0	1410	37354.7823
A2	0.0411	10005	3321	9481	18.1	0	1410	37354.8158
A3	0.0411	10003	3225	77075	17.79	0	1410	37354.8599
A4	0.0411	10005	3053	21566	17.96	0	1410	37354.9083
B2	0.0411	10002	3248	9555	18.04	0	1410	37354.9623
B3	0.0411	10004	3238	9999	18.81	0	1410	37355.0026

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Detector ID	Sample ID	Alpha	Beta	Guard	Count Time	Event	Voltage	TOD
B4	0.0411	10003	3328	9946	18.53	0	1410	37354.5961
C1	0.0411	10004	3197	10481	17.93	0	1440	37354.6288
C2	0.0411	10006	3179	10273	17.56	0	1440	37354.6719
C3	0.0411	10002	3363	10945	18.94	0	1440	37354.7048
C4	0.0411	10002	3075	10306	17.62	0	1440	37354.7519
A1	0.0488	10007	3313	9819	18.64	0	1410	37354.7526
A2	0.0488	10002	3268	70428	18.5	0	1410	37354.7826
A3	0.0488	10003	3309	9822	18.74	0	1410	37354.8163
A4	0.0488	9999	3072	79120	18.32	0	1410	37354.8603
B2	0.0488	10000	6474	9767	18.37	0	1410	37354.9085
B3	0.0488	10004	3105	9732	18.39	0	1410	37354.9626
B4	0.0488	10000	3231	10121	19.09	0	1410	37355.0028
C1	0.0488	10005	3451	10851	18.72	0	1440	37354.5963
C2	0.0488	10005	3183	10552	18.05	0	1440	37354.6288
C3	0.0488	10001	3399	11381	19.51	0	1440	37354.6733
C4	0.0488	10007	3051	10328	17.93	0	1440	37354.7041
A1	0.0762	10005	3553	63231	23.83	0	1410	37354.7085
A2	0.0762	10002	3400	12109	23.05	0	1410	37354.7557
A3	0.0762	10003	3388	78975	23.54	0	1410	37354.7861
A4	0.0762	10002	3202	12335	23.57	0	1410	37354.8196
B2	0.0762	10002	9192	12270	23.45	0	1410	37354.8635
B3	0.0762	10002	3403	12896	24.34	0	1410	37354.9127
B4	0.0762	10001	3736	13205	24.84	0	1410	37354.9671
C1	0.0762	10000	3468	14045	23.97	0	1440	37355.0062
C2	0.0762	10003	3299	13131	22.59	0	1440	37354.599
C3	0.0762	10000	3777	14928	25.63	0	1440	37354.6341
C4	0.0762	10004	3279	13464	23.1	0	1440	37354.6758
A1	0.0988	10003	3609	32235	28.52	0	1410	37354.6797
A2	0.0988	10002	3593	73110	27.51	0	1410	37354.7111
A3	0.0988	9999	3510	14502	27.67	0	1410	37354.7589
A4	0.0988	9999	3364	89787	27.52	0	1410	37354.7889
B2	0.0988	10000	9394	14610	27.46	0	1410	37354.8224
B3	0.0988	10001	3592	15066	28.85	0	1410	37354.8673
B4	0.0988	10002	3679	15206	28.68	0	1410	37354.9157
C1	0.0988	10002	3800	16407	28.15	0	1440	37354.9694
C2	0.0988	10000	3814	16246	27.71	0	1440	37355.0088
C3	0.0988	10002	3624	17167	29.32	0	1440	37354.6036
C4	0.0988	10001	3435	16029	27.58	0	1440	37354.6355

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Detector ID	Sample ID	Alpha	Beta	Guard	Count Time	Event	Voltage	TOD
A1	0.1514	10003	3815	36336	38.36	0	1410	37354.6431
A2	0.1514	10000	3660	40932	36.6	0	1410	37354.6853
A3	0.1514	9999	3803	98387	37.6	0	1410	37354.7182
A4	0.1514	9999	3564	19337	37.1	0	1410	37354.7655
B2	0.1514	9999	6622	19770	36.91	0	1410	37354.7952
B3	0.1514	10000	3840	20823	39.21	0	1410	37354.8305
B4	0.1514	10005	3995	20419	38.8	0	1410	37354.8742
C1	0.1514	9999	4101	22082	37.98	0	1440	37354.9221
C2	0.1514	9999	3792	21090	36.35	0	1440	37354.9751
C3	0.1514	9999	4145	23900	41	0	1440	37355.018
C4	0.1514	10000	3531	21282	36.21	0	1440	37354.6084

Detector ID	Sample ID	Alpha	Beta	Guard	Count Time	Event	Voltage	TOD
A1	0	7	10011	2328	2.85	0	1410	37355.4694
A1	0.0108	6	10013	1412	2.75	0	1410	37355.7369
A1	0.0152	8	10067	1464	2.78	0	1410	37355.7263
A1	0.0247	11	10034	1444	2.86	0	1410	37355.7113
A1	0.0416	7	10011	1410	2.9	0	1410	37355.6835
A1	0.0509	6	10001	1762	2.92	0	1410	37355.6184
A1	0.0755	7	10039	1483	3	0	1410	37355.5732
A1	0.0954	2	10017	1517	2.93	0	1410	37355.5444
A1	0.1569	8	10027	1637	3.14	0	1410	37355.5344
A1	0.2051	8	10047	1910	3.2	0	1410	37355.4945
A1	0.255	12	10016	4385	3.22	0	1410	37355.4843
A2	0	6	10025	3869	2.88	0	1410	37355.4841
A2	0.0021	7	10063	2205	2.71	0	1410	37355.4693
A2	0.0041	9	10066	1412	2.73	0	1410	37355.7657
A2	0.0108	8	10035	1365	2.78	0	1410	37355.7471
A2	0.0152	7	10029	1434	2.79	0	1410	37355.737
A2	0.0247	8	10075	1518	2.87	0	1410	37355.7263
A2	0.0416	8	10016	1447	2.86	0	1410	37355.7113
A2	0.0509	4	10022	1384	2.85	0	1410	37355.6835
A2	0.0755	14	10032	1778	2.95	0	1410	37355.6185
A2	0.0954	7	10015	1469	2.97	0	1410	37355.5732
A2	0.1569	7	10001	1605	3.11	0	1410	37355.5445
A2	0.2051	11	10019	1663	3.18	0	1410	37355.5344
A2	0.255	3	10002	1939	3.27	0	1410	37355.4945
A3	0	9	10056	1711	2.84	0	1410	37355.4942
A3	0.0021	8	10057	3486	2.68	0	1410	37355.4839
A3	0.0041	6	10037	2239	2.74	0	1410	37355.4693
A3	0.0108	4	10060	1427	2.76	0	1410	37355.7657
A3	0.0152	9	10054	1366	2.78	0	1410	37355.7471
A3	0.0247	15	10033	1426	2.78	0	1410	37355.737
A3	0.0416	5	10031	1534	2.91	0	1410	37355.7264
A3	0.0509	5	10042	1470	2.89	0	1410	37355.7113
A3	0.0755	5	10029	1439	2.95	0	1410	37355.6836
A3	0.0954	8	10041	1802	2.99	0	1410	37355.6185
A3	0.1569	4	10024	1540	3.1	0	1410	37355.5733

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Detector ID	Sample ID	Alpha	Beta	Guard	Count Time	Event	Voltage	TOD
A3	0.2051	8	10010	1634	3.16	0	1410	37355.5446
A3	0.255	0	10014	1701	3.27	0	1410	37355.5345
A4	0	11	10031	1459	2.77	0	1410	37355.5341
A4	0.0041	8	10018	3665	2.77	0	1410	37355.484
A4	0.0152	9	10022	1468	2.83	0	1410	37355.7657
A4	0.0247	7	10041	1381	2.8	0	1410	37355.7471
A4	0.0416	10	10022	1493	2.93	0	1410	37355.7371
A4	0.0509	6	10019	1517	2.87	0	1410	37355.7264
A4	0.0755	6	10028	1504	2.95	0	1410	37355.7113
A4	0.0954	4	10020	1465	3	0	1410	37355.6836
A4	0.1569	6	10030	1894	3.15	0	1410	37355.6186
A4	0.2051	5	10031	1528	3.08	0	1410	37355.5733
A4	0.255	5	10004	1661	3.21	0	1410	37355.5446
B2	0	2	10017	1521	2.84	0	1410	37355.5444
B2	0.0021	8	10059	1471	2.75	0	1410	37355.5341
B2	0.0041	7	10060	1448	2.74	0	1410	37355.4942
B2	0.0108	8	10032	1432	2.82	0	1410	37355.484
B2	0.0152	10	10025	1408	2.8	0	1410	37355.4694
B2	0.0247	7	10016	1460	2.8	0	1410	37355.7657
B2	0.0416	7	10031	1427	2.86	0	1410	37355.7472
B2	0.0509	5	10030	1520	2.87	0	1410	37355.737
B2	0.0755	9	10011	1572	2.96	0	1410	37355.7264
B2	0.0954	8	10050	1499	2.96	0	1410	37355.7113
B2	0.1569	10	10025	1622	3.13	0	1410	37355.6837
B2	0.2051	7	10020	1576	3.08	0	1410	37355.6186
B2	0.255	3	10014	1662	3.26	0	1410	37355.5734
B3	0	13	10029	1429	2.82	0	1410	37355.5731
B3	0.0021	5	10057	1507	2.8	0	1410	37355.5444
B3	0.0041	4	10029	1470	2.75	0	1410	37355.5341
B3	0.0108	7	10032	1488	2.83	0	1410	37355.4942
B3	0.0152	7	10050	1459	2.87	0	1410	37355.4841
B3	0.0247	8	10004	1442	2.89	0	1410	37355.4694
B3	0.0416	8	10008	1525	2.94	0	1410	37355.7658
B3	0.0509	9	10003	1469	2.93	0	1410	37355.7472
B3	0.0755	9	10035	1576	2.98	0	1410	37355.7371
B3	0.0954	6	10023	1632	3.08	0	1410	37355.7265
B3	0.1569	2	10023	1582	3.14	0	1410	37355.7115

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Detector ID	Sample ID	Alpha	Beta	Guard	Count Time	Event	Voltage	TOD
B3	0.2051	7	10013	1662	3.21	0	1410	37355.6838
B3	0.255	8	10023	1693	3.28	0	1410	37355.6187
B4	0	5	10055	1471	2.87	0	1410	37355.6184
B4	0.0021	7	10026	1405	2.75	0	1410	37355.5731
B4	0.0041	4	10058	1508	2.8	0	1410	37355.5444
B4	0.0108	3	10040	1484	2.77	0	1410	37355.5341
B4	0.0152	6	10026	1516	2.88	0	1410	37355.4943
B4	0.0247	8	10034	1448	2.85	0	1410	37355.4841
B4	0.0416	7	10035	1465	2.95	0	1410	37355.4695
B4	0.0509	11	10003	1501	2.89	0	1410	37355.7658
B4	0.0755	6	10023	1504	3	0	1410	37355.7473
B4	0.0954	4	10037	1573	2.98	0	1410	37355.7371
B4	0.1569	5	10032	1689	3.2	0	1410	37355.7266
B4	0.2051	5	10025	1625	3.22	0	1410	37355.7115
B4	0.255	3	10004	1705	3.3	0	1410	37355.6838
C1	0	10	10009	1587	2.79	0	1440	37355.6835
C1	0.0108	7	10053	1610	2.75	0	1440	37355.5443
C1	0.0152	6	10041	1641	2.84	0	1440	37355.5342
C1	0.0247	4	10015	1623	2.81	0	1440	37355.4942
C1	0.0416	6	10017	1634	2.93	0	1440	37355.4841
C1	0.0509	9	10010	1580	2.8	0	1440	37355.4694
C1	0.0755	3	10025	1666	2.93	0	1440	37355.7658
C1	0.0954	3	10025	1580	2.91	0	1440	37355.7472
C1	0.1569	6	10010	1852	3.15	0	1440	37355.7372
C1	0.2051	8	10040	1830	3.13	0	1440	37355.7265
C1	0.255	7	10011	1862	3.24	0	1440	37355.7115
C2	0	4	10060	1601	2.77	0	1440	37355.7112
C2	0.0021	3	10026	1494	2.63	0	1440	37355.6834
C2	0.0041	9	10033	1569	2.7	0	1440	37355.6183
C2	0.0108	12	10014	1517	2.71	0	1440	37355.573
C2	0.0152	16	10032	1602	2.74	0	1440	37355.5443
C2	0.0247	16	10017	1607	2.77	0	1440	37355.5341
C2	0.0416	7	10040	1600	2.79	0	1440	37355.4942
C2	0.0509	11	10031	1588	2.84	0	1440	37355.484
C2	0.0755	4	10034	1617	2.88	0	1440	37355.4694
C2	0.0954	16	10047	1647	2.9	0	1440	37355.7658
C2	0.1569	8	10032	1666	3.06	0	1440	37355.7473
C2	0.2051	3	10030	1791	3.04	0	1440	37355.7372

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Detector ID	Sample ID	Alpha	Beta	Guard	Count Time	Event	Voltage	TOD
C2	0.255	11	10010	1882	3.24	0	1440	37355.7266
C3	0	6	10048	1663	2.86	0	1440	37355.7263
C3	0.0021	5	10038	1578	2.74	0	1440	37355.7112
C3	0.0041	8	10035	1573	2.77	0	1440	37355.6834
C3	0.0108	7	10024	1669	2.9	0	1440	37355.6184
C3	0.0152	7	10014	1604	2.85	0	1440	37355.5731
C3	0.0247	2	10016	1664	2.86	0	1440	37355.5444
C3	0.0416	10	10022	1723	2.99	0	1440	37355.5343
C3	0.0509	3	10040	1679	2.94	0	1440	37355.4943
C3	0.0755	4	10022	1652	2.95	0	1440	37355.4841
C3	0.0954	7	10016	1698	3.03	0	1440	37355.4695
C3	0.1569	3	9999	1797	3.13	0	1440	37355.7659
C3	0.2051	5	10034	1745	3.2	0	1440	37355.7474
C3	0.255	7	10033	1942	3.31	0	1440	37355.7373
C4	0	10	10003	1637	2.78	0	1440	37355.737
C4	0.0021	5	10047	1592	2.71	0	1440	37355.7262
C4	0.0041	11	10038	1585	2.75	0	1440	37355.7112
C4	0.0108	5	10028	1574	2.77	0	1440	37355.6835
C4	0.0152	3	10012	1611	2.79	0	1440	37355.6184
C4	0.0247	7	10011	1605	2.85	0	1440	37355.5731
C4	0.0416	4	10013	1654	2.85	0	1440	37355.5444
C4	0.0509	6	10021	1654	2.85	0	1440	37355.5342
C4	0.0755	5	10037	1685	2.95	0	1440	37355.4943
C4	0.0954	5	10015	1651	2.95	0	1440	37355.4841
C4	0.1569	5	10021	1752	3.13	0	1440	37355.4696
C4	0.2051	7	10032	1788	3.12	0	1440	37355.7659
C4	0.255	3	10025	1782	3.28	0	1440	37355.7475

SEVERN TRENT SERVICES

Efficiency/Attenuation Calibration Standards

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Radiochemistry Prep Report

General Prep Information

Analysis	Batch	Method Description	Analyst
ABT	56	GROSS A/B BY DOE RP-710 MOD	

Weights

Lot ID	Aliquot	Gross	Tare	Mass	Gross	Tare	Mass
Alpha-001C		8.2087	8.2087	0.0000			
Alpha-002		8.2473	8.2452	0.0021			
Alpha-003		8.2389	8.2348	0.0041			
Alpha-004		8.1666	8.1570	0.0096			
Alpha-005		8.2600	8.2451	0.0149			
Alpha-006		8.2475	8.2236	0.0239			
Alpha-007		8.2855	8.2444	0.0411			
Alpha-008		8.2883	8.2395	0.0488			
Alpha-009		8.2877	8.2115	0.0762			
Alpha-010		8.3087	8.2099	0.0988			
Alpha-011		8.3921	8.2407	0.1514			
Beta-001C					8.2399	8.2399	0.0000
Beta-002					8.2086	8.2065	0.0021
Beta-003					8.2472	8.2431	0.0041
Beta-004					8.2471	8.2363	0.0108
Beta-005					8.2329	8.2177	0.0152
Beta-006					8.2501	8.2254	0.0247
Beta-007					8.2217	8.1801	0.0416
Beta-008					8.2674	8.2165	0.0509
Beta-009					8.3346	8.2591	0.0755
Beta-010					8.3068	8.2114	0.0954
Beta-011					8.3855	8.2286	0.1569
Beta-012					8.4741	8.2690	0.2051
Beta-013					8.4716	8.2166	0.2550

Spike Information

Isotope	Lot ID	No	QCCode	Std. No.	Volume	Ref. Date	Activity	Units
Th-230	Alpha	1	C	01050	1.0000	07/18/2001	4452	dpm/mL
Sr-90/Y-90	Beta	1	C	01051	1.0000	07/18/2001	8299.8	dpm/mL

Analyst's Signature Date 9-27-01 Reviewed By Date 9-27-01

Thursday, September 13, 2001 5:25:37 PM Page 1 of 1 RadCapture, Version 2.0, 03/16/2001

Atlanta, Georgia 30318 - U.S.A.

Phone (404) 352-8677
Fax (404) 352-2837

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

56869-334

Sr-90 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared using an aliquot measured gravimetrically from a master radionuclide solution standard. The master radionuclide solution standard was calibrated by the Department Des Applications Et De La Metrologie Des Rayonnements Ionisants (DAMRI), Paris, France, as Number 25931.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

Radionuclide purity and calibration were checked by germanium gamma-ray spectrometry and liquid scintillation counting. The nuclear decay rate and assay date for this source are given below.

ISOTOPE:	Sr-90
ACTIVITY (dps):	7.513 E+05
CALIBRATION DATE:	December 3, 1998 12:00 EST
HALF-LIFE:	28.74 years
PERCENT UNCERTAINTY:	5.0

5.10743 grams of solution 30 ppm Sr carrier in 0.1M HCl.

P O NUMBER 612904-000 OP, Item 2

PREPARED BY: M. D. Carrie

M. D. Carrie, Radiochemist

Q A APPROVED: 12-7-1

LOT# F5D220356

Sr^{90}

.9

99-078

prep date 10-14-99

ID # 56869-334

20.305 µCi in 5.10743 g

$\frac{5.10743\ g}{50\ ml\ in\ HNO_3} = 884.661\ dpm/ml$

ANALYTICS
1380 Seaboard Ind. Blvd. · Atlanta, GA 30318 · U.S.A. (404) 352-8677
Type 90Sr-90
SRS # 56869-334 Date 12/3/98 12:00 EST
Amount 20.305 µCi Exp. QA
PO# 612904-000 OP, Item 2
5.10743 grams solution in HCl
CAUTION: RADIOACTIVE MATERIAL

Quanterra Environmental Services

Standard Preparation Log - Radiochemistry

St. Louis, Missouri

Notebook: 800 Page 31

Date Prepared	Expiration Date	Standard ID Number	Isotope	Parent ID Number	Parent Activity	Parent Ref. Date	Aliquot	Dilution Volume	Change in Time	T 1/2	Final Activity	Solvent/Lot #	Prep'd Initials	Cal. Ver Initials	Comments
07/09/99	07/09/01	98-242-5-5-1	Pu 242	98-242-5-5	121.13 [illegible] 7,777.8 [illegible]	12-18-89	5.8122g	50ml	NA	NA	904.123	1M HNO3 6623 [illegible]	BLG		
07/09/99	07/09/00	99-019	Pu242	98-242-5-5-1	904.123	12-18-89	2.5ml	100ml	NA	NA	22.60 dpm/ml	1M HNO3 6623 [illegible]	BLG		
09/20/99	[illegible]	990660	Th229	NIST SRM [illegible]	[illegible]	06/01/96	5.1733g	100ml	NA	NA	103.58 dpm/g	1M HNO3 6623 [illegible]	BLG		
09/20/99	09/20/00	99-067	Th229	99066	103.58 dpm/g [illegible]	06/01/96	15ml	100ml	NA	NA	15.53 dpm/ml	1M HNO3	BLG		
9-23-99	3/23/00	99-068	Natural Uranium	MS0122-98	1000 µg/ml	12/1/98	1.00ml	1000ml	NA	NA	1.000 µg/ml	0.8M HNO3	JJK		
		99069		99068	1.0002 µg/ml	12/1/98	20ml	100ml			200 mg/ml				
		99070					15ml				150mg/ml				
		99071					10ml				100mg/ml				
		99072					5ml				50mg/ml				
		99073					1ml				10mg/ml				
		99074		99071	100 mg/ml		5ml				5mg/ml				
		99075		99073	10mg/ml		10ml				1mg/ml				
9/28/99	9-28-2001	99076	Natural Uranium	METODIUO -99	1001.2 µg/ml	9-14-99	1.0ml	1L	NA	NA	1.0 µg/ml	[illegible]	JJK/ED		
9/28/99	9-28-2001	99077	Natural Uranium	99076	1µg/ml	9-28-99	20ml	100ml	N/A	NA	200ng/ml		JJK/ED		
10-14-99		99-078	Sr 90	58869-339	28.305 nCi/g	12-3-98	5.0116g	50 [illegible]		28.75 yr	111,161 [illegible]	1M HNO3 6623 [illegible]	BT		
10-14-99		99-079	Th 230	A8438	21.32 nCi/g	3-1-98	4.4413	50ml	N/A	7.54×10⁴ yr	4332.4 [illegible]		BT		
10-14-99		99-080	Sr 90	99-078	111,161 [illegible]	12-3-98 [illegible]	0.5ml	100ml	318 days	28.75yr	4423 [illegible]		BT		
															Entry corrected BT

SEVERN TRENT SERVICES

Logbook: 2060

Radiochemistry
Standards Preparation Logbook

Date Prep'd	Expir. Date	Standard ID Number	Isotope	Parent ID Number	Parent Activity	Parent Ref. Date	Aliquot	Dilution Volume	Change in Time	T ½	Final Activity	Solvent/ Lot #	Prep'd Initials	Cal. Ver. Initials	Comments
5/24/01	7/24/01	01-043	Uranat Cal Std	01-041	100 ug/mL	5/24/01	10 mL	100 mL	NA	NA	10 ug/mL	0.5% HNO3	RSD		
↓	↓	01-044	↓	01-042	50 ug/mL	↓	10 mL	↓	↓	↓	5 ug/mL	↓	↓		
↓	↓	01-045	↓	01-041	100 ug/mL	↓	1 mL	↓	↓	↓	1 ug/mL	↓	↓		
6.6.01	6.6.02	01-046	Th 229	00-015	102.2 dpm/mL	7/96	15 mL 30mL 30DS	100mL 6.6.01 500mL	N/A	N/A	15.33 dpm/mL	1m HNO_3	SDS	BT 6.6.01 calc.	
6.12.01	6.12.02	01-047	Th 229	00-015	102.2 dpm/mL	7/96	8.55 mL	100 mL	N/A	N/A	8.74 dpm/mL	1m HNO_3	SDS	BT 6.12.01 calc.	
6/14/01	6/14/02	Y-30	STD YTTRIUM CARRIER	Yttrium bromide trihydrate	N/A	N/A	8.2g	200mL	N/A	N/A	concentration 18.1 mg/mL	DI H_2O	REW		Reported in Radiochem
6/15/01	9/14/01	01-048	Uranium (Nat)	00063	1 mg/mL	9/14/99	20 mL	100 mL	N/A	N/A	200 ug	0.5% HNO_3	HA	BT 7-3-01 calc.	LCS
7/6/01	7/6/02	01-049	RA-226	01-012	1,048 dpm/mL	2/16/01	2.0 mL	100.0 mL	N/A	N/A	20.36 dpm/mL	0.8 M HNO_3	BMW		
6/10/01	6/10/02	Y-30	3rd Yttrium Carrier	Yttrium Oxalate Hexahydrate	N/A	N/A	8.2g	200 mL	N/A	N/A	25.2 mg/mL	DI H_2O	REW		Returned unused Y30. Rejected until 6/19.
7/17/01	7/17/02	01-050	Th-230	Vial # G1781-314	3,751 dpm/vial	6/21/01	5.1633 g	50.0 mL	N/A	75,380 yrs	4,452 dpm/mL	0.5 M HNO_3	BMW		- Calc. c.v. STD's.
7/18/01	7/18/02	01-051	SR90	99-078	8249.4 dpm/mL	12/31/98	0.5 mL	100 mL	958 days	28.8 years	41.24 dpm/mL	0.5 M HNO_3	BMW	BT 7.22.01 calc.	Decay corrected
7.18.01	7.18.02	01052	Th 229	5340 508	1.633x10^5 dpm/mL	7.18.96	.5 mL	100 mL	N/A	N/A	816.5	N/A	SDS		

Additional Comments:

Decay Correction

Strontium 90							
Initial Activity:	884661.1	dpm	Parent				
Reference Date:	12/3/98						
Current Date:	4/15/02		(or date at which you wish to determine activity)				
Elapsed Time:	1229.000	days					
Half Life:	10409.625	days					
Exponential Term:	0.9214234						
Corrected Activity:	815147.47	dpm	367183.5	pCi	13585.79	Bq	
Activity (Sr/Y-90)	1630294.9	dpm	734367.1	pCi	27171.58	Bq	

0.5 ml → 1000 ml

$$\frac{(815147.47)(0.5\text{ml})}{1000\text{ml}} = 4075.73\ \text{dpm}$$

8151.5 dpm/ml Sr-90/Y90

ST 4-24-02

CERTIFICATE OF CALIBRATION

CAL3000 STANDARDIZED SOLUTION

Radionuclide:	Th-230[1]	**Activity:**	3.944 kBq (106.6 nCi)
Serial Number:	A8438	**Mass of Solution:**	4.9998 grams
Concentration:	788.8 Bq/g (21.32 nCi/g)	**Chemical Form:**	$Th(NO_3)_4$ in 0.1 M HNO_3
Half Life[2]:	$(7.54 \pm 0.03) \times 10^4$ years	**Reference Date:**	1200 PST March 1, 1998

PRINCIPAL EMISSIONS[2]

Type	Energy (keV)	Intensity (%)
alpha	4621.1	23.4
alpha	4687.6	76.3

SOURCE DESCRIPTION

Standardized solution in a flame-seal ampoule.

METHOD OF CALIBRATION

Gravimetric aliquots of a master solution were calibrated by liquid scintillation counting. The efficiency for Th-230 was established through ongoing intercomparisons with the National Institute of Standards and Technology. A gravimetric aliquot of this master solution was dispensed into a flame-seal ampoule. This standard is indirectly (implicitly) traceable to the National Institute of Standards and Technology.

North American Scientific, Inc. actively participates in the Radioactivity Measurements Assurance Program conducted by the National Institute of Standards and Technology in cooperation with the Nuclear Energy Institute.

TOTAL UNCERTAINTY (99% Confidence Level)

Systematic uncertainty	2.15%
Weighing uncertainty	0.07%
Total uncertainty (quadratic sum)	± 2.15%

Jay Fan, Ph.D.
Calibration Laboratory Manager

March 23, 1998
Date

REFERENCES

The solution contained 0.39% Ra-226 as of 28 September 1996.
Table of Radioactive Isotopes, 7th edition, 1986.

• LEAK TEST CERTIFICATION ON REVERSE •

North American Scientific, Inc. 7435 Greenbush Ave., North Hollywood, CA 91605 (818) 503-9201 Fax (818) 503-0764

Th^{230} 11

9907

Prep Date: 10-14-99

I.D. # A8435

North American Scientific

STANDARDIZED SOLUTION

CAUTION RADIOACTIVE MATERIAL

4.9945g

788.8 Bq/g

$\left(\frac{4.8413\text{g}}{50\text{ml}}\right)$ $\frac{47328\ \text{dpm}}{\text{g}}$ = 4582.58 dpm/ml

SEVERN TRENT SERVICES

Efficiency/Attenuation Calibration Verification

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Radiochemistry Prep Report

General Prep Information

Analysis	Batch	Method Description	Analyst
ABT	M02_004	GROSS A/B BY GFPC SW846 9310 MOD	

Weights

			ABT/Alpha Spiked			Beta Spiked		
Lot ID	WorkNo	Aliquot	Gross	Tare	Mass	Gross	Tare	Mass
Alpha_LOW-001		1.000 g	8.2087	8.2087	0.0000			
Alpha_MED-005		1.000 g	8.2600	8.2451	0.0149			
AlphaHIGH-009		1.000 g	8.2877	8.2115	0.0762			
Beta_HIGH-009		1.000 g				8.3346	8.2591	0.0755
Beta_LOW-001		1.000 g				8.2399	8.2399	0.0000
Beta_MED-005		1.000 g				8.2329	8.2177	0.0152

Spike Information

Isotope	Lot ID	No	QCCode	Std. No.	Volume	Ref. Date	Activity	Units

See Calibration standards prep sheet — Analyst's Signature — Date

Reviewed By — 5-14-02 — Date

LOT# F5D220356

STL ST. LOUIS

SEVERN TRENT

Gross Alpha/Beta Analysis Report for Batch # M02_004

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Data Summary

Identification		Measurement		Run Data			Count Data					Results				
Lot Number	Work Order	Aliquot	Mass(g)	Run Date/Time	Instr	Dur		Samp CPM	Bkg CPM	Efficiency	TF	Activity	Units	Error	MDA	DLC
Alpha_LOW-001C		1.0000 sam	0.0000	04/26/02 9:32	Blue A1	8.95	Alpha	1.12E+03	0.038	1.0000	0.2485	2.03E+03	pCi/sam	2.07E+02	1.10E+00	2.75E-01
							Beta						pCi/sam			
Alpha_LOW-001C		1.0000 sam	0.0000	04/26/02 11:54	Blue A2	8.88	Alpha	1.13E+03	0.026	1.0000	0.2492	2.04E+03	pCi/sam	2.08E+02	1.01E+00	2.28E-01
							Beta						pCi/sam			
Alpha_LOW-001C		1.0000 sam	0.0000	04/26/02 10:56	Blue A3	8.87	Alpha	1.13E+03	0.038	1.0000	0.2487	2.04E+03	pCi/sam	2.08E+02	1.10E+00	2.76E-01
							Beta						pCi/sam			
Alpha_LOW-001C		1.0000 sam	0.0000	04/30/02 7:43	Blue A4	8.85	Alpha	1.13E+03	0.048	1.0000	0.2491	2.04E+03	pCi/sam	2.08E+02	1.17E+00	3.10E-01
							Beta						pCi/sam			
Alpha_LOW-001C		1.0000 sam	0.0000	04/26/02 13:54	Blue B2	8.83	Alpha	1.13E+03	0.223	1.0000	0.2494	2.05E+03	pCi/sam	2.09E+02	1.89E+00	6.68E-01
							Beta						pCi/sam			
Alpha_LOW-001C		1.0000 sam	0.0000	04/29/02 11:03	Blue B3	9.13	Alpha	1.10E+03	0.048	1.0000	0.2452	2.01E+03	pCi/sam	2.05E+02	1.16E+00	3.10E-01
							Beta						pCi/sam			
Alpha_LOW-001C		1.0000 sam	0.0000	04/29/02 10:02	Blue B4	8.96	Alpha	1.12E+03	0.057	1.0000	0.2424	2.08E+03	pCi/sam	2.12E+02	1.25E+00	3.45E-01
							Beta						pCi/sam			
Alpha_LOW-001C		1.0000 sam	0.0000	04/30/02 14:02	Blue C1	8.87	Alpha	1.13E+03	0.082	1.0000	0.2476	2.05E+03	pCi/sam	2.09E+02	1.37E+00	4.07E-01
							Beta						pCi/sam			
Alpha_LOW-001C		1.0000 sam	0.0000	05/08/02 13:36	Blue C2	8.8	Alpha	1.14E+03	0.074	1.0000	0.2502	2.05E+03	pCi/sam	2.09E+02	1.32E+00	3.84E-01
							Beta						pCi/sam			
Alpha_LOW-001C		1.0000 sam	0.0000	04/30/02 14:22	Blue C3	9.1	Alpha	1.10E+03	0.040	1.0000	0.2384	2.08E+03	pCi/sam	2.12E+02	1.15E+00	2.91E-01
							Beta						pCi/sam			
Alpha_LOW-001C		1.0000 sam	0.0000	04/30/02 14:40	Blue C4	8.87	Alpha	1.13E+03	0.062	1.0000	0.2511	2.02E+03	pCi/sam	2.06E+02	1.25E+00	3.49E-01
							Beta						pCi/sam			
Alpha_MED-005C		1.0000 sam	0.0149	04/26/02 10:56	Blue A1	12.01	Alpha	8.33E+02	0.038	1.0000	0.1911	1.96E+03	pCi/sam	2.00E+02	1.15E+00	3.09E-01
							Beta						pCi/sam			
Alpha_MED-005C		1.0000 sam	0.0149	04/26/02 9:32	Blue A2	12.02	Alpha	8.32E+02	0.026	1.0000	0.1915	1.96E+03	pCi/sam	2.00E+02	1.04E+00	2.55E-01
							Beta						pCi/sam			
Alpha_MED-005C		1.0000 sam	0.0149	04/26/02 11:54	Blue A3	12.08	Alpha	8.28E+02	0.038	1.0000	0.1913	1.95E+03	pCi/sam	1.99E+02	1.14E+00	3.07E-01
							Beta						pCi/sam			
Alpha_MED-005C		1.0000 sam	0.0149	05/08/02 13:36	Blue A4	12.13	Alpha	8.26E+02	0.071	1.0000	0.1922	1.93E+03	pCi/sam	1.97E+02	1.36E+00	4.17E-01
							Beta						pCi/sam			

NOTE: Uncertainty results for this report were calculated using a 2 sigma confidence level.

492 of 938

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Gross Alpha/Beta Analysis Report for Batch # M02_004

Alpha_MED-005C	1.0000 sam	0.0149	04/29/02 10:02	Blue B2	11.98	*Alpha*	8.36E+02	0.223	1.0000	0.1928	**1.95E+03** pCi/sam	1.99E+02	2.01E+00	7.42E-01
						Beta					pCi/sam			
Alpha_MED-005C	1.0000 sam	0.0149	04/26/02 13:54	Blue B3	12.44	*Alpha*	8.04E+02	0.048	1.0000	0.1881	**1.93E+03** pCi/sam	1.96E+02	1.21E+00	3.46E-01
						Beta					pCi/sam			
Alpha_MED-005C	1.0000 sam	0.0149	04/29/02 11:04	Blue B4	12.61	*Alpha*	7.93E+02	0.057	1.0000	0.1857	**1.92E+03** pCi/sam	1.96E+02	1.28E+00	3.79E-01
						Beta					pCi/sam			
Alpha_MED-005C	1.0000 sam	0.0149	04/30/02 7:43	Blue C1	12.13	*Alpha*	8.25E+02	0.082	1.0000	0.1910	**1.95E+03** pCi/sam	1.98E+02	1.43E+00	4.51E-01
						Beta					pCi/sam			
Alpha_MED-005C	1.0000 sam	0.0149	04/30/02 14:02	Blue C2	11.9	*Alpha*	8.41E+02	0.049	1.0000	0.1942	**1.95E+03** pCi/sam	1.99E+02	1.22E+00	3.46E-01
						Beta					pCi/sam			
Alpha_MED-005C	1.0000 sam	0.0149	04/30/02 15:17	Blue C3	12.66	*Alpha*	7.91E+02	0.040	1.0000	0.1835	**1.94E+03** pCi/sam	1.98E+02	1.17E+00	3.21E-01
						Beta					pCi/sam			
Alpha_MED-005C	1.0000 sam	0.0149	04/30/02 14:22	Blue C4	11.78	*Alpha*	8.49E+02	0.062	1.0000	0.1946	**1.97E+03** pCi/sam	2.00E+02	1.31E+00	3.91E-01
						Beta					pCi/sam			
AlphaHIGH-009C	1.0000 sam	0.0762	04/26/02 11:54	Blue A1	24.03	*Alpha*	4.16E+02	0.038	1.0000	0.0906	**2.07E+03** pCi/sam	2.11E+02	1.48E+00	4.60E-01
						Beta					pCi/sam			
AlphaHIGH-009C	1.0000 sam	0.0762	04/26/02 10:56	Blue A2	23.09	*Alpha*	4.33E+02	0.026	1.0000	0.0929	**2.10E+03** pCi/sam	2.14E+02	1.33E+00	3.79E-01
						Beta					pCi/sam			
AlphaHIGH-009C	1.0000 sam	0.0762	04/26/02 9:32	Blue A3	24.02	*Alpha*	4.16E+02	0.038	1.0000	0.0920	**2.04E+03** pCi/sam	2.08E+02	1.46E+00	4.53E-01
						Beta					pCi/sam			
AlphaHIGH-009C	1.0000 sam	0.0762	05/06/02 11:17	Blue A4	23.56	*Alpha*	4.25E+02	0.071	1.0000	0.0925	**2.07E+03** pCi/sam	2.11E+02	1.80E+00	6.22E-01
						Beta					pCi/sam			
AlphaHIGH-009C	1.0000 sam	0.0762	04/29/02 11:04	Blue B2	24.04	*Alpha*	4.16E+02	0.223	1.0000	0.0925	**2.02E+03** pCi/sam	2.06E+02	2.73E+00	1.09E+00
						Beta					pCi/sam			
AlphaHIGH-009C	1.0000 sam	0.0762	04/29/02 10:02	Blue B3	24.85	*Alpha*	4.02E+02	0.048	1.0000	0.0892	**2.03E+03** pCi/sam	2.07E+02	1.58E+00	5.16E-01
						Beta					pCi/sam			
AlphaHIGH-009C	1.0000 sam	0.0762	04/26/02 13:54	Blue B4	24.33	*Alpha*	4.11E+02	0.057	1.0000	0.0882	**2.10E+03** pCi/sam	2.14E+02	1.72E+00	5.75E-01
						Beta					pCi/sam			
AlphaHIGH-009C	1.0000 sam	0.0762	05/06/02 10:38	Blue C1	23.41	*Alpha*	4.27E+02	0.082	1.0000	0.0908	**2.12E+03** pCi/sam	2.16E+02	1.94E+00	6.83E-01
						Beta					pCi/sam			
AlphaHIGH-009C	1.0000 sam	0.0762	04/30/02 7:43	Blue C2	23.44	*Alpha*	4.27E+02	0.049	1.0000	0.0943	**2.04E+03** pCi/sam	2.08E+02	1.57E+00	5.08E-01
						Beta					pCi/sam			

NOTE: Uncertainty results for this report were calculated using a 2 sigma confidence level.

Gross Alpha/Beta Analysis Report for Batch # M02_004

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

AlphaHIGH-009C	1.0000 sam	0.0762	04/30/02 14:40	Blue C3	25.01	*Alpha*	4.00E+02	0.040	1.0000	0.0861	**2.09E+03** pCi/sam	2.13E+02	1.54E+00	4.87E-01
						Beta					pCi/sam			
AlphaHIGH-009C	1.0000 sam	0.0762	04/30/02 15:17	Blue C4	22.94	*Alpha*	4.36E+02	0.062	1.0000	0.0936	**2.10E+03** pCi/sam	2.14E+02	1.73E+00	5.82E-01
						Beta					pCi/sam			
Beta_LOW-001C	1.0000 sam	0.0000	04/26/02 13:53	Blue A1	2.83	*Alpha*					pCi/sam			
						Beta	3.54E+03	1.155	1.0000	0.4417	**3.61E+03** pCi/sam	3.68E+02	4.01E+00	1.52E+00
Beta_LOW-001C	1.0000 sam	0.0000	04/29/02 11:00	Blue A2	2.77	*Alpha*					pCi/sam			
						Beta	3.63E+03	1.053	1.0000	0.4453	**3.67E+03** pCi/sam	3.74E+02	3.89E+00	1.45E+00
Beta_LOW-001C	1.0000 sam	0.0000	04/29/02 9:55	Blue A3	2.79	*Alpha*					pCi/sam			
						Beta	3.60E+03	1.090	1.0000	0.4490	**3.61E+03** pCi/sam	3.68E+02	3.89E+00	1.46E+00
Beta_LOW-001C	1.0000 sam	0.0000	04/30/02 14:04	Blue A4	2.79	*Alpha*					pCi/sam			
						Beta	3.60E+03	1.186	1.0000	0.4440	**3.65E+03** pCi/sam	3.72E+02	4.06E+00	1.54E+00
Beta_LOW-001C	1.0000 sam	0.0000	04/26/02 10:59	Blue B2	2.84	*Alpha*					pCi/sam			
						Beta	3.53E+03	1.177	1.0000	0.4469	**3.56E+03** pCi/sam	3.63E+02	3.98E+00	1.51E+00
Beta_LOW-001C	1.0000 sam	0.0000	04/26/02 11:56	Blue B3	2.83	*Alpha*					pCi/sam			
						Beta	3.54E+03	1.100	1.0000	0.4396	**3.63E+03** pCi/sam	3.70E+02	3.95E+00	1.49E+00
Beta_LOW-001C	1.0000 sam	0.0000	04/26/02 9:38	Blue B4	2.85	*Alpha*					pCi/sam			
						Beta	3.52E+03	1.001	1.0000	0.4403	**3.60E+03** pCi/sam	3.67E+02	3.79E+00	1.41E+00
Beta_LOW-001C	1.0000 sam	0.0000	04/30/02 14:21	Blue C1	2.79	*Alpha*					pCi/sam			
						Beta	3.60E+03	0.964	1.0000	0.4437	**3.65E+03** pCi/sam	3.72E+02	3.76E+00	1.39E+00
Beta_LOW-001C	1.0000 sam	0.0000	04/30/02 14:41	Blue C2	2.72	*Alpha*					pCi/sam			
						Beta	3.68E+03	1.320	1.0000	0.4556	**3.64E+03** pCi/sam	3.71E+02	4.19E+00	1.60E+00
Beta_LOW-001C	1.0000 sam	0.0000	04/30/02 7:44	Blue C3	2.81	*Alpha*					pCi/sam			
						Beta	3.58E+03	1.056	1.0000	0.4375	**3.68E+03** pCi/sam	3.75E+02	3.93E+00	1.47E+00
Beta_LOW-001C	1.0000 sam	0.0000	05/06/02 10:38	Blue C4	2.79	*Alpha*					pCi/sam			
						Beta	3.59E+03	1.022	1.0000	0.4472	**3.62E+03** pCi/sam	3.69E+02	3.81E+00	1.42E+00
Beta_MED-005C	1.0000 sam	0.0152	04/29/02 9:55	Blue A1	2.82	*Alpha*					pCi/sam			
						Beta	3.55E+03	1.155	1.0000	0.4359	**3.67E+03** pCi/sam	3.74E+02	4.07E+00	1.54E+00
Beta_MED-005C	1.0000 sam	0.0152	04/26/02 13:53	Blue A2	2.8	*Alpha*					pCi/sam			
						Beta	3.58E+03	1.053	1.0000	0.4397	**3.67E+03** pCi/sam	3.74E+02	3.91E+00	1.46E+00
Beta_MED-005C	1.0000 sam	0.0152	04/29/02 11:00	Blue A3	2.79	*Alpha*					pCi/sam			
						Beta	3.60E+03	1.090	1.0000	0.4423	**3.66E+03** pCi/sam	3.73E+02	3.95E+00	1.48E+00

NOTE: Uncertainty results for this report were calculated using a 2 sigma confidence level.

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Gross Alpha/Beta Analysis Report for Batch # M02_004

Beta_MED-005C	1.0000 sam	0.0152	04/30/02 14:41	Blue A4	2.86	Alpha					pCi/sam			
						Beta	3.51E+03	1.186	1.0000	0.4377	3.61E+03 pCi/sam	3.68E+02	4.06E+00	1.54E+00
Beta_MED-005C	1.0000 sam	0.0152	04/26/02 9:38	Blue B2	2.84	Alpha					pCi/sam			
						Beta	3.53E+03	1.177	1.0000	0.4409	3.61E+03 pCi/sam	3.68E+02	4.03E+00	1.53E+00
Beta_MED-005C	1.0000 sam	0.0152	04/26/02 10:59	Blue B3	2.83	Alpha					pCi/sam			
						Beta	3.55E+03	1.100	1.0000	0.4328	3.69E+03 pCi/sam	3.76E+02	4.01E+00	1.51E+00
Beta_MED-005C	1.0000 sam	0.0152	04/26/02 11:56	Blue B4	2.88	Alpha					pCi/sam			
						Beta	3.48E+03	1.001	1.0000	0.4342	3.61E+03 pCi/sam	3.69E+02	3.82E+00	1.42E+00
Beta_MED-005C	1.0000 sam	0.0152	05/06/02 11:17	Blue C1	2.71	Alpha					pCi/sam			
						Beta	3.70E+03	0.964	1.0000	0.4389	3.79E+03 pCi/sam	3.87E+02	3.87E+00	1.42E+00
Beta_MED-005C	1.0000 sam	0.0152	04/30/02 14:21	Blue C2	2.76	Alpha					pCi/sam			
						Beta	3.63E+03	1.320	1.0000	0.4500	3.63E+03 pCi/sam	3.71E+02	4.20E+00	1.61E+00
Beta_MED-005C	1.0000 sam	0.0152	04/30/02 14:04	Blue C3	2.85	Alpha					pCi/sam			
						Beta	3.52E+03	1.056	1.0000	0.4318	3.67E+03 pCi/sam	3.75E+02	3.94E+00	1.48E+00
Beta_MED-005C	1.0000 sam	0.0152	04/30/02 7:44	Blue C4	2.83	Alpha					pCi/sam			
						Beta	3.55E+03	1.094	1.0000	0.4413	3.62E+03 pCi/sam	3.69E+02	3.93E+00	1.48E+00
Beta_HIGH-009C	1.0000 sam	0.0755	04/29/02 11:00	Blue A1	2.91	Alpha					pCi/sam			
						Beta	3.44E+03	1.155	1.0000	0.4156	3.73E+03 pCi/sam	3.80E+02	4.18E+00	1.59E+00
Beta_HIGH-009C	1.0000 sam	0.0755	04/29/02 9:55	Blue A2	2.96	Alpha					pCi/sam			
						Beta	3.40E+03	1.053	1.0000	0.4192	3.65E+03 pCi/sam	3.73E+02	3.96E+00	1.49E+00
Beta_HIGH-009C	1.0000 sam	0.0755	04/26/02 13:53	Blue A3	2.94	Alpha					pCi/sam			
						Beta	3.41E+03	1.090	1.0000	0.4187	3.67E+03 pCi/sam	3.74E+02	4.04E+00	1.52E+00
Beta_HIGH-009C	1.0000 sam	0.0755	04/30/02 14:21	Blue A4	2.94	Alpha					pCi/sam			
						Beta	3.41E+03	1.186	1.0000	0.4163	3.69E+03 pCi/sam	3.76E+02	4.19E+00	1.60E+00
Beta_HIGH-009C	1.0000 sam	0.0755	04/26/02 11:56	Blue B2	3.04	Alpha					pCi/sam			
						Beta	3.30E+03	1.177	1.0000	0.4198	3.54E+03 pCi/sam	3.61E+02	4.06E+00	1.55E+00
Beta_HIGH-009C	1.0000 sam	0.0755	04/26/02 9:38	Blue B3	2.94	Alpha					pCi/sam			
						Beta	3.41E+03	1.100	1.0000	0.4097	3.74E+03 pCi/sam	3.82E+02	4.14E+00	1.56E+00
Beta_HIGH-009C	1.0000 sam	0.0755	04/26/02 10:59	Blue B4	3.01	Alpha					pCi/sam			
						Beta	3.34E+03	1.001	1.0000	0.4125	3.64E+03 pCi/sam	3.72E+02	3.91E+00	1.46E+00
Beta_HIGH-009C	1.0000 sam	0.0755	04/30/02 14:41	Blue C1	2.96	Alpha					pCi/sam			
						Beta	3.38E+03	0.964	1.0000	0.4210	3.62E+03 pCi/sam	3.69E+02	3.82E+00	1.42E+00

NOTE: Uncertainty results for this report were calculated using a 2 sigma confidence level.

Gross Alpha/Beta Analysis Report for Batch # M02_004

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Earth City, MO 63045

Beta_HIGH-009C	1.0000 sam	0.0755	05/06/02 11:17	Blue C2	2.9	*Alpha*					pCi/sam				
						Beta	3.45E+03	1.240	1.0000	0.4295	3.62E+03 pCi/sam		3.69E+02	4.17E+00	1.60E+00
Beta_HIGH-009C	1.0000 sam	0.0755	05/06/02 10:38	Blue C3	2.99	*Alpha*					pCi/sam				
						Beta	3.35E+03	1.173	1.0000	0.4117	3.66E+03 pCi/sam		3.74E+02	4.18E+00	1.59E+00
Beta_HIGH-009C	1.0000 sam	0.0755	04/30/02 14:04	Blue C4	2.92	*Alpha*					pCi/sam				
						Beta	3.43E+03	1.094	1.0000	0.4202	3.68E+03 pCi/sam		3.75E+02	4.05E+00	1.53E+00

LCS Summary

		Alpha			*Beta*		
LOTNo	**WRKNO**	**Activity**	**Std Added**	**Recovery**	**Activity**	**Std Added**	**Recovery**
Alpha_LOW-001		2.05E+03 pCi/sa	2.01E+03 pCi/sa	102.06%	pCi/sa	pCi/sa	
Alpha_LOW-001		2.08E+03 pCi/sa	2.01E+03 pCi/sa	103.60%	pCi/sa	pCi/sa	
Alpha_LOW-001		2.01E+03 pCi/sa	2.01E+03 pCi/sa	100.37%	pCi/sa	pCi/sa	
Alpha_LOW-001		2.03E+03 pCi/sa	2.01E+03 pCi/sa	101.05%	pCi/sa	pCi/sa	
Alpha_LOW-001		2.02E+03 pCi/sa	2.01E+03 pCi/sa	100.90%	pCi/sa	pCi/sa	
Alpha_LOW-001		2.04E+03 pCi/sa	2.01E+03 pCi/sa	101.58%	pCi/sa	pCi/sa	
Alpha_LOW-001		2.08E+03 pCi/sa	2.01E+03 pCi/sa	103.54%	pCi/sa	pCi/sa	
Alpha_LOW-001		2.04E+03 pCi/sa	2.01E+03 pCi/sa	101.93%	pCi/sa	pCi/sa	
Alpha_LOW-001		2.05E+03 pCi/sa	2.01E+03 pCi/sa	102.05%	pCi/sa	pCi/sa	
Alpha_LOW-001		2.04E+03 pCi/sa	2.01E+03 pCi/sa	101.86%	pCi/sa	pCi/sa	
Alpha_LOW-001		2.05E+03 pCi/sa	2.01E+03 pCi/sa	102.27%	pCi/sa	pCi/sa	
Alpha_MED-005		1.94E+03 pCi/sa	2.01E+03 pCi/sa	96.77%	pCi/sa	pCi/sa	
Alpha_MED-005		1.93E+03 pCi/sa	2.01E+03 pCi/sa	96.46%	pCi/sa	pCi/sa	
Alpha_MED-005		1.96E+03 pCi/sa	2.01E+03 pCi/sa	97.94%	pCi/sa	pCi/sa	
Alpha_MED-005		1.93E+03 pCi/sa	2.01E+03 pCi/sa	96.04%	pCi/sa	pCi/sa	
Alpha_MED-005		1.95E+03 pCi/sa	2.01E+03 pCi/sa	97.04%	pCi/sa	pCi/sa	
Alpha_MED-005		1.96E+03 pCi/sa	2.01E+03 pCi/sa	97.61%	pCi/sa	pCi/sa	
Alpha_MED-005		1.95E+03 pCi/sa	2.01E+03 pCi/sa	97.22%	pCi/sa	pCi/sa	
Alpha_MED-005		1.95E+03 pCi/sa	2.01E+03 pCi/sa	97.35%	pCi/sa	pCi/sa	
Alpha_MED-005		1.92E+03 pCi/sa	2.01E+03 pCi/sa	95.94%	pCi/sa	pCi/sa	
Alpha_MED-005		1.95E+03 pCi/sa	2.01E+03 pCi/sa	97.24%	pCi/sa	pCi/sa	
Alpha_MED-005		1.97E+03 pCi/sa	2.01E+03 pCi/sa	98.00%	pCi/sa	pCi/sa	

NOTE: Uncertainty results for this report were calculated using a 2 sigma confidence level.

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13715 Rider Trail North
Earth City, MO 63045

Gross Alpha/Beta Analysis Report for Batch # M02_004

AlphaHIGH-009	2.09E+03 pCi/sa	2.01E+03 pCi/sa	104.31%	pCi/sa	pCi/sa	
AlphaHIGH-009	2.10E+03 pCi/sa	2.01E+03 pCi/sa	104.61%	pCi/sa	pCi/sa	
AlphaHIGH-009	2.12E+03 pCi/sa	2.01E+03 pCi/sa	105.68%	pCi/sa	pCi/sa	
AlphaHIGH-009	2.04E+03 pCi/sa	2.01E+03 pCi/sa	101.61%	pCi/sa	pCi/sa	
AlphaHIGH-009	2.07E+03 pCi/sa	2.01E+03 pCi/sa	103.11%	pCi/sa	pCi/sa	
AlphaHIGH-009	2.04E+03 pCi/sa	2.01E+03 pCi/sa	101.70%	pCi/sa	pCi/sa	
AlphaHIGH-009	2.10E+03 pCi/sa	2.01E+03 pCi/sa	104.74%	pCi/sa	pCi/sa	
AlphaHIGH-009	2.03E+03 pCi/sa	2.01E+03 pCi/sa	101.31%	pCi/sa	pCi/sa	
AlphaHIGH-009	2.07E+03 pCi/sa	2.01E+03 pCi/sa	103.21%	pCi/sa	pCi/sa	
AlphaHIGH-009	2.02E+03 pCi/sa	2.01E+03 pCi/sa	100.96%	pCi/sa	pCi/sa	
AlphaHIGH-009	2.10E+03 pCi/sa	2.01E+03 pCi/sa	104.79%	pCi/sa	pCi/sa	
Beta__LOW-001	pCi/sa	pCi/sa		3.67E+03 pCi/sa	3.67E+03 pCi/sa	99.93%
Beta__LOW-001	pCi/sa	pCi/sa		3.65E+03 pCi/sa	3.67E+03 pCi/sa	99.48%
Beta__LOW-001	pCi/sa	pCi/sa		3.64E+03 pCi/sa	3.67E+03 pCi/sa	99.19%
Beta__LOW-001	pCi/sa	pCi/sa		3.56E+03 pCi/sa	3.67E+03 pCi/sa	96.94%
Beta__LOW-001	pCi/sa	pCi/sa		3.60E+03 pCi/sa	3.67E+03 pCi/sa	97.94%
Beta__LOW-001	pCi/sa	pCi/sa		3.62E+03 pCi/sa	3.67E+03 pCi/sa	98.55%
Beta__LOW-001	pCi/sa	pCi/sa		3.65E+03 pCi/sa	3.67E+03 pCi/sa	99.48%
Beta__LOW-001	pCi/sa	pCi/sa		3.68E+03 pCi/sa	3.67E+03 pCi/sa	100.24%
Beta__LOW-001	pCi/sa	pCi/sa		3.63E+03 pCi/sa	3.67E+03 pCi/sa	98.80%
Beta__LOW-001	pCi/sa	pCi/sa		3.61E+03 pCi/sa	3.67E+03 pCi/sa	98.32%
Beta__LOW-001	pCi/sa	pCi/sa		3.61E+03 pCi/sa	3.67E+03 pCi/sa	98.27%
Beta__MED-005	pCi/sa	pCi/sa		3.67E+03 pCi/sa	3.67E+03 pCi/sa	100.03%
Beta__MED-005	pCi/sa	pCi/sa		3.79E+03 pCi/sa	3.67E+03 pCi/sa	103.34%
Beta__MED-005	pCi/sa	pCi/sa		3.61E+03 pCi/sa	3.67E+03 pCi/sa	98.29%
Beta__MED-005	pCi/sa	pCi/sa		3.67E+03 pCi/sa	3.67E+03 pCi/sa	99.91%
Beta__MED-005	pCi/sa	pCi/sa		3.66E+03 pCi/sa	3.67E+03 pCi/sa	99.71%
Beta__MED-005	pCi/sa	pCi/sa		3.61E+03 pCi/sa	3.67E+03 pCi/sa	98.27%
Beta__MED-005	pCi/sa	pCi/sa		3.61E+03 pCi/sa	3.67E+03 pCi/sa	98.42%
Beta__MED-005	pCi/sa	pCi/sa		3.69E+03 pCi/sa	3.67E+03 pCi/sa	100.55%
Beta__MED-005	pCi/sa	pCi/sa		3.63E+03 pCi/sa	3.67E+03 pCi/sa	98.98%

NOTE: Uncertainty results for this report were calculated using a 2 sigma confidence level.

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Gross Alpha/Beta Analysis Report for Batch # M02_004

Beta__MED-005	pCi/sa	pCi/sa	3.62E+03 pCi/sa	3.67E+03 pCi/sa	**98.58%**
Beta__MED-005	pCi/sa	pCi/sa	3.67E+03 pCi/sa	3.67E+03 pCi/sa	**99.95%**
Beta_HIGH-009	pCi/sa	pCi/sa	3.74E+03 pCi/sa	3.67E+03 pCi/sa	**101.97%**
Beta_HIGH-009	pCi/sa	pCi/sa	3.68E+03 pCi/sa	3.67E+03 pCi/sa	**100.24%**
Beta_HIGH-009	pCi/sa	pCi/sa	3.73E+03 pCi/sa	3.67E+03 pCi/sa	**101.48%**
Beta_HIGH-009	pCi/sa	pCi/sa	3.64E+03 pCi/sa	3.67E+03 pCi/sa	**99.24%**
Beta_HIGH-009	pCi/sa	pCi/sa	3.54E+03 pCi/sa	3.67E+03 pCi/sa	**96.28%**
Beta_HIGH-009	pCi/sa	pCi/sa	3.62E+03 pCi/sa	3.67E+03 pCi/sa	**98.47%**
Beta_HIGH-009	pCi/sa	pCi/sa	3.67E+03 pCi/sa	3.67E+03 pCi/sa	**99.82%**
Beta_HIGH-009	pCi/sa	pCi/sa	3.66E+03 pCi/sa	3.67E+03 pCi/sa	**99.76%**
Beta_HIGH-009	pCi/sa	pCi/sa	3.65E+03 pCi/sa	3.67E+03 pCi/sa	**99.49%**
Beta_HIGH-009	pCi/sa	pCi/sa	3.69E+03 pCi/sa	3.67E+03 pCi/sa	**100.55%**
Beta_HIGH-009	pCi/sa	pCi/sa	3.62E+03 pCi/sa	3.67E+03 pCi/sa	**98.52%**

NOTE: Uncertainty results for this report were calculated using a 2 sigma confidence level.

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: M02_004Z

Batch ID: A/B

Reviewed By: JRC

Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
001CA	Blue	C2	5/8/2002 13:36	9	10005	3014	1000	74	1240	1136.86	341.26
ALPHA_MED-005CA	Blue	A4	5/8/2002 13:36	12	10014	2841	1000	71	1157	825.49	233.06

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: M02_004X

Batch ID: A/B CALIB

Reviewed By: JK

Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
ALPHA_HIGH-009	Blue	A4	5/6/2002 11:17	24	10002	3308	1000	71	1157	424.46	139.25
BETA_HIGH-009	Blue	C2	5/6/2002 11:17	3	5	10007	1000	74	1240	1.65	3449.45
BETA_MED-005	Blue	C1	5/6/2002 11:17	3	13	10022	1000	82	964	4.72	3697.19

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: M02_004W

Batch ID: A/B CALIB

Reviewed By: _____

Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
ALPHA_HIGH-009	Blue	C1	5/6/2002 10:38	23	10003	4690	1000	82	964	427.21	199.38
ALPHA_LOW-001	Blue	C2	5/6/2002 10:38	12	10006	3082	1000	74	1240	831.68	254.95
ALPHA_MED-005	Blue	A4	5/6/2002 10:37	3	16	10029	1000	71	1157	5.64	3580.63
BETA_HIGH-009	Blue	C3	5/6/2002 10:38	3	9	10015	1000	59	1173	2.95	3348.33
BETA_LOW-001	Blue	C4	5/6/2002 10:38	3	7	10026	1000	64	1022	2.44	3592.53

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: ALPHA1

Reviewed By: _____

Batch ID: ~~ALPHA1~~ M02-004A

Date: 5/4-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample		Bkgd Time	Background		Net CPM	
					Alpha	Beta		Alpha	Beta	Alpha	Beta
ALPHA_LOW-001	Blue	A1	4/26/2002 9:32	9	10006	3105	1000	38	1155	1117.95	345.77
ALPHA_MED-005	Blue	A2	4/26/2002 9:32	12	10002	2972	1000	26	1053	832.09	246.20
ALPHA_HIGH-009	Blue	A3	4/26/2002 9:32	24	10000	3466	1000	38	1090	416.28	143.21

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: ALPHA2

Reviewed By: JK

Batch ID: ~~ALPHA2~~ M02_004B

Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample		Bkgd Time	Background		Net CPM	
					Alpha	Beta		Alpha	Beta	Alpha	Beta
ALPHA_LOW-001	Blue	A3	4/26/2002 10:56	9	10004	3040	1000	38	1090	1127.81	341.64
ALPHA_MED-005	Blue	A1	4/26/2002 10:56	12	10006	2996	1000	38	1155	833.10	248.30
ALPHA_HIGH-009	Blue	A2	4/26/2002 10:56	23	10002	3431	1000	26	1053	433.15	147.54

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: ALPHA3
Batch ID: ~~ALPHA3~~ M02_004C

Reviewed By: MC
Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample		Bkgd Time	Background		Net CPM	
					Alpha	Beta		Alpha	Beta	Alpha	Beta
ALPHA_LOW-001	Blue	A2	4/26/2002 11:54	9	10008	3028	1000	26	1053	1127.00	339.94
ALPHA_MED-005	Blue	A3	4/26/2002 11:54	12	10001	3004	1000	38	1090	827.86	247.59
ALPHA_HIGH-009	Blue	A1	4/26/2002 11:54	24	10000	3431	1000	38	1155	416.11	141.62

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: ALPHA4

Batch ID: ~~ALPHA4~~ m02-004 D

Reviewed By: JK

Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
ALPHA_LOW-001	Blue	B2	4/26/2002 13:54	9	10007	2993	1000	223	1177	1133.07	337.78
ALPHA_MED-005	Blue	B3	4/26/2002 13:54	12	10007	2979	1000	48	1100	804.37	238.37
ALPHA_HIGH-009	Blue	B4	4/26/2002 13:54	24	10004	3489	1000	57	1001	411.12	142.40

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: ALPHA5

Reviewed By: JJC

Batch ID: ~~AEPHA5~~ M02-004R

Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
ALPHA_LOW-001	Blue	B4	4/29/2002 10:02	9	10012	3188	1000	57	1001	1117.35	354.80
ALPHA_MED-005	Blue	B2	4/29/2002 10:02	12	10013	2896	1000	223	1177	835.59	240.56
ALPHA_HIGH-009	Blue	B3	4/29/2002 10:02	25	10002	3477	1000	48	1100	402.45	138.82

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: ALPHA6

Reviewed By: [signature]

Batch ID: ~~ALPHA6~~ m02_004F

Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample		Bkgd Time	Background		Net CPM	
					Alpha	Beta		Alpha	Beta	Alpha	Beta
ALPHA_LOW-001	Blue	B3	4/29/2002 11:03	9	10004	3094	1000	48	1100	1095.68	337.78
ALPHA_MED-005	Blue	B4	4/29/2002 11:04	13	10003	3074	1000	57	1001	793.20	242.77
ALPHA_HIGH-009	Blue	B2	4/29/2002 11:04	24	10004	3372	1000	223	1177	415.92	139.09

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: ALPHA7

Reviewed By: JJC

Batch ID: ~~ALPHA7~~ M02.024 G

Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
ALPHA_LOW-001	Blue	A4	4/30/2002 7:43	9	10004	2927	1001	48	1186	1130.35	329.55
ALPHA_MED-005	Blue	C1	4/30/2002 7:43	12	10009	3053	1002	82	964	825.06	250.73
ALPHA_HIGH-009	Blue	C2	4/30/2002 7:43	23	10004	3382	1003	49	1320	426.74	142.96

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: ALPHA8

Batch ID: ~~ALPHA8~~ m02-0041

Reviewed By: JJC

Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
ALPHA_LOW-001	Blue	C1	4/30/2002 14:02	9	10000	3174	1000	82	964	1127.31	356.87
ALPHA_MED-005	Blue	C2	4/30/2002 14:02	12	10005	2975	1000	49	1320	840.71	248.68

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: ALPHA10

Reviewed By: JK

Batch ID: ~~ALPHA10~~ M02-004 I

Date: 51402

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
ALPHA_LOW-001	Blue	C3	4/30/2002 14:22	9	10006	3118	1000	40	1056	1099.52	341.58
ALPHA_MED-005	Blue	C4	4/30/2002 14:22	12	10004	2804	1000	62	1094	849.17	236.94

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: ALPHA11

Reviewed By: JK

Batch ID: ~~ALPHA11~~ M02_004J

Date: 5/4/02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
ALPHA_HIGH-009	Blue	C3	4/30/2002 14:40	25	10000	3507	1000	40	1056	399.80	139.17
ALPHA_LOW-001	Blue	C4	4/30/2002 14:40	9	10006	2897	1000	62	1094	1128.01	325.51

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: ALPHA12

Reviewed By: JMC

Batch ID: ~~alpha12~~ M02-004 K

Date: 5/14/02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample		Bkgd Time	Background		Net CPM	
					Alpha	Beta		Alpha	Beta	Alpha	Beta
ALPHA_HIGH-009	Blue	C4	4/30/2002 15:17	23	10000	3250	1000	62	1094	435.86	140.58
ALPHA_MED-005	Blue	C3	4/30/2002 15:17	13	10009	3047	1000	40	1056	790.56	239.62

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: BETA1

Reviewed By: JK

Batch ID: ~~BETAT~~ M02_004L

Date: 5/4/02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample		Bkgd Time	Background		Net CPM	
					Alpha	Beta		Alpha	Beta	Alpha	Beta
BETA_LOW-001	Blue	B4	4/26/2002 9:38	3	4	10021	1000	57	1001	1.35	3515.14
BETA_MED-005	Blue	B2	4/26/2002 9:38	3	5	10034	1000	223	1177	1.54	3531.92
BETA_HIGH-009	Blue	B3	4/26/2002 9:38	3	13	10015	1000	48	1100	4.37	3405.36

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: BETA2

Reviewed By: JMC

Batch ID: ~~BETA2~~ M02-004 M

Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample		Bkgd Time	Background		Net CPM	
					Alpha	Beta		Alpha	Beta	Alpha	Beta
BETA_LOW-001	Blue	B2	4/26/2002 10:59	3	5	10033	1000	223	1177	1.54	3531.57
BETA_MED-005	Blue	B3	4/26/2002 10:59	3	8	10042	1000	48	1100	2.78	3547.31
BETA_HIGH-009	Blue	B4	4/26/2002 10:59	3	10	10047	1000	57	1001	3.27	3336.87

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: BETA3
Batch ID: ~~BETA3~~ 0502-004 N

Reviewed By: JK
Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample		Bkgd Time	Background		Net CPM	
					Alpha	Beta		Alpha	Beta	Alpha	Beta
BETA_LOE-001	Blue	B3	4/26/2002 11:56	3	8	10022	1000	48	1100	2.78	3540.24
BETA_MED-005	Blue	B4	4/26/2002 11:56	3	8	10035	1000	57	1001	2.72	3483.37
BETA_HIGH-009	Blue	B2	4/26/2002 11:56	3	9	10020	1000	223	1177	2.74	3294.88

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: BETA4

Reviewed By: JK

Batch ID: ~~BETA4~~ M02_004D

Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
BETA_LOW-001	Blue	A1	4/26/2002 13:53	3	4	10022	1000	38	1155	1.38	3540.19
BETA_MED-005	Blue	A2	4/26/2002 13:53	3	9	10033	1000	26	1053	3.19	3582.16
BETA_HIGH-009	Blue	A3	4/26/2002 13:53	3	2	10019	1000	38	1090	0.64	3406.73

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: ~~BETA5~~
Batch ID: ~~beta5~~ m02_004 P

Reviewed By: MK
Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
BETA_LOW-001	Blue	A3	4/29/2002 9:55	3	6	10038	1000	38	1090	2.11	3596.76
BETA_MED-005	Blue	A1	4/29/2002 9:55	3	10	10015	1000	38	1155	3.51	3550.26
BETA_HIGH-009	Blue	A2	4/29/2002 9:55	3	13	10065	1000	26	1053	4.37	3399.28

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: BETA6

Reviewed By: JK

Batch ID: ~~BETA6~~ M02-004Q

Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
BETA_LOW-001	Blue	A2	4/29/2002 11:00	3	8	10051	1000	26	1053	2.86	3627.47
BETA_MED-005	Blue	A3	4/29/2002 11:00	3	9	10032	1000	38	1090	3.19	3594.61
BETA_HIGH-009	Blue	A1	4/29/2002 11:00	3	11	10008	1000	38	1155	3.74	3438.02

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: BETA7

Batch ID: ~~BETA7~~ M02-004 R

Reviewed By: JK

Date: 5/14/02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
BETA_LOW-001	Blue	C3	4/30/2002 7:44	3	6	10048	1000	40	1056	2.10	3574.74
BETA_MED-005	Blue	C4	4/30/2002 7:44	3	6	10039	1000	62	1094	2.06	3546.26

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: BETA8
Batch ID: ~~BETA8~~ M02-0045

Reviewed By: MK
Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
BETA_LOW-001	Blue	A4	4/30/2002 14:04	3	9	10049	1000	48	1186	3.18	3600.61
BETA_MED-005	Blue	C3	4/30/2002 14:04	3	6	10038	1000	40	1056	2.07	3521.05
BETA_HIGH-009	Blue	C4	4/30/2002 14:04	3	7	10030	1000	62	1094	2.34	3433.84

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: BETA11
Batch ID: ~~BETA11~~ ~~A00~~ M02-024 U

Reviewed By: [signature]
Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample		Bkgd Time	Background		Net CPM	
					Alpha	Beta		Alpha	Beta	Alpha	Beta
BETA_HIGH-009	Blue	C1	4/30/2002 14:41	3	14	10006	1000	82	964	4.65	3379.44
BETA_LOW-001	Blue	C2	4/30/2002 14:41	3	14	10023	1000	49	1320	5.10	3683.61
BETA_MED-005	Blue	A4	4/30/2002 14:41	3	21	10033	1000	48	1186	7.29	3506.86

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: BETA10

Batch ID: BETA10

Reviewed By: MC

Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
BETA_HIGH-009	Blue	A4	4/30/2002 14:21	3	16	10036	1000	48	1186	5.39	3412.42
BETA_LOW-001	Blue	C1	4/30/2002 14:21	3	11	10041	1000	82	964	3.86	3597.96
BETA_MED-005	Blue	C2	4/30/2002 14:21	3	12	10025	1000	49	1320	4.30	3630.93

SEVERN TRENT STL

Calibration for LB4000

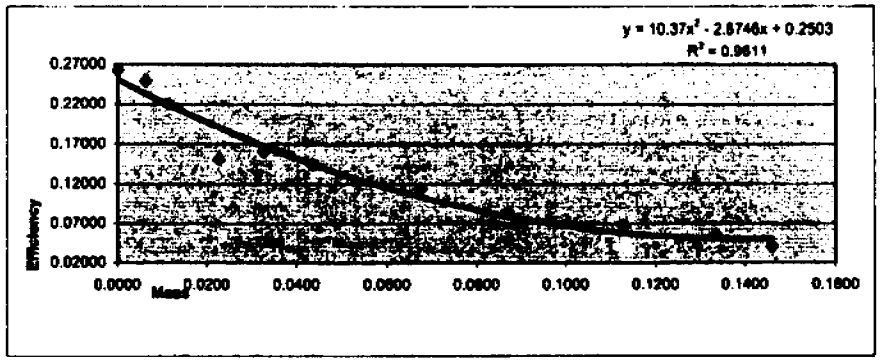
Yellow

Alpha Th-230

Detector Efficiency Curves

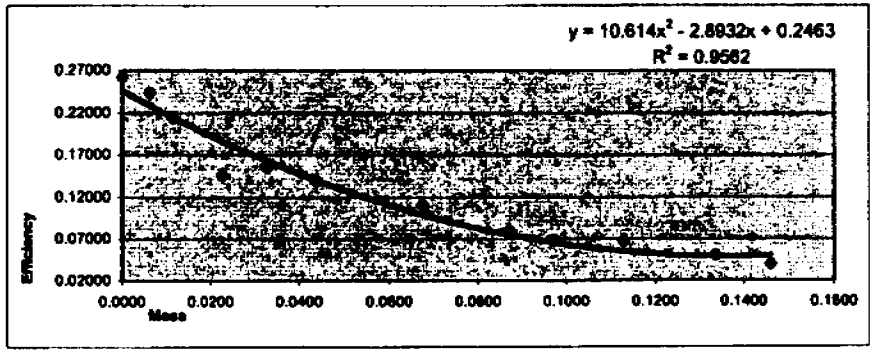
Alpha Attenuation Yellow A1
11/17/2003

Detector ID	Sample ID	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
A1	0.0000	53848	60	897.467	0.20427
A1	0.0063	65502	60	1091.700	0.24848
A1	0.0115	57862	60	964.367	0.21950
A1	0.0228	39792	60	663.200	0.15095
A1	0.0328	42424	60	707.067	0.16094
A1	0.0437	37967	60	633.117	0.14410
A1	0.0675	30071	60	501.183	0.11407
A1	0.0870	21879	60	364.650	0.08300
A1	0.1129	17711	60	295.183	0.06719
A1	0.1335	14552	60	242.533	0.05520
A1	0.1460	10632	60	177.200	0.04033



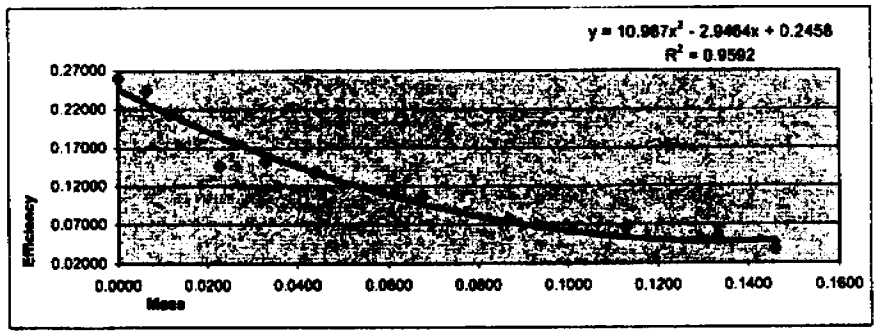
Alpha Attenuation Yellow A2
11/17/2003

Detector ID	Sample ID	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
A2	0.0000	52800	60	880.000	0.20030
A2	0.0063	64170	60	1069.500	0.24343
A2	0.0115	56348	60	939.133	0.21376
A2	0.0228	38349	60	639.150	0.14546
A2	0.0328	40906	60	681.767	0.15518
A2	0.0437	36782	60	613.033	0.13953
A2	0.0675	29339	60	488.983	0.11130
A2	0.0870	20859	60	347.650	0.07913
A2	0.1129	17740	60	295.667	0.06730
A2	0.1335	13237	60	220.617	0.05021
A2	0.1460	10362	60	172.700	0.03931



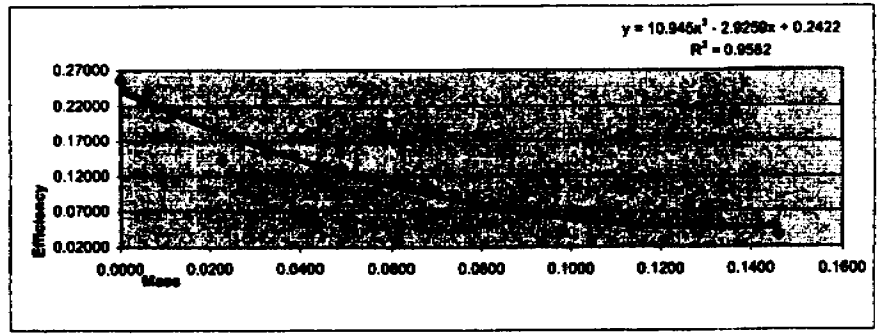
Alpha Attenuation Yellow A3
11/17/2003

Detector ID	Sample ID	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
A3	0.0000	52442	60	874.033	0.19894
A3	0.0063	64243	60	1070.717	0.24371
A3	0.0115	56060	60	934.333	0.21266
A3	0.0228	38508	60	641.800	0.14608
A3	0.0328	40131	60	668.850	0.15224
A3	0.0437	36251	60	604.183	0.13752
A3	0.0675	28379	60	472.983	0.10766
A3	0.0870	20174	60	336.233	0.07653
A3	0.1129	17238	60	287.300	0.06539
A3	0.1335	13250	60	220.833	0.05026
A3	0.1460	9906	60	165.133	0.03759



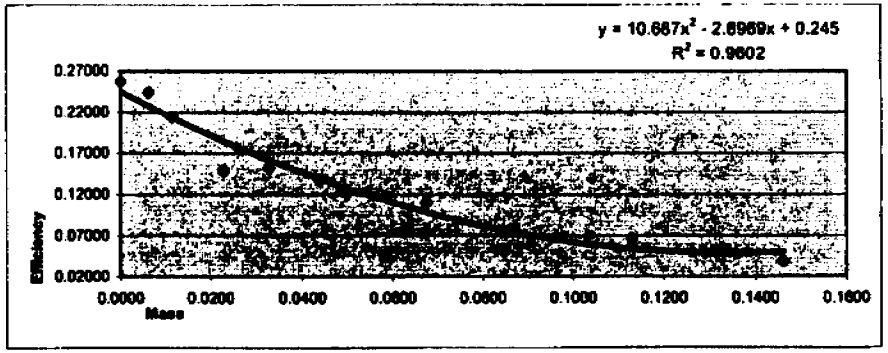
Alpha Attenuation Yellow A4
11/17/2003

Detector ID	Sample ID	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
A4	0.0000	51887	60	864.783	0.19683
A4	0.0063	63066	60	1051.433	0.23932
A4	0.0115	55707	60	928.450	0.21132
A4	0.0228	37429	60	623.817	0.14199
A4	0.0328	39953	60	665.883	0.15156
A4	0.0437	35043	60	584.050	0.13294
A4	0.0675	27680	60	461.333	0.10500
A4	0.0870	19768	60	329.467	0.07499
A4	0.1129	16907	60	281.783	0.06414
A4	0.1335	12868	60	214.467	0.04881
A4	0.1460	9645	60	160.750	0.03659



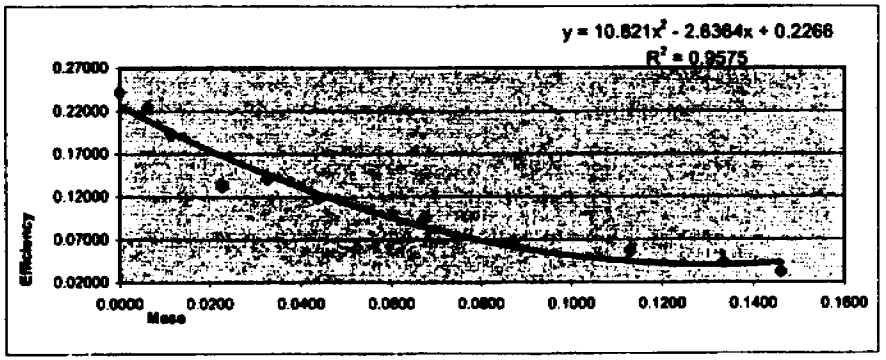
Alpha Attenuation Yellow B1
11/17/2003

Detector ID	Sample ID	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
B1	0.0000	53185	60	886.417	0.20176
B1	0.0063	64282	60	1071.367	0.24385
B1	0.0115	56400	60	940.000	0.21395
B1	0.0228	38957	60	649.283	0.14778
B1	0.0328	40038	60	667.300	0.15186
B1	0.0437	36156	60	602.600	0.13716
B1	0.0675	28860	60	481.000	0.10948
B1	0.0870	20418	60	340.300	0.07746
B1	0.1129	17616	60	293.600	0.06683
B1	0.1335	13617	60	226.950	0.05166
B1	0.1460	9938	60	165.633	0.03770



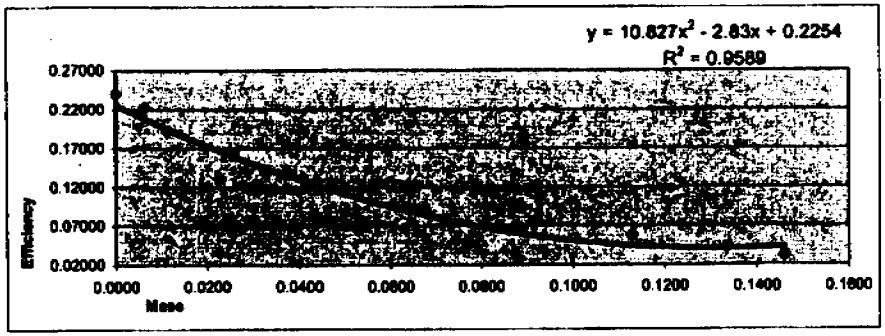
Alpha Attenuation Yellow B2
11/17/2003

Detector ID	Sample ID	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
B2	0.0000	48896	60	814.933	0.18549
B2	0.0063	59105	60	985.083	0.22421
B2	0.0115	50809	60	846.817	0.19274
B2	0.0228	34704	60	578.400	0.13165
B2	0.0328	36927	60	615.450	0.14008
B2	0.0437	31164	60	519.400	0.11822
B2	0.0675	25238	60	420.633	0.09574
B2	0.0870	17599	60	293.317	0.06676
B2	0.1129	14911	60	248.517	0.05656
B2	0.1335	11243	60	187.383	0.04265
B2	0.1460	8369	60	139.483	0.03175



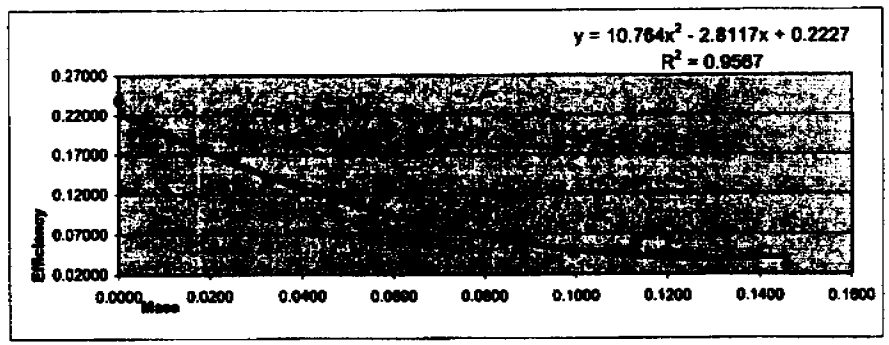
Alpha Attenuation Yellow B3
11/17/2003

Detector ID	Sample ID	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
B3	0.0000	48315	60	805.250	0.18328
B3	0.0063	58600	60	976.667	0.22230
B3	0.0115	50667	60	844.450	0.19221
B3	0.0228	34416	60	573.600	0.13056
B3	0.0328	36520	60	608.667	0.13854
B3	0.0437	32046	60	534.100	0.12157
B3	0.0675	23929	60	398.817	0.09077
B3	0.0870	17447	60	290.783	0.06619
B3	0.1129	15167	60	252.783	0.05754
B3	0.1335	11093	60	184.883	0.04208
B3	0.1460	8314	60	138.567	0.03154



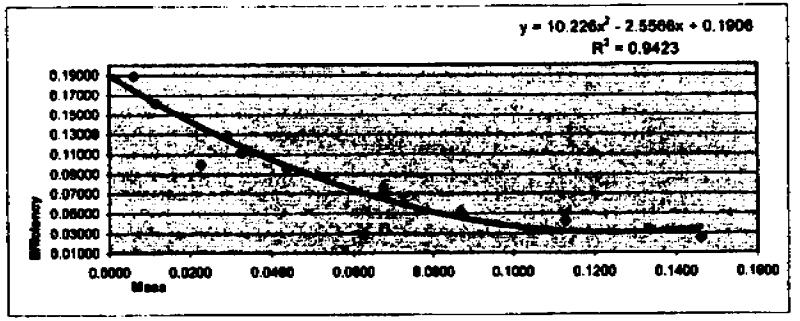
Alpha Attenuation Yellow B4
11/17/2003

Detector ID	Sample ID	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
B4	0.0000	48011	60	800.1833	0.18213
B4	0.0063	57763	60	962.7167	0.21912
B4	0.0115	49739	60	828.9833	0.18868
B4	0.0228	33676	60	561.3000	0.12776
B4	0.0328	35979	60	599.6500	0.13649
B4	0.0437	31580	60	526.3333	0.11980
B4	0.0675	24606	60	410.1000	0.09334
B4	0.0870	15948	60	265.8000	0.06050
B4	0.1129	14633	60	243.8833	0.05551
B4	0.1335	10903	60	181.7167	0.04136
B4	0.1460	8004	60	133.4000	0.03036



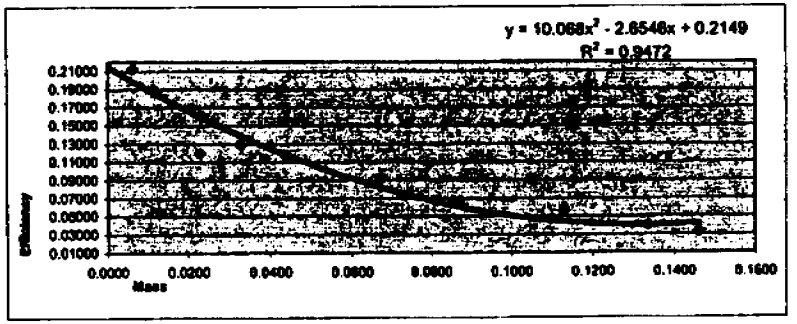
Alpha Attenuation Yellow C1
11/17/2003

Detector ID	Sample ID	Alpha	Count Time	DPM 4393.46 CPM	Th230 Eff
C1	0.0000	39335	60	655.5833	0.14922
C1	0.0063	49617	60	830.2833	0.18898
C1	0.0115	42634	60	710.5667	0.16173
C1	0.0228	26306	60	438.4333	0.09979
C1	0.0328	29365	60	489.4167	0.11140
C1	0.0437	25211	60	420.1833	0.09564
C1	0.0675	19839	60	330.6500	0.07526
C1	0.0870	13763	60	229.3833	0.05221
C1	0.1129	11156	60	185.9333	0.04232
C1	0.1335	8676	60	144.6000	0.03291
C1	0.1460	6568	60	109.4667	0.02492



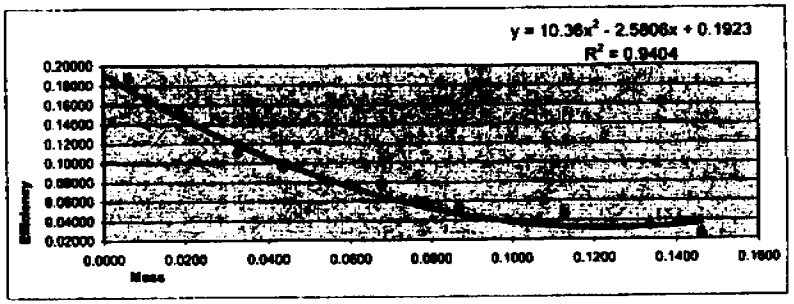
Alpha Attenuation Yellow C2
11/17/2003

Detector ID	Sample ID	Alpha	Count Time	DPM 4393.46 CPM	Th230 Eff
C2	0.0000	43806	60	730.1000	0.16618
C2	0.0063	56090	60	934.8333	0.21278
C2	0.0115	50086	60	834.7667	0.19000
C2	0.0228	31516	60	525.2667	0.11956
C2	0.0328	34076	60	567.9333	0.12927
C2	0.0437	30923	60	515.3833	0.11731
C2	0.0675	24421	60	407.0167	0.09264
C2	0.0870	17391	60	289.8500	0.06597
C2	0.1129	14680	60	244.6667	0.05569
C2	0.1335	10430	60	173.8333	0.03957
C2	0.1460	8466	60	141.4333	0.03219



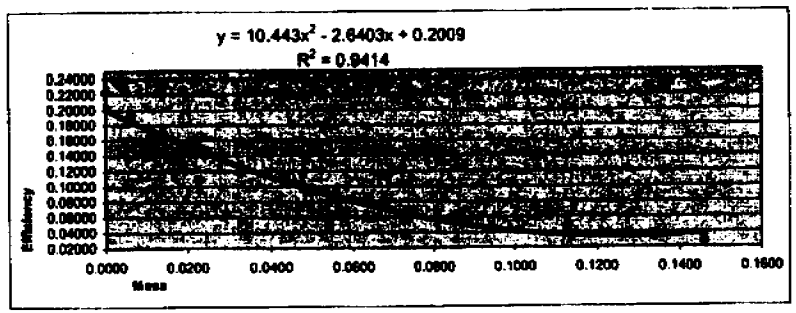
Alpha Attenuation Yellow C3
11/17/2003

Detector ID	Sample ID	Alpha	Count Time	DPM 4393.46 CPM	Th230 Eff
C3	0.0000	39303	60	655.0500	0.14910
C3	0.0063	49420	60	823.6667	0.18747
C3	0.0115	43002	60	716.7000	0.16313
C3	0.0228	26916	60	448.6000	0.10211
C3	0.0328	29110	60	485.1667	0.11043
C3	0.0437	25152	60	419.2000	0.09541
C3	0.0675	20212	60	336.8667	0.07667
C3	0.0870	13905	60	231.7500	0.05275
C3	0.1129	11958	60	199.3000	0.04536
C3	0.1335	9003	60	150.0500	0.03415
C3	0.1460	6425	60	107.0833	0.02437



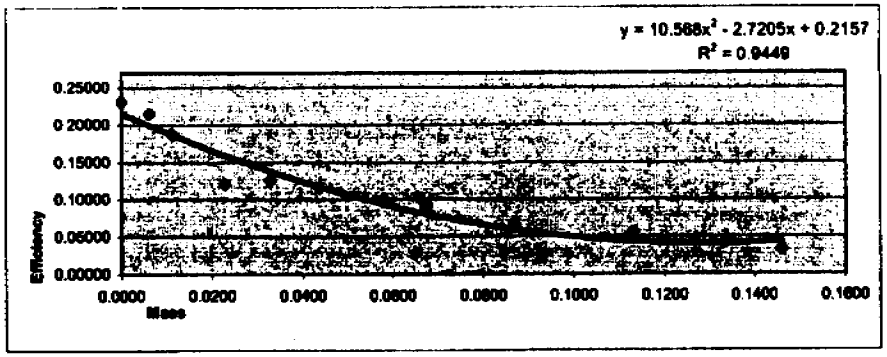
Alpha Attenuation Yellow C4
11/17/2003

Detector ID	Sample Wt	Alpha	Count Time	DPM 4393.46 CPM	Th230 Eff
C4	0.0000	11797	12	983.0833	0.22376
C4	0.0063	18706	22	850.2727	0.19353
C4	0.0115	16102	22	731.9091	0.16659
C4	0.0228	10465	22	475.6818	0.10827
C4	0.0328	11394	22	517.9091	0.11788
C4	0.0437	28120	60	468.6667	0.10667
C4	0.0675	21380	60	356.3333	0.08111
C4	0.0870	14634	60	243.9000	0.05551
C4	0.1129	12605	60	210.0833	0.04782
C4	0.1335	9317	60	155.2833	0.03534
C4	0.1460	7202	60	120.0333	0.02732



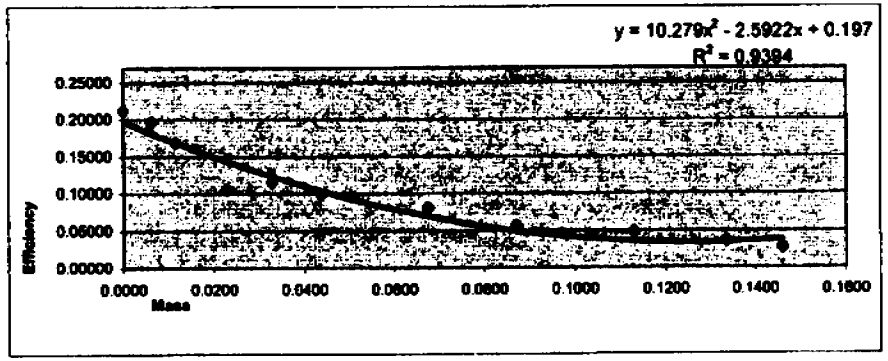
Alpha Attenuation Yellow D1
11/17/2003

Detector ID	Sample ID	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
D1	0.0000	12184	12	1015.3333	0.23110
D1	0.0063	20770	22	944.0909	0.21488
D1	0.0115	18002	22	818.2727	0.18625
D1	0.0228	11658	22	529.9091	0.12061
D1	0.0328	12165	22	552.9545	0.12586
D1	0.0437	30359	60	505.9833	0.11517
D1	0.0675	24373	60	406.2167	0.09246
D1	0.0870	17268	60	287.8000	0.06551
D1	0.1129	14646	60	244.1000	0.05556
D1	0.1335	11119	60	185.3167	0.04218
D1	0.1460	8456	60	140.9333	0.03208



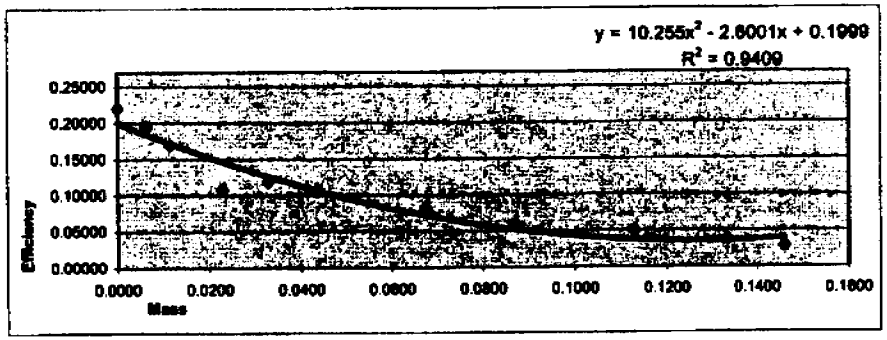
Alpha Attenuation Yellow D2
11/17/2003

Detector ID	Sample Wt	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
D2	0.0000	11164	12	930.3333	0.21175
D2	0.0063	19022	22	864.6364	0.19680
D2	0.0115	16331	22	742.3182	0.16898
D2	0.0228	10139	22	460.8636	0.10490
D2	0.0328	11064	22	503.8182	0.11467
D2	0.0437	26039	60	433.9833	0.09878
D2	0.0675	21308	60	355.1333	0.08083
D2	0.0870	14651	60	244.1833	0.05558
D2	0.1129	12666	60	211.1000	0.04805
D2	0.1335	9317	60	155.2833	0.03534
D2	0.1460	6866	60	114.4667	0.02605



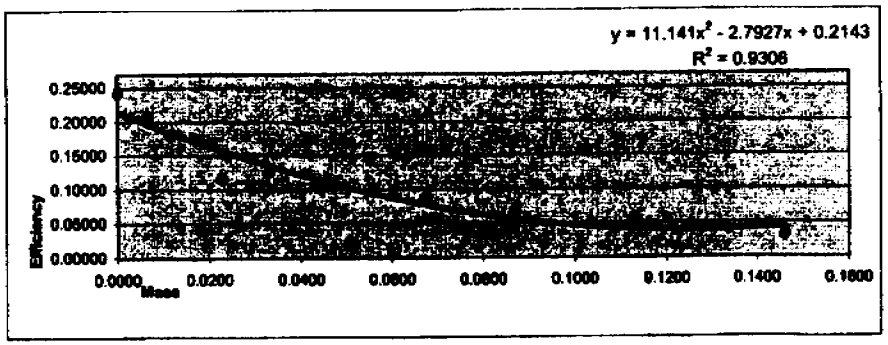
Alpha Attenuation Yellow D3
11/17/2003

Detector ID	Sample Wt	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
D3	0.0000	11600	12	966.6667	0.22002
D3	0.0063	18769	22	853.1364	0.19418
D3	0.0115	16383	22	744.6818	0.16950
D3	0.0228	10364	22	471.0909	0.10723
D3	0.0328	11412	22	518.7273	0.11807
D3	0.0437	27743	60	462.3833	0.10524
D3	0.0675	21412	60	356.8667	0.08123
D3	0.0870	15276	60	254.6000	0.05795
D3	0.1129	12924	60	215.4000	0.04903
D3	0.1335	9868	60	161.4667	0.03675
D3	0.1460	7298	60	121.6333	0.02768

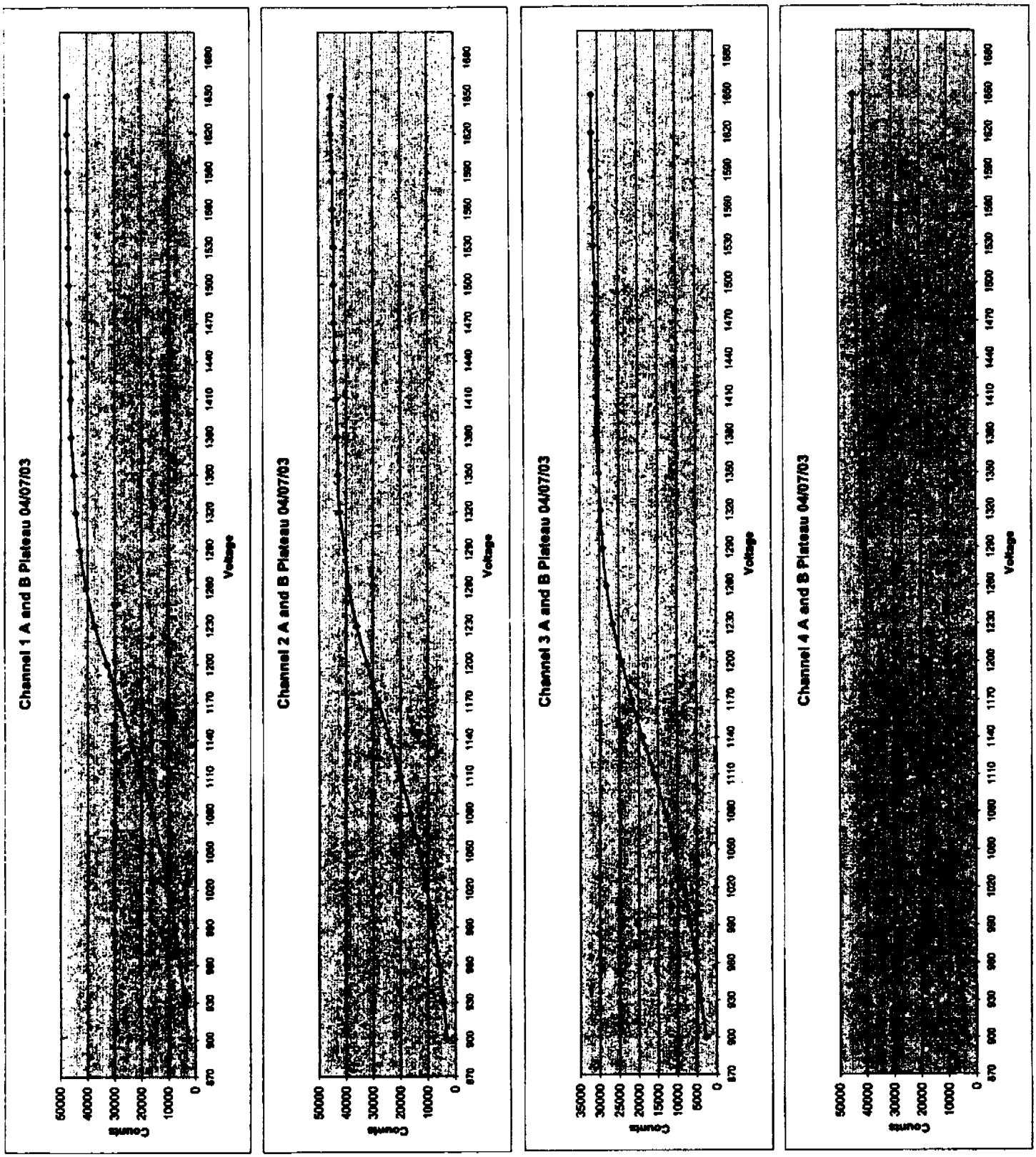


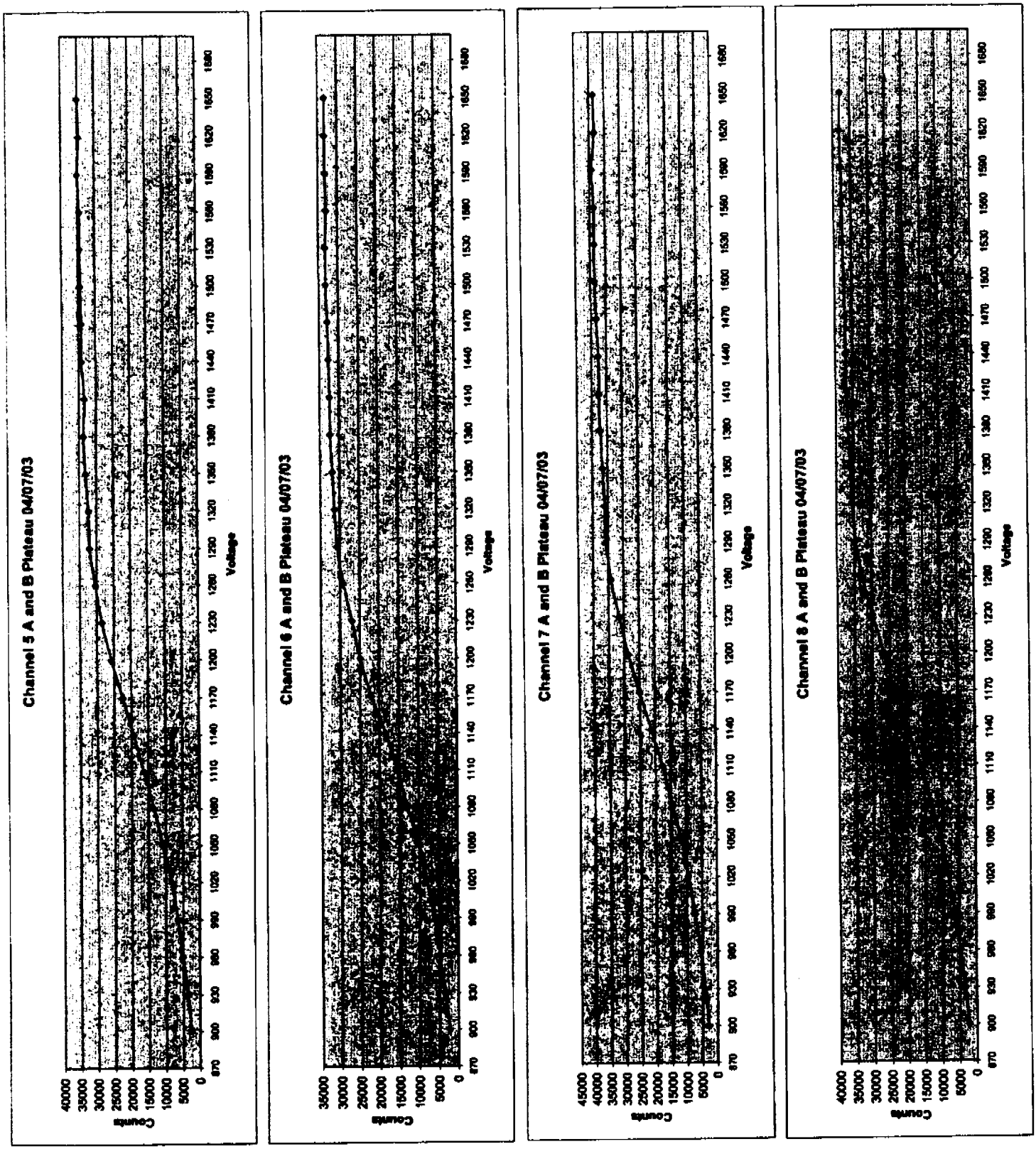
Alpha Attenuation Yellow D4
11/17/2003

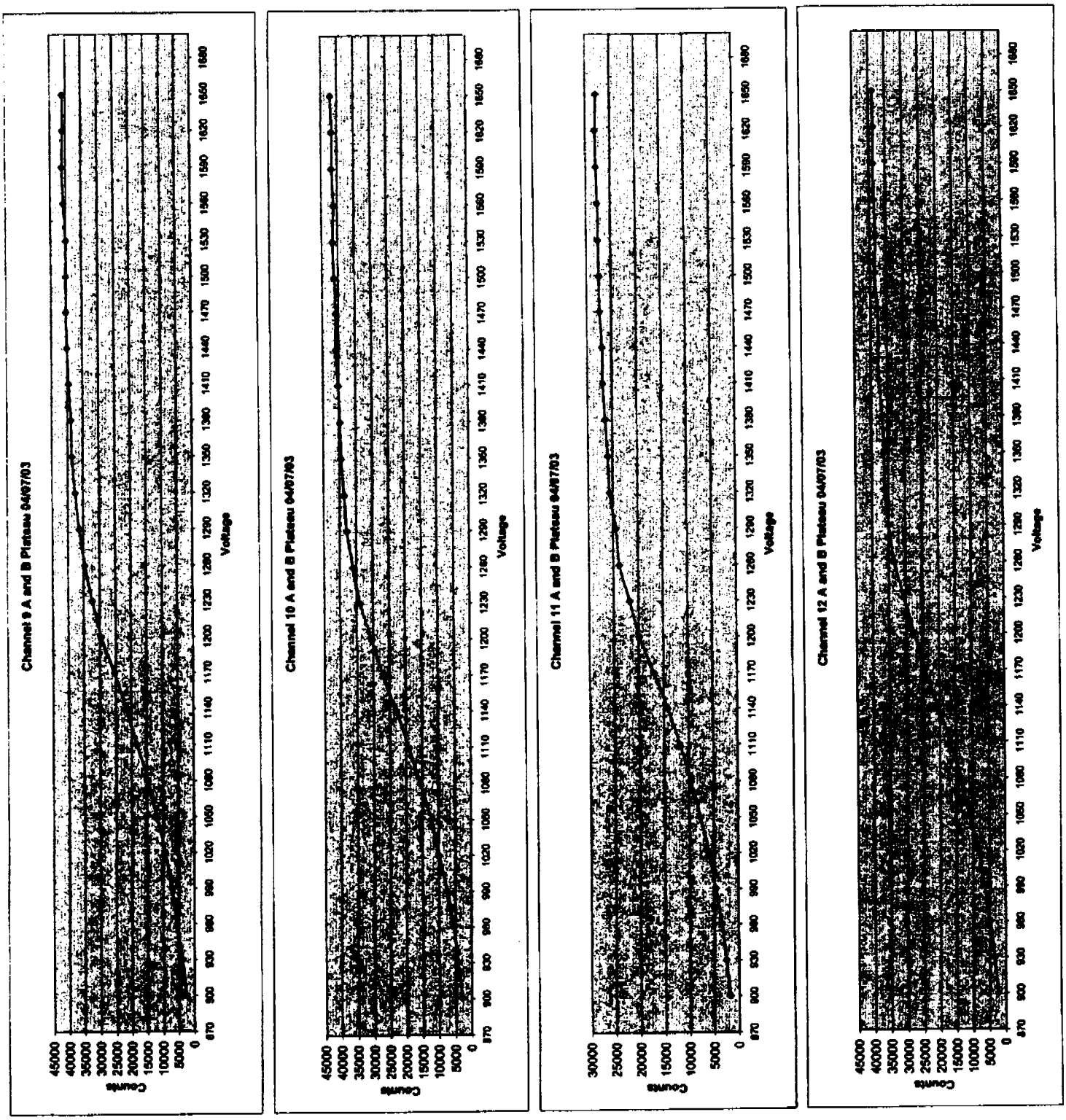
Detector ID	Sample Wt	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
D4	0.0000	12742	12	1061.8333	0.24168
D4	0.0063	19919	22	905.4091	0.20608
D4	0.0115	17310	22	786.8182	0.17909
D4	0.0228	11153	22	506.9545	0.11539
D4	0.0328	12023	22	546.5000	0.12439
D4	0.0437	28859	60	480.9833	0.10948
D4	0.0675	23306	60	388.4333	0.08841
D4	0.0870	17309	60	288.4833	0.06566
D4	0.1129	14840	60	247.3333	0.05630
D4	0.1335	10598	60	176.6000	0.04020
D4	0.1460	8079	60	134.6500	0.03065

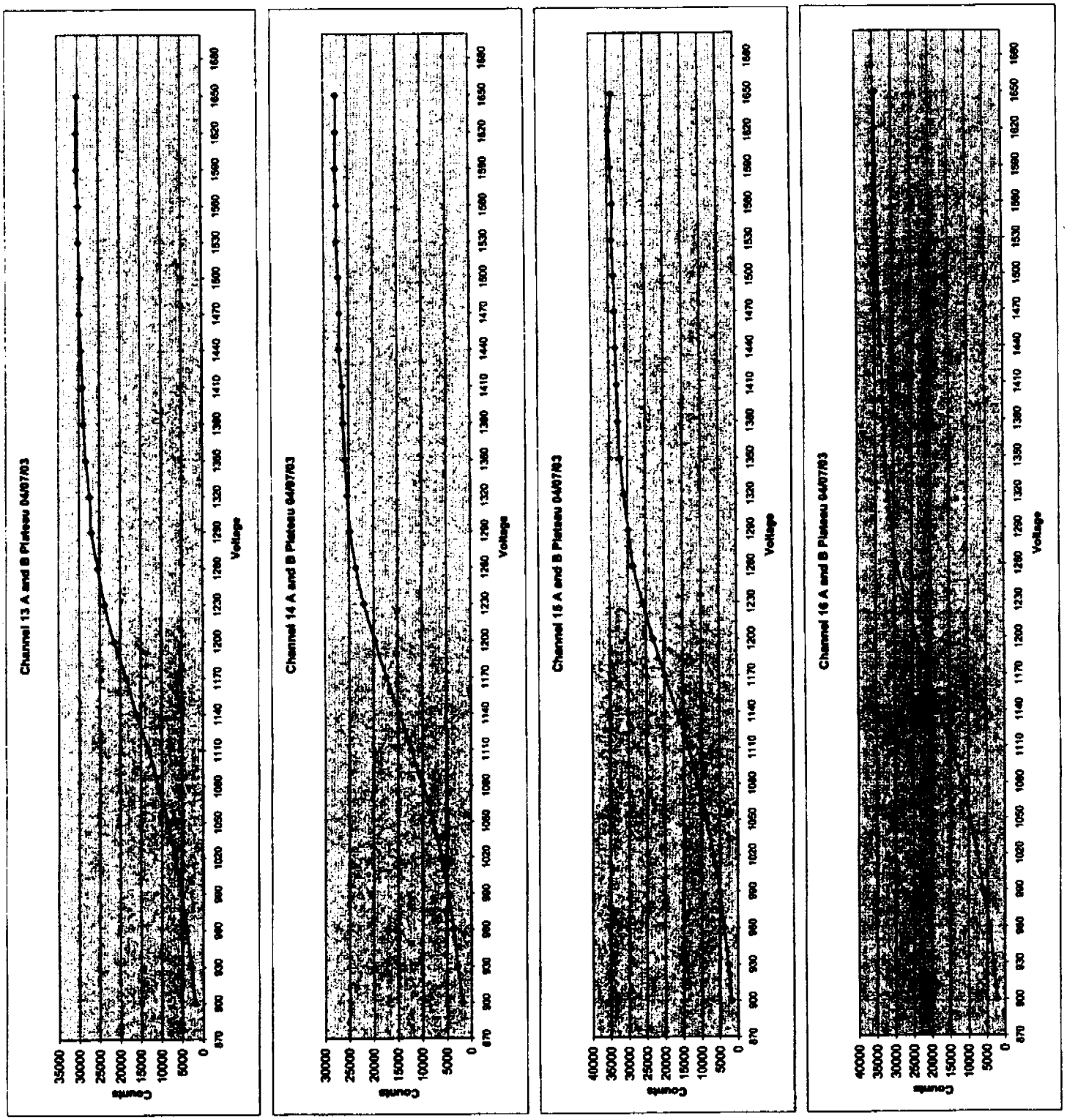


Voltage Plateaus


Channel 1 A and B Plateau 04/07/03
Counts
Voltage
Channel 2 A and B Plateau 04/07/03
Counts
Voltage
Channel 3 A and B Plateau 04/07/03
Counts
Voltage
Channel 4 A and B Plateau 04/07/03
Counts
Voltage


Channel 5 A and B Plateau 04/07/03
Channel 6 A and B Plateau 04/07/03
Channel 7 A and B Plateau 04/07/03
Channel 8 A and B Plateau 04/07/03
Counts
Voltage


Channel 9 A and B Plateau 04/07/03
Channel 10 A and B Plateau 04/07/03
Channel 11 A and B Plateau 04/07/03
Channel 12 A and B Plateau 04/07/03
Counts
Voltage


Channel 13 A and B Plateau 04/07/03
Channel 14 A and B Plateau 04/07/03
Channel 15 A and B Plateau 04/07/03
Channel 16 A and B Plateau 04/07/03
Counts
Voltage

PLATEAU GENERATION

GROSS COUNTS

CHANNEL	GROUP A	GROUP B	GROUP C	GROUP D
1	14	0	0	0
2	0	0	0	0
3	16	0	0	0
4	14	0	0	0
GUARD	6782	6862	7112	6883

START VOLTAGE	900.0	PRESET TIME	1.00
STOP VOLTAGE	1650.0	ELAPSED TIME	13.25
STEP VOLTAGE	30.0	GATING	YES
PRESENT VOLTAGE		MODE	Normal

ALT E: Begin a plateau count
ALT D: Abort a plateau early
ALT P: Print or Plot a stored or saved Plateau

Yellow GPC Plateaus 4/7/2003

Counting time: 1.00

Voltage	4/7/2003 Channel 1	4/7/2003 Channel 2	4/7/2003 Channel 3	4/7/2003 Channel 4	4/7/2003 Channel 5	4/7/2003 Channel 6	4/7/2003 Channel 7	4/7/2003 Channel 8	4/7/2003 Channel 9	4/7/2003 Channel 10	4/7/2003 Channel 11	4/7/2003 Channel 12	4/7/2003 Channel 13	4/7/2003 Channel 14	4/7/2003 Channel 15	4/7/2003 Channel 16
900	2740	3076	2687	3370	2514	2267	2851	2228	2704	2967	1750	2387	2037	1862	1786	2176
930	4111	4295	3897	4883	3673	3443	4056	3415	3874	4221	2533	3491	2834	2757	2695	3174
960	5786	6064	5055	6646	5053	4829	5455	4757	5463	5568	3425	4799	3948	3810	3756	4288
990	7463	7967	6749	8900	6451	5975	7231	6359	7182	7449	4624	6530	5148	4830	5035	5982
1020	9944	10362	8578	11303	8302	8045	9337	8158	9253	9944	5956	8336	6802	6075	6643	7492
1050	12653	12987	10729	14427	10796	10077	11680	10440	11943	12328	7780	10945	8505	7829	8648	9486
1080	15940	16390	13211	18097	13271	12996	14720	13203	14600	15554	9536	13579	10726	9884	11018	11848
1110	19828	19880	15883	21704	16300	15475	17692	16338	18263	19069	11790	16804	13103	12254	13458	14771
1140	23909	23988	18880	26119	19255	18402	21258	19834	21630	22815	14200	20533	16025	14668	16580	17835
1170	28369	27959	21728	29904	22443	22088	25035	23554	25332	26882	16895	24170	18528	17283	19828	20873
1200	32768	32359	24236	33972	25730	24949	28606	26803	29513	30389	19771	27461	21458	19841	22902	24065
1230	37266	36063	26525	36843	28441	27029	31410	29870	32163	33793	21720	30556	23790	21894	25842	26714
1260	40333	38863	28036	39471	30297	29143	34045	32558	34491	36000	23716	33265	25362	23516	28368	29234
1290	42713	40448	28986	40931	31905	30688	35671	34458	36303	37767	24371	34896	26899	24683	29786	30469
1320	44319	42370	29626	41529	32258	31370	35975	35291	37538	38581	25634	36050	27273	25277	30930	31416
1350	44952	42876	30060	42081	33043	31787	36571	35834	38647	39286	25917	36145	28227	25669	31962	32285
1380	46105	43181	30686	42332	33578	32384	37222	36357	38790	39648	26377	36587	28779	26099	32448	32658
1410	46302	43623	30585	43221	33240	32440	37541	36777	39446	40080	26820	37499	28964	26319	32738	32904
1440	46135	44024	30659	43271	34095	32717	37675	36990	39923	40788	26845	37561	29330	26893	33120	33351
1470	46773	44390	30971	43244	34046	32864	38121	37140	40147	40652	27327	37795	29706	26771	33300	33764
1500	46812	44474	30914	43650	34277	33226	38620	37168	40195	41076	27371	38592	29482	26939	33503	34023
1530	46932	44435	31279	43778	34414	33201	38588	37491	40023	41473	27541	38081	29941	27325	33908	34216
1560	46952	44738	31366	43451	34368	32943	38574	37565	40680	41123	27832	38504	29863	27224	33630	34321
1590	47095	44717	31637	43947	35060	33208	39114	37740	41110	41668	27846	38661	30303	27485	34157	34471
1620	47408	45434	31619	44148	34697	33253	38273	38058	40865	41536	28005	38510	30372	27404	34495	34501
1650	47255	45248	31567	44111	34975	33255	38610	37835	40936	41979	27760	38749	30123	27388	33776	34266

Discriminator Settings

TENNELEC LB4000 PAGE 3

#1 Channel GROUP > A B C D

Discriminator Settings	Beta LL	0	0	0	0
	Beta UL	1150	1200	1225	1575
	Alpha LL	1151	1201	1226	1576
	Alpha UL	4095	4095	4095	4095
	Threshold	25	25	25	25
Automatic Sequence	Print Enable	YES	YES	YES	YES
	Save Enable	NO	NO	NO	NO
	Print	QUANTERA	QUANTERA	QUANTERA	QUANTERA
	Save	leebkg.dat	leebkg.dat	leebkg.dat	leebkg.dat
	Repeat	0	0	0	0
Detector Bias	Alpha	802.5			
	Beta	1440.0			

Count Mode Simultaneous

(ALT T to select Count Mode, CTL PgUp and CTL PgDn for other channels)
(ALT X to configure the Print & Save commands and the Autoexecute Batch Name)

TENNELEC LB4000 PAGE 3

#2 Channel GROUP > A B C D

Discriminator Settings	Beta LL	0	0	0	0
	Beta UL	1107	1200	1450	1575
	Alpha LL	1108	1201	1451	1576
	Alpha UL	4095	4095	4095	4095
	Threshold	25	25	25	25
Automatic Sequence	Print Enable	YES	YES	YES	YES
	Save Enable	NO	NO	NO	NO
	Print	QUANTERA	QUANTERA	QUANTERA	QUANTERA
	Save	leebkg.dat	leebkg.dat	leebkg.dat	leebkg.dat
	Repeat	0	0	0	0
Detector Bias	Alpha	802.5			
	Beta	1440.0			

Count Mode Simultaneous

(ALT T to select Count Mode, CTL PgUp and CTL PgDn for other channels)
(ALT X to configure the Print & Save commands and the Autoexecute Batch Name)

TENNELEC LB4000 PAGE 3

#3 Channel GROUP > A B C D

Discriminator Settings	Beta LL	0	0	0	0
	Beta UL	1350	1350	1275	1425
	Alpha LL	1356	1351	1276	1426
	Alpha UL	4095	4095	4095	4095
	Threshold	25	25	25	25
Automatic Sequence	Print Enable	YES	YES	YES	YES
	Save Enable	NO	NO	NO	NO
	Print	QUANTERA	QUANTERA	QUANTERA	QUANTERA
	Save	leebkg.dat	leebkg.dat	leebkg.dat	leebkg.dat
	Repeat	0	0	0	0
Detector Bias	Alpha	802.5			
	Beta	1440.0			

Count Mode Simultaneous

(ALT T to select Count Mode, CTL PgUp and CTL PgDn for other channels)
(ALT X to configure the Print & Save commands and the Autoexecute Batch Name)

TENNELEC LB4000 PAGE 3

#4 Channel GROUP > A B C D

Discriminator Settings	Beta LL	0	0	0	0
	Beta UL	1250	835	1450	1435
	Alpha LL	1251	836	1451	1436
	Alpha UL	4095	4095	4095	4095
	Threshold	25	25	25	25
Automatic Sequence	Print Enable	YES	YES	YES	YES
	Save Enable	NO	NO	NO	NO
	Print	QUANTERA	QUANTERA	QUANTERA	QUANTERA
	Save	leebkg.dat	leebkg.dat	leebkg.dat	leebkg.dat
	Repeat	0	0	0	0
Detector Bias	Alpha	802.5			
	Beta	1440.0			

Count Mode Simultaneous

(ALT T to select Count Mode, CTL PgUp and CTL PgDn for other channels)
(ALT X to configure the Print & Save commands and the Autoexecute Batch Name)

STL

Beta into Alpha Crosstalk

[TENNELEC LB4000] [PAGE 1]

10:28:30		I.D.	TIME	COUNTS α	COUNTS β	αEFF	βEFF	BKGα	BKGβ
GROUP A	1	e	0.38	18	18191	0.00	0.00	0.00	0.00
9:24:00	2	ROIA2	0.38	18	18298	0.00	0.00	0.00	0.00
1500.00	3	ROIA3	0.38	12	12695	0.00	0.00	0.00	0.00
	4	ROIA4	0.38	14	16250	0.00	0.00	0.00	0.00
GROUP B	1	ROIB1	0.38	13	14245	0.00	0.00	0.00	0.00
9:24:00	2	ROIB2	0.38	11	11896	0.00	0.00	0.00	0.00
1500.00	3	ROIB3	0.38	13	14912	0.00	0.00	0.00	0.00
	4	ROIB4	0.38	13	14236	0.00	0.00	0.00	0.00
GROUP C	1	ROIC1	0.44	14	16662	0.00	0.00	0.00	0.00
10:08:49	2	ROIC2	0.44	18	18247	0.00	0.00	0.00	0.00
1500.00	3	ROIC3	0.44	10	11321	0.00	0.00	0.00	0.00
	4	ROIC4	0.44	13	15911	0.00	0.00	0.00	0.00
GROUP D	1	ROID1	0.44	14	14451	0.00	0.00	0.00	0.00
10:08:49	2	ROID2	0.44	10	11868	0.00	0.00	0.00	0.00
1500.00	3	ROID3	0.44	13	14698	0.00	0.00	0.00	0.00
	4	ROID4	0.44	13	14874	0.00	0.00	0.00	0.00

SEVERN TRENT **STL**

BACKGROUNDS

Yellow – November 2003

BG1103.TXT
11/20/03

12:27:58		I.D.	TIME	COUNTS					
GROUP A	1	LONG BKG 11/20/03	1000.0	29	1024	0.00	0.00	0.03	1.02
18:35:04	2	LONG BKG	1000.0	37	1049	0.00	0.00	0.04	1.05
1.00	3	LONG BKG	1000.0	51	1122	0.00	0.00	0.05	1.12
	4	LONG BKG	1000.0	61	1111	0.00	0.00	0.06	1.11
GROUP B	1	LONG BKG	1000.0	51	1176	0.00	0.00	0.05	1.18
18:35:04	2	LONG BKG	1000.0	60	1012	0.00	0.00	0.06	1.01
1.00	3	LONG BKG	1000.0	44	1141	0.00	0.00	0.04	1.14
	4	LONG BKG	1000.0	48	1005	0.00	0.00	0.05	1.00
GROUP C	1	LONG BKG	1000.0	44	976	0.00	0.00	0.04	0.98
18:35:04	2	LONG BKG	1000.0	34	965	0.00	0.00	0.03	0.97
1.00	3	LONG BKG	1000.0	46	883	0.00	0.00	0.05	0.89
	4	LONG BKG	1000.0	36	1065	0.00	0.00	0.04	1.00
GROUP D	1	LONG BKG	1000.0	38	859	0.00	0.00	0.04	0.86
18:35:04	2	LONG BKG	1000.0	72	975	0.00	0.00	0.07	0.98
1.00	3	LONG BKG	1000.0	35	723	0.00	0.00	0.04	0.72
	4	LONG BKG	1000.0	51	912	0.00	0.00	0.05	0.91

Long Backgrounds 04/07/2003

[TENNELEC LB4000] [PAGE 1]

18:09:44		I.D.	TIME	COUNTS α	COUNTS β	αEFF	βEFF	BKGα	BKGβ
GROUP A	1	BA1	1000.0	89	1219	0.00	0.00	0.00	0.00
22:41:27	2	BA2	1000.0	39	1081	0.00	0.00	0.00	0.00
1000.00	3	BA3	1000.0	35	1187	0.00	0.00	0.00	0.00
	4	BA4	1000.0	61	1123	0.00	0.00	0.00	0.00
GROUP B	1	BB1	1000.0	52	1159	0.00	0.00	0.00	0.00
22:41:27	2	BB2	1000.0	44	1160	0.00	0.00	0.00	0.00
1000.00	3	BB3	1000.0	54	1294	0.00	0.00	0.00	0.00
	4	BB4	1000.0	43	1038	0.00	0.00	0.00	0.00
GROUP C	1	BC1	1000.0	30	933	0.00	0.00	0.00	0.00
22:41:27	2	BC2	1000.0	34	924	0.00	0.00	0.00	0.00
1000.00	3	BC3	1000.0	44	1090	0.00	0.00	0.00	0.00
	4	BC4	1000.0	31	1056	0.00	0.00	0.00	0.00
GROUP D	1	BD1	1000.0	45	912	0.00	0.00	0.00	0.00
22:41:27	2	BD2	1000.0	44	1136	0.00	0.00	0.00	0.00
1000.00	3	BD3	1000.0	54	917	0.00	0.00	0.00	0.00
	4	BD4	1000.0	61	980	0.00	0.00	0.00	0.00

Group C channel 2 COUNT TERMINATED

Calibration Standards and Certificates

Alpha Th-230

Alpha Calibration Standards
11/14/2003 reprep 11/17/03
Alpha standard, 02-047, 2196.7 dpm/mL Th-230, 4393.4 dpm/ standard

Std #	mLs, 02-047	mLs salt solution	gross mass (g)	tare mass (g)	net mass (g)
1	2	0	8.4532	8.4525	0.0007
2	2	0.25	8.4245	8.4182	0.0063
3	2	0.5	8.4418	8.4303	0.0115
4	2	1	8.4154	8.3926	0.0228
5	2	1.5	8.4875	8.4547	0.0328
6	2	2	8.4561	8.4124	0.0437
7	2	3	8.4552	8.3877	0.0675
8	2	4	8.5208	8.4338	0.0870
9	2	5	8.5345	8.4216	0.1129
10	2	6	8.5468	8.4133	0.1335
11	2	7	8.5682	8.4222	0.1460
1-reprep	2	0	*	*	0

* See Calibration Narrative.

ANALYTICS

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CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

65090-334

Th-230 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated by liquid scintillation counting.

Radionuclide purity and calibration were checked by germanium gamma-ray spectrometry and liquid scintillation counting. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

ISOTOPE:	Th-230
ACTIVITY (dps):	7.654 E3
HALF-LIFE:	7.538 E4 Years
CALIBRATION DATE:	December 19, 2002 12:00 EST
TOTAL UNCERTAINTY*:	3.5%
SYSTEMATIC:	2.6%
RANDOM:	0.9%

*99% Confidence Level

Impurities: γ-impurities <0.1%, α-impurities <0.05%

5.17738 grams 0.5M HNO_3 solution.

P O NUMBER 1614557-000 OP, Item 3

SOURCE PREPARED BY: M. V. Taskaeva for
M. Taskaeva, Radiochemist

Q A APPROVED: 12-19-02

Logbook: 2060

Radiochemistry
Standards Preparation Logbook

Date Prep'd	Exp. Date	Standard ID Number	Isotope	Parent ID	Parent Activity	Parent Ref. Date	Aliquot	Dilution Volume	Change in Time	T½	Final Activity	Solvent/ Lot #	Prep'd Initials	Cal. Ver. Initials	Comments
9-11-03	9-11-04	03-069	Pu-238	02-026	132.98	2-23-02	0.5 ml	↓	1.56 yrs	32022.4 / 87.75			MFM		re-certification of 03-031 ... 66.20
↓	↓	↓	Pu-239	02-025	128.05	2-23-02		150 ml		24110 yrs	62.025 dpm/ml		MFM		62.025 dpm/ml
9-11-03	9-11-08	03-070	Am243	98-011	1161 dpm/g	2-28-98	15 g	200 ml		7.37 E+3 y	87.075		MFM		
10-6-03	10-6-08	03-071	Th230	65090-334	7,654 dps	10-19-02	5.1498 g	100 mL	N/A	7.53 E+4	4,567.9 dpm/mL	0.5 M HNO3	BH	BBF	
10-6-03	10-6-08	03-072	Th230	03-071	4,567.9 dpm/mL	12-19-02	1 mL	200 mL	N/A	7.53 E+4	22.84 dpm/mL	0.5 M HNO3	BH	BBF	
10-11-03	10-11-08	03-073	Clean U-232	047-105	1099 dpm/ml	9-16-97	10 ml	1000 L		70 y	163.85 dpm/L	DI H2O 2M H2SO4 KOH pH 1.5	MFM BBF		Rad 03-0078 in Rad Capture
10/31/03	10/31/08	03-074	I-129	681-78-4	1.059 uCi	1-1-2000	1 mL	100 mL	N/A	1.57 e+07	10.54 nCi/mL	0.1 M NaOH	BH	BBF	
10/31/03	10/31/04	03-075	I-129	03-074	10.54 nCi/mL	1-1-2000	1 mL	100 mL	N/A	1.57 E7	105.4 pCi/mL	0.1 M NaOH	BH	BBF	
10/31/03	10/31/04	03-076	Ra 228	01012	1,015 dpm/mL	2/16/01	2 mL	100 mL	NA	5.75 y	20.30 dpm/mL	0.5 M HNO3	BH	BBF	
10/31/03	10/31/04	03-081	Pu-242	92-242-5-1	124.63 Bq/g	12/18/89	5.0723	500 mL	NA	3.73 X 10^5 y	78.9017	.5 M HNO3	MFM	MO	
11/3/03	11/3/04	SR19	SM SR carrier	[illegible]	N/A	N/A	120.77 g	1 Liter	N/A	N/A		ditto	[illegible]	BBF	Reported in Rad capture
11-5-03	11-5-04	RAD03-0022	Th-229	02-006	2134.75 dpm/g	1-28-02	17.5 mL	500 mL	N/A	7.3e+3	74.716 dpm/mL	.5 M HNO3	MFM	JMW	

Additional Comments:

28

LOT# F5D220356

Narrative for LB4000 Yellow Alpha Calibration

The first count of calibration standards was on November 14, 2003. Detector efficiencies were calculated. It was discovered the efficiency of standard number one was below the expected value. This standard was re-prepared and counted separately on November 17, 2003. Efficiency calculations using the new standard number one yielded acceptable results.

During the re-preparation process of standard number one the gross and tare weights of the planchette were lost due to laboratory technician error. Note standard number one is the zero mass standard. The prep technician recalled that the net mass was actually zero before the weights were lost.

STL

Beta Calibration for LB4000

Yellow

Sr90

Calibration Standards and Certificates

Beta

Sr90

Beta Standards 1/22/04

Strontium 90 standard 01093
10,435 pCi/mL
Reference date: 9/19/01
0.1 ml ADDED TO EACH STANDARD

STD #	TARE	GROSS	MASS	SALT mL
1	8.4539	8.454	0.0001	0
2	8.512	8.5145	0.0025	0.1
3	8.5133	8.5179	0.0046	0.2
4	8.4823	8.4906	0.0083	0.375
5	8.4135	8.4279	0.0144	0.625
6	8.4015	8.426	0.0245	1.1
7	8.5081	8.5359	0.0278	1.25
8	8.4565	8.4992	0.0427	1.9
9	8.4036	8.459	0.0554	2.5
10	8.4005	8.4844	0.0839	3.75
11	8.4275	8.5471	0.1196	5.5
12	8.394	8.5664	0.1724	8
13	8.4041	8.592	0.1879	10
14	8.4168	8.6704	0.2536	12

Decay Correction

Strontium 90						
Initial Activity:	23166	dpm				
Reference Date:	8/7/2001					
Current Date:	3/3/2004		(or date at which you wish to determine activity)			
Elapsed Time:	939.000	days				
Half Life:	10409.625	days				
Exponential Term:	0.939389271					
Corrected Activity:	21761.89185	dpm	9802.653987	pCi	362.6982	Bq
Activity (Sr/Y-90)	43523.7837	dpm	19605.30797	pCi	725.3964	Bq

LOT# F5D220356

STL ST. LOUIS

Logbook: 2060

Radiochemistry
Standards Preparation Logbook

Date Prep'd	Expir. Date	Standard ID Number	Isotope	Parent ID Number	Parent Activity	Parent Ref. Date	Aliquot	Dilution Volume	Change in Time	T ½	Final Activity	Solvent/ Lot #	Prep'd Initials	Cal. Ver. Initials	Comments
9/18/01	12/18/01	01-087	UNAT CAL STD	01085	10 µg/mL	9/18/01	1.5 mL	100 mL	N/A	N/A	150 ng/mL	.8 M HNO_3	BMW	JMC	Nanogram/mL
		01-088					1.0 mL				100 ng/mL			JMC	
		01-089					0.5 mL				50 ng/mL			JMC	
		01-090		01086	100 ng/mL		10 mL	100 mL			10 ng/mL			JMC	
		01-091		01-089	50 ng/mL		10 mL	100.0 mL			5 ng/mL			JMC	
		01-092		01-088	100 ng/mL		1.0 mL	100.0 mL			1 ng/mL			JMC	
9/19/01	9/19/04	01-093	SR-90	ampule C2201-374	38,897 d/s	8/7/01	4.7531 g	100.0 mL	N/A	29.7 yr	~~10435 pCi/mL~~ 104.9 pCi/mL 231.66 dpm/mL	.8 M HNO_3	BMW	JMC	
9/19/01	9/19/04	01-094	SR90	01093	10435.9 d/s	9/19/01	1.0 mL	100.0 mL	N/A	29.7 yr	104.9 pCi/mL 231.66 dpm/mL	.8 M HNO_3	BMW	JMC	
9/26/01	9/26/02 10/4/02	Ba-28	STD. Barium Carrier	mo38-RFCM $BaCl_2$	N/A	3/23/98	28.46 g	1000.0mL	N/A	N/A	27.2 mg/mL	Reagent H2O	BMW	JMC	See And explore right sheet.
10/4/01	~~10/4/01~~ 10/4/02 ema 3-18-03	01-095	U-232	97-105	10,994 dpm/mL	9-6-97	1 mL	500 mL	—	70 yr	21.99 dpm	1M HNO_3	CMA	JMC	1
10/12/01	10/12/02	01-096	Ra226	98-006	1316 dpm/mL	4/2/98	1.0 mL	100.0mL	—	1600 yr	13.16 dpm/mL	1M HNO_3	AM	JMC	
12/18/01	10/18/02 to 12/19/01 ema 3-18-03	01-097	(ABT) SR90 Yt90	01032	1765.4 d/m/mL	3/26/96	2.0mL	100.0mL	N/A	28.5 yr	(35.31) total ~~33.99~~ dpm/mL decay corrected 34.83	HNO_3	BMW	AW	Decay Correct= 1699.65 d/m/mL

Additional Comments:

JMC 10-29-01

553 of 938

[redacted]UIS

ANALYTICS

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Phone (404) 352-8677
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CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

62204-334

Sr-90 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated by liquid scintillation counting.

Radionuclide purity and calibration were checked by germanium gamma-ray spectrometry and liquid scintillation counting. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

ISOTOPE:	Sr-90
ACTIVITY (dps):	3.897 E4
HALF-LIFE:	28.79 years
CALIBRATION DATE:	August 7, 2001 12:00 EST
TOTAL UNCERTAINTY*:	4.0%
SYSTEMATIC:	3.5%
RANDOM:	0.5%

*99% Confidence Level

Impurities: γ-impurities <0.1%

4.99897 grams 0.1M HCl solution with 30 µg/g Sr carrier.

P O NUMBER 1097166, Item 1

SOURCE PREPARED BY: M. D. Currie

M. D. Currie, Radiochemist

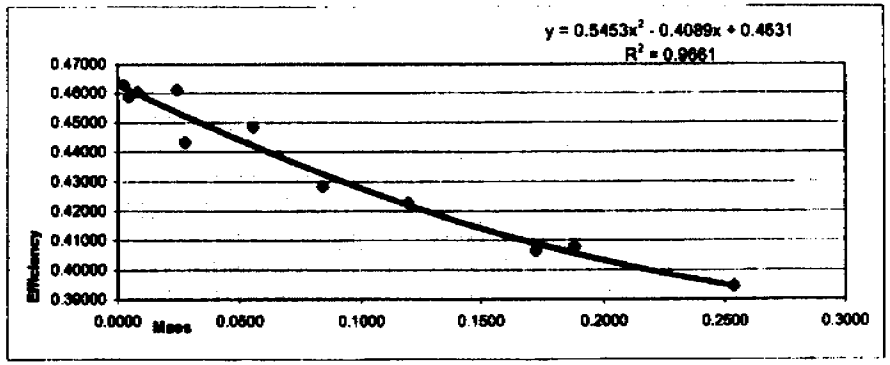
Q A APPROVED: 8-8-01

LOT# F5D220356

Detector Efficiency Curves

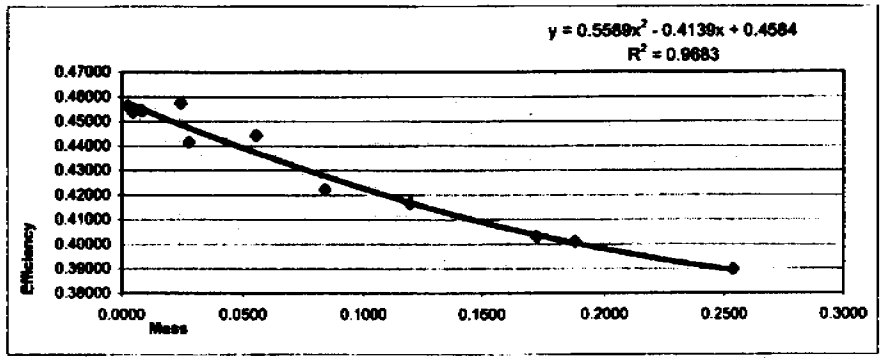
Beta Attenuation Yellow A1
1/22/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4364.3 CPM	Sr90 Eff
A1	0.0025	30297	15.00	2019.800	0.46280
A1	0.0046	30020	15.00	2001.333	0.45857
A1	0.0063	30141	15.00	2009.400	0.46042
A1	0.0245	30174	15.00	2011.600	0.46092
A1	0.0278	29011	15.00	1934.067	0.44316
A1	0.0554	29349	15.00	1956.600	0.44832
A1	0.0839	28041	15.00	1869.400	0.42834
A1	0.1196	27671	15.00	1844.733	0.42269
A1	0.1724	26606	15.00	1773.733	0.40642
A1	0.1879	26603	15.00	1779.533	0.40775
A1	0.2536	25814	15.00	1720.933	0.39432



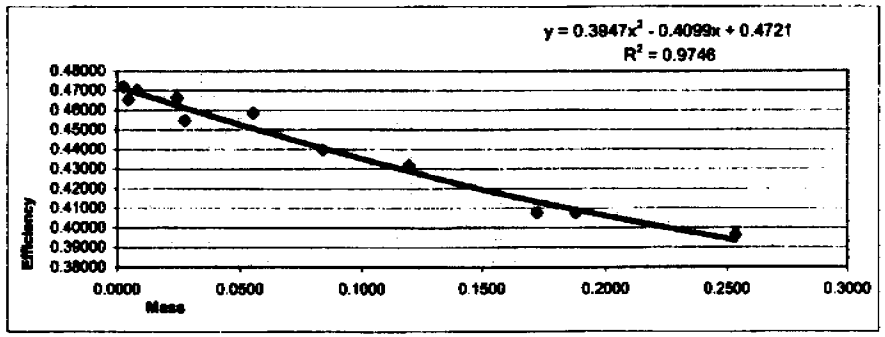
Beta Attenuation Yellow A2
1/22/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4364.3 CPM	Sr90 Eff
A2	0.0025	29870	15.00	1991.333	0.45628
A2	0.0046	29707	15.00	1980.467	0.45379
A2	0.0063	29736	15.00	1982.400	0.45423
A2	0.0245	29948	15.00	1996.533	0.45747
A2	0.0278	28900	15.00	1926.667	0.44146
A2	0.0554	29080	15.00	1938.667	0.44421
A2	0.0839	27642	15.00	1842.800	0.42224
A2	0.1196	27258	15.00	1817.200	0.41638
A2	0.1724	26363	15.00	1756.867	0.40301
A2	0.1879	26249	15.00	1749.933	0.40097
A2	0.2536	25509	15.00	1700.600	0.38966



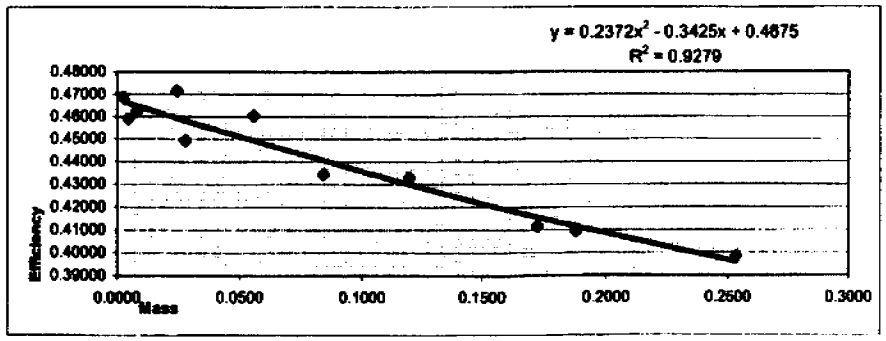
Beta Attenuation Yellow A3
1/22/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4364.3 CPM	Sr90 Eff
A3	0.0025	30900	15.00	2060.000	0.47201
A3	0.0046	30454	15.00	2030.267	0.46520
A3	0.0063	30773	15.00	2051.533	0.47007
A3	0.0245	30523	15.00	2034.867	0.46625
A3	0.0278	29762	15.00	1984.133	0.45463
A3	0.0554	30017	15.00	2001.133	0.45852
A3	0.0839	28779	15.00	1918.600	0.43981
A3	0.1196	28257	15.00	1883.800	0.43184
A3	0.1724	26872	15.00	1778.133	0.40743
A3	0.1879	26872	15.00	1778.133	0.40743
A3	0.2536	25937	15.00	1729.133	0.39620



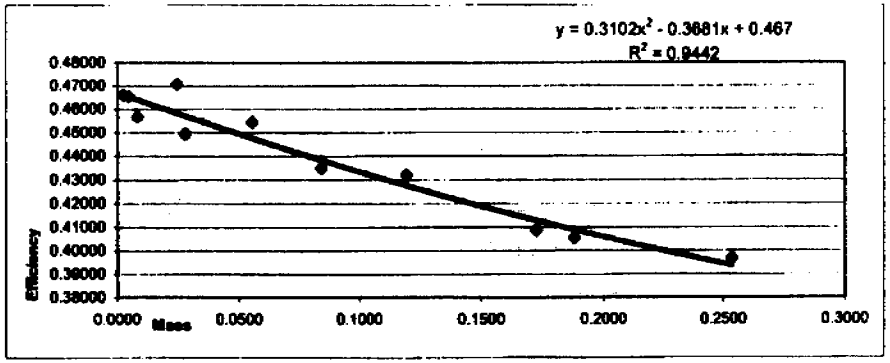
Beta Attenuation Yellow A4
1/22/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4364.3 CPM	Sr90 Eff
A4	0.0025	30669	15.00	2044.600	0.46848
A4	0.0046	30046	15.00	2003.067	0.45897
A4	0.0063	30271	15.00	2018.067	0.46240
A4	0.0245	30861	15.00	2057.400	0.47142
A4	0.0278	29399	15.00	1959.933	0.44906
A4	0.0554	30131	15.00	2008.733	0.46026
A4	0.0839	28428	15.00	1895.200	0.43425
A4	0.1196	28343	15.00	1889.533	0.43295
A4	0.1724	26934	15.00	1795.600	0.41143
A4	0.1879	26806	15.00	1787.067	0.40947
A4	0.2536	26077	15.00	1738.467	0.39834



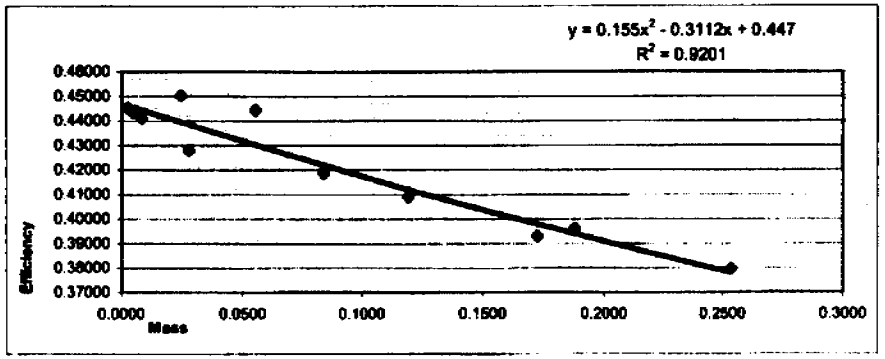
Beta Attenuation Yellow B1
1/22/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4364.3 CPM	Sr90 Eff
B1	0.0025	30502	15.00	2033.467	0.46593
B1	0.0046	30469	15.00	2031.267	0.46543
B1	0.0083	29883	15.00	1992.200	0.45648
B1	0.0245	30810	15.00	2054.000	0.47064
B1	0.0278	29408	15.00	1960.533	0.44922
B1	0.0554	29740	15.00	1982.667	0.45429
B1	0.0839	28466	15.00	1897.733	0.43483
B1	0.1196	28283	15.00	1885.533	0.43204
B1	0.1724	26742	15.00	1782.800	0.40850
B1	0.1879	26534	15.00	1768.933	0.40532
B1	0.2536	25980	15.00	1730.667	0.39655



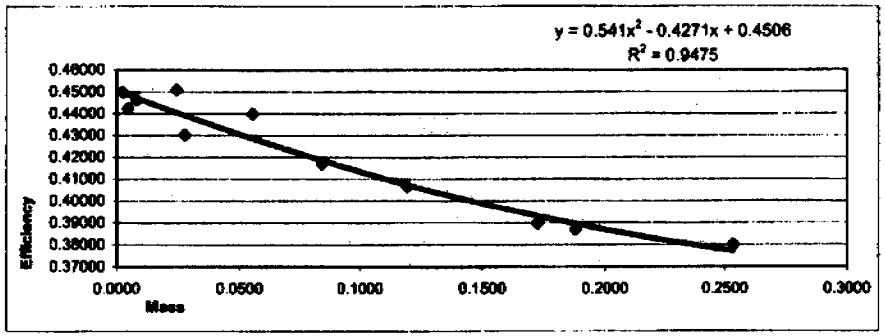
Beta Attenuation Yellow B2
1/22/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4364.3 CPM	Sr90 Eff
B2	0.0025	29142	15.00	1942.800	0.44516
B2	0.0046	29021	15.00	1934.733	0.44331
B2	0.0083	28870	15.00	1924.667	0.44100
B2	0.0245	29474	15.00	1964.933	0.45023
B2	0.0278	28009	15.00	1867.267	0.42785
B2	0.0554	29080	15.00	1938.667	0.44421
B2	0.0839	27403	15.00	1826.867	0.41859
B2	0.1196	26776	15.00	1785.067	0.40902
B2	0.1724	25725	15.00	1715.000	0.39298
B2	0.1879	25927	15.00	1728.467	0.39605
B2	0.2536	24845	15.00	1656.333	0.37952



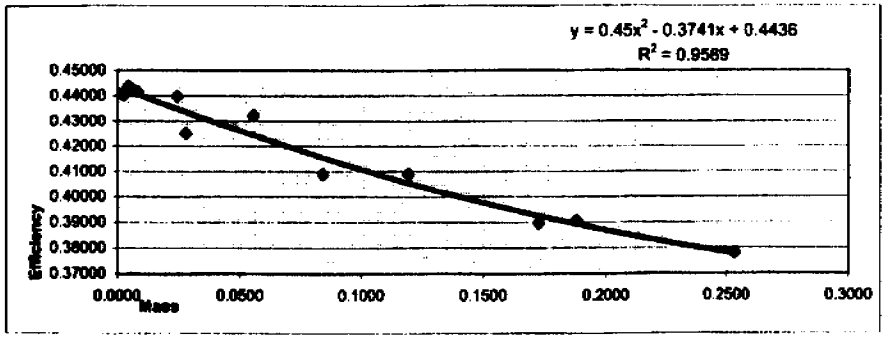
Beta Attenuation Yellow B3
1/22/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4364.3 CPM	Sr90 Eff
B3	0.0025	29438	15.00	1962.533	0.44968
B3	0.0046	28962	15.00	1930.800	0.44241
B3	0.0083	29207	15.00	1947.133	0.44615
B3	0.0245	29512	15.00	1967.467	0.45081
B3	0.0278	28157	15.00	1877.133	0.43011
B3	0.0554	28788	15.00	1919.200	0.43975
B3	0.0839	27286	15.00	1819.067	0.41681
B3	0.1196	26615	15.00	1774.333	0.40656
B3	0.1724	25503	15.00	1700.200	0.38957
B3	0.1879	25325	15.00	1688.333	0.38685
B3	0.2536	24689	15.00	1657.933	0.37989



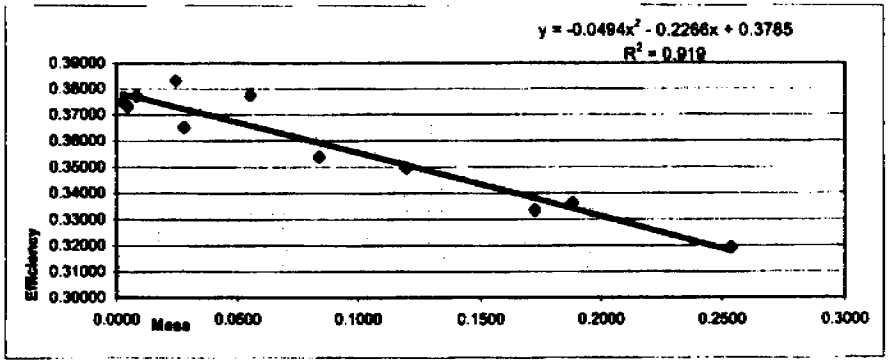
Beta Attenuation Yellow B4
1/22/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4364.3 CPM	Sr90 Eff
B4	0.0025	28810	15.00	1920.667	0.44009
B4	0.0046	29040	15.00	1936.000	0.44360
B4	0.0083	28903	15.00	1926.867	0.44151
B4	0.0245	28782	15.00	1918.800	0.43966
B4	0.0278	27818	15.00	1854.533	0.42493
B4	0.0554	28282	15.00	1885.467	0.43202
B4	0.0839	26755	15.00	1783.667	0.40869
B4	0.1196	26761	15.00	1784.067	0.40879
B4	0.1724	25502	15.00	1700.133	0.38955
B4	0.1879	25559	15.00	1703.933	0.39043
B4	0.2536	24737	15.00	1649.133	0.37787



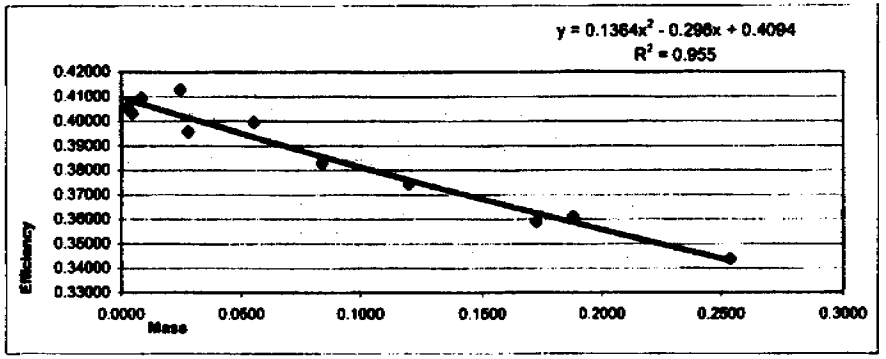
Beta Attenuation Yellow C1
3/3/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4352.38 CPM	Sr90 Eff
C1	0.0025	48945	30.00	1631.500	0.37485
C1	0.0046	48717	30.00	1623.900	0.37311
C1	0.0083	49232	30.00	1641.067	0.37705
C1	0.0245	50015	30.00	1667.167	0.38305
C1	0.0278	47671	30.00	1589.033	0.36510
C1	0.0554	49279	30.00	1642.633	0.37741
C1	0.0839	46184	30.00	1539.467	0.35371
C1	0.1196	45841	30.00	1521.367	0.34955
C1	0.1724	43527	30.00	1450.900	0.33336
C1	0.1879	43893	30.00	1463.100	0.33616
C1	0.2536	41671	30.00	1389.033	0.31914



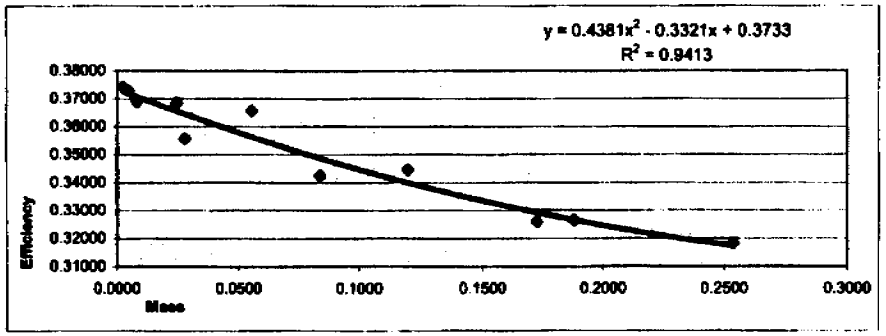
Beta Attenuation Yellow C2
3/3/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4352.38 CPM	Sr90 Eff
C2	0.0025	52929	30.00	1764.300	0.40536
C2	0.0046	52635	30.00	1754.500	0.40311
C2	0.0083	53443	30.00	1781.433	0.40930
C2	0.0245	53884	30.00	1796.133	0.41268
C2	0.0278	51670	30.00	1722.333	0.39572
C2	0.0554	52153	30.00	1738.433	0.39942
C2	0.0839	49978	30.00	1665.933	0.38276
C2	0.1196	48883	30.00	1629.433	0.37438
C2	0.1724	46847	30.00	1561.567	0.35878
C2	0.1879	47144	30.00	1571.467	0.36106
C2	0.2536	44893	30.00	1496.433	0.34382



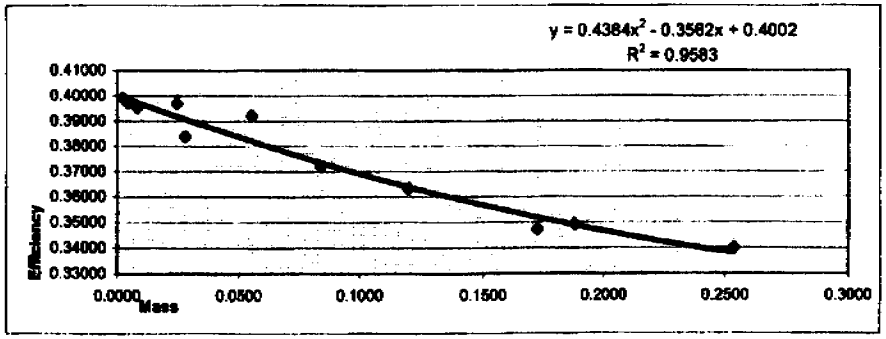
Beta Attenuation Yellow C3
3/3/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4352.38 CPM	Sr90 Eff
C3	0.0025	48832	30.00	1627.733	0.37399
C3	0.0046	48690	30.00	1623.000	0.37290
C3	0.0083	48153	30.00	1605.100	0.36879
C3	0.0245	48096	30.00	1603.267	0.36837
C3	0.0278	46426	30.00	1547.533	0.35556
C3	0.0554	47736	30.00	1591.267	0.36561
C3	0.0839	44707	30.00	1490.233	0.34240
C3	0.1196	44983	30.00	1499.433	0.34451
C3	0.1724	42535	30.00	1417.833	0.32576
C3	0.1879	42606	30.00	1420.267	0.32632
C3	0.2536	41543	30.00	1384.767	0.31816



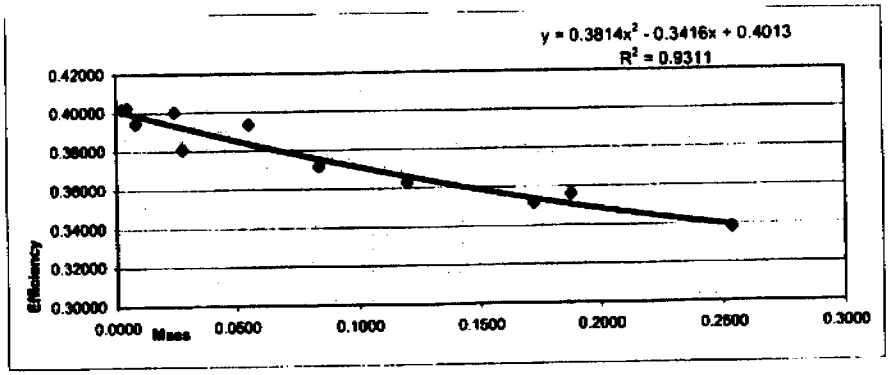
Beta Attenuation Yellow C4
3/3/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4352.38 CPM	Sr90 Eff
C4	0.0025	52103	30.00	1736.767	0.39904
C4	0.0046	51846	30.00	1728.200	0.39707
C4	0.0083	51607	30.00	1720.233	0.39524
C4	0.0245	51811	30.00	1727.033	0.39680
C4	0.0278	50082	30.00	1669.400	0.38356
C4	0.0554	51190	30.00	1706.333	0.39205
C4	0.0839	48570	30.00	1619.000	0.37198
C4	0.1196	47425	30.00	1580.833	0.36321
C4	0.1724	45330	30.00	1511.000	0.34717
C4	0.1879	45578	30.00	1519.267	0.34907
C4	0.2536	44374	30.00	1479.133	0.33984



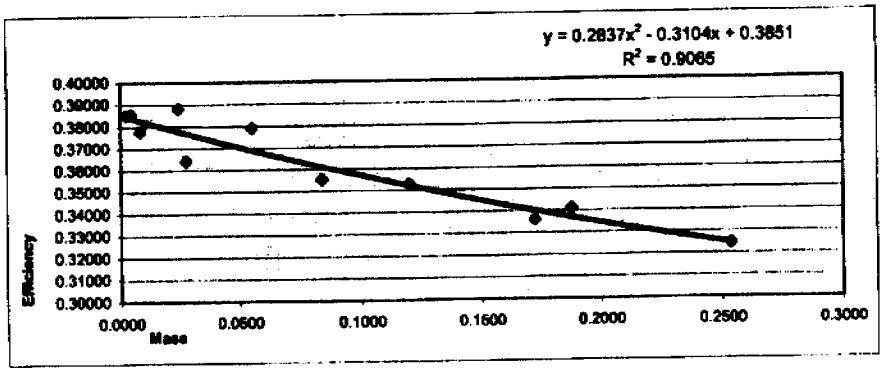
Beta Attenuation Yellow D1
3/3/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4352.38 CPM	Sr90 Eff
D1	0.0025	52443	30.00	1748.100	0.40164
D1	0.0046	52540	30.00	1751.333	0.40239
D1	0.0083	51491	30.00	1716.367	0.39435
D1	0.0245	52220	30.00	1740.667	0.39993
D1	0.0278	49698	30.00	1656.600	0.38062
D1	0.0554	51353	30.00	1711.767	0.39329
D1	0.0839	48509	30.00	1616.967	0.37151
D1	0.1196	47356	30.00	1578.533	0.36268
D1	0.1724	45883	30.00	1529.433	0.35140
D1	0.1879	46481	30.00	1549.367	0.35598
D1	0.2536	44127	30.00	1470.900	0.33795



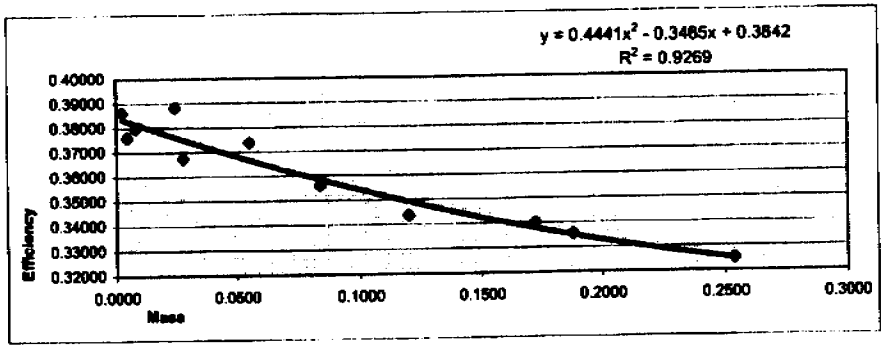
Beta Attenuation Yellow D2
3/3/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4352.38 CPM	Sr90 Eff
D2	0.0025	50292	30.00	1676.400	0.38517
D2	0.0046	50339	30.00	1677.967	0.38553
D2	0.0083	49317	30.00	1643.900	0.37770
D2	0.0245	50853	30.00	1688.433	0.38793
D2	0.0278	47552	30.00	1585.067	0.36418
D2	0.0554	49491	30.00	1649.700	0.37903
D2	0.0839	46369	30.00	1545.633	0.35512
D2	0.1196	46046	30.00	1534.867	0.35265
D2	0.1724	43848	30.00	1461.600	0.33582
D2	0.1879	44519	30.00	1483.967	0.34096
D2	0.2536	42363	30.00	1412.100	0.32444



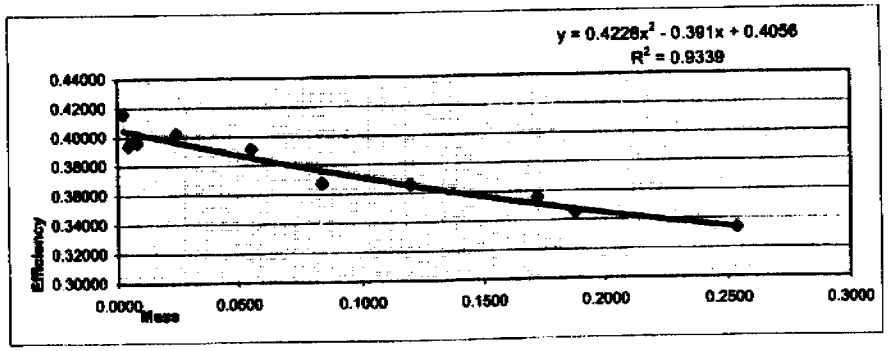
Beta Attenuation Yellow D3
3/3/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4352.38 CPM	Sr90 Eff
D3	0.0025	50403	30.00	1680.100	0.38602
D3	0.0046	49072	30.00	1635.733	0.37583
D3	0.0083	49548	30.00	1651.600	0.37947
D3	0.0245	50657	30.00	1688.567	0.38796
D3	0.0278	47946	30.00	1598.200	0.36720
D3	0.0554	48782	30.00	1626.067	0.37360
D3	0.0839	46459	30.00	1548.633	0.35581
D3	0.1196	44843	30.00	1494.767	0.34344
D3	0.1724	44391	30.00	1479.700	0.33998
D3	0.1879	43765	30.00	1458.833	0.33518
D3	0.2536	42406	30.00	1413.533	0.32477



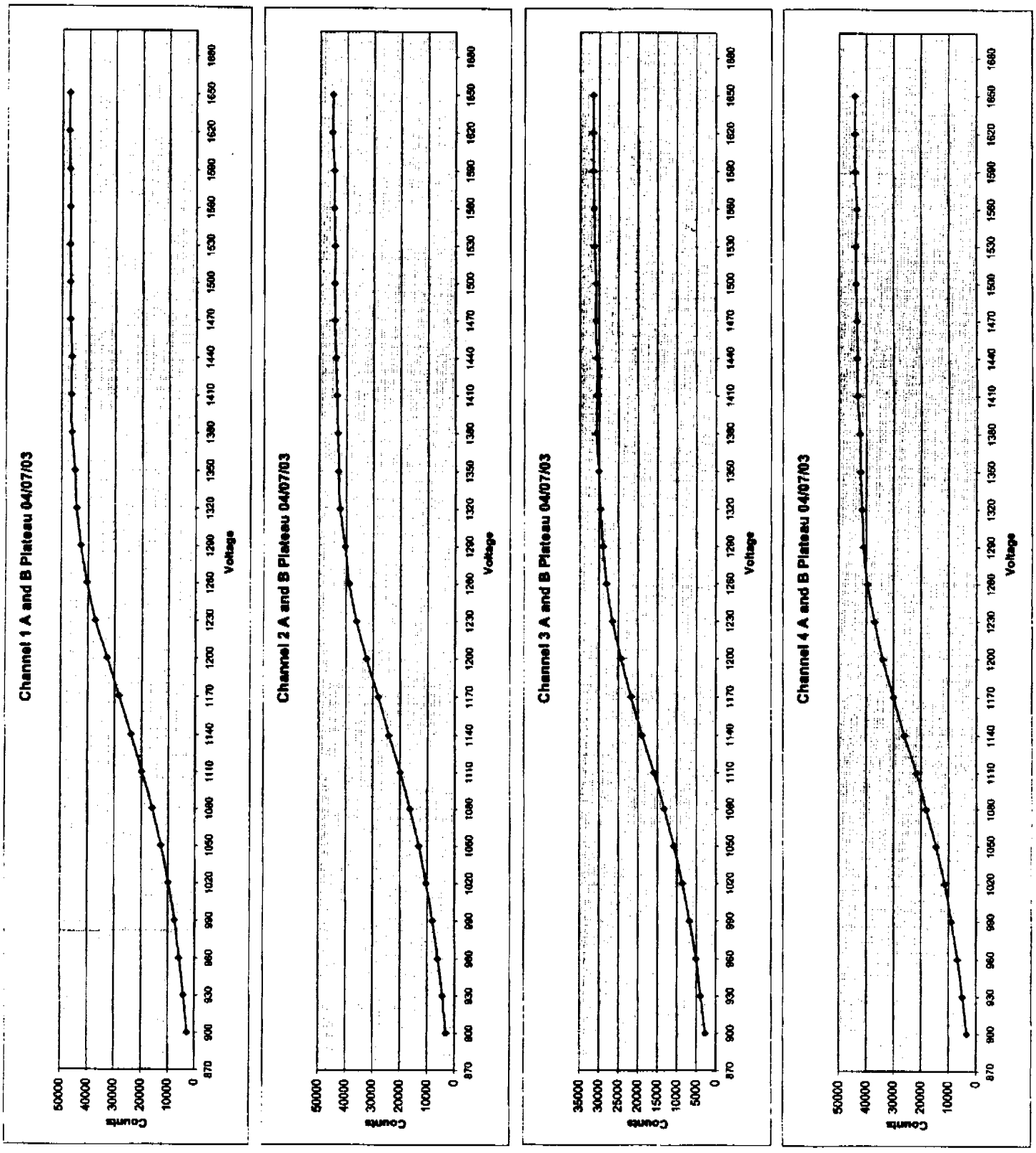
Beta Attenuation Yellow D4
3/3/2004

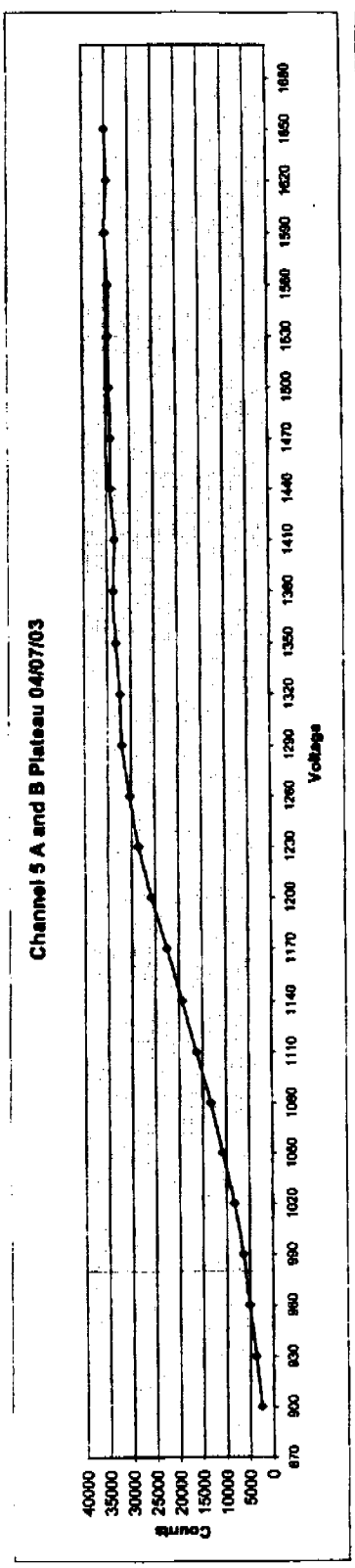
Detector ID	Sample ID	Beta	Count Time	DPM 4352.38 CPM	Sr90 Eff
D4	0.0025	54258	30.00	1808.600	0.41554
D4	0.0046	51421	30.00	1714.033	0.39382
D4	0.0083	51701	30.00	1723.367	0.39596
D4	0.0245	52498	30.00	1749.933	0.40206
D4	0.0554	51072	30.00	1702.400	0.39114
D4	0.0839	47894	30.00	1596.467	0.36680
D4	0.1196	47715	30.00	1590.500	0.36543
D4	0.1724	46410	30.00	1547.000	0.35544
D4	0.1879	45012	30.00	1500.400	0.34473
D4	0.2536	43508	30.00	1450.200	0.33320

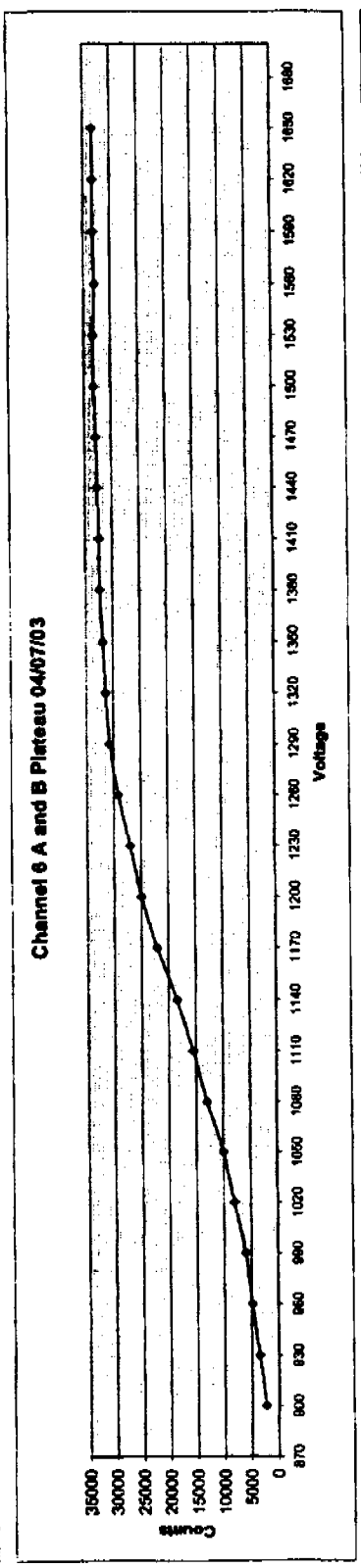


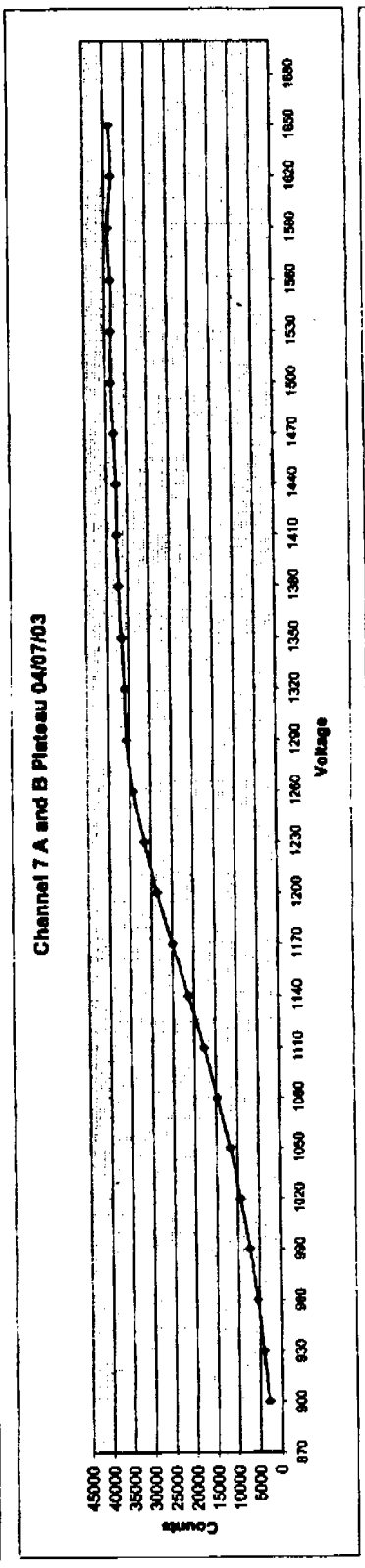
SEVERN TRENT STL

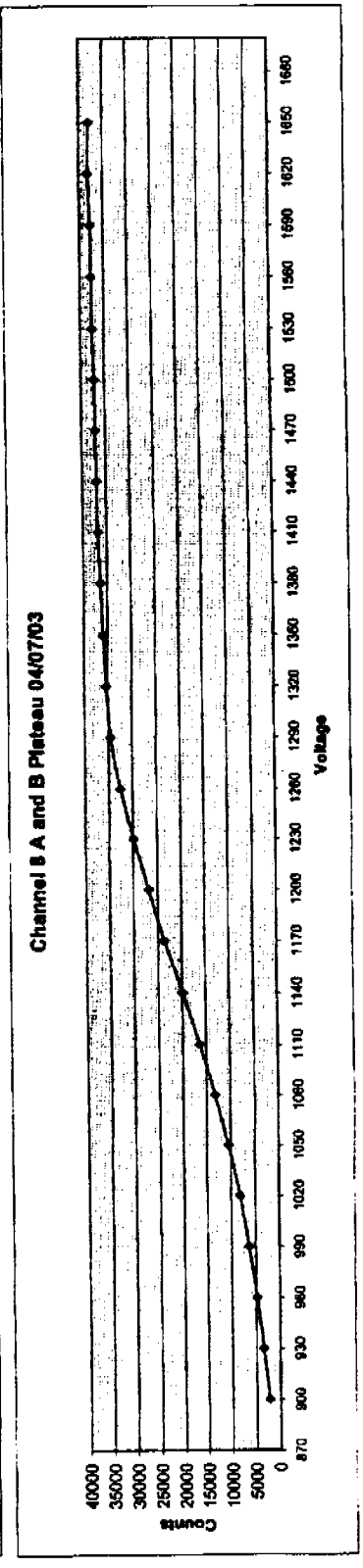
Voltage Plateaus

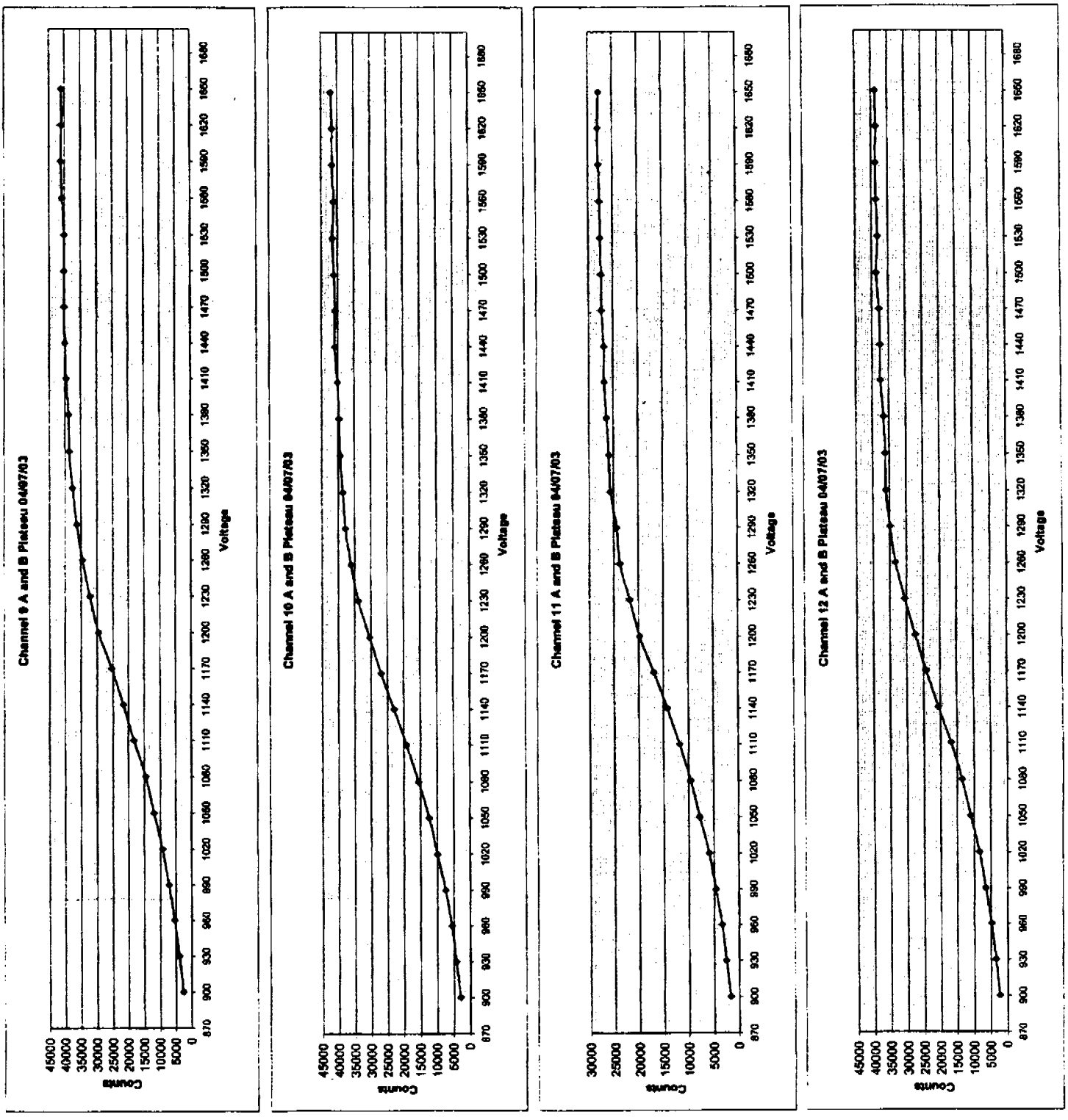

Channel 1 A and B Plateau 04/07/03
Counts
Voltage
Channel 2 A and B Plateau 04/07/03
Counts
Voltage
Channel 3 A and B Plateau 04/07/03
Counts
Voltage
Channel 4 A and B Plateau 04/07/03
Counts
Voltage

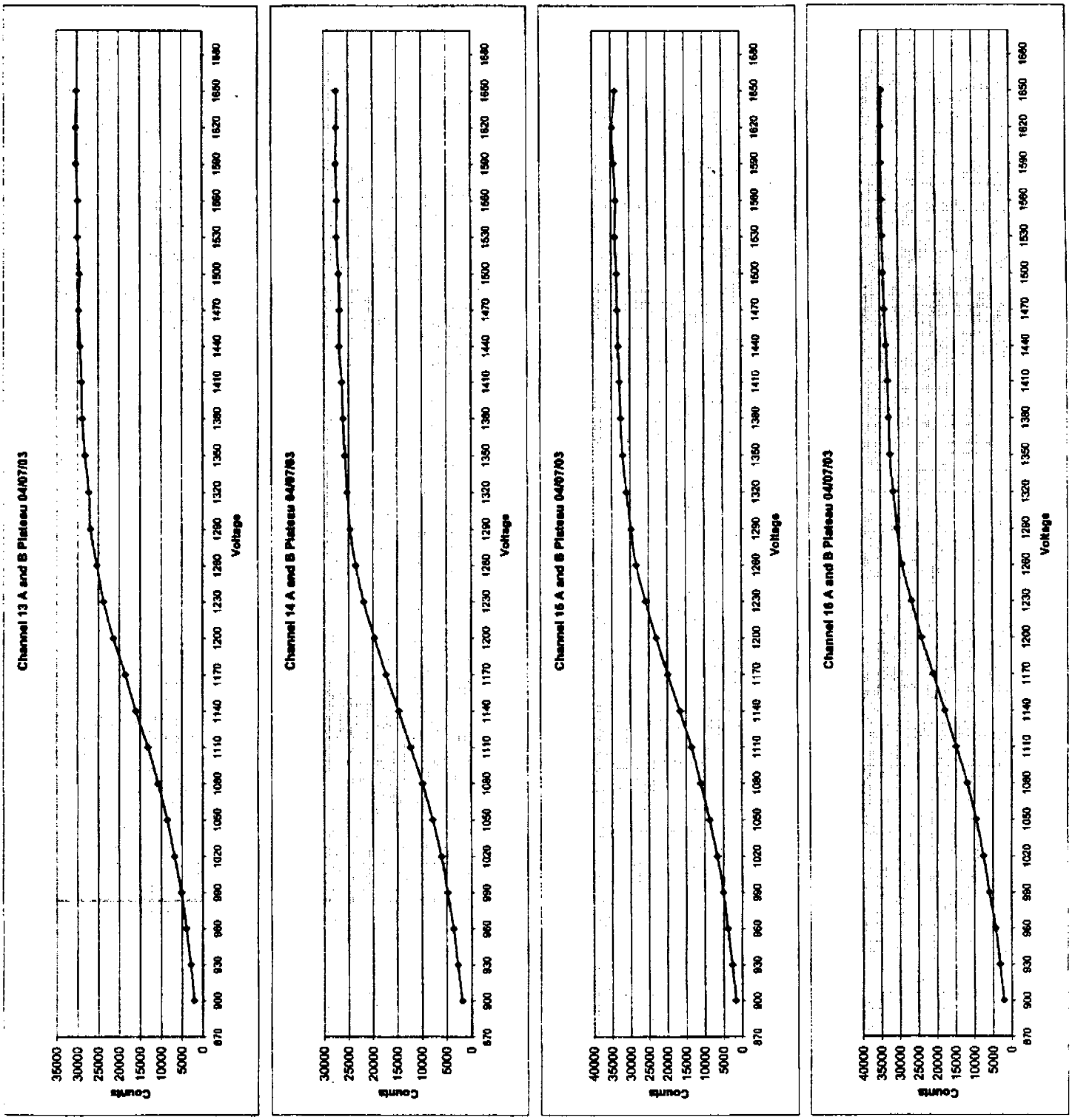

Channel 5 A and B Plateau 04/07/03
Counts
Voltage


Channel 6 A and B Plateau 04/07/03
Counts
Voltage


Channel 7 A and B Plateau 04/07/03
Counts
Voltage


Channel 8 A and B Plateau 04/07/03
Counts
Voltage


Channel 9 A and B Plateau 04/07/03
Counts
Voltage
Channel 10 A and B Plateau 04/07/03
Counts
Voltage
Channel 11 A and B Plateau 04/07/03
Counts
Voltage
Channel 12 A and B Plateau 04/07/03
Counts
Voltage


Channel 13 A and B Plateau 04/07/03
Counts
Voltage
Channel 14 A and B Plateau 04/07/03
Counts
Voltage
Channel 15 A and B Plateau 04/07/03
Counts
Voltage
Channel 16 A and B Plateau 04/07/03
Counts
Voltage

PLATEAU GENERATION

GROSS COUNTS

CHANNEL	GROUP A	GROUP B	GROUP C	GROUP D
1	14	0	0	0
2	0	0	0	0
3	16	0	0	0
4	14	0	0	0
GUARD	6782	6862	7112	6883

START VOLTAGE	900.0	PRESET TIME	1.00
STOP VOLTAGE	1650.0	ELAPSED TIME	13.25
STEP VOLTAGE	30.0	GATING	YES
PRESENT VOLTAGE		MODE	Normal

ALT E: Begin a plateau count
ALT D: Abort a plateau early
ALT P: Print or Plot a stored or saved Plateau

Yellow GPC Plateaus 4/7/2003

Counting time: 1.00

Voltage	4/7/2003 Channel 1	4/7/2003 Channel 2	4/7/2003 Channel 3	4/7/2003 Channel 4	4/7/2003 Channel 5	4/7/2003 Channel 6	4/7/2003 Channel 7	4/7/2003 Channel 8	4/7/2003 Channel 9	4/7/2003 Channel 10	4/7/2003 Channel 11	4/7/2003 Channel 12	4/7/2003 Channel 13	4/7/2003 Channel 14	4/7/2003 Channel 15	4/7/2003 Channel 16
900	2740	3076	2687	3370	2514	2267	2851	2228	2704	2967	1750	2387	2037	1862	1786	2176
930	4111	4295	3897	4883	3673	3443	4056	3415	3874	4221	2533	3491	2834	2757	2695	3174
960	5786	6064	5055	6646	5053	4829	5455	4757	5463	5568	3425	4799	3948	3610	3756	4268
990	7463	7967	6749	8900	6451	5975	7231	6359	7182	7449	4624	6530	5148	4830	5035	5982
1020	9944	10362	8578	11303	8302	8045	9337	8158	9253	9944	5956	8336	6802	6075	6643	7492
1050	12653	12987	10729	14427	10798	10077	11680	10440	11943	12328	7780	10945	8505	7829	8648	9486
1080	15940	16390	13211	18097	13271	12998	14720	13203	14600	15554	9536	13579	10728	9884	11018	11848
1110	19828	19880	15883	21704	16300	15475	17692	16338	18263	19069	11790	16804	13103	12254	13458	14771
1140	23909	23988	18880	26119	19255	18402	21258	19834	21630	22815	14200	20533	16025	14668	16580	17835
1170	28369	27959	21728	29904	22443	22088	25035	23554	25332	26882	16895	24170	18528	17283	19828	20873
1200	32768	32359	24236	33972	25730	24949	28606	26803	29513	30389	19771	27461	21458	19641	22902	24065
1230	37266	36063	26525	36843	28441	27029	31410	29870	32163	33793	21720	30556	23790	21894	25842	26714
1260	40333	38863	28038	39471	30297	29143	34045	32558	34491	36000	23716	33265	25362	23516	28368	29234
1290	42713	40448	28986	40931	31905	30688	35671	34458	36303	37767	24371	34898	26899	24683	29786	30469
1320	44319	42370	29626	41529	32258	31370	35975	35291	37538	38581	25634	36050	27273	25277	30930	31416
1350	44952	42876	30060	42081	33043	31787	36571	35834	38647	39286	25917	36145	28227	25669	31962	32285
1380	46105	43181	30686	42332	33578	32384	37222	36357	38790	39648	26377	36587	28779	26099	32448	32658
1410	46302	43623	30585	43221	33240	32440	37541	36777	39446	40080	26820	37499	28964	26319	32736	32904
1440	46135	44024	30659	43271	34095	32717	37675	36990	39923	40788	26845	37561	29330	26893	33120	33351
1470	46773	44390	30971	43244	34046	32664	38121	37140	40147	40652	27327	37795	29706	26771	33300	33764
1500	46812	44474	30914	43650	34277	33226	38620	37168	40195	41078	27371	38592	29482	26939	33503	34023
1530	46932	44435	31279	43778	34414	33201	38588	37491	40023	41473	27541	38081	29941	27325	33908	34216
1560	46952	44738	31366	43451	34368	32943	38574	37565	40680	41123	27632	38504	29863	27224	33630	34321
1590	47095	44717	31637	43947	35050	33208	39114	37740	41110	41668	27846	38661	30303	27485	34157	34471
1620	47406	45434	31619	44148	34597	33253	38273	38058	40865	41536	28005	38510	30372	27404	34495	34501
1650	47255	45248	31567	44111	34975	33255	38610	37835	40936	41979	27760	38749	30123	27388	33776	34266

STL ST. LOUIS

LOT# F5D220356

STL

Discriminator Settings

#1 Channel GROUP > A B C D

Discriminator Settings	Beta LL	0	0	0	0
	Beta UL	1150	1200	1225	1575
	Alpha LL	1151	1201	1226	1576
	Alpha UL	4095	4095	4095	4095
	Threshold	25	25	25	25
Automatic Sequence	Print Enable	YES	YES	YES	YES
	Save Enable	NO	NO	NO	NO
	Print	QUANTERA	QUANTERA	QUANTERA	QUANTERA
	Save	leebkg.dat	leebkg.dat	leebkg.dat	leebkg.dat
	Repeat	0	0	0	0
Detector Bias	Alpha	802.5			
	Beta	1440.0			

Count Mode Simultaneous

(ALT T to select Count Mode, CTL PgUp and CTL PgDn for other channels)

(ALT X to configure the Print & Save commands and the Autoexecute Batch Name)

#2 Channel	GROUP >	A	B	C	D
Discriminator Settings	Beta LL	0	0	0	0
	Beta UL	1107	1200	1450	1575
	Alpha LL	1108	1201	1451	1576
	Alpha UL	4095	4095	4095	4095
	Threshold	25	25	25	25
Automatic Sequence	Print Enable	YES	YES	YES	YES
	Save Enable	NO	NO	NO	NO
	Print	QUANTERA	QUANTERA	QUANTERA	QUANTERA
	Save	leebkg.dat	leebkg.dat	leebkg.dat	leebkg.dat
	Repeat	0	0	0	0
Detector Bias	Alpha	802.5			
	Beta	1440.0			

Count Mode Simultaneous

(ALT T to select Count Mode, CTL PgUp and CTL PgDn for other channels)
(ALT X to configure the Print & Save commands and the Autoexecute Batch Name)

#3 Channel	GROUP >	A	B	C	D
Discriminator Settings	Beta LL	0	0	0	0
	Beta UL	1350	1350	1275	1425
	Alpha LL	1356	1351	1276	1426
	Alpha UL	4095	4095	4095	4095
	Threshold	25	25	25	25
Automatic Sequence	Print Enable	YES	YES	YES	YES
	Save Enable	NO	NO	NO	NO
	Print	QUANTERA	QUANTERA	QUANTERA	QUANTERA
	Save	leebkg.dat	leebkg.dat	leebkg.dat	leebkg.dat
	Repeat	0	0	0	0
Detector Bias	Alpha	802.5			
	Beta	1440.0			

Count Mode Simultaneous

(ALT T to select Count Mode, CTL PgUp and CTL PgDn for other channels)
(ALT X to configure the Print & Save commands and the Autoexecute Batch Name)

#4 Channel GROUP > A B C D

Discriminator Settings	Beta LL	0	0	0	0
	Beta UL	1250	835	1450	1435
	Alpha LL	1251	836	1451	1436
	Alpha UL	4095	4095	4095	4095
	Threshold	25	25	25	25
Automatic Sequence	Print Enable	YES	YES	YES	YES
	Save Enable	NO	NO	NO	NO
	Print	QUANTERA	QUANTERA	QUANTERA	QUANTERA
	Save	leebkg.dat	leebkg.dat	leebkg.dat	leebkg.dat
	Repeat	0	0	0	0
Detector Bias	Alpha	802.5			
	Beta	1440.0			

Count Mode Simultaneous

(ALT T to select Count Mode, CTL PgUp and CTL PgDn for other channels)
(ALT X to configure the Print & Save commands and the Autoexecute Batch Name)

SEVERN TRENT STL

Beta into Alpha Crosstalk

[TENNELEC LB4000] [PAGE 1]

10:28:30		I.D.	TIME	COUNTS α	COUNTS β	αEFF	βEFF	BKGα	BKGβ
GROUP A	1	e	0.38	18	18191	0.00	0.00	0.00	0.00
9:24:00	2	ROIA2	0.38	18	18298	0.00	0.00	0.00	0.00
1500.00	3	ROIA3	0.38	12	12695	0.00	0.00	0.00	0.00
	4	ROIA4	0.38	14	16250	0.00	0.00	0.00	0.00
GROUP B	1	ROIB1	0.38	13	14245	0.00	0.00	0.00	0.00
9:24:00	2	ROIB2	0.38	11	11896	0.00	0.00	0.00	0.00
1500.00	3	ROIB3	0.38	13	14912	0.00	0.00	0.00	0.00
	4	ROIB4	0.38	13	14236	0.00	0.00	0.00	0.00
GROUP C	1	ROIC1	0.44	14	16662	0.00	0.00	0.00	0.00
10:08:49	2	ROIC2	0.44	18	18247	0.00	0.00	0.00	0.00
1500.00	3	ROIC3	0.44	10	11321	0.00	0.00	0.00	0.00
	4	ROIC4	0.44	13	15911	0.00	0.00	0.00	0.00
GROUP D	1	ROID1	0.44	14	14451	0.00	0.00	0.00	0.00
10:08:49	2	ROID2	0.44	10	11868	0.00	0.00	0.00	0.00
1500.00	3	ROID3	0.44	13	14698	0.00	0.00	0.00	0.00
	4	ROID4	0.44	13	14874	0.00	0.00	0.00	0.00

SEVERN TRENT STL

BACKGROUNDS

Yellow – November 2003

[TENNELEC LB4000] [PAGE 1]

LBG-1103.TXT
11/20/03

12:27:58		I.D.	TIME	COUNTS α	COUNTS β	αEFF	βEFF	BKGα	BKGβ
GROUP A	1	LONG BKG 11/20/03	1000.0	29	1024	0.00	0.00	0.03	1.02
18:35:04	2	LONG BKG	1000.0	37	1049	0.00	0.00	0.04	1.05
1.00	3	LONG BKG	1000.0	51	1122	0.00	0.00	0.05	1.12
	4	LONG BKG	1000.0	61	1111	0.00	0.00	0.06	1.11
GROUP B	1	LONG BKG	1000.0	51	1176	0.00	0.00	0.05	1.18
18:35:04	2	LONG BKG	1000.0	60	1012	0.00	0.00	0.06	1.01
1.00	3	LONG BKG	1000.0	44	1141	0.00	0.00	0.04	1.14
	4	LONG BKG	1000.0	48	1005	0.00	0.00	0.05	1.00
GROUP C	1	LONG BKG	1000.0	44	976	0.00	0.00	0.04	0.98
18:35:04	2	LONG BKG	1000.0	34	965	0.00	0.00	0.03	0.97
1.00	3	LONG BKG	1000.0	46	893	0.00	0.00	0.05	0.89
	4	LONG BKG	1000.0	36	1005	0.00	0.00	0.04	1.00
GROUP D	1	LONG BKG	1000.0	36	859	0.00	0.00	0.04	0.86
18:35:04	2	LONG BKG	1000.0	72	975	0.00	0.00	0.07	0.98
1.00	3	LONG BKG	1000.0	35	723	0.00	0.00	0.04	0.72
	4	LONG BKG	1000.0	51	912	0.00	0.00	0.05	0.91

Long Backgrounds 04/07/2003

[TENNELEC LB4000] [PAGE 1]

18:09:44		I.D.	TIME	COUNTS α	COUNTS β	αEFF	βEFF	BKGα	BKGβ
GROUP A	1	BA1	1000.0	89	1219	0.00	0.00	0.00	0.00
22:41:27	2	BA2	1000.0	39	1081	0.00	0.00	0.00	0.00
1000.00	3	BA3	1000.0	35	1187	0.00	0.00	0.00	0.00
	4	BA4	1000.0	61	1123	0.00	0.00	0.00	0.00
GROUP B	1	BB1	1000.0	52	1159	0.00	0.00	0.00	0.00
22:41:27	2	BB2	1000.0	44	1160	0.00	0.00	0.00	0.00
1000.00	3	BB3	1000.0	54	1294	0.00	0.00	0.00	0.00
	4	BB4	1000.0	43	1038	0.00	0.00	0.00	0.00
GROUP C	1	BC1	1000.0	30	933	0.00	0.00	0.00	0.00
22:41:27	2	BC2	1000.0	34	924	0.00	0.00	0.00	0.00
1000.00	3	BC3	1000.0	44	1090	0.00	0.00	0.00	0.00
	4	BC4	1000.0	31	1056	0.00	0.00	0.00	0.00
GROUP D	1	BD1	1000.0	45	912	0.00	0.00	0.00	0.00
22:41:27	2	BD2	1000.0	44	1136	0.00	0.00	0.00	0.00
1000.00	3	BD3	1000.0	54	917	0.00	0.00	0.00	0.00
	4	BD4	1000.0	61	980	0.00	0.00	0.00	0.00

Group C channel 2 COUNT TERMINATED

SEVERN TRENT **STL**

Yellow – January 2004

BACKGROUNDS

[TENNELEC LB4000] [PAGE 1]

9:38:30		I.D.	TIME	COUNTS α	COUNTS β	αEFF	βEFF	BKGα	BKGβ
GROUP A	1	LBKG	1000.0	47	1081	0.00	0.00	0.05	1.08
12:51:06	2	LBKG	1000.0	51	1008	0.00	0.00	0.05	1.01
1000.00	3	LBKG	1000.0	46	1278	0.00	0.00	0.05	1.28
	4	LBKG	1000.0	66	1107	0.00	0.00	0.07	1.11
GROUP B	1	LBKG	1000.0	58	1164	0.00	0.00	0.06	1.16
12:51:06	2	LBKG	1000.0	56	1123	0.00	0.00	0.06	1.12
1000.00	3	LBKG	1000.0	51	1251	0.00	0.00	0.05	1.25
	4	LBKG	1000.0	40	1004	0.00	0.00	0.04	1.00
GROUP C	1	LBKG	1000.0	50	941	0.00	0.00	0.05	0.94
12:51:06	2	LBKG	1000.0	30	890	0.00	0.00	0.03	0.89
1000.00	3	LBKG	1000.0	44	945	0.00	0.00	0.04	0.94
	4	LBKG	1000.0	29	999	0.00	0.00	0.03	1.00
GROUP D	1	LBKG	1000.0	32	1102	0.00	0.00	0.03	1.10
12:51:06	2	LBKG	1000.0	55	1064	0.00	0.00	0.06	1.06
1000.00	3	LBKG	1000.0	57	820	0.00	0.00	0.06	0.82
	4	LBKG	1000.0	58	883	0.00	0.00	0.06	0.88

STL

Backgrounds

Yellow – February 2004

[TENNELEC LB4000] [PAGE 1]

8:25:23		I.D.	TIME	COUNTS α	COUNTS β	αEFF	βEFF	BKGα	BKGβ
GROUP A	1	BKG	1000.0	57	999	0.00	0.00	0.06	1.00
11:01:47	2	BKG	1000.0	64	1041	0.00	0.00	0.06	1.04
1000.00	3	BKG	1000.0	55	1157	0.00	0.00	0.06	1.16
	4	BKG	1000.0	48	1043	0.00	0.00	0.05	1.04
GROUP B	1	BKG	1000.0	55	1113	0.00	0.00	0.06	1.11
11:01:47	2	BKG	1000.0	64	1036	0.00	0.00	0.06	1.04
1000.00	3	BKG	1000.0	43	1194	0.00	0.00	0.04	1.19
	4	BKG	1000.0	43	991	0.00	0.00	0.04	0.99
GROUP C	1	BKG	1000.0	38	911	0.00	0.00	0.04	0.91
11:01:47	2	BKG	1000.0	35	889	0.00	0.00	0.04	0.89
1000.00	3	BKG	1000.0	43	909	0.00	0.00	0.04	0.91
	4	BKG	1000.0	65	1003	0.00	0.00	0.07	1.00
GROUP D	1	BKG	1000.0	38	835	0.00	0.00	0.04	0.84
11:01:47	2	BKG	1000.0	49	965	0.00	0.00	0.05	0.97
1000.00	3	BKG	1000.0	46	732	0.00	0.00	0.05	0.73
	4	BKG	1000.0	49	883	0.00	0.00	0.05	0.88

Group C channel 2 COUNT TERMINATED

Monthly Backgrounds
April 2005
Alphavision

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:36AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV1
Comment:

Spectrum #1 Analysis #1

Batch

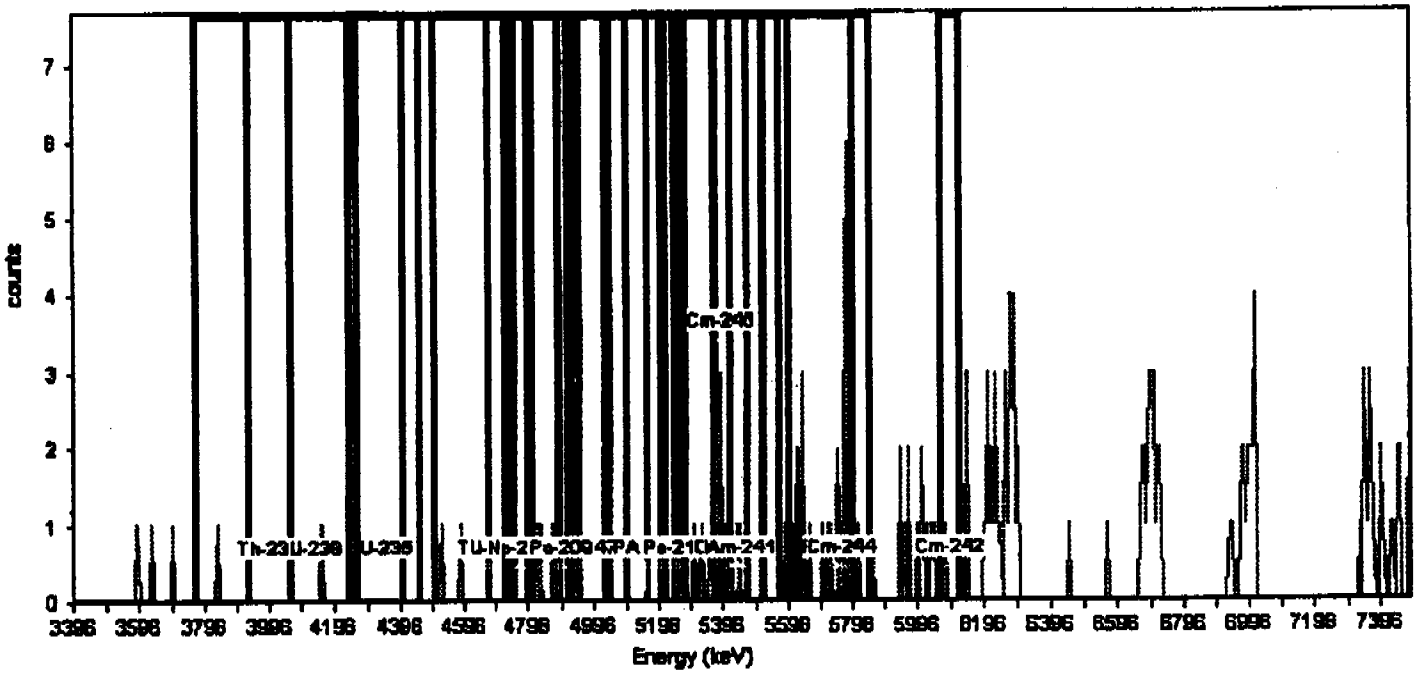
Batch Name: April_2005
Description:

Acquisition

Detector: AV1 , SN: 41-158W6
Acquisition Start Date: 4/26/2005 10:37:36AM
Live Time: 800.00 min.
Real Time: 800.11 min.
Calibration Name: March2005_AV1
Calibration Date: 3/16/2005 7:59:48PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.33% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 156.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	3.00	3.750E-003	2.500E-003
U-234	4.70	4.50	4.80	3.00	3.750E-003	2.500E-003
Pu-242	4.88	4.67	4.93	4.00	5.000E-003	2.795E-003
Th-229	4.84	4.72	5.10	4.00	5.000E-003	2.795E-003
Np-237	4.77	4.76	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.86	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.86	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	6.00	7.500E-003	3.307E-003
Th-228	5.41	5.16	5.47	14.00	1.750E-002	4.841E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	15.00	1.875E-002	5.000E-003
Am-241	5.45	5.27	5.57	14.00	1.750E-002	4.841E-003
Cm-245	5.39	5.36	5.41	9.00	1.125E-002	3.953E-003
Pu-236	5.74	5.52	5.80	25.00	3.125E-002	6.374E-003
Cm-244	5.76	5.60	5.85	25.00	3.125E-002	6.374E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:40AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV2
Spectrum #1 Analysis #1
Comment:

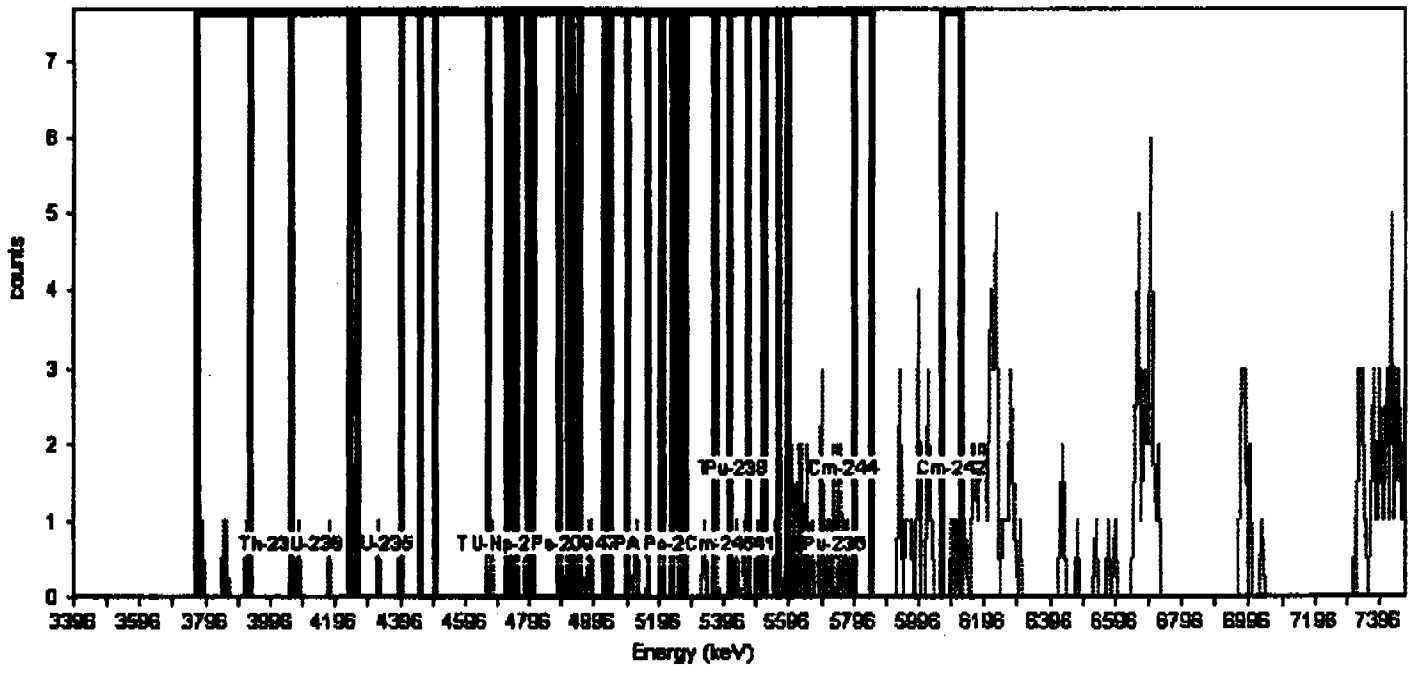
Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV2 , SN: 41-158W7
Acquisition Start Date: 4/26/2005 10:37:38AM
Live Time: 800.00 min.
Real Time: 800.11 min.
Calibration Name: March2005_AV2
Calibration Date: 3/16/2005 7:59:52PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.39% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI, Library: Background ROI Library
Total Background Counts: 197.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	4.00	5.000E-003	2.795E-003
U-238	4.14	3.93	4.24	2.00	2.500E-003	2.165E-003
U-235	4.35	4.26	4.46	2.00	2.500E-003	2.165E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	3.00	3.750E-003	2.500E-003
Pu-242	4.88	4.67	4.93	4.00	5.000E-003	2.795E-003
Th-229	4.84	4.72	5.10	5.00	6.250E-003	3.062E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	4.00	5.000E-003	2.795E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	3.00	3.750E-003	2.500E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	5.00	6.250E-003	3.062E-003
Th-228	5.41	5.16	5.47	10.00	1.250E-002	4.146E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	11.00	1.375E-002	4.330E-003
Am-241	5.45	5.27	5.57	14.00	1.750E-002	4.841E-003
Cm-245	5.39	5.36	5.41	5.00	6.250E-003	3.062E-003
Pu-236	5.74	5.52	5.80	26.00	3.250E-002	6.495E-003
Cm-244	5.76	5.60	5.85	23.00	2.875E-002	6.124E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:43AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV3
Spectrum #1 Analysis #1
Comment:

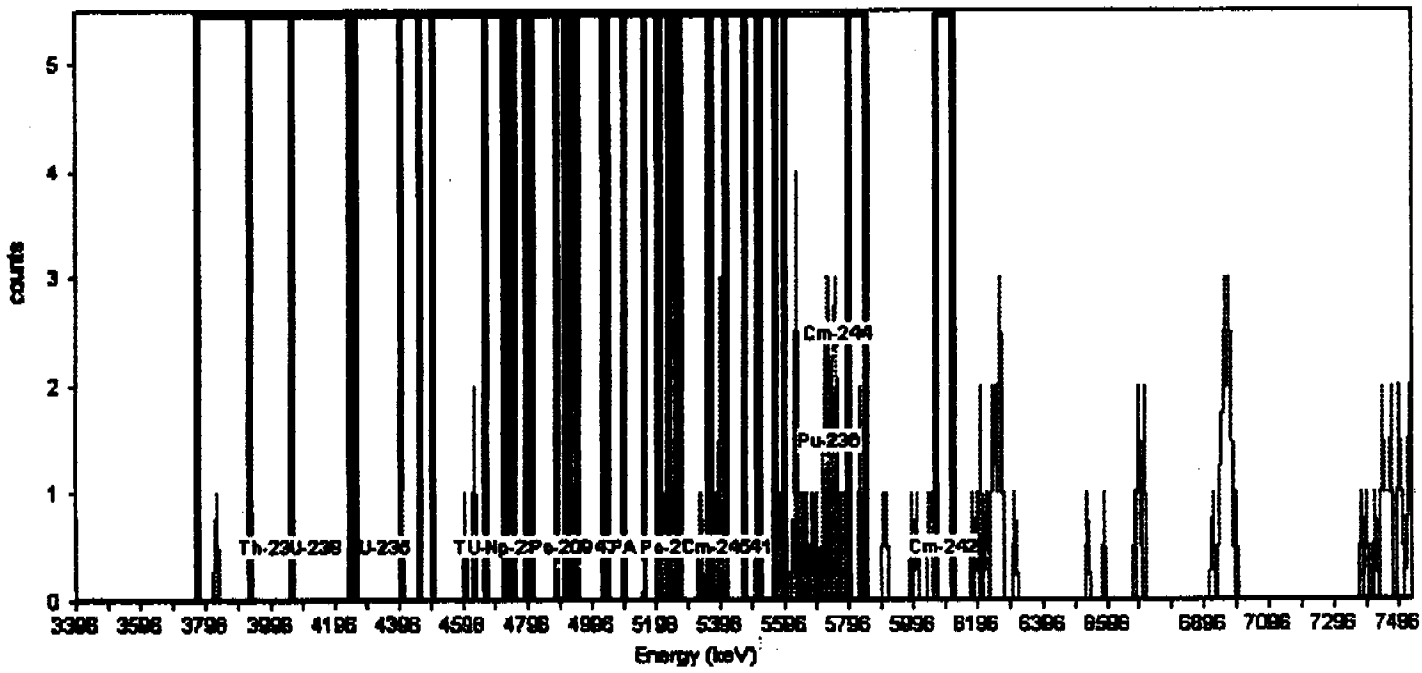
Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV3 , SN: 41-158X5
Acquisition Start Date: 4/26/2005 10:37:40AM
Live Time: 800.00 min.
Real Time: 800.11 min.
Calibration Name: March2005_AV3
Calibration Date: 3/16/2005 7:59:56PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.35% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 107.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	4.00	5.000E-003	2.795E-003
U-234	4.70	4.50	4.80	3.00	3.750E-003	2.500E-003
Pu-242	4.86	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	3.00	3.750E-003	2.500E-003
Th-228	5.41	5.16	5.47	8.00	1.000E-002	3.750E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	8.00	1.000E-002	3.750E-003
Am-241	5.45	5.27	5.57	8.00	1.000E-002	3.750E-003
Cm-245	5.39	5.36	5.41	6.00	7.500E-003	3.307E-003
Pu-236	5.74	5.52	5.80	29.00	3.625E-002	6.847E-003
Cm-244	5.76	5.60	5.85	30.00	3.750E-002	6.960E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:46AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV4
Comment:

Spectrum #1 Analysis #1

Batch

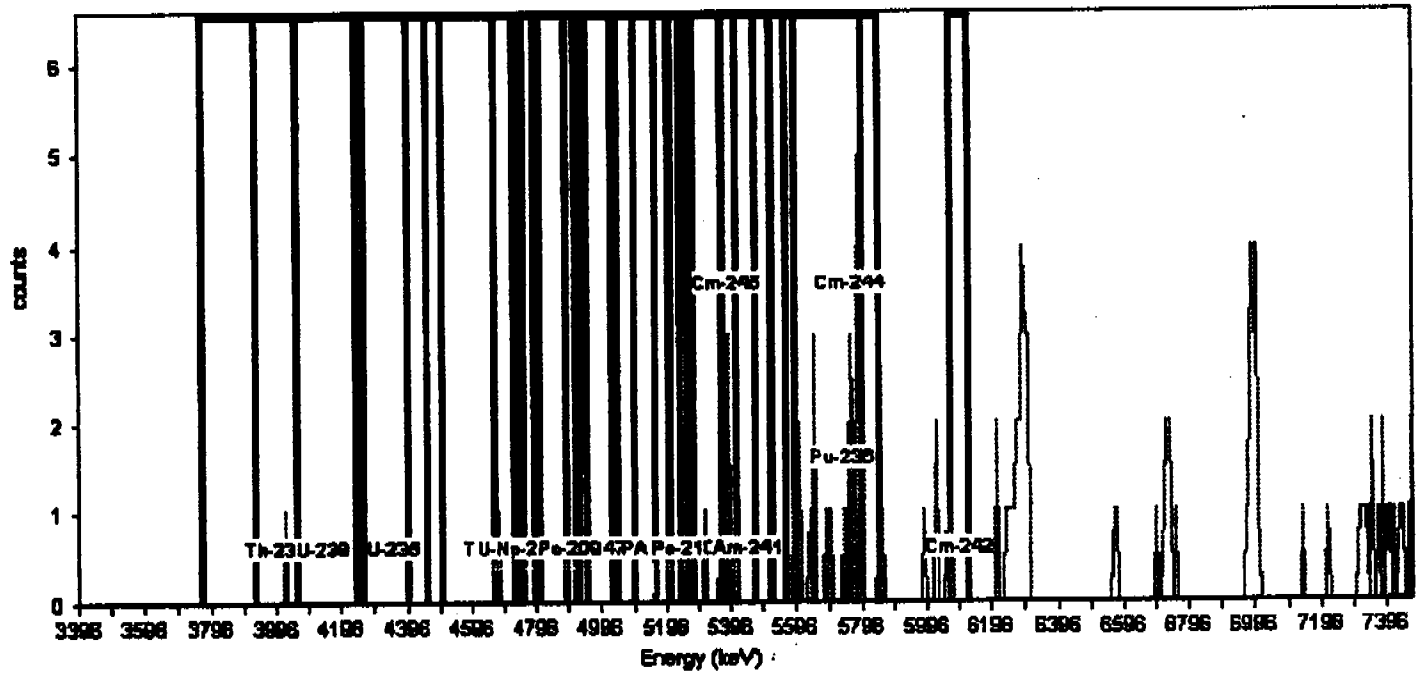
Batch Name: April_2005
Description:

Acquisition

Detector: AV4 , SN: 41-172B5
Acquisition Start Date: 4/26/2005 10:37:42AM
Live Time: 800.00 min.
Real Time: 800.11 min.
Calibration Name: March2005_AV4
Calibration Date: 3/16/2005 7:59:59PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.17% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 117.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	2.00	2.500E-003	2.165E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.26	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	8.00	1.000E-002	3.750E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	8.00	1.000E-002	3.750E-003
Am-241	5.45	5.27	5.57	8.00	1.000E-002	3.750E-003
Cm-245	5.39	5.36	5.41	7.00	8.750E-003	3.538E-003
Pu-236	5.74	5.52	5.80	31.00	3.875E-002	7.071E-003
Cm-244	5.76	5.60	5.85	31.00	3.875E-002	7.071E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
2:53:46AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV5
Comment:

Spectrum #1 Analysis #1

Batch

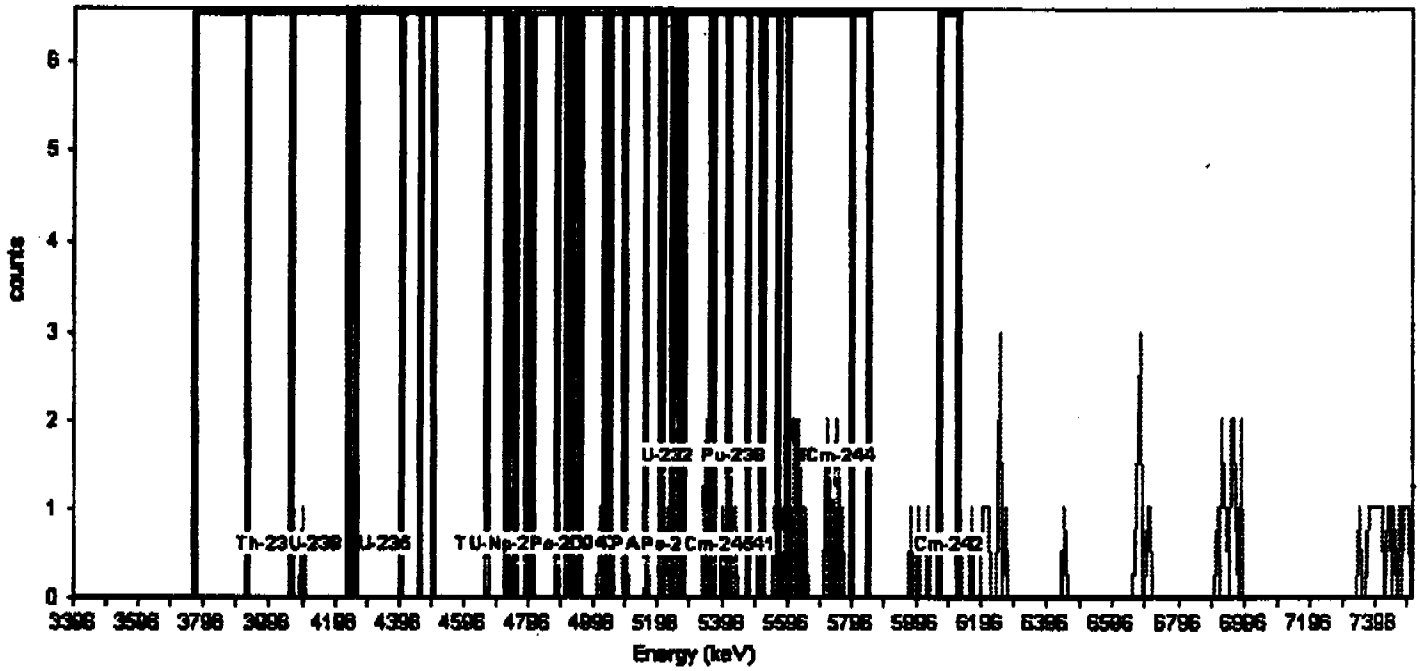
Batch Name: April_2005
Description:

Acquisition

Detector: AV5 , SN: 41-158X7
Acquisition Start Date: 4/26/2005 1:33:24PM
Live Time: 800.00 min.
Real Time: 800.04 min.
Calibration Name: March2005_AV5
Calibration Date: 3/16/2005 10:54:03PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 29.32% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROU[illegible] Library: Background ROI Library
Total Background Counts: 91.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.08	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	4.00	5.000E-003	2.795E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	5.00	6.250E-003	3.062E-003
Am-243	5.20	5.03	5.28	7.00	8.750E-003	3.536E-003
U-232	5.29	5.04	5.37	17.00	2.125E-002	5.303E-003
Th-228	5.41	5.16	5.47	17.00	2.125E-002	5.303E-003
Po-210	5.25	5.20	5.26	3.00	3.750E-003	2.500E-003
Pu-238	5.44	5.24	5.52	16.00	2.000E-002	5.154E-003
Am-241	5.45	5.27	5.57	15.00	1.875E-002	5.000E-003
Cm-245	5.39	5.36	5.41	8.00	1.000E-002	3.750E-003
Pu-236	5.74	5.52	5.80	19.00	2.375E-002	5.590E-003
Cm-244	5.76	5.60	5.85	17.00	2.125E-002	5.303E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:50AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV6
Spectrum #1 Analysis #1
Comment:

Batch

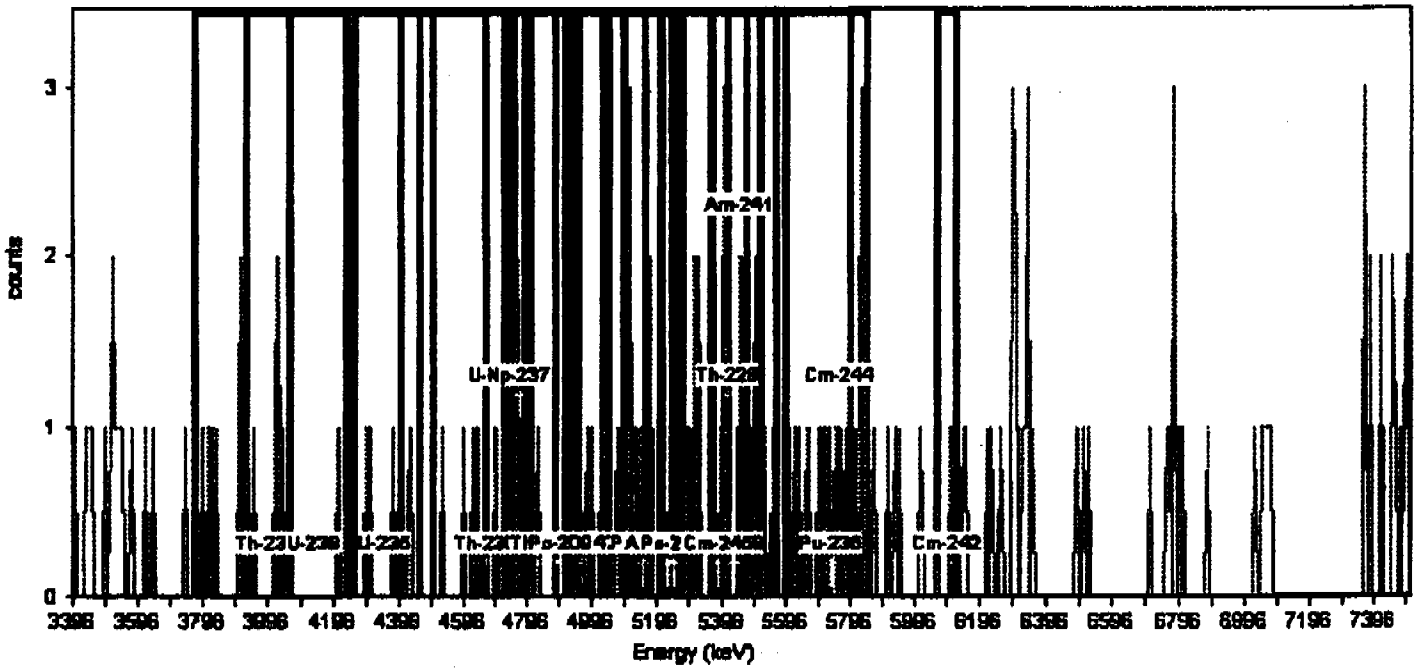
Batch Name: April_2005
Description:

Acquisition

Detector: AV6 , SN:
Acquisition Start Date: 4/26/2005 10:37:43AM
Live Time: 800.00 min.
Real Time: 800.11 min.
Calibration Name: March2005_AV6
Calibration Date: 3/16/2005 10:54:07PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.74% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 182.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	14.00	1.750E-002	4.841E-003
U-238	4.14	3.93	4.24	9.00	1.125E-002	3.953E-003
U-235	4.35	4.26	4.46	4.00	5.000E-003	2.795E-003
Th-230	4.67	4.40	4.73	8.00	1.000E-002	3.750E-003
U-234	4.70	4.50	4.80	11.00	1.375E-002	4.330E-003
Pu-242	4.88	4.67	4.93	9.00	1.125E-002	3.953E-003
Th-229	4.84	4.72	5.10	20.00	2.500E-002	5.728E-003
Np-237	4.77	4.75	4.79	3.00	3.750E-003	2.500E-003
Cm-247	4.98	4.88	5.04	12.00	1.500E-002	4.507E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	19.00	2.375E-002	5.590E-003
Am-243	5.20	5.03	5.28	16.00	2.000E-002	5.154E-003
U-232	5.23	5.04	5.37	23.00	2.875E-002	6.124E-003
Th-228	5.41	5.16	5.47	23.00	2.875E-002	6.124E-003
Po-210	5.25	5.20	5.28	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	21.00	2.625E-002	5.863E-003
Am-241	5.46	5.27	5.57	24.00	3.000E-002	6.250E-003
Cm-245	5.39	5.36	5.41	7.00	8.750E-003	3.536E-003
Pu-236	5.74	5.52	5.80	22.00	2.750E-002	5.996E-003
Cm-244	5.76	5.60	5.85	29.00	3.625E-002	6.847E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:53AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV7
Comment:

Spectrum #1 Analysis #1

Batch

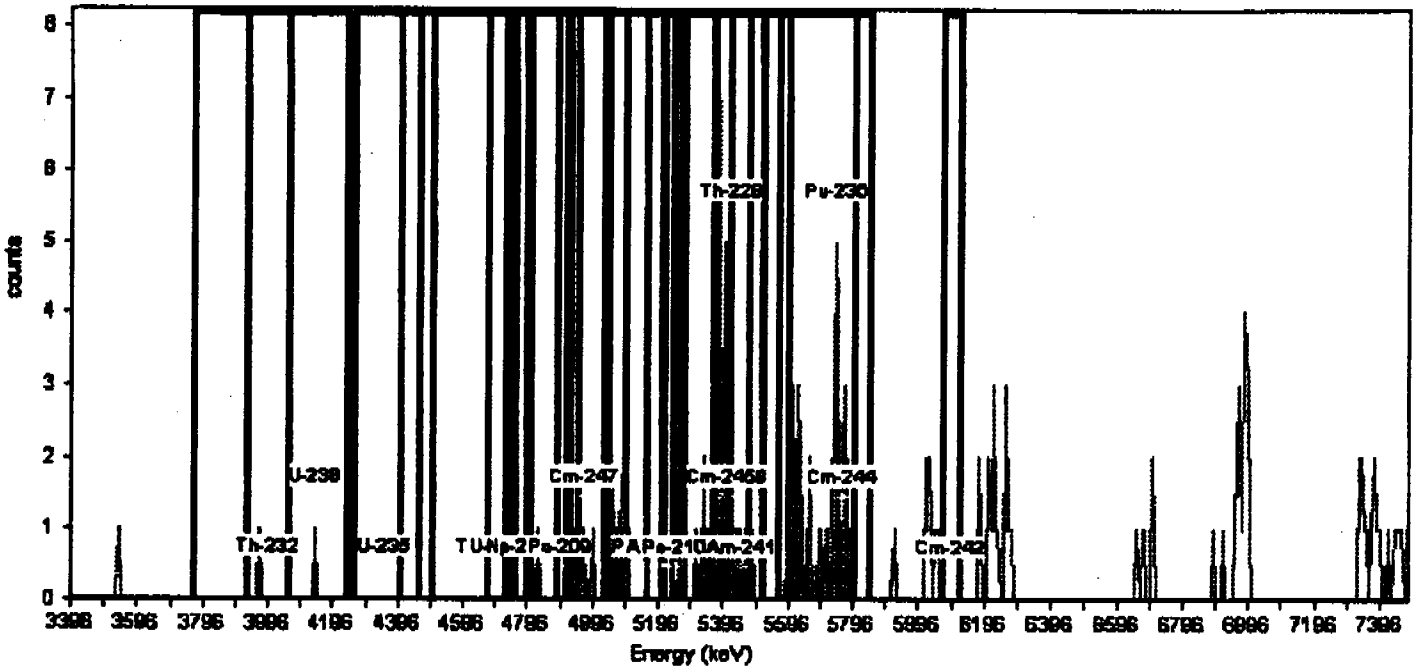
Batch Name: April_2005
Description:

Acquisition

Detector: AV7 , SN: 41-158X6
Acquisition Start Date: 4/26/2005 10:37:45AM
Live Time: 800.00 min.
Real Time: 800.11 min.
Calibration Name: March2005_AV7
Calibration Date: 3/16/2005 10:54:14PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.46% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 154.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	3.00	3.750E-003	2.500E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	13.00	1.625E-002	4.677E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	3.00	3.750E-003	2.500E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	13.00	1.625E-002	4.677E-003
Am-243	5.20	5.03	5.28	14.00	1.750E-002	4.841E-003
U-232	5.23	5.04	5.37	20.00	2.500E-002	5.726E-003
Th-228	5.41	5.16	5.47	34.00	4.250E-002	7.395E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	35.00	4.375E-002	7.500E-003
Am-241	5.45	5.27	5.57	34.00	4.250E-002	7.395E-003
Cm-245	5.39	5.36	5.41	21.00	2.625E-002	5.863E-003
Pu-236	5.74	5.52	5.80	35.00	4.375E-002	7.500E-003
Cm-244	5.76	5.60	5.85	35.00	4.375E-002	7.500E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:56AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV8
Comment:

Spectrum #1 Analysis #1

Batch

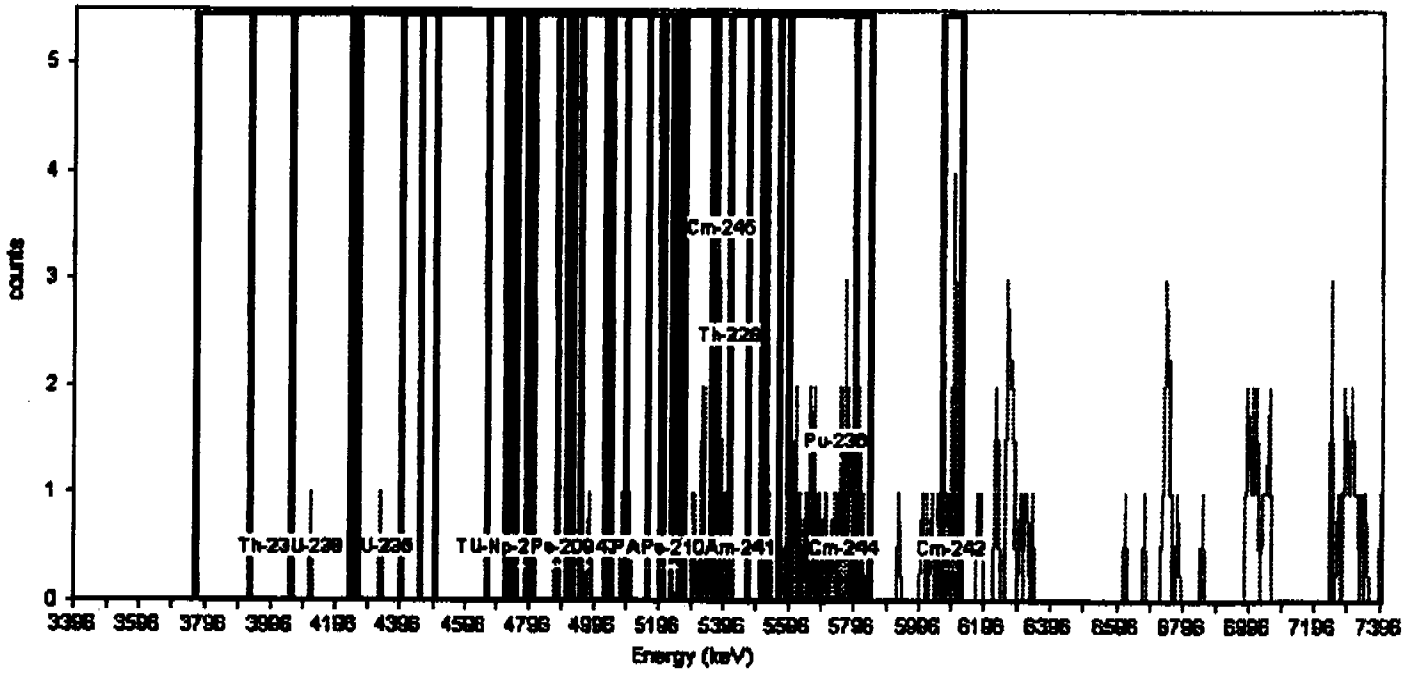
Batch Name: April_2005
Description:

Acquisition

Detector: AV8 , SN: 41-158X1
Acquisition Start Date: 4/26/2005 10:37:46AM
Live Time: 800.00 min.
Real Time: 800.11 min.
Calibration Name: March2005_AV8
Calibration Date: 3/16/2005 10:54:19PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 28.25% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND-ROI Library: Background ROI Library
Total Background Counts: 119.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.08	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.86	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	3.00	3.750E-003	2.500E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	3.00	3.750E-003	2.500E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	9.00	1.125E-002	3.953E-003
Th-228	5.41	5.16	5.47	15.00	1.875E-002	5.000E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	15.00	1.875E-002	5.000E-003
Am-241	5.46	5.27	5.57	16.00	2.000E-002	5.154E-003
Cm-245	5.39	5.36	5.41	9.00	1.125E-002	3.953E-003
Pu-236	5.74	5.52	5.80	26.00	3.250E-002	6.495E-003
Cm-244	5.76	5.60	5.85	27.00	3.375E-002	6.614E-003
Cm-242	6.10	6.07	6.13	8.00	1.000E-002	3.750E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 2:58:06AM 4/27/2005

Sample

Sample Name: AV9 Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

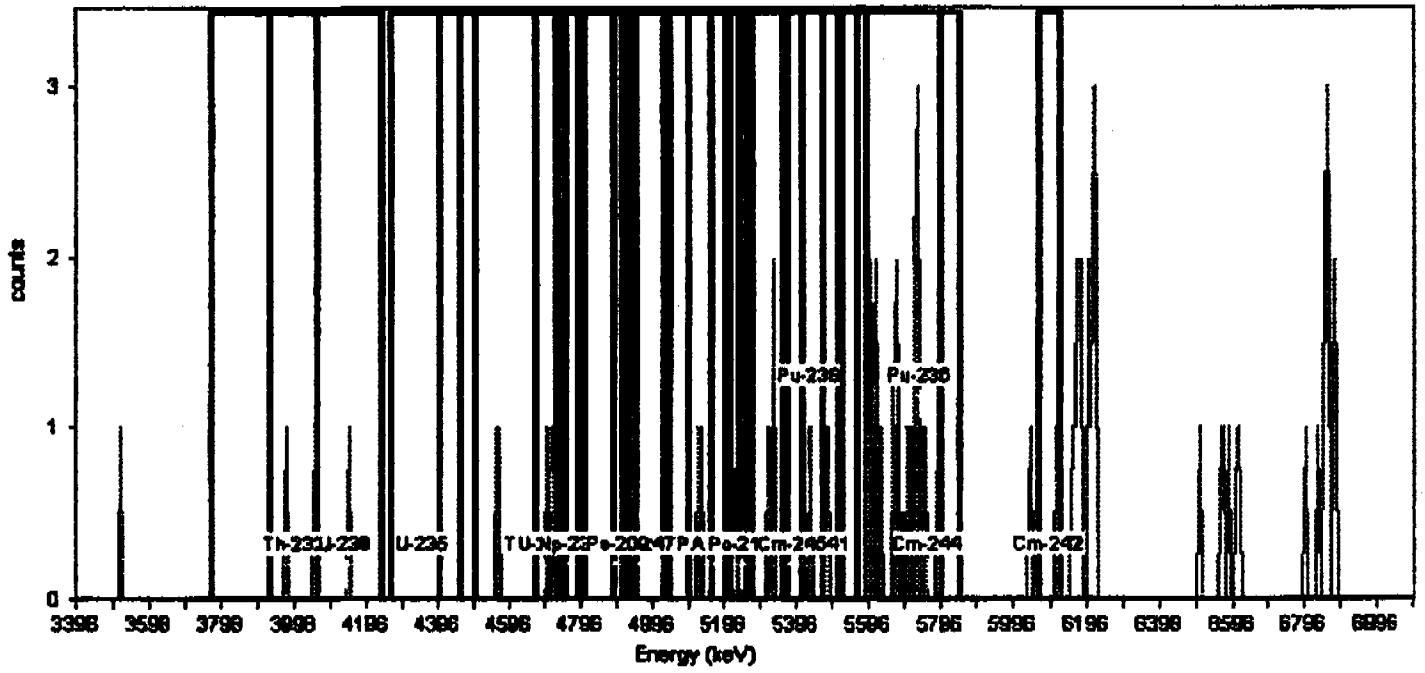
Description:

Acquisition

Detector: AV9 , SN: 41-172R1
Acquisition Start Date: 4/26/2005 10:37:48AM
Live Time: 800.00 min.
Real Time: 979.61 min.
Calibration Name: March2005_AV9#2
Calibration Date: 3/21/2005 8:25:56PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.56% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library

Total Background Counts: 72.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	3.00	3.750E-003	2.500E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	4.00	5.000E-003	2.795E-003
U-234	4.70	4.50	4.80	4.00	5.000E-003	2.795E-003
Pu-242	4.88	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	3.00	3.750E-003	2.500E-003
U-232	5.23	5.04	5.37	6.00	7.500E-003	3.307E-003
Th-228	5.41	5.16	5.47	5.00	6.250E-003	3.062E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	5.00	6.250E-003	3.062E-003
Am-241	5.45	5.27	5.57	5.00	6.250E-003	3.062E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	23.00	2.875E-002	6.124E-003
Cm-244	5.76	5.60	5.85	23.00	2.875E-002	6.124E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:21:18PM 4/28/2005

Analyst: 60040

Sample

Sample Name: AV10
Comment:

Spectrum #1 Analysis #1

Batch

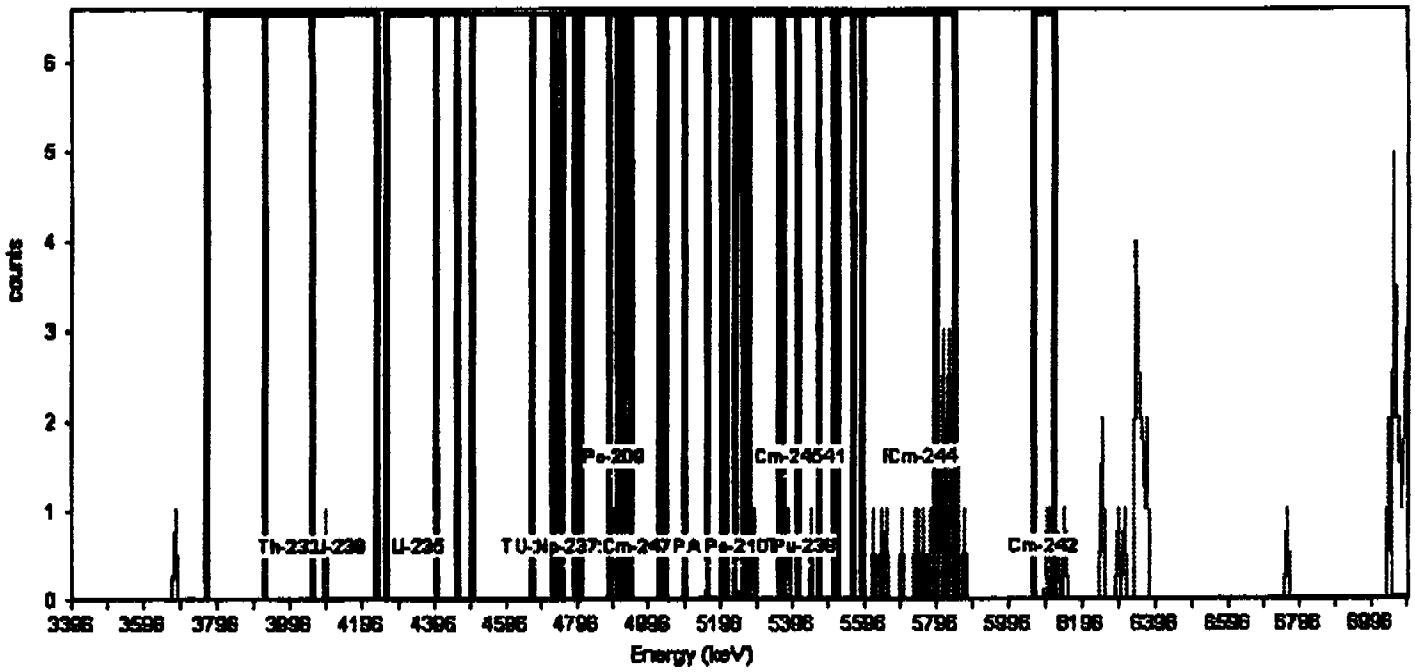
Batch Name: Aprila_2005
Description:

Acquisition

Detector: AV10 , SN: 41-172R3
Acquisition Start Date: 4/28/2005 9:01:10AM
Live Time: 800.00 min.
Real Time: 800.00 min.
Calibration Name: March2005_AV10
Calibration Date: 3/16/2005 5:27:48PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.75% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 72.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	3.00	3.750E-003	2.500E-003
Am-241	5.46	5.27	5.57	3.00	3.750E-003	2.500E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	11.00	1.375E-002	4.330E-003
Cm-244	5.76	5.60	5.85	25.00	3.125E-002	6.374E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 2:58:14AM 4/27/2005

Sample

Sample Name: AV11 Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

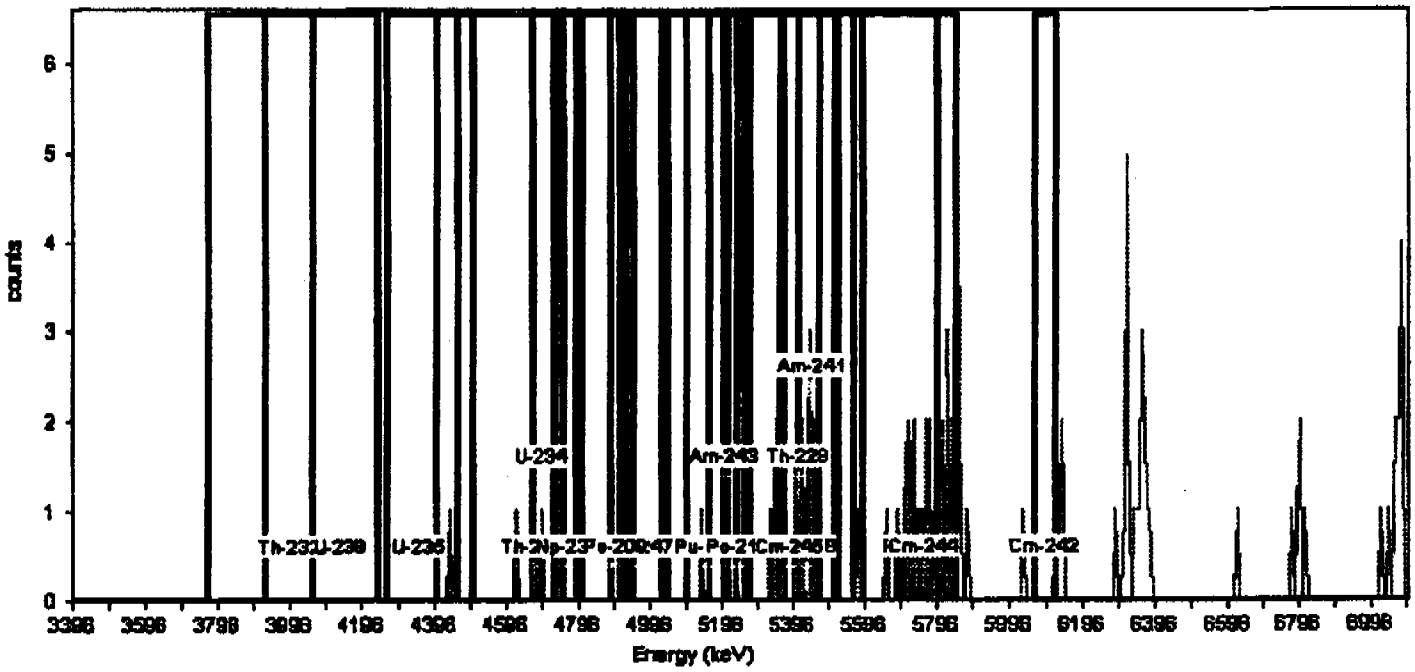
Description:

Acquisition

Detector: AV11 , SN: 41-172Q3
Acquisition Start Date: 4/26/2005 10:37:50AM
Live Time: 800.00 min.
Real Time: 979.61 min.
Calibration Name: March2005_AV11
Calibration Date: 3/16/2005 5:27:52PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.13% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library

Total Background Counts: 100.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	4.00	5.000E-003	2.795E-003
U-234	4.70	4.50	4.80	3.00	3.750E-003	2.500E-003
Pu-242	4.88	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.98	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	7.00	8.750E-003	3.538E-003
Th-228	5.41	5.16	5.47	19.00	2.375E-002	5.590E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	18.00	2.250E-002	5.449E-003
Am-241	5.45	5.27	5.57	18.00	2.250E-002	5.449E-003
Cm-245	5.39	5.36	5.41	5.00	6.250E-003	3.062E-003
Pu-236	5.74	5.52	5.80	16.00	2.000E-002	5.154E-003
Cm-244	5.76	5.60	5.85	26.00	3.250E-002	6.495E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 2:58:17AM 4/27/2005

Sample

Sample Name: AV12 Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

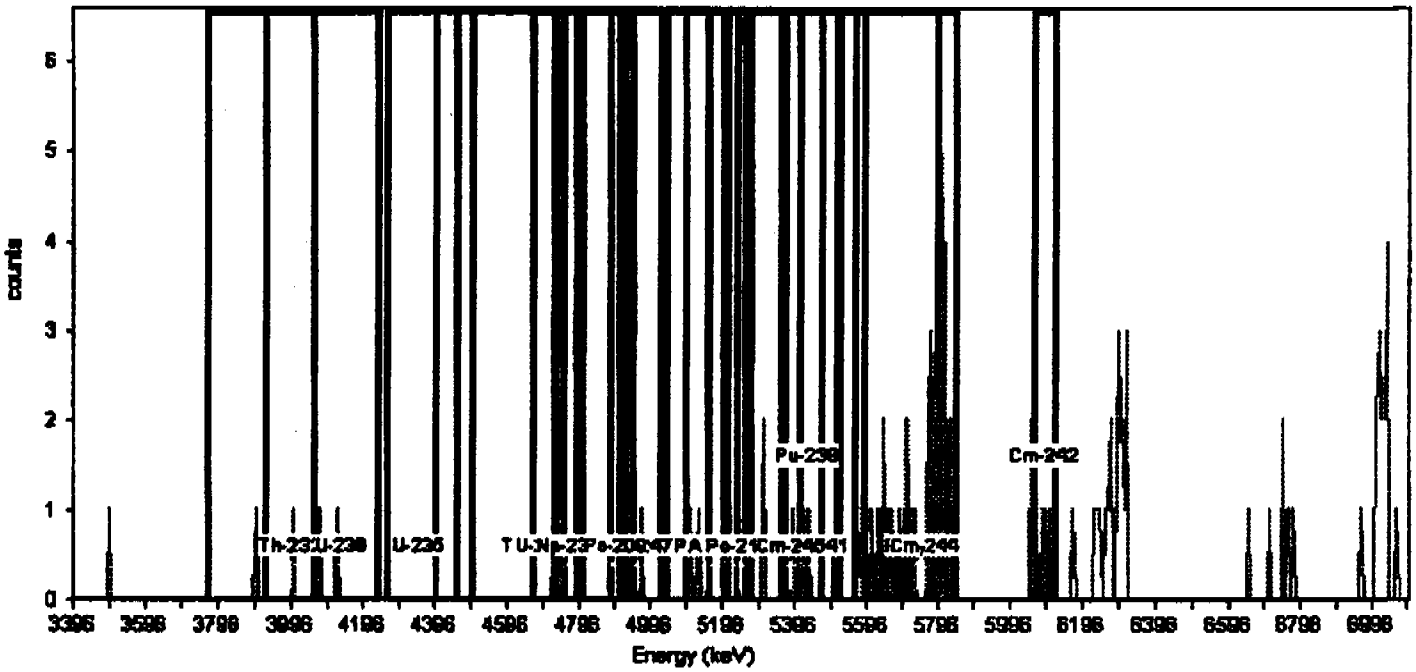
Description:

Acquisition

Detector: AV12 , SN: 41-172Q2
Acquisition Start Date: 4/26/2005 10:37:53AM
Live Time: 800.00 min.
Real Time: 979.61 min.
Calibration Name: March2005_AV12
Calibration Date: 3/16/2005 5:27:57PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.80% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library

Total Background Counts: 101.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	3.00	3.750E-003	2.500E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	2.00	2.500E-003	2.165E-003
Pu-242	4.88	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	3.00	3.750E-003	2.500E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.16	4.95	5.21	4.00	5.000E-003	2.795E-003
Am-243	5.20	5.03	5.28	5.00	6.250E-003	3.062E-003
U-232	5.23	5.04	5.37	7.00	8.750E-003	3.536E-003
Th-228	5.41	5.16	5.47	8.00	1.000E-002	3.750E-003
Po-210	5.25	5.20	5.26	2.00	2.500E-003	2.165E-003
Pu-238	5.44	5.24	5.52	8.00	1.000E-002	3.750E-003
Am-241	5.45	5.27	5.57	7.00	8.750E-003	3.536E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	25.00	3.125E-002	6.374E-003
Cm-244	5.76	5.60	5.85	37.00	4.625E-002	7.706E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
2:58:20AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV13 Spectrum #1 Analysis #1
Comment:

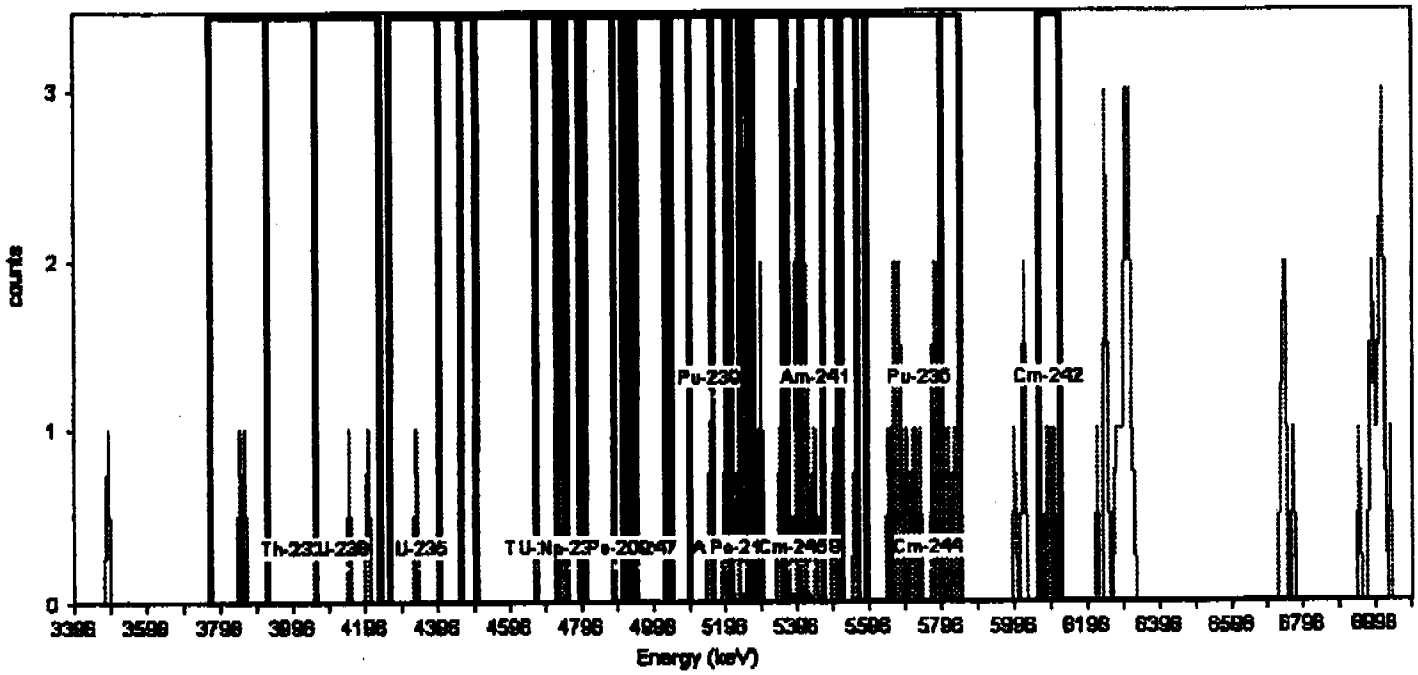
Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV13 , SN: 41-172Q1
Acquisition Start Date: 4/26/2005 10:37:55AM
Live Time: 800.00 min.
Real Time: 979.61 min.
Calibration Name: March2005_AV13
Calibration Date: 3/16/2005 1:21:34PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.86% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 94.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	3.00	3.750E-003	2.500E-003
U-238	4.14	3.93	4.24	3.00	3.750E-003	2.500E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	3.00	3.750E-003	2.500E-003
U-232	5.23	5.04	5.37	7.00	8.750E-003	3.536E-003
Th-228	5.41	5.16	5.47	15.00	1.875E-002	5.000E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	14.00	1.750E-002	4.841E-003
Am-241	5.45	5.27	5.57	15.00	1.875E-002	5.000E-003
Cm-245	5.39	5.36	5.41	5.00	6.250E-003	3.062E-003
Pu-236	5.74	5.52	5.80	20.00	2.500E-002	5.728E-003
Cm-244	5.76	5.60	5.85	25.00	3.125E-002	6.374E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
5:21:32AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV14
Spectrum #1 Analysis #1
Comment:

Batch

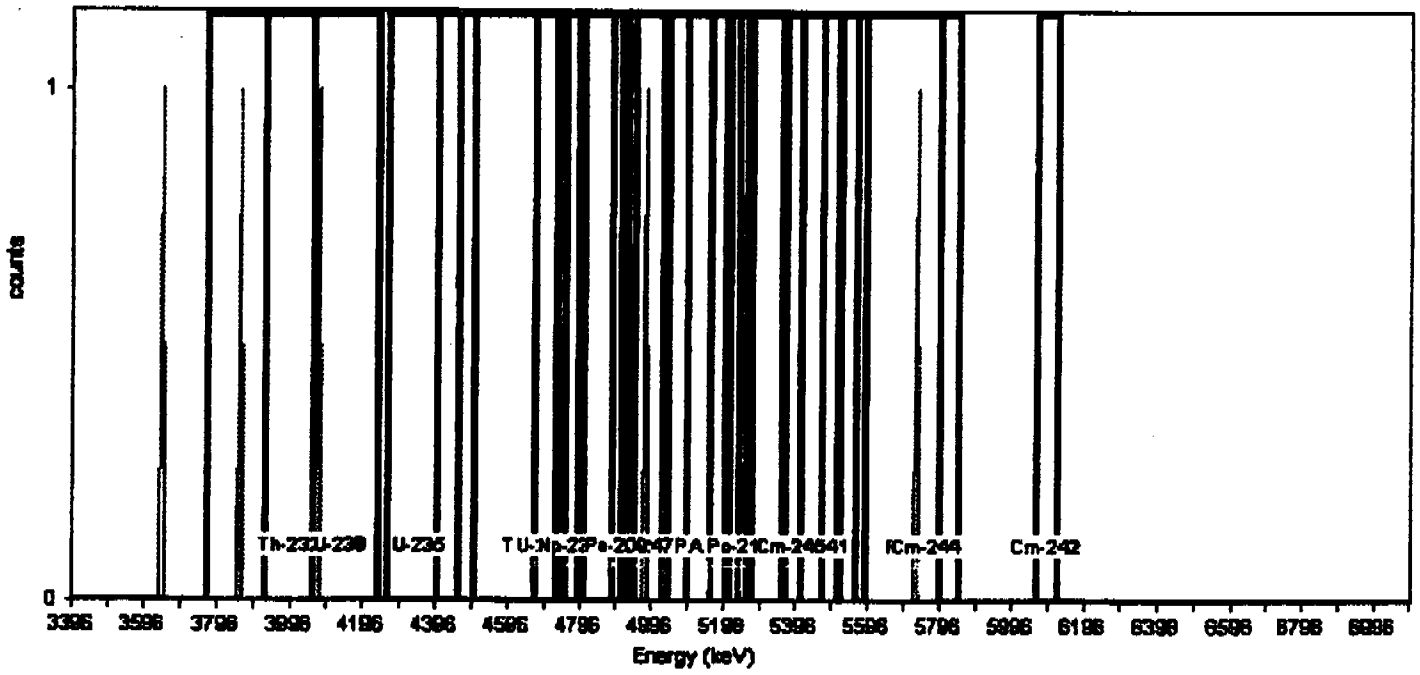
Batch Name: April_2005
Description:

Acquisition

Detector: AV14 , SN: 41-172C4
Acquisition Start Date: 4/26/2005 1:33:40PM
Live Time: 800.00 min.
Real Time: 947.91 min.
Calibration Name: March2005_AV14
Calibration Date: 3/16/2005 1:21:48PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 0.05% +/- 0.01% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 6.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.768E-003
Th-228	5.41	5.16	5.47	0.00	0.000E+000	1.768E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	0.00	0.000E+000	1.768E-003
Am-241	5.45	5.27	5.57	0.00	0.000E+000	1.768E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	1.00	1.250E-003	1.768E-003
Cm-244	5.76	5.60	5.85	1.00	1.250E-003	1.768E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 2:58:24AM 4/27/2005

Sample

Sample Name: AV15 Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

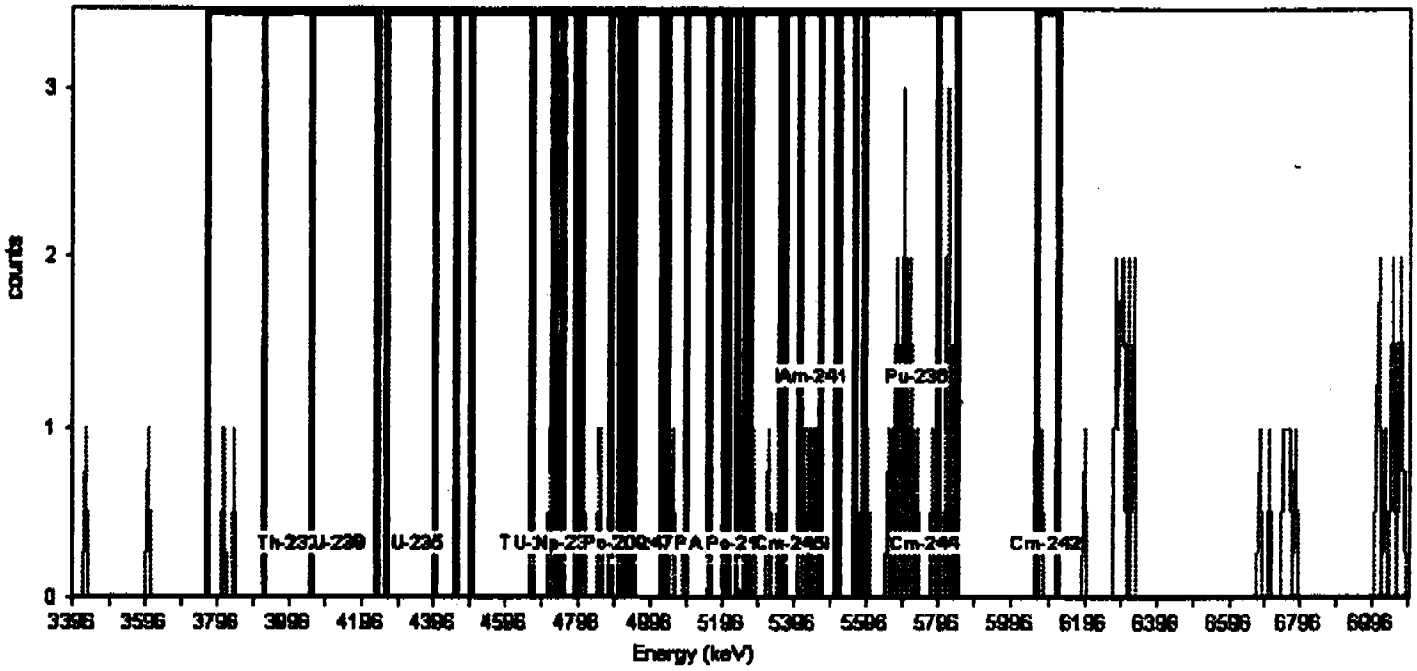
Description:

Acquisition

Detector: AV15 , SN: 41-172C5
Acquisition Start Date: 4/26/2005 10:37:57AM
Live Time: 800.00 min.
Real Time: 979.61 min.
Calibration Name: March2005_AV15
Calibration Date: 3/16/2005 1:21:55PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.84% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library

Total Background Counts: 72.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	3.00	3.750E-003	2.500E-003
Th-229	4.84	4.72	5.10	4.00	5.000E-003	2.795E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.26	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	5.00	6.250E-003	3.062E-003
Th-228	5.41	5.16	5.47	8.00	1.000E-002	3.750E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	8.00	1.000E-002	3.750E-003
Am-241	5.45	5.27	5.57	8.00	1.000E-002	3.750E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.90	19.00	2.375E-002	5.590E-003
Cm-244	5.76	5.60	5.85	24.00	3.000E-002	6.250E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 2:58:27AM 4/27/2005

Sample

Sample Name: AV16 Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

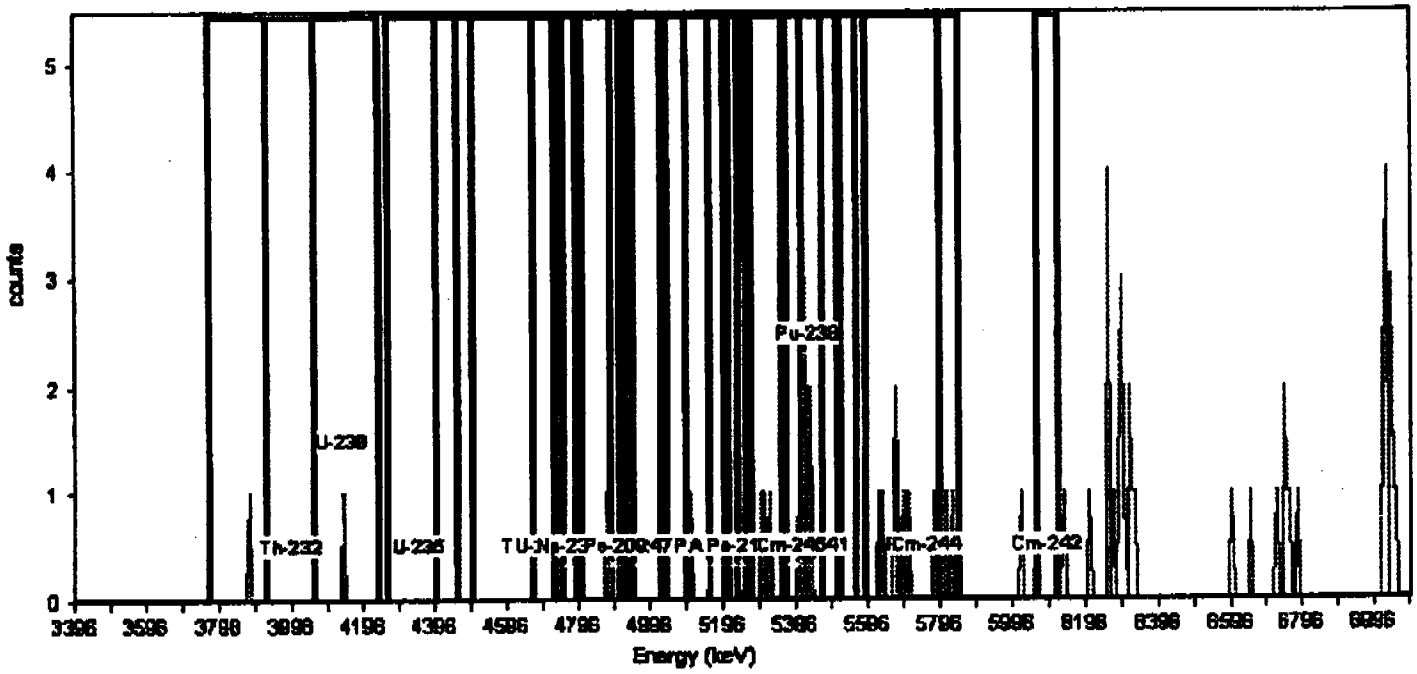
Description:

Acquisition

Detector: AV16 , SN: 41-172Q7
Acquisition Start Date: 4/26/2005 10:37:58AM
Live Time: 800.00 min.
Real Time: 979.61 min.
Calibration Name: March2005_AV16
Calibration Date: 3/16/2005 1:22:01PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 28.82% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Library: Background ROI Library

Total Background Counts: 66.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	4.00	5.000E-003	2.795E-003
Th-228	5.41	5.16	5.47	11.00	1.375E-002	4.330E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	11.00	1.375E-002	4.330E-003
Am-241	5.45	5.27	5.57	11.00	1.375E-002	4.330E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	9.00	1.125E-002	3.953E-003
Cm-244	5.76	5.80	5.85	13.00	1.625E-002	4.677E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:09AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV17
Spectrum #1 Analysis #1
Comment:

Batch

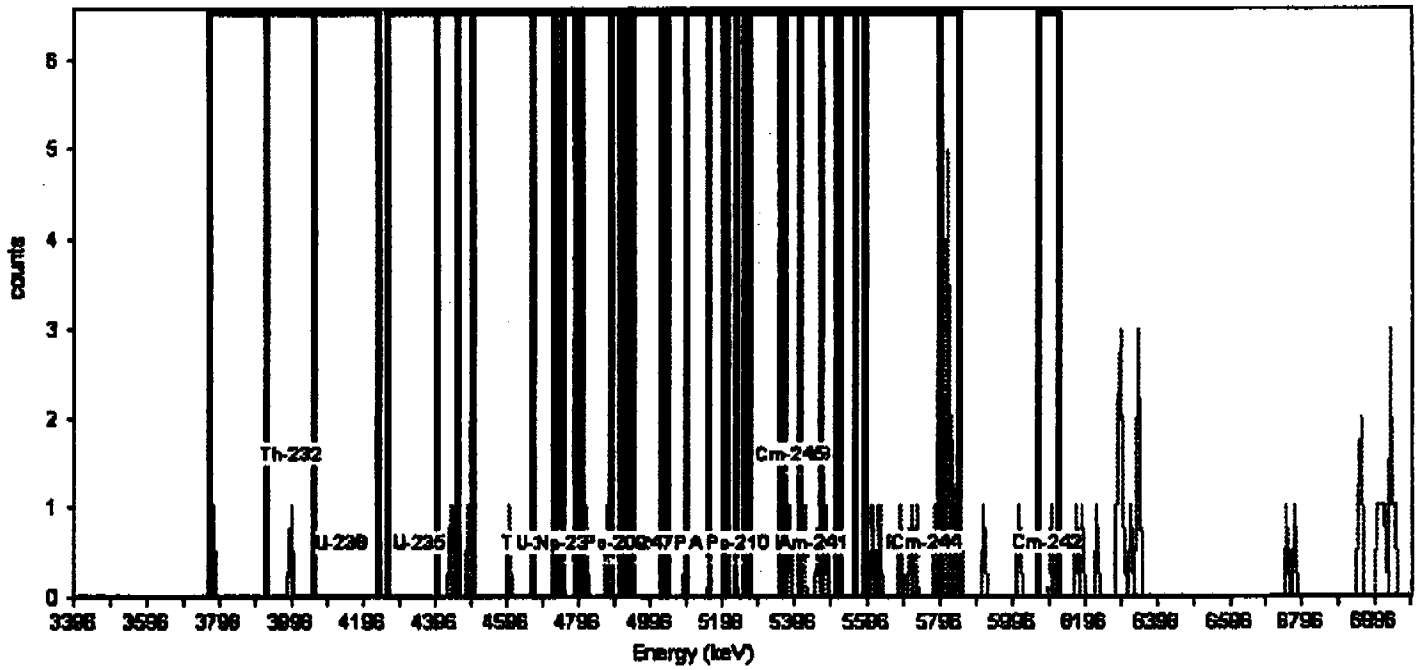
Batch Name: April_2005
Description:

Acquisition

Detector: AV17 , SN: 41-172Q4
Acquisition Start Date: 4/26/2005 10:38:00AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: Mar2005_AV17
Calibration Date: 3/16/2005 5:28:41PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.69% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 68.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	2.00	2.500E-003	2.165E-003
Th-230	4.67	4.40	4.73	5.00	6.250E-003	3.062E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.86	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	3.00	3.750E-003	2.500E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.86	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	4.00	5.000E-003	2.795E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	5.00	6.250E-003	3.062E-003
Am-241	5.45	5.27	5.57	5.00	6.250E-003	3.062E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	9.00	1.125E-002	3.953E-003
Cm-244	5.76	5.80	5.86	21.00	2.625E-002	5.863E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:12AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV18 Spectrum #1 Analysis #1
Comment:

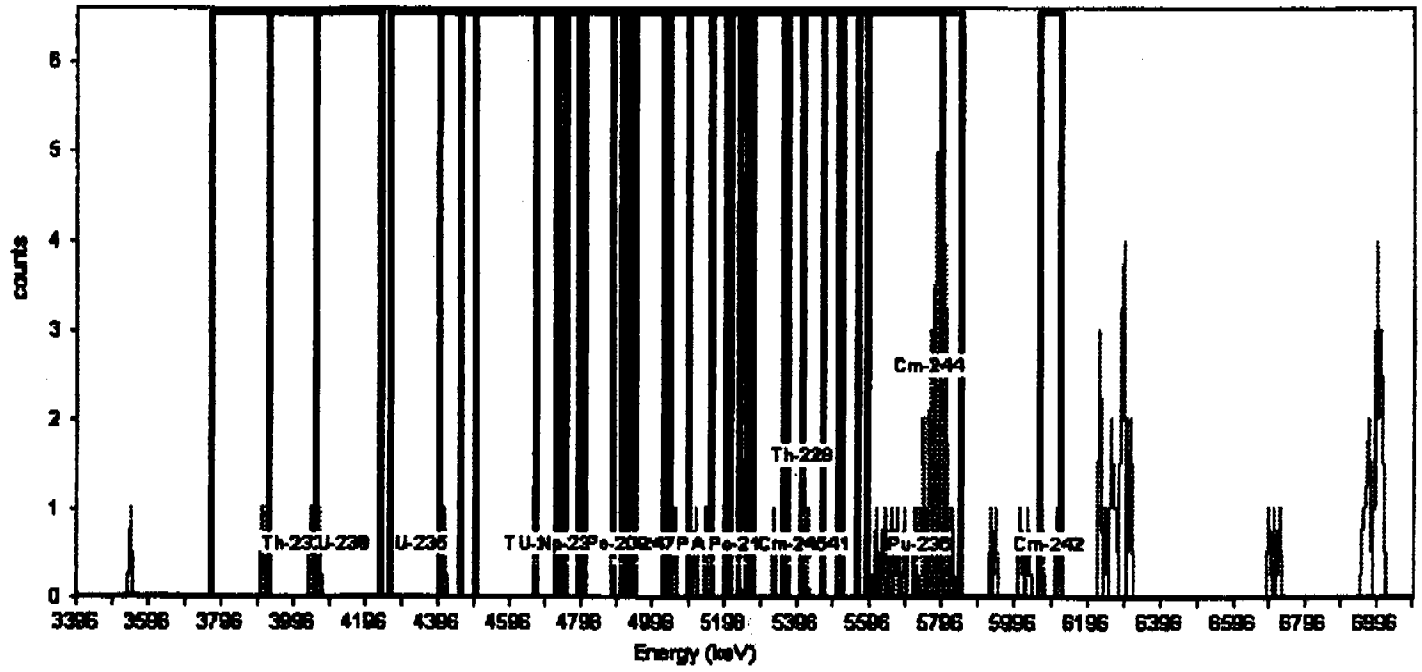
Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV18 , SN: 41-172C6
Acquisition Start Date: 4/26/2005 10:38:01AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: Mar2005_AV18
Calibration Date: 3/16/2005 5:28:55PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 25.79% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 87.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	2.00	2.500E-003	2.165E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	3.00	3.750E-003	2.500E-003
Am-243	5.20	5.03	5.28	3.00	3.750E-003	2.500E-003
U-232	5.23	5.04	5.37	4.00	5.000E-003	2.795E-003
Th-228	5.41	5.16	5.47	4.00	5.000E-003	2.795E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	5.00	6.250E-003	3.062E-003
Am-241	5.45	5.27	5.57	5.00	6.250E-003	3.062E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	26.00	3.250E-002	6.495E-003
Cm-244	5.78	5.60	5.85	32.00	4.000E-002	7.181E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL ST. LOUIS

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:16AM 4/27/2005

Analyst: 60040

Sample

Spectrum #1 Analysis #1

Sample Name: AV19

Comment:

Batch

Batch Name: April_2005

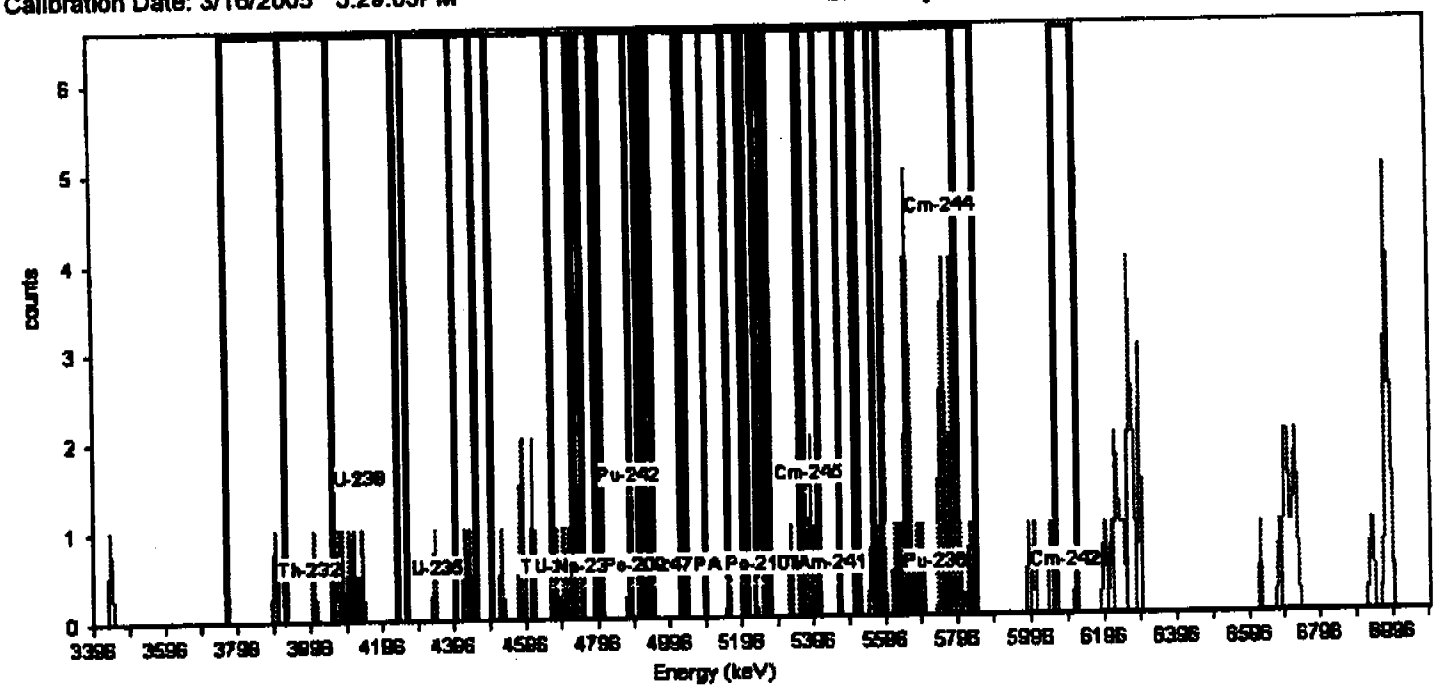
Description:

Acquisition

Detector: AV19 , SN: 41-172Q6
Acquisition Start Date: 4/26/2005 10:38:03AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: Mar2005_AV19
Calibration Date: 3/16/2005 5:29:03PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 28.94% +/- 0.30% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library

Total Background Counts: 117.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	6.00	7.500E-003	3.307E-003
U-235	4.35	4.26	4.46	4.00	5.000E-003	2.795E-003
Th-230	4.67	4.40	4.73	13.00	1.625E-002	4.677E-003
U-234	4.70	4.50	4.80	12.00	1.500E-002	4.507E-003
Pu-242	4.88	4.67	4.93	7.00	8.750E-003	3.536E-003
Th-229	4.84	4.72	5.10	5.00	6.250E-003	3.062E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.86	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.86	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.96	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	3.00	3.750E-003	2.500E-003
Th-228	5.41	5.16	5.47	7.00	8.750E-003	3.536E-003
Po-210	5.25	5.20	5.28	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	7.00	8.750E-003	3.536E-003
Am-241	5.45	5.27	5.57	7.00	8.750E-003	3.536E-003
Cm-245	5.39	5.36	5.41	5.00	6.250E-003	3.062E-003
Pu-236	5.74	5.52	5.80	35.00	4.375E-002	7.500E-003
Cm-244	5.76	5.60	5.85	35.00	4.375E-002	7.500E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:19AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV20
Spectrum #1 Analysis #1
Comment:

Batch

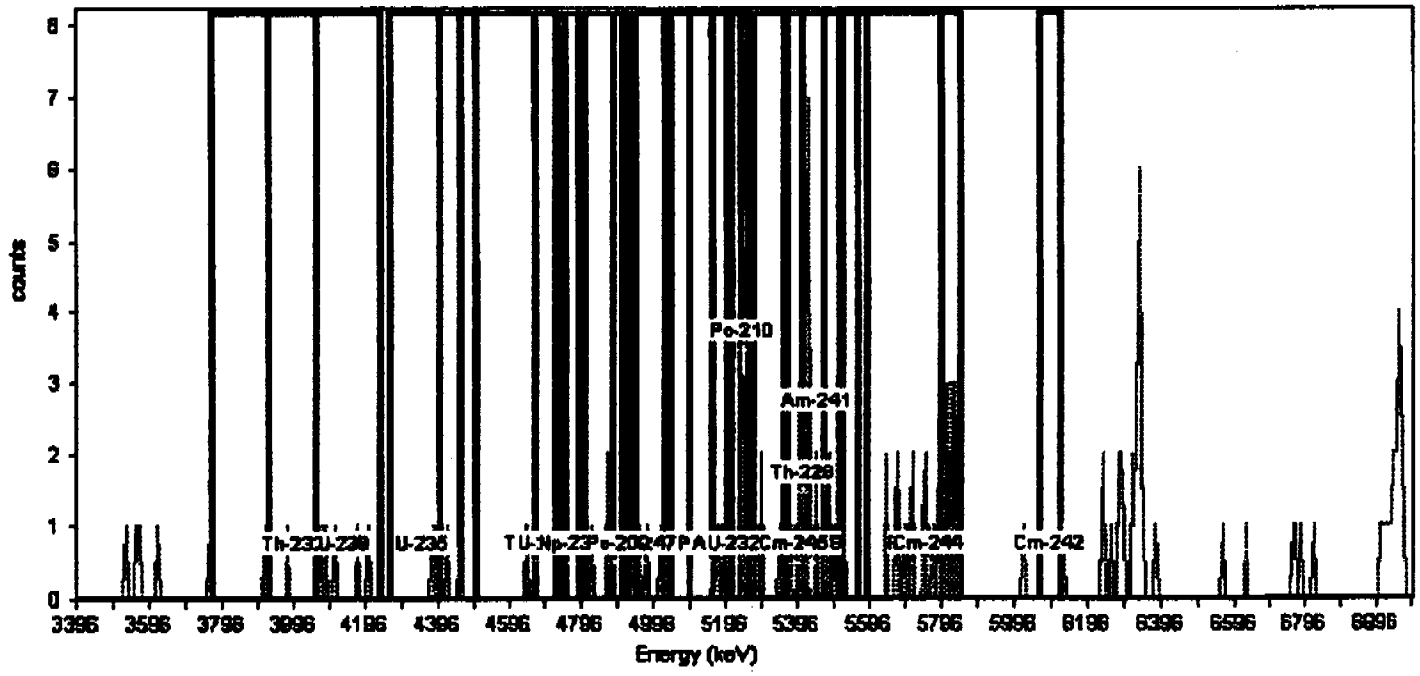
Batch Name: April_2005
Description:

Acquisition

Detector: AV20 , SN: 41-172R2
Acquisition Start Date: 4/26/2005 10:38:06AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: Mar2005_AV20
Calibration Date: 3/16/2005 5:29:11PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.11% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 140.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.08	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	6.00	7.500E-003	3.307E-003
U-235	4.35	4.26	4.46	4.00	5.000E-003	2.795E-003
Th-230	4.67	4.40	4.73	3.00	3.750E-003	2.500E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	3.00	3.750E-003	2.500E-003
Th-229	4.84	4.72	5.10	7.00	8.750E-003	3.536E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	4.00	5.000E-003	2.795E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	6.00	7.500E-003	3.307E-003
Am-243	5.20	5.03	5.28	7.00	8.750E-003	3.536E-003
U-232	5.23	5.04	5.37	11.00	1.375E-002	4.330E-003
Th-228	5.41	5.16	5.47	33.00	4.125E-002	7.289E-003
Po-210	5.25	5.20	5.26	3.00	3.750E-003	2.500E-003
Pu-238	5.44	5.24	5.52	35.00	4.375E-002	7.500E-003
Am-241	5.45	5.27	5.57	33.00	4.125E-002	7.289E-003
Cm-245	5.39	5.36	5.41	8.00	1.000E-002	3.750E-003
Pu-236	5.74	5.52	5.80	16.00	2.000E-002	5.154E-003
Cm-244	5.78	5.60	5.85	29.00	3.625E-002	6.847E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:23AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV21
Comment:

Spectrum #1 Analysis #1

Batch

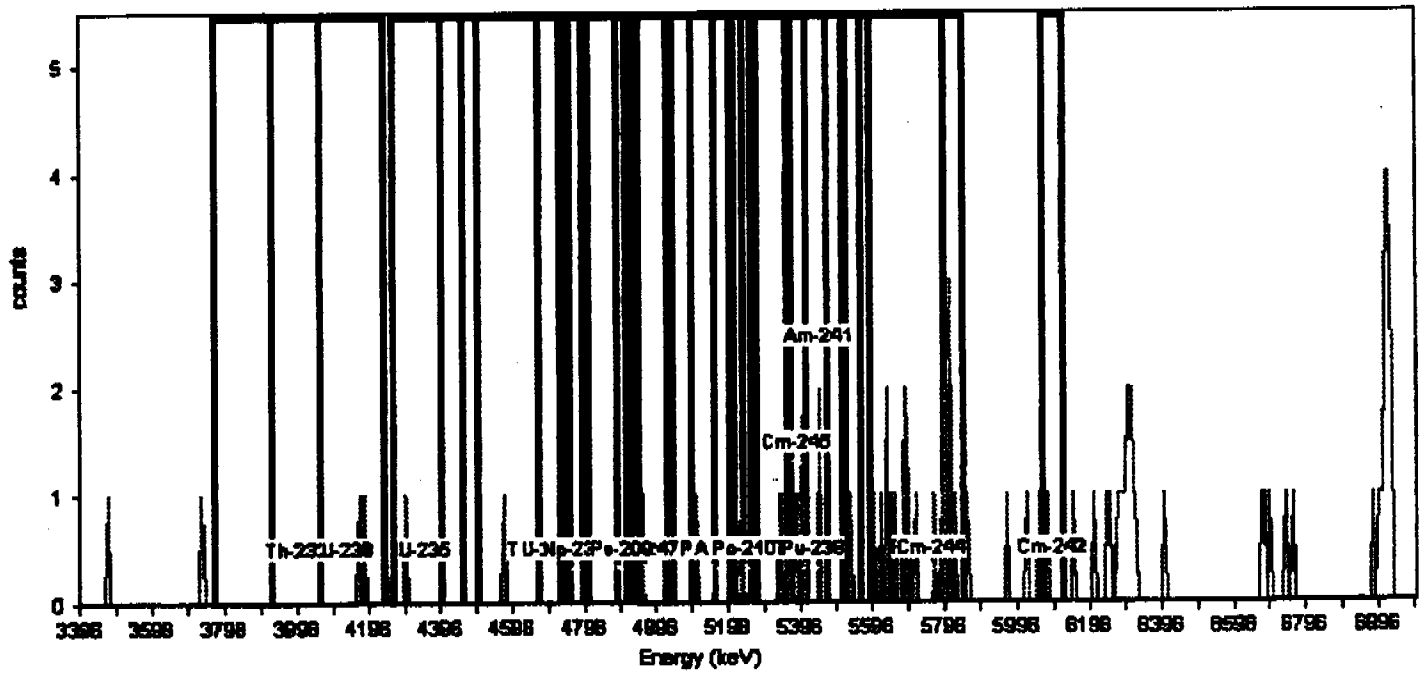
Batch Name: April_2005
Description:

Acquisition

Detector: AV21 , SN: 41-172C7
Acquisition Start Date: 4/26/2005 10:38:07AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV21
Calibration Date: 3/16/2005 12:47:04AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.06% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 85.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	3.00	3.750E-003	2.500E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	3.00	3.750E-003	2.500E-003
Pu-242	4.86	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	4.00	5.000E-003	2.795E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	3.00	3.750E-003	2.500E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	4.00	5.000E-003	2.795E-003
Th-228	5.41	5.16	5.47	10.00	1.250E-002	4.146E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	9.00	1.125E-002	3.953E-003
Am-241	5.45	5.27	5.57	11.00	1.375E-002	4.330E-003
Cm-245	5.39	5.36	5.41	5.00	6.250E-003	3.062E-003
Pu-236	5.74	5.52	5.80	17.00	2.125E-002	5.303E-003
Cm-244	5.76	5.60	5.85	22.00	2.750E-002	5.995E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:26AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV22
Comment:

Spectrum #1 Analysis #1

Batch

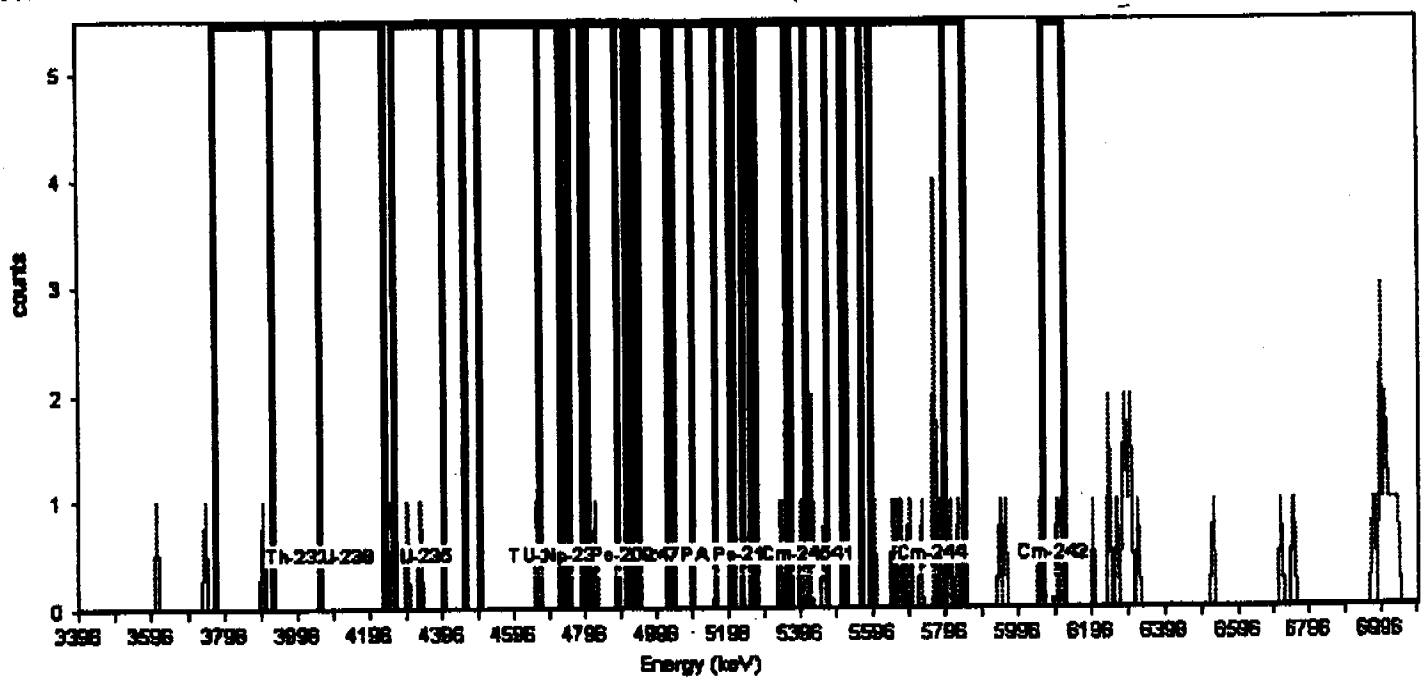
Batch Name: April_2005
Description:

Acquisition

Detector: AV22 , SN: 41-172Q5
Acquisition Start Date: 4/26/2005 10:38:09AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV22
Calibration Date: 3/16/2005 12:47:13AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 25.61% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 64.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	2.00	2.500E-003	2.165E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.60	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.26	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	7.00	8.750E-003	3.536E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	7.00	8.750E-003	3.536E-003
Am-241	5.45	5.27	5.57	7.00	8.750E-003	3.536E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	14.00	1.750E-002	4.841E-003
Cm-244	5.76	5.60	5.85	16.00	2.000E-002	5.154E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:29AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV23 Spectrum #1 Analysis #1
Comment:

Batch

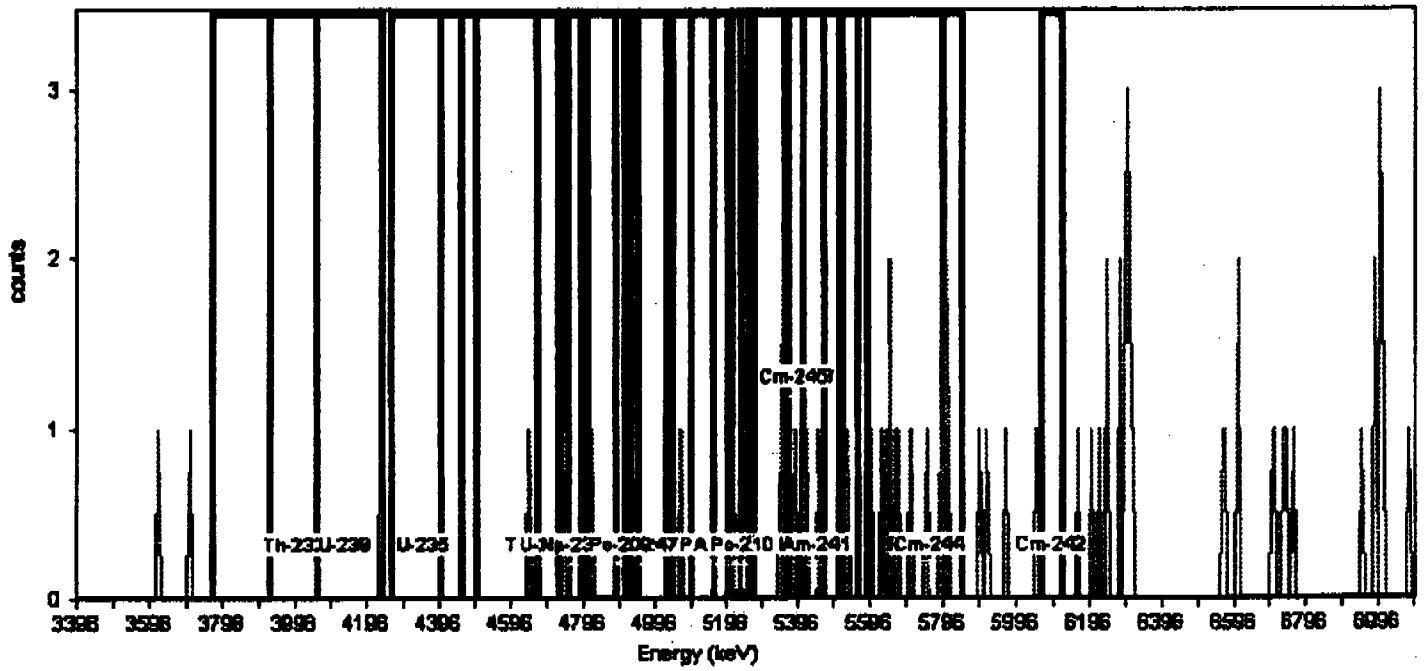
Batch Name: April_2005
Description:

Acquisition

Detector: AV23 , SN: 41-172R4
Acquisition Start Date: 4/26/2005 10:38:11AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV23
Calibration Date: 3/16/2005 12:47:20AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.07% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 66.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	2.00	2.500E-003	2.165E-003
Pu-242	4.88	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	3.00	3.750E-003	2.500E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.98	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	5.00	6.250E-003	3.062E-003
Th-228	5.41	5.16	5.47	9.00	1.125E-002	3.953E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	8.00	1.000E-002	3.750E-003
Am-241	5.45	5.27	5.57	9.00	1.125E-002	3.953E-003
Cm-245	5.39	5.36	5.41	3.00	3.750E-003	2.500E-003
Pu-236	5.74	5.52	5.80	11.00	1.375E-002	4.330E-003
Cm-244	5.78	5.60	5.85	13.00	1.625E-002	4.677E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:33AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV24
Comment:

Spectrum #1 Analysis #1

Batch

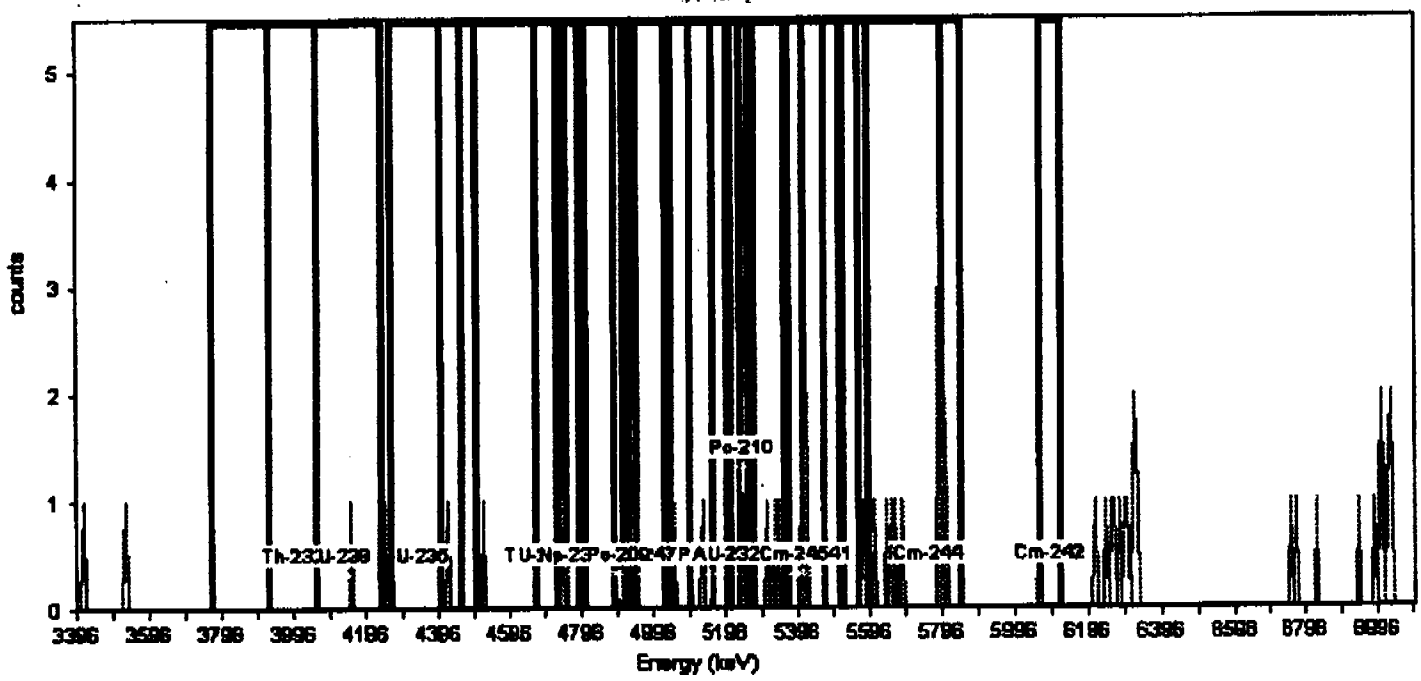
Batch Name: April_2005
Description:

Acquisition

Detector: AV24 , SN: 41-172R5
Acquisition Start Date: 4/26/2005 10:38:13AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV24
Calibration Date: 3/16/2005 12:47:29AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.59% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Library: Background ROI Library
Total Background Counts: 57.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	3.00	3.750E-003	2.500E-003
Pu-242	4.88	4.67	4.93	3.00	3.750E-003	2.500E-003
Th-229	4.84	4.72	5.10	4.00	5.000E-003	2.795E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	3.00	3.750E-003	2.500E-003
U-232	5.23	5.04	5.37	6.00	7.500E-003	3.307E-003
Th-228	5.41	5.16	5.47	7.00	8.750E-003	3.536E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	7.00	8.750E-003	3.536E-003
Am-241	5.45	5.27	5.57	6.00	7.500E-003	3.307E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	12.00	1.500E-002	4.507E-003
Cm-244	5.76	5.60	5.85	14.00	1.750E-002	4.841E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 1:16:38AM 4/26/2005

Sample

Sample Name: AV25 Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

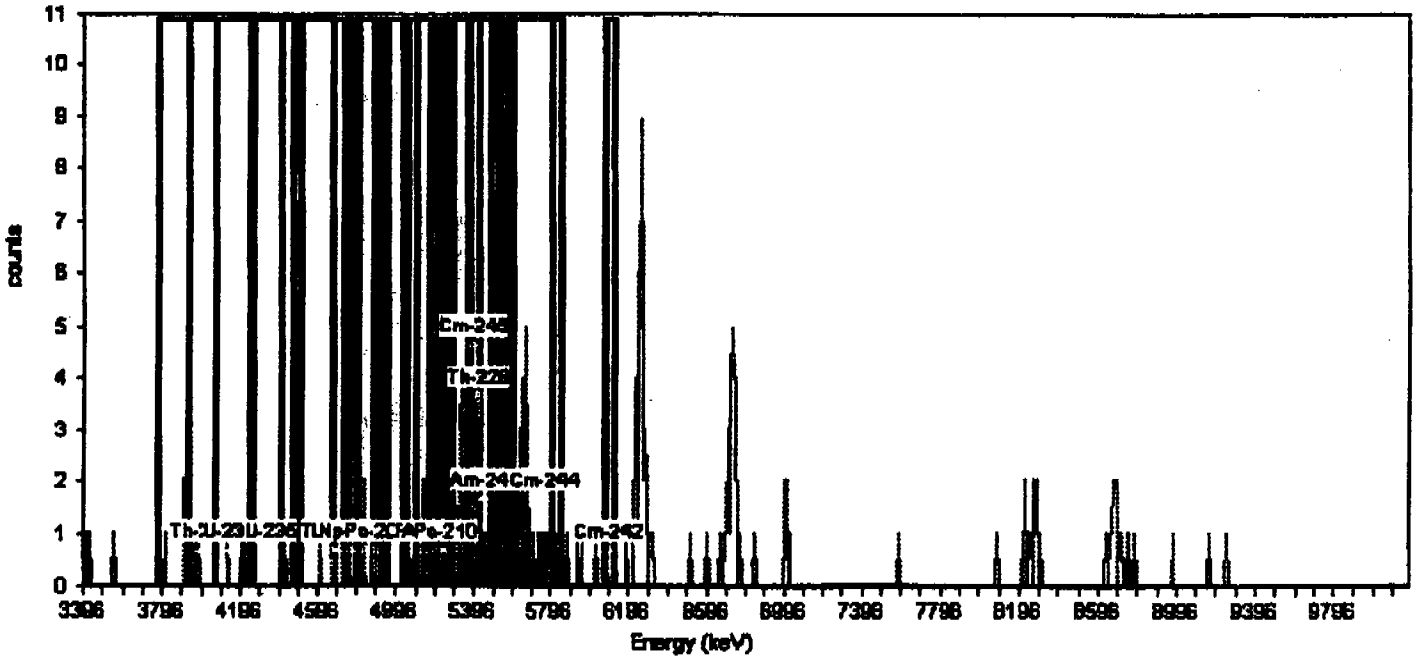
Description:

Acquisition

Detector: AV25 , SN: ALDR17
Acquisition Start Date: 4/25/2005 11:49:22AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV25
Calibration Date: 3/18/2005 4:19:57PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 24.95% +/- 0.25% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library

Total Background Counts: 228.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	6.00	7.500E-003	3.307E-003
U-238	4.14	3.93	4.24	6.00	7.500E-003	3.307E-003
U-235	4.36	4.26	4.46	2.00	2.500E-003	2.165E-003
Th-230	4.67	4.40	4.73	6.00	7.500E-003	3.307E-003
U-234	4.70	4.50	4.80	7.00	8.750E-003	3.536E-003
Pu-242	4.88	4.67	4.93	10.00	1.250E-002	4.146E-003
Th-229	4.84	4.72	5.10	11.00	1.375E-002	4.330E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	3.00	3.750E-003	2.500E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	6.00	7.500E-003	3.307E-003
Am-243	5.20	5.03	5.28	6.00	7.500E-003	3.307E-003
U-232	5.23	5.04	5.37	20.00	2.500E-002	5.728E-003
Th-228	5.41	5.16	5.47	40.00	5.000E-002	8.004E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	39.00	4.875E-002	7.906E-003
Am-241	5.45	5.27	5.57	40.00	5.000E-002	8.004E-003
Cm-245	5.39	5.36	5.41	23.00	2.875E-002	6.124E-003
Pu-236	5.74	5.52	5.80	36.00	4.500E-002	7.603E-003
Cm-244	5.76	5.60	5.85	38.00	4.750E-002	7.806E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:16:44AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV26 Spectrum #1 Analysis #1
Comment:

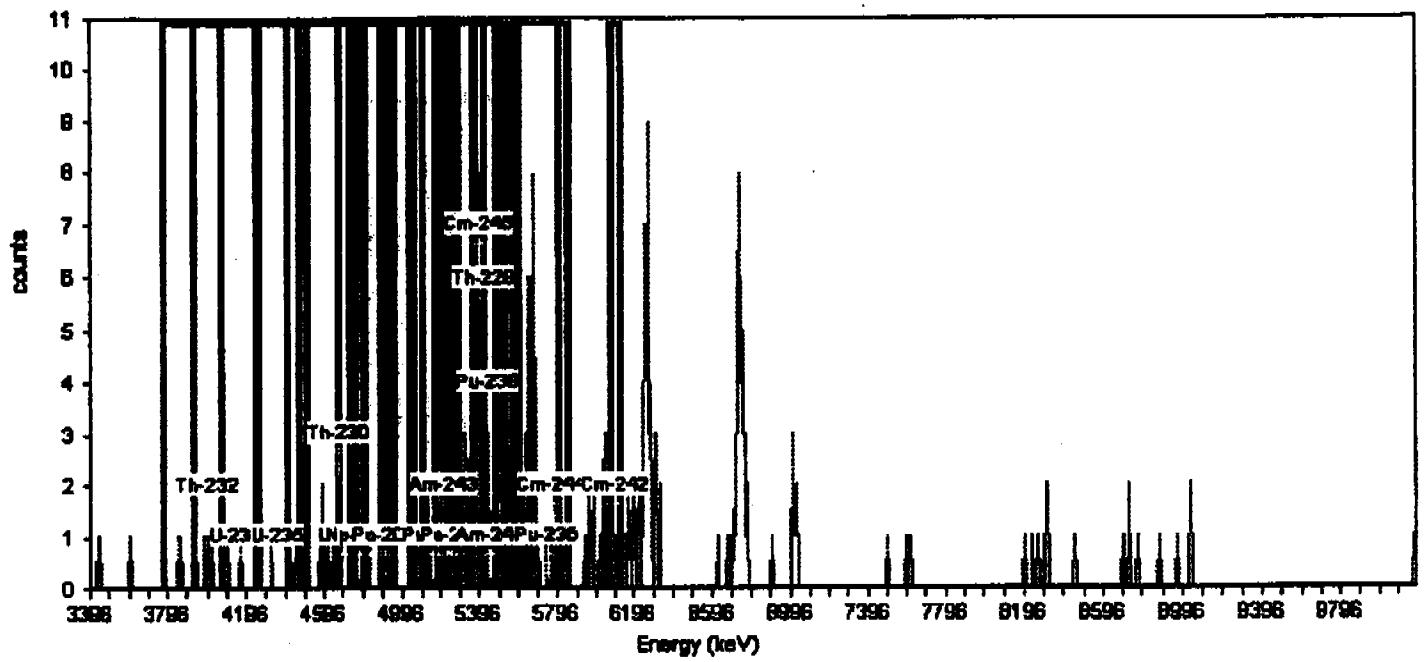
Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV26 , SN: ALDR18
Acquisition Start Date: 4/25/2005 11:49:23AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV26
Calibration Date: 3/18/2005 4:20:03PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 23.91% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 288.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
U-234	4.70	4.50	4.80	12.00	1.500E-002	4.507E-003
Pu-242	4.86	4.67	4.93	8.00	1.000E-002	3.750E-003
Th-229	4.84	4.72	5.10	7.00	8.750E-003	3.536E-003
Np-237	4.77	4.75	4.79	2.00	2.500E-003	2.165E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.96	5.21	5.00	6.250E-003	3.062E-003
Am-243	5.20	6.03	5.28	7.00	8.750E-003	3.536E-003
U-232	5.23	5.04	5.37	29.00	3.625E-002	6.847E-003
Th-228	5.41	5.16	5.47	55.00	6.875E-002	9.354E-003
Po-210	5.25	5.20	5.28	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	55.00	6.875E-002	9.354E-003
Am-241	5.45	5.27	5.57	55.00	6.875E-002	9.354E-003
Cm-245	5.39	5.36	5.41	31.00	3.875E-002	7.071E-003
Pu-236	5.74	5.52	5.80	55.00	6.875E-002	9.354E-003
Cm-244	5.76	5.60	5.86	55.00	6.875E-002	9.354E-003
Cm-242	6.10	6.07	6.13	7.00	8.750E-003	3.536E-003
Th-232	3.99	3.77	4.06	6.00	7.500E-003	3.307E-003
U-238	4.14	3.93	4.24	6.00	7.500E-003	3.307E-003
U-235	4.35	4.26	4.46	3.00	3.750E-003	2.500E-003
Th-230	4.67	4.40	4.73	12.00	1.500E-002	4.507E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:16:49AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV27
Spectrum #1 Analysis #1
Comment:

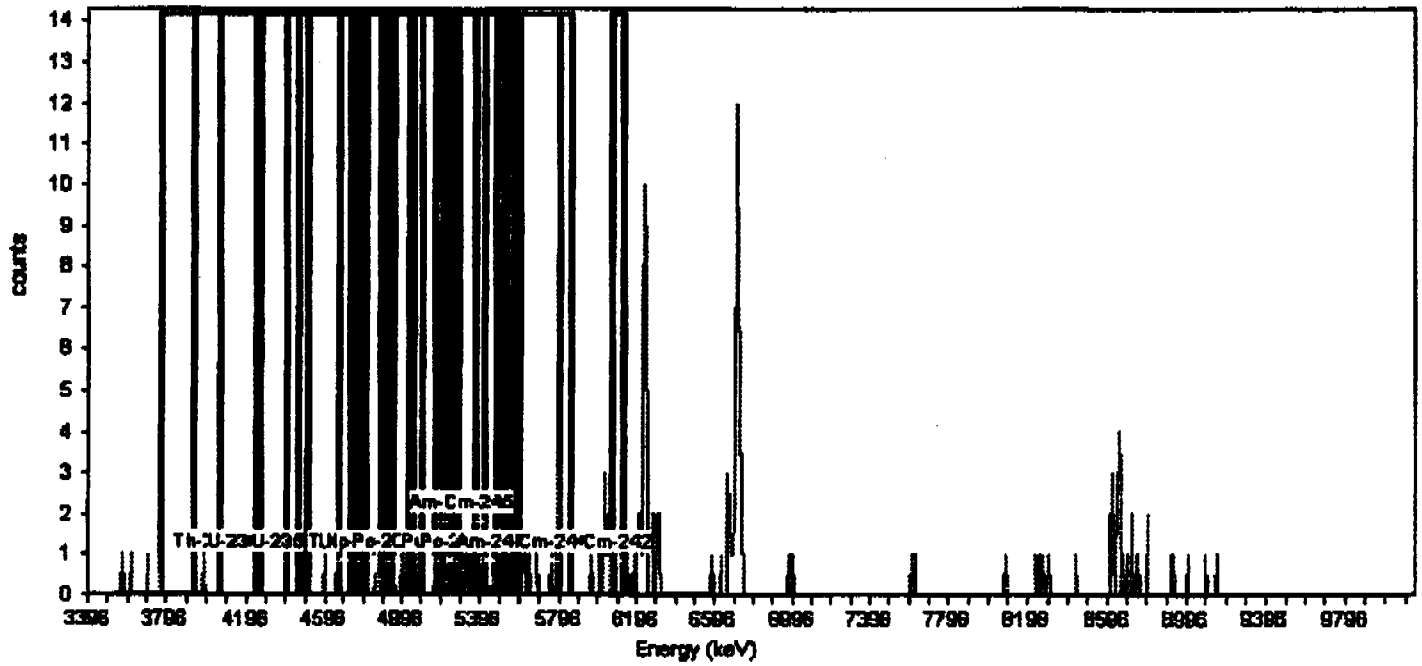
Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV27 , SN: ALDR19
Acquisition Start Date: 4/25/2005 11:48:20AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV27
Calibration Date: 3/18/2005 4:20:09PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 24.34% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 172.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	3.00	3.750E-003	2.500E-003
U-234	4.70	4.50	4.80	3.00	3.750E-003	2.500E-003
Pu-242	4.88	4.67	4.93	3.00	3.750E-003	2.500E-003
Th-229	4.84	4.72	5.10	7.00	8.750E-003	3.536E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	6.00	7.500E-003	3.307E-003
Am-243	5.20	5.03	5.28	4.00	5.000E-003	2.795E-003
U-232	5.23	5.04	5.37	7.00	8.750E-003	3.536E-003
Th-228	5.41	5.16	5.47	6.00	7.500E-003	3.307E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	5.00	6.250E-003	3.062E-003
Am-241	5.45	5.27	5.57	6.00	7.500E-003	3.307E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	9.00	1.125E-002	3.953E-003
Cm-244	5.76	5.60	5.85	7.00	8.750E-003	3.536E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:16:55AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV28
Comment:

Spectrum #1 Analysis #1

Batch

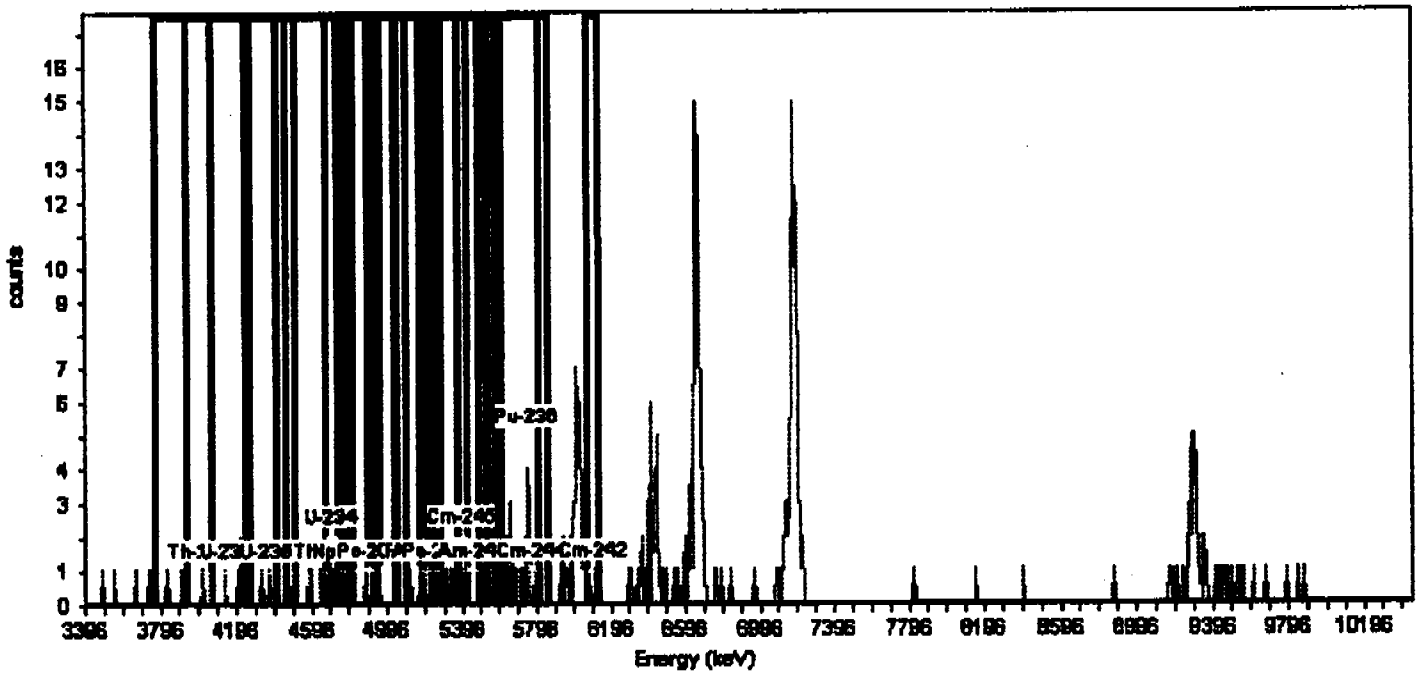
Batch Name: April_2005
Description:

Acquisition

Detector: AV28 , SN: ALDR20
Acquisition Start Date: 4/25/2005 11:48:20AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: Feb2005_AV28
Calibration Date: 2/28/2005 11:00:16PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 0.68% +/- 0.04% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 381.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	5.00	6.250E-003	3.062E-003
U-238	4.14	3.93	4.24	8.00	1.000E-002	3.750E-003
U-235	4.35	4.26	4.46	2.00	2.500E-003	2.165E-003
Th-230	4.67	4.40	4.73	9.00	1.125E-002	3.953E-003
U-234	4.70	4.50	4.80	9.00	1.125E-002	3.953E-003
Pu-242	4.88	4.67	4.93	6.00	7.500E-003	3.307E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	3.00	3.750E-003	2.500E-003
Am-243	5.20	5.03	5.28	3.00	3.750E-003	2.500E-003
U-232	5.23	5.04	5.37	6.00	7.500E-003	3.307E-003
Th-228	5.41	5.16	5.47	6.00	7.500E-003	3.307E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	6.00	7.500E-003	3.307E-003
Am-241	5.46	5.27	5.57	7.00	8.750E-003	3.536E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	29.00	3.625E-002	6.847E-003
Cm-244	5.76	5.60	5.85	27.00	3.375E-002	6.614E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:17:00AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV29
Comment:

Spectrum #1 Analysis #1

Batch

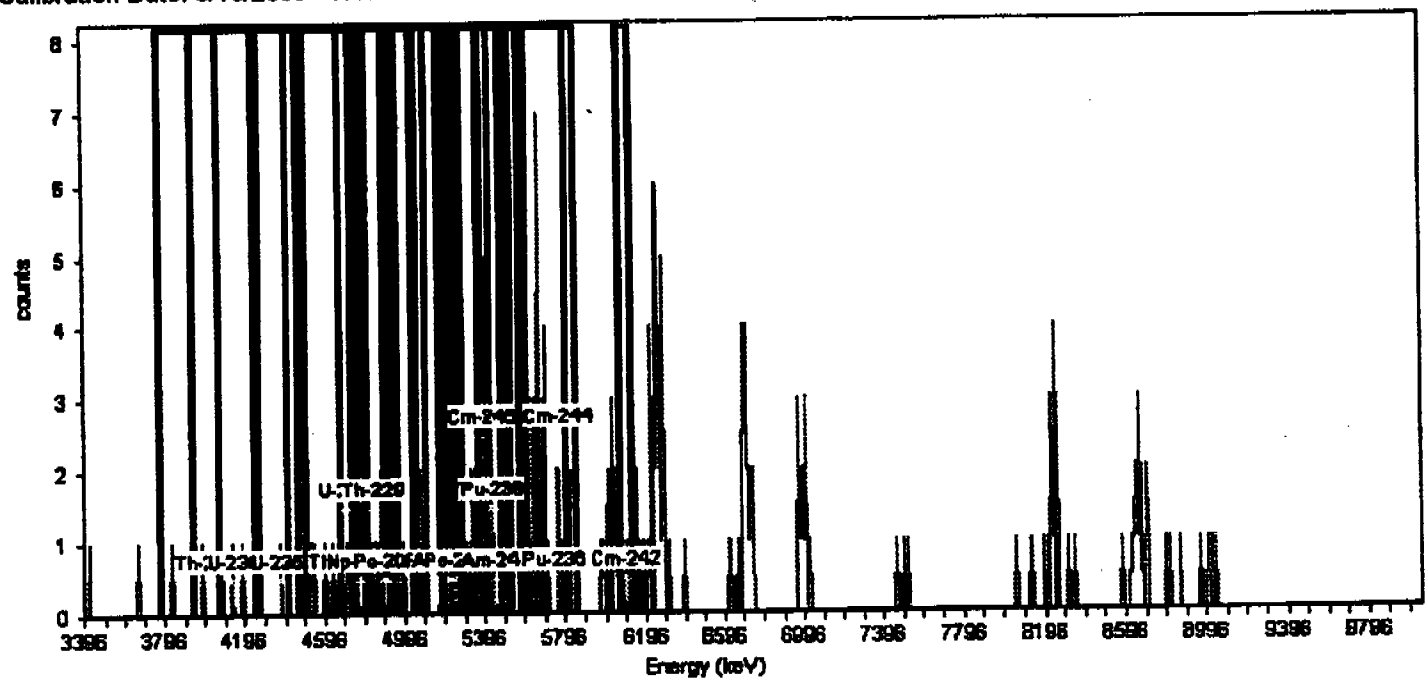
Batch Name: April_2005
Description:

Acquisition

Detector: AV29 , SN: ALDR21
Acquisition Start Date: 4/25/2005 11:48:21AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: MARCH2005_AV29
Calibration Date: 3/19/2005 6:47:49AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 25.44% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND_ROI Library: Background ROI Library
Total Background Counts: 255.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	4.00	5.000E-003	2.795E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	7.00	8.750E-003	3.536E-003
U-234	4.70	4.50	4.80	7.00	8.750E-003	3.536E-003
Pu-242	4.86	4.67	4.93	8.00	1.000E-002	3.750E-003
Th-229	4.84	4.72	5.10	17.00	2.125E-002	5.303E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	15.00	1.875E-002	5.000E-003
Am-243	5.20	5.03	5.28	15.00	1.875E-002	5.000E-003
U-232	5.23	5.04	5.37	27.00	3.375E-002	6.614E-003
Th-228	5.41	5.16	5.47	41.00	5.125E-002	8.101E-003
Po-210	5.25	5.20	5.26	2.00	2.500E-003	2.165E-003
Pu-238	5.44	5.24	5.52	41.00	5.125E-002	8.101E-003
Am-241	5.45	5.27	5.57	40.00	5.000E-002	8.004E-003
Cm-245	5.39	5.36	5.41	19.00	2.375E-002	5.590E-003
Pu-236	5.74	5.52	5.80	38.00	4.750E-002	7.806E-003
Cm-244	5.76	5.60	5.85	44.00	5.500E-002	8.385E-003
Cm-242	6.10	6.07	6.13	4.00	5.000E-003	2.795E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:17:06AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV30
Comment:

Spectrum #1 Analysis #1

Batch

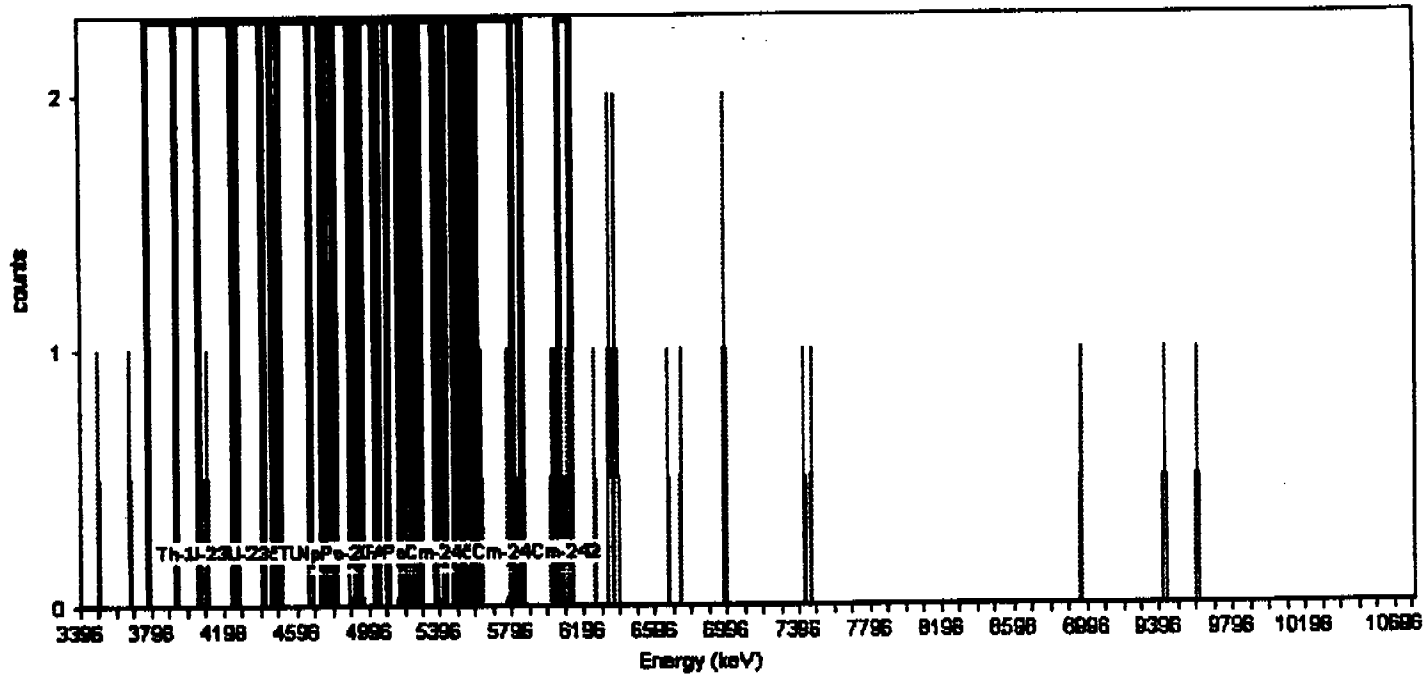
Batch Name: April_2005
Description:

Acquisition

Detector: AV30 , SN:
Acquisition Start Date: 4/25/2005 11:48:22AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: Test
Calibration Date: 12/27/2004 4:30:29PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 24.04% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI, Library: Background ROI Library
Total Background Counts: 34.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	1.00	1.250E-003	1.768E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	1.00	1.250E-003	1.768E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	3.00	3.750E-003	2.500E-003
Cm-244	5.76	5.60	5.85	3.00	3.750E-003	2.500E-003
Cm-242	6.10	6.07	6.13	5.00	6.250E-003	3.062E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:17:12AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV33
Comment:

Spectrum #1 Analysis #1

Batch

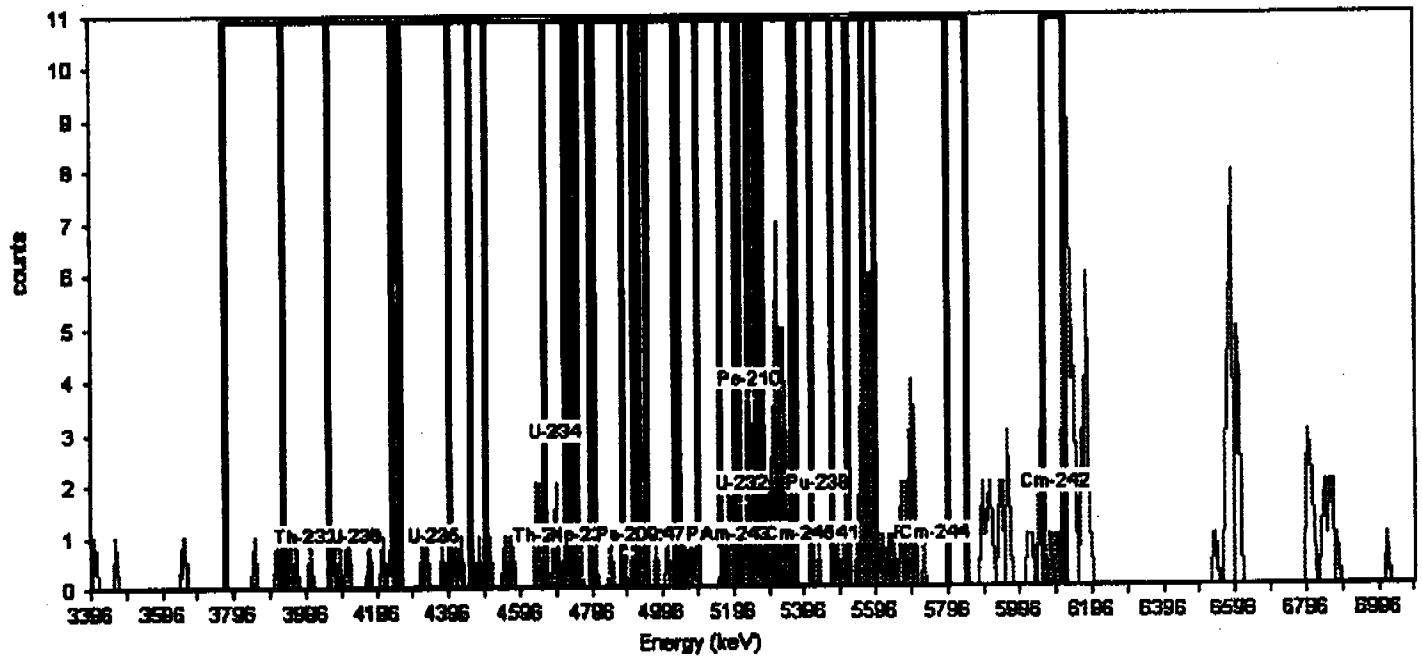
Batch Name: April_2005
Description:

Acquisition

Detector: AV33 , SN: ALDR25
Acquisition Start Date: 4/25/2005 11:46:23AM
Live Time: 800.00 min.
Real Time: 800.00 min.
Calibration Name: March2005_AV33
Calibration Date: 3/21/2005 2:52:41PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²

Efficiency: 23.43% +/- 0.25% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Library: Background ROI Library
Total Background Counts: 270.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	7.00	8.750E-003	3.536E-003
U-238	4.14	3.93	4.24	12.00	1.500E-002	4.507E-003
U-235	4.35	4.26	4.46	6.00	7.500E-003	3.307E-003
Th-230	4.67	4.40	4.73	17.00	2.125E-002	5.303E-003
U-234	4.70	4.50	4.80	18.00	2.250E-002	5.449E-003
Pu-242	4.88	4.67	4.93	13.00	1.625E-002	4.677E-003
Th-229	4.84	4.72	5.10	18.00	2.250E-002	5.449E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	8.00	1.000E-002	3.750E-003
Po-209	4.90	4.88	4.91	3.00	3.750E-003	2.500E-003
Pu-239	5.15	4.95	5.21	9.00	1.125E-002	3.953E-003
Am-243	5.20	5.03	5.28	19.00	2.375E-002	5.590E-003
U-232	5.23	5.04	5.37	49.00	6.125E-002	8.839E-003
Th-228	5.41	5.16	5.47	46.00	5.750E-002	8.570E-003
Po-210	5.25	5.20	5.26	8.00	1.000E-002	3.750E-003
Pu-238	5.44	5.24	5.52	46.00	5.750E-002	8.570E-003
Am-241	5.45	5.27	5.57	54.00	6.750E-002	9.270E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	47.00	5.875E-002	8.660E-003
Cm-244	5.76	5.60	5.85	18.00	2.250E-002	5.449E-003
Cm-242	6.10	6.07	6.13	14.00	1.750E-002	4.841E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:17:17AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV34
Comment:

Spectrum #1 Analysis #1

Batch

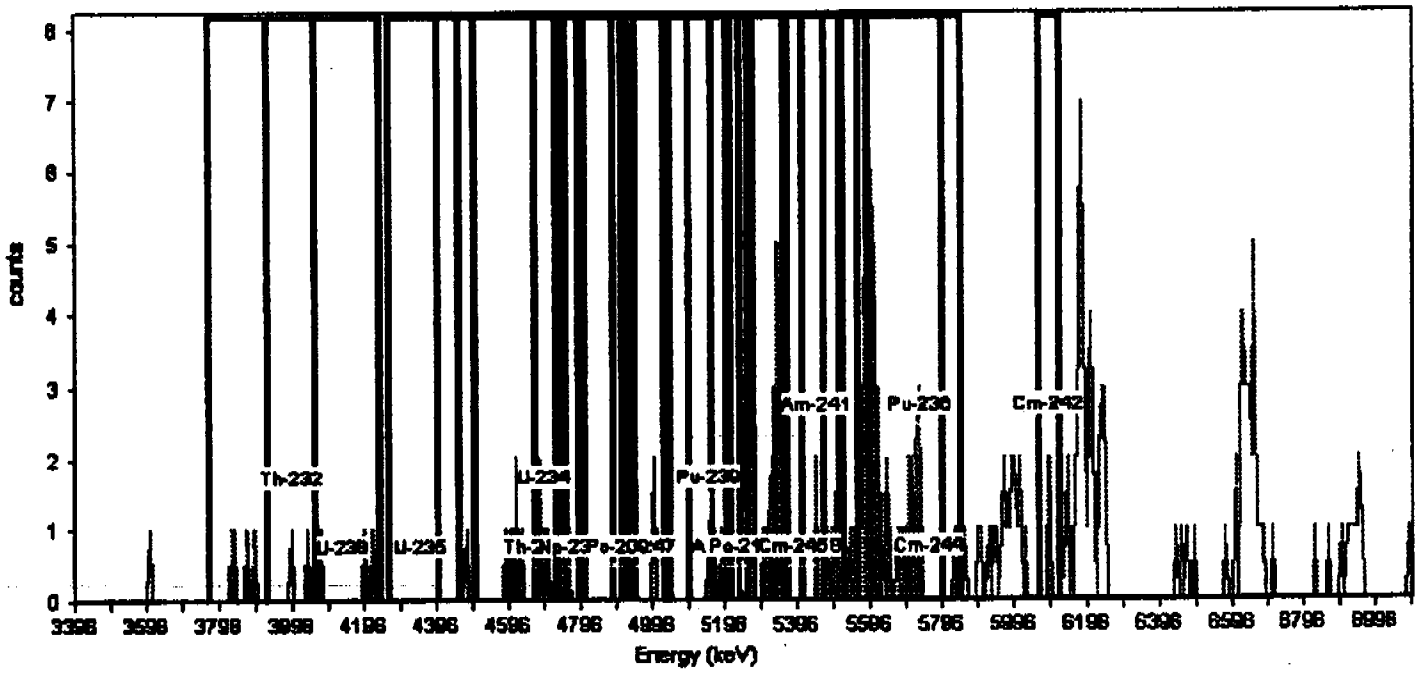
Batch Name: April_2005
Description:

Acquisition

Detector: AV34 , SN: ALDR26
Acquisition Start Date: 4/25/2005 11:48:24AM
Live Time: 800.00 min.
Real Time: 800.00 min.
Calibration Name: March2005_AV34
Calibration Date: 3/18/2005 7:00:45PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 23.85% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND_ROI Library: Background ROI Library
Total Background Counts: 208.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	6.00	7.500E-003	3.307E-003
U-238	4.14	3.93	4.24	5.00	6.250E-003	3.062E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	12.00	1.500E-002	4.507E-003
U-234	4.70	4.50	4.80	13.00	1.625E-002	4.677E-003
Pu-242	4.88	4.67	4.93	7.00	8.750E-003	3.536E-003
Th-229	4.84	4.72	5.10	5.00	6.250E-003	3.062E-003
Np-237	4.77	4.75	4.79	2.00	2.500E-003	2.165E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	5.00	6.250E-003	3.062E-003
Am-243	5.20	5.03	5.26	7.00	8.750E-003	3.536E-003
U-232	5.23	5.04	5.37	24.00	3.000E-002	6.250E-003
Th-228	5.41	5.16	5.47	25.00	3.125E-002	6.374E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	29.00	3.625E-002	6.847E-003
Am-241	5.45	5.27	5.57	32.00	4.000E-002	7.181E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	48.00	6.000E-002	8.750E-003
Cm-244	5.76	5.60	5.85	37.00	4.625E-002	7.706E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:17:23AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV35
Comment:

Spectrum #1 Analysis #1

Batch

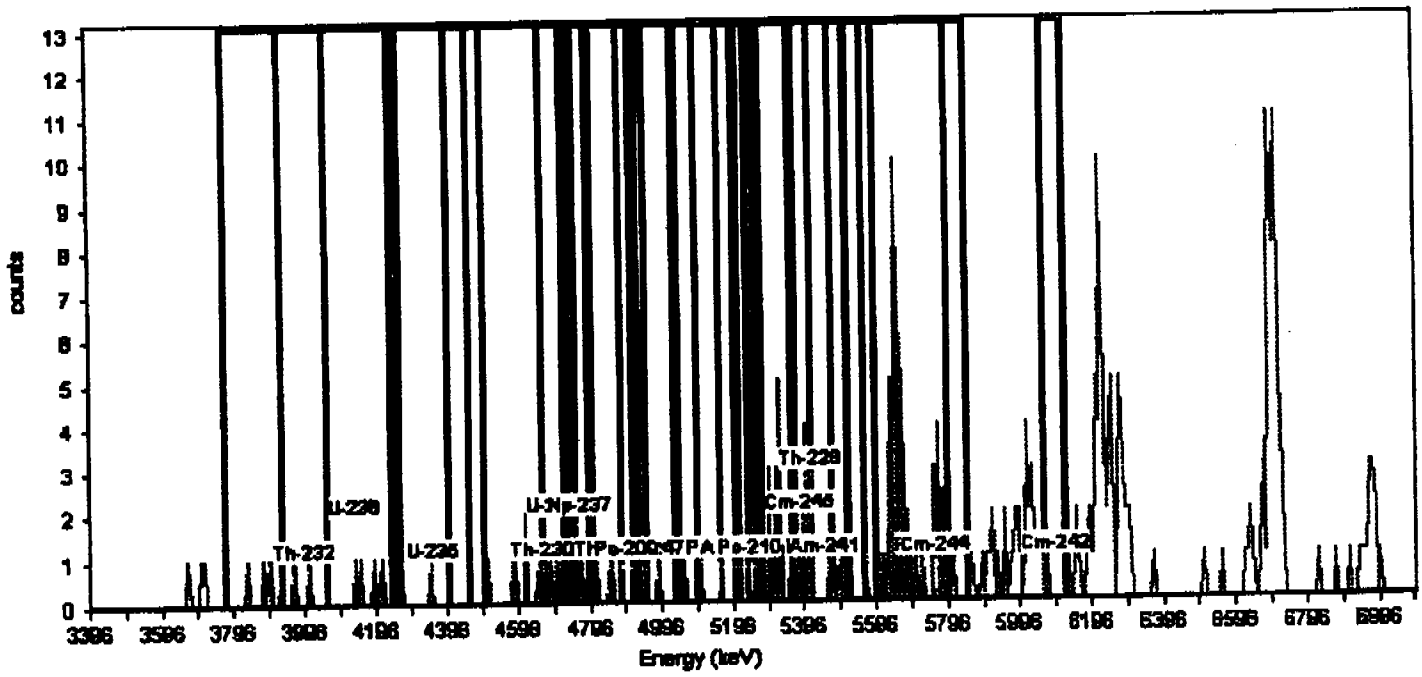
Batch Name: April_2005
Description:

Acquisition

Detector: AV35 , SN: ALDR27
Acquisition Start Date: 4/25/2005 11:48:25AM
Live Time: 800.00 min.
Real Time: 800.00 min.
Calibration Name: March2005_AV35
Calibration Date: 3/18/2005 7:00:50PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.52% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 293.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	7.00	8.750E-003	3.536E-003
U-238	4.14	3.93	4.24	7.00	8.750E-003	3.536E-003
U-235	4.35	4.26	4.46	2.00	2.500E-003	2.165E-003
Th-230	4.67	4.40	4.73	11.00	1.375E-002	4.330E-003
U-234	4.70	4.50	4.80	14.00	1.750E-002	4.841E-003
Pu-242	4.88	4.67	4.93	11.00	1.375E-002	4.330E-003
Th-229	4.84	4.72	5.10	10.00	1.250E-002	4.146E-003
Np-237	4.77	4.75	4.79	3.00	3.750E-003	2.500E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	5.00	6.250E-003	3.062E-003
Am-243	5.20	5.03	5.26	4.00	5.000E-003	2.795E-003
U-232	5.23	5.04	5.37	17.00	2.125E-002	5.303E-003
Th-228	5.41	5.16	5.47	29.00	3.625E-002	6.847E-003
Po-210	5.25	5.20	5.26	2.00	2.500E-003	2.165E-003
Pu-238	5.44	5.24	5.52	30.00	3.750E-002	6.960E-003
Am-241	5.45	5.27	5.57	30.00	3.750E-002	6.960E-003
Cm-245	5.39	5.36	5.41	13.00	1.625E-002	4.677E-003
Pu-236	5.74	5.52	5.80	54.00	6.750E-002	9.270E-003
Cm-244	5.76	5.60	5.85	54.00	6.750E-002	9.270E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 1:17:28AM 4/26/2005

Sample

Sample Name: AV37 Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

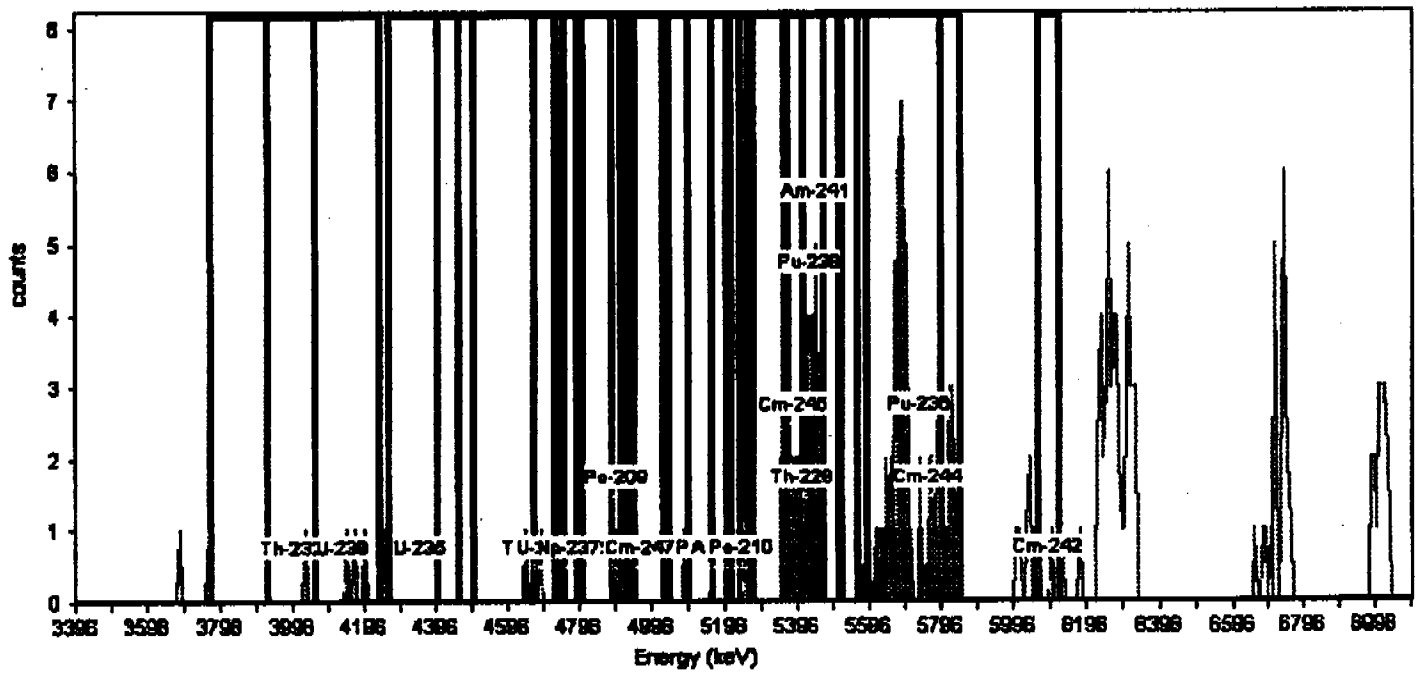
Description:

Acquisition

Detector: AV37 , SN:
Acquisition Start Date: 4/25/2005 11:48:26AM
Live Time: 800.00 min.
Real Time: 800.00 min.
Calibration Name: March2005_AV37
Calibration Date: 3/21/2005 5:29:23PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 22.97% +/- 0.24% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library

Total Background Counts: 202.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	4.00	5.000E-003	2.795E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	2.00	2.500E-003	2.165E-003
Pu-242	4.88	4.67	4.93	4.00	5.000E-003	2.795E-003
Th-229	4.84	4.72	5.10	4.00	5.000E-003	2.795E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	3.00	3.750E-003	2.500E-003
Po-209	4.90	4.88	4.91	3.00	3.750E-003	2.500E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	8.00	1.000E-002	3.750E-003
Th-228	5.41	5.16	5.47	34.00	4.250E-002	7.395E-003
Po-210	5.25	5.20	5.28	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	34.00	4.250E-002	7.395E-003
Am-241	5.45	5.27	5.57	33.00	4.125E-002	7.289E-003
Cm-245	5.39	5.36	5.41	11.00	1.375E-002	4.330E-003
Pu-236	5.74	5.52	5.80	50.00	6.250E-002	8.927E-003
Cm-244	5.76	5.60	5.85	59.00	7.375E-002	9.682E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:17:34AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV38
Spectrum #1 Analysis #1
Comment:

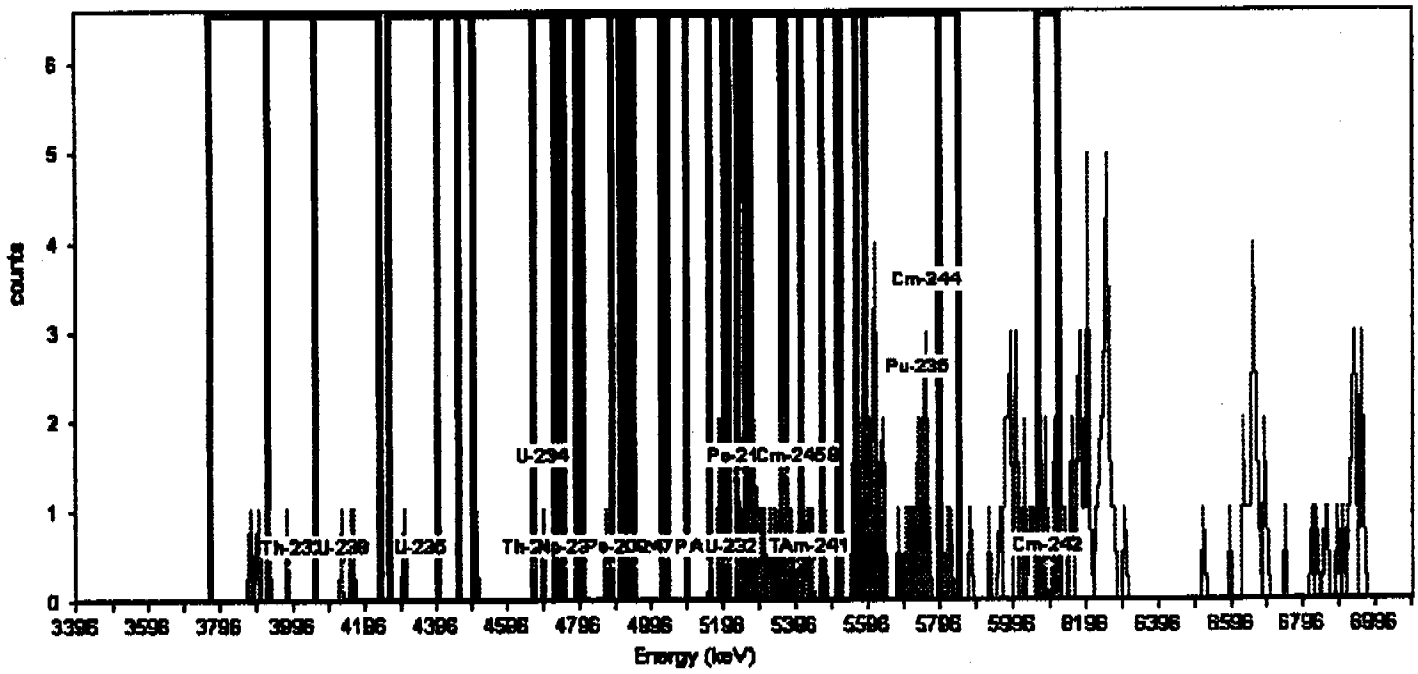
Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV38 , SN: ALDR30
Acquisition Start Date: 4/25/2005 11:48:27AM
Live Time: 600.00 min.
Real Time: 600.00 min.
Calibration Name: March2005_AV38
Calibration Date: 3/19/2005 6:48:01AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 24.37% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROU[illegible]Library: Background ROI Library
Total Background Counts: 170.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	4.00	5.000E-003	2.795E-003
U-238	4.14	3.93	4.24	4.00	5.000E-003	2.795E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	2.00	2.500E-003	2.165E-003
Pu-242	4.88	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	4.00	5.000E-003	2.795E-003
Am-243	5.20	5.03	5.28	7.00	8.750E-003	3.536E-003
U-232	5.23	5.04	5.37	21.00	2.625E-002	5.863E-003
Th-228	5.41	5.16	5.47	26.00	3.250E-002	6.495E-003
Po-210	5.25	5.20	5.26	2.00	2.500E-003	2.165E-003
Pu-238	5.44	5.24	5.52	24.00	3.000E-002	6.250E-003
Am-241	5.45	5.27	5.57	27.00	3.375E-002	6.614E-003
Cm-245	5.39	5.36	5.41	8.00	1.000E-002	3.750E-003
Pu-236	5.74	5.52	5.80	39.00	4.875E-002	7.906E-003
Cm-244	5.76	5.60	5.85	33.00	4.125E-002	7.289E-003
Cm-242	6.10	6.07	6.13	7.00	8.750E-003	3.536E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:17:39AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV39
Comment:

Spectrum #1 Analysis #1

Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV39 , SN: ALDR31
Acquisition Start Date: 4/25/2005 11:48:28AM
Live Time: 800.00 min.
Real Time: 800.00 min.
Calibration Name: March2005_AV39
Calibration Date: 3/19/2005 6:48:11AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 25.89% +/- 0.28% TPU(2 sigma)

General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 115.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.86	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	3.00	3.750E-003	2.500E-003
U-232	5.23	5.04	5.37	5.00	6.250E-003	3.062E-003
Th-228	5.41	5.16	5.47	17.00	2.125E-002	5.303E-003
Po-210	5.25	5.20	5.26	2.00	2.500E-003	2.165E-003
Pu-238	5.44	5.24	5.52	16.00	2.000E-002	5.154E-003
Am-241	5.45	5.27	5.57	15.00	1.875E-002	5.000E-003
Cm-245	5.39	5.36	5.41	7.00	8.750E-003	3.536E-003
Pu-236	5.74	5.52	5.80	23.00	2.875E-002	6.124E-003
Cm-244	5.76	5.60	5.85	35.00	4.375E-002	7.500E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:17:45AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV40
Comment:

Spectrum #1 Analysis #1

Batch

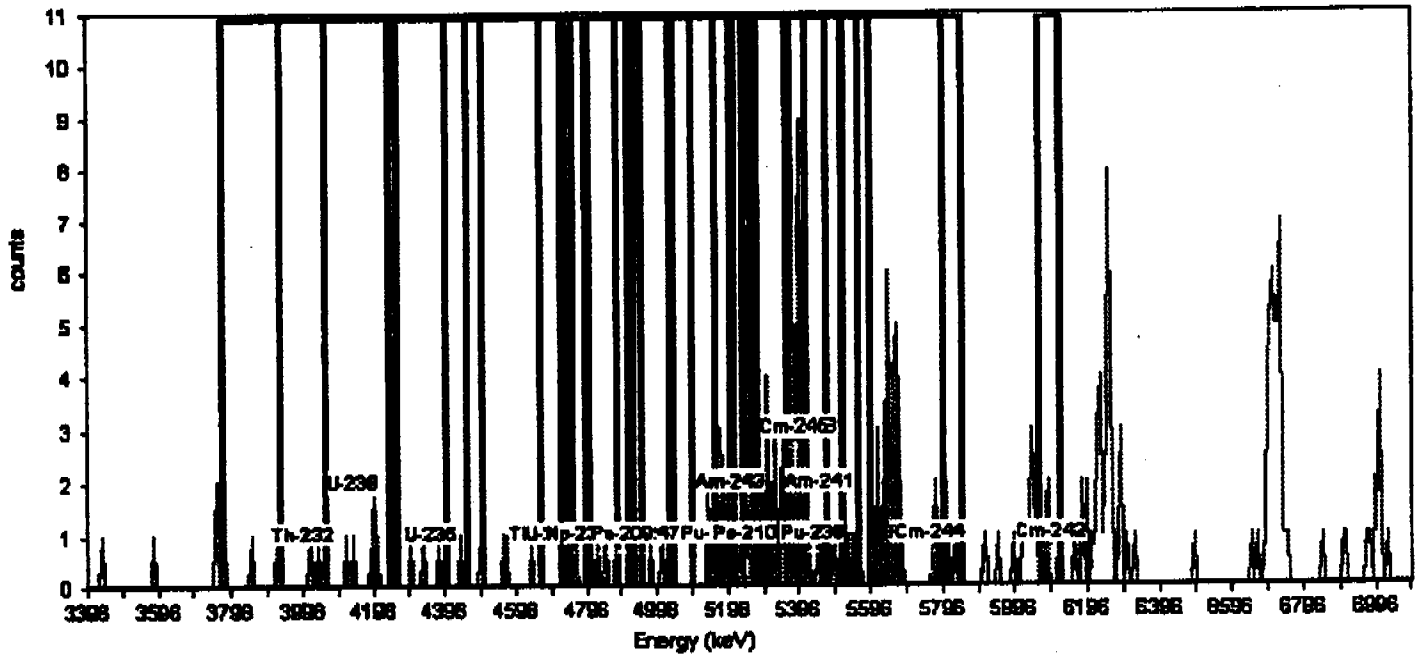
Batch Name: April_2005
Description:

Acquisition

Detector: AV40 , SN: ALDR32
Acquisition Start Date: 4/25/2005 11:48:29AM
Live Time: 800.00 min.
Real Time: 800.00 min.
Calibration Name: March2005_AV40
Calibration Date: 3/18/2005 4:20:21PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 25.23% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Library: Background ROI Library
Total Background Counts: 255.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	7.00	8.750E-003	3.536E-003
U-238	4.14	3.93	4.24	9.00	1.125E-002	3.953E-003
U-235	4.36	4.26	4.46	4.00	5.000E-003	2.795E-003
Th-230	4.67	4.40	4.73	7.00	8.750E-003	3.536E-003
U-234	4.70	4.50	4.80	7.00	8.750E-003	3.536E-003
Pu-242	4.88	4.67	4.93	7.00	8.750E-003	3.536E-003
Th-229	4.84	4.72	5.10	11.00	1.375E-002	4.330E-003
Np-237	4.77	4.75	4.79	2.00	2.500E-003	2.165E-003
Cm-247	4.96	4.88	5.04	3.00	3.750E-003	2.500E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	14.00	1.750E-002	4.841E-003
Am-243	5.20	5.03	5.28	19.00	2.375E-002	5.590E-003
U-232	5.23	5.04	5.37	38.00	4.750E-002	7.806E-003
Th-228	5.41	5.16	5.47	67.00	8.375E-002	1.031E-002
Po-210	5.25	5.20	5.26	6.00	7.500E-003	3.307E-003
Pu-238	5.44	5.24	5.52	61.00	7.625E-002	9.843E-003
Am-241	5.45	5.27	5.57	61.00	7.625E-002	9.843E-003
Cm-245	5.39	5.36	5.41	34.00	4.250E-002	7.395E-003
Pu-236	5.74	5.52	5.80	37.00	4.625E-002	7.706E-003
Cm-244	5.78	5.60	5.85	37.00	4.625E-002	7.706E-003
Cm-242	6.10	6.07	6.13	5.00	6.250E-003	3.062E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 1:17:50AM 4/26/2005

Sample

Sample Name: AV41 Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

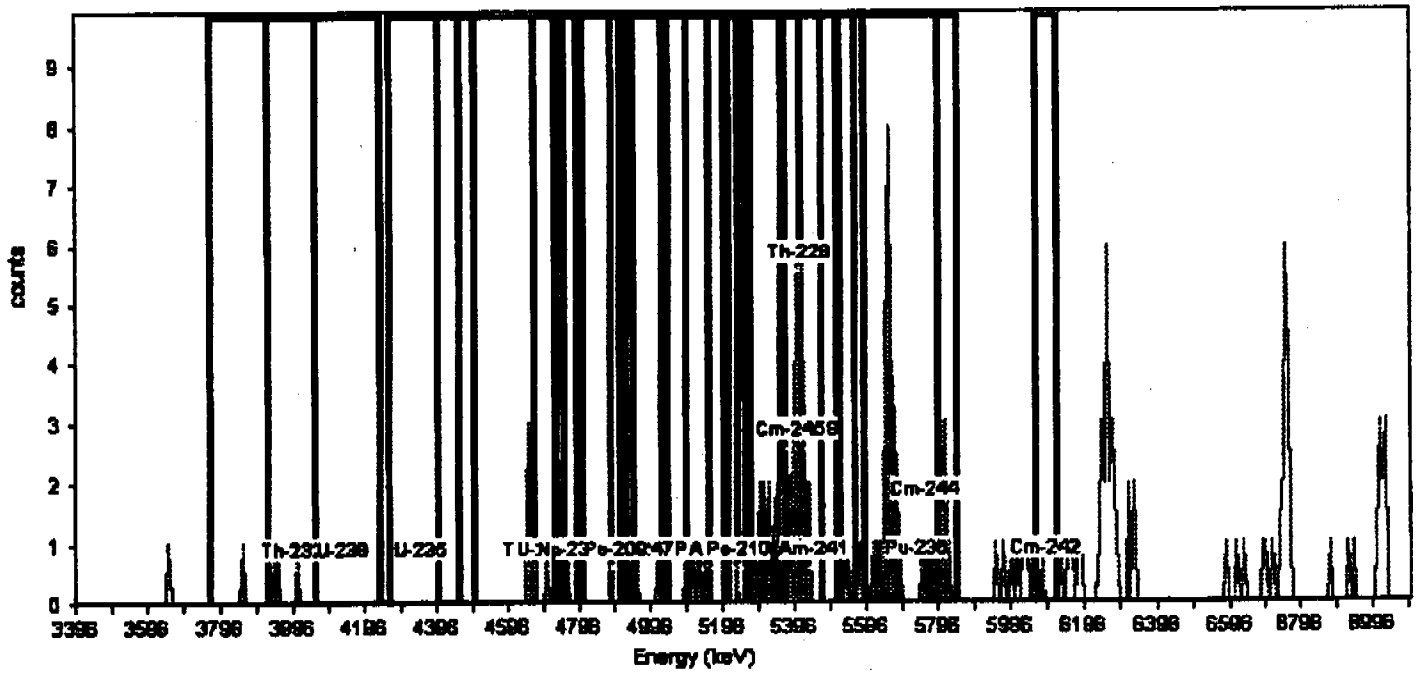
Description:

Acquisition

Detector: AV41 , SN: ALDR33
Acquisition Start Date: 4/25/2005 11:48:30AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV41
Calibration Date: 3/21/2005 12:30:51PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 23.34% +/- 0.24% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library

Total Background Counts: 175.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	4.00	5.000E-003	2.795E-003
U-238	4.14	3.93	4.24	3.00	3.750E-003	2.500E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	5.00	6.250E-003	3.062E-003
U-234	4.70	4.50	4.80	6.00	7.500E-003	3.307E-003
Pu-242	4.88	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	4.00	5.000E-003	2.795E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	6.00	7.500E-003	3.307E-003
Am-243	5.20	5.03	5.28	5.00	6.250E-003	3.062E-003
U-232	5.23	5.04	5.37	22.00	2.750E-002	5.995E-003
Th-228	5.41	5.16	5.47	45.00	5.625E-002	8.478E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	45.00	5.625E-002	8.478E-003
Am-241	5.45	5.27	5.57	45.00	5.625E-002	8.478E-003
Cm-245	5.39	5.36	5.41	24.00	3.000E-002	6.250E-003
Pu-236	5.74	5.52	5.80	32.00	4.000E-002	7.181E-003
Cm-244	5.76	5.60	5.85	38.00	4.750E-002	7.806E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:17:56AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV42
Comment:

Spectrum #1 Analysis #1

Batch

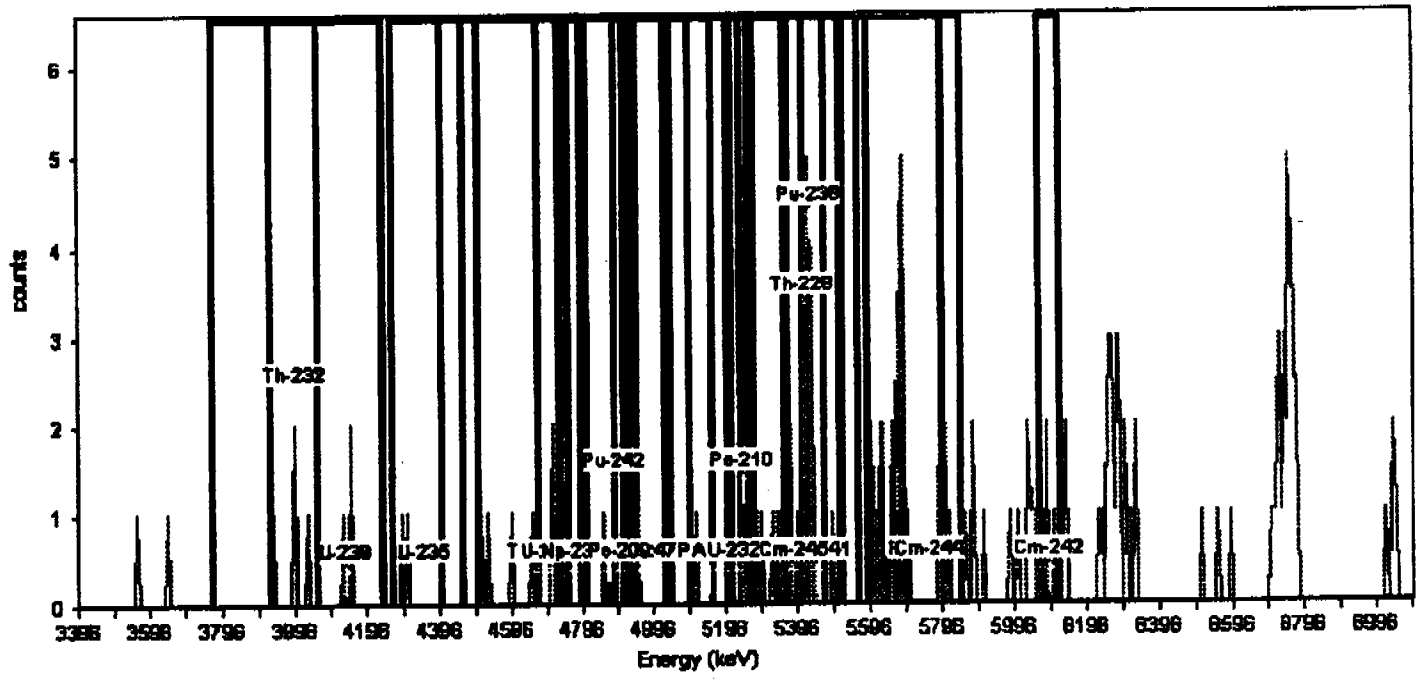
Batch Name: April_2005
Description:

Acquisition

Detector: AV42 , SN: ALDR34
Acquisition Start Date: 4/25/2005 11:48:32AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV42
Calibration Date: 3/21/2005 12:31:05PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 24.13% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Library: Background ROI Library
Total Background Counts: 155.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	4.00	5.000E-003	2.795E-003
U-238	4.14	3.93	4.24	7.00	8.750E-003	3.536E-003
U-235	4.35	4.26	4.46	2.00	2.500E-003	2.165E-003
Th-230	4.67	4.40	4.73	6.00	7.500E-003	3.307E-003
U-234	4.70	4.50	4.80	7.00	8.750E-003	3.536E-003
Pu-242	4.88	4.67	4.93	6.00	7.500E-003	3.307E-003
Th-229	4.84	4.72	5.10	5.00	6.250E-003	3.062E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	3.00	3.750E-003	2.500E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	9.00	1.125E-002	3.953E-003
Th-228	5.41	5.16	5.47	28.00	3.500E-002	6.731E-003
Po-210	5.26	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	29.00	3.625E-002	6.847E-003
Am-241	5.46	5.27	5.57	28.00	3.500E-002	6.731E-003
Cm-245	5.39	5.36	5.41	7.00	8.750E-003	3.536E-003
Pu-236	5.74	5.52	5.80	25.00	3.125E-002	6.374E-003
Cm-244	5.76	5.60	5.85	28.00	3.500E-002	6.731E-003
Cm-242	6.10	6.07	6.13	6.00	7.500E-003	3.307E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:01AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV43
Comment:

Spectrum #1 Analysis #1

Batch

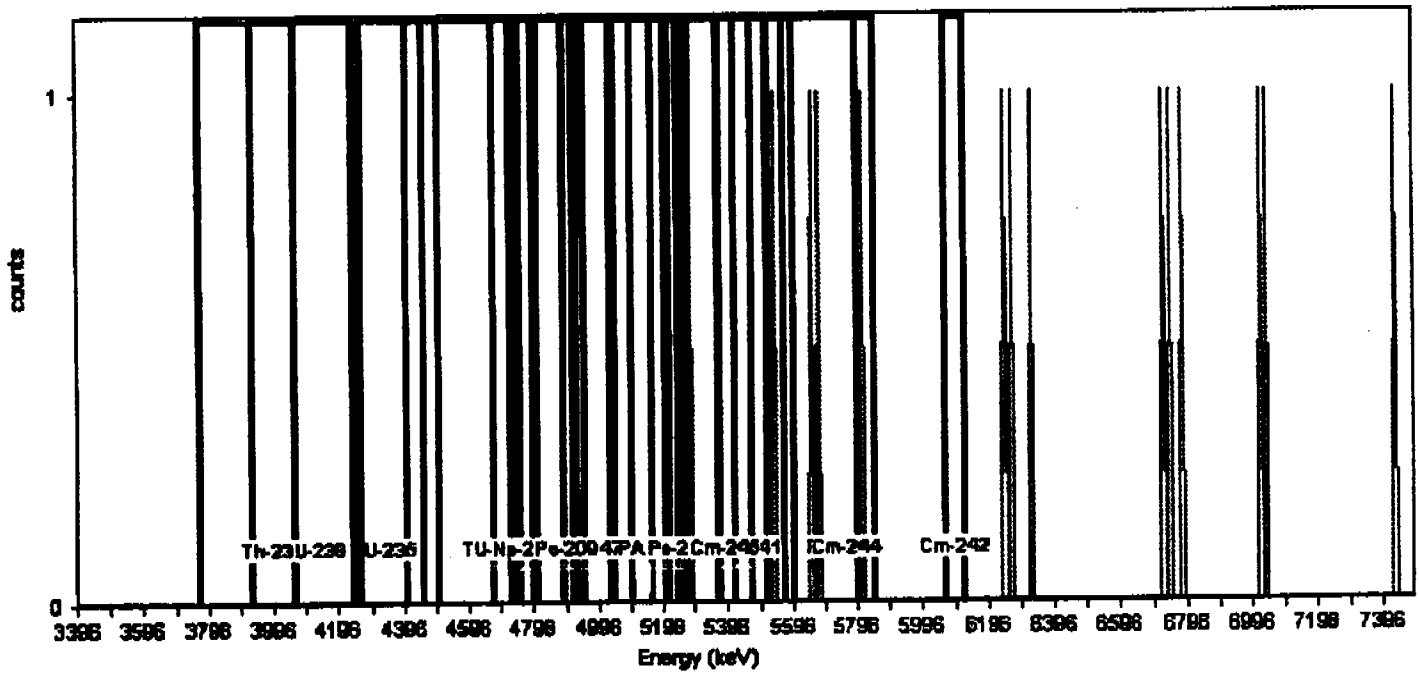
Batch Name: April_2005
Description:

Acquisition

Detector: AV43 , SN: AV43
Acquisition Start Date: 4/25/2005 11:48:33AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV43
Calibration Date: 3/17/2005 12:19:51PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.51% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 14.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.60	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.86	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.86	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.26	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	1.00	1.250E-003	1.768E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	1.00	1.250E-003	1.768E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	3.00	3.750E-003	2.500E-003
Cm-244	5.76	5.60	5.85	3.00	3.750E-003	2.500E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:07AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV44
Comment:

Spectrum #1 Analysis #1

Batch

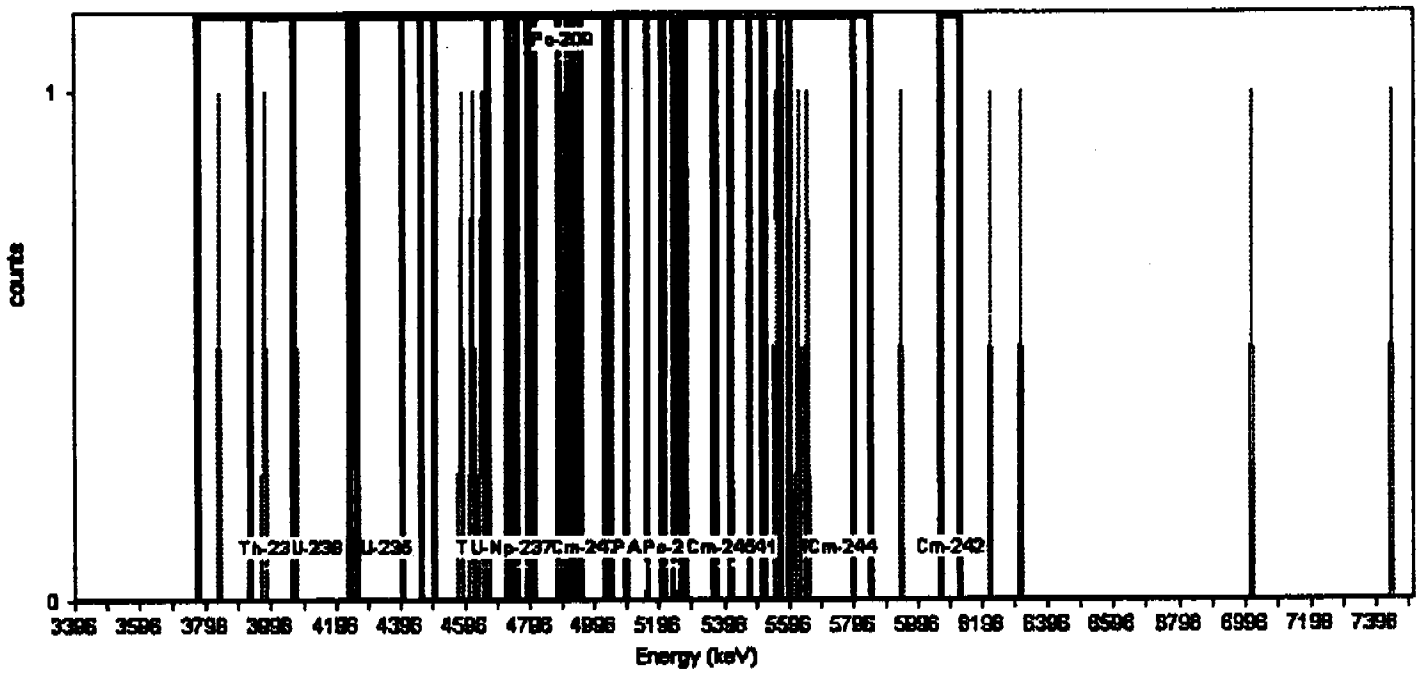
Batch Name: April_2005
Description:

Acquisition

Detector: AV44 , SN: AV44
Acquisition Start Date: 4/25/2005 11:48:35AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV44
Calibration Date: 3/17/2005 12:19:57PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 28.18% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND Nuclide Library: Background ROI Library
Total Background Counts: 15.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	2.00	2.500E-003	2.165E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	3.00	3.750E-003	2.500E-003
U-234	4.70	4.50	4.80	3.00	3.750E-003	2.500E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.768E-003
Th-228	5.41	5.16	5.47	0.00	0.000E+000	1.768E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	0.00	0.000E+000	1.768E-003
Am-241	5.45	5.27	5.57	1.00	1.250E-003	1.768E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	3.00	3.750E-003	2.500E-003
Cm-244	5.76	5.60	5.85	2.00	2.500E-003	2.165E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:54:44AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV45
Comment:

Spectrum #1 Analysis #1

Batch

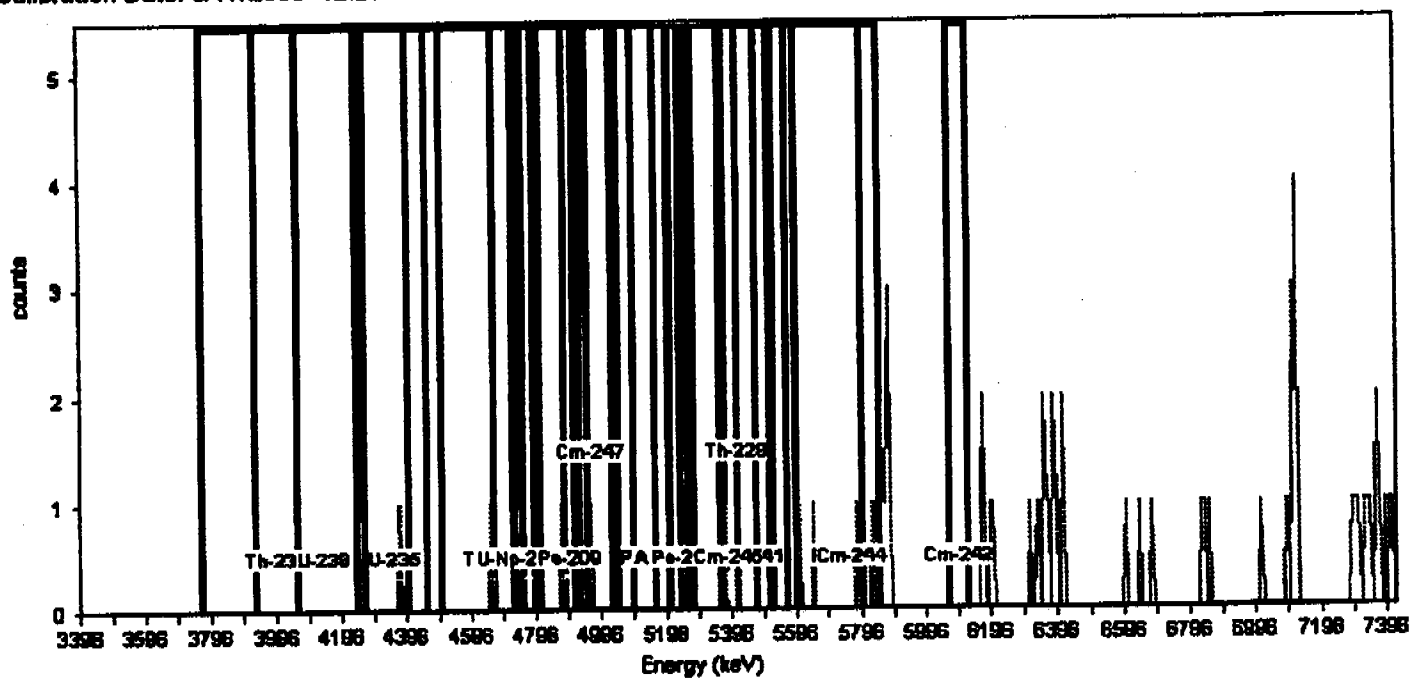
Batch Name: April_2005
Description:

Acquisition

Detector: AV45 , SN: AV45
Acquisition Start Date: 4/26/2005 12:34:24PM
Live Time: 800.00 min.
Real Time: 800.00 min.
Calibration Name: March2005_AV45
Calibration Date: 3/17/2005 12:20:04PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.96% +/- 0.30% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 70.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.86	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.768E-003
Th-228	5.41	5.16	5.47	2.00	2.500E-003	2.165E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	4.00	5.000E-003	2.795E-003
Cm-244	5.76	5.60	5.85	7.00	8.750E-003	3.536E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:13AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV46
Spectrum #1 Analysis #1
Comment:

Batch

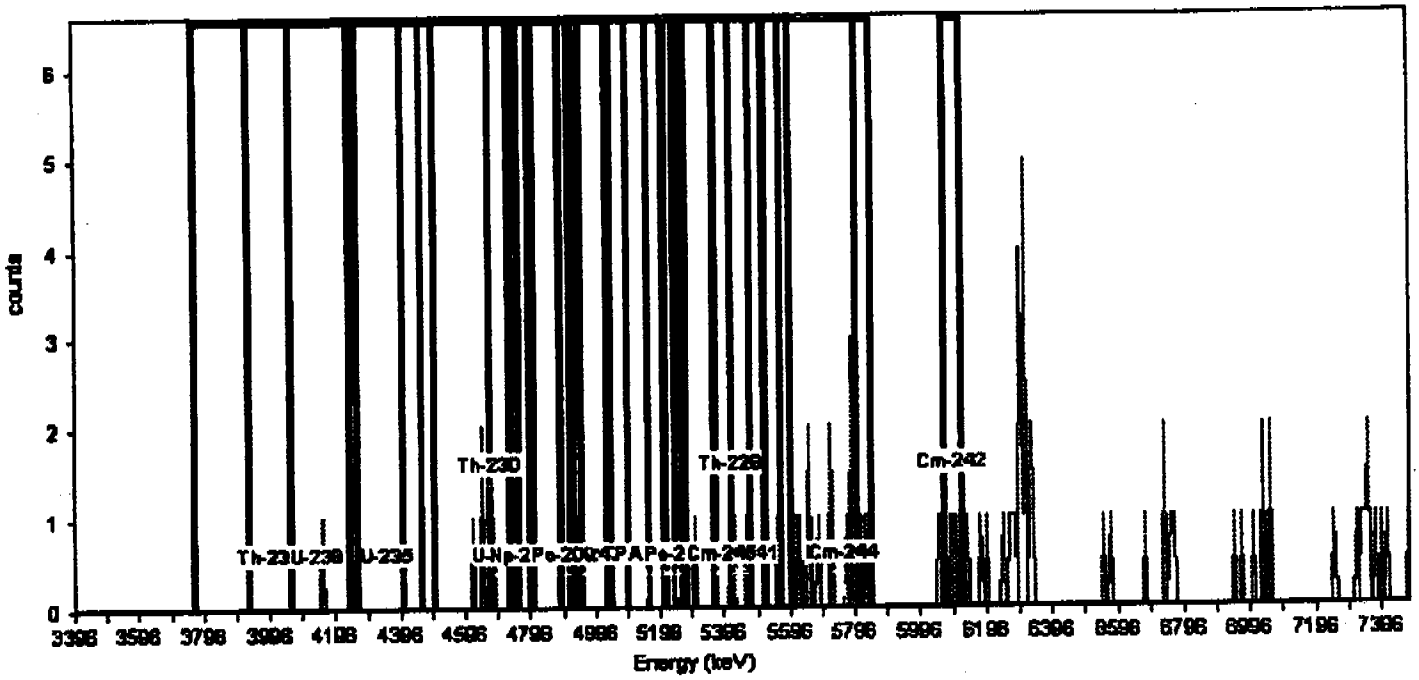
Batch Name: April_2005
Description:

Acquisition

Detector: AV46 , SN: AV46
Acquisition Start Date: 4/25/2005 11:48:40AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV46
Calibration Date: 3/17/2005 12:20:10PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 29.31% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 82.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	5.00	6.250E-003	3.062E-003
U-234	4.70	4.50	4.80	5.00	6.250E-003	3.062E-003
Pu-242	4.88	4.67	4.93	3.00	3.750E-003	2.500E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	5.00	6.250E-003	3.062E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	5.00	6.250E-003	3.062E-003
Am-241	5.45	5.27	5.57	6.00	7.500E-003	3.307E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	15.00	1.875E-002	5.000E-003
Cm-244	5.76	5.60	5.85	17.00	2.125E-002	5.303E-003
Cm-242	6.10	6.07	6.13	4.00	5.000E-003	2.795E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:18AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV47
Comment:

Spectrum #1 Analysis #1

Batch

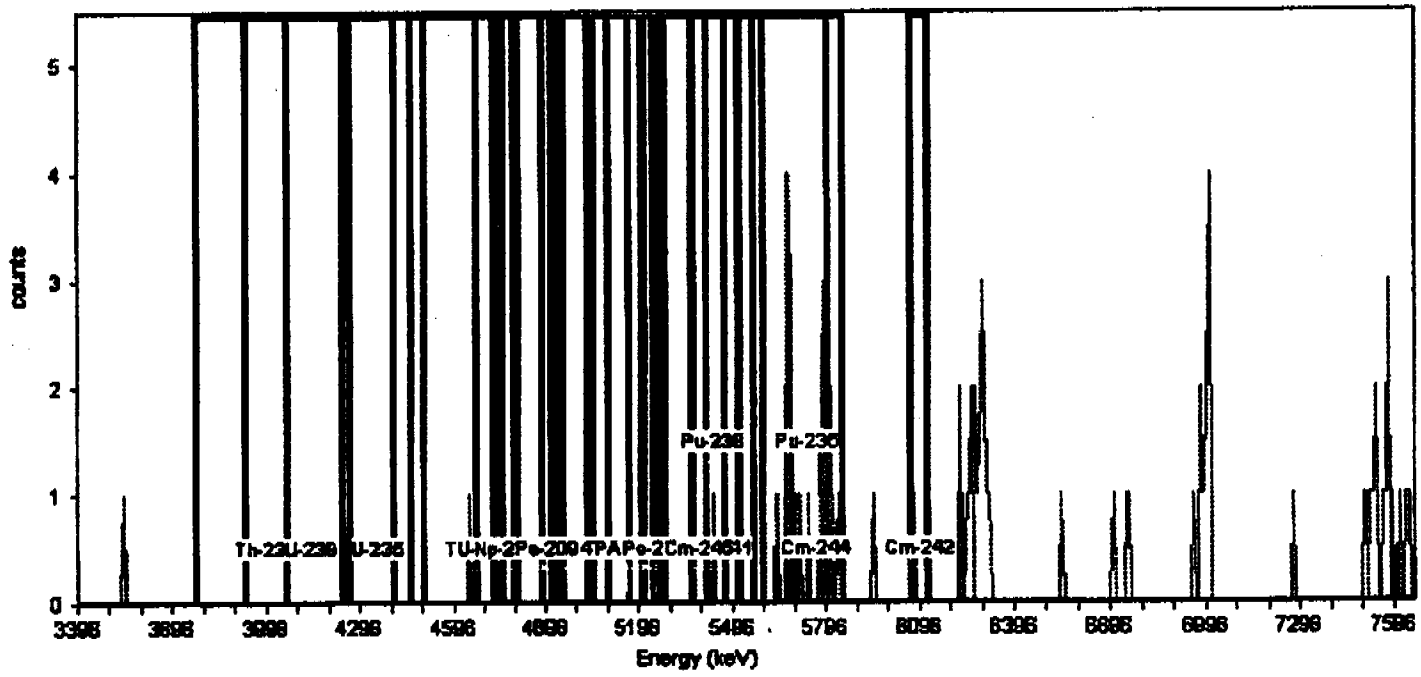
Batch Name: April_2005
Description:

Acquisition

Detector: AV47 , SN: AV47
Acquisition Start Date: 4/25/2005 11:48:42AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV47
Calibration Date: 3/17/2005 4:29:23PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.70% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROU[illegible]Library: Background ROI Library
Total Background Counts: 82.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.86	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.26	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	2.00	2.500E-003	2.165E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	19.00	2.375E-002	5.590E-003
Cm-244	5.78	5.60	5.85	24.00	3.000E-002	6.250E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:24AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV48
Comment:

Spectrum #1 Analysis #1

Batch

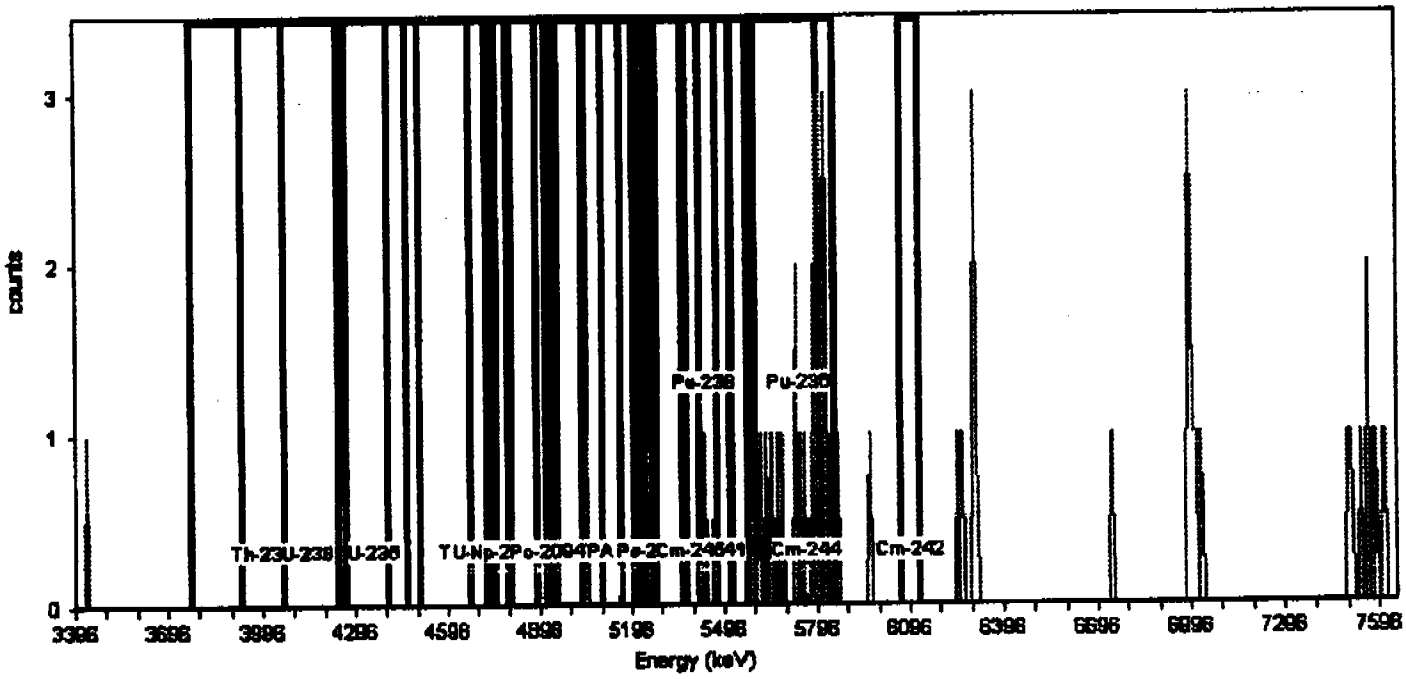
Batch Name: April_2005
Description:

Acquisition

Detector: AV48 , SN: AV48
Acquisition Start Date: 4/25/2005 11:48:43AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV48
Calibration Date: 3/17/2005 4:29:35PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.24% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 82.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	3.00	3.750E-003	2.500E-003
Am-241	5.45	5.27	5.57	3.00	3.750E-003	2.500E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	18.00	2.250E-002	5.449E-003
Cm-244	5.76	5.60	5.85	24.00	3.000E-002	6.250E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:29AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV49
Comment:

Spectrum #1 Analysis #1

Batch

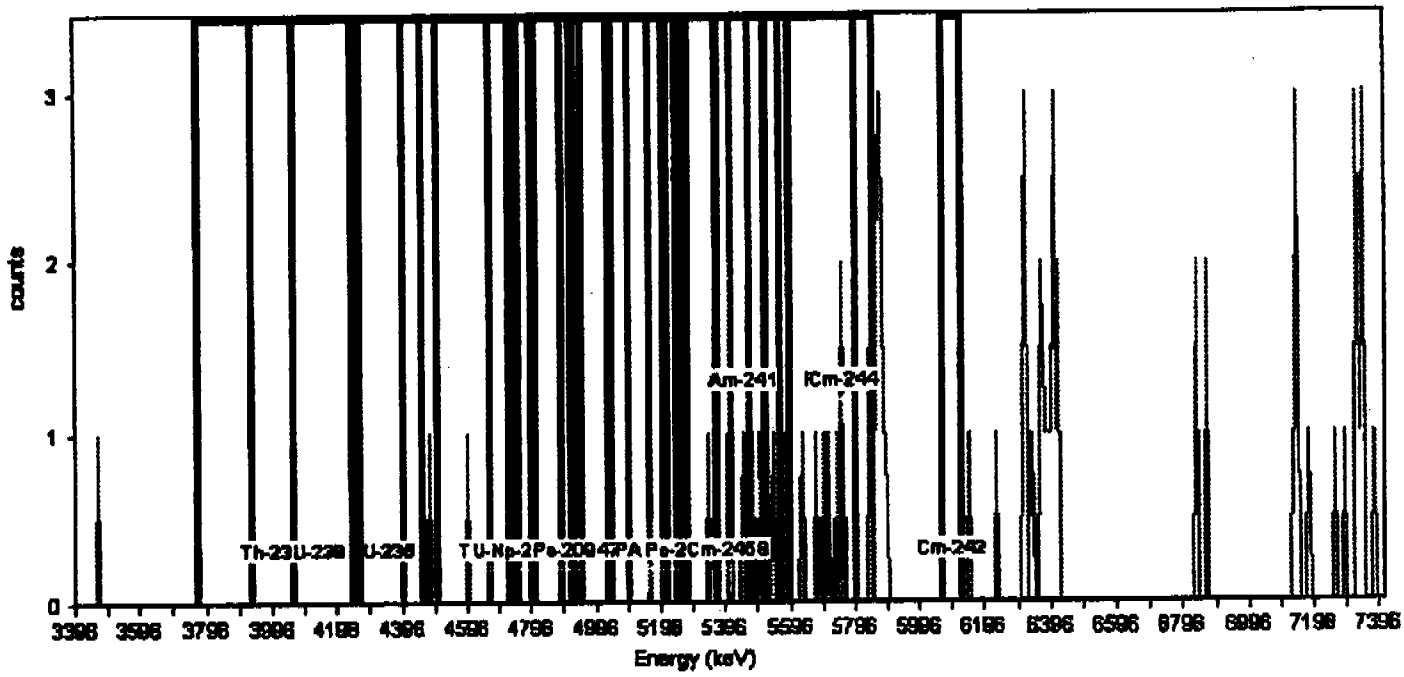
Batch Name: April_2005
Description:

Acquisition

Detector: AV49 , SN: AV49
Acquisition Start Date: 4/25/2005 11:48:45AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV49
Calibration Date: 3/17/2005 4:29:42PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.84% +/- 0.30% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 81.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	2.00	2.500E-003	2.165E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	6.00	7.500E-003	3.307E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	7.00	8.750E-003	3.536E-003
Am-241	5.45	5.27	5.57	8.00	1.000E-002	3.750E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	13.00	1.625E-002	4.677E-003
Cm-244	5.76	5.60	5.85	13.00	1.625E-002	4.677E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:35AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV50
Comment:

Spectrum #1 Analysis #1

Batch

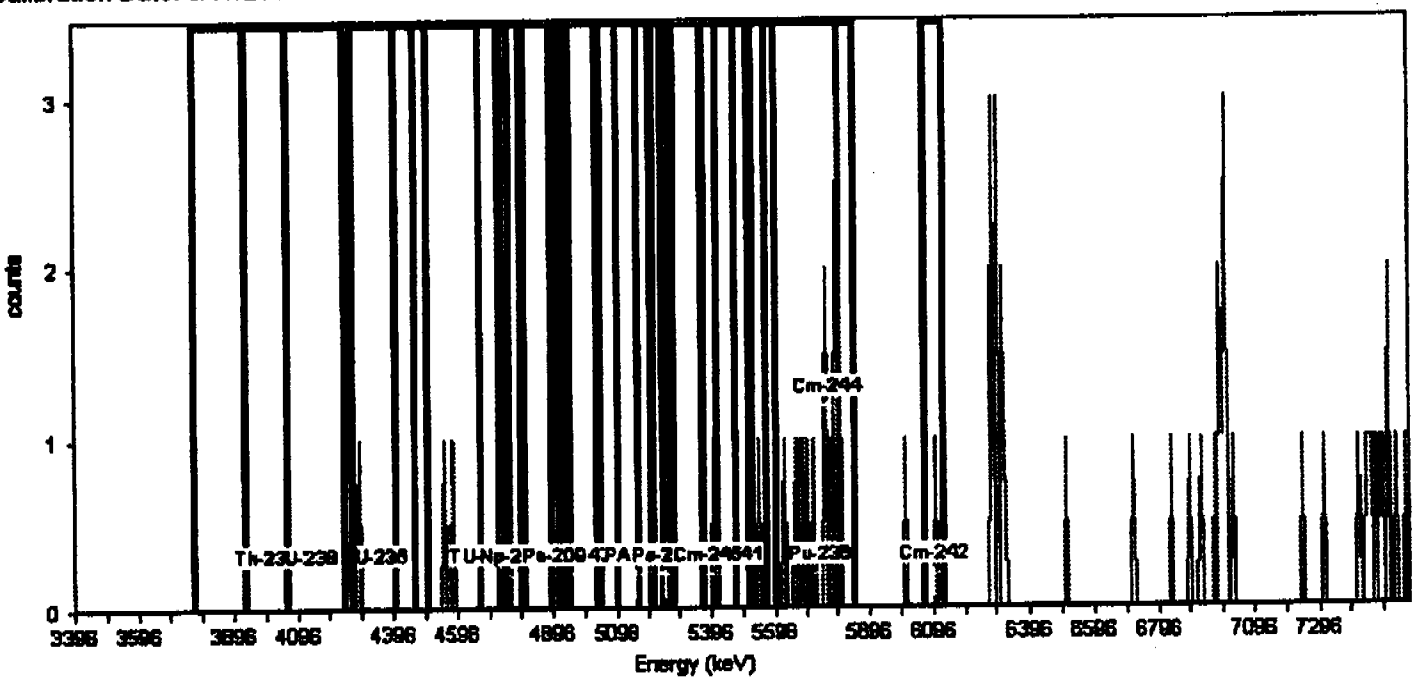
Batch Name: April_2005
Description:

Acquisition

Detector: AV50 , SN: AV50
Acquisition Start Date: 4/25/2005 11:48:47AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV50
Calibration Date: 3/17/2005 4:29:48PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.29% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROU[illegible]Library: Background ROI Library
Total Background Counts: 65.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	3.00	3.750E-003	2.500E-003
U-234	4.70	4.50	4.80	4.00	5.000E-003	2.795E-003
Pu-242	4.88	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.98	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.768E-003
Th-228	5.41	5.16	5.47	1.00	1.250E-003	1.768E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	1.00	1.250E-003	1.768E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-239	5.74	5.52	5.80	16.00	2.000E-002	5.154E-003
Cm-244	5.76	5.60	5.85	17.00	2.125E-002	5.303E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:40AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV51
Comment:

Spectrum #1 Analysis #1

Batch

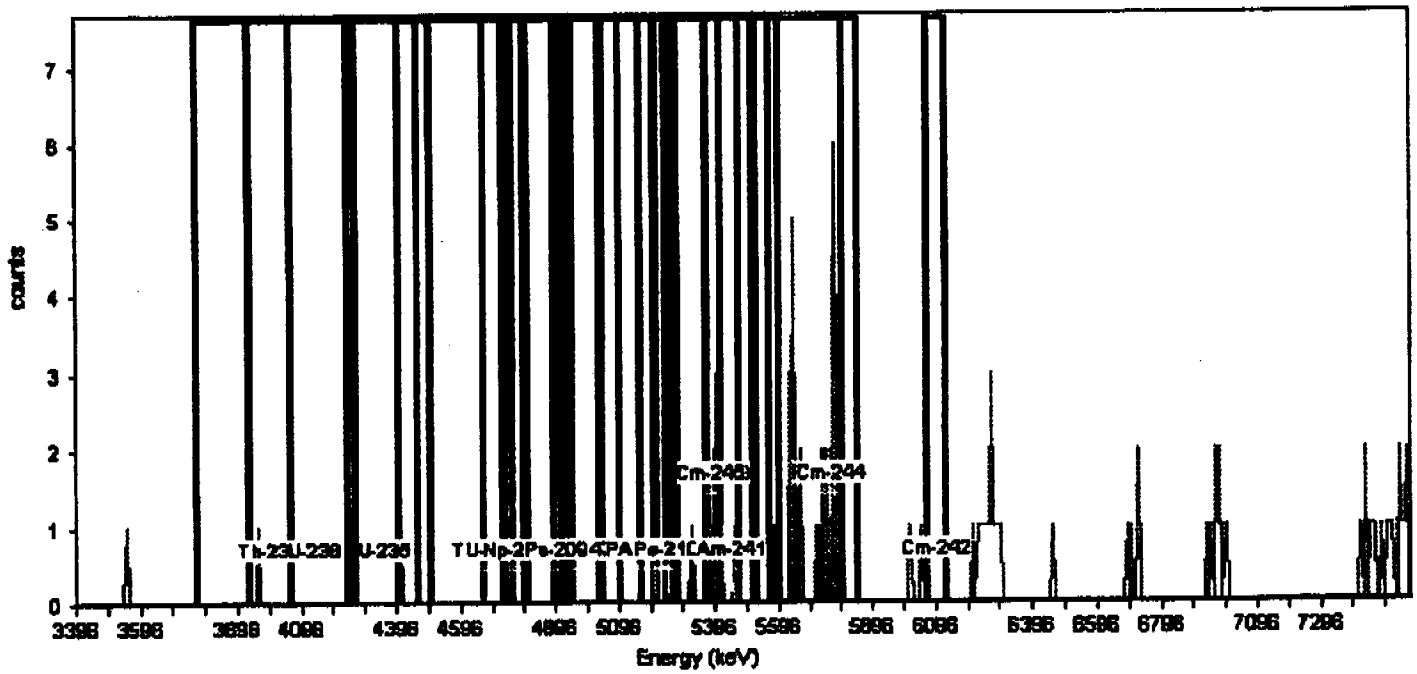
Batch Name: April_2005
Description:

Acquisition

Detector: AV51 , SN:
Acquisition Start Date: 4/25/2005 11:48:48AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV51
Calibration Date: 3/18/2005 12:58:33PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²

Efficiency: 27.39% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROU[illegible] Library: Background ROI Library
Total Background Counts: 98.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Pu-236	5.74	5.52	5.80	34.00	4.250E-002	7.395E-003
Cm-244	5.76	5.60	5.85	33.00	4.125E-002	7.289E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	3.00	3.750E-003	2.500E-003
Th-228	5.41	5.18	5.47	12.00	1.500E-002	4.507E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	11.00	1.375E-002	4.330E-003
Am-241	5.45	5.27	5.57	11.00	1.375E-002	4.330E-003
Cm-245	5.39	5.36	5.41	9.00	1.125E-002	3.953E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:46AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV52
Comment:

Spectrum #1 Analysis #1

Batch

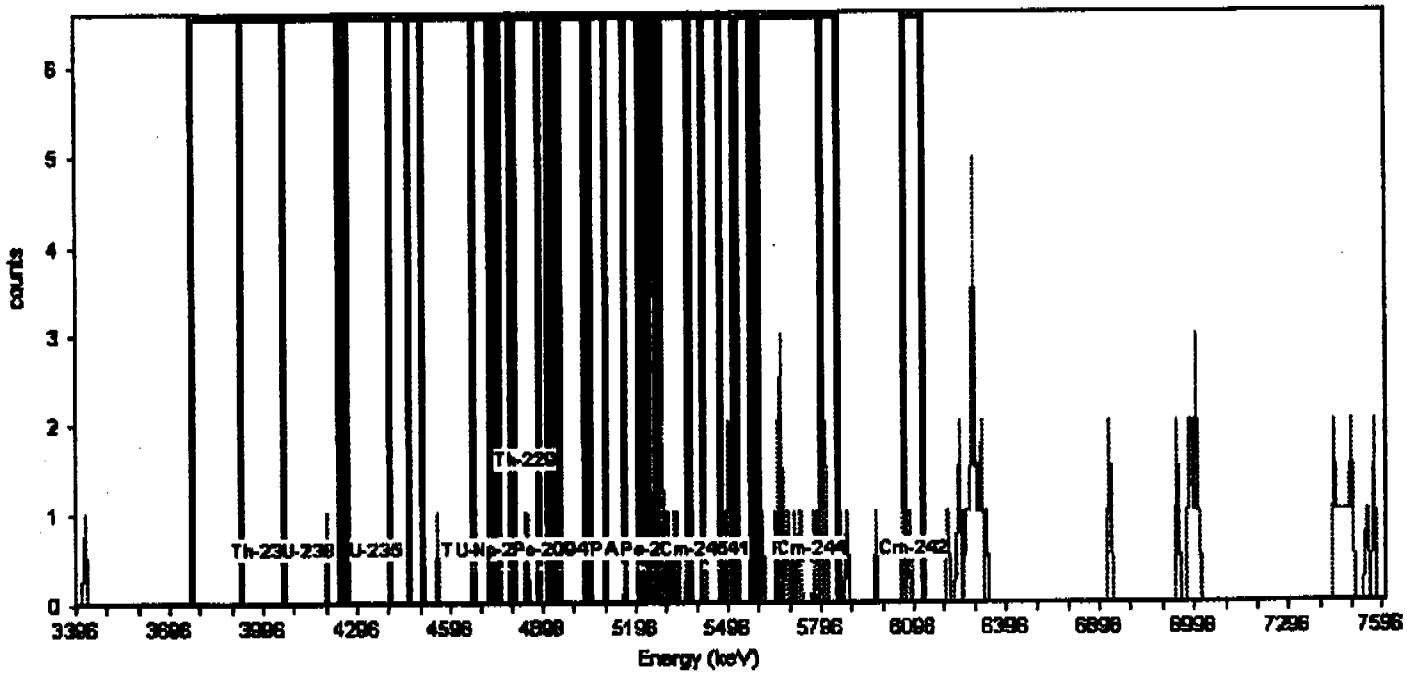
Batch Name: April_2005
Description:

Acquisition

Detector: AV52 , SN:
Acquisition Start Date: 4/25/2005 11:48:50AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV52
Calibration Date: 3/18/2005 12:58:40PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²

Efficiency: 26.60% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 91.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.96	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	7.00	8.750E-003	3.536E-003
Th-228	5.41	5.16	5.47	8.00	1.000E-002	3.750E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	10.00	1.250E-002	4.146E-003
Am-241	5.45	5.27	5.57	10.00	1.250E-002	4.146E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	17.00	2.125E-002	5.303E-003
Cm-244	5.76	5.60	5.85	20.00	2.500E-002	5.728E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:51AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV53
Comment:

Spectrum #1 Analysis #1

Batch

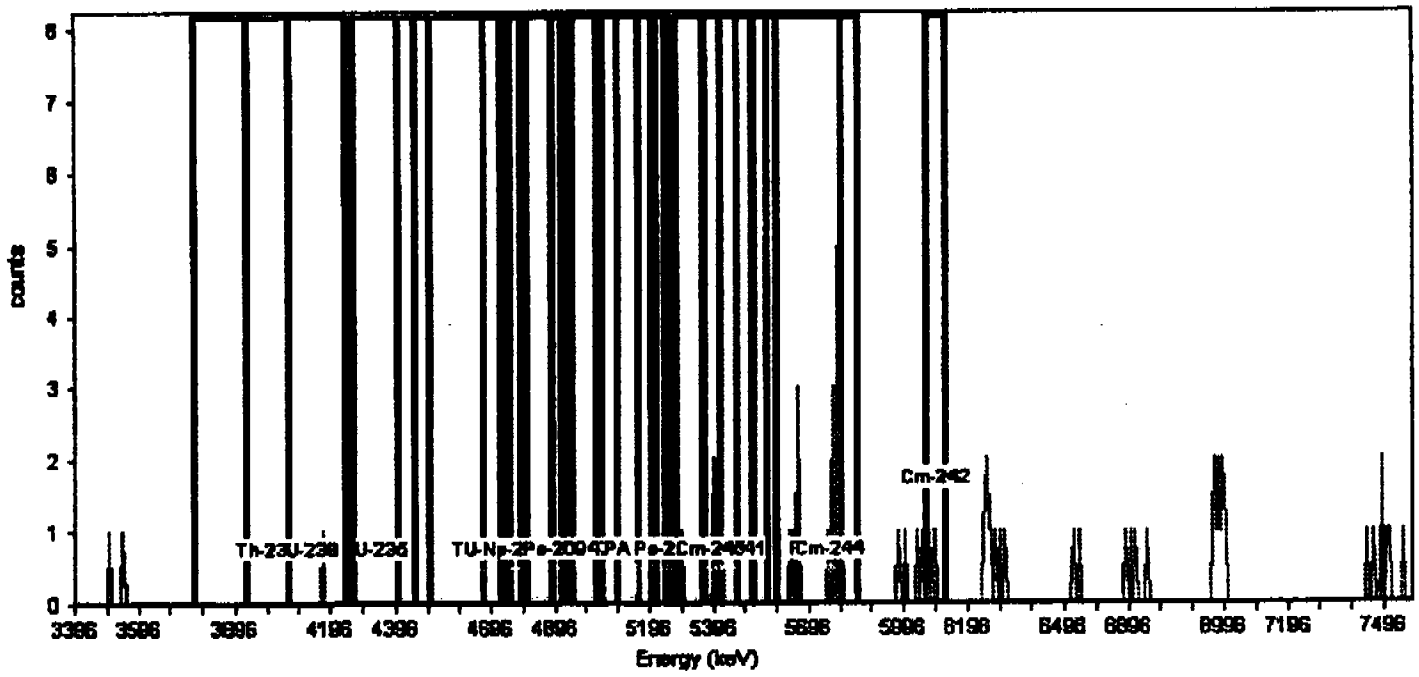
Batch Name: April_2005
Description:

Acquisition

Detector: AV53 , SN:
Acquisition Start Date: 4/25/2005 11:48:51AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV53
Calibration Date: 3/18/2005 12:58:46PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.69% +/- 0.30% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 68.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	6.00	7.500E-003	3.307E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	6.00	7.500E-003	3.307E-003
Am-241	5.46	5.27	5.57	6.00	7.500E-003	3.307E-003
Cm-245	5.39	5.36	5.41	4.00	5.000E-003	2.795E-003
Pu-236	5.74	5.52	5.80	21.00	2.625E-002	5.863E-003
Cm-244	5.76	5.60	5.85	22.00	2.750E-002	5.995E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:57AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV54
Comment:

Spectrum #1 Analysis #1

Batch

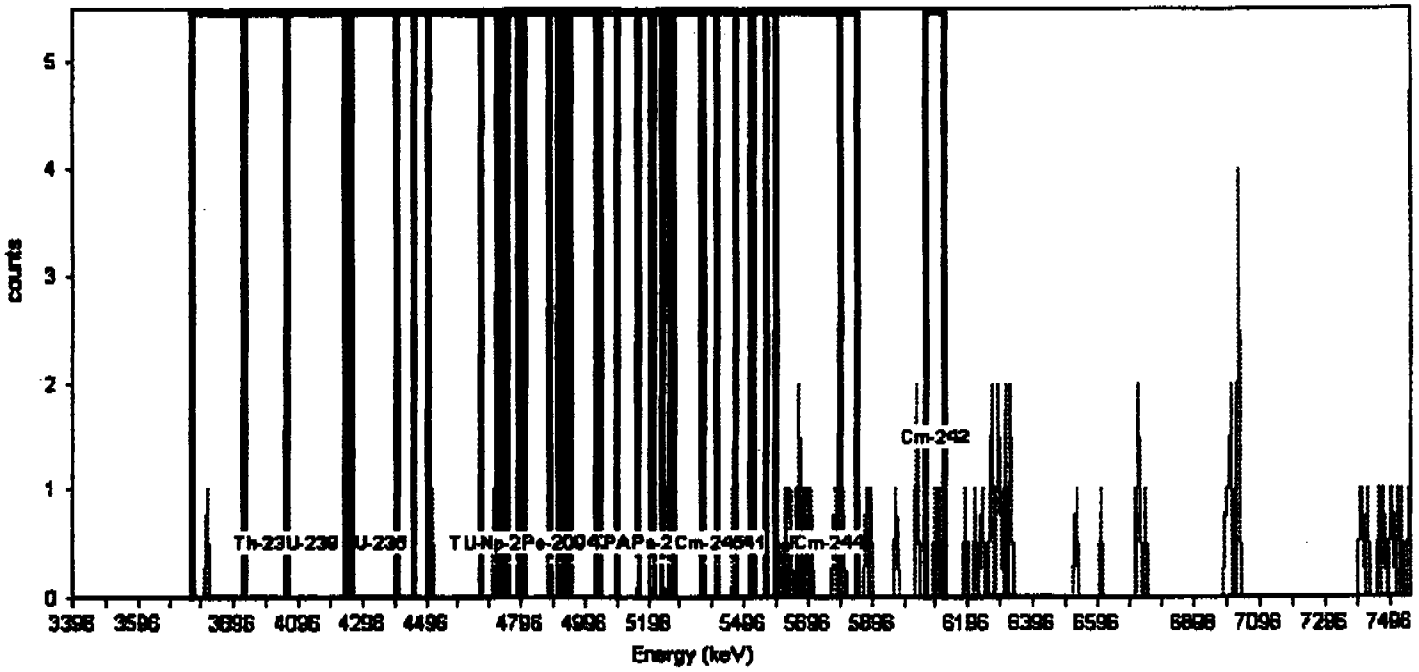
Batch Name: April_2005
Description:

Acquisition

Detector: AV54 , SN:
Acquisition Start Date: 4/25/2005 11:48:54AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV54
Calibration Date: 3/18/2005 12:58:53PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.27% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 64.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	2.00	2.500E-003	2.165E-003
Pu-242	4.86	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	2.00	2.500E-003	2.165E-003
Po-210	5.25	5.20	5.28	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.45	5.27	5.57	1.00	1.250E-003	1.768E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	14.00	1.750E-002	4.841E-003
Cm-244	5.76	5.60	5.85	15.00	1.875E-002	5.000E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 1:19:02AM 4/26/2005

Sample

Sample Name: AV55 Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

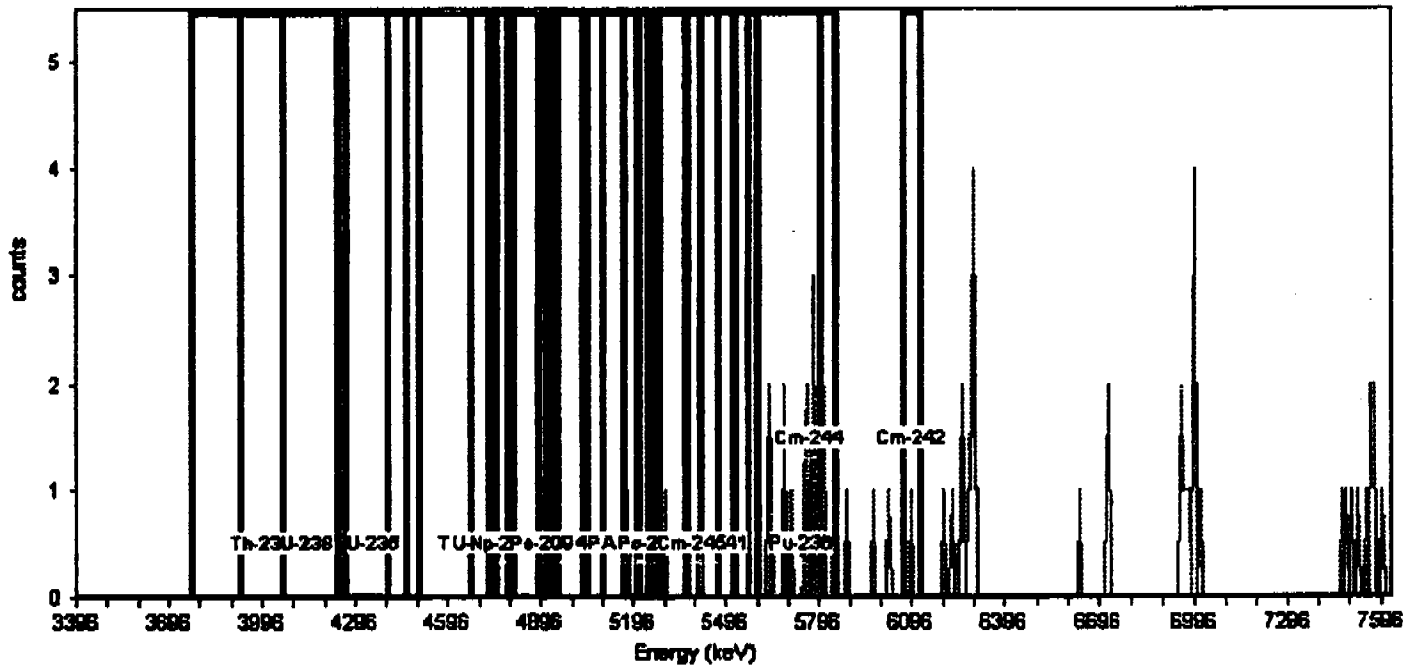
Description:

Acquisition

Detector: AV55 , SN:
Acquisition Start Date: 4/25/2005 11:48:56AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: Mar2005_AV55
Calibration Date: 3/18/2005 9:23:08AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.78% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI, Library: Background ROI Library

Total Background Counts: 67.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.86	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-238	5.74	5.52	5.80	16.00	2.000E-002	5.154E-003
Cm-244	5.76	5.60	5.85	20.00	2.500E-002	5.728E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:19:08AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV56
Spectrum #1 Analysis #1
Comment:

Batch

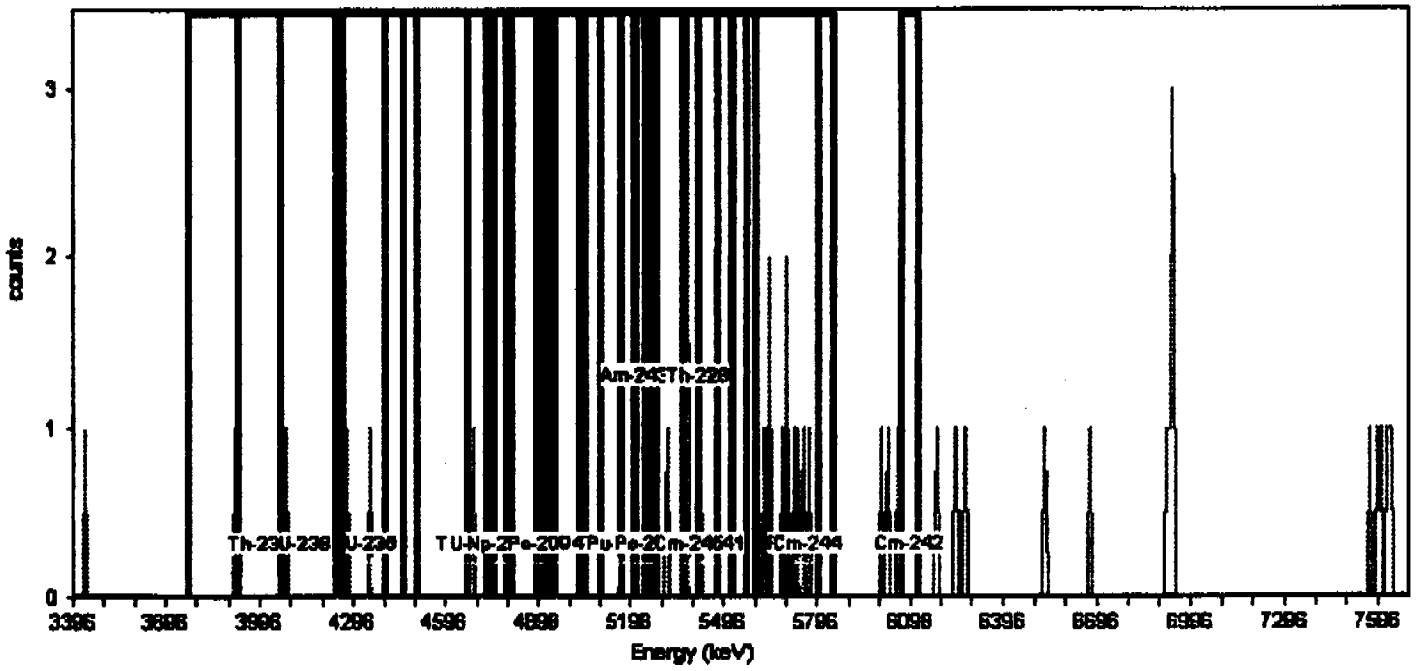
Batch Name: April_2005
Description:

Acquisition

Detector: AV56 , SN:
Acquisition Start Date: 4/25/2005 11:48:57AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: Mar2005_AV56
Calibration Date: 3/18/2005 9:23:19AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 25.92% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 49.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Pu-236	5.74	5.52	5.80	11.00	1.375E-002	4.390E-003
Cm-244	5.76	5.60	5.85	11.00	1.375E-002	4.330E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	3.00	3.750E-003	2.500E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	3.00	3.750E-003	2.500E-003
Th-228	5.41	5.16	5.47	8.00	1.000E-002	3.750E-003
Po-210	5.25	5.20	5.28	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	7.00	8.750E-003	3.536E-003
Am-241	5.46	5.27	5.67	7.00	8.750E-003	3.536E-003
Cm-245	5.39	5.36	5.41	5.00	6.250E-003	3.062E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:19:13AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV57
Spectrum #1 Analysis #1
Comment:

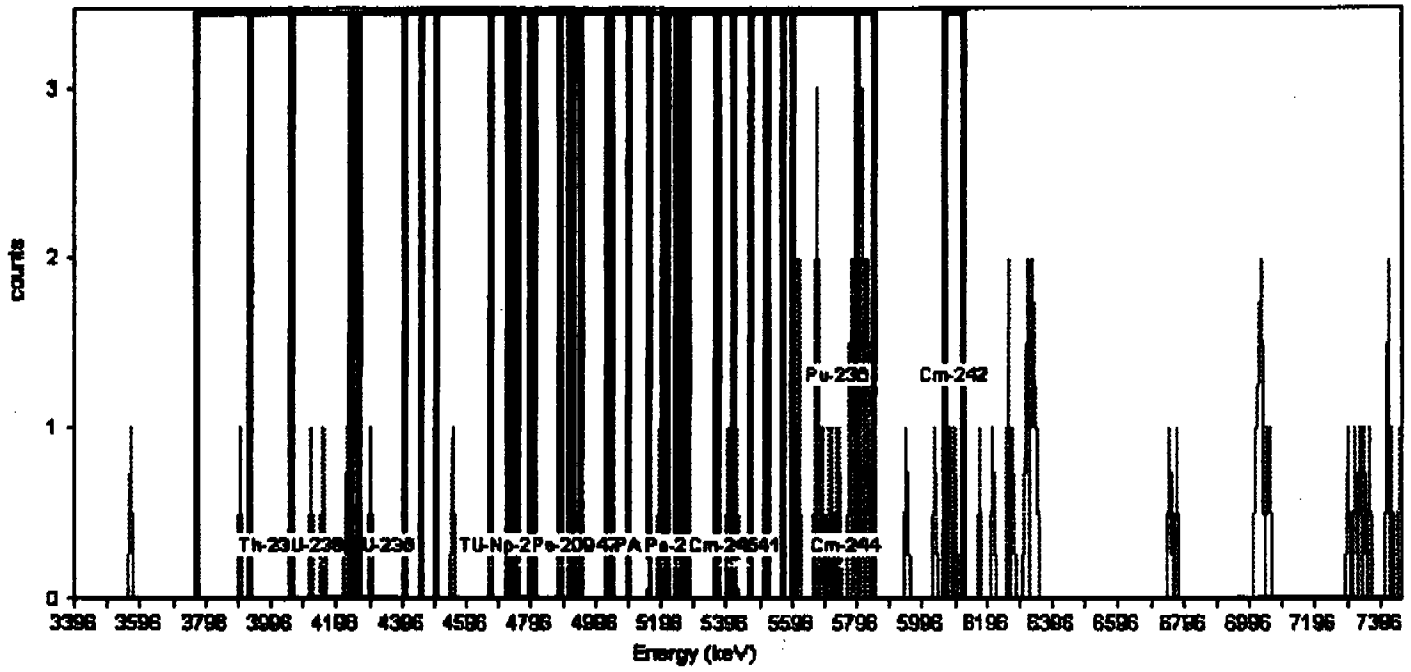
Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV57 , SN:
Acquisition Start Date: 4/25/2005 11:48:59AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: Mar2005_AV57
Calibration Date: 3/18/2005 9:23:31AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.01% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 67.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	3.00	3.750E-003	2.500E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	16.00	2.000E-002	5.154E-003
Cm-244	5.76	5.60	5.85	23.00	2.875E-002	6.124E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 1:19:19AM 4/26/2005

Sample

Sample Name: AV58 Spectrum #1 Analysis #1
Comment:

Batch

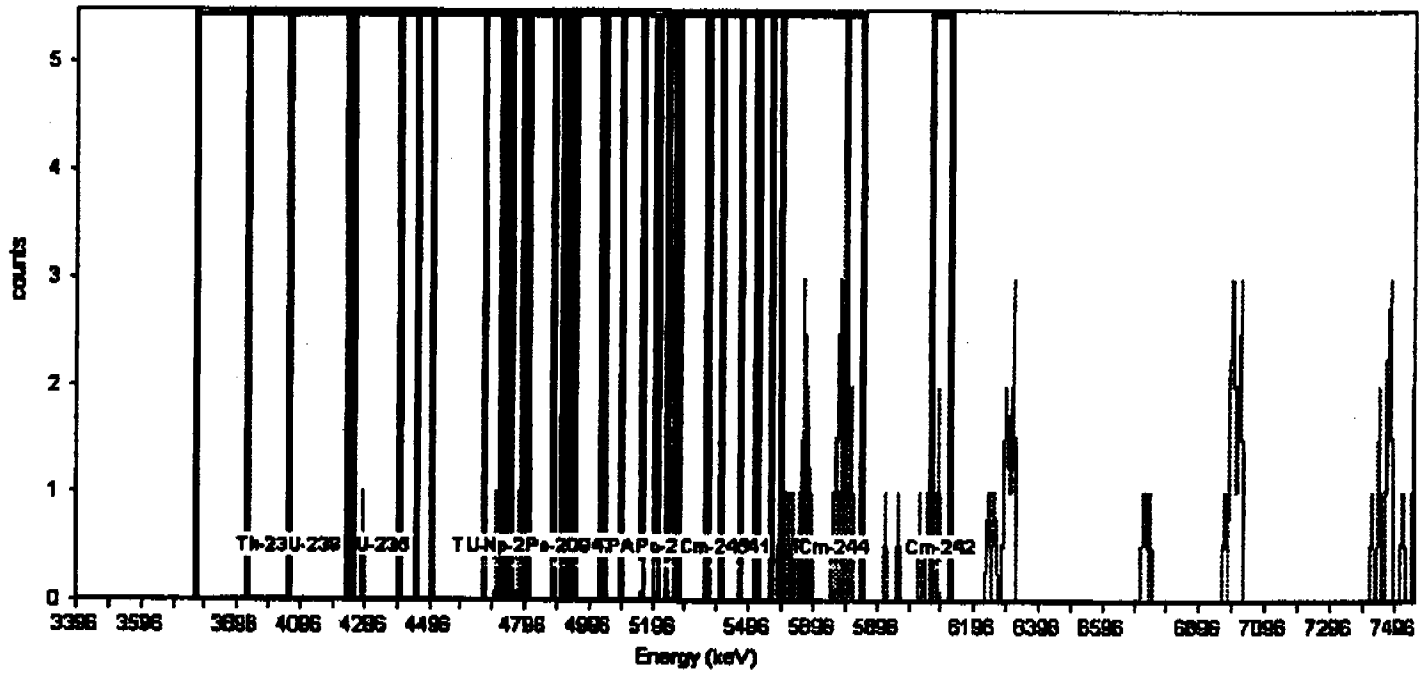
Batch Name: April_2005
Description:

Acquisition

Detector: AV58 , SN:
Acquisition Start Date: 4/25/2005 11:49:00AM
Live Time: 600.00 min.
Real Time: 600.01 min.
Calibration Name: Mar2005_AV58
Calibration Date: 3/18/2005 9:23:40AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²

Efficiency: 27.78% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 76.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	2.00	2.500E-003	2.165E-003
Pu-242	4.88	4.67	4.93	3.00	3.750E-003	2.500E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.768E-003
Th-228	5.41	5.16	5.47	0.00	0.000E+000	1.768E-003
Po-210	5.26	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	0.00	0.000E+000	1.768E-003
Am-241	5.45	5.27	5.57	0.00	0.000E+000	1.768E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	23.00	2.875E-002	6.124E-003
Cm-244	5.76	5.60	5.85	26.00	3.250E-002	6.495E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:19:24AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV59
Comment:

Spectrum #1 Analysis #1

Batch

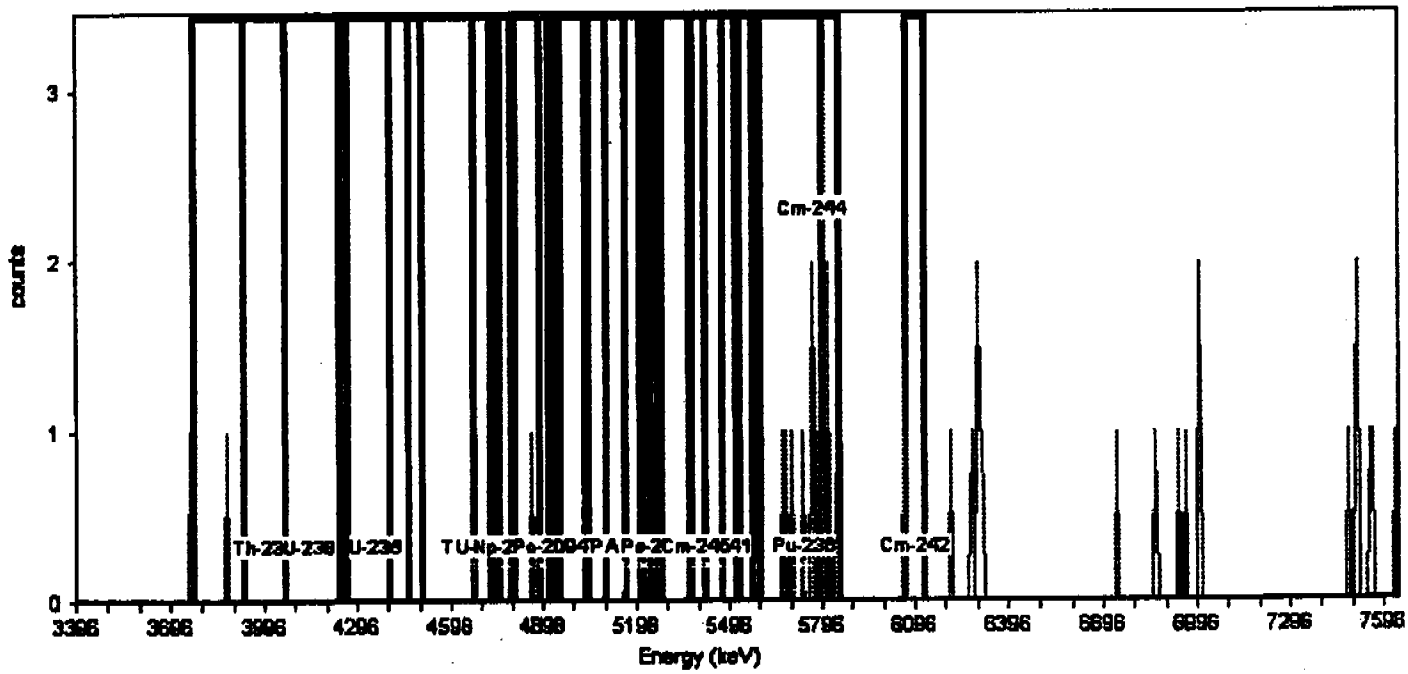
Batch Name: April_2005
Description:

Acquisition

Detector: AV59 , SN:
Acquisition Start Date: 4/25/2005 11:48:22AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV59
Calibration Date: 3/18/2005 1:41:17AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.09% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 40.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.768E-003
Th-228	5.41	5.18	5.47	0.00	0.000E+000	1.768E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	0.00	0.000E+000	1.768E-003
Am-241	5.45	5.27	5.57	0.00	0.000E+000	1.768E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	11.00	1.375E-002	4.330E-003
Cm-244	5.76	5.60	5.85	14.00	1.750E-002	4.841E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 1:19:30AM 4/26/2005

Sample

Sample Name: AV60 Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

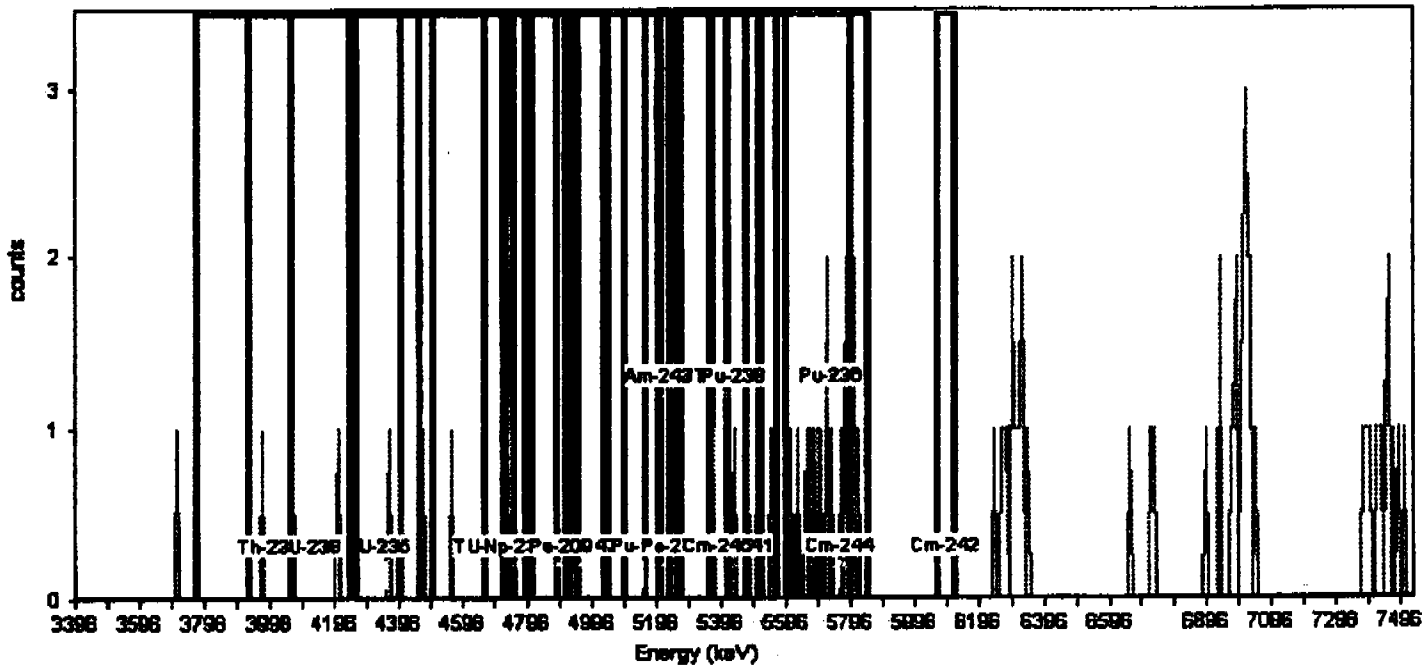
Description:

Acquisition

Detector: AV60 , SN:
Acquisition Start Date: 4/25/2005 11:48:23AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV60
Calibration Date: 3/18/2005 1:41:25AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 28.01% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library

Total Background Counts: 83.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	3.00	3.750E-003	2.500E-003
U-235	4.35	4.26	4.46	2.00	2.500E-003	2.165E-003
Th-230	4.67	4.40	4.73	3.00	3.750E-003	2.500E-003
U-234	4.70	4.50	4.80	2.00	2.500E-003	2.165E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	4.00	5.000E-003	2.795E-003
Po-210	5.25	5.20	5.28	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	5.00	6.250E-003	3.062E-003
Am-241	5.45	5.27	5.57	6.00	7.500E-003	3.307E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	15.00	1.875E-002	5.000E-003
Cm-244	5.76	5.60	5.85	19.00	2.375E-002	5.590E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:19:38AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV61
Spectrum #1 Analysis #1
Comment:

Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV61 , SN:
Acquisition Start Date: 4/25/2005 11:48:24AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV61
Calibration Date: 3/18/2005 1:41:36AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 27.35% +/- 0.29% TPU(2 sigma)

General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI, Library: Background ROI Library
Total Background Counts: 78.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.08	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.36	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.86	4.67	4.93	3.00	3.750E-003	2.500E-003
Th-229	4.84	4.72	5.10	3.00	3.750E-003	2.500E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	3.00	3.750E-003	2.500E-003
Po-209	4.90	4.88	4.91	3.00	3.750E-003	2.500E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	5.00	6.250E-003	3.062E-003
Po-210	5.25	5.20	5.28	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	5.00	6.250E-003	3.062E-003
Am-241	5.45	5.27	5.57	4.00	5.000E-003	2.795E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	24.00	3.000E-002	6.250E-003
Cm-244	5.76	5.60	5.85	28.00	3.500E-002	6.731E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:15:30AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV62
Comment:

Spectrum #1 Analysis #1

Batch

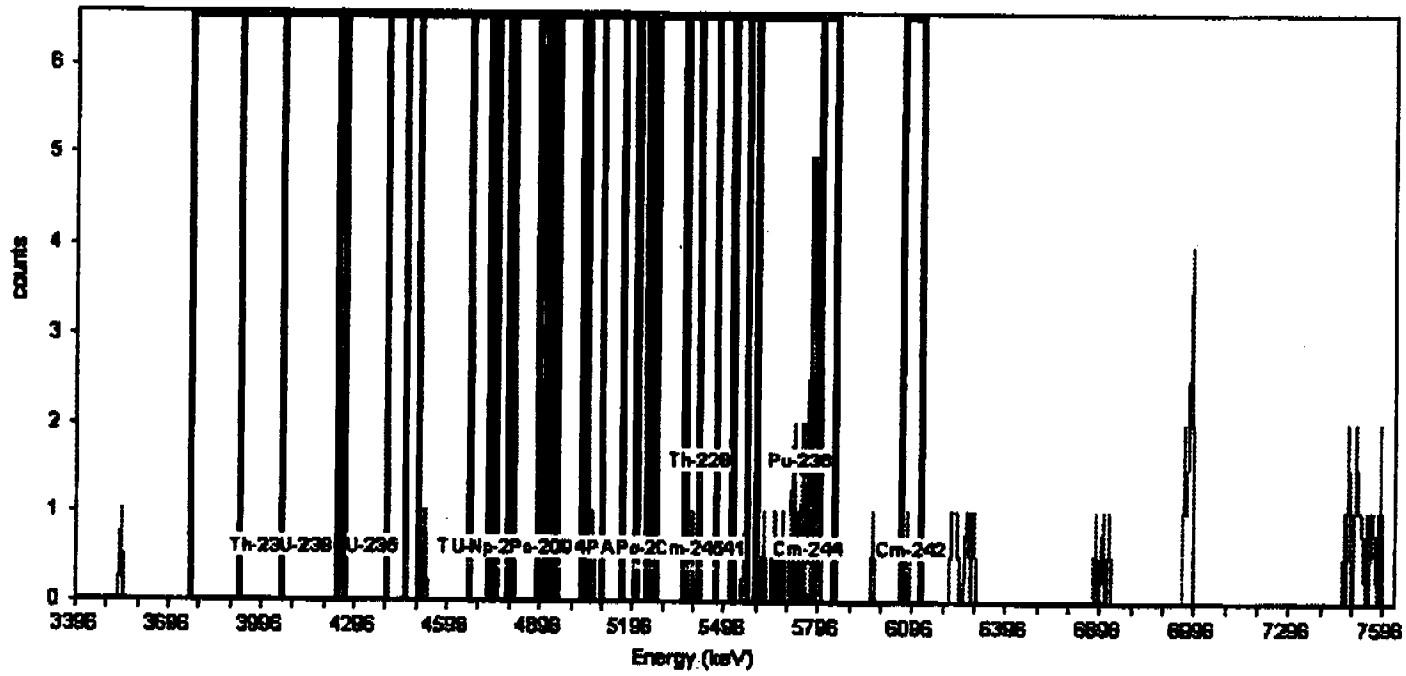
Batch Name: April_2005
Description:

Acquisition

Detector: AV62 , SN:
Acquisition Start Date: 4/25/2005 11:48:25AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV62
Calibration Date: 3/18/2005 1:41:44AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²

Efficiency: 27.65% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 68.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	2.00	2.500E-003	2.165E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.45	5.27	5.57	3.00	3.750E-003	2.500E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	26.00	3.250E-002	6.495E-003
Cm-244	5.76	5.60	5.86	25.00	3.125E-002	6.374E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:15:36AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV63
Comment:

Spectrum #1 Analysis #1

Batch

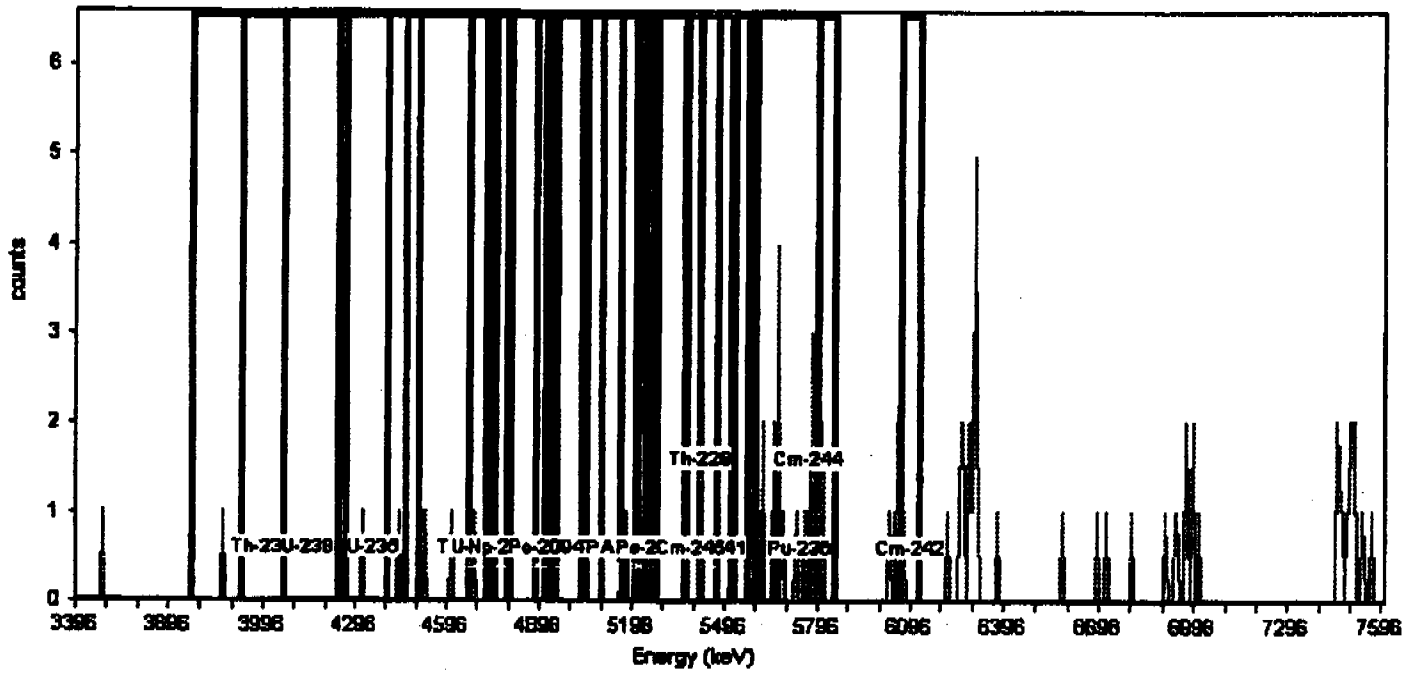
Batch Name: April_2005
Description:

Acquisition

Detector: AV63 , SN:
Acquisition Start Date: 4/25/2005 11:48:26AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: Mar2005_AV63
Calibration Date: 3/17/2005 10:32:03PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²

Efficiency: 27.17% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 79.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	2.00	2.500E-003	2.165E-003
Th-230	4.67	4.40	4.73	4.00	5.000E-003	2.795E-003
U-234	4.70	4.50	4.80	3.00	3.750E-003	2.500E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	4.00	5.000E-003	2.795E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	3.00	3.750E-003	2.500E-003
Am-241	5.45	5.27	5.57	3.00	3.750E-003	2.500E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	18.00	2.250E-002	5.449E-003
Cm-244	5.76	5.60	5.85	21.00	2.625E-002	5.863E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 1:15:42AM 4/26/2005

Sample

Sample Name: AV64 Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

Description:

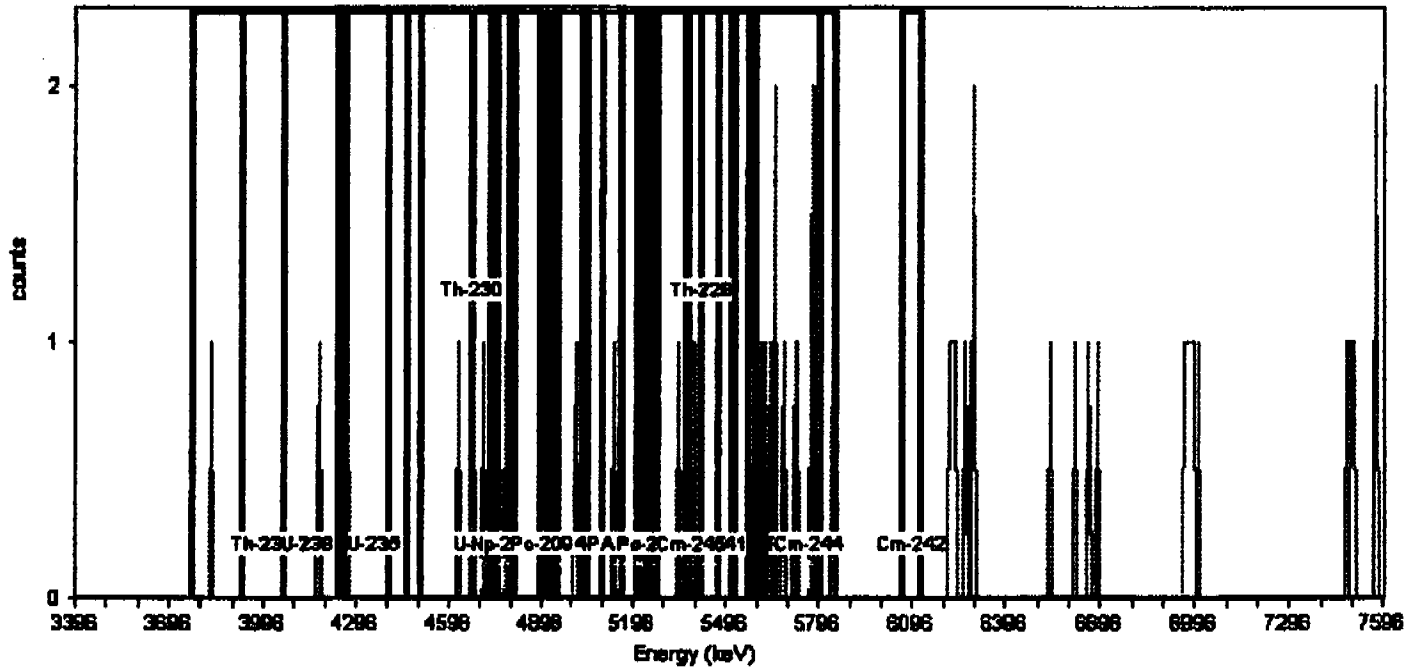
Acquisition

Detector: AV64 , SN:
Acquisition Start Date: 4/25/2005 11:48:27AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: Mar2005_AV64
Calibration Date: 3/17/2005 10:32:07PM

Energy Calibration Equation:

Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.00% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library

Total Background Counts: 54.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
U-234	4.70	4.50	4.80	6.00	7.500E-003	3.307E-003
Pu-242	4.88	4.67	4.93	5.00	6.250E-003	3.062E-003
Th-229	4.84	4.72	5.10	3.00	3.750E-003	2.500E-003
Np-237	4.77	4.75	4.79	2.00	2.500E-003	2.165E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.80	4.86	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.16	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	3.00	3.750E-003	2.500E-003
Am-241	5.45	5.27	5.57	3.00	3.750E-003	2.500E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	17.00	2.125E-002	5.303E-003
Cm-244	5.76	5.80	5.85	17.00	2.125E-002	5.303E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	4.00	5.000E-003	2.795E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:15:47AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV65
Comment:

Spectrum #1 Analysis #1

Batch

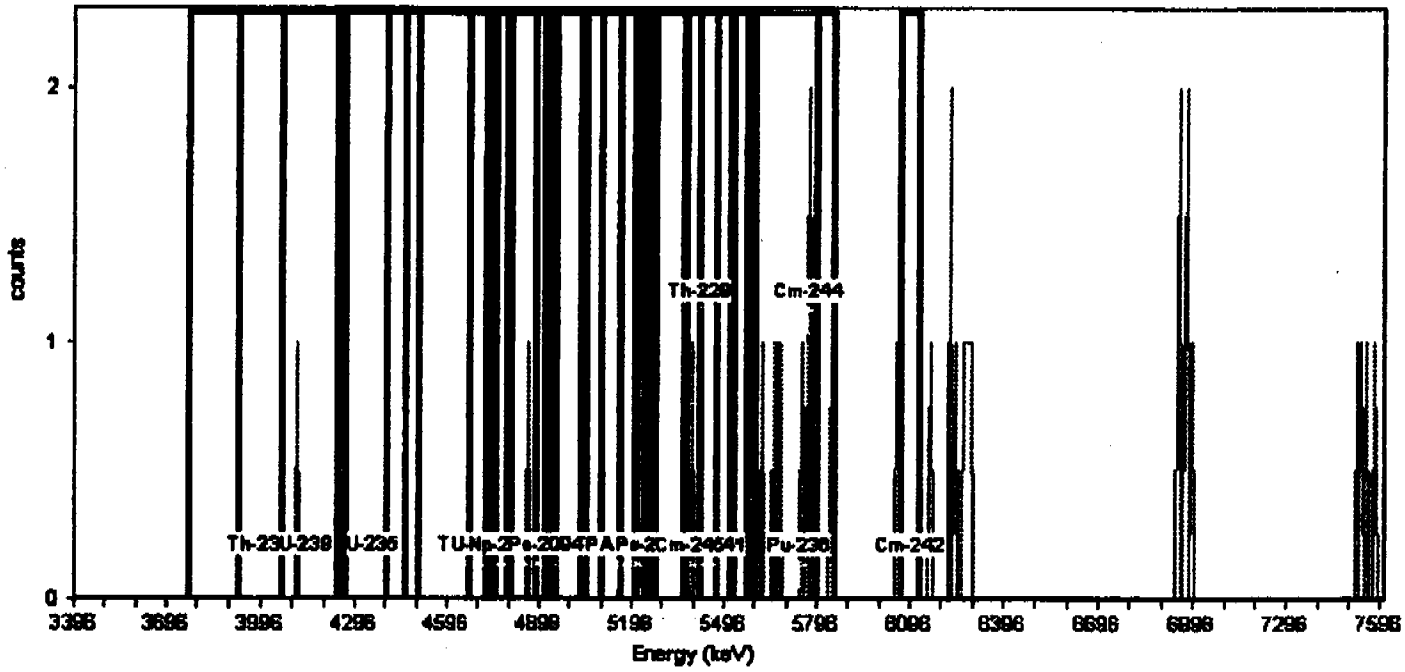
Batch Name: April_2005
Description:

Acquisition

Detector: AV65 , SN:
Acquisition Start Date: 4/25/2005 11:48:28AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: Mar2005_AV65
Calibration Date: 3/17/2005 10:32:12PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.10% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 40.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.60	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	3.00	3.750E-003	2.500E-003
Am-241	5.45	5.27	5.57	3.00	3.750E-003	2.500E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	13.00	1.625E-002	4.677E-003
Cm-244	5.76	5.60	5.85	13.00	1.625E-002	4.677E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040

1:16:16AM 4/26/2005

Sample

Sample Name: AV66

Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

Description:

Acquisition

Detector: AV66 , SN:

Acquisition Start Date: 4/25/2005 11:48:29AM

Live Time: 800.00 min.

Real Time: 800.02 min.

Calibration Name: Mar2005_AV66

Calibration Date: 3/17/2005 10:32:16PM

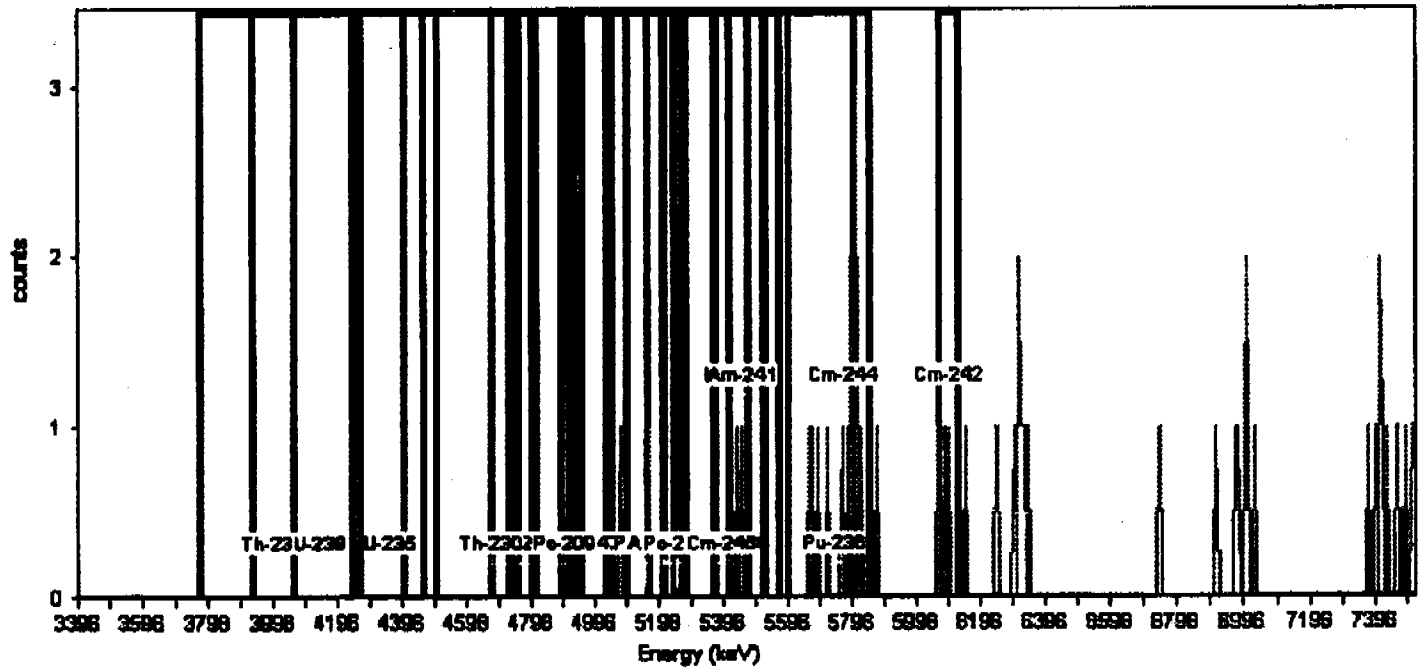
Energy Calibration Equation:

Gain = 7.2598 keV / Ch

Offset = 3,388.96 keV

Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.56% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library

Total Background Counts: 51.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.86	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.46	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	7.00	8.750E-003	3.536E-003
Cm-244	5.76	5.60	5.85	12.00	1.500E-002	4.507E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:15:53AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV67
Comment:

Spectrum #1 Analysis #1

Batch

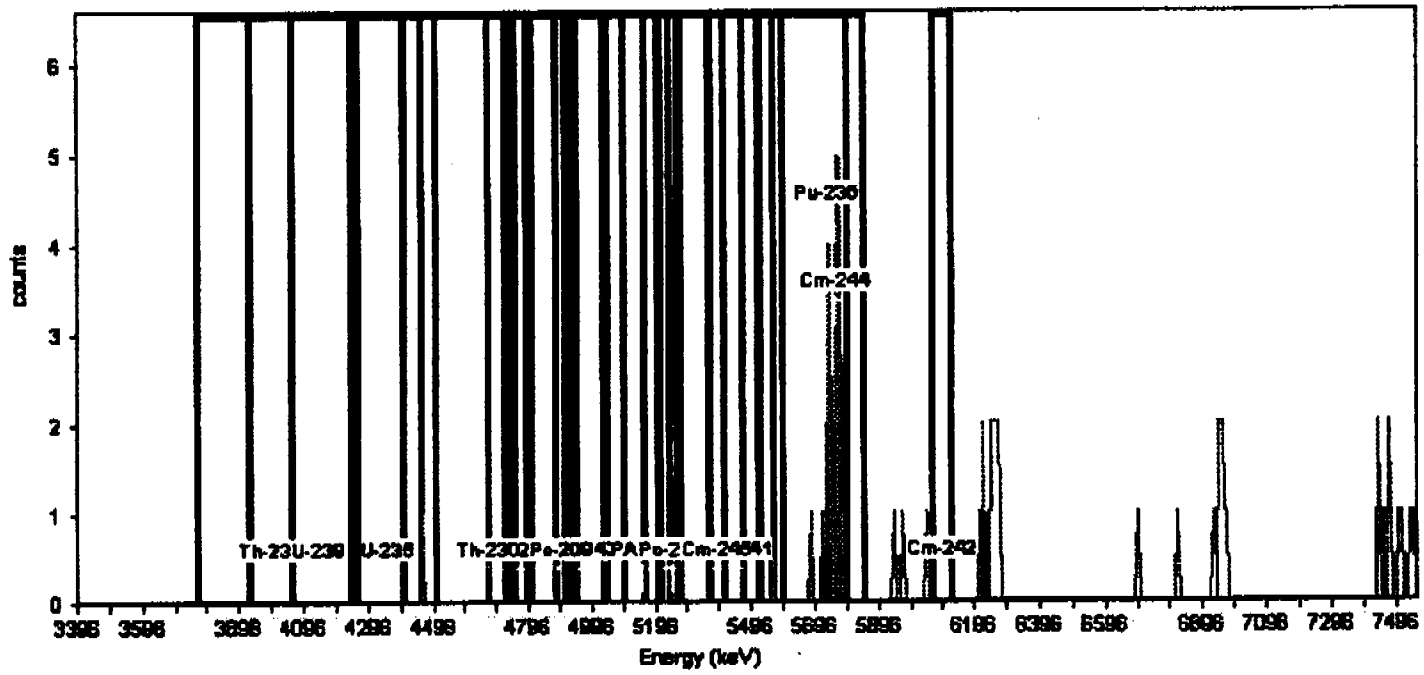
Batch Name: April_2005
Description:

Acquisition

Detector: AV67 , SN:
Acquisition Start Date: 4/25/2005 11:48:30AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV67
Calibration Date: 3/17/2005 8:01:05PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.87% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 56.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.86	4.68	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	1.00	1.250E-003	1.768E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	1.00	1.250E-003	1.768E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	20.00	2.500E-002	5.728E-003
Cm-244	5.76	5.60	5.85	19.00	2.375E-002	5.590E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:15:58AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV68
Comment:

Spectrum #1 Analysis #1

Batch

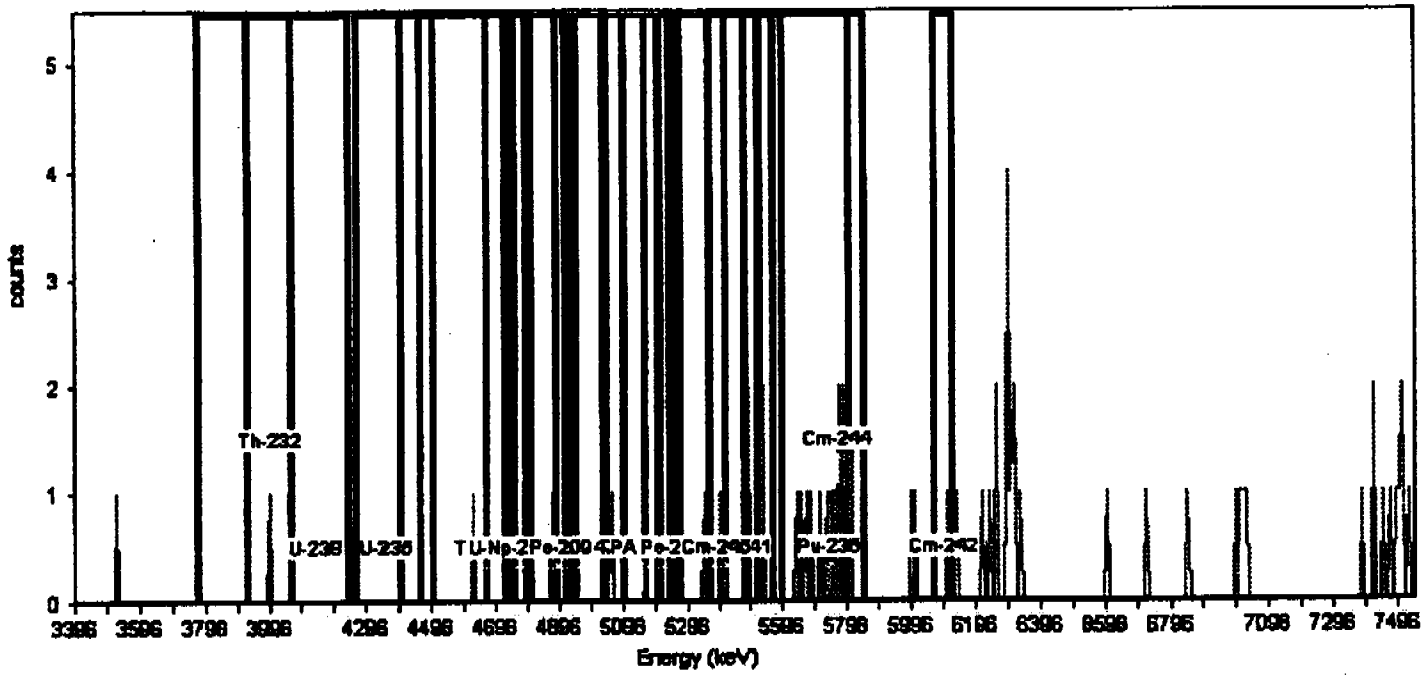
Batch Name: April_2005
Description:

Acquisition

Detector: AV68 , SN:
Acquisition Start Date: 4/25/2005 11:48:31AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV68
Calibration Date: 3/17/2005 8:01:31PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.17% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROU[illegible] Library: Background ROI Library
Total Background Counts: 71.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.86	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	3.00	3.750E-003	2.500E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	5.00	6.250E-003	3.062E-003
Am-241	5.46	5.27	5.57	7.00	8.750E-003	3.536E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	20.00	2.500E-002	5.728E-003
Cm-244	5.76	5.60	5.85	21.00	2.625E-002	5.863E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:16:04AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV69
Comment:

Spectrum #1 Analysis #1

Batch

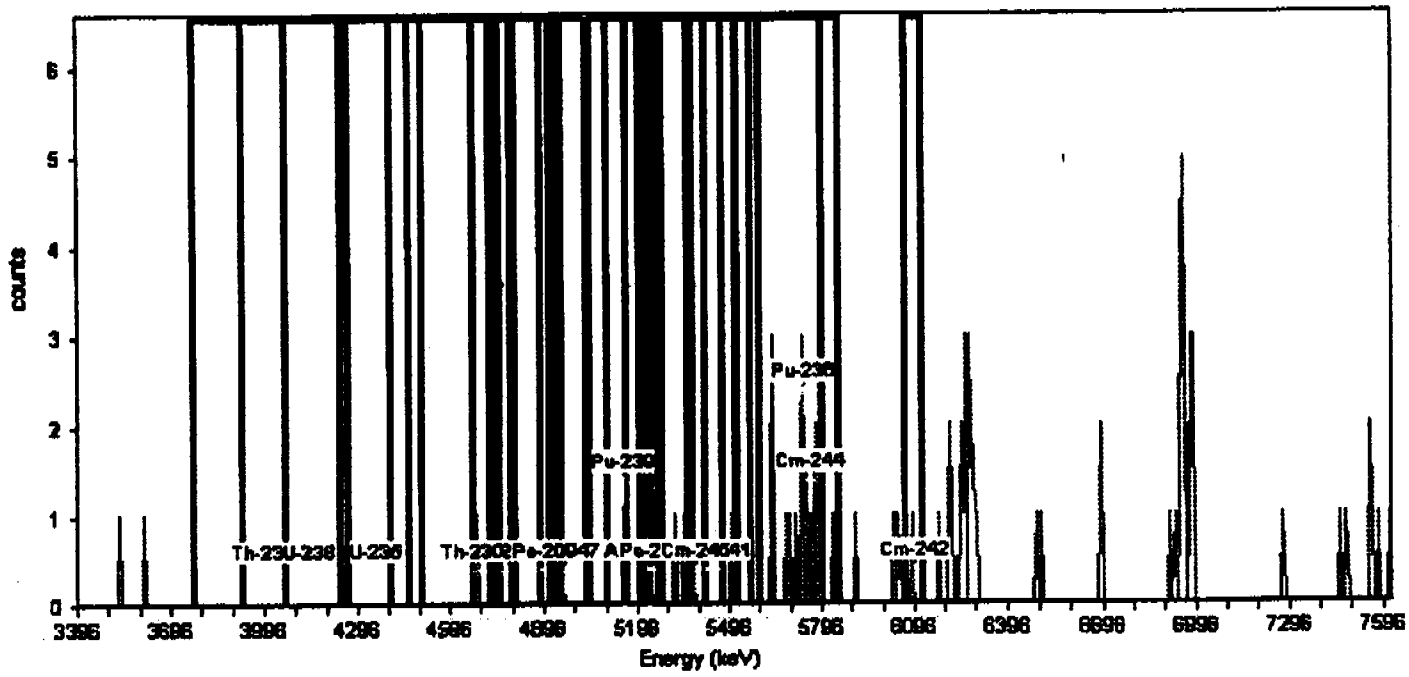
Batch Name: April_2005
Description:

Acquisition

Detector: AV69 , SN:
Acquisition Start Date: 4/25/2005 11:48:32AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March05_AV69
Calibration Date: 3/17/2005 8:01:49PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 28.07% +/- 0.30% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 84.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.185E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	3.00	3.750E-003	2.500E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	4.00	5.000E-003	2.795E-003
Am-241	5.46	5.27	5.57	4.00	5.000E-003	2.795E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	22.00	2.750E-002	5.995E-003
Cm-244	5.76	5.60	5.85	23.00	2.875E-002	6.124E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:16:09AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV70
Comment:

Spectrum #1 Analysis #1

Batch

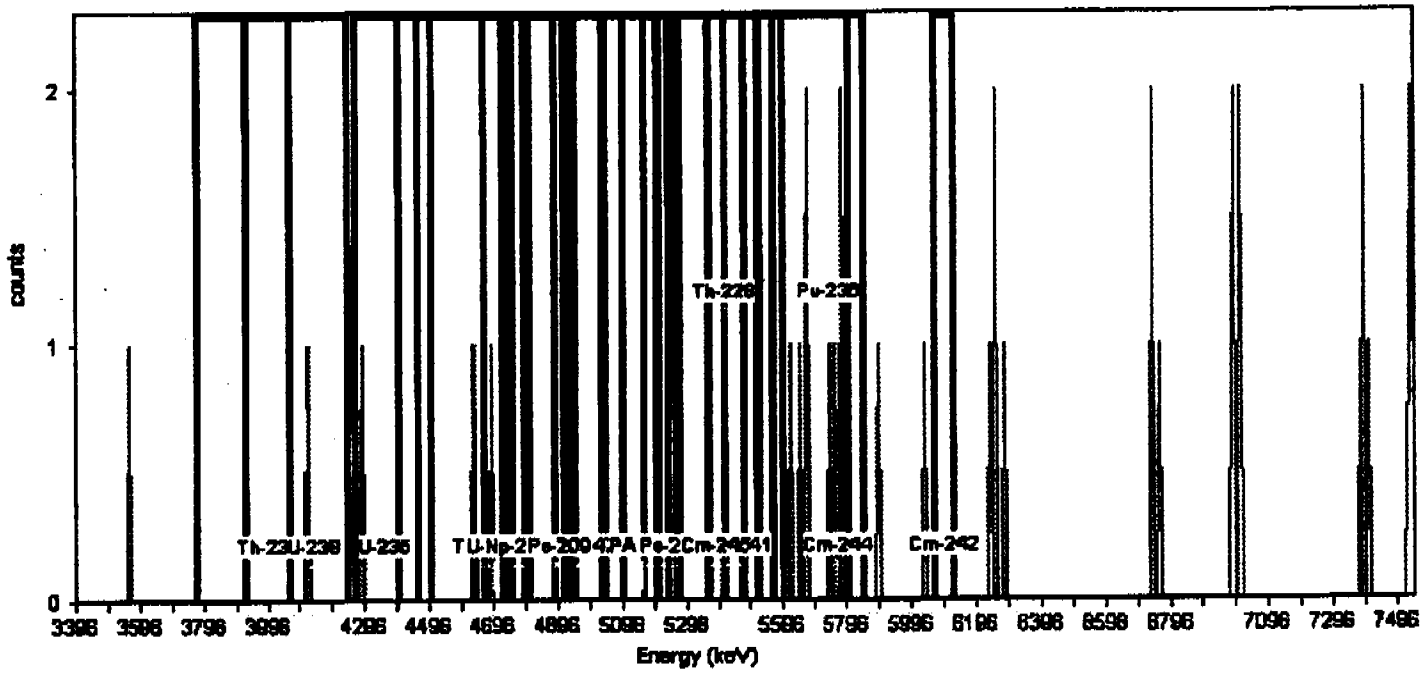
Batch Name: April_2005
Description:

Acquisition

Detector: AV70 , SN:
Acquisition Start Date: 4/25/2005 11:48:33AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV70
Calibration Date: 3/17/2005 8:01:57PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.03% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI, Library: Background ROI Library
Total Background Counts: 37.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	2.00	2.500E-003	2.165E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.768E-003
Th-228	5.41	5.16	5.47	2.00	2.500E-003	2.165E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	9.00	1.125E-002	3.953E-003
Cm-244	5.76	5.60	5.85	9.00	1.125E-002	3.953E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:38:45PM 4/28/2005

Analyst: 60040

Sample

Sample Name: AV71
Comment:

Spectrum #1 Analysis #1

Batch

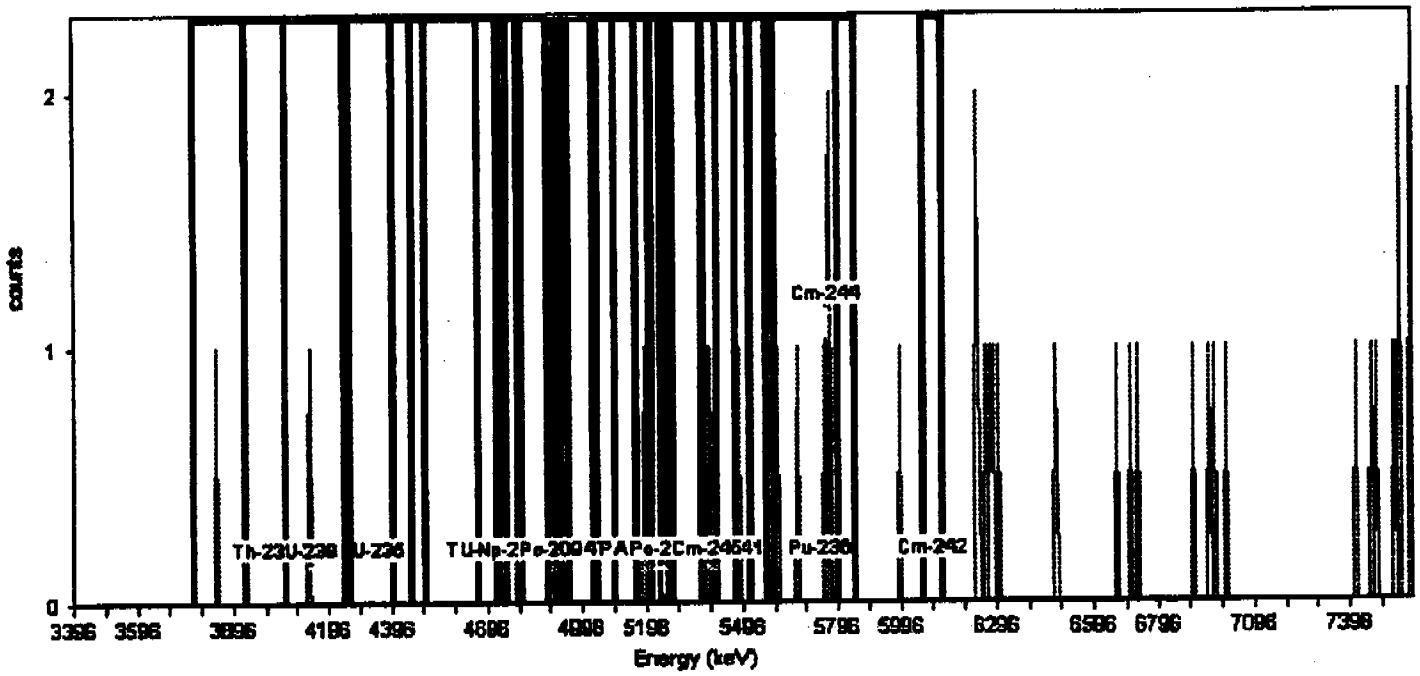
Batch Name: Aprilb_2005
Description:

Acquisition

Detector: AV71 , SN:
Acquisition Start Date: 4/28/2005 9:18:33AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: April2005_AV71a
Calibration Date: 4/27/2005 6:27:17PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.10% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 36.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	2.00	2.500E-003	2.165E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	6.00	7.500E-003	3.307E-003
Cm-244	5.76	5.60	5.85	6.00	7.500E-003	3.307E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:16:21AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV72
Comment:

Spectrum #1 Analysis #1

Batch

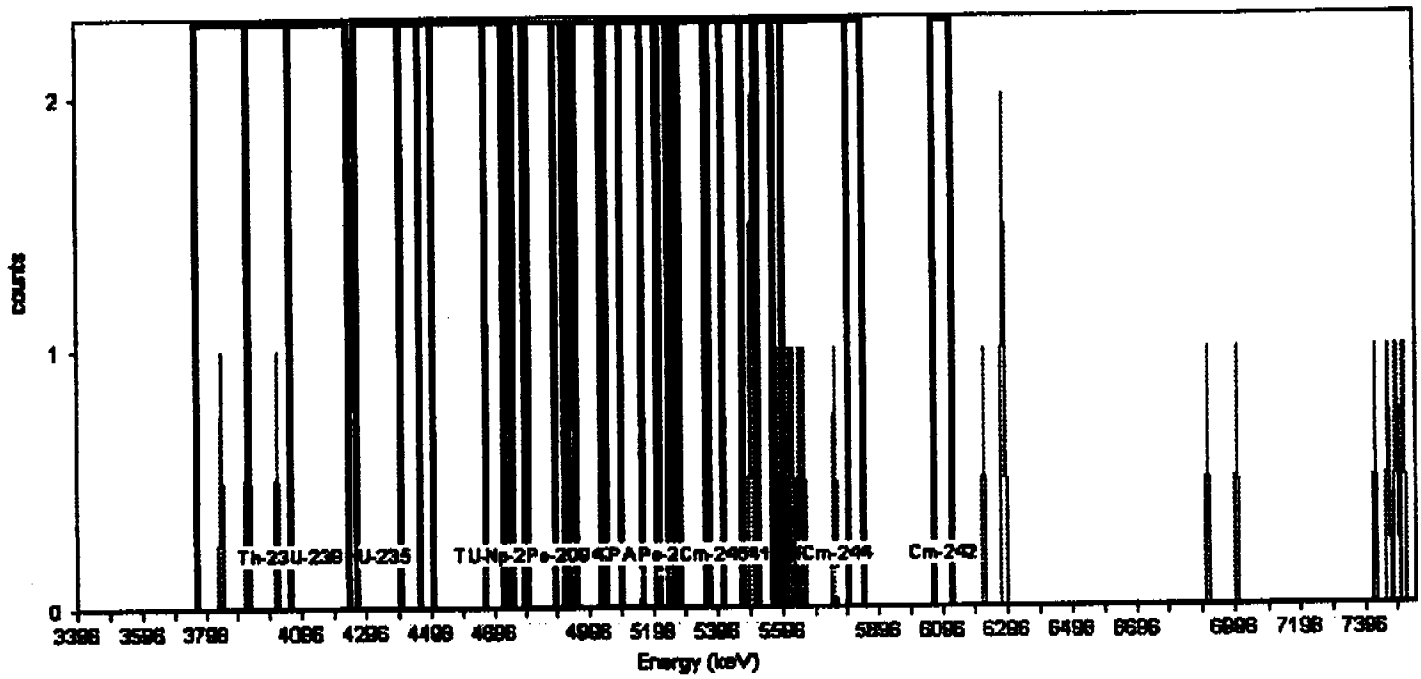
Batch Name: April_2005
Description:

Acquisition

Detector: AV72 , SN:
Acquisition Start Date: 4/25/2005 11:48:36AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV72
Calibration Date: 3/17/2005 8:34:09AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.14% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 25.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.08	3.00	3.750E-003	2.500E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.26	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.768E-003
Th-228	5.41	5.16	5.47	0.00	0.000E+000	1.768E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	7.00	8.750E-003	3.536E-003
Cm-244	5.76	5.60	5.85	6.00	7.500E-003	3.307E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:16:27AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV73
Comment:

Spectrum #1 Analysis #1

Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV73 , SN:
Acquisition Start Date: 4/25/2005 11:48:38AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV73
Calibration Date: 3/17/2005 8:34:15AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.38% +/- 0.29% TPU(2 sigma)

General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI, Library: Background ROI Library
Total Background Counts: 35.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	4.00	5.000E-003	2.795E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	4.00	5.000E-003	2.795E-003
U-234	4.70	4.50	4.80	4.00	5.000E-003	2.795E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	3.00	3.750E-003	2.500E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.28	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	3.00	3.750E-003	2.500E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	6.00	7.500E-003	3.307E-003
Cm-244	5.76	5.60	5.85	6.00	7.500E-003	3.307E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:16:32AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV74
Comment:

Spectrum #1 Analysis #1

Batch

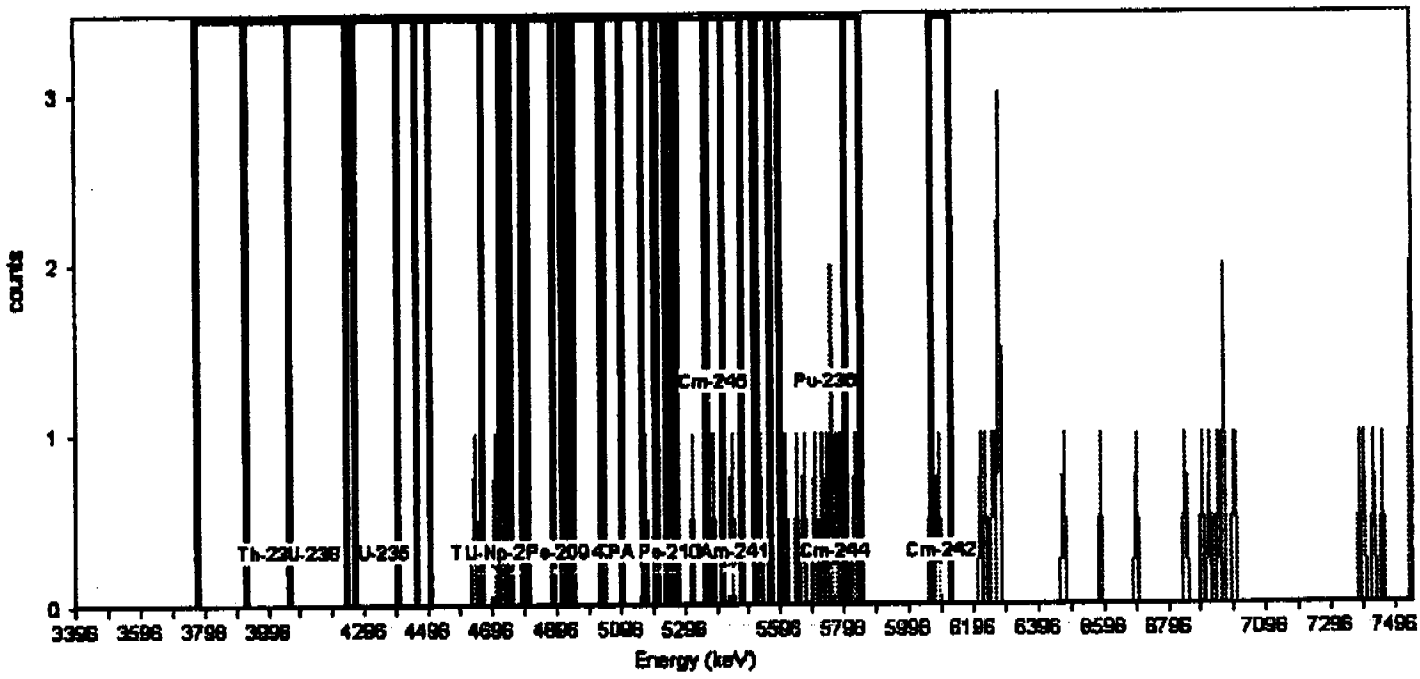
Batch Name: April_2005
Description:

Acquisition

Detector: AV74 , SN:
Acquisition Start Date: 4/25/2005 11:48:41AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV74
Calibration Date: 3/17/2005 8:34:21AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.79% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 49.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	3.00	3.750E-003	2.500E-003
U-234	4.70	4.50	4.80	4.00	5.000E-003	2.795E-003
Pu-242	4.88	4.67	4.93	3.00	3.750E-003	2.500E-003
Th-229	4.84	4.72	5.10	4.00	5.000E-003	2.795E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	4.00	5.000E-003	2.795E-003
Th-228	5.41	5.16	5.47	5.00	6.250E-003	3.062E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	4.00	5.000E-003	2.795E-003
Am-241	5.45	5.27	5.57	5.00	6.250E-003	3.062E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	11.00	1.375E-002	4.330E-003
Cm-244	5.76	5.60	5.85	11.00	1.375E-002	4.330E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

SEVERN TRENT STL

Monthly Backgrounds
Alphavision
March 2005

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:25:24PM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV1
Comment:

Spectrum #1 Analysis #1

Batch

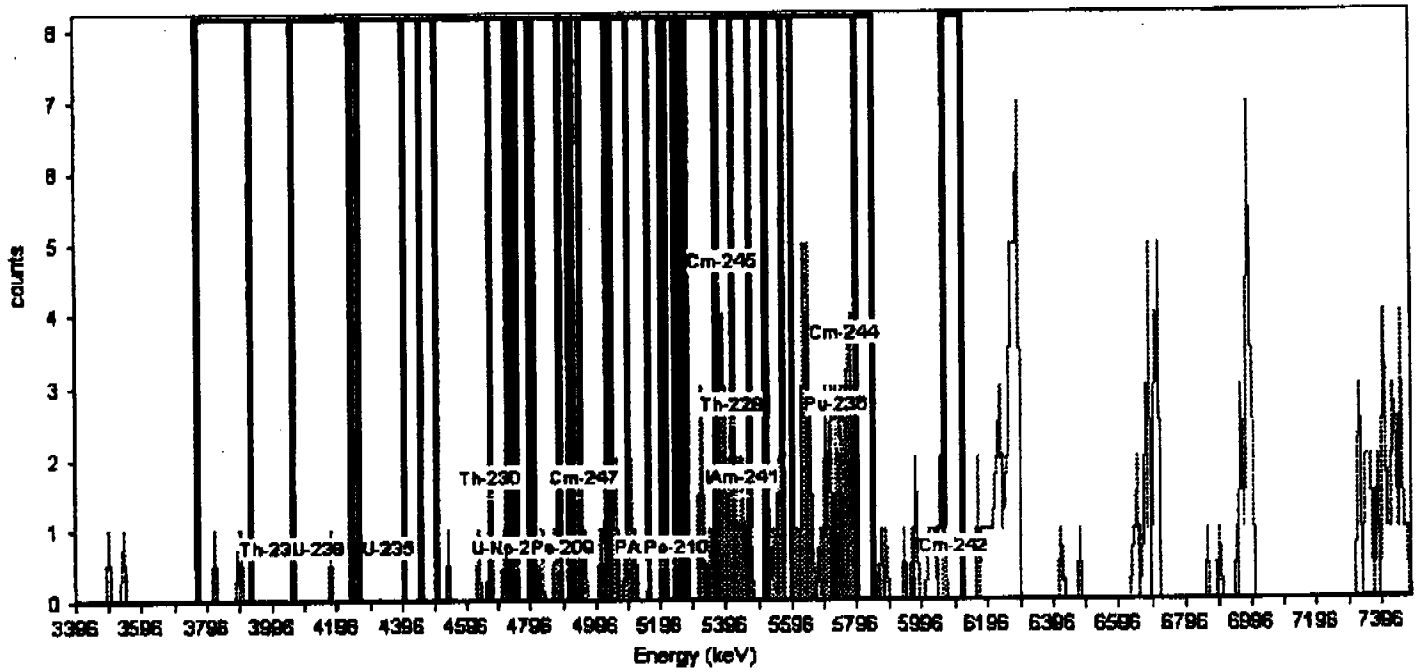
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV1 , SN: 41-158W6
Acquisition Start Date: 3/14/2005 8:25:07PM
Live Time: 960.00 min.
Real Time: 960.03 min.
Calibration Name: February2005_AV1
Calibration Date: 2/4/2005 11:03:41AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.87% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 259.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	3.00	3.125E-003	2.083E-003
U-238	4.14	3.93	4.24	1.00	1.042E-003	1.473E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	4.00	4.167E-003	2.329E-003
U-234	4.70	4.50	4.80	5.00	5.208E-003	2.552E-003
Pu-242	4.88	4.67	4.93	7.00	7.292E-003	2.946E-003
Th-229	4.84	4.72	5.10	14.00	1.458E-002	4.034E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	4.00	4.167E-003	2.329E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	14.00	1.458E-002	4.034E-003
Am-243	5.20	5.03	5.28	11.00	1.146E-002	3.608E-003
U-232	5.23	5.04	5.37	18.00	1.875E-002	4.541E-003
Th-228	5.41	5.16	5.47	31.00	3.229E-002	5.893E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	31.00	3.229E-002	5.893E-003
Am-241	5.46	5.27	5.57	37.00	3.854E-002	6.421E-003
Cm-245	5.39	5.36	5.41	16.00	1.667E-002	4.295E-003
Pu-236	5.74	5.52	5.80	57.00	5.937E-002	7.933E-003
Cm-244	5.76	5.60	5.85	51.00	5.313E-002	7.512E-003
Cm-242	6.10	6.07	6.13	1.00	1.042E-003	1.473E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:25:01PM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV2
Comment:

Spectrum #1 Analysis #1

Batch

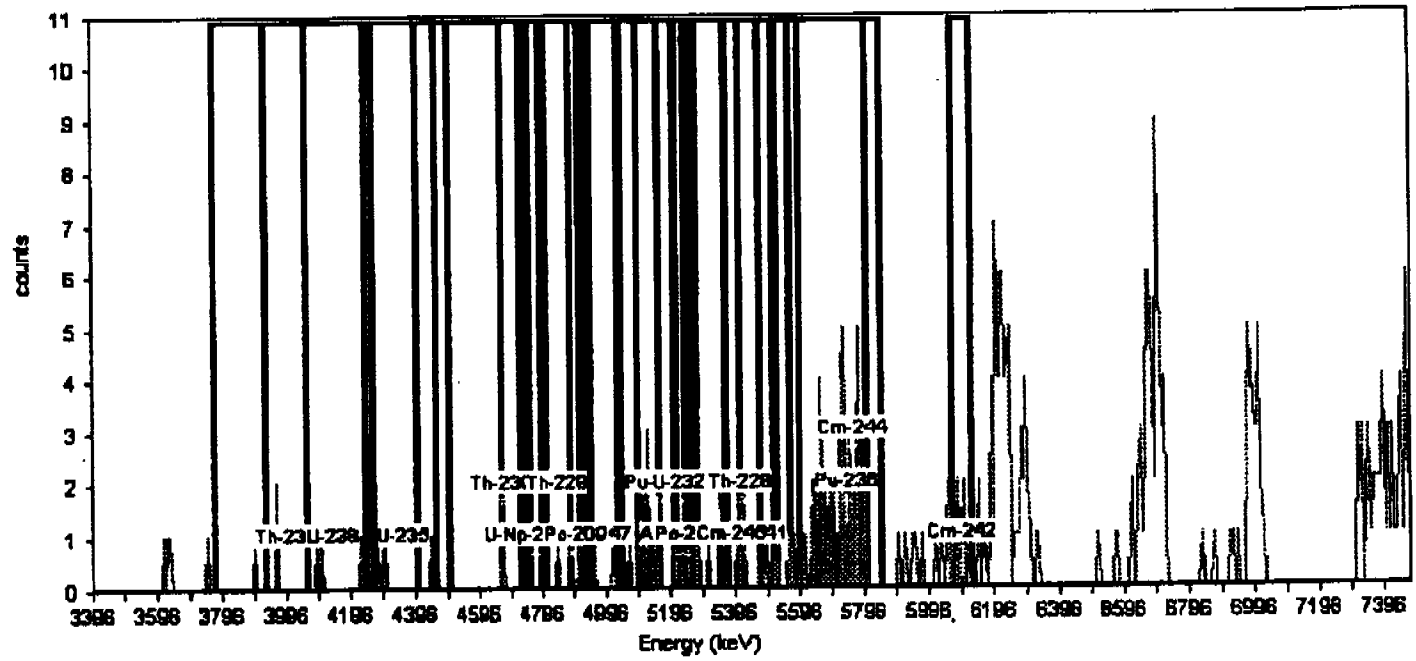
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV2 , SN: 41-158W7
Acquisition Start Date: 3/14/2005 8:25:09PM
Live Time: 960.00 min.
Real Time: 960.03 min.
Calibration Name: February2005_AV2
Calibration Date: 2/4/2005 11:03:48AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.86% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 320.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	3.00	3.125E-003	2.083E-003
U-238	4.14	3.93	4.24	5.00	5.208E-003	2.552E-003
U-235	4.35	4.26	4.46	3.00	3.125E-003	2.083E-003
Th-230	4.67	4.40	4.73	2.00	2.083E-003	1.804E-003
U-234	4.70	4.50	4.80	1.00	1.042E-003	1.473E-003
Pu-242	4.88	4.67	4.93	3.00	3.125E-003	2.083E-003
Th-229	4.84	4.72	5.10	6.00	6.250E-003	2.756E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	3.00	3.125E-003	2.083E-003
Po-209	4.90	4.88	4.91	1.00	1.042E-003	1.473E-003
Pu-239	5.15	4.95	5.21	14.00	1.458E-002	4.034E-003
Am-243	5.20	5.03	5.28	17.00	1.771E-002	4.419E-003
U-232	5.23	5.04	5.37	23.00	2.396E-002	5.103E-003
Th-228	5.41	5.16	5.47	18.00	1.875E-002	4.541E-003
Po-210	5.25	5.20	5.26	4.00	4.167E-003	2.329E-003
Pu-238	5.44	5.24	5.52	17.00	1.771E-002	4.419E-003
Am-241	5.45	5.27	5.57	19.00	1.979E-002	4.658E-003
Cm-245	5.39	5.36	5.41	4.00	4.167E-003	2.329E-003
Pu-236	5.74	5.52	5.80	55.00	5.729E-002	7.795E-003
Cm-244	5.76	5.60	5.85	50.00	5.208E-002	7.439E-003
Cm-242	6.10	6.07	6.13	8.00	8.333E-003	3.125E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:25:04PM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV3
Comment:

Spectrum #1 Analysis #1

Batch

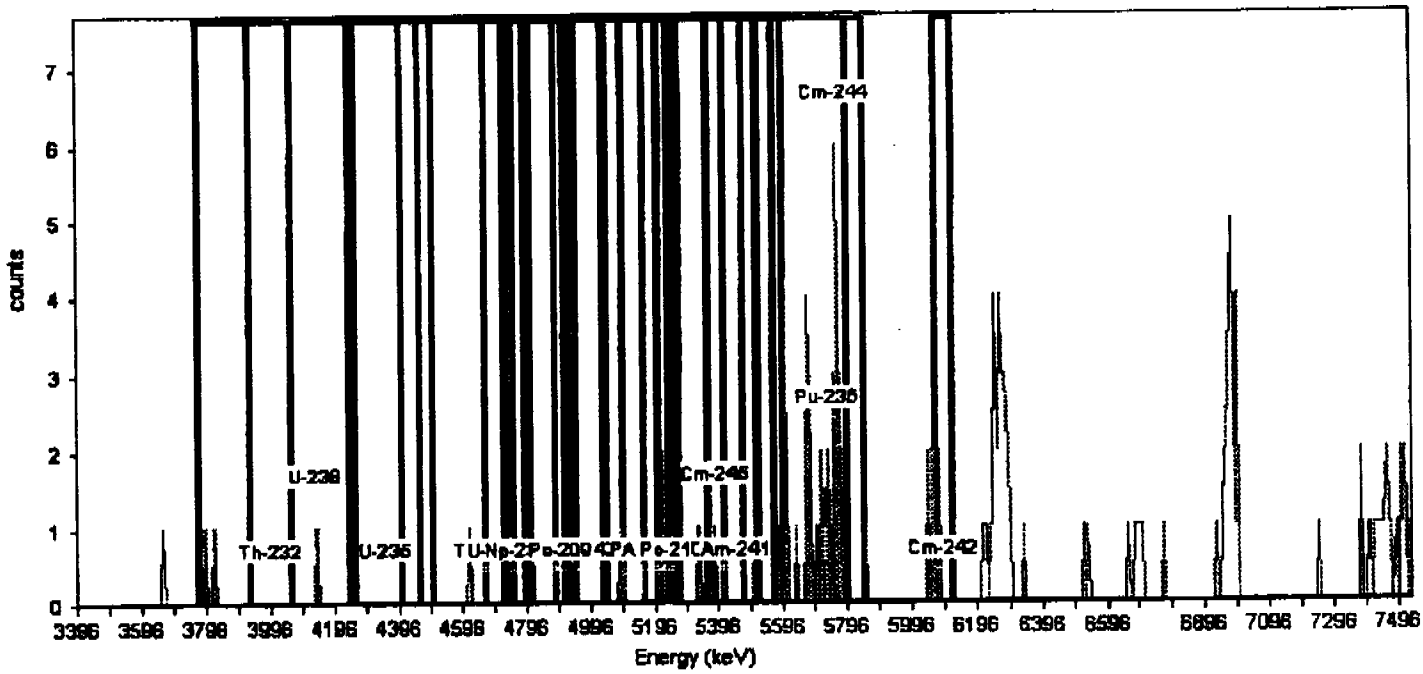
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV3 , SN: 41-158X5
Acquisition Start Date: 3/14/2005 8:25:10PM
Live Time: 960.00 min.
Real Time: 960.03 min.
Calibration Name: Jan2005_AV3
Calibration Date: 2/3/2005 2:52:23PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.16% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Nuclide Library: Background ROI Library
Total Background Counts: 133.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.083E-003	1.804E-003
U-238	4.14	3.93	4.24	1.00	1.042E-003	1.473E-003
U-235	4.36	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	1.00	1.042E-003	1.473E-003
U-234	4.70	4.50	4.80	1.00	1.042E-003	1.473E-003
Pu-242	4.88	4.67	4.93	1.00	1.042E-003	1.473E-003
Th-229	4.84	4.72	5.10	3.00	3.125E-003	2.083E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	2.00	2.083E-003	1.804E-003
Am-243	5.20	5.03	5.28	4.00	4.167E-003	2.329E-003
U-232	5.23	5.04	5.37	6.00	6.250E-003	2.756E-003
Th-228	5.41	5.16	5.47	5.00	5.208E-003	2.552E-003
Po-210	5.25	5.20	5.28	2.00	2.083E-003	1.804E-003
Pu-238	5.44	5.24	5.52	4.00	4.167E-003	2.329E-003
Am-241	5.45	5.27	5.57	4.00	4.167E-003	2.329E-003
Cm-245	5.39	5.36	5.41	2.00	2.083E-003	1.804E-003
Pu-236	5.74	5.52	5.80	35.00	3.646E-002	6.250E-003
Cm-244	5.76	5.60	5.85	34.00	3.542E-002	6.163E-003
Cm-242	6.10	6.07	6.13	4.00	4.167E-003	2.329E-003

SEVERN TRENT **STL**

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:25:07PM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV4
Comment:

Spectrum #1 Analysis #1

Batch

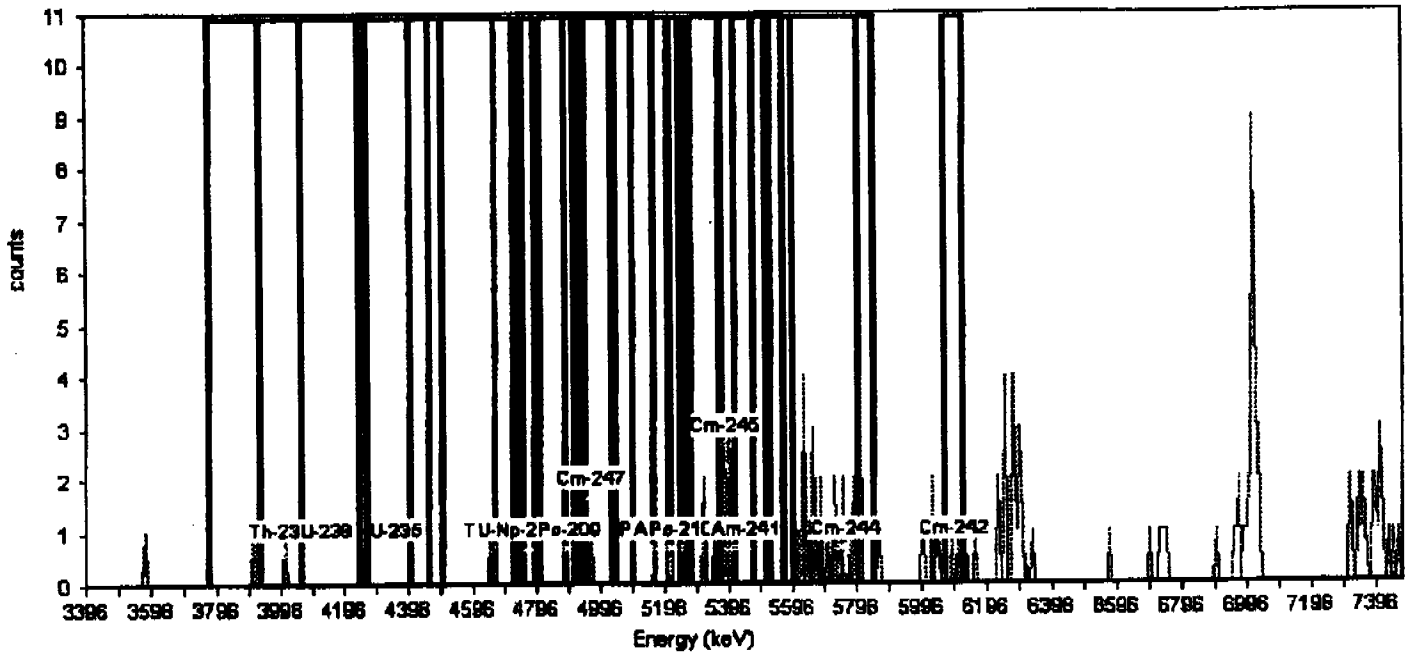
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV4 , SN: 41-172B5
Acquisition Start Date: 3/14/2005 8:25:13PM
Live Time: 960.00 min.
Real Time: 960.03 min.
Calibration Name: Jan2005_AV4
Calibration Date: 2/3/2005 2:52:29PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.05% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 137.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	4.00	4.167E-003	2.329E-003
U-238	4.14	3.93	4.24	1.00	1.042E-003	1.473E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	1.00	1.042E-003	1.473E-003
U-234	4.70	4.50	4.80	1.00	1.042E-003	1.473E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.473E-003
Th-229	4.84	4.72	5.10	1.00	1.042E-003	1.473E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	1.00	1.042E-003	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	2.00	2.083E-003	1.804E-003
Am-243	5.20	5.03	5.28	1.00	1.042E-003	1.473E-003
U-232	5.23	5.04	5.37	5.00	5.208E-003	2.552E-003
Th-228	5.41	5.16	5.47	14.00	1.458E-002	4.034E-003
Po-210	5.25	5.20	5.26	1.00	1.042E-003	1.473E-003
Pu-238	5.44	5.24	5.52	13.00	1.354E-002	3.898E-003
Am-241	5.45	5.27	5.57	13.00	1.354E-002	3.898E-003
Cm-245	5.39	5.36	5.41	9.00	9.375E-003	3.294E-003
Pu-236	5.74	5.52	5.80	26.00	2.708E-002	5.413E-003
Cm-244	5.76	5.60	5.85	30.00	3.125E-002	5.800E-003
Cm-242	6.10	6.07	6.13	2.00	2.083E-003	1.804E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:25:11PM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV5
Comment:

Spectrum #1 Analysis #1

Batch

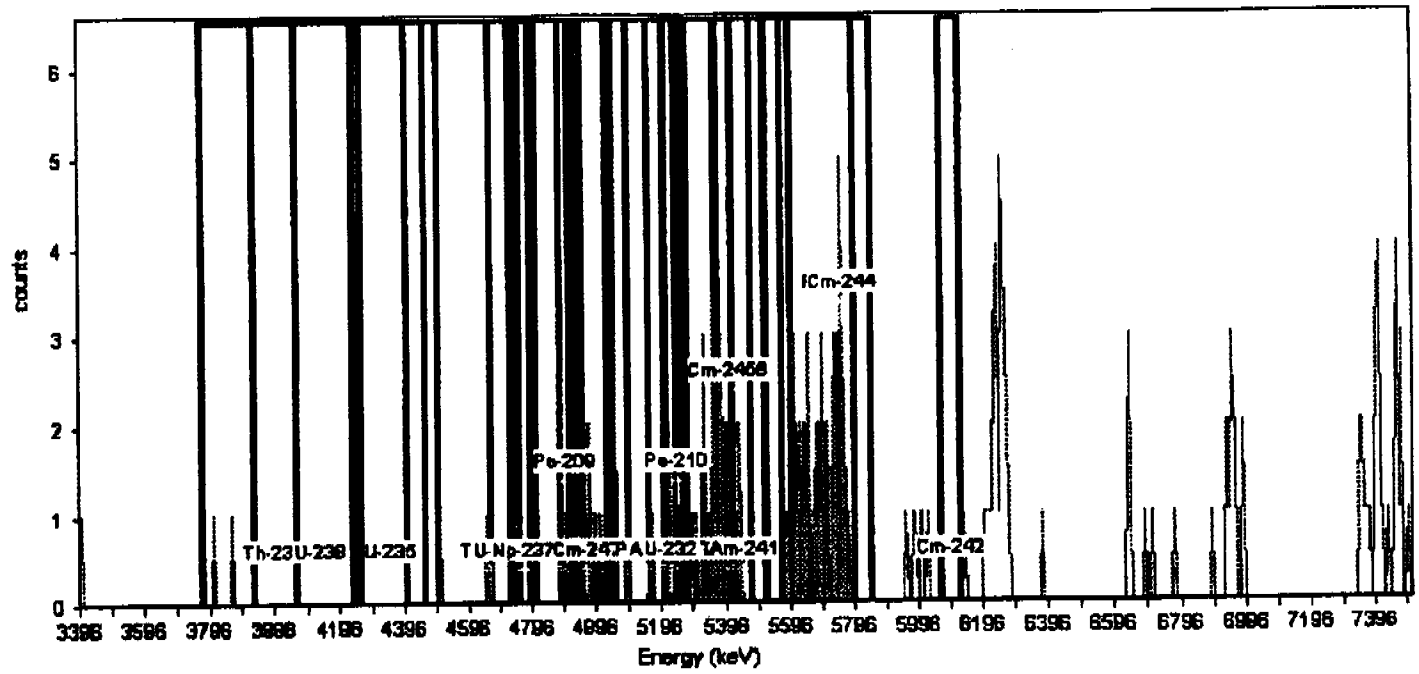
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV5 , SN: 41-158X7
Acquisition Start Date: 3/14/2005 8:25:14PM
Live Time: 960.00 min.
Real Time: 960.03 min.
Calibration Name: Feb2005_AV5
Calibration Date: 2/3/2005 12:17:32PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 29.56% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 176.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.083E-003	1.804E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.473E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	2.00	2.083E-003	1.804E-003
U-234	4.70	4.50	4.80	3.00	3.125E-003	2.083E-003
Pu-242	4.88	4.67	4.93	3.00	3.125E-003	2.083E-003
Th-229	4.84	4.72	5.10	13.00	1.354E-002	3.898E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	8.00	8.333E-003	3.125E-003
Po-209	4.90	4.88	4.91	2.00	2.083E-003	1.804E-003
Pu-239	5.15	4.95	5.21	11.00	1.146E-002	3.608E-003
Am-243	5.20	5.03	5.28	8.00	8.333E-003	3.125E-003
U-232	5.23	5.04	5.37	23.00	2.396E-002	5.103E-003
Th-228	5.41	5.16	5.47	30.00	3.125E-002	5.800E-003
Po-210	5.25	5.20	5.26	3.00	3.125E-003	2.083E-003
Pu-238	5.44	5.24	5.52	27.00	2.813E-002	5.512E-003
Am-241	5.45	5.27	5.57	26.00	2.708E-002	5.413E-003
Cm-245	5.39	5.36	5.41	14.00	1.458E-002	4.034E-003
Pu-236	5.74	5.52	5.80	47.00	4.896E-002	7.217E-003
Cm-244	5.76	5.60	5.85	45.00	4.688E-002	7.065E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.473E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:25:14PM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV6
Comment:

Spectrum #1 Analysis #1

Batch

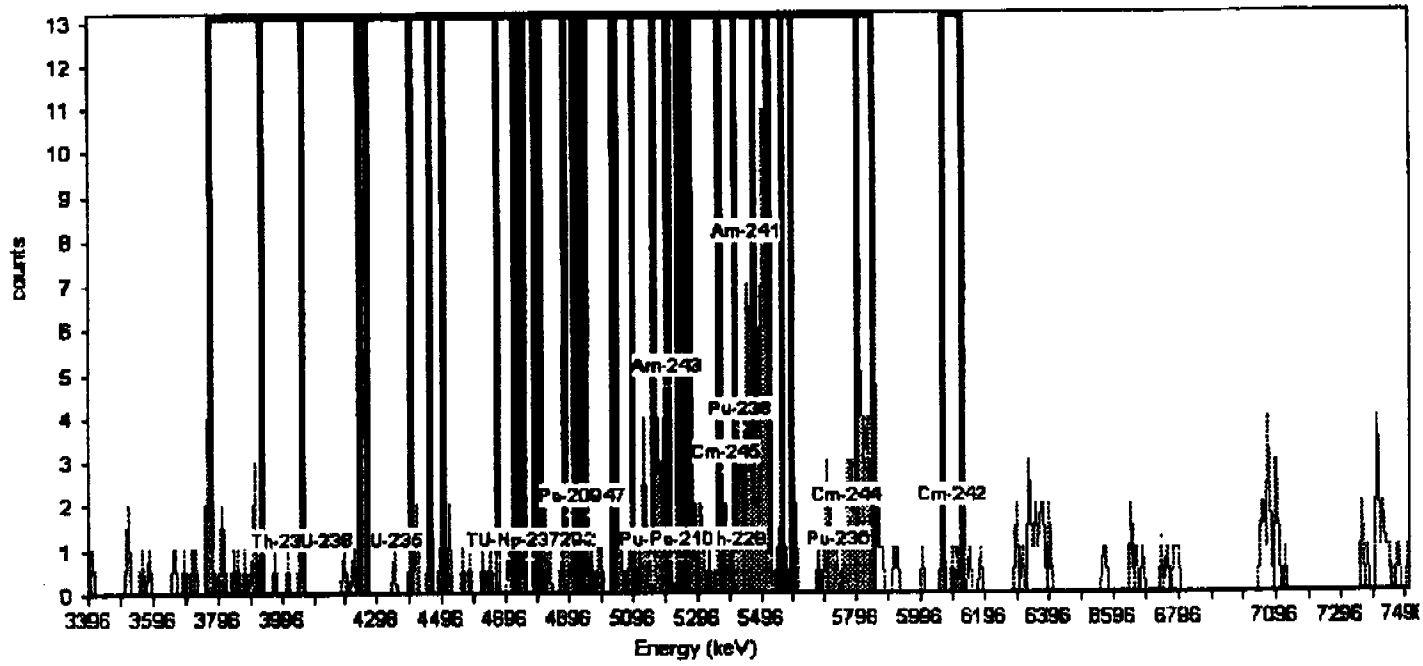
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV6 , SN:
Acquisition Start Date: 3/14/2005 8:25:15PM
Live Time: 960.00 min.
Real Time: 960.03 min.
Calibration Name: Feb2005_AV6
Calibration Date: 2/3/2005 12:17:39PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.96% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 321.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-230	4.67	4.40	4.73	11.00	1.146E-002	3.608E-003
U-234	4.70	4.50	4.80	9.00	9.375E-003	3.294E-003
Pu-242	4.88	4.67	4.93	10.00	1.042E-002	3.455E-003
Th-229	4.84	4.72	5.10	19.00	1.979E-002	4.658E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	7.00	7.292E-003	2.946E-003
Po-209	4.90	4.88	4.91	2.00	2.083E-003	1.804E-003
Pu-239	5.15	4.95	5.21	39.00	4.062E-002	6.588E-003
Am-243	5.20	5.03	5.28	38.00	3.958E-002	6.506E-003
U-232	5.23	5.04	5.37	48.00	5.000E-002	7.292E-003
Th-228	5.41	5.16	5.47	64.00	6.667E-002	8.398E-003
Po-210	5.25	5.20	5.26	6.00	6.250E-003	2.756E-003
Pu-238	5.44	5.24	5.52	77.00	8.021E-002	9.200E-003
Am-241	5.45	5.27	5.57	83.00	8.646E-002	9.547E-003
Cm-245	5.39	5.36	5.41	6.00	6.250E-003	2.756E-003
Pu-236	5.74	5.52	5.80	35.00	3.646E-002	6.250E-003
Cm-244	5.76	5.60	5.85	58.00	6.042E-002	8.001E-003
Cm-242	6.10	6.07	6.13	4.00	4.167E-003	2.329E-003
Th-232	3.99	3.77	4.06	15.00	1.563E-002	4.167E-003
U-238	4.14	3.93	4.24	6.00	6.250E-003	2.756E-003
U-235	4.36	4.26	4.46	5.00	5.208E-003	2.552E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:25:17PM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV7
Comment:

Spectrum #1 Analysis #1

Batch

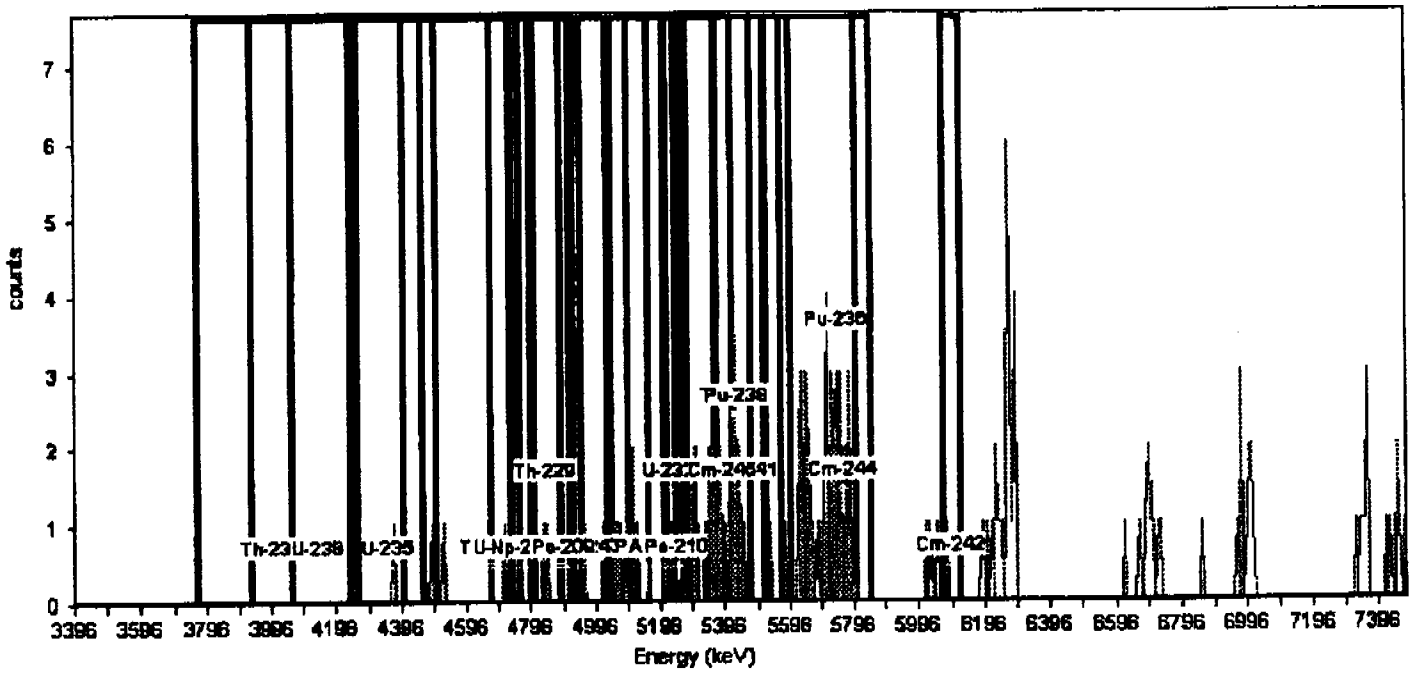
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV7 , SN: 41-158X6
Acquisition Start Date: 3/14/2005 8:24:41PM
Live Time: 960.00 min.
Real Time: 960.03 min.
Calibration Name: Feb2005_AV7
Calibration Date: 2/3/2005 12:17:49PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.12% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI, Library: Background ROI Library
Total Background Counts: 153.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.473E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.473E-003
U-235	4.35	4.26	4.46	1.00	1.042E-003	1.473E-003
Th-230	4.67	4.40	4.73	3.00	3.125E-003	2.083E-003
U-234	4.70	4.50	4.80	2.00	2.083E-003	1.804E-003
Pu-242	4.88	4.67	4.93	4.00	4.167E-003	2.329E-003
Th-229	4.84	4.72	5.10	12.00	1.250E-002	3.756E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	3.00	3.125E-003	2.083E-003
Po-209	4.90	4.88	4.91	1.00	1.042E-003	1.473E-003
Pu-239	5.15	4.95	5.21	13.00	1.354E-002	3.898E-003
Am-243	5.20	5.03	5.28	14.00	1.458E-002	4.034E-003
U-232	5.23	5.04	5.37	26.00	2.708E-002	5.413E-003
Th-228	5.41	5.16	5.47	34.00	3.542E-002	6.163E-003
Po-210	5.25	5.20	5.26	3.00	3.125E-003	2.083E-003
Pu-238	5.44	5.24	5.52	32.00	3.333E-002	5.984E-003
Am-241	5.45	5.27	5.57	32.00	3.333E-002	5.984E-003
Cm-245	5.39	5.36	5.41	10.00	1.042E-002	3.456E-003
Pu-236	5.74	5.52	5.80	42.00	4.375E-002	6.831E-003
Cm-244	5.76	5.60	5.85	40.00	4.167E-002	6.670E-003
Cm-242	6.10	6.07	6.13	1.00	1.042E-003	1.473E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:25:21PM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV8
Comment:

Spectrum #1 Analysis #1

Batch

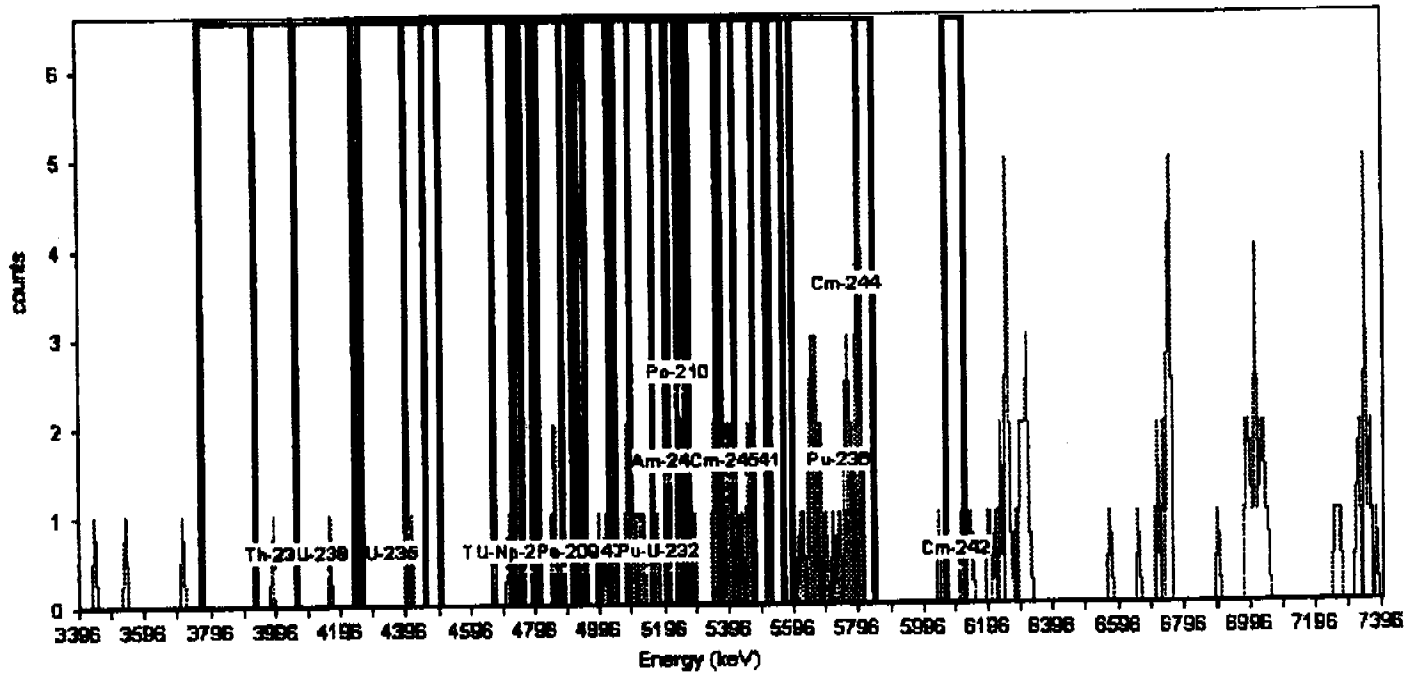
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV8 , SN: 41-158X1
Acquisition Start Date: 3/14/2005 8:24:43PM
Live Time: 960.00 min.
Real Time: 960.03 min.
Calibration Name: Feb2005_AV8
Calibration Date: 2/3/2005 12:17:54PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.99% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Library: Background ROI Library
Total Background Counts: 162.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.08	1.00	1.042E-003	1.473E-003
U-238	4.14	3.93	4.24	2.00	2.083E-003	1.804E-003
U-235	4.35	4.26	4.46	2.00	2.083E-003	1.804E-003
Th-230	4.67	4.40	4.73	3.00	3.125E-003	2.083E-003
U-234	4.70	4.50	4.80	1.00	1.042E-003	1.473E-003
Pu-242	4.88	4.67	4.93	3.00	3.125E-003	2.083E-003
Th-229	4.84	4.72	5.10	9.00	9.375E-003	3.294E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	4.00	4.167E-003	2.329E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	13.00	1.354E-002	3.898E-003
Am-243	5.20	5.03	5.28	14.00	1.458E-002	4.034E-003
U-232	5.23	5.04	5.37	20.00	2.083E-002	4.774E-003
Th-228	5.41	5.16	5.47	24.00	2.500E-002	5.208E-003
Po-210	5.25	5.20	5.26	3.00	3.125E-003	2.083E-003
Pu-238	5.44	5.24	5.52	23.00	2.396E-002	5.103E-003
Am-241	5.45	5.27	5.57	21.00	2.187E-002	4.886E-003
Cm-245	5.39	5.36	5.41	7.00	7.292E-003	2.946E-003
Pu-236	5.74	5.52	5.80	33.00	3.437E-002	6.074E-003
Cm-244	5.76	5.60	5.85	41.00	4.271E-002	6.751E-003
Cm-242	6.10	6.07	6.13	1.00	1.042E-003	1.473E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:00:22AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV9
Spectrum #1 Analysis #1
Comment:

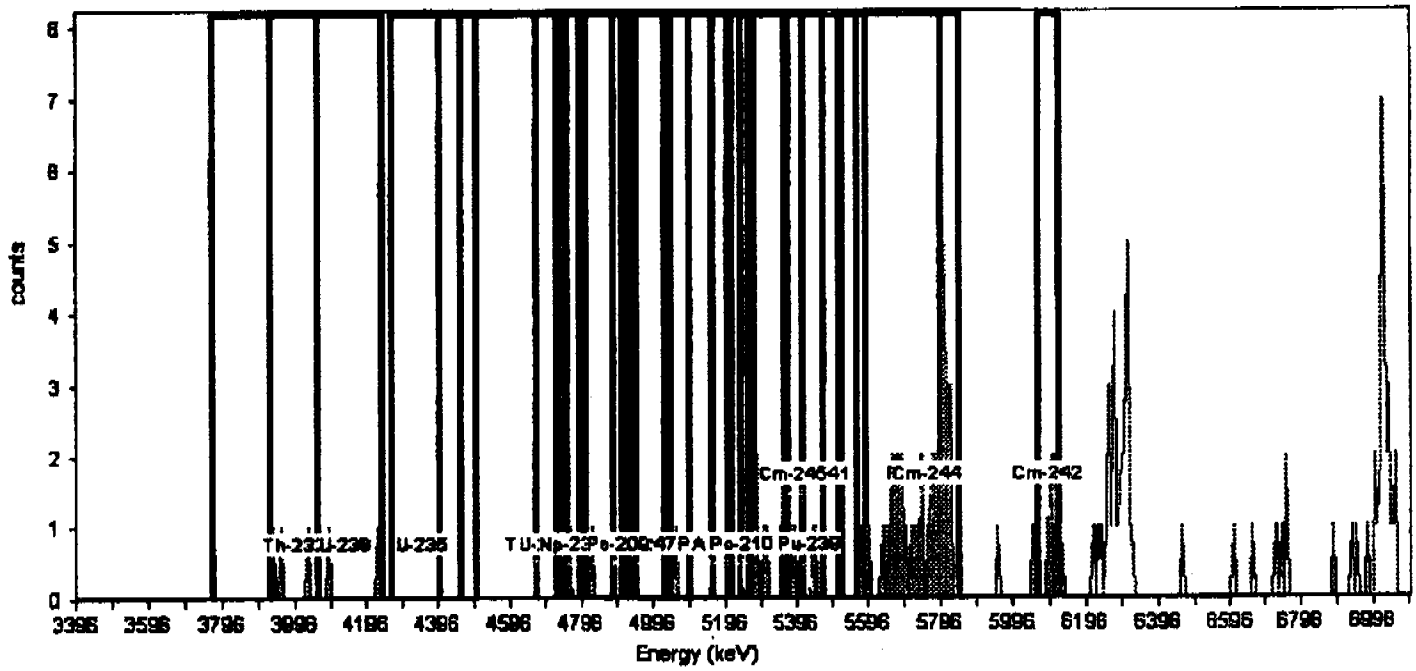
Batch

Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV9 , SN: 41-172R1
Acquisition Start Date: 3/14/2005 5:40:25PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Calibration Name: Feb2005_AV9
Calibration Date: 3/1/2005 4:04:32PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 27.09% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 132.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	3.00	3.125E-003	2.083E-003
U-238	4.14	3.93	4.24	5.00	5.208E-003	2.552E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.473E-003
U-234	4.70	4.50	4.80	1.00	1.042E-003	1.473E-003
Pu-242	4.88	4.67	4.93	2.00	2.083E-003	1.804E-003
Th-229	4.84	4.72	5.10	3.00	3.125E-003	2.083E-003
Np-237	4.77	4.75	4.79	1.00	1.042E-003	1.473E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	1.00	1.042E-003	1.473E-003
Am-243	5.20	5.03	5.28	2.00	2.083E-003	1.804E-003
U-232	5.23	5.04	5.37	8.00	8.333E-003	3.125E-003
Th-228	5.41	5.16	5.47	12.00	1.250E-002	3.758E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	12.00	1.250E-002	3.756E-003
Am-241	5.45	5.27	5.57	12.00	1.250E-002	3.756E-003
Cm-245	5.39	5.36	5.41	3.00	3.125E-003	2.083E-003
Pu-236	5.74	5.52	5.80	33.00	3.437E-002	6.074E-003
Cm-244	5.76	5.60	5.85	45.00	4.688E-002	7.065E-003
Cm-242	6.10	6.07	6.13	5.00	5.208E-003	2.552E-003

SEVERN TRENT **STL**

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:00:26AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV10
Comment:

Spectrum #1 Analysis #1

Batch

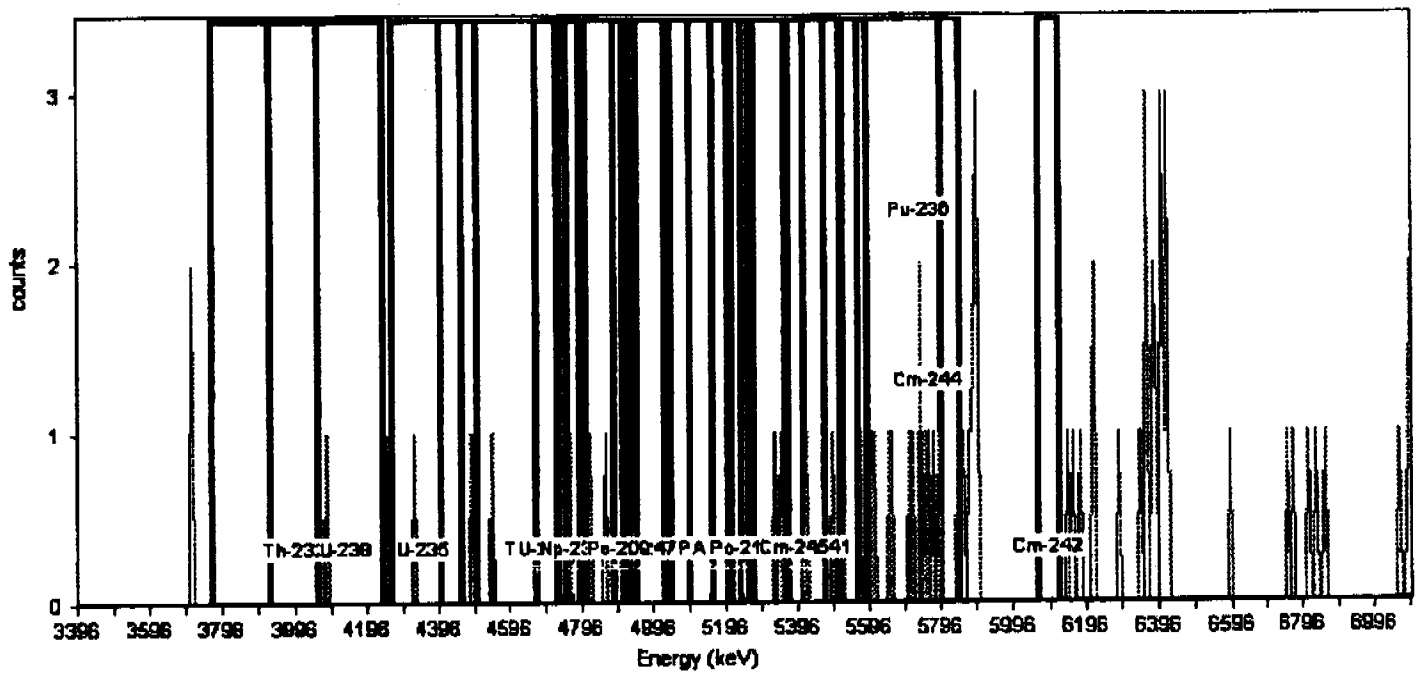
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV10 , SN: 41-172R3
Acquisition Start Date: 3/14/2005 5:39:41PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Calibration Name: Feb2005_AV10
Calibration Date: 3/1/2005 3:31:37PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.47% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 72.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.473E-003
U-238	4.14	3.93	4.24	1.00	1.042E-003	1.473E-003
U-235	4.35	4.26	4.46	1.00	1.042E-003	1.473E-003
Th-230	4.67	4.40	4.73	2.00	2.083E-003	1.804E-003
U-234	4.70	4.50	4.80	2.00	2.083E-003	1.804E-003
Pu-242	4.86	4.67	4.93	4.00	4.167E-003	2.329E-003
Th-229	4.84	4.72	5.10	4.00	4.167E-003	2.329E-003
Np-237	4.77	4.75	4.79	1.00	1.042E-003	1.473E-003
Cm-247	4.96	4.88	5.04	1.00	1.042E-003	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.473E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.473E-003
U-232	5.23	5.04	5.37	2.00	2.083E-003	1.804E-003
Th-228	5.41	5.16	5.47	3.00	3.125E-003	2.083E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	4.00	4.167E-003	2.329E-003
Am-241	5.45	5.27	5.57	5.00	5.208E-003	2.552E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.473E-003
Pu-236	5.74	5.52	5.80	15.00	1.563E-002	4.167E-003
Cm-244	5.76	5.60	5.85	15.00	1.563E-002	4.167E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.473E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:00:29AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV11
Comment:

Spectrum #1 Analysis #1

Batch

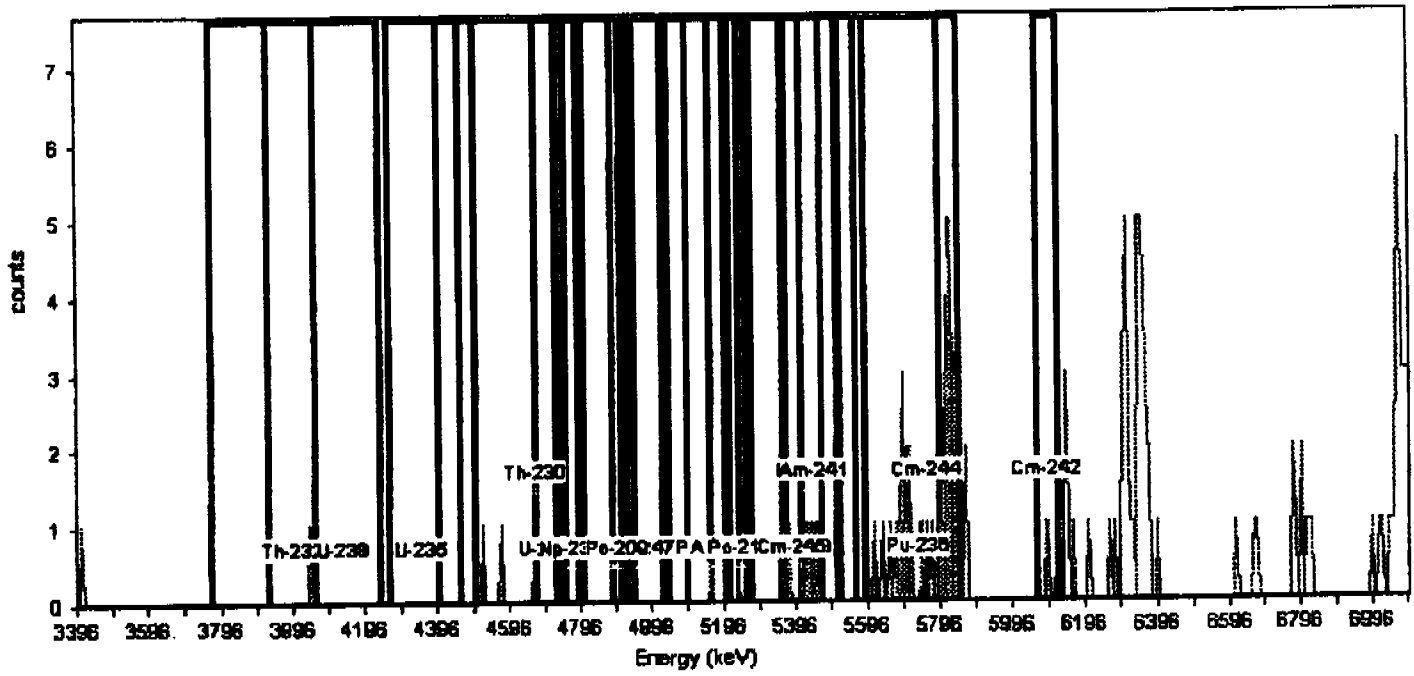
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV11 , SN: 41-172Q3
Acquisition Start Date: 3/14/2005 5:39:42PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Calibration Name: Feb2005_AV11
Calibration Date: 3/1/2005 3:31:46PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²

Efficiency: 26.81% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 138.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.042E-003	1.473E-003
U-238	4.14	3.93	4.24	1.00	1.042E-003	1.473E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	3.00	3.125E-003	2.083E-003
U-234	4.70	4.50	4.80	3.00	3.125E-003	2.083E-003
Pu-242	4.88	4.67	4.93	2.00	2.083E-003	1.804E-003
Th-229	4.84	4.72	5.10	1.00	1.042E-003	1.473E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	1.00	1.042E-003	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	1.00	1.042E-003	1.473E-003
Am-243	5.20	5.03	5.28	1.00	1.042E-003	1.473E-003
U-232	5.23	5.04	5.37	3.00	3.125E-003	2.083E-003
Th-228	5.41	5.16	5.47	9.00	9.375E-003	3.294E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	8.00	8.333E-003	3.125E-003
Am-241	5.45	5.27	5.57	8.00	8.333E-003	3.125E-003
Cm-245	5.39	5.36	5.41	2.00	2.083E-003	1.804E-003
Pu-236	5.74	5.52	5.80	17.00	1.771E-002	4.419E-003
Cm-244	5.76	5.60	5.85	39.00	4.062E-002	6.588E-003
Cm-242	6.10	6.07	6.13	2.00	2.083E-003	1.804E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:00:32AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV12
Comment:

Spectrum #1 Analysis #1

Batch

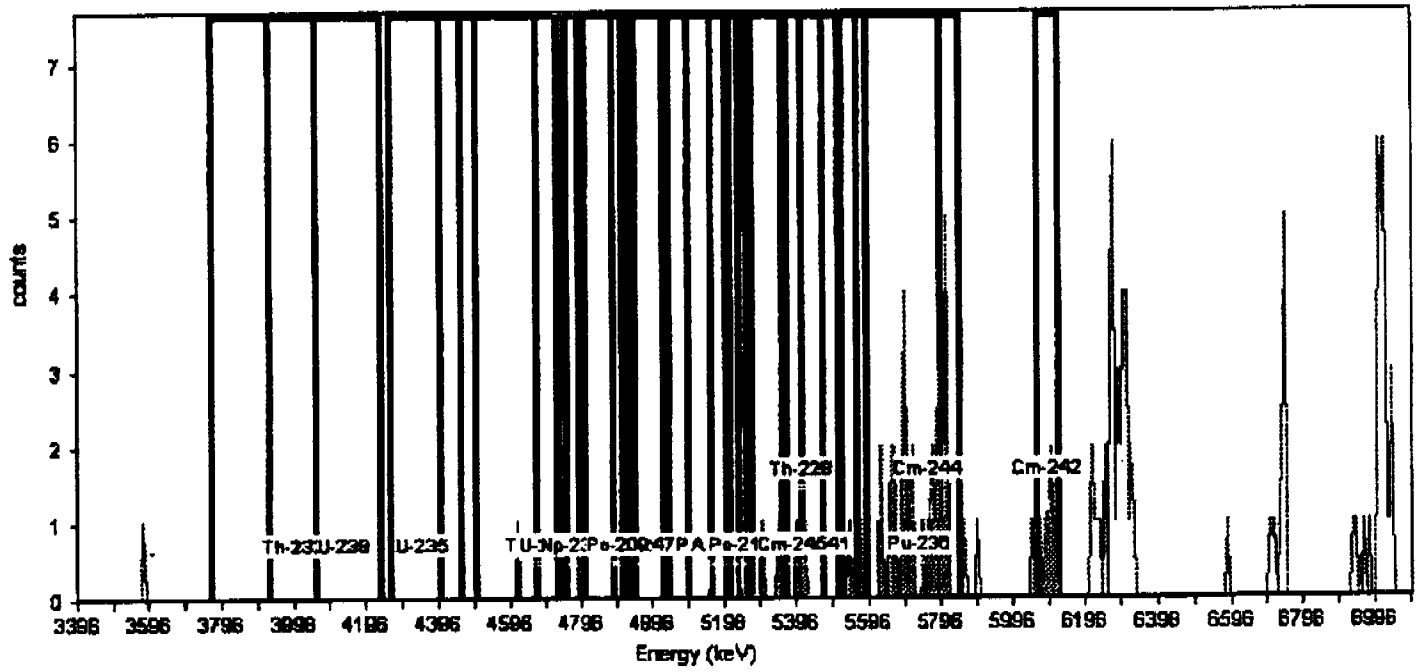
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV12 , SN: 41-172Q2
Acquisition Start Date: 3/14/2005 5:39:44PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Calibration Name: Feb2005_AV12
Calibration Date: 3/1/2005 3:31:55PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.96% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 136.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.473E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.473E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	1.00	1.042E-003	1.473E-003
U-234	4.70	4.60	4.80	2.00	2.083E-003	1.804E-003
Pu-242	4.86	4.67	4.93	1.00	1.042E-003	1.473E-003
Th-229	4.84	4.72	5.10	1.00	1.042E-003	1.473E-003
Np-237	4.77	4.75	4.79	1.00	1.042E-003	1.473E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.473E-003
Am-243	5.20	5.03	5.28	2.00	2.083E-003	1.804E-003
U-232	5.23	5.04	5.37	4.00	4.167E-003	2.329E-003
Th-228	5.41	5.16	5.47	7.00	7.292E-003	2.946E-003
Po-210	5.25	5.20	5.28	1.00	1.042E-003	1.473E-003
Pu-238	5.44	5.24	5.52	7.00	7.292E-003	2.946E-003
Am-241	5.45	5.27	5.57	7.00	7.292E-003	2.946E-003
Cm-245	5.39	5.36	5.41	2.00	2.083E-003	1.804E-003
Pu-236	5.74	5.52	5.80	29.00	3.021E-002	5.705E-003
Cm-244	5.76	5.60	5.85	36.00	3.750E-002	6.336E-003
Cm-242	6.10	6.07	6.13	7.00	7.292E-003	2.946E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:00:36AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV13
Comment:

Spectrum #1 Analysis #1

Batch

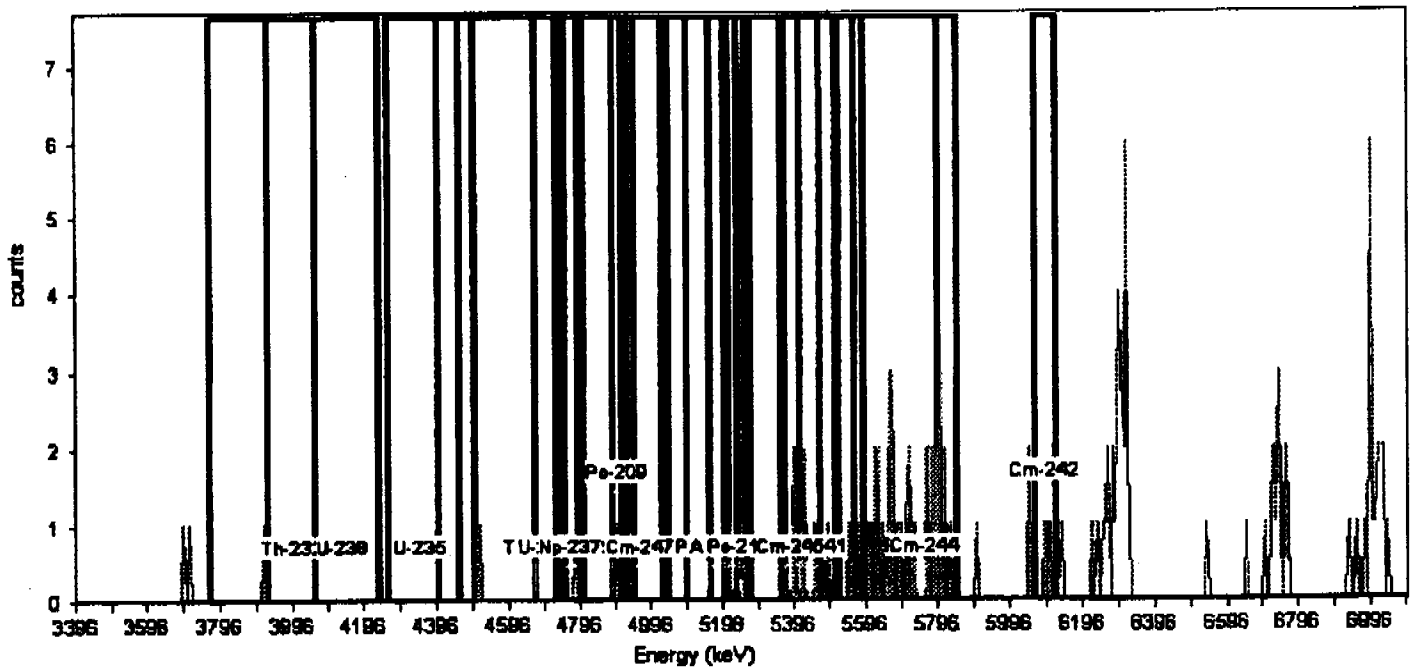
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV13 , SN: 41-172Q1
Acquisition Start Date: 3/14/2005 5:39:46PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Calibration Name: Feb2005_AV13
Calibration Date: 3/1/2005 6:28:50PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.08% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 120.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.042E-003	1.473E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.473E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	2.00	2.083E-003	1.804E-003
U-234	4.70	4.50	4.80	3.00	3.125E-003	2.083E-003
Pu-242	4.88	4.67	4.93	2.00	2.083E-003	1.804E-003
Th-229	4.84	4.72	5.10	2.00	2.083E-003	1.804E-003
Np-237	4.77	4.75	4.79	1.00	1.042E-003	1.473E-003
Cm-247	4.96	4.88	5.04	1.00	1.042E-003	1.473E-003
Po-209	4.90	4.88	4.91	1.00	1.042E-003	1.473E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.473E-003
Am-243	5.20	5.03	5.28	2.00	2.083E-003	1.804E-003
U-232	5.23	5.04	5.37	3.00	3.125E-003	2.083E-003
Th-228	5.41	5.16	5.47	11.00	1.146E-002	3.608E-003
Po-210	5.25	5.20	5.26	2.00	2.083E-003	1.804E-003
Pu-238	5.44	5.24	5.52	11.00	1.146E-002	3.608E-003
Am-241	5.45	5.27	5.57	12.00	1.250E-002	3.756E-003
Cm-245	5.39	5.36	5.41	5.00	5.208E-003	2.552E-003
Pu-236	5.74	5.52	5.80	31.00	3.229E-002	5.893E-003
Cm-244	5.76	5.60	5.85	34.00	3.542E-002	6.163E-003
Cm-242	6.10	6.07	6.13	3.00	3.125E-003	2.083E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:01:43AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV14
Comment:

Spectrum #1 Analysis #1

Batch

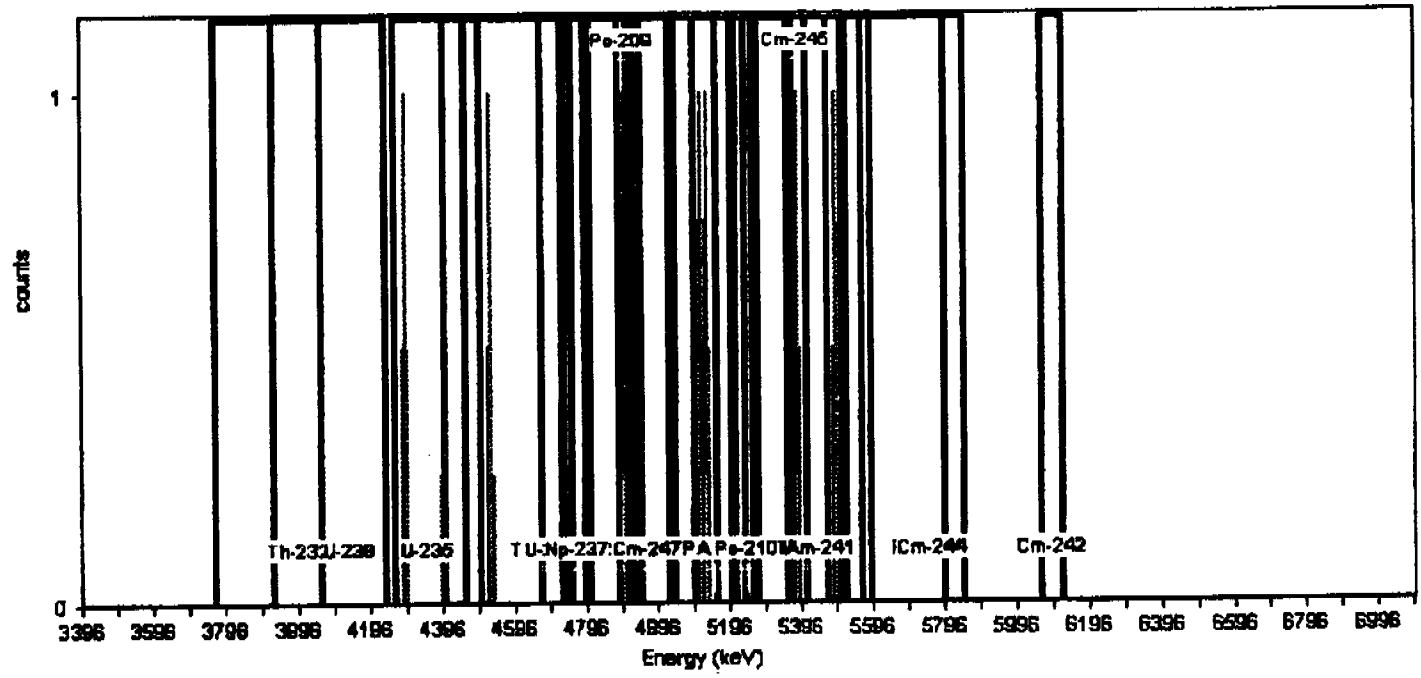
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV14 , SN: 41-172C4
Acquisition Start Date: 3/14/2005 5:41:18PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Calibration Name: Feb2005_AV14
Calibration Date: 3/1/2005 6:28:56PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 4.54% +/- 0.11% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 8.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.473E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.473E-003
U-235	4.35	4.26	4.46	2.00	2.083E-003	1.804E-003
Th-230	4.67	4.40	4.73	2.00	2.083E-003	1.804E-003
U-234	4.70	4.50	4.80	1.00	1.042E-003	1.473E-003
Pu-242	4.88	4.67	4.93	1.00	1.042E-003	1.473E-003
Th-229	4.84	4.72	5.10	1.00	1.042E-003	1.473E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	1.00	1.042E-003	1.473E-003
Po-209	4.90	4.88	4.91	1.00	1.042E-003	1.473E-003
Pu-239	5.15	4.95	5.21	2.00	2.083E-003	1.804E-003
Am-243	5.20	5.03	5.28	2.00	2.083E-003	1.804E-003
U-232	5.23	5.04	5.37	2.00	2.083E-003	1.804E-003
Th-228	5.41	5.16	5.47	1.00	1.042E-003	1.473E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	2.00	2.083E-003	1.804E-003
Am-241	5.45	5.27	5.57	2.00	2.083E-003	1.804E-003
Cm-245	5.39	5.36	5.41	1.00	1.042E-003	1.473E-003
Pu-236	5.74	5.52	5.80	0.00	0.000E+000	1.473E-003
Cm-244	5.76	5.60	5.85	0.00	0.000E+000	1.473E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.473E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:00:39AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV15
Comment:

Spectrum #1 Analysis #1

Batch

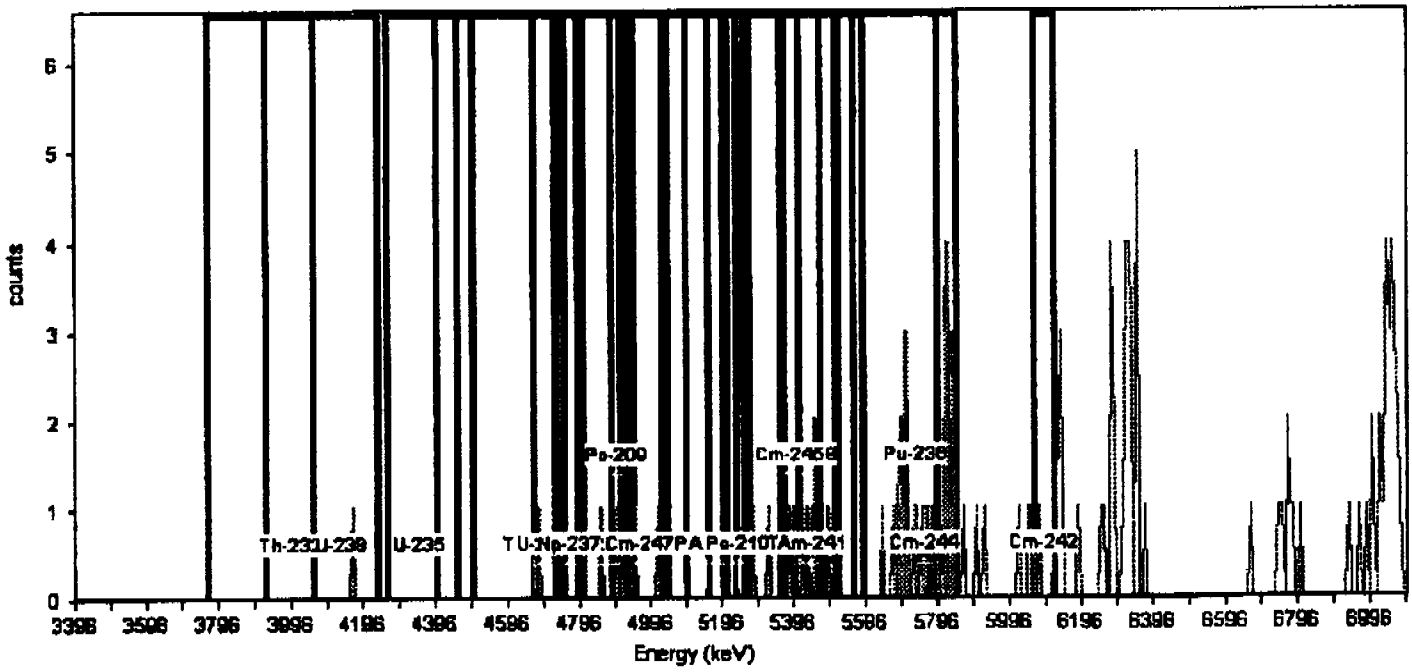
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV15 , SN: 41-172C5
Acquisition Start Date: 3/14/2005 5:39:48PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Calibration Name: Feb2005_AV15
Calibration Date: 3/1/2005 6:29:01PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.04% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 128.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.473E-003
U-238	4.14	3.93	4.24	1.00	1.042E-003	1.473E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	1.00	1.042E-003	1.473E-003
U-234	4.70	4.50	4.80	2.00	2.083E-003	1.804E-003
Pu-242	4.88	4.67	4.93	6.00	6.250E-003	2.756E-003
Th-229	4.84	4.72	5.10	7.00	7.292E-003	2.946E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	5.00	5.208E-003	2.552E-003
Po-209	4.90	4.88	4.91	3.00	3.125E-003	2.083E-003
Pu-239	5.15	4.95	5.21	2.00	2.083E-003	1.804E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.473E-003
U-232	5.23	5.04	5.37	2.00	2.083E-003	1.804E-003
Th-228	5.41	5.16	5.47	8.00	8.333E-003	3.125E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	9.00	9.375E-003	3.294E-003
Am-241	5.45	5.27	5.57	9.00	9.375E-003	3.294E-003
Cm-245	5.39	5.36	5.41	2.00	2.083E-003	1.804E-003
Pu-236	5.74	5.52	5.80	16.00	1.667E-002	4.295E-003
Cm-244	5.76	5.60	5.85	29.00	3.021E-002	5.705E-003
Cm-242	6.10	6.07	6.13	3.00	3.125E-003	2.083E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:00:42AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV16
Comment:

Spectrum #1 Analysis #1

Batch

Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV16 , SN: 41-172Q7
Acquisition Start Date: 3/14/2005 5:39:49PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Calibration Name: Feb2005_AV16
Calibration Date: 3/1/2005 6:29:05PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 29.07% +/- 0.29% TPU(2 sigma)

General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND_ROI Library: Background ROI Library
Total Background Counts: 119.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.473E-003
U-238	4.14	3.93	4.24	1.00	1.042E-003	1.473E-003
U-235	4.35	4.26	4.46	1.00	1.042E-003	1.473E-003
Th-230	4.67	4.40	4.73	2.00	2.083E-003	1.804E-003
U-234	4.70	4.50	4.80	1.00	1.042E-003	1.473E-003
Pu-242	4.88	4.67	4.93	3.00	3.125E-003	2.083E-003
Th-229	4.84	4.72	5.10	3.00	3.125E-003	2.083E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	2.00	2.083E-003	1.804E-003
Po-209	4.90	4.88	4.91	1.00	1.042E-003	1.473E-003
Pu-239	5.15	4.95	5.21	3.00	3.125E-003	2.083E-003
Am-243	5.20	5.03	5.28	4.00	4.167E-003	2.329E-003
U-232	5.23	5.04	5.37	7.00	7.292E-003	2.946E-003
Th-228	5.41	5.16	5.47	13.00	1.354E-002	3.898E-003
Po-210	5.25	5.20	5.26	1.00	1.042E-003	1.473E-003
Pu-238	5.44	5.24	5.52	10.00	1.042E-002	3.455E-003
Am-241	5.45	5.27	5.57	10.00	1.042E-002	3.455E-003
Cm-245	5.39	5.36	5.41	6.00	6.250E-003	2.756E-003
Pu-236	5.74	5.52	5.80	12.00	1.250E-002	3.756E-003
Cm-244	5.76	5.60	5.85	26.00	2.708E-002	5.413E-003
Cm-242	6.10	6.07	6.13	4.00	4.167E-003	2.329E-003

SEVERN TRENT **STL**

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:00:46AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV17
Comment:

Spectrum #1 Analysis #1

Batch

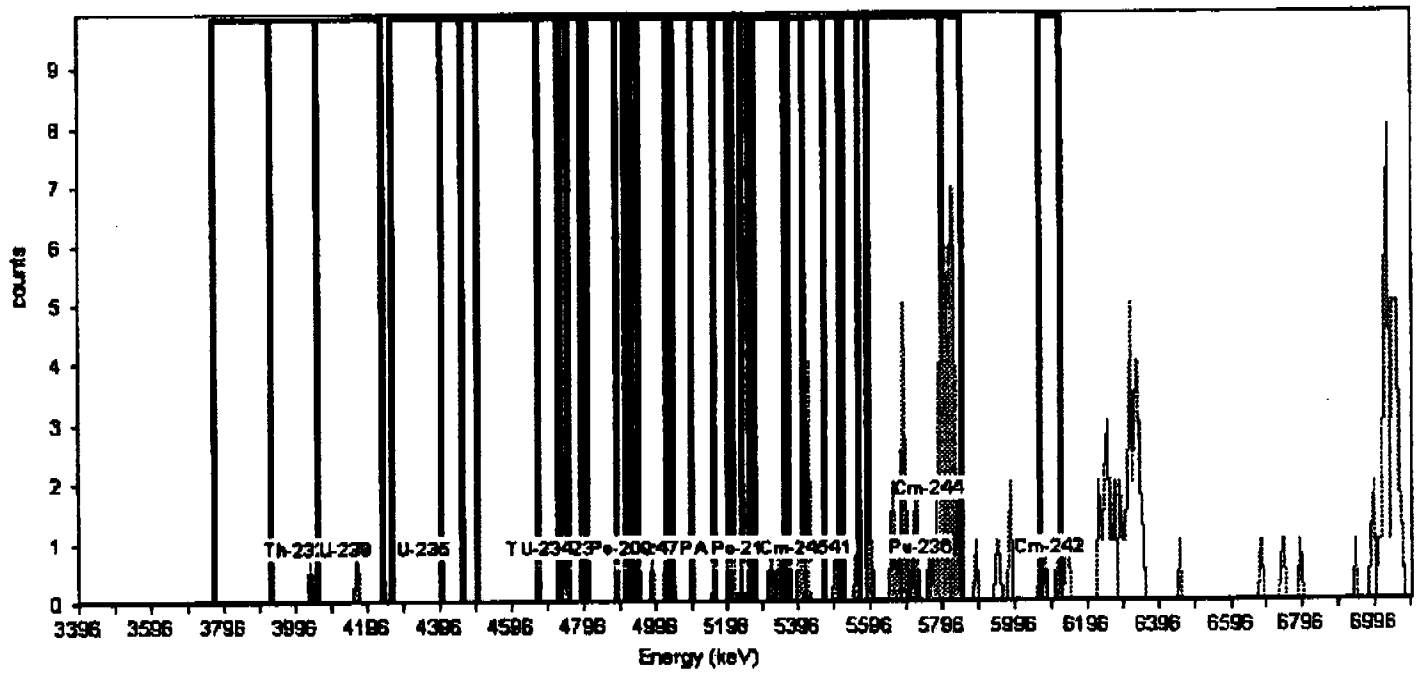
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV17 , SN: 41-172Q4
Acquisition Start Date: 3/14/2005 5:39:51PM
Live Time: 960.00 min.
Real Time: 960.03 min.
Calibration Name: Feb2005_AV17
Calibration Date: 2/28/2005 11:59:45AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.43% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 164.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Pu-242	4.88	4.67	4.93	1.00	1.042E-003	1.473E-003
Th-229	4.84	4.72	5.10	3.00	3.125E-003	2.083E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	2.00	2.083E-003	1.804E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	3.00	3.125E-003	2.083E-003
Am-243	5.20	5.03	5.28	2.00	2.083E-003	1.804E-003
U-232	5.23	5.04	5.37	6.00	6.250E-003	2.756E-003
Th-228	5.41	5.16	5.47	12.00	1.250E-002	3.756E-003
Po-210	5.25	5.20	5.26	2.00	2.083E-003	1.804E-003
Pu-238	5.44	5.24	5.52	11.00	1.146E-002	3.608E-003
Am-241	5.45	5.27	5.57	12.00	1.250E-002	3.756E-003
Cm-245	5.39	5.36	5.41	3.00	3.125E-003	2.083E-003
Pu-236	5.74	5.52	5.80	30.00	3.125E-002	5.800E-003
Cm-244	5.76	5.60	5.85	55.00	5.729E-002	7.795E-003
Cm-242	6.10	6.07	6.13	3.00	3.125E-003	2.083E-003
Th-232	3.99	3.77	4.06	1.00	1.042E-003	1.473E-003
U-238	4.14	3.93	4.24	2.00	2.083E-003	1.804E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.473E-003
U-234	4.70	4.50	4.80	1.00	1.042E-003	1.473E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:00:49AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV18
Comment:

Spectrum #1 Analysis #1

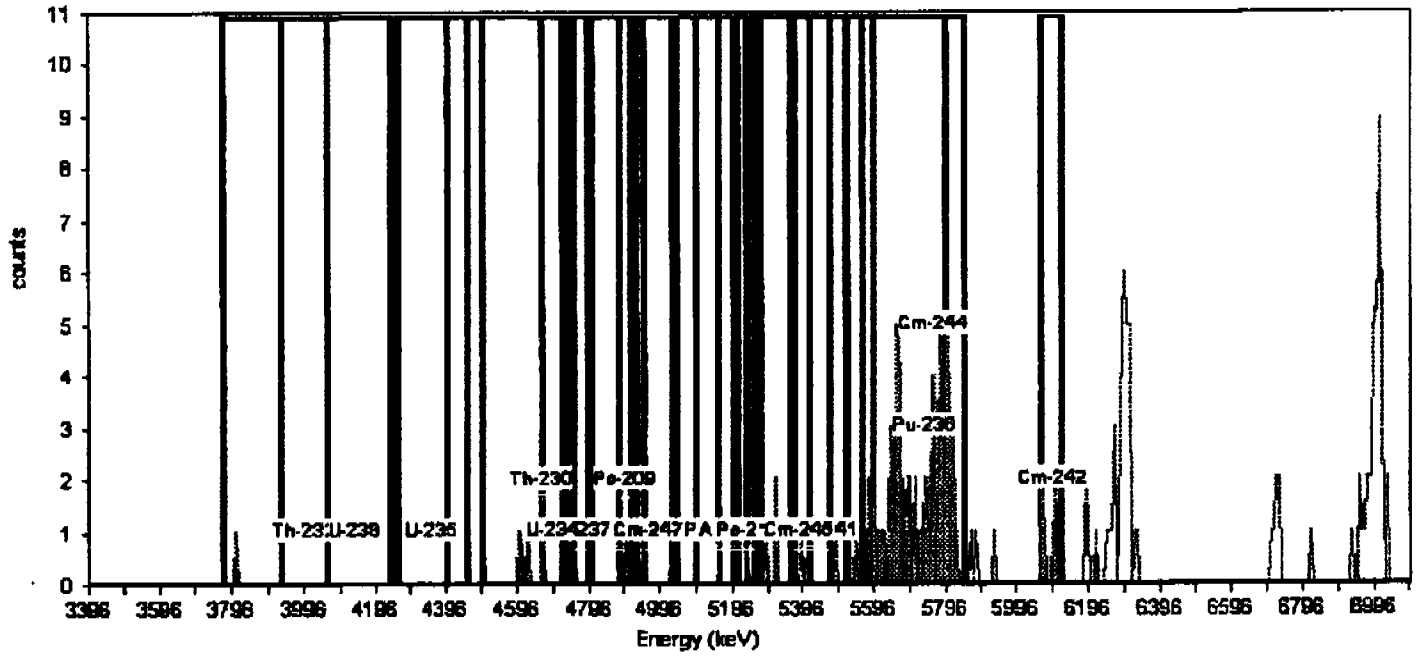
Batch

Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV18 , SN: 41-172C6
Acquisition Start Date: 3/14/2005 5:39:53PM
Live Time: 960.00 min.
Real Time: 960.03 min.
Calibration Name: Feb2005_AV18
Calibration Date: 2/28/2005 11:59:54AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.25% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 167.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Pu-242	4.88	4.67	4.93	2.00	2.083E-003	1.804E-003
Th-229	4.84	4.72	5.10	2.00	2.083E-003	1.804E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	2.00	2.083E-003	1.804E-003
Po-209	4.90	4.86	4.91	1.00	1.042E-003	1.473E-003
Pu-239	5.15	4.95	5.21	1.00	1.042E-003	1.473E-003
Am-243	5.20	5.03	5.28	1.00	1.042E-003	1.473E-003
U-232	5.23	5.04	5.37	3.00	3.125E-003	2.083E-003
Th-228	5.41	5.16	5.47	4.00	4.167E-003	2.329E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	5.00	5.208E-003	2.552E-003
Am-241	5.45	5.27	5.57	6.00	6.250E-003	2.756E-003
Cm-245	5.39	5.36	5.41	1.00	1.042E-003	1.473E-003
Pu-236	5.74	5.52	5.80	56.00	5.833E-002	7.864E-003
Cm-244	5.76	5.60	5.85	64.00	6.667E-002	8.398E-003
Cm-242	6.10	6.07	6.13	6.00	6.250E-003	2.756E-003
Th-232	3.99	3.77	4.06	1.00	1.042E-003	1.473E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.473E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	3.00	3.125E-003	2.083E-003
U-234	4.70	4.50	4.80	3.00	3.125E-003	2.083E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:00:52AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV19
Comment:

Spectrum #1 Analysis #1

Batch

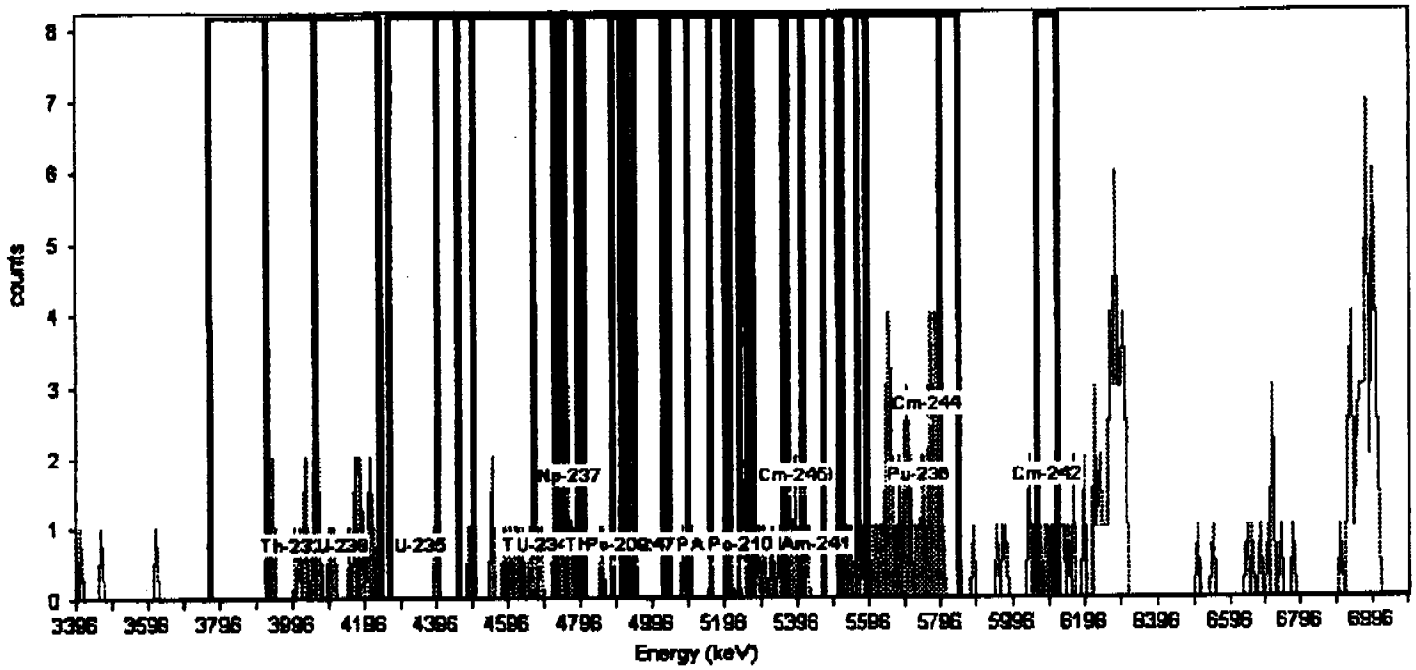
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV19 , SN: 41-172Q6
Acquisition Start Date: 3/14/2005 5:39:54PM
Live Time: 960.00 min.
Real Time: 960.03 min.
Calibration Name: FeB2005_AV19
Calibration Date: 2/28/2005 12:00:03PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 29.55% +/- 0.31% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 223.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	7.00	7.292E-003	2.946E-003
U-238	4.14	3.93	4.24	23.00	2.396E-002	5.103E-003
U-235	4.35	4.26	4.46	1.00	1.042E-003	1.473E-003
Th-230	4.67	4.40	4.73	14.00	1.458E-002	4.034E-003
U-234	4.70	4.50	4.80	20.00	2.083E-002	4.774E-003
Pu-242	4.88	4.67	4.93	13.00	1.354E-002	3.898E-003
Th-229	4.84	4.72	5.10	11.00	1.146E-002	3.608E-003
Np-237	4.77	4.75	4.79	5.00	5.208E-003	2.552E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	3.00	3.125E-003	2.083E-003
Am-243	5.20	5.03	5.28	5.00	5.208E-003	2.552E-003
U-232	5.23	5.04	5.37	9.00	9.375E-003	3.294E-003
Th-228	5.41	5.16	5.47	12.00	1.250E-002	3.756E-003
Po-210	5.25	5.20	5.26	2.00	2.083E-003	1.804E-003
Pu-238	5.44	5.24	5.52	11.00	1.146E-002	3.608E-003
Am-241	5.46	5.27	5.57	14.00	1.458E-002	4.034E-003
Cm-245	5.39	5.36	5.41	5.00	5.208E-003	2.552E-003
Pu-236	5.74	5.52	5.80	52.00	5.417E-002	7.583E-003
Cm-244	5.76	5.60	5.85	48.00	5.000E-002	7.292E-003
Cm-242	6.10	6.07	6.13	4.00	4.167E-003	2.329E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:00:56AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV20
Spectrum #1 Analysis #1
Comment:

Batch

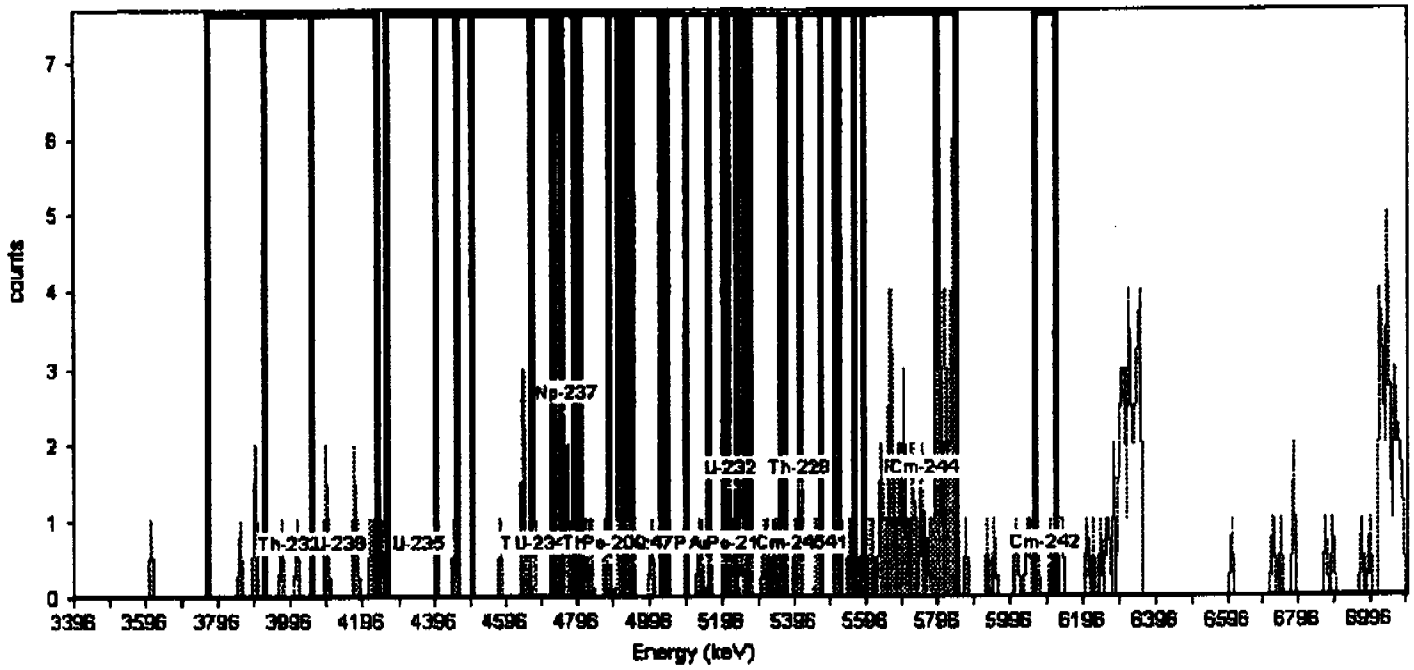
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV20 , SN: 41-172R2
Acquisition Start Date: 3/14/2005 5:39:56PM
Live Time: 960.00 min.
Real Time: 960.03 min.
Calibration Name: FEB2005_AV20
Calibration Date: 3/3/2005 9:04:28PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.36% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND_ROI, Library: Background ROI Library
Total Background Counts: 180.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	5.00	5.208E-003	2.552E-003
U-238	4.14	3.93	4.24	10.00	1.042E-002	3.455E-003
U-235	4.35	4.26	4.46	1.00	1.042E-003	1.473E-003
Th-230	4.67	4.40	4.73	7.00	7.292E-003	2.946E-003
U-234	4.70	4.50	4.80	8.00	8.333E-003	3.125E-003
Pu-242	4.88	4.67	4.93	10.00	1.042E-002	3.455E-003
Th-229	4.84	4.72	5.10	11.00	1.146E-002	3.606E-003
Np-237	4.77	4.75	4.79	2.00	2.083E-003	1.804E-003
Cm-247	4.96	4.88	5.04	6.00	6.250E-003	2.756E-003
Po-209	4.90	4.88	4.91	3.00	3.125E-003	2.083E-003
Pu-239	5.15	4.95	5.21	3.00	3.125E-003	2.083E-003
Am-243	5.20	5.03	5.28	6.00	6.250E-003	2.756E-003
U-232	5.23	5.04	5.37	10.00	1.042E-002	3.455E-003
Th-228	5.41	5.16	5.47	13.00	1.354E-002	3.898E-003
Po-210	5.25	5.20	5.26	3.00	3.125E-003	2.083E-003
Pu-238	5.44	5.24	5.52	14.00	1.458E-002	4.034E-003
Am-241	5.45	5.27	5.57	13.00	1.354E-002	3.898E-003
Cm-245	5.39	5.36	5.41	4.00	4.167E-003	2.329E-003
Pu-236	5.74	5.52	5.80	34.00	3.542E-002	6.163E-003
Cm-244	5.76	5.60	5.85	53.00	5.521E-002	7.655E-003
Cm-242	6.10	6.07	6.13	2.00	2.083E-003	1.804E-003

SEVERN TRENT **STL**

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:00:59AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV21
Spectrum #1 Analysis #1
Comment:

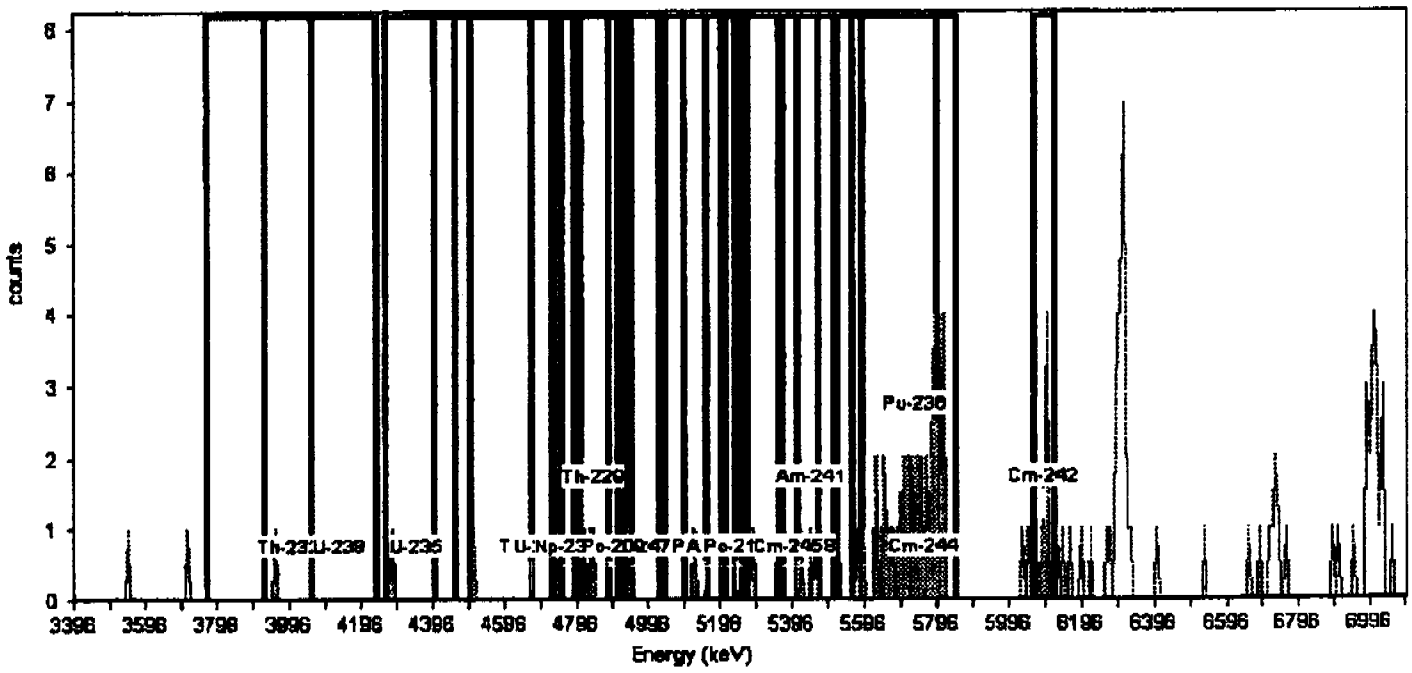
Batch

Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV21 , SN: 41-172C7
Acquisition Start Date: 3/14/2005 5:39:57PM
Live Time: 960.00 min.
Real Time: 960.03 min.
Calibration Name: Feb2005_AV21
Calibration Date: 2/28/2005 1:56:09PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.09% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI, Library: Background ROI Library
Total Background Counts: 135.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.042E-003	1.473E-003
U-238	4.14	3.93	4.24	1.00	1.042E-003	1.473E-003
U-235	4.35	4.26	4.46	1.00	1.042E-003	1.473E-003
Th-230	4.67	4.40	4.73	1.00	1.042E-003	1.473E-003
U-234	4.70	4.50	4.80	1.00	1.042E-003	1.473E-003
Pu-242	4.88	4.67	4.93	4.00	4.167E-003	2.329E-003
Th-229	4.84	4.72	5.10	5.00	5.208E-003	2.552E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	1.00	1.042E-003	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	1.00	1.042E-003	1.473E-003
Am-243	5.20	5.03	5.28	1.00	1.042E-003	1.473E-003
U-232	5.23	5.04	5.37	3.00	3.125E-003	2.083E-003
Th-228	5.41	5.16	5.47	5.00	5.208E-003	2.552E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	5.00	5.208E-003	2.552E-003
Am-241	5.45	5.27	5.57	6.00	6.250E-003	2.756E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.473E-003
Pu-236	5.74	5.52	5.80	40.00	4.167E-002	6.670E-003
Cm-244	5.76	5.60	5.85	47.00	4.896E-002	7.217E-003
Cm-242	6.10	6.07	6.13	7.00	7.292E-003	2.946E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:01:02AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV22 Spectrum #1 Analysis #1
Comment:

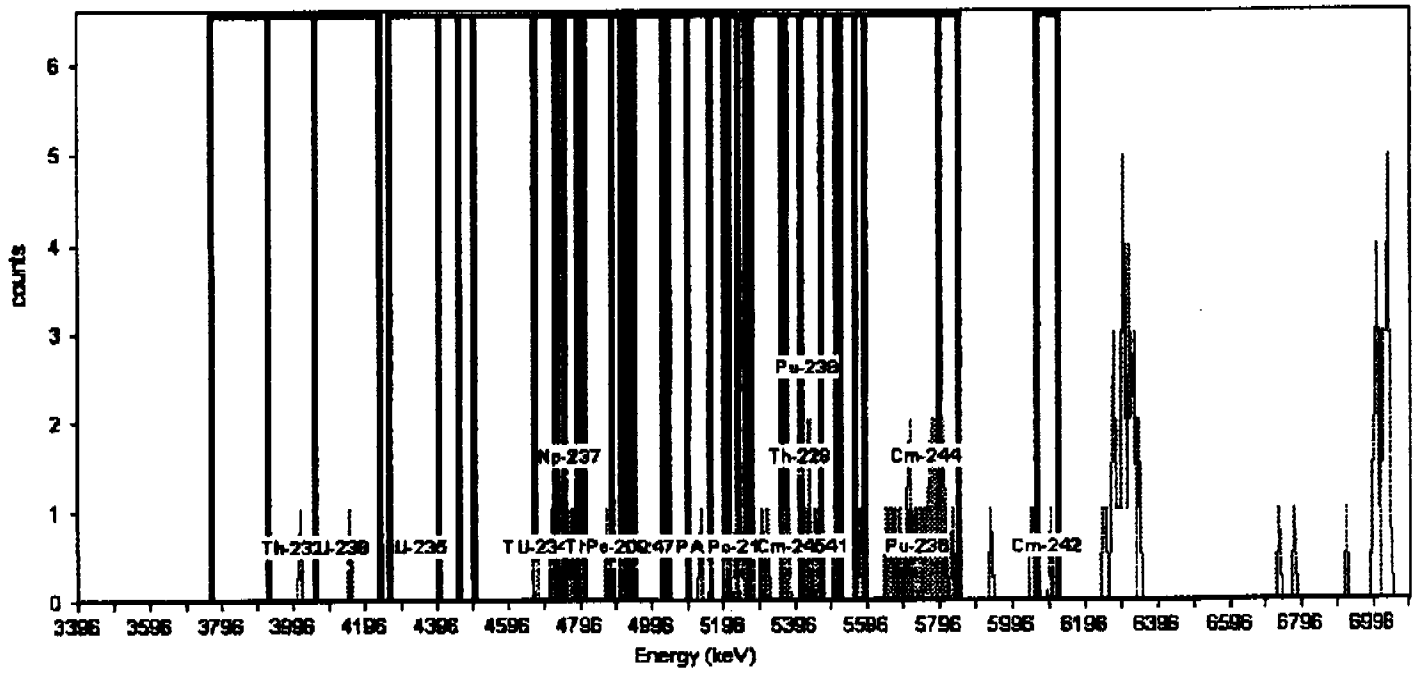
Batch

Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV22 , SN: 41-172Q5
Acquisition Start Date: 3/14/2005 5:40:00PM
Live Time: 960.00 min.
Real Time: 960.03 min.
Calibration Name: Feb2005_AV22
Calibration Date: 2/28/2005 1:56:15PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.15% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND_ROI Library: Background ROI Library
Total Background Counts: 101.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.042E-003	1.473E-003
U-238	4.14	3.93	4.24	2.00	2.083E-003	1.804E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	2.00	2.083E-003	1.804E-003
U-234	4.70	4.50	4.80	5.00	5.208E-003	2.552E-003
Pu-242	4.88	4.67	4.93	7.00	7.292E-003	2.946E-003
Th-229	4.84	4.72	5.10	5.00	5.208E-003	2.552E-003
Np-237	4.77	4.75	4.79	2.00	2.083E-003	1.804E-003
Cm-247	4.96	4.88	5.04	1.00	1.042E-003	1.473E-003
Po-209	4.90	4.88	4.91	1.00	1.042E-003	1.473E-003
Pu-239	5.15	4.95	5.21	2.00	2.083E-003	1.804E-003
Am-243	5.20	5.03	5.28	5.00	5.208E-003	2.552E-003
U-232	5.23	5.04	5.37	9.00	9.375E-003	3.294E-003
Th-228	5.41	5.16	5.47	13.00	1.354E-002	3.898E-003
Po-210	5.25	5.20	5.26	3.00	3.125E-003	2.083E-003
Pu-238	5.44	5.24	5.52	12.00	1.250E-002	3.756E-003
Am-241	5.45	5.27	5.57	11.00	1.146E-002	3.608E-003
Cm-245	5.39	5.36	5.41	4.00	4.167E-003	2.329E-003
Pu-236	5.74	5.52	5.80	21.00	2.187E-002	4.886E-003
Cm-244	5.76	5.60	5.85	24.00	2.500E-002	5.208E-003
Cm-242	6.10	6.07	6.13	1.00	1.042E-003	1.473E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:01:06AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV23
Comment:

Spectrum #1 Analysis #1

Batch

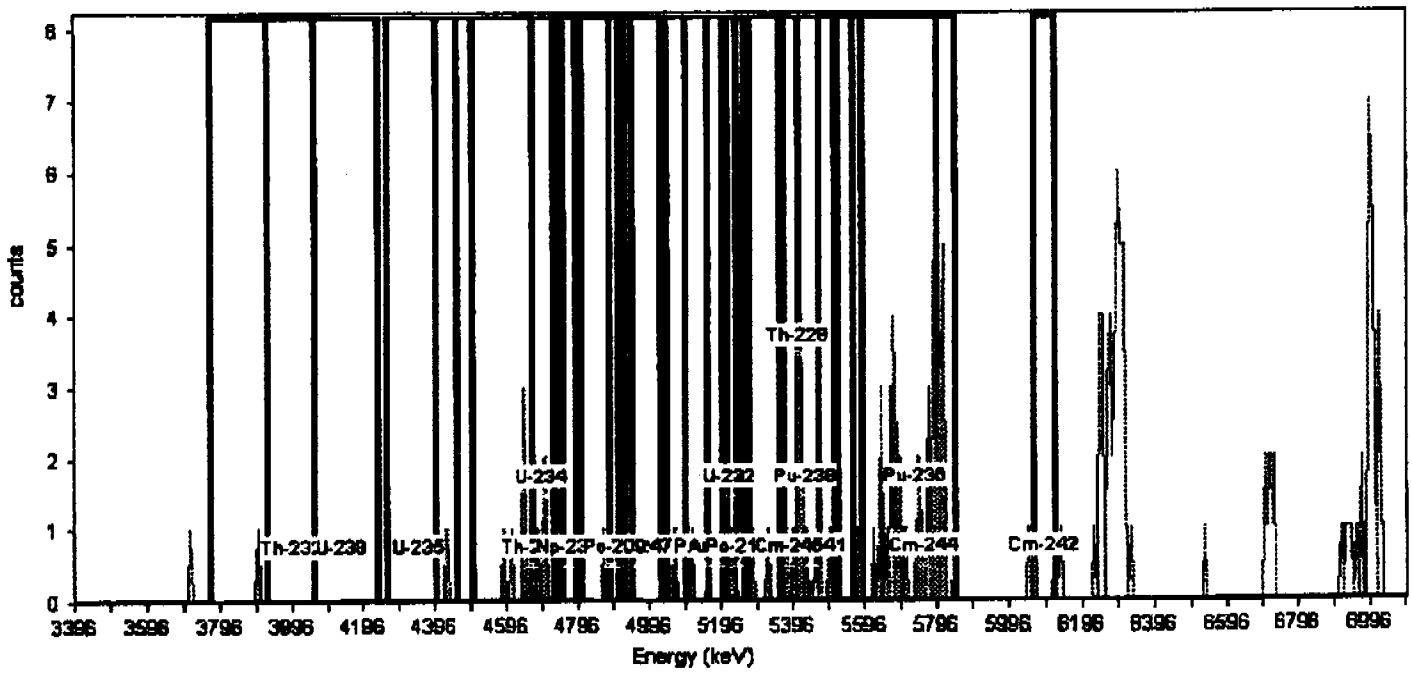
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV23 , SN: 41-172R4
Acquisition Start Date: 3/14/2005 5:40:01PM
Live Time: 960.00 min.
Real Time: 960.03 min.
Calibration Name: Feb2005_AV23
Calibration Date: 2/28/2005 1:56:22PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.20% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND_ROI Library: Background ROI Library
Total Background Counts: 165.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.042E-003	1.473E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.473E-003
U-235	4.35	4.26	4.46	1.00	1.042E-003	1.473E-003
Th-230	4.67	4.40	4.73	10.00	1.042E-002	3.455E-003
U-234	4.70	4.50	4.80	9.00	9.375E-003	3.294E-003
Pu-242	4.88	4.67	4.93	6.00	6.250E-003	2.756E-003
Th-229	4.84	4.72	5.10	3.00	3.125E-003	2.083E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	1.00	1.042E-003	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	2.00	2.083E-003	1.804E-003
Am-243	5.20	5.03	5.28	3.00	3.125E-003	2.083E-003
U-232	5.23	5.04	5.37	5.00	5.208E-003	2.552E-003
Th-228	5.41	5.16	5.47	17.00	1.771E-002	4.419E-003
Po-210	5.25	5.20	5.26	1.00	1.042E-003	1.473E-003
Pu-238	5.44	5.24	5.52	17.00	1.771E-002	4.419E-003
Am-241	5.45	5.27	5.57	17.00	1.771E-002	4.419E-003
Cm-245	5.39	5.36	5.41	5.00	5.208E-003	2.552E-003
Pu-236	5.74	5.52	5.80	37.00	3.854E-002	6.421E-003
Cm-244	5.76	5.60	5.85	47.00	4.896E-002	7.217E-003
Cm-242	6.10	6.07	6.13	2.00	2.083E-003	1.804E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:01:09AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV24
Comment:

Spectrum #1 Analysis #1

Batch

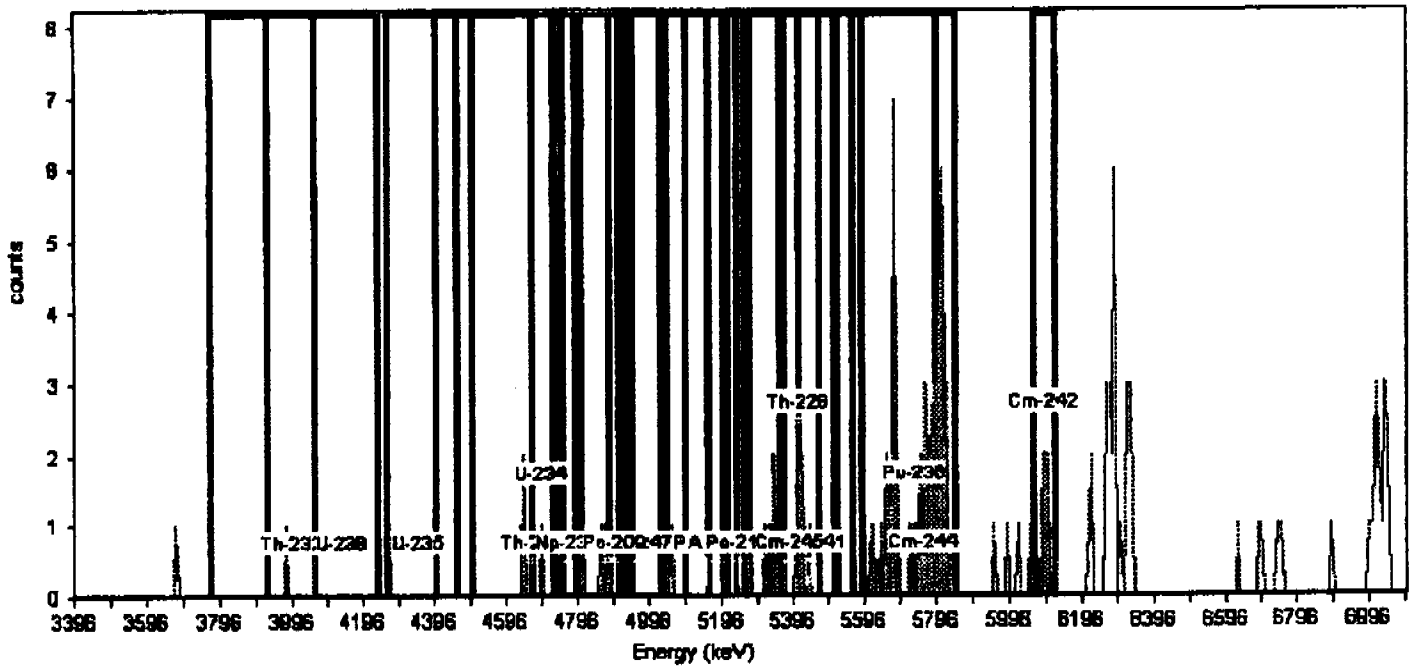
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV24 , SN: 41-172R5
Acquisition Start Date: 3/14/2005 5:40:04PM
Live Time: 960.00 min.
Real Time: 960.03 min.
Calibration Name: Feb2005_AV24
Calibration Date: 2/28/2005 1:56:28PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.38% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND_ROI Library: Background ROI Library
Total Background Counts: 138.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.083E-003	1.804E-003
U-238	4.14	3.93	4.24	2.00	2.083E-003	1.804E-003
U-235	4.35	4.26	4.46	1.00	1.042E-003	1.473E-003
Th-230	4.67	4.40	4.73	3.00	3.125E-003	2.083E-003
U-234	4.70	4.50	4.80	4.00	4.167E-003	2.329E-003
Pu-242	4.88	4.67	4.93	5.00	5.208E-003	2.552E-003
Th-229	4.84	4.72	5.10	6.00	6.250E-003	2.756E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	1.00	1.042E-003	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	2.00	2.083E-003	1.804E-003
Am-243	5.20	5.03	5.28	3.00	3.125E-003	2.083E-003
U-232	5.23	5.04	5.37	8.00	8.333E-003	3.125E-003
Th-228	5.41	5.16	5.47	13.00	1.354E-002	3.898E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	13.00	1.354E-002	3.898E-003
Am-241	5.45	5.27	5.57	13.00	1.354E-002	3.898E-003
Cm-245	5.39	5.36	5.41	4.00	4.167E-003	2.329E-003
Pu-236	5.74	5.52	5.80	34.00	3.542E-002	6.163E-003
Cm-244	5.76	5.60	5.85	52.00	5.417E-002	7.583E-003
Cm-242	6.10	6.07	6.13	6.00	6.250E-003	2.756E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:01:12AM 3/15/2005

Analyst: 60040

Sample

Spectrum #1 Analysis #1

Sample Name: AV25
Comment:

Batch

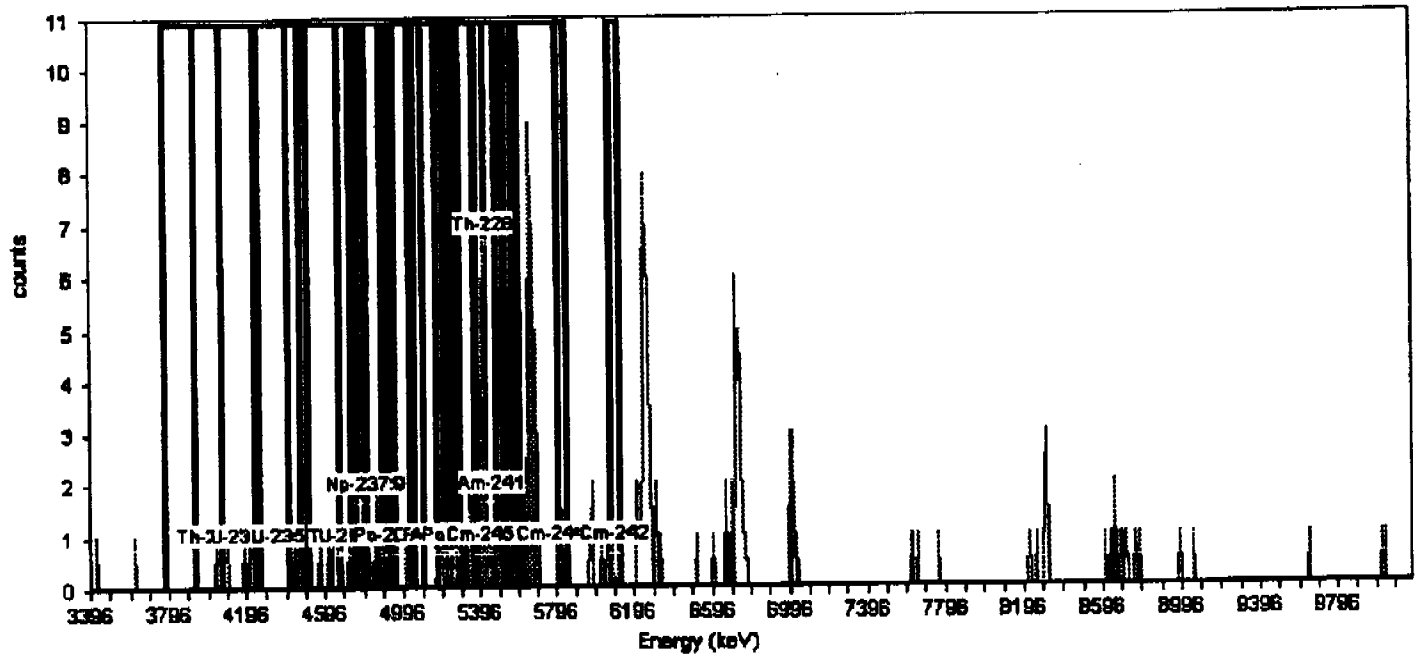
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV25 , SN: ALDR17
Acquisition Start Date: 3/14/2005 5:40:05PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: FEB2005_AV25
Calibration Date: 3/1/2005 1:37:33AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 25.00% +/- 0.25% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 243.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.083E-003	1.804E-003
U-238	4.14	3.93	4.24	5.00	5.208E-003	2.552E-003
U-235	4.35	4.26	4.46	4.00	4.167E-003	2.329E-003
Th-230	4.67	4.40	4.73	11.00	1.146E-002	3.608E-003
U-234	4.70	4.50	4.80	8.00	8.333E-003	3.125E-003
Pu-242	4.88	4.67	4.93	9.00	9.375E-003	3.294E-003
Th-229	4.84	4.72	5.10	10.00	1.042E-002	3.455E-003
Np-237	4.77	4.75	4.79	1.00	1.042E-003	1.473E-003
Cm-247	4.96	4.88	5.04	2.00	2.083E-003	1.804E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	3.00	3.125E-003	2.083E-003
Am-243	5.20	5.03	5.28	7.00	7.292E-003	2.946E-003
U-232	5.23	5.04	5.37	14.00	1.458E-002	4.034E-003
Th-228	5.41	5.16	5.47	42.00	4.375E-002	6.831E-003
Po-210	5.25	5.20	5.26	3.00	3.125E-003	2.083E-003
Pu-238	5.44	5.24	5.52	43.00	4.479E-002	6.910E-003
Am-241	5.45	5.27	5.57	43.00	4.479E-002	6.910E-003
Cm-245	5.39	5.36	5.41	21.00	2.187E-002	4.886E-003
Pu-236	5.74	5.52	5.80	50.00	5.208E-002	7.439E-003
Cm-244	5.76	5.60	5.85	51.00	5.313E-002	7.512E-003
Cm-242	6.10	6.07	6.13	3.00	3.125E-003	2.083E-003

SEVERN TRENT **STL**

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:01:16AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV26
Comment:

Spectrum #1 Analysis #1

Batch

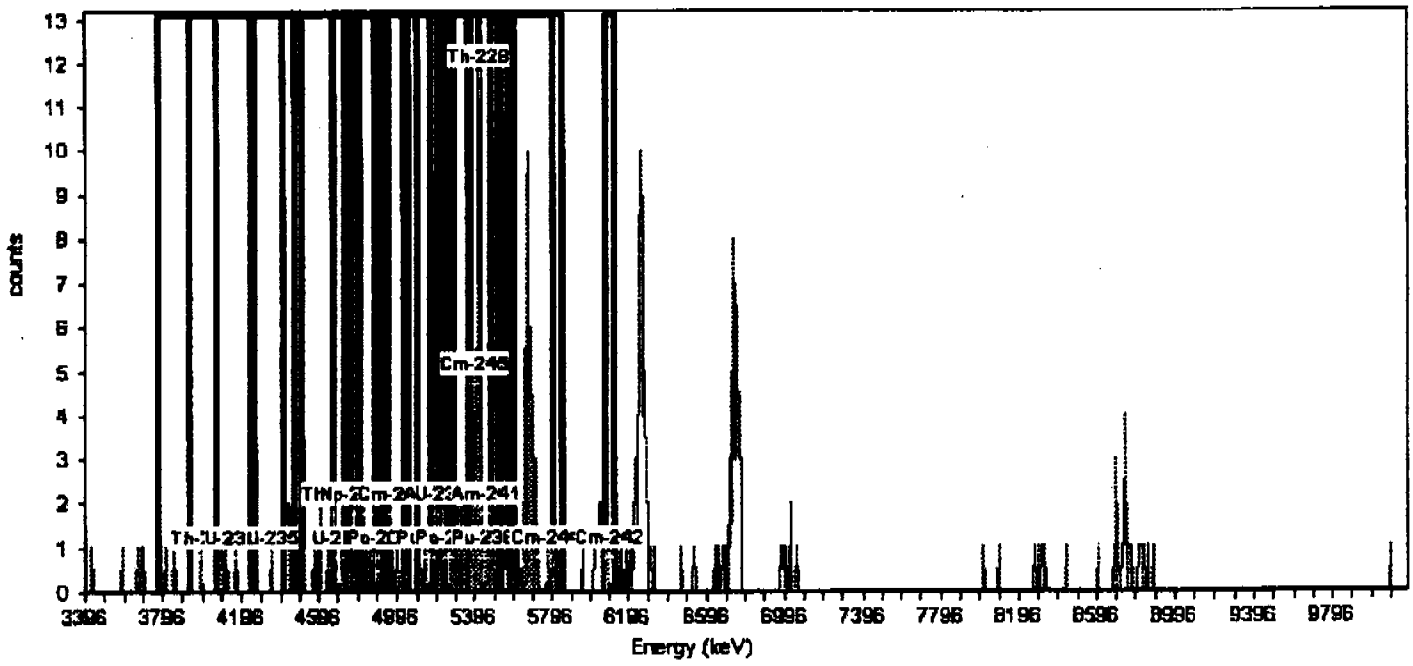
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV26 , SN: ALDR18
Acquisition Start Date: 3/14/2005 5:40:06PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Feb2005_AV26
Calibration Date: 2/28/2005 11:00:05PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 24.75% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROU[illegible]Library: Background ROI Library
Total Background Counts: 306.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	5.00	5.208E-003	2.552E-003
U-238	4.14	3.93	4.24	5.00	5.208E-003	2.552E-003
U-235	4.35	4.26	4.46	3.00	3.125E-003	2.083E-003
Th-230	4.67	4.40	4.73	12.00	1.250E-002	3.756E-003
U-234	4.70	4.50	4.80	14.00	1.458E-002	4.034E-003
Pu-242	4.88	4.67	4.93	13.00	1.354E-002	3.898E-003
Th-229	4.84	4.72	5.10	17.00	1.771E-002	4.419E-003
Np-237	4.77	4.75	4.79	4.00	4.167E-003	2.329E-003
Cm-247	4.96	4.88	5.04	6.00	6.250E-003	2.756E-003
Po-209	4.90	4.88	4.91	1.00	1.042E-003	1.473E-003
Pu-239	5.15	4.95	5.21	8.00	8.333E-003	3.125E-003
Am-243	5.20	5.03	5.28	10.00	1.042E-002	3.455E-003
U-232	5.23	5.04	5.37	22.00	2.292E-002	4.996E-003
Th-228	5.41	5.16	5.47	61.00	6.354E-002	8.202E-003
Po-210	5.25	5.20	5.28	4.00	4.167E-003	2.329E-003
Pu-238	5.44	5.24	5.52	63.00	6.563E-002	8.333E-003
Am-241	5.45	5.27	5.57	62.00	6.458E-002	8.268E-003
Cm-245	5.39	5.36	5.41	32.00	3.333E-002	5.984E-003
Pu-236	5.74	5.52	5.80	53.00	5.521E-002	7.655E-003
Cm-244	5.76	5.60	5.85	53.00	5.521E-002	7.655E-003
Cm-242	6.10	6.07	6.13	4.00	4.167E-003	2.329E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:01:20AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV27
Comment:

Spectrum #1 Analysis #1

Batch

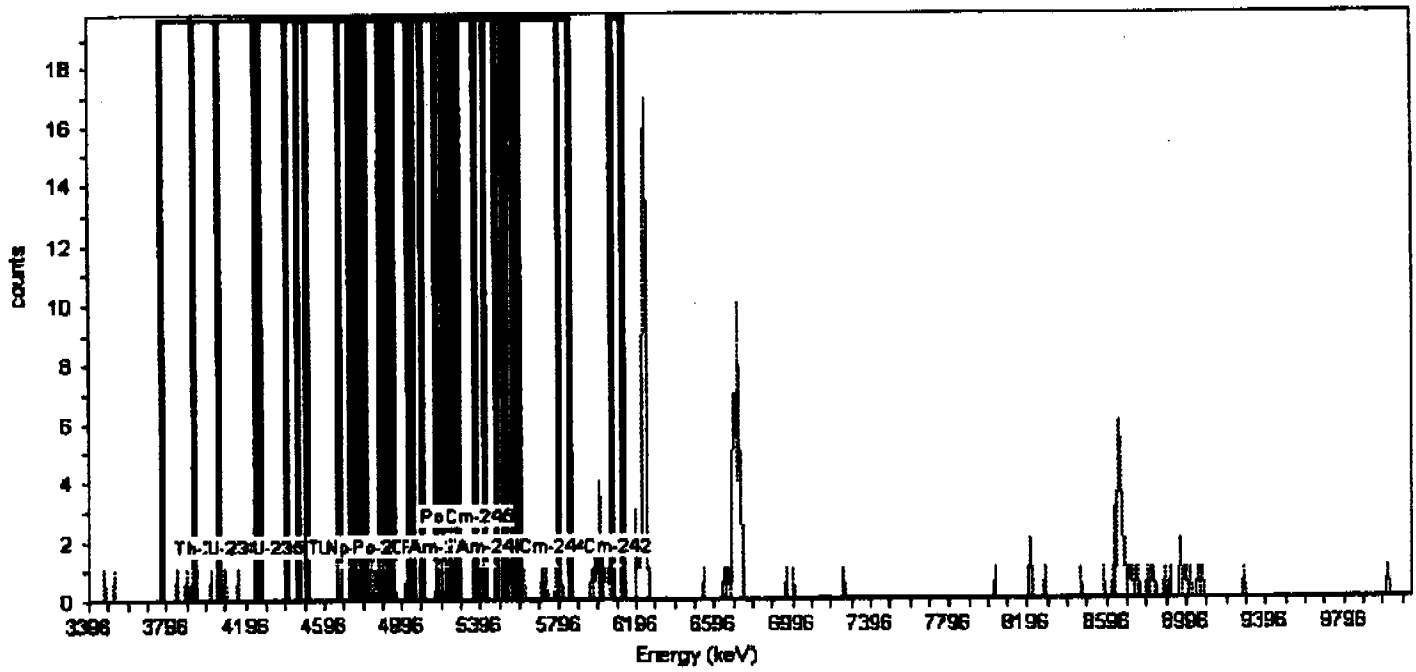
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV27 , SN: ALDR19
Acquisition Start Date: 3/14/2005 5:40:07PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Feb2005_AV27
Calibration Date: 2/28/2005 11:00:09PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 23.55% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 203.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	4.00	4.167E-003	2.329E-003
U-238	4.14	3.93	4.24	3.00	3.125E-003	2.083E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.473E-003
U-234	4.70	4.50	4.80	1.00	1.042E-003	1.473E-003
Pu-242	4.86	4.67	4.93	5.00	5.208E-003	2.552E-003
Th-229	4.84	4.72	5.10	6.00	6.250E-003	2.756E-003
Np-237	4.77	4.75	4.79	1.00	1.042E-003	1.473E-003
Cm-247	4.96	4.88	5.04	1.00	1.042E-003	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	1.00	1.042E-003	1.473E-003
Am-243	5.20	5.03	5.28	2.00	2.083E-003	1.804E-003
U-232	5.23	5.04	5.37	3.00	3.125E-003	2.083E-003
Th-228	5.41	5.16	5.47	5.00	5.208E-003	2.552E-003
Po-210	5.25	5.20	5.26	2.00	2.083E-003	1.804E-003
Pu-238	5.44	5.24	5.52	4.00	4.167E-003	2.329E-003
Am-241	5.45	5.27	5.57	4.00	4.167E-003	2.329E-003
Cm-245	5.39	5.36	5.41	2.00	2.083E-003	1.804E-003
Pu-236	5.74	5.52	5.80	6.00	6.250E-003	2.756E-003
Cm-244	5.76	5.60	5.85	7.00	7.292E-003	2.948E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.473E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:01:23AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV28 Spectrum #1 Analysis #1
Comment:

Batch

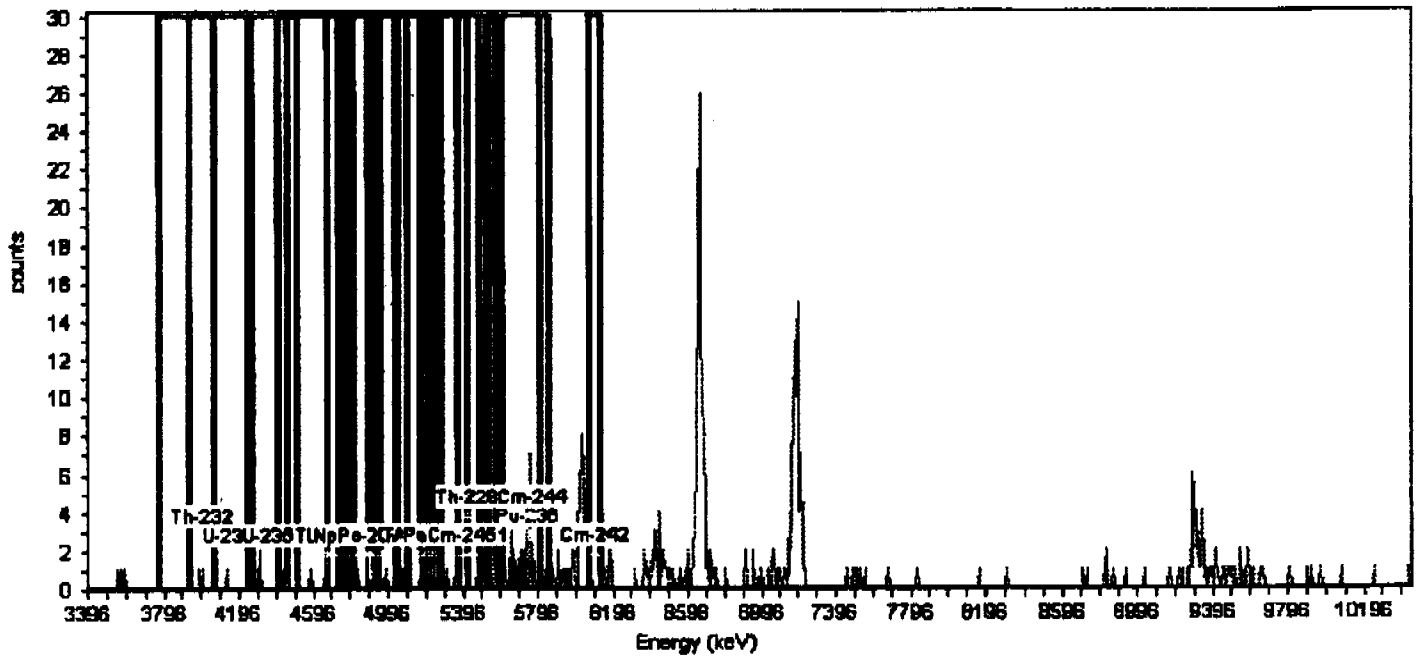
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV28 , SN: ALDR20
Acquisition Start Date: 3/14/2005 5:40:08PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Feb2005_AV28
Calibration Date: 2/28/2005 11:00:16PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 0.68% +/- 0.04% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 447.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	3.00	3.125E-003	2.083E-003
U-238	4.14	3.93	4.24	4.00	4.167E-003	2.329E-003
U-235	4.35	4.26	4.46	6.00	6.250E-003	2.756E-003
Th-230	4.67	4.40	4.73	6.00	6.250E-003	2.756E-003
U-234	4.70	4.50	4.80	3.00	3.125E-003	2.083E-003
Pu-242	4.88	4.67	4.93	4.00	4.167E-003	2.329E-003
Th-229	4.84	4.72	5.10	10.00	1.042E-002	3.455E-003
Np-237	4.77	4.76	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	5.00	5.208E-003	2.552E-003
Po-209	4.90	4.88	4.91	1.00	1.042E-003	1.473E-003
Pu-239	5.15	4.95	5.21	11.00	1.146E-002	3.608E-003
Am-243	5.20	5.03	5.28	9.00	9.375E-003	3.294E-003
U-232	5.23	5.04	5.37	10.00	1.042E-002	3.455E-003
Th-228	5.41	5.16	5.47	8.00	8.333E-003	3.125E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	7.00	7.292E-003	2.946E-003
Am-241	5.45	5.27	5.57	11.00	1.146E-002	3.608E-003
Cm-245	5.39	5.36	5.41	2.00	2.083E-003	1.804E-003
Pu-236	5.74	5.52	5.80	39.00	4.062E-002	6.588E-003
Cm-244	5.76	5.60	5.85	35.00	3.646E-002	6.250E-003
Cm-242	6.10	6.07	6.13	2.00	2.083E-003	1.804E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:01:26AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV29
Spectrum #1 Analysis #1
Comment:

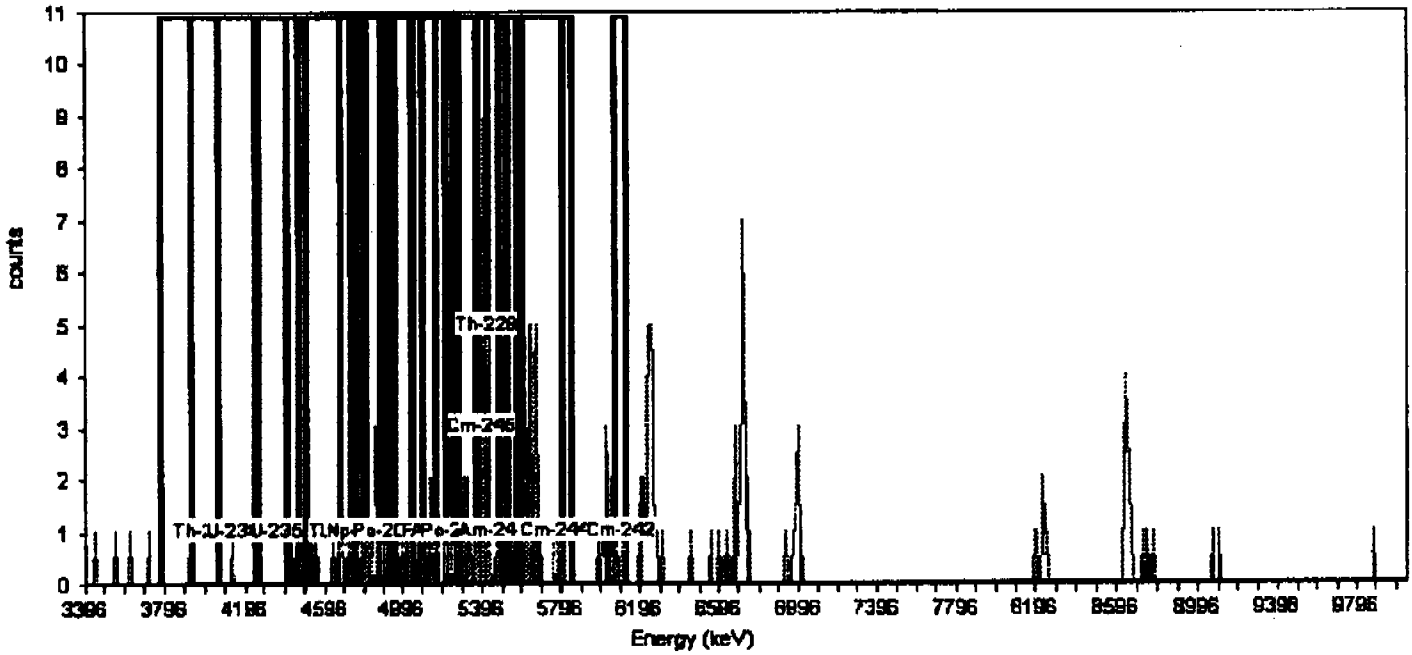
Batch

Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV29 , SN: ALDR21
Acquisition Start Date: 3/14/2005 5:40:09PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: FEB2005_AV29
Calibration Date: 3/1/2005 10:44:06AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 25.73% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 222.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.042E-003	1.473E-003
U-238	4.14	3.93	4.24	1.00	1.042E-003	1.473E-003
U-235	4.35	4.26	4.46	1.00	1.042E-003	1.473E-003
Th-230	4.67	4.40	4.73	11.00	1.146E-002	3.608E-003
U-234	4.70	4.50	4.80	13.00	1.354E-002	3.898E-003
Pu-242	4.88	4.67	4.93	17.00	1.771E-002	4.419E-003
Th-229	4.84	4.72	5.10	22.00	2.292E-002	4.996E-003
Np-237	4.77	4.75	4.79	2.00	2.083E-003	1.804E-003
Cm-247	4.96	4.88	5.04	6.00	6.250E-003	2.756E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	12.00	1.250E-002	3.756E-003
Am-243	5.20	5.03	5.28	8.00	8.333E-003	3.125E-003
U-232	5.23	5.04	5.37	18.00	1.875E-002	4.541E-003
Th-228	5.41	5.16	5.47	34.00	3.542E-002	6.163E-003
Po-210	5.25	5.20	5.26	1.00	1.042E-003	1.473E-003
Pu-238	5.44	5.24	5.52	33.00	3.437E-002	6.074E-003
Am-241	5.45	5.27	5.57	34.00	3.542E-002	6.163E-003
Cm-245	5.39	5.36	5.41	22.00	2.292E-002	4.996E-003
Pu-236	5.74	5.52	5.80	32.00	3.333E-002	5.984E-003
Cm-244	5.76	5.60	5.85	30.00	3.125E-002	5.800E-003
Cm-242	6.10	6.07	6.13	3.00	3.125E-003	2.083E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:01:30AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV30 Spectrum #1 Analysis #1
Comment:

Batch

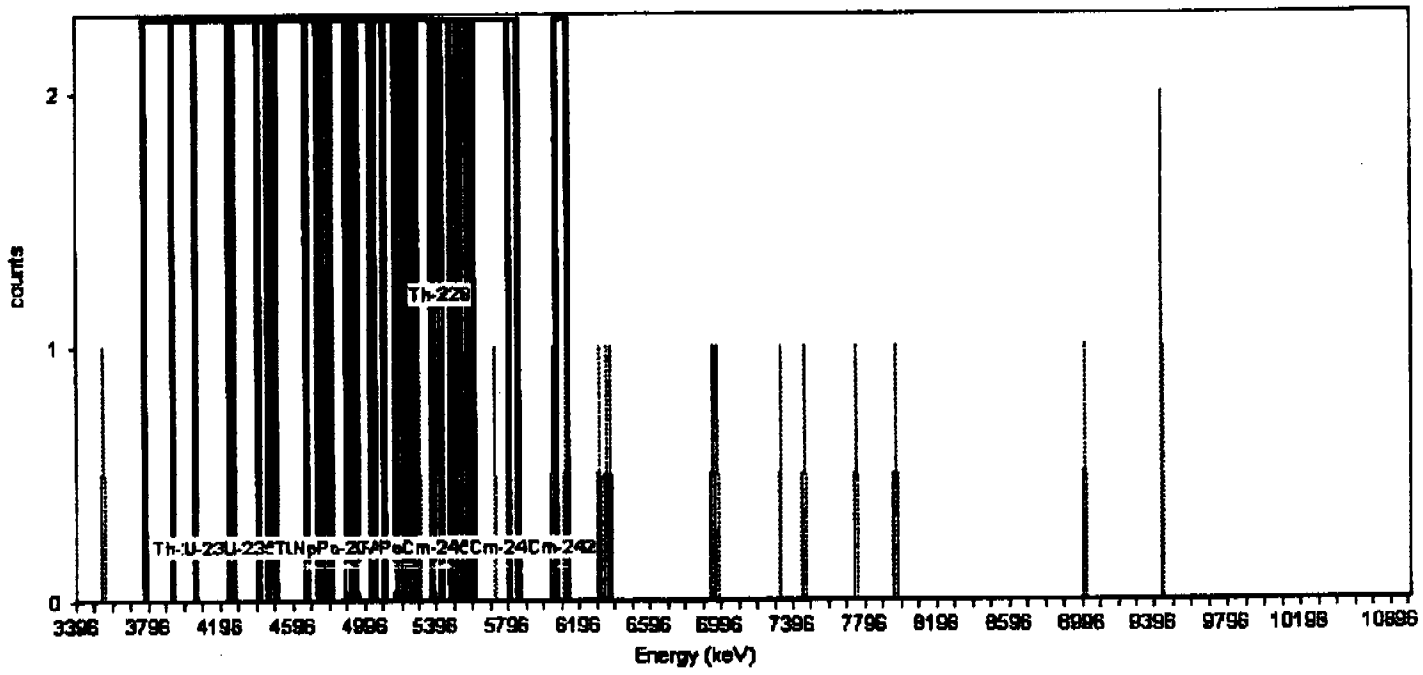
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV30 , SN:
Acquisition Start Date: 3/14/2005 5:40:10PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Test
Calibration Date: 12/27/2004 4:30:29PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 24.04% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 22.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.473E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.473E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.473E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.473E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.473E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.473E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.473E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.473E-003
U-232	5.23	5.04	5.37	1.00	1.042E-003	1.473E-003
Th-228	5.41	5.16	5.47	2.00	2.083E-003	1.804E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	3.00	3.125E-003	2.083E-003
Am-241	5.45	5.27	5.57	3.00	3.125E-003	2.083E-003
Cm-245	5.39	5.36	5.41	1.00	1.042E-003	1.473E-003
Pu-236	5.74	5.52	5.80	1.00	1.042E-003	1.473E-003
Cm-244	5.76	5.60	5.85	1.00	1.042E-003	1.473E-003
Cm-242	6.10	6.07	6.13	1.00	1.042E-003	1.473E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:01:33AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV33
Spectrum #1 Analysis #1
Comment:

Batch

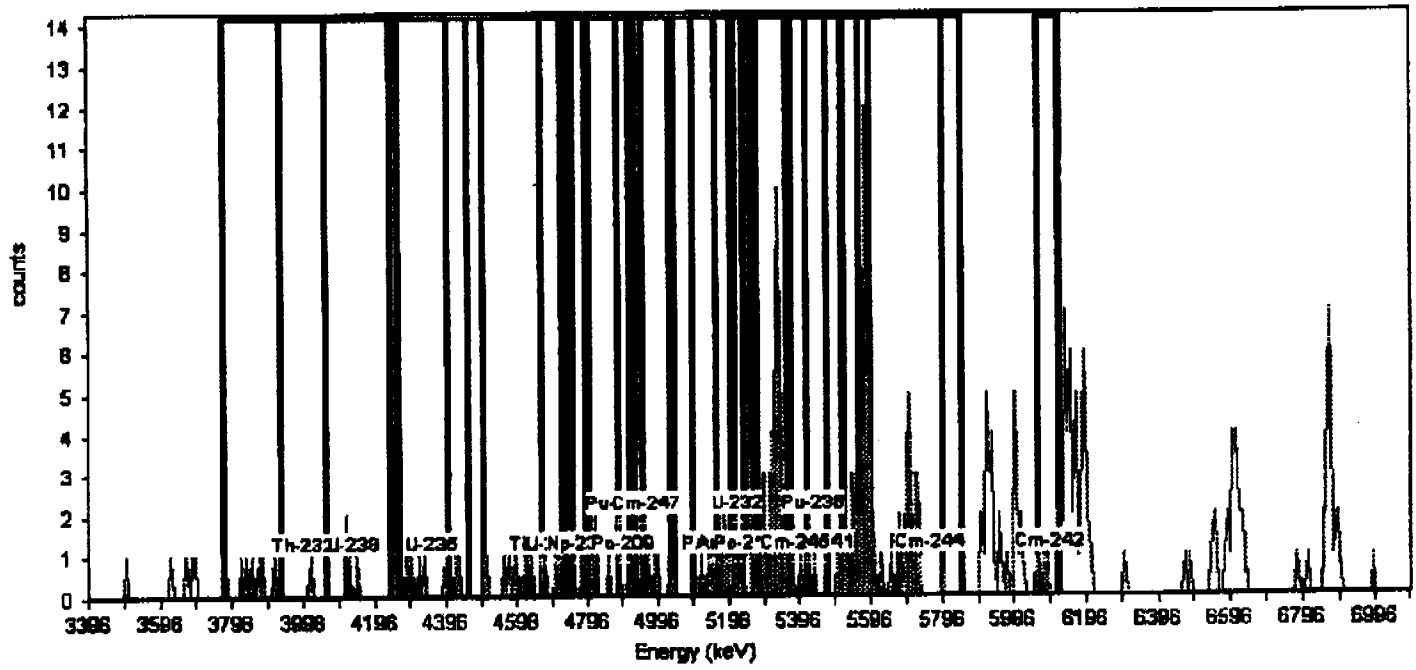
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV33 , SN: ALDR25
Acquisition Start Date: 3/14/2005 5:40:11PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Calibration Name: Feb2005_AV33
Calibration Date: 3/4/2005 1:09:18PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 25.38% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 311.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	8.00	8.333E-003	3.125E-003
U-238	4.14	3.93	4.24	5.00	5.208E-003	2.552E-003
U-235	4.35	4.26	4.46	7.00	7.292E-003	2.946E-003
Th-230	4.67	4.40	4.73	16.00	1.667E-002	4.295E-003
U-234	4.70	4.50	4.80	18.00	1.875E-002	4.541E-003
Pu-242	4.88	4.67	4.93	16.00	1.667E-002	4.295E-003
Th-229	4.84	4.72	5.10	17.00	1.771E-002	4.419E-003
Np-237	4.77	4.75	4.79	3.00	3.125E-003	2.083E-003
Cm-247	4.96	4.88	5.04	9.00	9.375E-003	3.294E-003
Po-209	4.90	4.88	4.91	2.00	2.083E-003	1.804E-003
Pu-239	5.15	4.95	5.21	16.00	1.667E-002	4.295E-003
Am-243	5.20	5.03	5.28	23.00	2.396E-002	5.103E-003
U-232	5.23	5.04	5.37	59.00	6.146E-002	8.069E-003
Th-228	5.41	5.16	5.47	60.00	6.250E-002	8.136E-003
Po-210	5.25	5.20	5.26	10.00	1.042E-002	3.455E-003
Pu-238	5.44	5.24	5.52	53.00	5.521E-002	7.655E-003
Am-241	5.45	5.27	5.57	56.00	5.833E-002	7.864E-003
Cm-245	5.39	5.36	5.41	3.00	3.125E-003	2.083E-003
Pu-236	5.74	5.52	5.80	62.00	6.458E-002	8.268E-003
Cm-244	5.76	5.60	5.85	30.00	3.125E-002	5.800E-003
Cm-242	6.10	6.07	6.13	6.00	6.250E-003	2.756E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:01:36AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV34
Spectrum #1 Analysis #1
Comment:

Batch

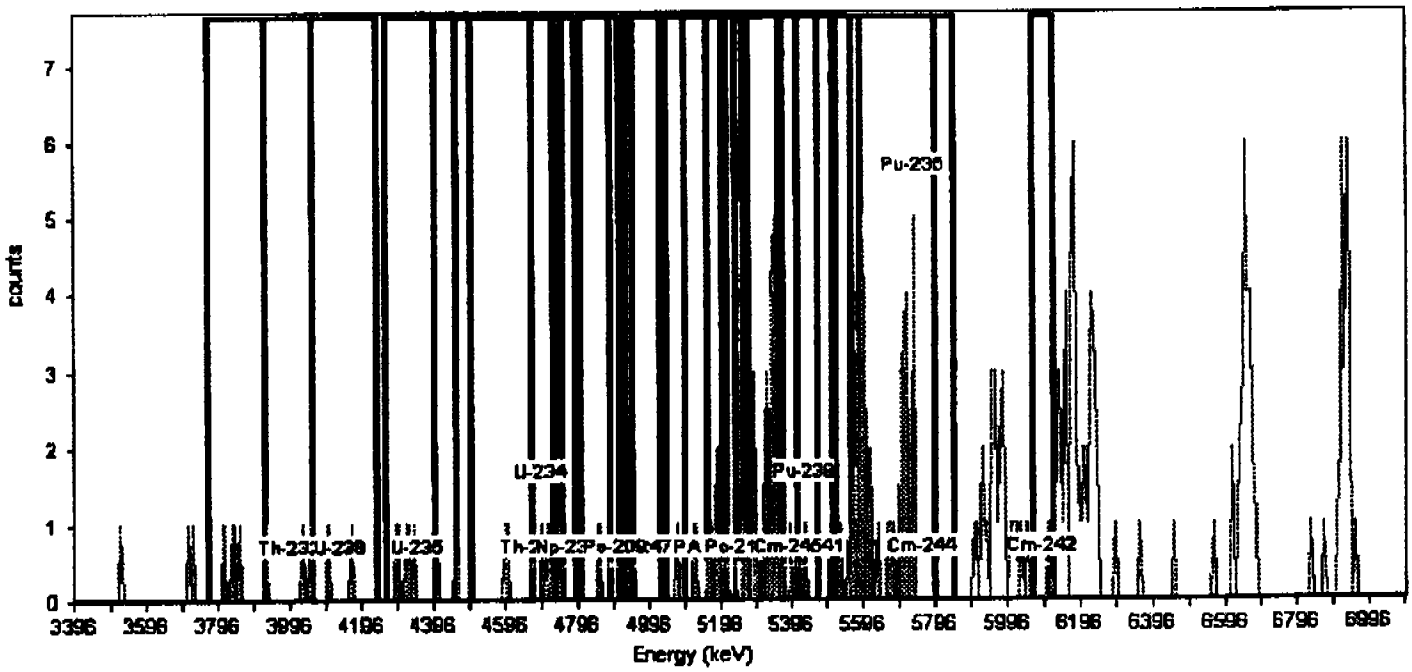
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV34 , SN: ALDR26
Acquisition Start Date: 3/14/2005 5:40:12PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Calibration Name: Feb2005_AV34
Calibration Date: 3/3/2005 9:04:47PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 24.96% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 236.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	7.00	7.292E-003	2.946E-003
U-238	4.14	3.93	4.24	5.00	5.208E-003	2.552E-003
U-235	4.35	4.26	4.46	7.00	7.292E-003	2.946E-003
Th-230	4.67	4.40	4.73	8.00	8.333E-003	3.125E-003
U-234	4.70	4.50	4.80	8.00	8.333E-003	3.125E-003
Pu-242	4.88	4.67	4.93	6.00	6.250E-003	2.756E-003
Th-229	4.84	4.72	5.10	5.00	5.208E-003	2.552E-003
Np-237	4.77	4.75	4.79	1.00	1.042E-003	1.473E-003
Cm-247	4.96	4.88	5.04	1.00	1.042E-003	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	7.00	7.292E-003	2.946E-003
Am-243	5.20	5.03	5.28	13.00	1.354E-002	3.898E-003
U-232	5.23	5.04	5.37	36.00	3.750E-002	6.336E-003
Th-228	5.41	5.16	5.47	36.00	3.750E-002	6.336E-003
Po-210	5.25	5.20	5.26	4.00	4.167E-003	2.329E-003
Pu-238	5.44	5.24	5.52	31.00	3.229E-002	5.893E-003
Am-241	5.45	5.27	5.57	34.00	3.542E-002	6.163E-003
Cm-245	5.39	5.36	5.41	4.00	4.167E-003	2.329E-003
Pu-236	5.74	5.52	5.80	48.00	5.000E-002	7.292E-003
Cm-244	5.76	5.60	5.85	34.00	3.542E-002	6.163E-003
Cm-242	6.10	6.07	6.13	3.00	3.125E-003	2.083E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:01:40AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV35
Spectrum #1 Analysis #1
Comment:

Batch

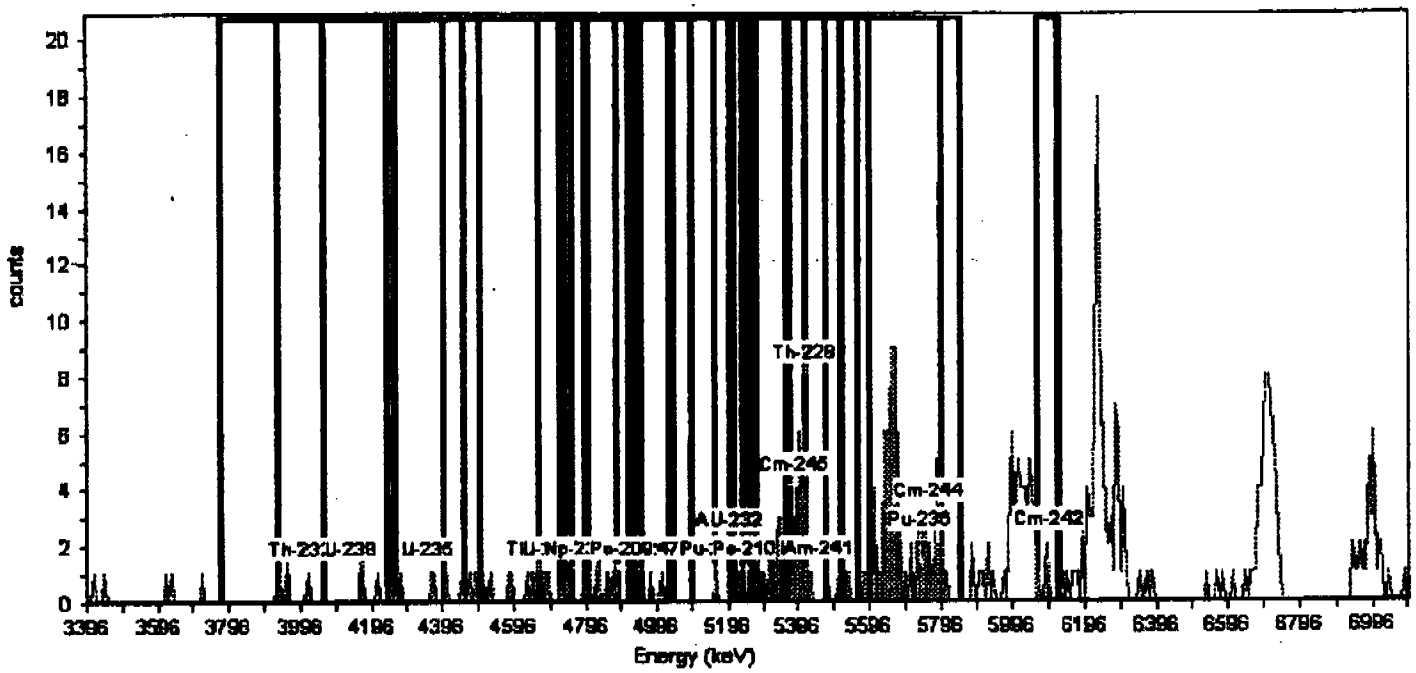
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV35 , SN: ALDR27
Acquisition Start Date: 3/14/2005 5:40:13PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Calibration Name: Feb2005_AV
Calibration Date: 3/3/2005 9:04:52PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 23.62% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 404.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	5.00	5.208E-003	2.552E-003
U-238	4.14	3.83	4.24	9.00	9.375E-003	3.294E-003
U-235	4.35	4.26	4.46	6.00	6.250E-003	2.756E-003
Th-230	4.67	4.40	4.73	13.00	1.354E-002	3.898E-003
U-234	4.70	4.50	4.80	13.00	1.354E-002	3.898E-003
Pu-242	4.88	4.87	4.93	13.00	1.354E-002	3.898E-003
Th-229	4.84	4.72	5.10	13.00	1.354E-002	3.898E-003
Np-237	4.77	4.75	4.79	1.00	1.042E-003	1.473E-003
Cm-247	4.96	4.88	5.04	2.00	2.083E-003	1.804E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	4.00	4.167E-003	2.329E-003
Am-243	5.20	5.03	5.28	6.00	6.250E-003	2.756E-003
U-232	5.23	5.04	5.37	23.00	2.396E-002	5.103E-003
Th-228	5.41	5.16	5.47	48.00	5.000E-002	7.292E-003
Po-210	5.25	5.20	5.26	3.00	3.125E-003	2.083E-003
Pu-238	5.44	5.24	5.52	46.00	4.792E-002	7.141E-003
Am-241	5.45	5.27	5.57	48.00	5.000E-002	7.292E-003
Cm-245	5.39	5.36	5.41	27.00	2.813E-002	5.512E-003
Pu-236	5.74	5.52	5.80	79.00	8.229E-002	9.317E-003
Cm-244	5.76	5.60	5.85	77.00	8.021E-002	9.200E-003
Cm-242	6.10	6.07	6.13	4.00	4.167E-003	2.329E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:41:07AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV37
Comment:

Spectrum #1 Analysis #1

Batch

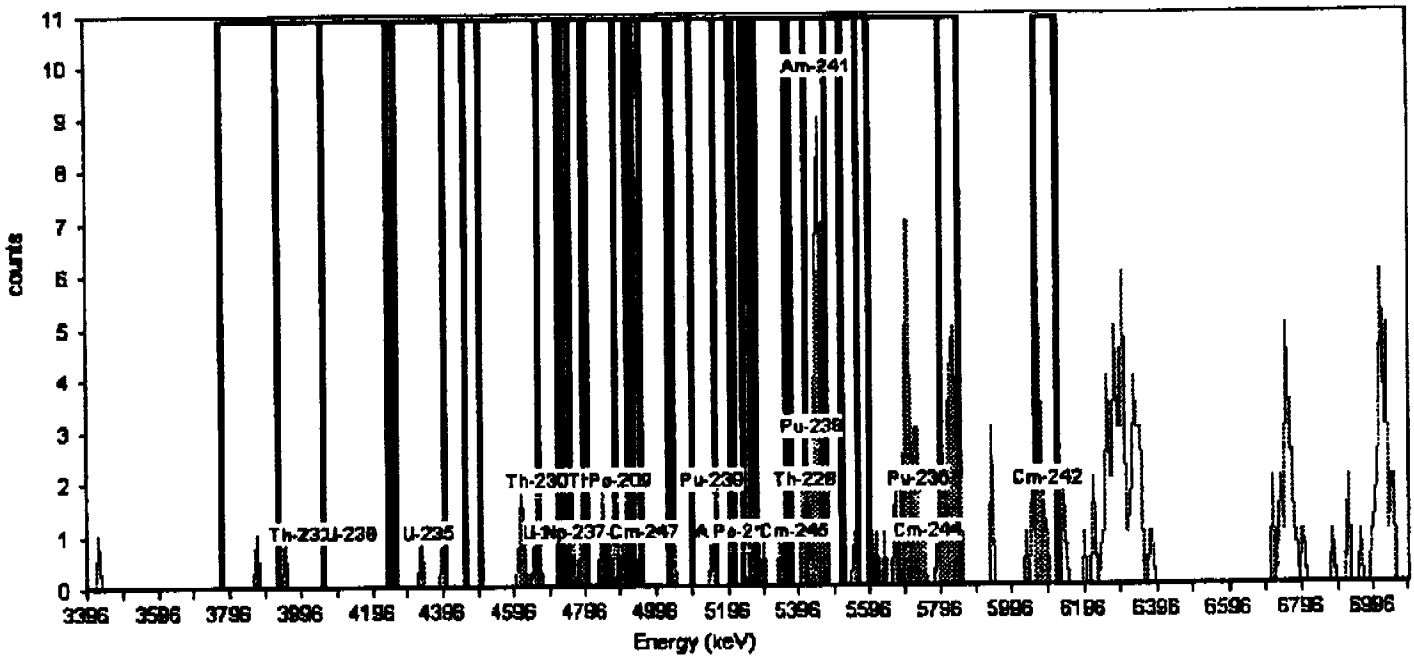
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV37 , SN:
Acquisition Start Date: 3/14/2005 5:40:14PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Calibration Name: Feb2005_AV37a
Calibration Date: 3/4/2005 3:35:12PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 24.55% +/- 0.25% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 241.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.083E-003	1.804E-003
U-238	4.14	3.93	4.24	1.00	1.042E-003	1.473E-003
U-235	4.35	4.26	4.46	2.00	2.083E-003	1.804E-003
Th-230	4.67	4.40	4.73	6.00	6.250E-003	2.756E-003
U-234	4.70	4.50	4.80	9.00	9.375E-003	3.294E-003
Pu-242	4.88	4.67	4.93	10.00	1.042E-002	3.455E-003
Th-229	4.84	4.72	5.10	11.00	1.146E-002	3.608E-003
Np-237	4.77	4.75	4.79	3.00	3.125E-003	2.083E-003
Cm-247	4.96	4.88	5.04	3.00	3.125E-003	2.083E-003
Po-209	4.90	4.88	4.91	1.00	1.042E-003	1.473E-003
Pu-239	5.15	4.95	5.21	2.00	2.083E-003	1.804E-003
Am-243	5.20	5.03	5.28	4.00	4.167E-003	2.329E-003
U-232	5.23	5.04	5.37	7.00	7.292E-003	2.946E-003
Th-228	5.41	5.16	5.47	38.00	3.958E-002	6.505E-003
Po-210	5.25	5.20	5.26	2.00	2.083E-003	1.804E-003
Pu-238	5.44	5.24	5.52	38.00	3.958E-002	6.505E-003
Am-241	5.45	5.27	5.57	37.00	3.854E-002	6.421E-003
Cm-245	5.39	5.36	5.41	3.00	3.125E-003	2.083E-003
Pu-236	5.74	5.52	5.80	37.00	3.854E-002	6.421E-003
Cm-244	5.76	5.60	5.85	55.00	5.729E-002	7.795E-003
Cm-242	6.10	6.07	6.13	12.00	1.250E-002	3.756E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:58:22AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV38
Spectrum #1 Analysis #1
Comment:

Batch

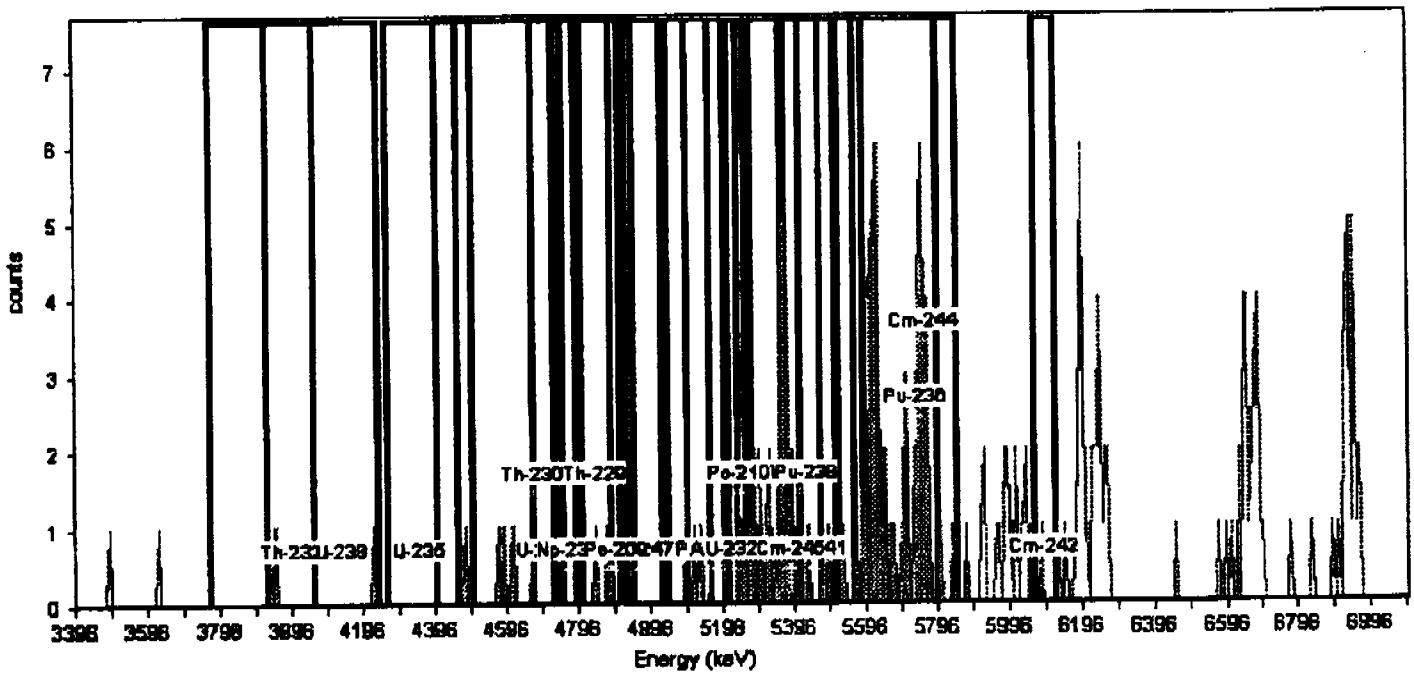
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV38 , SN: ALDR30
Acquisition Start Date: 3/14/2005 5:40:15PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Calibration Name: Feb2005_AV38
Calibration Date: 3/4/2005 1:09:44PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 24.76% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 215.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.042E-003	1.473E-003
U-238	4.14	3.93	4.24	2.00	2.083E-003	1.804E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	6.00	6.250E-003	2.756E-003
U-234	4.70	4.50	4.80	5.00	5.208E-003	2.552E-003
Pu-242	4.88	4.67	4.93	3.00	3.125E-003	2.083E-003
Th-229	4.84	4.72	5.10	4.00	4.167E-003	2.329E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	4.00	4.167E-003	2.329E-003
Am-243	5.20	5.03	5.28	9.00	9.375E-003	3.294E-003
U-232	5.23	5.04	5.37	31.00	3.229E-002	5.893E-003
Th-228	5.41	5.16	5.47	36.00	3.750E-002	6.336E-003
Po-210	5.25	5.20	5.26	3.00	3.125E-003	2.083E-003
Pu-238	5.44	5.24	5.52	38.00	3.958E-002	6.505E-003
Am-241	5.45	5.27	5.57	38.00	3.958E-002	6.505E-003
Cm-245	5.39	5.36	5.41	18.00	1.875E-002	4.541E-003
Pu-236	5.74	5.52	5.80	60.00	6.250E-002	8.136E-003
Cm-244	5.76	5.60	5.85	58.00	6.042E-002	8.001E-003
Cm-242	6.10	6.07	6.13	1.00	1.042E-003	1.473E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:58:29AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV39
Comment:

Spectrum #1 Analysis #1

Batch

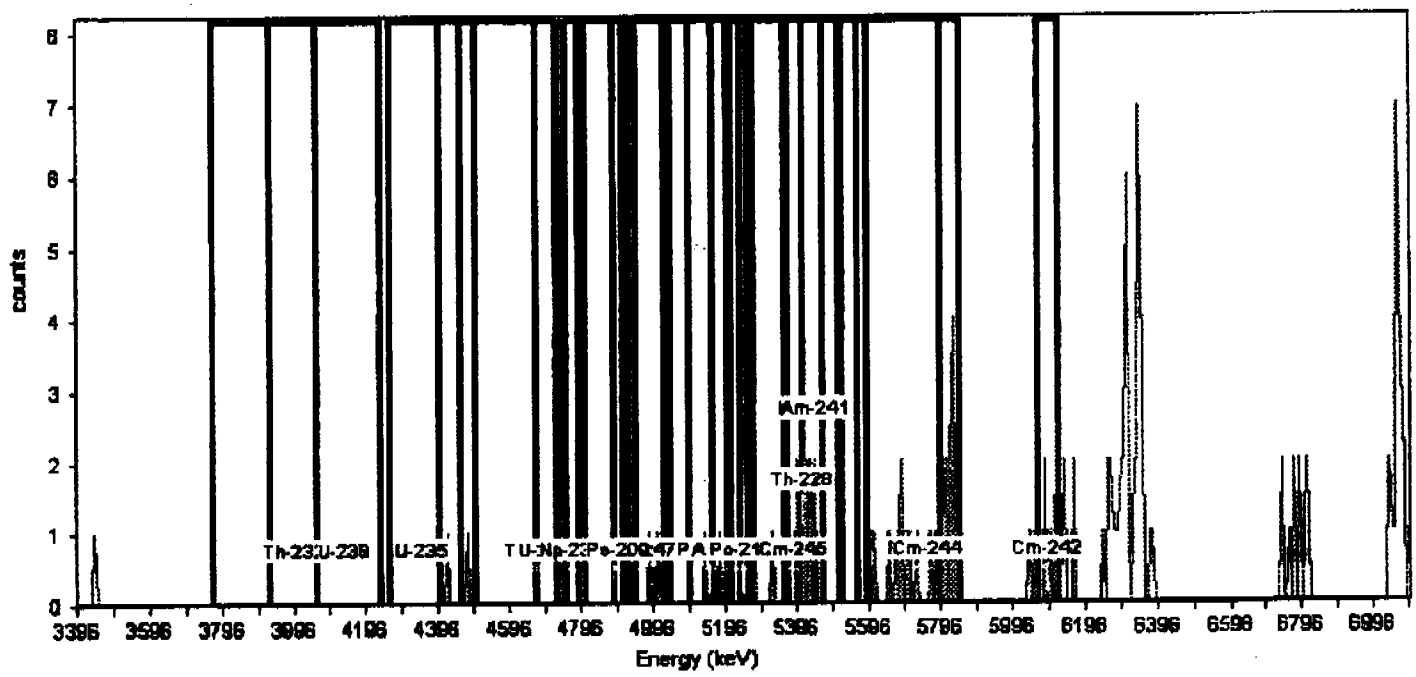
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV39 , SN: ALDR31
Acquisition Start Date: 3/14/2005 5:40:16PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Calibration Name: Feb2005_AV39
Calibration Date: 3/4/2005 1:09:54PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.24% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 126.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.473E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.473E-003
U-235	4.35	4.26	4.46	1.00	1.042E-003	1.473E-003
Th-230	4.67	4.40	4.73	2.00	2.083E-003	1.804E-003
U-234	4.70	4.50	4.80	2.00	2.083E-003	1.804E-003
Pu-242	4.88	4.67	4.93	2.00	2.083E-003	1.804E-003
Th-229	4.84	4.72	5.10	4.00	4.167E-003	2.329E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	2.00	2.083E-003	1.804E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	4.00	4.167E-003	2.329E-003
Am-243	5.20	5.03	5.28	3.00	3.125E-003	2.083E-003
U-232	5.23	5.04	5.37	4.00	4.167E-003	2.329E-003
Th-228	5.41	5.16	5.47	15.00	1.563E-002	4.167E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	14.00	1.458E-002	4.034E-003
Am-241	5.45	5.27	5.57	14.00	1.458E-002	4.034E-003
Cm-245	5.39	5.36	5.41	3.00	3.125E-003	2.083E-003
Pu-236	5.74	5.52	5.80	11.00	1.146E-002	3.608E-003
Cm-244	5.76	5.60	5.85	25.00	2.604E-002	5.311E-003
Cm-242	6.10	6.07	6.13	7.00	7.292E-003	2.946E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:58:32AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV40
Comment:

Spectrum #1 Analysis #1

Batch

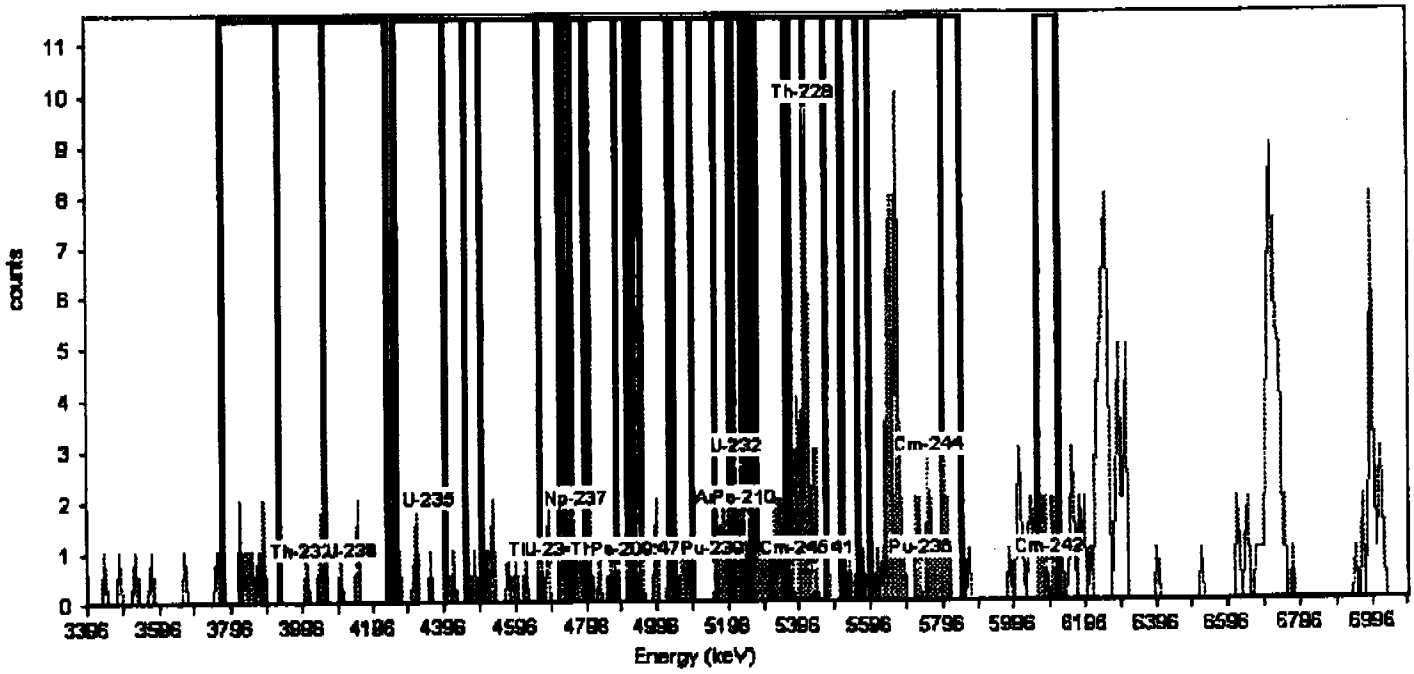
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV40 , SN: ALDR32
Acquisition Start Date: 3/14/2005 5:40:16PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Calibration Name: Feb2005_AV40
Calibration Date: 3/4/2005 1:10:02PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 24.65% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI, Library: Background ROI Library
Total Background Counts: 331.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	12.00	1.250E-002	3.758E-003
U-238	4.14	3.93	4.24	7.00	7.292E-003	2.946E-003
U-235	4.35	4.26	4.46	7.00	7.292E-003	2.946E-003
Th-230	4.67	4.40	4.73	13.00	1.354E-002	3.898E-003
U-234	4.70	4.50	4.80	15.00	1.563E-002	4.167E-003
Pu-242	4.88	4.67	4.93	11.00	1.146E-002	3.608E-003
Th-229	4.84	4.72	5.10	18.00	1.875E-002	4.541E-003
Np-237	4.77	4.75	4.79	3.00	3.125E-003	2.083E-003
Cm-247	4.96	4.88	5.04	6.00	6.250E-003	2.756E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	15.00	1.563E-002	4.167E-003
Am-243	5.20	5.03	5.28	17.00	1.771E-002	4.419E-003
U-232	5.23	5.04	5.37	28.00	2.917E-002	5.610E-003
Th-228	5.41	5.16	5.47	55.00	5.729E-002	7.795E-003
Po-210	5.25	5.20	5.26	5.00	5.208E-003	2.552E-003
Pu-238	5.44	5.24	5.52	47.00	4.896E-002	7.217E-003
Am-241	5.45	5.27	5.57	48.00	5.000E-002	7.292E-003
Cm-245	5.39	5.36	5.41	21.00	2.187E-002	4.886E-003
Pu-236	5.74	5.52	5.80	58.00	6.042E-002	8.001E-003
Cm-244	5.76	5.60	5.85	59.00	6.146E-002	8.069E-003
Cm-242	6.10	6.07	6.13	7.00	7.292E-003	2.946E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:58:42AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV41
Comment:

Spectrum #1 Analysis #1

Batch

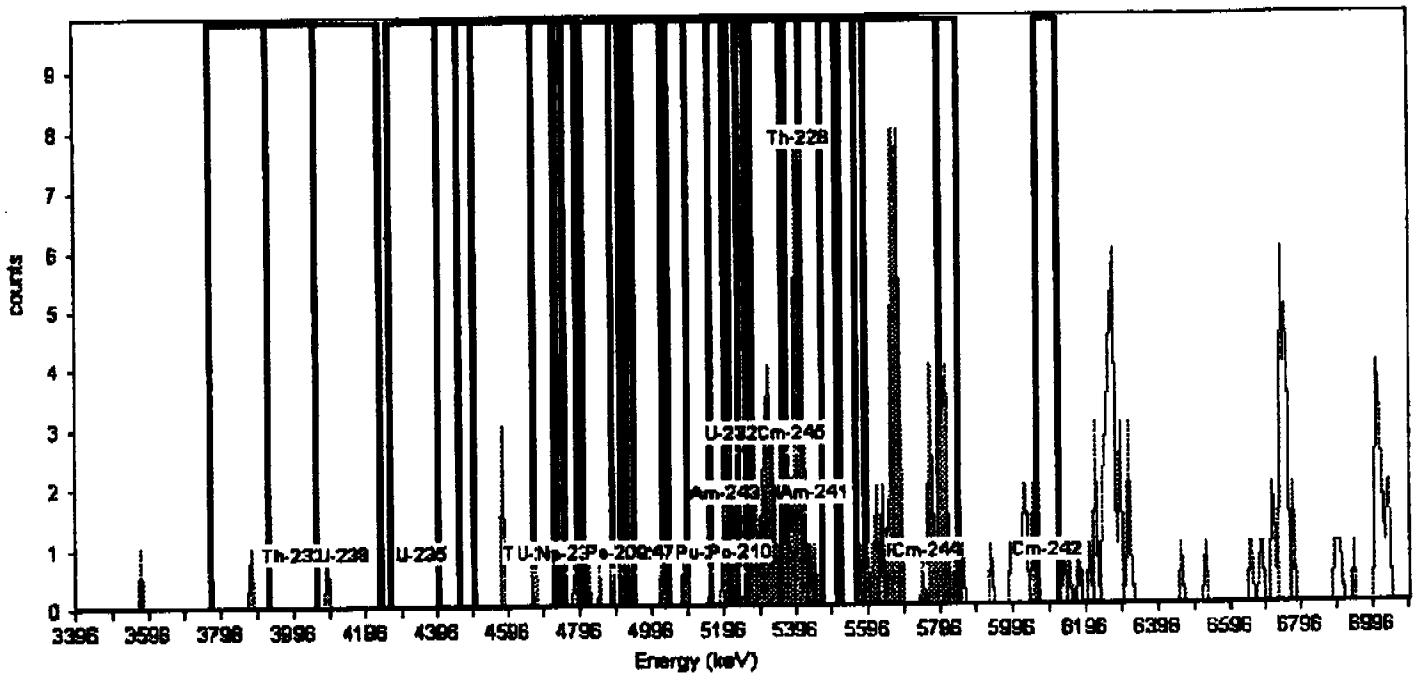
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV41 , SN: ALDR33
Acquisition Start Date: 3/14/2005 5:40:17PM
Live Time: 960.00 min.
Real Time: 960.03 min.
Calibration Name: Feb2005_AV41
Calibration Date: 3/4/2005 1:10:28PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 25.35% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 235.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.042E-003	1.473E-003
U-238	4.14	3.93	4.24	1.00	1.042E-003	1.473E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	4.00	4.167E-003	2.329E-003
U-234	4.70	4.50	4.80	5.00	5.208E-003	2.552E-003
Pu-242	4.88	4.67	4.93	6.00	6.250E-003	2.756E-003
Th-229	4.84	4.72	5.10	9.00	9.375E-003	3.294E-003
Np-237	4.77	4.75	4.79	1.00	1.042E-003	1.473E-003
Cm-247	4.96	4.88	5.04	4.00	4.167E-003	2.329E-003
Po-209	4.90	4.88	4.91	1.00	1.042E-003	1.473E-003
Pu-239	5.15	4.95	5.21	6.00	6.250E-003	2.756E-003
Am-243	5.20	5.03	5.28	9.00	9.375E-003	3.294E-003
U-232	5.23	5.04	5.37	31.00	3.229E-002	5.893E-003
Th-228	5.41	5.16	5.47	58.00	6.042E-002	8.001E-003
Po-210	5.25	5.20	5.26	3.00	3.125E-003	2.083E-003
Pu-238	5.44	5.24	5.52	54.00	5.625E-002	7.725E-003
Am-241	5.45	5.27	5.57	54.00	5.625E-002	7.725E-003
Cm-245	5.39	5.36	5.41	27.00	2.813E-002	5.512E-003
Pu-236	5.74	5.52	5.80	49.00	5.104E-002	7.366E-003
Cm-244	5.76	5.60	5.85	59.00	6.146E-002	8.069E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.473E-003

SEVERN TRENT **STL**

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:58:49AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV42
Spectrum #1 Analysis #1
Comment:

Batch

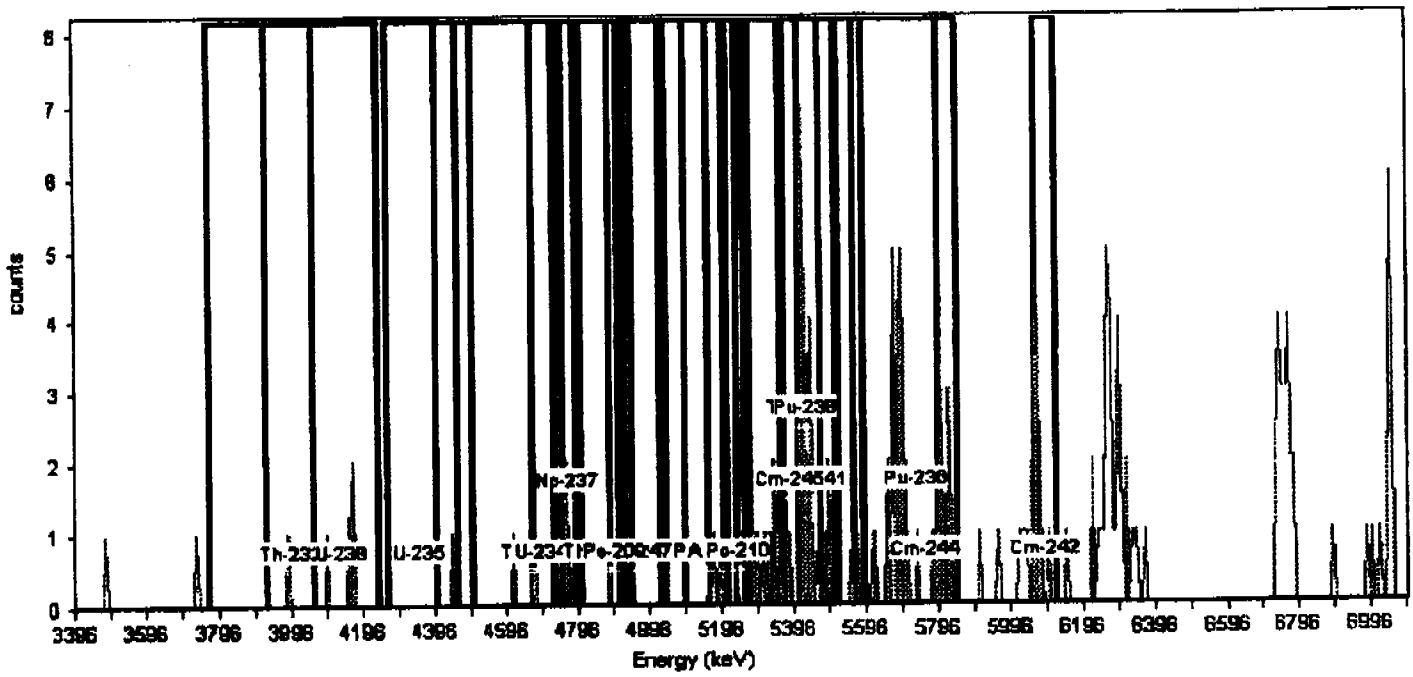
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV42 , SN: ALDR34
Acquisition Start Date: 3/14/2005 5:40:18PM
Live Time: 960.00 min.
Real Time: 960.03 min.
Calibration Name: Feb2005_AV42
Calibration Date: 3/4/2005 1:10:38PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 25.26% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 178.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.042E-003	1.473E-003
U-238	4.14	3.93	4.24	5.00	5.208E-003	2.552E-003
U-235	4.36	4.26	4.46	1.00	1.042E-003	1.473E-003
Th-230	4.67	4.40	4.73	3.00	3.125E-003	2.083E-003
U-234	4.70	4.50	4.80	5.00	5.208E-003	2.552E-003
Pu-242	4.88	4.67	4.93	4.00	4.167E-003	2.329E-003
Th-229	4.84	4.72	5.10	4.00	4.167E-003	2.329E-003
Np-237	4.77	4.75	4.79	3.00	3.125E-003	2.083E-003
Cm-247	4.96	4.88	5.04	1.00	1.042E-003	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	3.00	3.125E-003	2.083E-003
Am-243	5.20	5.03	5.28	4.00	4.167E-003	2.329E-003
U-232	5.23	5.04	5.37	13.00	1.354E-002	3.898E-003
Th-228	5.41	5.16	5.47	35.00	3.646E-002	6.250E-003
Po-210	5.25	5.20	5.26	1.00	1.042E-003	1.473E-003
Pu-238	5.44	5.24	5.52	35.00	3.646E-002	6.250E-003
Am-241	5.45	5.27	5.57	35.00	3.646E-002	6.250E-003
Cm-245	5.39	5.36	5.41	5.00	5.208E-003	2.552E-003
Pu-236	5.74	5.52	5.80	30.00	3.125E-002	5.800E-003
Cm-244	5.76	5.60	5.85	37.00	3.854E-002	6.421E-003
Cm-242	6.10	6.07	6.13	12.00	1.250E-002	3.756E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:58:56AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV43
Comment:

Spectrum #1 Analysis #1

Batch

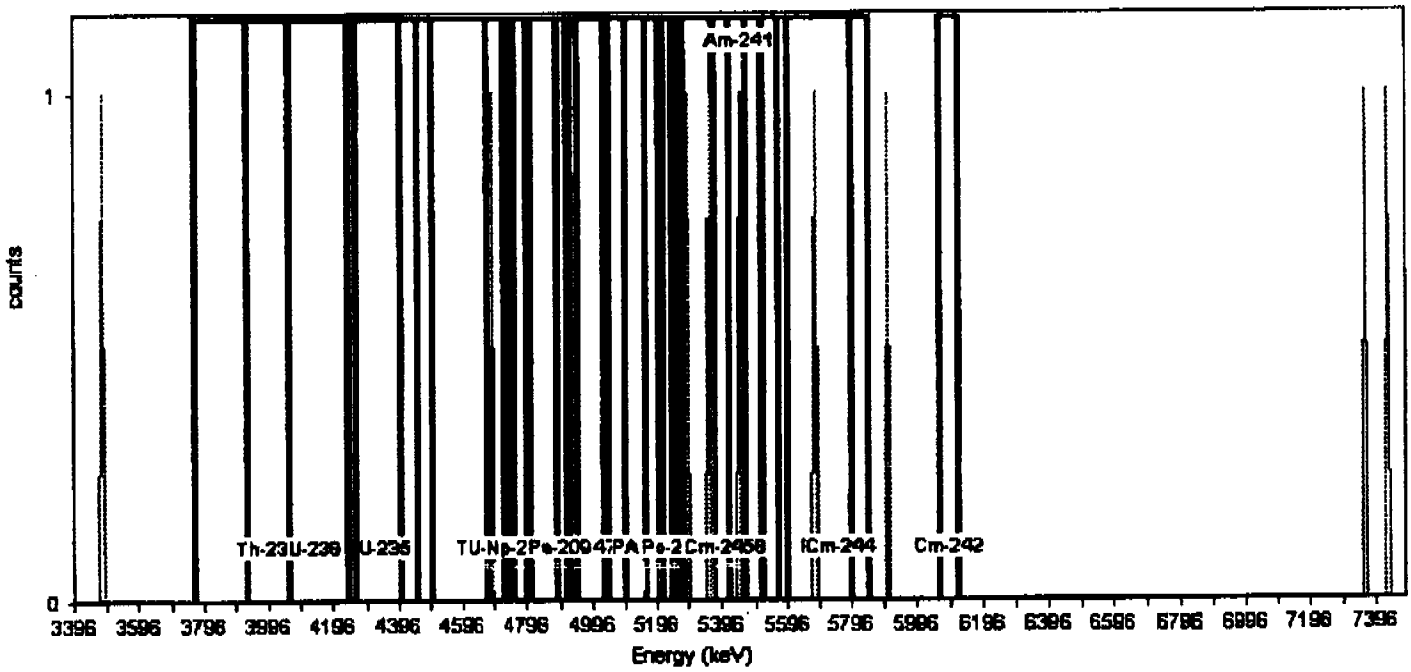
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV43 , SN: AV43
Acquisition Start Date: 3/14/2005 5:40:20PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Calibration Name: Feb2005_AV43
Calibration Date: 3/2/2005 9:42:20PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.81% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 10.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.473E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.473E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	1.00	1.042E-003	1.473E-003
U-234	4.70	4.50	4.80	1.00	1.042E-003	1.473E-003
Pu-242	4.88	4.67	4.93	1.00	1.042E-003	1.473E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.473E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.473E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.473E-003
U-232	5.23	5.04	5.37	3.00	3.125E-003	2.083E-003
Th-228	5.41	5.16	5.47	4.00	4.167E-003	2.329E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	4.00	4.167E-003	2.329E-003
Am-241	5.45	5.27	5.57	4.00	4.167E-003	2.329E-003
Cm-245	5.39	5.36	5.41	1.00	1.042E-003	1.473E-003
Pu-236	5.74	5.52	5.80	1.00	1.042E-003	1.473E-003
Cm-244	5.76	5.60	5.85	1.00	1.042E-003	1.473E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.473E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:59:02AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV44
Comment:

Spectrum #1 Analysis #1

Batch

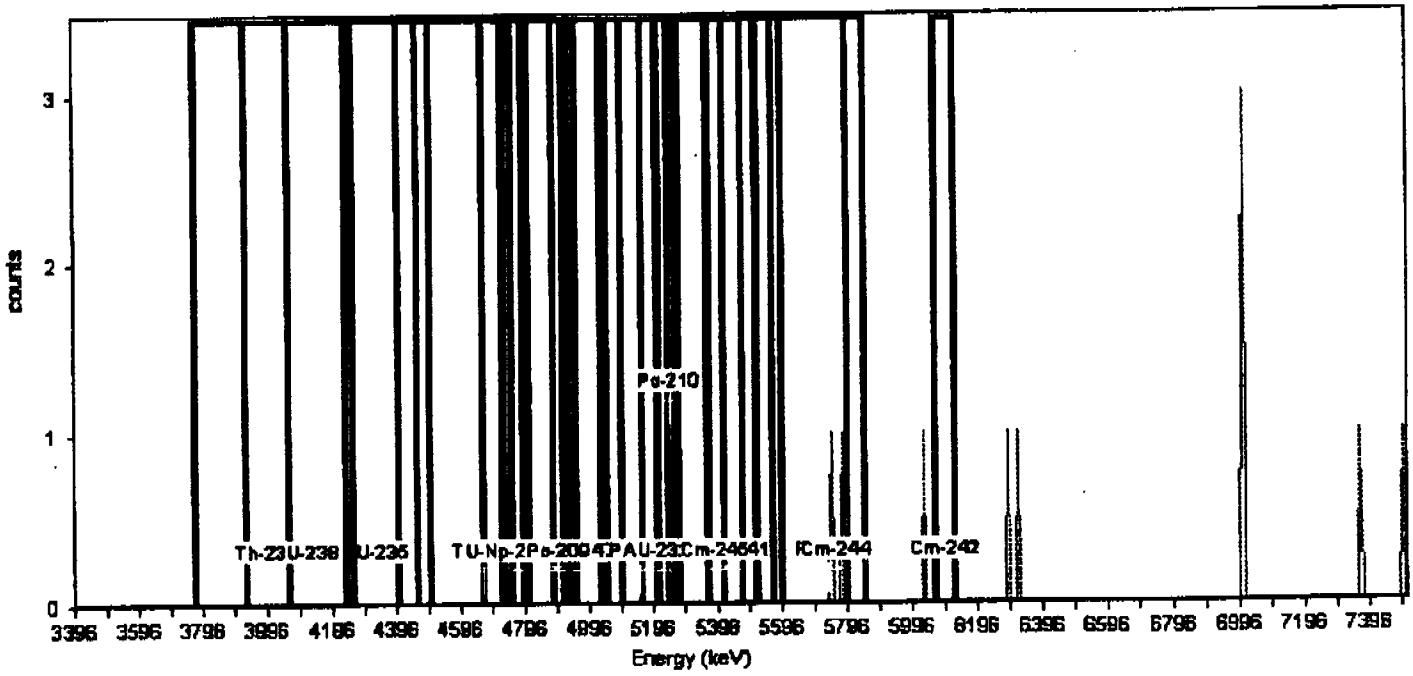
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV44 , SN: AV44
Acquisition Start Date: 3/14/2005 5:40:22PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Calibration Name: Feb2005_AV44
Calibration Date: 3/2/2005 9:42:40PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.09% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 12.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.473E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.473E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.473E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.473E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.473E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.473E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.473E-003
Am-243	5.20	5.03	5.28	1.00	1.042E-003	1.473E-003
U-232	5.23	5.04	5.37	1.00	1.042E-003	1.473E-003
Th-228	5.41	5.16	5.47	1.00	1.042E-003	1.473E-003
Po-210	5.25	5.20	5.26	1.00	1.042E-003	1.473E-003
Pu-238	5.44	5.24	5.52	1.00	1.042E-003	1.473E-003
Am-241	5.45	5.27	5.57	0.00	0.000E+000	1.473E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.473E-003
Pu-236	5.74	5.52	5.80	3.00	3.125E-003	2.083E-003
Cm-244	5.76	5.60	5.85	3.00	3.125E-003	2.083E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.473E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:59:09AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV45
Comment:

Spectrum #1 Analysis #1

Batch

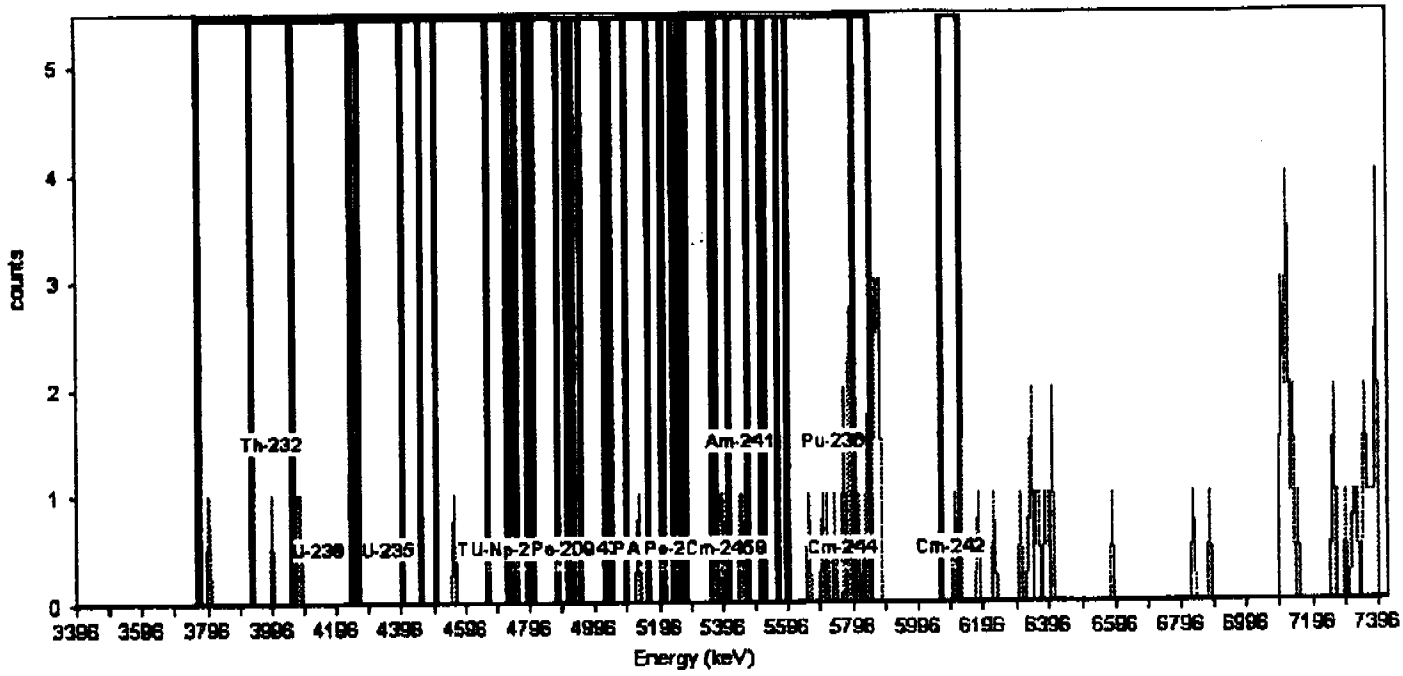
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV45 , SN: AV45
Acquisition Start Date: 3/14/2005 5:40:24PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Calibration Name: Feb2005_AV45
Calibration Date: 3/2/2005 9:42:56PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 28.03% +/- 0.30% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 89.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.083E-003	1.804E-003
U-238	4.14	3.93	4.24	3.00	3.125E-003	2.083E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	1.00	1.042E-003	1.473E-003
U-234	4.70	4.50	4.80	2.00	2.083E-003	1.804E-003
Pu-242	4.88	4.67	4.93	2.00	2.083E-003	1.804E-003
Th-229	4.84	4.72	5.10	2.00	2.083E-003	1.804E-003
Np-237	4.77	4.75	4.79	1.00	1.042E-003	1.473E-003
Cm-247	4.96	4.88	5.04	1.00	1.042E-003	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	1.00	1.042E-003	1.473E-003
Am-243	5.20	5.03	5.28	1.00	1.042E-003	1.473E-003
U-232	5.23	5.04	5.37	2.00	2.083E-003	1.804E-003
Th-228	5.41	5.16	5.47	3.00	3.125E-003	2.083E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	3.00	3.125E-003	2.083E-003
Am-241	5.45	5.27	5.57	3.00	3.125E-003	2.083E-003
Cm-245	5.39	5.36	5.41	2.00	2.083E-003	1.804E-003
Pu-236	5.74	5.52	5.80	11.00	1.146E-002	3.608E-003
Cm-244	5.76	5.60	5.85	18.00	1.875E-002	4.541E-003
Cm-242	6.10	6.07	6.13	4.00	4.167E-003	2.329E-003

SEVERN TRENT **STL**

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:59:16AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV46
Comment:

Spectrum #1 Analysis #1

Batch

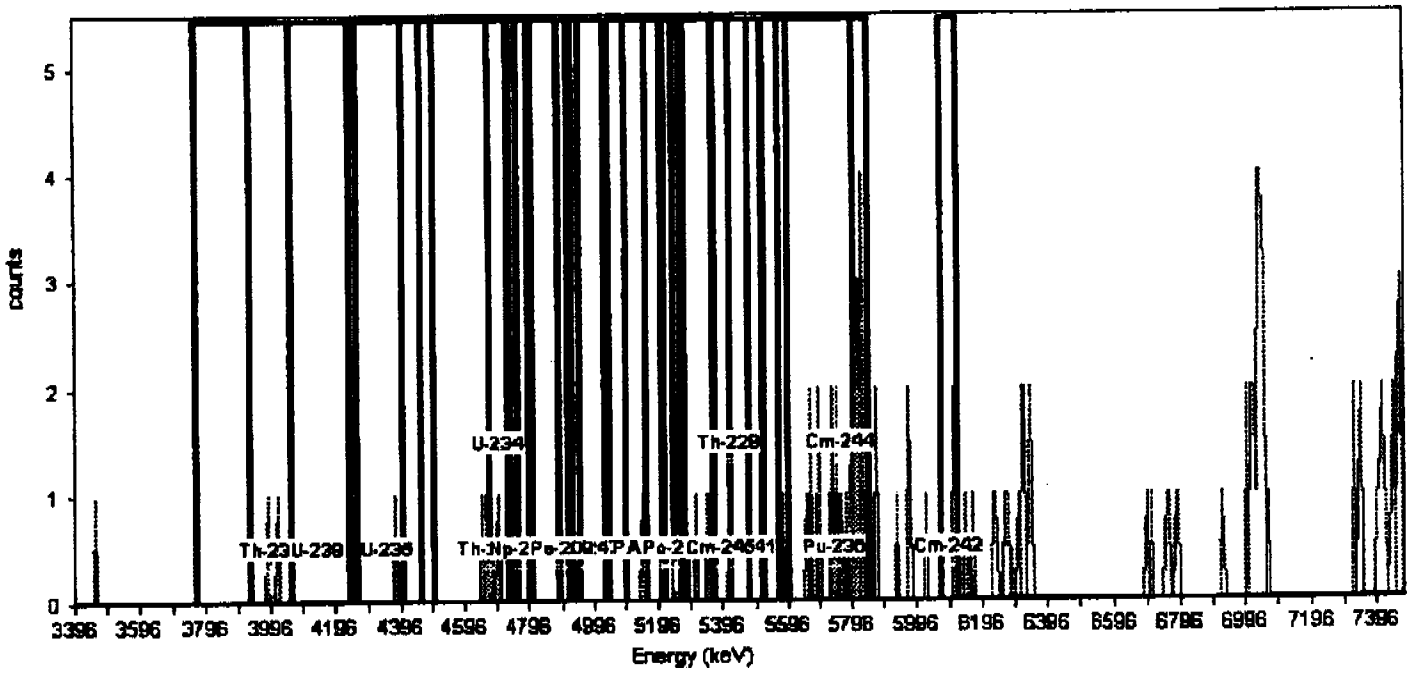
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV46 , SN: AV46
Acquisition Start Date: 3/14/2005 5:40:25PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Calibration Name: Feb2005_AV46
Calibration Date: 3/2/2005 9:43:21PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.92% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Active Library: Background ROI Library
Total Background Counts: 109.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.083E-003	1.804E-003
U-238	4.14	3.93	4.24	2.00	2.083E-003	1.804E-003
U-235	4.35	4.26	4.46	1.00	1.042E-003	1.473E-003
Th-230	4.67	4.40	4.73	4.00	4.167E-003	2.329E-003
U-234	4.70	4.50	4.80	4.00	4.167E-003	2.329E-003
Pu-242	4.88	4.67	4.93	2.00	2.083E-003	1.804E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.473E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	1.00	1.042E-003	1.473E-003
Am-243	5.20	5.03	5.28	2.00	2.083E-003	1.804E-003
U-232	5.23	5.04	5.37	5.00	5.208E-003	2.552E-003
Th-228	5.41	5.16	5.47	5.00	5.208E-003	2.552E-003
Po-210	5.25	5.20	5.26	1.00	1.042E-003	1.473E-003
Pu-238	5.44	5.24	5.52	5.00	5.208E-003	2.552E-003
Am-241	5.45	5.27	5.57	4.00	4.167E-003	2.329E-003
Cm-245	5.39	5.36	5.41	1.00	1.042E-003	1.473E-003
Pu-236	5.74	5.52	5.80	16.00	1.667E-002	4.295E-003
Cm-244	5.76	5.60	5.85	27.00	2.813E-002	5.512E-003
Cm-242	6.10	6.07	6.13	2.00	2.083E-003	1.804E-003

SEVERN TRENT **STL**

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:59:22AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV47
Comment:

Spectrum #1 Analysis #1

Batch

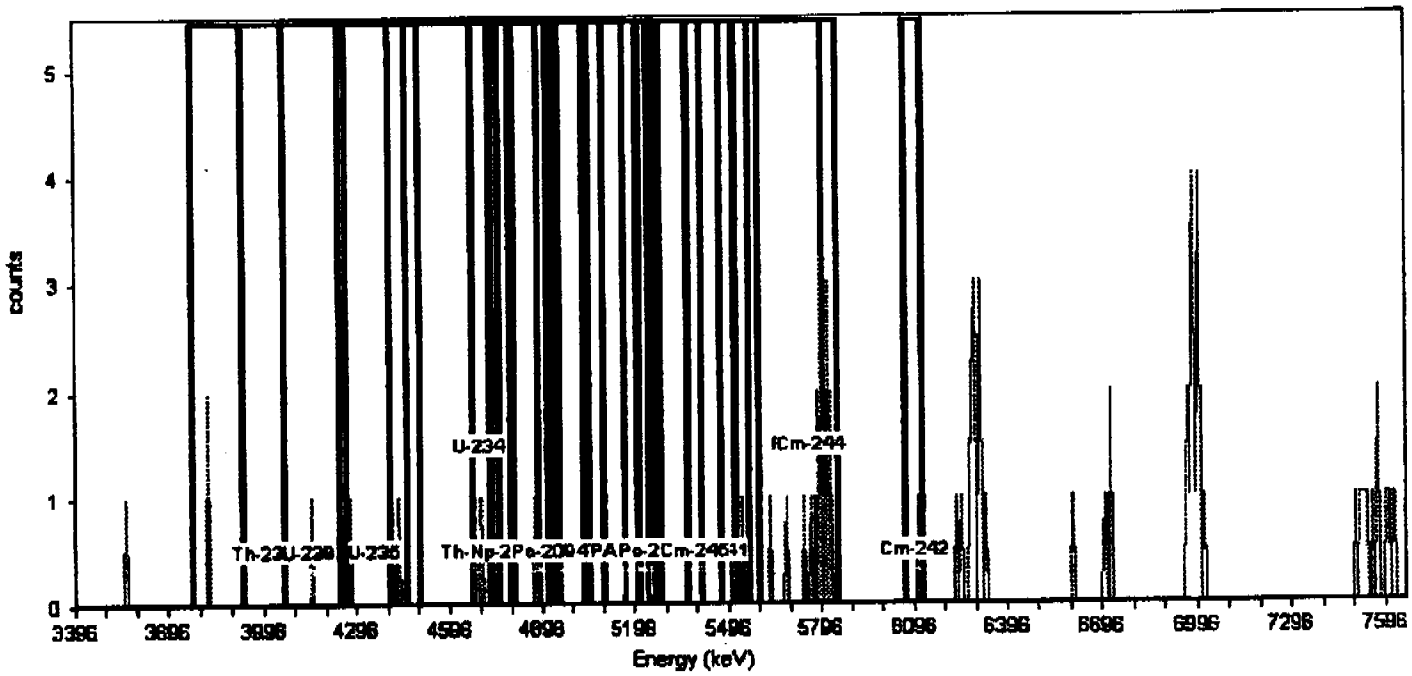
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV47 , SN: AV47
Acquisition Start Date: 3/14/2005 5:40:27PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Calibration Name: FEB2005_AV47
Calibration Date: 3/3/2005 9:04:41PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.23% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROU[illegible]I Library: Background ROI Library
Total Background Counts: 75.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.083E-003	1.804E-003
U-238	4.14	3.93	4.24	1.00	1.042E-003	1.473E-003
U-235	4.35	4.26	4.46	2.00	2.083E-003	1.804E-003
Th-230	4.67	4.40	4.73	2.00	2.083E-003	1.804E-003
U-234	4.70	4.50	4.80	1.00	1.042E-003	1.473E-003
Pu-242	4.88	4.67	4.93	2.00	2.083E-003	1.804E-003
Th-229	4.84	4.72	5.10	1.00	1.042E-003	1.473E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.473E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.473E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.473E-003
Th-228	5.41	5.16	5.47	0.00	0.000E+000	1.473E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	1.00	1.042E-003	1.473E-003
Am-241	5.45	5.27	5.57	2.00	2.083E-003	1.804E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.473E-003
Pu-236	5.74	5.52	5.80	12.00	1.250E-002	3.756E-003
Cm-244	5.76	5.60	5.85	17.00	1.771E-002	4.419E-003
Cm-242	6.10	6.07	6.13	1.00	1.042E-003	1.473E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:59:32AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV48
Comment:

Spectrum #1 Analysis #1

Batch

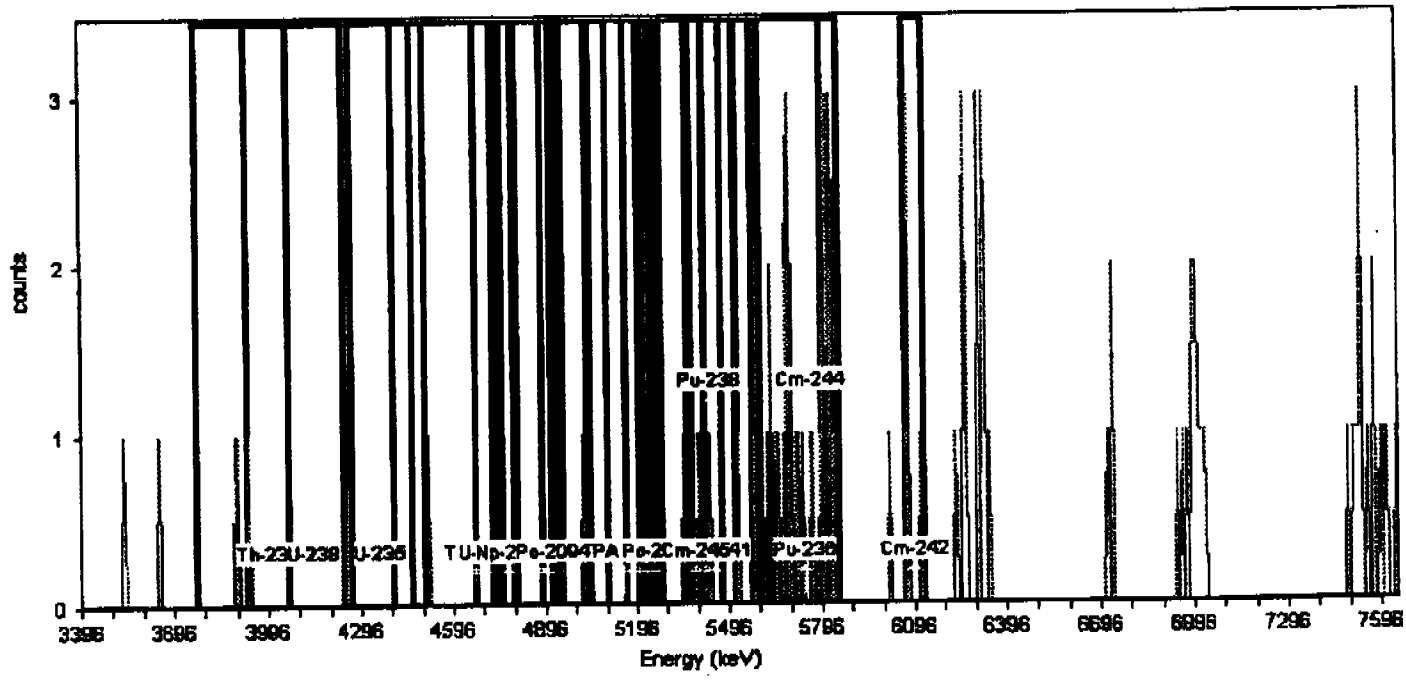
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV48 , SN: AV48
Acquisition Start Date: 3/14/2005 5:40:29PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Calibration Name: Feb2005_AV48
Calibration Date: 3/1/2005 9:51:35PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.62% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Nuclide Library: Background ROI Library
Total Background Counts: 95.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.083E-003	1.804E-003
U-238	4.14	3.93	4.24	2.00	2.083E-003	1.804E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	1.00	1.042E-003	1.473E-003
U-234	4.70	4.50	4.80	1.00	1.042E-003	1.473E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.473E-003
Th-229	4.84	4.72	5.10	1.00	1.042E-003	1.473E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	1.00	1.042E-003	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	1.00	1.042E-003	1.473E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.473E-003
U-232	5.23	5.04	5.37	1.00	1.042E-003	1.473E-003
Th-228	5.41	5.16	5.47	4.00	4.167E-003	2.329E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	4.00	4.167E-003	2.329E-003
Am-241	5.45	5.27	5.57	5.00	5.208E-003	2.552E-003
Cm-245	5.39	5.36	5.41	1.00	1.042E-003	1.473E-003
Pu-236	5.74	5.52	5.80	22.00	2.292E-002	4.996E-003
Cm-244	5.76	5.60	5.85	29.00	3.021E-002	5.705E-003
Cm-242	6.10	6.07	6.13	5.00	5.208E-003	2.552E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:59:36AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV49
Comment:

Spectrum #1 Analysis #1

Batch

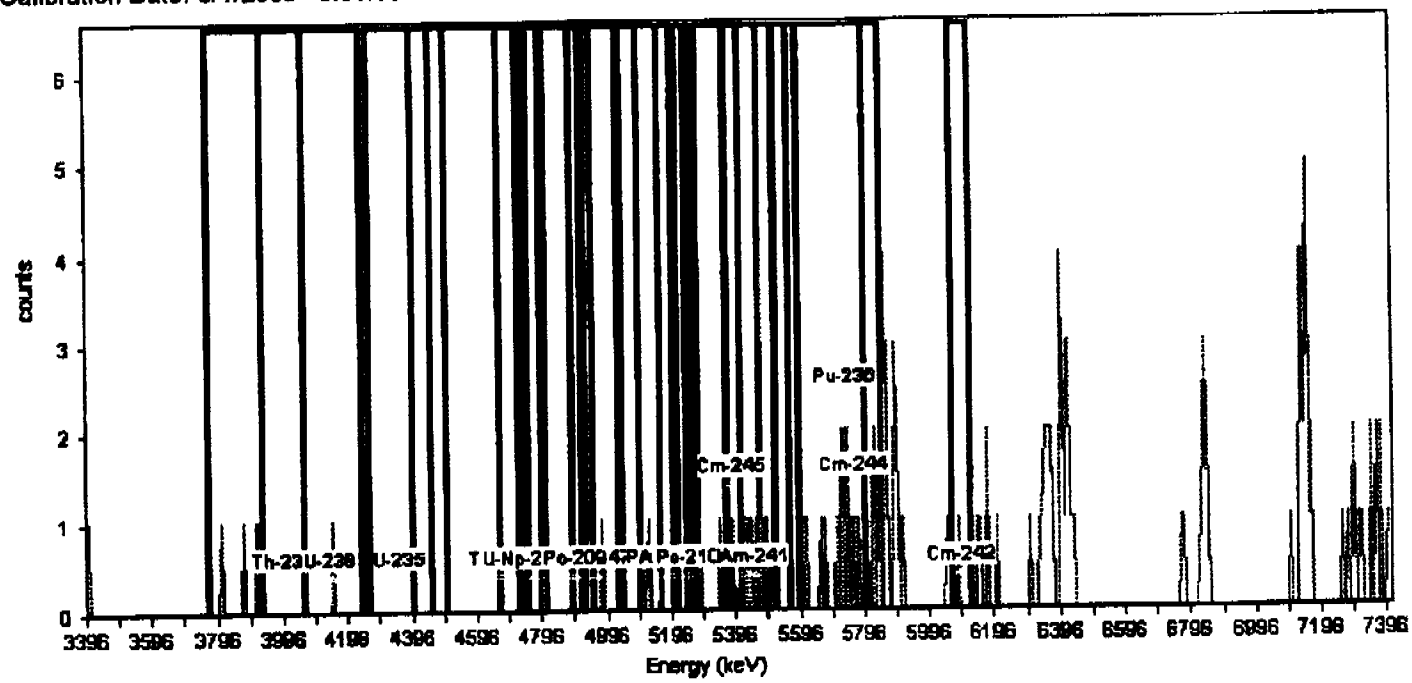
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV49 , SN: AV49
Acquisition Start Date: 3/14/2005 5:40:31PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Calibration Name: Feb2005_AV49
Calibration Date: 3/1/2005 9:51:53PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 28.12% +/- 0.30% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 128.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	4.00	4.167E-003	2.329E-003
U-238	4.14	3.93	4.24	2.00	2.083E-003	1.804E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.473E-003
U-234	4.70	4.50	4.80	1.00	1.042E-003	1.473E-003
Pu-242	4.88	4.67	4.93	1.00	1.042E-003	1.473E-003
Th-229	4.84	4.72	5.10	2.00	2.083E-003	1.804E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	1.00	1.042E-003	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	3.00	3.125E-003	2.083E-003
Am-243	5.20	5.03	5.28	2.00	2.083E-003	1.804E-003
U-232	5.23	5.04	5.37	4.00	4.167E-003	2.329E-003
Th-228	5.41	5.16	5.47	11.00	1.146E-002	3.608E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	13.00	1.354E-002	3.898E-003
Am-241	5.45	5.27	5.57	13.00	1.354E-002	3.898E-003
Cm-245	5.39	5.36	5.41	1.00	1.042E-003	1.473E-003
Pu-236	5.74	5.52	5.80	14.00	1.458E-002	4.034E-003
Cm-244	5.76	5.80	5.85	19.00	1.979E-002	4.658E-003
Cm-242	6.10	6.07	6.13	1.00	1.042E-003	1.473E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:59:42AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV50
Comment:

Spectrum #1 Analysis #1

Batch

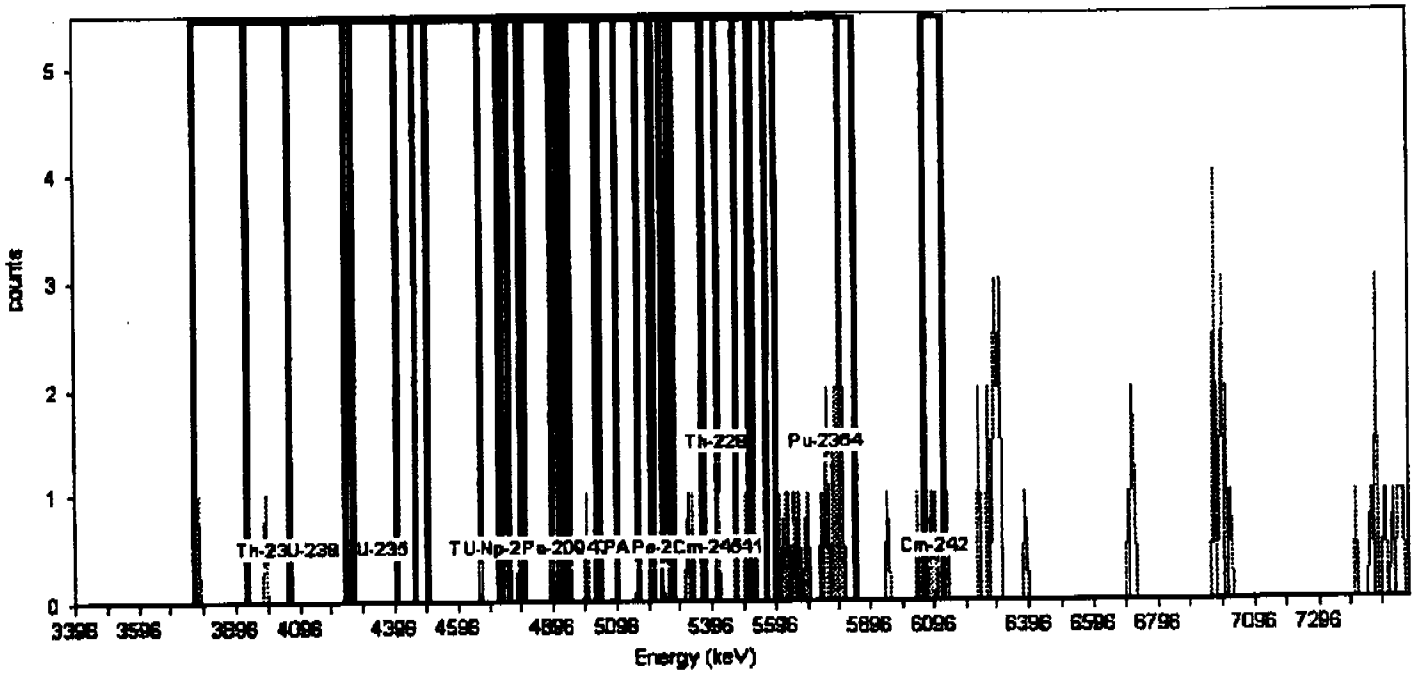
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV50 , SN: AV50
Acquisition Start Date: 3/14/2005 5:40:33PM
Live Time: 960.00 min.
Real Time: 960.01 min.
Calibration Name: Feb2005_AV50
Calibration Date: 3/1/2005 9:52:10PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.23% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 81.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Cm-244	5.76	5.60	5.85	24.00	2.500E-002	5.208E-003
Cm-242	6.10	6.07	6.13	2.00	2.083E-003	1.804E-003
Th-232	3.99	3.77	4.06	2.00	2.083E-003	1.804E-003
U-238	4.14	3.93	4.24	1.00	1.042E-003	1.473E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.473E-003
U-234	4.70	4.50	4.80	1.00	1.042E-003	1.473E-003
Pu-242	4.88	4.67	4.93	1.00	1.042E-003	1.473E-003
Th-229	4.84	4.72	5.10	2.00	2.083E-003	1.804E-003
Np-237	4.77	4.75	4.79	1.00	1.042E-003	1.473E-003
Cm-247	4.96	4.88	5.04	1.00	1.042E-003	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	1.00	1.042E-003	1.473E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.473E-003
U-232	5.23	5.04	5.37	2.00	2.083E-003	1.804E-003
Th-228	5.41	5.16	5.47	4.00	4.167E-003	2.329E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	5.00	5.208E-003	2.552E-003
Am-241	5.45	5.27	5.57	6.00	6.250E-003	2.756E-003
Cm-245	5.39	5.36	5.41	1.00	1.042E-003	1.473E-003
Pu-236	5.74	5.52	5.80	21.00	2.187E-002	4.886E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:59:52AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV51
Comment:

Spectrum #1 Analysis #1

Batch

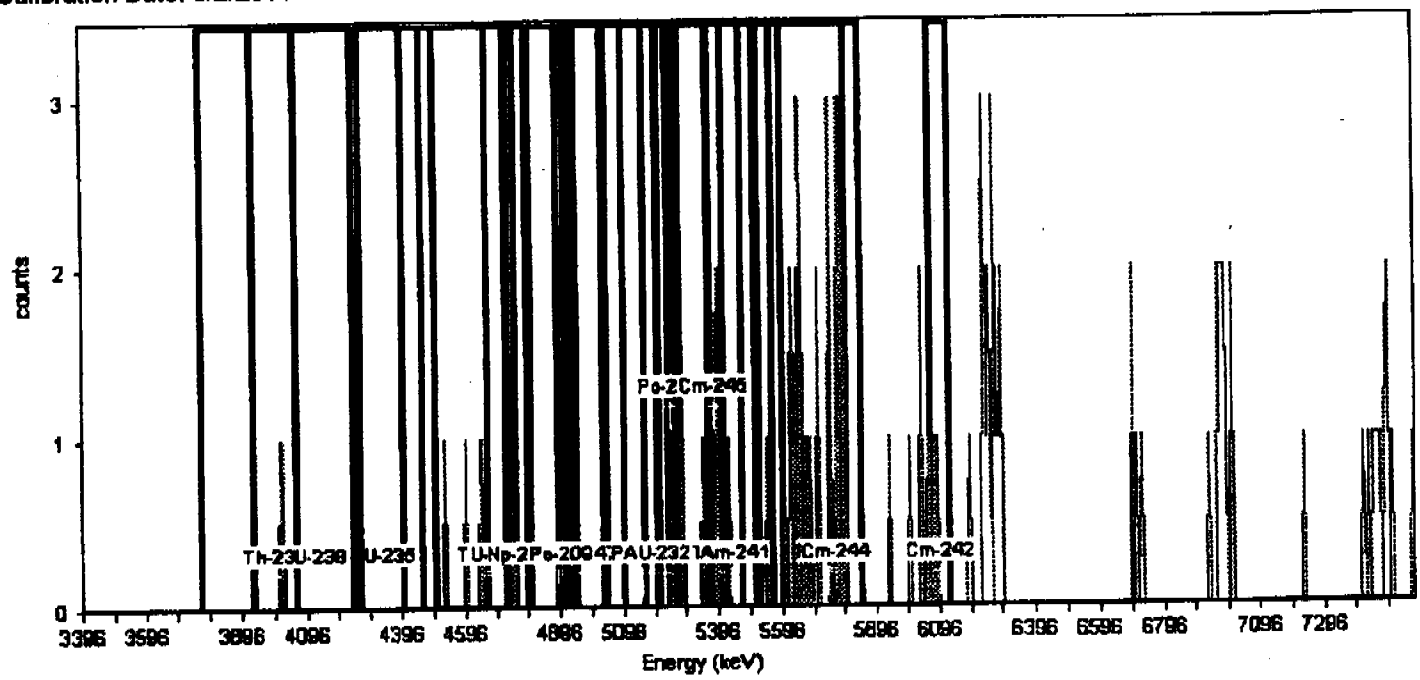
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV51 , SN:
Acquisition Start Date: 3/14/2005 5:40:34PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Feb2005_AV51
Calibration Date: 3/2/2005 10:06:47AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.36% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Library: Background ROI Library
Total Background Counts: 97.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.042E-003	1.473E-003
U-238	4.14	3.93	4.24	1.00	1.042E-003	1.473E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	3.00	3.125E-003	2.083E-003
U-234	4.70	4.50	4.80	4.00	4.167E-003	2.329E-003
Pu-242	4.88	4.67	4.93	1.00	1.042E-003	1.473E-003
Th-229	4.84	4.72	5.10	2.00	2.083E-003	1.804E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	1.00	1.042E-003	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.473E-003
Am-243	5.20	5.03	5.28	2.00	2.083E-003	1.804E-003
U-232	5.23	5.04	5.37	4.00	4.167E-003	2.329E-003
Th-228	5.41	5.16	5.47	10.00	1.042E-002	3.455E-003
Po-210	5.25	5.20	5.26	1.00	1.042E-003	1.473E-003
Pu-238	5.44	5.24	5.52	10.00	1.042E-002	3.455E-003
Am-241	5.46	5.27	5.57	10.00	1.042E-002	3.455E-003
Cm-245	5.39	5.36	5.41	5.00	5.208E-003	2.552E-003
Pu-236	5.74	5.52	5.80	29.00	3.021E-002	5.705E-003
Cm-244	5.76	5.60	5.85	28.00	2.917E-002	5.610E-003
Cm-242	6.10	6.07	6.13	4.00	4.167E-003	2.329E-003

SEVERN TRENT **STL**

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:59:56AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV52
Comment:

Spectrum #1 Analysis #1

Batch

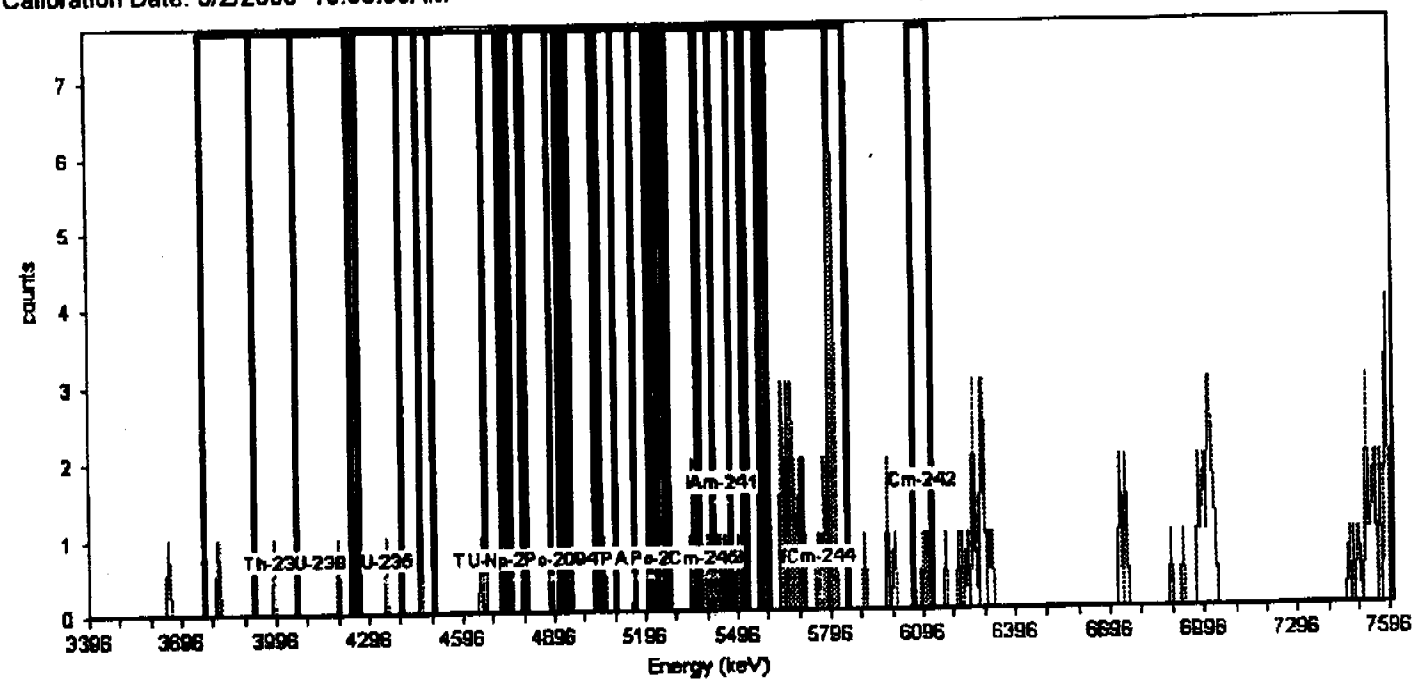
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV52 , SN:
Acquisition Start Date: 3/14/2005 5:40:37PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Feb2005_AV52
Calibration Date: 3/2/2005 10:06:56AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.18% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 128.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.083E-003	1.804E-003
U-238	4.14	3.93	4.24	2.00	2.083E-003	1.804E-003
U-235	4.35	4.26	4.46	2.00	2.083E-003	1.804E-003
Th-230	4.67	4.40	4.73	2.00	2.083E-003	1.804E-003
U-234	4.70	4.50	4.80	1.00	1.042E-003	1.473E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.473E-003
Th-229	4.84	4.72	5.10	1.00	1.042E-003	1.473E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	1.00	1.042E-003	1.473E-003
Am-243	5.20	5.03	5.28	1.00	1.042E-003	1.473E-003
U-232	5.23	5.04	5.37	3.00	3.125E-003	2.083E-003
Th-228	5.41	5.16	5.47	8.00	8.333E-003	3.125E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	9.00	9.375E-003	3.294E-003
Am-241	5.45	5.27	5.57	9.00	9.375E-003	3.294E-003
Cm-245	5.39	5.36	5.41	2.00	2.083E-003	1.804E-003
Pu-236	5.74	5.52	5.80	33.00	3.437E-002	6.074E-003
Cm-244	5.76	5.60	5.85	38.00	3.958E-002	6.505E-003
Cm-242	6.10	6.07	6.13	3.00	3.125E-003	2.083E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:00:09AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV53
Comment:

Spectrum #1 Analysis #1

Batch

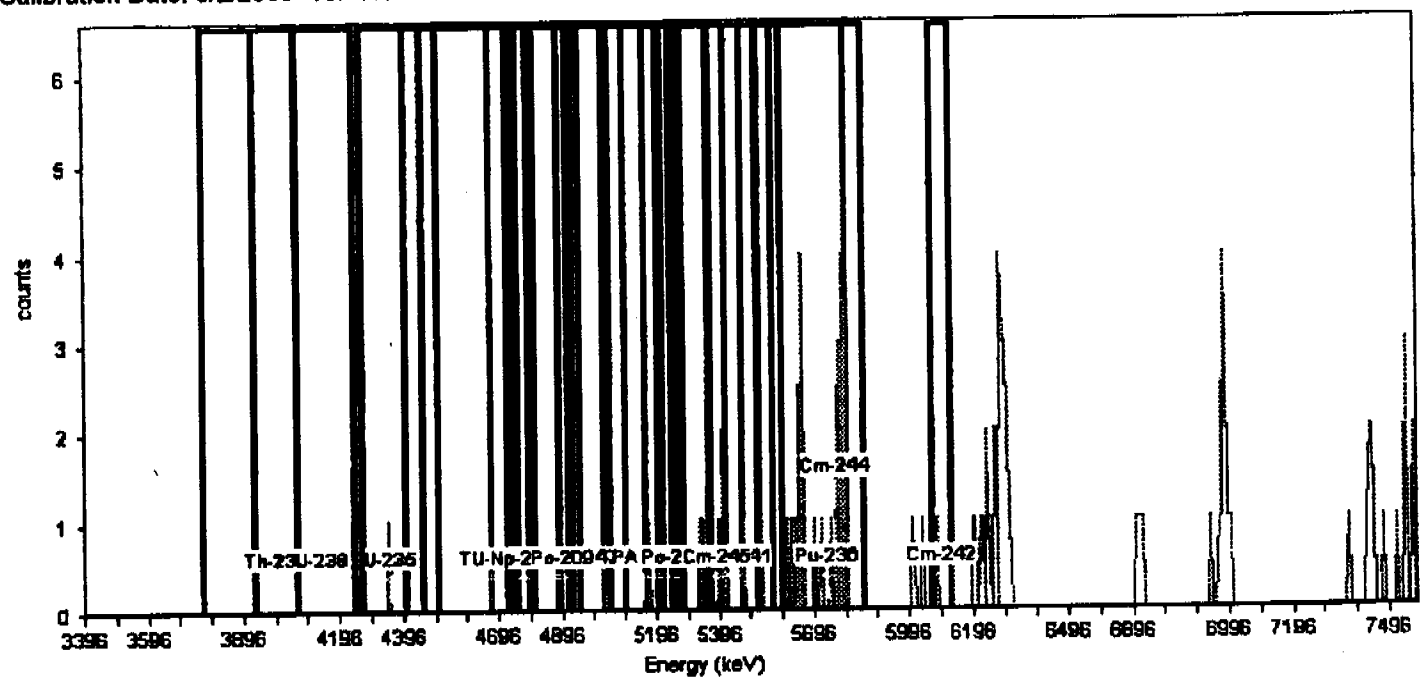
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV53 , SN:
Acquisition Start Date: 3/14/2005 5:39:42PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Feb2005_AV53
Calibration Date: 3/2/2005 10:07:10AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.65% +/- 0.30% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 101.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.473E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.473E-003
U-235	4.35	4.26	4.46	1.00	1.042E-003	1.473E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.473E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.473E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.473E-003
Th-229	4.84	4.72	5.10	1.00	1.042E-003	1.473E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	1.00	1.042E-003	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	2.00	2.083E-003	1.804E-003
Am-243	5.20	5.03	5.28	2.00	2.083E-003	1.804E-003
U-232	5.23	5.04	5.37	3.00	3.125E-003	2.083E-003
Th-228	5.41	5.16	5.47	7.00	7.292E-003	2.946E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	6.00	6.250E-003	2.756E-003
Am-241	5.45	5.27	5.57	7.00	7.292E-003	2.946E-003
Cm-245	5.39	5.36	5.41	3.00	3.125E-003	2.083E-003
Pu-236	5.74	5.52	5.80	33.00	3.437E-002	6.074E-003
Cm-244	5.76	5.60	5.85	32.00	3.333E-002	5.984E-003
Cm-242	6.10	6.07	6.13	2.00	2.083E-003	1.804E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:00:12AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV54
Spectrum #1 Analysis #1
Comment:

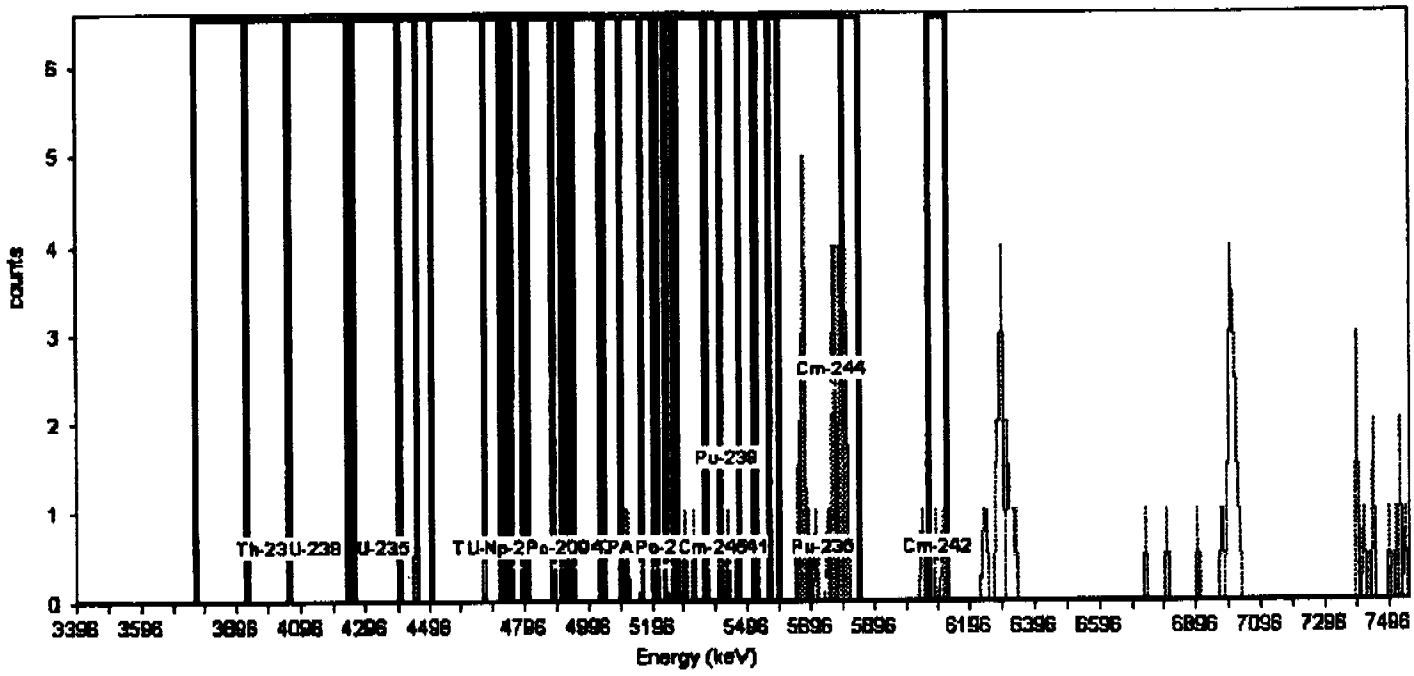
Batch

Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV54 , SN:
Acquisition Start Date: 3/14/2005 5:39:43PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Feb2005_AV54
Calibration Date: 3/2/2005 10:07:19AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.17% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 88.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.473E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.473E-003
U-235	4.35	4.26	4.46	1.00	1.042E-003	1.473E-003
Th-230	4.67	4.40	4.73	1.00	1.042E-003	1.473E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.473E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.473E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.473E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	1.00	1.042E-003	1.473E-003
Am-243	5.20	5.03	5.28	1.00	1.042E-003	1.473E-003
U-232	5.23	5.04	5.37	3.00	3.125E-003	2.083E-003
Th-228	5.41	5.16	5.47	4.00	4.167E-003	2.329E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	4.00	4.167E-003	2.329E-003
Am-241	5.45	5.27	5.57	4.00	4.167E-003	2.329E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.473E-003
Pu-236	5.74	5.52	5.80	27.00	2.813E-002	5.512E-003
Cm-244	5.76	5.60	5.85	32.00	3.333E-002	5.984E-003
Cm-242	6.10	6.07	6.13	3.00	3.125E-003	2.083E-003

SEVERN TRENT **STL**

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:00:19AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV55
Comment:

Spectrum #1 Analysis #1

Batch

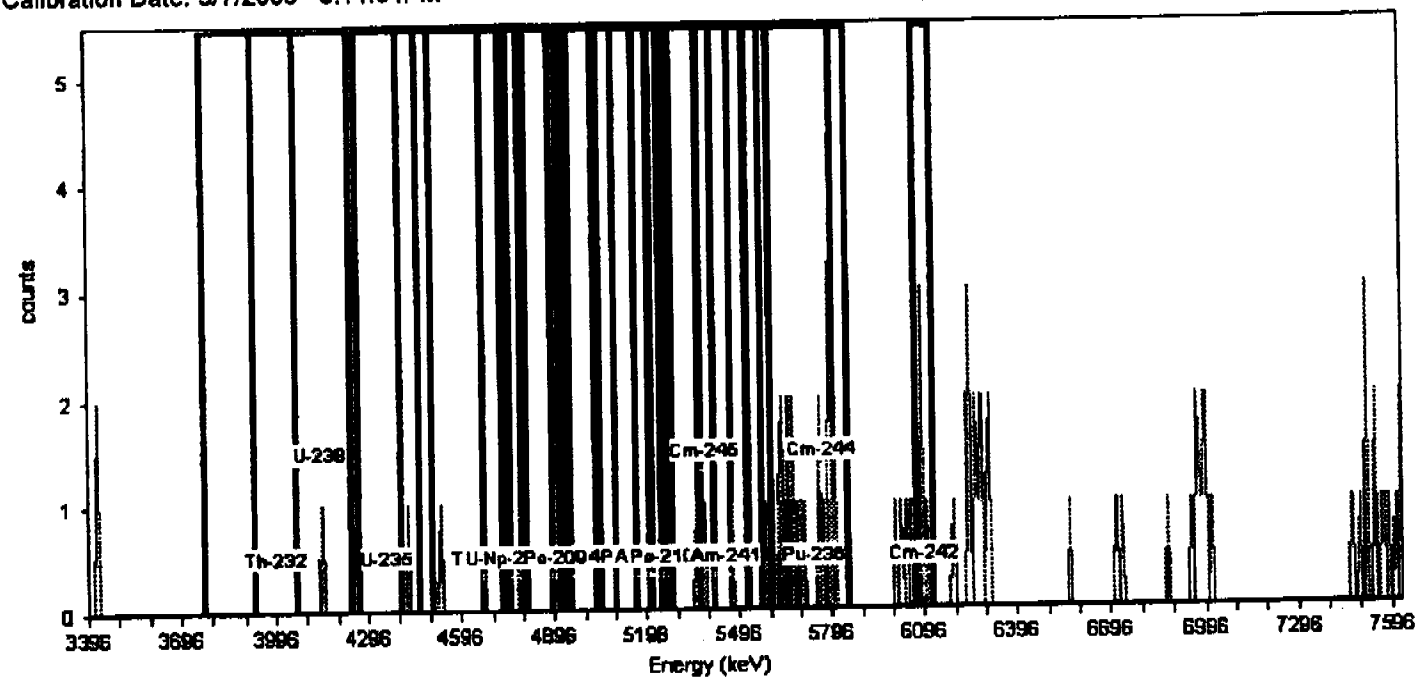
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV55 , SN:
Acquisition Start Date: 3/14/2005 5:39:45PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Feb2005_AV55#2
Calibration Date: 3/7/2005 5:14:04PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.18% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 90.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.473E-003
U-238	4.14	3.93	4.24	2.00	2.083E-003	1.804E-003
U-235	4.35	4.26	4.46	1.00	1.042E-003	1.473E-003
Th-230	4.67	4.40	4.73	2.00	2.083E-003	1.804E-003
U-234	4.70	4.50	4.80	2.00	2.083E-003	1.804E-003
Pu-242	4.88	4.67	4.93	1.00	1.042E-003	1.473E-003
Th-229	4.84	4.72	5.10	1.00	1.042E-003	1.473E-003
Np-237	4.77	4.75	4.79	1.00	1.042E-003	1.473E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.473E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.473E-003
U-232	5.23	5.04	5.37	1.00	1.042E-003	1.473E-003
Th-228	5.41	5.16	5.47	4.00	4.167E-003	2.329E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	4.00	4.167E-003	2.329E-003
Am-241	5.45	5.27	5.57	4.00	4.167E-003	2.329E-003
Cm-245	5.39	5.36	5.41	2.00	2.083E-003	1.804E-003
Pu-236	5.74	5.52	5.80	22.00	2.292E-002	4.996E-003
Cm-244	5.76	5.60	5.85	23.00	2.396E-002	5.103E-003
Cm-242	6.10	6.07	6.13	4.00	4.167E-003	2.329E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:40:20AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV56
Comment:

Spectrum #1 Analysis #1

Batch

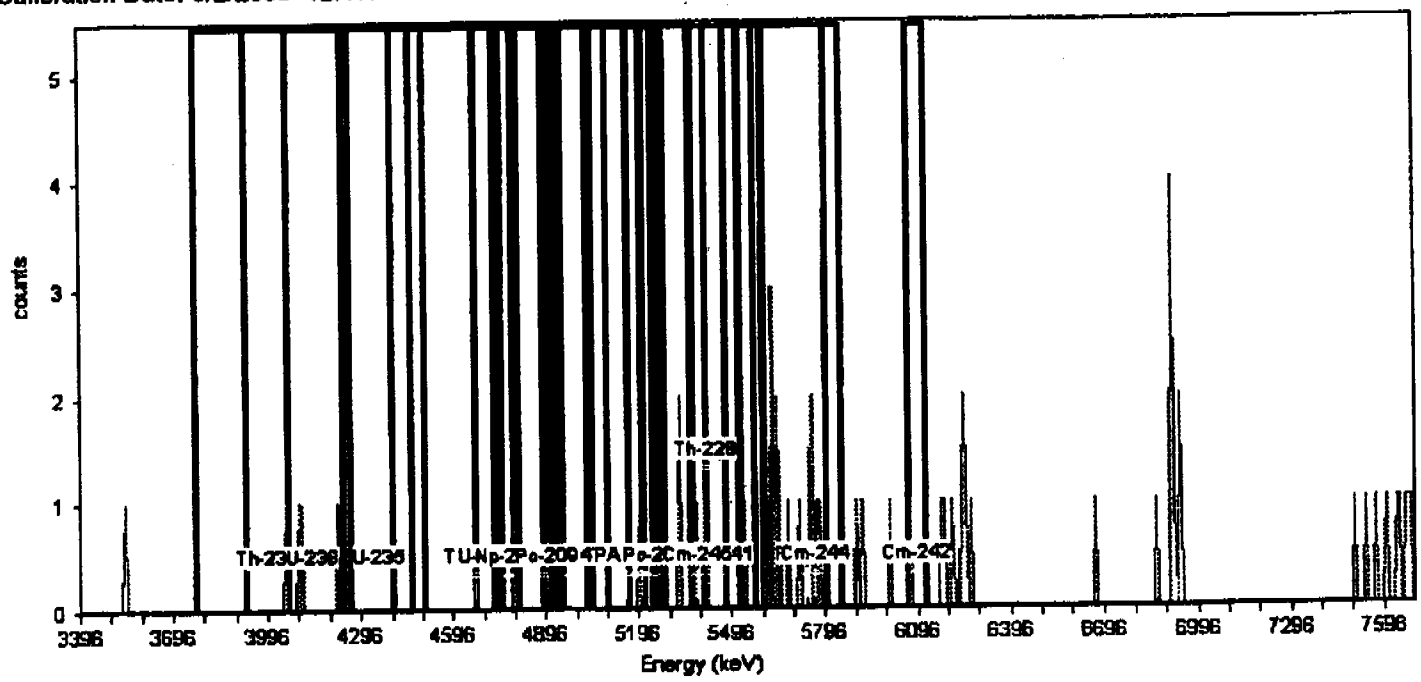
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV56 , SN:
Acquisition Start Date: 3/14/2005 5:39:47PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Feb2005_AV56
Calibration Date: 3/2/2005 12:48:50PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.51% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 65.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.042E-003	1.473E-003
U-238	4.14	3.93	4.24	4.00	4.167E-003	2.329E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.473E-003
U-234	4.70	4.50	4.80	1.00	1.042E-003	1.473E-003
Pu-242	4.88	4.67	4.93	1.00	1.042E-003	1.473E-003
Th-229	4.84	4.72	5.10	1.00	1.042E-003	1.473E-003
Np-237	4.77	4.75	4.79	1.00	1.042E-003	1.473E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	1.00	1.042E-003	1.473E-003
Am-243	5.20	5.03	5.28	1.00	1.042E-003	1.473E-003
U-232	5.23	5.04	5.37	5.00	5.208E-003	2.552E-003
Th-228	5.41	5.16	5.47	9.00	9.375E-003	3.294E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	8.00	8.333E-003	3.125E-003
Am-241	5.45	5.27	5.57	9.00	9.375E-003	3.294E-003
Cm-246	5.39	5.36	5.41	5.00	5.208E-003	2.552E-003
Pu-236	5.74	5.52	5.80	18.00	1.875E-002	4.541E-003
Cm-244	5.76	5.60	5.85	17.00	1.771E-002	4.419E-003
Cm-242	6.10	6.07	6.13	1.00	1.042E-003	1.473E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:58:26AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV57
Spectrum #1 Analysis #1
Comment:

Batch

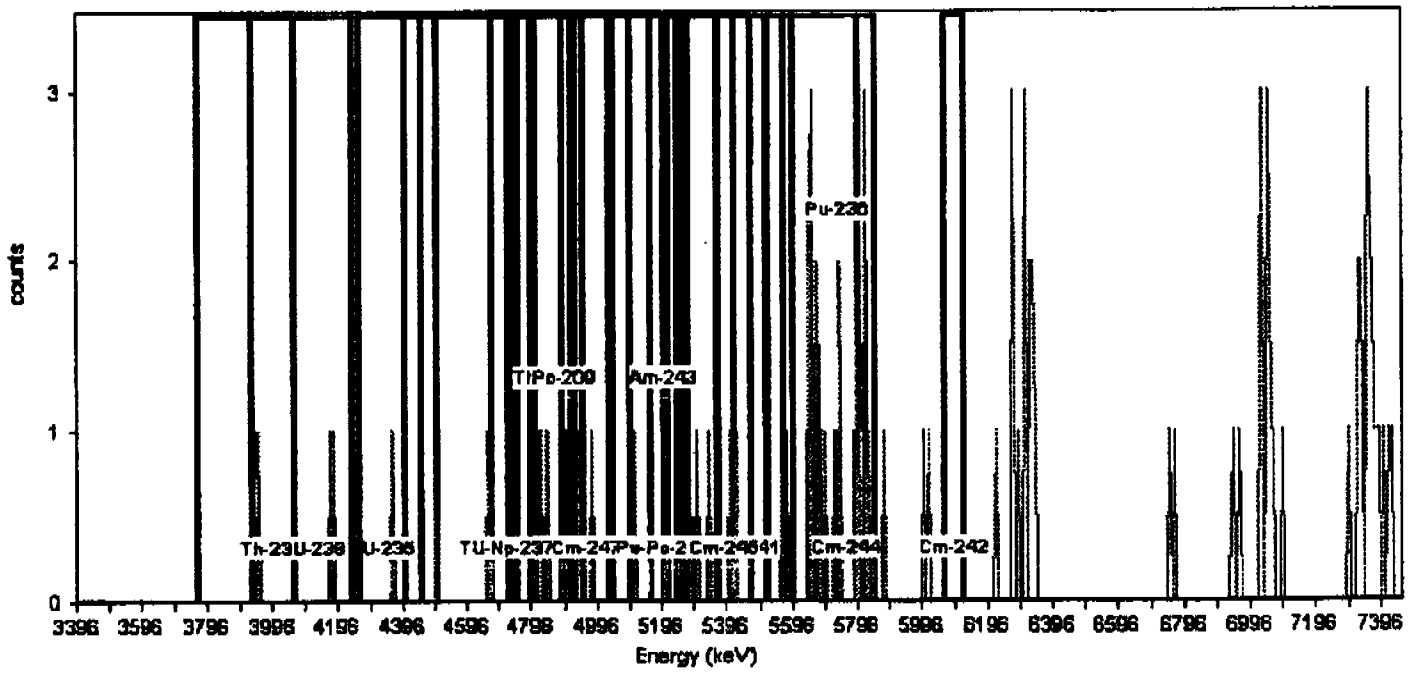
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV57 , SN:
Acquisition Start Date: 3/14/2005 5:39:49PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Feb2005_AV57
Calibration Date: 3/2/2005 12:48:57PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.24% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 95.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.042E-003	1.473E-003
U-238	4.14	3.93	4.24	3.00	3.125E-003	2.083E-003
U-235	4.35	4.26	4.46	1.00	1.042E-003	1.473E-003
Th-230	4.67	4.40	4.73	2.00	2.083E-003	1.804E-003
U-234	4.70	4.50	4.80	3.00	3.125E-003	2.083E-003
Pu-242	4.88	4.67	4.93	5.00	5.208E-003	2.552E-003
Th-229	4.84	4.72	5.10	6.00	6.250E-003	2.756E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	3.00	3.125E-003	2.083E-003
Po-209	4.90	4.88	4.91	1.00	1.042E-003	1.473E-003
Pu-239	5.15	4.95	5.21	3.00	3.125E-003	2.083E-003
Am-243	5.20	5.03	5.28	3.00	3.125E-003	2.083E-003
U-232	5.23	5.04	5.37	6.00	6.250E-003	2.756E-003
Th-228	5.41	5.16	5.47	8.00	8.333E-003	3.125E-003
Po-210	5.25	5.20	5.26	1.00	1.042E-003	1.473E-003
Pu-238	5.44	5.24	5.52	7.00	7.292E-003	2.946E-003
Am-241	5.45	5.27	5.57	8.00	8.333E-003	3.125E-003
Cm-245	5.39	5.36	5.41	1.00	1.042E-003	1.473E-003
Pu-236	5.74	5.52	5.80	19.00	1.979E-002	4.658E-003
Cm-244	5.76	5.60	5.85	22.00	2.292E-002	4.996E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.473E-003

SEVERN TRENT **STL**

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:58:36AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV58
Comment:

Spectrum #1 Analysis #1

Batch

Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV58 , SN:
Acquisition Start Date: 3/14/2005 5:39:50PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Feb2005_AV58
Calibration Date: 3/2/2005 12:49:03PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 29.30% +/- 0.29% TPU(2 sigma)

General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 107.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.042E-003	1.473E-003
U-238	4.14	3.93	4.24	1.00	1.042E-003	1.473E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.473E-003
U-234	4.70	4.50	4.80	1.00	1.042E-003	1.473E-003
Pu-242	4.88	4.67	4.93	1.00	1.042E-003	1.473E-003
Th-229	4.84	4.72	5.10	1.00	1.042E-003	1.473E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	1.00	1.042E-003	1.473E-003
Am-243	5.20	5.03	5.28	1.00	1.042E-003	1.473E-003
U-232	5.23	5.04	5.37	1.00	1.042E-003	1.473E-003
Th-228	5.41	5.16	5.47	4.00	4.167E-003	2.329E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	5.00	5.208E-003	2.552E-003
Am-241	5.45	5.27	5.57	5.00	5.208E-003	2.552E-003
Cm-245	5.39	5.36	5.41	2.00	2.083E-003	1.804E-003
Pu-236	5.74	5.52	5.80	23.00	2.396E-002	5.103E-003
Cm-244	5.76	5.60	5.85	33.00	3.437E-002	6.074E-003
Cm-242	6.10	6.07	6.13	3.00	3.125E-003	2.083E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:58:39AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV59
Comment:

Spectrum #1 Analysis #1

Batch

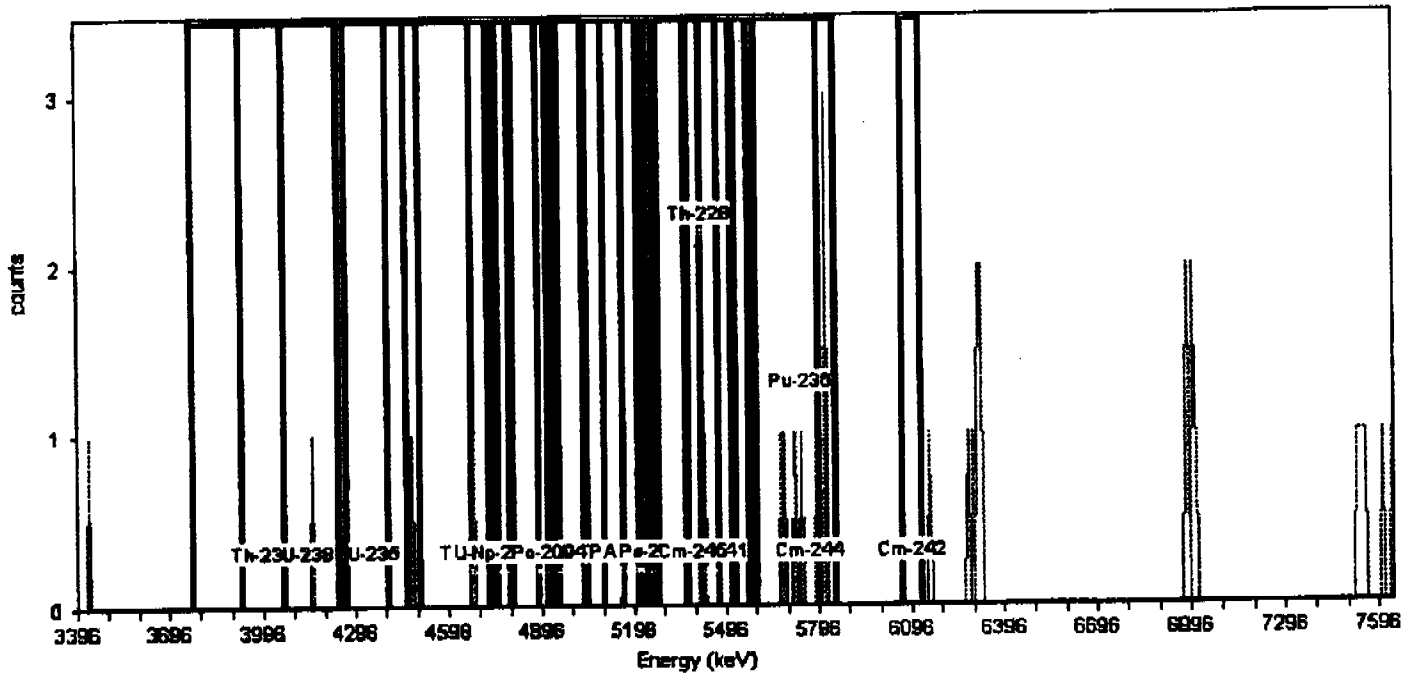
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV59 , SN:
Acquisition Start Date: 3/14/2005 5:39:52PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Feb2005_2005
Calibration Date: 3/2/2005 3:20:27PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.75% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 39.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.473E-003
U-238	4.14	3.93	4.24	1.00	1.042E-003	1.473E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	2.00	2.083E-003	1.804E-003
U-234	4.70	4.50	4.80	1.00	1.042E-003	1.473E-003
Pu-242	4.88	4.67	4.93	1.00	1.042E-003	1.473E-003
Th-229	4.84	4.72	5.10	1.00	1.042E-003	1.473E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	1.00	1.042E-003	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	1.00	1.042E-003	1.473E-003
Am-243	5.20	5.03	5.28	1.00	1.042E-003	1.473E-003
U-232	5.23	5.04	5.37	1.00	1.042E-003	1.473E-003
Th-228	5.41	5.16	5.47	3.00	3.125E-003	2.083E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	3.00	3.125E-003	2.083E-003
Am-241	5.45	5.27	5.57	3.00	3.125E-003	2.083E-003
Cm-245	5.39	5.36	5.41	2.00	2.083E-003	1.804E-003
Pu-236	5.74	5.52	5.80	6.00	6.250E-003	2.756E-003
Cm-244	5.76	5.60	5.85	8.00	8.333E-003	3.125E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.473E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:58:46AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV60
Comment:

Spectrum #1 Analysis #1

Batch

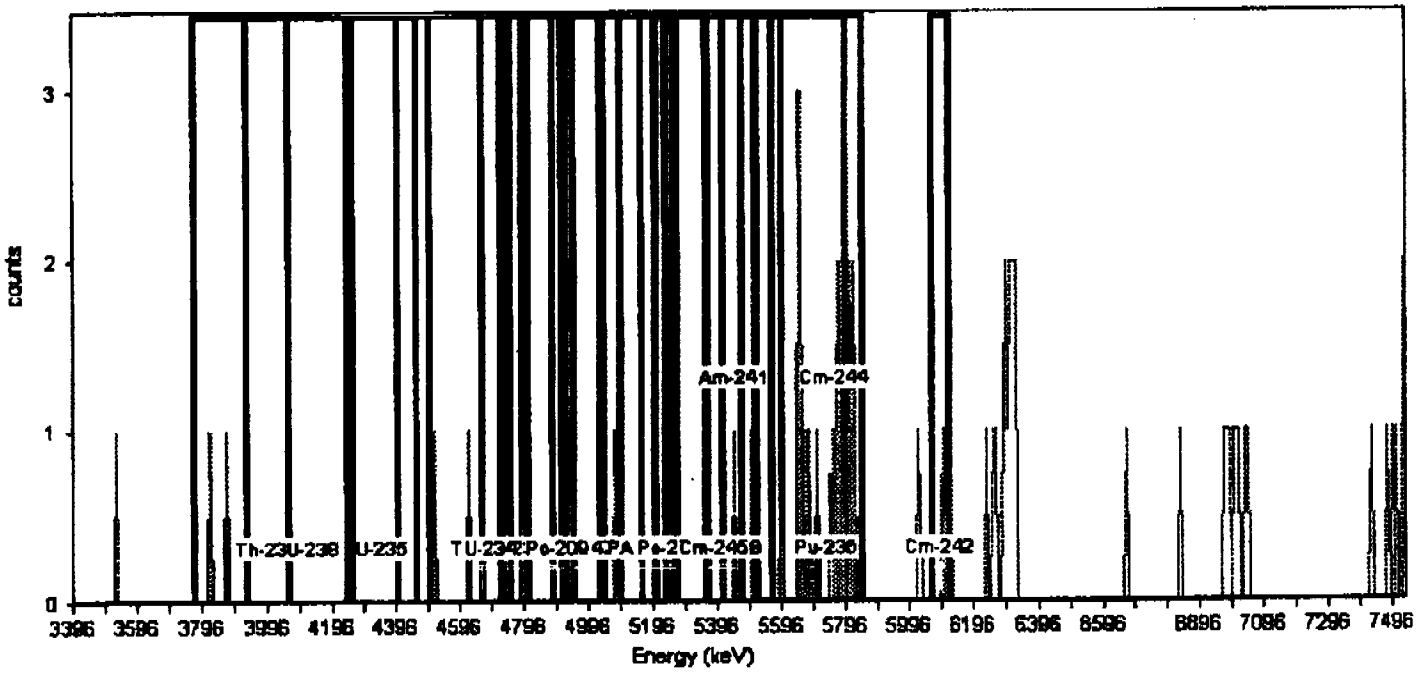
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV60 , SN:
Acquisition Start Date: 3/14/2005 5:39:54PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Feb2005_AV60
Calibration Date: 3/2/2005 3:20:36PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 28.27% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 65.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Pu-242	4.88	4.67	4.93	1.00	1.042E-003	1.473E-003
Th-229	4.84	4.72	5.10	2.00	2.083E-003	1.804E-003
Np-237	4.77	4.75	4.79	1.00	1.042E-003	1.473E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	1.00	1.042E-003	1.473E-003
Am-243	5.20	5.03	5.28	1.00	1.042E-003	1.473E-003
U-232	5.23	5.04	5.37	1.00	1.042E-003	1.473E-003
Th-228	5.41	5.16	5.47	1.00	1.042E-003	1.473E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	3.00	3.125E-003	2.083E-003
Am-241	5.45	5.27	5.57	3.00	3.125E-003	2.083E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.473E-003
Pu-236	5.74	5.52	5.80	15.00	1.563E-002	4.167E-003
Cm-244	5.76	5.60	5.85	22.00	2.292E-002	4.996E-003
Cm-242	6.10	6.07	6.13	3.00	3.125E-003	2.083E-003
Th-232	3.99	3.77	4.06	2.00	2.083E-003	1.804E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.473E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	2.00	2.083E-003	1.804E-003
U-234	4.70	4.50	4.80	3.00	3.125E-003	2.083E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:58:52AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV61
Comment:

Spectrum #1 Analysis #1

Batch

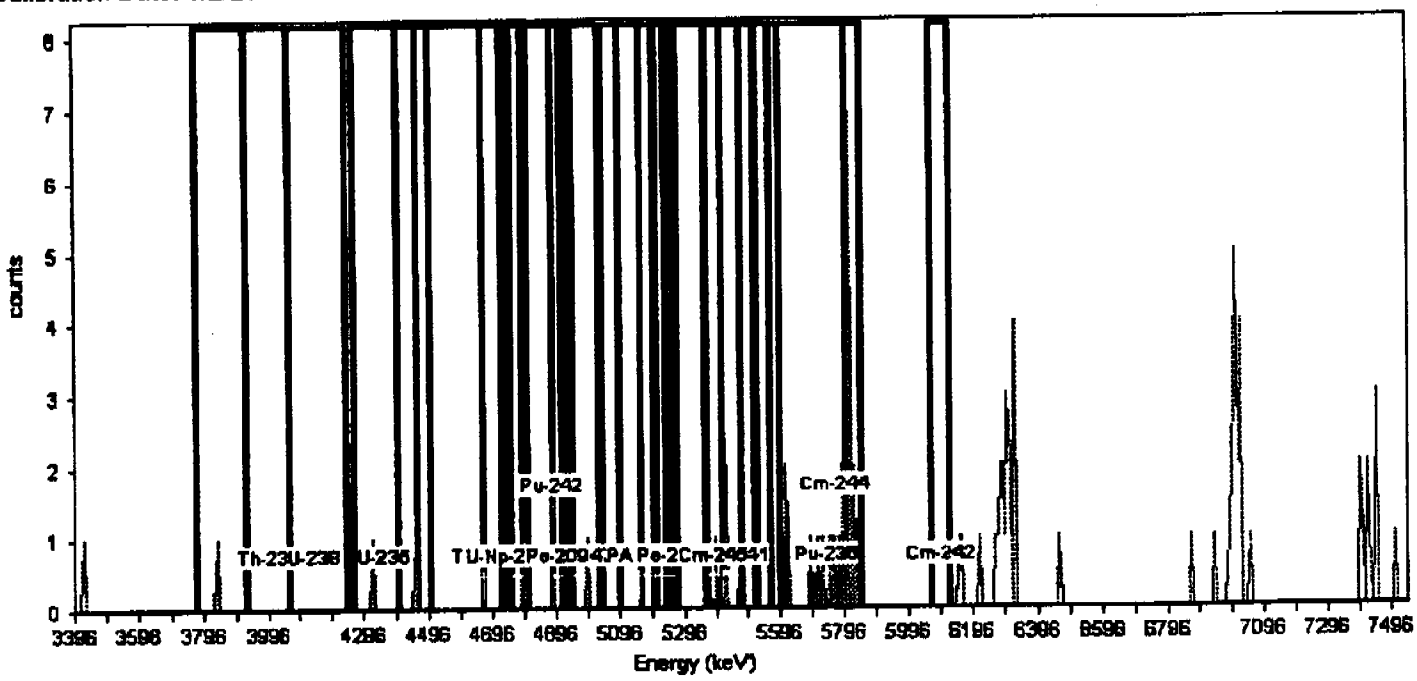
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV61 , SN:
Acquisition Start Date: 3/14/2005 5:39:55PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Feb2005_AV61
Calibration Date: 3/2/2005 3:20:44PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.76% +/- 0.30% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 90.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.042E-003	1.473E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.473E-003
U-235	4.35	4.26	4.46	2.00	2.083E-003	1.804E-003
Th-230	4.67	4.40	4.73	1.00	1.042E-003	1.473E-003
U-234	4.70	4.50	4.80	1.00	1.042E-003	1.473E-003
Pu-242	4.88	4.67	4.93	2.00	2.083E-003	1.804E-003
Th-229	4.84	4.72	5.10	3.00	3.125E-003	2.083E-003
Np-237	4.77	4.75	4.79	1.00	1.042E-003	1.473E-003
Cm-247	4.96	4.88	5.04	2.00	2.083E-003	1.804E-003
Po-209	4.90	4.88	4.91	1.00	1.042E-003	1.473E-003
Pu-239	5.15	4.95	5.21	1.00	1.042E-003	1.473E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.473E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.473E-003
Th-228	5.41	5.16	5.47	5.00	5.208E-003	2.552E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	5.00	5.208E-003	2.552E-003
Am-241	5.45	5.27	5.57	5.00	5.208E-003	2.552E-003
Cm-245	5.39	5.36	5.41	1.00	1.042E-003	1.473E-003
Pu-236	5.74	5.52	5.80	13.00	1.354E-002	3.898E-003
Cm-244	5.76	5.60	5.85	27.00	2.813E-002	5.512E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.473E-003

SATURN TREND **STL**

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:58:59AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV62
Comment:

Spectrum #1 Analysis #1

Batch

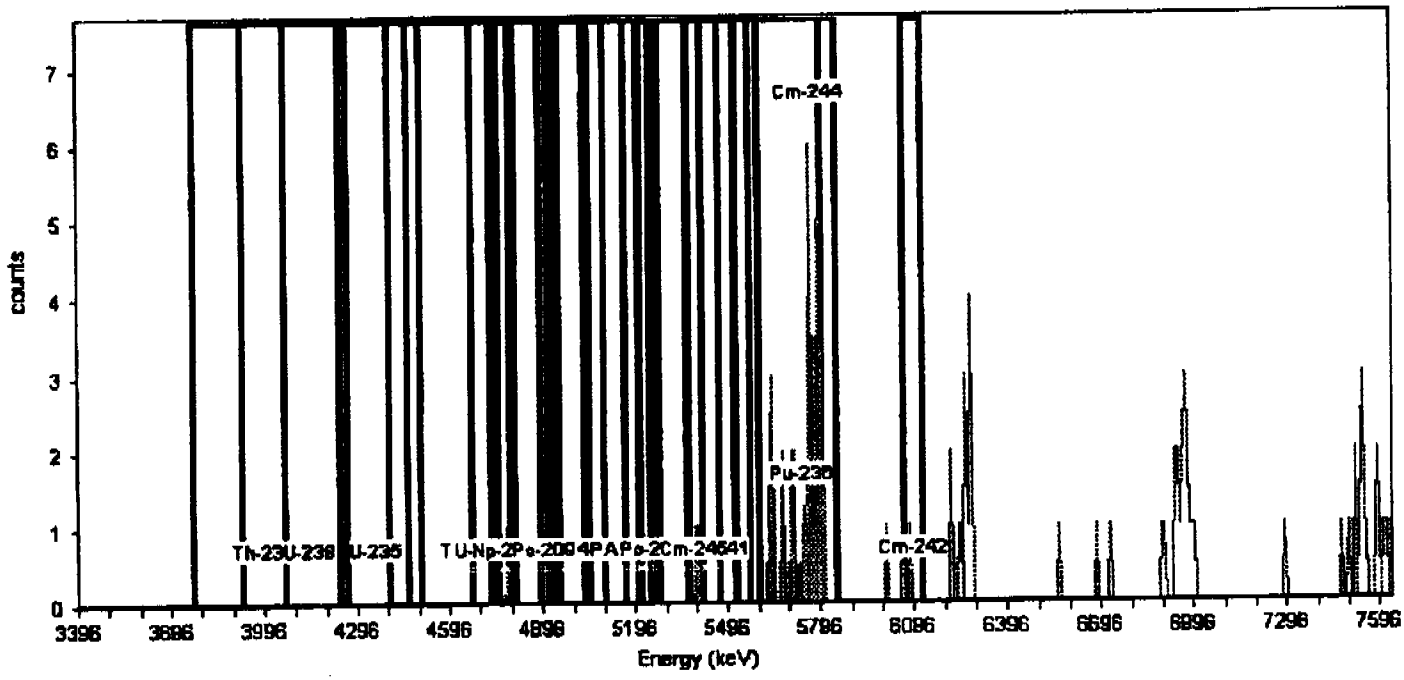
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV62 , SN:
Acquisition Start Date: 3/14/2005 5:39:57PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Feb2005_AV62#2
Calibration Date: 3/2/2005 5:48:59PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.85% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 94.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.473E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.473E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.473E-003
U-234	4.70	4.50	4.80	1.00	1.042E-003	1.473E-003
Pu-242	4.88	4.67	4.93	1.00	1.042E-003	1.473E-003
Th-229	4.84	4.72	5.10	1.00	1.042E-003	1.473E-003
Np-237	4.77	4.75	4.79	1.00	1.042E-003	1.473E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.473E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.473E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.473E-003
Th-228	5.41	5.16	5.47	2.00	2.083E-003	1.804E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	2.00	2.083E-003	1.804E-003
Am-241	5.45	5.27	5.57	2.00	2.083E-003	1.804E-003
Cm-245	5.39	5.36	5.41	2.00	2.083E-003	1.804E-003
Pu-236	5.74	5.52	5.80	32.00	3.333E-002	5.984E-003
Cm-244	5.76	5.60	5.85	35.00	3.646E-002	6.250E-003
Cm-242	6.10	6.07	6.13	1.00	1.042E-003	1.473E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:59:06AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV63
Comment:

Spectrum #1 Analysis #1

Batch

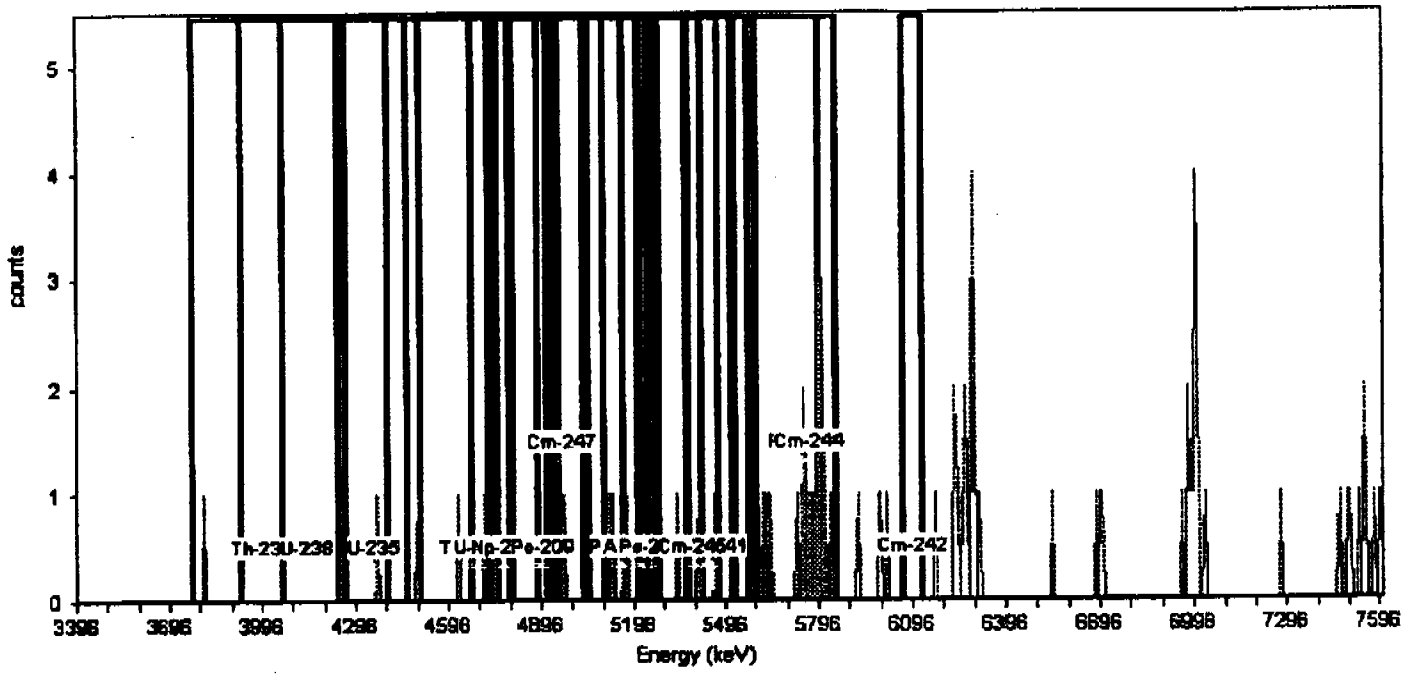
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV63 , SN:
Acquisition Start Date: 3/14/2005 5:39:59PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Feb2005_AV63
Calibration Date: 3/2/2005 5:49:08PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.05% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 83.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.042E-003	1.473E-003
U-238	4.14	3.93	4.24	1.00	1.042E-003	1.473E-003
U-235	4.35	4.26	4.46	1.00	1.042E-003	1.473E-003
Th-230	4.67	4.40	4.73	3.00	3.125E-003	2.083E-003
U-234	4.70	4.50	4.80	3.00	3.125E-003	2.083E-003
Pu-242	4.88	4.67	4.93	2.00	2.083E-003	1.804E-003
Th-229	4.84	4.72	5.10	2.00	2.083E-003	1.804E-003
Np-237	4.77	4.76	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	1.00	1.042E-003	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	5.00	5.208E-003	2.552E-003
Am-243	5.20	5.03	5.28	4.00	4.167E-003	2.329E-003
U-232	5.23	5.04	5.37	5.00	5.208E-003	2.552E-003
Th-228	5.41	5.16	5.47	5.00	5.208E-003	2.552E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	3.00	3.125E-003	2.083E-003
Am-241	5.45	5.27	5.57	3.00	3.125E-003	2.083E-003
Cm-245	5.39	5.36	5.41	1.00	1.042E-003	1.473E-003
Pu-236	5.74	5.52	5.80	16.00	1.667E-002	4.295E-003
Cm-244	5.76	5.60	5.85	20.00	2.083E-002	4.774E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.473E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:59:12AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV64
Comment:

Spectrum #1 Analysis #1

Batch

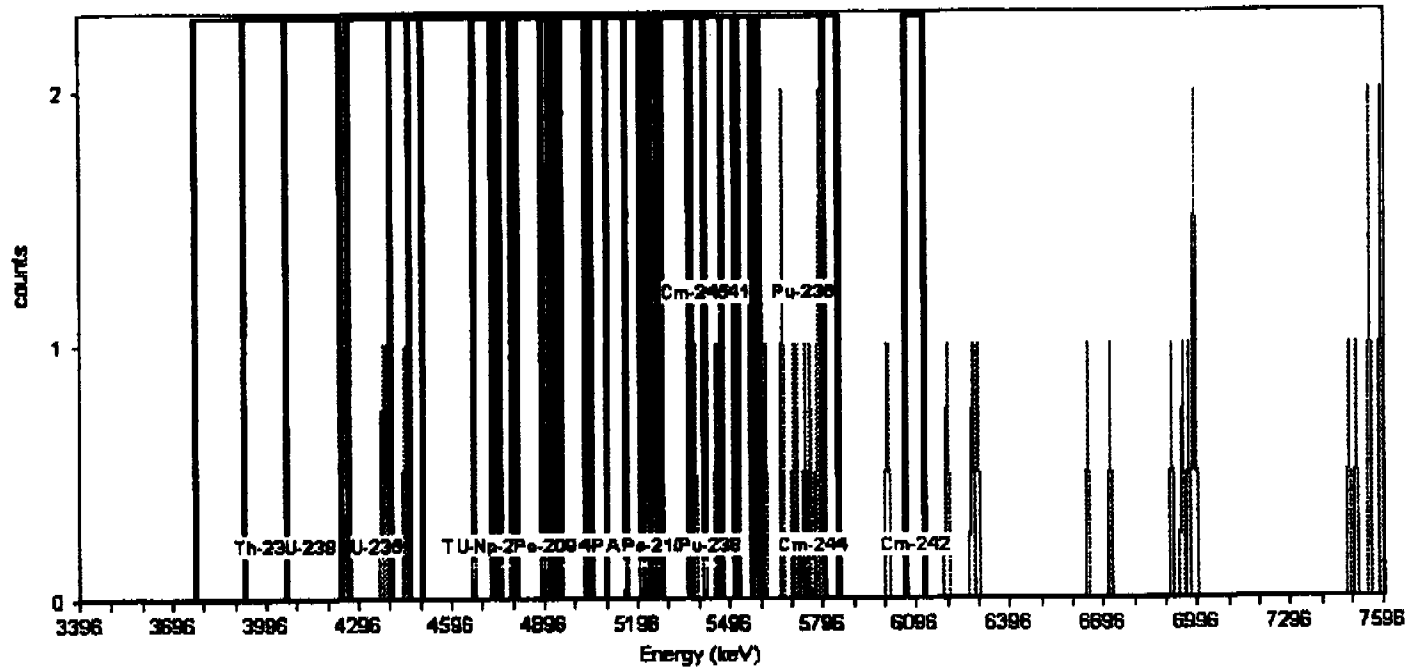
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV64 , SN:
Acquisition Start Date: 3/14/2005 5:40:01PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Feb2005_AV64
Calibration Date: 3/2/2005 5:49:12PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.41% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 36.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.473E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.473E-003
U-235	4.35	4.26	4.46	3.00	3.125E-003	2.083E-003
Th-230	4.67	4.40	4.73	1.00	1.042E-003	1.473E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.473E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.473E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.473E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.473E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.473E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.473E-003
Th-228	5.41	5.16	5.47	2.00	2.083E-003	1.804E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	2.00	2.083E-003	1.804E-003
Am-241	5.45	5.27	5.57	2.00	2.083E-003	1.804E-003
Cm-245	5.39	5.36	5.41	1.00	1.042E-003	1.473E-003
Pu-236	5.74	5.52	5.80	11.00	1.146E-002	3.608E-003
Cm-244	5.76	5.60	5.85	11.00	1.146E-002	3.608E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.473E-003

SEVERN TRENT **STL**

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:59:19AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV65
Comment:

Spectrum #1 Analysis #1

Batch

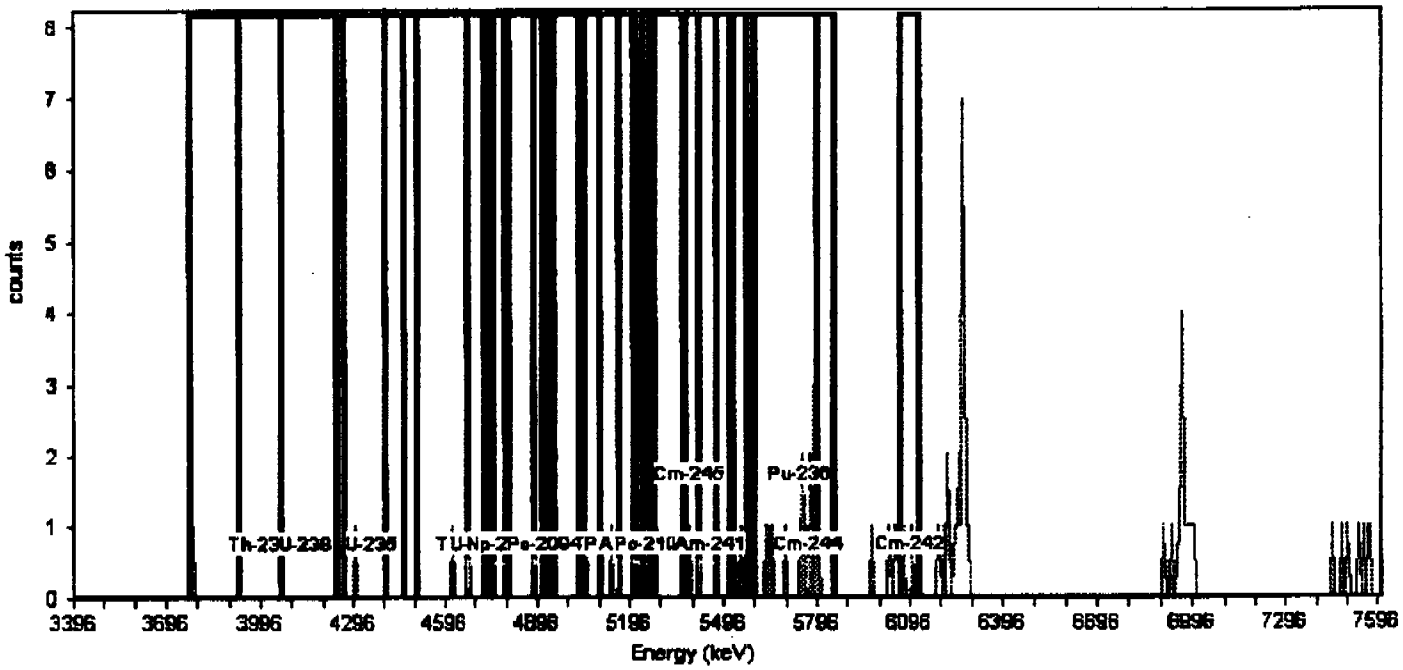
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV65 , SN:
Acquisition Start Date: 3/14/2005 5:40:02PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Feb2005_AV65
Calibration Date: 3/2/2005 5:49:17PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.19% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 72.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.042E-003	1.473E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.473E-003
U-235	4.35	4.26	4.46	1.00	1.042E-003	1.473E-003
Th-230	4.67	4.40	4.73	2.00	2.083E-003	1.804E-003
U-234	4.70	4.50	4.80	2.00	2.083E-003	1.804E-003
Pu-242	4.88	4.67	4.93	1.00	1.042E-003	1.473E-003
Th-229	4.84	4.72	5.10	1.00	1.042E-003	1.473E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	2.00	2.083E-003	1.804E-003
Am-243	5.20	5.03	5.28	2.00	2.083E-003	1.804E-003
U-232	5.23	5.04	5.37	2.00	2.083E-003	1.804E-003
Th-228	5.41	5.16	5.47	1.00	1.042E-003	1.473E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	1.00	1.042E-003	1.473E-003
Am-241	5.45	5.27	5.57	2.00	2.083E-003	1.804E-003
Cm-245	5.39	5.36	5.41	1.00	1.042E-003	1.473E-003
Pu-236	5.74	5.52	5.80	19.00	1.979E-002	4.658E-003
Cm-244	5.76	5.60	5.85	18.00	1.875E-002	4.541E-003
Cm-242	6.10	6.07	6.13	2.00	2.083E-003	1.804E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:59:26AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV66
Spectrum #1 Analysis #1
Comment:

Batch

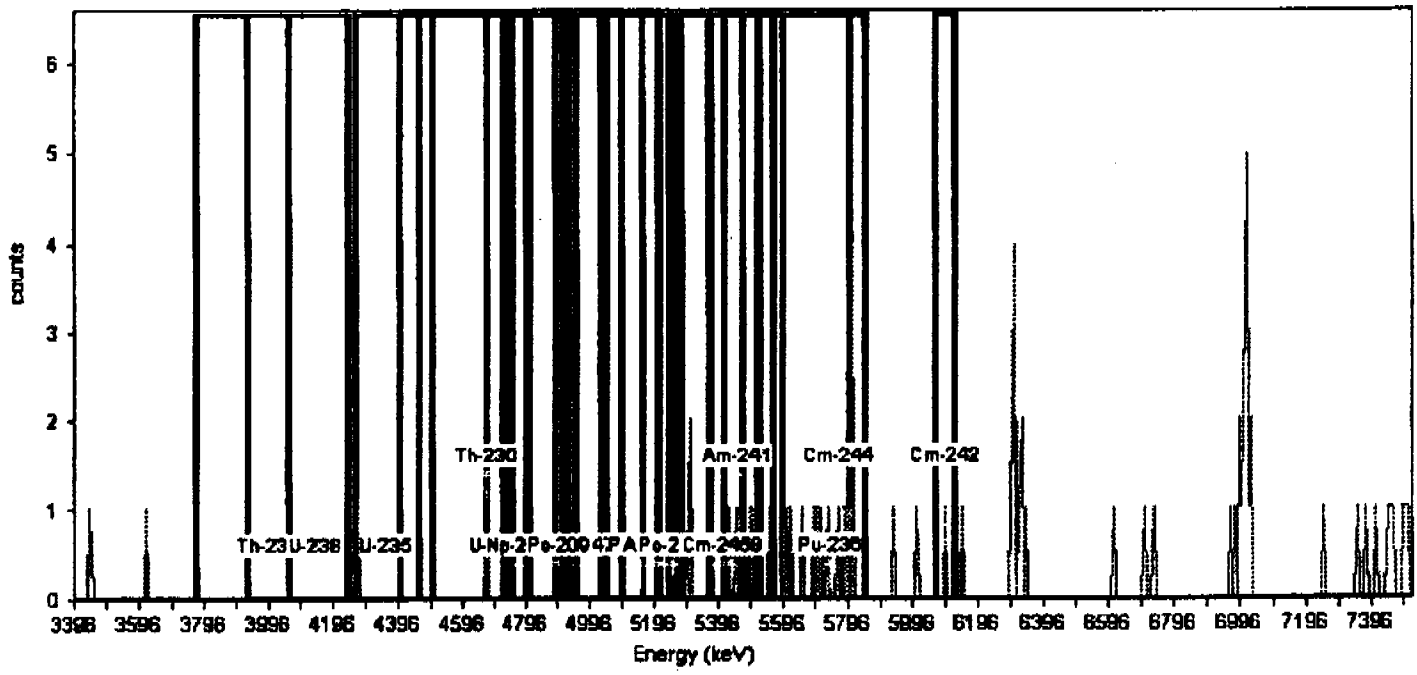
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV66 , SN:
Acquisition Start Date: 3/14/2005 5:40:05PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Feb2005_AV66
Calibration Date: 3/2/2005 8:17:14PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 28.04% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROU[illegible]Library: Background ROI Library
Total Background Counts: 76.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.473E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.473E-003
U-235	4.35	4.26	4.46	1.00	1.042E-003	1.473E-003
Th-230	4.67	4.40	4.73	1.00	1.042E-003	1.473E-003
U-234	4.70	4.50	4.80	1.00	1.042E-003	1.473E-003
Pu-242	4.88	4.67	4.93	1.00	1.042E-003	1.473E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.473E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.473E-003
Am-243	5.20	5.03	5.28	2.00	2.083E-003	1.804E-003
U-232	5.23	5.04	5.37	5.00	5.208E-003	2.552E-003
Th-228	5.41	5.16	5.47	8.00	8.333E-003	3.125E-003
Po-210	5.25	5.20	5.26	1.00	1.042E-003	1.473E-003
Pu-238	5.44	5.24	5.52	10.00	1.042E-002	3.455E-003
Am-241	5.45	5.27	5.57	10.00	1.042E-002	3.455E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.473E-003
Pu-236	5.74	5.52	5.80	14.00	1.458E-002	4.034E-003
Cm-244	5.76	5.60	5.85	18.00	1.875E-002	4.541E-003
Cm-242	6.10	6.07	6.13	1.00	1.042E-003	1.473E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:59:29AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV67
Spectrum #1 Analysis #1
Comment:

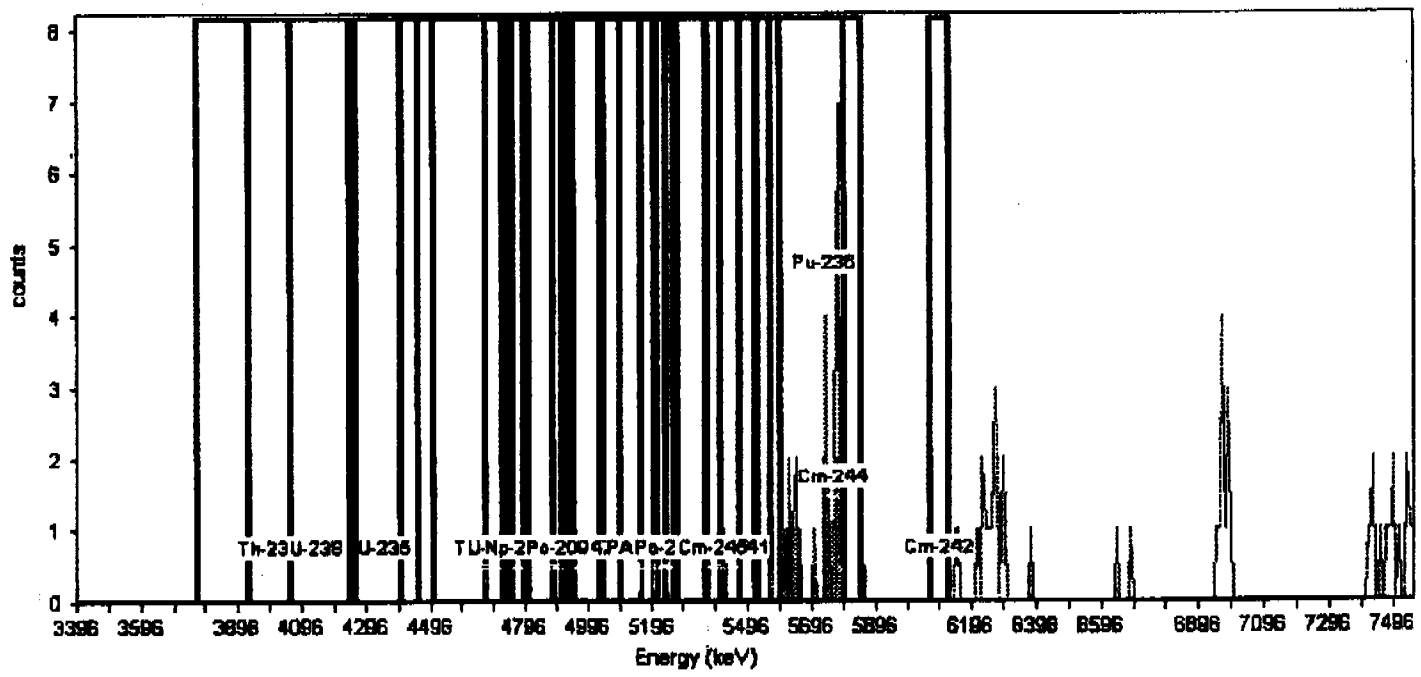
Batch

Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV67 , SN:
Acquisition Start Date: 3/14/2005 5:40:06PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Feb2005_AV67
Calibration Date: 3/2/2005 8:17:19PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.99% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 77.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.473E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.473E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.473E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.473E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.473E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.473E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.473E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.473E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.473E-003
Th-228	5.41	5.16	5.47	1.00	1.042E-003	1.473E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	1.00	1.042E-003	1.473E-003
Am-241	5.45	5.27	5.57	2.00	2.083E-003	1.804E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.473E-003
Pu-236	5.74	5.52	5.80	26.00	2.708E-002	5.413E-003
Cm-244	5.76	5.60	5.85	25.00	2.604E-002	5.311E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.473E-003

SEVERN TRENT **STL**

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:59:39AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV68
Comment:

Spectrum #1 Analysis #1

Batch

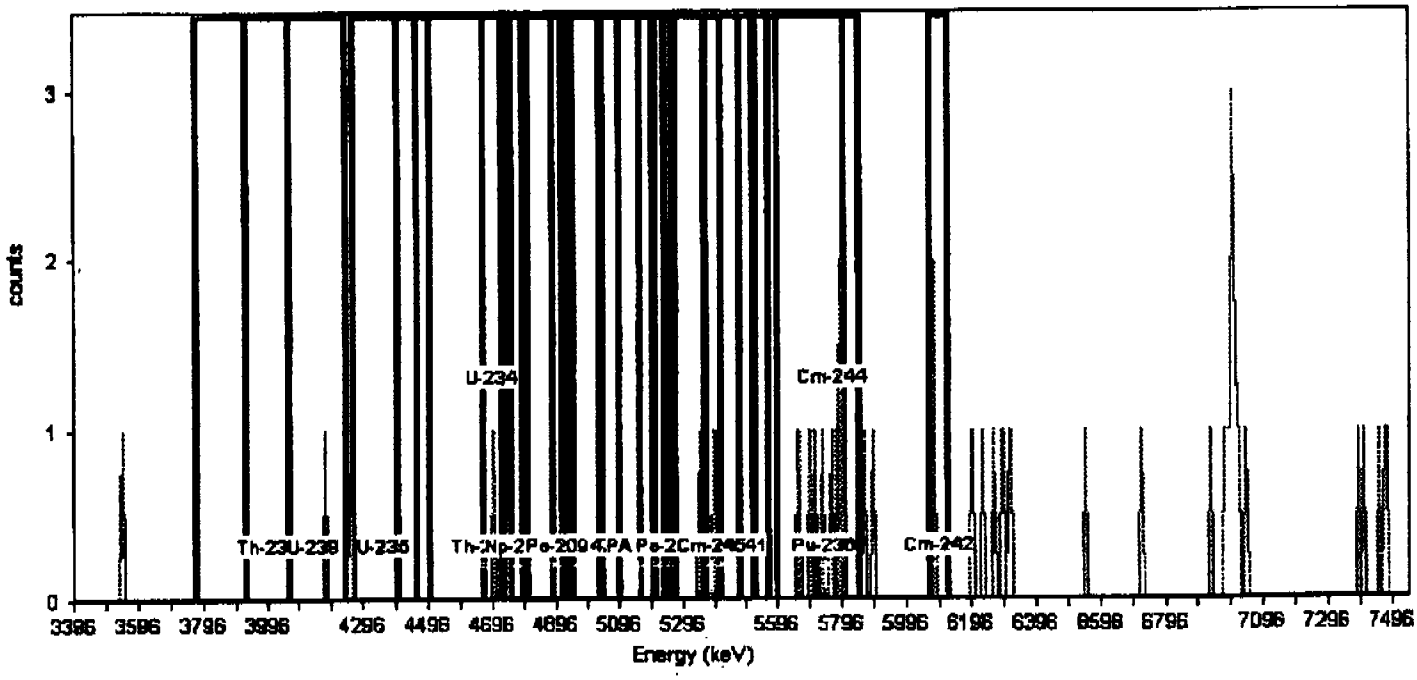
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV68 , SN:
Acquisition Start Date: 3/14/2005 5:40:07PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Feb2005_AV68
Calibration Date: 3/2/2005 8:17:24PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.31% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 49.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.473E-003
U-238	4.14	3.93	4.24	1.00	1.042E-003	1.473E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	1.00	1.042E-003	1.473E-003
U-234	4.70	4.50	4.80	2.00	2.083E-003	1.804E-003
Pu-242	4.88	4.67	4.93	2.00	2.083E-003	1.804E-003
Th-229	4.84	4.72	5.10	1.00	1.042E-003	1.473E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.473E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.473E-003
U-232	5.23	5.04	5.37	1.00	1.042E-003	1.473E-003
Th-228	5.41	5.16	5.47	3.00	3.125E-003	2.083E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	3.00	3.125E-003	2.083E-003
Am-241	5.45	5.27	5.57	3.00	3.125E-003	2.083E-003
Cm-245	5.39	5.36	5.41	2.00	2.083E-003	1.804E-003
Pu-236	5.74	5.52	5.80	10.00	1.042E-002	3.455E-003
Cm-244	5.76	5.60	5.85	10.00	1.042E-002	3.455E-003
Cm-242	6.10	6.07	6.13	2.00	2.083E-003	1.804E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:59:46AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV69
Comment:

Spectrum #1 Analysis #1

Batch

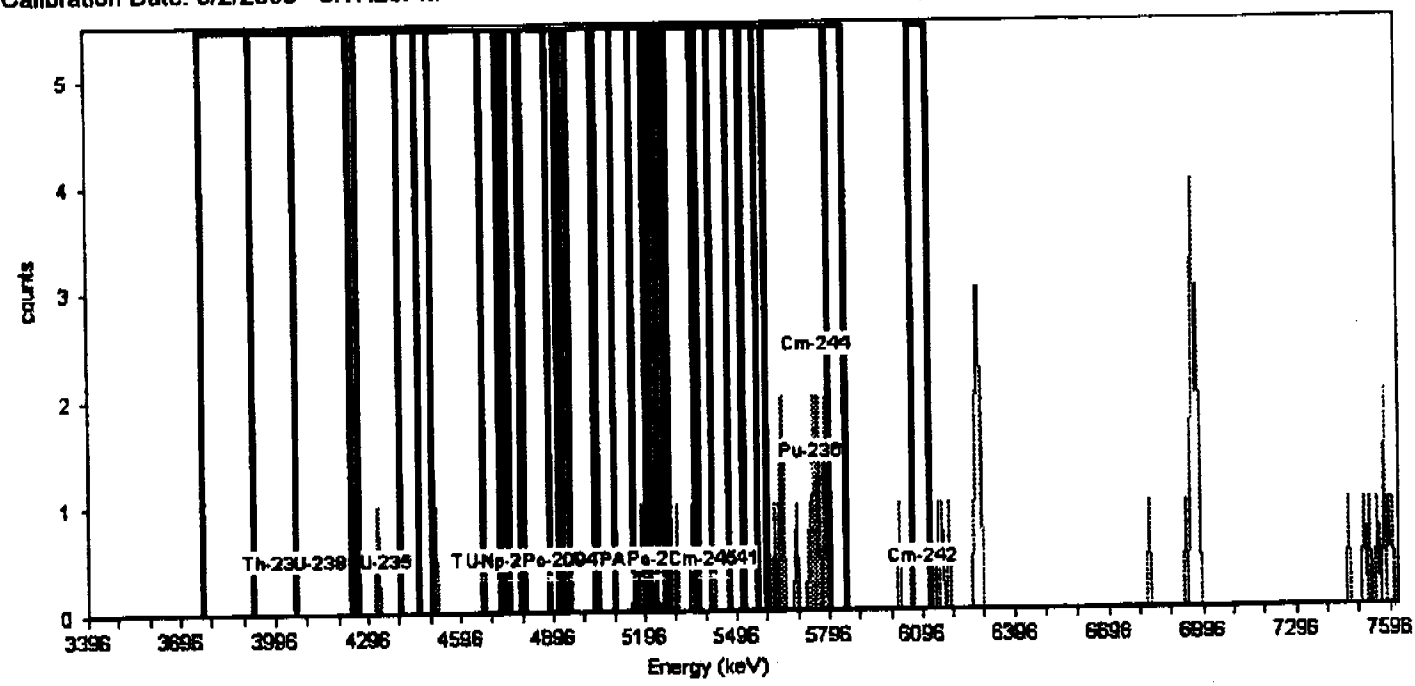
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV69 , SN:
Acquisition Start Date: 3/14/2005 5:40:08PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Feb2005_AV69
Calibration Date: 3/2/2005 8:17:28PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 28.37% +/- 0.30% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 59.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.473E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.473E-003
U-235	4.35	4.26	4.46	1.00	1.042E-003	1.473E-003
Th-230	4.67	4.40	4.73	1.00	1.042E-003	1.473E-003
U-234	4.70	4.50	4.80	1.00	1.042E-003	1.473E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.473E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.473E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	1.00	1.042E-003	1.473E-003
Am-243	5.20	5.03	5.28	1.00	1.042E-003	1.473E-003
U-232	5.23	5.04	5.37	3.00	3.125E-003	2.083E-003
Th-228	5.41	5.16	5.47	4.00	4.167E-003	2.329E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	3.00	3.125E-003	2.083E-003
Am-241	5.45	5.27	5.57	3.00	3.125E-003	2.083E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.473E-003
Pu-236	5.74	5.52	5.80	18.00	1.875E-002	4.541E-003
Cm-244	5.76	5.60	5.85	18.00	1.875E-002	4.541E-003
Cm-242	6.10	6.07	6.13	1.00	1.042E-003	1.473E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:59:49AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV70
Comment:

Spectrum #1 Analysis #1

Batch

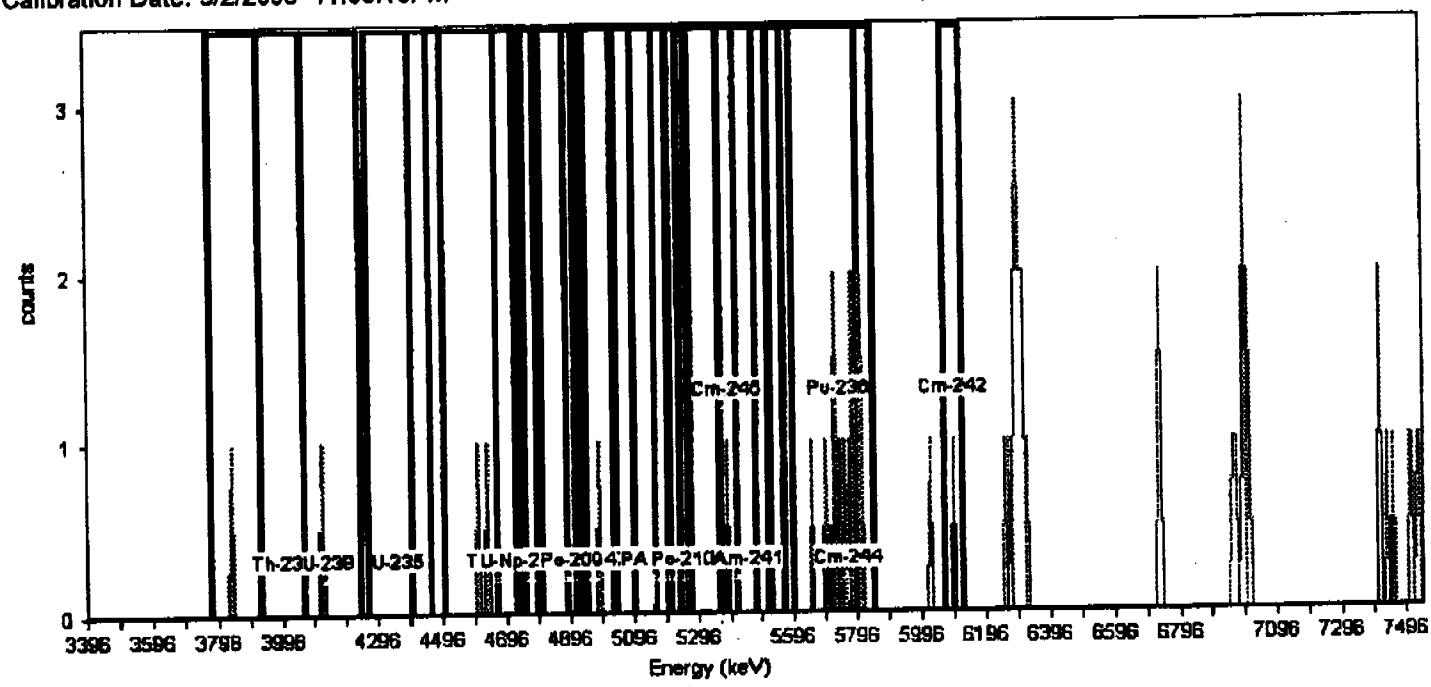
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV70 , SN:
Acquisition Start Date: 3/14/2005 5:40:09PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Feb2005_AV70
Calibration Date: 3/2/2005 11:06:13PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.52% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 58.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.042E-003	1.473E-003
U-238	4.14	3.93	4.24	1.00	1.042E-003	1.473E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	2.00	2.083E-003	1.804E-003
U-234	4.70	4.50	4.80	2.00	2.083E-003	1.804E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.473E-003
Th-229	4.84	4.72	5.10	1.00	1.042E-003	1.473E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	1.00	1.042E-003	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	1.00	1.042E-003	1.473E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.473E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.473E-003
Th-228	5.41	5.16	5.47	1.00	1.042E-003	1.473E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	1.00	1.042E-003	1.473E-003
Am-241	5.46	5.27	5.57	1.00	1.042E-003	1.473E-003
Cm-245	5.39	5.36	5.41	1.00	1.042E-003	1.473E-003
Pu-236	5.74	5.52	5.80	13.00	1.354E-002	3.898E-003
Cm-244	5.76	5.60	5.85	16.00	1.667E-002	4.295E-003
Cm-242	6.10	6.07	6.13	1.00	1.042E-003	1.473E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:59:59AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV71
Comment:

Spectrum #1 Analysis #1

Batch

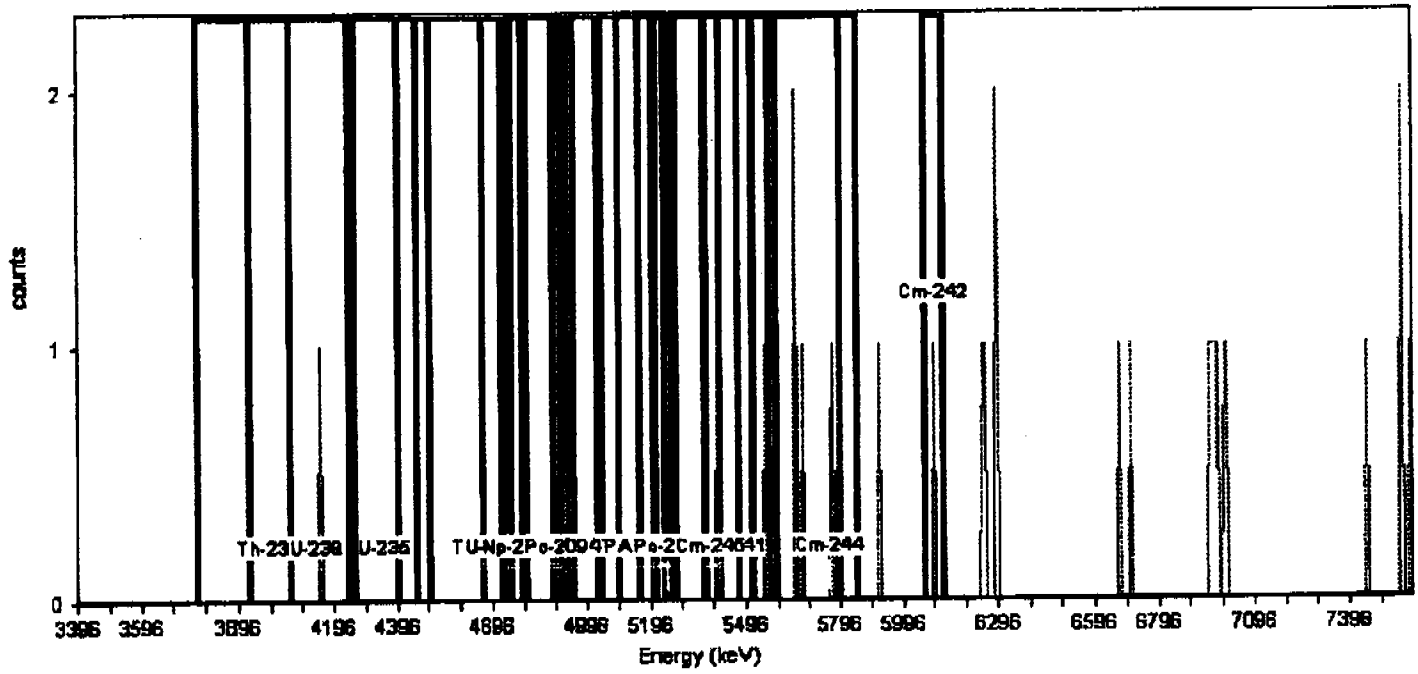
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV71 , SN:
Acquisition Start Date: 3/14/2005 5:40:10PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Feb2005_AV71
Calibration Date: 3/2/2005 11:06:22PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.61% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Library: Background ROI Library
Total Background Counts: 29.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.473E-003
U-238	4.14	3.93	4.24	1.00	1.042E-003	1.473E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.473E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.473E-003
Pu-242	4.88	4.67	4.93	1.00	1.042E-003	1.473E-003
Th-229	4.84	4.72	5.10	1.00	1.042E-003	1.473E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	1.00	1.042E-003	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.473E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.473E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.473E-003
Th-228	5.41	5.16	5.47	1.00	1.042E-003	1.473E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	1.00	1.042E-003	1.473E-003
Am-241	5.45	5.27	5.57	2.00	2.083E-003	1.804E-003
Cm-245	5.39	5.36	5.41	1.00	1.042E-003	1.473E-003
Pu-236	5.74	5.52	5.80	6.00	6.250E-003	2.756E-003
Cm-244	5.76	5.60	5.85	5.00	5.208E-003	2.552E-003
Cm-242	6.10	6.07	6.13	1.00	1.042E-003	1.473E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:00:02AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV72
Comment:

Spectrum #1 Analysis #1

Batch

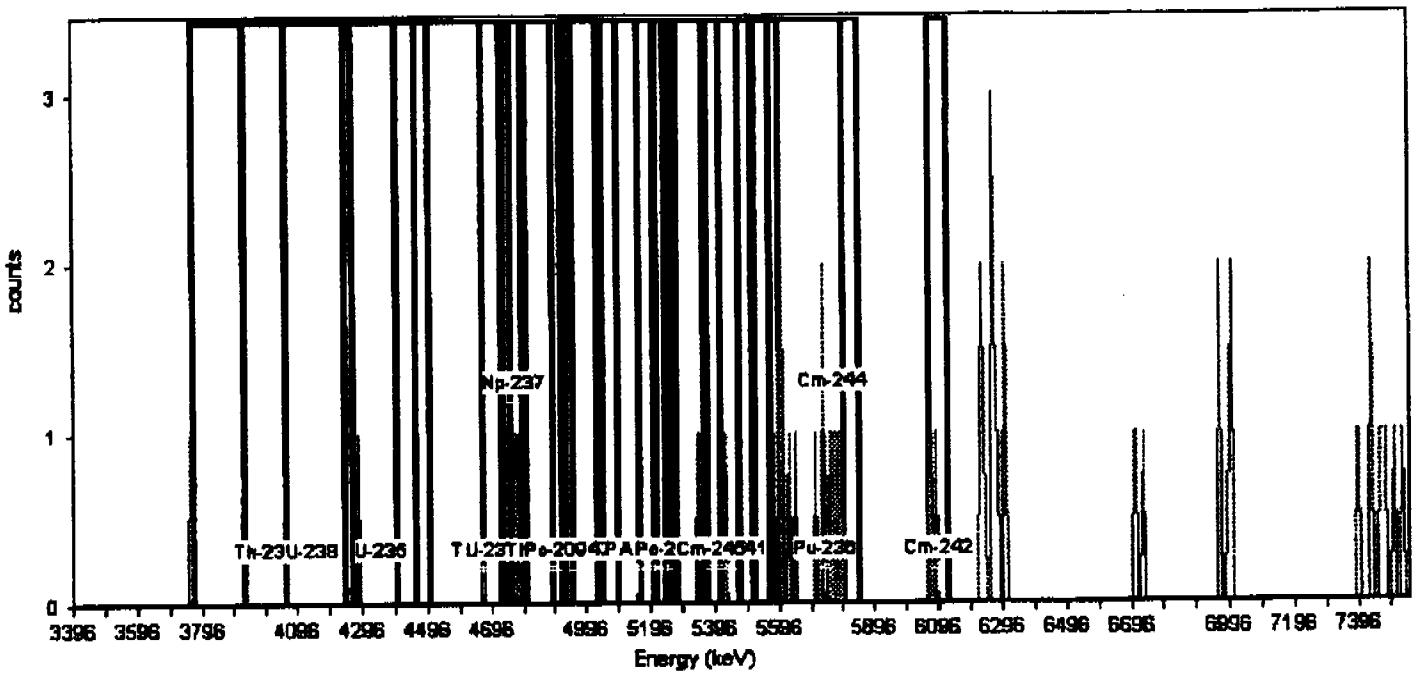
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV72 , SN:
Acquisition Start Date: 3/14/2005 5:40:11PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Feb2005_AV72
Calibration Date: 3/2/2005 11:06:34PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.48% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 54.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.473E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.473E-003
U-235	4.35	4.26	4.46	1.00	1.042E-003	1.473E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.473E-003
U-234	4.70	4.60	4.80	2.00	2.083E-003	1.804E-003
Pu-242	4.88	4.67	4.93	2.00	2.083E-003	1.804E-003
Th-229	4.84	4.72	5.10	2.00	2.083E-003	1.804E-003
Np-237	4.77	4.75	4.79	2.00	2.083E-003	1.804E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.473E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.473E-003
U-232	5.23	5.04	5.37	1.00	1.042E-003	1.473E-003
Th-228	5.41	5.16	5.47	2.00	2.083E-003	1.804E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	2.00	2.083E-003	1.804E-003
Am-241	5.45	5.27	5.57	2.00	2.083E-003	1.804E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.473E-003
Pu-236	5.74	5.52	5.80	17.00	1.771E-002	4.419E-003
Cm-244	5.76	5.60	5.85	16.00	1.667E-002	4.295E-003
Cm-242	6.10	6.07	6.13	3.00	3.125E-003	2.083E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:00:06AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV73
Comment:

Spectrum #1 Analysis #1

Batch

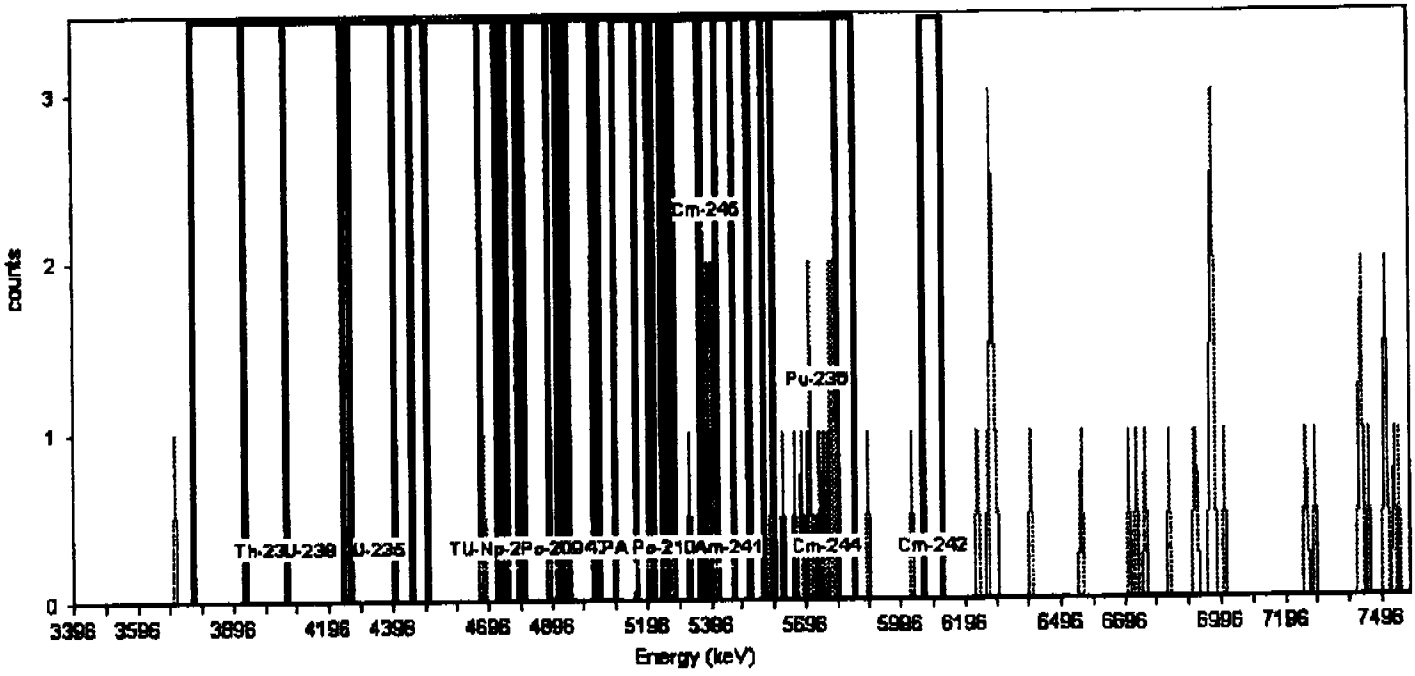
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV73 , SN:
Acquisition Start Date: 3/14/2005 5:40:12PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Feb2005_AV73
Calibration Date: 3/2/2005 11:06:41PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.55% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROU[illegible] Library: Background ROI Library
Total Background Counts: 60.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.473E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.473E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.473E-003
Th-230	4.67	4.40	4.73	1.00	1.042E-003	1.473E-003
U-234	4.70	4.50	4.80	2.00	2.083E-003	1.804E-003
Pu-242	4.88	4.67	4.93	2.00	2.083E-003	1.804E-003
Th-229	4.84	4.72	5.10	1.00	1.042E-003	1.473E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.473E-003
Am-243	5.20	5.03	5.28	1.00	1.042E-003	1.473E-003
U-232	5.23	5.04	5.37	2.00	2.083E-003	1.804E-003
Th-228	5.41	5.16	5.47	7.00	7.292E-003	2.946E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.473E-003
Pu-238	5.44	5.24	5.52	7.00	7.292E-003	2.946E-003
Am-241	5.45	5.27	5.57	7.00	7.292E-003	2.946E-003
Cm-245	5.39	5.36	5.41	5.00	5.208E-003	2.552E-003
Pu-236	5.74	5.52	5.80	14.00	1.458E-002	4.034E-003
Cm-244	5.76	5.80	5.85	13.00	1.354E-002	3.898E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.473E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:00:16AM 3/15/2005

Analyst: 60040

Sample

Sample Name: AV74
Comment:

Spectrum #1 Analysis #1

Batch

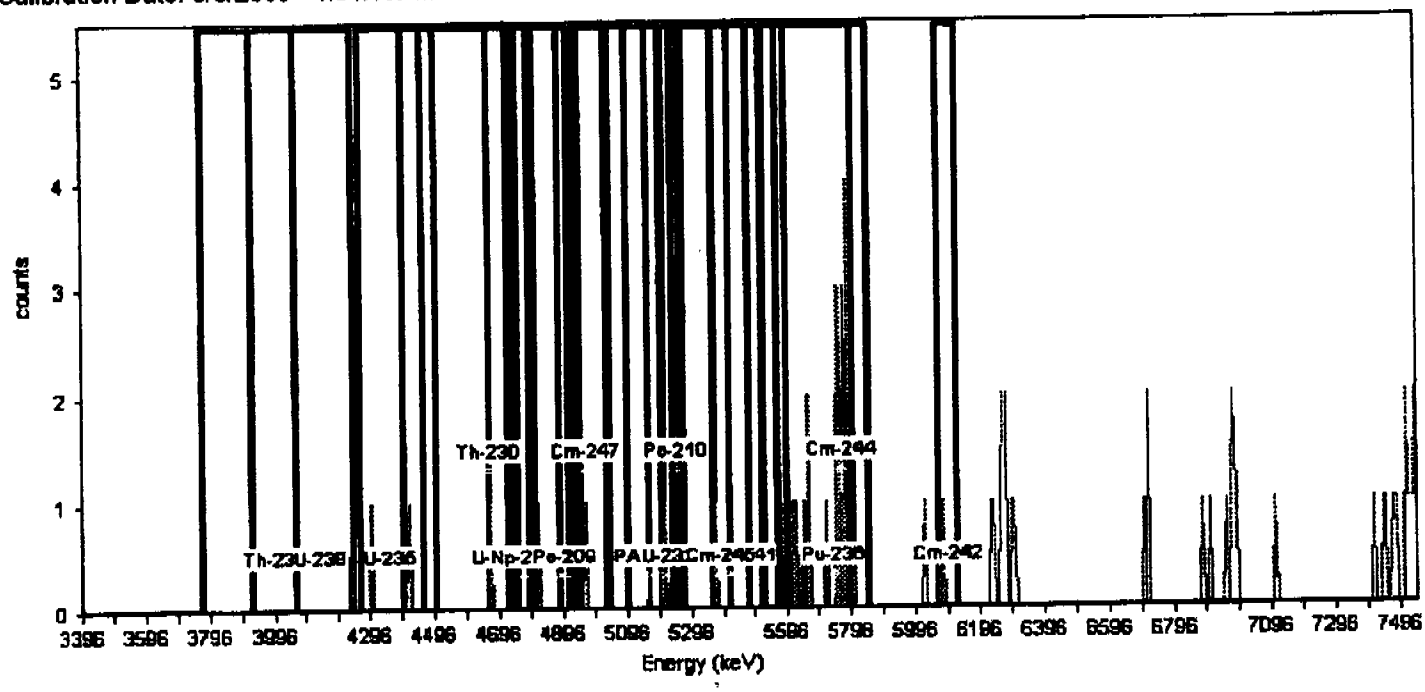
Batch Name: March2005_BKGDS
Description:

Acquisition

Detector: AV74 , SN:
Acquisition Start Date: 3/14/2005 5:40:13PM
Live Time: 960.00 min.
Real Time: 960.02 min.
Calibration Name: Feb2005_AV74
Calibration Date: 3/3/2005 4:34:19PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.98% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 67.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.473E-003
U-238	4.14	3.93	4.24	1.00	1.042E-003	1.473E-003
U-235	4.35	4.26	4.46	2.00	2.083E-003	1.804E-003
Th-230	4.67	4.40	4.73	2.00	2.083E-003	1.804E-003
U-234	4.70	4.50	4.80	1.00	1.042E-003	1.473E-003
Pu-242	4.88	4.67	4.93	2.00	2.083E-003	1.804E-003
Th-229	4.84	4.72	5.10	2.00	2.083E-003	1.804E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.473E-003
Cm-247	4.96	4.88	5.04	1.00	1.042E-003	1.473E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.473E-003
Pu-239	5.15	4.95	5.21	2.00	2.083E-003	1.804E-003
Am-243	5.20	5.03	5.28	2.00	2.083E-003	1.804E-003
U-232	5.23	5.04	5.37	3.00	3.125E-003	2.083E-003
Th-228	5.41	5.16	5.47	3.00	3.125E-003	2.083E-003
Po-210	5.25	5.20	5.26	2.00	2.083E-003	1.804E-003
Pu-238	5.44	5.24	5.52	2.00	2.083E-003	1.804E-003
Am-241	5.45	5.27	5.57	1.00	1.042E-003	1.473E-003
Cm-245	5.39	5.36	5.41	1.00	1.042E-003	1.473E-003
Pu-236	5.74	5.52	5.80	22.00	2.292E-002	4.996E-003
Cm-244	5.76	5.60	5.85	21.00	2.187E-002	4.886E-003
Cm-242	6.10	6.07	6.13	2.00	2.083E-003	1.804E-003

SEVERN TRENT STL

March 2005
Monthly Calibrations
Alphavision

ST STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
7:59:50PM 3/16/2005

Analyst: 60040
Detector: AV1

Calibration

Name: March2005_AV1
Description:

Calibration Date: 3/16/2005 7:59:48PM

Source Info

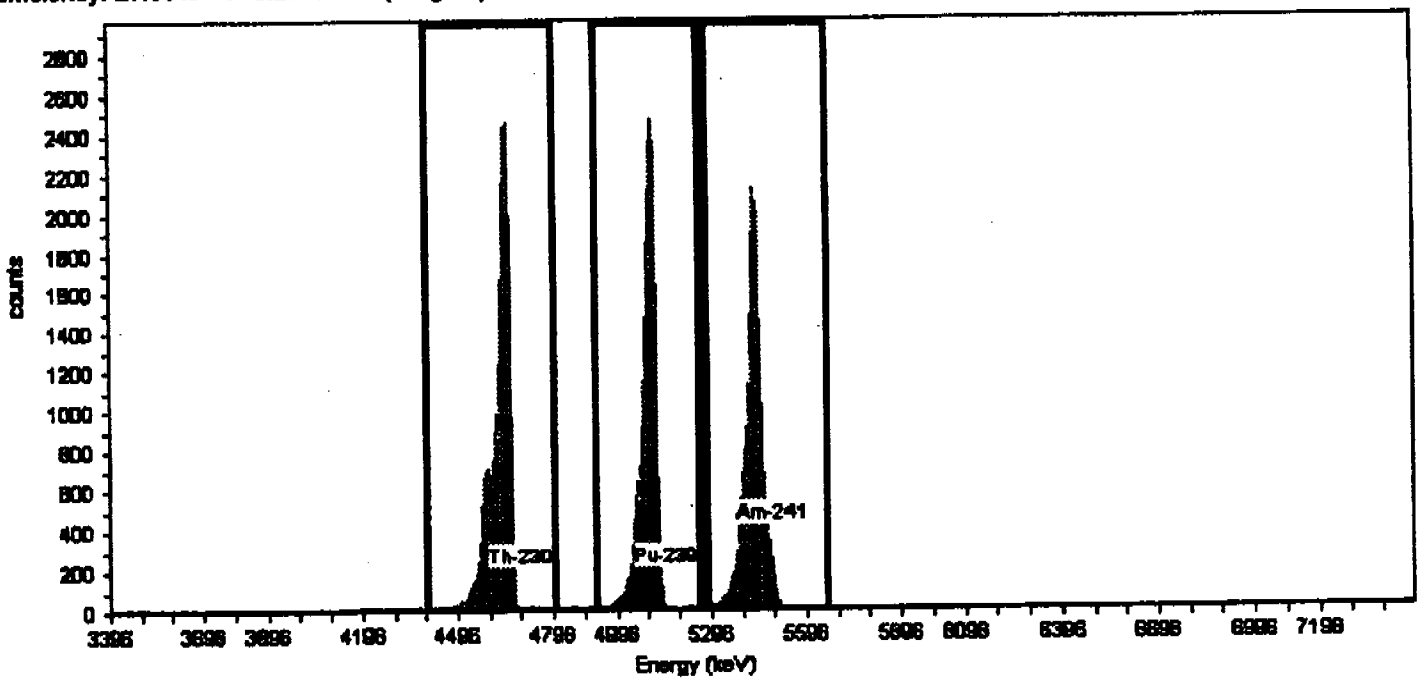
Certificate ID: 63506-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:07PM

Acquisition

Detector: AV1 , SN: 41-158W6
Acquisition Start Date: 3/16/2005 5:32:25PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.33% +/- 0.27% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	16,838.00	120.27
Pu-239	243	5.16	212	258	15,781.00	112.72
Am-241	289	5.49	261	313	15,014.00	107.24

ST [redacted] **STL** **Alpha-Spectroscopy Calibration Report**

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:00:01PM 3/16/2005

Analyst: 60040
Detector: AV2

Calibration

Name: March2005_AV2
Description:
Calibration Date: 3/16/2005 7:59:52PM

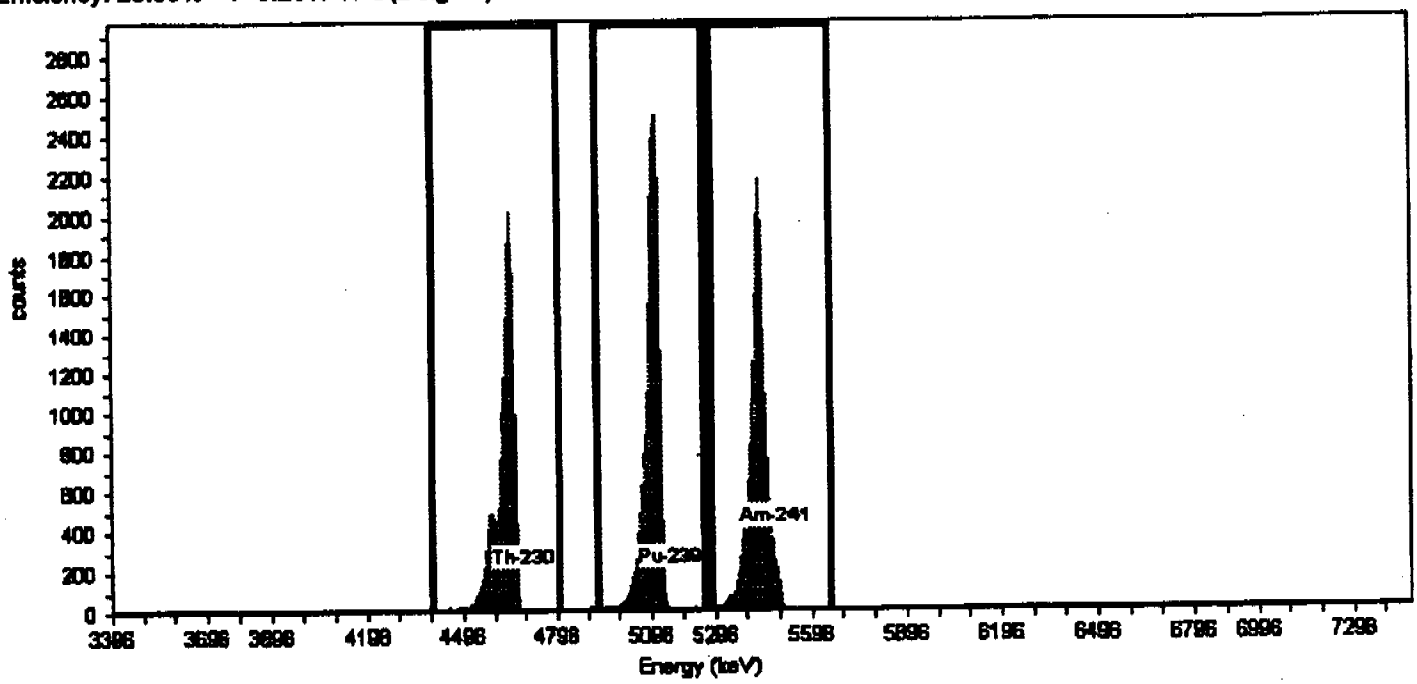
Source Info

Certificate ID: 63507-334
Prepared by: Analytics
Description:
Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV2 , SN: 41-158W7
Acquisition Start Date: 3/16/2005 5:32:43PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 26.39% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear
Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,462.00	89.01
Pu-239	243	5.16	212	258	14,320.00	102.29
Am-241	289	5.49	261	313	14,123.00	100.88

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:00:04PM 3/16/2005

Analyst: 60040
Detector: AV3

Calibration

Name: March2005_AV3
Description:

Calibration Date: 3/16/2005 7:59:56PM

Source Info

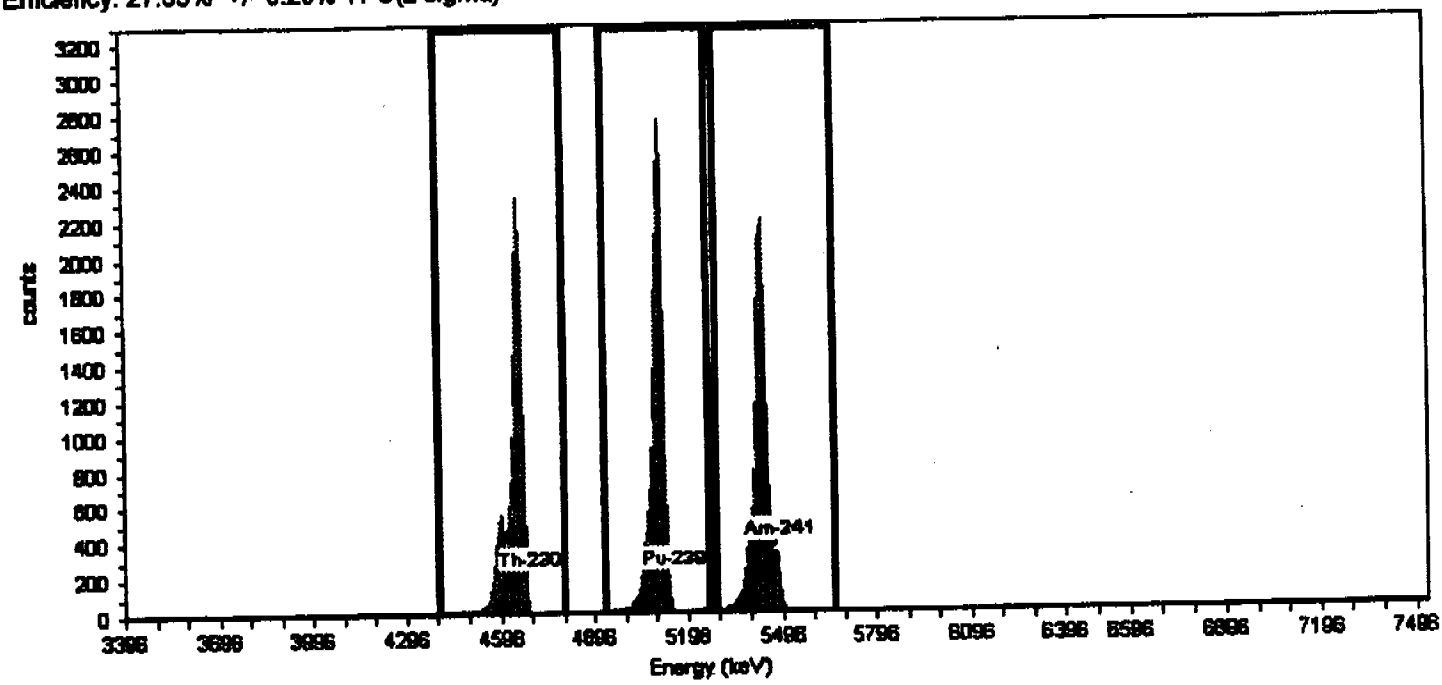
Certificate ID: 63508A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV3 , SN: 41-158X5
Acquisition Start Date: 3/16/2005 5:32:44PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.35% +/- 0.29% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,611.00	90.06
Pu-239	243	5.16	212	258	14,432.00	103.09
Am-241	289	5.49	261	313	13,386.00	95.61

LOT# F5D220356

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:00:07PM 3/16/2005

Analyst: 60040
Detector: AV4

Calibration

Name: March2005_AV4
Description:

Calibration Date: 3/16/2005 7:59:59PM

Source Info

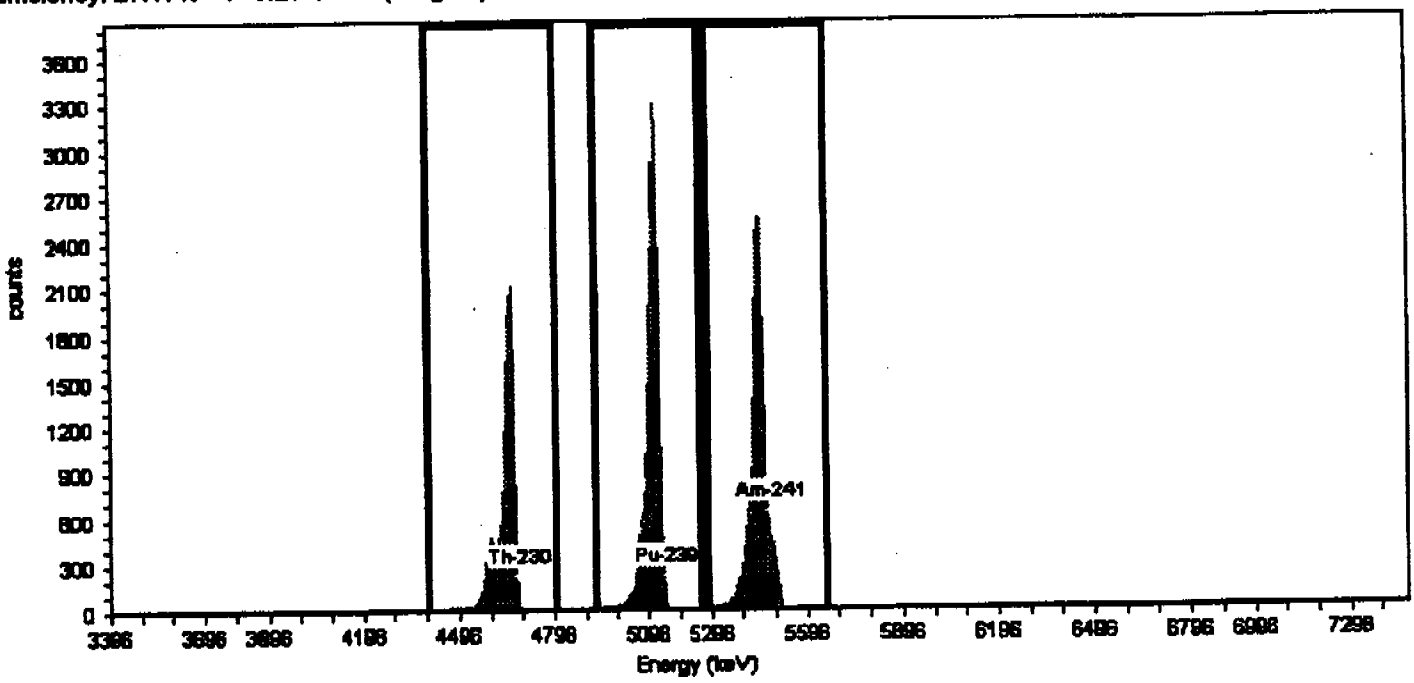
Certificate ID: 63509A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV4 , SN: 41-172B5
Acquisition Start Date: 3/16/2005 5:33:16PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.17% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	11,695.00	83.54
Pu-239	243	5.16	212	258	17,500.00	125.00
Am-241	289	5.49	261	313	15,515.00	110.82

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:54:06PM 3/16/2005

Analyst: 60040
Detector: AV5

Calibration

Name: March2005_AV5
Description:

Calibration Date: 3/16/2005 10:54:03PM

Source Info

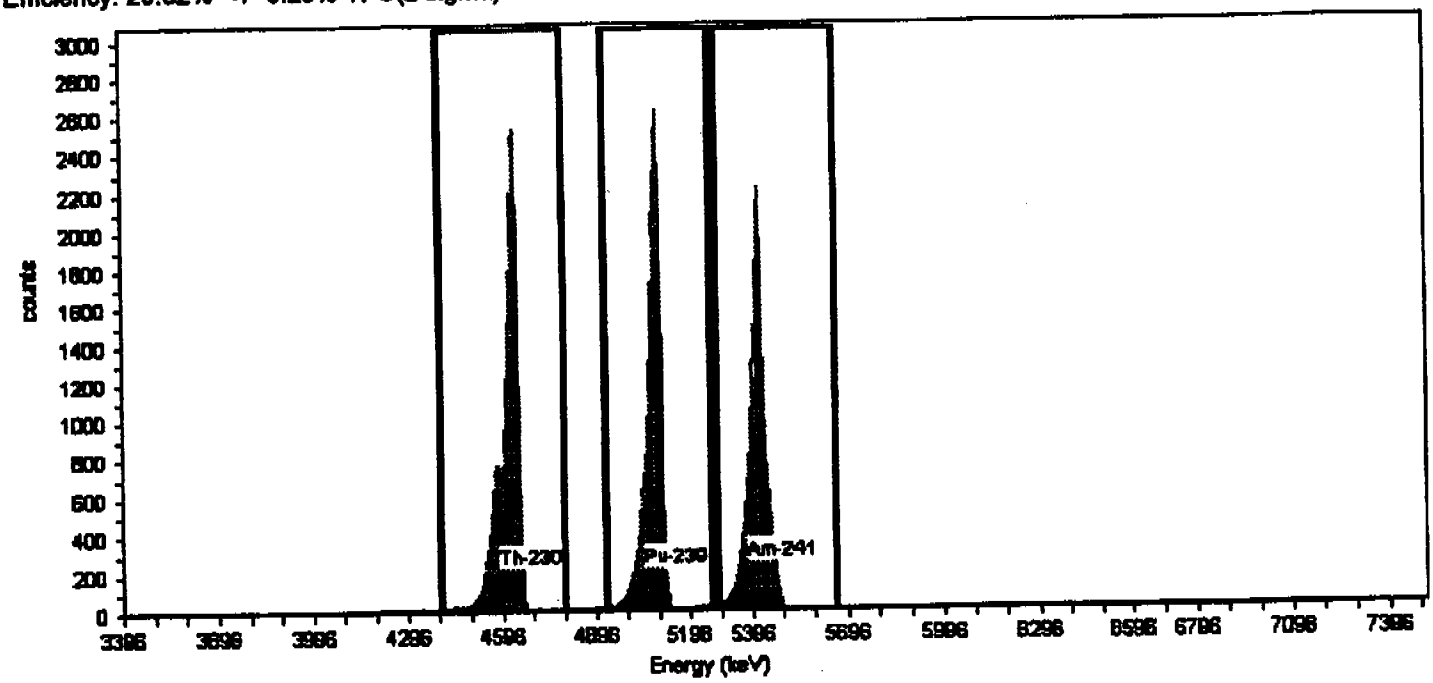
Certificate ID: 63506-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:07PM

Acquisition

Detector: AV5 , SN: 41-158X7
Acquisition Start Date: 3/16/2005 8:01:59PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 29.32% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	17,829.00	127.35
Pu-239	243	5.16	212	258	17,005.00	121.46
Am-241	289	5.49	261	313	16,180.00	115.57

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:54:11PM 3/16/2005

Analyst: 60040
Detector: AV6

Calibration

Name: March2005_AV6
Description:

Calibration Date: 3/16/2005 10:54:07PM

Source Info

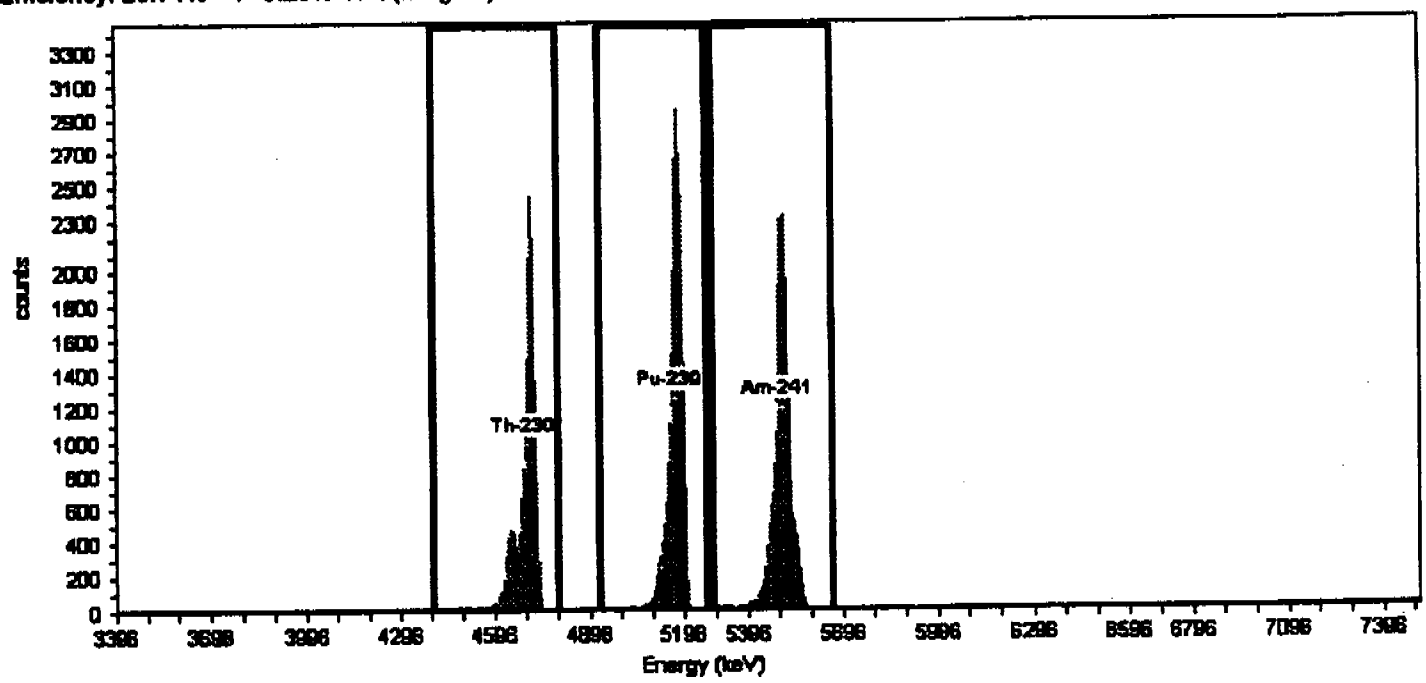
Certificate ID: 63507-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV6 , SN:
Acquisition Start Date: 3/16/2005 8:02:02PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 26.74% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,505.00	89.32
Pu-239	243	5.16	212	258	14,589.00	104.21
Am-241	289	5.49	261	313	14,448.00	103.20

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:54:17PM 3/16/2005

Analyst: 60040
Detector: AV7

Calibration

Name: March2005_AV7
Description:

Calibration Date: 3/16/2005 10:54:14PM

Source Info

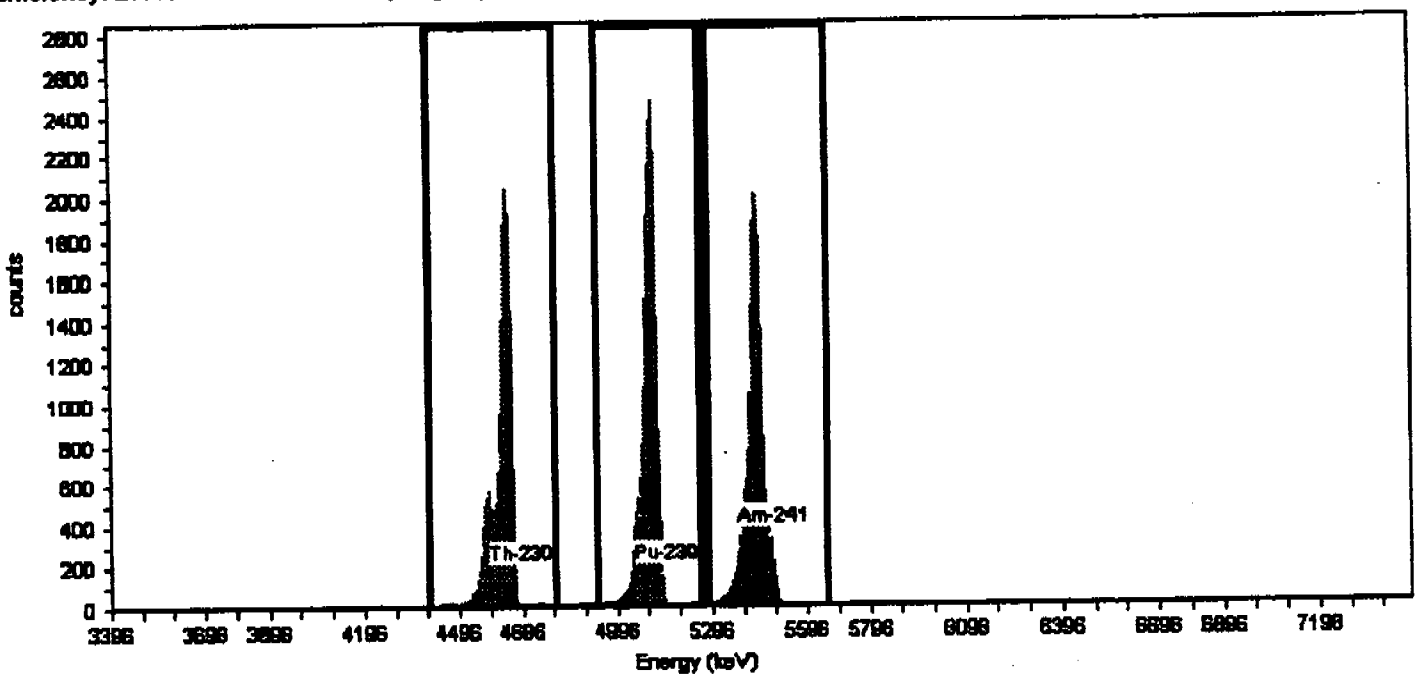
Certificate ID: 63508A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV7 , SN: 41-158X6
Acquisition Start Date: 3/16/2005 8:02:04PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.46% +/- 0.29% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,747.00	91.05
Pu-239	243	5.16	212	258	14,510.00	103.64
Am-241	289	5.49	261	313	13,348.00	95.34

STL ST. LOUIS

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:54:28PM 3/16/2005

Analyst: 60040
Detector: AV8

Calibration

Name: March2005_AV8
Description:

Calibration Date: 3/16/2005 10:54:19PM

Source Info

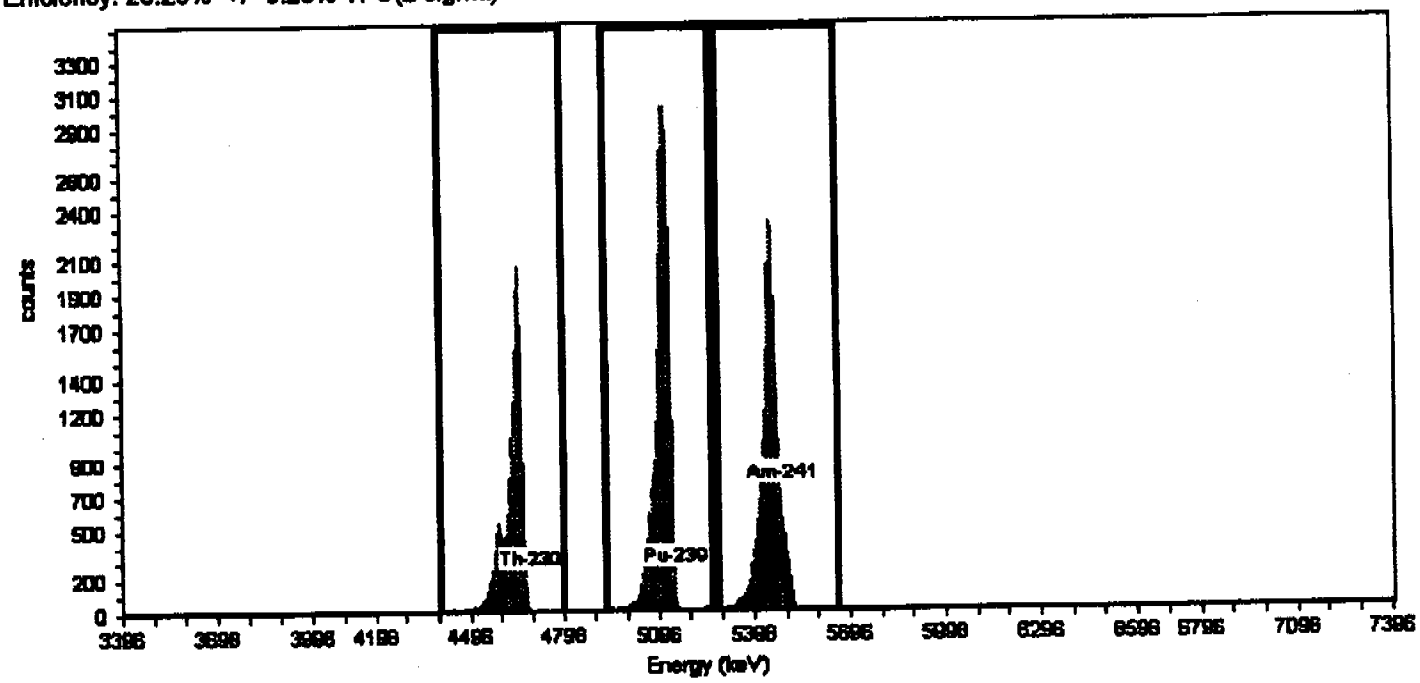
Certificate ID: 63509A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV8 , SN: 41-158X1
Acquisition Start Date: 3/16/2005 8:03:05PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 28.25% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,368.00	88.34
Pu-239	243	5.16	212	258	18,059.00	128.99
Am-241	289	5.49	261	313	16,078.00	114.84

STL ST. LOUIS

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
5:28:04PM 3/16/2005

Analyst: 60040
Detector: AV9

Calibration

Name: March2005_AV9
Description:

Calibration Date: 3/16/2005 5:28:01PM

Source Info

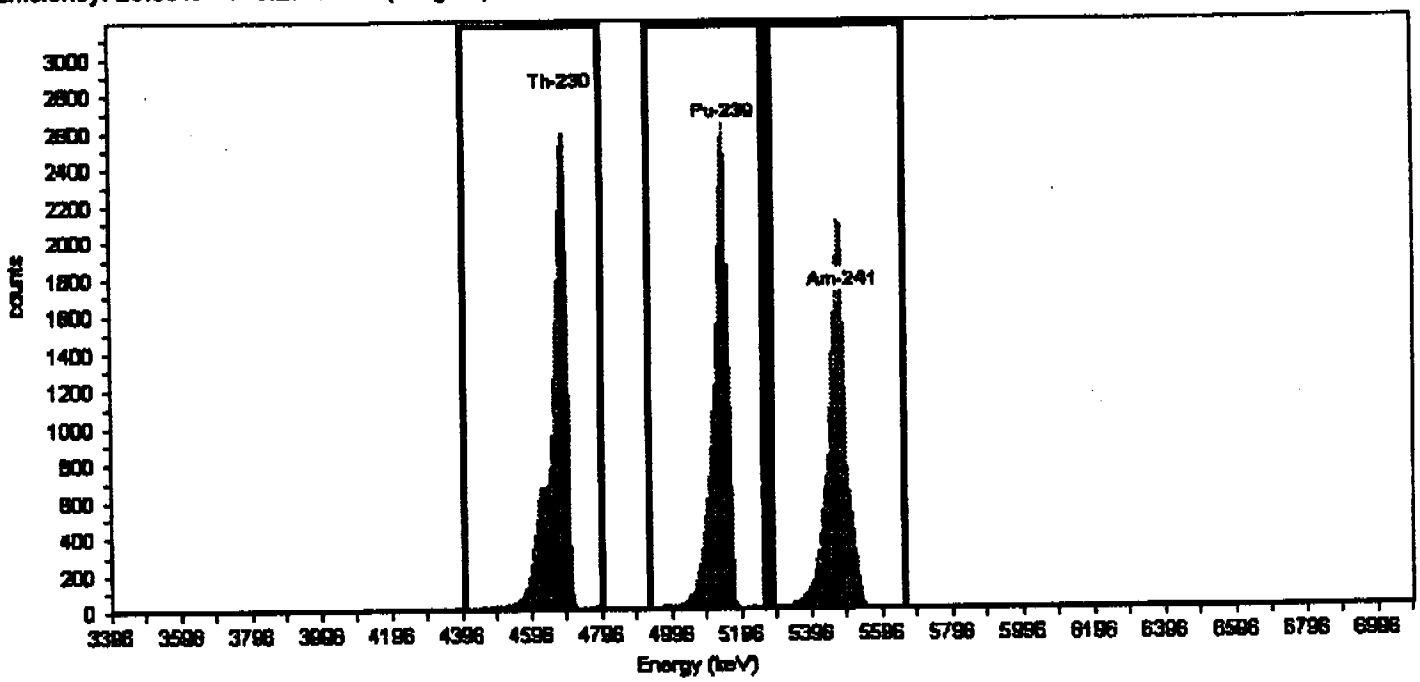
Certificate ID: 63506-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:07PM

Acquisition

Detector: AV9 , SN: 41-172R1
Acquisition Start Date: 3/16/2005 1:34:37PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 28.38% +/- 0.27% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	17,321.00	123.72
Pu-239	243	5.16	212	258	16,379.00	116.99
Am-241	289	5.49	261	313	15,692.00	112.09

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:09:22PM 3/21/2005

Analyst: 60040
Detector: AV9

Calibration

Name: March2005_AV9#2
Description:

Calibration Date: 3/21/2005 8:25:56PM

Source Info

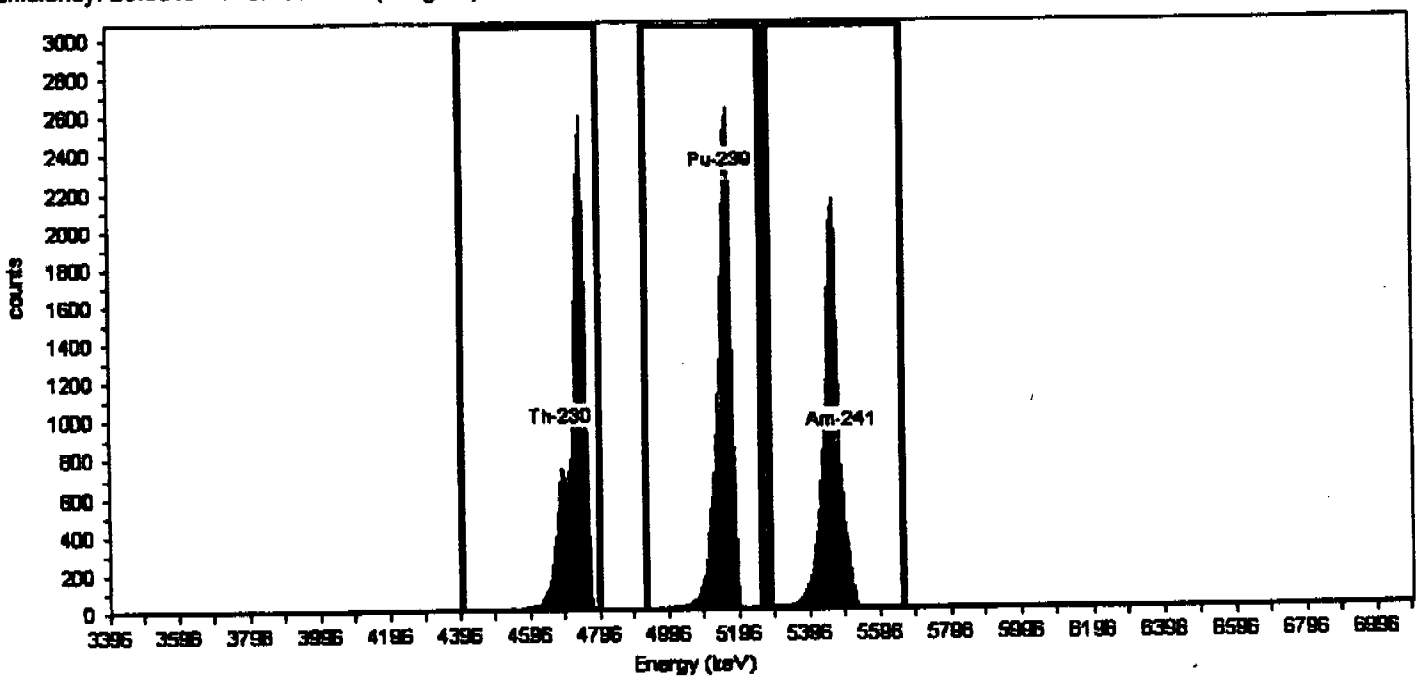
Certificate ID: 63506-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:07PM

Acquisition

Detector: AV9 , SN: 41-172R1
Acquisition Start Date: 3/21/2005 5:31:49PM
Live Time: 140.00 min.
Real Time: 140.02 min.
Efficiency: 26.56% +/- 0.26% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	16,281.00	116.29
Pu-239	243	5.16	212	258	15,490.00	110.64
Am-241	289	5.49	261	313	14,488.00	103.49

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STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
5:27:50PM 3/16/2005

Analyst: 60040
Detector: AV10

Calibration

Name: March2005_AV10
Description:

Calibration Date: 3/16/2005 5:27:48PM

Source Info

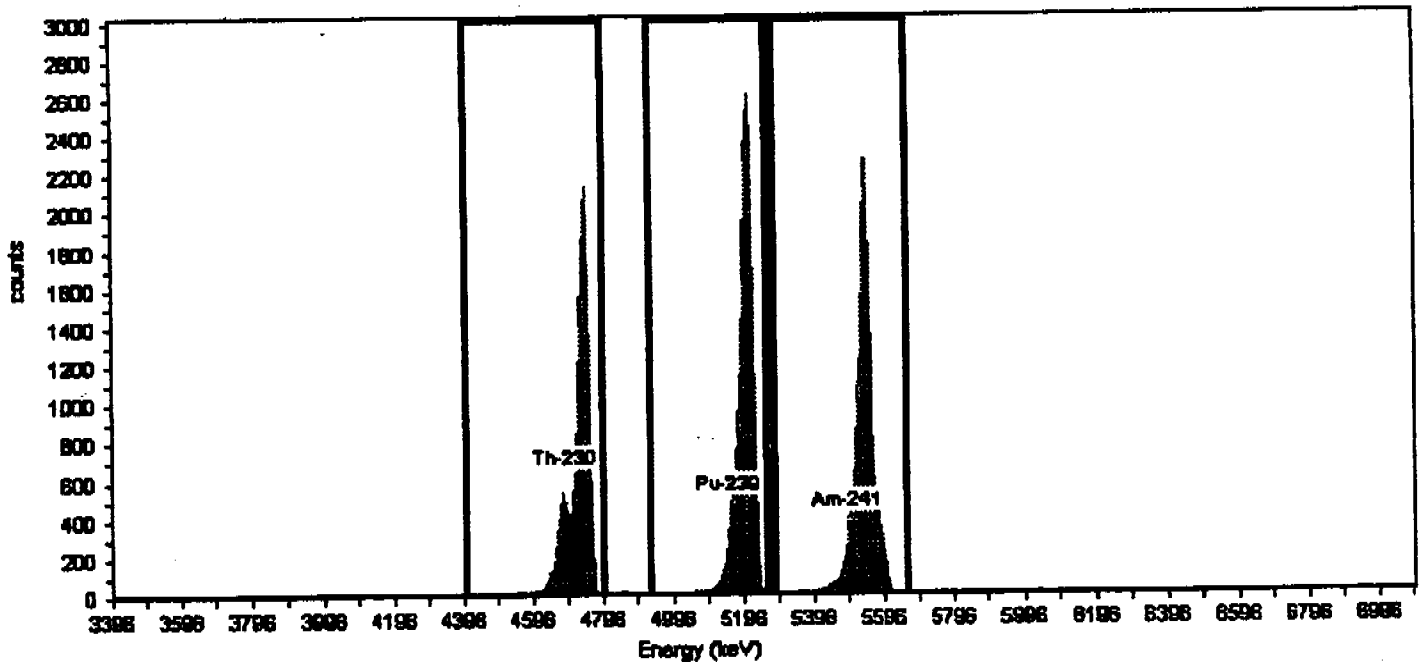
Certificate ID: 63507-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV10 , SN: 41-172R3
Acquisition Start Date: 3/16/2005 1:33:15PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 26.75% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,518.00	89.41
Pu-239	243	5.16	212	258	14,906.00	106.47
Am-241	289	5.49	261	313	14,113.00	100.81

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
5:27:55PM 3/16/2005

Analyst: 60040
Detector: AV11

Calibration

Name: March2005_AV11
Description:

Calibration Date: 3/16/2005 5:27:52PM

Source Info

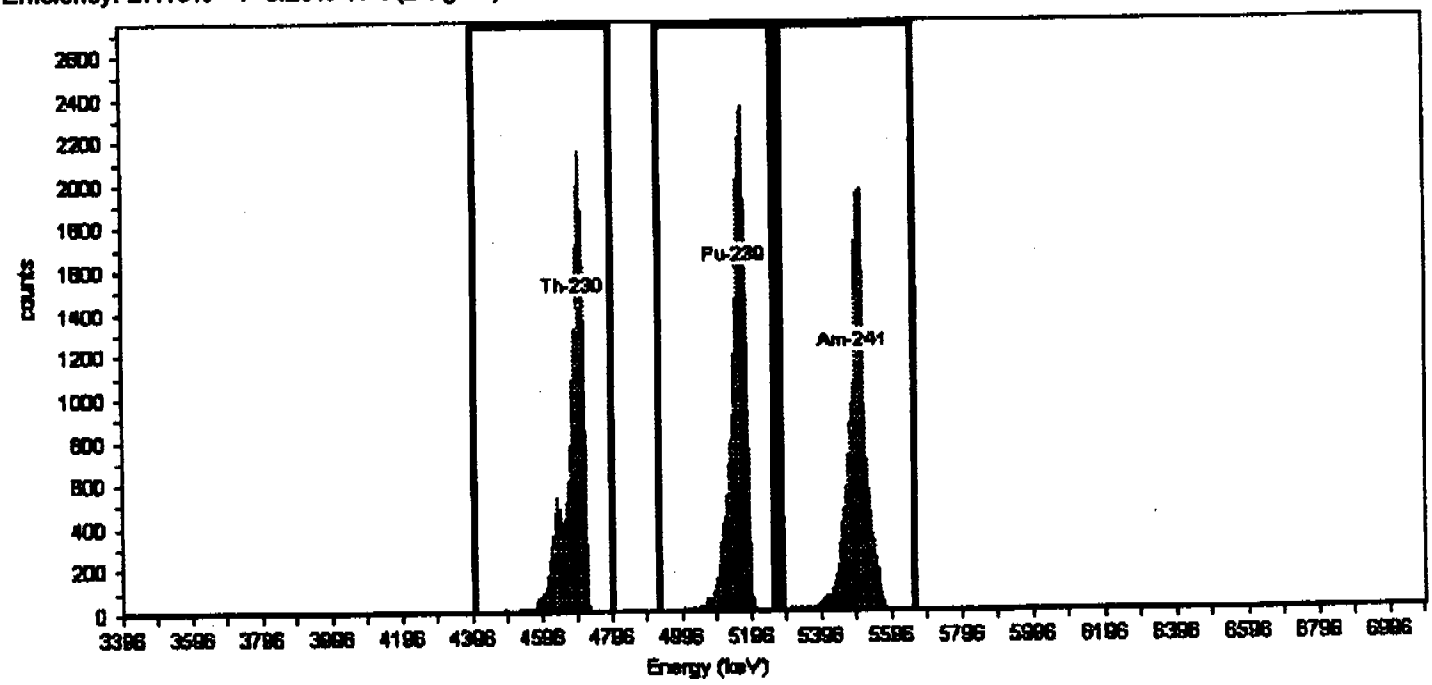
Certificate ID: 63508A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV11 , SN: 41-172Q3
Acquisition Start Date: 3/16/2005 1:33:17PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.13% +/- 0.29% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,557.00	89.69
Pu-239	243	5.16	212	258	14,137.00	100.98
Am-241	289	5.49	261	313	13,410.00	95.79

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
5:27:59PM 3/16/2005

Analyst: 60040
Detector: AV12

Calibration

Name: March2005_AV12
Description:

Calibration Date: 3/16/2005 5:27:57PM

Source Info

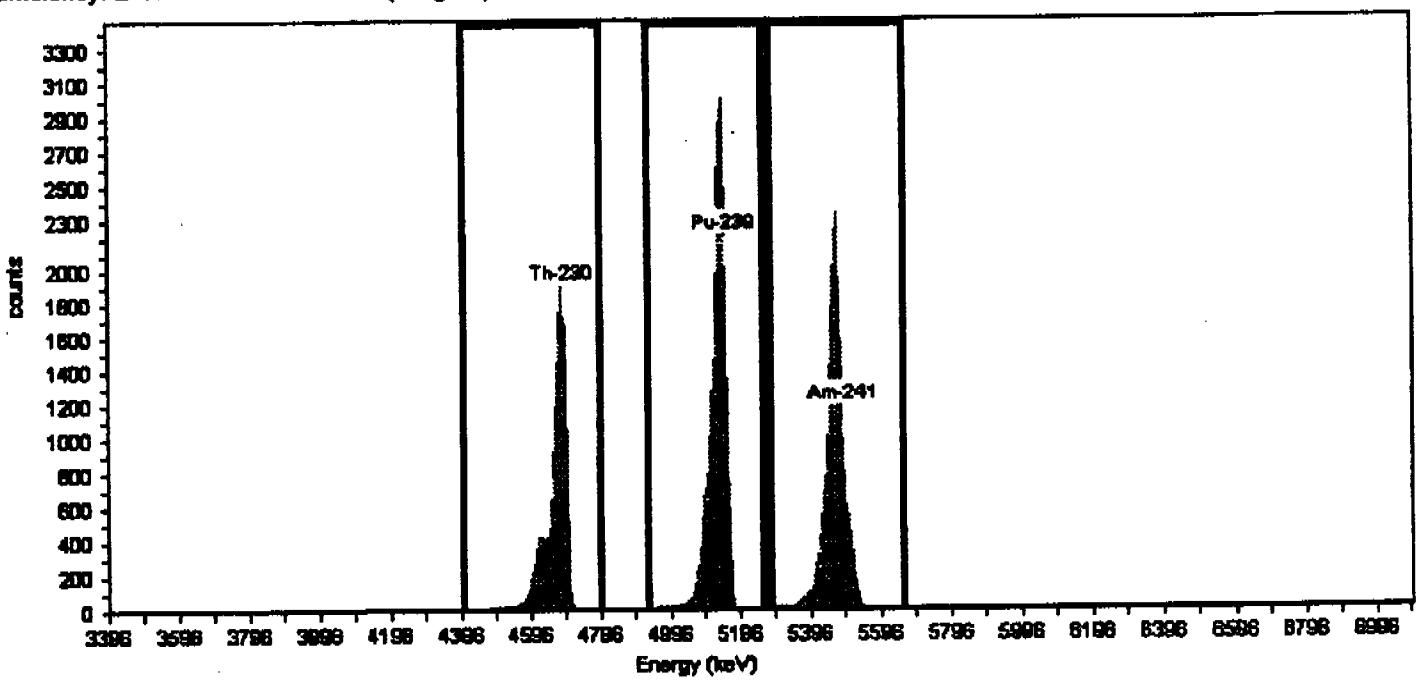
Certificate ID: 63509A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV12 , SN: 41-172Q2
Acquisition Start Date: 3/16/2005 1:33:56PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 26.80% +/- 0.27% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	11,520.00	82.29
Pu-239	243	5.16	212	258	17,339.00	123.85
Am-241	289	5.49	261	313	15,238.00	108.84

STL Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040
Detector: AV13
1:21:42PM 3/16/2005

Calibration

Name: March2005_AV13
Description:

Calibration Date: 3/16/2005 1:21:34PM

Source Info

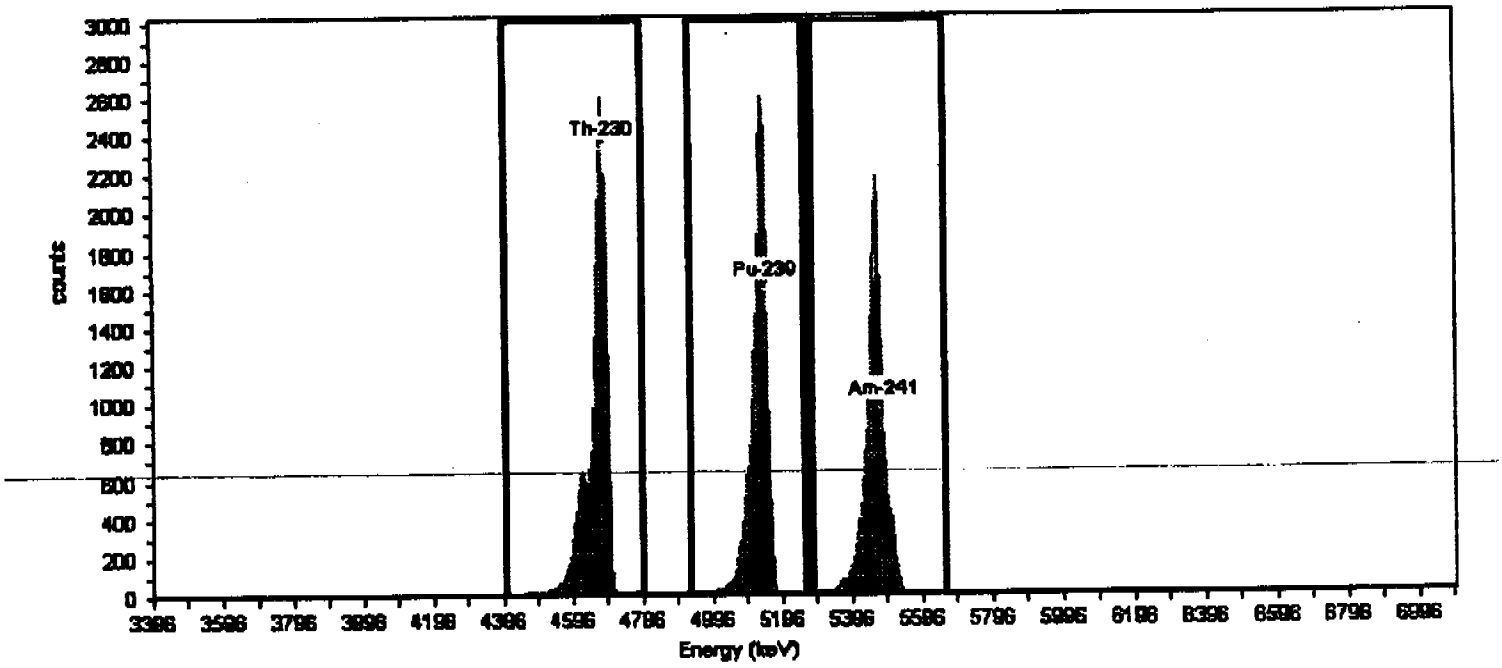
Certificate ID: 63506-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:07PM

Acquisition

Detector: AV13 , SN: 41-172Q1
Acquisition Start Date: 3/16/2005 10:05:11AM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 26.86% +/- 0.26% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	16,334.00	116.67
Pu-239	243	5.16	212	258	15,633.00	111.66
Am-241	289	5.49	261	313	14,759.00	105.42

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Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:21:58PM 3/16/2005

Analyst: 60040
Detector: AV15

Calibration

Name: March2005_AV15
Description:

Calibration Date: 3/16/2005 1:21:55PM

Source Info

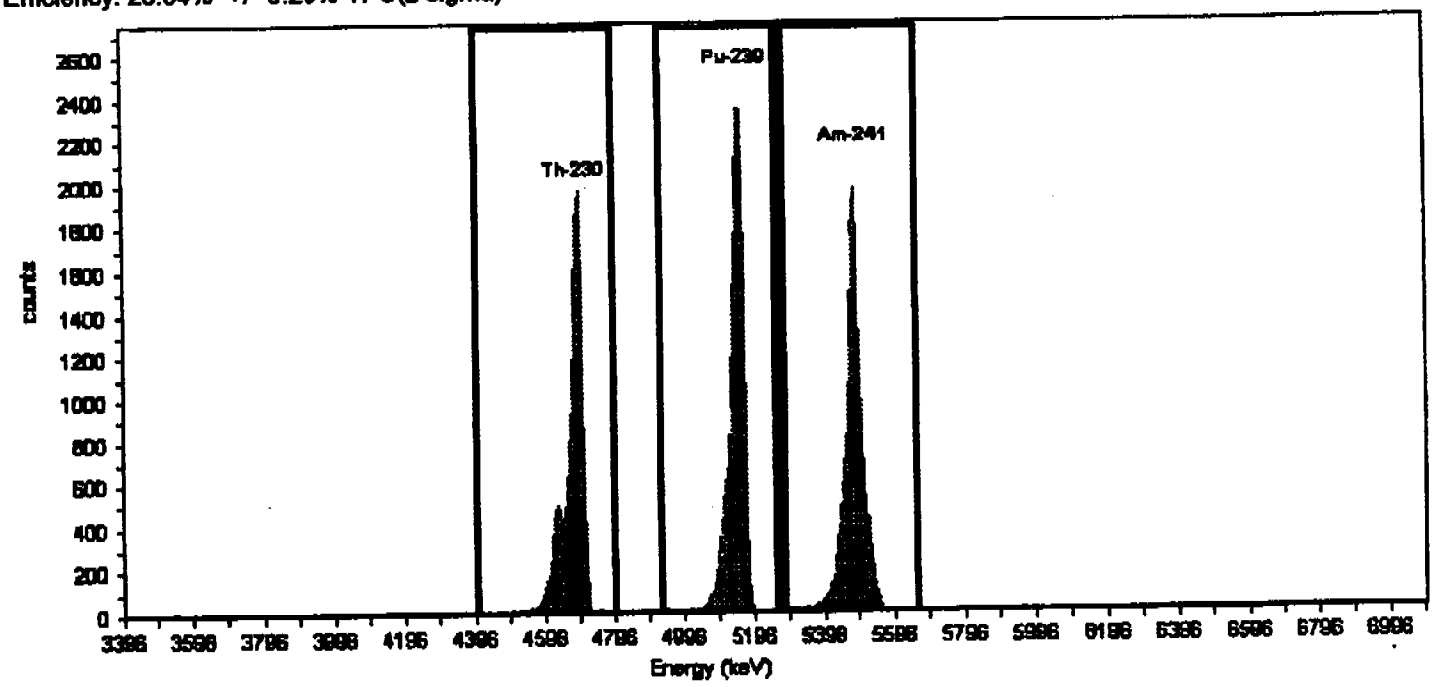
Certificate ID: 63508A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV15 , SN: 41-172C5
Acquisition Start Date: 3/16/2005 10:05:54AM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 26.84% +/- 0.29% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,375.00	88.39
Pu-239	243	5.16	212	258	14,069.00	100.49
Am-241	289	5.49	261	313	13,233.00	94.52

STL ST. LOUIS

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:22:04PM 3/16/2005

Analyst: 60040
Detector: AV16

Calibration

Name: March2005_AV16
Description:

Calibration Date: 3/16/2005 1:22:01PM

Source Info

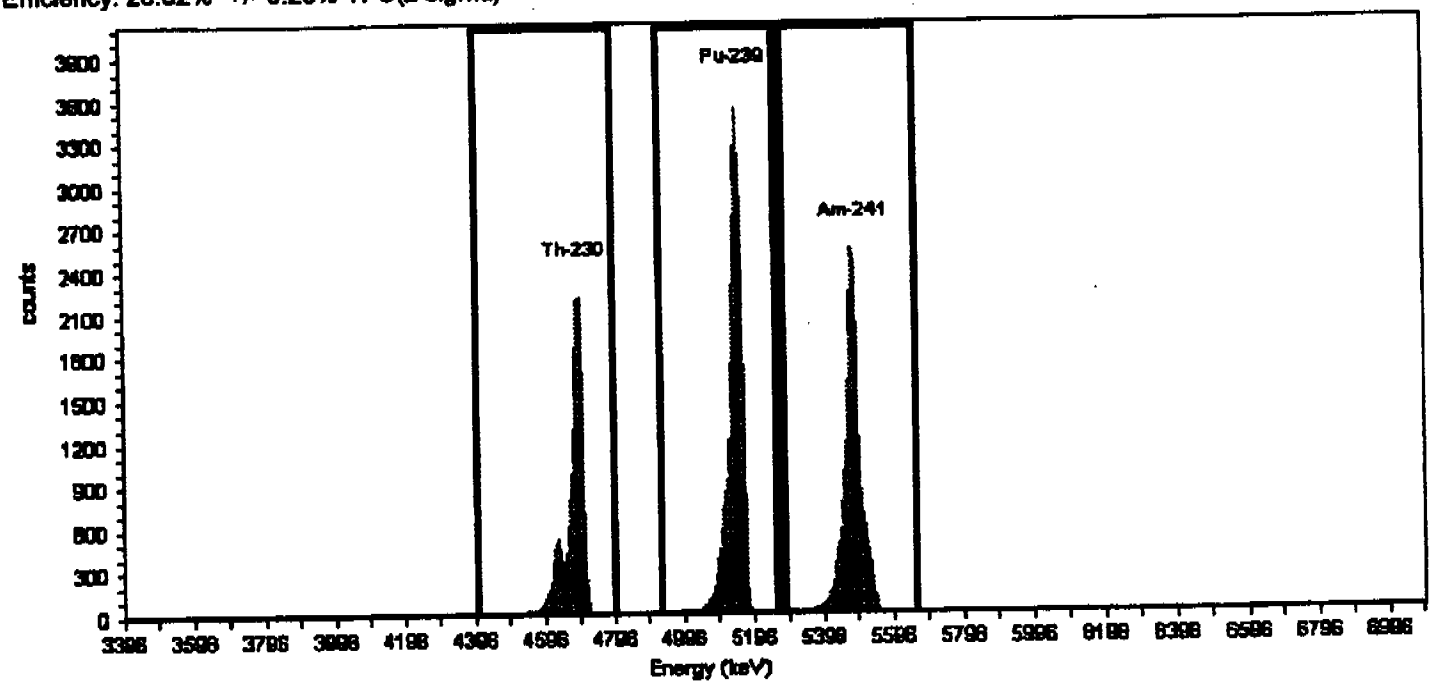
Certificate ID: 63509A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV16 , SN: 41-172Q7
Acquisition Start Date: 3/16/2005 10:06:31AM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 28.82% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,497.00	89.26
Pu-239	243	5.16	212	258	18,631.00	133.08
Am-241	289	5.49	261	313	16,291.00	116.36

LOT# F5D220356

STL ST. LOUIS

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
5:29:16PM 3/16/2005

Analyst: 60040
Detector: AV17

Calibration

Calibration Date: 3/16/2005 5:28:41PM

Name: Mar2005_AV17
Description:

Source Info

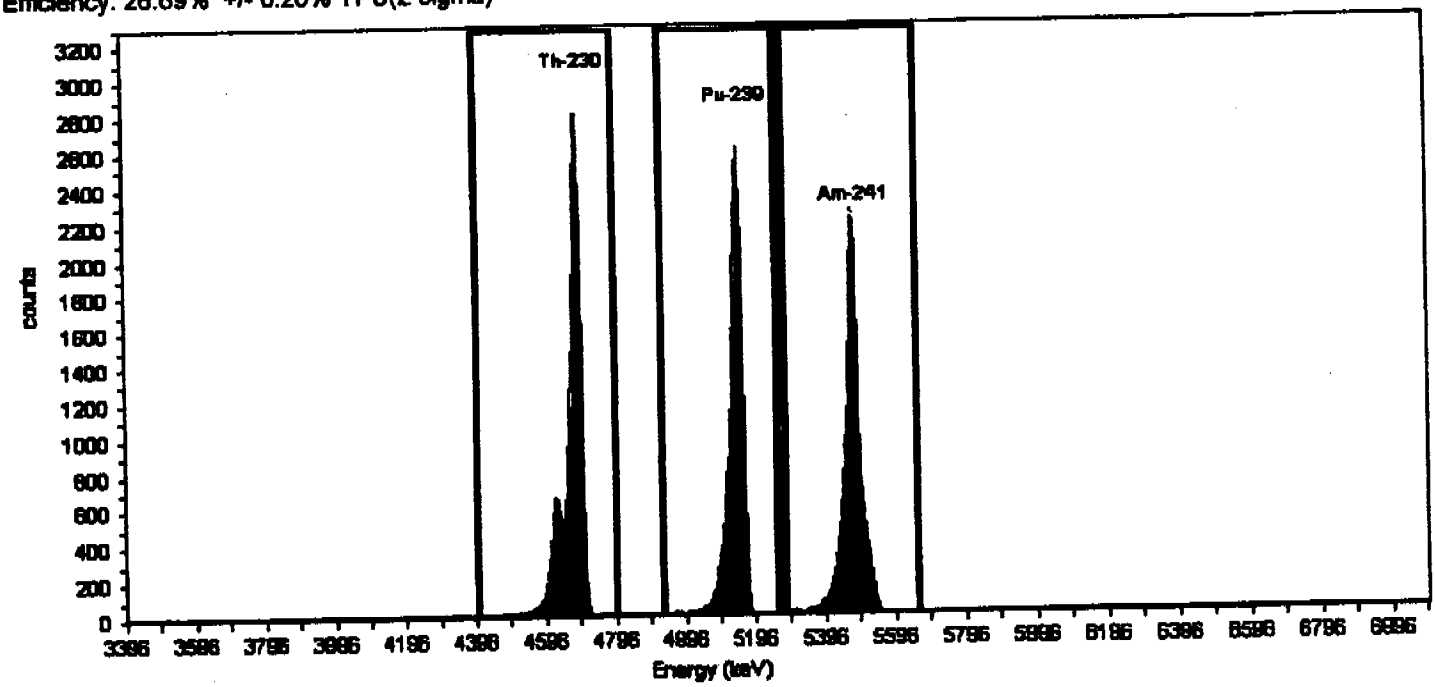
Certification Date: 5/30/2002 12:00:07PM

Certificate ID: 63506-334
Prepared by: Analytics
Description:

Acquisition

Detector: AV17 , SN: 41-172Q4
Acquisition Start Date: 3/16/2005 12:51:49AM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 26.69% +/- 0.26% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	16,506.00	117.90
Pu-239	243	5.16	212	258	15,303.00	109.31
Am-241	289	5.49	261	313	14,717.00	105.12

LOT# F5D220356

STL ST. LOUIS

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
5:29:20PM 3/16/2005

Analyst: 60040
Detector: AV18

Calibration

Name: Mar2005_AV18
Description:

Calibration Date: 3/16/2005 5:28:55PM

Source Info

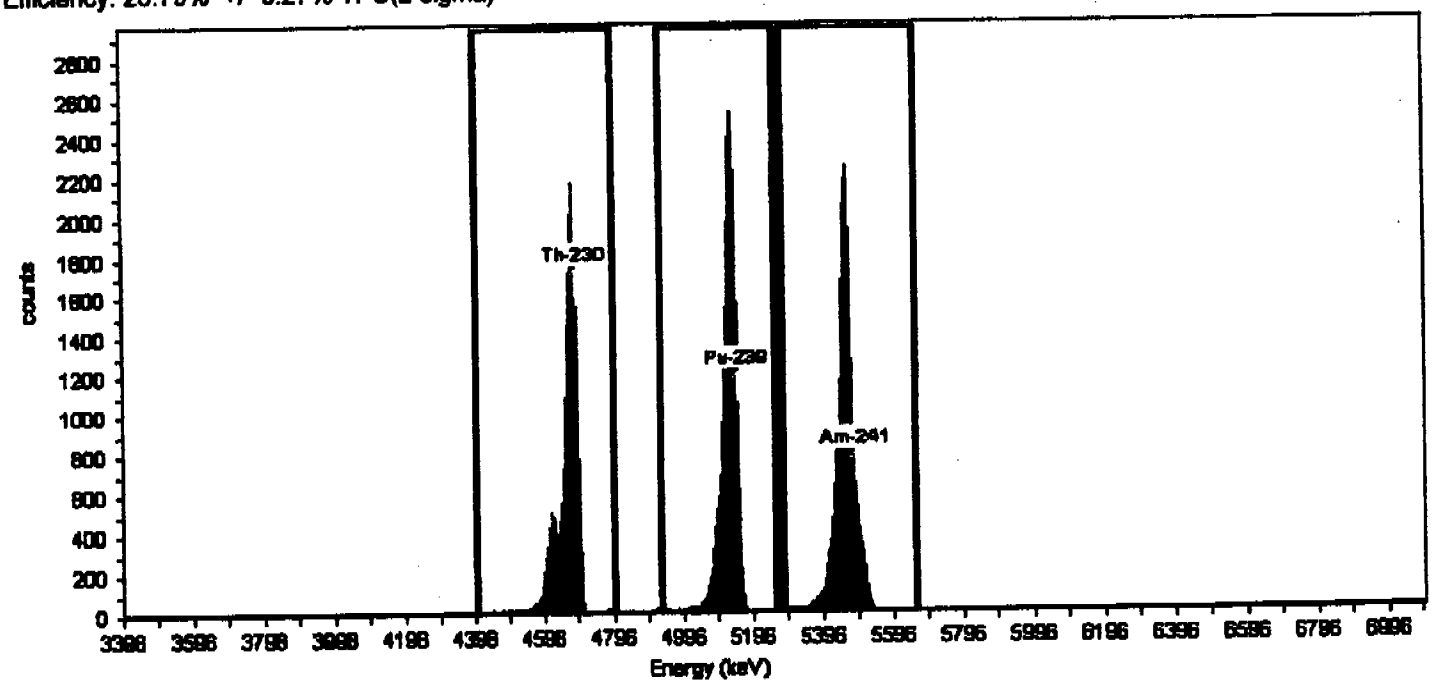
Certificate ID: 63507-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV18 , SN: 41-172C6
Acquisition Start Date: 3/16/2005 12:51:50AM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 25.79% +/- 0.27% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,152.00	86.80
Pu-239	243	5.16	212	258	14,040.00	100.29
Am-241	289	5.49	261	313	13,799.00	98.56

LOT# F5D220356

STL ST. LOUIS

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
5:29:24PM 3/16/2005

Analyst: 60040
Detector: AV19

Calibration

Name: Mar2005_AV19
Description:

Calibration Date: 3/16/2005 5:29:03PM

Source Info

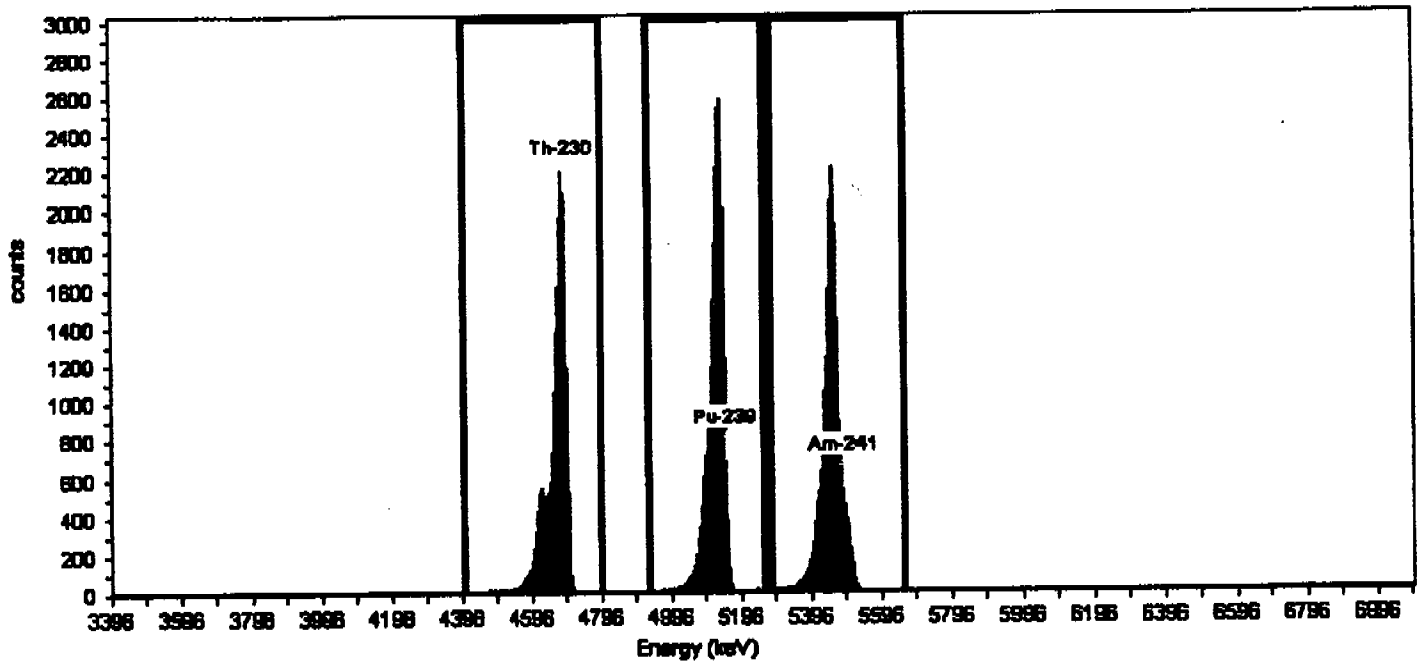
Certificate ID: 63508A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV19 , SN: 41-172Q6
Acquisition Start Date: 3/16/2005 12:52:28AM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 28.94% +/- 0.30% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	13,283.00	94.88
Pu-239	243	5.16	212	258	15,183.00	108.45
Am-241	289	5.49	261	313	14,320.00	102.29

STL ST. LOUIS

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
5:29:29PM 3/16/2005

Analyst: 60040
Detector: AV20

Calibration

Name: Mar2005_AV20
Description:

Calibration Date: 3/16/2005 5:29:11PM

Source Info

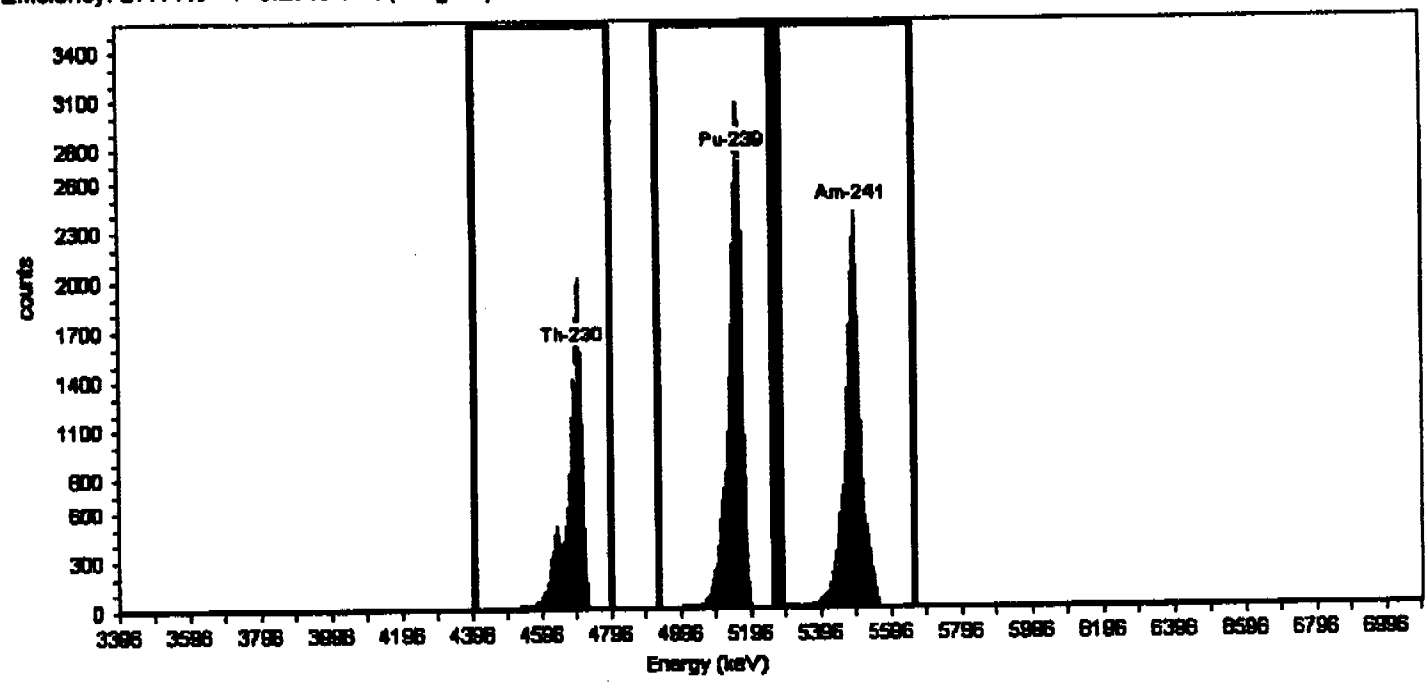
Certificate ID: 63509A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV20 , SN: 41-172R2
Acquisition Start Date: 3/16/2005 12:52:30AM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.11% +/- 0.27% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	11,708.00	83.63
Pu-239	243	5.16	212	258	17,585.00	125.61
Am-241	289	5.49	261	313	15,311.00	109.36

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:47:08AM 3/16/2005

Analyst: 60040
Detector: AV21

Calibration

Name: March2005_AV21
Description:

Calibration Date: 3/16/2005 12:47:04AM

Source Info

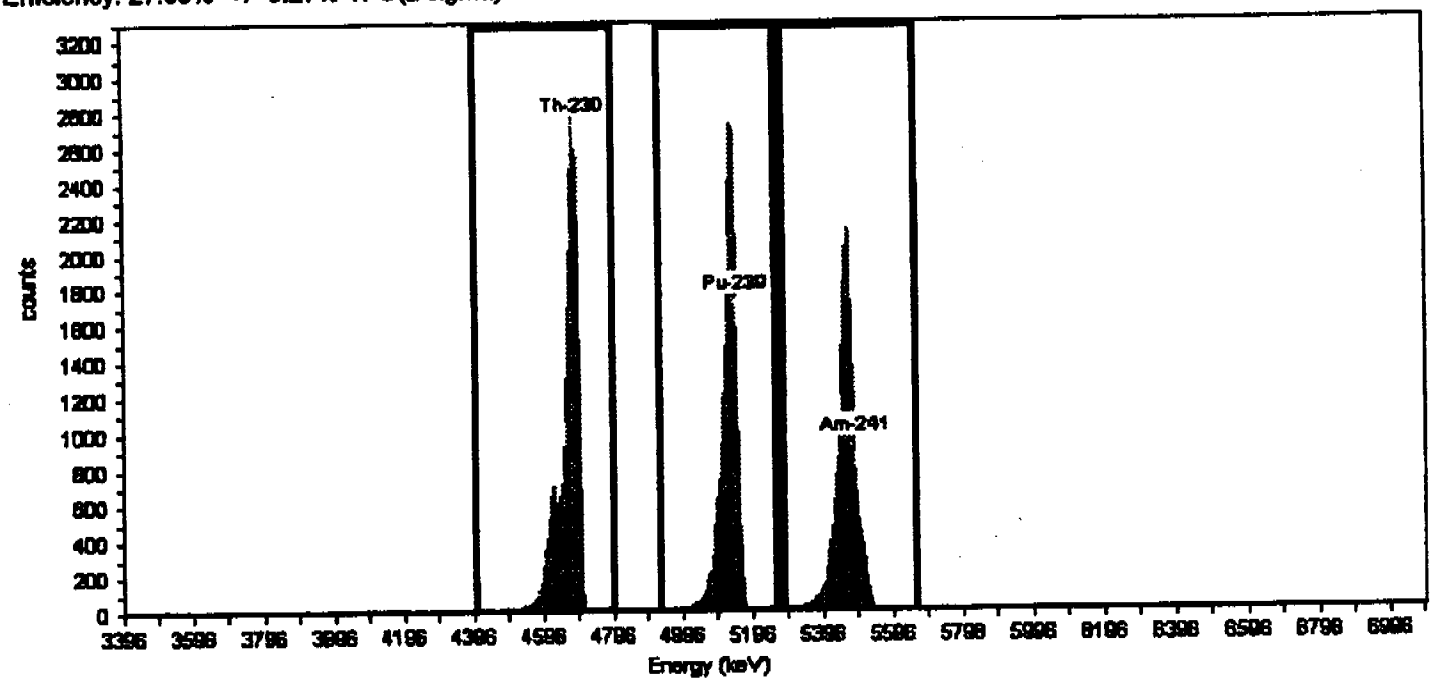
Certificate ID: 63506-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:07PM

Acquisition

Detector: AV21 , SN: 41-172C7
Acquisition Start Date: 3/15/2005 8:00:57PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.06% +/- 0.27% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	16,728.00	119.49
Pu-239	243	5.16	212	258	15,684.00	112.03
Am-241	289	5.49	261	313	14,774.00	105.53

ST

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:47:16AM 3/16/2005

Analyst: 60040
Detector: AV22

Calibration

Name: March2005_AV22
Description:

Calibration Date: 3/16/2005 12:47:13AM

Source Info

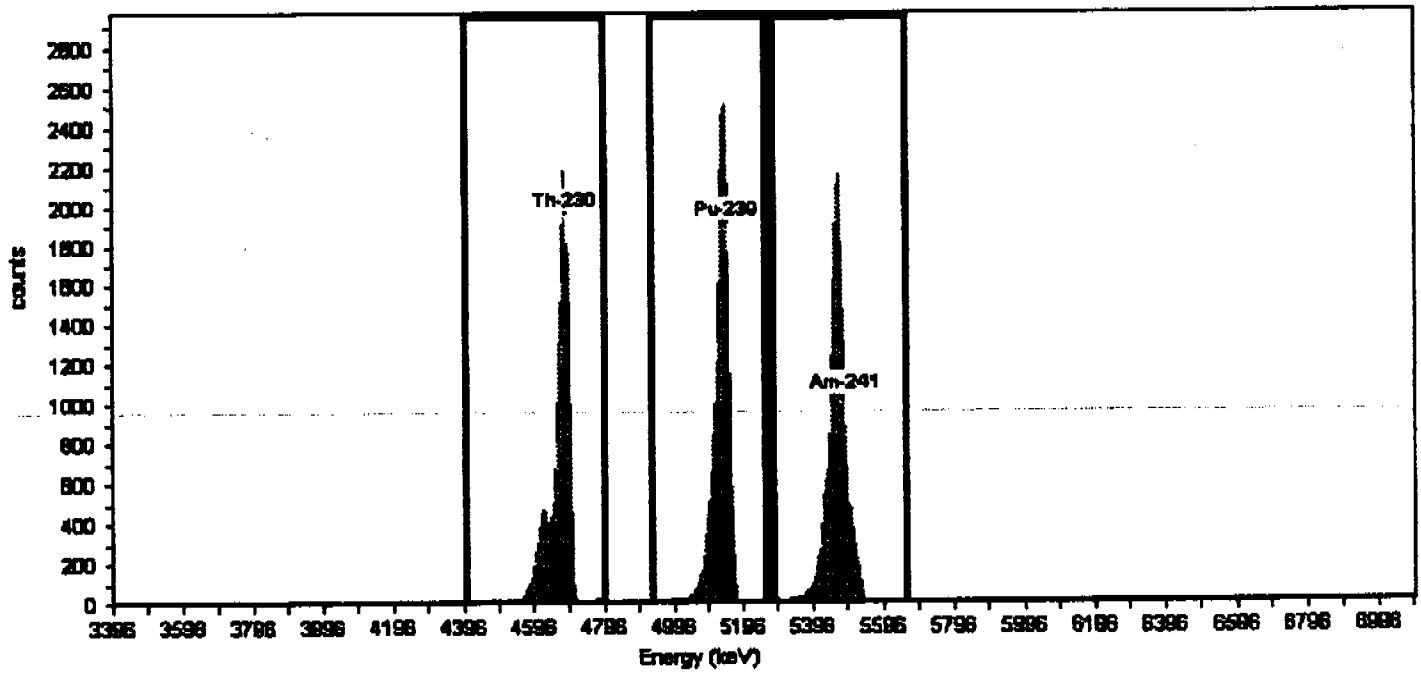
Certificate ID: 63507-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV22 , SN: 41-172Q5
Acquisition Start Date: 3/15/2005 8:01:09PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 25.61% +/- 0.27% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,057.00	86.12
Pu-239	243	5.16	212	268	14,041.00	100.29
Am-241	289	5.49	261	313	13,618.00	97.27

ST

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:47:24AM 3/16/2005

Analyst: 60040
Detector: AV23

Calibration

Name: March2005_AV23
Description:

Calibration Date: 3/16/2005 12:47:20AM

Source Info

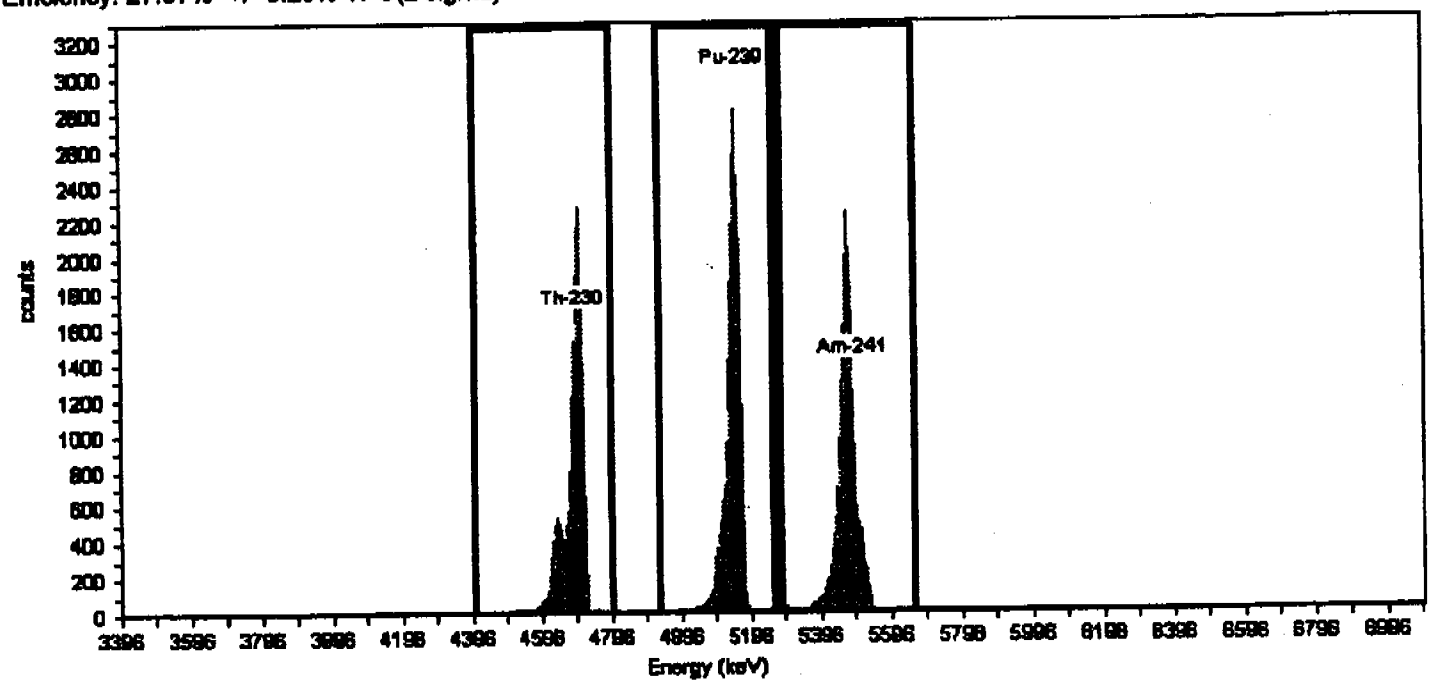
Certificate ID: 63508A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV23 , SN: 41-172R4
Acquisition Start Date: 3/15/2005 8:01:41PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.07% +/- 0.29% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,575.00	89.82
Pu-239	243	5.16	212	258	14,064.00	100.46
Am-241	289	5.49	261	313	13,367.00	95.48

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:47:39AM 3/16/2005

Analyst: 60040
Detector: AV24

Calibration

Name: March2005_AV24
Description:

Calibration Date: 3/16/2005 12:47:29AM

Source Info

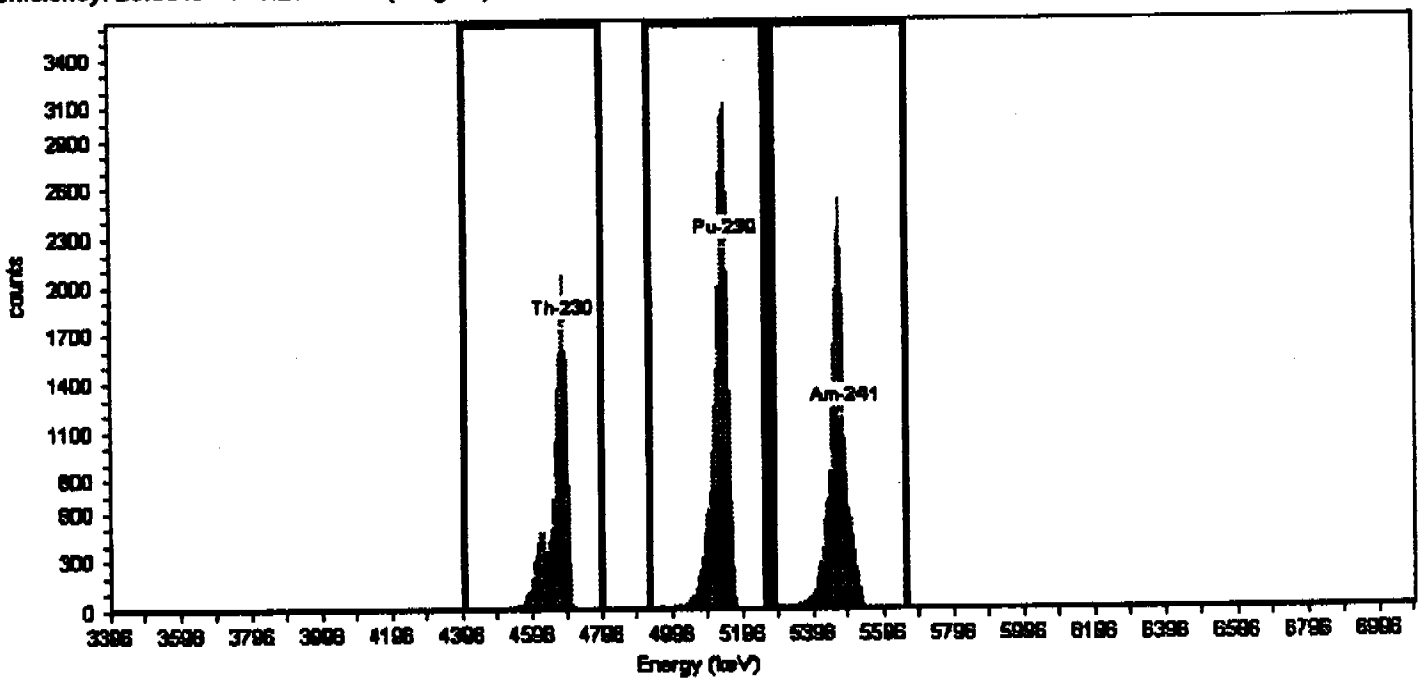
Certificate ID: 63509A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV24 , SN: 41-172R5
Acquisition Start Date: 3/15/2005 8:01:43PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 26.59% +/- 0.27% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	11,462.00	81.87
Pu-239	243	5.16	212	258	17,153.00	122.52
Am-241	289	5.49	261	313	15,143.00	108.16

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
4:19:59PM 3/18/2005

Analyst: 60040
Detector: AV25

Calibration

Name: March2005_AV25
Description:

Calibration Date: 3/18/2005 4:19:57PM

Source Info

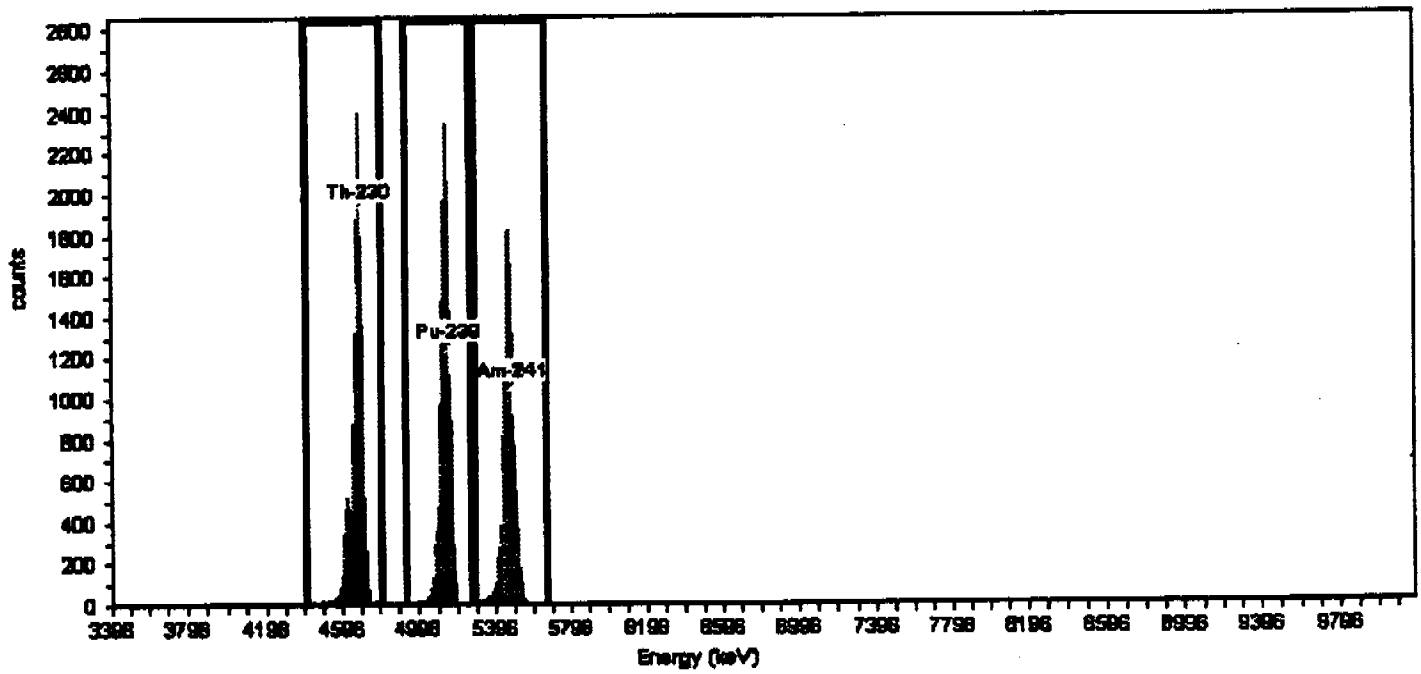
Certificate ID: 63506-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:07PM

Acquisition

Detector: AV25 , SN: ALDR17
Acquisition Start Date: 3/18/2005 1:06:57PM
Live Time: 140.00 min.
Real Time: 140.05 min.
Efficiency: 24.95% +/- 0.25% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 2

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	15,386.00	109.90
Pu-239	243	5.16	212	258	14,352.00	102.51
Am-241	289	5.49	261	313	13,734.00	98.10

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
4:20:06PM 3/18/2005

Analyst: 60040
Detector: AV26

Calibration

Name: March2005_AV26
Description:

Calibration Date: 3/18/2005 4:20:03PM

Source Info

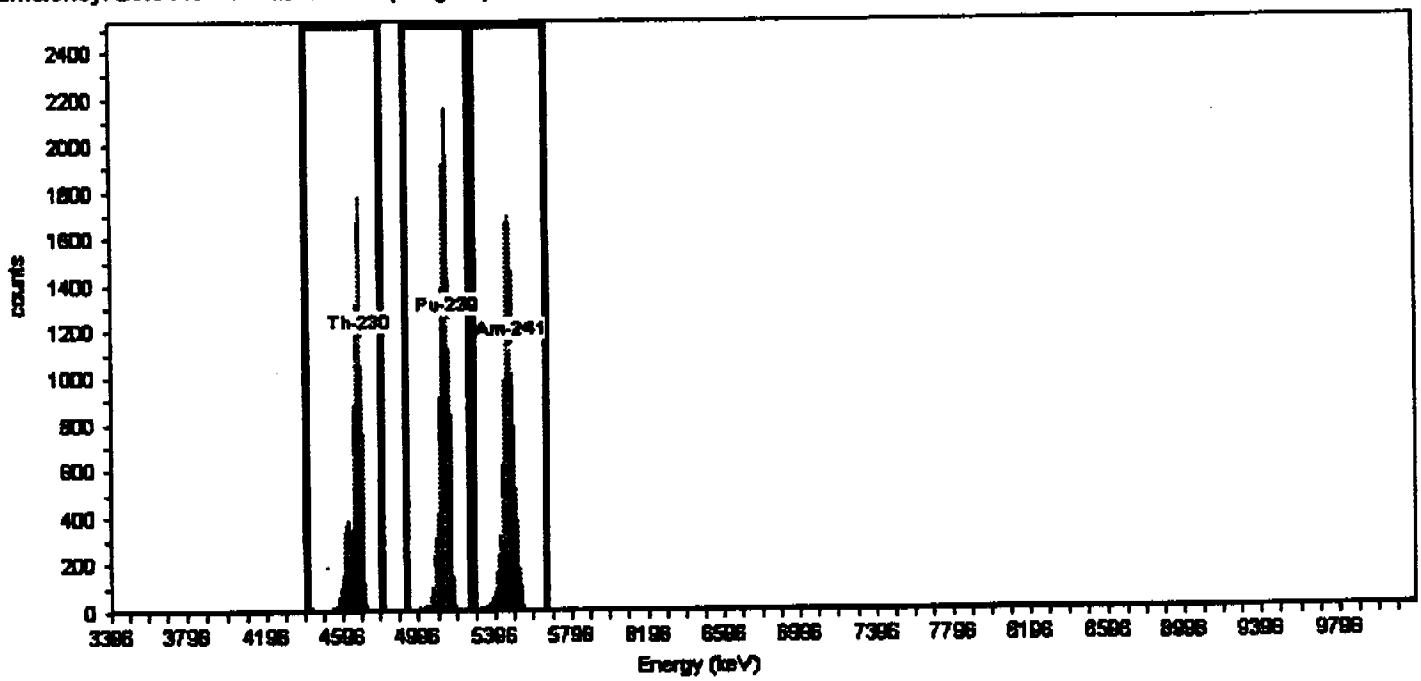
Certificate ID: 63507-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV26 , SN: ALDR18
Acquisition Start Date: 3/18/2005 1:07:33PM
Live Time: 140.00 min.
Real Time: 140.05 min.
Efficiency: 23.91% +/- 0.26% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 2

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	11,152.00	79.66
Pu-239	243	5.16	212	258	13,161.00	94.01
Am-241	289	5.49	261	313	12,833.00	91.66

ST [redacted] STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
4:20:12PM 3/18/2005

Analyst: 60040
Detector: AV27

Calibration

Name: March2005_AV27
Description:

Calibration Date: 3/18/2005 4:20:09PM

Source Info

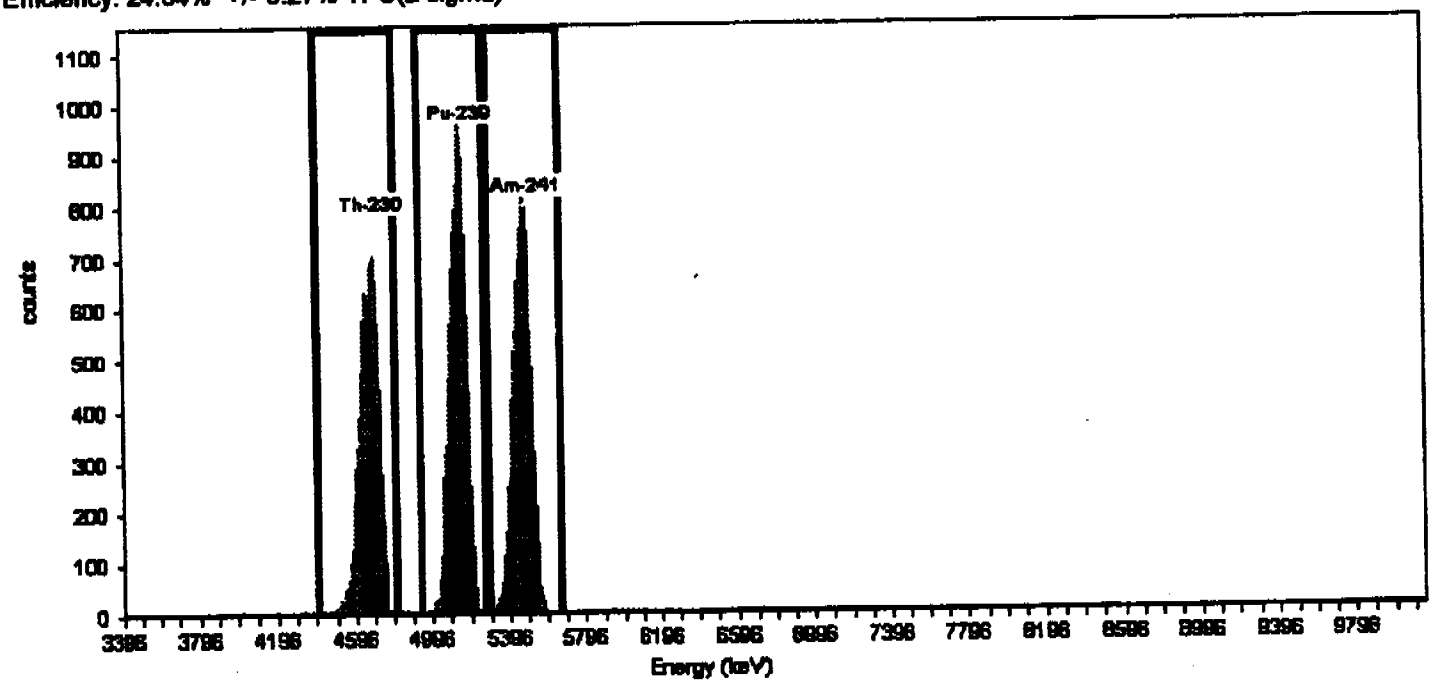
Certificate ID: 63508A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV27 , SN: ALDR19
Acquisition Start Date: 3/18/2005 1:08:00PM
Live Time: 140.00 min.
Real Time: 140.05 min.
Efficiency: 24.34% +/- 0.27% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 2

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	11,173.00	79.81
Pu-239	243	5.16	212	258	12,886.00	92.04
Am-241	289	5.49	261	313	11,936.00	85.26

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:47:55AM 3/19/2005

Analyst: 60040
Detector: AV29

Calibration

Name: MARCH2005_AV29
Description:

Calibration Date: 3/19/2005 6:47:49AM

Source Info

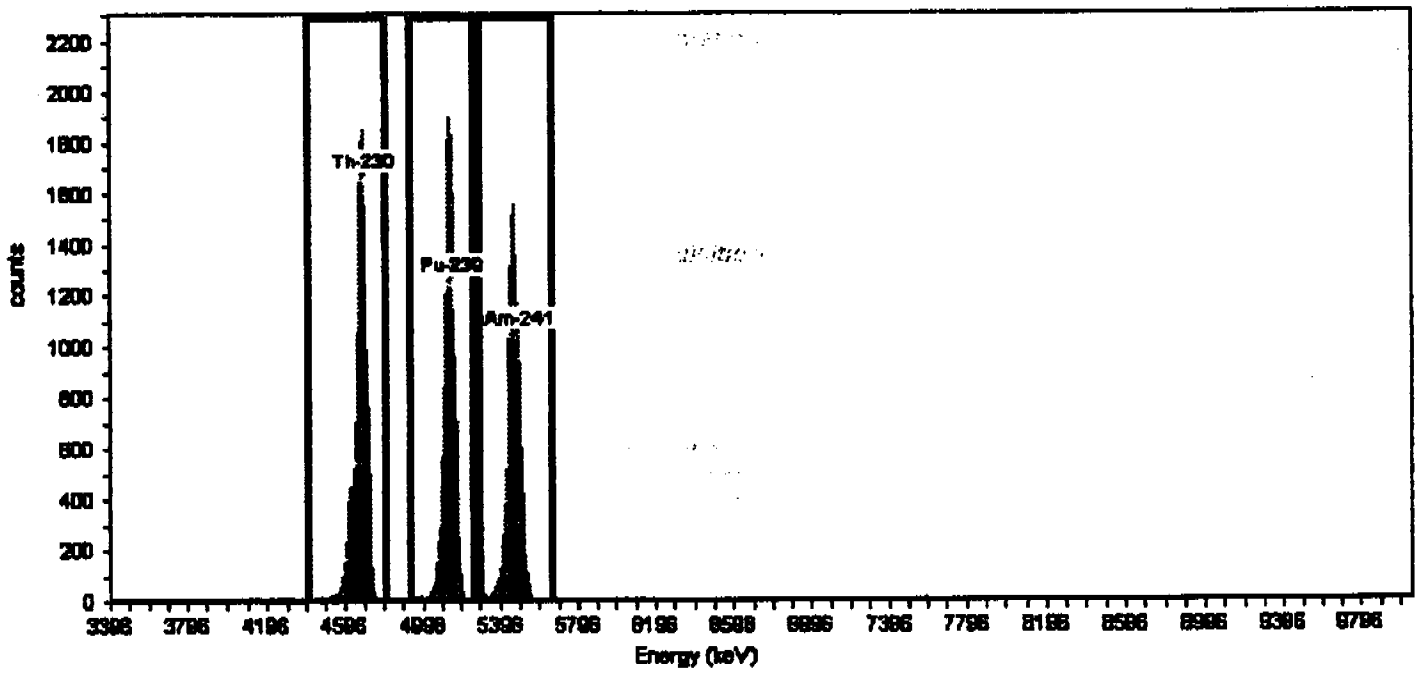
Certificate ID: 63506-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:07PM

Acquisition

Detector: AV29 , SN: ALDR21
Acquisition Start Date: 3/18/2005 7:09:57PM
Live Time: 140.00 min.
Real Time: 140.02 min.
Efficiency: 25.44% +/- 0.26% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 2

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	15,603.00	111.45
Pu-239	243	5.16	212	258	14,651.00	104.65
Am-241	289	5.49	281	313	14,046.00	100.33

STL ST. LOUIS

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
2:52:43PM 3/21/2005

Analyst: 60040
Detector: AV33

Calibration

Name: March2005_AV33
Description:

Calibration Date: 3/21/2005 2:52:41PM

Source Info

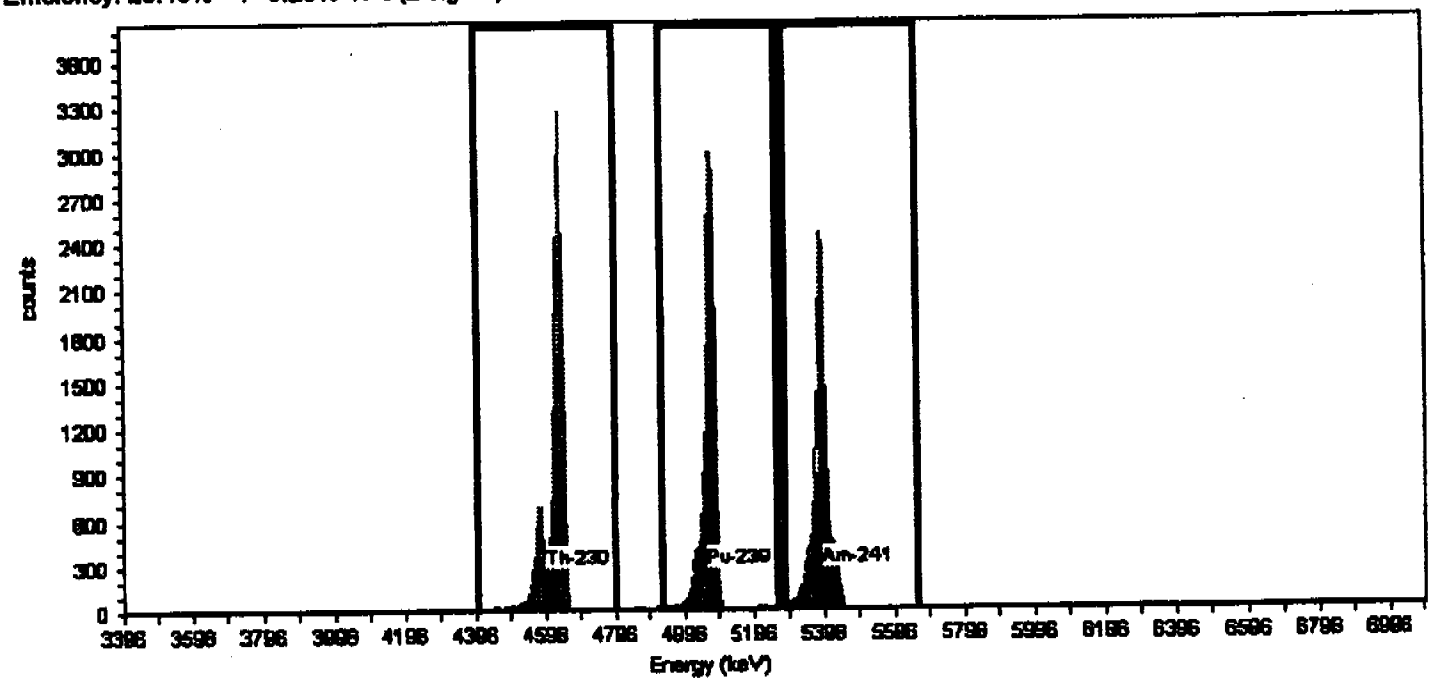
Certificate ID: 63506-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:07PM

Acquisition

Detector: AV33 , SN: ALDR25
Acquisition Start Date: 3/21/2005 12:32:12PM
Live Time: 140.00 min.
Real Time: 140.04 min.
Efficiency: 23.43% +/- 0.25% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 2

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	14,503.00	103.59
Pu-239	243	5.16	212	258	13,470.00	96.21
Am-241	289	5.49	261	313	12,879.00	91.99

STL ST. LOUIS

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
7:00:46PM 3/18/2005

Analyst: 60040
Detector: AV34

Calibration

Name: March2005_AV34
Description:

Calibration Date: 3/18/2005 7:00:45PM

Source Info

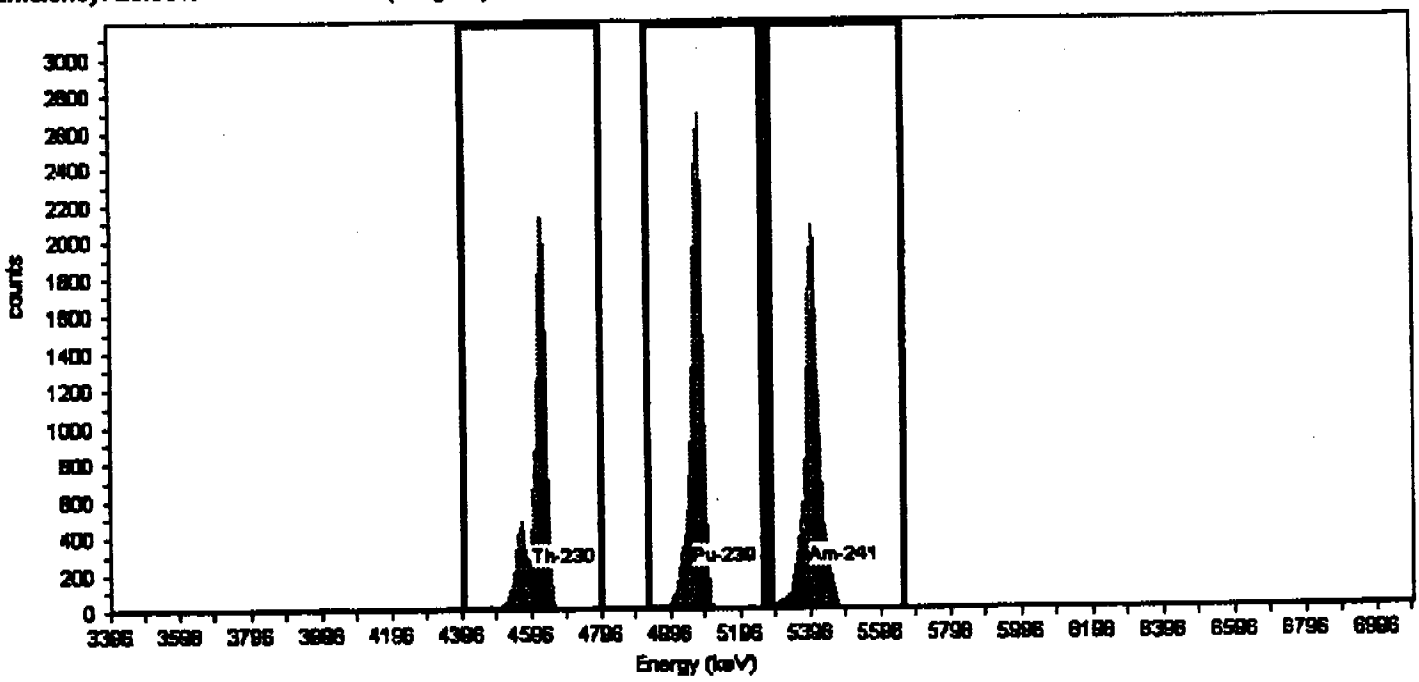
Certificate ID: 63507-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV34 , SN: ALDR26
Acquisition Start Date: 3/18/2005 4:27:14PM
Live Time: 140.00 min.
Real Time: 140.03 min.
Efficiency: 23.85% +/- 0.26% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 2

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	11,273.00	80.52
Pu-239	243	5.16	212	258	13,120.00	93.71
Am-241	289	5.49	261	313	12,565.00	89.75

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
7:00:52PM 3/18/2005

Analyst: 60040
Detector: AV35

Calibration

Name: March2005_AV35
Description:

Calibration Date: 3/18/2005 7:00:50PM

Source Info

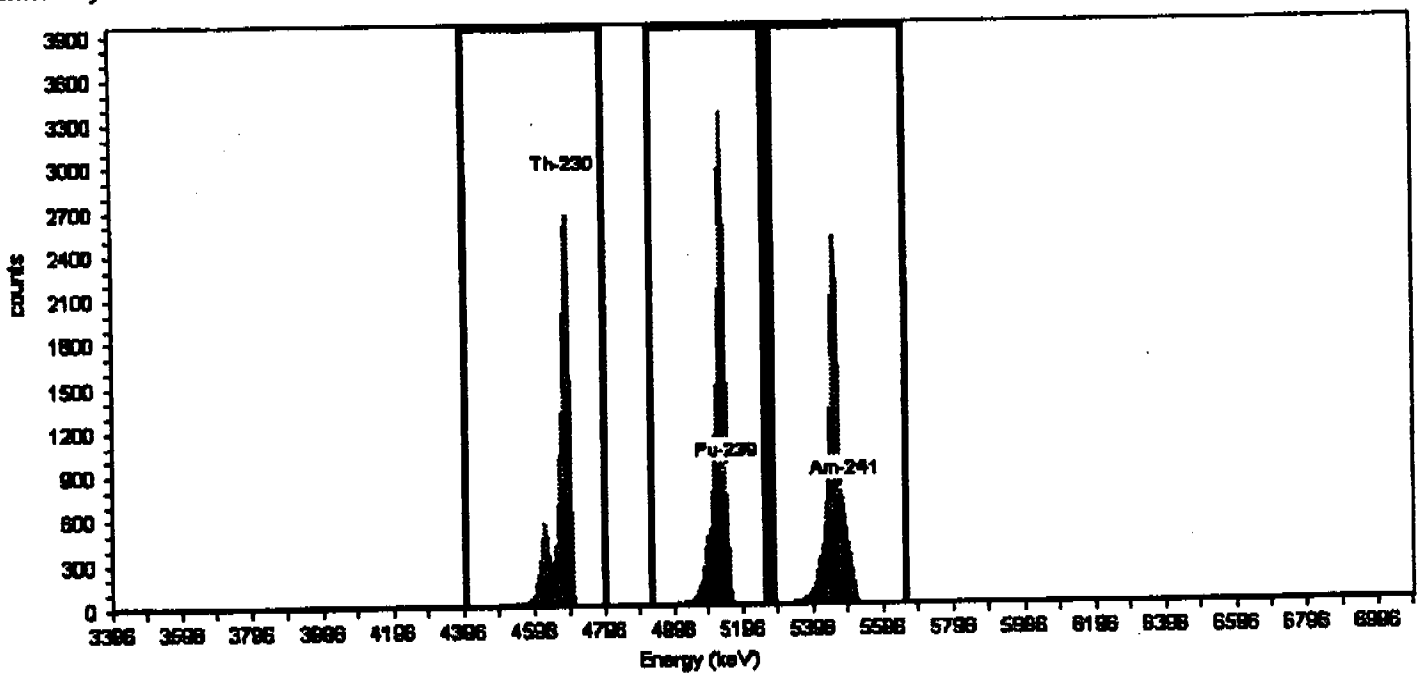
Certificate ID: 63508A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV35 , SN: ALDR27
Acquisition Start Date: 3/18/2005 4:27:15PM
Live Time: 140.00 min.
Real Time: 140.03 min.
Efficiency: 26.52% +/- 0.29% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 2

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,102.00	86.44
Pu-239	243	5.16	212	258	14,022.00	100.16
Am-241	289	5.49	261	313	13,081.00	93.44

STL ST. LOUIS

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
5:29:27PM 3/21/2005

Analyst: 60040
Detector: AV37

Calibration

Name: March2005_AV37
Description:

Calibration Date: 3/21/2005 5:29:23PM

Source Info

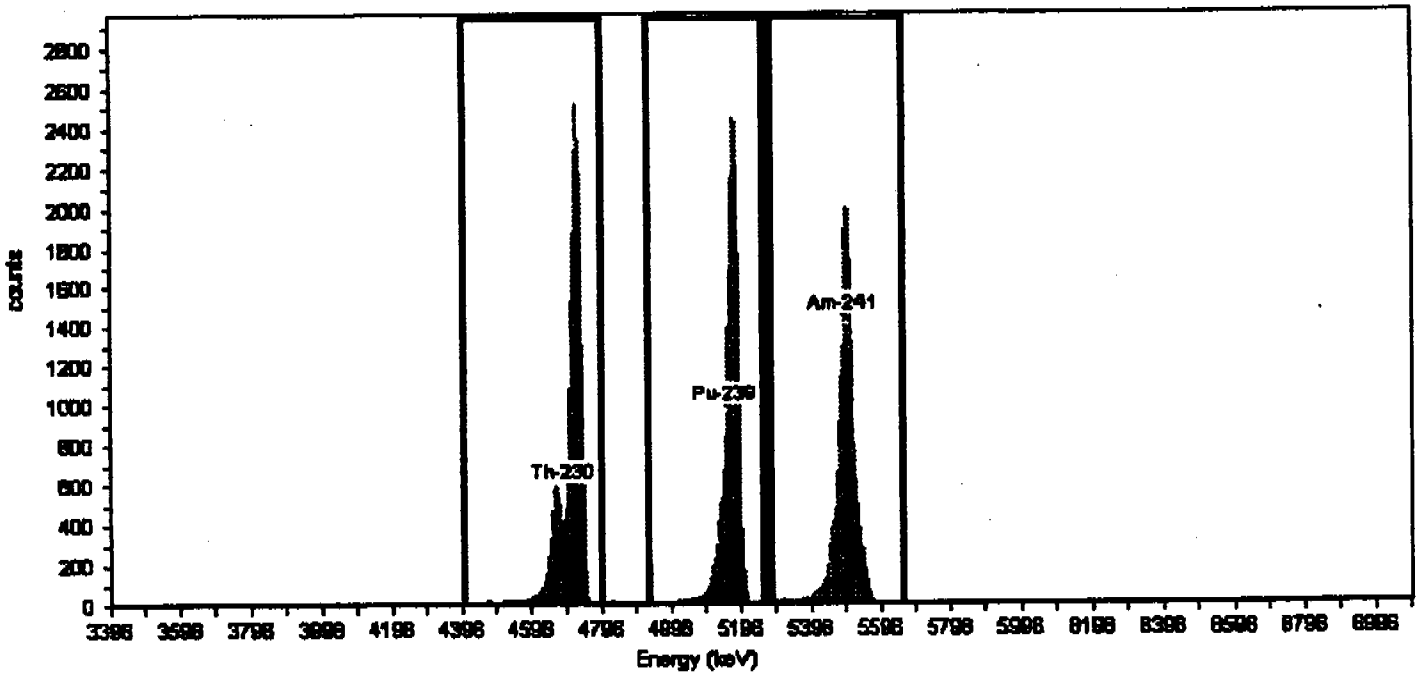
Certificate ID: 63506-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:07PM

Acquisition

Detector: AV37 , SN:
Acquisition Start Date: 3/21/2005 2:56:24PM
Live Time: 140.00 min.
Real Time: 140.02 min.
Efficiency: 22.97% +/- 0.24% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 2

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	14,187.00	101.34
Pu-239	243	5.16	212	256	13,229.00	94.49
Am-241	289	5.49	261	313	12,615.00	90.11

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:48:05AM 3/19/2005

Analyst: 60040
Detector: AV38

Calibration

Name: March2005_AV38
Description:

Calibration Date: 3/19/2005 6:48:01AM

Source Info

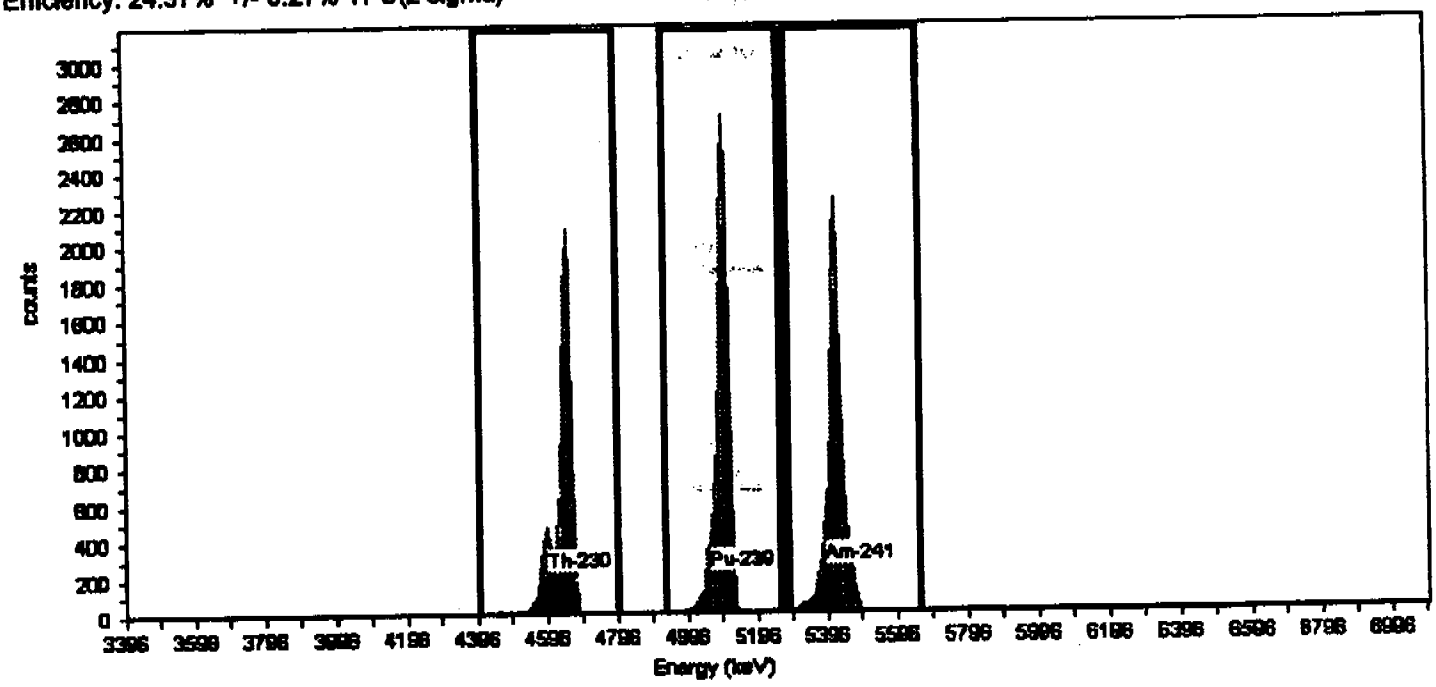
Certificate ID: 63507-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV38 , SN: ALDR30
Acquisition Start Date: 3/18/2005 7:10:44PM
Live Time: 140.00 min.
Real Time: 140.03 min.
Efficiency: 24.37% +/- 0.27% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 2

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	11,479.00	81.99
Pu-239	243	5.16	212	258	13,420.00	95.86
Am-241	289	5.49	261	313	12,884.00	92.03

LOT# F5D220356

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:48:20AM 3/19/2005

Analyst: 60040
Detector: AV39

Calibration

Name: March2005_AV39
Description:

Calibration Date: 3/19/2005 6:48:11AM

Source Info

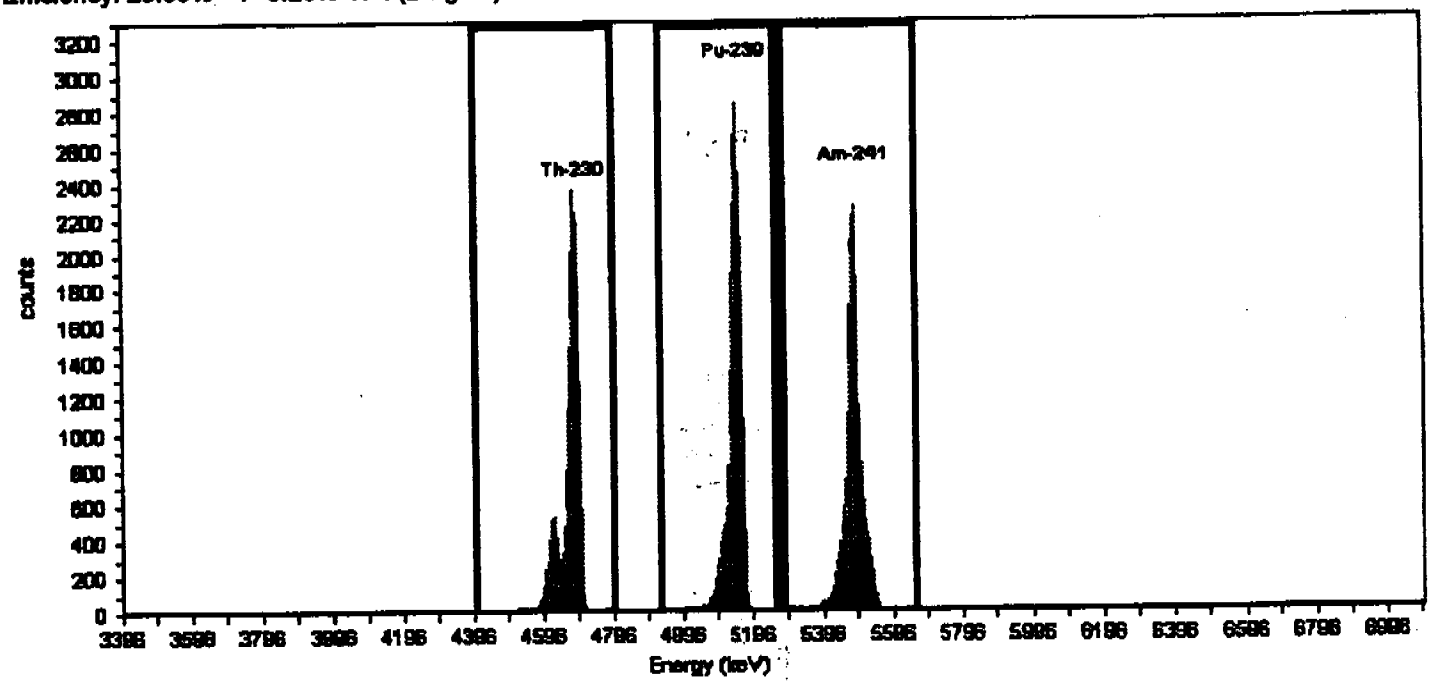
Certificate ID: 63508A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV39 , SN: ALDR31
Acquisition Start Date: 3/18/2005 7:10:45PM
Live Time: 140.00 min.
Real Time: 140.03 min.
Efficiency: 25.89% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 2

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	11,968.00	85.49
Pu-239	243	5.16	212	258	13,509.00	96.49
Am-241	289	5.49	261	313	12,790.00	91.36

ST

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
4:20:24PM 3/18/2005

Analyst: 60040
Detector: AV40

Calibration

Name: March2005_AV40
Description:

Calibration Date: 3/18/2005 4:20:21PM

Source Info

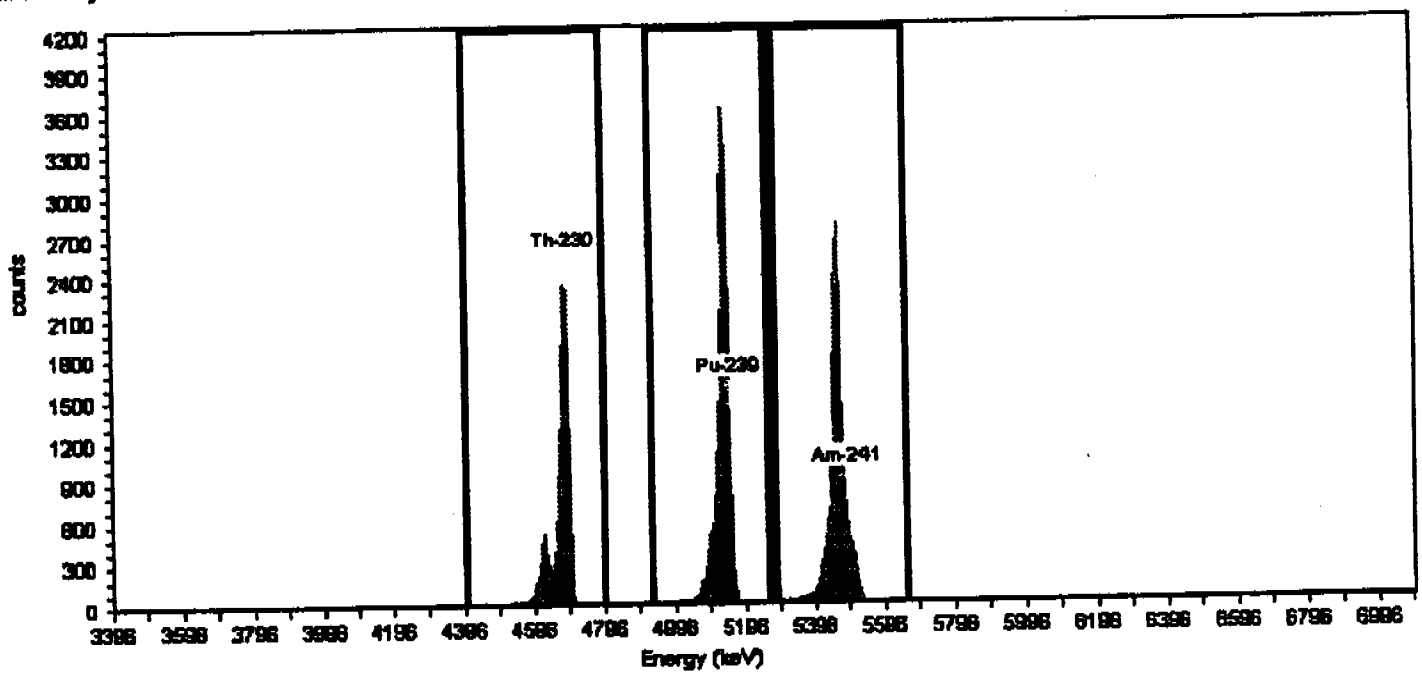
Certificate ID: 63509A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV40 , SN: ALDR32
Acquisition Start Date: 3/18/2005 1:08:42PM
Live Time: 140.00 min.
Real Time: 140.02 min.
Efficiency: 25.23% +/- 0.26% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 2

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	10,910.00	77.93
Pu-239	243	5.16	212	258	16,257.00	116.12
Am-241	289	5.49	261	313	14,354.00	102.53

LOT# F5D220356

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:50:09PM 3/21/2005

Analyst: 60040
Detector: AV41

Calibration

Name: March2005_AV41
Description:

Calibration Date: 3/21/2005 12:30:51PM

Source Info

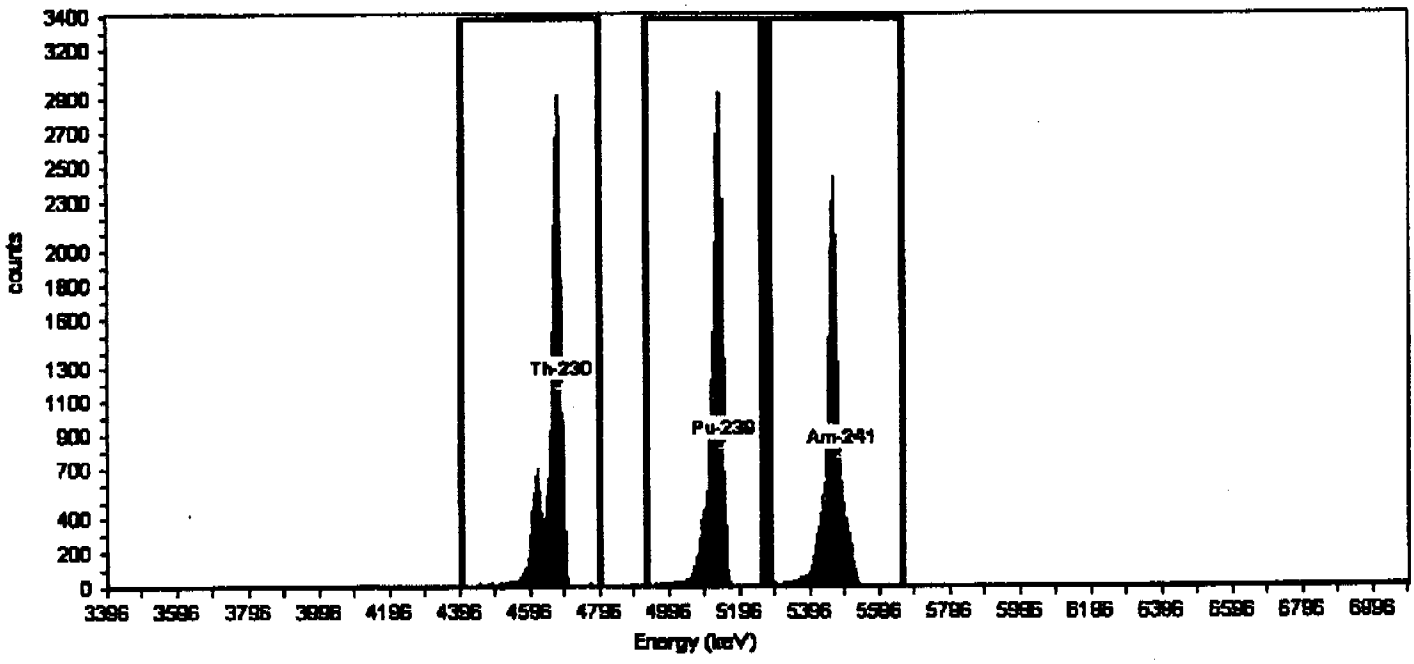
Certificate ID: 63506-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:07PM

Acquisition

Detector: AV41 , SN: ALDR33
Acquisition Start Date: 3/21/2005 8:53:58AM
Live Time: 140.00 min.
Real Time: 140.04 min.
Efficiency: 23.34% +/- 0.24% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 2

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	14,377.00	102.69
Pu-239	243	5.16	212	258	13,592.00	97.09
Am-241	289	5.49	261	313	12,705.00	90.75

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:50:14PM 3/21/2005

Analyst: 60040
Detector: AV42

Calibration

Name: March2005_AV42
Description:

Calibration Date: 3/21/2005 12:31:05PM

Source Info

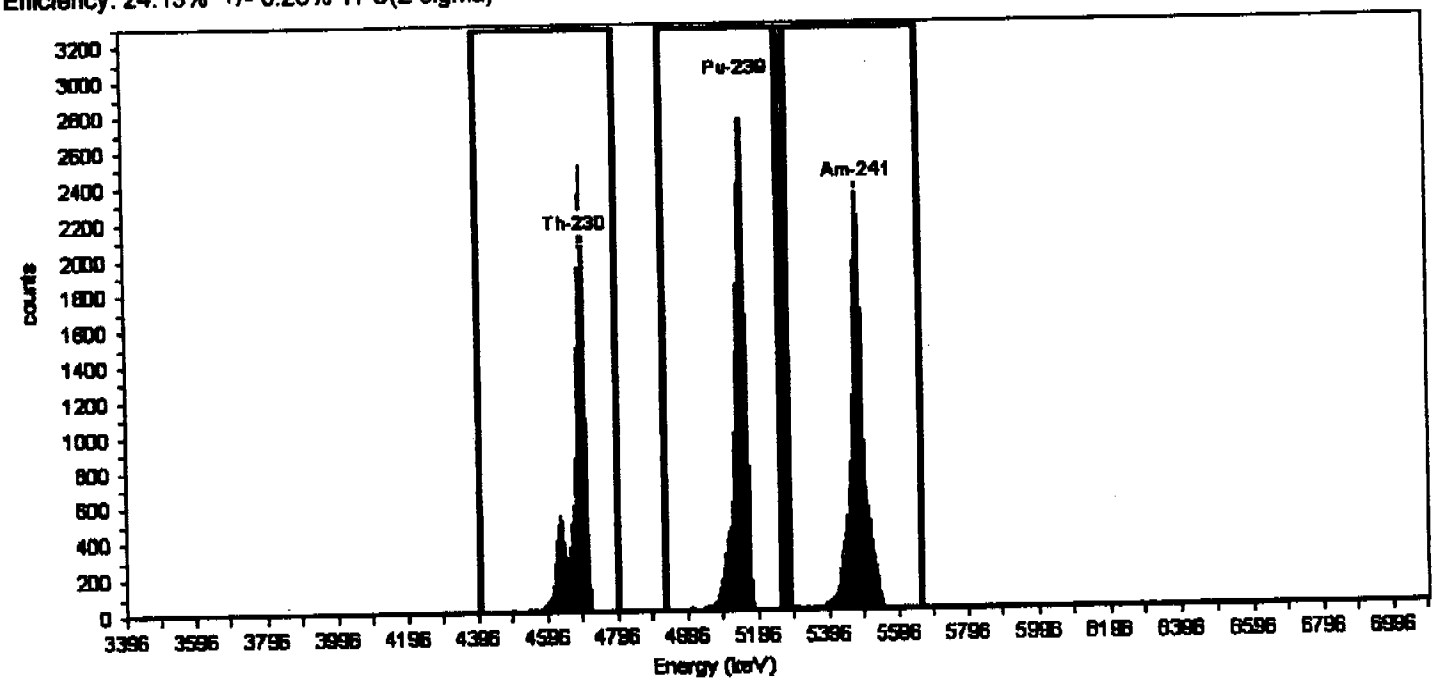
Certificate ID: 63507-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV42 , SN: ALDR34
Acquisition Start Date: 3/21/2005 8:54:14AM
Live Time: 140.00 min.
Real Time: 140.04 min.
Efficiency: 24.13% +/- 0.26% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 2

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	11,405.00	81.46
Pu-239	243	5.16	212	258	13,149.00	93.92
Am-241	289	5.49	261	313	12,832.00	91.66

LOT# F5D220356

[redacted] **STL**

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:19:54PM 3/17/2005

Analyst: 60040
Detector: AV43

Calibration

Name: March2005_AV43
Description:

Calibration Date: 3/17/2005 12:19:51PM

Source Info

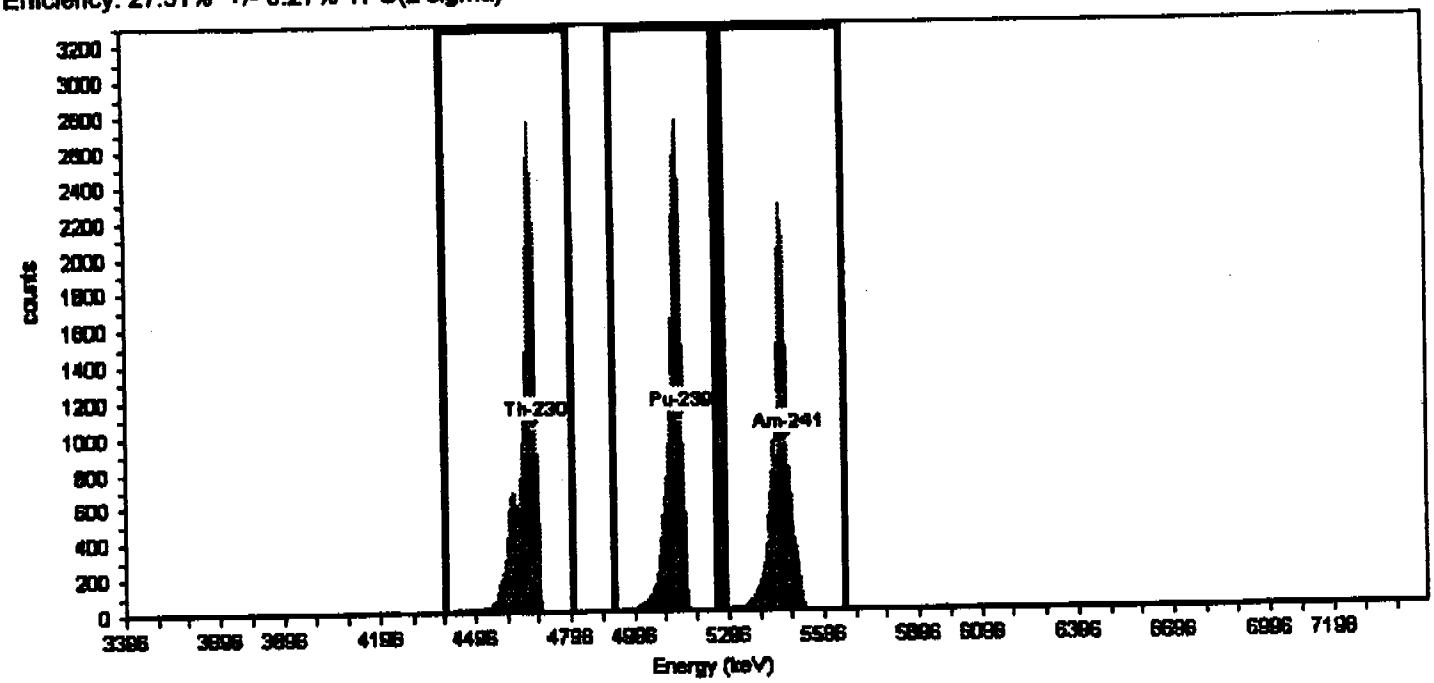
Certificate ID: 63506-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:07PM

Acquisition

Detector: AV43 , SN: AV43
Acquisition Start Date: 3/17/2005 9:56:21AM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.51% +/- 0.27% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	17,013.00	121.52
Pu-239	243	5.16	212	258	16,041.00	114.58
Am-241	289	5.49	261	313	14,931.00	106.65

LOT# F5D220356

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STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:20:00PM 3/17/2005

Analyst: 60040
Detector: AV44

Calibration

Name: March2005_AV44
Description:

Calibration Date: 3/17/2005 12:19:57PM

Source Info

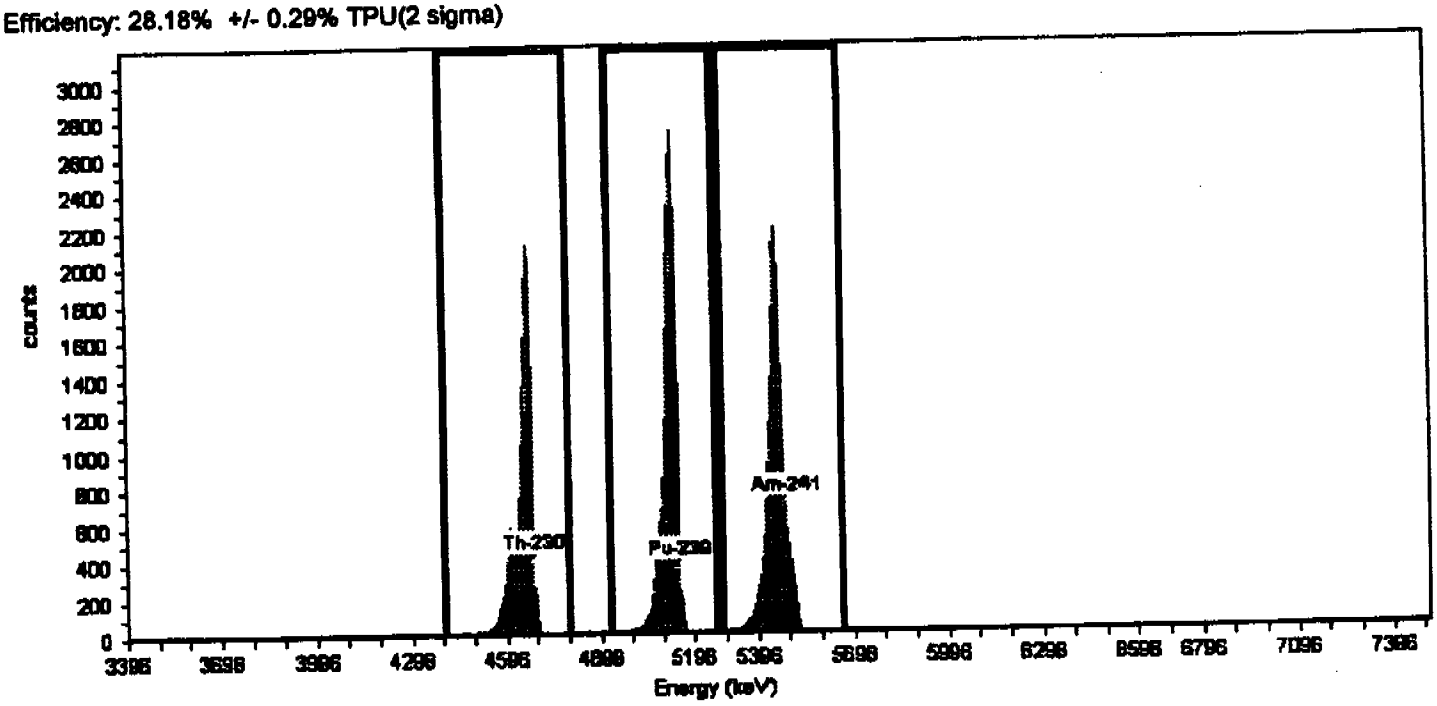
Certificate ID: 63507-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV44 , SN: AV44
Acquisition Start Date: 3/17/2005 9:56:33AM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 28.18% +/- 0.29% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	13,308.00	95.06
Pu-239	243	5.16	212	258	15,314.00	109.39
Am-241	289	5.49	261	313	15,062.00	107.59

LOT# F5D220356

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:20:06PM 3/17/2005

Analyst: 60040
Detector: AV45

Calibration

Name: March2005_AV45
Calibration Date: 3/17/2005 12:20:04PM
Description:

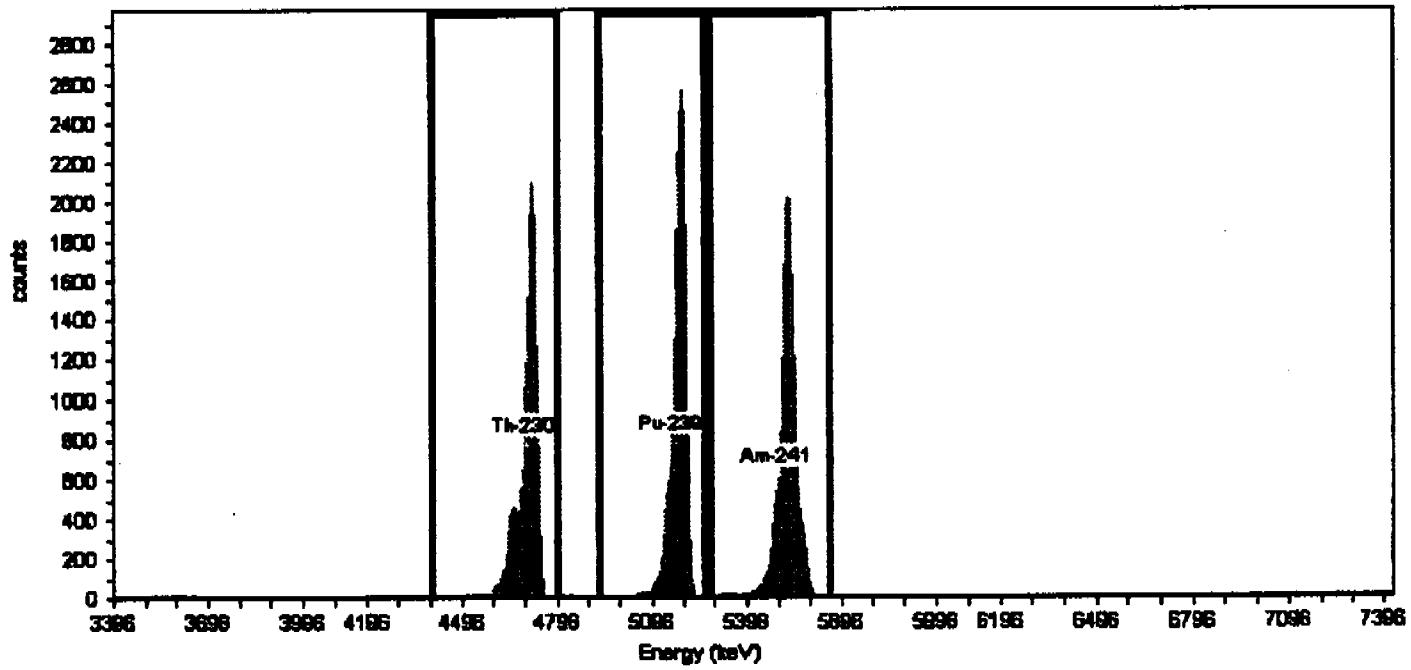
Source Info

Certificate ID: 63508A-334
Certification Date: 5/30/2002 12:00:00PM
Prepared by: Analytics
Description:

Acquisition

Detector: AV45 , SN: AV45
Acquisition Start Date: 3/17/2005 9:56:44AM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.96% +/- 0.30% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear
Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,881.00	92.01
Pu-239	243	5.16	212	258	14,760.00	105.43
Am-241	289	5.49	261	313	13,691.00	97.79

STL ST. LOUIS

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:20:12PM 3/17/2005

Analyst: 60040
Detector: AV46

Calibration

Name: March2005_AV46
Description:

Calibration Date: 3/17/2005 12:20:10PM

Source Info

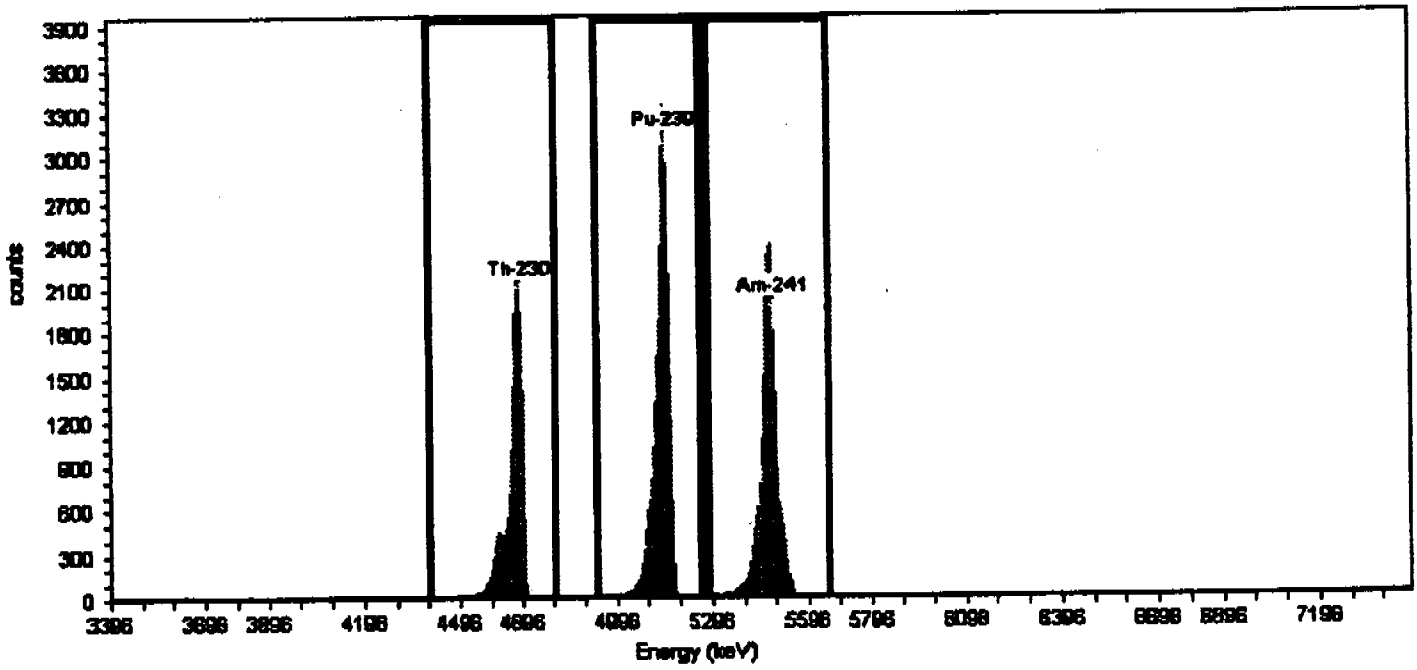
Certificate ID: 63509A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV46 , SN: AV46
Acquisition Start Date: 3/17/2005 9:56:56AM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 29.31% +/- 0.29% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,636.00	90.26
Pu-239	243	5.16	212	258	19,137.00	136.69
Am-241	289	5.49	261	313	16,458.00	117.56

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STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
4:29:26PM 3/17/2005

Analyst: 60040
Detector: AV47

Calibration

Name: March2005_AV47
Description:

Calibration Date: 3/17/2005 4:29:23PM

Source Info

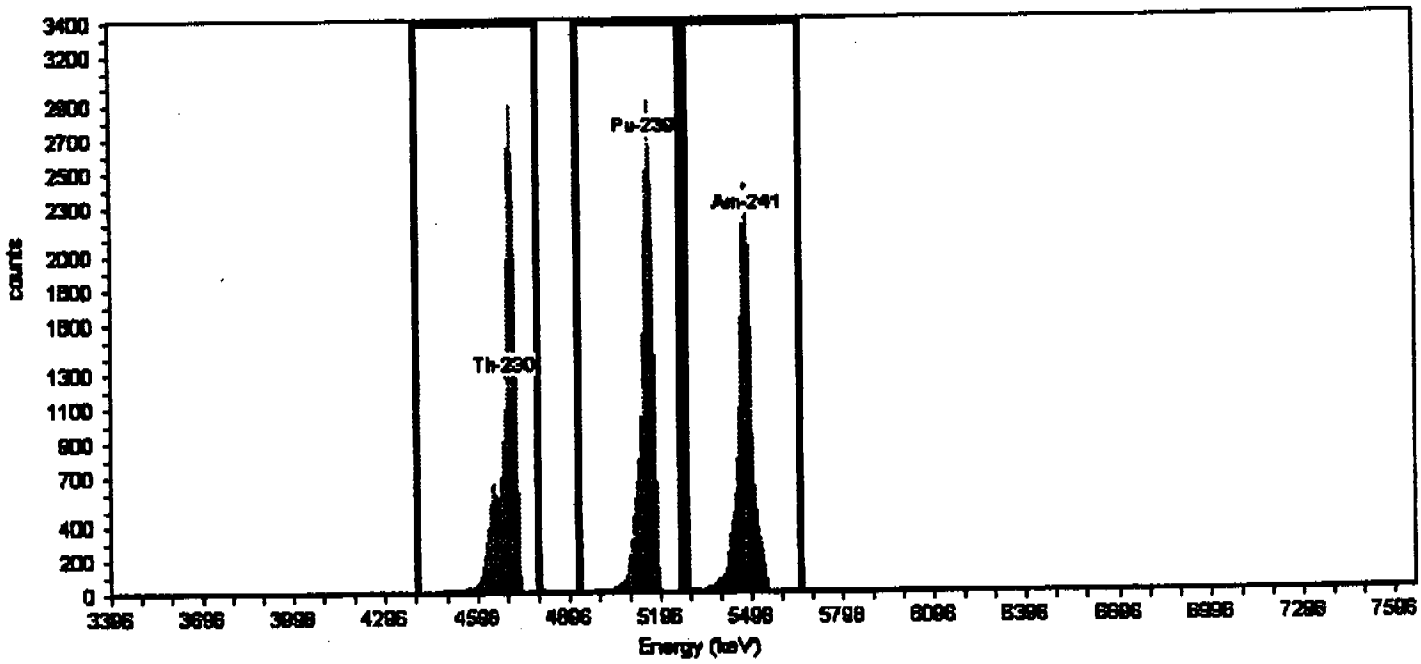
Certificate ID: 63506-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:07PM

Acquisition

Detector: AV47 , SN: AV47
Acquisition Start Date: 3/17/2005 1:44:39PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 26.70% +/- 0.26% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	16,273.00	116.24
Pu-239	243	5.16	212	258	15,485.00	110.61
Am-241	289	5.49	261	313	14,704.00	105.03

LOT# F5D220356

STL ST. LOUIS

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
4:29:38PM 3/17/2005

Analyst: 60040
Detector: AV48

Calibration

Name: March2005_AV48
Description:

Calibration Date: 3/17/2005 4:29:35PM

Source Info

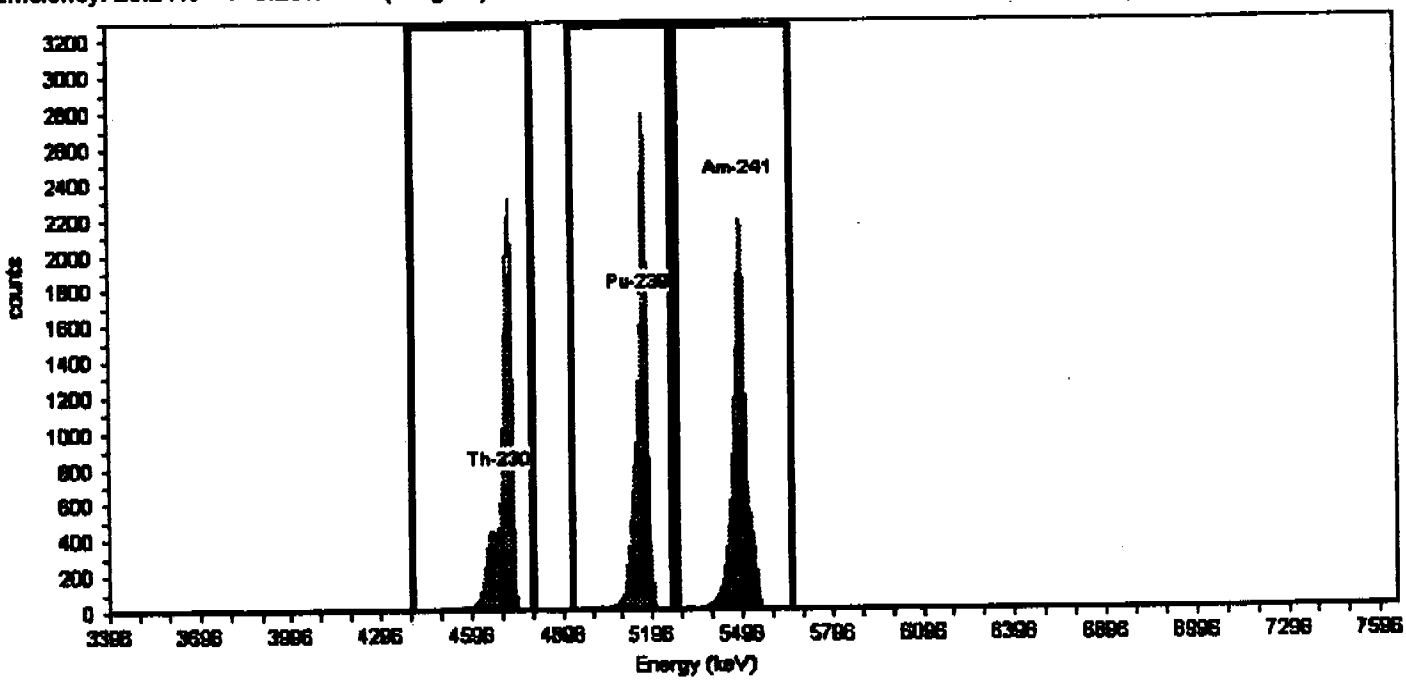
Certificate ID: 63507-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV48 , SN: AV48
Acquisition Start Date: 3/17/2005 1:44:41PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 26.24% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,277.00	87.69
Pu-239	243	5.16	212	258	14,407.00	102.91
Am-241	289	5.49	261	313	14,077.00	100.55

LOT# F5D220356

STL ST. LOUIS

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
4:29:45PM 3/17/2005

Analyst: 60040
Detector: AV49

Calibration

Name: March2005_AV49
Description:

Calibration Date: 3/17/2005 4:29:42PM

Source Info

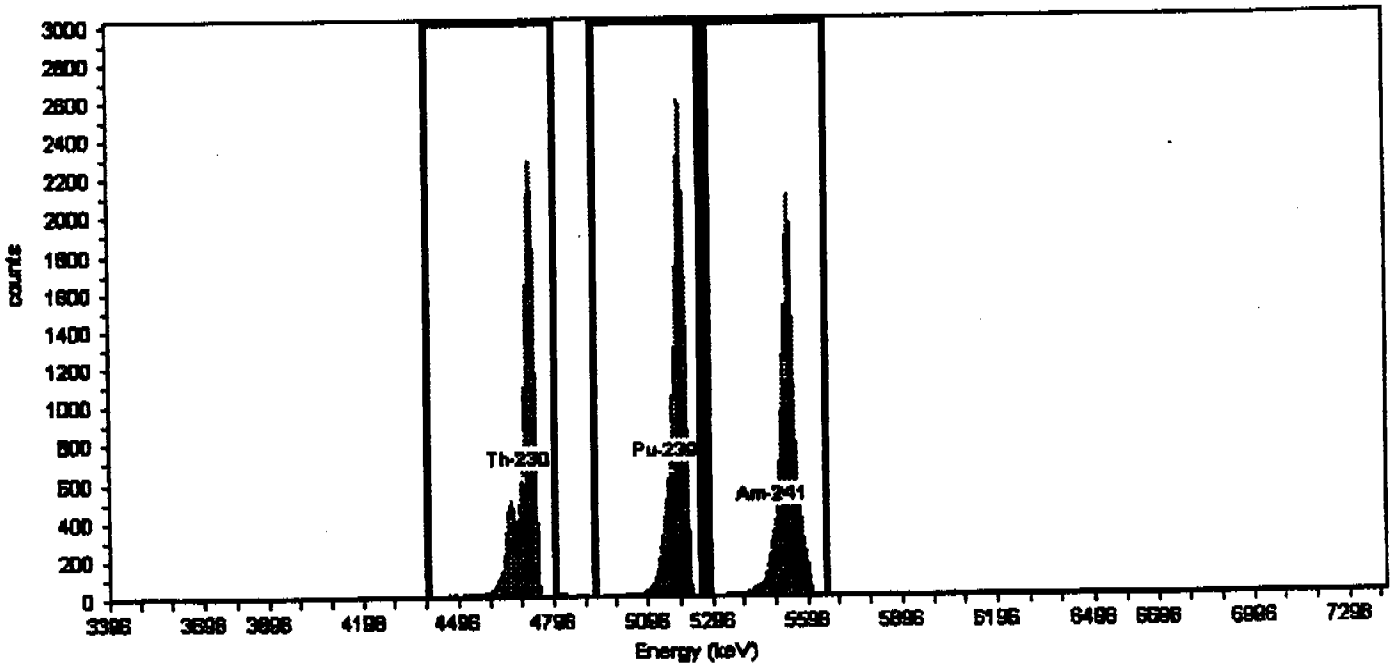
Certificate ID: 63508A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV49 , SN: AV49
Acquisition Start Date: 3/17/2005 1:44:43PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.84% +/- 0.30% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,903.00	92.16
Pu-239	243	5.16	212	258	14,795.00	105.68
Am-241	289	5.49	261	313	13,476.00	96.26

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STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
4:29:51PM 3/17/2005

Analyst: 60040
Detector: AV50

Calibration

Name: March2005_AV50
Description:

Calibration Date: 3/17/2005 4:29:48PM

Source Info

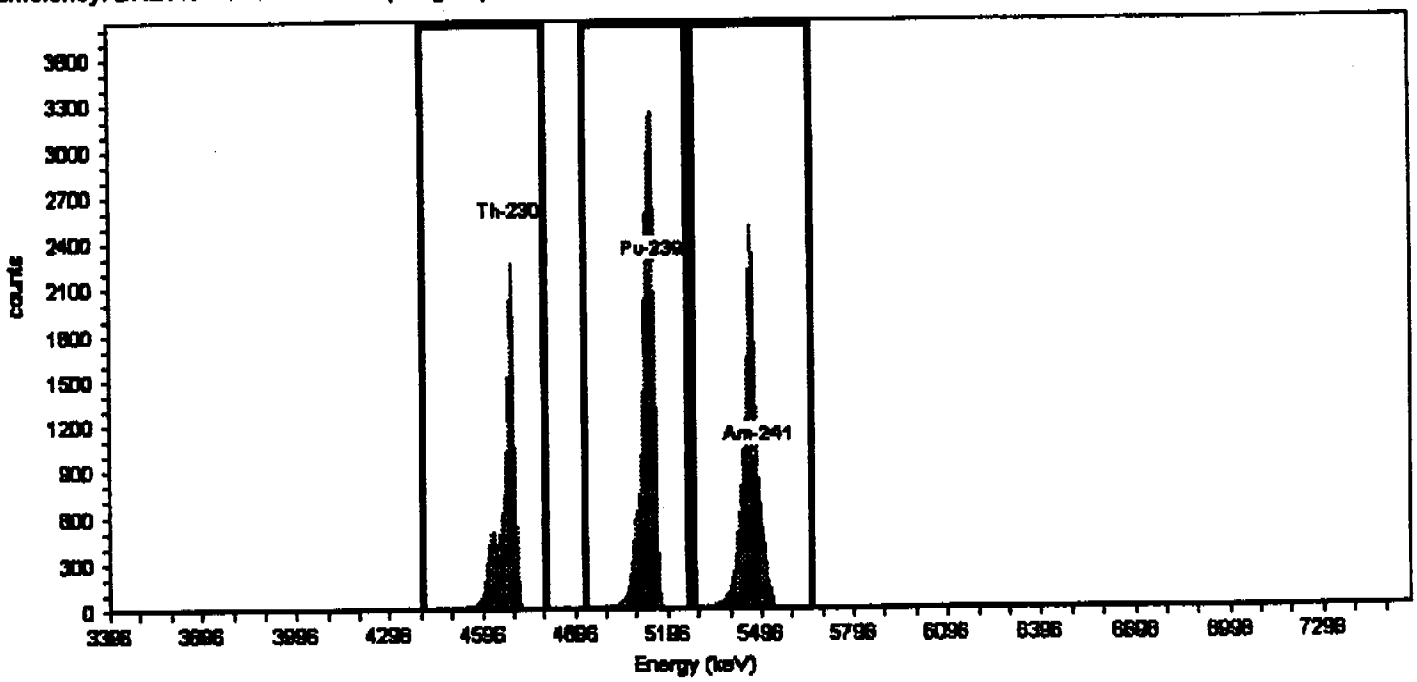
Certificate ID: 63509A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV50 , SN: AV50
Acquisition Start Date: 3/17/2005 1:44:45PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.29% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	11,916.00	85.13
Pu-239	243	5.16	212	258	17,583.00	125.59
Am-241	289	5.49	261	313	15,417.00	110.12

STL ST. LOUIS

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:58:36PM 3/18/2005

Analyst: 60040
Detector: AV51

Calibration

Name: March2005_AV51
Description:

Calibration Date: 3/18/2005 12:58:33PM

Source Info

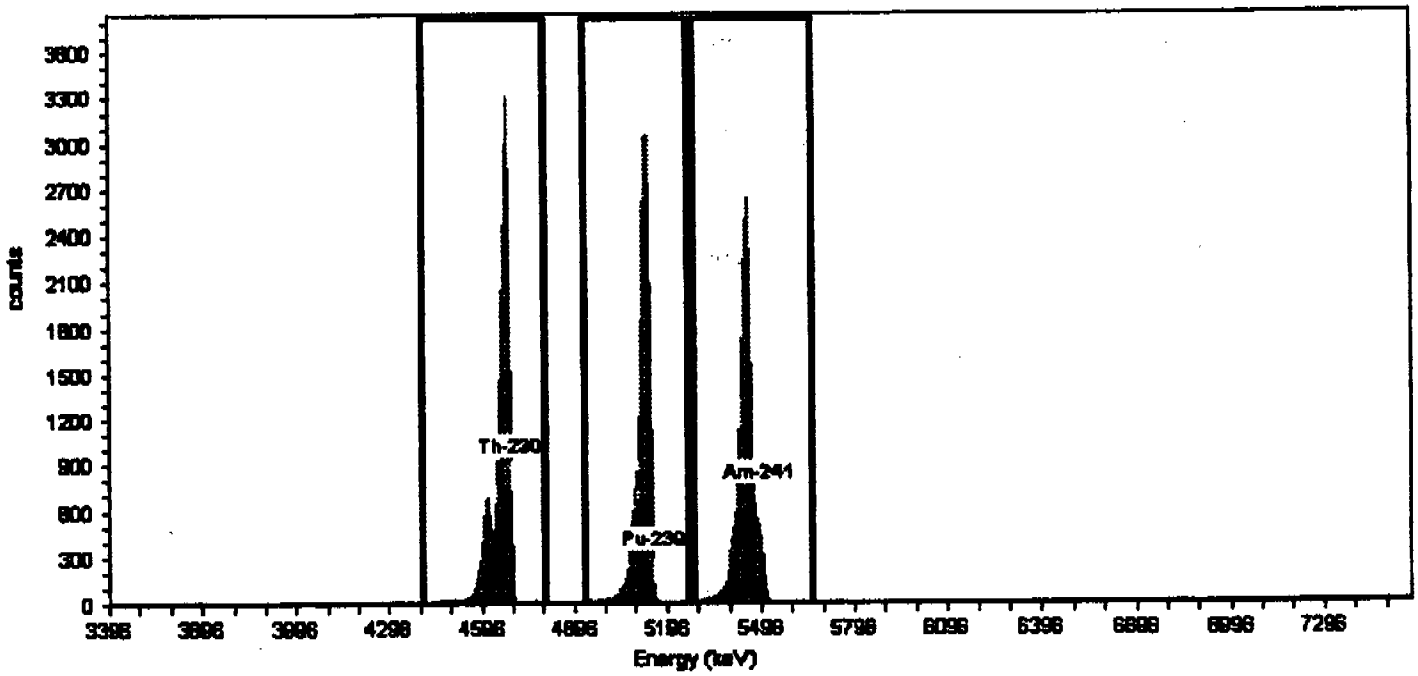
Certificate ID: 63506-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:07PM

Acquisition

Detector: AV51 , SN:
Acquisition Start Date: 3/18/2005 9:26:52AM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.39% +/- 0.27% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	16,963.00	121.31
Pu-239	243	5.16	212	258	15,663.00	112.02
Am-241	289	5.49	261	313	15,115.00	107.96

STL ST. LOUIS

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:58:43PM 3/18/2005

Analyst: 60040
Detector: AV52

Calibration

Name: March2005_AV52
Description:

Calibration Date: 3/18/2005 12:58:40PM

Source Info

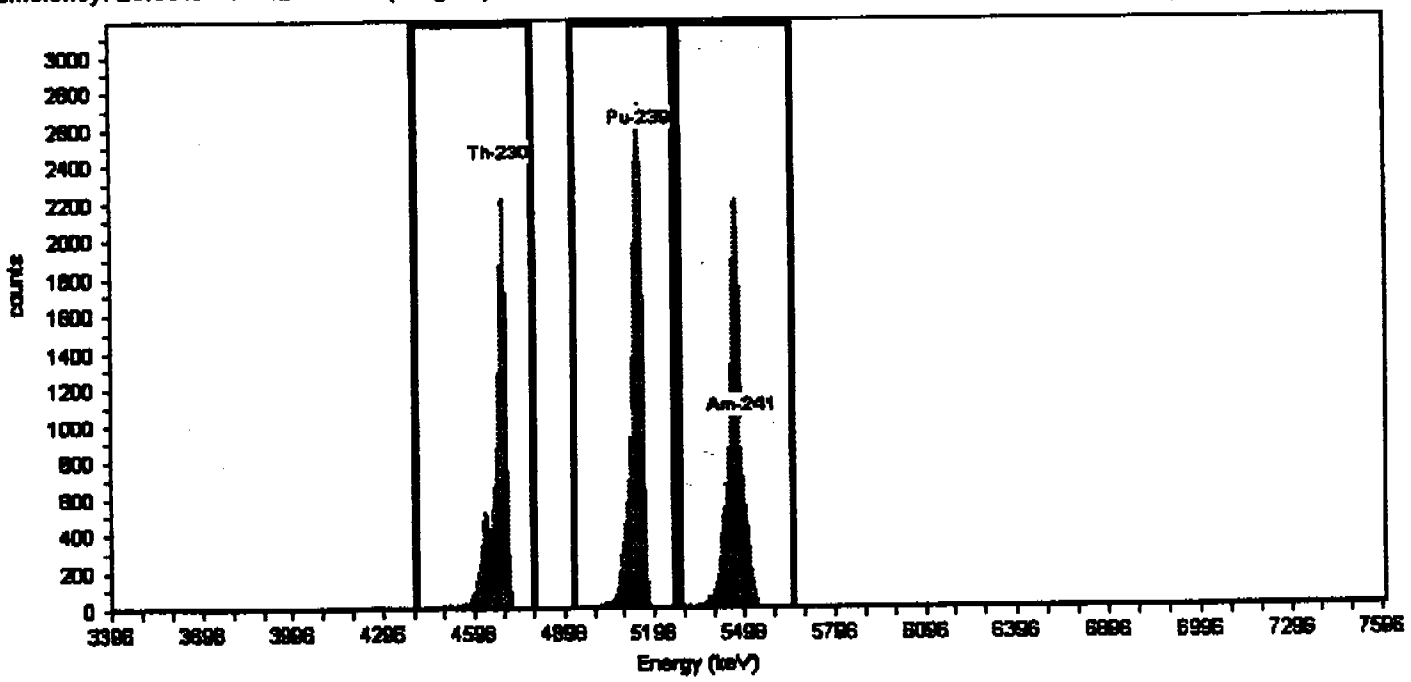
Certificate ID: 63507-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV52 , SN:
Acquisition Start Date: 3/18/2005 9:27:03AM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 26.60% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,596.00	89.97
Pu-239	243	5.16	212	258	14,396.00	102.83
Am-241	289	5.49	261	313	14,222.00	101.59

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:58:49PM 3/18/2005

Analyst: 60040
Detector: AV53

Calibration

Name: March2005_AV53
Calibration Date: 3/18/2005 12:58:46PM
Description:

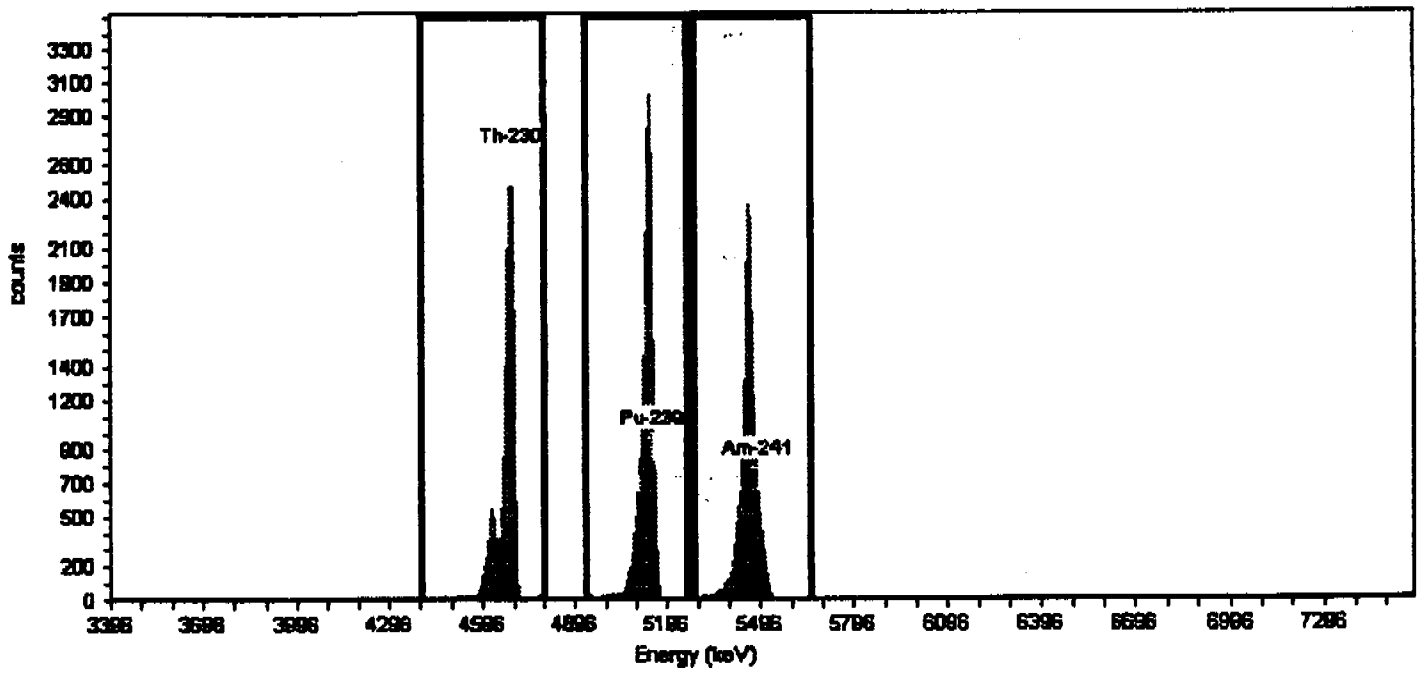
Source Info

Certificate ID: 63508A-334
Certification Date: 5/30/2002 12:00:00PM
Prepared by: Analytics
Description:

Acquisition

Detector: AV53 , SN:
Acquisition Start Date: 3/18/2005 9:27:15AM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.69% +/- 0.30% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear
Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,808.00	91.49
Pu-239	243	5.16	212	258	14,554.00	103.96
Am-241	289	5.49	261	313	13,577.00	96.98

STL ST. LOUIS

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:58:57PM 3/18/2005

Analyst: 60040
Detector: AV54

Calibration

Name: March2005_AV54
Description:

Calibration Date: 3/18/2005 12:58:53PM

Source Info

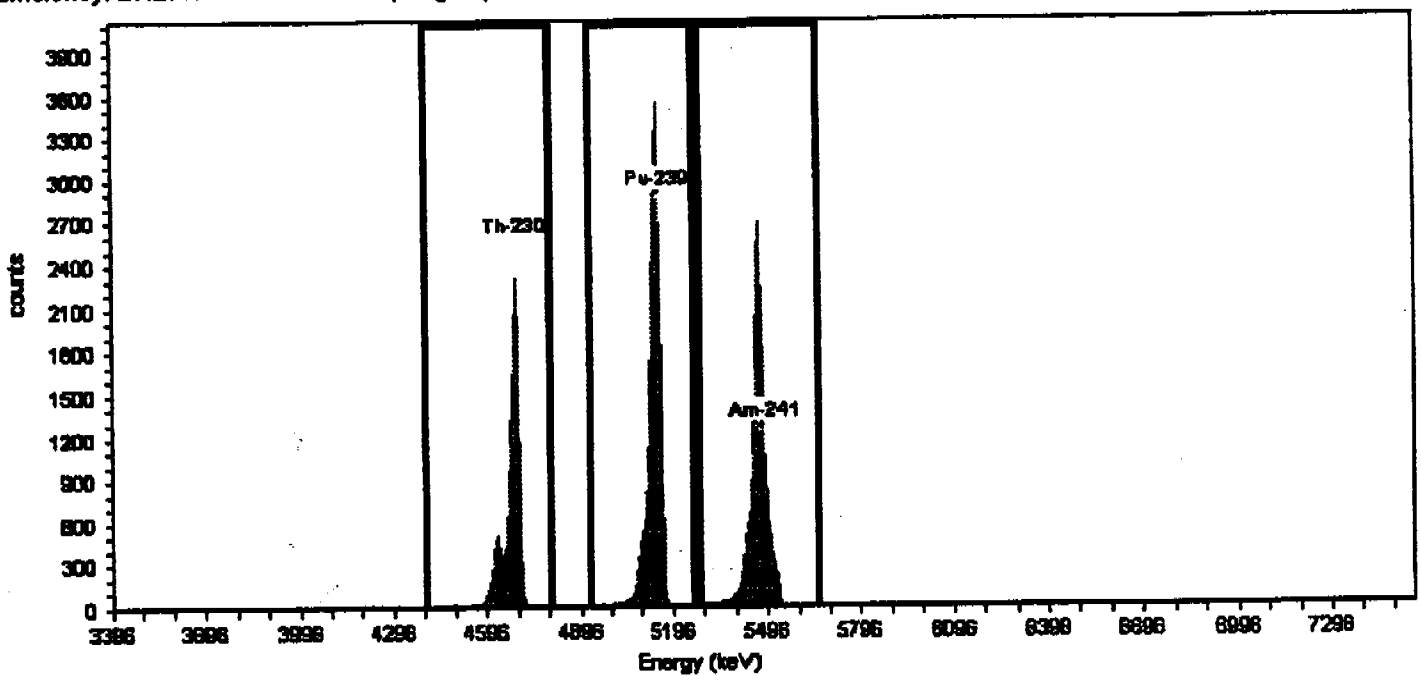
Certificate ID: 63509A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV54 , SN:
Acquisition Start Date: 3/18/2005 9:27:27AM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.27% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	11,749.00	83.92
Pu-239	243	5.16	212	258	17,512.00	125.09
Am-241	289	5.49	261	313	15,618.00	111.56

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:23:45AM 3/18/2005

Analyst: 60040
Detector: AV55

Calibration

Name: Mar2005_AV55
Description:

Calibration Date: 3/18/2005 9:23:08AM

Source Info

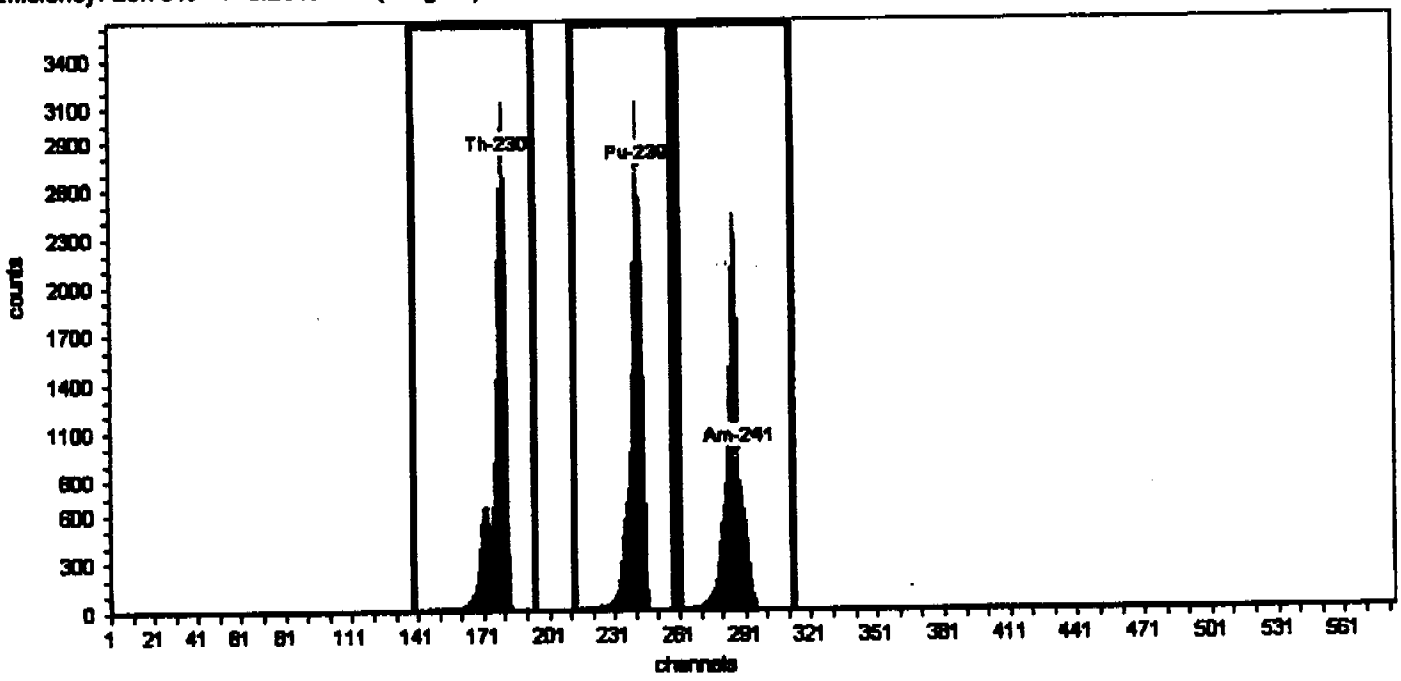
Certificate ID: 63506-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:07PM

Acquisition

Detector: AV55 , SN:
Acquisition Start Date: 3/18/2005 1:45:01AM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 26.78% +/- 0.26% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	16,430.00	117.36
Pu-239	243	5.16	212	258	15,472.00	110.51
Am-241	289	5.49	261	313	14,745.00	105.32

LOT# F5D220356

STL ST. LOUIS

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:23:50AM 3/18/2005

Analyst: 60040
Detector: AV56

Calibration

Name: Mar2005_AV56
Description:

Calibration Date: 3/18/2005 9:23:19AM

Source Info

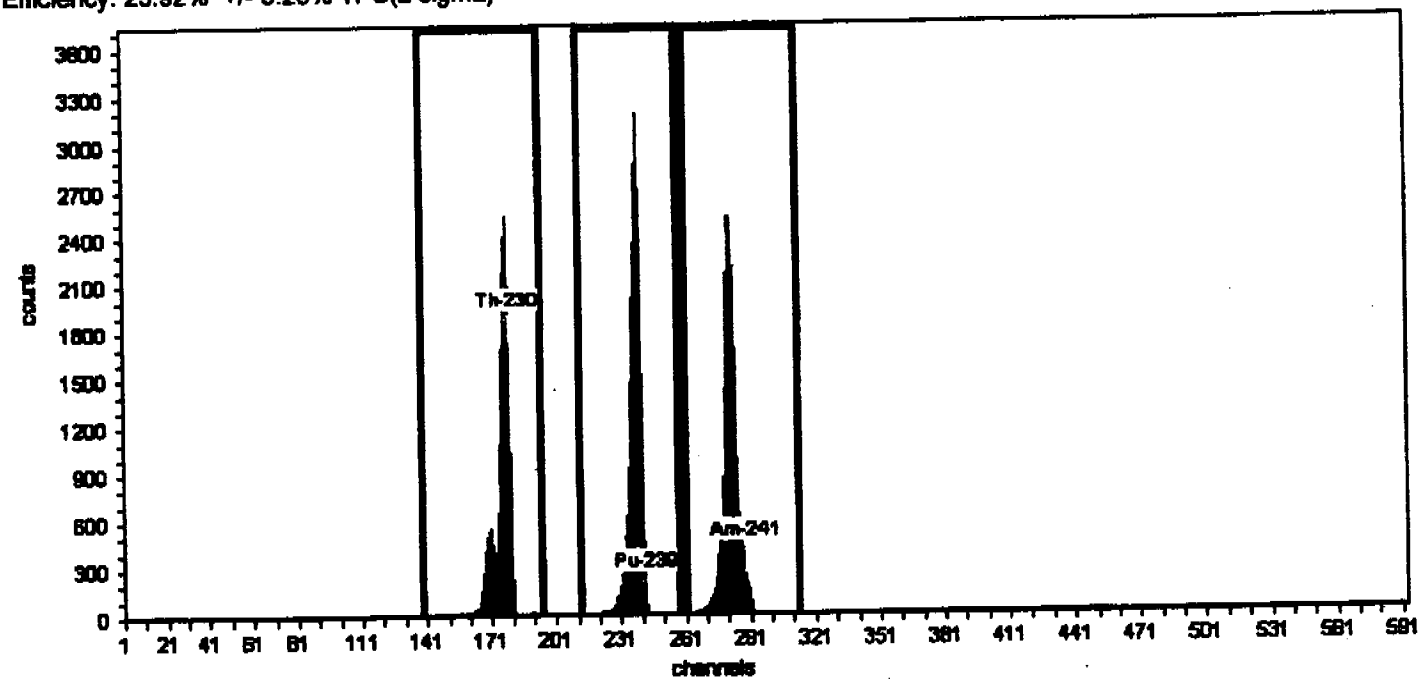
Certificate ID: 63507-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV56 , SN:
Acquisition Start Date: 3/18/2005 1:45:30AM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 25.92% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,121.00	86.58
Pu-239	243	5.16	212	258	14,428.00	103.06
Am-241	289	5.49	261	313	13,712.00	97.94

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:23:55AM 3/18/2005

Analyst: 60040
Detector: AV57

Calibration

Name: Mar2005_AV57
Description:

Calibration Date: 3/18/2005 9:23:31AM

Source Info

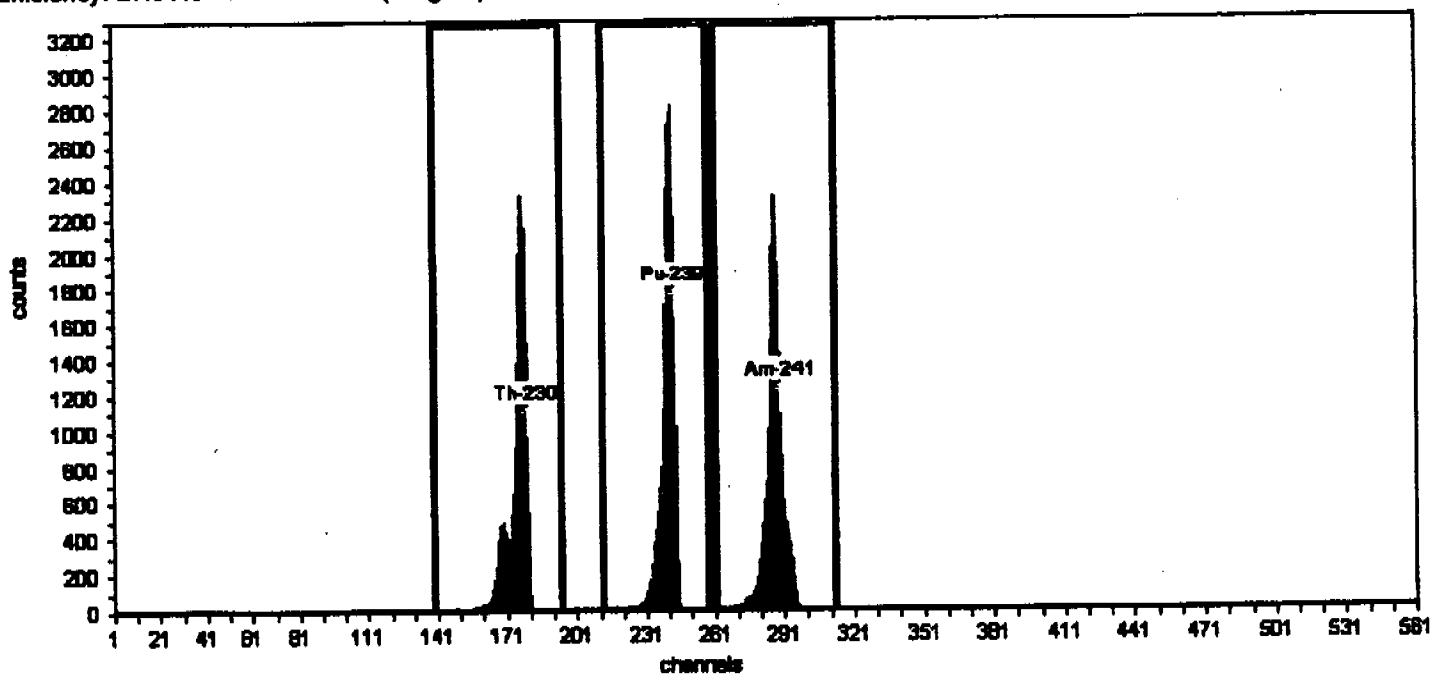
Certificate ID: 63508A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV57 , SN:
Acquisition Start Date: 3/18/2005 1:46:07AM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.01% +/- 0.29% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,231.00	87.36
Pu-239	243	5.16	212	258	14,278.00	101.99
Am-241	289	5.49	261	313	13,436.00	95.97

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:23:59AM 3/18/2005

Analyst: 60040
Detector: AV58

Calibration

Name: Mar2005_AV58
Description:

Calibration Date: 3/18/2005 9:23:40AM

Source Info

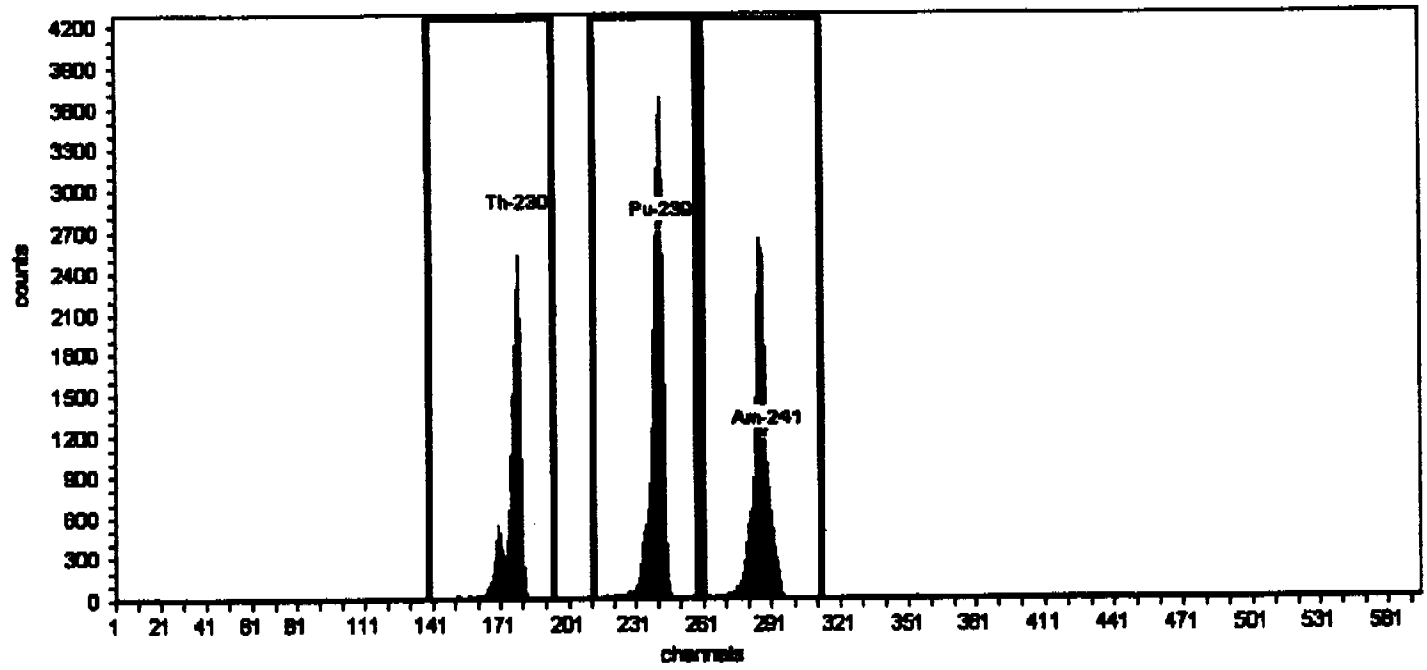
Certificate ID: 63509A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV58 , SN:
Acquisition Start Date: 3/18/2005 1:46:10AM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.78% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,032.00	85.94
Pu-239	243	5.16	212	258	17,966.00	128.33
Am-241	289	5.49	261	313	15,711.00	112.22

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:41:20AM 3/18/2005

Analyst: 60040
Detector: AV59

Calibration

Name: March2005_AV59
Description:

Calibration Date: 3/18/2005 1:41:17AM

Source Info

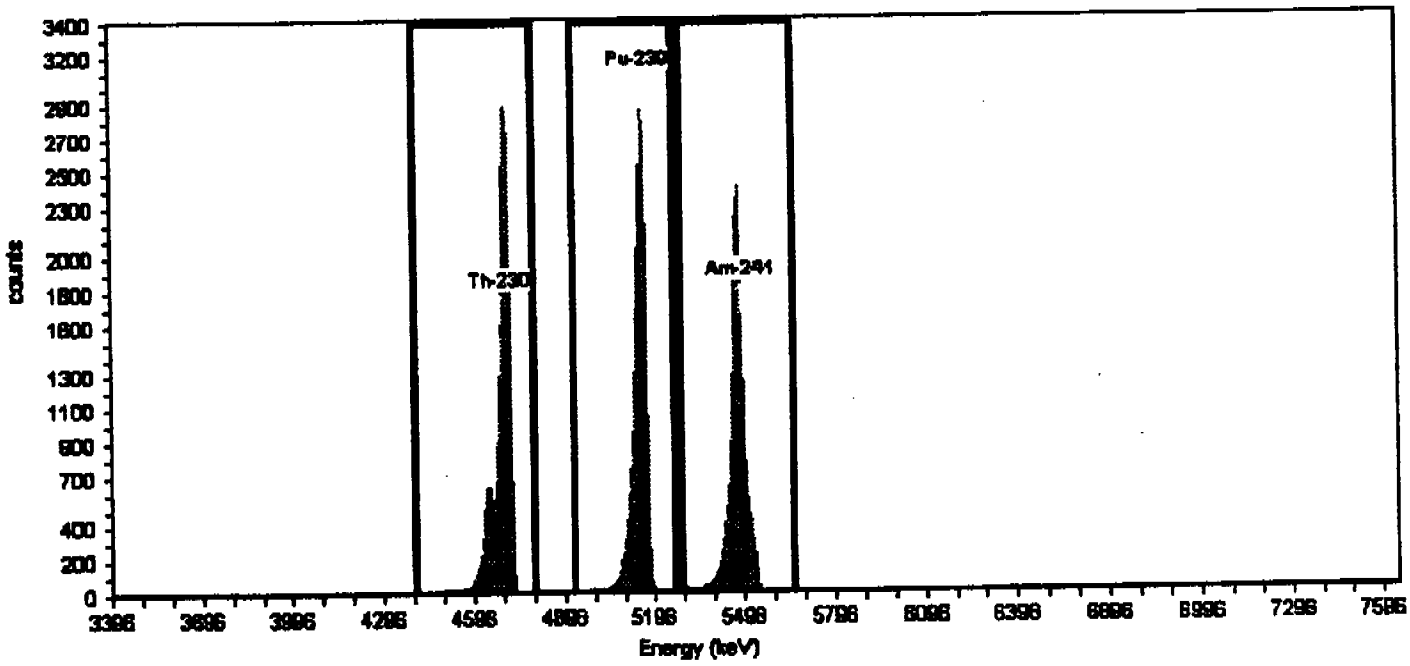
Certificate ID: 63508-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:07PM

Acquisition

Detector: AV59 , SN:
Acquisition Start Date: 3/17/2005 10:52:55PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.09% +/- 0.27% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	16,669.00	119.06
Pu-239	243	5.16	212	258	15,792.00	112.80
Am-241	289	5.49	261	313	14,751.00	105.36

LOT# F5D220356

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:41:29AM 3/18/2005

Analyst: 60040
Detector: AV60

Calibration

Name: March2005_AV60
Description:

Calibration Date: 3/18/2005 1:41:25AM

Source Info

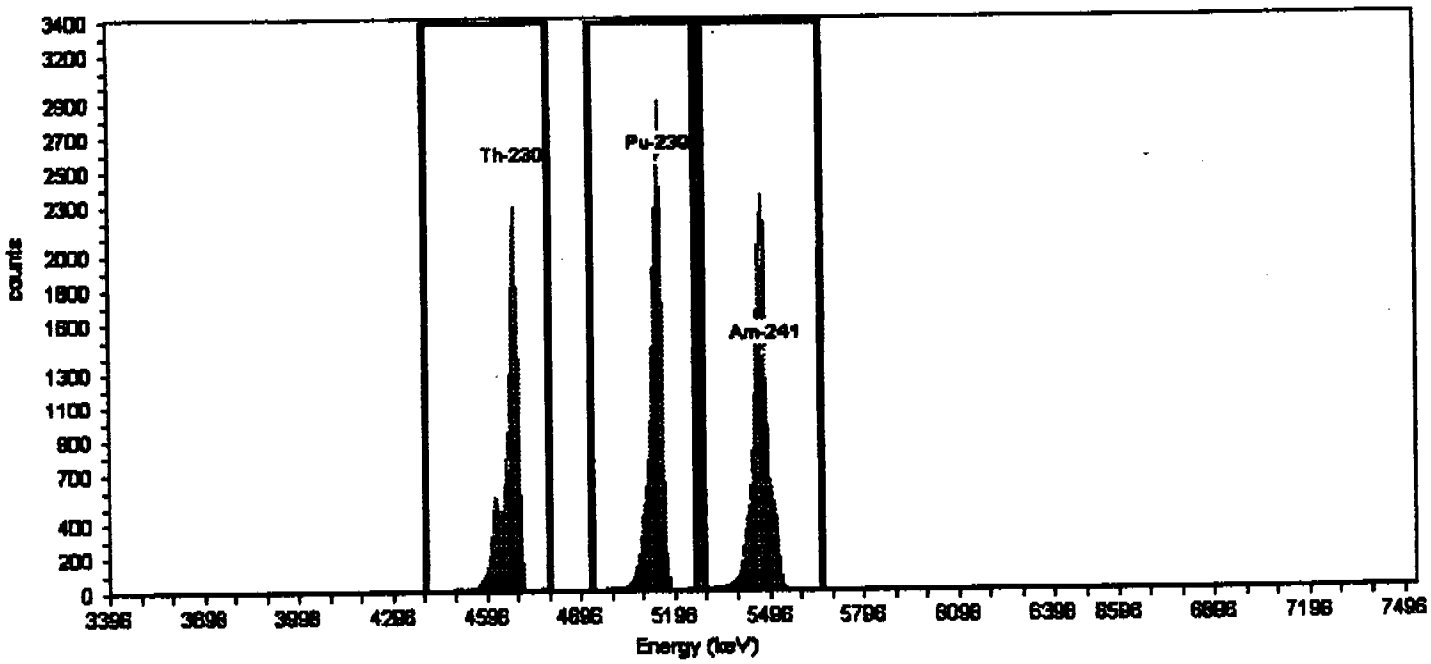
Certificate ID: 63507-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV60 , SN:
Acquisition Start Date: 3/17/2005 10:52:56PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 28.01% +/- 0.29% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	13,057.00	93.26
Pu-239	243	5.16	212	258	15,261.00	109.01
Am-241	289	5.49	261	313	15,234.00	108.81

LOT# F5D220356

STL ST. LOUIS

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:41:39AM 3/18/2005

Analyst: 60040
Detector: AV61

Calibration

Name: March2005_AV61
Description:

Calibration Date: 3/18/2005 1:41:36AM

Source Info

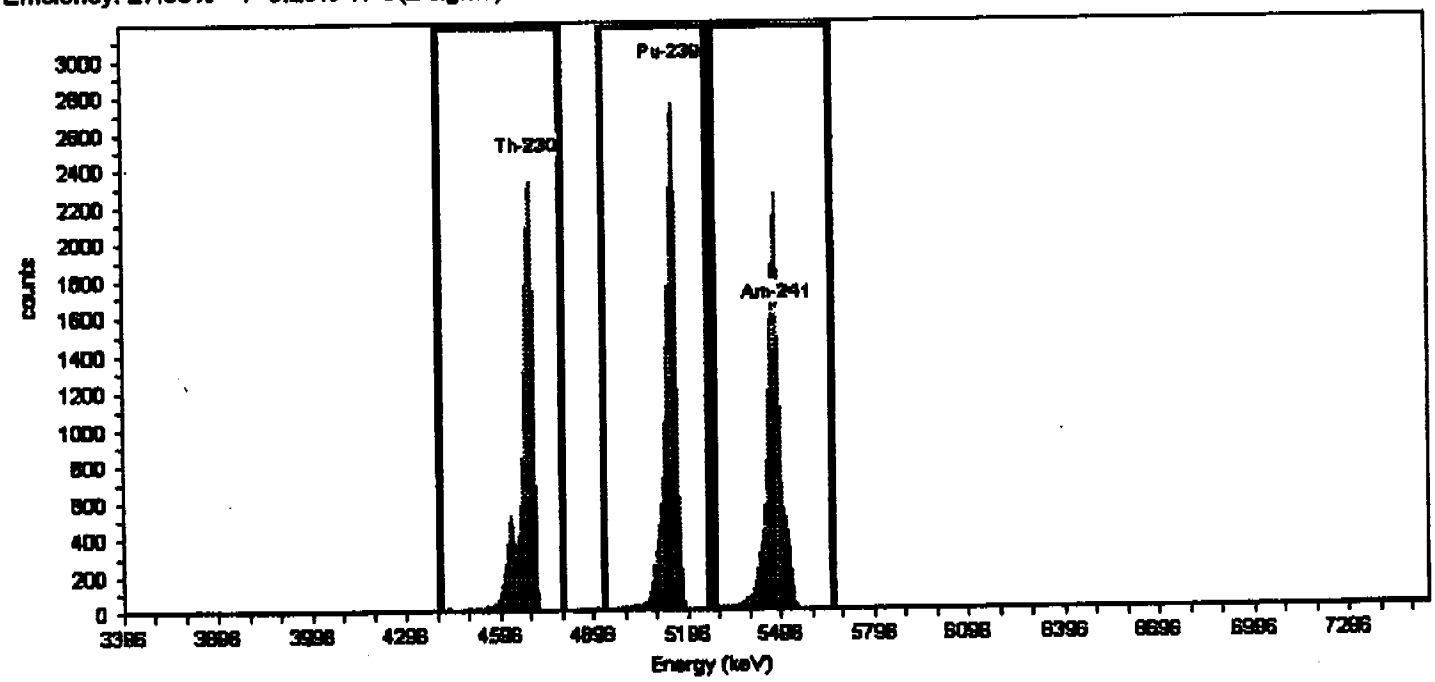
Certificate ID: 63508A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV61 , SN:
Acquisition Start Date: 3/17/2005 10:53:30PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.35% +/- 0.29% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,627.00	90.19
Pu-239	243	5.16	212	258	14,395.00	102.82
Am-241	289	5.49	261	313	13,416.00	95.83

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:41:48AM 3/18/2005

Analyst: 60040
Detector: AV62

Calibration

Name: March2005_AV62
Description:

Calibration Date: 3/18/2005 1:41:44AM

Source Info

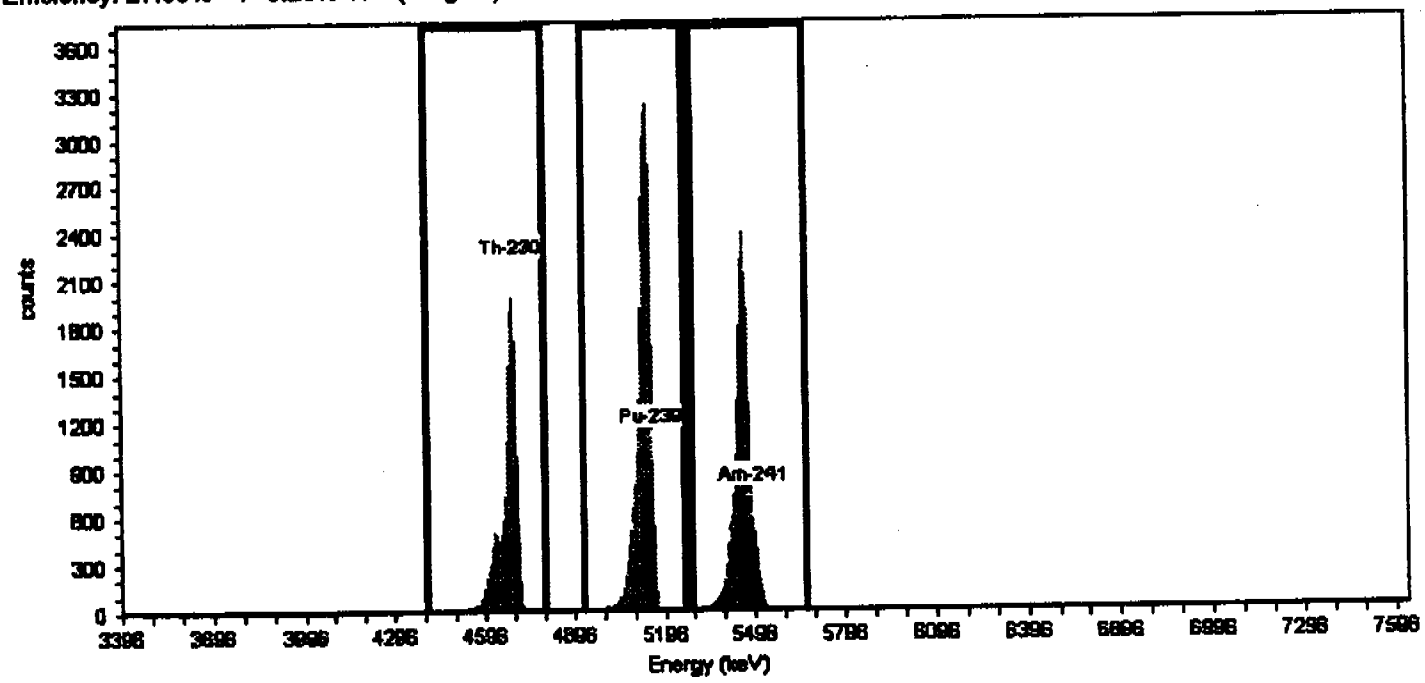
Certificate ID: 63509A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV62 , SN:
Acquisition Start Date: 3/17/2005 10:53:31PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.65% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	11,893.00	84.95
Pu-239	243	5.16	212	258	18,041.00	128.86
Am-241	289	5.49	261	313	15,559.00	111.14

STL ST. LOUIS

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:32:06PM 3/17/2005

Analyst: 60040
Detector: AV63

Calibration

Name: Mar2005_AV63
Description:

Calibration Date: 3/17/2005 10:32:03PM

Source Info

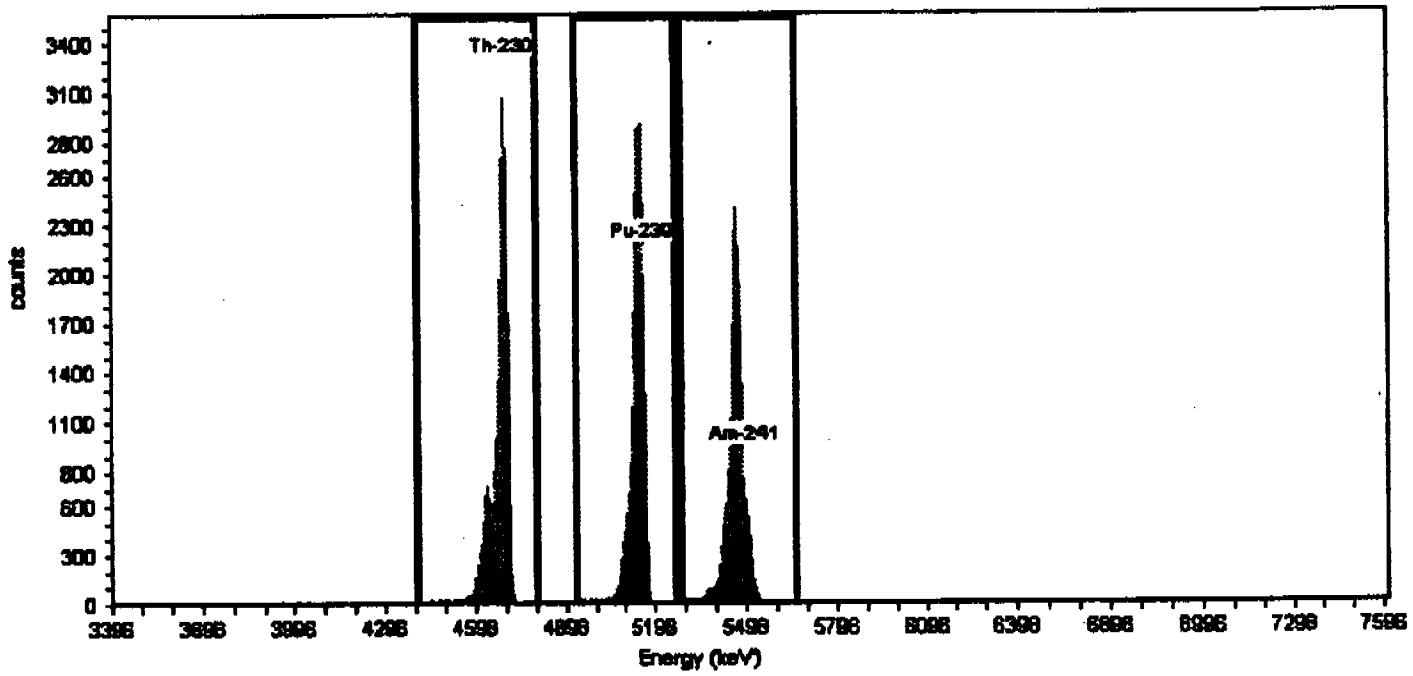
Certificate ID: 63506-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:07PM

Acquisition

Detector: AV63 , SN:
Acquisition Start Date: 3/17/2005 8:06:19PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.17% +/- 0.27% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	16,740.00	119.57
Pu-239	243	5.16	212	258	15,765.00	112.61
Am-241	289	5.49	261	313	14,857.00	106.12

STL ST. LOUIS

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:32:10PM 3/17/2005

Analyst: 60040
Detector: AV64

Calibration

Name: Mar2005_AV64
Description:

Calibration Date: 3/17/2005 10:32:07PM

Source Info

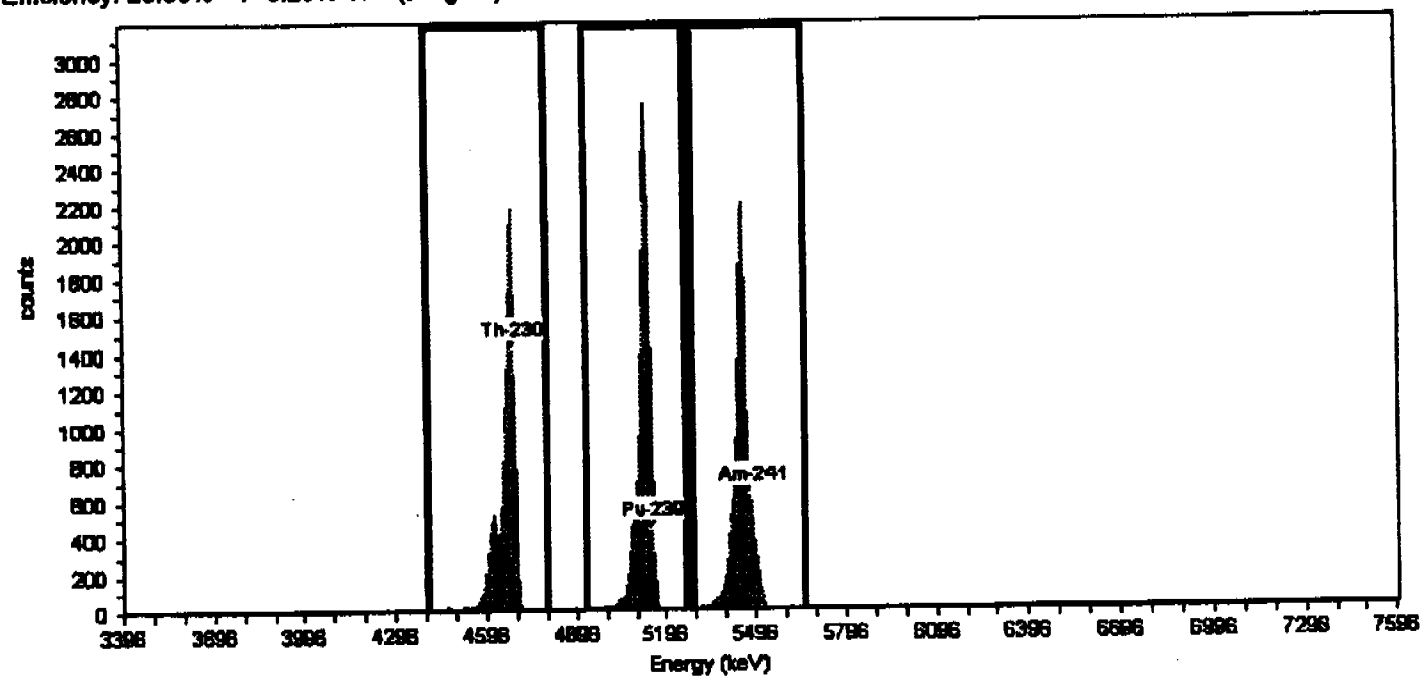
Certificate ID: 63507-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV64 , SN:
Acquisition Start Date: 3/17/2005 8:06:20PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 26.00% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,114.00	86.53
Pu-239	243	5.16	212	258	14,450.00	103.21
Am-241	289	5.49	261	313	13,848.00	98.91

LOT# F5D220356

STL ST. LOUIS

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:32:14PM 3/17/2005

Analyst: 60040
Detector: AV65

Calibration

Name: Mar2005_AV65
Description:

Calibration Date: 3/17/2005 10:32:12PM

Source Info

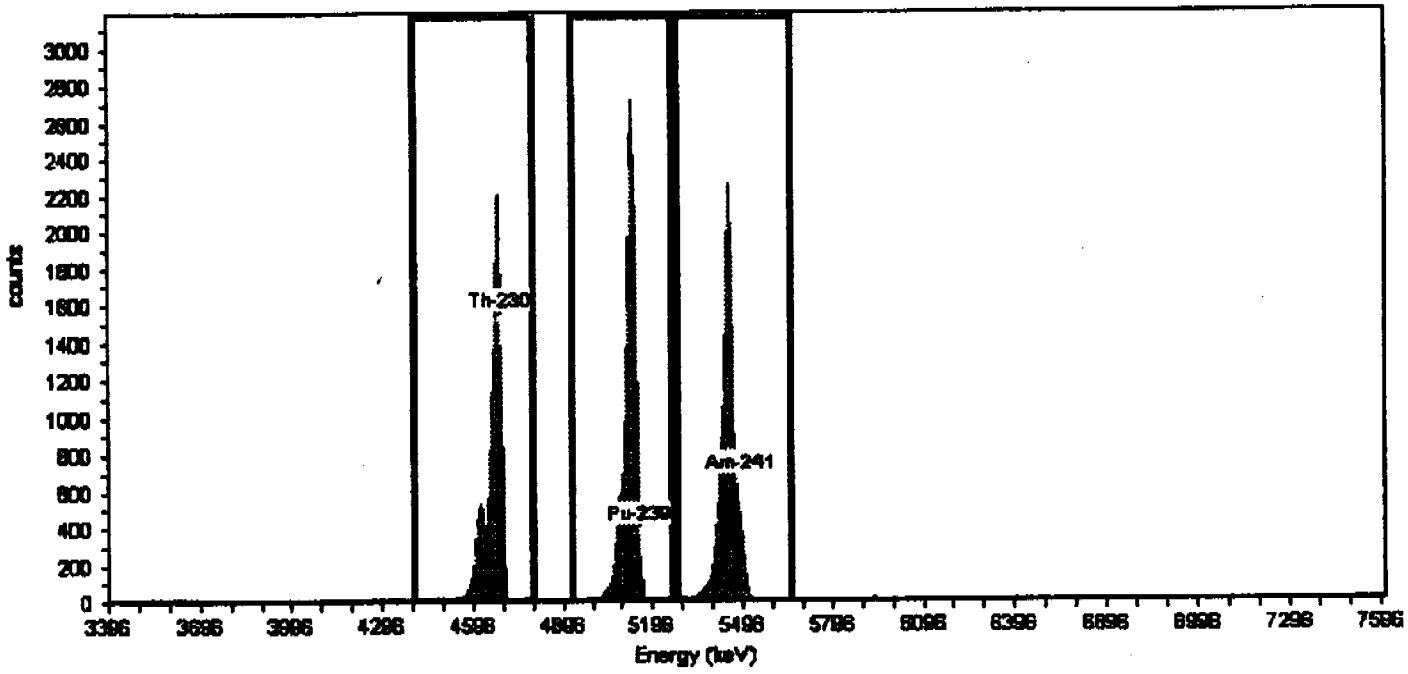
Certificate ID: 63508A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV65 , SN:
Acquisition Start Date: 3/17/2005 8:06:45PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.10% +/- 0.29% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,568.00	89.77
Pu-239	243	5.16	212	258	14,123.00	100.88
Am-241	289	5.49	261	313	13,367.00	95.48

STL ST. LOUIS

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:32:19PM 3/17/2005

Analyst: 60040
Detector: AV66

Calibration

Name: Mar2005_AV66
Description:

Calibration Date: 3/17/2005 10:32:16PM

Source Info

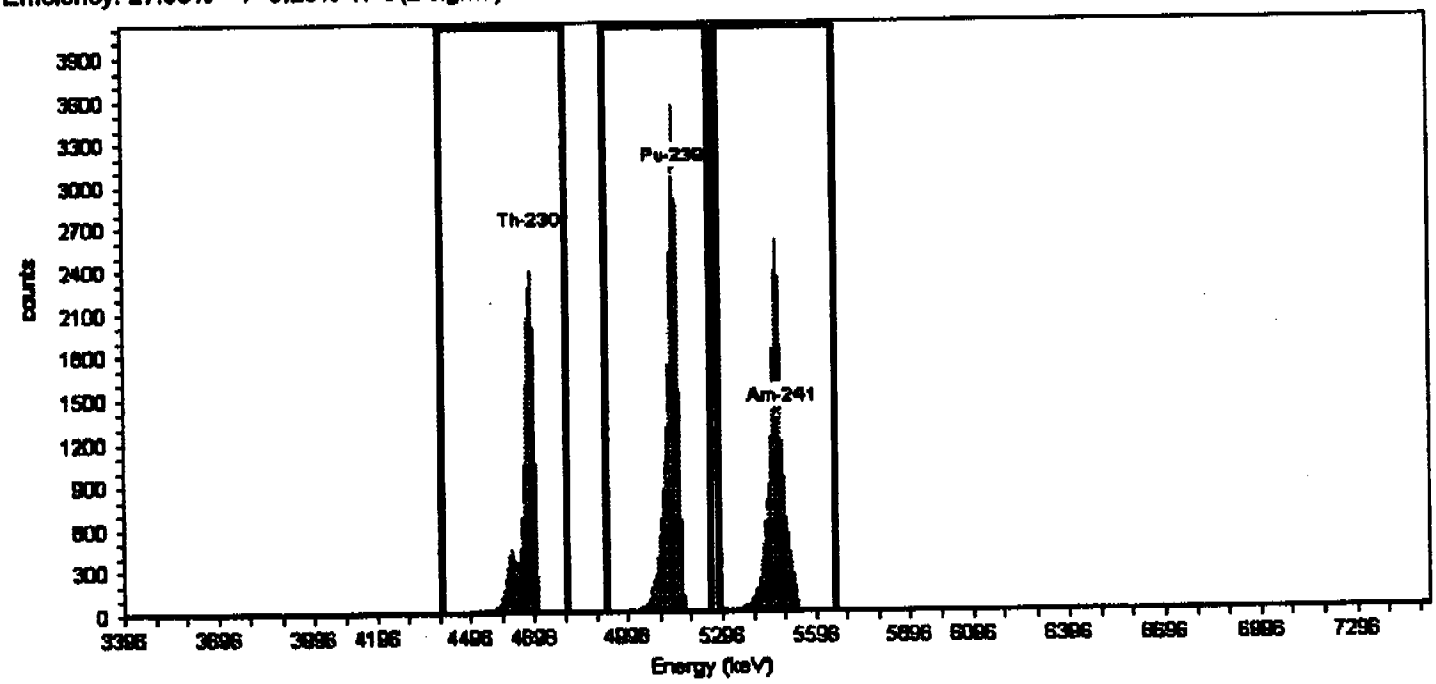
Certificate ID: 63509A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV66 , SN:
Acquisition Start Date: 3/17/2005 8:07:04PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.56% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	11,902.00	85.01
Pu-239	243	5.16	212	258	17,786.00	127.04
Am-241	289	5.49	261	313	15,669.00	111.92

STL ST. LOUIS

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:01:23PM 3/17/2005

Analyst: 60040
Detector: AV67

Calibration

Name: March2005_AV67
Description:

Calibration Date: 3/17/2005 8:01:05PM

Source Info

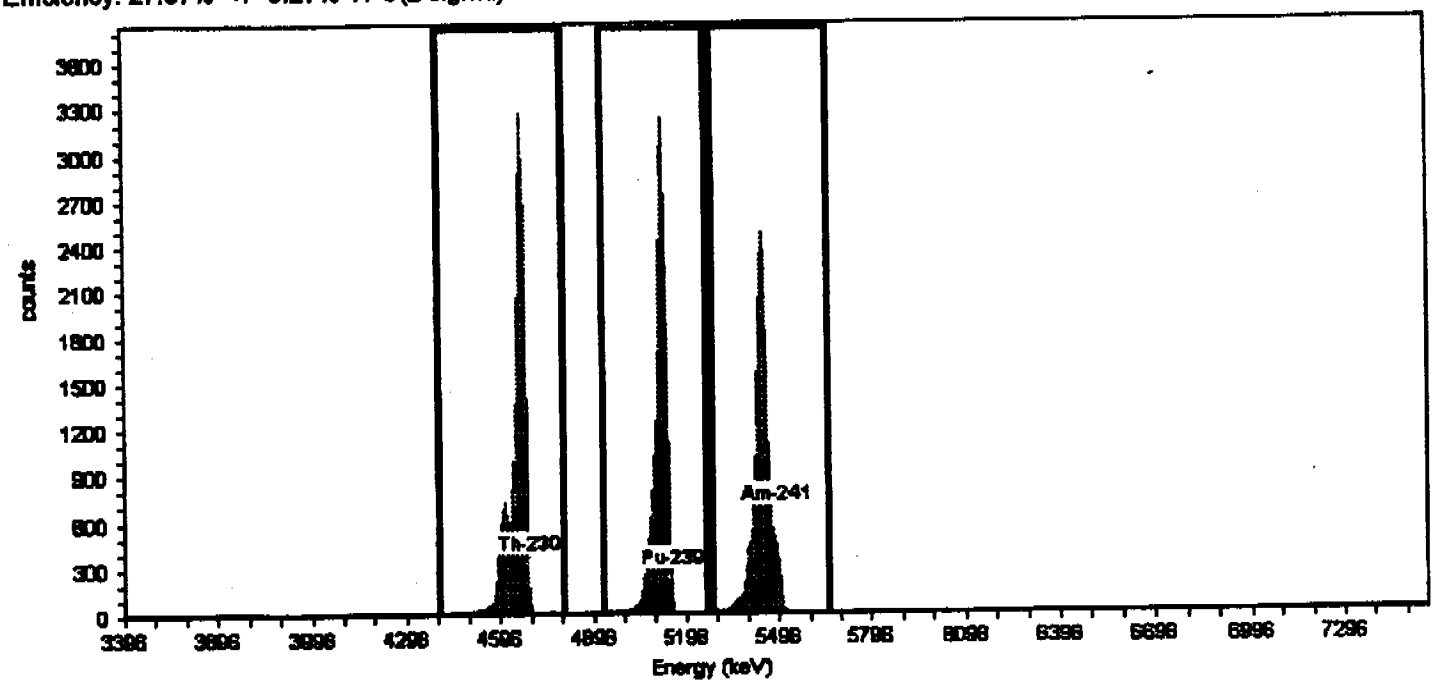
Certificate ID: 63506-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:07PM

Acquisition

Detector: AV67 , SN:
Acquisition Start Date: 3/17/2005 4:39:52PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.67% +/- 0.27% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	17,111.00	122.22
Pu-239	243	5.16	212	258	16,159.00	115.42
Am-241	289	5.49	261	313	15,278.00	109.13

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:01:34PM 3/17/2005

Analyst: 60040
Detector: AV68

Calibration

Name: March2005_AV68
Description:

Calibration Date: 3/17/2005 8:01:31PM

Source Info

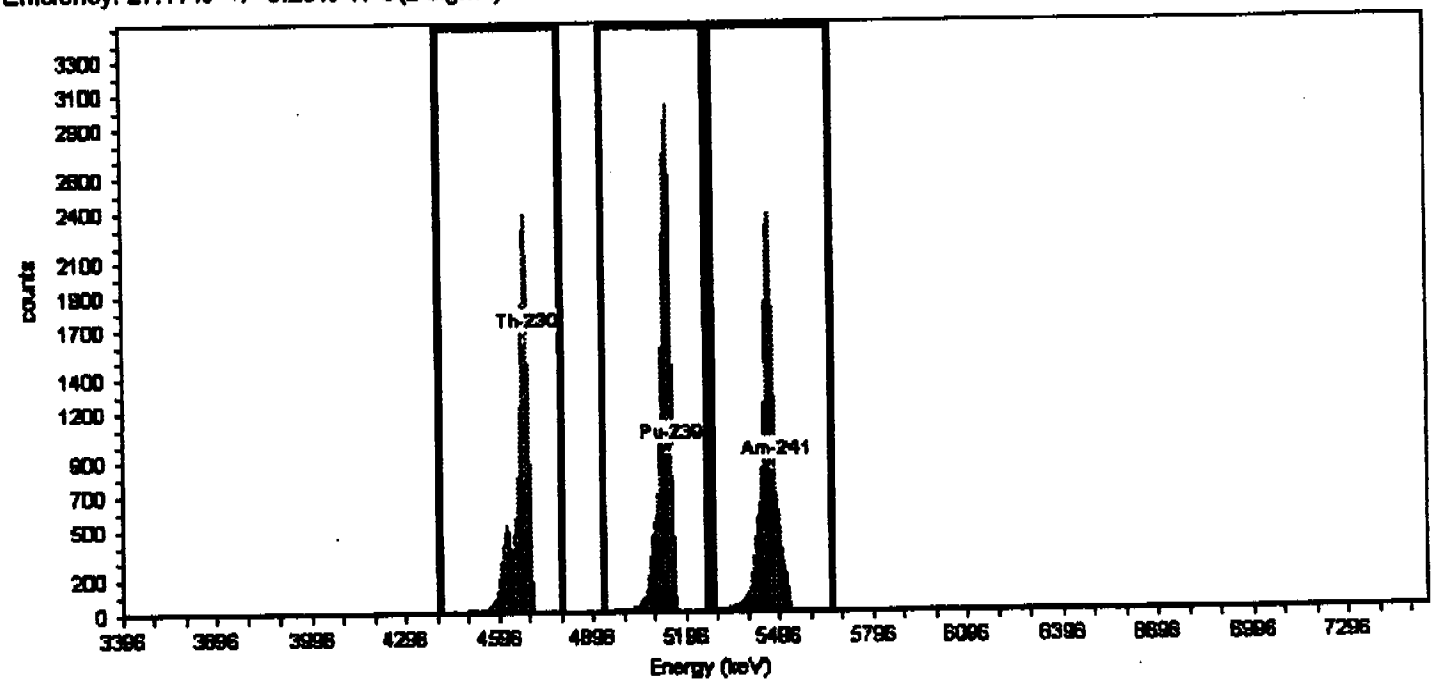
Certificate ID: 63507-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV68 , SN:
Acquisition Start Date: 3/17/2005 4:40:34PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.17% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,661.00	90.44
Pu-239	243	5.16	212	258	15,075.00	107.68
Am-241	289	5.49	261	313	14,492.00	103.51

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:01:52PM 3/17/2005

Analyst: 60040
Detector: AV69

Calibration

Name: March05_AV69
Description:

Calibration Date: 3/17/2005 8:01:49PM

Source Info

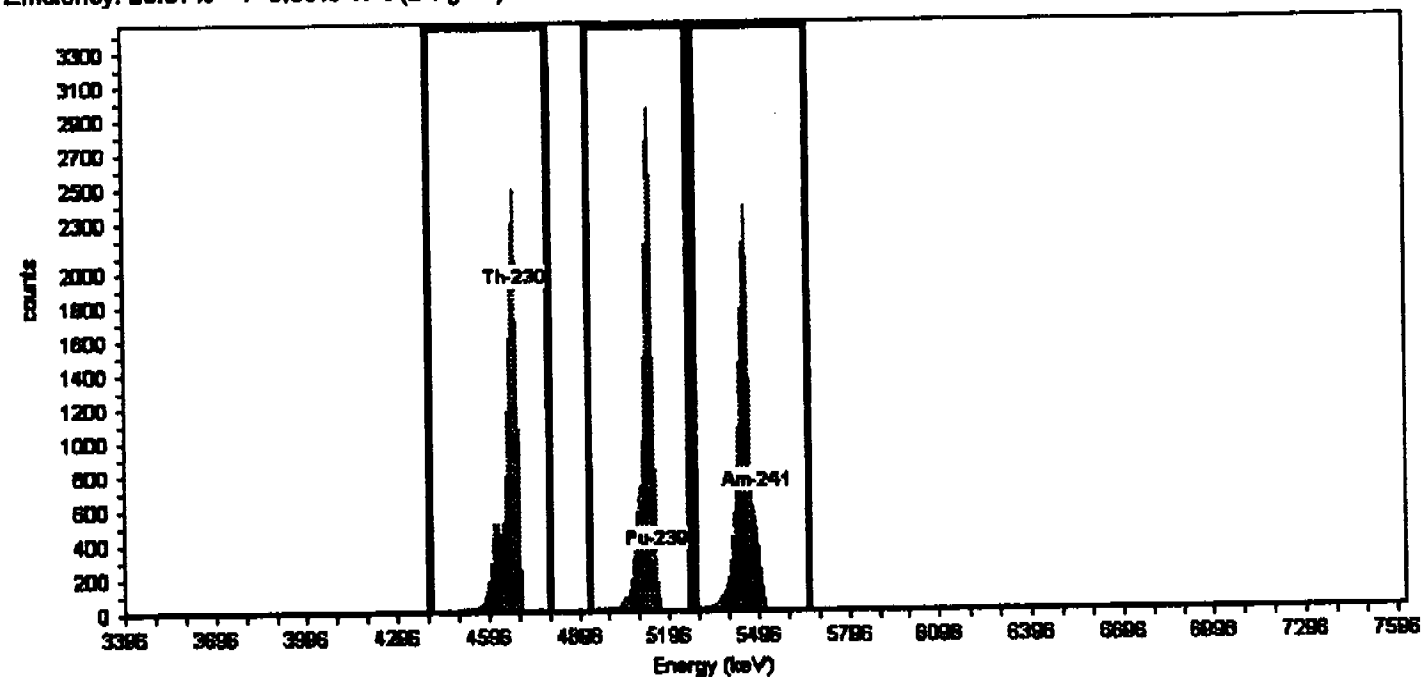
Certificate ID: 63508A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV69 , SN:
Acquisition Start Date: 3/17/2005 4:40:37PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 28.07% +/- 0.30% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	13,000.00	92.86
Pu-239	243	5.16	212	258	14,663.00	104.74
Am-241	289	5.49	261	313	13,825.00	98.75

STL ST. LOUIS

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:02:00PM 3/17/2005

Analyst: 60040
Detector: AV70

Calibration

Name: March2005_AV70
Description:

Calibration Date: 3/17/2005 8:01:57PM

Source Info

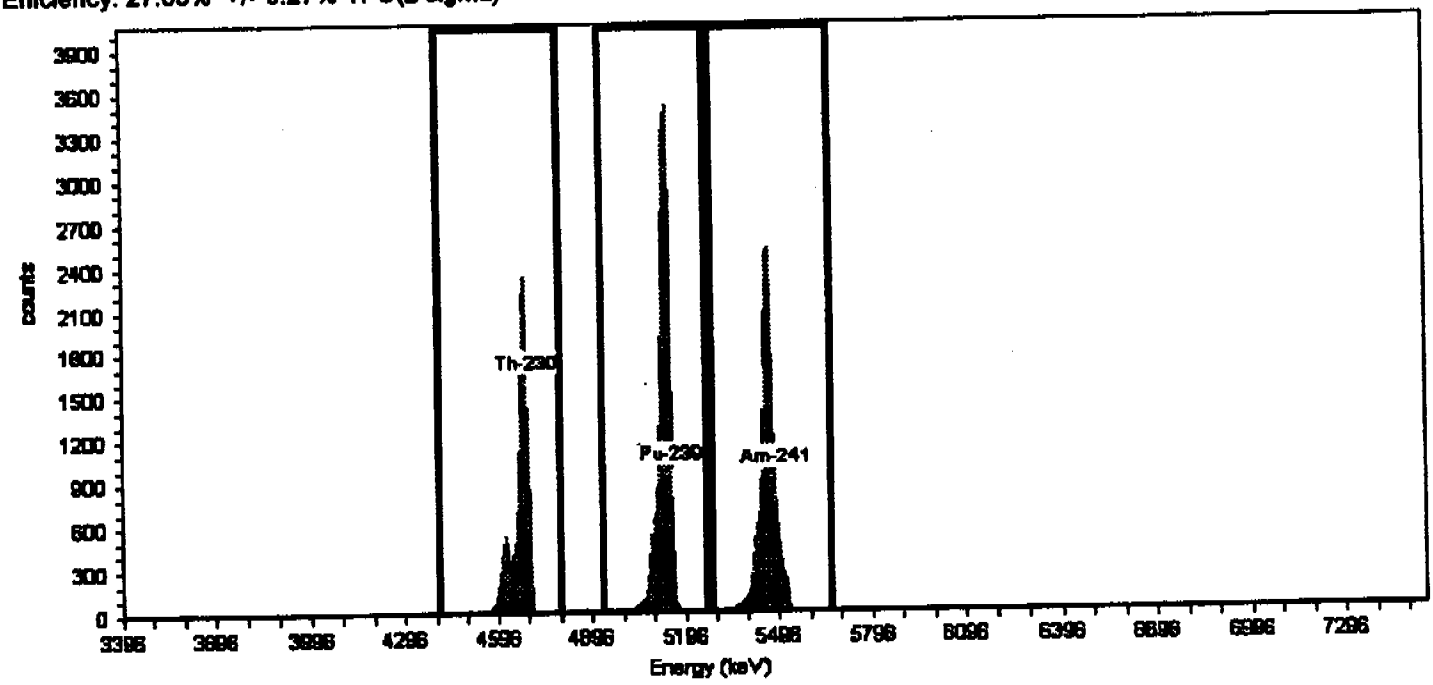
Certificate ID: 63509A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV70 , SN:
Acquisition Start Date: 3/17/2005 4:40:38PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.03% +/- 0.27% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	11,808.00	84.34
Pu-239	243	5.16	212	256	17,508.00	125.06
Am-241	289	5.49	261	313	15,169.00	108.35

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:34:05AM 3/17/2005

Analyst: 60040
Detector: AV71

Calibration

Name: March2005_AV71
Description:

Calibration Date: 3/17/2005 8:34:02AM

Source Info

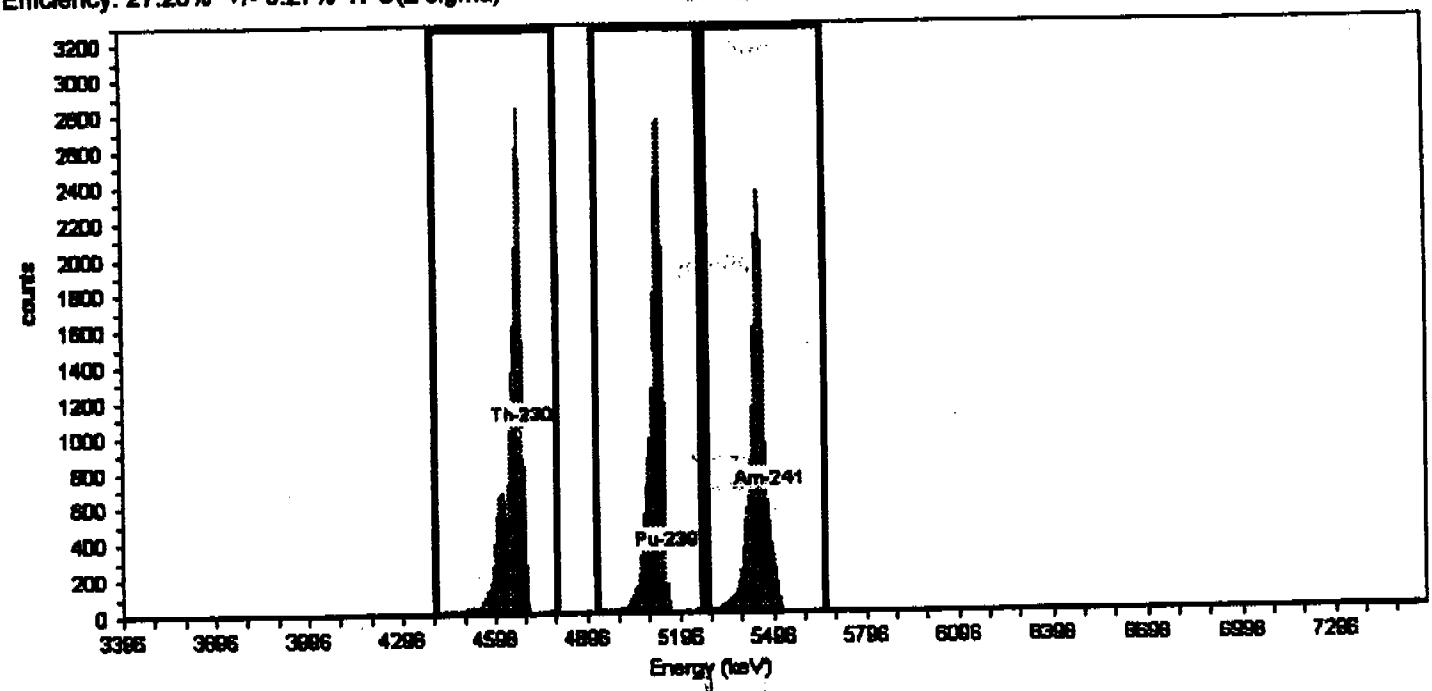
Certificate ID: 63506-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:07PM

Acquisition

Detector: AV71 , SN:
Acquisition Start Date: 3/16/2005 11:22:22PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.28% +/- 0.27% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	16,817.00	120.12
Pu-239	243	5.16	212	258	15,794.00	112.81
Am-241	289	5.49	261	313	14,939.00	106.71

STL ST. LOUIS

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:34:12AM 3/17/2005

Analyst: 60040
Detector: AV72

Calibration

Name: March2005_AV72
Description:

Calibration Date: 3/17/2005 8:34:09AM

Source Info

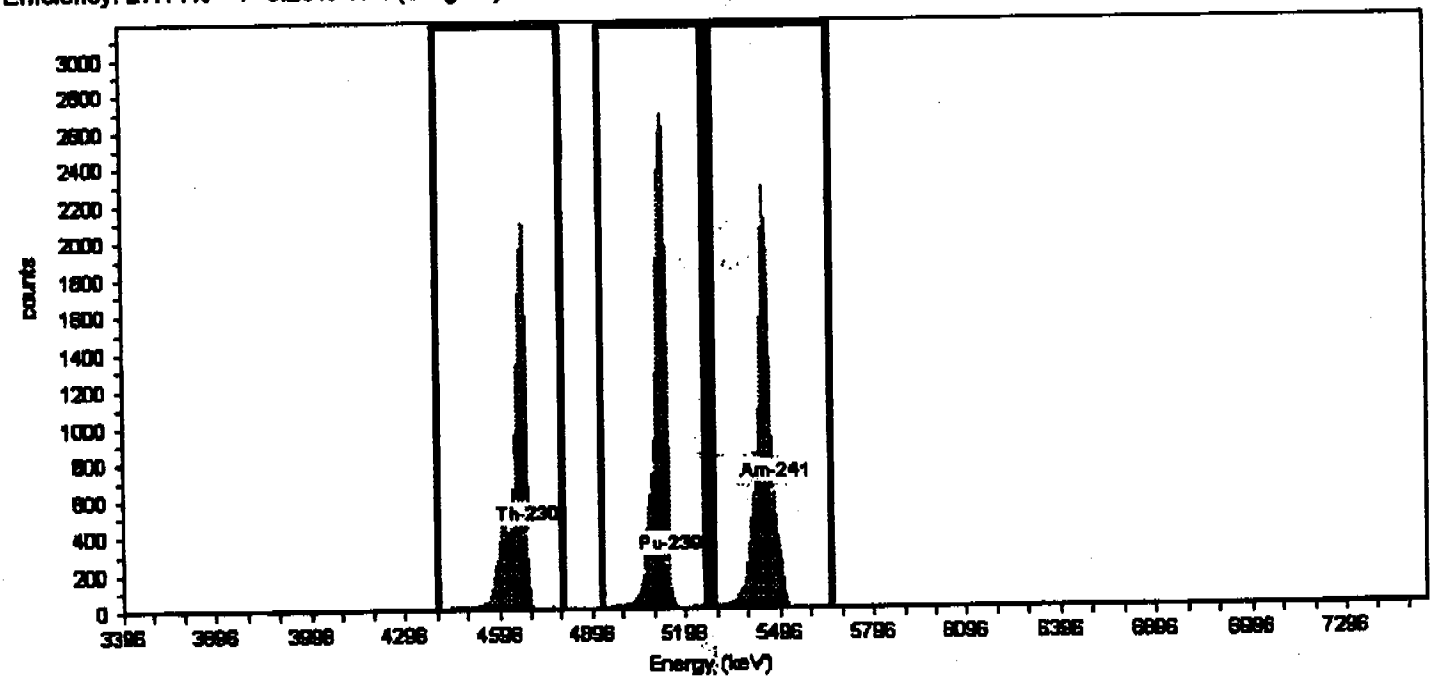
Certificate ID: 63507-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV72 , SN:
Acquisition Start Date: 3/16/2005 11:22:34PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.14% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,683.00	90.59
Pu-239	243	5.16	212	258	15,049.00	107.49
Am-241	289	5.49	261	313	14,426.00	103.04

STL ST. LOUIS

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:34:18AM 3/17/2005

Analyst: 60040
Detector: AV73

Calibration

Name: March2005_AV73
Description:

Calibration Date: 3/17/2005 8:34:15AM

Source Info

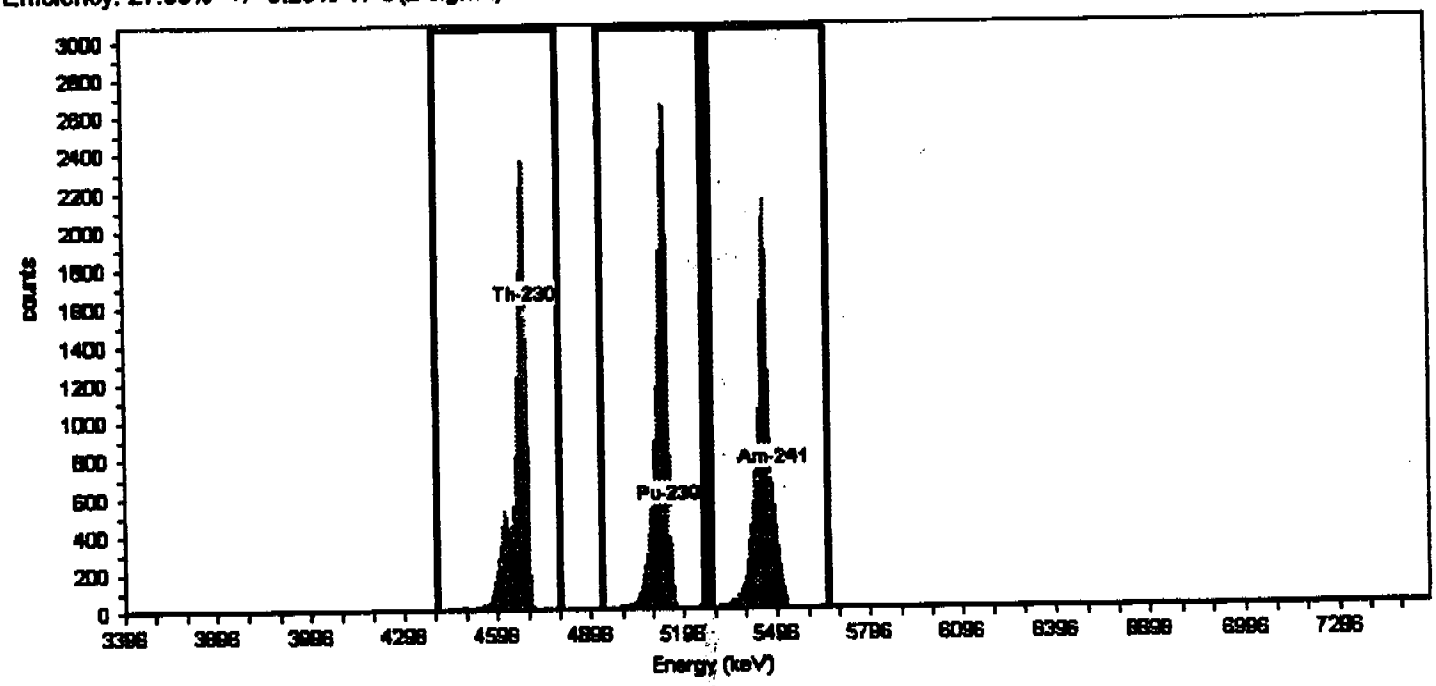
Certificate ID: 63508A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV73 , SN:
Acquisition Start Date: 3/16/2005 11:22:46PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.38% +/- 0.29% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,706.00	90.77
Pu-239	243	5.16	212	258	14,532.00	103.80
Am-241	289	5.49	261	313	13,256.00	94.69

LOT# F5D220356

ST

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:34:33AM 3/17/2005

Analyst: 60040
Detector: AV74

Calibration

Name: March2005_AV74
Description:

Calibration Date: 3/17/2005 8:34:21AM

Source Info

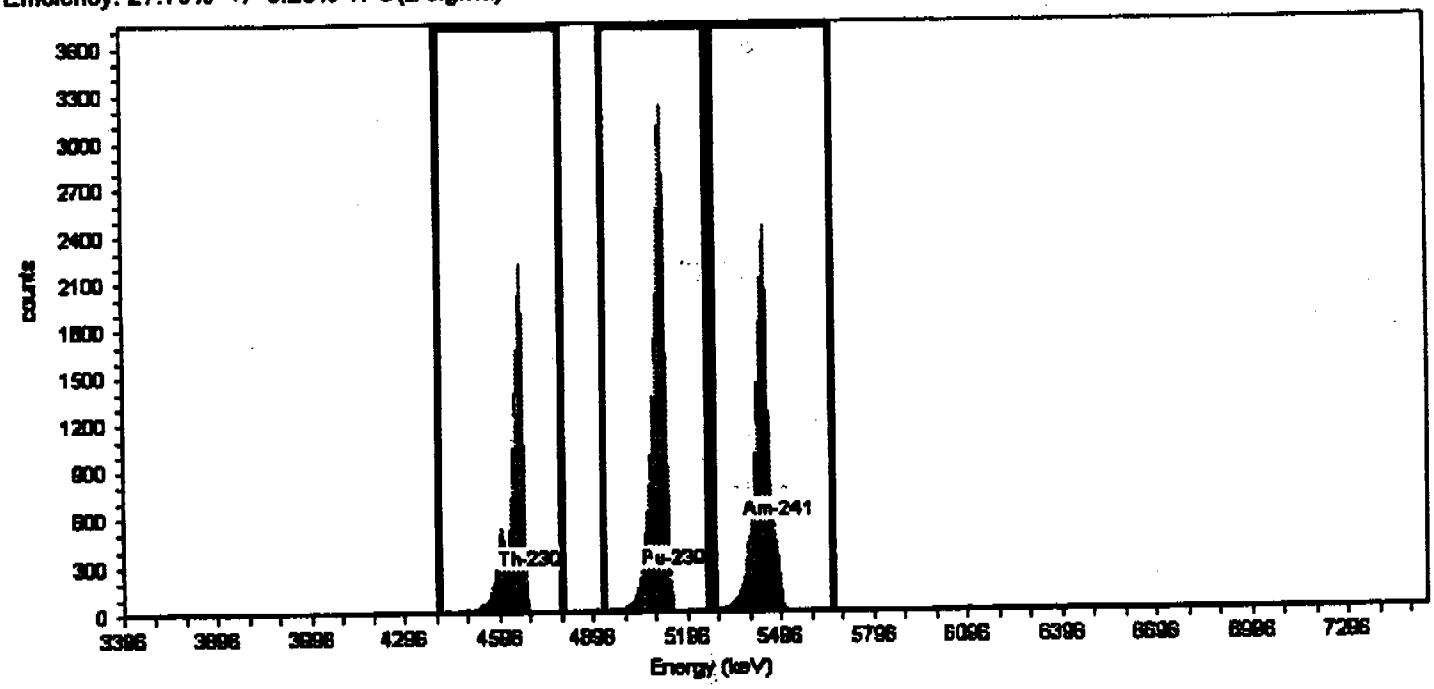
Certificate ID: 63509A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV74 , SN:
Acquisition Start Date: 3/16/2005 11:22:55PM
Live Time: 140.00 min.
Real Time: 140.06 min.
Efficiency: 27.79% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,203.00	87.16
Pu-239	243	5.16	212	258	18,013.00	128.66
Am-241	289	5.49	261	313	15,532.00	110.94

LOT# F5D220356

F5D220356

CLIENT ANALYSIS SUMMARY

Storage Loc: RAD
Date Received: 2005-04-22
Analytical Due Date: 2005-05-04 11
Report Due Date: 2005-05-06 13

Project Manager: EK
Quote #: 44975
SDG: F5D220356
Project: 3165S
Los Alamos Non-Rad
PO#: 126310021
Report to: Joylene Valdez or Keith
Report Type: D Expanded Deliverable
Client: 108581 LOS ALAMOS NATIONAL LABORATORY
#SMPS in LOT: 0
EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"
Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********
Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level
Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

	SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
	1	RE73-05-58842			2005-04-20 / 0	G8159	SOLID

SAMPLE COMMENTS:

	XX	17	NAS/DOE	3006/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	9Q	CLIENT: LANL	PROT: A	WRK LOC	06
	XX	2L	EML	A-01-R MOD	Iso PLUTONIUM (LONG CT) DOE A-01-R MOD	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	XX	2M	EML	A-01-R MOD	Iso URANIUM (LONG CT) DOE A-01-R MOD	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	XX	Z8	DOE	RP-730 MOD	Gamma Cs-137 & Hits by DOE RP-730 MOD	G6	Dry, Grind, and Fill Geometry	9Q	CLIENT: LANL	PROT: A	WRK LOC	06
X	XX	Z8	DOE	RP-730 MOD	Gamma Cs-137 & Hits by DOE RP-730 MOD	G6	Dry, Grind, and Fill Geometry	9Q	CLIENT: LANL	PROT: A	WRK LOC	06

	SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
	2	RE73-05-58843			2005-04-20 / 0	G816E	SOLID

SAMPLE COMMENTS:

	XX	17	NAS/DOE	3006/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	9Q	CLIENT: LANL	PROT: A	WRK LOC	06
	XX	2L	EML	A-01-R MOD	Iso PLUTONIUM (LONG CT) DOE A-01-R MOD	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	XX	2M	EML	A-01-R MOD	Iso URANIUM (LONG CT) DOE A-01-R MOD	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	XX	Z8	DOE	RP-730 MOD	Gamma Cs-137 & Hits by DOE RP-730 MOD	G6	Dry, Grind, and Fill Geometry	9Q	CLIENT: LANL	PROT: A	WRK LOC	06
S	XX	2L	EML	A-01-R MOD	Iso PLUTONIUM (LONG CT) DOE A-01-R MOD	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: A	WRK LOC	06
X	XX	2L	EML	A-01-R MOD	Iso PLUTONIUM (LONG CT) DOE A-01-R MOD	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: A	WRK LOC	06

	SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
	3	RE73-05-58844			2005-04-20 / 0	G816L	SOLID

SAMPLE COMMENTS:

	XX	17	NAS/DOE	3006/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	9Q	CLIENT: LANL	PROT: A	WRK LOC	06
	XX	2L	EML	A-01-R MOD	Iso PLUTONIUM (LONG CT) DOE A-01-R MOD	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	XX	2M	EML	A-01-R MOD	Iso URANIUM (LONG CT) DOE A-01-R MOD	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	XX	Z8	DOE	RP-730 MOD	Gamma Cs-137 & Hits by DOE RP-730 MOD	G6	Dry, Grind, and Fill Geometry	9Q	CLIENT: LANL	PROT: A	WRK LOC	06
S	XX	2M	EML	A-01-R MOD	Iso URANIUM (LONG CT) DOE A-01-R MOD	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: A	WRK LOC	06
X	XX	2M	EML	A-01-R MOD	Iso URANIUM (LONG CT) DOE A-01-R MOD	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: A	WRK LOC	06

	SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
	4	RE73-05-58845			2005-04-20 / 0	G816P	SOLID

SAMPLE COMMENTS:

	XX	17	NAS/DOE	3006/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	9Q	CLIENT: LANL	PROT: A	WRK LOC	06
	XX	2L	EML	A-01-R MOD	Iso PLUTONIUM (LONG CT) DOE A-01-R MOD	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	XX	2M	EML	A-01-R MOD	Iso URANIUM (LONG CT) DOE A-01-R MOD	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	XX	Z8	DOE	RP-730 MOD	Gamma Cs-137 & Hits by DOE RP-730 MOD	G6	Dry, Grind, and Fill Geometry	9Q	CLIENT: LANL	PROT: A	WRK LOC	06
S	XX	17	NAS/DOE	3006/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	9Q	CLIENT: LANL	PROT: A	WRK LOC	06
X	XX	17	NAS/DOE	3006/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	9Q	CLIENT: LANL	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A

F5D220356

CLIENT ANALYSIS SUMMARY

Storage Loc: RAD
Date Received: 2005-04-22
Analytical Due Date: 2005-05-04
Report Due Date: 2005-05-06
Report Type: D Expanded Deliverable
EDD Code: 99

Project Manager: EK
Quote #: 44975 SDG: F5D220356
Project: 3165S Los Alamos Non-Rad
PO#: 126310021 Report to: Joylene Valdez or Keith
Client: 108581 LOS ALAMOS NATIONAL LABORATORY
#SMPS in LOT: 0

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"
Project Name = "Request number" ---------- METALS AND WETCHEMISTRY ----------
Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level
Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

5 RE73-05-58846 2005-04-20 / 0 G816T SOLID

SAMPLE COMMENTS:

XX	17	NAS/DOE	3005/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	9Q	CLIENT: LANL	PROT: A	WRK LOC	06
XX	2L	EML	A-01-R MOD	Iso PLUTONIUM (LONG CT) DOE A-01-R MOD	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	2M	EML	A-01-R MOD	Iso URANIUM (LONG CT) DOE A-01-R MOD	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	Z8	DOE	RP-730 MOD	Gamma Cs-137 & Hits by DOE RP-730 MOD	G6	Dry, Grind, and Fill Geometry	9Q	CLIENT: LANL	PROT: A	WRK LOC	06

F5D220356

CLIENT COMMENTS SUMMARY

Storage Loc: RAD
Date Received: 2005-04-22
Analytical Due Date: 2005-05-04
Report Due Date: 2005-05-06
Report Type: D Expanded Deliverable
EDD Code: 99

Project Manager: EK
Quote #: 44975 SDG: F5D220356
Project: 3165S Los Alamos Non-Rad
PO#: 126310021 Report to: Joylene Valdez or Keith
Client: 108581 LOS ALAMOS NATIONAL LABORATORY #SMPS in LOT: 0

Sample Receiving: LOS ALAMOS CLIENT REQUIREMEN
Enter COC NUMBER on sample sample header in the COC Fi
SDG = "Lot Number"
Project Name = "Request number"

********** METALS AND WETCHEMISTRY **********
Can batch multiple Lots together and report Client specific
Batch QC: Matrix Spike and Sample Duplicate
Met Prep: GFAA Spike Level and Standard Spike Level
Sb spike at 100 ppb
Pb - Spike Solids at 100 ppb, spike Waters at 20
- Perform analytical spike when matrix spike is swamped with
indigenous analyte.
********** GC/MS ORGANICS **********
Can batch multiple Lots together and report Client specific
Batch QC MS and MSD
Clouseau observations for:
- Dilutions and elevated detection limits
- Unknown aldol condensate in TIC report
USE GPC for sample extracts as required.
Put client ID on all raw data
Client requires qualifiers
********** GC/HPLC **********
Can batch multiple Lots together and report Client specific
Batch QC
USE GPC for sample extracts as required.
Client requires Qualifiers for both GC and HPLC
- No averaging of CCV compounds
- Include Form Xs in data packages
********** Radiochemistry **********
Rad Chem with no tracers require MS (spk <= 100 pCi/L or g)
and sample duplicate ..... Gamma does not require MS.
Radium 228 requires MS and Sample Duplicate
Radiological: "Do not include control chart, standard certif
certificates, or calibration data as part of data package"
- Tracers need to be added at a level to yield at least 400
- Report 1 sigma uncertainty
Gross Alpha/Beta requires a total digestion.

STL ST. LOUIS
Thursday, April 21, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3165SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3165S

ANALYSIS TYPE: RAD

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58842	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58843	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58844	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58845	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58846	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3165S

Relinquished By:	Date	Time	Received By:	Date	Time
PRINTED NAME SIGNATURE	4/21/05	2:30	Steve Wilson	4.22.05	0910
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		

Received for DISPOSAL By:	Date	Time	Remarks:
PRINTED NAME SIGNATURE			

LOT# FSD200356

Thursday, April 21, 2005

cwf 6163

REQUEST NUMBER: 3165S

ANALYSIS TYPE: RAD

Los Alamos
NATIONAL LABORATORY

ATTN: Mark Loeb
Severn Trent Laboraties, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

SHIP DATE: 04/21/2005
REPORT DUE: 05/06/2005
TURN AROUND REQ'D: 15

RAD SCREENING: NOT REQ
COMMENTS:

These samples are on:

LANL Request Number: 3165S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
EPA:901.1	RE73-05-58842	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58842	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58842	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58842	2	S	04/20/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58843	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58843	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58843	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58843	2	S	04/20/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58844	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58844	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58844	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58844	2	S	04/20/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58845	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58845	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58845	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58845	2	S	04/20/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58846	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58846	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58846	2	S	04/20/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58846	2	S	04/20/2005	Analyze for Gross A/B/G also

Final Page of REQUEST NUMBER 3165S

SEVERN TRENT **STL**

Lot No: F5D220356

Condition Upon Receipt Form
St. Louis Laboratory

Client: LANL

Quote No: 44975

Shipper/No: FedX 6954 7789 2939

Date: 4.22.05 Time: 0900

Initiated by: SH

COC/RFA Numbers: Below

Condition/Variance (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	(Y) N	Sample received in undamaged condition?	7.	(Y) N	Sample received with Chain of Custody?
2.	(Y) N	Sample received within 4C ± 2C* ?	8.	(Y) N	Chain of Custody matches sample IDs on containers?
		Record ____	9.	(Y) N N/A	Custody seal received intact on cooler.?
3.	(Y) N N/A	Sample received with proper pH [1]?	10.	(Y) N N/A	Custody seal tamper evident on cooler.?
4.	Y N	If N/A - Was pH taken by original STL lab?	11.	(Y) N N/A	Custody seal on bottles received intact?
5.	(Y) N	Sample received in proper containers?	12.	(Y) N N/A	Custody seal tamper evident on bottles?
6.	(Y) N	Sample volume sufficient for analysis?	13.	Y N	Was CUR (equivalent) rec' d from original STL lab?

* Temperature Variance Does Not Affect the Following Analyses: ____

[1]For DOE-AL (Pantex, LANL, Sandia) sites, verify pH all containers received, except for VOA, TOX, and soils.

Notes: 2861SC, 3163SC thru 68SC.

Chain 3163SC - containers received were different than C-O-C.

Corrective Action:

☐ Client's Name: ____ Informed by: ____ By: ____

☐ Sample(s) processed "as is". ____

☐ Sample(s) on hold until: ____ If released, notify: ____

Project Management Review: Terry Loring Date: 4/25/05

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED
IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIALS AND THE DATE NEXT TO THAT ITEM

Thursday, April 21, 2005

REQUEST NUMBER: 3164S

ANALYSIS TYPE: INORGANIC

Los Alamos
NATIONAL LABORATORY

ATTN: Mark Loeb
Severn Trent Laboraties, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

These samples are on:

SHIP DATE: 04/21/2005
REPORT DUE: 05/06/2005
TURN AROUND REQ'D: 15

LANL Request Number: 3164S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

RAD SCREENING: NOT REQ
COMMENTS: NOTE: For sample RE73-05-58879 do full waste classification testing.

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:6010B	RE73-05-58842	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58842	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58842	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58842	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58843	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58843	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58843	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58843	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58844	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58844	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58844	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58844	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58845	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58845	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58845	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58845	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58846	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58846	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58846	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58846	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:1020A	RE73-05-58879	6	S	04/20/2005	
SW-846:7.3	RE73-05-58879	6	S	04/20/2005	
SW-846:9045C	RE73-05-58879	6	S	04/20/2005	
SW-846:9095	RE73-05-58879	6	S	04/20/2005	

Final Page of REQUEST NUMBER 3164S

Thursday, April 21, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3164SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3164S

ANALYSIS TYPE: INORGANIC

ATTN: Mark Loeb
Severn Trent Laboraties, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58842	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58843	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58844	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58845	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58846	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58879	6	500 ML POLY	RC+RS+ph+PF+I	ICE	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3164S

Relinquished By:	Date	Time	Received By:	Date	Time
PRINTED NAME SIGNATURE	4/21/05	2:30	PRINTED NAME SIGNATURE		
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		

Received for DISPOSAL By:	Date	Time	Remarks:
PRINTED NAME SIGNATURE			

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218682 Event ID:4802

SAMPLE ID: RE73-05-58878

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
1	8260B	125 SEPTUM AMBER GLASS	Ice	Y		

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.20.05 1520	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4.20.05 1520	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218862 **Event ID:**4802

SAMPLE ID: RE73-05-58844 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4-23-05 1523	**RELINQUISHED BY** (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 42305 1520	**RECEIVED BY** (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218852 Event ID:4802

SAMPLE ID: RE73-05-58843 ER TEAM LEADER: Terry Rust DESTINATION: SMO

SAMPLE ORDER MATRIX: Soil FIELD TEAM LEADER: John Tymkowych DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): K Rheault (signature):	Date/Time: 4.20.05 1520	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/20/05 1520	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

EVENT NAME: TA-73 Ash Pile

FIELD CHAIN OF CUSTODY

COC ID: 218872 Event ID:4802

SAMPLE ID: RE73-05-58845
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4-20-05 1530	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/20/05 1530	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218882 **Event ID:**4802

SAMPLE ID: RE73-05-58846 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	**Date/Time:** 4.20.05 1530	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4/20/05 1530	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218842 Event ID:4802

SAMPLE ID: RE73-05-58842

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4-23-05 1530	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/25/05 1530	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 219172 Event ID:4802

SAMPLE ID: RE73-05-58879
SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	8260B	~~125 SEPTUM AMBER GLASS~~ 2"x6" SS TUBE	Ice	Y		
1	8270C+8082	250 ML AMBER GLASS	Ice	Y		
3	8290	125 ML GLASS	Ice	Y		
4	8290	125 ML GLASS	Ice	Y		
5	PSDA+PROP-DBS	~~PROTEGGRE BAG~~ 2"x6" SS TUBE	Ice	Y		
6	RC+RS+ph+PF+I	500 ML POLY	Ice	Y		

RELINQUISHED BY (printed name): (signature):	Date/Time: 4-20-05 1530	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/20/05 1530	RECEIVED BY (printed name): (signature):	Date/Time:

Rad Screening Data Release Form

The Following samples were received at the Field Support Facility (FSF) without screening data (list sample number):

These samples will not be shipped until radiological screening data documentation arrives at the FSF. I understand that it is my responsibility to ensure this information arrives at the FSF in a timely manner. If holding times are missed because screening data does not arrive, I will pick up the samples.

The following samples do not require rad screening data for the reasons stated (list sample numbers):

~~SAMPLES WERE~~ ALL

RE73-05 - 58842
- 58843
- 58844
- 58845
- 58846
- 58879
- 58878

Reason: SAMPLES WERE SCREENED IN THE FIELD
READINGS RECORDED ON SCL.

Print Last Name LEONARD Signature [signature] Date 4/20/05

Data-Validation Cover Sheet

☐ Rejected Data

Section I

Request Number: 3164S Validation Date: 01-Jun-05 Lab Code: STL- St Louis

Contract Laboratory Name: _____

Validator: Clifford Deiner Organization: ENV-ECR

Analytical Suite (check all that apply):
☐ Volatile Organics
☐ Semivolatile Organics
☐ Organochlorine Pesticides/Polychlorinated Biphenyls
☐ High Explosives
☒ Inorganics
☐ Radiochemistry

Other (describe): Reactive cyanide, Reactive sulfide, Free liquid, Flashpoint, pH

Section II—Completeness Check

Yes	No	n/a	(check one)	Yes	No	n/a	(check one)
☒	☐	☐	1. Chain-of-custody form(s)	☒	☐	☐	6. Raw/BSS data
☒	☐	☐	2. Case narrative	☒	☐	☐	7. Quality control forms
☒	☐	☐	3. Sample result forms	☒	☐	☐	8. Quantitation reports
☐	☐	☒	4. Sample chromatograms	☐	☐	☒	9. TICs forms
☐	☐	☒	5. Standard chromatograms	☐	☐	☒	10. TICs mass spectra

Identify any samples in the assigned Request Number that are missing:

_____ _____ _____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____ _____ _____

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

TCLP_Metals:

Blank contamination was present for Ba and Zn in water. The 5x rule was applied and no sample results were qualified. B-flagged sample results were qualified J,l1. All other QCs met acceptance limits.

Metals:

Numerous analytes were present in the blank. The 5x rule was applied and some Se sample results were qualified U,l4a. The matrix spike recoveries for Sb, Na, and Hg were greater than acceptance limits and sample results were qualified J+,l3c. Numerous other analyte matrix spike reocoveries were greater than acceptance limits, however, the sample results were at least 4x greater than the spike level and thus not qualified. All other QCs met acceptance limits.

Reactive cyanide, Reactive sulfide, Free liquid, Flashpoint, pH:

All applicable QCs met acceptance limits.

Validator's signature: Clifford Deiner Date: 6-1-05

(Attach additional comment sheets as necessary.)

Inorganic Data-Validation Checklist

Yes	No	(check one)	Assign qualifier listed below if criteria = Yes: Detected analyte	Assign qualifier listed below if criteria = Yes: Undetected analyte
☐	☒	1. The preparation Blank (PB), ICB, or CCB was not analyzed with the samples.	R, I4	R, I4
☒	☐	2. The analyte detected in PB and the sample result for the analyte ≤5x the amount in PB.	U, I4a	N/A
☐	☒	3. The initial or continuing calibration verification (ICV or CCV) was not analyzed with the samples.	R, I16	R, I16
☐	☒	4. The ICV or CCV recovery is >UAL.	R, I16a	N/A
☐	☒	5. The ICV or CCV recovery is >UWL and ≤UAL.	J+, I16b	N/A
☐	☒	6. The ICV or CCV recovery is <LWL but ≥LAL.	J-, I16c	UJ, I16c
☐	☒	7. The ICV or CCV recovery is <LAL.	R, I16d	R, I16d
☐	☒	8. For ICPMS and CN analyses: The correlation coefficient is <0.995?	R, I16e	R,I16e
☐	☒	9. The interference check sample (ICS) was not analyzed with the samples.	R, I7	R, I7
☐	☒	10. The ICS recovery is >120%.	J+, I7a	N/A
☐	☒	11. The ICS recovery is ≥50% and <80%.	J-, I7b	UJ, I7b
☐	☒	12. The ICS recovery is <50%.	R, I7c	R, I7d
☐	☒	13. The MS was not analyzed with the sample without explanation.	R, I3	R, I3
☐	☒	14. Insufficient sample volume for MS analyses was provided.	J, I3a	UJ, I3a
☐	☒	15. An MS analyses was performed on a non-LANL sample.	J, I3b	UJ, I3b
☒	☐	16. The MS recovery was > 150%*.	J+, I3c	UJ, I3c
☐	☒	17. The MS recovery was >125% and ≤150%.	J+, I3d	N/A
☐	☒	18. The MS recovery was ≥30% and <75%.	J-, I3e	UJ, I3e
☐	☒	19. The MS recovery was <30%.	R, I3f	R, I3f
☐	☒	20. A duplicate sample was not analyzed without explanation.	J, I10	UJ, I10
☐	☒	21. Insufficient sample volume for duplicate sample analysis was provided.	J, I10a	UJ, I10a
☐	☒	22. A duplicate sample was performed on a non-LANL sample.	J, I10b	UJ, I10b
☐	☒	23. Both the sample and the duplicate are ≥5x RL, and the RPD is >20 for water samples or >35 for soil samples	J, I10c	UJ, I10c
☐	☒	24. Either the sample or Dup is ≥5x the RL and the sample and Dup results are not within ±1x the RL for water or ±2x the RL for soil.	J, I10d	UJ, I10d
☐	☒	25. The LCS was not analyzed with the samples.	R, I6	R, I6
☐	☒	26. The LCS recovery was >the UWL.	J+, I6a	N/A
☐	☒	27. The LCS recovery was ≥LAL and <LWL.	J-, I6b	UJ, I6b
☐	☒	28. The LCS recovery was <the LAL.	R, I6c	R, I6c
☐	☒	29. The serial dilution sample was not analyzed with the samples.	J, I18	UJ, I18
☐	☒	30. The serial dilution sample was performed on a non-LANL sample.	J, I18a	UJ, I18a
☐	☒	31. The RPD between the sample and the serial dilution sample is >10, and the undiluted sample result is >50x the RL(>100x for ICPMS).	J, I18b	UJ, I18b
☐	☒	32. The sample was analyzed past the appropriate hold time.	J-, I9	UJ, I9
☐	☒	33. The sample was analyzed past double the hold time.	J-, I9a	R, I9a
☒	☐	34. B-flagged sample results are present.	J, I1	N/A
☐	☒	35. Other obvious data quality issues are identified.	__, I19	__, I19

UD

Thursday, April 21, 2005

REQUEST NUMBER: 3164S

Los Alamos
NATIONAL LABORATORY

cur 6193

ANALYSIS TYPE: INORGANIC

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

SHIP DATE: 04/21/2005
REPORT DUE: 05/06/2005
TURN AROUND REQ'D: 15

These samples are on:

LANL Request Number: 3164S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

RAD SCREENING: NOT REQ
COMMENTS: NOTE: For sample RE73-05-58879 do full waste classification testing.

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:6010B	RE73-05-58842	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58842	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58842	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58842	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58843	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58843	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58843	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58843	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58844	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58844	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58844	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58844	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58845	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58845	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58845	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58845	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58846	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58846	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58846	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58846	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:1020A	RE73-05-58879	6	S	04/20/2005	
SW-846:7.3	RE73-05-58879	6	S	04/20/2005	
SW-846:9045C	RE73-05-58879	6	S	04/20/2005	
SW-846:9095	RE73-05-58879	6	S	04/20/2005	

Final Page of REQUEST NUMBER 3164S

STL ST LOUIS

Thursday, April 21, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3164SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3164S

ANALYSIS TYPE: INORGANIC

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58842	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58843	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58844	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58845	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58846	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58879	6	500 ML POLY	RC+RS+ph+PF+I	ICE	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3164S Page 1

Relinquished By:		Date	Time	Received By:		Date	Time
		4/21/05	2:30	Sue Wilcox	Sue Wilcox	42205	0900
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

PRINTED NAME SIGNATURE

LOT #R5D220357

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58879

General Chemistry

Lot-Sample #...: F5D220357-006 Work Order #...: G817H Matrix.....: SOLID
Date Sampled...: 04/20/05 Date Received..: 04/22/05
% Moisture.....: 22

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	8.3		No Units	SW846 9045A	04/25/05	5115278
		Dilution Factor: 1		Analysis Time..: 00:00		
Flashpoint	>60.0		deg C	SW846 1010	04/25/05	5115320
		Dilution Factor: 1		Analysis Time..: 00:00		
Paint Filter Test	PAS,S		No Units	SW846 9095	04/25/05	5115319
		Dilution Factor: 1		Analysis Time..: 00:00		
Percent Moisture	22.3	0.10	%	MCAWW 160.3 MOD	04/25-04/26/05	5115139
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Cyanide	0.14	0.064	mg/kg	SW846 7.3.3	05/04-05/06/05	5126308
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Sulfide	ND	5.7	mg/kg	SW846 7.3.4	05/04-05/06/05	5126399
		Dilution Factor: 1		Analysis Time..: 00:00		

NOTE(S):

RL Reporting Limit

S The result was determined using the Method of Standard Additions (MSA).

Results and reporting limits have been adjusted for dry weight.

CP

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58842

TCLP Metals

Lot-Sample #...: F5D220357-001 **Matrix.....: SOLID**
Date Sampled...: 04/20/05 **Date Received..: 04/22/05**
Leach Date.....: 05/02/05 **Leach Batch #..: P512209**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5123215						
Mercury	ND	10	ug/L	SW846 7470A	05/03/05	G817C1CA
		Dilution Factor: 1		Analysis Time..: 17:27		
Prep Batch #...: 5124228						
Arsenic	ND	500	ug/L	SW846 6010B	05/04-05/06/05	G817C1A3
		Dilution Factor: 1		Analysis Time..: 13:29		
Barium	**2330**	**500**	**ug/L**	**SW846 6010B**	**05/04-05/06/05**	**G817C1A4**
		Dilution Factor: 1		Analysis Time..: 13:29		
Cadmium	**71.9**	**25**	**ug/L**	**SW846 6010B**	**05/04-05/06/05**	**G817C1A5**
		Dilution Factor: 1		Analysis Time..: 13:29		
Chromium	ND	50	ug/L	SW846 6010B	05/04-05/06/05	G817C1A6
		Dilution Factor: 1		Analysis Time..: 13:29		
Lead	**817**	**250**	**ug/L**	**SW846 6010B**	**05/04-05/06/05**	**G817C1A7**
		Dilution Factor: 1		Analysis Time..: 13:29		
Silver	ND	50	ug/L	SW846 6010B	05/04-05/06/05	G817C1A8
		Dilution Factor: 1		Analysis Time..: 13:29		
Selenium	ND	500	ug/L	SW846 6010B	05/04-05/06/05	G817C1A9
		Dilution Factor: 1		Analysis Time..: 13:29		
Zinc	**30600 N**	**100**	**ug/L**	**SW846 6010B**	**05/04-05/06/05**	**G817C1EJ**
		Dilution Factor: 1		Analysis Time..: 13:29		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58843

TCLP Metals

Lot-Sample #...: F5D220357-002
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05 **Matrix.....:** SOLID
Leach Date.....: 05/02/05 **Leach Batch #..:** P512209

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5123215						
Mercury	ND	10	ug/L	SW846 7470A	05/03/05	G817D1CA
		Dilution Factor: 1		Analysis Time..: 17:37		
Prep Batch #...: 5124228						
Arsenic	ND	500	ug/L	SW846 6010B	05/04-05/06/05	G817D1AE
		Dilution Factor: 1		Analysis Time..: 13:42		
Barium	**1450**	**500**	**ug/L**	**SW846 6010B**	**05/04-05/06/05**	**G817D1AF**
		Dilution Factor: 1		Analysis Time..: 13:42		
Cadmium	**63.2**	**25**	**ug/L**	**SW846 6010B**	**05/04-05/06/05**	**G817D1AG**
		Dilution Factor: 1		Analysis Time..: 13:42		
Chromium	ND	50	ug/L	SW846 6010B	05/04-05/06/05	G817D1AH
		Dilution Factor: 1		Analysis Time..: 13:42		
Lead	**779**	**250**	**ug/L**	**SW846 6010B**	**05/04-05/06/05**	**G817D1AJ**
		Dilution Factor: 1		Analysis Time..: 13:42		
Silver	ND	50	ug/L	SW846 6010B	05/04-05/06/05	G817D1AK
		Dilution Factor: 1		Analysis Time..: 13:42		
Selenium	ND	500	ug/L	SW846 6010B	05/04-05/06/05	G817D1AL
		Dilution Factor: 1		Analysis Time..: 13:42		
Zinc	**42500 N**	**100**	**ug/L**	**SW846 6010B**	**05/04-05/06/05**	**G817D1CE**
		Dilution Factor: 1		Analysis Time..: 13:42		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58844

TCLP Metals

Lot-Sample #...: F5D220357-003 **Matrix.....: SOLID**
Date Sampled...: 04/20/05 **Date Received..: 04/22/05**
Leach Date.....: 05/02/05 **Leach Batch #..: P512209**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5123215						
Mercury J.I1	**0.37 B**	**10** Dilution Factor: 1	**ug/L**	**SW846 7470A** Analysis Time..: 17:39	**05/03/05**	**G817E1CA**
Prep Batch #...: 5124228						
Arsenic	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 13:46	05/04-05/06/05	G817E1AE
Barium	**1970**	**500** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 13:46	**05/04-05/06/05**	**G817E1AF**
Cadmium J.I1	**21.4 B**	**25** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 13:46	**05/04-05/06/05**	**G817E1AG**
Chromium	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 13:46	05/04-05/06/05	G817E1AH
Lead	**960**	**250** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 13:46	**05/04-05/06/05**	**G817E1AJ**
Silver	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 13:46	05/04-05/06/05	G817E1AK
Selenium	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 13:46	05/04-05/06/05	G817E1AL
Zinc	**12500 N**	**100** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 13:46	**05/04-05/06/05**	**G817E1CE**

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

B Estimated result. Result is less than RL.

N Spiked analyte recovery is outside stated control limits.

G

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58845

TCLP Metals

Lot-Sample #...: F5D220357-004
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05 **Matrix.....:** SOLID
Leach Date.....: 05/02/05 **Leach Batch #..:** P512209

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5123215						
Mercury	ND	10 Dilution Factor: 1	ug/L	SW846 7470A Analysis Time..: 17:42	05/03/05	G817F1CA
Prep Batch #...: 5124228						
Arsenic	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 14:00	05/04-05/06/05	G817F1AE
Barium	**2480**	**500** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 14:00	**05/04-05/06/05**	**G817F1AF**
Cadmium J.L1	**18.4 B**	**25** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 14:00	**05/04-05/06/05**	**G817F1AG**
Chromium	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 14:00	05/04-05/06/05	G817F1AH
Lead	**638**	**250** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 14:00	**05/04-05/06/05**	**G817F1AJ**
Silver	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 14:00	05/04-05/06/05	G817F1AK
Selenium	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 14:00	05/04-05/06/05	G817F1AL
Zinc	**10200 N**	**100** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 14:00	**05/04-05/06/05**	**G817F1CK**

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

B Estimated result. Result is less than RL.

N Spiked analyte recovery is outside stated control limits.

CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58846

TCLP Metals

Lot-Sample #...: F5D220357-005
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05
Leach Date.....: 05/02/05 **Leach Batch #..:** P512209
Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5123215						
Mercury	ND	10 Dilution Factor: 1	ug/L	SW846 7470A Analysis Time..: 17:47	05/03/05	G817G1CA
Prep Batch #...: 5124228						
Arsenic	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 14:04	05/04-05/06/05	G817G1AE
Barium	**1700**	**500** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 14:04	**05/04-05/06/05**	**G817G1AF**
Cadmium	**48.1**	**25** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 14:04	**05/04-05/06/05**	**G817G1AG**
Chromium	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 14:04	05/04-05/06/05	G817G1AH
Lead	**1330**	**250** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 14:04	**05/04-05/06/05**	**G817G1AJ**
Silver	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 14:04	05/04-05/06/05	G817G1AK
Selenium	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 14:04	05/04-05/06/05	G817G1AL
Zinc	**22000 N**	**100** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 14:04	**05/04-05/06/05**	**G817G1CK**

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RK73-05-58842

TOTAL Metals

Lot-Sample #...: F5D220357-001
Date Sampled...: 04/20/05 Date Received..: 04/22/05 Matrix.....: SOLID
% Moisture.....: 20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	63.0 N*	0.5	mg/kg	SW846 6020	04/27-04/28/05	G817C1AA
		Dilution Factor: 10		Analysis Time..: 02:39		
Arsenic	29.8	0.5	mg/kg	SW846 6020	04/27-04/28/05	G817C1AC
		Dilution Factor: 10		Analysis Time..: 02:39		
Barium	1790 N	5	mg/kg	SW846 6020	04/27-04/28/05	G817C1AD
		Dilution Factor: 10		Analysis Time..: 02:39		
Beryllium	0.33	0.25	mg/kg	SW846 6020	04/27-04/28/05	G817C1AE
		Dilution Factor: 10		Analysis Time..: 02:39		
Cadmium	17.7 N	0.63	mg/kg	SW846 6020	04/27-04/28/05	G817C1AF
		Dilution Factor: 10		Analysis Time..: 02:39		
Cobalt	16.4	1.3	mg/kg	SW846 6020	04/27-04/28/05	G817C1AG
		Dilution Factor: 10		Analysis Time..: 02:39		
Chromium	85.9 N	1.3	mg/kg	SW846 6020	04/27-04/28/05	G817C1AH
		Dilution Factor: 10		Analysis Time..: 02:39		
Copper	2710 N	6.3	mg/kg	SW846 6020	04/27-04/28/05	G817C1AJ
		Dilution Factor: 50		Analysis Time..: 19:05		
Manganese	1580 N	2.5	mg/kg	SW846 6020	04/27-04/28/05	G817C1AK
		Dilution Factor: 10		Analysis Time..: 02:39		
Nickel	234	0.5	mg/kg	SW846 6020	04/27-04/28/05	G817C1AL
		Dilution Factor: 10		Analysis Time..: 02:39		
Lead	3430 N*	3.8	mg/kg	SW846 6020	04/27-04/28/05	G817C1AM
		Dilution Factor: 50		Analysis Time..: 19:05		
Antimony	32.6 N*	0.5	mg/kg	SW846 6020	04/27-04/28/05	G817C1AN
		Dilution Factor: 10		Analysis Time..: 02:39		
Selenium	2.2	0.5	mg/kg	SW846 6020	04/27-04/28/05	G817C1AP
		Dilution Factor: 10		Analysis Time..: 02:39		

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58842

TOTAL Metals

Lot-Sample #...: F5D220357-001 **Matrix.....: SOLID**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.25	mg/kg	SW846 6020	04/27-04/28/05	G817C1AQ
		Dilution Factor: 10		Analysis Time..: 02:39		
Vanadium	16.6	2.5	mg/kg	SW846 6020	04/27-04/28/05	G817C1AR
		Dilution Factor: 10		Analysis Time..: 02:39		
Prep Batch #...: 5115193						
Calcium	29100 N	314	mg/kg	SW846 6010B	04/27/05	G817C1AT
		Dilution Factor: 1		Analysis Time..: 16:59		
Iron	82400 N	62.8	mg/kg	SW846 6010B	04/27-04/28/05	G817C1AU
		Dilution Factor: 5		Analysis Time..: 09:29		
Potassium	3780	377	mg/kg	SW846 6010B	04/27/05	G817C1AV
		Dilution Factor: 1		Analysis Time..: 16:59		
Magnesium	3300	314	mg/kg	SW846 6010B	04/27/05	G817C1AW
		Dilution Factor: 1		Analysis Time..: 16:59		
Sodium J+.c3c	4170 N*	314	mg/kg	SW846 6010B	04/27/05	G817C1AX
		Dilution Factor: 1		Analysis Time..: 16:59		
Zinc	6460 N*	12.6	mg/kg	SW846 6010B	04/27-04/28/05	G817C1A0
		Dilution Factor: 5		Analysis Time..: 09:29		
Aluminum	17100 N*	12.6	mg/kg	SW846 6010B	04/27/05	G817C1A1
		Dilution Factor: 1		Analysis Time..: 16:59		
Prep Batch #...: 5122051						
Mercury J+.c3c; ~~J-.c18~~ UD 6-1-05	0.79 N*E	0.042	mg/kg	SW846 7471A	05/02/05	G817C1A2
		Dilution Factor: 1		Analysis Time..: 13:47		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

CN

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58843

TOTAL Metals

Lot-Sample #...: F5D220357-002 **Matrix.....: SOLID**
Date Sampled...: 04/20/05 **Date Received..: 04/22/05**
% Moisture.....: 19

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	**59.6 N***	**0.5** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:54	**04/27-04/28/05**	**G817D1AM**
Arsenic	**56.4**	**0.5** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:54	**04/27-04/28/05**	**G817D1AN**
Barium	**1710 N**	**5** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:54	**04/27-04/28/05**	**G817D1AP**
Beryllium	**0.26**	**0.25** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:54	**04/27-04/28/05**	**G817D1AQ**
Cadmium	**16.8 N**	**0.62** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:54	**04/27-04/28/05**	**G817D1AR**
Cobalt	**16.8**	**1.2** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:54	**04/27-04/28/05**	**G817D1AT**
Chromium	**72.2 N**	**1.2** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:54	**04/27-04/28/05**	**G817D1AU**
Copper	**2360 N**	**1.2** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 19:15	**04/27-04/28/05**	**G817D1AV**
Manganese	**1770 N**	**2.5** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:54	**04/27-04/28/05**	**G817D1AW**
Nickel	**189**	**0.5** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:54	**04/27-04/28/05**	**G817D1AX**
Lead	**2220 N***	**0.74** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:54	**04/27-04/28/05**	**G817D1A0**
Antimony JMZ3c	**27.3 N***	**0.5** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:54	**04/27-04/28/05**	**G817D1A1**
Selenium	**1.6**	**0.5** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:54	**04/27-04/28/05**	**G817D1A2**

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CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RR73-05-58843

TOTAL Metals

Lot-Sample #...: F5D220357-002 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	0.31	0.25	mg/kg	SW846 6020	04/27-04/28/05	G817D1A3
		Dilution Factor: 10		Analysis Time..: 02:54		
Vanadium	15.3	2.5	mg/kg	SW846 6020	04/27-04/28/05	G817D1A4
		Dilution Factor: 10		Analysis Time..: 02:54		
Prep Batch #...: 5115193						
Calcium	36400 N	309	mg/kg	SW846 6010B	04/27/05	G817D1A5
		Dilution Factor: 1		Analysis Time..: 17:12		
Iron	74100 N	61.8	mg/kg	SW846 6010B	04/27-04/28/05	G817D1A6
		Dilution Factor: 5		Analysis Time..: 09:42		
Potassium	4470	371	mg/kg	SW846 6010B	04/27/05	G817D1A7
		Dilution Factor: 1		Analysis Time..: 17:12		
Magnesium	4560	309	mg/kg	SW846 6010B	04/27/05	G817D1A8
		Dilution Factor: 1		Analysis Time..: 17:12		
Sodium JT.23c	4930 N*	309	mg/kg	SW846 6010B	04/27/05	G817D1A9
		Dilution Factor: 1		Analysis Time..: 17:12		
Zinc	6120 N*	2.5	mg/kg	SW846 6010B	04/27/05	G817D1AA
		Dilution Factor: 1		Analysis Time..: 17:12		
Aluminum	19200 N*	12.4	mg/kg	SW846 6010B	04/27/05	G817D1AC
		Dilution Factor: 1		Analysis Time..: 17:12		
Prep Batch #...: 5122051						
Mercury JT.23c	1.5 N*E	0.041	mg/kg	SW846 7471A	05/02/05	G817D1AD
		Dilution Factor: 1		Analysis Time..: 14:00		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

GD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58844

TOTAL Metals

Lot-Sample #...: F5D220357-003
Date Sampled...: 04/20/05 Date Received..: 04/22/05 Matrix.....: SOLID
% Moisture.....: 28

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	73.3 N*	0.56 Dilution Factor: 10	mg/kg	SW846 6020 Analysis Time..: 02:59	04/27-04/28/05	G817E1AM
Arsenic	45.1	0.56 Dilution Factor: 10	mg/kg	SW846 6020 Analysis Time..: 02:59	04/27-04/28/05	G817E1AN
Barium	1990 N	5.6 Dilution Factor: 10	mg/kg	SW846 6020 Analysis Time..: 02:59	04/27-04/28/05	G817E1AP
Beryllium J,I1	0.25 B	0.28 Dilution Factor: 10	mg/kg	SW846 6020 Analysis Time..: 02:59	04/27-04/28/05	G817E1AQ
Cadmium	5.9 N	0.69 Dilution Factor: 10	mg/kg	SW846 6020 Analysis Time..: 02:59	04/27-04/28/05	G817E1AR
Cobalt	16.5	1.4 Dilution Factor: 10	mg/kg	SW846 6020 Analysis Time..: 02:59	04/27-04/28/05	G817E1AT
Chromium	67.7 N	1.4 Dilution Factor: 10	mg/kg	SW846 6020 Analysis Time..: 02:59	04/27-04/28/05	G817E1AU
Copper	536 N	1.4 Dilution Factor: 10	mg/kg	SW846 6020 Analysis Time..: 19:19	04/27-04/28/05	G817E1AV
Manganese	974 N	2.8 Dilution Factor: 10	mg/kg	SW846 6020 Analysis Time..: 02:59	04/27-04/28/05	G817E1AW
Nickel	115	0.56 Dilution Factor: 10	mg/kg	SW846 6020 Analysis Time..: 02:59	04/27-04/28/05	G817E1AX
Lead	2990 N*	0.83 Dilution Factor: 10	mg/kg	SW846 6020 Analysis Time..: 02:59	04/27-04/28/05	G817E1A0
Antimony J1,I3c	17.2 N*	0.56 Dilution Factor: 10	mg/kg	SW846 6020 Analysis Time..: 02:59	04/27-04/28/05	G817E1A1
Selenium U,I4a	0.93	0.56 Dilution Factor: 10	mg/kg	SW846 6020 Analysis Time..: 02:59	04/27-04/28/05	G817E1A2

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CJ

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58844

TOTAL Metals

Lot-Sample #...: F5D220357-003 **Matrix.....: SOLID**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.28	mg/kg	SW846 6020	04/27-04/28/05	G817E1A3
		Dilution Factor: 10		Analysis Time..: 02:59		
Vanadium	**10.1**	**2.8**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817E1A4**
		Dilution Factor: 10		Analysis Time..: 02:59		
Prep Batch #...: 5115193						
Calcium	**19200 N**	**347**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G817E1A5**
		Dilution Factor: 1		Analysis Time..: 17:17		
Iron	**128000 N**	**69.4**	**mg/kg**	**SW846 6010B**	**04/27-04/28/05**	**G817E1A6**
		Dilution Factor: 5		Analysis Time..: 09:46		
Potassium	**1390**	**416**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G817E1A7**
		Dilution Factor: 1		Analysis Time..: 17:17		
Magnesium	**1540**	**347**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G817E1A8**
		Dilution Factor: 1		Analysis Time..: 17:17		
Sodium JH 23C	**1170 N***	**347**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G817E1A9**
		Dilution Factor: 1		Analysis Time..: 17:17		
Zinc	**2040 N***	**2.8**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G817E1AA**
		Dilution Factor: 1		Analysis Time..: 17:17		
Aluminum	**9640 N***	**13.9**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G817E1AC**
		Dilution Factor: 1		Analysis Time..: 17:17		
Prep Batch #...: 5122051						
Mercury JH 23C	**0.70 N*E**	**0.046**	**mg/kg**	**SW846 7471A**	**05/02/05**	**G817E1AD**
		Dilution Factor: 1		Analysis Time..: 14:02		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

B Estimated result. Result is less than RL.

CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58845

TOTAL Metals

Lot-Sample #...: F5D220357-004
Date Sampled...: 04/20/05 Date Received..: 04/22/05 Matrix.....: SOLID
% Moisture.....: 25

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	78.2 N*	0.53	mg/kg	SW846 6020	04/27-04/28/05	G817F1AM
		Dilution Factor: 10		Analysis Time..: 03:17		
Arsenic	138	0.53	mg/kg	SW846 6020	04/27-04/28/05	G817F1AN
		Dilution Factor: 10		Analysis Time..: 03:17		
Barium	1940 N	5.3	mg/kg	SW846 6020	04/27-04/28/05	G817F1AP
		Dilution Factor: 10		Analysis Time..: 03:17		
Beryllium J, I1	0.25 B	0.27	mg/kg	SW846 6020	04/27-04/28/05	G817F1AQ
		Dilution Factor: 10		Analysis Time..: 03:17		
Cadmium	6.0 N	0.67	mg/kg	SW846 6020	04/27-04/28/05	G817F1AR
		Dilution Factor: 10		Analysis Time..: 03:17		
Cobalt	40.2	1.3	mg/kg	SW846 6020	04/27-04/28/05	G817F1AT
		Dilution Factor: 10		Analysis Time..: 03:17		
Chromium	116 N	1.3	mg/kg	SW846 6020	04/27-04/28/05	G817F1AU
		Dilution Factor: 10		Analysis Time..: 03:17		
Copper	1640 N	1.3	mg/kg	SW846 6020	04/27-04/28/05	G817F1AV
		Dilution Factor: 10		Analysis Time..: 19:22		
Manganese	2010 N	2.7	mg/kg	SW846 6020	04/27-04/28/05	G817F1AW
		Dilution Factor: 10		Analysis Time..: 03:17		
Nickel	215	0.53	mg/kg	SW846 6020	04/27-04/28/05	G817F1AX
		Dilution Factor: 10		Analysis Time..: 03:17		
Lead	3690 N*	0.8	mg/kg	SW846 6020	04/27-04/28/05	G817F1A0
		Dilution Factor: 10		Analysis Time..: 03:17		
Antimony J+, Z3c	64.7 N*	0.53	mg/kg	SW846 6020	04/27-04/28/05	G817F1A1
		Dilution Factor: 10		Analysis Time..: 03:17		
Selenium U, I4a	0.55	0.53	mg/kg	SW846 6020	04/27-04/28/05	G817F1A2
		Dilution Factor: 10		Analysis Time..: 03:17		

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CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58845

TOTAL Metals

Lot-Sample #...: F5D220357-004 **Matrix.....: SOLID**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.27	mg/kg	SW846 6020	04/27-04/28/05	G817F1A3
		Dilution Factor: 10		Analysis Time..: 03:17		
Vanadium	**8.6**	**2.7**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817F1A4**
		Dilution Factor: 10		Analysis Time..: 03:17		
Prep Batch #...: 5115193						
Calcium	**20800 N**	**8330**	**mg/kg**	**SW846 6010B**	**04/27-04/28/05**	**G817F1A5**
		Dilution Factor: 25		Analysis Time..: 09:51		
Iron	**325000 N**	**333**	**mg/kg**	**SW846 6010B**	**04/27-04/28/05**	**G817F1A6**
		Dilution Factor: 25		Analysis Time..: 09:51		
Potassium	ND	10000	mg/kg	SW846 6010B	04/27-04/28/05	G817F1A7
		Dilution Factor: 25		Analysis Time..: 09:51		
Magnesium J,I1	**2370 B**	**8330**	**mg/kg**	**SW846 6010B**	**04/27-04/28/05**	**G817F1A8**
		Dilution Factor: 25		Analysis Time..: 09:51		
Sodium JT-E3C	**1280 N***	**333**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G817F1A9**
		Dilution Factor: 1		Analysis Time..: 17:21		
Zinc	**1710 N***	**66.7**	**mg/kg**	**SW846 6010B**	**04/27-04/28/05**	**G817F1AA**
		Dilution Factor: 25		Analysis Time..: 09:51		
Aluminum	**12700 N***	**333**	**mg/kg**	**SW846 6010B**	**04/27-04/28/05**	**G817F1AC**
		Dilution Factor: 25		Analysis Time..: 09:51		
Prep Batch #...: 5122051						
Mercury JT-E3C	**0.50 N*E**	**0.045**	**mg/kg**	**SW846 7471A**	**05/02/05**	**G817F1AD**
		Dilution Factor: 1		Analysis Time..: 14:04		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

B Estimated result. Result is less than RL.

CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58846

TOTAL Metals

Lot-Sample #...: F5D220357-005
Date Sampled...: 04/20/05 **Date Received..: 04/22/05** **Matrix.....: SOLID**
% Moisture.....: 21

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	**102 N***	**0.51**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817G1AM**
		Dilution Factor: 10		Analysis Time..: 03:22		
Arsenic	**21.0**	**0.51**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817G1AN**
		Dilution Factor: 10		Analysis Time..: 03:22		
Barium	**3330 N**	**5.1**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817G1AP**
		Dilution Factor: 10		Analysis Time..: 03:22		
Beryllium J, I1	**0.17 B**	**0.25**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817G1AQ**
		Dilution Factor: 10		Analysis Time..: 03:22		
Cadmium	**7.2 N**	**0.63**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817G1AR**
		Dilution Factor: 10		Analysis Time..: 03:22		
Cobalt	**18.6**	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817G1AT**
		Dilution Factor: 10		Analysis Time..: 03:22		
Chromium	**66.5 N**	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817G1AU**
		Dilution Factor: 10		Analysis Time..: 03:22		
Copper	**2750 N**	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817G1AV**
		Dilution Factor: 10		Analysis Time..: 19:25		
Manganese	**1130 N**	**2.5**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817G1AW**
		Dilution Factor: 10		Analysis Time..: 03:22		
Nickel	**792**	**0.51**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817G1AX**
		Dilution Factor: 10		Analysis Time..: 03:22		
Lead	**1740 N***	**0.76**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817G1A0**
		Dilution Factor: 10		Analysis Time..: 03:22		
Antimony J+, E3c	**29.8 N***	**0.51**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817G1A1**
		Dilution Factor: 10		Analysis Time..: 03:22		
Selenium U, E4a	**0.85**	**0.51**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817G1A2**
		Dilution Factor: 10		Analysis Time..: 03:22		

(Continued on next page)

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58846

TOTAL Metals

Lot-Sample #...: F5D220357-005 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.25	mg/kg	SW846 6020	04/27-04/28/05	G817G1A3
		Dilution Factor: 10		Analysis Time..: 03:22		
Vanadium	14.8	2.5	mg/kg	SW846 6020	04/27-04/28/05	G817G1A4
		Dilution Factor: 10		Analysis Time..: 03:22		
Prep Batch #...: 5115193						
Calcium	126000 N	1580	mg/kg	SW846 6010B	04/27-04/28/05	G817G1A5
		Dilution Factor: 5		Analysis Time..: 10:04		
Iron	103000 N	63.3	mg/kg	SW846 6010B	04/27-04/28/05	G817G1A6
		Dilution Factor: 5		Analysis Time..: 10:04		
Potassium	2170	380	mg/kg	SW846 6010B	04/27/05	G817G1A7
		Dilution Factor: 1		Analysis Time..: 17:25		
Magnesium	2880	316	mg/kg	SW846 6010B	04/27/05	G817G1A8
		Dilution Factor: 1		Analysis Time..: 17:25		
Sodium JH 3c	3370 N*	316	mg/kg	SW846 6010B	04/27/05	G817G1A9
		Dilution Factor: 1		Analysis Time..: 17:25		
Zinc	2190 N*	2.5	mg/kg	SW846 6010B	04/27/05	G817G1AA
		Dilution Factor: 1		Analysis Time..: 17:25		
Aluminum	14400 N*	12.7	mg/kg	SW846 6010B	04/27/05	G817G1AC
		Dilution Factor: 1		Analysis Time..: 17:25		
Prep Batch #...: 5122051						
Mercury JH 3c	0.33 N*E	0.042	mg/kg	SW846 7471A	05/02/05	G817G1AD
		Dilution Factor: 1		Analysis Time..: 14:06		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

B Estimated result. Result is less than RL.

DATA VALIDATION COVER SHEET (Example)

SECTION I.

REQUEST NUMBER: 31645 COST CODE: _____

VALIDATION DATE: _____

LAB NAME: STL LAB CODE: _____

VALIDATOR: _____ ORGANIZATION: _____

ANALYTICAL SUITE:
___ VOLATILES
___ SEMIVOLATILES
___ PESTICIDES/AROCLORS
___ HIGH EXPLOSIVES
___ INORGANICS
___ RADIOCHEMISTRY

OTHER (describe) _____

SECTION II. COMPLETENESS CHECKLIST

Item	Present? (Y/N/NA)	Item	Present? (Y/N/NA)
1. COC form(s)		2. Case Narrative	
3. Sample Results		4. Sample Chromatograms	
5. Standard Chromatograms		6. Quantitation Reports	
7. QC Forms			

Identify any samples in the assigned Request Number that are missing:

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

Comments: include information about requests to the laboratory and agreed upon date of resolution and lab contact: (Attach additional comment sheets as necessary)

_____

_____

_____

Signature/1st validation: _____ Date/1st validation: _____

Signature/2nd validation: _____ Date/2nd validation: _____

SEVERN TRENT STL

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Tel: 314 298 8566 Fax: 314 298 8757
www.stl-inc.com

RECD MAY 24 2005

ANALYTICAL REPORT

PROJECT NO. 31648

Los Alamos Non-Rad

Lot #: F5D220357

Joylene Valdez or Keith Greene

Los Alamos National Laboratory
SMO TA-00 Bldg 1237
DP: 03U; MS: 707
Los Alamos, NM 87545

SEVERN TRENT LABORATORIES, INC.

Elaine Wildfox

Ed Kao
Project Manager

May 12, 2005

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METALS 597
WET CHEMISTRY 891
CLIENT ANALYSIS SUMMARY 932
CLIENT CHAIN OF CUSTODY 940

TOTAL # OF PAGES IN PACKAGE 942

Case Narrative
LOT NUMBER: **F5D220357**
LANL Request Number: **3164S**

This report contains the analytical results for the six samples received under chain of custody number by STL St. Louis on April 22, 2005. These samples are associated with your Los Alamos Non-Rad project.

All applicable quality control procedures met method-specified acceptance criteria except as noted on the following page.

This report is incomplete without the case narrative. All chemical analysis results are based upon dry weight correction as required per the statement of work. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances

Sample Receiving

Samples were received at 4.0 +/- 2°C. No problems were noted at the time of sample receipt.

Metals Method 6020A

QC Batch: 5115187
The Method Blank shows contamination below the reporting limit for Arsenic, Manganese, Selenium, and Vanadium.

The LCS is in control for spike compounds.

The Batch QC Matrix Spike and Matrix Spike Duplicate was performed on F5D220357-001. The MS (MSD) recovery for Silver, Barium, Cadmium, Chromium, Copper, Manganese, and Lead is outside the established QC limits. The said analyte concentration in the original sample is greater than 4 times the amount spiked, making % recovery information ineffective.

The MS (MSD) recovery for Antimony is outside the established QC limits. A matrix interference is physically evident in the sample. Method performance is demonstrated by acceptable LCS recovery.

The MS/MSD Lead and Silver RPD is greater than 30% potentially indicating matrix interference or lack of sample homogeneity.

The sample was analyzed at a dilution due to the presence of matrix interferences and high concentrations of target and non-target analytes. The reporting limit has been adjusted for the dilution.

Metals Method 6010B

QC Batch: 5115193
The Method Blank shows contamination below the reporting limit for Calcium, Iron, Magnesium, and Aluminum.

The LCS is in control for spike compounds.

The MS (MSD) recovery for Aluminum, Iron and Calcium is outside the established QC limits. The said analyte concentration in the original sample is greater than 4 times the amount spiked, making % recovery information ineffective. Method performance is demonstrated by acceptable LCS recovery. No further action is required.

The target analyte concentration for Zinc inherent to the sample is such that the MS and/or MSD spike concentrations are above the instrument's linear range. MS/MSD results are considered estimated values. The said analyte concentration in the original sample is greater than 4 times the amount spiked, making % recovery information ineffective. Method performance is demonstrated by acceptable LCS recovery.

The MS (MSD) recovery for Sodium is outside the established QC limits. A matrix interference is physically evident in the sample. Method performance is demonstrated by acceptable LCS recovery.

The percent difference between the original sample concentration and the calculated serial dilution result for Calcium and Magnesium is greater than 10% indicating a potential matrix interference. All associated samples are flagged accordingly.

Mercury Method 7471A

QC Batch: 5122051

The Method Blank shows no contamination below the reporting limit.

The LCS is in control for spike compounds.

The Batch QC Matrix Spike and Matrix Spike Duplicate was performed on F5D220357-001. The MS (MSD) recovery for Mercury is outside the established QC limits. A matrix interference is physically evident in the sample. Method performance is demonstrated by acceptable LCS recovery.

The MS/MSD Mercury RPD is greater than 30% potentially indicating matrix interference or lack of sample homogeneity.

TCLP Metals Method 6010B

QC Batch: 5124228

The Method Blank shows contamination below the reporting limit for Barium and Zinc.

The LCS is in control for spike compounds.

The Batch QC Matrix Spike and Matrix Spike Duplicate was performed on F5D210354-001. The MS (MSD) recovery for Zinc is outside the established QC limits. The said analyte concentration in the original sample is greater than 4 times the amount spiked, making % recovery information ineffective. Method performance is demonstrated by acceptable LCS recovery.

TCLP Mercury Method 7470A

QC Batch: 5123215

The Method Blank shows no contamination below the reporting limit.

The LCS is in control for spike compounds.

The Batch QC Matrix Spike and Matrix Spike Duplicate was performed on F5D220357-001. The Matrix Spike and Matrix Spike Duplicate recovery and RPD value are inside stated limits.

Reactive Cyanide Method 7.3.3

QC Batch: 5126308

The Method Blank shows no contamination below the reporting limit.

The LCS is in control for spike compounds.

The Batch QC Matrix Spike and Duplicate was performed on F5D220357-006. The Matrix Spike recovery is outside stated limits. Reactive Cyanide is a semi-qualitative analysis. The RPD value is outside stated limits.

Reactive Sulfide Method 7.3.4

QC Batch: 5126399

The Method Blank shows no contamination below the reporting limit.

The LCS is in control for spike compounds.

The Batch QC Matrix Spike and Duplicate was performed on F5D220357-006. The Matrix Spike recovery is outside stated limits. Reactive Sulfide is a semi-qualitative analysis. The RPD value is inside stated limits.

pH Method 9045C

QC Batch: 5115278

The LCS is in control.

The Batch QC Duplicate was performed on F5D220357-006. The RPD value is inside stated limits.

Flashpoint Method 1010

QC Batch: 5115320

The LCS is in control.

The Batch QC Duplicate was performed on F5D220357-006. The RPD value is inside stated limits.

Paint Filter Method 9095

QC Batch: 5115319

The Batch QC Duplicate was performed on F5D210354-006. The RPD value is inside stated limits.

I certify that this data is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the signature on the front page, has authorized release of the data contained in this hardcopy.

METHODS SUMMARY

F5D220357

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
pH Non-Aqueous	SW846 9045A	
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 1311/3010
ICP-MS (6020)	SW846 6020	
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A	SW846 1311/7470
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Paint Filter Test	SW846 9095	SW846 9095
Pensky-Martens Method for Determining Ignitability	SW846 1010	SW846 1010
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
Reactive Cyanide	SW846 7.3.3	SW846 7.3.3
Reactive Sulfide	SW846 7.3.4	SW846 7.3.4

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

F5D220357

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
G817C	001	RE73-05-58842	04/20/05	
G817D	002	RE73-05-58843	04/20/05	
G817E	003	RE73-05-58844	04/20/05	
G817F	004	RE73-05-58845	04/20/05	
G817G	005	RE73-05-58846	04/20/05	
G817H	006	RE73-05-58879	04/20/05	

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

QC DATA ASSOCIATION SUMMARY

F5D220357

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SOLID	SW846 6020		5115187	5115143
	SOLID	SW846 7470A	P512209	5123215	5123145
	SOLID	SW846 7471A		5122051	5122033
	SOLID	SW846 6010B		5115193	5115168
	SOLID	SW846 6010B	P512209	5124228	5124145
	SOLID	MCAWW 160.3 MOD		5115139	5115275
002	SOLID	SW846 6020		5115187	5115143
	SOLID	SW846 7470A	P512209	5123215	5123145
	SOLID	SW846 7471A		5122051	5122033
	SOLID	SW846 6010B		5115193	5115168
	SOLID	SW846 6010B	P512209	5124228	5124145
	SOLID	MCAWW 160.3 MOD		5115139	5115275
003	SOLID	SW846 6020		5115187	5115143
	SOLID	SW846 7470A	P512209	5123215	5123145
	SOLID	SW846 7471A		5122051	5122033
	SOLID	SW846 6010B		5115193	5115168
	SOLID	SW846 6010B	P512209	5124228	5124145
	SOLID	MCAWW 160.3 MOD		5115139	5115275
004	SOLID	SW846 6020		5115187	5115143
	SOLID	SW846 7470A	P512209	5123215	5123145
	SOLID	SW846 7471A		5122051	5122033
	SOLID	SW846 6010B		5115193	5115168
	SOLID	SW846 6010B	P512209	5124228	5124145
	SOLID	MCAWW 160.3 MOD		5115139	5115275
005	SOLID	SW846 6020		5115187	5115143
	SOLID	SW846 7470A	P512209	5123215	5123145
	SOLID	SW846 7471A		5122051	5122033
	SOLID	SW846 6010B		5115193	5115168
	SOLID	SW846 6010B	P512209	5124228	5124145
	SOLID	MCAWW 160.3 MOD		5115139	5115275
006	SOLID	SW846 1010		5115320	5115262
	SOLID	SW846 9045A		5115278	5115243
	SOLID	SW846 9095		5115319	5115260
	SOLID	SW846 7.3.3		5126308	5126202
	SOLID	SW846 7.3.4		5126399	5126256
	SOLID	MCAWW 160.3 MOD		5115139	5115275

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: EK73-05-58842

TOTAL Metals

Lot-Sample #...: F5D220357-001 **Matrix.....:** SOLID
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05
% Moisture.....: 20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	**63.0 M***	**0.5**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817C1AA**
		Dilution Factor: 10		Analysis Time..: 02:39		
Arsenic	**29.8**	**0.5**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817C1AC**
		Dilution Factor: 10		Analysis Time..: 02:39		
Barium	**1790 M**	**5**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817C1AD**
		Dilution Factor: 10		Analysis Time..: 02:39		
Beryllium	**0.33**	**0.25**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817C1AE**
		Dilution Factor: 10		Analysis Time..: 02:39		
Cadmium	**17.7 M**	**0.63**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817C1AF**
		Dilution Factor: 10		Analysis Time..: 02:39		
Cobalt	**16.4**	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817C1AG**
		Dilution Factor: 10		Analysis Time..: 02:39		
Chromium	**85.9 M**	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817C1AH**
		Dilution Factor: 10		Analysis Time..: 02:39		
Copper	**2710 M**	**6.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817C1AJ**
		Dilution Factor: 50		Analysis Time..: 19:05		
Manganese	**1580 M**	**2.5**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817C1AK**
		Dilution Factor: 10		Analysis Time..: 02:39		
Nickel	**234**	**0.5**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817C1AL**
		Dilution Factor: 10		Analysis Time..: 02:39		
Lead	**3430 M***	**3.8**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817C1AM**
		Dilution Factor: 50		Analysis Time..: 19:05		
Antimony	**32.6 M***	**0.5**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817C1AN**
		Dilution Factor: 10		Analysis Time..: 02:39		
Selenium	**2.2**	**0.5**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817C1AP**
		Dilution Factor: 10		Analysis Time..: 02:39		

(Continued on next page)

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58842

TOTAL Metals

Lot-Sample #...: F5D220357-001 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.25	mg/kg	SW846 6020	04/27-04/28/05	G817C1AQ
		Dilution Factor: 10		Analysis Time..: 02:39		
Vanadium	**16.6**	**2.5**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817C1AR**
		Dilution Factor: 10		Analysis Time..: 02:39		
Prep Batch #...: 5115193						
Calcium	**29100 N**	**314**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G817C1AT**
		Dilution Factor: 1		Analysis Time..: 16:59		
Iron	**82400 N**	**62.8**	**mg/kg**	**SW846 6010B**	**04/27-04/28/05**	**G817C1AU**
		Dilution Factor: 5		Analysis Time..: 09:29		
Potassium	**3780**	**377**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G817C1AV**
		Dilution Factor: 1		Analysis Time..: 16:59		
Magnesium	**3300**	**314**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G817C1AW**
		Dilution Factor: 1		Analysis Time..: 16:59		
Sodium	**4170 N***	**314**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G817C1AX**
		Dilution Factor: 1		Analysis Time..: 16:59		
Zinc	**6460 N***	**12.6**	**mg/kg**	**SW846 6010B**	**04/27-04/28/05**	**G817C1A0**
		Dilution Factor: 5		Analysis Time..: 09:29		
Aluminum	**17100 N***	**12.6**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G817C1A1**
		Dilution Factor: 1		Analysis Time..: 16:59		
Prep Batch #...: 5122051						
Mercury	**0.79 N*E**	**0.042**	**mg/kg**	**SW846 7471A**	**05/02/05**	**G817C1A2**
		Dilution Factor: 1		Analysis Time..: 13:47		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RF73-05-58842

TCLP Metals

Lot-Sample #...: F5D220357-001 **Matrix.....:** SOLID
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05
Leach Date.....: 05/02/05 **Leach Batch #..:** P512209

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5123215						
Mercury	ND	10	ug/L	SW846 7470A	05/03/05	G817C1CA
		Dilution Factor: 1		Analysis Time..: 17:27		
Prep Batch #...: 5124228						
Arsenic	ND	500	ug/L	SW846 6010B	05/04-05/06/05	G817C1A3
		Dilution Factor: 1		Analysis Time..: 13:29		
Barium	**2330**	**500**	**ug/L**	**SW846 6010B**	**05/04-05/06/05**	**G817C1A4**
		Dilution Factor: 1		Analysis Time..: 13:29		
Cadmium	**71.9**	**25**	**ug/L**	**SW846 6010B**	**05/04-05/06/05**	**G817C1A5**
		Dilution Factor: 1		Analysis Time..: 13:29		
Chromium	ND	50	ug/L	SW846 6010B	05/04-05/06/05	G817C1A6
		Dilution Factor: 1		Analysis Time..: 13:29		
Lead	**817**	**250**	**ug/L**	**SW846 6010B**	**05/04-05/06/05**	**G817C1A7**
		Dilution Factor: 1		Analysis Time..: 13:29		
Silver	ND	50	ug/L	SW846 6010B	05/04-05/06/05	G817C1A8
		Dilution Factor: 1		Analysis Time..: 13:29		
Selenium	ND	500	ug/L	SW846 6010B	05/04-05/06/05	G817C1A9
		Dilution Factor: 1		Analysis Time..: 13:29		
Zinc	**30600 N**	**100**	**ug/L**	**SW846 6010B**	**05/04-05/06/05**	**G817C1EJ**
		Dilution Factor: 1		Analysis Time..: 13:29		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RR73-05-58842

General Chemistry

Lot-Sample #...: P5D220357-001 **Work Order #...:** G817C **Matrix.....:** SOLID
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05
% Moisture.....: 20

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	20.3	0.10	%	MCAWW 160.3 MOD	04/25-04/26/05	5115139

Dilution Factor: 1 Analysis Time..: 00:00

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58843

TOTAL Metals

Lot-Sample #...: F5D220357-002 **Matrix.....:** SOLID
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05
% Moisture.....: 19

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	**59.6 N***	**0.5**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817D1AM**
		Dilution Factor: 10		Analysis Time..: 02:54		
Arsenic	**56.4**	**0.5**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817D1AN**
		Dilution Factor: 10		Analysis Time..: 02:54		
Barium	**1710 N**	**5**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817D1AP**
		Dilution Factor: 10		Analysis Time..: 02:54		
Beryllium	**0.26**	**0.25**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817D1AQ**
		Dilution Factor: 10		Analysis Time..: 02:54		
Cadmium	**16.8 N**	**0.62**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817D1AR**
		Dilution Factor: 10		Analysis Time..: 02:54		
Cobalt	**16.8**	**1.2**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817D1AT**
		Dilution Factor: 10		Analysis Time..: 02:54		
Chromium	**72.2 N**	**1.2**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817D1AU**
		Dilution Factor: 10		Analysis Time..: 02:54		
Copper	**2360 N**	**1.2**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817D1AV**
		Dilution Factor: 10		Analysis Time..: 19:15		
Manganese	**1770 N**	**2.5**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817D1AW**
		Dilution Factor: 10		Analysis Time..: 02:54		
Nickel	**189**	**0.5**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817D1AX**
		Dilution Factor: 10		Analysis Time..: 02:54		
Lead	**2220 N***	**0.74**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817D1A0**
		Dilution Factor: 10		Analysis Time..: 02:54		
Antimony	**27.3 N***	**0.5**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817D1A1**
		Dilution Factor: 10		Analysis Time..: 02:54		
Selenium	**1.6**	**0.5**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817D1A2**
		Dilution Factor: 10		Analysis Time..: 02:54		

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58843

TOTAL Metals

Lot-Sample #...: F5D220357-002 **Matrix.....: SOLID**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	**0.31**	**0.25**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817D1A3**
		Dilution Factor: 10		Analysis Time..: 02:54		
Vanadium	**15.3**	**2.5**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817D1A4**
		Dilution Factor: 10		Analysis Time..: 02:54		
Prep Batch #...: 5115193						
Calcium	**36400 N**	**309**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G817D1A5**
		Dilution Factor: 1		Analysis Time..: 17:12		
Iron	**74100 N**	**61.8**	**mg/kg**	**SW846 6010B**	**04/27-04/28/05**	**G817D1A6**
		Dilution Factor: 5		Analysis Time..: 09:42		
Potassium	**4470**	**371**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G817D1A7**
		Dilution Factor: 1		Analysis Time..: 17:12		
Magnesium	**4560**	**309**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G817D1A8**
		Dilution Factor: 1		Analysis Time..: 17:12		
Sodium	**4930 N***	**309**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G817D1A9**
		Dilution Factor: 1		Analysis Time..: 17:12		
Zinc	**6120 N***	**2.5**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G817D1AA**
		Dilution Factor: 1		Analysis Time..: 17:12		
Aluminum	**19200 N***	**12.4**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G817D1AC**
		Dilution Factor: 1		Analysis Time..: 17:12		
Prep Batch #...: 5122051						
Mercury	**1.5 N*E**	**0.041**	**mg/kg**	**SW846 7471A**	**05/02/05**	**G817D1AD**
		Dilution Factor: 1		Analysis Time..: 14:00		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58843

TCLP Metals

Lot-Sample #...: F5D220357-002 **Matrix.....:** SOLID
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05
Leach Date.....: 05/02/05 **Leach Batch #..:** P512209

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5123215						
Mercury	ND	10	ug/L	SW846 7470A	05/03/05	G817D1CA
		Dilution Factor: 1		Analysis Time..: 17:37		
Prep Batch #...: 5124228						
Arsenic	ND	500	ug/L	SW846 6010B	05/04-05/06/05	G817D1AE
		Dilution Factor: 1		Analysis Time..: 13:42		
Barium	**1450**	**500**	**ug/L**	**SW846 6010B**	**05/04-05/06/05**	**G817D1AF**
		Dilution Factor: 1		Analysis Time..: 13:42		
Cadmium	**63.2**	**25**	**ug/L**	**SW846 6010B**	**05/04-05/06/05**	**G817D1AG**
		Dilution Factor: 1		Analysis Time..: 13:42		
Chromium	ND	50	ug/L	SW846 6010B	05/04-05/06/05	G817D1AH
		Dilution Factor: 1		Analysis Time..: 13:42		
Lead	**779**	**250**	**ug/L**	**SW846 6010B**	**05/04-05/06/05**	**G817D1AJ**
		Dilution Factor: 1		Analysis Time..: 13:42		
Silver	ND	50	ug/L	SW846 6010B	05/04-05/06/05	G817D1AK
		Dilution Factor: 1		Analysis Time..: 13:42		
Selenium	ND	500	ug/L	SW846 6010B	05/04-05/06/05	G817D1AL
		Dilution Factor: 1		Analysis Time..: 13:42		
Zinc	**42500 N**	**100**	**ug/L**	**SW846 6010B**	**05/04-05/06/05**	**G817D1CE**
		Dilution Factor: 1		Analysis Time..: 13:42		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RR73-05-58843

General Chemistry

Lot-Sample #...: F5D220357-002 **Work Order #...:** G817D **Matrix.....:** SOLID
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05
% Moisture.....: 19

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	19.1	0.10	%	MCAWW 160.3 MOD	04/25-04/26/05	5115139

Dilution Factor: 1 Analysis Time..: 00:00

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58844

TOTAL Metals

Lot-Sample #...: F5D220357-003 **Matrix.....:** SOLID
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05
% Moisture.....: 28

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	**73.3 N***	**0.56**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817E1AM**
		Dilution Factor: 10		Analysis Time..: 02:59		
Arsenic	**45.1**	**0.56**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817E1AN**
		Dilution Factor: 10		Analysis Time..: 02:59		
Barium	**1990 N**	**5.6**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817E1AP**
		Dilution Factor: 10		Analysis Time..: 02:59		
Beryllium	**0.25 B**	**0.28**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817E1AQ**
		Dilution Factor: 10		Analysis Time..: 02:59		
Cadmium	**5.9 N**	**0.69**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817E1AR**
		Dilution Factor: 10		Analysis Time..: 02:59		
Cobalt	**16.5**	**1.4**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817E1AT**
		Dilution Factor: 10		Analysis Time..: 02:59		
Chromium	**67.7 N**	**1.4**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817E1AU**
		Dilution Factor: 10		Analysis Time..: 02:59		
Copper	**536 N**	**1.4**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817E1AV**
		Dilution Factor: 10		Analysis Time..: 19:19		
Manganese	**974 N**	**2.8**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817E1AW**
		Dilution Factor: 10		Analysis Time..: 02:59		
Nickel	**115**	**0.56**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817E1AX**
		Dilution Factor: 10		Analysis Time..: 02:59		
Lead	**2990 N***	**0.83**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817E1A0**
		Dilution Factor: 10		Analysis Time..: 02:59		
Antimony	**17.2 N***	**0.56**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817E1A1**
		Dilution Factor: 10		Analysis Time..: 02:59		
Selenium	**0.93**	**0.56**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817E1A2**
		Dilution Factor: 10		Analysis Time..: 02:59		

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58844

TOTAL Metals

Lot-Sample #...: F5D220357-003 **Matrix.....: SOLID**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.28	mg/kg	SW846 6020	04/27-04/28/05	G817E1A3
		Dilution Factor: 10		Analysis Time..: 02:59		
Vanadium	**10.1**	**2.8**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817E1A4**
		Dilution Factor: 10		Analysis Time..: 02:59		
Prep Batch #...: 5115193						
Calcium	**19200 N**	**347**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G817E1A5**
		Dilution Factor: 1		Analysis Time..: 17:17		
Iron	**128000 N**	**69.4**	**mg/kg**	**SW846 6010B**	**04/27-04/28/05**	**G817E1A6**
		Dilution Factor: 5		Analysis Time..: 09:46		
Potassium	**1390**	**416**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G817E1A7**
		Dilution Factor: 1		Analysis Time..: 17:17		
Magnesium	**1540**	**347**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G817E1A8**
		Dilution Factor: 1		Analysis Time..: 17:17		
Sodium	**1170 N***	**347**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G817E1A9**
		Dilution Factor: 1		Analysis Time..: 17:17		
Zinc	**2040 N***	**2.8**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G817E1AA**
		Dilution Factor: 1		Analysis Time..: 17:17		
Aluminum	**9640 N***	**13.9**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G817E1AC**
		Dilution Factor: 1		Analysis Time..: 17:17		
Prep Batch #...: 5122051						
Mercury	**0.70 N*E**	**0.046**	**mg/kg**	**SW846 7471A**	**05/02/05**	**G817E1AD**
		Dilution Factor: 1		Analysis Time..: 14:02		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

B Estimated result. Result is less than RL.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58844

TCLP Metals

Lot-Sample #...: F5D220357-003 **Matrix.....:** SOLID
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05
Leach Date.....: 05/02/05 **Leach Batch #..:** P512209

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5123215						
Mercury	**0.37 B**	**10**	**ug/L**	**SW846 7470A**	**05/03/05**	**G817E1CA**
		Dilution Factor: 1		Analysis Time..: 17:39		
Prep Batch #...: 5124228						
Arsenic	ND	500	ug/L	SW846 6010B	05/04-05/06/05	G817E1AE
		Dilution Factor: 1		Analysis Time..: 13:46		
Barium	**1970**	**500**	**ug/L**	**SW846 6010B**	**05/04-05/06/05**	**G817E1AF**
		Dilution Factor: 1		Analysis Time..: 13:46		
Cadmium	**21.4 B**	**25**	**ug/L**	**SW846 6010B**	**05/04-05/06/05**	**G817E1AG**
		Dilution Factor: 1		Analysis Time..: 13:46		
Chromium	ND	50	ug/L	SW846 6010B	05/04-05/06/05	G817E1AH
		Dilution Factor: 1		Analysis Time..: 13:46		
Lead	**960**	**250**	**ug/L**	**SW846 6010B**	**05/04-05/06/05**	**G817E1AJ**
		Dilution Factor: 1		Analysis Time..: 13:46		
Silver	ND	50	ug/L	SW846 6010B	05/04-05/06/05	G817E1AK
		Dilution Factor: 1		Analysis Time..: 13:46		
Selenium	ND	500	ug/L	SW846 6010B	05/04-05/06/05	G817E1AL
		Dilution Factor: 1		Analysis Time..: 13:46		
Zinc	**12500 N**	**100**	**ug/L**	**SW846 6010B**	**05/04-05/06/05**	**G817E1CE**
		Dilution Factor: 1		Analysis Time..: 13:46		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

B Estimated result. Result is less than RL.

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58844

General Chemistry

Lot-Sample #...: F5D220357-003 **Work Order #...:** G817E **Matrix.....:** SOLID
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05
% Moisture.....: 28

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	27.9	0.10	%	MCAWW 160.3 MOD	04/25-04/26/05	5115139

Dilution Factor: 1 Analysis Time..: 00:00

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58845

TOTAL Metals

Lot-Sample #...: F5D220357-004 **Matrix.....:** SOLID
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05
% Moisture.....: 25

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	**78.2 N***	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817F1AM**
		Dilution Factor: 10		Analysis Time..: 03:17		
Arsenic	**138**	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817F1AN**
		Dilution Factor: 10		Analysis Time..: 03:17		
Barium	**1940 N**	**5.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817F1AP**
		Dilution Factor: 10		Analysis Time..: 03:17		
Beryllium	**0.25 B**	**0.27**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817F1AQ**
		Dilution Factor: 10		Analysis Time..: 03:17		
Cadmium	**6.0 N**	**0.67**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817F1AR**
		Dilution Factor: 10		Analysis Time..: 03:17		
Cobalt	**40.2**	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817F1AT**
		Dilution Factor: 10		Analysis Time..: 03:17		
Chromium	**116 N**	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817F1AU**
		Dilution Factor: 10		Analysis Time..: 03:17		
Copper	**1640 N**	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817F1AV**
		Dilution Factor: 10		Analysis Time..: 19:22		
Manganese	**2010 N**	**2.7**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817F1AW**
		Dilution Factor: 10		Analysis Time..: 03:17		
Nickel	**215**	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817F1AX**
		Dilution Factor: 10		Analysis Time..: 03:17		
Lead	**3690 N***	**0.8**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817F1A0**
		Dilution Factor: 10		Analysis Time..: 03:17		
Antimony	**64.7 N***	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817F1A1**
		Dilution Factor: 10		Analysis Time..: 03:17		
Selenium	**0.55**	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817F1A2**
		Dilution Factor: 10		Analysis Time..: 03:17		

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58845

TOTAL Metals

Lot-Sample #...: F5D220357-004 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.27	mg/kg	SW846 6020	04/27-04/28/05	G817F1A3
		Dilution Factor: 10		Analysis Time..: 03:17		
Vanadium	**8.6**	**2.7**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817F1A4**
		Dilution Factor: 10		Analysis Time..: 03:17		
Prep Batch #...: 5115193						
Calcium	**20800 N**	**8330**	**mg/kg**	**SW846 6010B**	**04/27-04/28/05**	**G817F1A5**
		Dilution Factor: 25		Analysis Time..: 09:51		
Iron	**325000 N**	**333**	**mg/kg**	**SW846 6010B**	**04/27-04/28/05**	**G817F1A6**
		Dilution Factor: 25		Analysis Time..: 09:51		
Potassium	ND	10000	mg/kg	SW846 6010B	04/27-04/28/05	G817F1A7
		Dilution Factor: 25		Analysis Time..: 09:51		
Magnesium	**2370 B**	**8330**	**mg/kg**	**SW846 6010B**	**04/27-04/28/05**	**G817F1A8**
		Dilution Factor: 25		Analysis Time..: 09:51		
Sodium	**1280 N***	**333**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G817F1A9**
		Dilution Factor: 1		Analysis Time..: 17:21		
Zinc	**1710 N***	**66.7**	**mg/kg**	**SW846 6010B**	**04/27-04/28/05**	**G817F1AA**
		Dilution Factor: 25		Analysis Time..: 09:51		
Aluminum	**12700 N***	**333**	**mg/kg**	**SW846 6010B**	**04/27-04/28/05**	**G817F1AC**
		Dilution Factor: 25		Analysis Time..: 09:51		
Prep Batch #...: 5122051						
Mercury	**0.50 N*E**	**0.045**	**mg/kg**	**SW846 7471A**	**05/02/05**	**G817F1AD**
		Dilution Factor: 1		Analysis Time..: 14:04		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

B Estimated result. Result is less than RL.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58845

TCLP Metals

Lot-Sample #...: F5D220357-004 **Matrix.....:** SOLID
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05
Leach Date.....: 05/02/05 **Leach Batch #..:** P512209

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5123215						
Mercury	ND	10 Dilution Factor: 1	ug/L	SW846 7470A Analysis Time..: 17:42	05/03/05	G817F1CA
Prep Batch #...: 5124228						
Arsenic	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 14:00	05/04-05/06/05	G817F1AE
Barium	**2480**	**500** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 14:00	**05/04-05/06/05**	**G817F1AF**
Cadmium	**18.4 B**	**25** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 14:00	**05/04-05/06/05**	**G817F1AG**
Chromium	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 14:00	05/04-05/06/05	G817F1AH
Lead	**638**	**250** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 14:00	**05/04-05/06/05**	**G817F1AJ**
Silver	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 14:00	05/04-05/06/05	G817F1AK
Selenium	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 14:00	05/04-05/06/05	G817F1AL
Zinc	**10200 N**	**100** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 14:00	**05/04-05/06/05**	**G817F1CE**

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

B Estimated result. Result is less than RL.

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58845

General Chemistry

Lot-Sample #...: F5D220357-004 **Work Order #...:** G817F **Matrix.....:** SOLID
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05
% Moisture.....: 25

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	25.0	0.10	%	MCAWW 160.3 MOD	04/25-04/26/05	5115139

Dilution Factor: 1 Analysis Time..: 00:00

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58846

TOTAL Metals

Lot-Sample #...: F5D220357-005 **Matrix.....:** SOLID
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05
% Moisture.....: 21

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	**102 N***	**0.51**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817G1AM**
		Dilution Factor: 10		Analysis Time..: 03:22		
Arsenic	**21.0**	**0.51**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817G1AN**
		Dilution Factor: 10		Analysis Time..: 03:22		
Barium	**3330 N**	**5.1**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817G1AP**
		Dilution Factor: 10		Analysis Time..: 03:22		
Beryllium	**0.17 B**	**0.25**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817G1AQ**
		Dilution Factor: 10		Analysis Time..: 03:22		
Cadmium	**7.2 N**	**0.63**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817G1AR**
		Dilution Factor: 10		Analysis Time..: 03:22		
Cobalt	**18.6**	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817G1AT**
		Dilution Factor: 10		Analysis Time..: 03:22		
Chromium	**66.5 N**	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817G1AU**
		Dilution Factor: 10		Analysis Time..: 03:22		
Copper	**2750 N**	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817G1AV**
		Dilution Factor: 10		Analysis Time..: 19:25		
Manganese	**1130 N**	**2.5**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817G1AW**
		Dilution Factor: 10		Analysis Time..: 03:22		
Nickel	**792**	**0.51**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817G1AX**
		Dilution Factor: 10		Analysis Time..: 03:22		
Lead	**1740 N***	**0.76**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817G1A0**
		Dilution Factor: 10		Analysis Time..: 03:22		
Antimony	**29.8 N***	**0.51**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817G1A1**
		Dilution Factor: 10		Analysis Time..: 03:22		
Selenium	**0.85**	**0.51**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G817G1A2**
		Dilution Factor: 10		Analysis Time..: 03:22		

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58846

TOTAL Metals

Lot-Sample #...: F5D220357-005 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.25	mg/kg	SW846 6020	04/27-04/28/05	G817G1A3
		Dilution Factor: 10		Analysis Time..: 03:22		
Vanadium	14.8	2.5	mg/kg	SW846 6020	04/27-04/28/05	G817G1A4
		Dilution Factor: 10		Analysis Time..: 03:22		
Prep Batch #...: 5115193						
Calcium	126000 N	1580	mg/kg	SW846 6010B	04/27-04/28/05	G817G1A5
		Dilution Factor: 5		Analysis Time..: 10:04		
Iron	103000 N	63.3	mg/kg	SW846 6010B	04/27-04/28/05	G817G1A6
		Dilution Factor: 5		Analysis Time..: 10:04		
Potassium	2170	380	mg/kg	SW846 6010B	04/27/05	G817G1A7
		Dilution Factor: 1		Analysis Time..: 17:25		
Magnesium	2880	316	mg/kg	SW846 6010B	04/27/05	G817G1A8
		Dilution Factor: 1		Analysis Time..: 17:25		
Sodium	3370 N*	316	mg/kg	SW846 6010B	04/27/05	G817G1A9
		Dilution Factor: 1		Analysis Time..: 17:25		
Zinc	2190 N*	2.5	mg/kg	SW846 6010B	04/27/05	G817G1AA
		Dilution Factor: 1		Analysis Time..: 17:25		
Aluminum	14400 N*	12.7	mg/kg	SW846 6010B	04/27/05	G817G1AC
		Dilution Factor: 1		Analysis Time..: 17:25		
Prep Batch #...: 5122051						
Mercury	0.33 N*E	0.042	mg/kg	SW846 7471A	05/02/05	G817G1AD
		Dilution Factor: 1		Analysis Time..: 14:06		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

B Estimated result. Result is less than RL.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58846

TCLP Metals

Lot-Sample #...: F5D220357-005 **Matrix.....:** SOLID
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05
Leach Date.....: 05/02/05 **Leach Batch #..:** P512209

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5123215						
Mercury	ND	10	ug/L	SW846 7470A	05/03/05	G817G1CA
		Dilution Factor: 1		Analysis Time..: 17:47		
Prep Batch #...: 5124228						
Arsenic	ND	500	ug/L	SW846 6010B	05/04-05/06/05	G817G1AE
		Dilution Factor: 1		Analysis Time..: 14:04		
Barium	**1700**	**500**	**ug/L**	**SW846 6010B**	**05/04-05/06/05**	**G817G1AF**
		Dilution Factor: 1		Analysis Time..: 14:04		
Cadmium	**48.1**	**25**	**ug/L**	**SW846 6010B**	**05/04-05/06/05**	**G817G1AG**
		Dilution Factor: 1		Analysis Time..: 14:04		
Chromium	ND	50	ug/L	SW846 6010B	05/04-05/06/05	G817G1AH
		Dilution Factor: 1		Analysis Time..: 14:04		
Lead	**1330**	**250**	**ug/L**	**SW846 6010B**	**05/04-05/06/05**	**G817G1AJ**
		Dilution Factor: 1		Analysis Time..: 14:04		
Silver	ND	50	ug/L	SW846 6010B	05/04-05/06/05	G817G1AK
		Dilution Factor: 1		Analysis Time..: 14:04		
Selenium	ND	500	ug/L	SW846 6010B	05/04-05/06/05	G817G1AL
		Dilution Factor: 1		Analysis Time..: 14:04		
Zinc	**22000 N**	**100**	**ug/L**	**SW846 6010B**	**05/04-05/06/05**	**G817G1CK**
		Dilution Factor: 1		Analysis Time..: 14:04		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58846

General Chemistry

Lot-Sample #...: F5D220357-005 **Work Order #...:** G817G **Matrix.....:** SOLID
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05
% Moisture.....: 21

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	21.0	0.10	%	MCAWW 160.3 MOD	04/25-04/26/05	5115139

Dilution Factor: 1 Analysis Time..: 00:00

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58879

General Chemistry

Lot-Sample #...: F5D220357-006 **Work Order #...:** G817H **Matrix.....:** SOLID
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05
% Moisture.....: 22

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	8.3		No Units	SW846 9045A	04/25/05	5115278
		Dilution Factor: 1		Analysis Time..: 00:00		
Flashpoint	>60.0		deg C	SW846 1010	04/25/05	5115320
		Dilution Factor: 1		Analysis Time..: 00:00		
Paint Filter Test	PAS,S		No Units	SW846 9095	04/25/05	5115319
		Dilution Factor: 1		Analysis Time..: 00:00		
Percent Moisture	22.3	0.10	%	MCAWW 160.3 MOD	04/25-04/26/05	5115139
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Cyanide	0.14	0.064	mg/kg	SW846 7.3.3	05/04-05/06/05	5126308
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Sulfide	ND	5.7	mg/kg	SW846 7.3.4	05/04-05/06/05	5126399
		Dilution Factor: 1		Analysis Time..: 00:00		

NOTE(S):

RL Reporting Limit

S The result was determined using the Method of Standard Additions (MSA).

Results and reporting limits have been adjusted for dry weight.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: F5D220357 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: F5D250000-187 **Prep Batch #...:** 5115187						
Antimony	ND	1	mg/kg	SW846 6020	04/27-04/28/05	G84MF1AN
		Dilution Factor: 5				
		Analysis Time..: 00:26				
Arsenic	**0.66**	**1**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G84MF1AC**
		Dilution Factor: 5				
		Analysis Time..: 00:26				
Barium	ND	10	mg/kg	SW846 6020	04/27-04/28/05	G84MF1AD
		Dilution Factor: 5				
		Analysis Time..: 00:26				
Beryllium	ND	0.5	mg/kg	SW846 6020	04/27-04/28/05	G84MF1AE
		Dilution Factor: 5				
		Analysis Time..: 00:26				
Cadmium	ND	1.25	mg/kg	SW846 6020	04/27-04/28/05	G84MF1AF
		Dilution Factor: 5				
		Analysis Time..: 00:26				
Chromium	ND	2.5	mg/kg	SW846 6020	04/27-04/28/05	G84MF1AH
		Dilution Factor: 5				
		Analysis Time..: 00:26				
Cobalt	ND	2.5	mg/kg	SW846 6020	04/27-04/28/05	G84MF1AG
		Dilution Factor: 5				
		Analysis Time..: 00:26				
Copper	ND	0.50	mg/kg	SW846 6020	04/27-04/28/05	G84MF1AJ
		Dilution Factor: 1				
		Analysis Time..: 00:26				
Lead	ND	0.30	mg/kg	SW846 6020	04/27-04/28/05	G84MF1AM
		Dilution Factor: 1				
		Analysis Time..: 00:26				
Manganese	**0.14 B**	**5**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G84MF1AK**
		Dilution Factor: 5				
		Analysis Time..: 00:26				
Nickel	ND	1	mg/kg	SW846 6020	04/27-04/28/05	G84MF1AL
		Dilution Factor: 5				
		Analysis Time..: 00:26				

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: F5D220357 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Selenium	**0.27**	**1**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G84MF1AP**
		Dilution Factor: 5				
		Analysis Time..: 00:26				
Silver	ND	1	mg/kg	SW846 6020	04/27-04/28/05	G84MF1AA
		Dilution Factor: 5				
		Analysis Time..: 00:26				
Thallium	ND	0.5	mg/kg	SW846 6020	04/27-04/28/05	G84MF1AQ
		Dilution Factor: 5				
		Analysis Time..: 00:26				
Vanadium	**0.73 B**	**2.5**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G84MF1AR**
		Dilution Factor: 5				
		Analysis Time..: 00:26				
MB Lot-Sample #: F5D250000-193 **Prep Batch #...:** 5115193						
Calcium	**9.4 B**	**250**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G84N21AA**
		Dilution Factor: 1				
		Analysis Time..: 15:15				
Iron	**2.9 B**	**10**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G84N21AC**
		Dilution Factor: 1				
		Analysis Time..: 15:15				
Magnesium	**31.2 B**	**250**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G84N21AE**
		Dilution Factor: 1				
		Analysis Time..: 15:15				
Potassium	ND	300	mg/kg	SW846 6010B	04/27/05	G84N21AD
		Dilution Factor: 1				
		Analysis Time..: 15:15				
Sodium	ND	250	mg/kg	SW846 6010B	04/27/05	G84N21AF
		Dilution Factor: 1				
		Analysis Time..: 15:15				
Zinc	ND	2	mg/kg	SW846 6010B	04/27/05	G84N21AG
		Dilution Factor: 1				
		Analysis Time..: 15:15				
Aluminum	**6.6 B**	**10**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G84N21AH**
		Dilution Factor: 1				
		Analysis Time..: 15:15				

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: F5D220357 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: F5E020000-051 **Prep Batch #...:** 5122051						
Mercury	ND	0.0333	mg/kg	SW846 7471A	05/02/05	G9L0C1AA
		Dilution Factor: 1				
		Analysis Time..: 13:43				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

TCLP Metals

Client Lot #...: F5D220357 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: F5E020000-353 **Prep Batch #...:** 5124228						
Leach Date.....: 05/02/05 **Leach Batch #..:** P512209						
Arsenic	ND	500	ug/L	SW846 6010B	05/04-05/06/05	G9MPR1AC
		Dilution Factor: 1				
		Analysis Time..: 12:54				
Barium	**125 B**	**500**	**ug/L**	**SW846 6010B**	**05/04-05/06/05**	**G9MPR1AD**
		Dilution Factor: 1				
		Analysis Time..: 12:54				
Cadmium	ND	25.0	ug/L	SW846 6010B	05/04-05/06/05	G9MPR1AE
		Dilution Factor: 1				
		Analysis Time..: 12:54				
Chromium	ND	50	ug/L	SW846 6010B	05/04-05/06/05	G9MPR1AF
		Dilution Factor: 1				
		Analysis Time..: 12:54				
Lead	ND	250	ug/L	SW846 6010B	05/04-05/06/05	G9MPR1AG
		Dilution Factor: 1				
		Analysis Time..: 12:54				
Silver	ND	50.0	ug/L	SW846 6010B	05/04-05/06/05	G9MPR1AH
		Dilution Factor: 1				
		Analysis Time..: 12:54				
Selenium	ND	500	ug/L	SW846 6010B	05/04-05/06/05	G9MPR1AJ
		Dilution Factor: 1				
		Analysis Time..: 12:54				
MB Lot-Sample #: F5E020000-353 **Prep Batch #...:** 5123215						
Leach Date.....: 05/02/05 **Leach Batch #..:** P512209						
Mercury	ND	10	ug/L	SW846 7470A	05/03/05	G9MPR1AK
		Dilution Factor: 1				
		Analysis Time..: 17:23				
MB Lot-Sample #: F5E020000-353 **Prep Batch #...:** 5124228						
Leach Date.....: 05/02/05 **Leach Batch #..:** P512209						
Zinc	**43.9 B**	**60.0**	**ug/L**	**SW846 6010B**	**05/04-05/06/05**	**G9MPR1AL**
		Dilution Factor: 1				
		Analysis Time..: 12:54				

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METHOD BLANK REPORT

TCLP Metals

Client Lot #...: F5D220357 **Matrix.....:** SOLID

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: F5D220357 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Reactive Cyanide		Work Order #: G91171AA		MB Lot-Sample #:	F5E060000-308	
	ND	0.050	mg/kg	SW846 7.3.3	05/04-05/06/05	5126308
		Dilution Factor: 1				
		Analysis Time..: 00:00				
Reactive Sulfide		Work Order #: G92N41AA		MB Lot-Sample #:	F5E060000-399	
	ND	4.4	mg/kg	SW846 7.3.4	05/04-05/06/05	5126399
		Dilution Factor: 1				
		Analysis Time..: 00:00				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F5D220357 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: F5D250000-187 **Prep Batch #...:** 5115187					
Silver	70	(53 - 147)	SW846 6020	04/27-04/28/05	G84MF1AT
		Dilution Factor: 5	Analysis Time..: 00:32		
Arsenic	110	(80 - 120)	SW846 6020	04/27-04/28/05	G84MF1AU
		Dilution Factor: 5	Analysis Time..: 00:32		
Barium	107	(82 - 118)	SW846 6020	04/27-04/28/05	G84MF1AV
		Dilution Factor: 5	Analysis Time..: 00:32		
Beryllium	93	(82 - 118)	SW846 6020	04/27-04/28/05	G84MF1AW
		Dilution Factor: 5	Analysis Time..: 00:32		
Cadmium	99	(81 - 119)	SW846 6020	04/27-04/28/05	G84MF1AX
		Dilution Factor: 5	Analysis Time..: 00:32		
Cobalt	97	(73 - 127)	SW846 6020	04/27-04/28/05	G84MF1A0
		Dilution Factor: 5	Analysis Time..: 00:32		
Chromium	92	(78 - 121)	SW846 6020	04/27-04/28/05	G84MF1A1
		Dilution Factor: 5	Analysis Time..: 00:32		
Copper	94	(82 - 118)	SW846 6020	04/27-04/28/05	G84MF1A2
		Dilution Factor: 1	Analysis Time..: 00:32		
Manganese	96	(80 - 120)	SW846 6020	04/27-04/28/05	G84MF1A3
		Dilution Factor: 5	Analysis Time..: 00:32		
Nickel	97	(82 - 118)	SW846 6020	04/27-04/28/05	G84MF1A4
		Dilution Factor: 5	Analysis Time..: 00:32		
Lead	98	(80 - 120)	SW846 6020	04/27-04/28/05	G84MF1A5
		Dilution Factor: 1	Analysis Time..: 00:32		
Antimony	104	(10 - 150)	SW846 6020	04/27-04/28/05	G84MF1A6
		Dilution Factor: 5	Analysis Time..: 00:32		
Selenium	105	(76 - 124)	SW846 6020	04/27-04/28/05	G84MF1A7
		Dilution Factor: 5	Analysis Time..: 00:32		
Thallium	98	(76 - 125)	SW846 6020	04/27-04/28/05	G84MF1A8
		Dilution Factor: 5	Analysis Time..: 00:32		

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F5D220357 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	90	(75 - 125)	SW846 6020	04/27-04/28/05	G84MF1A9
		Dilution Factor: 5	Analysis Time..: 00:32		
LCS Lot-Sample#: F5D250000-193 **Prep Batch #...:** 5115193					
Calcium	106	(79 - 121)	SW846 6010B	04/27/05	G84N21AJ
		Dilution Factor: 1	Analysis Time..: 15:19		
Iron	93	(57 - 143)	SW846 6010B	04/27/05	G84N21AK
		Dilution Factor: 1	Analysis Time..: 15:19		
Potassium	101	(72 - 129)	SW846 6010B	04/27/05	G84N21AL
		Dilution Factor: 1	Analysis Time..: 15:19		
Magnesium	99	(77 - 123)	SW846 6010B	04/27/05	G84N21AM
		Dilution Factor: 1	Analysis Time..: 15:19		
Sodium	103	(56 - 144)	SW846 6010B	04/27/05	G84N21AN
		Dilution Factor: 1	Analysis Time..: 15:19		
Zinc	106	(79 - 121)	SW846 6010B	04/27/05	G84N21AP
		Dilution Factor: 1	Analysis Time..: 15:19		
Aluminum	83	(58 - 142)	SW846 6010B	04/27/05	G84N21AQ
		Dilution Factor: 1	Analysis Time..: 15:19		
LCS Lot-Sample#: F5E020000-051 **Prep Batch #...:** 5122051					
Mercury	89	(48 - 151)	SW846 7471A	05/02/05	G9L0C1AC
		Dilution Factor: 20	Analysis Time..: 13:45		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TCLP Metals

Client Lot #...: F5D220357 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: F5E030000-215 **Prep Batch #...:** 5123215					
Mercury	108	(82 - 125)	SW846 7470A	05/03/05	G9N861AA
		Dilution Factor: 1		Analysis Time..: 17:25	
LCS Lot-Sample#: F5E040000-228 **Prep Batch #...:** 5124228					
Arsenic	102	(80 - 120)	SW846 6010B	05/04-05/06/05	G9RQF1AC
		Dilution Factor: 1		Analysis Time..: 13:07	
Barium	110	(80 - 120)	SW846 6010B	05/04-05/06/05	G9RQF1AD
		Dilution Factor: 1		Analysis Time..: 13:07	
Cadmium	100	(80 - 120)	SW846 6010B	05/04-05/06/05	G9RQF1AE
		Dilution Factor: 1		Analysis Time..: 13:07	
Chromium	99	(80 - 120)	SW846 6010B	05/04-05/06/05	G9RQF1AA
		Dilution Factor: 1		Analysis Time..: 13:07	
Lead	98	(80 - 120)	SW846 6010B	05/04-05/06/05	G9RQF1AF
		Dilution Factor: 1		Analysis Time..: 13:07	
Silver	102	(80 - 120)	SW846 6010B	05/04-05/06/05	G9RQF1AG
		Dilution Factor: 1		Analysis Time..: 13:07	
Selenium	105	(80 - 120)	SW846 6010B	05/04-05/06/05	G9RQF1AH
		Dilution Factor: 1		Analysis Time..: 13:07	
Zinc	100	(80 - 120)	SW846 6010B	05/04-05/06/05	G9RQF1AJ
		Dilution Factor: 1		Analysis Time..: 13:07	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: F5D220357 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)		Work Order #: G846W1AA	LCS Lot-Sample#: F5D250000-278		
	100	(99 - 101)	SW846 9045A	04/25/05	5115278
		Dilution Factor: 1	Analysis Time..: 00:00		
Flashpoint		Work Order #: G84881AA	LCS Lot-Sample#: F5D250000-320		
	103	(96 - 104)	SW846 1010	04/25/05	5115320
		Dilution Factor: 1	Analysis Time..: 00:00		
Reactive Cyanide		Work Order #: G91171AC	LCS Lot-Sample#: F5E060000-308		
	12	(10 - 100)	SW846 7.3.3	05/04-05/06/05	5126308
		Dilution Factor: 1	Analysis Time..: 00:00		
Reactive Sulfide		Work Order #: G92N41AC	LCS Lot-Sample#: F5E060000-399		
	33	(10 - 150)	SW846 7.3.4	05/04-05/06/05	5126399
		Dilution Factor: 1	Analysis Time..: 00:00		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F5D220357 **Matrix.....:** SOLID
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F5D220357-001 **Prep Batch #...:** 5115187							
						% Moisture.....: 20	
Antimony	166 N	(10 - 150)			SW846 6020	04/27-04/28/05	G817C1DR
	561 N,*	(10 - 150)	84	(0-20)	SW846 6020	04/27-04/28/05	G817C1DT
		Dilution Factor: 10					
		Analysis Time..: 02:44					
Arsenic	99	(73 - 111)			SW846 6020	04/27-04/28/05	G817C1C4
	94	(73 - 111)	4.1	(0-30)	SW846 6020	04/27-04/28/05	G817C1C5
		Dilution Factor: 10					
		Analysis Time..: 02:44					
Barium	53 N	(10 - 150)			SW846 6020	04/27-04/28/05	G817C1C6
	0 N	(10 - 150)	0.0	(0-30)	SW846 6020	04/27-04/28/05	G817C1C7
		Dilution Factor: 10					
		Analysis Time..: 02:44					
Beryllium	103	(86 - 111)			SW846 6020	04/27-04/28/05	G817C1C8
	104	(86 - 111)	1.2	(0-30)	SW846 6020	04/27-04/28/05	G817C1C9
		Dilution Factor: 10					
		Analysis Time..: 02:44					
Cadmium	20 N	(68 - 130)			SW846 6020	04/27-04/28/05	G817C1DA
	119	(68 - 130)	16	(0-30)	SW846 6020	04/27-04/28/05	G817C1DC
		Dilution Factor: 10					
		Analysis Time..: 02:44					
Chromium	191 N	(74 - 130)			SW846 6020	04/27-04/28/05	G817C1DF
	217 N	(74 - 130)	2.9	(0-30)	SW846 6020	04/27-04/28/05	G817C1DG
		Dilution Factor: 10					
		Analysis Time..: 02:44					
Cobalt	100	(69 - 120)			SW846 6020	04/27-04/28/05	G817C1DD
	96	(69 - 120)	2.7	(0-30)	SW846 6020	04/27-04/28/05	G817C1DE
		Dilution Factor: 10					
		Analysis Time..: 02:44					
Copper	0 N	(63 - 110)			SW846 6020	04/27-04/28/05	G817C1DH
	973 N	(63 - 110)	0.0	(0-30)	SW846 6020	04/27-04/28/05	G817C1DJ
		Dilution Factor: 50					
		Analysis Time..: 19:08					

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F5D220357 **Matrix.....:** SOLID
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	0 N	(10 - 150)			SW846 6020	04/27-04/28/05	G817C1DP
	6130 N,*	(10 - 150)	0.0	(0-30)	SW846 6020	04/27-04/28/05	G817C1DQ
		Dilution Factor: 50					
		Analysis Time..: 19:08					
Manganese	1220 N	(75 - 125)			SW846 6020	04/27-04/28/05	G817C1DK
	188 N	(75 - 125)	18	(0-30)	SW846 6020	04/27-04/28/05	G817C1DL
		Dilution Factor: 10					
		Analysis Time..: 02:44					
Nickel	78	(62 - 120)			SW846 6020	04/27-04/28/05	G817C1DM
	112	(62 - 120)	4.0	(0-30)	SW846 6020	04/27-04/28/05	G817C1DN
		Dilution Factor: 10					
		Analysis Time..: 02:44					
Selenium	89	(16 - 145)			SW846 6020	04/27-04/28/05	G817C1DU
	87	(16 - 145)	2.5	(0-30)	SW846 6020	04/27-04/28/05	G817C1DV
		Dilution Factor: 10					
		Analysis Time..: 02:44					
Silver	0 N	(10 - 150)			SW846 6020	04/27-04/28/05	G817C1C2
	0 N,*	(10 - 150)	0.0	(0-30)	SW846 6020	04/27-04/28/05	G817C1C3
		Dilution Factor: 10					
		Analysis Time..: 02:44					
Thallium	88	(69 - 138)			SW846 6020	04/27-04/28/05	G817C1DW
	88	(69 - 138)	0.28	(0-30)	SW846 6020	04/27-04/28/05	G817C1DX
		Dilution Factor: 10					
		Analysis Time..: 02:44					
Vanadium	100	(71 - 128)			SW846 6020	04/27-04/28/05	G817C1D0
	85	(71 - 128)	11	(0-30)	SW846 6020	04/27-04/28/05	G817C1D1
		Dilution Factor: 10					
		Analysis Time..: 02:44					

MS Lot-Sample #: F5D220357-001 **Prep Batch #...:** 5115193

% Moisture.....: 20

Calcium	240 N	(75 - 125)			SW846 6010B	04/27/05	G817C1D2
	0 N	(75 - 125)	0.0	(0-20)	SW846 6010B	04/27/05	G817C1D3
		Dilution Factor: 1					
		Analysis Time..: 17:03					

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F5D220357 **Matrix.....:** SOLID
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	13500 N	(75 - 125)			SW846 6010B	04/27-04/28/05	G817C1D4
	41000 N	(75 - 125)	17	(0-20)	SW846 6010B	04/27-04/28/05	G817C1D5
		Dilution Factor: 5					
		Analysis Time..: 09:33					
Magnesium	108	(75 - 125)			SW846 6010B	04/27/05	G817C1D8
	83	(75 - 125)	13	(0-20)	SW846 6010B	04/27/05	G817C1D9
		Dilution Factor: 1					
		Analysis Time..: 17:03					
Potassium	123	(75 - 125)			SW846 6010B	04/27/05	G817C1D6
	99	(75 - 125)	11	(0-20)	SW846 6010B	04/27/05	G817C1D7
		Dilution Factor: 1					
		Analysis Time..: 17:03					
Sodium	239 N	(75 - 125)			SW846 6010B	04/27/05	G817C1EA
	92 *	(75 - 125)	49	(0-20)	SW846 6010B	04/27/05	G817C1EC
		Dilution Factor: 1					
		Analysis Time..: 17:03					
Zinc	0 N	(75 - 125)			SW846 6010B	04/27-04/28/05	G817C1CD
	96000 N,*	(75 - 125)	0.0	(0-20)	SW846 6010B	04/27-04/28/05	G817C1CE
		Dilution Factor: 5					
		Analysis Time..: 09:33					
Aluminum	23500 N	(75 - 125)			SW846 6010B	04/27/05	G817C1CF
	3670 N,*	(75 - 125)	73	(0-20)	SW846 6010B	04/27/05	G817C1CG
		Dilution Factor: 1					
		Analysis Time..: 17:03					

MS Lot-Sample #: F5D220357-001 **Prep Batch #...:** 5122051
% Moisture.....: 20

Mercury	226 N	(10 - 150)			SW846 7471A	05/02/05	G817C1CH
	0 N,*	(10 - 150)	0.0	(0-30)	SW846 7471A	05/02/05	G817C1CJ
		Dilution Factor: 1					
		Analysis Time..: 13:55					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

* Relative percent difference (RPD) is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TCLP Metals

Client Lot #...: F5D220357 **Matrix.....:** SOLID
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F5D220357-001 **Prep Batch #...:** 5123215							
Leach Date.....: 05/02/05 **Leach Batch #..:** P512209							
Mercury	98	(64 - 122)			SW846 7470A	05/03/05	G817C1ED
	102	(64 - 122)	4.2	(0-20)	SW846 7470A	05/03/05	G817C1EE
		Dilution Factor: 1					
		Analysis Time..: 17:31					
MS Lot-Sample #: F5D220357-001 **Prep Batch #...:** 5124228							
Leach Date.....: 05/02/05 **Leach Batch #..:** P512209							
Arsenic	102	(83 - 111)			SW846 6010B	05/04-05/06/05	G817C1CK
	101	(83 - 111)	0.35	(0-20)	SW846 6010B	05/04-05/06/05	G817C1CL
		Dilution Factor: 1					
		Analysis Time..: 13:33					
Barium	101	(79 - 111)			SW846 6010B	05/04-05/06/05	G817C1CM
	100	(79 - 111)	0.75	(0-20)	SW846 6010B	05/04-05/06/05	G817C1CN
		Dilution Factor: 1					
		Analysis Time..: 13:33					
Cadmium	93	(65 - 122)			SW846 6010B	05/04-05/06/05	G817C1CP
	92	(65 - 122)	0.77	(0-20)	SW846 6010B	05/04-05/06/05	G817C1CQ
		Dilution Factor: 1					
		Analysis Time..: 13:33					
Chromium	97	(74 - 114)			SW846 6010B	05/04-05/06/05	G817C1CR
	96	(74 - 114)	0.53	(0-20)	SW846 6010B	05/04-05/06/05	G817C1CT
		Dilution Factor: 1					
		Analysis Time..: 13:33					
Lead	92	(65 - 121)			SW846 6010B	05/04-05/06/05	G817C1CU
	90	(65 - 121)	1.1	(0-20)	SW846 6010B	05/04-05/06/05	G817C1CV
		Dilution Factor: 1					
		Analysis Time..: 13:33					
Silver	98	(70 - 123)			SW846 6010B	05/04-05/06/05	G817C1CW
	101	(70 - 123)	2.1	(0-20)	SW846 6010B	05/04-05/06/05	G817C1CX
		Dilution Factor: 1					
		Analysis Time..: 13:33					

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TCLP Metals

Client Lot #...: F5D220357 **Matrix.....:** SOLID
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Selenium	104	(76 - 124)			SW846 6010B	05/04-05/06/05	G817C1C0
	104	(76 - 124)	0.63	(0-20)	SW846 6010B	05/04-05/06/05	G817C1C1

Dilution Factor: 1
Analysis Time..: 13:33

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: F5D220357
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05 **Matrix.....:** SOLID

Percnt Moisture: 21

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Reactive Cyanide	7.5 N	(10 - 100)	Work Order #...: G817H1AM SW846 7.3.3 Dilution Factor: 1	MS Lot-Sample #: F5D220357-006 05/04-05/06/05 Analysis Time..: 00:00	5126308
Reactive Sulfide	0.0	(10 - 136)	Work Order #...: G817H1AN SW846 7.3.4 Dilution Factor: 1	MS Lot-Sample #: F5D220357-006 05/04-05/06/05 Analysis Time..: 00:00	5126399

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Client Lot #...: F5D220357 **Work Order #...:** G817C-SMP G817C-DUP **Matrix.....:** SOLID

Date Sampled...: 04/20/05 **Date Received..:** 04/22/05

% Moisture.....: 20

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Mercury						SD Lot-Sample #: F5D220357-001		
	0.79 N*E	1.0	mg/kg	1.7	(0-30)	SW846 7471A	05/02/05	5122051
			Dilution Factor: 1			Analysis Time..: 13:47		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Client Lot #...: F5D220357 **Work Order #...:** G817C-SMP G817C-DUP **Matrix.....:** SOLID

Date Sampled...: 04/20/05 **Date Received..:** 04/22/05

% Moisture.....: 20

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Mercury						SD Lot-Sample #:	F5D220357-001	
	ND	ND	ug/L	0	(0-20)	SW846 7470A	05/03/05	5123215
			Dilution Factor: 1			Analysis Time..: 17:27		

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F5D220357 **Work Order #...:** G829G-SMP G829G-DUP **Matrix.....:** SOLID

Date Sampled...: 04/22/05 15:00 **Date Received..:** 04/23/05

% Moisture.....: 21

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture						SD Lot-Sample #: F5D230129-002		
	20.9	21.0	%	0.38	(0-30)	MCAWW 160.3 MOD	04/25-04/26/05	5115139

Dilution Factor: 1 Analysis Time..: 00:00

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F5D220357 **Work Order #...:** G817H-SMP G817H-DUP **Matrix.....:** SOLID

Date Sampled...: 04/20/05 **Date Received..:** 04/22/05

% Moisture.....: 22

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)						SD Lot-Sample #: F5D220357-006		
	8.3	8.2	No Units	0.85	(0-30)	SW846 9045A	04/25/05	5115278
		Dilution Factor: 1				Analysis Time..: 00:00		
Reactive Cyanide						SD Lot-Sample #: F5D220357-006		
	0.14	0.077	mg/kg	59	(0-30)	SW846 7.3.3	05/04-05/06/05	5126308
		Dilution Factor: 1				Analysis Time..: 00:00		
Reactive Sulfide						SD Lot-Sample #: F5D220357-006		
	ND	ND	mg/kg	0	(0-30)	SW846 7.3.4	05/04-05/06/05	5126399
		Dilution Factor: 1				Analysis Time..: 00:00		
Flashpoint						SD Lot-Sample #: F5D220357-006		
	>60.0	>60.0	deg C	0.0	(0-30)	SW846 1010	04/25/05	5115320
		Dilution Factor: 1				Analysis Time..: 00:00		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F5D220357 **Work Order #...:** G8WQV-SMP G8WQV-DUP **Matrix.....:** SOLID

Date Sampled...: 04/19/05 **Date Received..:** 04/21/05

% Moisture.....: 23

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Paint Filter Test						SD Lot-Sample #: F5D210354-006		
			No Units	0	(0-30)	SW846 9095	04/25/05	5115319

Dilution Factor: 1 Analysis Time..: 00:00

METALS SAMPLE AND QC SUMMARY RESULTS

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G817C **Client ID:** RE73-05-58842

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/3/2005 **Prep Batch:** 5123215

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.23	10.0	0.23	U	1	CVAA	5/3/2005	17:27

Comments: Lot #: F5D220357 Sample #: 1

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G817D **Client ID:** RE73-05-58843

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/3/2005 **Prep Batch:** 5123215

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.23	10.0	0.23	U	1	CVAA	5/3/2005	17:37

Comments: Lot #: F5D220357 Sample #: 2

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G817E **Client ID:** RE73-05-58844

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/3/2005 **Prep Batch:** 5123215

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.23	10.0	0.37	B	1	CVAA	5/3/2005	17:39

Comments: Lot #: F5D220357 Sample #: 3

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G817F **Client ID:** RE73-05-58845

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/3/2005 **Prep Batch:** 5123215

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.23	10.0	0.23	U	1	CVAA	5/3/2005	17:42

Comments: Lot #: F5D220357 Sample #: 4

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G817G **Client ID:** RE73-05-58846

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/3/2005 **Prep Batch:** 5123215

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.23	10.0	0.23	U	1	CVAA	5/3/2005	17:47

Comments: Lot #: F5D220357 Sample #: 5

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G80NW **Client ID:** XXXXX

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/4/2005 **Prep Batch:** 5124228

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	154	500	154	U	1	ICPST	5/6/2005	13:11
Barium	**493.41**	**2.0**	**500**	**1000**		1	**ICPST**	**5/6/2005**	**13:11**
Cadmium	226.50	5.4	25.0	5.4	U	1	ICPST	5/6/2005	13:11
Chromium	267.76	11.9	50.0	11.9	U	1	ICPST	5/6/2005	13:11
Lead	220.35	112	250	112	U	1	ICPST	5/6/2005	13:11
Selenium	196.03	184	500	184	U	1	ICPST	5/6/2005	13:11
Silver	328.07	13.8	50.0	13.8	U	1	ICPST	5/6/2005	13:11
Zinc	**213.86**	**7.4**	**100**	**1990**	**N**	1	**ICPST**	**5/6/2005**	**13:11**

Comments:

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G817C **Client ID:** RE73-05-58842

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/4/2005 **Prep Batch:** 5124228

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	154	500	154	U	1	ICPST	5/6/2005	13:29
Barium	**493.41**	**2.0**	**500**	**2330**		**1**	**ICPST**	**5/6/2005**	**13:29**
Cadmium	**226.50**	**5.4**	**25.0**	**71.9**		**1**	**ICPST**	**5/6/2005**	**13:29**
Chromium	267.76	11.9	50.0	11.9	U	1	ICPST	5/6/2005	13:29
Lead	**220.35**	**112**	**250**	**817**		**1**	**ICPST**	**5/6/2005**	**13:29**
Selenium	196.03	184	500	184	U	1	ICPST	5/6/2005	13:29
Silver	328.07	13.8	50.0	13.8	U	1	ICPST	5/6/2005	13:29
Zinc	**213.86**	**7.4**	**100**	**30600**	**N**	**1**	**ICPST**	**5/6/2005**	**13:29**

Comments: Lot #: F5D220357 Sample #: 1

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G817D **Client ID:** RE73-05-58843

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/4/2005 **Prep Batch:** 5124228

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	154	500	154	U	1	ICPST	5/6/2005	13:42
Barium	**493.41**	**2.0**	**500**	**1450**		**1**	**ICPST**	**5/6/2005**	**13:42**
Cadmium	**226.50**	**5.4**	**25.0**	**63.2**		**1**	**ICPST**	**5/6/2005**	**13:42**
Chromium	267.76	11.9	50.0	11.9	U	1	ICPST	5/6/2005	13:42
Lead	**220.35**	**112**	**250**	**779**		**1**	**ICPST**	**5/6/2005**	**13:42**
Selenium	196.03	184	500	184	U	1	ICPST	5/6/2005	13:42
Silver	328.07	13.8	50.0	13.8	U	1	ICPST	5/6/2005	13:42
Zinc	**213.86**	**7.4**	**100**	**42500**	**N**	**1**	**ICPST**	**5/6/2005**	**13:42**

Comments: Lot #: F5D220357 Sample #: 2

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G817E **Client ID:** RE73-05-58844

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/4/2005 **Prep Batch:** 5124228

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	154	500	154	U	1	ICPST	5/6/2005	13:46
Barium	**493.41**	**2.0**	**500**	**1970**		**1**	**ICPST**	**5/6/2005**	**13:46**
Cadmium	**226.50**	**5.4**	**25.0**	**21.4**	**B**	**1**	**ICPST**	**5/6/2005**	**13:46**
Chromium	267.76	11.9	50.0	11.9	U	1	ICPST	5/6/2005	13:46
Lead	**220.35**	**112**	**250**	**960**		**1**	**ICPST**	**5/6/2005**	**13:46**
Selenium	196.03	184	500	184	U	1	ICPST	5/6/2005	13:46
Silver	328.07	13.8	50.0	13.8	U	1	ICPST	5/6/2005	13:46
Zinc	**213.86**	**7.4**	**100**	**12500**	**N**	**1**	**ICPST**	**5/6/2005**	**13:46**

Comments: Lot #: F5D220357 Sample #: 3

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G817F **Client ID:** RE73-05-58845

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/4/2005 **Prep Batch:** 5124228

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	154	500	154	U	1	ICPST	5/6/2005	14:00
Barium	**493.41**	**2.0**	**500**	**2480**		**1**	**ICPST**	**5/6/2005**	**14:00**
Cadmium	**226.50**	**5.4**	**25.0**	**18.4**	**B**	**1**	**ICPST**	**5/6/2005**	**14:00**
Chromium	267.76	11.9	50.0	11.9	U	1	ICPST	5/6/2005	14:00
Lead	**220.35**	**112**	**250**	**638**		**1**	**ICPST**	**5/6/2005**	**14:00**
Selenium	196.03	184	500	184	U	1	ICPST	5/6/2005	14:00
Silver	328.07	13.8	50.0	13.8	U	1	ICPST	5/6/2005	14:00
Zinc	**213.86**	**7.4**	**100**	**10200**	**N**	**1**	**ICPST**	**5/6/2005**	**14:00**

Comments: Lot #: F5D220357 Sample #: 4

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G817G **Client ID:** RE73-05-58846

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/4/2005 **Prep Batch:** 5124228

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	154	500	154	U	1	ICPST	5/6/2005	14:04
Barium	**493.41**	**2.0**	**500**	**1700**		**1**	**ICPST**	**5/6/2005**	**14:04**
Cadmium	**226.50**	**5.4**	**25.0**	**48.1**		**1**	**ICPST**	**5/6/2005**	**14:04**
Chromium	267.76	11.9	50.0	11.9	U	1	ICPST	5/6/2005	14:04
Lead	**220.35**	**112**	**250**	**1330**		**1**	**ICPST**	**5/6/2005**	**14:04**
Selenium	196.03	184	500	184	U	1	ICPST	5/6/2005	14:04
Silver	328.07	13.8	50.0	13.8	U	1	ICPST	5/6/2005	14:04
Zinc	**213.86**	**7.4**	**100**	**22000**	**N**	**1**	**ICPST**	**5/6/2005**	**14:04**

Comments: Lot #: F5D220357 Sample #: 5

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: CVAA **Units:** ug/L

Chart Number: AA0503C.PRN **Acceptable Range:** 80% - 120%

Standard Source: Leeman **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	ICV 5/3/2005 5:14 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	2.5	2.44	97.6								

Version 4.75.1

Form 2A Equivalent

LOT #F5D220357

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICPST **Units:** ug/L

Chart Number: 0506IT1.ARC **Acceptable Range:** 90% - 110%

Standard Source: Solutions Plus **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	ICV 5/6/2005 8:22 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	4000.0	4061.33	**101.5**								
Barium	493.409	4000.0	4251.02	**106.3**								
Cadmium	226.502	4000.0	4038.57	**101.0**								
Chromium	267.76	4000.0	3946.06	**98.7**								
Lead	220.353	4000.0	3992.81	**99.8**								
Selenium	196.026	4000.0	4044.82	**101.1**								
Silver	328.068	1000.0	1006.27	**100.6**								
Zinc	213.856	4000.0	4011.14	**100.3**								

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: CVAA **Units:** ug/L

Chart Number: AA0503C.PRN **Acceptable Range:** 80% - 120%

Standard Source: Leeman **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	CCV 5/3/2005 5:20 PM		CCV 5/3/2005 6:07 PM							
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	5.0	4.99	99.8	5.12	102.4						

Version 4.75.1

Form 2A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPST **Units:** ug/L

Chart Number: 0506IT1.ARC **Acceptable Range:** 90% - 110%

Standard Source: Solutions Plus **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	CCV 5/6/2005 8:50 AM Found	% Rec	CCV 5/6/2005 9:45 AM Found	% Rec	CCV 5/6/2005 10:11 AM Found	% Rec	CCV 5/6/2005 11:11 AM Found	% Rec	CCV 5/6/2005 12:06 PM Found	% Rec
Arsenic	189.042	4000.0	4094.05	102.4	4050.38	101.3	4073.92	101.8	4097.90	102.4	4094.88	102.4
Barium	493.409	4000.0	4299.34	107.5	4254.32	106.4	4270.92	106.8	4287.72	107.2	4273.13	106.8
Cadmium	226.502	4000.0	4094.71	102.4	4040.13	101.0	4056.99	101.4	4074.96	101.9	4075.10	101.9
Chromium	267.76	4000.0	3996.98	99.9	3943.21	98.6	3963.20	99.1	3979.47	99.5	3976.70	99.4
Lead	220.353	4000.0	4043.60	101.1	3996.58	99.9	4009.21	100.2	4003.72	100.1	4014.83	100.4
Selenium	196.026	4000.0	4094.89	102.4	4043.31	101.1	4066.65	101.7	4071.79	101.8	4110.64	102.8
Silver	328.068	1000.0	1016.17	101.6	1006.36	100.6	1012.04	101.2	1022.35	102.2	1026.08	102.6
Zinc	213.856	4000.0	4021.14	100.5	3938.20	98.5	3947.42	98.7	3946.74	98.7	3953.48	98.8

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPST **Units:** ug/L

Chart Number: 0506IT1.ARC **Acceptable Range:** 90% - 110%

Standard Source: Solutions Plus **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	CCV 5/6/2005 12:58 PM Found	% Rec	CCV 5/6/2005 1:51 PM Found	% Rec	CCV 5/6/2005 2:43 PM Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	4000.0	4050.99	101.3	4052.63	101.3	4035.49	100.9				
Barium	493.409	4000.0	4173.48	104.3	4176.22	104.4	4110.60	102.8				
Cadmium	226.502	4000.0	4031.83	100.8	4011.15	100.3	4000.17	100.0				
Chromium	267.76	4000.0	3920.51	98.0	3907.63	97.7	3887.04	97.2				
Lead	220.353	4000.0	3956.30	98.9	3936.40	98.4	3914.98	97.9				
Selenium	196.026	4000.0	4036.65	100.9	4054.67	101.4	4026.42	100.7				
Silver	328.068	1000.0	1013.73	101.4	1018.60	101.9	1013.83	101.4				
Zinc	213.856	4000.0	3917.82	97.9	3941.52	98.5	3914.81	97.9				

STL-ST. LOUIS

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: CVAA **Units:** ug/L

Chart Number: AA0503C.PRN **Acceptable Range:** 50% - 150%

Standard Source: SPEX **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	CRA 5/3/2005 5:18 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	0.2	0.21	107.0								

STL-ST. LOUIS

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: ICPST **Units:** ug/L

Chart Number: 0506IT1.ARC **Acceptable Range:** 80% - 120%

Standard Source: Solutions Plus **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	CRI 5/6/2005 8:31 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	10.0	10.40	**104.0**								
Barium	493.409	200.0	212.75	**106.4**								
Cadmium	226.502	5.0	5.11	**102.2**								
Chromium	267.76	10.0	9.72	**97.2**								
Lead	220.353	10.0	10.62	**106.2**								
Selenium	196.026	15.0	16.76	**111.7**								
Zinc	213.856	20.0	21.20	**106.0**								

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: CVAA **Units:** ug/L

Chart Number: AA0503C.PRN

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 5/3/2005 5:16 PM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Mercury	253.7	2	0.0	U								

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: 0506IT1.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 5/6/2005 8:26 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	200	61.5	U								
Barium	493.409	200	0.8	U								
Cadmium	226.502	10	2.2	U								
Chromium	267.76	20	4.8	U								
Lead	220.353	100	44.8	U								
Selenium	196.026	200	73.5	U								
Silver	328.068	20	5.5	U								
Zinc	213.856	40	3.0	U								

U Result is less than the MDL
B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: CVAA **Units:** ug/L

Chart Number: AA0503C.PRN

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 5/3/2005 5:21 PM Found	Q	CCB 5/3/2005 6:09 PM Found	Q	Found	Q	Found	Q	Found	Q
Mercury	253.7	2	-0.1	B	0.0	U						

U Result is less than the MDL
B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: 0506IT1.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 5/6/2005 8:54 AM		CCB 5/6/2005 9:49 AM		CCB 5/6/2005 10:16 AM		CCB 5/6/2005 11:15 AM		CCB 5/6/2005 12:10 PM	
			Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	200	61.5	U	61.5	U	61.5	U	61.5	U	61.5	U
Barium	493.409	200	0.8	U	0.8	U	0.8	U	0.9	B	1.0	B
Cadmium	226.502	10	2.2	U	2.2	U	2.2	U	2.2	U	2.2	U
Chromium	267.76	20	4.8	U	4.8	U	4.8	U	4.8	U	4.8	U
Lead	220.353	100	44.8	U	44.8	U	44.8	U	44.8	U	44.8	U
Selenium	196.026	200	73.5	U	73.5	U	73.5	U	73.5	U	73.5	U
Silver	328.068	20	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U
Zinc	213.856	40	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: 0506IT1.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 5/6/2005 1:03 PM Found	Q	CCB 5/6/2005 1:55 PM Found	Q	CCB 5/6/2005 2:48 PM Found	Q	Found	Q	Found	Q
Arsenic	189.042	200	61.5	U	61.5	U	61.5	U				
Barium	493.409	200	**1.5**	**B**	**1.5**	**B**	**1.5**	**B**				
Cadmium	226.502	10	**2.2**	**U**	**2.2**	**U**	**2.2**	**U**				
Chromium	267.76	20	**4.8**	**U**	**4.8**	**U**	**4.8**	**U**				
Lead	220.353	100	**44.8**	**U**	**44.8**	**U**	**44.8**	**U**				
Selenium	196.026	200	73.5	U	73.5	U	73.5	U				
Silver	328.068	20	5.5	U	5.5	U	5.5	U				
Zinc	213.856	40	**3.1**	**B**	**3.1**	**B**	**3.1**	**B**				

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: G9MPRB

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/3/2005 **Prep Batch:** 5123215

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.23	10.0	0.23	U	1	CVAA	5/3/2005	17:23

Comments: Lot #: F5D220357

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: G9MPRB

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/4/2005 **Prep Batch:** 5124228

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.042	154	500	154	U	1	ICPST	5/6/2005	12:54
Barium	**493.409**	**2.0**	**500**	**125**	**B**	**1**	**ICPST**	**5/6/2005**	**12:54**
Cadmium	226.502	5.4	25.0	5.4	U	1	ICPST	5/6/2005	12:54
Chromium	267.76	11.9	50.0	11.9	U	1	ICPST	5/6/2005	12:54
Lead	220.353	112	250	112	U	1	ICPST	5/6/2005	12:54
Selenium	196.026	184	500	184	U	1	ICPST	5/6/2005	12:54
Silver	328.068	13.8	50.0	13.8	U	1	ICPST	5/6/2005	12:54
Zinc	**213.856**	**7.4**	**100**	**43.9**	**B**	**1**	**ICPST**	**5/6/2005**	**12:54**

Comments: Lot #: F5D220357

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPST **Units:** ug/L

Chart Number: 0506IT1.ARC **Acceptable Range:** 80% - 120%

Standard Source: Solutions Plus **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 5/6/2005 8:40 AM Found	Found	Found	Found	Found
Arsenic	189.042	200		1				
Barium	493.409	200		2				
Cadmium	226.502	10		-7				
Chromium	267.76	20		1				
Lead	220.353	100		-4				
Selenium	196.026	200		1				
Silver	328.068	20		0				
Zinc	213.856	40		-4				

STL-ST. LOUIS

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPST **Units:** ug/L

Chart Number: 0506IT1.ARC **Acceptable Range:** 80% - 120%

Standard Source: Solutions Plus **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	ICSAB 5/6/2005 8:44 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	1000	956.0	**95.6**								
Barium	493.409	500	522.3	**104.5**								
Cadmium	226.502	1000	899.3	**89.9**								
Chromium	267.76	500	461.0	**92.2**								
Lead	220.353	1000	904.4	**90.4**								
Selenium	196.026	1000	956.0	**95.6**								
Silver	328.068	1000	980.5	**98.1**								
Zinc	213.856	1000	938.2	**93.8**								

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: G817CS

Original Sample ID: G817C **Client ID:** RE73-05-58842 S

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/3/2005 **Prep Batch:** 5123215

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Mercury	253.7	0.23	U	24.6		25	98.2	1	1	CVAA	5/3/2005	17:27	5/3/2005	17:31

Comments: Lot #: F5D220357 Sample #: 1

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: G817CS

Original Sample ID: G817C **Client ID:** RE73-05-58842 S

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/4/2005 **Prep Batch:** 5124228

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Arsenic	189.0	154	U	5080		5000	101.7	1	1	ICPST	5/6/2005	13:29	5/6/2005	13:33
Barium	493.4	2330		7380		5000	100.9	1	1	ICPST	5/6/2005	13:29	5/6/2005	13:33
Cadmium	226.5	71.9		188		125	93.1	1	1	ICPST	5/6/2005	13:29	5/6/2005	13:33
Chromium	267.8	11.9	U	483		500	96.7	1	1	ICPST	5/6/2005	13:29	5/6/2005	13:33
Lead	220.4	817		1960		1250	91.6	1	1	ICPST	5/6/2005	13:29	5/6/2005	13:33
Selenium	196.0	184	U	5220		5000	104.4	1	1	ICPST	5/6/2005	13:29	5/6/2005	13:33
Silver	328.1	13.8	U	123		125	98.5	1	1	ICPST	5/6/2005	13:29	5/6/2005	13:33
Zinc	213.9	30600		30400	N	1250	-16.6	1	1	ICPST	5/6/2005	13:29	5/6/2005	13:33

Comments: Lot #: F5D220357 Sample #: 1

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: G817CD

Original Sample ID: G817C **Client ID:** RE73-05-58842 D

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/3/2005 **Prep Batch:** 5123215

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	MSD Conc	Q	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Mercury	253.7	0.23	U	25.6		25	102.4	1	1	CVAA	5/3/2005	17:27	5/3/2005	17:33

Comments: Lot #: F5D220357 Sample #: 1

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: G817CD

Original Sample ID: G817C **Client ID:** RE73-05-58842 D

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/4/2005 **Prep Batch:** 5124228

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	MSD Conc	Q	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Arsenic	189.0	154	U	5070		5000	101.3	1	1	ICPST	5/6/2005	13:29	5/6/2005	13:38
Barium	493.4	2330		7320		5000	99.8	1	1	ICPST	5/6/2005	13:29	5/6/2005	13:38
Cadmium	226.5	71.9		187		125	92.0	1	1	ICPST	5/6/2005	13:29	5/6/2005	13:38
Chromium	267.8	11.9	U	481		500	96.1	1	1	ICPST	5/6/2005	13:29	5/6/2005	13:38
Lead	220.4	817		1940		1250	89.9	1	1	ICPST	5/6/2005	13:29	5/6/2005	13:38
Selenium	196.0	184	U	5190		5000	103.7	1	1	ICPST	5/6/2005	13:29	5/6/2005	13:38
Silver	328.1	13.8	U	126		125	100.7	1	1	ICPST	5/6/2005	13:29	5/6/2005	13:38
Zinc	213.9	30600	N	30000	N	1250	-46.5	1	1	ICPST	5/6/2005	13:29	5/6/2005	13:38

Comments: Lot #: F5D220357 Sample #: 1

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: G817CD

Matrix Spike Sample ID: G817CS **Client ID:** RE73-05-58842 D

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/3/2005 **Prep Batch:** 5123215

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MS Conc	Q	MSD Conc	Q	% RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Mercury	253.7	24.6		25.6		1.1	1	1	CVAA	5/3/2005	17:31	5/3/2005	17:33

Comments: Lot #: F5D220357 Sample #: 1

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 6 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: G817CD

Matrix Spike Sample ID: G817CS **Client ID:** RE73-05-58842 D

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/4/2005 **Prep Batch:** 5124228

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MS Conc	Q	MSD Conc	Q	% RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Arsenic	189.042	5080		5070		0.4	1	1	ICPST	5/6/2005	13:33	5/6/2005	13:38
Barium	493.409	7380		7320		0.8	1	1	ICPST	5/6/2005	13:33	5/6/2005	13:38
Cadmium	226.502	188		187		0.8	1	1	ICPST	5/6/2005	13:33	5/6/2005	13:38
Chromium	267.76	483		481		0.5	1	1	ICPST	5/6/2005	13:33	5/6/2005	13:38
Lead	220.353	1960		1940		1.1	1	1	ICPST	5/6/2005	13:33	5/6/2005	13:38
Selenium	196.026	5220		5190		0.6	1	1	ICPST	5/6/2005	13:33	5/6/2005	13:38
Silver	328.068	123		126		2.7	1	1	ICPST	5/6/2005	13:33	5/6/2005	13:38
Zinc	213.856	30400	N	30000	N	1.2	1	1	ICPST	5/6/2005	13:33	5/6/2005	13:38

Comments: Lot #: F5D220357 Sample #: 1

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 6 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Duplicate Sample Results

Lab Sample ID: G817CX **Client ID:** RE73-05-58842

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/3/2005 **Prep Batch:** 5123215

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	IDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.23	10.0	0.23	U	1	CVAA	5/3/2005	17:29

Comments: Lot #: F5D220357 Sample #: 1

Version 4.75.1

U Result is less than the MDL

STL-ST. LOUIS

Metals Data Reporting Form

Sample Duplicate RPD Report

Duplicate Sample ID: G817CX

Original Sample ID: G817C **Client ID:** RE73-05-58842

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/3/2005 **Prep Batch:** 5123215

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	Dupe Conc	Q	% RPD	OS DF	Dupe DF	Instr	OS Anal Date	OS Anal Time	Dupe Anal Date	Dupe Anal Time
Mercury	253.7	0.23	U	0.23	U		1	1	CVAA	5/3/2005	17:27	5/3/2005	17:29

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
* Duplicate analysis RPD was not within limits

Form 6 Equivalent

LOT #F5D220357

STL-ST. LOUIS

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: G9N86C

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/3/2005 **Prep Batch:** 5123215

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Mercury	253.7	25.0	27.1	108.2		82-125	1	CVAA	5/3/2005	17:25

Comments: Lot #: F5D220357

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 7 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: G9RQFC

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/4/2005 **Prep Batch:** 5124228

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Arsenic	189.042	2500	2550	101.8		80-120	1	ICPST	5/6/2005	13:07
Barium	493.409	2500	2750	109.9		80-120	1	ICPST	5/6/2005	13:07
Cadmium	226.502	2500	2490	99.6		80-120	1	ICPST	5/6/2005	13:07
Chromium	267.76	2500	2470	98.7		80-120	1	ICPST	5/6/2005	13:07
Lead	220.353	2500	2450	98.0		80-120	1	ICPST	5/6/2005	13:07
Selenium	196.026	2500	2620	104.9		80-120	1	ICPST	5/6/2005	13:07
Silver	328.068	625	636	101.8		80-120	1	ICPST	5/6/2005	13:07
Zinc	213.856	2500	2500	100.1		80-120	1	ICPST	5/6/2005	13:07

Comments: Lot #: F5D220357

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 7 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: G817CV

Original Sample ID: G817C **Client ID:** RE73-05-58842

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/3/2005 **Prep Batch:** 5123215

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Mercury	253.7	0.23	U	1.2	U		1	5	CVAA	5/3/2005	17:27	5/3/2005	17:36

Comments:

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
E Serial dilution percent difference not within limits

Form 9 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: G80NWV

Original Sample ID: G80NW **Client ID:** XXXXX

Matrix: TCLP **Units:** ug/L **Prep Date:** 5/4/2005 **Prep Batch:** 5124228

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Arsenic	189.042	154	U	769	U		1	5	ICPST	5/6/2005	13:11	5/6/2005	13:25
Barium	493.409	1000		1020	B	1.7	1	5	ICPST	5/6/2005	13:11	5/6/2005	13:25
Cadmium	226.502	5.4	U	27.0	U		1	5	ICPST	5/6/2005	13:11	5/6/2005	13:25
Chromium	267.76	11.9	U	59.7	U		1	5	ICPST	5/6/2005	13:11	5/6/2005	13:25
Lead	220.353	112	U	559	U		1	5	ICPST	5/6/2005	13:11	5/6/2005	13:25
Selenium	196.026	184	U	919	U		1	5	ICPST	5/6/2005	13:11	5/6/2005	13:25
Silver	328.068	13.8	U	69.1	U		1	5	ICPST	5/6/2005	13:11	5/6/2005	13:25
Zinc	213.856	1990	N	2020		1.1	1	5	ICPST	5/6/2005	13:11	5/6/2005	13:25

Comments:

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
E Serial dilution percent difference not within limits

Form 9 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Detection Limits

Instrument: CVAA **Units:** ug/L

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Mercury	253.70	2	0.046	8/16/2004

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICPST **Units:** ug/L

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Arsenic	189.04	200	61.5	12/29/2004
Barium	493.41	200	0.80	12/29/2004
Cadmium	226.50	10	2.2	12/29/2004
Chromium	267.76	20	4.8	12/29/2004
Lead	220.35	100	44.8	12/29/2004
Selenium	196.03	200	73.5	12/29/2004
Silver	328.07	20	5.5	12/29/2004
Zinc	213.86	40	3.0	12/29/2004

STL-ST. LOUIS

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICP **Date of IEC's:** 6/2/04

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	As(-0.002148), Cd(-0.000059), Cr(0.00001), Fe(0.00006), Mn(0.000011), Pb(0.001404), Se(-0.001822), Si(0.000412), Tl(0.00016), Zn(-0.000003)
Arsenic	193.696	Cd(0.00774)
Calcium	317.933	Ag(0.000008), Ba(-0.000006), Cu(0.00005), Mn(0.000014), Se(-0.00002), Si(0.000412), V(0.0004)
Iron	259.94	Ag(-0.00049), As(-0.000542), B(0.001012), Cd(0.000156), Co(0.00008), Cr(-0.000013), Cu(-0.000202), Mn(0.000161), Mo(0.000049), Sb(-0.000528), Se(0.004534), Si(-0.000876), Sn(-0.000083), Tl(-0.000251), V(0.00027), Zn(0.000012)
Magnesium	383.273	As(-0.000312), B(0.00019), Ba(0.000003), Co(-0.000018), Cr(-0.000014), Fe(0.00019), Mn(0.000028), Sb(0.000105), Se(-0.000102), Si(0.00004), Tl(-0.00028), V(0.000117)
Nickel	231.604	Cd(-0.000914), Co(0.000546), Zn(0.00503)
Sodium	588.995	K(-0.000963)
Thorium	283.73	Ag(-0.00253), Al(0.181039), As(-0.001959), B(0.00014), Ba(0.00031), Be(0.000015), Ca(0.0033), Co(-0.000854), Cr(-0.001124), Cu(0.002515), Fe(0.002718), K(-0.00082), Li(-0.00021), Mg(0.007), Mn(0.000103), Na(0.00042), Ni(-0.000169), Pb(-0.00176), Sb(-0.000639), Se(-0.002503), Si(0.00029), Sn(0.001125), Tl(-0.000627), V(0.00243)
Uranium	409.014	Ag(0.00107), Al(0.020406), As(0.00282), B(0.00036), Ba(0.00009), Be(0.000062), Ca(0.0052), Cd(-0.000037), Co(0.000098), Cr(-0.002773), Cu(0.001594), Fe(0.0018), K(-0.004418), Li(0.000075), Mg(0.0108), Mn(0.00031), Na(0.00041), Ni(0.000186), Pb(0.001642), Sb(0.000309), Se(0.001177), Si(-0.000876), Sn(0.00033), Sr(0.00007), Tl(0.00048), V(0.00161)

STL-ST. LOUIS

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICPST **Date of IEC's:** 6/2/04

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	Pb(-0.000204)
Calcium	317.933	Sr(0.00002)
Iron	217.441	Cd(0.000075), Mn(0.000002), Pb(0.000031), Sb(0.000048), Se(-0.000184), Tl(-0.000813), Zn(0.000274)
Magnesium	279.078	Mn(0.000025), Zn(-0.000003)
Manganese	257.61	Cr(0.000228), Pb(0.000148), Se(0.000736), Tl(-0.000492)
Nickel	231.604	Co(0.000232), Pb(0.000099), Zn(0.00567)
Thorium	401.913	Ag(0.000475), Al(0.0062265), Cd(0.000027), Co(-0.00009), Cu(0.002327), Fe(-0.1011), Pb(0.000033), Sb(0.000007), Se(-0.000167), Sn(0.00021), Tl(-0.000314), V(0.00064)
Uranium	385.958	Ag(0.0012), Al(0.005), As(-0.000021), Co(0.000148), Cr(0.000488), Cu(0.00052), Fe(-0.048618), Mn(0.000226), Mo(-0.00046), Pb(0.001395), Sb(-0.00045), Se(0.000104), Sn(0.000185), Tl(-0.00043), V(-0.00018)

STL-ST. LOUIS

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: CVAA **Units:** ug/L

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Mercury	253.70	10	1/6/2004

STL-ST. LOUIS

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICPST **Units:** ug/L

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Arsenic	189.04	20000	10/26/2004
Barium	493.41	20000	10/26/2004
Cadmium	226.50	20000	10/26/2004
Chromium	267.76	50000	10/26/2004
Lead	220.35	50000	10/26/2004
Selenium	196.03	50000	10/26/2004
Silver	328.07	10000	10/26/2004
Zinc	213.86	5000	2/3/2004

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Log

Preparation Batch: 5123215 **Instrument:** CVAA **Matrix:** TCLP

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
G9MPRB	5/3/2005	6	30	NA
G9N86C	5/3/2005	6	30	NA
G817C	5/3/2005	6	30	NA
G817CD	5/3/2005	6	30	NA
G817CS	5/3/2005	6	30	NA
G817CX	5/3/2005	6	30	NA
G817D	5/3/2005	6	30	NA
G817E	5/3/2005	6	30	NA
G817F	5/3/2005	6	30	NA
G817G	5/3/2005	6	30	NA

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Log

Preparation Batch: 5124228 **Instrument:** ICP **Matrix:** TCLP

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
G9MPRB	5/4/2005	20	50	NA
G9RQFC	5/4/2005	20	50	NA
G80NW	5/4/2005	20	50	NA
G817C	5/4/2005	20	50	NA
G817CD	5/4/2005	20	50	NA
G817CS	5/4/2005	20	50	NA
G817D	5/4/2005	20	50	NA
G817E	5/4/2005	20	50	NA
G817F	5/4/2005	20	50	NA
G817G	5/4/2005	20	50	NA

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAA **Chart Number:** AA0503C.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
Std01Rep1		5/3/2005	17:02
Std02Rep1		5/3/2005	17:04
Std03Rep1		5/3/2005	17:06
Std04Rep1		5/3/2005	17:08
Std05Rep1		5/3/2005	17:10
Std06Rep1		5/3/2005	17:12
ICV		5/3/2005	17:14
ICB		5/3/2005	17:16
CRA		5/3/2005	17:18
CCV		5/3/2005	17:20
CCB		5/3/2005	17:21
G9MPRB		5/3/2005	17:23
G9N86C		5/3/2005	17:25
G817C	RE73-05-58842	5/3/2005	17:27
G817CX	RE73-05-58842	5/3/2005	17:29
G817CS	RE73-05-58842 S	5/3/2005	17:31
G817CD	RE73-05-58842 D	5/3/2005	17:33
G817CV	RE73-05-58842	5/3/2005	17:36
G817D	RE73-05-58843	5/3/2005	17:37
G817E	RE73-05-58844	5/3/2005	17:39
G817F	RE73-05-58845	5/3/2005	17:42
ZZZZZZ		5/3/2005	17:43
ZZZZZZ		5/3/2005	17:45
G817G	RE73-05-58846	5/3/2005	17:47
ZZZZZZ		5/3/2005	17:49
ZZZZZZ		5/3/2005	17:51
ZZZZZZ		5/3/2005	17:53
ZZZZZZ		5/3/2005	17:55
ZZZZZZ		5/3/2005	17:57
ZZZZZZ		5/3/2005	18:00
ZZZZZZ		5/3/2005	18:02
ZZZZZZ		5/3/2005	18:04
ZZZZZZ		5/3/2005	18:05
CCV		5/3/2005	18:07
CCB		5/3/2005	18:09
ZZZZZZ		5/3/2005	18:11
ZZZZZZ		5/3/2005	18:13
ZZZZZZ		5/3/2005	18:15
ZZZZZZ		5/3/2005	18:17

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAA **Chart Number:** AA0503C.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		5/3/2005	18:19
ZZZZZZ		5/3/2005	18:21
ZZZZZZ		5/3/2005	18:23
ZZZZZZ		5/3/2005	18:25
ZZZZZZ		5/3/2005	18:27
ZZZZZZ		5/3/2005	18:29
ZZZZZZ		5/3/2005	18:31
ZZZZZZ		5/3/2005	18:33
ZZZZZZ		5/3/2005	18:35
ZZZZZZ		5/3/2005	18:36
ZZZZZZ		5/3/2005	18:38
ZZZZZZ		5/3/2005	18:40
ZZZZZZ		5/3/2005	18:42
ZZZZZZ		5/3/2005	18:45
ZZZZZZ		5/3/2005	18:47
ZZZZZZ		5/3/2005	18:49
ZZZZZZ		5/3/2005	18:51
ZZZZZZ		5/3/2005	18:53
ZZZZZZ		5/3/2005	18:55
ZZZZZZ		5/3/2005	18:57
ZZZZZZ		5/3/2005	19:00
ZZZZZZ		5/3/2005	19:02
ZZZZZZ		5/3/2005	19:04
ZZZZZZ		5/3/2005	19:06
ZZZZZZ		5/3/2005	19:08
ZZZZZZ		5/3/2005	19:09
ZZZZZZ		5/3/2005	19:12
ZZZZZZ		5/3/2005	19:14
ZZZZZZ		5/3/2005	19:15
ZZZZZZ		5/3/2005	19:17
ZZZZZZ		5/3/2005	19:19
ZZZZZZ		5/3/2005	19:22
ZZZZZZ		5/3/2005	19:24
ZZZZZZ		5/3/2005	19:26
ZZZZZZ		5/3/2005	19:28
ZZZZZZ		5/3/2005	19:30
ZZZZZZ		5/3/2005	19:32
ZZZZZZ		5/3/2005	19:34
ZZZZZZ		5/3/2005	19:37

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAA **Chart Number:** AA0503C.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		5/3/2005	19:39
ZZZZZZ		5/3/2005	19:41
ZZZZZZ		5/3/2005	19:43

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST **Chart Number:** 0506IT1.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
CALBLK		5/6/2005	8:09
CAL1		5/6/2005	8:14
CAL2		5/6/2005	8:18
ICV		5/6/2005	8:22
ICB		5/6/2005	8:26
CRI		5/6/2005	8:31
CRI		5/6/2005	8:35
ICSA		5/6/2005	8:40
ICSAB		5/6/2005	8:44
CCV		5/6/2005	8:50
CCB		5/6/2005	8:54
ZZZZZZ		5/6/2005	9:01
ZZZZZZ		5/6/2005	9:06
ZZZZZZ		5/6/2005	9:10
ZZZZZZ		5/6/2005	9:14
ZZZZZZ		5/6/2005	9:19
ZZZZZZ		5/6/2005	9:23
ZZZZZZ		5/6/2005	9:28
ZZZZZZ		5/6/2005	9:32
ZZZZZZ		5/6/2005	9:36
ZZZZZZ		5/6/2005	9:41
CCV		5/6/2005	9:45
CCB		5/6/2005	9:49
ZZZZZZ		5/6/2005	9:54
ZZZZZZ		5/6/2005	9:58
ZZZZZZ		5/6/2005	10:02
ZZZZZZ		5/6/2005	10:07
CCV		5/6/2005	10:11
CCB		5/6/2005	10:16
ZZZZZZ		5/6/2005	10:27
ZZZZZZ		5/6/2005	10:32
ZZZZZZ		5/6/2005	10:36
ZZZZZZ		5/6/2005	10:40
ZZZZZZ		5/6/2005	10:45
ZZZZZZ		5/6/2005	10:49
ZZZZZZ		5/6/2005	10:53
ZZZZZZ		5/6/2005	10:58
ZZZZZZ		5/6/2005	11:02
ZZZZZZ		5/6/2005	11:07

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST **Chart Number:** 0506IT1.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
CCV		5/6/2005	11:11
CCB		5/6/2005	11:15
ZZZZZZ		5/6/2005	11:20
ZZZZZZ		5/6/2005	11:24
ZZZZZZ		5/6/2005	11:28
ZZZZZZ		5/6/2005	11:33
ZZZZZZ		5/6/2005	11:40
ZZZZZZ		5/6/2005	11:44
ZZZZZZ		5/6/2005	11:48
ZZZZZZ		5/6/2005	11:53
ZZZZZZ		5/6/2005	11:57
ZZZZZZ		5/6/2005	12:01
CCV		5/6/2005	12:06
CCB		5/6/2005	12:10
ZZZZZZ		5/6/2005	12:15
ZZZZZZ		5/6/2005	12:19
ZZZZZZ		5/6/2005	12:23
ZZZZZZ		5/6/2005	12:28
ZZZZZZ		5/6/2005	12:32
ZZZZZZ		5/6/2005	12:36
ZZZZZZ		5/6/2005	12:41
ZZZZZZ		5/6/2005	12:45
ZZZZZZ		5/6/2005	12:50
G9MPRB		5/6/2005	12:54
CCV		5/6/2005	12:58
CCB		5/6/2005	13:03
G9RQFC		5/6/2005	13:07
G80NW	XXXXX	5/6/2005	13:11
ZZZZZZ		5/6/2005	13:16
ZZZZZZ		5/6/2005	13:20
G80NWV	XXXXX	5/6/2005	13:25
G817C	RE73-05-58842	5/6/2005	13:29
G817CS	RE73-05-58842 S	5/6/2005	13:33
G817CD	RE73-05-58842 D	5/6/2005	13:38
G817D	RE73-05-58843	5/6/2005	13:42
G817E	RE73-05-58844	5/6/2005	13:46
CCV		5/6/2005	13:51
CCB		5/6/2005	13:55
G817F	RE73-05-58845	5/6/2005	14:00

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST **Chart Number:** 0506IT1.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
G817G	RE73-05-58846	5/6/2005	14:04
ZZZZZZ		5/6/2005	14:08
ZZZZZZ		5/6/2005	14:13
ZZZZZZ		5/6/2005	14:17
ZZZZZZ		5/6/2005	14:21
ZZZZZZ		5/6/2005	14:26
ZZZZZZ		5/6/2005	14:30
ZZZZZZ		5/6/2005	14:35
ZZZZZZ		5/6/2005	14:39
CCV		5/6/2005	14:43
CCB		5/6/2005	14:48
ZZZZZZ		5/6/2005	14:52
ZZZZZZ		5/6/2005	14:56
ZZZZZZ		5/6/2005	15:01
ZZZZZZ		5/6/2005	15:05
ZZZZZZ		5/6/2005	15:10
ZZZZZZ		5/6/2005	15:14
ZZZZZZ		5/6/2005	15:18
ZZZZZZ		5/6/2005	15:23
ZZZZZZ		5/6/2005	15:27
ZZZZZZ		5/6/2005	15:31
ZZZZZZ		5/6/2005	15:36
ZZZZZZ		5/6/2005	15:40
ZZZZZZ		5/6/2005	15:45
ZZZZZZ		5/6/2005	15:49
ZZZZZZ		5/6/2005	15:53
ZZZZZZ		5/6/2005	15:58
ZZZZZZ		5/6/2005	16:02
ZZZZZZ		5/6/2005	16:06
ZZZZZZ		5/6/2005	16:11
ZZZZZZ		5/6/2005	16:15
ZZZZZZ		5/6/2005	16:20
ZZZZZZ		5/6/2005	16:24
ZZZZZZ		5/6/2005	16:28
ZZZZZZ		5/6/2005	16:33
ZZZZZZ		5/6/2005	16:37
ZZZZZZ		5/6/2005	16:41
ZZZZZZ		5/6/2005	16:45
ZZZZZZ		5/6/2005	16:50

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST **Chart Number:** 0506IT1.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		5/6/2005	16:54
ZZZZZZ		5/6/2005	16:59
ZZZZZZ		5/6/2005	17:03
ZZZZZZ		5/6/2005	17:07
ZZZZZZ		5/6/2005	17:12
ZZZZZZ		5/6/2005	17:16
ZZZZZZ		5/6/2005	17:52
ZZZZZZ		5/6/2005	17:56
ZZZZZZ		5/6/2005	18:00
ZZZZZZ		5/6/2005	18:04
ZZZZZZ		5/6/2005	18:09
ZZZZZZ		5/6/2005	18:13
ZZZZZZ		5/6/2005	18:17
ZZZZZZ		5/6/2005	18:22
ZZZZZZ		5/6/2005	18:26
ZZZZZZ		5/6/2005	18:30
ZZZZZZ		5/6/2005	18:35
ZZZZZZ		5/6/2005	18:39
ZZZZZZ		5/6/2005	18:44
ZZZZZZ		5/6/2005	18:48
ZZZZZZ		5/6/2005	18:52
ZZZZZZ		5/6/2005	18:57
ZZZZZZ		5/6/2005	19:01
ZZZZZZ		5/6/2005	19:05
ZZZZZZ		5/6/2005	19:10
ZZZZZZ		5/6/2005	19:14
ZZZZZZ		5/6/2005	19:19
ZZZZZZ		5/6/2005	19:23
ZZZZZZ		5/6/2005	19:27
ZZZZZZ		5/6/2005	19:32
ZZZZZZ		5/6/2005	19:36
ZZZZZZ		5/6/2005	19:40
ZZZZZZ		5/6/2005	19:45
ZZZZZZ		5/6/2005	19:49
ZZZZZZ		5/6/2005	19:54
ZZZZZZ		5/6/2005	19:58
ZZZZZZ		5/6/2005	20:02
ZZZZZZ		5/6/2005	20:07
ZZZZZZ		5/6/2005	20:11

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST **Chart Number:** 0506IT1.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		5/6/2005	20:15
ZZZZZZ		5/6/2005	20:20
ZZZZZZ		5/6/2005	20:24
ZZZZZZ		5/6/2005	20:28
ZZZZZZ		5/6/2005	20:33
ZZZZZZ		5/6/2005	20:37
ZZZZZZ		5/6/2005	20:42
ZZZZZZ		5/6/2005	20:46
ZZZZZZ		5/6/2005	20:50
ZZZZZZ		5/6/2005	20:55
ZZZZZZ		5/6/2005	20:59
ZZZZZZ		5/6/2005	21:03
ZZZZZZ		5/6/2005	21:08
ZZZZZZ		5/6/2005	21:12
ZZZZZZ		5/6/2005	21:17
ZZZZZZ		5/6/2005	21:21
ZZZZZZ		5/6/2005	21:25
ZZZZZZ		5/6/2005	21:30
ZZZZZZ		5/6/2005	21:34
ZZZZZZ		5/6/2005	21:38
ZZZZZZ		5/6/2005	21:43
ZZZZZZ		5/6/2005	21:47
ZZZZZZ		5/6/2005	21:52
ZZZZZZ		5/6/2005	21:56
ZZZZZZ		5/6/2005	22:00
ZZZZZZ		5/6/2005	22:05
ZZZZZZ		5/6/2005	22:09
ZZZZZZ		5/6/2005	22:13
ZZZZZZ		5/6/2005	22:18
ZZZZZZ		5/6/2005	22:22
ZZZZZZ		5/6/2005	22:27
ZZZZZZ		5/6/2005	22:31
ZZZZZZ		5/6/2005	22:35
ZZZZZZ		5/6/2005	22:40
ZZZZZZ		5/6/2005	22:44
ZZZZZZ		5/6/2005	22:48
ZZZZZZ		5/6/2005	22:53
ZZZZZZ		5/6/2005	22:57
ZZZZZZ		5/6/2005	23:02

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST **Chart Number:** 0506IT1.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		5/6/2005	23:06
ZZZZZZ		5/6/2005	23:10
ZZZZZZ		5/6/2005	23:15
ZZZZZZ		5/6/2005	23:19
ZZZZZZ		5/6/2005	23:23
ZZZZZZ		5/6/2005	23:28
ZZZZZZ		5/6/2005	23:32
ZZZZZZ		5/6/2005	23:37
ZZZZZZ		5/6/2005	23:41
ZZZZZZ		5/6/2005	23:45
ZZZZZZ		5/6/2005	23:50
ZZZZZZ		5/6/2005	23:54
ZZZZZZ		5/6/2005	23:58
ZZZZZZ		5/7/2005	0:03
ZZZZZZ		5/7/2005	0:07
ZZZZZZ		5/7/2005	0:12
ZZZZZZ		5/7/2005	0:16
ZZZZZZ		5/7/2005	0:20
ZZZZZZ		5/7/2005	0:25
ZZZZZZ		5/7/2005	0:29
ZZZZZZ		5/7/2005	0:34

METALS RAW DATA

JJ 5/10/05

Analysis Report Summary

STD 050605 Lot OC

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#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	CALBLK	0506IT1	6010C	05/06/05	08:09		X	IR
2	CAL1	0506IT1	6010C	05/06/05	08:14		X	IR
3	CAL2	0506IT1	6010C	05/06/05	08:18		X	IR
4	ICV	0506IT1	6010C	05/06/05	08:22	STL	Q	CONC
5	ICB	0506IT1	6010C	05/06/05	08:26	STL	Q	CONC
6	LLC	0506IT1	6010C	05/06/05	08:31	STL	Q	CONC
7	LLC AG	0506IT1	6010C	05/06/05	08:35	STL	Q	CONC
8	ICSA	0506IT1	6010C	05/06/05	08:40	STL	Q	CONC
9	ICSAB	0506IT1	6010C	05/06/05	08:44	STL	Q	CONC
10	CCV	0506IT1	6010C	05/06/05	08:50	STL	Q	CONC
11	CCB	0506IT1	6010C	05/06/05	08:54	STL	Q	CONC
12	G9TQTB	0506IT1	6010C	05/06/05	09:01	STL	S	CONC
13	G9WHRC	0506IT1	6010C	05/06/05	09:06	STL	S	CONC
14	G9RK9	0506IT1	6010C	05/06/05	09:10	STL	S	CONC
15	G9RLM	0506IT1	6010C	05/06/05	09:14	STL	S	CONC
16	G9RLQ	0506IT1	6010C	05/06/05	09:19	STL	S	CONC
17	G9RLR	0506IT1	6010C	05/06/05	09:23	STL	S	CONC
18	G9RLW	0506IT1	6010C	05/06/05	09:28	STL	S	CONC
19	G9RLWS	0506IT1	6010C	05/06/05	09:32	STL	S	CONC
20	G9RLWD	0506IT1	6010C	05/06/05	09:36	STL	S	CONC
21	G9RLWV 5X	0506IT1	6010C	05/06/05	09:41	STL	S	CONC
22	CCV	0506IT1	6010C	05/06/05	09:45	STL	Q	CONC
23	CCB	0506IT1	6010C	05/06/05	09:49	STL	Q	CONC
24	G9RL1	0506IT1	6010C	05/06/05	09:54	STL	S	CONC
25	G9RL2	0506IT1	6010C	05/06/05	09:58	STL	S	CONC
26	G9RL3	0506IT1	6010C	05/06/05	10:02	STL	S	CONC
27	G9RL5	0506IT1	6010C	05/06/05	10:07	STL	S	CONC
28	CCV	0506IT1	6010C	05/06/05	10:11	STL	Q	CONC
29	CCB	0506IT1	6010C	05/06/05	10:16	STL	Q	CONC
30	G9VXQB	0506IT1	6010C	05/06/05	10:27	STL	S	CONC
31	G9VXQC	0506IT1	6010C	05/06/05	10:32	STL	S	CONC
32	G9P28	0506IT1	6010C	05/06/05	10:36	STL	S	CONC
33	G9P28S	0506IT1	6010C	05/06/05	10:40	STL	S	CONC
34	G9P28D	0506IT1	6010C	05/06/05	10:45	STL	S	CONC
35	G9P28V 5X	0506IT1	6010C	05/06/05	10:49	STL	S	CONC
36	G9L7DB	0506IT1	6010C	05/06/05	10:53	STL	S	CONC
37	G9L7DC	0506IT1	6010C	05/06/05	10:58	STL	S	CONC
38	G9GGF	0506IT1	6010C	05/06/05	11:02	STL	S	CONC
39	G9GGFS	0506IT1	6010C	05/06/05	11:07	STL	S	CONC
40	CCV	0506IT1	6010C	05/06/05	11:11	STL	Q	CONC
41	CCB	0506IT1	6010C	05/06/05	11:15	STL	Q	CONC
42	G9GGFD	0506IT1	6010C	05/06/05	11:20	STL	S	CONC
43	G9GGFV 5X	0506IT1	6010C	05/06/05	11:24	STL	S	CONC
44	G9GGQ	0506IT1	6010C	05/06/05	11:28	STL	S	CONC
45	G9GGT	0506IT1	6010C	05/06/05	11:33	STL	S	CONC
46	G9GG0	0506IT1	6010C	05/06/05	11:40	STL	S	CONC
47	G9GG1	0506IT1	6010C	05/06/05	11:44	STL	S	CONC
48	G9K20	0506IT1	6010C	05/06/05	11:48	STL	S	CONC
49	G9K3D	0506IT1	6010C	05/06/05	11:53	STL	S	CONC
50	G9L2FB	0506IT1	6010C	05/06/05	11:57	STL	S	CONC
51	G9L2FC	0506IT1	6010C	05/06/05	12:01	STL	S	CONC
52	CCV	0506IT1	6010C	05/06/05	12:06	STL	Q	CONC
53	CCB	0506IT1	6010C	05/06/05	12:10	STL	Q	CONC

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#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	G81F3 5	0506IT1	6010C	05/06/05	12:15	STL	S	CONC
55	G81F3S 5	0506IT1	6010C	05/06/05	12:19	STL	S	CONC
56	G81F3D 5	0506IT1	6010C	05/06/05	12:23	STL	S	CONC
57	G81F3V 25	0506IT1	6010C	05/06/05	12:28	STL	S	CONC
58	G9GG2 5	0506IT1	6010C	05/06/05	12:32	STL	S	CONC
59	G9H12	0506IT1	6010C	05/06/05	12:36	STL	S	CONC
60	G9H2V	0506IT1	6010C	05/06/05	12:41	STL	S	CONC
61	G9H27	0506IT1	6010C	05/06/05	12:45	STL	S	CONC
62	G9H3E	0506IT1	6010C	05/06/05	12:50	STL	S	CONC
63	G9MPRB	0506IT1	6010C	05/06/05	12:54	STL	S	CONC
64	CCV	0506IT1	6010C	05/06/05	12:58	STL	Q	CONC
65	CCB	0506IT1	6010C	05/06/05	13:03	STL	Q	CONC
66	G9RQFC	0506IT1	6010C	05/06/05	13:07	STL	S	CONC
67	G80NW	0506IT1	6010C	05/06/05	13:11	STL	S	CONC
68	G80NWX	0506IT1	6010C	05/06/05	13:16	STL	S	CONC
69	G80NWS	0506IT1	6010C	05/06/05	13:20	STL	S	CONC
70	G80NWV 5X	0506IT1	6010C	05/06/05	13:25	STL	S	CONC
71	G817C	0506IT1	6010C	05/06/05	13:29	STL	S	CONC
72	G817CS	0506IT1	6010C	05/06/05	13:33	STL	S	CONC
73	G817CD	0506IT1	6010C	05/06/05	13:38	STL	S	CONC
74	G817D	0506IT1	6010C	05/06/05	13:42	STL	S	CONC
75	G817E	0506IT1	6010C	05/06/05	13:46	STL	S	CONC
76	CCV	0506IT1	6010C	05/06/05	13:51	STL	Q	CONC
77	CCB	0506IT1	6010C	05/06/05	13:55	STL	Q	CONC
78	G817F	0506IT1	6010C	05/06/05	14:00	STL	S	CONC
79	G817G	0506IT1	6010C	05/06/05	14:04	STL	S	CONC
80	G893X	0506IT1	6010C	05/06/05	14:08	STL	S	CONC
81	G894X	0506IT1	6010C	05/06/05	14:13	STL	S	CONC
82	G8943	0506IT1	6010C	05/06/05	14:17	STL	S	CONC
83	G895L	0506IT1	6010C	05/06/05	14:21	STL	S	CONC
84	G895P	0506IT1	6010C	05/06/05	14:26	STL	S	CONC
85	G895V	0506IT1	6010C	05/06/05	14:30	STL	S	CONC
86	G8952	0506IT1	6010C	05/06/05	14:35	STL	S	CONC
87	G8959	0506IT1	6010C	05/06/05	14:39	STL	S	CONC
88	CCV	0506IT1	6010C	05/06/05	14:43	STL	Q	CONC
89	CCB	0506IT1	6010C	05/06/05	14:48	STL	Q	CONC
90	G896A	0506IT1	6010C	05/06/05	14:52	STL	S	CONC
91	G896D	0506IT1	6010C	05/06/05	14:56	STL	S	CONC
92	G896E	0506IT1	6010C	05/06/05	15:01	STL	S	CONC
93	G8985	0506IT1	6010C	05/06/05	15:05	STL	S	CONC
94	G899L	0506IT1	6010C	05/06/05	15:10	STL	S	CONC
95	G9Q7WB	0506IT1	6010C	05/06/05	15:14	STL	S	CONC
96	G9Q7WC	0506IT1	6010C	05/06/05	15:18	STL	S	CONC
97	G8V7K	0506IT1	6010C	05/06/05	15:23	STL	S	CONC
98	G8V7KS	0506IT1	6010C	05/06/05	15:27	STL	S	CONC
99	G8V7KD	0506IT1	6010C	05/06/05	15:31	STL	S	CONC
100	CCV1	0506IT1	6010C	05/06/05	15:36	STL	Q	CONC
101	CCB1	0506IT1	6010C	05/06/05	15:40	STL	Q	CONC
102	G8V7KV 5X	0506IT1	6010C	05/06/05	15:45	STL	S	CONC
103	G8V8N	0506IT1	6010C	05/06/05	15:49	STL	S	CONC
104	G9Q88B	0506IT1	6010C	05/06/05	15:53	STL	S	CONC
105	G9Q88C	0506IT1	6010C	05/06/05	15:58	STL	S	CONC
106	G9NXC	0506IT1	6010C	05/06/05	16:02	STL	S	CONC
107	G9PW2	0506IT1	6010C	05/06/05	16:06	STL	S	CONC

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#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
108	G9PW2S	O506IT1	6010C	05/06/05	16:11	STL	S	CONC
109	G9PW2D	O506IT1	6010C	05/06/05	16:15	STL	S	CONC
110	G9PW2V 5X	O506IT1	6010C	05/06/05	16:20	STL	S	CONC
111	G9P9Q	O506IT1	6010C	05/06/05	16:24	STL	S	CONC
112	CALBLK	O506IT1	6010C	05/06/05	16:28		X	IR
113	CAL1	O506IT1	6010C	05/06/05	16:33		X	IR
114	CAL2	O506IT1	6010C	05/06/05	16:37		X	IR
115	CCV1	O506IT1	6010C	05/06/05	16:41	STL	Q	CONC
116	CCB1	O506IT1	6010C	05/06/05	16:45	STL	Q	CONC
117	G9WPGB	O506IT1	6010C	05/06/05	16:50	STL	S	CONC
118	G9WPGC	O506IT1	6010C	05/06/05	16:54	STL	S	CONC
119	G9WPGL	O506IT1	6010C	05/06/05	16:59	STL	S	CONC
120	G9EF6	O506IT1	6010C	05/06/05	17:03	STL	S	CONC
121	G9EF6V 5X	O506IT1	6010C	05/06/05	17:07	STL	S	CONC
122	CCV1	O506IT1	6010C	05/06/05	17:12	STL	Q	CONC
123	CCB1	O506IT1	6010C	05/06/05	17:16	STL	Q	CONC
124	CALBLK	O506IT1	6010C	05/06/05	17:52		X	IR
125	CAL1	O506IT1	6010C	05/06/05	17:56		X	IR
126	CAL2	O506IT1	6010C	05/06/05	18:00		X	IR
127	CCV	O506IT1	6010C	05/06/05	18:04	STL	Q	CONC
128	CCB	O506IT1	6010C	05/06/05	18:09	STL	Q	CONC
129	G9P18B	O506IT1	6010C	05/06/05	18:13	STL	S	CONC
130	G9WK6C	O506IT1	6010C	05/06/05	18:17	STL	S	CONC
131	G9DNL	O506IT1	6010C	05/06/05	18:22	STL	S	CONC
132	G9DNV	O506IT1	6010C	05/06/05	18:26	STL	S	CONC
133	G9D9P	O506IT1	6010C	05/06/05	18:30	STL	S	CONC
134	G9GAR	O506IT1	6010C	05/06/05	18:35	STL	S	CONC
135	G9GARX	O506IT1	6010C	05/06/05	18:39	STL	S	CONC
136	G9GARS	O506IT1	6010C	05/06/05	18:44	STL	S	CONC
137	G9GARV 5X	O506IT1	6010C	05/06/05	18:48	STL	S	CONC
138	G9MAF	O506IT1	6010C	05/06/05	18:52	STL	S	CONC
139	CCV	O506IT1	6010C	05/06/05	18:57	STL	Q	CONC
140	CCB	O506IT1	6010C	05/06/05	19:01	STL	Q	CONC
141	G9HH7	O506IT1	6010C	05/06/05	19:05	STL	S	CONC
142	G9HH7S	O506IT1	6010C	05/06/05	19:10	STL	S	CONC
143	G9HH7D	O506IT1	6010C	05/06/05	19:14	STL	S	CONC
144	G9QMDB	O506IT1	6010C	05/06/05	19:19	STL	S	CONC
145	G9WJ2C	O506IT1	6010C	05/06/05	19:23	STL	S	CONC
146	G9QD1	O506IT1	6010C	05/06/05	19:27	STL	S	CONC
147	G9QD1S	O506IT1	6010C	05/06/05	19:32	STL	S	CONC
148	G9QD1D	O506IT1	6010C	05/06/05	19:36	STL	S	CONC
149	G9QD1V 5X	O506IT1	6010C	05/06/05	19:40	STL	S	CONC
150	G9QEW	O506IT1	6010C	05/06/05	19:45	STL	S	CONC
151	CCV	O506IT1	6010C	05/06/05	19:49	STL	Q	CONC
152	CCB	O506IT1	6010C	05/06/05	19:54	STL	Q	CONC
153	G9QE1	O506IT1	6010C	05/06/05	19:58	STL	S	CONC
154	G9QE2	O506IT1	6010C	05/06/05	20:02	STL	S	CONC
155	G9QE6	O506IT1	6010C	05/06/05	20:07	STL	S	CONC
156	G9QE8	O506IT1	6010C	05/06/05	20:11	STL	S	CONC
157	G9QE9	O506IT1	6010C	05/06/05	20:15	STL	S	CONC
158	G9QFC	O506IT1	6010C	05/06/05	20:20	STL	S	CONC
159	G9QFF	O506IT1	6010C	05/06/05	20:24	STL	S	CONC
160	G9RA9B	O506IT1	6010C	05/06/05	20:28	STL	S	CONC
161	G9WJRC	O506IT1	6010C	05/06/05	20:33	STL	S	CONC

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#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
162	G9D8V	0506IT1	6010C	05/06/05	20:37	STL	S	CONC
163	CCV	0506IT1	6010C	05/06/05	20:42	STL	Q	CONC
164	CCB	0506IT1	6010C	05/06/05	20:46	STL	Q	CONC
165	G9D8V 10X	0506IT1	6010C	05/06/05	20:50	STL	S	CONC
166	G9D81	0506IT1	6010C	05/06/05	20:55	STL	S	CONC
167	G9EA4	0506IT1	6010C	05/06/05	20:59	STL	S	CONC
168	G9EA4 10X	0506IT1	6010C	05/06/05	21:03	STL	S	CONC
169	G9ECN	0506IT1	6010C	05/06/05	21:08	STL	S	CONC
170	G9ECP	0506IT1	6010C	05/06/05	21:12	STL	S	CONC
171	G9ECV	0506IT1	6010C	05/06/05	21:17	STL	S	CONC
172	G9ECV 10X	0506IT1	6010C	05/06/05	21:21	STL	S	CONC
173	G9EDE	0506IT1	6010C	05/06/05	21:25	STL	S	CONC
174	G9EDE 10X	0506IT1	6010C	05/06/05	21:30	STL	S	CONC
175	CCV	0506IT1	6010C	05/06/05	21:34	STL	Q	CONC
176	CCB	0506IT1	6010C	05/06/05	21:38	STL	Q	CONC
177	G9EDG 10X	0506IT1	6010C	05/06/05	21:43	STL	S	CONC
178	G9EDH	0506IT1	6010C	05/06/05	21:47	STL	S	CONC
179	G9EDN	0506IT1	6010C	05/06/05	21:52	STL	S	CONC
180	G9EDNS	0506IT1	6010C	05/06/05	21:56	STL	S	CONC
181	G9EDND	0506IT1	6010C	05/06/05	22:00	STL	S	CONC
182	G9EDNV 5X	0506IT1	6010C	05/06/05	22:05	STL	S	CONC
183	G9EFM	0506IT1	6010C	05/06/05	22:09	STL	S	CONC
184	G9TQ6B	0506IT1	6010C	05/06/05	22:13	STL	S	CONC
185	G9WNJC	0506IT1	6010C	05/06/05	22:18	STL	S	CONC
186	G9P28	0506IT1	6010C	05/06/05	22:22	STL	S	CONC
187	CCV1	0506IT1	6010C	05/06/05	22:27	STL	Q	CONC
188	CCB1	0506IT1	6010C	05/06/05	22:31	STL	Q	CONC
189	G9RE6	0506IT1	6010C	05/06/05	22:35	STL	S	CONC
190	G9RFM	0506IT1	6010C	05/06/05	22:40	STL	S	CONC
191	G9RF1	0506IT1	6010C	05/06/05	22:44	STL	S	CONC
192	G9RF4	0506IT1	6010C	05/06/05	22:48	STL	S	CONC
193	G9RGA	0506IT1	6010C	05/06/05	22:53	STL	S	CONC
194	G9RM0	0506IT1	6010C	05/06/05	22:57	STL	S	CONC
195	G9RPL	0506IT1	6010C	05/06/05	23:02	STL	S	CONC
196	G9RPM	0506IT1	6010C	05/06/05	23:06	STL	S	CONC
197	G9RPN	0506IT1	6010C	05/06/05	23:10	STL	S	CONC
198	G9RPP	0506IT1	6010C	05/06/05	23:15	STL	S	CONC
199	CCV1	0506IT1	6010C	05/06/05	23:19	STL	Q	CONC
200	CCB1	0506IT1	6010C	05/06/05	23:23	STL	Q	CONC
201	G9RPR	0506IT1	6010C	05/06/05	23:28	STL	S	CONC
202	G9RPV	0506IT1	6010C	05/06/05	23:32	STL	S	CONC
203	G9RPW	0506IT1	6010C	05/06/05	23:37	STL	S	CONC
204	G9RNQ	0506IT1	6010C	05/06/05	23:41	STL	S	CONC
205	G9RNQS	0506IT1	6010C	05/06/05	23:45	STL	S	CONC
206	G9RNQD	0506IT1	6010C	05/06/05	23:50	STL	S	CONC
207	G9RNQV 5X	0506IT1	6010C	05/06/05	23:54	STL	S	CONC
208	G9RNX	0506IT1	6010C	05/06/05	23:58	STL	S	CONC
209	CCV1	0506IT1	6010C	05/07/05	00:03	STL	Q	CONC
210	CCB1	0506IT1	6010C	05/07/05	00:07	STL	Q	CONC
211	G9P28 5X	0506IT1	6010C	05/07/05	00:12	STL	S	CONC
212	G9P28S 5X	0506IT1	6010C	05/07/05	00:16	STL	S	CONC
213	G9P28D 5X	0506IT1	6010C	05/07/05	00:20	STL	S	CONC
214	G9P28V 25X	0506IT1	6010C	05/07/05	00:25	STL	S	CONC
215	CCV1	0506IT1	6010C	05/07/05	00:29	STL	Q	CONC

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#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
216	CCB1	0506IT1	6010C	05/07/05	00:34	STL	Q	CONC

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#	Sample Name	Ag3280	As1890	Ba4934	Cd2265	Cr2677	Pb2203
1	CALBLK	-.15249	.42147	-.00349	-.01049	.01499	
2	CAL1	300.267	1743.72	458.15	1189.45	912.604	
3	CAL2						
4	ICV	1.0063	4.0613	4.2510	4.0386	3.9461	3.9928
5	ICB	.00050	.00057	.00003	.00003	-.00032	.00034
6	LLC	Q.01292	.01040	.21275	.00511	.00972	.01062
7	LLC AG	.01037	.05069	.05299	.05325	.05024	.05063
8	ICSA	.00024	.00121	.00222	-.00648	.00143	-.00358
9	ICSAB	.98054	.95597	.52232	.89934	.46101	.90439
10	CCV	1.0162	4.0941	4.2993	4.0947	3.9970	4.0436
11	CCB	.00082	.00031	.00054	.00051	.00033	.00093
12	G9TQTB	.00042	L-.00040	.07294	.00002	-.00016	.00245
13	G9WHRC	.25151	1.0294	1.1338	1.0132	.99838	1.0021
14	G9RK9	.00105	.07547	.45875	.02131	.00034	.24737
15	G9RLM	.00177	.26904	.39709	.03125	-.00065	.18269
16	G9RLQ	.00063	.15143	.47212	.03473	-.00023	.39136
17	G9RLR	.00088	.13090	.49965	.03283	-.00087	.22156
18	G9RLW	.00085	.12999	.55608	.03610	-.00015	.20632
19	G9RLWS	.04952	2.1510	2.6150	.08397	.19244	.68073
20	G9RLWD	.05137	2.1786	2.6372	.08402	.19506	.68410
21	G9RLWV 5X	.00082	.02617	.11706	.00755	-.00011	.04286
22	CCV	1.0064	4.0504	4.2543	4.0401	3.9432	3.9966
23	CCB	.00027	.00062	.00051	.00050	.00000	.00125
24	G9RL1	.00121	.12407	.46476	.02190	.00001	.26556
25	G9RL2	.00198	.22285	.33381	.03160	-.00088	.27919
26	G9RL3	.00197	.12256	.46035	.02960	-.00046	.24572
27	G9RL5	.00062	.09946	.66629	.01574	-.00056	.34283
28	CCV	1.0120	4.0739	4.2709	4.0570	3.9632	4.0092
29	CCB	.00072	.00049	.00067	.00062	.00052	.00049
30	G9VXQB	-.00010	L-.00072	.00112	-.00003	.00153	.00051
31	G9VXQC	1.5295	1.7866	2.9606	1.3567	.71946	1.5399
32	G9P28	-.00161	-.00312	.03255	.00405	.09769	.11034
33	G9P28S	.04797	2.0052	2.1595	.05276	.27166	.57326
34	G9P28D	.04756	1.9783	2.1305	.05254	.27482	.57867
35	G9P28V 5X	-.00033	-.00010	.00677	.00080	.01968	.02294
36	G9L7DB	.00023	L-.00078	.00037	.00004	.00012	-.00012
37	G9L7DC	.25312	1.0408	1.1111	1.0423	1.0193	1.0117
38	G9GGF	.00081	.00020	.55495	-.00075	.00063	.00938
39	G9GGFS	.05037	2.0310	2.7063	.04884	.19723	.49461
40	CCV	1.0224	4.0979	4.2877	4.0750	3.9795	4.0037
41	CCB	.00093	.00145	.00091	.00096	.00039	.00129
42	G9GGFD	.05115	2.0621	2.7473	.04945	.20024	.50121
43	G9GGFV 5X	.00084	-.00007	.11099	.00001	.00028	.00298
44	G9GGQ	.00123	.00130	.07763	-.00001	.00206	.01124
45	G9GGT	.00093	.00169	.32079	-.00050	.00038	.00014
46	G9GG0	.00046	-.00082	.04975	-.00007	.00153	.00086
47	G9GG1	.00105	.00053	.06771	-.00001	.00145	.00026
48	G9K20	.00044	-.00062	.03461	-.00007	.00233	.00116
49	G9K3D	.00092	.00037	.05946	.00012	.00776	.00039
50	G9L2FB	.00071	L-.00022	.00075	.00005	.00072	.00071
51	G9L2FC	1.4670	1.6926	2.7618	1.3075	.68650	1.4540
52	CCV	1.0261	4.0949	4.2731	4.0751	3.9767	4.0148
53	CCB	.00074	.00102	.00100	.00094	.00075	.00102

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#	Sample Name	Ag3280	As1890	Ba4934	Cd2265	Cr2677	Pb2203
54	G81F3 5	.00563	.04954	1.8335	.08917	.37077	7.1970
55	G81F3S 5	.01485	.45384	2.0190	.07923	.41133	4.5164
56	G81F3D 5	.01598	.45021	2.5438	.09711	.39420	9.8774
57	G81F3V 25	.00184	.00996	.37224	.01858	.07672	1.4917
58	G9GG2 5	.00094	.00536	.23148	-.00242	.01003	.01256
59	G9H12	.00001	.00643	.07653	-.00220	.05133	.01292
60	G9H2V	.00026	.00776	.07559	-.00132	.03395	.01090
61	G9H27	.00034	.00592	.04461	-.00161	.02934	.00797
62	G9H3E	.00002	.01142	.06207	-.00243	.23498	.00947
63	G9MPRB	.00065	L-.00045	.04995	.00002	.00017	H.00396
64	CCV	1.0137	4.0510	4.1735	4.0318	3.9205	3.9563
65	CCB	.00130	.00155	.00145	.00142	.00138	.00203
66	G9RQFC	.25439	1.0183	1.0994	.99647	.98668	.98002
67	G80NW	.00096	.00004	.40008	.00010	.00022	.00352
68	G80NWX	.00015	.00048	.39950	-.00005	.00065	.00274
69	G80NWS	.05001	2.0387	2.4691	.04839	.19414	.47756
70	G80NWV 5X	.00201	-.00076	.08137	.00010	.00037	.00073
71	G817C	.00132	.00146	.93182	.02876	-.00002	.32660
72	G817CS	.04926	2.0333	2.9498	.07533	.19332	.78440
73	G817CD	.05033	2.0261	2.9276	.07475	.19229	.77595
74	G817D	.00024	.00141	.57939	.02529	-.00057	.31165
75	G817E	.00083	.00095	.78972	.00854	-.00012	.38391
76	CCV	1.0186	4.0526	4.1762	4.0112	3.9076	3.9364
77	CCB	.00037	.00221	.00148	.00149	.00126	.00195
78	G817F	.00020	-.00006	.99087	.00735	.00072	.25516
79	G817G	.00046	-.00056	.68012	.01925	.00032	.53062
80	G893X	.00155	.20220	.25016	.06971	-.00016	.30498
81	G894X	.00171	.13737	.55292	.05078	-.00079	.31049
82	G8943	.00146	.15693	.62247	.03652	-.00110	.99196
83	G895L	.00085	.05540	.62035	.00831	.00006	.45029
84	G895P	.00133	.10302	.37808	.04062	.00070	.21067
85	G895V	.00129	.05508	.38453	.03791	.00033	.28060
86	G8952	.00002	.03767	.45492	.02757	.00006	.24784
87	G8959	.00096	.03344	.44140	.01574	.00104	.38954
88	CCV	1.0138	4.0355	4.1106	4.0002	3.8870	3.9150
89	CCB	.00072	.00151	.00154	.00151	.00146	.00203
90	G896A	.00237	.13487	.34482	.03268	-.00029	.28598
91	G896D	.00072	.17388	.42532	.03396	-.00037	.30069
92	G896E	.00061	.01854	.37234	.02154	-.00023	.78260
93	G8985	.00077	.01186	.66710	.06578	-.00035	40.582
94	G899L	.00109	.00795	.54381	.01512	.00002	.16169
95	G9Q7WB	-.00013	L-.00157	.00089	-.00006	.00103	.00175
96	G9Q7WC	1.5687	1.7698	2.8546	1.3598	.74279	1.4950
97	G8V7K	.00090	.02856	.80099	L-.00662	.26205	.04298
98	G8V7KS	.05005	1.9667	2.7458	.04192	.42658	.50667
99	G8V7KD	.05088	1.9998	2.7816	.04324	.41256	.51911
100	CCV1	.98860	3.9240	3.9679	3.8917	3.7847	3.8141
101	CCB1	.00051	.00081	.00014	.00011	.00009	.00055
102	G8V7KV 5X	~~.00075~~	~~.00527~~	~~.16400~~	~~-.00148~~	~~.05511~~	~~.00972~~
103	G8V8N 8/25/05	.00095	.02407	.74279	L-.00573	.32786	.04498
104	G9Q88B	.00083	L-.00050	.00048	.00000	-.00015	.00025
105	G9Q88C	.25922	1.0035	1.0380	1.0071	.98108	.97073
106	G9NXC	.00077	.04320	.19476	-.00398	-.00067	.00140
107	G9PW2	~~-.00002~~	~~-.00055~~	.06988	~~-.00013~~	~~.00064~~	~~.00002~~

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#	Sample Name	Ag3280	As1890	Ba4934	Cd2265	Cr2677	Pb2203
108	G9PW2S	~~.06000~~	~~2.0248~~	~~2.1201~~	~~.04902~~	~~.19516~~	~~.47580~~
109	G9PW2D 12/5/05	.05971	2.0196	2.1254	~~.04892~~	.19518	.47422
110	G9PW2V 5X	.00047	~~.00045~~	.01414	-.00008	.00062	-.00046
111	G9P9Q	~~.00062~~	~~.00066~~	~~.07225~~	~~.00011~~	~~.00007~~	~~.00038~~
112	CALBLK	-.13249	.16749	-.00499	-.00649	.03699	
113	CAL1	304.638	1744.66	436.316	1180.75	900.949	
114	CAL2						
115	CCV1	.98258	3.9583	4.1678	3.9332	3.8488	3.8809
116	CCB1	.00041	.00159	.00029	.00024	.00047	.00002
117	G9WPGB	.00065	L.00100	.00055	.00000	-.00055	.00028
118	G9WPGC	.25556	1.0134	1.0785	1.0171	.99310	.98737
119	G9WPGL	.26034	1.0485	1.0866	1.0381	1.0034	1.0046
120	G9EF6	.00108	.00195	.00085	.00007	-.00016	.00400
121	G9EF6V 5X	.00023	.00088	.00019	-.00011	-.00029	.00073
122	CCV1	.97118	3.9161	4.1057	3.8910	3.8016	3.8381
123	CCB1	.00030	.00199	.00032	.00013	.00006	.00027
124	CALBLK	-.09949	.28673	.00049	-.01299	.00549	
125	CAL1	301.333	1727.21	428.286	1171.38	892.623	
126	CAL2						
127	CCV	1.0010	4.0385	4.2404	4.0152	3.9210	3.9485
128	CCB	.00000	.00166	-.00002	.00004	.00008	.00003
129	G9P18B	.00008	L-.00028	.04601	.00009	.00014	H.00310
130	G9WK6C	.25451	1.0278	1.1222	1.0086	1.0002	.99605
131	G9DNL	.00055	.53862	.20914	-.00306	-.00254	.00556
132	G9DNV	-.00030	.69984	.25789	-.00150	-.00218	.00401
133	G9D9P	-.00029	.00150	.05096	-.00007	.00052	.00242
134	G9GAR	-.00023	.00140	4.1600	.05116	.00164	.01319
135	G9GARX	.00024	.00078	4.1441	.05272	.00079	.01396
136	G9GARS	.04993	2.0757	6.3693	.10319	.20159	.50365
137	G9GARV 5X	.00083	.00140	.83357	.01034	.00070	.00217
138	G9MAF	-.00001	.00003	.21685	.00008	.00046	.00362
139	CCV	1.0095	4.0529	4.2676	4.0424	3.9469	3.9773
140	CCB	.00004	.00085	.00047	.00059	.00054	.00046
141	G9HH7	.00049	.00007	.24898	.00195	.01604	.00452
142	G9HH7S	.05079	2.0393	2.3489	.05127	.21427	.49263
143	G9HH7D	.05064	2.0373	2.3663	.05088	.21408	.48940
144	G9QMDB	-.00022	L.00101	.07324	-.00008	.00004	.00291
145	G9WJ2C	.25596	1.0335	1.1502	1.0106	1.0008	.99668
146	G9QD1	-.00003	.00026	.32599	.00024	.00047	.00501
147	G9QD1S	.05035	2.0043	2.4211	.04906	.19476	.48340
148	G9QD1D	.04886	1.9946	2.3951	.04885	.19436	.48156
149	G9QD1V 5X	-.00018	.00079	.06796	.00005	.00052	-.00020
150	G9QEW	.00046	-.00068	.15952	.00037	.00105	.00479
151	CCV	1.0124	4.0716	4.2598	4.0373	3.9443	3.9766
152	CCB	.00037	.00267	.00084	.00092	.00067	.00135
153	G9QE1	.00038	.00021	.23672	.00025	.00165	.00729
154	G9QE2	.00038	.00019	.14843	.00045	.00091	.00410
155	G9QE6	.00119	.00099	.31908	.00076	.00080	.00368
156	G9QE8	.00016	.00133	.11512	.00097	.00166	.00431
157	G9QE9	.00001	-.00025	.15039	.00089	.00108	.00704
158	G9QFC	.00022	-.00024	.04957	.00020	.00021	.00563
159	G9QFF	-.00035	-.00086	.10715	.00050	.00008	.00419
160	G9RA9B	-.00024	L-.00055	.04257	-.00002	-.00003	-.00049
161	G9WJRC	.25268	1.0272	1.1465	1.0325	1.0121	.99976

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#	Sample Name	Ag3280	As1890	Ba4934	Cd2265	Cr2677	Pb2203
162	G9D8V	.00057	-.00030	2.7643	.01179	1.0631	.05404
163	CCV	1.0069	4.0426	4.2280	4.0129	3.9180	3.9492
164	CCB	.00058	.00182	.00117	.00113	.00149	.00074
165	G9D8V 10X	.00036	.00012	.31226	.00130	.11684	.00445
166	G9D81	.00037	-.00001	.24492	.00009	.00538	.00134
167	G9EA4	.00059	.00035	.22666	.00008	.00204	-.00038
168	G9EA4 10X	-.00020	-.00010	.02248	-.00008	.00042	-.00015
169	G9ECN	.00008	-.00041	.07086	.00243	.00217	.02048
170	G9ECP	.00070	.00240	.27092	.00570	.00602	.01072
171	G9ECV	-.00009	.00127	2.2011	-.00210	.01872	-.00258
172	G9ECV 10X	-.00020	.00031	.21852	-.00027	.00256	-.00092
173	G9EDE	-.00005	L-.01015	.26465	.00025	6.7722	.00046
174	G9EDE 10X	-.00022	-.00141	.02537	-.00004	.66069	-.00010
175	CCV	.98934	3.9880	4.1369	3.9692	3.8673	3.9052
176	CCB	.00027	.00115	.00119	.00118	.00140	.00126
177	G9EDG 10X	.00010	.00135	.01081	.00001	.00078	-.00025
178	G9EDH	.00022	.00017	.04164	.00000	.00082	-.00188
179	G9EDN	.00011	.00057	.31553	-.00007	.00233	.00046
180	G9EDNS	.04873	2.0011	2.4058	.04974	.19762	.48465
181	G9EDND	.04781	1.9594	2.3678	.04882	.19403	.47462
182	G9EDNV 5X	.00027	.00089	.06338	.00000	.00099	-.00042
183	G9EFM	.00080	.00108	.40858	-.00035	.00137	.06100
184	G9TQ6B	-.00046	L-.00003	H.25668	-.00001	.00043	.00276
185	G9WNJC	.25724	1.0306	H1.3246	1.0108	.99912	.99683
186	G9P28	-.00151	-.00179	.19940	.00208	.00076	.00167
187	CCV1	.98486	3.9757	4.1028	3.9602	3.8511	3.8986
188	CCB1	.00012	.00106	-.00004	.00004	.00070	-.00046
189	G9RE6	.00003	.00004	.22878	.00124	.00109	.01096
190	G9RFM	.00009	-.00030	.31761	.00106	.00136	.28975
191	G9RF1	.00029	.00094	.25586	.00077	.00092	.00992
192	G9RF4	.00074	.00066	.27466	.00082	.00045	.00784
193	G9RGA	.00017	-.00015	.27419	.03272	.01540	.00779
194	G9RM0	.00021	.01081	.72966	.01826	.00183	.00792
195	G9RPL	.00113	.01160	.91806	.01799	.00012	.00912
196	G9RPM	.00029	.01116	.81589	.01831	.00168	.00733
197	G9RPN	.00051	.00990	1.0421	.01498	.00062	.00753
198	G9RPP	.00133	.00508	.58988	.01414	-.00034	.01354
199	CCV1	1.0027	4.0390	4.1909	4.0166	3.9083	3.9469
200	CCB1	.00005	.00072	.00031	.00033	.00065	.00026
201	G9RPR	.00123	.01153	1.5575	.01525	.00021	.00923
202	G9RPV	.00002	.00993	1.1927	.01770	.00157	.00487
203	G9RPW	-.00002	.00977	.60003	.01566	.00211	.00540
204	G9RNQ	.00063	.00254	.34148	.00008	.00194	.00512
205	G9RNQS	.04813	2.0097	2.4182	.04719	.19291	.46970
206	G9RNQD	.04827	2.0300	2.4320	.04810	.19692	.48120
207	G9RNQV 5X	.00058	.00165	.06920	-.00003	.00052	.00068
208	G9RNX	.00073	.00319	.32873	.00004	.00146	.00446
209	CCV1	1.0016	4.0309	4.1842	4.0150	3.9049	3.9499
210	CCB1	.00047	.00245	.00088	.00087	.00143	.00004
211	G9P28 5X	-.00062	-.00021	.00654	.00074	.02056	.02126
212	G9P28S 5X	.00917	.41152	.44332	.01109	.05675	.11959
213	G9P28D 5X	.00935	.40503	.45120	.01104	.05756	.12252
214	G9P28V 25X	-.00017	.00069	.00130	.00014	.00446	.00417
215	CCV1	1.0067	4.0519	4.2116	4.0411	3.9344	3.9758

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#	Sample Name	Ag3280	As1890	Ba4934	Cd2265	Cr2677	Pb2203
216	CCB1	.00034	.00091	.00061	.00063	.00103	-.00041

#	Sample Name	Se1960	Zn2138	V_2924
1	CALBLK		.34198	-.00699
2	CAL1		214.73	203.02
3	CAL2			
4	ICV	4.0448	4.0111	4.0154
5	ICB	.00187	.00167	.00029
6	LLC	.01676	.02120	.05039
7	LLC AG	.05132	.05337	.05080
8	ICSA	.00095	-.00395	.00349
9	ICSAB	.95601	.93822	.47869
10	CCV	4.0949	4.0211	4.0656
11	CCB	.00246	.00219	.00117
12	G9TQTB	.00070	H.01062	.00024
13	G9WHRC	1.0567	1.0189	1.0212
14	G9RK9	.00073	1.2435	.00059
15	G9RLM	-.00001	2.1458	.00118
16	G9RLQ	-.00050	1.7002	.00009
17	G9RLR	-.00207	1.6615	.00012
18	G9RLW	-.00290	1.8055	.00014
19	G9RLWS	2.0537	2.2714	.49323
20	G9RLWD	2.1012	2.2504	.50031
21	G9RLWV 5X	.00222	.36435	.00036
22	CCV	4.0433	3.9382	4.0169
23	CCB	.00176	.00232	.00073
24	G9RL1	-.00095	1.4315	.00100
25	G9RL2	-.00172	1.5859	.00135
26	G9RL3	-.00094	1.7982	.00113
27	G9RL5	-.00144	2.1426	.00059
28	CCV	4.0667	3.9474	4.0385
29	CCB	.00162	.00231	.00137
30	G9VXQB	.00131	.00643	.00002
31	G9VXQC	.72114	1.7163	1.0646
32	G9P28	-.00076	.32789	.00884
33	G9P28S	1.9989	.77964	.51054
34	G9P28D	1.9717	.79987	.50459
35	G9P28V 5X	.00253	.06723	.00183
36	G9L7DB	-.00016	.00204	.00034
37	G9L7DC	1.0452	1.0032	1.0372
38	G9GGF	.00083	.02002	.00130
39	G9GGFS	2.0402	.50442	.50371
40	CCV	4.0718	3.9467	4.0596
41	CCB	.00227	.00245	.00130
42	G9GGFD	2.0690	.51448	.51262
43	G9GGFV 5X	.00249	.00661	.00068
44	G9GGQ	-.00003	.03880	.00505
45	G9GGT	-.00027	.00365	.00073
46	G9GG0	.00028	.00313	.00024
47	G9GG1	-.00038	.00600	.00088
48	G9K20	-.00012	.00767	.00120
49	G9K3D	.00000	.01013	.00103

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#	Sample Name	Se1960	Zn2138	V_2924
50	G9L2FB	.00101	H.01048	.00073
51	G9L2FC	.67405	1.6102	.99609
52	CCV	4.1106	3.9535	4.0570
53	CCB	.00148	.00253	.00125
54	G81F3 5	.00265	10.454	.04808
55	G81F3S 5	.39876	10.624	.14940
56	G81F3D 5	.37932	12.992	.14627
57	G81F3V 25	.00156	2.2042	.01089
58	G9GG2 5	-.00001	3.9578	.01152
59	G9H12	.00036	.05004	.04271
60	G9H2V	.00024	.04162	.02736
61	G9H27	.00195	.03831	.02756
62	G9H3E	.00026	.02664	.04237
63	G9MPRB	-.00014	H.01755	.00012
64	CCV	4.0367	3.9178	3.9961
65	CCB	.00184	.00306	.00226
66	G9RQFC	1.0494	1.0012	1.0130
67	G80NW	.00298	.79764	.00063
68	G80NWX	.00127	.79851	.00005
69	G80NWS	2.0810	1.2815	.49796
70	G80NWV 5X	.00184	.16122	.00066
71	G817C	.00124	12.238	.00071
72	G817CS	2.0877	12.155	.49853
73	G817CD	2.0745	12.006	.49619
74	G817D	.00181	17.015	.00004
75	G817E	.00199	4.9864	.00034
76	CCV	4.0547	3.9415	3.9928
77	CCB	.00364	.00310	.00130
78	G817F	.00160	4.0662	-.00007
79	G817G	.00069	8.8036	.00022
80	G893X	.00167	4.9694	.00084
81	G894X	-.00117	2.7334	.00071
82	G8943	-.00120	1.9767	.00049
83	G895L	-.00069	1.9114	.00093
84	G895P	.00105	1.9373	.00118
85	G895V	.00089	1.8030	.00078
86	G8952	-.00060	1.8509	.00007
87	G8959	.00048	1.0118	.00103
88	CCV	4.0264	3.9148	3.9644
89	CCB	.00341	.00310	.00167
90	G896A	.00250	1.7098	.00177
91	G896D	.00125	1.8609	.00049
92	G896E	.00168	1.6737	.00051
93	G8985	.00487	8.1715	.00049
94	G899L	-.00018	.92867	.00081
95	G9Q7WB	.00054	H.03371	.00022
96	G9Q7WC	.70313	1.7226	1.0997
97	G8V7K	-.00060	1.2639	.25693
98	G8V7KS	1.9172	1.5331	.71474
99	G8V7KD	1.9466	1.4206	.71252
100	CCV1	3.9216	3.8157	3.8513
101	CCB1	.00149	.00191	.00026
102	G8V7KV 5X	~~.00024~~	~~.26233~~	~~.05363~~
103	G8V8N	~~.00035~~	~~2.1733~~	~~.22487~~

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#	Sample Name	Se1960	Zn2138	V_2924
104	G9Q88B	.00123	.00364	.00044
105	G9Q88C	1.0024	.98172	.99460
106	G9NXC	-.00088	.03184	.00637
107	G9PW2	.00023	.00808	.00004
108	G9PW2S	2.0032	.49303	.49298
109	G9PW2D	2.0013	.49091	.49273
110	G9PW2V 5X	.00149	.00498	.00039
111	G9P9Q	.00080	.01778	.00031
112	CALBLK		.33898	.00199
113	CAL1		211.077	200.049
114	CAL2			
115	CCV1	3.9536	3.9215	3.9195
116	CCB1	.00072	.00221	.00022
117	G9WPGB	.00025	.00173	.00009
118	G9WPGC	1.0077	1.0048	1.0061
119	G9WPGL	1.0764	1.0348	1.0162
120	G9EF6	.00238	.00567	.00004
121	G9EF6V 5X	.00013	.00364	-.00037
122	CCV1	3.8993	3.8788	3.8713
123	CCB1	.00048	.00222	.00014
124	CALBLK		.34048	.00149
125	CAL1		209.435	197.704
126	CAL2			
127	CCV	4.0055	3.9964	3.9948
128	CCB	.00150	.00224	-.00020
129	G9P18B	.00154	H.01745	-.00002
130	G9WK6C	1.0599	1.0386	1.0259
131	G9DNL	-.00255	.47061	-.00031
132	G9DNV	.00097	.65861	-.00228
133	G9D9P	.00216	.03312	-.00050
134	G9GAR	.00302	.71026	.00002
135	G9GARX	.00214	.72534	-.00010
136	G9GARS	2.0845	1.2452	.51616
137	G9GARV 5X	.00151	.14000	.00053
138	G9MAF	.00215	.02156	.00007
139	CCV	4.0451	4.0091	4.0256
140	CCB	.00199	.00260	.00042
141	G9HH7	-.00019	3.0371	.00126
142	G9HH7S	2.0611	3.3594	.50589
143	G9HH7D	2.0687	3.3968	.50670
144	G9QMDB	.00131	H.02096	-.00050
145	G9WJ2C	1.0568	1.0480	1.0295
146	G9QD1	-.00032	.05101	-.00030
147	G9QD1S	2.0327	.53400	.49819
148	G9QD1D	2.0325	.52941	.49488
149	G9QD1V 5X	.00078	.00998	-.00002
150	G9QEW	.00032	.02399	.00035
151	CCV	4.0524	4.0132	4.0293
152	CCB	.00180	.00284	.00098
153	G9QE1	.00105	.03038	.00033
154	G9QE2	.00121	.02471	.00004
155	G9QE6	.00143	.05300	.00075
156	G9QE8	.00223	.04696	.00080
157	G9QE9	.00218	.04503	.00025

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#	Sample Name	Se1960	Zn2138	V_2924
158	G9QFC	.00135	.01044	.00004
159	G9QFF	.00188	.02127	-.00022
160	G9RA9B	-.00029	H.01088	-.00020
161	G9WJRC	1.0403	1.0275	1.0296
162	G9D8V	.00892	.47464	.00291
163	CCV	4.0318	3.9852	3.9975
164	CCB	.00249	.00312	.00121
165	G9D8V 10X	.00132	.05121	.00040
166	G9D81	.00039	.04837	.00098
167	G9EA4	.00026	.04722	.00025
168	G9EA4 10X	.00134	.00765	-.00002
169	G9ECN	-.00014	.04021	.00012
170	G9ECP	-.00039	.23570	.00114
171	G9ECV	.00483	.05511	.01586
172	G9ECV 10X	.00215	.00856	.00136
173	G9EDE	.00180	.10859	.00038
174	G9EDE 10X	.00048	.01365	-.00032
175	CCV	3.9596	3.9300	3.9301
176	CCB	.00213	.00324	.00146
177	G9EDG 10X	.00091	.00927	.00258
178	G9EDH	.00240	.00491	.00048
179	G9EDN	.00058	.25549	.00038
180	G9EDNS	2.0114	.73216	.49617
181	G9EDND	1.9705	.72399	.48699
182	G9EDNV 5X	.00043	.05267	.00020
183	G9EFM	.00076	.02020	.00030
184	G9TQ6B	.00125	H.01943	-.00050
185	G9WNJC	1.0580	1.0386	1.0243
186	G9P28	.00107	.03228	.00334
187	CCV1	3.9509	3.9234	3.9127
188	CCB1	.00156	.00204	.00012
189	G9RE6	.00155	.06349	-.00010
190	G9RFM	.00166	.21759	.00022
191	G9RF1	.00118	.03357	.00020
192	G9RF4	.00004	.06193	.00025
193	G9RGA	.00188	.25117	.00032
194	G9RM0	-.00073	.83930	.00000
195	G9RPL	-.00061	.92638	.00062
196	G9RPM	-.00019	.81710	-.00012
197	G9RPN	.00078	.71495	.00015
198	G9RPP	-.00056	.45942	.00027
199	CCV1	4.0214	3.9883	3.9837
200	CCB1	.00096	.00224	.00048
201	G9RPR	-.00028	.70062	.00032
202	G9RPV	-.00091	.50251	.00005
203	G9RPW	.00032	2.4658	-.00015
204	G9RNQ	.00077	.00652	.00410
205	G9RNQS	2.0418	.50777	.49974
206	G9RNQD	2.0720	.50712	.50584
207	G9RNQV 5X	.00148	.00357	.00108
208	G9RNX	.00082	.00576	.00409
209	CCV1	4.0214	3.9804	3.9830
210	CCB1	.00290	.00296	.00093
211	G9P28 5X	.00082	.07215	.00191

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#	Sample Name	Se1960	Zn2138	V_2924
212	G9P28S 5X	.41061	.16605	.10431
213	G9P28D 5X	.40790	.18057	.10360
214	G9P28V 25X	.00041	.01899	.00054
215	CCV1	4.0430	4.0038	4.0112
216	CCB1	.00192	.00252	.00047

JJ 5/6/05

Standardization Rpt.

STD 080608 6010C CAT

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Method: 6010C Standard: CALBLK
Run Time: 05/06/05 08:09:51

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Avge	-.13149	.19199	1.8229	-.71646	-.39698	.40148	3.0013
SDev	.02333	.02970	.1287	.10535	.11879	.19303	.0177
%RSD	17.745	15.468	7.0594	14.705	29.923	48.080	.58896
#1	-.11499	.21299	1.9139	-.79096	-.31298	.26499	2.9889
#2	-.14799	.17099	1.7319	-.64197	-.48098	.53797	3.0138

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Avge	.42148	-.00350	-1.2814	-.01050	.25499	.01500	-.01450
SDev	.13364	.00636	.0035	.00778	.00141	.03960	.00354
%RSD	31.707	181.83	.27589	74.078	.55459	263.99	24.383
#1	.32698	-.00800	-1.2839	-.01600	.25399	-.01300	-.01700
#2	.51597	.00100	-1.2789	-.00500	.25599	.04300	-.01200

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Avge	.12299	-.05600	2.0419	.92595	-.05700	-.15249	-.30998
SDev	.00566	.03394	.0113	.00566	.01697	.11101	.01697
%RSD	4.5991	60.609	.55405	.61089	29.773	72.797	5.4744
#1	.11899	-.08000	2.0339	.92195	-.06900	-.23099	-.32198
#2	.12699	-.03200	2.0499	.92995	-.04500	-.07400	-.29799

Elem	V 2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Avge	-.00700	.34198	.01050	.00000	.00050	-.06250	-.01500
SDev	.00424	.00000	.00212	.00000	.01061	.06576	.05232
%RSD	60.609	.00000	20.203	.00000	2121.3	105.22	348.84
#1	-.01000	.34198	.01200	.00000	-.00700	-.10899	-.05200
#2	-.00400	.34198	.00900	.00000	.00800	-.01600	.02200

Elem	Ti3349	Zr3496	Na3302
Avge	-.03450	97.040	11.155
SDev	.00212	.737	.082
%RSD	6.1488	.75998	.73525
#1	-.03600	96.518	11.097
#2	-.03300	97.561	11.213

Method: 6010C Standard: CAL1
Run Time: 05/06/05 08:14:14

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	As1890
Avge	1095.1	993.46	2907.6	4993.6	647.04	730.50	1743.7
SDev	2.9	.97	2.2	12.1	.02	2.38	6.0
%RSD	.26868	.09801	.07555	.24234	.00251	.32513	.34246
#1	1093.0	994.15	2906.0	4985.1	647.05	728.82	1739.5
#2	1097.1	992.77	2909.2	5002.2	647.03	732.18	1747.9

Elem	Ba4934	Be3130	Cd2265	Cr2677	Co2286	Cu3247	Mn2576
Avge	458.15	1717.5	1189.4	912.60	152.00	179.80	893.36
SDev	1.91	4.0	5.4	3.91	.57	.61	3.50
%RSD	.41777	.23424	.45303	.42854	.37261	.33900	.39123

Standardization Rpt. 05/06/05 08:18:33 AM page 2

#1	456.80	1714.7	1185.6	909.84	151.60	179.37	890.88
#2	459.50	1720.4	1193.3	915.37	152.40	180.23	895.83
Elem	Ni2316	Ag3280	Tl1908	V_2924	Zn2138	Mo2020	Sr4215
Avge	240.39	300.27	548.25	203.02	214.73	190.36	208.11
SDev	.93	1.04	1.93	.70	.79	.71	1.65
%RSD	.38797	.34733	.35196	.34410	.36814	.37441	.79060
#1	239.73	299.53	546.88	202.53	214.17	189.86	206.95
#2	241.05	301.00	549.61	203.51	215.29	190.87	209.28

Elem	Sn1899	Th	U	Ti3349	Zr3496
Avge	132.56	185.38	43.853	210.95	313.54
SDev	.49	.76	.264	.86	.25
%RSD	.37284	.40812	.60303	.40959	.07983
#1	132.21	184.84	43.666	210.34	313.36
#2	132.91	185.91	44.040	211.56	313.72

Method: 6010C Standard: CAL2
Run Time: 05/06/05 08:18:37

Elem	Al	Ca	Fe	Mg	Na3302
Avge	344.47	122.25	401.77	201.96	31.086
SDev	.99	.34	1.13	.43	.079
%RSD	.28799	.27416	.28053	.21496	.25475
#1	343.77	122.01	400.97	201.65	31.030
#2	345.17	122.49	402.56	202.27	31.142

Method: 6010C Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Sb1	206.831	CAL1	CALBLK	.009118	.001199	05/06/05 08:18:37
Sb2	206.832	CAL1	CALBLK	.010063	-.001932	05/06/05 08:18:37
Pb1	220.351	CAL1	CALBLK	.003433	-.006259	05/06/05 08:18:37
Pb2	220.352	CAL1	CALBLK	.002006	.001437	05/06/05 08:18:37
Se1	196.021	CAL1	CALBLK	.015087	.005989	05/06/05 08:18:37
Se2	196.022	CAL1	CALBLK	.013706	-.005503	05/06/05 08:18:37
Al	308.215	CAL2	CALBLK	.292855	-.878960	05/06/05 08:18:37
As1890	189.042	CAL1	CALBLK	.005736	-.002418	05/06/05 08:18:37
Ba4934	493.409	CAL1	CALBLK	.021827	.000076	05/06/05 08:18:37
Be3130	313.042	CAL1	CALBLK	.005818	.007455	05/06/05 08:18:37
Cd2265	226.502	CAL1	CALBLK	.008407	.000088	05/06/05 08:18:37
Ca	317.933	CAL2	CALBLK	.409857	-.104508	05/06/05 08:18:37
Cr2677	267.760	CAL1	CALBLK	.010966	-.000164	05/06/05 08:18:37
Co2286	228.616	CAL1	CALBLK	.065804	.000954	05/06/05 08:18:37
Cu3247	324.753	CAL1	CALBLK	.055815	-.006865	05/06/05 08:18:37
Fe	217.441	CAL2	CALBLK	.248866	.013936	05/06/05 08:18:37
Mg	279.078	CAL2	CALBLK	.250100	-.510679	05/06/05 08:18:37
Mn2576	257.610	CAL1	CALBLK	.011208	-.010378	05/06/05 08:18:37
Ni2316	231.604	CAL1	CALBLK	.041590	.002370	05/06/05 08:18:37
Ag3280	328.068	CAL1	CALBLK	.006713	.001024	05/06/05 08:18:37
Tl1908	190.864	CAL1	CALBLK	.018207	.005644	05/06/05 08:18:37
V_2924	292.402	CAL1	CALBLK	.049277	.000345	05/06/05 08:18:37

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Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Zn2138	213.856	CAL1	CALBLK	.516507	-.019645	05/06/05 08:18:37
Mo2020	202.030	CAL1	CALBLK	.052510	-.000551	05/06/05 08:18:37
Sr4215	421.552	CAL1	CALBLK	.048051	.000000	05/06/05 08:18:37
Sn1899	189.989	CAL1	CALBLK	.075465	-.000038	05/06/05 08:18:37
Th	401.913	CAL1	CALBLK	.054233	.003389	05/06/05 08:18:37
U	385.958	CAL1	CALBLK	.228621	.003429	05/06/05 08:18:37
Pb2203	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Se1960	196.026	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Sb2068	206.838	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Ti3349	334.941	CAL1	CALBLK	.047396	.001635	05/06/05 08:18:37
Zr3496	349.621	CAL1	CALBLK	.023095	-2.24108	05/06/05 08:18:37
Na3302	330.232	CAL2	CALBLK	5.01731	-55.9703	05/06/05 08:18:37

Method: 6010C

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sb1	206.831	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.98635	.013650
Sb2	206.832	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.99557	.004431
Pb1	220.351	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	9.97654	.023456
Pb2	220.352	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0168	-.016750
Se1	196.021	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.76756	.232440
Se2	196.022	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0067	-.006726
Al	308.215	CALBLK	.000000	.000000	-.000000
		CAL2	100.000	100.000	-.000008
As1890	189.042	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.99979	.000210

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Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ba4934	493.409	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Be3130	313.042	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cd2265	226.502	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0003	-.000270
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ca	317.933	CALBLK	.000000	.000000	-.000000
		CAL2	50.0000	50.0000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cr2677	267.760	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0072	-.007160
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Co2286	228.616	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0029	-.002900
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cu3247	324.753	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0285	-.028476
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Fe	217.441	CALBLK	.000000	.000000	-.000000
		CAL2	100.000	100.000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mg	279.078	CALBLK	.000000	.000000	-.000000
		CAL2	50.0000	50.0000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mn2576	257.610	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0023	-.002260
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ni2316	231.604	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0000	.000000
			Known	Measured	Residual

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Element	Wavelength	Standard	Concentration	Concentration	Concentration
Ag3280	328.068	CALBLK	.000000	.000000	-.000000
		CAL1	2.00000	2.01675	-.016750

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Tl1908	190.864	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	9.98764	.012361

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
V_2924	292.402	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0046	-.004601

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Zn2138	213.856	CALBLK	.156992	.341983	-.184991
		CAL1	110.890	214.730	-103.840

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mo2020	202.030	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	9.99540	.004600

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sr4215	421.552	CALBLK	.000000	.000000	.000000
		CAL1	10.0000	10.0000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sn1899	189.989	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0040	-.003950

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Th	401.913	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0570	-.057000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
U	385.958	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0291	-.029115

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Pb2203	220.353	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Se1960	196.026	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Sb2068	206.838	NONE	.000000	.000000	.000000

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		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ti3349	334.941	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Zr3496	349.621	CALBLK	.000000	.000000	-.000000
		CAL1	5.00000	5.00000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Na3302	330.232	CALBLK	.000000	.000001	-.000001
		CAL2	100.000	100.000	.000000

Method: 6010C Sample Name: ICV Operator: STL
Run Time: 05/06/05 08:22:29
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	4.0137	3.9831	3.9953	3.9916	4.0474	4.0436	39.463
SDev	.0066	.0089	.0051	.0046	.0097	.0045	.055
%RSD	.16328	.22298	.12835	.11435	.23856	.11160	.14026
#1	4.0090	3.9894	3.9989	3.9884	4.0542	4.0404	39.502
#2	4.0183	3.9768	3.9916	3.9948	4.0406	4.0467	39.423
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.0613	4.2510	4.2364	4.0386	20.312	3.9461	3.9691
SDev	.0019	.0092	.0012	.0013	.001	.0021	.0002
%RSD	.04749	.21747	.02767	.03259	.00428	.05276	.00587
#1	4.0627	4.2576	4.2372	4.0376	20.313	3.9475	3.9689
#2	4.0600	4.2445	4.2356	4.0395	20.311	3.9446	3.9692
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.0013	41.353	19.990	4.1088	3.9792	1.0063	3.8970
SDev	.0087	.026	.005	.0023	.0009	.0008	.0037
%RSD	.21840	.06276	.02477	.05629	.02291	.07860	.09577
#1	4.0075	41.371	19.987	4.1105	3.9799	1.0068	3.8997
#2	3.9951	41.334	19.994	4.1072	3.9786	1.0057	3.8944

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.0154	4.0111	4.1025	4.2535	4.1343	Q3.3233	4:0411
SDev	.0035	.0025	.0007	.0057	.0009	.0085	.0059
%RSD	.08667	.06202	.01804	.13339	.02072	.25514	.14677
#1	4.0178	4.0129	4.1020	4.2575	4.1337	Q3.3293	4.0453
#2	4.0129	4.0094	4.1030	4.2495	4.1349	Q3.3173	4.0369

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	3.9928	4.0448	4.0035	4.1382	3.8455	40.184	
SDev	.0013	.0002	.0014	.0051	.0019	.202	
%RSD	.03348	.00508	.03531	.12391	.04933	.50322	
#1	3.9919	4.0450	4.0025	4.1418	3.8442	40.041	
#2	3.9938	4.0447	4.0045	4.1345	3.8468	40.327	

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	4.0000	4.0000	4.0000	4.0000	4.0000	
Range	10.000	10.000	10.000	10.000	10.000	

Method: 6010C Sample Name: ICB Operator: STL
Run Time: 05/06/05 08:26:51
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00371	.00051	-.00098	.00100	-.00279	.00420	.00102
SDev	.00038	.00112	.00021	.00026	.00248	.00177	.00063
%RSD	10.314	220.07	20.980	25.745	88.906	41.981	62.061
#1	.00398	-.00028	-.00113	.00082	-.00104	.00545	.00147
#2	.00344	.00130	-.00084	.00118	-.00455	.00296	.00057

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00057	.00003	.00006	.00003	.00082	-.00032	.00043
SDev	.00038	.00003	.00006	.00002	.00000	.00018	.00009
%RSD	65.758	94.281	104.20	53.698	.00000	54.991	21.728
#1	.00031	.00005	.00001	.00005	.00082	-.00020	.00036
#2	.00084	.00001	.00010	.00002	.00082	-.00045	.00049

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Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00013	.01079	.00013	.00004	.00033	.00050	.00002
SDev	.00011	.00265	.00053	.00001	.00029	.00014	.00115
%RSD	86.135	24.533	424.00	20.864	88.388	28.779	6343.0
#1	.00021	.01266	.00050	.00003	.00054	.00060	.00083
#2	.00005	.00892	-.00025	.00005	.00012	.00040	-.00079

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00029	.00167	.00257	-.00000	.00045	.00477	-.00037
SDev	.00007	.00003	.00130	.00000	.00059	.00302	.00112
%RSD	24.414	1.5209	50.531	.00000	129.72	63.317	305.00
#1	.00024	.00169	.00349	-.00000	.00087	.00691	.00042
#2	.00034	.00166	.00165	-.00000	.00004	.00264	-.00116

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00034	.00187	.00265	.00073	.00089	-.01756
SDev	.00024	.00200	.00012	.00027	.00099	.13126
%RSD	70.480	107.00	4.4015	36.496	111.36	747.42
#1	.00017	.00329	.00256	.00092	.00160	.07525
#2	.00051	.00046	.00273	.00055	.00019	-.11038

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00300	.00400	.06000	.05000	.50000	.25000

Method: 6010C Sample Name: LLC Operator: STL
Run Time: 05/06/05 08:31:13
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.06027	.05672	.00707	.01240	.01518	.01756	.20510
SDev	.00519	.00375	.00371	.00040	.00576	.00226	.00159
%RSD	8.6076	6.6139	52.405	3.2374	37.930	12.869	.77542
#1	.05661	.05938	.00969	.01212	.01925	.01596	.20398
#2	.06394	.05407	.00445	.01269	.01111	.01916	.20623

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.20000
Range							20.000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.01041	.21276	.00553	.00511	5.0117	.00972	.05068
SDev	.00043	.00054	.00002	.00018	.0003	.00036	.00028
%RSD	4.1520	.25388	.37216	3.5969	.00578	3.6516	.55215
#1	.01071	.21314	.00551	.00498	5.0119	.00998	.05049
#2	.01010	.21237	.00554	.00524	5.0115	.00947	.05088
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.01000	.20000	.00500	.00500	5.0000	.01000	.05000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.02443	Q.12639	4.8880	.01567	.04117	Q.01292	.02118
SDev	.00051	.00578	.0060	.00002	.00035	.00021	.00045
%RSD	2.1055	4.5755	.12301	.09751	.85709	1.6048	2.1418
#1	.02480	Q.12230	4.8837	.01568	.04142	Q.01277	.02086
#2	.02407	Q.13048	4.8922	.01566	.04092	Q.01307	.02150
Errors	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	.02500	.10000	5.0000	.01500	.04000	.01000	.02000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.05040	.02120	.04202	.05285	.10133	Q.00341	.49138
SDev	.00028	.00009	.00019	.00014	.00261	.00132	.00324
%RSD	.55026	.40476	.44533	.25714	2.5800	38.793	.65987
#1	.05020	.02114	.04215	.05295	.10318	Q.00247	.49367
#2	.05059	.02126	.04189	.05275	.09948	Q.00434	.48909
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	.05000	.02000	.04000	.05000	.10000	.50000	.50000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.01063	.01677	.05909	.05235	.49134	4.0086	
SDev	.00097	.00041	.00221	.00000	.01097	.2483	
%RSD	9.0905	2.4472	3.7421	.00000	2.2325	6.1950	
#1	.01131	.01706	.05753	.05235	.48359	3.8330	
#2	.00994	.01648	.06066	.05235	.49910	4.1842	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	
Value	.01000	.01500	.06000	.05000	.50000		
Range	20.000	20.000	20.000	20.000	20.000		

Method: 6010C Sample Name: LLC AG Operator: STL
Run Time: 05/06/05 08:35:36
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.05155	.04975	.04745	.05222	.05182	.05108	.02787
SDev	.00051	.00066	.00146	.00113	.00203	.00184	.00586
%RSD	.99596	1.3325	3.0707	2.1571	3.9139	3.6066	21.025
#1	.05119	.05022	.04848	.05143	.05325	.04978	.03202
#2	.05192	.04928	.04642	.05302	.05039	.05238	.02373
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.05069	.05299	.05534	.05325	.12316	.05025	.05213
SDev	.00082	.00079	.00050	.00036	.00029	.00018	.00018
%RSD	1.6194	1.4853	.90688	.67008	.23532	.35746	.35165
#1	.05011	.05244	.05499	.05300	.12336	.05012	.05226
#2	.05127	.05355	.05570	.05350	.12295	.05038	.05200
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.04866	.01036	.01451	.05258	.05300	.01038	.05118
SDev	.00013	.00275	.00813	.00044	.00038	.00057	.00012
%RSD	.26722	26.584	56.081	.83742	.72125	5.4510	.23195
#1	.04857	.01230	.02026	.05227	.05327	.01078	.05109
#2	.04875	.00841	.00875	.05289	.05273	.00998	.05126
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value						.01000	
Range						20.000	

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.05080	.05338	.05161	.05338	.05129	.05159	.04945
SDev	.00017	.00038	.00001	.00075	.00122	.00081	.01875
%RSD	.33730	.70548	.01671	1.4003	2.3855	1.5768	37.912
#1	.05068	.05311	.05162	.05285	.05216	.05216	.06270
#2	.05092	.05365	.05161	.05391	.05043	.05101	.03619
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.05063	.05133	.05095	.05190	.06589	.35621
SDev	.00027	.00055	.00012	.00030	.04170	.93656
%RSD	.52642	1.0782	.23888	.58118	63.289	262.93
#1	.05045	.05094	.05087	.05168	.09538	1.0185
#2	.05082	.05172	.05104	.05211	.03641	-.30604
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value						
Range						

Method: 6010C Sample Name: ICSA Operator: STL
Run Time: 05/06/05 08:40:00
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00856	-.00904	.09872	-.05466	.00451	-.00082	472.19
SDev	.00149	.00011	.00186	.00030	.00163	.00247	1.08
%RSD	17.439	1.1838	1.8872	.55620	36.254	302.24	.22810
#1	.00961	-.00896	.10003	-.05488	.00566	.00093	471.42
#2	.00750	-.00912	.09740	-.05445	.00335	-.00256	472.95
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							500.00
Range							100.00

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00122	.00223	-.00001	-.00648	447.20	.00143	.00099
SDev	.00053	.00002	.00000	.00005	1.57	.00013	.00042
%RSD	43.949	.69325	70.708	.71454	.35065	9.0643	42.243
#1	.00084	.00222	-.00001	-.00652	446.09	.00134	.00069
#2	.00160	.00224	-.00000	-.00645	448.31	.00152	.00129
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	500.00	.00000	.00000
Range	.02000	.20000	.01000	.01000	100.00	.02000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.01071	188.74	491.86	.00402	.00247	.00025	.01277
SDev	.00007	.49	1.13	.00003	.00015	.00028	.00045
%RSD	.68155	.26032	.22913	.82740	5.9421	113.37	3.5025
#1	-.01076	188.39	491.06	.00400	.00237	.00005	.01309
#2	-.01065	189.09	492.65	.00404	.00258	.00044	.01246
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	200.00	500.00	.00000	.00000	.00000	.00000
Range	.02500	40.000	100.00	.01500	.04000	.02000	.02000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00349	-.00395	-.00056	-.00642	.00212	.00108	-.02355
SDev	.00028	.00004	.00000	.00000	.00155	.00159	.00437
%RSD	7.9721	1.1222	.35748	.04070	73.039	146.38	18.550
#1	.00330	-.00392	-.00056	-.00642	.00102	-.00004	-.02664
#2	.00369	-.00398	-.00056	-.00642	.00321	.00220	-.02046
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.02000	.04000	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	-.00359	.00096	.00270	.00787	-.06494	-1.7535
SDev	.00042	.00219	.00103	.00017	.00948	.1525
%RSD	11.645	229.04	38.222	2.1298	14.602	8.6996
#1	-.00329	.00251	.00343	.00775	-.07164	-1.8613
#2	-.00388	-.00059	.00197	.00799	-.05823	-1.6456
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.00000	.00000	.00000	.00000	.00000	
Range	.00600	.01000	.06000	.05000	.50000	

Method: 6010C Sample Name: ICSAB Operator: STL
Run Time: 05/06/05 08:44:23
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.94483	.93887	1.0419	.83574	.96248	.95279	474.57
SDev	.00021	.00688	.0023	.00477	.00102	.00449	1.55
%RSD	.02204	.73287	.21827	.57083	.10613	.47153	.32619
#1	.94469	.93401	1.0435	.83237	.96176	.94962	473.47
#2	.94498	.94374	1.0403	.83911	.96320	.95597	475.66
Errors	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value	1.0000	1.0000					500.00
Range	20.000	20.000					20.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.95598	.52232	.51113	.89934	450.48	.46102	.44437
SDev	.00501	.00210	.00158	.00228	1.30	.00019	.00130
%RSD	.52393	.40184	.30906	.25340	.28897	.04182	.29367
#1	.95244	.52084	.51001	.89773	449.56	.46088	.44345
#2	.95952	.52381	.51224	.90096	451.40	.46116	.44529
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	.50000	.50000	1.0000	500.00	.50000	.50000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.51368	189.09	493.23	.48785	.89492	.98055	.88876
SDev	.00114	.60	1.66	.00158	.00200	.00311	.00063
%RSD	.22181	.31949	.33580	.32332	.22345	.31714	.07095
#1	.51287	188.66	492.06	.48674	.89351	.97835	.88832
#2	.51449	189.51	494.40	.48897	.89634	.98275	.88921
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	200.00	500.00	.50000	1.0000	1.0000	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.47870	.93822	.93663	1.0197	.92904	.78623	.96096
SDev	.00198	.00283	.00296	.0041	.00379	.00541	.01450
%RSD	.41361	.30199	.31641	.40395	.40795	.68846	1.5092
#1	.47730	.93622	.93453	1.0167	.92636	.78240	.97122
#2	.48010	.94023	.93872	1.0226	.93172	.79006	.95071
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass
Value	.50000	1.0000	1.0000	1.0000	1.0000		1.0000
Range	20.000	20.000	20.000	20.000	20.000		20.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.90439	.95602	.94285	.50285	.85577	19.694
SDev	.00243	.00334	.00243	.00211	.00162	.060
%RSD	.26811	.34903	.25774	.41987	.18991	.30622
#1	.90268	.95366	.94113	.50136	.85462	19.737
#2	.90611	.95838	.94457	.50434	.85692	19.652
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	1.0000	1.0000	1.0000	.50000	1.0000	
Range	20.000	20.000	20.000	20.000	20.000	

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/06/05 08:50:28
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	4.0515	4.0373	4.0516	4.0396	4.1055	4.0896	40.051
SDev	.0163	.0271	.0193	.0209	.0255	.0281	.287
%RSD	.40344	.67112	.47575	.51847	.62064	.68732	.71554
#1	4.0399	4.0182	4.0380	4.0248	4.0874	4.0697	39.849
#2	4.0630	4.0565	4.0653	4.0544	4.1235	4.1095	40.254
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.0941	4.2993	4.2885	4.0947	20.634	3.9970	4.0192
SDev	.0285	.0329	.0258	.0236	.127	.0272	.0272
%RSD	.69527	.76532	.60249	.57696	.61656	.68113	.67586
#1	4.0739	4.2761	4.2702	4.0780	20.544	3.9777	4.0000
#2	4.1142	4.3226	4.3068	4.1114	20.724	4.0162	4.0384
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.0313	41.794	20.140	4.1551	4.0272	1.0162	3.9287
SDev	.0325	.294	.114	.0288	.0264	.0071	.0247
%RSD	.80586	.70448	.56545	.69303	.65571	.69786	.62815
#1	4.0084	41.586	20.060	4.1348	4.0085	1.0112	3.9112
#2	4.0543	42.002	20.221	4.1755	4.0459	1.0212	3.9461
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.0657	4.0211	4.1445	4.2526	4.1775	Q3.3513	4.0867
SDev	.0295	.0264	.0292	.0384	.0167	.0242	.0300
%RSD	.72563	.65546	.70536	.90353	.39954	.72263	.73494
#1	4.0448	4.0025	4.1239	4.2254	4.1657	Q3.3341	4.0654
#2	4.0865	4.0398	4.1652	4.2798	4.1893	Q3.3684	4.1079
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	4.0436	4.0949	4.0468	4.1845	3.9262	41.265
SDev	.0204	.0272	.0199	.0312	.0169	.270
%RSD	.50421	.66506	.49237	.74641	.42947	.65338
#1	4.0292	4.0756	4.0327	4.1624	3.9143	41.075
#2	4.0580	4.1141	4.0609	4.2066	3.9381	41.456
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL

Run Time: 05/06/05 08:54:52

Comment:

Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

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Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00251	-.00026	-.00196	.00238	-.00070	.00405	.01898
SDev	.00180	.00069	.00137	.00269	.00020	.00021	.00091
%RSD	71.629	269.74	69.715	112.98	28.863	5.0927	4.7724
#1	.00378	-.00075	-.00293	.00429	-.00084	.00419	.01834
#2	.00124	.00023	-.00100	.00048	-.00056	.00390	.01962
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00032	.00055	.00048	.00051	.00430	.00034	.00069
SDev	.00013	.00020	.00004	.00006	.00029	.00003	.00009
%RSD	41.150	36.770	7.7610	12.641	6.7344	8.8130	13.558
#1	.00022	.00069	.00050	.00056	.00451	.00032	.00076
#2	.00041	.00040	.00045	.00047	.00410	.00036	.00062
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00063	.02045	.00438	.00054	.00096	.00082	.00173
SDev	.00003	.00863	.00018	.00006	.00082	.00042	.00025
%RSD	4.7188	42.221	4.0405	11.902	86.083	50.812	14.510
#1	.00065	.02655	.00425	.00058	.00154	.00112	.00155
#2	.00061	.01434	.00450	.00049	.00037	.00053	.00191
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00118	.00220	.00276	.00043	.00102	.00533	.00259
SDev	.00055	.00005	.00104	.00014	.00160	.00477	.00245
%RSD	46.962	2.2255	37.655	31.432	157.33	89.525	94.345
#1	.00157	.00223	.00349	.00053	.00215	.00870	.00086
#2	.00079	.00216	.00202	.00034	-.00011	.00195	.00432
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00094	.00247	.00159	.00123	.02258	Q.40136
SDev	.00134	.00007	.00097	.00030	.00099	.01419
%RSD	143.17	2.8456	60.990	24.477	4.3672	3.5355

#1	.00189	.00252	.00228	.00145	.02188	Q.41140
#2	-.00001	.00242	.00090	.00102	.02328	Q.39133
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00300	.00400	.06000	.05000	.50000	.25000

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Method: 6010C Sample Name: G9TQTB Operator: STL
Run Time: 05/06/05 09:01:49
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00043	-.00104	-.00035	.00386	.00492	-.00139	L.01878
SDev	.00028	.00105	.00008	.00042	.00117	.00145	.00318
%RSD	66.088	100.50	22.705	10.751	23.767	104.62	16.936
#1	.00062	-.00178	-.00030	.00415	.00574	-.00242	L.01653
#2	.00023	-.00030	-.00041	.00357	.00409	-.00036	L.02102
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Low
High							.20000
Low							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L-.00040	.07294	-.00015	.00002	H.54980	-.00016	.00066
SDev	.00087	.00011	.00000	.00002	.00087	.00009	.00005
%RSD	216.46	.14811	2.7196	69.950	.15813	55.919	7.0985
#1	L-.00101	.07287	-.00015	.00001	H.54918	-.00023	.00069
#2	L.00021	.07302	-.00015	.00004	H.55041	-.00010	.00062
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	.00700	.20000	.20000	.00500	.25000	.01000	.05000
Low	.00700	-.20000	-.20000	-.00500	-.25000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00030	.00269	.03564	-.00002	.00114	.00042	-.00012
SDev	.00005	.00417	.00159	.00003	.00026	.00029	.00078
%RSD	14.897	154.95	4.4659	133.32	23.142	68.497	622.46
#1	.00033	-.00026	.03451	-.00005	.00096	.00022	-.00067
#2	.00027	.00563	.03676	-.00000	.00133	.00063	.00042
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.02500	.05000	.25000	.01500	.04000	.01000	.01000
Low	-.02500	-.05000	-.25000	-.01500	-.04000	-.01000	-.01000

Elem	V 2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00025	H.01063	.00055	.00102	.00185	.00176	.00045
SDev	.00021	.00005	.00037	.00003	.00128	.00198	.00193
%RSD	84.839	.50796	67.157	3.3225	69.243	112.68	429.38
#1	.00010	H.01059	.00081	.00100	.00094	.00036	-.00092
#2	.00039	H.01066	.00029	.00105	.00275	.00316	.00181
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.04000	.05000	.10000	.50000	.50000
Low	-.05000	-.01000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00246	.00071	-.00006	.00078	-.00501	H651.24
SDev	.00030	.00058	.00016	.00000	.00808	.86
%RSD	12.359	81.900	255.15	.00000	161.17	.13183
#1	.00267	.00030	-.00018	.00078	-.01073	H651.85
#2	.00224	.00112	.00005	.00078	.00070	H650.63
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC High
High	.00300	.00500	.01000	.05000		.25000
Low	-.00300	-.00500	-.01000	-.05000		-.25000

Method: 6010C Sample Name: G9WHRC Operator: STL
Run Time: 05/06/05 09:06:11
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	1.0086	1.0024	.99383	1.0063	1.0717	1.0493	1.1543
SDev	.0050	.0000	.00532	.0014	.0026	.0020	.0038
%RSD	.49625	.00323	.53536	.14328	.24073	.19237	.33158
#1	1.0121	1.0024	.99759	1.0053	1.0735	1.0507	1.1570
#2	1.0051	1.0025	.99007	1.0073	1.0699	1.0478	1.1516
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							1.2000
Low							.80000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.0294	1.1338	1.0897	1.0132	20.895	.99838	.99389
SDev	.0054	.0106	.0055	.0034	.078	.00576	.00414
%RSD	.52583	.93380	.50660	.33976	.37447	.57736	.41638
#1	1.0332	1.1413	1.0936	1.0157	20.950	1.0025	.99681
#2	1.0255	1.1263	1.0858	1.0108	20.840	.99431	.99096
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2040	1.2040	1.2000	1.2040	24.000	1.2040	1.2000
Low	.79500	.79500	.80000	.79500	16.000	.79500	.80000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.0392	1.1301	20.153	1.0323	.99862	.25151	.98097
SDev	.0088	.0063	.056	.0058	.00538	.00059	.00649
%RSD	.84400	.55388	.27641	.56399	.53889	.23581	.66138
#1	1.0454	1.1257	20.192	1.0364	1.0024	.25193	.98555
#2	1.0330	1.1346	20.114	1.0282	.99482	.25109	.97638
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2000	1.2000	24.000	1.2040	1.2000	.33700	1.2040
Low	.80000	.80000	16.000	.79500	.80000	.12300	.79500

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	1.0212	1.0189	1.0359	1.0643	L.00136	L.00161	L-.00716
SDev	.0065	.0057	.0037	.0086	.00240	.00544	.00633
%RSD	.63510	.56274	.35872	.81066	176.65	337.34	88.382
#1	1.0258	1.0230	1.0385	1.0704	L-.00034	L-.00224	L-.00268
#2	1.0166	1.0149	1.0333	1.0582	L.00306	L.00546	L-.01163
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Low	LC Low
High	1.2000	1.2000	1.2000	1.2000	2.4000	2.4000	2.4000
Low	.80000	.80000	.80000	.80000	1.6000	1.6000	1.6000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	1.0021	1.0567	1.0065	L.00156	L.04103	653.93
SDev	.0008	.0022	.0033	.00023	.02228	3.89
%RSD	.08083	.20870	.33060	14.999	54.316	.59459
#1	1.0027	1.0583	1.0089	L.00140	L.02527	656.68
#2	1.0016	1.0552	1.0042	L.00173	L.05679	651.18
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Low	NOCHECK
High	1.2040	1.2040	1.2040	2.4000	2.4000	
Low	.79500	.79500	.79500	1.6000	1.6000	

Method: 6010C Sample Name: G9RK9 Operator: STL
Run Time: 05/06/05 09:10:33
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.24045	.23756	.24393	.24909	.00420	-.00100	2.5179
SDev	.00255	.00036	.00204	.00230	.00224	.00338	.0005
%RSD	1.0616	.15192	.83603	.92216	53.440	339.60	.02122
#1	.24225	.23730	.24249	.25071	.00261	.00139	2.5183
#2	.23864	.23781	.24538	.24746	.00578	-.00339	2.5175
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.07548	.45875	.00120	.02131	88.905	.00035	.03158
SDev	.00043	.00150	.00002	.00007	.029	.00045	.00014
%RSD	.56991	.32632	1.7080	.33163	.03292	129.28	.44795
#1	.07517	.45981	.00119	.02136	88.925	.00003	.03168
#2	.07578	.45770	.00122	.02126	88.884	.00066	.03148
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00970	3.1773	3.6442	6.0558	.02809	.00106	.00145
SDev	.00032	.0078	.0016	.0069	.00032	.00034	.00151
%RSD	3.2593	.24666	.04367	.11349	1.1515	32.085	104.27
#1	.00947	3.1828	3.6430	6.0606	.02786	.00130	.00038
#2	.00992	3.1717	3.6453	6.0509	.02832	.00082	.00252
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00059	1.2435	.03259	.37451	.00203	.00244	.01372
SDev	.00028	.0021	.00082	.00119	.00005	.00251	.01052
%RSD	46.477	.17093	2.5214	.31735	2.5531	102.89	76.710
#1	.00079	1.2450	.03201	.37535	.00200	.00422	.00628
#2	.00040	1.2420	.03317	.37367	.00207	.00067	.02116
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.24737	.00073	.23949	.00069	.20304	H656.81
SDev	.00085	.00151	.00158	.00013	.01046	1.49
%RSD	.34482	205.44	.66075	19.506	5.1499	.22631
#1	.24797	.00180	.24060	.00078	.19565	H657.86
#2	.24677	-.00033	.23837	.00059	.21044	H655.75
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9RLM Operator: STL
Run Time: 05/06/05 09:14:55
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.29716	.29535	.17756	.18525	.00128	-.00066	2.1302
SDev	.00050	.00226	.00061	.00046	.00326	.00167	.0010
%RSD	.16887	.76520	.34598	.24851	254.81	254.28	.04792
#1	.29751	.29375	.17713	.18493	-.00103	.00053	2.1295
#2	.29680	.29695	.17800	.18558	.00359	-.00184	2.1309
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.26905	.39710	.00217	.03125	150.01	-.00065	.07181
SDev	.00025	.00100	.00000	.00026	.30	.00001	.00009
%RSD	.09354	.25262	.18957	.81766	.20284	.85513	.12720
#1	.26887	.39639	.00217	.03107	149.80	-.00066	.07175
#2	.26923	.39781	.00217	.03143	150.23	-.00065	.07188
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00264	1.7264	6.2893	11.270	.03687	.00178	-.00017
SDev	.00027	.0011	.0122	.022	.00085	.00029	.00041
%RSD	10.316	.06530	.19401	.19890	2.3132	16.397	235.46
#1	.00245	1.7256	6.2807	11.254	.03626	.00198	.00012
#2	.00283	1.7272	6.2980	11.286	.03747	.00157	-.00046
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00118	2.1458	.11421	.56942	.00215	.00339	.00460
SDev	.00028	.0029	.00011	.00145	.00011	.00056	.00986
%RSD	23.417	.13303	.09356	.25551	4.8863	16.362	214.19
#1	.00138	2.1438	.11428	.56840	.00207	.00378	-.00237
#2	.00099	2.1478	.11413	.57045	.00222	.00300	.01158
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.18269	-.00001	.29656	.00064	.17632	H713.93
SDev	.00051	.00003	.00042	.00027	.00294	1.02
%RSD	.28005	236.90	.14090	41.903	1.6675	.14311
#1	.18233	.00001	.29626	.00045	.17840	H713.20
#2	.18306	-.00003	.29685	.00083	.17424	H714.65
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9RLQ Operator: STL
Run Time: 05/06/05 09:19:17
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

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Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.30175	.30310	.38810	.39300	.00274	-.00213	2.3195
SDev	.00192	.00491	.00763	.00053	.00254	.00082	.0079
%RSD	.63471	1.6214	1.9669	.13569	92.668	38.660	.33994
#1	.30310	.29962	.38270	.39338	.00094	-.00155	2.3251
#2	.30039	.30657	.39350	.39262	.00453	-.00271	2.3140
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.15143	.47212	.00161	.03473	111.76	-.00023	.04257
SDev	.00020	.00293	.00003	.00013	.29	.00074	.00052
%RSD	.13223	.62109	1.7934	.37477	.25697	318.28	1.2104
#1	.15157	.47420	.00163	.03482	111.96	-.00076	.04293
#2	.15129	.47005	.00159	.03464	111.55	.00029	.04220
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00425	2.8334	3.2460	9.1139	.02870	.00063	-.00193
SDev	.00039	.0076	.0027	.0330	.00071	.00035	.00206
%RSD	9.0862	.26783	.08172	.36257	2.4595	54.855	106.75
#1	.00397	2.8387	3.2479	9.1372	.02919	.00088	-.00339
#2	.00452	2.8280	3.2441	9.0905	.02820	.00039	-.00047
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00010	1.7002	.06261	.47676	.00140	-.00107	-.00709
SDev	.00041	.0066	.00090	.00264	.00053	.00191	.02523
%RSD	420.94	.39016	1.4431	.55465	37.875	178.07	356.06
#1	.00039	1.7049	.06197	.47863	.00102	.00028	-.02493
#2	-.00019	1.6955	.06325	.47489	.00177	-.00242	.01075
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.39137	-.00051	.30220	.00026	.12052	H648.93
SDev	.00219	.00030	.00036	.00000	.00776	3.06
%RSD	.55861	58.190	.11880	.00000	6.4405	.47123

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#1	.38982	-.00072	.30194	.00026	.11503	H651.09
#2	.39291	-.00030	.30245	.00026	.12601	H646.77
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9RLR Operator: STL
Run Time: 05/06/05 09:23:39
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.28027	.27533	.21811	.22330	.00021	-.00321	2.1760
SDev	.00942	.00685	.01092	.00777	.01062	.00570	.0135
%RSD	3.3600	2.4895	5.0077	3.4782	5065.3	177.54	.62256
#1	.27361	.28018	.22583	.21780	.00772	-.00724	2.1855
#2	.28693	.27048	.21039	.22879	-.00730	.00082	2.1664
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.13090	.49966	.00155	.03283	127.35	-.00088	.04131
SDev	.00501	.00069	.00003	.00056	1.44	.00217	.00050
%RSD	3.8246	.13900	1.8608	1.6908	1.1290	246.35	1.2135
#1	.13444	.49916	.00157	.03322	128.36	.00065	.04167
#2	.12736	.50015	.00153	.03244	126.33	-.00241	.04096
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	T11908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00237	3.1801	3.5586	12.159	.04042	.00088	-.00048
SDev	.00244	.0484	.0557	.096	.00088	.00074	.00468
%RSD	102.91	1.5206	1.5653	.79027	2.1824	84.112	984.84
#1	.00410	3.2143	3.5980	12.227	.04105	.00141	.00284
#2	.00065	3.1460	3.5192	12.091	.03980	.00036	-.00379
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00012	1.6615	.05763	.62768	.00170	.00001	-.00171
SDev	.00032	.0142	.00263	.00001	.00479	.00269	.07334
%RSD	264.55	.85280	4.5686	.00083	281.96	27578.	4288.5

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#1	.00035	1.6715	.05949	.62768	.00508	.00191	.05015
#2	-.00011	1.6514	.05576	.62768	-.00169	-.00189	-.05357
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.22157	-.00207	.27862	.00005	.15530	H650.08	
SDev	.00154	.00026	.00400	.00037	.05645	1.58	
%RSD	.69654	12.777	1.4351	777.82	36.348	.24284	
#1	.22048	-.00226	.27580	.00031	.19521	H651.20	
#2	.22266	-.00188	.28145	-.00021	.11538	H648.97	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9RLW Operator: STL
Run Time: 05/06/05 09:28:01
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.18920	.19076	.20513	.20692	.00084	-.00477	2.3627
SDev	.00934	.00212	.00466	.00614	.00681	.00279	.0131
%RSD	4.9389	1.1104	2.2693	2.9688	811.90	58.549	.55642
#1	.18260	.19226	.20842	.20258	.00565	-.00674	2.3534
#2	.19581	.18927	.20184	.21127	-.00398	-.00279	2.3720
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.13000	.55609	.00164	.03611	104.72	-.00016	.03714
SDev	.00081	.00198	.00004	.00046	.86	.00039	.00065
%RSD	.62384	.35524	2.5119	1.2806	.81918	251.22	1.7585
#1	.12942	.55469	.00161	.03578	104.11	.00012	.03668
#2	.13057	.55748	.00167	.03644	105.32	-.00044	.03760
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.05768	.48426	3.5016	10.854	.02553	.00085	.00152
SDev	.00036	.01493	.0359	.084	.00071	.00088	.00041
%RSD	.63108	3.0823	1.0252	.77458	2.7639	103.33	27.293

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#1	.05794	.47371	3.4762	10.795	.02504	.00023	.00181
#2	.05743	.49482	3.5270	10.914	.02603	.00148	.00122
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V 2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00015	1.8055	.03925	.41595	.00189	-.00156	.00308
SDev	.00104	.0115	.00038	.00151	.00144	.00573	.00892
%RSD	696.22	.63634	.95598	.36344	76.359	366.33	289.79
#1	-.00059	1.7973	.03952	.41488	.00290	-.00561	.00939
#2	.00088	1.8136	.03899	.41702	.00087	.00249	-.00323
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.20633	-.00290	.18972	.00107	.22967	H684.37	
SDev	.00255	.00041	.00553	.00027	.02757	3.26	
%RSD	1.2346	13.963	2.9135	25.142	12.004	.47587	
#1	.20452	-.00261	.18581	.00088	.21018	H682.07	
#2	.20813	-.00319	.19363	.00126	.24917	H686.67	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9RLWS Operator: STL
Run Time: 05/06/05 09:32:22
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.66010	.65785	.67369	.68425	2.0821	2.0395	4.5257
SDev	.00377	.00200	.00156	.00106	.0020	.0007	.0134
%RSD	.57135	.30444	.23181	.15459	.09651	.03542	.29503
#1	.65743	.65643	.67479	.68499	2.0807	2.0390	4.5352
#2	.66276	.65927	.67258	.68350	2.0835	2.0400	4.5163
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	2.1510	2.6150	.05525	.08398	151.77	.19245	.50928
SDev	.0033	.0120	.00015	.00010	.37	.00070	.00186
%RSD	.15244	.45974	.26803	.11310	.24652	.36431	.36554

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#1	2.1534	2.6235	.05536	.08404	152.03	.19294	.51060
#2	2.1487	2.6065	.05515	.08391	151.50	.19195	.50796
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.31387	1.5271	52.365	11.221	.50433	.04952	1.8923
SDev	.00143	.0022	.134	.035	.00176	.00002	.0026
%RSD	.45460	.14362	.25632	.31003	.34985	.02973	.13551
#1	.31488	1.5286	52.460	11.245	.50558	.04951	1.8941
#2	.31286	1.5255	52.270	11.196	.50308	.04953	1.8905
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.49324	2.2714	1.0193	1.4428	.00083	.00348	.00788
SDev	.00258	.0089	.0021	.0057	.00091	.00100	.00711
%RSD	.52261	.39215	.20730	.39509	109.38	28.587	90.216
#1	.49506	2.2777	1.0208	1.4469	.00019	.00278	.00285
#2	.49142	2.2651	1.0178	1.4388	.00147	.00418	.01291
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.68073	2.0537	.65935	.00284	.19972	H765.69	
SDev	.00123	.0012	.00318	.00003	.01019	1.93	
%RSD	.18004	.05604	.48267	1.1785	5.1028	.25205	
#1	.68160	2.0529	.65710	.00282	.19251	H767.06	
#2	.67986	2.0545	.66160	.00287	.20693	H764.33	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9RLWD Operator: STL
Run Time: 05/06/05 09:36:44
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.67099	.66937	.67842	.68695	2.1341	2.0847	4.5246
SDev	.00564	.00303	.00171	.00106	.0003	.0023	.0206
%RSD	.84014	.45286	.25284	.15410	.01188	.10848	.45582

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#1	.66701	.66722	.67720	.68620	2.1339	2.0831	4.5392
#2	.67498	.67151	.67963	.68770	2.1343	2.0863	4.5101
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	2.1786	2.6372	.05610	.08402	150.62	.19507	.51586
SDev	.0056	.0219	.00019	.00008	.28	.00037	.00047
%RSD	.25792	.83216	.33730	.09340	.18893	.18997	.09054
#1	2.1826	2.6527	.05624	.08408	150.82	.19533	.51619
#2	2.1746	2.6217	.05597	.08397	150.42	.19480	.51553
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.31741	1.5475	52.959	11.041	.50922	.05138	1.9180
SDev	.00187	.0144	.095	.042	.00109	.00055	.0078
%RSD	.58990	.93146	.17865	.38279	.21366	1.0664	.40485
#1	.31873	1.5374	53.026	11.071	.50999	.05099	1.9235
#2	.31608	1.5577	52.892	11.011	.50845	.05176	1.9125
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.50031	2.2504	1.0365	1.4547	.00203	.00610	.01906
SDev	.00205	.0091	.0026	.0104	.00059	.00412	.01646
%RSD	.41084	.40431	.25002	.71664	29.069	67.603	86.383
#1	.50176	2.2568	1.0383	1.4620	.00245	.00318	.00742
#2	.49886	2.2439	1.0347	1.4473	.00161	.00902	.03070
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.68411	2.1012	.67045	.00325	.18016	H758.30	
SDev	.00128	.0016	.00477	.00040	.02434	4.09	
%RSD	.18670	.07581	.71136	12.387	13.509	.53942	
#1	.68320	2.1000	.66708	.00296	.16295	H761.19	
#2	.68501	2.1023	.67382	.00353	.19736	H755.40	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	

Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9RLWV 5X Operator: STL
Run Time: 05/06/05 09:41:06
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.04203	.03688	.03949	.04454	.00030	.00318	.45656
SDev	.00093	.00023	.00026	.00058	.00145	.00121	.00451
%RSD	2.2100	.61726	.64799	1.2944	481.19	37.893	.98682
#1	.04137	.03671	.03931	.04414	-.00073	.00404	.45337
#2	.04269	.03704	.03967	.04495	.00133	.00233	.45975
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.02617	.11706	.00022	.00755	21.811	-.00012	.00799
SDev	.00060	.00025	.00003	.00008	.074	.00016	.00009
%RSD	2.3011	.21094	14.693	1.1000	.33881	138.30	1.1618
#1	.02575	.11689	.00020	.00750	21.759	-.00000	.00806
#2	.02660	.11724	.00025	.00761	21.864	-.00023	.00793
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.01272	.10922	.71025	2.3233	.00539	.00082	.00052
SDev	.00000	.00149	.00389	.0064	.00050	.00000	.00009
%RSD	.01472	1.3632	.54776	.27562	9.2825	.53015	16.460
#1	.01272	.10817	.70750	2.3187	.00574	.00082	.00058
#2	.01272	.11028	.71300	2.3278	.00503	.00083	.00046
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00037	.36435	.00971	.08716	-.00076	.00195	.00057
SDev	.00003	.00033	.00048	.00020	.00016	.00081	.00000
%RSD	9.3173	.08969	4.9687	.23220	21.176	41.318	.65946
#1	.00034	.36412	.01006	.08701	-.00087	.00138	.00058
#2	.00039	.36458	.00937	.08730	-.00064	.00252	.00057
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000

Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.04286	.00222	.04031	.00059	.04505	106.91	
SDev	.00047	.00032	.00069	.00007	.00692	.46	
%RSD	1.0961	14.385	1.7249	11.314	15.365	.43139	
#1	.04253	.00245	.03982	.00055	.04016	106.58	
#2	.04319	.00200	.04080	.00064	.04995	107.23	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/06/05 09:45:29
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	4.0033	3.9874	3.9929	3.9984	4.0525	4.0387	39.490
SDev	.0036	.0035	.0105	.0052	.0014	.0023	.040
%RSD	.09051	.08734	.26324	.13039	.03526	.05715	.10167
#1	4.0058	3.9899	3.9855	3.9947	4.0515	4.0371	39.518
#2	4.0007	3.9850	4.0003	4.0021	4.0535	4.0404	39.461
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.0504	4.2543	4.2482	4.0401	20.407	3.9432	3.9617
SDev	.0010	.0079	.0043	.0032	.017	.0021	.0046
%RSD	.02524	.18609	.10138	.07904	.08095	.05329	.11737
#1	4.0511	4.2599	4.2513	4.0424	20.419	3.9447	3.9650
#2	4.0497	4.2487	4.2452	4.0379	20.395	3.9417	3.9584
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	3.9842	41.297	19.927	4.0957	3.9637	1.0064	3.8968
SDev	.0065	.065	.015	.0049	.0059	.0017	.0019
%RSD	.16391	.15684	.07543	.12047	.14764	.16887	.04944
#1	3.9888	41.343	19.937	4.0992	3.9679	1.0076	3.8955
#2	3.9796	41.252	19.916	4.0922	3.9596	1.0052	3.8982
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000

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Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.0169	3.9382	4.0982	4.1977	4.1398	Q3.3113	4.0291
SDev	.0060	.0011	.0010	.0003	.0085	.0059	.0133
%RSD	.14916	.02821	.02370	.00648	.20614	.17951	.33103
#1	4.0212	3.9390	4.0989	4.1975	4.1458	Q3.3155	4.0385
#2	4.0127	3.9374	4.0975	4.1979	4.1337	Q3.3071	4.0197
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	3.9966	4.0433	3.9980	4.1346	3.8391	40.570
SDev	.0070	.0020	.0036	.0050	.0035	.096
%RSD	.17459	.04985	.08946	.12076	.09062	.23609
#1	3.9916	4.0419	4.0005	4.1381	3.8415	40.503
#2	4.0015	4.0447	3.9955	4.1311	3.8366	40.638
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 05/06/05 09:49:52
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00365	-.00073	-.00159	.00267	-.00258	.00394	.02391
SDev	.00057	.00102	.00020	.00031	.00016	.00119	.00358
%RSD	15.542	139.97	12.472	11.542	6.1558	30.269	14.968
#1	.00405	-.00145	-.00173	.00245	-.00247	.00478	.02644
#2	.00325	-.00001	-.00145	.00289	-.00270	.00309	.02138
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00063	.00051	.00051	.00050	.00799	-.00000	.00069
SDev	.00051	.00052	.00051	.00058	.00203	.00070	.00028
%RSD	80.266	102.30	98.834	114.46	25.383	264570.	40.165
#1	.00099	.00088	.00087	.00091	.00943	.00050	.00089
#2	.00027	.00014	.00015	.00010	.00656	-.00050	.00050
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000

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Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00039	.00855	.00863	.00065	.00052	.00028	.00069
SDev	.00078	.00140	.00265	.00044	.00021	.00015	.00022
%RSD	202.97	16.333	30.744	67.791	39.598	52.840	32.592
#1	.00094	.00953	.01050	.00096	.00067	.00038	.00084
#2	-.00017	.00756	.00675	.00034	.00037	.00017	.00053
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00073	.00232	.00278	.00050	.00030	.00489	-.01100
SDev	.00028	.00039	.00175	.00051	.00016	.00184	.00678
%RSD	37.981	16.709	62.932	101.04	52.315	37.641	61.684
#1	.00093	.00260	.00401	.00086	.00041	.00619	-.00620
#2	.00054	.00205	.00154	.00014	.00019	.00359	-.01579
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00125	.00177	.00219	.00107	.03642	Q.65221
SDev	.00027	.00085	.00004	.00067	.00046	.05676
%RSD	21.702	48.023	1.7423	62.854	1.2525	8.7027
#1	.00106	.00236	.00222	.00154	.03675	Q.61208
#2	.00144	.00117	.00216	.00059	.03610	Q.69235
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00300	.00400	.06000	.05000	.50000	.25000

Method: 6010C Sample Name: G9RL1 Operator: STL
Run Time: 05/06/05 09:54:15
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.29038	.28450	.26007	.26832	.00097	-.00192	2.8982
SDev	.00111	.00006	.00007	.00176	.00099	.00015	.0020
%RSD	.38246	.01936	.02824	.65578	102.05	7.6264	.06917
#1	.29117	.28454	.26012	.26707	.00027	-.00202	2.8967
#2	.28960	.28446	.26002	.26956	.00167	-.00182	2.8996
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00

Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.12407	.46477	.00156	.02191	84.490	.00001	.03911
SDev	.00044	.00022	.00003	.00011	.033	.00005	.00000
%RSD	.35804	.04649	1.8401	.51064	.03944	404.33	.00197
#1	.12376	.46461	.00154	.02183	84.466	.00005	.03911
#2	.12439	.46492	.00159	.02199	84.513	-.00002	.03911
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00434	5.3698	3.5785	7.5828	.02971	.00122	.00186
SDev	.00023	.0137	.0039	.0014	.00009	.00007	.00081
%RSD	5.3338	.25580	.10871	.01807	.29690	5.6434	43.605
#1	.00418	5.3601	3.5758	7.5819	.02965	.00117	.00129
#2	.00451	5.3795	3.5813	7.5838	.02978	.00127	.00243
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00101	1.4315	.04928	.39995	-.00008	.00296	.00473
SDev	.00011	.0006	.00007	.00014	.00048	.00093	.00564
%RSD	10.400	.04510	.15251	.03381	622.41	31.347	119.21
#1	.00093	1.4320	.04923	.39985	-.00042	.00230	.00074
#2	.00108	1.4311	.04934	.40004	.00026	.00361	.00872
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.26557	-.00096	.28842	.00102	.24249	H677.59	
SDev	.00115	.00043	.00076	.00013	.00063	1.28	
%RSD	.43272	44.644	.26318	13.155	.25834	.18901	
#1	.26476	-.00126	.28896	.00092	.24204	H676.69	
#2	.26638	-.00066	.28789	.00111	.24293	H678.50	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

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Method: 6010C Sample Name: G9RL2 Operator: STL
Run Time: 05/06/05 09:58:37
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.29553	.28804	.27035	.28361	-.00362	-.00078	2.1285
SDev	.00257	.00045	.00061	.00099	.00321	.00047	.0118
%RSD	.86862	.15677	.22439	.34961	88.738	60.371	.55417
#1	.29371	.28772	.27078	.28291	-.00135	-.00112	2.1201
#2	.29734	.28836	.26992	.28432	-.00589	-.00045	2.1368
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.22286	.33381	.00175	.03160	130.45	-.00088	.04349
SDev	.00108	.00185	.00001	.00021	.33	.00017	.00033
%RSD	.48311	.55479	.46907	.65522	.25059	19.824	.75154
#1	.22210	.33250	.00176	.03146	130.22	-.00076	.04326
#2	.22362	.33512	.00175	.03175	130.68	-.00100	.04372
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00513	1.8856	4.1339	10.087	.02974	.00198	.00082
SDev	.00016	.0129	.0007	.032	.00012	.00022	.00255
%RSD	3.0368	.68222	.01711	.32016	.39558	11.175	312.80
#1	.00524	1.8765	4.1334	10.064	.02982	.00183	.00262
#2	.00502	1.8947	4.1344	10.110	.02965	.00214	-.00099
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00135	1.5859	.09910	.52177	.00068	.00345	-.01075
SDev	.00017	.0044	.00029	.00247	.00208	.00073	.00713
%RSD	12.766	.27812	.29641	.47409	306.01	21.180	66.282
#1	.00123	1.5828	.09890	.52002	-.00079	.00293	-.00571
#2	.00147	1.5890	.09931	.52352	.00215	.00397	-.01579
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.27920	-.00173	.29304	.00116	.19294	H701.32
SDev	.00046	.00075	.00186	.00000	.01480	1.46
%RSD	.16453	43.606	.63561	.00000	7.6728	.20790
#1	.27887	-.00120	.29172	.00116	.20341	H700.29
#2	.27952	-.00226	.29435	.00116	.18247	H702.35
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9RL3 Operator: STL
Run Time: 05/06/05 10:02:59
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.36803	.36202	.23974	.24871	.00189	-.00236	2.2120
SDev	.00110	.00123	.00045	.00018	.00141	.00008	.0051
%RSD	.29786	.33982	.18935	.07098	74.431	3.2134	.23056
#1	.36726	.36115	.24006	.24859	.00289	-.00230	2.2084
#2	.36881	.36289	.23942	.24884	.00090	-.00241	2.2156
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.12256	.46036	.00188	.02960	132.44	-.00047	.04687
SDev	.00045	.00009	.00003	.00030	.22	.00041	.00028
%RSD	.36731	.02011	1.7541	1.0012	.16542	87.580	.59591
#1	.12225	.46029	.00185	.02939	132.29	-.00075	.04667
#2	.12288	.46042	.00190	.02981	132.60	-.00018	.04707
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00177	6.7583	3.4330	10.160	.04319	.00197	.00226
SDev	.00015	.0108	.0018	.014	.00021	.00052	.00094
%RSD	8.7893	.16036	.05151	.13564	.47662	26.242	41.474
#1	.00166	6.7507	3.4317	10.150	.04304	.00161	.00292
#2	.00188	6.7660	3.4342	10.170	.04333	.00234	.00160
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00113	1.7982	.07436	.58748	.00173	.00517	.01641
SDev	.00091	.0024	.00004	.00034	.00005	.00127	.00050
%RSD	79.910	.13172	.05023	.05708	3.0716	24.547	3.0415
#1	.00049	1.7965	.07438	.58724	.00169	.00427	.01676
#2	.00177	1.7999	.07433	.58772	.00177	.00606	.01606
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.24572	-.00094	.36603	.00043	.20582	H690.83
SDev	.00003	.00052	.00114	.00030	.00301	.29
%RSD	.01360	55.096	.31168	70.711	1.4638	.04211
#1	.24575	-.00058	.36522	.00021	.20369	H691.03
#2	.24570	-.00131	.36684	.00064	.20795	H690.62
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9RL5 Operator: STL
Run Time: 05/06/05 10:07:21
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.23733	.23708	.34009	.34421	.00146	-.00290	2.7313
SDev	.00685	.00262	.00274	.00314	.00153	.00262	.0261
%RSD	2.8868	1.1041	.80441	.91164	104.62	90.534	.95400
#1	.23249	.23893	.34202	.34199	.00038	-.00475	2.7129
#2	.24218	.23523	.33816	.34643	.00254	-.00104	2.7497
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.09947	.66629	.00153	.01574	112.84	-.00056	.03539
SDev	.00195	.00536	.00004	.00038	1.09	.00025	.00089
%RSD	1.9571	.80374	2.6835	2.4099	.96439	44.496	2.4999
#1	.09809	.66251	.00150	.01547	112.07	-.00038	.03476
#2	.10084	.67008	.00156	.01601	113.61	-.00074	.03601
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00129	8.7930	3.3952	9.3911	.06101	.00063	.00323
SDev	.00009	.0921	.0389	.0839	.00159	.00077	.00141
%RSD	6.7397	1.0473	1.1459	.89357	2.6028	122.53	43.805
#1	.00135	8.7279	3.3677	9.3318	.05989	.00008	.00422
#2	.00122	8.8582	3.4227	9.4505	.06213	.00118	.00223
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00059	2.1426	.02581	.53327	.00072	-.00042	-.00166
SDev	.00076	.0197	.00037	.00416	.00032	.00420	.00398
%RSD	129.07	.91953	1.4423	.77958	44.655	990.27	239.71
#1	.00005	2.1287	.02555	.53033	.00094	-.00340	.00115
#2	.00113	2.1566	.02607	.53621	.00049	.00255	-.00448
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.34284	-.00144	.23725	.00009	.18952	H663.64
SDev	.00118	.00226	.00370	.00023	.01345	4.84
%RSD	.34478	156.32	1.5588	247.49	7.0981	.72970
#1	.34200	-.00304	.23463	-.00007	.18001	H660.21
#2	.34367	.00015	.23986	.00026	.19903	H667.06
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/06/05 10:11:44
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	4.0147	4.0230	4.0119	4.0079	4.0854	4.0573	39.692
SDev	.0131	.0041	.0056	.0127	.0028	.0117	.101
%RSD	.32697	.10264	.14069	.31606	.06900	.28918	.25360
#1	4.0054	4.0201	4.0079	3.9989	4.0834	4.0490	39.763
#2	4.0240	4.0259	4.0159	4.0168	4.0874	4.0656	39.620
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.0739	4.2709	4.2636	4.0570	20.555	3.9632	3.9773
SDev	.0059	.0227	.0036	.0017	.003	.0013	.0013
%RSD	.14396	.53192	.08480	.04182	.01550	.03227	.03279
#1	4.0781	4.2870	4.2661	4.0558	20.557	3.9641	3.9782
#2	4.0698	4.2549	4.2610	4.0582	20.553	3.9623	3.9763
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.0018	41.497	20.043	4.1135	3.9806	1.0120	3.9180
SDev	.0215	.025	.044	.0057	.0006	.0026	.0101
%RSD	.53672	.06069	.21705	.13739	.01478	.25518	.25724
#1	4.0170	41.515	20.012	4.1175	3.9801	1.0139	3.9251
#2	3.9866	41.479	20.074	4.1095	3.9810	1.0102	3.9109
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.0385	3.9474	4.1165	4.2180	4.1565	Q3.3315	4.0535
SDev	.0072	.0054	.0047	.0109	.0042	.0131	.0015
%RSD	.17837	.13712	.11453	.25776	.10021	.39276	.03744
#1	4.0436	3.9512	4.1199	4.2257	4.1536	Q3.3407	4.0524
#2	4.0334	3.9436	4.1132	4.2103	4.1595	Q3.3222	4.0546
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	4.0092	4.0667	4.0175	4.1548	3.8138	40.759
SDev	.0103	.0088	.0101	.0112	.0117	.568
%RSD	.25762	.21552	.25217	.26860	.30705	1.3926
#1	4.0019	4.0605	4.0103	4.1627	3.8056	40.357
#2	4.0165	4.0729	4.0246	4.1469	3.8221	41.160
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 05/06/05 10:16:08
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

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Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00562	-.00152	-.00164	.00156	-.00174	.00330	.02381
SDev	.00187	.00243	.00265	.00200	.00231	.00219	.00151
%RSD	33.219	160.42	161.29	127.94	133.21	66.430	6.3281
#1	.00694	-.00324	-.00352	.00297	-.00337	.00485	.02487
#2	.00430	.00020	.00023	.00015	-.00010	.00175	.02274
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00049	.00068	.00054	.00062	.00820	.00053	.00105
SDev	.00009	.00017	.00009	.00005	.00058	.00006	.00070
%RSD	17.355	25.091	16.638	8.5626	7.0710	10.421	66.335
#1	.00043	.00080	.00061	.00066	.00861	.00049	.00155
#2	.00055	.00056	.00048	.00058	.00779	.00057	.00056
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00065	.01420	.00488	.00070	.00150	.00073	.00176
SDev	.00024	.00364	.00053	.00011	.00100	.00049	.00065
%RSD	37.140	25.665	10.879	15.711	66.782	66.899	36.733
#1	.00048	.01678	.00450	.00078	.00220	.00107	.00222
#2	.00083	.01163	.00525	.00063	.00079	.00038	.00131
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00138	.00232	.00273	.00060	.00022	.00503	.00786
SDev	.00063	.00011	.00130	.00010	.00112	.00229	.00145
%RSD	45.429	4.5325	47.555	16.973	500.19	45.616	18.383
#1	.00182	.00239	.00365	.00067	.00102	.00665	.00888
#2	.00094	.00224	.00181	.00053	-.00057	.00340	.00684
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00049	.00162	.00324	.00133	.00883	.13044
SDev	.00045	.00069	.00043	.00030	.00439	.09224
%RSD	90.917	42.624	13.397	22.728	49.752	70.713

#1	.00081	.00211	.00355	.00154	.00573	.06522
#2	.00018	.00113	.00293	.00111	.01194	.19566
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00300	.00400	.06000	.05000	.50000	.25000

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Method: 6010C Sample Name: G9VXQB Operator: STL
Run Time: 05/06/05 10:27:47
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00165	.00076	.00140	.00008	.00133	.00131	L.09458
SDev	.00079	.00159	.00084	.00006	.00050	.00176	.00191
%RSD	48.031	208.87	60.188	69.367	37.791	134.28	2.0188
#1	-.00109	.00189	.00199	.00004	.00169	.00007	L.09323
#2	-.00221	-.00036	.00080	.00012	.00098	.00256	L.09593
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Low
High							.20000
Low							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L-.00072	.00112	-.00024	-.00003	.15512	.00154	-.00000
SDev	.00034	.00000	.00000	.00006	.00029	.00005	.00023
%RSD	46.558	.00000	.00000	216.14	.18681	3.2457	4346400.
#1	L-.00096	.00112	-.00024	.00002	.15492	.00150	-.00017
#2	L-.00048	.00112	-.00024	-.00008	.15533	.00157	.00017
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00700	.20000	.20000	.00500	.25000	.01000	.05000
Low	.00700	-.20000	-.20000	-.00500	-.25000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00056	H.17667	.24821	.00108	.00048	-.00010	.00033
SDev	.00000	.00528	.00230	.00002	.00032	.00024	.00034
%RSD	.71214	2.9865	.92618	1.6041	67.636	240.81	104.79
#1	.00056	H.18040	.24659	.00107	.00071	-.00027	.00057
#2	.00056	H.17294	.24984	.00109	.00025	.00007	.00008
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.02500	.05000	.25000	.01500	.04000	.01000	.01000
Low	-.02500	-.05000	-.25000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00002	.00644	.00063	.00024	.00030	.00014	-.00063
SDev	.00032	.00006	.00049	.00000	.00080	.00019	.00678
%RSD	1287.8	.92269	77.134	.00244	265.52	137.55	1078.8
#1	.00025	.00640	.00097	.00024	-.00026	.00027	.00417
#2	-.00020	.00648	.00029	.00024	.00087	.00000	-.00543
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.04000	.05000	.10000	.50000	.50000
Low	-.05000	-.01000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00052	.00132	-.00085	.00133	-.03355	L-1.0360
SDev	.00024	.00101	.00106	.00003	.00227	.0816
%RSD	46.777	76.442	124.96	2.5254	6.7776	7.8757
#1	.00069	.00061	-.00010	.00130	-.03516	L-1.0937
#2	.00035	.00203	-.00159	.00135	-.03194	L-.97833
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Low
High	.00300	.00500	.01000	.05000		.25000
Low	-.00300	-.00500	-.01000	-.05000		-.25000

Method: 6010C Sample Name: G9VXQC Operator: STL
Run Time: 05/06/05 10:32:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.43076	.42341	1.5484	1.5357	.72730	.71807	64.160
SDev	.00460	.00099	.0014	.0006	.00172	.00307	.114
%RSD	1.0676	.23429	.09308	.03766	.23628	.42694	.17792
#1	.43402	.42270	1.5473	1.5361	.72609	.72024	64.241
#2	.42751	.42411	1.5494	1.5353	.72852	.71590	64.079
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							89.900
Low							36.600

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.7866	2.9606	H1.1157	1.3567	38.015	.71946	.37373
SDev	.0012	.0078	.0008	.0005	.019	.00070	.00070
%RSD	.06776	.26429	.06821	.03984	.04956	.09776	.18669
#1	1.7857	2.9661	H1.1162	1.3571	38.028	.71996	.37422
#2	1.7874	2.9551	H1.1151	1.3564	38.002	.71897	.37324
Errors	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass
High	1.9400	2.9700	1.1100	1.5200	40.100	.84400	.44700
Low	1.2800	2.0700	.77500	1.0400	26.300	.54600	.25800

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.5831	127.73	22.122	4.5926	1.5668	1.5295	.92199
SDev	.0031	.09	.002	.0040	.0001	.0026	.00004
%RSD	.19653	.06763	.00799	.08746	.00375	.16861	.00426
#1	1.5853	127.79	22.120	4.5954	1.5668	1.5313	.92202
#2	1.5809	127.67	22.123	4.5897	1.5667	1.5277	.92196
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.7400	160.00	25.100	4.9000	1.7400	1.9100	1.0500
Low	1.2200	64.200	15.700	3.2600	1.2000	.68900	.63500

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	1.0646	1.7163	.94996	.95187	.72511	.10165	-.03799
SDev	.0025	.0002	.00018	.00187	.00181	.00213	.00266
%RSD	.23884	.01042	.01942	.19628	.25033	2.0976	6.9962
#1	1.0664	1.7161	.94983	.95319	.72383	.10316	-.03611
#2	1.0628	1.7164	.95009	.95055	.72640	.10015	-.03987
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	1.2200	1.9900	1.0100	1.0100	.86400		
Low	.72800	1.3100	.66700	.67000	.35700		

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	1.5399	.72114	.42831	3.3124	1.1286	4.6057
SDev	.0001	.00147	.00274	.0052	.0025	.1632
%RSD	.00611	.20420	.63906	.15682	.22128	3.5432
#1	1.5399	.72219	.43025	3.3160	1.1268	4.4903
#2	1.5400	.72010	.42638	3.3087	1.1303	4.7210
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	1.7000	.79900	1.3600	4.9800		
Low	1.1400	.48500	.01000	1.2300		

Method: 6010C Sample Name: G9P28 Operator: STL
Run Time: 05/06/05 10:36:31
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00606	-.05946	.26182	.03473	-.00699	.00234	H550.20
SDev	.00094	.00158	.00476	.00367	.00145	.00076	1.91
%RSD	15.534	2.6583	1.8170	10.556	20.758	32.465	.34799
#1	-.00672	-.06058	.26518	.03214	-.00596	.00288	H548.84
#2	-.00539	-.05834	.25845	.03732	-.00801	.00180	H551.55
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC High
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00312	.03255	.00042	.00405	2.4340	.09770	-.00167
SDev	.00040	.00025	.00001	.00007	.0093	.00028	.00018
%RSD	12.887	.75854	2.9463	1.6563	.38100	.28198	10.753
#1	-.00341	.03238	.00043	.00400	2.4275	.09789	-.00180
#2	-.00284	.03273	.00041	.00410	2.4406	.09750	-.00154
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

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Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.9008	18.215	2.3936	.19335	1.0693	-.00162	.00121
SDev	.0082	.056	.0085	.00074	.0026	.00066	.00068
%RSD	.43261	.30636	.35462	.38046	.24201	40.999	55.951
#1	1.8950	18.176	2.3876	.19283	1.0674	-.00209	.00073
#2	1.9066	18.255	2.3996	.19387	1.0711	-.00115	.00169
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00885	.32790	7.0028	.04841	.49715	.03997	15.202
SDev	.00025	.00156	.0307	.00024	.00554	.00196	.040
%RSD	2.8242	.47553	.43873	.49091	1.1147	4.8996	.26224
#1	.00867	.32680	6.9810	.04824	.49323	.03859	15.174
#2	.00902	.32900	7.0245	.04858	.50107	.04136	15.231
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.11035	-.00077	L-.02384	.21569	.30761	H255.44
SDev	.00086	.00099	.00115	.00084	.00437	.97
%RSD	.78026	129.26	4.8401	.38844	1.4202	.37915
#1	.10974	-.00007	L-.02466	.21510	.31070	H254.76
#2	.11096	-.00147	L-.02302	.21628	.30452	H256.13
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9P28S Operator: STL
Run Time: 05/06/05 10:40:53
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.44852	.40197	.70663	.50668	2.0180	1.9894	H524.95
SDev	.00427	.00121	.00309	.00354	.0105	.0090	2.34
%RSD	.95217	.30115	.43736	.69792	.52275	.45316	.44505
#1	.45154	.40111	.70881	.50418	2.0105	1.9958	H526.60
#2	.44550	.40282	.70444	.50918	2.0254	1.9831	H523.30
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC High
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	2.0052	2.1596	.05677	.05276	52.398	.27167	.47792
SDev	.0126	.0148	.00018	.00009	.132	.00168	.00073
%RSD	.62946	.68606	.32609	.16382	.25109	.61872	.15201
#1	2.0142	2.1700	.05690	.05270	52.491	.27285	.47843
#2	1.9963	2.1491	.05664	.05283	52.305	.27048	.47740
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.6829	11.785	51.950	.63394	1.1422	.04797	1.9100
SDev	.0113	.044	.108	.00248	.0034	.00040	.0067
%RSD	.67248	.37744	.20832	.39180	.30122	.83343	.35130
#1	1.6909	11.816	52.027	.63570	1.1447	.04769	1.9148
#2	1.6749	11.753	51.874	.63218	1.1398	.04826	1.9053
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.51054	.77965	7.1250	1.0939	.30092	.03475	15.761
SDev	.00274	.00311	.0239	.0068	.00248	.00448	.113
%RSD	.53688	.39929	.33580	.61785	.82233	12.894	.71980
#1	.51248	.78185	7.1420	1.0986	.29917	.03159	15.841
#2	.50860	.77745	7.1081	1.0891	.30267	.03792	15.681
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.57326	1.9989	.43302	.17595	.34926	H332.24
SDev	.00133	.0025	.00245	.00121	.01230	1.50
%RSD	.23192	.12509	.56474	.68568	3.5207	.45167
#1	.57232	2.0007	.43475	.17680	.34057	H333.30
#2	.57420	1.9972	.43129	.17510	.35796	H331.18
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9P28D Operator: STL
Run Time: 05/06/05 10:45:15
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

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Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.43514	.40024	.73122	.50251	1.9993	1.9579	H581.25
SDev	.00265	.00017	.00398	.00116	.0011	.0031	5.00
%RSD	.60961	.04226	.54409	.23014	.05510	.15972	.86037
#1	.43327	.40036	.73403	.50170	2.0000	1.9557	H577.71
#2	.43702	.40012	.72840	.50333	1.9985	1.9601	H584.79
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC High
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.9783	2.1305	.05604	.05255	51.882	.27482	.47191
SDev	.0124	.0216	.00035	.00010	.286	.00102	.00235
%RSD	.62844	1.0134	.62400	.18083	.55187	.36997	.49813
#1	1.9695	2.1152	.05579	.05248	51.679	.27410	.47025
#2	1.9870	2.1458	.05628	.05262	52.084	.27554	.47358
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.7906	13.940	51.478	.64794	1.2478	.04757	1.8821
SDev	.0194	.082	.212	.00441	.0054	.00017	.0088
%RSD	1.0831	.58816	.41257	.68046	.42891	.36588	.46596
#1	1.7769	13.882	51.328	.64483	1.2441	.04769	1.8759
#2	1.8043	13.998	51.628	.65106	1.2516	.04745	1.8883
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.50459	.79987	7.0811	1.0852	.34094	.03653	15.017
SDev	.00330	.00531	.0446	.0110	.00157	.00420	.139
%RSD	.65456	.66407	.62957	1.0107	.46115	11.508	.92424
#1	.50226	.79612	7.0496	1.0775	.34205	.03950	14.919
#2	.50693	.80363	7.1126	1.0930	.33983	.03356	15.115
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.57867	1.9717	.42352	.18787	.32732	H317.65
SDev	.00055	.0017	.00171	.00184	.02196	2.32
%RSD	.09564	.08719	.40448	.98110	6.7087	.73151

#1	.57906	1.9704	.42231	.18657	.34284	H316.01
#2	.57828	1.9729	.42473	.18917	.31179	H319.30
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9P28V 5X Operator: STL
Run Time: 05/06/05 10:49:37
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00036	-.01162	.05294	.00797	-.00027	.00394	111.96
SDev	.00176	.00182	.00177	.00252	.00051	.00079	.12
%RSD	484.84	15.665	3.3515	31.581	187.64	19.960	.10817
#1	.00088	-.01033	.05419	.00619	.00009	.00338	112.04
#2	-.00161	-.01291	.05168	.00975	-.00063	.00449	111.87
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00010	.00678	-.00006	.00080	.50963	.01969	-.00048
SDev	.00083	.00006	.00002	.00002	.00203	.00009	.00010
%RSD	820.57	.91093	32.141	2.9480	.39805	.43983	20.015
#1	.00049	.00673	-.00008	.00082	.50820	.01975	-.00054
#2	-.00069	.00682	-.00005	.00079	.51107	.01963	-.00041
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.37610	3.7032	.47767	.03930	.21921	-.00033	.00234
SDev	.00070	.0018	.00248	.00008	.00012	.00029	.00061
%RSD	.18730	.04951	.51830	.20910	.05366	87.915	26.118
#1	.37660	3.7045	.47592	.03924	.21929	-.00054	.00191
#2	.37561	3.7019	.47942	.03936	.21912	-.00013	.00277
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00183	.06723	1.4611	.01001	.10428	.00942	3.0943
SDev	.00021	.00017	.0022	.00003	.00042	.00042	.0133
%RSD	11.266	.25894	.14781	.33908	.40709	4.4641	.42837

#1	.00169	.06711	1.4626	.00998	.10458	.00913	3.1036
#2	.00198	.06736	1.4596	.01003	.10398	.00972	3.0849
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.02294	.00254	-.00411	.04424	.04773	41.255
SDev	.00109	.00036	.00178	.00007	.00606	.021
%RSD	4.7415	14.016	43.350	.15150	12.695	.05158
#1	.02217	.00229	-.00285	.04429	.04345	41.240
#2	.02371	.00279	-.00537	.04419	.05202	41.270
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9L7DB Operator: STL
Run Time: 05/06/05 10:53:58
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00108	.00111	-.00071	.00016	-.00042	-.00004	L.03189
SDev	.00094	.00159	.00206	.00128	.00307	.00317	.00300
%RSD	86.978	142.82	289.95	790.17	725.87	7688.9	9.4121
#1	.00041	.00223	.00074	-.00074	.00175	-.00228	L.02977
#2	.00174	-.00001	-.00216	.00107	-.00259	.00220	L.03401
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Low
High							.20000
Low							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L-.00078	.00037	-.00031	.00004	.01865	.00013	.00056
SDev	.00062	.00017	.00000	.00009	.00029	.00007	.00056
%RSD	79.207	45.754	.00000	212.50	1.5541	55.433	99.723
#1	L-.00122	.00025	-.00031	-.00002	.01844	.00008	.00016
#2	L-.00034	.00049	-.00031	.00010	.01885	.00018	.00095
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00700	.20000	.20000	.00500	.25000	.01000	.05000
Low	.00700	-.20000	-.20000	-.00500	-.25000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00016	.00382	-.00588	-.00010	.00033	.00023	.00209
SDev	.00014	.00622	.00371	.00008	.00053	.00093	.00023
%RSD	89.727	162.77	63.189	73.434	159.10	401.51	11.041

#1	.00006	-.00058	-.00850	-.00016	-.00004	-.00043	.00193
#2	.00026	.00822	-.00325	-.00005	.00071	.00089	.00226
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.02500	.05000	.25000	.01500	.04000	.01000	.01000
Low	-.02500	-.05000	-.25000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00035	.00205	.00179	.00005	.00030	.00200	.01051
SDev	.00070	.00016	.00010	.00007	.00006	.00379	.01518
%RSD	201.76	7.9195	5.8322	142.52	19.020	189.24	144.46
#1	-.00015	.00194	.00186	-.00000	.00034	-.00068	-.00023
#2	.00084	.00216	.00172	.00010	.00026	.00468	.02124
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.04000	.05000	.10000	.50000	.50000
Low	-.05000	-.01000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	-.00013	-.00017	.00109	.00036	-.01111	L-.87799	
SDev	.00017	.00109	.00010	.00020	.01579	.26961	
%RSD	130.92	647.81	8.8010	56.569	142.08	30.708	
#1	-.00025	-.00094	.00102	.00021	-.02227	L-1.0686	
#2	-.00001	.00060	.00116	.00050	.00005	L-.68734	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Low	
High	.00300	.00500	.01000	.05000		.25000	
Low	-.00300	-.00500	-.01000	-.05000		-.25000	

Method: 6010C Sample Name: G9L7DC Operator: STL
Run Time: 05/06/05 10:58:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	1.0239	1.0256	1.0117	1.0117	1.0587	1.0385	1.0619
SDev	.0008	.0049	.0025	.0015	.0071	.0007	.0037
%RSD	.08260	.48003	.24265	.15161	.67312	.06513	.35146
#1	1.0245	1.0291	1.0100	1.0106	1.0637	1.0380	1.0593
#2	1.0233	1.0221	1.0135	1.0128	1.0536	1.0390	1.0645
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							1.2000
Low							.80000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.0408	1.1111	1.1263	1.0423	20.927	1.0193	1.0121
SDev	.0010	.0003	.0009	.0003	.031	.0010	.0016
%RSD	.09216	.02639	.08327	.03254	.14679	.10108	.15622

#1	1.0401	1.1109	1.1257	1.0421	20.905	1.0186	1.0110
#2	1.0415	1.1113	1.1270	1.0425	20.949	1.0200	1.0133
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2040	1.2040	1.2000	1.2040	24.000	1.2040	1.2000
Low	.79500	.79500	.80000	.79500	16.000	.79500	.80000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.0201	1.1497	20.183	1.0544	1.0138	.25312	1.0100
SDev	.0005	.0026	.036	.0010	.0012	.00078	.0008
%RSD	.04571	.22454	.17785	.09533	.12182	.30742	.08138
#1	1.0204	1.1515	20.158	1.0537	1.0129	.25367	1.0094
#2	1.0198	1.1479	20.209	1.0551	1.0147	.25257	1.0106
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2000	1.2000	24.000	1.2040	1.2000	.33700	1.2040
Low	.80000	.80000	16.000	.79500	.80000	.12300	.79500
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	1.0372	1.0032	1.0679	1.0966	L-.00151	L-.00064	L-.00648
SDev	.0008	.0010	.0013	.0010	.00101	.00346	.00114
%RSD	.08038	.10459	.12522	.08669	67.200	539.50	17.644
#1	1.0378	1.0025	1.0669	1.0959	L-.00079	L.00180	L-.00729
#2	1.0366	1.0039	1.0688	1.0972	L-.00222	L-.00309	L-.00568
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Low	LC Low
High	1.2000	1.2000	1.2000	1.2000	2.4000	2.4000	2.4000
Low	.80000	.80000	.80000	.80000	1.6000	1.6000	1.6000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	1.0117	1.0452	1.0245	L.00121	L-.00178	14.625	
SDev	.0018	.0019	.0022	.00013	.00769	.369	
%RSD	.18193	.18388	.21509	11.092	432.75	2.5228	
#1	1.0104	1.0466	1.0260	L.00130	L-.00722	14.364	
#2	1.0130	1.0438	1.0229	L.00111	L.00366	14.886	
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Low	NOCHECK	
High	1.2040	1.2040	1.2040	2.4000	2.4000		
Low	.79500	.79500	.79500	1.6000	1.6000		

Method: 6010C Sample Name: G9GGF Operator: STL
Run Time: 05/06/05 11:02:42
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00113	.00053	.00675	.01070	.00044	.00103	.19373
SDev	.00484	.00052	.00459	.00268	.00501	.00113	.00179
%RSD	429.24	96.940	67.992	25.056	1140.9	110.37	.92356

#1	-.00229	.00090	.01000	.00881	.00398	.00023	.19247
#2	.00455	.00017	.00351	.01260	-.00310	.00183	.19500
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00021	.55495	-.00026	-.00075	125.77	.00064	.00441
SDev	.00043	.00040	.00002	.00020	.30	.00039	.00070
%RSD	210.49	.07230	7.8567	26.352	.24194	60.586	15.911
#1	-.00010	.55467	-.00028	-.00089	125.55	.00091	.00391
#2	.00051	.55523	-.00025	-.00061	125.98	.00036	.00490
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00014	20.859	42.061	.88643	.01273	.00081	.00464
SDev	.00043	.047	.100	.00145	.00006	.00082	.00197
%RSD	318.02	.22707	.23880	.16381	.46216	101.35	42.441
#1	.00044	20.826	41.990	.88541	.01277	.00023	.00603
#2	-.00017	20.893	42.132	.88746	.01268	.00140	.00325
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00130	.02003	.00089	.45265	-.00049	.00218	-.00170
SDev	.00093	.00016	.00101	.00047	.00160	.00276	.01945
%RSD	71.735	.79238	113.41	.10374	325.65	126.52	1143.3
#1	.00064	.01991	.00161	.45232	.00064	.00023	.01205
#2	.00197	.02014	.00018	.45298	-.00162	.00413	-.01546
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00939	.00083	.00093	.00263	.01942	17.058	
SDev	.00026	.00091	.00306	.00013	.00775	.014	
%RSD	2.7733	109.67	328.85	5.0963	39.922	.08318	
#1	.00920	.00148	-.00123	.00254	.01394	17.068	
#2	.00957	.00019	.00309	.00273	.02491	17.048	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	
High	50.000	50.000	50.000	50.000	20.000	250.00	

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Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9GGFS Operator: STL
Run Time: 05/06/05 11:07:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.49372	.49279	.49216	.49584	2.0710	2.0249	2.4357
SDev	.00514	.00252	.00449	.00403	.0035	.0081	.0047
%RSD	1.0420	.51111	.91164	.81321	.16938	.39871	.19324
#1	.49009	.49457	.49533	.49299	2.0734	2.0192	2.4323
#2	.49736	.49101	.48899	.49869	2.0685	2.0306	2.4390
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	2.0310	2.7063	.05488	.04885	175.36	.19723	.48273
SDev	.0023	.0014	.00014	.00021	.48	.00017	.00126
%RSD	.11192	.05019	.25486	.42887	.27234	.08841	.26042
#1	2.0294	2.7072	.05478	.04870	175.02	.19711	.48184
#2	2.0326	2.7053	.05498	.04900	175.70	.19736	.48362
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.25736	22.197	92.632	1.3887	.49593	.05037	1.9174
SDev	.00028	.060	.274	.0024	.00265	.00064	.0039
%RSD	.10700	.26832	.29553	.17371	.53366	1.2636	.20552
#1	.25756	22.154	92.439	1.3870	.49406	.04992	1.9146
#2	.25717	22.239	92.826	1.3904	.49780	.05082	1.9202
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.50371	.50442	1.0251	1.5270	.00091	.00129	-.00357
SDev	.00038	.00145	.0033	.0008	.00069	.00166	.00895
%RSD	.07556	.28790	.31832	.05055	76.426	128.33	251.06
#1	.50344	.50339	1.0228	1.5264	.00140	.00012	.00276
#2	.50398	.50545	1.0275	1.5275	.00042	.00247	-.00990
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000

Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.49462	2.0402	.49341	.00571	.02095	65.500	
SDev	.00120	.0042	.00259	.00040	.01431	.479	
%RSD	.24168	.20669	.52544	7.0417	68.313	.73118	
#1	.49377	2.0373	.49158	.00543	.01083	65.162	
#2	.49546	2.0432	.49525	.00600	.03107	65.839	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/06/05 11:11:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	4.0149	4.0284	3.9977	4.0068	4.0911	4.0622	39.966
SDev	.0118	.0154	.0059	.0026	.0114	.0049	.162
%RSD	.29273	.38232	.14841	.06569	.27816	.12143	.40540
#1	4.0232	4.0393	4.0019	4.0049	4.0991	4.0657	39.851
#2	4.0066	4.0175	3.9935	4.0086	4.0830	4.0587	40.080
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.0979	4.2877	4.2664	4.0750	20.697	3.9795	3.9852
SDev	.0139	.0191	.0148	.0127	.075	.0157	.0153
%RSD	.33919	.44488	.34596	.31072	.36126	.39434	.38402
#1	4.0881	4.2742	4.2559	4.0660	20.644	3.9684	3.9744
#2	4.1077	4.3012	4.2768	4.0839	20.750	3.9906	3.9961
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.0328	41.715	20.108	4.1213	3.9981	1.0224	3.9199
SDev	.0171	.161	.069	.0158	.0151	.0037	.0074
%RSD	.42474	.38507	.34299	.38235	.37806	.36455	.18920
#1	4.0207	41.602	20.060	4.1102	3.9874	1.0197	3.9147
#2	4.0449	41.829	20.157	4.1325	4.0087	1.0250	3.9252
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000

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Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.0596	3.9467	4.1409	4.2622	4.1836	Q3.3701	4.0722
SDev	.0181	.0164	.0176	.0238	.0114	.0144	.0093
%RSD	.44611	.41470	.42600	.55875	.27155	.42739	.22936
#1	4.0468	3.9352	4.1284	4.2454	4.1756	Q3.3599	4.0656
#2	4.0724	3.9583	4.1534	4.2791	4.1917	Q3.3803	4.0788
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	4.0037	4.0718	4.0194	4.1801	3.6580	39.850	
SDev	.0002	.0071	.0130	.0181	.0072	.156	
%RSD	.00549	.17386	.32264	.43293	.19762	.39170	
#1	4.0039	4.0768	4.0286	4.1673	3.6529	39.740	
#2	4.0036	4.0668	4.0102	4.1929	3.6631	39.961	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000	
Range	10.000	10.000	10.000	10.000	10.000	10.000	

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 05/06/05 11:15:50
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00546	-.00073	-.00369	.00379	-.00115	.00399	.04695
SDev	.00000	.00166	.00166	.00156	.00201	.00103	.00006
%RSD	.01896	227.89	44.902	41.262	174.72	25.794	.12821
#1	.00546	-.00190	-.00487	.00489	-.00257	.00471	.04699
#2	.00547	.00045	-.00252	.00268	.00027	.00326	.04691
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00145	.00092	.00072	.00097	.00902	.00040	.00142
SDev	.00012	.00029	.00029	.00024	.00058	.00024	.00028
%RSD	8.5429	31.988	40.817	24.568	6.4283	60.246	19.905
#1	.00136	.00112	.00092	.00114	.00943	.00023	.00162
#2	.00154	.00071	.00051	.00080	.00861	.00057	.00122
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000

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Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00007	.01639	.00175	.00085	.00116	.00094	.00072
SDev	.00035	.00593	.00071	.00019	.00035	.00006	.00171
%RSD	477.22	36.212	40.406	22.782	30.305	6.8537	237.13
#1	-.00017	.01219	.00125	.00099	.00141	.00098	-.00049
#2	.00032	.02058	.00225	.00072	.00091	.00089	.00193
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00130	.00246	.00388	.00084	-.00128	.00597	-.00552
SDev	.00010	.00014	.00077	.00031	.00144	.00049	.01810
%RSD	7.7602	5.6566	19.865	36.372	112.03	8.1519	327.92
#1	.00137	.00255	.00443	.00106	-.00230	.00631	-.01832
#2	.00123	.00236	.00334	.00062	-.00027	.00563	.00728
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00130	.00228	.00340	.00147	-.00039	-.19065	
SDev	.00049	.00002	.00055	.00050	.01368	.39024	
%RSD	37.806	.75598	16.252	34.215	3479.8	204.69	
#1	.00164	.00229	.00301	.00182	-.01007	Q-.46659	
#2	.00095	.00226	.00379	.00111	.00928	.08529	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.00300	.00400	.06000	.05000	.50000	.25000	

Method: 6010C Sample Name: G9GGFD Operator: STL
Run Time: 05/06/05 11:20:13
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.50105	.49940	.49494	.50435	2.0925	2.0573	2.5587
SDev	.00164	.00018	.00002	.00333	.0024	.0037	.0018
%RSD	.32817	.03676	.00397	.66074	.11229	.17866	.06861
#1	.50221	.49927	.49496	.50200	2.0909	2.0547	2.5575
#2	.49988	.49953	.49493	.50671	2.0942	2.0599	2.5600
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00

Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	2.0621	2.7473	.05562	.04946	177.05	.20025	.48934
SDev	.0001	.0026	.00009	.00016	.32	.00032	.00075
%RSD	.00314	.09550	.16272	.33388	.18005	.15895	.15215
#1	2.0621	2.7491	.05556	.04934	176.83	.20002	.48882
#2	2.0620	2.7454	.05568	.04958	177.28	.20047	.48987
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.26150	22.581	93.626	1.4055	.50452	.05116	1.9372
SDev	.00059	.017	.152	.0011	.00121	.00058	.0043
%RSD	.22500	.07457	.16206	.07700	.23898	1.1342	.21994
#1	.26109	22.569	93.519	1.4047	.50367	.05075	1.9342
#2	.26192	22.593	93.734	1.4062	.50537	.05157	1.9402
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V 2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.51263	.51449	1.0390	1.5647	.00012	.00160	-.01846
SDev	.00017	.00079	.0009	.0007	.00117	.00185	.00131
%RSD	.03371	.15357	.08927	.04601	1009.5	115.76	7.1246
#1	.51251	.51393	1.0384	1.5652	-.00071	.00029	-.01753
#2	.51275	.51504	1.0397	1.5642	.00095	.00290	-.01939
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.50122	2.0691	.50050	.00701	.00786	65.836	
SDev	.00222	.0032	.00104	.00030	.00662	.287	
%RSD	.44217	.15631	.20691	4.3000	84.229	.43648	
#1	.49965	2.0668	.50123	.00680	.00318	65.633	
#2	.50279	2.0713	.49977	.00723	.01254	66.040	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9GGFV 5X Operator: STL
Run Time: 05/06/05 11:24:35
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00312	-.00156	-.00004	.00450	-.00139	.00444	.07444
SDev	.00299	.00064	.00216	.00099	.00201	.00142	.00076
%RSD	95.958	40.795	4854.5	22.037	144.02	32.036	1.0152
#1	.00100	-.00111	.00149	.00380	.00003	.00544	.07497
#2	.00523	-.00201	-.00157	.00521	-.00281	.00343	.07391
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00007	.11099	-.00014	.00002	25.892	.00029	.00148
SDev	.00031	.00034	.00004	.00002	.082	.00018	.00009
%RSD	413.52	.30590	28.862	121.59	.31675	64.220	6.3352
#1	.00014	.11075	-.00017	.00003	25.834	.00042	.00141
#2	-.00029	.11123	-.00011	.00000	25.950	.00016	.00155
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00026	4.2709	8.4696	.18156	.00351	.00084	.00242
SDev	.00044	.0186	.0256	.00069	.00009	.00028	.00180
%RSD	168.45	.43450	.30275	.37980	2.5104	33.544	74.550
#1	.00005	4.2577	8.4515	.18107	.00345	.00064	.00369
#2	-.00057	4.2840	8.4877	.18204	.00358	.00104	.00114
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00069	.00662	.00137	.09145	-.00023	.00374	.00031
SDev	.00014	.00009	.00041	.00027	.00133	.00244	.00342
%RSD	19.956	1.3549	30.028	.29544	587.02	65.113	1108.3
#1	.00059	.00668	.00166	.09126	.00072	.00202	.00273
#2	.00078	.00656	.00108	.09164	-.00117	.00546	-.00211
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00299	.00249	.00156	.00107	.03022	3.0303
SDev	.00006	.00162	.00178	.00007	.00229	.0922
%RSD	1.9512	64.808	114.32	6.2854	7.5736	3.0438
#1	.00303	.00364	.00030	.00102	.02860	2.9651
#2	.00295	.00135	.00282	.00111	.03184	3.0955
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9GGQ Operator: STL
Run Time: 05/06/05 11:28:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00126	.00006	.00988	.01193	.00033	-.00021	1.6315
SDev	.00241	.00334	.00475	.00297	.00275	.00105	.0002
%RSD	191.34	5618.4	48.066	24.891	831.13	498.76	.01366
#1	-.00296	.00242	.01324	.00983	.00227	-.00095	1.6316
#2	.00044	-.00230	.00652	.01403	-.00161	.00053	1.6313
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00130	.07763	.00010	-.00001	135.84	.00206	.00473
SDev	.00151	.00011	.00002	.00018	.01	.00029	.00033
%RSD	115.80	.13916	19.642	1740.2	.00661	14.130	6.9044
#1	.00024	.07771	.00009	-.00014	135.85	.00227	.00450
#2	.00237	.07756	.00012	.00012	135.84	.00185	.00496
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00553	6.6405	48.212	1.7299	.00385	.00124	.00259
SDev	.00005	.0100	.003	.0022	.00056	.00068	.00012
%RSD	.82793	.15018	.00660	.12590	14.524	55.270	4.6471
#1	.00556	6.6335	48.210	1.7314	.00345	.00075	.00251
#2	.00550	6.6476	48.215	1.7283	.00424	.00172	.00268
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00505	.03880	.00067	.16954	-.00042	.00404	.02430
SDev	.00059	.00006	.00007	.00061	.00075	.00406	.00600
%RSD	11.665	.16252	10.711	.36062	177.64	100.58	24.701
#1	.00464	.03884	.00062	.16997	.00011	.00117	.02855
#2	.00547	.03876	.00072	.16910	-.00095	.00691	.02006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.01125	-.00003	-.00082	.00732	.11074	3.7377
SDev	.00040	.00021	.00049	.00027	.01333	.3689
%RSD	3.5539	694.70	60.289	3.6614	12.040	9.8710
#1	.01096	.00012	-.00117	.00713	.10131	3.4768
#2	.01153	-.00018	-.00047	.00751	.12017	3.9986
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9GGT Operator: STL
Run Time: 05/06/05 11:33:19
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00321	-.00210	-.00411	.00227	-.00233	.00074	.04309
SDev	.00169	.00212	.00115	.00158	.00262	.00211	.00078
%RSD	52.495	101.33	28.008	69.510	112.87	283.91	1.8081
#1	.00202	-.00059	-.00329	.00115	-.00047	-.00075	.04254
#2	.00440	-.00360	-.00492	.00338	-.00418	.00223	.04364
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00169	.32079	-.00028	-.00050	103.99	.00038	.00553
SDev	.00049	.00017	.00001	.00007	.18	.00009	.00023
%RSD	28.663	.05292	2.9158	14.421	.17779	22.951	4.2259
#1	.00203	.32091	-.00029	-.00045	103.86	.00032	.00536
#2	.00135	.32067	-.00028	-.00055	104.12	.00044	.00569
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00137	12.790	37.447	2.2101	.00260	.00093	.00388
SDev	.00036	.012	.074	.0017	.00021	.00026	.00046
%RSD	25.938	.09384	.19881	.07563	7.9196	27.631	11.798
#1	-.00112	12.782	37.395	2.2089	.00274	.00075	.00356
#2	-.00162	12.799	37.500	2.2113	.00245	.00111	.00421
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00074	.00366	-.00037	.48270	.00000	.00209	-.00520
SDev	.00000	.00000	.00026	.00017	.00102	.00122	.00535
%RSD	.23658	.04965	70.919	.03596	194100.	58.326	102.91
#1	.00074	.00366	-.00018	.48283	-.00072	.00123	-.00142
#2	.00074	.00365	-.00056	.48258	.00072	.00295	-.00898
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00014	-.00028	.00144	-.00007	.01706	35.744
SDev	.00067	.00053	.00042	.00000	.00938	.294
%RSD	463.32	189.33	28.891	.00000	54.995	.82378
#1	-.00033	-.00065	.00115	-.00007	.01042	35.536
#2	.00062	.00009	.00174	-.00007	.02369	35.952
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

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Method: 6010C Sample Name: G9GG0 Operator: STL
Run Time: 05/06/05 11:40:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00201	.00048	.00030	.00115	.00054	.00015	.06642
SDev	.00289	.00329	.00257	.00049	.00271	.00309	.00198
%RSD	143.37	679.23	846.60	42.371	506.07	2003.0	2.9744
#1	-.00405	.00281	.00212	.00080	.00245	-.00203	.06502
#2	.00003	-.00184	-.00151	.00149	-.00138	.00234	.06781
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00082	.04975	-.00027	-.00008	25.422	.00153	.00085
SDev	.00072	.00003	.00002	.00007	.053	.00063	.00004
%RSD	87.785	.06204	9.1239	86.920	.20861	40.852	5.1413
#1	-.00031	.04977	-.00029	-.00003	25.384	.00198	.00088
#2	-.00133	.04973	-.00025	-.00012	25.459	.00109	.00082
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00001	1.4558	5.6882	.26405	.00229	.00046	.00097
SDev	.00062	.0039	.0180	.00052	.00012	.00012	.00150
%RSD	9778.2	.26596	.31710	.19648	5.1426	26.418	154.92
#1	.00043	1.4531	5.6755	.26368	.00220	.00038	.00203
#2	-.00045	1.4585	5.7010	.26441	.00237	.00055	-.00009
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00025	.00313	.00045	.10121	-.00034	-.00007	.01253
SDev	.00014	.00005	.00045	.00007	.00053	.00032	.01843
%RSD	57.297	1.7308	100.43	.06609	155.06	443.34	147.04
#1	.00035	.00310	.00077	.10116	.00003	.00015	.02557
#2	.00015	.00317	.00013	.10126	-.00072	-.00030	-.00050
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00087	.00028	-.00118	.00057	.00502	8.8651
SDev	.00053	.00116	.00083	.00010	.00939	.0284
%RSD	61.060	412.83	70.227	17.678	187.16	.32013
#1	.00124	-.00054	-.00177	.00064	-.00162	8.8451
#2	.00049	.00110	-.00059	.00050	.01165	8.8852
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9GG1 Operator: STL
Run Time: 05/06/05 11:44:31
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00213	-.00008	-.00217	.00148	-.00086	-.00015	.15386
SDev	.00110	.00105	.00074	.00177	.00073	.00127	.00288
%RSD	51.939	1345.9	34.289	119.91	84.999	834.05	1.8710
#1	.00135	-.00082	-.00164	.00022	-.00034	.00075	.15590
#2	.00291	.00066	-.00269	.00273	-.00138	-.00105	.15183
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00053	.06771	-.00027	-.00001	12.360	.00146	.00352
SDev	.00003	.00015	.00000	.00009	.016	.00028	.00009
%RSD	4.9294	.22792	1.5373	843.06	.13130	18.998	2.6699
#1	.00051	.06761	-.00026	-.00008	12.348	.00165	.00345
#2	.00055	.06782	-.00027	.00006	12.371	.00126	.00358
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00021	1.7740	5.7765	.55577	.00487	.00105	.00101
SDev	.00019	.0033	.0092	.00102	.00012	.00025	.00095
%RSD	91.553	.18327	.15919	.18413	2.4175	23.643	94.241
#1	-.00007	1.7717	5.7700	.55505	.00478	.00088	.00034
#2	-.00035	1.7763	5.7830	.55650	.00495	.00123	.00169
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00089	.00601	.00035	.09446	-.00117	.00387	.01587
SDev	.00007	.00006	.00022	.00020	.00064	.00015	.00582
%RSD	7.7245	.95972	63.136	.21547	54.658	3.8319	36.686
#1	.00084	.00605	.00019	.09431	-.00163	.00376	.01999
#2	.00094	.00597	.00050	.09460	-.00072	.00397	.01176
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00026	-.00039	.00139	.00218	-.01226	16.554
SDev	.00093	.00109	.00109	.00017	.00368	.046
%RSD	354.38	281.09	78.030	7.6859	29.979	.27860
#1	-.00040	.00038	.00062	.00206	-.00966	16.521
#2	.00092	-.00116	.00216	.00230	-.01486	16.586
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9K20 Operator: STL
Run Time: 05/06/05 11:48:53
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00113	-.00119	-.00076	.00213	-.00195	.00079	.59385
SDev	.00160	.00044	.00107	.00063	.00007	.00328	.00062
%RSD	141.90	36.677	140.34	29.631	3.6605	416.79	.10391
#1	-.00000	-.00088	-.00001	.00168	-.00190	-.00153	.59429
#2	.00226	-.00149	-.00151	.00257	-.00200	.00310	.59341
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00063	.03462	-.00024	-.00007	25.079	.00233	.00125
SDev	.00075	.00002	.00001	.00004	.028	.00010	.00014
%RSD	120.01	.04459	5.1740	58.910	.10977	4.2827	11.203
#1	-.00116	.03460	-.00023	-.00004	25.059	.00240	.00115
#2	-.00009	.03463	-.00025	-.00010	25.098	.00226	.00135
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	T11908

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Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00095	.72614	20.362	.22116	.00516	.00045	.00044
SDev	.00016	.00502	.029	.00008	.00018	.00003	.00056
%RSD	16.589	.69202	.14156	.03569	3.4215	6.9546	127.39
#1	.00106	.72259	20.342	.22110	.00528	.00047	.00084
#2	.00084	.72970	20.383	.22121	.00503	.00043	.00004
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00121	.00768	.00058	.17163	-.00057	.00029	.00170
SDev	.00003	.00006	.00048	.00003	.00213	.00009	.00178
%RSD	2.8617	.73009	83.596	.01947	376.82	30.096	105.15
#1	.00118	.00764	.00092	.17161	.00094	.00023	.00296
#2	.00123	.00772	.00024	.17166	-.00208	.00035	.00043
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00117	-.00013	.00036	.00953	-.00138	41.704
SDev	.00006	.00216	.00092	.00023	.00176	.167
%RSD	5.6080	1714.7	258.70	2.4626	127.33	.39980
#1	.00112	-.00165	-.00030	.00969	-.00263	41.586
#2	.00121	.00140	.00101	.00936	-.00014	41.822
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9K3D Operator: STL
Run Time: 05/06/05 11:53:15
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00288	-.00000	-.00257	.00187	-.00196	.00098	.30512
SDev	.00008	.00115	.00017	.00069	.00007	.00067	.00031
%RSD	2.8899	23504.	6.7966	36.764	3.6690	68.024	.10289
#1	.00282	-.00082	-.00270	.00236	-.00202	.00051	.30535
#2	.00294	.00081	-.00245	.00139	-.00191	.00145	.30490
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00038	.05946	-.00021	.00013	75.326	.00776	.00746
SDev	.00029	.00003	.00001	.00007	.060	.00029	.00056
%RSD	77.849	.05191	3.8745	56.450	.07964	3.7606	7.4446
#1	.00017	.05944	-.00022	.00008	75.283	.00756	.00707
#2	.00058	.05949	-.00021	.00018	75.368	.00797	.00785
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00320	.62251	56.077	.88937	.03223	.00093	.00029
SDev	.00034	.00472	.042	.00012	.00012	.00049	.00064
%RSD	10.500	.75770	.07442	.01359	.36496	52.963	223.85
#1	.00297	.61917	56.048	.88928	.03215	.00058	-.00017
#2	.00344	.62584	56.107	.88945	.03231	.00127	.00074
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00103	.01013	.00438	.45157	-.00015	.00263	-.00038
SDev	.00042	.00017	.00008	.00031	.00005	.00333	.02132
%RSD	40.640	1.6549	1.9175	.06798	32.175	126.49	5578.0
#1	.00074	.01002	.00432	.45178	-.00019	.00028	-.01546
#2	.00133	.01025	.00444	.45135	-.00012	.00499	.01470
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00039	.00000	.00192	.00332	.02504	128.43
SDev	.00040	.00047	.00044	.00003	.00418	.09
%RSD	102.06	93674.	22.947	1.0102	16.678	.06631
#1	.00068	-.00033	.00161	.00334	.02209	128.37
#2	.00011	.00033	.00223	.00329	.02800	128.49
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9L2FB Operator: STL
Run Time: 05/06/05 11:57:37
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

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Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00073	-.00014	-.00114	.00164	-.00122	.00214	L.08275
SDev	.00042	.00078	.00154	.00047	.00112	.00050	.00248
%RSD	58.380	572.79	135.33	28.628	91.620	23.579	2.9947
#1	.00043	.00042	-.00005	.00131	-.00201	.00178	L.08099
#2	.00103	-.00069	-.00223	.00197	-.00043	.00249	L.08450
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Low
High							.20000
Low							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L-.00022	.00075	-.00017	.00006	.20369	.00073	.00069
SDev	.00013	.00003	.00002	.00001	.00058	.00006	.00000
%RSD	58.071	4.0992	9.5879	10.919	.28455	8.4059	.04966
#1	L-.00032	.00073	-.00016	.00005	.20328	.00077	.00069
#2	L-.00013	.00077	-.00018	.00006	.20410	.00069	.00069
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00700	.20000	.20000	.00500	.25000	.01000	.05000
Low	.00700	-.20000	-.20000	-.00500	-.25000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00041	.02882	.10704	.00030	.00054	.00072	.00168
SDev	.00024	.00322	.00000	.00002	.00035	.00004	.00034
%RSD	58.527	11.180	.00000	5.4601	65.271	5.5376	20.052
#1	-.00057	.03109	.10704	.00029	.00079	.00069	.00192
#2	-.00024	.02654	.10704	.00031	.00029	.00075	.00144
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.02500	.05000	.25000	.01500	.04000	.01000	.01000
Low	-.02500	-.05000	-.25000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00074	H.01048	.00066	.00028	-.00087	.00343	.01231
SDev	.00028	.00009	.00000	.00000	.00011	.00024	.00161
%RSD	37.771	.83529	.11216	.00408	12.284	6.9808	13.115
#1	.00094	H.01042	.00066	.00028	-.00095	.00326	.01345
#2	.00054	H.01055	.00066	.00028	-.00080	.00360	.01117
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.04000	.05000	.10000	.50000	.50000
Low	-.05000	-.01000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00071	.00102	.00044	.00078	-.02699	L-.70741
SDev	.00020	.00071	.00002	.00007	.00103	.12771
%RSD	28.191	69.431	5.0676	8.5710	3.8198	18.054

#1	.00085	.00052	.00042	.00073	-.02772	L-.61710
#2	.00057	.00152	.00046	.00083	-.02627	L-.79771
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Low
High	.00300	.00500	.01000	.05000		.25000
Low	-.00300	-.00500	-.01000	-.05000		-.25000

Method: 6010C Sample Name: G9L2FC Operator: STL
Run Time: 05/06/05 12:01:59
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.44998	.44583	1.4605	1.4508	.67888	.67165	56.581
SDev	.00066	.00031	.0006	.0033	.00284	.00182	.031
%RSD	.14732	.07024	.03772	.22951	.41808	.27086	.05418
#1	.45045	.44560	1.4609	1.4484	.67687	.67294	56.603
#2	.44951	.44605	1.4601	1.4531	.68088	.67037	56.560
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							89.900
Low							36.600

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.6926	2.7618	1.0526	1.3075	34.141	.68650	.35562
SDev	.0011	.0060	.0006	.0004	.018	.00056	.00037
%RSD	.06685	.21794	.05354	.03219	.05177	.08119	.10454
#1	1.6918	2.7660	1.0530	1.3072	34.128	.68611	.35535
#2	1.6934	2.7575	1.0522	1.3078	34.153	.68690	.35588
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.9400	2.9700	1.1100	1.5200	40.100	.84400	.44700
Low	1.2800	2.0700	.77500	1.0400	26.300	.54600	.25800

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.5207	113.13	20.276	4.1888	1.5005	1.4670	.89975
SDev	.0026	.01	.028	.0001	.0010	.0015	.00007
%RSD	.16875	.01314	.13692	.00286	.06467	.10239	.00734
#1	1.5225	113.12	20.257	4.1889	1.4999	1.4681	.89979
#2	1.5189	113.14	20.296	4.1887	1.5012	1.4659	.89970
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.7400	160.00	25.100	4.9000	1.7400	1.9100	1.0500
Low	1.2200	64.200	15.700	3.2600	1.2000	.68900	.63500

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.99609	1.6102	.90009	.89403	.60445	.08766	-.04210
SDev	.00160	.0003	.00037	.00102	.00032	.00003	.00176
%RSD	.16087	.01653	.04135	.11404	.05302	.03227	4.1894

#1	.99723	1.6100	.89983	.89475	.60468	.08764	-.04335
#2	.99496	1.6104	.90036	.89331	.60423	.08768	-.04085
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	1.2200	1.9900	1.0100	1.0100	.86400		
Low	.72800	1.3100	.66700	.67000	.35700		
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	1.4540	.67406	.44860	2.9011	.91283	3.3865	
SDev	.0020	.00027	.00034	.0021	.01219	.1419	
%RSD	.14013	.03980	.07532	.07392	1.3351	4.1903	
#1	1.4526	.67425	.44884	2.9026	.90421	3.2862	
#2	1.4555	.67387	.44836	2.8995	.92145	3.4869	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK	
High	1.7000	.79900	1.3600	4.9800			
Low	1.1400	.48500	.01000	1.2300			

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/06/05 12:06:22
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	4.0445	4.0483	3.9964	4.0241	4.0959	4.1180	39.989
SDev	.0252	.0109	.0111	.0194	.0099	.0151	.107
%RSD	.62394	.26809	.27858	.48272	.24135	.36589	.26761
#1	4.0266	4.0406	3.9885	4.0103	4.0889	4.1074	39.913
#2	4.0623	4.0560	4.0042	4.0378	4.1029	4.1287	40.064
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.0949	4.2731	4.2345	4.0751	20.698	3.9767	3.9728
SDev	.0166	.0134	.0114	.0118	.064	.0139	.0113
%RSD	.40437	.31386	.26948	.28944	.30943	.34890	.28566
#1	4.0832	4.2637	4.2265	4.0668	20.652	3.9669	3.9648
#2	4.1066	4.2826	4.2426	4.0834	20.743	3.9865	3.9809
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.0399	41.683	20.060	4.1160	3.9987	1.0261	3.9371
SDev	.0117	.142	.051	.0120	.0104	.0032	.0121
%RSD	.28917	.33997	.25389	.29078	.25887	.30766	.30809

#1	4.0317	41.583	20.024	4.1076	3.9914	1.0239	3.9285
#2	4.0482	41.783	20.096	4.1245	4.0060	1.0283	3.9456
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.0570	3.9535	4.1434	4.2676	4.1841	Q3.3973	4.1122
SDev	.0127	.0127	.0145	.0222	.0148	.0125	.0186
%RSD	.31421	.32141	.35057	.52063	.35312	.36824	.45176
#1	4.0480	3.9445	4.1332	4.2519	4.1736	Q3.3885	4.0991
#2	4.0660	3.9625	4.1537	4.2833	4.1945	Q3.4062	4.1254
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	4.0148	4.1106	4.0458	4.1830	Q3.4521	38.298	
SDev	.0167	.0133	.0204	.0149	.0018	.011	
%RSD	.41506	.32456	.50537	.35651	.05277	.02777	
#1	4.0031	4.1012	4.0313	4.1724	Q3.4508	38.305	
#2	4.0266	4.1201	4.0602	4.1935	Q3.4534	38.290	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000	
Range	10.000	10.000	10.000	10.000	10.000	10.000	

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 05/06/05 12:10:46
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00232	.00002	-.00191	.00249	-.00332	.00389	.06674
SDev	.00153	.00211	.00045	.00098	.00144	.00023	.00278
%RSD	65.688	9951.0	23.422	39.313	43.326	6.0303	4.1654
#1	.00340	-.00147	-.00159	.00318	-.00433	.00405	.06477
#2	.00124	.00151	-.00222	.00180	-.00230	.00372	.06870
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00102	.00100	.00090	.00094	.00922	.00076	.00128
SDev	.00025	.00005	.00001	.00002	.00029	.00006	.00009
%RSD	24.801	4.6116	1.3686	1.8446	3.1427	7.4470	7.1861

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#1	.00084	.00104	.00089	.00095	.00902	.00080	.00122
#2	.00120	.00097	.00091	.00093	.00943	.00072	.00135
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00029	.01862	.00188	.00099	.00123	.00075	.00155
SDev	.00016	.00594	.00088	.00003	.00015	.00028	.00139
%RSD	54.540	31.875	47.140	3.1089	11.985	37.467	89.731
#1	-.00041	.02282	.00125	.00096	.00112	.00095	.00057
#2	-.00018	.01442	.00250	.00101	.00133	.00055	.00253
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00125	.00253	.00347	.00098	-.00049	.00483	.00443
SDev	.00038	.00003	.00070	.00003	.00053	.00179	.00470
%RSD	30.400	1.1296	20.282	3.4505	108.28	37.088	106.17
#1	.00152	.00251	.00396	.00101	-.00087	.00609	.00110
#2	.00098	.00255	.00297	.00096	-.00012	.00356	.00775
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00102	.00149	.00156	.00161	-.00975	Q-.35872	
SDev	.00080	.00032	.00032	.00023	.01614	.42216	
%RSD	78.246	21.618	20.258	14.558	165.56	117.69	
#1	.00159	.00126	.00178	.00178	-.02116	Q-.65724	
#2	.00046	.00172	.00133	.00145	.00166	-.06021	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.00300	.00400	.06000	.05000	.50000	.25000	

Method: 6010C Sample Name: G81F3 5 Operator: STL
Run Time: 05/06/05 12:15:08
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.04823	.03410	7.1575	7.2167	.00119	.00339	42.824
SDev	.00322	.00097	.0233	.0207	.00111	.00331	.064
%RSD	6.6674	2.8411	.32550	.28683	93.182	97.812	.14950

#1	.04596	.03479	7.1411	7.2021	.00197	.00105	42.870
#2	.05051	.03342	7.1740	7.2314	.00041	.00573	42.779
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.04955	1.8335	.00151	.08918	88.487	.37078	.03922
SDev	.00138	.0047	.00001	.00009	.001	.00000	.00005
%RSD	2.7913	.25589	.81591	.09767	.00065	.00014	.11978
#1	.04857	1.8368	.00150	.08924	88.488	.37078	.03918
#2	.05053	1.8301	.00152	.08912	88.487	.37078	.03925
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	2.0044	202.53	24.226	2.3170	.48190	.00563	.02525
SDev	.0043	.11	.005	.0013	.00156	.00057	.00290
%RSD	.21313	.05347	.02044	.05712	.32342	10.049	11.466
#1	2.0074	202.60	24.229	2.3179	.48300	.00523	.02729
#2	2.0014	202.45	24.222	2.3160	.48079	.00603	.02320
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.04808	10.454	.03562	.15785	.15657	.01589	3.7013
SDev	.00038	.003	.00063	.00034	.00048	.00379	.0017
%RSD	.79270	.02397	1.7697	.21524	.30601	23.833	.04621
#1	.04781	10.452	.03607	.15809	.15624	.01321	3.7001
#2	.04835	10.455	.03518	.15761	.15691	.01857	3.7025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	7.1970	.00266	.04353	.44832	.12426	4.3924	
SDev	.0216	.00184	.00182	.00040	.00464	.1738	
%RSD	.29964	69.356	4.1867	.08970	3.7312	3.9575	
#1	7.1818	.00135	.04224	.44861	.12098	4.2695	
#2	7.2123	.00396	.04482	.44804	.12754	4.5153	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	
High	50.000	50.000	50.000	50.000	20.000	250.00	

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Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G81F38 5 Operator: STL
Run Time: 05/06/05 12:19:30
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.08096	.06786	4.5001	4.5245	.40188	.39720	27.363
SDev	.00141	.00022	.0087	.0133	.00327	.00198	.012
%RSD	1.7412	.31842	.19287	.29324	.81238	.49974	.04442
#1	.07997	.06801	4.4939	4.5151	.39957	.39580	27.354
#2	.08196	.06771	4.5062	4.5339	.40419	.39861	27.371
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.45385	2.0190	.01368	.07924	85.844	.41133	.13990
SDev	.00071	.0020	.00005	.00032	.181	.00060	.00014
%RSD	.15594	.10089	.39100	.40802	.21031	.14501	.09972
#1	.45335	2.0205	.01364	.07901	85.717	.41091	.13980
#2	.45435	2.0176	.01372	.07947	85.972	.41175	.14000
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	2.0053	209.01	23.890	2.0440	.64311	.01486	.41550
SDev	.0017	.21	.064	.0015	.00041	.00016	.00249
%RSD	.08277	.09890	.26796	.07123	.06402	1.0478	.59946
#1	2.0065	208.86	23.844	2.0430	.64282	.01475	.41374
#2	2.0042	209.15	23.935	2.0450	.64340	.01497	.41726
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.14941	10.624	.24619	.36518	.17327	.01453	3.3788
SDev	.00014	.018	.00152	.00021	.00064	.00096	.0004
%RSD	.09293	.16963	.61842	.05681	.36938	6.5822	.01312
#1	.14931	10.611	.24511	.36533	.17282	.01385	3.3785
#2	.14951	10.637	.24726	.36503	.17373	.01520	3.3791
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000

Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	4.5164	.39876	.07660	.33209	.08672	11.444
SDev	.0117	.00241	.00087	.00017	.00992	.270
%RSD	.25994	.60467	1.1336	.05045	11.441	2.3560
#1	4.5081	.39706	.07599	.33197	.07971	11.253
#2	4.5247	.40047	.07721	.33221	.09374	11.635
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G81F3D 5 Operator: STL
Run Time: 05/06/05 12:23:52
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.18528	.17392	9.8098	9.9112	.38362	.37718	30.956
SDev	.00174	.00068	.0036	.0283	.00315	.00103	.018
%RSD	.94109	.39222	.03684	.28542	.82073	.27236	.05871
#1	.18652	.17344	9.8124	9.8912	.38585	.37646	30.969
#2	.18405	.17440	9.8073	9.9312	.38139	.37791	30.943
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.45022	2.5438	.01285	.09712	71.355	.39421	.14108
SDev	.00053	.0047	.00005	.00011	.109	.00005	.00051
%RSD	.11674	.18564	.35227	.11687	.15230	.01196	.36446
#1	.45059	2.5472	.01281	.09704	71.278	.39417	.14071
#2	.44985	2.5405	.01288	.09720	71.432	.39424	.14144
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	3.0355	233.40	23.867	2.6560	.95312	.01599	.40961
SDev	.0068	.15	.053	.0008	.00132	.00019	.00014
%RSD	.22466	.06472	.22079	.03202	.13884	1.1693	.03387
#1	3.0403	233.29	23.830	2.6554	.95219	.01586	.40951
#2	3.0307	233.51	23.904	2.6566	.95406	.01612	.40971
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000

Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.14627	12.992	.23879	.38467	.27291	.01404	6.0759
SDev	.00003	.016	.00140	.00058	.00224	.00064	.0176
%RSD	.02137	.12345	.58745	.15072	.82232	4.5388	.28978
#1	.14625	12.980	.23780	.38508	.27133	.01359	6.0883
#2	.14629	13.003	.23978	.38426	.27450	.01449	6.0634
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	9.8774	.37933	.18150	.53069	.15422	13.945
SDev	.0177	.00036	.00094	.00074	.01556	.436
%RSD	.17884	.09575	.51564	.13893	10.092	3.1291
#1	9.8649	.37958	.18216	.53121	.14322	13.636
#2	9.8899	.37907	.18084	.53017	.16523	14.253
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G81F3V 25 Operator: STL
Run Time: 05/06/05 12:28:14
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00891	.00869	1.4899	1.4926	-.00084	.00277	8.3996
SDev	.00246	.00134	.0006	.0017	.00242	.00005	.0230
%RSD	27.600	15.442	.04337	.11429	288.61	1.9129	.27327
#1	.00717	.00964	1.4904	1.4914	-.00255	.00273	8.4158
#2	.01065	.00775	1.4895	1.4938	.00087	.00281	8.3834
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00997	.37225	.00031	.01859	18.361	.07672	.00845
SDev	.00056	.00225	.00003	.00013	.002	.00011	.00037
%RSD	5.5748	.60530	10.775	.71648	.01263	.14086	4.4050
#1	.00957	.37384	.00028	.01849	18.359	.07665	.00819
#2	.01036	.37065	.00033	.01868	18.363	.07680	.00871
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000

Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.39518	41.412	4.9356	.47931	.10031	.00185	.00733
SDev	.00214	.033	.0097	.00077	.00006	.00063	.00031
%RSD	.54104	.07949	.19706	.16048	.05863	34.009	4.2605
#1	.39670	41.435	4.9287	.47986	.10035	.00140	.00711
#2	.39367	41.389	4.9425	.47877	.10027	.00229	.00755
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01090	2.2042	.00789	.03163	.03344	.00656	.76227
SDev	.00045	.0036	.00015	.00014	.00091	.00271	.00132
%RSD	4.1419	.16479	1.8757	.42976	2.7152	41.418	.17280
#1	.01058	2.2068	.00799	.03173	.03408	.00464	.76134
#2	.01122	2.2017	.00778	.03154	.03280	.00848	.76320
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	1.4917	.00157	.00884	.09149	.03270	.60455	
SDev	.0009	.00084	.00119	.00027	.02849	.77692	
%RSD	.06185	53.705	13.501	.29303	87.116	128.51	
#1	1.4910	.00097	.00800	.09168	.01256	.05519	
#2	1.4923	.00216	.00968	.09130	.05284	1.1539	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9GG2 5 Operator: STL
Run Time: 05/06/05 12:32:35
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00149	-.00301	.01147	.01311	.00034	-.00020	4.2717
SDev	.00103	.00013	.00004	.00042	.00154	.00211	.0041
%RSD	69.223	4.4085	.31301	3.2361	449.07	1058.4	.09519
#1	.00223	-.00310	.01150	.01281	.00144	-.00169	4.2688
#2	.00076	-.00292	.01145	.01341	-.00075	.00129	4.2745
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00

Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00536	.23148	.00080	-.00243	8.8186	.01003	.01964
SDev	.00009	.00051	.00005	.00001	.0235	.00013	.00010
%RSD	1.7464	.22001	5.6364	.35355	.26619	1.2528	.48521
#1	.00543	.23112	.00077	-.00244	8.8020	.01012	.01957
#2	.00529	.23184	.00083	-.00242	8.8352	.00995	.01971
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00599	67.422	.92245	2.5188	.01616	.00094	.00913
SDev	.00019	.203	.00442	.0065	.00003	.00044	.00023
%RSD	3.1266	.30098	.47926	.25937	.18201	46.747	2.5555
#1	.00612	67.278	.91932	2.5142	.01618	.00126	.00929
#2	.00586	67.565	.92557	2.5235	.01614	.00063	.00896
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01153	3.9578	-.00013	.03408	.00207	.00521	-.00008
SDev	.00021	.0132	.00023	.00007	.00085	.00087	.01555
%RSD	1.8331	.33375	175.11	.19799	41.015	16.710	19758.
#1	.01168	3.9484	.00003	.03403	.00268	.00582	.01092
#2	.01138	3.9671	-.00029	.03413	.00147	.00459	-.01107
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.01257	-.00002	-.00001	.03026	.05578	.71744	
SDev	.00027	.00089	.00065	.00007	.00150	.12062	
%RSD	2.1570	4877.9	11751.	.22149	2.6867	16.812	
#1	.01238	-.00065	.00045	.03031	.05472	.63215	
#2	.01276	.00061	-.00046	.03021	.05684	.80273	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9H12 Operator: STL
Run Time: 05/06/05 12:36:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00411	-.00181	.01673	.01103	-.00141	.00124	20.221
SDev	.00726	.00377	.00518	.00297	.00298	.00422	.035
%RSD	176.62	207.50	30.990	26.924	211.93	339.42	.17257
#1	-.00102	.00085	.02039	.00893	.00070	-.00174	20.196
#2	.00925	-.00448	.01306	.01313	-.00352	.00423	20.246
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00643	.07653	.00203	-.00221	2.0699	.05133	.00895
SDev	.00082	.00025	.00001	.00028	.0038	.00076	.00033
%RSD	12.740	.32265	.60783	12.793	.18201	1.4905	3.6778
#1	.00585	.07636	.00202	-.00241	2.0672	.05187	.00871
#2	.00701	.07671	.00204	-.00201	2.0725	.05079	.00918
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.03140	52.049	4.2376	.54499	.02435	.00001	.00745
SDev	.00079	.120	.0083	.00060	.00062	.00103	.00014
%RSD	2.5034	.23092	.19613	.10986	2.5362	7864.0	1.9040
#1	.03196	51.964	4.2317	.54457	.02391	-.00072	.00735
#2	.03085	52.134	4.2435	.54541	.02479	.00074	.00755
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.04272	.05005	.00448	.02290	.00147	.01024	-.01217
SDev	.00098	.00008	.00068	.00003	.00149	.00342	.02130
%RSD	2.2850	.15817	15.124	.14803	101.31	33.399	175.00
#1	.04203	.04999	.00496	.02288	.00253	.00782	.00289
#2	.04341	.05011	.00400	.02293	.00042	.01266	-.02724
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Tl3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.01293	.00036	.00214	1.2774	.15123	L-.04014
SDev	.00026	.00182	.00359	.0018	.00522	.12771
%RSD	1.9731	505.26	167.90	.14167	3.4501	318.17
#1	.01275	-.00093	-.00040	1.2762	.14755	L-.13044
#2	.01311	.00165	.00468	1.2787	.15492	.05017
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9H2V Operator: STL
Run Time: 05/06/05 12:41:19
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00323	-.00154	.01179	.01046	-.00298	.00186	10.739
SDev	.00070	.00003	.00026	.00044	.00011	.00198	.041
%RSD	21.698	2.1282	2.1752	4.1686	3.8119	106.46	.38528
#1	.00372	-.00156	.01161	.01077	-.00290	.00046	10.710
#2	.00273	-.00151	.01197	.01015	-.00306	.00326	10.768
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00776	.07559	.00164	-.00132	.98668	.03395	.01375
SDev	.00037	.00028	.00004	.00006	.00377	.00027	.00032
%RSD	4.7579	.36749	2.2567	4.2983	.38182	.78810	2.3596
#1	.00802	.07540	.00161	-.00128	.98402	.03414	.01398
#2	.00750	.07579	.00167	-.00136	.98934	.03377	.01352
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.02197	35.294	1.6890	.59363	.01678	.00027	.00372
SDev	.00017	.125	.0073	.00235	.00044	.00019	.00053
%RSD	.76005	.35420	.42928	.39675	2.6286	70.790	14.308
#1	.02185	35.206	1.6838	.59196	.01709	.00040	.00410
#2	.02209	35.383	1.6941	.59529	.01647	.00013	.00335
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.02737	.04162	.00220	.01192	.00015	.01077	-.01000
SDev	.00003	.00006	.00019	.00003	.00059	.00194	.00884
%RSD	.12838	.14361	8.6204	.28439	391.33	18.051	88.456
#1	.02739	.04166	.00233	.01190	-.00027	.01214	-.00374
#2	.02734	.04158	.00207	.01194	.00057	.00939	-.01625
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.01090	.00025	.00164	.46761	.09755	L-.38883
SDev	.00020	.00128	.00046	.00181	.00310	.05321
%RSD	1.8841	517.79	27.810	.38700	3.1752	13.685
#1	.01105	-.00066	.00196	.46633	.09974	L-.35120
#2	.01076	.00115	.00132	.46889	.09536	L-.42645
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9H27 Operator: STL
Run Time: 05/06/05 12:45:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00101	-.00093	.00945	.00723	.00068	.00260	7.0561
SDev	.00007	.00177	.00228	.00032	.00053	.00127	.0024
%RSD	7.4512	190.38	24.087	4.3654	78.348	48.868	.03445
#1	.00106	.00032	.01106	.00746	.00030	.00170	7.0578
#2	.00095	-.00219	.00784	.00701	.00106	.00349	7.0544
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00593	.04461	.00113	-.00162	.61434	.02934	.00714
SDev	.00021	.00005	.00001	.00002	.00058	.00049	.00065
%RSD	3.5226	.10379	.73084	1.1369	.09434	1.6828	9.1166
#1	.00578	.04464	.00112	-.00163	.61393	.02969	.00760
#2	.00607	.04458	.00113	-.00160	.61475	.02899	.00668
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

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Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.01636	41.941	1.7517	.29307	.01399	.00035	.00575
SDev	.00067	.007	.0030	.00005	.00026	.00005	.00017
%RSD	4.0777	.01663	.17162	.01586	1.8912	13.292	3.0367
#1	.01684	41.946	1.7496	.29310	.01418	.00038	.00587
#2	.01589	41.936	1.7539	.29303	.01381	.00031	.00563
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.02757	.03831	.00105	.00647	.00041	.00702	-.00031
SDev	.00018	.00015	.00071	.00000	.00021	.00043	.00500
%RSD	.64847	.38257	67.403	.00018	51.356	6.1447	1604.0
#1	.02744	.03821	.00155	.00647	.00056	.00733	.00323
#2	.02769	.03842	.00055	.00647	.00026	.00672	-.00385
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00797	.00196	.00036	.38003	.10148	L-.21072
SDev	.00097	.00103	.00064	.00034	.00778	.15609
%RSD	12.150	52.292	177.33	.08819	7.6644	74.077
#1	.00866	.00123	.00081	.38027	.09598	L-.32109
#2	.00729	.00268	-.00009	.37979	.10698	L-.10034
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9H3E Operator: STL
Run Time: 05/06/05 12:50:03
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00961	-.00124	.01029	.00906	-.00426	.00252	19.161
SDev	.00181	.00060	.00205	.00181	.00050	.00037	.053
%RSD	18.801	48.308	19.958	19.973	11.730	14.588	.27779
#1	.01089	-.00081	.00884	.01034	-.00461	.00278	19.123
#2	.00833	-.00166	.01174	.00778	-.00390	.00226	19.199
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.01143	.06207	.00130	-.00244	.48074	.23499	.00970
SDev	.00127	.00008	.00001	.00001	.00116	.00060	.00028
%RSD	11.107	.12431	.95128	.45004	.24113	.25349	2.8812
#1	.01053	.06202	.00131	-.00244	.47992	.23456	.00990
#2	.01233	.06213	.00129	-.00243	.48156	.23541	.00950
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.04122	60.909	1.3784	.72937	.03100	.00002	.00687
SDev	.00059	.171	.0041	.00177	.00021	.00019	.00086
%RSD	1.4358	.28064	.29509	.24326	.66395	830.14	12.458
#1	.04080	60.788	1.3755	.72811	.03086	-.00011	.00747
#2	.04163	61.030	1.3812	.73062	.03115	.00016	.00626
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.04238	.02665	.03948	.00650	.00196	.00533	-.02143
SDev	.00014	.00005	.00004	.00003	.00069	.00036	.00194
%RSD	.33028	.17566	.09180	.52226	35.319	6.6844	9.0386
#1	.04228	.02668	.03950	.00648	.00246	.00558	-.02280
#2	.04248	.02661	.03945	.00652	.00147	.00508	-.02006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00947	.00026	.00600	.57683	.09593	L-.52429
SDev	.00052	.00008	.00140	.00137	.00097	.01774
%RSD	5.5262	29.995	23.414	.23820	1.0083	3.3835
#1	.00984	.00032	.00699	.57586	.09524	L-.51174
#2	.00910	.00021	.00500	.57780	.09661	L-.53683
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9MPRB Operator: STL
Run Time: 05/06/05 12:54:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

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Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00047	-.00190	.00226	.00481	.00395	-.00218	L.07982
SDev	.00288	.00144	.00202	.00083	.00282	.00132	.00368
%RSD	619.05	75.582	89.410	17.322	71.410	60.427	4.6156
#1	-.00157	-.00088	.00369	.00422	.00595	-.00312	L.07721
#2	.00250	-.00292	.00083	.00540	.00196	-.00125	L.08242
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Low
High							.20000
Low							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L-.00045	.04996	-.00022	.00002	H.44467	.00018	.00079
SDev	.00052	.00008	.00000	.00004	.00000	.00016	.00051
%RSD	114.70	.15446	1.9111	165.92	.00000	90.146	64.827
#1	L-.00082	.04990	-.00021	-.00000	H.44467	.00006	.00043
#2	L-.00009	.05001	-.00022	.00005	H.44467	.00029	.00115
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	.00700	.20000	.20000	.00500	.25000	.01000	.05000
Low	.00700	-.20000	-.20000	-.00500	-.25000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00073	.00838	.02513	-.00011	.00104	.00065	-.00009
SDev	.00001	.01042	.00124	.00000	.00094	.00096	.00137
%RSD	1.4609	124.39	4.9250	.84347	90.510	146.99	1493.8
#1	-.00072	.00101	.02426	-.00011	.00037	-.00003	.00088
#2	-.00074	.01575	.02601	-.00011	.00171	.00133	-.00106
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.02500	.05000	.25000	.01500	.04000	.01000	.01000
Low	-.02500	-.05000	-.25000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00012	H.01756	.00061	.00086	.00173	.00165	.00513
SDev	.00087	.00011	.00044	.00007	.00123	.00370	.00402
%RSD	706.54	.60188	73.193	7.9384	70.676	223.79	78.359
#1	-.00049	H.01749	.00092	.00081	.00087	-.00096	.00229
#2	.00074	H.01763	.00029	.00090	.00260	.00427	.00797
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.04000	.05000	.10000	.50000	.50000
Low	-.05000	-.01000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	H.00396	-.00014	-.00032	.00069	-.03440	H614.39
SDev	.00012	.00006	.00144	.00020	.00007	.43
%RSD	2.9442	42.358	447.75	29.260	.21230	.06929

#1	H.00404	-.00010	-.00134	.00055	-.03435	H614.70
#2	H.00388	-.00018	.00070	.00083	-.03446	H614.09

Errors	LC High	LC Pass	LC Pass	LC Pass	NOCHECK	LC High
High	.00300	.00500	.01000	.05000		.25000
Low	-.00300	-.00500	-.01000	-.05000		-.25000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/06/05 12:58:49
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	3.9770	3.9965	3.9414	3.9637	4.0247	4.0426	39.412
SDev	.0002	.0059	.0009	.0020	.0032	.0056	.044
%RSD	.00419	.14716	.02182	.05019	.07980	.13794	.11166
#1	3.9771	4.0007	3.9420	3.9623	4.0270	4.0387	39.381
#2	3.9769	3.9924	3.9408	3.9651	4.0225	4.0465	39.443
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.0510	4.1735	4.1536	4.0318	20.458	3.9205	3.9157
SDev	.0036	.0014	.0017	.0036	.019	.0036	.0023
%RSD	.08901	.03291	.04210	.08869	.09067	.09279	.05939
#1	4.0484	4.1725	4.1523	4.0293	20.445	3.9179	3.9140
#2	4.0535	4.1745	4.1548	4.0344	20.471	3.9231	3.9173
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	3.9635	41.037	19.833	4.0554	3.9579	1.0137	3.8916
SDev	.0015	.036	.028	.0041	.0046	.0006	.0063
%RSD	.03898	.08741	.14266	.10005	.11665	.05777	.16307
#1	3.9625	41.012	19.813	4.0525	3.9546	1.0133	3.8871
#2	3.9646	41.063	19.853	4.0583	3.9612	1.0142	3.8961
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	3.9961	3.9178	4.0891	4.1912	4.1500	Q3.3561	4.0364
SDev	.0033	.0051	.0067	.0128	.0010	.0014	.0049
%RSD	.08283	.12972	.16429	.30641	.02317	.04145	.12091

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#1	3.9938	3.9142	4.0844	4.1821	4.1493	Q3.3571	4.0399
#2	3.9985	3.9214	4.0939	4.2003	4.1506	Q3.3551	4.0330
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	3.9563	4.0367	3.9835	4.1201	Q3.2706	37.239
SDev	.0010	.0027	.0021	.0032	.0063	.060
%RSD	.02630	.06564	.05195	.07646	.19404	.16194
#1	3.9556	4.0348	3.9850	4.1179	Q3.2750	37.196
#2	3.9570	4.0385	3.9820	4.1223	Q3.2661	37.282
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 05/06/05 13:03:13
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00569	.00121	-.00202	.00407	-.00157	.00354	.09042
SDev	.00003	.00156	.00162	.00090	.00180	.00139	.00014
%RSD	.44491	128.45	79.956	22.194	114.72	39.179	.15203
#1	.00570	.00011	-.00317	.00471	-.00284	.00452	.09032
#2	.00567	.00232	-.00088	.00343	-.00030	.00256	.09051
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00156	.00145	.00143	.00142	.01270	.00138	.00197
SDev	.00051	.00006	.00000	.00003	.00000	.00030	.00042
%RSD	32.449	4.2533	.00000	2.4771	.00000	21.778	21.244
#1	.00191	.00150	.00143	.00145	.01270	.00117	.00227
#2	.00120	.00141	.00143	.00140	.01270	.00160	.00168
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00024	.03034	.00963	.00149	.00150	.00130	.00105
SDev	.00024	.00488	.00053	.00002	.00035	.00037	.00155
%RSD	98.615	16.090	5.5098	1.6238	23.570	28.590	147.84

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#1	-.00042	.03380	.01000	.00151	.00175	.00156	.00214
#2	-.00007	.02689	.00925	.00148	.00125	.00104	-.00005
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00226	.00306	.00457	.00142	.00083	.00763	.00681
SDev	.00069	.00005	.00115	.00003	.00155	.00239	.00228
%RSD	30.708	1.7196	25.156	2.3974	187.05	31.310	33.420
#1	.00275	.00310	.00538	.00144	.00192	.00933	.00520
#2	.00177	.00302	.00376	.00139	-.00027	.00594	.00842
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00204	.00184	.00420	.00220	.01558	Q.25336	
SDev	.00006	.00033	.00050	.00034	.00193	.11707	
%RSD	3.0966	17.775	11.974	15.207	12.393	46.207	
#1	.00208	.00207	.00384	.00244	.01421	.17058	
#2	.00199	.00161	.00455	.00197	.01694	Q.33614	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.00300	.00400	.06000	.05000	.50000	.25000	

Method: 6010C Sample Name: G9RQFC Operator: STL
Run Time: 05/06/05 13:07:36
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.99973	1.0059	.96648	.98679	1.0590	1.0446	H1.2078
SDev	.00090	.0005	.00115	.00010	.0022	.0038	.0055
%RSD	.09030	.04747	.11932	.01013	.20640	.36432	.45202
#1	1.0004	1.0055	.96566	.98686	1.0575	1.0419	H1.2039
#2	.99909	1.0062	.96729	.98672	1.0606	1.0473	H1.2116
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC High
High							1.2000
Low							.80000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.0183	1.0994	1.0581	.99648	20.639	.98668	.97037
SDev	.0043	.0015	.0018	.00149	.038	.00232	.00214
%RSD	.41923	.14038	.16640	.14920	.18394	.23567	.22054

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#1	1.0152	1.0983	1.0568	.99543	20.612	.98504	.96886
#2	1.0213	1.1005	1.0593	.99753	20.666	.98833	.97188
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2040	1.2040	1.2000	1.2040	24.000	1.2040	1.2000
Low	.79500	.79500	.80000	.79500	16.000	.79500	.80000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.0436	1.1130	19.754	1.0145	.98249	.25440	.97477
SDev	.0016	.0077	.035	.0017	.00026	.00004	.00424
%RSD	.15529	.68850	.17636	.16862	.02694	.01686	.43534
#1	1.0425	1.1184	19.729	1.0133	.98267	.25443	.97177
#2	1.0448	1.1076	19.778	1.0158	.98230	.25437	.97777
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2000	1.2000	24.000	1.2040	1.2000	.33700	1.2040
Low	.80000	.80000	16.000	.79500	.80000	.12300	.79500
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	1.0130	1.0012	1.0249	1.0795	L.00079	L.00198	L-.01457
SDev	.0017	.0015	.0024	.0023	.00171	.00127	.00066
%RSD	.16519	.15400	.23188	.21079	214.86	64.064	4.5135
#1	1.0118	1.0001	1.0232	1.0779	L.00200	L.00288	L-.01504
#2	1.0142	1.0023	1.0266	1.0812	L-.00041	L.00108	L-.01411
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Low	LC Low
High	1.2000	1.2000	1.2000	1.2000	2.4000	2.4000	2.4000
Low	.80000	.80000	.80000	.80000	1.6000	1.6000	1.6000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.98002	1.0494	1.0018	L.00161	L-.02437	599.23	
SDev	.00032	.0033	.0004	.00017	.00010	.38	
%RSD	.03239	.31125	.04424	10.399	.42570	.06334	
#1	.97980	1.0471	1.0021	L.00173	L-.02444	598.97	
#2	.98025	1.0517	1.0015	L.00149	L-.02430	599.50	
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Low	NOCHECK	
High	1.2040	1.2040	1.2040	2.4000	2.4000		
Low	.79500	.79500	.79500	1.6000	1.6000		

Method: 6010C Sample Name: G80NW Operator: STL
Run Time: 05/06/05 13:11:58
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00567	-.00298	-.00117	.00588	.00289	.00304	.23925
SDev	.00023	.00044	.00006	.00023	.00043	.00132	.00075
%RSD	4.1217	14.794	5.4810	3.9439	14.959	43.442	.31343

#1	.00551	-.00267	-.00122	.00571	.00320	.00397	.23872
#2	.00584	-.00329	-.00113	.00604	.00258	.00210	.23978
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00005	.40009	-.00016	.00011	251.62	.00022	.01355
SDev	.00043	.00042	.00001	.00006	.58	.00011	.00005
%RSD	878.86	.10416	5.1425	54.385	.22919	47.914	.34443
#1	.00035	.40038	-.00017	.00007	251.21	.00015	.01359
#2	-.00025	.39979	-.00015	.00015	252.03	.00030	.01352
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00112	.05602	10.050	1.4507	.01772	.00097	.02057
SDev	.00008	.00036	.020	.0012	.00018	.00003	.00135
%RSD	7.3727	.64615	.19532	.08189	.99593	3.1939	6.5816
#1	-.00106	.05576	10.036	1.4498	.01759	.00095	.01961
#2	-.00118	.05627	10.064	1.4515	.01784	.00099	.02152
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00064	.79764	.00136	5.4128	.00166	.00347	-.01435
SDev	.00021	.00015	.00026	.0090	.00229	.00114	.00145
%RSD	32.956	.01866	19.081	.16613	138.02	32.903	10.111
#1	.00078	.79754	.00154	5.4065	.00004	.00266	-.01538
#2	.00049	.79775	.00118	5.4192	.00328	.00428	-.01333
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00353	.00299	.00279	-.00078	.00526	H601.04	
SDev	.00018	.00102	.00001	.00007	.00519	.27	
%RSD	4.9890	34.265	.33344	8.5710	98.747	.04427	
#1	.00340	.00371	.00279	-.00073	.00159	H600.85	
#2	.00365	.00226	.00280	-.00083	.00893	H601.23	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	

Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G80NWX Operator: STL
Run Time: 05/06/05 13:16:21
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00089	.00122	.00336	.00244	.00891	-.00253	.23983
SDev	.00431	.00188	.00288	.00176	.00172	.00093	.00390
%RSD	483.09	154.75	85.645	72.113	19.295	36.691	1.6278
#1	-.00394	.00255	.00539	.00120	.01012	-.00319	.23707
#2	.00215	-.00011	.00132	.00369	.00769	-.00187	.24259
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00048	.39951	-.00012	-.00005	252.42	.00065	.01322
SDev	.00066	.00089	.00003	.00019	1.08	.00057	.00014
%RSD	136.34	.22406	24.749	375.59	.42697	87.232	1.0653
#1	.00002	.39888	-.00014	-.00018	251.66	.00106	.01312
#2	.00095	.40014	-.00010	.00008	253.18	.00025	.01332
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00084	.05764	10.064	1.4514	.01726	.00015	.01943
SDev	.00031	.00428	.049	.0047	.00059	.00030	.00002
%RSD	37.455	7.4174	.48671	.32220	3.4077	192.24	.07637
#1	-.00062	.05462	10.030	1.4481	.01684	-.00006	.01942
#2	-.00106	.06067	10.099	1.4547	.01767	.00036	.01944
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00005	.79851	.00089	5.4682	.00313	-.00029	.00383
SDev	.00056	.00341	.00064	.0152	.00011	.00124	.00874
%RSD	1106.9	.42734	71.021	.27795	3.4516	422.73	228.04
#1	-.00034	.79610	.00134	5.4575	.00305	-.00117	.01001
#2	.00044	.80093	.00045	5.4790	.00321	.00058	-.00235
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000

Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00275	.00128	-.00019	-.00100	.00702	H599.23
SDev	.00022	.00005	.00225	.00023	.01089	1.56
%RSD	7.9214	3.6962	1184.8	23.570	155.02	.26049
#1	.00259	.00124	-.00178	-.00116	-.00068	H598.13
#2	.00290	.00131	.00140	-.00083	.01472	H600.34

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G80NWS Operator: STL
Run Time: 05/06/05 13:20:43
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.48165	.48008	.46970	.48150	2.0961	2.0736	2.4226
SDev	.00155	.00251	.00083	.00056	.0035	.0063	.0062
%RSD	.32239	.52244	.17738	.11724	.16903	.30495	.25418
#1	.48055	.47831	.46911	.48190	2.0986	2.0691	2.4183
#2	.48275	.48186	.47029	.48110	2.0936	2.0780	2.4270

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	2.0387	2.4691	.05236	.04840	297.31	.19415	.48243
SDev	.0044	.0078	.00014	.00015	.60	.00009	.00075
%RSD	.21346	.31565	.26711	.31776	.20206	.04543	.15452
#1	2.0356	2.4636	.05226	.04851	296.89	.19409	.48191
#2	2.0418	2.4746	.05246	.04829	297.74	.19421	.48296

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.26459	1.0952	58.815	1.9255	.49797	.05001	1.9033
SDev	.00096	.0097	.108	.0049	.00018	.00025	.0094
%RSD	.36120	.88857	.18431	.25431	.03543	.50052	.49264
#1	.26391	1.1021	58.739	1.9221	.49784	.05019	1.8966
#2	.26526	1.0883	58.892	1.9290	.49809	.04984	1.9099

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000

Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.49797	1.2815	.97468	6.4425	.00203	.00468	.01093
SDev	.00132	.0037	.00401	.0230	.00059	.00179	.00823
%RSD	.26582	.28958	.41101	.35683	28.944	38.304	75.313
#1	.49703	1.2789	.97185	6.4262	.00162	.00595	.01675
#2	.49891	1.2842	.97751	6.4587	.00245	.00341	.00511
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.47757	2.0810	.48113	.00069	.01908	H664.81	
SDev	.00010	.0030	.00187	.00027	.00682	1.48	
%RSD	.02075	.14598	.38890	39.013	35.733	.22306	
#1	.47764	2.0789	.47981	.00088	.02390	H663.76	
#2	.47750	2.0832	.48245	.00050	.01426	H665.86	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G80NWV 5X Operator: STL
Run Time: 05/06/05 13:25:05
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00337	.00056	-.00233	.00227	.00067	.00244	.11361
SDev	.00188	.00118	.00095	.00225	.00226	.00079	.00118
%RSD	55.767	211.42	40.927	99.147	337.80	32.566	1.0372
#1	.00204	.00139	-.00165	.00068	.00227	.00300	.11278
#2	.00470	-.00028	-.00300	.00386	-.00093	.00188	.11445
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00077	.08138	.00000	.00010	52.907	.00037	.00335
SDev	.00103	.00015	.00005	.00007	.164	.00070	.00032
%RSD	135.16	.18965	1697.2	69.225	.31057	187.31	9.6206
#1	-.00003	.08127	-.00003	.00015	52.791	.00086	.00358
#2	-.00150	.08149	.00004	.00005	53.023	-.00012	.00313
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000

Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00071	.02937	2.0483	.29833	.00437	.00201	.00525
SDev	.00050	.00230	.0087	.00100	.00029	.00050	.00071
%RSD	70.336	7.8162	.42302	.33354	6.7343	24.923	13.429
#1	-.00036	.03099	2.0422	.29762	.00457	.00237	.00575
#2	-.00107	.02774	2.0545	.29903	.00416	.00166	.00475
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00066	.16123	.00142	1.1596	.00494	.00409	.00945
SDev	.00046	.00050	.00101	.0024	.00149	.00065	.02053
%RSD	68.680	.30858	71.159	.20480	30.164	15.872	217.27
#1	.00099	.16088	.00214	1.1579	.00599	.00455	.02396
#2	.00034	.16158	.00071	1.1613	.00389	.00364	-.00507
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00074	.00185	.00243	.00017	.04274	91.559
SDev	.00118	.00128	.00086	.00013	.00392	.422
%RSD	160.30	69.330	35.421	80.812	9.1743	.46109
#1	-.00010	.00275	.00182	.00026	.03996	91.260
#2	.00157	.00094	.00304	.00007	.04551	91.857
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G817C Operator: STL
Run Time: 05/06/05 13:29:27
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00991	.00612	.31901	.33040	.00313	.00031	.10585
SDev	.00291	.00088	.00073	.00171	.00022	.00218	.00081
%RSD	29.362	14.422	.22869	.51703	7.1035	712.39	.76702
#1	.00785	.00674	.31953	.32919	.00329	-.00124	.10642
#2	.01197	.00549	.31850	.33160	.00297	.00185	.10527
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00

Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00146	.93183	-.00014	.02877	210.72	-.00003	.01623
SDev	.00085	.00159	.00000	.00002	.51	.00021	.00047
%RSD	58.316	.17060	2.9462	.06278	.24328	764.34	2.8661
#1	.00086	.93070	-.00014	.02878	210.36	-.00017	.01590
#2	.00207	.93295	-.00014	.02875	211.09	.00012	.01656
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	8.7332	.04041	12.965	4.7617	.24543	.00133	.00113
SDev	.0162	.00193	.027	.0092	.00115	.00053	.00120
%RSD	.18520	4.7815	.20595	.19270	.46729	39.908	106.10
#1	8.7217	.03904	12.946	4.7552	.24462	.00095	.00198
#2	8.7446	.04178	12.984	4.7681	.24624	.00170	.00028
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00071	12.238	.00163	.51867	.00204	.00264	-.00096
SDev	.00059	.035	.00004	.00057	.00048	.00299	.00096
%RSD	82.875	.28652	2.3098	.10937	23.614	113.28	99.800
#1	.00030	12.213	.00160	.51827	.00238	.00052	-.00164
#2	.00113	12.263	.00165	.51907	.00170	.00475	-.00028
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.32661	.00125	.00865	.00019	.00954	H658.39	
SDev	.00090	.00138	.00165	.00017	.00078	.79	
%RSD	.27448	110.97	19.051	88.388	8.2290	.12070	
#1	.32597	.00027	.00748	.00007	.01010	H657.83	
#2	.32724	.00222	.00981	.00031	.00899	H658.96	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G817C8 Operator: STL
Run Time: 05/06/05 13:33:49
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.48987	.49164	.77255	.79032	2.1024	2.0804	2.2965
SDev	.00218	.00028	.00063	.00301	.0041	.0043	.0017
%RSD	.44448	.05744	.08161	.38074	.19602	.20628	.07559
#1	.48833	.49144	.77300	.78819	2.0995	2.0773	2.2977
#2	.49141	.49184	.77211	.79245	2.1054	2.0834	2.2953
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	2.0333	2.9498	.05255	.07534	248.55	.19332	.48383
SDev	.0015	.0004	.00009	.00002	.39	.00047	.00056
%RSD	.07271	.01360	.16439	.03060	.15542	.24079	.11549
#1	2.0323	2.9496	.05249	.07532	248.27	.19299	.48344
#2	2.0344	2.9501	.05261	.07535	248.82	.19365	.48423
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	8.5890	1.0603	61.272	5.0126	.71333	.04927	1.8900
SDev	.0013	.0091	.071	.0056	.00091	.00038	.0011
%RSD	.01561	.86291	.11631	.11270	.12781	.77717	.05765
#1	8.5881	1.0538	61.222	5.0086	.71269	.04900	1.8892
#2	8.5900	1.0668	61.323	5.0166	.71398	.04954	1.8908
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.49854	12.155	.98032	1.5740	.00283	.00176	.00011
SDev	.00052	.023	.00115	.0008	.00032	.00155	.00325
%RSD	.10452	.18605	.11725	.05347	11.325	88.110	2938.7
#1	.49817	12.139	.97951	1.5734	.00260	.00066	.00241
#2	.49890	12.171	.98113	1.5746	.00306	.00286	-.00219
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.78440	2.0877	.49046	.00152	.01992	H693.90
SDev	.00180	.0042	.00155	.00010	.00437	.06
%RSD	.22910	.20284	.31531	6.6291	21.940	.00819
#1	.78313	2.0847	.48937	.00145	.01683	H693.94
#2	.78567	2.0907	.49155	.00159	.02301	H693.86
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G817CD Operator: STL
Run Time: 05/06/05 13:38:11
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.48802	.48733	.76269	.78257	2.0910	2.0664	2.2864
SDev	.00183	.00181	.00021	.00020	.0005	.0050	.0050
%RSD	.37416	.37178	.02806	.02602	.02207	.24021	.22052
#1	.48673	.48605	.76284	.78272	2.0913	2.0628	2.2829
#2	.48931	.48861	.76254	.78243	2.0906	2.0699	2.2900
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	2.0261	2.9276	.05227	.07476	245.36	.19230	.48048
SDev	.0076	.0095	.00014	.00020	.50	.00050	.00065
%RSD	.37484	.32367	.25971	.26236	.20221	.25811	.13571
#1	2.0207	2.9209	.05218	.07462	245.01	.19195	.48002
#2	2.0314	2.9343	.05237	.07490	245.71	.19265	.48094
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	8.4769	1.0644	60.747	4.9453	.70674	.05034	1.8813
SDev	.0294	.0007	.111	.0119	.00047	.00006	.0065
%RSD	.34738	.06878	.18311	.24082	.06657	.12949	.34715
#1	8.4561	1.0638	60.668	4.9369	.70641	.05029	1.8766
#2	8.4978	1.0649	60.826	4.9537	.70707	.05038	1.8859
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.49619	12.006	.97197	1.5627	.00249	.00368	-.00287
SDev	.00118	.030	.00248	.0049	.00048	.00073	.00582
%RSD	.23863	.24626	.25566	.31461	19.336	19.956	202.65
#1	.49536	11.985	.97021	1.5593	.00215	.00420	.00124
#2	.49703	12.026	.97373	1.5662	.00283	.00316	-.00698
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.77595	2.0745	.48779	.00171	.01184	H680.76
SDev	.00021	.0032	.00182	.00017	.00616	1.76
%RSD	.02669	.15218	.37337	9.8209	51.993	.25900
#1	.77610	2.0723	.48651	.00182	.01620	H679.52
#2	.77581	2.0768	.48908	.00159	.00749	H682.01
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G817D Operator: STL
Run Time: 05/06/05 13:42:32
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.01421	.00810	.30226	.31635	.00229	.00158	.17189
SDev	.00312	.00075	.00230	.00122	.00109	.00052	.00443
%RSD	21.944	9.2865	.76016	.38555	47.407	32.796	2.5757
#1	.01200	.00863	.30388	.31721	.00305	.00122	.17502
#2	.01641	.00756	.30063	.31549	.00152	.00195	.16876
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00142	.57940	-.00010	.02530	197.95	-.00058	.00682
SDev	.00090	.00015	.00002	.00010	.93	.00044	.00032
%RSD	63.461	.02664	25.713	.39800	.46951	76.537	4.7530
#1	.00206	.57950	-.00008	.02537	198.60	-.00027	.00705
#2	.00078	.57929	-.00011	.02523	197.29	-.00089	.00659
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.75253	-.00580	11.620	2.2434	.13075	.00024	-.00170
SDev	.00181	.00523	.074	.0081	.00082	.00028	.00219
%RSD	.24009	90.231	.63311	.36154	.62974	118.71	128.42
#1	.75380	-.00210	11.672	2.2491	.13133	.00044	-.00016
#2	.75125	-.00950	11.568	2.2376	.13017	.00004	-.00325
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00005	17.015	.00115	.47367	.00012	-.00056	-.02091
SDev	.00056	.110	.00101	.00063	.00064	.00116	.01115
%RSD	1218.1	.64862	87.958	.13236	548.41	208.27	53.299
#1	.00044	17.093	.00186	.47411	-.00034	.00026	-.01303
#2	-.00035	16.937	.00043	.47322	.00057	-.00138	-.02879
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.31166	.00182	.01217	-.00059	.00373	H630.70
SDev	.00158	.00002	.00183	.00020	.02341	1.26
%RSD	.50653	.80132	15.026	33.941	627.05	.19911
#1	.31277	.00183	.01088	-.00045	.02029	H631.59
#2	.31054	.00181	.01347	-.00073	-.01282	H629.82
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G817E Operator: STL
Run Time: 05/06/05 13:46:54
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.01923	.01313	.37463	.38855	.00370	.00115	.39551
SDev	.00377	.00041	.00288	.00138	.00453	.00256	.00168
%RSD	19.615	3.1488	.76796	.35581	122.70	222.54	.42353
#1	.01656	.01342	.37667	.38757	.00690	-.00066	.39669
#2	.02190	.01284	.37260	.38953	.00049	.00296	.39432
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00095	.78973	-.00014	.00854	110.24	-.00012	.01311
SDev	.00050	.00049	.00001	.00006	.02	.00014	.00065
%RSD	52.159	.06253	6.0178	.76465	.02182	114.91	4.9877
#1	.00130	.79008	-.00013	.00850	110.26	-.00002	.01265
#2	.00060	.78938	-.00014	.00859	110.22	-.00022	.01358
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.29952	.44454	4.4501	2.4134	.07014	.00083	-.00003
SDev	.00082	.00040	.0074	.0014	.00026	.00034	.00088
%RSD	.27501	.08888	.16690	.05598	.37735	41.106	2667.6
#1	.30010	.44426	4.4553	2.4144	.06995	.00059	.00059
#2	.29894	.44482	4.4448	2.4125	.07032	.00108	-.00066
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00034	4.9864	-.00051	.29404	.00208	.00087	-.01541
SDev	.00006	.0058	.00023	.00017	.00053	.00179	.01730
%RSD	19.154	.11730	45.607	.05761	25.544	204.30	112.30
#1	.00030	4.9906	-.00034	.29416	.00245	-.00039	-.00317
#2	.00039	4.9823	-.00067	.29392	.00170	.00214	-.02764
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.38392	.00200	.01720	-.00000	-.04062	H603.19
SDev	.00004	.00020	.00238	.00017	.00467	.27
%RSD	.00935	9.9355	13.828	354e6	11.499	.04411
#1	.38394	.00186	.01552	-.00012	-.03731	H603.38
#2	.38389	.00214	.01888	.00012	-.04392	H603.01
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/06/05 13:51:17
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

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Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	3.9833	4.0053	3.9158	3.9467	4.0394	4.0623	39.480
SDev	.0117	.0040	.0084	.0193	.0015	.0165	.040
%RSD	.29484	.10067	.21407	.48915	.03667	.40592	.10073
#1	3.9750	4.0025	3.9098	3.9331	4.0384	4.0506	39.452
#2	3.9916	4.0082	3.9217	3.9604	4.0405	4.0739	39.508
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.0526	4.1762	4.1192	4.0112	20.500	3.9076	3.8933
SDev	.0138	.0043	.0169	.0241	.104	.0172	.0148
%RSD	.34093	.10348	.40935	.60045	.50609	.43943	.37986
#1	4.0429	4.1793	4.1072	3.9941	20.426	3.8955	3.8828
#2	4.0624	4.1732	4.1311	4.0282	20.573	3.9198	3.9038
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	3.9831	40.965	19.649	4.0472	3.9437	1.0186	3.8854
SDev	.0008	.195	.128	.0136	.0193	.0026	.0214
%RSD	.01914	.47573	.65250	.33662	.49065	.25996	.55095
#1	3.9837	40.827	19.558	4.0375	3.9300	1.0167	3.8702
#2	3.9826	41.102	19.739	4.0568	3.9573	1.0205	3.9005
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	3.9928	3.9415	4.0871	4.3037	4.1305	Q3.3995	4.0636
SDev	.0116	.0148	.0166	.0051	.0251	.0020	.0156
%RSD	.29062	.37642	.40624	.11758	.60708	.05829	.38506
#1	3.9846	3.9310	4.0754	4.3001	4.1127	Q3.3981	4.0525
#2	4.0010	3.9520	4.0989	4.3073	4.1482	Q3.4009	4.0746
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	3.9364	4.0547	3.9906	4.1293	Q3.0889	Q35.032
SDev	.0157	.0115	.0092	.0079	.0273	.670
%RSD	.39803	.28342	.22994	.19234	.88292	1.9140

#1	3.9253	4.0465	3.9842	4.1237	Q3.0696	Q34.557
#2	3.9475	4.0628	3.9971	4.1350	Q3.1082	Q35.506
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Fail
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 05/06/05 13:55:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00281	.00181	.00198	.00194	.00129	.00483	.10942
SDev	.00171	.00164	.00010	.00022	.00347	.00195	.00035
%RSD	60.905	90.432	4.8000	11.477	269.70	40.402	.32159
#1	.00160	.00297	.00204	.00210	.00374	.00620	.10917
#2	.00402	.00065	.00191	.00179	-.00117	.00345	.10966
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00222	.00148	.00158	.00149	.01270	.00127	.00151
SDev	.00136	.00011	.00001	.00006	.00000	.00036	.00004
%RSD	61.614	7.2790	.78279	3.9022	.00000	28.726	2.9361
#1	.00318	.00156	.00157	.00153	.01270	.00153	.00154
#2	.00125	.00141	.00159	.00145	.01270	.00101	.00148
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00093	.01568	.00425	.00151	.00162	.00037	.00293
SDev	.00057	.01531	.00035	.00000	.00035	.00065	.00128
%RSD	61.446	97.689	8.3186	.27783	21.757	174.45	43.726
#1	-.00053	.02650	.00400	.00151	.00187	.00083	.00384
#2	-.00134	.00485	.00450	.00150	.00137	-.00009	.00202
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00131	.00310	.00410	.00151	.00200	.00342	.00820
SDev	.00052	.00001	.00168	.00003	.00128	.00432	.01646
%RSD	40.062	.19062	40.942	2.2452	63.914	126.05	200.63

#1	.00167	.00310	.00529	.00154	.00290	.00648	.01984
#2	.00094	.00311	.00291	.00149	.00109	.00037	-.00343
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00196	.00365	.00248	.00213	-.01061	Q-.30855
SDev	.00018	.00246	.00060	.00044	.00146	.02483
%RSD	9.2298	67.337	24.112	20.428	13.803	8.0487
#1	.00208	Q.00538	.00206	.00244	-.01165	Q-.29099
#2	.00183	.00191	.00290	.00182	-.00958	Q-.32611
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00300	.00400	.06000	.05000	.50000	.25000

Method: 6010C Sample Name: G817F Operator: STL
Run Time: 05/06/05 14:00:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.01468	.01612	.25263	.25643	.00770	-.00144	.40048
SDev	.00205	.00105	.00307	.00072	.00222	.00071	.00189
%RSD	13.988	6.5324	1.2131	.28051	28.795	49.097	.47115
#1	.01323	.01686	.25480	.25592	.00927	-.00195	.40181
#2	.01613	.01537	.25046	.25694	.00613	-.00094	.39914
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00006	.99087	-.00006	.00736	129.59	.00073	.01236
SDev	.00100	.00130	.00002	.00001	.14	.00020	.00033
%RSD	1551.9	.13083	44.659	.15161	.10510	27.761	2.6368
#1	-.00077	.99179	-.00007	.00735	129.50	.00087	.01213
#2	.00064	.98996	-.00004	.00736	129.69	.00059	.01259
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.22492	.50410	5.1015	1.9385	.05697	.00021	.00078
SDev	.00040	.00852	.0088	.0005	.00006	.00070	.00134
%RSD	.17949	1.6902	.17332	.02777	.10323	339.80	173.17

#1	.22521	.49808	5.0953	1.9381	.05693	-.00029	.00173
#2	.22464	.51013	5.1078	1.9389	.05702	.00070	-.00017
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00007	4.0662	.00008	.33408	.00192	-.00071	.00500
SDev	.00024	.0019	.00044	.00041	.00032	.00360	.00127
%RSD	333.28	.04712	548.91	.12285	16.597	509.26	25.489
#1	-.00024	4.0648	.00040	.33437	.00170	-.00325	.00410
#2	.00010	4.0675	-.00023	.33379	.00215	.00184	.00590
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.25516	.00160	.01516	-.00002	-.01557	H638.30	
SDev	.00054	.00026	.00102	.00013	.00252	.31	
%RSD	.21194	16.574	6.7222	565.68	16.215	.04835	
#1	.25555	.00179	.01444	-.00012	-.01736	H638.08	
#2	.25478	.00141	.01588	.00007	-.01378	H638.52	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G817G Operator: STL
Run Time: 05/06/05 14:04:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.01110	.00881	.52208	.53489	.00446	-.00119	.26748
SDev	.00035	.00060	.00034	.00074	.00141	.00098	.00083
%RSD	3.1247	6.7735	.06610	.13796	31.670	82.284	.30972
#1	.01085	.00839	.52232	.53437	.00346	-.00188	.26690
#2	.01134	.00923	.52183	.53542	.00545	-.00050	.26807
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00057	.68012	-.00012	.01926	174.30	.00033	.00706
SDev	.00038	.00056	.00002	.00005	.36	.00003	.00009
%RSD	66.754	.08169	20.696	.24737	.20932	9.2851	1.3156

#1	-.00030	.67973	-.00014	.01922	174.04	.00035	.00712
#2	-.00083	.68051	-.00010	.01929	174.56	.00031	.00699
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.1798	.00502	7.5059	1.5971	.06912	.00047	.00042
SDev	.0006	.00113	.0067	.0024	.00047	.00012	.00044
%RSD	.05357	22.581	.08953	.14938	.68073	25.956	103.42
#1	1.1794	.00582	7.5011	1.5954	.06879	.00055	.00011
#2	1.1803	.00422	7.5106	1.5988	.06945	.00038	.00073
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00022	8.8036	.00005	.39899	.00219	.00093	-.00618
SDev	.00003	.0143	.00034	.00037	.00187	.00016	.00194
%RSD	15.629	.16288	674.62	.09184	85.318	17.681	31.378
#1	.00020	8.7935	.00029	.39873	.00087	.00081	-.00481
#2	.00024	8.8138	-.00019	.39925	.00351	.00105	-.00755
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.53063	.00069	.01034	-.00038	.02549	H567.31	
SDev	.00038	.00112	.00043	.00010	.00188	.46	
%RSD	.07110	162.14	4.1606	26.516	7.3698	.08067	
#1	.53036	-.00010	.01003	-.00045	.02416	H566.98	
#2	.53089	.00148	.01064	-.00031	.02682	H567.63	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G893X Operator: STL
Run Time: 05/06/05 14:08:48
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.44273	.45030	.30024	.30735	.00851	-.00173	3.0348
SDev	.01118	.00345	.00760	.00763	.00914	.00595	.0030
%RSD	2.5253	.76511	2.5317	2.4838	107.39	343.29	.09939

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#1	.43482	.45273	.30562	.30196	.01498	-.00594	3.0326
#2	.45063	.44786	.29487	.31275	.00205	.00247	3.0369
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.20221	.25017	.00270	.06972	142.38	-.00017	.07184
SDev	.00019	.00057	.00002	.00008	.45	.00144	.00033
%RSD	.09576	.22825	.61023	.11048	.31873	848.47	.46369
#1	.20207	.24976	.00268	.06966	142.06	.00085	.07161
#2	.20234	.25057	.00271	.06977	142.70	-.00119	.07208
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.04354	.23494	6.5362	9.2795	.03570	.00156	.00262
SDev	.00112	.00271	.0278	.0266	.00068	.00032	.00266
%RSD	2.5806	1.1547	.42477	.28629	1.8944	20.230	101.53
#1	.04433	.23302	6.5165	9.2607	.03522	.00134	.00450
#2	.04274	.23686	6.5558	9.2983	.03618	.00178	.00074
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00084	4.9694	.07710	.49995	.00660	.00347	.03417
SDev	.00020	.0141	.00103	.00098	.00159	.00213	.04996
%RSD	23.610	.28458	1.3300	.19526	24.136	61.325	146.22
#1	.00070	4.9594	.07782	.49926	.00772	.00196	.06949
#2	.00098	4.9794	.07637	.50065	.00547	.00497	-.00116
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.30499	.00168	.44525	.00161	.16043	H590.71	
SDev	.00256	.00092	.00631	.00010	.00506	.73	
%RSD	.83960	54.937	1.4171	6.2392	3.1542	.12311	
#1	.30318	.00103	.44079	.00154	.15685	H590.19	
#2	.30680	.00233	.44971	.00168	.16401	H591.22	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	

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Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G894X Operator: STL
Run Time: 05/06/05 14:13:10
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.33335	.33200	.30569	.31290	.00347	-.00350	2.8202
SDev	.00144	.00178	.00018	.00080	.00041	.00083	.0002
%RSD	.43039	.53602	.06062	.25458	11.862	23.614	.00692
#1	.33437	.33325	.30582	.31233	.00318	-.00292	2.8201
#2	.33234	.33074	.30556	.31346	.00376	-.00408	2.8203
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.13737	.55292	.00292	.05078	123.33	-.00080	.05493
SDev	.00086	.00111	.00003	.00010	.04	.00014	.00033
%RSD	.62744	.20097	.84599	.19992	.03431	17.922	.59301
#1	.13798	.55371	.00290	.05071	123.36	-.00090	.05516
#2	.13676	.55213	.00294	.05085	123.30	-.00070	.05470
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.01234	1.6309	3.9225	15.224	.03897	.00172	.00069
SDev	.00013	.0050	.0027	.011	.00029	.00039	.00049
%RSD	1.0280	.30641	.06763	.07386	.75464	22.722	70.182
#1	.01225	1.6344	3.9244	15.232	.03876	.00199	.00104
#2	.01243	1.6273	3.9206	15.216	.03918	.00144	.00035
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00072	2.7334	.02506	.51088	.00120	.00222	.02893
SDev	.00059	.0022	.00004	.00088	.00123	.00317	.00209
%RSD	82.235	.08191	.14433	.17273	102.05	142.75	7.2147
#1	.00114	2.7350	.02503	.51151	.00207	.00446	.03041
#2	.00030	2.7318	.02509	.51026	.00033	-.00002	.02746
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000

Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.31050	-.00118	.33290	.00028	.22119	H581.13
SDev	.00047	.00041	.00155	.00010	.00676	1.34
%RSD	.15124	35.132	.46547	35.355	3.0581	.23014
#1	.31016	-.00089	.33400	.00036	.21641	H582.07
#2	.31083	-.00147	.33181	.00021	.22597	H580.18
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8943 Operator: STL
Run Time: 05/06/05 14:17:32
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.36767	.36973	.97724	.99932	.00403	-.00382	2.5850
SDev	.00224	.00001	.00049	.00227	.00025	.00187	.0087
%RSD	.60945	.00247	.05002	.22711	6.1642	48.780	.33506
#1	.36609	.36972	.97689	.99772	.00421	-.00251	2.5789
#2	.36926	.36974	.97758	1.0009	.00385	-.00514	2.5911
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.15694	.62248	.00251	.03652	146.41	-.00111	.05368
SDev	.00010	.00253	.00001	.00008	.38	.00011	.00023
%RSD	.06190	.40661	.32775	.23060	.26167	10.113	.43588
#1	.15687	.62069	.00250	.03658	146.14	-.00103	.05352
#2	.15701	.62427	.00252	.03646	146.68	-.00119	.05385
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00130	4.2625	3.8784	13.252	.04581	.00147	.00235
SDev	.00027	.0141	.0074	.037	.00038	.00077	.00107
%RSD	20.465	.33019	.19150	.28125	.83453	52.786	45.595
#1	.00149	4.2526	3.8731	13.226	.04608	.00202	.00311
#2	.00111	4.2725	3.8836	13.279	.04554	.00092	.00159
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000

Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00049	1.9767	.04422	.65236	.00294	.00200	.01472
SDev	.00063	.0059	.00019	.00264	.00026	.00225	.00987
%RSD	127.00	.30060	.43009	.40505	8.9970	112.01	67.019
#1	.00094	1.9725	.04435	.65049	.00313	.00359	.02170
#2	.00005	1.9809	.04408	.65422	.00275	.00042	.00775
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.99197	-.00121	.36836	.00190	.22310	H594.77	
SDev	.00168	.00133	.00150	.00023	.00300	2.15	
%RSD	.16901	109.76	.40657	12.374	1.3441	.36086	
#1	.99078	-.00027	.36730	.00206	.22522	H593.25	
#2	.99315	-.00215	.36942	.00173	.22098	H596.29	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G895L Operator: STL
Run Time: 05/06/05 14:21:55
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.18735	.19087	.44473	.45307	.00436	-.00322	2.5724
SDev	.00347	.00106	.00247	.00181	.00171	.00325	.0007
%RSD	1.8505	.55533	.55480	.39975	39.134	100.92	.02704
#1	.18490	.19012	.44647	.45179	.00557	-.00552	2.5729
#2	.18980	.19162	.44298	.45435	.00315	-.00092	2.5719
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.05540	.62035	.00142	.00831	90.545	.00007	.03597
SDev	.00122	.00072	.00005	.00017	.052	.00128	.00013
%RSD	2.2090	.11693	3.1878	2.0588	.05792	1944.8	.36735
#1	.05627	.62086	.00145	.00843	90.582	.00097	.03607
#2	.05454	.61984	.00139	.00819	90.508	-.00084	.03588
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000

Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00285	17.881	3.2804	7.2468	.07769	.00085	.00175
SDev	.00147	.016	.0014	.0056	.00123	.00067	.00333
%RSD	51.437	.08932	.04312	.07749	1.5899	78.568	189.91
#1	-.00182	17.892	3.2794	7.2508	.07856	.00133	.00411
#2	-.00389	17.869	3.2814	7.2428	.07681	.00038	-.00060
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00094	1.9114	.01329	.42613	.00215	.00177	.00736
SDev	.00056	.0010	.00125	.00051	.00405	.00240	.04977
%RSD	60.326	.05434	9.3931	.11935	188.26	135.26	676.34
#1	.00134	1.9122	.01417	.42649	.00501	.00347	.04255
#2	.00054	1.9107	.01241	.42577	-.00071	.00008	-.02783
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.45029	-.00070	.18852	.00071	.16658	H569.80
SDev	.00039	.00160	.00266	.00023	.00034	.52
%RSD	.08581	229.56	1.4138	32.998	.20351	.09090
#1	.45002	-.00183	.18664	.00088	.16634	H570.16
#2	.45057	.00043	.19041	.00055	.16682	H569.43
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G895P Operator: STL
Run Time: 05/06/05 14:26:17
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.19025	.19086	.20534	.21335	.00470	-.00077	2.8545
SDev	.00394	.00015	.00358	.00238	.00592	.00072	.0084
%RSD	2.0681	.07679	1.7445	1.1170	125.97	93.906	.29263
#1	.18747	.19096	.20787	.21166	.00888	-.00127	2.8486
#2	.19303	.19075	.20281	.21503	.00051	-.00026	2.8604
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00

Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.10303	.37809	.00113	.04063	106.63	.00070	.04776
SDev	.00072	.00051	.00000	.00009	.38	.00020	.00042
%RSD	.70057	.13470	.36262	.21679	.35279	28.718	.87946
#1	.10252	.37773	.00113	.04057	106.36	.00084	.04746
#2	.10354	.37845	.00114	.04069	106.89	.00056	.04806
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.03132	1.2726	4.6334	6.2167	.03086	.00134	.00091
SDev	.00036	.0135	.0219	.0162	.00065	.00055	.00030
%RSD	1.1432	1.0582	.47326	.26096	2.0965	41.098	32.739
#1	.03157	1.2630	4.6179	6.2052	.03040	.00095	.00070
#2	.03107	1.2821	4.6489	6.2282	.03132	.00172	.00112
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00118	1.9373	.04052	.42891	.00607	.00440	.01739
SDev	.00000	.0035	.00008	.00047	.00235	.00300	.00794
%RSD	.28306	.17839	.19228	.10915	38.662	68.104	45.685
#1	.00119	1.9349	.04057	.42858	.00773	.00228	.02300
#2	.00118	1.9398	.04046	.42924	.00441	.00652	.01177
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.21068	.00105	.19045	.00749	.17118	H586.35
SDev	.00040	.00149	.00258	.00030	.01119	1.29
%RSD	.18830	141.49	1.3522	4.0278	6.5381	.22023
#1	.21040	.00211	.18863	.00727	.16327	H585.44
#2	.21096	-.00000	.19227	.00770	.17910	H587.26
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G895V Operator: STL
Run Time: 05/06/05 14:30:39
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.16383	.16403	.27500	.28340	.00281	-.00006	2.6420
SDev	.00371	.00078	.00093	.00153	.00201	.00167	.0029
%RSD	2.2639	.47519	.34015	.53875	71.547	2908.0	.10864
#1	.16121	.16348	.27566	.28232	.00423	-.00124	2.6441
#2	.16646	.16458	.27434	.28448	.00139	.00113	2.6400
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.05508	.38454	.00101	.03791	97.173	.00033	.03358
SDev	.00080	.00210	.00007	.00006	.034	.00041	.00009
%RSD	1.4472	.54583	6.5209	.15623	.03459	122.96	.27338
#1	.05452	.38602	.00096	.03787	97.150	.00004	.03352
#2	.05565	.38305	.00106	.03796	97.197	.00062	.03365
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.04642	1.0818	3.4907	5.4587	.02974	.00129	.00024
SDev	.00009	.0021	.0074	.0093	.00059	.00054	.00203
%RSD	.19127	.19107	.21277	.17092	1.9779	41.691	856.13
#1	.04648	1.0804	3.4855	5.4653	.02932	.00091	-.00120
#2	.04636	1.0833	3.4960	5.4521	.03015	.00167	.00168
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00079	1.8030	.02469	.38468	.00268	.00303	.01529
SDev	.00049	.0028	.00034	.00180	.00022	.00225	.00888
%RSD	61.828	.15750	1.3702	.46828	8.0568	74.236	58.098
#1	.00044	1.8050	.02445	.38595	.00283	.00144	.00901
#2	.00113	1.8010	.02492	.38340	.00252	.00462	.02157
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.28060	.00090	.16390	.00140	.13541	H552.52
SDev	.00071	.00045	.00273	.00013	.02596	1.71
%RSD	.25192	49.732	1.6679	9.5879	19.173	.30948
#1	.28010	.00058	.16197	.00130	.11705	H553.73
#2	.28110	.00121	.16583	.00149	.15377	H551.31
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8952 Operator: STL
Run Time: 05/06/05 14:35:01
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.11524	.11908	.24829	.24762	.00512	-.00346	2.5778
SDev	.00382	.00423	.00205	.00616	.00064	.00059	.0131
%RSD	3.3152	3.5546	.82521	2.4869	12.569	17.055	.50850
#1	.11253	.12207	.24974	.24327	.00557	-.00304	2.5685
#2	.11794	.11608	.24684	.25198	.00466	-.00388	2.5871
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.03767	.45492	.00115	.02757	101.81	.00006	.03296
SDev	.00103	.00154	.00005	.00024	.65	.00030	.00014
%RSD	2.7402	.33925	3.9483	.86014	.64300	487.37	.42240
#1	.03694	.45383	.00111	.02740	101.35	-.00015	.03286
#2	.03840	.45601	.00118	.02774	102.28	.00027	.03305
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.08335	.53800	3.3023	4.9288	.03481	.00003	.00046
SDev	.00051	.00757	.0263	.0272	.00047	.00027	.00181
%RSD	.60780	1.4072	.79790	.55195	1.3517	960.44	391.19
#1	.08300	.53265	3.2836	4.9095	.03448	-.00016	.00174
#2	.08371	.54335	3.3209	4.9480	.03514	.00022	-.00082
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00008	1.8509	.01592	.36981	.00245	-.00194	.01126
SDev	.00017	.0102	.00004	.00128	.00064	.00205	.00306
%RSD	224.74	.54991	.22446	.34558	26.167	106.11	27.164
#1	-.00005	1.8437	.01594	.36891	.00290	-.00339	.00910
#2	.00020	1.8581	.01589	.37071	.00200	-.00048	.01342
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.24785	-.00061	.11652	.00436	.08610	H522.29
SDev	.00343	.00061	.00114	.00017	.01645	2.47
%RSD	1.3820	100.41	.97726	3.8430	19.112	.47274
#1	.24542	-.00018	.11571	.00424	.07446	H520.54
#2	.25027	-.00104	.11732	.00448	.09773	H524.04
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8959 Operator: STL
Run Time: 05/06/05 14:39:23
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.07525	.07685	.38499	.39182	.00581	-.00217	2.8362
SDev	.00206	.00161	.00146	.00201	.00410	.00298	.0130
%RSD	2.7412	2.0917	.37959	.51377	70.553	137.24	.45855
#1	.07379	.07798	.38602	.39040	.00870	-.00427	2.8270
#2	.07671	.07571	.38395	.39324	.00291	-.00006	2.8454
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.03345	.44140	.00087	.01574	48.709	.00104	.01779
SDev	.00075	.00193	.00000	.00017	.159	.00048	.00074
%RSD	2.2330	.43705	.47456	1.0919	.32723	45.795	4.1610
#1	.03398	.44004	.00086	.01587	48.596	.00138	.01831
#2	.03292	.44277	.00087	.01562	48.821	.00070	.01727
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.12651	1.4921	2.9251	3.6436	.02720	.00096	.00101
SDev	.00013	.0052	.0076	.0135	.00006	.00104	.00000
%RSD	.10591	.34535	.25996	.37080	.21624	107.83	.15131
#1	.12661	1.4958	2.9198	3.6340	.02716	.00170	.00101
#2	.12642	1.4885	2.9305	3.6532	.02724	.00023	.00101
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00104	1.0118	.00867	.20902	.00701	.00190	.01867
SDev	.00070	.0038	.00064	.00098	.00133	.00362	.03070
%RSD	67.514	.37879	7.4353	.46986	18.930	190.58	164.46
#1	.00153	1.0091	.00913	.20833	.00795	.00446	.04037
#2	.00054	1.0145	.00822	.20972	.00608	-.00066	-.00304
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.38954	.00049	.07578	.01263	.12966	H549.02
SDev	.00086	.00062	.00084	.00000	.00431	2.17
%RSD	.21976	127.68	1.1092	.00000	3.3220	.39481
#1	.38894	.00005	.07519	.01263	.13270	H547.49
#2	.39015	.00093	.07637	.01263	.12661	H550.56
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/06/05 14:43:47
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	3.9454	3.9893	3.8932	3.9259	4.0182	4.0305	39.186
SDev	.0017	.0119	.0079	.0066	.0091	.0037	.126
%RSD	.04195	.29897	.20404	.16862	.22530	.09242	.32034
#1	3.9442	3.9808	3.8876	3.9212	4.0118	4.0332	39.275
#2	3.9465	3.9977	3.8988	3.9306	4.0246	4.0279	39.098
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.0355	4.1106	4.0770	4.0002	20.443	3.8870	3.8709
SDev	.0055	.0200	.0068	.0016	.018	.0049	.0041
%RSD	.13670	.48545	.16658	.04004	.08789	.12620	.10573
#1	4.0394	4.1247	4.0818	4.0013	20.456	3.8905	3.8738
#2	4.0316	4.0965	4.0722	3.9990	20.430	3.8836	3.8680
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	3.9467	40.830	19.598	4.0206	3.9329	1.0138	3.8650
SDev	.0161	.042	.010	.0070	.0035	.0021	.0052
%RSD	.40691	.10218	.05233	.17356	.08973	.21080	.13506
#1	3.9580	40.859	19.591	4.0255	3.9354	1.0153	3.8687
#2	3.9353	40.800	19.605	4.0156	3.9304	1.0123	3.8613
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	3.9644	3.9148	4.0656	4.2460	4.1176	Q3.3846	4.0292
SDev	.0054	.0051	.0029	.0085	.0067	.0146	.0171
%RSD	.13694	.12910	.07233	.19924	.16313	.42992	.42322
#1	3.9682	3.9184	4.0677	4.2520	4.1223	Q3.3949	4.0413
#2	3.9606	3.9112	4.0635	4.2400	4.1128	Q3.3743	4.0172
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	3.9150	4.0264	3.9600	4.1025	Q3.0053	Q34.778
SDev	.0071	.0005	.0051	.0099	.0059	.355
%RSD	.18034	.01316	.12817	.24099	.19556	1.0201
#1	3.9100	4.0260	3.9564	4.1095	Q3.0011	Q34.527
#2	3.9200	4.0268	3.9636	4.0955	Q3.0095	Q35.029
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Fail
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 05/06/05 14:48:11
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00326	.00128	.00020	.00295	-.00046	.00536	.12424
SDev	.00119	.00091	.00103	.00122	.00032	.00029	.00076
%RSD	36.375	71.483	515.99	41.269	68.356	5.4251	.61406
#1	.00410	.00063	-.00053	.00381	-.00069	.00556	.12370
#2	.00242	.00193	.00093	.00209	-.00024	.00515	.12478
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00152	.00155	.00169	.00152	.01414	.00147	.00155
SDev	.00003	.00005	.00000	.00005	.00029	.00031	.00019
%RSD	2.2853	2.9878	.24299	3.4942	2.0496	20.880	12.117
#1	.00149	.00152	.00169	.00148	.01393	.00125	.00168
#2	.00154	.00158	.00170	.00156	.01434	.00168	.00141
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00138	.02429	.00788	.00162	.00156	.00072	.00320
SDev	.00043	.00518	.00230	.00003	.00026	.00021	.00225
%RSD	31.032	21.316	29.182	1.8381	16.971	29.484	70.207
#1	-.00169	.02063	.00625	.00160	.00137	.00057	.00479
#2	-.00108	.02795	.00950	.00164	.00175	.00087	.00161
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00167	.00310	.00457	.00159	.00136	.00553	.00442
SDev	.00007	.00000	.00100	.00000	.00069	.00042	.00792
%RSD	4.2356	.08958	21.855	.00036	51.029	7.5007	179.14
#1	.00162	.00310	.00528	.00159	.00087	.00524	-.00118
#2	.00172	.00310	.00386	.00159	.00185	.00583	.01001
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00203	.00342	.00260	.00223	.01221	.18563
SDev	.00047	.00009	.00049	.00010	.00940	.19157
%RSD	23.093	2.5888	18.718	4.5134	77.003	103.20

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#1	.00237	.00348	.00295	.00230	.00556	.05017
#2	.00170	.00336	.00226	.00216	.01886	Q.32109
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00300	.00400	.06000	.05000	.50000	.25000

Method: 6010C Sample Name: G896A Operator: STL
Run Time: 05/06/05 14:52:33
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.24487	.24355	.27818	.28988	.00188	.00281	2.4877
SDev	.00130	.00238	.00083	.00035	.00189	.00111	.0124
%RSD	.53302	.97893	.29789	.11983	100.57	39.367	.50012
#1	.24579	.24524	.27759	.29013	.00321	.00359	2.4789
#2	.24394	.24187	.27877	.28963	.00054	.00203	2.4965
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.13487	.34482	.00171	.03268	118.06	-.00030	.04585
SDev	.00053	.00230	.00003	.00006	.61	.00034	.00033
%RSD	.39246	.66687	1.4406	.18146	.51551	113.99	.71084
#1	.13525	.34320	.00170	.03264	117.63	-.00006	.04608
#2	.13450	.34645	.00173	.03273	118.49	-.00054	.04562
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.03285	.98574	3.9149	10.549	.03560	.00238	.00167
SDev	.00015	.00312	.0159	.056	.00029	.00097	.00034
%RSD	.45409	.31615	.40653	.52982	.82605	40.603	20.727
#1	.03295	.98353	3.9036	10.510	.03539	.00306	.00191
#2	.03274	.98794	3.9261	10.589	.03581	.00170	.00142
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00177	1.7098	.03345	.49086	.00354	.00770	.01525
SDev	.00049	.0078	.00056	.00318	.00091	.00352	.00096
%RSD	27.415	.45663	1.6661	.64816	25.582	45.775	6.3111

#1	.00212	1.7043	.03385	.48861	.00418	.01019	.01593
#2	.00143	1.7153	.03306	.49311	.00290	.00520	.01457
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.28598	.00250	.24443	.00306	.20568	H577.74
SDev	.00004	.00137	.00167	.00027	.00884	2.87
%RSD	.01547	54.659	.68098	8.7703	4.2963	.49737
#1	.28595	.00347	.24561	.00325	.21192	H575.71
#2	.28601	.00153	.24325	.00287	.19943	H579.78

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G896D Operator: STL
Run Time: 05/06/05 14:56:56
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.35858	.36708	.29906	.30152	.00869	-.00246	2.6472
SDev	.00399	.00278	.00267	.00533	.00065	.00219	.0192
%RSD	1.1123	.75760	.89235	1.7669	7.4961	88.918	.72522
#1	.35576	.36905	.30095	.29775	.00915	-.00401	2.6336
#2	.36140	.36511	.29717	.30528	.00823	-.00091	2.6608
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.17388	.42533	.00199	.03397	113.49	-.00038	.04845
SDev	.00129	.00176	.00003	.00022	.82	.00014	.00065
%RSD	.74275	.41365	1.2387	.66329	.72368	36.934	1.3483
#1	.17297	.42408	.00198	.03381	112.91	-.00028	.04799
#2	.17480	.42657	.00201	.03413	114.07	-.00048	.04891
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.01079	1.3821	3.4199	10.119	.03354	.00073	.00149
SDev	.00035	.0073	.0325	.061	.00068	.00065	.00267
%RSD	3.2748	.53121	.95142	.60620	2.0165	89.586	179.94

#1	.01104	1.3769	3.3969	10.075	.03306	.00027	.00338
#2	.01054	1.3872	3.4430	10.162	.03402	.00119	-.00040
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00050	1.8609	.03975	.51552	.00324	.00014	.01341
SDev	.00034	.0131	.00018	.00219	.00144	.00203	.01246
%RSD	69.680	.70464	.45366	.42519	44.376	1442.4	92.947
#1	.00025	1.8516	.03963	.51397	.00426	-.00129	.02222
#2	.00074	1.8701	.03988	.51707	.00222	.00157	.00459
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.30070	.00125	.36141	.00156	.16269	H539.20	
SDev	.00266	.00124	.00173	.00023	.01747	2.92	
%RSD	.88617	99.016	.47984	14.999	10.736	.54214	
#1	.29881	.00038	.36019	.00140	.15034	H537.14	
#2	.30258	.00213	.36264	.00173	.17504	H541.27	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G896E Operator: STL
Run Time: 05/06/05 15:01:18
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.02844	.02551	.77030	.78874	.00337	.00083	3.7386
SDev	.00009	.00040	.00429	.00120	.00185	.00220	.0011
%RSD	.31053	1.5659	.55736	.15207	54.718	263.69	.02874
#1	.02850	.02523	.76726	.78790	.00468	.00239	3.7394
#2	.02837	.02580	.77333	.78959	.00207	-.00072	3.7379
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.01855	.37235	.00114	.02154	120.30	-.00024	.01388
SDev	.00133	.00094	.00001	.00007	.14	.00021	.00005
%RSD	7.1627	.25283	.72337	.33201	.11442	88.787	.33626

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#1	.01761	.37301	.00114	.02149	120.20	-.00009	.01391
#2	.01948	.37168	.00113	.02159	120.40	-.00039	.01385
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.30125	.01404	3.8561	4.1596	.02809	.00061	-.00066
SDev	.00083	.00249	.0074	.0001	.00056	.00016	.00016
%RSD	.27583	17.747	.19261	.00151	1.9889	26.888	23.531
#1	.30183	.01580	3.8508	4.1596	.02849	.00073	-.00055
#2	.30066	.01228	3.8614	4.1597	.02770	.00049	-.00077
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00051	1.6737	.00325	.37773	.00249	.00149	-.00859
SDev	.00003	.0004	.00004	.00078	.00027	.00045	.00210
%RSD	6.7492	.02594	1.1716	.20760	10.689	30.158	24.475
#1	.00054	1.6734	.00322	.37828	.00230	.00117	-.01008
#2	.00049	1.6740	.00328	.37717	.00268	.00180	-.00710
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.78260	.00168	.02746	.00047	.07833	H543.89	
SDev	.00223	.00208	.00007	.00003	.01401	.30	
%RSD	.28490	123.95	.26997	7.0711	17.888	.05478	
#1	.78102	.00315	.02741	.00050	.06843	H544.10	
#2	.78418	.00021	.02752	.00045	.08824	H543.68	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G8985 Operator: STL
Run Time: 05/06/05 15:05:40
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.14353	.14390	39.915	40.915	.00861	.00301	5.4521
SDev	.00006	.00028	.123	.240	.00114	.00063	.0190
%RSD	.04060	.19798	.30801	.58759	13.297	20.904	.34915

#1	.14358	.14410	39.829	40.745	.00942	.00346	5.4386
#2	.14349	.14370	40.002	41.085	.00780	.00257	5.4656
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.01187	.66710	.00413	.06579	149.18	-.00036	.03407
SDev	.00007	.00100	.00002	.00033	.76	.00017	.00005
%RSD	.59824	.15037	.39865	.50591	.50681	47.143	.13684
#1	.01192	.66639	.00412	.06555	148.65	-.00047	.03410
#2	.01182	.66781	.00414	.06602	149.72	-.00024	.03403
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.5229	.01854	2.5136	3.6283	.08374	.00078	-.00156
SDev	.0077	.00088	.0180	.0137	.00079	.00006	.00144
%RSD	.16925	4.7668	.71759	.37894	.94819	7.8763	92.064
#1	4.5175	.01791	2.5009	3.6186	.08318	.00082	-.00258
#2	4.5284	.01916	2.5264	3.6380	.08430	.00073	-.00054
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00049	8.1715	.00205	.44771	.00068	.00250	-.00014
SDev	.00021	.0424	.00063	.00080	.00123	.00027	.00049
%RSD	42.620	.51866	30.813	.17875	180.84	10.868	348.74
#1	.00064	8.1415	.00160	.44714	-.00019	.00230	.00020
#2	.00034	8.2014	.00249	.44828	.00155	.00269	-.00048
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	40.582	.00488	.14365	.00007	.31613	H565.16	
SDev	.201	.00080	.00013	.00007	.01909	1.58	
%RSD	.49602	16.433	.09309	94.281	6.0381	.27996	
#1	40.440	.00544	.14375	.00002	.30264	H564.04	
#2	40.725	.00431	.14356	.00012	.32963	H566.28	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	

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Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G899L Operator: STL
Run Time: 05/06/05 15:10:02
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.02733	.02112	.15481	.16513	-.00037	-.00010	2.2794
SDev	.00015	.00071	.00183	.00094	.00114	.00190	.0116
%RSD	.54945	3.3471	1.1837	.57227	309.92	1935.8	.51046
#1	.02744	.02062	.15611	.16447	.00044	.00125	2.2712
#2	.02722	.02162	.15352	.16580	-.00118	-.00144	2.2877
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00795	.54382	.00071	.01513	78.377	.00002	.01381
SDev	.00057	.00432	.00002	.00008	.367	.00015	.00005
%RSD	7.1428	.79462	2.3089	.55234	.46884	670.97	.32455
#1	.00835	.54076	.00072	.01507	78.118	.00013	.01385
#2	.00755	.54688	.00070	.01518	78.637	-.00009	.01378
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.21216	.03399	5.4073	3.5138	.02279	.00109	-.00157
SDev	.00154	.00437	.0242	.0195	.00029	.00009	.00186
%RSD	.72786	12.850	.44805	.55622	1.2903	8.1200	118.75
#1	.21107	.03708	5.3901	3.5000	.02300	.00103	-.00025
#2	.21326	.03090	5.4244	3.5276	.02258	.00116	-.00289
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00081	.92868	.00302	.27317	.00117	.00319	-.00359
SDev	.00004	.00539	.00001	.00196	.00096	.00029	.01083
%RSD	4.5633	.58038	.16506	.71867	81.950	9.1389	301.96
#1	.00084	.92487	.00302	.27178	.00185	.00299	.00407
#2	.00078	.93249	.00301	.27456	.00049	.00340	-.01124
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000

Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.16170	-.00019	.02526	.00052	.09013	H533.71
SDev	.00002	.00165	.00014	.00003	.01366	3.40
%RSD	.01245	875.59	.53530	6.4282	15.161	.63746
#1	.16168	.00098	.02517	.00055	.09979	H531.30
#2	.16171	-.00136	.02536	.00050	.08047	H536.11
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9Q7WB Operator: STL
Run Time: 05/06/05 15:14:24
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00045	-.00172	.00137	.00194	.00184	-.00010	H.22023
SDev	.00034	.00101	.00056	.00052	.00130	.00116	.00151
%RSD	75.207	58.498	41.255	26.856	70.710	1203.4	.68627
#1	-.00069	-.00243	.00177	.00158	.00092	-.00092	H.21917
#2	-.00021	-.00101	.00097	.00231	.00276	.00073	H.22130
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC High
High							.20000
Low							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L-.00157	.00089	.00003	-.00007	H.35451	.00104	.00007
SDev	.00060	.00002	.00000	.00001	.00116	.00009	.00033
%RSD	38.116	1.7246	.00000	18.058	.32699	8.5215	496.47
#1	L-.00200	.00088	.00003	-.00006	H.35369	.00097	-.00017
#2	L-.00115	.00091	.00003	-.00007	H.35533	.00110	.00030
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	.00700	.20000	.20000	.00500	.25000	.01000	.05000
Low	.00700	-.20000	-.20000	-.00500	-.25000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00243	.03630	H.40877	.00071	-.00010	-.00014	-.00092
SDev	.00004	.00000	.00018	.00001	.00056	.00009	.00118
%RSD	1.8057	.00716	.04326	.91669	537.40	67.706	128.33
#1	-.00246	.03630	H.40889	.00072	.00029	-.00020	-.00176
#2	-.00240	.03630	H.40864	.00071	-.00050	-.00007	-.00009
Errors	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass
High	.02500	.05000	.25000	.01500	.04000	.01000	.01000

Low	-.02500	-.05000	-.25000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00022	H.03371	.00053	.00040	-.00011	-.00030	-.00003
SDev	.00024	.00015	.00033	.00003	.00075	.00050	.00614
%RSD	109.55	.43345	63.103	8.4601	661.47	168.36	17900.
#1	.00005	H.03361	.00029	.00038	-.00064	.00006	.00431
#2	.00039	H.03382	.00076	.00043	.00042	-.00065	-.00438
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.04000	.05000	.10000	.50000	.50000
Low	-.05000	-.01000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00175	.00055	-.00087	.00206	-.02184	L-.66225	
SDev	.00016	.00121	.00056	.00007	.00983	.00710	
%RSD	9.1632	220.41	64.217	3.2511	45.013	1.0719	
#1	.00164	-.00031	-.00127	.00201	-.01489	L-.65724	
#2	.00187	.00140	-.00048	.00211	-.02879	L-.66727	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Low	
High	.00300	.00500	.01000	.05000		.25000	
Low	-.00300	-.00500	-.01000	-.05000		-.25000	

Method: 6010C Sample Name: G9Q7WC Operator: STL
Run Time: 05/06/05 15:18:46
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.61711	.61597	1.4988	1.4931	.70933	.70005	65.900
SDev	.00208	.00235	.0016	.0008	.00168	.00174	.341
%RSD	.33674	.38208	.10456	.05429	.23723	.24881	.51793
#1	.61858	.61763	1.4999	1.4925	.70814	.70128	65.658
#2	.61564	.61430	1.4977	1.4937	.71052	.69882	66.141
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							89.900
Low							36.600
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.7698	2.8546	1.0725	1.3598	38.147	.74279	.36929
SDev	.0106	.0142	.0042	.0050	.143	.00299	.00103
%RSD	.59652	.49792	.39586	.36446	.37604	.40268	.27763
#1	1.7623	2.8446	1.0695	1.3563	38.046	.74068	.36856
#2	1.7772	2.8647	1.0755	1.3633	38.249	.74491	.37001
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.9400	2.9700	1.1100	1.5200	40.100	.84400	.44700

Low	1.2800	2.0700	.77500	1.0400	26.300	.54600	.25800
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.6123	150.43	21.484	4.6505	1.5857	1.5687	.91706
SDev	.0087	.66	.075	.0186	.0052	.0073	.00422
%RSD	.54201	.43771	.35065	.39982	.33011	.46397	.46075
#1	1.6061	149.96	21.431	4.6374	1.5819	1.5635	.91407
#2	1.6185	150.89	21.537	4.6636	1.5894	1.5738	.92005
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.7400	160.00	25.100	4.9000	1.7400	1.9100	1.0500
Low	1.2200	64.200	15.700	3.2600	1.2000	.68900	.63500
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	1.0997	1.7226	.96716	H1.0177	.64583	.11902	-.05409
SDev	.0042	.0069	.00578	.0055	.00081	.00260	.02084
%RSD	.38639	.40144	.59792	.53721	.12460	2.1878	38.520
#1	1.0967	1.7177	.96307	H1.0138	.64527	.12086	-.03936
#2	1.1027	1.7275	.97125	H1.0216	.64640	.11718	-.06883
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	NOCHECK	NOCHECK
High	1.2200	1.9900	1.0100	1.0100	.86400		
Low	.72800	1.3100	.66700	.67000	.35700		
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	1.4950	.70314	.61673	3.8374	1.0852	4.3523	
SDev	.0000	.00060	.00217	.0176	.0003	.0958	
%RSD	.00126	.08554	.35182	.45849	.02702	2.2008	
#1	1.4950	.70356	.61827	3.8250	1.0854	4.4200	
#2	1.4950	.70271	.61520	3.8498	1.0849	4.2846	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK	
High	1.7000	.79900	1.3600	4.9800			
Low	1.1400	.48500	.01000	1.2300			

Method: 6010C Sample Name: G8V7K Operator: STL
Run Time: 05/06/05 15:23:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.01038	-.00128	.06368	.03265	-.00135	-.00023	102.39
SDev	.00175	.00121	.00149	.00151	.00138	.00339	.42
%RSD	16.833	94.409	2.3358	4.6344	102.04	1477.9	.41098
#1	.00914	-.00043	.06473	.03158	-.00038	-.00263	102.69
#2	.01161	-.00214	.06263	.03372	-.00233	.00217	102.09
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00

Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.02857	.80099	.00263	L-.00662	215.99	.26205	.08927
SDev	.00042	.00574	.00002	.00004	.04	.00013	.00037
%RSD	1.4851	.71675	.78220	.62836	.01852	.04772	.41386
#1	.02827	.80505	.00262	L-.00665	215.96	.26214	.08901
#2	.02887	.79693	.00264	L-.00659	216.02	.26197	.08954
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.17828	167.26	78.127	2.5067	.23260	.00091	.00958
SDev	.00097	.40	.005	.0063	.00059	.00116	.00006
%RSD	.54423	.23821	.00656	.25307	.25285	127.94	.62330
#1	.17896	167.54	78.123	2.5112	.23218	.00009	.00954
#2	.17759	166.98	78.131	2.5023	.23302	.00173	.00963
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.25693	1.2639	.00669	.88244	.01218	.01983	-.01045
SDev	.00000	.0043	.00014	.00527	.00053	.00525	.02090
%RSD	.00011	.34232	2.0763	.59687	4.3384	26.477	199.99
#1	.25693	1.2669	.00679	.88616	.01181	.01611	-.02523
#2	.25693	1.2608	.00659	.87871	.01256	.02354	.00433
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.04298	-.00060	.00650	5.4499	.64607	11.461	
SDev	.00051	.00180	.00076	.0240	.02531	.521	
%RSD	1.1957	298.72	11.738	.43967	3.9179	4.5500	
#1	.04262	-.00188	.00596	5.4669	.62817	11.093	
#2	.04334	.00067	.00703	5.4330	.66397	11.830	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G8V7KS Operator: STL
Run Time: 05/06/05 15:27:31
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.39887	.38783	.51979	.50012	1.9231	1.9142	94.869
SDev	.00061	.00332	.00128	.00161	.0011	.0017	.277
%RSD	.15201	.85553	.24687	.32235	.05567	.08655	.29176
#1	.39930	.39017	.52070	.49898	1.9224	1.9131	95.065
#2	.39845	.38548	.51889	.50126	1.9239	1.9154	94.674
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.9667	2.7458	.05430	.04193	249.43	.42658	.52790
SDev	.0045	.0125	.00007	.00020	.07	.00040	.00033
%RSD	.23015	.45470	.12880	.46757	.02649	.09441	.06172
#1	1.9699	2.7547	.05435	.04179	249.48	.42687	.52813
#2	1.9635	2.7370	.05425	.04206	249.39	.42630	.52767
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.38222	142.52	114.93	2.6457	.66432	.05005	1.8291
SDev	.00143	.24	.06	.0056	.00035	.00012	.0088
%RSD	.37331	.16610	.05339	.21321	.05311	.23093	.47871
#1	.38323	142.69	114.97	2.6496	.66407	.04997	1.8353
#2	.38121	142.35	114.88	2.6417	.66457	.05013	1.8229
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.71474	1.5331	.98098	1.8719	.00732	.01922	-.01414
SDev	.00216	.0025	.00156	.0061	.00027	.00225	.00168
%RSD	.30241	.16143	.15889	.32664	3.6563	11.719	11.868
#1	.71627	1.5348	.98208	1.8762	.00751	.01763	-.01532
#2	.71321	1.5313	.97988	1.8676	.00713	.02082	-.01295
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.50667	1.9172	.39519	4.5125	.58354	48.708
SDev	.00065	.0015	.00151	.0136	.01169	.160
%RSD	.12789	.07624	.38191	.30152	2.0030	.32775
#1	.50621	1.9162	.39626	4.5222	.57528	48.595
#2	.50713	1.9182	.39413	4.5029	.59181	48.821
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8V7KD Operator: STL
Run Time: 05/06/05 15:31:53
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.41407	.40710	.52850	.51442	1.9621	1.9389	87.756
SDev	.00178	.00175	.00059	.00430	.0011	.0122	.740
%RSD	.42905	.43036	.11234	.83682	.05467	.62922	.84362
#1	.41282	.40586	.52892	.51138	1.9613	1.9302	87.232
#2	.41533	.40834	.52808	.51747	1.9628	1.9475	88.279
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.9998	2.7816	.05501	.04325	246.88	.41257	.52853
SDev	.0150	.0261	.00037	.00030	1.49	.00275	.00326
%RSD	.74959	.93710	.66552	.69607	.60324	.66561	.61633
#1	1.9892	2.7632	.05475	.04303	245.83	.41062	.52623
#2	2.0104	2.8000	.05527	.04346	247.93	.41451	.53083
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.38116	130.95	111.41	2.4643	.64712	.05089	1.8531
SDev	.00324	.90	.67	.0179	.00473	.00029	.0086
%RSD	.85051	.68762	.59999	.72550	.73162	.56709	.46678
#1	.37887	130.32	110.94	2.4516	.64378	.05068	1.8470
#2	.38345	131.59	111.88	2.4769	.65047	.05109	1.8592
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.71252	1.4206	.99725	1.8956	.00917	.01737	-.01161
SDev	.00613	.0101	.00683	.0174	.00118	.00003	.01106
%RSD	.86039	.71042	.68457	.91968	12.828	.14210	95.240
#1	.70819	1.4135	.99243	1.8833	.00834	.01735	-.00379
#2	.71686	1.4278	1.0021	1.9079	.01000	.01738	-.01943
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.51911	1.9466	.41175	4.3481	.54574	48.204
SDev	.00267	.0085	.00177	.0368	.00634	.028
%RSD	.51503	.43638	.42947	.84628	1.1608	.05888
#1	.51722	1.9406	.41050	4.3221	.55022	48.184
#2	.52100	1.9526	.41300	4.3741	.54126	48.224
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: CCV1 Operator: STL
Run Time: 05/06/05 15:36:17
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	3.8501	3.8923	3.7903	3.8260	3.9024	3.9312	38.201
SDev	.0129	.0012	.0046	.0033	.0041	.0116	.000
%RSD	.33410	.03107	.12245	.08733	.10403	.29433	.00064
#1	3.8592	3.8932	3.7936	3.8236	3.9053	3.9393	38.201
#2	3.8410	3.8915	3.7870	3.8283	3.8996	3.9230	38.202
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	3.9240	3.9679	3.9407	3.8917	19.984	3.7847	3.7645
SDev	.0037	.0092	.0021	.0035	.010	.0011	.0003
%RSD	.09458	.23103	.05209	.08922	.05076	.02991	.00871
#1	3.9266	3.9743	3.9421	3.8892	19.977	3.7839	3.7643
#2	3.9214	3.9614	3.9392	3.8941	19.991	3.7855	3.7648
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	3.8275	39.660	19.055	3.9105	3.8319	.98860	3.7643
SDev	.0107	.003	.023	.0002	.0009	.00106	.0059
%RSD	.27905	.00836	.11972	.00397	.02302	.10698	.15587
#1	3.8350	39.662	19.039	3.9106	3.8325	.98935	3.7685
#2	3.8199	39.657	19.071	3.9104	3.8313	.98786	3.7602
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	3.8513	3.8157	3.9615	4.1730	4.0130	Q3.3032	3.9268
SDev	.0021	.0014	.0014	.0024	.0020	.0027	.0155
%RSD	.05521	.03712	.03544	.05700	.05045	.08207	.39491
#1	3.8528	3.8167	3.9606	4.1747	4.0144	Q3.3051	3.9378
#2	3.8498	3.8147	3.9625	4.1713	4.0115	Q3.3013	3.9158
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	3.8141	3.9216	3.8642	3.9996	Q2.8461	Q33.203
SDev	.0007	.0091	.0090	.0041	.0103	.255
%RSD	.01791	.23127	.23246	.10139	.36270	.76929
#1	3.8136	3.9280	3.8705	4.0024	Q2.8388	Q33.022
#2	3.8146	3.9152	3.8578	3.9967	Q2.8534	Q33.384
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Fail
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB1 Operator: STL
Run Time: 05/06/05 15:40:43
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00176	.00005	-.00062	.00115	-.00088	.00269	.13296
SDev	.00039	.00045	.00142	.00004	.00329	.00053	.00052
%RSD	22.306	949.59	229.22	3.3245	373.51	19.805	.39495
#1	.00203	.00036	.00038	.00117	.00145	.00306	.13259
#2	.00148	-.00027	-.00162	.00112	-.00321	.00231	.13333
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00082	.00014	.00031	.00011	.00779	.00009	.00062
SDev	.00045	.00003	.00001	.00005	.00000	.00007	.00009
%RSD	55.567	21.757	3.9284	42.437	.00000	77.458	14.865
#1	.00114	.00012	.00032	.00015	.00779	.00014	.00069
#2	.00050	.00016	.00031	.00008	.00779	.00004	.00056
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00303	.01089	.00388	.00021	.00035	.00051	.00149
SDev	.00015	.00229	.00053	.00001	.00073	.00013	.00008
%RSD	5.0905	21.065	13.685	3.9135	207.97	24.406	5.3566
#1	-.00314	.00927	.00425	.00021	.00087	.00060	.00143
#2	-.00292	.01251	.00350	.00020	-.00017	.00042	.00154
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00027	.00191	.00323	.00010	-.00038	.00414	.00546
SDev	.00024	.00008	.00104	.00000	.00027	.00149	.00064
%RSD	90.241	4.1864	32.159	.00000	70.246	35.996	11.714
#1	.00010	.00197	.00397	.00010	-.00057	.00309	.00501
#2	.00044	.00185	.00250	.00010	-.00019	.00520	.00592
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00056	.00150	.00119	.00100	.04306	Q.95825
SDev	.00050	.00145	.00041	.00023	.00272	.07805
%RSD	89.348	96.784	34.574	23.570	6.3290	8.1449
#1	.00091	.00253	.00148	.00116	.04113	Q1.0134
#2	.00021	.00047	.00090	.00083	.04499	Q.90307
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00300	.00400	.06000	.05000	.50000	.25000

Method: 6010C Sample Name: G8V7KV 5X Operator: STL
Run Time: 05/06/05 15:45:06
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00529	-.00244	.01213	.00852	-.00149	.00111	20.389
SDev	.00206	.00038	.00088	.00019	.00040	.00183	.123
%RSD	38.960	15.691	7.2562	2.2003	26.799	164.81	.60266
#1	.00674	-.00271	.01150	.00839	-.00178	.00241	20.476
#2	.00383	-.00217	.01275	.00866	-.00121	-.00018	20.302
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00527	.16401	.00074	-.00146	46.273	.05511	.01934
SDev	.00036	.00117	.00001	.00019	.120	.00022	.00042
%RSD	6.8041	.71515	1.6573	13.203	.25991	.39499	2.1545
#1	.00502	.16484	.00074	-.00160	46.358	.05496	.01904
#2	.00553	.16318	.00075	-.00133	46.188	.05526	.01963
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.03301	35.201	16.156	.53203	.04920	.00075	.00481
SDev	.00026	.120	.025	.00236	.00047	.00112	.00162
%RSD	.78868	.34078	.15543	.44290	.95636	148.35	33.726
#1	.03282	35.286	16.174	.53369	.04887	-.00004	.00366
#2	.03319	35.116	16.138	.53036	.04953	.00155	.00595
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.05364	.26234	.00217	.18332	.00117	.00566	-.01252
SDev	.00010	.00126	.00038	.00139	.00053	.00332	.01579
%RSD	.19369	.48043	17.418	.75858	45.267	58.738	126.07
#1	.05371	.26323	.00191	.18430	.00080	.00331	-.02368
#2	.05356	.26144	.00244	.18233	.00155	.00801	-.00136
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00972	.00024	.00271	1.1449	.19078	2.6891
SDev	.00042	.00109	.00125	.0059	.02177	.4754
%RSD	4.3000	445.83	45.926	.51225	11.413	17.678

#1	.00943	.00101	.00360	1.1490	.17538	2.3530
#2	.01002	-.00053	.00183	1.1407	.20618	3.0253
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8V8N Operator: STL
Run Time: 05/06/05 15:49:29
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.01111	-.00095	.06236	.03631	.00053	.00027	94.429
SDev	.00207	.00033	.00160	.00011	.00345	.00012	.314
%RSD	18.636	34.703	2.5631	.30560	646.48	42.358	.33217
#1	.00964	-.00118	.06349	.03639	.00297	.00035	94.651
#2	.01257	-.00072	.06123	.03623	-.00191	.00019	94.207
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.02407	.74279	.00265	L-.00573	201.54	.32787	.09075
SDev	.00147	.00421	.00000	.00016	.09	.00055	.00070
%RSD	6.1077	.56722	.15540	2.7544	.04501	.16864	.76815
#1	.02303	.74577	.00265	L-.00584	201.60	.32826	.09025
#2	.02511	.73981	.00264	L-.00562	201.47	.32748	.09124
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.19006	153.64	76.605	2.4602	.26408	.00095	.01120
SDev	.00057	.28	.039	.0058	.00076	.00095	.00117
%RSD	.29919	.18472	.05079	.23677	.28953	99.549	10.399
#1	.19046	153.84	76.633	2.4643	.26354	.00028	.01202
#2	.18966	153.44	76.578	2.4561	.26462	.00162	.01038
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V 2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.22488	2.1732	.00716	.73411	.01181	.01928	-.01451
SDev	.00032	.0044	.00000	.00343	.00117	.00521	.00770
%RSD	.14034	.20254	.04944	.46719	9.9200	27.021	53.034

#1	.22510	2.1763	.00716	.73654	.01098	.01560	-.01995
#2	.22465	2.1701	.00716	.73169	.01264	.02296	-.00907
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.04499	.00036	.00709	4.5820	.62317	10.044
SDev	.00061	.00123	.00149	.0172	.01736	.227
%RSD	1.3476	340.62	21.019	.37520	2.7853	2.2605
#1	.04541	.00123	.00604	4.5942	.61089	9.8836
#2	.04456	-.00051	.00815	4.5699	.63544	10.205
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9Q88B Operator: STL
Run Time: 05/06/05 15:53:51
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00172	-.00123	-.00318	.00197	-.00100	.00236	L.13876
SDev	.00010	.00187	.00011	.00033	.00256	.00203	.00101
%RSD	5.8715	151.51	3.5169	16.679	254.95	85.873	.72974
#1	.00179	-.00255	-.00310	.00221	.00081	.00379	L.13948
#2	.00165	.00009	-.00326	.00174	-.00281	.00093	L.13805
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Low
High							.20000
Low							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L-.00050	.00048	.00007	.00001	.08074	-.00015	.00039
SDev	.00080	.00008	.00001	.00015	.00000	.00035	.00014
%RSD	159.22	16.071	17.678	1977.4	.00000	226.41	35.013
#1	L.00006	.00053	.00008	.00011	.08074	.00009	.00049
#2	L-.00107	.00043	.00006	-.00010	.08074	-.00040	.00030
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00700	.20000	.20000	.00500	.25000	.01000	.05000
Low	.00700	-.20000	-.20000	-.00500	-.25000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00325	.01138	-.00113	-.00003	.00089	.00083	-.00004
SDev	.00038	.00895	.00265	.00007	.00015	.00048	.00026
%RSD	11.774	78.683	235.72	238.97	16.444	57.533	730.52

#1	-.00297	.01771	.00075	.00002	.00079	.00117	-.00022
#2	-.00352	.00505	-.00300	-.00008	.00100	.00049	.00015
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.02500	.05000	.25000	.01500	.04000	.01000	.01000
Low	-.02500	-.05000	-.25000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00044	.00364	.00026	.00009	-.00094	.00280	.00295
SDev	.00028	.00003	.00025	.00007	.00010	.00273	.01195
%RSD	63.124	.72529	96.403	71.919	11.005	97.434	404.56
#1	.00064	.00366	.00008	.00014	-.00087	.00473	.01140
#2	.00024	.00362	.00044	.00005	-.00102	.00087	-.00549
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.04000	.05000	.10000	.50000	.50000
Low	-.05000	-.01000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00026	.00124	.00074	.00104	.01686	-.12041	
SDev	.00026	.00220	.00055	.00017	.00999	.24123	
%RSD	100.55	177.73	75.009	16.071	59.230	200.34	
#1	.00044	.00280	.00035	.00116	.02392	.05017	
#2	.00007	-.00032	.00113	.00092	.00980	L-.29099	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	
High	.00300	.00500	.01000	.05000		.25000	
Low	-.00300	-.00500	-.01000	-.05000		-.25000	

Method: 6010C Sample Name: G9Q88C Operator: STL
Run Time: 05/06/05 15:58:14
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.98753	1.0008	.96328	.97446	.98079	1.0132	H1.2180
SDev	.00300	.0035	.00470	.00330	.00217	.0029	.0015
%RSD	.30419	.34860	.48756	.33823	.22130	.28227	.12676
#1	.98541	.99829	.95996	.97213	.97925	1.0111	H1.2169
#2	.98965	1.0032	.96660	.97679	.98232	1.0152	H1.2191
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC High
High							1.2000
Low							.80000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.0035	1.0380	1.0447	1.0071	20.539	.98109	.97054
SDev	.0006	.0001	.0011	.0014	.027	.00196	.00158
%RSD	.05641	.01040	.10513	.14401	.13263	.19965	.16315

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#1	1.0039	1.0380	1.0440	1.0061	20.520	.97970	.96942
#2	1.0031	1.0381	1.0455	1.0081	20.558	.98247	.97166
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2040	1.2040	1.2000	1.2040	24.000	1.2040	1.2000
Low	.79500	.79500	.80000	.79500	16.000	.79500	.80000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.97573	1.1425	19.471	1.0143	.98423	.25922	.96914
SDev	.00095	.0027	.029	.0013	.00144	.00009	.00111
%RSD	.09700	.24000	.14803	.13064	.14640	.03375	.11436
#1	.97506	1.1405	19.451	1.0134	.98321	.25916	.96992
#2	.97640	1.1444	19.492	1.0152	.98525	.25929	.96835
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2000	1.2000	24.000	1.2040	1.2000	.33700	1.2040
Low	.80000	.80000	16.000	.79500	.80000	.12300	.79500
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.99460	.98173	1.0298	1.0894	2.0691	1.7118	2.0576
SDev	.00052	.00234	.0013	.0009	.0005	.0027	.0107
%RSD	.05218	.23856	.12210	.08416	.02328	.15588	.51904
#1	.99423	.98007	1.0289	1.0888	2.0688	1.7100	2.0651
#2	.99497	.98338	1.0307	1.0900	2.0694	1.7137	2.0500
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2000	1.2000	1.2000	1.2000	2.4000	2.4000	2.4000
Low	.80000	.80000	.80000	.80000	1.6000	1.6000	1.6000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.97074	1.0024	.99193	2.0529	L1.4179	14.818	
SDev	.00376	.0026	.00316	.0026	.0008	.216	
%RSD	.38757	.26240	.31911	.12896	.05657	1.4604	
#1	.96808	1.0005	.98969	2.0510	L1.4185	14.665	
#2	.97340	1.0042	.99417	2.0548	L1.4173	14.971	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	NOCHECK	
High	1.2040	1.2040	1.2040	2.4000	2.4000		
Low	.79500	.79500	.79500	1.6000	1.6000		

Method: 6010C Sample Name: G9NXC Operator: STL
Run Time: 05/06/05 16:02:36
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00200	-.00505	-.00272	.00347	.00158	-.00211	.18088
SDev	.00001	.00146	.00124	.00101	.00359	.00108	.00230
%RSD	.56560	28.825	45.649	29.177	227.31	51.057	1.2710

#1	.00201	-.00402	-.00184	.00275	-.00096	-.00287	.17925
#2	.00200	-.00608	-.00360	.00418	.00412	-.00135	.18251
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.04320	.19476	.00014	-.00399	366.41	-.00067	.00524
SDev	.00067	.00117	.00003	.00013	.06	.00034	.00023
%RSD	1.5443	.60223	24.072	3.1358	.01716	51.446	4.4444
#1	.04273	.19559	.00011	-.00408	366.45	-.00091	.00507
#2	.04367	.19393	.00016	-.00390	366.36	-.00043	.00540
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00644	100.89	48.283	4.4060	.10027	.00078	.00833
SDev	.00016	.24	.042	.0111	.00059	.00046	.00139
%RSD	2.4778	.23926	.08607	.25140	.58657	58.910	16.665
#1	-.00655	101.06	48.312	4.4139	.09985	.00045	.00931
#2	-.00632	100.72	48.254	4.3982	.10068	.00110	.00735
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00638	.03184	.15708	1.0406	.00098	.00527	.01184
SDev	.00038	.00003	.00007	.0053	.00059	.00014	.00251
%RSD	6.0018	.07694	.04800	.51246	60.084	2.6366	21.232
#1	.00611	.03186	.15714	1.0444	.00056	.00537	.01362
#2	.00665	.03182	.15703	1.0369	.00139	.00518	.01006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00141	-.00088	-.00034	.00005	.03772	214.50	
SDev	.00026	.00191	.00049	.00003	.01749	.53	
%RSD	18.551	216.75	143.06	70.711	46.365	.24808	
#1	.00122	-.00224	.00000	.00002	.02535	214.88	
#2	.00159	.00047	-.00069	.00007	.05009	214.12	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	
High	50.000	50.000	50.000	50.000	20.000	250.00	

Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9PW2 Operator: STL
Run Time: 05/06/05 16:06:58
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00023	-.00131	-.00149	.00072	-.00064	.00068	.13735
SDev	.00113	.00063	.00004	.00024	.00070	.00011	.00237
%RSD	490.56	48.340	2.6430	33.363	109.37	15.631	1.7226
#1	.00057	-.00175	-.00152	.00055	-.00015	.00060	.13568
#2	-.00103	-.00086	-.00146	.00090	-.00114	.00075	.13903
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00056	.06989	.00012	-.00013	63.110	.00065	.00026
SDev	.00022	.00008	.00001	.00007	.073	.00004	.00005
%RSD	38.652	.11042	10.101	54.657	.11526	6.7388	17.950
#1	-.00040	.06994	.00011	-.00018	63.059	.00068	.00023
#2	-.00071	.06983	.00013	-.00008	63.161	.00062	.00030
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00282	.01950	18.385	.00014	.00121	-.00003	-.00047
SDev	.00011	.00882	.032	.00024	.00006	.00034	.00067
%RSD	4.0191	45.231	.17314	175.57	4.8766	1156.5	143.21
#1	-.00274	.02573	18.362	.00030	.00125	.00021	-.00095
#2	-.00290	.01326	18.407	-.00003	.00116	-.00027	.00001
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00005	.00808	.00181	.47009	-.00057	.00010	-.00356
SDev	.00042	.00005	.00022	.00027	.00096	.00097	.00565
%RSD	861.69	.66370	12.452	.05813	169.68	949.14	158.49
#1	.00034	.00812	.00197	.47029	.00011	.00078	.00043
#2	-.00025	.00804	.00165	.46990	-.00124	-.00058	-.00756
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000

Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	-.00001	.00024	-.00059	.00017	.05316	2.7343	
SDev	.00017	.00016	.00055	.00007	.00990	.1064	
%RSD	1444.9	69.462	92.660	40.406	18.628	3.8922	
#1	-.00014	.00035	-.00020	.00021	.04616	2.6590	
#2	.00011	.00012	-.00097	.00012	.06016	2.8095	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9PW2S Operator: STL
Run Time: 05/06/05 16:11:21
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.48485	.49102	.46861	.47939	1.9890	2.0102	2.2228
SDev	.00229	.00117	.00093	.00243	.0032	.0029	.0036
%RSD	.47219	.23744	.19800	.50595	.16238	.14208	.16390
#1	.48323	.49184	.46926	.47768	1.9913	2.0123	2.2254
#2	.48647	.49019	.46795	.48111	1.9868	2.0082	2.2203
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	2.0248	2.1281	.05312	.04902	112.25	.19516	.47034
SDev	.0030	.0064	.00003	.00005	.03	.00026	.00042
%RSD	.14934	.30241	.04646	.10836	.02994	.13579	.08871
#1	2.0270	2.1327	.05314	.04898	112.27	.19535	.47064
#2	2.0227	2.1236	.05310	.04906	112.22	.19498	.47005
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.24547	1.0734	67.157	.49694	.48175	.06000	1.9034
SDev	.00097	.0064	.002	.00062	.00029	.00019	.0005
%RSD	.39577	.59637	.00368	.12540	.06104	.31320	.02786
#1	.24615	1.0688	67.159	.49738	.48154	.05987	1.9038
#2	.24478	1.0779	67.156	.49650	.48196	.06014	1.9030
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000

Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.49299	.49303	1.0198	1.5534	2.0469	1.7084	2.0582
SDev	.00066	.00003	.0005	.0038	.0008	.0036	.0128
%RSD	.13428	.00530	.04791	.24272	.03665	.21345	.62025
#1	.49345	.49302	1.0201	1.5561	2.0463	1.7110	2.0672
#2	.49252	.49305	1.0194	1.5507	2.0474	1.7059	2.0492
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.47580	2.0032	.48691	2.0491	1.4157	40.992
SDev	.00131	.0030	.00114	.0032	.0062	.380
%RSD	.27508	.14879	.23389	.15373	.43798	.92602
#1	.47488	2.0053	.48610	2.0514	1.4113	40.723
#2	.47673	2.0011	.48771	2.0469	1.4201	41.260
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9PW2D Operator: STL
Run Time: 05/06/05 16:15:43
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.48616	.49137	.46907	.47680	1.9847	2.0096	2.2227
SDev	.00553	.00294	.00346	.00109	.0054	.0011	.0016
%RSD	1.1384	.59808	.73813	.22876	.27159	.05276	.07094
#1	.48225	.49344	.47152	.47603	1.9809	2.0089	2.2216
#2	.49007	.48929	.46662	.47757	1.9885	2.0104	2.2238
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	2.0196	2.1254	.05307	.04892	112.12	.19518	.46988
SDev	.0002	.0054	.00003	.00033	.08	.00008	.00061
%RSD	.00993	.25487	.05426	.67861	.06746	.04002	.12919
#1	2.0194	2.1292	.05309	.04869	112.06	.19524	.46945
#2	2.0197	2.1216	.05305	.04916	112.17	.19513	.47031
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000

Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.24554	1.0831	67.072	.49702	.48196	.05971	1.9019
SDev	.00094	.0111	.052	.00001	.00106	.00105	.0032
%RSD	.38497	1.0292	.07726	.00119	.21965	1.7606	.17045
#1	.24620	1.0752	67.035	.49703	.48121	.05897	1.9042
#2	.24487	1.0910	67.108	.49702	.48271	.06045	1.8996
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.49274	.49091	1.0215	1.5561	2.0394	1.7127	2.0651
SDev	.00080	.00001	.0012	.0021	.0009	.0025	.0147
%RSD	.16178	.00184	.11698	.13328	.04197	.14372	.71321
#1	.49217	.49092	1.0224	1.5576	2.0388	1.7110	2.0755
#2	.49330	.49091	1.0207	1.5547	2.0400	1.7145	2.0546
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.47423	2.0013	.48789	2.0514	1.4160	40.944
SDev	.00042	.0025	.00271	.0013	.0074	.220
%RSD	.08972	.12502	.55602	.06371	.52530	.53720
#1	.47453	1.9995	.48598	2.0524	1.4107	40.789
#2	.47392	2.0031	.48981	2.0505	1.4212	41.100
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9PW2V 5X Operator: STL
Run Time: 05/06/05 16:20:06
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00206	-.00045	-.00010	-.00064	.00040	.00204	.13630
SDev	.00214	.00035	.00034	.00008	.00110	.00170	.00253
%RSD	103.56	78.767	356.46	12.964	276.26	83.073	1.8597
#1	-.00055	-.00020	.00015	-.00070	-.00038	.00324	.13451
#2	-.00357	-.00070	-.00034	-.00058	.00118	.00084	.13809
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00

Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00046	.01414	.00022	-.00009	13.018	.00062	.00026
SDev	.00029	.00002	.00000	.00001	.020	.00008	.00014
%RSD	64.037	.10912	.00000	13.347	.15584	13.060	52.869
#1	.00025	.01413	.00022	-.00008	13.003	.00057	.00016
#2	.00066	.01415	.00022	-.00010	13.032	.00068	.00036
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00297	.00726	3.7498	-.00002	.00008	.00048	.00166
SDev	.00016	.00023	.0117	.00001	.00006	.00033	.00001
%RSD	5.2837	3.2146	.31126	75.417	70.711	68.554	.59110
#1	-.00309	.00710	3.7416	-.00003	.00004	.00025	.00167
#2	-.00286	.00743	3.7581	-.00001	.00012	.00071	.00165
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00039	.00499	.00161	.09596	-.00015	.00391	.01324
SDev	.00028	.00006	.00052	.00003	.00037	.00143	.00776
%RSD	71.318	1.1182	32.112	.03583	242.97	36.434	58.630
#1	.00020	.00495	.00197	.09598	.00011	.00492	.00775
#2	.00059	.00502	.00124	.09593	-.00042	.00290	.01873
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	-.00046	.00150	-.00152	.00062	.02947	.61208	
SDev	.00006	.00076	.00154	.00010	.00683	.31219	
%RSD	12.517	51.121	101.14	16.318	23.159	51.005	
#1	-.00042	.00204	-.00043	.00055	.02465	.39133	
#2	-.00050	.00095	-.00261	.00069	.03430	.83283	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

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Method: 6010C Sample Name: G9P9Q Operator: STL
Run Time: 05/06/05 16:24:28
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00259	-.00353	-.00477	.00296	-.00253	.00247	.13733
SDev	.00154	.00185	.00332	.00196	.00020	.00180	.00257
%RSD	59.288	52.413	69.628	66.101	7.8376	72.941	1.8716
#1	.00150	-.00222	-.00242	.00158	-.00239	.00120	.13551
#2	.00368	-.00484	-.00712	.00435	-.00267	.00375	.13915
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00066	.07225	.00011	.00011	117.23	.00008	.00056
SDev	.00042	.00031	.00002	.00007	.26	.00027	.00000
%RSD	63.195	.42719	18.608	62.666	.21778	346.55	.01330
#1	-.00096	.07247	.00010	.00006	117.41	.00027	.00056
#2	-.00037	.07204	.00013	.00016	117.05	-.00011	.00056
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00019	.01152	23.793	.00534	.00183	.00063	.00058
SDev	.00012	.00972	.037	.00005	.00076	.00092	.00057
%RSD	64.771	84.362	.15682	.90593	41.784	146.58	98.989
#1	-.00010	.00465	23.820	.00530	.00129	-.00002	.00098
#2	-.00028	.01839	23.767	.00537	.00237	.00128	.00017
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00032	.01778	.00217	.38742	-.00158	.00153	-.01705
SDev	.00052	.00011	.00000	.00231	.00176	.00192	.00047
%RSD	164.91	.60025	.00996	.59501	111.28	124.79	2.7569
#1	-.00005	.01771	.00217	.38905	-.00283	.00018	-.01738
#2	.00068	.01786	.00217	.38579	-.00034	.00289	-.01671
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00039	.00081	.00055	-.00002	.05667	2.2727
SDev	.00020	.00114	.00041	.00020	.01639	.2483
%RSD	51.707	140.88	73.922	848.53	28.916	10.927
#1	.00025	.00000	.00026	-.00017	.04509	2.0971
#2	.00053	.00161	.00084	.00012	.06826	2.4483
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Standard: CALBLK
Run Time: 05/06/05 16:28:51

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Avge	-.25949	.06250	1.8894	-.72646	-.42198	.54897	3.4673
SDev	.02616	.08697	.1449	.30616	.07919	.08485	.0134
%RSD	10.082	139.16	7.6717	42.144	18.767	15.456	.38746
#1	-.27799	.00100	1.7869	-.50997	-.47798	.60897	3.4768
#2	-.24099	.12399	1.9919	-.94295	-.36598	.48898	3.4578

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Avge	.16749	-.00500	-1.2284	-.00650	.25999	.03700	-.00800
SDev	.01131	.00000	.0021	.00354	.00000	.00707	.00566
%RSD	6.7545	.00000	.17267	54.393	.00000	19.111	70.711
#1	.15949	-.00500	-1.2299	-.00900	.25999	.03200	-.01200
#2	.17549	-.00500	-1.2269	-.00400	.25999	.04200	-.00400

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Avge	.06000	-.04050	2.0434	.93095	-.04500	-.13249	-.24999
SDev	.00283	.00495	.0021	.00141	.00707	.00919	.01273
%RSD	4.7140	12.222	.10381	.15190	15.713	6.9377	5.0912
#1	.06200	-.04400	2.0419	.92995	-.05000	-.12599	-.24099
#2	.05800	-.03700	2.0449	.93195	-.04000	-.13899	-.25899

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Avge	.00200	.33898	.01300	.00050	-.01650	-.04500	.00250
SDev	.00566	.00141	.00990	.00071	.00919	.01980	.02050
%RSD	282.84	.41718	76.150	141.42	55.711	43.998	820.24
#1	-.00200	.33798	.00600	.00100	-.01000	-.03100	-.01200
#2	.00600	.33998	.02000	.00000	-.02300	-.05900	.01700

Elem	Ti3349	Zr3496	Na3302
Avge	-.02800	97.718	11.221
SDev	.00000	.156	.011
%RSD	.00000	.15919	.09452
#1	-.02800	97.828	11.228
#2	-.02800	97.608	11.213

Method: 6010C Standard: CAL1
Run Time: 05/06/05 16:33:13

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	As1890
Avge	1082.7	997.39	2831.9	4932.3	641.94	732.99	1744.7
SDev	.5	1.56	.3	1.6	.91	.19	.6
%RSD	.05015	.15660	.00936	.03324	.14132	.02634	.03317
#1	1082.3	998.50	2832.1	4931.2	642.58	732.85	1745.1
#2	1083.1	996.29	2831.7	4933.5	641.29	733.12	1744.3

Elem	Ba4934	Be3130	Cd2265	Cr2677	Co2286	Cu3247	Mn2576
Avge	436.32	1618.6	1180.8	900.95	148.14	177.07	873.98
SDev	.52	.2	.5	.49	.01	.23	.27
%RSD	.11960	.01442	.04198	.05423	.00859	.12898	.03066
#1	436.69	1618.7	1180.4	900.60	148.13	177.24	873.79
#2	435.95	1618.4	1181.1	901.29	148.15	176.91	874.17

Elem	Ni2316	Ag3280	Tl1908	V_2924	Zn2138	Mo2020	Sr4215
Avge	238.87	304.64	546.70	200.05	211.08	189.74	212.88
SDev	.14	.17	.07	.04	.23	.26	.59
%RSD	.05713	.05454	.01242	.01944	.10753	.13937	.27600
#1	238.78	304.76	546.65	200.08	210.92	189.55	212.47
#2	238.97	304.52	546.75	200.02	211.24	189.92	213.30

Elem	Sn1899	Th	U	Ti3349	Zr3496
Avge	132.82	190.18	43.886	209.87	259.97
SDev	.07	.29	.013	.02	.03
%RSD	.05482	.15281	.02900	.00775	.00979
#1	132.77	190.39	43.877	209.86	259.99
#2	132.88	189.97	43.895	209.88	259.95

Method: 6010C Standard: CAL2
Run Time: 05/06/05 16:37:37

Elem	Al	Ca	Fe	Mg	Na3302
Avge	345.69	124.04	397.99	198.16	26.785
SDev	.87	.36	1.14	.57	.061
%RSD	.25035	.29015	.28656	.28902	.22703
#1	345.08	123.79	397.19	197.75	26.742
#2	346.30	124.29	398.80	198.56	26.828

Method: 6010C Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Sb1	206.831	CAL1	CALBLK	.009221	.002393	05/06/05 04:37:37
Sb2	206.832	CAL1	CALBLK	.010022	-.000626	05/06/05 04:37:37
Pb1	220.351	CAL1	CALBLK	.003525	-.006661	05/06/05 04:37:37
Pb2	220.352	CAL1	CALBLK	.002031	.001475	05/06/05 04:37:37
Se1	196.021	CAL1	CALBLK	.015206	.006417	05/06/05 04:37:37
Se2	196.022	CAL1	CALBLK	.013662	-.007500	05/06/05 04:37:37
Al	308.215	CAL2	CALBLK	.292205	-1.01317	05/06/05 04:37:37
As1890	189.042	CAL1	CALBLK	.005732	-.000960	05/06/05 04:37:37

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Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Ba4934	493.409	CAL1	CALBLK	.022919	.000115	05/06/05 04:37:37
Be3130	313.042	CAL1	CALBLK	.006174	.007584	05/06/05 04:37:37
Cd2265	226.502	CAL1	CALBLK	.008469	.000055	05/06/05 04:37:37
Ca	317.933	CAL2	CALBLK	.403941	-.105020	05/06/05 04:37:37
Cr2677	267.760	CAL1	CALBLK	.011108	-.000411	05/06/05 04:37:37
Co2286	228.616	CAL1	CALBLK	.067521	.000540	05/06/05 04:37:37
Cu3247	324.753	CAL1	CALBLK	.056654	-.003399	05/06/05 04:37:37
Fe	217.441	CAL2	CALBLK	.251236	.010175	05/06/05 04:37:37
Mg	279.078	CAL2	CALBLK	.254952	-.520967	05/06/05 04:37:37
Mn2576	257.610	CAL1	CALBLK	.011457	-.010666	05/06/05 04:37:37
Ni2316	231.604	CAL1	CALBLK	.041856	.001883	05/06/05 04:37:37
Ag3280	328.068	CAL1	CALBLK	.006617	.000877	05/06/05 04:37:37
Tl1908	190.864	CAL1	CALBLK	.018261	.004565	05/06/05 04:37:37
V 2924	292.402	CAL1	CALBLK	.050011	-.000100	05/06/05 04:37:37
Zn2138	213.856	CAL1	CALBLK	.525454	-.021128	05/06/05 04:37:37
Mo2020	202.030	CAL1	CALBLK	.052684	-.000685	05/06/05 04:37:37
Sr4215	421.552	CAL1	CALBLK	.046974	-.000023	05/06/05 04:37:37
Sn1899	189.989	CAL1	CALBLK	.075308	.001243	05/06/05 04:37:37
Th	401.913	CAL1	CALBLK	.052869	.002379	05/06/05 04:37:37
U	385.958	CAL1	CALBLK	.228541	-.000571	05/06/05 04:37:37
Pb2203	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Se1960	196.026	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Sb2068	206.838	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Ti3349	334.941	CAL1	CALBLK	.047642	.001334	05/06/05 04:37:37
Zr3496	349.621	CAL1	CALBLK	.030816	-3.01127	05/06/05 04:37:37
Na3302	330.232	CAL2	CALBLK	6.42520	-72.0968	05/06/05 04:37:37

Method: 6010C

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sb1	206.831	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.98635	.013649

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sb2	206.832	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.99557	.004431

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Pb1	220.351	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	9.97654	.023456

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Pb2	220.352	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0167	-.016749

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Se1	196.021	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	9.76756	.232440

			Known	Measured	Residual

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Element	Wavelength	Standard	Concentration	Concentration	Concentration
Se2	196.022	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0067	-.006726

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Al	308.215	CALBLK	.000000	.000000	-.000000
		CAL2	100.000	100.000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
As1890	189.042	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	9.99979	.000210

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ba4934	493.409	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Be3130	313.042	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cd2265	226.502	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0003	-.000270

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ca	317.933	CALBLK	.000000	.000000	-.000000
		CAL2	50.0000	50.0000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cr2677	267.760	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0072	-.007160

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Co2286	228.616	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0029	-.002900

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cu3247	324.753	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0285	-.028476

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Fe	217.441	CALBLK	.000000	.000000	-.000000
		CAL2	100.000	100.000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mg	279.078	CALBLK	.000000	.000000	-.000000

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		CAL2	50.0000	50.0000	-.000004
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mn2576	257.610	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0023	-.002260
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ni2316	231.604	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ag3280	328.068	CALBLK	.000000	.000000	-.000000
		CAL1	2.00000	2.01675	-.016750
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Tl1908	190.864	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	9.98764	.012361
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
V_2924	292.402	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0046	-.004601
Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Zn2138	213.856	CALBLK	.156992	.338983	-.181991
		CAL1	110.890	211.077	-100.187
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mo2020	202.030	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	9.99540	.004600
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sr4215	421.552	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sn1899	189.989	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0040	-.003950
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Th	401.913	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0570	-.057000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
U	385.958	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0291	-.029115

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Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Pb2203	220.353	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Se1960	196.026	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Sb2068	206.838	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ti3349	334.941	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Zr3496	349.621	CALBLK	.000000	-.000000	.000000
		CAL1	5.00000	5.00000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Na3302	330.232	CALBLK	.000000	-.000001	.000001
		CAL2	100.000	100.000	.000000

Method: 6010C Sample Name: CCV1 Operator: STL
Run Time: 05/06/05 16:41:30
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	3.9130	3.9061	3.8927	3.8750	3.9635	3.9486	38.176
SDev	.0070	.0032	.0020	.0059	.0142	.0173	.175
%RSD	.17945	.08181	.05022	.15196	.35767	.43685	.45925
#1	3.9180	3.9084	3.8914	3.8791	3.9736	3.9608	38.300
#2	3.9081	3.9039	3.8941	3.8708	3.9535	3.9364	38.052
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	3.9583	4.1678	4.1510	3.9332	19.722	3.8488	3.8684
SDev	.0150	.0279	.0146	.0129	.052	.0130	.0124
%RSD	.37989	.66955	.35187	.32736	.26357	.33849	.31950
#1	3.9689	4.1875	4.1613	3.9423	19.759	3.8580	3.8771

#2	3.9477	4.1481	4.1407	3.9241	19.685	3.8396	3.8596
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	3.9143	40.211	19.410	4.0099	3.8750	.98258	3.8033
SDev	.0249	.143	.029	.0144	.0129	.00507	.0125
%RSD	.63605	.35517	.14766	.35980	.33375	.51638	.32789
#1	3.9319	40.312	19.431	4.0201	3.8842	.98617	3.8121
#2	3.8966	40.110	19.390	3.9997	3.8659	.97899	3.7944
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	3.9195	3.9215	4.0001	4.1550	4.0351	Q3.2566	3.9637
SDev	.0162	.0137	.0142	.0218	.0080	.0190	.0299
%RSD	.41395	.34837	.35516	.52437	.19771	.58249	.75341
#1	3.9310	3.9312	4.0101	4.1704	4.0407	Q3.2701	3.9848
#2	3.9080	3.9119	3.9900	4.1396	4.0294	Q3.2432	3.9426
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	3.8809	3.9536	3.9107	4.0427	3.6464	40.448	
SDev	.0033	.0162	.0057	.0192	.0086	.491	
%RSD	.08444	.41041	.14698	.47497	.23714	1.2130	
#1	3.8832	3.9651	3.9148	4.0563	3.6403	40.101	
#2	3.8786	3.9421	3.9067	4.0291	3.6526	40.795	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000	
Range	10.000	10.000	10.000	10.000	10.000	10.000	

Method: 6010C Sample Name: CCB1 Operator: STL
Run Time: 05/06/05 16:45:55
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00213	.00194	.00022	-.00008	.00026	.00096	.01063
SDev	.00217	.00041	.00122	.00010	.00394	.00061	.00114
%RSD	101.87	21.285	541.86	123.63	1530.1	63.311	10.747
#1	.00366	.00165	-.00064	-.00001	-.00253	.00140	.01143

#2	.00060	.00223	.00108	-.00015	.00304	.00053	.00982
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00160	.00030	.00022	.00024	.00646	.00047	.00024
SDev	.00112	.00006	.00000	.00000	.00000	.00017	.00014
%RSD	70.064	21.757	.00000	.20904	.00000	35.974	60.420
#1	.00239	.00034	.00022	.00024	.00646	.00035	.00014
#2	.00081	.00025	.00022	.00024	.00646	.00059	.00034
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00044	.00647	.00153	.00021	-.00025	.00042	.00003
SDev	.00008	.00602	.00162	.00003	.00030	.00001	.00204
%RSD	18.756	92.960	106.07	12.056	117.85	2.1942	7448.2
#1	.00038	.01072	.00038	.00023	-.00004	.00043	.00147
#2	.00050	.00222	.00268	.00019	-.00046	.00041	-.00142
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00022	.00222	.00440	.00016	.00109	.00474	.00695
SDev	.00046	.00011	.00190	.00000	.00053	.00193	.00454
%RSD	204.99	4.9571	43.110	.00000	48.908	40.726	65.267
#1	.00055	.00230	.00574	.00016	.00147	.00611	.00374
#2	-.00010	.00214	.00306	.00016	.00071	.00338	.01016
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00002	.00073	.00207	.00088	.00950	.20880	
SDev	.00034	.00090	.00131	.00030	.00089	.08177	
%RSD	1497.1	124.11	63.331	34.400	9.3542	39.163	
#1	-.00022	.00009	.00299	.00110	.01013	.15098	
#2	.00026	.00137	.00114	.00067	.00887	Q.26663	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.00300	.00400	.06000	.05000	.50000	.25000	

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Method: 6010C Sample Name: G9WPGB Operator: STL
Run Time: 05/06/05 16:50:19
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00461	-.00184	-.00589	.00336	.00115	-.00020	L.01645
SDev	.00120	.00183	.00223	.00022	.00310	.00245	.00182
%RSD	25.985	99.686	37.805	6.5534	268.70	1244.0	11.075
#1	.00376	-.00054	-.00431	.00321	.00334	-.00193	L.01516
#2	.00546	-.00314	-.00746	.00352	-.00104	.00153	L.01773
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Low
High							.20000
Low							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L.00101	.00055	-.00026	-.00000	.01252	-.00055	.00027
SDev	.00064	.00010	.00003	.00014	.00057	.00013	.00048
%RSD	63.504	17.678	13.310	3466.4	4.5619	23.776	175.37
#1	L.00056	.00048	-.00029	-.00011	.01212	-.00065	-.00007
#2	L.00146	.00062	-.00024	.00010	.01293	-.00046	.00061
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00700	.20000	.20000	.00500	.25000	.01000	.05000
Low	.00700	-.20000	-.20000	-.00500	-.25000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00054	-.00221	-.00548	-.00019	.00088	.00065	.00042
SDev	.00011	.00853	.00288	.00007	.00047	.00078	.00072
%RSD	20.497	386.35	52.622	38.759	53.875	119.30	170.25
#1	-.00061	-.00824	-.00752	-.00024	.00054	.00010	-.00009
#2	-.00046	.00383	-.00344	-.00013	.00121	.00121	.00093
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.02500	.05000	.25000	.01500	.04000	.01000	.01000
Low	-.02500	-.05000	-.25000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00010	.00174	.00018	-.00000	-.00030	.00209	-.01360
SDev	.00056	.00006	.00004	.00003	.00080	.00364	.00354
%RSD	586.16	3.5173	21.826	13258.	266.53	174.62	25.999
#1	-.00030	.00178	.00015	-.00002	-.00086	-.00049	-.01610
#2	.00050	.00169	.00021	.00002	.00026	.00466	-.01110
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.04000	.05000	.10000	.50000	.50000
Low	-.05000	-.01000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00028	.00025	.00246	.00062	-.01521	L-1.3878
SDev	.00059	.00060	.00019	.00027	.01710	.3044
%RSD	209.60	238.05	7.6449	43.514	112.45	21.933
#1	.00070	-.00017	.00233	.00043	-.02730	L-1.6030
#2	-.00014	.00068	.00260	.00081	-.00312	L-1.1725
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Low
High	.00300	.00500	.01000	.05000		.25000
Low	-.00300	-.00500	-.01000	-.05000		-.25000

Method: 6010C Sample Name: G9WPGC Operator: STL
Run Time: 05/06/05 16:54:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.99691	.99708	.98748	.98733	.99852	1.0122	1.0862
SDev	.00018	.00266	.00131	.00184	.00409	.0032	.0022
%RSD	.01844	.26662	.13290	.18605	.40932	.31771	.20608
#1	.99678	.99896	.98841	.98603	1.0014	1.0145	1.0846
#2	.99704	.99520	.98655	.98863	.99563	1.0100	1.0877
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							1.2000
Low							.80000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.0134	1.0785	1.0958	1.0171	20.210	.99311	.99321
SDev	.0037	.0052	.0021	.0008	.027	.00173	.00258
%RSD	.36276	.48383	.18923	.07771	.13426	.17382	.25961
#1	1.0160	1.0822	1.0972	1.0176	20.230	.99433	.99504
#2	1.0108	1.0748	1.0943	1.0165	20.191	.99189	.99139
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2040	1.2040	1.2000	1.2040	24.000	1.2040	1.2000
Low	.79500	.79500	.80000	.79500	16.000	.79500	.80000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.98522	1.1390	19.859	1.0360	.99046	.25557	.97704
SDev	.00451	.0000	.003	.0021	.00124	.00086	.00473
%RSD	.45793	.00019	.01271	.20638	.12550	.33830	.48407
#1	.98841	1.1390	19.861	1.0375	.98958	.25618	.98039
#2	.98203	1.1390	19.858	1.0345	.99134	.25496	.97370
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2000	1.2000	24.000	1.2040	1.2000	.33700	1.2040
Low	.80000	.80000	16.000	.79500	.80000	.12300	.79500

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	1.0061	1.0048	1.0350	1.0734	2.0832	1.6523	2.0218
SDev	.0022	.0021	.0013	.0048	.0030	.0059	.0024
%RSD	.21759	.21143	.12608	.45170	.14561	.35662	.11904
#1	1.0076	1.0063	1.0360	1.0769	2.0853	1.6565	2.0235
#2	1.0045	1.0033	1.0341	1.0700	2.0810	1.6482	2.0201
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2000	1.2000	1.2000	1.2000	2.4000	2.4000	2.4000
Low	.80000	.80000	.80000	.80000	1.6000	1.6000	1.6000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.98738	1.0077	.99697	2.0623	1.8309	18.202
SDev	.00079	.0035	.00076	.0063	.0125	.423
%RSD	.07983	.34794	.07650	.30382	.68312	2.3213
#1	.98682	1.0101	.99751	2.0668	1.8220	17.903
#2	.98794	1.0052	.99643	2.0579	1.8397	18.500
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	1.2040	1.2040	1.2040	2.4000	2.4000	
Low	.79500	.79500	.79500	1.6000	1.6000	

Method: 6010C Sample Name: G9WPGL Operator: STL
Run Time: 05/06/05 16:59:03
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	1.0251	1.0255	1.0029	1.0054	1.0731	1.0780	1.1124
SDev	.0002	.0019	.0005	.0006	.0012	.0031	.0004
%RSD	.02312	.18079	.04510	.05692	.10985	.28545	.03721
#1	1.0250	1.0268	1.0025	1.0050	1.0739	1.0758	1.1121
#2	1.0253	1.0242	1.0032	1.0058	1.0723	1.0802	1.1127
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							1.2000
Low							.80000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.0485	1.0866	1.1235	1.0381	20.507	1.0034	1.0088
SDev	.0015	.0003	.0001	.0005	.002	.0001	.0001
%RSD	.14588	.02385	.01127	.04739	.00975	.00762	.01388
#1	1.0496	1.0868	1.1234	1.0377	20.508	1.0033	1.0087
#2	1.0474	1.0865	1.1236	1.0384	20.505	1.0034	1.0089
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2040	1.2040	1.2000	1.2040	24.000	1.2040	1.2000
Low	.79500	.79500	.80000	.79500	16.000	.79500	.80000

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Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.98843	1.1500	20.206	1.0495	1.0063	.26034	.99897
SDev	.00047	.0107	.005	.0000	.0000	.00052	.00452
%RSD	.04794	.93243	.02320	.00266	.00294	.19781	.45244
#1	.98809	1.1576	20.210	1.0495	1.0063	.26071	.99577
#2	.98876	1.1424	20.203	1.0495	1.0063	.25998	1.0022
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2000	1.2000	24.000	1.2040	1.2000	.33700	1.2040
Low	.80000	.80000	16.000	.79500	.80000	.12300	.79500

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	1.0162	1.0348	1.0448	1.0814	2.1085	1.6673	2.0491
SDev	.0001	.0003	.0009	.0002	.0011	.0016	.0204
%RSD	.00997	.03296	.08289	.02148	.05319	.09890	.99440
#1	1.0163	1.0345	1.0442	1.0816	2.1093	1.6684	2.0347
#2	1.0161	1.0350	1.0455	1.0812	2.1077	1.6661	2.0635
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2000	1.2000	1.2000	1.2000	2.4000	2.4000	2.4000
Low	.80000	.80000	.80000	.80000	1.6000	1.6000	1.6000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	1.0046	1.0764	1.0253	2.0853	1.8819	18.937
SDev	.0005	.0017	.0005	.0001	.0056	.036
%RSD	.05300	.15422	.04479	.00323	.29714	.19191
#1	1.0042	1.0752	1.0256	2.0854	1.8858	18.912
#2	1.0049	1.0775	1.0249	2.0853	1.8779	18.963
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	1.2040	1.2040	1.2040	2.4000	2.4000	
Low	.79500	.79500	.79500	1.6000	1.6000	

Method: 6010C Sample Name: G9EF6 Operator: STL
Run Time: 05/06/05 17:03:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00507	-.00028	-.00122	.00662	.01041	-.00162	.00930
SDev	.00283	.00252	.00328	.00255	.00086	.00006	.00776
%RSD	55.693	885.71	267.67	38.493	8.2212	3.7261	83.432
#1	.00707	-.00207	-.00354	.00842	.00980	-.00158	.00381
#2	.00308	.00150	.00109	.00482	.01101	-.00167	.01479
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

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Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00195	.00086	-.00015	.00008	.05554	-.00016	.00071
SDev	.00021	.00008	.00002	.00006	.00200	.00078	.00005
%RSD	10.552	9.4281	12.036	75.485	3.5998	480.03	7.1951
#1	.00210	.00080	-.00013	.00004	.05413	-.00072	.00074
#2	.00181	.00092	-.00016	.00012	.05695	.00039	.00067
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00007	.01114	-.00166	-.00013	.00142	.00109	-.00163
SDev	.00075	.00076	.00721	.00016	.00030	.00030	.00287
%RSD	1149.1	6.8500	435.14	123.69	20.797	27.799	176.23
#1	-.00047	.01168	-.00676	-.00024	.00121	.00087	-.00366
#2	.00060	.01060	.00344	-.00002	.00163	.00130	.00040
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00005	.00567	.00113	.00103	.00674	.00751	.00420
SDev	.00022	.00023	.00042	.00003	.00106	.00023	.02133
%RSD	470.34	4.0062	36.981	3.2137	15.749	3.1126	508.49
#1	-.00011	.00551	.00084	.00101	.00599	.00767	-.01089
#2	.00020	.00583	.00143	.00106	.00749	.00734	.01928
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00401	.00238	.00329	.00133	-.02434	H835.33
SDev	.00061	.00024	.00105	.00014	.04364	5.26
%RSD	15.197	10.263	31.807	10.102	179.34	.62925
#1	.00444	.00221	.00403	.00143	-.05520	H831.61
#2	.00358	.00256	.00255	.00124	.00652	H839.05
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9EF6V 5X Operator: STL
Run Time: 05/06/05 17:07:48
Comment:

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Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00256	.00149	-.00048	.00134	.00088	-.00023	.01277
SDev	.00225	.00136	.00273	.00084	.00036	.00128	.00049
%RSD	87.583	91.301	566.77	62.482	40.382	550.73	3.8361
#1	.00098	.00246	.00145	.00075	.00113	.00067	.01243
#2	.00415	.00053	-.00241	.00193	.00063	-.00113	.01312
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00088	.00019	-.00004	-.00011	.02848	-.00030	-.00030
SDev	.00073	.00011	.00002	.00004	.00029	.00036	.00043
%RSD	82.246	58.232	58.926	32.411	1.0030	120.37	140.24
#1	.00140	.00028	-.00005	-.00014	.02868	-.00004	-.00000
#2	.00037	.00011	-.00002	-.00009	.02827	-.00055	-.00061
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00027	.00189	.00127	-.00001	-.00040	.00023	-.00154
SDev	.00053	.01394	.00234	.00003	.00027	.00073	.00055
%RSD	195.13	736.34	183.84	527.37	66.989	313.29	35.892
#1	.00065	.01175	.00293	.00002	-.00021	.00075	-.00115
#2	-.00010	-.00796	-.00038	-.00003	-.00059	-.00028	-.00193
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00038	.00365	.00032	.00019	.00102	.00342	.00342
SDev	.00025	.00002	.00105	.00003	.00117	.00576	.02631
%RSD	66.000	.64038	332.16	17.728	114.79	168.47	770.15
#1	-.00020	.00366	.00106	.00021	.00184	.00749	.02202
#2	-.00055	.00363	-.00043	.00016	.00019	-.00065	-.01519
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00073	.00014	.00221	.00040	-.00102	128.26
SDev	.00035	.00097	.00104	.00024	.01546	.44

%RSD	48.180	699.35	47.251	58.232	1518.1	.34005
#1	.00098	.00082	.00147	.00057	.00991	127.95
#2	.00048	-.00055	.00295	.00024	-.01195	128.57
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: CCV1 Operator: STL
Run Time: 05/06/05 17:12:12
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	3.8636	3.8531	3.8477	3.8333	3.9073	3.8953	37.682
SDev	.0135	.0124	.0074	.0083	.0089	.0184	.016
%RSD	.35036	.32213	.19107	.21553	.22667	.47285	.04301
#1	3.8732	3.8619	3.8529	3.8391	3.9136	3.9083	37.671
#2	3.8540	3.8444	3.8425	3.8274	3.9011	3.8823	37.694
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	3.9161	4.1057	4.0940	3.8910	19.471	3.8016	3.8247
SDev	.0020	.0039	.0005	.0035	.018	.0015	.0010
%RSD	.05201	.09394	.01279	.08892	.09241	.04055	.02620
#1	3.9175	4.1084	4.0936	3.8886	19.459	3.8005	3.8240
#2	3.9146	4.1030	4.0943	3.8935	19.484	3.8027	3.8254
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	3.8618	39.750	19.204	3.9615	3.8319	.97119	3.7599
SDev	.0030	.023	.029	.0020	.0037	.00013	.0040
%RSD	.07850	.05857	.15301	.04950	.09731	.01310	.10717
#1	3.8640	39.734	19.183	3.9601	3.8293	.97128	3.7571
#2	3.8597	39.767	19.225	3.9629	3.8345	.97110	3.7628
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	3.8713	3.8788	3.9585	4.0656	4.0007	Q3.2223	3.8981
SDev	.0009	.0022	.0042	.0041	.0035	.0044	.0053

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%RSD	.02278	.05698	.10627	.10130	.08656	.13594	.13705
#1	3.8719	3.8772	3.9555	4.0626	3.9983	Q3.2254	3.9019
#2	3.8707	3.8803	3.9615	4.0685	4.0032	Q3.2192	3.8943
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	3.8381	3.8993	3.8601	3.9923	Q3.5521	39.593
SDev	.0080	.0152	.0132	.0002	.0089	.300
%RSD	.20737	.39070	.34098	.00421	.25040	.75733
#1	3.8437	3.9101	3.8694	3.9921	Q3.5458	39.381
#2	3.8324	3.8885	3.8508	3.9924	Q3.5584	39.805
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB1 Operator: STL
Run Time: 05/06/05 17:16:38
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00250	.00091	-.00138	.00110	-.00013	.00079	.01730
SDev	.00405	.00042	.00202	.00202	.00213	.00162	.00216
%RSD	161.71	45.986	146.99	184.32	1612.0	204.80	12.477
#1	-.00036	.00061	.00005	-.00033	.00138	-.00036	.01883
#2	.00537	.00120	-.00281	.00253	-.00164	.00194	.01578
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00199	.00032	.00031	.00014	.00707	.00006	.00013
SDev	.00040	.00006	.00001	.00005	.00029	.00012	.00038
%RSD	19.929	20.203	4.1594	34.367	4.0406	181.69	285.01
#1	.00228	.00028	.00032	.00011	.00727	.00015	-.00014
#2	.00171	.00037	.00031	.00017	.00687	-.00002	.00041
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00004	.00542	.00778	.00033	-.00040	.00030	.00112
SDev	.00043	.00092	.00072	.00000	.00033	.00042	.00143

%RSD	1130.9	17.046	9.2739	1.3395	81.876	140.06	127.34
#1	.00027	.00477	.00829	.00033	-.00017	.00000	.00213
#2	-.00034	.00607	.00727	.00032	-.00063	.00060	.00011
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00015	.00222	.00361	.00016	.00117	.00336	.00376
SDev	.00014	.00000	.00176	.00007	.00032	.00050	.01648
%RSD	96.997	.05876	48.704	40.444	27.675	14.996	438.86
#1	.00025	.00222	.00485	.00012	.00094	.00372	.01541
#2	.00005	.00222	.00237	.00021	.00139	.00301	-.00790
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00027	.00049	.00197	.00083	.03907	Q.88984	
SDev	.00068	.00037	.00284	.00010	.00179	.08178	
%RSD	246.80	76.923	143.96	12.122	4.5763	9.1902	
#1	-.00020	.00022	-.00004	.00091	.04033	Q.94767	
#2	.00075	.00075	.00398	.00076	.03780	Q.83202	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.00300	.00400	.06000	.05000	.50000	.25000	

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Method: 6010C Standard: CALBLK
Run Time: 05/06/05 17:52:04

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Avge	.15349	-.00750	1.5194	.04650	-.53747	.52797	3.4953
SDev	.04172	.06293	.0658	.44616	.17889	.06505	.0007
%RSD	27.179	839.10	4.3278	959.54	33.283	12.321	.02023
#1	.18299	.03700	1.4729	.36198	-.41098	.48198	3.4958
#2	.12399	-.05200	1.5659	-.26899	-.66397	.57397	3.4948

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Avge	.28674	.00050	-1.1989	-.01300	.25999	.00550	-.00950
SDev	.05338	.00212	.0014	.00990	.00000	.00495	.00354
%RSD	18.618	424.26	.11795	76.150	.00000	89.995	37.216
#1	.24899	.00200	-1.1979	-.00600	.25999	.00900	-.00700
#2	.32448	-.00100	-1.1999	-.02000	.25999	.00200	-.01200

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Avge	.04950	-.02450	2.0364	.92995	-.05100	-.09950	-.32248
SDev	.00212	.03323	.0049	.00283	.00141	.04737	.02616
%RSD	4.2855	135.65	.24305	.30413	2.7730	47.614	8.1125
#1	.05100	-.00100	2.0399	.93195	-.05000	-.06600	-.30398
#2	.04800	-.04800	2.0329	.92795	-.05200	-.13299	-.34098

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Avge	.00150	.34048	.01400	.00050	-.02450	-.02500	-.00500
SDev	.00778	.00071	.00000	.00071	.02333	.05515	.04667
%RSD	518.54	.20766	.00000	141.42	95.243	220.62	933.38
#1	.00700	.33998	.01400	.00100	-.00800	.01400	.02800
#2	-.00400	.34098	.01400	.00000	-.04100	-.06400	-.03800

Elem	Ti3349	Zr3496	Na3302
Avge	-.02700	97.535	11.180
SDev	.00141	.243	.035
%RSD	5.2378	.24865	.31621
#1	-.02600	97.706	11.205
#2	-.02800	97.363	11.155

Method: 6010C Standard: CAL1
Run Time: 05/06/05 17:56:27

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	As1890
Avge	1071.9	991.15	2814.9	4901.0	638.01	728.25	1727.2
SDev	3.2	.96	2.7	18.2	1.53	1.93	1.2
%RSD	.29723	.09652	.09502	.37164	.23972	.26438	.07037
#1	1069.7	991.83	2813.0	4888.1	639.09	726.89	1726.3
#2	1074.2	990.48	2816.8	4913.9	636.93	729.61	1728.1

Elem	Ba4934	Be3130	Cd2265	Cr2677	Co2286	Cu3247	Mn2576
Avge	428.29	1584.3	1171.4	892.62	146.60	174.38	865.10
SDev	.47	1.5	2.5	1.64	.26	.20	1.29
%RSD	.10896	.09400	.21157	.18425	.17846	.11596	.14933

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#1	428.62	1583.2	1169.6	891.46	146.41	174.52	864.19
#2	427.96	1585.3	1173.1	893.79	146.78	174.24	866.02
Elem	Ni2316	Ag3280	Tl1908	V_2924	Zn2138	Mo2020	Sr4215
Avge	237.02	301.33	542.74	197.70	209.43	187.70	210.23
SDev	.38	.06	.80	.16	.44	.36	.83
%RSD	.15989	.01995	.14787	.08190	.20932	.19287	.39350
#1	236.76	301.38	542.17	197.59	209.12	187.44	209.65
#2	237.29	301.29	543.30	197.82	209.74	187.96	210.82

Elem	Sn1899	Th	U	Ti3349	Zr3496
Avge	131.92	188.47	43.390	207.71	254.93
SDev	.26	.14	.016	.18	.49
%RSD	.19563	.07279	.03748	.08442	.19305
#1	131.74	188.57	43.379	207.59	254.58
#2	132.10	188.37	43.402	207.83	255.27

Method: 6010C Standard: CAL2
Run Time: 05/06/05 18:00:50

Elem	Al	Ca	Fe	Mg	Na3302
Avge	338.65	121.97	392.35	195.62	26.186
SDev	.17	.17	.45	.30	.088
%RSD	.04948	.14319	.11444	.15109	.33483
#1	338.53	121.84	392.03	195.41	26.124
#2	338.77	122.09	392.67	195.83	26.248

Method: 6010C Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Sb1	206.831	CAL1	CALBLK	.009318	-.001430	05/06/05 06:00:50
Sb2	206.832	CAL1	CALBLK	.010085	.000076	05/06/05 06:00:50
Pb1	220.351	CAL1	CALBLK	.003546	-.005388	05/06/05 06:00:50
Pb2	220.352	CAL1	CALBLK	.002044	-.000095	05/06/05 06:00:50
Se1	196.021	CAL1	CALBLK	.015297	.008222	05/06/05 06:00:50
Se2	196.022	CAL1	CALBLK	.013751	-.007260	05/06/05 06:00:50
Al	308.215	CAL2	CALBLK	.298372	-1.04291	05/06/05 06:00:50
As1890	189.042	CAL1	CALBLK	.005791	-.001660	05/06/05 06:00:50
Ba4934	493.409	CAL1	CALBLK	.023349	-.000012	05/06/05 06:00:50
Be3130	313.042	CAL1	CALBLK	.006307	.007562	05/06/05 06:00:50
Cd2265	226.502	CAL1	CALBLK	.008537	.000111	05/06/05 06:00:50
Ca	317.933	CAL2	CALBLK	.410821	-.106808	05/06/05 06:00:50
Cr2677	267.760	CAL1	CALBLK	.011211	-.000062	05/06/05 06:00:50
Co2286	228.616	CAL1	CALBLK	.068228	.000648	05/06/05 06:00:50
Cu3247	324.753	CAL1	CALBLK	.057526	-.002847	05/06/05 06:00:50
Fe	217.441	CAL2	CALBLK	.254860	.006244	05/06/05 06:00:50
Mg	279.078	CAL2	CALBLK	.258282	-.525965	05/06/05 06:00:50
Mn2576	257.610	CAL1	CALBLK	.011574	-.010764	05/06/05 06:00:50
Ni2316	231.604	CAL1	CALBLK	.042181	.002151	05/06/05 06:00:50
Ag3280	328.068	CAL1	CALBLK	.006691	.000666	05/06/05 06:00:50
Tl1908	190.864	CAL1	CALBLK	.018391	.005931	05/06/05 06:00:50
V_2924	292.402	CAL1	CALBLK	.050604	-.000076	05/06/05 06:00:50

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Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Zn2138	213.856	CAL1	CALBLK	.529585	-.023323	05/06/05 06:00:50
Mo2020	202.030	CAL1	CALBLK	.053256	-.000746	05/06/05 06:00:50
Sr4215	421.552	CAL1	CALBLK	.047566	-.000024	05/06/05 06:00:50
Sn1899	189.989	CAL1	CALBLK	.075820	.001857	05/06/05 06:00:50
Th	401.913	CAL1	CALBLK	.053354	.001334	05/06/05 06:00:50
U	385.958	CAL1	CALBLK	.231110	.001155	05/06/05 06:00:50
Pb2203	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Se1960	196.026	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Sb2068	206.838	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Ti3349	334.941	CAL1	CALBLK	.048138	.001300	05/06/05 06:00:50
Zr3496	349.621	CAL1	CALBLK	.031768	-3.09847	05/06/05 06:00:50
Na3302	330.232	CAL2	CALBLK	6.66433	-74.5102	05/06/05 06:00:50

Method: 6010C

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sb1	206.831	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	9.98635	.013650
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sb2	206.832	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	9.99557	.004431
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Pb1	220.351	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.97654	.023456
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Pb2	220.352	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0168	-.016750
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Se1	196.021	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.76756	.232440
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Se2	196.022	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0067	-.006726
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Al	308.215	CALBLK	.000000	.000000	-.000000
		CAL2	100.000	100.000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
As1890	189.042	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.99979	.000210

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Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ba4934	493.409	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Be3130	313.042	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cd2265	226.502	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0003	-.000270
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ca	317.933	CALBLK	.000000	.000000	-.000000
		CAL2	50.0000	50.0000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cr2677	267.760	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0072	-.007160
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Co2286	228.616	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0029	-.002900
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cu3247	324.753	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0285	-.028476
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Fe	217.441	CALBLK	.000000	-.000000	.000000
		CAL2	100.000	100.000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mg	279.078	CALBLK	.000000	-.000000	.000000
		CAL2	50.0000	50.0000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mn2576	257.610	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0023	-.002260
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ni2316	231.604	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0000	.000000
			Known	Measured	Residual

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Element	Wavelength	Standard	Concentration	Concentration	Concentration
Ag3280	328.068	CALBLK	.000000	-.000000	.000000
		CAL1	2.00000	2.01675	-.016750
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Tl1908	190.864	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	9.98764	.012361
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
V_2924	292.402	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0046	-.004601
Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Zn2138	213.856	CALBLK	.156992	.340483	-.183491
		CAL1	110.890	209.435	-98.5444
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mo2020	202.030	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	9.99540	.004600
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sr4215	421.552	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sn1899	189.989	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0040	-.003950
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Th	401.913	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0570	-.057000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
U	385.958	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0291	-.029115
Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Pb2203	220.353	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000
Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Se1960	196.026	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000
Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Sb2068	206.838	NONE	.000000	.000000	.000000

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		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ti3349	334.941	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Zr3496	349.621	CALBLK	.000000	-.000000	.000000
		CAL1	5.00000	5.00000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Na3302	330.232	CALBLK	.000000	-.000002	.000002
		CAL2	100.000	100.000	.000000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/06/05 18:04:43
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	3.9720	3.9567	3.9606	3.9424	4.0158	4.0004	39.257
SDev	.0263	.0005	.0079	.0235	.0075	.0298	.076
%RSD	.66164	.01154	.19945	.59549	.18675	.74448	.19351
#1	3.9534	3.9564	3.9550	3.9258	4.0211	3.9794	39.203
#2	3.9906	3.9570	3.9662	3.9590	4.0105	4.0215	39.310
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.0385	4.2404	4.2353	4.0152	20.243	3.9210	3.9442
SDev	.0031	.0037	.0075	.0086	.038	.0082	.0085
%RSD	.07685	.08759	.17616	.21459	.18942	.20953	.21639
#1	4.0363	4.2377	4.2301	4.0091	20.216	3.9151	3.9382
#2	4.0407	4.2430	4.2406	4.0213	20.270	3.9268	3.9503
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	3.9857	41.237	19.933	4.0834	3.9495	1.0010	3.8723
SDev	.0034	.048	.050	.0074	.0050	.0001	.0070
%RSD	.08516	.11651	.25286	.18142	.12762	.01037	.18160
#1	3.9833	41.203	19.897	4.0782	3.9460	1.0009	3.8673
#2	3.9881	41.271	19.969	4.0887	3.9531	1.0011	3.8773

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Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	3.9948	3.9964	4.0804	4.2293	4.1144	Q3.3046	4.0098
SDev	.0057	.0077	.0136	.0078	.0047	.0048	.0220
%RSD	.14333	.19299	.33339	.18448	.11454	.14461	.54866
#1	3.9908	3.9910	4.0708	4.2238	4.1110	Q3.3012	3.9942
#2	3.9989	4.0019	4.0900	4.2348	4.1177	Q3.3080	4.0253

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	3.9485	4.0055	3.9669	4.1125	3.7497	42.750	
SDev	.0183	.0174	.0177	.0066	.0023	.236	
%RSD	.46320	.43358	.44572	.16139	.06195	.55114	
#1	3.9355	3.9933	3.9544	4.1078	3.7481	42.583	
#2	3.9614	4.0178	3.9794	4.1172	3.7514	42.916	

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 05/06/05 18:09:07
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00081	.00140	.00003	.00004	.00359	.00046	.00808
SDev	.00422	.00032	.00405	.00151	.00643	.00098	.00289
%RSD	518.24	23.004	12436.	3808.5	178.96	212.30	35.812
#1	-.00217	.00163	.00290	-.00103	.00814	.00115	.00603
#2	.00379	.00117	-.00283	.00111	-.00095	-.00023	.01012

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00166	-.00002	.00012	.00004	.00288	.00009	-.00017
SDev	.00031	.00015	.00001	.00004	.00058	.00016	.00048
%RSD	18.707	636.40	7.4435	83.746	20.203	183.47	284.45
#1	.00144	-.00013	.00011	.00002	.00246	.00020	-.00051
#2	.00188	.00008	.00013	.00007	.00329	-.00003	.00017

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Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00011	.00183	.00245	.00010	-.00032	-.00001	.00226
SDev	.00029	.00814	.00365	.00004	.00033	.00065	.00084
%RSD	256.57	444.99	148.87	41.515	103.71	10185.	37.121
#1	.00031	-.00393	-.00013	.00007	-.00055	-.00047	.00286
#2	-.00009	.00759	.00504	.00013	-.00008	.00046	.00167

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00020	.00225	.00413	.00002	.00136	.00234	-.00394
SDev	.00082	.00000	.00169	.00007	.00048	.00110	.00165
%RSD	401.71	.17268	41.094	283.48	35.355	47.089	41.786
#1	-.00079	.00225	.00532	-.00002	.00102	.00156	-.00277
#2	.00038	.00224	.00293	.00007	.00171	.00312	-.00510

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00004	.00150	.00101	.00055	.01904	Q.58310	
SDev	.00034	.00280	.00270	.00010	.01707	.32514	
%RSD	923.21	185.79	268.13	18.446	89.616	55.760	
#1	.00028	.00348	-.00090	.00063	.00698	Q.35319	
#2	-.00021	-.00047	.00292	.00048	.03111	Q.81301	

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00300	.00400	.06000	.05000	.50000	.25000

Method: 6010C Sample Name: G9P18B Operator: STL
Run Time: 05/06/05 18:13:30
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00139	.00031	.00126	.00402	.00440	.00012	L.01131
SDev	.00266	.00189	.00212	.00090	.00243	.00387	.00207
%RSD	191.46	598.90	167.46	22.308	55.203	3105.4	18.279
#1	.00327	-.00102	-.00023	.00465	.00612	.00286	L.00985
#2	-.00049	.00165	.00276	.00338	.00268	-.00261	L.01278

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Low
High							.20000
Low							.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L-.00029	.04602	-.00018	.00009	H.35493	.00015	.00024
SDev	.00030	.00012	.00003	.00007	.00000	.00012	.00010
%RSD	102.44	.25113	14.630	76.386	.00000	77.950	40.704
#1	L-.00008	.04610	-.00020	.00014	H.35493	.00007	.00031
#2	L-.00050	.04594	-.00016	.00004	H.35493	.00023	.00017

Errors	LC Low	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	.00700	.20000	.20000	.00500	.25000	.01000	.05000
Low	.00700	-.20000	-.20000	-.00500	-.25000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00000	.00068	.03577	-.00006	.00049	.00008	.00046
SDev	.00029	.00904	.00073	.00002	.00051	.00059	.00124
%RSD	25848.	1321.7	2.0421	26.136	104.53	729.77	270.86
#1	-.00020	.00708	.03525	-.00007	.00084	.00050	.00133
#2	.00021	-.00571	.03629	-.00005	.00013	-.00033	-.00042

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.02500	.05000	.25000	.01500	.04000	.01000	.01000
Low	-.02500	-.05000	-.25000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00003	H.01746	.00074	.00068	.00444	.00089	-.00613
SDev	.00028	.00005	.00030	.00007	.00043	.00320	.00606
%RSD	1049.6	.30419	40.935	9.8546	9.6779	360.53	98.971
#1	.00017	H.01749	.00053	.00073	.00474	.00315	-.01042
#2	-.00023	H.01742	.00096	.00064	.00413	-.00138	-.00184

Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.04000	.05000	.10000	.50000	.50000
Low	-.05000	-.01000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	H.00310	.00155	.00103	.00041	-.03092	H678.16	
SDev	.00011	.00339	.00114	.00017	.00062	1.43	
%RSD	3.4462	219.09	111.09	41.595	2.0122	.21054	
#1	H.00303	.00395	.00184	.00053	-.03048	H679.17	
#2	H.00318	-.00085	.00022	.00029	-.03136	H677.15	

Errors	LC High	LC Pass	LC Pass	LC Pass	NOCHECK	LC High
High	.00300	.00500	.01000	.05000		.25000
Low	-.00300	-.00500	-.01000	-.05000		-.25000

Method: 6010C Sample Name: G9WK6C Operator: STL
Run Time: 05/06/05 18:17:52
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	1.0113	1.0058	.98932	.99941	1.0757	1.0521	1.1441
SDev	.0037	.0039	.00200	.00362	.0005	.0017	.0009
%RSD	.36735	.39197	.20245	.36218	.04423	.16257	.07749
#1	1.0086	1.0030	.98791	.99685	1.0761	1.0533	1.1447
#2	1.0139	1.0086	.99074	1.0020	1.0754	1.0508	1.1435
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							1.2000
Low							.80000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.0278	1.1222	1.0944	1.0086	20.717	1.0002	.99251
SDev	.0016	.0017	.0004	.0004	.007	.0013	.00169
%RSD	.15536	.14711	.03220	.04011	.03505	.12671	.17008
#1	1.0289	1.1234	1.0946	1.0089	20.722	1.0011	.99371
#2	1.0267	1.1211	1.0941	1.0083	20.712	.99926	.99132
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2040	1.2040	1.2000	1.2040	24.000	1.2040	1.2000
Low	.79500	.79500	.80000	.79500	16.000	.79500	.80000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.0580	1.1316	20.220	1.0362	.99877	.25451	.97968
SDev	.0004	.0016	.002	.0004	.00051	.00034	.00001
%RSD	.04239	.14310	.00994	.04024	.05076	.13313	.00138
#1	1.0583	1.1304	20.221	1.0365	.99913	.25475	.97967
#2	1.0577	1.1327	20.218	1.0359	.99841	.25427	.97969
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2000	1.2000	24.000	1.2040	1.2000	.33700	1.2040
Low	.80000	.80000	16.000	.79500	.80000	.12300	.79500

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	1.0259	1.0386	1.0357	1.0843	L.00353	L.00176	L-.02849
SDev	.0010	.0001	.0008	.0014	.00054	.00084	.00180
%RSD	.09425	.01169	.07627	.13026	15.190	47.661	6.3241
#1	1.0266	1.0387	1.0352	1.0853	L.00315	L.00117	L-.02721
#2	1.0253	1.0386	1.0363	1.0833	L.00391	L.00236	L-.02976
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Low	LC Low
High	1.2000	1.2000	1.2000	1.2000	2.4000	2.4000	2.4000
Low	.80000	.80000	.80000	.80000	1.6000	1.6000	1.6000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.99605	1.0599	1.0094	L.00137	L.00620	697.42
SDev	.00308	.0013	.0038	.00003	.00624	.33
%RSD	.30935	.12257	.37551	2.4811	100.77	.04797
#1	.99387	1.0609	1.0068	L.00140	L.00178	697.18
#2	.99823	1.0590	1.0121	L.00135	L.01061	697.65
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Low	NOCHECK
High	1.2040	1.2040	1.2040	2.4000	2.4000	
Low	.79500	.79500	.79500	1.6000	1.6000	

Method: 6010C Sample Name: G9DNL Operator: STL
Run Time: 05/06/05 18:22:14
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.30469	.28798	.00381	.00644	.00585	-.00675	.60158
SDev	.00236	.00060	.00080	.00013	.00143	.00069	.00184
%RSD	.77545	.20853	20.950	2.0873	24.404	10.273	.30553
#1	.30636	.28841	.00324	.00634	.00484	-.00626	.60028
#2	.30302	.28756	.00437	.00653	.00686	-.00724	.60288
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.53862	.20915	.00109	-.00307	208.75	-.00255	.04719
SDev	.00125	.00111	.00000	.00002	.73	.00043	.00082
%RSD	.23290	.52887	.40759	.65681	.34802	16.855	1.7317
#1	.53774	.20837	.00109	-.00306	208.23	-.00224	.04777
#2	.53951	.20993	.00110	-.00308	209.26	-.00285	.04661
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00266	65.853	3.7798	H28.427	.01864	.00055	.00730
SDev	.00010	.270	.0122	.088	.00000	.00076	.00080
%RSD	3.8060	.41041	.32371	.30890	.00000	137.37	11.000
#1	-.00259	65.662	3.7711	H28.365	.01864	.00109	.00787
#2	-.00273	66.044	3.7884	H28.489	.01864	.00002	.00673
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00031	.47062	3.1773	.85245	.00502	.00360	.11643
SDev	.00050	.00211	.0180	.00453	.00150	.00402	.02215
%RSD	161.91	.44874	.56501	.53093	29.807	111.63	19.021
#1	.00004	.46912	3.1646	.84925	.00608	.00645	.13209
#2	-.00067	.47211	3.1900	.85565	.00396	.00076	.10077
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00556	-.00256	.29912	.00168	.33836	H674.09
SDev	.00036	.00001	.00178	.00027	.02055	2.32
%RSD	6.3856	.50478	.59370	16.162	6.0738	.34463
#1	.00531	-.00256	.30038	.00188	.35289	H672.44
#2	.00581	-.00255	.29787	.00149	.32383	H675.73
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9DNV Operator: STL
Run Time: 05/06/05 18:26:36
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.22919	.19805	-.00027	.00616	.00416	-.00061	.90589
SDev	.00027	.00123	.00111	.00145	.00381	.00276	.00694
%RSD	.11697	.62175	414.73	23.622	91.672	449.08	.76553
#1	.22938	.19718	-.00105	.00719	.00146	.00134	.90099
#2	.22900	.19893	.00052	.00513	.00685	-.00257	.91079
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.69985	.25790	.00144	-.00150	173.19	-.00218	.06400
SDev	.00351	.00124	.00008	.00024	.87	.00147	.00173
%RSD	.50095	.48011	5.5824	15.805	.50317	67.381	2.7013
#1	.69737	.25877	.00138	-.00167	172.58	-.00323	.06278
#2	.70233	.25702	.00149	-.00134	173.81	-.00114	.06522
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

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Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00043	31.477	3.4629	H25.060	.02611	-.00030	.00519
SDev	.00227	.129	.0301	.063	.00137	.00196	.00393
%RSD	521.89	.41023	.87018	.25035	5.2548	649.32	75.748
#1	-.00204	31.386	3.4416	H25.016	.02514	-.00169	.00241
#2	.00117	31.568	3.4842	H25.105	.02708	.00108	.00798

Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00228	.65862	5.5203	.84702	.00873	.00647	.14269
SDev	.00144	.00014	.0169	.00409	.00213	.00945	.05655
%RSD	62.932	.02121	.30675	.48251	24.424	146.05	39.633
#1	-.00330	.65852	5.5083	.84991	.00722	-.00021	.10270
#2	-.00127	.65871	5.5323	.84413	.01024	.01315	.18268

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Be1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00402	.00097	.21882	.00323	.27929	H624.70
SDev	.00060	.00057	.00023	.00068	.06960	.14
%RSD	14.944	58.596	.10568	21.108	24.922	.02263
#1	.00444	.00138	.21866	.00274	.23007	H624.60
#2	.00359	.00057	.21899	.00371	.32850	H624.80

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9D9P Operator: STL
Run Time: 05/06/05 18:30:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00142	.00079	.00215	.00256	.00450	.00099	.02194
SDev	.00294	.00011	.00035	.00244	.00331	.00389	.00137
%RSD	206.86	14.316	16.150	95.337	73.377	393.08	6.2511
#1	-.00350	.00071	.00239	.00084	.00684	-.00176	.02097
#2	.00066	.00087	.00190	.00429	.00217	.00374	.02291

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00150	.05097	-.00036	-.00007	1.0071	.00052	-.00010
SDev	.00093	.00005	.00000	.00004	.0032	.00022	.00010
%RSD	61.925	.09717	1.2297	58.195	.31729	42.062	94.275
#1	.00216	.05093	-.00037	-.00010	1.0048	.00068	-.00003
#2	.00084	.05100	-.00036	-.00004	1.0093	.00037	-.00017
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00723	-.00120	.32464	.00093	.00110	-.00030	-.00039
SDev	.00017	.00079	.00274	.00006	.00030	.00049	.00165
%RSD	2.2935	65.630	.84380	6.2480	27.196	164.30	423.02
#1	.00734	-.00175	.32271	.00088	.00131	-.00064	.00078
#2	.00711	-.00064	.32658	.00097	.00089	.00005	-.00156
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00051	.03312	.00721	.01413	.00334	-.00199	-.00739
SDev	.00025	.00018	.00207	.00007	.00038	.00190	.00262
%RSD	49.158	.53523	28.732	.47560	11.241	95.767	35.474
#1	-.00068	.03300	.00868	.01408	.00360	-.00333	-.00553
#2	-.00033	.03325	.00575	.01418	.00307	-.00064	-.00924
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00242	.00216	-.00069	.00036	L-.12678	H614.80
SDev	.00152	.00149	.00200	.00003	.01426	.99
%RSD	62.471	69.159	291.41	9.4281	11.250	.16095
#1	.00135	.00110	-.00210	.00034	L-.13686	H614.10
#2	.00350	.00322	.00073	.00039	L-.11669	H615.50
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9GAR Operator: STL
Run Time: 05/06/05 18:35:19
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

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Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00220	.00464	.01619	.01171	.01102	-.00096	.14161
SDev	.00584	.00081	.00314	.00105	.00171	.00064	.00016
%RSD	265.40	17.530	19.406	8.9989	15.516	66.307	.10982
#1	-.00633	.00522	.01841	.01096	.01223	-.00051	.14172
#2	.00193	.00407	.01396	.01245	.00981	-.00141	.14150
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00140	4.1600	-.00023	.05116	1.9000	.00165	.00102
SDev	.00055	.0277	.00005	.00006	.0157	.00013	.00063
%RSD	39.483	.66515	21.310	.10902	.82560	7.6195	61.702
#1	.00101	4.1795	-.00026	.05120	1.8889	.00156	.00058
#2	.00180	4.1404	-.00020	.05113	1.9110	.00174	.00147
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.07967	.90544	.70714	.01854	.00578	-.00024	-.00141
SDev	.00045	.01802	.00931	.00236	.00048	.00059	.00199
%RSD	.56239	1.9906	1.3171	12.728	8.2582	246.28	140.41
#1	.07998	.89270	.70055	.01687	.00544	-.00066	-.00282
#2	.07935	.91818	.71373	.02021	.00612	.00018	-.00001
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00003	.71027	.00376	.03036	.00644	-.00145	.01022
SDev	.00028	.00160	.00011	.00010	.00048	.00371	.01506
%RSD	1001.8	.22544	2.8285	.33342	7.4596	256.50	147.38
#1	-.00017	.71140	.00368	.03043	.00678	-.00407	.02087
#2	.00023	.70914	.00383	.03028	.00610	.00118	-.00043
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.01320	.00303	.00008	.00067	L-.12499	H615.59
SDev	.00034	.00100	.00363	.00020	.04154	.83
%RSD	2.6016	32.855	4682.0	30.305	33.236	.13548

#1	.01344	.00373	-.00249	.00053	L-.15436	H616.18
#2	.01295	.00232	.00264	.00082	-.09562	H615.00

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9GARX Operator: STL
Run Time: 05/06/05 18:39:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00065	.00087	.01344	.01423	.00772	-.00064	.13799
SDev	.00194	.00154	.00151	.00014	.00299	.00252	.00178
%RSD	296.90	176.39	11.202	.98821	38.793	393.79	1.2877
#1	-.00202	.00196	.01450	.01413	.00984	-.00242	.13673
#2	.00072	-.00022	.01237	.01433	.00560	.00114	.13924
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00078	4.1441	-.00031	.05273	1.8344	.00079	.00160
SDev	.00000	.0175	.00001	.00031	.0125	.00005	.00010
%RSD	.24616	.42189	4.2856	.58309	.68090	6.6533	6.0714
#1	.00078	4.1318	-.00032	.05251	1.8256	.00083	.00153
#2	.00079	4.1565	-.00030	.05294	1.8433	.00075	.00167
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.07904	.78950	.72677	.01063	.00553	.00024	-.00125
SDev	.00005	.00574	.00311	.00076	.00024	.00001	.00038
%RSD	.05833	.72669	.42718	7.1697	4.3182	2.6516	29.937
#1	.07900	.78544	.72457	.01009	.00536	.00025	-.00099
#2	.07907	.79355	.72896	.01117	.00569	.00024	-.00152
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00010	.72534	.00155	.03050	.00478	-.00017	.00259
SDev	.00004	.00331	.00060	.00017	.00038	.00095	.00605
%RSD	36.038	.45606	39.163	.55054	7.8831	541.41	233.88

#1	-.00007	.72300	.00197	.03038	.00451	.00049	.00686
#2	-.00013	.72768	.00112	.03062	.00504	-.00084	-.00169
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.01397	.00214	-.00015	.00063	-.09393	H637.12	
SDev	.00041	.00068	.00078	.00007	.00390	3.60	
%RSD	2.9164	31.848	537.22	10.879	4.1563	.56432	
#1	.01426	.00166	-.00070	.00058	-.09669	H634.58	
#2	.01368	.00263	.00041	.00067	-.09117	H639.66	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9GARS Operator: STL
Run Time: 05/06/05 18:44:03
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.49039	.49374	.50564	.50266	2.1159	2.0688	2.3521
SDev	.00484	.00364	.00134	.00594	.0025	.0177	.0110
%RSD	.98786	.73767	.26437	1.1811	.11853	.85536	.46593
#1	.48696	.49631	.50658	.49847	2.1141	2.0563	2.3443
#2	.49381	.49116	.50469	.50686	2.1176	2.0813	2.3598
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	2.0757	6.3693	.05626	.10320	52.518	.20160	.49397
SDev	.0059	.0247	.00030	.00057	.277	.00001	.00246
%RSD	.28531	.38854	.53115	.55595	.52655	.00304	.49830
#1	2.0715	6.3518	.05604	.10279	52.323	.20159	.49223
#2	2.0799	6.3868	.05647	.10361	52.714	.20160	.49571
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.35662	1.8736	51.448	.52703	.50267	.04994	1.7910
SDev	.00074	.0032	.300	.00038	.00265	.00029	.0071
%RSD	.20854	.16910	.58356	.07211	.52807	.57376	.39816

#1	.35609	1.8758	51.236	.52676	.50079	.05014	1.7860
#2	.35714	1.8714	51.661	.52729	.50454	.04973	1.7961
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.51617	1.2452	1.0285	1.1209	.00554	-.00196	-.00204
SDev	.00236	.0065	.0045	.0048	.00091	.00204	.01274
%RSD	.45733	.52155	.43511	.42557	16.414	103.96	624.08
#1	.51450	1.2406	1.0253	1.1175	.00618	-.00052	.00697
#2	.51783	1.2498	1.0317	1.1243	.00489	-.00340	-.01105
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.50365	2.0845	.49150	.00178	-.06624	H732.55	
SDev	.00351	.0126	.00202	.00007	.01056	4.18	
%RSD	.69785	.60628	.41061	3.8222	15.941	.57056	
#1	.50117	2.0755	.49008	.00183	-.07371	H729.59	
#2	.50614	2.0934	.49293	.00173	-.05878	H735.51	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9GARV 5X Operator: STL
Run Time: 05/06/05 18:48:24
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00220	.00153	.00172	.00241	.00312	.00071	.03032
SDev	.00005	.00124	.00126	.00080	.00224	.00153	.00100
%RSD	2.4254	80.715	73.417	33.153	71.907	213.98	3.2830
#1	.00223	.00066	.00083	.00297	.00153	-.00037	.02962
#2	.00216	.00241	.00261	.00184	.00470	.00179	.03102
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00141	.83357	-.00020	.01035	.37917	.00070	.00065
SDev	.00090	.00934	.00005	.00009	.00291	.00018	.00048
%RSD	63.875	1.1210	24.693	.87095	.76610	25.447	74.435

#1	.00204	.82697	-.00016	.01041	.37712	.00083	.00099
#2	.00077	.84018	-.00023	.01028	.38122	.00058	.00031
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.01635	.18467	.13934	.00141	.00152	.00084	.00139
SDev	.00001	.00525	.00110	.00006	.00018	.00043	.00045
%RSD	.05059	2.8421	.78638	3.9295	11.785	51.345	32.255
#1	.01635	.18838	.14011	.00145	.00164	.00114	.00107
#2	.01636	.18096	.13856	.00137	.00139	.00053	.00170
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00053	.14000	.00179	.00596	.00280	.00344	.00929
SDev	.00021	.00102	.00019	.00000	.00102	.00180	.00783
%RSD	40.495	.72574	10.730	.00097	36.277	52.414	84.357
#1	.00068	.13928	.00192	.00596	.00352	.00472	.01483
#2	.00038	.14072	.00165	.00596	.00208	.00217	.00375
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00218	.00151	.00198	.00026	-.01645	93.936	
SDev	.00011	.00176	.00038	.00017	.01936	.971	
%RSD	5.1544	116.56	19.062	64.282	117.69	1.0334	
#1	.00226	.00027	.00171	.00039	-.00276	93.249	
#2	.00210	.00276	.00224	.00014	-.03014	94.622	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9MAF Operator: STL
Run Time: 05/06/05 18:52:46
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00152	.00094	.00293	.00397	.00469	.00089	.01402
SDev	.00298	.00144	.00201	.00009	.00308	.00298	.00297
%RSD	196.15	153.01	68.756	2.1654	65.607	333.32	21.170

#1	-.00059	-.00008	.00435	.00403	.00687	-.00121	.01192
#2	.00362	.00196	.00150	.00391	.00251	.00300	.01611
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00003	.21685	-.00033	.00009	.63962	.00046	.00020
SDev	.00082	.00064	.00003	.00005	.00174	.00001	.00053
%RSD	2582.4	.29692	8.0049	55.156	.27249	2.0497	258.76
#1	-.00055	.21731	-.00035	.00005	.63838	.00047	-.00017
#2	.00061	.21640	-.00032	.00012	.64085	.00045	.00058
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.01378	-.00303	.04365	.00023	.00061	-.00001	-.00044
SDev	.00009	.01342	.00420	.00006	.00051	.00072	.00130
%RSD	.65151	443.51	9.6233	27.985	82.902	6942.1	292.32
#1	.01384	-.01252	.04068	.00019	.00025	-.00052	-.00136
#2	.01371	.00646	.04662	.00028	.00097	.00050	.00047
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00008	.02156	.00029	.00134	.00379	.00034	-.00266
SDev	.00050	.00008	.00041	.00007	.00166	.00293	.00308
%RSD	664.29	.37702	141.53	5.0068	43.804	872.49	116.10
#1	-.00028	.02150	.00058	.00130	.00262	-.00173	-.00484
#2	.00043	.02162	-.00000	.00139	.00497	.00240	-.00048
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00362	.00216	.00133	.00012	-.06426	H704.85	
SDev	.00073	.00096	.00246	.00024	.02814	1.01	
%RSD	20.092	44.572	185.94	197.99	43.783	.14373	
#1	.00414	.00148	-.00042	-.00005	-.08416	H705.57	
#2	.00311	.00284	.00307	.00029	-.04437	H704.14	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	

Low -.00500 -.00500 -.01000 -.05000 -.10000 .00000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/06/05 18:57:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	4.0022	3.9889	3.9867	3.9726	4.0505	4.0424	39.592
SDev	.0111	.0081	.0113	.0124	.0114	.0154	.039
%RSD	.27697	.20371	.28357	.31108	.28145	.38040	.09739
#1	3.9944	3.9831	3.9787	3.9639	4.0425	4.0315	39.620
#2	4.0100	3.9946	3.9947	3.9814	4.0586	4.0532	39.565
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.0529	4.2676	4.2713	4.0424	20.427	3.9469	3.9752
SDev	.0040	.0079	.0037	.0005	.000	.0005	.0008
%RSD	.09866	.18415	.08582	.01203	.00143	.01332	.01937
#1	4.0558	4.2731	4.2739	4.0427	20.427	3.9473	3.9758
#2	4.0501	4.2620	4.2687	4.0420	20.427	3.9465	3.9747
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.0244	41.563	20.070	4.1092	3.9765	1.0095	3.8883
SDev	.0067	.033	.012	.0015	.0025	.0005	.0004
%RSD	.16745	.08009	.05914	.03738	.06225	.04637	.00913
#1	4.0292	41.586	20.061	4.1103	3.9782	1.0098	3.8886
#2	4.0197	41.539	20.078	4.1081	3.9747	1.0092	3.8881
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.0256	4.0091	4.1031	4.2137	4.1239	Q3.3505	4.0698
SDev	.0047	.0021	.0027	.0024	.0061	.0033	.0107
%RSD	.11733	.05299	.06503	.05747	.14684	.09725	.26398
#1	4.0289	4.0076	4.1012	4.2119	4.1281	Q3.3528	4.0774
#2	4.0222	4.0106	4.1049	4.2154	4.1196	Q3.3482	4.0622
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000

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Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	3.9773	4.0451	3.9978	4.1484	3.7497	42.663	
SDev	.0120	.0141	.0101	.0040	.0046	.132	
%RSD	.30190	.34741	.25263	.09764	.12167	.30928	
#1	3.9688	4.0351	3.9906	4.1512	3.7465	42.570	
#2	3.9858	4.0550	4.0049	4.1455	3.7530	42.756	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000	
Range	10.000	10.000	10.000	10.000	10.000	10.000	

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 05/06/05 19:01:33
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00142	.00144	-.00071	.00105	.00309	.00145	.02050
SDev	.00177	.00225	.00189	.00036	.00404	.00141	.00027
%RSD	124.55	156.60	266.33	34.871	130.77	97.134	1.3209
#1	.00017	.00303	.00063	.00079	.00594	.00045	.02031
#2	.00268	-.00015	-.00204	.00131	.00023	.00245	.02069
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00086	.00048	.00060	.00060	.00534	.00055	.00048
SDev	.00076	.00010	.00002	.00001	.00058	.00047	.00005
%RSD	88.153	20.696	3.7021	2.0627	10.879	85.903	9.8436
#1	.00032	.00041	.00059	.00061	.00493	.00088	.00051
#2	.00139	.00055	.00062	.00059	.00575	.00022	.00045
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00029	.00606	.00491	.00056	.00044	.00005	.00150
SDev	.00012	.00335	.00237	.00003	.00063	.00010	.00083
%RSD	40.607	55.256	48.382	6.1937	141.42	194.77	55.566
#1	.00037	.00369	.00323	.00053	-.00000	-.00002	.00209
#2	.00021	.00843	.00659	.00058	.00089	.00012	.00091
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000

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Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00043	.00260	.00404	.00055	.00220	.00222	-.01099
SDev	.00043	.00005	.00211	.00000	.00037	.00029	.00834
%RSD	100.31	2.0309	52.263	.00212	16.983	13.134	75.857
#1	.00012	.00257	.00554	.00055	.00246	.00243	-.00509
#2	.00073	.00264	.00255	.00055	.00194	.00202	-.01688
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00046	.00200	.00143	.00096	.02028	Q.40650
SDev	.00038	.00040	.00043	.00027	.01940	.49006
%RSD	83.367	20.191	30.313	28.284	95.693	120.56
#1	.00073	.00228	.00112	.00116	.00656	.05998
#2	.00019	.00171	.00173	.00077	.03400	Q.75303
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00300	.00400	.06000	.05000	.50000	.25000

Method: 6010C Sample Name: G9HH7 Operator: STL
Run Time: 05/06/05 19:05:56
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00096	.00180	.00351	.00503	.00420	-.00239	.28235
SDev	.00096	.00054	.00317	.00082	.00557	.00052	.00120
%RSD	99.496	30.117	90.186	16.250	132.64	21.943	.42589
#1	.00028	.00219	.00575	.00445	.00814	-.00276	.28320
#2	.00164	.00142	.00127	.00561	.00026	-.00202	.28150
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00008	.24898	-.00017	.00196	9.5326	.01605	.02135
SDev	.00003	.00064	.00003	.00007	.0134	.00055	.00024
%RSD	40.919	.25860	15.713	3.6577	.14017	3.4176	1.1186
#1	.00010	.24853	-.00015	.00190	9.5232	.01644	.02152
#2	.00005	.24944	-.00019	.00201	9.5421	.01566	.02118
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000

Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	2.6947	15.357	.83989	5.1201	.31436	.00049	.00252
SDev	.0059	.012	.00091	.0075	.00048	.00004	.00094
%RSD	.21917	.07818	.10873	.14600	.15180	8.8461	37.479
#1	2.6905	15.349	.83925	5.1148	.31402	.00046	.00319
#2	2.6989	15.366	.84054	5.1254	.31470	.00052	.00185
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00126	3.0371	.00138	.09111	.00356	.00093	-.00333
SDev	.00018	.0052	.00084	.00013	.00091	.00032	.01668
%RSD	13.902	.17241	60.453	.14737	25.553	34.714	501.08
#1	.00114	3.0334	.00197	.09101	.00421	.00070	.00847
#2	.00139	3.0408	.00079	.09120	.00292	.00115	-.01512
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00452	-.00019	.00124	.00065	.05983	H702.41	
SDev	.00051	.00151	.00046	.00017	.00517	2.21	
%RSD	11.273	781.00	36.787	26.189	8.6501	.31530	
#1	.00489	.00087	.00092	.00077	.06349	H700.84	
#2	.00416	-.00126	.00156	.00053	.05617	H703.97	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9HH78 Operator: STL
Run Time: 05/06/05 19:10:18
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.48889	.48796	.49080	.49355	2.0895	2.0469	2.4449
SDev	.00146	.00125	.00132	.00153	.0057	.0050	.0054
%RSD	.29938	.25506	.26810	.31079	.27484	.24471	.21930
#1	.48992	.48884	.48987	.49246	2.0936	2.0434	2.4487
#2	.48785	.48708	.49173	.49463	2.0855	2.0505	2.4411
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00

Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	2.0393	2.3489	.05555	.05127	59.019	.21427	.50837
SDev	.0002	.0088	.00005	.00001	.001	.00012	.00005
%RSD	.00993	.37322	.09633	.01322	.00098	.05467	.00965
#1	2.0394	2.3551	.05559	.05127	59.019	.21419	.50840
#2	2.0391	2.3427	.05551	.05128	59.019	.21436	.50833
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	2.8354	15.541	51.072	5.3260	.78531	.05080	1.9212
SDev	.0101	.010	.010	.0056	.00021	.00002	.0018
%RSD	.35740	.06588	.02038	.10452	.02659	.03107	.09311
#1	2.8425	15.548	51.065	5.3299	.78545	.05079	1.9224
#2	2.8282	15.534	51.080	5.3221	.78516	.05081	1.9199
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.50589	3.3594	1.0093	1.1497	.00262	.00112	-.00050
SDev	.00072	.0041	.0003	.0033	.00204	.00087	.00622
%RSD	.14136	.12096	.02956	.28961	77.939	77.451	1235.9
#1	.50640	3.3623	1.0095	1.1520	.00406	.00051	-.00490
#2	.50539	3.3566	1.0091	1.1473	.00117	.00174	.00389
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.49263	2.0611	.48858	.00219	.10799	H745.56
SDev	.00146	.0014	.00139	.00003	.02209	1.63
%RSD	.29662	.06930	.28464	1.5541	20.453	.21868
#1	.49160	2.0601	.48956	.00217	.09237	H746.71
#2	.49367	2.0621	.48759	.00221	.12361	H744.41
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

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Method: 6010C Sample Name: G9HH7D Operator: STL
Run Time: 05/06/05 19:14:39
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.48985	.48749	.48581	.49121	2.0978	2.0541	2.4562
SDev	.00121	.00400	.00343	.00101	.0050	.0006	.0051
%RSD	.24677	.82008	.70549	.20578	.23892	.02730	.20929
#1	.49070	.49031	.48339	.49192	2.1013	2.0537	2.4525
#2	.48899	.48466	.48823	.49049	2.0942	2.0545	2.4598
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	2.0373	2.3663	.05540	.05089	59.056	.21409	.50707
SDev	.0020	.0015	.00011	.00005	.072	.00012	.00063
%RSD	.09697	.06210	.20126	.09509	.12248	.05384	.12385
#1	2.0387	2.3673	.05532	.05092	59.005	.21400	.50752
#2	2.0359	2.3652	.05548	.05085	59.107	.21417	.50663
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	2.8862	15.729	50.773	5.3956	.79003	.05065	1.9103
SDev	.0026	.002	.052	.0038	.00093	.00057	.0018
%RSD	.08875	.01213	.10287	.07003	.11703	1.1235	.09353
#1	2.8880	15.728	50.736	5.3930	.79068	.05105	1.9091
#2	2.8843	15.730	50.810	5.3983	.78938	.05024	1.9116
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.50670	3.3968	1.0109	1.1601	.00394	.00129	-.01605
SDev	.00043	.0025	.0019	.0004	.00037	.00173	.00572
%RSD	.08515	.07460	.18652	.03201	9.4831	133.93	35.646
#1	.50640	3.3950	1.0095	1.1603	.00421	.00252	-.02010
#2	.50701	3.3985	1.0122	1.1598	.00368	.00007	-.01201
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.48941	2.0687	.48906	.00214	.04362	H748.91
SDev	.00047	.0013	.00214	.00010	.01040	.67
%RSD	.09544	.06260	.43707	4.7670	23.838	.08935
#1	.48908	2.0696	.49057	.00221	.03627	H749.38
#2	.48974	2.0677	.48755	.00207	.05097	H748.43
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9QMDB Operator: STL
Run Time: 05/06/05 19:19:02
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00020	.00014	.00269	.00303	.00298	.00049	L.01946
SDev	.00042	.00169	.00034	.00003	.00269	.00085	.00259
%RSD	206.82	1226.2	12.444	1.1206	90.141	173.83	13.315
#1	.00050	.00133	.00293	.00305	.00488	-.00011	L.02130
#2	-.00009	-.00106	.00245	.00301	.00108	.00108	L.01763
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Low
High							.20000
Low							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L.00102	.07324	-.00027	-.00008	H.38964	.00005	.00007
SDev	.00088	.00045	.00001	.00014	.00087	.00020	.00024
%RSD	86.802	.60861	3.2890	171.74	.22364	409.02	354.49
#1	L.00039	.07293	-.00028	.00002	H.38903	.00019	.00024
#2	L.00164	.07356	-.00026	-.00018	H.39026	-.00009	-.00010
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	.00700	.20000	.20000	.00500	.25000	.01000	.05000
Low	.00700	-.20000	-.20000	-.00500	-.25000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00015	-.00600	.05372	-.00007	.00015	-.00023	-.00019
SDev	.00023	.00461	.00311	.00006	.00027	.00038	.00001
%RSD	161.54	76.798	5.7793	83.868	181.83	165.34	2.6575
#1	.00031	-.00274	.05592	-.00003	-.00004	.00004	-.00019
#2	-.00002	-.00926	.05152	-.00010	.00034	-.00050	-.00018
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.02500	.05000	.25000	.01500	.04000	.01000	.01000
Low	-.02500	-.05000	-.25000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00050	H.02097	.00120	.00087	.00235	-.00132	.00255
SDev	.00025	.00006	.00042	.00000	.00069	.00164	.00979
%RSD	49.767	.28046	34.912	.00200	29.564	124.22	383.87
#1	-.00033	H.02101	.00150	.00087	.00284	-.00016	.00948
#2	-.00068	H.02092	.00090	.00087	.00186	-.00248	-.00437
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.04000	.05000	.10000	.50000	.50000
Low	-.05000	-.01000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00292	.00132	.00018	.00024	-.03591	H668.55
SDev	.00013	.00033	.00084	.00014	.01949	2.69
%RSD	4.5992	25.079	465.80	56.569	54.289	.40175
#1	H.00301	.00155	.00077	.00034	-.02212	H666.65
#2	.00282	.00108	-.00041	.00014	-.04969	H670.45
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC High
High	.00300	.00500	.01000	.05000		.25000
Low	-.00300	-.00500	-.01000	-.05000		-.25000

Method: 6010C Sample Name: G9WJ2C Operator: STL
Run Time: 05/06/05 19:23:24
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	1.0127	1.0079	.98998	1.0000	1.0718	1.0493	1.1655
SDev	.0007	.0016	.00329	.0017	.0041	.0019	.0009
%RSD	.07108	.15912	.33230	.17283	.38182	.17746	.08051
#1	1.0122	1.0067	.98766	1.0012	1.0689	1.0480	1.1661
#2	1.0132	1.0090	.99231	.99880	1.0747	1.0506	1.1648
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							1.2000
Low							.80000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.0335	1.1502	1.0972	1.0106	20.858	1.0008	.99398
SDev	.0014	.0052	.0034	.0023	.043	.0023	.00241
%RSD	.13627	.44782	.30729	.22287	.20610	.22738	.24261
#1	1.0325	1.1466	1.0948	1.0090	20.828	.99916	.99227
#2	1.0345	1.1539	1.0996	1.0122	20.889	1.0024	.99569
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2040	1.2040	1.2000	1.2040	24.000	1.2040	1.2000
Low	.79500	.79500	.80000	.79500	16.000	.79500	.80000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

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Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.0619	1.1241	20.294	1.0377	.99789	.25596	.98180
SDev	.0049	.0100	.033	.0032	.00236	.00027	.00088
%RSD	.46473	.89045	.16018	.30677	.23612	.10653	.08923
#1	1.0584	1.1312	20.271	1.0355	.99622	.25616	.98118
#2	1.0654	1.1171	20.317	1.0400	.99955	.25577	.98242
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2000	1.2000	24.000	1.2040	1.2000	.33700	1.2040
Low	.80000	.80000	16.000	.79500	.80000	.12300	.79500
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	1.0295	1.0480	1.0353	1.0805	L.00254	L-.00181	L-.02489
SDev	.0027	.0031	.0044	.0044	.00043	.00508	.00259
%RSD	.26442	.29739	.42908	.40769	16.914	281.26	10.407
#1	1.0275	1.0458	1.0321	1.0774	L.00224	L.00179	L-.02306
#2	1.0314	1.0502	1.0384	1.0836	L.00285	L-.00540	L-.02672
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Low	LC Low
High	1.2000	1.2000	1.2000	1.2000	2.4000	2.4000	2.4000
Low	.80000	.80000	.80000	.80000	1.6000	1.6000	1.6000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.99668	1.0568	1.0111	L.00103	L.03188	719.91	
SDev	.00006	.0026	.0010	.00031	.01111	2.25	
%RSD	.00576	.24648	.10031	29.600	34.849	.31222	
#1	.99672	1.0549	1.0104	L.00125	L.03974	718.32	
#2	.99664	1.0586	1.0118	L.00082	L.02403	721.50	
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Low	NOCHECK	
High	1.2040	1.2040	1.2040	2.4000	2.4000		
Low	.79500	.79500	.79500	1.6000	1.6000		

Method: 6010C Sample Name: G9QD1 Operator: STL
Run Time: 05/06/05 19:27:47
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00037	-.00101	.00332	.00587	.00306	-.00201	.46904
SDev	.00296	.00075	.00150	.00095	.00168	.00128	.00118
%RSD	809.69	74.186	45.278	16.202	54.829	63.332	.25125
#1	-.00173	-.00048	.00438	.00520	.00425	-.00291	.46987
#2	.00246	-.00154	.00226	.00654	.00187	-.00111	.46820
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00027	.32599	-.00006	.00024	11.551	.00048	.00085
SDev	.00030	.00046	.00003	.00001	.010	.00027	.00020
%RSD	110.50	.14180	42.426	2.3996	.09053	56.184	22.903
#1	.00048	.32567	-.00008	.00025	11.559	.00067	.00072
#2	.00006	.32632	-.00004	.00024	11.544	.00029	.00099
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.08161	.03146	.82607	.04504	.00169	-.00003	.00073
SDev	.00131	.00341	.00146	.00009	.00030	.00019	.00064
%RSD	1.6064	10.827	.17685	.19058	17.678	604.64	87.875
#1	.08068	.03386	.82711	.04511	.00148	-.00016	.00028
#2	.08253	.02905	.82504	.04498	.00190	.00010	.00118
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00030	.05101	.00047	.04243	.00258	-.00172	-.01250
SDev	.00018	.00003	.00076	.00003	.00016	.00007	.01830
%RSD	59.797	.05629	160.82	.07877	6.1021	3.8801	146.34
#1	-.00018	.05099	.00101	.04246	.00269	-.00176	.00043
#2	-.00043	.05103	-.00006	.04241	.00247	-.00167	-.02544
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00502	-.00032	-.00009	.00128	.07056	H643.74
SDev	.00013	.00029	.00173	.00010	.01157	.40
%RSD	2.6668	90.081	1869.8	8.0050	16.391	.06222
#1	.00492	-.00053	-.00131	.00135	.07874	H643.46
#2	.00511	-.00012	.00113	.00120	.06238	H644.02
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9QD1S Operator: STL
Run Time: 05/06/05 19:32:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

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Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.49548	.48687	.47386	.48817	2.0526	2.0228	2.6435
SDev	.00486	.00430	.00676	.00313	.0206	.0179	.0156
%RSD	.98094	.88218	1.4258	.64137	1.0054	.88242	.58893
#1	.49204	.48383	.46908	.48596	2.0380	2.0102	2.6325
#2	.49891	.48990	.47864	.49038	2.0672	2.0354	2.6545
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	2.0043	2.4211	.05440	.04906	60.918	.19477	.47767
SDev	.0093	.0001	.00031	.00040	.430	.00161	.00255
%RSD	.46220	.00613	.57388	.81111	.70619	.82849	.53495
#1	1.9977	2.4212	.05418	.04878	60.614	.19363	.47586
#2	2.0108	2.4210	.05462	.04935	61.222	.19591	.47948
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.26122	1.0834	50.058	.54359	.48421	.05035	1.8920
SDev	.00036	.0057	.402	.00260	.00280	.00006	.0145
%RSD	.13877	.52715	.80261	.47816	.57900	.12674	.76610
#1	.26096	1.0794	49.774	.54176	.48223	.05031	1.8817
#2	.26148	1.0875	50.342	.54543	.48619	.05040	1.9022
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.49819	.53401	1.0164	1.0964	.00220	.00358	-.02925
SDev	.00265	.00330	.0068	.0013	.00048	.00019	.00588
%RSD	.53166	.61844	.67084	.11886	21.847	5.3851	20.088
#1	.49632	.53167	1.0116	1.0954	.00186	.00344	-.03341
#2	.50007	.53634	1.0212	1.0973	.00254	.00372	-.02510
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.48341	2.0327	.49261	.00296	.03388	H735.87	
SDev	.00434	.0188	.00467	.00003	.04943	2.78	
%RSD	.89744	.92378	.94843	1.1498	145.89	.37844	

#1	.48034	2.0194	.48931	.00294	-.00107	H733.90
#2	.48647	2.0460	.49591	.00298	.06884	H737.84

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9QD1D Operator: STL
Run Time: 05/06/05 19:36:31
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.48792	.48731	.47987	.48241	2.0562	2.0206	2.6326
SDev	.00034	.00111	.00172	.00303	.0021	.0121	.0067
%RSD	.07024	.22700	.35938	.62820	.10077	.59657	.25377
#1	.48817	.48653	.47865	.48027	2.0576	2.0121	2.6278
#2	.48768	.48809	.48109	.48455	2.0547	2.0291	2.6373
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.9946	2.3951	.05414	.04886	60.673	.19437	.47467
SDev	.0046	.0057	.00017	.00004	.182	.00069	.00150
%RSD	.23185	.23780	.31303	.08748	.30065	.35429	.31496
#1	1.9914	2.3910	.05402	.04883	60.544	.19388	.47361
#2	1.9979	2.3991	.05426	.04889	60.802	.19486	.47572

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.25863	1.0640	49.897	.54051	.48238	.04887	1.8869
SDev	.00061	.0056	.140	.00124	.00033	.00047	.0073
%RSD	.23776	.52400	.28109	.22944	.06801	.96941	.38644
#1	.25820	1.0679	49.798	.53963	.48215	.04920	1.8818
#2	.25906	1.0600	49.996	.54139	.48261	.04853	1.8921

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.49489	.52942	1.0119	1.0877	.00300	-.00230	-.00322
SDev	.00140	.00143	.0035	.0028	.00054	.00239	.00148
%RSD	.28234	.27028	.34242	.25939	17.903	103.59	46.062

#1	.49390	.52840	1.0095	1.0857	.00262	-.00062	-.00427
#2	.49588	.53043	1.0144	1.0897	.00338	-.00399	-.00217
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.48156	2.0325	.48772	.00272	.07775	H728.10	
SDev	.00260	.0073	.00014	.00003	.00584	1.88	
%RSD	.53900	.36165	.02866	1.2515	7.5166	.25823	
#1	.47973	2.0273	.48762	.00274	.07362	H726.77	
#2	.48340	2.0377	.48782	.00270	.08188	H729.43	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9QD1V 5X Operator: STL
Run Time: 05/06/05 19:40:53
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00150	.00206	.00069	-.00065	.00199	.00019	.10501
SDev	.00019	.00057	.00119	.00195	.00061	.00161	.00333
%RSD	12.345	27.643	172.69	301.20	30.580	866.71	3.1751
#1	-.00137	.00166	.00153	-.00202	.00156	.00133	.10265
#2	-.00163	.00246	-.00015	.00073	.00242	-.00095	.10736
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00079	.06797	-.00004	.00006	2.4178	.00053	.00007
SDev	.00025	.00018	.00004	.00003	.0026	.00012	.00053
%RSD	31.504	.26720	97.905	53.688	.10813	22.744	779.64
#1	.00097	.06809	-.00007	.00003	2.4159	.00044	-.00031
#2	.00062	.06784	-.00001	.00008	2.4196	.00061	.00044
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00164	.00614	.17317	.00971	-.00023	-.00018	.00211
SDev	.00001	.00744	.00438	.00010	.00033	.00056	.00140
%RSD	.84834	121.25	2.5310	1.0631	141.42	309.39	66.705

#1	.00165	.00088	.17007	.00964	-.00046	-.00058	.00310
#2	.00163	.01140	.17627	.00978	-.00000	.00021	.00111
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00002	.00998	.00115	.00882	.00205	.00001	.00300
SDev	.00050	.00011	.00027	.00000	.00112	.00298	.01338
%RSD	2024.6	1.1229	23.531	.00060	54.861	31085.	446.38
#1	-.00038	.00990	.00096	.00882	.00125	-.00210	-.00647
#2	.00033	.01006	.00134	.00882	.00284	.00212	.01246
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	-.00020	.00079	-.00032	.00017	.06115	102.64	
SDev	.00090	.00087	.00007	.00024	.03259	.82	
%RSD	447.88	111.14	20.759	141.42	53.295	.79427	
#1	-.00084	.00140	-.00036	-.00000	.03810	102.06	
#2	.00044	.00017	-.00027	.00034	.08419	103.21	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9QEW Operator: STL
Run Time: 05/06/05 19:45:15
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00076	.00054	.00380	.00529	.00592	-.00247	.98835
SDev	.00029	.00169	.00004	.00051	.00116	.00028	.00241
%RSD	38.677	315.01	1.1463	9.6602	19.609	11.371	.24361
#1	.00055	-.00066	.00383	.00565	.00510	-.00267	.98665
#2	.00097	.00173	.00376	.00493	.00674	-.00227	.99005
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00068	.15952	-.00013	.00037	2.2397	.00105	.00089
SDev	.00118	.00020	.00001	.00004	.0017	.00014	.00024
%RSD	173.59	.12420	10.348	11.540	.07782	13.445	27.189

#1	.00016	.15938	-.00014	.00034	2.2385	.00115	.00106
#2	-.00152	.15966	-.00012	.00040	2.2409	.00095	.00072
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00060	.01274	.23141	.02503	.00122	.00046	.00003
SDev	.00000	.00602	.00018	.00002	.00006	.00022	.00037
%RSD	.70417	47.251	.07892	.06287	4.8766	47.338	1114.9
#1	.00060	.01700	.23128	.02504	.00127	.00062	.00029
#2	.00060	.00849	.23154	.02502	.00118	.00031	-.00023
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00035	.02399	-.00013	.01387	.00375	.00130	.00518
SDev	.00004	.00003	.00042	.00000	.00097	.00119	.00277
%RSD	10.024	.12990	317.78	.00025	25.742	91.350	53.413
#1	.00038	.02397	.00016	.01387	.00307	.00215	.00714
#2	.00033	.02401	-.00042	.01387	.00443	.00046	.00323
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00479	.00032	.00069	.00070	.01883	H663.89
SDev	.00036	.00057	.00076	.00010	.00217	.68
%RSD	7.4143	176.93	110.70	14.630	11.549	.10292
#1	.00504	-.00008	.00015	.00077	.02037	H663.41
#2	.00454	.00073	.00122	.00063	.01729	H664.37
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/06/05 19:49:38
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	4.0215	3.9947	3.9796	3.9752	4.0554	4.0509	39.562
SDev	.0083	.0029	.0015	.0024	.0010	.0160	.175
%RSD	.20739	.07164	.03758	.06085	.02370	.39477	.44256

#1	4.0156	3.9967	3.9785	3.9735	4.0561	4.0396	39.438
#2	4.0274	3.9927	3.9806	3.9769	4.0547	4.0622	39.685
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.0716	4.2598	4.2671	4.0373	20.414	3.9443	3.9711
SDev	.0128	.0203	.0185	.0112	.070	.0145	.0123
%RSD	.31485	.47709	.43342	.27674	.34435	.36797	.31085
#1	4.0626	4.2454	4.2540	4.0294	20.364	3.9340	3.9623
#2	4.0807	4.2741	4.2802	4.0452	20.464	3.9545	3.9798
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.0256	41.552	20.031	4.1081	3.9744	1.0124	3.9024
SDev	.0192	.158	.055	.0148	.0134	.0037	.0182
%RSD	.47589	.38114	.27534	.36119	.33769	.36820	.46565
#1	4.0120	41.440	19.992	4.0976	3.9649	1.0098	3.8895
#2	4.0391	41.664	20.070	4.1186	3.9839	1.0151	3.9152
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.0293	4.0132	4.1076	4.2188	4.1410	Q3.3598	4.0735
SDev	.0161	.0131	.0177	.0251	.0093	.0117	.0269
%RSD	.39865	.32622	.43116	.59468	.22379	.34913	.66132
#1	4.0180	4.0039	4.0951	4.2011	4.1344	Q3.3515	4.0544
#2	4.0407	4.0224	4.1201	4.2366	4.1475	Q3.3681	4.0925
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	3.9766	4.0524	4.0126	4.1478	3.7241	42.506	
SDev	.0021	.0103	.0046	.0175	.0014	.024	
%RSD	.05310	.25532	.11489	.42097	.03814	.05544	
#1	3.9752	4.0451	4.0093	4.1354	3.7251	42.490	
#2	3.9781	4.0597	4.0158	4.1601	3.7231	42.523	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000	

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Range	10.000	10.000	10.000	10.000	10.000	10.000	
Method: 6010C	Sample Name: CCB				Operator: STL		
Run Time: 05/06/05 19:54:02							
Comment:							
Mode: CONC Corr. Factor: 1							
Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00025	.00266	.00030	.00189	.00072	.00235	.02619
SDev	.00088	.00130	.00108	.00105	.00161	.00197	.00039
%RSD	354.02	48.880	356.70	55.541	224.48	84.041	1.5008
#1	-.00037	.00357	.00107	.00115	.00185	.00374	.02647
#2	.00087	.00174	-.00046	.00263	-.00042	.00095	.02591
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00268	.00084	.00088	.00093	.00698	.00068	.00106
SDev	.00044	.00008	.00002	.00007	.00000	.00006	.00019
%RSD	16.367	9.8209	2.0203	7.7523	.00000	9.2744	18.258
#1	.00237	.00078	.00087	.00088	.00698	.00072	.00092
#2	.00299	.00090	.00090	.00098	.00698	.00063	.00119
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00062	.01617	.00400	.00082	.00105	.00038	.00326
SDev	.00012	.00549	.00000	.00002	.00012	.00033	.00164
%RSD	19.301	33.977	.00000	2.0227	11.314	88.546	50.376
#1	.00071	.01228	.00400	.00081	.00097	.00014	.00210
#2	.00054	.02005	.00400	.00083	.00114	.00061	.00442
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00098	.00284	.00479	.00090	.00227	.00336	.00055
SDev	.00021	.00006	.00181	.00003	.00059	.00037	.00115
%RSD	21.806	2.0862	37.721	3.7222	25.924	11.040	207.88
#1	.00083	.00288	.00607	.00088	.00269	.00362	.00136
#2	.00114	.00280	.00351	.00093	.00186	.00310	-.00026
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000

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Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00136	.00180	.00105	.00135	.01655	Q.33986	
SDev	.00034	.00185	.00016	.00027	.00584	.12252	
%RSD	24.992	102.62	14.811	20.203	35.255	36.049	
#1	.00112	.00311	.00094	.00154	.01243	Q.42650	
#2	.00160	.00050	.00116	.00116	.02068	Q.25323	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.00300	.00400	.06000	.05000	.50000	.25000	

Method: 6010C Sample Name: G9QE1 Operator: STL
Run Time: 05/06/05 19:58:24
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00427	.00231	.00990	.00599	.00850	-.00266	.54847
SDev	.00368	.00163	.00187	.00078	.00393	.00057	.00310
%RSD	86.008	70.757	18.873	12.968	46.305	21.277	.56519
#1	-.00687	.00346	.01122	.00544	.01128	-.00306	.54628
#2	-.00167	.00115	.00858	.00654	.00571	-.00226	.55066
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00022	.23672	-.00018	.00025	9.3607	.00165	.00071
SDev	.00071	.00055	.00001	.00014	.0253	.00067	.00057
%RSD	324.91	.23015	4.8765	55.197	.26998	40.725	80.521
#1	.00072	.23634	-.00019	.00035	9.3428	.00213	.00112
#2	-.00028	.23711	-.00018	.00015	9.3786	.00118	.00031
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00243	.02071	.63728	.02514	.00108	.00039	.00089
SDev	.00055	.00840	.00402	.00001	.00069	.00057	.00338
%RSD	22.439	40.536	.63045	.02918	63.778	146.71	378.48
#1	.00282	.02665	.63444	.02514	.00156	.00079	.00328
#2	.00204	.01478	.64012	.02515	.00059	-.00001	-.00150
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000

Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00033	.03038	.00222	.04174	.00458	.00166	.02158
SDev	.00029	.00018	.00058	.00000	.00074	.00310	.03283
%RSD	87.473	.59848	26.124	.00121	16.232	185.97	152.11
#1	.00054	.03026	.00263	.04174	.00511	.00385	.04480
#2	.00013	.03051	.00181	.04174	.00406	-.00052	-.00163
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00729	.00106	-.00208	.00101	-.03917	H658.69
SDev	.00010	.00093	.00191	.00020	.00157	1.51
%RSD	1.4232	88.266	91.639	20.203	3.9982	.22964
#1	.00737	.00172	-.00343	.00116	-.03806	H657.62
#2	.00722	.00040	-.00073	.00087	-.04027	H659.76
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9QE2 Operator: STL
Run Time: 05/06/05 20:02:46
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00156	-.00043	.00302	.00465	.00400	-.00017	.79577
SDev	.00230	.00149	.00054	.00006	.00120	.00051	.00181
%RSD	147.08	347.51	18.041	1.2832	30.103	289.64	.22762
#1	-.00319	-.00148	.00340	.00460	.00485	.00018	.79449
#2	.00006	.00062	.00263	.00469	.00315	-.00053	.79705
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00020	.14843	-.00021	.00045	2.7045	.00092	.00051
SDev	.00198	.00026	.00001	.00013	.0015	.00045	.00058
%RSD	993.03	.17796	4.1596	29.273	.05370	49.395	112.85
#1	-.00120	.14862	-.00022	.00036	2.7035	.00060	.00010
#2	.00160	.14825	-.00021	.00054	2.7055	.00124	.00092
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000

Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00135	.01296	.28991	.03486	.00141	.00039	.00110
SDev	.00064	.00739	.00402	.00008	.00021	.00056	.00072
%RSD	47.102	56.999	1.3859	.22488	14.775	143.38	64.854
#1	.00090	.00774	.28707	.03481	.00127	-.00001	.00161
#2	.00180	.01818	.29275	.03492	.00156	.00078	.00060
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00005	.02471	.00000	.01776	.00296	.00149	.00137
SDev	.00025	.00011	.00061	.00000	.00037	.00361	.01469
%RSD	502.63	.46056	96676.	.00016	12.576	243.15	1072.4
#1	-.00013	.02463	-.00043	.01776	.00269	-.00107	-.00902
#2	.00023	.02479	.00043	.01776	.00322	.00404	.01176
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00410	.00122	-.00119	.00055	-.04482	H582.25	
SDev	.00014	.00074	.00203	.00017	.02295	.13	
%RSD	3.4463	60.680	171.21	30.744	51.211	.02185	
#1	.00420	.00174	-.00262	.00043	-.06104	H582.16	
#2	.00400	.00069	.00025	.00067	-.02859	H582.34	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9QE6 Operator: STL
Run Time: 05/06/05 20:07:08
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00516	-.00302	-.00200	.00653	.00226	.00103	.43080
SDev	.00929	.00317	.00795	.00406	.00853	.00496	.00817
%RSD	180.12	104.79	397.26	62.214	378.06	481.34	1.8972
#1	.01173	-.00526	-.00762	.00940	-.00378	.00453	.43658
#2	-.00141	-.00078	.00362	.00366	.00829	-.00247	.42502
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00

Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00100	.31908	-.00020	.00077	5.9782	.00081	.00133
SDev	.00026	.00003	.00004	.00028	.0206	.00028	.00116
%RSD	26.081	.01035	20.203	36.623	.34499	34.482	87.110
#1	.00118	.31911	-.00017	.00097	5.9928	.00061	.00215
#2	.00081	.31906	-.00023	.00057	5.9636	.00100	.00051
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00095	.04257	.69423	.04321	.00158	.00119	-.00275
SDev	.00049	.02437	.00822	.00018	.00104	.00142	.00156
%RSD	52.154	57.249	1.1838	.42343	65.997	119.56	56.805
#1	.00060	.05980	.70004	.04334	.00232	.00220	-.00385
#2	.00129	.02533	.68842	.04308	.00084	.00018	-.00164
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00075	.05301	-.00043	.03603	.00345	.00360	-.00999
SDev	.00118	.00019	.00014	.00017	.00257	.00540	.01409
%RSD	155.62	.36591	33.471	.46561	74.530	149.79	141.08
#1	.00159	.05315	-.00033	.03615	.00163	.00742	-.01995
#2	-.00008	.05287	-.00053	.03591	.00527	-.00021	-.00002
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00369	.00144	.00244	.00168	-.09509	H662.90
SDev	.00006	.00046	.00515	.00027	.02613	1.26
%RSD	1.6693	32.201	211.25	16.162	27.476	.19050
#1	.00373	.00177	.00607	.00188	-.07662	H663.79
#2	.00364	.00111	-.00120	.00149	L-.11357	H662.01
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

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Method: 6010C Sample Name: G9QE8 Operator: STL
Run Time: 05/06/05 20:11:29
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00037	.00112	.00223	.00536	.00627	.00023	.12352
SDev	.00339	.00046	.00087	.00019	.00587	.00081	.00058
%RSD	919.56	41.082	39.032	3.5778	93.671	354.99	.47032
#1	-.00277	.00145	.00284	.00549	.01042	.00080	.12393
#2	.00203	.00080	.00161	.00522	.00212	-.00035	.12311
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00134	.11513	-.00019	.00097	166.36	.00167	.00167
SDev	.00001	.00025	.00003	.00004	.16	.00011	.00029
%RSD	.75089	.21510	14.142	4.2761	.09691	6.3793	17.402
#1	.00133	.11530	-.00017	.00094	166.48	.00174	.00147
#2	.00134	.11495	-.00021	.00100	166.25	.00159	.00188
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00242	.05224	2.8585	.13119	.00297	.00016	-.00043
SDev	.00028	.00838	.0038	.00031	.00021	.00036	.00022
%RSD	11.578	16.033	.13416	.23542	7.0209	221.83	51.620
#1	.00261	.04631	2.8612	.13141	.00283	-.00009	-.00059
#2	.00222	.05816	2.8558	.13097	.00312	.00041	-.00027
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00081	.04697	.00059	.51631	.00417	-.00005	-.00005
SDev	.00046	.00009	.00053	.00077	.00027	.00010	.00916
%RSD	57.255	.19530	90.718	.14921	6.4693	185.99	18149.
#1	.00048	.04703	.00096	.51685	.00398	.00002	.00643
#2	.00114	.04690	.00021	.51576	.00436	-.00012	-.00653
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00431	.00224	.00013	.00079	-.02204	H626.97
SDev	.00042	.00250	.00211	.00003	.00327	1.51
%RSD	9.6708	111.51	1653.8	4.2855	14.853	.24126
#1	.00461	.00401	-.00136	.00077	-.02435	H628.04
#2	.00402	.00047	.00162	.00082	-.01972	H625.90
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9QE9 Operator: STL
Run Time: 05/06/05 20:15:51
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00110	.00032	.00464	.00824	.00698	-.00020	.28105
SDev	.00496	.00177	.00420	.00260	.00553	.00256	.00306
%RSD	451.97	560.38	90.579	31.496	79.229	1271.2	1.0886
#1	.00461	-.00094	.00167	.01008	.00307	.00161	.27888
#2	-.00241	.00157	.00760	.00641	.01089	-.00201	.28321
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00026	.15039	-.00016	.00089	60.815	.00109	.00147
SDev	.00064	.00036	.00002	.00000	.299	.00040	.00000
%RSD	246.12	.24150	13.865	.08645	.49198	36.395	.19016
#1	.00019	.15014	-.00015	.00089	60.603	.00081	.00147
#2	-.00071	.15065	-.00018	.00089	61.026	.00137	.00147
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00349	.03075	2.7974	.12406	.00224	.00001	.00017
SDev	.00057	.00921	.0168	.00047	.00012	.00070	.00137
%RSD	16.268	29.945	.60061	.37915	5.3367	5893.2	807.35
#1	.00309	.03726	2.7856	.12373	.00232	.00051	-.00080
#2	.00389	.02424	2.8093	.12439	.00215	-.00048	.00113
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00025	.04504	.00018	.20925	.00417	-.00134	-.01216
SDev	.00039	.00024	.00103	.00063	.00091	.00308	.01718
%RSD	154.37	.52965	566.72	.30252	21.903	228.94	141.27
#1	.00053	.04487	-.00054	.20881	.00482	.00083	-.02430
#2	-.00002	.04521	.00091	.20970	.00353	-.00352	-.00001
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00704	.00219	.00084	.00108	.00204	H682.35
SDev	.00033	.00013	.00272	.00003	.01220	2.67
%RSD	4.7383	6.0722	324.86	3.1427	597.64	.39156
#1	.00728	.00210	.00276	.00111	-.00659	H680.46
#2	.00681	.00228	-.00109	.00106	.01067	H684.24
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9QFC Operator: STL
Run Time: 05/06/05 20:20:13
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00095	-.00023	.00266	.00712	.00267	.00069	.52360
SDev	.00056	.00013	.00015	.00028	.00236	.00078	.00764
%RSD	59.002	55.230	5.6721	3.9909	88.431	112.36	1.4593
#1	.00135	-.00014	.00256	.00732	.00100	.00124	.51819
#2	.00055	-.00032	.00277	.00692	.00434	.00014	.52900
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00024	.04958	-.00022	.00020	1.2990	.00022	.00085
SDev	.00050	.00003	.00003	.00020	.0081	.00032	.00000
%RSD	204.28	.06659	14.347	99.134	.62615	150.02	.26925
#1	-.00060	.04956	-.00024	.00006	1.2932	-.00001	.00085
#2	.00011	.04960	-.00020	.00034	1.3047	.00045	.00085
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

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Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00055	.00161	.11015	.01235	.00103	.00022	-.00091
SDev	.00056	.00560	.00767	.00018	.00033	.00053	.00213
%RSD	102.12	347.99	6.9633	1.4276	31.748	239.47	233.40
#1	.00015	-.00235	.10473	.01222	.00080	-.00015	-.00242
#2	.00094	.00556	.11558	.01247	.00127	.00060	.00059
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00005	.01045	-.00021	.01272	.00273	.00046	-.00197
SDev	.00061	.00008	.00031	.00003	.00112	.00138	.01584
%RSD	1221.7	.80083	144.23	.26311	41.126	297.18	805.26
#1	-.00038	.01039	-.00043	.01270	.00194	-.00051	-.01317
#2	.00048	.01051	.00000	.01274	.00352	.00144	.00923
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00564	.00135	.00056	.00043	-.03645	H652.14
SDev	.00014	.00027	.00042	.00014	.04223	2.52
%RSD	2.4712	19.807	74.951	31.427	115.83	.38585
#1	.00574	.00116	.00085	.00034	-.06631	H650.36
#2	.00554	.00154	.00026	.00053	-.00660	H653.92
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9QFF Operator: STL
Run Time: 05/06/05 20:24:34
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00025	.00063	.00294	.00482	.00492	.00037	.21067
SDev	.00394	.00227	.00208	.00184	.00174	.00040	.00963
%RSD	1547.5	358.98	70.806	38.230	35.404	107.76	4.5691
#1	.00253	-.00097	.00147	.00612	.00369	.00065	.20386
#2	-.00304	.00224	.00441	.00352	.00616	.00009	.21747
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00086	.10715	-.00022	.00051	4.2970	.00008	.00027
SDev	.00028	.00073	.00001	.00004	.0447	.00066	.00034
%RSD	32.067	.67792	5.9754	8.2933	1.0410	804.64	122.43
#1	-.00106	.10664	-.00023	.00048	4.2653	-.00038	.00004
#2	-.00067	.10767	-.00021	.00054	4.3286	.00055	.00051
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00156	-.00202	.51383	.02780	.00055	-.00035	-.00087
SDev	.00060	.00152	.01096	.00040	.00018	.00003	.00197
%RSD	38.509	75.151	2.1325	1.4283	32.636	9.2066	225.44
#1	.00114	-.00309	.50608	.02751	.00042	-.00037	-.00227
#2	.00199	-.00095	.52157	.02808	.00067	-.00033	.00052
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00023	.02127	-.00051	.01739	.00140	-.00217	-.00820
SDev	.00022	.00032	.00057	.00013	.00150	.00006	.01650
%RSD	95.564	1.5039	112.31	.76830	106.65	2.5998	201.36
#1	-.00038	.02105	-.00091	.01730	.00035	-.00213	-.01987
#2	-.00007	.02150	-.00010	.01749	.00246	-.00221	.00347
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00419	.00189	.00004	.00034	-.05623	H612.51
SDev	.00054	.00031	.00187	.00000	.02873	5.40
%RSD	12.793	16.608	4618.8	.00000	51.096	.88242
#1	.00457	.00167	.00136	.00034	-.07654	H608.68
#2	.00381	.00211	-.00128	.00034	-.03591	H616.33
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9RA9B Operator: STL
Run Time: 05/06/05 20:28:56
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00147	-.00037	-.00164	.00007	-.00035	-.00027	H.26220
SDev	.00273	.00181	.00165	.00196	.00460	.00013	.00083
%RSD	185.17	493.75	100.52	2762.2	1330.8	47.607	.31539
#1	-.00341	.00091	-.00047	-.00131	.00291	-.00036	H.26279
#2	.00046	-.00165	-.00280	.00145	-.00360	-.00018	H.26162
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC High
High							.20000
Low							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L-.00056	.04257	-.00026	-.00003	H.41532	-.00004	.00010
SDev	.00074	.00013	.00001	.00001	.00174	.00020	.00019
%RSD	132.15	.31022	5.2377	20.825	.41965	568.89	188.41
#1	L-.00108	.04248	-.00025	-.00003	H.41409	.00011	-.00003
#2	L-.00004	.04267	-.00026	-.00003	H.41655	-.00018	.00024
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	.00700	.20000	.20000	.00500	.25000	.01000	.05000
Low	.00700	-.20000	-.20000	-.00500	-.25000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00034	-.00688	.07658	.00036	.00030	-.00024	-.00020
SDev	.00061	.00070	.00000	.00002	.00018	.00012	.00086
%RSD	178.65	10.149	.00000	5.3947	60.609	49.807	427.79
#1	.00009	-.00737	.07658	.00035	.00017	-.00032	.00041
#2	-.00077	-.00638	.07658	.00037	.00042	-.00016	-.00081
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.02500	.05000	.25000	.01500	.04000	.01000	.01000
Low	-.02500	-.05000	-.25000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00020	H.01088	-.00059	.00111	.00205	-.00083	-.00866
SDev	.00010	.00012	.00053	.00000	.00252	.00079	.01324
%RSD	51.345	1.0532	90.420	.00314	122.87	95.341	152.93
#1	-.00028	H.01080	-.00021	.00111	.00383	-.00139	.00070
#2	-.00013	H.01096	-.00097	.00111	.00027	-.00027	-.01802
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.04000	.05000	.10000	.50000	.50000
Low	-.05000	-.01000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	-.00050	-.00029	-.00111	.00005	-.03349	H12.875
SDev	.00076	.00145	.00122	.00007	.00678	.066
%RSD	151.69	491.49	110.22	141.42	20.253	.51239

#1	-.00103	.00073	-.00197	.00010	-.03829	H12.828
#2	.00004	-.00132	-.00024	-.00000	-.02870	H12.921
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC High
High	.00300	.00500	.01000	.05000		.25000
Low	-.00300	-.00500	-.01000	-.05000		-.25000

Method: 6010C Sample Name: G9WJRC Operator: STL
Run Time: 05/06/05 20:33:18
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	1.0136	1.0165	1.0052	.99703	1.0613	1.0298	H1.3037
SDev	.0066	.0023	.0014	.00690	.0027	.0066	.0037
%RSD	.65261	.22588	.13726	.69205	.25255	.64314	.28439
#1	1.0090	1.0181	1.0062	.99215	1.0632	1.0251	H1.3011
#2	1.0183	1.0149	1.0043	1.0019	1.0594	1.0345	H1.3064
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC High
High							1.2000
Low							.80000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.0272	1.1465	1.1225	1.0325	21.152	1.0121	1.0084
SDev	.0038	.0001	.0002	.0012	.020	.0001	.0022
%RSD	.36549	.01152	.01351	.11397	.09476	.00710	.21542
#1	1.0245	1.1464	1.1224	1.0317	21.138	1.0122	1.0069
#2	1.0298	1.1466	1.1226	1.0333	21.166	1.0121	1.0099
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2040	1.2040	1.2000	1.2040	24.000	1.2040	1.2000
Low	.79500	.79500	.80000	.79500	16.000	.79500	.80000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.0271	1.1319	20.211	1.0506	1.0099	.25269	.99427
SDev	.0008	.0038	.025	.0005	.0035	.00014	.00174
%RSD	.07618	.33882	.12198	.05090	.34849	.05622	.17488
#1	1.0266	1.1291	20.193	1.0502	1.0074	.25279	.99304
#2	1.0277	1.1346	20.228	1.0510	1.0124	.25259	.99550
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2000	1.2000	24.000	1.2040	1.2000	.33700	1.2040
Low	.80000	.80000	16.000	.79500	.80000	.12300	.79500

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	1.0296	1.0275	1.0605	1.0934	L.00156	L-.00293	L-.00594
SDev	.0012	.0008	.0010	.0008	.00096	.00063	.01536
%RSD	.11794	.07320	.09520	.07687	61.828	21.496	258.57

#1	1.0287	1.0270	1.0598	1.0928	L.00224	L-.00248	L.00492
#2	1.0304	1.0280	1.0612	1.0940	L.00088	L-.00337	L-.01680
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Low	LC Low
High	1.2000	1.2000	1.2000	1.2000	2.4000	2.4000	2.4000
Low	.80000	.80000	.80000	.80000	1.6000	1.6000	1.6000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.99976	1.0403	1.0146	L.00096	L.01741	30.778	
SDev	.00414	.0035	.0036	.00007	.00894	.184	
%RSD	.41437	.33885	.35952	7.0711	51.336	.59711	
#1	.99683	1.0378	1.0120	L.00091	L.01109	30.648	
#2	1.0027	1.0428	1.0172	L.00101	L.02373	30.908	
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Low	NOCHECK	
High	1.2040	1.2040	1.2040	2.4000	2.4000		
Low	.79500	.79500	.79500	1.6000	1.6000		

Method: 6010C Sample Name: G9D8V Operator: STL
Run Time: 05/06/05 20:37:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.02009	.00934	.05408	.05403	.02406	.00138	.04791
SDev	.00155	.00133	.00228	.00143	.00006	.00203	.00149
%RSD	7.7076	14.281	4.2088	2.6434	.25458	147.71	3.1190
#1	.01899	.00840	.05247	.05504	.02410	.00281	.04897
#2	.02118	.01028	.05569	.05302	.02401	-.00006	.04685
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00030	2.7643	.00109	.01180	14.803	1.0631	.00359
SDev	.00088	.0041	.00013	.00001	.037	.0021	.00019
%RSD	289.04	.14990	12.262	.09923	.24920	.19457	5.3155
#1	-.00092	2.7614	.00100	.01181	14.777	1.0616	.00373
#2	.00032	2.7672	.00119	.01179	14.829	1.0645	.00346
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.32494	2.4887	.73310	.03099	.81839	.00057	-.00408
SDev	.00030	.0041	.00365	.00020	.00089	.00059	.00034
%RSD	.09148	.16456	.49823	.64469	.10933	102.86	8.2109

#1	.32473	2.4916	.73051	.03085	.81776	.00099	-.00384
#2	.32515	2.4858	.73568	.03113	.81903	.00016	-.00432
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00291	.47464	.87065	.11395	.01467	-.00135	.01238
SDev	.00022	.00154	.00218	.00023	.00032	.00187	.01535
%RSD	7.4244	.32557	.25004	.20596	2.1730	138.73	123.97
#1	.00307	.47355	.86911	.11379	.01489	-.00003	.02324
#2	.00276	.47574	.87219	.11412	.01444	-.00268	.00153
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.05405	.00893	.01651	.80923	L-.21665	H7565.1	
SDev	.00019	.00137	.00148	.00221	.00685	7.5	
%RSD	.36009	15.406	8.9460	.27339	3.1636	.09960	
#1	.05418	.00990	.01546	.80766	L-.22150	H7559.7	
#2	.05391	.00796	.01755	.81079	L-.21181	H7570.4	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/06/05 20:42:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	3.9934	3.9883	3.9628	3.9424	4.0382	4.0286	39.334
SDev	.0222	.0100	.0022	.0230	.0000	.0191	.049
%RSD	.55536	.25178	.05570	.58316	.00008	.47466	.12401
#1	3.9777	3.9954	3.9644	3.9262	4.0382	4.0151	39.300
#2	4.0091	3.9812	3.9612	3.9587	4.0382	4.0422	39.369
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.0426	4.2280	4.2261	4.0129	20.304	3.9180	3.9439
SDev	.0003	.0021	.0068	.0076	.041	.0086	.0061
%RSD	.00664	.04881	.16071	.18850	.20173	.21985	.15401

#1	4.0424	4.2266	4.2213	4.0076	20.275	3.9119	3.9396
#2	4.0428	4.2295	4.2309	4.0183	20.333	3.9241	3.9481
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.0043	41.299	19.909	4.0765	3.9528	1.0069	3.8819
SDev	.0010	.075	.047	.0067	.0065	.0015	.0027
%RSD	.02609	.18057	.23391	.16488	.16524	.14612	.06967
#1	4.0035	41.246	19.876	4.0718	3.9482	1.0058	3.8800
#2	4.0050	41.352	19.942	4.0813	3.9574	1.0079	3.8838
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	3.9975	3.9852	4.0850	4.1891	4.1109	Q3.3469	4.0703
SDev	.0054	.0087	.0080	.0111	.0056	.0011	.0192
%RSD	.13522	.21725	.19564	.26573	.13554	.03392	.47189
#1	3.9937	3.9791	4.0794	4.1812	4.1069	Q3.3461	4.0567
#2	4.0013	3.9913	4.0907	4.1970	4.1148	Q3.3477	4.0838
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	3.9492	4.0318	3.9917	4.1250	3.6568	41.490	
SDev	.0146	.0128	.0114	.0050	.0123	.226	
%RSD	.36968	.31631	.28681	.12212	.33755	.54513	
#1	3.9389	4.0228	3.9836	4.1214	3.6481	41.330	
#2	3.9595	4.0408	3.9998	4.1286	3.6656	41.650	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000	
Range	10.000	10.000	10.000	10.000	10.000	10.000	

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 05/06/05 20:46:28
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00045	.00182	.00023	.00100	.00273	.00238	.03002
SDev	.00397	.00240	.00085	.00115	.00015	.00062	.00167
%RSD	873.86	131.85	363.47	114.75	5.6205	26.063	5.5564

#1	.00326	.00012	-.00037	.00182	.00262	.00194	.02884
#2	-.00236	.00352	.00083	.00019	.00284	.00282	.03120
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00183	.00118	.00127	.00114	.00945	.00149	.00116
SDev	.00058	.00000	.00002	.00008	.00058	.00082	.00034
%RSD	31.902	.00000	1.4072	6.8980	6.1487	54.707	28.936
#1	.00142	.00118	.00128	.00119	.00904	.00092	.00092
#2	.00224	.00118	.00126	.00108	.00986	.00207	.00140
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00114	.01830	.00904	.00112	.00114	.00059	.00197
SDev	.00036	.00085	.00420	.00003	.00024	.00028	.00070
%RSD	31.632	4.6665	46.468	2.5917	20.951	47.771	35.399
#1	.00088	.01770	.00607	.00110	.00131	.00039	.00147
#2	.00139	.01891	.01201	.00114	.00097	.00078	.00246
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00121	.00312	.00482	.00117	.00212	.00361	.00725
SDev	.00032	.00000	.00131	.00007	.00145	.00096	.01585
%RSD	26.824	.03448	27.177	5.7742	68.124	26.515	218.62
#1	.00098	.00312	.00575	.00121	.00110	.00429	-.00396
#2	.00144	.00312	.00390	.00112	.00314	.00294	.01846
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00075	.00250	.00091	.00178	.05189	Q.86299	
SDev	.00049	.00047	.00185	.00027	.02190	.62672	
%RSD	64.967	18.619	203.29	15.289	42.203	72.622	
#1	.00109	.00217	.00222	.00197	.03641	Q.41983	
#2	.00040	.00283	-.00040	.00159	.06738	Q1.3061	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	
Value	.00000	.00000	.00000	.00000	.00000	.00000	

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Range	.00300	.00400	.06000	.05000	.50000	.25000

Method: 6010C Sample Name: G9D8V 10X Operator: STL
Run Time: 05/06/05 20:50:51
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00265	.00429	.00555	.00391	.00659	-.00131	.02588
SDev	.00056	.00144	.00112	.00111	.00051	.00141	.00282
%RSD	21.054	33.544	20.181	28.330	7.7365	108.03	10.892
#1	.00225	.00327	.00634	.00313	.00695	-.00230	.02389
#2	.00304	.00531	.00475	.00469	.00623	-.00031	.02788
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00013	.31226	-.00014	.00131	1.6995	.11684	.00042
SDev	.00007	.00059	.00005	.00007	.0081	.00037	.00019
%RSD	52.019	.19033	38.570	5.0662	.47858	.32001	45.876
#1	.00017	.31184	-.00018	.00126	1.6937	.11658	.00028
#2	.00008	.31268	-.00010	.00135	1.7052	.11711	.00056
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.03356	.27964	.07993	.00312	.09142	.00036	-.00032
SDev	.00016	.00319	.00438	.00010	.00045	.00014	.00151
%RSD	.47394	1.1398	5.4832	3.1629	.48934	37.866	468.93
#1	.03367	.27739	.07684	.00305	.09174	.00046	-.00139
#2	.03345	.28190	.08303	.00319	.09111	.00027	.00075
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00041	.05121	.09735	.01269	.00315	.00080	.00516
SDev	.00018	.00024	.00030	.00000	.00075	.00100	.00278
%RSD	44.114	.46343	.30813	.00128	23.886	125.73	53.866
#1	.00053	.05105	.09714	.01269	.00261	.00151	.00712
#2	.00028	.05138	.09756	.01269	.00368	.00009	.00319
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000

Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00445	.00132	.00319	.08828	-.00912	H715.20
SDev	.00037	.00077	.00085	.00027	.01693	2.76
%RSD	8.2219	58.231	26.641	.30845	185.72	.38543
#1	.00420	.00078	.00259	.08809	-.02109	H713.25
#2	.00471	.00187	.00380	.08847	.00286	H717.15
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9D81 Operator: STL
Run Time: 05/06/05 20:55:13
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00042	.00154	.00008	.00197	.00149	-.00016	1.3992
SDev	.00154	.00095	.00081	.00113	.00112	.00189	.0055
%RSD	368.78	61.631	966.65	57.376	74.620	1183.3	.39213
#1	-.00067	.00087	.00066	.00278	.00228	-.00149	1.3953
#2	.00151	.00221	-.00049	.00117	.00071	.00117	1.4031
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00001	.24493	-.00026	.00009	1.5469	.00539	.00041
SDev	.00010	.00033	.00000	.00001	.0044	.00002	.00005
%RSD	996.47	.13481	.00000	13.610	.28167	.29251	11.755
#1	.00006	.24470	-.00026	.00010	1.5438	.00538	.00038
#2	-.00008	.24516	-.00026	.00008	1.5500	.00540	.00044
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.01657	.02984	.78527	.00080	.00110	.00038	.00133
SDev	.00012	.00541	.00183	.00005	.00006	.00003	.00081
%RSD	.73633	18.129	.23257	6.0993	5.4393	7.4358	60.754
#1	.01666	.02602	.78398	.00077	.00105	.00036	.00076
#2	.01648	.03367	.78656	.00084	.00114	.00040	.00191
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000

Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00099	.04837	.00045	.00646	.00080	-.00036	-.00661
SDev	.00021	.00000	.00011	.00007	.00054	.00004	.00016
%RSD	21.784	.00368	25.142	1.0424	67.231	10.658	2.3931
#1	.00083	.04837	.00037	.00651	.00042	-.00034	-.00673
#2	.00114	.04837	.00053	.00641	.00118	-.00039	-.00650
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00134	.00039	.00079	.00118	.01685	H418.94
SDev	.00103	.00089	.00134	.00003	.00891	1.05
%RSD	76.354	226.91	169.88	2.8862	52.912	.24971
#1	.00207	-.00024	-.00016	.00116	.01054	H418.20
#2	.00062	.00102	.00174	.00120	.02315	H419.68

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9EA4 Operator: STL
Run Time: 05/06/05 20:59:35
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00026	.00081	-.00061	-.00027	.00268	-.00094	.68182
SDev	.00082	.00042	.00061	.00115	.00044	.00181	.00155
%RSD	319.43	51.687	99.040	425.75	16.613	193.02	.22723
#1	.00084	.00111	-.00018	.00054	.00299	-.00221	.68291
#2	-.00032	.00052	-.00104	-.00108	.00236	.00034	.68072
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00035	.22666	-.00020	.00008	1.5869	.00204	.00027
SDev	.00024	.00071	.00000	.00016	.0017	.00021	.00082
%RSD	68.737	.31320	2.1757	185.35	.10983	10.501	301.19
#1	.00018	.22716	-.00020	-.00003	1.5882	.00189	-.00031
#2	.00052	.22616	-.00021	.00020	1.5857	.00219	.00085
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000

Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00129	.01100	.37255	.00405	.00112	.00059	.00093
SDev	.00031	.00253	.00402	.00005	.00009	.00075	.00075
%RSD	24.022	23.011	1.0784	1.1229	8.0050	126.61	80.498
#1	.00107	.00921	.36971	.00402	.00105	.00006	.00040
#2	.00151	.01278	.37539	.00408	.00118	.00112	.00146
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00025	.04723	.00205	.00489	.00368	.00065	.00727
SDev	.00018	.00009	.00042	.00000	.00097	.00331	.01551
%RSD	70.729	.18945	20.518	.00071	26.351	507.07	213.46
#1	.00013	.04729	.00176	.00489	.00436	-.00169	-.00370
#2	.00038	.04717	.00235	.00489	.00299	.00299	.01824
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	-.00038	.00027	.00044	.00055	.01653	15.411	
SDev	.00097	.00106	.00069	.00017	.02327	.344	
%RSD	252.40	395.32	155.50	30.744	140.80	2.2322	
#1	.00030	-.00048	.00093	.00043	.00007	15.167	
#2	-.00107	.00102	-.00004	.00067	.03298	15.654	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9EA4 10X Operator: STL
Run Time: 05/06/05 21:03:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00168	.00110	.00038	-.00042	-.00017	.00210	.08257
SDev	.00332	.00080	.00393	.00189	.00501	.00196	.00242
%RSD	197.89	72.015	1036.4	449.80	2899.6	93.246	2.9260
#1	-.00403	.00167	.00316	-.00176	.00337	.00071	.08428
#2	.00067	.00054	-.00240	.00092	-.00371	.00348	.08086
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00

Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00011	.02248	.00002	-.00008	.19164	.00042	-.00010
SDev	.00019	.00005	.00000	.00004	.00087	.00043	.00000
%RSD	181.98	.22028	.00000	52.245	.45473	102.78	3.2644
#1	.00003	.02245	.00002	-.00011	.19102	.00073	-.00010
#2	-.00025	.02252	.00002	-.00005	.19225	.00011	-.00010
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00012	.00582	.03939	.00039	-.00051	-.00021	-.00001
SDev	.00076	.00438	.00183	.00004	.00054	.00003	.00083
%RSD	643.35	75.179	4.6368	9.1959	106.07	13.755	5594.8
#1	.00066	.00892	.04068	.00041	-.00089	-.00019	.00057
#2	-.00042	.00273	.03809	.00036	-.00013	-.00023	-.00060
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00002	.00765	.00051	.00050	.00216	-.00114	-.00104
SDev	.00014	.00006	.00012	.00000	.00214	.00002	.02336
%RSD	561.05	.78050	24.477	.00351	99.023	1.7528	2241.0
#1	-.00012	.00769	.00059	.00050	.00367	-.00116	.01548
#2	.00007	.00761	.00042	.00050	.00065	-.00113	-.01756
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	-.00015	.00134	-.00075	-.00010	.05262	2.3657	
SDev	.00005	.00036	.00195	.00007	.01001	.2733	
%RSD	30.765	27.061	259.38	70.711	19.035	11.553	
#1	-.00012	.00160	-.00213	-.00005	.05970	2.5590	
#2	-.00019	.00108	.00063	-.00014	.04553	2.1725	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

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Method: 6010C Sample Name: G9ECN Operator: STL
Run Time: 05/06/05 21:08:19
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00024	.00066	.02010	.02067	.00229	-.00137	.69251
SDev	.00370	.00019	.00230	.00003	.00193	.00367	.00053
%RSD	1543.6	29.264	11.423	.14185	84.203	268.46	.07611
#1	-.00286	.00080	.02173	.02065	.00366	-.00396	.69213
#2	.00238	.00053	.01848	.02069	.00093	.00123	.69288
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00042	.07086	-.00014	.00244	1.0186	.00217	.00020
SDev	.00002	.00012	.00000	.00010	.0003	.00005	.00044
%RSD	4.9411	.16309	3.2888	4.1805	.02853	2.2542	212.44
#1	-.00040	.07078	-.00014	.00236	1.0184	.00214	-.00010
#2	-.00043	.07094	-.00013	.00251	1.0188	.00220	.00051
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.04323	.01363	.25155	.00121	.00164	.00009	-.00026
SDev	.00008	.00961	.00091	.00003	.00012	.00069	.00077
%RSD	.19520	70.509	.36299	2.7553	7.2524	765.23	300.60
#1	.04329	.00683	.25091	.00119	.00156	-.00040	.00029
#2	.04317	.02043	.25220	.00123	.00173	.00058	-.00080
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00013	.04022	.00013	.00849	.00887	-.00012	-.00244
SDev	.00028	.00011	.00004	.00003	.00016	.00194	.00279
%RSD	225.54	.28422	29.498	.39591	1.8142	1623.7	114.49
#1	-.00008	.04014	.00016	.00847	.00876	-.00149	-.00046
#2	.00033	.04030	.00010	.00852	.00898	.00125	-.00441
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.02048	-.00015	.00006	.00147	.06322	105.36
SDev	.00075	.00180	.00240	.00017	.00714	.23
%RSD	3.6383	1219.1	3934.3	11.592	11.287	.21467
#1	.02101	-.00142	-.00164	.00135	.05817	105.20
#2	.01996	.00113	.00176	.00159	.06827	105.52
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9ECP Operator: STL
Run Time: 05/06/05 21:12:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00209	.00170	.01295	.00961	.00443	-.00280	5.4727
SDev	.00229	.00028	.00177	.00128	.00028	.00032	.0107
%RSD	109.37	16.538	13.652	13.364	6.2705	11.477	.19519
#1	-.00371	.00150	.01420	.00870	.00423	-.00303	5.4651
#2	-.00047	.00189	.01170	.01052	.00463	-.00258	5.4802
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00241	.27093	-.00014	.00571	2.3783	.00603	.00324
SDev	.00026	.00064	.00003	.00001	.0044	.00056	.00019
%RSD	10.782	.23765	19.285	.10459	.18321	9.2540	6.0099
#1	.00223	.27047	-.00016	.00571	2.3752	.00642	.00310
#2	.00259	.27138	-.00012	.00570	2.3814	.00563	.00337
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.01500	.12969	.81962	.01616	.00464	.00070	.00117
SDev	.00036	.00047	.00292	.00002	.00000	.00008	.00151
%RSD	2.3849	.36040	.35651	.11588	.00000	10.885	129.40
#1	.01525	.13002	.81755	.01615	.00464	.00076	.00224
#2	.01474	.12936	.82168	.01618	.00464	.00065	.00010
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00114	.23571	.00265	.00716	.00466	.00139	.02806
SDev	.00000	.00051	.00049	.00000	.00257	.00122	.01078
%RSD	.10144	.21661	18.667	.00122	55.205	88.032	38.416
#1	.00114	.23535	.00300	.00716	.00648	.00225	.03569
#2	.00114	.23607	.00230	.00716	.00284	.00052	.02044
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.01072	-.00039	-.00083	.00327	.06920	H451.90
SDev	.00027	.00031	.00162	.00000	.00000	1.39
%RSD	2.5000	77.835	194.79	.00000	.00051	.30866
#1	.01053	-.00061	-.00198	.00327	.06920	H450.91
#2	.01091	-.00018	.00031	.00327	.06920	H452.89
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9ECV Operator: STL
Run Time: 05/06/05 21:17:03
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.03693	.02633	-.00097	-.00339	.01350	.00051	1.3189
SDev	.00517	.00493	.00173	.00167	.00278	.00148	.0004
%RSD	14.003	18.725	177.78	49.237	20.586	291.40	.02748
#1	.03327	.02285	-.00219	-.00221	.01154	.00155	1.3192
#2	.04058	.02982	.00025	-.00457	.01547	-.00054	1.3187
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00128	2.2011	-.00044	-.00211	.46605	.01873	.02398
SDev	.00099	.0051	.00001	.00004	.00087	.00010	.00000
%RSD	77.232	.23027	2.0495	1.9909	.18698	.52978	.00540
#1	.00058	2.1975	-.00043	-.00208	.46544	.01866	.02398
#2	.00198	2.2046	-.00044	-.00214	.46667	.01880	.02398
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00861	.61001	.17046	.00703	.01584	-.00010	-.00974
SDev	.00032	.00339	.00055	.00001	.00003	.00038	.00019
%RSD	3.7775	.55524	.32143	.09285	.18831	388.81	1.9977
#1	.00838	.61241	.17085	.00702	.01586	.00017	-.00960
#2	.00884	.60762	.17007	.00703	.01582	-.00036	-.00988
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01586	.05511	.00769	.04394	.01376	.00095	-.01700
SDev	.00050	.00003	.00004	.00010	.00011	.00163	.00785
%RSD	3.1430	.05156	.53683	.22959	.78709	171.40	46.182
#1	.01621	.05513	.00766	.04387	.01384	.00210	-.02255
#2	.01551	.05509	.00772	.04401	.01369	-.00020	-.01145
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	-.00258	.00483	.03340	11.609	-.07553	8.1401
SDev	.00054	.00006	.00509	.030	.00516	.0707
%RSD	20.835	1.2680	15.243	.26212	6.8365	.86834
#1	-.00220	.00488	.02980	11.587	-.07188	8.1901
#2	-.00296	.00479	.03700	11.630	-.07918	8.0901
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9ECV 10X Operator: STL
Run Time: 05/06/05 21:21:25
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.01058	.01499	.00298	-.00287	.00366	.00140	.14399
SDev	.00105	.00229	.00235	.00176	.00244	.00131	.00076
%RSD	9.9120	15.275	79.099	61.512	66.555	93.599	.52486
#1	.01132	.01661	.00464	-.00412	.00538	.00047	.14452
#2	.00984	.01337	.00131	-.00162	.00194	.00233	.14345
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00032	.21852	-.00003	-.00028	.08483	.00257	.00218
SDev	.00105	.00116	.00001	.00007	.00087	.00059	.00014
%RSD	329.64	.52885	28.283	26.078	1.0273	23.117	6.5093
#1	.00106	.21771	-.00004	-.00033	.08421	.00299	.00228
#2	-.00042	.21934	-.00003	-.00023	.08545	.00215	.00208
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00112	.05877	.01860	.00064	.00137	-.00021	-.00005
SDev	.00048	.00073	.00018	.00003	.00009	.00036	.00058
%RSD	42.776	1.2434	.98207	4.4279	6.5271	174.40	1059.7
#1	.00146	.05826	.01872	.00067	.00143	.00005	.00036
#2	.00078	.05929	.01847	.00062	.00131	-.00046	-.00046
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V 2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00137	.00857	.00115	.00433	.00421	-.00137	.01139
SDev	.00011	.00000	.00027	.00003	.00161	.00007	.01847
%RSD	8.0859	.00348	23.656	.77694	38.158	4.9222	162.18
#1	.00145	.00857	.00134	.00430	.00534	-.00142	.02444
#2	.00129	.00857	.00096	.00435	.00307	-.00132	-.00167
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	-.00092	.00215	.01205	1.1895	.02537	1.2628
SDev	.00039	.00007	.00146	.0067	.00097	.0047
%RSD	42.594	3.0707	12.134	.56367	3.8095	.37331
#1	-.00120	.00211	.01308	1.1848	.02605	1.2595
#2	-.00064	.00220	.01102	1.1943	.02469	1.2662
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9EDE Operator: STL
Run Time: 05/06/05 21:25:47
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.10547	.06690	.03773	-.01814	.00404	.00069	131.57
SDev	.00082	.00117	.00025	.00023	.00141	.00191	.07
%RSD	.77365	1.7415	.67442	1.2870	34.908	275.45	.05573
#1	.10490	.06607	.03755	-.01798	.00304	-.00066	131.52
#2	.10605	.06772	.03791	-.01831	.00503	.00204	131.62
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L-.01016	.26466	-.00034	.00025	2.0129	6.7722	.01103
SDev	.00070	.00040	.00000	.00002	.0023	.0058	.00024
%RSD	6.9153	.14971	1.3217	9.3715	.11544	.08551	2.1743
#1	L-.01065	.26494	-.00033	.00024	2.0113	6.7681	.01086
#2	-.00966	.26438	-.00034	.00027	2.0146	6.7763	.01120
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.01004	.04002	.43635	.00354	2.1358	-.00005	.00054
SDev	.00008	.00544	.00475	.00008	.0016	.00018	.00081
%RSD	.76015	13.591	1.0882	2.2645	.07401	350.49	151.42
#1	.00998	.03618	.43299	.00348	2.1347	-.00017	-.00004
#2	.01009	.04387	.43970	.00360	2.1369	.00007	.00111
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00038	.10859	.00067	.07002	.00322	.00001	.00285
SDev	.00029	.00007	.00019	.00003	.00064	.00068	.00669
%RSD	75.527	.06425	28.690	.04810	20.012	6505.8	234.84
#1	.00018	.10864	.00053	.07004	.00368	-.00047	-.00188
#2	.00058	.10854	.00080	.07000	.00277	.00049	.00758
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00046	.00181	.09263	.00380	.13734	23.790
SDev	.00007	.00174	.00093	.00007	.01725	.226
%RSD	15.362	96.392	1.0064	1.7901	12.557	.95073

#1	.00051	.00057	.09197	.00375	.12515	23.631
#2	.00041	.00304	.09329	.00385	.14954	23.950
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9EDE 10X Operator: STL
Run Time: 05/06/05 21:30:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00941	.00928	.00498	-.00264	.00367	-.00111	12.239
SDev	.00336	.00330	.00542	.00298	.00329	.00200	.066
%RSD	35.712	35.516	108.94	112.85	89.472	180.27	.53807
#1	.00703	.01161	.00881	-.00475	.00600	-.00252	12.193
#2	.01178	.00695	.00114	-.00053	.00135	.00030	12.286
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00142	.02538	.00001	-.00004	.23868	.66069	.00097
SDev	.00051	.00018	.00000	.00004	.00116	.00323	.00024
%RSD	35.620	.71556	47.141	83.520	.48682	.48842	24.531
#1	-.00178	.02525	.00001	-.00007	.23785	.65841	.00114
#2	-.00106	.02551	.00001	-.00002	.23950	.66297	.00081
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00063	.00108	.04610	.00034	.20931	-.00023	.00065
SDev	.00028	.00663	.00183	.00001	.00206	.00051	.00067
%RSD	43.875	612.03	3.9613	3.5688	.98318	225.07	103.10
#1	.00083	-.00361	.04481	.00033	.20786	-.00059	.00112
#2	.00044	.00577	.04739	.00035	.21077	.00013	.00017
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00033	.01366	.00003	.00665	.00148	-.00103	.00347
SDev	.00035	.00002	.00035	.00003	.00032	.00101	.01766
%RSD	108.05	.11723	1229.6	.50510	21.557	97.350	509.10

#1	-.00058	.01364	.00027	.00663	.00170	-.00174	.01595
#2	-.00008	.01367	-.00022	.00668	.00125	-.00032	-.00902
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	-.00010	.00048	.00937	.00043	.05793	2.9255	
SDev	.00018	.00024	.00114	.00000	.00925	.1319	
%RSD	175.38	48.818	12.211	.00000	15.967	4.5099	
#1	-.00023	.00032	.00856	.00043	.05139	2.8322	
#2	.00002	.00065	.01017	.00043	.06447	3.0188	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/06/05 21:34:32
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	3.9292	3.8964	3.9116	3.9020	3.9605	3.9591	38.693
SDev	.0067	.0098	.0040	.0097	.0006	.0049	.077
%RSD	.17119	.25278	.10187	.24884	.01511	.12288	.19776
#1	3.9244	3.9034	3.9088	3.8951	3.9609	3.9557	38.638
#2	3.9339	3.8895	3.9144	3.9089	3.9601	3.9626	38.747
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	3.9880	4.1369	4.1781	3.9692	20.045	3.8673	3.8965
SDev	.0094	.0044	.0057	.0073	.046	.0080	.0063
%RSD	.23495	.10615	.13525	.18519	.22896	.20629	.16212
#1	3.9814	4.1338	4.1741	3.9640	20.013	3.8616	3.8920
#2	3.9947	4.1400	4.1820	3.9744	20.078	3.8729	3.9010
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	3.9193	40.761	19.757	4.0183	3.9040	.98934	3.8368
SDev	.0037	.102	.046	.0073	.0088	.00113	.0081
%RSD	.09515	.25112	.23201	.18262	.22536	.11473	.21223

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#1	3.9167	40.688	19.725	4.0131	3.8978	.98854	3.8310
#2	3.9219	40.833	19.789	4.0235	3.9102	.99015	3.8425
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	3.9301	3.9300	4.0298	4.0865	4.0780	Q3.2712	3.9690
SDev	.0096	.0064	.0120	.0155	.0055	.0040	.0066
%RSD	.24306	.16193	.29723	.37939	.13536	.12110	.16602
#1	3.9233	3.9255	4.0213	4.0755	4.0741	Q3.2684	3.9643
#2	3.9368	3.9345	4.0382	4.0975	4.0819	Q3.2740	3.9736
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	3.9052	3.9596	3.9183	4.0569	3.6487	42.443	
SDev	.0078	.0030	.0012	.0079	.0138	.349	
%RSD	.19982	.07692	.03079	.19549	.37714	.82157	
#1	3.8997	3.9574	3.9174	4.0513	3.6390	42.196	
#2	3.9107	3.9617	3.9191	4.0625	3.6584	42.690	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000	
Range	10.000	10.000	10.000	10.000	10.000	10.000	

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 05/06/05 21:38:56
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00129	.00470	.00024	.00177	.00174	.00233	.03621
SDev	.00348	.00071	.00271	.00199	.00054	.00308	.00016
%RSD	269.92	15.103	1108.6	112.71	30.918	132.15	.42947
#1	.00375	.00420	-.00167	.00317	.00136	.00451	.03632
#2	-.00117	.00521	.00216	.00036	.00212	.00015	.03610
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00115	.00119	.00138	.00118	.01006	.00141	.00099
SDev	.00106	.00002	.00006	.00004	.00029	.00046	.00029
%RSD	92.270	1.3865	4.2070	3.5936	2.8862	32.917	29.385

#1	.00191	.00118	.00134	.00115	.00986	.00108	.00120
#2	.00040	.00120	.00142	.00121	.01027	.00173	.00079
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00060	.01210	.01188	.00128	.00078	.00027	.00321
SDev	.00065	.00203	.00091	.00006	.00063	.00034	.00033
%RSD	108.15	16.819	7.6862	4.9589	80.266	124.09	10.212
#1	.00014	.01354	.01123	.00123	.00034	.00051	.00297
#2	.00106	.01066	.01253	.00132	.00122	.00003	.00344
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00146	.00325	.00465	.00119	.00254	.00382	-.01065
SDev	.00011	.00000	.00094	.00003	.00097	.00168	.00981
%RSD	7.1426	.08786	20.127	2.8294	38.034	43.907	92.098
#1	.00154	.00325	.00532	.00121	.00322	.00501	-.01759
#2	.00139	.00325	.00399	.00117	.00186	.00264	-.00372
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00126	.00214	.00243	.00171	.05763	Q1.2228
SDev	.00042	.00188	.00208	.00024	.00548	.1461
%RSD	33.667	87.874	85.884	13.943	9.5127	11.946
#1	.00156	.00346	.00390	.00188	.05375	Q1.1195
#2	.00096	.00081	.00095	.00154	.06151	Q1.3261
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00300	.00400	.06000	.05000	.50000	.25000

Method: 6010C Sample Name: G9EDG 10X Operator: STL
Run Time: 05/06/05 21:43:18
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00114	.00362	.00003	-.00040	.00339	-.00032	.05669
SDev	.00179	.00010	.00219	.00055	.00270	.00057	.00179
%RSD	157.22	2.8220	6985.8	138.67	79.590	178.15	3.1664

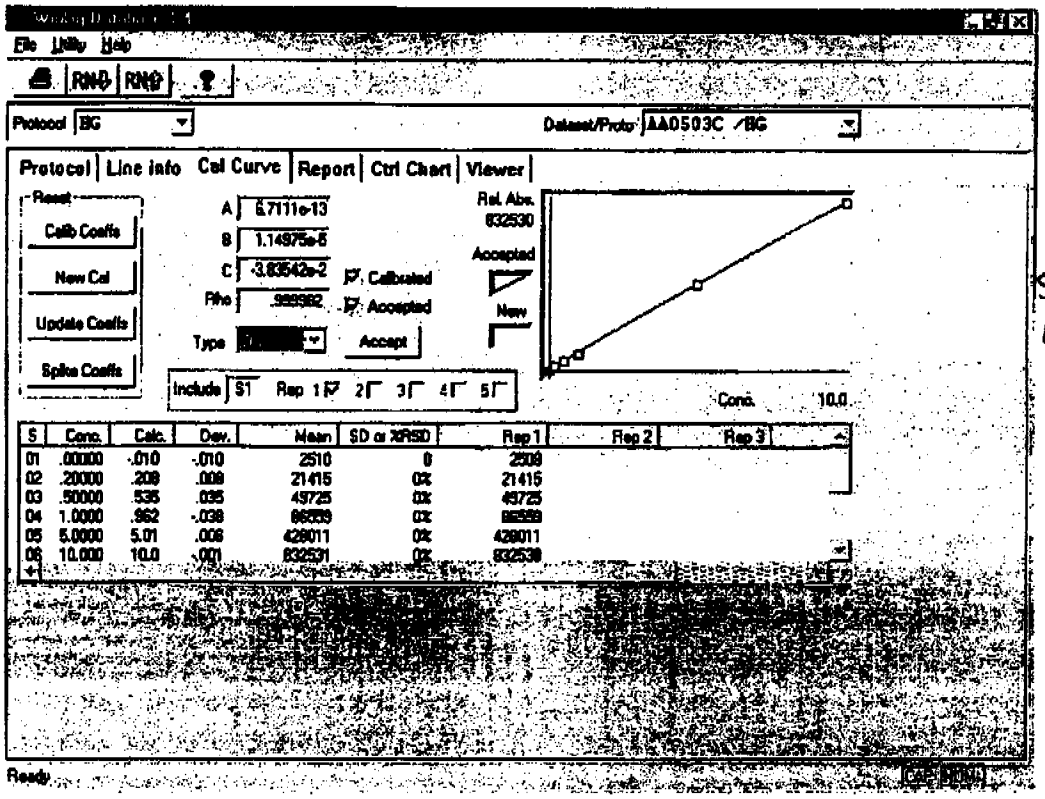
Analytical Runlog for Mercury Analysis											
Run #: AA0503C											
Instrument ID:											
Seq	Sample ID	Run Date/Time		Instr Conc.	Dilution	Final Conc.		QC Expected		% Recovery
1	S0	5/3/2005	17:02:31		1					
2	S0.2	5/3/2005	17:04:22		1					
3	S0.5	5/3/2005	17:06:21		1					
4	S1	5/3/2005	17:08:11		1					
5	S5	5/3/2005	17:10:20		1					
6	S10	5/3/2005	17:12:30		1					
7	ICV	5/3/2005	17:14:35	2.44	1	2.44	ppb	2.5	ppb	97.6%
8	CCB	5/3/2005	17:16:24	-0.039	1	-0.039	ppb	<0.2	ppb	
9	CRA	5/3/2005	17:18:15	0.214	1	0.214	ppb	0.2	ppb	107.0%
10	CCV	5/3/2005	17:20:04	4.99	1	4.99	ppb	5	ppb	99.8%
11	CCB	5/3/2005	17:21:53	-0.069	1	-0.069	ppb	<0.2	ppb	
12	G9MPRB	5/3/2005	17:23:47	-0.01	1	-0.01	ppb			✓
13	G9N86C	5/3/2005	17:25:37	5.41	1	5.41	ppb	5		108
14	G817C	5/3/2005	17:27:57	-0.003	1	-0.003	ppb			
15	G817CX	5/3/2005	17:29:46	-0.031	1	-0.031	ppb			
16	G817CS	5/3/2005	17:31:45	4.91	1	4.91	ppb	5		98
17	G817CD	5/3/2005	17:33:55	5.12	1	5.12	ppb	5		102
18	G817CV	5/3/2005	17:36:06	-0.048	5	-0.24	ppb			
19	G817D	5/3/2005	17:37:55	-0.012	1	-0.012	ppb			
20	G817E	5/3/2005	17:39:58	0.074	1	0.074	ppb			
21	G817F	5/3/2005	17:42:01	0.022	1	0.022	ppb			
22	CCV	5/3/2005	17:43:52	4.87	1	4.87	ppb	5	ppb	97.4%
23	CCB	5/3/2005	17:45:40	-0.069	1	-0.069	ppb	<0.2	ppb	
24	G817G	5/3/2005	17:47:30	-0.018	1	-0.018	ppb			
25	G8943	5/3/2005	17:49:34	-0.015	1	-0.015	ppb			
26	G896E	5/3/2005	17:51:47	-0.009	1	-0.009	ppb			
27	G8985	5/3/2005	17:53:49	0.003	1	0.003	ppb			
28	G899L	5/3/2005	17:55:48	-0.008	1	-0.008	ppb			
29	G9NWVB	5/3/2005	17:57:57	-0.004	1	-0.004	ppb			✓
30	G9NWVC	5/3/2005	18:00:20	1.04	1	1.04	ppb	1		104
31	G9ACV	5/3/2005	18:02:10	-0.02	1	-0.02	ppb			
32	G9GGF	5/3/2005	18:04:04	0.004	1	0.004	ppb			
33	G9GGQ	5/3/2005	18:05:55	0.023	1	0.023	ppb			
34	CCV	5/3/2005	18:07:45	5.12	1	5.12	ppb	5	ppb	102.4%
35	CCB	5/3/2005	18:09:33	-0.045	1	-0.045	ppb	<0.2	ppb	
36	G9GGQS	5/3/2005	18:11:36	1.1	1	1.1	ppb	1		110
37	G9GGQD	5/3/2005	18:13:48	1.1	1	1.1	ppb	1		110
38	G9GGQV	5/3/2005	18:15:37	-0.032	5	-0.16	ppb			
39	G9GGT	5/3/2005	18:17:51	-0.002	1	-0.002	ppb			
40	G9GG1	5/3/2005	18:19:55	-0.005	1	-0.005	ppb			
41	G9K03	5/3/2005	18:21:45	0.082	1	0.082	ppb			
42	G9K20	5/3/2005	18:23:36	-0.003	1	-0.003	ppb			
43	G9K3D	5/3/2005	18:25:27	-0.003	1	-0.003	ppb			
44	G9N7TB	5/3/2005	18:27:18	-0.005	1	-0.005	ppb			✓
45	G9N7TC	5/3/2005	18:29:18	1.04	1	1.04	ppb	1		104
46	CCV	5/3/2005	18:31:09	4.85	1	4.85	ppb	5	ppb	97.0%
47	CCB	5/3/2005	18:33:01	-0.041	1	-0.041	ppb	<0.2	ppb	

Analyst: [signature] Page 1 of 2 Reviewed by: [signature] 5/10/05

Analytical Runlog for Mercury Analysis											
Run #: AA0503C											
Instrument ID:											
Seq	Sample ID	Run Date/Time		Instr Conc.	Dilution	Final Conc.		QC Expected		% Recovery
48	G8MQ5	5/3/2005	18:35:03	-0.039	1	-0.039	ppb			
49	G8MVF	5/3/2005	18:36:54	0.012	1	0.012	ppb			
50	G8MWF	5/3/2005	18:38:50	0.001	1	0.001	ppb			
51	G8MWFS	5/3/2005	18:40:52	1.07	1	1.07	ppb	1		107
52	G8MWFD	5/3/2005	18:42:47	1	1	1	ppb	1		100
53	G8MWFV	5/3/2005	18:45:07	-0.034	5	-0.17	ppb			
54	G8MXL	5/3/2005	18:47:47	0.014	1	0.014	ppb			
55	G8M0K	5/3/2005	18:49:48	0.009	1	0.009	ppb			
56	G8P4M	5/3/2005	18:51:43	0.003	1	0.003	ppb			
57	G8P5V	5/3/2005	18:53:52	-0.006	1	-0.006	ppb			
58	CCV	5/3/2005	18:55:44	4.86	1	4.86	ppb	5	ppb	97.2%
59	CCB	5/3/2005	18:57:43	-0.022	1	-0.022	ppb	<0.2	ppb	
60	G8P59	5/3/2005	19:00:14	0.007	1	0.007	ppb			
61	G8WET	5/3/2005	19:02:25	0.001	1	0.001	ppb			
62	G8WFR	5/3/2005	19:04:17	0.009	1	0.009	ppb			
63	G80EM	5/3/2005	19:06:08	0.009	1	0.009	ppb			
64	CCV	5/3/2005	19:08:00	4.9	1	4.9	ppb	5	ppb	98.0%
65	CCB	5/3/2005	19:09:51	-0.059	1	-0.059	ppb	<0.2	ppb	
66	G80EMS	5/3/2005	19:12:12	0.932	1	0.932	ppb	1		93
67	G80EMD	5/3/2005	19:14:03	1.03	1	1.03	ppb	1		103
68	G8015	5/3/2005	19:15:57	-0.018	1	-0.018	ppb			
69	G805A	5/3/2005	19:17:49	-0.027	1	-0.027	ppb			
70	CCV	5/3/2005	19:19:43	4.87	1	4.87	ppb	5	ppb	97.4%
71	CCB	5/3/2005	19:22:21	-0.004	1	-0.004	ppb	<0.2	ppb	
72	G9HX1B	5/3/2005	19:24:10	-0.01	1	-0.01	ppb			V
73	G9NWJC	5/3/2005	19:26:22	5.31	1	5.31	ppb	5		106
74	G8170	5/3/2005	19:28:13	-0.059	1	-0.059	ppb			
75	G8170X	5/3/2005	19:30:24	0.003	1	0.003	ppb			
76	G8170S	5/3/2005	19:32:15	4.77	1	4.77	ppb	5		95
77	G8170V	5/3/2005	19:34:50	-0.011	5	-0.055	ppb			
78	G84EP	5/3/2005	19:37:16	-0.02	1	-0.02	ppb			
79	G9GG0	5/3/2005	19:39:16	-0.009	1	-0.009	ppb			
80	CCV	5/3/2005	19:41:16	4.83	1	4.83	ppb	5	ppb	96.6%
81	CCB	5/3/2005	19:43:30	-0.006	1	-0.006	ppb	<0.2	ppb	

Analyst: LJ for FC

Reviewed by: SW 5/10/05



YJ for FC
5/3/05
7470A
STD
H605050S

Hg for FC 5/3/05

17:02:31 03 May 2005 Folder: AA0503C 7470A Page 1
Protocol: HG

S1D H6050305

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1 Seq: 1 17:02:31 03 May 05 HG

Hg .000 ppb 2509

*** Standard: 2 Rep: 1 Seq: 2 17:04:22 03 May 05 HG

Hg .200 ppb 21415

*** Standard: 3 Rep: 1 Seq: 3 17:06:21 03 May 05 HG

Hg .500 ppb 49725

*** Standard: 4 Rep: 1 Seq: 4 17:08:11 03 May 05 HG

Hg 1.00 ppb 86559

*** Standard: 5 Rep: 1 Seq: 5 17:10:20 03 May 05 HG

Hg 5.00 ppb 428011

*** Standard: 6 Rep: 1 Seq: 6 17:12:30 03 May 05 HG

Hg 10.0 ppb 832530

*** Check Standard: 4 Ck4ICV Seq: 7 17:14:35 03 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		97.7	2.44	2.50	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 8 17:16:24 03 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.039	.200	ppb	.000 %

*** Check Standard: 5 Ck5CRA Seq: 9 17:18:15 03 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		107.	.214	.200	ppb	.000 %

*** Check Standard: 2 Ck2CCV Seq: 10 17:20:04 03 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		99.8	4.99	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 11 17:21:53 03 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.069	.200	ppb	.000 %

*** Sample ID: G9MPRB AA0503C Seq: 12 17:23:47 03 May 05 HG

Hg -.010 ppb .000 % -.010

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: G9N86C AA0503C Seq: 13 17:25:37 03 May 05 HG

Hg 5.41 ppb .000 % 5.41

*** Sample ID: G817C AA0503C Seq: 14 17:27:57 03 May 05 HG

Hg -.003 ppb .000 % -.003

*** Sample ID: G817CX AA0503C Seq: 15 17:29:46 03 May 05 HG

Hg -.031 ppb .000 % -.031

*** Sample ID: G817CS AA0503C Seq: 16 17:31:45 03 May 05 HG

Hg 4.91 ppb .000 % 4.91

*** Sample ID: G817CD AA0503C Seq: 17 17:33:55 03 May 05 HG

Hg 5.12 ppb .000 % 5.12

*** Sample ID: G817CV AA0503C Seq: 18 17:36:06 03 May 05 HG
5X

Hg -.048 ppb .000 % -.048

*** Sample ID: G817D AA0503C Seq: 19 17:37:55 03 May 05 HG

Hg -.012 ppb .000 % -.012

*** Sample ID: G817E AA0503C Seq: 20 17:39:58 03 May 05 HG

Hg .074 ppb .000 % .074

*** Sample ID: G817F AA0503C Seq: 21 17:42:01 03 May 05 HG

Hg .022 ppb .000 % .022

*** Check Standard: 2 Ck2CCV Seq: 22 17:43:52 03 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		97.5	4.87	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 23 17:45:40 03 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.069	.200	ppb	.000 %

*** Sample ID: G817G AA0503C Seq: 24 17:47:30 03 May 05 HG

Hg -.018 ppb .000 % -.018

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: G8943 AA0503C Seq: 25 17:49:34 03 May 05 HG

Hg -.015 ppb .000 % -.015

*** Sample ID: G896E AA0503C Seq: 26 17:51:47 03 May 05 HG

Hg -.009 ppb .000 % -.009

*** Sample ID: G8985 AA0503C Seq: 27 17:53:49 03 May 05 HG

Hg .003 ppb .000 % .003

*** Sample ID: G899L AA0503C Seq: 28 17:55:48 03 May 05 HG

Hg -.008 ppb .000 % -.008

*** Sample ID: G9NWVB AA0503C Seq: 29 17:57:57 03 May 05 HG

Hg -.004 ppb .000 % -.004

*** Sample ID: G9NWVC AA0503C Seq: 30 18:00:20 03 May 05 HG

Hg 1.04 ppb .000 % 1.04

*** Sample ID: G9ACV AA0503C Seq: 31 18:02:10 03 May 05 HG

Hg -.020 ppb .000 % -.020

*** Sample ID: G9GGF AA0503C Seq: 32 18:04:04 03 May 05 HG

Hg .004 ppb .000 % .004

*** Sample ID: G9GGQ AA0503C Seq: 33 18:05:55 03 May 05 HG

Hg .023 ppb .000 % .023

*** Check Standard: 2 Ck2CCV Seq: 34 18:07:45 03 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		102.	5.12	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 35 18:09:33 03 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.045	.200	ppb	.000 %

*** Sample ID: G9GGQS AA0503C Seq: 36 18:11:36 03 May 05 HG

Hg 1.10 ppb .000 % 1.10

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: G9GGQD AA0503C Seq: 37 18:13:48 03 May 05 HG

Hg 1.10 ppb .000 % 1.10

*** Sample ID: G9GGQV AA0503C Seq: 38 18:15:37 03 May 05 HG
5X
Hg -.032 ppb .000 % -.032

*** Sample ID: G9GGT AA0503C Seq: 39 18:17:51 03 May 05 HG

Hg -.002 ppb .000 % -.002

*** Sample ID: G9GG1 AA0503C Seq: 40 18:19:55 03 May 05 HG

Hg -.005 ppb .000 % -.005

*** Sample ID: G9K03 AA0503C Seq: 41 18:21:45 03 May 05 HG

Hg .082 ppb .000 % .082

*** Sample ID: G9K20 AA0503C Seq: 42 18:23:36 03 May 05 HG

Hg -.003 ppb .000 % -.003

*** Sample ID: G9K3D AA0503C Seq: 43 18:25:27 03 May 05 HG

Hg -.003 ppb .000 % -.003

*** Sample ID: G9N7TB AA0503C Seq: 44 18:27:18 03 May 05 HG

Hg -.005 ppb .000 % -.005

*** Sample ID: G9N7TC AA0503C Seq: 45 18:29:18 03 May 05 HG

Hg 1.04 ppb .000 % 1.04

*** Check Standard: 2 Ck2CCV Seq: 46 18:31:09 03 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		96.9	4.85	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 47 18:33:01 03 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.041	.200	ppb	.000 %

*** Sample ID: G8MQ5 AA0503C Seq: 48 18:35:03 03 May 05 HG

Hg -.039 ppb .000 % -.039

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: G8MVF		AA0503C	Seq: 49	18:36:54 03 May 05	HG			
Hg	.012	ppb	.000 %	.012				
*** Sample ID: G8MWF		AA0503C	Seq: 50	18:38:50 03 May 05	HG			
Hg	.001	ppb	.000 %	.001				
*** Sample ID: G8MWFS		AA0503C	Seq: 51	18:40:52 03 May 05	HG			
Hg	1.07	ppb	.000 %	1.07				
*** Sample ID: G8MWFD		AA0503C	Seq: 52	18:42:47 03 May 05	HG			
Hg	1.00	ppb	.000 %	1.00				
*** Sample ID: G8MWFV		AA0503C 5X	Seq: 53	18:45:07 03 May 05	HG			
Hg	-.034	ppb	.000 %	-.034				
*** Sample ID: G8MXL		AA0503C	Seq: 54	18:47:47 03 May 05	HG			
Hg	.014	ppb	.000 %	.014				
*** Sample ID: G8M0K		AA0503C	Seq: 55	18:49:48 03 May 05	HG			
Hg	.009	ppb	.000 %	.009				
*** Sample ID: G8P4M		AA0503C	Seq: 56	18:51:43 03 May 05	HG			
Hg	.003	ppb	.000 %	.003				
*** Sample ID: G8P5V		AA0503C	Seq: 57	18:53:52 03 May 05	HG			
Hg	-.006	ppb	.000 %	-.006				

*** Check Standard: 2 Ck2CCV Seq: 58 18:55:44 03 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		97.2	4.86	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 59 18:57:43 03 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.022	.200	ppb	.000 %

*** Sample ID: G8P59		AA0503C	Seq: 60	19:00:14 03 May 05	HG			
Hg	.007	ppb	.000 %	.007				

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-------------------------------------------------------------------------

*** Sample ID: G8WET      AA0503C    Seq:  61     19:02:25 03 May 05   HG

Hg    .001    ppb       .000  %   .001

*** Sample ID: G8WFR      AA0503C    Seq:  62     19:04:17 03 May 05   HG

Hg    .009    ppb       .000  %   .009

*** Sample ID: G80EM      AA0503C    Seq:  63     19:06:08 03 May 05   HG

Hg    .009    ppb       .000  %   .009

*** Check Standard: 2  Ck2CCV       Seq:  64     19:08:00 03 May 05   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          97.9     4.90    5.00  ppb        .000  %

*** Check Standard: 1  Ck1CCB       Seq:  65     19:09:51 03 May 05   HG
Line  Flag  Found Range(+/-) Units      SD/RSD
Hg         -.059     .200     ppb        .000  %

*** Sample ID: G80EMS     AA0503C    Seq:  66     19:12:12 03 May 05   HG

Hg    .932    ppb       .000  %   .932

*** Sample ID: G80EMD     AA0503C    Seq:  67     19:14:03 03 May 05   HG

Hg    1.03    ppb       .000  %   1.03

*** Sample ID: G8015      AA0503C    Seq:  68     19:15:57 03 May 05   HG

Hg   -.018    ppb       .000  %  -.018

*** Sample ID: G805A      AA0503C    Seq:  69     19:17:49 03 May 05   HG

Hg   -.027    ppb       .000  %  -.027

*** Check Standard: 2  Ck2CCV       Seq:  70     19:19:43 03 May 05   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          97.3     4.87    5.00  ppb        .000  %

*** Check Standard: 1  Ck1CCB       Seq:  71     19:22:21 03 May 05   HG
Line  Flag  Found Range(+/-) Units      SD/RSD
Hg         -.004     .200     ppb        .000  %

*** Sample ID: G9HX1B     AA0503C    Seq:  72     19:24:10 03 May 05   HG

Hg   -.010    ppb       .000  %  -.010
```

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: G9NWJC			AA0503C	Seq: 73		19:26:22 03 May 05		HG
Hg	5.31	ppb	.000 %	5.31				
*** Sample ID: G8170			AA0503C	Seq: 74		19:28:13 03 May 05		HG
Hg	-.059	ppb	.000 %	-.059				
*** Sample ID: G8170X			AA0503C	Seq: 75		19:30:24 03 May 05		HG
Hg	.003	ppb	.000 %	.003				
*** Sample ID: G8170S			AA0503C	Seq: 76		19:32:15 03 May 05		HG
Hg	4.77	ppb	.000 %	4.77				
*** Sample ID: G8170V			AA0503C 5X	Seq: 77		19:34:50 03 May 05		HG
Hg	-.011	ppb	.000 %	-.011				
*** Sample ID: G84EP			AA0503C	Seq: 78		19:37:16 03 May 05		HG
Hg	-.020	ppb	.000 %	-.020				
*** Sample ID: G9GG0			AA0503C	Seq: 79		19:39:16 03 May 05		HG
Hg	-.009	ppb	.000 %	-.009				

*** Check Standard: 2 Ck2CCV Seq: 80 19:41:16 03 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		96.6	4.83	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 81 19:43:30 03 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.006	.200	ppb	.000 %

METALS MISCELLANEOUS DATA

STAT RN TRENT **STL** **Metals Prep Report for Batch # 5124228**

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Prep Method: SW-846 3010A **SOP Number:** STL-IP-0013, Rev 6

Extraction Code: 34 **Extraction:** TCLP **Matrix:** SOLID **Prep Date:** 5/4/2005

Standard Log Ref#: MET-04/05-H20

Lot ID	Work Order #	Initial Wt/Vol	Final Volume	Lab Filtered	Due Date	Sample Location	Target List
F5D220192-001	G80NW [redacted]	20 mL	50 mL	☐	05/11/2005	A81	AG AS BA CD CR PB SE ZN
F5D220192-001S	G80NWS [redacted]	20 mL	50 mL	☐		A81	
F5D220192-001X	G80NWX [redacted]	20 mL	50 mL	☐		A81	
F5D220357-001	G817C [redacted]	20 mL	50 mL	☐	05/11/2005	A57	
F5D220357-001D	G817CD [redacted]	20 mL	50 mL	☐		A57	
F5D220357-001S	G817CS [redacted]	20 mL	50 mL	☐		A57	
F5D220357-002	G817D [redacted]	20 mL	50 mL	☐	05/11/2005	A57	
F5D220357-003	G817E [redacted]	20 mL	50 mL	☐	05/11/2005	A57	
F5D220357-004	G817F [redacted]	20 mL	50 mL	☐	05/11/2005	A88	
F5D220357-005	G817G [redacted]	20 mL	50 mL	☐	05/11/2005	A88	
F5D270229-001	G893X [redacted]	20 mL	50 mL	☐	05/11/2005	RAD,A123	
F5D270229-002	G894X [redacted]	20 mL	50 mL	☐	05/11/2005	RAD,A123	
F5D270229-003	G8943 [redacted]	20 mL	50 mL	☐	05/11/2005	RAD,A123	
F5D270229-004	G895L [redacted]	20 mL	50 mL	☐	05/11/2005	RAD,A123	
F5D270229-005	G895P [redacted]	20 mL	50 mL	☐	05/11/2005	RAD,A123	
F5D270229-006	G895V [redacted]	20 mL	50 mL	☐	05/11/2005	RAD,A123	
F5D270229-007	G8952 [redacted]	20 mL	50 mL	☐	05/11/2005	RAD,A123	
F5D270229-008	G8959 [redacted]	20 mL	50 mL	☐	05/11/2005	RAD,A123	

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.16, updated 2/7/2005

F5D270229-009	G896A	[redacted]	20 mL	50 mL	☐	05/11/2005	RAD,A123
F5D270229-010	G896D	[redacted]	20 mL	50 mL	☐	05/11/2005	RAD,A123
F5D270229-011	G896E	[redacted]	20 mL	50 mL	☐	05/11/2005	RAD,A123,VS5
F5D270229-012	G8985	[redacted]	20 mL	50 mL	☐	05/11/2005	RAD,A123,VS5
F5D270229-013	G899L	[redacted]	20 mL	50 mL	☐	05/11/2005	RAD,A123,VS5
F5E020000-353B	G9MPRB	[redacted]	20 mL	50 mL	☐		
F5E040000-228C	G9RQFC	[redacted]	20 mL	50 mL	☐		

Comments:

Chemical Lot Information

Chemical	Lot Number
Hydrochloric Acid	4104090
Nitric Acid	1104100

Custody Information

Relinquished By: ML

Review/Received By: [illegible]

Date of Transfer: 5-5-05

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.16, updated 2/7/2005

LOT #FSD220357

STL ST LOUIS

TCLP Extraction Record/Chain of Custody

Form: SL-INORG-0087, Rev. 3/31/05; SW-846 Method 1311; SOP: STL-IP-0016, current revision

	Fluid #1	Fluid #2	Fluid #3 (DI Water)/Filter Only & Wet Chem
Daily pH Check	4.95 (4.88 – 4.98)	(2.83 – 2.99)	N/A
Lot #	OP0273-05		N/A

Logbook No.: 2851

	Date	Time	Temp (°C) [2]
Rotation Started	5/2/05	1500	21
Rotation Ended	5/3/05	700	21
During Rotation	N/A	N/A	21-24

Batch #	P512209
Page #	1 of 2
Analyst	CB

5124228

Filtration Start Date/Time: 5/3/05 735

Definition of QC Types: B=Blank, X=Duplicate, S=Matrix Spike, D=Matrix Spike Duplicate

Sample	Initial Vol. (ml)	Percent Solids Determination: Filter Tare	Sample Wt. (g)	Wt. Filtrate (g)	Wt. Dried Solids and Filter (g)	% Solids	Fluid Determination: pH #1	pH #2	Fluid #	Leachate Preparation: Wt. Sample (g) [1]	Wt. Filtrate [4] (g)	Volume Fluid Added (ml)	Wt. Leachate [4] (g)	Final pH	Size Reduction [5]	Requested Analyses [6]
FSE020000-353 G9MPR B	ICP / Hg	NA				-	—	-	1	—		2000		-	NA	ALL
FSD220192-1 G80NW 5/X	ICP20 / Hg -					100	9.20	1.98		100				6.29		M
FSD220357-1 G817C 5/b	ICP20 / Hg b						8.77	1.92						5.89		
-2 G817D	ICP / Hg						8.72	1.99						5.77		
-3 G817E	ICP / Hg						8.53	1.96						5.18		
-4 G817F	ICP / Hg						8.43	1.85						5.26		
-5 G817G	ICP / Hg						8.78	1.84						5.58		
FSD220229-1 G893X	ICP / Hg						8.97	1.97						5.39		
-2 G894X	ICP / Hg						8.72	1.92						5.35		
-3 G8943	ICP / Hg						8.85	1.86						5.47		
-4 G8952	ICP / Hg					100	8.62	1.84	1	100		2000		5.23	NA	M

a Required for Immiscible Multi-Phasic Samples Only
b C=Cut, CR=Crush, G=Grind, O=Other _____
c B=BNA, H=Herbicides, P=Pesticides, M=Metals

Generate a NCM for the following anomolies: Multiphasic samples, single phase oils, or samples that contain liquids that didn't filter under test conditions.

(1) Sample weights less than the method requirement require immediate notification of the PM and generation of a NCM.
(2) Temperature excursions outside 23° C ± 2° C require the immediate generation of a NCM.
NCM(s):

What [3]	From	To	Date	Dept.
	CB	METORG	5/3/05	TCLP

Metals Preserved By	Date
CB	5/3/05

Type	Standard Number(s) and Volume(s)	Expiration Date
ICP	MT 00239-05 500ml	11/1/06
ICP	MT 00240-05 500ml	11/1/06
HG	HG 01023-05 50ml	5/24/05

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STL

TCLP Extraction Record/Chain of Custody

Form: SL-INORG-0087, Rev. 3/31/05; SW-846 Method 1311: SOP: STL-IP-0016, current revision

Logbook No.: 2651

	Fluid #1	Fluid #2	Fluid #3 (DI Water)Filter Only & Wet Chem
Daily pH Check	4.95 (4.88 – 4.98)	(2.83 – 2.93)	N/A
Lot #	020273-05		N/A

	Date	Time	Temp (°C) [2]
Rotation Started	5/2/05	1500	21
Rotation Ended	5/3/05	700	21
During Rotation	N/A	N/A	21-24

Batch #	PS12209
Page #	2 of 2
Analyst	CB

Filtration Start Date/Time: 5/3/05 735

Definition of QC Types: B=Blank, X=Duplicate, S=Matrix Spike, D=Matrix Spike Duplicate

Sample	Initial Vol. (ml)	Percent Solids Determination: Filter Tare	Sample Wt. (g)	Wt. Filtrate (g)	Wt. Dried Solids and Filter (g)	% Solids	Fluid Determination: pH #1	pH #2	Fluid #	Leachate Preparation: Wt. Sample (g) [1]	Wt. Filtrate [a] (g)	Volume Fluid Added (ml)	Wt. Leachate [a] (g)	Final pH	Size Reduction [b]	Requested Analyses [c]
F5D220220-5 G895P	ICP	N/A				100	8.58	1.16	1	100		2000		5.17	N/A	M
	Hg															
G895V -6	ICP						8.74	1.92						5.13		
	Hg															
G895Z -7	ICP						8.41	1.85						5.19		
	Hg															
G895A -8	ICP						8.50	1.88						5.02		
	Hg															
G896A -9	ICP						8.63	1.89						5.22		V
	Hg															
G896D -10	ICP						8.76	1.90						5.24		M
	Hg															
G896E -11	ICP						8.75	1.91						5.24		ALL
	Hg															
G896S -12	ICP						8.79	1.91						5.40		
	Hg															
G89L -13	ICP				N/A	100	8.80	1.93	1	100		2000		5.14	N/A	ALL
	Hg															
	ICP															
	Hg															
	ICP															
	Hg															

a Required for Immiscible Multi-Phasic Samples Only
b C=Cut, CR=Crush, G=Grind, O=Other _____
c B=BNA, H=Herbicides, P=Pesticides, M=Metals

Generate a NCM for the following anomalies: Multiphasic samples, single phase oils, or samples that contain liquids that didn't filter under test conditions.

What [c]	From	To	Date	Dept.
	CB	METORG	5/3/05	TCLP

Metals Preserved By	Date
CB	5/3/05

(1) Sample weights less than the method requirement require immediate notification of the PM and generation of a NCM.
(2) Temperature excursions outside 23° C ± 2° C require the immediate generation of a NCM.
NCM(s):

Type	Standard Number(s) and Volume(s)	Expiration Date
	See Page 1	

SEVERN TRENT **STL** Mercury Prep Report for Batch # 5123215

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Prep Method: SW-846 7470A **SOP Number:** STL-MT-0005, Rev 0

Extraction Code: 0M **Extraction:** TCLP **Matrix:** SOLID **Prep Date:** 5/3/2005

Time In: 12:15 **Temp In:** 94 °C

Time Out: 14:15 **Temp Out:** 93 C **Standard Log Ref#:** HG050305

Lot ID	Work Order #		Initial Wt/Vol	Final Volume	Lab Filtered	Prep Date	Sample Location
F5D220357-001	G817C	[redacted]	6 mL	30 mL	☐	05/11/2005	A57
F5D220357-001D	G817CD	[redacted]	6 mL	30 mL	☐		A57
F5D220357-001S	G817CS	[redacted]	6 mL	30 mL	☐		A57
F5D220357-001X	G817C	[redacted]	6 mL	30 mL	☐		A57
F5D220357-002	G817D	[redacted]	6 mL	30 mL	☐	05/11/2005	A57
F5D220357-003	G817E	[redacted]	6 mL	30 mL	☐	05/11/2005	A57
F5D220357-004	G817F	[redacted]	6 mL	30 mL	☐	05/11/2005	A88
F5D220357-006	G817G	[redacted]	6 mL	30 mL	☐	05/11/2005	A88
F5D270229-003	G8943	[redacted]	6 mL	30 mL	☐	05/11/2005	RAD,A123
F5D270229-011	G898E	[redacted]	6 mL	30 mL	☐	05/11/2005	RAD,A123,VS5
F5D270229-012	G8985	[redacted]	6 mL	30 mL	☐	05/11/2005	RAD,A123,VS5
F5D270229-013	G899L	[redacted]	6 mL	30 mL	☐	05/11/2005	RAD,A123,VS5
F5E020000-353B	G9MPRB	[redacted]	6 mL	30 mL	☐		
F5E030000-215C	G9N86C	[redacted]	6 mL	30 mL	☐		

Comments:

Custody Information

Relinquished By:

Review/Received By: FC

Date of Transfer: 5/3/05

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.16, updated 2/7/2005

STL

TCLP Extraction Record/Chain of Custody

Form: SL-INORG-0087, Rev. 3/31/05; SW-846 Method 1311: SOP: STL-IP-0016, current revision

Logbook No.: 2651

	Fluid #1	Fluid #2	Fluid #3 (DI Water)/Filter Only & Wet Chem
Daily pH Check	4.95 (4.88 – 4.98)	(2.83 – 2.93)	N/A
Lot #	OP0273-05		N/A

	Date	Time	Temp (°C) [2]
Rotation Started	5/2/05	1500	21
Rotation Ended	5/3/05	700	21
During Rotation	N/A	N/A	21-24

Batch #	P572209
Page #	1 of 2
Analyst	CB

Filtration Start Date/Time: 5/3/05 735

Definition of QC Types: B=Blank, X=Duplicate, S=Matrix Spike, D=Matrix Spike Duplicate

Sample	Initial Vol. (ml)	Percent Solids Determination: Filter Tare	Sample Wt. (g)	Wt. Filtrate (g)	Wt. Dried Solids and Filter (g)	% Solids	Fluid Determination: pH #1	pH #2	Fluid #	Leachate Preparation: Wt. Sample (g) [1]	Wt. Filtrate [a] (g)	Volume Fluid Added (ml)	Wt. Leachate [a] (g)	Final pH	Size Reduction [b]	Requested Analyses [c]
FSE620000-353 G9MPR B	ICP	NA				-	—	-	1	—		2000		-	NA	ALL
FSD220192-1 G80NW S1X	ICP20					100	9.20	1.98	1	100				6.29		M
FSD220357-1 G817C S1B	ICP20						8.77	1.92						5.89		
-2 G817D	ICP						8.72	1.99						5.77		
-3 G817E	ICP						8.53	1.96						5.18		
-4 G817F	ICP						8.43	1.85						5.26		
-5 G817G	ICP						8.78	1.84						5.58		
FSD220229-1 G893X	ICP						8.97	1.97						5.39		
-2 G894X	ICP						8.72	1.92						5.35		
-3 G8943	ICP						8.85	1.86						5.47		
-4 G8952	ICP					100	8.62	1.84	1	100		2000		5.23	NA	M

a Required for Immiscible Multi-Phasic Samples Only
b C=Cut, CR=Crush, G=Grind, O=Other _____
c B=BNA, H=Herbicides, P=Pesticides, M=Metals

Generate a NCM for the following anomalies: Multiphasic samples, single phase oils, or samples that contain liquids that didn't filter under test conditions.

(1) Sample weights less than the method requirement require immediate notification of the PM and generation of a NCM.
(2) Temperature excursions outside 23° C ± 2° C require the immediate generation of a NCM.
NCM(s):

Metals Preserved By	Date
CB	5/3/05

What [c]	From	To	Date	Dept.
	CB	METORG	5/3/05	TCLP

Type	Standard Number(s) and Volume(s)	Expiration Date
ICP	MT C0239-05 500ml	1/1/06
ICP	MT C0240-05 500ml	1/1/06
HG	HG C1023-05 50ml	5/24/05

STL

TCLP Extraction Record/Chain of Custody

Form: SL-INORG-0067, Rev. 3/31/05; SW-846 Method 1311; SOP: STL-IP-0018, current revision

Logbook No.: 2651

	Fluid #1	Fluid #2	Fluid #3 (DI Water)/Filter Only & Wet Chem
Daily pH Check	4.95 (4.88 – 4.96)	(2.88 – 2.92)	N/A
Lot #	OP0273-05		N/A

	Date	Time	Temp (°C) [2]
Rotation Started	5/2/05	1500	21
Rotation Ended	5/3/05	700	21
During Rotation	N/A	N/A	21-24

Batch #	PS12209
Page #	2 of 2
Analyst	CB

Filtration Start Date/Time: 5/3/05 735

Definition of QC Types: B=Blank, X=Duplicate, S=Matrix Spike, D=Matrix Spike Duplicate

Sample	Initial Vol. (ml)	Percent Solids Determination: Filter Tare	Sample Wt. (g)	Wt. Filtrate (g)	Wt. Dried Solids and Filter (g)	% Solids	Fluid Determination: pH #1	pH #2	Fluid #	Leachate Preparation: Wt. Sample (g) [1]	Wt. Filtrate [a] (g)	Volume Fluid Added (ml)	Wt. Leachate [a] (g)	Final pH	Size Reduction [b]	Requested Analyses [c]
F5D270229-5 G895P	ICP	N/A				106	8.58	1.96	1	100		2000		5.17	N/A	M
-6 G895V	ICP						8.74	1.92	1					5.13		
-7 G8952	ICP						8.41	1.85						5.19		
-8 G8959	ICP						8.50	1.88						5.02		
-9 G896A	ICP						8.63	1.89						5.22		
-10 G896D	ICP						8.76	1.90						5.24		M
-11 G896E	ICP						8.75	1.91						5.24		ALL
-12 G8985	ICP						8.79	1.91						5.40		
-13 G89L	ICP				N/A	100	8.80	1.93	1	100		2000		5.14	N/A	ALL
	ICP															
	ICP															

a Required for Immiscible Multi-Phasic Samples Only
b C=Cut, CR=Crush, G=Grind, O=Other ____
c B=BNA, H=Herbicides, P=Pesticides, M=Metals

Generate a NCM for the following anomolies: Multiphasic samples, single phase oils, or samples that contain liquids that didn't filter under test conditions.

What [c]	From	To	Date	Dept.
	CJS	METORG	5/3/05	TCLP

Metals Preserved By	Date
CB	5/3/05

(1) Sample weights less than the method requirement require immediate notification of the PM and generation of a NCM.
(2) Temperature excursions outside 23° C ± 2° C require the immediate generation of a NCM.
NCM(s):

Type	Standard Number(s) and Volume(s)	Expiration Date
	See Page 1	

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METALS SAMPLE AND QC SUMMARY RESULTS

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G817C **Client ID:** RE73-05-58842

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 20.34

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	308.22	3.6	12.6	17100	N*	1	ICP	4/27/05	16:59
Calcium	317.93	2.8	314	29100	N	1	ICP	4/27/05	16:59
Iron	259.94	12.6	62.8	82400	N	5	ICP	4/28/05	9:29
Magnesium	383.27	14.7	314	3300		1	ICP	4/27/05	16:59
Potassium	766.49	352	377	3780		1	ICP	4/27/05	16:59
Sodium	589	8.5	314	4170	N*	1	ICP	4/27/05	16:59
Zinc	213.86	1.9	12.6	6460	N*	5	ICP	4/28/05	9:29

Comments: Lot #: F5D220357 Sample #: 1

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G817D **Client ID:** RE73-05-58843

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 19.14

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	308.22	3.5	12.4	19200	N*	1	ICP	4/27/05	17:12
Calcium	317.93	2.7	309	36400	N	1	ICP	4/27/05	17:12
Iron	259.94	12.4	61.8	74100	N	5	ICP	4/28/05	9:42
Magnesium	383.27	14.5	309	4560		1	ICP	4/27/05	17:12
Potassium	766.49	347	371	4470		1	ICP	4/27/05	17:12
Sodium	589	8.4	309	4930	N*	1	ICP	4/27/05	17:12
Zinc	213.86	0.38	2.5	6120	N*	1	ICP	4/27/05	17:12

Comments: Lot #: F5D220357 Sample #: 2

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G817E **Client ID:** RE73-05-58844

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 27.93

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	308.22	4.0	13.9	9640	N*	1	ICP	4/27/05	17:17
Calcium	317.93	3.1	347	19200	N	1	ICP	4/27/05	17:17
Iron	259.94	13.9	69.4	128000	N	5	ICP	4/28/05	9:46
Magnesium	383.27	16.3	347	1540		1	ICP	4/27/05	17:17
Potassium	766.49	390	416	1390		1	ICP	4/27/05	17:17
Sodium	589	9.4	347	1170	N*	1	ICP	4/27/05	17:17
Zinc	213.86	0.42	2.8	2040	N*	1	ICP	4/27/05	17:17

Comments: Lot #: F5D220357 Sample #: 3

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G817F **Client ID:** RE73-05-58845

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 25.01

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	**308.22**	**95.2**	**333**	**12700**	**N***	**25**	**ICP**	**4/28/05**	**9:51**
Calcium	**317.93**	**73.5**	**8330**	**20800**	**N**	**25**	**ICP**	**4/28/05**	**9:51**
Iron	**259.94**	**66.7**	**333**	**325000**	**N**	**25**	**ICP**	**4/28/05**	**9:51**
Magnesium	**383.27**	**391**	**8330**	**2370**	**B**	**25**	**ICP**	**4/28/05**	**9:51**
Potassium	766.49	9360	10000	9360	U	25	ICP	4/28/05	9:51
Sodium	**589**	**9.1**	**333**	**1280**	**N***	**1**	**ICP**	**4/27/05**	**17:21**
Zinc	**213.86**	**10.2**	**66.7**	**1710**	**N***	**25**	**ICP**	**4/28/05**	**9:51**

Comments: Lot #: F5D220357 Sample #: 4

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G817G **Client ID:** RE73-05-58846

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 20.99

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	308.22	3.6	12.7	14400	N*	1	ICP	4/27/05	17:25
Calcium	317.93	14.0	1580	126000	N	5	ICP	4/28/05	10:04
Iron	259.94	12.7	63.3	103000	N	5	ICP	4/28/05	10:04
Magnesium	383.27	14.9	316	2880		1	ICP	4/27/05	17:25
Potassium	766.49	355	380	2170		1	ICP	4/27/05	17:25
Sodium	589	8.6	316	3370	N*	1	ICP	4/27/05	17:25
Zinc	213.86	0.39	2.5	2190	N*	1	ICP	4/27/05	17:25

Comments: Lot #: F5D220357 Sample #: 5

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G817C **Client ID:** RE73-05-58842

Matrix: Soil **Units:** mg/kg **Prep Date:** 5/2/05 **Prep Batch:** 5122051

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 20.34

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0090	0.042	0.79	N*E	1	CVAA	5/2/05	13:47

Comments: Lot #: F5D220357 Sample #: 1

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G817D **Client ID:** RE73-05-58843

Matrix: Soil **Units:** mg/kg **Prep Date:** 5/2/05 **Prep Batch:** 5122051

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 19.14

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0089	0.041	1.5	N*E	1	CVAA	5/2/05	14:00

Comments: Lot #: F5D220357 Sample #: 2

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G817E **Client ID:** RE73-05-58844

Matrix: Soil **Units:** mg/kg **Prep Date:** 5/2/05 **Prep Batch:** 5122051

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 27.93

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.010	0.046	0.70	N*E	1	CVAA	5/2/05	14:02

Comments: Lot #: F5D220357 Sample #: 3

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G817F **Client ID:** RE73-05-58845

Matrix: Soil **Units:** mg/kg **Prep Date:** 5/2/05 **Prep Batch:** 5122051

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 25.01

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0096	0.045	0.50	N*E	1	CVAA	5/2/05	14:04

Comments: Lot #: F5D220357 Sample #: 4

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G817G **Client ID:** RE73-05-58846

Matrix: Soil **Units:** mg/kg **Prep Date:** 5/2/05 **Prep Batch:** 5122051

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 20.99

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0091	0.042	0.33	N*E	1	CVAA	5/2/05	14:06

Comments: Lot #: F5D220357 Sample #: 5

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: CVAA **Units:** ug/L

Chart Number: AA0502B.PRN **Acceptable Range:** 80% - 120%

Standard Source: Leeman **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	ICV 5/2/05 1:21 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	2.5	2.48	99.2								

Version 4.75.1

Form 2A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICP **Units:** ug/L

Chart Number: 0427IE2.ARC **Acceptable Range:** 90% - 110%

Standard Source: Solutions Plus **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	ICV 4/27/05 2:16 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	40000.0	41151.61	102.9								
Calcium	317.933	20000.0	20717.00	103.6								
Iron	259.94	40000.0	42178.74	105.4								
Magnesium	383.273	20000.0	20506.06	102.5								
Potassium	766.49	40000.0	40141.41	100.4								
Sodium	588.995	40000.0	40106.14	100.3								
Zinc	213.856	4000.0	3989.28	99.7								

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: CVAA **Units:** ug/L

Chart Number: AA0502B.PRN **Acceptable Range:** 80% - 120%

Standard Source: Leeman **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	CCV 5/2/05 1:28 PM Found	% Rec	CCV 5/2/05 1:51 PM Found	% Rec	CCV 5/2/05 2:14 PM Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	5.0	4.98	99.6	5.00	100.0	5.27	105.4				

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICP **Units:** ug/L

Chart Number: 0427IE2.ARC **Acceptable Range:** 90% - 110%

Standard Source: Solution Plus **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	CCV 4/27/05 2:40 PM Found	% Rec	CCV 4/27/05 3:58 PM Found	% Rec	CCV 4/27/05 4:50 PM Found	% Rec	CCV 4/27/05 5:30 PM Found	% Rec	CCV 4/28/05 8:10 AM Found	% Rec
Aluminum	308.215	40000.0	40812.53	102.0	40983.86	102.5	40778.85	101.9	40705.80	101.8	41193.84	103.0
Calcium	317.933	20000.0	20437.35	102.2	20502.16	102.5	20250.10	101.3	20243.01	101.2	20457.38	102.3
Iron	259.94	40000.0	42557.83	106.4	42336.19	105.8	42059.52	105.1	42108.56	105.3	43286.07	108.2
Magnesium	383.273	20000.0	20211.66	101.1	20298.54	101.5	20083.23	100.4	20059.71	100.3	20577.19	102.9
Potassium	766.49	40000.0	40554.27	101.4	40603.80	101.5	40469.53	101.2	39289.72	98.2	40320.48	100.8
Sodium	588.995	40000.0	39720.31	99.3	39779.97	99.4	39722.30	99.3	39235.28	98.1	40778.00	101.9
Zinc	213.856	4000.0	3985.55	99.6	3974.19	99.4	3908.80	97.7	3911.72	97.8	4029.73	100.7

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICP

Units: ug/L

Chart Number: 0427IE2.ARC

Acceptable Range: 90% - 110%

Standard Source: Solution Plus

Standard ID: SEE STANDARDS LOG

Element	WL/ Mass	True Conc	CCV 4/28/05 9:03 AM Found	% Rec	CCV 4/28/05 9:55 AM Found	% Rec	CCV 4/28/05 10:08 AM Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	40000.0	40957.99	102.4	41017.03	102.5	41377.90	103.4				
Calcium	317.933	20000.0	20577.14	102.9	20820.80	104.1	20847.46	104.2				
Iron	259.94	40000.0	42897.80	107.2	43052.74	107.6	43493.08	108.7				
Magnesium	383.273	20000.0	20504.43	102.5	20565.04	102.8	20692.77	103.5				
Potassium	766.49	40000.0	40188.94	100.5	40666.20	101.7	41204.25	103.0				
Sodium	588.995	40000.0	40093.23	100.2	39934.31	99.8	40627.49	101.6				
Zinc	213.856	4000.0	4003.69	100.1	3997.97	99.9	4016.86	100.4				

STL-ST. LOUIS

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: CVAA **Units:** ug/L

Chart Number: AA0502B.PRN **Acceptable Range:** 50% - 150%

Standard Source: SPEX **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	CRA 5/2/05 1:25 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	0.2	0.19	95.5								

STL-ST. LOUIS

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: ICP **Units:** ug/L

Chart Number: 0427IE2.ARC **Acceptable Range:** 50% - 150%

Standard Source: Solutions Plus **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	CRI 4/27/05 2:25 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	200.0	235.44	117.7								
Calcium	317.933	5000.0	5254.26	105.1								
Iron	259.94	100.0	110.22	110.2								
Magnesium	383.273	5000.0	5189.65	103.8								
Potassium	766.49	5000.0	4791.32	95.8								
Sodium	588.995	5000.0	5035.19	100.7								
Zinc	213.856	20.0	20.12	100.6								

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: CVAA **Units:** ug/L

Chart Number: AA0502B.PRN

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 5/2/05 1:23 PM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.0	U								

U Result is less than the MDL
B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICP **Units:** ug/L

Chart Number: 0427IE2.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 4/27/05 2:20 PM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	308.215	100	28.5	U								
Calcium	317.933	2500	22.0	U								
Iron	259.94	100	20.0	U								
Magnesium	383.273	2500	117.0	U								
Potassium	766.49	3000	**2810.0**	**U**								
Sodium	588.995	2500	68.0	U								
Zinc	213.856	20	3.1	U								

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: CVAA **Units:** ug/L

Chart Number: AA0502B.PRN

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 5/2/05 1:29 PM Found	Q	CCB 5/2/05 1:53 PM Found	Q	CCB 5/2/05 2:17 PM Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.0	B	-0.1	B	0.0	U				

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICP **Units:** ug/L

Chart Number: 0427IE2.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 4/27/05 2:44 PM		CCB 4/27/05 4:02 PM		CCB 4/27/05 4:55 PM		CCB 4/27/05 5:34 PM		CCB 4/28/05 8:15 AM	
			Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	308.215	100	28.5	U	28.5	U	28.5	U	**37.0**	**B**	28.5	U
Calcium	317.933	2500	22.0	U	22.0	U	22.0	U	22.0	U	22.0	U
Iron	259.94	100	20.0	U	20.0	U	20.0	U	**20.5**	**B**	20.0	U
Magnesium	383.273	2500	117.0	U	117.0	U	117.0	U	117.0	U	117.0	U
Potassium	766.49	3000	**2810.0**	**U**	**2810.0**	**U**	**2810.0**	**U**	**2810.0**	**U**	**2810.0**	**U**
Sodium	588.995	2500	68.0	U	68.0	U	68.0	U	68.0	U	68.0	U
Zinc	213.856	20	**3.1**	**U**	**3.1**	**U**	**6.1**	**B**	**6.4**	**B**	**4.3**	**B**

U Result is less than the MDL
B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICP **Units:** ug/L

Chart Number: 0427IE2.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 4/28/05 9:07 AM Found	Q	CCB 4/28/05 9:59 AM Found	Q	CCB 4/28/05 10:12 AM Found	Q	Found	Q	Found	Q
Aluminum	308.215	100	28.5	U	28.5	U	28.5	U				
Calcium	317.933	2500	22.0	U	22.0	U	22.0	U				
Iron	259.94	100	20.0	U	20.0	U	20.0	U				
Magnesium	383.273	2500	117.0	U	117.0	U	117.0	U				
Potassium	766.49	3000	**2810.0**	**U**	**2810.0**	**U**	**2810.0**	**U**				
Sodium	588.995	2500	68.0	U	68.0	U	68.0	U				
Zinc	213.856	20	**3.1**	**U**	**3.1**	**U**	**3.1**	**U**				

U Result is less than the MDL
B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: G84N2B

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	308.215	2.9	10.0	6.6	B	1	ICP	4/27/05	15:15
Calcium	317.933	2.2	250	9.4	B	1	ICP	4/27/05	15:15
Iron	259.94	2.0	10.0	2.9	B	1	ICP	4/27/05	15:15
Magnesium	383.273	11.7	250	31.2	B	1	ICP	4/27/05	15:15
Potassium	766.49	281	300	281	U	1	ICP	4/27/05	15:15
Sodium	588.995	6.8	250	6.8	U	1	ICP	4/27/05	15:15
Zinc	213.856	0.31	2.0	0.31	U	1	ICP	4/27/05	15:15

Comments: Lot #: F5D220357

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: G9L0CB

Matrix: Soil **Units:** mg/kg **Prep Date:** 5/2/05 **Prep Batch:** 5122051

Weight: 0.6 **Volume:** 100 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0072	0.033	0.0072	U	1	CVAA	5/2/05	13:43

Comments: Lot #: F5D220357

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICP **Units:** ug/L

Chart Number: 0427IE2.ARC **Acceptable Range:** 80% - 120%

Standard Source: Solution Plus **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 4/27/05 2:29 PM Found	Found	Found	Found	Found
Aluminum	308.215		500000	488000				
Calcium	317.933		500000	448000				
Iron	259.94		200000	180000				
Magnesium	383.273		500000	480000				
Potassium	766.49	3000		-880				
Sodium	588.995	2500		-58				
Zinc	213.856	20		-7				

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 4 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICP

Units: ug/L

Chart Number: 0427IE2.ARC

Acceptable Range: 80% - 120%

Standard Source: Ultra

Standard ID: SEE STANDARDS LOG

Element	WL/ Mass	True Conc	ICSAB 4/27/05 2:33 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	500000	491634.8	98.3								
Calcium	317.933	500000	449245.0	89.8								
Iron	259.94	200000	181246.0	90.6								
Magnesium	383.273	500000	480380.6	96.1								
Potassium	766.49	20000	20966.9	104.8								
Sodium	588.995	20000	19927.5	99.6								
Zinc	213.856	1000	898.5	89.8								

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: G817CS

Original Sample ID: G817C **Client ID:** RE73-05-58842 S

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 20.34

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Aluminum	308.2	17100		46600	N	125.53	3460.4	1	1	ICP	4/27/05	16:59	4/27/05	17:03
Calcium	317.9	29100		36600	N	3138.3	240.3	1	1	ICP	4/27/05	16:59	4/27/05	17:03
Iron	259.9	82400		90900	N	62.767	3518.1	5	5	ICP	4/28/05	9:29	4/28/05	9:33
Magnesium	383.3	3300		6700		3138.3	108.2	1	1	ICP	4/27/05	16:59	4/27/05	17:03
Potassium	766.5	3780		7660		3138.3	123.4	1	1	ICP	4/27/05	16:59	4/27/05	17:03
Sodium	589	4170		11700	N	3138.3	238.7	1	1	ICP	4/27/05	16:59	4/27/05	17:03
Zinc	213.9	6460		4770	N	31.383	5383.9	5	5	ICP	4/28/05	9:29	4/28/05	9:33

Comments: Lot #: F5D220357 Sample #: 1

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: G817CS

Original Sample ID: G817C **Client ID:** RE73-05-58842 S

Matrix: Soil **Units:** mg/kg **Prep Date:** 5/2/05 **Prep Batch:** 5122051

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 20.34

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Mercury	253.7	0.79		1.3	N	0.2092	226.0	1	1	CVAA	5/2/05	13:47	5/2/05	13:55

Comments: Lot #: F5D220357 Sample #: 1

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: G817CD

Original Sample ID: G817C **Client ID:** RE73-05-58842 D

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 20.34

Element	WL/ Mass	OS Conc	Q	MSD Conc	Q	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Aluminum	308.2	17100	N	21800	N *	125.53	3669.7	1	1	ICP	4/27/05	16:59	4/27/05	17:08
Calcium	317.9	29100	N	27100	N	3138.3	-61.0	1	1	ICP	4/27/05	16:59	4/27/05	17:08
Iron	259.9	82400	N	108000	N	62.767	1026.1	5	5	ICP	4/28/05	9:29	4/28/05	9:38
Magnesium	383.3	3300		5900		3138.3	82.9	1	1	ICP	4/27/05	16:59	4/27/05	17:08
Potassium	766.5	3780		6880		3138.3	98.7	1	1	ICP	4/27/05	16:59	4/27/05	17:08
Sodium	589	4170	N	7070	*	3138.3	92.4	1	1	ICP	4/27/05	16:59	4/27/05	17:08
Zinc	213.9	6460	N	36600	N *	31.383	6014.3	5	5	ICP	4/28/05	9:29	4/28/05	9:38

Comments: Lot #: F5D220357 Sample #: 1

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: G817CD

Original Sample ID: G817C **Client ID:** RE73-05-58842 D

Matrix: Soil **Units:** mg/kg **Prep Date:** 5/2/05 **Prep Batch:** 5122051

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 20.34

Element	WL/ Mass	OS Conc	Q	MSD Conc	Q	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Mercury	253.7	0.79	N	0.63	N *	0.2092	-74.0	1	1	CVAA	5/2/05	13:47	5/2/05	13:57

Comments: Lot #: F5D220357 Sample #: 1

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: G817CD

Matrix Spike Sample ID: G817CS **Client ID:** RE73-05-58842 D

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 20.34

Element	WL/ Mass	MS Conc	Q	MSD Conc	Q	% RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Aluminum	308.215	46600	N	21800	N *	72.7	1	1	ICP	4/27/05	17:03	4/27/05	17:08
Calcium	317.933	36600	N	27100	N	29.7	1	1	ICP	4/27/05	17:03	4/27/05	17:08
Iron	259.94	90900	N	108000	N	17.3	5	5	ICP	4/28/05	9:33	4/28/05	9:38
Magnesium	383.273	6700		5900		12.6	1	1	ICP	4/27/05	17:03	4/27/05	17:08
Potassium	766.49	7660		6880		10.7	1	1	ICP	4/27/05	17:03	4/27/05	17:08
Sodium	588.995	11700	N	7070	*	49.0	1	1	ICP	4/27/05	17:03	4/27/05	17:08
Zinc	213.856	4770	N	36600	N *	153.9	5	5	ICP	4/28/05	9:33	4/28/05	9:38

Comments: Lot #: F5D220357 Sample #: 1

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 6 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: G817CD

Matrix Spike Sample ID: G817CS **Client ID:** RE73-05-58842 D

Matrix: Soil **Units:** mg/kg **Prep Date:** 5/2/05 **Prep Batch:** 5122051

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 20.34

Element	WL/ Mass	MS Conc	Q	MSD Conc	Q	% RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Mercury	253.7	1.3	N	0.63	N *	66.5	1	1	CVAA	5/2/05	13:55	5/2/05	13:57

Comments: Lot #: F5D220357 Sample #: 1

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 6 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: G84N2C

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Aluminum	308.215	6320	5270	83.4		58-142	1	ICP	4/27/05	15:19
Calcium	317.933	3320	3510	105.6		79.2-120.8	1	ICP	4/27/05	15:19
Iron	259.94	11200	10400	92.7		57.3-143	1	ICP	4/27/05	15:19
Magnesium	383.273	2040	2020	99.0		76.9-123	1	ICP	4/27/05	15:19
Potassium	766.49	1920	1930	100.7		71.4-129	1	ICP	4/27/05	15:19
Sodium	588.995	445	457	102.6		55.5-144.5	1	ICP	4/27/05	15:19
Zinc	213.856	165	175	105.8		79.4-120.6	1	ICP	4/27/05	15:19

Comments: Lot #: F5D220357

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 7 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: G9L0CC

Matrix: Soil **Units:** mg/kg **Prep Date:** 5/2/05 **Prep Batch:** 5122051

Weight: 0.6 **Volume:** 100 **Percent Moisture:** NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Mercury	253.7	16.9	15.1	89.3		65-135	20	CVAA	5/2/05	13:45

Comments: Lot #: F5D220357

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 7 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: G817CV

Original Sample ID: G817C **Client ID:** RE73-05-58842

Matrix: Soil **Units:** mg/kg **Prep Date:** 5/2/05 **Prep Batch:** 5122051

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 20.34

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Mercury	253.7	0.79	N*	2.8	E	256.0	1	5	CVAA	5/2/05	13:47	5/2/05	13:58

Comments:

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
E Serial dilution percent difference not within limits

Form 9 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Detection Limits

Instrument: CVAA **Units:** ug/L

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Mercury	253.70	0.2	0.043	8/2/04

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICP **Units:** ug/L

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Aluminum	308.21	100	28.5	2/9/04
Calcium	317.93	2500	22.0	2/9/04
Iron	259.94	100	20.0	2/9/04
Magnesium	383.27	2500	117	2/9/04
Potassium	766.49	3000	2810	2/9/04
Sodium	589.00	2500	68.0	2/9/04
Zinc	213.86	20	3.1	2/9/04

STL-ST. LOUIS

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICP **Date of IEC's:** 6/2/04

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	As(-0.002148), Cd(-0.000059), Cr(0.00001), Fe(0.00006), Mn(0.000011), Pb(0.001404), Se(-0.001822), Si(0.000412), Tl(0.00016), Zn(-0.000003)
Arsenic	193.696	Cd(0.00774)
Calcium	317.933	Ag(0.000008), Ba(-0.000006), Cu(0.00005), Mn(0.000014), Se(-0.00002), Si(0.000412), V(0.0004)
Iron	259.94	Ag(-0.00049), As(-0.000542), B(0.001012), Cd(0.000156), Co(0.00008), Cr(-0.000013), Cu(-0.000202), Mn(0.000161), Mo(0.000049), Sb(-0.000528), Se(0.004534), Si(-0.000876), Sn(-0.000083), Tl(-0.000251), V(0.00027), Zn(0.000012)
Magnesium	383.273	As(-0.000312), B(0.00019), Ba(0.000003), Co(-0.000018), Cr(-0.000014), Fe(0.00019), Mn(0.000028), Sb(0.000105), Se(-0.000102), Si(0.00004), Tl(-0.00028), V(0.000117)
Nickel	231.604	Cd(-0.000914), Co(0.000546), Zn(0.00503)
Sodium	588.995	K(-0.000963)
Thorium	283.73	Ag(-0.00253), Al(0.181039), As(-0.001959), B(0.00014), Ba(0.00031), Be(0.000015), Ca(0.0033), Co(-0.000854), Cr(-0.001124), Cu(0.002515), Fe(0.002718), K(-0.00082), Li(-0.00021), Mg(0.007), Mn(0.000103), Na(0.00042), Ni(-0.000169), Pb(-0.00176), Sb(-0.000639), Se(-0.002503), Si(0.00029), Sn(0.001125), Tl(-0.000627), V(0.00243)
Uranium	409.014	Ag(0.00107), Al(0.020406), As(0.00282), B(0.00036), Ba(0.00009), Be(0.000062), Ca(0.0052), Cd(-0.000037), Co(0.000098), Cr(-0.002773), Cu(0.001594), Fe(0.0018), K(-0.004418), Li(0.000075), Mg(0.0108), Mn(0.00031), Na(0.00041), Ni(0.000186), Pb(0.001642), Sb(0.000309), Se(0.001177), Si(-0.000876), Sn(0.00033), Sr(0.00007), Tl(0.00048), V(0.00161)

STL-ST. LOUIS

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: CVAA **Units:** ug/L

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Mercury	253.70	10	4/1/03

STL-ST. LOUIS

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICP **Units:** ug/L

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Aluminum	308.21	500000	10/26/04
Calcium	317.93	500000	10/26/04
Iron	259.94	500000	10/26/04
Magnesium	383.27	500000	10/26/04
Potassium	766.49	1000000	10/26/04
Sodium	589.00	500000	10/26/04
Zinc	213.86	50000	10/26/04

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Log

Preparation Batch: 5115193 **Instrument:** ICP **Matrix:** Soil

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
G84N2B	4/27/05	0.5	50	NA
G84N2C	4/27/05	0.5	50	NA
G817C	4/27/05	0.5	50	20.34
G817CD	4/27/05	0.5	50	20.34
G817CS	4/27/05	0.5	50	20.34
G817D	4/27/05	0.5	50	19.14
G817E	4/27/05	0.5	50	27.93
G817F	4/27/05	0.5	50	25.01
G817G	4/27/05	0.5	50	20.99

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Log

Preparation Batch: 5122051 **Instrument:** CVAA **Matrix:** Soil

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
G9L0CB	5/2/05	0.6	100	NA
G9L0CC	5/2/05	0.6	100	NA
G817C	5/2/05	0.6	100	20.34
G817CD	5/2/05	0.6	100	20.34
G817CS	5/2/05	0.6	100	20.34
G817D	5/2/05	0.6	100	19.14
G817E	5/2/05	0.6	100	27.93
G817F	5/2/05	0.6	100	25.01
G817G	5/2/05	0.6	100	20.99

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAA **Chart Number:** AA0502B.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
Std01Rep1		5/2/05	13:08
Std02Rep1		5/2/05	13:10
Std03Rep1		5/2/05	13:13
Std04Rep1		5/2/05	13:15
Std05Rep1		5/2/05	13:17
Std06Rep1		5/2/05	13:19
ICV		5/2/05	13:21
ICB		5/2/05	13:23
CRA		5/2/05	13:25
CCV		5/2/05	13:28
CCB		5/2/05	13:29
ZZZZZZ		5/2/05	13:31
ZZZZZZ		5/2/05	13:33
ZZZZZZ		5/2/05	13:35
ZZZZZZ		5/2/05	13:37
ZZZZZZ		5/2/05	13:39
ZZZZZZ		5/2/05	13:41
G9L0CB		5/2/05	13:43
G9L0CC		5/2/05	13:45
G817C	RE73-05-58842	5/2/05	13:47
ZZZZZZ		5/2/05	13:49
CCV		5/2/05	13:51
CCB		5/2/05	13:53
G817CS	RE73-05-58842 S	5/2/05	13:55
G817CD	RE73-05-58842 D	5/2/05	13:57
G817CV	RE73-05-58842	5/2/05	13:58
G817D	RE73-05-58843	5/2/05	14:00
G817E	RE73-05-58844	5/2/05	14:02
G817F	RE73-05-58845	5/2/05	14:04
G817G	RE73-05-58846	5/2/05	14:06
ZZZZZZ		5/2/05	14:08
ZZZZZZ		5/2/05	14:10
ZZZZZZ		5/2/05	14:12
CCV		5/2/05	14:14
CCB		5/2/05	14:17
ZZZZZZ		5/2/05	14:19
ZZZZZZ		5/2/05	14:21
ZZZZZZ		5/2/05	14:23
ZZZZZZ		5/2/05	14:25

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAA **Chart Number:** AA0502B.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		5/2/05	14:27
ZZZZZZ		5/2/05	14:29
ZZZZZZ		5/2/05	14:31
ZZZZZZ		5/2/05	14:33
ZZZZZZ		5/2/05	14:36
ZZZZZZ		5/2/05	14:38
ZZZZZZ		5/2/05	14:39
ZZZZZZ		5/2/05	14:41
ZZZZZZ		5/2/05	14:44
ZZZZZZ		5/2/05	14:46
ZZZZZZ		5/2/05	14:47
ZZZZZZ		5/2/05	14:49
ZZZZZZ		5/2/05	14:52
ZZZZZZ		5/2/05	14:54
ZZZZZZ		5/2/05	14:56
ZZZZZZ		5/2/05	14:58
ZZZZZZ		5/2/05	15:00
ZZZZZZ		5/2/05	15:02
ZZZZZZ		5/2/05	15:04
ZZZZZZ		5/2/05	15:06
ZZZZZZ		5/2/05	15:08
ZZZZZZ		5/2/05	15:09
ZZZZZZ		5/2/05	15:11
ZZZZZZ		5/2/05	15:15
ZZZZZZ		5/2/05	15:17
ZZZZZZ		5/2/05	15:19

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICP **Chart Number:** 0427IE2.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
CALBLK		4/27/05	14:00
CAL1		4/27/05	14:05
CAL2		4/27/05	14:09
CAL3		4/27/05	14:13
ICV		4/27/05	14:16
ICB		4/27/05	14:20
CRI		4/27/05	14:25
ICSA		4/27/05	14:29
ICSAB		4/27/05	14:33
CCV		4/27/05	14:40
CCB		4/27/05	14:44
G84N2B		4/27/05	15:15
G84N2C		4/27/05	15:19
ZZZZZZ		4/27/05	15:23
ZZZZZZ		4/27/05	15:28
ZZZZZZ		4/27/05	15:32
ZZZZZZ		4/27/05	15:36
ZZZZZZ		4/27/05	15:41
ZZZZZZ		4/27/05	15:45
ZZZZZZ		4/27/05	15:49
ZZZZZZ		4/27/05	15:54
CCV		4/27/05	15:58
CCB		4/27/05	16:02
ZZZZZZ		4/27/05	16:07
ZZZZZZ		4/27/05	16:11
ZZZZZZ		4/27/05	16:16
ZZZZZZ		4/27/05	16:20
ZZZZZZ		4/27/05	16:24
ZZZZZZ		4/27/05	16:29
ZZZZZZ		4/27/05	16:33
ZZZZZZ		4/27/05	16:37
ZZZZZZ		4/27/05	16:42
ZZZZZZ		4/27/05	16:46
CCV		4/27/05	16:50
CCB		4/27/05	16:55
G817C	RE73-05-58842	4/27/05	16:59
G817CS	RE73-05-58842 S	4/27/05	17:03
G817CD	RE73-05-58842 D	4/27/05	17:08
G817D	RE73-05-58843	4/27/05	17:12

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICP **Chart Number:** 0427IE2.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
G817E	RE73-05-58844	4/27/05	17:17
G817F	RE73-05-58845	4/27/05	17:21
G817G	RE73-05-58846	4/27/05	17:25
CCV		4/27/05	17:30
CCB		4/27/05	17:34
CCV		4/28/05	8:10
CCB		4/28/05	8:15
ZZZZZZ		4/28/05	8:19
ZZZZZZ		4/28/05	8:23
ZZZZZZ		4/28/05	8:28
ZZZZZZ		4/28/05	8:32
ZZZZZZ		4/28/05	8:37
ZZZZZZ		4/28/05	8:41
ZZZZZZ		4/28/05	8:45
ZZZZZZ		4/28/05	8:50
ZZZZZZ		4/28/05	8:54
ZZZZZZ		4/28/05	8:58
CCV		4/28/05	9:03
CCB		4/28/05	9:07
ZZZZZZ		4/28/05	9:11
ZZZZZZ		4/28/05	9:16
ZZZZZZ		4/28/05	9:20
ZZZZZZ		4/28/05	9:24
G817C	RE73-05-58842	4/28/05	9:29
G817CS	RE73-05-58842 S	4/28/05	9:33
G817CD	RE73-05-58842 D	4/28/05	9:38
G817D	RE73-05-58843	4/28/05	9:42
G817E	RE73-05-58844	4/28/05	9:46
G817F	RE73-05-58845	4/28/05	9:51
CCV		4/28/05	9:55
CCB		4/28/05	9:59
G817G	RE73-05-58846	4/28/05	10:04
CCV		4/28/05	10:08
CCB		4/28/05	10:12

METALS RAW DATA

FJ 4/27/05 SID C42605 6010C

Analysis Report Summary 04/28/05 10:33:37 AM WE page 1

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	CALBLK	0427IE2	6010C	04/27/05	14:00		X	IR
2	CAL1	0427IE2	6010C	04/27/05	14:05		X	IR
3	CAL2	0427IE2	6010C	04/27/05	14:09		X	IR
4	CAL3	0427IE2	6010C	04/27/05	14:13		X	IR
5	ICV	0427IE2	6010C	04/27/05	14:16	STL	Q	CONC
6	ICB	0427IE2	6010C	04/27/05	14:20	STL	Q	CONC
7	LLC	0427IE2	6010C	04/27/05	14:25	STL	Q	CONC
8	ICSA	0427IE2	6010C	04/27/05	14:29	STL	Q	CONC
9	ICSAB	0427IE2	6010C	04/27/05	14:33	STL	Q	CONC
10	CCV	0427IE2	6010C	04/27/05	14:40	STL	Q	CONC
11	CCB	0427IE2	6010C	04/27/05	14:44	STL	Q	CONC
12	G84N2B	0427IE2	6010C	04/27/05	15:15	STL	S	CONC
13	G84N2C	0427IE2	6010C	04/27/05	15:19	STL	S	CONC
14	G8WP7	0427IE2	6010C	04/27/05	15:23	STL	S	CONC
15	G8WP7S	0427IE2	6010C	04/27/05	15:28	STL	S	CONC
16	G8WP7D	0427IE2	6010C	04/27/05	15:32	STL	S	CONC
17	G8WP7V 5X	0427IE2	6010C	04/27/05	15:36	STL	S	CONC
18	G8WQL	0427IE2	6010C	04/27/05	15:41	STL	S	CONC
19	G8WQN	0427IE2	6010C	04/27/05	15:45	STL	S	CONC
20	G8WQR	0427IE2	6010C	04/27/05	15:49	STL	S	CONC
21	G8WQT	0427IE2	6010C	04/27/05	15:54	STL	S	CONC
22	CCV	0427IE2	6010C	04/27/05	15:58	STL	Q	CONC
23	CCB	0427IE2	6010C	04/27/05	16:02	STL	Q	CONC
24	G8WR6	0427IE2	6010C	04/27/05	16:07	STL	S	CONC
25	G8WTA	0427IE2	6010C	04/27/05	16:11	STL	S	CONC
26	G8WTE	0427IE2	6010C	04/27/05	16:16	STL	S	CONC
27	G8WTG	0427IE2	6010C	04/27/05	16:20	STL	S	CONC
28	G8WTR	0427IE2	6010C	04/27/05	16:24	STL	S	CONC
29	G8WTV	0427IE2	6010C	04/27/05	16:29	STL	S	CONC
30	G8WTW	0427IE2	6010C	04/27/05	16:33	STL	S	CONC
31	G8WTX	0427IE2	6010C	04/27/05	16:37	STL	S	CONC
32	G8WT0	0427IE2	6010C	04/27/05	16:42	STL	S	CONC
33	G8WT1	0427IE2	6010C	04/27/05	16:46	STL	S	CONC
34	CCV	0427IE2	6010C	04/27/05	16:50	STL	Q	CONC
35	CCB	0427IE2	6010C	04/27/05	16:55	STL	Q	CONC
36	G817C	0427IE2	6010C	04/27/05	16:59	STL	S	CONC
37	G817CS	0427IE2	6010C	04/27/05	17:03	STL	S	CONC
38	G817CD	0427IE2	6010C	04/27/05	17:08	STL	S	CONC
39	G817D	0427IE2	6010C	04/27/05	17:12	STL	S	CONC
40	G817E	0427IE2	6010C	04/27/05	17:17	STL	S	CONC
41	G817F	0427IE2	6010C	04/27/05	17:21	STL	S	CONC
42	G817G	0427IE2	6010C	04/27/05	17:25	STL	S	CONC
43	CCV	0427IE2	6010C	04/27/05	17:30	STL	Q	CONC
44	CCB	0427IE2	6010C	04/27/05	17:34	STL	Q	CONC
45	CCV	0427IE2	6010C	04/28/05	08:10	STL	Q	CONC
46	CCB	0427IE2	6010C	04/28/05	08:15	STL	Q	CONC
47	G8WP7 5	0427IE2	6010C	04/28/05	08:19	STL	S	CONC
48	G8WP7S 5	0427IE2	6010C	04/28/05	08:23	STL	S	CONC
49	G8WP7D 5	0427IE2	6010C	04/28/05	08:28	STL	S	CONC
50	G8WP7V 25	0427IE2	6010C	04/28/05	08:32	STL	S	CONC
51	G8WQL 5	0427IE2	6010C	04/28/05	08:37	STL	S	CONC
52	G8WQN 5	0427IE2	6010C	04/28/05	08:41	STL	S	CONC
53	G8WQT 5	0427IE2	6010C	04/28/05	08:45	STL	S	CONC

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#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	G8WTA 10	0427IE2	6010C	04/28/05	08:50	STL	S	CONC
55	G8WTG 5	0427IE2	6010C	04/28/05	08:54	STL	S	CONC
56	G8WTR 5	0427IE2	6010C	04/28/05	08:58	STL	S	CONC
57	CCV	0427IE2	6010C	04/28/05	09:03	STL	Q	CONC
58	CCB	0427IE2	6010C	04/28/05	09:07	STL	Q	CONC
59	G8WTV 25	0427IE2	6010C	04/28/05	09:11	STL	S	CONC
60	G8WTW 25	0427IE2	6010C	04/28/05	09:16	STL	S	CONC
61	G8WT0 5	0427IE2	6010C	04/28/05	09:20	STL	S	CONC
62	G8WT1 5	0427IE2	6010C	04/28/05	09:24	STL	S	CONC
63	G817C 5	0427IE2	6010C	04/28/05	09:29	STL	S	CONC
64	G817CS 5	0427IE2	6010C	04/28/05	09:33	STL	S	CONC
65	G817CD 5	0427IE2	6010C	04/28/05	09:38	STL	S	CONC
66	G817D 5	0427IE2	6010C	04/28/05	09:42	STL	S	CONC
67	G817E 5	0427IE2	6010C	04/28/05	09:46	STL	S	CONC
68	G817F 25	0427IE2	6010C	04/28/05	09:51	STL	S	CONC
69	CCV	0427IE2	6010C	04/28/05	09:55	STL	Q	CONC
70	CCB	0427IE2	6010C	04/28/05	09:59	STL	Q	CONC
71	G817G 5	0427IE2	6010C	04/28/05	10:04	STL	S	CONC
72	CCV	0427IE2	6010C	04/28/05	10:08	STL	Q	CONC
73	CCB	0427IE2	6010C	04/28/05	10:12	STL	Q	CONC

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#	Sample Name	Al	Fe	K	Mg	Na	Zn
1	CALBLK	.1516	.02769	-.06158	.2105	.1419	.0006
2	CAL1						3.45879
3	CAL2	12.8777	28.1936	1.21461	4.87699	15.5622	
4	CAL3						
5	ICV	41.152	42.179	40.141	20.506	40.106	3.9893
6	ICB	.00517	.00124	-.54163	.00102	.00068	-.00029
7	LLC	.23544	.11022	4.7913	5.1897	5.0352	.02012
8	ICSA	488.35	179.71	-.88081	479.64	-.05768	-.00649
9	ICSAB	491.63	181.25	20.967	480.38	19.928	.89845
10	CCV	40.813	42.558	40.554	20.212	39.720	3.9856
11	CCB	.01105	.00259	1.1071	-.00357	.00326	-.00146
12	G84N2B	H.06628	.02860	-.35322	H.31207	.04221	.00175
13	G84N2C	52.730	103.82	19.336	20.205	4.5648	1.7463
14	G8WP7	143.58	H525.00	37.870	28.165	41.374	H56.076
15	G8WP7S	165.52	353.89	63.938	62.873	76.347	40.439
16	G8WP7D	107.60	422.22	52.163	46.891	60.226	23.811
17	G8WP7V 5X	30.742	126.92	6.9511	6.2800	8.6295	12.744
18	G8WQL	93.467	H966.72	17.849	19.853	14.322	(21.169)
19	G8WQN	114.46	H509.14	28.798	21.360	27.819	32.814
20	G8WQR	111.02	347.42	20.711	22.238	16.564	36.933
21	G8WQT	100.02	336.35	22.036	23.732	20.139	H78.362
22	CCV	40.984	42.336	40.604	20.299	39.780	3.9742
23	CCB	.00875	.00649	-.30616	-.00697	.00002	.00205
24	G8WR6	95.993	451.47	17.579	455.64	11.970	38.626
25	G8WTA	133.24	377.80	29.168	23.191	30.605	H240.20
26	G8WTE	136.77	438.18	32.879	25.517	29.799	29.648
27	G8WTG	132.12	H930.72	26.706	23.595	39.599	31.388
28	G8WTR	100.10	H746.84	19.297	22.121	24.837	H65.046
29	G8WTV	k38.826	S5681.4	k7.9167	k9.2491	k7.8049	k6.7138
30	G8WTW	k51.610	S5601.4	6.1697	k7.8232	k4.0099	k5.4851
31	G8WTX	82.926	397.01	19.143	15.487	14.523	34.608
32	G8WT0	104.37	H590.51	22.053	24.057	22.725	32.814
33	G8WT1	175.51	H552.76	38.208	32.049	45.500	46.901
34	CCV	40.779	42.060	40.470	20.083	39.722	3.9088
35	CCB	.02265	.01086	-.85869	.00986	.00588	.00610
36	G817C	136.57	H693.57	30.147	26.304	33.215	H50.136
37	G817CS	371.17	H594.09	61.005	53.358	92.897	-34.290
38	G817CD	173.27	H697.71	54.816	47.020	56.326	H222.74
39	G817D	154.97	H515.00	36.108	36.881	39.865	49.449
40	G817E	69.451	H766.68	10.035	11.081	8.4218	14.664
41	G817F	k90.730	S5681.4	k11.085	k16.492	9.6011	k10.897
42	G817G	113.96	H661.93	17.127	22.726	26.594	17.269
43	CCV	40.706	42.109	39.290	20.060	39.235	3.9117
44	CCB	.03701	.02047	.22059	.03152	.01626	.00641
45	CCV	41.194	43.286	40.320	20.577	40.778	4.0297
46	CCB	-.00593	.00131	1.0490	.01752	-.00318	.00434
47	G8WP7 5	29.438	125.81	7.8095	6.0381	8.3987	12.573
48	G8WP7S 5	34.273	82.932	13.343	13.444	15.828	8.9664
49	G8WP7D 5	21.558	97.275	10.922	9.8570	11.980	5.1120
50	G8WP7V 25	5.8660	25.923	1.3044	1.2375	1.6485	2.5169
51	G8WQL 5	18.761	216.17	4.3510	4.1571	2.8436	4.5400
52	G8WQN 5	23.135	118.10	6.4633	4.5099	5.5907	7.0353
53	G8WQT 5	20.579	79.139	4.8867	5.1037	3.9714	18.653

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#	Sample Name	Al	Fe	K	Mg	Na	Zn
54	G8WTA 10	13.845	44.566	2.6089	2.5165	3.1031	32.456
55	G8WTG 5	27.459	247.32	6.2237	5.1578	8.1872	7.0676
56	G8WTR 5	20.507	187.56	4.4931	4.7690	4.9772	14.800
57	CCV	40.958	42.898	40.189	20.504	40.093	4.0037
58	CCB	-.01516	.00165	-.48729	-.02449	-.02394	.00145
59	G8WTV 25	1.6224	152.01	1.5288	.38156	.29375	.33570
60	G8WTW 25	1.3198	165.83	-.03332	.31082	.12389	.28078
61	G8WT0 5	20.880	140.56	5.9135	5.2450	4.4513	7.1698
62	G8WT1 5	27.721	170.48	6.3962	5.5942	6.6393	12.972
63	G817C 5	36.434	131.29	8.4920	6.9618	9.3934	10.285
64	G817CS 5	77.332	144.81	12.569	11.502	19.302	7.5933
65	G817CD 5	35.605	172.32	11.485	10.044	11.391	H58.292
66	G817D 5	31.430	119.84	7.2827	7.8181	7.9979	10.757
67	G817E 5	13.840	184.33	2.5784	2.3312	1.6504	3.1108
68	G817F 25	3.8084	97.359	1.2948	.71191	.37223	.51414
69	CCV	41.017	43.053	40.666	20.565	39.934	3.9980
70	CCB	-.00226	.00455	.49489	.00700	-.00252	.00000
71	G817G 5	23.414	162.92	3.9425	5.2538	5.3378	3.8027
72	CCV	41.378	43.493	41.204	20.693	40.627	4.0169
73	CCB	-.00551	.00270	-.85354	-.02018	-.02199	.00144

#	Sample Name	Ca3179
1	CALBLK	.04389
2	CAL1	
3	CAL2	11.2307
4	CAL3	
5	ICV	20.717
6	ICB	.00138
7	LLC	5.2543
8	ICSA	447.82
9	ICSAB	449.25
10	CCV	20.437
11	CCB	.00214
12	G84N2B	.09415
13	G84N2C	35.065
14	G8WP7	337.60
15	G8WP7S	309.71
16	G8WP7D	471.65
17	G8WP7V 5X	77.045
18	G8WQL	189.73
19	G8WQN	205.37
20	G8WQR	189.39
21	G8WQT	227.84
22	CCV	20.502
23	CCB	.00026
24	G8WR6	242.67
25	G8WTA	237.28
26	G8WTE	261.93
27	G8WTG	227.08
28	G8WTR	247.97
29	G8WTV	~~360.347~~
30	G8WTW	~~444.645~~

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#	Sample Name	Ca3179
31	G8WTX	168.52
32	G8WT0	479.14
33	G8WT1	264.52
34	CCV	20.250
35	CCB	.00598
36	G817C	231.49
37	G817CS	291.56
38	G817CD	216.23
39	G817D	294.41
40	G817E	138.70
41	G817F	129.11
42	G817G	~~H058.66~~
43	CCV	20.243
44	CCB	.01097
45	CCV	20.457
46	CCB	.00738
47	G8WP7 5	74.004
48	G8WP7S 5	68.992
49	G8WP7D 5	102.09
50	G8WP7V 25	15.155
51	G8WQL 5	41.471
52	G8WQN 5	44.350
53	G8WQT 5	50.654
54	G8WTA 10	26.682
55	G8WTG 5	51.732
56	G8WTR 5	55.059
57	CCV	20.577
58	CCB	-.00339
59	G8WTV 25	3.0088
60	G8WTW 25	2.2639
61	G8WT0 5	105.49
62	G8WT1 5	50.998
63	G817C 5	59.290
64	G817CS 5	65.624
65	G817CD 5	48.395
66	G817D 5	64.116
67	G817E 5	30.148
68	G817F 25	6.2442
69	CCV	20.821
70	CCB	.00660
71	G817G 5	199.42
72	CCV	20.847
73	CCB	-.00338

4/28/05

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Standardization Rpt.

STD 042605 Corr Corr

04/27/05 02:05:17 PM

Method: 6010C Standard: CALBLK
Run Time: 04/27/05 14:00:59

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Avge	-.00170	.15160	.00105	.01720	.00000	.00910	.06570
SDev	.00014	.00198	.00049	.00057	.00028	.00014	.00014
%RSD	8.3189	1.3060	47.140	3.2889	.00000	1.5541	.21526
#1	-.00180	.15020	.00140	.01680	-.00020	.00900	.06580
#2	-.00160	.15300	.00070	.01760	.00020	.00920	.06560

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Avge	.04390	.00010	.00110	.00590	.00280	.02770	-.06158
SDev	.00127	.00014	.00099	.00014	.00057	.00042	.00521
%RSD	2.8993	141.42	89.995	2.3970	20.203	1.5316	8.4651
#1	.04300	.00000	.00040	.00600	.00320	.02740	-.06527
#2	.04480	.00020	.00180	.00580	.00240	.02800	-.05790

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Avge	.78740	.21050	.01300	-.00010	.14190	.00010	-.00070
SDev	.01216	.00438	.00028	.00014	.00438	.00240	.00099
%RSD	1.5446	2.0827	2.1757	141.42	3.0895	2404.2	141.42
#1	.77880	.20740	.01280	.00000	.13880	-.00160	.00000
#2	.79600	.21360	.01320	-.00020	.14500	.00180	-.00140

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Avge	.00000	.00010	-.00130	.00270	-.00040	.01500	-.00120
SDev	.00000	.00042	.00071	.00212	.00028	.00028	.00141
%RSD	.00000	424.26	54.393	78.567	70.711	1.8856	117.85
#1	.00000	.00040	-.00080	.00120	-.00060	.01480	-.00020
#2	.00000	-.00020	-.00180	.00420	-.00020	.01520	-.00220

Elem	Tl	U	V	Zn
Avge	.00100	.00440	.04940	.00060
SDev	.00057	.00255	.00113	.00000
%RSD	56.569	57.854	2.2902	.00000
#1	.00060	.00620	.04860	.00060
#2	.00140	.00260	.05020	.00060

Method: 6010C Standard: CAL1
Run Time: 04/27/05 14:05:21

Elem	Ag	As1936	B	Ba	Be	Bi	Cd2288
Avge	1.2527	.43680	2.8507	9.9142	16.000	1.1970	8.1343
SDev	.0069	.00509	.0191	.0591	.116	.0020	.0318
%RSD	.55317	1.1656	.66973	.59626	.72655	.16540	.39118
#1	1.2478	.43320	2.8372	9.8724	15.918	1.1984	8.1118
#2	1.2576	.44040	2.8642	9.9560	16.082	1.1956	8.1568

Elem	Co	Cr	Cu	Li	Mn	Mo	Ni
Avge	4.7312	17.357	4.7401	46.394	7.8412	.49780	8.2566
SDev	.0127	.049	.0086	.297	.0554	.00255	.0023
%RSD	.26902	.28028	.18199	.63984	.70700	.51137	.02740
#1	4.7222	17.323	4.7340	46.604	7.8020	.49600	8.2582
#2	4.7402	17.391	4.7462	46.184	7.8804	.49960	8.2550

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Tl
Avge	.63410	.13740	.35100	3.0098	.04970	17.296	.46950
SDev	.00495	.00057	.00424	.0014	.00071	.106	.00665
%RSD	.78060	.41171	1.2087	.04698	1.4228	.61488	1.4157
#1	.63060	.13700	.34800	3.0088	.04920	17.221	.46480
#2	.63760	.13780	.35400	3.0108	.05020	17.371	.47420

Elem	U	V	Zn
Avge	.33100	4.8364	3.4588

SDev	.00141	.0130	.0260
%RSD	.42725	.26902	.75233
#1	.33000	4.8272	3.4404
#2	.33200	4.8456	3.4772

Method: 6010C Standard: CAL2
Run Time: 04/27/05 14:09:33

Elem	Al	Ca3179	Fe	K	Mg	Na	P_1782
Avge	12.878	11.231	28.194	1.2146	4.8770	15.562	.13360
SDev	.073	.047	.236	.0126	.0263	.139	.00113
%RSD	.56776	.41429	.83869	1.0354	.53936	.89057	.84683
#1	12.826	11.198	28.026	1.2057	4.8584	15.464	.13440
#2	12.929	11.264	28.361	1.2235	4.8956	15.660	.13280

Method: 6010C Standard: CAL3
Run Time: 04/27/05 14:13:13

Elem	Th
Avge	2.3861
SDev	.0194
%RSD	.81198
#1	2.3724
#2	2.3998

Method: 6010C Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Ag	328.068	CAL1	CALBLK	1.60292	.002725	04/27/05 02:13:13
Al	308.215	CAL2	CALBLK	7.85787	-1.19125	04/27/05 02:13:13
As1936	193.696	CAL1	CALBLK	23.0137	-.024164	04/27/05 02:13:13
B	249.678	CAL1	CALBLK	3.53047	-.060724	04/27/05 02:13:13
Ba	455.403	CAL1	CALBLK	1.00875	.000000	04/27/05 02:13:13
Be	313.242	CAL1	CALBLK	.625394	-.005691	04/27/05 02:13:13
Bi	223.000	CAL1	CALBLK	8.86721	-.582576	04/27/05 02:13:13
Ca3179	317.933	CAL2	CALBLK	4.46955	-.196213	04/27/05 02:13:13
Cd2288	228.802	CAL1	CALBLK	1.23772	-.000124	04/27/05 02:13:13
Co	228.612	CAL1	CALBLK	2.11548	-.002327	04/27/05 02:13:13
Cr	267.716	CAL1	CALBLK	.574734	-.003391	04/27/05 02:13:13
Cu	324.754	CAL1	CALBLK	2.11427	-.005920	04/27/05 02:13:13
Fe	259.940	CAL2	CALBLK	3.55094	-.098361	04/27/05 02:13:13
K	766.490	CAL2	CALBLK	78.2822	4.82083	04/27/05 02:13:13
Li	670.789	CAL1	CALBLK	.219289	-.172669	04/27/05 02:13:13
Mg	383.273	CAL2	CALBLK	10.7585	-2.26466	04/27/05 02:13:13
Mn	257.610	CAL1	CALBLK	1.27783	-.016612	04/27/05 02:13:13
Mo	202.030	CAL1	CALBLK	20.0844	.002008	04/27/05 02:13:13
Na	588.995	CAL2	CALBLK	6.48496	-.920215	04/27/05 02:13:13
Ni	231.604	CAL1	CALBLK	1.21131	-.000121	04/27/05 02:13:13
P_1782	178.287	CAL2	CALBLK	36.1198	.025284	04/27/05 02:13:13
Pb	220.353	CAL1	CALBLK	15.7963	.000000	04/27/05 02:13:13
Sb	206.838	CAL1	CALBLK	72.8557	-.007286	04/27/05 02:13:13
Se1960	196.026	CAL1	CALBLK	28.4183	.036944	04/27/05 02:13:13
Si	251.616	CAL1	CALBLK	3.32255	-.008971	04/27/05 02:13:13

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Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Sn	189.989	CAL1	CALBLK	199.667	.079867	04/27/05 02:13:13
Sr	421.552	CAL1	CALBLK	.578711	-.008681	04/27/05 02:13:13
Th	283.730	CAL3	CALBLK	4.18883	.005027	04/27/05 02:13:13
Tl	190.801	CAL1	CALBLK	21.3550	-.021355	04/27/05 02:13:13
U	409.014	CAL1	CALBLK	30.6185	-.134721	04/27/05 02:13:13
V	292.402	CAL1	CALBLK	2.09235	-.103362	04/27/05 02:13:13
Zn	213.856	CAL1	CALBLK	2.90622	-.001744	04/27/05 02:13:13

Method: 6010C

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ag	328.068	CALBLK	.000000	-.000000	.000000
		CAL1	2.00000	2.01070	-.010700
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Al	308.215	CALBLK	.000000	-.000000	.000000
		CAL2	100.000	100.000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
As1936	193.696	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0282	-.028200
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
B	249.678	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0036	-.003600
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ba	455.403	CALBLK	.000000	.000000	.000000
		CAL1	10.0000	10.0009	-.000900
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Be	313.242	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0006	-.000620
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Bi	223.000	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0315	-.031480
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ca3179	317.933	CALBLK	.000000	-.000000	.000000
		CAL2	50.0000	50.0000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cd2288	228.802	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0679	-.067890

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Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Co	228.612	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0064	-.006440
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cr	267.716	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.97227	.027730
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cu	324.754	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0159	-.015940
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Fe	259.940	CALBLK	.000000	-.000000	.000000
		CAL2	100.000	100.015	-.015495
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
K	766.490	CALBLK	.000000	-.000000	.000000
		CAL2	100.000	99.9037	.096298
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Li	670.789	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0010	-.000980
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mg	383.273	CALBLK	.000000	-.000000	.000000
		CAL2	50.0000	50.2045	-.204498
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mn	257.610	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0031	-.003100
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mo	202.030	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Na	588.995	CALBLK	.000000	.000000	-.000000
		CAL2	100.000	100.000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ni	231.604	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0012	-.001200
			Known	Measured	Residual

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Element	Wavelength	Standard	Concentration	Concentration	Concentration
P_1782	178.287	CALBLK	.000000	.000000	-.000000
		CAL2	5.00000	4.85089	.149110

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Pb	220.353	CALBLK	.000000	.000000	.000000
		CAL1	10.0000	10.0164	-.016420

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sb	206.838	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0031	-.003090

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Se1960	196.026	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0118	-.011770

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Si	251.616	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	9.99124	.008760

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sn	189.989	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0033	-.003300

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sr	421.552	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0007	-.000700

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Th	283.730	CALBLK	.000000	-.000000	.000000
		CAL3	10.0000	10.0000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Tl	190.801	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0048	-.004800

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
U	409.014	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
V	292.402	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0161	-.016100

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Zn	213.856	CALBLK	.000000	.000000	-.000000

CAL1	10.0000	10.0503	-.050300

Method: 6010C Sample Name: ICV Operator: STL
Run Time: 04/27/05 14:16:32
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.81829	41.152	4.2139	4.0738	4.1300	3.9658	4.2757
SDev	.00079	.058	.0027	.0080	.0030	.0035	.0193
%RSD	.09701	.14065	.06392	.19691	.07289	.08901	.45137
#1	Q.81773	41.193	4.2158	4.0681	4.1279	3.9682	4.2621
#2	Q.81885	41.111	4.2120	4.0795	4.1322	3.9633	4.2894
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	40.000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.717	3.9752	3.9349	3.9475	3.9609	42.179	40.141
SDev	.029	.0089	.0009	.0004	.0081	.015	1.399
%RSD	.14061	.22483	.02326	.00904	.20565	.03632	3.4856
#1	20.696	3.9815	3.9342	3.9478	3.9667	42.168	41.131
#2	20.738	3.9689	3.9355	3.9473	3.9552	42.190	39.152
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.000	4.0000	4.0000	4.0000	4.0000	40.000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.0280	20.506	3.9571	4.0248	40.106	3.9095	3.9716
SDev	.0345	.006	.0011	.0057	.243	.0229	.1277
%RSD	.85735	.03073	.02832	.14112	.60583	.58680	3.2143
#1	4.0524	20.511	3.9563	4.0208	40.278	3.9257	4.0618
#2	4.0036	20.502	3.9579	4.0289	39.934	3.8932	3.8813
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	20.000	4.0000	4.0000	40.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9341	4.0737	3.8097	4.1387	4.1111	3.9599	3.7747
SDev	.0020	.0103	.0482	.0057	.2258	.0021	.0099
%RSD	.04989	.25190	1.2649	.13789	5.4935	.05396	.26233
#1	3.9355	4.0809	3.7757	4.1428	4.2708	3.9584	3.7817
#2	3.9328	4.0664	3.8438	4.1347	3.9514	3.9615	3.7677
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass

Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	3.9247	4.0193	3.9649	3.9893
SDev	.0634	.1255	.0039	.0129
%RSD	1.6144	3.1232	.09884	.32225
#1	3.9695	4.1080	3.9676	3.9802
#2	3.8799	3.9305	3.9621	3.9984
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: ICB Operator: STL
Run Time: 04/27/05 14:20:54
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00296	.00518	-.03426	.00851	-.00009	.00007	-.00768
SDev	.00313	.01126	.03754	.00001	.00042	.00000	.00746
%RSD	105.82	217.52	109.57	.13386	465.41	3.9742	97.220
#1	-.00075	-.00278	-.06081	.00850	.00021	.00007	-.00240
#2	-.00518	.01314	-.00772	.00851	-.00039	.00007	-.01295
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.01000	.05000	.20000	.02500	.20000	.00500	.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00139	.00063	-.00084	-.00124	-.00069	.00124	-.54163
SDev	.00719	.00076	.00089	.00053	.00067	.00008	.44225
%RSD	517.41	119.39	106.22	42.677	97.930	6.3020	81.651
#1	-.00369	.00010	-.00021	-.00161	-.00116	.00119	-.22892
#2	.00647	.00117	-.00147	-.00086	-.00021	.00130	-.85435
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass

Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.25000	.00500	.05000	.01000	.02500	.05000	2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00091	.00102	.00003	.00201	.00069	.00146	.03251
SDev	.00186	.02328	.00001	.00000	.01102	.00119	.07150
%RSD	204.51	2276.2	45.336	.00000	1601.6	81.541	219.95
#1	-.00223	-.01544	.00002	.00201	-.00711	.00231	-.01805
#2	.00041	.01748	.00004	.00201	.00848	.00062	.08307
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.01000	.25000	.01500	.04000	.25000	.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01724	-.03640	-.06526	.00457	.05994	-.00011	-.00521
SDev	.02005	.04122	.01601	.00145	.14117	.00000	.00206
%RSD	116.31	113.24	24.528	31.765	235.53	2.7716	39.419
#1	-.00306	Q-.06555	-.05394	.00560	Q.15976	-.00011	-.00376
#2	-.03142	-.00725	-.07658	.00354	-.03989	-.00011	-.00667
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.10000	.06000	.20000	.50000	.10000	.05000	.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.06402	-.09183	.00100	-.00030
SDev	.03018	.04329	.00126	.00040
%RSD	47.132	47.143	125.96	135.87
#1	-.04269	-.06122	.00011	-.00001
#2	-.08536	-.12244	.00189	-.00058
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000
Range	2.0000	.50000	.05000	.02000

Method: 6010C Sample Name: LLC Operator: STL
Run Time: 04/27/05 14:25:15
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01023	.23544	.17500	.20629	.20602	.00528	.21784
SDev	.00224	.00681	.01783	.00002	.00029	.00000	.00020
%RSD	21.901	2.8931	10.190	.00861	.14011	.03609	.09431
#1	.00864	.23063	.16239	.20630	.20622	.00528	.21798
#2	.01181	Q.24026	.18761	.20627	.20581	.00528	.21769
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.01000	.20000	.20000	.20000	.20000	.00500	.20000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.2543	Q.00600	.04769	Q.00688	.02221	.11023	4.7913
SDev	.0156	.00084	.00150	.00041	.00084	.00094	.7229
%RSD	.29763	13.944	3.1396	5.9876	3.7967	.85137	15.088
#1	5.2432	Q.00659	.04875	Q.00659	.02161	.10957	4.2802
#2	5.2653	.00541	.04663	Q.00717	.02281	.11089	5.3025
Errors	QC Pass	QC Fail	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass
Value	5.0000	.00500	.05000	.01000	.02500	.10000	5.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05108	5.1897	.01582	.04418	5.0352	.04225	.32311
SDev	.00015	.0300	.00017	.01420	.0092	.00000	.02555
%RSD	.29789	.57856	1.0749	32.145	.18242	.00838	7.9083
#1	.05098	5.1684	.01570	.03414	5.0417	.04225	.34118
#2	.05119	5.2109	.01594	Q.05422	5.0287	.04225	.30504
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.05000	5.0000	.01500	.04000	5.0000	.04000	.30000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.07710	Q.03613	.18893	.50459	Q.21897	.04939	.48052
SDev	.03356	.00001	.07634	.00519	.02823	.00000	.00193
%RSD	43.535	.02976	40.407	1.0290	12.890	.00429	.40114
#1	.10083	Q.03613	Q.13495	.50091	Q.19901	.04939	.47915
#2	Q.05337	Q.03612	Q.24291	.50826	Q.23892	.04939	.48188
Errors	QC Fail	QC Fail	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value	.10000	.06000	.20000	.50000	.10000	.05000	.50000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Tl	U	V	Zn

Units	ppm	ppm	ppm	ppm
Avge	.20440	.41059	.05194	.02012
SDev	.02113	.03030	.00083	.00000
%RSD	10.340	7.3794	1.6002	.00010
#1	.18945	Q.38917	.05135	.02012
#2	.21934	.43202	.05252	.02012
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	.20000	.50000	.05000	.02000
Range	20.000	20.000	20.000	20.000

Method: 6010C Sample Name: ICSA Operator: STL
Run Time: 04/27/05 14:29:36
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01032	488.35	.02753	.01164	.00215	.00088	.16391
SDev	.00397	5.25	.04346	.00607	.00018	.00009	.00641
%RSD	38.445	1.0742	157.87	52.191	8.5096	10.126	3.9104
#1	-.01313	484.64	-.00320	.00734	.00202	.00082	.16844
#2	-.00751	492.06	.05826	.01594	.00228	.00095	.15938
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	500.00	.00000	.00000	.00000	.00000	.00000
Range	.02000	100.00	.20000	.02500	.20000	.01000	.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	447.82	.00159	.00298	.00776	-.00040	179.71	-.88081
SDev	9.16	.00005	.00006	.00165	.00002	2.03	.47568
%RSD	2.0444	2.9985	2.1073	21.241	6.1214	1.1290	54.005
#1	441.34	.00156	.00302	.00893	-.00038	178.28	-1.2172
#2	454.29	.00162	.00293	.00660	-.00042	181.15	-.54445
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.00	.00000	.00000	.00000	.00000	200.00	.00000
Range	100.00	.01000	.05000	.02000	.02500	40.000	2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00201	479.64	.00796	.01128	-.05769	-.01089	.16584
SDev	.00438	5.30	.00059	.00274	.02385	.00565	.03017
%RSD	217.57	1.1060	7.3517	24.303	41.343	51.917	18.195
#1	-.00108	475.89	.00754	.00934	-.07455	-.00689	.18717
#2	.00511	483.39	.00837	.01322	-.04082	-.01488	.14450
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	500.00	.00000	.00000	.00000	.00000	.00000
Range	.01000	100.00	.01500	.04000	.25000	.04000	.25000

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02493	.01499	Q-.35583	-.02057	Q.17463	.00429	.04794
SDev	.03304	.04181	.07765	.00399	.16960	.00033	.00051
%RSD	132.55	278.83	21.821	19.382	97.115	7.6525	1.0546
#1	-.04829	-.01457	Q-.30093	-.02339	.05471	.00406	.04829
#2	-.00156	.04456	Q-.41073	-.01775	Q.29456	.00452	.04758
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Fail	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.10000	.06000	.20000	.50000	.10000	.05000	.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	Q-.20366	-.11544	-.00255	-.00650
SDev	.22424	.01380	.00277	.00049
%RSD	110.11	11.957	108.90	7.5945
#1	Q-.36222	-.10568	-.00451	-.00615
#2	-.04510	-.12520	-.00059	-.00685
Errors	QC Fail	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000
Range	.20000	.50000	.05000	.01000

Method: 6010C Sample Name: ICSAB Operator: STL
Run Time: 04/27/05 14:33:59
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.94274	491.63	Q.71270	.96459	.48489	.44966	1.0850
SDev	.00760	1.44	.05605	.00734	.00315	.00283	.0163
%RSD	.80644	.29264	7.8647	.76078	.64985	.63023	1.5054
#1	.93737	490.62	Q.75234	.95941	.48266	.44765	1.0734
#2	.94812	492.65	Q.67307	.96978	.48712	.45166	1.0965
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	500.00	1.0000	1.0000	.50000	.50000	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	449.25	.90764	.41114	.44298	.47629	181.25	20.967
SDev	1.22	.00472	.00065	.00029	.00236	1.05	.809
%RSD	.27204	.52051	.15740	.06564	.49529	.57707	3.8608
#1	448.38	.90430	.41160	.44319	.47462	180.51	21.539
#2	450.11	.91098	.41069	.44277	.47796	181.99	20.394
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.00	1.0000	.50000	.50000	.50000	200.00	20.000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0656	480.38	.44156	.89491	19.928	Q.79092	Q.66615
SDev	.0007	.98	.00309	.00279	.049	.03203	.12132
%RSD	.06167	.20497	.69883	.31167	.24378	4.0494	18.212
#1	1.0661	479.68	.43938	.89294	19.962	.81357	Q.75194
#2	1.0651	481.08	.44374	.89689	19.893	Q.76828	.58036
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Fail
Value	1.0000	500.00	.50000	1.0000	20.000	1.0000	.50000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.94814	.83934	Q.65170	.98107	.91223	.92582	.93862
SDev	.01753	.03041	.04934	.00911	.14130	.00614	.01005
%RSD	1.8491	3.6231	7.5708	.92873	15.490	.66343	1.0707
#1	.96053	.86084	Q.68659	.98752	.81231	.92147	.94572
#2	.93574	.81784	Q.61682	.97463	1.0121	.93016	.93151
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	Q.79563	.80361	.44322	.89845
SDev	.12092	.05679	.00273	.00298
%RSD	15.198	7.0668	.61507	.33136

#1	Q.71013	.84377	.44130	.89635
#2	.88114	Q.76346	.44515	.90056
Errors	QC Fail	QC Pass	QC Pass	QC Pass
Value	1.0000	1.0000	.50000	1.0000
Range	20.000	20.000	20.000	20.000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 04/27/05 14:40:03
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.81846	40.813	4.2988	4.0792	4.1652	3.9798	4.2234
SDev	.00045	.130	.0372	.0110	.0113	.0064	.0117
%RSD	.05518	.31883	.86419	.27059	.27097	.16011	.27778
#1	Q.81814	40.721	4.3251	4.0713	4.1731	3.9843	4.2151
#2	Q.81878	40.905	4.2725	4.0870	4.1572	3.9753	4.2317
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	40.000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.437	3.9303	3.9067	3.9226	3.9279	42.558	40.554
SDev	.094	.0168	.0168	.0125	.0354	.104	.589
%RSD	.45882	.42730	.42907	.31965	.90062	.24479	1.4519
#1	20.371	3.9184	3.8948	3.9137	3.9029	42.631	40.138
#2	20.504	3.9421	3.9185	3.9314	3.9529	42.484	40.971
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.000	4.0000	4.0000	4.0000	4.0000	40.000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9837	20.212	3.9703	4.0349	39.720	3.8952	4.0122
SDev	.0044	.099	.0029	.0256	.024	.0319	.0105
%RSD	.10941	.49068	.07298	.63343	.06013	.81789	.26149

#1	3.9806	20.142	3.9724	4.0529	39.737	3.8726	4.0196
#2	3.9867	20.282	3.9683	4.0168	39.703	3.9177	4.0048
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	20.000	4.0000	4.0000	40.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.8856	3.8917	3.8417	4.1110	4.2709	3.9895	3.7292
SDev	.0047	.0411	.0958	.0286	.0564	.0107	.0361
%RSD	.12061	1.0574	2.4935	.69463	1.3207	.26884	.96692
#1	3.8889	3.8626	3.9094	4.0908	4.2310	3.9971	3.7037
#2	3.8823	3.9208	3.7739	4.1312	4.3108	3.9819	3.7547
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	3.8734	4.0193	3.9304	3.9856
SDev	.1480	.0562	.0143	.0100
%RSD	3.8204	1.3972	.36489	.25134
#1	3.7687	3.9796	3.9202	3.9926
#2	3.9780	4.0590	3.9405	3.9785
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 04/27/05 14:44:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00343	.01106	-.03543	.00850	-.00020	.00013	.02149
SDev	.00028	.02448	.05843	.00001	.00058	.00009	.01886
%RSD	8.0922	221.35	164.92	.16453	292.40	71.252	87.757

#1	-.00362	-.00625	.00589	.00849	-.00061	.00006	.00816
#2	-.00323	.02836	-.07675	.00851	.00021	.00019	.03483
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.01000	.05000	.20000	.02500	.20000	.00500	.20000
Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00214	.00164	.00149	-.00077	.00115	.00260	1.1071
SDev	.00855	.00010	.00239	.00091	.00138	.00011	.3635
%RSD	398.85	6.2633	160.37	117.66	119.93	4.4016	32.836
#1	-.00390	.00156	.00318	-.00013	.00213	.00252	1.3641
#2	.00819	.00171	-.00020	-.00141	.00018	.00268	.85003
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.25000	.00500	.05000	.01000	.02500	.05000	2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00034	-.00357	.00028	-.00402	.00327	.00316	.00000
SDev	.00379	.04478	.00002	.00852	.02204	.00121	.03578
%RSD	1103.3	1253.0	6.6433	212.13	674.08	38.185	976600.
#1	-.00302	-.03524	.00026	.00201	-.01231	.00231	.02530
#2	.00234	.02809	.00029	-.01004	.01885	.00401	-.02530
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.01000	.25000	.01500	.04000	.25000	.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00644	-.02911	.03990	.00558	.05992	.00001	.00798
SDev	.00888	.03092	.03606	.00276	.08469	.00017	.00560
%RSD	137.95	106.21	90.382	49.403	141.34	3263.2	70.212
#1	.01271	-.05098	.06540	.00363	Q.11980	-.00011	.01194
#2	.00016	-.00725	.01440	.00753	.00003	.00012	.00402
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.10000	.06000	.20000	.50000	.10000	.05000	.50000
Elem	Tl	U	V	Zn			
Units	ppm	ppm	ppm	ppm			
Avge	-.04054	-.07352	.00073	-.00147			
SDev	.01513	.06058	.00159	.00206			
%RSD	37.335	82.396	218.27	140.29			
#1	-.05124	-.03068	-.00039	-.00001			
#2	-.02984	-.11635	.00185	-.00293			
Errors	QC Pass	QC Pass	QC Pass	QC Pass			
Value	.00000	.00000	.00000	.00000			

Range	2.0000	.50000	.05000	.02000

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Method: 6010C Sample Name: G84N2B Operator: STL
Run Time: 04/27/05 15:15:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00049	H.06628	-.02572	.02397	.00062	-.00005	-.03340
SDev	.00153	.00193	.03919	.00198	.00028	.00000	.01768
%RSD	312.65	2.9130	152.35	8.2706	45.665	4.9018	52.937
#1	-.00157	H.06492	.00199	.02257	.00042	-.00005	-.02090
#2	.00059	H.06765	-.05344	.02537	.00082	-.00006	-.04590
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.05000	.20000	.20000	.20000	.00500	.20000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09416	.00019	-.00104	-.00182	.00002	.02861	-.35323
SDev	.00021	.00013	.00061	.00109	.00024	.00057	.04448
%RSD	.22766	70.111	58.309	59.858	1095.6	1.9970	12.592
#1	.09431	.00010	-.00061	-.00260	-.00015	.02901	-.32178
#2	.09400	.00029	-.00147	-.00105	.00019	.02820	-.38468
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.00500	.05000	.01000	.02500	.05000	2.0000
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00492	H.31208	.00041	.00402	.04221	-.00313	.04687
SDev	.00015	.00044	.00019	.00284	.00002	.00428	.04086
%RSD	3.0657	.14228	46.786	70.735	.03882	136.54	87.190
#1	-.00502	H.31239	.00055	.00602	.04222	-.00616	.01797
#2	-.00481	H.31176	.00028	.00201	.04220	-.00011	.07576
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.01000	.25000	.01500	.04000	.25000	.04000	
Low	-.01000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02830	.00731	.00873	.15736	.07992	-.00016	-.00302
SDev	.02673	.02062	.03210	.00137	.00001	.00008	.00327
%RSD	94.454	282.09	367.61	.87186	.01334	48.127	108.27
#1	-.04720	.02189	-.01397	.15833	.07993	-.00022	-.00071
#2	-.00940	-.00727	.03143	.15638	.07991	-.00011	-.00533
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.10000	.06000	.20000	.50000	.10000	.05000	.50000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn

Units	ppm	ppm	ppm	ppm
Avge	-.04470	-.14084	-.00274	.00176
SDev	.00300	.04330	.00006	.00080
%RSD	6.7040	30.742	2.2505	45.539
#1	-.04682	-.17145	-.00269	.00119
#2	-.04258	-.11022	-.00278	.00232
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	.20000	.50000	.05000	.01000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G84N2C Operator: STL
Run Time: 04/27/05 15:19:25
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.4055	52.730	2.5941	1.0040	2.7898	1.0138	.47297
SDev	.0145	.096	.0532	.0006	.0040	.0010	.01791
%RSD	1.0316	.18211	2.0503	.05844	.14286	.09569	3.7870
#1	1.3953	52.798	2.5564	1.0035	2.7926	1.0145	.46031
#2	1.4158	52.662	2.6317	1.0044	2.7869	1.0131	.48564
Errors	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass	NOCHECK
High	1.9100	89.800		1.4000	2.9700	1.1100	
Low	.68900	36.600		.54500	2.0700	.77500	

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	35.065	1.3563	.38171	.71879	1.5970	103.82	19.336
SDev	.012	.0038	.00150	.00144	.0019	.06	.596
%RSD	.03526	.27943	.39196	.20077	.11809	.05984	3.0829
#1	35.074	1.3536	.38066	.71981	1.5956	103.86	18.915
#2	35.056	1.3590	.38277	.71777	1.5983	103.77	19.758
Errors	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	40.100		.44700	.84400	1.7400	160.00	24.700
Low	26.300		.25800	.54600	1.2200	64.200	13.700

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06406	20.205	4.4477	.92683	4.5648	1.5851	4.6846
SDev	.00152	.060	.0020	.01988	.0349	.0005	.0408
%RSD	2.3710	.29817	.04525	2.1449	.76398	.03213	.87081
#1	.06299	20.248	4.4462	.94088	4.5402	1.5855	4.6557
#2	.06514	20.163	4.4491	.91277	4.5895	1.5848	4.7134
Errors	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High		25.100	4.9000	1.0100	6.4300	1.7400	
Low		15.700	3.2600	.66700	2.4700	1.2000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.5788	.69054	.45655	12.576	.58778	.84655	-.03761
SDev	.0244	.02063	.02819	.085	.02821	.00065	.01391
%RSD	1.5445	2.9877	6.1746	.67290	4.7998	.07699	36.973
#1	1.5960	.70513	.43662	12.636	.60773	.84701	-.02778
#2	1.5615	.67595	.47648	12.516	.56783	.84609	-.04744
Errors	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Pass	LC Pass	NOCHECK
High	1.7000	1.3600			.86400	1.0100	
Low	1.1400	.06000			.35700	.67000	

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.85895	-.26603	.99009	1.7463
SDev	.02719	.04319	.00165	.0033
%RSD	3.1653	16.235	.16653	.18864
#1	.83973	-.23549	.99125	1.7440
#2	.87818	-.29657	.98892	1.7486
Errors	LC Pass	NOCHECK	LC Pass	LC Pass
High	1.0500		1.2200	1.9900
Low	.63500		.72800	1.3100

Method: 6010C Sample Name: G8WP7 Operator: STL
Run Time: 04/27/05 15:23:47
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.10667	143.58	5.3313	.96931	8.6475	.00344	2.1401
SDev	.00047	.16	.0430	.00752	.0180	.00000	.0014
%RSD	.43989	.10923	.80743	.77549	.20779	.00183	.06709
#1	.10634	143.47	5.3618	.96399	8.6602	.00344	2.1391
#2	.10700	143.69	5.3009	.97462	8.6348	.00344	2.1411
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	337.60	.03050	.12567	.81151	13.801	H525.00	37.870
SDev	1.17	.00154	.00077	.00234	.057	1.55	.713
%RSD	.34600	5.0375	.61602	.28860	.41134	.29547	1.8821
#1	336.77	.02941	.12512	.81316	13.761	H523.90	37.366
#2	338.42	.03159	.12622	.80985	13.841	H526.10	38.374
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08667	28.165	11.282	.12692	41.374	1.4231	54.015
SDev	.00028	.058	.029	.00860	.019	.0000	.003
%RSD	.31860	.20457	.25553	6.7738	.04655	.00000	.00546
#1	.08648	28.124	11.262	.13300	41.360	1.4231	54.013
#2	.08687	28.205	11.303	.12084	41.387	1.4231	54.017
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	24.264	.40345	L-1.7658	23.986	5.4346	.94507	-.04744
SDev	.190	.00087	.1593	.126	.1693	.00205	.00066
%RSD	.78171	.21608	9.0221	.52667	3.1151	.21650	1.3938
#1	24.130	.40283	L-1.8784	23.896	5.5543	.94652	-.04697
#2	24.398	.40406	L-1.6531	24.075	5.3149	.94363	-.04791
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.15918	-.00052	.12761	H56.076
SDev	.13899	.00085	.00022	.293
%RSD	87.317	163.70	.16925	.52315

#1	L-.25746	.00008	.12746	H55.868
#2	-.06090	-.00113	.12776	H56.283

Errors	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WP7S Operator: STL
Run Time: 04/27/05 15:28:08
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.13436	165.52	4.0921	.89008	10.757	.02720	1.9525
SDev	.00650	.41	.2380	.02318	.047	.00053	.0282
%RSD	4.8399	.24786	5.8170	2.6037	.43523	1.9508	1.4435
#1	.12976	165.23	3.9238	.87369	10.724	.02683	1.9325
#2	.13896	165.81	4.2604	.90646	10.790	.02758	1.9724
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	309.71	.05883	.32892	.64808	31.544	353.89	63.938
SDev	4.13	.00283	.00289	.00675	.017	5.03	1.873
%RSD	1.3347	4.8145	.87831	1.0422	.05284	1.4213	2.9290
#1	306.79	.06083	.32688	.64330	31.532	350.33	62.613
#2	312.64	.05682	.33096	.65286	31.556	357.45	65.262
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07343	62.873	11.970	.55908	76.347	1.0296	30.329
SDev	.00452	.283	.175	.02248	.121	.0057	.326
%RSD	6.1516	.44992	1.4647	4.0202	.15857	.54903	1.0757

#1	.07024	62.673	11.846	.54319	76.432	1.0256	30.099
#2	.07663	63.073	12.094	.57497	76.261	1.0336	30.560
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	39.360	.42687	L-.35716	30.848	9.7533	2.3443	-.04795
SDev	.641	.00749	.17903	.300	.3110	.0117	.00330
%RSD	1.6275	1.7541	50.127	.97385	3.1890	.49923	6.8774
#1	38.907	.43216	L-.48375	30.635	9.5333	2.3360	-.04562
#2	39.813	.42157	L-.23056	31.060	9.9732	2.3526	-.05029
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.84207	-.18344	.35138	40.439
SDev	.10899	.00276	.00530	.658
%RSD	12.943	1.5030	1.5074	1.6284
#1	.76500	-.18149	.34763	39.973
#2	.91914	-.18539	.35513	40.904
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WP7D Operator: STL
Run Time: 04/27/05 15:32:29
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09334	107.60	4.9879	.60815	10.259	.02703	1.8531
SDev	.00065	.20	.0333	.00514	.016	.00009	.0052
%RSD	.70159	.18877	.66728	.84523	.15300	.32411	.28043

#1	.09288	107.46	5.0114	.60452	10.248	.02697	1.8568
#2	.09381	107.75	4.9643	.61179	10.270	.02709	1.8494
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000
Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	471.65	.02336	.31071	.60426	16.958	422.22	52.163
SDev	1.25	.00237	.00168	.00142	.039	1.41	.223
%RSD	.26466	10.138	.54078	.23568	.23209	.33409	.42734
#1	470.77	.02168	.30952	.60326	16.930	421.22	52.005
#2	472.54	.02503	.31190	.60527	16.986	423.21	52.321
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05808	46.891	10.110	.54569	60.226	.95754	123.51
SDev	.00073	.094	.032	.00277	.015	.01096	1.38
%RSD	1.2553	.19965	.31751	.50783	.02435	1.1448	1.1187
#1	.05756	46.825	10.087	.54373	60.216	.94979	124.49
#2	.05859	46.957	10.133	.54765	60.237	.96529	122.53
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.015	.41619	L-.71304	28.499	5.4661	1.6464	-.06550
SDev	.064	.02140	.06749	.145	.1131	.0021	.00607
%RSD	.42952	5.1407	9.4648	.50710	2.0683	.12920	9.2732
#1	14.970	.40106	L-.76076	28.397	5.3862	1.6449	-.06980
#2	15.061	.43132	L-.66532	28.601	5.5460	1.6479	-.06121
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000
Elem	Tl	U	V	Zn			
Units	ppm	ppm	ppm	ppm			
Avge	.93574	-.14812	.33352	23.811			
SDev	.09054	.01219	.00051	.125			
%RSD	9.6755	8.2274	.15335	.52586			
#1	.99976	-.15673	.33316	23.722			
#2	.87172	-.13950	.33389	23.899			
Errors	LC Pass	LC Pass	LC Pass	LC Pass			
High	50.000	50.000	50.000	50.000			

Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WP7V 5X Operator: STL
Run Time: 04/27/05 15:36:50
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02283	30.742	1.3341	.20563	1.8446	.00082	.52962
SDev	.00200	1.928	.0134	.01359	.0976	.00000	.04292
%RSD	8.7561	6.2713	1.0061	6.6107	5.2913	.09083	8.1039
#1	.02142	29.379	1.3436	.19602	1.7756	.00082	.49928
#2	.02425	32.105	1.3246	.21524	1.9137	.00082	.55997
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	77.045	.00263	.02977	.18207	2.9350	126.92	6.9511
SDev	4.703	.00127	.00185	.01023	.1464	6.70	.3717
%RSD	6.1046	48.260	6.2100	5.6176	4.9890	5.2764	5.3478
#1	73.720	.00173	.02846	.17484	2.8315	122.19	7.2139
#2	80.371	.00353	.03107	.18931	3.0386	131.66	6.6882
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01868	6.2800	2.5124	.03596	8.6295	.33336	12.416
SDev	.00151	.3793	.1388	.01169	.5704	.01936	.549
%RSD	8.1007	6.0396	5.5227	32.509	6.6103	5.8061	4.4195
#1	.01761	6.0118	2.4142	.04422	8.2262	.31967	12.028
#2	.01975	6.5482	2.6105	.02769	9.0329	.34705	12.804
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	

Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.6036	.09306	L-.35520	5.3678	1.3483	.20377	-.00771
SDev	.3279	.02435	.08566	.2891	.1417	.01056	.00697
%RSD	5.8524	26.163	24.116	5.3852	10.512	5.1806	90.382
#1	5.3717	.07585	L-.29463	5.1634	1.2481	.19630	-.00278
#2	5.8355	.11028	L-.41577	5.5722	1.4486	.21123	-.01263
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.05643	-.11297	.02854	12.744
SDev	.02403	.01370	.00070	.709
%RSD	42.586	12.126	2.4448	5.5657
#1	-.03944	-.12265	.02805	12.242
#2	-.07343	-.10328	.02903	13.245
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WQL Operator: STL
Run Time: 04/27/05 15:41:11
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.2633	93.467	8.9081	.72072	31.717	.00245	3.3201
SDev	.0012	.300	.1546	.00135	.124	.00000	.0140
%RSD	.09162	.32084	1.7352	.18755	.38952	.17430	.42072
#1	1.2625	93.255	9.0174	.72168	31.804	.00246	3.3300
#2	1.2642	93.679	8.7988	.71976	31.630	.00245	3.3103
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000

Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000
Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	189.73	L-.09304	.14076	.56617	7.0998	H866.72	17.849
SDev	.51	.00276	.00355	.00137	.0087	.34	.242
%RSD	.26666	2.9662	2.5218	.24127	.12306	.03880	1.3551
#1	189.37	L-.09499	.13825	.56520	7.1060	H866.48	18.020
#2	190.09	L-.09109	.14326	.56714	7.0937	H866.96	17.678
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09289	19.853	8.2969	.08808	14.322	.56627	19.045
SDev	.00021	.063	.0066	.00002	.085	.01370	.052
%RSD	.22127	.31539	.07936	.01871	.59530	2.4187	.27113
#1	.09274	19.809	8.3015	.08809	14.262	.55658	19.008
#2	.09303	19.897	8.2922	.08807	14.383	.57595	19.081
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	42.134	.61962	L-3.4644	22.645	12.012	.79420	-.07268
SDev	.058	.09257	.0128	.148	.056	.00279	.00074
%RSD	.13660	14.939	.37037	.65472	.47010	.35098	1.0145
#1	42.093	.68508	L-3.4553	22.540	12.052	.79617	-.07216
#2	42.174	.55417	L-3.4734	22.750	11.972	.79223	-.07321
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000
Elem	Tl	U	V	Zn			
Units	ppm	ppm	ppm	ppm			
Avge	.24841	-.19801	.07556	21.189			
SDev	.11481	.06912	.00100	.043			
%RSD	46.218	34.908	1.3185	.20324			
#1	.32959	-.24689	.07485	21.159			
#2	.16722	-.14914	.07626	21.220			
Errors	LC Pass	LC Pass	LC Pass	LC Pass			
High	50.000	50.000	50.000	50.000			
Low	-.20000	-.50000	-.05000	-.01000			

Method: 6010C Sample Name: G8WQN Operator: STL
Run Time: 04/27/05 15:45:31
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.40844	114.46	4.8827	.72747	10.480	.00357	2.1189
SDev	.00177	.20	.0913	.01641	.116	.00001	.0298
%RSD	.43417	.17045	1.8694	2.2558	1.1068	.17025	1.4083
#1	.40718	114.32	4.8181	.71587	10.398	.00357	2.0978
#2	.40969	114.60	4.9472	.73908	10.562	.00357	2.1400
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	205.37	.05547	.11186	.60266	13.990	H509.14	28.798
SDev	.64	.00122	.00222	.00686	.063	5.40	.337
%RSD	.30956	2.2035	1.9881	1.1386	.45322	1.0610	1.1704
#1	204.92	.05461	.11343	.59780	13.945	H505.32	29.036
#2	205.82	.05634	.11029	.60751	14.035	H512.96	28.560
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07292	21.360	9.3795	.11966	27.819	.55101	26.121
SDev	.00118	.058	.0868	.02530	.019	.01509	.066
%RSD	1.6117	.27055	.92541	21.142	.06910	2.7379	.25343
#1	.07209	21.319	9.3181	.10177	27.833	.54034	26.167
#2	.07375	21.401	9.4408	.13755	27.805	.56168	26.074
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th

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Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.605	.54092	L-1.8255	24.262	14.598	.70896	-.04581
SDev	.127	.01752	.0478	.043	.424	.00729	.00153
%RSD	.26177	3.2396	2.6174	.17772	2.9047	1.0283	3.3421
#1	48.515	.55331	L-1.7917	24.231	14.298	.70381	-.04690
#2	48.695	.52853	L-1.8592	24.292	14.898	.71412	-.04473
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.15032	-.08385	.09321	32.814
SDev	.01843	.09842	.00069	.344
%RSD	12.260	117.37	.74385	1.0471
#1	.13729	-.01426	.09370	32.571
#2	.16335	-.15344	.09272	33.057
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WQR Operator: STL
Run Time: 04/27/05 15:49:52
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0274	111.02	3.3918	.44768	32.487	.00407	1.4963
SDev	.0034	.36	.0400	.00074	.035	.00000	.0136
%RSD	.33302	.32160	1.1781	.16610	.10625	.02915	.91001
#1	1.0250	110.76	3.4201	.44715	32.511	.00407	1.4867
#2	1.0298	111.27	3.3636	.44820	32.462	.00406	1.5060
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	189.39	.01052	.12471	.54673	10.473	347.42	20.711
SDev	.79	.00170	.00206	.00146	.016	.25	.369
%RSD	.41947	16.193	1.6559	.26642	.15705	.07139	1.7809
#1	188.83	.00931	.12325	.54570	10.461	347.25	20.972
#2	189.96	.01172	.12617	.54776	10.485	347.60	20.450
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06857	22.238	7.1989	.08942	16.564	.33394	15.982
SDev	.00172	.080	.0083	.01135	.039	.00479	.312
%RSD	2.5128	.36095	.11475	12.692	.23251	1.4354	1.9519
#1	.06735	22.181	7.1931	.08140	16.537	.33055	15.762
#2	.06978	22.295	7.2048	.09745	16.592	.33733	16.203
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.508	.34727	L-1.1751	23.082	4.9407	.78292	-.04551
SDev	.125	.06170	.0164	.002	.0000	.00008	.01031
%RSD	.63852	17.767	1.3936	.01070	.00051	.01065	22.656
#1	19.420	.39090	L-1.1636	23.080	4.9407	.78298	-.03822
#2	19.596	.30364	L-1.1867	23.084	4.9407	.78286	-.05280
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.09635	.00741	.11193	36.933
SDev	.18728	.02161	.00143	.084
%RSD	194.37	291.53	1.2733	.22803
#1	.03607	-.00787	.11092	36.874
#2	L-.22878	.02269	.11293	36.993
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WQT Operator: STL
Run Time: 04/27/05 15:54:13
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.26347	100.02	3.3888	.62721	9.1775	.01506	27.180
SDev	.01010	.57	.1175	.01321	.0327	.00018	.216
%RSD	3.8354	.57452	3.4674	2.1058	.35628	1.2067	.79373
#1	.25632	99.610	3.3057	.61787	9.1544	.01493	27.027
#2	.27061	100.42	3.4719	.63655	9.2007	.01519	27.332
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	227.84	.24931	.11014	.54745	H684.41	336.35	22.036
SDev	3.26	.00472	.00118	.00975	.38	4.00	.422
%RSD	1.4328	1.8933	1.0696	1.7815	.05606	1.1889	1.9159
#1	225.53	.24598	.10931	.54055	H684.68	333.52	22.335
#2	230.14	.25265	.11097	.55434	H684.14	339.18	21.738
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05867	23.732	H158.84	.14018	20.139	.80076	19.828
SDev	.00379	.176	2.44	.00833	.082	.00446	.258
%RSD	6.4642	.74246	1.5366	5.9390	.40546	.55726	1.3005
#1	.05599	23.608	H157.11	.13429	20.082	.79761	19.645
#2	.06135	23.857	H160.56	.14606	20.197	.80392	20.010
Errors	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.785	.10768	L-1.1304	24.849	4.6801	.78737	-.01261
SDev	.098	.16259	.0539	.190	.2545	.00312	.01042
%RSD	.61839	151.00	4.7688	.76598	5.4380	.39564	82.641

#1	15.716	.22265	L-1.0922	24.714	4.5002	.78517	-.00524
#2	15.854	-.00729	L-1.1685	24.984	4.8601	.78957	-.01997
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	L-1.1989	.17402	.19418	H79.362
SDev	.1965	.07575	.00480	1.025
%RSD	16.390	43.528	2.4717	1.2918
#1	L-1.3378	.22758	.19079	H78.637
#2	L-1.0599	.12046	.19758	H80.087

Errors	LC Low	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 04/27/05 15:58:35
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.81364	40.984	4.1939	4.0585	4.1148	3.9518	4.2706
SDev	.00229	.195	.1144	.0044	.0009	.0013	.0196
%RSD	.28145	.47652	2.7280	.10891	.02073	.03358	.45881
#1	Q.81202	40.846	4.1130	4.0616	4.1142	3.9509	4.2568
#2	Q.81526	41.122	4.2748	4.0554	4.1154	3.9527	4.2845
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	40.000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.502	3.9630	3.9281	3.9463	Q3.5287	42.336	40.604
SDev	.140	.0338	.0207	.0092	.0242	.092	.523
%RSD	.68451	.85236	.52626	.23403	.68512	.21717	1.2887

#1	20.403	3.9392	3.9134	3.9398	Q3.5116	42.401	40.234
#2	20.601	3.9869	3.9427	3.9529	Q3.5458	42.271	40.974
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value	20.000	4.0000	4.0000	4.0000	4.0000	40.000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9870	20.299	4.0354	3.9847	39.780	3.9040	4.0081
SDev	.0092	.083	.0110	.0000	.189	.0176	.0457
%RSD	.23008	.40960	.27275	.00011	.47492	.45189	1.1405
#1	3.9806	20.240	4.0432	3.9847	39.646	3.9165	3.9758
#2	3.9935	20.357	4.0276	3.9847	39.914	3.8915	4.0404
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	20.000	4.0000	4.0000	40.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9265	3.9863	3.8827	4.2077	4.2109	3.9473	3.7477
SDev	.0092	.1339	.0410	.0181	.1412	.0006	.0153
%RSD	.23329	3.3589	1.0548	.43136	3.3533	.01453	.40896
#1	3.9329	3.8917	3.8537	4.1949	4.3108	3.9469	3.7369
#2	3.9200	4.0810	3.9116	4.2206	4.1111	3.9477	3.7586
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	3.8178	4.0071	3.9473	3.9742
SDev	.0151	.0130	.0142	.0063
%RSD	.39560	.32466	.35993	.15752
#1	3.8072	4.0163	3.9373	3.9698
#2	3.8285	3.9979	3.9574	3.9786
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 04/27/05 16:02:58
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00053	.00875	-.02973	.00849	.00021	.00025	.01438
SDev	.00044	.01221	.01792	.00201	.00028	.00009	.02869
%RSD	84.066	139.46	60.292	23.655	137.32	34.717	199.48
#1	.00021	.00012	-.01705	.00991	.00001	.00019	-.00590
#2	.00084	.01738	-.04240	.00707	.00041	.00032	.03467
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.01000	.05000	.20000	.02500	.20000	.00500	.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00027	.00109	.00022	-.00117	.01193	.00649	-.30617
SDev	.00565	.00090	.00179	.00076	.00121	.00048	.15345
%RSD	2114.2	82.951	830.86	64.311	10.125	7.4154	50.119
#1	-.00373	.00173	-.00105	-.00171	.01278	.00615	-.41467
#2	.00426	.00045	.00148	-.00064	.01107	.00683	-.19766
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.25000	.00500	.05000	.01000	.02500	.05000	2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00086	-.00698	.00091	.00201	.00002	-.00375	.02530
SDev	.00264	.03641	.00018	.00000	.02659	.00617	.07153
%RSD	306.23	521.80	19.483	.00117	122640.	164.45	282.76
#1	-.00100	-.03272	.00078	.00201	-.01878	-.00811	.07588
#2	.00272	.01877	.00103	.00201	.01883	.00061	-.02528
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.01000	.25000	.01500	.04000	.25000	.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00006	.00730	.07393	.03784	Q.11982	.00018	-.00376
SDev	.00003	.02060	.11654	.00047	.11295	.00008	.00088
%RSD	51.195	282.09	157.64	1.2365	94.263	45.885	23.360
#1	.00009	-.00726	.15633	.03817	.03996	.00012	-.00314
#2	.00004	.02187	-.00848	.03751	Q.19969	.00023	-.00439
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000

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Range	.10000	.06000	.20000	.50000	.10000	.05000	.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.02988	-.04897	.00009	.00205
SDev	.06040	.00866	.00235	.00038
%RSD	202.14	17.691	2700.7	18.511
#1	.01283	-.05510	-.00158	.00178
#2	-.07259	-.04285	.00175	.00232
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000
Range	2.0000	.50000	.05000	.02000

Method: 6010C Sample Name: G8WR6 Operator: STL
Run Time: 04/27/05 16:07:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.38286	95.993	4.2223	.67632	13.192	.00395	1.7753
SDev	.00179	.803	.1544	.01902	.015	.00018	.0514
%RSD	.46719	.83701	3.6579	2.8126	.11356	4.5525	2.8948
#1	.38413	95.425	4.3315	.68977	13.181	.00382	1.8117
#2	.38160	96.561	4.1131	.66286	13.202	.00408	1.7390
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	242.67	.04427	.27323	1.1000	9.5513	451.47	17.579
SDev	1.51	.00112	.00169	.0028	.0840	1.62	.347
%RSD	.62159	2.5310	.61683	.25509	.87913	.35919	1.9721
#1	241.60	.04348	.27204	1.0980	9.4919	452.61	17.824
#2	243.73	.04506	.27442	1.1020	9.6107	450.32	17.334
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0

Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08764	455.64	15.252	.09236	11.970	4.0816	22.693
SDev	.00050	3.12	.003	.01712	.104	.0153	.040
%RSD	.56909	.68530	.01658	18.538	.86594	.37370	.17795
#1	.08729	453.43	15.254	.08025	11.897	4.0708	22.722
#2	.08800	457.85	15.250	.10447	12.043	4.0924	22.664
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	40.821	.56474	L-2.1444	26.319	4.2505	.67639	.00659
SDev	.287	.03999	.1729	.353	.0284	.00099	.01181
%RSD	.70351	7.0813	8.0630	1.3426	.66741	.14573	179.12
#1	40.617	.53646	L-2.0222	26.069	4.2706	.67569	-.00176
#2	41.024	.59302	L-2.2667	26.569	4.2304	.67709	.01495
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000
Elem	Tl	U	V	Zn			
Units	ppm	ppm	ppm	ppm			
Avge	-.02269	-.18358	.14403	38.626			
SDev	.15635	.05114	.00137	.202			
%RSD	689.05	27.854	.95126	.52345			
#1	.08786	-.14742	.14306	38.769			
#2	-.13324	-.21974	.14500	38.483			
Errors	LC Pass	LC Pass	LC Pass	LC Pass			
High	50.000	50.000	50.000	50.000			
Low	-.20000	-.50000	-.05000	-.01000			

Method: 6010C Sample Name: G8WTA Operator: STL
Run Time: 04/27/05 16:11:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.39013	133.24	3.5414	.90430	13.356	.00318	1.9124
SDev	.00045	.39	.0869	.01244	.101	.00000	.0449
%RSD	.11469	.29365	2.4549	1.3758	.75838	.13832	2.3503
#1	.38981	133.52	3.4800	.91309	13.428	.00318	1.9442
#2	.39044	132.97	3.6029	.89550	13.285	.00318	1.8806
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	237.28	.55170	.11545	.67113	27.757	377.80	29.168
SDev	.09	.00229	.00067	.00136	.083	1.12	.699
%RSD	.03957	.41573	.58050	.20312	.29837	.29577	2.3950
#1	237.34	.55332	.11498	.67016	27.698	378.59	29.662
#2	237.21	.55008	.11593	.67209	27.816	377.01	28.674
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07461	23.191	9.8930	.19037	30.605	.84292	20.922
SDev	.00049	.067	.0302	.01983	.426	.00170	.247
%RSD	.66319	.29006	.30532	10.416	1.3935	.20212	1.1817
#1	.07426	23.238	9.9144	.20439	30.906	.84171	21.097
#2	.07496	23.143	9.8716	.17634	30.303	.84412	20.748
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	29.168	L-.18209	L-1.3379	25.797	10.634	.77504	-.03726
SDev	.002	.17581	.1400	.003	.254	.00565	.01392
%RSD	.00630	96.553	10.461	.00984	2.3889	.72929	37.358
#1	29.169	-.05777	L-1.4369	25.796	10.454	.77904	-.02742
#2	29.167	L-.30641	L-1.2390	25.799	10.813	.77105	-.04710
Errors	LC Pass	LC Low	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn

Units	ppm	ppm	ppm	ppm
Avge	.08977	.15188	.12222	H240.20
SDev	.24770	.07433	.00259	.06
%RSD	275.94	48.939	2.1168	.02500
#1	.26492	.09932	.12039	H240.16
#2	-.08539	.20443	.12405	H240.24
Errors	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WTE Operator: STL
Run Time: 04/27/05 16:16:02
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.25287	136.77	4.1832	.70879	10.978	.00320	2.0558
SDev	.00095	.31	.0432	.00047	.048	.00001	.0021
%RSD	.37419	.22609	1.0337	.06634	.43793	.28475	.10266
#1	.25220	136.55	4.2138	.70845	11.012	.00319	2.0543
#2	.25354	136.98	4.1526	.70912	10.944	.00320	2.0573
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	261.93	.03271	.09756	.52808	14.135	438.18	32.879
SDev	.54	.00335	.00052	.00266	.092	1.06	.057
%RSD	.20720	10.245	.53797	.50366	.64930	.24254	.17238
#1	261.54	.03507	.09793	.52996	14.071	438.93	32.838
#2	262.31	.03034	.09719	.52620	14.200	437.43	32.919
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782

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Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08135	25.517	10.122	.08297	29.799	.88717	21.236
SDev	.00109	.058	.021	.00847	.051	.00428	.299
%RSD	1.3399	.22762	.20562	10.208	.17228	.48193	1.4090
#1	.08058	25.476	10.137	.08896	29.763	.88415	21.025
#2	.08212	25.558	10.107	.07698	29.835	.89020	21.448
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.288	.28180	L-1.6691	25.711	5.9267	.87663	-.03938
SDev	.046	.02124	.0848	.044	.2540	.00393	.00797
%RSD	.26829	7.5361	5.0826	.16978	4.2863	.44858	20.250
#1	17.255	.29682	L-1.7291	25.680	5.7470	.87941	-.03374
#2	17.321	.26679	L-1.6091	25.742	6.1063	.87385	-.04502
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.02220	-.23771	.12212	29.648
SDev	.05448	.05700	.00112	.008
%RSD	245.42	23.978	.91480	.02618
#1	.01633	-.27801	.12133	29.653
#2	-.06072	-.19741	.12291	29.642
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WTG Operator: STL
Run Time: 04/27/05 16:20:23
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi

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Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.92586	132.12	9.3182	1.6387	20.131	.01015	3.6469
SDev	.00206	.03	.0977	.0211	.068	.00009	.0125
%RSD	.22241	.02452	1.0483	1.2859	.33589	.85195	.34189
#1	.92441	132.10	9.2491	1.6536	20.084	.01009	3.6557
#2	.92732	132.14	9.3873	1.6238	20.179	.01021	3.6381
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	227.08	L-.11816	.14490	.89581	8.9594	H938.72	26.706
SDev	.57	.00111	.00105	.00161	.0139	2.03	1.073
%RSD	.25129	.93512	.72482	.17986	.15470	.21608	4.0172
#1	226.68	L-.11895	.14415	.89695	8.9496	H940.15	25.948
#2	227.48	L-.11738	.14564	.89467	8.9692	H937.29	27.465
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.11592	23.595	13.474	.22514	39.599	.78843	30.728
SDev	.00058	.014	.021	.00010	.123	.01404	.264
%RSD	.50292	.05954	.15653	.04414	.31038	1.7812	.86068
#1	.11551	23.585	13.459	.22507	39.686	.77850	30.915
#2	.11633	23.605	13.489	.22521	39.512	.79836	30.541
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.457	.49973	L-3.6270	24.664	6.1679	.87858	-.06168
SDev	.103	.03207	.0438	.063	.0281	.00311	.00162
%RSD	.52766	6.4171	1.2068	.25395	.45489	.35374	2.6322
#1	19.385	.52241	L-3.6580	24.619	6.1481	.87638	-.06282
#2	19.530	.47705	L-3.5961	24.708	6.1877	.88078	-.06053
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.22349	-.27075	.10330	31.388
SDev	.06354	.03152	.00051	.060
%RSD	28.430	11.643	.49773	.18968

#1	.26842	-.29304	.10293	31.430
#2	.17856	-.24846	.10366	31.346
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WTR Operator: STL
Run Time: 04/27/05 16:24:45
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.38941	100.10	7.5112	.83277	7.4230	.00702	5.9391
SDev	.00138	.08	.2256	.01233	.0305	.00027	.0084
%RSD	.35371	.08404	3.0031	1.4811	.41140	3.8503	.14225
#1	.38844	100.16	7.6707	.84149	7.4446	.00721	5.9332
#2	.39039	100.04	7.3517	.82405	7.4014	.00683	5.9451
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	247.97	L-.02819	.12198	.62757	H233.75	H746.84	19.297
SDev	.24	.00016	.00279	.00017	.46	1.25	1.643
%RSD	.09872	.56897	2.2885	.02701	.19808	.16685	8.5164
#1	247.79	L-.02831	.12001	.62745	H233.43	H747.72	18.135
#2	248.14	L-.02808	.12395	.62769	H234.08	H745.96	20.460
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC High	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08804	22.121	17.993	.08190	24.837	1.8711	53.430
SDev	.00185	.023	.043	.01142	.033	.0014	.360
%RSD	2.1000	.10510	.24111	13.946	.13309	.07278	.67432

#1	.08673	22.138	18.023	.07383	24.860	1.8701	53.175
#2	.08935	22.105	17.962	.08998	24.813	1.8721	53.685
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H53.845	.98871	L-2.7622	21.439	11.263	.66545	-.05584
SDev	.286	.01102	.0286	.149	.310	.00287	.01385
%RSD	.53106	1.1148	1.0336	.69676	2.7564	.43129	24.799
#1	H53.643	.99650	L-2.7824	21.334	11.044	.66748	-.06564
#2	H54.048	.98092	L-2.7421	21.545	11.483	.66342	-.04605
Errors	LC High	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.06467	-.29006	.08854	H65.046
SDev	.26266	.07861	.00108	.043
%RSD	406.12	27.100	1.2157	.06686
#1	-.12105	-.34564	.08778	H65.077
#2	.25040	-.23448	.08931	H65.015
Errors	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WTV Operator: STL
Run Time: 04/27/05 16:29:06
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	k.79889	k38.826	k61.421	k-1.9110	5.2294	k.00211	k12.462
SDev	.00274	.012	.122	.0080	.0224	.00000	.016
%RSD	.34235	.03107	.19863	.41823	.42838	.06564	.13081

#1	k.79696	k38.817	k61.507	k-1.9167	5.2135	k.00211	k12.450
#2	k.80083	k38.834	k61.335	k-1.9054	5.2452	k.00211	k12.473

Errors	LC Pass	LC Pass	LC High	LC Low	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	k60.347	k-1.1659	k.04050	k1.3944	k7.4451	S5681.4	k7.9167
SDev	.142	.0011	.00150	.0024	.0059	.0	.5013
%RSD	.23483	.09556	3.7031	.17036	.07986	.00000	6.3322

#1	k60.247	k-1.1666	k.03944	k1.3927	k7.4493	S5681.4	k7.5622
#2	k60.447	k-1.1651	k.04156	k1.3961	k7.4409	S5681.4	k8.2712

Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	k.44531	k9.2491	k14.881	k.02890	k7.8049	1.4484	k21.269
SDev	.00037	.0210	.055	.01704	.0330	.0057	.036
%RSD	.08309	.22677	.36679	58.965	.42288	.39013	.16816

#1	k.44557	k9.2343	k14.842	k.04095	k7.8283	1.4524	k21.295
#2	k.44505	k9.2640	k14.919	k.01685	k7.7816	1.4444	k21.244

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	k20.674	k3.0469	k-21.595	k17.586	k30.484	k.25051	k-1.5155
SDev	.058	.1030	.330	.016	.028	.00082	.0028
%RSD	.28101	3.3817	1.5262	.08828	.09260	.32730	.18492

#1	k20.633	k2.9740	k-21.829	k17.597	k30.504	k.24993	k-1.5135
#2	k20.715	k3.1197	k-21.362	k17.575	k30.464	k.25109	k-1.5175

Errors	LC Pass	LC Pass	LC Low	LC Pass	LC High	LC Pass	LC Low
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	k1.2772	k-2.3510	k-.82822	k6.7138
SDev	.2235	.0216	.00084	.0124
%RSD	17.499	.92002	.10176	.18408

#1	k1.1191	k-2.3357	k-.82762	k6.7051
#2	k1.4352	k-2.3663	k-.82881	k6.7225

Errors	LC Pass	LC Low	LC Low	LC Pass
High	50.000	50.000	50.000	50.000

Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WTW Operator: STL
Run Time: 04/27/05 16:33:27
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	k.66468	k31.610	k61.916	k-1.6930	4.4341	k.00178	k12.678
SDev	.00129	.075	.008	.0784	.0237	.00009	.036
%RSD	.19360	.23769	.01337	4.6312	.53427	5.2166	.28737
#1	k.66559	k31.557	k61.910	k-1.7484	4.4173	k.00172	k12.653
#2	k.66377	k31.663	k61.921	k-1.6376	4.4508	k.00185	k12.704
Errors	LC Pass	LC Pass	LC High	LC Low	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	k44.645	k-1.1756	k.09681	k1.2858	k4.5736	S5681.4	6.1697
SDev	.168	.0053	.00265	.0033	.0038	.0	.2470
%RSD	.37606	.45194	2.7427	.25578	.08252	.00000	4.0028
#1	k44.526	k-1.1794	k.09868	k1.2835	k4.5763	S5681.4	5.9950
#2	k44.763	k-1.1719	k.09493	k1.2881	k4.5710	S5681.4	6.3443
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	k.43955	k7.8232	k16.523	k.01886	k4.0099	1.3803	k19.596
SDev	.00038	.0412	.141	.01420	.0294	.0557	.526
%RSD	.08630	.52663	.85434	75.302	.73265	4.0328	2.6851
#1	k.43928	k7.7941	k16.423	k.02890	k3.9891	1.4197	k19.968
#2	k.43982	k7.8523	k16.622	k.00882	k4.0306	1.3410	k19.224
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	

Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	k29.850	k2.8430	k-21.470	k16.532	k36.015	k.20131	k-1.4500
SDev	.029	.0412	.671	.041	.565	.00115	.0016
%RSD	.09734	1.4490	3.1250	.24673	1.5682	.57171	.11022
#1	k29.829	k2.8722	k-20.995	k16.503	k35.615	k.20050	k-1.4488
#2	k29.871	k2.8139	k-21.944	k16.561	k36.414	k.20213	k-1.4511
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC High	LC Pass	LC Low
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	k1.1391	k-2.1870	k-.79144	k5.4851
SDev	.1420	.0736	.00042	.0763
%RSD	12.464	3.3651	.05308	1.3913
#1	k1.0387	k-2.1350	k-.79173	k5.4311
#2	k1.2395	k-2.2390	k-.79114	k5.5390
Errors	LC Pass	LC Low	LC Low	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WTX Operator: STL
Run Time: 04/27/05 16:37:49
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.73177	82.926	3.9231	.76654	18.170	.00305	1.9277
SDev	.00065	.489	.0509	.00427	.099	.00000	.0002
%RSD	.08932	.58982	1.2971	.55684	.54563	.02075	.01029
#1	.73131	82.580	3.8871	.76956	18.241	.00305	1.9279
#2	.73223	83.272	3.9591	.76352	18.100	.00305	1.9276
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000

Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000
Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	168.52	.42309	.08645	.42920	24.256	397.01	19.143
SDev	1.12	.00465	.00126	.00156	.113	.79	1.020
%RSD	.66650	1.0987	1.4569	.36334	.46696	.19974	5.3306
#1	167.72	.41981	.08556	.42809	24.336	397.57	18.422
#2	169.31	.42638	.08734	.43030	24.176	396.45	19.865
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06401	15.487	6.1959	.33604	14.523	.49406	14.448
SDev	.00087	.094	.0194	.02268	.069	.00719	.228
%RSD	1.3555	.60810	.31314	6.7504	.47356	1.4561	1.5792
#1	.06339	15.420	6.2096	.35208	14.475	.48897	14.287
#2	.06462	15.553	6.1822	.32000	14.572	.49914	14.610
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H97.655	1.0317	L-1.5519	19.341	H28.266	.61600	-.04624
SDev	.607	.0201	.1204	.154	.282	.00336	.00422
%RSD	.62152	1.9530	7.7601	.79732	.99873	.54482	9.1350
#1	H97.226	1.0174	L-1.6371	19.232	H28.066	.61837	-.04923
#2	H98.084	1.0459	L-1.4667	19.450	H28.465	.61363	-.04325
Errors	LC High	LC Pass	LC Low	LC Pass	LC High	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.07521	.29160	.08946	34.608
SDev	.06050	.00917	.00141	.006
%RSD	80.433	3.1458	1.5724	.01659
#1	.11799	.28511	.08846	34.612
#2	.03243	.29808	.09045	34.604
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WT0 Operator: STL
Run Time: 04/27/05 16:42:10
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.93535	104.37	6.2258	.79338	19.606	.00345	2.9809
SDev	.00091	.71	.0280	.01938	.007	.00000	.0113
%RSD	.09694	.68295	.44897	2.4434	.03631	.04516	.37774
#1	.93471	103.86	6.2456	.80709	19.611	.00344	2.9889
#2	.93599	104.87	6.2061	.77967	19.601	.00345	2.9730
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	479.14	.00650	.11995	.54184	27.432	H590.51	22.053
SDev	2.30	.00124	.00138	.00418	.016	5.96	.946
%RSD	.48101	19.011	1.1481	.77177	.05812	1.0087	4.2897
#1	477.51	.00563	.11898	.54480	27.443	H594.72	22.722
#2	480.77	.00737	.12093	.53889	27.421	H586.30	21.384
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07979	24.057	20.148	.13977	22.725	.63035	156.29
SDev	.00053	.183	.076	.00823	.237	.01217	.29
%RSD	.66472	.75872	.37920	5.8875	1.0413	1.9301	.18406
#1	.07942	23.928	20.202	.14559	22.558	.62175	156.49
#2	.08017	24.186	20.094	.13395	22.892	.63895	156.08
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H234.94	4.0036	L-2.0960	25.350	H39.583	1.2843	-.04602
SDev	1.23	.0343	.0045	.107	.735	.0001	.00667
%RSD	.52354	.85642	.21540	.42149	1.8560	.00621	14.483
#1	H234.07	4.0279	L-2.0928	25.275	H40.103	1.2844	-.05074
#2	H235.81	3.9794	L-2.0992	25.426	H39.064	1.2843	-.04131
Errors	LC High	LC Pass	LC Low	LC Pass	LC High	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.11840	-.08671	.11557	32.814
SDev	.08421	.02671	.00318	.292
%RSD	71.126	30.805	2.7562	.89084
#1	.05885	-.06782	.11332	33.021
#2	.17795	-.10560	.11782	32.607
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WT1 Operator: STL
Run Time: 04/27/05 16:46:31
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.47529	175.51	5.3238	1.1480	13.386	.00363	2.4575
SDev	.00059	.14	.2327	.0027	.025	.00026	.0797
%RSD	.12416	.08112	4.3703	.23609	.18544	7.2092	3.2431
#1	.47487	175.61	5.4883	1.1499	13.403	.00345	2.4012
#2	.47571	175.41	5.1593	1.1460	13.368	.00382	2.5139
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	264.52	.04107	.12700	.69814	22.153	H552.76	38.208
SDev	.15	.00029	.00007	.00007	.071	.74	.084
%RSD	.05582	.70605	.05300	.00960	.32026	.13318	.21953
#1	264.41	.04087	.12705	.69809	22.102	H552.23	38.149
#2	264.62	.04128	.12696	.69819	22.203	H553.28	38.267
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.10540	32.049	12.130	.10547	45.500	1.6376	25.055
SDev	.00018	.010	.010	.01992	.238	.0069	.185
%RSD	.16697	.02972	.08376	18.885	.52410	.41888	.73978
#1	.10528	32.043	12.123	.11956	45.669	1.6424	24.924
#2	.10553	32.056	12.137	.09139	45.332	1.6327	25.186
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	26.081	.33863	L-1.9143	21.727	6.6150	.96325	-.05854
SDev	.087	.00991	.0152	.022	.1412	.00205	.01174
%RSD	.33439	2.9272	.79150	.10083	2.1352	.21282	20.052
#1	26.019	.34564	L-1.9036	21.712	6.5152	.96470	-.05024
#2	26.142	.33162	L-1.9250	21.743	6.7149	.96180	-.06684
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.01764	-.10740	.12677	46.901
SDev	.13895	.05592	.00055	.158
%RSD	787.74	52.067	.43495	.33648
#1	-.08061	-.14694	.12716	46.790
#2	.11589	-.06786	.12638	47.013
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 04/27/05 16:50:52
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.80916	40.779	4.1910	4.0250	4.1006	3.9110	4.2263
SDev	.00295	.081	.0769	.0084	.0039	.0111	.0089
%RSD	.36415	.19831	1.8337	.20972	.09398	.28268	.21120
#1	Q.80708	40.722	4.1366	4.0190	4.0979	3.9032	4.2326
#2	Q.81125	40.836	4.2453	4.0309	4.1033	3.9189	4.2199
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	40.000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.250	3.9396	3.9027	3.9176	3.6492	42.060	40.470
SDev	.082	.0072	.0062	.0093	.0186	.040	.560
%RSD	.40274	.18182	.15999	.23857	.50845	.09431	1.3826
#1	20.192	3.9345	3.8982	3.9110	3.6360	42.031	40.074
#2	20.308	3.9446	3.9071	3.9242	3.6623	42.088	40.865
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.000	4.0000	4.0000	4.0000	4.0000	40.000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9787	20.083	3.9605	3.9927	39.722	3.9064	4.0258
SDev	.0125	.053	.0047	.0114	.122	.0618	.0102
%RSD	.31327	.26366	.11846	.28460	.30707	1.5831	.25290
#1	3.9875	20.046	3.9572	4.0008	39.809	3.8627	4.0330
#2	3.9698	20.121	3.9638	3.9847	39.636	3.9502	4.0186
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	20.000	4.0000	4.0000	40.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9062	3.9498	3.8832	4.1580	4.0912	3.9318	3.6974
SDev	.0245	.0206	.0563	.0047	.0282	.0065	.0047
%RSD	.62606	.52207	1.4491	.11291	.68998	.16444	.12821

#1	3.8889	3.9352	3.9230	4.1613	4.1112	3.9272	3.7008
#2	3.9235	3.9643	3.8434	4.1547	4.0712	3.9363	3.6941
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	3.7708	3.9493	3.9169	3.9088
SDev	.0453	.0000	.0092	.0096
%RSD	1.2013	.00019	.23413	.24434
#1	3.8029	3.9493	3.9104	3.9021
#2	3.7388	3.9493	3.9234	3.9156
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 04/27/05 16:55:15
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00229	.02266	-.02950	.00992	.00021	.00038	.02341
SDev	.00144	.01593	.06695	.00003	.00001	.00009	.01610
%RSD	62.871	70.306	226.99	.30285	5.3850	24.704	68.765
#1	-.00330	.01139	-.07684	.00989	.00021	.00032	.03479
#2	-.00127	.03392	.01785	.00994	.00022	.00045	.01202
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.01000	.05000	.20000	.02500	.20000	.00500	.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00598	.00159	-.00147	-.00308	.00358	.01087	-.85869
SDev	.00116	.00053	.00119	.00084	.00162	.00132	.34544
%RSD	19.386	33.359	80.956	27.357	45.210	12.113	40.228

#1	.00516	.00121	-.00063	-.00249	.00472	.01180	-.61443
#2	.00680	.00196	-.00231	-.00368	.00243	.00994	-1.1030
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.25000	.00500	.05000	.01000	.02500	.05000	2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00067	.00986	.00118	-.01004	.00589	.00001	-.02888
SDev	.00243	.03609	.00021	.00000	.01655	.00085	.00513
%RSD	362.35	365.85	17.785	.00074	281.21	6133.1	17.755
#1	-.00105	-.01565	.00104	-.01004	-.00582	.00061	-.02526
#2	.00239	.03538	.00133	-.01004	.01759	-.00058	-.03251
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.01000	.25000	.01500	.04000	.25000	.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00458	-.04367	-.00840	.03412	.09988	.00024	-.00353
SDev	.01105	.01028	.03203	.00667	.02820	.00017	.00974
%RSD	241.02	23.548	381.47	19.542	28.230	71.089	275.61
#1	.00323	-.03640	.01425	.03884	Q.11981	.00012	.00335
#2	-.01240	-.05095	-.03104	.02941	.07994	.00036	-.01042
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.10000	.06000	.20000	.50000	.10000	.05000	.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.01703	-.11634	.00187	.00610
SDev	.05431	.09521	.00195	.00042
%RSD	318.92	81.839	104.43	6.8070
#1	.02137	-.04901	.00049	.00581
#2	-.05544	-.18366	.00324	.00640
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000
Range	2.0000	.50000	.05000	.02000

Method: 6010C Sample Name: G817C Operator: STL
Run Time: 04/27/05 16:59:37
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.6935	136.57	6.8297	1.1818	28.548	.00289	2.7716
SDev	.0048	.61	.0208	.0111	.076	.00009	.0447
%RSD	.28380	.44602	.30382	.93933	.26787	3.0335	1.6136
#1	1.6901	136.14	6.8151	1.1897	28.494	.00283	2.7400
#2	1.6969	137.00	6.8444	1.1740	28.602	.00296	2.8033
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	231.49	.00913	.14546	.74797	8.5959	H693.57	30.147
SDev	1.09	.00125	.00074	.00119	.0025	2.03	.368
%RSD	.46963	13.644	.50706	.15839	.02908	.29202	1.2197
#1	230.72	.01001	.14598	.74880	8.5942	H695.00	30.407
#2	232.26	.00825	.14494	.74713	8.5977	H692.14	29.887
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09794	26.304	8.5423	.10661	33.215	1.6407	24.864
SDev	.00016	.114	.0033	.00862	.023	.0103	.374
%RSD	.16230	.43374	.03862	8.0862	.06905	.62640	1.5036
#1	.09805	26.224	8.5446	.10051	33.231	1.6334	24.600
#2	.09782	26.385	8.5400	.11270	33.198	1.6480	25.128
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.413	.26596	L-2.5228	23.953	7.1659	.96875	-.08151
SDev	.021	.08127	.0449	.173	.1128	.00262	.00418
%RSD	.13945	30.557	1.7783	.72345	1.5737	.27028	5.1239
#1	15.398	.20849	L-2.5545	23.830	7.0861	.96690	-.08446
#2	15.429	.32342	L-2.4911	24.075	7.2456	.97060	-.07856
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000

Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.31779	-.24539	.10847	H58.136
SDev	.14211	.00990	.00203	.258
%RSD	44.720	4.0355	1.8719	.44313
#1	.41828	-.25239	.10703	H58.319
#2	.21730	-.23839	.10990	H57.954
Errors	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G817CS Operator: STL
Run Time: 04/27/05 17:03:58
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.42721	371.17	5.9124	1.8034	13.488	.02690	2.5574
SDev	.00380	1.89	.2804	.0061	.125	.00009	.0335
%RSD	.89073	.50845	4.7421	.33960	.92336	.33266	1.3118
#1	.42452	369.84	5.7141	1.7990	13.400	.02684	2.5337
#2	.42990	372.51	6.1107	1.8077	13.576	.02696	2.5811
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	291.56	.05121	.34148	.82199	16.924	H594.09	61.005
SDev	.92	.00146	.00046	.00187	.066	1.95	.035
%RSD	.31631	2.8526	.13491	.22810	.38907	.32871	.05692
#1	290.91	.05224	.34115	.82067	16.877	H592.71	61.030
#2	292.21	.05017	.34180	.82332	16.970	H595.47	60.981
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0

Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08999	53.358	14.196	.62564	92.897	1.7498	23.937
SDev	.00102	.170	.090	.00843	.720	.0183	.095
%RSD	1.1383	.31828	.63446	1.3467	.77499	1.0474	.39772
#1	.09071	53.238	14.132	.61968	92.388	1.7628	23.870
#2	.08927	53.478	14.259	.63160	93.406	1.7369	24.004
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.169	.69491	L-.95619	32.500	6.2791	1.4162	-.08374
SDev	.116	.01140	.04446	.161	.2261	.0129	.00631
%RSD	.67478	1.6406	4.6496	.49448	3.6002	.91316	7.5367
#1	17.087	.68685	L-.98763	32.386	6.1192	1.4071	-.08821
#2	17.251	.70297	L-.92475	32.613	6.4389	1.4254	-.07928
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.86141	-.12467	.33859	34.290
SDev	.03638	.01838	.00039	.085
%RSD	4.2236	14.741	.11570	.24805
#1	.88714	-.11168	.33831	34.230
#2	.83569	-.13767	.33886	34.350
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G817CD Operator: STL
Run Time: 04/27/05 17:08:19
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.28244	173.27	7.4069	.90107	10.893	.02665	3.1287
SDev	.00080	.18	.0400	.00754	.018	.00009	.0140
%RSD	.28248	.10361	.53964	.83686	.16624	.33870	.44795
#1	.28301	173.14	7.3786	.90640	10.906	.02659	3.1387
#2	.28188	173.39	7.4351	.89574	10.880	.02672	3.1188
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	216.23	.03905	.33428	.89626	23.355	H697.71	54.816
SDev	.60	.00341	.00070	.00573	.065	1.11	.804
%RSD	.27691	8.7311	.20915	.63948	.27795	.15951	1.4660
#1	215.81	.04146	.33477	.89220	23.401	H696.92	55.385
#2	216.65	.03664	.33378	.90031	23.309	H698.50	54.248
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08650	47.020	12.335	.66676	56.326	1.8785	22.976
SDev	.00108	.074	.015	.02835	.140	.0152	.268
%RSD	1.2507	.15738	.12456	4.2518	.24910	.81175	1.1652
#1	.08573	46.968	12.324	.64671	56.425	1.8677	22.787
#2	.08726	47.073	12.346	.68680	56.226	1.8893	23.166
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	40.125	1.3152	L-1.6597	29.034	10.161	1.1628	-.08645
SDev	.308	.1024	.0685	.084	.282	.0019	.01260
%RSD	.76775	7.7866	4.1295	.28956	2.7800	.16172	14.579
#1	39.907	1.3876	L-1.7082	28.975	9.9615	1.1641	-.07754
#2	40.343	1.2428	L-1.6113	29.093	10.361	1.1615	-.09536
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn

Units	ppm	ppm	ppm	ppm
Avge	.89021	-.18038	.30969	H222.74
SDev	.09971	.02654	.00068	.52
%RSD	11.201	14.711	.21825	.23262
#1	.81970	-.16162	.30921	H222.37
#2	.96071	-.19914	.31017	H223.11
Errors	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G817D Operator: STL
Run Time: 04/27/05 17:12:40
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.46875	154.97	5.1317	.90718	12.865	.00332	2.2624
SDev	.00098	.81	.0103	.01942	.021	.00001	.0360
%RSD	.20969	.52400	.20138	2.1402	.16633	.16141	1.5913
#1	.46945	154.39	5.1244	.92091	12.880	.00332	2.2370
#2	.46806	155.54	5.1390	.89345	12.849	.00331	2.2879
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	294.41	.03933	.13638	.60360	18.737	H515.00	36.108
SDev	1.30	.00298	.00009	.00153	.053	2.77	.633
%RSD	.44320	7.5653	.06894	.25359	.28167	.53859	1.7536
#1	293.49	.03723	.13645	.60252	18.699	H516.96	35.661
#2	295.33	.04143	.13631	.60469	18.774	H513.04	36.556
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782

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Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08774	36.881	13.743	.13544	39.865	1.3815	26.780
SDev	.00032	.140	.036	.01975	.267	.0106	.275
%RSD	.36252	.37914	.26261	14.580	.66937	.76804	1.0280
#1	.08796	36.782	13.768	.14940	39.677	1.3740	26.585
#2	.08751	36.980	13.717	.12148	40.054	1.3890	26.975
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.222	.19288	L-1.8640	21.138	5.2541	1.0084	-.06090
SDev	.166	.00162	.1169	.172	.0280	.0016	.00825
%RSD	.96549	.83846	6.2699	.81444	.53267	.15481	13.541
#1	17.104	.19402	L-1.7813	21.016	5.2343	1.0095	-.05507
#2	17.339	.19173	L-1.9466	21.260	5.2739	1.0073	-.06673
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.02239	-.03922	.12138	49.449
SDev	.13920	.08837	.00066	.238
%RSD	621.69	225.32	.54581	.48182
#1	.07604	-.10171	.12091	49.618
#2	-.12082	.02327	.12185	49.281
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G817E Operator: STL
Run Time: 04/27/05 17:17:01
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi

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Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.47349	69.451	7.8036	.44974	13.685	.00265	2.7942
SDev	.00245	.222	.0887	.00336	.080	.00009	.0412
%RSD	.51799	.31962	1.1368	.74740	.58381	3.2744	1.4729
#1	.47522	69.294	7.7408	.44736	13.628	.00258	2.7651
#2	.47176	69.608	7.8663	.45212	13.741	.00271	2.8233
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	138.70	L-.10701	.12146	.54101	3.5035	H766.68	10.035
SDev	.62	.00064	.00152	.00241	.0108	3.32	.934
%RSD	.44697	.59456	1.2504	.44567	.30795	.43243	9.3100
#1	138.26	L-.10746	.12038	.53930	3.4959	H764.33	10.696
#2	139.13	L-.10656	.12253	.54271	3.5111	H769.02	9.3747
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07643	11.081	6.7519	.10503	8.4218	.71067	22.605
SDev	.00022	.001	.0296	.00016	.0073	.00103	.410
%RSD	.29356	.01143	.43887	.15467	.08701	.14529	1.8134
#1	.07627	11.082	6.7309	.10515	8.4167	.71140	22.315
#2	.07659	11.080	6.7728	.10492	8.4270	.70994	22.895
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.805	.41096	L-2.8272	17.586	9.7876	.46145	-.06561
SDev	.087	.03936	.1406	.077	.0844	.00245	.01449
%RSD	.41693	9.5767	4.9741	.43583	.86263	.53155	22.093
#1	20.744	.43879	L-2.7277	17.531	9.8473	.45972	-.05536
#2	20.867	.38313	L-2.9266	17.640	9.7279	.46319	-.07586
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.29813	-.28908	.04728	14.664
SDev	.15995	.03281	.00089	.092
%RSD	53.653	11.349	1.8776	.62924

#1	.41123	-.31228	.04791	14.599
#2	.18502	-.26589	.04665	14.730
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G817F Operator: STL
Run Time: 04/27/05 17:21:22
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	k1.6155	k90.730	k62.419	k-2.7094	13.354	k.00270	k10.618
SDev	.0002	.619	.245	.0110	.078	.00009	.021
%RSD	.01450	.68241	.39279	.40482	.58227	3.3069	.19526
#1	k1.6154	k90.292	k62.245	k-2.7172	13.299	k.00264	k10.603
#2	k1.6157	k91.168	k62.592	k-2.7017	13.409	k.00276	k10.632
Errors	LC Pass	LC Pass	LC High	LC Low	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	129.11	k-1.1669	k-.05357	k1.3925	k12.114	S5681.4	k11.085
SDev	.93	.0030	.00779	.0097	.025	.0	.492
%RSD	.71726	.25881	14.549	.69755	.20712	.00001	4.4409
#1	128.46	k-1.1690	k-.05908	k1.3857	k12.096	S5681.4	k11.433
#2	129.77	k-1.1647	k-.04806	k1.3994	k12.131	S5681.4	k10.737
Errors	LC Pass	LC Low	LC Low	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	k.45837	k16.492	k12.616	k-.06549	9.6011	1.2699	k35.954
SDev	.00025	.112	.064	.00284	.1146	.0214	.516
%RSD	.05440	.67898	.50421	4.3368	1.1941	1.6861	1.4355

#1	k.45820	k16.413	k12.571	k-.06750	9.5200	1.2850	k36.319
#2	k.45855	k16.572	k12.661	k-.06349	9.6822	1.2548	k35.589

Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	k24.869	k3.3302	k-21.425	k22.702	k17.706	.52242	k-1.8503
SDev	.305	.0515	.216	.093	.198	.00344	.0005
%RSD	1.2273	1.5472	1.0074	.40878	1.1163	.65815	.02604
#1	k24.653	k3.3666	k-21.273	k22.637	k17.846	.51999	k-1.8506
#2	k25.085	k3.2937	k-21.578	k22.768	k17.566	.52485	k-1.8499

Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Low
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	k.77543	k-2.7297	k-1.0245	k10.897
SDev	.06046	.0129	.0015	.056
%RSD	7.7972	.47356	.14868	.51775
#1	k.81819	k-2.7205	k-1.0256	k10.857
#2	k.73268	k-2.7388	k-1.0234	k10.937

Errors	LC Pass	LC Low	LC Low	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G817G Operator: STL
Run Time: 04/27/05 17:25:43
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.78877	113.96	6.6660	.77692	25.140	.00282	2.6945
SDev	.00381	.21	.0419	.00517	.303	.00000	.0449
%RSD	.48352	.18502	.62856	.66494	1.2042	.11435	1.6680

#1	.78607	113.81	6.6364	.77327	24.926	.00282	2.6627
#2	.79147	114.11	6.6957	.78057	25.354	.00282	2.7263
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000
Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H858.66	L-.07011	.14993	.56394	18.214	H661.93	17.127
SDev	2.08	.00018	.00014	.00539	.022	5.66	.600
%RSD	.24185	.26137	.09631	.95598	.11949	.85480	3.5053
#1	H857.19	L-.06998	.14982	.56013	18.199	H657.93	17.551
#2	H860.12	L-.07024	.15003	.56775	18.230	H665.93	16.702
Errors	LC High	LC Low	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09920	22.726	7.9700	.07401	26.594	5.3388	323.00
SDev	.00141	.071	.0759	.01108	.061	.0086	3.62
%RSD	1.4190	.31332	.95209	14.976	.22754	.16053	1.1199
#1	.09821	22.676	7.9163	.06617	26.637	5.3328	320.44
#2	.10020	22.777	8.0236	.08185	26.551	5.3449	325.56
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.811	.32854	L-2.2976	22.461	3.3296	1.1397	-.06361
SDev	.098	.00710	.1040	.054	.1134	.0128	.00496
%RSD	.83042	2.1598	4.5254	.23941	3.4071	1.1205	7.7976
#1	11.742	.33356	L-2.3711	22.423	3.2494	1.1307	-.06010
#2	11.880	.32353	L-2.2240	22.499	3.4098	1.1487	-.06711
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000
Elem	Tl	U	V	Zn			
Units	ppm	ppm	ppm	ppm			
Avge	.34649	-.09917	.13763	17.269			
SDev	.13318	.05084	.00071	.192			
%RSD	38.436	51.262	.51752	1.1140			
#1	.25232	-.06323	.13713	17.133			
#2	.44066	-.13512	.13813	17.405			
Errors	LC Pass	LC Pass	LC Pass	LC Pass			
High	50.000	50.000	50.000	50.000			

Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 04/27/05 17:30:05
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.80724	40.706	4.1651	4.0023	4.0661	3.9094	4.1866
SDev	.00478	.133	.1115	.0184	.0041	.0137	.0400
%RSD	.59265	.32558	2.6765	.45959	.10190	.35070	.95563
#1	Q.80386	40.612	4.0863	3.9893	4.0632	3.8997	4.1583
#2	Q.81062	40.800	4.2440	4.0153	4.0691	3.9191	4.2148
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	40.000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.243	3.9441	3.9122	3.9290	3.6651	42.109	39.290
SDev	.089	.0182	.0102	.0115	.0050	.079	.120
%RSD	.44113	.46157	.25991	.29392	.13649	.18736	.30439
#1	20.180	3.9312	3.9050	3.9208	3.6686	42.053	39.205
#2	20.306	3.9570	3.9194	3.9372	3.6615	42.164	39.374
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.000	4.0000	4.0000	4.0000	4.0000	40.000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9428	20.060	3.9402	3.9546	39.235	3.9028	4.0728
SDev	.0040	.084	.0092	.0199	.002	.0091	.0050
%RSD	.10247	.41711	.23379	.50287	.00472	.23257	.12331
#1	3.9400	20.001	3.9337	3.9686	39.234	3.9092	4.0764
#2	3.9457	20.119	3.9467	3.9405	39.237	3.8964	4.0693
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	20.000	4.0000	4.0000	40.000	4.0000	4.0000

Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9553	3.9498	3.6584	4.1694	4.0513	3.9017	3.6892
SDev	.0356	.0824	.0764	.0235	.1412	.0058	.0110
%RSD	.89975	2.0859	2.0883	.56337	3.4843	.14898	.29715
#1	3.9301	4.0080	3.7124	4.1528	4.1511	3.8976	3.6970
#2	3.9805	3.8915	3.6044	4.1860	3.9515	3.9058	3.6815
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	3.7900	3.9432	3.9178	3.9117
SDev	.1510	.0260	.0104	.0222
%RSD	3.9839	.65835	.26539	.56842
#1	3.8968	3.9616	3.9104	3.8960
#2	3.6833	3.9249	3.9251	3.9274
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 04/27/05 17:34:28
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00194	.03702	.01437	.00850	.00021	.00051	-.00410
SDev	.00120	.02065	.03458	.00194	.00002	.00008	.02302
%RSD	61.681	55.792	240.59	22.845	7.2693	15.428	560.86
#1	-.00110	.02241	-.01008	.00987	.00020	.00056	-.02038
#2	-.00279	Q.05162	.03883	.00712	.00023	.00045	.01217
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000

Range	.01000	.05000	.20000	.02500	.20000	.00500	.20000
Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01097	.00161	-.00041	-.00192	.00339	.02048	.22060
SDev	.00085	.00011	.00032	.00256	.00123	.00171	1.5721
%RSD	7.7092	6.5450	77.394	133.60	36.261	8.3720	712.66
#1	.01038	.00169	-.00064	-.00011	.00426	.02169	1.3322
#2	.01157	.00154	-.00019	-.00373	.00252	.01927	-.89105
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.25000	.00500	.05000	.01000	.02500	.05000	2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00276	.03152	.00132	.00803	.01627	-.00374	.02530
SDev	.00060	.01849	.00005	.00852	.00924	.00923	.09193
%RSD	21.948	58.660	3.8169	106.08	56.790	246.87	363.33
#1	.00233	.01845	.00128	.01406	.00974	.00279	-.03970
#2	.00318	.04460	.00135	.00201	.02280	-.01027	.09031
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.01000	.25000	.01500	.04000	.25000	.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02070	.01462	-.01975	.03444	Q.11985	.00047	-.00300
SDev	.01541	.01035	.04800	.01472	.05653	.00001	.00395
%RSD	74.450	70.785	243.04	42.727	47.169	2.3743	131.61
#1	.03159	.00730	.01419	.04485	.07987	.00046	-.00021
#2	.00980	.02193	-.05369	.02404	Q.15982	.00048	-.00580
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.10000	.06000	.20000	.50000	.10000	.05000	.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.02129	-.13165	.00314	.00641
SDev	.00612	.16019	.00204	.00005
%RSD	28.729	121.68	65.013	.72694
#1	-.02561	-.01838	.00170	.00638
#2	-.01696	-.24493	.00458	.00644
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000
Range	2.0000	.50000	.05000	.02000

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Method: 6010C Sample Name: CCV Operator: STL
Run Time: 04/28/05 08:10:53
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.82798	41.194	4.3663	4.0681	4.2241	3.9756	4.1262
SDev	.00069	.090	.1508	.0014	.0078	.0058	.0336
%RSD	.08332	.21788	3.4526	.03522	.18555	.14688	.81418
#1	Q.82749	41.257	4.2597	4.0671	4.2296	3.9715	4.1499
#2	Q.82846	41.130	Q4.4729	4.0692	4.2185	3.9798	4.1024
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	40.000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.457	3.9141	3.9660	3.9699	3.7626	43.286	40.320
SDev	.036	.0110	.0141	.0045	.0137	.081	.108
%RSD	.17396	.28222	.35454	.11259	.36293	.18816	.26814
#1	20.432	3.9062	3.9561	3.9730	3.7722	43.228	40.244
#2	20.483	3.9219	3.9760	3.9667	3.7529	43.344	40.397
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.000	4.0000	4.0000	4.0000	4.0000	40.000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.1616	20.577	3.9801	4.1674	40.778	3.8851	3.8761
SDev	.0616	.000	.0088	.0312	.423	.0248	.2658
%RSD	1.4798	.00123	.22234	.74962	1.0368	.63929	6.8574
#1	4.2051	20.577	3.9738	4.1453	41.077	3.9027	3.6882
#2	4.1180	20.577	3.9863	4.1895	40.479	3.8675	4.0641
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	20.000	4.0000	4.0000	40.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.0445	3.8338	3.6662	4.1959	4.2111	4.0731	3.6838
SDev	.0202	.0000	.0277	.0062	.0283	.0050	.0169
%RSD	.50059	.00113	.75432	.14776	.67136	.12253	.45917
#1	4.0301	3.8338	3.6466	4.1915	4.1911	4.0766	3.6958
#2	4.0588	3.8338	3.6857	4.2003	4.2311	4.0696	3.6719
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Tl	U	V	Zn

Units	ppm	ppm	ppm	ppm
Avge	3.7495	4.0650	4.0183	4.0297
SDev	.0272	.0259	.0088	.0182
%RSD	.72435	.63810	.21937	.45172
#1	3.7687	4.0834	4.0245	4.0169
#2	3.7303	4.0467	4.0120	4.0426
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 04/28/05 08:15:16
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00085	-.00594	.00611	.00569	.00032	.00013	-.01470
SDev	.00197	.00188	.01320	.00197	.00015	.00008	.00983
%RSD	231.74	31.628	215.93	34.686	46.939	63.463	66.850
#1	-.00225	-.00726	.01545	.00429	.00042	.00007	-.02165
#2	.00054	-.00461	-.00322	.00709	.00021	.00019	-.00775
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.01000	.05000	.20000	.02500	.20000	.00500	.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00739	.00082	.00106	-.00145	.00149	.00131	1.0490
SDev	.00034	.00081	.00120	.00047	.00049	.00012	.6176
%RSD	4.6036	98.619	113.14	32.366	33.011	9.0453	58.874
#1	.00763	.00025	.00191	-.00112	.00114	.00140	1.4857
#2	.00715	.00139	.00021	-.00178	.00184	.00123	.61229
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.25000	.00500	.05000	.01000	.02500	.05000	2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00119	.01753	.00017	.00402	-.00319	.00280	.01083
SDev	.00002	.00071	.00016	.00284	.00553	.00034	.01022
%RSD	2.0645	4.0225	96.306	70.712	173.50	11.956	94.315
#1	-.00121	.01803	.00005	.00201	.00072	.00256	.01806
#2	-.00118	.01703	.00028	.00603	-.00710	.00304	.00361
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.01000	.25000	.01500	.04000	.25000	.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00020	-.02183	-.00273	.01186	.09989	.00007	-.00950
SDev	.00011	.00002	.03208	.00041	.08473	.00008	.00072
%RSD	53.963	.08980	1174.4	3.4920	84.831	115.96	7.6296
#1	.00028	-.02181	-.02542	.01215	Q.15980	.00001	-.01001
#2	.00012	-.02184	.01995	.01156	.03997	.00012	-.00898
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.10000	.06000	.20000	.50000	.10000	.05000	.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.01714	-.12549	.00148	.00435
SDev	.04829	.06495	.00049	.00123
%RSD	281.67	51.757	32.845	28.338
#1	-.01700	-.17141	.00114	.00347
#2	.05129	-.07956	.00182	.00522
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000
Range	2.0000	.50000	.05000	.02000

Method: 6010C Sample Name: G8WP7 5 Operator: STL
Run Time: 04/28/05 08:19:38
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi

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Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02575	29.438	1.1470	.20039	1.8276	.00070	.45193
SDev	.00001	.158	.0388	.00364	.0170	.00000	.01151
%RSD	.04392	.53671	3.3828	1.8158	.92930	.28415	2.5459
#1	.02575	29.326	1.1196	.19782	1.8156	.00070	.44380
#2	.02576	29.550	1.1745	.20296	1.8396	.00070	.46007
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	74.004	.00413	.02500	.17191	2.6583	125.81	7.8095
SDev	.589	.00242	.00161	.00008	.0239	1.44	.1402
%RSD	.79628	58.534	6.4245	.04499	.90065	1.1460	1.7953
#1	73.587	.00583	.02614	.17186	2.6414	124.79	7.7103
#2	74.421	.00242	.02386	.17197	2.6752	126.83	7.9086
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01417	6.0381	2.4382	.03200	8.3987	.30684	11.302
SDev	.00253	.0482	.0298	.01129	.0348	.00616	.079
%RSD	17.885	.79761	1.2210	35.288	.41477	2.0087	.70223
#1	.01238	6.0041	2.4172	.02401	8.4233	.31120	11.246
#2	.01596	6.0722	2.4593	.03998	8.3741	.30248	11.358
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.5691	.04876	L-.49557	4.6582	1.3882	.20261	-.01681
SDev	.0735	.02142	.02112	.0388	.0284	.00188	.00372
%RSD	1.3206	43.942	4.2616	.83259	2.0437	.93009	22.121
#1	5.5171	.03361	L-.48063	4.6308	1.3682	.20128	-.01418
#2	5.6212	.06391	L-.51050	4.6856	1.4083	.20395	-.01944
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.08836	-.16450	.02048	12.573
SDev	.04523	.03111	.00031	.154
%RSD	51.184	18.911	1.5244	1.2221

#1	-.05638	-.14250	.02070	12.464
#2	-.12034	-.18650	.02026	12.682
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WP7S 5 Operator: STL
Run Time: 04/28/05 08:23:59
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03024	34.273	.85928	.18493	2.2462	.00588	.42111
SDev	.00110	.136	.01365	.00897	.0004	.00027	.00509
%RSD	3.6370	.39795	1.5889	4.8521	.01834	4.6120	1.2076
#1	.02946	34.176	.86894	.17858	2.2464	.00569	.42471
#2	.03102	34.369	.84963	.19127	2.2459	.00608	.41752
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	68.992	.01303	.07259	.13697	6.0611	82.932	13.343
SDev	.997	.00295	.00218	.00063	.0237	1.097	.455
%RSD	1.4447	22.620	3.0006	.46097	.39037	1.3233	3.4107
#1	68.287	.01094	.07413	.13742	6.0444	82.156	13.665
#2	69.696	.01511	.07105	.13652	6.0779	83.708	13.021
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01117	13.444	2.5832	.11644	15.828	.23960	6.4067
SDev	.00506	.081	.0369	.00857	.081	.00703	.0082
%RSD	45.277	.60008	1.4279	7.3640	.50962	2.9359	.12724

#1	.00759	13.387	2.5571	.12251	15.885	.23463	6.4125
#2	.01474	13.501	2.6093	.11038	15.771	.24458	6.4010
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.1845	.08925	.00330	5.8210	2.4628	.49671	-.01672
SDev	.1831	.03155	.03587	.0572	.0846	.00058	.00547
%RSD	1.9940	35.347	1088.3	.98339	3.4344	.11668	32.706
#1	9.0550	.06695	.02866	5.7805	2.5226	.49630	-.01285
#2	9.3139	.11156	-.02207	5.8615	2.4030	.49712	-.02058
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.19046	-.07533	.07479	8.9664
SDev	.04842	.09583	.00464	.1627
%RSD	25.423	127.22	6.1992	1.8140
#1	.15622	-.00757	.07151	8.8514
#2	.22470	-.14309	.07807	9.0814
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WP7D 5 Operator: STL
Run Time: 04/28/05 08:28:21
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02131	21.558	1.0909	.12482	2.0864	.00582	.40005
SDev	.00039	.070	.0303	.00052	.0027	.00000	.00462
%RSD	1.8426	.32530	2.7735	.42072	.13011	.01391	1.1561

#1	.02104	21.508	1.1123	.12444	2.0845	.00582	.40332
#2	.02159	21.607	1.0695	.12519	2.0883	.00582	.39678
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000
Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	102.09	.00347	.06696	.12375	3.2067	97.275	10.922
SDev	.54	.00159	.00056	.00055	.0112	.499	1.006
%RSD	.53193	45.638	.84309	.44163	.34789	.51264	9.2089
#1	101.70	.00459	.06656	.12413	3.1988	96.922	11.634
#2	102.47	.00235	.06736	.12336	3.2146	97.627	10.211
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00984	9.8570	2.1314	.12377	11.980	.21053	25.547
SDev	.00209	.0466	.0104	.01986	.021	.00634	.369
%RSD	21.220	.47280	.48784	16.044	.17612	3.0098	1.4433
#1	.00836	9.8241	2.1240	.10973	11.965	.21502	25.286
#2	.01131	9.8900	2.1387	.13782	11.995	.20605	25.807
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.3431	.05405	-.07868	5.3389	1.3259	.33884	-.01193
SDev	.0200	.01059	.03045	.0216	.0564	.00057	.00084
%RSD	.59920	19.585	38.706	.40384	4.2559	.16935	7.0128
#1	3.3290	.04656	-.10021	5.3236	1.3658	.33843	-.01252
#2	3.3573	.06153	-.05715	5.3541	1.2860	.33924	-.01134
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000
Elem	Tl	U	V	Zn			
Units	ppm	ppm	ppm	ppm			
Avge	.17729	-.11036	.06894	5.1120			
SDev	.03319	.01326	.00010	.0460			
%RSD	18.718	12.019	.14368	.90051			
#1	.20076	-.10098	.06901	5.0794			
#2	.15383	-.11973	.06887	5.1445			
Errors	LC Pass	LC Pass	LC Pass	LC Pass			
High	50.000	50.000	50.000	50.000			

Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WP7V 25 Operator: STL
Run Time: 04/28/05 08:32:42
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00571	5.8660	.23206	.03966	.36002	.00026	.07727
SDev	.00061	.0498	.06047	.00085	.00143	.00009	.01395
%RSD	10.656	.84918	26.056	2.1298	.39708	35.202	18.053
#1	.00614	5.8308	.18931	.03906	.35901	.00019	.06740
#2	.00528	5.9012	.27482	.04025	.36103	.00032	.08713
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.155	.00295	.00342	.03173	.53530	25.923	1.3044
SDev	.127	.00118	.00028	.00224	.00365	.167	.3613
%RSD	.83913	39.843	8.2219	7.0482	.68239	.64523	27.696
#1	15.065	.00379	.00322	.03332	.53272	25.805	1.0489
#2	15.245	.00212	.00362	.03015	.53789	26.041	1.5598
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00054	1.2375	.49279	.00676	1.6485	.06300	2.3023
SDev	.00082	.0241	.00359	.00853	.0211	.01217	.0156
%RSD	152.55	1.9448	.72904	126.11	1.2801	19.311	.67878
#1	-.00004	1.2204	.49025	.01279	1.6336	.05440	2.2912
#2	.00112	1.2545	.49533	.00073	1.6634	.07160	2.3133
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	

Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.1057	-.02186	-.00304	.87601	.34162	.03988	-.00581
SDev	.0111	.00010	.08791	.00036	.08473	.00025	.00110
%RSD	1.0072	.44893	2894.6	.04087	24.804	.62129	18.878
#1	1.0978	-.02193	-.06520	.87626	.28170	.03970	-.00504
#2	1.1136	-.02180	.05913	.87575	.40153	.04005	-.00659
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.04195	-.07864	.00365	2.5169
SDev	.00602	.02174	.00236	.0225
%RSD	14.359	27.641	64.779	.89529
#1	-.03769	-.06327	.00198	2.5010
#2	-.04620	-.09401	.00532	2.5328
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WQL 5 Operator: STL
Run Time: 04/28/05 08:37:02
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.26852	18.761	2.1351	.12983	6.4196	.00051	.71241
SDev	.00585	.253	.1117	.00693	.0033	.00009	.04202
%RSD	2.1796	1.3469	5.2324	5.3373	.05105	17.217	5.8987
#1	.26438	18.582	2.0561	.12493	6.4219	.00045	.68269
#2	.27266	18.939	2.2141	.13473	6.4173	.00057	.74212
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000

Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000
Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	41.471	L-.02562	.02629	.11548	1.3842	216.17	4.3510
SDev	.861	.00078	.00132	.00223	.0097	2.16	1.2044
%RSD	2.0758	3.0437	5.0113	1.9320	.69736	.99959	27.681
#1	40.862	L-.02507	.02536	.11390	1.3774	214.64	3.4994
#2	42.079	L-.02617	.02722	.11706	1.3911	217.70	5.2026
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01580	4.1571	1.7633	.02958	2.8436	.12465	4.0221
SDev	.00516	.1074	.0202	.00863	.0330	.00754	.1471
%RSD	32.658	2.5847	1.1478	29.168	1.1609	6.0456	3.6578
#1	.01215	4.0811	1.7490	.03568	2.8203	.11932	3.9180
#2	.01945	4.2330	1.7776	.02348	2.8670	.12998	4.1261
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.6450	.10737	L-.81301	3.7189	2.8932	.16574	-.02713
SDev	.1471	.03212	.12012	.0530	.1131	.00016	.00373
%RSD	1.5248	29.911	14.775	1.4264	3.9101	.09821	13.746
#1	9.5410	.08466	L-.72807	3.6814	2.8132	.16563	-.02449
#2	9.7490	.13008	L-.89795	3.7564	2.9732	.16586	-.02976
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000
Elem	Tl	U	V	Zn			
Units	ppm	ppm	ppm	ppm			
Avge	-.08045	-.14605	.00086	4.5400			
SDev	.06031	.01178	.00298	.0746			
%RSD	74.964	8.0676	347.82	1.6438			
#1	-.03781	-.15439	-.00125	4.4872			
#2	-.12310	-.13772	.00296	4.5928			
Errors	LC Pass	LC Pass	LC Pass	LC Pass			
High	50.000	50.000	50.000	50.000			
Low	-.20000	-.50000	-.05000	-.01000			

Method: 6010C Sample Name: G8WQN 5 Operator: STL
Run Time: 04/28/05 08:41:23
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08646	23.135	1.2023	.14717	2.1409	.00075	.45672
SDev	.00212	.084	.0138	.00062	.0044	.00009	.00266
%RSD	2.4519	.36334	1.1516	.42275	.20660	11.497	.58160
#1	.08496	23.075	1.1925	.14673	2.1440	.00069	.45484
#2	.08796	23.194	1.2121	.14761	2.1378	.00081	.45860
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	44.350	.00753	.02398	.12462	2.6843	118.10	6.4633
SDev	.300	.00054	.00153	.00036	.0111	.38	.3651
%RSD	.67663	7.2282	6.3653	.28994	.41277	.32184	5.6490
#1	44.138	.00715	.02506	.12487	2.6764	117.83	6.7215
#2	44.562	.00791	.02290	.12436	2.6921	118.37	6.2051
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01340	4.5099	1.9703	.03438	5.5907	.12307	5.5532
SDev	.00254	.0426	.0064	.00854	.0220	.00463	.0146
%RSD	18.940	.94413	.32642	24.838	.39392	3.7612	.26335
#1	.01161	4.4798	1.9657	.04042	5.6062	.12634	5.5635
#2	.01520	4.5400	1.9748	.02834	5.5751	.11979	5.5428
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.000	.08823	L-.32575	4.3364	3.2245	.14606	-.01852
SDev	.071	.00020	.07105	.0027	.0282	.00000	.00120
%RSD	.64834	.22736	21.811	.06192	.87499	.00145	6.4630
#1	10.950	.08808	L-.37599	4.3345	3.2444	.14607	-.01768
#2	11.051	.08837	L-.27551	4.3383	3.2045	.14606	-.01937
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.05698	-.03902	.01466	7.0353
SDev	.03926	.03011	.00014	.0596
%RSD	68.909	77.167	.96276	.84708
#1	.02922	-.06031	.01476	6.9932
#2	.08474	-.01773	.01456	7.0775
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WQT 5 Operator: STL
Run Time: 04/28/05 08:45:44
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05854	20.579	.82231	.13641	1.8954	.00325	6.1545
SDev	.00292	.131	.02790	.00057	.0113	.00009	.0884
%RSD	4.9892	.63739	3.3928	.41641	.59501	2.7878	1.4357
#1	.05648	20.486	.80259	.13681	1.8874	.00319	6.0920
#2	.06061	20.671	.84204	.13600	1.9034	.00332	6.2170
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K

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Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	50.654	.05109	.02349	.11664	H527.40	79.139	4.8867
SDev	.377	.00024	.00114	.00013	2.24	.608	.0865
%RSD	.74414	.47312	4.8682	.10855	.42383	.76791	1.7695
#1	50.387	.05091	.02268	.11656	H525.82	78.709	4.9478
#2	50.920	.05126	.02429	.11673	H528.98	79.568	4.8255
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01043	5.1037	30.018	.03227	3.9714	.19030	4.2751
SDev	.00179	.0521	.302	.01991	.0431	.00754	.0829
%RSD	17.136	1.0217	1.0075	61.697	1.0858	3.9628	1.9381
#1	.00917	5.0669	29.804	.04635	3.9409	.18497	4.2165
#2	.01170	5.1406	30.231	.01819	4.0019	.19563	4.3337
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.6777	-.00673	L-.26451	4.7245	1.1048	.16418	-.00622
SDev	.0982	.00034	.19490	.0568	.0846	.00107	.00854
%RSD	2.6690	5.1067	73.686	1.2033	7.6614	.64952	137.20
#1	3.6082	-.00698	-.12669	4.6843	1.1646	.16343	-.00019
#2	3.7471	-.00649	L-.40232	4.7647	1.0449	.16493	-.01226
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.19214	-.04358	.04020	18.653
SDev	.09970	.03493	.00199	.193
%RSD	51.888	80.153	4.9585	1.0330
#1	L-.26264	-.01888	.03879	18.517
#2	-.12164	-.06828	.04161	18.789
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WTA 10 Operator: STL
Run Time: 04/28/05 08:50:05
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04114	13.845	.41271	.09247	1.3927	.00032	.19502
SDev	.00047	.143	.06721	.00042	.0193	.00000	.00942
%RSD	1.1441	1.0322	16.285	.45006	1.3832	.84644	4.8284
#1	.04081	13.744	.36518	.09217	1.3791	.00031	.18836
#2	.04147	13.946	.46023	.09276	1.4064	.00032	.20168
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	26.682	.05677	.01060	.07216	2.8910	44.566	2.6089
SDev	.350	.00081	.00064	.00021	.0148	.628	.0838
%RSD	1.3109	1.4209	6.0790	.28877	.51276	1.4087	3.2110
#1	26.434	.05620	.01105	.07231	2.8805	44.122	2.6681
#2	26.929	.05734	.01014	.07202	2.9015	45.009	2.5496
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00337	2.5165	1.0751	.03999	3.1031	.10090	2.2240
SDev	.00350	.0371	.0142	.01133	.0220	.00343	.0829
%RSD	103.71	1.4727	1.3194	28.331	.70988	3.4006	3.7274
#1	.00090	2.4903	1.0651	.03198	3.0875	.09848	2.1654
#2	.00584	2.5427	1.0851	.04801	3.1186	.10333	2.2827
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.3615	-.00418	-.16853	2.4640	1.3415	.08177	-.01306
SDev	.0312	.05115	.05827	.0230	.0283	.00107	.00241
%RSD	.92680	1224.4	34.576	.93418	2.1097	1.3048	18.482

#1	3.3394	.03199	L-.20974	2.4478	1.3215	.08102	-.01477
#2	3.3835	-.04035	-.12733	2.4803	1.3615	.08253	-.01135
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.00563	-.04281	.01165	32.456
SDev	.04534	.04366	.00138	.480
%RSD	805.11	102.00	11.883	1.4802
#1	-.03769	-.01193	.01067	32.116
#2	.02643	-.07368	.01263	32.796
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WTG 5 Operator: STL
Run Time: 04/28/05 08:54:27
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.21028	27.459	2.5282	.34041	4.2844	.00226	.81833
SDev	.00419	.039	.0655	.00261	.0240	.00008	.01037
%RSD	1.9925	.14250	2.5905	.76533	.55938	3.5709	1.2667
#1	.20731	27.431	2.5745	.33857	4.3014	.00220	.81100
#2	.21324	27.486	2.4819	.34226	4.2675	.00231	.82566
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	51.732	L-.03471	.03330	.20100	1.8988	247.32	6.2237
SDev	.206	.00045	.00183	.00180	.0020	.41	.3233
%RSD	.39825	1.3092	5.4912	.89599	.10685	.16467	5.1946

#1	51.586	L-.03503	.03460	.20228	1.9002	247.03	5.9951
#2	51.878	L-.03439	.03201	.19973	1.8973	247.60	6.4523
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02615	5.1578	2.9892	.04613	8.1872	.18570	6.5795
SDev	.00270	.0234	.0048	.01134	.0110	.00103	.0314
%RSD	10.318	.45419	.16086	24.588	.13445	.55410	.47756
#1	.02424	5.1413	2.9858	.03811	8.1950	.18643	6.5573
#2	.02806	5.1744	2.9926	.05415	8.1795	.18497	6.6017
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.5672	.08847	L-.77939	4.6629	1.5181	.19086	-.02903
SDev	.0111	.02038	.10997	.0192	.0847	.00098	.00225
%RSD	.24302	23.039	14.109	.41072	5.5778	.51488	7.7399
#1	4.5594	.10288	L-.70163	4.6494	1.5780	.19156	-.02744
#2	4.5751	.07406	L-.85715	4.6765	1.4582	.19017	-.03062
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000
Elem	Tl	U	V	Zn			
Units	ppm	ppm	ppm	ppm			
Avge	.09942	-.16661	.00784	7.0676			
SDev	.01810	.00844	.00107	.0209			
%RSD	18.211	5.0672	13.656	.29629			
#1	.11222	-.17258	.00709	7.0528			
#2	.08661	-.16064	.00860	7.0824			
Errors	LC Pass	LC Pass	LC Pass	LC Pass			
High	50.000	50.000	50.000	50.000			
Low	-.20000	-.50000	-.05000	-.01000			

Method: 6010C Sample Name: G8WTR 5 Operator: STL
Run Time: 04/28/05 08:58:47
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08845	20.507	1.8249	.17078	1.5632	.00145	1.2921
SDev	.00110	.018	.0458	.00180	.0084	.00000	.0278
%RSD	1.2457	.08725	2.5083	1.0514	.53895	.19628	2.1497
#1	.08767	20.494	1.8572	.16951	1.5572	.00145	1.2725
#2	.08923	20.520	1.7925	.17205	1.5691	.00145	1.3117
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	55.059	L-.01125	.02591	.13574	40.412	187.56	4.4931
SDev	.288	.00141	.00139	.00010	.201	1.29	.3407
%RSD	.52281	12.546	5.3701	.07447	.49730	.68521	7.5835
#1	54.855	L-.01225	.02492	.13567	40.269	186.65	4.7340
#2	55.262	L-.01026	.02689	.13581	40.554	188.47	4.2522
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01741	4.7690	3.8810	.02495	4.9772	.40859	11.233
SDev	.00259	.0404	.0312	.00562	.0220	.00412	.130
%RSD	14.850	.84785	.80511	22.513	.44180	1.0074	1.1603
#1	.01558	4.7404	3.8589	.02098	4.9928	.40568	11.325
#2	.01924	4.7976	3.9031	.02893	4.9617	.41150	11.141
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.306	.22227	L-.64591	4.0963	2.9508	.14057	-.01851
SDev	.085	.01103	.00472	.0316	.0848	.00074	.00794
%RSD	.69012	4.9647	.73028	.77227	2.8752	.52614	42.915
#1	12.246	.21447	L-.64257	4.0739	2.8908	.14005	-.01289
#2	12.366	.23007	L-.64924	4.1186	3.0107	.14110	-.02413
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000

Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.03074	-.19289	.00953	14.800
SDev	.07239	.04400	.00093	.119
%RSD	235.51	22.812	9.7989	.80190
#1	.02045	-.16178	.00887	14.716
#2	-.08193	-.22401	.01019	14.884
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 04/28/05 09:03:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.81876	40.958	Q4.4394	4.0633	4.1293	3.9546	4.1450
SDev	.00277	.235	.0366	.0031	.0070	.0117	.0545
%RSD	.33843	.57328	.82439	.07692	.16908	.29516	1.3154
#1	Q.81681	40.792	Q4.4653	4.0655	4.1243	3.9464	4.1064
#2	Q.82072	41.124	Q4.4136	4.0611	4.1342	3.9629	4.1835
Errors	QC Fail	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	40.000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.577	3.9454	3.9544	3.9549	3.6624	42.898	40.189
SDev	.127	.0309	.0132	.0208	.0238	.094	.727
%RSD	.61646	.78385	.33288	.52672	.65098	.21974	1.8083
#1	20.487	3.9235	3.9451	3.9402	3.6456	42.831	40.703
#2	20.667	3.9672	3.9637	3.9697	3.6793	42.964	39.675
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.000	4.0000	4.0000	4.0000	4.0000	40.000	40.000

Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.0587	20.504	3.9878	4.0951	40.093	3.9240	3.9549
SDev	.0266	.154	.0103	.0880	.236	.0086	.0920
%RSD	.65418	.75230	.25763	2.1500	.58783	.21823	2.3264
#1	4.0399	20.395	3.9805	4.0328	39.927	3.9179	3.8899
#2	4.0774	20.614	3.9951	4.1574	40.260	3.9300	4.0200
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	20.000	4.0000	4.0000	40.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.0149	3.8846	3.7553	4.1777	4.1711	3.9764	3.6710
SDev	.0399	.0310	.0642	.0277	.0847	.0075	.0199
%RSD	.99319	.79678	1.7093	.66363	2.0314	.18931	.54076
#1	3.9867	3.8627	3.8007	4.1581	4.2311	3.9711	3.6570
#2	4.0431	3.9065	3.7099	4.1973	4.1112	3.9817	3.6850
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Tl	U	V	Zn			
Units	ppm	ppm	ppm	ppm			
Avge	3.8029	3.9919	3.9846	4.0037			
SDev	.0000	.0258	.0241	.0193			
%RSD	.00027	.64693	.60573	.48127			
#1	3.8029	3.9736	3.9676	3.9901			
#2	3.8030	4.0101	4.0017	4.0173			
Errors	QC Pass	QC Pass	QC Pass	QC Pass			
Value	4.0000	4.0000	4.0000	4.0000			
Range	10.000	10.000	10.000	10.000			

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 04/28/05 09:07:33
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00134	-.01516	-.01807	.00569	.00021	.00007	-.02878
SDev	.00176	.01283	.00501	.00202	.00000	.00000	.02232
%RSD	131.88	84.599	27.699	35.461	1.5663	3.7993	77.569
#1	-.00258	-.02423	-.01453	.00712	.00022	.00007	-.04456
#2	-.00009	-.00609	-.02161	.00427	.00021	.00007	-.01299
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.01000	.05000	.20000	.02500	.20000	.00500	.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00339	-.00048	-.00021	-.00177	.00084	.00166	-.48730
SDev	.00022	.00144	.00300	.00053	.00156	.00042	.43578
%RSD	6.4349	297.76	1461.5	30.101	185.88	25.527	89.429
#1	-.00324	-.00150	.00191	-.00139	.00194	.00136	-.79544
#2	-.00355	.00054	-.00232	-.00214	-.00026	.00195	-.17915
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.25000	.00500	.05000	.01000	.02500	.05000	2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00117	-.02450	.00016	.00603	-.02394	.00013	.03252
SDev	.00316	.03454	.00017	.00000	.01649	.00068	.00002
%RSD	269.40	140.99	101.18	.00041	68.875	504.66	.05048
#1	-.00341	-.04892	.00005	.00603	-.03560	-.00035	.03254
#2	.00106	-.00007	.00028	.00603	-.01228	.00062	.03251
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.01000	.25000	.01500	.04000	.25000	.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00296	.00732	.01998	.00954	.07991	.00001	-.00731
SDev	.00438	.00002	.00003	.00379	.00001	.00016	.00207
%RSD	147.94	.24719	.15445	39.723	.01492	1973.6	28.356
#1	-.00605	.00733	.02000	.00686	.07992	-.00011	-.00585
#2	.00014	.00731	.01995	.01223	.07990	.00012	-.00878
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.10000	.06000	.20000	.50000	.10000	.05000	.50000

Elem	Tl	U	V	Zn

Units	ppm	ppm	ppm	ppm
Avge	-.06615	-.11631	-.00042	.00145
SDev	.02115	.04331	.00141	.00041
%RSD	31.978	37.237	335.56	28.535
#1	-.05119	-.14694	-.00142	.00175
#2	-.08111	-.08568	.00058	.00116
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000
Range	2.0000	.50000	.05000	.02000

Method: 6010C Sample Name: G8WTV 25 Operator: STL
Run Time: 04/28/05 09:11:55
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00435	1.6224	1.5378	.04474	.23060	.00007	.46244
SDev	.00177	.0295	.0521	.00360	.00114	.00000	.00048
%RSD	40.722	1.8159	3.3888	8.0483	.49430	2.9968	.10467
#1	.00310	1.6016	1.5746	.04220	.23141	.00007	.46210
#2	.00561	1.6432	1.5009	.04729	.22980	.00007	.46278
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.0088	L-.02887	.01446	.05065	.30837	152.01	1.5288
SDev	.0299	.00069	.00032	.00183	.00077	.43	.0826
%RSD	.99272	2.4031	2.2370	3.6080	.25105	.28050	5.4043
#1	2.9877	L-.02936	.01469	.05194	.30892	151.71	1.4704
#2	3.0299	L-.02838	.01423	.04935	.30782	152.31	1.5872
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00840	.38157	.72026	-.00142	.29375	.07183	.77881
SDev	.00227	.01846	.00247	.00002	.00368	.00376	.15754
%RSD	27.014	4.8391	.34308	1.4680	1.2528	5.2403	20.228
#1	.00680	.36851	.71851	-.00141	.29115	.07450	.89020
#2	.01001	.39462	.72200	-.00144	.29636	.06917	.66741
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0499	.03501	L-.52383	.60566	1.6899	.01100	-.02254
SDev	.0268	.00026	.03765	.00644	.0000	.00017	.00694
%RSD	2.5557	.72721	7.1866	1.0629	.00231	1.5100	30.778
#1	1.0310	.03483	L-.49721	.60111	1.6898	.01088	-.02745
#2	1.0689	.03519	L-.55045	.61021	1.6899	.01112	-.01764
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.05888	-.09534	-.01147	.33571
SDev	.05432	.03493	.00170	.00042
%RSD	92.246	36.636	14.815	.12469
#1	.09729	-.07064	-.01267	.33600
#2	.02048	-.12004	-.01026	.33541
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WTW 25 Operator: STL
Run Time: 04/28/05 09:16:16
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00192	1.3198	1.7705	.04377	.19872	.00007	.52882
SDev	.00422	.0222	.0019	.00270	.00114	.00000	.00909
%RSD	219.82	1.6824	.10623	6.1731	.57187	1.7328	1.7193
#1	.00106	1.3041	1.7692	.04186	.19953	.00007	.52240
#2	-.00490	1.3355	1.7718	.04569	.19792	.00007	.53525
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.2639	L-.03327	.01674	.04859	.18780	165.83	-.03333
SDev	.0090	.00180	.00093	.00149	.00078	.31	1.45630
%RSD	.39643	5.4073	5.5587	3.0583	.41577	.18870	4369.9
#1	2.2575	L-.03200	.01740	.04964	.18835	165.61	.99644
#2	2.2702	L-.03454	.01608	.04754	.18724	166.05	-1.0631
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00788	.31083	.80775	.00794	.12389	.07269	.82382
SDev	.00229	.03522	.00321	.00282	.00913	.00771	.00963
%RSD	29.053	11.330	.39718	35.571	7.3719	10.608	1.1687
#1	.00626	.28592	.80548	.00594	.11744	.06723	.83063
#2	.00950	.33573	.81002	.00994	.13035	.07814	.81701
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.5638	.04285	L-.54462	.58459	2.1902	.00886	-.02671
SDev	.0112	.00017	.03906	.00586	.0283	.00025	.01019
%RSD	.71533	.40206	7.1724	1.0019	1.2912	2.7838	38.164
#1	1.5717	.04273	L-.57224	.58874	2.1702	.00869	-.01950
#2	1.5559	.04297	L-.51699	.58045	2.2102	.00904	-.03392
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.04074	-.13412	-.01473	.28078
SDev	.03928	.01745	.00174	.00200
%RSD	96.438	13.010	11.815	.71114

#1	-.06851	-.12178	-.01596	.27937
#2	-.01296	-.14646	-.01350	.28220
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WT0 5 Operator: STL
Run Time: 04/28/05 09:20:37
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.19608	20.880	1.4705	.16687	3.9906	.00082	.64018
SDev	.00178	.093	.0515	.00080	.0271	.00001	.01103
%RSD	.90727	.44707	3.5005	.48112	.67906	.75817	1.7236
#1	.19482	20.814	1.4341	.16744	4.0098	.00081	.63238
#2	.19734	20.946	1.5069	.16630	3.9715	.00082	.64798
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	105.49	-.00483	.02432	.10961	5.5044	140.56	5.9135
SDev	.47	.00072	.00387	.00126	.0395	.20	.6145
%RSD	.44778	14.917	15.907	1.1496	.71697	.14250	10.391
#1	105.15	-.00432	.02706	.11050	5.4765	140.70	6.3480
#2	105.82	L-.00534	.02158	.10871	5.5323	140.42	5.4790
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01593	5.2450	4.2498	.03328	4.4513	.13737	32.983
SDev	.00104	.0289	.0043	.00851	.0009	.00394	.229
%RSD	6.5419	.55074	.10117	25.574	.02096	2.8653	.69564

#1	.01519	5.2245	4.2528	.03930	4.4506	.14015	32.821
#2	.01667	5.2654	4.2467	.02726	4.4519	.13459	33.145
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H52.425	.85130	L-.50313	4.3932	9.2363	.26708	-.01089
SDev	.465	.05141	.02508	.0275	.0565	.00155	.00227
%RSD	.88620	6.0389	4.9844	.62588	.61141	.58132	20.799
#1	H52.096	.81495	L-.52086	4.3738	9.1964	.26818	-.00929
#2	H52.753	.88766	L-.48540	4.4127	9.2763	.26598	-.01249
Errors	LC High	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.08863	-.11405	.02236	7.1698
SDev	.05134	.03449	.00131	.0284
%RSD	57.930	30.237	5.8781	.39599
#1	.12493	-.08967	.02143	7.1498
#2	.05232	-.13844	.02329	7.1899
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WT1 5 Operator: STL
Run Time: 04/28/05 09:24:59
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.35802	27.721	1.6710	.24952	5.8165	.00070	.60732
SDev	.00402	.177	.0722	.00268	.0291	.00000	.00631
%RSD	1.1222	.63958	4.3225	1.0728	.50041	.04815	1.0388

#1	.35518	27.595	1.6199	.24763	5.7959	.00070	.60286
#2	.36086	27.846	1.7221	.25141	5.8371	.00070	.61179
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000
Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	50.998	-.00357	.02941	.15833	1.7763	170.48	6.3962
SDev	.436	.00004	.00079	.00163	.0107	1.39	.4405
%RSD	.85518	1.1445	2.6708	1.0324	.60447	.81387	6.8871
#1	50.690	-.00354	.02886	.15718	1.7687	169.50	6.0847
#2	51.307	-.00360	.02997	.15949	1.7839	171.46	6.7077
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01884	5.5942	1.8477	.02780	6.6393	.36595	5.3753
SDev	.00246	.0545	.0155	.00291	.0138	.00891	.0128
%RSD	13.082	.97419	.83849	10.462	.20721	2.4346	.23898
#1	.01710	5.5557	1.8368	.02985	6.6296	.37225	5.3662
#2	.02058	5.6327	1.8587	.02574	6.6490	.35965	5.3843
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.4721	.04493	L-.59193	4.2416	1.7913	.20377	-.03426
SDev	.0087	.01984	.00487	.0505	.0284	.00106	.01037
%RSD	.24955	44.151	.82288	1.1907	1.5833	.52184	30.266
#1	3.4660	.05895	L-.58849	4.2059	1.7712	.20302	-.02693
#2	3.4783	.03090	L-.59538	4.2774	1.8113	.20452	-.04159
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000
Elem	Tl	U	V	Zn			
Units	ppm	ppm	ppm	ppm			
Avge	-.00907	-.14586	.01551	12.972			
SDev	.00307	.00793	.00142	.138			
%RSD	33.803	5.4334	9.1803	1.0674			
#1	-.01124	-.15147	.01451	12.874			
#2	-.00691	-.14026	.01652	13.070			
Errors	LC Pass	LC Pass	LC Pass	LC Pass			
High	50.000	50.000	50.000	50.000			

Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G817C 5 Operator: STL
Run Time: 04/28/05 09:29:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.10228	36.434	1.2183	.23808	2.8215	.00081	.56432
SDev	.00093	.064	.0025	.00269	.0267	.00002	.01486
%RSD	.90871	.17488	.20579	1.1301	.94653	2.0414	2.6334
#1	.10163	36.389	1.2165	.23617	2.8026	.00080	.55381
#2	.10294	36.479	1.2201	.23998	2.8404	.00083	.57483
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	59.290	.00667	.02939	.15685	4.5879	131.29	8.4920
SDev	.248	.00198	.00548	.00424	.0175	1.48	.6959
%RSD	.41822	29.631	18.651	2.7000	.38118	1.1261	8.1952
#1	59.115	.00807	.03327	.15984	4.5756	130.25	8.9841
#2	59.466	.00528	.02551	.15385	4.6003	132.34	7.9999
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02073	6.9618	2.6123	.02570	9.3934	.38326	5.4987
SDev	.00206	.0522	.0289	.01996	.0109	.00562	.0789
%RSD	9.9590	.74915	1.1077	77.641	.11591	1.4670	1.4348
#1	.01927	6.9249	2.5918	.03981	9.4011	.38723	5.5545
#2	.02218	6.9987	2.6327	.01159	9.3857	.37928	5.4429
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	

Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.9590	.08086	L-.36153	4.4084	1.6282	.20596	-.01327
SDev	.0092	.04212	.06941	.0086	.0849	.00174	.01404
%RSD	.15523	52.085	19.200	.19425	5.2166	.84345	105.80
#1	5.9524	.05108	L-.31244	4.4024	1.5682	.20473	-.00334
#2	5.9655	.11065	L-.41061	4.4145	1.6883	.20719	-.02321
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.00999	-.02725	.02456	10.285
SDev	.10288	.26492	.00036	.132
%RSD	1029.6	972.33	1.4705	1.2821
#1	-.08274	.16008	.02431	10.192
#2	.06275	-.21457	.02482	10.379
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G817CS 5 Operator: STL
Run Time: 04/28/05 09:33:42
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09461	77.332	1.4378	.38976	2.8416	.00582	.56599
SDev	.00002	.812	.0210	.00142	.0071	.00001	.02786
%RSD	.01876	1.0503	1.4626	.36384	.25155	.09097	4.9215
#1	.09460	76.758	1.4229	.38875	2.8366	.00582	.54630
#2	.09463	77.906	1.4527	.39076	2.8467	.00583	.58569
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000

Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000
Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	65.624	.00845	.07281	.17952	3.5197	144.81	12.569
SDev	.694	.00106	.00234	.00023	.0113	.62	.862
%RSD	1.0574	12.586	3.2125	.12838	.32153	.43044	6.8606
#1	65.133	.00920	.07116	.17936	3.5117	144.37	13.179
#2	66.115	.00769	.07446	.17968	3.5277	145.25	11.959
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01598	11.502	3.0954	.13952	19.302	.39659	5.1951
SDev	.00071	.126	.0144	.00003	.115	.01423	.1440
%RSD	4.4308	1.0950	.46475	.02189	.59413	3.5874	2.7716
#1	.01548	11.413	3.0852	.13954	19.221	.38653	5.0933
#2	.01648	11.591	3.1055	.13950	19.383	.40665	5.2969
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9601	.18277	-.19465	6.6528	1.5495	.30128	-.02844
SDev	.0347	.03127	.01683	.0857	.0283	.00131	.01221
%RSD	.87743	17.107	8.6445	1.2879	1.8283	.43656	42.936
#1	3.9355	.16066	-.18275	6.5922	1.5295	.30035	-.01981
#2	3.9846	.20488	L-.20655	6.7134	1.5696	.30221	-.03708
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000
Elem	Tl	U	V	Zn			
Units	ppm	ppm	ppm	ppm			
Avge	.28443	-.12486	.06937	7.5933			
SDev	.04829	.08251	.00208	.0496			
%RSD	16.978	66.077	2.9963	.65351			
#1	.25029	-.06652	.06790	7.5582			
#2	.31858	-.18321	.07084	7.6284			
Errors	LC Pass	LC Pass	LC Pass	LC Pass			
High	50.000	50.000	50.000	50.000			
Low	-.20000	-.50000	-.05000	-.01000			

Method: 6010C Sample Name: G817CD 5 Operator: STL
Run Time: 04/28/05 09:38:03
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06401	35.605	1.7804	.18975	2.2744	.00583	.70875
SDev	.00216	.159	.0175	.00401	.0083	.00000	.01167
%RSD	3.3690	.44648	.98475	2.1115	.36391	.01417	1.6463
#1	.06248	35.493	1.7928	.19258	2.2685	.00582	.71700
#2	.06553	35.718	1.7680	.18691	2.2802	.00583	.70050
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.395	.00428	.07205	.19414	4.8164	172.32	11.485
SDev	.373	.00351	.00158	.00147	.0086	1.06	.362
%RSD	.77073	82.004	2.1906	.75680	.17828	.61665	3.1549
#1	48.131	.00180	.07317	.19310	4.8104	171.57	11.229
#2	48.659	.00675	.07094	.19518	4.8225	173.07	11.741
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01701	10.044	2.6624	.16027	11.391	.42130	4.9922
SDev	.00312	.082	.0172	.00847	.005	.00189	.0531
%RSD	18.366	.81937	.64517	5.2844	.04827	.44766	1.0631
#1	.01480	9.9855	2.6502	.15428	11.395	.41997	4.9547
#2	.01922	10.102	2.6745	.16625	11.387	.42264	5.0297
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.1274	.25679	L-.47032	5.6604	2.4703	.24555	-.02304
SDev	.1003	.01090	.02851	.0455	.0281	.00074	.00119
%RSD	1.0992	4.2452	6.0628	.80388	1.1394	.30034	5.1836
#1	9.0565	.24908	L-.49048	5.6283	2.4902	.24503	-.02388
#2	9.1984	.26449	L-.45015	5.6926	2.4504	.24607	-.02219
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.18961	-.13778	.06080	H58.292
SDev	.09670	.01360	.00211	.519
%RSD	51.000	9.8729	3.4613	.89108
#1	.12123	-.12816	.05932	H57.925
#2	.25799	-.14740	.06229	H58.660
Errors	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G817D 5 Operator: STL
Run Time: 04/28/05 09:42:25
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09677	31.430	1.1342	.18872	2.6802	.00070	.51165
SDev	.00113	.107	.0281	.00320	.0380	.00001	.04215
%RSD	1.1732	.33905	2.4736	1.6982	1.4163	.82040	8.2391
#1	.09597	31.355	1.1143	.18645	2.6534	.00069	.48184
#2	.09757	31.505	1.1540	.19099	2.7071	.00070	.54146
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K

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Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	64.116	.00686	.02679	.12665	3.8331	119.84	7.2827
SDev	.670	.00110	.00195	.00143	.0140	1.92	.8147
%RSD	1.0448	16.050	7.2943	1.1298	.36415	1.5984	11.186
#1	63.642	.00609	.02540	.12564	3.8232	118.48	6.7066
#2	64.590	.00764	.02817	.12767	3.8430	121.19	7.8587
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01594	7.8181	2.9104	.03430	7.9979	.30005	5.6218
SDev	.00264	.0987	.0483	.01411	.0238	.00513	.0241
%RSD	16.557	1.2622	1.6603	41.135	.29766	1.7092	.42847
#1	.01407	7.7483	2.8763	.02432	8.0148	.30368	5.6047
#2	.01781	7.8878	2.9446	.04427	7.9811	.29643	5.6388
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.7767	.09619	L-.39579	4.1390	1.3078	.21268	-.00921
SDev	.1028	.00920	.08964	.0340	.0849	.00320	.00123
%RSD	2.7210	9.5663	22.647	.82140	6.4918	1.5037	13.336
#1	3.7040	.10270	L-.45917	4.1150	1.2478	.21042	-.00834
#2	3.8494	.08968	L-.33241	4.1631	1.3679	.21494	-.01008
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.00975	-.15533	.02292	10.757
SDev	.03941	.09202	.00172	.178
%RSD	404.35	59.244	7.5061	1.6535
#1	-.01812	-.09026	.02171	10.631
#2	.03762	-.22040	.02414	10.883
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G817E 5 Operator: STL
Run Time: 04/28/05 09:46:46
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.10424	13.840	1.8176	.08812	2.7658	.00057	.61167
SDev	.00202	.022	.0396	.00183	.0113	.00000	.01775
%RSD	1.9366	.15763	2.1785	2.0768	.40774	.58226	2.9024
#1	.10281	13.825	1.8456	.08682	2.7579	.00057	.59912
#2	.10567	13.856	1.7896	.08941	2.7738	.00057	.62422
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	30.148	L-.02711	.02202	.11188	.71912	184.33	2.5784
SDev	.162	.00021	.00100	.00187	.00482	1.25	.6328
%RSD	.53768	.77268	4.5195	1.6744	.67086	.67979	24.542
#1	30.034	L-.02697	.02273	.11320	.71571	183.44	2.1310
#2	30.263	L-.02726	.02132	.11055	.72253	185.21	3.0259
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01538	2.3312	1.4141	.02511	1.6504	.15069	4.8001
SDev	.00286	.0319	.0107	.00006	.0092	.00155	.2170
%RSD	18.619	1.3678	.75350	.24451	.55711	1.0271	4.5198
#1	.01335	2.3087	1.4066	.02515	1.6439	.14960	4.6467
#2	.01740	2.3538	1.4216	.02507	1.6569	.15179	4.9535
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.5748	.08225	L-.69231	2.9833	2.3115	.09422	-.02499
SDev	.0447	.01989	.00457	.0217	.1411	.00049	.00408
%RSD	.97773	24.177	.66062	.72818	6.1024	.52505	16.329

#1	4.5431	.09631	L-.68908	2.9679	2.4113	.09387	-.02210
#2	4.6064	.06819	L-.69555	2.9986	2.2118	.09457	-.02787
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.08263	-.13102	.00249	3.1108
SDev	.06937	.05267	.00094	.0221
%RSD	83.953	40.200	37.857	.71069
#1	.13168	-.09378	.00182	3.0952
#2	.03358	-.16826	.00316	3.1264
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G817F 25 Operator: STL
Run Time: 04/28/05 09:51:06
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02267	3.8084	.99843	.04172	.57844	.00013	.33218
SDev	.00085	.0273	.06949	.00194	.00142	.00008	.00821
%RSD	3.7708	.71667	6.9599	4.6454	.24503	65.875	2.4706
#1	.02328	3.7891	1.0476	.04035	.57744	.00007	.32637
#2	.02207	3.8277	.94929	.04309	.57944	.00019	.33798
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.2442	L-.01731	.01250	.04504	.48691	97.359	1.2948
SDev	.0552	.00075	.00380	.00284	.00398	1.081	1.8266
%RSD	.88451	4.3439	30.403	6.3177	.81639	1.1103	141.08

#1	6.2052	L-.01784	.00981	.04303	.48410	96.595	.00313
#2	6.2833	L-.01677	.01518	.04705	.48972	98.124	2.5864

Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00692	.71191	.60661	.00326	.37224	.05851	1.3727
SDev	.00594	.07810	.00775	.00857	.03210	.00376	.0787
%RSD	85.847	10.970	1.2781	262.75	8.6225	6.4336	5.7322
#1	.00272	.65669	.60112	.00933	.34954	.05585	1.3170
#2	.01112	.76714	.61209	-.00280	.39493	.06117	1.4283

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.2143	.08418	L-.34161	.76935	.94654	.02280	-.01155
SDev	.0579	.03150	.06027	.01227	.02818	.00032	.00724
%RSD	4.7717	37.417	17.643	1.5949	2.9770	1.4269	62.674
#1	1.1733	.06191	L-.38423	.76068	.96647	.02257	-.01667
#2	1.2553	.10645	L-.29900	.77803	.92662	.02303	-.00643

Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.01738	-.03848	-.00385	.51415
SDev	.04233	.06860	.00372	.00443
%RSD	243.53	178.29	96.475	.86255
#1	-.01255	-.08699	-.00648	.51101
#2	.04731	.01003	-.00122	.51728

Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 04/28/05 09:55:28
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.81939	41.017	4.3284	4.0970	4.1392	3.9912	4.2492
SDev	.00384	.266	.0756	.0247	.0291	.0293	.1048
%RSD	.46895	.64892	1.7455	.60241	.70297	.73338	2.4670
#1	Q.81668	40.829	4.2750	4.0795	4.1187	3.9705	4.1751
#2	Q.82211	41.205	4.3818	4.1144	4.1598	4.0119	4.3233
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	40.000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.821	3.9714	3.9849	3.9804	3.7005	43.053	40.666
SDev	.136	.0110	.0179	.0176	.0002	.246	.242
%RSD	.65106	.27664	.44930	.44238	.00659	.57236	.59606
#1	20.725	3.9636	3.9722	3.9679	3.7003	42.879	40.495
#2	20.917	3.9791	3.9975	3.9928	3.7007	43.227	40.838
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.000	4.0000	4.0000	4.0000	4.0000	40.000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.0218	20.565	3.9957	4.1051	39.934	3.9620	4.0852
SDev	.0356	.145	.0290	.0341	.301	.0363	.0004
%RSD	.88553	.70408	.72662	.82998	.75320	.91640	.00866
#1	3.9966	20.463	3.9752	4.0810	39.722	3.9364	4.0850
#2	4.0470	20.667	4.0162	4.1292	40.147	3.9877	4.0855
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	20.000	4.0000	4.0000	40.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9848	3.9357	3.8800	4.1858	4.2110	3.9781	3.7271
SDev	.0732	.0207	.0156	.0316	.0282	.0293	.0048
%RSD	1.8378	.52613	.40119	.75614	.67048	.73639	.12928
#1	3.9330	3.9211	3.8690	4.1634	4.2310	3.9574	3.7305
#2	4.0366	3.9503	3.8910	4.2082	4.1911	3.9988	3.7237
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000

Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Tl	U	V	Zn			
Units	ppm	ppm	ppm	ppm			
Avge	3.8073	4.0282	3.9934	3.9980			
SDev	.0181	.0692	.0220	.0146			
%RSD	.47527	1.7173	.55129	.36516			
#1	3.7945	3.9793	3.9778	3.9877			
#2	3.8200	4.0771	4.0090	4.0083			
Errors	QC Pass	QC Pass	QC Pass	QC Pass			
Value	4.0000	4.0000	4.0000	4.0000			
Range	10.000	10.000	10.000	10.000			

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 04/28/05 09:59:51
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00051	-.00226	-.05478	.00711	.00012	.00020	-.00395
SDev	.00110	.01109	.03427	.00002	.00014	.00000	.01774
%RSD	217.04	490.58	62.552	.23343	118.37	1.1085	448.85
#1	-.00129	-.01010	-.03055	.00712	.00002	.00020	.00859
#2	.00027	.00558	-.07901	.00710	.00022	.00020	-.01649
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.01000	.05000	.20000	.02500	.20000	.00500	.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00661	.00141	-.00168	-.00122	-.00016	.00455	.49489
SDev	.00019	.00009	.00030	.00031	.00066	.00043	.65523
%RSD	2.8434	6.6331	17.910	25.153	404.62	9.4330	132.40
#1	.00674	.00134	-.00147	-.00101	.00030	.00425	.95821
#2	.00647	.00148	-.00190	-.00144	-.00063	.00486	.03158
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000

Range	.25000	.00500	.05000	.01000	.02500	.05000	2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00023	.00701	.00017	.00402	-.00253	.00123	.03613
SDev	.00158	.01787	.00017	.00284	.00640	.00154	.00512
%RSD	696.90	254.93	97.740	70.714	253.19	125.17	14.162
#1	-.00134	-.00563	.00005	.00201	-.00706	.00014	.03974
#2	.00089	.01964	.00029	.00603	.00200	.00232	.03251
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.01000	.25000	.01500	.04000	.25000	.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00181	-.01453	.01718	.00486	.09989	.00007	-.01002
SDev	.00677	.03092	.02815	.00003	.08472	.00008	.00237
%RSD	374.17	212.80	163.85	.50859	84.816	116.53	23.627
#1	.00660	.00733	.03708	.00485	Q.15980	.00001	-.01169
#2	-.00298	-.03639	-.00272	.00488	.03998	.00012	-.00834
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.10000	.06000	.20000	.50000	.10000	.05000	.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.04478	-.14692	.00026	-.00001
SDev	.00303	.03463	.00230	.00164
%RSD	6.7708	23.569	889.07	25303.
#1	-.04263	-.17140	-.00137	-.00116
#2	-.04692	-.12243	.00189	.00115
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000
Range	2.0000	.50000	.05000	.02000

Method: 6010C Sample Name: G817G 5 Operator: STL
Run Time: 04/28/05 10:04:13
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.16956	23.414	1.5839	.16208	5.2456	.00082	.60750
SDev	.00297	.134	.0760	.00519	.0113	.00000	.00937
%RSD	1.7538	.57123	4.7959	3.1994	.21498	.11040	1.5427
#1	.16746	23.319	1.5302	.15841	5.2376	.00082	.60087
#2	.17166	23.508	1.6376	.16575	5.2535	.00082	.61412
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	199.42	L-.01760	.03211	.11931	3.7756	162.92	3.9425
SDev	1.87	.00122	.00084	.00087	.0047	.84	.2050
%RSD	.93627	6.9374	2.6080	.73232	.12578	.51627	5.1996
#1	198.10	L-.01673	.03152	.11869	3.7790	162.32	3.7976
#2	200.74	L-.01846	.03270	.11993	3.7723	163.51	4.0875
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02013	5.2538	1.7465	.01813	5.3378	1.1936	70.981
SDev	.00254	.0454	.0110	.01140	.0477	.0046	.518
%RSD	12.643	.86451	.63208	62.905	.89326	.38759	.72908
#1	.01833	5.2216	1.7387	.02619	5.3041	1.1969	70.615
#2	.02193	5.2859	1.7543	.01006	5.3715	1.1904	71.347
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.6724	.07712	L-.59986	4.1221	.87215	.24445	-.01358
SDev	.0356	.05199	.04940	.0506	.02818	.00049	.00868
%RSD	1.3303	67.413	8.2359	1.2268	3.2312	.20050	63.908
#1	2.6473	.04036	L-.63479	4.0864	.89208	.24410	-.01971
#2	2.6976	.11388	L-.56492	4.1579	.85222	.24480	-.00744
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn

Units	ppm	ppm	ppm	ppm
Avge	.12568	-.13825	.03100	3.8027
SDev	.00601	.01253	.00217	.0255
%RSD	4.7792	9.0656	6.9934	.66935
#1	.12993	-.14712	.02947	3.7847
#2	.12143	-.12939	.03254	3.8207
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 04/28/05 10:08:35
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.82790	41.378	4.3904	4.1322	4.2234	4.0374	4.2363
SDev	.00724	.208	.0886	.0449	.0429	.0456	.0049
%RSD	.87398	.50381	2.0177	1.0869	1.0164	1.1303	.11675
#1	Q.82278	41.230	4.3277	4.1004	4.1931	4.0051	4.2328
#2	Q.83302	41.525	Q4.4530	4.1639	4.2538	4.0697	4.2398
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	40.000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.847	3.9720	3.9920	4.0018	3.7655	43.493	41.204
SDev	.133	.0180	.0257	.0240	.0254	.518	.408
%RSD	.63560	.45285	.64392	.59922	.67446	1.1912	.99005
#1	20.754	3.9592	3.9739	3.9848	3.7475	43.127	41.493
#2	20.941	3.9847	4.0102	4.0188	3.7834	43.859	40.916
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.000	4.0000	4.0000	4.0000	4.0000	40.000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.1134	20.693	4.0353	4.1553	40.627	3.9574	4.0245
SDev	.0273	.112	.0451	.0596	.245	.0010	.0757
%RSD	.66439	.53913	1.1172	1.4348	.60265	.02601	1.8813
#1	4.0940	20.614	4.0034	4.1132	40.454	3.9581	4.0781
#2	4.1327	20.772	4.0672	4.1975	40.801	3.9567	3.9710
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	20.000	4.0000	4.0000	40.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9842	3.8849	3.8108	4.2043	4.2509	4.0547	3.7772
SDev	.0070	.0306	.0467	.0248	.0847	.0414	.0303
%RSD	.17534	.78809	1.2264	.59024	1.9928	1.0213	.80263
#1	3.9892	3.9066	3.7778	4.1868	4.1910	4.0255	3.7558
#2	3.9793	3.8633	3.8439	4.2219	4.3108	4.0840	3.7986
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	3.8670	4.1134	4.0273	4.0169
SDev	.1631	.0255	.0255	.0538
%RSD	4.2164	.62037	.63271	1.3397
#1	3.9823	4.0954	4.0093	3.9788
#2	3.7517	4.1315	4.0453	4.0549
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 04/28/05 10:12:58
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00466	-.00552	-.05369	.00852	.00001	.00020	.01463
SDev	.00021	.01998	.02269	.00003	.00001	.00017	.03852
%RSD	4.5015	362.02	42.260	.34060	88.416	88.952	263.24
#1	-.00481	-.01965	-.06973	.00854	.00002	.00007	-.01261
#2	-.00451	.00861	-.03764	.00850	.00000	.00032	.04188
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.01000	.05000	.20000	.02500	.20000	.00500	.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00339	.00091	-.00062	-.00247	.00315	.00270	-.85355
SDev	.00029	.00035	.00179	.00083	.00288	.00188	1.59399
%RSD	8.5832	38.130	288.62	33.546	91.567	69.530	186.75
#1	-.00318	.00115	.00065	-.00188	.00111	.00137	.27357
#2	-.00359	.00066	-.00189	-.00305	.00518	.00403	-1.9807
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.25000	.00500	.05000	.01000	.02500	.05000	2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00290	-.02019	.00029	-.00000	-.02200	.00256	.02169
SDev	.00499	.04352	.00034	.00284	.02107	.00205	.00509
%RSD	171.78	215.59	117.07	2330400.	95.767	80.130	23.467
#1	-.00643	-.05096	.00005	.00201	-.03690	.00111	.01809
#2	.00062	.01059	.00054	-.00201	-.00710	.00401	.02529
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.01000	.25000	.01500	.04000	.25000	.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00926	.00733	.06266	.00554	Q.15977	.00001	.00557
SDev	.01332	.02060	.06833	.00191	.00003	.00016	.01319
%RSD	143.88	280.93	109.05	34.446	.01901	1824.7	236.52
#1	-.01867	-.00723	.01434	.00419	Q.15979	-.00010	-.00375
#2	.00016	.02190	.11098	.00689	Q.15975	.00012	.01490
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.10000	.06000	.20000	.50000	.10000	.05000	.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.06614	-.12557	-.00086	.00144
SDev	.03927	.04756	.00196	.00042
%RSD	59.367	37.873	228.62	29.261

#1	-.03838	-.15919	-.00224	.00174
#2	-.09391	-.09194	.00053	.00114
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000
Range	2.0000	.50000	.05000	.02000

Analytical Runlog for Mercury Analysis											
Run #: AA0502B											
Instrument ID:		HAA									
Seq	Sample ID	Run Date/Time		Instr Conc.	Dilution	Final Conc.		QC Expected		% Recovery
1	S0	5/2/2005	13:08:42		1					
2	S0.2	5/2/2005	13:10:42		1					
3	S0.5	5/2/2005	13:13:12		1					
4	S1	5/2/2005	13:15:16		1					
5	S5	5/2/2005	13:17:25		1					
6	S10	5/2/2005	13:19:57		1					
7	ICV	5/2/2005	13:21:51	2.48	1	2.48	ppb	2.5	ppb	99.2%
8	~~ICB~~ ICB	5/2/2005	13:23:42	-0.039	1	-0.039	ppb	<0.2	ppb	
9	CRA 4/5/05	5/2/2005	13:25:50	0.191	1	0.191	ppb	0.2	ppb	95.5%
10	CCV	5/2/2005	13:28:11	4.96	1	4.98	ppb	5	ppb	99.6%
11	CCB	5/2/2005	13:29:59	-0.048	1	-0.048	ppb	<0.2	ppb	
12	G9L0EB	5/2/2005	13:31:50	-0.003	1	-0.003	ppb			
13	G9L0EC	5/2/2005	13:33:38	4.35	20	87	ppb	101.4	ppb	85%
14	G8C3K	5/2/2005	13:35:31	-0.009	1	-0.009	ppb			
15	G8C3KS	5/2/2005	13:37:44	1.03	1	1.03	ppb	1	ppb	103%
16	G8C3KD	5/2/2005	13:39:37	1	1	1	ppb	1	ppb	100%
17	G8C3KV	5/2/2005	13:41:27	-0.022	1	-0.022	ppb			
18	G9L0CB	5/2/2005	13:43:31	-0.01	1	-0.01	ppb			
19	G9L0CC	5/2/2005	13:45:33	4.53	20	90.6	ppb	101.4	ppb	89%
20	G817C	5/2/2005	13:47:28	3.75	1	3.75	ppb			
21	G817CX	5/2/2005	13:49:33	4.82	1	4.82	ppb			
22	CCV	5/2/2005	13:51:27	5	1	5	ppb	5	ppb	100.0%
23	CCB	5/2/2005	13:53:15	-0.05	1	-0.05	ppb	<0.2	ppb	
24	G817CS	5/2/2005	13:55:07	6.01	1	6.01	ppb	1	ppb	225%
25	G817CD	5/2/2005	13:57:00	3.01	1	3.01	ppb	1	ppb	0
26	G817CV	5/2/2005	13:58:59	2.67	13	2.67	ppb	4/5/11/05		
27	G817D	5/2/2005	14:00:48	7.26	1	7.26	ppb			
28	G817E	5/2/2005	14:02:36	3.01	1	3.01	ppb			
29	G817F	5/2/2005	14:04:25	2.26	1	2.26	ppb			
30	G817G	5/2/2005	14:06:15	1.58	1	1.58	ppb			
31	G9LX9B	5/2/2005	14:08:15	-0.016	1	-0.016	ppb			
32	G9LX9C	5/2/2005	14:10:49	5.38	20	107.6	ppb	101.4	ppb	106%
33	G8JDL	5/2/2005	14:12:53	0.159	1	0.159	ppb			
34	CCV	5/2/2005	14:14:43	5.27	1	5.27	ppb	5	ppb	105.4%
35	CCB	5/2/2005	14:17:44	-0.016	1	-0.016	ppb	<0.2	ppb	
36	G8JDLS	5/2/2005	14:19:48	1.23	1	1.23	ppb	1	ppb	107%
37	G8JDLD	5/2/2005	14:21:52	1.29	1	1.29	ppb	1	ppb	113%
38	G8JDLV	5/2/2005	14:23:43	0.012	5	0.06	ppb			
39	G8JD2	5/2/2005	14:25:32	0.422	1	0.422	ppb			
40	G8JEE	5/2/2005	14:27:25	0.777	1	0.777	ppb			
41	G8QE3	5/2/2005	14:29:15	0.374	1	0.374	ppb			
42	G8QE3S	5/2/2005	14:31:04	1.39	1	1.39	ppb	1	ppb	101%
43	G8QE3D	5/2/2005	14:33:04	1.34	1	1.34	ppb	1	ppb	96%
44	~~G81E3~~	~~5/2/2005~~	~~14:36:14~~	^^^^^^	~~1~~	#########	ppb			
45	G8104	5/2/2005	14:38:03	-0.04	1	-0.04	ppb			
46	CCV	5/2/2005	14:39:52	5.07	1	5.07	ppb	5	ppb	101.4%
47	CCB	5/2/2005	14:41:44	-0.038	1	-0.038	ppb	<0.2	ppb	

Analyst: [signature] 5/6/05

Page 1 of 2

Reviewed by: [signature] 5/10/05

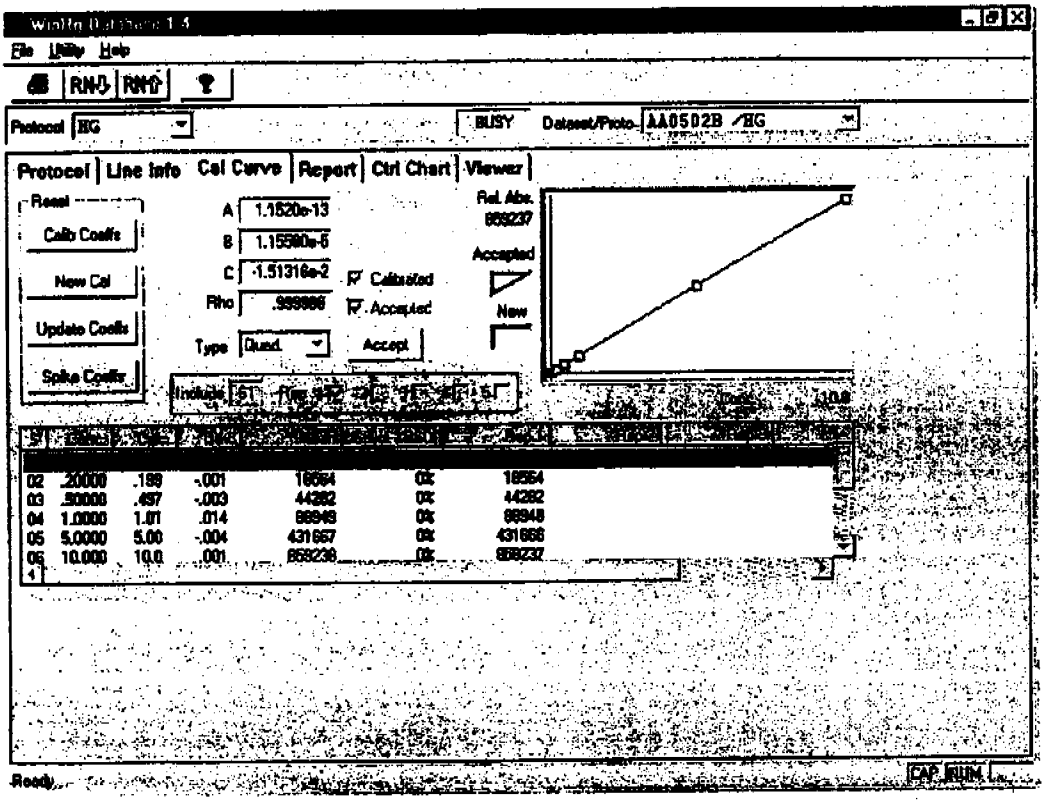
5/10/05

Analytical Runlog for Mercury Analysis											
Run #: AA0502B											
Instrument ID:		HAA									
Seq	Sample ID	Run Date/Time		Instr Conc.	Dilution	Final Conc.		QC Expected		% Recovery
48	G811W	5/2/2005	14:44:13	0.017	1	0.017	ppb			
49	G8111	5/2/2005	14:46:05	0	1	0	ppb			
50	G813A	5/2/2005	14:47:57	0	1	0	ppb			
51	G813D	5/2/2005	14:49:57	-0.007	1	-0.007	ppb			
52	G813H	5/2/2005	14:52:28	0.019	1	0.019	ppb			
53	G813N	5/2/2005	14:54:19	0.04	1	0.04	ppb			
54	G813P	5/2/2005	14:56:41	0.015	1	0.015	ppb			
55	G88W7	5/2/2005	14:58:34	1.44	1	1.44	ppb			
56	G9HF7	5/2/2005	15:00:28	0.255	1	0.255	ppb			
57	G9HF7S	5/2/2005	15:02:28	1.18	1	1.18	ppb	1	ppb	92%
58	CCV	5/2/2005	15:04:22	5.06	1	5.06	ppb	5	ppb	101.2%
59	CCB	5/2/2005	15:06:12	-0.042	1	-0.042	ppb	<0.2	ppb	
60	G9HF7D	5/2/2005	15:08:04	1.56	1	1.56	ppb	1	ppb	150%
61	CCV	5/2/2005	15:09:56	5	1	5	ppb	5	ppb	100.0%
62	CCB	5/2/2005	15:11:55	-0.015	1	-0.015	ppb	<0.2	ppb	
63	G81F3	5/2/2005	15:15:41	6.28	200	1256	ppb			
64	CCV	5/2/2005	15:17:32	5.09	1	5.09	ppb	5	ppb	101.8%
65	CCB	5/2/2005	15:19:51	-0.019	1	-0.019	ppb	<0.2	ppb	

Analyst: K 5/5/05

Reviewed by: 5/14/05

FE
HG
5/2/05
7471
HG050205



5/16/05

13:08:42 02 May 2005 Folder: AA0502B Protocol: HG

RC 5/2/05 7471 HG050205

Line	Conc.	Units	SD/RSD	1	2	3	4	5	

*** Standard: 1 Rep: 1 Seq: 1 13:08:42 02 May 05 HG

Hg .000 ppb 726

*** Standard: 2 Rep: 1 Seq: 2 13:10:42 02 May 05 HG

Hg .200 ppb 18564

*** Standard: 3 Rep: 1 Seq: 3 13:13:12 02 May 05 HG

Hg .500 ppb 44282

*** Standard: 4 Rep: 1 Seq: 4 13:15:16 02 May 05 HG

Hg 1.00 ppb 88948

*** Standard: 5 Rep: 1 Seq: 5 13:17:25 02 May 05 HG

Hg 5.00 ppb 431666

*** Standard: 6 Rep: 1 Seq: 6 13:19:57 02 May 05 HG

Hg 10.0 ppb 859237

*** Check Standard: 4 Ck4ICV Seq: 7 13:21:51 02 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		99.2	2.48	2.50	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 8 13:23:42 02 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.039	.200	ppb	.000 %

*** Check Standard: 5 Ck5CRA Seq: 9 13:25:50 02 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		95.3	.191	.200	ppb	.000 %

*** Check Standard: 2 Ck2CCV Seq: 10 13:28:11 02 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		99.5	4.98	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 11 13:29:59 02 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.048	.200	ppb	.000 %

*** Sample ID: G9L0EB AA0502B Seq: 12 13:31:50 02 May 05 HG

Hg -.003 ppb .000 % -.003

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: G9L0EC			AA0502B	Seq: 13		13:33:38 02 May 05		HG
			20X					
Hg	4.35	ppb	.000 %	4.35				
*** Sample ID: G8C3K			AA0502B	Seq: 14		13:35:31 02 May 05		HG
Hg	-.009	ppb	.000 %	-.009				
*** Sample ID: G8C3KS			AA0502B	Seq: 15		13:37:44 02 May 05		HG
Hg	1.03	ppb	.000 %	1.03				
*** Sample ID: G8C3KD			AA0502B	Seq: 16		13:39:37 02 May 05		HG
Hg	1.00	ppb	.000 %	1.00				
*** Sample ID: G8C3KV			AA0502B	Seq: 17		13:41:27 02 May 05		HG
			5X					
Hg	-.022	ppb	.000 %	-.022				
*** Sample ID: G9L0CB			AA0502B	Seq: 18		13:43:31 02 May 05		HG
Hg	-.010	ppb	.000 %	-.010				
*** Sample ID: G9L0CC			AA0502B	Seq: 19		13:45:33 02 May 05		HG
			20X					
Hg	4.53	ppb	.000 %	4.53				
*** Sample ID: G817C			AA0502B	Seq: 20		13:47:28 02 May 05		HG
Hg	3.75	ppb	.000 %	3.75				
*** Sample ID: G817CX			AA0502B	Seq: 21		13:49:33 02 May 05		HG
Hg	4.82	ppb	.000 %	4.82				

*** Check Standard: 2 Ck2CCV Seq: 22 13:51:27 02 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		100.	5.00	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 23 13:53:15 02 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.050	.200	ppb	.000 %

*** Sample ID: G817CS			AA0502B	Seq: 24		13:55:07 02 May 05		HG
Hg	6.01	ppb	.000 %	6.01				

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: G817CD AA0502B Seq: 25 13:57:00 02 May 05 HG

Hg 3.01 ppb .000 % 3.01

*** Sample ID: G817CV AA0502B Seq: 26 13:58:59 02 May 05 HG
5X
Hg 2.67 ppb .000 % 2.67

*** Sample ID: G817D AA0502B Seq: 27 14:00:48 02 May 05 HG

Hg 7.26 ppb .000 % 7.26

*** Sample ID: G817E AA0502B Seq: 28 14:02:36 02 May 05 HG

Hg 3.01 ppb .000 % 3.01

*** Sample ID: G817F AA0502B Seq: 29 14:04:25 02 May 05 HG

Hg 2.26 ppb .000 % 2.26

*** Sample ID: G817G AA0502B Seq: 30 14:06:15 02 May 05 HG

Hg 1.58 ppb .000 % 1.58

*** Sample ID: G9LX9B AA0502B Seq: 31 14:08:15 02 May 05 HG

Hg -.016 ppb .000 % -.016

*** Sample ID: G9LX9C AA0502B Seq: 32 14:10:49 02 May 05 HG
20X
Hg 5.38 ppb .000 % 5.38

*** Sample ID: G8JDL AA0502B Seq: 33 14:12:53 02 May 05 HG

Hg .159 ppb .000 % .159

*** Check Standard: 2 Ck2CCV Seq: 34 14:14:43 02 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		105.	5.27	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 35 14:17:44 02 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.016	.200	ppb	.000 %

*** Sample ID: G8JDLS AA0502B Seq: 36 14:19:48 02 May 05 HG

Hg 1.23 ppb .000 % 1.23

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: G8JDLD		AA0502B	Seq: 37	14:21:52 02 May 05	HG			
Hg	1.29	ppb	.000 %	1.29				
*** Sample ID: G8JDLV		AA0502B	Seq: 38	14:23:43 02 May 05	HG			
		5X						
Hg	.012	ppb	.000 %	.012				
*** Sample ID: G8JD2		AA0502B	Seq: 39	14:25:32 02 May 05	HG			
Hg	.422	ppb	.000 %	.422				
*** Sample ID: G8JEE		AA0502B	Seq: 40	14:27:25 02 May 05	HG			
Hg	.777	ppb	.000 %	.777				
*** Sample ID: G8QE3		AA0502B	Seq: 41	14:29:15 02 May 05	HG			
Hg	.374	ppb	.000 %	.374				
*** Sample ID: G8QE3S		AA0502B	Seq: 42	14:31:04 02 May 05	HG			
Hg	1.39	ppb	.000 %	1.39				
*** Sample ID: G8QE3D		AA0502B	Seq: 43	14:33:04 02 May 05	HG			
Hg	1.34	ppb	.000 %	1.34				
*** Sample ID: G81F3		AA0502B	Seq: 44	14:36:14 02 May 05	HG			
Hg	^^^^^^O	ppb	100. %	^^^^^^				
*** Sample ID: G8104		AA0502B	Seq: 45	14:38:03 02 May 05	HG			
Hg	-.040	ppb	.000 %	-.040				

*** Check Standard: 2 Ck2CCV		Seq: 46	14:39:52 02 May 05	HG
Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.	5.07	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB		Seq: 47	14:41:44 02 May 05	HG
Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.038	.200	ppb	.000 %

*** Sample ID: G811W		AA0502B	Seq: 48	14:44:13 02 May 05	HG			
Hg	.017	ppb	.000 %	.017				

14:46:05 02 May 2005 Folder: AA0502B Protocol: HG

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: G8111 AA0502B Seq: 49 14:46:05 02 May 05 HG

Hg -.000 ppb .000 % -.000

*** Sample ID: G813A AA0502B Seq: 50 14:47:57 02 May 05 HG

Hg -.000 ppb .000 % -.000

*** Sample ID: G813D AA0502B Seq: 51 14:49:57 02 May 05 HG

Hg -.007 ppb .000 % -.007

*** Sample ID: G813H AA0502B Seq: 52 14:52:28 02 May 05 HG

Hg .019 ppb .000 % .019

*** Sample ID: G813N AA0502B Seq: 53 14:54:19 02 May 05 HG

Hg .040 ppb .000 % .040

*** Sample ID: G813P AA0502B Seq: 54 14:56:41 02 May 05 HG

Hg .015 ppb .000 % .015

*** Sample ID: G88W7 AA0502B Seq: 55 14:58:34 02 May 05 HG

Hg 1.44 ppb .000 % 1.44

*** Sample ID: G9HF7 AA0502B Seq: 56 15:00:28 02 May 05 HG

Hg .255 ppb .000 % .255

*** Sample ID: G9HF7S AA0502B Seq: 57 15:02:28 02 May 05 HG

Hg 1.18 ppb .000 % 1.18

*** Check Standard: 2 Ck2CCV Seq: 58 15:04:22 02 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.	5.06	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 59 15:06:12 02 May 05 HG

Line	Flag	Found	Range (+/-)	Units	SD/RSD
Hg		-.042	.200	ppb	.000 %

*** Sample ID: G9HF7D AA0502B Seq: 60 15:08:04 02 May 05 HG

Hg 1.56 ppb .000 % 1.56

15:09:56 02 May 2005 Folder: AA0502B Protocol: HG

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 2 Ck2CCV Seq: 61 15:09:56 02 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		100.	5.00	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 62 15:11:55 02 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.015	.200	ppb	.000 %

*** Sample ID: 0504G81F3 AA0502B Seq: 63 15:15:41 02 May 05 HG

200X

Hg	6.28	ppb	.000 %	6.28	

*** Check Standard: 2 Ck2CCV Seq: 64 15:17:32 02 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		102.	5.09	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 65 15:19:51 02 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.019	.200	ppb	.000 %

METALS MISCELLANEOUS DATA

SEVERN TRENT **STL** Metals Prep Report for Batch # 5115193

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Prep Method: SW-846 3050B 2% **SOP Number:** STL-IP-0013, Rev 6

Extraction Code: GK **Extraction:** TOTAL **Matrix:** SOLID **Prep Date:** 4/27/2005

Standard Log Ref#: MET-04/05-SOIL

Lot ID	Work Order #		Initial Wt/Vol	Final Volume	Lab Filtered	Due Date	Sample Location	Target List
F5D210354-001	G8WP7	[redacted]	0.50 g	50 mL	☐	05/09/2005	A68	AL CA FE K MG NA ZN
F5D210354-001D	G8WP7D	[redacted]	0.50 g	50 mL	☐		A68	
F5D210354-001S	G8WP7S	[redacted]	0.50 g	50 mL	☐		A68	
F5D210354-002	G8WQL	[redacted]	0.50 g	50 mL	☐	05/09/2005	A67	
F5D210354-003	G8WQN	[redacted]	0.50 g	50 mL	☐	05/09/2005	A67	
F5D210354-004	G8WQR	[redacted]	0.50 g	50 mL	☐	05/09/2005	A54	
F5D210354-005	G8WQT	[redacted]	0.50 g	50 mL	☐	05/09/2005	A54	
F5D210354-007	G8WR6	[redacted]	0.50 g	50 mL	☐	05/09/2005	A54	
F5D210354-008	G8WTA	[redacted]	0.50 g	50 mL	☐	05/09/2005	A54	
F5D210354-009	G8WTE	[redacted]	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-010	G8WTG	[redacted]	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-011	G8WTR	[redacted]	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-013	G8WTV	[redacted]	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-014	G8WTW	[redacted]	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-015	G8WTX	[redacted]	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-016	G8WT0	[redacted]	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-017	G8WT1	[redacted]	0.50 g	50 mL	☐	05/09/2005	A44	
F5D220357-001	G817C	[redacted]	0.50 g	50 mL	☐	05/04/2005	A57	

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.16, updated 2/7/2005

F5D220357-001D	G817CD		0.50 g	50 mL	☐		A57
F5D220357-001S	G817CS		0.50 g	50 mL	☐		A57
F5D220357-002	G817D		0.50 g	50 mL	☐	05/04/2005	A57
F5D220357-003	G817E		0.50 g	50 mL	☐	05/04/2005	A57
F5D220357-004	G817F		0.50 g	50 mL	☐	05/04/2005	A88
F5D220357-005	G817G		0.50 g	50 mL	☐	05/04/2005	A88
F5D250000-193B	G84N2B		0.50 g	50 mL	☐		
F5D250000-193C	G84N2C		0.50 g	50 mL	☐		

Comments:

Chemical Lot Information

Chemical	Lot Number
Hydrochloric Acid	4104090
Hydrogen Peroxide	A50478
Nitric Acid	1104100

Custody Information

Relinquished By: MC

Review/Received By: [signature]

Date of Transfer: 4-27-05

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.16, updated 2/7/2005

SEVERN TRENT **STL** Mercury Prep Report for Batch # 5122051

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Prep Method: SW-846 7471A **SOP Number:** STL-MT-0007, Rev 0

Extraction Code: 70 **Extraction:** TOTAL **Matrix:** SOLID **Prep Date:** 5/2/2005

Time In: 10:40 **Temp In:** 94° C

Time Out: 11:15 **Temp Out:** 94° C **Standard Log Ref#:** HG050205

Lot ID	Work Order #		Initial Wt/Vol	Final Volume	Lab Filtered	Due Date	Sample Location
F5D220357-001	G817C		0.60 g	100 mL	☐	05/11/2005	A57
F5D220357-001D	G817CD		0.60 g	100 mL	☐		A57
F5D220357-001S	G817CS		0.60 g	100 mL	☐		A57
F5D220357-001X	G817CX		0.60 g	100 mL	☐		A57
F5D220357-002	G817D		0.60 g	100 mL	☐	05/11/2005	A57
F5D220357-003	G817E		0.60 g	100 mL	☐	05/11/2005	A57
F5D220357-004	G817F		0.60 g	100 mL	☐	05/11/2005	A88
F5D220357-005	G817G		0.60 g	100 mL	☐	05/11/2005	A88
F5E020000-051B	G9L0CB		0.60 g	100 mL	☐		
F5E020000-051C	G9L0CC		0.60 g	100 mL	☐		

Comments:

Custody Information

Relinquished By: CS

Review/Received By: [illegible]

Date of Transfer: 5/2/05

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.16, updated 2/7/2005

METALS SAMPLE AND QC SUMMARY RESULTS

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G817C **Client ID:** RE73-05-58842

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 20.34

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Antimony	123	0.37	0.50	32.6	N*	10	ICPMS	4/28/05	2:39
Arsenic	75	0.36	0.50	29.8		10	ICPMS	4/28/05	2:39
Barium	135	0.38	5.0	1790	N	10	ICPMS	4/28/05	2:39
Beryllium	9	0.078	0.25	0.33		10	ICPMS	4/28/05	2:39
Cadmium	111	0.062	0.63	17.7	N	10	ICPMS	4/28/05	2:39
Chromium	52	0.97	1.3	85.9	N	10	ICPMS	4/28/05	2:39
Cobalt	59	0.16	1.3	16.4		10	ICPMS	4/28/05	2:39
Copper	65	2.8	6.3	2710	N	50	ICPMS	4/28/05	19:05
Lead	208	1.2	3.8	3430	N*	50	ICPMS	4/28/05	19:05
Manganese	55	0.033	2.5	1580	N	10	ICPMS	4/28/05	2:39
Nickel	60	0.33	0.50	234		10	ICPMS	4/28/05	2:39
Selenium	82	0.19	0.50	2.2		10	ICPMS	4/28/05	2:39
Silver	107	0.16	0.50	63.0	N*	10	ICPMS	4/28/05	2:39
Thallium	205	0.20	0.25	0.20	U	10	ICPMS	4/28/05	2:39
Vanadium	51	1.4	2.5	16.6		10	ICPMS	4/28/05	2:39

Comments: Lot #: F5D220357 Sample #: 1

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G817D **Client ID:** RE73-05-58843

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 19.14

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Antimony	123	0.36	0.50	27.3	N*	10	ICPMS	4/28/05	2:54
Arsenic	75	0.35	0.50	56.4		10	ICPMS	4/28/05	2:54
Barium	135	0.38	5.0	1710	N	10	ICPMS	4/28/05	2:54
Beryllium	9	0.077	0.25	0.26		10	ICPMS	4/28/05	2:54
Cadmium	111	0.061	0.62	16.8	N	10	ICPMS	4/28/05	2:54
Chromium	52	0.95	1.2	72.2	N	10	ICPMS	4/28/05	2:54
Cobalt	59	0.16	1.2	16.8		10	ICPMS	4/28/05	2:54
Copper	65	0.55	1.2	2360	N	10	ICPMS	4/28/05	19:15
Lead	208	0.23	0.74	2220	N*	10	ICPMS	4/28/05	2:54
Manganese	55	0.032	2.5	1770	N	10	ICPMS	4/28/05	2:54
Nickel	60	0.32	0.50	189		10	ICPMS	4/28/05	2:54
Selenium	82	0.19	0.50	1.6		10	ICPMS	4/28/05	2:54
Silver	107	0.15	0.50	59.6	N*	10	ICPMS	4/28/05	2:54
Thallium	205	0.19	0.25	0.31		10	ICPMS	4/28/05	2:54
Vanadium	51	1.4	2.5	15.3		10	ICPMS	4/28/05	2:54

Comments: Lot #: F5D220357 Sample #: 2

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G817E **Client ID:** RE73-05-58844

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 27.93

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Antimony	123	0.41	0.56	17.2	N*	10	ICPMS	4/28/05	2:59
Arsenic	75	0.39	0.56	45.1		10	ICPMS	4/28/05	2:59
Barium	135	0.42	5.6	1990	N	10	ICPMS	4/28/05	2:59
Beryllium	9	0.086	0.28	0.25	B	10	ICPMS	4/28/05	2:59
Cadmium	111	0.068	0.69	5.9	N	10	ICPMS	4/28/05	2:59
Chromium	52	1.1	1.4	67.7	N	10	ICPMS	4/28/05	2:59
Cobalt	59	0.18	1.4	16.5		10	ICPMS	4/28/05	2:59
Copper	65	0.61	1.4	536	N	10	ICPMS	4/28/05	19:19
Lead	208	0.26	0.83	2990	N*	10	ICPMS	4/28/05	2:59
Manganese	55	0.036	2.8	974	N	10	ICPMS	4/28/05	2:59
Nickel	60	0.36	0.56	115		10	ICPMS	4/28/05	2:59
Selenium	82	0.21	0.56	0.93		10	ICPMS	4/28/05	2:59
Silver	107	0.17	0.56	73.3	N*	10	ICPMS	4/28/05	2:59
Thallium	205	0.22	0.28	0.22	U	10	ICPMS	4/28/05	2:59
Vanadium	51	1.5	2.8	10.1		10	ICPMS	4/28/05	2:59

Comments: Lot #: F5D220357 Sample #: 3

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G817F **Client ID:** RE73-05-58845

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 25.01

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Antimony	123	0.39	0.53	64.7	N*	10	ICPMS	4/28/05	3:17
Arsenic	75	0.38	0.53	138		10	ICPMS	4/28/05	3:17
Barium	135	0.41	5.3	1940	N	10	ICPMS	4/28/05	3:17
Beryllium	9	0.083	0.27	0.25	B	10	ICPMS	4/28/05	3:17
Cadmium	111	0.065	0.67	6.0	N	10	ICPMS	4/28/05	3:17
Chromium	52	1.0	1.3	116	N	10	ICPMS	4/28/05	3:17
Cobalt	59	0.17	1.3	40.2		10	ICPMS	4/28/05	3:17
Copper	65	0.59	1.3	1640	N	10	ICPMS	4/28/05	19:22
Lead	208	0.25	0.80	3690	N*	10	ICPMS	4/28/05	3:17
Manganese	55	0.035	2.7	2010	N	10	ICPMS	4/28/05	3:17
Nickel	60	0.35	0.53	215		10	ICPMS	4/28/05	3:17
Selenium	82	0.21	0.53	0.55		10	ICPMS	4/28/05	3:17
Silver	107	0.17	0.53	78.2	N*	10	ICPMS	4/28/05	3:17
Thallium	205	0.21	0.27	0.21	U	10	ICPMS	4/28/05	3:17
Vanadium	51	1.5	2.7	8.6		10	ICPMS	4/28/05	3:17

Comments: Lot #: F5D220357 Sample #: 4

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G817G **Client ID:** RE73-05-58846

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 20.99

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Antimony	123	0.37	0.51	29.8	N*	10	ICPMS	4/28/05	3:22
Arsenic	75	0.36	0.51	21.0		10	ICPMS	4/28/05	3:22
Barium	135	0.39	5.1	3330	N	10	ICPMS	4/28/05	3:22
Beryllium	9	0.079	0.25	0.17	B	10	ICPMS	4/28/05	3:22
Cadmium	111	0.062	0.63	7.2	N	10	ICPMS	4/28/05	3:22
Chromium	52	0.97	1.3	66.5	N	10	ICPMS	4/28/05	3:22
Cobalt	59	0.16	1.3	18.6		10	ICPMS	4/28/05	3:22
Copper	65	0.56	1.3	2750	N	10	ICPMS	4/28/05	19:25
Lead	208	0.24	0.76	1740	N*	10	ICPMS	4/28/05	3:22
Manganese	55	0.033	2.5	1130	N	10	ICPMS	4/28/05	3:22
Nickel	60	0.33	0.51	792		10	ICPMS	4/28/05	3:22
Selenium	82	0.20	0.51	0.85		10	ICPMS	4/28/05	3:22
Silver	107	0.16	0.51	102	N*	10	ICPMS	4/28/05	3:22
Thallium	205	0.20	0.25	0.20	U	10	ICPMS	4/28/05	3:22
Vanadium	51	1.4	2.5	14.8		10	ICPMS	4/28/05	3:22

Comments: Lot #: F5D220357 Sample #: 5

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICPMS **Units:** ug/L

Chart Number: 042705M2.REP **Acceptable Range:** 90% - 110%

Standard Source: Inorganic Ventures **Standard ID:** See Standards Log

Element	WL/ Mass	True Conc	ICV 4/27/05 7:26 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Antimony	123	200.0	197.63	**98.8**								
Arsenic	75	200.0	201.38	**100.7**								
Barium	135	200.0	204.65	**102.3**								
Beryllium	9	200.0	204.20	**102.1**								
Cadmium	111	200.0	191.39	**95.7**								
Chromium	52	200.0	194.41	**97.2**								
Cobalt	59	200.0	199.24	**99.6**								
Copper	65	200.0	200.73	**100.4**								
Lead	208	200.0	196.43	**98.2**								
Manganese	55	200.0	200.52	**100.3**								
Nickel	60	200.0	198.06	**99.0**								
Selenium	82	200.0	199.40	**99.7**								
Silver	107	50.0	48.13	**96.3**								
Thallium	205	200.0	192.66	**96.3**								
Vanadium	51	200.0	193.01	**96.5**								

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICPMS **Units:** ug/L

Chart Number: 042805M2.REP **Acceptable Range:** 90% - 110%

Standard Source: Inorganic Ventures **Standard ID:** See Standards Log

Element	WL/ Mass	True Conc	ICV 4/28/05 5:22 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Copper	65	200.0	189.35	94.7								
Lead	208	200.0	198.23	99.1								

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPMS **Units:** ug/L

Chart Number: 042705M2.REP **Acceptable Range:** 90% - 110%

Standard Source: Inorganic Ventures **Standard ID:** See Standards Log

Element	WL/ Mass	True Conc	CCV 4/27/05 7:56 PM Found	% Rec	CCV 4/27/05 8:42 PM Found	% Rec	CCV 4/27/05 9:46 PM Found	% Rec	CCV 4/27/05 10:50 PM Found	% Rec	CCV 4/27/05 11:54 PM Found	% Rec
Antimony	123	200.0	198.12	99.1	195.11	97.6	197.02	98.5	196.30	98.1	195.57	97.8
Arsenic	75	200.0	199.76	99.9	199.50	99.7	198.32	99.2	208.31	104.2	204.59	102.3
Barium	135	200.0	206.86	103.4	209.10	104.5	203.78	101.9	207.92	104.0	211.15	105.6
Beryllium	9	200.0	193.28	96.6	192.38	96.2	195.08	97.5	195.34	97.7	194.68	97.3
Cadmium	111	200.0	193.74	96.9	192.18	96.1	193.65	96.8	197.20	98.6	195.60	97.8
Chromium	52	200.0	195.89	97.9	195.26	97.6	194.53	97.3	200.25	100.1	204.28	102.1
Cobalt	59	200.0	203.91	102.0	188.89	94.4	191.64	95.8	192.28	96.1	198.47	99.2
Copper	65	200.0	199.87	99.9	192.34	96.2	198.99	99.5	198.91	99.5	203.81	101.9
Lead	208	200.0	194.30	97.1	193.74	96.9	193.18	96.6	191.47	95.7	186.67	93.3
Manganese	55	200.0	200.00	100.0	193.11	96.6	194.15	97.1	196.32	98.2	201.94	101.0
Nickel	60	200.0	196.87	98.4	191.78	95.9	198.14	99.1	198.21	99.1	203.60	101.8
Selenium	82	200.0	198.17	99.1	199.39	99.7	196.90	98.5	202.24	101.1	202.60	101.3
Silver	107	50.0	49.42	98.8	48.35	96.7	48.79	97.6	48.64	97.3	49.08	98.2
Thallium	205	200.0	190.51	95.3	192.45	96.2	190.85	95.4	187.72	93.9	185.78	92.9
Vanadium	51	200.0	194.78	97.4	188.54	94.3	191.66	95.8	195.10	97.6	195.98	98.0

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPMS **Units:** ug/L

Chart Number: 042705M2.REP **Acceptable Range:** 90% - 110%

Standard Source: Inorganic Ventures **Standard ID:** See Standards Log

Element	WL/ Mass	True Conc	CCV 4/28/05 12:57 AM Found	% Rec	CCV 4/28/05 2:01 AM Found	% Rec	CCV 4/28/05 3:04 AM Found	% Rec	CCV 4/28/05 3:27 AM Found	% Rec	Found	% Rec
Antimony	123	200.0	195.70	97.9	195.57	97.8	199.24	99.6	196.14	98.1		
Arsenic	75	200.0	207.54	103.8	199.99	100.0	197.11	98.6	198.90	99.4		
Barium	135	200.0	214.16	107.1	208.30	104.2	212.91	106.5	208.71	104.4		
Beryllium	9	200.0	194.40	97.2	217.73	108.9	211.05	105.5	213.49	106.7		
Cadmium	111	200.0	193.25	96.6	197.55	98.8	197.59	98.8	199.53	99.8		
Chromium	52	200.0	198.59	99.3	212.38	106.2	209.95	105.0	207.56	103.8		
Cobalt	59	200.0	198.99	99.5	211.75	105.9	214.43	107.2	210.37	105.2		
Copper	65	200.0	203.19	101.6	225.49	112.7	227.88	113.9	225.79	112.9		
Lead	208	200.0	189.13	94.6	197.22	98.6	198.64	99.3	202.02	101.0		
Manganese	55	200.0	197.48	98.7	207.86	103.9	206.98	103.5	207.95	104.0		
Nickel	60	200.0	202.26	101.1	215.96	108.0	218.89	109.4	214.87	107.4		
Selenium	82	200.0	203.38	101.7	192.17	96.1	194.60	97.3	197.00	98.5		
Silver	107	50.0	48.93	97.9	50.02	100.0	50.57	101.1	49.90	99.8		
Thallium	205	200.0	186.90	93.4	193.46	96.7	195.65	97.8	199.45	99.7		
Vanadium	51	200.0	197.14	98.6	202.96	101.5	205.49	102.7	201.31	100.7		

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPMS **Units:** ug/L

Chart Number: 042805M2.REP **Acceptable Range:** 90% - 110%

Standard Source: Inorganic Ventures **Standard ID:** See Standards Log

Element	WL/ Mass	True Conc	CCV 4/28/05 5:42 PM Found	% Rec	CCV 4/28/05 6:10 PM Found	% Rec	CCV 4/28/05 6:51 PM Found	% Rec	CCV 4/28/05 7:31 PM Found	% Rec	Found	% Rec
Copper	65	200.0	199.05	99.5	195.12	97.6	200.50	100.3	192.45	96.2		
Lead	208	200.0	194.85	97.4	197.99	99.0	200.83	100.4	196.89	98.4		

STL-ST. LOUIS

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: ICPMS **Units:** ug/L

Chart Number: 042705M2.REP **Acceptable Range:** 50% - 150%

Standard Source: Inorganic Ventures **Standard ID:** See Standards Log

Element	WL/ Mass	True Conc	CRI 4/27/05 7:39 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Antimony	123	60.0	58.77	98.0								
Arsenic	75	10.0	10.21	102.1								
Barium	135	200.0	204.35	102.2								
Beryllium	9	5.0	5.18	103.7								
Cadmium	111	5.0	4.92	98.3								
Chromium	52	10.0	9.90	99.0								
Cobalt	59	50.0	49.63	99.3								
Copper	65	25.0	24.99	100.0								
Lead	208	3.0	3.05	101.6								
Manganese	55	15.0	15.49	103.3								
Nickel	60	40.0	39.64	99.1								
Selenium	82	5.0	5.22	104.5								
Silver	107	10.0	9.86	98.6								
Thallium	205	10.0	9.63	96.3								
Vanadium	51	50.0	50.78	101.6								

STL-ST. LOUIS

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: ICPMS **Units:** ug/L

Chart Number: 042805M2.REP **Acceptable Range:** 50% - 150%

Standard Source: Inorganic Ventures **Standard ID:** See Standards Log

Element	WL/ Mass	True Conc	CRI 4/28/05 5:30 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Copper	65	25.0	24.07	96.3								
Lead	208	3.0	3.00	100.1								

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: 042705M2.REP

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 4/27/05 7:32 PM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Antimony	123	0.4	0.3	U								
Arsenic	75	0.4	**0.6**									
Barium	135	4	0.3	U								
Beryllium	9	0.2	0.1	U								
Cadmium	111	0.5	0.0	U								
Chromium	52	1	-0.8	B								
Cobalt	59	1	**0.1**	**U**								
Copper	65	1	0.4	U								
Lead	208	0.6	**0.2**	**U**								
Manganese	55	2	**0.0**	**B**								
Nickel	60	0.4	**0.3**	**U**								
Selenium	82	0.4	**0.3**	**B**								
Silver	107	0.4	0.1	U								
Thallium	205	0.2	**0.2**									
Vanadium	51	2	1.1	U								

Version 4.75.1

U Result is less than the IDL
B Result is between IDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: 042805M2.REP

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 4/28/05 5:26 PM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Copper	65	1	0.4	U								
Lead	208	0.6	0.2	U								

Version 4.75.1

U Result is less than the IDL
B Result is between IDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: 042705M2.REP

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 4/27/05 8:01 PM Found	Q	CCB 4/27/05 8:48 PM Found	Q	CCB 4/27/05 9:52 PM Found	Q	CCB 4/27/05 10:56 PM Found	Q	CCB 4/28/05 12:00 AM Found	Q
Antimony	123	0.4	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Arsenic	75	0.4	0.8		0.3	U	1.0		0.9		1.0	
Barium	135	4	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Beryllium	9	0.2	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Cadmium	111	0.5	0.0	U	0.0	U	0.0	U	0.0	U	0.0	U
Chromium	52	1	0.8	U	0.8	U	-0.8	B	-1.0	B	-0.9	B
Cobalt	59	1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Copper	65	1	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
Lead	208	0.6	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Manganese	55	2	0.1	B	0.0	B	0.0	U	0.0	B	0.0	U
Nickel	60	0.4	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Selenium	82	0.4	0.4		0.4	B	0.3	B	0.5		0.4	B
Silver	107	0.4	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Thallium	205	0.2	0.4		0.3		0.3		0.4		0.3	
Vanadium	51	2	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U

Version 4.75.1

U Result is less than the IDL
B Result is between IDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: 042705M2.REP

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 4/28/05 1:04 AM Found	Q	CCB 4/28/05 2:07 AM Found	Q	CCB 4/28/05 3:11 AM Found	Q	CCB 4/28/05 3:33 AM Found	Q	Found	Q
Antimony	123	0.4	0.3	U	0.3	U	0.3	U	0.3	U		
Arsenic	75	0.4	**0.9**		**1.2**		**0.7**		**0.9**			
Barium	135	4	0.3	U	0.3	U	0.3	U	0.3	U		
Beryllium	9	0.2	0.1	U	0.1	U	0.1	U	0.1	U		
Cadmium	111	0.5	0.0	U	0.0	U	0.0	U	0.0	U		
Chromium	52	1	**0.8**	**U**	-0.9	B	**0.8**	**U**	**0.8**	**U**		
Cobalt	59	1	**0.1**	**U**	**0.1**	**U**	**0.1**	**U**	**0.1**	**U**		
Copper	65	1	0.4	U	**3.2**		0.4	U	**0.7**	**B**		
Lead	208	0.6	**0.2**	**U**	**0.3**	**B**	**0.2**	**U**	**0.2**	**U**		
Manganese	55	2	0.0	U	0.0	U	0.0	U	0.0	U		
Nickel	60	0.4	**0.3**	**U**	**0.3**	**U**	**0.3**	**U**	**0.3**	**U**		
Selenium	82	0.4	**0.3**	**B**	**0.3**	**B**	**0.4**		0.1	U		
Silver	107	0.4	0.1	U	0.1	U	0.1	U	0.1	U		
Thallium	205	0.2	**0.3**		**0.2**		**0.2**		**0.2**			
Vanadium	51	2	1.1	U	1.1	U	1.1	U	1.1	U		

Version 4.75.1

U Result is less than the IDL
B Result is between IDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: 042805M2.REP

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 4/28/05 5:45 PM Found	Q	CCB 4/28/05 6:14 PM Found	Q	CCB 4/28/05 6:55 PM Found	Q	CCB 4/28/05 7:36 PM Found	Q	Found	Q
Copper	65	1	0.4	U	0.4	U	0.4	U	0.4	U		
Lead	208	0.6	0.2	U	0.2	U	0.2	U	0.2	U		

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: G84MFB

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Antimony	123	0.15	0.20	0.15	U	5	ICPMS	4/28/05	0:26
Arsenic	**75**	**0.14**	**0.20**	**0.66**		**5**	**ICPMS**	**4/28/05**	**0:26**
Barium	135	0.15	2.0	0.15	U	5	ICPMS	4/28/05	0:26
Beryllium	9	0.031	0.10	0.031	U	5	ICPMS	4/28/05	0:26
Cadmium	111	0.025	0.25	0.025	U	5	ICPMS	4/28/05	0:26
Chromium	52	0.39	0.50	0.39	U	5	ICPMS	4/28/05	0:26
Cobalt	59	0.064	0.50	0.064	U	5	ICPMS	4/28/05	0:26
Manganese	**55**	**0.013**	**1.0**	**0.14**	**B**	**5**	**ICPMS**	**4/28/05**	**0:26**
Nickel	60	0.13	0.20	0.13	U	5	ICPMS	4/28/05	0:26
Selenium	**82**	**0.077**	**0.20**	**0.27**		**5**	**ICPMS**	**4/28/05**	**0:26**
Silver	107	0.062	0.20	0.062	U	5	ICPMS	4/28/05	0:26
Thallium	205	0.078	0.10	0.078	U	5	ICPMS	4/28/05	0:26
Vanadium	**51**	**0.55**	**1.0**	**0.73**	**B**	**5**	**ICPMS**	**4/28/05**	**0:26**

Comments: Lot #: F5D220357

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPMS **Units:** ug/L

Chart Number: 042705M2.REP **Acceptable Range:** 50% - 150%

Standard Source: Inorganic Ventures **Standard ID:** See Standards Log

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 4/27/05 7:51 PM Found	Found	Found	Found	Found
Antimony	123	0.4		0				
Arsenic	75	0.4		0				
Barium	135	4		0				
Beryllium	9	0.2		0				
Cadmium	111	0.5		0				
Chromium	52	1		1				
Cobalt	59	1		0				
Copper	65	1		0				
Lead	208	0.6		1				
Manganese	55	2		1				
Nickel	60	0.4		1				
Selenium	82	0.4		0				
Silver	107	0.4		0				
Thallium	205	0.2		0				
Vanadium	51	2		-1				

STL-ST. LOUIS

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPMS **Units:** ug/L

Chart Number: 042805M2.REP **Acceptable Range:** 50% - 150%

Standard Source: Inorganic Ventures **Standard ID:** See Standards Log

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 4/28/05 5:39 PM Found	Found	Found	Found	Found
Copper	65	1		0				
Lead	208	0.6		1				

STL-ST. LOUIS

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPMS **Units:** ug/L

Chart Number: 042705M2.REP **Acceptable Range:** 50% - 150%

Standard Source: Inorganic Ventures **Standard ID:** See Standards Log

Element	WL/ Mass	True Conc	ICSAB 4/27/05 7:45 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Antimony	123	100	101.5	101.5								
Arsenic	75	100	103.3	103.3								
Barium	135	50	50.9	101.8								
Beryllium	9	50	49.7	99.4								
Cadmium	111	100	99.2	99.2								
Chromium	52	50	51.8	103.6								
Cobalt	59	50	48.9	97.7								
Copper	65	50	48.2	96.5								
Lead	208	100	96.4	96.4								
Manganese	55	50	51.8	103.6								
Nickel	60	100	98.1	98.1								
Selenium	82	100	98.6	98.6								
Silver	107	100	93.0	93.0								
Thallium	205	100	98.3	98.3								
Vanadium	51	50	49.9	99.8								

STL-ST. LOUIS

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPMS **Units:** ug/L

Chart Number: 042805M2.REP **Acceptable Range:** 50% - 150%

Standard Source: Inorganic Ventures **Standard ID:** See Standards Log

Element	WL/ Mass	True Conc	ICSAB 4/28/05 5:34 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Copper	65	50	46.9	93.9								
Lead	208	100	98.9	98.9								

Version 4.75.1

U Result is less than the IDL
B Result is between IDL and RL
N Spike recovery failed

Form 4 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: G817CS

Original Sample ID: G817C **Client ID:** RE73-05-58842 S

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 20.34

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Antimony	123	32.6		84.8	N	31.383	166.3	10	10	ICPMS	4/28/05	2:39	4/28/05	2:44
Arsenic	75	29.8		154		125.53	99.2	10	10	ICPMS	4/28/05	2:39	4/28/05	2:44
Barium	135	1790		1850	N	125.53	53.1	10	10	ICPMS	4/28/05	2:39	4/28/05	2:44
Beryllium	9	0.33		3.6		3.1383	103.2	10	10	ICPMS	4/28/05	2:39	4/28/05	2:44
Cadmium	111	17.7		18.4	N	3.1383	20.2	10	10	ICPMS	4/28/05	2:39	4/28/05	2:44
Chromium	52	85.9		110	N	12.553	191.3	10	10	ICPMS	4/28/05	2:39	4/28/05	2:44
Cobalt	59	16.4		47.7		31.383	99.9	10	10	ICPMS	4/28/05	2:39	4/28/05	2:44
Copper	65	2710		2160	N	15.692	3469.6	50	50	ICPMS	4/28/05	19:05	4/28/05	19:08
Lead	208	3430		2280	N	31.383	3676.5	50	50	ICPMS	4/28/05	19:05	4/28/05	19:08
Manganese	55	1580		1960	N	31.383	1219.8	10	10	ICPMS	4/28/05	2:39	4/28/05	2:44
Nickel	60	234		259		31.383	77.6	10	10	ICPMS	4/28/05	2:39	4/28/05	2:44
Selenium	82	2.2		114		125.53	88.9	10	10	ICPMS	4/28/05	2:39	4/28/05	2:44
Silver	107	63.0		56.2	N	3.1383	-216.4	10	10	ICPMS	4/28/05	2:39	4/28/05	2:44
Thallium	205	0.20	U	110		125.53	87.9	10	10	ICPMS	4/28/05	2:39	4/28/05	2:44
Vanadium	51	16.6		48.1		31.383	100.3	10	10	ICPMS	4/28/05	2:39	4/28/05	2:44

Comments: Lot #: F5D220357 Sample #: 1

Version 4.75.1

U Result is less than the IDL
B Result is between IDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: G817CD

Original Sample ID: G817C **Client ID:** RE73-05-58842 D

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 20.34

Element	WL/ Mass	OS Conc	Q	MSD Conc	Q	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Antimony	123	32.6	N	209	N *	31.383	560.9	10	10	ICPMS	4/28/05	2:39	4/28/05	2:49
Arsenic	75	29.8		148		125.53	94.3	10	10	ICPMS	4/28/05	2:39	4/28/05	2:49
Barium	135	1790	N	1540	N	125.53	-200.4	10	10	ICPMS	4/28/05	2:39	4/28/05	2:49
Beryllium	9	0.33		3.6		3.1383	104.5	10	10	ICPMS	4/28/05	2:39	4/28/05	2:49
Cadmium	111	17.7	N	21.4		3.1383	118.6	10	10	ICPMS	4/28/05	2:39	4/28/05	2:49
Chromium	52	85.9	N	113	N	12.553	216.9	10	10	ICPMS	4/28/05	2:39	4/28/05	2:49
Cobalt	59	16.4		46.4		31.383	95.8	10	10	ICPMS	4/28/05	2:39	4/28/05	2:49
Copper	65	2710	N	2860	N	15.692	973.2	50	50	ICPMS	4/28/05	19:05	4/28/05	19:12
Lead	208	3430	N	5350	N *	31.383	6126.0	50	50	ICPMS	4/28/05	19:05	4/28/05	19:12
Manganese	55	1580	N	1640	N	31.383	187.8	10	10	ICPMS	4/28/05	2:39	4/28/05	2:49
Nickel	60	234		269		31.383	111.5	10	10	ICPMS	4/28/05	2:39	4/28/05	2:49
Selenium	82	2.2		111		125.53	86.6	10	10	ICPMS	4/28/05	2:39	4/28/05	2:49
Silver	107	63.0	N	40.6	N *	3.1383	-715.8	10	10	ICPMS	4/28/05	2:39	4/28/05	2:49
Thallium	205	0.20	U	111		125.53	88.2	10	10	ICPMS	4/28/05	2:39	4/28/05	2:49
Vanadium	51	16.6		43.2		31.383	84.8	10	10	ICPMS	4/28/05	2:39	4/28/05	2:49

Comments: Lot #: F5D220357 Sample #: 1

Version 4.75.1

U Result is less than the IDL
B Result is between IDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: G817CD

Matrix Spike Sample ID: G817CS **Client ID:** RE73-05-58842 D

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 20.34

Element	WL/ Mass	MS Conc	Q	MSD Conc	Q	% RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Antimony	123	84.8	N	209	N *	84.4	10	10	ICPMS	4/28/05	2:44	4/28/05	2:49
Arsenic	75	154		148		4.1	10	10	ICPMS	4/28/05	2:44	4/28/05	2:49
Barium	135	1850	N	1540	N	18.8	10	10	ICPMS	4/28/05	2:44	4/28/05	2:49
Beryllium	9	3.6		3.6		1.2	10	10	ICPMS	4/28/05	2:44	4/28/05	2:49
Cadmium	111	18.4	N	21.4		15.5	10	10	ICPMS	4/28/05	2:44	4/28/05	2:49
Chromium	52	110	N	113	N	2.9	10	10	ICPMS	4/28/05	2:44	4/28/05	2:49
Cobalt	59	47.7		46.4		2.7	10	10	ICPMS	4/28/05	2:44	4/28/05	2:49
Copper	65	2160	N	2860	N	27.8	50	50	ICPMS	4/28/05	19:08	4/28/05	19:12
Lead	208	2280	N	5350	N *	80.6	50	50	ICPMS	4/28/05	19:08	4/28/05	19:12
Manganese	55	1960	N	1640	N	18.0	10	10	ICPMS	4/28/05	2:44	4/28/05	2:49
Nickel	60	259		269		4.0	10	10	ICPMS	4/28/05	2:44	4/28/05	2:49
Selenium	82	114		111		2.5	10	10	ICPMS	4/28/05	2:44	4/28/05	2:49
Silver	107	56.2	N	40.6	N *	32.4	10	10	ICPMS	4/28/05	2:44	4/28/05	2:49
Thallium	205	110		111		0.3	10	10	ICPMS	4/28/05	2:44	4/28/05	2:49
Vanadium	51	48.1		43.2		10.7	10	10	ICPMS	4/28/05	2:44	4/28/05	2:49

Comments: Lot #: F5D220357 Sample #: 1

Version 4.75.1

U Result is less than the IDL
B Result is between IDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 6 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: G84MFC

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Antimony	123	60.9	63.3	103.9		0-223.3	5	ICPMS	4/28/05	0:32
Arsenic	75	161	177	110.0		79.5-120.5	5	ICPMS	4/28/05	0:32
Barium	135	252	271	107.3		82-117.8	5	ICPMS	4/28/05	0:32
Beryllium	9	94.4	88.1	93.4		82-118	5	ICPMS	4/28/05	0:32
Cadmium	111	128	126	98.8		81.3-119	5	ICPMS	4/28/05	0:32
Chromium	52	69.5	63.9	92.0		78.5-121.4	5	ICPMS	4/28/05	0:32
Cobalt	59	35.2	34.2	97.1		73-127	5	ICPMS	4/28/05	0:32
Manganese	55	408	390	95.7		79.9-120	5	ICPMS	4/28/05	0:32
Nickel	60	147	142	96.8		81.6-118.4	5	ICPMS	4/28/05	0:32
Selenium	82	64.2	67.2	104.7		75.5-124.4	5	ICPMS	4/28/05	0:32
Silver	107	130	91.1	70.1		53-147	5	ICPMS	4/28/05	0:32
Thallium	205	84.0	82.4	98.1		75.6-125	5	ICPMS	4/28/05	0:32
Vanadium	51	97.3	87.6	90.1		74.8-125.4	5	ICPMS	4/28/05	0:32

Comments: Lot #: F5D220357

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

Form 7 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICPMS **Units:** ppb

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Antimony	123.00	0.4	0.29	1/28/05
Arsenic	75.00	0.4	0.28	1/28/05
Barium	135.00	4	0.30	1/28/05
Beryllium	9.00	0.2	0.062	1/28/05
Cadmium	111.00	0.5	0.049	1/28/05
Chromium	52.00	1	0.77	1/28/05
Cobalt	59.00	1	0.13	1/28/05
Copper	65.00	1	0.44	1/28/05
Lead	208.00	0.6	0.19	1/28/05
Manganese	55.00	2	0.026	1/28/05
Nickel	60.00	0.4	0.26	1/28/05
Selenium	82.00	0.4	0.15	1/28/05
Silver	107.00	0.4	0.12	1/28/05
Thallium	205.00	0.2	0.16	1/28/05
Vanadium	51.00	2	1.1	1/28/05

STL-ST. LOUIS

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICPMS **Units:** ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Antimony	123.00	20000	6/21/04
Arsenic	75.00	20000	6/21/04
Barium	135.00	4000	6/21/04
Beryllium	9.00	4000	6/21/04
Cadmium	111.00	20000	6/21/04
Chromium	52.00	20000	6/21/04
Cobalt	59.00	20000	6/21/04
Copper	65.00	4000	6/21/04
Lead	208.00	4000	6/21/04
Manganese	55.00	20000	6/21/04
Nickel	60.00	20000	6/21/04
Selenium	82.00	20000	6/21/04
Silver	107.00	4000	6/21/04
Thallium	205.00	2000	6/21/04
Vanadium	51.00	4000	6/21/04

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Log

Preparation Batch: 5115187 **Instrument:** ICP **Matrix:** Soil

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
G84MFB	4/27/05	0.5	50	NA
G84MFC	4/27/05	0.5	50	NA
G817C	4/27/05	0.5	50	20.34
G817CD	4/27/05	0.5	50	20.34
G817CS	4/27/05	0.5	50	20.34
G817D	4/27/05	0.5	50	19.14
G817E	4/27/05	0.5	50	27.93
G817F	4/27/05	0.5	50	25.01
G817G	4/27/05	0.5	50	20.99

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPMS **Chart Number:** 042705M2.REP

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
Blank		4/27/05	18:55
Standard 1		4/27/05	19:00
Standard 2		4/27/05	19:06
Standard 3		4/27/05	19:11
Standard 4		4/27/05	19:16
Standard 5		4/27/05	19:21
ICV		4/27/05	19:26
ICB		4/27/05	19:32
CRI		4/27/05	19:39
ICSAB		4/27/05	19:45
ICSA		4/27/05	19:51
CCV		4/27/05	19:56
CCB		4/27/05	20:01
ZZZZZZ		4/27/05	20:06
ZZZZZZ		4/27/05	20:11
ZZZZZZ		4/27/05	20:16
ZZZZZZ		4/27/05	20:22
ZZZZZZ		4/27/05	20:27
ZZZZZZ		4/27/05	20:32
ZZZZZZ		4/27/05	20:37
CCV		4/27/05	20:42
CCB		4/27/05	20:48
ZZZZZZ		4/27/05	20:54
ZZZZZZ		4/27/05	21:00
ZZZZZZ		4/27/05	21:05
ZZZZZZ		4/27/05	21:10
ZZZZZZ		4/27/05	21:15
ZZZZZZ		4/27/05	21:20
ZZZZZZ		4/27/05	21:25
ZZZZZZ		4/27/05	21:31
ZZZZZZ		4/27/05	21:36
ZZZZZZ		4/27/05	21:41
CCV		4/27/05	21:46
CCB		4/27/05	21:52
ZZZZZZ		4/27/05	21:58
ZZZZZZ		4/27/05	22:04
ZZZZZZ		4/27/05	22:09
ZZZZZZ		4/27/05	22:14
ZZZZZZ		4/27/05	22:19

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPMS **Chart Number:** 042705M2.REP

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		4/27/05	22:24
ZZZZZZ		4/27/05	22:29
ZZZZZZ		4/27/05	22:34
ZZZZZZ		4/27/05	22:40
ZZZZZZ		4/27/05	22:45
CCV		4/27/05	22:50
CCB		4/27/05	22:56
ZZZZZZ		4/27/05	23:02
ZZZZZZ		4/27/05	23:07
ZZZZZZ		4/27/05	23:13
ZZZZZZ		4/27/05	23:18
ZZZZZZ		4/27/05	23:23
ZZZZZZ		4/27/05	23:28
ZZZZZZ		4/27/05	23:33
ZZZZZZ		4/27/05	23:38
ZZZZZZ		4/27/05	23:43
ZZZZZZ		4/27/05	23:48
CCV		4/27/05	23:54
CCB		4/28/05	0:00
ZZZZZZ		4/28/05	0:06
ZZZZZZ		4/28/05	0:11
ZZZZZZ		4/28/05	0:16
ZZZZZZ		4/28/05	0:21
G84MFB		4/28/05	0:26
G84MFC		4/28/05	0:32
ZZZZZZ		4/28/05	0:37
ZZZZZZ		4/28/05	0:42
ZZZZZZ		4/28/05	0:47
ZZZZZZ		4/28/05	0:52
CCV		4/28/05	0:57
CCB		4/28/05	1:04
ZZZZZZ		4/28/05	1:10
ZZZZZZ		4/28/05	1:15
ZZZZZZ		4/28/05	1:20
ZZZZZZ		4/28/05	1:25
ZZZZZZ		4/28/05	1:30
ZZZZZZ		4/28/05	1:35
ZZZZZZ		4/28/05	1:40
ZZZZZZ		4/28/05	1:45

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPMS **Chart Number:** 042705M2.REP

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		4/28/05	1:51
ZZZZZZ		4/28/05	1:56
CCV		4/28/05	2:01
CCB		4/28/05	2:07
ZZZZZZ		4/28/05	2:13
ZZZZZZ		4/28/05	2:18
ZZZZZZ		4/28/05	2:23
ZZZZZZ		4/28/05	2:29
ZZZZZZ		4/28/05	2:34
G817C	RE73-05-58842	4/28/05	2:39
G817CS	RE73-05-58842 S	4/28/05	2:44
G817CD	RE73-05-58842 D	4/28/05	2:49
G817D	RE73-05-58843	4/28/05	2:54
G817E	RE73-05-58844	4/28/05	2:59
CCV		4/28/05	3:04
CCB		4/28/05	3:11
G817F	RE73-05-58845	4/28/05	3:17
G817G	RE73-05-58846	4/28/05	3:22
CCV		4/28/05	3:27
CCB		4/28/05	3:33

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPMS **Chart Number:** 042805M2.REP

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
Blank		4/28/05	17:03
Standard 1		4/28/05	17:06
Standard 2		4/28/05	17:09
Standard 3		4/28/05	17:12
Standard 4		4/28/05	17:15
Standard 5		4/28/05	17:19
ICV		4/28/05	17:22
ICB		4/28/05	17:26
CRI		4/28/05	17:30
ICSAB		4/28/05	17:34
ICSA		4/28/05	17:39
CCV		4/28/05	17:42
CCB		4/28/05	17:45
ZZZZZZ		4/28/05	17:48
ZZZZZZ		4/28/05	17:51
ZZZZZZ		4/28/05	17:54
ZZZZZZ		4/28/05	17:57
ZZZZZZ		4/28/05	18:01
ZZZZZZ		4/28/05	18:04
ZZZZZZ		4/28/05	18:07
CCV		4/28/05	18:10
CCB		4/28/05	18:14
ZZZZZZ		4/28/05	18:19
ZZZZZZ		4/28/05	18:22
ZZZZZZ		4/28/05	18:25
ZZZZZZ		4/28/05	18:28
ZZZZZZ		4/28/05	18:31
ZZZZZZ		4/28/05	18:35
ZZZZZZ		4/28/05	18:38
ZZZZZZ		4/28/05	18:41
ZZZZZZ		4/28/05	18:44
ZZZZZZ		4/28/05	18:47
CCV		4/28/05	18:51
CCB		4/28/05	18:55
ZZZZZZ		4/28/05	18:59
ZZZZZZ		4/28/05	19:02
G817C	RE73-05-58842	4/28/05	19:05
G817CS	RE73-05-58842 S	4/28/05	19:08
G817CD	RE73-05-58842 D	4/28/05	19:12

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPMS **Chart Number:** 042805M2.REP

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
G817D	RE73-05-58843	4/28/05	19:15
G817E	RE73-05-58844	4/28/05	19:19
G817F	RE73-05-58845	4/28/05	19:22
G817G	RE73-05-58846	4/28/05	19:25
ZZZZZZ		4/28/05	19:28
CCV		4/28/05	19:31
CCB		4/28/05	19:36
ZZZZZZ		4/28/05	19:40
ZZZZZZ		4/28/05	19:43
ZZZZZZ		4/28/05	19:47

METALS RAW DATA

4/28/05

file : 042705M2

Sample/Batch Report

STL ST. LOUIS - PERKIN ELMER ELAN 6100 - METHOD 6020 / 200.8 QUANTITATIVE ANALYSIS REP

User Name: stlmetals
Computer Name: SLICP03
Sample File: D:\Elandata\Sample\SW846 TEMP.sam
Report Date/Time: Wednesday, April 27, 2005 16:50:27
Method File: d:\Elandata\Method\epa temp.mth
Tuning File: d:\Elandata\Tuning\epa tuning.tun
Optimization File: d:\Elandata\Optimize\EPA.dac
Calibration File:
Calibration Type: External Calibration
Number of Replicates: 3
Number of Readings: 1
Number of Sweeps: 10
Dual Detector Mode: Dual

MS042605

A/S Loc.	Batch ID	Sample ID	Description	Aliquot Vol.	Diluted Vol.
158		ICSA			
7		CCV			
1		CCB			
24	5115326	G849FB	2X		
25	5115326	G849FC	2X		
26	5115326	G833J	2X		
27	5115326	G833JS	2X		
28	5115326	G833JD	2X		
29	5115326	G833JA	2X		
30	5115326	G833JV	10X		
31	5115332	G849VB	2X		
32	5115332	G849VC	2X		
33	5115332	G8170	2X		
34	5115332	G8170X	2X		
35	5115332	G8170S	2X		
36	5115332	G8170S LL	2X		
37	5115332	G8170V	10X		
38	5115332	G84EP	5X		
39	5109067	G8L0KB	5X		
40	5109067	G8L0KC	5X		
41	5109067	G8L0KC	5X		
42	5109067	G7NWL	5X		
43	5109067	G7NW8	5X		
44	5109067	G7NW8S	5X		
45	5109067	G7NW8D	25X		
46	5109067	G7NW8V	5X		
47	5109067	G7NXD	5X		
48	5109067	G73N8	5X		
49	5109067	G73N8S	5X		
50	5109067	G73N8D	5X		
51	5109067	G73N8	5X		
52	5109067	G77EX	5X		
53	5109067	G77EXS	5X		
54	5109067	G77EXD	5X		
55	5109067	G77FD	5X		
56	5109067	G782L	5X		
57	5109067	G782LS	5X		
58	5109067	G782LD	5X		
59	5109067	G783X	5X		
60	5109067	G8JDL	5X		
61	5109067	G8JDLS	5X		

Report All

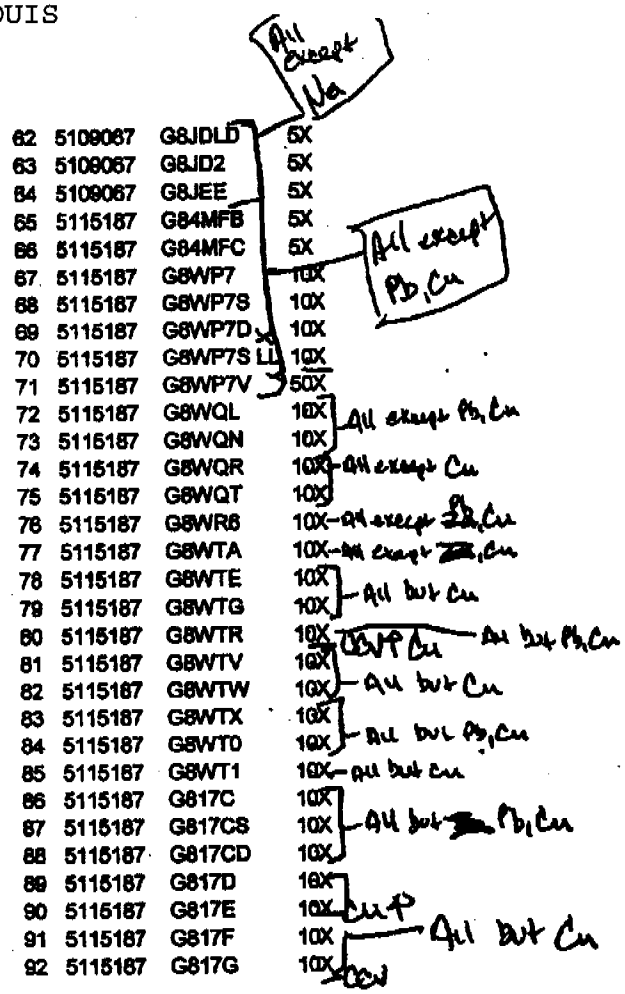
Report #4

All except Na

All but Na

All except Na

All except Na



62	5109067	G8JDLD	5X
63	5109067	G8JD2	5X
64	5109067	G8JEE	5X
65	5115187	G84MFB	5X
66	5115187	G84MFC	5X
67	5115187	G8WP7	10X
68	5115187	G8WP7S	10X
69	5115187	G8WP7D	10X
70	5115187	G8WP7S LL	10X
71	5115187	G8WP7V	50X
72	5115187	G8WQL	10X
73	5115187	G8WQN	10X
74	5115187	G8WQR	10X
75	5115187	G8WQT	10X
76	5115187	G8WR6	10X
77	5115187	G8WTA	10X
78	5115187	G8WTE	10X
79	5115187	G8WTG	10X
80	5115187	G8WTR	10X
81	5115187	G8WTV	10X
82	5115187	G8WTW	10X
83	5115187	G8WTX	10X
84	5115187	G8WT0	10X
85	5115187	G8WT1	10X
86	5115187	G817C	10X
87	5115187	G817CS	10X
88	5115187	G817CD	10X
89	5115187	G817D	10X
90	5115187	G817E	10X
91	5115187	G817F	10X
92	5115187	G817G	10X

Quantitative Analysis Calibration Report

File Name: 042705M2.cal
File Path: D:\Elandata\System
Calibration Type: External Calibration

Analyte	Mass	Curve Type	Slope	Intercept	Corr. Coeff.
Be	9.012	Linear Thru Zero	0.000382	0.00	0.999981
B	10.013	Linear Thru Zero	0.000072	0.00	0.999959
Na	22.990	Linear Thru Zero	0.008430	0.00	0.999993
Mg	23.985	Linear Thru Zero	0.006127	0.00	0.999993
Al	26.982	Linear Thru Zero	0.009368	0.00	0.999992
K	38.964	Linear Thru Zero	0.018130	0.00	0.999998
Ca	43.956	Linear Thru Zero	0.000581	0.00	0.999928
Sc-1	44.956	Linear Thru Zero	0.000000	0.00	0.000000
V	50.944	Linear Thru Zero	0.022635	0.00	0.999998
Cr	51.941	Linear Thru Zero	0.019942	0.00	0.999977
Mn	54.938	Linear Thru Zero	0.032781	0.00	0.999962
Fe	56.935	Linear Thru Zero	0.000689	0.00	0.999997
Co	58.933	Linear Thru Zero	0.025326	0.00	0.999992
Ni	59.933	Linear Thru Zero	0.005442	0.00	0.999990
Cu	64.928	Linear Thru Zero	0.005987	0.00	0.999997
Zn	65.926	Linear Thru Zero	0.003517	0.00	0.999991
Ge-1	71.922	Linear Thru Zero	0.000000	0.00	0.000000
As	74.922	Linear Thru Zero	0.002810	0.00	0.999994
Se	81.917	Linear Thru Zero	0.000311	0.00	0.999998
Mo	96.906	Linear Thru Zero	0.001936	0.00	0.999999
Ag	106.905	Linear Thru Zero	0.008999	0.00	0.999994
Cd	110.904	Linear Thru Zero	0.002066	0.00	0.999985
In-1	114.904	Linear Thru Zero	0.000000	0.00	0.000000
Sb	122.904	Linear Thru Zero	0.005147	0.00	0.999982
Ba	134.906	Linear Thru Zero	0.001503	0.00	0.999996
Ho-1	164.930	Linear Thru Zero	0.000000	0.00	0.000000
Tl	204.975	Linear Thru Zero	0.017287	0.00	0.999969
Pb	207.977	Linear Thru Zero	0.023674	0.00	0.999996
U	238.050	Linear Thru Zero	0.030302	0.00	0.999997
Sc-2	44.956	Linear Thru Zero	0.000000	0.00	0.000000
Cr	52.941	Linear Thru Zero	0.002733	0.00	0.998494
Fe	53.940	Linear Thru Zero	0.001566	0.00	0.999970
Ni	60.931	Linear Thru Zero	0.000244	0.00	0.999995
Cu	62.930	Linear Thru Zero	0.012387	0.00	0.999970
Zn	66.927	Linear Thru Zero	0.000621	0.00	0.999598
Ge	71.922	Linear Thru Zero	0.000000	0.00	0.000000
Se	76.920	Linear Thru Zero	0.000251	0.00	0.999978
Mo	97.906	Linear Thru Zero	0.004887	0.00	0.999993
Ag	108.905	Linear Thru Zero	0.009178	0.00	0.999989
In-2	114.904	Linear Thru Zero	0.000000	0.00	0.000000

Report Date/Time: Thursday, April 28, 2005 09:30:00
Page 1

Cd	113.904	Linear Thru Zero	0.004615	0.00	0.999989
Sb	120.904	Linear Thru Zero	0.006741	0.00	0.999980
Ba	136.905	Linear Thru Zero	0.002563	0.00	0.999981
Ho-2	164.930	Linear Thru Zero	0.000000	0.00	0.000000
Tl	202.972	Linear Thru Zero	0.007347	0.00	0.999967
Pb	205.975	Linear Thru Zero	0.005901	0.00	0.999996
Pb	206.976	Linear Thru Zero	0.004973	0.00	0.999992
Sc	44.956	Linear Thru Zero	0.000000	0.00	0.000000
Ti	46.952	Linear Thru Zero	0.001635	0.00	0.999985
Sr	85.909	Linear Thru Zero	0.007936	0.00	0.999999
Sr	87.906	Linear Thru Zero	0.069070	0.00	0.999986
In	114.904	Linear Thru Zero	0.000000	0.00	0.000000
Sn	117.902	Linear Thru Zero	0.005668	0.00	0.999997
Sn	119.902	Linear Thru Zero	0.007458	0.00	0.999971

Instrument Tuning Report

File Name: EPA TUNING.tun
File Path: d:\Elandata\Tuning
Sample ID: daily check
Sample Date/Time: Wednesday, April 27, 2005 11:18:52

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
He	3.016	2.975	595	2079	0.668	
Mg	23.985	24.028	5677	2073	0.718	
Rh	102.905	102.879	24914	2066	0.727	
Ce	139.905	139.879	33928	2109	0.694	
Pb	207.977	207.927	50397	2284	0.733	

Replicates: 6

Meas. Intens. RSD	Mass
0.656	2.000
1.394	3.000
17.534	4.000
10.189	5.000
12.177	22.000
2.065	23.000
2.565	24.000
2.574	25.000
4.666	26.000
1.694	102.000
0.346	103.000
3.439	104.000
3.395	139.000
0.969	140.000
1.519	141.000
2.744	206.000
2.277	207.000
0.568	208.000
4.717	209.000

Report Date/Time: Wednesday, April 27, 2005 11:20:05
Page 1

Daily Performance Report

Sample ID: daily check
Sample Date/Time: Wednesday, April 27, 2005 11:22:54
Sample Description:
Method File: d:\Elandata\Method\DAILY EPA.mth
Dataset File: d:\Elandata\Dataset\DAILY PEFORMANCE EPA\daily check.177
Tuning File: d:\Elandata\Tuning\EPA TUNING.tun
Optimization File: d:\Elandata\Optimize\EPA.dac
Dual Detector Mode: Pulse
Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24.0	52822.2	52822.204	429.986	0.8
	Rh	102.9	419851.8	419851.764	3585.720	0.9
	Pb	208.0	270582.7	270582.682	1537.037	0.6
>	Ba	137.9	416802.2	416802.168	3897.641	0.9
	Ba++	69.0	5899.9	0.014	0.000	1.6
>	Ce	139.9	501663.8	501663.842	1422.297	0.3
	CeO	155.9	13643.3	0.027	0.000	1.7
	Bkgd	220.0	7.9	7.944	1.452	18.3

Current Optimization File Data

Current Value	Description
0.88	Nebulizer Gas Flow
8.75	Lens Voltage
1200.00	ICP RF Power
-2200.00	Analog Stage Voltage
1400.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-13.50	AC Rod Offset
60.00	Service DAC 1
0.00	Quadrupole Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	25	7.8	2935.3
Mg	24	25	5.8	58094.9
Co	59	25	6.8	190724.7
Rh	103	25	7.8	479282.3
In	115	25	8.0	555076.3
Ba	138	25	8.3	454846.5
Ce	140	25	8.3	543658.6
Pb	208	25	9.5	308645.5

QUANTITATIVE ANALYSIS REPORT

Sample ID: Blank
Sample Date/Time: Wednesday, April 27, 2005 18:55:49
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042705M2\Blank.003

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be			7.667	ug/L	
	10	B			27.667	ug/L	
	23	Na			18838.944	ug/L	
	24	Mg			2106.176	ug/L	
	27	Al			3413.777	ug/L	
	39	K			807733.262	ug/L	
	44	Ca			61872.368	ug/L	
>	45	Sc-1			454114.374	ug/L	
	51	V			-26072.212	ug/L	
	52	Cr			26547.338	ug/L	
	55	Mn			3062.361	ug/L	
	57	Fe			9798.695	ug/L	
	59	Co			232.338	ug/L	
	60	Ni			301.006	ug/L	
	65	Cu			168.336	ug/L	
	66	Zn			15137.170	ug/L	
>	72	Ge-1			739226.379	ug/L	
	75	As			-1945.453	ug/L	
	82	Se			-120.884	ug/L	
	97	Mo			72.001	ug/L	
	107	Ag			267.339	ug/L	
	111	Cd			39.334	ug/L	
>	115	In-1			1483966.870	ug/L	
	123	Sb			268.758	ug/L	
	135	Ba			112.002	ug/L	
>	165	Ho-1			1592460.464	ug/L	
	205	Tl			3951.949	ug/L	
	208	Pb			4580.000	ug/L	
	238	U			234.671	ug/L	
>	45	Sc-2			454114.374	ug/L	
	53	Cr			154333.029	ug/L	
	54	Fe			62090.940	ug/L	
	61	Ni			1661.113	ug/L	
	63	Cu			345.006	ug/L	
	67	Zn			9047.975	ug/L	
>	72	Ge			739226.379	ug/L	
	77	Se			8561.780	ug/L	
	96	Mo			141.970	ug/L	
	109	Ag			286.339	ug/L	
>	115	In-2			1483966.870	ug/L	
	114	Cd			84.731	ug/L	
	121	Sb			349.674	ug/L	
	137	Ba			156.669	ug/L	
>	165	Ho-2			1592460.464	ug/L	
	203	Tl			1582.773	ug/L	
	206	Pb			1161.392	ug/L	
	207	Pb			996.045	ug/L	
>	45	Sc			454114.374	ug/L	
	47	Ti			297.006	ug/L	
	86	Sr			716.656	ug/L	
	88	Sr			5834.250	ug/L	
>	115	In			1483966.870	ug/L	
	118	Sn			855.034	ug/L	
	120	Sn			1103.483	ug/L	

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10
	Na	23
	Mg	24
	Al	27
	K	39
	Ca	44
>	Sc-1	45
	V	51
	Cr	52
	Mn	55
	Fe	57
	Co	59
	Ni	60
	Cu	65
	Zn	66
>	Ge-1	72
	As	75
	Se	82
	Mo	97
	Ag	107
	Cd	111
>	In-1	115
	Sb	123
	Ba	135
>	Ho-1	165
	Tl	205
	Pb	208
	U	238
>	Sc-2	45
	Cr	53
	Fe	54
	Ni	61
	Cu	63
	Zn	67
>	Ge	72
	Se	77
	Mo	98
	Ag	109
>	In-2	115
	Cd	114
	Sb	121
	Ba	137
>	Ho-2	165
	Tl	203
	Pb	206
	Pb	207
>	Sc	45
	Ti	47
	Sr	86
	Sr	88
>	In	115
	Sn	118
	Sn	120

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: Standard 1
Sample Date/Time: Wednesday, April 27, 2005 19:00:56
Autosampler Position: 2
Dataset File: D:\Elandata\Dataset\042705M2\Standard 1.004

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	20.000000	2.828	3416.443	ug/L	7.667
	10	B	20.000000	4.287	667.022	ug/L	27.667
	23	Na			36869.719	ug/L	18838.944
	24	Mg			4869.212	ug/L	2106.176
	27	Al			9693.051	ug/L	3413.777
	39	K			798184.810	ug/L	807733.282
	44	Ca			68531.232	ug/L	61872.368
>	45	Sc-1			461404.320	ug/L	454114.374
	51	V	20.000000	1.075	181999.324	ug/L	-26072.212
	52	Cr	20.000000	4.797	216901.295	ug/L	26547.338
	55	Mn	20.000000	3.218	313096.106	ug/L	3062.361
	57	Fe			9848.596	ug/L	9798.695
	59	Co	20.000000	3.957	241779.530	ug/L	232.338
	60	Ni	20.000000	1.709	50607.036	ug/L	301.006
	65	Cu	20.000000	2.211	56749.396	ug/L	168.336
	66	Zn	20.000000	5.487	47957.879	ug/L	15137.170
>	72	Ge-1			739744.143	ug/L	739226.379
	75	As	20.000000	2.397	40933.560	ug/L	-1945.453
	82	Se	20.000000	0.348	4460.396	ug/L	-120.864
	97	Mo	20.000000	3.349	56605.202	ug/L	72.001
	107	Ag	4.000000	1.002	53647.081	ug/L	267.339
	111	Cd	20.000000	2.032	61013.645	ug/L	39.334
>	115	In-1			1446304.234	ug/L	1483966.870
	123	Sb	20.000000	0.574	154526.672	ug/L	268.758
	135	Ba	20.000000	0.747	49063.527	ug/L	112.002
>	165	Ho-1			1583142.734	ug/L	1592460.464
	205	Tl	20.000000	0.592	542762.502	ug/L	3951.949
	208	Pb	20.000000	0.627	762296.314	ug/L	4580.000
	238	U	20.000000	4.113	941022.019	ug/L	234.671
>	45	Sc-2			461404.320	ug/L	454114.374
	53	Cr	20.000000	48.870	189687.476	ug/L	154333.029
	54	Fe			64659.611	ug/L	62090.940
	61	Ni	20.000000	5.312	3886.901	ug/L	1661.113
	63	Cu	20.000000	3.976	118557.856	ug/L	346.008
	67	Zn	20.000000	16.401	15450.859	ug/L	9047.975
>	72	Ge			739744.143	ug/L	739226.379
	77	Se	20.000000	21.011	12525.180	ug/L	8561.780
	98	Mo	20.000000	0.955	146190.356	ug/L	141.970
	109	Ag	4.000000	1.507	56367.977	ug/L	288.339
>	115	In-2			1446304.234	ug/L	1483966.870
	114	Cd	20.000000	1.699	140068.705	ug/L	84.731
	121	Sb	20.000000	1.087	204609.088	ug/L	349.674
	137	Ba	20.000000	1.750	85000.644	ug/L	156.669
>	165	Ho-2			1583142.734	ug/L	1592460.464
	203	Tl	20.000000	1.374	226836.678	ug/L	1582.773
	206	Pb	20.000000	1.468	192180.282	ug/L	1161.392
	207	Pb	20.000000	0.804	182228.272	ug/L	995.045
>	45	Sc			461404.320	ug/L	454114.374
	47	Ti	20.000000	1.310	18129.492	ug/L	297.006
	86	Sr	20.000000	1.154	72931.787	ug/L	716.656
	88	Sr	20.000000	5.186	626921.262	ug/L	5834.250
>	115	In			1446304.234	ug/L	1483966.870
	118	Sn	20.000000	0.591	169078.134	ug/L	855.034
	120	Sn	20.000000	2.193	223660.780	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10
	Na	23
	Mg	24
	Al	27
	K	39
	Ca	44
>	Sc-1	45
	V	51
	Cr	52
	Mn	55
	Fe	57
	Co	59
	Ni	60
	Cu	65
	Zn	66
>	Ge-1	72
	As	75
	Se	82
	Mo	97
	Ag	107
	Cd	111
>	In-1	115
	Sb	123
	Ba	136
>	Ho-1	165
	Tl	205
	Pb	208
	U	238
>	Sc-2	45
	Cr	53
	Fe	54
	Ni	61
	Cu	63
	Zn	67
>	Ge	72
	Se	77
	Mo	98
	Ag	109
>	In-2	115
	Cd	114
	Sb	121
	Ba	137
>	Ho-2	165
	Tl	205
	Pb	206
	Pb	207
>	Sc	45
	Ti	47
	Sr	88
	Sr	86
>	In	115
	Sn	118
	Sn	120

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: Standard 2
Sample Date/Time: Wednesday, April 27, 2005 19:06:04
Autosampler Position: 3
Dataset File: D:\Elandata\Dataset\042705M2\Standard 2.005

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	50.084342	3.571	8489.942	ug/L	7.667
	10	B	50.867045	0.715	1708.453	ug/L	27.667
	23	Na			80742.218	ug/L	18838.944
	24	Mg			7143.182	ug/L	2106.176
	27	Al			6931.088	ug/L	3413.777
	39	K			784921.339	ug/L	807733.262
	44	Ca			68117.362	ug/L	61872.368
>	45	Sc-1			453669.751	ug/L	454114.374
	51	V	49.959641	1.294	483397.134	ug/L	-28072.212
	52	Cr	49.941689	4.141	489638.296	ug/L	26547.336
	55	Mn	50.055435	0.726	771425.525	ug/L	3062.361
	57	Fe			10551.822	ug/L	9796.695
	59	Co	49.840065	1.047	580376.795	ug/L	232.338
	60	Ni	50.079736	3.483	125884.729	ug/L	301.006
	65	Cu	49.829366	0.790	135905.776	ug/L	168.336
	66	Zn	50.086306	1.144	96250.786	ug/L	15137.170
>	72	Ge-1			742207.268	ug/L	739226.379
	75	As	49.727726	2.942	101495.323	ug/L	-1945.453
	82	Se	49.982436	1.680	11339.909	ug/L	-120.854
	97	Mo	49.919207	0.471	141878.510	ug/L	72.001
	107	Ag	9.960461	2.719	130996.059	ug/L	267.339
	111	Cd	49.713104	2.007	146534.101	ug/L	39.334
>	115	In-1			1467812.057	ug/L	1483966.870
	123	Sb	49.883183	1.647	385101.711	ug/L	268.758
	135	Ba	49.802066	1.567	119496.225	ug/L	112.002
>	165	Ho-1			1589172.952	ug/L	1592460.464
	205	Tl	49.889211	0.284	1334836.134	ug/L	3951.949
	208	Pb	49.854974	2.917	1868545.656	ug/L	4580.000
	238	U	50.091287	1.245	2393586.768	ug/L	234.671
>	45	Sc-2			453669.751	ug/L	454114.374
	53	Cr	49.265829	16.684	227410.470	ug/L	154333.029
	54	Fe			68297.378	ug/L	62090.940
	61	Ni	50.227342	2.804	7241.574	ug/L	1661.113
	63	Cu	49.966723	1.012	289114.396	ug/L	345.008
	67	Zn	50.080826	9.900	24624.496	ug/L	9047.975
>	72	Ge			742207.268	ug/L	739226.379
	77	Se	49.496622	4.712	17849.486	ug/L	8561.780
	98	Mo	49.829065	2.694	361704.073	ug/L	141.970
	109	Ag	9.964628	1.965	136535.786	ug/L	288.339
>	115	In-2			1467812.057	ug/L	1483966.870
	114	Cd	49.677277	2.263	339261.066	ug/L	84.731
	121	Sb	49.798186	1.238	503579.444	ug/L	349.674
	137	Ba	49.901014	0.565	207110.277	ug/L	156.669
>	165	Ho-2			1589172.952	ug/L	1592460.464
	203	Tl	50.012043	2.273	567804.025	ug/L	1582.773
	206	Pb	49.899468	3.940	473579.721	ug/L	1161.392
	207	Pb	49.924606	1.775	401211.416	ug/L	995.045
>	45	Sc			453669.751	ug/L	454114.374
	47	Ti	49.977009	2.123	39824.926	ug/L	297.006
	86	Sr	50.060515	1.568	180300.759	ug/L	716.856
	88	Sr	50.046612	1.324	1543393.200	ug/L	5834.250
>	115	In			1467812.057	ug/L	1483966.870
	118	Sn	49.818993	1.570	416740.961	ug/L	855.034
	120	Sn	49.973604	3.023	563675.221	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

B	10
Na	23
Mg	24
Al	27
K	39
Ca	44
Sc-1	45
V	51
Cr	52
Mn	55
Fe	57
Co	59
Ni	60
Cu	65
Zn	66
Ge-1	72
As	75
Se	82
Mo	97
Ag	107
Cd	111
In-1	115
Sb	123
Ba	135
Ho-1	165
Tl	205
Pb	208
U	238
Sc-2	45
Cr	53
Fe	54
Ni	61
Cu	63
Zn	67
Ge	72
Se	77
Mo	98
Ag	109
In-2	115
Cd	114
Sb	121
Ba	137
Ho-2	165
Tl	203
Pb	206
Pb	207
Sc	45
Ti	47
Sr	86
Sr	88
In	115
Sn	118
Sn	120

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: Standard 3
Sample Date/Time: Wednesday, April 27, 2005 19:11:13
Autosampler Position: 4
Dataset File: D:\Elandata\Dataset\042705M2\Standard 3.006

Sample Result Summary

Mass	Analyte	Conc. Mean	Conc. RSD	Mass. Intens. Mean	Sample Unit	Blank Intensity
9	Be	200.323122	3.752	34648.664	ug/L	7.667
10	B	199.722128	2.875	6530.891	ug/L	27.667
23	Na	500.000000	1.417	1812455.730	ug/L	18838.944
24	Mg	250.000000	4.511	655341.040	ug/L	2106.176
27	Al	500.000000	4.167	2097096.965	ug/L	3413.777
39	K	500.000000	2.816	4809970.860	ug/L	807733.282
44	Ca	250.000000	3.285	140544.384	ug/L	61872.368
> 45	Sc-1			452988.498	ug/L	454114.374
51	V	200.100530	1.362	2025406.873	ug/L	-26072.212
52	Cr	199.634396	1.230	1829631.979	ug/L	26547.338
55	Mn	199.533383	1.623	2965924.899	ug/L	3062.361
57	Fe	500.000000	4.426	161146.570	ug/L	9798.695
59	Co	199.810725	1.557	2292322.268	ug/L	232.336
60	Ni	199.779661	2.795	492725.132	ug/L	301.006
65	Cu	199.957196	4.565	542173.334	ug/L	168.336
66	Zn	199.778921	2.620	333275.827	ug/L	15137.170
> 72	Ge-1			719651.870	ug/L	739226.379
75	As	200.032279	1.790	402461.819	ug/L	-1945.453
82	Se	200.113153	2.627	44711.844	ug/L	-120.864
97	Mo	200.003284	0.748	559093.674	ug/L	72.001
107	Ag	40.016408	2.266	520221.776	ug/L	267.339
111	Cd	200.216343	2.236	597177.442	ug/L	39.334
> 115	In-1			1443960.816	ug/L	1483966.870
123	Sb	199.590680	3.816	1483605.526	ug/L	268.758
135	Ba	199.949125	3.525	470833.761	ug/L	112.002
> 165	Ho-1			1567164.675	ug/L	1592460.464
205	Tl	200.420044	2.978	5430266.292	ug/L	3951.949
208	Pb	200.102320	2.548	7424555.269	ug/L	4580.000
238	U	200.111828	5.209	9492787.201	ug/L	234.671
> 45	Sc-2			452988.498	ug/L	454114.374
53	Cr	197.106074	4.629	397942.113	ug/L	154333.029
54	Fe	500.000000	5.064	437417.402	ug/L	62090.940
61	Ni	199.948405	2.688	23763.320	ug/L	1661.113
63	Cu	199.884523	3.036	1119859.429	ug/L	345.008
67	Zn	198.474551	0.724	64861.561	ug/L	9047.975
> 72	Ge			719651.870	ug/L	739226.379
77	Se	199.982407	2.584	44488.687	ug/L	8561.780
98	Mo	199.832894	1.453	1410177.928	ug/L	141.970
109	Ag	39.956360	0.690	529791.124	ug/L	288.339
> 115	In-2			1443960.816	ug/L	1483966.870
114	Cd	199.883418	2.315	1331711.528	ug/L	84.731
121	Sb	199.687983	3.482	1943054.940	ug/L	349.674
137	Ba	199.703414	3.628	801563.380	ug/L	156.669
> 165	Ho-2			1567164.675	ug/L	1592460.464
203	Tl	200.437257	3.135	2307868.407	ug/L	1582.773
206	Pb	199.857865	2.068	1848718.071	ug/L	1161.392
207	Pb	199.789941	4.109	1556785.249	ug/L	995.045
> 45	Sc			452988.498	ug/L	454114.374
47	Ti	200.289880	3.802	148585.435	ug/L	297.008
86	Sr	200.067236	1.093	719826.185	ug/L	716.656
88	Sr	200.282339	0.560	6272235.909	ug/L	5834.250
> 115	In			1443960.816	ug/L	1483966.870
118	Sn	199.950612	1.300	1637253.184	ug/L	855.034
120	Sn	199.887266	1.992	2150063.669	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10
	Na	23
	Mg	24
	Al	27
	K	39
	Ca	44
>	Sc-1	45
	V	51
	Cr	52
	Mn	55
	Fe	57
	Co	59
	Ni	60
	Cu	65
	Zn	66
>	Ge-1	72
	As	75
	Se	82
	Mo	97
	Ag	107
	Cd	111
>	In-1	115
	Sb	123
	Ba	135
>	Ho-1	165
	Tl	205
	Pb	208
	U	238
>	Sc-2	45
	Cr	53
	Fe	54
	Ni	61
	Cu	63
	Zn	67
>	Ge	72
	Se	77
	Mo	98
	Ag	109
>	In-2	115
	Cd	114
	Sb	121
	Ba	137
>	Ho-2	166
	Tl	203
	Pb	206
	Pb	207
>	Sc	45
	Ti	47
	Sr	86
	Sr	88
>	In	115
	Sn	118
	Sn	120

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: Standard 4
Sample Date/Time: Wednesday, April 27, 2005 19:16:23
Autosampler Position: 5
Dataset File: D:\Elandata\Dataset\042705M2\Standard 4.007

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.036751	124.308	13.667	ug/L	7.667
	10	B	5.174197	23.855	192.337	ug/L	27.667
	23	Na	2008.381275	2.998	7606065.165	ug/L	18838.944
	24	Mg	1002.702180	3.185	2893573.782	ug/L	2106.178
	27	Al	2003.794878	0.324	8505812.744	ug/L	3413.777
	39	K	2003.681972	3.860	17036567.523	ug/L	807733.282
	44	Ca	990.684495	3.741	327777.278	ug/L	61872.368
>	45	Sc-1			445162.813	ug/L	454114.374
	51	V	0.059919	486.300	-24953.280	ug/L	-26072.212
	52	Cr	-0.059119	153.327	25504.698	ug/L	26547.338
	55	Mn	0.110684	20.619	4617.127	ug/L	3062.361
	57	Fe	2002.259504	2.819	616219.060	ug/L	9798.695
	59	Co	0.068165	23.566	994.045	ug/L	232.338
	60	Ni	0.097041	18.002	530.015	ug/L	301.006
	65	Cu	0.055748	19.573	313.340	ug/L	168.336
	66	Zn	1.452646	6.128	17112.750	ug/L	15137.170
>	72	Ge-1			719861.230	ug/L	739226.379
	75	As	0.778866	19.544	-321.657	ug/L	-1945.453
	82	Se	0.314849	29.078	-47.079	ug/L	-120.854
	97	Mo	0.144544	44.373	471.013	ug/L	72.001
	107	Ag	0.006603	29.553	331.674	ug/L	267.339
	111	Cd	0.012786	58.304	76.001	ug/L	39.334
>	115	In-1			1439464.290	ug/L	1483966.870
	123	Sb	0.122882	37.051	1167.893	ug/L	288.758
	135	Ba	0.512332	8.491	1327.742	ug/L	112.002
>	165	Ho-1			1581503.472	ug/L	1592460.464
	205	Tl	0.437819	48.490	15804.241	ug/L	3961.949
	208	Pb	0.054874	50.057	6587.007	ug/L	4580.000
	238	U	0.013679	96.595	879.045	ug/L	234.671
>	45	Sc-2			445162.813	ug/L	454114.374
	53	Cr	6.049469	108.562	158696.648	ug/L	154333.029
	54	Fe	1997.320766	4.227	1504017.694	ug/L	62090.940
	61	Ni	-0.580325	139.763	1566.435	ug/L	1661.113
	63	Cu	0.078245	22.969	752.027	ug/L	345.006
	67	Zn	8.821575	31.672	11232.212	ug/L	9047.975
>	72	Ge			719861.230	ug/L	739226.379
	77	Se	-11.468904	7.764	6263.062	ug/L	8561.780
	98	Mo	0.149391	42.052	1184.999	ug/L	141.970
	109	Ag	0.018247	38.448	520.015	ug/L	288.339
>	115	In-2			1439464.290	ug/L	1483966.870
	114	Cd	0.011555	78.028	158.492	ug/L	84.731
	121	Sb	0.119011	35.782	1490.096	ug/L	349.674
	137	Ba	0.534136	2.685	2319.545	ug/L	156.669
>	165	Ho-2			1581503.472	ug/L	1592460.464
	203	Tl	0.436836	51.581	6907.066	ug/L	1582.773
	206	Pb	0.051322	44.646	1629.110	ug/L	1161.392
	207	Pb	0.056824	38.193	1432.420	ug/L	995.045
>	45	Sc			445162.813	ug/L	454114.374
	47	Ti	0.249739	3.665	473.013	ug/L	297.006
	86	Sr	0.123469	26.456	1137.457	ug/L	716.656
	88	Sr	0.105870	11.291	8971.575	ug/L	5834.250
>	115	In			1439464.290	ug/L	1483966.870
	118	Sn	0.105117	42.797	1684.119	ug/L	855.034
	120	Sn	0.109373	30.118	2240.719	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

B	10
Na	23
Mg	24
Al	27
K	39
Ca	44
Sc-1	45
V	51
Cr	52
Mn	55
Fe	57
Co	59
Ni	60
Cu	65
Zn	66
Ge-1	72
As	75
Se	82
Mo	97
Ag	107
Cd	111
In-1	115
Sb	123
Ba	135
Ho-1	165
Tl	205
Pb	208
U	238
Sc-2	45
Cr	53
Fe	54
Ni	61
Cu	63
Zn	67
Ge	72
Se	77
Mo	98
Ag	109
In-2	115
Cd	114
Sb	121
Ba	137
Ho-2	165
Tl	203
Pb	208
Pb	207
Sc	45
Ti	47
Sr	88
Sr	88
In	115
Sn	118
Sn	120

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: Standard 5
Sample Date/Time: Wednesday, April 27, 2005 19:21:34
Autosampler Position: 6
Dataset File: D:\Elandata\Dataset\042705M2\Standard 5.008

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌜	9	Be	0.003076	506.328	8.000	ug/L	7.667
|	10	B	2.449680	17.783	105.001	ug/L	27.667
|	23	Na	9997.032527	1.292	37348438.042	ug/L	18838.944
|	24	Mg	5003.293048	1.707	13579886.718	ug/L	2106.176
|	27	Al	9982.575978	2.023	41466389.402	ug/L	3413.777
|	39	K	9997.879228	1.230	81070628.627	ug/L	807733.262
|	44	Ca	4990.676768	2.360	1343540.196	ug/L	61872.368
|>	45	Sc-1			442910.499	ug/L	454114.374
|	51	V	-0.788647	146.196	-33030.257	ug/L	-26072.212
|	52	Cr	0.079131	251.980	26590.728	ug/L	26547.338
|	55	Mn	0.124076	5.111	4788.184	ug/L	3062.361
|	57	Fe	10004.926314	0.388	3061061.837	ug/L	9798.695
|	59	Co	0.269128	4.787	3245.402	ug/L	232.338
|	60	Ni	0.181473	6.401	731.026	ug/L	301.006
|	65	Cu	0.116337	5.056	472.679	ug/L	168.336
⌊	66	Zn	0.970585	21.450	16275.785	ug/L	15137.170
⌈>	72	Ge-1			743053.465	ug/L	739226.379
|	75	As	0.560041	53.092	-791.534	ug/L	-1946.453
⌊	82	Se	0.334826	52.268	-44.448	ug/L	-120.864
⌈	97	Mo	0.063706	18.928	211.670	ug/L	72.001
|	107	Ag	0.006924	30.381	361.008	ug/L	267.339
|	111	Cd	0.003822	92.603	47.667	ug/L	39.334
|>	115	In-1			1387502.391	ug/L	1483966.870
⌊	123	Sb	0.062300	8.737	898.390	ug/L	268.758
⌈	135	Ba	0.191024	9.129	555.683	ug/L	112.002
|>	165	Ho-1			1555541.748	ug/L	1592460.464
|	205	Tl	0.119567	44.769	7090.887	ug/L	3951.949
|	208	Pb	0.060720	20.944	6714.887	ug/L	4580.000
⌊	238	U	0.002921	7.231	367.008	ug/L	234.671
⌈>	45	Sc-2			442910.499	ug/L	454114.374
|	53	Cr	26.575373	51.663	182686.792	ug/L	154333.029
|	54	Fe	9984.232207	0.776	6985017.754	ug/L	62090.940
|	61	Ni	0.572617	221.593	1682.116	ug/L	1661.113
|	63	Cu	0.218840	5.378	1526.097	ug/L	345.008
⌊	67	Zn	17.740607	39.480	13703.125	ug/L	9047.975
⌈>	72	Ge			743053.465	ug/L	739226.379
⌊	77	Se	-15.009876	8.618	5616.398	ug/L	8561.780
⌈	98	Mo	0.047551	16.338	455.464	ug/L	141.970
|	109	Ag	0.014800	11.511	458.012	ug/L	288.339
|>	115	In-2			1387502.391	ug/L	1483966.870
|	114	Cd	0.006324	35.250	113.225	ug/L	84.731
⌊	121	Sb	0.063656	18.235	923.373	ug/L	349.674
⌈	137	Ba	0.185102	2.954	891.037	ug/L	156.669
|>	165	Ho-2			1555541.748	ug/L	1592460.464
|	203	Tl	0.117589	42.429	2895.998	ug/L	1582.773
|	206	Pb	0.063052	15.740	1714.120	ug/L	1161.392
⌊	207	Pb	0.062244	27.347	1454.756	ug/L	996.045
⌈>	45	Sc			442910.499	ug/L	454114.374
|	47	Ti	1.221538	7.143	1174.383	ug/L	297.006
|	86	Sr	0.217417	3.431	1483.224	ug/L	716.656
⌊	88	Sr	0.196969	1.508	11715.586	ug/L	5834.250
⌈>	115	In			1387502.391	ug/L	1483966.870
|	118	Sn	0.063181	1.890	1296.405	ug/L	855.034
⌊	120	Sn	0.063250	7.728	1685.781	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Be	9		

	B	10
	Na	23
	Mg	24
	Al	27
	K	39
	Ca	44
>	Sc-1	45
	V	51
	Cr	52
	Mn	55
	Fe	57
	Co	59
	Ni	60
	Cu	65
	Zn	66
>	Ge-1	72
	As	75
	Se	82
	Mo	97
	Ag	107
	Cd	111
>	In-1	115
	Sb	123
	Ba	135
>	Ho-1	165
	Tl	205
	Pb	208
	U	238
>	Sc-2	45
	Cr	53
	Fe	54
	Ni	61
	Cu	63
	Zn	67
>	Ge	72
	Se	77
	Mo	98
	Ag	109
>	In-2	115
	Cd	114
	Sb	121
	Ba	137
>	Ho-2	165
	Tl	203
	Pb	206
	Pb	207
>	Sc	45
	Ti	47
	Sr	86
	Sr	88
>	In	115
	Sn	118
	Sn	120

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Wednesday, April 27, 2005 19:26:46
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 1.009

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	204.197421	4.656	34000.769	ug/L	7.667
	10	B	202.831479	3.799	6389.159	ug/L	27.667
	23	Na	1910.932281	2.748	7042874.655	ug/L	18638.944
	24	Mg	983.107668	4.718	2574487.603	ug/L	2106.176
	27	Al	1970.902075	1.189	8057968.797	ug/L	3413.777
	39	K	1945.902935	5.614	16151790.015	ug/L	807733.282
	44	Ca	1032.084287	7.124	320463.169	ug/L	61872.368
>	45	Sc-1			436296.235	ug/L	454114.374
	51	V	193.006472	2.198	1880532.791	ug/L	-26072.212
	52	Cr	194.413417	1.870	1716407.733	ug/L	26547.338
	55	Mn	200.820061	3.354	2869643.739	ug/L	3062.361
	57	Fe	1949.200320	2.097	594800.464	ug/L	9798.695
	59	Co	199.235070	5.248	2199472.453	ug/L	232.338
	60	Ni	188.067063	2.873	470384.190	ug/L	301.006
	65	Cu	200.734170	2.883	524203.783	ug/L	168.336
	66	Zn	202.537083	3.297	325134.998	ug/L	15137.170
>	72	Ge-1			718305.334	ug/L	739226.379
	75	As	201.376029	3.601	404394.742	ug/L	-1945.453
	82	Se	199.397348	3.100	44467.681	ug/L	-120.854
	97	Mo	198.991666	1.910	557809.368	ug/L	72.001
	107	Ag	48.131515	1.261	627443.846	ug/L	267.339
	111	Cd	191.357451	1.165	572577.664	ug/L	39.334
>	115	In-1			1447954.290	ug/L	1483966.870
	123	Sb	197.625291	1.252	1473010.133	ug/L	268.758
	135	Ba	204.654681	3.959	474855.084	ug/L	112.002
>	165	Ho-1			1544030.050	ug/L	1592460.464
	205	Tl	192.857396	2.215	5144502.511	ug/L	3951.949
	206	Pb	196.426387	0.930	7183424.354	ug/L	4680.000
	238	U	195.891431	3.758	9159853.250	ug/L	234.671
>	45	Sc-2			436296.235	ug/L	454114.374
	53	Cr	173.962869	4.475	355568.207	ug/L	154333.029
	54	Fe	2024.674890	2.480	1442187.137	ug/L	62090.940
	61	Ni	199.228819	6.548	22790.742	ug/L	1861.113
	63	Cu	196.702442	1.761	1062995.175	ug/L	345.006
	67	Zn	203.254065	1.639	63746.275	ug/L	9047.975
>	72	Ge			718305.334	ug/L	739226.379
	77	Se	173.441682	3.144	39615.759	ug/L	8561.780
	98	Mo	199.983034	0.072	1415449.878	ug/L	141.970
	109	Ag	47.211517	1.878	627744.508	ug/L	288.339
>	115	In-2			1447954.290	ug/L	1483966.870
	114	Cd	196.897148	1.081	1315828.576	ug/L	84.731
	121	Sb	197.468252	1.868	1927561.821	ug/L	349.674
	137	Ba	206.713986	3.945	817563.034	ug/L	156.669
>	165	Ho-2			1544030.050	ug/L	1592460.464
	203	Tl	193.108885	2.605	2191324.139	ug/L	1582.773
	206	Pb	198.491617	1.846	1809185.046	ug/L	1161.392
	207	Pb	200.112774	1.584	1537163.862	ug/L	995.045
>	45	Sc			436296.235	ug/L	454114.374
	47	Ti	197.375188	1.615	141053.172	ug/L	297.006
	86	Sr	200.596598	3.201	894812.417	ug/L	716.656
	88	Sr	202.418807	0.582	6105102.920	ug/L	5834.250
>	115	In			1447954.290	ug/L	1483966.870
	118	Sn	199.602944	0.983	1639071.548	ug/L	855.034
	120	Sn	201.823103	2.090	2180682.263	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		102.099

	B	10		101.466
	Na	23		96.847
	Mg	24		96.311
	Al	27		96.646
	K	39		97.296
	Ca	44		103.396
>	Sc-1	45	96.076	
	V	51		96.803
	Cr	52		97.207
	Mn	55		100.269
	Fe	57		97.466
	Co	59		99.818
	Ni	60		99.029
	Cu	65		100.367
	Zn	66		101.399
>	Ge-1	72	97.170	
	As	75		100.686
	Se	82		99.649
	Mo	97		99.496
	Ag	107		96.253
	Cd	111		95.694
>	In-1	115	97.573	
	Sb	123		96.813
	Ba	135		102.527
>	Ho-1	165	96.959	
	Tl	205		96.329
	Pb	208		96.213
	U	238		97.546
>	Sc-2	45	96.076	
	Cr	53		96.891
	Fe	54		101.234
	Ni	61		99.813
	Cu	63		96.361
	Zn	67		101.627
>	Ge	72	97.170	
	Se	77		96.721
	Mo	98		99.997
	Ag	109		94.423
>	In-2	115	97.573	
	Cd	114		96.449
	Sb	121		96.734
	Ba	137		103.357
>	Ho-2	165	96.959	
	Tl	203		96.554
	Pb	206		99.246
	Pb	207		100.058
>	Sc	45	96.076	
	Ti	47		96.696
	Sr	86		100.299
	Sr	88		101.399
>	In	115	97.573	
	Sn	118		99.991
	Sn	120		100.912

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cr	53	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Wednesday, April 27, 2005 19:32:56
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 2.010

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.004323	254.389	8.000	ug/L	7.667
	10	B	3.609390	22.308	138.336	ug/L	27.667
	23	Na	0.112569	189.200	18342.291	ug/L	18838.944
	24	Mg	0.017426	86.876	2051.501	ug/L	2106.176
	27	Al	0.015007	136.943	3312.751	ug/L	3413.777
	39	K	-5.518896	38.752	725705.296	ug/L	807733.282
	44	Ca	0.099781	630.863	58944.640	ug/L	61872.368
>	45	Sc-1			432458.282	ug/L	454114.374
	51	V	0.275949	169.363	-22192.568	ug/L	-26072.212
	52	Cr	-0.614483	22.970	18276.953	ug/L	26547.338
	55	Mn	0.043023	19.963	3527.472	ug/L	3062.361
	57	Fe	-3.086282	20.431	8411.950	ug/L	9798.695
	59	Co	0.009539	52.276	325.007	ug/L	232.338
	60	Ni	-0.002200	264.010	281.339	ug/L	301.006
	65	Cu	0.015256	46.822	202.337	ug/L	158.336
	66	Zn	-0.024539	394.858	14377.377	ug/L	15137.170
>	72	Ge-1			714291.692	ug/L	739226.379
	75	As	0.631649	14.614	-615.056	ug/L	-1945.453
	82	Se	0.321602	80.739	-45.294	ug/L	-120.854
	97	Mo	0.080182	43.160	294.006	ug/L	72.001
	107	Ag	0.002174	104.897	288.339	ug/L	267.339
	111	Cd	0.006060	26.312	56.334	ug/L	39.334
>	115	In-1			1443884.675	ug/L	1483966.670
	123	Sb	0.092345	33.170	947.206	ug/L	268.758
	135	Ba	-0.002524	123.981	102.668	ug/L	112.002
>	165	Ho-1			1544378.791	ug/L	1592460.464
	205	Tl	0.242489	51.628	10305.074	ug/L	3951.949
	208	Pb	0.007544	14.626	4716.018	ug/L	4580.000
	238	U	0.004618	10.456	443.678	ug/L	234.671
>	45	Sc-2			432458.282	ug/L	454114.374
	53	Cr	-17.721942	59.297	126186.136	ug/L	154333.029
	54	Fe	-0.437646	1000.818	58800.733	ug/L	62090.940
	61	Ni	-0.668712	68.392	1521.783	ug/L	1661.113
	63	Cu	0.013282	21.563	399.676	ug/L	345.008
	67	Zn	2.137178	164.893	9202.417	ug/L	9047.975
>	72	Ge			714291.692	ug/L	739226.379
	77	Se	-28.461946	12.631	3165.468	ug/L	8561.780
	98	Mo	0.068664	30.527	783.107	ug/L	141.970
	109	Ag	0.014907	21.437	478.013	ug/L	288.339
>	115	In-2			1443884.675	ug/L	1483966.670
	114	Cd	0.003574	79.394	106.172	ug/L	84.731
	121	Sb	0.094634	26.543	1259.736	ug/L	349.574
	137	Ba	0.003658	134.880	166.669	ug/L	158.668
>	165	Ho-2			1544378.791	ug/L	1592460.464
	203	Tl	0.247444	52.193	4343.753	ug/L	1582.773
	206	Pb	0.011671	24.447	1227.396	ug/L	1161.392
	207	Pb	0.006282	32.667	1013.379	ug/L	995.045
>	45	Sc			432458.282	ug/L	454114.374
	47	Ti	0.020022	224.477	297.339	ug/L	297.006
	86	Sr	-0.000436	5376.171	681.023	ug/L	716.656
	88	Sr	0.002928	131.636	5841.837	ug/L	5834.250
>	115	In			1443884.675	ug/L	1483966.670
	118	Sn	0.063130	26.489	1348.078	ug/L	855.034
	120	Sn	0.059240	33.968	1711.190	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		8.432

	B	10		368.938
	Na	23		0.113
	Mg	24		0.017
	Al	27		0.015
	K	39		-5.819
	Ca	44		0.160
>	Sc-1	45	96.231	
	V	51		27.895
	Cr	52		-91.448
	Mn	55		4.302
	Fe	57		-3.088
	Co	59		0.964
	Ni	60		-0.220
	Cu	65		1.828
	Zn	66		-2.464
>	Ge-1	72	96.627	
	As	75		53.166
	Se	82		32.150
	Mo	97		8.018
	Ag	107		0.217
	Cd	111		0.606
>	In-1	115	97.299	
	Sb	123		9.234
	Ba	135		-8.252
>	Ho-1	165	96.891	
	Tl	205		24.249
	Pb	208		0.754
	U	238		0.462
>	Sc-2	45	96.231	
	Cr	53		-1772.194
	Fe	54		-8.438
	Ni	61		-66.871
	Cu	63		1.328
	Zn	67		213.718
>	Ge	72	96.627	
	Se	77		-2846.195
	Mo	98		8.866
	Ag	109		1.491
>	In-2	115	97.299	
	Cd	114		0.357
	Sb	121		9.459
	Ba	137		0.366
>	Ho-2	165	96.891	
	Tl	203		24.744
	Pb	206		1.187
	Pb	207		0.628
>	Sc	45	96.231	
	Tl	47		2.602
	Sr	86		-0.044
	Sr	88		0.293
>	In	115	97.299	
	Sn	118		8.313
	Sn	120		8.924

QC Out Of Limits

Analyte	Mass	Out of Limits Message
B	10	Q
Cr	53	Q
Zn	67	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 3
Sample Date/Time: Wednesday, April 27, 2005 19:39:04
Autosampler Position: 160
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 3.011

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	5.184022	4.805	910.371	ug/L	7.867
	10	B	207.805223	4.379	6839.372	ug/L	27.867
	23	Na	4713.913671	2.320	18154386.149	ug/L	18838.944
	24	Mg	4775.421017	2.542	13344721.433	ug/L	2106.176
	27	Al	199.294044	1.198	855111.152	ug/L	3413.777
	39	K	4808.361680	3.497	40575050.846	ug/L	807733.282
	44	Ca	4829.823447	5.861	1339853.465	ug/L	61872.368
>	45	Sc-1			456283.090	ug/L	454114.374
	51	V	50.778845	5.856	497888.820	ug/L	-26072.212
	52	Cr	9.896815	3.906	116638.084	ug/L	26547.338
	55	Mn	15.488409	0.906	234705.031	ug/L	3062.361
	57	Fe	96.052570	6.610	39966.396	ug/L	9798.695
	59	Co	49.631176	5.145	573087.020	ug/L	232.338
	60	Ni	39.641618	4.431	98651.505	ug/L	301.006
	65	Cu	24.993797	5.860	68353.211	ug/L	168.336
	66	Zn	21.428193	6.349	49546.611	ug/L	15137.170
>	72	Ge-1			732723.484	ug/L	739226.379
	75	As	10.212686	1.592	19098.848	ug/L	-1945.453
	82	Se	5.223142	6.551	1072.456	ug/L	-120.854
	97	Mo	40.341252	1.260	114662.559	ug/L	72.001
	107	Ag	9.857392	1.095	130440.920	ug/L	267.339
	111	Cd	4.916868	0.321	14944.964	ug/L	39.334
>	115	In-1			1467378.174	ug/L	1483966.870
	123	Sb	58.773826	2.901	444031.337	ug/L	268.758
	135	Ba	204.349609	2.306	484902.037	ug/L	112.002
>	185	Ho-1			1578363.534	ug/L	1592460.464
	205	Tl	9.829465	2.611	286591.831	ug/L	3951.949
	208	Pb	3.047949	1.677	118410.421	ug/L	4580.000
	238	U	496.533846	4.206	23836662.715	ug/L	234.671
>	45	Sc-2			456283.090	ug/L	454114.374
	53	Cr	-6.966896	145.430	146667.908	ug/L	154333.029
	54	Fe	115.577492	6.461	144840.301	ug/L	52090.940
	61	Ni	40.750481	6.842	6201.408	ug/L	1861.113
	63	Cu	24.940706	3.584	141191.371	ug/L	345.008
	67	Zn	27.547614	4.300	16898.505	ug/L	9047.975
>	72	Ge			732723.484	ug/L	739226.379
	77	Se	-12.807751	34.631	6123.122	ug/L	8561.780
	98	Mo	41.622481	0.255	298644.798	ug/L	141.970
	109	Ag	9.237980	0.896	124696.434	ug/L	288.339
>	115	In-2			1467378.174	ug/L	1483966.870
	114	Cd	5.036452	2.136	34184.993	ug/L	84.731
	121	Sb	59.289575	1.606	586418.036	ug/L	348.674
	137	Ba	207.077796	3.306	837463.527	ug/L	158.669
>	165	Ho-2			1578363.534	ug/L	1592460.464
	203	Tl	9.396007	2.694	110494.187	ug/L	1582.773
	206	Pb	3.119367	2.941	30197.522	ug/L	1161.392
	207	Pb	3.128665	3.605	25534.394	ug/L	995.045
>	45	Sc			456283.090	ug/L	454114.374
	47	Ti	49.818891	4.947	37424.671	ug/L	297.006
	86	Sr	48.752869	3.203	177250.503	ug/L	716.656
	88	Sr	47.585741	2.879	1504544.697	ug/L	5834.250
>	115	In			1467378.174	ug/L	1483966.870
	118	Sn	101.776616	2.480	847551.801	ug/L	856.034
	120	Sn	102.516044	1.285	1123025.794	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		103.899

	B	10		103.803
	Na	23		94.276
	Mg	24		96.596
	Al	27		99.947
	K	39		98.167
	Ca	44		96.596
>	Sc-1	45	100.478	
	V	51		101.668
	Cr	52		99.958
	Mn	55		103.266
	Fe	57		98.053
	Co	59		99.262
	Ni	60		99.104
	Cu	65		99.976
	Zn	66		107.141
>	Ge-1	72	99.120	
	As	75		102.127
	Se	82		104.453
	Mo	97		100.853
	Ag	107		96.574
	Cd	111		99.333
>	In-1	115	98.882	
	Sb	123		97.967
	Ba	135		102.175
>	Ho-1	165	99.116	
	Tl	205		96.295
	Pb	208		101.598
	U	238		99.707
>	Sc-2	45	100.478	
	Cr	53		-99.869
	Fe	54		115.577
	Ni	61		101.578
	Cu	63		99.766
	Zn	67		137.738
>	Ge	72	99.120	
	Se	77		-268.185
	Mo	96		104.896
	Ag	109		92.389
>	In-2	115	98.882	
	Cd	114		100.729
	Sb	121		98.766
	Ba	137		103.539
>	Ho-2	165	99.116	
	Tl	203		93.980
	Pb	206		103.979
	Pb	207		104.286
>	Sc	45	100.478	
	Ti	47		99.837
	Sr	86		97.598
	Sr	88		95.171
>	In	115	98.882	
	Sn	118		101.777
	Sn	120		102.516

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cr	53	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 5
Sample Date/Time: Wednesday, April 27, 2005 19:45:13
Autosampler Position: 159
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 5.012

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	49.716128	6.166	8368.561	ug/L	7.667
	10	B	99.760604	3.359	3194.056	ug/L	27.667
	23	Na	1863.382832	2.564	6954261.838	ug/L	18838.944
	24	Mg	47048.591363	3.581	127272414.417	ug/L	2106.176
	27	Al	49990.489654	3.401	206766177.490	ug/L	3413.777
	39	K	1925.810478	3.504	16200058.214	ug/L	807733.282
	44	Ca	49661.042107	2.950	12790839.089	ug/L	61872.368
>	45	Sc-1			441614.661	ug/L	454114.374
	51	V	49.894701	3.726	473496.636	ug/L	-26072.212
	52	Cr	51.821427	3.812	482066.936	ug/L	26547.338
	55	Mn	81.782196	2.257	752470.100	ug/L	3062.361
	57	Fe	20028.638649	3.982	6098475.420	ug/L	9798.695
	59	Co	48.859841	0.790	548666.099	ug/L	232.338
	60	Ni	98.125196	3.709	236059.436	ug/L	301.006
	65	Cu	48.240489	3.340	127690.735	ug/L	168.336
	66	Zn	97.969237	2.031	186857.352	ug/L	15137.170
>	72	Ge-1			711926.280	ug/L	739226.379
	75	As	103.308060	2.193	204758.440	ug/L	-1945.453
	82	Se	98.838069	3.810	21748.258	ug/L	-120.854
	97	Mo	103.798791	2.604	277599.838	ug/L	72.001
	107	Ag	93.001234	1.767	1156279.392	ug/L	287.339
	111	Cd	99.249900	1.749	283253.481	ug/L	39.334
>	115	In-1			1381346.977	ug/L	1483966.870
	123	Sb	101.474768	1.700	721584.245	ug/L	268.758
	135	Ba	50.889214	2.158	118755.753	ug/L	112.002
>	165	Ho-1			1524865.283	ug/L	1592460.464
	205	Tl	98.251858	1.870	2593927.285	ug/L	3951.949
	206	Pb	96.423444	1.559	3485155.296	ug/L	4580.000
	238	U	102.520896	1.913	4737628.764	ug/L	234.671
>	45	Sc-2			441614.661	ug/L	454114.374
	53	Cr	67.094606	31.467	230956.822	ug/L	154333.029
	54	Fe	19740.238777	2.717	13706319.373	ug/L	62090.940
	61	Ni	105.894006	4.360	13029.406	ug/L	1661.113
	63	Cu	48.097377	2.390	263383.941	ug/L	345.008
	67	Zn	100.602014	8.873	38373.393	ug/L	9047.975
>	72	Ge			711926.280	ug/L	739226.379
	77	Se	97.722070	8.691	23943.016	ug/L	8561.780
	98	Mo	103.688112	0.718	700136.393	ug/L	141.970
	109	Ag	99.287200	1.205	1132310.887	ug/L	288.339
>	115	In-2			1381346.977	ug/L	1483966.870
	114	Cd	98.585881	1.676	628494.151	ug/L	84.731
	121	Sb	101.704336	1.674	947182.875	ug/L	349.674
	137	Ba	52.312330	1.072	204563.261	ug/L	156.669
>	165	Ho-2			1524865.283	ug/L	1592460.464
	203	Tl	95.102655	2.384	1066903.111	ug/L	1582.773
	206	Pb	96.365741	1.558	886219.227	ug/L	1161.392
	207	Pb	101.471043	1.302	770401.006	ug/L	995.045
>	45	Sc			441614.661	ug/L	454114.374
	47	Ti	51.388904	4.170	37384.593	ug/L	297.006
	86	Sr	98.841449	1.807	347078.379	ug/L	716.656
	88	Sr	100.803580	1.951	3079914.617	ug/L	5834.250
>	115	In			1381346.977	ug/L	1483966.870
	118	Sn	102.253698	0.810	801413.176	ug/L	855.034
	120	Sn	105.273712	1.602	1085664.337	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		99.432

	B	10		99.761
	Na	23		93.169
	Mg	24		94.067
	Al	27		99.861
	K	39		98.291
	Ca	44		99.322
>	Sc-1	45	97.247	
	V	51		99.759
	Cr	52		103.643
	Mn	55		103.864
	Fe	57		100.143
	Co	59		97.729
	Ni	60		96.126
	Cu	65		96.481
	Zn	66		97.989
>	Ge-1	72	96.307	
	As	75		103.398
	Se	82		99.838
	Mo	97		103.809
	Ag	107		93.001
	Cd	111		99.269
>	In-1	115	93.066	
	Sb	123		101.476
	Ba	135		101.778
>	Ho-1	165	96.756	
	Tl	205		99.282
	Pb	208		94.423
	U	238		102.521
>	Sc-2	45	97.247	
	Cr	53		134.196
	Fe	54		99.701
	Ni	61		106.894
	Cu	63		96.196
	Zn	67		100.802
>	Ge	72	96.307	
	Se	77		97.722
	Mo	98		103.899
	Ag	109		99.287
>	In-2	115	93.066	
	Cd	114		99.896
	Sb	121		101.704
	Ba	137		104.826
>	Ho-2	165	96.756	
	Tl	203		99.193
	Pb	206		99.365
	Pb	207		101.471
>	Sc	45	97.247	
	Ti	47		102.774
	Sr	86		99.841
	Sr	88		100.804
>	In	115	93.066	
	Sn	118		102.264
	Sn	120		106.274

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cr	53	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: ICSA
Sample Date/Time: Wednesday, April 27, 2005 19:51:21
Autosampler Position: 158
Dataset File: D:\Elandata\Dataset\042705M2\ICSA.013

Sample Result Summary

Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
9	Be	-0.016990	53.026	4.667	ug/L	7.667
10	B	3.744594	12.933	146.336	ug/L	27.667
23	Na	8.032742	1.873	49073.302	ug/L	18838.944
24	Mg	46319.705200	1.640	127544593.180	ug/L	2106.176
27	Al	49799.994858	1.490	209859471.771	ug/L	3413.777
39	K	-13.961056	10.243	685545.835	ug/L	807733.262
44	Ca	49323.708527	1.879	12928762.278	ug/L	61872.368
45	Sc-1			449384.522	ug/L	454114.374
51	V	-1.249464	32.982	-38506.467	ug/L	-26072.212
52	Cr	0.992255	60.094	32484.898	ug/L	26647.338
55	Mn	1.114419	2.148	19446.423	ug/L	3062.361
57	Fe	19678.206865	1.023	6099446.306	ug/L	9796.695
59	Co	0.089024	3.460	1243.067	ug/L	232.338
60	Ni	1.141623	3.829	3090.032	ug/L	301.006
65	Cu	0.243851	2.473	822.699	ug/L	168.336
66	Zn	1.536710	2.170	17406.107	ug/L	15137.170
72	Ge-1			745452.912	ug/L	739226.379
75	As	-0.485478	53.178	-2973.400	ug/L	-1945.453
82	Se	-0.023735	706.788	-126.902	ug/L	-120.854
97	Mo	0.087413	25.246	302.673	ug/L	72.001
107	Ag	0.015201	15.222	441.011	ug/L	267.339
111	Cd	0.016588	15.664	82.001	ug/L	39.334
115	In-1			1391901.455	ug/L	1483966.870
123	Sb	0.142877	23.792	1274.036	ug/L	268.758
135	Ba	0.402850	0.327	1032.048	ug/L	112.002
165	Ho-1			1526786.130	ug/L	1592460.464
205	Tl	0.130825	64.328	7236.684	ug/L	3951.949
208	Pb	0.533012	4.087	29652.524	ug/L	4560.000
238	U	0.006686	24.376	487.680	ug/L	234.671
45	Sc-2			449384.522	ug/L	454114.374
53	Cr	33.458664	54.451	193877.243	ug/L	154333.029
54	Fe	19972.913749	1.611	14115446.765	ug/L	62090.940
61	Ni	8.146662	21.890	2537.918	ug/L	1661.113
63	Cu	0.133873	6.218	1086.719	ug/L	345.008
67	Zn	14.601960	45.179	13033.156	ug/L	9047.975
72	Ge			745452.912	ug/L	739226.379
77	Se	12.219809	48.875	10910.030	ug/L	8561.780
98	Mo	0.085822	21.517	716.107	ug/L	141.970
109	Ag	0.015643	23.769	468.679	ug/L	288.339
115	In-2			1391901.455	ug/L	1483966.870
114	Cd	0.011187	26.716	151.218	ug/L	84.731
121	Sb	0.138402	20.827	1624.777	ug/L	349.674
137	Ba	0.423763	2.123	1808.133	ug/L	156.669
165	Ho-2			1526785.130	ug/L	1592460.464
203	Tl	0.138998	60.226	3073.381	ug/L	1582.773
206	Pb	0.560436	7.050	6161.059	ug/L	1161.392
207	Pb	0.544415	2.981	5066.957	ug/L	995.045
45	Sc			449384.522	ug/L	454114.374
47	Ti	1.341525	11.128	1278.404	ug/L	297.006
86	Sr	0.613545	2.804	2897.402	ug/L	716.666
88	Sr	0.331674	4.416	16067.195	ug/L	5834.250
115	In			1391901.455	ug/L	1483966.870
118	Sn	0.058065	24.974	1259.402	ug/L	855.034
120	Sn	0.058939	22.974	1645.898	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	98.988
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	100.842
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	93.796
	Sb	123	
	Ba	135	
>	Ho-1	165	95.876
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	98.988
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	100.842
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	93.796
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	166	95.876
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	98.988
	Ti	47	
	Sr	88	
	Sr	88	
>	In	115	93.796
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: CCV
Sample Date/Time: Wednesday, April 27, 2005 19:56:31
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042705M2\CCV.014

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	193.283507	3.479	33014.775	ug/L	7.667
	10	B	194.098809	1.240	6271.773	ug/L	27.667
	23	Na	1882.666422	1.957	7120216.928	ug/L	18838.944
	24	Mg	967.658804	2.174	2663782.641	ug/L	2106.176
	27	Al	1967.503497	0.750	8249347.516	ug/L	3413.777
	39	K	1969.500389	4.104	16680724.162	ug/L	807733.282
	44	Ca	1047.544205	4.360	332877.411	ug/L	61872.368
>	45	Sc-1			447375.499	ug/L	454114.374
	51	V	194.783129	1.810	1946498.141	ug/L	-26072.212
	52	Cr	196.891749	2.600	1773212.335	ug/L	28547.338
	55	Mn	199.995714	2.547	2936969.854	ug/L	3062.361
	57	Fe	1966.500771	1.078	612394.700	ug/L	9798.695
	59	Co	203.906192	2.373	2310324.429	ug/L	232.338
	60	Ni	196.873198	3.011	479537.948	ug/L	301.006
	65	Cu	199.870529	2.586	536363.509	ug/L	168.336
	66	Zn	198.274685	0.663	326853.904	ug/L	15137.170
>	72	Ge-1			734916.874	ug/L	739226.379
	75	As	199.769003	2.078	410588.785	ug/L	-1945.453
	82	Se	198.196137	2.161	45230.886	ug/L	-120.854
	97	Mo	201.442864	3.002	557763.360	ug/L	72.001
	107	Ag	49.421550	1.408	647820.913	ug/L	267.339
	111	Cd	193.744765	1.390	582835.446	ug/L	39.334
>	115	In-1			1456030.918	ug/L	1483966.870
	123	Sb	198.119845	1.254	1464960.726	ug/L	268.758
	135	Ba	206.884898	1.870	480028.806	ug/L	112.002
>	165	Ho-1			1543420.991	ug/L	1592460.464
	205	Tl	199.812722	3.833	5086553.675	ug/L	3951.949
	208	Pb	194.296788	1.470	7103252.367	ug/L	4580.000
	238	U	193.364380	3.126	9041372.855	ug/L	234.571
>	45	Sc-2			447375.499	ug/L	454114.374
	53	Cr	174.134718	2.484	364916.988	ug/L	154333.029
	54	Fe	2038.540242	1.574	1488974.107	ug/L	62090.940
	61	Ni	200.807570	6.472	23528.951	ug/L	1661.113
	63	Cu	203.406769	1.822	1127271.889	ug/L	345.006
	67	Zn	197.623233	1.320	63820.633	ug/L	9047.975
>	72	Ge			734916.874	ug/L	739226.379
	77	Se	176.693230	1.686	41129.971	ug/L	8561.790
	98	Mo	201.941383	1.014	1437139.835	ug/L	141.970
	109	Ag	48.465972	2.414	648053.261	ug/L	288.338
>	115	In-2			1456030.918	ug/L	1483966.870
	114	Cd	193.783801	0.561	1302241.361	ug/L	84.731
	121	Sb	196.818874	0.480	1931965.957	ug/L	349.674
	137	Ba	206.996220	2.935	814751.897	ug/L	156.669
>	165	Ho-2			1543420.991	ug/L	1592460.464
	203	Tl	191.467046	3.492	2172496.073	ug/L	1562.773
	206	Pb	197.389625	2.278	1798691.863	ug/L	1161.392
	207	Pb	198.468196	1.536	1524153.372	ug/L	995.045
>	45	Sc			447375.499	ug/L	454114.374
	47	Ti	195.897470	1.416	143580.825	ug/L	297.006
	86	Sr	199.731408	2.654	709633.586	ug/L	716.656
	88	Sr	199.611848	0.350	6173540.236	ug/L	5834.250
>	115	In			1456030.918	ug/L	1483966.870
	118	Sn	201.550593	0.230	1684313.234	ug/L	855.034
	120	Sn	204.256595	2.910	2219440.919	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	98.516
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	98.417
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.117
	Sb	123	
	Ba	135	
>	Ho-1	165	98.921
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	98.516
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	98.417
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.117
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	98.921
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	98.516
	Ti	47	
	Sr	88	
	Sr	86	
>	In	115	98.117
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: CCB
Sample Date/Time: Wednesday, April 27, 2005 20:01:41
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042705M2\CCB.015

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.019603	134.951	11.000	ug/L	7.667
	10	B	3.633709	21.718	146.336	ug/L	27.667
	23	Na	-0.067454	209.824	18501.492	ug/L	18838.944
	24	Mg	0.246513	28.789	2785.968	ug/L	2106.176
	27	Al	0.336386	50.957	4841.220	ug/L	3413.777
	39	K	-9.589404	37.363	725452.568	ug/L	807733.282
	44	Ca	-0.122251	7584.074	61559.971	ug/L	61872.368
>	45	Sc-1			452530.902	ug/L	454114.374
	51	V	0.106791	346.752	-24925.312	ug/L	-26072.212
	52	Cr	-0.618651	29.090	20647.758	ug/L	26547.338
	55	Mn	0.049476	14.598	3783.873	ug/L	3062.361
	57	Fe	-2.835621	24.485	8875.106	ug/L	9798.695
	59	Co	0.007995	48.213	324.340	ug/L	232.338
	60	Ni	0.009427	166.726	324.007	ug/L	301.006
	65	Cu	0.015834	29.974	210.337	ug/L	168.336
	66	Zn	-0.075160	367.690	14952.972	ug/L	15137.170
>	72	Ge-1			728709.820	ug/L	739228.379
	75	As	0.758601	28.398	-383.630	ug/L	-1945.453
	82	Se	0.419606	34.400	-23.891	ug/L	-120.854
	97	Mo	0.126960	45.488	441.579	ug/L	72.001
	107	Ag	0.005371	35.714	344.341	ug/L	287.339
	111	Cd	0.010460	57.289	72.334	ug/L	39.334
>	115	In-1			1507503.969	ug/L	1483986.870
	123	Sb	0.163606	34.456	1537.655	ug/L	268.758
	135	Ba	0.004517	103.890	123.002	ug/L	112.002
>	165	Ho-1			1594921.061	ug/L	1592460.464
	205	Tl	0.375250	49.370	14335.642	ug/L	3951.949
	208	Pb	-0.004031	117.197	4435.982	ug/L	4560.000
	238	U	0.000531	25.092	896.358	ug/L	234.671
>	45	Sc-2			452530.902	ug/L	454114.374
	53	Cr	-9.320626	144.492	141846.386	ug/L	154333.029
	54	Fe	-1.537967	154.788	60743.234	ug/L	62090.940
	61	Ni	-0.473738	138.461	1801.439	ug/L	1661.113
	63	Cu	0.010601	40.290	402.678	ug/L	345.006
	67	Zn	3.039486	120.535	9646.836	ug/L	9047.975
>	72	Ge			728709.820	ug/L	739228.379
	77	Se	-23.401783	6.242	4153.948	ug/L	8561.780
	98	Mo	0.124920	39.709	1060.910	ug/L	141.970
	109	Ag	0.021536	40.380	589.686	ug/L	288.339
>	115	In-2			1507503.969	ug/L	1483986.870
	114	Cd	0.008526	9.691	145.332	ug/L	84.731
	121	Sb	0.169417	33.886	2070.511	ug/L	349.674
	137	Ba	0.010996	55.136	202.003	ug/L	156.669
>	165	Ho-2			1594921.061	ug/L	1592460.464
	203	Tl	0.356118	50.814	5771.334	ug/L	1582.773
	206	Pb	-0.001823	341.373	1146.391	ug/L	1161.392
	207	Pb	-0.007946	40.005	933.707	ug/L	995.045
>	45	Sc			452530.902	ug/L	454114.374
	47	Ti	0.147949	127.257	405.344	ug/L	297.006
	86	Sr	0.002140	990.831	721.606	ug/L	716.656
	88	Sr	-0.001186	404.537	5772.891	ug/L	5834.250
>	115	In			1507503.969	ug/L	1483986.870
	118	Sn	0.092162	40.578	1652.781	ug/L	855.034
	120	Sn	0.104831	29.183	2293.686	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	99.951
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	99.577
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	116	101.596
	Sb	123	
	Ba	135	
>	Ho-1	165	100.156
	Tl	205	
	Pb	208	
	U	238	
>	Sc-3	45	99.951
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	99.577
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	101.596
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	100.156
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	99.951
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	101.596
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G849FB
Sample Date/Time: Wednesday, April 27, 2005 20:06:47
Autosampler Position: 24
Dataset File: D:\Elandata\Dataset\042705M2\G849FB.016

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌜	9	Be	0.001488	2369.348	8.000	ug/L	7.867
|	10	B	1.884681	27.209	90.001	ug/L	27.667
|	23	Na	1.934226	2.535	26473.439	ug/L	18838.944
|	24	Mg	4.987083	4.212	15116.921	ug/L	2106.176
|	27	Al	2.819912	1.581	14257.587	ug/L	3413.777
|	39	K	-0.841287	7.816	733061.825	ug/L	807733.282
|	44	Ca	14.706345	24.392	66320.252	ug/L	61872.368
|>	45	Sc-1			458095.076	ug/L	454114.374
|	51	V	-0.832397	102.704	-32880.263	ug/L	-26072.212
|	52	Cr	0.054984	592.162	27268.791	ug/L	26547.338
|	55	Mn	0.137409	6.688	5152.981	ug/L	3062.361
|	57	Fe	-2.197112	22.013	9190.648	ug/L	9796.695
|	59	Co	0.004896	59.818	289.008	ug/L	232.338
|	60	Ni	0.069170	9.186	476.013	ug/L	301.006
|	65	Cu	0.109419	6.612	470.012	ug/L	168.336
⌊	66	Zn	0.365033	21.615	15842.272	ug/L	15137.170
⌜>	72	Ge-1			740698.030	ug/L	739226.379
|	75	As	0.537367	44.861	-831.371	ug/L	-1945.453
⌊	82	Se	0.224593	119.306	-69.182	ug/L	-120.854
⌜	97	Mo	0.026879	32.680	147.002	ug/L	72.001
|	107	Ag	0.021426	10.568	556.016	ug/L	257.339
|	111	Cd	-0.000932	220.048	36.667	ug/L	39.334
|>	115	In-1			1490875.110	ug/L	1483966.870
⌊	123	Sb	0.121485	11.333	1201.785	ug/L	268.758
⌜	135	Ba	0.122091	10.263	396.009	ug/L	112.002
|>	165	Ho-1			1580328.388	ug/L	1592460.464
|	205	Tl	0.070288	75.664	5761.266	ug/L	3951.949
|	208	Pb	0.001404	866.686	4534.664	ug/L	4580.000
⌊	238	U	-0.001830	23.573	143.335	ug/L	234.671
⌜>	45	Sc-2			458095.076	ug/L	454114.374
|	53	Cr	16.277178	84.721	175990.121	ug/L	154333.029
|	54	Fe	15.726518	6.676	73912.400	ug/L	62090.940
|	61	Ni	-1.280411	49.115	1532.098	ug/L	1661.113
|	63	Cu	0.106771	4.776	948.374	ug/L	345.006
⌊	67	Zn	10.054568	53.713	11980.190	ug/L	9047.975
⌜>	72	Ge			740698.090	ug/L	739226.379
⌊	77	Se	-16.715207	8.169	5457.683	ug/L	8561.780
⌜	98	Mo	0.025054	15.916	325.089	ug/L	141.970
|	109	Ag	0.029897	7.306	698.691	ug/L	288.339
|>	115	In-2			1490875.110	ug/L	1483966.870
|	114	Cd	-0.000920	144.916	78.830	ug/L	84.731
⌊	121	Sb	0.122911	8.411	1586.104	ug/L	348.874
⌜	137	Ba	0.124408	5.134	650.688	ug/L	158.669
|>	165	Ho-2			1580328.388	ug/L	1592460.464
|	203	Tl	0.075812	89.838	2416.237	ug/L	1582.773
|	206	Pb	-0.000072	19362.816	1136.057	ug/L	1161.392
⌊	207	Pb	0.000323	2920.278	976.710	ug/L	995.045
⌜>	45	Sc			458095.076	ug/L	454114.374
|	47	Ti	0.339007	75.761	553.350	ug/L	297.006
|	86	Sr	0.018196	116.757	788.882	ug/L	716.656
⌊	88	Sr	0.019116	6.758	6363.481	ug/L	5834.250
⌜>	115	In			1490875.110	ug/L	1483966.870
|	118	Sn	0.063802	6.186	1396.082	ug/L	855.034
⌊	120	Sn	0.068632	12.511	1671.638	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌜	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	100.577
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	100.199
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	100.466
	Sb	123	
	Ba	135	
>	Ho-1	165	97.562
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	100.577
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	100.199
	Se	77	
	Mo	95	
	Ag	109	
>	In-2	115	100.466
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	97.562
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	100.577
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	100.466
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G849FC
Sample Date/Time: Wednesday, April 27, 2005 20:11:53
Autosampler Position: 25
Dataset File: D:\Elandata\Dataset\042705M2\G849FC.017

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	244.406240	1.044	42958.940	ug/L	7.667
	10	B	6.313275	14.256	237.004	ug/L	27.667
	23	Na	4640.795781	1.481	18021935.310	ug/L	18838.944
	24	Mg	4692.858080	2.361	12952012.316	ug/L	2106.176
	27	Al	247.469223	0.483	1070303.602	ug/L	3413.777
	39	K	4683.894845	3.540	39976139.496	ug/L	807733.262
	44	Ca	4888.261842	2.505	1371056.226	ug/L	61872.368
>	45	Sc-1			460168.747	ug/L	454114.374
	51	V	245.640501	4.145	2532606.057	ug/L	-26072.212
	52	Cr	251.763068	2.492	2337263.624	ug/L	26547.338
	55	Mn	243.725544	1.526	3679401.390	ug/L	3062.361
	57	Fe	243.663928	1.696	87146.084	ug/L	9798.695
	59	Co	239.296820	1.310	2788953.478	ug/L	232.338
	60	Ni	242.493117	2.347	607657.959	ug/L	301.006
	65	Cu	244.372804	1.364	673461.066	ug/L	168.336
	66	Zn	237.178557	0.884	399175.482	ug/L	15137.170
>	72	Ge-1			736790.930	ug/L	739226.379
	75	As	256.412360	2.597	528641.047	ug/L	-1945.453
	82	Se	240.944702	2.089	55154.568	ug/L	-120.854
	97	Mo	245.214442	2.145	706409.896	ug/L	72.001
	107	Ag	88.621889	3.924	798495.429	ug/L	287.339
	111	Cd	230.436873	2.535	736159.719	ug/L	39.334
>	115	In-1			1488391.013	ug/L	1483966.870
	123	Sb	237.360915	1.616	1816116.080	ug/L	268.758
	135	Ba	257.898841	2.188	606473.426	ug/L	112.002
>	165	Ho-1			1564328.219	ug/L	1592460.464
	205	Tl	232.788570	1.514	6297742.757	ug/L	3951.949
	208	Pb	237.327088	0.921	8793355.005	ug/L	4580.000
	238	U	-0.001883	5.578	141.335	ug/L	234.671
>	45	Sc-2			460168.747	ug/L	454114.374
	53	Cr	252.298809	5.909	473643.721	ug/L	154333.028
	54	Fe	259.880625	3.562	271786.925	ug/L	52090.940
	61	Ni	249.376490	1.455	29699.475	ug/L	1681.113
	63	Cu	242.992711	2.094	1385316.907	ug/L	345.008
	67	Zn	249.080249	0.751	80335.747	ug/L	9047.975
>	72	Ge			736790.930	ug/L	739226.379
	77	Se	190.481891	1.052	43804.639	ug/L	8561.760
	98	Mo	245.480025	2.538	1785318.535	ug/L	141.970
	109	Ag	84.902890	2.220	750121.685	ug/L	288.339
>	115	In-2			1488391.013	ug/L	1483966.870
	114	Cd	234.631725	2.567	1610564.738	ug/L	84.731
	121	Sb	242.348581	2.859	2431041.161	ug/L	349.674
	137	Ba	257.831870	2.119	1032768.930	ug/L	156.669
>	165	Ho-2			1564328.219	ug/L	1592460.464
	203	Tl	230.220106	2.454	2648961.163	ug/L	1582.773
	206	Pb	244.282382	3.959	2258045.536	ug/L	1161.392
	207	Pb	239.989521	1.538	1887715.183	ug/L	995.045
>	45	Sc			460168.747	ug/L	454114.374
	47	Ti	0.362106	9.476	566.017	ug/L	297.008
	88	Sr	237.314176	2.557	867366.130	ug/L	716.656
	88	Sr	244.317841	1.866	7770595.333	ug/L	5834.250
>	115	In			1488391.013	ug/L	1483966.870
	118	Sn	0.076630	11.105	1503.761	ug/L	855.034
	120	Sn	0.068381	3.115	2067.752	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

B	10	
Na	23	
Mg	24	
Al	27	
K	39	
Ca	44	
Sc-1	45	101.333
V	51	
Cr	52	
Mn	55	
Fe	57	
Co	59	
Ni	60	
Cu	65	
Zn	66	
Ge-1	72	99.671
As	75	
Se	82	
Mo	97	
Ag	107	
Cd	111	
In-1	115	100.299
Sb	123	
Ba	135	
Ho-1	165	99.233
Tl	205	
Pb	208	
U	238	
Sc-2	45	101.333
Cr	53	
Fe	54	
Ni	61	
Cu	63	
Zn	67	
Ge	72	99.671
Se	77	
Mo	98	
Ag	109	
In-2	115	100.299
Cd	114	
Sb	121	
Ba	137	
Ho-2	165	99.233
Tl	203	
Pb	206	
Pb	207	
Sc	45	101.333
Ti	47	
Sr	86	
Sr	88	
In	115	100.299
Sn	118	
Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G833J
Sample Date/Time: Wednesday, April 27, 2005 20:16:59
Autosampler Position: 28
Dataset File: D:\Elandata\Dataset\042705M2\G833J.018

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	-0.002272	846.859	8.000	ug/L	7.667
	10	B	4.308932	11.186	186.670	ug/L	27.667
	23	Na	5391.730532	3.180	22888146.048	ug/L	18838.944
	24	Mg	4758.242648	2.467	14863657.979	ug/L	2106.176
	27	Al	50.726520	1.469	242890.438	ug/L	3413.777
	39	K	1703.149038	3.766	16422660.706	ug/L	807733.282
	44	Ca	12732.965877	4.586	3784045.496	ug/L	61872.368
>	45	Sc-1			503147.755	ug/L	454114.374
	51	V	4.210135	24.415	18889.512	ug/L	-26072.212
	52	Cr	99.421388	3.500	1026520.884	ug/L	26547.338
	55	Mn	6.282340	2.906	106950.274	ug/L	3062.361
	57	Fe	21.835717	10.351	18410.786	ug/L	9796.895
	59	Co	0.028460	26.670	818.353	ug/L	232.338
	60	Ni	0.430780	4.530	1512.095	ug/L	301.006
	65	Cu	0.237749	2.286	902.371	ug/L	168.336
	66	Zn	2.581376	15.559	21326.122	ug/L	15137.170
>	72	Ge-1			780086.284	ug/L	739226.379
	75	As	0.661825	40.354	-602.135	ug/L	-1945.453
	82	Se	0.730993	37.835	49.664	ug/L	-120.854
	97	Mo	1.015118	6.637	2966.676	ug/L	72.001
	107	Ag	0.004680	13.306	329.340	ug/L	287.339
	111	Cd	0.011320	32.122	74.001	ug/L	39.334
>	115	In-1			1483559.605	ug/L	1483966.870
	123	Sb	0.318331	11.797	2869.116	ug/L	268.758
	135	Ba	4.811709	3.331	11473.722	ug/L	112.002
>	165	Ho-1			1571340.176	ug/L	1592460.464
	205	Tl	0.600040	56.183	17408.351	ug/L	3951.949
	208	Pb	0.056896	33.665	6628.671	ug/L	4580.000
	238	U	0.306592	1.302	14923.942	ug/L	234.671
>	45	Sc-2			503147.755	ug/L	454114.374
	53	Cr	147.241739	15.722	373574.014	ug/L	154333.029
	54	Fe	66.366548	8.687	121026.479	ug/L	62090.940
	61	Ni	-0.390788	189.239	1790.797	ug/L	1661.113
	63	Cu	0.296894	8.085	2230.197	ug/L	345.008
	67	Zn	12.996013	27.626	14068.454	ug/L	9047.975
>	72	Ge			780086.284	ug/L	739226.379
	77	Se	33.969992	54.491	15684.778	ug/L	8561.780
	98	Mo	1.042936	7.637	7703.354	ug/L	141.970
	109	Ag	0.007376	29.230	388.676	ug/L	288.339
>	115	In-2			1483559.605	ug/L	1483966.870
	114	Cd	0.008802	26.584	129.890	ug/L	84.731
	121	Sb	0.309403	12.056	3443.453	ug/L	349.674
	137	Ba	4.839843	1.099	19637.352	ug/L	156.669
>	165	Ho-2			1571340.176	ug/L	1592460.464
	203	Tl	0.488030	61.345	7161.790	ug/L	1582.773
	206	Pb	0.056895	34.692	1662.447	ug/L	1161.392
	207	Pb	0.061778	31.087	1483.090	ug/L	995.045
>	45	Sc			503147.755	ug/L	454114.374
	47	Ti	1.254136	5.284	1359.746	ug/L	297.006
	86	Sr	60.628761	5.387	202728.642	ug/L	716.656
	88	Sr	48.654609	3.230	1696399.435	ug/L	5834.250
>	115	In			1483559.605	ug/L	1483966.870
	118	Sn	0.067310	5.734	1420.752	ug/L	855.034
	120	Sn	0.073751	4.902	1919.217	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	110.798
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	66	
	Zn	66	
>	Ge-1	72	106.527
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.973
	Sb	123	
	Ba	135	
>	Ho-1	165	99.674
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	110.798
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	106.527
	Se	77	
	Mo	96	
	Ag	109	
>	In-2	115	99.973
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	99.674
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	110.798
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	99.973
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G833JS
Sample Date/Time: Wednesday, April 27, 2005 20:22:06
Autosampler Position: 27
Dataset File: D:\Elandata\Dataset\042705M2\G833JS.019

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌜	9	Be	11.327484	2.830	2136.514	ug/L	7.667
|	10	B	4.895659	12.337	192.337	ug/L	27.667
|	23	Na	16681.416588	4.500	69112727.861	ug/L	18838.944
|	24	Mg	15786.518259	2.598	47590427.717	ug/L	2106.176
|	27	Al	519.948636	0.961	2400970.826	ug/L	3413.777
|	39	K	13429.647959	2.185	120666730.282	ug/L	807733.282
|	44	Ca	24582.816172	3.358	7121103.547	ug/L	61872.368
|>	45	Sc-1			492181.002	ug/L	454114.374
|	51	V	129.715072	0.642	1416764.848	ug/L	-26072.212
|	52	Cr	144.287809	3.443	1444081.584	ug/L	26547.338
|	55	Mn	116.977242	2.963	1890164.338	ug/L	3062.361
|	57	Fe	232.960912	2.268	89559.743	ug/L	9798.695
|	59	Co	112.578947	0.741	1403888.750	ug/L	232.338
|	60	Ni	112.725841	1.333	302263.474	ug/L	301.006
|	65	Cu	88.400052	3.373	166298.819	ug/L	168.336
⌊	66	Zn	110.377963	2.148	207406.182	ug/L	15137.170
⌈>	72	Ge-1			766429.644	ug/L	739226.379
|	75	As	492.066281	2.234	1057565.043	ug/L	-1945.453
⌊	82	Se	466.890628	0.267	111071.994	ug/L	-120.864
⌈	97	Mo	256.632187	2.292	715952.166	ug/L	72.001
|	107	Ag	11.923518	2.395	154891.118	ug/L	287.339
|	111	Cd	12.573901	2.428	37478.153	ug/L	39.334
|>	115	In-1			1441386.369	ug/L	1483986.870
⌊	123	Sb	124.024894	1.975	920161.012	ug/L	268.758
⌈	138	Ba	496.681662	1.942	1179043.044	ug/L	112.002
|>	165	Ho-1			1579318.193	ug/L	1592460.464
|	205	Tl	468.862437	1.134	12532387.084	ug/L	3951.949
|	208	Pb	118.045214	1.983	4417837.240	ug/L	4580.000
⌊	238	U	0.306000	1.193	14828.174	ug/L	234.671
⌈>	45	Sc-2			492181.002	ug/L	454114.374
|	53	Cr	196.722930	6.828	431795.071	ug/L	154333.029
|	54	Fe	311.836409	5.676	307442.993	ug/L	62090.940
|	61	Ni	115.378386	0.714	15863.742	ug/L	1661.113
|	63	Cu	56.423986	2.256	344319.356	ug/L	345.008
⌊	67	Zn	130.366000	3.717	49630.243	ug/L	9047.975
⌈>	72	Ge			766429.644	ug/L	739226.379
⌊	77	Se	466.838364	1.938	96868.892	ug/L	8561.780
⌈	98	Mo	264.347382	1.263	1791709.556	ug/L	141.970
|	109	Ag	11.074236	0.520	146781.064	ug/L	288.339
|>	115	In-2			1441386.369	ug/L	1483986.870
|	114	Cd	12.410360	1.617	82623.010	ug/L	84.731
⌊	121	Sb	124.841984	3.124	1210925.603	ug/L	349.674
⌈	137	Ba	496.309102	2.887	2017198.720	ug/L	156.669
|>	165	Ho-2			1579318.193	ug/L	1592460.464
|	203	Tl	466.902994	0.584	5291416.253	ug/L	1582.773
|	206	Pb	118.261744	1.870	1103230.857	ug/L	1161.392
⌊	207	Pb	122.490831	0.648	963009.729	ug/L	995.045
⌈>	45	Sc			492181.002	ug/L	454114.374
|	47	Ti	1.709455	8.609	1696.785	ug/L	297.006
|	86	Sr	271.767786	4.246	1051792.825	ug/L	716.656
⌊	88	Sr	272.303684	1.685	9261210.691	ug/L	5634.250
⌈>	115	In			1441386.369	ug/L	1483986.870
|	118	Sn	0.066825	4.665	1377.080	ug/L	855.034
⌊	120	Sn	0.071218	1.235	1837.368	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Be	9		

B	10	
Na	23	
Mg	24	
Al	27	
K	39	
Ca	44	
> Sc-1	45	108.383
V	51	
Cr	52	
Mn	55	
Fe	57	
Co	59	
Ni	60	
Cu	65	
Zn	66	
> Ge-1	72	103.880
As	75	
Se	82	
Mo	97	
Ag	107	
Cd	111	
> In-1	115	97.131
Sb	123	
Ba	135	
> Ho-1	165	99.175
Tl	205	
Pb	208	
U	238	
> Sc-2	45	108.383
Cr	53	
Fe	54	
Ni	61	
Cu	63	
Zn	67	
> Ge	72	103.880
Se	77	
Mo	96	
Ag	109	
> In-2	115	97.131
Cd	114	
Sb	121	
Ba	137	
> Ho-2	165	99.175
Tl	203	
Pb	206	
Pb	207	
> Sc	45	108.383
Ti	47	
Sr	88	
Sr	88	
> In	115	97.131
Sn	118	
Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G833JD
Sample Date/Time: Wednesday, April 27, 2005 20:27:13
Autosampler Position: 28
Dataset File: D:\Elandata\Dataset\042705M2\G833JD.020

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌈	9	Be	11.284955	3.192	2162.852	ug/L	7.667
|	10	B	4.790994	4.819	203.003	ug/L	27.667
|	23	Na	16858.804235	4.040	69921630.651	ug/L	18838.944
|	24	Mg	15749.102244	5.445	48310960.938	ug/L	2106.176
|	27	Al	514.266526	3.045	2417021.201	ug/L	3413.777
|	39	K	13054.753819	2.573	119427134.345	ug/L	807733.282
|	44	Ca	24412.803619	3.887	7164955.684	ug/L	61872.368
|>	45	Sc-1			500966.022	ug/L	454114.374
|	51	V	128.604342	1.879	1429895.126	ug/L	-26072.212
|	52	Cr	144.076768	2.242	1468229.210	ug/L	26547.338
|	55	Mn	117.550207	1.366	1933915.254	ug/L	3062.361
|	57	Fe	233.042667	2.894	91176.311	ug/L	9798.895
|	59	Co	108.783050	2.433	1380050.300	ug/L	232.338
|	60	Ni	113.530311	1.725	309805.315	ug/L	301.006
|	65	Cu	56.232883	3.897	165767.409	ug/L	168.336
⌊	66	Zn	107.978348	2.035	206802.005	ug/L	15137.170
⌈>	72	Ge-1			746825.101	ug/L	739226.379
|	75	As	503.092812	1.204	1053801.256	ug/L	-1945.483
⌊	82	Se	477.858836	1.257	111008.007	ug/L	-120.854
⌈	97	Mo	252.894834	2.583	708441.483	ug/L	72.001
|	107	Ag	11.735229	0.347	152872.447	ug/L	267.339
|	111	Cd	12.324600	1.916	36785.352	ug/L	39.334
|>	115	In-1			1443160.325	ug/L	1483966.870
⌊	123	Sb	121.669171	2.429	903756.637	ug/L	268.758
⌈	135	Ba	503.097422	1.907	1189514.703	ug/L	112.002
|>	165	Ho-1			1546348.522	ug/L	1592460.464
|	205	Tl	468.685852	2.936	12529717.479	ug/L	3951.949
|	208	Pb	120.162170	1.573	4402884.481	ug/L	4580.000
⌊	238	U	0.322688	3.606	15345.730	ug/L	234.671
⌈>	45	Sc-2			500966.022	ug/L	454114.374
|	53	Cr	194.733717	8.430	436589.055	ug/L	154333.029
|	54	Fe	303.946664	5.127	306775.087	ug/L	62090.940
|	61	Ni	114.142619	4.171	15785.543	ug/L	1661.113
|	63	Cu	55.200821	0.424	342908.088	ug/L	345.008
⌊	67	Zn	126.433360	7.255	49275.083	ug/L	9047.976
⌈>	72	Ge			746825.101	ug/L	739226.379
⌊	77	Se	468.842473	2.730	94769.345	ug/L	8561.780
⌈	98	Mo	248.936216	1.771	1755702.286	ug/L	141.970
|	109	Ag	10.937217	1.244	145140.039	ug/L	288.339
|>	115	In-2			1443160.325	ug/L	1483966.870
|	114	Cd	12.516663	3.641	83420.860	ug/L	84.731
⌊	121	Sb	123.578755	0.936	1202365.837	ug/L	349.874
⌈	137	Ba	501.146372	1.521	1985829.050	ug/L	156.669
|>	165	Ho-2			1546348.522	ug/L	1592460.464
|	203	Tl	469.081519	2.844	5216410.493	ug/L	1582.773
|	206	Pb	121.799201	2.949	1112376.553	ug/L	1161.392
⌊	207	Pb	126.037411	2.599	970034.425	ug/L	995.045
⌈>	45	Sc			500966.022	ug/L	454114.374
|	47	Ti	1.774062	7.894	1779.462	ug/L	297.006
|	86	Sr	264.891060	1.844	1053727.869	ug/L	716.656
⌊	88	Sr	267.667239	1.147	9268954.758	ug/L	5834.250
⌈>	115	In			1443160.325	ug/L	1483966.870
|	118	Sn	0.114961	3.616	1771.794	ug/L	855.034
⌊	120	Sn	0.130210	4.783	2474.066	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	110.317
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	66	
	Zn	66	
>	Ge-1	72	101.028
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	97.289
	Sb	123	
	Ba	135	
>	Ho-1	165	97.194
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	110.317
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.028
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	97.289
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	97.194
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	110.317
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	97.289
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G833JA
Sample Date/Time: Wednesday, April 27, 2005 20:32:21
Autosampler Position: 29
Dataset File: D:\Elandata\Dataset\042705M2\G833JA.021

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	22.416066	1.521	4350.706	ug/L	7.667
	10	B	4.272818	15.257	187.003	ug/L	27.667
	23	Na	27581.261546	1.229	117988628.989	ug/L	18838.944
	24	Mg	26944.793578	4.141	83709006.529	ug/L	2106.176
	27	Al	990.706574	3.389	4709762.747	ug/L	3413.777
	39	K	25215.966696	5.327	232599894.366	ug/L	807733.282
	44	Ca	36268.806656	4.270	10739583.868	ug/L	61872.368
>	45	Sc-1			507409.917	ug/L	454114.374
	51	V	244.921567	1.715	2783419.540	ug/L	-26072.212
	52	Cr	186.089164	1.336	1912226.923	ug/L	26547.338
	55	Mn	228.097413	3.679	3795405.998	ug/L	3062.361
	57	Fe	434.448692	1.036	162718.875	ug/L	9798.695
	59	Co	217.047636	4.793	2786495.177	ug/L	232.338
	60	Ni	215.051306	1.793	593973.477	ug/L	301.006
	65	Cu	105.590670	3.094	320749.387	ug/L	168.336
	66	Zn	213.472302	4.957	397441.873	ug/L	15137.170
>	72	Ge-1			733163.866	ug/L	739226.379
	75	As	1129.431838	1.647	2324508.054	ug/L	-1945.453
	82	Se	963.199883	2.595	219782.685	ug/L	-120.854
	97	Mo	576.230163	1.783	1620342.988	ug/L	72.001
	107	Ag	23.105075	2.818	302251.108	ug/L	267.339
	111	Cd	25.116401	2.592	75405.914	ug/L	39.334
>	115	In-1			1452925.041	ug/L	1483966.870
	123	Sb	279.725697	1.060	2091643.548	ug/L	268.758
	135	Ba	1056.037482	1.444	2433379.208	ug/L	112.002
>	165	Ho-1			1532736.673	ug/L	1592460.464
	205	Tl	929.930360	1.880	24641946.493	ug/L	3951.949
	208	Pb	236.948689	0.821	8801972.856	ug/L	4580.000
	238	U	0.318107	0.912	14998.687	ug/L	234.671
>	45	Sc-2			507409.917	ug/L	454114.374
	53	Cr	220.362348	1.969	477930.718	ug/L	154333.029
	54	Fe	531.048169	4.916	490887.123	ug/L	62090.940
	61	Ni	220.120729	3.815	29100.901	ug/L	1661.113
	63	Cu	107.395295	3.338	674876.102	ug/L	345.008
	67	Zn	237.079737	1.439	84792.549	ug/L	9047.975
>	72	Ge			733163.866	ug/L	739226.379
	77	Se	875.869173	1.562	169862.335	ug/L	8561.780
	98	Mo	586.580718	2.367	4164164.335	ug/L	141.970
	109	Ag	21.953444	1.664	291642.810	ug/L	288.339
>	115	In-2			1452925.041	ug/L	1483966.870
	114	Cd	25.421010	1.754	170496.475	ug/L	84.731
	121	Sb	280.366097	1.654	2745560.671	ug/L	349.674
	137	Ba	1024.729060	1.604	4024816.150	ug/L	158.669
>	165	Ho-2			1532736.673	ug/L	1592460.464
	203	Tl	921.154742	1.381	10374147.480	ug/L	1582.773
	206	Pb	249.881785	1.325	2261465.466	ug/L	1161.392
	207	Pb	241.968482	2.623	1845097.900	ug/L	995.045
>	45	Sc			507409.917	ug/L	454114.374
	47	Ti	2.300862	7.128	2242.533	ug/L	297.006
	86	Sr	465.886314	5.328	1874847.545	ug/L	716.656
	88	Sr	462.849673	4.348	16912466.561	ug/L	5834.250
>	115	In			1452925.041	ug/L	1483966.870
	118	Sn	0.096733	5.994	1633.443	ug/L	855.034
	120	Sn	0.117166	4.303	2350.789	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	111.736
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	99.189
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	97.906
	Sb	123	
	Ba	135	
>	Ho-1	165	96.259
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	111.736
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	99.189
	Se	77	
	Mo	95	
	Ag	109	
>	In-2	115	97.906
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	96.259
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	111.736
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	97.906
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G833JV
Sample Date/Time: Wednesday, April 27, 2005 20:37:29
Autosampler Position: 30
Dataset File: D:\Elandata\Dataset\042705M2\G833JV.022

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	-0.003811	675.774	7.000	ug/L	7.667
	10	B	1.944867	70.321	92.335	ug/L	27.667
	23	Na	1158.782906	2.883	4513552.612	ug/L	18838.944
	24	Mg	1060.983289	4.371	2983781.719	ug/L	2106.176
	27	Al	13.321681	2.805	60883.416	ug/L	3413.777
	39	K	349.180413	4.367	3730627.307	ug/L	807733.282
	44	Ca	2575.217491	2.776	750519.025	ug/L	61872.368
>	45	Sc-1			460376.166	ug/L	454114.374
	51	V	2.739473	3.014	2133.253	ug/L	-26072.212
	52	Cr	20.092710	3.457	211238.217	ug/L	26547.338
	55	Mn	1.312848	2.361	22906.916	ug/L	3052.361
	57	Fe	3.100539	14.692	10913.382	ug/L	9796.695
	59	Co	0.026863	14.976	548.349	ug/L	232.338
	60	Ni	0.127866	10.189	625.020	ug/L	301.006
	65	Cu	0.034800	12.950	266.338	ug/L	168.336
	66	Zn	0.279146	198.375	15777.201	ug/L	15137.170
>	72	Ge-1			714353.543	ug/L	739226.379
	75	As	1.431267	12.555	992.807	ug/L	-1945.453
	82	Se	0.741743	10.485	48.212	ug/L	-120.854
	97	Mo	0.420394	27.559	1283.406	ug/L	72.001
	107	Ag	-0.001519	47.993	247.671	ug/L	267.339
	111	Cd	-0.000806	199.048	37.000	ug/L	39.334
>	115	In-1			1487909.700	ug/L	1483966.870
	123	Sb	1.088713	37.782	8596.758	ug/L	268.758
	135	Ba	0.967013	4.200	2383.224	ug/L	112.002
>	165	Ho-1			1570626.233	ug/L	1592460.464
	205	Tl	0.578543	34.286	19513.466	ug/L	3951.949
	208	Pb	-0.007371	68.824	4242.290	ug/L	4580.000
	238	U	0.058213	1.291	3002.012	ug/L	234.671
>	45	Sc-2			460376.166	ug/L	454114.374
	53	Cr	-21.113121	2.265	129894.621	ug/L	154333.029
	54	Fe	6.527134	67.761	67580.836	ug/L	62090.940
	61	Ni	-1.011535	71.929	1569.102	ug/L	1661.113
	63	Cu	0.039177	18.194	572.684	ug/L	345.006
	67	Zn	-7.945269	11.259	6907.411	ug/L	9047.975
>	72	Ge			714353.543	ug/L	739226.379
	77	Se	-12.746553	6.706	5985.340	ug/L	8561.780
	98	Mo	0.441488	25.680	3353.485	ug/L	141.970
	109	Ag	-0.003319	91.180	243.671	ug/L	288.339
>	115	In-2			1487909.700	ug/L	1483966.870
	114	Cd	-0.002617	128.065	67.083	ug/L	84.731
	121	Sb	1.119722	38.536	11585.257	ug/L	349.674
	137	Ba	1.018233	5.812	4256.011	ug/L	156.669
>	165	Ho-2			1570626.233	ug/L	1592460.464
	203	Tl	0.570732	38.394	8131.535	ug/L	1582.773
	206	Pb	-0.006576	55.891	1093.719	ug/L	1161.392
	207	Pb	-0.010617	101.343	896.704	ug/L	995.045
>	45	Sc			460376.166	ug/L	454114.374
	47	Ti	0.249933	20.631	488.347	ug/L	297.006
	88	Sr	10.743688	5.711	39927.192	ug/L	716.656
	88	Sr	10.551838	1.979	341353.256	ug/L	5834.250
>	115	In			1487909.700	ug/L	1483966.870
	118	Sn	0.038014	23.685	1177.394	ug/L	855.034
	120	Sn	0.038992	14.852	1532.607	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

B	10	
Na	23	
Mg	24	
Al	27	
K	39	
Ca	44	
> Sc-1	45	191.379
V	51	
Cr	52	
Mn	55	
Fe	57	
Co	59	
Ni	60	
Cu	65	
Zn	66	
> Ge-1	72	96.835
As	75	
Se	82	
Mo	97	
Ag	107	
Cd	111	
> In-1	115	100.286
Sb	123	
Ba	135	
> Ho-1	165	98.841
Tl	205	
Pb	208	
U	238	
> Sc-2	45	191.379
Cr	53	
Fe	54	
Ni	61	
Cu	63	
Zn	67	
> Ge	72	96.835
Se	77	
Mo	95	
Ag	109	
> In-2	115	100.286
Cd	114	
Sb	121	
Ba	137	
> Ho-2	165	98.841
Tl	203	
Pb	208	
Pb	207	
> Sc	45	191.379
Ti	47	
Sr	86	
Sr	88	
> In	115	100.286
Sn	118	
Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Wednesday, April 27, 2005 20:42:39
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 1.023

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	192.378871	0.617	34681.729	ug/L	7.667
	10	B	187.997439	3.456	6409.169	ug/L	27.667
	23	Na	1838.533230	2.449	7334854.910	ug/L	18838.944
	24	Mg	922.814793	0.284	2670737.980	ug/L	2106.176
	27	Al	1904.538266	1.529	8424717.468	ug/L	3413.777
	39	K	1914.993363	1.180	17226068.587	ug/L	807733.282
	44	Ca	1015.229297	1.337	342469.317	ug/L	61872.368
>	45	Sc-1			471966.706	ug/L	454114.374
	51	V	188.538729	1.583	1967099.369	ug/L	-26072.212
	52	Cr	195.258626	1.667	1865239.556	ug/L	28547.338
	55	Mn	193.110467	1.331	2990955.747	ug/L	3062.381
	57	Fe	1874.386695	2.326	619386.240	ug/L	9796.695
	59	Co	188.886690	1.253	2258123.602	ug/L	232.338
	60	Ni	191.780953	3.127	492971.224	ug/L	301.006
	65	Cu	192.338646	1.358	543639.096	ug/L	168.336
	66	Zn	190.773280	2.260	332408.654	ug/L	15137.170
>	72	Ge-1			731720.822	ug/L	739226.379
	75	As	199.494973	3.229	408001.786	ug/L	-1945.463
	82	Se	199.385260	0.534	45309.383	ug/L	-120.854
	97	Mo	196.485416	2.309	563931.448	ug/L	72.001
	107	Ag	48.352069	1.750	648612.572	ug/L	267.339
	111	Cd	192.180068	0.904	591671.263	ug/L	39.334
>	115	In-1			1490135.733	ug/L	1483966.870
	123	Sb	195.109010	0.949	1496522.102	ug/L	268.758
	135	Ba	209.086998	1.249	485529.388	ug/L	112.002
>	165	Ho-1			1544250.330	ug/L	1592460.464
	205	Tl	192.445139	3.419	5140715.734	ug/L	3951.949
	208	Pb	193.741159	1.173	7086895.719	ug/L	4580.000
	238	U	194.336214	2.447	9092620.096	ug/L	234.671
>	45	Sc-2			471966.706	ug/L	454114.374
	53	Cr	179.739999	1.666	392223.784	ug/L	154333.029
	54	Fe	1979.576402	1.085	1527463.728	ug/L	62090.940
	61	Ni	190.668031	1.624	23695.543	ug/L	1861.113
	63	Cu	194.699629	2.114	1138633.325	ug/L	345.008
	67	Zn	181.077285	2.950	62471.317	ug/L	9047.975
>	72	Ge			731720.822	ug/L	739226.379
	77	Se	212.698225	1.427	47579.831	ug/L	8561.780
	98	Mo	198.996445	1.844	1434929.586	ug/L	141.970
	109	Ag	47.584803	1.576	651037.452	ug/L	288.339
>	115	In-2			1490136.733	ug/L	1483966.870
	114	Cd	196.233667	0.867	1349851.228	ug/L	84.731
	121	Sb	192.937223	0.489	1836199.013	ug/L	349.674
	137	Ba	211.503466	2.095	837059.887	ug/L	156.669
>	165	Ho-2			1544250.330	ug/L	1592460.464
	203	Tl	191.897066	2.758	2176159.519	ug/L	1582.773
	206	Pb	195.311167	0.868	1780944.949	ug/L	1161.392
	207	Pb	202.729009	1.292	1557744.522	ug/L	995.045
>	45	Sc			471966.706	ug/L	454114.374
	47	Ti	192.946656	1.140	148208.686	ug/L	297.008
	86	Sr	187.151910	1.661	701723.479	ug/L	716.656
	88	Sr	188.392041	0.326	6147377.627	ug/L	5834.250
>	115	In			1490135.733	ug/L	1483966.870
	118	Sn	196.770328	1.206	1662772.761	ug/L	855.034
	120	Sn	197.403567	1.663	2194774.099	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		96.189

	B	10		93.890
	Na	23		91.927
	Mg	24		92.281
	Al	27		95.227
	K	39		98.758
	Ca	44		101.523
>	Sc-1	45	103.931	
	V	51		94.369
	Cr	52		97.629
	Mn	55		96.696
	Fe	57		93.719
	Co	59		94.443
	Ni	60		95.999
	Cu	65		96.168
	Zn	66		95.367
>	Ge-1	72	98.986	
	As	75		99.747
	Se	82		99.983
	Mo	97		97.743
	Ag	107		96.704
	Cd	111		96.090
>	In-1	115	100.416	
	Sb	123		97.558
	Ba	135		104.849
>	Ho-1	165	98.973	
	Tl	205		96.223
	Pb	208		96.671
	U	238		97.168
>	Sc-2	45	103.931	
	Cr	53		99.870
	Fe	54		99.979
	Ni	61		95.329
	Cu	63		97.358
	Zn	67		96.538
>	Ge	72	98.986	
	Se	77		100.369
	Mo	98		98.486
	Ag	109		96.176
>	In-2	115	100.416	
	Cd	114		98.117
	Sb	121		96.498
	Ba	137		105.702
>	Ho-2	165	98.973	
	Tl	203		96.849
	Pb	206		97.886
	Pb	207		101.364
>	Sc	45	103.931	
	Ti	47		96.473
	Sr	86		93.578
	Sr	88		94.196
>	In	115	100.416	
	Sn	118		96.366
	Sn	120		96.702

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cr	53	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Wednesday, April 27, 2005 20:48:49
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 2.024

Sample Result Summary

Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
9	Be	-0.001314	2391.857	7.667	ug/L	7.667
10	B	2.447366	28.323	110.686	ug/L	27.667
23	Na	0.265336	26.775	20206.490	ug/L	18838.944
24	Mg	0.046231	85.077	2299.542	ug/L	2106.176
27	Al	0.001235	1137.204	3520.136	ug/L	3413.777
39	K	-10.236890	21.093	744590.566	ug/L	807733.282
44	Ca	-2.282783	234.973	63061.175	ug/L	61872.368
45	Sc-1			467539.448	ug/L	454114.374
51	V	0.252364	343.523	-24174.726	ug/L	-26072.212
52	Cr	0.086244	235.791	28148.405	ug/L	26547.338
55	Mn	0.042170	45.279	3796.877	ug/L	3062.361
57	Fe	-3.257660	24.696	9026.270	ug/L	9798.696
59	Co	0.095819	155.743	1348.479	ug/L	232.338
60	Ni	-0.009916	59.964	284.672	ug/L	301.006
65	Cu	0.007140	129.136	193.003	ug/L	168.336
66	Zn	-0.230105	26.492	15205.575	ug/L	15137.170
72	Ge-1			747851.937	ug/L	739228.379
75	As	0.229879	96.821	-1483.362	ug/L	-1945.453
82	Se	0.374557	21.638	-35.194	ug/L	-120.854
97	Mo	0.113628	14.429	393.009	ug/L	72.001
107	Ag	0.001419	84.302	282.339	ug/L	267.339
111	Cd	0.004927	45.265	53.667	ug/L	39.334
115	In-1			1463063.528	ug/L	1483986.870
123	Sb	0.219530	13.913	1919.279	ug/L	268.758
135	Ba	-0.004585	104.378	101.335	ug/L	112.002
165	Ho-1			1596264.114	ug/L	1592460.464
205	Tl	0.286641	43.408	12245.029	ug/L	3961.949
208	Pb	-0.003396	102.745	4468.987	ug/L	4580.000
238	U	0.005254	35.651	490.580	ug/L	234.671
45	Sc-2			467539.448	ug/L	454114.374
53	Cr	5.397493	280.069	165738.949	ug/L	154333.029
54	Fe	0.980667	371.185	64608.554	ug/L	62090.940
61	Ni	-1.428203	10.389	1547.433	ug/L	1661.113
63	Cu	0.010087	41.045	413.343	ug/L	345.008
67	Zn	-0.763007	391.846	9083.670	ug/L	9047.975
72	Ge			747851.937	ug/L	739228.379
77	Se	10.436343	62.142	10612.885	ug/L	8561.780
98	Mo	0.113398	21.831	951.787	ug/L	141.970
109	Ag	0.011879	24.188	444.011	ug/L	288.339
115	In-2			1463063.528	ug/L	1483986.870
114	Cd	0.002960	59.206	103.524	ug/L	84.731
121	Sb	0.227540	15.275	2590.597	ug/L	349.674
137	Ba	0.003680	29.152	172.336	ug/L	156.669
165	Ho-2			1596264.114	ug/L	1592460.464
203	Tl	0.290073	40.197	5004.641	ug/L	1582.773
206	Pb	-0.003638	208.733	1131.723	ug/L	1161.392
207	Pb	-0.004837	51.165	980.375	ug/L	995.045
45	Sc			467539.448	ug/L	454114.374
47	Ti	0.040686	266.323	335.674	ug/L	297.006
86	Sr	0.013201	148.364	787.249	ug/L	716.656
88	Sr	-0.009086	29.029	5712.533	ug/L	5834.250
115	In			1463063.528	ug/L	1483986.870
118	Sn	0.066733	23.848	1397.083	ug/L	855.034
120	Sn	0.070008	31.432	1853.241	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		-8.131

	B	10		244.737
	Na	23		0.205
	Mg	24		0.045
	Al	27		0.001
	K	39		-10.336
	Ca	44		-2.283
>	Sc-1	45	102.969	
	V	51		28.236
	Cr	52		5.834
	Mn	55		4.217
	Fe	57		-3.286
	Co	59		9.582
	Ni	60		-0.992
	Cu	65		0.714
	Zn	66		-23.010
>	Ge-1	72	101.167	
	As	75		22.988
	Se	82		37.487
	Mo	97		11.363
	Ag	107		0.142
	Cd	111		0.493
>	In-1	115	98.891	
	Sb	123		21.883
	Ba	136		-0.488
>	Ho-1	165	100.364	
	Tl	206		28.864
	Pb	208		-0.340
	U	238		0.625
>	Sc-2	45	102.969	
	Cr	53		539.749
	Fe	54		0.991
	Ni	61		-142.820
	Cu	63		1.099
	Zn	67		-76.361
>	Ge	72	101.167	
	Se	77		1043.634
	Mo	98		11.348
	Ag	109		1.156
>	In-2	115	98.891	
	Cd	114		0.396
	Sb	121		22.764
	Ba	137		0.368
>	Ho-2	166	100.364	
	Tl	203		29.007
	Pb	208		-0.364
	Pb	207		-0.484
>	Sc	45	102.969	
	Ti	47		4.988
	Sr	86		1.328
	Sr	88		-0.909
>	In	115	98.891	
	Sn	118		6.673
	Sn	120		7.601

QC Out Of Limits

Analyte	Mass	Out of Limits Message
B	10	Q
Cr	53	Q
Ni	61	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: G849VB
Sample Date/Time: Wednesday, April 27, 2005 20:54:57
Autosampler Position: 31
Dataset File: D:\Elandata\Dataset\042705M2\G849VB.025

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Mass. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.005058	349.346	9.333	ug/L	7.667
	10	B	0.948385	47.039	63.667	ug/L	27.667
	23	Na	1.756471	14.379	27815.669	ug/L	18838.944
	24	Mg	4.857710	4.893	16999.260	ug/L	2106.176
	27	Al	2.330812	0.974	14516.522	ug/L	3413.777
	39	K	-12.289060	16.138	769062.211	ug/L	807733.282
	44	Ca	9.566588	39.924	70106.349	ug/L	61872.368
>	45	Sc-1			494502.482	ug/L	454114.374
	51	V	-1.335184	37.402	-43431.954	ug/L	-28072.212
	52	Cr	0.929807	21.167	38110.679	ug/L	26547.338
	55	Mn	0.108461	5.882	5091.625	ug/L	3062.361
	57	Fe	-2.007239	12.296	9985.709	ug/L	9796.695
	59	Co	0.006757	88.349	336.341	ug/L	232.338
	60	Ni	0.063451	15.149	498.680	ug/L	301.006
	65	Cu	0.037917	5.707	295.673	ug/L	168.336
	66	Zn	-0.097727	130.385	16311.807	ug/L	15137.170
>	72	Ge-1			769793.759	ug/L	739226.379
	75	As	-0.404011	21.937	-2899.468	ug/L	-1945.453
	82	Se	0.487728	33.022	-9.027	ug/L	-120.854
	97	Mo	0.028160	20.761	145.336	ug/L	72.001
	107	Ag	-0.000779	310.756	253.671	ug/L	267.339
	111	Cd	0.000296	484.507	39.667	ug/L	39.334
>	115	In-1			1465841.604	ug/L	1483966.870
	123	Sb	0.144616	4.454	1356.249	ug/L	268.758
	136	Ba	0.105979	6.381	370.675	ug/L	112.002
>	165	Ho-1			1614336.329	ug/L	1592460.464
	205	Tl	0.109380	57.606	7069.585	ug/L	3951.949
	208	Pb	-0.002170	368.087	4561.333	ug/L	4580.000
	238	U	-0.002635	8.267	109.002	ug/L	234.671
>	45	Sc-2			494502.482	ug/L	454114.374
	53	Cr	35.486016	34.665	215298.113	ug/L	154333.029
	54	Fe	18.704269	33.480	82013.212	ug/L	62090.940
	61	Ni	-1.662362	41.369	1606.773	ug/L	1661.113
	63	Cu	0.093479	3.254	580.684	ug/L	345.006
	67	Zn	5.330636	96.477	11515.835	ug/L	9047.975
>	72	Ge			769793.759	ug/L	739226.379
	77	Se	27.182817	28.105	14170.239	ug/L	8561.780
	98	Mo	0.034475	20.572	387.312	ug/L	141.970
	109	Ag	0.006691	31.889	360.006	ug/L	288.339
>	115	In-2			1465841.604	ug/L	1483966.870
	114	Cd	-0.002221	87.536	68.728	ug/L	84.731
	121	Sb	0.141473	9.044	1742.791	ug/L	349.674
	137	Ba	0.106507	9.240	607.686	ug/L	156.669
>	165	Ho-2			1614336.329	ug/L	1592460.464
	203	Tl	0.113642	54.686	2957.349	ug/L	1582.773
	206	Pb	0.001065	887.877	1188.062	ug/L	1161.392
	207	Pb	-0.006404	73.933	957.375	ug/L	996.045
>	45	Sc			494502.482	ug/L	454114.374
	47	Ti	0.085550	41.237	392.676	ug/L	297.006
	86	Sr	0.027758	30.943	889.888	ug/L	716.656
	88	Sr	0.006809	39.855	6584.250	ug/L	5834.250
>	115	In			1465841.604	ug/L	1483966.870
	118	Sn	0.074696	11.460	1464.090	ug/L	855.034
	120	Sn	0.086476	4.276	2035.270	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	108.894
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	104.136
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.779
	Sb	123	
	Ba	135	
>	Ho-1	165	101.374
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	108.894
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	104.136
	Se	77	
	Mo	95	
	Ag	109	
>	In-2	115	98.779
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	101.374
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	108.894
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	98.779
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G849VC
Sample Date/Time: Wednesday, April 27, 2005 21:00:06
Autosampler Position: 32
Dataset File: D:\Elandata\Dataset\042705M2\G849VC.026

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	231.577890	2.199	43324.362	ug/L	7.667
	10	B	6.391919	13.481	255.338	ug/L	27.667
	23	Na	4505.621210	2.841	18623872.542	ug/L	18838.944
	24	Mg	4584.473200	4.180	13757322.130	ug/L	2106.176
	27	Al	240.701681	1.210	1106381.221	ug/L	3413.777
	39	K	4751.690800	3.006	43063044.723	ug/L	807733.282
	44	Ca	4768.956887	4.776	1422671.112	ug/L	61872.368
>	45	Sc-1			489971.030	ug/L	454114.374
	51	V	234.740960	3.159	2574676.838	ug/L	-26072.212
	52	Cr	242.240644	3.404	2394750.951	ug/L	26547.338
	55	Mn	233.206486	3.261	3747046.130	ug/L	3062.361
	57	Fe	227.445896	5.660	87245.880	ug/L	9798.695
	59	Co	231.066862	3.511	2865998.375	ug/L	232.338
	60	Ni	236.127926	1.454	627203.765	ug/L	301.006
	65	Cu	228.135866	1.777	669226.958	ug/L	168.336
	66	Zn	228.336844	3.469	404438.597	ug/L	15137.170
>	72	Ge-1			748330.879	ug/L	739226.379
	75	As	254.745762	3.031	533591.461	ug/L	-1945.453
	82	Se	239.368836	1.714	56857.429	ug/L	-120.854
	97	Mo	249.887634	0.751	715524.032	ug/L	72.001
	107	Ag	59.152918	1.107	788259.050	ug/L	287.339
	111	Cd	235.100632	1.335	719097.768	ug/L	39.334
>	115	In-1			1480273.134	ug/L	1483966.870
	123	Sb	236.005368	1.754	1796107.911	ug/L	268.758
	135	Ba	246.896327	2.869	586107.225	ug/L	112.002
>	165	Ho-1			1592888.462	ug/L	1592460.464
	205	Tl	227.813518	0.904	6277053.320	ug/L	3951.949
	208	Pb	232.540687	1.090	8773276.340	ug/L	4580.000
	238	U	-0.062183	16.552	129.335	ug/L	234.671
>	45	Sc-2			489971.030	ug/L	454114.374
	53	Cr	262.496526	7.404	517643.942	ug/L	154333.029
	54	Fe	277.129286	7.607	279357.268	ug/L	62090.940
	61	Ni	234.817149	3.347	29666.822	ug/L	1681.113
	63	Cu	229.004766	2.463	1390231.827	ug/L	345.008
	67	Zn	234.060967	3.491	80650.924	ug/L	9047.975
>	72	Ge			748330.879	ug/L	739226.379
	77	Se	229.121152	2.341	51752.887	ug/L	8561.760
	98	Mo	242.485112	1.199	1754385.696	ug/L	141.970
	109	Ag	55.338386	2.113	752072.012	ug/L	288.339
>	115	In-2			1480273.134	ug/L	1483966.870
	114	Cd	233.848529	2.164	1597734.981	ug/L	84.731
	121	Sb	237.775368	0.600	2372866.270	ug/L	349.674
	137	Ba	248.816591	3.653	1015574.341	ug/L	156.669
>	165	Ho-2			1592888.462	ug/L	1592460.464
	203	Tl	226.930302	2.118	2857034.157	ug/L	1562.773
	206	Pb	241.768573	2.122	2273586.666	ug/L	1161.392
	207	Pb	236.241290	3.368	1671965.733	ug/L	995.045
>	45	Sc			489971.030	ug/L	454114.374
	47	Ti	0.291034	4.616	563.683	ug/L	297.006
	86	Sr	222.719093	2.977	866408.479	ug/L	716.656
	88	Sr	225.949962	2.572	7651433.196	ug/L	5834.250
>	115	In			1480273.134	ug/L	1483966.870
	118	Sn	0.083410	6.942	1552.787	ug/L	855.034
	120	Sn	0.096893	9.398	2170.067	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	107.886
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.232
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.791
	Sb	123	
	Ba	135	
>	Ho-1	165	100.027
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	107.886
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.232
	Se	77	
	Mo	95	
	Ag	109	
>	In-2	115	99.791
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	166	100.027
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	107.886
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	99.791
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8170
Sample Date/Time: Wednesday, April 27, 2005 21:05:16
Autosampler Position: 33
Dataset File: D:\Elandata\Dataset\042705M2\G8170.027

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌈	9	Be	-0.012403	153.003	5.000	ug/L	7.667
|	10	B	0.509291	14.186	48.001	ug/L	27.667
|	23	Na	31.706563	2.212	151927.523	ug/L	18838.844
|	24	Mg	12.885440	3.019	41126.548	ug/L	2106.176
|	27	Al	4.696602	3.980	24883.911	ug/L	3413.777
|	39	K	-0.152032	681.164	873823.072	ug/L	807733.282
|	44	Ca	51.799273	9.149	81630.620	ug/L	61872.368
|>	45	Sc-1			492067.864	ug/L	454114.374
|	51	V	-1.684872	20.567	-47001.342	ug/L	-26072.212
|	52	Cr	2.196219	12.652	50301.063	ug/L	26547.338
|	55	Mn	0.248410	3.568	7324.817	ug/L	3062.361
|	57	Fe	2.252583	20.073	11381.997	ug/L	9798.695
|	59	Co	0.011049	59.454	389.343	ug/L	232.338
|	60	Ni	0.103143	3.296	602.352	ug/L	301.006
|	65	Cu	0.282689	3.894	1015.046	ug/L	168.336
L	66	Zn	1.351932	25.351	18738.808	ug/L	15137.170
⌈>	72	Ge-1			763204.579	ug/L	739226.379
|	75	As	0.140616	115.623	-1703.221	ug/L	-1945.453
L	82	Se	0.466816	53.971	-14.098	ug/L	-120.854
⌈	97	Mo	0.166471	42.819	526.016	ug/L	72.001
|	107	Ag	0.010521	24.145	411.677	ug/L	267.339
|	111	Cd	0.011610	23.694	75.334	ug/L	39.334
|>	115	In-1			1498252.874	ug/L	1483966.870
L	123	Sb	0.264077	19.142	2306.718	ug/L	268.758
⌈	135	Ba	1.000761	1.621	2494.909	ug/L	112.002
|>	165	Ho-1			1584340.526	ug/L	1592460.464
|	205	Tl	0.316116	44.444	12581.335	ug/L	3951.949
|	208	Pb	0.164003	14.643	10706.358	ug/L	4580.000
L	238	U	-0.000954	6.604	187.670	ug/L	234.671
⌈>	45	Sc-2			492067.864	ug/L	454114.374
|	53	Cr	54.875418	28.683	240996.033	ug/L	154333.029
|	54	Fe	21.978445	8.344	84215.671	ug/L	62090.940
|	61	Ni	-1.749345	48.902	1589.438	ug/L	1661.113
|	63	Cu	0.273680	4.008	2041.500	ug/L	345.008
L	67	Zn	14.270066	33.299	14161.538	ug/L	9047.975
⌈>	72	Ge			763204.579	ug/L	739226.379
L	77	Se	22.976604	28.661	13229.466	ug/L	8561.780
⌈	98	Mo	0.160027	40.490	1314.234	ug/L	141.970
|	109	Ag	0.011226	26.300	445.345	ug/L	288.339
|>	115	In-2			1498252.874	ug/L	1483966.870
|	114	Cd	0.009013	51.171	147.801	ug/L	84.731
L	121	Sb	0.262963	15.100	3006.017	ug/L	349.874
⌈	137	Ba	1.010545	2.407	4258.677	ug/L	156.669
|>	165	Ho-2			1584340.526	ug/L	1592460.464
|	203	Tl	0.335048	44.811	5471.172	ug/L	1582.773
|	206	Pb	0.166888	17.845	2713.286	ug/L	1161.392
L	207	Pb	0.166292	12.571	2299.875	ug/L	995.045
⌈>	45	Sc			492067.864	ug/L	454114.374
|	47	Ti	0.086725	18.221	391.676	ug/L	297.006
|	86	Sr	0.257317	5.422	1761.219	ug/L	716.656
L	88	Sr	0.243984	0.575	14613.951	ug/L	5834.250
⌈>	115	In			1498252.874	ug/L	1483966.870
|	118	Sn	0.071893	2.175	1473.757	ug/L	855.034
L	120	Sn	0.073466	0.717	1934.922	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	100.000
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	100.000
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	100.000
	Sb	123	
	Ba	135	
>	Ho-1	165	99.400
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	100.000
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	100.000
	Se	77	
	Mo	95	
	Ag	109	
>	In-2	115	100.000
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	99.400
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	100.000
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	100.000
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8170X
Sample Date/Time: Wednesday, April 27, 2005 21:10:26
Autosampler Position: 34
Dataset File: D:\Elandata\Dataset\042705M2\G8170X.028

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌜	9	Be	0.000672	3205.794	8.333	ug/L	7.667
|	10	B	0.534904	51.768	48.001	ug/L	27.667
|	23	Na	32.091861	4.285	150659.884	ug/L	18838.944
|	24	Mg	13.243349	4.711	41414.381	ug/L	2106.176
|	27	Al	4.683669	0.058	24738.990	ug/L	3413.777
|	39	K	-0.516048	325.912	854569.582	ug/L	807733.282
|	44	Ca	49.557289	17.503	79686.782	ug/L	61872.368
|>	45	Sc-1			483096.570	ug/L	454114.374
|	51	V	-1.868424	32.520	-48082.345	ug/L	-26072.212
|	52	Cr	1.883525	17.241	44437.925	ug/L	26547.338
|	55	Mn	0.236677	3.896	7003.120	ug/L	3062.361
|	57	Fe	5.697704	39.876	12312.065	ug/L	9798.695
|	59	Co	0.007427	39.330	337.674	ug/L	232.338
|	60	Ni	0.154333	6.589	725.692	ug/L	301.006
|	65	Cu	0.390963	2.969	1309.406	ug/L	168.336
L	66	Zn	0.522160	38.959	17154.465	ug/L	15137.170
⌜>	72	Ge-1			753054.231	ug/L	739226.379
|	75	As	-0.144600	479.689	-2285.396	ug/L	-1945.463
L	82	Se	0.373881	46.031	-35.212	ug/L	-120.854
⌜	97	Mo	0.033422	22.335	168.003	ug/L	72.001
|	107	Ag	0.007610	17.769	368.575	ug/L	267.339
|	111	Cd	0.004797	41.584	54.001	ug/L	39.334
|>	115	In-1			1483090.901	ug/L	1483966.870
L	123	Sb	0.099313	7.396	1026.849	ug/L	268.758
⌜	135	Ba	0.947107	1.755	2357.885	ug/L	112.002
|>	165	Ho-1			1577811.946	ug/L	1592460.464
|	205	Tl	0.076759	55.872	5997.012	ug/L	3951.949
|	208	Pb	0.166496	7.797	10341.248	ug/L	4580.000
L	238	U	-0.001852	11.189	144.002	ug/L	234.671
⌜>	45	Sc-2			483096.570	ug/L	454114.374
|	53	Cr	57.978621	28.207	240496.922	ug/L	154333.029
|	54	Fe	30.922136	7.967	89423.510	ug/L	62090.940
|	61	Ni	-1.569560	43.360	1581.437	ug/L	1661.113
|	63	Cu	0.400829	1.505	2765.295	ug/L	345.008
L	67	Zn	13.779937	33.481	13746.118	ug/L	9047.975
⌜>	72	Ge			753054.231	ug/L	739226.379
L	77	Se	28.902287	15.777	14192.349	ug/L	8561.760
⌜	98	Mo	0.048956	14.007	482.462	ug/L	141.970
|	109	Ag	0.006386	23.241	402.343	ug/L	268.339
|>	115	In-2			1483090.901	ug/L	1483966.870
|	114	Cd	0.000136	1592.348	85.633	ug/L	84.731
L	121	Sb	0.103839	11.871	1388.082	ug/L	349.674
⌜	137	Ba	0.971545	3.133	4082.291	ug/L	156.669
|>	165	Ho-2			1577811.946	ug/L	1592460.464
|	203	Tl	0.079782	59.251	2487.914	ug/L	1582.773
|	206	Pb	0.153297	7.356	2576.925	ug/L	1161.392
L	207	Pb	0.169178	10.190	2233.530	ug/L	995.045
⌜>	45	Sc			483096.570	ug/L	454114.374
|	47	Ti	0.179588	47.625	458.579	ug/L	297.008
|	86	Sr	0.245069	2.784	1701.583	ug/L	716.856
L	88	Sr	0.236823	2.189	14106.436	ug/L	5834.250
⌜>	115	In			1483090.901	ug/L	1483966.870
|	118	Sn	0.059629	3.436	1355.745	ug/L	855.034
L	120	Sn	0.073089	32.994	1912.265	ug/L	1109.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌜	Be	9		

B	10	
Na	23	
Mg	24	
Al	27	
K	39	
Ca	44	
Sc-1	45	108.382
V	51	
Cr	52	
Mn	55	
Fe	57	
Co	59	
Ni	60	
Cu	65	
Zn	66	
Ge-1	72	101.871
As	75	
Se	82	
Mo	97	
Ag	107	
Cd	111	
In-1	115	99.941
Sb	123	
Ba	135	
Ho-1	165	99.089
Tl	205	
Pb	208	
U	238	
Sc-2	45	108.382
Cr	53	
Fe	54	
Ni	61	
Cu	63	
Zn	67	
Ge	72	101.871
Se	77	
Mo	98	
Ag	109	
In-2	115	99.941
Cd	114	
Sb	121	
Ba	137	
Ho-2	165	99.089
Tl	205	
Pb	206	
Pb	207	
Sc	45	108.382
Ti	47	
Sr	86	
Sr	88	
In	115	99.941
Sn	118	
Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8170S
Sample Date/Time: Wednesday, April 27, 2005 21:15:36
Autosampler Position: 35
Dataset File: D:\Elandata\Dataset\042705M2\G8170S.029

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	11.806300	2.747	2218.861	ug/L	7.667
	10	B	0.572868	38.286	50.001	ug/L	27.667
	23	Na	11606.628970	2.460	47586634.063	ug/L	18838.944
	24	Mg	11616.426465	2.155	34899279.960	ug/L	2106.176
	27	Al	489.250618	3.877	2250920.266	ug/L	3413.777
	39	K	12040.274741	4.737	107893878.804	ug/L	807733.282
	44	Ca	12752.824529	3.068	3695572.376	ug/L	61872.368
>	45	Sc-1			490377.195	ug/L	454114.374
	51	V	128.291549	1.820	1395766.057	ug/L	-26072.212
	52	Cr	61.609477	2.109	533304.181	ug/L	26547.338
	55	Mn	114.199402	2.873	1838963.271	ug/L	3062.361
	57	Fe	218.714868	0.905	84438.714	ug/L	9798.695
	59	Co	116.121287	2.262	1442441.085	ug/L	232.338
	60	Ni	117.237547	0.705	313232.228	ug/L	301.006
	65	Cu	57.620968	1.726	169335.144	ug/L	168.336
	66	Zn	111.953728	1.403	209406.370	ug/L	15137.170
>	72	Ge-1			749802.048	ug/L	739226.379
	75	As	494.766249	0.821	1040346.452	ug/L	-1945.453
	82	Se	481.246657	1.351	112241.335	ug/L	-120.854
	97	Mo	258.523827	0.727	721162.533	ug/L	72.001
	107	Ag	12.041240	1.202	156392.289	ug/L	267.339
	111	Cd	12.606697	1.515	37577.083	ug/L	39.334
>	115	In-1			1440976.681	ug/L	1483966.870
	123	Sb	121.314164	1.486	899823.070	ug/L	268.758
	135	Ba	496.740917	0.224	1158627.438	ug/L	112.002
>	165	Ho-1			1564763.022	ug/L	1592460.464
	205	Tl	453.271643	1.894	12283409.894	ug/L	3951.949
	208	Pb	116.663622	2.531	4325730.699	ug/L	4580.000
	238	U	-0.001524	2.796	158.336	ug/L	234.671
>	45	Sc-2			490377.195	ug/L	454114.374
	53	Cr	114.323334	16.038	319745.591	ug/L	154333.029
	54	Fe	276.857704	0.896	279661.818	ug/L	62090.940
	61	Ni	117.501405	2.566	15859.292	ug/L	1661.113
	63	Cu	58.370878	1.868	354882.559	ug/L	345.006
	67	Zn	132.536683	3.426	50120.633	ug/L	9047.975
>	72	Ge			749802.048	ug/L	739226.379
	77	Se	431.846094	1.863	90060.814	ug/L	8561.760
	98	Mo	254.120280	3.523	1789244.788	ug/L	141.970
	109	Ag	11.148940	2.398	147719.364	ug/L	288.338
>	115	In-2			1440976.681	ug/L	1483966.870
	114	Cd	12.473660	0.493	83029.916	ug/L	84.731
	121	Sb	123.179870	1.184	1196845.583	ug/L	349.674
	137	Ba	481.193100	1.959	1969612.163	ug/L	156.669
>	165	Ho-2			1564763.022	ug/L	1592460.464
	203	Tl	441.149955	2.812	5072368.493	ug/L	1582.773
	208	Pb	117.921918	3.024	1069974.375	ug/L	1161.392
	207	Pb	120.017224	2.021	934798.509	ug/L	995.045
>	45	Sc			490377.195	ug/L	454114.374
	47	Ti	0.568094	12.234	775.029	ug/L	297.006
	86	Sr	225.848696	0.764	879668.437	ug/L	716.656
	88	Sr	226.691590	2.471	7683998.296	ug/L	5834.250
>	115	In			1440976.681	ug/L	1483966.870
	118	Sn	0.099686	7.360	1644.111	ug/L	855.034
	120	Sn	0.107429	4.330	2225.739	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	107.965
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.431
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	97.103
	Sb	123	
	Ba	135	
>	Ho-1	165	98.391
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	107.965
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.431
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	97.103
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	98.391
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	107.965
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	97.103
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8170S LL
Sample Date/Time: Wednesday, April 27, 2005 21:20:48
Autosampler Position: 36
Dataset File: D:\Elandata\Dataset\042705M2\G8170S LL.030

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.008254	243.514	10.000	ug/L	7.667
	10	B	0.178178	46.436	36.334	ug/L	27.667
	23	Na	33.124518	5.794	157886.309	ug/L	18838.944
	24	Mg	13.386470	2.156	42678.752	ug/L	2106.176
	27	Al	5.527021	0.332	29212.139	ug/L	3413.777
	39	K	-0.656696	461.745	869982.884	ug/L	907733.282
	44	Ca	42.686416	8.449	79320.106	ug/L	61872.368
>	45	Sc-1			492651.625	ug/L	454114.374
	51	V	-1.678544	9.966	-46973.178	ug/L	-26072.212
	52	Cr	5.363985	3.892	81471.160	ug/L	28547.338
	55	Mn	0.408858	3.377	9821.643	ug/L	3062.361
	57	Fe	14.802664	14.361	15572.912	ug/L	9798.695
	59	Co	0.023160	29.289	539.682	ug/L	232.338
	60	Ni	0.788193	6.404	2384.223	ug/L	301.008
	65	Cu	0.448964	3.617	1506.094	ug/L	168.336
	66	Zn	0.181889	144.943	16731.295	ug/L	15137.170
>	72	Ge-1			755403.964	ug/L	739226.379
	75	As	19.503722	3.550	39404.528	ug/L	-1945.453
	82	Se	5.194397	2.804	1098.193	ug/L	-120.854
	97	Mo	0.225349	27.847	730.360	ug/L	72.001
	107	Ag	0.011728	5.231	430.011	ug/L	267.339
	111	Cd	2.414074	2.426	7548.070	ug/L	39.334
>	115	In-1			1505240.760	ug/L	1483966.870
	123	Sb	47.025513	1.440	364552.624	ug/L	268.758
	135	Ba	0.993112	1.845	2503.244	ug/L	112.002
>	165	Ho-1			1601194.168	ug/L	1592460.464
	205	Tl	24.297289	2.695	676586.010	ug/L	3951.949
	208	Pb	9.713780	0.489	372828.445	ug/L	4580.000
	238	U	-0.001888	14.033	144.336	ug/L	234.671
>	45	Sc-2			492651.625	ug/L	454114.374
	53	Cr	70.567329	7.895	262543.831	ug/L	154333.029
	54	Fe	39.572784	12.763	97825.428	ug/L	62090.940
	61	Ni	-0.719948	74.272	1715.454	ug/L	1861.113
	63	Cu	0.453155	5.946	3137.376	ug/L	345.008
	67	Zn	12.192413	22.116	13557.281	ug/L	9047.975
>	72	Ge			755403.964	ug/L	739226.379
	77	Se	37.462854	12.199	15854.235	ug/L	8561.780
	98	Mo	0.241860	28.365	1925.051	ug/L	141.970
	109	Ag	0.017272	7.768	531.015	ug/L	288.339
>	115	In-2			1505240.760	ug/L	1483966.870
	114	Cd	2.410388	2.338	16828.522	ug/L	84.731
	121	Sb	48.143817	0.321	488820.988	ug/L	349.674
	137	Ba	1.080919	1.139	4592.784	ug/L	156.669
>	165	Ho-2			1601194.168	ug/L	1592460.464
	203	Tl	23.565407	2.752	278814.551	ug/L	1582.773
	206	Pb	9.814404	1.236	93906.648	ug/L	1161.392
	207	Pb	9.881677	1.493	79689.491	ug/L	995.045
>	45	Sc			492651.625	ug/L	454114.374
	47	Ti	0.170474	6.856	459.679	ug/L	297.006
	86	Sr	0.244804	11.134	1732.944	ug/L	716.656
	88	Sr	0.234358	7.078	14295.961	ug/L	5834.250
>	115	In			1505240.760	ug/L	1483966.870
	118	Sn	0.205069	111.376	2808.351	ug/L	855.034
	120	Sn	0.072386	9.120	1931.597	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	100.486
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	102.186
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	101.434
	Sb	123	
	Ba	136	
>	Ho-1	165	100.548
	Tl	205	
	Pb	206	
	U	238	
>	Sc-2	45	100.486
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	102.186
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	101.434
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	100.548
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	100.486
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	101.434
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8170V
Sample Data/Time: Wednesday, April 27, 2005 21:25:59
Autosampler Position: 37
Dataset File: D:\Elandata\Dataset\042705M2\G8170V.031

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	-0.012691	86.489	5.667	ug/L	7.667
	10	B	-0.144576	49.261	23.667	ug/L	27.667
	23	Na	8.902965	1.743	54628.818	ug/L	18838.944
	24	Mg	10.422150	3.889	32097.682	ug/L	2106.176
	27	Al	3.831293	10.283	20332.040	ug/L	3413.777
	39	K	-4.638131	24.136	794326.411	ug/L	807733.282
	44	Ca	2.588365	202.193	64560.867	ug/L	61872.368
>	45	Sc-1			468805.348	ug/L	454114.374
	51	V	1.209506	22.662	-14045.476	ug/L	-26072.212
	52	Cr	-0.555267	14.858	22206.138	ug/L	26547.338
	55	Mn	0.079413	21.347	4378.716	ug/L	3082.361
	57	Fe	1.492419	43.307	10694.952	ug/L	9798.695
	59	Co	0.017849	4.928	451.578	ug/L	232.338
	60	Ni	0.079469	23.652	514.014	ug/L	301.006
	65	Cu	0.060353	14.773	343.341	ug/L	168.336
	66	Zn	0.116568	404.704	15809.908	ug/L	15137.170
>	72	Ge-1			720231.427	ug/L	739226.379
	75	As	1.273613	6.781	682.534	ug/L	-1945.453
	82	Se	0.283920	53.154	-54.122	ug/L	-120.854
	97	Mo	0.034447	23.356	174.669	ug/L	72.001
	107	Ag	-0.002165	126.602	243.671	ug/L	267.339
	111	Cd	-0.004431	3.979	26.334	ug/L	39.334
>	115	In-1			1517785.376	ug/L	1483966.870
	123	Sb	0.071279	17.081	831.052	ug/L	268.758
	135	Ba	0.206772	3.677	818.353	ug/L	112.002
>	165	Ho-1			1609162.761	ug/L	1592460.464
	205	Tl	0.286872	21.500	11962.543	ug/L	3951.949
	208	Pb	-0.004288	33.380	4464.984	ug/L	4580.000
	238	U	-0.003074	6.785	87.334	ug/L	234.671
>	45	Sc-2			468805.348	ug/L	454114.374
	53	Cr	-50.684475	8.121	94326.617	ug/L	154333.029
	54	Fe	1.913379	260.252	65459.182	ug/L	62090.940
	61	Ni	-0.380619	168.646	1674.782	ug/L	1661.113
	63	Cu	0.056922	13.458	680.680	ug/L	346.008
	67	Zn	-7.680978	22.571	7096.838	ug/L	9047.975
>	72	Ge			720231.427	ug/L	739226.379
	77	Se	-22.614746	2.132	4266.363	ug/L	8561.780
	98	Mo	0.044016	19.344	471.203	ug/L	141.970
	109	Ag	-0.003841	17.523	241.338	ug/L	288.339
>	115	In-2			1517785.376	ug/L	1483966.870
	114	Cd	-0.003784	53.525	60.297	ug/L	84.731
	121	Sb	0.074433	10.802	1118.388	ug/L	349.674
	137	Ba	0.206318	5.901	1017.713	ug/L	156.669
>	165	Ho-2			1609162.761	ug/L	1592460.464
	203	Tl	0.291942	19.201	5057.292	ug/L	1582.773
	206	Pb	-0.004348	93.716	1132.056	ug/L	1161.392
	207	Pb	-0.004036	73.039	973.376	ug/L	995.045
>	45	Sc			468805.348	ug/L	454114.374
	47	Ti	0.288936	73.324	530.016	ug/L	297.006
	86	Sr	0.063767	4.531	977.090	ug/L	716.656
	88	Sr	0.064630	15.603	7790.203	ug/L	5834.250
>	115	In			1517785.376	ug/L	1483966.870
	118	Sn	0.028612	5.722	1119.722	ug/L	855.034
	120	Sn	0.040983	18.284	1593.299	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	103.236
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	97.439
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	102.279
	Sb	123	
	Ba	135	
>	Ho-1	165	101.849
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	103.236
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	97.439
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	102.279
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	101.849
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	103.236
	Ti	47	
	Sr	88	
	Sr	88	
>	In	115	102.279
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G84EP
Sample Date/Time: Wednesday, April 27, 2005 21:31:11
Autosampler Position: 38
Dataset File: D:\Elandata\Dataset\042705M2\G84EP.032

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.001164	2349.674	8.333	ug/L	7.667
	10	B	0.037714	620.473	30.667	ug/L	27.667
	23	Na	23.614398	3.430	116299.314	ug/L	18838.944
	24	Mg	8.698887	4.683	27999.360	ug/L	2106.176
	27	Al	4.481961	7.001	23920.931	ug/L	3413.777
	39	K	-1.195115	291.522	849270.412	ug/L	807733.282
	44	Ca	30.537093	14.213	74461.352	ug/L	61872.388
>	45	Sc-1			483766.664	ug/L	454114.374
	51	V	-1.522925	41.039	-44574.084	ug/L	-26072.212
	52	Cr	1.251191	19.987	40404.128	ug/L	28547.338
	55	Mn	0.164350	13.763	5713.871	ug/L	3062.361
	57	Fe	3.068041	38.593	11450.316	ug/L	9798.695
	59	Co	0.007679	92.089	339.674	ug/L	232.338
	60	Ni	0.096339	13.736	574.351	ug/L	301.006
	65	Cu	0.127020	7.291	546.683	ug/L	168.336
	66	Zn	0.550066	53.848	17049.672	ug/L	15137.170
>	72	Ge-1			764122.697	ug/L	739226.379
	75	As	-0.209437	133.903	-2462.630	ug/L	-1945.453
	82	Se	0.323494	96.597	-47.888	ug/L	-120.854
	97	Mo	0.019000	15.312	128.335	ug/L	72.001
	107	Ag	0.000079	2541.338	272.005	ug/L	267.339
	111	Cd	-0.002310	61.383	32.667	ug/L	39.334
>	115	In-1			1504135.302	ug/L	1483966.870
	123	Sb	0.063783	5.387	766.169	ug/L	268.758
	135	Ba	0.339978	4.110	927.706	ug/L	112.002
>	165	Ho-1			1595857.330	ug/L	1592460.464
	205	Tl	0.093162	74.336	6535.314	ug/L	3951.949
	208	Pb	0.060827	3.680	6502.650	ug/L	4580.000
	238	U	-0.002671	13.866	106.001	ug/L	234.671
>	45	Sc-2			483766.664	ug/L	454114.374
	53	Cr	42.306859	33.405	220723.287	ug/L	154333.029
	54	Fe	25.489268	25.760	85336.766	ug/L	62090.940
	61	Ni	-0.616476	252.347	1662.451	ug/L	1661.113
	63	Cu	0.121307	8.125	1093.053	ug/L	346.008
	67	Zn	6.618102	88.028	11661.975	ug/L	9047.975
>	72	Ge			764122.697	ug/L	739226.379
	77	Se	27.479134	17.268	14124.488	ug/L	8561.780
	98	Mo	0.022590	28.748	310.162	ug/L	141.970
	109	Ag	0.000031	834.282	292.673	ug/L	288.339
>	115	In-2			1504135.302	ug/L	1483966.870
	114	Cd	-0.001668	79.313	74.355	ug/L	84.731
	121	Sb	0.063671	11.927	1000.379	ug/L	349.674
	137	Ba	0.344809	2.567	1567.435	ug/L	156.669
>	165	Ho-2			1595857.330	ug/L	1592460.464
	203	Tl	0.096070	72.938	2702.632	ug/L	1582.773
	206	Pb	0.046273	3.556	1599.772	ug/L	1161.392
	207	Pb	0.053466	4.039	1421.418	ug/L	995.045
>	45	Sc			483766.664	ug/L	454114.374
	47	Ti	0.148379	48.872	434.344	ug/L	297.006
	86	Sr	0.129024	13.608	1257.615	ug/L	716.656
	88	Sr	0.129611	9.581	10539.327	ug/L	5834.250
>	115	In			1504135.302	ug/L	1483966.870
	118	Sn	0.042544	8.625	1229.399	ug/L	855.034
	120	Sn	0.049882	10.715	1678.954	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	106.530
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	103.966
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	101.359
	Sb	123	
	Ba	135	
>	Ho-1	165	100.213
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	106.530
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	103.966
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	101.359
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	100.213
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	106.530
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	101.359
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8L0KB
Sample Date/Time: Wednesday, April 27, 2005 21:36:23
Autosampler Position: 39
Dataset File: D:\Elandata\Dataset\042705M2VG8L0KB.033

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.012406	191.027	10.667	ug/L	7.667
	10	B	6.249499	14.831	250.671	ug/L	27.667
	23	Na	20.817765	3.453	106418.842	ug/L	18838.944
	24	Mg	98.506849	2.567	298209.329	ug/L	2106.176
	27	Al	23.572000	2.114	113353.748	ug/L	3413.777
	39	K	-4.220648	76.925	834512.213	ug/L	807733.282
	44	Ca	25.242957	22.020	73997.232	ug/L	61872.368
>	45	Sc-1			490533.956	ug/L	454114.374
	51	V	-0.289073	150.305	-31291.784	ug/L	-26072.212
	52	Cr	0.927617	13.034	37748.566	ug/L	26547.338
	55	Mn	0.295761	5.257	8059.687	ug/L	3062.361
	57	Fe	6.473879	20.889	12766.929	ug/L	9798.695
	59	Co	0.016919	16.513	448.345	ug/L	232.338
	60	Ni	0.190286	8.525	832.366	ug/L	301.006
	65	Cu	0.090777	2.104	448.345	ug/L	168.336
	66	Zn	0.621886	60.012	17413.114	ug/L	15137.170
>	72	Ge-1			753147.165	ug/L	739226.379
	75	As	0.463661	51.723	-999.221	ug/L	-1946.463
	82	Se	0.320014	57.953	-48.237	ug/L	-120.854
	97	Mo	0.042364	20.660	197.003	ug/L	72.001
	107	Ag	0.000964	160.156	285.006	ug/L	267.339
	111	Cd	-0.003122	45.215	30.334	ug/L	39.334
>	115	In-1			1510751.571	ug/L	1483966.870
	123	Sb	0.029494	13.467	502.682	ug/L	268.758
	135	Ba	0.133090	9.755	436.678	ug/L	112.002
>	165	Ho-1			1615439.172	ug/L	1592460.464
	205	Tl	0.028282	89.851	4796.864	ug/L	3951.949
	208	Pb	0.016848	29.785	5290.437	ug/L	4580.000
	238	U	-0.002248	11.441	126.002	ug/L	234.671
>	45	Sc-2			490533.956	ug/L	454114.374
	53	Cr	4.176643	134.618	172324.716	ug/L	154333.029
	54	Fe	22.778431	22.842	84500.938	ug/L	62090.940
	61	Ni	-1.743148	50.835	1583.770	ug/L	1681.113
	63	Cu	0.067601	3.845	904.038	ug/L	345.008
	67	Zn	0.220860	948.450	9841.164	ug/L	9047.975
>	72	Ge			753147.165	ug/L	739226.379
	77	Se	6.460961	34.229	9947.149	ug/L	8561.780
	98	Mo	0.063538	6.480	540.391	ug/L	141.970
	109	Ag	0.000604	316.763	300.340	ug/L	288.339
>	115	In-2			1510751.571	ug/L	1483966.870
	114	Cd	-0.003311	32.271	63.244	ug/L	84.731
	121	Sb	0.034397	19.338	604.019	ug/L	349.674
	137	Ba	0.127848	7.296	688.023	ug/L	156.669
>	165	Ho-2			1615439.172	ug/L	1592460.464
	203	Tl	0.036089	81.366	2020.832	ug/L	1582.773
	206	Pb	0.018157	47.601	1322.408	ug/L	1161.392
	207	Pb	0.018900	37.131	1161.392	ug/L	995.045
>	45	Sc			490533.956	ug/L	454114.374
	47	Ti	0.273928	27.166	539.682	ug/L	297.006
	86	Sr	0.048247	69.265	963.679	ug/L	716.656
	88	Sr	0.040018	18.266	7653.793	ug/L	5834.250
>	115	In			1510751.571	ug/L	1483966.870
	118	Sn	0.051128	6.102	1308.073	ug/L	855.034
	120	Sn	0.066463	17.746	1671.562	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	100.020
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.883
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	101.806
	Sb	123	
	Ba	135	
>	Ho-1	165	101.443
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	100.020
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.883
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	101.806
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	101.443
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	100.020
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	101.806
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8L0KC
Sample Date/Time: Wednesday, April 27, 2005 21:41:33
Autosampler Position: 40
Dataset File: D:\Elandata\Dataset\042705M2\G8L0KC.034

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	175.273868	2.052	34015.456	ug/L	7.667
	10	B	169.723082	4.886	6230.088	ug/L	27.667
	23	Na	740.835840	0.938	3193954.861	ug/L	18838.944
	24	Mg	3374.328988	2.134	10506784.084	ug/L	2106.176
	27	Al	9212.868874	1.718	43857121.501	ug/L	3413.777
	39	K	3284.188855	5.737	31146224.314	ug/L	807733.282
	44	Ca	5979.761773	2.607	1832869.908	ug/L	61872.368
>	45	Sc-1			508171.551	ug/L	454114.374
	51	V	176.313108	3.220	1998445.075	ug/L	-26072.212
	52	Cr	128.302968	1.593	1309426.643	ug/L	28547.338
	55	Mn	716.429184	2.425	11936538.030	ug/L	3062.361
	57	Fe	17649.382650	0.906	6187592.040	ug/L	9798.696
	59	Co	64.038901	3.442	824246.843	ug/L	232.338
	60	Ni	275.744671	2.967	762761.641	ug/L	301.006
	65	Cu	261.247858	3.014	794752.437	ug/L	168.336
	66	Zn	290.407214	1.673	535869.794	ug/L	15137.170
>	72	Ge-1			728190.073	ug/L	739226.379
	75	As	347.751725	3.009	707219.198	ug/L	-1945.453
	82	Se	134.294820	1.988	30250.864	ug/L	-120.854
	97	Mo	176.974327	3.480	496578.831	ug/L	72.001
	107	Ag	289.619891	1.565	3539084.558	ug/L	267.339
	111	Cd	289.297127	1.526	781146.000	ug/L	39.334
>	115	In-1			1458448.851	ug/L	1483966.870
	123	Sb	125.074213	1.195	938861.958	ug/L	268.758
	135	Ba	535.683700	1.007	1258173.253	ug/L	112.002
>	165	Ho-1			1559385.890	ug/L	1592480.464
	205	Tl	178.743794	2.803	4740607.167	ug/L	3961.949
	208	Pb	293.674132	1.874	10844468.918	ug/L	4580.000
	238	U	2.733818	2.177	129373.168	ug/L	234.671
>	45	Sc-2			508171.551	ug/L	454114.374
	53	Cr	91.648431	2.861	299943.096	ug/L	154333.029
	54	Fe	17645.309209	4.659	14266050.654	ug/L	62090.940
	61	Ni	275.999678	1.121	36097.579	ug/L	1861.113
	63	Cu	262.511153	1.517	1652986.084	ug/L	345.006
	67	Zn	276.590825	1.826	97369.203	ug/L	9047.975
>	72	Ge			728190.073	ug/L	739226.379
	77	Se	95.929762	5.663	25938.126	ug/L	8561.780
	98	Mo	177.962568	2.442	1268290.818	ug/L	141.970
	109	Ag	262.434268	2.009	3512055.610	ug/L	268.339
>	115	In-2			1458448.851	ug/L	1483966.870
	114	Cd	261.570421	1.225	1760461.815	ug/L	84.731
	121	Sb	125.165697	1.033	1230701.596	ug/L	349.674
	137	Ba	552.868106	3.736	2209051.962	ug/L	156.669
>	165	Ho-2			1559385.890	ug/L	1592480.464
	203	Tl	170.203649	2.131	1951373.194	ug/L	1582.773
	206	Pb	295.061096	2.862	2716003.116	ug/L	1161.392
	207	Pb	309.324760	3.621	2399125.990	ug/L	995.045
>	45	Sc			508171.551	ug/L	454114.374
	47	Ti	483.964975	1.766	402415.502	ug/L	297.006
	86	Sr	147.240771	4.027	594358.409	ug/L	716.656
	88	Sr	150.566138	2.020	5293811.782	ug/L	5834.250
>	115	In			1458448.851	ug/L	1483966.870
	118	Sn	124.888193	0.823	1033171.144	ug/L	855.034
	120	Sn	126.262629	2.548	1373965.307	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	111.904
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	98.236
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.280
	Sb	123	
	Ba	135	
>	Ho-1	165	97.823
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	111.904
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	98.236
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.280
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	97.823
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	111.904
	Ti	47	
	Sr	88	
	Sr	88	
>	In	115	98.280
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Wednesday, April 27, 2005 21:46:41
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 1.035

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	196.083176	3.724	33738.816	ug/L	7.667
	10	B	189.036405	5.894	6181.401	ug/L	27.667
	23	Na	1868.191668	3.067	7150230.239	ug/L	18638.944
	24	Mg	946.144024	4.291	2626789.774	ug/L	2106.176
	27	Al	1962.892069	1.124	8287701.438	ug/L	3413.777
	39	K	1919.754096	1.705	16666877.511	ug/L	807733.282
	44	Ca	1038.253108	3.371	334077.518	ug/L	61872.368
>	45	Sc-1			452883.208	ug/L	454114.374
	51	V	191.856691	1.561	1938534.024	ug/L	-28072.212
	52	Cr	194.629034	2.177	1783063.993	ug/L	26547.338
	55	Mn	194.163919	4.009	2885268.661	ug/L	3062.361
	57	Fe	1941.083333	3.450	615006.943	ug/L	9798.695
	59	Co	191.839062	3.836	2197786.450	ug/L	232.338
	60	Ni	196.138518	4.361	488581.610	ug/L	301.006
	65	Cu	196.988436	4.462	539639.750	ug/L	168.336
	66	Zn	193.285194	0.525	322948.564	ug/L	15137.170
>	72	Ge-1			724499.242	ug/L	739226.379
	75	As	196.318640	4.258	401712.180	ug/L	-1945.453
	82	Se	196.901594	1.387	44303.300	ug/L	-120.864
	97	Mo	197.261219	1.274	560679.572	ug/L	72.001
	107	Ag	48.790780	2.267	645251.576	ug/L	267.339
	111	Cd	193.662947	0.646	587706.945	ug/L	39.334
>	115	In-1			1468771.972	ug/L	1483966.870
	123	Sb	197.019577	1.655	1469407.800	ug/L	268.758
	135	Ba	203.779684	1.243	483960.575	ug/L	112.002
>	165	Ho-1			1579635.152	ug/L	1592460.464
	205	Tl	190.848266	3.325	5213955.761	ug/L	3951.949
	208	Pb	193.177596	1.590	7227334.360	ug/L	4580.000
	238	U	192.787379	2.621	9226134.173	ug/L	234.671
>	45	Sc-2			452883.208	ug/L	454114.374
	53	Cr	157.545418	10.638	348766.805	ug/L	154333.029
	54	Fe	2008.881827	2.758	1486344.129	ug/L	62090.940
	61	Ni	196.408936	2.457	23369.334	ug/L	1681.113
	63	Cu	196.277907	1.720	1101350.929	ug/L	345.008
	67	Zn	192.305346	4.004	63068.020	ug/L	9047.975
>	72	Ge			724499.242	ug/L	739226.379
	77	Se	173.663475	3.954	40012.716	ug/L	8561.760
	98	Mo	196.871769	2.843	1413160.694	ug/L	141.970
	109	Ag	47.714623	2.292	643495.710	ug/L	268.339
>	115	In-2			1468771.972	ug/L	1483966.870
	114	Cd	193.664213	2.965	1312475.748	ug/L	84.731
	121	Sb	197.822233	2.026	1958897.252	ug/L	349.674
	137	Ba	209.182866	2.089	846719.812	ug/L	156.669
>	165	Ho-2			1579635.152	ug/L	1592460.464
	203	Tl	190.021160	3.826	2205876.753	ug/L	1582.773
	206	Pb	193.450666	3.168	1803762.317	ug/L	1161.382
	207	Pb	199.494002	2.090	1567752.799	ug/L	995.045
>	45	Sc			452883.208	ug/L	454114.374
	47	Ti	199.217731	2.000	147801.840	ug/L	297.006
	86	Sr	190.546626	3.598	685429.080	ug/L	716.656
	88	Sr	193.151026	2.217	8047151.872	ug/L	5834.250
>	115	In			1468771.972	ug/L	1483966.870
	118	Sn	199.503070	0.905	1661763.876	ug/L	855.034
	120	Sn	202.525900	2.425	2220375.236	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		97.542

	B	10		94.818
	Na	23		93.410
	Mg	24		94.814
	Al	27		97.539
	K	39		96.968
	Ca	44		103.625
>	Sc-1	45	99.729	
	V	51		96.825
	Cr	52		97.396
	Mn	55		97.077
	Fe	57		97.864
	Co	59		96.529
	Ni	60		99.009
	Cu	65		99.494
	Zn	66		96.843
>	Ge-1	72	99.008	
	As	75		99.159
	Se	82		96.491
	Mo	97		96.826
	Ag	107		97.582
	Cd	111		96.828
>	In-1	115	99.979	
	Sb	123		99.819
	Ba	135		101.899
>	Ho-1	165	99.199	
	Tl	205		96.426
	Pb	208		96.589
	U	238		96.394
>	Sc-2	45	99.729	
	Cr	53		79.773
	Fe	54		100.444
	Ni	61		96.304
	Cu	63		96.139
	Zn	67		99.153
>	Ge	72	99.008	
	Se	77		96.512
	Mo	95		96.436
	Ag	109		96.429
>	In-2	115	99.979	
	Cd	114		96.832
	Sb	121		96.911
	Ba	137		104.991
>	Ho-2	165	99.199	
	Tl	203		96.911
	Pb	208		96.728
	Pb	207		96.747
>	Sc	45	99.729	
	Ti	47		99.809
	Sr	86		96.273
	Sr	88		99.579
>	In	115	99.979	
	Sn	118		99.782
	Sn	120		101.313

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cr	53	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Wednesday, April 27, 2005 21:52:51
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 2.036

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	-0.009246	102.400	6.000	ug/L	7.667
	10	B	3.823037	24.245	144.336	ug/L	27.667
	23	Na	-0.050294	160.252	18367.359	ug/L	18838.944
	24	Mg	0.059737	111.015	2240.865	ug/L	2108.176
	27	Al	0.161188	15.345	4045.614	ug/L	3413.777
	39	K	-5.802037	25.922	749720.918	ug/L	807733.282
	44	Ca	-4.993245	161.746	59727.559	ug/L	61872.368
>	45	Sc-1			448070.962	ug/L	454114.374
	51	V	0.531629	50.780	-20326.657	ug/L	-26072.212
	52	Cr	-0.776370	27.914	19219.510	ug/L	26547.338
	55	Mn	0.022561	29.168	3352.093	ug/L	3062.361
	57	Fe	-3.784735	23.078	8497.613	ug/L	9798.695
	59	Co	0.009426	52.805	336.674	ug/L	232.338
	60	Ni	-0.006391	99.669	281.339	ug/L	301.006
	65	Cu	0.823788	15.076	230.004	ug/L	168.336
	66	Zn	-0.198254	45.351	14521.959	ug/L	15137.170
>	72	Ge-1			718154.348	ug/L	739226.379
	75	As	0.995819	30.390	120.447	ug/L	-1945.453
	82	Se	0.320686	67.085	-45.706	ug/L	-120.854
	97	Mo	0.069212	36.593	326.674	ug/L	72.001
	107	Ag	0.007060	28.022	359.675	ug/L	267.339
	111	Cd	0.010675	6.033	71.668	ug/L	39.334
>	115	In-1			1476030.759	ug/L	1483966.870
	123	Sb	0.116801	26.194	1144.967	ug/L	268.758
	135	Ba	-0.006421	75.523	96.668	ug/L	112.002
>	165	Ho-1			1593960.540	ug/L	1592460.464
	205	Tl	0.316541	48.709	12845.437	ug/L	3951.949
	208	Pb	-0.006118	32.002	4277.980	ug/L	4580.000
	238	U	0.008502	16.032	549.016	ug/L	234.671
>	45	Sc-2			448070.962	ug/L	454114.374
	53	Cr	-20.837975	64.133	126602.043	ug/L	154333.029
	54	Fe	-3.542899	94.613	58754.296	ug/L	62090.940
	61	Ni	-0.703196	141.473	1661.434	ug/L	1661.113
	63	Cu	0.032569	13.510	521.348	ug/L	345.008
	67	Zn	0.529479	441.186	9174.394	ug/L	9047.975
>	72	Ge			718154.348	ug/L	739226.379
	77	Se	-27.864763	8.112	3287.666	ug/L	8561.780
	98	Mo	0.111411	24.424	945.457	ug/L	141.970
	109	Ag	0.014396	26.296	482.013	ug/L	288.339
>	115	In-2			1476030.759	ug/L	1483966.870
	114	Cd	0.008663	3.891	143.306	ug/L	84.731
	121	Sb	0.116426	26.133	1496.782	ug/L	349.674
	137	Ba	0.009096	12.533	194.003	ug/L	156.669
>	165	Ho-2			1593960.540	ug/L	1592460.464
	203	Tl	0.310157	46.342	6215.067	ug/L	1582.773
	206	Pb	-0.012304	29.207	1046.716	ug/L	1161.392
	207	Pb	-0.003606	166.691	967.376	ug/L	995.045
>	45	Sc			448070.962	ug/L	454114.374
	47	Ti	0.000204	12349.335	293.006	ug/L	297.006
	86	Sr	-0.000888	1800.707	703.362	ug/L	716.656
	88	Sr	0.001753	122.369	5810.239	ug/L	5834.250
>	115	In			1476030.759	ug/L	1483966.870
	118	Sn	0.064786	19.912	1392.749	ug/L	855.034
	120	Sn	0.071980	37.414	1690.629	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		-0.838

|	B	10		362.304
|	Na	23		-0.000
|	Mg	24		0.000
|	Al	27		0.101
|	K	39		-6.802
|	Ca	44		-4.993
|>	Sc-1	45	98.869	
|	V	51		83.183
|	Cr	52		-77.837
|	Mn	55		2.256
|	Fe	57		-3.756
|	Co	59		0.943
|	Ni	60		-0.838
|	Cu	65		2.379
L	Zn	66		-10.825
[>	Ge-1	72	97.149	
|	As	75		99.662
L	Se	82		32.099
[	Mo	97		8.821
|	Ag	107		0.705
|	Cd	111		1.068
|>	In-1	115	99.485	
L	Sb	123		11.580
[	Ba	136		-0.842
|>	Ho-1	165	100.094	
|	Tl	205		31.564
|	Pb	208		-0.912
L	U	238		0.856
[>	Sc-2	45	98.869	
|	Cr	53		-2083.796
|	Fe	54		-3.843
|	Ni	61		-70.329
|	Cu	63		3.257
L	Zn	67		92.946
[>	Ge	72	97.149	
L	Se	77		-2799.475
[	Mo	98		11.141
|	Ag	109		1.439
|>	In-2	115	99.486	
|	Cd	114		0.866
L	Sb	121		11.542
[	Ba	137		0.919
|>	Ho-2	165	100.094	
|	Tl	203		31.016
|	Pb	206		-1.239
L	Pb	207		-0.301
[>	Sc	45	98.869	
|	Ti	47		0.028
|	Sr	86		-0.009
L	Sr	88		0.175
[>	In	115	99.485	
|	Sn	118		6.477
L	Sn	120		7.198

QC Out Of Limits

Analyte	Mass	Out of Limits Message
B	10	Q
Cr	53	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8L0KC ODD
Sample Date/Time: Wednesday, April 27, 2005 21:58:58
Autosampler Position: 41
Dataset File: D:\Elandata\Dataset\042705M2\G8L0KC ODD.037

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.000320	951.903	7.667	ug/L	7.667
	10	B	196.668890	2.230	6368.817	ug/L	27.667
	23	Na	8.264636	7.093	50074.474	ug/L	18838.944
	24	Mg	8.663007	3.982	25974.856	ug/L	2106.178
	27	Al	3.875285	0.876	19755.188	ug/L	3413.777
	39	K	-4.870368	52.148	761676.015	ug/L	807733.282
	44	Ca	34.615007	9.511	70467.453	ug/L	61872.368
>	45	Sc-1			450755.756	ug/L	454114.374
	51	V	0.222081	74.485	-23804.855	ug/L	-26072.212
	52	Cr	-0.022362	591.875	28161.255	ug/L	26547.338
	55	Mn	0.176584	2.985	5833.500	ug/L	3062.361
	57	Fe	1.729762	85.195	10258.438	ug/L	9798.685
	59	Co	0.026096	22.294	527.682	ug/L	232.338
	60	Ni	0.142804	10.096	648.688	ug/L	301.006
	65	Cu	0.250041	8.747	841.033	ug/L	168.336
	66	Zn	1.998805	13.691	18185.083	ug/L	15137.170
>	72	Ge-1			734727.690	ug/L	739228.379
	75	As	0.854661	13.941	-171.697	ug/L	-1945.453
	82	Se	0.392737	31.734	-30.496	ug/L	-120.654
	97	Mo	0.027139	28.321	149.336	ug/L	72.001
	107	Ag	0.822866	2.055	11208.842	ug/L	267.339
	111	Cd	0.128362	3.662	431.011	ug/L	39.334
>	115	In-1			1477746.490	ug/L	1483966.870
	123	Sb	0.060765	11.818	729.823	ug/L	268.758
	135	Ba	0.078154	3.248	296.673	ug/L	112.002
>	165	Ho-1			1589698.478	ug/L	1592460.464
	205	Tl	0.134691	49.624	7666.557	ug/L	3951.949
	208	Pb	0.019641	34.711	5308.104	ug/L	4580.000
	238	U	187.058241	1.508	9008853.779	ug/L	234.671
>	45	Sc-2			450755.756	ug/L	454114.374
	53	Cr	-24.816425	36.827	122962.010	ug/L	154333.029
	54	Fe	20.630773	17.012	76159.776	ug/L	62090.940
	61	Ni	-0.562961	128.794	1585.771	ug/L	1661.113
	63	Cu	0.177394	9.525	1332.409	ug/L	345.008
	67	Zn	0.186142	1260.116	9039.631	ug/L	9047.975
>	72	Ge			734727.690	ug/L	739228.379
	77	Se	-25.183401	15.964	3858.608	ug/L	8561.780
	98	Mo	0.034607	12.123	391.312	ug/L	141.970
	109	Ag	0.839236	8.691	819.365	ug/L	288.339
>	115	In-2			1477746.490	ug/L	1483966.870
	114	Cd	0.262879	31.643	1875.638	ug/L	84.731
	121	Sb	0.066913	12.394	1014.713	ug/L	349.674
	137	Ba	0.074775	8.137	460.679	ug/L	156.669
>	165	Ho-2			1589698.478	ug/L	1592460.464
	203	Tl	0.133605	42.851	3147.390	ug/L	1582.773
	206	Pb	0.022883	28.421	1373.747	ug/L	1161.392
	207	Pb	0.019288	57.997	1144.391	ug/L	995.045
>	45	Sc			450755.756	ug/L	454114.374
	47	Ti	198.523004	1.603	146562.671	ug/L	297.006
	86	Sr	0.078773	7.736	992.640	ug/L	716.656
	88	Sr	0.054943	7.648	7500.711	ug/L	5834.250
>	115	In			1477746.490	ug/L	1483966.870
	118	Sn	200.965305	2.950	1684064.555	ug/L	855.034
	120	Sn	196.668414	2.611	2168596.146	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	99.288
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	98.391
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.591
	Sb	123	
	Ba	135	
>	Ho-1	165	99.827
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	99.288
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	98.391
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	99.591
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	99.827
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	99.288
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	99.591
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G7NWL
Sample Data/Time: Wednesday, April 27, 2005 22:04:04
Autosampler Position: 42
Dataset File: D:\Elandata\Dataset\042705M2\G7NWL.038

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	1.386812	5.405	291.006	ug/L	7.667
	10	B	6.538397	6.810	283.006	ug/L	27.667
	23	Na	41.372037	4.106	207868.760	ug/L	18838.944
	24	Mg	9427.982160	3.881	30757775.473	ug/L	2106.176
	27	Al	22318.993865	5.305	111398736.225	ug/L	3413.777
	39	K	2348.205364	3.286	23623606.606	ug/L	807733.282
	44	Ca	16247.337007	2.332	5714435.250	ug/L	61872.368
>	45	Sc-1			532489.503	ug/L	454114.374
	51	V	37.966893	5.635	427294.739	ug/L	-26072.212
	52	Cr	33.564380	6.549	387649.571	ug/L	26547.338
	55	Mn	1215.876968	4.848	21238640.313	ug/L	3062.361
	57	Fe	37246.551539	5.371	13675476.389	ug/L	9796.696
	59	Co	27.244887	4.566	367868.808	ug/L	232.338
	60	Ni	31.822171	4.541	92818.218	ug/L	301.006
	65	Cu	24.206306	3.186	77385.758	ug/L	168.336
	66	Zn	93.930128	4.594	193738.223	ug/L	15137.170
>	72	Ge-1			747264.159	ug/L	739226.379
	75	As	8.450729	6.740	11577.775	ug/L	-1945.453
	82	Se	1.009535	7.110	112.761	ug/L	-120.854
	97	Mo	0.833171	6.987	2423.897	ug/L	72.001
	107	Ag	0.089116	3.757	1432.066	ug/L	267.339
	111	Cd	0.162726	0.926	629.015	ug/L	39.334
>	115	In-1			1458439.963	ug/L	1483966.870
	123	Sb	0.195466	7.077	1731.901	ug/L	268.758
	135	Ba	218.503261	7.676	517000.001	ug/L	112.002
>	165	Ho-1			1574326.976	ug/L	1592460.464
	205	Tl	0.358586	14.220	13656.384	ug/L	3951.949
	208	Pb	42.978909	7.571	1605578.561	ug/L	4580.000
	238	U	1.200708	11.087	57471.054	ug/L	234.671
>	45	Sc-2			532489.503	ug/L	454114.374
	53	Cr	7.454100	135.189	191671.409	ug/L	154333.029
	54	Fe	38832.025789	0.839	30785706.747	ug/L	62090.940
	61	Ni	33.556891	5.151	6312.126	ug/L	1661.113
	63	Cu	24.262263	6.886	160546.180	ug/L	345.006
	67	Zn	91.410481	2.211	40837.391	ug/L	9047.975
>	72	Ge			747264.159	ug/L	739226.379
	77	Se	-19.172096	10.870	5054.461	ug/L	8561.780
	98	Mo	0.835572	5.729	6097.485	ug/L	141.970
	109	Ag	0.050052	3.919	953.375	ug/L	268.339
>	115	In-2			1458439.963	ug/L	1483966.870
	114	Cd	0.159805	7.162	1152.682	ug/L	84.731
	121	Sb	0.193615	8.758	2248.200	ug/L	349.674
	137	Ba	221.038907	8.250	891446.759	ug/L	156.889
>	165	Ho-2			1574326.976	ug/L	1592460.464
	203	Tl	0.368416	17.007	5705.873	ug/L	1582.773
	206	Pb	43.738440	7.873	407289.073	ug/L	1161.392
	207	Pb	44.283256	7.072	347530.208	ug/L	996.045
>	45	Sc			532489.503	ug/L	454114.374
	47	Ti	286.902487	4.782	250245.699	ug/L	297.006
	86	Sr	16.975783	4.206	72807.121	ug/L	716.656
	88	Sr	17.212016	4.391	640159.180	ug/L	5834.250
>	115	In			1458439.963	ug/L	1483966.870
	118	Sn	1.842730	7.568	16062.249	ug/L	856.034
	120	Sn	1.896987	8.867	21753.192	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	117.269
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.087
	As	78	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.280
	Sb	123	
	Ba	135	
>	Ho-1	165	98.891
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	117.269
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.087
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.280
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	98.891
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	117.269
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	98.280
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G7NW8
Sample Date/Time: Wednesday, April 27, 2005 22:09:11
Autosampler Position: 43
Dataset File: D:\Elandata\Dataset\042705M2\G7NW8.039

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	1.292762	7.597	248.005	ug/L	7.667
	10	B	3.941908	9.616	167.336	ug/L	27.667
	23	Na	84.696434	2.353	366561.121	ug/L	18838.944
	24	Mg	10052.296827	3.059	29946287.023	ug/L	2106.176
	27	Al	16977.733642	2.215	86362603.779	ug/L	3413.777
	39	K	1978.430495	3.640	18285709.964	ug/L	807733.282
	44	Ca	263322.282036	5.143	71488094.675	ug/L	61872.368
>	45	Sc-1			485764.394	ug/L	454114.374
	51	V	27.221434	2.056	271401.853	ug/L	-26072.212
	52	Cr	25.922288	2.106	279508.762	ug/L	26547.338
	55	Mn	752.579414	2.864	12463548.540	ug/L	3062.361
	57	Fe	29036.462064	1.112	9723048.286	ug/L	9798.695
	59	Co	16.121406	3.596	198558.492	ug/L	232.338
	60	Ni	27.963980	2.847	74226.185	ug/L	301.006
	65	Cu	22.421498	2.263	66383.639	ug/L	168.336
	66	Zn	139.676612	4.307	254784.334	ug/L	15137.170
>	72	Ge-1			724498.270	ug/L	739226.379
	75	As	5.218348	13.554	8891.880	ug/L	-1945.453
	82	Se	0.472986	43.140	-10.931	ug/L	-120.854
	97	Mo	0.503818	3.187	1435.088	ug/L	72.001
	107	Ag	0.084910	9.441	944.707	ug/L	267.339
	111	Cd	0.113132	4.963	364.575	ug/L	39.334
>	115	In-1			1402178.473	ug/L	1483986.870
	123	Sb	0.103932	7.149	1003.158	ug/L	268.758
	135	Ba	142.932627	1.492	327282.182	ug/L	112.002
>	165	Ho-1			1522739.764	ug/L	1592460.464
	205	Tl	0.230883	16.362	9850.510	ug/L	3951.949
	208	Pb	20.153297	1.352	730824.964	ug/L	4580.000
	238	U	0.732749	2.078	34031.166	ug/L	234.671
>	45	Sc-2			485764.394	ug/L	454114.374
	53	Cr	-8.365930	126.523	153939.574	ug/L	154333.029
	54	Fe	29645.525855	2.444	22796414.483	ug/L	62090.940
	61	Ni	63.221549	6.847	9274.442	ug/L	1661.113
	63	Cu	22.150556	0.937	133645.901	ug/L	345.008
	67	Zn	127.689188	3.597	48186.647	ug/L	9047.975
>	72	Ge			724498.270	ug/L	739226.379
	77	Se	-5.527219	64.722	7396.284	ug/L	8561.780
	98	Mo	0.493474	1.943	3514.957	ug/L	141.970
	109	Ag	0.021104	6.194	544.016	ug/L	288.338
>	115	In-2			1402178.473	ug/L	1483986.870
	114	Cd	0.102069	9.804	741.377	ug/L	84.731
	121	Sb	0.097297	4.860	1249.400	ug/L	349.674
	137	Ba	145.210140	2.091	566707.789	ug/L	156.669
>	165	Ho-2			1522739.764	ug/L	1592460.464
	203	Tl	0.232072	11.775	4107.633	ug/L	1582.773
	208	Pb	20.395103	3.694	184389.416	ug/L	1161.392
	207	Pb	20.501276	2.578	156171.325	ug/L	995.045
>	45	Sc			485764.394	ug/L	454114.374
	47	Ti	280.117410	1.374	222800.577	ug/L	297.006
	86	Sr	361.116807	0.443	1392909.844	ug/L	716.656
	88	Sr	367.227050	0.846	12327061.233	ug/L	5834.250
>	115	In			1402178.473	ug/L	1483986.870
	118	Sn	0.734547	4.233	6647.615	ug/L	855.034
	120	Sn	0.728420	4.452	8634.442	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	106.970
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	96.906
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	94.480
	Sb	123	
	Ba	135	
>	Ho-1	165	95.622
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	106.970
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	96.906
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	94.480
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	95.622
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	106.970
	Tl	47	
	Sr	88	
	Sr	86	
>	In	115	94.480
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G7NW8S
Sample Date/Time: Wednesday, April 27, 2005 22:14:18
Autosampler Position: 44
Dataset File: D:\Elandata\Dataset\042705M2\G7NW8S.040

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	6.127250	1.588	1360.745	ug/L	7.667
	10	B	146.673311	1.857	6086.360	ug/L	27.667
	23	Na	4074.089905	1.792	19648694.811	ug/L	18838.944
	24	Mg	15348.295178	1.520	54261531.042	ug/L	2106.176
	27	Al	36192.876880	1.514	195823571.437	ug/L	3413.777
	39	K	7120.680382	2.941	75574832.493	ug/L	807733.282
	44	Ca	20319.780031	2.944	6893550.156	ug/L	61872.368
>	45	Sc-1			577403.226	ug/L	454114.374
	51	V	83.641583	3.834	1060920.246	ug/L	-26072.212
	52	Cr	88.315852	1.591	705379.743	ug/L	26547.338
	55	Mn	964.806279	2.786	18082179.750	ug/L	3062.361
	57	Fe	42882.677873	1.874	17068750.829	ug/L	9796.695
	59	Co	63.540163	2.639	931249.745	ug/L	232.338
	60	Ni	82.462969	2.322	259444.441	ug/L	301.006
	65	Cu	53.594235	1.302	185386.187	ug/L	168.336
	66	Zn	191.703408	2.697	408510.377	ug/L	15137.170
>	72	Ge-1			760707.452	ug/L	739228.379
	75	As	219.093200	5.207	466323.911	ug/L	-1945.453
	82	Se	197.865328	5.553	46756.316	ug/L	-120.854
	97	Mo	103.666724	5.719	292787.720	ug/L	72.001
	107	Ag	5.861916	6.736	77201.103	ug/L	267.339
	111	Cd	5.719964	4.816	17279.623	ug/L	39.334
>	115	In-1			1459803.359	ug/L	1483966.870
	123	Sb	19.321825	8.635	145257.319	ug/L	268.758
	135	Ba	466.852200	3.277	1096587.830	ug/L	112.002
>	165	Ho-1			1560997.807	ug/L	1592460.464
	208	Tl	192.833163	4.118	5208079.729	ug/L	3951.949
	208	Pb	77.350706	4.178	2883442.484	ug/L	4580.000
	238	U	202.919263	5.121	9600837.352	ug/L	234.671
>	45	Sc-2			577403.226	ug/L	454114.374
	53	Cr	30.344685	33.643	243726.366	ug/L	154333.029
	54	Fe	42660.554618	1.790	38118451.679	ug/L	62090.940
	61	Ni	82.929771	2.859	13796.801	ug/L	1861.113
	63	Cu	53.509764	1.429	383293.861	ug/L	345.008
	67	Zn	189.402891	3.648	79371.499	ug/L	9047.975
>	72	Ge			760707.452	ug/L	739228.379
	77	Se	149.558518	2.720	37401.859	ug/L	8561.760
	98	Mo	104.936768	7.239	748078.272	ug/L	141.970
	109	Ag	4.865699	6.083	85423.951	ug/L	288.339
>	115	In-2			1459803.359	ug/L	1483966.870
	114	Cd	6.002886	6.380	40489.132	ug/L	84.731
	121	Sb	19.416201	8.780	191216.967	ug/L	349.674
	137	Ba	461.739629	2.640	1847442.784	ug/L	156.669
>	165	Ho-2			1560997.807	ug/L	1592460.464
	203	Tl	193.862916	3.304	2225185.467	ug/L	1582.773
	206	Pb	79.393178	6.730	732679.154	ug/L	1161.392
	207	Pb	81.336201	3.399	632403.212	ug/L	995.045
>	45	Sc			577403.226	ug/L	454114.374
	47	Ti	499.942842	3.129	472408.518	ug/L	297.006
	86	Sr	102.649113	2.786	471336.302	ug/L	716.666
	88	Sr	105.000729	3.933	4197943.806	ug/L	5834.250
>	115	In			1459803.359	ug/L	1483966.870
	118	Sn	200.049321	5.751	1654889.862	ug/L	855.034
	120	Sn	204.699802	6.078	2227950.885	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	127.149
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	102.906
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.372
	Sb	128	
	Ba	135	
>	Ho-1	165	98.024
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	127.149
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	102.906
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.372
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	98.024
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	127.149
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	98.372
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G7NW8D
Sample Date/Time: Wednesday, April 27, 2005 22:19:25
Autosampler Position: 45
Dataset File: D:\Elandata\Dataset\042705M2\G7NW8D.041

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	5.965975	6.861	1329.409	ug/L	7.667
	10	B	150.483220	4.939	6299.121	ug/L	27.667
	23	Na	4109.497891	4.264	20085776.698	ug/L	18838.944
	24	Mg	14272.824283	3.134	50631374.088	ug/L	2106.176
	27	Al	36204.119984	6.704	196433144.914	ug/L	3413.777
	39	K	7106.341609	4.860	75654617.216	ug/L	807733.282
	44	Ca	18193.723326	4.358	6193582.210	ug/L	61872.368
>	45	Sc-1			578827.890	ug/L	454114.374
	51	V	81.215116	2.330	1031126.332	ug/L	-26072.212
	52	Cr	56.872906	5.594	690515.218	ug/L	26547.338
	55	Mn	1050.441177	8.295	19940384.625	ug/L	3062.361
	57	Fe	48361.506368	3.572	18090062.668	ug/L	9796.695
	59	Co	65.926638	6.731	967094.742	ug/L	232.338
	60	Ni	82.876638	5.305	281518.963	ug/L	301.006
	65	Cu	62.888702	4.367	183622.971	ug/L	168.336
	66	Zn	168.639624	7.047	362718.323	ug/L	15137.170
>	72	Ge-1			740638.749	ug/L	739228.379
	75	As	225.454164	7.680	467042.917	ug/L	-1946.453
	82	Se	196.788236	8.071	45717.058	ug/L	-120.864
	97	Mo	104.483340	6.364	298968.723	ug/L	72.001
	107	Ag	5.886687	7.791	78007.606	ug/L	267.339
	111	Cd	5.751772	6.054	17481.888	ug/L	39.334
>	115	In-1			1468060.303	ug/L	1483966.870
	123	Sb	19.118627	8.808	144693.270	ug/L	268.758
	135	Ba	460.048047	6.378	1066946.640	ug/L	112.002
>	165	Ho-1			1542921.788	ug/L	1592460.464
	205	Tl	197.116063	6.110	5260209.565	ug/L	3951.949
	208	Pb	80.079161	6.784	2928742.898	ug/L	4580.000
	238	U	207.792855	7.434	9712506.872	ug/L	234.671
>	45	Sc-2			578827.890	ug/L	454114.374
	53	Cr	35.712760	15.311	253114.231	ug/L	154333.029
	54	Fe	43936.680797	4.317	99905687.356	ug/L	62090.940
	61	Ni	85.366677	4.353	14185.862	ug/L	1861.113
	63	Cu	53.813727	5.869	384206.169	ug/L	345.008
	67	Zn	166.139280	3.176	71961.978	ug/L	9047.975
>	72	Ge			740638.749	ug/L	739228.379
	77	Se	185.763949	3.265	39426.905	ug/L	8561.780
	98	Mo	104.035472	9.075	746423.958	ug/L	141.970
	109	Ag	4.931499	6.396	66723.794	ug/L	288.339
>	115	In-2			1468060.303	ug/L	1483966.870
	114	Cd	6.020203	5.654	40865.949	ug/L	84.731
	121	Sb	19.284125	8.881	190962.050	ug/L	349.674
	137	Ba	462.303875	6.855	1827612.541	ug/L	156.669
>	165	Ho-2			1542921.788	ug/L	1592460.464
	203	Tl	193.707500	10.278	2186569.517	ug/L	1582.773
	206	Pb	81.111733	9.075	739405.563	ug/L	1161.392
	207	Pb	83.441222	6.348	841061.906	ug/L	995.045
>	45	Sc			578827.890	ug/L	454114.374
	47	Ti	526.900654	2.895	499082.904	ug/L	297.008
	88	Sr	101.228142	5.363	465890.113	ug/L	716.656
	88	Sr	101.776532	6.968	4078805.208	ug/L	5834.250
>	115	In			1468060.303	ug/L	1483966.870
	118	Sn	203.447112	6.301	1693551.699	ug/L	855.034
	120	Sn	204.443842	7.340	2239361.805	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	127.463
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	100.191
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.928
	Sb	123	
	Ba	135	
>	Ho-1	165	98.869
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	46	127.463
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	100.191
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.928
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	98.869
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	127.463
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	98.928
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G7NW8V
Sample Date/Time: Wednesday, April 27, 2005 22:24:33
Autosampler Position: 46
Dataset File: D:\Elandata\Dataset\042705M2\G7NW8V.042

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.307969	15.350	61.667	ug/L	7.667
	10	B	5.585039	17.858	212.670	ug/L	27.667
	23	Na	22.589972	2.088	106567.441	ug/L	18838.944
	24	Mg	2327.972817	2.134	6554997.995	ug/L	2108.176
	27	Al	4397.081588	1.114	18929483.434	ug/L	3413.777
	39	K	443.144533	2.010	4507710.254	ug/L	807733.282
	44	Ca	54234.002193	1.340	14527587.902	ug/L	61872.368
>	45	Sc-1			459465.268	ug/L	454114.374
	51	V	7.969850	4.542	56448.231	ug/L	-26072.212
	52	Cr	4.547314	3.035	68507.891	ug/L	26547.338
	55	Mn	172.944931	1.363	2807531.933	ug/L	3062.361
	57	Fe	6217.923421	8.135	1976206.218	ug/L	9798.695
	59	Co	3.422606	2.540	40051.141	ug/L	232.338
	60	Ni	6.232086	4.515	15879.318	ug/L	301.006
	65	Cu	4.943460	4.400	13764.438	ug/L	168.336
	66	Zn	30.498358	1.928	84582.634	ug/L	15137.170
>	72	Ge-1			701991.646	ug/L	739226.379
	75	As	2.534731	2.089	3152.812	ug/L	-1945.453
	82	Se	0.874334	6.666	32.663	ug/L	-120.864
	97	Mo	0.138510	18.925	468.346	ug/L	72.001
	107	Ag	0.007467	20.136	366.008	ug/L	267.339
	111	Cd	0.019565	27.908	99.001	ug/L	39.334
>	115	In-1			1479571.203	ug/L	1483966.870
	123	Sb	0.021418	28.081	430.982	ug/L	268.758
	135	Ba	30.170058	2.007	70613.654	ug/L	112.002
>	165	Ho-1			1552420.941	ug/L	1592460.464
	205	Tl	0.428986	18.343	15282.069	ug/L	3951.949
	208	Pb	4.078701	0.645	154291.661	ug/L	4580.000
	238	U	0.149489	1.802	7260.584	ug/L	234.671
>	45	Sc-2			459465.268	ug/L	454114.374
	53	Cr	-69.741165	5.592	68608.119	ug/L	154333.029
	54	Fe	6356.363499	4.644	4633719.786	ug/L	62090.940
	61	Ni	14.344964	5.461	3288.745	ug/L	1661.113
	63	Cu	5.069619	2.397	29197.442	ug/L	345.008
	67	Zn	17.559606	2.239	14163.494	ug/L	9047.975
>	72	Ge			701991.646	ug/L	739226.379
	77	Se	-37.611252	2.133	1458.827	ug/L	8561.780
	98	Mo	0.164102	13.858	1256.629	ug/L	141.970
	109	Ag	-0.002143	80.560	258.338	ug/L	288.339
>	115	In-2			1479571.203	ug/L	1483966.870
	114	Cd	0.015748	11.137	192.023	ug/L	84.731
	121	Sb	0.018990	7.736	538.016	ug/L	349.674
	137	Ba	30.557067	1.464	122111.945	ug/L	156.669
>	165	Ho-2			1552420.941	ug/L	1592460.464
	203	Tl	0.416209	22.567	6287.806	ug/L	1582.773
	206	Pb	4.119245	0.927	38869.199	ug/L	1161.392
	207	Pb	4.130943	1.207	32860.747	ug/L	995.045
>	45	Sc			459465.268	ug/L	454114.374
	47	Ti	62.683193	2.442	47379.249	ug/L	297.006
	86	Sr	76.879015	3.535	280925.779	ug/L	716.656
	88	Sr	78.363931	3.078	2491789.154	ug/L	5834.250
>	115	In			1479571.203	ug/L	1483966.870
	118	Sn	0.218317	4.964	2683.279	ug/L	855.034
	120	Sn	0.231236	4.614	3651.658	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	101.178
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	94.963
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.704
	Sb	123	
	Ba	136	
>	Ho-1	165	97.486
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	101.178
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	94.963
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	99.704
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	97.486
	Tl	205	
	Pb	206	
	Pb	207	
>	Sc	45	101.178
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	99.704
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G7NXD
Sample Date/Time: Wednesday, April 27, 2005 22:29:41
Autosampler Position: 47
Dataset File: D:\Elandata\Dataset\042705M2\G7NXD.043

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	1.668986	4.956	432.011	ug/L	7.667
	10	B	6.045857	8.013	293.006	ug/L	27.667
	23	Na	85.012396	3.575	448292.963	ug/L	18838.944
	24	Mg	10966.909779	6.683	39894650.997	ug/L	2106.176
	27	Al	27291.697405	4.121	151173132.037	ug/L	3413.777
	39	K	1604.511530	4.553	18249401.682	ug/L	807733.282
	44	Ca	9241.516824	5.625	3252512.904	ug/L	61672.368
>	45	Sc-1			591258.242	ug/L	454114.374
	51	V	36.937094	8.819	460353.117	ug/L	-26072.212
	52	Cr	35.654551	5.948	454987.603	ug/L	26547.338
	55	Mn	14831.668994	5.099	287500277.878	ug/L	3062.361
	57	Fe	44892.732961	4.937	18212471.032	ug/L	9798.695
	59	Co	44.768960	4.300	670577.628	ug/L	232.338
	60	Ni	54.164786	1.758	174862.302	ug/L	301.006
	65	Cu	27.889695	6.401	98133.150	ug/L	168.336
	66	Zn	626.830998	6.044	1323277.888	ug/L	15137.170
>	72	Ge-1			761468.618	ug/L	739226.379
	75	As	19.881707	1.773	40533.547	ug/L	-1945.453
	82	Se	0.885093	42.650	86.502	ug/L	-120.854
	97	Mo	1.173183	7.258	3474.792	ug/L	72.001
	107	Ag	0.132962	4.307	2062.836	ug/L	267.339
	111	Cd	7.632187	6.843	23663.185	ug/L	39.334
>	115	In-1			1496766.059	ug/L	1483966.870
	123	Sb	0.160432	6.255	1508.588	ug/L	268.758
	135	Ba	647.918077	5.466	1547837.148	ug/L	112.002
>	165	Ho-1			1588114.454	ug/L	1592480.464
	205	Tl	0.476886	16.528	17026.445	ug/L	3951.949
	208	Pb	175.663676	4.005	6607868.694	ug/L	4580.000
	238	U	0.899706	4.310	33918.307	ug/L	234.671
>	45	Sc-2			591258.242	ug/L	454114.374
	53	Cr	-6.770781	197.816	191577.926	ug/L	154333.029
	54	Fe	44772.130706	4.317	41534449.349	ug/L	62090.940
	61	Ni	56.876369	8.951	10374.216	ug/L	1661.113
	63	Cu	27.814611	5.600	204156.482	ug/L	345.006
	67	Zn	671.211687	3.977	221491.719	ug/L	9047.975
>	72	Ge			761468.618	ug/L	739226.379
	77	Se	-31.969915	16.868	2685.337	ug/L	8561.780
	98	Mo	1.176582	7.975	8757.014	ug/L	141.970
	109	Ag	0.029563	2.483	697.691	ug/L	288.339
>	115	In-2			1496766.059	ug/L	1483966.870
	114	Cd	7.869212	6.130	54491.369	ug/L	84.731
	121	Sb	0.185304	12.219	2021.831	ug/L	349.674
	137	Ba	671.767034	2.017	2734593.174	ug/L	166.669
>	165	Ho-2			1588114.454	ug/L	1592480.464
	203	Tl	0.480218	16.734	7190.237	ug/L	1582.773
	206	Pb	178.032620	4.021	1670324.347	ug/L	1161.392
	207	Pb	176.964767	2.862	1399015.229	ug/L	995.045
>	45	Sc			591258.242	ug/L	454114.374
	47	Ti	118.486838	7.899	114922.826	ug/L	297.006
	86	Sr	10.705294	7.733	51169.807	ug/L	716.856
	88	Sr	10.767083	5.747	447342.432	ug/L	5834.250
>	115	In			1496766.059	ug/L	1483966.870
	118	Sn	1.015226	8.926	9482.918	ug/L	855.034
	120	Sn	1.019570	4.230	12606.302	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	130.300
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	103.000
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	100.007
	Sb	123	
	Ba	135	
>	Ho-1	165	99.727
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	130.280
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	103.000
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	116	100.007
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	99.727
	Tl	205	
	Pb	206	
	Pb	207	
>	Sc	45	130.280
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	100.007
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Sc-1	45	Q
Sc-2	45	Q
Sc	45	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: G73N6
Sample Date/Time: Wednesday, April 27, 2005 22:34:51
Autosampler Position: 48
Dataset File: D:\Elandata\Dataset\042705M2\G73N6.044

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.620010	26.177	137.335	ug/L	7.667
	10	B	3.107831	8.097	154.002	ug/L	27.667
	23	Na	43.291566	6.964	220003.291	ug/L	18838.944
	24	Mg	3972.889449	7.789	13161750.899	ug/L	2106.176
	27	Al	19743.761629	6.002	100119444.942	ug/L	3413.777
	39	K	1198.917935	6.605	12726880.782	ug/L	807733.282
	44	Ca	25916.884407	9.542	8217984.860	ug/L	61872.368
>	45	Sc-1			541043.834	ug/L	454114.374
	51	V	53.336655	6.090	622528.804	ug/L	-26072.212
	52	Cr	29.808715	9.174	353517.380	ug/L	28547.338
	55	Mn	201.411597	9.209	3577935.781	ug/L	3062.361
	57	Fe	56313.019059	9.663	21008017.536	ug/L	9798.695
	59	Co	5.164935	7.329	71075.558	ug/L	232.338
	60	Ni	18.174826	7.374	53921.013	ug/L	301.006
	65	Cu	25.901918	9.675	84180.581	ug/L	168.336
	66	Zn	49.278864	9.763	111867.330	ug/L	15137.170
>	72	Ge-1			762768.790	ug/L	739226.379
	75	As	12.357377	7.664	24507.903	ug/L	-1945.453
	82	Se	0.554642	38.343	14.848	ug/L	-120.854
	97	Mo	1.946387	7.778	5650.845	ug/L	72.001
	107	Ag	0.141106	9.561	2147.184	ug/L	267.339
	111	Cd	0.103878	9.340	357.008	ug/L	39.334
>	115	In-1			1480999.131	ug/L	1483966.870
	123	Sb	0.342180	10.800	2675.197	ug/L	268.758
	135	Ba	72.616091	7.289	189445.807	ug/L	112.002
>	165	Ho-1			1550232.500	ug/L	1592460.464
	205	Tl	0.502686	13.532	17332.443	ug/L	3951.949
	208	Pb	33.753412	8.640	1244157.041	ug/L	4580.000
	238	U	1.554443	6.802	77989.617	ug/L	234.671
>	45	Sc-2			541043.834	ug/L	454114.374
	53	Cr	16.242664	28.859	207795.925	ug/L	154333.029
	54	Fe	56252.928602	7.735	47750400.127	ug/L	62090.940
	61	Ni	22.460651	13.835	4946.910	ug/L	1661.113
	63	Cu	25.783609	7.405	173405.691	ug/L	345.008
	67	Zn	52.396364	5.893	28380.474	ug/L	9047.975
>	72	Ge			762768.790	ug/L	739226.379
	77	Se	-20.327243	12.616	4936.183	ug/L	8561.780
	98	Mo	1.989157	7.817	14536.573	ug/L	141.970
	109	Ag	0.028960	13.608	681.366	ug/L	288.339
>	115	In-2			1480999.131	ug/L	1483966.870
	114	Cd	0.087064	2.806	679.645	ug/L	84.731
	121	Sb	0.344712	9.076	3769.878	ug/L	349.674
	137	Ba	73.569210	8.108	292815.884	ug/L	156.669
>	165	Ho-2			1550232.500	ug/L	1592460.464
	203	Tl	0.496696	13.219	7202.236	ug/L	1582.773
	206	Pb	34.982606	8.975	321373.944	ug/L	1161.392
	207	Pb	34.274572	9.311	285417.840	ug/L	995.045
>	45	Sc			541043.834	ug/L	454114.374
	47	Ti	127.006287	9.350	112810.285	ug/L	297.006
	86	Sr	34.257297	10.071	148063.726	ug/L	716.656
	88	Sr	33.689336	6.518	1266386.565	ug/L	5834.250
>	115	In			1480999.131	ug/L	1483966.870
	118	Sn	1.474006	6.848	13223.606	ug/L	855.034
	120	Sn	1.496922	7.680	17521.778	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	119.143
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	103.186
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.809
	Sb	123	
	Ba	135	
>	Ho-1	165	97.348
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	119.143
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	103.186
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	99.809
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	97.348
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	119.143
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	99.809
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G73N6S
Sample Date/Time: Wednesday, April 27, 2005 22:40:01
Autosampler Position: 49
Dataset File: D:\Elandata\Dataset\042705M2\G73N6S.045

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Mass. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	4.897689	5.396	1032.714	ug/L	7.667
	10	B	132.887888	7.240	5262.025	ug/L	27.667
	23	Na	4212.218733	1.712	19449108.101	ug/L	18838.944
	24	Mg	9467.661849	6.287	31738521.323	ug/L	2106.176
	27	Al	28669.209950	4.305	136709120.212	ug/L	3413.777
	39	K	5598.448982	5.308	56407799.361	ug/L	807733.282
	44	Ca	27626.924214	8.847	8848854.294	ug/L	61872.368
>	45	Sc-1			547069.378	ug/L	454114.374
	51	V	94.909269	5.447	1144010.031	ug/L	-26072.212
	52	Cr	46.629236	4.160	540648.666	ug/L	26547.338
	55	Mn	254.525573	3.219	4574118.431	ug/L	3062.361
	57	Fe	44380.695982	5.170	16731246.361	ug/L	9796.895
	59	Co	51.230630	3.768	710133.495	ug/L	232.336
	60	Ni	61.164360	6.214	182483.333	ug/L	301.006
	65	Cu	46.660365	5.512	152679.835	ug/L	188.336
	66	Zn	93.050289	7.364	197267.975	ug/L	15137.170
>	72	Ge-1			746755.691	ug/L	739226.379
	75	As	229.510486	3.557	479661.478	ug/L	-1945.453
	82	Se	200.962990	9.097	48629.505	ug/L	-120.654
	97	Mo	106.489638	7.113	297378.046	ug/L	72.001
	107	Ag	6.620994	8.341	78401.111	ug/L	267.339
	111	Cd	5.767708	7.206	17193.538	ug/L	39.334
>	115	In-1			1442965.249	ug/L	1483966.870
	123	Sb	19.576192	6.897	145548.196	ug/L	268.758
	135	Ba	299.511686	6.740	686590.552	ug/L	112.002
>	165	Ho-1			1521701.991	ug/L	1592460.464
	205	Tl	196.217148	3.408	5140353.016	ug/L	3951.949
	208	Pb	80.591428	5.097	2919426.900	ug/L	4580.000
	238	U	204.997889	3.363	9454654.760	ug/L	234.671
>	45	Sc-2			547069.378	ug/L	454114.374
	53	Cr	30.240178	16.933	231130.020	ug/L	154333.029
	54	Fe	44763.114526	5.593	38421886.487	ug/L	62090.940
	61	Ni	66.556324	7.950	10757.502	ug/L	1661.113
	63	Cu	47.563729	3.962	322849.875	ug/L	345.008
	67	Zn	96.831462	2.005	43795.152	ug/L	9047.975
>	72	Ge			746756.691	ug/L	739226.379
	77	Se	152.571163	5.269	37289.387	ug/L	8561.780
	98	Mo	108.573727	8.160	765317.889	ug/L	141.970
	109	Ag	6.063674	6.153	67314.174	ug/L	288.339
>	115	In-2			1442965.249	ug/L	1483966.870
	114	Cd	6.068674	6.318	40966.094	ug/L	84.731
	121	Sb	19.862969	7.300	191482.660	ug/L	349.674
	137	Ba	299.528550	3.788	1166502.084	ug/L	156.669
>	165	Ho-2			1521701.991	ug/L	1592460.464
	203	Tl	197.228367	3.465	2206999.599	ug/L	1582.773
	206	Pb	83.277445	5.866	749203.044	ug/L	1161.392
	207	Pb	83.186846	4.458	830825.347	ug/L	995.045
>	45	Sc			547069.378	ug/L	454114.374
	47	Ti	236.560417	5.341	211066.161	ug/L	297.006
	86	Sr	116.346608	8.747	506009.834	ug/L	716.656
	88	Sr	119.297306	5.572	4514920.977	ug/L	5834.250
>	115	In			1442965.249	ug/L	1483966.870
	118	Sn	194.877946	7.068	1593741.796	ug/L	855.034
	120	Sn	196.277926	4.652	2112425.714	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	120.470
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.019
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	97.236
	Sb	123	
	Ba	135	
>	Ho-1	165	95.557
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	120.470
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.019
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	97.236
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	95.557
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	120.470
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	97.236
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G73N6D
Sample Date/Time: Wednesday, April 27, 2005 22:45:10
Autosampler Position: 50
Dataset File: D:\Elandata\Dataset\042705M2\G73N6D.046

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	4.674607	3.398	852.701	ug/L	7.667
	10	B	186.579112	4.343	5895.193	ug/L	27.667
	23	Na	4388.788695	4.161	17515617.133	ug/L	18838.944
	24	Mg	25162.286270	2.961	72932158.130	ug/L	2106.176
	27	Al	11637.973103	1.781	51143105.745	ug/L	3413.777
	39	K	5332.021758	2.286	46571468.848	ug/L	807733.282
	44	Ca	406531.603567	2.889	111703615.284	ug/L	61872.368
>	45	Sc-1			473238.015	ug/L	454114.374
	51	V	67.499753	1.486	695950.741	ug/L	-26072.212
	52	Cr	31.303706	4.059	322865.601	ug/L	28547.338
	55	Mn	327.466932	1.895	5061835.822	ug/L	3062.361
	57	Fe	22907.886297	2.809	7471946.906	ug/L	9798.695
	59	Co	49.296445	2.521	590965.467	ug/L	232.338
	60	Ni	61.925869	3.123	159721.602	ug/L	301.006
	65	Cu	38.870139	5.347	110204.143	ug/L	168.336
	66	Zn	77.723270	1.809	145096.592	ug/L	15137.170
>	72	Ge-1			694990.262	ug/L	739226.379
	75	As	210.411053	2.361	409020.979	ug/L	-1945.453
	82	Se	187.863496	1.475	40544.032	ug/L	-120.854
	97	Mo	101.374482	2.970	271508.076	ug/L	72.001
	107	Ag	5.536086	0.193	89172.431	ug/L	267.339
	111	Cd	5.279715	1.848	15125.822	ug/L	39.334
>	115	In-1			1383394.462	ug/L	1483966.870
	123	Sb	25.603867	1.102	182554.528	ug/L	268.758
	135	Ba	283.281799	2.339	623008.229	ug/L	112.002
>	165	Ho-1			1462817.878	ug/L	1592460.464
	205	Tl	176.297479	2.124	4461852.850	ug/L	3951.949
	208	Pb	59.652244	0.911	2069928.317	ug/L	4580.000
	238	U	184.934040	1.010	8197827.644	ug/L	234.671
>	45	Sc-2			473238.015	ug/L	454114.374
	53	Cr	2.816201	362.086	164472.208	ug/L	154333.029
	54	Fe	23651.188084	3.678	17579174.019	ug/L	62090.940
	61	Ni	116.765304	2.395	15218.591	ug/L	1661.113
	63	Cu	38.445879	1.708	225671.151	ug/L	345.008
	67	Zn	82.518934	3.685	33670.996	ug/L	9047.975
>	72	Ge			694990.262	ug/L	739226.379
	77	Se	177.823486	2.428	39111.957	ug/L	8561.780
	98	Mo	103.557391	0.203	700305.399	ug/L	141.970
	109	Ag	4.387207	0.389	55975.011	ug/L	288.339
>	115	In-2			1383394.462	ug/L	1483966.870
	114	Cd	5.282377	3.182	33806.857	ug/L	84.731
	121	Sb	26.009868	0.594	242858.017	ug/L	349.674
	137	Ba	286.052231	0.924	1072476.437	ug/L	156.669
>	165	Ho-2			1462817.878	ug/L	1592460.464
	203	Tl	167.528748	1.112	1801925.025	ug/L	1582.773
	206	Pb	60.954871	1.488	527228.181	ug/L	1161.392
	207	Pb	61.540062	1.272	449336.471	ug/L	995.045
>	45	Sc			473238.015	ug/L	454114.374
	47	Ti	209.948169	1.746	162718.880	ug/L	297.006
	86	Sr	402.712309	5.795	1511586.994	ug/L	716.656
	88	Sr	403.700460	1.627	13198257.090	ug/L	5834.250
>	115	In			1383394.462	ug/L	1483966.870
	118	Sn	187.832801	1.226	1473721.876	ug/L	855.034
	120	Sn	187.948260	1.856	1940114.529	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	104.211
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	94.016
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	93.223
	Sb	123	
	Ba	135	
>	Ho-1	165	91.559
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	104.211
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	94.016
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	93.223
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	91.559
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	104.211
	Ti	47	
	Sr	88	
	Sr	88	
>	In	115	93.223
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Wednesday, April 27, 2005 22:50:22
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 1.047

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	186.342302	2.910	33915.888	ug/L	7.667
	10	B	191.429775	2.723	6286.113	ug/L	27.667
	23	Na	1900.666615	1.144	7306100.388	ug/L	18838.944
	24	Mg	951.434933	4.325	2650894.253	ug/L	2106.176
	27	Al	1976.101846	1.436	8421859.026	ug/L	3413.777
	39	K	1933.141536	1.127	16750674.752	ug/L	807733.282
	44	Ca	1037.143199	3.648	335638.664	ug/L	61872.368
>	45	Sc-1			454857.991	ug/L	454114.374
	51	V	196.103274	4.281	1980648.804	ug/L	-26072.212
	52	Cr	200.246551	4.664	1840935.737	ug/L	26547.338
	55	Mn	196.315764	2.324	2928668.670	ug/L	3062.361
	57	Fe	1951.480069	3.965	620496.880	ug/L	9796.696
	59	Co	192.283422	3.718	2213536.981	ug/L	232.338
	60	Ni	196.211367	3.474	490607.692	ug/L	301.006
	65	Cu	196.912464	5.073	541202.675	ug/L	168.336
	66	Zn	188.994875	4.966	317136.389	ug/L	15137.170
>	72	Ge-1			704388.418	ug/L	739226.379
	75	As	208.306939	4.041	410248.928	ug/L	-1945.453
	82	Se	202.237732	0.308	44245.898	ug/L	-120.854
	97	Mo	202.048650	1.251	579152.871	ug/L	72.001
	107	Ag	48.638236	2.358	648219.365	ug/L	267.339
	111	Cd	197.202167	2.356	603146.588	ug/L	39.334
>	115	In-1			1480515.571	ug/L	1483966.870
	123	Sb	196.298724	1.149	1495934.805	ug/L	268.758
	135	Ba	207.917721	2.349	482332.850	ug/L	112.002
>	165	Ho-1			1543167.876	ug/L	1592460.464
	205	Tl	187.724210	2.325	5010470.940	ug/L	3951.948
	208	Pb	191.469771	1.773	6997456.610	ug/L	4580.000
	238	U	188.943448	2.886	8591296.779	ug/L	234.671
>	45	Sc-2			454857.991	ug/L	454114.374
	53	Cr	157.016386	7.512	349419.115	ug/L	154333.029
	54	Fe	1997.259624	4.053	1483335.307	ug/L	62090.940
	61	Ni	196.066168	5.052	23410.737	ug/L	1661.113
	63	Cu	197.530007	2.383	1112890.631	ug/L	345.008
	67	Zn	192.841191	5.317	63375.588	ug/L	9047.975
>	72	Ge			704386.418	ug/L	739226.379
	77	Se	189.857061	1.544	38224.495	ug/L	8561.780
	98	Mo	197.908166	0.974	1432166.074	ug/L	141.970
	109	Ag	47.856373	1.537	650619.833	ug/L	288.338
>	115	In-2			1480515.571	ug/L	1483966.870
	114	Cd	194.067339	0.213	1326210.610	ug/L	84.731
	121	Sb	195.222760	0.919	1948462.721	ug/L	349.674
	137	Ba	212.512664	2.871	841417.843	ug/L	158.669
>	165	Ho-2			1543167.876	ug/L	1592460.464
	203	Tl	188.794660	2.425	2141247.322	ug/L	1582.773
	208	Pb	191.098207	2.022	1740983.557	ug/L	1161.392
	207	Pb	199.012735	3.842	1527331.010	ug/L	995.045
>	45	Sc			454857.991	ug/L	454114.374
	47	Ti	200.399660	2.516	149253.520	ug/L	297.006
	86	Sr	194.116561	3.903	700774.375	ug/L	716.656
	88	Sr	194.691951	1.495	6121873.887	ug/L	5834.250
>	115	In			1480515.571	ug/L	1483966.870
	118	Sn	201.072500	1.164	1686163.171	ug/L	856.034
	120	Sn	203.350505	1.190	2246640.322	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		97.671

	B	10		96.715
	Na	23		95.043
	Mg	24		95.143
	Al	27		96.895
	K	39		96.667
	Ca	44		103.714
>	Sc-1	45	100.164	
	V	51		97.662
	Cr	52		100.123
	Mn	55		96.158
	Fe	57		97.574
	Co	59		96.142
	Ni	60		96.196
	Cu	65		96.466
	Zn	66		94.497
>	Ge-1	72	96.287	
	As	75		104.163
	Se	82		101.119
	Mo	97		101.823
	Ag	107		97.278
	Cd	111		96.901
>	In-1	115	96.767	
	Sb	123		96.149
	Ba	135		103.989
>	Ho-1	165	96.906	
	Tl	205		93.882
	Pb	208		96.736
	U	238		92.972
>	Sc-2	45	100.164	
	Cr	53		75.808
	Fe	54		96.953
	Ni	61		96.033
	Cu	63		96.786
	Zn	67		96.271
>	Ge	72	96.287	
	Se	77		84.939
	Mo	98		96.964
	Ag	109		96.713
>	In-2	115	96.767	
	Cd	114		97.944
	Sb	121		97.811
	Ba	137		106.466
>	Ho-2	165	96.906	
	Tl	203		94.397
	Pb	206		96.849
	Pb	207		96.906
>	Sc	45	100.164	
	Ti	47		100.200
	Sr	86		97.058
	Sr	88		97.346
>	In	115	96.767	
	Sn	118		100.536
	Sn	120		101.676

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cr	53	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Wednesday, April 27, 2005 22:58:32
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 2.048

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.011304	227.175	9.667	ug/L	7.667
	10	B	3.765839	16.503	150.336	ug/L	27.667
	23	Na	0.239057	28.489	19694.758	ug/L	18838.944
	24	Mg	0.058789	40.363	2290.207	ug/L	2106.176
	27	Al	0.269979	12.116	4547.102	ug/L	3413.777
	39	K	-6.545274	36.967	750539.130	ug/L	807733.282
	44	Ca	-11.886960	46.965	58597.855	ug/L	61872.368
>	45	Sc-1			452807.103	ug/L	454114.374
	51	V	0.349727	127.757	-22439.607	ug/L	-26072.212
	52	Cr	-0.977334	19.340	17621.415	ug/L	26547.338
	55	Mn	0.031814	44.315	3520.136	ug/L	3062.381
	57	Fe	-3.749477	28.921	8595.541	ug/L	9798.695
	59	Co	0.018271	56.114	350.341	ug/L	232.338
	60	Ni	0.000557	2472.505	301.006	ug/L	301.006
	65	Cu	0.017132	42.522	214.004	ug/L	168.336
	66	Zn	-0.365786	48.927	14507.175	ug/L	15137.170
>	72	Ge-1			721111.754	ug/L	739226.379
	75	As	0.936709	12.982	1.136	ug/L	-1945.453
	82	Se	0.479643	54.017	-11.343	ug/L	-120.864
	97	Mo	0.106403	14.302	376.675	ug/L	72.001
	107	Ag	0.001930	73.812	294.006	ug/L	267.339
	111	Cd	0.005903	3.321	57.667	ug/L	39.334
>	115	In-1			1490071.919	ug/L	1483966.870
	123	Sb	0.092076	21.207	977.766	ug/L	268.758
	135	Ba	-0.000777	432.679	109.002	ug/L	112.002
>	165	Ho-1			1574954.964	ug/L	1592460.464
	205	Tl	0.362887	35.464	13748.664	ug/L	3951.949
	208	Pb	-0.017781	9.459	3866.242	ug/L	4580.000
	238	U	0.006584	19.381	498.014	ug/L	234.671
>	45	Sc-2			452807.103	ug/L	454114.374
	53	Cr	-27.039845	49.747	120167.067	ug/L	154333.029
	54	Fe	-0.837036	327.664	61288.579	ug/L	62090.940
	61	Ni	-0.896163	93.392	1556.100	ug/L	1681.113
	63	Cu	0.014044	7.661	422.677	ug/L	345.006
	67	Zn	-0.671186	619.915	8816.832	ug/L	9047.975
>	72	Ge			721111.754	ug/L	739226.379
	77	Se	-36.449767	6.302	1749.846	ug/L	8561.780
	98	Mo	0.099382	21.268	867.970	ug/L	141.970
	109	Ag	0.014680	29.213	490.680	ug/L	288.339
>	115	In-2			1490071.919	ug/L	1483966.870
	114	Cd	0.005032	30.878	119.758	ug/L	84.731
	121	Sb	0.091412	18.536	1271.070	ug/L	349.674
	137	Ba	0.006463	30.927	177.003	ug/L	156.869
>	165	Ho-2			1574954.964	ug/L	1592460.464
	203	Tl	0.352490	35.245	5527.873	ug/L	1582.773
	206	Pb	-0.017382	30.367	986.711	ug/L	1161.392
	207	Pb	-0.016527	19.258	854.701	ug/L	985.045
>	45	Sc			452807.103	ug/L	454114.374
	47	Ti	0.177281	12.337	427.677	ug/L	297.006
	86	Sr	0.032366	113.739	830.198	ug/L	716.656
	88	Sr	0.091983	198.325	5877.601	ug/L	5834.250
>	115	In			1490071.919	ug/L	1483966.870
	118	Sn	0.084628	13.257	1574.770	ug/L	855.034
	120	Sn	0.079616	20.413	1994.323	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		1.139

	B	10		376.884
	Na	23		0.239
	Mg	24		0.089
	Al	27		0.279
	K	39		-6.845
	Ca	44		-11.987
>	Sc-1	45	99.712	
	V	51		34.973
	Cr	52		-97.733
	Mn	55		3.191
	Fe	57		-3.749
	Co	59		1.627
	Ni	60		0.969
	Cu	65		1.713
	Zn	66		-38.579
>	Ge-1	72	97.588	
	As	75		93.671
	Se	82		47.564
	Mo	97		10.549
	Ag	107		0.198
	Cd	111		0.586
>	In-1	115	100.411	
	Sb	123		9.286
	Ba	135		-0.075
>	Ho-1	165	99.901	
	Tl	205		36.289
	Pb	208		-1.778
	U	238		0.556
>	Sc-2	45	99.712	
	Cr	53		-2788.884
	Fe	54		-8.837
	Ni	61		-99.516
	Cu	63		1.484
	Zn	67		-67.116
>	Ge	72	97.599	
	Se	77		-3644.977
	Mo	96		9.938
	Ag	109		1.488
>	In-2	115	100.411	
	Cd	114		0.803
	Sb	121		9.141
	Ba	137		0.846
>	Ho-2	165	99.901	
	Tl	203		36.249
	Pb	206		-1.738
	Pb	207		-1.883
>	Sc	45	99.712	
	Ti	47		17.728
	Sr	88		3.238
	Sr	88		0.196
>	In	115	100.411	
	Sn	118		8.483
	Sn	120		7.982

QC Out Of Limits

Analyte	Mass	Out of Limits Message
B	10	Q
Cr	53	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: G73N8
Sample Date/Time: Wednesday, April 27, 2005 23:02:40
Autosampler Position: 51
Dataset File: D:\Elandata\Dataset\042705M2\G73N8.049

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.581241	25.548	121.335	ug/L	7.667
	10	B	4.812019	58.933	200.004	ug/L	27.667
	23	Na	36.636943	1.937	173840.703	ug/L	18838.944
	24	Mg	8248.093213	4.850	25897896.831	ug/L	2106.176
	27	Al	17073.580673	1.176	81387873.536	ug/L	3413.777
	39	K	686.407980	2.741	7234775.860	ug/L	807733.282
	44	Ca	19597.690921	0.955	5857299.021	ug/L	61872.368
>	45	Sc-1			506832.492	ug/L	454114.374
	51	V	46.755488	2.289	509107.682	ug/L	-26072.212
	52	Cr	22.759413	4.216	260550.465	ug/L	26547.338
	55	Mn	1035.200603	2.004	17272227.426	ug/L	3062.361
	57	Fe	31838.832261	2.993	11182677.857	ug/L	9798.696
	59	Co	10.636622	1.464	129588.239	ug/L	232.338
	60	Ni	9.922067	1.867	27808.321	ug/L	301.006
	65	Cu	11.861847	1.666	36315.801	ug/L	168.336
	66	Zn	33.757675	0.555	77375.852	ug/L	15137.170
>	72	Ge-1			752518.800	ug/L	739226.379
	75	As	11.447347	2.841	22225.537	ug/L	-1945.453
	82	Se	0.685879	8.150	37.706	ug/L	-120.854
	97	Mo	2.023828	2.223	5788.898	ug/L	72.001
	107	Ag	0.138710	2.059	2058.836	ug/L	267.339
	111	Cd	0.084274	12.778	292.673	ug/L	39.334
>	115	In-1			1459697.558	ug/L	1483966.870
	123	Sb	0.411986	3.187	3359.373	ug/L	288.758
	135	Ba	188.983434	2.236	395891.878	ug/L	112.002
>	165	Ho-1			1548282.274	ug/L	1592460.464
	205	Tl	0.474786	16.189	16533.807	ug/L	3951.949
	208	Pb	25.084616	1.544	923819.659	ug/L	4580.000
	238	U	1.837983	2.742	77056.389	ug/L	234.671
>	45	Sc-2			506832.492	ug/L	454114.374
	53	Cr	-13.322292	94.375	154135.054	ug/L	154333.029
	54	Fe	31511.230912	3.121	26164230.864	ug/L	62090.940
	61	Ni	12.790977	10.244	3448.117	ug/L	1661.113
	63	Cu	12.101315	0.774	76654.262	ug/L	345.008
	67	Zn	37.276668	14.031	21891.011	ug/L	9047.975
>	72	Ge			752518.800	ug/L	739226.379
	77	Se	-35.333881	5.384	2035.107	ug/L	8561.780
	98	Mo	2.092116	0.801	15066.140	ug/L	141.970
	109	Ag	0.056752	8.510	1044.715	ug/L	288.339
>	115	In-2			1459697.558	ug/L	1483966.870
	114	Cd	0.067829	3.641	540.469	ug/L	84.731
	121	Sb	0.400289	2.022	4283.685	ug/L	349.674
	137	Ba	175.348364	1.478	695800.672	ug/L	156.669
>	165	Ho-2			1548282.274	ug/L	1592460.464
	203	Tl	0.471346	20.044	6892.067	ug/L	1582.773
	206	Pb	26.025716	2.146	238883.673	ug/L	1161.392
	207	Pb	25.661473	2.069	196536.682	ug/L	995.045
>	45	Sc			506832.492	ug/L	454114.374
	47	Ti	198.188678	5.697	165079.972	ug/L	297.006
	86	Sr	20.331374	3.474	82860.274	ug/L	716.656
	88	Sr	20.288864	0.367	719626.785	ug/L	5834.250
>	115	In			1459697.558	ug/L	1483966.870
	118	Sn	1.031673	1.414	9377.504	ug/L	855.034
	120	Sn	1.063154	1.642	12662.801	ug/L	1109.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	112.949
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.798
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.378
	Sb	123	
	Ba	135	
>	Ho-1	165	97.228
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	112.949
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.798
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.378
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	97.228
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	112.949
	Ti	47	
	Sr	88	
	Sr	86	
>	In	115	98.378
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G77EX
Sample Date/Time: Wednesday, April 27, 2005 23:07:52
Autosampler Position: 52
Dataset File: D:\Elandata\Dataset\042705M2\G77EX.050

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.309035	12.280	60.667	ug/L	7.667
	10	B	6.209680	12.145	226.671	ug/L	27.667
	23	Na	189.897077	2.974	739313.769	ug/L	18838.944
	24	Mg	7902.927793	3.131	21797989.029	ug/L	2106.176
	27	Al	3293.288186	2.785	13891829.587	ug/L	3413.777
	39	K	686.540456	1.916	6405022.529	ug/L	807733.282
	44	Ca	636994.019788	2.979	166512140.779	ug/L	61872.368
>	45	Sc-1			450326.247	ug/L	454114.374
	51	V	7.373455	10.301	49198.616	ug/L	-28072.212
	52	Cr	4.710281	8.986	68574.358	ug/L	26547.338
	55	Mn	190.613846	4.268	2813649.641	ug/L	3062.381
	57	Fe	7494.373570	9.350	2330849.907	ug/L	9796.695
	59	Co	3.611161	5.923	41384.672	ug/L	232.338
	60	Ni	16.224254	7.345	40023.833	ug/L	301.006
	65	Cu	5.233438	8.534	14259.943	ug/L	168.336
	66	Zn	14.028476	5.677	37206.096	ug/L	15137.170
>	72	Ge-1			659093.348	ug/L	739226.379
	75	As	1.058006	31.223	217.667	ug/L	-1945.453
	82	Se	0.332539	101.406	-39.860	ug/L	-120.854
	97	Mo	0.284941	7.509	761.695	ug/L	72.001
	107	Ag	0.026297	9.962	565.350	ug/L	267.339
	111	Cd	0.042588	9.869	166.336	ug/L	39.334
>	115	In-1			1356081.087	ug/L	1483966.870
	123	Sb	0.084539	2.155	835.710	ug/L	268.758
	135	Ba	23.832403	4.413	52415.952	ug/L	112.002
>	165	Ho-1			1472549.296	ug/L	1592460.464
	205	Tl	0.092302	40.516	6002.341	ug/L	3951.949
	208	Pb	5.085196	4.124	181498.556	ug/L	4580.000
	238	U	0.669268	4.340	25616.227	ug/L	234.671
>	45	Sc-2			450326.247	ug/L	454114.374
	53	Cr	-14.469573	45.057	135271.430	ug/L	154333.029
	54	Fe	7919.788627	6.187	5641602.766	ug/L	62090.940
	61	Ni	102.744746	3.667	12937.319	ug/L	1661.113
	63	Cu	4.794965	5.538	27071.256	ug/L	345.006
	67	Zn	14.796734	12.093	13109.150	ug/L	9047.975
>	72	Ge			659093.348	ug/L	739226.379
	77	Se	62.242107	10.425	17937.260	ug/L	8561.760
	98	Mo	0.242956	3.176	1739.877	ug/L	141.970
	109	Ag	0.010606	12.003	396.010	ug/L	266.339
>	115	In-2			1356081.087	ug/L	1483966.870
	114	Cd	0.039693	11.970	326.123	ug/L	84.731
	121	Sb	0.064311	6.056	907.705	ug/L	349.674
	137	Ba	24.196033	6.481	91442.724	ug/L	156.669
>	165	Ho-2			1472549.296	ug/L	1592460.464
	203	Tl	0.096280	36.428	2504.581	ug/L	1582.773
	206	Pb	5.309111	4.070	47206.410	ug/L	1161.392
	207	Pb	5.068033	4.570	38030.659	ug/L	995.045
>	45	Sc			450326.247	ug/L	454114.374
	47	Ti	47.464041	5.869	35209.066	ug/L	297.006
	86	Sr	635.124163	5.824	2256892.416	ug/L	716.656
	88	Sr	613.946073	5.125	19090245.147	ug/L	5834.250
>	115	In			1356081.087	ug/L	1483966.870
	118	Sn	0.274422	1.566	2890.988	ug/L	855.034
	120	Sn	0.299025	1.474	4032.906	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	99.186
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	99.180
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	91.382
	Sb	123	
	Ba	135	
>	Ho-1	165	92.470
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	99.186
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	99.180
	Se	77	
	Mo	96	
	Ag	109	
>	In-2	115	91.382
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	166	92.479
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	99.186
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	91.382
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Ca	44	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: G77EXS
Sample Date/Time: Wednesday, April 27, 2005 23:13:03
Autosampler Position: 53
Dataset File: D:\Elandata\Dataset\042705M2\G77EXS.051

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	5.241221	4.718	1144.057	ug/L	7.667
	10	B	139.287445	2.957	5711.200	ug/L	27.667
	23	Na	4340.169039	6.370	20789013.131	ug/L	18838.944
	24	Mg	15873.359976	7.307	55149643.356	ug/L	2106.176
	27	Al	24391.427263	4.933	129645813.994	ug/L	3413.777
	39	K	5832.132438	6.417	58906681.826	ug/L	807733.282
	44	Ca	29950.214044	7.254	9836636.118	ug/L	51872.368
>	45	Sc-1			566580.947	ug/L	454114.374
	51	V	79.629440	6.218	969460.017	ug/L	-26072.212
	52	Cr	39.605811	8.796	474297.763	ug/L	28547.338
	55	Mn	283.682190	5.634	5276068.232	ug/L	3062.361
	57	Fe	49375.528660	8.844	18292312.316	ug/L	9796.695
	59	Co	64.318319	4.281	780138.350	ug/L	232.338
	60	Ni	64.648886	6.945	199585.803	ug/L	301.006
	65	Cu	46.217408	7.314	157121.925	ug/L	168.336
	66	Zn	101.074876	4.891	220410.874	ug/L	15137.170
>	72	Ge-1			728460.000	ug/L	739226.379
	75	As	226.114960	9.788	460548.795	ug/L	-1945.453
	82	Se	203.409632	7.969	46002.011	ug/L	-120.854
	97	Mo	105.809896	9.219	288970.876	ug/L	72.001
	107	Ag	6.111640	7.668	77620.143	ug/L	267.339
	111	Cd	5.907158	7.755	17247.960	ug/L	39.334
>	115	In-1			1409781.468	ug/L	1483966.870
	123	Sb	18.824599	8.116	135897.764	ug/L	268.758
	135	Ba	272.399871	9.476	639526.497	ug/L	112.002
>	165	Ho-1			1560990.235	ug/L	1592460.464
	205	Tl	200.457822	8.440	5414582.363	ug/L	3951.949
	208	Pb	78.624437	8.249	2910686.616	ug/L	4580.000
	238	U	212.064944	6.801	10032960.849	ug/L	234.671
>	45	Sc-2			566580.947	ug/L	454114.374
	53	Cr	1.221880	561.479	194322.533	ug/L	154333.029
	54	Fe	50762.450007	7.111	45152298.489	ug/L	62090.940
	61	Ni	70.560431	8.336	11842.716	ug/L	1661.113
	63	Cu	46.496874	5.367	328960.437	ug/L	345.008
	67	Zn	100.979022	4.216	46832.234	ug/L	9047.975
>	72	Ge			728460.000	ug/L	739226.379
	77	Se	133.894130	10.287	32876.831	ug/L	8561.760
	98	Mo	107.971826	7.634	744324.220	ug/L	141.970
	109	Ag	4.918671	4.408	63934.311	ug/L	288.339
>	115	In-2			1409781.468	ug/L	1483966.870
	114	Cd	6.009022	9.872	39196.073	ug/L	84.731
	121	Sb	19.235374	9.384	183206.460	ug/L	349.674
	137	Ba	272.292608	9.145	1089653.166	ug/L	156.669
>	165	Ho-2			1560990.235	ug/L	1592460.464
	203	Tl	202.529484	5.483	2324667.712	ug/L	1582.773
	206	Pb	80.501986	8.121	742857.532	ug/L	1161.392
	207	Pb	80.671689	8.697	527345.902	ug/L	995.045
>	45	Sc			566580.947	ug/L	454114.374
	47	Ti	188.581280	8.845	175265.939	ug/L	297.006
	86	Sr	101.944668	8.255	459748.704	ug/L	716.656
	88	Sr	101.788503	6.077	3993573.386	ug/L	5834.250
>	115	In			1409781.468	ug/L	1483966.870
	118	Sn	201.690765	6.435	1812973.512	ug/L	855.034
	120	Sn	203.140042	7.556	2137699.459	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	124.786
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	86.844
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	86.891
	Sb	123	
	Ba	135	
>	Ho-1	165	96.024
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	124.786
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	86.844
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	86.891
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	96.024
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	124.786
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	86.891
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G77EXD
Sample Date/Time: Wednesday, April 27, 2005 23:18:15
Autosampler Position: 54
Dataset File: D:\Elandata\Dataset\042705M2\G77EXD.052

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	4.914067	5.163	1003.378	ug/L	7.667
	10	B	136.188169	3.931	5221.007	ug/L	27.667
	23	Na	4217.971718	2.423	18864291.322	ug/L	18838.844
	24	Mg	47400.442864	5.806	153850438.896	ug/L	2106.178
	27	Al	20687.977334	3.789	102691321.582	ug/L	3413.777
	39	K	5327.748750	3.136	52128022.457	ug/L	807733.282
	44	Ca	87033.356361	3.624	26841466.377	ug/L	61872.368
>	45	Sc-1			529960.251	ug/L	454114.374
	51	V	72.879170	6.340	843395.469	ug/L	-26072.212
	52	Cr	35.298667	7.042	403826.485	ug/L	26547.338
	55	Mn	188.589619	3.409	3227073.586	ug/L	3062.361
	57	Fe	34756.599615	6.011	12699733.202	ug/L	9798.695
	59	Co	47.536328	3.987	638104.493	ug/L	232.338
	60	Ni	58.168221	5.005	168067.480	ug/L	301.006
	65	Cu	40.548928	6.214	128790.149	ug/L	168.336
	66	Zn	85.562846	5.411	177837.690	ug/L	15137.170
>	72	Ge-1			706248.799	ug/L	739226.379
	75	As	215.257768	4.672	426263.102	ug/L	-1945.453
	82	Se	194.942462	3.346	42868.248	ug/L	-120.854
	97	Mo	101.523162	3.501	270586.346	ug/L	72.001
	107	Ag	5.591947	3.447	69514.959	ug/L	267.336
	111	Cd	5.480155	4.285	15564.311	ug/L	39.334
>	115	In-1			1376127.562	ug/L	1483966.870
	123	Sb	16.517827	3.032	117252.356	ug/L	268.758
	136	Ba	261.485823	4.515	575917.875	ug/L	112.002
>	165	Ho-1			1522955.357	ug/L	1592460.464
	205	Tl	157.848962	4.724	4949706.414	ug/L	3951.949
	208	Pb	67.376170	4.450	2433730.440	ug/L	4580.000
	238	U	196.021661	3.105	9138918.636	ug/L	234.671
>	45	Sc-2			529960.251	ug/L	454114.374
	53	Cr	-3.976236	115.853	174411.382	ug/L	154333.029
	54	Fe	35401.791954	7.214	29433777.626	ug/L	62090.940
	61	Ni	70.320130	8.223	11031.043	ug/L	1661.113
	63	Cu	40.366389	3.988	265311.478	ug/L	345.006
	67	Zn	86.162681	4.018	39904.636	ug/L	9047.975
>	72	Ge			706248.799	ug/L	739226.379
	77	Se	134.517316	6.435	32133.893	ug/L	8561.780
	98	Mo	102.842256	4.092	691965.749	ug/L	141.970
	109	Ag	4.589767	2.132	57867.949	ug/L	288.339
>	115	In-2			1376127.562	ug/L	1483966.870
	114	Cd	5.499433	2.852	35010.662	ug/L	84.731
	121	Sb	16.629876	4.493	154615.288	ug/L	349.674
	137	Ba	260.796362	3.502	978987.186	ug/L	158.669
>	165	Ho-2			1522955.357	ug/L	1592460.464
	203	Tl	162.832463	4.471	2047343.858	ug/L	1582.773
	206	Pb	69.068334	3.820	621688.662	ug/L	1161.392
	207	Pb	69.529067	3.868	527576.586	ug/L	995.045
>	45	Sc			529960.251	ug/L	454114.374
	47	Ti	173.411614	8.626	150515.990	ug/L	287.006
	86	Sr	109.997317	6.467	453237.953	ug/L	716.656
	88	Sr	110.474844	3.082	4049806.146	ug/L	5834.250
>	115	In			1376127.562	ug/L	1483966.870
	118	Sn	182.942610	3.236	1428102.049	ug/L	855.034
	120	Sn	183.321030	3.477	1882885.748	ug/L	1103.469

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	116.706
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	95.899
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	92.733
	Sb	123	
	Ba	135	
>	Ho-1	165	96.635
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	116.706
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	95.899
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	92.733
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	96.635
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	116.706
	Tl	47	
	Br	86	
	Sr	88	
>	In	115	92.733
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G77FD
Sample Date/Time: Wednesday, April 27, 2005 23:23:23
Autosampler Position: 55
Dataset File: D:\Elandata\Dataset\042705M2\G77FD.053

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	1.052840	2.074	210.337	ug/L	7.667
	10	B	6.331852	11.196	259.672	ug/L	27.667
	23	Na	82.629087	1.245	370688.068	ug/L	18838.944
	24	Mg	11318.538090	3.535	34840802.063	ug/L	2106.176
	27	Al	18289.933296	3.023	86093257.359	ug/L	3413.777
	39	K	696.171832	3.971	7235681.619	ug/L	807733.282
	44	Ca	33369.939811	5.442	9802180.631	ug/L	61872.368
>	45	Sc-1			502166.660	ug/L	454114.374
	51	V	45.131394	2.546	484284.642	ug/L	-28072.212
	52	Cr	22.467068	2.387	254328.563	ug/L	28547.338
	55	Mn	2053.113944	3.455	33920568.479	ug/L	3062.361
	57	Fe	26007.946399	2.624	9008475.261	ug/L	9798.695
	59	Co	17.184461	5.196	218989.579	ug/L	232.338
	60	Ni	12.296787	0.873	33942.647	ug/L	301.006
	65	Cu	12.896033	2.102	38369.247	ug/L	168.336
	66	Zn	45.719783	3.260	97522.278	ug/L	15137.170
>	72	Ge-1			729186.781	ug/L	739226.379
	75	As	16.024397	2.325	30908.078	ug/L	-1945.453
	82	Se	1.433491	13.453	206.086	ug/L	-120.854
	97	Mo	1.893249	10.611	5361.398	ug/L	72.001
	107	Ag	0.067307	8.805	1395.062	ug/L	267.339
	111	Cd	0.222772	7.945	703.024	ug/L	39.334
>	115	In-1			1445803.437	ug/L	1483966.870
	123	Sb	0.378364	8.022	3074.434	ug/L	268.768
	135	Ba	194.357786	7.539	456369.114	ug/L	112.002
>	165	Ho-1			1562311.603	ug/L	1592460.464
	205	Tl	0.722213	19.073	23367.966	ug/L	3951.949
	208	Pb	39.796806	6.901	1475842.506	ug/L	4580.000
	238	U	1.891068	5.095	88715.664	ug/L	234.671
>	45	Sc-2			502166.660	ug/L	454114.374
	53	Cr	-3.891464	252.577	165099.922	ug/L	154333.029
	54	Fe	26336.869186	3.354	20788031.506	ug/L	62090.940
	61	Ni	16.926383	8.943	3909.241	ug/L	1661.113
	63	Cu	13.026384	2.061	81437.268	ug/L	345.008
	67	Zn	51.621902	5.941	26087.398	ug/L	9047.975
>	72	Ge			729186.781	ug/L	739226.379
	77	Se	-33.876966	8.254	2239.803	ug/L	8561.780
	96	Mo	1.940261	12.439	13624.802	ug/L	141.970
	109	Ag	0.064798	6.729	1140.724	ug/L	288.339
>	115	In-2			1445803.437	ug/L	1483966.870
	114	Cd	0.211608	8.596	1493.096	ug/L	84.731
	121	Sb	0.378179	9.288	4021.274	ug/L	349.874
	137	Ba	198.198278	6.405	793324.834	ug/L	156.669
>	165	Ho-2			1562311.603	ug/L	1592460.464
	203	Tl	0.707794	18.890	9670.086	ug/L	1582.773
	206	Pb	41.059268	7.286	379556.932	ug/L	1161.392
	207	Pb	40.626460	5.842	316528.103	ug/L	995.045
>	45	Sc			502166.660	ug/L	454114.374
	47	Ti	246.060609	4.958	201695.808	ug/L	297.008
	88	Sr	39.426529	5.496	158050.679	ug/L	716.656
	88	Sr	38.841320	4.047	1354801.885	ug/L	5834.250
>	115	In			1445803.437	ug/L	1483966.870
	118	Sn	1.099183	8.901	9629.820	ug/L	856.034
	120	Sn	1.144908	9.408	13405.515	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	110.882
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	98.842
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	97.439
	Sb	123	
	Ba	135	
>	Ho-1	166	98.107
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	110.882
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	98.842
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	97.439
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	166	98.107
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	110.882
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	97.439
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G782L
Sample Date/Time: Wednesday, April 27, 2005 23:28:28
Autosampler Position: 56
Dataset File: D:\Elandata\Dataset\042705M2\G782L.054

Sample Result Summary

Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
9	Be	0.897729	15.008	189.670	ug/L	7.667
10	B	5.934916	7.586	257.005	ug/L	27.667
23	Na	20.766196	6.341	114053.333	ug/L	18838.944
24	Mg	1432.186270	3.146	4624285.889	ug/L	2106.176
27	Al	13477.536697	6.508	66543287.214	ug/L	3413.777
39	K	1011.498123	5.152	10597976.566	ug/L	807733.282
44	Ca	6047.784689	7.674	1922267.926	ug/L	61872.368
45	Sc-1			526440.880	ug/L	454114.374
51	V	39.385569	6.443	439526.781	ug/L	-26072.212
52	Cr	21.187269	8.109	253487.899	ug/L	26547.338
55	Mn	438.391714	6.511	7576785.294	ug/L	3062.361
57	Fe	33028.648973	6.391	11996620.781	ug/L	9798.695
59	Co	11.358179	3.294	151787.369	ug/L	232.338
60	Ni	26.198890	7.039	75498.243	ug/L	301.006
65	Cu	26.884743	6.370	85004.192	ug/L	168.336
66	Zn	86.444788	3.165	177680.566	ug/L	15137.170
72	Ge-1			749011.709	ug/L	739226.379
75	As	25.525801	9.717	51718.423	ug/L	-1945.453
82	Se	1.322699	16.375	186.158	ug/L	-120.854
97	Mo	1.885465	5.428	5465.103	ug/L	72.001
107	Ag	0.117876	4.085	1829.469	ug/L	267.339
111	Cd	0.312871	5.795	994.045	ug/L	39.334
115	In-1			1476739.642	ug/L	1483966.870
123	Sb	0.460744	8.143	3771.972	ug/L	268.758
135	Ba	84.257986	8.693	197971.166	ug/L	112.002
165	Ho-1			1562762.937	ug/L	1592460.464
205	Tl	0.439680	19.913	15741.943	ug/L	3951.949
208	Pb	29.053476	7.729	1078961.740	ug/L	4560.000
238	U	2.543239	9.059	120610.857	ug/L	234.671
45	Sc-2			526440.880	ug/L	454114.374
53	Cr	0.771416	896.430	179866.139	ug/L	154333.029
54	Fe	33250.846336	4.013	27498504.962	ug/L	62080.940
61	Ni	27.341825	7.070	5443.094	ug/L	1661.113
63	Cu	27.374638	8.235	179088.882	ug/L	345.008
67	Zn	82.657546	4.688	37526.703	ug/L	9047.975
72	Ge			749011.709	ug/L	739226.379
77	Se	-36.809167	3.657	1935.982	ug/L	8561.780
98	Mo	1.888698	5.277	13758.420	ug/L	141.970
109	Ag	0.086710	11.500	1463.423	ug/L	288.339
115	In-2			1476739.642	ug/L	1483966.870
114	Cd	0.309652	6.072	2196.397	ug/L	84.731
121	Sb	0.486319	6.991	5193.000	ug/L	349.674
137	Ba	84.843579	8.866	339780.927	ug/L	156.669
165	Ho-2			1562762.937	ug/L	1592460.464
203	Tl	0.436051	17.613	6655.252	ug/L	1582.773
206	Pb	29.729081	6.918	275222.240	ug/L	1161.392
207	Pb	29.942981	9.982	233564.550	ug/L	995.045
45	Sc			526440.880	ug/L	454114.374
47	Ti	203.946670	5.433	178056.348	ug/L	297.006
86	Sr	16.914252	3.457	71529.904	ug/L	716.656
88	Sr	16.286390	4.892	599401.856	ug/L	5834.250
115	In			1476738.642	ug/L	1483966.870
118	Sn	1.181286	5.039	10742.486	ug/L	855.034
120	Sn	1.189229	6.193	14204.814	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	116.927
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.324
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.513
	Sb	128	
	Ba	135	
>	Ho-1	165	99.136
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	116.927
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.324
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	99.513
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	99.136
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	116.927
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	99.513
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G782LS
Sample Date/Time: Wednesday, April 27, 2005 23:33:34
Autosampler Position: 57
Dataset File: D:\Elandata\Dataset\042705M2\G782LS.055

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	4.818868	3.745	931.040	ug/L	7.667
	10	B	137.222761	0.450	5305.371	ug/L	27.667
	23	Na	4087.568884	1.870	18438691.302	ug/L	18838.944
	24	Mg	5386.383402	4.102	17635214.945	ug/L	2106.176
	27	Al	28136.101256	3.874	130862012.898	ug/L	3413.777
	39	K	5215.573202	1.727	51481277.745	ug/L	807733.282
	44	Ca	5913.595397	2.361	1906825.899	ug/L	61872.368
>	45	Sc-1			534382.845	ug/L	454114.374
	51	V	85.896481	0.699	1008356.420	ug/L	-26072.212
	52	Cr	39.727655	1.894	454588.532	ug/L	28547.338
	55	Mn	248.047470	2.086	4348318.280	ug/L	3062.361
	57	Fe	42683.922535	6.140	15714874.106	ug/L	9796.695
	59	Co	48.222351	3.208	652845.377	ug/L	232.338
	60	Ni	85.491195	2.635	161722.400	ug/L	301.006
	65	Cu	40.723631	3.295	130469.666	ug/L	168.336
	66	Zn	86.377533	1.411	180142.522	ug/L	15137.170
>	72	Ge-1			746780.316	ug/L	739226.379
	75	As	207.314549	1.978	433072.136	ug/L	-1945.453
	82	Se	161.176555	0.504	42012.208	ug/L	-120.654
	97	Mo	99.818285	1.032	280183.216	ug/L	72.001
	107	Ag	5.469153	2.542	71628.949	ug/L	287.339
	111	Cd	8.237534	3.880	15759.525	ug/L	39.334
>	115	In-1			1452555.083	ug/L	1483966.870
	123	Sb	19.332159	1.683	144788.322	ug/L	288.758
	135	Ba	266.079366	1.662	588994.809	ug/L	112.002
>	165	Ho-1			1529762.358	ug/L	1592460.464
	205	Tl	179.639609	1.471	4754101.829	ug/L	3851.949
	208	Pb	81.144780	0.699	2218689.215	ug/L	4580.000
	238	U	184.441121	1.698	8548392.282	ug/L	234.671
>	45	Sc-2			534382.845	ug/L	454114.374
	53	Cr	10.206661	60.698	196561.427	ug/L	154333.029
	54	Fe	43648.516469	4.316	36606734.666	ug/L	62090.940
	61	Ni	56.328662	4.175	9302.789	ug/L	1661.113
	63	Cu	41.721232	1.880	276646.706	ug/L	345.008
	67	Zn	89.329484	3.495	40283.131	ug/L	9047.975
>	72	Ge			746780.316	ug/L	739226.379
	77	Se	117.217371	1.943	30646.164	ug/L	8561.780
	98	Mo	99.795072	0.656	708588.780	ug/L	141.970
	109	Ag	4.564672	1.257	61142.547	ug/L	288.339
>	115	In-2			1452555.083	ug/L	1483966.870
	114	Cd	5.370693	0.979	38087.739	ug/L	84.731
	121	Sb	19.457696	3.286	190865.585	ug/L	349.674
	137	Ba	257.966196	2.130	1011425.704	ug/L	156.669
>	165	Ho-2			1529762.358	ug/L	1592460.464
	203	Tl	171.230461	0.802	1926112.436	ug/L	1582.773
	206	Pb	62.661288	2.788	565740.570	ug/L	1161.392
	207	Pb	62.686671	0.734	477824.134	ug/L	995.045
>	45	Sc			534382.845	ug/L	454114.374
	47	Ti	248.203608	3.692	217198.595	ug/L	297.008
	86	Sr	90.188056	3.648	383281.469	ug/L	716.656
	88	Sr	91.921012	3.564	3399269.145	ug/L	5834.250
>	115	In			1452555.083	ug/L	1483966.870
	118	Sn	185.147804	2.078	1525262.572	ug/L	855.034
	120	Sn	184.830885	1.417	2003551.080	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	117.676
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.022
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	97.683
	Sb	123	
	Ba	135	
>	Ho-1	165	96.063
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	117.676
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.022
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	97.683
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	96.063
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	117.676
	Ti	47	
	Sr	88	
	Sr	88	
>	In	115	97.683
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G782LD
Sample Date/Time: Wednesday, April 27, 2005 23:38:40
Autosampler Position: 58
Dataset File: D:\Elandata\Dataset\042705M2\G782LD.056

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	5.041177	2.309	1053.716	ug/L	7.667
	10	B	152.264002	1.622	5969.974	ug/L	27.667
	23	Na	4174.568200	3.055	19116048.911	ug/L	18838.944
	24	Mg	6911.361361	3.908	19536110.102	ug/L	2106.176
	27	Al	20059.861723	2.432	101942713.019	ug/L	3413.777
	39	K	5478.249880	1.498	54844585.614	ug/L	807733.282
	44	Ca	10168.578297	3.051	3270812.720	ug/L	61872.368
>	45	Sc-1			542379.593	ug/L	454114.374
	51	V	81.675967	0.641	971638.311	ug/L	-26072.212
	52	Cr	38.628234	2.291	449632.180	ug/L	26547.338
	55	Mn	450.053128	1.369	8005690.885	ug/L	3062.361
	57	Fe	30316.890347	4.656	11338061.084	ug/L	9796.696
	59	Co	53.621414	0.769	738947.194	ug/L	232.338
	60	Ni	69.837861	3.155	206025.712	ug/L	301.006
	65	Cu	46.941224	3.361	152620.940	ug/L	168.336
	66	Zn	131.828256	2.516	269492.839	ug/L	15137.170
>	72	Ge-1			750712.663	ug/L	739226.379
	75	As	223.848826	3.352	470184.649	ug/L	-1945.453
	82	Se	196.930140	2.571	45679.476	ug/L	-120.854
	97	Mo	100.162884	2.698	286429.491	ug/L	72.001
	107	Ag	5.598857	0.675	74670.121	ug/L	267.339
	111	Cd	5.668534	2.123	17030.658	ug/L	39.334
>	115	In-1			1478564.162	ug/L	1483966.870
	123	Sb	21.206811	1.296	161436.108	ug/L	268.758
	135	Ba	289.833941	3.147	684484.395	ug/L	112.002
>	165	Ho-1			1571068.074	ug/L	1592460.464
	205	Tl	180.794853	3.486	4912769.209	ug/L	3951.949
	208	Pb	72.913768	3.151	2715823.949	ug/L	4580.000
	238	U	186.593777	4.293	8880287.417	ug/L	234.671
>	45	Sc-2			542379.593	ug/L	454114.374
	53	Cr	12.875826	81.626	203160.013	ug/L	154333.029
	54	Fe	30588.197117	4.163	26039401.890	ug/L	62090.940
	61	Ni	69.971778	2.389	11246.204	ug/L	1861.113
	63	Cu	47.643457	0.614	320529.674	ug/L	346.006
	67	Zn	130.706267	3.002	54821.934	ug/L	9047.975
>	72	Ge			750712.663	ug/L	739226.379
	77	Se	146.820381	3.055	36209.091	ug/L	9561.780
	98	Mo	100.796749	1.386	727455.465	ug/L	141.970
	109	Ag	4.573811	2.772	62290.967	ug/L	288.339
>	115	In-2			1478564.162	ug/L	1483966.870
	114	Cd	5.533907	0.989	37796.495	ug/L	84.731
	121	Sb	21.523184	1.542	214599.349	ug/L	349.874
	137	Ba	290.091369	5.295	1167641.757	ug/L	156.669
>	165	Ho-2			1571068.074	ug/L	1592460.464
	203	Tl	174.020325	6.045	2009019.542	ug/L	1582.773
	206	Pb	74.446964	3.031	691169.755	ug/L	1161.392
	207	Pb	75.811136	6.138	592967.895	ug/L	995.045
>	45	Sc			542379.593	ug/L	454114.374
	47	Ti	310.032168	3.194	275309.628	ug/L	297.006
	86	Sr	98.705823	1.142	425665.044	ug/L	716.656
	88	Sr	100.163330	2.208	3760239.210	ug/L	5834.250
>	115	In			1478564.162	ug/L	1483966.870
	118	Sn	186.886991	1.320	1566257.910	ug/L	855.034
	120	Sn	187.943382	2.154	2071358.033	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	119.437
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.864
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.891
	Sb	123	
	Ba	135	
>	Ho-1	165	99.857
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	119.437
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.864
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	99.891
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	99.857
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	119.437
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	99.891
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G783X
Sample Date/Time: Wednesday, April 27, 2005 23:43:46
Autosampler Position: 59
Dataset File: D:\Elandata\Dataset\042706M2\G783X.057

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.457769	4.673	100.668	ug/L	7.667
	10	B	5.175383	12.255	228.004	ug/L	27.667
	23	Na	26.048927	5.903	137264.575	ug/L	18838.944
	24	Mg	2136.293441	1.528	6877516.062	ug/L	2106.176
	27	Al	18122.866000	5.638	89280531.360	ug/L	3413.777
	39	K	841.749704	2.410	8953507.485	ug/L	807733.282
	44	Ca	5127.904730	2.858	1635428.152	ug/L	61872.368
>	45	Sc-1			525427.037	ug/L	454114.374
	51	V	57.589861	4.140	654555.719	ug/L	-26072.212
	52	Cr	47.136330	6.030	524805.467	ug/L	26547.338
	55	Mn	241.152215	5.595	4159813.334	ug/L	3062.361
	57	Fe	44971.798227	3.180	16283779.771	ug/L	9798.685
	59	Co	5.282061	2.689	70567.458	ug/L	232.338
	60	Ni	9.810778	7.441	28422.019	ug/L	301.006
	65	Cu	17.388196	4.444	54834.838	ug/L	168.336
	66	Zn	41.602270	7.111	94474.069	ug/L	15137.170
>	72	Ge-1			758359.336	ug/L	739228.379
	75	As	14.207464	9.840	28275.613	ug/L	-1945.453
	82	Se	0.753899	7.850	54.013	ug/L	-120.854
	97	Mo	2.111625	6.521	6178.401	ug/L	72.001
	107	Ag	0.146336	2.529	2236.197	ug/L	267.339
	111	Cd	0.133735	8.593	452.345	ug/L	39.334
>	115	In-1			1493761.853	ug/L	1483966.870
	123	Sb	0.429674	9.858	3573.678	ug/L	268.758
	135	Ba	64.234883	4.628	150097.629	ug/L	112.002
>	165	Ho-1			1553270.444	ug/L	1592460.464
	205	Tl	0.726587	26.968	23361.293	ug/L	3951.949
	208	Pb	26.514336	4.973	979395.846	ug/L	4580.000
	238	U	1.736384	5.185	81950.601	ug/L	234.671
>	45	Sc-2			525427.037	ug/L	454114.374
	53	Cr	18.736907	38.925	205280.390	ug/L	154333.029
	54	Fe	45854.709916	5.134	37798841.696	ug/L	82090.940
	61	Ni	9.171091	18.391	3098.702	ug/L	1661.113
	63	Cu	17.532762	4.519	114595.691	ug/L	345.006
	67	Zn	44.919116	4.146	25119.663	ug/L	9047.975
>	72	Ge			758359.335	ug/L	739228.379
	77	Se	-34.928390	0.970	2126.727	ug/L	8561.780
	98	Mo	2.100563	4.914	15477.638	ug/L	141.970
	109	Ag	0.039693	13.355	833.033	ug/L	288.339
>	115	In-2			1493761.853	ug/L	1483966.870
	114	Cd	0.103055	11.992	795.904	ug/L	84.731
	121	Sb	0.437844	5.016	4757.507	ug/L	349.674
	137	Ba	65.061579	5.049	259196.227	ug/L	156.669
>	165	Ho-2			1553270.444	ug/L	1592460.464
	203	Tl	0.713337	26.067	9683.166	ug/L	1582.773
	206	Pb	27.014148	5.241	248738.219	ug/L	1161.392
	207	Pb	27.127180	6.495	210495.843	ug/L	995.045
>	45	Sc			525427.037	ug/L	454114.374
	47	Ti	195.002461	3.152	167635.829	ug/L	297.006
	86	Sr	9.926716	3.144	42215.528	ug/L	716.666
	88	Sr	9.920336	4.417	366862.376	ug/L	5834.250
>	115	In			1493761.853	ug/L	1483966.870
	118	Sn	1.313561	5.703	11982.819	ug/L	855.034
	120	Sn	1.339618	6.219	19037.564	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	115.704
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	102.588
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	100.000
	Sb	123	
	Ba	138	
>	Ho-1	165	97.539
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	115.704
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	102.588
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	100.000
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	97.539
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	115.704
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	100.000
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8JDL
Sample Date/Time: Wednesday, April 27, 2005 23:48:53
Autosampler Position: 60
Dataset File: D:\Elandata\Dataset\042705M2\G8JDL.058

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.403552	1.331	87.334	ug/L	7.667
	10	B	2.068849	13.894	107.668	ug/L	27.667
	23	Na	15.451653	3.496	87682.558	ug/L	18838.944
	24	Mg	283.970376	6.664	888618.291	ug/L	2106.176
	27	Al	11612.357208	3.805	55524619.581	ug/L	3413.777
	39	K	747.915206	2.979	7831193.936	ug/L	807733.282
	44	Ca	170.116926	9.008	119991.897	ug/L	61872.368
>	45	Sc-1			510931.401	ug/L	454114.374
	51	V	38.580873	2.007	416583.862	ug/L	-26072.212
	52	Cr	20.048885	4.403	234056.973	ug/L	26547.338
	55	Mn	67.331139	4.450	1129627.309	ug/L	3082.361
	57	Fe	36791.918883	3.739	12942755.424	ug/L	9798.695
	59	Co	3.818413	4.867	49587.777	ug/L	232.338
	60	Ni	8.854062	4.877	24922.972	ug/L	301.008
	65	Cu	12.268667	5.336	37670.018	ug/L	168.336
	66	Zn	28.818873	5.278	68733.321	ug/L	15137.170
>	72	Ge-1			740095.043	ug/L	739226.379
	75	As	8.663406	3.820	18070.887	ug/L	-1945.453
	82	Se	0.479210	37.620	-10.634	ug/L	-120.854
	97	Mo	0.890310	4.132	2586.593	ug/L	72.001
	107	Ag	0.076257	2.190	1266.069	ug/L	267.339
	111	Cd	0.046213	8.520	175.003	ug/L	39.334
>	115	In-1			1460111.796	ug/L	1483966.870
	123	Sb	0.160693	5.160	1471.510	ug/L	268.758
	135	Ba	39.394559	2.204	91274.935	ug/L	112.002
>	165	Ho-1			1539614.730	ug/L	1592460.464
	205	Tl	0.281836	14.119	11327.969	ug/L	3951.949
	208	Pb	13.874360	1.449	510134.829	ug/L	4580.000
	238	U	1.135771	3.891	53211.546	ug/L	234.671
>	45	Sc-2			510931.401	ug/L	454114.374
	53	Cr	-13.373183	64.875	155036.428	ug/L	154333.029
	54	Fe	37096.966239	5.655	29701104.760	ug/L	62090.940
	61	Ni	7.192292	25.800	2759.628	ug/L	1661.113
	63	Cu	12.648680	5.210	79869.179	ug/L	345.008
	67	Zn	27.803316	11.031	18899.380	ug/L	9047.975
>	72	Ge			740095.043	ug/L	739226.379
	77	Se	-44.132706	7.952	367.819	ug/L	8561.780
	98	Mo	0.879399	1.139	6414.811	ug/L	141.970
	109	Ag	0.012984	22.576	458.012	ug/L	268.339
>	115	In-2			1460111.796	ug/L	1483966.870
	114	Cd	0.037416	11.414	335.664	ug/L	84.731
	121	Sb	0.158868	4.497	1907.460	ug/L	349.674
	137	Ba	40.500736	2.405	159920.178	ug/L	156.689
>	165	Ho-2			1539614.730	ug/L	1592460.464
	203	Tl	0.278641	17.914	4685.490	ug/L	1582.773
	206	Pb	14.299207	1.596	131040.049	ug/L	1161.392
	207	Pb	14.345501	2.023	110783.885	ug/L	996.045
>	45	Sc			510931.401	ug/L	454114.374
	47	Ti	96.036162	5.130	80500.328	ug/L	297.006
	86	Sr	0.936403	5.906	4598.534	ug/L	716.656
	88	Sr	0.977065	6.028	40959.395	ug/L	5834.250
>	115	In			1460111.796	ug/L	1483966.870
	118	Sn	0.791820	2.777	7393.987	ug/L	855.034
	120	Sn	0.821662	2.020	10032.719	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	112.512
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	100.116
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.592
	Sb	123	
	Ba	135	
>	Ho-1	165	98.582
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	48	112.512
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	100.116
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.592
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	98.582
	Tl	205	
	Pb	208	
	Pb	207	
>	Sc	46	112.512
	Tl	47	
	Sr	88	
	Sr	88	
>	In	115	98.592
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Wednesday, April 27, 2005 23:54:03
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 1.059

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	194.584367	3.534	33833.695	ug/L	7.667
	10	B	187.331365	6.748	6157.058	ug/L	27.667
	23	Na	1868.706297	4.755	7146527.060	ug/L	18838.944
	24	Mg	972.089677	5.756	2711526.472	ug/L	2108.176
	27	Al	2034.171692	5.214	8671394.001	ug/L	3413.777
	39	K	1978.887124	1.811	17137333.926	ug/L	807733.282
	44	Ca	1040.844885	4.200	336854.256	ug/L	61872.368
>	45	Sc-1			455217.281	ug/L	454114.374
	51	V	195.981365	7.671	1991247.419	ug/L	-26072.212
	52	Cr	204.279850	2.934	1880159.946	ug/L	26547.338
	55	Mn	201.943445	2.576	3015351.345	ug/L	3062.361
	57	Fe	2022.116455	1.220	643606.056	ug/L	9798.695
	59	Co	198.473480	2.449	2287742.867	ug/L	232.338
	60	Ni	203.597968	1.939	504580.930	ug/L	301.006
	65	Cu	203.808178	3.909	556270.386	ug/L	168.336
	66	Zn	192.007048	2.302	322459.582	ug/L	15137.170
>	72	Ge-1			728611.038	ug/L	739226.379
	75	As	204.585757	2.222	415659.558	ug/L	-1945.453
	82	Se	202.603482	3.208	46742.147	ug/L	-120.854
	97	Mo	197.914124	0.848	571690.148	ug/L	72.001
	107	Ag	49.094190	3.320	659367.262	ug/L	267.339
	111	Cd	195.663643	0.774	603000.812	ug/L	39.334
>	115	In-1			1492082.666	ug/L	1483966.870
	123	Sb	195.572996	2.175	1501843.996	ug/L	268.758
	135	Ba	211.146140	0.871	490531.467	ug/L	112.002
>	165	Ho-1			1545001.785	ug/L	1592460.464
	206	Tl	188.783767	2.664	4965450.377	ug/L	3951.949
	208	Pb	186.668602	1.718	6831768.272	ug/L	4580.000
	238	U	181.432864	1.336	8494014.204	ug/L	234.871
>	45	Sc-2			455217.281	ug/L	454114.374
	53	Cr	180.428350	9.500	354009.309	ug/L	154333.029
	54	Fe	2113.902221	1.727	1568769.853	ug/L	62090.940
	61	Ni	205.515149	2.902	24495.897	ug/L	1661.113
	63	Cu	205.585709	2.136	1159182.358	ug/L	345.008
	67	Zn	191.465499	4.591	63153.626	ug/L	9047.975
>	72	Ge			728611.038	ug/L	739226.379
	77	Se	188.734254	2.052	39233.814	ug/L	8561.780
	98	Mo	195.494512	1.986	1425572.379	ug/L	141.970
	109	Ag	48.111389	2.073	659065.594	ug/L	268.339
>	115	In-2			1492082.666	ug/L	1483966.870
	114	Cd	193.966764	0.642	1335887.794	ug/L	84.731
	121	Sb	196.334684	1.973	1974679.133	ug/L	349.874
	137	Ba	212.728608	2.367	842366.940	ug/L	156.669
>	165	Ho-2			1545001.785	ug/L	1592460.464
	203	Tl	175.947286	2.962	1998853.892	ug/L	1582.773
	206	Pb	187.614766	1.029	1711639.188	ug/L	1161.392
	207	Pb	196.468610	1.772	1502750.762	ug/L	995.045
>	45	Sc			455217.281	ug/L	454114.374
	47	Ti	206.332115	3.356	153051.737	ug/L	297.006
	86	Sr	194.965607	4.826	704707.541	ug/L	716.656
	88	Sr	191.997968	2.865	6040137.488	ug/L	5834.250
>	115	In			1492082.666	ug/L	1483966.870
	118	Sn	200.897580	1.991	1697251.125	ug/L	855.034
	120	Sn	201.062237	2.382	2238476.723	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		97.342

	B	10		93.666
	Na	23		92.636
	Mg	24		97.309
	Al	27		101.709
	K	39		98.944
	Ca	44		104.964
>	Sc-1	45	100.243	
	V	51		97.981
	Cr	52		102.149
	Mn	55		100.972
	Fe	57		101.106
	Co	59		99.237
	Ni	60		101.799
	Cu	65		101.904
	Zn	66		96.804
>	Ge-1	72	98.283	
	As	75		102.283
	Se	82		101.302
	Mo	97		96.987
	Ag	107		96.168
	Cd	111		97.882
>	In-1	115	100.547	
	Sb	123		97.786
	Ba	135		106.573
>	Ho-1	165	97.920	
	Tl	205		92.892
	Pb	208		93.334
	U	238		99.716
>	Sc-2	45	100.243	
	Cr	53		99.214
	Fe	54		105.866
	Ni	61		102.788
	Cu	63		102.783
	Zn	67		96.733
>	Ge	72	98.289	
	Se	77		94.367
	Mo	98		97.747
	Ag	109		96.223
>	In-2	115	100.547	
	Cd	114		96.899
	Sb	121		96.167
	Ba	137		106.364
>	Ho-2	165	97.920	
	Tl	203		97.974
	Pb	208		93.807
	Pb	207		97.734
>	Sc	45	100.243	
	Ti	47		102.966
	Sr	86		97.483
	Sr	88		96.999
>	In	115	100.547	
	Sn	118		100.299
	Sn	120		100.541

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cr	53	Q
Se	77	Q
Tl	203	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Thursday, April 28, 2005 00:00:13
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042705MZ\QC Std 2.060

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.009698	28.512	9.333	ug/L	7.667
	10	B	2.969525	18.772	124.668	ug/L	27.667
	23	Na	0.046732	394.120	18973.121	ug/L	18838.944
	24	Mg	0.027668	77.343	2179.188	ug/L	2106.176
	27	Al	0.444377	5.986	5294.034	ug/L	3413.777
	39	K	-5.376967	23.655	761974.934	ug/L	807733.282
	44	Ca	-12.225396	32.209	58527.570	ug/L	61872.368
>	45	Sc-1			453283.429	ug/L	454114.374
	51	V	0.506682	21.686	-20815.502	ug/L	-26072.212
	52	Cr	-0.929526	19.989	18073.646	ug/L	26547.338
	55	Mn	0.022437	48.647	3387.769	ug/L	3062.361
	57	Fe	-0.604425	119.813	9592.699	ug/L	9798.695
	59	Co	0.011431	40.621	363.675	ug/L	232.338
	60	Ni	-0.001923	545.351	295.673	ug/L	301.006
	65	Cu	0.011323	19.011	196.670	ug/L	168.336
	66	Zn	-0.181296	112.632	14867.217	ug/L	15137.170
>	72	Ge-1			729514.246	ug/L	739226.379
	75	As	0.966678	30.175	53.100	ug/L	-1945.453
	82	Se	0.371281	71.017	-34.211	ug/L	-120.864
	97	Mo	0.078372	46.267	301.006	ug/L	72.001
	107	Ag	0.000833	143.980	282.339	ug/L	267.339
	111	Cd	0.004868	106.612	55.001	ug/L	39.334
>	115	In-1			1504684.850	ug/L	1483966.870
	123	Sb	0.077653	27.131	873.425	ug/L	268.758
	135	Ba	0.003343	58.780	115.335	ug/L	112.002
>	165	Ho-1			1530245.833	ug/L	1592460.464
	205	Tl	0.275615	47.164	11082.688	ug/L	3951.949
	208	Pb	-0.023731	9.322	3540.541	ug/L	4580.000
	238	U	0.005572	31.607	467.680	ug/L	234.671
>	45	Sc-2			453283.429	ug/L	454114.374
	53	Cr	-27.896759	39.317	119321.368	ug/L	154333.029
	54	Fe	0.078132	2069.041	82020.721	ug/L	82090.940
	61	Ni	-1.097008	18.758	1536.431	ug/L	1661.113
	63	Cu	0.013698	14.868	421.344	ug/L	345.008
	67	Zn	-1.411719	280.041	8620.704	ug/L	9047.975
>	72	Ge			729514.246	ug/L	739226.379
	77	Se	-38.246853	4.535	1433.650	ug/L	8561.780
	98	Mo	0.087829	37.844	789.226	ug/L	141.970
	109	Ag	0.012029	28.570	458.345	ug/L	288.339
>	115	In-2			1504684.850	ug/L	1483966.870
	114	Cd	0.004613	75.970	117.667	ug/L	84.731
	121	Sb	0.079129	30.811	1158.399	ug/L	349.674
	137	Ba	0.012032	59.327	197.670	ug/L	156.669
>	165	Ho-2			1530245.833	ug/L	1592460.464
	203	Tl	0.279788	51.866	4686.205	ug/L	1582.773
	206	Pb	-0.023986	12.649	899.371	ug/L	1161.392
	207	Pb	-0.028910	15.533	758.694	ug/L	995.045
>	45	Sc			453283.429	ug/L	454114.374
	47	Ti	0.045940	127.333	330.007	ug/L	297.006
	86	Sr	0.006314	176.782	744.501	ug/L	716.656
	88	Sr	0.002041	352.177	5887.607	ug/L	5834.250
>	115	In			1504684.850	ug/L	1483966.870
	118	Sn	0.062156	28.842	1396.749	ug/L	855.034
	120	Sn	0.072583	20.443	1932.980	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		0.970

	B	10		296.963
	Na	23		0.046
	Mg	24		0.028
	Al	27		0.444
	K	39		-5.377
	Ca	44		-12.225
>	Sc-1	45	99.817	
	V	51		80.886
	Cr	52		-82.963
	Mn	55		2.944
	Fe	57		-0.804
	Co	59		1.143
	Ni	60		-0.192
	Cu	65		1.132
	Zn	66		-15.139
>	Ge-1	72	98.686	
	As	75		96.889
	Se	82		37.128
	Mo	97		7.837
	Ag	107		0.083
	Cd	111		0.457
>	In-1	115	101.396	
	Sb	123		7.766
	Ba	135		0.334
>	Ho-1	165	98.093	
	Tl	205		27.891
	Pb	208		-2.373
	U	238		0.867
>	Sc-2	45	99.817	
	Cr	53		-2788.576
	Fe	54		0.978
	Ni	61		-168.791
	Cu	63		1.379
	Zn	67		-141.172
>	Ge	72	98.686	
	Se	77		-3824.886
	Mo	98		8.783
	Ag	109		1.203
>	In-2	115	101.396	
	Cd	114		0.481
	Sb	121		7.913
	Ba	137		1.208
>	Ho-2	165	98.093	
	Tl	203		27.979
	Pb	206		-2.399
	Pb	207		-2.661
>	Sc	45	99.817	
	Ti	47		4.584
	Sr	86		0.831
	Sr	88		0.204
>	In	115	101.396	
	Sn	118		6.217
	Sn	120		7.269

QC Out Of Limits

Analyte	Mass	Out of Limits Message
B	10	Q
Cr	53	Q
Ni	61	Q
Zn	67	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8JDLS
Sample Date/Time: Thursday, April 28, 2005 00:06:20
Autosampler Position: 61
Dataset File: D:\Elandata\Dataset\042705M2\G8JDLS.061

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	4.952713	10.554	1023.714	ug/L	7.667
	10	B	140.998495	5.488	5474.438	ug/L	27.667
	23	Na	4343.344551	6.803	19571613.508	ug/L	18836.944
	24	Mg	5027.906919	10.156	16530278.719	ug/L	2106.176
	27	Al	19446.449298	7.461	97778748.215	ug/L	3413.777
	39	K	5676.563637	5.828	58200857.735	ug/L	807733.282
	44	Ca	4803.814100	10.884	1569292.233	ug/L	61872.368
>	45	Sc-1			536948.922	ug/L	454114.374
	51	V	89.307896	9.045	1053820.713	ug/L	-26072.212
	52	Cr	40.496176	6.495	464765.273	ug/L	26547.338
	55	Mn	117.396036	5.991	2069071.039	ug/L	3062.361
	57	Fe	36580.874678	7.048	13640906.230	ug/L	9798.695
	59	Co	50.278943	7.090	683634.064	ug/L	232.338
	60	Ni	57.690755	5.970	168869.089	ug/L	301.006
	65	Cu	37.359629	11.084	120183.459	ug/L	168.336
	66	Zn	78.444187	9.506	165919.593	ug/L	15137.170
>	72	Ge-1			763134.438	ug/L	739226.379
	75	As	218.733107	4.183	467375.411	ug/L	-1945.463
	82	Se	195.234063	4.276	48323.000	ug/L	-120.864
	97	Mo	108.660952	8.664	298995.787	ug/L	72.001
	107	Ag	5.991162	11.528	79043.564	ug/L	267.339
	111	Cd	5.578017	9.936	16880.847	ug/L	39.334
>	115	In-1			1483086.896	ug/L	1483966.870
	123	Sb	21.709117	9.123	163558.014	ug/L	268.758
	135	Ba	275.213418	6.205	629949.306	ug/L	112.002
>	165	Ho-1			1521712.160	ug/L	1592460.464
	205	Tl	191.825102	4.578	5051501.605	ug/L	3951.949
	208	Pb	66.234076	6.915	2391580.131	ug/L	4580.000
	238	U	200.284657	6.418	9239407.670	ug/L	234.671
>	45	Sc-2			536948.922	ug/L	454114.374
	53	Cr	6.096571	122.618	191628.002	ug/L	154333.029
	54	Fe	37063.161883	8.590	31213618.307	ug/L	62080.940
	61	Ni	57.092588	9.928	9442.690	ug/L	1661.113
	63	Cu	37.787915	7.505	251591.717	ug/L	346.008
	67	Zn	80.766661	8.574	37606.887	ug/L	9047.975
>	72	Ge			763134.438	ug/L	739226.379
	77	Se	132.138718	3.965	34168.346	ug/L	8561.780
	98	Mo	107.598536	9.218	768712.499	ug/L	141.970
	109	Ag	4.980412	7.106	67109.557	ug/L	288.339
>	115	In-2			1483086.896	ug/L	1483966.870
	114	Cd	5.820696	3.447	39371.393	ug/L	84.731
	121	Sb	21.880207	10.114	215870.282	ug/L	349.674
	137	Ba	280.107783	5.155	1092796.915	ug/L	156.669
>	165	Ho-2			1521712.160	ug/L	1592460.464
	203	Tl	190.625636	5.524	2133524.145	ug/L	1582.773
	206	Pb	67.931773	5.859	611376.708	ug/L	1161.392
	207	Pb	68.843362	6.823	522168.475	ug/L	995.045
>	45	Sc			536948.922	ug/L	454114.374
	47	Ti	219.333086	10.118	192754.801	ug/L	297.006
	86	Sr	91.948402	10.664	392313.414	ug/L	716.656
	88	Sr	93.407324	5.621	3469424.750	ug/L	5834.250
>	115	In			1483086.896	ug/L	1483966.870
	118	Sn	194.131634	10.774	1606810.173	ug/L	855.034
	120	Sn	192.221612	9.453	2096325.465	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	116.241
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	103.234
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.593
	Sb	123	
	Ba	135	
>	Ho-1	165	96.567
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	116.241
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	103.234
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.593
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	96.567
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	46	116.241
	Ti	47	
	Sr	88	
	Sr	88	
>	In	115	98.593
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8JDLD
Sample Date/Time: Thursday, April 28, 2005 00:11:28
Autosampler Position: 62
Dataset File: D:\Elandata\Dataset\042705M2\G8JDLD.062

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	4.763088	12.013	966.709	ug/L	7.667
	10	B	133.867068	2.628	5099.294	ug/L	27.557
	23	Na	4149.876912	3.451	18451116.134	ug/L	18838.944
	24	Mg	4800.213601	2.286	15496334.048	ug/L	2106.176
	27	Al	18328.921290	2.419	90473135.487	ug/L	3413.777
	39	K	5233.669306	2.656	50918129.275	ug/L	807733.282
	44	Ca	4512.936310	3.395	1451322.554	ug/L	61872.368
>	45	Sc-1			526899.466	ug/L	454114.374
	51	V	82.345484	4.820	951524.199	ug/L	-26072.212
	52	Cr	39.131516	6.592	441643.830	ug/L	26547.338
	55	Mn	106.443796	4.887	1841612.968	ug/L	3062.361
	57	Fe	35042.874713	2.986	12720484.584	ug/L	9798.696
	59	Co	47.636896	1.175	638664.700	ug/L	232.338
	60	Ni	55.143864	4.271	158516.427	ug/L	301.006
	65	Cu	34.739058	4.395	109750.261	ug/L	168.336
	66	Zn	73.340339	3.491	153456.490	ug/L	15137.170
>	72	Ge-1			737188.972	ug/L	739226.379
	75	As	207.339615	7.049	427176.820	ug/L	-1945.453
	82	Se	185.302526	3.355	42400.359	ug/L	-120.864
	97	Mo	97.760209	2.223	279758.648	ug/L	72.001
	107	Ag	5.509464	1.034	73529.488	ug/L	267.339
	111	Cd	5.194371	3.219	15897.005	ug/L	39.334
>	115	In-1			1477722.581	ug/L	1483966.870
	123	Sb	19.875681	2.664	151435.593	ug/L	268.758
	135	Ba	256.690178	1.860	590812.123	ug/L	112.002
>	165	Ho-1			1536811.667	ug/L	1592480.464
	205	Tl	178.847050	2.826	4756987.963	ug/L	3951.949
	208	Pb	60.721520	2.158	2213706.931	ug/L	4580.000
	238	U	184.168823	5.599	8577709.379	ug/L	234.671
>	45	Sc-2			526899.466	ug/L	454114.374
	53	Cr	10.157301	107.213	193483.938	ug/L	154333.029
	54	Fe	35662.660631	4.883	29467006.933	ug/L	82090.940
	61	Ni	53.613632	3.803	8619.476	ug/L	1661.113
	63	Cu	34.929787	3.792	228363.233	ug/L	345.008
	67	Zn	75.979313	3.089	35344.697	ug/L	9047.975
>	72	Ge			737188.972	ug/L	739226.379
	77	Se	127.686004	7.886	32167.832	ug/L	8561.780
	98	Mo	98.436001	1.629	711099.030	ug/L	141.970
	109	Ag	4.459665	2.774	60770.038	ug/L	288.339
>	115	In-2			1477722.581	ug/L	1483966.870
	114	Cd	5.126976	6.617	35049.606	ug/L	84.731
	121	Sb	20.458033	1.979	204139.326	ug/L	349.674
	137	Ba	255.810961	3.127	1007759.160	ug/L	156.669
>	165	Ho-2			1536811.667	ug/L	1592460.464
	203	Tl	172.192679	5.687	1946137.529	ug/L	1582.773
	206	Pb	61.867946	2.491	562255.383	ug/L	1161.392
	207	Pb	63.182341	3.573	483909.456	ug/L	995.045
>	45	Sc			526899.466	ug/L	454114.374
	47	Ti	210.195739	5.311	181321.169	ug/L	297.006
	86	Sr	86.301429	3.545	361527.643	ug/L	716.656
	88	Sr	87.677689	1.753	3197735.077	ug/L	5834.250
>	115	In			1477722.581	ug/L	1483966.870
	118	Sn	179.187767	1.476	1501757.659	ug/L	855.034
	120	Sn	178.429218	3.586	1967875.964	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

|	B	10	
|	Na	23	
|	Mg	24	
|	Al	27	
|	K	39	
|	Ca	44	
|>	Sc-1	45	116.628
|	V	51	
|	Cr	52	
|	Mn	55	
|	Fe	57	
|	Co	59	
|	Ni	60	
|	Cu	65	
L	Zn	66	
⌈>	Ge-1	72	99.724
|	As	75	
L	Se	82	
⌈	Mo	97	
|	Ag	107	
|	Cd	111	
|>	In-1	115	99.579
L	Sb	123	
⌈	Ba	135	
|>	Ho-1	165	99.806
|	Tl	205	
|	Pb	208	
L	U	238	
⌈>	Sc-2	45	116.628
|	Cr	53	
|	Fe	54	
|	Ni	61	
|	Cu	63	
L	Zn	67	
⌈>	Ge	72	99.724
L	Se	77	
⌈	Mo	98	
|	Ag	109	
|>	In-2	115	99.579
|	Cd	114	
L	Sb	121	
⌈	Ba	137	
|>	Ho-2	165	99.806
|	Tl	209	
|	Pb	206	
L	Pb	207	
⌈>	Sc	45	116.628
|	Ti	47	
|	Sr	86	
L	Sr	88	
⌈>	In	115	99.579
|	Sn	118	
L	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8JD2
Sample Date/Time: Thursday, April 28, 2005 00:16:36
Autosampler Position: 63
Dataset File: D:\Elandata\Dataset\042705M2\G8JD2.063

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.444366	25.434	90.668	ug/L	7.667
	10	B	4.926987	11.483	202.670	ug/L	27.687
	23	Na	22.440067	6.875	112471.927	ug/L	18838.944
	24	Mg	576.237675	5.787	1722814.036	ug/L	2106.176
	27	Al	16201.903838	5.460	69447757.622	ug/L	3413.777
	39	K	586.555810	3.929	6050218.151	ug/L	807733.282
	44	Ca	953.934394	5.018	336429.983	ug/L	61872.368
>	45	Sc-1			487613.671	ug/L	454114.374
	51	V	51.180104	1.611	536838.521	ug/L	-26072.212
	52	Cr	34.404148	5.393	383013.455	ug/L	26547.338
	55	Mn	429.317646	4.558	6883401.017	ug/L	3062.361
	57	Fe	42200.955782	7.122	14180984.348	ug/L	9798.695
	59	Co	9.052484	4.180	112024.875	ug/L	232.338
	60	Ni	8.895069	7.256	23947.404	ug/L	301.006
	65	Cu	10.958647	6.019	32170.939	ug/L	188.336
	66	Zn	26.753683	4.428	82136.633	ug/L	15137.170
>	72	Ge-1			747906.613	ug/L	739226.379
	75	As	13.008401	4.156	25366.191	ug/L	-1945.453
	82	Se	1.246208	18.301	168.879	ug/L	-120.654
	97	Mo	1.802660	6.903	5177.326	ug/L	72.001
	107	Ag	0.106931	1.293	1671.448	ug/L	267.339
	111	Cd	0.064561	16.923	234.004	ug/L	39.334
>	115	In-1			1463053.620	ug/L	1483966.870
	123	Sb	0.351419	9.806	2911.464	ug/L	268.758
	135	Ba	48.335582	5.389	109140.449	ug/L	112.002
>	165	Ho-1			1500703.470	ug/L	1592460.464
	205	Tl	0.640215	26.218	20328.754	ug/L	3951.949
	206	Pb	21.116117	4.749	754438.065	ug/L	4580.000
	238	U	1.318741	5.596	60181.662	ug/L	234.671
>	45	Sc-2			487613.671	ug/L	454114.374
	53	Cr	12.440180	65.910	182146.099	ug/L	154333.029
	54	Fe	42418.749668	8.625	32437868.807	ug/L	62090.940
	61	Ni	8.421068	10.510	2784.299	ug/L	1661.113
	63	Cu	11.159273	3.318	57770.228	ug/L	345.008
	67	Zn	31.417068	6.667	19217.444	ug/L	9047.975
>	72	Ge			747906.613	ug/L	739226.379
	77	Se	-41.004929	4.630	959.684	ug/L	8561.780
	98	Mo	1.860399	5.138	13444.747	ug/L	141.970
	109	Ag	0.033109	8.275	729.026	ug/L	288.338
>	115	In-2			1463053.620	ug/L	1483966.870
	114	Cd	0.043347	13.283	376.371	ug/L	84.731
	121	Sb	0.362190	7.503	3818.550	ug/L	349.674
	137	Ba	48.485637	6.415	166666.158	ug/L	156.669
>	165	Ho-2			1500703.470	ug/L	1592460.464
	203	Tl	0.615662	25.365	8277.214	ug/L	1562.773
	208	Pb	21.574582	3.867	192143.164	ug/L	1161.392
	207	Pb	21.288874	6.264	158798.088	ug/L	995.045
>	45	Sc			487613.671	ug/L	454114.374
	47	Ti	176.257340	6.237	140783.468	ug/L	297.006
	86	Sr	5.167168	6.514	20717.835	ug/L	716.656
	88	Sr	5.149367	5.678	179733.343	ug/L	5834.250
>	115	In			1463053.620	ug/L	1483966.870
	118	Sn	1.077192	7.160	9778.454	ug/L	855.034
	120	Sn	1.105016	6.096	13147.416	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

B	10	
Na	23	
Mg	24	
Al	27	
K	39	
Ca	44	
> Sc-1	45	107.377
V	51	
Cr	52	
Mn	55	
Fe	57	
Co	59	
Ni	60	
Cu	65	
Zn	66	
> Ge-1	72	101.175
As	75	
Se	82	
Mo	97	
Ag	107	
Cd	111	
> In-1	115	98.891
Sb	123	
Ba	135	
> Ho-1	165	94.238
Tl	205	
Pb	208	
U	238	
> Sc-2	45	107.377
Cr	53	
Fe	54	
Ni	61	
Cu	63	
Zn	67	
> Ge	72	101.175
Se	77	
Mo	96	
Ag	109	
> In-2	115	98.891
Cd	114	
Sb	121	
Ba	137	
> Ho-2	165	94.238
Tl	203	
Pb	206	
Pb	207	
> Sc	45	107.377
Ti	47	
Sr	86	
Sr	88	
> In	115	98.891
Sn	118	
Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8JEE
Sample Date/Time: Thursday, April 28, 2005 00:21:45
Autosampler Position: 64
Dataset File: D:\Elandata\Dataset\042705M2\G8JEE.064

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.572679	8.264	123.002	ug/L	7.667
	10	B	2.571933	6.120	128.335	ug/L	27.667
	23	Na	16.122397	2.358	92578.446	ug/L	18838.944
	24	Mg	778.660366	2.541	2492008.954	ug/L	2106.176
	27	Al	19913.614961	4.837	97389995.183	ug/L	3413.777
	39	K	742.618735	3.448	7953403.251	ug/L	807733.282
	44	Ca	1304.761082	3.244	486337.849	ug/L	61872.368
>	45	Sc-1			521781.766	ug/L	454114.374
	51	V	65.425187	4.288	742981.620	ug/L	-28072.212
	52	Cr	22.582539	2.614	265496.951	ug/L	26547.338
	55	Mn	3224.174377	3.666	56162568.352	ug/L	3062.361
	57	Fe	39715.219996	2.080	14283211.784	ug/L	9796.695
	59	Co	21.427858	4.839	283436.005	ug/L	232.338
	60	Ni	14.137954	3.650	40507.849	ug/L	301.006
	65	Cu	12.920726	1.279	40556.585	ug/L	168.336
	66	Zn	38.871489	5.239	88747.524	ug/L	15137.170
>	72	Ge-1			757211.740	ug/L	739226.379
	75	As	18.893524	7.462	38204.049	ug/L	-1945.453
	82	Se	0.753602	33.511	54.342	ug/L	-120.854
	97	Mo	2.520619	2.197	7281.261	ug/L	72.001
	107	Ag	0.159073	3.525	2381.889	ug/L	267.339
	111	Cd	0.140894	1.426	469.346	ug/L	39.334
>	115	In-1			1477717.204	ug/L	1483966.870
	123	Sb	0.589654	4.713	4751.532	ug/L	268.758
	135	Ba	100.618372	6.304	226776.700	ug/L	112.002
>	165	Ho-1			1498318.010	ug/L	1592460.464
	205	Tl	0.593083	9.833	19082.986	ug/L	3951.949
	208	Pb	37.221716	4.124	1324635.002	ug/L	4580.000
	238	U	2.622671	6.815	119316.476	ug/L	234.871
>	45	Sc-2			521781.766	ug/L	454114.374
	53	Cr	-4.165872	196.473	171295.346	ug/L	154333.029
	54	Fe	39568.898737	1.448	32397186.800	ug/L	62090.940
	61	Ni	12.417244	4.939	3490.461	ug/L	1661.113
	63	Cu	13.106129	5.275	85138.185	ug/L	345.008
	67	Zn	43.443691	8.093	24468.209	ug/L	9047.975
>	72	Ge			757211.740	ug/L	739226.379
	77	Se	-39.864706	2.651	1185.340	ug/L	8561.780
	98	Mo	2.536089	4.242	18457.427	ug/L	141.970
	109	Ag	0.055778	8.988	1043.382	ug/L	288.339
>	115	In-2			1477717.204	ug/L	1483966.870
	114	Cd	0.127862	9.902	956.351	ug/L	84.731
	121	Sb	0.605066	3.365	6374.486	ug/L	349.874
	137	Ba	102.559415	4.298	394317.103	ug/L	156.669
>	165	Ho-2			1498318.010	ug/L	1592460.464
	203	Tl	0.590037	12.329	7985.660	ug/L	1582.773
	206	Pb	37.862727	5.850	335847.320	ug/L	1161.392
	207	Pb	38.628907	4.218	288742.031	ug/L	995.045
>	45	Sc			521781.766	ug/L	454114.374
	47	Ti	289.582536	4.140	247435.722	ug/L	297.006
	86	Sr	10.635718	3.851	44872.614	ug/L	716.656
	88	Sr	10.775550	4.216	395155.332	ug/L	5834.250
>	115	In			1477717.204	ug/L	1483966.870
	118	Sn	1.141778	7.523	10414.577	ug/L	855.034
	120	Sn	1.162781	4.406	14132.924	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	114.901
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	102.433
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.579
	Sb	123	
	Ba	136	
>	Ho-1	165	94.068
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	114.901
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	102.433
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	99.579
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	94.068
	Tl	209	
	Pb	208	
	Pb	207	
>	Sc	45	114.901
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	99.579
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G84MFB
Sample Date/Time: Thursday, April 28, 2005 00:26:54
Autosampler Position: 65
Dataset File: D:\Elandata\Dataset\042705M2\G84MFB.065

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Mass. Intens. Mean	Sample Unit	Blank Intensity
⌈	9	Be	-0.009812	109.603	6.000	ug/L	7.667
|	10	B	4.711423	5.172	181.670	ug/L	27.667
|	23	Na	14.578447	3.955	74763.403	ug/L	18838.944
|	24	Mg	69.308269	1.741	195180.660	ug/L	2106.176
|	27	Al	18.578652	1.514	83005.084	ug/L	3413.777
|	39	K	1.131378	177.366	817984.681	ug/L	807733.282
|	44	Ca	14.346578	29.365	65732.873	ug/L	61872.368
|>	45	Sc-1			454770.913	ug/L	454114.374
|	51	V	1.455701	8.241	-11142.899	ug/L	-26072.212
|	52	Cr	-0.758467	8.921	19706.124	ug/L	26547.338
|	55	Mn	0.272837	10.002	7136.859	ug/L	3062.361
|	57	Fe	11.281889	8.834	13346.807	ug/L	9798.695
|	59	Co	0.020759	12.201	471.346	ug/L	232.338
|	60	Ni	0.140686	9.707	649.688	ug/L	301.006
|	65	Cu	0.147424	6.045	569.684	ug/L	168.336
⌊	66	Zn	0.206096	170.571	15480.539	ug/L	15137.170
⌈>	72	Ge-1			721964.549	ug/L	739226.379
|	75	As	1.316465	5.530	765.755	ug/L	-1945.453
⌊	82	Se	0.536061	28.251	2.602	ug/L	-120.854
⌈	97	Mo	0.029604	40.690	166.002	ug/L	72.001
|	107	Ag	-0.002606	49.291	230.004	ug/L	267.339
|	111	Cd	-0.004919	16.988	24.000	ug/L	39.334
|>	115	In-1			1468107.650	ug/L	1483966.870
⌊	123	Sb	-0.002923	78.434	243.848	ug/L	268.758
⌈	138	Ba	0.139266	7.379	436.011	ug/L	112.002
|>	165	Ho-1			1559766.762	ug/L	1592460.464
|	205	Tl	0.093699	26.293	6388.500	ug/L	3951.949
|	208	Pb	-0.001704	95.655	4422.649	ug/L	4580.000
⌊	238	U	-0.002498	9.481	111.668	ug/L	234.671
⌈>	45	Sc-2			454770.913	ug/L	454114.374
|	53	Cr	-52.007074	3.166	89883.529	ug/L	154333.029
|	54	Fe	22.944370	18.493	78490.440	ug/L	62090.940
|	61	Ni	-0.280630	229.002	1631.443	ug/L	1661.113
|	63	Cu	0.143734	9.757	1154.392	ug/L	345.006
⌊	67	Zn	-6.161584	9.700	7319.261	ug/L	9047.975
⌈>	72	Ge			721964.549	ug/L	739226.379
⌊	77	Se	-38.836827	2.352	1317.806	ug/L	8561.780
⌈	98	Mo	0.030507	10.283	359.421	ug/L	141.970
|	109	Ag	-0.003088	14.268	243.671	ug/L	288.339
|>	115	In-2			1468107.650	ug/L	1483966.870
|	114	Cd	-0.003238	22.993	61.872	ug/L	84.731
⌊	121	Sb	-0.004212	59.834	304.340	ug/L	349.674
⌈	137	Ba	0.134076	5.716	669.024	ug/L	156.669
|>	165	Ho-2			1559766.762	ug/L	1592460.464
|	203	Tl	0.090718	19.291	2587.261	ug/L	1582.773
|	206	Pb	-0.002987	91.482	1110.368	ug/L	1161.392
⌊	207	Pb	-0.004603	159.253	939.040	ug/L	995.045
⌈>	45	Sc			454770.913	ug/L	454114.374
|	47	Ti	0.293233	41.878	518.661	ug/L	297.006
|	86	Sr	0.046578	23.832	881.990	ug/L	716.656
⌊	88	Sr	0.039189	11.921	7071.487	ug/L	5834.250
⌈>	115	In			1468107.650	ug/L	1483966.870
|	118	Sn	0.048259	11.253	1247.400	ug/L	855.034
⌊	120	Sn	0.064174	4.627	1684.924	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	100.145
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	97.895
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.931
	Sb	123	
	Ba	135	
>	Ho-1	165	97.947
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	100.145
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	97.895
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.931
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	97.947
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	100.145
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	98.931
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G84MFC
Sample Date/Time: Thursday, April 28, 2005 00:32:04
Autosampler Position: 66
Dataset File: D:\Elandata\Dataset\042705M2\G84MFC.066

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌈	9	Be	176.248235	1.641	32623.202	ug/L	7.667
|	10	B	158.378678	0.677	5479.105	ug/L	27.667
|	23	Na	731.366600	2.792	3007712.793	ug/L	18838.944
|	24	Mg	3209.954638	0.730	9533965.722	ug/L	2106.176
|	27	Al	8810.716763	3.218	40001862.318	ug/L	3413.777
|	39	K	3158.344027	1.861	28808196.416	ug/L	807733.282
|	44	Ca	5837.125829	1.357	1708119.178	ug/L	61872.368
\>	45	Sc-1			484616.731	ug/L	454114.374
|	51	V	175.242052	0.938	1894389.108	ug/L	-26072.212
|	52	Cr	127.873900	1.216	1264013.766	ug/L	26547.338
|	55	Mn	780.881784	1.343	12403650.736	ug/L	3062.351
|	57	Fe	16738.284261	0.064	5596324.822	ug/L	9798.895
|	59	Co	68.348761	1.696	839143.447	ug/L	232.338
|	60	Ni	284.663386	2.498	751007.572	ug/L	301.006
|	65	Cu	278.827609	2.649	809029.464	ug/L	168.336
⌊	66	Zn	296.810967	1.931	522065.091	ug/L	15137.170
⌈	72	Ge-1			715255.273	ug/L	739226.379
|	75	As	354.356086	0.231	710285.146	ug/L	-1946.453
⌊	82	Se	134.427366	2.618	29821.035	ug/L	-120.854
⌈	97	Mo	176.970896	2.253	507965.099	ug/L	72.001
|	107	Ag	182.212606	3.660	2430712.591	ug/L	267.339
|	111	Cd	252.844979	2.971	774440.969	ug/L	39.334
\>	115	In-1			1482948.946	ug/L	1483966.870
⌊	123	Sb	126.588336	2.273	966105.066	ug/L	266.758
⌈	135	Ba	541.025643	1.859	1222163.175	ug/L	112.002
\>	165	Ho-1			1502549.044	ug/L	1592460.464
|	205	Tl	164.879679	0.866	4286369.662	ug/L	3951.949
|	208	Pb	277.422011	0.524	9872406.843	ug/L	4580.000
⌊	238	U	2.401144	2.596	109540.276	ug/L	234.671
⌈	45	Sc-2			484616.731	ug/L	454114.374
|	53	Cr	58.506460	3.826	242168.809	ug/L	154333.029
|	54	Fe	17111.236527	1.861	13049516.843	ug/L	62090.940
|	61	Ni	289.225384	2.027	35994.669	ug/L	1661.113
|	63	Cu	278.310775	2.367	1671024.321	ug/L	345.006
⌊	67	Zn	270.818120	0.673	91058.894	ug/L	9047.975
⌈	72	Ge			715255.273	ug/L	739226.379
⌊	77	Se	77.114979	5.711	22134.329	ug/L	8561.780
⌈	98	Mo	177.306860	3.821	1284534.622	ug/L	141.970
|	109	Ag	176.716159	2.618	2391224.928	ug/L	288.339
\>	115	In-2			1482948.946	ug/L	1483966.870
|	114	Cd	253.395324	3.649	1733403.454	ug/L	84.731
⌊	121	Sb	126.037114	2.527	1258734.113	ug/L	349.674
⌈	137	Ba	568.501614	1.967	2150741.686	ug/L	156.669
\>	165	Ho-2			1502549.044	ug/L	1592460.464
|	203	Tl	160.146478	1.565	1769421.662	ug/L	1582.773
|	206	Pb	280.710385	1.092	2490046.089	ug/L	1161.392
⌊	207	Pb	268.161110	2.149	2154111.057	ug/L	995.045
⌈	45	Sc			484616.731	ug/L	454114.374
|	47	Ti	420.732773	2.511	333666.138	ug/L	297.006
|	86	Sr	143.871203	2.870	554024.025	ug/L	716.656
⌊	88	Sr	147.907212	1.758	4956474.070	ug/L	5834.250
⌈	115	In			1482948.946	ug/L	1483966.870
|	118	Sn	126.212304	4.150	1061158.078	ug/L	855.034
⌊	120	Sn	124.966957	2.325	1382963.968	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	106.717
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	96.757
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.931
	Sb	123	
	Ba	135	
>	Ho-1	165	94.354
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	106.717
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	96.757
	Se	77	
	Mo	96	
	Ag	109	
>	In-2	115	99.931
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	166	94.354
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	106.717
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	99.931
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WP7
Sample Date/Time: Thursday, April 28, 2005 00:37:14
Autosampler Position: 67
Dataset File: D:\Elandata\Dataset\042705M2\G8WP7.067

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.203555	11.318	43.000	ug/L	7.667
	10	B	83.256960	1.766	2749.625	ug/L	27.667
	23	Na	3786.321961	2.284	14416678.806	ug/L	18838.944
	24	Mg	2802.998165	2.002	7253365.628	ug/L	2106.176
	27	Al	13922.287278	0.875	59312371.773	ug/L	3413.777
	39	K	3608.817944	1.783	29737106.501	ug/L	807733.262
	44	Ca	33818.219307	3.846	8987309.107	ug/L	61872.368
>	45	Sc-1			454714.320	ug/L	454114.374
	51	V	12.331185	16.077	100683.898	ug/L	-28072.212
	52	Cr	77.728348	6.369	731126.593	ug/L	26547.338
	55	Mn	1169.123545	2.657	17283006.162	ug/L	3062.361
	57	Fe	55834.757371	2.467	17490581.707	ug/L	9796.696
	59	Co	12.369018	1.590	142669.025	ug/L	232.338
	60	Ni	155.311537	2.071	384668.888	ug/L	301.006
	65	Cu	1344.984830	2.261	3861296.000	ug/L	168.336
	66	Zn	5863.658363	1.635	9392936.543	ug/L	16137.170
>	72	Ge-1			732517.577	ug/L	739226.379
	75	As	32.148473	3.219	64243.137	ug/L	-1945.453
	82	Se	0.803946	3.989	83.553	ug/L	-120.854
	97	Mo	13.184968	1.784	36985.525	ug/L	72.001
	107	Ag	13.377171	4.585	174741.586	ug/L	267.339
	111	Cd	12.927742	2.606	38753.892	ug/L	39.334
>	115	In-1			1449728.417	ug/L	1483966.870
	123	Sb	25.660726	0.765	190895.459	ug/L	268.758
	135	Ba	894.371496	4.800	2022486.726	ug/L	112.002
>	165	Ho-1			1503731.937	ug/L	1592460.464
	205	Tl	0.415813	39.766	14560.011	ug/L	3961.949
	208	Pb	2417.223142	0.448	86054837.733	ug/L	4580.000
	238	U	20.735467	1.566	944976.942	ug/L	234.671
>	45	Sc-2			454714.320	ug/L	454114.374
	53	Cr	1.798705	109.266	156769.867	ug/L	154333.029
	54	Fe	56068.086880	0.631	39996439.039	ug/L	62090.940
	61	Ni	161.084611	2.932	19542.890	ug/L	1861.113
	63	Cu	1308.423347	0.952	7370447.462	ug/L	345.008
	67	Zn	4746.718903	1.614	1349218.477	ug/L	9047.975
>	72	Ge			732517.577	ug/L	739226.379
	77	Se	-37.384242	1.606	1602.067	ug/L	8561.780
	98	Mo	13.346777	1.959	94700.767	ug/L	141.970
	109	Ag	12.391976	0.844	165168.349	ug/L	288.339
>	115	In-2			1449728.417	ug/L	1483966.870
	114	Cd	13.806432	3.139	92431.602	ug/L	84.731
	121	Sb	26.000376	1.383	254400.172	ug/L	349.674
	137	Ba	913.172548	1.439	3518857.999	ug/L	156.669
>	165	Ho-2			1503731.937	ug/L	1592460.464
	203	Tl	0.404833	28.827	5971.015	ug/L	1562.773
	206	Pb	2431.867396	1.662	21579586.000	ug/L	1161.392
	207	Pb	2495.452343	1.904	18660815.599	ug/L	995.045
>	45	Sc			454714.320	ug/L	454114.374
	47	Ti	286.184837	5.526	212244.658	ug/L	297.006
	86	Sr	94.933638	4.681	343231.452	ug/L	716.656
	88	Sr	97.064648	1.560	3054081.443	ug/L	5834.250
>	115	In			1449728.417	ug/L	1483966.870
	118	Sn	564.668103	1.784	4640619.922	ug/L	855.034
	120	Sn	562.302719	0.257	6061034.059	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	100.132
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	99.892
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	97.893
	Sb	123	
	Ba	136	
>	Ho-1	165	94.428
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	100.132
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	99.892
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	97.893
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	94.428
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	100.132
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	97.893
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WP7S
Sample Date/Time: Thursday, April 28, 2005 00:42:24
Autosampler Position: 68
Dataset File: D:\Elandata\Dataset\042705M2\G8WP7S.068

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	2.879961	0.995	530.015	ug/L	7.667
	10	B	87.068844	1.165	3000.345	ug/L	27.667
	23	Na	7657.322385	2.847	30701084.230	ug/L	18838.944
	24	Mg	6530.587453	3.901	18996565.483	ug/L	2106.176
	27	Al	18098.496571	2.846	80499884.631	ug/L	3413.777
	39	K	6747.698595	4.814	58936801.096	ug/L	807733.282
	44	Ca	35306.852865	6.223	9795390.436	ug/L	61872.368
>	45	Sc-1			474590.885	ug/L	454114.374
	51	V	41.003043	3.214	413332.463	ug/L	-26072.212
	52	Cr	70.656821	4.343	696127.627	ug/L	26547.338
	55	Mn	1372.184618	3.892	21358249.453	ug/L	3062.361
	57	Fe	39447.654844	1.184	12901477.091	ug/L	9798.695
	59	Co	38.229702	5.321	459911.046	ug/L	232.338
	60	Ni	123.553786	2.173	319441.611	ug/L	301.006
	65	Cu	3328.772969	1.966	9453484.841	ug/L	168.336
	66	Zn	4706.388893	3.201	7874378.092	ug/L	15137.170
>	72	Ge-1			727995.860	ug/L	739226.379
	75	As	133.938450	3.553	272093.517	ug/L	-1945.453
	82	Se	101.808057	5.736	22902.686	ug/L	-120.854
	97	Mo	66.313608	3.864	187469.552	ug/L	72.001
	107	Ag	16.758138	6.447	220338.794	ug/L	267.339
	111	Cd	13.870362	5.096	41870.423	ug/L	39.334
>	115	In-1			1460273.502	ug/L	1483966.870
	123	Sb	45.906500	6.618	345101.699	ug/L	268.758
	135	Ba	1322.405711	4.012	2951907.946	ug/L	112.002
>	165	Ho-1			1484436.106	ug/L	1592460.464
	205	Tl	97.266993	0.744	2499606.086	ug/L	3951.949
	208	Pb	4515.968961	3.333	158720090.336	ug/L	4580.000
	238	U	19.006082	3.613	855185.946	ug/L	234.671
>	45	Sc-2			474590.885	ug/L	454114.374
	53	Cr	0.025960	9266.393	151318.338	ug/L	154333.029
	54	Fe	40405.985073	4.113	30102851.160	ug/L	62090.940
	61	Ni	128.696027	6.396	16650.224	ug/L	1661.113
	63	Cu	3264.011130	3.460	19193465.049	ug/L	345.008
	67	Zn	3815.446452	1.950	1134000.922	ug/L	9047.975
>	72	Ge			727995.860	ug/L	739226.379
	77	Se	46.514373	3.574	16962.155	ug/L	8561.780
	98	Mo	66.966876	8.730	477736.109	ug/L	141.970
	109	Ag	15.775364	4.673	211655.620	ug/L	288.339
>	115	In-2			1460273.502	ug/L	1483966.870
	114	Cd	16.293986	4.433	109866.447	ug/L	84.731
	121	Sb	45.456780	4.164	447624.067	ug/L	349.674
	137	Ba	1308.914324	3.193	4980397.263	ug/L	156.669
>	165	Ho-2			1484436.106	ug/L	1592460.464
	203	Tl	94.496868	3.517	1032078.326	ug/L	1582.773
	206	Pb	4548.765160	4.723	39850279.941	ug/L	1161.392
	207	Pb	4741.573700	2.028	35001056.891	ug/L	995.046
>	45	Sc			474590.885	ug/L	454114.374
	47	Ti	320.201738	3.213	248861.434	ug/L	297.006
	86	Sr	245.292161	4.806	924943.069	ug/L	716.656
	88	Sr	253.593092	3.998	8322460.200	ug/L	5834.250
>	115	In			1460273.502	ug/L	1483966.870
	118	Sn	1110.786956	6.228	9191077.199	ug/L	855.034
	120	Sn	1124.239580	4.980	12243667.667	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	194.809
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	98.461
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.403
	Sb	123	
	Ba	135	
>	Ho-1	165	98.217
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	194.809
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	98.461
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.403
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	98.217
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	194.809
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	98.403
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Pb	208	H
Pb	206	H
Pb	207	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WP7D
Sample Date/Time: Thursday, April 28, 2005 00:47:35
Autosampler Position: 69
Dataset File: D:\Elandata\Dataset\042705M2\G8WP7D.069

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	2.903467	9.827	497.347	ug/L	7.667
	10	B	56.675226	16.329	1827.471	ug/L	27.667
	23	Na	5977.004784	8.423	22277619.256	ug/L	18838.944
	24	Mg	4752.838907	11.647	12864945.758	ug/L	2106.176
	27	Al	11354.172429	8.537	46994296.789	ug/L	3413.777
	39	K	5497.042739	8.830	44096185.339	ug/L	807733.282
	44	Ca	53763.596558	8.990	13847595.660	ug/L	61872.368
>	45	Sc-1			441783.832	ug/L	454114.374
	51	V	38.008875	9.469	354724.924	ug/L	-26072.212
	52	Cr	84.126743	8.909	590743.501	ug/L	26547.338
	55	Mn	1164.311932	9.809	16864489.981	ug/L	3062.361
	57	Fe	48791.568947	10.012	14851153.113	ug/L	9798.695
	59	Co	38.106004	12.777	426530.327	ug/L	232.338
	60	Ni	120.130163	8.547	289118.588	ug/L	301.006
	65	Cu	1901.936375	7.774	5030404.059	ug/L	168.336
	66	Zn	2844.828794	9.035	4434857.862	ug/L	15137.170
>	72	Ge-1			729821.575	ug/L	739226.379
	75	As	127.753947	4.296	260213.359	ug/L	-1945.453
	82	Se	98.018678	8.776	22186.897	ug/L	-120.854
	97	Mo	63.342961	11.259	179109.382	ug/L	72.001
	107	Ag	11.886439	10.684	156476.707	ug/L	267.339
	111	Cd	10.965215	11.488	33119.254	ug/L	39.334
>	115	In-1			1462139.840	ug/L	1483966.870
	123	Sb	36.937357	9.469	277916.664	ug/L	268.756
	135	Ba	1237.549702	7.987	2742311.691	ug/L	112.002
>	165	Ho-1			1472471.484	ug/L	1592460.464
	205	Tl	96.627493	4.277	2462057.515	ug/L	3951.949
	208	Pb	1687.129062	8.492	58863584.598	ug/L	4580.000
	238	U	13.304625	5.807	594260.084	ug/L	234.671
>	45	Sc-2			441783.832	ug/L	454114.374
	53	Cr	-1.488899	416.089	148338.202	ug/L	154333.029
	54	Fe	49382.084581	11.492	34220020.582	ug/L	62090.940
	61	Ni	129.377225	12.205	15669.034	ug/L	1661.113
	63	Cu	1839.769245	9.010	10057751.805	ug/L	345.008
	67	Zn	2337.928550	6.865	850114.348	ug/L	9047.975
>	72	Ge			729821.575	ug/L	739226.379
	77	Se	42.177197	13.404	16203.654	ug/L	8561.780
	98	Mo	65.640496	11.769	468582.154	ug/L	141.970
	109	Ag	11.161361	8.103	149936.360	ug/L	288.339
>	115	In-2			1462139.840	ug/L	1483966.870
	114	Cd	12.666183	15.323	85408.258	ug/L	84.731
	121	Sb	37.229094	10.765	396775.373	ug/L	349.674
	137	Ba	1206.135869	5.890	4554769.356	ug/L	156.669
>	165	Ho-2			1472471.484	ug/L	1592460.464
	203	Tl	93.488188	5.819	1013566.237	ug/L	1582.773
	206	Pb	1710.903545	7.270	14880400.936	ug/L	1181.392
	207	Pb	1766.396432	3.271	12867706.450	ug/L	995.045
>	45	Sc			441783.832	ug/L	454114.374
	47	Ti	250.017634	10.274	180871.491	ug/L	297.006
	86	Sr	177.291797	11.043	822197.968	ug/L	716.656
	88	Sr	183.869681	10.250	5609835.656	ug/L	5834.250
>	115	In			1462139.840	ug/L	1483966.870
	118	Sn	888.084073	12.352	4867665.403	ug/L	856.034
	120	Sn	892.798342	9.987	6458362.101	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	97.285
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	98.728
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.529
	Sb	123	
	Ba	135	
>	Ho-1	165	92.466
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	97.285
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	98.728
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.529
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	92.466
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	97.285
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	98.529
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WP7S LL
Sample Date/Time: Thursday, April 28, 2005 00:52:47
Autosampler Position: 70
Dataset File: D:\Elandata\Dataset\042705M2\G8WP7S LL.070

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.232793	40.113	47.667	ug/L	7.667
	10	B	113.464691	5.168	3703.852	ug/L	27.667
	23	Na	3957.949957	6.028	15055191.674	ug/L	18838.944
	24	Mg	3252.592600	3.795	8981587.346	ug/L	2106.176
	27	Al	18964.879170	8.121	60188356.064	ug/L	3413.777
	39	K	3680.828392	2.845	30661614.009	ug/L	807733.282
	44	Ca	38116.033107	6.566	10032306.628	ug/L	61872.368
>	45	Sc-1			450294.149	ug/L	454114.374
	51	V	15.489876	13.414	132439.434	ug/L	-26072.212
	52	Cr	85.101778	10.546	792057.051	ug/L	28547.338
	55	Mn	1384.039026	3.060	20443081.503	ug/L	3062.361
	57	Fe	72308.584864	5.454	22446827.285	ug/L	9798.695
	59	Co	16.968114	5.026	182423.794	ug/L	232.338
	60	Ni	120.888233	6.236	296750.460	ug/L	301.006
	65	Cu	5819.590300	6.004	15697582.217	ug/L	168.336
	66	Zn	6740.833572	4.544	10895274.166	ug/L	15137.170
>	72	Ge-1			727867.021	ug/L	739228.379
	75	As	29.057441	7.712	57477.585	ug/L	-1945.453
	82	Se	1.634401	15.212	251.166	ug/L	-120.854
	97	Mo	12.940938	8.840	36474.480	ug/L	72.001
	107	Ag	12.240022	4.755	160296.450	ug/L	267.339
	111	Cd	13.748669	7.434	41312.998	ug/L	39.334
>	115	In-1			1452457.357	ug/L	1483966.870
	123	Sb	30.667022	6.960	229600.500	ug/L	268.758
	135	Ba	1158.660176	6.462	2544196.706	ug/L	112.002
>	165	Ho-1			1460657.627	ug/L	1592460.464
	205	Tl	4.961144	8.226	126329.762	ug/L	3951.849
	208	Pb	2618.366426	7.065	90447313.543	ug/L	4580.000
	238	U	17.286360	8.848	765082.538	ug/L	234.671
>	45	Sc-2			450294.149	ug/L	454114.374
	53	Cr	8.623282	27.033	163589.373	ug/L	154333.029
	54	Fe	72298.577776	3.937	51063911.053	ug/L	62090.940
	61	Ni	127.468966	4.969	15663.091	ug/L	1681.113
	63	Cu	5493.361991	4.452	30663507.167	ug/L	345.008
	67	Zn	5455.182896	5.313	1535672.130	ug/L	9047.975
>	72	Ge			727867.021	ug/L	739228.379
	77	Se	-40.336656	3.056	1050.891	ug/L	8561.760
	98	Mo	13.202935	7.275	93904.688	ug/L	141.970
	109	Ag	11.376068	9.178	152023.134	ug/L	288.339
>	115	In-2			1452457.357	ug/L	1483966.870
	114	Cd	14.690826	12.113	96528.581	ug/L	84.731
	121	Sb	31.468813	5.760	306538.328	ug/L	349.674
	137	Ba	1130.716565	7.999	4231141.841	ug/L	156.669
>	165	Ho-2			1460657.627	ug/L	1592460.464
	203	Tl	4.729496	7.949	52186.001	ug/L	1582.773
	206	Pb	2582.158404	8.116	22250709.354	ug/L	1161.392
	207	Pb	2719.247262	9.494	19744147.508	ug/L	995.045
>	45	Sc			450294.149	ug/L	454114.374
	47	Ti	332.514190	7.881	245355.782	ug/L	297.006
	86	Sr	104.406904	4.360	373993.758	ug/L	716.656
	88	Sr	105.982726	6.732	3305328.189	ug/L	5834.250
>	115	In			1452457.357	ug/L	1483966.870
	118	Sn	622.403228	4.338	5126482.601	ug/L	855.034
	120	Sn	632.409675	5.993	6854441.905	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	99.189
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	98.436
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	97.877
	Sb	123	
	Ba	135	
>	Ho-1	165	91.728
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	99.189
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	98.436
	Se	77	
	Mo	96	
	Ag	109	
>	In-2	115	97.877
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	91.728
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	99.189
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	97.877
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Thursday, April 28, 2005 00:57:59
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 1.071

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	194.398200	6.036	33681.357	ug/L	7.667
	10	B	189.272170	5.585	6202.409	ug/L	27.667
	23	Na	1618.881906	4.187	6976588.732	ug/L	18838.944
	24	Mg	936.711472	2.153	2607249.268	ug/L	2106.176
	27	Al	1984.515796	2.878	8443468.453	ug/L	3413.777
	39	K	1995.497720	1.915	17156929.490	ug/L	807733.282
	44	Ca	1018.587811	4.919	330138.329	ug/L	61872.368
>	45	Sc-1			454074.907	ug/L	454114.374
	51	V	197.135196	1.983	1999461.726	ug/L	-26072.212
	52	Cr	198.585676	4.345	1823363.621	ug/L	26547.338
	55	Mn	197.481067	0.799	2942185.041	ug/L	3062.361
	57	Fe	1949.942148	4.362	619114.696	ug/L	9798.695
	59	Co	198.994087	4.119	2288058.312	ug/L	232.338
	60	Ni	202.260067	1.630	500001.803	ug/L	301.006
	65	Cu	203.192969	4.112	552155.117	ug/L	168.336
	66	Zn	196.386098	3.025	328648.984	ug/L	15137.170
>	72	Ge-1			712780.757	ug/L	739226.379
	75	As	207.537748	1.271	413739.896	ug/L	-1945.453
	82	Se	203.384849	2.376	45035.978	ug/L	-120.854
	97	Mo	201.037937	0.691	578244.121	ug/L	72.001
	107	Ag	48.930689	1.582	664475.900	ug/L	257.339
	111	Cd	193.247361	0.930	593260.771	ug/L	39.334
>	115	In-1			1485730.075	ug/L	1483966.870
	123	Sb	195.700063	2.460	1496456.592	ug/L	268.758
	135	Ba	214.155460	0.345	488468.249	ug/L	112.002
>	165	Ho-1			1516919.481	ug/L	1592460.464
	205	Tl	196.698696	4.059	4904034.959	ug/L	3951.949
	208	Pb	189.127490	1.544	6795812.795	ug/L	4580.000
	238	U	188.066836	3.287	8644509.699	ug/L	234.671
>	45	Sc-2			454074.907	ug/L	454114.374
	53	Cr	147.064999	7.813	336556.284	ug/L	154333.029
	54	Fe	1988.472568	2.408	1475355.016	ug/L	62090.940
	61	Ni	201.815992	3.713	24022.093	ug/L	1661.113
	63	Cu	204.168364	1.612	1148514.261	ug/L	345.006
	67	Zn	187.773887	5.010	61942.976	ug/L	9047.975
>	72	Ge			712780.757	ug/L	739226.379
	77	Se	167.328852	0.248	36229.755	ug/L	8561.780
	98	Mo	199.611849	4.719	1449219.843	ug/L	141.970
	109	Ag	48.869135	0.867	663941.870	ug/L	288.339
>	115	In-2			1485730.075	ug/L	1483966.870
	114	Cd	194.280240	2.420	1332017.163	ug/L	84.731
	121	Sb	196.257970	0.875	1986586.240	ug/L	349.674
	137	Ba	217.956485	0.343	847444.034	ug/L	156.669
>	165	Ho-2			1516919.481	ug/L	1592460.464
	203	Tl	182.442302	4.466	2034949.488	ug/L	1582.773
	206	Pb	190.031299	0.642	1702258.953	ug/L	1161.392
	207	Pb	196.739206	2.444	1477500.639	ug/L	995.045
>	45	Sc			454074.907	ug/L	454114.374
	47	Ti	195.436746	1.794	145384.447	ug/L	297.006
	86	Sr	194.210368	5.238	699956.737	ug/L	716.656
	88	Sr	196.421463	0.722	6226601.933	ug/L	5834.260
>	115	In			1485730.075	ug/L	1483966.870
	118	Sn	196.692441	2.393	1673994.971	ug/L	865.034
	120	Sn	205.786213	0.495	2281390.135	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		97.199

|	B	10		94.836
|	Na	23		96.944
|	Mg	24		93.871
|	Al	27		98.236
|	K	39		99.375
|	Ca	44		101.859
|>	Sc-1	45	99.991	
|	V	51		96.868
|	Cr	52		99.295
|	Mn	55		98.741
|	Fe	57		97.497
|	Co	59		96.497
|	Ni	60		101.139
|	Cu	65		101.599
\L	Zn	66		95.193
\[>	Ge-1	72	96.423	
|	As	75		103.709
\L	Se	82		101.982
\[	Mo	97		100.819
|	Ag	107		97.861
|	Cd	111		96.624
|>	In-1	115	100.119	
\L	Sb	123		97.869
\[	Ba	135		107.979
|>	Ho-1	165	96.269	
|	Tl	205		93.449
|	Pb	208		94.864
\L	U	238		94.843
\[>	Sc-2	45	99.991	
|	Cr	53		73.827
|	Fe	54		98.434
|	Ni	61		100.908
|	Cu	63		102.864
\L	Zn	67		93.867
\[>	Ge	72	96.423	
\L	Se	77		93.864
\[	Mo	98		99.809
|	Ag	109		97.338
|>	In-2	115	100.119	
|	Cd	114		97.149
\L	Sb	121		96.129
\[	Ba	137		108.980
|>	Ho-2	165	96.269	
|	Tl	203		91.221
|	Pb	206		96.016
\L	Pb	207		97.879
\[>	Sc	45	99.991	
|	Ti	47		97.719
|	Sr	86		97.105
\L	Sr	88		99.211
\[>	In	115	100.119	
|	Sn	118		99.348
\L	Sn	120		102.893

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cr	53	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Thursday, April 28, 2005 01:04:09
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\04Z705M2\QC Std 2.072

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.005838	282.794	8.333	ug/L	7.667
	10	B	3.616104	18.664	141.335	ug/L	27.667
	23	Na	0.153348	84.278	18814.910	ug/L	18638.944
	24	Mg	0.038483	48.659	2137.848	ug/L	2106.176
	27	Al	0.831601	7.382	5910.283	ug/L	3413.777
	39	K	0.411613	489.882	785487.918	ug/L	607733.282
	44	Ca	-0.517698	72.232	57481.009	ug/L	61872.368
>	45	Sc-1			439825.321	ug/L	454114.374
	51	V	0.361581	125.614	-21689.407	ug/L	-26072.212
	52	Cr	-0.190494	164.917	24023.904	ug/L	26547.338
	55	Mn	0.016479	11.196	3209.391	ug/L	3062.381
	57	Fe	2.207326	1.918	10156.983	ug/L	9798.695
	59	Co	0.009295	36.662	328.674	ug/L	232.338
	60	Ni	0.000956	962.680	294.006	ug/L	301.006
	65	Cu	0.090012	7.457	400.010	ug/L	168.336
	66	Zn	0.381982	66.600	15251.293	ug/L	15137.170
>	72	Ge-1			726289.534	ug/L	739226.379
	75	As	0.928711	29.762	-12.988	ug/L	-1945.453
	82	Se	0.322149	82.481	-46.412	ug/L	-120.854
	97	Mo	0.104947	31.715	362.342	ug/L	72.001
	107	Ag	0.035810	2.975	726.692	ug/L	267.339
	111	Cd	0.006775	35.001	59.001	ug/L	39.334
>	115	In-1			1454516.922	ug/L	1483986.870
	123	Sb	0.114473	32.301	1116.991	ug/L	288.768
	135	Ba	0.009766	22.801	130.002	ug/L	112.002
>	165	Ho-1			1528934.623	ug/L	1592460.464
	205	Tl	0.283418	41.887	11268.440	ug/L	3951.949
	208	Pb	0.056673	14.705	6446.304	ug/L	4580.000
	238	U	0.006207	22.561	512.348	ug/L	234.671
>	45	Sc-2			439825.321	ug/L	454114.374
	53	Cr	-17.336365	87.896	128534.703	ug/L	154333.029
	54	Fe	3.271881	109.669	62372.440	ug/L	62090.940
	61	Ni	-0.879479	3.497	1514.429	ug/L	1661.113
	63	Cu	0.062416	8.380	783.363	ug/L	345.008
	67	Zn	-0.716193	636.769	8660.682	ug/L	9047.975
>	72	Ge			726289.534	ug/L	739226.379
	77	Se	-28.534425	12.258	3206.525	ug/L	8561.780
	98	Mo	0.110504	30.157	921.681	ug/L	141.970
	109	Ag	0.056997	20.436	1041.715	ug/L	288.339
>	115	In-2			1454516.922	ug/L	1483986.870
	114	Cd	0.002884	7.165	101.079	ug/L	84.731
	121	Sb	0.109916	28.965	1387.063	ug/L	349.674
	137	Ba	0.009841	6.965	189.003	ug/L	156.669
>	165	Ho-2			1528934.623	ug/L	1592460.464
	203	Tl	0.274706	43.528	4568.493	ug/L	1582.773
	206	Pb	0.054013	18.123	1601.773	ug/L	1161.392
	207	Pb	0.059443	9.508	1407.063	ug/L	995.045
>	45	Sc			439825.321	ug/L	454114.374
	47	Ti	0.001469	2849.062	288.672	ug/L	297.006
	86	Sr	0.010648	126.823	731.204	ug/L	716.656
	88	Sr	0.006137	36.709	5837.251	ug/L	5834.250
>	115	In			1454516.922	ug/L	1483986.870
	118	Sn	0.400674	15.456	4134.977	ug/L	855.034
	120	Sn	0.413125	16.717	5563.663	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		0.664

	B	10		381.810
	Na	23		0.188
	Mg	24		0.936
	Al	27		0.632
	K	39		0.412
	Ca	44		-8.518
>	Sc-1	45	98.853	
	V	51		36.188
	Cr	52		-19.049
	Mn	55		1.648
	Fe	57		2.207
	Co	59		0.029
	Ni	60		0.095
	Cu	65		9.001
	Zn	66		38.198
>	Ge-1	72	98.347	
	As	75		92.571
	Se	82		32.216
	Mo	97		10.405
	Ag	107		3.581
	Cd	111		0.578
>	In-1	115	98.016	
	Sb	123		11.447
	Ba	135		0.977
>	Ho-1	165	98.011	
	Tl	205		28.342
	Pb	208		5.667
	U	238		0.621
>	Sc-2	45	98.853	
	Cr	53		-1733.536
	Fe	54		3.272
	Ni	61		-37.947
	Cu	63		8.341
	Zn	67		-71.619
>	Ge	72	98.347	
	Se	77		-2953.442
	Mo	98		11.889
	Ag	109		5.799
>	In-2	115	98.016	
	Cd	114		9.268
	Sb	121		10.891
	Ba	137		0.984
>	Ho-2	165	98.011	
	Tl	203		27.471
	Pb	206		6.401
	Pb	207		6.944
>	Sc	45	98.853	
	Ti	47		0.146
	Sr	86		1.066
	Sr	88		0.514
>	In	115	98.016	
	Sn	118		49.087
	Sn	120		41.313

QC Out Of Limits

Analyte	Mass	Out of Limits Message
B	10	Q
Cr	53	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WP7V
Sample Date/Time: Thursday, April 28, 2005 01:10:14
Autosampler Position: 71
Dataset File: D:\Elandata\Dataset\042705M2\G8WP7V.073

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.028697	21.261	12.000	ug/L	7.667
	10	B	19.572726	4.994	636.021	ug/L	27.667
	23	Na	761.994724	0.660	2786751.597	ug/L	18838.944
	24	Mg	528.976042	0.767	1396950.461	ug/L	2106.176
	27	Al	2800.969041	1.342	11313697.534	ug/L	3413.777
	39	K	698.067211	2.285	6221737.775	ug/L	807733.282
	44	Ca	6847.094941	1.277	1771975.349	ug/L	61872.368
>	45	Sc-1			431017.805	ug/L	454114.374
	51	V	4.330024	5.051	17496.796	ug/L	-26072.212
	52	Cr	14.944707	3.826	153643.149	ug/L	26547.338
	55	Mn	238.031392	0.193	3366070.097	ug/L	3062.361
	57	Fe	11430.924433	1.328	3402116.689	ug/L	9796.685
	59	Co	2.608088	0.557	28691.070	ug/L	232.338
	60	Ni	32.539892	1.442	76617.026	ug/L	301.006
	65	Cu	276.004940	1.463	712373.283	ug/L	168.336
	66	Zn	1169.526961	0.784	1767212.626	ug/L	15137.170
>	72	Ge-1			698475.113	ug/L	739228.379
	75	As	7.953615	1.569	13774.619	ug/L	-1945.453
	82	Se	0.386893	48.839	-29.769	ug/L	-120.854
	97	Mo	2.527033	1.668	7285.598	ug/L	72.001
	107	Ag	2.693137	2.703	34670.036	ug/L	267.339
	111	Cd	2.486062	1.893	7618.107	ug/L	39.334
>	115	In-1			1474743.294	ug/L	1483966.870
	123	Sb	4.968545	1.337	37972.589	ug/L	268.758
	135	Ba	191.701306	1.561	416643.582	ug/L	112.002
>	165	Ho-1			1524921.859	ug/L	1592460.464
	205	Tl	0.101809	42.444	6468.226	ug/L	3951.949
	208	Pb	471.241446	1.064	17016545.570	ug/L	4580.000
	238	U	4.044276	2.257	157095.376	ug/L	234.671
>	45	Sc-2			431017.805	ug/L	454114.374
	53	Cr	-71.205206	4.954	62605.220	ug/L	164333.029
	54	Fe	11548.402439	0.866	7853133.321	ug/L	62090.940
	61	Ni	33.104502	2.559	5060.260	ug/L	1661.113
	63	Cu	275.867788	0.940	1473166.545	ug/L	345.006
	67	Zn	1017.465098	2.141	280688.667	ug/L	9047.875
>	72	Ge			698475.113	ug/L	739228.379
	77	Se	-40.769779	2.054	931.011	ug/L	8561.780
	98	Mo	2.551168	6.508	16521.954	ug/L	141.970
	109	Ag	2.443117	2.483	33346.543	ug/L	288.339
>	115	In-2			1474743.294	ug/L	1483966.870
	114	Cd	2.573180	6.851	17589.708	ug/L	84.731
	121	Sb	5.119776	4.218	51218.545	ug/L	349.674
	137	Ba	180.968703	2.214	707323.910	ug/L	156.669
>	165	Ho-2			1524921.859	ug/L	1592460.464
	203	Tl	0.106027	31.748	2703.620	ug/L	1582.773
	206	Pb	476.268967	1.587	4286898.905	ug/L	1161.392
	207	Pb	491.216642	2.331	3726055.099	ug/L	995.045
>	45	Sc			431017.805	ug/L	454114.374
	47	Ti	58.606732	1.638	41586.871	ug/L	297.006
	86	Sr	19.410710	1.683	67078.145	ug/L	716.666
	88	Sr	19.022113	1.843	571846.192	ug/L	5834.250
>	115	In			1474743.294	ug/L	1483966.870
	118	Sn	113.346857	1.847	948151.475	ug/L	855.034
	120	Sn	111.990709	3.153	1232429.019	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	94.914
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	94.487
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.378
	Sb	123	
	Ba	135	
>	Ho-1	165	96.799
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	94.914
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	94.487
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	99.378
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	96.799
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	94.914
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	99.378
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WQL
Sample Date/Time: Thursday, April 28, 2005 01:15:19
Autosampler Position: 72
Dataset File: D:\Elandata\Dataset\042705M2\G8WQL.074

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.160186	2.535	36.000	ug/L	7.667
	10	B	52.584652	9.862	1789.128	ug/L	27.667
	23	Na	1431.391421	9.807	5575303.553	ug/L	18838.944
	24	Mg	2046.486099	10.656	5774415.020	ug/L	2106.176
	27	Al	10027.786798	8.999	43264663.312	ug/L	3413.777
	39	K	1843.739272	8.541	16214706.190	ug/L	807733.282
	44	Ca	21997.646578	9.569	5942633.950	ug/L	61872.368
>	46	Sc-1			461285.917	ug/L	454114.374
	51	V	9.631345	14.177	73809.696	ug/L	-26072.212
	52	Cr	56.656110	13.211	537694.301	ug/L	26547.338
	55	Mn	968.890838	8.284	14478424.184	ug/L	3082.361
	57	Fe	109620.686215	13.628	34744086.681	ug/L	9798.695
	59	Co	13.480358	9.835	157089.932	ug/L	232.338
	60	Ni	72.502699	10.979	181980.577	ug/L	301.006
	65	Cu	810.644105	14.936	2232590.879	ug/L	168.336
	66	Zn	2537.260248	7.294	4125915.467	ug/L	15137.170
>	72	Ge-1			760707.297	ug/L	739226.379
	75	As	22.258839	9.830	45524.871	ug/L	-1945.453
	82	Se	1.177842	22.444	163.454	ug/L	-120.854
	97	Mo	11.983920	8.806	33971.598	ug/L	72.001
	107	Ag	143.248813	6.104	1883696.873	ug/L	267.339
	111	Cd	9.338441	8.299	28232.974	ug/L	39.334
>	115	In-1			1460633.209	ug/L	1483966.870
	123	Sb	39.204118	7.387	295092.809	ug/L	268.758
	135	Ba	3786.160186	8.711	8219880.486	ug/L	112.002
>	165	Ho-1			1443949.571	ug/L	1592460.464
	205	Tl	0.133436	26.992	6916.430	ug/L	3951.949
	208	Pb	4905.067281	8.535	167702768.537	ug/L	4580.000
	238	U	16.333083	8.788	871189.711	ug/L	234.671
>	45	Sc-2			461285.917	ug/L	454114.374
	53	Cr	-21.865853	6.487	129215.572	ug/L	154333.029
	54	Fe	111471.630227	10.705	80415136.339	ug/L	62090.940
	61	Ni	76.446850	10.729	10279.810	ug/L	1661.113
	63	Cu	771.616783	9.243	4402059.555	ug/L	346.008
	67	Zn	2164.969576	11.801	627908.724	ug/L	9047.975
>	72	Ge			760707.297	ug/L	739226.379
	77	Se	-44.510016	1.728	301.042	ug/L	8561.780
	98	Mo	12.234937	7.276	87518.663	ug/L	141.970
	109	Ag	133.203248	7.056	1786785.490	ug/L	288.338
>	115	In-2			1460633.209	ug/L	1483966.870
	114	Cd	10.728720	8.683	72363.441	ug/L	84.731
	121	Sb	39.018115	9.237	384695.922	ug/L	349.674
	137	Ba	3646.795698	7.925	13496602.136	ug/L	156.669
>	165	Ho-2			1443949.571	ug/L	1592460.464
	203	Tl	0.131789	18.184	2834.311	ug/L	1582.773
	206	Pb	4907.185526	7.906	41620586.220	ug/L	1161.392
	207	Pb	5141.194269	9.049	36928863.018	ug/L	995.045
>	45	Sc			461285.917	ug/L	454114.374
	47	Ti	270.816747	11.785	203958.142	ug/L	297.006
	86	Sr	88.802037	13.734	324249.118	ug/L	716.656
	88	Sr	90.221083	7.711	2876615.184	ug/L	5834.250
>	115	In			1460633.209	ug/L	1483966.870
	118	Sn	1383.716048	8.615	11462934.982	ug/L	855.034
	120	Sn	1364.678246	8.603	14874757.218	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	101.579
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	102.906
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.428
	Sb	123	
	Ba	135	
>	Ho-1	165	90.674
	Tl	205	
	Pb	206	
	U	238	
>	Sc-2	45	101.579
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	102.906
	Se	77	
	Mo	95	
	Ag	109	
>	In-2	115	98.428
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	90.674
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	101.579
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	98.428
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Pb	208	H
Pb	206	H
Pb	207	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WQN
Sample Date/Time: Thursday, April 28, 2005 01:20:24
Autosampler Position: 73
Dataset File: D:\Elandata\Dataset\042705M2\G8WQN.075

Sample Result Summary

Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
9	Be	0.255710	8.544	54.334	ug/L	7.867
10	B	59.696747	5.268	2054.835	ug/L	27.667
23	Na	2486.664203	2.242	9921085.978	ug/L	18838.944
24	Mg	1918.299219	1.986	5630322.284	ug/L	2106.176
27	Al	10942.310163	4.402	48395663.209	ug/L	3413.777
39	K	2677.520001	4.427	23755209.884	ug/L	807733.282
44	Ca	20242.964440	2.725	5613218.007	ug/L	61872.368
45	Sc-1			472328.856	ug/L	454114.374
51	V	11.565207	16.927	98186.485	ug/L	-28072.212
52	Cr	57.991062	7.718	573303.156	ug/L	26547.338
55	Mn	926.250786	5.172	14396097.740	ug/L	3062.361
57	Fe	51702.527624	2.342	16832028.802	ug/L	9798.695
59	Co	10.390806	5.283	124467.305	ug/L	232.338
60	Ni	60.011033	3.156	154639.961	ug/L	301.006
65	Cu	1359.764460	1.870	3844466.027	ug/L	168.336
66	Zn	3347.797962	3.605	5574158.915	ug/L	15137.170
72	Ge-1			737880.895	ug/L	739226.379
75	As	17.080838	5.162	33442.669	ug/L	-1945.453
82	Se	0.844763	9.967	73.767	ug/L	-120.854
97	Mo	12.007178	0.965	34136.085	ug/L	72.001
107	Ag	41.360737	4.155	545498.053	ug/L	267.339
111	Cd	14.858621	2.786	45014.933	ug/L	39.334
115	In-1			1465563.499	ug/L	1483966.870
123	Sb	36.462602	3.392	275177.959	ug/L	268.758
135	Ba	1119.317898	2.543	2467557.560	ug/L	112.002
165	Ho-1			1466587.267	ug/L	1592460.464
205	Tl	0.102774	17.168	6244.431	ug/L	3951.949
208	Pb	4772.758108	0.945	165705107.317	ug/L	4580.000
238	U	17.257123	2.052	767017.472	ug/L	234.671
45	Sc-2			472328.856	ug/L	454114.374
53	Cr	-17.796098	11.677	137583.717	ug/L	154333.029
54	Fe	51837.385961	1.432	38397021.390	ug/L	62090.940
61	Ni	83.193119	2.021	9014.601	ug/L	1661.113
63	Cu	1309.301586	3.491	7656681.357	ug/L	345.006
67	Zn	2789.866484	2.936	827293.169	ug/L	9047.975
72	Ge			737880.895	ug/L	739226.379
77	Se	-39.593206	2.679	1201.003	ug/L	8561.760
98	Mo	12.276295	5.047	88013.674	ug/L	141.970
109	Ag	38.884640	3.125	523145.434	ug/L	288.339
115	In-2			1465563.499	ug/L	1483966.870
114	Cd	17.917800	3.370	121233.012	ug/L	84.731
121	Sb	36.656796	1.886	362387.764	ug/L	349.674
137	Ba	1096.213541	2.769	4115554.014	ug/L	156.669
165	Ho-2			1466587.267	ug/L	1592460.464
203	Tl	0.106586	24.967	2605.265	ug/L	1582.773
206	Pb	4738.483749	0.681	41012412.916	ug/L	1161.392
207	Pb	5043.249136	3.548	36776658.281	ug/L	995.046
45	Sc			472328.856	ug/L	454114.374
47	Ti	236.662098	2.850	182234.822	ug/L	297.006
86	Sr	67.114522	2.526	252257.863	ug/L	716.856
88	Sr	70.096296	3.956	2291667.378	ug/L	5834.250
115	In			1465563.499	ug/L	1483966.870
118	Sn	1394.594403	3.365	11581703.345	ug/L	855.034
120	Sn	1421.282590	2.654	15532050.060	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	104.011
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	99.816
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.760
	Sb	123	
	Ba	135	
>	Ho-1	165	92.098
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	104.011
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	99.816
	Se	77	
	Mo	95	
	Ag	109	
>	In-2	115	98.760
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	92.098
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	104.011
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	98.760
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Pb	208	H
Pb	206	H
Pb	207	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WQR
Sample Date/Time: Thursday, April 28, 2005 01:25:29
Autosampler Position: 74
Dataset File: D:\Elandata\Dataset\042705M2\G8WQR.078

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.302831	20.625	61.667	ug/L	7.667
	10	B	37.527931	9.653	1282.737	ug/L	27.667
	23	Na	1470.931544	3.712	5785606.963	ug/L	18838.944
	24	Mg	2015.288440	5.341	5742171.988	ug/L	2108.176
	27	Al	10636.695707	9.032	46343949.906	ug/L	3413.777
	39	K	1928.673736	6.829	17081137.899	ug/L	807733.282
	44	Ca	19002.000971	7.501	5192591.930	ug/L	61872.368
>	45	Sc-1			464837.799	ug/L	454114.374
	51	V	11.699623	5.075	96356.756	ug/L	-26072.212
	52	Cr	80.903781	7.136	499204.382	ug/L	26547.338
	55	Mn	743.801737	11.765	11341791.568	ug/L	3062.361
	57	Fe	34628.830880	7.942	11097900.358	ug/L	9798.695
	59	Co	9.412521	10.450	111106.091	ug/L	232.336
	60	Ni	36.304724	8.318	92191.408	ug/L	301.006
	65	Cu	1063.758744	6.362	2960966.803	ug/L	168.336
	66	Zn	3877.838374	7.523	6357335.969	ug/L	15137.170
>	72	Ge-1			722326.791	ug/L	739226.379
	75	As	27.942341	5.880	54819.892	ug/L	-1945.453
	82	Se	0.735648	10.499	47.070	ug/L	-120.854
	97	Mo	7.168074	7.397	20388.114	ug/L	72.001
	107	Ag	98.365405	5.689	1296709.331	ug/L	267.339
	111	Cd	7.434378	7.002	22866.409	ug/L	39.334
>	115	In-1			1467403.363	ug/L	1483966.870
	123	Sb	27.238394	7.413	205863.256	ug/L	268.758
	135	Ba	3450.525630	6.979	7483107.947	ug/L	1:12.002
>	165	Ho-1			1442628.880	ug/L	1592460.464
	205	Tl	0.094366	22.992	5932.297	ug/L	3951.949
	208	Pb	1995.490440	6.557	68156628.810	ug/L	4580.000
	238	U	24.909877	8.153	1089031.582	ug/L	234.871
>	45	Sc-2			464837.799	ug/L	454114.374
	53	Cr	-17.264420	15.621	136043.457	ug/L	154333.029
	54	Fe	35083.553191	7.377	25601512.624	ug/L	62090.940
	61	Ni	39.368862	11.385	6187.066	ug/L	1661.113
	63	Cu	1022.871244	7.575	5890255.391	ug/L	345.008
	67	Zn	3276.568430	6.006	955157.758	ug/L	9047.975
>	72	Ge			722326.791	ug/L	739226.379
	77	Se	-36.760035	1.997	1690.181	ug/L	8581.780
	98	Mo	7.224205	9.258	51917.509	ug/L	141.970
	109	Ag	92.963635	7.326	1251890.666	ug/L	288.339
>	115	In-2			1467403.363	ug/L	1483966.870
	114	Cd	8.569577	12.447	58084.872	ug/L	84.731
	121	Sb	27.184865	7.293	269096.111	ug/L	349.674
	137	Ba	3387.160306	6.787	12520715.053	ug/L	156.669
>	165	Ho-2			1442628.880	ug/L	1592460.464
	203	Tl	0.089006	38.285	2482.911	ug/L	1582.773
	208	Pb	2030.201078	8.277	17284581.385	ug/L	1161.392
	207	Pb	2078.974637	6.974	14916636.016	ug/L	995.045
>	45	Sc			464837.799	ug/L	454114.374
	47	Ti	292.232892	9.341	222438.752	ug/L	297.006
	86	Sr	76.899948	7.134	284475.882	ug/L	716.666
	88	Sr	79.235451	7.883	2550752.344	ug/L	5834.250
>	115	In			1467403.363	ug/L	1483966.870
	118	Sn	509.440054	7.638	4235856.444	ug/L	855.034
	120	Sn	514.494047	8.370	5628501.404	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	102.361
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	97.714
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.884
	Sb	123	
	Ba	138	
>	Ho-1	165	90.891
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	102.361
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	97.714
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.884
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	90.891
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	102.361
	Ti	47	
	Sr	88	
	Sr	88	
>	In	115	98.884
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WQT
Sample Date/Time: Thursday, April 28, 2005 01:30:35
Autosampler Position: 75
Dataset File: D:\Elandata\Dataset\042705M2\G8WQT.077

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	1.997465	18.926	326.674	ug/L	7.667
	10	B	69.650730	9.133	2125.847	ug/L	27.887
	23	Na	2265.677127	10.766	8023228.954	ug/L	18838.944
	24	Mg	2777.663944	13.398	7136353.982	ug/L	2106.176
	27	Al	12541.293502	13.260	49270766.458	ug/L	3413.777
	39	K	2654.222001	12.250	20827926.387	ug/L	807733.282
	44	Ca	29944.068298	15.455	7346586.169	ug/L	61872.368
>	45	Sc-1			419241.075	ug/L	454114.374
	51	V	20.355336	13.144	169207.058	ug/L	-26072.212
	52	Cr	70.742734	12.954	615693.727	ug/L	26547.338
	55	Mn	17946.103348	13.160	246504688.162	ug/L	3062.361
	57	Fe	44801.392033	13.343	12937925.518	ug/L	9796.695
	59	Co	15.025177	13.432	159751.994	ug/L	232.338
	60	Ni	119.903711	10.790	273763.063	ug/L	301.006
	65	Cu	260979.355012	12.699	629794312.483	ug/L	168.336
	66	Zn	11821.334575	11.819	17443296.384	ug/L	15137.170
>	72	Ge-1			674024.356	ug/L	739226.379
	75	As	32.390564	8.536	59590.120	ug/L	-1945.453
	82	Se	0.755975	14.504	48.264	ug/L	-120.854
	97	Mo	16.030336	12.923	43893.741	ug/L	72.001
	107	Ag	30.604601	10.021	389257.025	ug/L	267.339
	111	Cd	39.721269	15.112	115921.494	ug/L	39.334
>	115	In-1			1413821.660	ug/L	1483966.870
	123	Sb	22.921931	13.285	166811.103	ug/L	268.758
	135	Ba	1278.068029	13.143	2786166.167	ug/L	112.002
>	165	Ho-1			1448804.709	ug/L	1592460.464
	205	Tl	0.116449	23.887	6516.896	ug/L	3951.949
	206	Pb	2028.949191	8.729	69636590.852	ug/L	4580.000
	238	U	8.935801	9.045	392736.798	ug/L	234.671
>	45	Sc-2			419241.075	ug/L	454114.374
	53	Cr	7.716787	85.898	151270.523	ug/L	154333.029
	54	Fe	45841.426395	15.440	30019239.792	ug/L	62090.940
	61	Ni	128.318750	14.604	14662.751	ug/L	1661.113
	63	Cu	239388.287490	10.350	1242589210.691	ug/L	345.006
	67	Zn	10089.847306	9.412	2628106.203	ug/L	9047.975
>	72	Ge			674024.356	ug/L	739226.379
	77	Se	-47.002990	0.505	-155.528	ug/L	8561.780
	98	Mo	16.609452	14.841	114739.382	ug/L	141.970
	109	Ag	28.333984	9.956	367626.849	ug/L	288.339
>	115	In-2			1413821.660	ug/L	1483966.870
	114	Cd	42.093063	12.672	274362.224	ug/L	84.731
	121	Sb	23.224115	13.584	221370.831	ug/L	349.674
	137	Ba	1229.888686	11.471	4569475.697	ug/L	156.669
>	165	Ho-2			1448804.709	ug/L	1592460.464
	203	Tl	0.122248	29.311	2743.962	ug/L	1582.773
	206	Pb	2045.326781	8.900	17505561.325	ug/L	1161.382
	207	Pb	2065.118769	7.409	15031387.144	ug/L	995.045
>	45	Sc			419241.075	ug/L	454114.374
	47	Ti	274.113162	16.856	188151.222	ug/L	297.006
	86	Sr	101.890449	14.298	339658.131	ug/L	716.656
	88	Sr	105.496501	9.835	3061425.361	ug/L	5834.250
>	115	In			1413821.660	ug/L	1483966.870
	118	Sn	651.374715	13.017	5214869.804	ug/L	855.034
	120	Sn	652.401611	11.944	6872011.732	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	92.321
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	91.180
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	96.273
	Sb	123	
	Ba	135	
>	Ho-1	165	90.979
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	92.321
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	91.180
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	96.273
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	90.979
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	92.321
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	96.273
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cu	65	H
Cu	63	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WR6
Sample Data/Time: Thuraday, April 28, 2005 01:35:41
Autosampler Position: 76
Dataset File: D:\Elandata\Dataset\042705M2\G8WR6.078

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.310976	16.750	59.334	ug/L	7.667
	10	B	85.696867	9.256	2100.510	ug/L	27.667
	23	Na	1129.367696	8.473	4184436.012	ug/L	16838.944
	24	Mg	44640.784696	7.377	119686134.100	ug/L	2106.176
	27	Al	9627.309186	9.801	39466546.364	ug/L	3413.777
	39	K	1725.078479	4.623	14467233.755	ug/L	807733.262
	44	Ca	27134.541657	5.586	8953506.131	ug/L	61872.368
>	45	Sc-1			437830.007	ug/L	454114.374
	51	V	16.497664	11.787	138226.158	ug/L	-26072.212
	52	Cr	121.562394	12.010	1068013.728	ug/L	28547.338
	55	Mn	1736.368772	8.038	24895109.234	ug/L	3062.361
	57	Fe	53842.944066	10.656	16169121.293	ug/L	9798.695
	59	Co	31.890013	8.367	353613.693	ug/L	232.338
	60	Ni	501.204676	10.545	1193767.841	ug/L	301.006
	65	Cu	1241.405184	9.076	3252233.603	ug/L	168.336
	66	Zn	4754.612556	8.609	7331520.201	ug/L	15137.170
>	72	Ge-1			730191.008	ug/L	739226.379
	75	As	20.615113	9.080	40320.424	ug/L	-1945.453
	82	Se	0.637089	19.572	25.179	ug/L	-120.854
	97	Mo	8.093600	8.427	21961.519	ug/L	72.001
	107	Ag	42.771177	5.395	538795.626	ug/L	267.339
	111	Cd	14.406075	10.337	41671.515	ug/L	39.334
>	115	In-1			1399216.329	ug/L	1483966.870
	123	Sb	57.360778	10.460	416774.074	ug/L	268.758
	135	Ba	1568.969756	9.016	3394832.843	ug/L	112.002
>	165	Ho-1			1440754.337	ug/L	1592460.464
	205	Tl	0.089001	42.570	5780.243	ug/L	3951.949
	208	Pb	4771.847011	10.652	182686357.883	ug/L	4580.000
	238	U	9.928145	11.615	432934.852	ug/L	234.671
>	45	Sc-2			437830.007	ug/L	454114.374
	53	Cr	46.264889	10.729	204087.281	ug/L	184333.029
	54	Fe	53416.396314	8.079	36657245.704	ug/L	62090.940
	61	Ni	522.396863	8.583	57408.091	ug/L	1661.113
	63	Cu	1147.126792	10.174	6217330.110	ug/L	345.006
	67	Zn	3888.967191	11.414	1085081.728	ug/L	9047.975
>	72	Ge			730191.008	ug/L	739226.379
	77	Se	-46.558227	0.787	-85.771	ug/L	8561.780
	98	Mo	8.329793	6.990	67084.795	ug/L	141.970
	109	Ag	39.290655	9.068	504747.775	ug/L	268.339
>	115	In-2			1399216.329	ug/L	1483966.870
	114	Cd	15.173043	8.851	98027.774	ug/L	84.731
	121	Sb	59.216686	10.052	556627.026	ug/L	349.674
	137	Ba	1523.813806	11.384	5618273.216	ug/L	156.669
>	165	Ho-2			1440754.337	ug/L	1592460.464
	203	Tl	0.084476	30.533	2322.880	ug/L	1582.773
	206	Pb	4647.888939	8.962	39479294.623	ug/L	1161.392
	207	Pb	5119.765880	12.799	36628955.655	ug/L	995.045
>	45	Sc			437830.007	ug/L	454114.374
	47	Ti	196.756180	11.606	141100.874	ug/L	297.006
	86	Sr	76.534641	8.943	268453.696	ug/L	716.656
	88	Sr	78.391182	7.807	2372203.329	ug/L	5834.250
>	115	In			1399216.329	ug/L	1483966.870
	118	Sn	503.597149	8.057	3993725.915	ug/L	855.034
	120	Sn	497.502410	10.981	5190489.423	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	96.414
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	96.778
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	94.289
	Sb	123	
	Ba	135	
>	Ho-1	165	90.473
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	96.414
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	96.778
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	94.289
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	90.473
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	96.414
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	94.289
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Pb	208	H
Pb	206	H
Pb	207	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WTA
Sample Date/Time: Thursday, April 28, 2005 01:40:48
Autosampler Position: 77
Dataset File: D:\Elandata\Dataset\042705M2\G8WTA.079

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.207505	12.331	41.334	ug/L	7.667
	10	B	83.433787	2.974	2606.264	ug/L	27.667
	23	Na	2702.964332	1.406	9824291.040	ug/L	18838.944
	24	Mg	2078.146812	4.926	5475642.359	ug/L	2106.176
	27	Al	12388.860315	2.046	49927230.203	ug/L	3413.777
	39	K	2541.685180	2.467	20589756.811	ug/L	807733.282
	44	Ca	23709.386816	3.301	5977393.968	ug/L	61872.368
>	45	Sc-1			430370.109	ug/L	454114.374
	51	V	12.967086	16.693	100977.172	ug/L	-26072.212
	52	Cr	66.798135	6.841	597406.779	ug/L	26547.338
	55	Mn	1005.461361	0.467	14189273.325	ug/L	3062.361
	57	Fe	38572.963603	1.865	11437815.004	ug/L	9798.696
	59	Co	11.363239	4.277	123943.646	ug/L	232.338
	60	Ni	94.363724	1.210	221241.389	ug/L	301.006
	65	Cu	3085.804574	3.349	7944139.551	ug/L	168.336
	66	Zn	33740.122874	0.761	51074219.336	ug/L	15137.170
>	72	Ge-1			736290.140	ug/L	739228.379
	75	As	14.330667	4.458	27713.146	ug/L	-1945.453
	82	Se	1.302961	14.405	176.463	ug/L	-120.854
	97	Mo	10.173747	2.886	29490.370	ug/L	72.001
	107	Ag	37.342219	2.007	502329.429	ug/L	267.339
	111	Cd	89.309064	1.801	183116.135	ug/L	39.334
>	115	In-1			1494322.696	ug/L	1483966.870
	123	Sb	21.013100	1.286	161875.410	ug/L	268.758
	135	Ba	1422.103268	2.529	3063683.744	ug/L	112.002
>	165	Ho-1			1442786.066	ug/L	1592460.464
	205	Tl	0.060242	25.631	5587.824	ug/L	3851.949
	208	Pb	2984.227783	0.328	101938163.370	ug/L	4580.000
	238	U	39.469329	0.995	1725560.293	ug/L	234.671
>	45	Sc-2			430370.109	ug/L	454114.374
	53	Cr	-6.167312	11.433	139017.626	ug/L	154333.029
	54	Fe	38763.175611	4.128	28153283.895	ug/L	62090.940
	61	Ni	103.781244	4.392	12466.562	ug/L	1661.113
	63	Cu	2989.464975	0.432	15937248.595	ug/L	345.008
	67	Zn	28249.482928	1.163	7556144.393	ug/L	9047.975
>	72	Ge			736290.140	ug/L	739228.379
	77	Se	-44.008296	2.700	384.020	ug/L	8561.780
	98	Mo	10.478921	1.417	78642.802	ug/L	141.970
	109	Ag	34.939693	0.950	479516.716	ug/L	288.339
>	115	In-2			1494322.696	ug/L	1483966.870
	114	Cd	82.270794	2.871	429450.839	ug/L	84.731
	121	Sb	21.253696	1.170	214396.723	ug/L	349.674
	137	Ba	1376.140889	3.506	5086903.105	ug/L	156.669
>	165	Ho-2			1442786.066	ug/L	1592460.464
	203	Tl	0.078396	15.588	2268.536	ug/L	1582.773
	206	Pb	3025.028003	1.591	25754988.164	ug/L	1161.392
	207	Pb	3091.250961	2.340	22173976.049	ug/L	995.045
>	45	Sc			430370.109	ug/L	454114.374
	47	Ti	213.235824	4.326	150173.076	ug/L	297.006
	86	Sr	77.721858	6.260	265714.683	ug/L	716.656
	88	Sr	81.266296	3.577	2419067.885	ug/L	5834.250
>	115	In			1494322.696	ug/L	1483966.870
	118	Sn	969.836916	0.931	8384169.950	ug/L	855.034
	120	Sn	1013.176814	1.574	11296699.763	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	94.771
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	99.803
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	100.000
	Sb	123	
	Ba	135	
>	Ho-1	165	99.801
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	94.771
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	99.803
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	100.000
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	99.801
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	94.771
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	100.000
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Zn	66	H
Zn	67	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WTE
Sample Date/Time: Thursday, April 28, 2005 01:45:55
Autosampler Position: 78
Dataset File: D:\Elandata\Dataset\042705M2\G8WTE.080

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.209574	17.929	41.334	ug/L	7.667
	10	B	61.062776	5.486	1894.145	ug/L	27.667
	23	Na	2682.033763	3.469	9633650.533	ug/L	18838.944
	24	Mg	2301.559360	3.276	8999174.724	ug/L	2106.176
	27	Al	12746.055064	1.321	50802878.588	ug/L	3413.777
	39	K	3075.779438	1.085	24481093.068	ug/L	807733.282
	44	Ca	26348.454817	2.321	8584172.738	ug/L	61672.368
>	45	Sc-1			425516.856	ug/L	454114.374
	51	V	12.823831	2.003	99043.058	ug/L	-28072.212
	52	Cr	50.256412	1.571	451194.813	ug/L	26547.338
	55	Mn	1034.806139	1.881	14433126.854	ug/L	3082.361
	57	Fe	45239.251885	1.584	13261464.884	ug/L	9796.695
	59	Co	9.888991	2.975	106772.232	ug/L	232.338
	60	Ni	98.841191	0.402	229172.930	ug/L	301.006
	65	Cu	1620.803254	3.362	4126512.711	ug/L	168.336
	66	Zn	3322.832441	0.766	4988675.872	ug/L	15137.170
>	72	Ge-1			733474.439	ug/L	739226.379
	75	As	15.438722	3.109	29877.415	ug/L	-1945.453
	82	Se	0.506743	34.592	-2.967	ug/L	-120.854
	97	Mo	8.406852	1.314	22521.634	ug/L	72.001
	107	Ag	28.768143	0.182	332422.567	ug/L	267.339
	111	Cd	11.216375	0.837	31999.118	ug/L	39.334
>	115	In-1			1379434.461	ug/L	1483966.870
	123	Sb	21.889098	1.762	155842.307	ug/L	268.758
	135	Ba	1185.971359	3.501	2520424.502	ug/L	112.002
>	165	Ho-1			1414118.250	ug/L	1592460.464
	205	Tl	0.081488	21.139	5507.123	ug/L	3951.949
	208	Pb	1795.881828	0.879	60166785.883	ug/L	4680.000
	238	U	5.974191	3.422	256087.841	ug/L	234.671
>	45	Sc-2			425516.856	ug/L	454114.374
	53	Cr	-18.833897	6.956	122738.092	ug/L	154333.029
	54	Fe	45739.751046	2.542	30520972.084	ug/L	62090.940
	61	Ni	108.248133	2.967	12795.856	ug/L	1681.113
	63	Cu	1631.969781	0.487	8075529.966	ug/L	345.008
	67	Zn	2733.445827	2.103	730523.996	ug/L	9047.975
>	72	Ge			733474.439	ug/L	739226.379
	77	Se	-43.042062	0.721	561.063	ug/L	8561.780
	98	Mo	8.713717	1.711	58876.930	ug/L	141.970
	109	Ag	25.275887	1.169	320296.645	ug/L	268.339
>	115	In-2			1379434.461	ug/L	1483966.870
	114	Cd	12.606988	4.215	80313.208	ug/L	84.731
	121	Sb	22.154996	0.768	206323.734	ug/L	349.674
	137	Ba	1148.169947	2.828	4159987.403	ug/L	156.669
>	165	Ho-2			1414118.250	ug/L	1592460.464
	203	Tl	0.086037	28.391	2302.877	ug/L	1582.773
	206	Pb	1799.351583	2.189	15017813.815	ug/L	1161.392
	207	Pb	1840.720306	1.201	12943820.423	ug/L	995.045
>	45	Sc			425516.856	ug/L	454114.374
	47	Ti	234.881646	4.482	156480.425	ug/L	297.006
	86	Sr	89.916919	2.834	304185.175	ug/L	718.656
	88	Sr	92.534377	2.327	2723969.958	ug/L	5834.250
>	115	In			1379434.461	ug/L	1483966.870
	118	Sn	881.308306	0.963	4624193.982	ug/L	855.034
	120	Sn	892.961277	2.657	6101937.812	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte Mass	Int Std % Recovery	QC Std % Recovery
	Be 9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	93.703
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	99.222
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	92.966
	Sb	123	
	Ba	135	
>	Ho-1	165	99.991
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	93.703
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	99.222
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	92.966
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	99.991
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	93.703
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	92.966
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WTG
Sample Date/Time: Thursday, April 28, 2005 01:51:04
Autosampler Position: 79
Dataset File: D:\Elandata\Dataset\042705M2\G8WTG.081

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.969414	5.687	156.669	ug/L	7.667
	10	B	137.837007	6.759	4035.945	ug/L	27.667
	23	Na	3627.816833	3.861	12396733.989	ug/L	18838.944
	24	Mg	2135.496650	3.269	5299737.909	ug/L	2106.176
	27	Al	12439.283193	2.777	47188511.439	ug/L	3413.777
	39	K	2443.315856	3.712	18856990.163	ug/L	807733.282
	44	Ca	24152.523102	2.919	5734189.419	ug/L	61672.368
>	45	Sc-1			405003.746	ug/L	454114.374
	51	V	10.779766	9.373	75670.094	ug/L	-26072.212
	52	Cr	89.483381	0.809	746147.741	ug/L	26547.338
	55	Mn	1457.275807	4.904	19347072.595	ug/L	3062.361
	57	Fe	118701.166540	2.193	33113029.787	ug/L	9798.695
	59	Co	14.396664	3.012	147869.144	ug/L	232.338
	60	Ni	98.163660	3.636	212134.466	ug/L	301.006
	65	Cu	1088.816778	3.734	2639671.789	ug/L	168.336
	66	Zn	3691.368006	4.299	5255291.466	ug/L	15137.170
>	72	Ge-1			733583.333	ug/L	739226.379
	75	As	22.344377	2.685	44120.782	ug/L	-1945.453
	82	Se	0.477714	22.644	-10.843	ug/L	-120.654
	97	Mo	26.824306	1.014	69881.773	ug/L	72.001
	107	Ag	99.224107	1.249	1247166.364	ug/L	267.339
	111	Cd	6.442762	0.105	18622.651	ug/L	39.334
>	115	In-1			1396257.245	ug/L	1483966.870
	123	Sb	24.827864	0.671	178656.341	ug/L	268.758
	135	Ba	2221.830822	1.888	4571231.696	ug/L	112.002
>	165	Ho-1			1398404.443	ug/L	1592460.464
	205	Tl	0.068660	40.638	4813.865	ug/L	3951.949
	208	Pb	2066.984222	1.099	69093477.551	ug/L	4580.000
	238	U	3.004443	2.631	127506.992	ug/L	294.671
>	45	Sc-2			405003.746	ug/L	454114.374
	53	Cr	16.234542	37.764	155582.774	ug/L	154333.029
	54	Fe	116994.321979	4.154	74240795.782	ug/L	62090.940
	61	Ni	104.871154	5.087	11827.016	ug/L	1661.113
	63	Cu	1022.797916	5.519	5129170.006	ug/L	345.006
	67	Zn	3072.733180	1.477	780671.169	ug/L	9047.975
>	72	Ge			733583.333	ug/L	739226.379
	77	Se	-44.829476	1.469	287.521	ug/L	8561.780
	98	Mo	26.447660	2.210	180647.207	ug/L	141.970
	109	Ag	91.415969	1.829	1171872.501	ug/L	288.339
>	115	In-2			1396257.245	ug/L	1483966.870
	114	Cd	7.198756	9.912	46469.499	ug/L	84.731
	121	Sb	25.816869	1.783	240477.737	ug/L	349.674
	137	Ba	2127.921015	1.132	7625659.862	ug/L	156.669
>	165	Ho-2			1398404.443	ug/L	1592460.464
	203	Tl	0.068811	32.511	1993.493	ug/L	1582.773
	206	Pb	2118.252166	1.307	17481569.302	ug/L	1161.392
	207	Pb	2121.493778	1.556	14753808.909	ug/L	995.045
>	45	Sc			405003.746	ug/L	454114.374
	47	Ti	241.799475	3.247	160425.889	ug/L	297.006
	86	Sr	96.093361	2.236	306219.836	ug/L	716.656
	88	Sr	98.968628	2.911	2689357.036	ug/L	5834.250
>	115	In			1396257.245	ug/L	1483966.870
	118	Sn	646.346116	3.253	5117493.651	ug/L	855.034
	120	Sn	645.306996	0.717	6721234.917	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	88.186
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	69.237
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	94.080
	Sb	123	
	Ba	135	
>	Ho-1	165	87.814
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	88.186
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	69.237
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	94.080
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	87.814
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	88.186
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	94.080
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G5WTR
Sample Date/Time: Thursday, April 28, 2005 01:56:12
Autosampler Position: 80
Dataset File: D:\Elandata\Dataset\042705M2\G5WTR.082

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.554612	2.209	93.001	ug/L	7.667
	10	B	70.899388	1.621	2098.175	ug/L	27.667
	23	Na	2232.363699	1.830	7671324.538	ug/L	18838.944
	24	Mg	2043.280309	3.184	5095627.789	ug/L	2106.176
	27	Al	9896.140622	1.481	36585566.964	ug/L	3413.777
	39	K	1761.551934	2.247	13714684.221	ug/L	807733.262
	44	Ca	25839.342609	3.507	8068165.641	ug/L	61872.368
>	45	Sc-1			406774.317	ug/L	454114.374
	51	V	9.461959	2.497	53755.223	ug/L	-26072.212
	52	Cr	61.571585	2.143	523244.390	ug/L	26547.338
	55	Mn	1914.463382	1.595	25528073.077	ug/L	3082.361
	57	Fe	89441.925239	4.176	25074436.310	ug/L	9796.695
	59	Co	13.323080	3.900	137490.555	ug/L	232.338
	60	Ni	222.330478	2.377	492824.261	ug/L	301.006
	65	Cu	22758.750336	1.212	55433977.430	ug/L	168.338
	66	Zn	7808.494211	1.297	11183180.839	ug/L	15137.170
>	72	Ge-1			724069.102	ug/L	739226.379
	75	As	19.774464	2.957	38295.950	ug/L	-1945.453
	82	Se	1.509066	6.106	222.455	ug/L	-120.854
	97	Mo	9.183362	2.993	25173.780	ug/L	72.001
	107	Ag	42.816065	2.748	544317.369	ug/L	267.339
	111	Cd	11.561261	1.427	33775.908	ug/L	39.334
>	115	In-1			1412299.557	ug/L	1483966.870
	123	Sb	92.551594	1.229	672896.328	ug/L	268.758
	135	Ba	755.631193	1.874	1625610.737	ug/L	112.002
>	165	Ho-1			1430981.180	ug/L	1592460.464
	205	Tl	0.062507	26.740	5097.966	ug/L	3951.949
	208	Pb	8624.207802	1.276	190533144.565	ug/L	4580.000
	238	U	3.813907	2.892	165592.094	ug/L	234.671
>	45	Sc-2			406774.317	ug/L	454114.374
	53	Cr	-11.409222	46.220	125619.963	ug/L	154333.029
	54	Fe	88810.196692	4.284	56644221.284	ug/L	62090.940
	61	Ni	227.475360	4.254	24062.221	ug/L	1661.113
	63	Cu	21661.900337	0.213	109144141.118	ug/L	345.008
	67	Zn	6266.341488	1.478	1590301.589	ug/L	9047.975
>	72	Ge			724069.102	ug/L	739226.379
	77	Se	-44.250979	1.296	333.968	ug/L	8561.780
	98	Mo	9.352819	3.368	64674.195	ug/L	141.970
	109	Ag	40.157702	1.994	520753.778	ug/L	288.339
>	115	In-2			1412299.557	ug/L	1483966.870
	114	Cd	12.870687	3.058	83942.370	ug/L	84.731
	121	Sb	93.902945	2.266	894279.568	ug/L	349.674
	137	Ba	806.709679	0.134	2954770.299	ug/L	156.669
>	165	Ho-2			1430981.180	ug/L	1592460.464
	203	Tl	0.068521	41.288	2037.834	ug/L	1582.773
	206	Pb	6710.319177	1.336	48222406.309	ug/L	1161.392
	207	Pb	5813.091812	1.860	41368844.729	ug/L	995.046
>	45	Sc			408774.317	ug/L	454114.374
	47	Ti	164.626410	6.935	109847.162	ug/L	297.006
	86	Sr	72.039316	1.989	233211.006	ug/L	716.656
	88	Sr	69.824788	1.540	1966847.799	ug/L	5834.250
>	115	In			1412299.557	ug/L	1483966.870
	118	Sn	1168.357853	1.772	9354366.180	ug/L	865.034
	120	Sn	1163.838189	0.857	12260463.864	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	89.676
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	97.950
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	95.171
	Sb	123	
	Ba	135	
>	Ho-1	165	89.868
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	89.676
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	97.950
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	95.171
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	89.868
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	89.676
	Ti	47	
	Sr	88	
	Sr	86	
>	In	115	95.171
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cu	65	H
Pb	208	H
Cu	63	H
Pb	208	H
Pb	207	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Data/Time: Thursday, April 28, 2005 02:01:22
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 1.083

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	217.731544	3.809	31985.101	ug/L	7.667
	10	B	211.096062	3.889	5862.262	ug/L	27.667
	23	Na	1931.712431	1.410	6280861.516	ug/L	18838.944
	24	Mg	982.646467	4.069	2270153.596	ug/L	2106.176
	27	Al	1967.162802	1.388	7094001.863	ug/L	3413.777
	39	K	1971.472297	2.589	14435795.146	ug/L	807733.282
	44	Ca	1033.420810	3.936	283171.030	ug/L	61872.388
>	45	Sc-1			384727.118	ug/L	454114.374
	51	V	202.966907	1.182	1745252.559	ug/L	-26072.212
	52	Cr	212.378819	3.835	1651350.772	ug/L	28547.338
	55	Mn	207.866413	2.599	2623464.380	ug/L	3062.361
	57	Fe	2130.876261	0.845	572799.245	ug/L	9798.695
	59	Co	211.748438	4.683	2063014.422	ug/L	232.338
	60	Ni	215.960624	2.784	452333.630	ug/L	301.006
	65	Cu	225.486328	1.639	519454.867	ug/L	168.336
	66	Zn	217.699456	3.176	307180.757	ug/L	15137.170
>	72	Ge-1			696567.295	ug/L	739228.379
	75	As	199.989978	5.181	389155.191	ug/L	-1945.453
	82	Se	192.172803	2.855	41567.471	ug/L	-120.854
	97	Mo	206.224678	2.062	542863.588	ug/L	72.001
	107	Ag	50.021571	4.766	615203.320	ug/L	267.339
	111	Cd	197.854001	1.130	557764.969	ug/L	39.334
>	115	In-1			1366386.752	ug/L	1483966.870
	123	Sb	195.666600	2.210	1375322.575	ug/L	268.758
	135	Ba	208.302791	2.173	449706.111	ug/L	112.002
>	165	Ho-1			1435741.618	ug/L	1592460.464
	205	Tl	193.456661	2.881	4804563.163	ug/L	3951.949
	208	Pb	197.220457	0.786	6707452.668	ug/L	4560.000
	238	U	192.619116	1.309	8380669.082	ug/L	234.671
>	45	Sc-2			384727.118	ug/L	454114.374
	53	Cr	161.375518	13.167	300319.560	ug/L	154333.029
	54	Fe	2173.540943	4.612	1361491.723	ug/L	62080.940
	61	Ni	224.864109	2.053	22524.971	ug/L	1661.113
	63	Cu	220.828213	1.330	1052612.396	ug/L	345.008
	67	Zn	216.478719	3.436	59124.709	ug/L	9047.975
>	72	Ge			696567.295	ug/L	739228.379
	77	Se	161.116337	2.916	36287.993	ug/L	8561.760
	98	Mo	204.076307	3.636	1362716.838	ug/L	141.970
	109	Ag	48.742376	2.182	611449.899	ug/L	288.339
>	115	In-2			1366386.752	ug/L	1483966.870
	114	Cd	194.686166	2.004	1227691.007	ug/L	84.731
	121	Sb	199.126625	0.876	1834286.813	ug/L	349.674
	137	Ba	211.919362	2.132	779914.083	ug/L	156.669
>	165	Ho-2			1435741.618	ug/L	1592460.464
	203	Tl	194.063225	1.370	1943178.985	ug/L	1582.773
	206	Pb	196.646711	0.629	1667088.012	ug/L	1161.392
	207	Pb	203.213583	1.481	1451808.383	ug/L	995.045
>	45	Sc			384727.118	ug/L	454114.374
	47	Ti	202.868900	2.716	127843.933	ug/L	297.006
	86	Sr	216.164733	3.528	667356.186	ug/L	716.666
	88	Sr	213.999872	0.969	5691713.283	ug/L	5834.250
>	115	In			1366386.752	ug/L	1483966.870
	118	Sn	202.934476	1.089	1572515.224	ug/L	855.034
	120	Sn	203.381380	0.309	2073703.651	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		196.866

	B	10		103.549
	Na	23		96.596
	Mg	24		96.295
	Al	27		96.388
	K	39		96.574
	Ca	44		103.342
>	Sc-1	45	94.729	
	V	51		101.478
	Cr	52		106.188
	Mn	55		103.928
	Fe	57		108.544
	Co	59		106.573
	Ni	60		107.999
	Cu	65		112.745
	Zn	66		108.899
>	Ge-1	72	94.229	
	As	75		99.993
	Se	82		96.096
	Mo	97		102.612
	Ag	107		100.043
	Cd	111		96.777
>	In-1	115	92.077	
	Sb	123		97.783
	Ba	135		104.161
>	Ho-1	165	90.189	
	Tl	205		96.728
	Pb	208		96.610
	U	238		96.310
>	Sc-2	46	94.729	
	Cr	53		99.888
	Fe	54		106.677
	Ni	61		112.432
	Cu	63		110.414
	Zn	67		107.739
>	Ge	72	94.229	
	Se	77		99.896
	Mo	98		102.698
	Ag	109		97.466
>	In-2	115	92.077	
	Cd	114		97.343
	Sb	121		99.993
	Ba	137		105.999
>	Ho-2	165	90.189	
	Tl	203		92.842
	Pb	208		96.320
	Pb	207		101.887
>	Sc	45	94.729	
	Ti	47		101.438
	Sr	86		107.582
	Sr	88		107.000
>	In	115	92.077	
	Sn	118		101.467
	Sn	120		101.891

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cu	65	Q
Cr	53	Q
Ni	61	Q
Cu	63	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Thursday, April 28, 2005 02:07:32
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 2.084

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.003607	498.817	7.000	ug/L	7.667
	10	B	4.267991	13.085	141.002	ug/L	27.667
	23	Na	0.306897	32.875	16893.155	ug/L	18838.944
	24	Mg	0.062674	105.158	1924.816	ug/L	2106.176
	27	Al	0.811089	10.581	5794.569	ug/L	3413.777
	39	K	11.193487	9.581	759545.705	ug/L	807733.282
	44	Ca	-9.959016	38.268	50010.571	ug/L	61872.368
>	45	Sc-1			383315.581	ug/L	454114.374
	51	V	0.011521	7749.910	-21871.232	ug/L	-26072.212
	52	Cr	-0.871128	18.871	15744.193	ug/L	26647.336
	55	Mn	0.010020	123.151	2709.951	ug/L	3062.381
	57	Fe	5.758932	11.903	9791.770	ug/L	9796.666
	59	Co	0.013062	64.420	323.007	ug/L	232.338
	60	Ni	0.018917	34.857	287.339	ug/L	301.006
	65	Cu	3.147046	3.236	7362.971	ug/L	168.336
	66	Zn	1.279638	22.940	14499.835	ug/L	15137.170
>	72	Ge-1			686736.011	ug/L	739226.379
	75	As	1.204185	5.353	516.086	ug/L	-1945.453
	82	Se	0.313463	31.268	-44.969	ug/L	-120.854
	97	Mo	0.090822	36.600	305.673	ug/L	72.001
	107	Ag	0.031586	16.596	632.354	ug/L	267.339
	111	Cd	0.010629	35.405	85.667	ug/L	39.334
>	115	In-1			1360472.963	ug/L	1483966.870
	123	Sb	0.134355	29.458	1188.864	ug/L	268.758
	135	Ba	0.010941	35.002	121.668	ug/L	112.002
>	165	Ho-1			1424054.230	ug/L	1592460.464
	205	Tl	0.212892	86.341	8808.894	ug/L	3951.949
	208	Pb	0.276080	4.019	13372.590	ug/L	4580.000
	238	U	0.007068	25.367	516.348	ug/L	234.671
>	45	Sc-2			383315.581	ug/L	454114.374
	53	Cr	-21.242227	59.210	107964.440	ug/L	154333.029
	54	Fe	3.551173	40.746	54545.487	ug/L	62090.940
	61	Ni	1.294289	67.315	1523.783	ug/L	1661.113
	63	Cu	3.261063	2.311	15773.864	ug/L	345.008
	67	Zn	2.251206	176.049	8168.434	ug/L	9047.975
>	72	Ge			686736.011	ug/L	739226.379
	77	Se	-38.019834	8.076	1388.799	ug/L	8561.780
	98	Mo	0.233174	10.418	1680.879	ug/L	141.970
	109	Ag	0.064539	19.363	1071.052	ug/L	288.339
>	115	In-2			1360472.963	ug/L	1483966.870
	114	Cd	0.007396	30.732	124.251	ug/L	84.731
	121	Sb	0.129474	31.281	1509.765	ug/L	349.674
	137	Ba	0.012868	66.322	187.003	ug/L	156.669
>	165	Ho-2			1424054.230	ug/L	1592460.464
	203	Tl	0.204013	54.413	3563.181	ug/L	1582.773
	206	Pb	0.275892	7.938	3359.096	ug/L	1161.392
	207	Pb	0.287001	1.255	2922.662	ug/L	995.045
>	45	Sc			383315.581	ug/L	454114.374
	47	Ti	0.644946	144.443	651.362	ug/L	297.006
	88	Sr	0.028704	35.003	692.374	ug/L	716.656
	88	Sr	0.017607	52.137	5390.072	ug/L	5834.250
>	115	In			1360472.963	ug/L	1483966.870
	118	Sn	0.714999	14.210	6303.137	ug/L	855.034
	120	Sn	0.699551	15.073	8116.937	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		0.361

	B	10		428.799
	Na	23		0.307
	Mg	24		0.093
	Al	27		0.811
	K	39		11.193
	Ca	44		-0.958
>	Sc-1	45	84.469	
	V	51		1.152
	Cr	52		-57.113
	Mn	55		1.092
	Fe	57		5.759
	Co	59		1.308
	Ni	60		1.592
	Cu	65		314.706
	Zn	66		127.964
>	Ge-1	72	92.599	
	As	75		120.418
	Se	82		31.348
	Mo	97		9.082
	Ag	107		3.159
	Cd	111		1.663
>	In-1	115	91.678	
	Sb	123		13.436
	Ba	135		1.604
>	Ho-1	165	89.426	
	Tl	205		21.269
	Pb	208		27.806
	U	238		0.709
>	Sc-2	45	84.469	
	Cr	53		-2124.229
	Fe	54		3.581
	Ni	61		129.429
	Cu	63		328.165
	Zn	67		226.121
>	Ge	72	92.599	
	Se	77		-3891.983
	Mo	98		23.317
	Ag	109		6.464
>	In-2	115	91.678	
	Cd	114		9.749
	Sb	121		12.947
	Ba	137		1.351
>	Ho-2	166	89.426	
	Tl	203		20.401
	Pb	206		27.589
	Pb	207		28.709
>	Sc	45	84.469	
	Ti	47		84.495
	Sr	86		2.870
	Sr	88		1.761
>	In	115	91.678	
	Sn	118		71.809
	Sn	120		69.995

QC Out Of Limits

Analyte	Mass	Out of Limits Message
B	10	Q
Cu	65	Q
Zn	66	Q
As	75	Q
Cr	53	Q
Ni	61	Q
Cu	63	Q
Zn	67	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: GSWTV
Sample Date/Time: Thursday, April 28, 2005 02:13:40
Autosampler Position: 81
Dataset File: D:\Elandata\Dataset\042705M2\GSWTV.085

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.094806	41.498	18.667	ug/L	7.667
	10	B	40.906524	4.919	1057.383	ug/L	27.667
	23	Na	750.180685	5.706	2242457.543	ug/L	18838.944
	24	Mg	741.855119	3.741	1602850.288	ug/L	2106.176
	27	Al	3744.780205	5.570	12359598.087	ug/L	3413.777
	39	K	681.972962	3.851	4961188.585	ug/L	807733.282
	44	Ca	6693.683460	4.852	1416596.483	ug/L	61872.368
>	45	Sc-1			352211.050	ug/L	454114.374
	51	V	3.352193	5.043	6501.957	ug/L	-26072.212
	52	Cr	92.964064	6.481	673708.248	ug/L	26547.338
	55	Mn	1834.957339	5.641	21191394.212	ug/L	3062.361
	57	Fe	368904.911902	3.384	87072406.980	ug/L	9798.695
	59	Co	37.468493	2.359	334394.714	ug/L	232.338
	60	Ni	196.258023	5.795	376497.840	ug/L	301.006
	65	Cu	821.203471	5.269	1732160.763	ug/L	168.336
	66	Zn	897.631823	4.115	1123713.874	ug/L	15137.170
>	72	Ge-1			738094.551	ug/L	739226.379
	75	As	59.376470	8.498	121140.424	ug/L	-1945.453
	82	Se	0.401474	62.238	-28.573	ug/L	-120.854
	97	Mo	24.421368	3.964	61796.710	ug/L	72.001
	107	Ag	16.930637	3.231	222679.259	ug/L	287.339
	111	Cd	3.703860	4.948	10027.631	ug/L	39.334
>	115	In-1			1304961.818	ug/L	1483966.870
	123	Sb	32.392476	4.925	217975.393	ug/L	268.758
	135	Ba	574.390167	6.932	1172758.575	ug/L	112.002
>	165	Ho-1			1359309.597	ug/L	1592460.464
	205	Tl	0.120691	42.996	6169.430	ug/L	3951.949
	208	Pb	2542.054939	6.705	81728701.428	ug/L	4580.000
	238	U	3.985459	10.835	164114.293	ug/L	234.671
>	45	Sc-2			352211.050	ug/L	454114.374
	53	Cr	24.165220	4.994	142955.146	ug/L	154333.029
	54	Fe	359417.670764	3.634	195293943.364	ug/L	62090.940
	61	Ni	207.416924	3.105	19125.662	ug/L	1661.113
	63	Cu	826.287198	4.242	3605497.068	ug/L	345.008
	67	Zn	799.872494	6.408	181979.884	ug/L	9047.975
>	72	Ge			738094.551	ug/L	739226.379
	77	Se	-49.486868	1.108	-830.037	ug/L	8561.780
	98	Mo	24.641207	2.619	157364.006	ug/L	141.970
	109	Ag	17.593690	4.389	211142.739	ug/L	288.339
>	115	In-2			1304961.818	ug/L	1483966.870
	114	Cd	7.932475	39.681	48147.918	ug/L	84.731
	121	Sb	32.720517	4.342	288337.573	ug/L	349.674
	137	Ba	573.725512	10.541	1995911.065	ug/L	158.669
>	165	Ho-2			1359309.597	ug/L	1592460.464
	203	Tl	0.121113	44.979	2552.926	ug/L	1582.773
	206	Pb	2562.379458	5.913	20469670.029	ug/L	1161.392
	207	Pb	2579.766439	7.686	17420338.022	ug/L	995.045
>	45	Sc			352211.050	ug/L	454114.374
	47	Ti	134.887914	6.788	77925.787	ug/L	297.006
	86	Sr	30.439918	4.020	85843.209	ug/L	716.656
	88	Sr	30.112530	5.819	737034.242	ug/L	5834.250
>	115	In			1304961.818	ug/L	1483966.870
	118	Sn	3630.884229	1.031	26861676.746	ug/L	885.034
	120	Sn	3636.401661	3.445	35414192.971	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	77.890
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	98.847
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	87.937
	Sb	123	
	Ba	135	
>	Ho-1	165	86.359
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	77.890
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	98.847
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	87.937
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	86.359
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	77.890
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	87.937
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WTW
Sample Date/Time: Thursday, April 28, 2005 02:18:49
Autosampler Position: 82
Dataset File: D:\Elandata\Dataset\042705M2\G8WTW.066

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.075504	45.006	16.000	ug/L	7.667
	10	B	35.318875	1.488	910.706	ug/L	27.667
	23	Na	367.823718	3.080	1099803.202	ug/L	18838.944
	24	Mg	586.566637	3.001	1259491.231	ug/L	2106.176
	27	Al	3004.133282	3.578	9851735.512	ug/L	3413.777
	39	K	450.749919	2.239	3483355.049	ug/L	607733.282
	44	Ca	4906.282448	1.571	1024641.412	ug/L	61872.368
>	45	Sc-1			350174.318	ug/L	454114.374
	51	V	3.461812	30.650	7182.353	ug/L	-26072.212
	52	Cr	80.520662	4.365	582333.034	ug/L	26547.338
	55	Mn	1985.782282	2.739	22785776.208	ug/L	3062.361
	57	Fe	382306.345477	4.719	92118056.710	ug/L	9798.895
	59	Co	42.391666	0.865	376078.754	ug/L	232.338
	60	Ni	186.973394	2.960	356389.885	ug/L	301.006
	65	Cu	466.600067	5.137	975357.868	ug/L	168.336
	66	Zn	736.694879	1.518	918832.477	ug/L	15137.170
>	72	Ge-1			752006.261	ug/L	739226.379
	75	As	113.222895	2.808	237177.094	ug/L	-1945.453
	82	Se	0.547699	22.798	5.614	ug/L	-120.854
	97	Mo	23.436183	2.526	60458.611	ug/L	72.001
	107	Ag	13.095669	0.314	157164.474	ug/L	287.339
	111	Cd	2.370362	1.556	6555.236	ug/L	39.334
>	115	In-1			1331572.952	ug/L	1483966.870
	123	Sb	21.036609	2.483	144365.581	ug/L	268.758
	135	Ba	490.360340	3.653	978695.730	ug/L	112.002
>	165	Ho-1			1325333.327	ug/L	1592460.464
	205	Tl	0.061875	30.228	5156.654	ug/L	3951.949
	208	Pb	3676.298468	1.051	115334786.128	ug/L	4580.000
	238	U	3.732712	2.556	150046.099	ug/L	234.671
>	45	Sc-2			350174.318	ug/L	454114.374
	53	Cr	10.967227	46.262	129416.561	ug/L	154333.029
	54	Fe	374096.134212	3.782	205038332.022	ug/L	62090.940
	61	Ni	197.532463	2.618	18183.726	ug/L	1681.113
	63	Cu	463.166406	3.111	2008913.032	ug/L	345.006
	67	Zn	663.170724	3.422	148910.238	ug/L	9047.975
>	72	Ge			752006.261	ug/L	739226.379
	77	Se	-49.299619	1.147	-606.241	ug/L	8561.780
	98	Mo	23.926917	3.640	155780.761	ug/L	141.970
	109	Ag	12.200423	1.233	149387.928	ug/L	288.339
>	115	In-2			1331572.952	ug/L	1483966.870
	114	Cd	6.795476	18.797	41900.669	ug/L	84.731
	121	Sb	21.021043	2.930	189951.391	ug/L	349.674
	137	Ba	491.142910	2.216	1667835.814	ug/L	156.669
>	165	Ho-2			1325333.327	ug/L	1592460.464
	203	Tl	0.084628	33.456	2136.182	ug/L	1582.773
	206	Pb	3731.354875	2.178	29175390.604	ug/L	1161.392
	207	Pb	3833.563188	0.691	25256391.508	ug/L	995.045
>	45	Sc			350174.318	ug/L	454114.374
	47	Ti	150.209834	4.182	88188.662	ug/L	297.006
	86	Sr	23.146883	3.126	64843.255	ug/L	716.656
	88	Sr	23.816211	0.967	580544.637	ug/L	5834.250
>	115	In			1331572.952	ug/L	1483966.870
	118	Sn	4251.070221	3.446	32075379.476	ug/L	855.034
	120	Sn	4337.998197	2.244	43060887.942	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	77.111
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.729
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.731
	Sb	123	
	Ba	135	
>	Ho-1	165	83.229
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	77.111
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.729
	Se	77	
	Mo	95	
	Ag	109	
>	In-2	115	99.731
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	83.229
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	77.111
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	99.731
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WTX
Sample Date/Time: Thursday, April 28, 2005 02:23:59
Autosampler Position: 83
Dataset File: D:\Elandata\Dataset\042705M2\G8WTX.087

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.243342	0.950	41.667	ug/L	7.667
	10	B	74.816132	2.969	2058.502	ug/L	27.667
	23	Na	1370.441780	0.652	4399515.106	ug/L	18838.944
	24	Mg	1441.741667	4.137	3352573.159	ug/L	2106.178
	27	Al	7961.147511	4.431	26293301.177	ug/L	3413.777
	39	K	1736.076557	6.199	12511859.104	ug/L	807733.282
	44	Ca	17374.546095	4.527	3877596.078	ug/L	61872.368
>	45	Sc-1			379444.773	ug/L	454114.374
	51	V	10.812122	3.911	71102.842	ug/L	-26072.212
	52	Cr	40.432626	0.779	328108.528	ug/L	26547.338
	55	Mn	641.728319	3.626	7952340.353	ug/L	3062.361
	57	Fe	41383.407191	5.017	10818679.512	ug/L	9796.696
	59	Co	7.841572	3.857	72649.744	ug/L	232.338
	60	Ni	57.522606	2.183	119027.405	ug/L	301.006
	65	Cu	2839.725858	2.779	6449724.178	ug/L	168.336
	66	Zn	3969.634038	5.756	6307911.801	ug/L	15137.170
>	72	Ge-1			679815.958	ug/L	739226.379
	75	As	14.572918	1.803	26035.135	ug/L	-1945.453
	82	Se	0.913025	32.528	82.737	ug/L	-120.854
	97	Mo	36.337920	2.061	91228.279	ug/L	72.001
	107	Ag	71.470626	1.883	857425.830	ug/L	267.399
	111	Cd	50.395812	1.206	138618.048	ug/L	39.334
>	115	In-1			1332979.816	ug/L	1483966.870
	123	Sb	88.321911	2.964	592239.353	ug/L	268.758
	135	Ba	1940.412745	3.254	3979315.846	ug/L	112.002
>	165	Ho-1			1364284.609	ug/L	1592460.464
	205	Tl	0.099433	24.654	5491.782	ug/L	3951.949
	208	Pb	10279.158924	1.796	331959627.366	ug/L	4560.000
	238	U	45.987386	2.790	1900822.800	ug/L	234.671
>	45	Sc-2			379444.773	ug/L	454114.374
	53	Cr	-27.328453	26.206	100563.033	ug/L	154333.029
	54	Fe	41726.895941	4.387	24835283.341	ug/L	62090.940
	61	Ni	64.640391	7.591	7373.313	ug/L	1661.113
	63	Cu	2666.997960	4.508	12530517.640	ug/L	345.006
	67	Zn	3264.446382	2.144	776593.237	ug/L	9047.975
>	72	Ge			679815.958	ug/L	739226.379
	77	Se	-44.057821	8.500	357.029	ug/L	8561.780
	98	Mo	36.279204	4.057	236379.072	ug/L	141.970
	109	Ag	68.413860	2.939	812679.483	ug/L	288.338
>	115	In-2			1332979.816	ug/L	1483966.870
	114	Cd	53.305791	3.237	327924.342	ug/L	84.731
	121	Sb	86.747053	2.272	779533.722	ug/L	349.674
	137	Ba	1885.845903	3.585	6591113.758	ug/L	156.669
>	165	Ho-2			1364284.609	ug/L	1592460.464
	203	Tl	0.083278	17.672	2189.857	ug/L	1582.773
	206	Pb	10721.121113	3.330	86298469.475	ug/L	1161.392
	207	Pb	10461.101622	3.492	70954392.976	ug/L	995.045
>	45	Sc			379444.773	ug/L	454114.374
	47	Ti	210.876140	0.902	131093.902	ug/L	297.006
	86	Sr	86.490297	2.234	200788.761	ug/L	716.666
	88	Sr	84.326770	4.420	1690217.201	ug/L	5834.250
>	115	In			1332979.816	ug/L	1483966.870
	118	Sn	2762.238813	4.372	20862583.136	ug/L	855.034
	120	Sn	2776.619124	2.661	27587607.454	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	83.557
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	91.936
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.825
	Sb	123	
	Ba	135	
>	Ho-1	165	85.670
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	83.557
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	91.936
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	99.825
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	85.670
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	83.557
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	99.825
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Pb	208	H
Pb	206	H
Pb	207	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: GSWT0
Sample Date/Time: Thursday, April 28, 2005 02:29:09
Autosampler Position: 84
Dataset File: D:\Elandata\Dataset\042705M2\GSWT0.088

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.249903	7.976	44.667	ug/L	7.667
	10	B	72.373515	1.088	2092.841	ug/L	27.667
	23	Na	2067.832961	1.294	7014295.777	ug/L	16838.944
	24	Mg	2324.077231	2.379	5662262.569	ug/L	2106.176
	27	Al	10124.268634	2.205	37716363.664	ug/L	3413.777
	39	K	2060.707685	2.975	15497266.999	ug/L	807733.282
	44	Ca	51160.619604	3.035	11865629.309	ug/L	61672.368
>	45	Sc-1			397577.213	ug/L	454114.374
	51	V	11.359664	9.363	79283.501	ug/L	-29072.212
	52	Cr	51.511590	3.371	431369.560	ug/L	26547.338
	55	Mn	2108.240614	1.851	27489003.812	ug/L	3062.361
	57	Fe	66092.445834	2.969	18093235.329	ug/L	9798.695
	59	Co	11.110415	0.606	112061.047	ug/L	232.338
	60	Ni	73.983073	1.736	160315.459	ug/L	301.006
	65	Cu	3095.059909	3.392	7362318.454	ug/L	168.338
	66	Zn	3806.527874	1.298	5334416.206	ug/L	15137.170
>	72	Ge-1			692764.437	ug/L	739226.379
	75	As	57.038460	0.823	109200.669	ug/L	-1945.453
	82	Se	1.269361	12.941	160.804	ug/L	-120.854
	97	Mo	14.182303	1.024	35510.774	ug/L	72.001
	107	Ag	94.061861	0.913	1093296.552	ug/L	267.339
	111	Cd	12.319910	0.179	32903.187	ug/L	39.334
>	115	In-1			1291309.232	ug/L	1483966.870
	123	Sb	407.420474	2.863	2705995.818	ug/L	268.758
	135	Ba	2153.922039	1.372	4280616.270	ug/L	112.002
>	165	Ho-1			1322016.856	ug/L	1592460.464
	205	Tl	0.089365	21.976	5324.717	ug/L	3951.949
	208	Pb	27039.481470	1.291	846234709.603	ug/L	4580.000
	238	U	18.087964	2.488	724706.174	ug/L	234.671
>	45	Sc-2			397577.213	ug/L	454114.374
	53	Cr	-25.408887	1.946	107521.485	ug/L	154333.029
	54	Fe	65462.729805	1.832	40813902.512	ug/L	62090.940
	61	Ni	85.773479	1.938	9777.110	ug/L	1661.113
	63	Cu	2931.289671	1.260	14439497.977	ug/L	345.006
	67	Zn	3174.428036	3.880	791003.195	ug/L	9047.975
>	72	Ge			692764.437	ug/L	739226.379
	77	Se	-42.851082	2.054	597.902	ug/L	8561.780
	98	Mo	14.556316	2.343	92595.809	ug/L	141.970
	109	Ag	86.629112	2.402	1026892.147	ug/L	288.339
>	115	In-2			1291309.232	ug/L	1483966.870
	114	Cd	14.749078	17.679	88043.788	ug/L	84.731
	121	Sb	404.186843	1.046	3518185.783	ug/L	349.674
	137	Ba	2066.394749	0.803	7068336.318	ug/L	156.669
>	165	Ho-2			1322016.856	ug/L	1592460.464
	203	Tl	0.082793	6.867	2116.178	ug/L	1582.773
	206	Pb	27882.877294	1.713	217523910.471	ug/L	1161.392
	207	Pb	27490.812664	1.151	180733143.839	ug/L	995.045
>	45	Sc			397577.213	ug/L	454114.374
	47	Ti	310.966230	3.286	202328.445	ug/L	297.006
	86	Sr	134.916686	4.378	425953.882	ug/L	716.656
	88	Sr	137.379068	0.577	3777233.791	ug/L	5834.250
>	115	In			1291309.232	ug/L	1483966.870
	118	Sn	4288.662094	3.048	31382448.140	ug/L	855.034
	120	Sn	4297.685414	1.493	41386108.101	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	87.556
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	93.715
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	87.017
	Sb	123	
	Ba	135	
>	Ho-1	165	83.017
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	87.556
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	93.715
	Se	77	
	Mo	96	
	Ag	109	
>	In-2	115	87.017
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	83.017
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	87.556
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	87.017
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Pb	208	H
Pb	208	H
Pb	207	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WT1
Sample Date/Time: Thursday, April 28, 2005 02:34:23
Autosampler Position: 85
Dataset File: D:\Elandata\Dataset\042705M2\G8WT1.089

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.173406	6.284	34.334	ug/L	7.667
	10	B	102.014271	0.734	3056.357	ug/L	27.667
	23	Na	3006.446224	2.376	10489070.128	ug/L	18838.944
	24	Mg	2336.218503	4.524	5815243.902	ug/L	2106.176
	27	Al	12566.151209	1.254	48647582.088	ug/L	3413.777
	39	K	2777.803364	2.240	21542883.391	ug/L	807733.282
	44	Ca	23386.030077	2.237	5885401.376	ug/L	61872.368
>	45	Sc-1			413222.544	ug/L	454114.374
	51	V	12.050416	8.863	89036.079	ug/L	-26072.212
	52	Cr	72.561164	2.268	622092.168	ug/L	26547.336
	55	Mn	896.473744	1.006	12146620.919	ug/L	3062.361
	57	Fe	78972.884181	2.395	22477836.799	ug/L	9796.696
	59	Co	12.319575	2.839	129122.029	ug/L	232.338
	60	Ni	183.870267	4.025	413693.822	ug/L	301.006
	65	Cu	963.273670	3.838	2432152.818	ug/L	168.336
	66	Zn	6561.147546	1.067	9533955.030	ug/L	15137.170
>	72	Ge-1			706180.748	ug/L	739226.379
	75	As	18.860807	1.429	35542.259	ug/L	-1945.453
	82	Se	0.890698	38.245	60.237	ug/L	-120.854
	97	Mo	10.964392	2.078	28533.090	ug/L	72.001
	107	Ag	169.170771	3.086	1918061.043	ug/L	287.339
	111	Cd	14.048961	4.245	38891.299	ug/L	39.334
>	115	In-1			1338926.600	ug/L	1483966.870
	123	Sb	16.949796	0.728	117040.546	ug/L	268.758
	135	Ba	2976.960959	1.216	6184118.199	ug/L	112.002
>	165	Ho-1			1381724.187	ug/L	1592460.464
	205	Tl	0.066921	27.463	4755.185	ug/L	3951.949
	208	Pb	1661.418578	0.497	54348606.257	ug/L	4580.000
	238	U	5.836043	1.650	244511.851	ug/L	234.671
>	45	Sc-2			413222.544	ug/L	454114.374
	53	Cr	-6.350140	87.539	133227.612	ug/L	154333.029
	54	Fe	77173.996145	1.487	49966557.197	ug/L	62090.940
	61	Ni	192.296263	6.752	20903.187	ug/L	1661.113
	63	Cu	931.491741	2.851	4767903.987	ug/L	345.008
	67	Zn	5483.469325	1.932	1415038.683	ug/L	9047.975
>	72	Ge			706180.748	ug/L	739226.379
	77	Se	-40.824854	3.707	935.645	ug/L	8561.780
	98	Mo	11.368852	1.850	74452.722	ug/L	141.970
	109	Ag	150.586486	1.890	1850579.435	ug/L	288.339
>	115	In-2			1338926.600	ug/L	1483966.870
	114	Cd	15.241899	3.193	94259.581	ug/L	84.731
	121	Sb	17.255519	2.805	156027.510	ug/L	349.674
	137	Ba	2906.324878	0.291	10291352.940	ug/L	166.669
>	165	Ho-2			1381724.187	ug/L	1592460.464
	203	Tl	0.057867	36.377	1958.821	ug/L	1582.773
	206	Pb	1674.631975	0.485	13655217.069	ug/L	1161.392
	207	Pb	1737.260646	1.729	11936440.039	ug/L	995.045
>	45	Sc			413222.544	ug/L	454114.374
	47	Ti	339.217022	5.233	229409.338	ug/L	297.006
	88	Sr	99.591694	4.649	327182.061	ug/L	716.656
	88	Sr	101.948539	1.344	2914817.683	ug/L	5834.250
>	115	In			1338926.600	ug/L	1483966.870
	118	Sn	739.815384	2.528	5615176.054	ug/L	855.034
	120	Sn	745.888657	1.427	7447203.276	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	90.895
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	95.830
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	90.226
	Sb	123	
	Ba	135	
>	Ho-1	165	86.767
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	90.895
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	95.830
	Se	77	
	Mo	95	
	Ag	109	
>	In-2	115	90.226
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	86.767
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	90.895
	Ti	47	
	Sr	88	
	Sr	88	
>	In	115	90.226
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817C
Sample Date/Time: Thursday, April 28, 2005 02:39:30
Autosampler Position: 86
Dataset File: D:\Elandata\Dataset\042705M2\G817C.090

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌈	9	Be	0.260928	8.994	48.334	ug/L	7.867
|	10	B	104.259922	4.213	3136.376	ug/L	27.667
|	23	Na	4187.343471	0.696	14663635.437	ug/L	18838.944
|	24	Mg	2911.296817	1.893	7401247.922	ug/L	2106.176
|	27	Al	16566.605538	1.882	64795261.659	ug/L	3413.777
|	39	K	3496.006666	1.783	27027328.235	ug/L	807733.282
|	44	Ca	27275.653547	2.891	6624581.393	ug/L	61672.388
|>	45	Sc-1			414889.673	ug/L	454114.374
|	51	V	13.248957	6.450	100564.477	ug/L	-28072.212
|	52	Cr	68.384887	2.541	589948.986	ug/L	26547.338
|	55	Mn	1257.434673	2.975	17105423.416	ug/L	3062.361
|	57	Fe	89769.262771	1.002	17083590.390	ug/L	9796.695
|	59	Co	13.036948	3.303	137150.093	ug/L	232.338
|	60	Ni	186.526000	1.888	421378.859	ug/L	301.006
|	65	Cu	2468.693612	1.448	6106546.540	ug/L	168.336
⌊	66	Zn	5196.095638	1.827	7595010.356	ug/L	15137.170
⌈>	72	Ge-1			717659.138	ug/L	739226.379
|	75	As	23.740226	4.428	45963.592	ug/L	-1945.453
⌊	82	Se	1.711513	13.160	264.832	ug/L	-120.854
⌈	97	Mo	11.224679	0.763	29415.549	ug/L	72.001
|	107	Ag	50.212340	1.113	610589.322	ug/L	267.339
|	111	Cd	14.118621	1.609	39435.758	ug/L	39.334
|>	115	In-1			1350804.543	ug/L	1483966.870
⌊	123	Sb	25.984121	2.061	180658.254	ug/L	288.758
⌈	135	Ba	1423.919276	2.147	3034798.748	ug/L	112.002
|>	165	Ho-1			1417928.241	ug/L	1592460.464
|	205	Tl	0.053882	27.434	4842.540	ug/L	3851.949
|	208	Pb	2763.915779	1.569	92771187.466	ug/L	4580.000
⌊	238	U	19.108927	3.380	820921.074	ug/L	234.671
⌈>	45	Sc-2			414889.673	ug/L	454114.374
|	53	Cr	-1.449974	200.709	139378.211	ug/L	154333.029
|	54	Fe	59348.157847	2.263	38605244.574	ug/L	62090.940
|	61	Ni	191.402662	1.720	20901.822	ug/L	1661.113
|	63	Cu	2388.110430	1.027	12120236.615	ug/L	345.008
⌊	67	Zn	4252.847714	1.961	1103893.128	ug/L	9047.975
⌈>	72	Ge			717659.138	ug/L	739226.379
⌊	77	Se	-35.428770	2.330	1920.784	ug/L	8661.780
⌈	98	Mo	11.784923	1.947	77922.602	ug/L	141.970
|	109	Ag	46.417463	4.039	575570.247	ug/L	266.339
|>	115	In-2			1350804.543	ug/L	1483966.870
|	114	Cd	15.503961	7.585	98671.368	ug/L	84.731
⌊	121	Sb	26.347871	0.141	240221.850	ug/L	349.674
⌈	137	Ba	1384.851257	2.146	5030645.915	ug/L	156.669
|>	165	Ho-2			1417928.241	ug/L	1592460.464
|	203	Tl	0.055528	17.842	1968.492	ug/L	1582.773
|	206	Pb	2755.507201	2.371	23304505.754	ug/L	1161.392
⌊	207	Pb	2899.306892	3.516	20441164.827	ug/L	995.045
⌈>	45	Sc			414889.673	ug/L	454114.374
|	47	Ti	258.800299	3.775	175789.225	ug/L	297.006
|	86	Sr	102.561576	1.408	338310.541	ug/L	716.656
⌊	88	Sr	104.473341	0.812	2999143.284	ug/L	5834.250
⌈>	115	In			1350804.543	ug/L	1483966.870
|	118	Sn	649.286821	1.130	4972602.703	ug/L	855.034
⌊	120	Sn	654.591826	1.980	6594987.439	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	91.362
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	97.092
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	91.027
	Sb	123	
	Ba	135	
>	Ho-1	165	89.040
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	91.362
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	97.092
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	91.027
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	89.040
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	91.362
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	91.027
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817CS
Sample Date/Time: Thursday, April 28, 2005 02:44:34
Autosampler Position: 87
Dataset File: D:\Elandata\Dataset\042705M2\G817CS.091

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	2.849884	5.037	457.012	ug/L	7.667
	10	B	173.421348	3.873	5197.999	ug/L	27.667
	23	Na	9763.535752	1.380	30864147.586	ug/L	18838.944
	24	Mg	5060.812189	0.158	12838415.671	ug/L	2106.176
	27	Al	36833.571938	2.805	143140720.163	ug/L	3413.777
	39	K	5627.821176	2.300	43062012.352	ug/L	807733.282
	44	Ca	30802.119221	2.696	7424418.174	ug/L	61872.368
>	45	Sc-1			414791.609	ug/L	454114.374
	51	V	38.321701	2.861	336010.008	ug/L	-26072.212
	52	Cr	87.515559	1.819	748162.166	ug/L	26547.338
	55	Mn	1552.385102	4.435	21249222.335	ug/L	3062.361
	57	Fe	69511.252586	2.319	19861897.017	ug/L	9796.695
	59	Co	38.002753	4.246	389451.950	ug/L	232.338
	60	Ni	205.919586	0.510	465144.462	ug/L	301.006
	65	Cu	1998.150030	0.548	4962130.019	ug/L	168.336
	66	Zn	3956.859970	1.740	5785893.418	ug/L	15137.170
>	72	Ge-1			721579.744	ug/L	739226.379
	75	As	122.983227	5.816	247175.041	ug/L	-1945.453
	82	Se	90.876986	2.114	20230.896	ug/L	-120.854
	97	Mo	70.076872	2.482	189197.404	ug/L	72.001
	107	Ag	44.991872	3.711	562297.391	ug/L	267.339
	111	Cd	14.624676	2.088	42162.886	ug/L	39.334
>	115	In-1			1394588.022	ug/L	1483966.870
	123	Sb	67.561367	2.447	486034.373	ug/L	268.768
	135	Ba	1477.041198	1.739	3107522.315	ug/L	112.002
>	165	Ho-1			1398508.358	ug/L	1592460.464
	205	Tl	87.929409	4.392	2131619.861	ug/L	3951.949
	208	Pb	1867.611039	2.053	61877952.799	ug/L	4580.000
	238	U	19.228042	3.725	815727.138	ug/L	234.671
>	45	Sc-2			414791.609	ug/L	454114.374
	53	Cr	21.250899	31.249	165022.566	ug/L	154333.029
	54	Fe	68863.260028	1.749	44780710.018	ug/L	62090.940
	61	Ni	212.569641	2.549	23041.468	ug/L	1661.113
	63	Cu	1850.952889	2.839	9511724.784	ug/L	345.008
	67	Zn	3302.989777	0.902	859000.130	ug/L	9047.975
>	72	Ge			721579.744	ug/L	739226.379
	77	Se	49.478472	3.727	17331.745	ug/L	8561.760
	98	Mo	70.696309	3.538	481805.696	ug/L	141.970
	109	Ag	41.733969	2.447	534342.069	ug/L	288.339
>	115	In-2			1394588.022	ug/L	1483966.870
	114	Cd	15.206246	1.361	97978.096	ug/L	84.731
	121	Sb	66.339639	2.364	642522.131	ug/L	349.674
	137	Ba	1466.880688	0.604	5225243.623	ug/L	156.669
>	165	Ho-2			1398508.358	ug/L	1592460.464
	203	Tl	86.137160	3.851	857253.017	ug/L	1582.773
	206	Pb	1860.349080	3.371	15385337.320	ug/L	1161.392
	207	Pb	1986.730832	1.924	13688656.337	ug/L	995.045
>	45	Sc			414791.609	ug/L	454114.374
	47	Ti	327.227908	2.378	222190.153	ug/L	297.006
	86	Sr	181.887238	0.985	499654.490	ug/L	716.666
	88	Sr	166.061622	4.809	4447880.845	ug/L	5834.250
>	115	In			1394588.022	ug/L	1483966.870
	118	Sn	644.574810	2.661	5094686.053	ug/L	855.034
	120	Sn	643.174328	3.894	6686239.525	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	46	91.341
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	97.813
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	93.977
	Sb	123	
	Ba	135	
>	Ho-1	166	87.883
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	91.341
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	97.813
	Se	77	
	Mo	96	
	Ag	109	
>	In-2	115	93.977
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	87.883
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	91.341
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	93.977
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817CD
Sample Date/Time: Thursday, April 28, 2005 02:49:39
Autosampler Position: 88
Dataset File: D:\Elandata\Dataset\042705M2\G817CD.092

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌜	9	Be	2.873879	5.937	485.679	ug/L	7.667
|	10	B	76.048016	4.612	2309.543	ug/L	27.667
|	23	Na	5089.681336	1.795	17948471.860	ug/L	18838.944
|	24	Mg	4254.300184	4.708	10890397.170	ug/L	2106.176
|	27	Al	16206.371242	1.670	53480524.742	ug/L	3413.777
|	39	K	5067.716683	5.244	39123187.043	ug/L	807733.262
|	44	Ca	22523.553266	3.134	5520206.786	ug/L	61872.368
|>	45	Sc-1			418020.488	ug/L	454114.374
|	51	V	34.439714	2.123	301802.977	ug/L	-26072.212
|	52	Cr	90.070476	2.603	774984.901	ug/L	26547.338
|	55	Mn	1304.367141	1.558	17871902.186	ug/L	3062.361
|	57	Fe	79858.751403	3.498	22988142.096	ug/L	9798.695
|	59	Co	36.986806	3.762	391539.114	ug/L	232.338
|	60	Ni	214.403884	3.588	487812.473	ug/L	301.006
|	65	Cu	2868.856302	2.188	6680271.313	ug/L	168.336
⌊	66	Zn	31918.117627	4.248	46904355.426	ug/L	15137.170
⌈>	72	Ge-1			733468.936	ug/L	739226.379
|	75	As	118.006244	1.269	241240.460	ug/L	-1945.453
⌊	82	Se	88.333144	2.112	20055.130	ug/L	-120.854
⌈	97	Mo	66.053074	1.439	177519.597	ug/L	72.001
|	107	Ag	32.317306	0.175	403916.868	ug/L	267.339
|	111	Cd	17.082991	0.506	49023.130	ug/L	39.334
|>	115	In-1			1387970.997	ug/L	1483986.870
⌊	123	Sb	166.218267	2.375	1187415.875	ug/L	268.758
⌈	135	Ba	1223.553609	1.210	2542670.296	ug/L	112.002
|>	165	Ho-1			1382537.119	ug/L	1592460.464
|	205	Tl	88.178990	2.895	2109643.789	ug/L	3951.949
|	208	Pb	4400.429613	0.990	144010062.108	ug/L	4580.000
⌊	238	U	16.133871	2.487	575821.216	ug/L	234.671
⌈>	45	Sc-2			418020.488	ug/L	454114.374
|	53	Cr	17.994704	25.903	182506.468	ug/L	154333.029
|	54	Fe	79134.285358	3.470	51824534.713	ug/L	62090.940
|	61	Ni	227.518436	3.514	24736.848	ug/L	1661.113
|	63	Cu	2536.105318	0.439	13127572.763	ug/L	345.008
⌊	67	Zn	26713.072606	0.444	8941582.385	ug/L	9047.976
⌈>	72	Ge			733468.936	ug/L	739226.379
⌊	77	Se	40.229145	5.944	15909.222	ug/L	8561.780
⌈	98	Mo	67.842973	3.784	460234.282	ug/L	141.970
|	109	Ag	30.278166	1.861	385932.543	ug/L	288.339
|>	115	In-2			1387970.997	ug/L	1483986.870
|	114	Cd	19.461724	6.521	124705.183	ug/L	84.731
⌊	121	Sb	166.488046	0.783	1557905.542	ug/L	349.674
⌈	137	Ba	1175.405768	4.060	4161549.036	ug/L	156.669
|>	165	Ho-2			1382537.119	ug/L	1592460.464
|	203	Tl	87.226013	3.830	886821.942	ug/L	1582.773
|	206	Pb	4405.014807	2.531	35926899.223	ug/L	1161.392
⌊	207	Pb	4541.805536	2.746	31211306.659	ug/L	995.045
⌈>	45	Sc			418020.488	ug/L	454114.374
|	47	Ti	212.308567	3.601	145312.948	ug/L	297.006
|	86	Sr	121.923704	3.521	404894.797	ug/L	716.656
⌊	88	Sr	126.319044	2.872	3651633.956	ug/L	5834.250
⌈>	115	In			1387970.997	ug/L	1483986.870
|	118	Sn	1077.284377	1.445	8476194.948	ug/L	855.034
⌊	120	Sn	1083.080441	1.725	11212772.738	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Be	9		

|	B	10	
|	Na	23	
|	Mg	24	
|	Al	27	
|	K	39	
|	Ca	44	
|>	Sc-1	45	92.052
|	V	51	
|	Cr	52	
|	Mn	55	
|	Fe	57	
|	Co	59	
|	Ni	60	
|	Cu	65	
\L	Zn	66	
⌠>	Ge-1	72	99.221
|	As	75	
\L	Se	82	
⌠	Mo	97	
|	Ag	107	
|	Cd	111	
|>	In-1	115	93.831
\L	Sb	123	
⌠	Ba	135	
|>	Ho-1	165	98.818
|	Tl	205	
|	Pb	208	
\L	U	238	
⌠>	Sc-2	45	92.052
|	Cr	53	
|	Fe	54	
|	Ni	61	
|	Cu	63	
\L	Zn	67	
⌠>	Ge	72	99.221
\L	Se	77	
⌠	Mo	98	
|	Ag	109	
|>	In-2	115	93.831
|	Cd	114	
\L	Sb	121	
⌠	Ba	137	
|>	Ho-2	165	98.818
|	Tl	203	
|	Pb	206	
\L	Pb	207	
⌠>	Sc	45	92.052
|	Ti	47	
|	Sr	86	
\L	Sr	88	
⌠>	In	115	93.831
|	Sn	118	
\L	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Zn	66	H
Pb	208	H
Zn	67	H
Pb	206	H
Pb	207	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817D
Sample Date/Time: Thursday, April 28, 2005 02:54:44
Autosampler Position: 89
Dataset File: D:\Elandata\Dataset\042705M2\G817D.093

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌜	9	Be	0.206871	29.694	39.334	ug/L	7.667
|	10	B	79.596249	5.582	2377.222	ug/L	27.667
|	23	Na	3501.474268	2.586	12148689.535	ug/L	18838.944
|	24	Mg	3276.612305	2.930	8253091.110	ug/L	2106.176
|	27	Al	14512.152732	2.400	55884475.122	ug/L	3413.777
|	39	K	3336.754793	3.443	25598410.332	ug/L	807733.282
|	44	Ca	29895.202359	2.267	7189997.537	ug/L	61872.368
>	45	Sc-1			411105.818	ug/L	454114.374
|	51	V	12.344882	3.210	91240.917	ug/L	-28072.212
|	52	Cr	58.395665	2.554	502657.268	ug/L	26547.338
|	55	Mn	1426.963954	0.624	19232369.223	ug/L	3062.361
|	57	Fe	56116.578743	3.179	15890814.073	ug/L	9798.696
|	59	Co	13.575103	1.904	141562.027	ug/L	232.338
|	60	Ni	153.116181	0.667	342878.151	ug/L	301.006
|	65	Cu	2128.299163	3.290	5231982.699	ug/L	168.336
L	66	Zn	5826.721265	2.894	8148206.846	ug/L	15137.170
⌜ >	72	Ge-1			719445.267	ug/L	739226.379
|	75	As	46.587555	2.279	90226.727	ug/L	-1945.453
L	82	Se	1.295770	5.991	172.910	ug/L	-120.864
⌜	97	Mo	12.579673	0.996	33039.160	ug/L	72.001
|	107	Ag	48.166004	0.290	587178.111	ug/L	267.339
|	111	Cd	13.553041	1.159	37951.056	ug/L	39.334
>	115	In-1			1354083.744	ug/L	1483966.870
L	123	Sb	22.089489	1.360	154181.691	ug/L	268.758
⌜	135	Ba	1383.243448	1.852	2900434.685	ug/L	112.002
>	165	Ho-1			1394640.806	ug/L	1592460.464
|	205	Tl	0.250968	34.875	9497.344	ug/L	3951.949
|	208	Pb	1791.847533	0.350	59160066.953	ug/L	4580.000
L	238	U	22.182802	2.088	937485.111	ug/L	234.571
⌜ >	45	Sc-2			411105.818	ug/L	454114.374
|	53	Cr	-10.932510	36.208	127418.349	ug/L	154333.029
|	54	Fe	55630.788945	1.722	35862020.434	ug/L	62090.940
|	61	Ni	161.712441	4.343	17733.188	ug/L	1661.113
|	63	Cu	2097.991102	0.497	10225127.908	ug/L	345.006
L	67	Zn	4574.636377	3.187	1176607.328	ug/L	9047.975
⌜ >	72	Ge			719445.267	ug/L	739226.379
L	77	Se	-34.072820	3.406	2166.722	ug/L	8561.780
⌜	98	Mo	12.803709	2.271	84967.046	ug/L	141.970
|	109	Ag	44.553963	0.900	553997.028	ug/L	288.339
>	115	In-2			1354083.744	ug/L	1483966.870
|	114	Cd	14.310736	2.174	89510.787	ug/L	84.731
L	121	Sb	22.089147	1.356	207222.314	ug/L	349.674
⌜	137	Ba	1386.594671	2.032	4844206.556	ug/L	156.669
>	165	Ho-2			1394640.806	ug/L	1592460.464
|	203	Tl	0.243919	34.232	3879.581	ug/L	1582.773
|	206	Pb	1793.828453	1.812	14765742.922	ug/L	1161.392
L	207	Pb	1866.888723	1.628	12940468.100	ug/L	995.045
⌜ >	45	Sc			411105.818	ug/L	454114.374
|	47	Ti	236.638791	3.099	155289.346	ug/L	297.008
|	88	Sr	106.774462	0.923	349021.683	ug/L	716.656
L	88	Sr	108.811030	0.785	3069129.823	ug/L	5834.250
⌜ >	115	In			1354083.744	ug/L	1483966.870
|	118	Sn	516.328390	2.180	3963816.550	ug/L	855.034
L	120	Sn	522.161700	1.556	5274585.816	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌜	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	90.529
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	97.324
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	91.248
	Sb	123	
	Ba	136	
>	Ho-1	165	87.578
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	46	90.529
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	97.324
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	91.248
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	87.578
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	90.529
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	91.248
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817E
Sample Date/Time: Thursday, April 28, 2005 02:59:49
Autosampler Position: 90
Dataset File: D:\Elandata\Dataset\042705M2\G817E.094

Sample Result Summary

Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
9	Be	0.181336	8.638	34.667	ug/L	7.667
10	B	26.668452	7.319	801.364	ug/L	27.667
23	Na	752.473470	3.774	2565519.615	ug/L	18838.944
24	Mg	972.603374	5.457	2396614.975	ug/L	2106.176
27	Al	6434.648958	3.556	24226047.551	ug/L	3413.777
39	K	842.016769	6.119	6846136.993	ug/L	807733.282
44	Ca	14146.508072	2.770	3355020.766	ug/L	61872.368
> 45	Sc-1			402082.706	ug/L	454114.374
51	V	7.251760	2.571	42892.008	ug/L	-28072.212
52	Cr	48.756313	0.775	414379.844	ug/L	26547.338
55	Mn	782.189204	1.770	9255706.595	ug/L	3062.361
57	Fe	88823.934136	4.404	24525003.749	ug/L	9798.695
59	Co	11.892100	4.799	121233.805	ug/L	232.338
60	Ni	83.038448	1.870	181920.988	ug/L	301.006
65	Cu	400.947171	5.401	964255.776	ug/L	168.336
66	Zn	1695.140638	4.283	2408843.386	ug/L	15137.170
> 72	Ge-1			732369.749	ug/L	739226.379
75	As	32.497871	2.441	64951.609	ug/L	-1945.453
82	Se	0.666430	24.328	32.423	ug/L	-120.854
97	Mo	9.848148	0.463	26386.611	ug/L	72.001
107	Ag	82.849403	0.783	656805.334	ug/L	267.339
111	Cd	4.225537	2.240	12088.903	ug/L	39.334
> 115	In-1			1380462.742	ug/L	1483966.870
123	Sb	12.373914	1.689	88161.153	ug/L	266.758
135	Ba	1432.265969	3.416	3028215.265	ug/L	112.002
> 165	Ho-1			1406747.267	ug/L	1592460.464
205	Tl	0.113620	24.906	6240.764	ug/L	3961.949
208	Pb	2162.638535	2.281	71861550.615	ug/L	4580.000
238	U	2.034838	5.078	86858.524	ug/L	234.671
> 45	Sc-2			402082.706	ug/L	454114.374
53	Cr	-20.512362	37.742	113949.855	ug/L	154333.029
54	Fe	88808.150399	3.878	55925258.829	ug/L	62090.940
61	Ni	90.612976	7.785	10342.183	ug/L	1661.113
63	Cu	386.717955	2.598	1820433.590	ug/L	345.008
67	Zn	1464.091191	1.553	370982.253	ug/L	9047.975
> 72	Ge			732369.749	ug/L	739226.379
77	Se	-40.766220	0.682	979.688	ug/L	8561.780
98	Mo	9.980331	1.317	67331.584	ug/L	141.970
109	Ag	48.654100	1.170	616720.248	ug/L	288.339
> 115	In-2			1380462.742	ug/L	1483966.870
114	Cd	6.328580	17.923	34007.506	ug/L	84.731
121	Sb	12.628433	2.582	117842.166	ug/L	349.674
137	Ba	1387.536286	1.904	5000367.597	ug/L	156.889
> 165	Ho-2			1406747.267	ug/L	1592460.464
203	Tl	0.119623	22.245	2629.269	ug/L	1582.773
206	Pb	2102.781192	2.618	17454454.928	ug/L	1161.392
207	Pb	2270.670421	4.437	15872037.464	ug/L	995.045
> 45	Sc			402082.706	ug/L	454114.374
47	Ti	167.040763	5.147	109871.218	ug/L	297.006
86	Sr	49.323003	3.894	157896.084	ug/L	716.656
88	Sr	47.800518	2.359	1332030.784	ug/L	5834.250
> 115	In			1380462.742	ug/L	1483966.870
118	Sn	977.263712	3.584	7648491.439	ug/L	855.034
120	Sn	967.744322	2.637	9985596.217	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	99.542
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	99.072
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	93.025
	Sb	123	
	Ba	135	
>	Ho-1	165	88.338
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	99.542
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	99.072
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	93.025
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	88.338
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	99.542
	Ti	47	
	Sr	88	
	Sr	88	
>	In	115	93.025
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Thursday, April 28, 2005 03:04:58
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 1.095

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	211.047843	2.748	31966.378	ug/L	7.667
	10	B	208.102661	3.756	5957.635	ug/L	27.667
	23	Na	1876.615470	2.149	6290763.493	ug/L	18838.944
	24	Mg	951.805887	3.743	2314021.993	ug/L	2106.176
	27	Al	1925.367281	3.941	7156263.992	ug/L	3413.777
	39	K	1994.583473	4.719	15045497.691	ug/L	807733.262
	44	Ca	1046.023960	4.864	294579.630	ug/L	61672.368
>	45	Sc-1			396709.988	ug/L	454114.374
	51	V	205.488366	4.156	1821329.105	ug/L	-26072.212
	52	Cr	209.945786	1.338	1684039.312	ug/L	26547.338
	55	Mn	206.978469	3.579	2693198.293	ug/L	3062.361
	57	Fe	2066.916917	3.224	561830.330	ug/L	9798.695
	59	Co	214.430698	5.931	2152699.468	ug/L	232.338
	60	Ni	218.888832	2.703	472711.230	ug/L	301.006
	65	Cu	227.884929	3.804	541103.237	ug/L	168.336
	66	Zn	218.593273	5.516	317978.515	ug/L	15137.170
>	72	Ge-1			718487.381	ug/L	739226.379
	75	As	197.113144	3.083	395885.151	ug/L	-1945.453
	82	Se	194.803196	0.729	43422.927	ug/L	-120.854
	97	Mo	208.488966	2.946	551010.829	ug/L	72.001
	107	Ag	50.868169	2.394	621399.252	ug/L	267.339
	111	Cd	197.894717	1.123	557275.844	ug/L	39.334
>	115	In-1			1365012.280	ug/L	1483986.870
	123	Sb	199.241672	1.402	1399862.787	ug/L	266.758
	135	Ba	212.909521	1.509	452603.495	ug/L	112.002
>	165	Ho-1			1413966.961	ug/L	1592460.464
	205	Tl	196.660942	2.979	4783689.621	ug/L	3951.949
	208	Pb	198.638834	1.429	6652196.342	ug/L	4580.000
	238	U	193.271099	1.721	8278969.113	ug/L	234.671
>	45	Sc-2			396709.988	ug/L	454114.374
	53	Cr	170.964268	9.753	319966.964	ug/L	154333.029
	54	Fe	2172.961385	3.708	1403310.252	ug/L	62090.940
	61	Ni	226.045686	2.575	23239.454	ug/L	1661.113
	63	Cu	220.971264	1.695	1085671.067	ug/L	345.008
	67	Zn	209.763330	2.523	59554.807	ug/L	9047.975
>	72	Ge			718487.381	ug/L	739226.379
	77	Se	163.696378	3.901	37865.453	ug/L	8561.760
	98	Mo	207.675348	0.610	1385625.795	ug/L	141.970
	109	Ag	48.221078	0.303	616944.825	ug/L	288.339
>	115	In-2			1365012.280	ug/L	1483986.870
	114	Cd	196.592365	3.791	1238423.171	ug/L	84.731
	121	Sb	198.812200	0.122	1827729.658	ug/L	348.874
	137	Ba	215.909606	2.601	781083.688	ug/L	156.669
>	165	Ho-2			1413966.961	ug/L	1592460.464
	203	Tl	186.319643	2.234	1928188.248	ug/L	1582.773
	206	Pb	198.590898	2.294	1657744.751	ug/L	1161.392
	207	Pb	203.467766	3.772	1430784.102	ug/L	995.045
>	45	Sc			396709.988	ug/L	454114.374
	47	Ti	206.371318	3.320	134058.109	ug/L	297.006
	86	Sr	212.346925	3.461	668883.228	ug/L	716.656
	88	Sr	213.237254	3.604	5844805.736	ug/L	5834.250
>	115	In			1365012.280	ug/L	1483986.870
	118	Sn	204.936267	0.891	1586434.261	ug/L	855.034
	120	Sn	202.239279	1.391	2060054.464	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		166.834

	B	10		104.091
	Na	23		93.531
	Mg	24		95.181
	Al	27		96.268
	K	39		99.729
	Ca	44		104.562
>	Sc-1	45	97.359	
	V	51		102.744
	Cr	52		104.973
	Mn	55		103.489
	Fe	57		104.949
	Co	59		107.215
	Ni	60		108.444
	Cu	65		113.942
	Zn	66		109.297
>	Ge-1	72	97.194	
	As	75		98.557
	Se	82		97.382
	Mo	97		104.244
	Ag	107		101.136
	Cd	111		98.797
>	In-1	115	91.984	
	Sb	123		99.021
	Ba	135		106.486
>	Ho-1	165	98.791	
	Tl	205		97.826
	Pb	208		99.319
	U	238		96.936
>	Sc-2	45	97.359	
	Cr	53		95.482
	Fe	54		106.848
	Ni	61		112.523
	Cu	63		110.486
	Zn	67		104.882
>	Ge	72	97.194	
	Se	77		91.788
	Mo	98		103.838
	Ag	109		99.442
>	In-2	115	91.984	
	Cd	114		98.256
	Sb	121		99.366
	Ba	137		107.994
>	Ho-2	165	98.791	
	Tl	203		92.655
	Pb	206		99.256
	Pb	207		101.734
>	Sc	45	97.359	
	Ti	47		103.186
	Sr	86		106.173
	Sr	88		106.619
>	In	115	91.984	
	Sn	118		102.466
	Sn	120		101.129

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cu	65	Q
Cr	53	Q
Ni	61	Q
Cu	63	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Thursday, April 28, 2005 03:11:07
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042706M2\QC Std 2.096

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.026660	94.030	11.000	ug/L	7.667
	10	B	3.576874	24.237	131.335	ug/L	27.667
	23	Na	0.158169	258.577	17527.598	ug/L	18838.944
	24	Mg	0.666026	79.539	2066.170	ug/L	2106.176
	27	Al	1.014766	6.809	6981.110	ug/L	3413.777
	39	K	4.500189	118.827	762164.065	ug/L	807733.282
	44	Ca	-14.280678	74.836	52439.942	ug/L	61872.368
>	45	Sc-1			410397.519	ug/L	454114.374
	51	V	0.038606	2543.226	-22912.577	ug/L	-26072.212
	52	Cr	-0.355873	99.577	20967.030	ug/L	26547.338
	55	Mn	0.006816	180.302	2879.319	ug/L	3062.361
	57	Fe	9.210868	32.894	11430.679	ug/L	9798.696
	59	Co	0.011768	63.728	334.874	ug/L	232.338
	60	Ni	0.008377	80.991	290.673	ug/L	301.006
	65	Cu	0.286866	7.996	855.701	ug/L	168.336
	66	Zn	0.919111	58.239	14961.334	ug/L	15137.170
>	72	Ge-1			695570.490	ug/L	739226.379
	75	As	0.659443	68.820	-539.813	ug/L	-1945.453
	82	Se	0.409303	23.448	-25.073	ug/L	-120.854
	97	Mo	0.098478	38.884	331.007	ug/L	72.001
	107	Ag	0.032619	8.372	658.022	ug/L	267.339
	111	Cd	0.007719	39.421	59.001	ug/L	39.334
>	115	In-1			1390115.257	ug/L	1483966.870
	123	Sb	0.162134	27.795	1336.133	ug/L	268.758
	135	Ba	0.014362	27.854	130.335	ug/L	112.002
>	165	Ho-1			1416760.774	ug/L	1592460.464
	205	Tl	0.212793	47.264	8752.596	ug/L	3951.949
	208	Pb	0.146654	1.778	8990.854	ug/L	4550.000
	238	U	0.007830	14.147	545.349	ug/L	234.671
>	45	Sc-2			410397.519	ug/L	454114.374
	53	Cr	-13.826416	141.137	123254.523	ug/L	154333.029
	54	Fe	2.935763	126.089	57938.603	ug/L	62090.940
	61	Ni	-0.449674	181.053	1453.755	ug/L	1661.113
	63	Cu	0.303916	6.625	1853.806	ug/L	345.008
	67	Zn	0.586189	1086.206	8273.513	ug/L	9047.975
>	72	Ge			695570.490	ug/L	739226.379
	77	Se	-22.376006	14.385	4143.244	ug/L	8561.780
	98	Mo	0.119122	28.318	939.275	ug/L	141.970
	109	Ag	0.071231	13.153	1177.394	ug/L	288.339
>	115	In-2			1390115.257	ug/L	1483966.870
	114	Cd	0.010607	31.899	147.249	ug/L	84.731
	121	Sb	0.149568	29.944	1723.791	ug/L	349.674
	137	Ba	0.020173	39.190	212.337	ug/L	156.669
>	165	Ho-2			1416760.774	ug/L	1592460.464
	203	Tl	0.221143	47.184	3721.553	ug/L	1582.773
	206	Pb	0.154406	7.442	2324.546	ug/L	1161.392
	207	Pb	0.154184	4.704	1971.156	ug/L	995.045
>	45	Sc			410397.519	ug/L	454114.374
	47	Ti	0.047324	146.381	301.340	ug/L	297.006
	86	Sr	-0.004066	618.847	631.787	ug/L	716.666
	88	Sr	0.012067	87.153	5606.489	ug/L	5834.250
>	115	In			1390115.257	ug/L	1483966.870
	118	Sn	1.009808	15.913	8738.787	ug/L	855.034
	120	Sn	1.079677	11.250	12212.527	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		2.666

	B	10		387.667
	Na	23		0.158
	Mg	24		0.666
	Al	27		1.015
	K	39		4.800
	Ca	44		-14.261
>	Sc-1	45	90.373	
	V	51		3.661
	Cr	52		-35.667
	Mn	55		0.662
	Fe	57		8.211
	Co	59		1.177
	Ni	60		0.636
	Cu	65		26.667
	Zn	66		91.911
>	Ge-1	72	94.694	
	As	75		66.644
	Se	82		40.630
	Mo	97		9.646
	Ag	107		3.261
	Cd	111		0.772
>	In-1	115	93.676	
	Sb	123		16.213
	Ba	135		1.436
>	Ho-1	165	88.967	
	Tl	205		21.270
	Pb	208		14.655
	U	238		0.783
>	Sc-2	45	90.373	
	Cr	53		-1382.642
	Fe	54		2.536
	Ni	61		-44.667
	Cu	63		30.391
	Zn	67		88.617
>	Ge	72	94.694	
	Se	77		-2237.601
	Mo	98		11.912
	Ag	109		7.123
>	In-2	115	93.676	
	Cd	114		1.991
	Sb	121		14.667
	Ba	137		2.017
>	Ho-2	165	88.967	
	Tl	203		22.114
	Pb	206		16.441
	Pb	207		16.418
>	Sc	45	90.373	
	Ti	47		4.732
	Sr	86		-0.498
	Sr	88		1.299
>	In	115	93.676	
	Sn	118		100.861
	Sn	120		107.868

QC Out Of Limits

Analyte	Mass	Out of Limits Message
B	10	Q
Cr	53	Q
Se	77	Q
Sn	118	Q
Sn	120	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817F
Sample Date/Time: Thursday, April 28, 2005 03:17:14
Autosampler Position: 91
Dataset File: D:\Elandata\Dataset\042705M2\G817F.097

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.185778	27.929	33.000	ug/L	7.667
	10	B	57.634605	3.516	1586.104	ug/L	27.667
	23	Na	872.576445	1.653	2791874.571	ug/L	18838.944
	24	Mg	1470.133446	4.341	3398532.046	ug/L	2106.176
	27	Al	8704.144126	2.136	30786285.706	ug/L	3413.777
	39	K	974.723308	4.148	7335178.779	ug/L	807733.282
	44	Ca	13769.687639	4.312	3065623.630	ug/L	61872.368
>	45	Sc-1			377399.897	ug/L	454114.374
	51	V	8.480221	13.617	33711.039	ug/L	-26072.212
	52	Cr	86.594625	3.169	673853.093	ug/L	26547.336
	55	Mn	1609.177383	1.677	16668206.912	ug/L	3062.361
	57	Fe	229248.760133	3.567	59553199.321	ug/L	9796.695
	59	Co	30.179694	1.153	288591.955	ug/L	232.338
	60	Ni	160.874247	2.967	330870.174	ug/L	301.006
	66	Cu	1385.937665	2.621	3130763.996	ug/L	168.336
	66	Zn	1266.061911	1.694	1684464.220	ug/L	15137.170
>	72	Ge-1			741025.507	ug/L	739226.379
	75	As	103.329347	2.872	213129.876	ug/L	-1945.453
	82	Se	0.408700	25.299	-26.817	ug/L	-120.854
	97	Mo	19.115179	1.741	50241.052	ug/L	72.001
	107	Ag	68.625559	2.986	715401.868	ug/L	267.339
	111	Cd	4.803383	2.077	12650.726	ug/L	39.334
>	115	In-1			1356386.220	ug/L	1483966.870
	123	Sb	48.537905	2.298	338912.206	ug/L	268.758
	135	Ba	1461.863079	1.177	2993267.071	ug/L	112.002
>	165	Ho-1			1371626.391	ug/L	1592460.464
	205	Tl	0.124780	37.712	6380.841	ug/L	3951.949
	208	Pb	2763.815392	2.439	8743400.064	ug/L	4580.000
	238	U	2.563782	0.514	106757.486	ug/L	234.671
>	45	Sc-2			377399.897	ug/L	454114.374
	53	Cr	18.096541	32.613	143733.249	ug/L	154333.029
	54	Fe	221919.802838	2.396	131159693.729	ug/L	82090.940
	61	Ni	170.836106	2.662	17114.084	ug/L	1661.113
	63	Cu	1315.976950	1.200	6152595.838	ug/L	345.008
	67	Zn	1193.585292	2.837	287207.535	ug/L	9047.975
>	72	Ge			741025.507	ug/L	739226.379
	77	Se	-46.816733	1.640	51.001	ug/L	8561.780
	98	Mo	19.464451	2.362	129098.756	ug/L	141.970
	109	Ag	53.819283	1.812	670030.555	ug/L	288.339
>	115	In-2			1356386.220	ug/L	1483966.870
	114	Cd	7.611585	12.286	47782.014	ug/L	84.731
	121	Sb	48.868149	2.736	446836.384	ug/L	349.674
	137	Ba	1430.107666	2.392	5026650.466	ug/L	156.669
>	165	Ho-2			1371626.391	ug/L	1592460.464
	203	Tl	0.117207	35.966	2543.589	ug/L	1582.773
	206	Pb	2773.924210	1.940	22453941.972	ug/L	1161.392
	207	Pb	2838.076344	0.604	19360254.660	ug/L	995.045
>	45	Sc			377399.897	ug/L	454114.374
	47	Ti	150.279258	4.223	92907.427	ug/L	297.006
	86	Sr	59.192889	3.532	177515.322	ug/L	716.656
	88	Sr	57.706713	1.590	1508670.908	ug/L	5834.250
>	115	In			1356386.220	ug/L	1483966.870
	118	Sn	1848.917197	4.043	14206586.481	ug/L	855.034
	120	Sn	1859.596604	2.918	18805566.966	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	83.107
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	100.343
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	91.403
	Sb	123	
	Ba	135	
>	Ho-1	165	88.133
	Tl	205	
	Pb	206	
	U	238	
>	Sc-2	45	83.107
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	100.343
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	91.403
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	88.133
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	83.107
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	91.403
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817G
Sample Date/Time: Thursday, April 28, 2005 03:22:20
Autosampler Position: 92
Dataset File: D:\Elandata\Dataset\042705M2\G817G.098

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.130911	36.299	26.000	ug/L	7.667
	10	B	68.641984	4.856	1944.485	ug/L	27.667
	23	Na	2346.696469	3.765	7717738.684	ug/L	18838.944
	24	Mg	2196.694027	0.990	5240502.010	ug/L	2106.176
	27	Al	10509.872892	3.683	38326804.631	ug/L	3413.777
	39	K	1482.329355	1.306	11151687.840	ug/L	807733.282
	44	Ca	93074.680542	3.237	21080684.436	ug/L	61872.368
>	45	Sc-1			389216.225	ug/L	454114.374
	51	V	11.668644	3.030	80413.990	ug/L	-26072.212
	52	Cr	82.634710	1.050	430514.462	ug/L	26547.338
	55	Mn	889.696788	0.974	11352989.896	ug/L	3082.361
	57	Fe	76896.434368	3.511	20621723.088	ug/L	9798.695
	59	Co	14.688937	0.541	144961.889	ug/L	232.338
	60	Ni	625.419628	1.765	1325154.570	ug/L	301.006
	65	Cu	2065.102970	1.755	4859316.618	ug/L	168.336
	66	Zn	2083.580469	0.698	2878792.227	ug/L	15137.170
>	72	Ge-1			689219.480	ug/L	739228.379
	75	As	16.625732	2.562	30377.281	ug/L	-1945.453
	82	Se	0.668851	44.931	31.256	ug/L	-120.854
	97	Mo	9.798685	1.390	24931.653	ug/L	72.001
	107	Ag	80.672839	1.883	952060.636	ug/L	267.339
	111	Cd	5.648519	1.562	15329.040	ug/L	38.334
>	115	In-1			1311183.781	ug/L	1483966.870
	123	Sb	23.677045	25.837	159112.415	ug/L	268.758
	135	Ba	2529.872848	2.263	5490251.196	ug/L	112.002
>	165	Ho-1			1389022.884	ug/L	1592460.464
	205	Tl	0.082066	22.460	5422.090	ug/L	3951.949
	208	Pb	1373.806759	2.483	45156945.899	ug/L	4580.000
	238	U	12.062670	4.577	508492.653	ug/L	234.671
>	45	Sc-2			389216.225	ug/L	454114.374
	53	Cr	-23.189313	10.686	107619.154	ug/L	154333.029
	54	Fe	77167.813685	2.409	47088018.246	ug/L	62090.940
	61	Ni	667.163818	2.111	64815.041	ug/L	1661.113
	63	Cu	1980.464899	3.663	9549103.075	ug/L	345.006
	67	Zn	1741.096649	3.018	426589.552	ug/L	9047.975
>	72	Ge			689219.480	ug/L	739228.379
	77	Se	-39.377906	3.539	1161.367	ug/L	8561.780
	98	Mo	10.054367	3.015	64540.886	ug/L	141.970
	109	Ag	75.077545	2.150	903704.212	ug/L	288.339
>	115	In-2			1311183.781	ug/L	1483966.870
	114	Cd	6.501910	2.069	39413.969	ug/L	84.731
	121	Sb	20.104839	1.603	177974.905	ug/L	349.674
	137	Ba	2605.040680	3.232	9289462.108	ug/L	156.669
>	165	Ho-2			1389022.884	ug/L	1592460.464
	203	Tl	0.089669	18.171	2297.209	ug/L	1582.773
	206	Pb	1388.849145	2.899	11381748.258	ug/L	1161.392
	207	Pb	1444.386962	2.644	9875685.834	ug/L	995.045
>	45	Sc			389216.225	ug/L	454114.374
	47	Ti	304.679286	3.502	194182.500	ug/L	297.006
	86	Sr	125.851866	0.587	389367.790	ug/L	716.656
	88	Sr	128.836032	0.675	3466812.682	ug/L	5834.250
>	115	In			1311183.781	ug/L	1483966.870
	118	Sn	358.201220	3.048	2640032.261	ug/L	856.034
	120	Sn	358.649496	1.607	3508241.925	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	95.709
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	93.235
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.357
	Sb	123	
	Ba	136	
>	Ho-1	165	97.228
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	95.709
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	93.235
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.357
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	97.228
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	95.709
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	98.357
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Thursday, April 28, 2006 03:27:29
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 1.099

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	213.490538	1.257	31626.289	ug/L	7.667
	10	B	206.882060	4.033	5794.902	ug/L	27.667
	23	Na	1539.302716	1.840	6030596.906	ug/L	16838.944
	24	Mg	933.314957	1.494	2219766.379	ug/L	2106.176
	27	Al	1937.964791	2.079	7046131.665	ug/L	3413.777
	39	K	1950.989637	0.429	14406972.967	ug/L	607733.282
	44	Ca	1014.226186	3.093	281189.312	ug/L	61872.368
>	45	Sc-1			387858.810	ug/L	454114.374
	51	V	201.306643	0.678	1745143.772	ug/L	-26072.212
	52	Cr	207.555705	3.055	1627584.196	ug/L	26547.338
	55	Mn	207.945081	1.992	2846809.973	ug/L	3062.361
	57	Fe	2120.282833	3.579	574511.561	ug/L	9796.685
	59	Co	210.371043	3.758	2066791.843	ug/L	232.338
	60	Ni	214.986736	0.847	463804.264	ug/L	301.006
	65	Cu	228.792342	3.644	524282.903	ug/L	168.336
	66	Zn	219.814621	2.530	312560.011	ug/L	15137.170
>	72	Ga-1			694483.000	ug/L	739226.379
	75	As	198.899854	5.080	386083.633	ug/L	-1945.453
	82	Se	196.997606	1.237	42488.898	ug/L	-120.854
	97	Mo	208.181602	1.196	530807.385	ug/L	72.001
	107	Ag	48.901937	1.706	600247.714	ug/L	267.339
	111	Cd	199.526673	0.992	550901.315	ug/L	39.334
>	115	In-1			1336168.386	ug/L	1483966.870
	123	Sb	196.137148	2.935	1348658.719	ug/L	268.758
	135	Ba	208.706589	1.880	442351.831	ug/L	112.002
>	165	Ho-1			1409711.154	ug/L	1592460.464
	205	Tl	199.447863	3.170	4863192.907	ug/L	3951.949
	208	Pb	202.022829	1.521	6745501.590	ug/L	4580.000
	238	U	197.828790	2.082	8448648.981	ug/L	234.871
>	45	Sc-2			387858.810	ug/L	454114.374
	53	Cr	157.856062	13.524	299187.702	ug/L	154333.029
	54	Fe	2170.162496	2.795	1370762.053	ug/L	52090.940
	61	Ni	219.219969	0.254	22177.425	ug/L	1661.113
	63	Cu	218.948776	1.857	1052176.209	ug/L	345.008
	67	Zn	211.092086	1.794	58559.389	ug/L	9047.975
>	72	Ge			694483.000	ug/L	739226.379
	77	Se	160.887720	0.929	36123.790	ug/L	8661.780
	98	Mo	208.191164	3.359	1359309.036	ug/L	141.970
	109	Ag	48.887460	1.436	599483.819	ug/L	288.339
>	115	In-2			1336168.386	ug/L	1483966.870
	114	Cd	197.836034	3.866	1219606.102	ug/L	84.731
	121	Sb	196.814611	2.501	1797752.603	ug/L	349.574
	137	Ba	213.066769	1.738	769792.664	ug/L	156.669
>	165	Ho-2			1409711.154	ug/L	1592460.464
	203	Tl	167.912969	2.038	1947388.956	ug/L	1582.773
	206	Pb	202.286552	2.265	1683578.747	ug/L	1161.392
	207	Pb	208.153465	2.770	1459953.177	ug/L	995.045
>	45	Sc			387858.810	ug/L	454114.374
	47	Ti	204.797492	2.428	130121.377	ug/L	297.006
	86	Sr	213.473486	0.282	657709.435	ug/L	716.856
	88	Sr	214.522484	0.836	5751971.075	ug/L	5834.250
>	115	In			1336168.386	ug/L	1483966.870
	118	Sn	204.019820	1.879	1545606.516	ug/L	855.034
	120	Sn	203.338692	1.862	2027026.436	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		106.745

	B	10		103.441
	Na	23		91.995
	Mg	24		93.331
	Al	27		96.898
	K	39		97.548
	Ca	44		101.423
>	Sc-1	45	95.410	
	V	51		100.883
	Cr	52		103.778
	Mn	55		103.573
	Fe	57		108.013
	Co	59		105.186
	Ni	60		107.433
	Cu	65		112.898
	Zn	66		109.897
>	Ge-1	72	93.949	
	As	75		99.469
	Se	82		96.499
	Mo	97		102.991
	Ag	107		99.994
	Cd	111		99.783
>	In-1	115	90.049	
	Sb	123		99.999
	Ba	135		104.353
>	Hg-1	185	98.524	
	Tl	205		99.724
	Pb	208		101.011
	U	238		99.913
>	Sc-2	45	95.410	
	Cr	53		78.928
	Fe	54		108.586
	Ni	61		109.810
	Cu	63		109.474
	Zn	67		105.548
>	Ge	72	93.949	
	Se	77		99.444
	Mo	98		104.996
	Ag	109		97.735
>	In-2	115	90.049	
	Cd	114		99.919
	Sb	121		99.897
	Ba	137		106.536
>	Hg-2	185	98.524	
	Tl	205		99.966
	Pb	208		101.143
	Pb	207		104.077
>	Sc	45	95.410	
	Tl	47		102.369
	Sr	88		106.737
	Sr	88		107.261
>	In	115	90.049	
	Ba	118		102.918
	Se	120		101.859

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cu	65	Q
Cr	53	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Thursday, April 28, 2005 03:33:36
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 2.100

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.008267	88.858	8.000	ug/L	7.667
	10	B	3.398583	21.248	122.002	ug/L	27.667
	23	Na	0.093439	154.199	16895.822	ug/L	18838.944
	24	Mg	0.074475	42.579	2035.832	ug/L	2106.176
	27	Al	1.027408	10.243	6849.045	ug/L	3413.777
	39	K	4.483625	48.952	743466.160	ug/L	807733.282
	44	Ca	-22.641841	26.251	49204.428	ug/L	61872.368
>	45	Sc-1			399822.033	ug/L	454114.374
	51	V	-0.151633	416.578	-24391.689	ug/L	-26072.212
	52	Cr	-0.574731	36.206	18788.263	ug/L	26547.338
	55	Mn	0.003467	301.957	2739.957	ug/L	3062.361
	57	Fe	2.259815	39.249	9246.706	ug/L	9798.895
	59	Co	0.014631	56.605	352.675	ug/L	232.338
	60	Ni	0.006556	161.196	283.672	ug/L	301.006
	65	Cu	0.575063	3.606	1763.460	ug/L	168.336
	66	Zn	0.979080	22.839	14687.372	ug/L	15137.170
>	72	Ge-1			705679.118	ug/L	739226.379
	75	As	0.895000	17.643	-83.669	ug/L	-1945.453
	82	Se	0.066180	275.611	-96.819	ug/L	-120.854
	97	Mo	0.099947	36.327	324.340	ug/L	72.001
	107	Ag	0.032236	17.167	638.021	ug/L	267.339
	111	Cd	0.006189	65.361	58.667	ug/L	39.334
>	115	In-1			1359680.759	ug/L	1483966.870
	123	Sb	0.146510	33.802	1263.720	ug/L	268.756
	135	Ba	0.021701	54.366	145.002	ug/L	112.002
>	165	Ho-1			1407010.261	ug/L	1592460.464
	205	Tl	0.233379	55.533	9156.251	ug/L	3851.949
	208	Pb	0.128894	8.478	8338.710	ug/L	4580.000
	238	U	0.009253	14.929	601.685	ug/L	234.671
>	45	Sc-2			399822.033	ug/L	454114.374
	53	Cr	-21.991145	52.901	111864.898	ug/L	154333.029
	54	Fe	2.090614	166.890	55952.732	ug/L	62090.940
	61	Ni	0.506969	97.280	1511.762	ug/L	1661.113
	63	Cu	0.700988	3.199	3773.870	ug/L	345.008
	67	Zn	1.064436	418.923	8228.612	ug/L	9047.975
>	72	Ge			705679.118	ug/L	739226.379
	77	Se	-32.935239	8.969	2339.297	ug/L	8561.780
	98	Mo	0.136842	22.403	1048.024	ug/L	141.970
	109	Ag	0.079866	33.059	1253.403	ug/L	288.339
>	115	In-2			1359680.759	ug/L	1483966.870
	114	Cd	0.005580	88.268	111.827	ug/L	84.731
	121	Sb	0.143971	30.302	1630.779	ug/L	349.874
	137	Ba	0.016788	34.303	206.004	ug/L	156.669
>	165	Ho-2			1407010.261	ug/L	1592460.464
	203	Tl	0.240883	56.100	3879.276	ug/L	1582.773
	206	Pb	0.129172	7.860	2073.171	ug/L	1161.392
	207	Pb	0.134633	3.194	1821.134	ug/L	995.045
>	45	Sc			399822.033	ug/L	454114.374
	47	Ti	0.283135	77.234	432.345	ug/L	297.006
	86	Sr	0.091187	2138.306	633.908	ug/L	716.666
	88	Sr	0.018562	54.561	5646.506	ug/L	5834.250
>	115	In			1359680.759	ug/L	1483966.870
	118	Sn	0.817413	14.501	7064.495	ug/L	855.034
	120	Sn	0.878103	16.724	9862.758	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		0.827

	B	10		339.858
	Na	23		0.993
	Mg	24		9.574
	Al	27		1.827
	K	39		4.484
	Ca	44		-22.642
>	Sc-1	45	88.044	
	V	51		-16.193
	Cr	52		-57.473
	Mn	55		0.347
	Fe	57		2.269
	Co	59		1.483
	Ni	60		0.586
	Cu	65		97.596
	Zn	66		97.608
>	Ge-1	72	95.462	
	As	75		99.880
	Se	82		8.818
	Mo	97		9.886
	Ag	107		3.223
	Cd	111		0.917
>	In-1	115	91.825	
	Sb	123		14.851
	Ba	135		2.179
>	Ho-1	165	88.364	
	Tl	205		23.338
	Pb	208		12.899
	U	238		8.926
>	Sc-2	45	88.044	
	Cr	53		-2188.114
	Fe	54		2.891
	Ni	61		88.896
	Cu	63		78.898
	Zn	67		106.444
>	Ge	72	96.462	
	Se	77		-3293.534
	Mo	98		13.884
	Ag	109		7.987
>	In-2	115	91.825	
	Cd	114		8.886
	Sb	121		14.387
	Ba	137		1.879
>	Ho-2	165	88.364	
	Tl	203		24.088
	Pb	208		12.817
	Pb	207		13.463
>	Sc	45	88.044	
	Ti	47		28.313
	Sr	88		0.119
	Sr	88		1.888
>	In	115	91.825	
	Sn	118		91.741
	Sn	120		87.810

QC Out Of Limits

Analyte	Mass	Out of Limits Message
B	10	Q
Cr	53	Q
Zn	67	Q
Se	77	Q

FC 4/28/05

File 042805mz

Sample/Batch Report

STL ST. LOUIS - PERKIN ELMER ELAN 6100 - METHOD 6020 / 200.8 QUANTITATIVE ANALYSIS REP

User Name: stlmetals
Computer Name: SLICP03
Sample File: D:\Elandata\Sample\SW846 TEMP.sam
Report Date/Time: Thursday, April 28, 2005 19:38:20
Method File: d:\Elandata\Method\epa temp.mth
Tuning File: d:\Elandata\Tuning\epa tuning.tun
Optimization File: d:\Elandata\Optimize\EPA.dac
Calibration File:
Calibration Type: External Calibration
Number of Replicates: 3
Number of Readings: 1
Number of Sweeps: 10
Dual Detector Mode: Dual

M30428mz

A/S Loc.	Batch ID	Sample ID	Description	Aliquot Vol.	Diluted Vol.
158		ICSA			
7		CCV			
1		CCB			
24	5115187	G8WP7	20X		
25	5115187	G8WP7S	20X		
26	5115187	G8WP7D	20X		
27	5115187	G8WP7S L	20X		
28	5115187	G8WP7V	100X		
29	5115187	G8WQL	20X		
30	5115187	G8WQN	20X		
31	5115187	G8WQR	10X		
32	5115187	G8WQ[illegible]	[illegible]		
33	5115187	G8WR8	20X		
34	5115187	G8WTA	25X		
35	5115187	G8WTE	10X		
36	5115187	G8WTG	10X		
37	5115187	G8WTR	25X		
38	5115187	G8WTV	10X		
39	5115187	G8WTW	10X		
40	5115187	G8WTX	50X		
41	5115187	G8WT0	100X		
42	5115187	G8WT1	10X		
43	5115187	G817C	50X		
44	5115187	G817CS	50X		
45	5115187	G817CD	50X		
46	5115187	G817D	10X		
47	5115187	G817E	10X		
48	5115187	G817F	10X		
49	5115187	G817G	10X		
50	5115187	G8W[illegible]	50X		
51	5115187	G8WQT	200X		

Report Pb

Quantitative Analysis Calibration Report

File Name: 042805M2.cal
File Path: D:\Elandata\System
Calibration Type: External Calibration

Analyte	Mass	Curve Type	Slope	Intercept	Corr. Coeff.
Na	22.990	Linear Thru Zero	0.008702	0.00	0.999998
Mg	23.985	Linear Thru Zero	0.005834	0.00	0.999998
Al	26.982	Linear Thru Zero	0.008835	0.00	0.999998
K	38.964	Linear Thru Zero	0.015638	0.00	0.999993
Ca	43.956	Linear Thru Zero	0.000522	0.00	0.999925
Sc-1	44.956	Linear Thru Zero	0.000000	0.00	0.000000
Fe	56.935	Linear Thru Zero	0.000643	0.00	0.999994
Cu	64.928	Linear Thru Zero	0.005807	0.00	0.999979
Zn	65.926	Linear Thru Zero	0.003237	0.00	0.999977
Ho-1	164.930	Linear Thru Zero	0.000000	0.00	0.000000
Pb	207.977	Linear Thru Zero	0.020094	0.00	0.999921
Sc-2	44.956	Linear Thru Zero	0.000000	0.00	0.000000
Fe	53.940	Linear Thru Zero	0.001450	0.00	0.999969
Cu	62.930	Linear Thru Zero	0.011969	0.00	0.999987
Zn	66.927	Linear Thru Zero	0.000577	0.00	0.999597
Ho-2	164.930	Linear Thru Zero	0.000000	0.00	0.000000
Pb	205.975	Linear Thru Zero	0.005175	0.00	0.999957
Pb	206.976	Linear Thru Zero	0.004366	0.00	0.999976

Instrument Tuning Report

File Name: EPA TUNING.tun
File Path: d:\Elandata\Tuning
Sample ID: daily check
Sample Date/Time: Thursday, April 28, 2005 09:31:07

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
He	3.016	3.025	596	2079	0.648	
Mg	23.985	23.979	5675	2073	0.731	
Rh	102.905	102.879	24907	2066	0.720	
Ce	139.905	139.928	33933	2109	0.687	
Pb	207.977	207.975	50396	2284	0.717	

Replicates: 6

Meas. Intens. RSD	Mass
0.978	2.000
0.597	3.000
16.220	4.000
38.045	5.000
35.802	22.000
17.584	23.000
3.794	24.000
3.058	25.000
1.728	26.000
3.777	102.000
0.724	103.000
9.931	104.000
4.527	139.000
0.147	140.000
6.701	141.000
1.886	206.000
1.248	207.000
1.261	208.000
2.022	209.000

Report Date/Time: Thursday, April 28, 2005 09:32:21

Daily Performance Report

Sample ID: daily check
Sample Date/Time: Thursday, April 28, 2005 09:46:50
Sample Description:
Method File: d:\Elandata\Method\DAILY EPA.mth
Dataset File: d:\Elandata\Dataset\DAILY PEFORMANCE EPA\daily check.179
Tuning File: d:\Elandata\Tuning\EPA TUNING.tun
Optimization File: d:\Elandata\Optimize\EPA.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24.0	50291.7	50291.650	383.821	0.8
	Rh	102.9	394538.9	394538.940	2106.192	0.5
	Pb	208.0	281628.1	281628.098	2181.499	0.8
[>	Ba	137.9	386520.5	386520.542	1939.602	0.5
[	Ba++	69.0	5198.2	0.013	0.000	0.7
[>	Ce	139.9	468422.7	468422.710	4908.856	1.0
[	CeO	155.9	12219.7	0.026	0.001	2.1
	Bkgd	220.0	8.7	8.667	1.033	11.9

Current Optimization File Data

Current Value	Description
0.88	Nebulizer Gas Flow
8.75	Lens Voltage
1200.00	ICP RF Power
-2200.00	Analog Stage Voltage
1400.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-13.50	AC Rod Offset
60.00	Service DAC 1
0.00	Quadrupole Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	25	7.0	2702.3
Mg	24	25	4.5	64627.9
Co	59	25	5.8	182180.3
Rh	103	25	6.3	413168.3
In	115	25	7.0	463803.9
Ba	138	25	6.5	414292.5
Ce	140	25	7.0	483511.2
Pb	208	25	8.5	293571.8

QUANTITATIVE ANALYSIS REPORT

Sample ID: Blank
Sample Date/Time: Thursday, April 28, 2005 17:03:09
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042805M2\Blank.001

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na			9414.862	ug/L	
	24	Mg			774.696	ug/L	
	27	Al			3869.229	ug/L	
	39	K			625151.110	ug/L	
	44	Ca			33502.246	ug/L	
>	45	Sc-1			433946.682	ug/L	
	57	Fe			8492.631	ug/L	
	65	Cu			138.335	ug/L	
	66	Zn			1347.077	ug/L	
>	165	Ho-1			1663008.415	ug/L	
	208	Pb			11185.834	ug/L	
>	45	Sc-2			433946.682	ug/L	
	54	Fe			52661.795	ug/L	
	63	Cu			260.672	ug/L	
	67	Zn			3074.697	ug/L	
>	165	Ho-2			1663008.415	ug/L	
	206	Pb			2859.649	ug/L	
	207	Pb			2404.894	ug/L	

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45		
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165		
	Pb	208		
>	Sc-2	45		
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165		
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: Standard 1
Sample Date/Time: Thursday, April 28, 2005 17:06:18
Autosampler Position: 2
Dataset File: D:\Elandata\Dataset\042805M2\Standard 1.002

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Mass. Intens. Mean	Sample Unit	Blank Intensity
	23	Na			28044.807	ug/L	9414.862
	24	Mg			3245.401	ug/L	774.895
	27	Al			9722.076	ug/L	3868.229
	39	K			623449.340	ug/L	625151.110
	44	Ca			37481.486	ug/L	33502.246
>	45	Sc-1			428973.626	ug/L	433946.682
	57	Fe			8715.536	ug/L	8492.831
	65	Cu	20.000000	1.197	52994.312	ug/L	138.335
	66	Zn	20.000000	2.357	30814.506	ug/L	1347.077
>	165	Ho-1			1611279.609	ug/L	1653008.415
	208	Pb	20.000000	0.685	560845.822	ug/L	11186.834
>	45	Sc-2			428973.626	ug/L	433946.682
	54	Fe			55713.395	ug/L	52661.795
	63	Cu	20.000000	2.431	107659.895	ug/L	260.672
	67	Zn	20.000000	2.747	9069.638	ug/L	3074.697
>	165	Ho-2			1611279.609	ug/L	1653008.415
	206	Pb	20.000000	2.463	176882.433	ug/L	2859.649
	207	Pb	20.000000	1.399	147713.621	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45		
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165		
	Pb	208		
>	Sc-2	45		
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165		
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: Standard 2
Sample Date/Time: Thursday, April 28, 2005 17:09:28
Autosampler Position: 3
Dataset File: D:\Elandata\Dataset\042805M2\Standard 2.003

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na			48841.208	ug/L	9414.862
	24	Mg			5444.092	ug/L	774.595
	27	Al			5481.774	ug/L	3869.229
	39	K			623937.027	ug/L	625161.110
	44	Ca			39959.885	ug/L	33502.246
>	45	Sc-1			446454.488	ug/L	433946.682
	57	Fe			9293.727	ug/L	8492.631
	65	Cu	49.574996	1.036	130247.369	ug/L	138.335
	66	Zn	49.490329	1.723	73136.827	ug/L	1347.077
>	165	Ho-1			1619196.327	ug/L	1653008.415
	208	Pb	49.972707	1.689	1712138.329	ug/L	11185.834
>	45	Sc-2			446454.488	ug/L	433946.682
	54	Fe			58679.679	ug/L	52661.795
	63	Cu	49.682833	1.773	268660.667	ug/L	260.872
	67	Zn	49.007926	1.332	16937.206	ug/L	3074.697
>	165	Ho-2			1619196.327	ug/L	1653008.415
	206	Pb	49.924826	2.360	435348.421	ug/L	2859.649
	207	Pb	49.938711	0.746	384341.445	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45		
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165		
	Pb	208		
>	Sc-2	45		
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165		
	Pb	208		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: Standard 3
Sample Date/Time: Thursday, April 28, 2005 17:12:39
Autosampler Position: 4
Dataset File: D:\Elandata\Dataset\042805M2\Standard 3.004

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	500.000000	1.509	1851254.239	ug/L	9414.862
	24	Mg	250.000000	2.106	626237.039	ug/L	774.696
	27	Al	500.000000	2.217	1890833.794	ug/L	3869.229
	39	K	500.000000	2.304	3904918.248	ug/L	625151.110
	44	Ca	250.000000	1.448	104009.633	ug/L	33502.246
>	45	Sc-1			441678.299	ug/L	433946.682
	57	Fe	500.000000	2.247	143249.192	ug/L	8492.631
	65	Cu	199.820543	1.703	512575.813	ug/L	138.335
	66	Zn	199.951416	2.448	287164.064	ug/L	1347.077
>	165	Ho-1			1648147.737	ug/L	1653008.415
	206	Pb	199.335258	0.414	6604586.576	ug/L	11186.834
>	45	Sc-2			441678.299	ug/L	433946.682
	54	Fe	500.000000	0.882	387343.262	ug/L	52681.796
	63	Cu	199.848256	2.028	1056853.831	ug/L	280.672
	67	Zn	198.671799	2.139	53724.375	ug/L	3074.697
>	165	Ho-2			1648147.737	ug/L	1653008.415
	206	Pb	199.504531	1.554	1702803.564	ug/L	2858.649
	207	Pb	199.632495	0.592	1437320.823	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45		
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165		
	Pb	206		
>	Sc-2	45		
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165		
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: Standard 4
Sample Date/Time: Thursday, April 28, 2005 17:15:52
Autosampler Position: 5
Dataset File: D:\Elandata\Dataset\042805M2\Standard 4.005

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌈	23	Na	2004.650216	1.637	7697688.619	ug/L	9414.862
|	24	Mg	1002.114617	1.461	2602085.614	ug/L	774.695
|	27	Al	2003.372688	2.004	7791968.257	ug/L	3869.229
|	39	K	2004.812984	1.804	14302062.833	ug/L	625151.110
|	44	Ca	989.726779	3.492	272460.168	ug/L	33502.246
\>	45	Sc-1			442790.205	ug/L	433946.682
|	57	Fe	2004.770607	1.014	571179.949	ug/L	8492.631
|	65	Cu	0.049688	36.496	268.672	ug/L	138.335
⌊	66	Zn	1.060110	5.524	2878.986	ug/L	1347.077
⌈>	165	Ho-1			1642097.779	ug/L	1653008.415
⌊	208	Pb	0.150833	11.529	16088.676	ug/L	11165.834
⌈>	45	Sc-2			442790.205	ug/L	433946.682
|	54	Fe	1999.536221	0.835	1386728.338	ug/L	52861.795
|	63	Cu	0.078332	12.133	661.356	ug/L	260.672
⌊	67	Zn	10.204973	20.580	5740.216	ug/L	3074.697
⌈>	165	Ho-2			1642097.779	ug/L	1653008.415
|	208	Pb	0.164366	11.718	4152.846	ug/L	2859.649
⌊	207	Pb	0.166377	6.995	3531.805	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Na	23		
|	Mg	24		
|	Al	27		
|	K	39		
|	Ca	44		
\>	Sc-1	45		
|	Fe	57		
|	Cu	65		
⌊	Zn	66		
⌈>	Ho-1	165		
⌊	Pb	208		
⌈>	Sc-2	45		
|	Fe	54		
|	Cu	63		
⌊	Zn	67		
⌈>	Ho-2	165		
|	Pb	208		
⌊	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: Standard 6
Sample Date/Time: Thursday, April 28, 2005 17:19:05
Autosampler Position: 6
Dataset File: D:\Elandata\Dataset\042805M2\Standard 6.006

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌈	23	Na	10001.932906	2.439	37839713.093	ug/L	9414.882
|	24	Mg	4998.939464	2.146	12677400.950	ug/L	774.695
|	27	Al	10002.646097	2.948	38412118.463	ug/L	3869.229
|	39	K	10006.645722	1.749	68657329.085	ug/L	625151.110
|	44	Ca	4991.044634	3.398	1165403.774	ug/L	33502.246
|>	45	Sc-1			434921.227	ug/L	433946.682
|	57	Fe	10006.311497	1.481	2807088.852	ug/L	8492.631
|	65	Cu	0.095869	13.322	379.342	ug/L	138.335
⌊	66	Zn	1.348439	6.274	3247.068	ug/L	1347.077
⌈>	165	Ho-1			1634070.865	ug/L	1653008.416
⌊	208	Pb	0.146864	16.818	15848.618	ug/L	11186.834
⌈>	45	Sc-2			434921.227	ug/L	433946.682
|	54	Fe	9983.842006	2.170	6348311.962	ug/L	52661.795
|	63	Cu	0.231295	5.484	1463.756	ug/L	260.672
⌊	67	Zn	17.588591	14.446	7506.400	ug/L	3074.697
⌈>	165	Ho-2			1634070.865	ug/L	1653008.415
|	206	Pb	0.147973	19.038	4077.624	ug/L	2869.649
⌊	207	Pb	0.136868	12.087	3353.427	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Na	23		
|	Mg	24		
|	Al	27		
|	K	39		
|	Ca	44		
|>	Sc-1	45		
|	Fe	57		
|	Cu	65		
⌊	Zn	66		
⌈>	Ho-1	165		
⌊	Pb	208		
⌈>	Sc-2	45		
|	Fe	54		
|	Cu	63		
⌊	Zn	67		
⌈>	Ho-2	165		
|	Pb	206		
⌊	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Thursday, April 28, 2005 17:22:19
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042805MZ\QC Std 1.007

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	1904.916168	2.528	7678531.590	ug/L	9414.862
	24	Mg	985.443643	5.512	2659487.519	ug/L	774.695
	27	Al	1933.660686	3.848	7907671.319	ug/L	3869.229
	39	K	1915.846228	3.044	14525504.530	ug/L	625151.110
	44	Ca	1030.352612	1.374	284502.356	ug/L	33502.246
>	45	Sc-1			462783.534	ug/L	433946.682
	57	Fe	1891.815381	3.030	572043.324	ug/L	8492.631
	65	Cu	189.364344	3.056	508764.109	ug/L	138.335
	66	Zn	189.903254	2.139	285804.526	ug/L	1347.077
>	165	Ho-1			1657828.008	ug/L	1653008.415
	208	Pb	198.232889	2.211	6812700.173	ug/L	11185.634
>	45	Sc-2			462783.534	ug/L	433946.682
	54	Fe	1969.783164	3.326	1391379.831	ug/L	52661.795
	63	Cu	191.894250	3.498	1062827.915	ug/L	260.672
	67	Zn	192.848563	3.669	54717.816	ug/L	3074.697
>	165	Ho-2			1657828.008	ug/L	1653008.415
	208	Pb	193.842827	1.127	1665801.617	ug/L	2859.649
	207	Pb	199.249683	2.464	1444244.444	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		96.246
	Mg	24		98.844
	Al	27		96.678
	K	39		98.777
	Ca	44		100.936
>	Sc-1	45	100.845	
	Fe	57		94.691
	Cu	65		94.677
	Zn	66		94.992
>	Ho-1	165	100.282	
	Pb	208		98.118
>	Sc-2	45	100.845	
	Fe	54		99.459
	Cu	63		99.947
	Zn	67		99.424
>	Ho-2	165	100.282	
	Pb	208		96.921
	Pb	207		99.626

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Thursday, April 28, 2005 17:26:30
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042805M2\QC Std 2.008

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	0.352278	29.271	11052.053	ug/L	9414.862
	24	Mg	0.037469	77.821	894.370	ug/L	774.695
	27	Al	0.107229	32.159	4402.723	ug/L	3869.229
	39	K	1.883413	171.883	653822.774	ug/L	825161.110
	44	Ca	8.813074	31.322	38522.005	ug/L	33502.246
>	45	Sc-1			445476.079	ug/L	433946.882
	57	Fe	3.772291	35.034	9818.158	ug/L	8492.631
	65	Cu	0.001968	188.437	147.336	ug/L	138.335
	66	Zn	-0.014333	243.321	1364.746	ug/L	1347.077
>	166	Ho-1			1639631.606	ug/L	1653008.415
	208	Pb	0.010197	295.770	11439.266	ug/L	11185.834
>	45	Sc-2			446476.079	ug/L	433946.882
	54	Fe	3.036936	102.019	56141.783	ug/L	52661.795
	63	Cu	-0.004057	87.732	246.338	ug/L	260.572
	67	Zn	6.357919	29.288	4803.529	ug/L	3074.897
>	165	Ho-2			1639631.606	ug/L	1653008.415
	206	Pb	0.010093	287.369	2923.997	ug/L	2859.649
	207	Pb	0.003243	1022.296	2410.562	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		0.352
	Mg	24		0.037
	Al	27		0.107
	K	39		1.883
	Ca	44		8.813
>	Sc-1	45	102.597	
	Fe	57		3.772
	Cu	65		0.197
	Zn	66		-1.433
>	Ho-1	166	99.191	
	Pb	208		1.028
>	Sc-2	45	102.597	
	Fe	54		3.037
	Cu	63		-0.406
	Zn	67		636.792
>	Ho-2	165	99.191	
	Pb	206		1.000
	Pb	207		0.324

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Zn	67	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 3
Sample Date/Time: Thursday, April 28, 2005 17:30:41
Autosampler Position: 160
Dataset File: D:\Elandata\Dataset\042805M2\QC Std 3.009

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	4768.859819	6.632	19250907.972	ug/L	9414.862
	24	Mg	4833.368217	7.268	13071494.809	ug/L	774.695
	27	Al	203.994773	8.514	839257.336	ug/L	3889.229
	39	K	4819.786123	7.377	35606244.901	ug/L	625151.110
	44	Ca	4716.199699	6.902	1176811.883	ug/L	33502.246
>	45	Sc-1			464639.789	ug/L	433946.682
	57	Fe	94.028718	4.463	37157.028	ug/L	8492.631
	65	Cu	24.069304	5.879	64964.037	ug/L	138.335
	66	Zn	21.111008	5.713	33131.708	ug/L	1347.077
>	165	Ho-1			1705688.179	ug/L	1653008.415
	208	Pb	3.002878	3.821	114440.658	ug/L	11185.834
>	45	Sc-2			464639.789	ug/L	433946.682
	54	Fe	120.714866	4.563	137632.900	ug/L	52661.795
	63	Cu	24.401302	6.096	135747.284	ug/L	260.672
	67	Zn	32.737947	12.376	12030.190	ug/L	3074.897
>	165	Ho-2			1705688.179	ug/L	1653008.415
	206	Pb	3.003910	4.002	29460.989	ug/L	2859.649
	207	Pb	3.010919	4.876	24901.288	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		95.377
	Mg	24		96.667
	Al	27		101.697
	K	39		96.396
	Ca	44		94.334
>	Sc-1	45	107.073	
	Fe	57		94.029
	Cu	65		96.277
	Zn	66		105.595
>	Ho-1	165	103.197	
	Pb	208		108.096
>	Sc-2	45	107.073	
	Fe	54		120.715
	Cu	63		97.696
	Zn	67		103.699
>	Ho-2	165	103.197	
	Pb	206		100.139
	Pb	207		100.364

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Zn	67	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 5
Sample Date/Time: Thursday, April 28, 2005 17:34:52
Autosampler Position: 159
Dataset File: D:\Elandata\Dataset\042805M2\QC Std 5.010

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	1928.544140	2.426	7153582.086	ug/L	9414.882
	24	Mg	50893.007363	3.004	126367715.850	ug/L	774.695
	27	Al	51623.594861	3.549	193787593.734	ug/L	3869.229
	39	K	1969.196128	3.577	13722540.300	ug/L	625151.110
	44	Ca	50119.333606	3.958	11168050.135	ug/L	33502.246
>	45	Sc-1			425819.458	ug/L	433946.682
	57	Fe	19293.638116	4.810	5290501.619	ug/L	8492.631
	65	Cu	48.927219	1.383	116177.512	ug/L	136.335
	66	Zn	100.346849	1.832	139606.317	ug/L	1347.077
>	165	Ho-1			1603615.949	ug/L	1653008.415
	208	Pb	96.695469	2.480	3197551.257	ug/L	11185.634
>	45	Sc-2			425819.458	ug/L	433946.682
	54	Fe	19314.336126	4.462	11977440.796	ug/L	52661.795
	63	Cu	47.199088	1.487	240628.079	ug/L	260.672
	67	Zn	106.667535	6.186	29192.456	ug/L	3074.697
>	165	Ho-2			1603615.949	ug/L	1653008.415
	206	Pb	96.113810	1.220	817063.911	ug/L	2859.649
	207	Pb	100.427576	4.319	705646.887	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		96.427
	Mg	24		101.786
	Al	27		103.847
	K	39		98.466
	Ca	44		100.239
>	Sc-1	45	98.127	
	Fe	57		96.466
	Cu	65		93.884
	Zn	66		105.347
>	Ho-1	165	97.012	
	Pb	208		96.695
>	Sc-2	45	98.127	
	Fe	54		96.572
	Cu	63		94.336
	Zn	67		106.668
>	Ho-2	165	97.012	
	Pb	206		96.114
	Pb	207		100.428

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: ICSA
Sample Date/Time: Thursday, April 28, 2005 17:39:02
Autosampler Position: 158
Dataset File: D:\Elandata\Dataset\042805M2\ICSA.011

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌈	23	Na	7.903661	4.128	38572.406	ug/L	9414.862
|	24	Mg	50686.166675	4.568	125567944.475	ug/L	774.686
|	27	Al	51633.459690	4.901	194414813.620	ug/L	3869.229
|	39	K	-2.100969	78.768	600233.987	ug/L	625151.110
|	44	Ca	51385.103675	3.858	11463374.789	ug/L	33502.246
|>	45	Sc-1			426486.635	ug/L	433946.662
|	57	Fe	19841.573328	3.529	5394065.965	ug/L	8492.631
|	65	Cu	0.228204	2.430	696.024	ug/L	138.335
⌊	66	Zn	1.991015	2.935	4058.284	ug/L	1347.077
⌈>	165	Ho-1			1639426.276	ug/L	1663006.415
⌊	208	Pb	0.588389	7.833	29799.103	ug/L	11186.834
⌈>	45	Sc-2			426486.635	ug/L	433946.662
|	54	Fe	20161.331129	4.617	12517866.491	ug/L	52661.795
|	63	Cu	0.131983	6.548	930.373	ug/L	260.672
⌊	67	Zn	17.203967	22.311	7242.925	ug/L	3074.697
⌈>	165	Ho-2			1639426.276	ug/L	1663006.415
|	206	Pb	0.588218	7.403	7822.554	ug/L	2859.649
⌊	207	Pb	0.546597	8.745	6293.460	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Na	23		
|	Mg	24		
|	Al	27		
|	K	39		
|	Ca	44		
|>	Sc-1	45	98.281	
|	Fe	57		
|	Cu	65		
⌊	Zn	66		
⌈>	Ho-1	165	98.178	
⌊	Pb	208		
⌈>	Sc-2	45	98.281	
|	Fe	54		
|	Cu	63		
⌊	Zn	67		
⌈>	Ho-2	165	98.178	
|	Pb	206		
⌊	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Al	27	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: CCV
Sample Date/Time: Thursday, April 28, 2005 17:42:14
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042805M2\CCV.012

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	1921.135160	1.866	7540621.500	ug/L	9414.862
	24	Mg	991.677648	5.216	2604822.269	ug/L	774.695
	27	Al	1990.428466	5.183	7919737.156	ug/L	3869.229
	39	K	1970.623812	3.518	14526710.167	ug/L	625151.110
	44	Ca	1047.819404	5.273	280906.945	ug/L	33502.248
>	45	Sc-1			450886.356	ug/L	433946.682
	57	Fe	1932.215277	3.240	558577.364	ug/L	8492.631
	65	Cu	199.052814	5.224	520576.220	ug/L	138.335
	66	Zn	196.999430	4.462	268511.762	ug/L	1347.077
>	165	Ho-1			1678693.232	ug/L	1653008.415
	208	Pb	194.864446	2.646	6560858.065	ug/L	11185.834
>	45	Sc-2			450886.356	ug/L	433946.682
	54	Fe	2038.375245	4.999	1386823.686	ug/L	52661.795
	63	Cu	194.125573	3.862	1046530.968	ug/L	260.672
	67	Zn	198.446391	2.330	54739.902	ug/L	3074.697
>	165	Ho-2			1678693.232	ug/L	1653008.415
	208	Pb	194.488323	3.646	1691452.661	ug/L	2859.649
	207	Pb	196.272357	3.092	1432927.634	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	103.888	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	101.654	
	Pb	208		
>	Sc-2	45	103.888	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	101.654	
	Pb	208		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: CCB
Sample Date/Time: Thursday, April 28, 2005 17:45:26
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042805M2\CCB.013

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	0.209613	7.048	10687.103	ug/L	9414.862
	24	Mg	0.278504	5.501	1549.766	ug/L	774.695
	27	Al	0.280701	16.793	5179.992	ug/L	3869.229
	39	K	-3.972048	28.315	626346.929	ug/L	625151.110
	44	Ca	6.192038	57.745	36542.714	ug/L	33502.246
>	45	Sc-1			454401.539	ug/L	433946.682
	57	Fe	5.251043	9.349	10428.886	ug/L	8492.631
	65	Cu	0.005151	126.231	158.669	ug/L	138.335
	66	Zn	-0.003442	373.287	1405.417	ug/L	1347.077
>	165	Ho-1			1645049.379	ug/L	1653008.415
	208	Pb	0.036978	48.786	12321.206	ug/L	11185.834
>	45	Sc-2			454401.539	ug/L	433946.682
	54	Fe	2.400046	110.854	56734.438	ug/L	52661.795
	63	Cu	0.001584	201.379	281.672	ug/L	280.672
	67	Zn	8.302229	25.811	5391.410	ug/L	3074.897
>	165	Ho-2			1645049.379	ug/L	1653008.415
	206	Pb	0.040961	36.837	3194.723	ug/L	2859.849
	207	Pb	0.031175	91.084	2617.267	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	104.714	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	99.519	
	Pb	208		
>	Sc-2	45	104.714	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	99.519	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WP7
Sample Date/Time: Thursday, April 28, 2005 17:48:34
Autosampler Position: 24
Dataset File: D:\Elandata\Dataset\042805M2\G8WP7.014

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	1981.256236	3.448	8362167.661	ug/L	9414.862
	24	Mg	1430.130015	5.721	4050540.262	ug/L	774.695
	27	Al	7260.148202	3.486	31161751.303	ug/L	3869.229
	39	K	1796.057781	4.209	14351645.871	ug/L	625151.110
	44	Ca	17375.458999	3.911	4439764.158	ug/L	33602.246
>	45	Sc-1			485831.837	ug/L	433946.662
	57	Fe	27716.735750	2.502	8667320.883	ug/L	8492.831
	65	Cu	620.484901	2.667	1749899.730	ug/L	138.335
	66	Zn	2994.137322	4.313	4706490.324	ug/L	1347.077
>	165	Ho-1			1675952.641	ug/L	1653008.415
	208	Pb	1273.276440	1.185	42887446.209	ug/L	11185.834
>	45	Sc-2			485831.837	ug/L	433946.662
	54	Fe	27913.964823	3.782	19718628.668	ug/L	52661.795
	63	Cu	842.513290	2.958	3735136.203	ug/L	260.672
	67	Zn	2467.974835	2.550	700245.073	ug/L	3074.697
>	165	Ho-2			1675952.641	ug/L	1653008.415
	206	Pb	1289.403048	0.609	10927937.830	ug/L	2859.649
	207	Pb	1288.548894	1.115	9213627.816	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	111.967	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	101.388	
	Pb	208		
>	Sc-2	45	111.967	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	101.388	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WP7S
Sample Date/Time: Thursday, April 28, 2005 17:51:42
Autosampler Position: 25
Dataset File: D:\Elandata\Dataset\042805M2\G8WP7S.015

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	4429.837466	1.073	18724244.517	ug/L	9414.862
	24	Mg	3895.577464	0.222	10468140.063	ug/L	774.695
	27	Al	9674.016036	1.319	41498859.964	ug/L	3869.229
	39	K	3587.596251	2.932	27934740.402	ug/L	625151.110
	44	Ca	18793.846862	0.620	4798996.106	ug/L	33602.248
>	45	Sc-1			485526.436	ug/L	433946.682
	57	Fe	20606.312615	2.619	8443455.192	ug/L	8492.631
	65	Cu	1729.143968	2.774	4574381.328	ug/L	136.335
	66	Zn	2494.552676	1.946	3821697.896	ug/L	1347.077
>	165	Ho-1			1692512.194	ug/L	1653008.415
	208	Pb	2408.066602	0.669	81903879.838	ug/L	11185.634
>	45	Sc-2			485526.436	ug/L	433946.682
	54	Fe	20953.702192	2.758	14815036.732	ug/L	52661.795
	63	Cu	1646.676141	3.639	9567826.676	ug/L	280.672
	67	Zn	2047.160193	2.350	576534.732	ug/L	3074.697
>	165	Ho-2			1692512.194	ug/L	1653008.415
	206	Pb	2346.629647	1.348	20568244.040	ug/L	2859.649
	207	Pb	2393.867826	1.069	17892912.843	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	111.886	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	102.360	
	Pb	208		
>	Sc-2	45	111.886	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	102.360	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WP7D
Sample Date/Time: Thursday, April 28, 2005 17:54:50
Autosampler Position: 26
Dataset File: D:\Elandata\Dataset\042805M2\G8WP7D.016

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	2970.041797	1.101	12467385.819	ug/L	9414.862
	24	Mg	2341.277613	1.468	8584028.129	ug/L	774.695
	27	Al	5363.806795	0.523	22802984.180	ug/L	3869.229
	39	K	2472.789296	3.227	19332733.456	ug/L	625151.110
	44	Ca	24386.306461	0.312	6163240.906	ug/L	33502.246
>	45	Sc-1			481996.091	ug/L	433946.682
	57	Fe	21820.397404	0.283	6774325.280	ug/L	8492.531
	65	Cu	823.892228	0.245	2305232.467	ug/L	138.335
	66	Zn	1157.391892	1.361	1807044.811	ug/L	1347.077
>	165	Ho-1			1667985.015	ug/L	1653008.415
	208	Pb	806.417146	1.784	26872863.277	ug/L	11165.834
>	45	Sc-2			481996.091	ug/L	433946.682
	54	Fe	22126.526883	0.967	15528032.874	ug/L	52661.795
	63	Cu	790.466654	1.019	4560479.435	ug/L	260.672
	67	Zn	1038.677280	1.820	292106.942	ug/L	3074.697
>	165	Ho-2			1667985.015	ug/L	1653008.415
	206	Pb	806.087317	2.673	6936099.876	ug/L	2859.849
	207	Pb	801.111574	2.859	5800542.058	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	111.073	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	100.301	
	Pb	208		
>	Sc-2	45	111.073	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	100.301	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WP7S LL
Sample Date/Time: Thursday, April 28, 2005 17:57:59
Autosampler Position: 27
Dataset File: D:\Elandata\Dataset\042805M2\G8WP7S LL.017

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	2278.316428	4.378	9674175.167	ug/L	9414.862
	24	Mg	1891.061805	4.224	5378545.325	ug/L	774.695
	27	Al	10618.178519	4.695	45730014.719	ug/L	3869.229
	39	K	2030.079685	5.042	16176022.599	ug/L	625151.110
	44	Ca	21152.463249	4.910	5420036.293	ug/L	33502.246
>	45	Sc-1			487793.942	ug/L	433946.682
	57	Fe	37167.614843	4.656	11658083.472	ug/L	8492.631
	65	Cu	3021.590344	5.108	8651481.244	ug/L	138.335
	66	Zn	3630.880254	4.802	5729516.396	ug/L	1347.077
>	165	Ho-1			1661061.783	ug/L	1653008.415
	208	Pb	1473.898996	2.519	48192754.494	ug/L	11165.834
>	45	Sc-2			487793.942	ug/L	433946.682
	54	Fe	38976.021673	2.727	27624041.038	ug/L	52661.795
	63	Cu	2910.959394	5.471	16960232.708	ug/L	260.672
	67	Zn	2986.704646	4.686	842948.414	ug/L	3074.697
>	165	Ho-2			1661061.783	ug/L	1653008.415
	206	Pb	1457.432794	2.539	12528800.927	ug/L	2859.649
	207	Pb	1469.342663	3.261	10582243.169	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	112.409	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	100.488	
	Pb	208		
>	Sc-2	45	112.409	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	100.488	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WP7V
Sample Date/Time: Thursday, April 28, 2005 18:01:08
Autosampler Position: 28
Dataset File: D:\Elandata\Dataset\042805M2\G8WP7V.018

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	395.816279	0.842	1771696.189	ug/L	9414.662
	24	Mg	292.291947	1.136	872364.305	ug/L	774.695
	27	Al	1464.578363	1.948	6617246.163	ug/L	3869.229
	39	K	369.843931	1.662	3892393.743	ug/L	625151.110
	44	Ca	3465.019686	0.827	950664.096	ug/L	33502.246
>	45	Sc-1			511136.124	ug/L	433946.662
	57	Fe	5248.223106	1.436	1736348.626	ug/L	8492.631
	65	Cu	129.628792	1.737	384904.510	ug/L	138.335
	66	Zn	646.287985	0.837	905371.184	ug/L	1347.077
>	165	Ho-1			1652008.481	ug/L	1653008.415
	208	Pb	258.884674	0.433	8605057.510	ug/L	11185.834
>	45	Sc-2			511136.124	ug/L	433946.662
	54	Fe	5649.542747	3.540	4175336.741	ug/L	52661.795
	63	Cu	129.857113	2.144	794606.592	ug/L	260.672
	67	Zn	477.675045	0.992	144406.638	ug/L	3074.697
>	165	Ho-2			1652008.481	ug/L	1653008.415
	206	Pb	260.693192	1.149	2230782.827	ug/L	2859.849
	207	Pb	258.433814	0.641	1846016.852	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	117.798	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	99.940	
	Pb	208		
>	Sc-2	45	117.798	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	99.940	
	Pb	208		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WQL
Sample Date/Time: Thursday, April 28, 2005 18:04:18
Autosampler Position: 29
Dataset File: D:\Elandata\Dataset\042805M2\G8WQL.019

Sample Result Summary

Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
23	Na	785.359341	4.490	3184803.743	ug/L	9414.862
24	Mg	1124.102361	3.330	3048269.581	ug/L	774.695
27	Al	5326.518945	5.044	21863992.592	ug/L	3889.229
39	K	952.505574	4.919	7589878.808	ug/L	625151.110
44	Ca	10983.464905	4.486	2698687.734	ug/L	33502.246
45	Sc-1			465008.101	ug/L	433846.682
57	Fe	54328.880725	4.628	16242851.368	ug/L	8492.831
65	Cu	373.611868	7.872	1007338.121	ug/L	138.335
66	Zn	1170.709398	4.776	1761659.052	ug/L	1347.077
165	Ho-1			1609998.932	ug/L	1663008.415
208	Pb	2503.216980	6.807	80620250.806	ug/L	11185.834
45	Sc-2			465008.101	ug/L	433846.682
54	Fe	55871.102226	3.615	37577733.384	ug/L	52661.795
63	Cu	388.473706	6.266	2159536.033	ug/L	280.672
67	Zn	1090.019758	5.424	286255.271	ug/L	3074.697
165	Ho-2			1609998.932	ug/L	1663008.415
206	Pb	2433.782691	7.334	20236340.800	ug/L	2859.849
207	Pb	2467.243305	6.899	17309522.114	ug/L	2404.894

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Na	23		
Mg	24		
Al	27		
K	39		
Ca	44		
Sc-1	45	107.158	
Fe	57		
Cu	65		
Zn	66		
Ho-1	165	97.398	
Pb	208		
Sc-2	45	107.158	
Fe	54		
Cu	63		
Zn	67		
Ho-2	165	97.398	
Pb	206		
Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WQN
Sample Date/Time: Thursday, April 28, 2005 16:07:28
Autosampler Position: 30
Dataset File: D:\Elandata\Dataset\042805M2\G8WQN.020

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	1372.794489	3.387	5888622.412	ug/L	9414.862
	24	Mg	1072.831965	1.478	3061001.736	ug/L	774.695
	27	Al	5763.368316	2.143	25063127.960	ug/L	3869.229
	39	K	1386.710222	0.624	11375934.494	ug/L	825151.110
	44	Ca	10463.895806	1.606	2725704.105	ug/L	33502.246
>	45	Sc-1			492190.682	ug/L	433946.682
	57	Fe	26918.864117	1.351	8214295.742	ug/L	8492.631
	65	Cu	627.163757	2.479	1792559.684	ug/L	138.335
	66	Zn	1686.520896	1.291	2686309.684	ug/L	1347.077
>	165	Ho-1			1681756.297	ug/L	1663008.415
	208	Pb	2521.013084	1.325	85194147.910	ug/L	11185.834
>	45	Sc-2			492190.682	ug/L	433946.682
	54	Fe	28809.622952	3.060	19059149.333	ug/L	52681.795
	63	Cu	661.966861	1.344	3899722.415	ug/L	260.672
	67	Zn	1412.735514	1.671	404496.248	ug/L	3074.697
>	165	Ho-2			1681756.297	ug/L	1663008.415
	206	Pb	2447.032035	1.386	21296304.962	ug/L	2659.849
	207	Pb	2486.887862	2.289	18216136.061	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	113.422	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	101.739	
	Pb	208		
>	Sc-2	45	113.422	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	101.739	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Thursday, April 28, 2005 18:10:41
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042805M2\QC Std 1.021

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	1944.090302	3.914	7661961.387	ug/L	9414.862
	24	Mg	1011.809606	4.876	2576691.042	ug/L	774.695
	27	Al	2003.884357	6.217	8027184.199	ug/L	3869.229
	39	K	1980.883196	5.498	14480051.038	ug/L	625151.110
	44	Ca	1019.971862	6.201	276240.433	ug/L	33502.246
>	45	Sc-1			454025.817	ug/L	433946.682
	57	Fe	1943.900444	4.234	575989.024	ug/L	8492.631
	65	Cu	195.123346	5.465	513790.901	ug/L	138.335
	66	Zn	193.883677	4.012	285947.885	ug/L	1347.077
>	165	Ho-1			1661365.590	ug/L	1653006.415
	208	Pb	197.969978	1.686	6619856.113	ug/L	11185.834
>	45	Sc-2			454025.817	ug/L	433946.682
	54	Fe	2011.219197	4.219	1377957.550	ug/L	52661.795
	63	Cu	193.156190	5.651	1048214.119	ug/L	260.572
	67	Zn	196.870405	5.073	52069.571	ug/L	3074.697
>	165	Ho-2			1661365.590	ug/L	1653006.415
	206	Pb	193.528787	0.825	1656822.155	ug/L	2859.849
	207	Pb	199.704108	1.463	1450946.385	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		97.356
	Mg	24		101.191
	Al	27		100.194
	K	39		97.529
	Ca	44		101.997
>	Sc-1	45	104.627	
	Fe	57		97.195
	Cu	65		97.562
	Zn	66		96.932
>	Ho-1	165	100.509	
	Pb	208		99.996
>	Sc-2	45	104.627	
	Fe	54		100.591
	Cu	63		96.578
	Zn	67		93.436
>	Ho-2	165	100.509	
	Pb	206		99.764
	Pb	207		99.862

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Thursday, April 28, 2005 18:14:53
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042805M2\QC Std 2.022

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	0.213894	29.297	10574.427	ug/L	9414.862
	24	Mg	0.070331	30.906	995.711	ug/L	774.695
	27	Al	0.131888	48.972	4570.779	ug/L	3869.229
	39	K	3.489748	80.754	577430.892	ug/L	625151.110
	44	Ca	6.622869	73.017	36544.720	ug/L	33502.248
>	45	Sc-1			453285.495	ug/L	433946.682
	57	Fe	7.717332	14.092	11116.165	ug/L	8492.631
	65	Cu	0.001484	232.490	148.336	ug/L	138.335
	66	Zn	0.012814	292.186	1425.419	ug/L	1347.077
>	165	Ho-1			1637992.283	ug/L	1653008.415
	208	Pb	0.048736	60.213	12883.323	ug/L	11185.834
>	45	Sc-2			453285.495	ug/L	433946.682
	54	Fe	2.815120	173.000	58851.984	ug/L	52681.795
	63	Cu	0.008780	25.805	309.006	ug/L	280.672
	67	Zn	3.206091	59.069	4046.952	ug/L	3074.697
>	165	Ho-2			1637992.283	ug/L	1653008.415
	206	Pb	0.048221	58.564	3224.397	ug/L	2859.649
	207	Pb	0.068310	65.742	2798.837	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		0.214
	Mg	24		0.070
	Al	27		0.132
	K	39		3.490
	Ca	44		6.623
>	Sc-1	45	104.488	
	Fe	57		7.717
	Cu	65		0.149
	Zn	66		1.281
>	Ho-1	165	99.092	
	Pb	208		4.873
>	Sc-2	45	104.488	
	Fe	54		2.815
	Cu	63		0.878
	Zn	67		328.899
>	Ho-2	165	99.092	
	Pb	206		4.822
	Pb	207		6.831

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Zn	67	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WQR
Sample Date/Time: Thursday, April 28, 2005 18:19:02
Autosampler Position: 31
Dataset File: D:\Elandata\Dataset\042805M2\G8WQR.023

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	1587.270361	4.253	6633242.288	ug/L	9414.862
	24	Mg	2224.469048	3.108	6223471.967	ug/L	774.695
	27	Al	11097.728525	1.099	47037147.071	ug/L	3869.229
	39	K	2916.391054	4.059	15803167.260	ug/L	625151.110
	44	Ca	19706.969017	3.203	4968033.964	ug/L	33502.246
>	45	Sc-1			479776.741	ug/L	433946.682
	57	Fe	34462.477144	4.116	10536857.806	ug/L	8492.631
	65	Cu	1050.986587	4.486	2924837.909	ug/L	138.335
	66	Zn	3906.151611	4.340	6060771.722	ug/L	1347.077
>	165	Ho-1			1683741.737	ug/L	1663008.415
	208	Pb	2061.892794	3.543	89709078.248	ug/L	11185.834
>	45	Sc-2			479776.741	ug/L	433946.682
	54	Fe	36004.343246	3.396	25101214.205	ug/L	52661.795
	63	Cu	969.222480	3.741	5676935.051	ug/L	260.672
	67	Zn	3326.606143	5.847	922520.741	ug/L	3074.697
>	165	Ho-2			1683741.737	ug/L	1663008.415
	208	Pb	2035.288601	3.331	17724695.803	ug/L	2859.849
	207	Pb	2006.931070	3.559	14744158.599	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	110.591	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	101.359	
	Pb	208		
>	Sc-2	45	110.591	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	101.359	
	Pb	208		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WQT
Sample Date/Time: Thursday, April 28, 2005 18:22:14
Autosampler Position: 32
Dataset File: D:\Elandata\Dataset\D42805M2\G8WQT.024

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌈	23	Na	1036.648317	1.447	4323269.270	ug/L	9414.862
|	24	Mg	1288.461901	0.480	3615922.018	ug/L	774.695
|	27	Al	6428.934721	2.454	23072027.256	ug/L	3869.229
|	39	K	1114.997386	0.811	9079249.827	ug/L	625151.110
|	44	Ca	12686.513909	0.822	3213627.665	ug/L	33502.246
|>	45	Sc-1			480956.986	ug/L	433946.682
|	57	Fe	18231.341397	1.640	5849178.377	ug/L	8492.631
|	65	Cu	94248.451653	2.840	263194759.481	ug/L	138.335
⌊	66	Zn	4570.542294	3.185	7115747.411	ug/L	1347.077
⌈>	165	Ho-1			1698232.017	ug/L	1653008.415
⌊	208	Pb	863.137134	2.424	29455697.197	ug/L	11186.834
⌈>	45	Sc-2			480956.986	ug/L	433946.682
|	54	Fe	18184.626912	1.524	12743966.918	ug/L	52661.795
|	63	Cu	93263.230949	1.709	536800253.596	ug/L	280.672
⌊	67	Zn	3586.576648	0.857	997871.954	ug/L	3074.697
⌈>	165	Ho-2			1698232.017	ug/L	1653008.415
|	206	Pb	863.783033	1.852	7582606.935	ug/L	2869.649
⌊	207	Pb	859.551432	2.141	6374369.207	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Na	23		
|	Mg	24		
|	Al	27		
|	K	39		
|	Ca	44		
|>	Sc-1	45	110.833	
|	Fe	57		
|	Cu	65		
⌊	Zn	66		
⌈>	Ho-1	165	102.736	
⌊	Pb	208		
⌈>	Sc-2	45	110.833	
|	Fe	54		
|	Cu	63		
⌊	Zn	67		
⌈>	Ho-2	165	102.736	
|	Pb	206		
⌊	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cu	65	H
Cu	63	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WR6
Sample Date/Time: Thursday, April 28, 2005 18:25:25
Autosampler Position: 33
Dataset File: D:\Elandata\Dataset\042805M2\G8WR6.025

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	660.497162	3.891	2750983.107	ug/L	9414.882
	24	Mg	25423.353012	3.161	71807582.683	ug/L	774.695
	27	Al	5250.189986	2.592	22463650.995	ug/L	3869.229
	39	K	933.072096	3.612	7782161.593	ug/L	625151.110
	44	Ca	14307.993398	4.070	3652231.649	ug/L	33502.246
>	45	Sc-1			484293.041	ug/L	433946.682
	57	Fe	25984.124883	2.496	8070733.429	ug/L	8482.631
	65	Cu	525.818474	3.518	1478401.906	ug/L	138.335
	66	Zn	2271.156601	3.292	3580567.024	ug/L	1347.077
>	165	Ho-1			1654423.660	ug/L	1653008.415
	208	Pb	2416.490626	4.957	80287838.217	ug/L	11165.834
>	45	Sc-2			484293.041	ug/L	433946.682
	54	Fe	28909.869389	1.578	18959415.778	ug/L	52661.795
	63	Cu	554.312687	0.805	3213144.454	ug/L	260.672
	67	Zn	1863.974176	3.122	529856.177	ug/L	3074.897
>	165	Ho-2			1654423.660	ug/L	1653008.415
	206	Pb	2307.253804	3.297	19748796.886	ug/L	2859.649
	207	Pb	2437.634284	4.956	17899744.127	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	111.882	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	100.086	
	Pb	208		
>	Sc-2	45	111.882	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	100.086	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WTA
Sample Date/Time: Thursday, April 28, 2005 18:28:37
Autosampler Position: 34
Dataset File: D:\Elandata\Dataset\042805M2\G8WTA.026

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	1310.505793	1.665	5824310.302	ug/L	9414.862
	24	Mg	1018.881560	0.856	2927136.089	ug/L	774.695
	27	Al	5929.891838	2.990	25791778.941	ug/L	3869.229
	39	K	1297.820976	4.195	10004030.735	ug/L	625151.110
	44	Ca	10621.131656	3.231	2740499.014	ug/L	33502.246
>	45	Sc-1			492332.226	ug/L	433946.682
	57	Fe	18255.889978	4.488	5155667.468	ug/L	8492.531
	65	Cu	1247.234470	3.287	3665030.895	ug/L	138.335
	66	Zn	13432.806700	3.004	21401784.278	ug/L	1347.077
>	165	Ho-1			1680676.990	ug/L	1653008.415
	208	Pb	1304.297116	0.184	44059931.200	ug/L	11186.834
>	45	Sc-2			492332.226	ug/L	433946.682
	54	Fe	19084.875872	4.540	11542315.556	ug/L	52661.795
	63	Cu	1203.110736	4.206	7067687.591	ug/L	260.672
	67	Zn	11430.393423	2.365	3248119.360	ug/L	3074.697
>	165	Ho-2			1680676.990	ug/L	1653008.415
	206	Pb	1305.215813	1.223	11356810.854	ug/L	2859.849
	207	Pb	1294.639403	1.811	9502944.096	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	113.456	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	101.874	
	Pb	208		
>	Sc-2	45	113.456	
	Fe	54		
	Ca	63		
	Zn	67		
>	Ho-2	165	101.874	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WTE
Sample Date/Time: Thursday, April 28, 2005 18:31:50
Autosampler Position: 35
Dataset File: D:\Elandata\Dataset\042805M2\G8WTE.027

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	2848.779894	3.318	11974396.455	ug/L	9414.862
	24	Mg	2488.813753	3.782	6826144.540	ug/L	774.695
	27	Al	13226.490632	3.464	56401456.512	ug/L	3969.229
	39	K	3126.188290	4.702	24301669.731	ug/L	625151.110
	44	Ca	26136.039730	3.158	6619666.611	ug/L	33502.246
>	45	Sc-1			482810.105	ug/L	433946.682
	57	Fe	43414.532787	2.566	13488469.785	ug/L	8492.631
	65	Cu	1464.411013	3.530	4076158.541	ug/L	138.335
	66	Zn	3045.112633	3.661	4758117.819	ug/L	1347.077
>	165	Ho-1			1675800.466	ug/L	1653008.415
	208	Pb	1811.423780	1.819	60995349.032	ug/L	11185.834
>	45	Sc-2			482810.105	ug/L	433946.682
	54	Fe	44141.529626	3.673	30958378.896	ug/L	52651.795
	63	Cu	1398.822857	3.716	8080961.922	ug/L	260.672
	67	Zn	2496.209135	2.171	896026.625	ug/L	3074.697
>	165	Ho-2			1675800.466	ug/L	1653008.415
	208	Pb	1796.534625	2.712	15492474.912	ug/L	2859.649
	207	Pb	1784.756127	2.222	13058852.831	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	111.280	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	101.379	
	Pb	208		
>	Sc-2	45	111.280	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	101.379	
	Pb	208		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WTG
Sample Date/Time: Thursday, April 28, 2005 18:35:03
Autosampler Position: 36
Dataset File: D:\Elandata\Dataset\042805M2\G8WTG.028

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	3914.474173	2.067	16069522.738	ug/L	9414.862
	24	Mg	2375.366815	3.200	6541597.559	ug/L	774.695
	27	Al	13800.262696	2.054	56725657.881	ug/L	3869.229
	39	K	2543.032834	0.936	19454493.375	ug/L	625151.110
	44	Ca	24033.886181	0.636	5957268.789	ug/L	33502.246
>	45	Sc-1			472119.234	ug/L	433946.682
	57	Fe	111563.795603	1.556	33884416.360	ug/L	8492.631
	65	Cu	993.348882	3.825	2722597.020	ug/L	138.335
	66	Zn	3442.937080	3.611	5261142.858	ug/L	1347.077
>	165	Ho-1			1656663.852	ug/L	1653008.415
	208	Pb	2133.482679	0.738	71033490.209	ug/L	11185.834
>	45	Sc-2			472119.234	ug/L	433946.682
	54	Fe	115475.116804	0.891	79129911.900	ug/L	52861.795
	63	Cu	959.762033	2.631	5422635.034	ug/L	260.672
	67	Zn	2868.094557	2.093	789541.159	ug/L	3074.697
>	165	Ho-2			1656663.852	ug/L	1653008.415
	206	Pb	2186.188685	0.943	18490069.092	ug/L	2859.649
	207	Pb	2072.706789	1.432	14995988.337	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	108.797	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	100.221	
	Pb	208		
>	Sc-2	45	108.797	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	100.221	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WTR
Sample Date/Time: Thursday, April 28, 2005 16:38:17
Autosampler Position: 37
Dataset File: D:\Elandata\Dataset\042805M2\G8WTR.029

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌈	23	Na	1127.482222	1.887	4706729.643	ug/L	9414.862
|	24	Mg	1068.549144	2.685	2950471.902	ug/L	774.695
|	27	Al	4793.215289	1.096	20275731.327	ug/L	3869.229
|	39	K	860.820536	0.817	7134802.773	ug/L	625151.110
|	44	Ca	12039.169567	1.540	3045023.536	ug/L	33502.246
|>	45	Sc-1			478780.365	ug/L	433946.882
|	57	Fe	38662.097272	2.144	11911186.700	ug/L	8492.631
|	65	Cu	9488.332480	3.235	26364678.928	ug/L	138.335
⌊	66	Zn	3373.539215	1.926	5228104.882	ug/L	1347.077
⌈>	165	Ho-1			1675618.612	ug/L	1653008.415
⌊	208	Pb	2541.206793	0.644	88937019.970	ug/L	11185.834
⌈>	45	Sc-2			478780.365	ug/L	433946.882
|	54	Fe	40424.208281	2.057	28120942.210	ug/L	52661.795
|	63	Cu	9226.522744	1.765	52662070.742	ug/L	260.672
⌊	67	Zn	2735.829095	1.867	758498.944	ug/L	3074.697
⌈>	165	Ho-2			1675618.612	ug/L	1653008.415
|	205	Pb	2663.868884	1.186	23019622.389	ug/L	2859.649
⌊	207	Pb	2580.807963	0.623	18886025.211	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Na	23		
|	Mg	24		
|	Al	27		
|	K	39		
|	Ca	44		
|>	Sc-1	45	110.332	
|	Fe	57		
|	Cu	65		
⌊	Zn	66		
⌈>	Ho-1	165	101.369	
⌊	Pb	208		
⌈>	Sc-2	45	110.332	
|	Fe	54		
|	Cu	63		
⌊	Zn	67		
⌈>	Ho-2	165	101.369	
|	Pb	205		
⌊	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WTV
Sample Date/Time: Thursday, April 28, 2005 18:41:31
Autosampler Position: 38
Dataset File: D:\Elandata\Dataset\042805M2\G8WTV.030

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	809.543242	4.051	3043519.884	ug/L	9414.862
	24	Mg	940.660168	5.889	2113094.834	ug/L	774.695
	27	Al	4110.388603	1.689	15650850.150	ug/L	3869.229
	39	K	705.644064	3.513	5374467.244	ug/L	625151.110
	44	Ca	5767.977717	3.970	1562255.712	ug/L	33502.246
>	45	Sc-1			430976.936	ug/L	433946.682
	57	Fe	351181.992374	3.913	97318217.370	ug/L	8492.631
	85	Cu	728.757850	2.260	1823309.534	ug/L	138.335
	66	Zn	836.831065	1.661	1166982.290	ug/L	1347.077
>	165	Ho-1			1613126.617	ug/L	1653008.415
	208	Pb	2507.268817	3.071	81230179.942	ug/L	11185.834
>	45	Sc-2			430976.936	ug/L	433946.682
	54	Fe	355335.428852	5.025	222044352.849	ug/L	52861.795
	63	Cu	766.572343	3.207	3962859.501	ug/L	260.672
	67	Zn	736.830046	1.569	186091.835	ug/L	3074.897
>	165	Ho-2			1613126.617	ug/L	1653008.415
	208	Pb	2462.390708	3.670	20545818.413	ug/L	2859.649
	207	Pb	2454.275220	3.094	17278178.251	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	99.316	
	Fe	57		
	Cu	85		
	Zn	66		
>	Ho-1	165	97.667	
	Pb	208		
>	Sc-2	45	99.316	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	97.667	
	Pb	208		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WTW
Sample Date/Time: Thursday, April 28, 2005 18:44:45
Autosampler Position: 39
Dataset File: D:\Elandata\Dataset\042805M2\G8WTW.031

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	393.929963	2.249	1430952.267	ug/L	9414.862
	24	Mg	666.796436	2.637	1587780.883	ug/L	774.695
	27	Al	3246.449408	1.867	11899696.671	ug/L	3869.229
	39	K	464.682732	1.456	3612693.815	ug/L	625151.110
	44	Ca	5027.618825	3.552	1120146.330	ug/L	33502.246
>	45	Sc-1			414933.331	ug/L	433946.682
	57	Fe	383119.579440	1.170	102247396.174	ug/L	8482.631
	65	Cu	417.685121	1.446	1006346.412	ug/L	138.335
	66	Zn	690.899916	1.144	929014.590	ug/L	1347.077
>	165	Ho-1			1601796.418	ug/L	1653008.415
	208	Pb	3527.436429	1.119	116762177.340	ug/L	11185.834
>	45	Sc-2			414933.331	ug/L	433946.682
	54	Fe	387221.809321	1.666	233071823.180	ug/L	52661.795
	63	Cu	441.579435	1.212	2195066.841	ug/L	260.672
	67	Zn	613.773875	1.656	149774.537	ug/L	3074.697
>	165	Ho-2			1601796.418	ug/L	1653008.415
	206	Pb	3578.797048	1.138	29670277.268	ug/L	2659.649
	207	Pb	3579.192852	1.319	25034813.226	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	95.619	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	96.902	
	Pb	208		
>	Sc-2	45	95.619	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	96.902	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WTX
Sample Date/Time: Thursday, April 28, 2005 18:47:57
Autosampler Position: 40
Dataset File: D:\Elandata\Dataset\042805M2\G8WTX.032

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	286.790649	3.959	1127326.154	ug/L	9414.862
	24	Mg	320.794200	2.114	839163.637	ug/L	774.695
	27	Al	1686.286774	3.296	6712517.063	ug/L	3969.229
	39	K	370.807744	6.203	3242102.287	ug/L	625151.110
	44	Ca	3347.070284	2.147	817033.757	ug/L	33502.246
>	45	Sc-1			448156.131	ug/L	433946.682
	57	Fe	8049.282441	4.690	2327053.075	ug/L	8492.631
	65	Cu	488.848444	2.718	1286450.400	ug/L	138.335
	66	Zn	675.879481	4.119	961027.024	ug/L	1347.077
>	165	Ho-1			1594167.305	ug/L	1653008.415
	208	Pb	2044.218330	1.674	65488586.167	ug/L	11185.834
>	45	Sc-2			448156.131	ug/L	433946.682
	54	Fe	8164.764068	3.256	5356702.255	ug/L	62861.795
	63	Cu	497.121004	3.548	2866189.174	ug/L	260.872
	67	Zn	606.906665	2.141	159961.878	ug/L	3074.697
>	165	Ho-2			1594167.305	ug/L	1653008.415
	206	Pb	2063.038623	1.795	17024743.167	ug/L	2859.649
	207	Pb	1972.801202	1.504	13733675.056	ug/L	2404.884

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	103.274	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	96.449	
	Pb	208		
>	Sc-2	45	103.274	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	96.449	
	Pb	208		
	Pb	207		

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Data/Time: Thursday, April 28, 2005 18:51:07
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042805M2\QC Std 1.033

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	1981.999696	1.809	7142156.758	ug/L	9414.882
	24	Mg	1040.525507	4.226	2509871.905	ug/L	774.695
	27	Al	2026.833029	2.900	7407804.561	ug/L	3869.229
	39	K	1974.460239	2.956	13364646.262	ug/L	625151.110
	44	Ca	1038.752804	5.849	256960.823	ug/L	33502.246
>	45	Sc-1			413716.127	ug/L	433946.682
	57	Fe	1982.203828	5.106	535100.650	ug/L	8492.631
	65	Cu	200.601106	5.615	481255.012	ug/L	138.335
	66	Zn	198.961271	3.136	257566.277	ug/L	1347.077
>	165	Ho-1			1543323.978	ug/L	1653008.415
	208	Pb	200.834748	2.641	8238645.845	ug/L	11185.634
>	45	Sc-2			413716.127	ug/L	433946.682
	54	Fe	2092.186654	3.198	1306070.378	ug/L	52661.795
	63	Cu	202.058908	4.002	1000002.798	ug/L	260.672
	67	Zn	193.388782	3.353	49041.535	ug/L	3074.887
>	165	Ho-2			1543323.978	ug/L	1653008.415
	206	Pb	201.218649	2.315	1609403.430	ug/L	2869.649
	207	Pb	201.379688	2.445	1358865.764	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		99.199
	Mg	24		104.069
	Al	27		101.342
	K	39		98.723
	Ca	44		103.675
>	Sc-1	45	95.338	
	Fe	57		99.119
	Cu	65		100.291
	Zn	66		99.491
>	Ho-1	165	93.366	
	Pb	208		100.417
>	Sc-2	45	95.338	
	Fe	54		104.806
	Cu	63		101.029
	Zn	67		99.696
>	Ho-2	165	93.366	
	Pb	206		100.809
	Pb	207		100.809

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Thursday, April 28, 2005 18:55:19
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042805M2\QC Std 2.034

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	0.345773	22.856	10343.849	ug/L	9414.862
	24	Mg	0.089628	45.585	966.043	ug/L	774.695
	27	Al	0.257286	44.673	4683.485	ug/L	3889.229
	39	K	10.791249	2.436	673580.180	ug/L	626151.110
	44	Ca	-10.697689	28.661	29997.771	ug/L	33502.246
>	45	Sc-1			418542.163	ug/L	433946.682
	57	Fe	6.351388	11.869	9901.233	ug/L	8492.631
	65	Cu	0.345049	3.405	972.043	ug/L	136.336
	68	Zn	0.091916	36.898	1423.752	ug/L	1347.077
>	165	Ho-1			1556386.864	ug/L	1653008.415
	208	Pb	0.146040	23.096	16107.946	ug/L	11185.834
>	45	Sc-2			418542.163	ug/L	433946.682
	54	Fe	0.924001	501.614	51354.227	ug/L	52661.795
	63	Cu	0.354472	1.293	2027.164	ug/L	260.672
	67	Zn	3.337957	69.294	3770.875	ug/L	3074.697
>	165	Ho-2			1556386.864	ug/L	1653008.415
	206	Pb	0.148981	25.796	3894.573	ug/L	2859.649
	207	Pb	0.146176	22.552	3258.739	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		0.347
	Mg	24		0.090
	Al	27		0.257
	K	39		10.791
	Ca	44		-10.698
>	Sc-1	45	96.499	
	Fe	57		6.351
	Cu	65		34.505
	Zn	68		9.192
>	Ho-1	165	94.185	
	Pb	208		14.894
>	Sc-2	45	96.499	
	Fe	54		0.924
	Cu	63		35.447
	Zn	67		333.796
>	Ho-2	165	94.185	
	Pb	206		14.896
	Pb	207		14.918

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Zn	67	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WT0
Sample Date/Time: Thursday, April 28, 2005 18:59:27
Autosampler Position: 41
Dataset File: D:\Elandata\Dataset\042805M2\G8WT0.035

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	227.770372	2.334	924256.677	ug/L	9414.662
	24	Mg	264.666095	1.922	713083.457	ug/L	774.695
	27	Al	1077.919207	1.155	4396744.311	ug/L	3869.229
	39	K	228.927344	4.940	2315356.085	ug/L	625151.110
	44	Ca	5077.403829	2.124	1257891.290	ug/L	33502.246
>	45	Sc-1			461489.812	ug/L	433946.682
	57	Fe	6287.591084	4.704	1873877.311	ug/L	8492.631
	65	Cu	286.390687	2.209	767253.573	ug/L	138.335
	66	Zn	346.071777	1.371	518212.232	ug/L	1347.077
>	165	Ho-1			1645497.806	ug/L	1653006.415
	208	Pb	2476.979665	1.856	81909280.477	ug/L	11185.834
>	45	Sc-2			461489.812	ug/L	433946.682
	54	Fe	8520.606742	3.906	4417829.693	ug/L	52661.795
	63	Cu	287.327733	1.749	1586800.477	ug/L	260.672
	67	Zn	302.493270	3.726	83716.443	ug/L	3074.697
>	165	Ho-2			1645497.806	ug/L	1653006.415
	206	Pb	2506.919668	0.793	21343620.222	ug/L	2859.649
	207	Pb	2398.274061	1.834	17233341.712	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	106.347	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	99.548	
	Pb	208		
>	Sc-2	45	106.347	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	99.548	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WT1
Sample Date/Time: Thursday, April 28, 2005 19:02:35
Autosampler Position: 42
Dataset File: D:\Elandata\Dataset\042805M2\G8WT1.036

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	3145.860956	4.090	12512955.218	ug/L	9414.882
	24	Mg	2577.032622	3.326	6867579.187	ug/L	774.695
	27	Al	13491.122243	4.270	54435826.488	ug/L	3869.229
	39	K	2852.894856	4.213	21033802.871	ug/L	626151.110
	44	Ca	23290.929622	3.515	6586846.884	ug/L	33502.246
>	45	Sc-1			457061.359	ug/L	433946.682
	57	Fe	76078.786885	4.142	22356653.006	ug/L	8492.831
	65	Cu	884.823232	5.317	2345996.802	ug/L	138.335
	66	Zn	6140.043206	5.466	9074532.268	ug/L	1347.077
>	165	Ho-1			1647991.803	ug/L	1653006.415
	208	Pb	1628.833445	4.128	53924647.700	ug/L	11185.834
>	45	Sc-2			457061.359	ug/L	433946.682
	54	Fe	76338.869121	3.374	50840360.051	ug/L	52661.795
	63	Cu	843.071573	4.269	4606366.406	ug/L	260.672
	67	Zn	5149.578477	3.157	1359738.261	ug/L	3074.697
>	165	Ho-2			1647991.803	ug/L	1653006.415
	206	Pb	1696.629841	3.583	13605928.065	ug/L	2859.649
	207	Pb	1621.788482	4.490	11666950.820	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	105.337	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	99.697	
	Pb	208		
>	Sc-2	45	105.337	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	99.697	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817C
Sample Date/Time: Thursday, April 28, 2005 19:05:44
Autosampler Position: 43
Dataset File: D:\Elandata\Dataset\042805M2\G817C.037

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	878.081127	3.157	3674529.268	ug/L	9414.862
	24	Mg	633.047716	0.559	1772201.283	ug/L	774.695
	27	Al	3814.836093	0.343	14898491.751	ug/L	3869.229
	39	K	724.993457	0.941	6129111.032	ug/L	625151.110
	44	Ca	5285.207733	1.922	1359804.721	ug/L	33502.246
>	45	Sc-1			479675.628	ug/L	433946.662
	57	Fe	11119.231482	0.819	3439868.557	ug/L	8492.631
	65	Cu	431.366176	1.773	1201530.551	ug/L	138.335
	66	Zn	906.173283	1.814	1406118.434	ug/L	1347.077
>	165	Ho-1			1658902.872	ug/L	1653008.415
	208	Pb	546.503195	2.035	18225770.586	ug/L	11186.834
>	45	Sc-2			479675.628	ug/L	433946.662
	54	Fe	11115.730676	0.212	7792336.666	ug/L	52661.795
	63	Cu	431.376882	1.808	2477027.838	ug/L	260.672
	67	Zn	792.672220	2.308	222626.091	ug/L	3074.697
>	165	Ho-2			1658902.872	ug/L	1653008.415
	206	Pb	540.317916	1.657	4641280.853	ug/L	2859.649
	207	Pb	539.613049	1.905	3910560.382	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	110.538	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	100.357	
	Pb	208		
>	Sc-2	45	110.538	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	100.357	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817CS
Sample Date/Time: Thursday, April 28, 2005 19:08:53
Autosampler Position: 44
Dataset File: D:\Elandata\Dataset\042805M2\G817CS.038

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	1828.173446	0.772	7634449.903	ug/L	9414.852
	24	Mg	1087.609471	1.657	3041227.064	ug/L	774.695
	27	Al	7883.513068	0.508	32113989.083	ug/L	3868.229
	39	K	1141.922068	1.821	9248779.382	ug/L	625151.110
	44	Ca	6996.709057	1.850	1536430.144	ug/L	33502.246
>	45	Sc-1			479242.107	ug/L	433946.682
	57	Fe	12582.326760	1.972	3991264.455	ug/L	8492.631
	65	Cu	344.624173	1.991	959147.596	ug/L	138.335
	66	Zn	686.561646	1.019	1084848.948	ug/L	1347.077
>	165	Ho-1			1690620.629	ug/L	1653008.415
	208	Pb	362.678357	2.209	12331626.802	ug/L	11185.834
>	45	Sc-2			479242.107	ug/L	433946.682
	54	Fe	12574.377346	2.525	8799650.494	ug/L	52661.795
	63	Cu	330.342333	1.007	1895206.020	ug/L	260.572
	67	Zn	693.802171	0.699	170295.740	ug/L	3074.697
>	165	Ho-2			1690620.629	ug/L	1653008.415
	208	Pb	360.847717	1.788	3160172.815	ug/L	2859.849
	207	Pb	362.522048	1.969	2878569.562	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	110.436	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	102.267	
	Pb	208		
>	Sc-2	45	110.436	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	102.267	
	Pb	208		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817CD
Sample Date/Time: Thursday, April 28, 2005 19:12:46
Autosampler Position: 45
Dataset File: D:\Elandata\Dataset\042805M2\G817CD.039

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌈	23	Na	1109.382919	3.105	4673640.695	ug/L	9414.862
|	24	Mg	987.776354	3.458	2727878.898	ug/L	774.695
|	27	Al	3580.994638	4.584	15197727.905	ug/L	3869.229
|	39	K	1066.136901	3.569	8674335.717	ug/L	625151.110
|	44	Ca	4484.787336	3.077	1160240.175	ug/L	33502.246
|>	45	Sc-1			483320.039	ug/L	433946.682
|	57	Fe	14962.178347	2.967	4656803.317	ug/L	8492.631
|	65	Cu	466.894724	2.256	1278544.362	ug/L	138.336
⌊	66	Zn	5625.138419	4.582	6794266.236	ug/L	1347.077
⌈>	165	Ho-1			1666971.537	ug/L	1653008.415
⌊	208	Pb	882.803257	1.280	28574445.354	ug/L	11185.834
⌈>	45	Sc-2			483320.039	ug/L	433946.682
|	54	Fe	15172.987240	5.261	10686185.424	ug/L	52861.795
|	63	Cu	465.551549	3.385	2691996.372	ug/L	260.672
⌊	67	Zn	4606.359640	5.049	1286894.123	ug/L	3074.697
⌈>	165	Ho-2			1666971.537	ug/L	1653008.415
|	206	Pb	857.782061	1.518	7402640.697	ug/L	2859.649
⌊	207	Pb	836.440625	3.066	6089714.002	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Na	23		
|	Mg	24		
|	Al	27		
|	K	39		
|	Ca	44		
|>	Sc-1	45	111.378	
|	Fe	57		
|	Cu	65		
⌊	Zn	66		
⌈>	Ho-1	165	100.846	
⌊	Pb	208		
⌈>	Sc-2	45	111.378	
|	Fe	54		
|	Cu	63		
⌊	Zn	67		
⌈>	Ho-2	165	100.846	
|	Pb	206		
⌊	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817D
Sample Date/Time: Thursday, April 28, 2005 19:15:56
Autosampler Position: 46
Dataset File: D:\Elandata\Dataset\042805M2\G817D.040

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	3924.430160	1.578	15848491.547	ug/L	9414.662
	24	Mg	3721.200121	2.813	10069348.534	ug/L	774.695
	27	Al	16732.309222	0.781	64470058.569	ug/L	3869.229
	39	K	3573.879786	0.975	26689969.152	ug/L	625151.110
	44	Ca	29916.644826	1.510	7276405.983	ug/L	33502.246
>	45	Sc-1			463800.179	ug/L	433946.682
	57	Fe	53037.882868	1.527	15831314.486	ug/L	8492.631
	65	Cu	1911.606560	0.789	5148392.341	ug/L	138.336
	66	Zn	5241.758387	0.945	7870116.389	ug/L	1347.077
>	165	Ho-1			1637636.609	ug/L	1653008.415
	208	Pb	1838.217906	1.172	60493659.264	ug/L	11185.834
>	45	Sc-2			463800.179	ug/L	433946.682
	54	Fe	54247.569804	1.863	36550481.294	ug/L	52661.795
	63	Cu	1860.241016	1.405	10271327.492	ug/L	260.672
	67	Zn	4310.667931	1.577	1156198.865	ug/L	3074.697
>	165	Ho-2			1637636.609	ug/L	1653008.415
	206	Pb	1828.610374	2.320	15496246.057	ug/L	2859.849
	207	Pb	1811.887062	1.991	12958926.527	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	106.888	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	99.070	
	Pb	208		
>	Sc-2	45	106.888	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	99.070	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817E
Sample Date/Time: Thursday, April 28, 2005 19:19:06
Autosampler Position: 47
Dataset File: D:\Elandata\Dataset\042805M2\G817E.041

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	899.185457	1.849	3544775.939	ug/L	9414.982
	24	Mg	1184.638689	0.299	3123153.157	ug/L	774.695
	27	Al	7601.051058	0.363	30344816.628	ug/L	3869.229
	39	K	977.899396	2.280	7560193.538	ug/L	625151.110
	44	Ca	18967.510143	1.560	3799332.569	ug/L	33602.246
>	45	Sc-1			451805.437	ug/L	433946.682
	57	Fe	93257.175621	0.940	27109528.277	ug/L	8482.631
	65	Cu	386.412521	2.255	1013879.452	ug/L	138.335
	66	Zn	1732.457280	1.242	2534791.350	ug/L	1347.077
>	165	Ho-1			1663883.716	ug/L	1653008.415
	208	Pb	2333.065821	2.197	78001830.360	ug/L	11185.834
>	45	Sc-2			451805.437	ug/L	433946.682
	54	Fe	93763.302823	1.942	61501207.324	ug/L	52661.795
	63	Cu	389.085432	1.257	2158371.536	ug/L	280.672
	67	Zn	1479.731282	1.019	388724.761	ug/L	3074.697
>	165	Ho-2			1663883.716	ug/L	1653008.415
	206	Pb	2280.214326	2.102	19633241.499	ug/L	2859.649
	207	Pb	2327.919580	2.536	16909488.696	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	104.116	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	100.000	
	Pb	208		
>	Sc-2	45	104.116	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	100.000	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817F
Sample Date/Time: Thursday, April 28, 2005 19:22:17
Autosampler Position: 48
Dataset File: D:\Elandata\Dataset\042805M2\G817F.042

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	934.481483	4.511	3564922.333	ug/L	9414.662
	24	Mg	1606.972967	3.566	4100053.228	ug/L	774.695
	27	Al	9117.483207	4.462	35225473.188	ug/L	3869.229
	39	K	990.110434	5.367	7369948.144	ug/L	625151.110
	44	Ca	14095.051494	3.097	3250118.560	ug/L	33502.246
>	45	Sc-1			437336.114	ug/L	433946.682
	57	Fe	216492.569628	4.319	60894806.229	ug/L	8492.631
	65	Cu	1228.132097	1.969	3118789.012	ug/L	138.335
	66	Zn	1192.312433	1.646	1698879.211	ug/L	1347.077
>	165	Ho-1			1627890.560	ug/L	1653008.415
	208	Pb	2788.736998	2.148	91222476.851	ug/L	11185.834
>	45	Sc-2			437336.114	ug/L	433946.682
	54	Fe	213795.079193	0.701	135660741.761	ug/L	52681.795
	63	Cu	1191.581852	1.430	6237212.611	ug/L	280.672
	67	Zn	1101.180672	0.921	280797.585	ug/L	3074.697
>	165	Ho-2			1627890.560	ug/L	1653008.415
	208	Pb	2771.248369	1.391	23349048.697	ug/L	2859.549
	207	Pb	2717.842091	2.685	19316507.451	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	100.782	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	98.488	
	Pb	208		
>	Sc-2	45	100.782	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	98.488	
	Pb	208		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817G
Sample Date/Time: Thursday, April 28, 2005 19:25:29
Autosampler Position: 49
Dataset File: D:\Elandata\Dataset\042805M2\G817G.043

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌈	23	Na	2887.052890	0.340	11068501.648	ug/L	9414.862
|	24	Mg	2787.110048	2.865	7156370.261	ug/L	774.695
|	27	Al	13044.636432	2.443	50725525.829	ug/L	3869.229
|	39	K	1797.121971	2.807	13002689.129	ug/L	625151.110
|	44	Ca	109619.886170	2.014	28214136.849	ug/L	33502.246
|>	45	Sc-1			440228.793	ug/L	433946.682
|	57	Fe	85264.842213	3.221	24143264.921	ug/L	8492.631
|	65	Cu	2170.070521	2.332	5545965.965	ug/L	138.335
⌊	66	Zn	2171.856997	0.662	3095736.234	ug/L	1347.077
⌈>	165	Ho-1			1597627.761	ug/L	1653006.415
⌊	208	Pb	1571.019798	2.351	50434491.328	ug/L	11185.834
⌈>	45	Sc-2			440228.793	ug/L	433946.682
|	54	Fe	57144.576914	2.424	55686154.866	ug/L	52861.795
|	63	Cu	2106.546972	3.544	11106034.232	ug/L	260.672
⌊	67	Zn	1896.790479	3.592	481926.960	ug/L	3074.697
⌈>	165	Ho-2			1597627.761	ug/L	1653006.415
|	206	Pb	1567.972177	2.579	12661930.180	ug/L	2859.649
⌊	207	Pb	1545.087842	2.756	10777958.906	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Na	23		
|	Mg	24		
|	Al	27		
|	K	39		
|	Ca	44		
|>	Sc-1	45	101.448	
|	Fe	57		
|	Cu	65		
⌊	Zn	66		
⌈>	Ho-1	165	96.599	
⌊	Pb	208		
⌈>	Sc-2	45	101.448	
|	Fe	54		
|	Cu	63		
⌊	Zn	67		
⌈>	Ho-2	165	96.599	
|	Pb	206		
⌊	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WQT
Sample Date/Time: Thursday, April 28, 2005 19:28:41
Autosampler Position: 50
Dataset File: D:\Elandata\Dataset\042805M2\G8WQT.044

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Mass. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	397.146545	2.616	1655341.569	ug/L	9414.862
	24	Mg	496.826917	3.796	1378235.829	ug/L	774.695
	27	Al	2116.761990	5.528	8906615.718	ug/L	3869.229
	39	K	445.691148	4.182	4006242.498	ug/L	825151.110
	44	Ca	4744.244663	4.639	1215454.336	ug/L	33502.246
>	45	Sc-1			476531.877	ug/L	433946.682
	57	Fe	7110.143373	4.599	2186731.197	ug/L	8492.631
	65	Cu	36606.787164	3.237	101237945.370	ug/L	138.335
	66	Zn	1769.284832	4.380	2728190.426	ug/L	1347.077
>	165	Ho-1			1697466.563	ug/L	1653006.415
	206	Pb	337.781882	3.212	11528880.489	ug/L	11185.834
>	45	Sc-2			476531.877	ug/L	433946.682
	54	Fe	7336.631081	4.790	5125866.530	ug/L	52681.795
	63	Cu	35297.569557	3.524	201190109.540	ug/L	260.672
	67	Zn	1430.268027	4.215	396107.990	ug/L	3074.697
>	165	Ho-2			1697466.563	ug/L	1653006.415
	206	Pb	338.188484	2.636	2973243.485	ug/L	2859.849
	207	Pb	334.973687	2.906	2484608.836	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	109.813	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	102.669	
	Pb	206		
>	Sc-2	45	109.813	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	102.669	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cu	65	H
Cu	63	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Thursday, April 28, 2005 19:31:54
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042805M2\QC Std 1.045

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	1899.688986	2.977	7583633.206	ug/L	9414.662
	24	Mg	994.210377	2.128	2656777.664	ug/L	774.695
	27	Al	1976.146758	1.965	8004214.986	ug/L	3869.229
	39	K	1938.909462	3.282	14551952.614	ug/L	625151.110
	44	Ca	1008.186290	3.791	276397.742	ug/L	33502.246
>	45	Sc-1			458316.753	ug/L	433946.682
	57	Fe	1897.706739	0.844	588371.649	ug/L	8492.631
	65	Cu	192.450998	2.886	512160.781	ug/L	138.336
	66	Zn	191.738357	2.465	286830.338	ug/L	1347.077
>	165	Ho-1			1649118.942	ug/L	1653008.415
	208	Pb	196.882757	2.629	6634082.142	ug/L	11186.834
>	45	Sc-2			458316.753	ug/L	433946.682
	54	Fe	2023.095460	0.763	1400565.704	ug/L	52661.795
	63	Cu	195.063066	1.811	1070157.506	ug/L	260.672
	67	Zn	186.187521	1.657	52460.388	ug/L	3074.697
>	165	Ho-2			1649118.942	ug/L	1653008.415
	206	Pb	195.394292	2.517	1670144.307	ug/L	2869.649
	207	Pb	196.947316	2.155	1441910.928	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		94.994
	Mg	24		99.421
	Al	27		98.697
	K	39		96.946
	Ca	44		100.819
>	Sc-1	45	106.016	
	Fe	57		94.885
	Cu	65		96.225
	Zn	66		95.869
>	Ho-1	165	99.795	
	Pb	208		99.446
>	Sc-2	45	106.016	
	Fe	54		101.188
	Cu	63		97.533
	Zn	67		93.894
>	Ho-2	165	99.795	
	Pb	206		97.697
	Pb	207		99.974

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Thursday, April 28, 2005 19:36:06
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042805M2\QC Std 2.046

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	0.396871	23.828	11316.595	ug/L	9414.862
	24	Mg	0.081784	40.997	1018.047	ug/L	774.695
	27	Al	0.249908	16.956	5009.596	ug/L	3869.229
	39	K	2.447572	57.982	665778.234	ug/L	625151.110
	44	Ca	-8.857397	15.254	32726.443	ug/L	33502.248
>	45	Sc-1			450235.146	ug/L	433946.682
	57	Fe	2.037591	26.550	9401.294	ug/L	8492.631
	66	Cu	0.312223	8.145	959.375	ug/L	138.335
	66	Zn	0.091506	11.883	1531.097	ug/L	1347.077
>	165	Ho-1			1639052.139	ug/L	1653008.415
	208	Pb	0.056169	64.123	12942.441	ug/L	11185.834
>	45	Sc-2			450235.146	ug/L	433946.682
	54	Fe	2.791180	137.619	66450.777	ug/L	52661.795
	63	Cu	0.325166	9.269	2021.497	ug/L	260.672
	67	Zn	2.362778	73.062	3803.883	ug/L	3074.697
>	165	Ho-2			1639052.139	ug/L	1653008.415
	208	Pb	0.052449	72.846	3280.745	ug/L	2859.649
	207	Pb	0.057814	68.510	2798.637	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		0.396
	Mg	24		0.082
	Al	27		0.250
	K	39		2.448
	Ca	44		-8.857
>	Sc-1	45	103.784	
	Fe	57		2.038
	Cu	66		31.222
	Zn	66		9.151
>	Ho-1	165	99.166	
	Pb	208		5.617
>	Sc-2	45	103.784	
	Fe	54		2.791
	Cu	63		32.511
	Zn	67		236.278
>	Ho-2	165	99.166	
	Pb	208		5.245
	Pb	207		5.781

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Zn	67	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WQT
Sample Date/Time: Thuraday, April 28, 2005 19:40:16
Autosampler Position: 51
Dataset File: D:\Elandata\Dataset\042805M2\G8WQT.047

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	106.339966	3.214	460547.749	ug/L	9414.862
	24	Mg	136.314682	4.732	384700.442	ug/L	774.695
	27	Al	536.966011	2.806	2311609.047	ug/L	3869.229
	39	K	116.142918	3.912	1583961.136	ug/L	625151.110
	44	Ca	1233.496428	2.338	350623.618	ug/L	33502.246
>	45	Sc-1			486443.933	ug/L	433946.682
	57	Fe	1776.418365	1.351	566400.744	ug/L	8492.631
	65	Cu	8994.884619	2.689	25401520.386	ug/L	138.335
	66	Zn	413.299365	1.059	652206.065	ug/L	1347.077
>	165	Ho-1			1677722.214	ug/L	1653008.415
	208	Pb	88.202108	1.093	2984724.040	ug/L	11185.834
>	45	Sc-2			486443.933	ug/L	433946.682
	54	Fe	1887.318457	1.276	1390658.476	ug/L	52661.795
	63	Cu	8773.119010	2.065	51089161.161	ug/L	260.672
	67	Zn	357.422023	1.774	103699.775	ug/L	3074.697
>	166	Ho-2			1677722.214	ug/L	1653008.415
	206	Pb	86.835831	1.824	756857.933	ug/L	2859.849
	207	Pb	86.807833	1.544	652991.506	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	112.098	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	101.495	
	Pb	208		
>	Sc-2	45	112.098	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	101.495	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Thursday, April 28, 2005 19:43:30
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042805M2\QC Std 1.048

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Interna. Mean	Sample Unit	Blank Intensity
	23	Na	1983.381184	1.355	7748490.657	ug/L	9414.862
	24	Mg	1022.100856	1.241	2674370.121	ug/L	774.695
	27	Al	2045.258451	1.344	8106520.048	ug/L	3869.229
	39	K	2001.766762	2.361	14882142.504	ug/L	625151.110
	44	Ca	1047.278890	2.744	279676.399	ug/L	33502.246
>	45	Sc-1			448379.384	ug/L	433946.682
	57	Fe	1970.963219	2.244	577205.380	ug/L	8492.631
	65	Cu	200.221616	1.655	521464.283	ug/L	138.335
	66	Zn	196.747263	2.000	285462.076	ug/L	1347.077
>	165	Ho-1			1621461.370	ug/L	1653008.415
	208	Pb	196.567771	2.156	8413807.588	ug/L	11185.834
>	45	Sc-2			448379.384	ug/L	433946.682
	54	Fe	2051.861641	1.330	1388828.572	ug/L	52661.795
	63	Cu	199.611281	0.728	1071488.977	ug/L	260.672
	67	Zn	191.082715	0.657	52584.800	ug/L	3074.697
>	165	Ho-2			1621461.370	ug/L	1653008.415
	206	Pb	196.497800	1.747	1867378.976	ug/L	2859.649
	207	Pb	196.328919	2.480	1406016.869	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		99.199
	Mg	24		102.210
	Al	27		102.263
	K	39		100.088
	Ca	44		104.728
>	Sc-1	45	103.226	
	Fe	57		98.548
	Cu	65		100.111
	Zn	66		97.574
>	Ho-1	165	98.082	
	Pb	208		98.284
>	Sc-2	45	103.226	
	Fe	54		102.593
	Cu	63		99.806
	Zn	67		98.541
>	Ho-2	165	98.082	
	Pb	206		98.284
	Pb	207		98.184

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Thursday, April 28, 2005 19:47:41
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042805M2\QC Std 2.049

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	0.269214	43.196	11038.376	ug/L	9414.862
	24	Mg	0.109408	34.395	1112.721	ug/L	774.695
	27	Al	0.254917	29.652	5127.639	ug/L	3869.229
	39	K	1.046271	184.019	669136.783	ug/L	625151.110
	44	Ca	-6.872311	39.852	33813.985	ug/L	33602.246
>	45	Sc-1			456365.246	ug/L	433946.682
	57	Fe	2.311680	32.991	9875.487	ug/L	8482.631
	65	Cu	0.256366	3.006	830.032	ug/L	138.335
	66	Zn	0.057149	56.139	1511.429	ug/L	1347.077
>	165	Ho-1			1637659.560	ug/L	1653006.415
	208	Pb	-0.008624	582.486	10785.388	ug/L	11186.634
>	45	Sc-2			456365.246	ug/L	433946.682
	54	Fe	4.728482	113.606	58898.492	ug/L	52661.795
	63	Cu	0.267807	9.039	1747.791	ug/L	260.672
	67	Zn	2.361049	61.402	3882.237	ug/L	3074.697
>	165	Ho-2			1637659.560	ug/L	1653006.415
	206	Pb	-0.004610	1237.051	2790.638	ug/L	2859.649
	207	Pb	-0.011360	388.006	2296.210	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		0.269
	Mg	24		0.109
	Al	27		0.255
	K	39		1.046
	Ca	44		-6.872
>	Sc-1	45	100.000	
	Fe	57		2.312
	Cu	65		25.637
	Zn	66		0.716
>	Ho-1	165	99.071	
	Pb	208		-0.082
>	Sc-2	45	100.000	
	Fe	54		4.728
	Cu	63		26.781
	Zn	67		226.194
>	Ho-2	165	99.071	
	Pb	206		-0.461
	Pb	207		-1.136

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Zn	67	Q

METALS MISCELLANEOUS DATA

SEVERN TRENT **STL** Metals Prep Report for Batch # 5115187

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Prep Method: SW-846 6020, Soil 2% **SOP Number:** STL-IP-0013, Rev 6

Extraction Code: GK **Extraction:** TOTAL **Matrix:** SOLID **Prep Date:** 4/27/2005

Standard Log Ref#: MET-04/05-SOIL

Lot ID	Work Order #		Initial Wt/Vol	Final Volume	Lab Filtered	Due Date	Sample Location	Target List
								AG 2
F5D210354-001	G8WP7	[redacted]	0.50 g	50 mL	☐	05/09/2005	A68	AS 2
								BA 20
F5D210354-001D	G8WP7D	[redacted]	0.50 g	50 mL	☐		A68	BE 1
								CD 2.5
F5D210354-001S	G8WP7S	[redacted]	0.50 g	50 mL	☐		A68	CO 5
								CR 5
F5D210354-002	G8WQL	[redacted]	0.50 g	50 mL	☐	05/09/2005	A67	CU 5
								MN 10
F5D210354-003	G8WQN	[redacted]	0.50 g	50 mL	☐	05/09/2005	A67	NI 2
								PB 3
F5D210354-004	G8WQR	[redacted]	0.50 g	50 mL	☐	05/09/2005	A54	SB 2
								SE 2
F5D210354-005	G8WQT	[redacted]	0.50 g	50 mL	☐	05/09/2005	A54	TL 1
								V 5
F5D210354-007	G8WR6	[redacted]	0.50 g	50 mL	☐	05/09/2005	A54	
F5D210354-008	G8WTA	[redacted]	0.50 g	50 mL	☐	05/09/2005	A54	
F5D210354-009	G8WTE	[redacted]	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-010	G8WTG	[redacted]	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-011	G8WTR	[redacted]	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-013	G8WTV	[redacted]	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-014	G8WTW	[redacted]	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-015	G8WTX	[redacted]	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-016	G8WT0	[redacted]	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-017	G8WT1	[redacted]	0.50 g	50 mL	☐	05/09/2005	A44	
F5D220357-001	G817C	[redacted]	0.50 g	50 mL	☐	05/04/2005	A57	

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.16, updated 2/7/2005

F5D220357-001D	G817CD	[redacted]	0.50 g	50 mL	☐		A57
F5D220357-001S	G817CS	[redacted]	0.50 g	50 mL	☐		A57
F5D220357-002	G817D	[redacted]	0.50 g	50 mL	☐	05/04/2005	A57
F5D220357-003	G817E	[redacted]	0.50 g	50 mL	☐	05/04/2005	A57
F5D220357-004	G817F	[redacted]	0.50 g	50 mL	☐	05/04/2005	A88
F5D220357-005	G817G	[redacted]	0.50 g	50 mL	☐	05/04/2005	A88
F5D250000-187B	G84MFB	[redacted]	0.50 g	50 mL	☐		
F5D250000-187C	G84MFC	[redacted]	0.50 g	50 mL	☐		

Comments:

Chemical Lot Information

Chemical	Lot Number
Hydrochloric Acid	4104090
Hydrochloric Acid	A50478
Nitric Acid	1104100

Custody Information

Relinquished By: ML

Review/Received By: [redacted]

Date of Transfer: 4/27/05

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.16, updated 2/7/2005

WET CHEMISTRY

(ALPHABETICALLY BY ANALYSIS)

LOT #F5D220357

STL ST LOUIS

Severn Trent
St. Louis Laboratory

REACTIVE CYANIDE REPORT

SOP STL-IP-0001, current revision

Analyst: CF
Project No.: 8W0
Reviewed by: 5/10/05

Batch No.: 5126308

Prep Date: 5/4/2005
Analysis Date: 5/6/2005
Method No.: 9010
Date:

Laboratory ID	Standard ID	Raw Value (ug/L)	Dilution	Raw Value (mg/L)	Sample Weight (Kg)	Time of Measurement (seconds)	Scrubber Volume (L)	Reactive Cyanide Final Concentration (mg/Kg)	Percent Recovery	RPD	LCS True Value:
BLANK		0	1	0	0.01	1800	0.05	< 0.025			
LCS		152.42	1	0.15242	0.01	1800	0.05	0.76			
G8WQV		7.95	1	0.00795	0.01	1800	0.05	0.04			
G8WQV X		11.65	1	0.01165	0.01	1800	0.05	0.06			
G8WQV S		104.34	1	0.10434	0.01	1800	0.05	0.52			
G8WTT		14.08	1	0.01408	0.01	1800	0.05	0.07			
G8WT3		10.93	1	0.01093	0.01	1800	0.05	0.05			
G817H		21.27	1	0.02127	0.01	1800	0.05	0.11			
G817H X		11.42	1	0.01142	0.01	1800	0.05	0.06			
G817H S		116.97	1	0.11697	0.01	1800	0.05	0.58			
G88WQ		8.87	1	0.00887	0.01	1800	0.05	0.04			
G88W5		3.03	1	0.00303	0.01	1800	0.05	< 0.025			
G88W7		0.51	1	0.00051	0.01	1800	0.05	< 0.025			
G88XA		10.64	1	0.01064	0.01	1800	0.05	0.05			
G88XC		0	1	0	0.01	1800	0.05	< 0.025			
G88XD		0	1	0	0.01	1800	0.05	< 0.025			
G88XE		0	1	0	0.01	1800	0.05	< 0.025			
G896E		0	1	0	0.01	1800	0.05	< 0.025			
G8985		0	1	0	0.01	1800	0.05	< 0.025			
G899L		0	1	0	0.01	1800	0.05	< 0.025			
G9A7F		0.34	1	0.00034	0.01	1800	0.05	< 0.025			
G9A7P		33.71	1	0.03371	0.01	1800	0.05	0.17			

Control Limits (Water/Soil): LCS/MS = 10 - 100

$$\text{Total Available CN (mg/Kg)} = \frac{\text{raw value (mg/L) x scrubber volume(L) x 1800}}{\text{samples weight (Kg) x time (seconds)}}$$

File: Slsvr01\Wet Chem Results\ReacCN5605.xls, modified 3/22/04

STL

STL St. Louis

DISTILLATION SHEET/EXTRACT CHAIN OF CUSTODY

Analysis: CN Total Prep Date: 5/5/05 Batch No.: _____

Method No.: _____ Analyst: CE

SEQUENCE NO.	SAMPLE NO.	SAMPLE Weight/Volume	FINAL VOLUME	Interference Check Performed?	COMMENTS
1	BLK		50mL	NA	
2	LCS		↓	↓	
3	HCS		↓	↓	
4	G9DTE	50mL	↓	Yes	
5	-S	↓	↓	↓	
6	G9EXT	↓	↓	↓	
7	-X	↓	↓	↓	
8	-S	↓	↓	↓	
9	G9F0K	↓	↓	↓	
10	G9K2T	↓	↓	↓	
11	G9K2Y	↓	↓	↓	
12	G9QQP	↓	↓	↓	
13	G9QQ2	↓	↓	↓	
14	G9QRE	↓	↓	↓	
15	G9QRL	↓	↓	↓	
16	G9QRX	↓	↓	↓	
17	G9RJ1	↓	↓	↓	
18	G9RK1	↓	↓	↓	
19	G9TKF	↓	↓	↓	
20	G9TN8	↓	↓	↓	
21	G9QHP	↓	↓	↓	
22	G9QJM	↓	↓	↓	
23	G9QKN	↓	↓	↓	
24	G9QKQ	↓	↓	↓	
25	G9QMT	↓	↓	↓	

Note: Document custody transfer on date of distillatio extraction.

DATE	RELEASED BY	RECEIVED BY

STL St. Louis

Reactive Cyanide/Sulfide

DISTILLATION SHEET/EXTRACT CHAIN OF CUSTODY

Analysis: Reactive CnS Prep Date: 5/5/05 Batch No.: _____

Method No.: _____ Analyst: JZM

Flow rate maintained at 60 mL/min? X Yes ___ No

Stirrer setting maintained at approximately 30 rpm? X Yes ___ No

Length of time samples distilled: 30 min.

SEQUENCE NO.	SAMPLE NO.	SAMPLE Weight/Volume	FINAL VOLUME	COMMENTS
1	BLK	50ml	50ml	
2	LCS	↓	↓	
3	G9HTH	10ml		Sulfide Only
4	G9HTHX			↑
5	G9HTHS			
6	G9H2D			
7	G9H22			
8	G9H26			
9	G9H3C			
10	G9H3F			
11	G9H3K			
12	G9H3M			↓
13	G9H3P			Sulfide Only
14	G9JG1			
15	G9JHQ	↓		
16	G9RE6	~~50~~ 10g		
17	G9RFM ~~G9RE~~	10g		
18	G9RF1			
19	G9RF4			
20	G9RGA			
21	G9P28	↓		
22	G9P3M	10ml	↓	
23	G9JHQX	↓		
24	G9JHQS	↓	↓	
25				

DATE	RELEASED BY	RECEIVED BY

LOT #F[redacted]

STL St. Louis

Reactive Cyanide/Sulfide

DISTILLATION SHEET/EXTRACT CHAIN OF CUSTODY

Analysis: Reactive Cn/S Prep Date: 5/4/05 Batch No.: _____

Method No.: _____ Analyst: DZM

Flow rate maintained at 60 mL/min? X Yes ___ No

Stirrer setting maintained at approximately 30 rpm? X Yes ___ No

Length of time samples distilled: 30 min

SEQUENCE NO.	SAMPLE NO.	SAMPLE Weight/Volume	FINAL VOLUME	COMMENTS
1	BLK	50ml	50ml	
2	LCS	↓		
3	G9A7F	10g		
4	G9A7P			
5	G8WQV			
6	G8WQV-X			
7	G8WQV-S			
8	G8WTT			
9	G8WT3			
10	G817H			
11	G817H-X			
12	G817H-S			
13	G88WQ			
14	G88W5			
15	G88W7			
16	G88XA			
17	G88XC			
18	G88XD			
19	G88XE			
20	G886E			
21	G8985			
22	G899L	↓	↓	
23				
24				
25				

DATE	RELEASED BY	RECEIVED BY

LOT #F5D220357

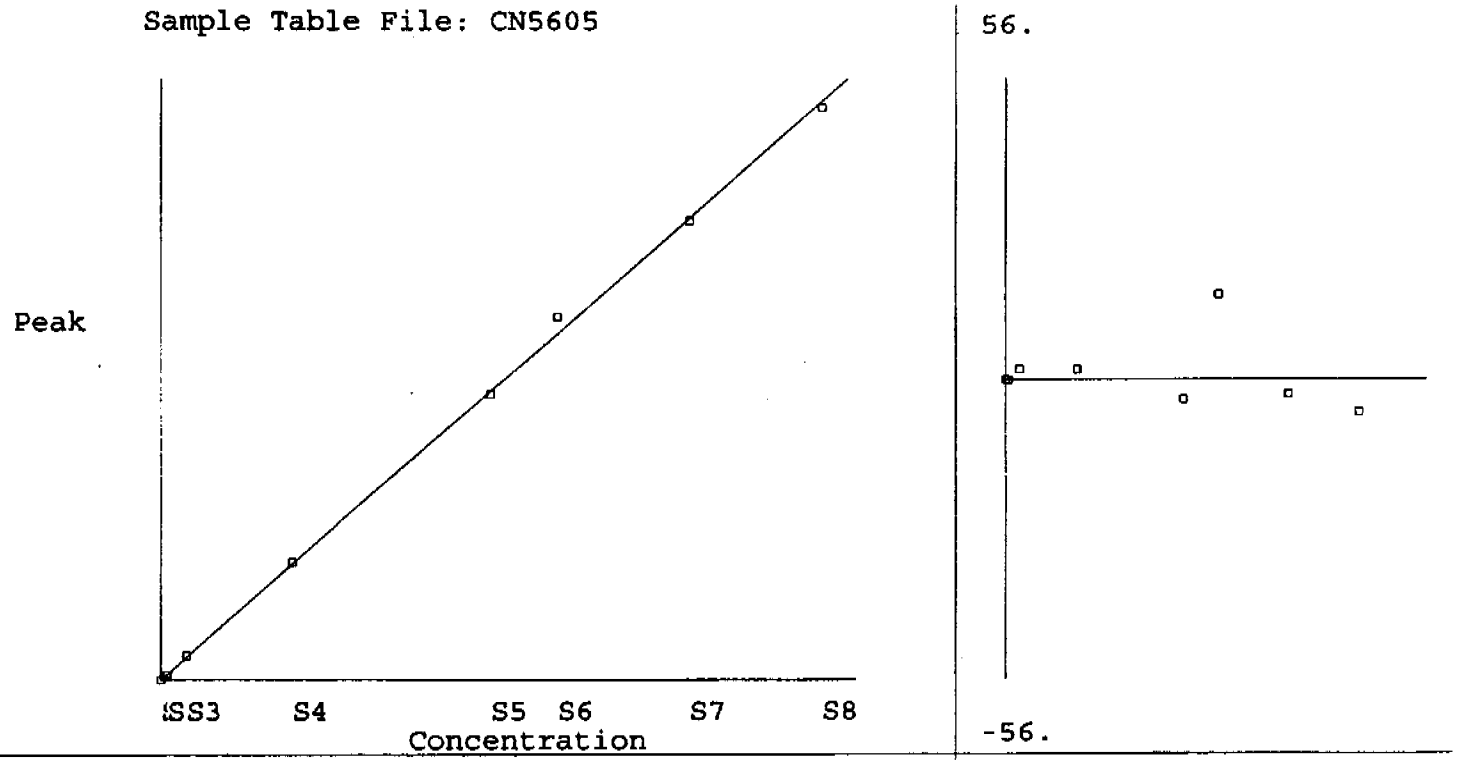
STL ST LOUIS

5/6/05 10:10 Standard Set #1.

Data File: CN5605

Method File: CYANIDE

Sample Table File: CN5605



S#	Peak	Value	Calc	Residual
S1	-0.01	0.00	-0.09	-0.09
S2	0.57	5.00	4.85	-0.15
S3	2.55	20.00	21.62	1.62
S4	11.97	100.00	101.66	1.66
S5	29.03	250.00	246.61	-3.39
S6	36.99	300.00	314.20	14.20
S7	46.78	400.00	397.35	-2.65
S8	58.20	500.00	494.39	-5.61

Coefficients:

Intercept :	0
Slope :	8.49407
Std Dev :	6.06029
Corr Coef :	0.999511
R^2 :	0.999022

Order of Fit: First
Coefs: 1st: 0.000000 2nd: 8.494066

Report Date: 5/6/05
Analysis Date: 5/6/05
Data File: CN5605
Method Name: CYANIDE
Units: ug/L
Description: Cyanide

R^2: 0.999022
Corr: 0.999511
Std. Dev.: 6.060290

Sample	Sample ID	Dilution	Weight	Corr. Conc.	Flags	Time
1	P			509.20		07:47:33
2	W			3.05	I	07:48:49
3	S1			0.00	-szI	07:50:05
4	S2			4.85	s	07:51:22
5	S3			21.62	s	07:52:34
6	S4			101.66	s	07:53:50
7	S5			246.61	s	07:55:05
8	S6			314.20	s	07:56:19
9	S7			397.35	s	07:57:35
10	S8			494.39	s	07:58:50
11	ICV			208.94/200 104%		08:00:05
12	ICB			0.00 ✓	-zRI	08:01:20
13	BLANK			0.00 ✓	-zRI	08:02:35
14	LCS			152.42		08:03:50
15	G9A7F			0.34	I	08:05:05
16	G9A7P			33.71		08:06:21
17	G8WQV			7.95		08:07:37
18	G8WQV X			11.65		08:08:52
19	G9WQV S			104.34		08:10:07
20	G8WTT			14.08		08:11:22
21	G8WT3			10.93		08:12:37
22	G817H			21.27		08:13:52
23	CCV			250.86/250 100%		08:15:06
24	CCB			0.00 ✓	-zRI	08:16:21
25	G817H X			11.42		08:17:37
26	G817H S			116.97		08:18:53
27	G88WQ			8.87		08:20:08
28	G88W5			3.03	I	08:21:22
29	G88W7			0.51	I	08:22:37
30	G88XA			10.64		08:23:52
31	G88XC			0.00	-zRI	08:25:07
32	G88XD			0.00	-zRI	08:26:22
33	G88XE			0.00	-zI	08:27:37
34	G886E			0.00	-zRI	08:28:53
35	CCV			252.54/250 101%		08:30:09
36	CCB			0.00 ✓	-zRI	08:31:24
37	G8985			0.00	-zRI	08:32:39
38	G899L			0.00	-zRI	08:33:54
39	BLANK			0.00	-zRI	08:35:09
40	LCS			138.91		08:36:25
41	G9JG1			0.00	-zRI	08:37:39
42	G9JHQ			0.00	-zRI	08:38:54
43	G9RE6			0.00	-zRI	08:40:09
44	G9RFM			0.00	-zRI	08:41:24
45	G9RF1			0.00	-zRI	08:42:39

Order of Fit: First
Coefs: 1st: 0.000000 2nd: 8.494066

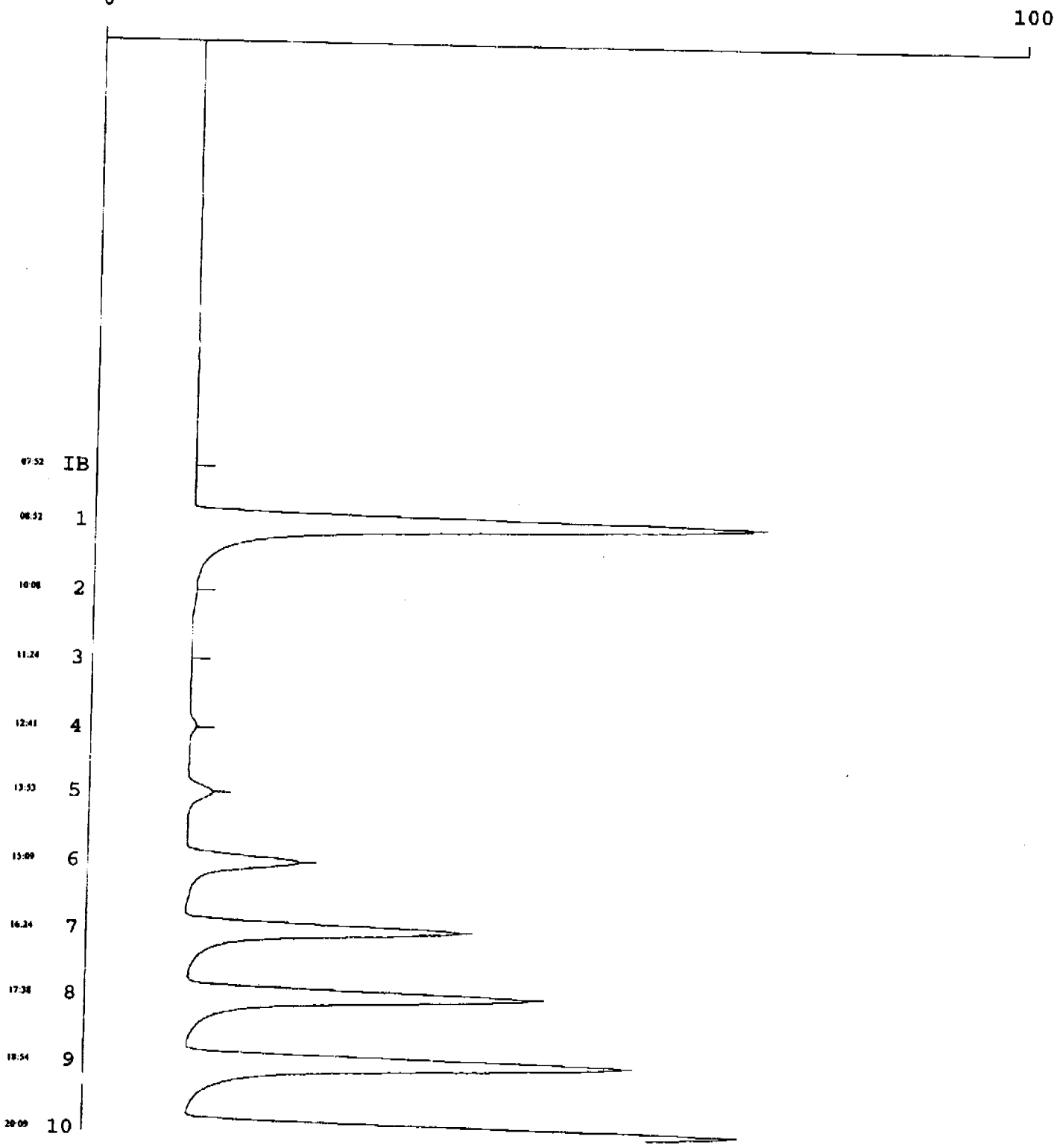
Report Date: 5/6/05
Analysis Date: 5/6/05
Data File: CN5605
Method Name: CYANIDE
Units: ug/L
Description: Cyanide

R^2: 0.999022
Corr: 0.999511
Std. Dev.: 6.060290

Sample	Sample ID	Dilution	Weight	Corr. Conc.	Flags	Time
46	G9RF4			0.00	-zRI	08:43:54
47	CCV			248.00/250 99%		08:45:09
48	CCB			0.00✓	-zRI	08:46:24
49	G9RGA			0.00	-zRI	08:47:39
50	G9P28			0.00	-zRI	08:48:54
51	G9P3M			0.00	-zRI	08:50:09
52	G9JHQ X			0.00	-zRI	08:51:25
53	G9JHQ S			175.62		08:52:41
54	BLANK			0.00✓	-zRI	08:53:56
55	LCS			102.75/100 103%		08:55:11
56	HCS			388.13/400 97%		08:56:27
57	G9DTE			14.52		08:57:41
58	G9DTE S			101.61		08:58:57
59	CCV			265.44/250 106%		09:00:12
60	CCB			0.00✓	-zRI	09:01:27
61	G9EXT			0.00	-zRI	09:02:42
62	G9EXT X			0.00	-zRI	09:03:57
63	G9EXT S			92.53		09:05:12
64	G9E0K			0.00	-zRI	09:06:27
65	G9K2T			142.04		09:07:43
66	G9K2V			139.72		09:08:58
67	G9QQP			0.00	-zRI	09:10:13
68	G9QQ2			0.00	-zRI	09:11:28
69	G9QRE			0.00	-zRI	09:12:43
70	G9QRL			43.76		09:13:59
71	CCV			258.21/250 103%		09:15:13
72	CCB			0.00✓	-zRI	09:16:28
73	G9QRX			0.00	-zRI	09:17:43
74	G9RJ1			0.00	-zRI	09:18:58
75	G9RKJ			0.00	-zRI	09:20:13
76	G9TKF			0.00	-zRI	09:21:28
77	G9TN8			0.00	-zRI	09:22:43
78	G9QHP			0.00	-zRI	09:23:58
79	G9QJM			0.00	-zRI	09:25:13
80	G9QKN			0.00	-zRI	09:26:28
81	G9QKQ			0.00	-zRI	09:27:43
82	G9QMT			0.00	-zRI	09:28:59
83	CCV			246.82/250 99%		09:30:15
84	CCB			0.00✓	-zRI	09:31:30
85	LCS			100.10		09:32:45
86	CCV			257.92/250 103%		09:34:00
87	CCB			0.00✓	-zRI	09:35:15
88	P			505.52		09:36:30

5/6/2005 10:10

Data: CN5605
Mthd: CYANIDE
Samp: CN5605



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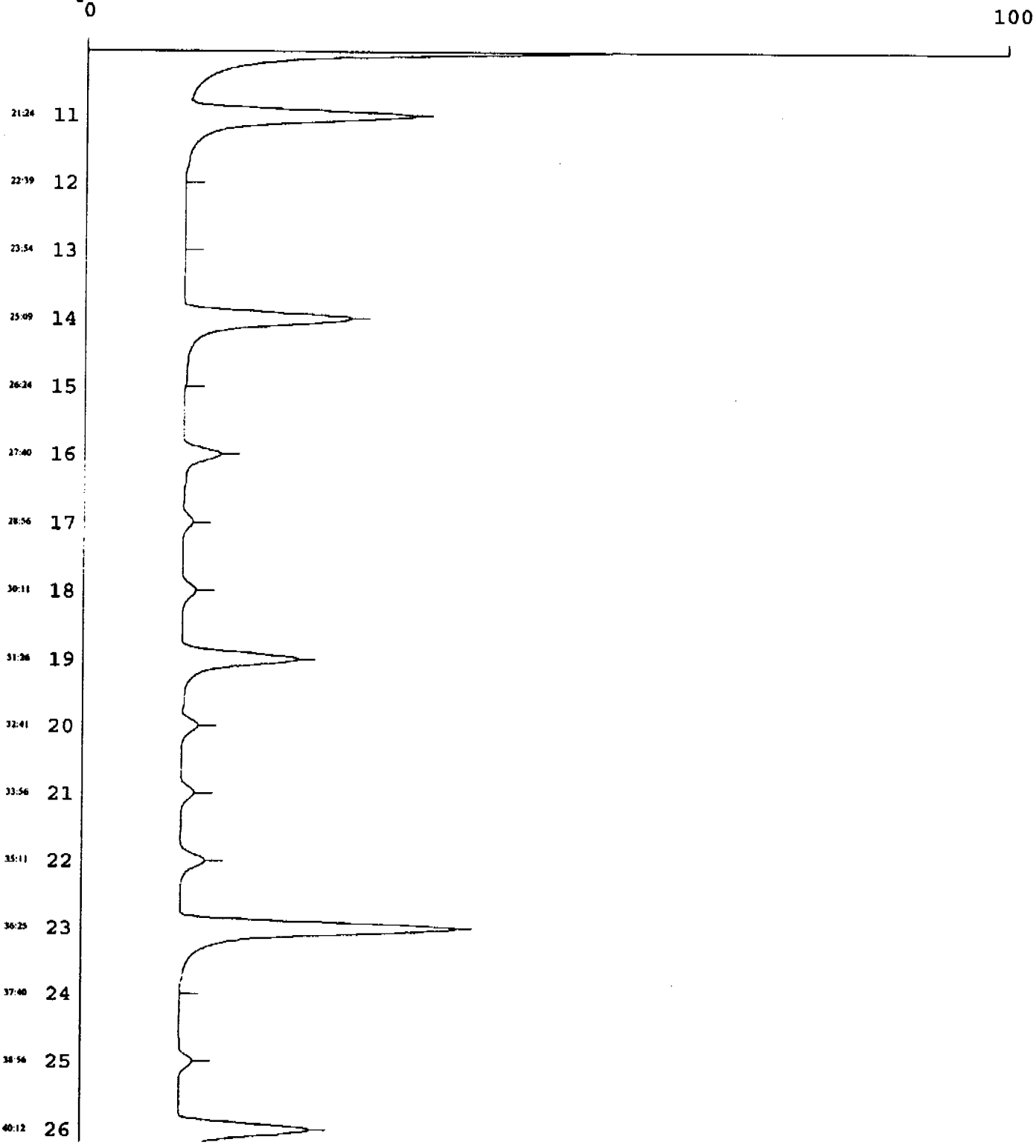
Mthd: CYANIDE
Samp: CN5605



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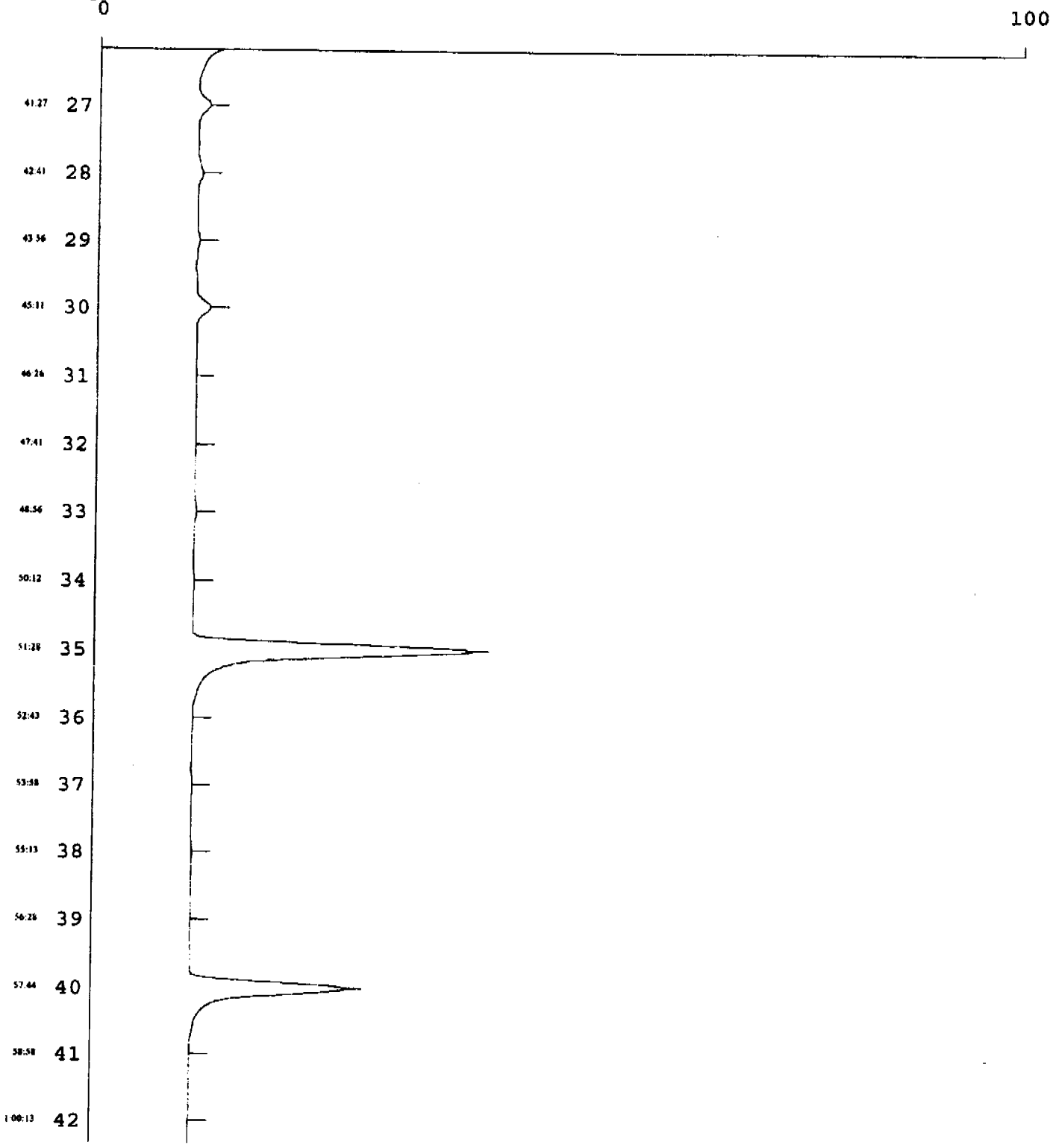
Samp: CN5605



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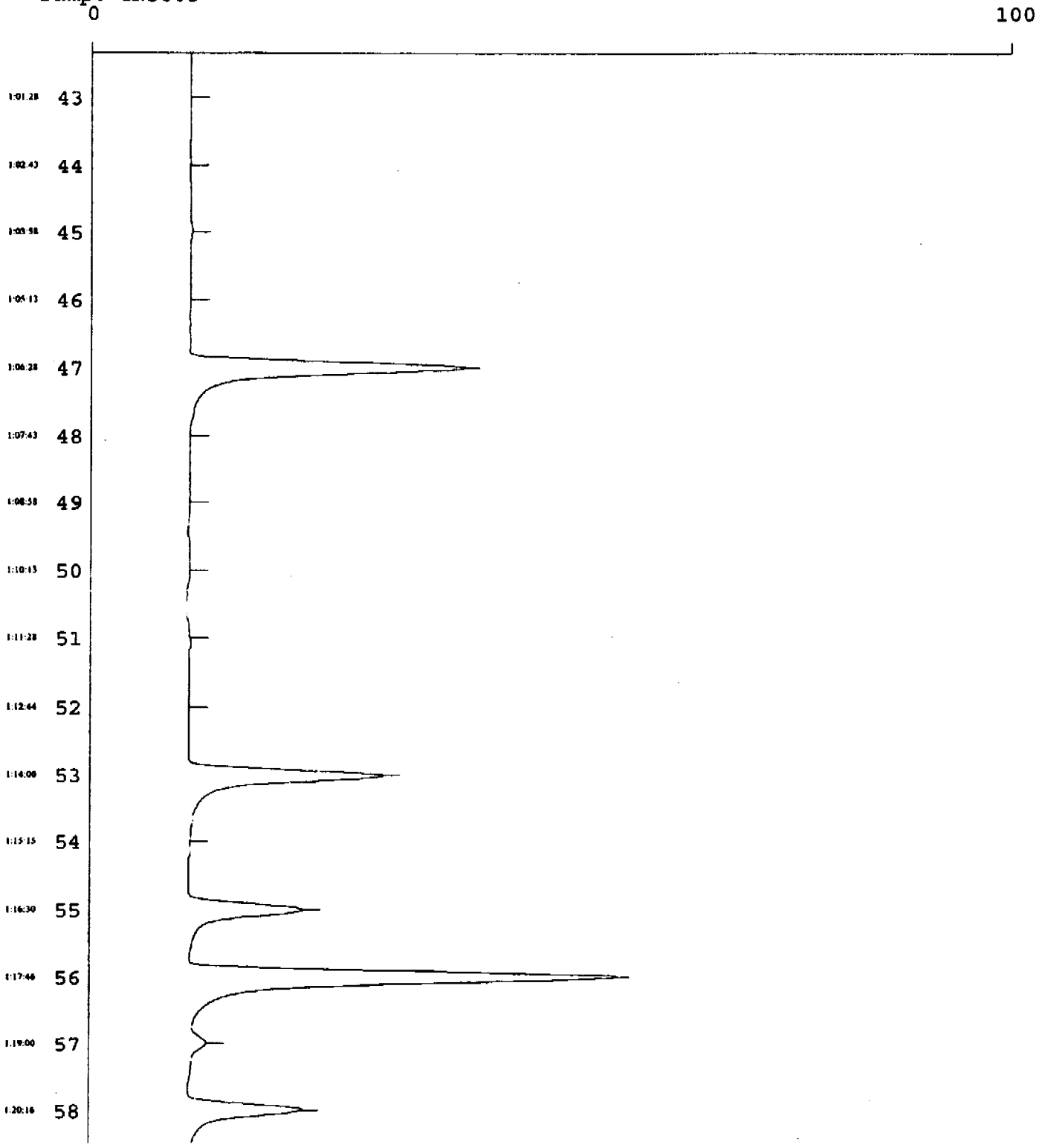
Mthd: CYANIDE
Samp: CN5605



5/6/2005 10:10

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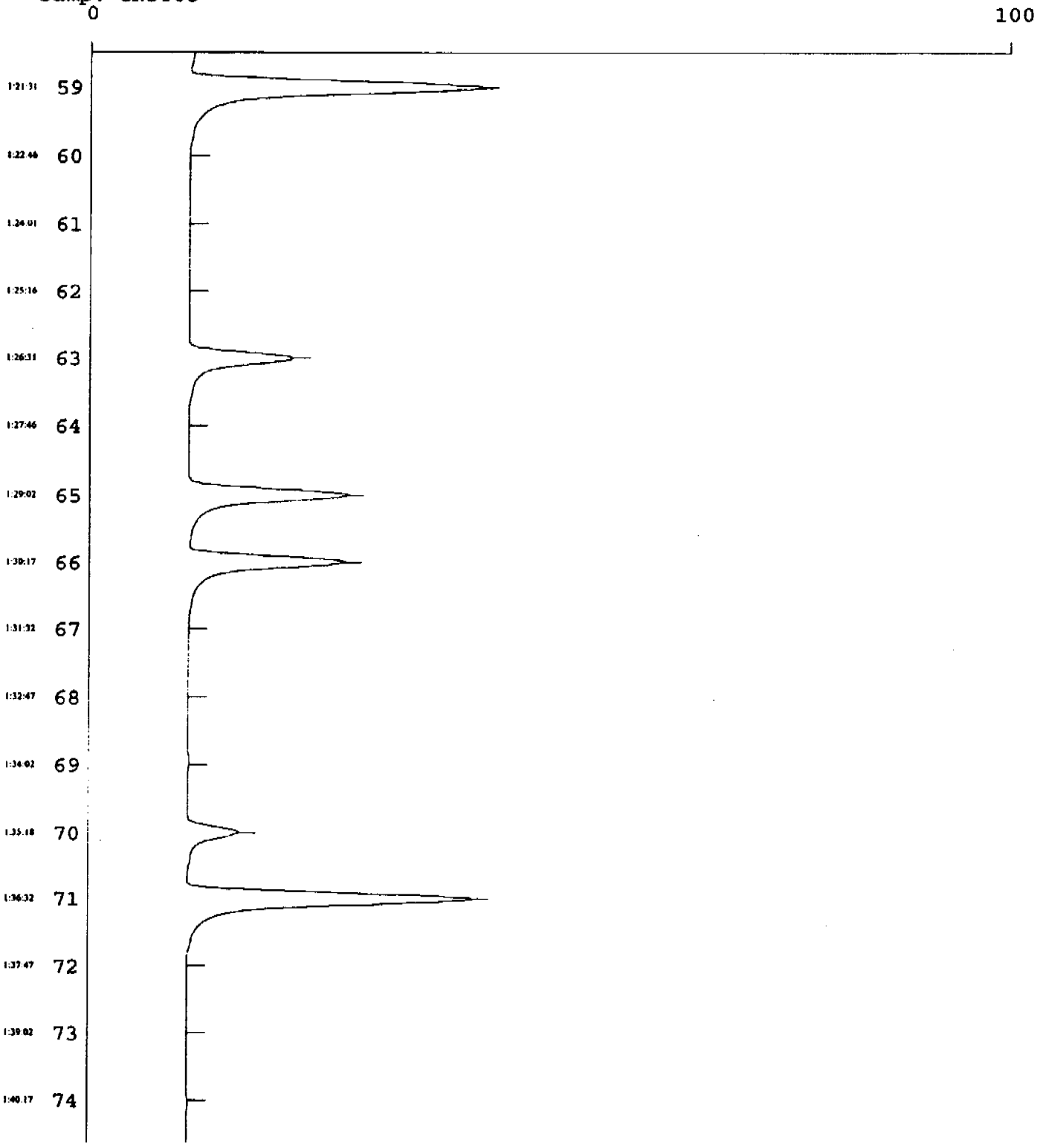
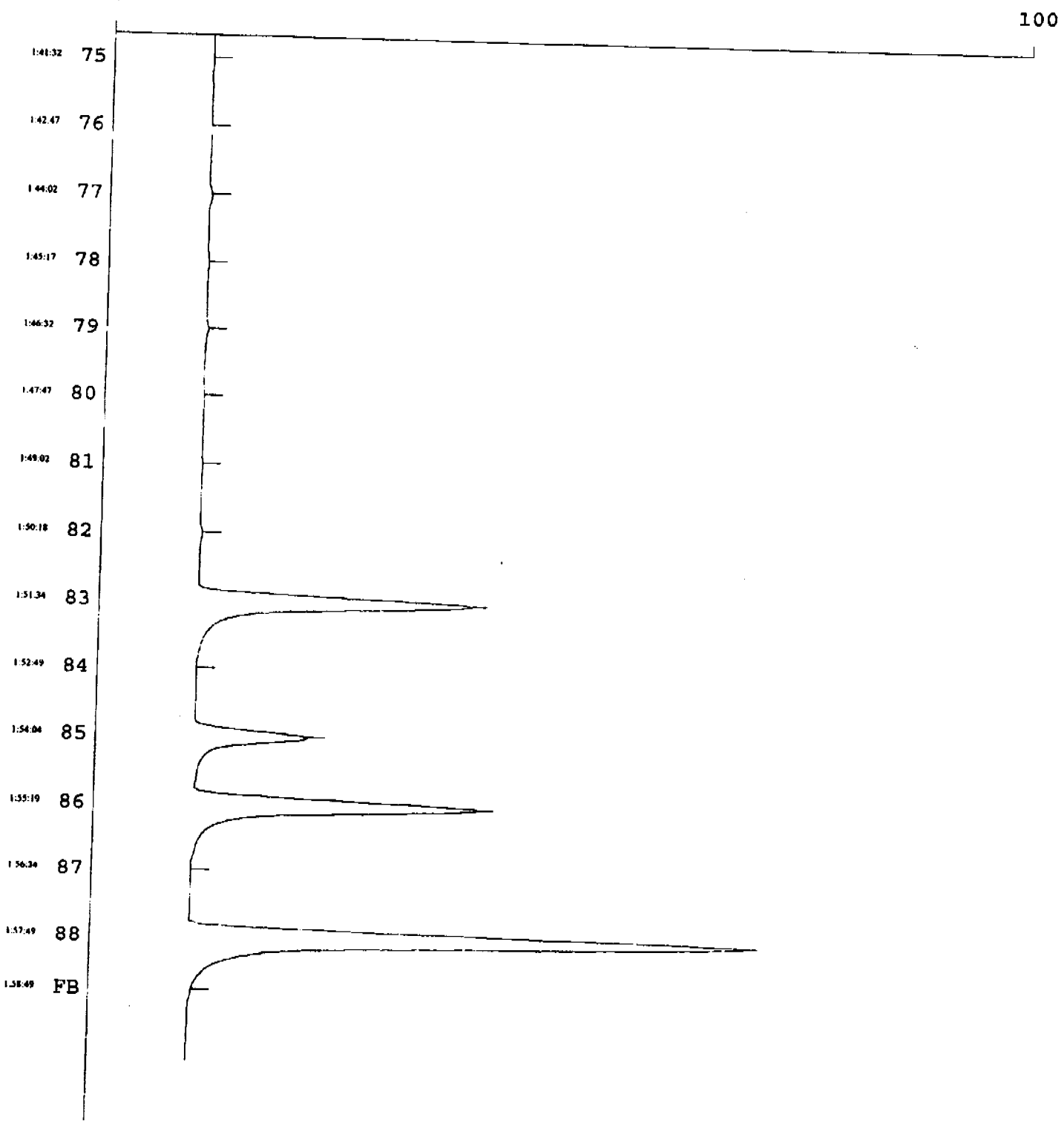
Mthd: CYANIDE
Samp: CN5605



5/6/2005 10:10

Page:6

Data: CN5605
Mthd: CYANIDE
Samp: CN5605



PDE115

Severn Trent Laboratories, Inc.
Inorganics Batch Review
QC Batch **5115320**

Date 4/25/2005
Time 14:16:11

Method Code:**AE Flash Point (1010, Closed Cup)**
Analyst:**Brian M. Wingbermuehle**

Work Order	Result	Units	LDL/Dil	Prep. - Anal.	Total Solids	PSRL Flag	R/R	Rounded Result	Output LDL	Dil.
G8WQV-1-AM	>60	deg C		04/25/05	.00	N		60.0		1.00
G8WQV-1-AP	>60	deg C		04/25/05	.00	N		60.0		1.00
G8WTT-1-AG	>60	deg C		04/25/05	.00	N		60.0		1.00
G8WT3-1-AG	>60	deg C		04/25/05	.00	N		60.0		1.00
G817H-1-AF	>60	deg C		04/25/05	.00	N		60.0		1.00
G817H-1-AL	>60	deg C		04/25/05	.00	N		60.0		1.00
G826H-1-AE	>60	deg C		04/25/05	.00	N		60.0		1.00

Notes:

Check Standard

Work Order	Exception Code	True Spike	Measured Spike	Percent Recovered	Prep. - Anal.	Control Limits	Dil.
G8488-1-AA		27.2	28	102.94	04/25/05	(96-104)	1.00

Notes:

PRODUCTION TOTALS

TEST	TOTAL #	SAMPLE #	QC #	MATRIX #	OTHER #	MISC #	HOURS
	0	0	0	0	0	0	.0

STL

Batch #: 5115320-1

Analyst: BMW

Analysis Date: 4/25/05

STL
St. Louis

FLASHPOINT REPORT

(SOP No. STL-WC-0026, Current Revision)

SW 2RVW 4/25/05

Lab ID	Flashpoint °C	Comments
LCS	28.0°C	
G8WQV	No Flash @ 60°C	
G8WQV-X	No Flash @ 60°C	
G826H	No Flash @ 60°C	
G8WTT	No Flash @ 60°C	
G8UT3	No Flash @ 60°C	
G817H	No Flash @ 60°C	
G817H-X	No Flash @ 60°C	
G8XUL	No Flash @ 60°C	liquid
G8XUL-X	No Flash @ 60°C	
CCV	27.5°C	

The flashpoint of the p-Xylene check standard must be 27.2° C ± 1.1° C (26.1° C to 28.3° C).

LOT #F5D220357

STL ST LOUIS

STL St. Louis

Standards Preparation Logbook Summary

Apr-25-2005

Logbook: \\Qstlmo01\Stdslog\l-Prep.std

Date Prep Opened	Std ID	Mix Name	Component	Parent ID	Parent Concentration	Aliquot	Final Volume	Final Concentration	Solvent	Analyst	Exp Date(1)	Exp Date(2)
08/03/2004	IP0907-04	P-Xylene	p-xylene		99.0(M) %				None	hraatz	07/16/2009	07/16/2009

Reviewed By: SRO 4/25/05

907 of 942

STL St. Louis

Standards Preparation Logbook Record

Apr-25-2005

Logbook: \\Qstlmo01\Stdslog\I-Prep.std

IP0907-04, P-Xylene

Analyst: braatzs

Vendor: Aldrich Lot No.: EA 43548tb Vendor's Expiration Date: 07-16-2009
Solvent: None
Date Prep./Opened: 08-03-2004 Date Received: 09-16-2003
Date Expires(1): 07-16-2009 (5 Years)
Date Expires(2): 07-16-2009 (5 Years)

Component	Initial Conc (%)	Final Conc (%)
p-xylene	99.000	99.000

STL
St. Louis Laboratory

Data Tracking Sheet

Lot #: F5D220141 **Batch #:** 5115139

Analysis: 220215, 220273, 220333, 220357, 220129 PM **SDG:**

Date Released by Lab: SW 4/26/05

Date Received By Document Control:

Check as Applicable:

☐ Certificate ☐ Data Package

Notes:

RQC050 Severn Trent Laboratories, Inc. Run Date: 4/25/05
WET CHEM BATCHSHEET Time: 13:33:11

STL St. Louis

PRODUCTION FIGURES - WET CHEM

TOTAL NUMBER	SAMPLE NUMBER	QC	RE-RUN MATRIX	RE-RUN OTHER	MISC NUMBER	TOTAL HOURS	EXPANDED DELIVERABLE

METHOD: WM Moisture, Percent (160.3)
QC BATCH #: 5115139 INITIALS: DATA ENTRY:
PREP DATE: 4/25/05 PREP _____ INITIALS _____
COMP DATE: 4/26/05 ANAL _____ DATE _____
USER: BRAATZS

Work Order	Lab Number	Structured Analysis	Exp. Del.	Analysis Date	Sample ID:
G8X5D-1-AA	F-5D220141-001	XX A 88 WM 01	B		SS-DR
G8X5Q-1-AA	F-5D220141-002	XX A 88 WM 01	B		SS-PPE
G80WX-1-AA	F-5D220215-001	XX A 88 WM 01	B		B1C7D5
G81GA-1-AA	F-5D220273-002	XX A 88 WM 01	Y-D		RE73-05-58879
G8104-1-AA	F-5D220333-001	XX A 88 WM 01	W		SB-1A
G811W-1-AA	F-5D220333-002	XX A 88 WM 01	W		SB-1B
G8111-1-AA	F-5D220333-003	XX A 88 WM 01	W		SB-2A
G813A-1-AA	F-5D220333-004	XX A 88 WM 01	W		SB-2B
G813D-1-AA	F-5D220333-005	XX A 88 WM 01	W		SB-3A
G813H-1-AA	F-5D220333-006	XX A 88 WM 01	W		SB-3B
G813N-1-AA	F-5D220333-007	XX A 88 WM 01	W		SB-4A
G813P-1-AA	F-5D220333-008	XX A 88 WM 01	W		SB-4B
G817C-1-EH	F-5D220357-001	XX A 88 WM 01	Y-D		RE73-05-58842
G817D-1-CD	F-5D220357-002	XX A 88 WM 01	Y-D		RE73-05-58843
G817E-1-CD	F-5D220357-003	XX A 88 WM 01	Y-D		RE73-05-58844
G817F-1-CD	F-5D220357-004	XX A 88 WM 01	Y-D		RE73-05-58845
G817G-1-CD	F-5D220357-005	XX A 88 WM 01	Y-D		RE73-05-58846
G817H-1-AG	F-5D220357-006	XX A 88 WM 01	Y-D		RE73-05-58879
G829D-1-AA	F-5D230129-001	XX A 88 WM 01	B		1014-1B-H

G829G-1-AA	F-5D230129-002	XX A 88 WM 01	B	_____	1014-1B-HT
G829G-1-AE	F-5D230129-002-X	XX A 88 WM 01	B	_____	1014-1B-HT DUP

Control Limits

PDE115

Severn Trent Laboratories, Inc.
Inorganics Batch Review
QC Batch 5115139

Date 4/26/2005
Time 9:08:05

Method Code: **WM Moisture, Percent (160.3)**
Analyst: **Steve Braatz**

Work Order	Result	Units	LDL/Dil	Prep. - Anal.	Total Solids	PSRL Flag	R/R	Rounded Result	Output LDL	Dil.
G8X5D-1-AA	7.20	%	0.1	04/25-04/26/05	7.20	N		7.2	0.10	1.00
G8X5Q-1-AA	7.74	%	0.1	04/25-04/26/05	7.74	N		7.7	0.10	1.00
G80WX-1-AA	3.34	%	0.1	04/25-04/26/05	.00	N		3.3	0.10	1.00
G81GA-1-AA	8.50	%	0.1	04/25-04/26/05	.00	N		8.5	0.10	1.00
G8104-1-AA	6.97	%	0.1	04/25-04/26/05	.00	N		7.0	0.10	1.00
G811W-1-AA	9.06	%	0.1	04/25-04/26/05	.00	N		9.1	0.10	1.00
G8111-1-AA	12.41	%	0.1	04/25-04/26/05	.00	N		12.4	0.10	1.00
G813A-1-AA	17.77	%	0.1	04/25-04/26/05	.00	N		17.8	0.10	1.00
G813D-1-AA	12.62	%	0.1	04/25-04/26/05	.00	N		12.6	0.10	1.00
G813H-1-AA	28.62	%	0.1	04/25-04/26/05	.00	N		28.6	0.10	1.00
G813N-1-AA	15.73	%	0.1	04/25-04/26/05	.00	N		15.7	0.10	1.00
G813P-1-AA	20.16	%	0.1	04/25-04/26/05	.00	N		20.2	0.10	1.00
G817C-1-EH	20.34	%	0.1	04/25-04/26/05	.00	N		20.3	0.10	1.00
G817D-1-CD	19.14	%	0.1	04/25-04/26/05	.00	N		19.1	0.10	1.00
G817E-1-CD	27.93	%	0.1	04/25-04/26/05	.00	N		27.9	0.10	1.00
G817F-1-CD	25.01	%	0.1	04/25-04/26/05	.00	N		25.0	0.10	1.00
G817G-1-CD	20.99	%	0.1	04/25-04/26/05	.00	N		21.0	0.10	1.00
G817H-1-AG	22.28	%	0.1	04/25-04/26/05	.00	N		22.3	0.10	1.00
G829D-1-AA	21.55	%	0.1	04/25-04/26/05	.00	N		21.6	0.10	1.00
G829G-1-AA	20.91	%	0.1	04/25-04/26/05	.00	N		20.9	0.10	1.00
G829G-1-AE	20.99	%	0.1	04/25-04/26/05	.00	N		21.0	0.10	1.00

Notes:

PRODUCTION TOTALS

TEST	TOTAL #	SAMPLE #	QC #	MATRIX #	OTHER #	MISC #	HOURS
	0	0	0	0	0	0	.0

STL ST LOUIS

LOT #F5D220357

Sheet1

Severn Trent St. Louis

Percent Total Solid/Percent Moisture Logsheet

STL-WC-0005, current revision

Analysis: %Moisture Time In: 11:20 Batch: 5115140

Prep Date: 04/25/05 Time Out: 2:30 Analyst: sdb

Anal Date: 04/26/05 Balance 1 SN: L22450 Reviewed By: SW 4/26/05

Balance 2 SN: L22450

Pan Number	Sample Id	Pan wt	Wet Sam + Pan g	Dry Sam + Pan wt	Results Total Solids %	Results MS %	Comments
1	G826H-001	1.0130	11.7054	9.5116	79.48	20.52	
2	G827R-001	1.0114	12.8143	11.8728	92.02	7.98	
3	G80CL-001	1.0190	5.9196	5.7331	96.19	3.81	
4	G80C5-001	1.0130	9.8263	9.0187	90.84	9.16	
5	G80C9-001	1.0210	10.3048	10.2308	99.20	0.80	
6	G80DE-001	1.0138	8.6790	8.5527	98.35	1.65	
7	G80DG-001	1.0185	8.1894	8.0347	97.84	2.16	
8	G80DL-001	1.0198	6.6268	6.3906	95.79	4.21	
9	G80DP-001	1.0158	8.3903	8.1948	97.35	2.65	
10	G80DV-001	1.0110	7.0334	6.8695	97.28	2.72	
11	G80DX-001	1.0075	6.6784	6.5561	97.84	2.16	
12	G80D1-001	1.0019	7.1447	6.6245	91.53	8.47	
13	G80D1x	1.0073	7.9508	7.3457	91.29	8.71	
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STL
St. Louis Laboratory

Data Tracking Sheet

Lot #: F5D210354
220357
230123

Batch #: 5115319

Analysis: Paint Filter

SDG:

Date Released by Lab: SW 4/25/05

Date Received By Document Control:

Check as Applicable:

☐ **Certificate** ☐ **Data Package**

Notes:

RQC050

Severn Trent Laboratories, Inc
WET CHEM BATCHSHEET

Run Date: 4/25/05
Time: 13:13:09

STL St. Louis

PRODUCTION FIGURES WET CHEM

TOTAL NUMBER	SAMPLE NUMBER	QC	RE-RUN MATRIX	RE-RUN OTHER	MISC NUMBER	TOTAL HOURS	EXPANDED DELIVERABLE

METHOD: FQ Paint Filter Test (9095, Free Liquids)
QC BATCH #: 5115319
PREP DATE: 4/25/05
COMP DATE: 4/25/05
USER: WINGBERB

INITIALS: PREP
ANAL

DATA ENTRY INITIALS:
DATE:

Work Order	Lab Number	Structured Analysis	Exp. Del.	Analysis Date	Sample ID
G8WQV-1-AL	F-5D210354-006	XX A 88 FQ 01	Y-D		RE73-05-58829
G8WQV-1-AR	F-5D210354-006-X	XX A 88 FQ 01	Y-D		RE73-05-58829 DUP
G8WTT 1 AF	F-5D210354-012	XX A 88 FQ 01	Y-D		RE73-05-58835
G8WT3 1 AF	F-5D210354-018	XX A 88 FQ 01	Y-D		RE73-05-58841
G817H 1 AE	F-5D220357-006	XX A 88 FQ 01	Y-D		RE73-05-58879
G826H-1-AF	F-5D230123-001	XX A 88 FQ 01	B		SB-1

Control Limits

PDE115

Severn Trent Laboratories, Inc.
Inorganics Batch Review
QC Batch **5115319**

Date 4/25/2005
Time 14:15:43

Method Code:**FQ Paint Filter Test (9095, Free Liquids)**
Analyst:**Brian M. Wingbermuehle**

Work Order	Result	Units	LDL/Dil	Prep. - Anal.	Total Solids	PSRL Flag	R/R	Rounded Result	Output LDL	Dil.
G8WQV-1-AL	PASS	No Units	0	04/25/05	.00	N		PAS,S	0.0	1.00
G8WQV-1-AR	PASS	No Units	0	04/25/05	.00	N		PAS,S	0.0	1.00
G8WTT-1-AF	PASS	No Units	0	04/25/05	.00	N		PAS,S	0.0	1.00
G8WT3-1-AF	PASS	No Units	0	04/25/05	.00	N		PAS,S	0.0	1.00
G817H-1-AE	PASS	No Units	0	04/25/05	.00	N		PAS,S	0.0	1.00
G826H-1-AF	PASS	No Units	0	04/25/05	.00	N		PAS,S	0.0	1.00

Notes:
S The result was determined using the Method of Standard Additions (
MSA).

PRODUCTION TOTALS

TEST	TOTAL #	SAMPLE #	QC #	MATRIX #	OTHER #	MISC #	HOURS
	0	0	0	0	0	0	.0

STL
St. Louis Laboratory

PAINT FILTER LIQUIDS TEST
(STL-WC-0031, Current Revision)

Analyst: SMW
Analysis Date: 4/25/05
Reviewed By: 5/04/2005

Project No.:
Batch No.: 511539

Laboratory ID	Sample Weight (g)	Start Time	Stop Time	PASS	FAIL
G8WQV	100.0g	13:30	13:35	✓	
G8WQV-X		13:32	13:37	✓	
G8WTT		13:35	13:40	✓	
G8WT3		13:38	13:43	✓	
G817H		13:41	13:46	✓	
G826H		13:42	13:47	✓	

PASS = Free liquids not present
FAIL = Free liquids present

PDE115

Severn Trent Laboratories, Inc.
Inorganics Batch Review
QC Batch **5115278**

Date 4/25/2005
Time 14:00:23

Method Code:**FK pH (9045) - Non-Aqueous**
Analyst:**Mike Anderson**

Work Order	Result	Units	LDL/Dil	Prep. - Anal.	Total Solids	PSRL Flag	R/R	Rounded Result	Output LDL	Dil.
G8WQV-1-AC	7.97	No Units	0	04/25/05	.00	N		8.0	0.0	1.00
G8WQV-1-AQ	8.05	No Units	0	04/25/05	.00	N		8.0	0.0	1.00
G8WTT-1-AC	8.05	No Units	0	04/25/05	.00	N		8.0	0.0	1.00
G8WT3-1-AC	8.13	No Units	0	04/25/05	.00	N		8.1	0.0	1.00
G817H-1-AA	8.26	No Units	0	04/25/05	.00	N		8.3	0.0	1.00
G817H-1-AP	8.19	No Units	0	04/25/05	.00	N		8.2	0.0	1.00

Notes:

Check Standard

Work Order	Exception Code	True Spike	Measured Spike	Percent Recovered	Prep. - Anal.	Control Limits	Dil.
G846W-1-AA		7.01	7.01	100.14	04/25/05	(99-101)	1.00

Notes:

PRODUCTION TOTALS

TEST	TOTAL #	SAMPLE #	QC #	MATRIX #	OTHER #	MISC #	HOURS
	0	0	0	0	0	0	.0

STL St. Louis
pH in Soil
(SOP # STL-WC-0021, Current Revision)

Analyst: [illegible]

Method No.: SW846 9045

Analysis Date: 4-25-05

Page 1 of 1

Batch No.: 5115278

Reviewed By: SW 4/25/05

Samples <20% Water? X Yes ____ No

Lab ID	SampleWeight (g)	Standard ID	Analysis Time	Temp. (°C)	Volume of Water or $CaCl_2$ (ml)	pH Reading
CAL 4			12:45	20.9	50	3.98
7				20.9		7.01
10				21.8		10.01
LCS				20.7		7.01
G8WQV	20g			21.8	40	7.97
G8WQV-X				21.5		8.05
G8WTT				21.8		8.05
G8WT3				21.7		8.13
G817H				21.6		8.26
G817H-X				21.6		8.19
CCV				20.2		7.01

SL-INORG-0010, Revised 2/19/02
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STL St. Louis

Standards Preparation Logbook Summary

Apr-25-2005

Logbook: \\Qstlmo01\Stdslog\I-Prep.std

The following groups are in included in this report, either in whole or in part: PH042505

Date Prep Opened	Std ID	Mix Name	Component	Parent ID	Parent Concentration	Aliquot	Final Volume	Final Concentration	Solvent	Analyst	Exp Date1	Exp Date2
03/02/2005	IPH121-05	Buffer solution LCS	DI WATER		100.00 %			100.00 %	None	andersonm	03/02/2007	03/02/2007
04/15/2005	IPH474-05	PH BUFFER 4	DI		99.900 %			99.900 %	Water	andersonm	05/15/2005	10/15/2006
04/15/2005	IPH475-05	PH BUFFER 7	DI		99.900 %			99.900 %	Water	andersonm	04/15/2006	04/15/2006
04/19/2005	IPH491-05	PH Buffer 10	DI		99.900 %			99.900 %	None	muellerd	01/31/2007	01/31/2007

Reviewed By: SW 4/25/05

Page 1 of 1

STL St. Louis

Standards Preparation Logbook Record

Apr-25-2005

Logbook: \\Qstlmo01\Stdslog\I-Prep.std
The following groups are in included in this report, either in whole or in part:
PH042505

IP0121-05, Buffer solution LCS

Analyst: andersonm

Vendor: solutions plus Lot No.: 3405080 Vendor's Expiration Date: 03-02-2007
Solvent: None
Date Prep./Opened: 03-02-2005 Date Received: 03-02-2005
Date Expires(1): 03-02-2007 (None)
Date Expires(2): 03-02-2007 (None)
24 mo exp. date

Component	Initial Conc (%)	Final Conc (%)
DI WATER	100.00	100.00

IP0474-05, PH BUFFER 4

Analyst: andersonm

Vendor: PROTOCOL Lot No.: V89591 Vendor's Expiration Date: 10-15-2006
Solvent: Water
Date Prep./Opened: 04-15-2005
Date Expires(1): 05-15-2005 (1 Month)
Date Expires(2): 10-15-2006 (None)

Component	Initial Conc (%)	Final Conc (%)
DI	99.900	99.900

IP0475-05, PH BUFFER 7

Analyst: andersonm

Vendor: PROTOCOL Lot No.: V88937 Vendor's Expiration Date: 09-15-2006
Solvent: Water
Date Prep./Opened: 04-15-2005
Date Expires(1): 04-15-2006 (1 Year)
Date Expires(2): 04-15-2006 (1 Year)

Component	Initial Conc (%)	Final Conc (%)
DI	99.900	99.900

IP0491-05, PH Buffer 10 Analyst: muellerd

Vendor: Fisher Lot No. V91772 Vendor's Expiration Date: 01-31-2007
Solvent: None
Date Prep./Opened: 04-19-2005 Date Received: 04-19-2005
Date Expires(1): 01-31-2007 (None)
Date Expires(2): 01-31-2007 (None)

Component	Initial Conc (%)	Final Conc (%)
DI	99.900	99.900

PDE115

Severn Trent Laboratories, Inc.
Inorganics Batch Review
QC Batch **5126399**

Date 5/06/2005
Time 15:48:55

Method Code:**GJ Sulfide, Reactive (SW7.3.4)**
Analyst:**Danielle Mueller**

Work Order	Result	Units	LDL/Dil	Prep. - Anal.	Total Solids	PSRL Flag	R/R	Rounded Result	Output LDL	Dil.
G8WQV-1-AE	ND	mg/kg	4.44	05/04-05/06/05	76.54	N		ND	5.8	1.00
G8WQV-1-AK	ND	mg/kg	4.44	05/04-05/06/05	76.54	N		ND	5.8	1.00
G8WTT-1-AE	ND	mg/kg	4.44	05/04-05/06/05	76.24	N		ND	5.8	1.00
G8WT3-1-AE	ND	mg/kg	4.44	05/04-05/06/05	80.35	N		ND	5.5	1.00
G817H-1-AD	ND	mg/kg	4.44	05/04-05/06/05	77.72	N		ND	5.7	1.00
G817H-1-AK	ND	mg/kg	4.44	05/04-05/06/05	77.72	N		ND	5.7	1.00
G88WQ-1-A4	ND	mg/kg	22.2	05/04-05/06/05	90.62	N		ND	24.5	1.00
G88W5-1-AF	ND	mg/kg	22.2	05/04-05/06/05	90.19	N		ND	24.6	1.00
G88W7-1-AF	ND	mg/kg	22.2	05/04-05/06/05	92.32	N		ND	24.0	1.00
G88XA-1-AF	ND	mg/kg	22.2	05/04-05/06/05	91.38	N		ND	24.3	1.00
G88XC-1-AF	ND	mg/kg	22.2	05/04-05/06/05	90.04	N		ND	24.7	1.00
G88XD-1-AF	ND	mg/kg	22.2	05/04-05/06/05	92.10	N		ND	24.1	1.00
G88XE-1-AF	ND	mg/kg	22.2	05/04-05/06/05	89.73	N		ND	24.7	1.00
G896E-1-A2	ND	mg/kg	22.2	05/04-05/06/05	96.38	N		ND	23.0	1.00
G8985-1-AD	ND	mg/kg	22.2	05/04-05/06/05	88.27	N		ND	25.2	1.00
G899L-1-AD	ND	mg/kg	22.2	05/04-05/06/05	89.59	N		ND	24.8	1.00
G9A7F-1-AD	ND	mg/kg	4.44	05/04-05/06/05	80.41	N		ND	5.5	1.00
G9A7P-1-AF	22.2	mg/kg	4.44	05/04-05/06/05	79.04	N		28.1	5.6	1.00
G92N4-1-AA	ND	mg/kg	4.44	05/04-05/06/05	.00			ND	4.4	1.00

Notes:
Results and reporting limits have been adjusted for dry weight.

Check Standard

Work Order	Exception Code	True Spike	Measured Spike	Percent Recovered	Prep. - Anal.	Control Limits	Dil.
G92N4-1-AC		200	66.5	33.25	05/04-05/06/05	(10-150)	1.00

Notes:

PDE115

Severn Trent Laboratories, Inc.
Inorganics Batch Review
QC Batch **5126399**

Date 5/06/2005
Time 15:48:55

Method Code:**GJ Sulfide, Reactive (SW7.3.4)**
Analyst:**Danielle Mueller**
Measured Spike

Work Order	Exception Code	Measured Sample	True Spike	Measured Spike	Percent Recovered	Prep. - Anal.	Dil.
G8WQV-1-AH		ND	200	ND	.00	05/04-05/06/05	1.00
G817H-1-AN		ND	200	ND	.00	05/04-05/06/05	1.00

Notes:

PRODUCTION TOTALS

TEST	TOTAL #	SAMPLE #	QC #	MATRIX #	OTHER #	MISC #	HOURS
	0	0	0	0	0	0	0

Severn Trent
St. Louis Laboratory

REACTIVE SULFIDE REPORT

(SOP: STL-IP-0002, current revision)
Page: 1 of 1

Analyst: DLM
Reviewed by: [illegible]
Date: [illegible]

Batch No.: 5126399

Prep Date: 5/4/2005
Analysis Date: 5/6/2005
Method No.: 9030

Laboratory ID	Standard ID	Raw Value (mg/L)	Sample Weight (kg)	Time of Measurement (seconds)	Scrubber Volume (L)	Reactive Sulfide Final Concentration (mg/Kg)	Percent Recovery	RPD	LCS True Value: mg/Kg
BLANK		0	0.01	1800	0.05	< 22.2			
LCS		13.3	0.01	1800	0.05	66.5			
G9A7F		0	0.01	1800	0.05	< 22.2			
G9A7P		4.44	0.01	1800	0.05	22.2			
G8WQV		0	0.01	1800	0.05	< 22.2			
G8WQV-X		0	0.01	1800	0.05	< 22.2			
G8WQV-5		0	0.01	1800	0.05	< 22.2			
G8WTT		0	0.01	1800	0.05	< 22.2			
G8WT3		0	0.01	1800	0.05	< 22.2			
G817H		0	0.01	1800	0.05	< 22.2			
G817H-X		0	0.01	1800	0.05	< 22.2			
G817H-S		0	0.01	1800	0.05	< 22.2			
G88WQ		0	0.01	1800	0.05	< 22.2			
G88W5		0	0.01	1800	0.05	< 22.2			
G88W7		0	0.01	1800	0.05	< 22.2			
G88XA		0	0.01	1800	0.05	< 22.2			
G88XC		0	0.01	1800	0.05	< 22.2			
G88XD		0	0.01	1800	0.05	< 22.2			
G88XE		0	0.01	1800	0.05	< 22.2			
G886E		0	0.01	1800	0.05	< 22.2			
G8985		0	0.01	1800	0.05	< 22.2			
G899L		0	0.01	1800	0.05	< 22.2			

Control Limits (Water/Soil): LCS = 10 - 150 MS = 10 - 136

Total Available S (mg/Kg) = $\frac{\text{raw value (mg/L) x scrubber volume(L) x 1800}}{\text{samples weight (Kg) x time (seconds)}}$

File: Slsvr01\Wet Chem Results\ReacS050605A.xls, modified 3/22/04

Severn Trent

St. Louis Laboratory

SULFIDE

(SOP # STL-WC-0012, current revision)

Analyst: DLM
Analysis Date: 4/6/2005
Reviewed By: SW
Date: 5/9/05

Method No.: EPA 9030/376.1
Batch No.:

Laboratory ID	True Value mg/L	Sample Vol., mL	Iodine (mL)	Titrant, mL $Na_2S_2O_3$ Initial	Final	Net	Sulfide mg/L	Percent Recovery	RPD
BLANK		45	10	0.00	10.00	10.00	4 U		
LCS		45	10	0.00	8.50	8.50	13.3		
G9A7F		45	10	0.00	9.90	9.90	4 U		
G9A7P		45	10	0.00	9.50	9.50	4.44		
G8WQV		45	10	0.00	9.80	9.80	4 U		
G8WQV-X		45	10	0.00	9.80	9.80	4 U		
G8WQV-S		45	10	0.00	9.70	9.70	4 U		
G8WTT		45	10	0.00	9.70	9.70	4 U		
G8WT3		45	10	0.00	9.70	9.70	4 U		
G817H		45	10	0.00	9.70	9.70	4 U		
G817H-X		45	10	0.00	9.80	9.80	4 U		
G817H-S		45	10	0.00	9.70	9.70	4 U		
G88WQ		45	10	0.00	9.80	9.80	4 U		
G88W5		45	10	0.00	9.80	9.80	4 U		
G88W7		45	10	0.00	9.80	9.80	4 U		
G88XA		45	10	0.00	9.80	9.80	4 U		
G88XC		45	10	0.00	9.80	9.80	4 U		
G88XD		45	10	0.00	9.80	9.80	4 U		
G88XE		45	10	0.00	9.70	9.70	4 U		
G886E		45	10	0.00	9.70	9.70	4 U		
G8985		45	10	0.00	9.70	9.70	4 U		
G899L		45	10	0.00	9.60	9.60	4 U		

Iodine (I_2) Normality (N) = 0.025

$Na_2S_2O_3$ Normality (N) = 0.025

$$\text{Sulfide mg/L} = \frac{[\text{mL } I_2 \times \text{N } I_2) - (\text{mL } Na_2S_2O_3 \times \text{N } Na_2S_2O_3)] \times 16{,}000}{\text{mL Sample}}$$

Control Limits (Water)
LCS = 81 - 115 MS = 85 - 114

Control Limits (Soil)
LCS = 81 - 115 MS = 75 - 125

Severn Trent

St. Louis Laboratory

SULFIDE

(SOP # STL-WC-0012, current revision)

Analyst: DLM
Analysis Date: 4/6/2005
Reviewed By: [illegible]
Date: 5/[illegible]/05

Method No.: EPA 9030/376.1
Batch No.:

Laboratory ID	True Value mg/L	Sample Vol., mL	Iodine (mL)	Titrant, mL $Na_2S_2O_3$ Initial	Final	Net	Sulfide mg/L	Percent Recovery	RPD
BLANK		45	10	0.00	10.0	0.00	88.9		
LCS		45	10	0.00	8.5	0.00	88.9		
G9A7F		45	10	0.00	9.9	0.00	88.9		
G9A7P		45	10	0.00	9.5	0.00	88.9		
G8WQV		45	10	0.00	9.8	0.00	88.9		
G8WQV-X		45	10	0.00	9.8	0.00	88.9		
G8WQV-S		45	10	0.00	9.7	0.00	88.9		
G8WTT		45	10	0.00	9.7	0.00	88.9		
G8WT3		45	10	0.00	9.7	0.00	88.9		
G817H		45	10	0.00	9.7	0.00	88.9		
G817H-X		45	10	0.00	9.8	0.00	88.9		
G817H-S		45	10	0.00	9.7	0.00	88.9		
G88WQ		45	10	0.00	9.8	0.00	88.9		
G88W5		45	10	0.00	9.8	0.00	88.9		
G88W7		45	10	0.00	9.8	0.00	88.9		
G88XA		45	10	0.00	9.8	0.00	88.9		
G88XC		45	10	0.00	9.8	0.00	88.9		
G88XD		45	10	0.00	9.8	0.00	88.9		
G88XE		45	10	0.00	9.7	0.00	88.9		
G886E		45	10	0.00	9.7	0.00	88.9		
G8985		45	10	0.00	9.7	0.00	88.9		
G899L		45	10	0.00	9.6	0.00	88.9		

Iodine (I_2) Normality (N) = 0.025

$Na_2S_2O_3$ Normality (N) = 0.025

$$\text{Sulfide mg/L} = \frac{[(\text{mL } I_2 \times \text{N } I_2) - (\text{mL } Na_2S_2O_3 \times \text{N } Na_2S_2O_3)] \times 16{,}000}{\text{mL Sample}}$$

Control Limits (Water)
LCS = 81 - 115 MS = 85 - 114

Control Limits (Soil)
LCS = 81 - 115 MS = 75 - 125

STL St. Louis

Reactive Cyanide/Sulfide

DISTILLATION SHEET/EXTRACT CHAIN OF CUSTODY

Analysis: Reactive CN/S Prep Date: 5/4/05 Batch No.: _____

Method No.: _____ Analyst: DZm

Flow rate maintained at 60 mL/min? X Yes ___ No

Stirrer setting maintained at approximately 30 rpm? X Yes ___ No

Length of time samples distilled: 30 min

SEQUENCE NO.	SAMPLE NO.	SAMPLE Weight/Volume	FINAL VOLUME	COMMENTS
1	BLK	50ml	50ml	
2	LCS	↓	↓	
3	G9A[redacted]F	10g		
4	G9A7P			
5	G8WQV			
6	G8WQV-X			
7	G8WQV-S			
8	G8WTT			
9	G8WT3			
10	G817H			
11	G817H-X			
12	G817H-S			
13	G88WQ			
14	G88W5			
15	G88W7			
16	G88XA			
17	G88XC			
18	G88XD			
19	G88XE			
20	G886E			
21	G8985			
22	G899L	↓	↓	
23				
24				
25				

DATE	RELEASED BY	RECEIVED BY

LOT #F5D220357

SOP References: STL-IP-0001, STL-IP-0002, current revisions

LOT #F5D220357

STL ST LOUIS

STL St. Louis

Standards Preparation Logbook Summary

May-06-2005

Logbook: \\Qstlmo01\Stdslog\I-Prep.std

The following groups are in included in this report, either in whole or in part: RSULFIDE050605a

Dev Prep/Opened	Std ID	Mix Name	Component	Parent ID	Parent Concentration	Aliquot	Final Volume	Final Concentration	Solvent	Analyst	Exp Date(1)	Exp Date(2)
02/24/2003	IP0154-03	Sodium Sulfide	sodium sulfide		13.351 %			13.351 %	None	wedara	02/24/2013	02/24/2013
10/26/2004	IP1221-04	HCL 6N	HCL		6.0000 N			6.0000 N	Water	mueller	08/31/2005	08/31/2005
03/28/2005	IP0368-05	Starch Indicator 2%	Starch Indicator		2.0000 %			2.0000 %	None	mueller	03/28/2006	05/31/2006
04/07/2005	IP0443-05	Sodium Thiosulfate	Sodium Thiosulfate		0.0250 N			0.0250 N	None	mueller	04/07/2006	04/07/2006
04/07/2005	IP0444-05	Iodine 0.025 N	Iodine		0.0250 N			0.0250 N	None	mueller	11/12/2005	11/12/2005
04/15/2005	IP0486-05	Sulfide spike 1000ppm	sodium sulfide	IP0154-03	13.351 %	7.5000 g	1,000.0 ml	1,001.3 ug/ml	Water	mueller	05/15/2005	05/15/2005
05/04/2005	IP0552-05	REACTIVE Sulfide LCS/MS	sodium sulfide	IP0486-05	1,001.3 ug/ml	2.0000 ml	50.000 ml	40.052 ug/ml	Water	mueller	05/11/2005	05/11/2005

Reviewed By: SW 5/9/05

STL St. Louis

Standards Preparation Logbook Record

May-06-2005

Logbook: \\Qstlmo01\Stdslog\I-Prep.std
The following groups are in included in this report, either in whole or in part:
RSULFIDE050605a

IP0154-03, Sodium Sulfide

Analyst: weders

Vendor: Fisher Lot No.: 985437
Solvent: None
Date Prep./Opened: 02-24-2003 Date Received: 02-24-2003
Date Expires(1): 02-24-2013 (10 Years)
Date Expires(2): 02-24-2013 (10 Years)

Component	Initial Conc (%)	Final Conc (%)
sodium sulfide	13.351	13.351

IP1221-04, HCL 6N

Analyst: muellerd

Vendor: Solutions Plus Lot No.: 3308014 Vendor's Expiration Date: 08-31-2005
Solvent: Water
Date Prep./Opened: 10-26-2004 Date Received: 10-26-2004
Date Expires(1): 08-31-2005 (1 Year)
Date Expires(2): 08-31-2005 (1 Year)

Component	Initial Conc (N)	Final Conc (N)
HCL	6.0000	6.0000

IP0368-05, Starch Indicator, 2%

Analyst: muellerd

Vendor: Solutions Plus Lot No.: 3503219 Vendor's Expiration Date: 05-31-2006
Solvent: None
Date Prep./Opened: 03-28-2005 Date Received: 03-24-2005
Date Expires(1): 03-28-2006 (1 Year)
Date Expires(2): 05-31-2006 (None)

Component	Initial Conc (%)	Final Conc (%)
Starch Indicator	2.0000	2.0000

IP0443-05, Sodium Thiosulfate

Analyst: muellerd

Lot No.: H371 A42422
Solvent: None
Date Prep./Opened: 04-07-2005 Date Received: 04-07-2005
Date Expires(1): 04-07-2006 (1 Year)
Date Expires(2): 04-07-2006 (1 Year)

Component	Initial Conc (N)	Final Conc (N)
Sodium Thiosulfate	0.0250	0.0250

IP0444-05, Iodine 0.025 N

Analyst: muellerd

Lot No.: 4307-17 Vendor's Expiration Date: 11-12-2005

Solvent: None
Date Prep./Opened: 04-07-2005 Date Received: 04-07-2005
Date Expires(1): 11-12-2005 (None)
Date Expires(2): 11-12-2005 (None)

Component	Initial Conc (N)	Final Conc (N)
Iodine	0.0250	0.0250

IP0486-05, Sulfide spike 1000ppm

Analyst: muellerd

Solvent: Water
Volume (ml): 1,000.0
Date Prep./Opened: 04-15-2005
Date Expires(1): 05-15-2005 (1 Month)
Date Expires(2): 05-15-2005 (1 Month)

Parent Std No.: IP0154-03, Sodium Sulfide Aliquot Amount (g): 7.5000
Parent Date Expires(1): 02-24-2013 Parent Date Expires(2): 02-24-2013

Component	Initial Conc (%)	Final Conc (ug/ml)
sodium sulfide	13.351	1,001.3

IP0552-05, REACTIVE Sulfide LCS/MS

Analyst: muellerd

Solvent: Water
Volume (ml): 50.000
Date Prep./Opened: 05-04-2005
Date Expires(1): 05-11-2005 (1 Week)
Date Expires(2): 05-11-2005 (1 Week)

Parent Std No.: IP0486-05, Sulfide spike 1000ppm Aliquot Amount (ml): 2.0000
Parent Date Expires(1): 05-15-2005 Parent Date Expires(2): 05-15-2005

Component	Initial Conc (ug/ml)	Final Conc (ug/ml)
sodium sulfide	1,001.3	40.052

F5D220357

CLIENT ANALYSIS SUMMARY

Storage Loc: A57

Project Manager: EK | Quote #: 44975 | SDG: F5D220357 | Date Received: 2005-04-22

Project: 3164S | Los Alamos Non-Rad | Analytical Due Date: 2005-05-04 (2005-05-11)

PO#: 126310021 | Report to: Joylene Valdez or Keith | Report Due Date: 2005-05-06 (2005-05-13)

Client: 108581 LOS ALAMOS NATIONAL LABORATORY | #SMPS in LOT: 6 | Report Type: D Expanded Deliverable | EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
1	RE73-05-58842			2005-04-20 / 0	G817C	SOLID

SAMPLE COMMENTS:

	MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	HG	O8	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC 06
D	SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06

STL - St. Louis | Logged in by: WILSONS | 2005-04-22 | 16:27:05 | printed on: Friday, April 22, 2005 05:29 PM

F5D220357

CLIENT ANALYSIS SUMMARY

Storage Loc: A57

Project Manager: EK | Quote #: 44975 | SDG: F5D220357 | Date Received: 2005-04-22

Project: 3164S | Los Alamos Non-Rad | Analytical Due Date: 2005-05-04

PO#: 126310021 | Report to: Joylene Valdez or Keith | Report Due Date: 2005-05-06

Client: 108581 LOS ALAMOS NATIONAL LABORATORY | Report Type: D Expanded Deliverable

#SMPS in LOT: 6 | EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

D	CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	HG	O8	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	

F5D220357

CLIENT ANALYSIS SUMMARY

Storage Loc: A57

Project Manager: EK | Quote #: 44975 | SDG: F5D220357 | Date Received: 2005-04-22

Project: 3164S | Los Alamos Non-Rad | Analytical Due Date: 2005-05-04

PO#: 126310021 | Report to: Joylene Valdez or Keith | Report Due Date: 2005-05-06

Client: 108581 LOS ALAMOS NATIONAL LABORATORY | Report Type: D Expanded Deliverable

#SMPS in LOT: 6 | EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

S	NI	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	BA	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	PB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	AS	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	SB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	SE	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	AG	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	TL	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	MN	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	HG	O8	SW846 7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	HG	O9	SW846 7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	ZN	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	CR	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	MG	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	CD	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	NA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	CA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	PB	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	BA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	AS	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	SE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	AL	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	AG	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	KX	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	FE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	XX	ZZ	NONE NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06	

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
2	RE73-05-58843			2005-04-20 / 0	G817D	SOLID

SAMPLE COMMENTS:

VX	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06		
CU	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06		
CR	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06		
NI	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06		
PB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06		
SB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06		
AS	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06		
CO	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06		

F5D220357

CLIENT ANALYSIS SUMMARY

Storage Loc: A57

Project Manager: EK | Quote #: 44975 | SDG: F5D220357 | Date Received: 2005-04-22

Project: 3164S | Los Alamos Non-Rad | Analytical Due Date: 2005-05-04

PO#: 126310021 | Report to: Joylene Valdez or Keith | Report Due Date: 2005-05-06

Client: 108581 LOS ALAMOS NATIONAL LABORATORY | Report Type: D Expanded Deliverable

#SMPS in LOT: 6 | EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

SE	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
TL	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MN	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BE	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O8	SW846 7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O9	SW846 7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AL	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
FE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
ZN	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MG	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
KX	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZZ	NONE NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	WM	MCAW W 160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
3	RE73-05-58844			2005-04-20 / 0	G817E	SOLID

SAMPLE COMMENTS:

SB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CO	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NI	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CU	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06

F5D220357

CLIENT ANALYSIS SUMMARY

Storage Loc: A57

Project Manager: EK | Quote #: 44975 | SDG: F5D220357 | Date Received: 2005-04-22

Project: 3164S | Los Alamos Non-Rad | Analytical Due Date: 2005-05-04

PO#: 126310021 | Report to: Joylene Valdez or Keith | Report Due Date: 2005-05-06

Client: 108581 LOS ALAMOS NATIONAL LABORATORY | Report Type: D Expanded Deliverable

#SMPS in LOT: 6 | EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O8	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
4	RE73-05-58845			2005-04-20 / 0	G817F	SOLID

SAMPLE COMMENTS:

NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06

F5D220357

CLIENT ANALYSIS SUMMARY

Storage Loc: A88

Project Manager: EK | Quote #: 44975 | SDG: F5D220357 | Date Received: 2005-04-22

Project: 3164S | Los Alamos Non-Rad | Analytical Due Date: 2005-05-04

PO#: 126310021 | Report to: Joylene Valdez or Keith | Report Due Date: 2005-05-06

Client: 108581 LOS ALAMOS NATIONAL LABORATORY | Report Type: D Expanded Deliverable

#SMPS in LOT: 6 | EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ---------- METALS AND WETCHEMISTRY ----------

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O8	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
5	RE73-05-58846			2005-04-20 / 0	G817G	SOLID

SAMPLE COMMENTS:

TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06

STL - St Louis | Logged in by: WILSONS | 2005-04-22 | 16:27:05 | printed on: Friday, April 22, 2005 05:29 PM

F5D220357

CLIENT ANALYSIS SUMMARY

Storage Loc: A88

Project Manager: EK | Quote #: 44975 | SDG: F5D220357 | Date Received: 2005-04-22

Project: 3164S | Los Alamos Non-Rad | Analytical Due Date: 2005-05-04

PO#: 126310021 | Report to: Joylene Valdez or Keith | Report Due Date: 2005-05-06

Client: 108581 LOS ALAMOS NATIONAL LABORATORY | Report Type: D Expanded Deliverable

#SMPS In LOT: 6 | EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
HG	O8	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC 06
HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC 06
PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC 06
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC 06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
6	RE73-05-58879			2005-04-20 / 0	G817H	SOLID

SAMPLE COMMENTS:

XX	AE	SW846	1010	Flash Point (1010, Closed Cup)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC 06
XX	FK	SW846	9045A	pH (9045) - Non-Aqueous	82	LEACHATE, DI (Routine)	01	STANDARD TEST SET	PROT: A	WRK LOC 06
XX	FQ	SW846	9095	Paint Filter Test (9095, Free Liquids)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC 06
XX	GI	SW846	7.3.3	Cyanide, Reactive (SW7.3.3)	08	DISTILLATION, MACRO - Acid	01	STANDARD TEST SET	PROT: A	WRK LOC 06
XX	GJ	SW846	7.3.4	Sulfide, Reactive (SW7.3.4)	08	DISTILLATION, MACRO - Acid	01	STANDARD TEST SET	PROT: A	WRK LOC 06
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC 06

F5D220357

CLIENT COMMENTS SUMMARY

Storage Loc: A57

Project Manager: EK | Quote #: 44975 | SDG: F5D220357 | Date Received: 2005-04-22

Project: 3164S | Los Alamos Non-Rad | Analytical Due Date: 2005-05-04

PO#: 126310021 | Report to: Joylene Valdez or Keith | Report Due Date: 2005-05-06

Client: 108581 LOS ALAMOS NATIONAL LABORATORY | Report Type: D Expanded Deliverable

#SMPS in LOT: 6 | EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMEN
Enter COC NUMBER on sample sample header in the COC Fi
SDG = "Lot Number"
Project Name = "Request number"

********** METALS AND WETCHEMISTRY **********
Can batch multiple Lots together and report Client specific
Batch QC: Matrix Spike and Sample Duplicate
Met Prep: GFAA Spike Level and Standard Spike Level
Sb spike at 100 ppb
Pb - Spike Solids at 100 ppb, spike Waters at 20
- Perform analytical spike when matrix spike is swamped with
indigenous analyte.
********** GC/MS ORGANICS **********
Can batch multiple Lots together and report Client specific
Batch QC MS and MSD
Clouseau observations for:
- Dilutions and elevated detection limits
- Unknown aldol condensate in TIC report
USE GPC for sample extracts as required.
Put client ID on all raw data
Client requires qualifiers
********** GC/HPLC **********
Can batch multiple Lots together and report Client specific
Batch QC
USE GPC for sample extracts as required.
Client requires Qualifiers for both GC and HPLC
- No averaging of CCV compounds
- Include Form Xs in data packages
********** Radiochemistry **********
Rad Chem with no tracers require MS (spk <= 100 pCi/L or g)
and sample duplicate ..... Gamma does not require MS.
Radium 228 requires MS and Sample Duplicate
Radiological: "Do not include control chart, standard certif
certificates, or calibration data as part of data package"
- Tracers need to be added at a level to yield at least 400
- Report 1 sigma uncertainty
Gross Alpha/Beta requires a total digestion.

STL ST LOUIS

Thursday, April 21, 2005

Los Alamos
NATIONAL LABORATORY

CHAIN OF CUSTODY DOCUMENT NUMBER: 3164SC

REQUEST NUMBER: 3164S

ANALYSIS TYPE: INORGANIC

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58842	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58843	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58844	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58845	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58846	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58879	6	500 ML POLY	RC+RS+ph+PF+I	ICE	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3164S Page 1

Relinquished By:		Date	Time	Received By:		Date	Time
PRINTED NAME	SIGNATURE	4/21/05	2:30	Sue Wilson	Sue Wilson	42205	0900
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

PRINTED NAME SIGNATURE

LOT #F5022035?

Thursday, April 21, 2005

REQUEST NUMBER: 3164S

ANALYSIS TYPE: INORGANIC

cwl 6193

Los Alamos
NATIONAL LABORATORY

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

These samples are on:

SHIP DATE: 04/21/2005
REPORT DUE: 05/06/2005
TURN AROUND REQ'D: 15

LANL Request Number: 3164S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

RAD SCREENING: NOT REQ
COMMENTS: NOTE: For sample RE73-05-58879 do full waste classification testing.

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:6010B	RE73-05-58842	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58842	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58842	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58842	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58843	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58843	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58843	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58843	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58844	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58844	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58844	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58844	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58845	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58845	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58845	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58845	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58846	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58846	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58846	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58846	1	S	04/20/2005	Analyze for TCLP Zinc also
SW-846:1020A	RE73-05-58879	6	S	04/20/2005	
SW-846:7.3	RE73-05-58879	6	S	04/20/2005	
SW-846:9045C	RE73-05-58879	6	S	04/20/2005	
SW-846:9095	RE73-05-58879	6	S	04/20/2005	

Final Page of REQUEST NUMBER 3164S

LOT #F5D220357

SEVERN TRENT **STL**

Lot No: F5D220357

Condition Upon Receipt Form
St. Louis Laboratory

Client: LANL

Date: 4.22.05 Time: 0900

Quote No: 44975

Initiated by: SW

Shipper/No: FedEx 6954 7789 2939

COC/RFA Numbers: Below

Condition/Variance (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	(Y) N	Sample received in undamaged condition?	7.	(Y) N	Sample received with Chain of Custody?
2.	(Y) N	Sample received within 4-C ± 2-C* ?	8.	(Y) N	Chain of Custody matches sample IDs on containers?
	SW 4.22.05	Record	9.	(Y) N N/A	Custody seal received intact on cooler.?
3.	(N) N N/A	Sample received with proper pH [1] ?	10.	(Y) N N/A	Custody seal tamper evident on cooler.?
4.	Y N	If N/A - Was pH taken by original STL lab?	11.	(Y) N N/A	Custody seal on bottles received intact?
5.	(Y) N	Sample received in proper containers?	12.	(Y) N N/A	Custody seal tamper evident on bottles?
6.	(Y) N	Sample volume sufficient for analysis?	13.	Y N	Was CUR (equivalent) rec' d from original STL lab?

* Temperature Variance Does Not Affect the Following Analyses:

[1]For DOE-AL (Pantex, LANL, Sandia) sites, verify pH all containers received, except for VOA, TOX, and soils.

Notes: 28615C, 31635C thru 68SC.

Chain 31635C - containers received were different than C-O-C.

Chains 31675C, 31685C - samples should be preserved but have pH of 7.

Corrective Action:

- ☐ Client's Name: _____ Informed by: _____ By: _____
- ☐ Sample(s) processed "as is".
- ☐ Sample(s) on hold until: _____ If released, notify: _____

Project Management Review: Tony Foley Date: 4/25/05

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED
IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIALS AND THE DATE NEXT TO THAT ITEM

Thursday, April 21, 2005

REQUEST NUMBER: 3163S

ANALYSIS TYPE: ORGANIC

Los Alamos
NATIONAL LABORATORY

ATTN: Mark Loeb
Severn Trent Laboraties, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

These samples are on:

SHIP DATE: 04/21/2005
REPORT DUE: 05/06/2005
TURN AROUND REQ'D: 15

LANL Request Number: 3163S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

RAD SCREENING: NOT REQ
COMMENTS: NOTE: Please do the GPC for all 8270 +8082.

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:8260B	RE73-05-58878	1	S	04/20/2005	
SW-846:8082	RE73-05-58879	1	S	04/20/2005	
SW-846:8270C	RE73-05-58879	1	S	04/20/2005	
SW-846:8260B	RE73-05-58879	2	S	04/20/2005	

Final Page of REQUEST NUMBER 3163S

Thursday, April 21, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3163SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3163S

ANALYSIS TYPE: ORGANIC

ATTN: Mark Loeb
Severn Trent Laboraties, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58878	1	125 SEPTUM AMBER GLASS	8260B	ICE	S
RE73-05-58879	1	250 ML AMBER GLASS	8270C+8082	ICE	S
RE73-05-58879	2	125 SEPTUM AMBER GLASS	8260B	ICE	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3163S

Relinquished By:	Date	Time	Received By:	Date	Time
PRINTED NAME SIGNATURE	4/21/05	2:30	PRINTED NAME SIGNATURE		
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PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		

Received for DISPOSAL By:	Date	Time	Remarks:
PRINTED NAME SIGNATURE			

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218682 Event ID:4802

SAMPLE ID: RE73-05-58878
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
1	8260B	125 SEPTUM AMBER GLASS	Ice	Y		

RELINQUISHED BY (printed name): K Lewis (signature):	Date/Time: 4.20.05 1520	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/20/05 1520	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218862 Event ID:4802

SAMPLE ID: RE73-05-58844

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4-20-05 1520	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 42005 1520	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218852 Event ID:4802

SAMPLE ID: RE73-05-58843

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): K Rheault (signature):	Date/Time: 4.20.05 1520	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/20/05 1520	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

EVENT NAME: TA-73 Ash Pile

FIELD CHAIN OF CUSTODY

COC ID: 218872 Event ID:4802

SAMPLE ID: RE73-05-58845
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4-23-05 1530	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/23/05 1530	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

EVENT NAME: TA-73 Ash Pile

FIELD CHAIN OF CUSTODY

COC ID: 218882 Event ID:4802

SAMPLE ID: RE73-05-58846 ER TEAM LEADER: Terry Rust DESTINATION: SMO

SAMPLE ORDER MATRIX: Soil FIELD TEAM LEADER: John Tymkowych DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4-20-05 1530	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/20/05 1530	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

EVENT NAME: TA-73 Ash Pile

FIELD CHAIN OF CUSTODY

COC ID: 218842 Event ID:4802

SAMPLE ID: RE73-05-58842
SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4-20-05 1530	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/20/05 1530	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 219172 Event ID:4802

SAMPLE ID: RE73-05-58879

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	8260B	~~125 SEPTUM AMBER GLASS~~ 2"x6" SS TUBE	Ice	Y		
1	8270C+8082	250 ML AMBER GLASS	Ice	Y		
3	8290	125 ML GLASS	Ice	Y		
4	8290	125 ML GLASS	Ice	Y		
5	PSDA+PROP-DBS	~~PROTECORE BAG~~ 2"x6" SS TUBE	Ice	Y		
6	RC+RS+ph+PF+I	500 ML POLY	Ice	Y		

RELINQUISHED BY (printed name): (signature):	Date/Time: 4-20-05 1530	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/20/05 1530	RECEIVED BY (printed name): (signature):	Date/Time:

Rad Screening Data Release Form

The Following samples were received at the Field Support Facility (FSF) without screening data (list sample number):

These samples will not be shipped until radiological screening data documentation arrives at the FSF. I understand that it is my responsibility to ensure this information arrives at the FSF in a timely manner. If holding times are missed because screening data does not arrive, I will pick up the samples.

The following samples do not require rad screening data for the reasons stated (list sample numbers):

~~SAMPLES WERE~~ ALL

RE73-05-58842
-58843
-58844
-58845
-58846
-58879
-58878

Reason: SAMPLES WERE SCREENED IN THE FIELD READINGS RECORDED ON SCL.

Print Last Name LEONARD Signature [signature] Date 4/20/05

Data-Validation Cover Sheet

☒ Rejected Data

Section I

Request Number: 3163S Validation Date: 01-Jun-05 Lab Code: STL St Louis

Contract Laboratory Name: _____

Validator: Clifford Deiner Organization: ENV-ECR

Analytical Suite (check all that apply):
- ☒ Volatile Organics
- ☒ Semivolatile Organics
- ☒ Organochlorine Pesticides/Polychlorinated Biphenyls
- ☐ High Explosives
- ☐ Inorganics
- ☐ Radiochemistry

Other (describe): _____

Section II—Completeness Check

Yes	No	n/a	(check one)	Yes	No	n/a	(check one)
☒	☐	☐	1. Chain-of-custody form(s)	☒	☐	☐	6. Raw/BSS data
☒	☐	☐	2. Case narrative	☒	☐	☐	7. Quality control forms
☒	☐	☐	3. Sample result forms	☒	☐	☐	8. Quantitation reports
☒	☐	☐	4. Sample chromatograms	☒	☐	☐	9. TICs forms
☒	☐	☐	5. Standard chromatograms	☒	☐	☐	10. TICs mass spectra

Identify any samples in the assigned Request Number that are missing:

_____ _____ _____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____ _____ _____

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

Volatiles:

Method blank contamination was present for methylene chloride and sample results were qualified either J,V4a or U,V4. The initial and continuing calibrations for some analytes did not meet accetpance limits and affected sample results were qualified either J,V7a or UJ,V7a. The surrogate recovery for 4-bromofluorobenzene for RE73-05-58879 was less than acceptance limits and affected sample results were qualified either J-,V3a or UJ,V3c. The internal standard recoveries for all internal standards for RE73-05-58879 were less than acceptance limits and sample results were qualified either J,V1a or UJ,V1a. All other QCs met acceptance limits.

Semivolatiles:

The internal standard area recoveries for chrysene-d12 and perylene-d12 were less than acceptance limits and affected sample results were qualfied either J,SV1a or UJ,SV1a. The LCS recovery for some analytes were less than acceptance limits and sample results were qualified either J-,SV12b or UJ,SV12c. The LCS recovery for benzo(g,h,i)perylene(2.7%) was less than 10% and the sample result was qualified R,SV12a. The sample was reextracted out of holding time and the sample results were qualified R,SV19. All other QCs met acceptance limits.

PCBs:

All QCs met acceptance limits.

CD

Validator's signature: [signature] Date: 6-1-05 (Attach additional comment sheets as necessary.)	
SOP-15.02, R1	**Los Alamos National Laboratory** **RRES-Remediation Services Project**

VOC Data-Validation Checklist

Yes	No	n/a	(check one)	Assign qualifier listed below if criteria = Yes: Detected analyte	Assign qualifier listed below if criteria = Yes: Undetected analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	J, V9	UJ, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	R, V9a
☐	☒	☐	3. The instrument performance check was not present or fails acceptance criteria.	R, V16a	R, V16a
☐	☒	☐	4. The initial calibration was not present.	R, V16	R, V16
☐	☒	☐	5. The initial calibration did not have 5 calibration points and a low standard at the reporting limit.	R, V7	R, V7
☒	☐	☐	6. The initial calibration analyte %RSD was >30% .	J, V7a	UJ, V7a
☐	☒	☐	7. The analyte minimum RRF was <0.05.	J, V7b	R, V7b
☐	☒	☐	8. The CCV was not present.	R, V16	R, V16
☒	☐	☐	9. The continuing calibration analyte %D was >25%.	J, V7a	UJ, V7a
☐	☒	☐	10. The analyte minimum RRF was <0.05.	J, V7b	R, V7b
☐	☒	☐	11. The method blank was not reported.	R, V4b	R, V4b
☒	☐	☐	12. The analyte detected in the method blank and sample result for analyte was < 5x/10x the amount in the blank.	U, V4	N/A
☒	☐	☐	13. The analyte detected in the method blank and sample result for analyte was >5x/10x the amount in the method blank.	J, V4a	N/A
☐	☒	☐	14. The IS information was not present.	R, V2a	R, V2a
☐	☒	☐	15. The IS areas in CCV were <50% or >200% of the previous days' IS areas.	J, V1	UJ, V1
☐	☒	☐	16. The IS retention times had shifted by >30 s.	J, V0	UJ, V0
☐	☒	☐	17. The sample IS areas were >200% of the daily CCV IS areas.	J, V1b	N/A
☒	☐	☐	18. The sample IS areas were <50% but are ≥10% of the daily CCV IS areas.	J, V1a	UJ, V1a
☐	☒	☐	19. The sample IS areas were <10% of the daily CCV IS areas.	J, V2	R, V2
☐	☒	☐	20. The surrogate information was not present.	R, V3f	R, V3f
☐	☒	☐	21. The surrogate %R was >UAL.	J+, V3	N/A
☒	☐	☐	22. The surrogate %R was <LAL but ≥10%.	J-, V3a	UJ, V3c
☐	☒	☐	23. The surrogate %R was <10%.	J-, V3b	R, V3d
☐	☒	☐	24. The surrogate recoveries were (1) <LAL and (1) >UAL.	J, V3e	UJ, V3e
☐	☒	☐	25. The LCS information was not present.	R, V12	R, V12
☐	☒	☐	26. The LCS %R was >UAL.	J+, V12d	N/A
☐	☒	☐	27. The LCS %R was <LAL but ≥10%.	J-, V12b	UJ, V12c
☐	☒	☐	28. The LCS %R was <10%.	J-, V12a	R, V12a
☐	☒	☐	29. The mass spectral information was missing.	R, V8a	R, V8a
☐	☒	☐	30. The mass spectrum did not meet method specifications.	U, V8	N/A
☐	☒	☐	31. The TICs were requested but not reported.	R, V11	R, V11
☐	☒	☐	32. The sample was diluted inappropriately.	N/A	U, V10
☐	☒	☐	33. Other obvious data-quality issues were identified.	__, V19	__, V19

CD

Attachment D: SVOC Data-Validation Checklist

Yes	No	(check one)	Assign qualifier listed below if criteria = Yes: Detected analyte	Assign qualifier listed below if criteria = Yes: Undetected analyte
☐	☒	1. The Sample was extracted >1 to ≤2 times the appropriate hold time requirement.	J-, SV9	UJ, SV9
☐	☒	2. The Sample was extracted >2 times the appropriate holding time requirement.	R, SV9a	R, SV9a
☐	☒	3. The Sample was analyzed outside the analytical holding time requirement.	R, SV9b	R, SV9b
☐	☒	4. The instrument performance check (DFTPP) is not present or fails acceptance criteria.	R, SV16A	R, SV16A
☐	☒	5. The initial calibration is not present.	R, SV16	R, SV16
☐	☒	6. The initial calibration does not have either 5 calibration points or a low standard at the reporting limit.	R, SV7	R, SV7
☐	☒	7. The initial calibration analyte %RSD is >30%.	J, SV7a	UJ, SV7a
☐	☒	8. The analyte minimum RRF is <0.05 in the initial calibration.	J, SV7b	R, SV7b
☐	☒	9. CCV is not present.	R, SV16	R, SV16
☐	☒	10. The continuing calibration analyte %D is >25%.	J, SV7a	UJ, SV7a
☐	☒	11. The analyte minimum RRF is <0.05 in the continuing calibration.	J, SV7b	R, SV7b
☐	☒	12. The method blank information is not present.	R, SV4b	R, SV4b
☐	☒	13. The analyte detected in the method blank and sample result for analyte is ≤5x/10x the amount in blank.	U, SV4	N/A
☐	☒	14. The analyte detected in the method blank and sample result for analyte is >5x/10x the amount in method blank	J, SV4a	N/A
☐	☒	15. IS information is not present.	R, SV2a	R, SV2a
☐	☒	16. The IS area in the CCV is <50%R or >200%R.	J, SV1	UJ, SV1
☐	☒	17. The IS retention times have shifted by more 30 s.	J, SV0	R, SV0
☐	☒	18. The sample IS area is >200%R.	J, SV1b	N/A
☒	☐	19. The sample IS area is <50%R but ≥10%R.The s	J, SV1a	UJ, SV1a
☐	☒	20. The Sample IS area is <10%R.	J, SV2	R, SV2
☐	☒	21. The surrogate information is not present.	R, SV3f	R, SV3f
☐	☒	22. The surrogate %R is greater than the UAL.	J+, SV3	N/A
☐	☒	23. The surrogate %R is less than the LAL but ≥10%.	J-, SV3a	UJ, SV3c
☐	☒	24. The surrogate %R is <10%.	J-, SV3b	R, SV3d
☐	☒	25. There is one surrogate %R <LAL and one surrogate %R >UAL.	J, SV3e	UJ, SV3e
☐	☒	26. LCS information is not present.	R, SV12	R, SV12
☐	☒	27. The LCS %R is >UAL.	J+, SV12d	N/A
☒	☐	28. The LCS %R is <LAL but ≥10%.	J-, SV12b	UJ, SV12c
☐	☒	29. The LCS %R is <10%	J-, SV12a	R, SV12a
☐	☒	30. Mass spectral information is missing.	R, SV8a	R, SV8a
☐	☒	31. The mass spectrum does not meet method specifications.	U, SV8	N/A
☐	☒	32. TICs were requested but not reported.	none	none
☐	☒	33. The samplewas diluted inappropriately.	N/A	UJ, V10
☒	☐	34. Other obvious data quality issues were identified.	__, SV19	__, SV19

PEST/PCB Data-Validation Checklist

Yes	No	n/a	(check one)	Assign qualifier listed below if criteria = Yes: Detected analyte	Undetected analyte
☐	☒	☐	1. The breakdown performance check is not present.	R, P10b	R, P10b
☐	☒	☐	2. The breakdown performance exceeds criteria for individual or combined.	J-, P10	---[a], P10
☐	☒	☐	3. The Breakdown performance exceeds criteria and the associated breakdown products are present in sample.	J+, P10a	UJ, P10a
☐	☒	☐	4. Initial calibration is not present.	R, P16	R, P16
☐	☒	☐	5. Initial calibration does not have 5 calibration points and/or low standard at or below the reporting limit.	J, P7	R, P7
☐	☒	☐	6. Initial calibration analyte %RSD is >20% or RSD is <0.995.	J, P7a	UJ, P7a
☐	☒	☐	7. The CCV is not present or analyzed at proper frequency.	R, P16	R, P16
☐	☒	☐	8. Continuing calibration analyte %D is >15%.	J, P7a	UJ, P7a
☐	☒	☐	9. A multicomponent analyte is reported with no standard being analyzed within 72 h of the initial analysis.	J, P7b	N/A
☐	☒	☐	10. The RT window information is not present.	R, P11	R, P11
☐	☒	☐	11. RT window for individual analytes in the CCV have shifted more than 0.05 minutes from the RT window from the initial calibration.	---[b], P11a	---[c], P11a
☐	☒	☐	12. The method blank is not reported.	R, P4b	R, P4b
☐	☒	☐	13. The analyte detected in blank and sample result for analyte < 5x the amount in blank.	UJ, P4	N/A
☐	☒	☐	14. The analyte detected in blank and sample result for analyte > 5x the amount in blank.	J, P4a	N/A
☐	☒	☐	15. The confirmation information is not present for positive results.	R, P8a	R, P8a
☐	☒	☐	16. The analyte reported was not confirmed on a second dissimilar column or detector.	UJ, P8	N/A
☐	☒	☐	17. The analyte reported exceeds the RT window but was confirmed.	J, P11b	N/A
☐	☒	☐	18. The multicomponent analyte is reported but does not match the pattern for the analyte in the associated standard.	J, P7b	N/A
☐	☒	☐	19. Surrogate information is not present.	R, P3f	R, P3f
☐	☒	☐	20. Surrogate % recovery is > the UAL.	J+, P3	N/A
☐	☒	☐	21. Surrogate % recovery is < LAL but ≥10%.	J-, P3a	UJ, P3c
☐	☒	☐	22. Surrogate % recovery is < 10%.	J-, P3b	R, P3d
☐	☒	☐	23. One surrogate recovery is < LAL and one surrogate recovery is > UAL.	J, P3e	UJ, P3e
☐	☒	☐	24. The LCS information is not present.	R, P12	R, P12
☐	☒	☐	25. LCS % recovery is >130%.	J+, P12d	N/A
☐	☒	☐	26. LCS % recovery is < 70% but ≥10%.	J-, P12b	UJ, P12c
☐	☒	☐	27. LCS % recovery is < 10%.	J-, P12a	R, P12a
☐	☒	☐	28. The sample was extracted outside of the appropriate hold time.	J-, P9	UJ, P9
☐	☒	☐	29. The sample was extracted 2 times the appropriate holding time.	R, P9a	R, P9a
☐	☒	☐	30. The sample was analyzed outside the analytical holding time.	R, P9b	R, P9b
☐	☒	☐	31. The sample was diluted inappropriately.	N/A	U, P10c
☐	☒	☐	32. The other obvious data quality issues identified.	__, P19	__, P19

CP

Thursday, April 21, 2005

cal 0 13

REQUEST NUMBER: 3163S

ANALYSIS TYPE: ORGANIC

Los Alamos
NATIONAL LABORATORY

ATTN: Mark Loeb
Severn Trent Laboratles, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

SHIP DATE: 04/21/2005
REPORT DUE: 05/06/2005
TURN AROUND REQ'D: 15

RAD SCREENING: NOT REQ
COMMENTS: NOTE: Please do the GPC for all 8270 +8082.

These samples are on:

LANL Request Number: 3163S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

LANL ER SMO CONTACT:
Signature:

Page 1

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:8260B	RE73-05-58878	1	S	04/20/2005	
SW-846:8082	RE73-05-58879	1	S	04/20/2005	
SW-846:8270C	RE73-05-58879	1	S	04/20/2005	
SW-846:8260B	RE73-05-58879	2	S	04/20/2005	

Final Page of REQUEST NUMBER 3163S

Page 1

STL ST. LOUIS
Thursday, April 21, 2005

Los Alamos
NATIONAL LABORATORY

CHAIN OF CUSTODY DOCUMENT NUMBER: 3163SC

REQUEST NUMBER: 3163S

ANALYSIS TYPE: ORGANIC

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION 40mL	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58878	1	~~125 SEPTUM AMBER GLASS~~	8260B	ICE	S
RE73-05-58879	1	250 ML AMBER GLASS	8270C+8082	ICE	S
RE73-05-58879	2	~~125 SEPTUM AMBER GLASS~~ 16 oz. liter	8260B	ICE	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3163S

SW 4.22.05

Relinquished By:	Date	Time	Received By:	Date	Time
PRINTED NAME SIGNATURE	4/21/05	2130	Sue Wilson	4.22.05	0910
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

PRINTED NAME SIGNATURE

LOT# KED220273

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RR73-05-58879

GC Semivolatiles

Lot-Sample #...: F5D220273-002
Date Sampled...: 04/20/05
Prep Date.....: 04/29/05
Prep Batch #...: 5119298
Dilution Factor: 1
% Moisture.....: 8.5

Work Order #...: G81GA1AD
Date Received..: 04/22/05
Analysis Date..: 05/09/05
Analysis Time..: 18:50

Method.....: SW846 8082

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	36	ug/kg
Aroclor 1221	ND	36	ug/kg
Aroclor 1232	ND	36	ug/kg
Aroclor 1242	ND	36	ug/kg
Aroclor 1248	ND	36	ug/kg
Aroclor 1254	380	36	ug/kg
Aroclor 1260	ND	36	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	105	(30 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58878

GC/MS Volatiles

Lot-Sample #...: F5D220273-001 Work Order #...: G81F81AC Matrix.....: SOLID
Date Sampled...: 04/20/05 Date Received..: 04/22/05
Prep Date.....: 04/27/05 Analysis Date..: 04/28/05
Prep Batch #...: 5118107 Analysis Time..: 01:11
Dilution Factor: 1
% Moisture.....: 0.18 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
Bromomethane	ND	10	ug/kg UJ V7a
Chloroethane	ND	10	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
Trichlorotrifluoroethane	ND	5.0	ug/kg
Acetone	26	20	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg UJ, V7a
Iodomethane	ND	5.0	ug/kg
Methylene chloride	14 B	5.0	ug/kg U, V4
Carbon disulfide	ND	5.0	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
2-Butanone (MEK)	3.9 J	20	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,2-Dichloroethene (total)	ND	5.0	ug/kg
Chloroform	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
Benzene	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
4-Methyl-2-pentanone	ND	20	ug/kg
cis-1,3-Dichloropropene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg UJ, V7a
trans-1,3-Dichloropropene	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
2-Hexanone	ND	20	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
1,2-Dibromoethane	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58878

GC/MS Volatiles

Lot-Sample #...: F5D220273-001 Work Order #...: G81F81AC Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
Xylenes (total)	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg UJ V7a
Isopropylbenzene	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	64	(60 - 148)
Dibromofluoromethane	69	(61 - 140)
1,2-Dichloroethane-d4	67	(56 - 149)
4-Bromofluorobenzene	69	(56 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

J Estimated result. Result is less than RL.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: EE73-05-58879

GC/MS Volatiles

Lot-Sample #...: F5D220273-002 Work Order #...: G81GA1AE Matrix.....: SOLID
Date Sampled...: 04/20/05 Date Received..: 04/22/05
Prep Date.....: 04/27/05 Analysis Date..: 04/28/05
Prep Batch #...: 5118107 Analysis Time..: 06:51
Dilution Factor: 1
% Moisture.....: 8.5 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	11	ug/kg UJ, V1a
Chloromethane	ND	11	ug/kg UJ, V1a
Bromomethane	3.0 J	11	ug/kg J, V7a; ~~UJ~~ J, V1a
Chloroethane	ND	11	ug/kg UJ, V1a
Trichlorofluoromethane	ND	11	ug/kg
Trichlorotrifluoroethane	ND	5.5	ug/kg
Acetone	ND	22	ug/kg
1,1-Dichloroethene	ND	5.5	ug/kg UJ, V7a; UJ, V1a
Iodomethane	ND	5.5	ug/kg UJ, V1a
Methylene chloride	31 B	5.5	ug/kg J, V4a; J, V1a
Carbon disulfide	ND	5.5	ug/kg UJ V1a
1,1-Dichloroethane	ND	5.5	ug/kg
2-Butanone (MEK)	ND	22	ug/kg
2,2-Dichloropropane	ND	5.5	ug/kg
1,2-Dichloroethene (total)	ND	5.5	ug/kg
Chloroform	ND	5.5	ug/kg
Bromochloromethane	ND	5.5	ug/kg
1,1,1-Trichloroethane	ND	5.5	ug/kg
1,1-Dichloropropene	ND	5.5	ug/kg
Carbon tetrachloride	ND	5.5	ug/kg
1,2-Dichloroethane	ND	5.5	ug/kg
Benzene	ND	5.5	ug/kg
Trichloroethene	ND	5.5	ug/kg
1,2-Dichloropropane	ND	5.5	ug/kg
Bromodichloromethane	ND	5.5	ug/kg
Dibromomethane	ND	5.5	ug/kg
4-Methyl-2-pentanone	ND	22	ug/kg
cis-1,3-Dichloropropene	ND	5.5	ug/kg
Toluene	ND	5.5	ug/kg UJ, V7a; UJ, V1a
trans-1,3-Dichloropropene	ND	5.5	ug/kg UJ, V1a
1,1,2-Trichloroethane	ND	5.5	ug/kg
2-Hexanone	ND	22	ug/kg
1,3-Dichloropropane	ND	5.5	ug/kg
Tetrachloroethene	ND	5.5	ug/kg
Chlorodibromomethane	ND	5.5	ug/kg
1,2-Dibromoethane	ND	5.5	ug/kg
Chlorobenzene	ND	5.5	ug/kg

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58879

GC/MS Volatiles

Lot-Sample #...: F5D220273-002 Work Order #...: G81GA1AE Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	
1,1,1,2-Tetrachloroethane	ND	5.5	ug/kg	UJ.V1a
Ethylbenzene	ND	5.5	ug/kg	
Vinyl chloride	ND	5.5	ug/kg	
Xylenes (total)	3.7 J	5.5	ug/kg	J.V1a
Styrene	ND	5.5	ug/kg	UJ.V1a
Bromoform	ND	5.5	ug/kg	UJ.V2a; UJ.V1a
Isopropylbenzene	ND	5.5	ug/kg	UJ.V1a
1,1,2,2-Tetrachloroethane	ND	5.5	ug/kg	
1,2,3-Trichloropropane	ND	5.5	ug/kg	
n-Propylbenzene	ND	5.5	ug/kg	
Bromobenzene	ND	5.5	ug/kg	UJ.V1a; UJ.V3c
2-Chlorotoluene	ND	5.5	ug/kg	UJ.V1a; UJ.V3c
1,3,5-Trimethylbenzene	ND	5.5	ug/kg	
4-Chlorotoluene	ND	5.5	ug/kg	
tert-Butylbenzene	ND	5.5	ug/kg	
1,2,4-Trimethylbenzene	ND	5.5	ug/kg	
sec-Butylbenzene	ND	5.5	ug/kg	
p-Isopropyltoluene	ND	5.5	ug/kg	
1,3-Dichlorobenzene	ND	5.5	ug/kg	
1,4-Dichlorobenzene	2.5 J	5.5	ug/kg	J.V1a; J.V3a
n-Butylbenzene	ND	5.5	ug/kg	UJ.V1a; UJ.V3c
1,2-Dichlorobenzene	ND	5.5	ug/kg	
1,2-Dibromo-3-chloro-propane	ND	11	ug/kg	

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	78	(60 - 148)
Dibromofluoromethane	136	(61 - 140)
1,2-Dichloroethane-d4	120	(56 - 149)
4-Bromofluorobenzene	51 *	(56 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58879

GC/MS Semivolatiles

Lot-Sample #...: F5D220273-002 Work Order #...: G81GA1AC Matrix.....: SOLID
Date Sampled...: 04/20/05 Date Received..: 04/22/05
Prep Date.....: 04/29/05 Analysis Date..: 05/10/05
Prep Batch #...: 5119285 Analysis Time..: 19:55
Dilution Factor: 1
% Moisture.....: 8.5 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
N-Nitrosodimethylamine	ND	360	ug/kg
Phenol	ND	360	ug/kg
Aniline	ND	360	ug/kg
bis(2-Chloroethyl)-ether	ND	360	ug/kg
2-Chlorophenol	ND	360	ug/kg
1,3-Dichlorobenzene	ND	360	ug/kg
1,4-Dichlorobenzene	ND	360	ug/kg
Benzyl alcohol	ND	360	ug/kg
1,2-Dichlorobenzene	ND	360	ug/kg
2-Methylphenol	ND	360	ug/kg
3-Methylphenol & 4-Methylphenol	ND	360	ug/kg
2,2'-oxybis(1-Chloropropane)	ND	360	ug/kg
N-Nitrosodi-n-propyl-amine	ND	360	ug/kg
Hexachloroethane	ND	360	ug/kg
Nitrobenzene	ND	360	ug/kg
Isophorone	ND	360	ug/kg
2-Nitrophenol	ND	360	ug/kg
2,4-Dimethylphenol	ND	360	ug/kg
bis(2-Chloroethoxy) methane	ND	360	ug/kg
Benzoic acid	ND	1700	ug/kg
2,4-Dichlorophenol	ND	360	ug/kg
1,2,4-Trichloro-benzene	ND	360	ug/kg
Naphthalene	ND	360	ug/kg
4-Chloroaniline	ND	360	ug/kg
Hexachlorobutadiene	ND	360	ug/kg 4J,5V12c
4-Chloro-3-methylphenol	ND	360	ug/kg
2-Methylnaphthalene	ND	360	ug/kg
Hexachlorocyclopenta-diene	ND	1700	ug/kg
2,4,6-Trichloro-phenol	ND	360	ug/kg
2,4,5-Trichloro-phenol	ND	360	ug/kg

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CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58879

GC/MS Semivolatiles

Lot-Sample #...: F5D220273-002 Work Order #...: G81GA1AC Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Chloronaphthalene	ND	360	ug/kg
2-Nitroaniline	ND	1700	ug/kg
Dimethyl phthalate	ND	360	ug/kg
Acenaphthylene	ND	360	ug/kg
2,6-Dinitrotoluene	ND	360	ug/kg
3-Nitroaniline	ND	1700	ug/kg
Acenaphthene	ND	360	ug/kg
2,4-Dinitrophenol	ND	1700	ug/kg
4-Nitrophenol	ND	1700	ug/kg
Dibenz(a,h)anthracene	ND	360	ug/kg UJ,SV1a
Dibenzofuran	ND	360	ug/kg
2,4-Dinitrotoluene	ND	360	ug/kg
Diethyl phthalate	ND	360	ug/kg
Fluorene	ND	360	ug/kg
4-Chlorophenyl phenyl ether	ND	360	ug/kg
4-Nitroaniline	ND	1700	ug/kg
4,6-Dinitro-2-methylphenol	ND	1700	ug/kg
N-Nitrosodiphenylamine	ND	360	ug/kg
Azobenzene	ND	360	ug/kg
Pyrene	ND	360	ug/kg UJ,SV1a; UJ,SV12c
4-Bromophenyl phenyl ether	ND	360	ug/kg
Hexachlorobenzene	ND	360	ug/kg
Pentachlorophenol	ND	1700	ug/kg
Phenanthrene	ND	360	ug/kg
Anthracene	ND	360	ug/kg
Di-n-butyl phthalate	ND	360	ug/kg
Fluoranthene	ND	360	ug/kg UJ,SV12c
Butyl benzyl phthalate	ND	360	ug/kg UJ,SV1a
Benzo(a)anthracene	ND	360	ug/kg
3,3'-Dichlorobenzidine	ND	1700	ug/kg
Chrysene	ND	360	ug/kg
bis(2-Ethylhexyl) phthalate	330 J	360	ug/kg J,SV1a
Di-n-octyl phthalate	ND	360	ug/kg UJ,SV1a
Benzo(b)fluoranthene	ND	360	ug/kg
Benzo(k)fluoranthene	ND	360	ug/kg
Benzo(a)pyrene	ND	360	ug/kg UJ,SV1a; UJ,SV12c
Indeno(1,2,3-cd)pyrene	ND	360	ug/kg UJ,SV1a; UJ,SV12c
Benzo(ghi)perylene	ND	360	ug/kg R,SV12a

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CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58879

GC/MS Semivolatiles

Lot-Sample #...: F5D220273-002 Work Order #...: G81GA1AC Matrix.....: SOLID

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	61	(40 - 103)
Phenol-d5	66	(36 - 105)
Nitrobenzene-d5	73	(45 - 114)
2-Fluorobiphenyl	68	(49 - 120)
2,4,6-Tribromophenol	69	(39 - 114)
Terphenyl-d14	69	(42 - 108)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RR73-05-58879

GC/MS Semivolatiles

Lot-Sample #...: F5D220273-002 Work Order #...: G81GA2AC Matrix.....: SOLID
Date Sampled...: 04/20/05 Date Received..: 04/22/05
Prep Date.....: 05/11/05 Analysis Date..: 05/14/05
Prep Batch #...: 5131374 Analysis Time..: 15:48
Dilution Factor: 1
% Moisture.....: 8.5 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
N-Nitrosodimethylamine	ND	720	ug/kg
Phenol	ND	720	ug/kg
Aniline	ND	720	ug/kg
bis(2-Chloroethyl)-ether	ND	720	ug/kg
2-Chlorophenol	ND	720	ug/kg
1,3-Dichlorobenzene	ND	720	ug/kg
1,4-Dichlorobenzene	ND	720	ug/kg
Benzyl alcohol	ND	720	ug/kg
1,2-Dichlorobenzene	ND	720	ug/kg
2-Methylphenol	ND	720	ug/kg
3-Methylphenol & 4-Methylphenol	ND	720	ug/kg
2,2'-oxybis(1-Chloropropane)	ND	720	ug/kg
N-Nitrosodi-n-propyl-amine	ND	720	ug/kg
Hexachloroethane	ND	720	ug/kg
Nitrobenzene	ND	720	ug/kg
Isophorone	ND	720	ug/kg
2-Nitrophenol	ND	720	ug/kg
2,4-Dimethylphenol	ND	720	ug/kg
bis(2-Chloroethoxy) methane	ND	720	ug/kg
Benzoic acid	ND	3500	ug/kg
2,4-Dichlorophenol	ND	720	ug/kg
1,2,4-Trichloro-benzene	ND	720	ug/kg
Naphthalene	ND	720	ug/kg
4-Chloroaniline	ND	720	ug/kg
Hexachlorobutadiene	ND	720	ug/kg
4-Chloro-3-methylphenol	ND	720	ug/kg
2-Methylnaphthalene	ND	720	ug/kg
Hexachlorocyclopenta-diene	ND	3500	ug/kg
2,4,6-Trichloro-phenol	ND	720	ug/kg
2,4,5-Trichloro-phenol	ND	720	ug/kg

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GP

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58879

GC/MS Semivolatiles

Lot-Sample #...: F5D220273-002 Work Order #...: G81GA2AC Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Chloronaphthalene	ND	720	ug/kg
2-Nitroaniline	ND	3500	ug/kg
Dimethyl phthalate	ND	720	ug/kg
Acenaphthylene	ND	720	ug/kg
2,6-Dinitrotoluene	ND	720	ug/kg
3-Nitroaniline	ND	3500	ug/kg
Acenaphthene	ND	720	ug/kg
2,4-Dinitrophenol	ND	3500	ug/kg
4-Nitrophenol	ND	3500	ug/kg
Dibenz(a,h)anthracene	ND	720	ug/kg
Dibenzofuran	ND	720	ug/kg
2,4-Dinitrotoluene	ND	720	ug/kg
Diethyl phthalate	ND	720	ug/kg
Fluorene	ND	720	ug/kg
4-Chlorophenyl phenyl ether	ND	720	ug/kg
4-Nitroaniline	ND	3500	ug/kg
4,6-Dinitro-2-methylphenol	ND	3500	ug/kg
N-Nitrosodiphenylamine	ND	720	ug/kg
Azobenzene	ND	720	ug/kg
Pyrene	ND	720	ug/kg
4-Bromophenyl phenyl ether	ND	720	ug/kg
Hexachlorobenzene	ND	720	ug/kg
Pentachlorophenol	ND	3500	ug/kg
Phenanthrene	ND	720	ug/kg
Anthracene	ND	720	ug/kg
Di-n-butyl phthalate	ND	720	ug/kg
Fluoranthene	ND	720	ug/kg
Butyl benzyl phthalate	ND	720	ug/kg
Benzo(a)anthracene	ND	720	ug/kg
3,3'-Dichlorobenzidine	ND	3500	ug/kg
Chrysene	ND	720	ug/kg
bis(2-Ethylhexyl) phthalate	ND	720	ug/kg
Di-n-octyl phthalate	ND	720	ug/kg
Benzo(b)fluoranthene	ND	720	ug/kg
Benzo(k)fluoranthene	ND	720	ug/kg
Benzo(a)pyrene	ND	720	ug/kg
Indeno(1,2,3-cd)pyrene	ND	720	ug/kg
Benzo(ghi)perylene	ND	720	ug/kg

R, SV19

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CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58879

GC/MS Semivolatiles

Lot-Sample #...: F5D220273-002 Work Order #...: G81GA2AC Matrix.....: SOLID

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	71	(40 - 103)
Phenol-d5	76	(36 - 105)
Nitrobenzene-d5	78	(45 - 114)
2-Fluorobiphenyl	74	(49 - 120)
2,4,6-Tribromophenol	72	(39 - 114)
Terphenyl-d14	70	(42 - 108)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

DATA VALIDATION COVER SHEET (Example)

SECTION I.

REQUEST NUMBER: 31635 COST CODE: _____

VALIDATION DATE: _____

LAB NAME: STC. LAB CODE: _____

VALIDATOR: _____ ORGANIZATION: _____

ANALYTICAL SUITE:

___ VOLATILES ___ HIGH EXPLOSIVES

___ SEMIVOLATILES ___ INORGANICS

___ PESTICIDES/AROCLORS ___ RADIOCHEMISTRY

OTHER (describe) _____

SECTION II. COMPLETENESS CHECKLIST

Item	Present? (Y/N/NA)	Item	Present? (Y/N/NA)
1. COC form(s)		2. Case Narrative	
3. Sample Results		4. Sample Chromatograms	
5. Standard Chromatograms		6. Quantitation Reports	
7. QC Forms			

Identify any samples in the assigned Request Number that are missing:

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

Comments: include information about requests to the laboratory and agreed upon date of resolution and lab contact: (Attach additional comment sheets as necessary)

_____

_____

_____

Signature/1st validation: _____ Date/1st validation: _____

Signature/2nd validation: _____ Date/2nd validation: _____

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Tel: 314 298 8566 Fax: 314 298 8757
www.stl-inc.com

ANALYTICAL REPORT

RECD MAY 23 2005

PROJECT NO. 31638

Los Alamos Non-Rad

Lot #: F5D220273

Joylene Valdez or Keith Greene

Los Alamos National Laboratory
ENO TA-00 Bldg 1237
DP: 03U; MS: 707
Los Alamos, NM 87545

SEVERN TRENT LABORATORIES, INC.

Elaine Wildfong

Ed Kao
Project Manager

May 17, 2005

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TOTAL # OF PAGES IN PACKAGE 1038

Case Narrative
LOT NUMBER: **F5D220273**
LANL Request Number: **3163S**

This report contains the analytical results for the two samples received under chain of custody number by STL St. Louis on April 22, 2005. These samples are associated with your Los Alamos Non-Rad project.

All applicable quality control procedures met method-specified acceptance criteria except as noted on the following page.

This report is incomplete without the case narrative. All chemical analysis results are based upon dry weight correction as required per the statement of work. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances

Sample Receiving

Samples were received at 4.0 +/- 2°C. No problems were noted at the time of sample receipt.

Volatile Organics Method 8260B

QC Batch: 5118107
The Method Blank shows contamination below the reporting limit for Methylene chloride. Surrogate recoveries are within laboratory stated limits.

The LCS is in control for spike and surrogate compounds.

The Batch QC Matrix Spike and Matrix Spike Duplicate was performed on F5D220273-001. The Matrix Spike and Matrix Spike Duplicate recoveries and RPD values are inside stated limits. Surrogates are in control for both the MS and MSD.

Affected Samples:
F5D220273 (2): RE73-05-58879

All three Internal Standard recoveries are low resulting in a positive bias result for the target analytes associated with the Internal Standards. The surrogate recovery for 4-BFB is low. This excursion is attributed to a matrix interference which is physically evident in the sample.

Semivolatile Organics Method 8270C

QC Batch: 5119285

Sample and QC extracts were taken through GPC cleanup.

The Method Blank shows no contamination below the reporting limit. Surrogate recoveries are within laboratory stated limits.

The LCS is in control for spike and surrogate compounds, except for 4-Chloroaniline, Pyrene, Hexachlorobenzene, Indeno(1,2,3) pyrene, and Benzo(a)pyrene. The LCS analyte recovery for Bezo(ghi)perylene is less than 10% (2.7%). Sample was reprepared outside holding time. The reanalysis, with an acceptable LCS, yielded comparable results. Both results are reported for your review.

The Batch QC Matrix Spike and Matrix Spike Duplicate was performed on F5D200213-001. The Matrix Spike and Matrix Spike Duplicate recoveries and RPD values are inside stated limits. Surrogates are in control for both the MS and MSD.

Affected Samples:
F5D220273 (2): RE73-05-58879

The Internal Standard recoveries for Chrysene-d12 and Perylene-d12 are low resulting in a positive bias result for the target analytes associated with the Internal Standard. A second aliquot was fortified with internal standards and yielded comparable results, indicating a matrix interference is present in the sample.

QC Batch: 5131374

Sample and QC extracts were taken through GPC cleanup.

The Method Blank shows no contamination below the reporting limit. Surrogate recoveries are within laboratory stated limits.

The LCS is in control for spike and surrogate compounds, except 2-Methylnaphthalene. The LCS recoveries are outside QC limits for less than 10% of the compounds spiked. Laboratory QC practices, based on federal guidance documents, allow for up to 10% of the spike compounds to be outside QC criteria without necessitating re-preparation/re-analysis. Sample extraction efficiency and compliance is demonstrated by the remaining acceptable LCS recoveries.

The Batch QC Matrix Spike and Matrix Spike Duplicate was performed on F5D210380-001. The Matrix Spike and Matrix Spike Duplicate recoveries and RPD values are inside stated limits. Surrogates are in control for both the MS and MSD.

PCBs Method 8082

QC Batch: 5119298

Sample and QC extracts were taken through GPC cleanup.

The Method Blank shows no contamination below the reporting limit. Surrogate recoveries are within laboratory stated limits.

The LCS is in control for spike and surrogate compounds.

The Batch QC Matrix Spike and Matrix Spike Duplicate was performed on F5D210380-003. The Matrix Spike and Matrix Spike Duplicate recoveries and RPD values are inside stated limits. The MS surrogate recovery is outside stated limits. The MSD surrogate is in control.

I certify that this data is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the signature on the front page, has authorized release of the data contained in this hardcopy.

METHODS SUMMARY

F5D220273

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
PCBs by SW-846 8082	SW846 8082	SW846 3550B/366
Semivolatile Organic Compounds by GC/MS	SW846 8270C	SW846 3550B
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

F5D220273

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
G81F8	001	RE73-05-58878	04/20/05	
G81GA	002	RE73-05-58879	04/20/05	

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

QC DATA ASSOCIATION SUMMARY

F5D220273

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SOLID	SW846 8260B		5118107	5119174
	SOLID	MCAWW 160.3 MOD		5115207	5116162
002	SOLID	SW846 8082		5119298	5119200
	SOLID	SW846 8260B		5118107	5119174
	SOLID	SW846 8270C		5119285	5119187
	SOLID	SW846 8270C		5131374	5131220
	SOLID	MCAWW 160.3 MOD		5115139	5115275

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: EE73-05-58878

GC/MS Volatiles

Lot-Sample #...: F5D220273-001	**Work Order #...:** G81F81AC	**Matrix.....:** SOLID	
Date Sampled...: 04/20/05	**Date Received..:** 04/22/05		
Prep Date.....: 04/27/05	**Analysis Date..:** 04/28/05		
Prep Batch #...: 5118107	**Analysis Time..:** 01:11		
Dilution Factor: 1			
% Moisture.....: 0.18	**Method.....:** SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
Bromomethane	ND	10	ug/kg
Chloroethane	ND	10	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
Trichlorotrifluoroethane	ND	5.0	ug/kg
Acetone	**26**	**20**	**ug/kg**
1,1-Dichloroethene	ND	5.0	ug/kg
Iodomethane	ND	5.0	ug/kg
Methylene chloride	**14 B**	**5.0**	**ug/kg**
Carbon disulfide	ND	5.0	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
2-Butanone (MEK)	**3.9 J**	**20**	**ug/kg**
2,2-Dichloropropane	ND	5.0	ug/kg
1,2-Dichloroethene (total)	ND	5.0	ug/kg
Chloroform	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
Benzene	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
4-Methyl-2-pentanone	ND	20	ug/kg
cis-1,3-Dichloropropene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
trans-1,3-Dichloropropene	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
2-Hexanone	ND	20	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
1,2-Dibromoethane	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: EK73-05-58878

GC/MS Volatiles

Lot-Sample #...: F5D220273-001 Work Order #...: G81F81AC Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
Xylenes (total)	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	64	(60 - 148)
Dibromofluoromethane	69	(61 - 140)
1,2-Dichloroethane-d4	67	(56 - 149)
4-Bromofluorobenzene	69	(56 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

J Estimated result. Result is less than RL.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58878

General Chemistry

Lot-Sample #...: F5D220273-001 Work Order #...: G81F8 Matrix.....: SOLID
Date Sampled...: 04/20/05 Date Received..: 04/22/05
% Moisture.....: 0.18

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	0.18	0.10	%	MCAWW 160.3 MOD	04/26-04/27/05	5115207

Dilution Factor: 1 Analysis Time..: 00:00

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: ES73-05-58879

GC/MS Volatiles

Lot-Sample #...: F5D220273-002 **Work Order #...:** G81GA1AE **Matrix.....:** SOLID
Date Sampled...: 04/20/05 **Date Received..:** 04/22/05
Prep Date.....: 04/27/05 **Analysis Date..:** 04/28/05
Prep Batch #...: 5118107 **Analysis Time..:** 06:51
Dilution Factor: 1
% Moisture.....: 8.5 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	11	ug/kg
Chloromethane	ND	11	ug/kg
Bromomethane	3.0 J	11	ug/kg
Chloroethane	ND	11	ug/kg
Trichlorofluoromethane	ND	11	ug/kg
Trichlorotrifluoroethane	ND	5.5	ug/kg
Acetone	ND	22	ug/kg
1,1-Dichloroethene	ND	5.5	ug/kg
Iodomethane	ND	5.5	ug/kg
Methylene chloride	31 B	5.5	ug/kg
Carbon disulfide	ND	5.5	ug/kg
1,1-Dichloroethane	ND	5.5	ug/kg
2-Butanone (MEK)	ND	22	ug/kg
2,2-Dichloropropane	ND	5.5	ug/kg
1,2-Dichloroethene (total)	ND	5.5	ug/kg
Chloroform	ND	5.5	ug/kg
Bromochloromethane	ND	5.5	ug/kg
1,1,1-Trichloroethane	ND	5.5	ug/kg
1,1-Dichloropropene	ND	5.5	ug/kg
Carbon tetrachloride	ND	5.5	ug/kg
1,2-Dichloroethane	ND	5.5	ug/kg
Benzene	ND	5.5	ug/kg
Trichloroethene	ND	5.5	ug/kg
1,2-Dichloropropane	ND	5.5	ug/kg
Bromodichloromethane	ND	5.5	ug/kg
Dibromomethane	ND	5.5	ug/kg
4-Methyl-2-pentanone	ND	22	ug/kg
cis-1,3-Dichloropropene	ND	5.5	ug/kg
Toluene	ND	5.5	ug/kg
trans-1,3-Dichloropropene	ND	5.5	ug/kg
1,1,2-Trichloroethane	ND	5.5	ug/kg
2-Hexanone	ND	22	ug/kg
1,3-Dichloropropane	ND	5.5	ug/kg
Tetrachloroethene	ND	5.5	ug/kg
Chlorodibromomethane	ND	5.5	ug/kg
1,2-Dibromoethane	ND	5.5	ug/kg
Chlorobenzene	ND	5.5	ug/kg

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58879

GC/MS Volatiles

Lot-Sample #...: F5D220273-002 Work Order #...: G81GA1AE Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,1,1,2-Tetrachloroethane	ND	5.5	ug/kg
Ethylbenzene	ND	5.5	ug/kg
Vinyl chloride	ND	5.5	ug/kg
Xylenes (total)	3.7 J	5.5	ug/kg
Styrene	ND	5.5	ug/kg
Bromoform	ND	5.5	ug/kg
Isopropylbenzene	ND	5.5	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.5	ug/kg
1,2,3-Trichloropropane	ND	5.5	ug/kg
n-Propylbenzene	ND	5.5	ug/kg
Bromobenzene	ND	5.5	ug/kg
2-Chlorotoluene	ND	5.5	ug/kg
1,3,5-Trimethylbenzene	ND	5.5	ug/kg
4-Chlorotoluene	ND	5.5	ug/kg
tert-Butylbenzene	ND	5.5	ug/kg
1,2,4-Trimethylbenzene	ND	5.5	ug/kg
sec-Butylbenzene	ND	5.5	ug/kg
p-Isopropyltoluene	ND	5.5	ug/kg
1,3-Dichlorobenzene	ND	5.5	ug/kg
1,4-Dichlorobenzene	2.5 J	5.5	ug/kg
n-Butylbenzene	ND	5.5	ug/kg
1,2-Dichlorobenzene	ND	5.5	ug/kg
1,2-Dibromo-3-chloropropane	ND	11	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	78	(60 - 148)
Dibromofluoromethane	136	(61 - 140)
1,2-Dichloroethane-d4	120	(56 - 149)
4-Bromofluorobenzene	51 *	(56 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RR73-05-58879

GC/MS Semivolatiles

Lot-Sample #...: F5D220273-002
Date Sampled...: 04/20/05
Prep Date.....: 04/29/05
Prep Batch #...: 5119285
Dilution Factor: 1
% Moisture.....: 8.5

Work Order #...: G81GA1AC
Date Received..: 04/22/05
Analysis Date..: 05/10/05
Analysis Time..: 19:55

Matrix.....: SOLID

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
N-Nitrosodimethylamine	ND	360	ug/kg
Phenol	ND	360	ug/kg
Aniline	ND	360	ug/kg
bis(2-Chloroethyl)-ether	ND	360	ug/kg
2-Chlorophenol	ND	360	ug/kg
1,3-Dichlorobenzene	ND	360	ug/kg
1,4-Dichlorobenzene	ND	360	ug/kg
Benzyl alcohol	ND	360	ug/kg
1,2-Dichlorobenzene	ND	360	ug/kg
2-Methylphenol	ND	360	ug/kg
3-Methylphenol & 4-Methylphenol	ND	360	ug/kg
2,2'-oxybis(1-Chloropropane)	ND	360	ug/kg
N-Nitrosodi-n-propyl-amine	ND	360	ug/kg
Hexachloroethane	ND	360	ug/kg
Nitrobenzene	ND	360	ug/kg
Isophorone	ND	360	ug/kg
2-Nitrophenol	ND	360	ug/kg
2,4-Dimethylphenol	ND	360	ug/kg
bis(2-Chloroethoxy) methane	ND	360	ug/kg
Benzoic acid	ND	1700	ug/kg
2,4-Dichlorophenol	ND	360	ug/kg
1,2,4-Trichloro-benzene	ND	360	ug/kg
Naphthalene	ND	360	ug/kg
4-Chloroaniline	ND	360	ug/kg
Hexachlorobutadiene	ND	360	ug/kg
4-Chloro-3-methylphenol	ND	360	ug/kg
2-Methylnaphthalene	ND	360	ug/kg
Hexachlorocyclopenta-diene	ND	1700	ug/kg
2,4,6-Trichloro-phenol	ND	360	ug/kg
2,4,5-Trichloro-phenol	ND	360	ug/kg

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: EE73-05-58879

GC/MS Semivolatiles

Lot-Sample #...: F5D220273-002 Work Order #...: G81GA1AC Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Chloronaphthalene	ND	360	ug/kg
2-Nitroaniline	ND	1700	ug/kg
Dimethyl phthalate	ND	360	ug/kg
Acenaphthylene	ND	360	ug/kg
2,6-Dinitrotoluene	ND	360	ug/kg
3-Nitroaniline	ND	1700	ug/kg
Acenaphthene	ND	360	ug/kg
2,4-Dinitrophenol	ND	1700	ug/kg
4-Nitrophenol	ND	1700	ug/kg
Dibenz(a,h)anthracene	ND	360	ug/kg
Dibenzofuran	ND	360	ug/kg
2,4-Dinitrotoluene	ND	360	ug/kg
Diethyl phthalate	ND	360	ug/kg
Fluorene	ND	360	ug/kg
4-Chlorophenyl phenyl ether	ND	360	ug/kg
4-Nitroaniline	ND	1700	ug/kg
4,6-Dinitro-2-methylphenol	ND	1700	ug/kg
N-Nitrosodiphenylamine	ND	360	ug/kg
Azobenzene	ND	360	ug/kg
Pyrene	ND	360	ug/kg
4-Bromophenyl phenyl ether	ND	360	ug/kg
Hexachlorobenzene	ND	360	ug/kg
Pentachlorophenol	ND	1700	ug/kg
Phenanthrene	ND	360	ug/kg
Anthracene	ND	360	ug/kg
Di-n-butyl phthalate	ND	360	ug/kg
Fluoranthene	ND	360	ug/kg
Butyl benzyl phthalate	ND	360	ug/kg
Benzo(a)anthracene	ND	360	ug/kg
3,3'-Dichlorobenzidine	ND	1700	ug/kg
Chrysene	ND	360	ug/kg
bis(2-Ethylhexyl) phthalate	330 J	360	ug/kg
Di-n-octyl phthalate	ND	360	ug/kg
Benzo(b)fluoranthene	ND	360	ug/kg
Benzo(k)fluoranthene	ND	360	ug/kg
Benzo(a)pyrene	ND	360	ug/kg
Indeno(1,2,3-cd)pyrene	ND	360	ug/kg
Benzo(ghi)perylene	ND	360	ug/kg

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58879

GC/MS Semivolatiles

Lot-Sample #...: F5D220273-002 Work Order #...: G81GA1AC Matrix.....: SOLID

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	61	(40 - 103)
Phenol-d5	66	(36 - 105)
Nitrobenzene-d5	73	(45 - 114)
2-Fluorobiphenyl	68	(49 - 120)
2,4,6-Tribromophenol	69	(39 - 114)
Terphenyl-d14	69	(42 - 108)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58879

GC/MS Semivolatiles

Lot-Sample #...: F5D220273-002 Work Order #...: G81GA2AC Matrix.....: SOLID
Date Sampled...: 04/20/05 Date Received..: 04/22/05
Prep Date.....: 05/11/05 Analysis Date..: 05/14/05
Prep Batch #...: 5131374 Analysis Time..: 15:48
Dilution Factor: 1
% Moisture.....: 8.5 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
N-Nitrosodimethylamine	ND	720	ug/kg
Phenol	ND	720	ug/kg
Aniline	ND	720	ug/kg
bis(2-Chloroethyl)-ether	ND	720	ug/kg
2-Chlorophenol	ND	720	ug/kg
1,3-Dichlorobenzene	ND	720	ug/kg
1,4-Dichlorobenzene	ND	720	ug/kg
Benzyl alcohol	ND	720	ug/kg
1,2-Dichlorobenzene	ND	720	ug/kg
2-Methylphenol	ND	720	ug/kg
3-Methylphenol & 4-Methylphenol	ND	720	ug/kg
2,2'-oxybis(1-Chloropropane)	ND	720	ug/kg
N-Nitrosodi-n-propyl-amine	ND	720	ug/kg
Hexachloroethane	ND	720	ug/kg
Nitrobenzene	ND	720	ug/kg
Isophorone	ND	720	ug/kg
2-Nitrophenol	ND	720	ug/kg
2,4-Dimethylphenol	ND	720	ug/kg
bis(2-Chloroethoxy) methane	ND	720	ug/kg
Benzoic acid	ND	3500	ug/kg
2,4-Dichlorophenol	ND	720	ug/kg
1,2,4-Trichloro-benzene	ND	720	ug/kg
Naphthalene	ND	720	ug/kg
4-Chloroaniline	ND	720	ug/kg
Hexachlorobutadiene	ND	720	ug/kg
4-Chloro-3-methylphenol	ND	720	ug/kg
2-Methylnaphthalene	ND	720	ug/kg
Hexachlorocyclopenta-diene	ND	3500	ug/kg
2,4,6-Trichloro-phenol	ND	720	ug/kg
2,4,5-Trichloro-phenol	ND	720	ug/kg

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58879

GC/MS Semivolatiles

Lot-Sample #...: F5D220273-002 Work Order #...: G81GA2AC Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Chloronaphthalene	ND	720	ug/kg
2-Nitroaniline	ND	3500	ug/kg
Dimethyl phthalate	ND	720	ug/kg
Acenaphthylene	ND	720	ug/kg
2,6-Dinitrotoluene	ND	720	ug/kg
3-Nitroaniline	ND	3500	ug/kg
Acenaphthene	ND	720	ug/kg
2,4-Dinitrophenol	ND	3500	ug/kg
4-Nitrophenol	ND	3500	ug/kg
Dibenz(a,h)anthracene	ND	720	ug/kg
Dibenzofuran	ND	720	ug/kg
2,4-Dinitrotoluene	ND	720	ug/kg
Diethyl phthalate	ND	720	ug/kg
Fluorene	ND	720	ug/kg
4-Chlorophenyl phenyl ether	ND	720	ug/kg
4-Nitroaniline	ND	3500	ug/kg
4,6-Dinitro-2-methylphenol	ND	3500	ug/kg
N-Nitrosodiphenylamine	ND	720	ug/kg
Azobenzene	ND	720	ug/kg
Pyrene	ND	720	ug/kg
4-Bromophenyl phenyl ether	ND	720	ug/kg
Hexachlorobenzene	ND	720	ug/kg
Pentachlorophenol	ND	3500	ug/kg
Phenanthrene	ND	720	ug/kg
Anthracene	ND	720	ug/kg
Di-n-butyl phthalate	ND	720	ug/kg
Fluoranthene	ND	720	ug/kg
Butyl benzyl phthalate	ND	720	ug/kg
Benzo(a)anthracene	ND	720	ug/kg
3,3'-Dichlorobenzidine	ND	3500	ug/kg
Chrysene	ND	720	ug/kg
bis(2-Ethylhexyl) phthalate	ND	720	ug/kg
Di-n-octyl phthalate	ND	720	ug/kg
Benzo(b)fluoranthene	ND	720	ug/kg
Benzo(k)fluoranthene	ND	720	ug/kg
Benzo(a)pyrene	ND	720	ug/kg
Indeno(1,2,3-cd)pyrene	ND	720	ug/kg
Benzo(ghi)perylene	ND	720	ug/kg

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58879

GC/MS Semivolatiles

Lot-Sample #...: F5D220273-002 Work Order #...: G81GA2AC Matrix.....: SOLID

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	71	(40 - 103)
Phenol-d5	76	(36 - 105)
Nitrobenzene-d5	78	(45 - 114)
2-Fluorobiphenyl	74	(49 - 120)
2,4,6-Tribromophenol	72	(39 - 114)
Terphenyl-d14	70	(42 - 108)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58879

GC Semivolatiles

Lot-Sample #...: F5D220273-002
Date Sampled...: 04/20/05
Prep Date.....: 04/29/05
Prep Batch #...: 5119298
Dilution Factor: 1
% Moisture.....: 8.5

Work Order #...: G81GA1AD
Date Received..: 04/22/05
Analysis Date..: 05/09/05
Analysis Time..: 18:50

Method.....: SW846 8082

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	36	ug/kg
Aroclor 1221	ND	36	ug/kg
Aroclor 1232	ND	36	ug/kg
Aroclor 1242	ND	36	ug/kg
Aroclor 1248	ND	36	ug/kg
Aroclor 1254	380	36	ug/kg
Aroclor 1260	ND	36	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	105	(30 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58879

General Chemistry

Lot-Sample #...: F5D220273-002 Work Order #...: G81GA Matrix.....: SOLID
Date Sampled...: 04/20/05 Date Received..: 04/22/05
% Moisture.....: 8.5

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	8.5	0.10	%	MCAWW 160.3 MOD	04/25-04/26/05	5115139
		Dilution Factor: 1		Analysis Time..: 00:00		

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F5D220273
MB Lot-Sample #: F5D280000-107
Work Order #...: G9G7W1AA
Matrix.....: SOLID
Prep Date.....: 04/27/05
Analysis Time..: 00:38
Analysis Date..: 04/28/05
Prep Batch #...: 5118107
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dichlorodifluoromethane	ND	10	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	10	ug/kg	SW846 8260B
Trichlorotrifluoroethane	ND	5.0	ug/kg	SW846 8260B
Acetone	ND	20	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Iodomethane	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	**3.0 J**	**5.0**	**ug/kg**	**SW846 8260B**
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone (MEK)	ND	20	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
Bromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
Dibromomethane	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	20	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
2-Hexanone	ND	20	ug/kg	SW846 8260B
1,3-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Chlorodibromomethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromoethane	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B

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GC/MS Volatiles

Client Lot #...: F5D220273 Work Order #...: G9G7W1AA Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260B
Bromobenzene	ND	5.0	ug/kg	SW846 8260B
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromo-3-chloropropane	ND	10	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	80	(60 - 148)
Dibromofluoromethane	97	(61 - 140)
1,2-Dichloroethane-d4	90	(56 - 149)
4-Bromofluorobenzene	96	(56 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220273
MB Lot-Sample #: F5D290000-285
Work Order #...: G9HAL1AA
Matrix.....: SOLID
Prep Date.....: 04/29/05
Analysis Time..: 18:37
Analysis Date..: 05/09/05
Prep Batch #...: 5119285
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
N-Nitrosodimethylamine	ND	330	ug/kg	SW846 8270C
Phenol	ND	330	ug/kg	SW846 8270C
Aniline	ND	330	ug/kg	SW846 8270C
bis(2-Chloroethyl)-ether	ND	330	ug/kg	SW846 8270C
2-Chlorophenol	ND	330	ug/kg	SW846 8270C
1,3-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
1,4-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
Benzyl alcohol	ND	330	ug/kg	SW846 8270C
1,2-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
2-Methylphenol	ND	330	ug/kg	SW846 8270C
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	SW846 8270C
2,2'-oxybis(1-Chloropropa	ND	330	ug/kg	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	330	ug/kg	SW846 8270C
Hexachloroethane	ND	330	ug/kg	SW846 8270C
Nitrobenzene	ND	330	ug/kg	SW846 8270C
Isophorone	ND	330	ug/kg	SW846 8270C
2-Nitrophenol	ND	330	ug/kg	SW846 8270C
2,4-Dimethylphenol	ND	330	ug/kg	SW846 8270C
bis(2-Chloroethoxy) methane	ND	330	ug/kg	SW846 8270C
Benzoic acid	ND	1600	ug/kg	SW846 8270C
2,4-Dichlorophenol	ND	330	ug/kg	SW846 8270C
1,2,4-Trichloro-benzene	ND	330	ug/kg	SW846 8270C
Naphthalene	ND	330	ug/kg	SW846 8270C
4-Chloroaniline	ND	330	ug/kg	SW846 8270C
Hexachlorobutadiene	ND	330	ug/kg	SW846 8270C
4-Chloro-3-methylphenol	ND	330	ug/kg	SW846 8270C
2-Methylnaphthalene	ND	330	ug/kg	SW846 8270C
Hexachlorocyclopenta-diene	ND	1600	ug/kg	SW846 8270C
2,4,6-Trichloro-phenol	ND	330	ug/kg	SW846 8270C
2,4,5-Trichloro-phenol	ND	330	ug/kg	SW846 8270C
2-Chloronaphthalene	ND	330	ug/kg	SW846 8270C
2-Nitroaniline	ND	1600	ug/kg	SW846 8270C
Dimethyl phthalate	ND	330	ug/kg	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220273 Work Order #...: G9HAL1AA Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthylene	ND	330	ug/kg	SW846 8270C
2,6-Dinitrotoluene	ND	330	ug/kg	SW846 8270C
3-Nitroaniline	ND	1600	ug/kg	SW846 8270C
Acenaphthene	ND	330	ug/kg	SW846 8270C
2,4-Dinitrophenol	ND	1600	ug/kg	SW846 8270C
4-Nitrophenol	ND	1600	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	ND	330	ug/kg	SW846 8270C
Dibenzofuran	ND	330	ug/kg	SW846 8270C
2,4-Dinitrotoluene	ND	330	ug/kg	SW846 8270C
Diethyl phthalate	ND	330	ug/kg	SW846 8270C
Fluorene	ND	330	ug/kg	SW846 8270C
4-Chlorophenyl phenyl ether	ND	330	ug/kg	SW846 8270C
4-Nitroaniline	ND	1600	ug/kg	SW846 8270C
4,6-Dinitro-2-methylphenol	ND	1600	ug/kg	SW846 8270C
N-Nitrosodiphenylamine	ND	330	ug/kg	SW846 8270C
Azobenzene	ND	330	ug/kg	SW846 8270C
Pyrene	ND	330	ug/kg	SW846 8270C
4-Bromophenyl phenyl ether	ND	330	ug/kg	SW846 8270C
Hexachlorobenzene	ND	330	ug/kg	SW846 8270C
Pentachlorophenol	ND	1600	ug/kg	SW846 8270C
Phenanthrene	ND	330	ug/kg	SW846 8270C
Anthracene	ND	330	ug/kg	SW846 8270C
Di-n-butyl phthalate	ND	330	ug/kg	SW846 8270C
Fluoranthene	ND	330	ug/kg	SW846 8270C
Butyl benzyl phthalate	ND	330	ug/kg	SW846 8270C
Benzo(a)anthracene	ND	330	ug/kg	SW846 8270C
3,3'-Dichlorobenzidine	ND	1600	ug/kg	SW846 8270C
Chrysene	ND	330	ug/kg	SW846 8270C
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	SW846 8270C
Di-n-octyl phthalate	ND	330	ug/kg	SW846 8270C
Benzo(b)fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo(k)fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo(a)pyrene	ND	330	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	SW846 8270C
Benzo(ghi)perylene	ND	330	ug/kg	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	81	(40 - 103)
Phenol-d5	80	(36 - 105)
Nitrobenzene-d5	72	(45 - 114)

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220273 Work Order #...: G9HAL1AA Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2-Fluorobiphenyl	62	(49 - 120)		
2,4,6-Tribromophenol	46	(39 - 114)		
Terphenyl-d14	60	(42 - 108)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220273
MB Lot-Sample #: F5E110000-374
Work Order #...: HAAT21AA
Matrix.....: SOLID
Analysis Date..: 05/12/05
Dilution Factor: 1
Prep Date.....: 05/11/05
Prep Batch #...: 5131374
Analysis Time..: 18:00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
N-Nitrosodimethylamine	ND	660	ug/kg	SW846 8270C
Phenol	ND	660	ug/kg	SW846 8270C
Aniline	ND	660	ug/kg	SW846 8270C
bis(2-Chloroethyl)-ether	ND	660	ug/kg	SW846 8270C
2-Chlorophenol	ND	660	ug/kg	SW846 8270C
1,3-Dichlorobenzene	ND	660	ug/kg	SW846 8270C
1,4-Dichlorobenzene	ND	660	ug/kg	SW846 8270C
Benzyl alcohol	ND	660	ug/kg	SW846 8270C
1,2-Dichlorobenzene	ND	660	ug/kg	SW846 8270C
2-Methylphenol	ND	660	ug/kg	SW846 8270C
3-Methylphenol & 4-Methylphenol	ND	660	ug/kg	SW846 8270C
2,2'-oxybis(1-Chloropropa	ND	660	ug/kg	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	660	ug/kg	SW846 8270C
Hexachloroethane	ND	660	ug/kg	SW846 8270C
Nitrobenzene	ND	660	ug/kg	SW846 8270C
Isophorone	ND	660	ug/kg	SW846 8270C
2-Nitrophenol	ND	660	ug/kg	SW846 8270C
2,4-Dimethylphenol	ND	660	ug/kg	SW846 8270C
bis(2-Chloroethoxy) methane	ND	660	ug/kg	SW846 8270C
Benzoic acid	ND	3200	ug/kg	SW846 8270C
2,4-Dichlorophenol	ND	660	ug/kg	SW846 8270C
1,2,4-Trichloro-benzene	ND	660	ug/kg	SW846 8270C
Naphthalene	ND	660	ug/kg	SW846 8270C
4-Chloroaniline	ND	660	ug/kg	SW846 8270C
Hexachlorobutadiene	ND	660	ug/kg	SW846 8270C
4-Chloro-3-methylphenol	ND	660	ug/kg	SW846 8270C
2-Methylnaphthalene	ND	660	ug/kg	SW846 8270C
Hexachlorocyclopenta-diene	ND	3200	ug/kg	SW846 8270C
2,4,6-Trichloro-phenol	ND	660	ug/kg	SW846 8270C
2,4,5-Trichloro-phenol	ND	660	ug/kg	SW846 8270C
2-Chloronaphthalene	ND	660	ug/kg	SW846 8270C
2-Nitroaniline	ND	3200	ug/kg	SW846 8270C
Dimethyl phthalate	ND	660	ug/kg	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220273 Work Order #...: HAAT21AA Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthylene	ND	660	ug/kg	SW846 8270C
2,6-Dinitrotoluene	ND	660	ug/kg	SW846 8270C
3-Nitroaniline	ND	3200	ug/kg	SW846 8270C
Acenaphthene	ND	660	ug/kg	SW846 8270C
2,4-Dinitrophenol	ND	3200	ug/kg	SW846 8270C
4-Nitrophenol	ND	3200	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	ND	660	ug/kg	SW846 8270C
Dibenzofuran	ND	660	ug/kg	SW846 8270C
2,4-Dinitrotoluene	ND	660	ug/kg	SW846 8270C
Diethyl phthalate	ND	660	ug/kg	SW846 8270C
Fluorene	ND	660	ug/kg	SW846 8270C
4-Chlorophenyl phenyl ether	ND	660	ug/kg	SW846 8270C
4-Nitroaniline	ND	3200	ug/kg	SW846 8270C
4,6-Dinitro-2-methylphenol	ND	3200	ug/kg	SW846 8270C
N-Nitrosodiphenylamine	ND	660	ug/kg	SW846 8270C
Azobenzene	ND	660	ug/kg	SW846 8270C
Pyrene	ND	660	ug/kg	SW846 8270C
4-Bromophenyl phenyl ether	ND	660	ug/kg	SW846 8270C
Hexachlorobenzene	ND	660	ug/kg	SW846 8270C
Pentachlorophenol	ND	3200	ug/kg	SW846 8270C
Phenanthrene	ND	660	ug/kg	SW846 8270C
Anthracene	ND	660	ug/kg	SW846 8270C
Di-n-butyl phthalate	ND	660	ug/kg	SW846 8270C
Fluoranthene	ND	660	ug/kg	SW846 8270C
Butyl benzyl phthalate	ND	660	ug/kg	SW846 8270C
Benzo(a)anthracene	ND	660	ug/kg	SW846 8270C
3,3'-Dichlorobenzidine	ND	3200	ug/kg	SW846 8270C
Chrysene	ND	660	ug/kg	SW846 8270C
bis(2-Ethylhexyl) phthalate	ND	660	ug/kg	SW846 8270C
Di-n-octyl phthalate	ND	660	ug/kg	SW846 8270C
Benzo(b)fluoranthene	ND	660	ug/kg	SW846 8270C
Benzo(k)fluoranthene	ND	660	ug/kg	SW846 8270C
Benzo(a)pyrene	ND	660	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	660	ug/kg	SW846 8270C
Benzo(ghi)perylene	ND	660	ug/kg	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	85	(40 - 103)
Phenol-d5	82	(36 - 105)
Nitrobenzene-d5	92	(45 - 114)

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220273 Work Order #...: HAAT21AA Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2-Fluorobiphenyl	85	(49 - 120)		
2,4,6-Tribromophenol	74	(39 - 114)		
Terphenyl-d14	74	(42 - 108)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F5D220273
MB Lot-Sample #: F5D290000-298
Work Order #...: G9HD11AA
Matrix.....: SOLID

Analysis Date..: 05/09/05
Dilution Factor: 1
Prep Date.....: 04/29/05
Prep Batch #...: 5119298
Analysis Time..: 16:55

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	33	ug/kg	SW846 8082
Aroclor 1221	ND	33	ug/kg	SW846 8082
Aroclor 1232	ND	33	ug/kg	SW846 8082
Aroclor 1242	ND	33	ug/kg	SW846 8082
Aroclor 1248	ND	33	ug/kg	SW846 8082
Aroclor 1254	ND	33	ug/kg	SW846 8082
Aroclor 1260	ND	33	ug/kg	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	107	(30 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F5D220273 Work Order #...: G9G7W1AC Matrix.....: SOLID
LCS Lot-Sample#: F5D280000-107
Prep Date.....: 04/27/05 Analysis Date..: 04/27/05
Prep Batch #...: 5118107 Analysis Time..: 22:45
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Dichlorodifluoromethane (Freon 12)	139	(30 - 150)	SW846 8260B
Chloromethane	88	(30 - 150)	SW846 8260B
Bromomethane	69	(30 - 142)	SW846 8260B
Chloroethane	109	(57 - 145)	SW846 8260B
Trichlorofluoromethane	95	(57 - 142)	SW846 8260B
Trichlorotrifluoroethane	94	(60 - 139)	SW846 8260B
Acetone	74	(30 - 150)	SW846 8260B
1,1-Dichloroethene	96	(56 - 130)	SW846 8260B
Methylene chloride	100	(31 - 148)	SW846 8260B
Carbon disulfide	93	(45 - 150)	SW846 8260B
1,1-Dichloroethane	93	(68 - 126)	SW846 8260B
2-Butanone (MEK)	116	(31 - 150)	SW846 8260B
2,2-Dichloropropane	93	(64 - 141)	SW846 8260B
1,2-Dichloroethene (total)	98	(72 - 125)	SW846 8260B
Chloroform	90	(72 - 125)	SW846 8260B
Bromochloromethane	97	(77 - 122)	SW846 8260B
1,1,1-Trichloroethane	93	(68 - 133)	SW846 8260B
1,1-Dichloropropene	96	(77 - 126)	SW846 8260B
Carbon tetrachloride	94	(65 - 136)	SW846 8260B
1,2-Dichloroethane	93	(66 - 132)	SW846 8260B
Benzene	96	(77 - 115)	SW846 8260B
Trichloroethene	95	(74 - 120)	SW846 8260B
1,2-Dichloropropane	97	(75 - 122)	SW846 8260B
Bromodichloromethane	96	(72 - 124)	SW846 8260B
4-Methyl-2-pentanone	71	(30 - 144)	SW846 8260B
cis-1,3-Dichloropropene	101	(77 - 125)	SW846 8260B
Toluene	85	(73 - 122)	SW846 8260B
trans-1,3-Dichloropropene	92	(81 - 137)	SW846 8260B
1,1,2-Trichloroethane	86	(75 - 117)	SW846 8260B
2-Hexanone	88	(54 - 143)	SW846 8260B
1,3-Dichloropropane	90	(74 - 122)	SW846 8260B
Tetrachloroethene	87	(48 - 125)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F5D220273 **Work Order #...:** G9G7W1AC **Matrix.....:** SOLID
LCS Lot-Sample#: F5D280000-107

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Chlorodibromomethane	**95**	**(73 - 125)**	**SW846 8260B**
1,2-Dibromoethane	**101**	**(79 - 121)**	**SW846 8260B**
Chlorobenzene	**100**	**(81 - 116)**	**SW846 8260B**
1,1,1,2-Tetrachloroethane	**103**	**(80 - 119)**	**SW846 8260B**
Ethylbenzene	**98**	**(81 - 116)**	**SW846 8260B**
Vinyl chloride	**102**	**(48 - 148)**	**SW846 8260B**
Styrene	**104**	**(76 - 125)**	**SW846 8260B**
Bromoform	**109**	**(69 - 133)**	**SW846 8260B**
Isopropylbenzene	**109**	**(80 - 143)**	**SW846 8260B**
1,1,2,2-Tetrachloroethane	**104**	**(64 - 134)**	**SW846 8260B**
n-Propylbenzene	**97**	**(69 - 129)**	**SW846 8260B**
Bromobenzene	**100**	**(75 - 125)**	**SW846 8260B**
2-Chlorotoluene	**91**	**(65 - 127)**	**SW846 8260B**
1,3,5-Trimethylbenzene	**97**	**(70 - 126)**	**SW846 8260B**
4-Chlorotoluene	**93**	**(67 - 130)**	**SW846 8260B**
tert-Butylbenzene	**81**	**(53 - 123)**	**SW846 8260B**
sec-Butylbenzene	**95**	**(76 - 115)**	**SW846 8260B**
p-Isopropyltoluene	**107**	**(80 - 127)**	**SW846 8260B**
1,3-Dichlorobenzene	**96**	**(82 - 114)**	**SW846 8260B**
1,4-Dichlorobenzene	**95**	**(79 - 109)**	**SW846 8260B**
n-Butylbenzene	**104**	**(77 - 128)**	**SW846 8260B**
1,2-Dichlorobenzene	**103**	**(82 - 115)**	**SW846 8260B**
1,2-Dibromo-3-chloropropane (DBCP)	**121**	**(72 - 133)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	79	(72 - 131)
Dibromofluoromethane	93	(74 - 128)
1,2-Dichloroethane-d4	88	(69 - 134)
4-Bromofluorobenzene	99	(70 - 131)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220273 Work Order #...: G9HAL1AC Matrix.....: SOLID
LCS Lot-Sample#: F5D290000-285
Prep Date.....: 04/29/05 Analysis Date..: 05/09/05
Prep Batch #...: 5119285 Analysis Time..: 19:09
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Phenol	81	(49 - 92)	SW846 8270C
bis(2-Chloroethyl)-ether	78	(43 - 94)	SW846 8270C
2-Chlorophenol	77	(49 - 92)	SW846 8270C
2-Methylphenol	69	(48 - 92)	SW846 8270C
3-Methylphenol & 4-Methylphenol	71	(47 - 100)	SW846 8270C
2,2'-oxybis(1-Chloropropa	72	(44 - 102)	SW846 8270C
N-Nitrosodi-n-propyl-amine	78	(55 - 108)	SW846 8270C
Hexachloroethane	47	(43 - 100)	SW846 8270C
Nitrobenzene	63	(50 - 102)	SW846 8270C
Isophorone	82	(57 - 110)	SW846 8270C
2-Nitrophenol	65	(50 - 99)	SW846 8270C
2,4-Dimethylphenol	77	(48 - 97)	SW846 8270C
bis(2-Chloroethoxy) methane	78	(53 - 103)	SW846 8270C
2,4-Dichlorophenol	76	(51 - 98)	SW846 8270C
1,2,4-Trichloro-benzene	57	(50 - 101)	SW846 8270C
Naphthalene	59	(52 - 102)	SW846 8270C
4-Chloroaniline	20 a	(21 - 96)	SW846 8270C
Hexachlorobutadiene	60	(50 - 102)	SW846 8270C
4-Chloro-3-methylphenol	76	(52 - 100)	SW846 8270C
2-Methylnaphthalene	59	(38 - 112)	SW846 8270C
Hexachlorocyclopenta-diene	73	(41 - 117)	SW846 8270C
2,4,6-Trichloro-phenol	68	(52 - 100)	SW846 8270C
2,4,5-Trichloro-phenol	80	(53 - 101)	SW846 8270C
2-Nitroaniline	71	(45 - 114)	SW846 8270C
Dimethyl phthalate	79	(55 - 105)	SW846 8270C
Acenaphthylene	64	(56 - 107)	SW846 8270C

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220273 Work Order #...: G9HAL1AC Matrix.....: SOLID
LCS Lot-Sample#: F5D290000-285

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,6-Dinitrotoluene	76	(55 - 108)	SW846 8270C
3-Nitroaniline	37	(30 - 94)	SW846 8270C
Acenaphthene	59	(56 - 107)	SW846 8270C
2,4-Dinitrophenol	65	(10 - 91)	SW846 8270C
4-Nitrophenol	84	(44 - 109)	SW846 8270C
Dibenzofuran	61	(46 - 108)	SW846 8270C
Dibenz(a,h)anthracene	61	(42 - 133)	SW846 8270C
2,4-Dinitrotoluene	80	(56 - 117)	SW846 8270C
Diethyl phthalate	80	(56 - 111)	SW846 8270C
Fluorene	61	(56 - 105)	SW846 8270C
4-Chlorophenyl phenyl ether	64	(56 - 105)	SW846 8270C
4-Nitroaniline	70	(42 - 109)	SW846 8270C
4,6-Dinitro-2-methylphenol	95	(27 - 100)	SW846 8270C
N-Nitrosodiphenylamine	79	(58 - 114)	SW846 8270C
Pyrene	40 a	(54 - 114)	SW846 8270C
4-Bromophenyl phenyl ether	65	(54 - 106)	SW846 8270C
Hexachlorobenzene	47 a	(57 - 111)	SW846 8270C
Pentachlorophenol	45	(37 - 102)	SW846 8270C
Phenanthrene	58	(57 - 108)	SW846 8270C
Anthracene	59	(55 - 107)	SW846 8270C
Di-n-butyl phthalate	76	(55 - 109)	SW846 8270C
Fluoranthene	52 a	(56 - 106)	SW846 8270C
Butyl benzyl phthalate	80	(55 - 115)	SW846 8270C
Benzo(a)anthracene	58	(56 - 112)	SW846 8270C
3,3'-Dichlorobenzidine	43	(32 - 95)	SW846 8270C
Chrysene	58	(55 - 112)	SW846 8270C
bis(2-Ethylhexyl) phthalate	77	(53 - 112)	SW846 8270C
Di-n-octyl phthalate	80	(49 - 112)	SW846 8270C
Benzo(b)fluoranthene	59	(53 - 112)	SW846 8270C
Benzo(k)fluoranthene	60	(60 - 126)	SW846 8270C
Benzo(a)pyrene	25 a	(54 - 109)	SW846 8270C
Indeno(1,2,3-cd)pyrene	30 a	(42 - 129)	SW846 8270C
Benzo(ghi)perylene	2.7 a	(37 - 139)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220273 **Work Order #...:** G9HAL1AC **Matrix.....:** SOLID
LCS Lot-Sample#: F5D290000-285

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	77	(50 - 98)
Phenol-d5	81	(51 - 95)
Nitrobenzene-d5	69	(50 - 111)
2-Fluorobiphenyl	69	(57 - 117)
2,4,6-Tribromophenol	59	(53 - 108)
Terphenyl-d14	60	(49 - 107)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220273 Work Order #...: HAAT21AC Matrix.....: SOLID
LCS Lot-Sample#: F5E110000-374
Prep Date.....: 05/11/05 Analysis Date..: 05/12/05
Prep Batch #...: 5131374 Analysis Time..: 18:32
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Phenol	78	(49 - 92)	SW846 8270C
bis(2-Chloroethyl)-ether	76	(43 - 94)	SW846 8270C
2-Chlorophenol	86	(49 - 92)	SW846 8270C
2-Methylphenol	81	(48 - 92)	SW846 8270C
3-Methylphenol & 4-Methylphenol	79	(47 - 100)	SW846 8270C
2,2'-oxybis(1-Chloropropa	83	(44 - 102)	SW846 8270C
N-Nitrosodi-n-propyl-amine	93	(55 - 108)	SW846 8270C
Hexachloroethane	87	(43 - 100)	SW846 8270C
Nitrobenzene	85	(50 - 102)	SW846 8270C
Isophorone	90	(57 - 110)	SW846 8270C
2-Nitrophenol	85	(50 - 99)	SW846 8270C
2,4-Dimethylphenol	89	(48 - 97)	SW846 8270C
bis(2-Chloroethoxy) methane	86	(53 - 103)	SW846 8270C
2,4-Dichlorophenol	86	(51 - 98)	SW846 8270C
1,2,4-Trichloro-benzene	89	(50 - 101)	SW846 8270C
Naphthalene	87	(52 - 102)	SW846 8270C
4-Chloroaniline	50	(21 - 96)	SW846 8270C
Hexachlorobutadiene	91	(50 - 102)	SW846 8270C
4-Chloro-3-methylphenol	91	(52 - 100)	SW846 8270C
2-Methylnaphthalene	115 a	(38 - 112)	SW846 8270C
Hexachlorocyclopenta-diene	106	(41 - 117)	SW846 8270C
2,4,6-Trichloro-phenol	89	(52 - 100)	SW846 8270C
2,4,5-Trichloro-phenol	85	(53 - 101)	SW846 8270C
2-Nitroaniline	82	(45 - 114)	SW846 8270C
Dimethyl phthalate	88	(55 - 105)	SW846 8270C
Acenaphthylene	95	(56 - 107)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220273 Work Order #...: HAAT21AC Matrix.....: SOLID
LCS Lot-Sample#: F5E110000-374

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,6-Dinitrotoluene	86	(55 - 108)	SW846 8270C
3-Nitroaniline	51	(30 - 94)	SW846 8270C
Acenaphthene	87	(56 - 107)	SW846 8270C
2,4-Dinitrophenol	40	(10 - 91)	SW846 8270C
4-Nitrophenol	86	(44 - 109)	SW846 8270C
Dibenzofuran	86	(46 - 108)	SW846 8270C
Dibenz(a,h)anthracene	84	(42 - 133)	SW846 8270C
2,4-Dinitrotoluene	87	(56 - 117)	SW846 8270C
Diethyl phthalate	89	(56 - 111)	SW846 8270C
Fluorene	90	(56 - 105)	SW846 8270C
4-Chlorophenyl phenyl ether	91	(56 - 105)	SW846 8270C
4-Nitroaniline	80	(42 - 109)	SW846 8270C
4,6-Dinitro-2-methylphenol	80	(27 - 100)	SW846 8270C
N-Nitrosodiphenylamine	98	(58 - 114)	SW846 8270C
Pyrene	86	(54 - 114)	SW846 8270C
4-Bromophenyl phenyl ether	90	(54 - 106)	SW846 8270C
Hexachlorobenzene	93	(57 - 111)	SW846 8270C
Pentachlorophenol	53	(37 - 102)	SW846 8270C
Phenanthrene	85	(57 - 108)	SW846 8270C
Anthracene	85	(55 - 107)	SW846 8270C
Di-n-butyl phthalate	86	(55 - 109)	SW846 8270C
Fluoranthene	79	(56 - 106)	SW846 8270C
Butyl benzyl phthalate	89	(55 - 115)	SW846 8270C
Benzo(a)anthracene	85	(56 - 112)	SW846 8270C
3,3'-Dichlorobenzidine	61	(32 - 95)	SW846 8270C
Chrysene	86	(55 - 112)	SW846 8270C
bis(2-Ethylhexyl) phthalate	86	(53 - 112)	SW846 8270C
Di-n-octyl phthalate	91	(49 - 112)	SW846 8270C
Benzo(b)fluoranthene	92	(53 - 112)	SW846 8270C
Benzo(k)fluoranthene	89	(60 - 126)	SW846 8270C
Benzo(a)pyrene	86	(54 - 109)	SW846 8270C
Indeno(1,2,3-cd)pyrene	81	(42 - 129)	SW846 8270C
Benzo(ghi)perylene	66	(37 - 139)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220273 Work Order #...: HAAT21AC Matrix.....: SOLID
LCS Lot-Sample#: F5E110000-374

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	86	(50 - 98)
Phenol-d5	83	(51 - 95)
Nitrobenzene-d5	89	(50 - 111)
2-Fluorobiphenyl	90	(57 - 117)
2,4,6-Tribromophenol	100	(53 - 108)
Terphenyl-d14	78	(49 - 107)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F5D220273
LCS Lot-Sample#: F5D290000-298
Prep Date.....: 04/29/05
Prep Batch #...: 5119298
Dilution Factor: 1

Work Order #...: G9HD11AC

Matrix.....: SOLID

Analysis Date..: 05/09/05
Analysis Time..: 17:11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	**98**	**(73 - 141)**	**SW846 8082**
Aroclor 1260	**101**	**(72 - 144)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	109	(73 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...:	F5D220273	Work Order #...:	G81F81AD-MS	Matrix.....:	SOLID
MS Lot-Sample #:	F5D220273-001		G81F81AR-MSD		
Date Sampled...:	04/20/05	Date Received..:	04/22/05		
Prep Date.....:	04/27/05	Analysis Date..:	04/28/05		
Prep Batch #...:	5118107	Analysis Time..:	01:45		
Dilution Factor:	1	% Moisture.....:	0.18		

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Dichlorodifluoromethane (Freon 12)	116	(30 - 150)			SW846 8260B
	108	(30 - 150)	7.7	(0-30)	SW846 8260B
Chloromethane	97	(30 - 150)			SW846 8260B
	87	(30 - 150)	11	(0-30)	SW846 8260B
Bromomethane	83	(30 - 150)			SW846 8260B
	71	(30 - 150)	16	(0-30)	SW846 8260B
Chloroethane	122	(42 - 150)			SW846 8260B
	104	(42 - 150)	16	(0-30)	SW846 8260B
Trichlorofluoromethane	86	(48 - 145)			SW846 8260B
	84	(48 - 145)	3.9	(0-30)	SW846 8260B
Trichlorotrifluoroethane	90	(54 - 136)			SW846 8260B
	83	(54 - 136)	9.1	(0-30)	SW846 8260B
Acetone	89	(30 - 150)			SW846 8260B
	94	(30 - 150)	3.2	(0-30)	SW846 8260B
1,1-Dichloroethene	111	(39 - 144)			SW846 8260B
	99	(39 - 144)	12	(0-30)	SW846 8260B
Methylene chloride	103	(30 - 143)			SW846 8260B
	82	(30 - 143)	18	(0-30)	SW846 8260B
Carbon disulfide	106	(30 - 150)			SW846 8260B
	95	(30 - 150)	11	(0-30)	SW846 8260B
1,1-Dichloroethane	105	(52 - 141)			SW846 8260B
	98	(52 - 141)	7.4	(0-30)	SW846 8260B
2-Butanone (MEK)	126	(30 - 150)			SW846 8260B
	138	(30 - 150)	8.0	(0-30)	SW846 8260B
2,2-Dichloropropane	91	(51 - 148)			SW846 8260B
	87	(51 - 148)	5.1	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	109	(41 - 150)			SW846 8260B
	96	(41 - 150)	13	(0-30)	SW846 8260B
Chloroform	93	(57 - 140)			SW846 8260B
	87	(57 - 140)	6.8	(0-30)	SW846 8260B
Bromochloromethane	113	(57 - 147)			SW846 8260B
	105	(57 - 147)	7.3	(0-30)	SW846 8260B
1,1,1-Trichloroethane	90	(55 - 145)			SW846 8260B
	84	(55 - 145)	6.8	(0-30)	SW846 8260B
1,1-Dichloropropene	101	(61 - 139)			SW846 8260B
	97	(61 - 139)	5.2	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F5D220273 Work Order #...: G81F81AD-MS Matrix.....: SOLID
MS Lot-Sample #: F5D220273-001 G81F81AE-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Carbon tetrachloride	88	(52 - 147)			SW846 8260B
	80	(52 - 147)	10	(0-30)	SW846 8260B
1,2-Dichloroethane	90	(55 - 150)			SW846 8260B
	89	(55 - 150)	2.6	(0-30)	SW846 8260B
Benzene	112	(59 - 135)			SW846 8260B
	99	(59 - 135)	12	(0-30)	SW846 8260B
Trichloroethene	127	(30 - 150)			SW846 8260B
	115	(30 - 150)	9.8	(0-30)	SW846 8260B
1,2-Dichloropropane	114	(55 - 143)			SW846 8260B
	106	(55 - 143)	7.9	(0-30)	SW846 8260B
Bromodichloromethane	97	(51 - 145)			SW846 8260B
	92	(51 - 145)	6.2	(0-30)	SW846 8260B
4-Methyl-2-pentanone	77	(30 - 150)			SW846 8260B
	87	(30 - 150)	11	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	109	(56 - 141)			SW846 8260B
	103	(56 - 141)	6.4	(0-30)	SW846 8260B
Toluene	100	(53 - 146)			SW846 8260B
	86	(53 - 146)	15	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	95	(51 - 150)			SW846 8260B
	94	(51 - 150)	1.7	(0-30)	SW846 8260B
1,1,2-Trichloroethane	97	(41 - 150)			SW846 8260B
	96	(41 - 150)	2.1	(0-30)	SW846 8260B
2-Hexanone	95	(30 - 150)			SW846 8260B
	111	(30 - 150)	15	(0-30)	SW846 8260B
1,3-Dichloropropane	99	(41 - 150)			SW846 8260B
	98	(41 - 150)	1.7	(0-30)	SW846 8260B
Tetrachloroethene	92	(30 - 136)			SW846 8260B
	86	(30 - 136)	6.4	(0-30)	SW846 8260B
Chlorodibromomethane	100	(51 - 150)			SW846 8260B
	88	(51 - 150)	13	(0-30)	SW846 8260B
1,2-Dibromoethane	109	(50 - 150)			SW846 8260B
	105	(50 - 150)	4.2	(0-30)	SW846 8260B
Chlorobenzene	113	(60 - 136)			SW846 8260B
	104	(60 - 136)	9.2	(0-30)	SW846 8260B
1,1,1,2-Tetrachloroethane	110	(55 - 148)			SW846 8260B
	100	(55 - 148)	10	(0-30)	SW846 8260B
Ethylbenzene	116	(60 - 134)			SW846 8260B
	103	(60 - 134)	13	(0-30)	SW846 8260B
Vinyl chloride	117	(37 - 150)			SW846 8260B
	99	(37 - 150)	17	(0-30)	SW846 8260B
Styrene	117	(58 - 138)			SW846 8260B
	104	(58 - 138)	12	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F5D220273 Work Order #...: G81F81AD-MS Matrix.....: SOLID
MS Lot-Sample #: F5D220273-001 G81F81AE-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Bromoform	113	(51 - 150)			SW846 8260B
	115	(51 - 150)	0.98	(0-30)	SW846 8260B
Isopropylbenzene	121	(61 - 150)			SW846 8260B
	108	(61 - 150)	12	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	90	(40 - 163)			SW846 8260B
	85	(40 - 163)	6.5	(0-30)	SW846 8260B
n-Propylbenzene	112	(35 - 150)			SW846 8260B
	103	(35 - 150)	8.6	(0-30)	SW846 8260B
Bromobenzene	119	(30 - 150)			SW846 8260B
	105	(30 - 150)	13	(0-30)	SW846 8260B
2-Chlorotoluene	105	(30 - 150)			SW846 8260B
	101	(30 - 150)	4.6	(0-30)	SW846 8260B
1,3,5-Trimethylbenzene	110	(30 - 150)			SW846 8260B
	100	(30 - 150)	9.8	(0-30)	SW846 8260B
4-Chlorotoluene	102	(45 - 150)			SW846 8260B
	98	(45 - 150)	4.6	(0-30)	SW846 8260B
tert-Butylbenzene	91	(32 - 148)			SW846 8260B
	80	(32 - 148)	13	(0-30)	SW846 8260B
sec-Butylbenzene	105	(42 - 150)			SW846 8260B
	98	(42 - 150)	7.2	(0-30)	SW846 8260B
p-Isopropyltoluene	115	(49 - 150)			SW846 8260B
	107	(49 - 150)	8.0	(0-30)	SW846 8260B
1,3-Dichlorobenzene	108	(57 - 136)			SW846 8260B
	102	(57 - 136)	6.5	(0-30)	SW846 8260B
1,4-Dichlorobenzene	107	(51 - 133)			SW846 8260B
	99	(51 - 133)	8.4	(0-30)	SW846 8260B
n-Butylbenzene	107	(34 - 150)			SW846 8260B
	105	(34 - 150)	3.0	(0-30)	SW846 8260B
1,2-Dichlorobenzene	115	(53 - 141)			SW846 8260B
	106	(53 - 141)	8.9	(0-30)	SW846 8260B
1,2-Dibromo-3-chloropropane (DBCP)	132	(30 - 150)			SW846 8260B
	143	(30 - 150)	6.8	(0-30)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	94	(60 - 148)
	86	(60 - 148)
Dibromofluoromethane	100	(61 - 140)
	87	(61 - 140)

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F5D220273 Work Order #...: G81F81AD-MS Matrix.....: SOLID
MS Lot-Sample #: F5D220273-001 G81F81AE-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	96	(56 - 149)
	91	(56 - 149)
4-Bromofluorobenzene	110	(56 - 150)
	102	(56 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220273 Work Order #...: G8QE31CW-MS Matrix.....: SOLID
MS Lot-Sample #: F5D200213-001 G8QE31CX-MSD
Date Sampled...: 04/19/05 10:30 Date Received..: 04/20/05
Prep Date.....: 04/29/05 Analysis Date..: 05/10/05
Prep Batch #...: 5119285 Analysis Time..: 02:35
Dilution Factor: 1 % Moisture.....: 20

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Phenol	85	(41 - 97)			SW846 8270C
	73	(41 - 97)	17	(0-30)	SW846 8270C
bis(2-Chloroethyl)-ether	80	(38 - 98)			SW846 8270C
	71	(38 - 98)	13	(0-30)	SW846 8270C
2-Chlorophenol	81	(41 - 96)			SW846 8270C
	71	(41 - 96)	16	(0-30)	SW846 8270C
2-Methylphenol	77	(43 - 95)			SW846 8270C
	68	(43 - 95)	15	(0-30)	SW846 8270C
3-Methylphenol & 4-Methylphenol	81	(41 - 103)			SW846 8270C
	72	(41 - 103)	17	(0-30)	SW846 8270C
2,2'-oxybis(1-Chloropropa	77	(41 - 102)			SW846 8270C
	70	(41 - 102)	11	(0-30)	SW846 8270C
N-Nitrosodi-n-propyl-amine	93	(51 - 109)			SW846 8270C
	83	(51 - 109)	13	(0-30)	SW846 8270C
Hexachloroethane	77	(36 - 99)			SW846 8270C
	70	(36 - 99)	12	(0-30)	SW846 8270C
Nitrobenzene	81	(45 - 105)			SW846 8270C
	74	(45 - 105)	10	(0-30)	SW846 8270C
Isophorone	91	(47 - 117)			SW846 8270C
	84	(47 - 117)	10	(0-30)	SW846 8270C
2-Nitrophenol	82	(36 - 108)			SW846 8270C
	74	(36 - 108)	12	(0-30)	SW846 8270C
2,4-Dimethylphenol	74	(36 - 105)			SW846 8270C
	65	(36 - 105)	15	(0-30)	SW846 8270C
bis(2-Chloroethoxy) methane	84	(46 - 107)			SW846 8270C
	75	(46 - 107)	13	(0-30)	SW846 8270C
2,4-Dichlorophenol	86	(40 - 105)			SW846 8270C
	74	(40 - 105)	17	(0-30)	SW846 8270C
1,2,4-Trichloro-benzene	82	(44 - 102)			SW846 8270C
	74	(44 - 102)	11	(0-30)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220273 Work Order #...: G8QE31CW-MS Matrix.....: SOLID
MS Lot-Sample #: F5D200213-001 G8QE31CX-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Naphthalene	79	(10 - 150)			SW846 8270C
	71	(10 - 150)	12	(0-30)	SW846 8270C
4-Chloroaniline	44	(11 - 99)			SW846 8270C
	43	(11 - 99)	3.9	(0-30)	SW846 8270C
Hexachlorobutadiene	79	(40 - 105)			SW846 8270C
	72	(40 - 105)	12	(0-30)	SW846 8270C
4-Chloro-3-methylphenol	91	(41 - 107)			SW846 8270C
	79	(41 - 107)	16	(0-30)	SW846 8270C
2-Methylnaphthalene	80	(35 - 118)			SW846 8270C
	71	(35 - 118)	14	(0-30)	SW846 8270C
Hexachlorocyclopenta-diene	91	(10 - 120)			SW846 8270C
	80	(10 - 120)	14	(0-30)	SW846 8270C
2,4,6-Trichloro-phenol	88	(40 - 105)			SW846 8270C
	77	(40 - 105)	16	(0-30)	SW846 8270C
2,4,5-Trichloro-phenol	93	(39 - 108)			SW846 8270C
	80	(39 - 108)	18	(0-30)	SW846 8270C
2-Nitroaniline	88	(42 - 114)			SW846 8270C
	78	(42 - 114)	14	(0-30)	SW846 8270C
Dimethyl phthalate	91	(46 - 110)			SW846 8270C
	79	(46 - 110)	16	(0-30)	SW846 8270C
Acenaphthylene	92	(48 - 110)			SW846 8270C
	81	(48 - 110)	15	(0-30)	SW846 8270C
2,6-Dinitrotoluene	91	(47 - 111)			SW846 8270C
	79	(47 - 111)	16	(0-30)	SW846 8270C
3-Nitroaniline	69	(23 - 102)			SW846 8270C
	62	(23 - 102)	12	(0-30)	SW846 8270C
Acenaphthene	86	(48 - 112)			SW846 8270C
	76	(48 - 112)	15	(0-30)	SW846 8270C
2,4-Dinitrophenol	54	(10 - 109)			SW846 8270C
	44	(10 - 109)	22	(0-30)	SW846 8270C
4-Nitrophenol	108	(33 - 114)			SW846 8270C
	91	(33 - 114)	19	(0-30)	SW846 8270C
Dibenzofuran	89	(46 - 107)			SW846 8270C
	77	(46 - 107)	16	(0-30)	SW846 8270C
Dibenz(a,h)anthracene	92	(33 - 131)			SW846 8270C
	80	(33 - 131)	16	(0-30)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220273 Work Order #...: G8QE31CW-MS Matrix.....: SOLID
MS Lot-Sample #: F5D200213-001 G8QE31CX-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2,4-Dinitrotoluene	99	(47 - 120)			SW846 8270C
	85	(47 - 120)	17	(0-30)	SW846 8270C
Diethyl phthalate	97	(46 - 115)			SW846 8270C
	83	(46 - 115)	18	(0-30)	SW846 8270C
Fluorene	91	(47 - 109)			SW846 8270C
	79	(47 - 109)	16	(0-30)	SW846 8270C
4-Chlorophenyl phenyl ether	94	(47 - 109)			SW846 8270C
	81	(47 - 109)	17	(0-30)	SW846 8270C
4-Nitroaniline	88	(21 - 116)			SW846 8270C
	78	(21 - 116)	13	(0-30)	SW846 8270C
4,6-Dinitro-2-methylphenol	80	(10 - 108)			SW846 8270C
	67	(10 - 108)	19	(0-30)	SW846 8270C
N-Nitrosodiphenylamine	96	(47 - 120)			SW846 8270C
	81	(47 - 120)	18	(0-30)	SW846 8270C
Pyrene	87	(41 - 121)			SW846 8270C
	73	(41 - 121)	19	(0-30)	SW846 8270C
4-Bromophenyl phenyl ether	87	(46 - 110)			SW846 8270C
	75	(46 - 110)	17	(0-30)	SW846 8270C
Hexachlorobenzene	91	(48 - 115)			SW846 8270C
	79	(48 - 115)	16	(0-30)	SW846 8270C
Pentachlorophenol	78	(11 - 110)			SW846 8270C
	67	(11 - 110)	18	(0-30)	SW846 8270C
Phenanthrene	84	(39 - 122)			SW846 8270C
	73	(39 - 122)	16	(0-30)	SW846 8270C
Anthracene	86	(46 - 111)			SW846 8270C
	74	(46 - 111)	16	(0-30)	SW846 8270C
Di-n-butyl phthalate	86	(45 - 114)			SW846 8270C
	73	(45 - 114)	17	(0-30)	SW846 8270C
Fluoranthene	81	(39 - 116)			SW846 8270C
	69	(39 - 116)	18	(0-30)	SW846 8270C
Butyl benzyl phthalate	90	(44 - 121)			SW846 8270C
	78	(44 - 121)	16	(0-30)	SW846 8270C
Benzo(a)anthracene	88	(46 - 117)			SW846 8270C
	76	(46 - 117)	16	(0-30)	SW846 8270C
3,3'-Dichlorobenzidine	63	(10 - 116)			SW846 8270C
	56	(10 - 116)	14	(0-30)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220273 Work Order #...: G8QE31CW-MS Matrix.....: SOLID
MS Lot-Sample #: F5D200213-001 G8QE31CX-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Chrysene	90	(43 - 119)			SW846 8270C
	78	(43 - 119)	17	(0-30)	SW846 8270C
bis(2-Ethylhexyl) phthalate	85	(43 - 118)			SW846 8270C
	74	(43 - 118)	16	(0-30)	SW846 8270C
Di-n-octyl phthalate	87	(35 - 120)			SW846 8270C
	75	(35 - 120)	16	(0-30)	SW846 8270C
Benzo(b)fluoranthene	92	(39 - 124)			SW846 8270C
	77	(39 - 124)	20	(0-30)	SW846 8270C
Benzo(k)fluoranthene	92	(43 - 131)			SW846 8270C
	77	(43 - 131)	20	(0-30)	SW846 8270C
Benzo(a)pyrene	88	(43 - 114)			SW846 8270C
	76	(43 - 114)	16	(0-30)	SW846 8270C
Indeno(1,2,3-cd)pyrene	84	(31 - 129)			SW846 8270C
	73	(31 - 129)	16	(0-30)	SW846 8270C
Benzo(ghi)perylene	85	(26 - 140)			SW846 8270C
	74	(26 - 140)	15	(0-30)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	79	(40 - 103)
	68	(40 - 103)
Phenol-d5	87	(36 - 105)
	74	(36 - 105)
Nitrobenzene-d5	82	(45 - 114)
	74	(45 - 114)
2-Fluorobiphenyl	88	(49 - 120)
	75	(49 - 120)
2,4,6-Tribromophenol	98	(39 - 114)
	83	(39 - 114)
Terphenyl-d14	76	(42 - 108)
	66	(42 - 108)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220273 Work Order #...: G8WXJ1AK-MS Matrix.....: SOLID
MS Lot-Sample #: F5D210380-001 G8WXJ1AL-MSD
Date Sampled...: 04/19/05 Date Received..: 04/21/05
Prep Date.....: 05/11/05 Analysis Date..: 05/12/05
Prep Batch #...: 5131374 Analysis Time..: 22:46
Dilution Factor: 1 % Moisture.....: 20

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Phenol	82	(41 - 97)			SW846 8270C
	79	(41 - 97)	1.9	(0-30)	SW846 8270C
bis(2-Chloroethyl)-ether	86	(38 - 98)			SW846 8270C
	80	(38 - 98)	5.1	(0-30)	SW846 8270C
2-Chlorophenol	89	(41 - 96)			SW846 8270C
	83	(41 - 96)	4.4	(0-30)	SW846 8270C
2-Methylphenol	72	(43 - 95)			SW846 8270C
	71	(43 - 95)	0.17	(0-30)	SW846 8270C
3-Methylphenol & 4-Methylphenol	71	(41 - 103)			SW846 8270C
	69	(41 - 103)	1.2	(0-30)	SW846 8270C
2,2'-oxybis(1-Chloropropa	89	(41 - 102)			SW846 8270C
	88	(41 - 102)	0.17	(0-30)	SW846 8270C
N-Nitrosodi-n-propyl-amine	100	(51 - 109)			SW846 8270C
	101	(51 - 109)	2.7	(0-30)	SW846 8270C
Hexachloroethane	94	(36 - 99)			SW846 8270C
	91	(36 - 99)	0.75	(0-30)	SW846 8270C
Nitrobenzene	89	(45 - 105)			SW846 8270C
	88	(45 - 105)	0.03	(0-30)	SW846 8270C
Isophorone	97	(47 - 117)			SW846 8270C
	97	(47 - 117)	1.1	(0-30)	SW846 8270C
2-Nitrophenol	89	(36 - 108)			SW846 8270C
	89	(36 - 108)	1.6	(0-30)	SW846 8270C
2,4-Dimethylphenol	50	(36 - 105)			SW846 8270C
	44	(36 - 105)	12	(0-30)	SW846 8270C
bis(2-Chloroethoxy) methane	93	(46 - 107)			SW846 8270C
	93	(46 - 107)	1.3	(0-30)	SW846 8270C
2,4-Dichlorophenol	86	(40 - 105)			SW846 8270C
	83	(40 - 105)	1.8	(0-30)	SW846 8270C
1,2,4-Trichloro-benzene	95	(44 - 102)			SW846 8270C
	93	(44 - 102)	0.90	(0-30)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220273 Work Order #...: G8WXJ1AK-MS Matrix.....: SOLID
MS Lot-Sample #: F5D210380-001 G8WXJ1AL-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Naphthalene	94	(10 - 150)			SW846 8270C
	90	(10 - 150)	2.7	(0-30)	SW846 8270C
4-Chloroaniline	37	(11 - 99)			SW846 8270C
	35	(11 - 99)	2.9	(0-30)	SW846 8270C
Hexachlorobutadiene	97	(40 - 105)			SW846 8270C
	95	(40 - 105)	0.63	(0-30)	SW846 8270C
4-Chloro-3-methylphenol	91	(41 - 107)			SW846 8270C
	89	(41 - 107)	0.60	(0-30)	SW846 8270C
2-Methylnaphthalene	117	(35 - 118)			SW846 8270C
	115	(35 - 118)	0.14	(0-30)	SW846 8270C
Hexachlorocyclopenta-diene	118	(10 - 120)			SW846 8270C
	108	(10 - 120)	6.7	(0-30)	SW846 8270C
2,4,6-Trichloro-phenol	90	(40 - 105)			SW846 8270C
	86	(40 - 105)	2.9	(0-30)	SW846 8270C
2,4,5-Trichloro-phenol	89	(39 - 108)			SW846 8270C
	86	(39 - 108)	2.0	(0-30)	SW846 8270C
2-Nitroaniline	86	(42 - 114)			SW846 8270C
	86	(42 - 114)	1.6	(0-30)	SW846 8270C
Dimethyl phthalate	98	(46 - 110)			SW846 8270C
	95	(46 - 110)	0.92	(0-30)	SW846 8270C
Acenaphthylene	103	(48 - 110)			SW846 8270C
	99	(48 - 110)	2.2	(0-30)	SW846 8270C
2,6-Dinitrotoluene	93	(47 - 111)			SW846 8270C
	93	(47 - 111)	1.2	(0-30)	SW846 8270C
3-Nitroaniline	50	(23 - 102)			SW846 8270C
	54	(23 - 102)	10	(0-30)	SW846 8270C
Acenaphthene	94	(48 - 112)			SW846 8270C
	91	(48 - 112)	1.5	(0-30)	SW846 8270C
2,4-Dinitrophenol	32	(10 - 109)			SW846 8270C
	27	(10 - 109)	14	(0-30)	SW846 8270C
4-Nitrophenol	88	(33 - 114)			SW846 8270C
	85	(33 - 114)	0.91	(0-30)	SW846 8270C
Dibenzofuran	89	(46 - 107)			SW846 8270C
	87	(46 - 107)	0.53	(0-30)	SW846 8270C
Dibenz(a,h)anthracene	98	(33 - 131)			SW846 8270C
	93	(33 - 131)	3.4	(0-30)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220273 Work Order #...: G8WXJ1AK-MS Matrix.....: SOLID
MS Lot-Sample #: F5D210380-001 G8WXJ1AL-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2,4-Dinitrotoluene	89	(47 - 120)			SW846 8270C
	89	(47 - 120)	1.2	(0-30)	SW846 8270C
Diethyl phthalate	95	(46 - 115)			SW846 8270C
	93	(46 - 115)	0.72	(0-30)	SW846 8270C
Fluorene	92	(47 - 109)			SW846 8270C
	91	(47 - 109)	0.13	(0-30)	SW846 8270C
4-Chlorophenyl phenyl ether	98	(47 - 109)			SW846 8270C
	93	(47 - 109)	2.9	(0-30)	SW846 8270C
4-Nitroaniline	71	(21 - 116)			SW846 8270C
	72	(21 - 116)	3.7	(0-30)	SW846 8270C
4,6-Dinitro-2-methylphenol	76	(10 - 108)			SW846 8270C
	62	(10 - 108)	18	(0-30)	SW846 8270C
N-Nitrosodiphenylamine	107	(47 - 120)			SW846 8270C
	94	(47 - 120)	11	(0-30)	SW846 8270C
Pyrene	105	(41 - 121)			SW846 8270C
	110	(41 - 121)	5.9	(0-30)	SW846 8270C
4-Bromophenyl phenyl ether	103	(46 - 110)			SW846 8270C
	95	(46 - 110)	6.3	(0-30)	SW846 8270C
Hexachlorobenzene	103	(48 - 115)			SW846 8270C
	97	(48 - 115)	4.1	(0-30)	SW846 8270C
Pentachlorophenol	42	(11 - 110)			SW846 8270C
	33	(11 - 110)	20	(0-30)	SW846 8270C
Phenanthrene	88	(39 - 122)			SW846 8270C
	83	(39 - 122)	3.8	(0-30)	SW846 8270C
Anthracene	88	(46 - 111)			SW846 8270C
	84	(46 - 111)	2.8	(0-30)	SW846 8270C
Di-n-butyl phthalate	75	(45 - 114)			SW846 8270C
	77	(45 - 114)	4.2	(0-30)	SW846 8270C
Fluoranthene	66	(39 - 116)			SW846 8270C
	67	(39 - 116)	4.2	(0-30)	SW846 8270C
Butyl benzyl phthalate	98	(44 - 121)			SW846 8270C
	97	(44 - 121)	1.0	(0-30)	SW846 8270C
Benzo(a)anthracene	87	(46 - 117)			SW846 8270C
	85	(46 - 117)	0.35	(0-30)	SW846 8270C
3,3'-Dichlorobenzidine	41	(10 - 116)			SW846 8270C
	40	(10 - 116)	2.1	(0-30)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D220273 Work Order #...: G8WXJ1AK-MS Matrix.....: SOLID
MS Lot-Sample #: F5D210380-001 G8WXJ1AL-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Chrysene	85	(43 - 119)			SW846 8270C
	79	(43 - 119)	5.4	(0-30)	SW846 8270C
bis(2-Ethylhexyl) phthalate	97	(43 - 118)			SW846 8270C
	94	(43 - 118)	2.0	(0-30)	SW846 8270C
Di-n-octyl phthalate	87	(35 - 120)			SW846 8270C
	80	(35 - 120)	7.1	(0-30)	SW846 8270C
Benzo(b)fluoranthene	84	(39 - 124)			SW846 8270C
	77	(39 - 124)	6.4	(0-30)	SW846 8270C
Benzo(k)fluoranthene	89	(43 - 131)			SW846 8270C
	81	(43 - 131)	7.6	(0-30)	SW846 8270C
Benzo(a)pyrene	78	(43 - 114)			SW846 8270C
	72	(43 - 114)	6.4	(0-30)	SW846 8270C
Indeno(1,2,3-cd)pyrene	85	(31 - 129)			SW846 8270C
	79	(31 - 129)	5.3	(0-30)	SW846 8270C
Benzo(ghi)perylene	81	(26 - 140)			SW846 8270C
	80	(26 - 140)	0.03	(0-30)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	83	(40 - 103)
	83	(40 - 103)
Phenol-d5	87	(36 - 105)
	82	(36 - 105)
Nitrobenzene-d5	91	(45 - 114)
	92	(45 - 114)
2-Fluorobiphenyl	97	(49 - 120)
	96	(49 - 120)
2,4,6-Tribromophenol	87	(39 - 114)
	85	(39 - 114)
Terphenyl-d14	90	(42 - 108)
	92	(42 - 108)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...:	F5D220273	**Work Order #...:**	G8WXX1AF-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	F5D210380-003		G8WXX1AG-MSD		
Date Sampled...:	04/19/05	**Date Received..:**	04/21/05		
Prep Date.....:	04/29/05	**Analysis Date..:**	05/09/05		
Prep Batch #...:	5119298	**Analysis Time..:**	18:17		
Dilution Factor:	1	**% Moisture.....:**	20		

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**96**	**(30 - 150)**			**SW846 8082**
	100	**(30 - 150)**	**3.5**	**(0-30)**	**SW846 8082**
Aroclor 1260	**93**	**(30 - 150)**			**SW846 8082**
	98	**(30 - 150)**	**4.6**	**(0-30)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	162 *	(30 - 150)
	118	(30 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

* Surrogate recovery is outside stated control limits.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F5D220273 **Work Order #...:** G829G-SMP G829G-DUP **Matrix.....:** SOLID

Date Sampled...: 04/22/05 15:00 **Date Received..:** 04/23/05

% Moisture.....: 21

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture						SD Lot-Sample #:	F5D230129-002	
	20.9	21.0	%	0.38	(0-30)	MCAWW 160.3 MOD	04/25-04/26/05	5115139

Dilution Factor: 1 Analysis Time..: 00:00

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F5D220273 **Work Order #...:** G81F8-SMP G81F8-DUP **Matrix.....:** SOLID

Date Sampled...: 04/20/05 **Date Received..:** 04/22/05

% Moisture.....: 0.18

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture						SD Lot-Sample #: F5D220273-001		
	0.18	0.18	%	0.0	(0-30)	MCAWW 160.3 MOD	04/26-04/27/05	5115207

Dilution Factor: 1 Analysis Time..: 00:00

GC SAMPLE AND QC DATA SUMMARY- FORMS I
PCB'S

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 003
Method: SW846 8082
PCBs (8082)

Sample WT/Vol: 30.877 / g Date Received: 04/21/05
Work Order: G8WXX1AE Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/09/05
Moisture %:20

QC Batch: 5119298

Client Sample Id: INTRA-LAB QC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor 1016	41	U
11096-82-5	Aroclor 1260	41	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Decachlorobiphenyl	115	(30 - 150)

FORM I

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D220273 002
Method: SW846 8082
PCBs (8082)

Sample WT/Vol: 30.522 / g Date Received: 04/22/05
Work Order: G81GA1AD Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/09/05
Moisture %:8.5

QC Batch: 5119298

Client Sample Id: RE73-05-58879

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor 1016	36	U
11104-28-2	Aroclor 1221	36	U
11141-16-5	Aroclor 1232	36	U
53469-21-9	Aroclor 1242	36	U
12672-29-6	Aroclor 1248	36	U
11097-69-1	**Aroclor 1254**	**380**	
11096-82-5	Aroclor 1260	36	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Decachlorobiphenyl	105	(30 - 150)

FORM I

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D290000 298
Method: SW846 8082
PCBs (8082)

Sample WT/Vol: 30 / g Date Received: 04/20/05
Work Order: G9HD11AA Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/09/05
Moisture %:NA

QC Batch: 5119298

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor 1016	33	U
11104-28-2	Aroclor 1221	33	U
11141-16-5	Aroclor 1232	33	U
53469-21-9	Aroclor 1242	33	U
12672-29-6	Aroclor 1248	33	U
11097-69-1	Aroclor 1254	33	U
11096-82-5	Aroclor 1260	33	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Decachlorobiphenyl	107	(30 - 150)

FORM I

LOS ALAMOS NATIONAL LABORATORY
CHECK SAMPLE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D290000 298
Method: SW846 8082
PCBs (8082)

Sample WT/Vol: 30 / g Date Received: 04/20/05
Work Order: G9HD11AC Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/09/05
Moisture %:NA

QC Batch: 5119298

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor 1016	327	
11096-82-5	Aroclor 1260	336	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Decachlorobiphenyl	109	(73 - 150)

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 003
Method: SW846 8082
PCBs (8082)

Sample WT/Vol: 30.511 / g Date Received: 04/21/05
Work Order: G8WXX1AG Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/09/05
Moisture %:20

QC Batch: 5119298

Client Sample Id: LAB MS/MSD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor 1016	411	
11096-82-5	Aroclor 1260	405	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Decachlorobiphenyl	118	(30 - 150)

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID
Method: SW846 8082
PCBs (8082)

Lab Sample ID:F5D210380 003

Sample WT/Vol: 30.256 / g
Work Order: G8WXX1AF
Dilution factor: 1
Moisture %:20

Date Received: 04/21/05
Date Extracted:04/29/05
Date Analyzed: 05/09/05

QC Batch: 5119298

Client Sample Id: LAB MS/MSD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor 1016	397	
11096-82-5	Aroclor 1260	386	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Decachlorobiphenyl	162	(30 - 150)

GC ADDITIONAL QC SUMMARY DATA
FORMS 2 THROUGH 4

SW846 8082 SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Lot #: F5D220273

Extraction: XXA71QH01

	CLIENT ID.	SRG01	TOT OUT
01	INTRA-LAB QC	115	00
02	RE73-05-58879	105	00
03	METHOD BLK. G9HD11AA	107	00
04	LCS G9HD11AC	109	00
05	LAB MS/MSD D	118	00
06	LAB MS/MSD S	162*	01

SURROGATES		QC LIMITS
SRG01	= Decachlorobiphenyl	(30-150)

\# Column to be used to flag recovery values
* Values outside of required QC Limits
D System monitoring Compound diluted out

FORM II

SW846 8082 MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Matrix Spike ID: LAB MS/MSD

Lot #: F5D210380 WO #: G8WXX1AF
BATCH: 5119298

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Aroclor 1016	414	ND	397	96	30- 150	
Aroclor 1260	414	ND	386	93	30- 150	

NOTES(S):

Results and reporting limits have been adjusted for dry weight.

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM III

SW846 8082 MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Matrix Spike ID: LAB MS/MSD

Lot #: F5D210380 WO #: G8WXX1AG
BATCH: 5119298

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
Aroclor 1016	411	411	100	3.5	30	30 - 150	
Aroclor 1260	411	405	98	4.6	30	30 - 150	

NOTES(S):

Results and reporting limits have been adjusted for dry weight.

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 2 outside limits
Spike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM III

SW846 8082 CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Lot #: F5D290000 WO #: G9HD11AC
BATCH: 5119298

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
Aroclor 1016	333	327	98	73 - 141	
Aroclor 1260	333	336	101	72 - 144	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM III

SW846 8082 METHOD BLANK SUMMARY

BLANK WORKORDER NO.: G9HD11AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: STLSTL

SDG Number:F5D220273

Lab File ID: PBLK931.

Lot Number: F5D220273

Matrix: SOLID

Extraction Method: 3550B/3665A

Date Extracted: 04/29/05

Date Analyzed(1): 05/09/05

Date Analyzed(2): N/A

Time Analyzed(1): 16:55

Time Analyzed(2): N/A

Instrument ID(1): GCP

Instrument ID(2): N/A

GC Column(1): RTX-CLP ID: 053 GC Column(2): N/A ID: N/A

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, AND MSD:

	CLIENT ID.	SAMPLE WORK ORDER #	DATE ANALYZED(1)	DATE ANALYZED(2)
01	INTRA-LAB QC	G8WXX1AE	05/09/05	N/A
02	LAB MS/MSD	G8WXX1AF S	05/09/05	N/A
03	LAB MS/MSD	G8WXX1AG D	05/09/05	N/A
04	RE73-05-58879	G81GA1AD	05/09/05	N/A
05	CHECK SAMPLE	G9HD11AC C	05/09/05	N/A
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

COMMENTS:

FORM IV

Report Date : 05-Apr-2005 12:00

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 04-APR-2005 16:50
End Cal Date : 04-APR-2005 20:37
Quant Method : ESTD
Origin : Disabled
Target Version : 4.10
Integrator : Falcon
Method file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Cal Date : 05-Apr-2005 11:59 owenb
Curve Type : Average

Calibration File Names:
Level 2: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL114.D
Level 3: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL115.D
Level 4: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL127.D
Level 5: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL117.D
Level 6: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL118.D
Level 7: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL119.D
Level 8: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL120.D

BO 4/05/05

Compound	100.000 Level 2	250.000 Level 3	500.000 Level 4	1000.000 Level 5	1500.000 Level 6	2500.000 Level 7	RRF	% RSD	
	4000.000 Level 8								
22 Aroclor-1016(1)	6563	5536	5023	4701	4312	4076			
	3975						4884	18.881	
(2)	11901	10355	9589	9020	8099	7472			
	7557						9142	17.686	
(3)	25256	22640	21302	20188	18617	17632			
	17552						20455	13.882	
(4)	9460	8372	7748	7340	6910	6142			
	6370						7477	15.593	
(5)	10139	9003	8415	8008	7072	6178			
	6937						7965	17.041	
23 Aroclor-1221(1)	+++++	+++++	814	+++++	+++++	+++++			
	+++++						814	0.000	<-
(2)	+++++	+++++	2519	+++++	+++++	+++++			
	+++++						2519	0.000	<-
(3)	+++++	+++++	6942	+++++	+++++	+++++			
	+++++						6942	0.000	<-
24 Aroclor-1232(1)	+++++	+++++	5856	+++++	+++++	+++++			
	+++++						5856	0.000	
(2)	+++++	+++++	4301	+++++	+++++	+++++			
	+++++						4301	0.000	
(3)	+++++	+++++	8860	+++++	+++++	+++++			

	+++++						8860	0.000
(4)	+++++	+++++	5537	+++++	+++++	+++++		
	+++++						5537	0.000
(5)	+++++	+++++	2901	+++++	+++++	+++++		
	+++++						2901	0.000

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 04-APR-2005 16:50
End Cal Date : 04-APR-2005 20:37
Quant Method : ESTD
Origin : Disabled
Target Version : 4.10
Integrator : Falcon
Method file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Cal Date : 05-Apr-2005 11:59 owenb
Curve Type : Average

Compound	100.000 Level 2	250.000 Level 3	500.000 Level 4	1000.000 Level 5	1500.000 Level 6	2500.000 Level 7	4000.000 Level 8	RRF	% RSD
25 Aroclor-1242(1)	+++++	+++++	7221	+++++	+++++	+++++	+++++	7221	0.000
(2)	+++++	+++++	5593	+++++	+++++	+++++	+++++	5593	0.000
(3)	+++++	+++++	16034	+++++	+++++	+++++	+++++	16034	0.000
(4)	+++++	+++++	6044	+++++	+++++	+++++	+++++	6044	0.000
(5)	+++++	+++++	2557	+++++	+++++	+++++	+++++	2557	0.000
26 Aroclor-1248(1)	+++++	+++++	11017	+++++	+++++	+++++	+++++	11017	0.000
(2)	+++++	+++++	15686	+++++	+++++	+++++	+++++	15686	0.000
(3)	+++++	+++++	18993	+++++	+++++	+++++	+++++	18993	0.000
(4)	+++++	+++++	11346	+++++	+++++	+++++	+++++	11346	0.000
(5)	+++++	+++++	5362	+++++	+++++	+++++	+++++	5362	0.000
27 Aroclor-1254(1)	+++++	+++++	7602	+++++	+++++	+++++	+++++	7602	0.000
(2)	+++++	+++++	20468	+++++	+++++	+++++	+++++	20468	0.000
(3)	+++++	+++++	16194	+++++	+++++	+++++	+++++	16194	0.000
(4)	+++++	+++++	11627	+++++	+++++	+++++			

	+++++						11627	0.000
(5)	+++++	+++++	16805	+++++	+++++	+++++		
	+++++						16805	0.000

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 04-APR-2005 16:50
End Cal Date : 04-APR-2005 20:37
Quant Method : ESTD
Origin : Disabled
Target Version : 4.10
Integrator : Falcon
Method file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Cal Date : 05-Apr-2005 11:59 owenb
Curve Type : Average

Compound	100.000 Level 2	250.000 Level 3	500.000 Level 4	1000.000 Level 5	1500.000 Level 6	2500.000 Level 7	RRF	% RSD
	4000.000 Level 8							
28 Aroclor-1260(1)	15121	13480	12391	11764	10790	9914		
	10104						11938	15.867
(2)	26044	23513	21741	20599	18879	17556		
	17743						20868	15.067
(3)	22581	20664	19197	18240	16559	15161		
	15925						18333	14.644
(4)	32524	30223	28058	26678	23760	21834		
	23576						26665	14.545
(5)	8454	7535	6963	6634	6119	5613		
	5942						6751	14.715
35 Aroclor-1262(1)	+++++	+++++	9480	+++++	+++++	+++++		
	+++++						9480	0.000
(2)	+++++	+++++	13200	+++++	+++++	+++++		
	+++++						13200	0.000
(3)	+++++	+++++	14268	+++++	+++++	+++++		
	+++++						14268	0.000
(4)	+++++	+++++	30358	+++++	+++++	+++++		
	+++++						30358	0.000
(5)	+++++	+++++	10517	+++++	+++++	+++++		
	+++++						10517	0.000
36 Aroclor-1268(1)	+++++	+++++	31225	+++++	+++++	+++++		
	+++++						31225	0.000
(2)	+++++	+++++	32422	+++++	+++++	+++++		
	+++++						32422	0.000
(3)	+++++	+++++	25142	+++++	+++++	+++++		
	+++++						25142	0.000
(4)	+++++	+++++	9957	+++++	+++++	+++++		

	+++++						9957	0.000
(5)	+++++	+++++	64547	+++++	+++++	+++++		
	+++++						64547	0.000

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 04-APR-2005 16:50
End Cal Date : 04-APR-2005 20:37
Quant Method : ESTD
Origin : Disabled
Target Version : 4.10
Integrator : Falcon
Method file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Cal Date : 05-Apr-2005 11:59 owenb
Curve Type : Average

Compound	100.000 Level 2	250.000 Level 3	500.000 Level 4	1000.000 Level 5	1500.000 Level 6	2500.000 Level 7	RRF	% RSD	
	4000.000 Level 8								
M 37 PCB (Total)	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
$ 32 Decachlorobiphenyl	250400	224908	207267	196795	196312	165039			
	175593						202331	14.292	

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL114.D
Report Date: 05-Apr-2005 12:11

STL St. Louis

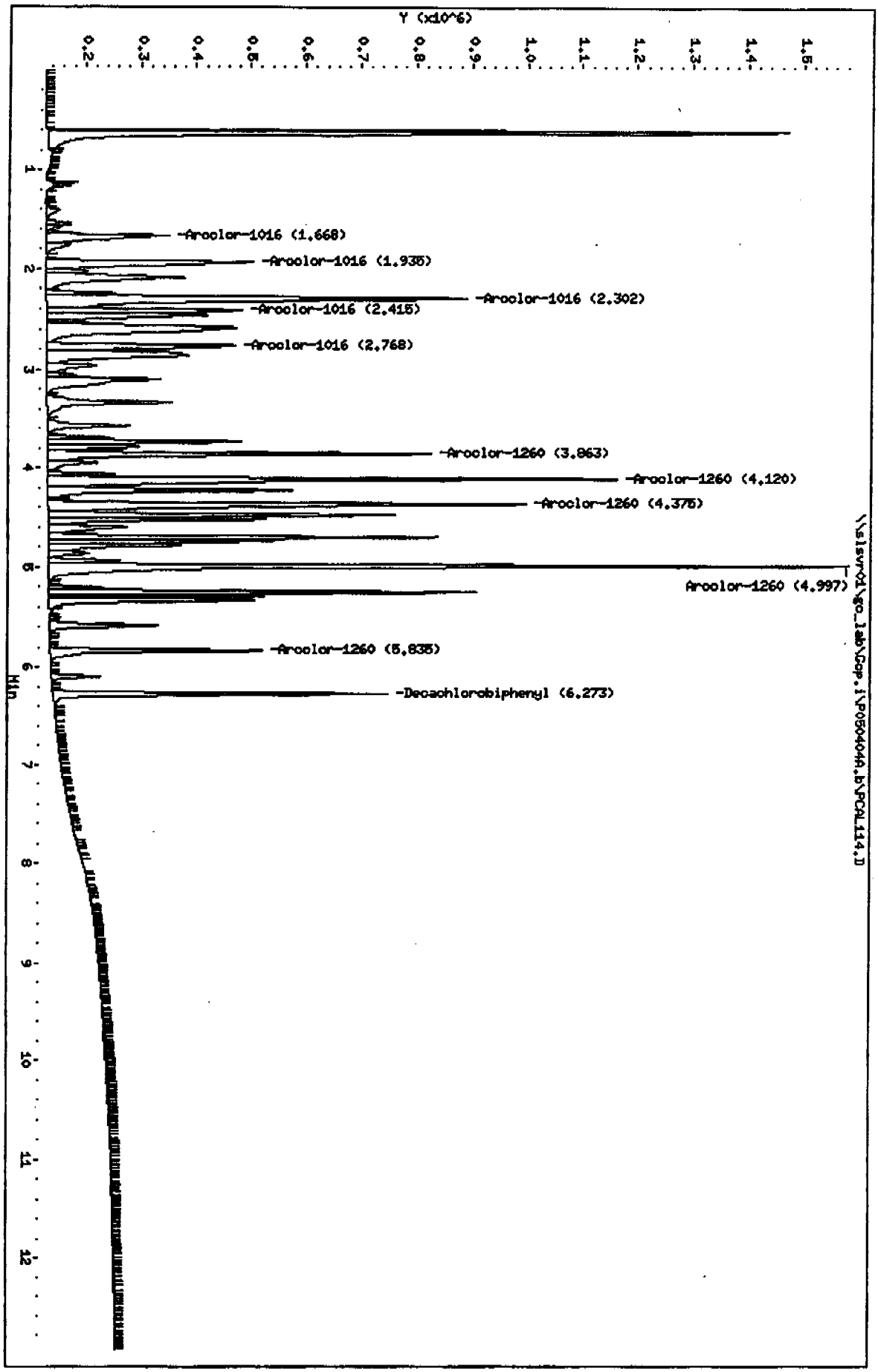
Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL114.D
Lab Smp Id: ICAL2
Inj Date : 04-APR-2005 16:50
Operator : BLO Inst ID: Gcp.i
Smp Info : ICAL2
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:00 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.668	1.668	0.000	656271	100.000	134.4	80.00- 120.00	100.00
1.934	1.933	0.001	1190059	100.000	130.2	165.85- 248.78	181.34
2.301	2.303	-0.002	2525616	100.000	123.5	384.65- 576.97	384.84
2.414	2.413	0.001	945992	100.000	126.5	140.52- 210.78	144.15
2.768	2.768	0.000	1013873	100.000	127.3	148.90- 223.36	154.49
		Average of Peak Amounts =			128.4		
28 Aroclor-1260					CAS #: 11096-82-5		
3.863	3.863	0.000	1512137	100.000	126.7	80.00- 120.00	100.00
4.119	4.121	-0.002	2604359	100.000	124.8	141.10- 211.66	172.23
4.374	4.375	-0.001	2258138	100.000	123.2	136.45- 204.67	149.33
4.996	4.998	-0.002	3252441	100.000	122.0	158.92- 238.38	215.09
5.834	5.835	-0.001	845400	100.000	125.2	38.21- 57.31	55.91
		Average of Peak Amounts =			124.4		
$ 32 Decachlorobiphenyl					CAS #:		
6.273	6.273	0.000	1252001	5.00000	6.188		

BLD 4105105



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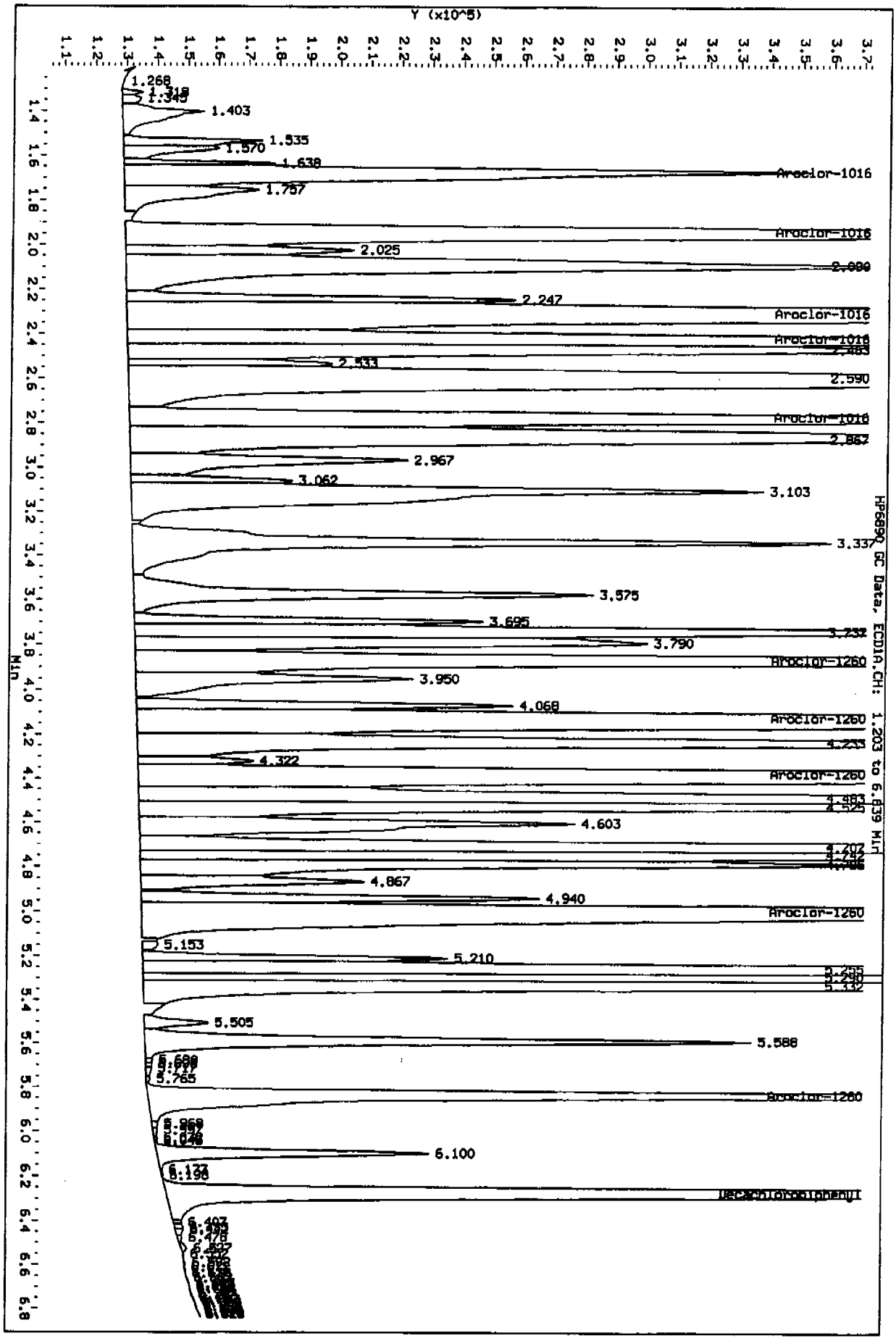
Date : 04-APR-2005 16:50
Client ID:
Sample Info: ICAL2
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53



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Injection Date: 04-APR-2005 16:50
Instrument: Gcp.i
Client Sample ID:

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL115.D
Report Date: 05-Apr-2005 12:11

STL St. Louis

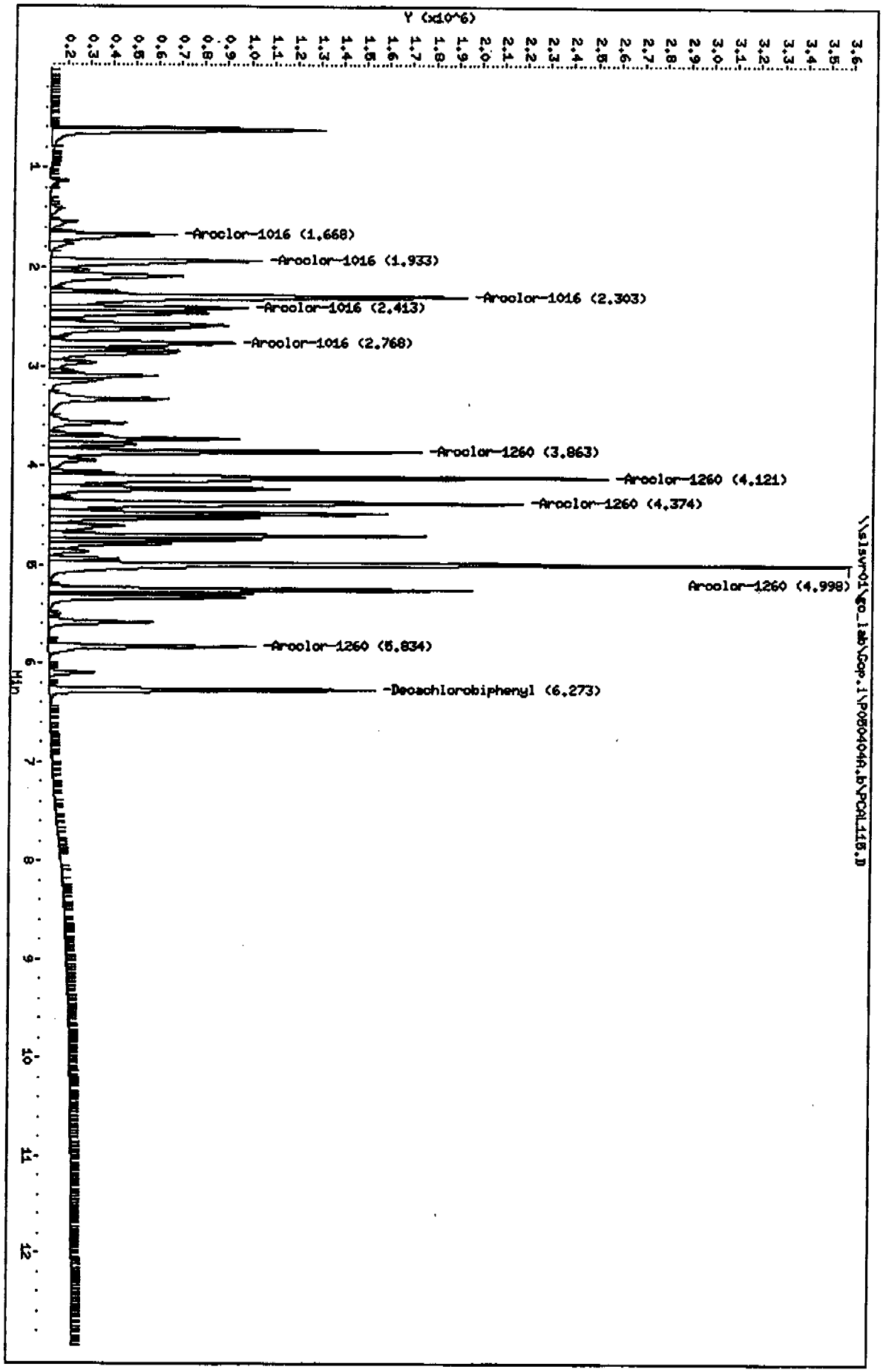
Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL115.D
Lab Smp Id: ICAL3
Inj Date : 04-APR-2005 17:07
Operator : BLO Inst ID: Gcp.i
Smp Info : ICAL3
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:00 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.667	1.668	-0.001	1384021	250.000	283.4	80.00- 120.00	100.00
1.932	1.933	-0.001	2588636	250.000	283.2	165.85- 248.78	187.04
2.302	2.303	-0.001	5659940	250.000	276.7	384.65- 576.97	408.95
2.412	2.413	-0.001	2093051	250.000	279.9	140.52- 210.78	151.23
2.767	2.768	-0.001	2250824	250.000	282.6	148.90- 223.36	162.63
		Average of Peak Amounts =			281.2		
28 Aroclor-1260					CAS #: 11096-82-5		
3.862	3.863	-0.001	3369925	250.000	282.3	80.00- 120.00	100.00
4.121	4.121	0.000	5878312	250.000	281.7	141.10- 211.66	174.43
4.374	4.375	-0.001	5166007	250.000	281.8	136.45- 204.67	153.30
4.997	4.998	-0.001	7555629	250.000	283.4	158.92- 238.38	224.21
5.834	5.835	-0.001	1883640	250.000	279.0	38.21- 57.31	55.90
		Average of Peak Amounts =			281.6		
$ 32 Decachlorobiphenyl					CAS #:		
6.272	6.273	-0.001	2811347	12.5000	13.89		

BLO 4/05/05



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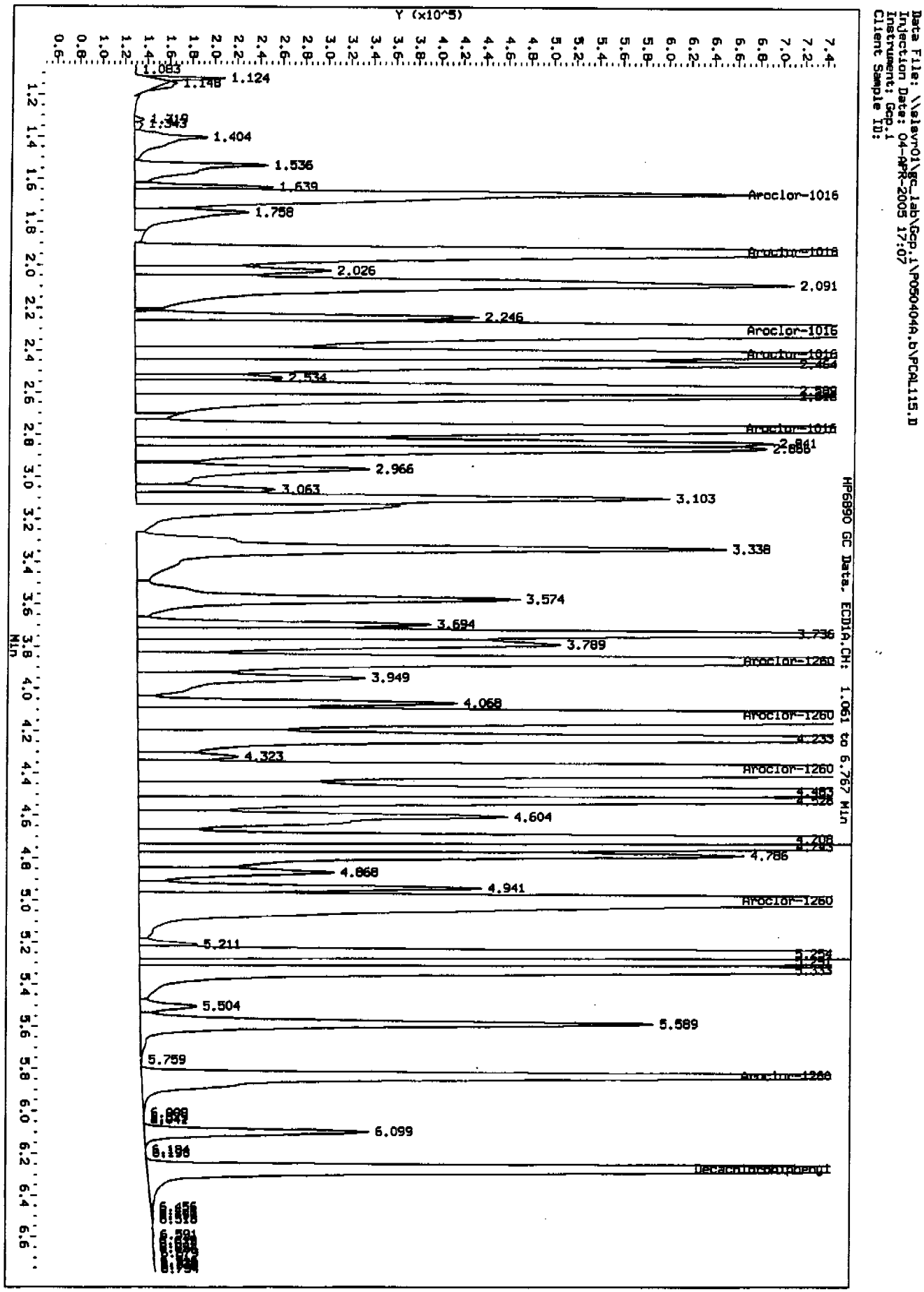
Date : 04-APR-2008 17:07
Client ID:
Sample Info: ICAL3
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^5)
Min
Data File: \\slavr01\gc_lab\Gcp.1\P050404A.b\PCAL115.D
Injection Date: 04-APR-2005 17:07
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 1.061 to 6.767 Min
1.083
1.124
1.404
1.536
1.758
Aroclor-1016
2.026
2.091
2.246
2.534
2.966
3.063
3.103
3.338
3.574
3.694
3.736
3.789
Aroclor-1260
3.949
4.068
4.323
4.604
4.786
4.868
4.941
5.211
5.504
5.589
5.759
6.099
Decachlorobiphenyl

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL116.D
Report Date: 05-Apr-2005 12:11

STL St. Louis

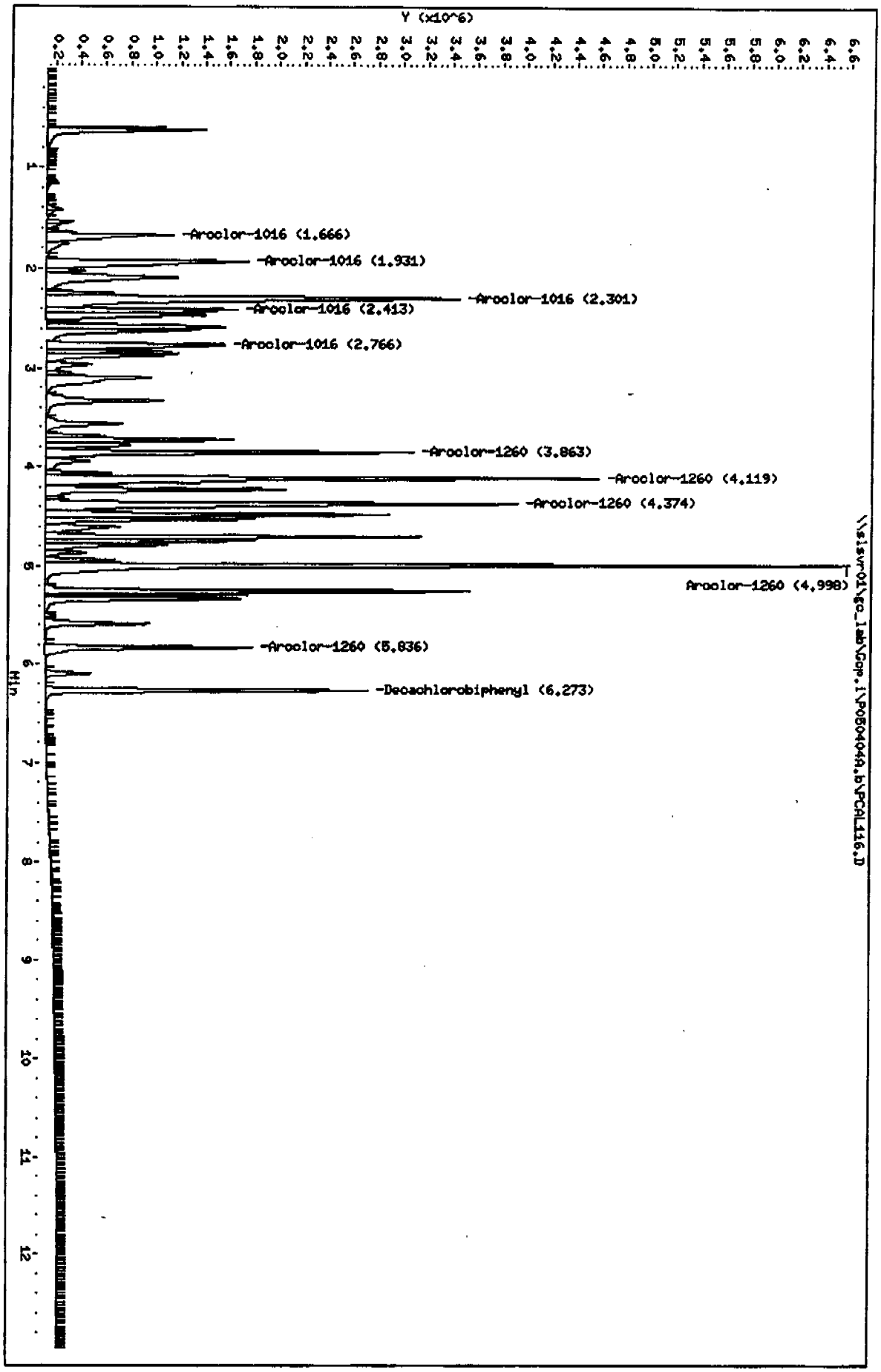
Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL116.D
Lab Smp Id: ICAL4
Inj Date : 04-APR-2005 17:23
Operator : BLO Inst ID: Gcp.i
Smp Info : ICAL4
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:00 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

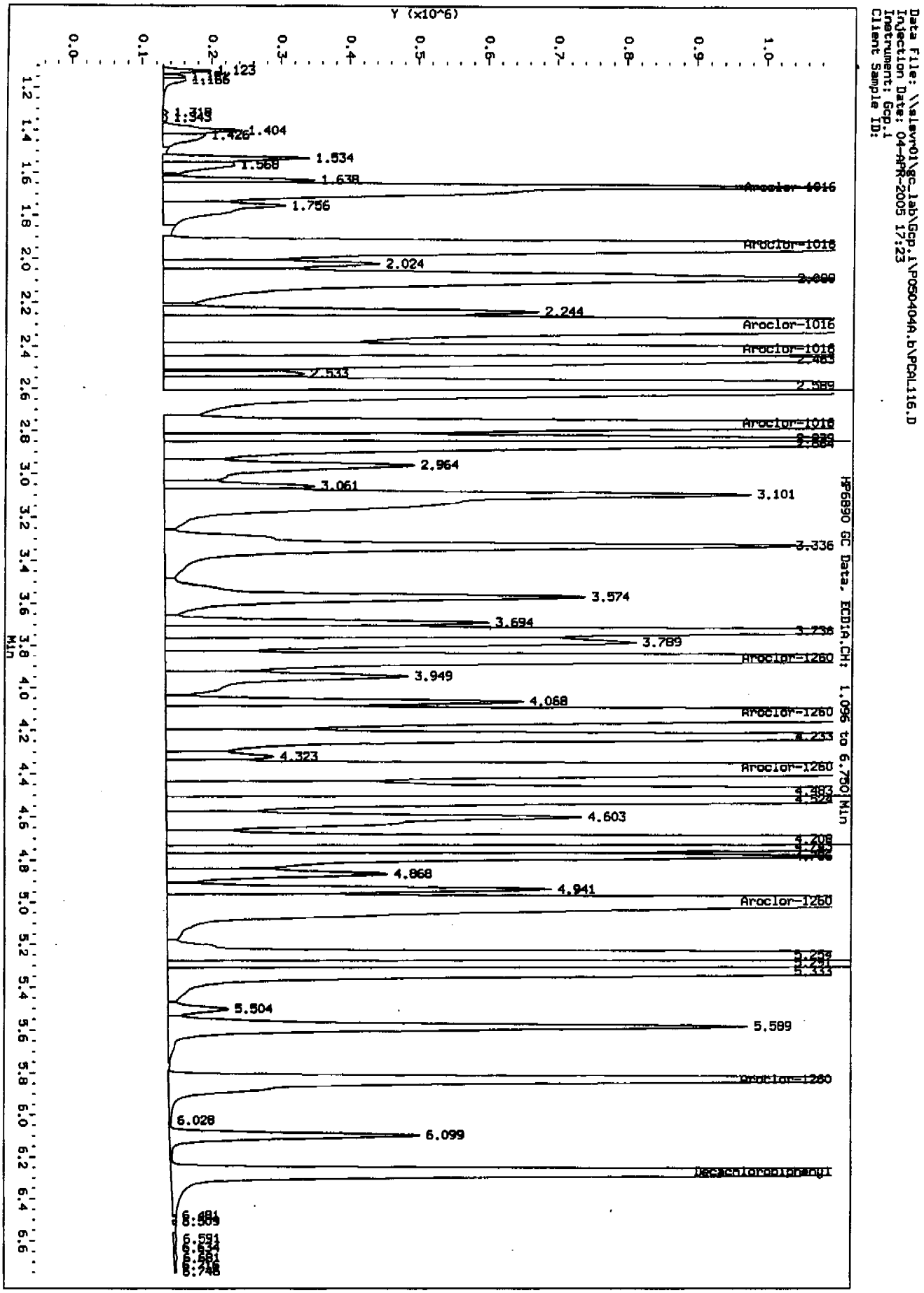
			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.666	1.668	-0.002	2511519	500.000	514.3	80.00- 120.00	100.00
1.931	1.933	-0.002	4794433	500.000	524.5	165.85- 248.78	190.90
2.301	2.303	-0.002	10651023	500.000	520.7	384.65- 576.97	424.09
2.412	2.413	-0.001	3874001	500.000	518.1	140.52- 210.78	154.25
2.766	2.768	-0.002	4207477	500.000	528.3	148.90- 223.36	167.53
		Average of Peak Amounts =			521.2		
28 Aroclor-1260					CAS #: 11096-82-5		
3.862	3.863	-0.001	6195496	500.000	519.0	80.00- 120.00	100.00
4.119	4.121	-0.002	10870556	500.000	520.9	141.10- 211.66	175.46
4.374	4.375	-0.001	9598390	500.000	523.6	136.45- 204.67	154.93
4.997	4.998	-0.001	14028904	500.000	526.1	158.92- 238.38	226.44
5.836	5.835	0.001	3481469	500.000	515.7	38.21- 57.31	56.19
		Average of Peak Amounts =			521.1		
$ 32 Decachlorobiphenyl					CAS #:		
6.272	6.273	-0.001	5181685	25.0000	25.61		

BLO 4/05/05



Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL116.D
Date : 04-APR-2005 17:23
Client ID:
Sample Info: ICAL4
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
Data File: \\slsvr01\gc_lab\Gcp.1\PC040404A.b\PCAL116.D
Injection Date: 04-APR-2005 17:23
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 1.096 to 6.750 Min
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL117.D
Report Date: 05-Apr-2005 12:12

STL St. Louis

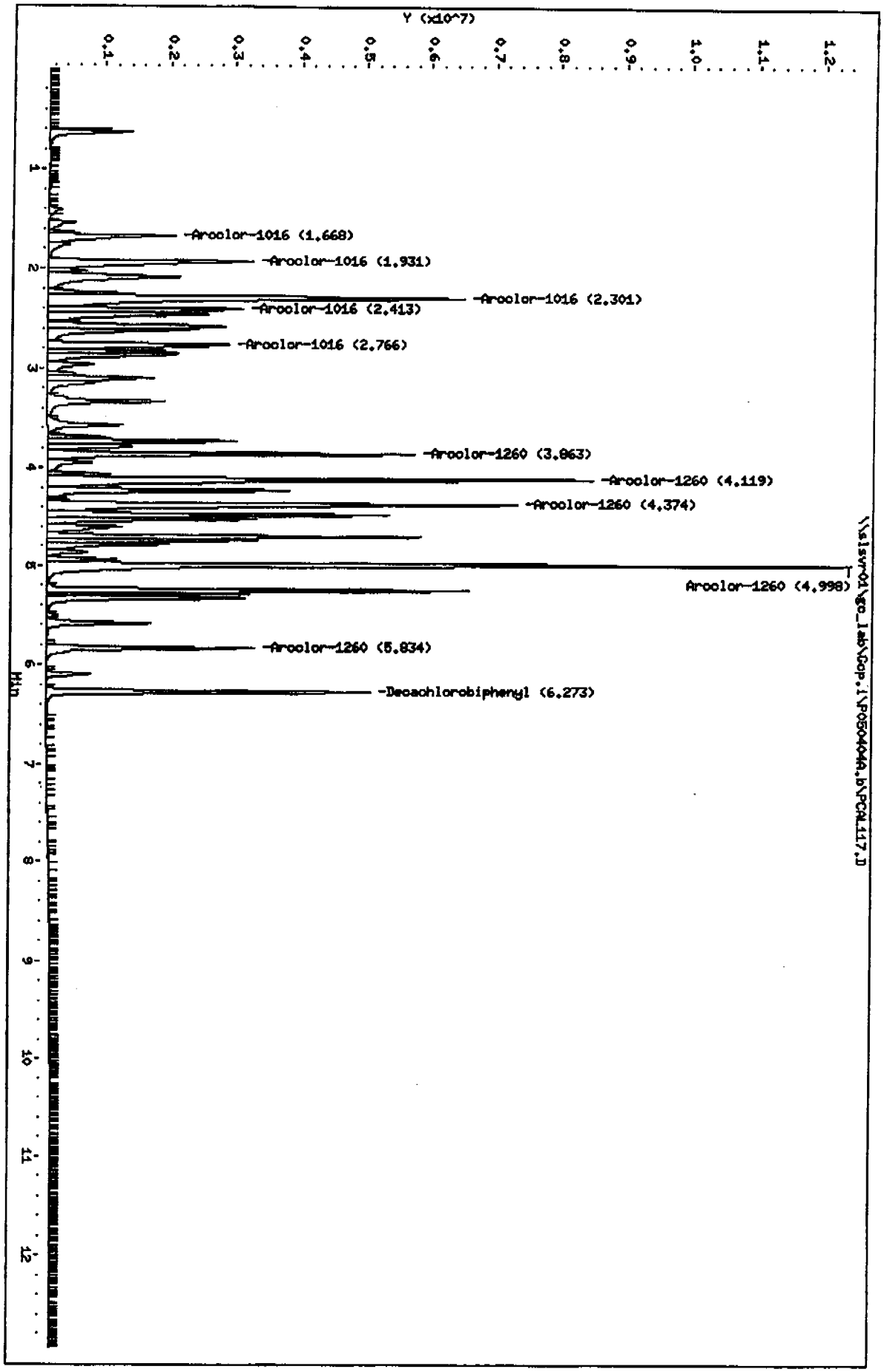
Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL117.D
Lab Smp Id: ICAL5
Inj Date : 04-APR-2005 17:39
Operator : BLO Inst ID: Gcp.i
Smp Info : ICAL5
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:00 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

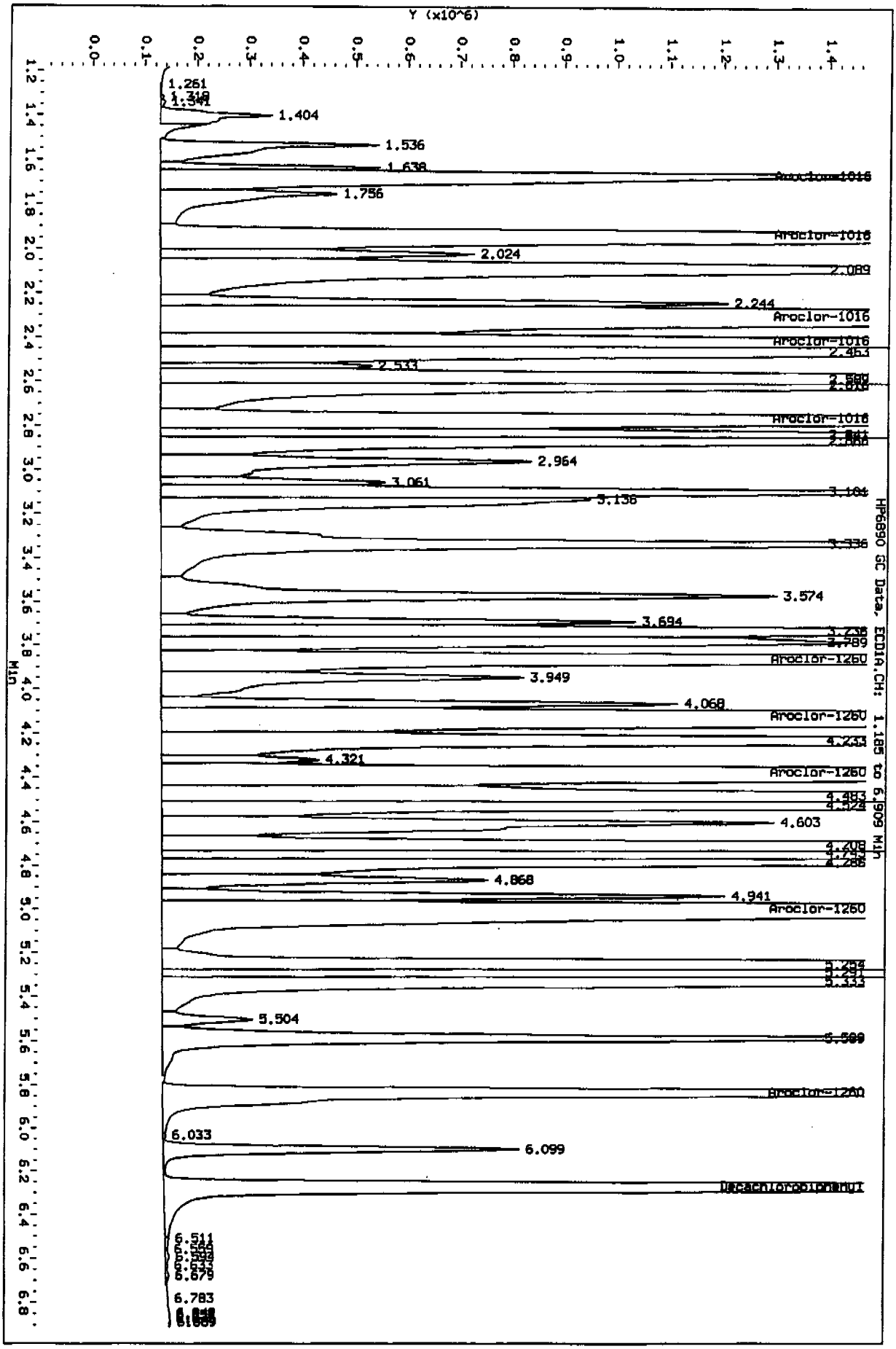
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.667	1.668	-0.001	4700878	1000.00	962.6	80.00- 120.00	100.00
1.930	1.933	-0.003	9019502	1000.00	986.6	165.85- 248.78	191.87
2.300	2.303	-0.003	20188345	1000.00	986.9	384.65- 576.97	429.46
2.412	2.413	-0.001	7339625	1000.00	981.6	140.52- 210.78	156.13
2.765	2.768	-0.003	8008111	1000.00	1005	148.90- 223.36	170.35
		Average of Peak Amounts =			984.6		
28 Aroclor-1260					CAS #: 11096-82-5		
3.862	3.863	-0.001	11763687	1000.00	985.4	80.00- 120.00	100.00
4.119	4.121	-0.002	20598790	1000.00	987.1	141.10- 211.66	175.10
4.374	4.375	-0.001	18240138	1000.00	995.0	136.45- 204.67	155.05
4.997	4.998	-0.001	26678204	1000.00	1000	158.92- 238.38	226.78
5.834	5.835	-0.001	6634249	1000.00	982.6	38.21- 57.31	56.40
		Average of Peak Amounts =			990.1		
$ 32 Decachlorobiphenyl					CAS #:		
6.272	6.273	-0.001	9839755	50.0000	48.63		

BLO 4/05/05



Data File: \\slsvr01\gc_lab\Gcp.i\P0504044.b\PCAL117.D
Date : 04-APR-2005 17:39
Client ID:
Sample Info: ICAL5
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
HP6890 GC Data, ECD1A,CH: 1.185 to 6.909 Min
Data File: \\slsvr01\gc_lab\Gcp;1\P050404A.b\PCAL117.D
Injection Date: 04-APR-2005 17:39
Instrument: Gcp;1
Client Sample ID:
1.261
1.404
1.536
1.638
Aroclor-1016
1.756
Aroclor-1016
2.024
2.089
2.244
Aroclor-1016
Aroclor-1016
2.453
2.533
Aroclor-1016
2.964
3.061
3.136
3.574
3.694
Aroclor-1260
3.949
4.068
Aroclor-1260
4.321
Aroclor-1260
4.603
4.868
4.941
Aroclor-1260
5.504
Aroclor-1260
6.033
6.099
Decachlorobiphenyl
6.511
6.679
6.783

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL118.D
Report Date: 05-Apr-2005 12:12

STL St. Louis

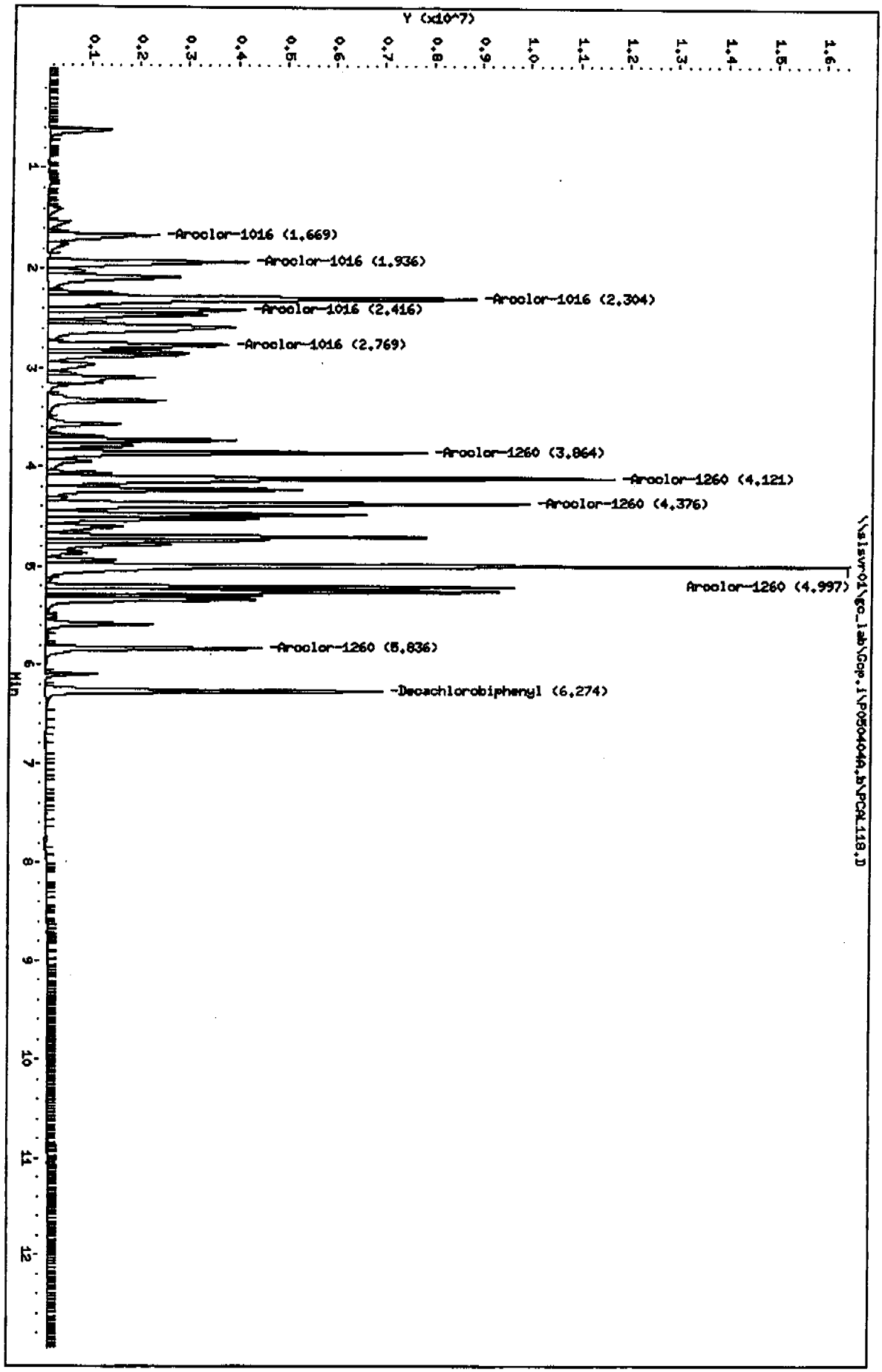
Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL118.D
Lab Smp Id: ICAL6
Inj Date : 04-APR-2005 17:55
Operator : BLO Inst ID: Gcp.i
Smp Info : ICAL6
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:00 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

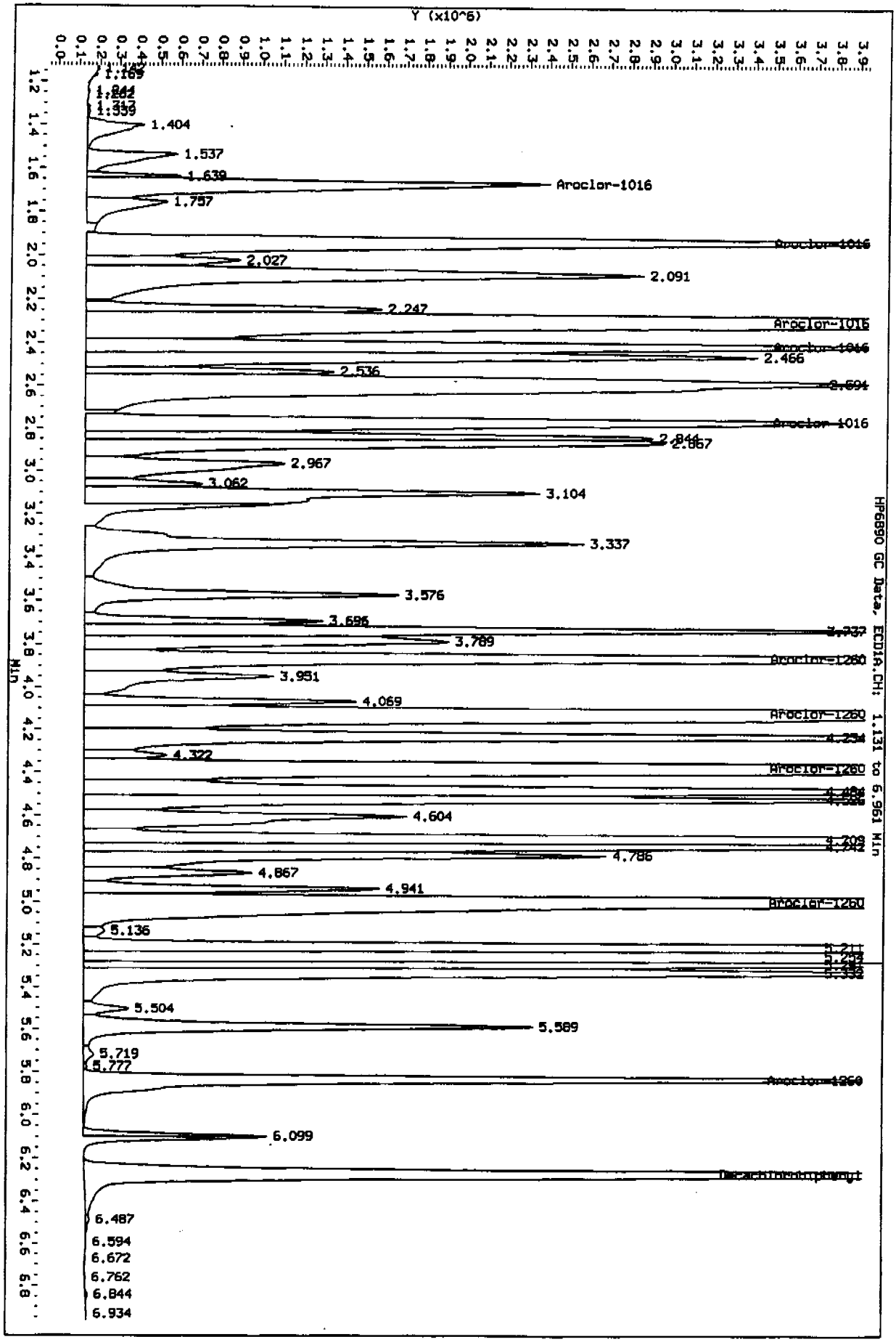
				AMOUNTS CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.669	1.668	0.001	6468387	1500.00	1324	80.00- 120.00	100.00
1.935	1.933	0.002	12148358	1500.00	1329	165.85- 248.78	187.81
2.304	2.303	0.001	27925658	1500.00	1365	384.65- 576.97	431.73
2.415	2.413	0.002	10364470	1500.00	1386	140.52- 210.78	160.23
2.769	2.768	0.001	10608159	1500.00	1332	148.90- 223.36	164.00
		Average of Peak Amounts =			1347		
28 Aroclor-1260					CAS #: 11096-82-5		
3.864	3.863	0.001	16184824	1500.00	1356	80.00- 120.00	100.00
4.120	4.121	-0.001	28318455	1500.00	1357	141.10- 211.66	174.97
4.375	4.375	0.000	24838426	1500.00	1355	136.45- 204.67	153.47
4.997	4.998	-0.001	35639998	1500.00	1336	158.92- 238.38	220.21
5.835	5.835	0.000	9178300	1500.00	1359	38.21- 57.31	56.71
		Average of Peak Amounts =			1353		
$ 32 Decachlorobiphenyl					CAS #:		
6.274	6.273	0.001	14723396	75.0000	72.77		

BLO 4/05/05



Data File: \\slsvr01\gc_lab\Gcp.i\P0504040.b\PCAL118.D
Date : 04-APR-2005 17:55
Client ID:
Sample Info: ICAL6
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
1.404
1.537
1.639
Aroclor-1016
1.757
2.027
2.091
2.247
2.466
2.536
2.844
2.867
2.967
3.062
3.104
3.337
3.576
3.686
3.789
3.951
4.069
Aroclor-1260
4.322
4.604
4.786
4.867
4.941
5.136
5.504
5.569
5.719
5.777
6.099
6.487
6.594
6.672
6.762
6.844
6.934
HP6890 GC Data, ECD1A.CH: 1.131 to 6.961 Min
Data File: \\slsvr01\gc_lab\Gcp.1\P050404A.b\PCAL118.D
Injection Date: 04-APR-2005 17:58
Instrument: Gcp.1
Client Sample ID:

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL119.D
Report Date: 05-Apr-2005 12:12

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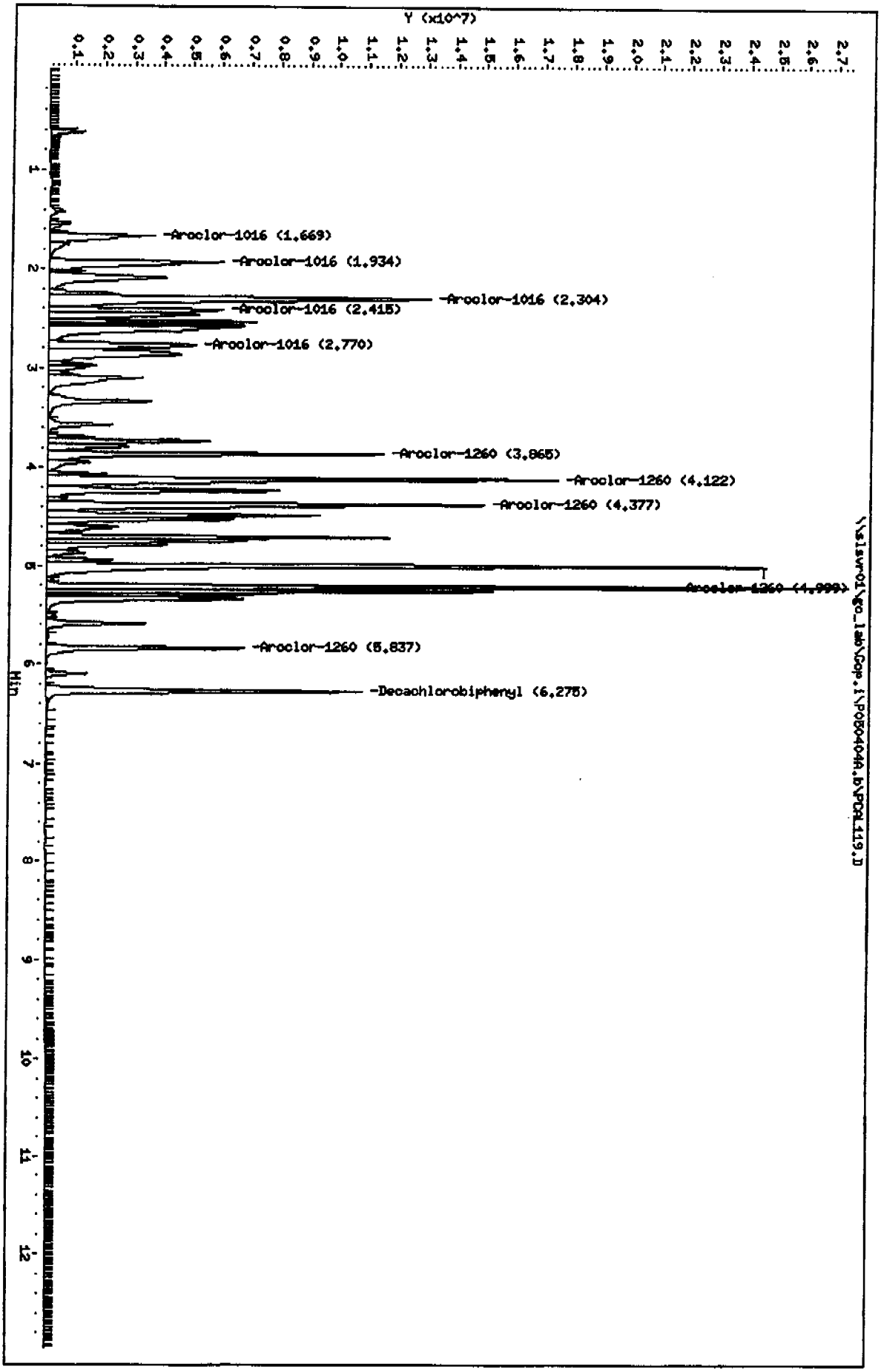
Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL119.D
Lab Smp Id: ICAL7
Inj Date : 04-APR-2005 18:11
Operator : BLO Inst ID: Gcp.i
Smp Info : ICAL7
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:00 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

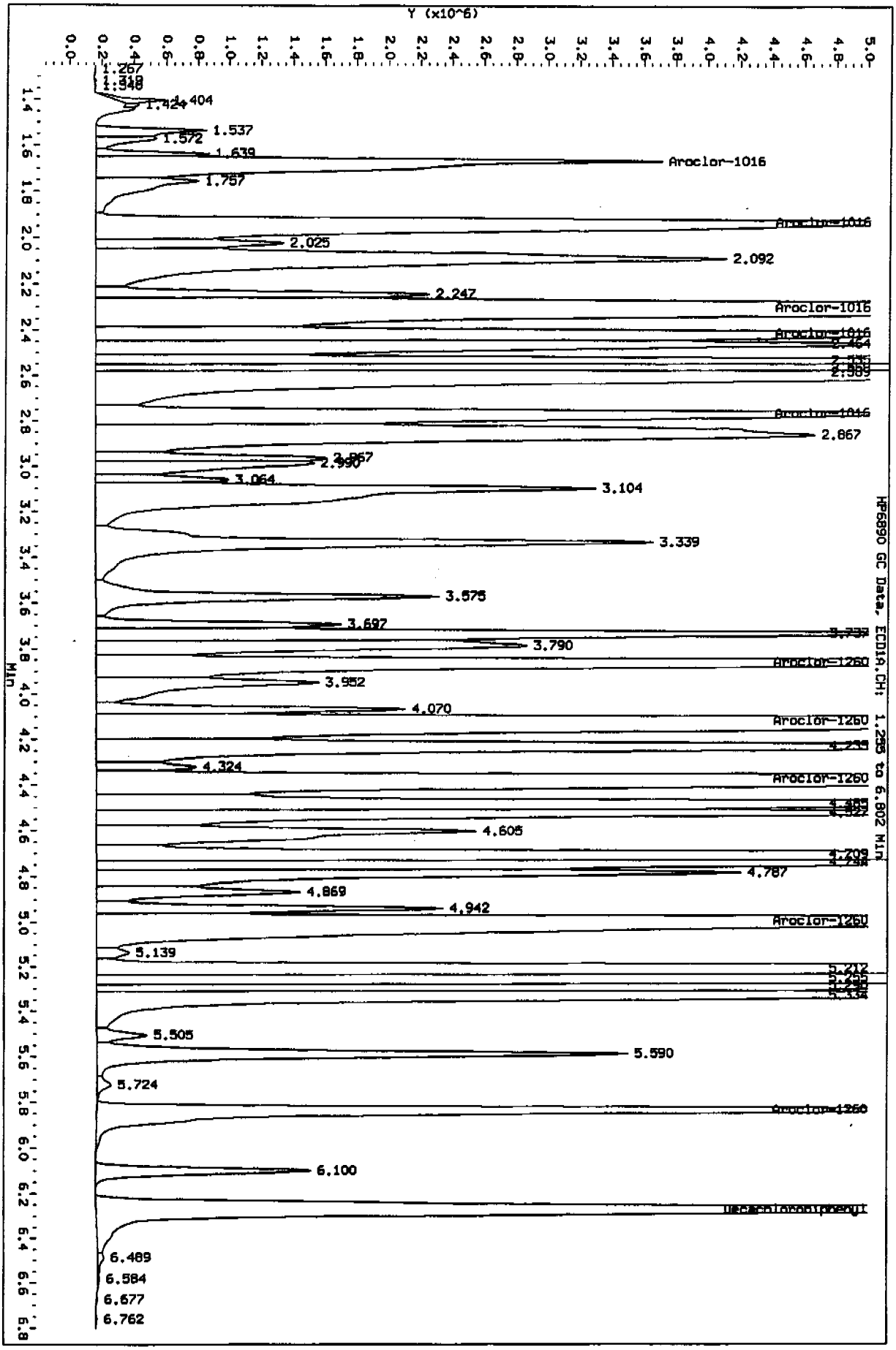
			AMOUNTS				
RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.668	1.668	0.000	10189950	2500.00	2086	80.00- 120.00	100.00
1.933	1.933	0.000	18679067	2500.00	2043	165.85- 248.78	183.31
2.303	2.303	0.000	44081030	2500.00	2155	384.65- 576.97	432.59
2.415	2.413	0.002	15354199	2500.00	2053	140.52- 210.78	150.68
2.770	2.768	0.002	15445963	2500.00	1939	148.90- 223.36	151.58
		Average of Peak Amounts =			2056		
28 Aroclor-1260					CAS #: 11096-82-5		
3.865	3.863	0.002	24783844	2500.00	2076	80.00- 120.00	100.00
4.121	4.121	0.000	43889068	2500.00	2103	141.10- 211.66	177.09
4.376	4.375	0.001	37903635	2500.00	2068	136.45- 204.67	152.94
4.998	4.998	0.000	54584395	2500.00	2047	158.92- 238.38	220.24
5.836	5.835	0.001	14032027	2500.00	2078	38.21- 57.31	56.62
		Average of Peak Amounts =			2074		
$ 32 Decachlorobiphenyl					CAS #:		
6.275	6.273	0.002	24755884	150.000	122.4		

BLO 4/05/05



Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL119.D
Date : 04-APR-2005 18:11
Client ID:
Sample Info: ICAL7
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLD
Column diameter: 0.53


Y (x10^6)
Min
Data File: \\alavr01\gc_lab\Gcp.i\P050404A.b\PCAL119.D
Injection Date: 04-APR-2005 18:11
Instrument: Gcp.i
Client Sample ID:
HP6890 GC Data, ECD1A,CH1 1.295 to 6.802 Min
1.404
1.537
1.572
1.639
Aroclor-1016
1.757
2.025
2.092
2.247
2.867
2.990
3.064
3.104
3.339
3.575
3.697
3.790
Aroclor-1260
3.952
4.070
4.324
4.605
4.787
4.869
4.942
5.139
5.505
5.590
5.724
6.100
6.489
6.584
6.677
6.762

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL120.D
Report Date: 05-Apr-2005 12:12

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Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL120.D
Lab Smp Id: ICAL8
Inj Date : 04-APR-2005 18:28
Operator : BLO Inst ID: Gcp.i
Smp Info : ICAL8
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:00 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

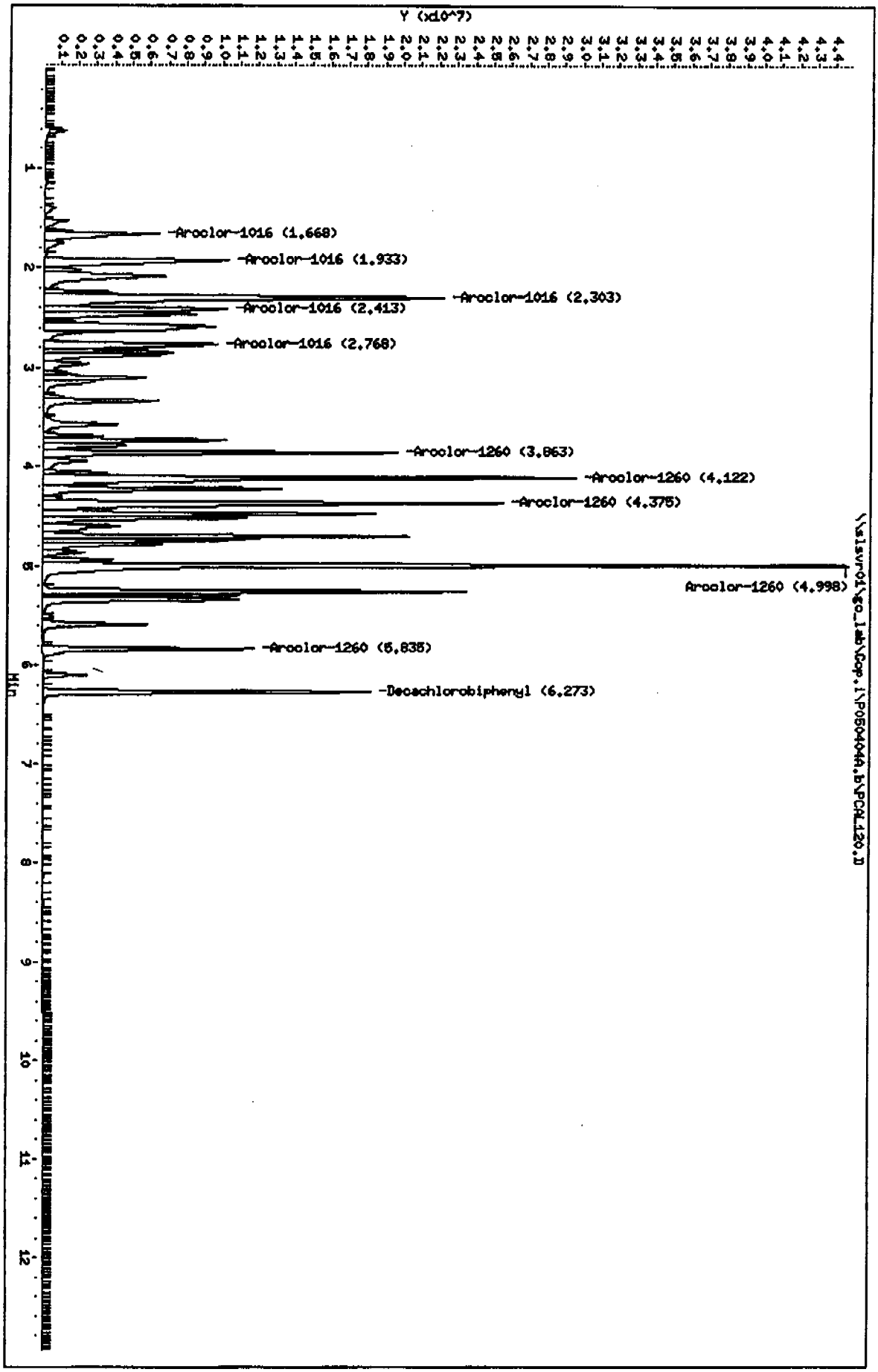
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.668	1.668	0.000	15900795	4000.00	3256	80.00- 120.00	100.00
1.933	1.933	0.000	30229942	4000.00	3307	165.85- 248.78	190.12
2.303	2.303	0.000	70209157	4000.00	3432	384.65- 576.97	441.54
2.413	2.413	0.000	25479175	4000.00	3408	140.52- 210.78	160.24
2.768	2.768	0.000	27749846	4000.00	3484	148.90- 223.36	174.52
		Average of Peak Amounts =			3377		
28 Aroclor-1260					CAS #: 11096-82-5		
3.863	3.863	0.000	40416367	4000.00	3386	80.00- 120.00	100.00(M)
4.121	4.121	0.000	70971878	4000.00	3401	141.10- 211.66	175.60
4.375	4.375	0.000	63699753	4000.00	3475	136.45- 204.67	157.61
4.998	4.998	0.000	94304462	4000.00	3537	158.92- 238.38	233.33
5.835	5.835	0.000	23768438	4000.00	3520	38.21- 57.31	58.81
		Average of Peak Amounts =			3464		
$ 32 Decachlorobiphenyl					CAS #:		
6.273	6.273	0.000	35118549	200.000	173.6		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other_____

BLO 4/05/05

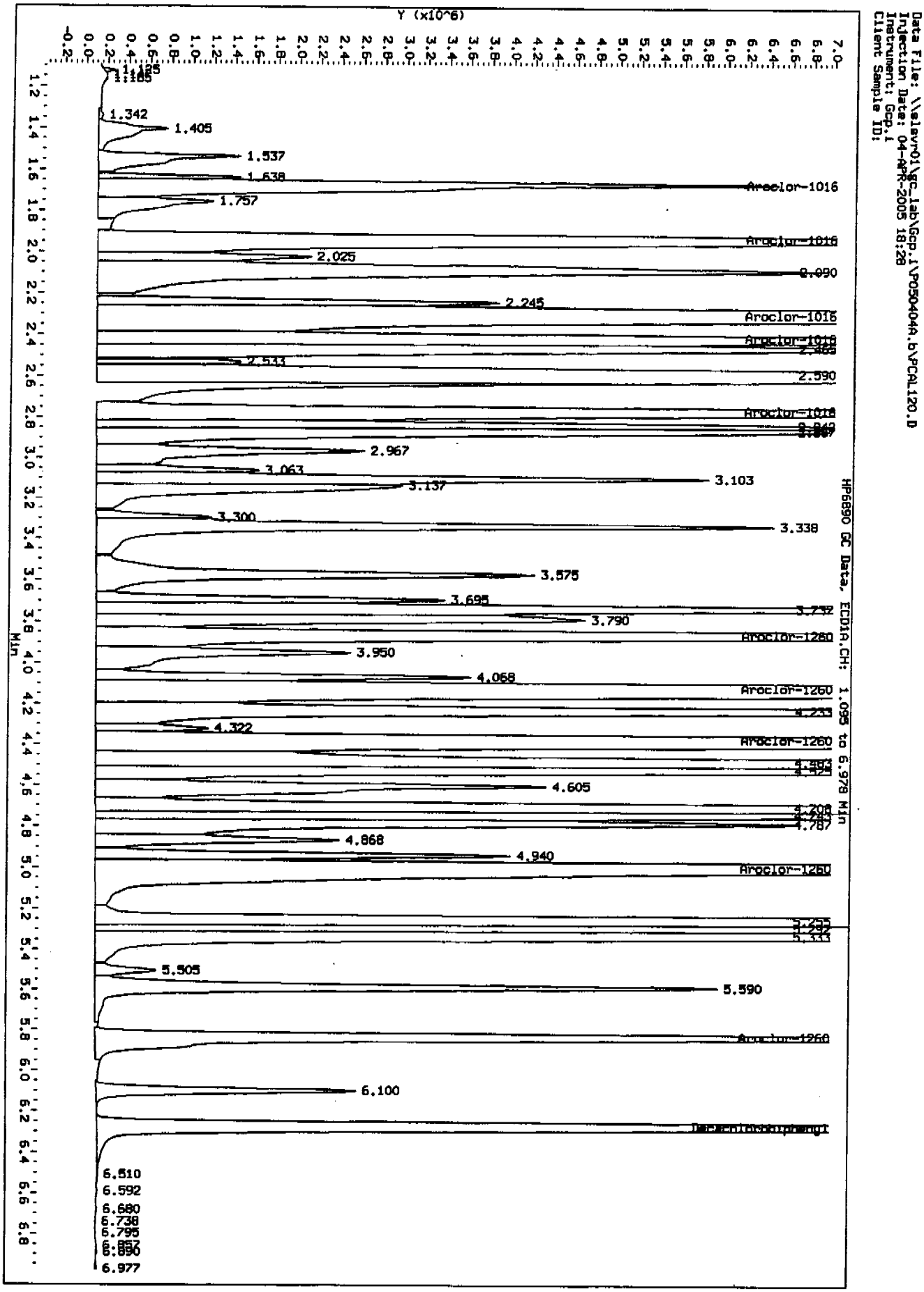
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\gc_lab\Gcp.i\P0504044.b\PCAL120.D
Date : 04-APR-2005 18:28
Client ID:
Sample Info: ICAL8
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
1.342
1.405
1.537
1.638
Aroclor-1016
1.757
Aroclor-1016
2.025
2.090
2.245
Aroclor-1016
Aroclor-1016
2.543
2.590
Aroclor-1016
2.967
3.063
3.103
3.137
3.300
3.338
3.575
3.695
3.732
3.790
Aroclor-1260
3.950
4.068
Aroclor-1260
4.322
Aroclor-1260
4.605
4.787
4.868
4.940
Aroclor-1260
5.505
5.590
Aroclor-1260
6.100
6.510
6.592
6.680
6.738
6.795
6.890
6.977
HP6890 GC Data, ECD1A.CH: 1.095 to 6.978 Min
Data File: \\slsvr01\gc_lab\Gcp_1\P0504044.b\PCAL120.D
Injection Date: 04-APR-2005 18:28
Instrument: Gcp_1
Client Sample ID:

STL ST. LOUIS

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b/PICV121.D
Report Date: 04/05/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PICV121.D
Analysis Type: SOIL

Injection Date: 04-APR-2005 19:00
Lab Sample ID: ICV
Method File: \\slsvr01\gc_lab\Gcp.i\P050404A.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
23 Aroclor-1016	1000.0000	889.9407	11.0	15.0	
29 Aroclor-1260	1000.0000	891.1039	10.9	15.0	
34 Decachlorobiphenyl	~~50.0000~~	~~0.0000~~	~~100.0~~	~~15.0~~	<-

BLD 4/05/05

LOT# F5D220273

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PICV121.D
Report Date: 05-Apr-2005 12:14

STL St. Louis

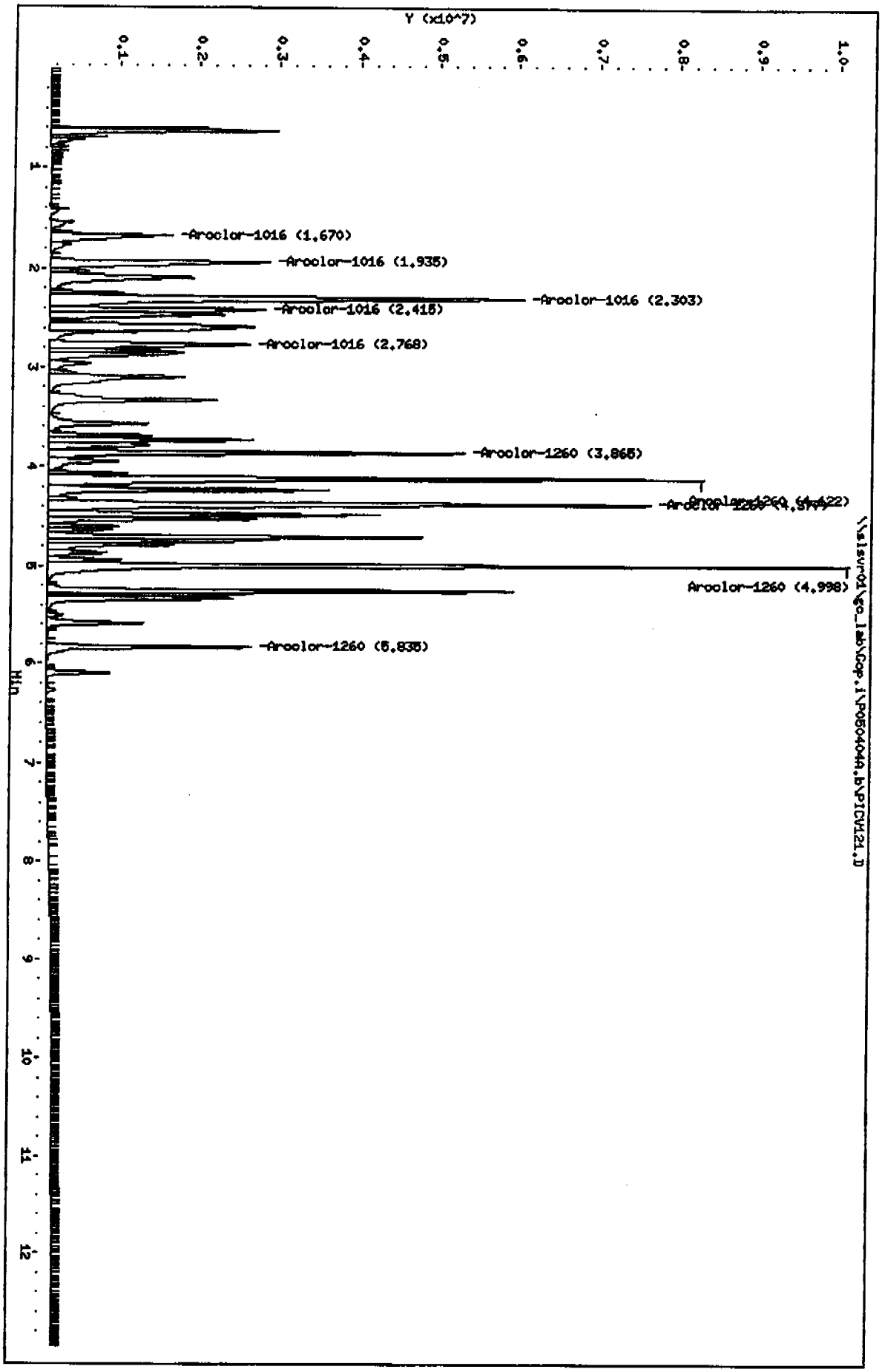
Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PICV121.D
Lab Smp Id: ICV
Inj Date : 04-APR-2005 19:00
Operator : BLO Inst ID: Gcp.i
Smp Info : ICV
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:14 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

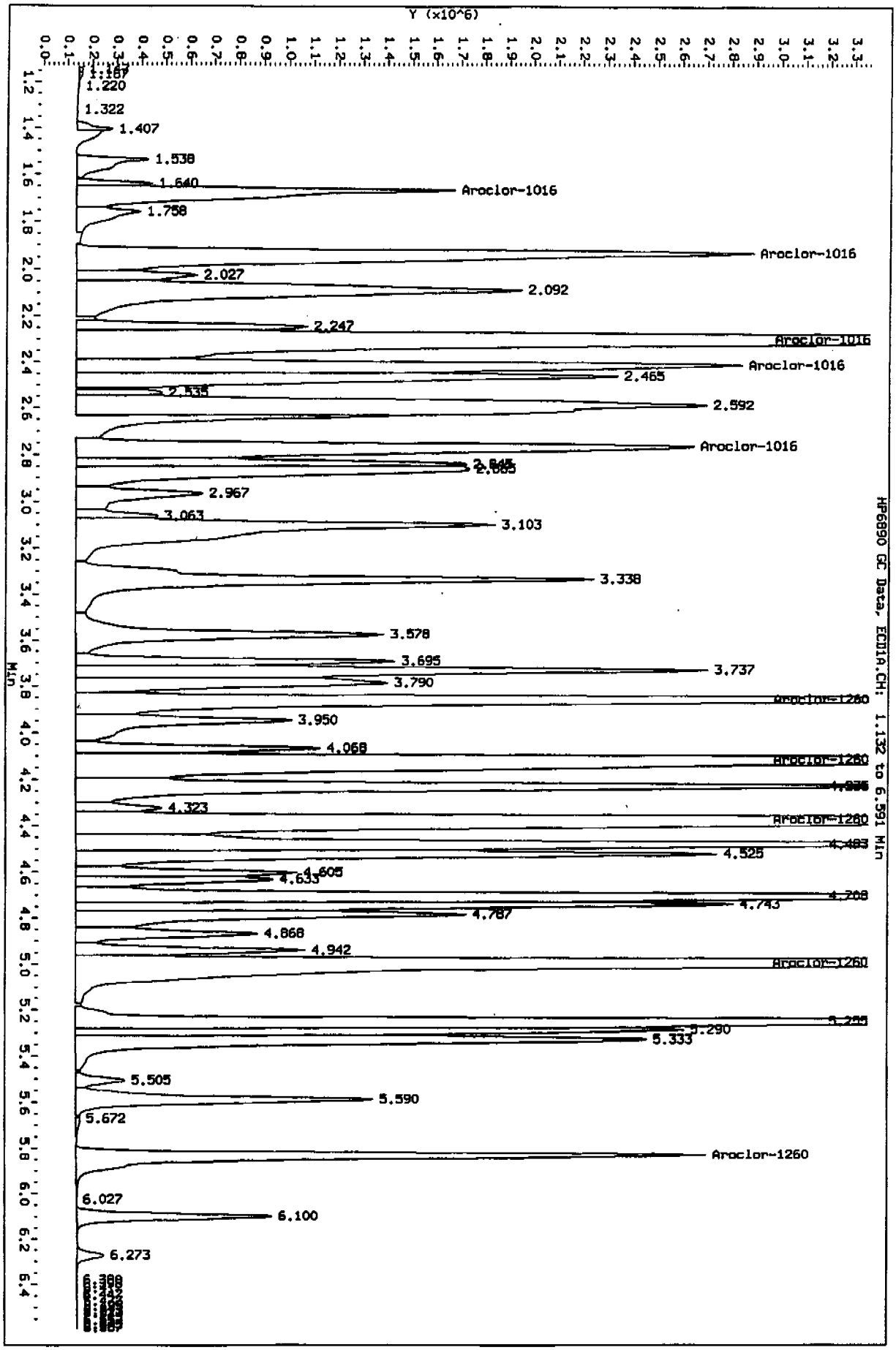
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.669	1.668	0.001	3919745	1000.00	802.6	80.00- 120.00	100.00
1.934	1.933	0.001	8126359	1000.00	888.9	165.85- 248.78	207.32
2.303	2.303	0.000	18846433	1000.00	921.3	384.65- 576.97	480.81
2.414	2.413	0.001	6885006	1000.00	920.8	140.52- 210.78	175.65
2.768	2.768	0.000	7295848	1000.00	916.0	148.90- 223.36	186.13
		Average of Peak Amounts =			889.9		
28 Aroclor-1260					CAS #: 11096-82-5		
3.864	3.863	0.001	10958924	1000.00	918.0	80.00- 120.00	100.00
4.121	4.121	0.000	19329304	1000.00	926.3	141.10- 211.66	176.38
4.376	4.375	0.001	18691428	1000.00	1020	136.45- 204.67	170.56
4.998	4.998	0.000	21769615	1000.00	816.4	158.92- 238.38	198.65
5.834	5.835	-0.001	5233847	1000.00	775.2	38.21- 57.31	47.76
		Average of Peak Amounts =			891.1		

BLO 4/05/05



Data File: \\slsvr01\gc_lab\Gcp.i\P0504044.b\PICM121.D
Date : 04-APR-2005 19:00
Client ID:
Sample Info: ICV
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
Data File: \\elsvr01\gc_lab\Gcp.i\P0504040.b\PICV121.D
Injection Date: 04-APR-2005 19:00
Instrument: Gcp.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 1.132 to 6.591 Min
1.220
1.322
1.407
1.538
1.640
Aroclor-1016
1.758
Aroclor-1016
2.027
2.092
2.247
Aroclor-1016
Aroclor-1016
2.465
2.535
2.592
Aroclor-1016
2.645
2.685
2.967
3.063
3.103
3.338
3.578
3.695
3.737
3.790
Aroclor-1260
3.950
4.068
Aroclor-1260
4.323
Aroclor-1260
4.525
4.605
4.633
4.743
4.787
4.868
4.942
Aroclor-1260
5.290
5.333
5.505
5.590
5.672
Aroclor-1260
6.027
6.100
6.273

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL122.D
Report Date: 05-Apr-2005 12:13

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL122.D
Lab Smp Id: 1232
Inj Date : 04-APR-2005 19:16
Operator : BLO Inst ID: Gcp.i
Smp Info : 1232
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:00 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 12 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1232.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

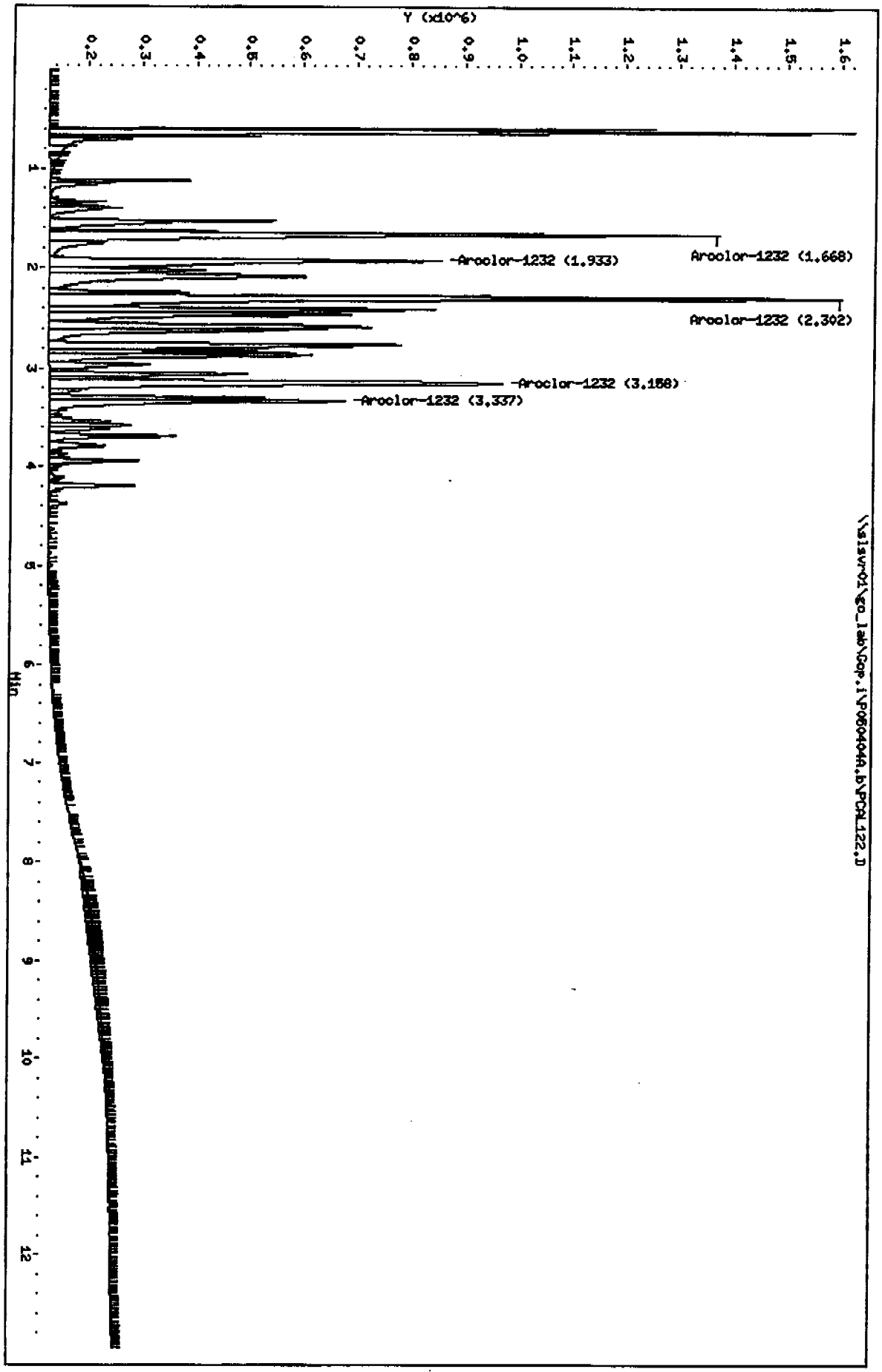
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
24 Aroclor-1232					CAS #: 1114-16-5		
1.668	1.668	0.000	2928234	500.000	500.0	80.00- 120.00	100.00(M)
1.933	1.933	0.000	2150574	500.000	500.0	58.75- 88.13	73.44
2.301	2.301	0.000	4430090	500.000	500.0	121.03- 181.55	151.29
3.158	3.158	0.000	2768496	500.000	500.0	75.64- 113.45	94.54
3.336	3.336	0.000	1450443	500.000	500.0	39.63- 59.44	49.53
		Average of Peak Amounts =			500		

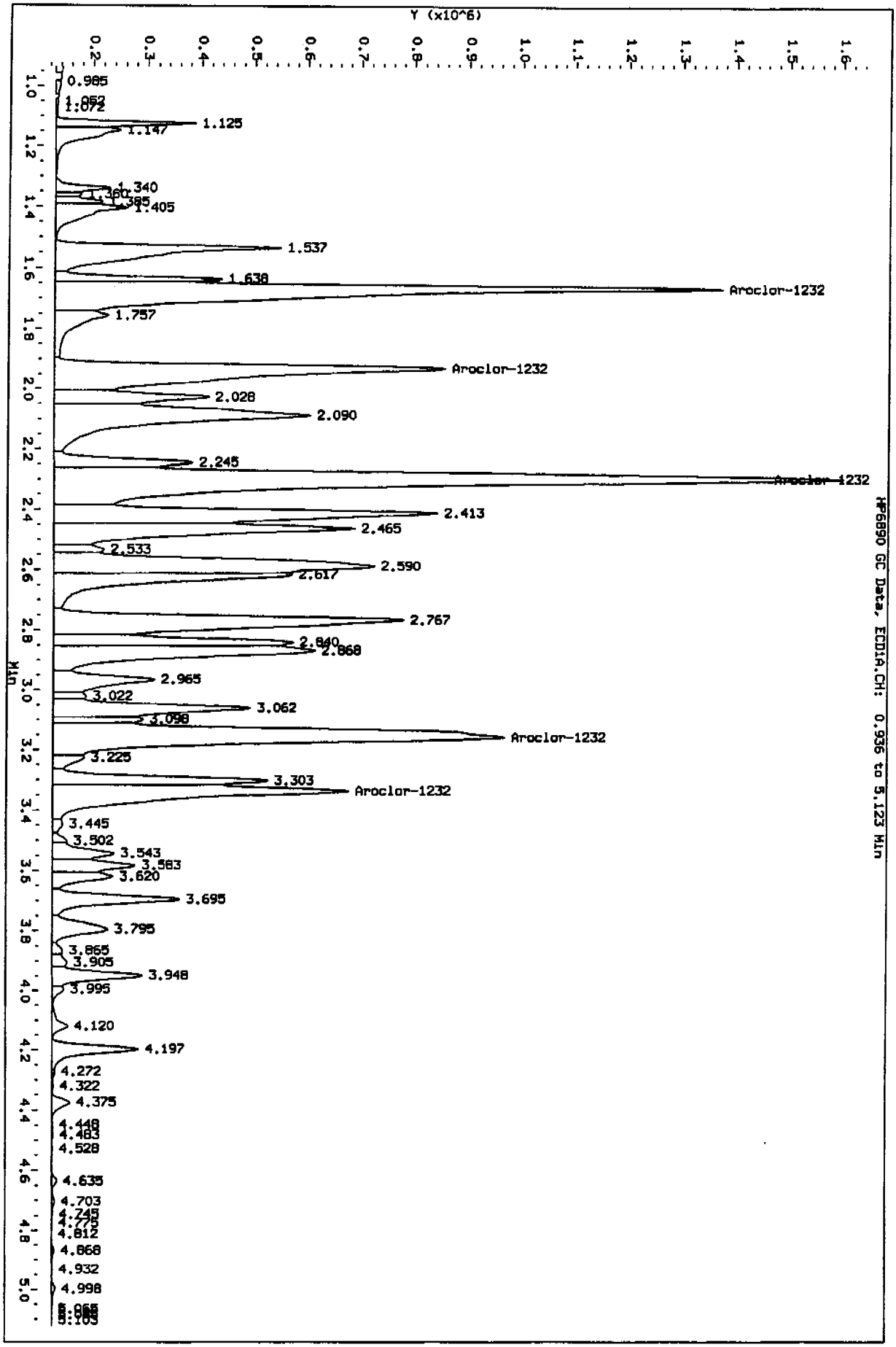
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 4/05/05

QC Flag Legend

M - Compound response manually integrated.


Y (x10^6)
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
Aroclor-1232 (1.668)
Aroclor-1232 (1.933)
Aroclor-1232 (2.302)
Aroclor-1232 (3.168)
Aroclor-1232 (3.337)
Min
1
2
3
4
5
6
7
8
9
10
11
12
\\slsvr01\go_lab\Gcp.i\P0804040.b\PCBL122.D
Data File: \\slsvr01\go_lab\Gcp.i\P0804040.b\PCBL122.D
Date : 04-APR-2005 19:16
Client ID:
Sample Info: 1232
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
Min
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4
2.6
2.8
3.0
3.2
3.4
3.6
3.8
4.0
4.2
4.4
4.6
4.8
5.0
0.985
1.052
1.072
1.125
1.147
1.340
1.360
1.385
1.405
1.537
1.638
Aroclor-1232
1.757
Aroclor-1232
2.028
2.090
2.245
Aroclor-1232
2.413
2.465
2.533
2.590
2.617
2.767
2.840
2.868
2.965
3.022
3.062
3.098
Aroclor-1232
3.225
3.303
Aroclor-1232
3.445
3.502
3.543
3.583
3.620
3.695
3.795
3.865
3.905
3.948
3.995
4.120
4.197
4.272
4.322
4.375
4.448
4.483
4.528
4.635
4.703
4.745
4.775
4.812
4.868
4.932
4.998
HP6890 GC Data, ECD1A.CH: 0.936 to 5.123 Min
Data File: \\slsvr01\gc_lab\Gcp.1\P050404A.b\PCAL122.D
Injection Date: 04-APR-2005 19:16
Instrument: Gcp.1
Client Sample ID:

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL123.D
Report Date: 05-Apr-2005 12:13

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL123.D
Lab Smp Id: 1242
Inj Date : 04-APR-2005 19:32
Operator : BLO Inst ID: Gcp.i
Smp Info : 1242
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:00 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 13 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1242.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

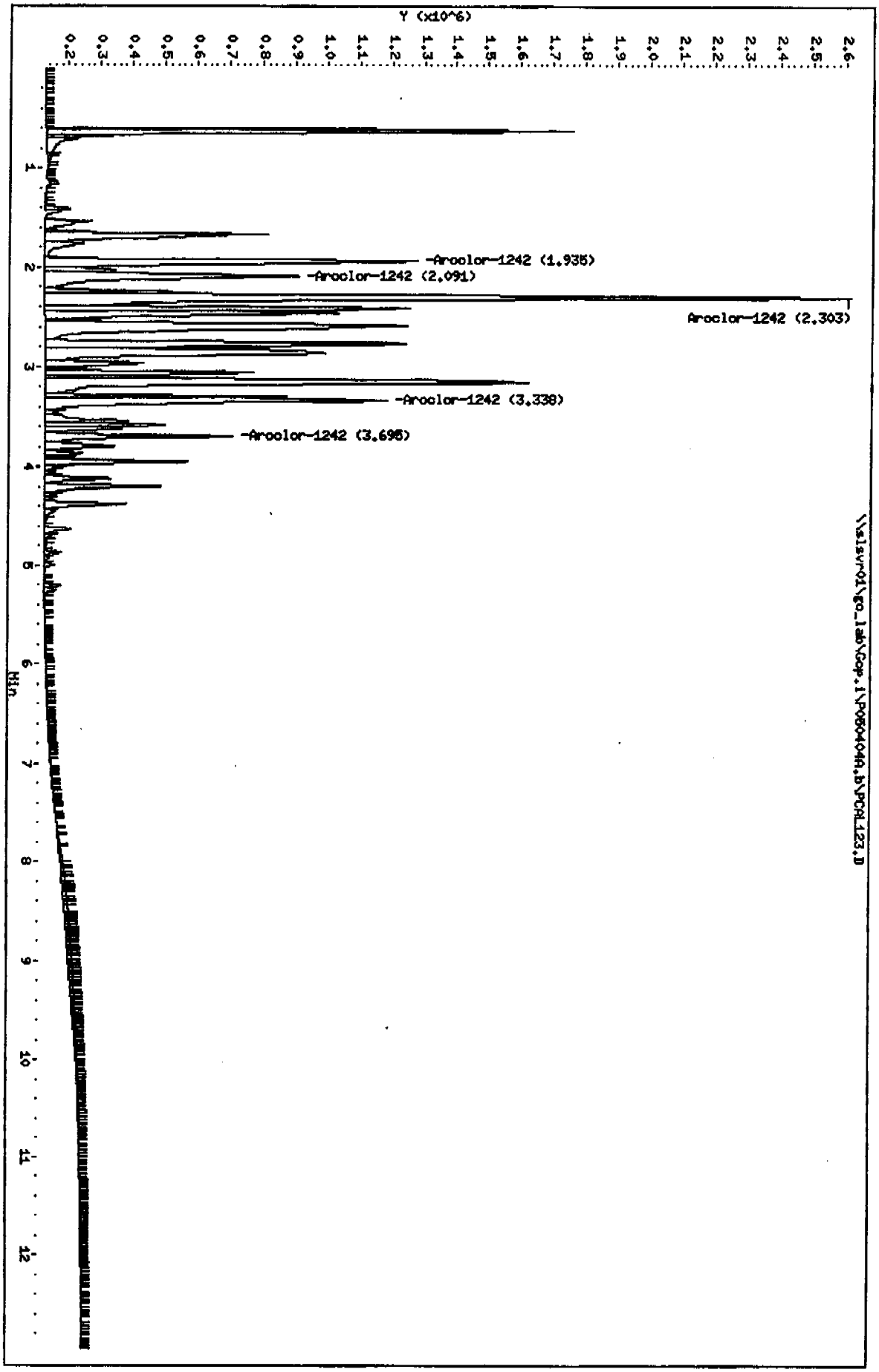
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
25 Aroclor-1242					CAS #: 53469-21-9		
1.934	1.934	0.000	3610396	500.000	500.0	80.00- 120.00	100.00(M)
2.091	2.091	0.000	2796559	500.000	500.0	61.97- 92.95	77.46
2.302	2.302	0.000	8017071	500.000	500.0	177.64- 266.47	222.06
3.337	3.337	0.000	3022049	500.000	500.0	66.96- 100.44	83.70
3.694	3.694	0.000	1278309	500.000	500.0	28.33- 42.49	35.41
		Average of Peak Amounts =			500		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 4/05/05

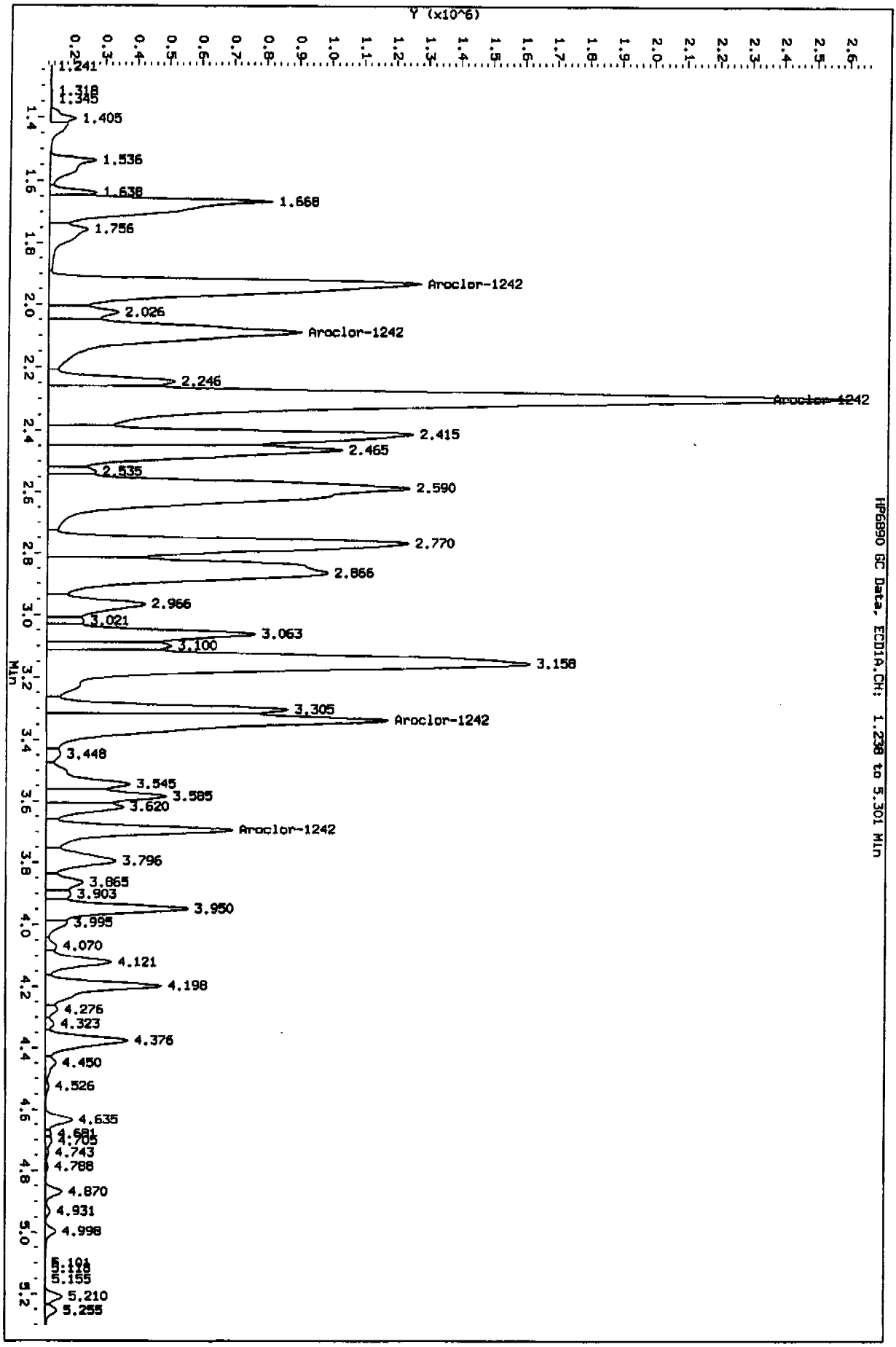
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\go_lab\Gop.i\P080404A.b\PCAL123.D
Date : 04-APR-2005 19:32
Client ID:
Sample Info: 1242
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gop.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
1.241
1.318
1.345
1.405
1.536
1.638
1.668
1.756
Aroclor-1242
2.026
Aroclor-1242
2.246
Aroclor-1242
2.415
2.465
2.535
2.590
2.770
2.866
2.966
3.021
3.063
3.100
3.158
3.305
Aroclor-1242
3.448
3.545
3.585
3.620
Aroclor-1242
3.796
3.865
3.903
3.950
3.995
4.070
4.121
4.198
4.276
4.323
4.376
4.450
4.526
4.635
4.681
4.705
4.743
4.788
4.870
4.931
4.998
5.101
5.178
5.155
5.210
5.255
Data File: \\elsvr01\gc_lab\Gcp.i\P0504044.b\PCAL123.D
Injection Date: 04-APR-2005 19:32
Instrument: Gcp.i
Client Sample ID:
HP6890 GC Data, ECD1A,CH: 1.238 to 5.301 Min

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL124.D
Report Date: 05-Apr-2005 12:13

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL124.D
Lab Smp Id: 1248
Inj Date : 04-APR-2005 19:48
Operator : BLO Inst ID: Gcp.i
Smp Info : 1248
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:00 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1248.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

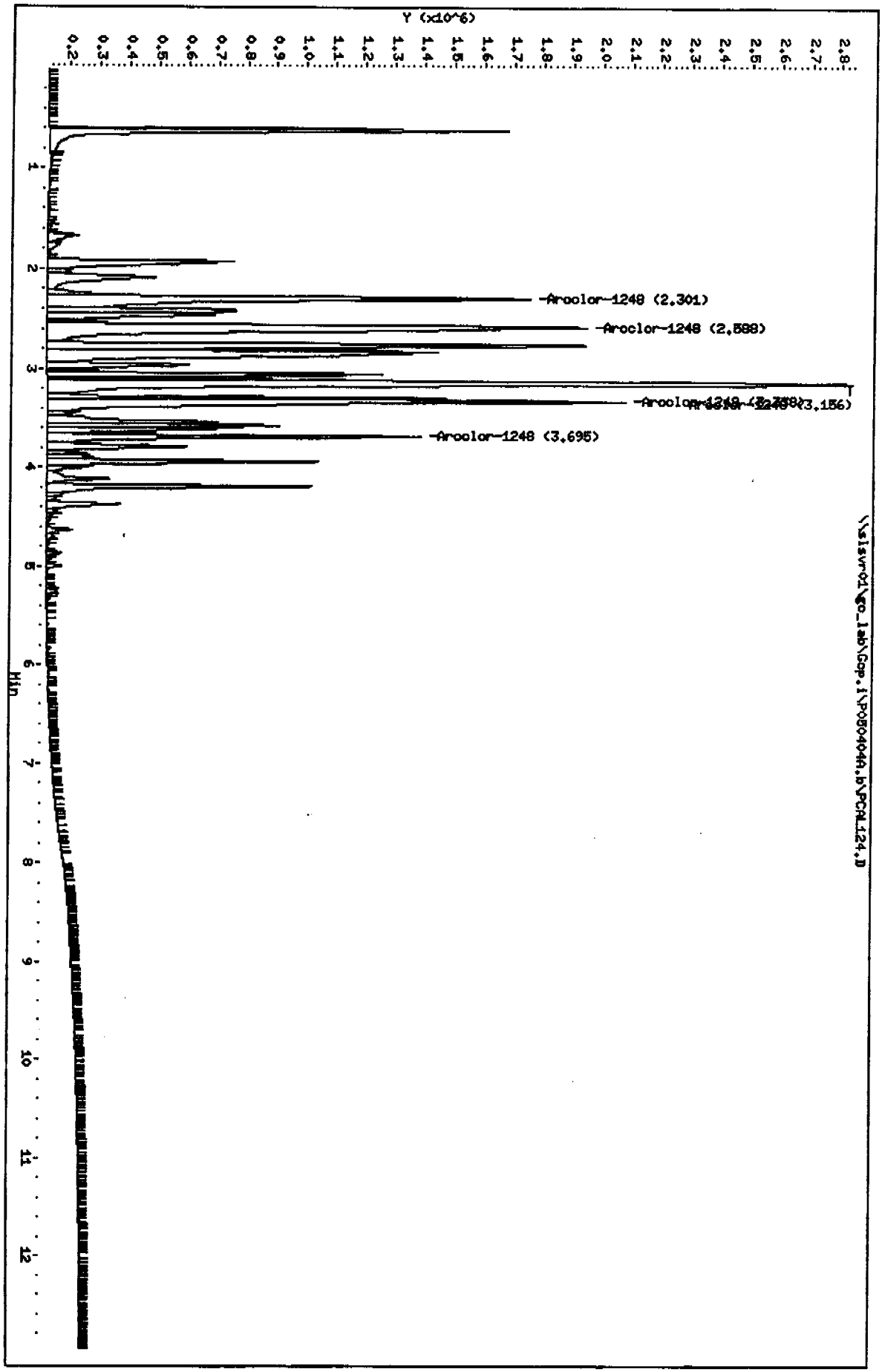
			AMOUNTS				
RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
26 Aroclor-1248					CAS #: 12672-29-6		
2.301	2.301	0.000	5508284	500.000	500.0	80.00- 120.00	100.00(M)
2.587	2.587	0.000	7842839	500.000	500.0	113.91- 170.86	142.38
3.156	3.156	0.000	9496651	500.000	500.0	137.93- 206.89	172.41
3.337	3.337	0.000	5673110	500.000	500.0	82.39- 123.59	102.99
3.694	3.694	0.000	2680988	500.000	500.0	38.94- 58.41	48.67
		Average of Peak Amounts =			500		

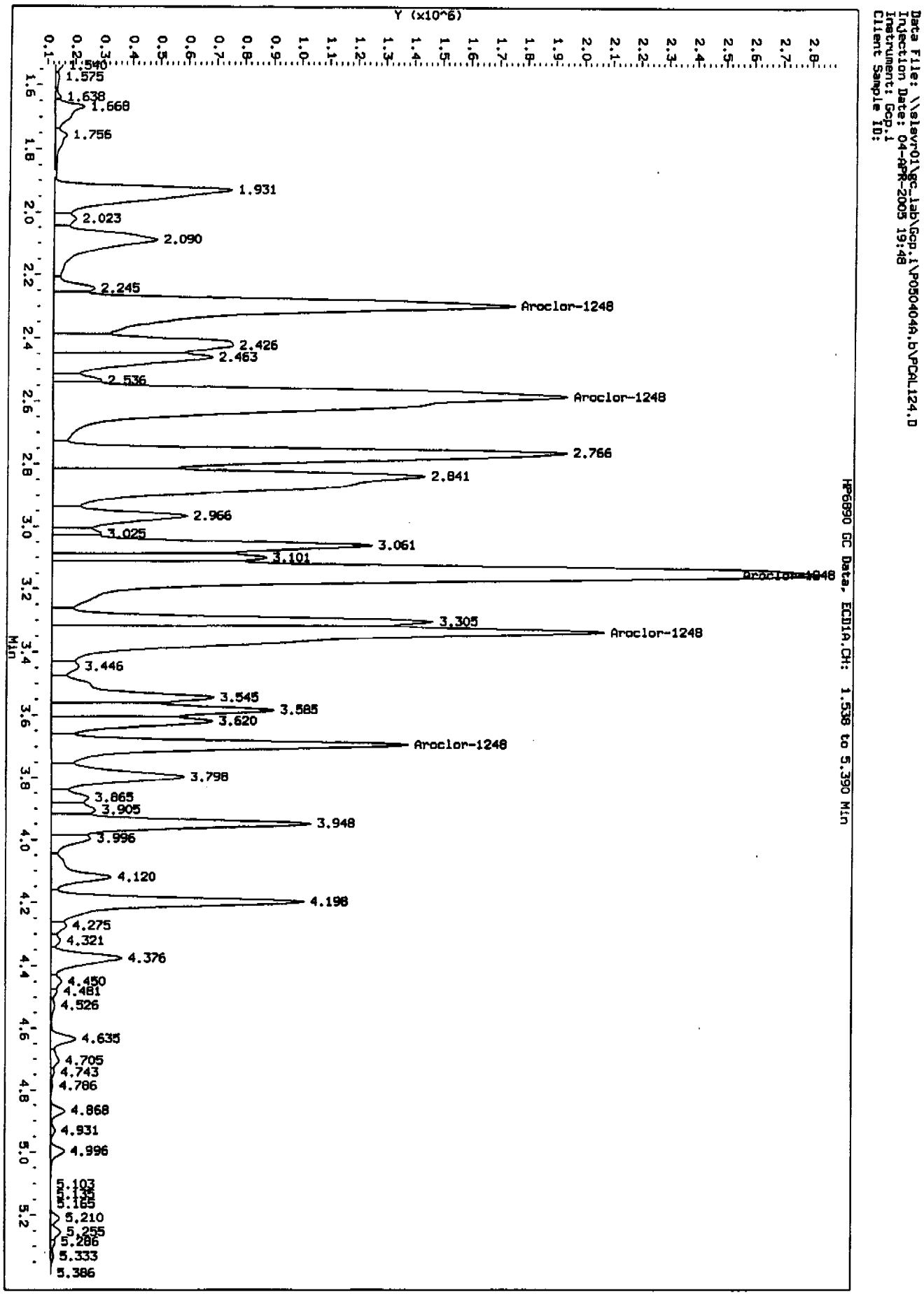
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 4/05/05

QC Flag Legend

M - Compound response manually integrated.


Data File: \\slsvr01\gc_lab\Gcp.i\P0804044.b\PCAL124.D
Date : 04-APR-2005 19:48
Client ID:
Sample Info: 1248
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53
Y (x10^6)
Aroclor-1248 (2,301)
Aroclor-1248 (2,588)
Aroclor-1248 (3,156)
Aroclor-1248 (3,695)
\\slsvr01\gc_lab\Gcp.i\P0804044.b\PCAL124.D
Min


Y (x10^6)
Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL124.D
Injection Date: 04-APR-2005 19:48
Instrument: Gcp.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 1.538 to 5.390 Min
Min
1.540
1.575
1.638
1.668
1.756
1.931
2.023
2.090
2.245
Aroclor-1248
2.426
2.463
2.536
Aroclor-1248
2.766
2.841
2.966
3.025
3.061
3.101
Aroclor-1248
3.305
Aroclor-1248
3.446
3.545
3.585
3.620
Aroclor-1248
3.798
3.865
3.905
3.948
3.996
4.120
4.198
4.275
4.321
4.376
4.450
4.481
4.526
4.635
4.705
4.743
4.786
4.868
4.931
4.996
5.103
5.135
5.165
5.210
5.255
5.286
5.333
5.386

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL125.D Page 1
Report Date: 05-Apr-2005 12:13

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL125.D
Lab Smp Id: 1254
Inj Date : 04-APR-2005 20:05
Operator : BLO Inst ID: Gcp.i
Smp Info : 1254
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:00 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 15 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar2154.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

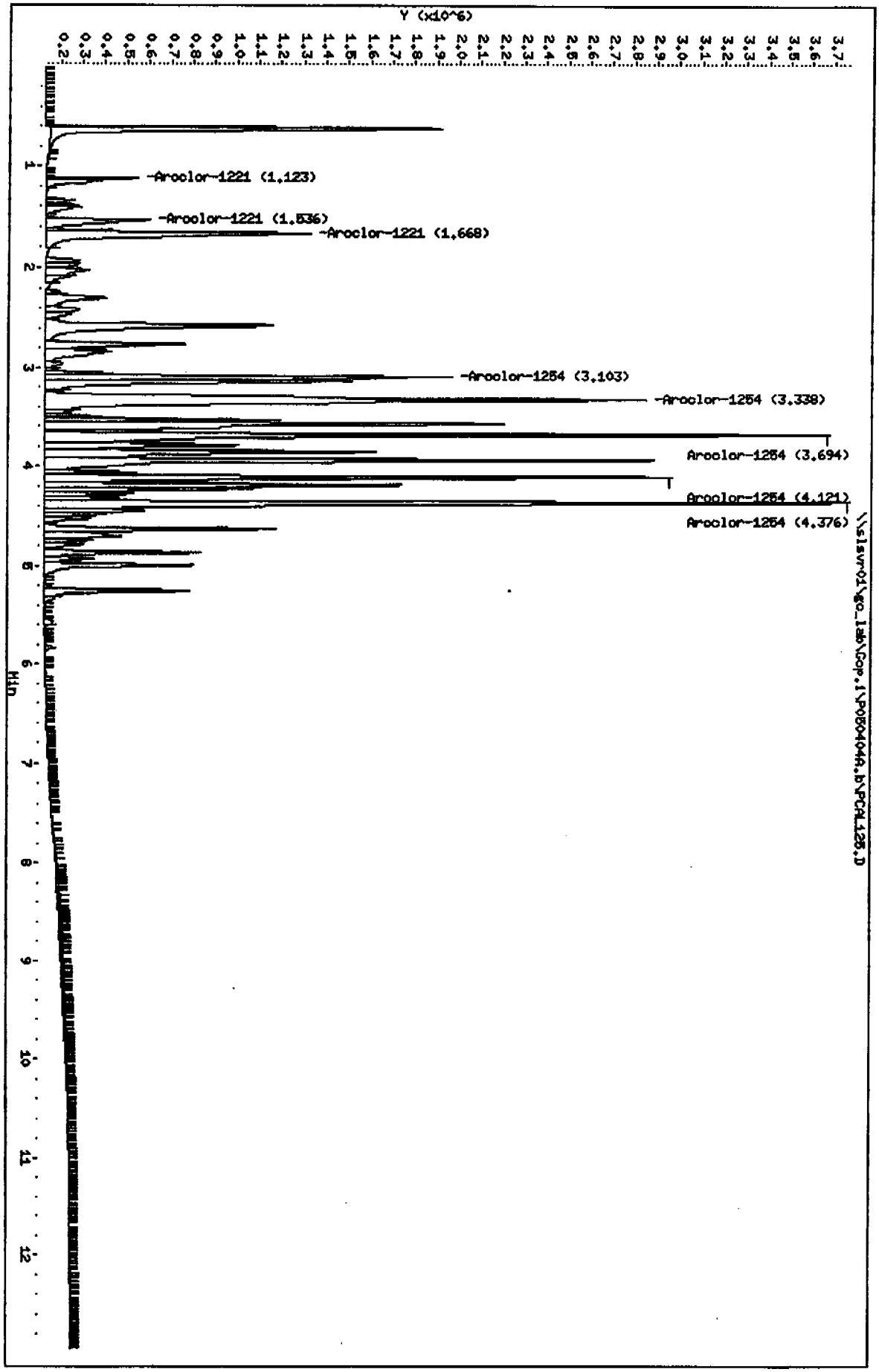
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
23 Aroclor-1221					CAS #: 11104-28-2		
1.122	1.122	0.000	407215	500.000	500.0	80.00- 120.00	100.00(M)
1.536	1.536	0.000	1259407	500.000	500.0	247.42- 371.13	309.27
1.667	1.667	0.000	3471051	500.000	500.0	681.91-1022.87	852.39
		Average of Peak Amounts =			500		
27 Aroclor-1254					CAS #: 11097-69-1		
3.102	3.102	0.000	3800823	500.000	500.0	80.00- 120.00	100.00(M)
3.337	3.337	0.000	10234178	500.000	500.0	215.41- 323.11	269.26
3.694	3.694	0.000	8097218	500.000	500.0	170.43- 255.65	213.04
4.121	4.121	0.000	5813590	500.000	500.0	122.36- 183.55	152.96
4.376	4.376	0.000	8402617	500.000	500.0	176.86- 265.29	221.07
		Average of Peak Amounts =			500		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 4/05/05

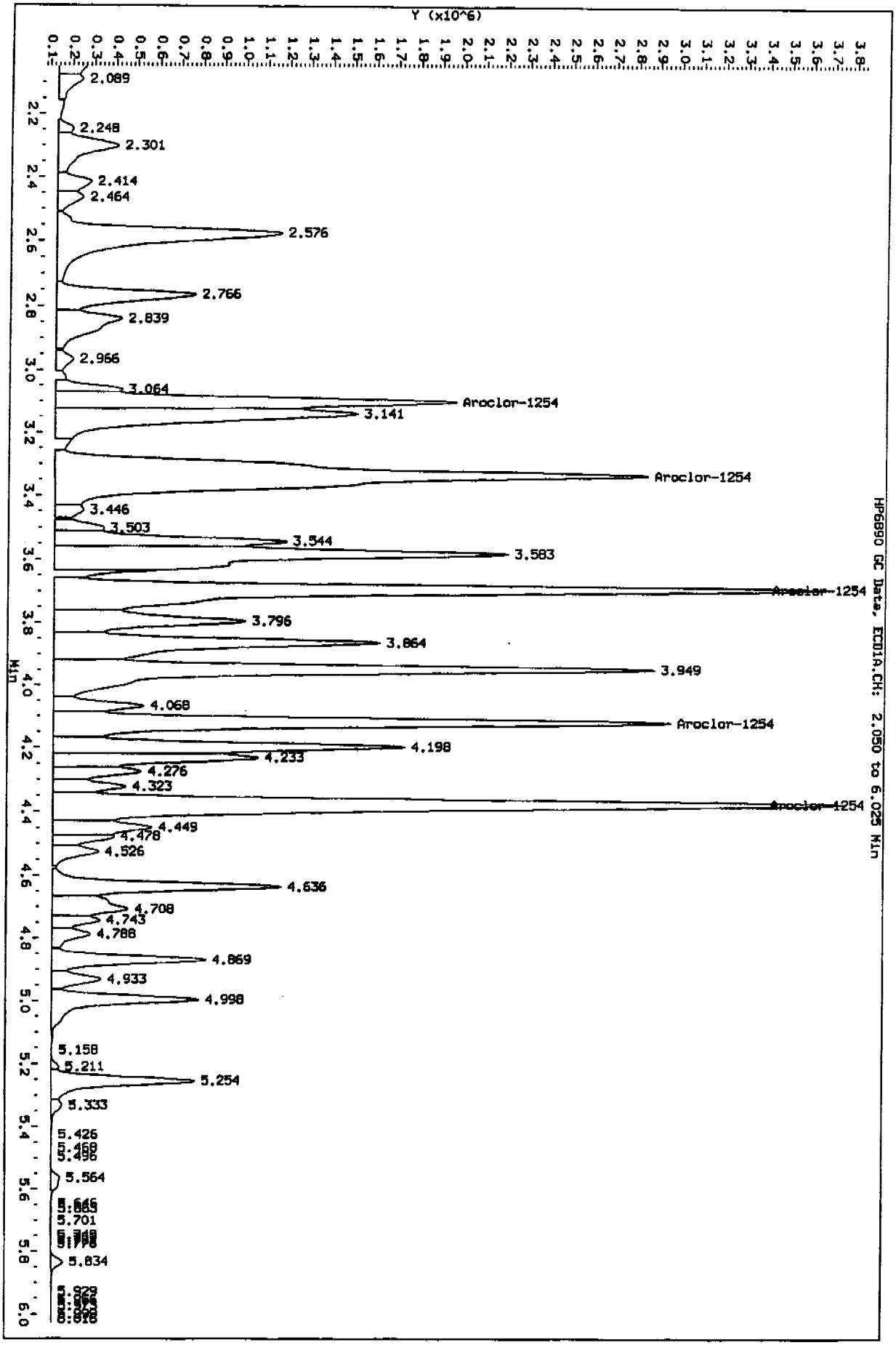
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\gc_lab\Gcp.i\P0804040.b\PCAL125.D
Date : 04-APR-2008 20:05
Client ID:
Sample Info: 1254
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
2.089
2.248
2.301
2.414
2.464
2.576
2.766
2.839
2.966
3.064
Aroclor-1254
3.141
Aroclor-1254
3.446
3.503
3.544
3.583
Aroclor-1254
3.796
3.864
3.949
4.068
Aroclor-1254
4.198
4.233
4.276
4.323
Aroclor-1254
4.449
4.478
4.526
4.636
4.708
4.743
4.788
4.869
4.933
4.998
5.158
5.211
5.254
5.333
5.426
5.460
5.496
5.564
5.701
5.834
HP6890 GC Data, ECD1A.CH: 2.050 to 6.025 Min
Data File: \\slsvr01\gc_lab\Gcp.1\P0504044.b\PCAL125.D
Injection Date: 04-APR-2005 20:05
Instrument: Gcp.1
Client Sample ID:

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL126.D
Report Date: 05-Apr-2005 12:14

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Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL126.D
Lab Smp Id: 1262
Inj Date : 04-APR-2005 20:21
Operator : BLO Inst ID: Gcp.i
Smp Info : 1262
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:00 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 16 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1262.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

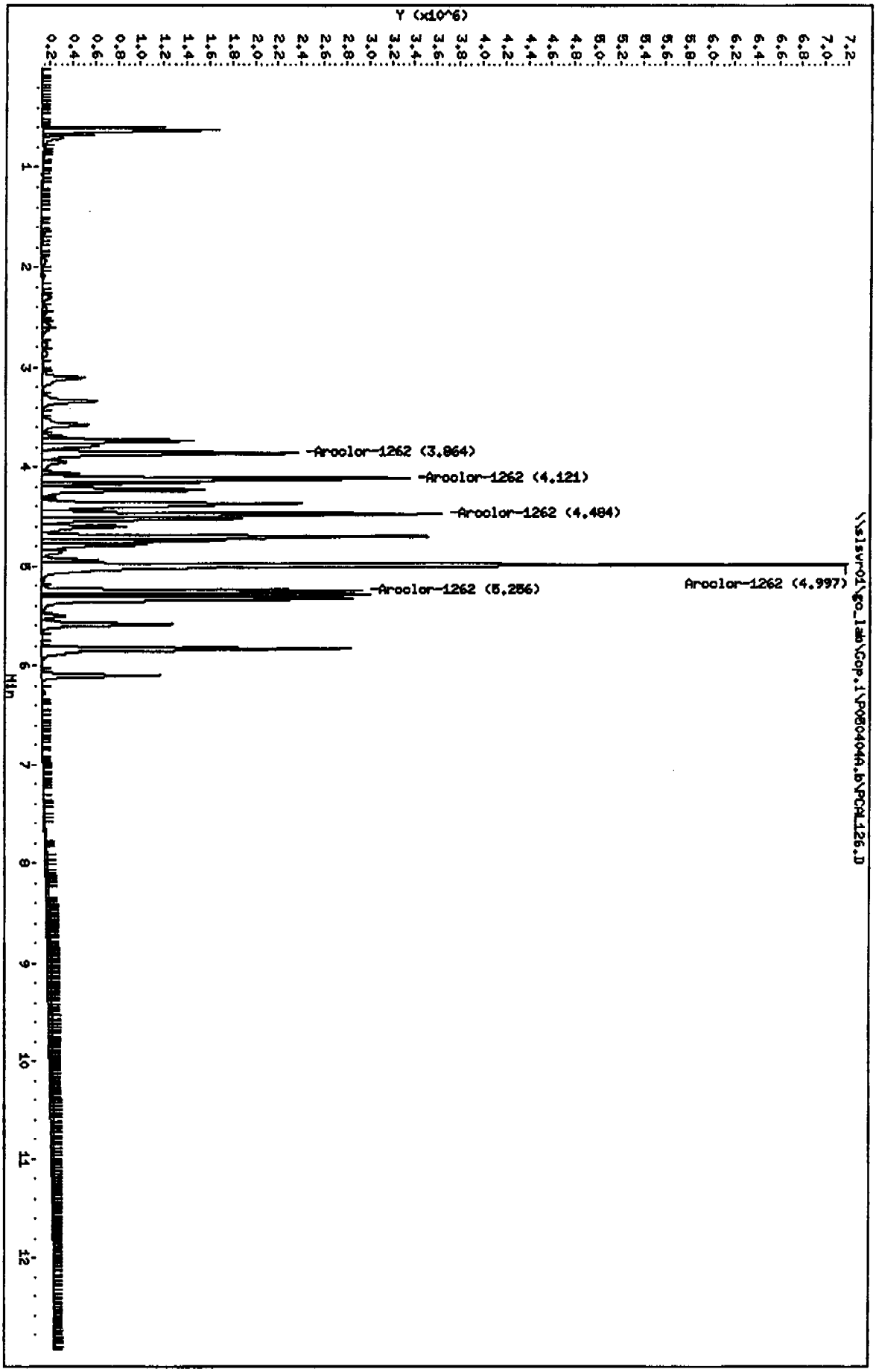
			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ng/mL)	TARGET RANGE	RATIO
35 Aroclor-1262					CAS #: 37324-23-5		
3.864	3.864	0.000	4739884	500.000	500.0	80.00- 120.00	100.00(M)
4.120	4.120	0.000	6600035	500.000	500.0	111.40- 167.09	139.24
4.484	4.484	0.000	7133757	500.000	500.0	120.40- 180.61	150.50
4.997	4.997	0.000	15179184	500.000	500.0	256.20- 384.29	320.24
5.255	5.255	0.000	5258404	500.000	500.0	88.75- 133.13	110.94
		Average of Peak Amounts =			500		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 4/05/05

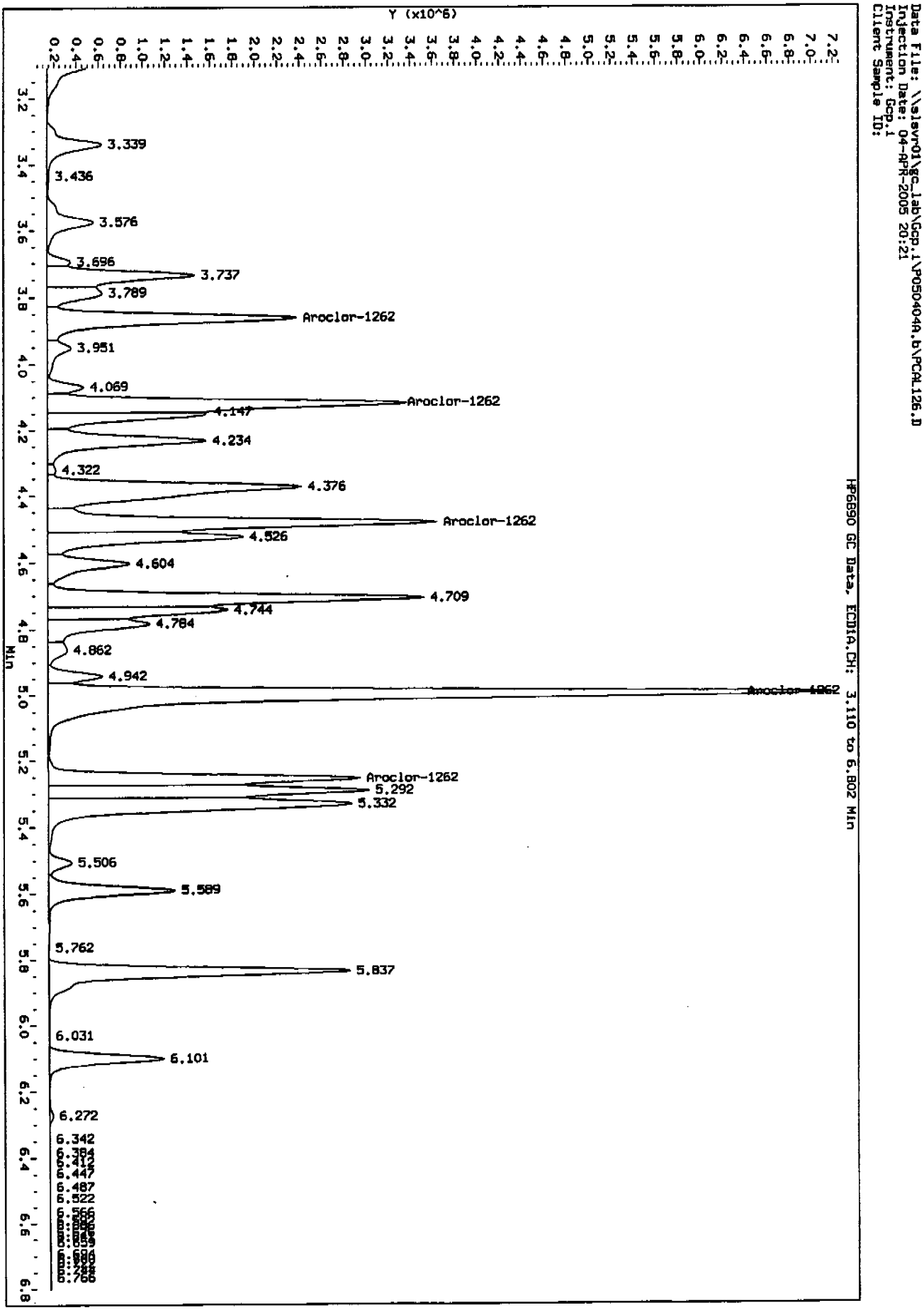
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\go_lab\Gcp.i\P050404A.b\PCAL126.D
Date : 04-APR-2005 20:21
Client ID:
Sample Info: 1262
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLD
Column diameter: 0.53


Y (x10^6)
Min
Data File: \\slsvr01\gc_lab\Gcp.1\P050404A.b\PCAL126.D
Injection Date: 04-APR-2005 20:21
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data, ECDIA.CH: 3.110 to 6.802 Min
3.339
3.436
3.576
3.696
3.737
3.789
Aroclor-1262
3.951
4.069
Aroclor-1262
4.147
4.234
4.322
4.376
Aroclor-1262
4.526
4.604
4.709
4.744
4.784
4.862
4.942
Aroclor-1262
Aroclor-1262
5.292
5.332
5.506
5.589
5.762
5.837
6.031
6.101
6.272
6.342
6.447
6.487
6.522

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL127.D
Report Date: 05-Apr-2005 12:14

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Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL127.D
Lab Smp Id: 1268
Inj Date : 04-APR-2005 20:37
Operator : BLO Inst ID: Gcp.i
Smp Info : 1268
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:00 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 17 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1268.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

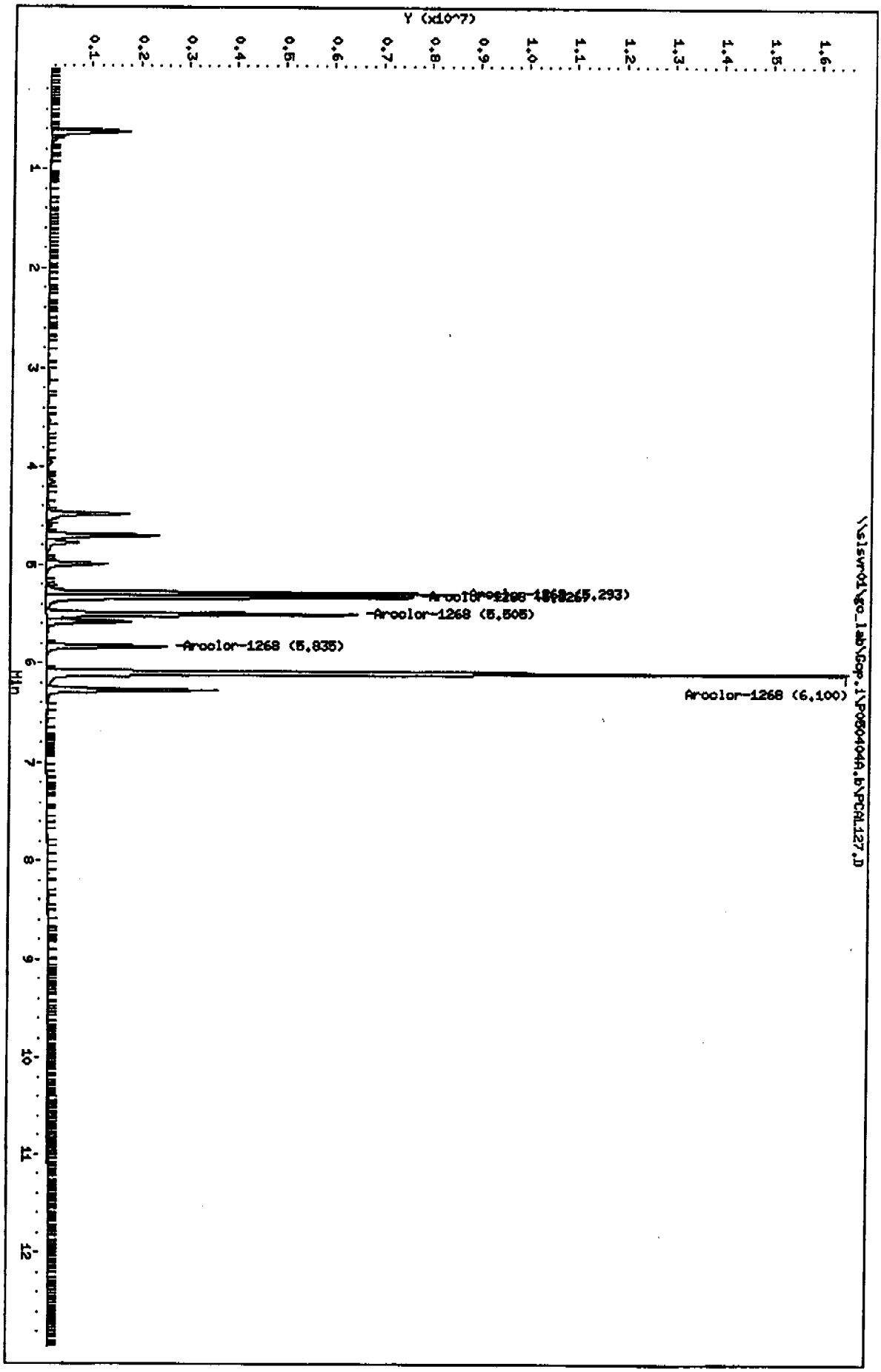
				AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)	TARGET RANGE	RATIO
RT	EXP RT	DLT RT	RESPONSE				
36 Aroclor-1268					CAS #: 11100-14-4		
5.293	5.293	0.000	15612725	500.000	500.0	80.00- 120.00	100.00(M)
5.326	5.326	0.000	16211130	500.000	500.0	83.07- 124.60	103.83
5.504	5.504	0.000	12571036	500.000	500.0	64.41- 96.62	80.52
5.834	5.834	0.000	4978357	500.000	500.0	25.51- 38.26	31.89
6.099	6.099	0.000	32273411	500.000	500.0	165.37- 248.05	206.71
Average of Peak Amounts =					500		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other_____

BLO 4/05/05

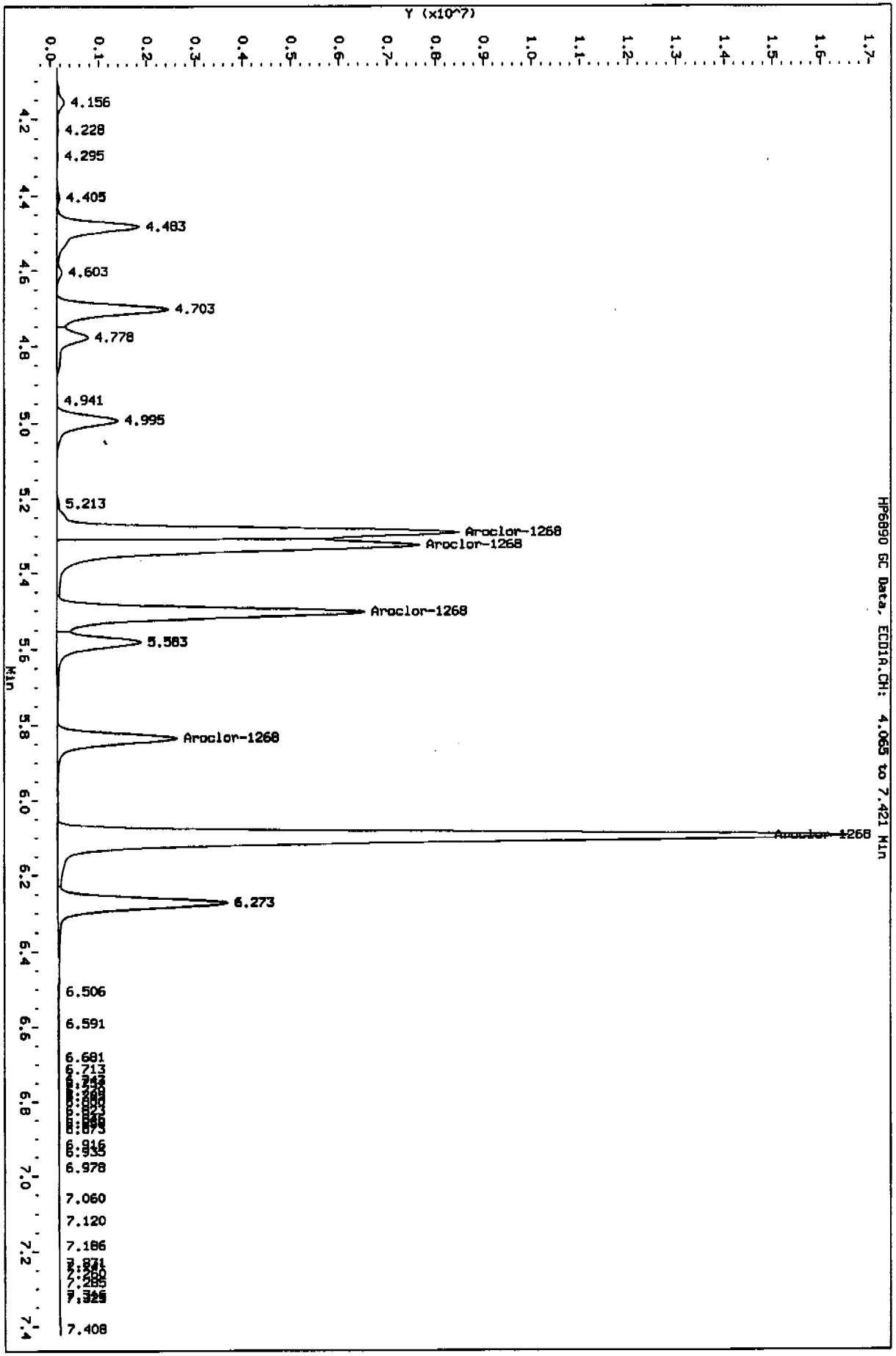
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL127.D
Date : 04-APR-2005 20:37
Client ID:
Sample Info: 1268
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Data File: \\slswr01\gc_lab\Gcp.1\P050404A.b\PCAL127.D
Injection Date: 04-APR-2005 20:37
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 4.065 to 7.421 Min
Y (x10^7)
Min
4.156
4.228
4.295
4.405
4.483
4.603
4.703
4.778
4.941
4.995
5.213
Aroclor-1268
Aroclor-1268
Aroclor-1268
5.583
Aroclor-1268
Aroclor-1268
6.273
6.506
6.591
6.681
6.713
6.916
6.935
6.978
7.060
7.120
7.186
7.408

Report Date : 05-Apr-2005 12:09

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INITIAL CALIBRATION DATA

Start Cal Date : 04-APR-2005 16:50
End Cal Date : 04-APR-2005 20:37
Quant Method : ESTD
Origin : Disabled
Target Version : 4.10
Integrator : Falcon
Method file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Cal Date : 05-Apr-2005 12:09 owenb
Curve Type : Average

Calibration File Names:
Level 2: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL114.D
Level 3: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL115.D
Level 4: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL127.D
Level 5: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL117.D
Level 6: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL118.D
Level 7: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL119.D
Level 8: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL120.D

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Compound	100.000 Level 2	250.000 Level 3	500.000 Level 4	1000.000 Level 5	1500.000 Level 6	2500.000 Level 7	RRF	% RSD	
	4000.000 Level 8								
22 Aroclor-1016(1)	6608	5703	5266	4912	4407	4118			
	3982						5000	18.842	
(2)	12756	10998	10119	9373	8458	7831			
	7584						9588	19.385	
(3)	23996	21615	20199	18968	17424	16382			
	16051						19234	15.143	
(4)	10559	9288	8624	8085	7365	6784			
	6747						8208	17.055	
(5)	7784	6870	6516	6126	5611	5079			
	5036						6146	16.275	
23 Aroclor-1221(1)	+++++	+++++	2042	+++++	+++++	+++++			
	+++++						2042	0.000	<-
(2)	+++++	+++++	2683	+++++	+++++	+++++			
	+++++						2683	0.000	<-
(3)	+++++	+++++	6565	+++++	+++++	+++++			
	+++++						6565	0.000	<-
24 Aroclor-1232(1)	+++++	+++++	5966	+++++	+++++	+++++			
	+++++						5966	0.000	
(2)	+++++	+++++	4156	+++++	+++++	+++++			
	+++++						4156	0.000	
(3)	+++++	+++++	8450	+++++	+++++	+++++			

	+++++						8450	0.000
(4)	+++++	+++++	3254	+++++	+++++	+++++		
	+++++						3254	0.000
(5)	+++++	+++++	4227	+++++	+++++	+++++		
	+++++						4227	0.000

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INITIAL CALIBRATION DATA

Start Cal Date : 04-APR-2005 16:50
End Cal Date : 04-APR-2005 20:37
Quant Method : ESTD
Origin : Disabled
Target Version : 4.10
Integrator : Falcon
Method file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Cal Date : 05-Apr-2005 12:09 owenb
Curve Type : Average

Compound	100.000 Level 2	250.000 Level 3	500.000 Level 4	1000.000 Level 5	1500.000 Level 6	2500.000 Level 7	4000.000 Level 8	RRF	% RSD
25 Aroclor-1242(1)	*****	*****	7652	*****	*****	*****	*****	7652	0.000
(2)	*****	*****	3931	*****	*****	*****	*****	3931	0.000
(3)	*****	*****	15020	*****	*****	*****	*****	15020	0.000
(4)	*****	*****	7203	*****	*****	*****	*****	7203	0.000
(5)	*****	*****	2867	*****	*****	*****	*****	2867	0.000
26 Aroclor-1248(1)	*****	*****	5878	*****	*****	*****	*****	5878	0.000
(2)	*****	*****	7920	*****	*****	*****	*****	7920	0.000
(3)	*****	*****	10999	*****	*****	*****	*****	10999	0.000
(4)	*****	*****	13226	*****	*****	*****	*****	13226	0.000
(5)	*****	*****	5756	*****	*****	*****	*****	5756	0.000
27 Aroclor-1254(1)	*****	*****	9588	*****	*****	*****	*****	9588	0.000
(2)	*****	*****	10182	*****	*****	*****	*****	10182	0.000
(3)	*****	*****	16192	*****	*****	*****	*****	16192	0.000
(4)	*****	*****	13191	*****	*****	*****			

	+++++						13191	0.000
(5)	+++++	+++++	16683	+++++	+++++	+++++		
	+++++						16683	0.000

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INITIAL CALIBRATION DATA

Start Cal Date : 04-APR-2005 16:50
End Cal Date : 04-APR-2005 20:37
Quant Method : ESTD
Origin : Disabled
Target Version : 4.10
Integrator : Falcon
Method file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Cal Date : 05-Apr-2005 12:09 owenb
Curve Type : Average

Compound	100.000 Level 2	250.000 Level 3	500.000 Level 4	1000.000 Level 5	1500.000 Level 6	2500.000 Level 7	RRF	% RSD
	4000.000 Level 8							
28 Aroclor-1260(1)	15778	13988	12803	12065	11183	10453		
	10242						12359	16.224
(2)	17901	15880	14543	13650	12933	12172		
	11674						14107	15.579
(3)	16828	14998	13771	13100	12110	11279		
	11265						13336	15.374
(4)	14626	13147	12093	11494	10714	10022		
	9969						11723	14.624
(5)	29251	26673	24612	23388	22022	20950		
	20825						23960	13.060
35 Aroclor-1262(1)	+++++	+++++	9666	+++++	+++++	+++++		
	+++++						9666	0.000
(2)	+++++	+++++	11209	+++++	+++++	+++++		
	+++++						11209	0.000
(3)	+++++	+++++	14104	+++++	+++++	+++++		
	+++++						14104	0.000
(4)	+++++	+++++	19397	+++++	+++++	+++++		
	+++++						19397	0.000
(5)	+++++	+++++	10596	+++++	+++++	+++++		
	+++++						10596	0.000
36 Aroclor-1268(1)	+++++	+++++	30544	+++++	+++++	+++++		
	+++++						30544	0.000
(2)	+++++	+++++	29297	+++++	+++++	+++++		
	+++++						29297	0.000
(3)	+++++	+++++	23819	+++++	+++++	+++++		
	+++++						23819	0.000
(4)	+++++	+++++	9281	+++++	+++++	+++++		

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(5)	+++++ +++++ +++++	+++++	63014	+++++	+++++	+++++	9281 63014	0.000 0.000

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INITIAL CALIBRATION DATA

Start Cal Date : 04-APR-2005 16:50
End Cal Date : 04-APR-2005 20:37
Quant Method : ESTD
Origin : Disabled
Target Version : 4.10
Integrator : Falcon
Method file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Cal Date : 05-Apr-2005 12:09 owenb
Curve Type : Average

Compound	100.000 Level 2	250.000 Level 3	500.000 Level 4	1000.000 Level 5	1500.000 Level 6	2500.000 Level 7	4000.000 Level 8	RRF	% RSD	
M 37 PCB (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
$ 32 Decachlorobiphenyl	246034	219512	200905	188715	176291	138561	+++++	195003	18.933	

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL114.D
Report Date: 05-Apr-2005 12:18

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Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL114.D
Lab Smp Id: ICAL2
Inj Date : 04-APR-2005 16:50
Operator : BLO Inst ID: Gcp.i
Smp Info : ICAL2
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:09 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO	
22 Aroclor-1016					CAS #: 12674-11-2			
2.223	2.223	0.000	660813	100.000	132.2	80.00- 120.00	100.00	(M)
2.598	2.598	0.000	1275551	100.000	133.0	164.40- 246.61	193.03	
3.016	3.016	0.000	2399649	100.000	124.8	337.81- 506.71	363.14	
3.145	3.145	0.000	1055937	100.000	128.6	144.30- 216.45	159.79	
3.588	3.590	-0.002	778448	100.000	126.6	106.98- 160.47	117.80	
		Average of Peak Amounts =			129.1			
28 Aroclor-1260					CAS #: 11096-82-5			
4.786	4.788	-0.002	1577760	100.000	127.7	80.00- 120.00	100.00	(M)
4.985	4.986	-0.001	1790102	100.000	126.9	87.40- 131.10	113.46	
5.140	5.140	0.000	1682766	100.000	126.2	85.10- 127.64	106.66	
5.685	5.685	0.000	1462591	100.000	124.8	67.08- 100.62	92.70	
5.921	5.923	-0.002	2925099	100.000	122.1	130.81- 196.21	185.40	
		Average of Peak Amounts =			125.5			
$ 32 Decachlorobiphenyl					CAS #:			
7.355	7.355	0.000	1230171	5.00000	6.308			(M)

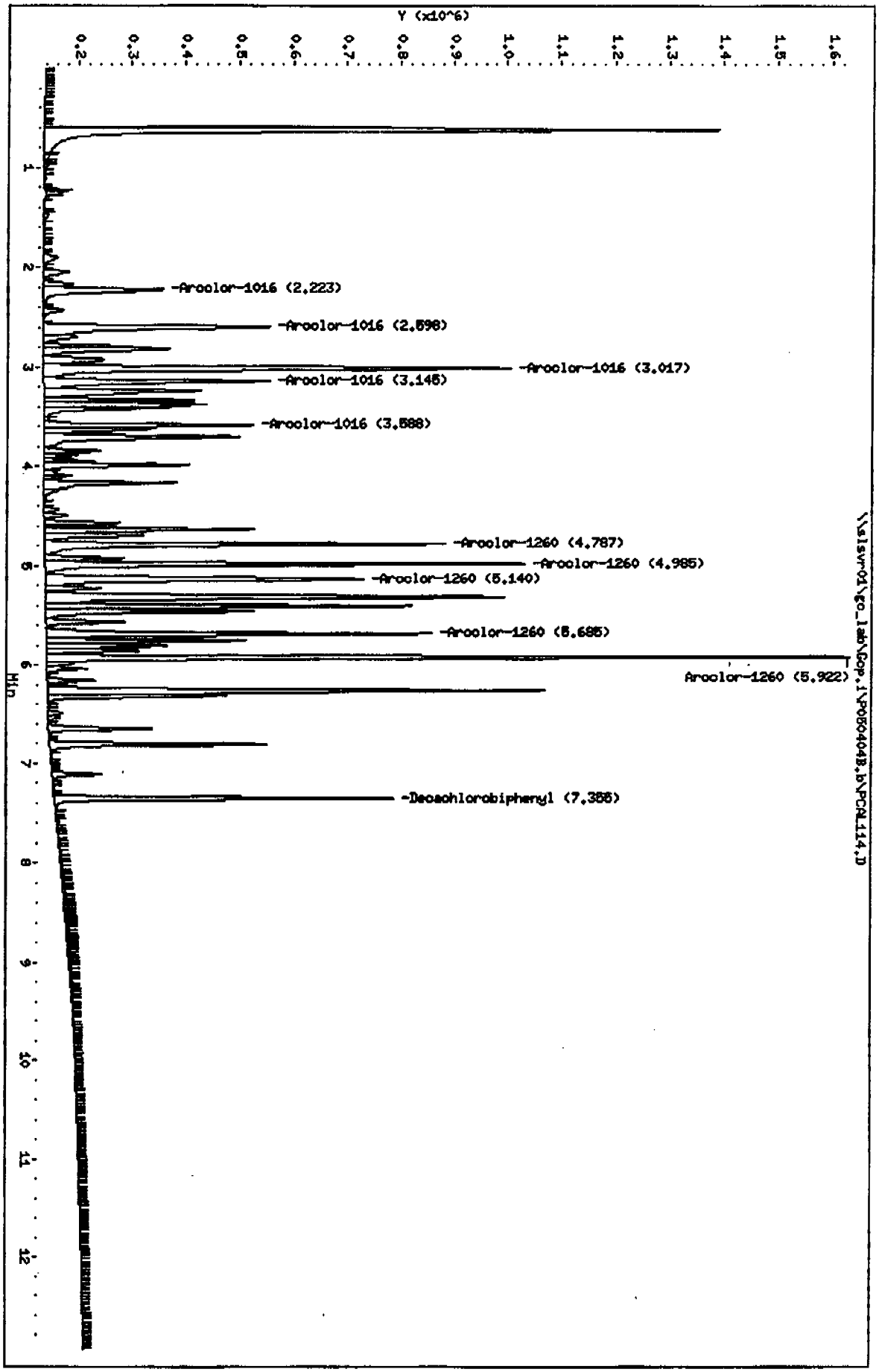
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 4/05/05

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL114.D
Report Date: 05-Apr-2005 12:18

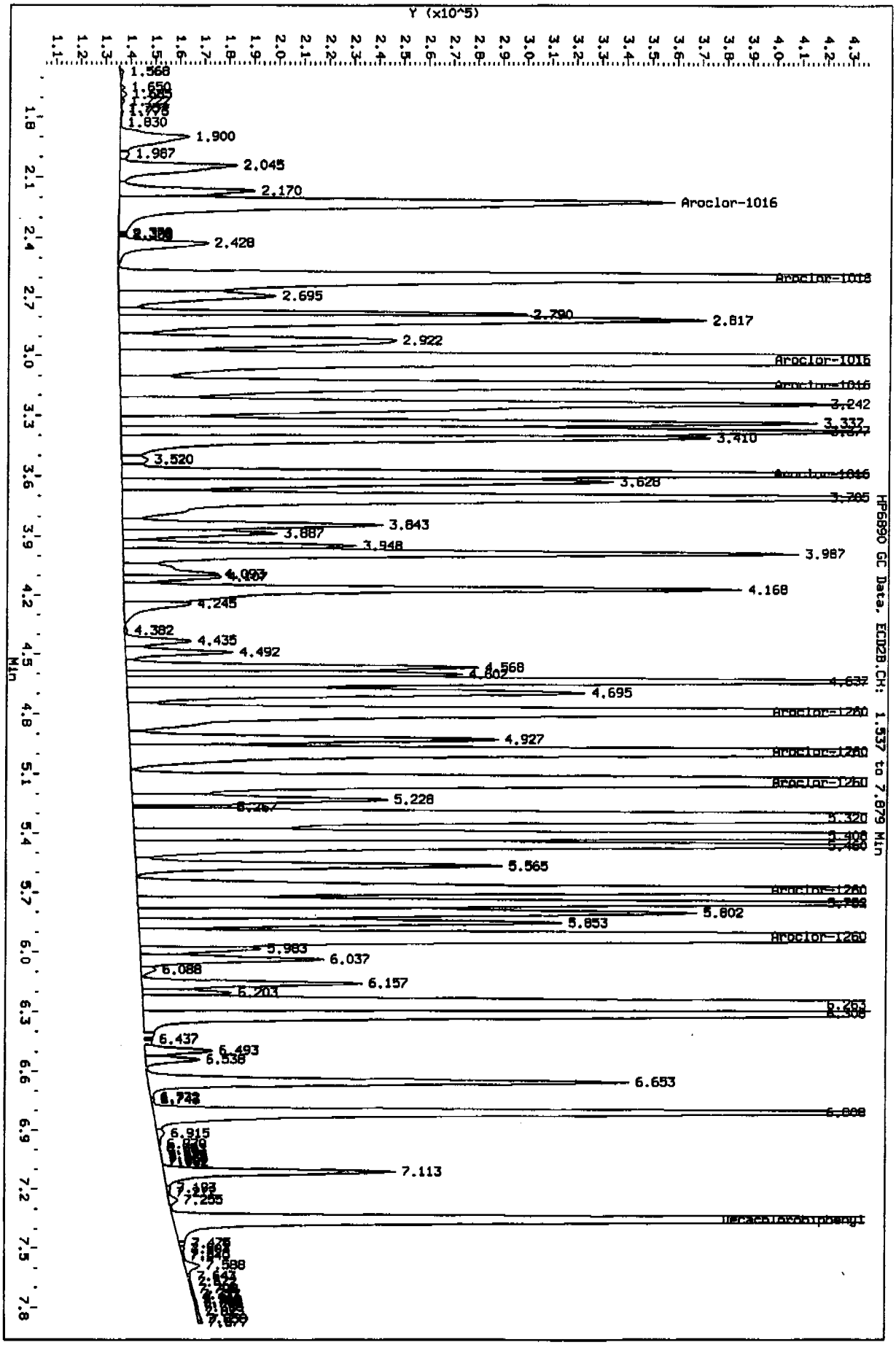
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\gc_lab\Gcp.i\P0504043.b\PCAL114.D
Date : 04-APR-2005 16:50
Client ID:
Sample Info: ICAL2
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^5)
Min
1.568
1.650
1.930
1.900
1.987
2.045
2.170
Aroclor-1016
2.428
2.695
2.790
2.817
2.922
3.242
3.337
3.410
3.520
3.628
3.843
3.887
3.948
3.987
4.168
4.245
4.382
4.435
4.492
4.695
4.927
5.228
5.565
5.802
5.853
5.983
6.037
6.088
6.157
6.437
6.493
6.653
6.915
7.113
7.255
HP6890 GC Data, ECD2B.CH: 1.537 to 7.879 Min
Data File: \\slsvr01\gc_lab\Gcp.1\P050404B.b\PCAL114.D
Injection Date: 04-APR-2005 16:50
Instrument: Gcp.1
Client Sample ID:

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL115.D
Report Date: 05-Apr-2005 12:18

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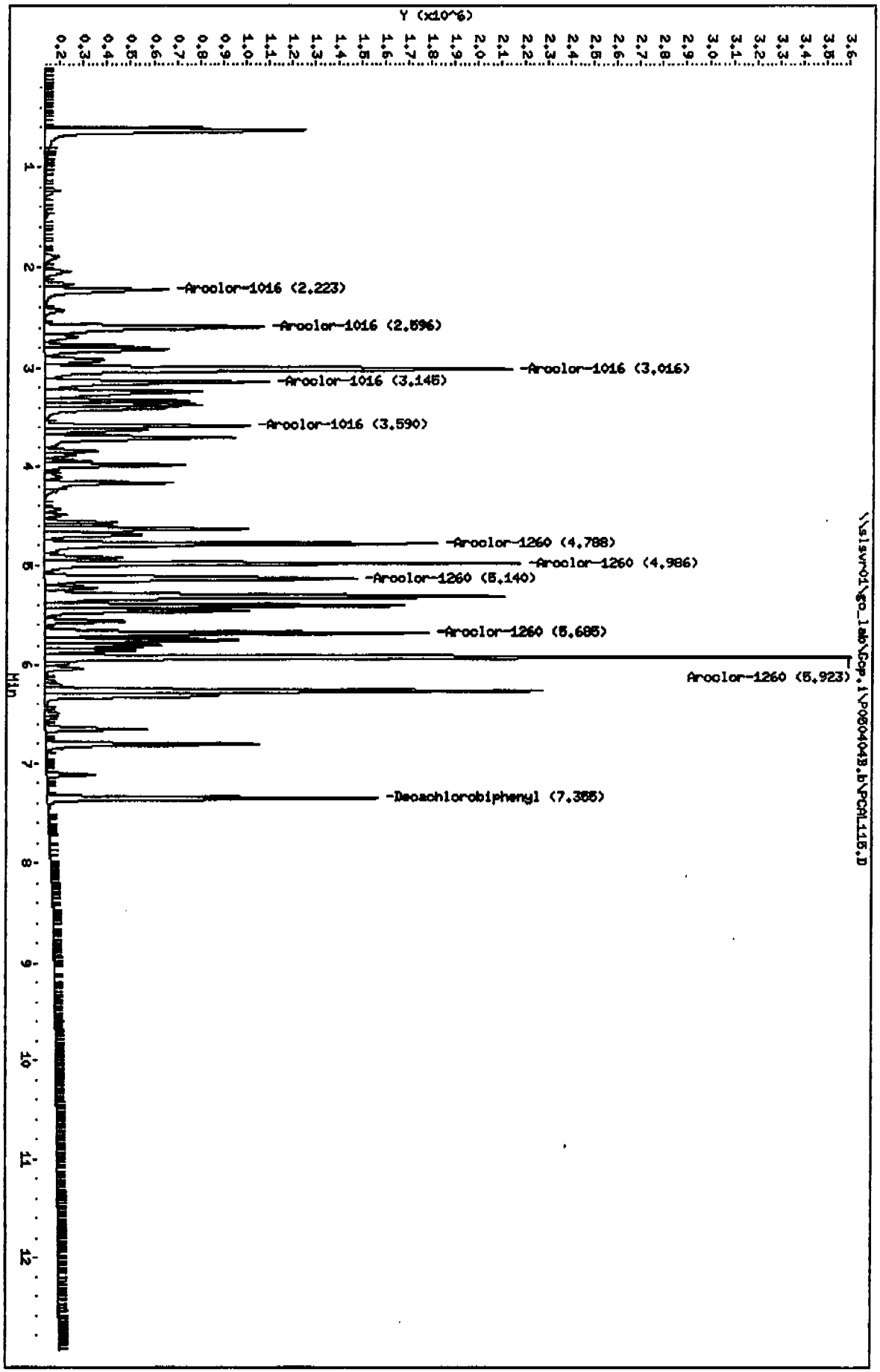
Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL115.D
Lab Smp Id: ICAL3
Inj Date : 04-APR-2005 17:07
Operator : BLO Inst ID: Gcp.i
Smp Info : ICAL3
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:09 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

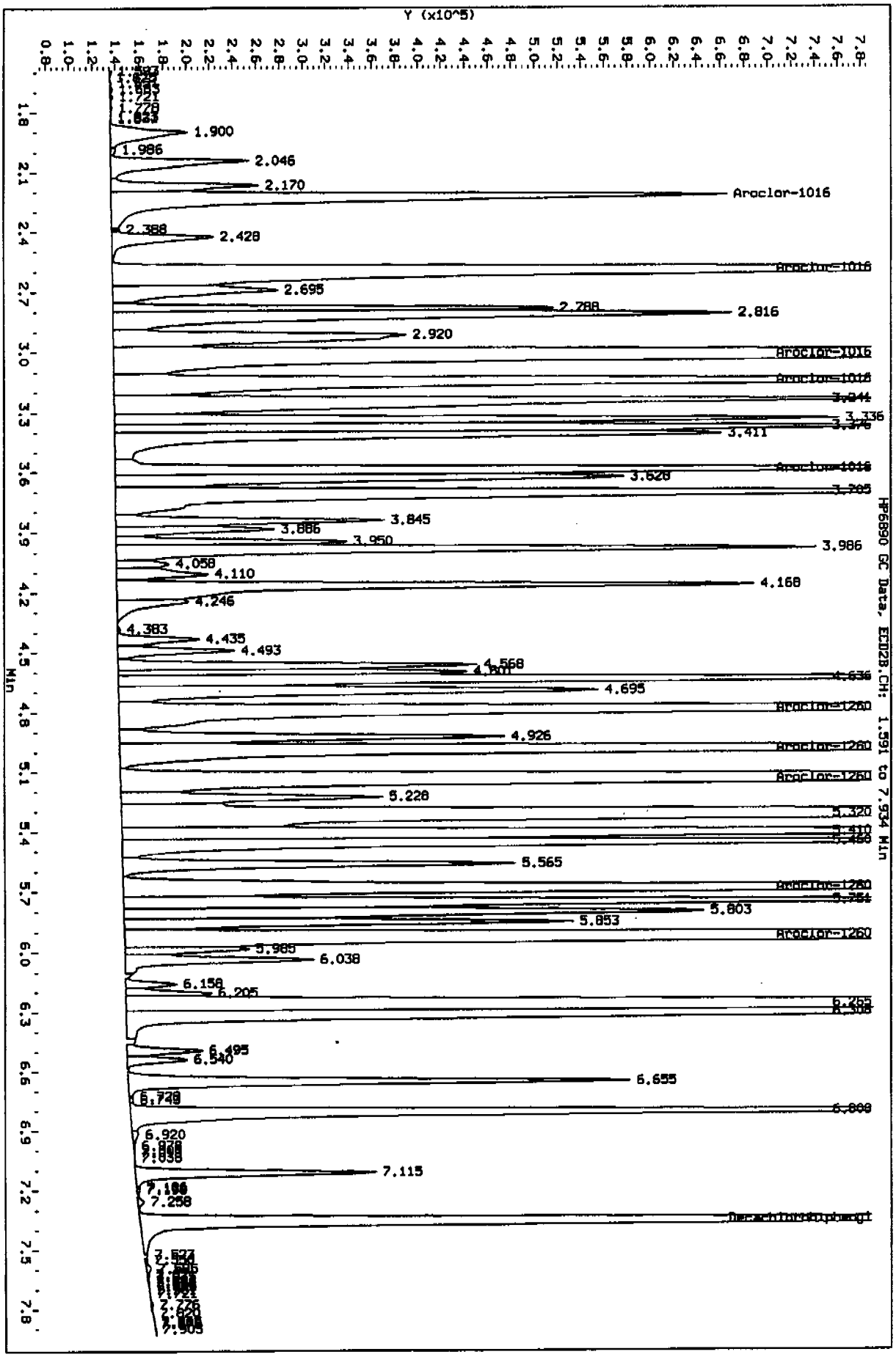
			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.222	2.223	-0.001	1425823	250.000	285.2	80.00- 120.00	100.00
2.596	2.598	-0.002	2749476	250.000	286.8	164.40- 246.61	192.83
3.016	3.016	0.000	5403796	250.000	281.0	337.81- 506.71	378.99
3.144	3.145	-0.001	2322118	250.000	282.9	144.30- 216.45	162.86
3.589	3.590	-0.001	1717425	250.000	279.4	106.98- 160.47	120.45
		Average of Peak Amounts =			283.1		
28 Aroclor-1260					CAS #: 11096-82-5		
4.787	4.788	-0.001	3497107	250.000	283.0	80.00- 120.00	100.00
4.986	4.986	0.000	3969999	250.000	281.4	87.40- 131.10	113.52
5.139	5.140	-0.001	3749501	250.000	281.2	85.10- 127.64	107.22
5.684	5.685	-0.001	3286824	250.000	280.4	67.08- 100.62	93.99
5.922	5.923	-0.001	6668191	250.000	278.3	130.81- 196.21	190.68
		Average of Peak Amounts =			280.8		
$ 32 Decachlorobiphenyl					CAS #:		
7.354	7.355	-0.001	2743904	12.5000	14.07		

BLO 4/05/05



Data File: \\slsvr01\gc_lab\Gcp.i\P0504048.b\PCBL115.D
Date : 04-APR-2005 17:07
Client ID:
Sample Info: ICAL3
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLD
Column diameter: 0.53


Y (x10^5)
Min
1.900
1.986
2.046
2.170
Aroclor-1016
2.388
2.428
2.695
2.788
2.816
2.920
3.411
3.628
3.845
3.886
3.950
3.986
4.058
4.110
4.168
4.246
4.383
4.435
4.493
4.695
4.926
5.228
5.565
5.803
5.853
5.985
6.038
6.156
6.205
6.495
6.540
6.655
6.920
7.115
7.186
7.258
Decachlorobiphenyl
Data File: \\slsvr01\gc_lab\Gcp.1\P050404B.b\PCAL115.D
Injection Date: 04-APR-2005 17:07
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 1.991 to 7.934 Min

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL116.D
Report Date: 05-Apr-2005 12:18

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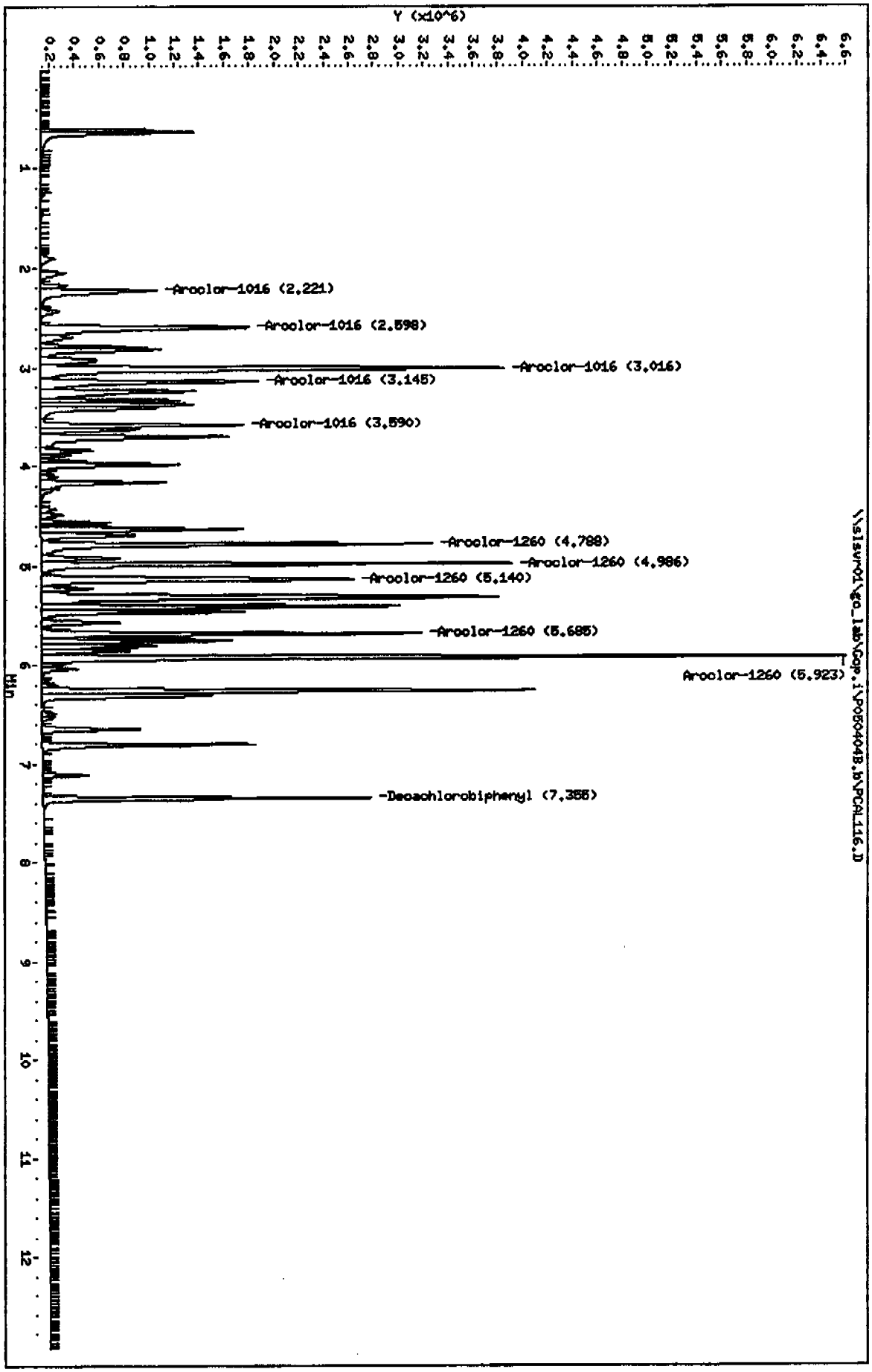
Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL116.D
Lab Smp Id: ICAL4
Inj Date : 04-APR-2005 17:23
Operator : BLO Inst ID: Gcp.i
Smp Info : ICAL4
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:09 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

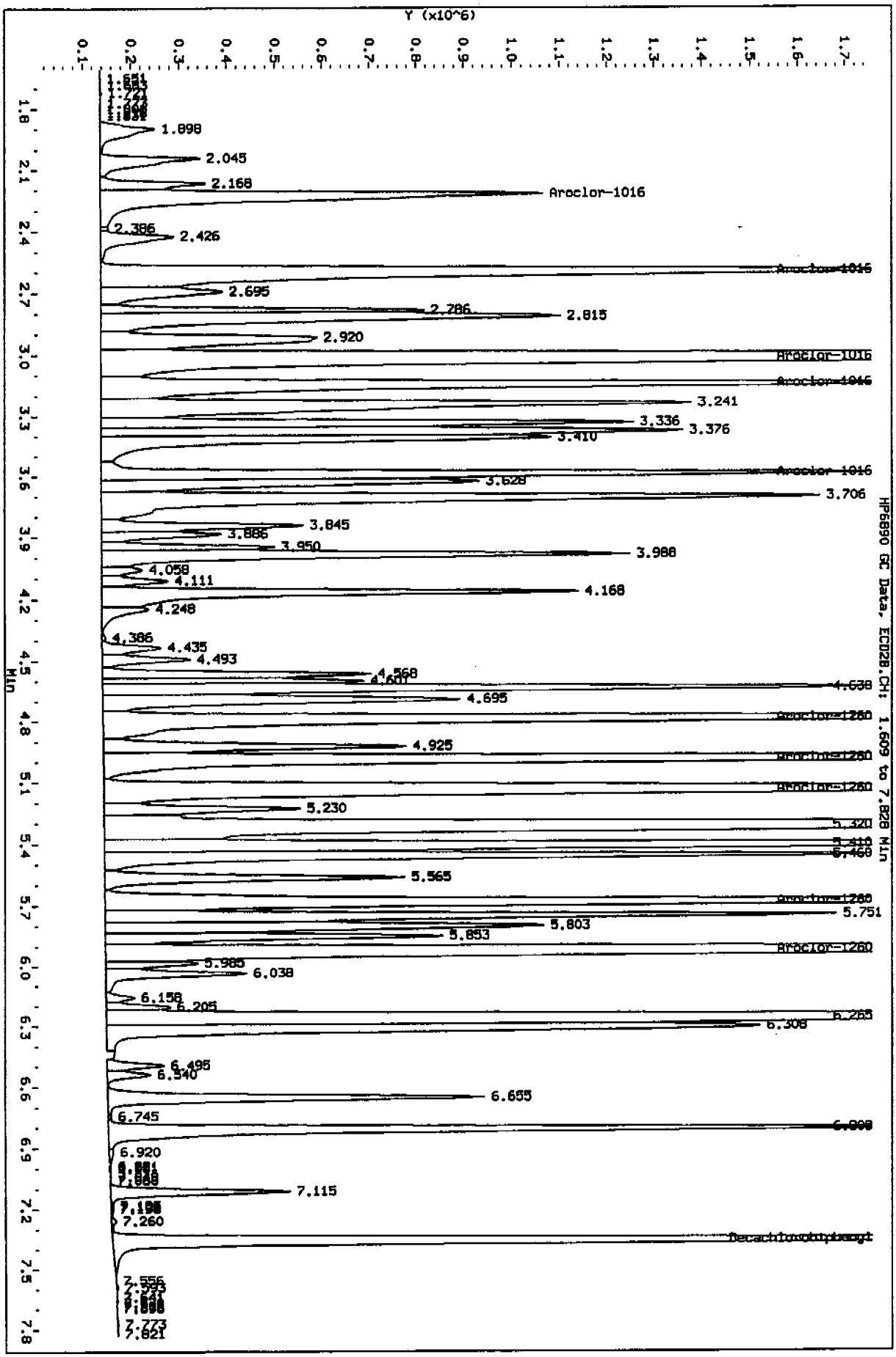
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.221	2.223	-0.002	2632961	500.000	526.6	80.00- 120.00	100.00
2.597	2.598	-0.001	5059471	500.000	527.7	164.40- 246.61	192.16
3.016	3.016	0.000	10099413	500.000	525.1	337.81- 506.71	383.58
3.144	3.145	-0.001	4311817	500.000	525.3	144.30- 216.45	163.76
3.589	3.590	-0.001	3257841	500.000	530.1	106.98- 160.47	123.73
Average of Peak Amounts =					527		
28 Aroclor-1260					CAS #: 11096-82-5		
4.787	4.788	-0.001	6401738	500.000	518.0	80.00- 120.00	100.00
4.986	4.986	0.000	7271274	500.000	515.4	87.40- 131.10	113.58
5.139	5.140	-0.001	6885446	500.000	516.3	85.10- 127.64	107.56
5.684	5.685	-0.001	6046266	500.000	515.7	67.08- 100.62	94.45
5.922	5.923	-0.001	12305788	500.000	513.6	130.81- 196.21	192.23
Average of Peak Amounts =					515.8		
$ 32 Decachlorobiphenyl					CAS #:		
7.354	7.355	-0.001	5022615	25.0000	25.76		

BLO 4/05/05



Data File: \\slsvr01\go_lab\Gop.i\P0504048.b\PCAL116.D
Date : 04-APR-2005 17:23
Client ID:
Sample Info: ICAL4
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gop.i
Operator: BLD
Column diameter: 0.53


Y (x10^6)
Min
1.898
2.045
2.168
Aroclor-1016
2.386
2.426
2.695
2.786
2.815
2.920
3.241
3.336
3.376
3.410
3.628
3.706
3.845
3.886
3.950
3.988
4.058
4.111
4.168
4.248
4.386
4.435
4.493
4.695
4.925
5.230
5.565
5.751
5.803
5.853
5.985
6.038
6.156
6.205
6.265
6.308
6.495
6.540
6.655
6.745
6.920
7.115
7.260
7.556
7.773
7.821
Data File: \\selsvr01\gc_lab\Gcp_1\P0504048.b\PCAL116.D
Injection Date: 04-APR-2005 17:23
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 1.609 to 7.828 Min

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL117.D
Report Date: 05-Apr-2005 12:19

STL St. Louis

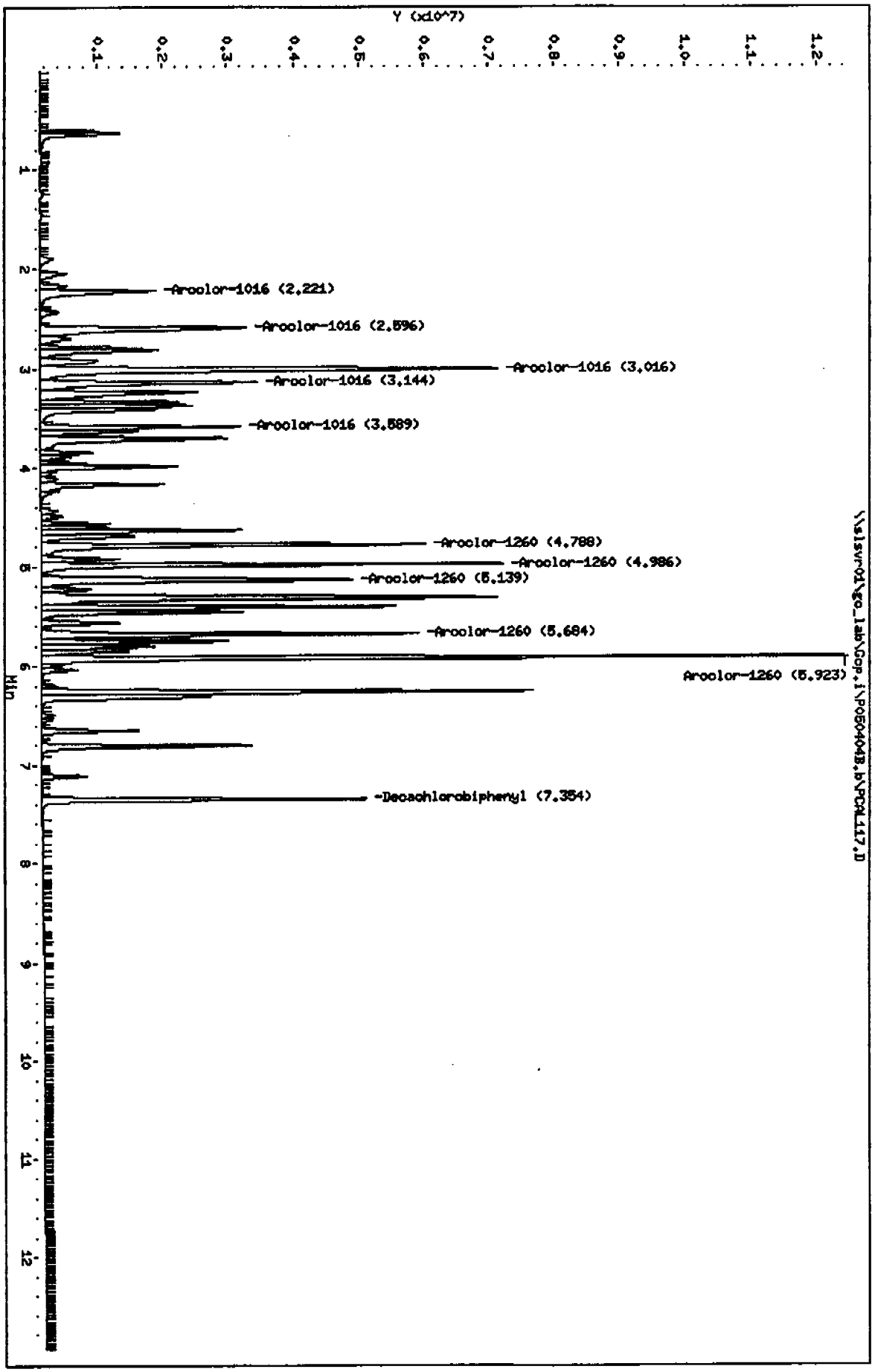
Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL117.D
Lab Smp Id: ICAL5
Inj Date : 04-APR-2005 17:39
Operator : BLO Inst ID: Gcp.i
Smp Info : ICAL5
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:09 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

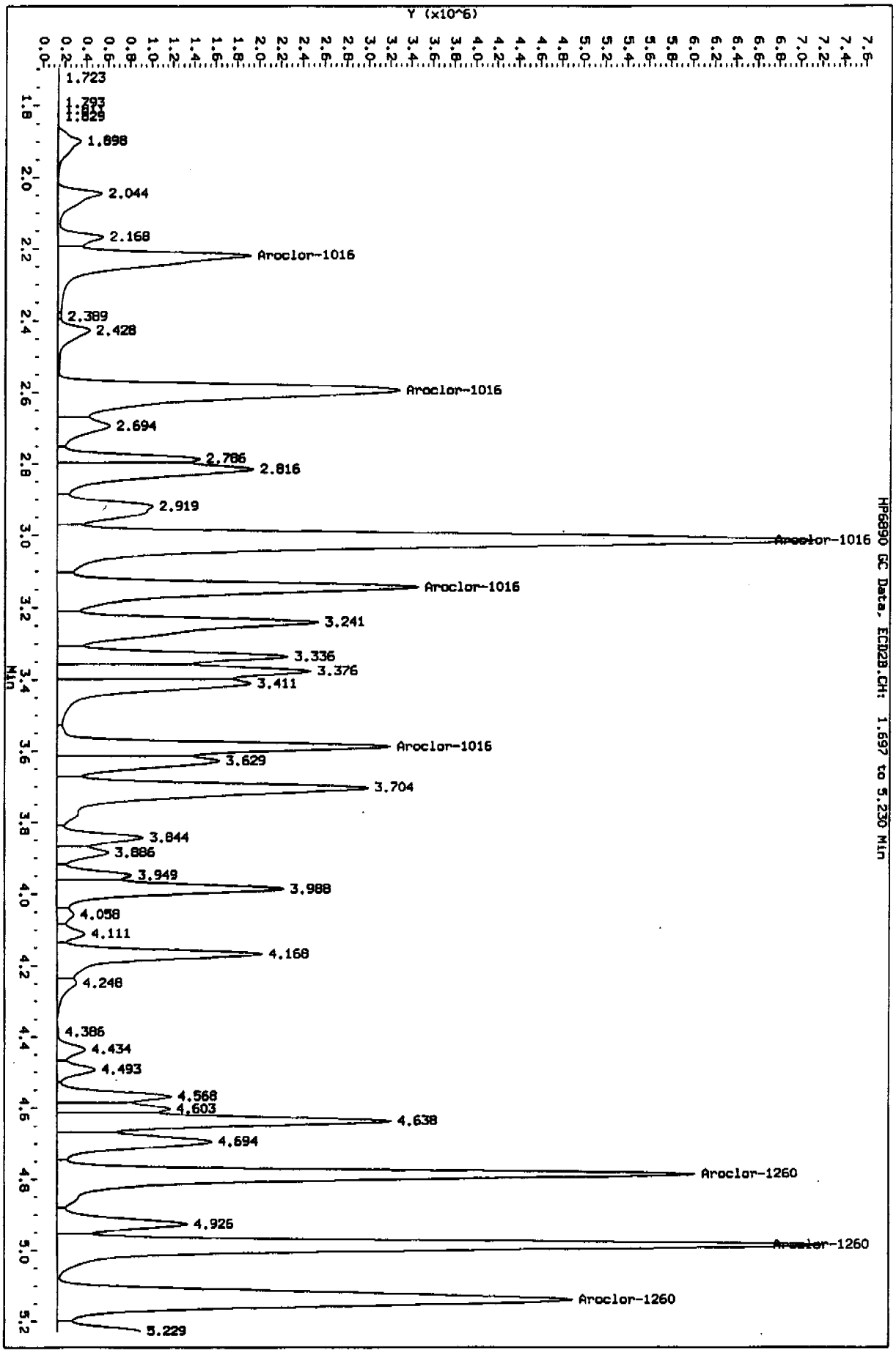
				AMOUNTS CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.221	2.223	-0.002	4912099	1000.00	982.5	80.00- 120.00	100.00
2.596	2.598	-0.002	9372530	1000.00	977.5	164.40- 246.61	190.80
3.016	3.016	0.000	18967867	1000.00	986.2	337.81- 506.71	386.15
3.144	3.145	-0.001	8084814	1000.00	985.0	144.30- 216.45	164.59
3.589	3.590	-0.001	6126297	1000.00	996.8	106.98- 160.47	124.72
	Average of Peak Amounts =				985.6		
28 Aroclor-1260					CAS #: 11096-82-5		
4.787	4.788	-0.001	12064522	1000.00	976.2	80.00- 120.00	100.00
4.986	4.986	0.000	13649861	1000.00	967.6	87.40- 131.10	113.14
5.139	5.140	-0.001	13099792	1000.00	982.3	85.10- 127.64	108.58
5.684	5.685	-0.001	11493646	1000.00	980.4	67.08- 100.62	95.27
5.922	5.923	-0.001	23387749	1000.00	976.1	130.81- 196.21	193.86
	Average of Peak Amounts =				976.5		
$ 32 Decachlorobiphenyl					CAS #:		
7.354	7.355	-0.001	9435757	50.0000	48.39		

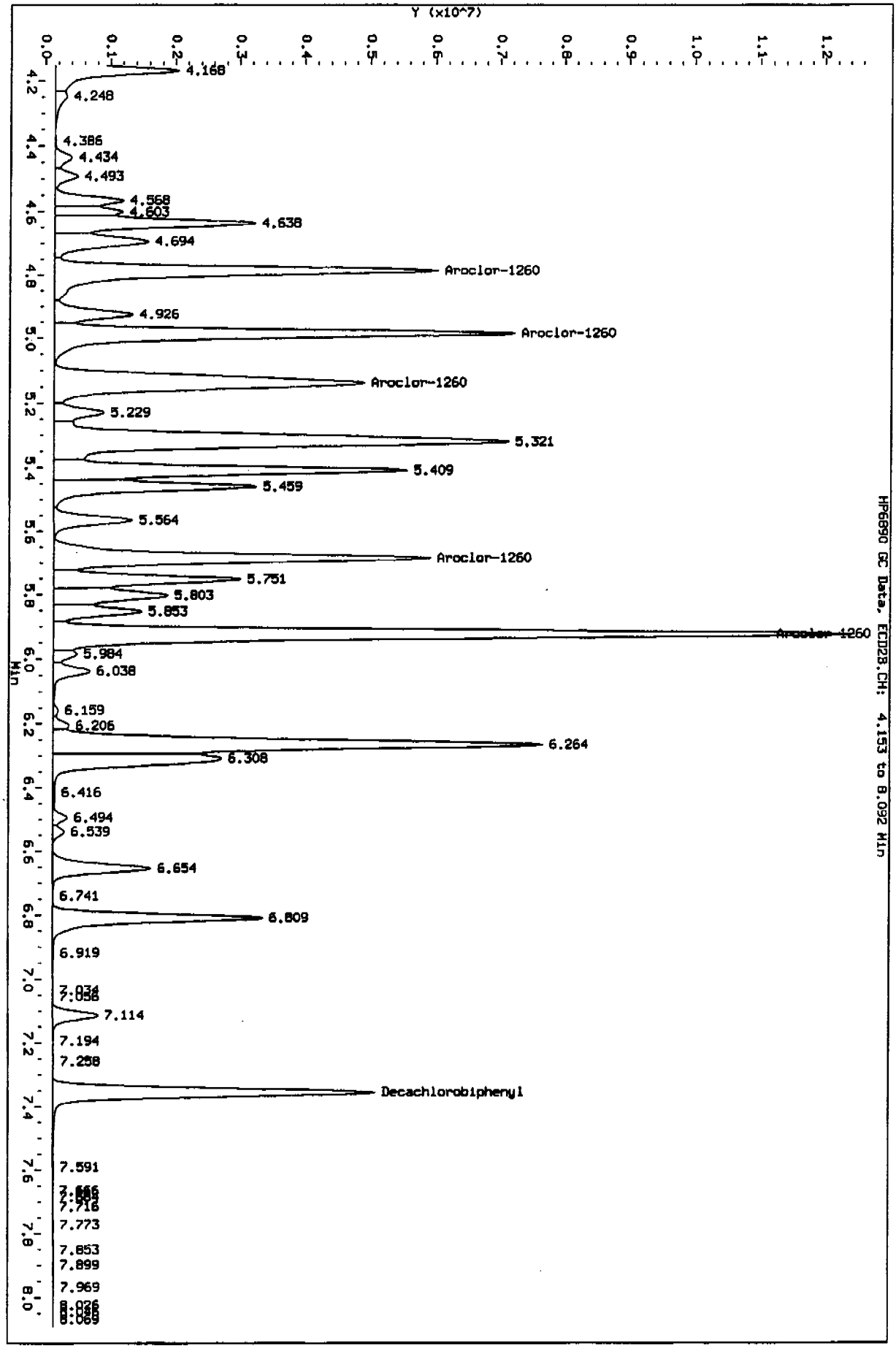
BLO 4/05/05



Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCRL117.D
Date : 04-APR-2005 17:39
Client ID:
Sample Info: ICAL5
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLG
Column diameter: 0.53


Y (x10^6)
Min
1.723
1.793
1.829
1.898
2.044
2.168
Aroclor-1016
2.389
2.428
Aroclor-1016
2.694
2.786
2.816
2.919
Aroclor-1016
Aroclor-1016
3.241
3.336
3.376
3.411
Aroclor-1016
3.629
3.704
3.844
3.886
3.949
3.988
4.058
4.111
4.168
4.248
4.386
4.434
4.493
4.568
4.603
4.638
4.694
Aroclor-1260
4.926
Aroclor-1260
Aroclor-1260
5.229
HP6890 GC Data, ECD2B.CH: 1.697 to 5.230 Min
Data File: \\elevr01\gc_lab\Gcp.1\P050404B.b\PCAL117.D
Injection Date: 04-APR-2005 17:39
Instrument: Gcp.1
Client Sample ID:


Y (x10^7)
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
Min
4.2
4.4
4.6
4.8
5.0
5.2
5.4
5.6
5.8
6.0
6.2
6.4
6.6
6.8
7.0
7.2
7.4
7.6
7.8
8.0
4.166
4.248
4.386
4.434
4.493
4.568
4.603
4.638
4.694
Aroclor-1260
4.926
Aroclor-1260
Aroclor-1260
5.229
5.321
5.409
5.459
5.564
Aroclor-1260
5.751
5.803
5.853
Aroclor-1260
5.984
6.038
6.159
6.206
6.264
6.308
6.416
6.494
6.539
6.654
6.741
6.809
6.919
7.034
7.056
7.114
7.194
7.258
Decachlorobiphenyl
7.591
7.716
7.773
7.853
7.899
7.969
8.026
HP6890 GC Data, ECD2B.CH; 4.153 to 8.092 Min
Data File: \\slsvr01\gc_lab\Gcp.1\P050404B.b\PCAL117.D
Injection Date: 04-APR-2005 17:39
Instrument: Gcp.1
Client Sample ID:

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL118.D
Report Date: 05-Apr-2005 12:19

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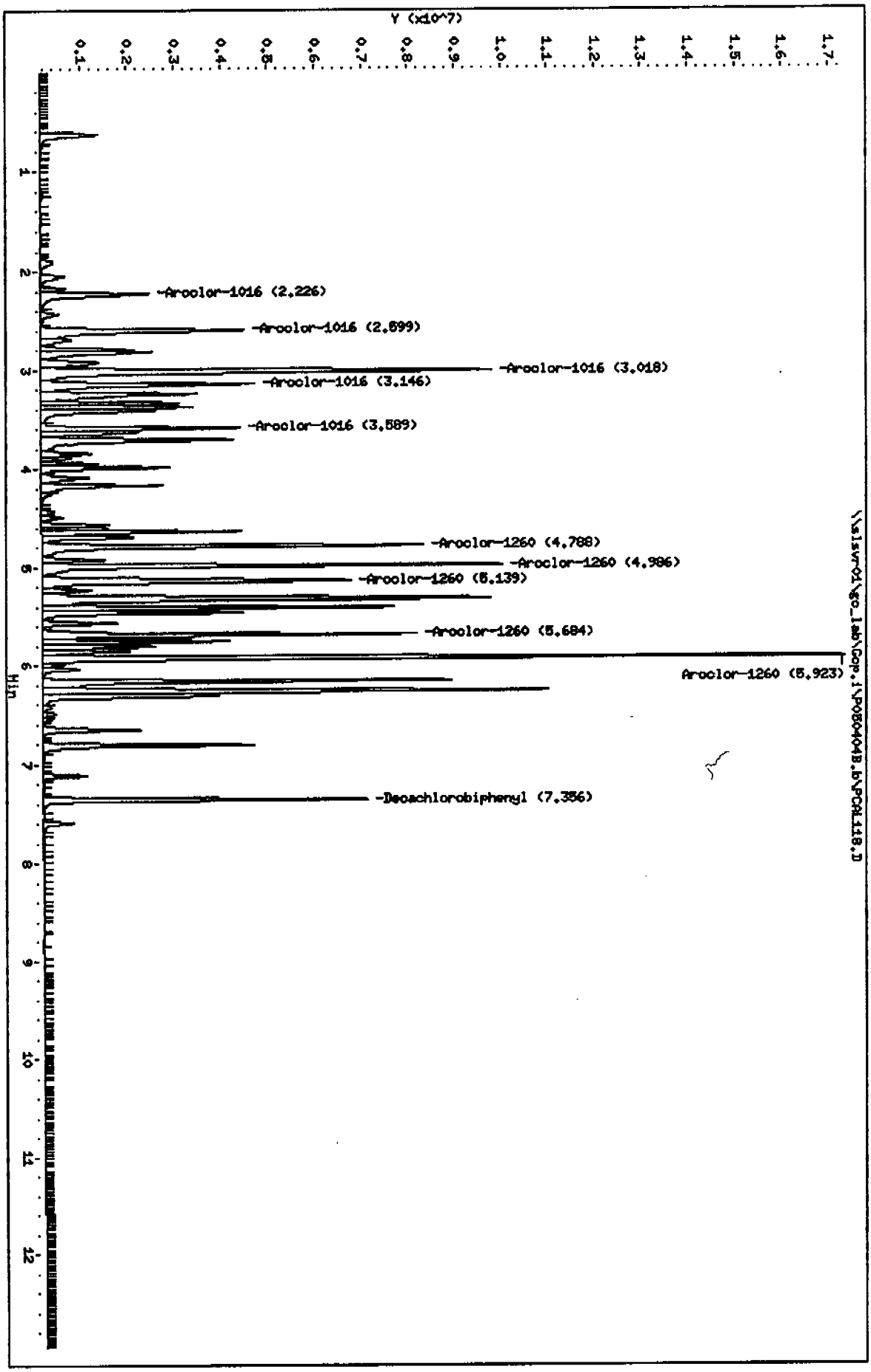
Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL118.D
Lab Smp Id: ICAL6
Inj Date : 04-APR-2005 17:55
Operator : BLO Inst ID: Gcp.i
Smp Info : ICAL6
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:09 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

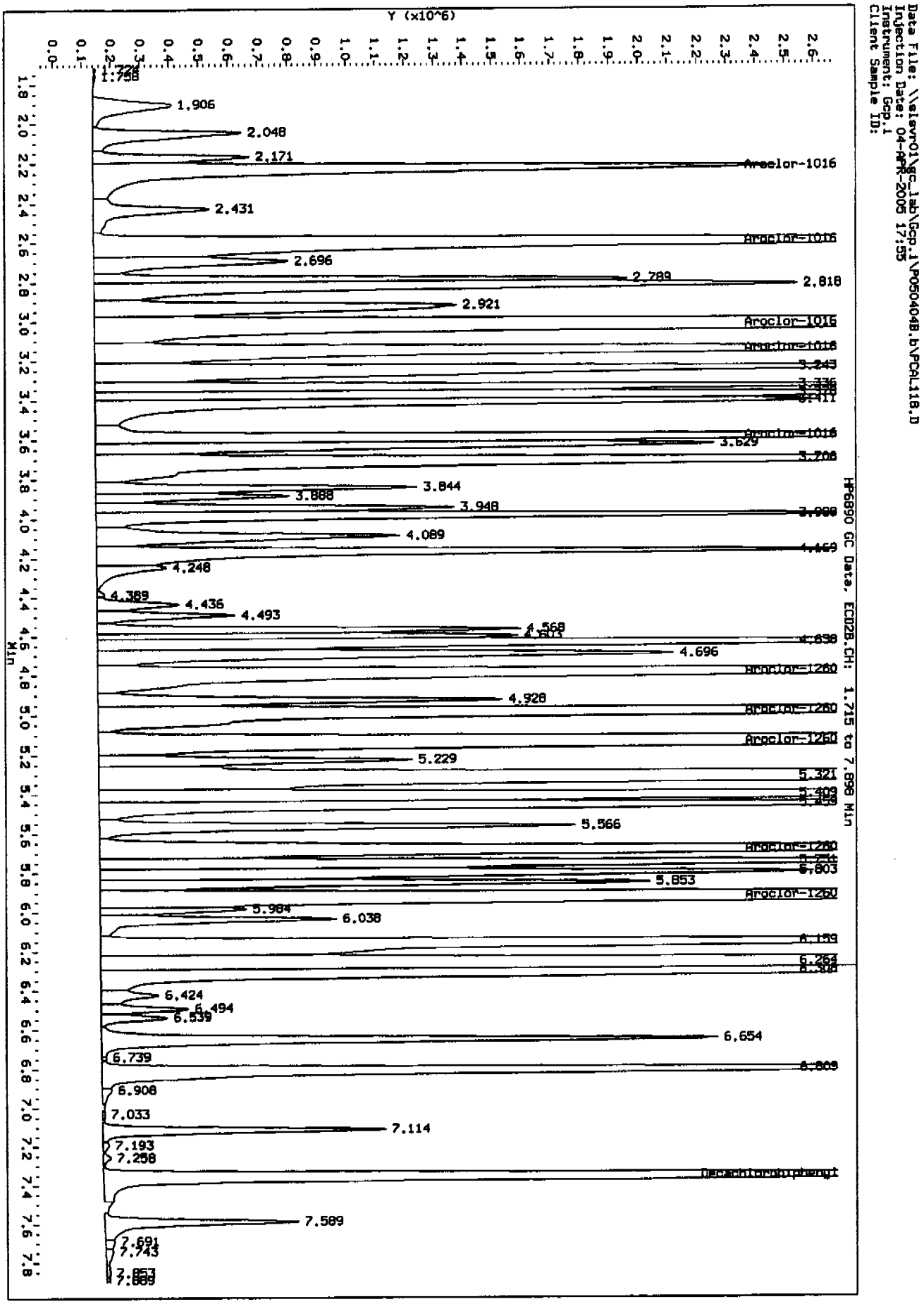
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.225	2.223	0.002	6610679	1500.00	1322	80.00- 120.00	100.00
2.599	2.598	0.001	12686999	1500.00	1323	164.40- 246.61	191.92
3.017	3.016	0.001	26136421	1500.00	1359	337.81- 506.71	395.37
3.145	3.145	0.000	11047796	1500.00	1346	144.30- 216.45	167.12
3.589	3.590	-0.001	8417213	1500.00	1370	106.98- 160.47	127.33
		Average of Peak Amounts =			1344		
28 Aroclor-1260					CAS #: 11096-82-5		
4.787	4.788	-0.001	16774252	1500.00	1357	80.00- 120.00	100.00
4.985	4.986	-0.001	19399382	1500.00	1375	87.40- 131.10	115.65
5.139	5.140	-0.001	18164635	1500.00	1362	85.10- 127.64	108.29
5.684	5.685	-0.001	16070723	1500.00	1371	67.08- 100.62	95.81
5.922	5.923	-0.001	33033231	1500.00	1379	130.81- 196.21	196.93
		Average of Peak Amounts =			1369		
$ 32 Decachlorobiphenyl					CAS #:		
7.355	7.355	0.000	13221826	75.0000	67.80		

BLO 4/05/05



Data File: \\slsvr01\go_lab\Gcp.i\P050404B.b\PCN118.D
Date : 04-APR-2005 17:55
Client ID:
Sample Info: ICAL6
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
Data File: \\elsvr01\gc_lab\Gcp.1\P050404B.b\PCAL118.D
Injection Date: 04-APR-2005 17:55
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 1.715 to 7.898 Min
1.758
1.906
2.048
2.171
Aroclor-1016
2.431
Aroclor-1016
2.696
2.789
2.818
2.921
Aroclor-1016
3.629
3.844
3.888
3.948
4.089
4.248
4.389
4.436
4.493
4.696
Aroclor-1260
4.928
Aroclor-1260
Aroclor-1260
5.229
5.321
5.566
Aroclor-1260
5.853
Aroclor-1260
5.984
6.038
6.424
6.494
6.539
6.654
6.739
6.908
7.033
7.114
7.193
7.258
Decachlorobiphenyl
7.589
7.691
7.743
7.853
7.889

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL119.D
Report Date: 05-Apr-2005 12:19

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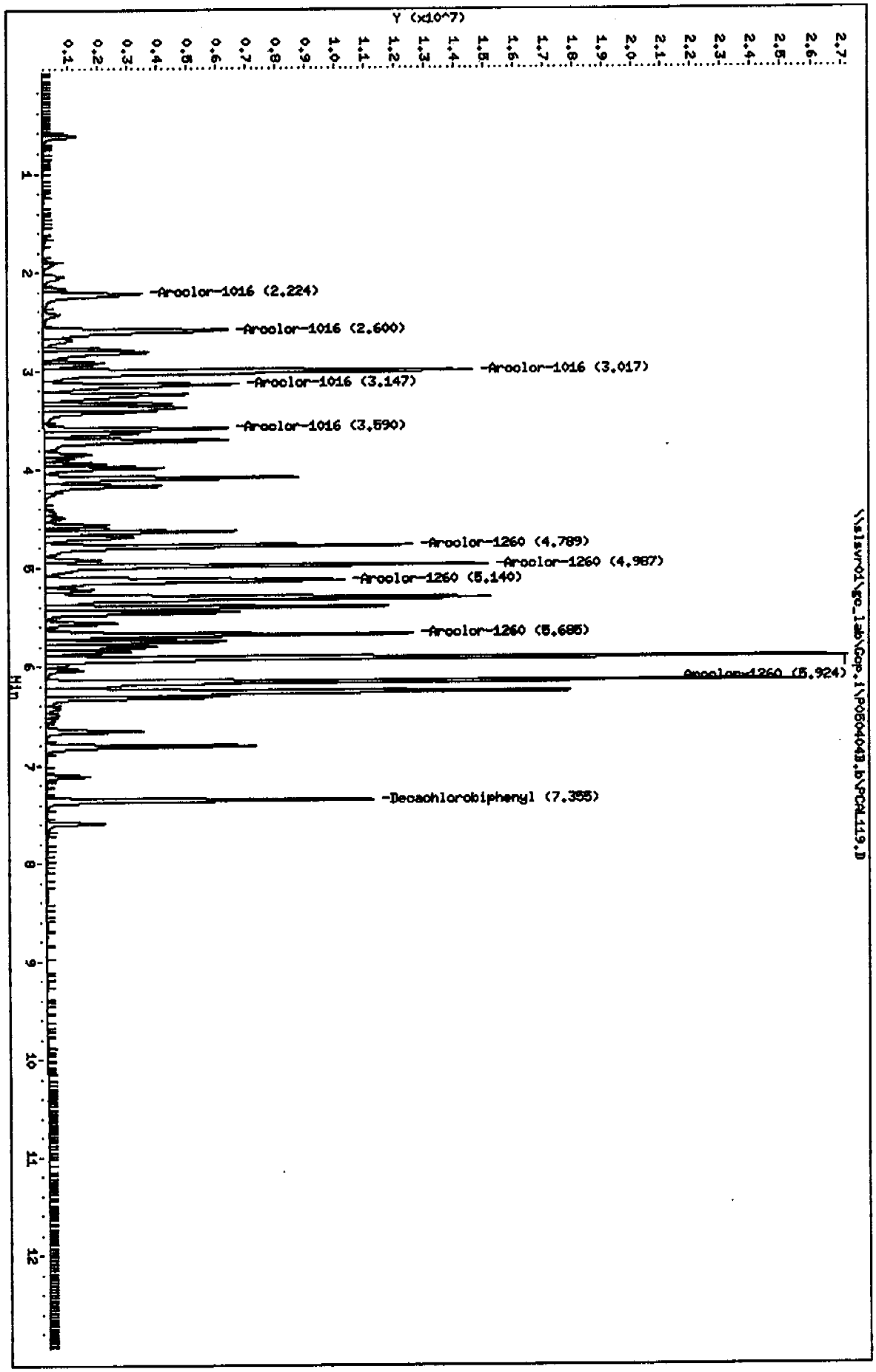
Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL119.D
Lab Smp Id: ICAL7
Inj Date : 04-APR-2005 18:11
Operator : BLO Inst ID: Gcp.i
Smp Info : ICAL7
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:09 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

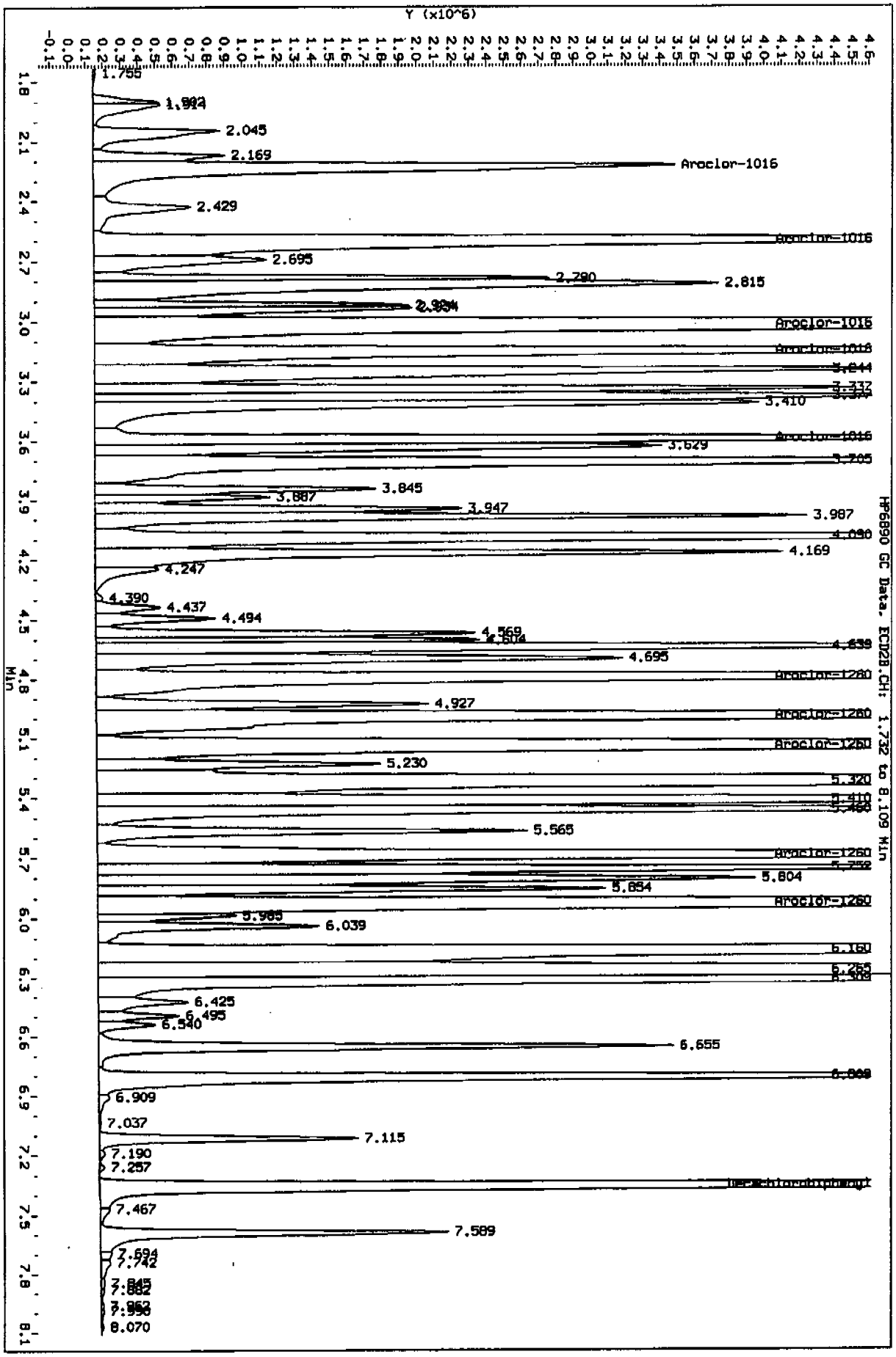
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.223	2.223	0.000	10295781	2500.00	2059	80.00- 120.00	100.00
2.600	2.598	0.002	19577065	2500.00	2042	164.40- 246.61	190.15
3.017	3.016	0.001	40954161	2500.00	2129	337.81- 506.71	397.78
3.147	3.145	0.002	16960942	2500.00	2066	144.30- 216.45	164.74
3.590	3.590	0.000	12696558	2500.00	2066	106.98- 160.47	123.32
		Average of Peak Amounts =			2073		
28 Aroclor-1260					CAS #: 11096-82-5		
4.788	4.788	0.000	26132305	2500.00	2114	80.00- 120.00	100.00
4.987	4.986	0.001	30429849	2500.00	2157	87.40- 131.10	116.45
5.140	5.140	0.000	28197137	2500.00	2114	85.10- 127.64	107.90
5.685	5.685	0.000	25054028	2500.00	2137	67.08- 100.62	95.87
5.923	5.923	0.000	52374963	2500.00	2186	130.81- 196.21	200.42
		Average of Peak Amounts =			2142		
$ 32 Decachlorobiphenyl					CAS #:		
7.355	7.355	0.000	20784182	150.000	106.6		

BLO 4/05/05



Data File: \\slsvr01\gc_lab\Gcp.i\P0504043.b\PCAL119.D
Date : 04-APR-2005 18:11
Client ID:
Sample Info: ICAL7
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLD
Column diameter: 0.53


Y (x10^6)
Min
1.755
1.992
2.045
2.169
Aroclor-1016
2.429
Aroclor-1016
2.695
2.790
2.815
Aroclor-1016
Aroclor-1016
3.410
Aroclor-1016
3.629
3.845
3.887
3.947
3.987
4.169
4.247
4.390
4.437
4.494
4.695
Aroclor-1260
4.927
Aroclor-1260
Aroclor-1260
5.230
5.565
Aroclor-1260
5.804
5.884
Aroclor-1260
5.985
6.039
6.425
6.495
6.540
6.655
6.909
7.037
7.115
7.190
7.257
7.467
7.589
7.694
7.742
8.070
Data File: \\alsvn01\gc_lab\Gcp.i\P0504048.b\PCBL119.D
Injection Date: 04-APR-2005 18:11
Instrument: Gcp.i
Client Sample ID:
HP6890 GC Data. ECD2B.CH: 1.732 to 8.109 Min

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL120.D Page 1
Report Date: 05-Apr-2005 12:19

STL St. Louis

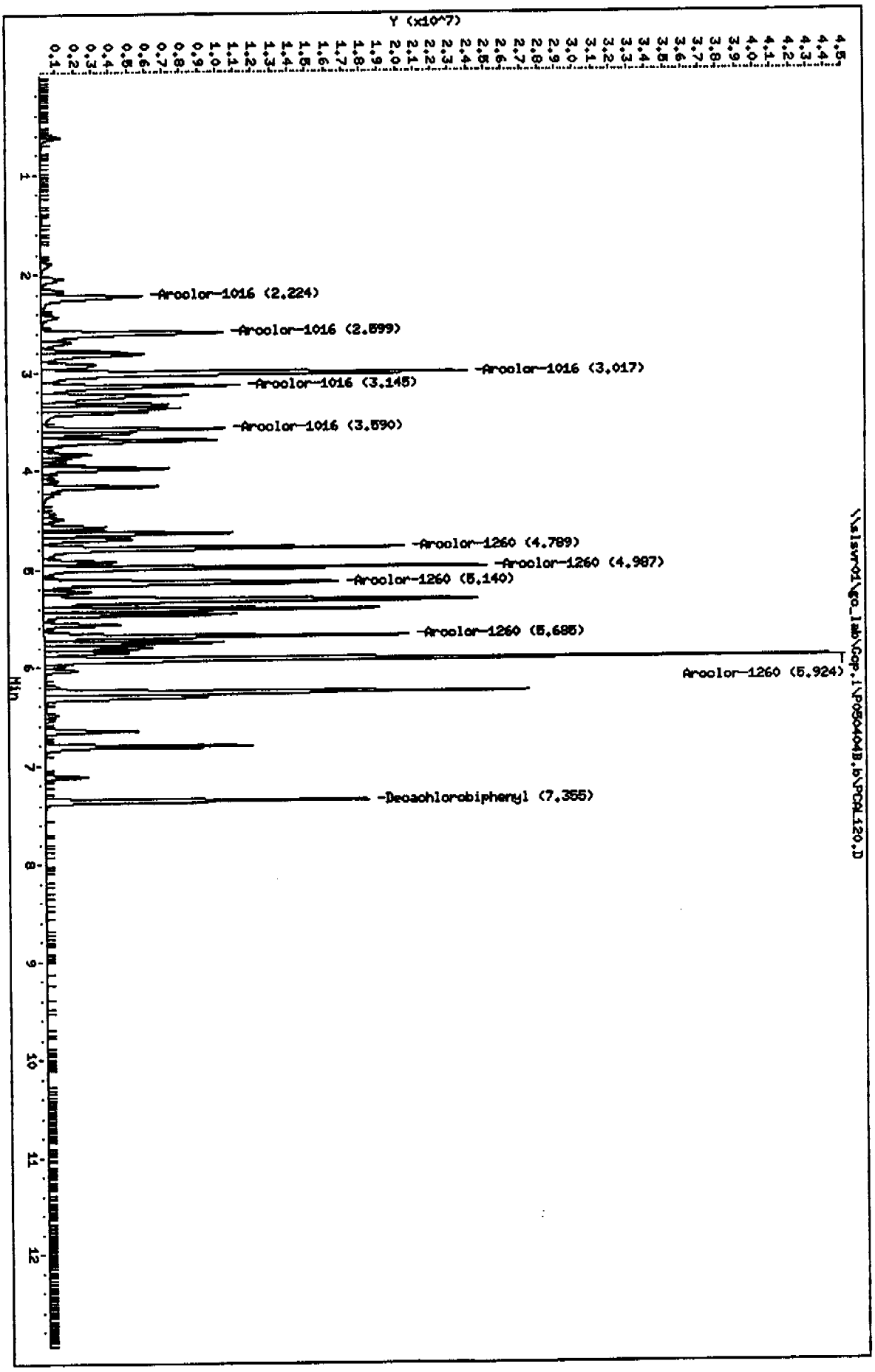
Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL120.D
Lab Smp Id: ICAL8
Inj Date : 04-APR-2005 18:28
Operator : BLO Inst ID: Gcp.i
Smp Info : ICAL8
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:09 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

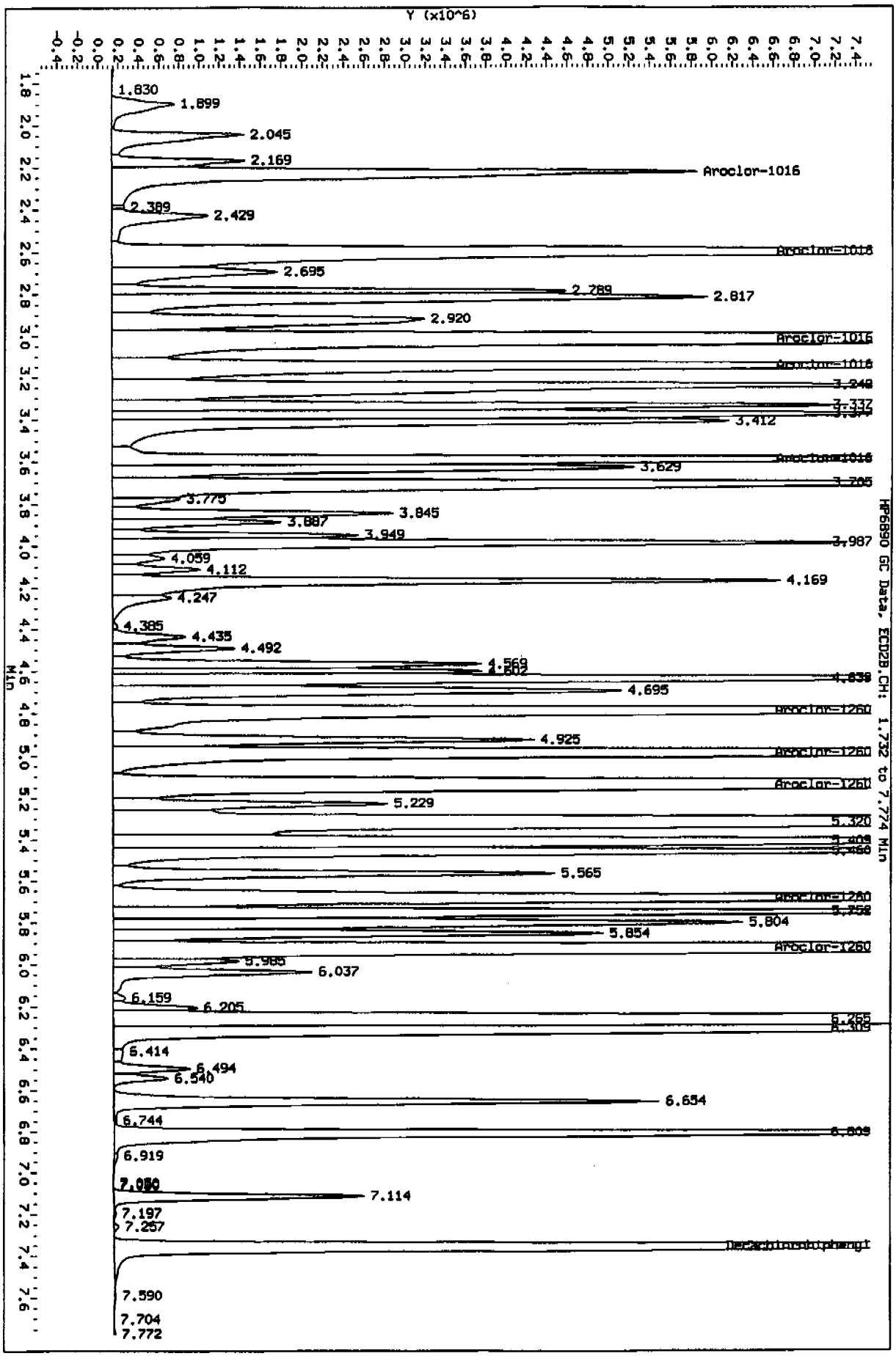
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ng/mL)	TARGET RANGE		RATIO
22 Aroclor-1016					CAS #: 12674-11-2			
2.223	2.223	0.000	15927558	4000.00	3186	80.00-	120.00	100.00
2.598	2.598	0.000	30337718	4000.00	3164	164.40-	246.61	190.47
3.016	3.016	0.000	64203782	4000.00	3338	337.81-	506.71	403.10
3.145	3.145	0.000	26987340	4000.00	3288	144.30-	216.45	169.44
3.590	3.590	0.000	20143298	4000.00	3277	106.98-	160.47	126.47
		Average of Peak Amounts =			3251			
28 Aroclor-1260					CAS #: 11096-82-5			
4.788	4.788	0.000	40968762	4000.00	3315	80.00-	120.00	100.00
4.986	4.986	0.000	46695023	4000.00	3310	87.40-	131.10	113.98
5.140	5.140	0.000	45061279	4000.00	3379	85.10-	127.64	109.99
5.685	5.685	0.000	39875092	4000.00	3401	67.08-	100.62	97.33
5.923	5.923	0.000	83399858	4000.00	3477	130.81-	196.21	203.33
		Average of Peak Amounts =			3376			
$ 32 Decachlorobiphenyl					CAS #:			
7.355	7.355	0.000	33612143	200.000	172.4			

BLO 4/05/05



Data File: \\slsvr01\go_lab\Gcp.1\P0504043.b\PCAL120.D
Date : 04-APR-2005 18:28
Client ID:
Sample Info: ICAL8
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.1
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
Data File: \\slavr01\gc_lab\Gcp.i\P050404B.b\PCAL120.D
Injection Date: 04-APR-2005 18:28
Instrument: Gcp.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 1.732 to 7.774 Min
1.830
1.899
2.045
2.169
Aroclor-1016
2.389
2.429
2.695
2.789
2.817
2.920
3.412
3.629
3.775
3.845
3.887
3.949
3.987
4.059
4.112
4.169
4.247
4.385
4.435
4.492
4.695
4.925
5.229
5.565
5.804
5.854
5.985
6.037
6.159
6.205
6.414
6.494
6.540
6.654
6.744
6.919
7.114
7.197
7.257
7.590
7.704
7.772

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Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b/PICV121.D
Report Date: 04/05/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PICV121.D
Analysis Type: SOIL

Injection Date: 04-APR-2005 19:00
Lab Sample ID: ICV
Method File: \\slsvr01\gc_lab\Gcp.i\P050404B.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
23 Aroclor-1016	1000.0000	904.0362	9.6	15.0	
29 Aroclor-1260	1000.0000	888.5741	11.1	15.0	
34 Decachlorobiphenyl	~~50.0000~~	~~0.0000~~	~~100.0~~	~~15.0~~	<-

BLO 4/05/05

LOT# F5D220273

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PICV121.D
Report Date: 05-Apr-2005 12:29

STL St. Louis

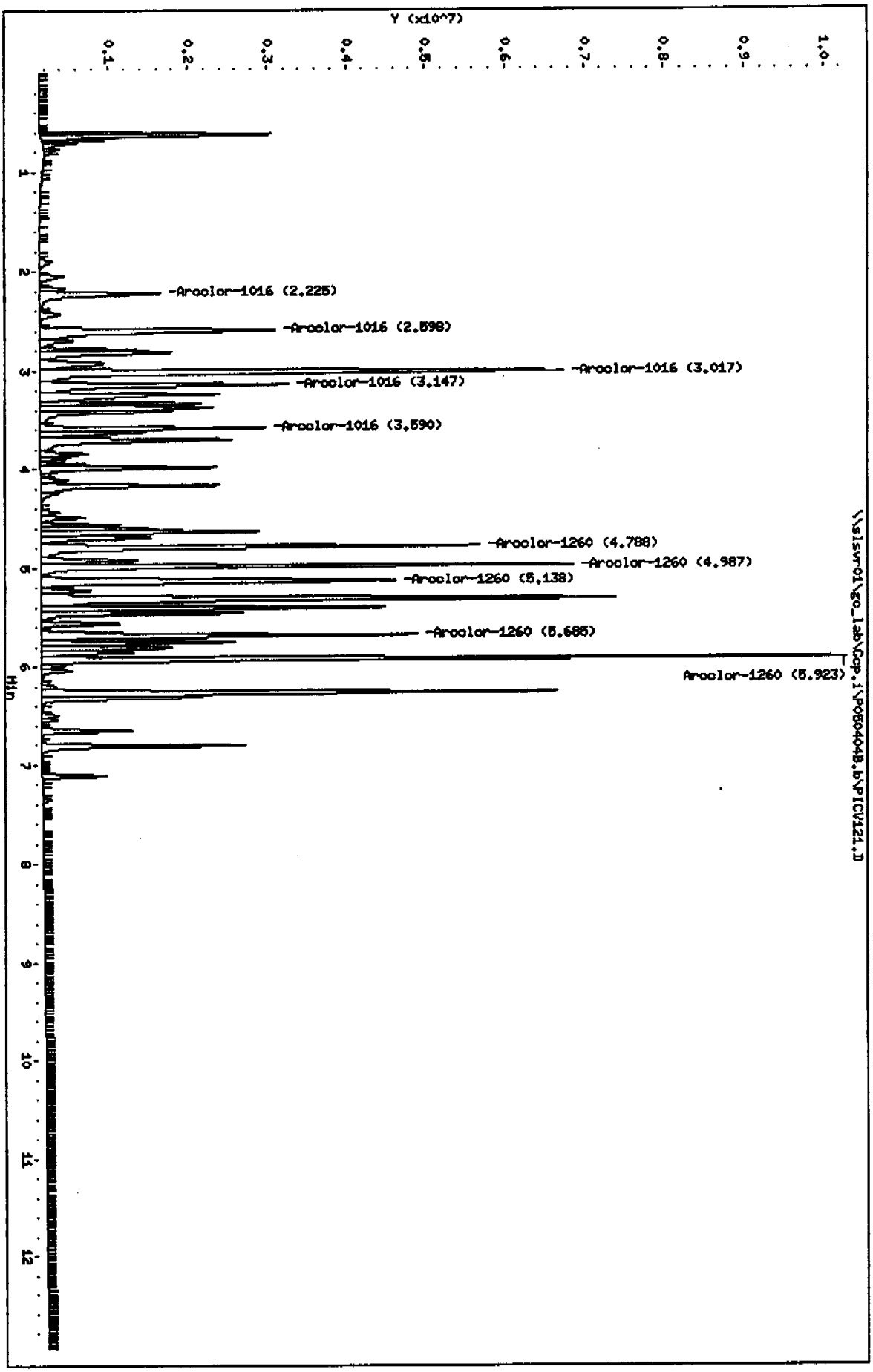
Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PICV121.D
Lab Smp Id: ICV
Inj Date : 04-APR-2005 19:00
Operator : BLO Inst ID: Gcp.i
Smp Info : ICV
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:29 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

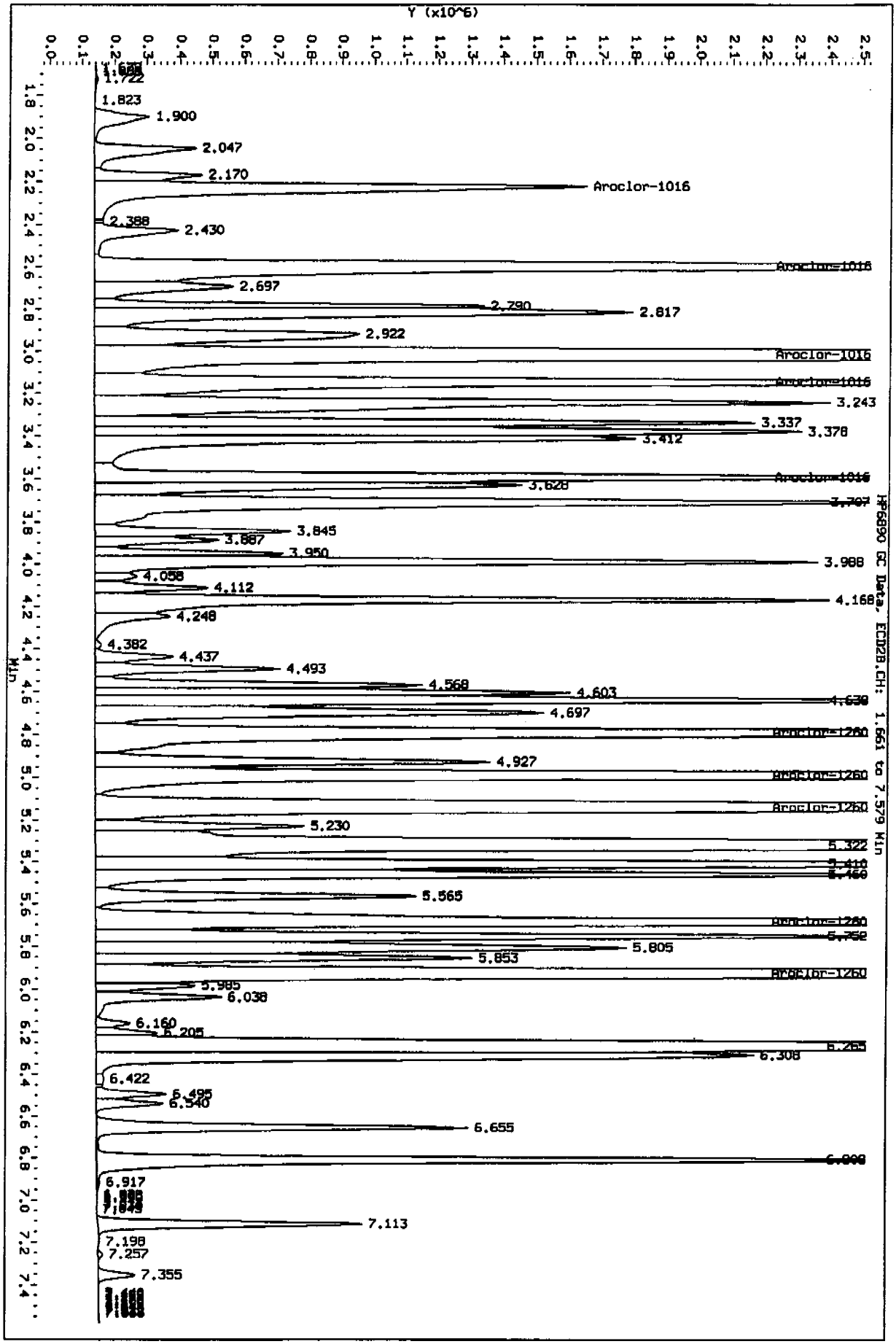
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.225	2.223	0.002	4219580	1000.00	844.0	80.00- 120.00	100.00
2.598	2.598	0.000	8671421	1000.00	904.4	164.40- 246.61	205.50
3.016	3.016	0.000	17817654	1000.00	926.4	337.81- 506.71	422.26
3.146	3.145	0.001	7611061	1000.00	927.3	144.30- 216.45	180.37
3.590	3.590	0.000	5642679	1000.00	918.1	106.98- 160.47	133.73
	Average of Peak Amounts =				904		
28 Aroclor-1260					CAS #: 11096-82-5		
4.788	4.788	0.000	11757188	1000.00	951.3	80.00- 120.00	100.00
4.986	4.986	0.000	12844934	1000.00	910.5	87.40- 131.10	109.25
5.138	5.140	-0.002	12506210	1000.00	937.8	85.10- 127.64	106.37
5.685	5.685	0.000	9858367	1000.00	840.9	67.08- 100.62	83.85
5.923	5.923	0.000	19223939	1000.00	802.3	130.81- 196.21	163.51
	Average of Peak Amounts =				888.6		

BLO 4/05/05



Data File: \\slsvr01\go_lab\Gcp.i\P0504048.b\PICV121.D
Date : 04-APR-2005 19:00
Client ID:
Sample Info: ICV
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
Data File: \\slsvr01\gc_lab\Gcp.i\P0504048.b\PICV121.D
Injection Date: 04-APR-2005 19:00
Instrument: Gcp.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 1.661 to 7.579 Min
1.722
1.823
1.900
2.047
2.170
Aroclor-1016
2.388
2.430
2.697
2.790
2.817
2.922
3.243
3.337
3.378
3.412
3.628
3.845
3.887
3.950
3.988
4.058
4.112
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4.248
4.382
4.437
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5.853
5.985
6.038
6.160
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6.655
6.917
7.113
7.198
7.257
7.355

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL122.D
Report Date: 05-Apr-2005 12:19

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL122.D
Lab Smp Id: 1232
Inj Date : 04-APR-2005 19:16
Operator : BLO Inst ID: Gcp.i
Smp Info : 1232
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:09 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 12 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1232.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

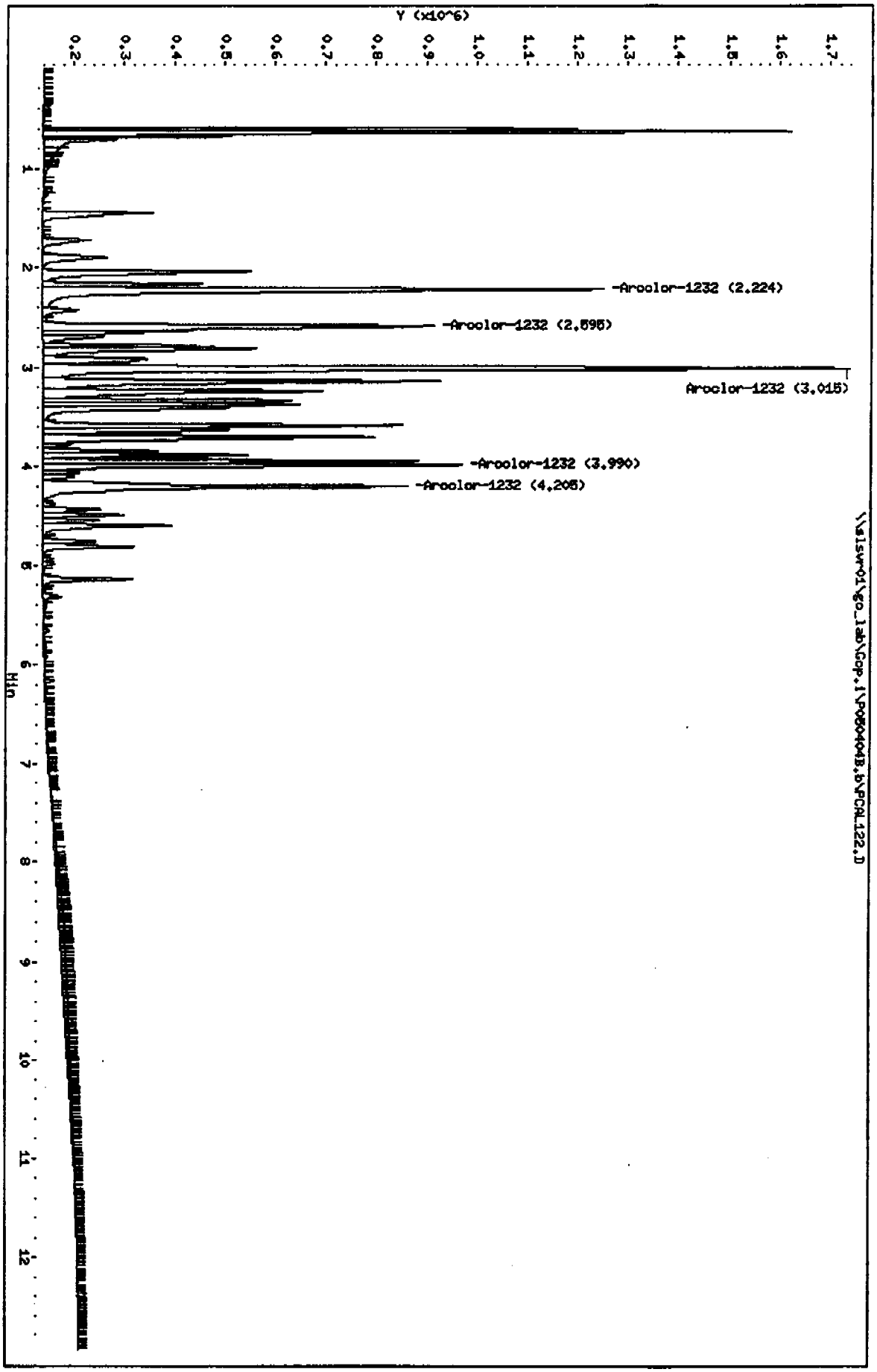
				AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
RT	EXP RT	DLT RT	RESPONSE				
24 Aroclor-1232					CAS #: 1114-16-5		
2.223	2.223	0.000	2982752	500.000	500.0	80.00- 120.00	100.00(M)
2.595	2.595	0.000	2078084	500.000	500.0	55.74- 83.60	69.67
3.015	3.015	0.000	4225077	500.000	500.0	113.32- 169.98	141.65
3.990	3.990	0.000	1626831	500.000	500.0	43.63- 65.45	54.54
4.205	4.205	0.000	2113658	500.000	500.0	56.69- 85.04	70.86
			Average of Peak Amounts =		500		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 4/05/05

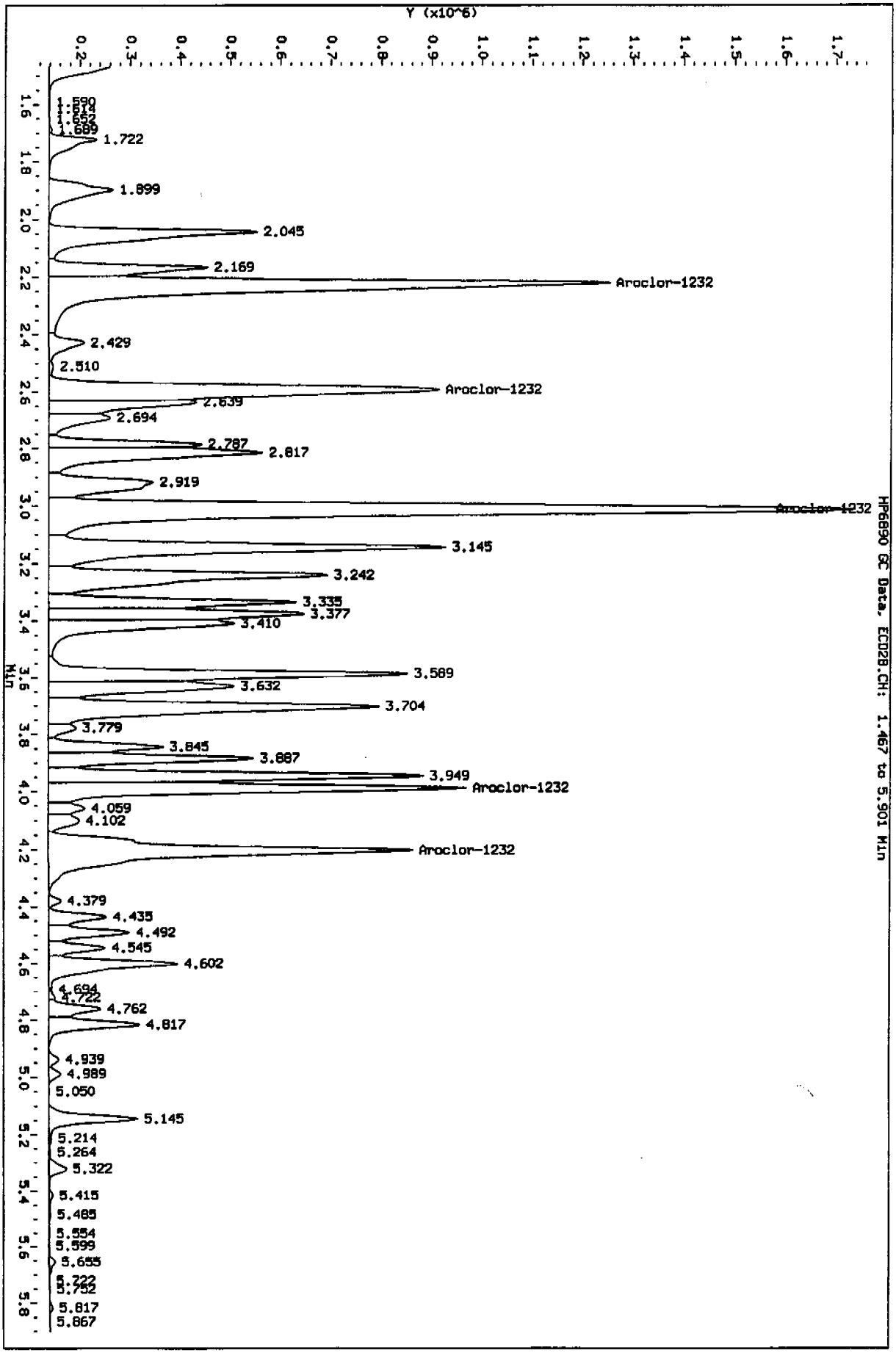
QC Flag Legend

M - Compound response manually integrated.



Data File: \\alsvr01\go_lab\Gcp.i\P050404B.b\PCAL122.D
Date : 04-APR-2005 19:16
Client ID:
Sample Info: 1232
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
Data File: \\slsvr01\gc_lab\Gcp.1\P050404B.b\PCAL122.D
Injection Date: 04-APR-2005 19:16
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 1.467 to 5.901 Min
1.590
1.722
1.899
2.045
2.169
Aroclor-1232
2.429
2.510
Aroclor-1232
2.639
2.694
2.787
2.817
2.919
Aroclor-1232
3.145
3.242
3.335
3.377
3.410
3.589
3.632
3.704
3.779
3.845
3.887
3.949
Aroclor-1232
4.059
4.102
Aroclor-1232
4.379
4.435
4.492
4.545
4.602
4.694
4.722
4.762
4.817
4.939
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5.485
5.554
5.599
5.655
5.722
5.752
5.817
5.867

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL123.D Page 1
Report Date: 05-Apr-2005 12:20

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL123.D
Lab Smp Id: 1242
Inj Date : 04-APR-2005 19:32
Operator : BLO Inst ID: Gcp.i
Smp Info : 1242
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:09 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 13 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1242.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

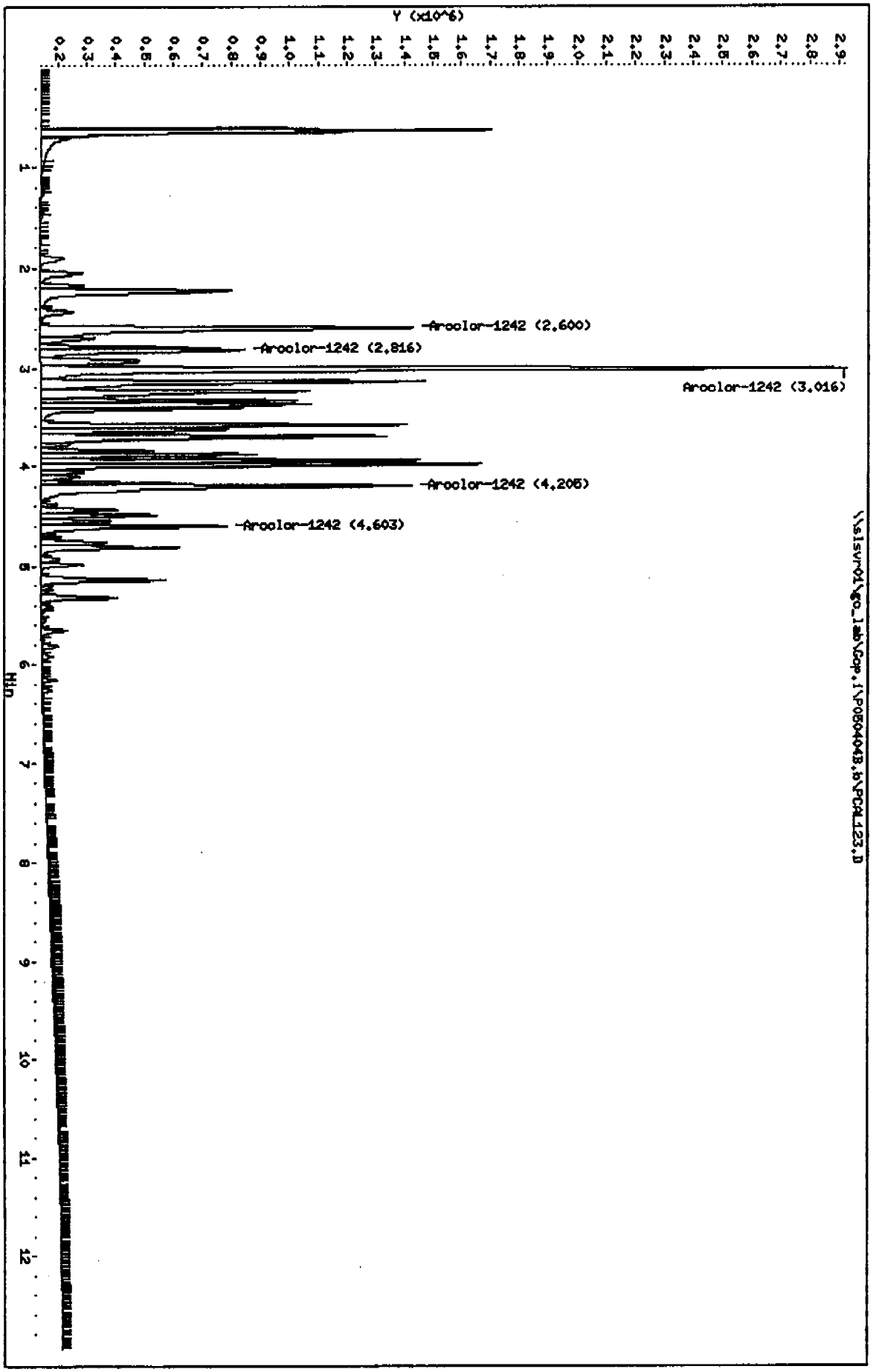
			AMOUNTS				
RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
25 Aroclor-1242					CAS #: 53469-21-9		
2.599	2.599	0.000	3825858	500.000	500.0	80.00- 120.00	100.00(M)
2.816	2.816	0.000	1965464	500.000	500.0	41.10- 61.65	51.37
3.016	3.016	0.000	7509788	500.000	500.0	157.03- 235.55	196.29
4.204	4.204	0.000	3601525	500.000	500.0	75.31- 112.96	94.14
4.603	4.603	0.000	1433658	500.000	500.0	29.98- 44.97	37.47
		Average of Peak Amounts =			500		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 4/05/05

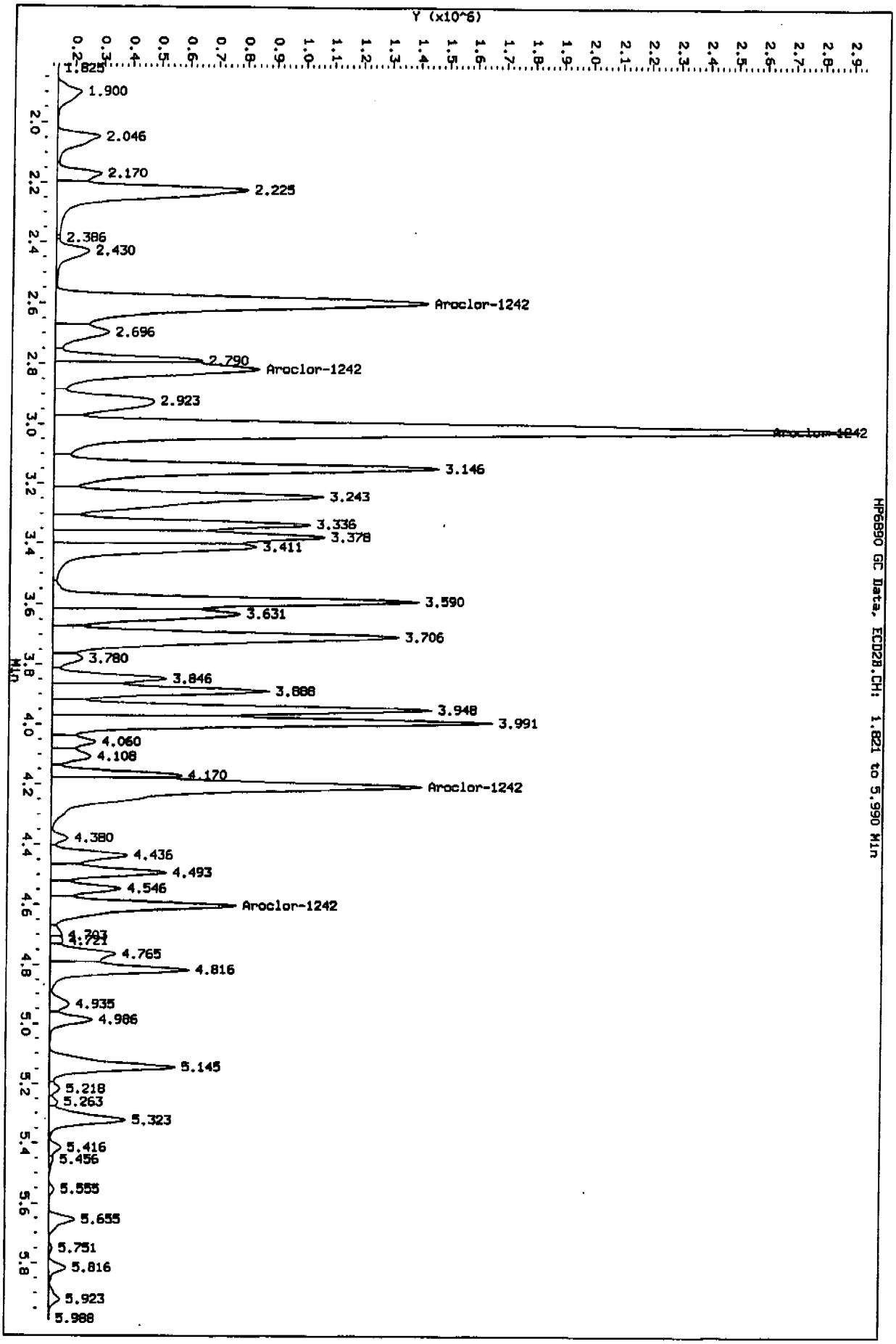
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\go_lab\Gcp.i\P0504048.b\PCAL123.D
Date : 04-APR-2005 19:32
Client ID:
Sample Info: 1242
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
1.825
1.900
2.046
2.170
2.225
2.386
2.430
Aroclor-1242
2.696
2.790
Aroclor-1242
2.923
Aroclor-1242
3.146
3.243
3.336
3.378
3.411
3.590
3.631
3.706
3.780
3.846
3.888
3.948
3.991
4.060
4.108
4.170
Aroclor-1242
4.380
4.436
4.493
4.546
Aroclor-1242
4.721
4.765
4.816
4.935
4.986
5.145
5.218
5.263
5.323
5.416
5.456
5.555
5.655
5.751
5.816
5.923
5.988
HP6890 GC Data, ECD2B.CH: 1.821 to 5.990 Min
Data File: \\slsvr01\gc_lab\Gcp.1\P050404B.b\PCAL123.D
Injection Date: 04-APR-2005 19:32
Instrument: Gcp.1
Client Sample ID:

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL124.D
Report Date: 05-Apr-2005 12:20

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL124.D
Lab Smp Id: 1248
Inj Date : 04-APR-2005 19:48
Operator : BLO Inst ID: Gcp.i
Smp Info : 1248
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:09 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1248.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

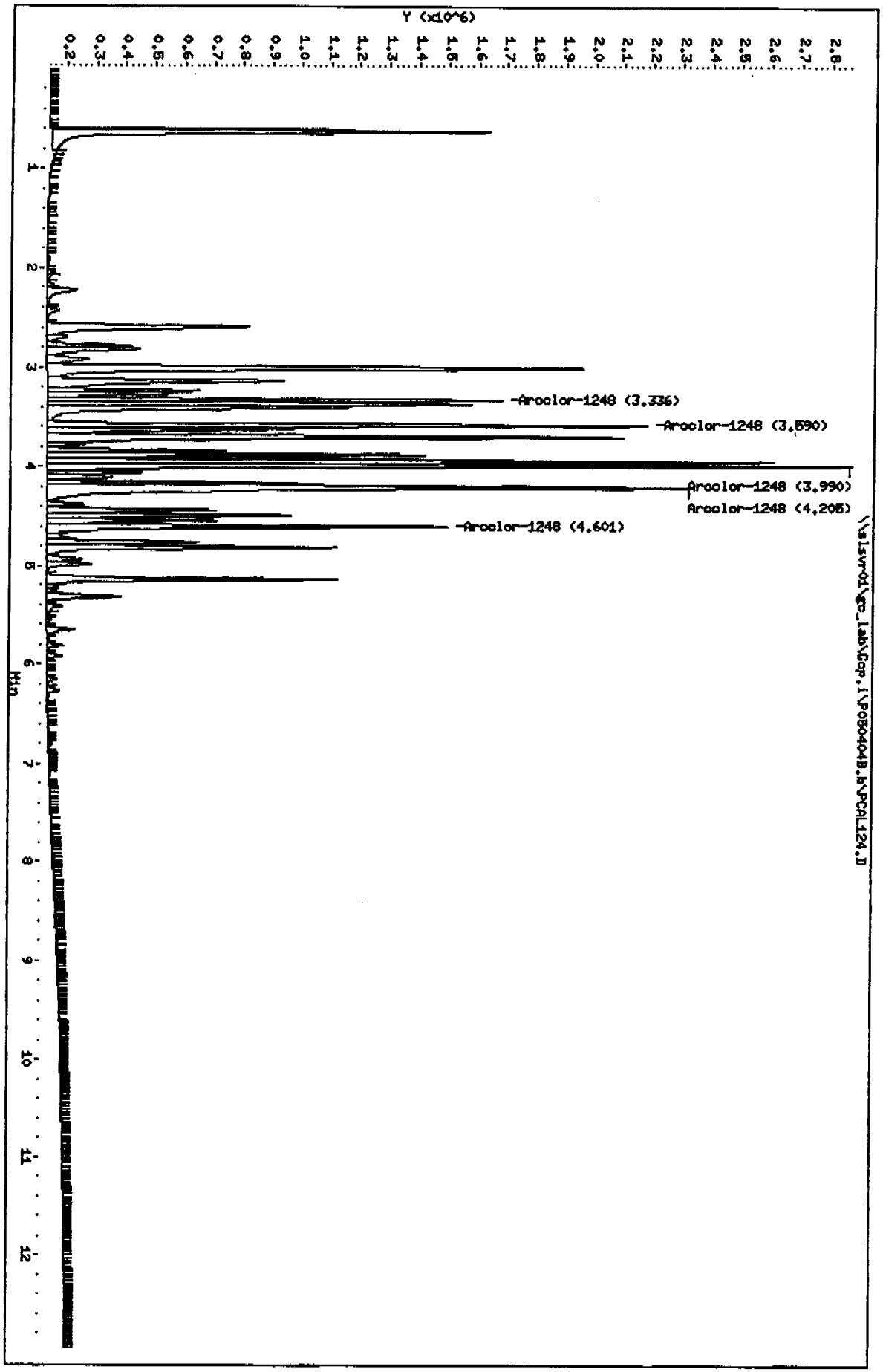
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
26 Aroclor-1248					CAS #: 12672-29-6		
3.336	3.336	0.000	2939031	500.000	500.0	80.00- 120.00	100.00(M)
3.589	3.589	0.000	3960174	500.000	500.0	107.80- 161.69	134.74
3.989	3.989	0.000	5499498	500.000	500.0	149.70- 224.54	187.12
4.204	4.204	0.000	6613231	500.000	500.0	180.01- 270.02	225.01
4.601	4.601	0.000	2877767	500.000	500.0	78.33- 117.50	97.92
		Average of Peak Amounts =			500		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other _____

BLO 4/05/05

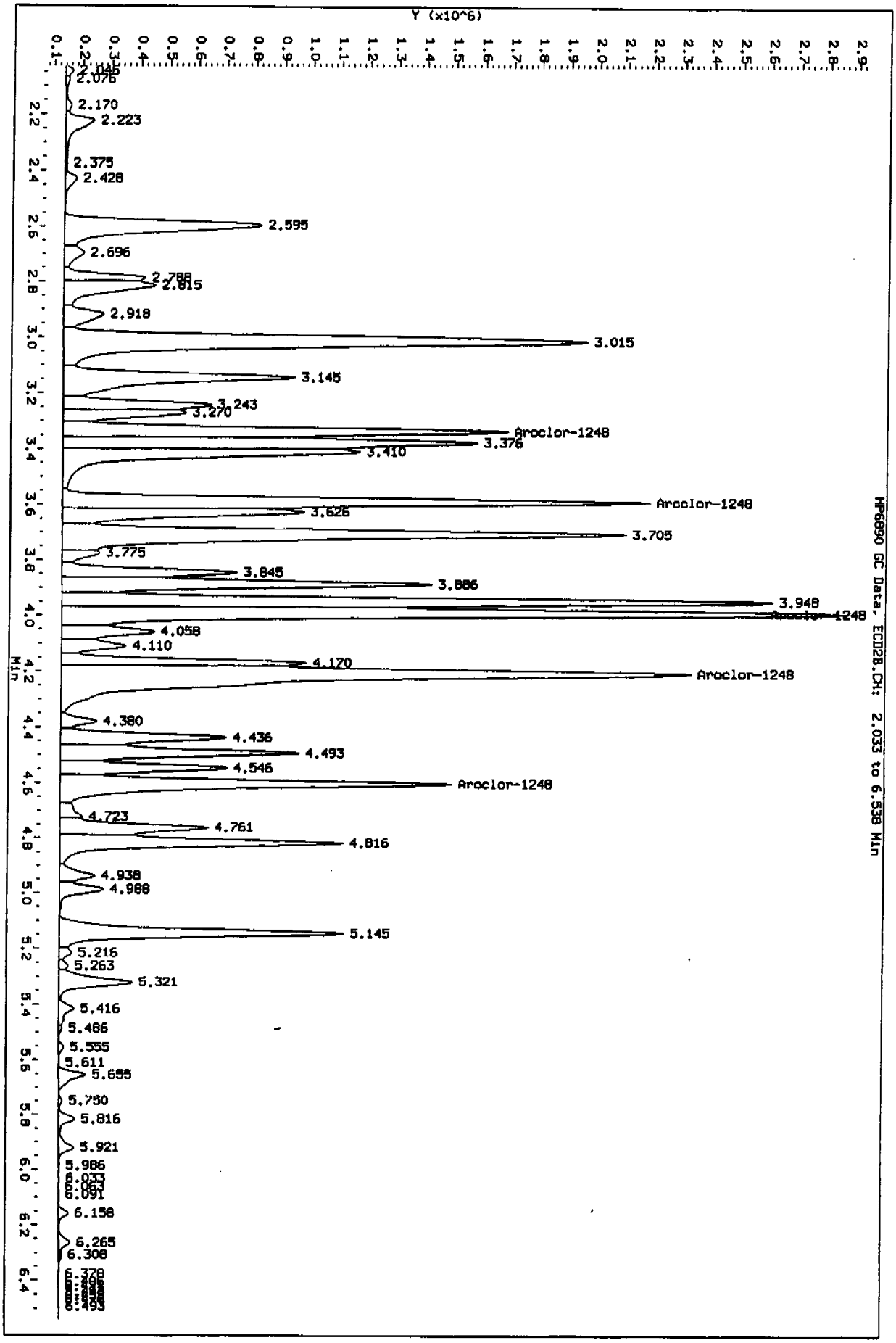
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\gc_lab\Gcp.i\P080404B.b\PCAL124.D
Date : 04-APR-2008 19:48
Client ID:
Sample Info: 1248
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLD
Column diameter: 0.53


Y (x10^6)
Min
Data File: \\elsvr01\gc_lab\Gcp.i\P050404B.b\PCAL124.D
Injection Date: 04-APR-2005 19:48
Instrument: Gcp.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 2.033 to 6.538 Min
2.045
2.076
2.170
2.223
2.375
2.428
2.595
2.696
2.788
2.815
2.918
3.015
3.145
3.243
3.270
Aroclor-1248
3.376
3.410
Aroclor-1248
3.626
3.705
3.775
3.845
3.886
3.948
Aroclor-1248
4.058
4.110
4.170
Aroclor-1248
4.380
4.436
4.493
4.546
Aroclor-1248
4.723
4.761
4.816
4.938
4.988
5.145
5.216
5.263
5.321
5.416
5.486
5.555
5.611
5.655
5.750
5.816
5.921
5.986
6.033
6.091
6.156
6.265
6.308
6.493

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL125.D
Report Date: 05-Apr-2005 12:20

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL125.D
Lab Smp Id: 1254
Inj Date : 04-APR-2005 20:05
Operator : BLO Inst ID: Gcp.i
Smp Info : 1254
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:09 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 15 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar2154.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

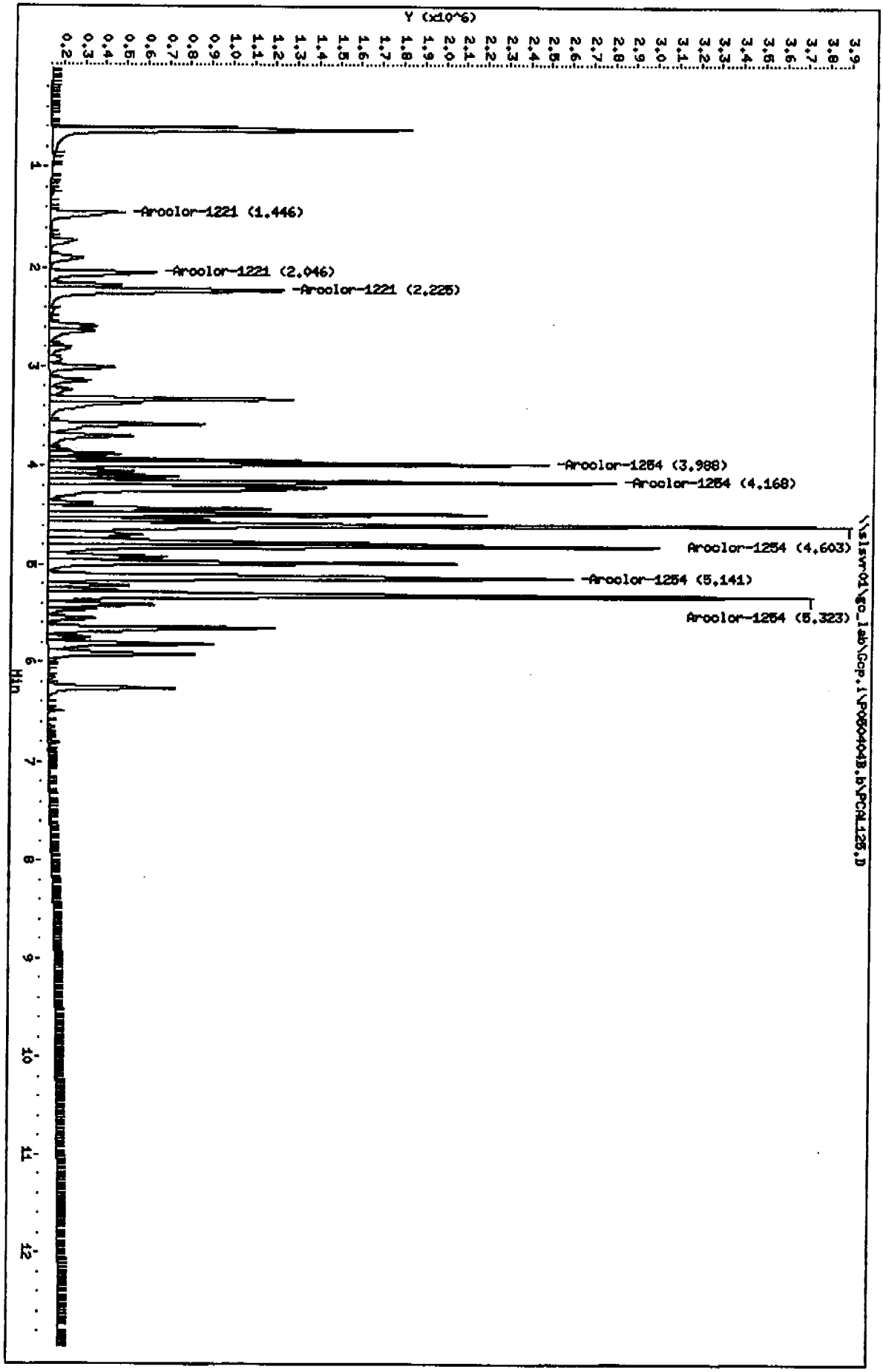
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
23 Aroclor-1221					CAS #: 11104-28-2		
1.446	1.446	0.000	1020950	500.000	500.0	80.00- 120.00	100.00(M)
2.046	2.046	0.000	1341501	500.000	500.0	105.12- 157.68	131.40
2.224	2.224	0.000	3282536	500.000	500.0	257.21- 385.82	321.52
Average of Peak Amounts =					500		
27 Aroclor-1254					CAS #: 11097-69-1		
3.987	3.987	0.000	4793873	500.000	500.0	80.00- 120.00	100.00(M)
4.167	4.167	0.000	5091216	500.000	500.0	84.96- 127.44	106.20
4.602	4.602	0.000	8095826	500.000	500.0	135.10- 202.65	168.88
5.141	5.141	0.000	6595365	500.000	500.0	110.06- 165.09	137.58
5.322	5.322	0.000	8341616	500.000	500.0	139.20- 208.81	174.01
Average of Peak Amounts =					500		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other_____

BLO 4/05/05

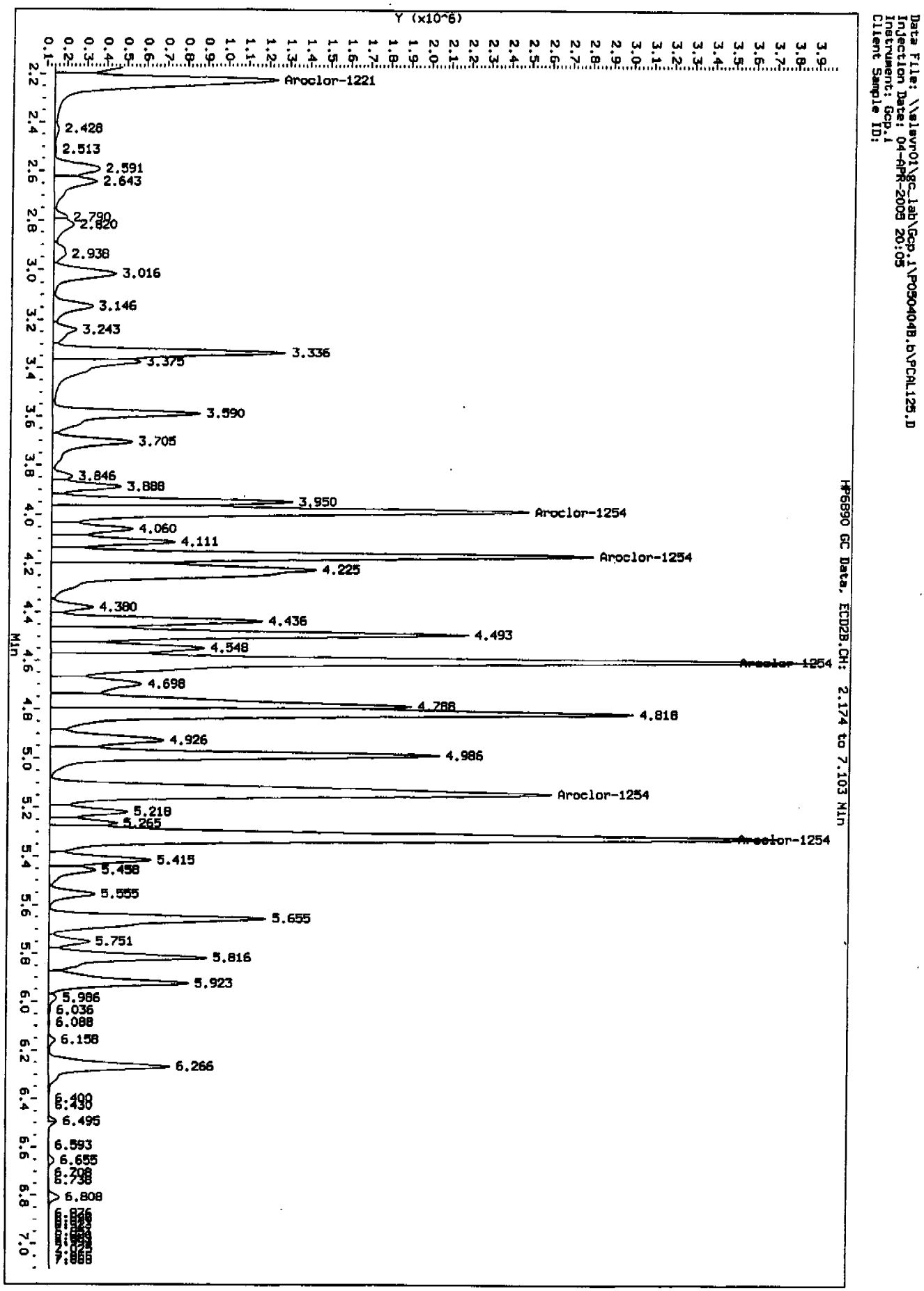
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\gc_lab\Gcp.i\P0504043.b\PCBL125.D
Date : 04-APR-2005 20:05
Client ID:
Sample Info: 1254
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
Aroclor-1221
2.428
2.513
2.591
2.643
2.790
2.820
2.938
3.016
3.146
3.243
3.336
3.375
3.590
3.705
3.846
3.888
3.950
Aroclor-1254
4.060
4.111
Aroclor-1254
4.225
4.380
4.436
4.493
4.548
Aroclor-1254
4.698
4.788
4.818
4.926
4.986
Aroclor-1254
5.218
5.265
Aroclor-1254
5.415
5.458
5.555
5.655
5.751
5.816
5.923
5.986
6.036
6.088
6.158
6.266
6.400
6.430
6.495
6.593
6.655
6.808
HP6890 GC Data, ECD2B.CH: 2.174 to 7.103 Min
Data File: \\slsvr01\gc_lab\Gcp.1\P050404B.b\PCAL125.D
Injection Date: 04-APR-2005 20:05
Instrument: Gcp.1
Client Sample ID:

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL126.D
Report Date: 05-Apr-2005 12:20

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Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL126.D
Lab Smp Id: 1262
Inj Date : 04-APR-2005 20:21
Operator : BLO Inst ID: Gcp.i
Smp Info : 1262
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:09 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 16 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1262.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

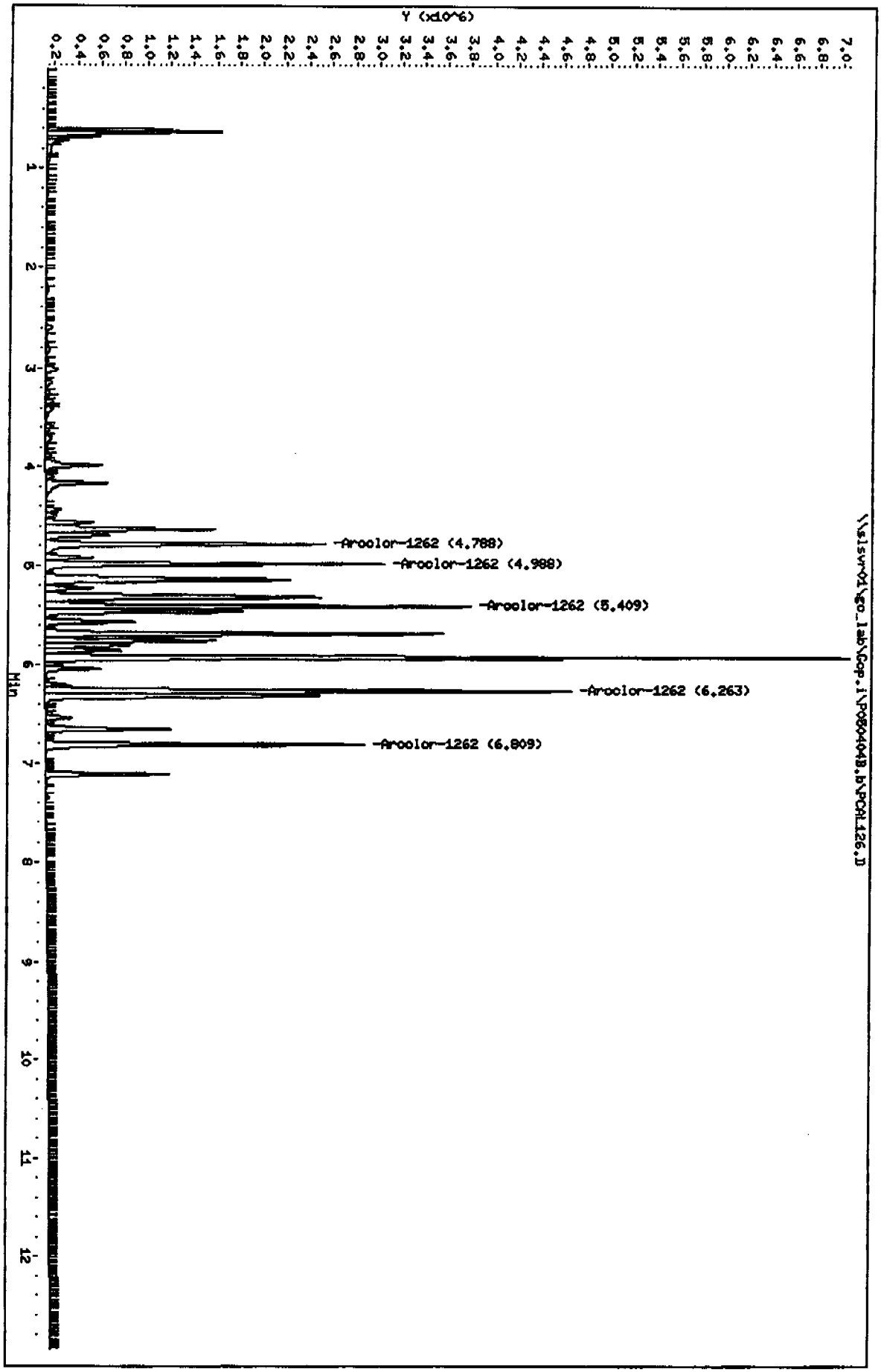
				AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
RT	EXP RT	DLT RT	RESPONSE				
35 Aroclor-1262					CAS #: 37324-23-5		
4.787	4.787	0.000	4833174	500.000	500.0	80.00- 120.00	100.00(M)
4.987	4.987	0.000	5604560	500.000	500.0	92.77- 139.15	115.96
5.409	5.409	0.000	7051953	500.000	500.0	116.73- 175.09	145.91
6.262	6.262	0.000	9698541	500.000	500.0	160.53- 240.80	200.67
6.809	6.809	0.000	5298016	500.000	500.0	87.69- 131.54	109.62
		Average of Peak Amounts =			500		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 4/05/05

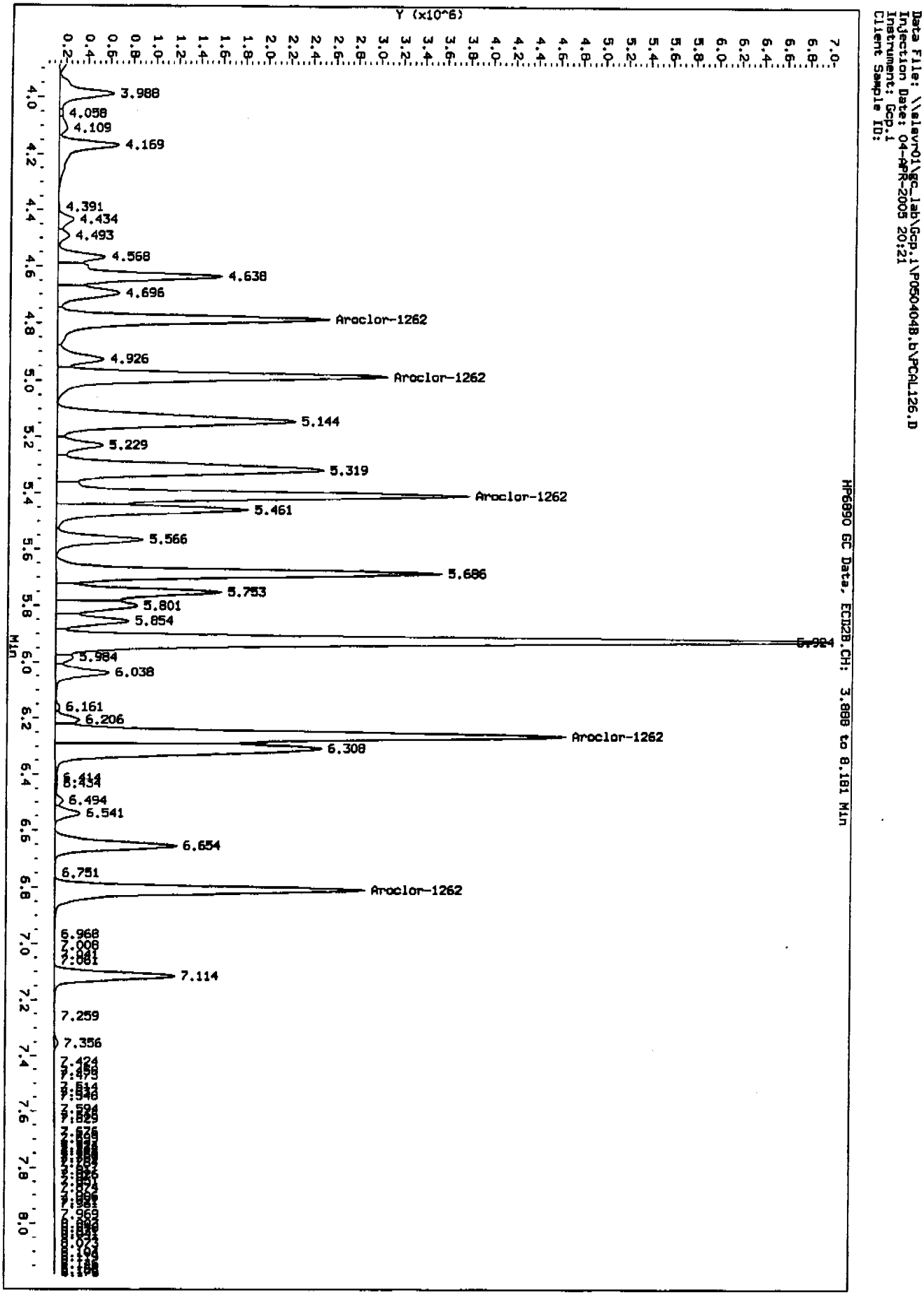
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\go_lab\Gcp.i\P0804048.b\PCAL126.D
Date : 04-APR-2008 20:21
Client ID:
Sample Info: 1262
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
3.988
4.058
4.109
4.169
4.391
4.434
4.493
4.568
4.638
4.696
Aroclor-1262
4.926
Aroclor-1262
5.144
5.229
5.319
Aroclor-1262
5.461
5.566
5.686
5.753
5.801
5.854
5.924
5.984
6.038
6.161
6.206
Aroclor-1262
6.308
6.494
6.541
6.654
6.751
Aroclor-1262
7.114
7.259
7.356
Data File: \\elavr01\gc_lab\Gcp.i\P050404B.b\PCAL126.D
Injection Date: 04-APR-2005 20:21
Instrument: Gcp.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 3.888 to 8.181 Min

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL127.D
Report Date: 05-Apr-2005 12:20

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Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL127.D
Lab Smp Id: 1268
Inj Date : 04-APR-2005 20:37
Operator : BLO Inst ID: Gcp.i
Smp Info : 1268
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:09 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 17 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1268.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

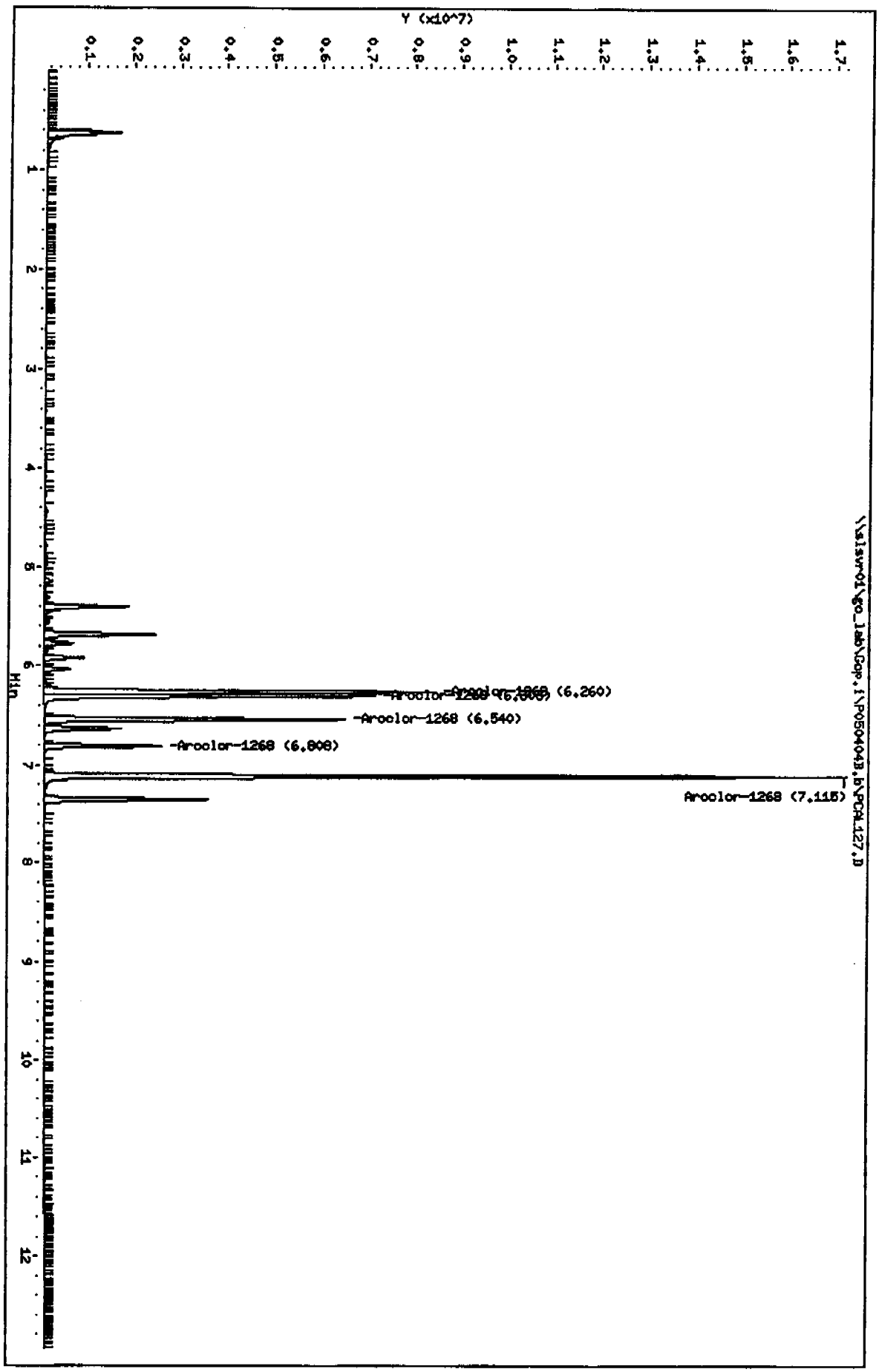
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
36 Aroclor-1268					CAS #: 11100-14-4		
6.259	6.259	0.000	15272244	500.000	500.0	80.00- 120.00	100.00(M)
6.303	6.303	0.000	14648534	500.000	500.0	76.73- 115.10	95.92
6.539	6.539	0.000	11909662	500.000	500.0	62.39- 93.58	77.98
6.808	6.808	0.000	4640307	500.000	500.0	24.31- 36.46	30.38
7.114	7.114	0.000	31506871	500.000	500.0	165.04- 247.56	206.30
		Average of Peak Amounts =			500		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other _____

BLO 4/05/05

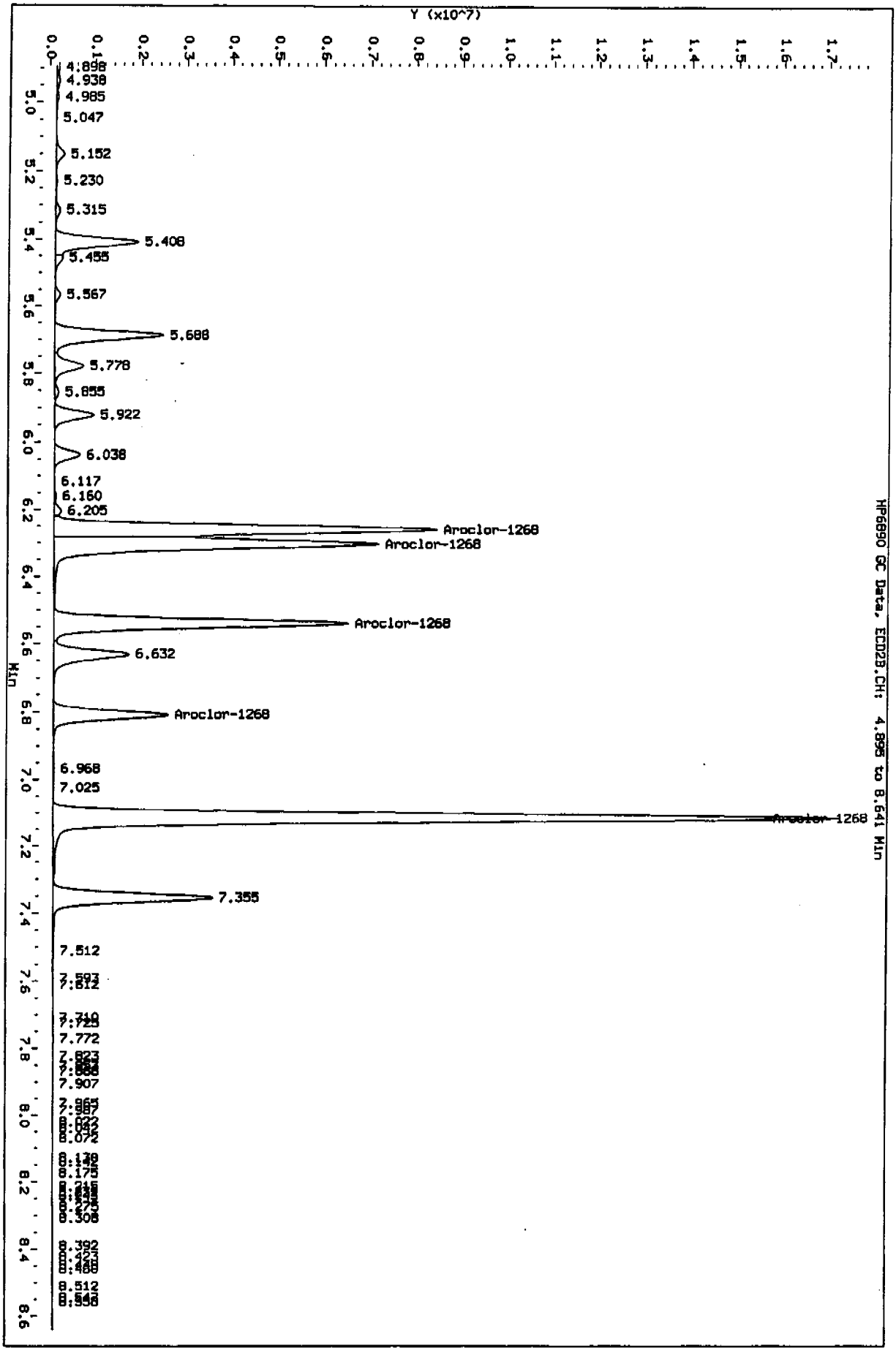
QC Flag Legend

M - Compound response manually integrated.



Data file: \\slsvr01\go_lab\Gop.i\P050403.b\PCAL127.D
Date : 04-APR-2005 20:37
Client ID:
Sample Info: 1268
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gop.i
Operator: BLO
Column diameter: 0.53


Y (x10^7)
Min
4.898
4.938
4.985
5.047
5.152
5.230
5.315
5.408
5.455
5.567
5.688
5.778
5.855
5.922
6.038
6.117
6.160
6.205
Aroclor-1268
Aroclor-1268
Aroclor-1268
6.632
Aroclor-1268
6.968
7.025
Aroclor-1268
7.355
7.512
7.772
7.907
8.072
8.308
8.392
8.512
HP6890 GC Data, ECD2B.CH: 4.895 to 8.641 Min
Data File: \\slavr01\gc_lab\Gcp.1\P050404B.b\PCAL127.D
Injection Date: 04-APR-2005 20:37
Instrument: Gcp.1
Client Sample ID:

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b/PCAL927.D
Report Date: 05/10/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PCAL927.D
Analysis Type: SOIL

Injection Date: 09-MAY-2005 15:39
Lab Sample ID: CCAL1000
Method File: \\slsvr01\gc_lab\Gcp.i\P050509A.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	924.7255	7.5	15.0
29 Aroclor-1260	1000.0000	956.0039	4.4	15.0
34 Decachlorobiphenyl	50.0000	49.3681	1.3	15.0

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL927.D Page 1
Report Date: 10-May-2005 09:45

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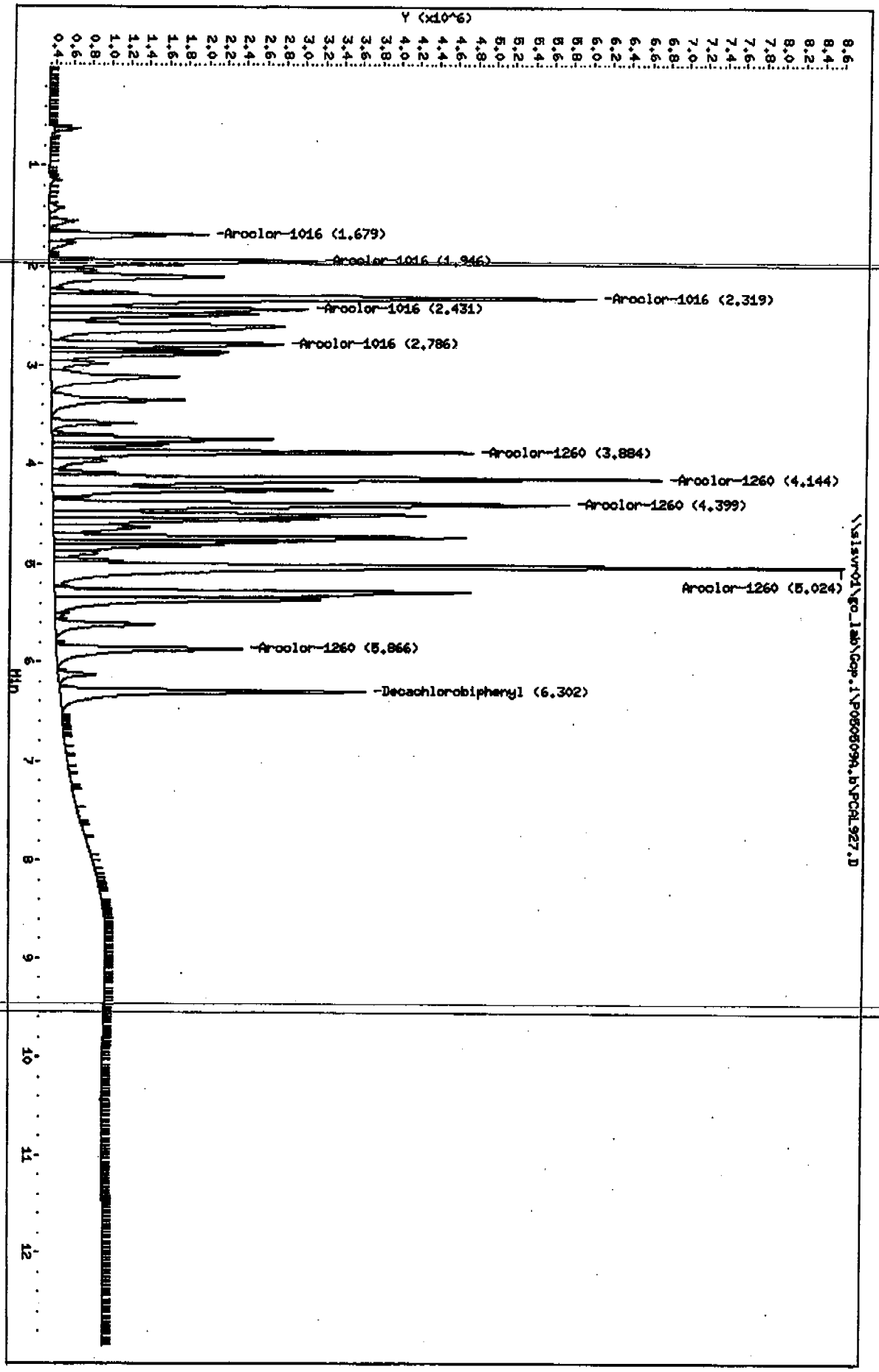
Data file : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL927.D
Lab Smp Id: CCAL1000
Inj Date : 09-MAY-2005 15:39
Operator : BLO Inst ID: Gcp.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Meth Date : 10-May-2005 09:43 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

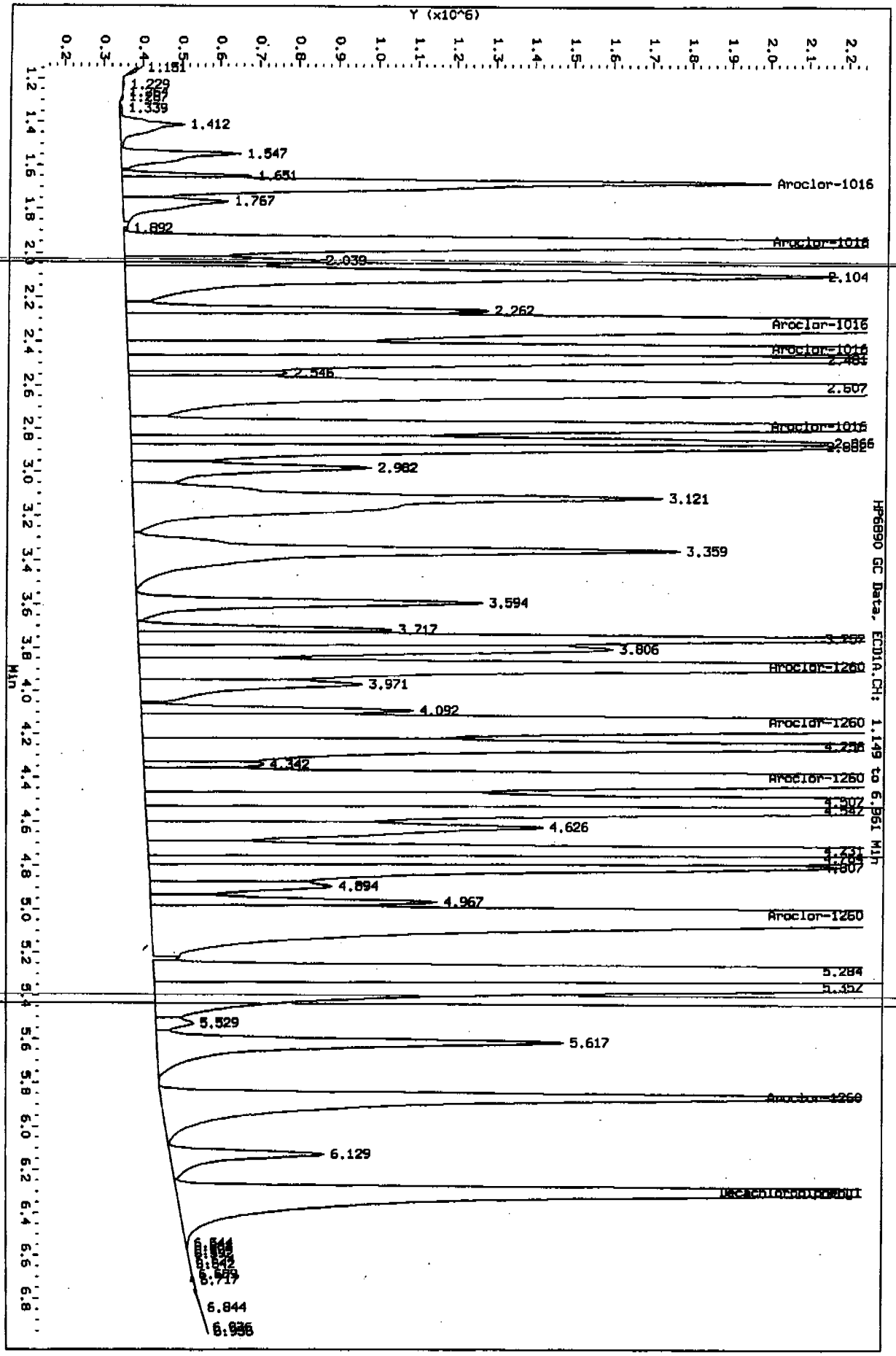
Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.678	1.668	0.010	4281214	1000.00	876.6	80.00- 120.00	100.00
1.945	1.933	0.012	8266976	1000.00	904.3	154.48- 231.72	193.10
2.318	2.303	0.015	19582445	1000.00	957.3	365.92- 548.88	457.40
2.430	2.413	0.017	7197204	1000.00	962.5	134.49- 201.73	168.11
2.785	2.768	0.017	7349951	1000.00	922.8	137.34- 206.01	171.68
		Average of Peak Amounts =			924.7		
28 Aroclor-1260					CAS #: 11096-82-5		
3.883	3.896	-0.013	11124804	1000.00	931.9	80.00- 120.00	100.00
4.143	4.156	-0.013	19358801	1000.00	927.7	139.21- 208.82	174.01
4.398	4.412	-0.014	17041997	1000.00	929.6	122.55- 183.83	153.19
5.023	5.039	-0.016	27183574	1000.00	1019	195.48- 293.22	244.35
5.865	5.882	-0.017	6557960	1000.00	971.4	47.16- 70.74	58.95
		Average of Peak Amounts =			956		
$ 32 Decachlorobiphenyl					CAS #:		
6.302	6.273	0.029	9988681	50.0000	49.37		

BLO 5/10/05


Y (x10^6)
Min
-Aroclor-1016 (1.679)
-Aroclor-1016 (1.946)
-Aroclor-1016 (2.319)
-Aroclor-1016 (2.431)
-Aroclor-1016 (2.786)
-Aroclor-1260 (3.884)
-Aroclor-1260 (4.144)
-Aroclor-1260 (4.399)
-Aroclor-1260 (5.024)
-Aroclor-1260 (5.866)
-Decachlorobiphenyl (6.302)
\\slsvr01\gc_lab\Gcp.i\P060609A.b\PCAL927.D
Data File: \\slsvr01\gc_lab\Gcp.i\P060609A.b\PCAL927.D
Date : 09-MAY-2006 15:39
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Data File: \\stlsvr01\gc_lab\Gcp_1\P050509A.b\PCAL927.D
Injection Date: 09-MAY-2005 15:39
Instrument: Gcp.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 1.149 to 6.961 Min
Min
1.151
1.229
1.339
1.412
1.547
1.651
Aroclor-1016
1.767
1.892
2.039
2.104
2.262
Aroclor-1016
2.546
2.607
Aroclor-1016
2.982
3.121
3.359
3.594
3.717
3.806
Aroclor-1260
3.971
4.092
Aroclor-1260
4.342
Aroclor-1260
4.626
4.894
4.967
Aroclor-1260
5.284
5.529
5.617
Aroclor-1260
6.129
6.844

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b/PCAL927.D
Report Date: 05/10/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PCAL927.D
Analysis Type: SOIL

Injection Date: 09-MAY-2005 15:39
Lab Sample ID: CCAL1000
Method File: \\slsvr01\gc_lab\Gcp.i\P050509B.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	919.9676	8.0	15.0
29 Aroclor-1260	1000.0000	969.2943	3.1	15.0
34 Decachlorobiphenyl	50.0000	46.7843	6.4	15.0

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PCAL927.D
Report Date: 10-May-2005 11:32

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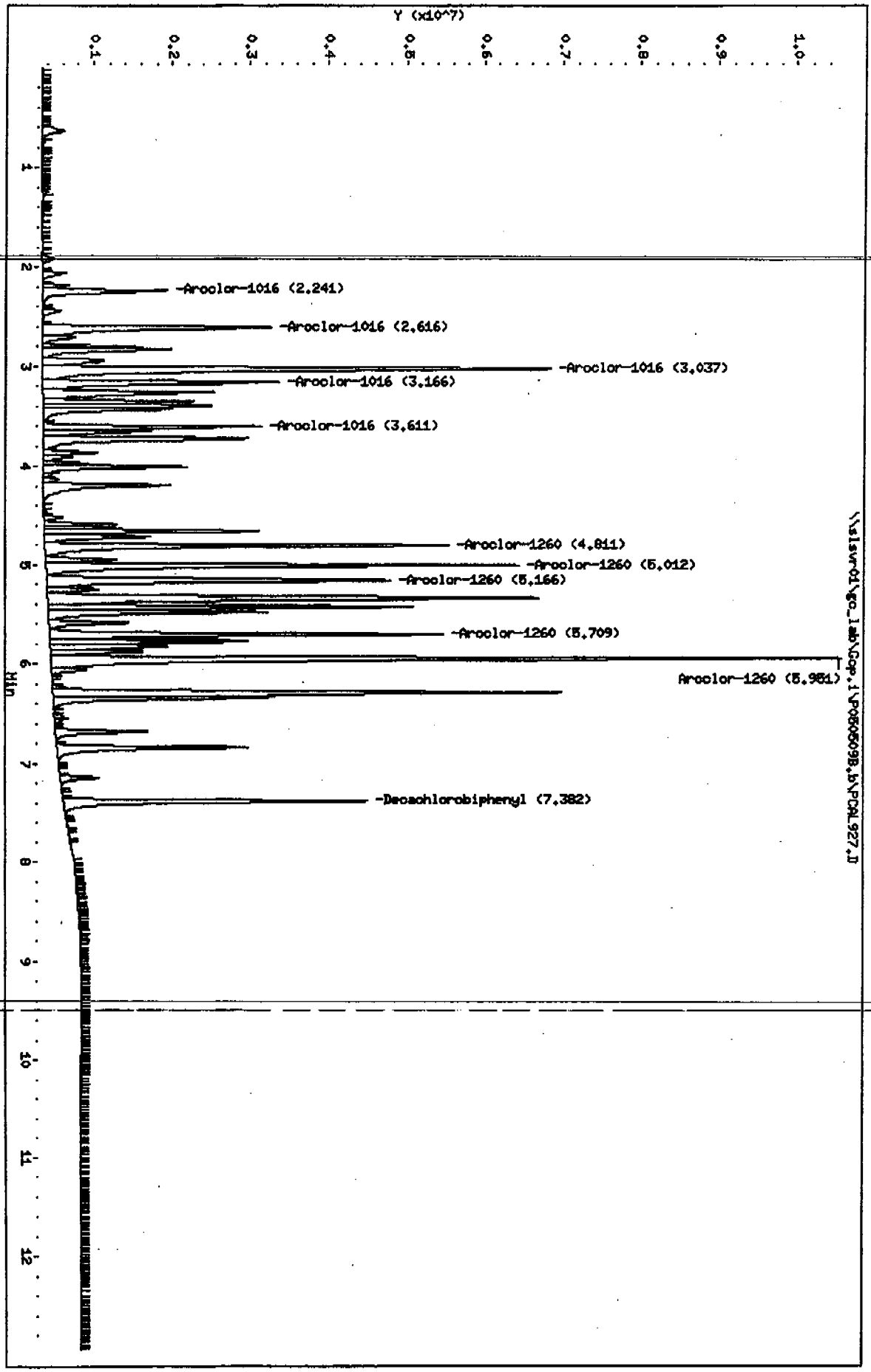
Data file : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PCAL927.D
Lab Smp Id: CCAL1000
Inj Date : 09-MAY-2005 15:39
Operator : BLO Inst ID: Gcp.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Meth Date : 10-May-2005 11:31 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

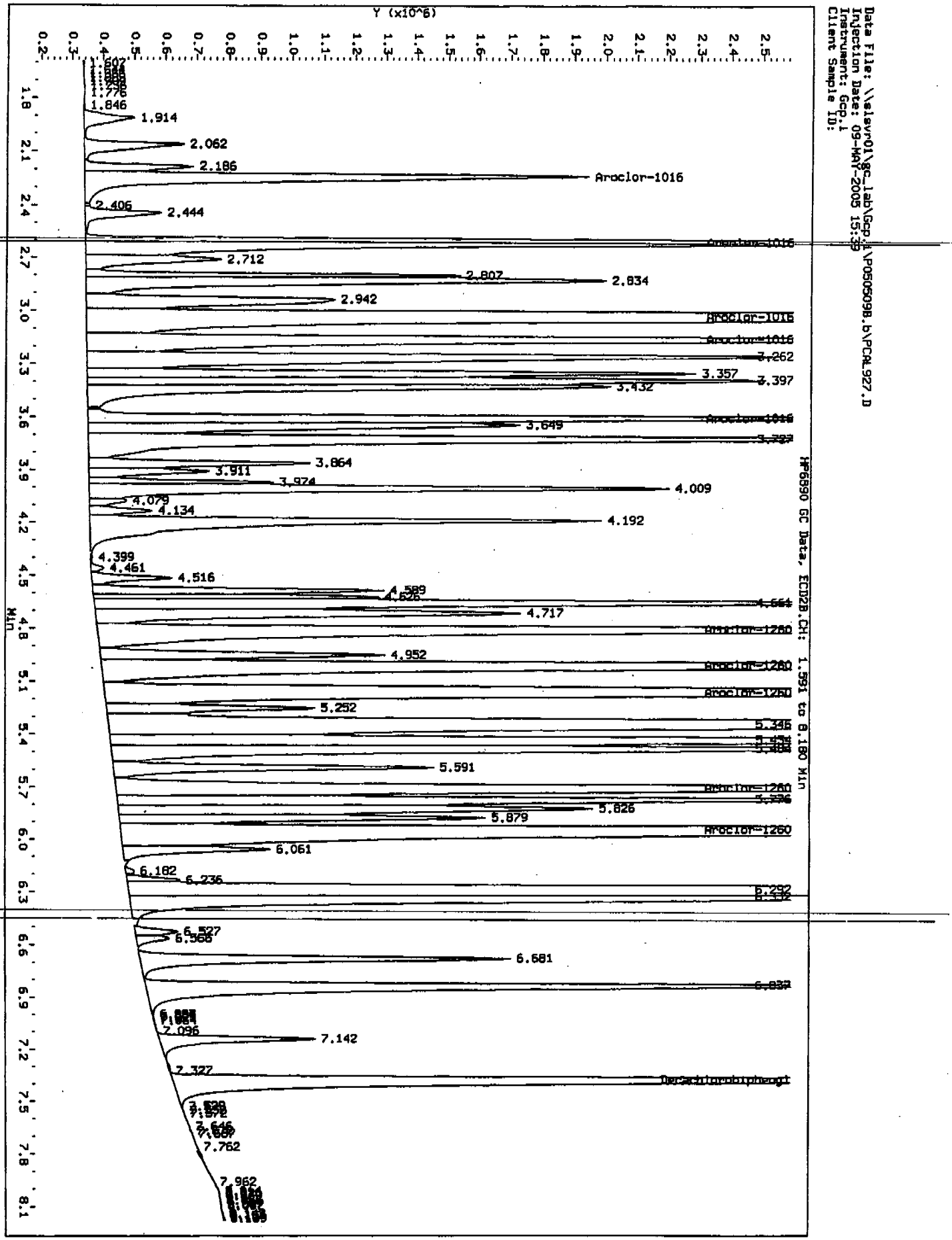
Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.240	2.223	0.017	4289071	1000.00	857.9	80.00- 120.00	100.00
2.615	2.598	0.017	8653223	1000.00	902.5	161.40- 242.10	201.75
3.037	3.016	0.021	18595364	1000.00	966.8	346.84- 520.26	433.55
3.165	3.145	0.020	7766265	1000.00	946.2	144.86- 217.29	181.07
3.610	3.590	0.020	5693757	1000.00	926.4	106.20- 159.30	132.75
Average of Peak Amounts =					920		
28 Aroclor-1260					CAS #: 11096-82-5		
4.810	4.788	0.022	11700097	1000.00	946.7	80.00- 120.00	100.00
5.012	5.019	-0.007	13721253	1000.00	972.6	93.82- 140.73	117.27
5.165	5.140	0.025	12734035	1000.00	954.9	87.07- 130.60	108.84
5.709	5.685	0.024	11191230	1000.00	954.6	76.52- 114.78	95.65
5.950	5.959	-0.009	24383162	1000.00	1018	166.72- 250.08	208.40
Average of Peak Amounts =					969.3		
$ 32 Decachlorobiphenyl					CAS #:		
7.382	7.391	-0.009	9123081	50.0000	46.78		

BLO 5-10-05


Y (x10^7)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Min
1
2
3
4
5
6
7
8
9
10
11
12
-Aroclor-1016 (2.241)
-Aroclor-1016 (2.616)
-Aroclor-1016 (3.037)
-Aroclor-1016 (3.166)
-Aroclor-1016 (3.611)
-Aroclor-1260 (4.811)
-Aroclor-1260 (5.012)
-Aroclor-1260 (5.166)
-Aroclor-1260 (5.709)
Aroclor-1260 (5.951)
-Decachlorobiphenyl (7.382)
Data File: \\slsvr01\gc_lab\Gcp.1\P0505098.b\PCAL927.D
Date : 09-MAY-2005 15:39
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column Phase: CLPEST-2
\\slsvr01\gc_lab\Gcp.1\P0505098.b\PCAL927.D
Instrument: Gcp.1
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Data File: \\alsvr01\gc_lab\Gcp.i\P050509B.b\PCBL927.D
Injection Date: 09-MAY-2005 15:39
Instrument: Gcp.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 1.591 to 8.180 Min
Min
1.846
1.914
2.062
2.186
Aroclor-1016
2.406
2.444
2.712
2.807
2.834
2.942
3.357
3.397
3.432
3.649
3.864
3.911
3.974
4.009
4.079
4.134
4.192
4.399
4.461
4.516
4.589
4.626
4.717
4.952
5.252
5.345
5.591
5.826
5.879
Aroclor-1260
6.061
6.182
6.236
6.527
6.568
6.681
7.096
7.142
2.327
7.762
7.962

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b/PCAL930.D
Report Date: 05/10/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PCAL930.D
Analysis Type: SOIL

Injection Date: 09-MAY-2005 16:38
Lab Sample ID: CCAL1000
Method File: \\slsvr01\gc_lab\Gcp.i\P050509A.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	913.1572	8.7	15.0
29 Aroclor-1260	1000.0000	944.0001	5.6	15.0
34 Decachlorobiphenyl	50.0000	49.1846	1.6	15.0

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL930.D
Report Date: 10-May-2005 09:45

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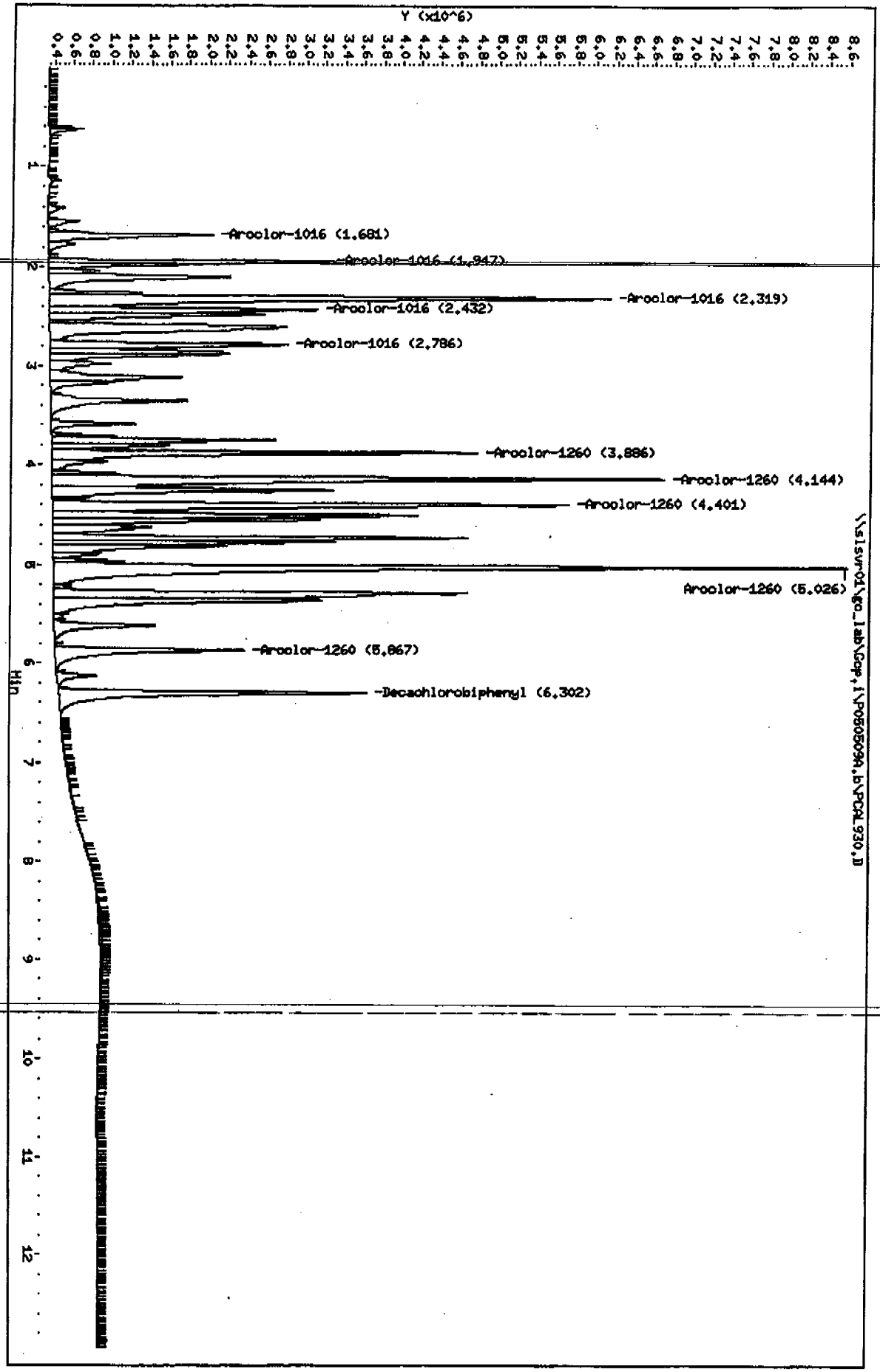
Data file : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL930.D
Lab Smp Id: CCAL1000
Inj Date : 09-MAY-2005 16:38
Operator : BLO Inst ID: Gcp.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Meth Date : 10-May-2005 09:43 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

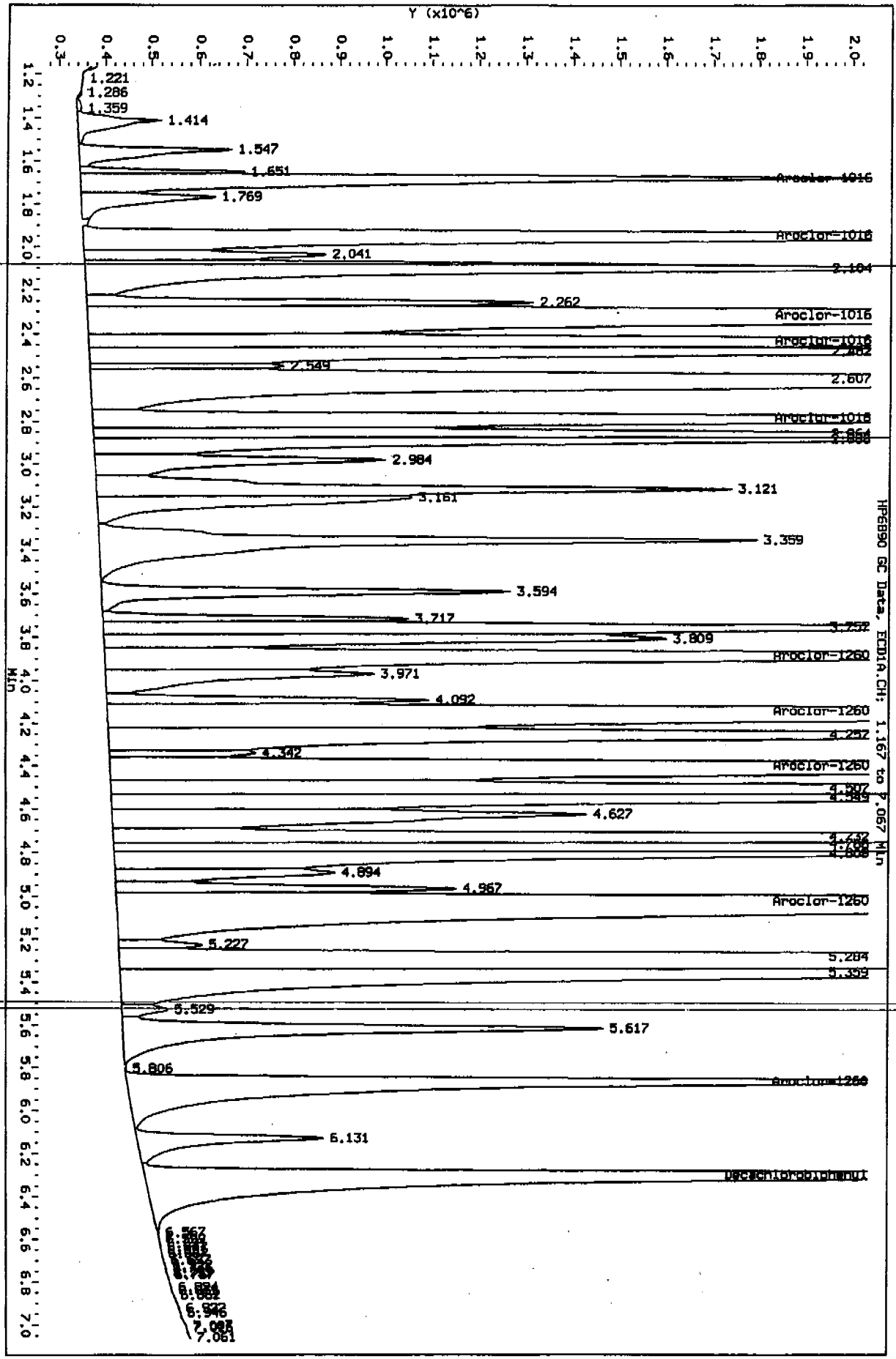
Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.680	1.668	0.012	4257140	1000.00	871.7	80.00- 120.00	100.00
1.947	1.933	0.014	8220859	1000.00	899.3	154.49- 231.73	193.11
2.318	2.303	0.015	19350776	1000.00	946.0	363.64- 545.46	454.55
2.432	2.413	0.019	7062514	1000.00	944.5	132.72- 199.08	165.90
2.785	2.768	0.017	7202380	1000.00	904.3	135.35- 203.02	169.18
	Average of Peak Amounts =				913.2		
28 Aroclor-1260					CAS #: 11096-82-5		
3.885	3.896	-0.011	11018350	1000.00	923.0	80.00- 120.00	100.00
4.143	4.156	-0.013	19131629	1000.00	916.8	138.91- 208.36	173.63
4.400	4.412	-0.012	16688508	1000.00	910.3	121.17- 181.75	151.46
5.025	5.039	-0.014	26788614	1000.00	1005	194.50- 291.75	243.13
5.867	5.882	-0.015	6516633	1000.00	965.2	47.31- 70.97	59.14
	Average of Peak Amounts =				944		
$ 32 Decachlorobiphenyl					CAS #:		
6.302	6.273	0.029	9951545	50.0000	49.18		

BLO 5/10/05


Y (x10^6)
-Aroclor-1016 (1,681)
-Aroclor-1016 (1,947)
-Aroclor-1016 (2,319)
-Aroclor-1016 (2,432)
-Aroclor-1016 (2,786)
-Aroclor-1260 (3,886)
-Aroclor-1260 (4,144)
-Aroclor-1260 (4,401)
Aroclor-1260 (5,026)
-Aroclor-1260 (5,867)
-Decachlorobiphenyl (6,302)
Min
Data File: \\slsvr01\gc_lab\Gcp,i\P0505098.b\PCAL930.D
Date : 09-MAY-2005 16:38
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gcp,i
Operator: BLO
Column diameter: 0.53
\\slsvr01\gc_lab\Gcp,i\P0505098.b\PCAL930.D


Y (x10^6)
Data File: \\elsvr01\gc_lab\Gcp.i\P050509A.b\PCAL930.D
Injection Date: 09-MAY-2005 16:38
Instrument: Gcp.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 1.167 to 7.067 Min
Min
1.221
1.286
1.359
1.414
1.547
1.651
Aroclor-1016
1.769
Aroclor-1016
2.041
2.104
2.262
Aroclor-1016
Aroclor-1016
2.549
2.607
Aroclor-1016
2.984
3.121
3.161
3.359
3.594
3.717
3.809
Aroclor-1260
3.971
4.092
Aroclor-1260
4.252
4.342
Aroclor-1260
4.627
4.894
4.967
Aroclor-1260
5.227
5.284
5.359
5.529
5.617
5.806
Aroclor-1260
6.131
Decachlorobiphenyl
7.061

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b/PCAL930.D
Report Date: 05/10/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PCAL930.D
Analysis Type: SOIL

Injection Date: 09-MAY-2005 16:38
Lab Sample ID: CCAL1000
Method File: \\slsvr01\gc_lab\Gcp.i\P050509B.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	910.9358	8.9	15.0
29 Aroclor-1260	1000.0000	962.9417	3.7	15.0
34 Decachlorobiphenyl	50.0000	47.2977	5.4	15.0

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PCAL930.D
Report Date: 10-May-2005 11:33

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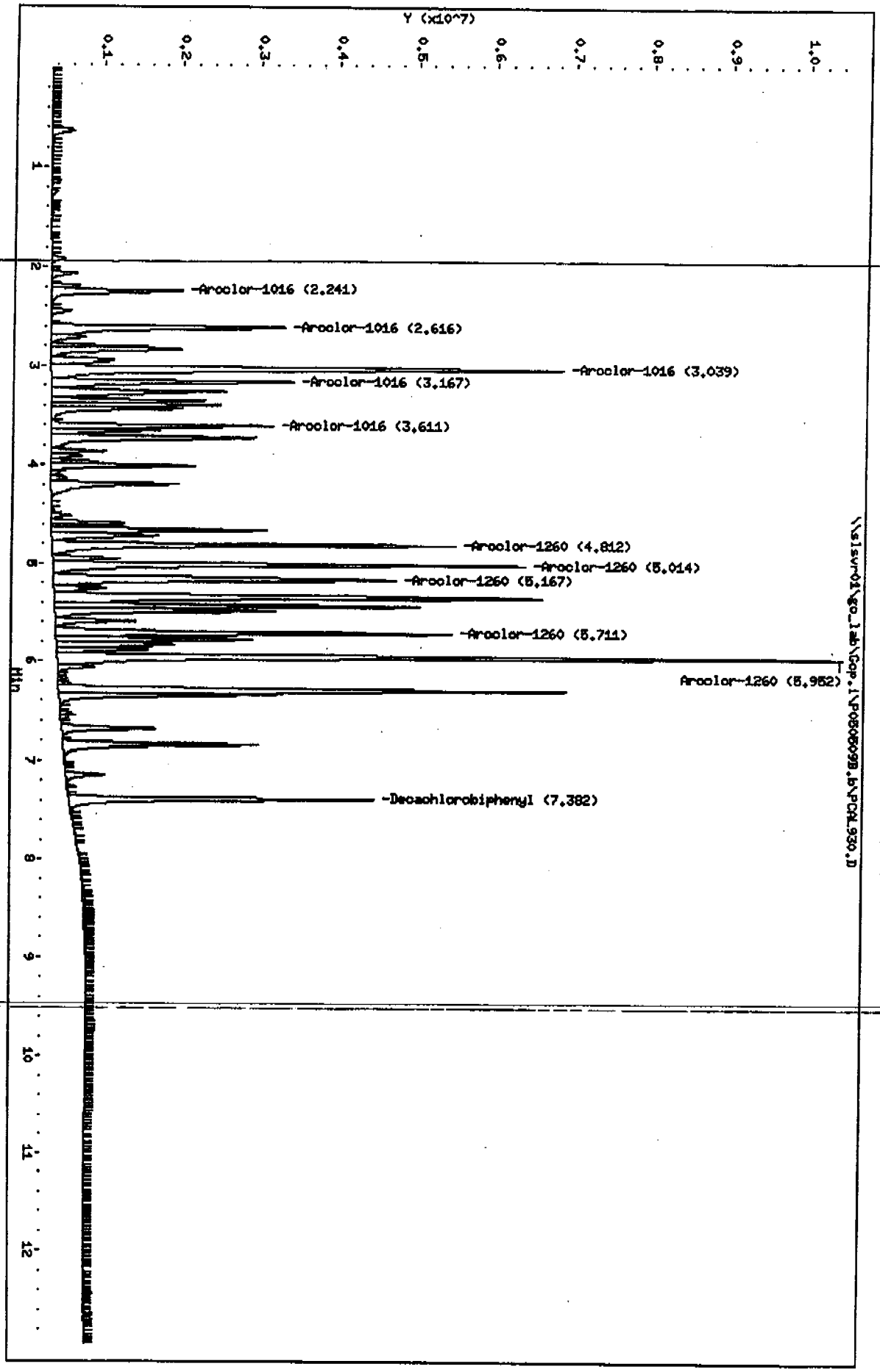
Data file : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PCAL930.D
Lab Smp Id: CCAL1000
Inj Date : 09-MAY-2005 16:38
Operator : BLO Inst ID: Gcp.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Meth Date : 10-May-2005 11:31 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

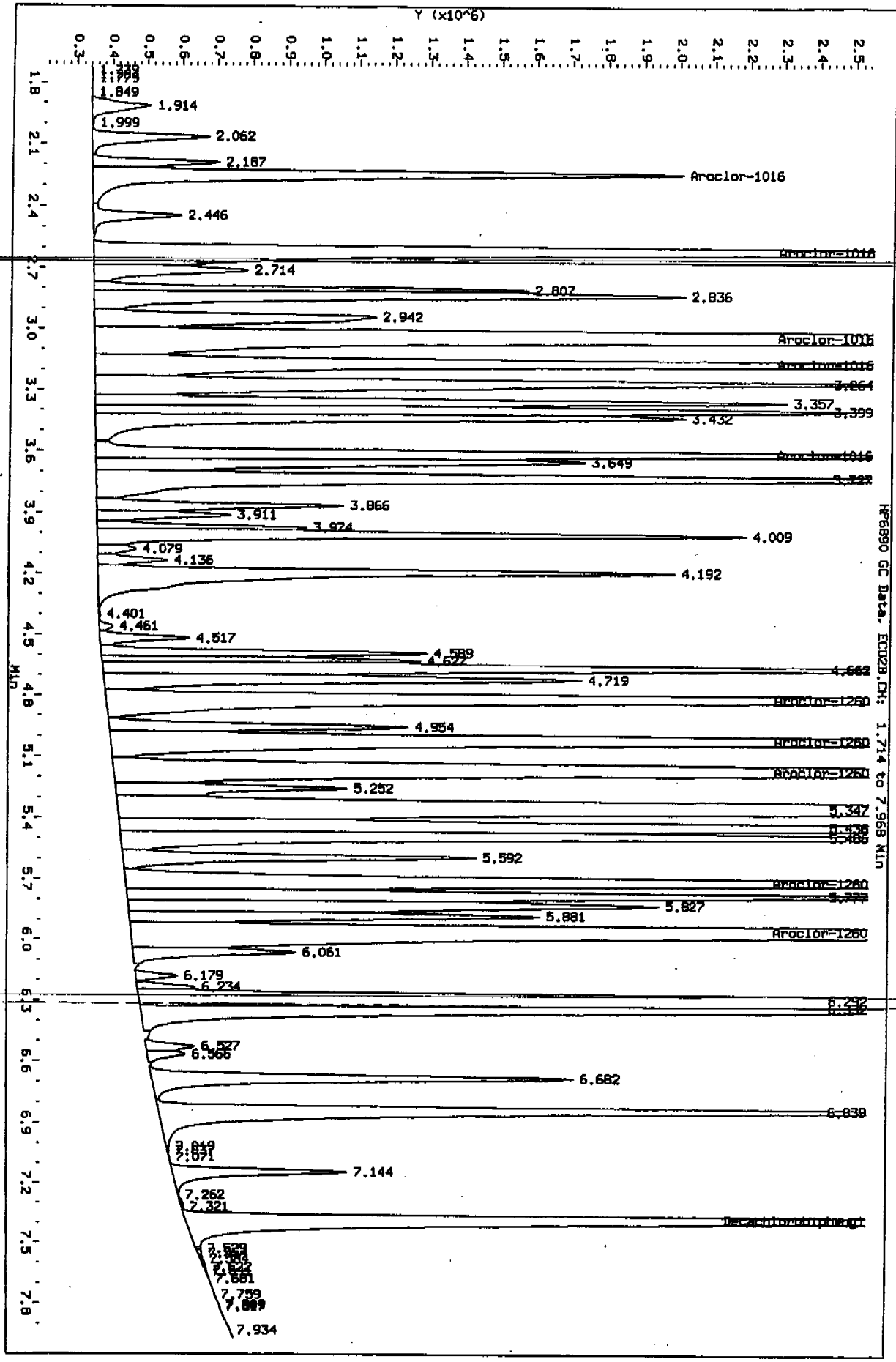
Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.240	2.223	0.017	4242168	1000.00	848.5	80.00- 120.00	100.00
2.615	2.598	0.017	8595150	1000.00	896.4	162.09- 243.13	202.61
3.039	3.016	0.023	18455762	1000.00	959.6	348.04- 522.07	435.05
~~3.167~~	~~3.145~~	~~0.022~~	~~7695021~~	~~1000.00~~	~~937.6~~	~~145.11- 217.67~~	~~181.39~~
3.610	3.590	0.020	5609051	1000.00	912.6	105.78- 158.67	132.22
		Average of Peak Amounts =			910.9		
28 Aroclor-1260					CAS #: 11096-82-5		
4.812	4.788	0.024	11605792	1000.00	939.1	80.00- 120.00	100.00
5.014	5.019	-0.005	13636854	1000.00	966.6	94.00- 141.00	117.50
5.167	5.140	0.027	12654985	1000.00	949.0	87.23- 130.85	109.04
5.710	5.685	0.025	11073388	1000.00	944.6	76.33- 114.50	95.41
5.952	5.959	-0.007	24331170	1000.00	1015	167.72- 251.58	209.65
		Average of Peak Amounts =			962.9		
$ 32 Decachlorobiphenyl					CAS #:		
7.382	7.391	-0.009	9223191	50.0000	47.30		

BLO 5-10-05


Y (x10^7)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Data File: \\slsvr01\go_lab\Gop.i\P060509B.b\PCAL930.D
Date : 09-MAY-2006 16:38
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-2
-Aroclor-1016 (2.241)
-Aroclor-1016 (2.616)
-Aroclor-1016 (3.039)
-Aroclor-1016 (3.167)
-Aroclor-1016 (3.611)
-Aroclor-1260 (4.812)
-Aroclor-1260 (5.014)
-Aroclor-1260 (5.167)
-Aroclor-1260 (5.711)
Aroclor-1260 (5.952)
-Decachlorobiphenyl (7.382)
\\slsvr01\go_lab\Gop.i\P060509B.b\PCAL930.D
Instrument: Gop.i
Operator: BLO
Column diameter: 0.53
Min
1
2
3
4
5
6
7
8
9
10
11
12


Y (x10^6)
Min
Data File: \\elsvr01\gc_lab\Gcp_1\P050509B.b\PCAL930.D
Injection Date: 09-MAY-2005 16:08
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 1.714 to 7.968 Min
1.849
1.914
1.999
2.062
2.187
Aroclor-1016
2.446
2.714
2.807
2.836
2.942
3.357
3.432
3.649
3.866
3.911
3.974
4.009
4.079
4.136
4.192
4.401
4.461
4.517
4.719
4.954
5.252
5.592
5.827
5.881
Aroclor-1260
6.061
6.179
6.234
6.527
6.566
6.682
7.071
7.144
7.262
7.321
7.759
7.934

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b/PCAL939.D
Report Date: 05/10/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PCAL939.D
Analysis Type: SOIL

Injection Date: 09-MAY-2005 19:07
Lab Sample ID: CCAL1000
Method File: \\slsvr01\gc_lab\Gcp.i\P050509A.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	932.2012	6.8	15.0
29 Aroclor-1260	1000.0000	959.0214	4.1	15.0
34 Decachlorobiphenyl	50.0000	48.9959	2.0	15.0

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL939.D
Report Date: 10-May-2005 09:46

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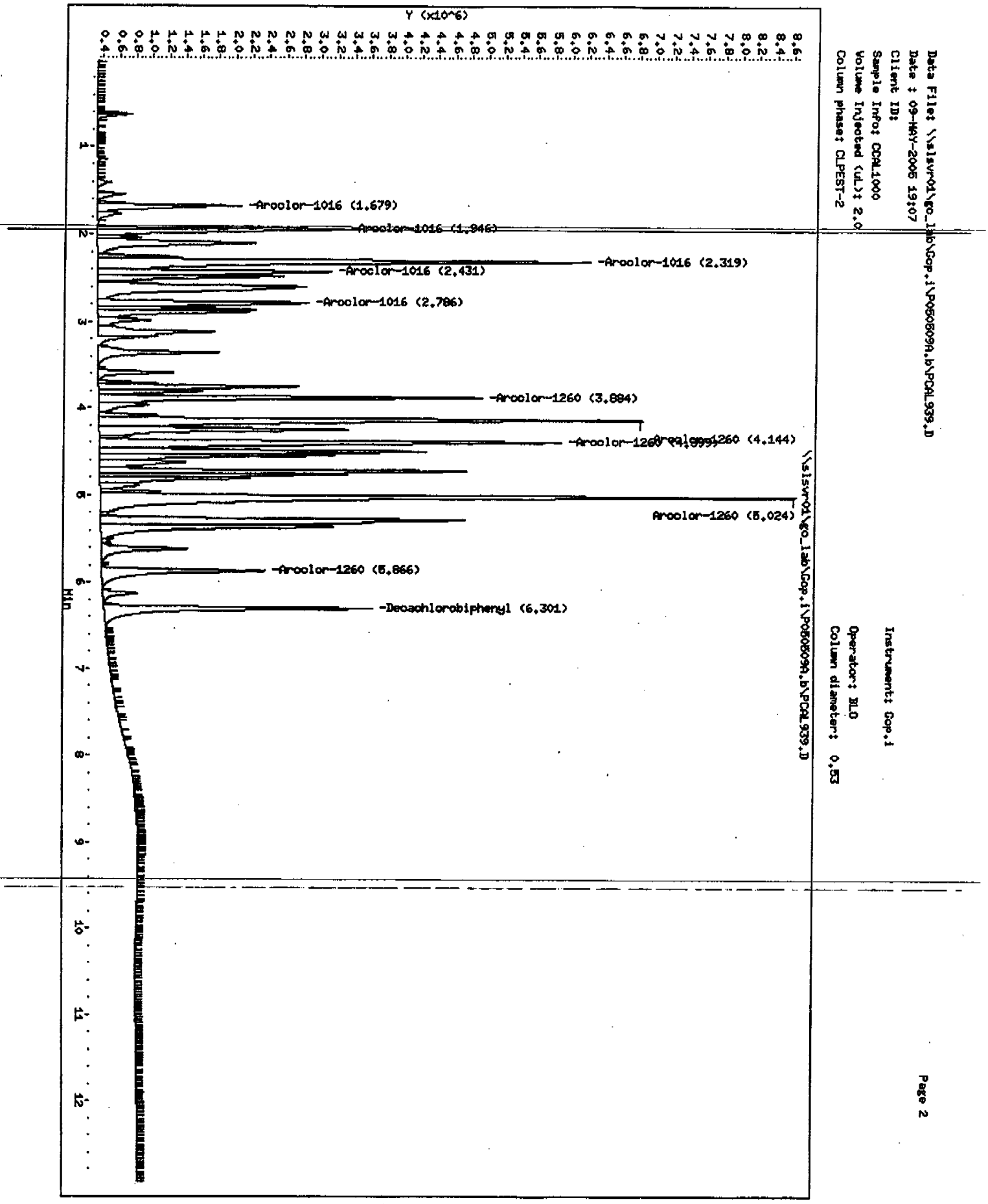
Data file : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL939.D
Lab Smp Id: CCAL1000
Inj Date : 09-MAY-2005 19:07
Operator : BLO Inst ID: Gcp.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Meth Date : 10-May-2005 09:43 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 14 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

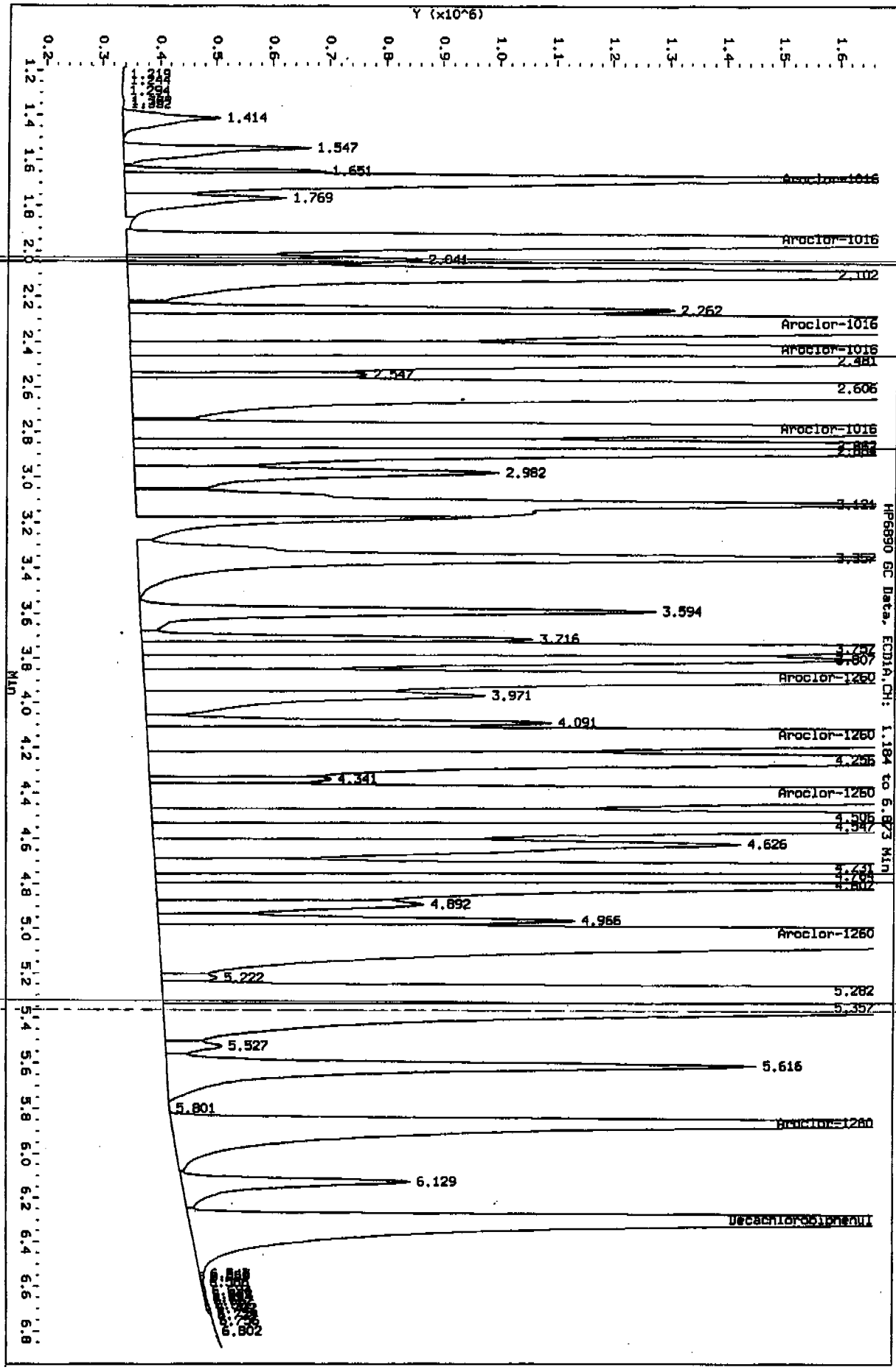
Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.678	1.668	0.010	4331236	1000.00	886.9	80.00- 120.00	100.00
1.945	1.933	0.012	8315890	1000.00	909.7	153.60- 230.40	192.00
2.318	2.303	0.015	19585230	1000.00	957.4	361.75- 542.62	452.19
~~2.430~~	~~2.413~~	~~0.017~~	~~7262294~~	~~1000.00~~	~~971.2~~	~~134.14- 201.21~~	~~167.67~~
2.785	2.768	0.017	7453047	1000.00	935.8	137.66- 206.49	172.08
	Average of Peak Amounts =				932.2		
28 Aroclor-1260					CAS #: 11096-82-5		
3.883	3.896	-0.013	11339777	1000.00	949.9	80.00- 120.00	100.00
4.143	4.156	-0.013	19446539	1000.00	931.9	137.19- 205.79	171.49
4.398	4.412	-0.014	17194338	1000.00	937.9	121.30- 181.95	151.63
5.023	5.039	-0.016	26990059	1000.00	1012	190.41- 285.61	238.01
5.865	5.882	-0.017	6502750	1000.00	963.2	45.88- 68.81	57.34
	Average of Peak Amounts =				959		
$ 32 Decachlorobiphenyl					CAS #:		
6.300	6.273	0.027	9913380	50.0000	49.00		

BLO 5/10/05


Y (x10^6)
Data File: \\slsvr01\go_lab\Gop.i\P0505094.b\PCAL939.D
Date : 09-MAY-2005 19:07
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gop.i
Operator: BLO
Column diameter: 0.53
\\slsvr01\go_lab\Gop.i\P0505094.b\PCAL939.D
Aroclor-1016 (1.679)
Aroclor-1016 (1.946)
Aroclor-1016 (2.319)
Aroclor-1016 (2.431)
Aroclor-1016 (2.786)
Aroclor-1260 (3.884)
Aroclor-1260 (4.144)
Aroclor-1260 (5.024)
Aroclor-1260 (5.866)
Decachlorobiphenyl (6.301)
Min


Y (x10^6)
Min
1.414
1.547
1.651
Aroclor-1016
1.769
Aroclor-1016
2.044
2.102
2.262
Aroclor-1016
Aroclor-1016
2.481
2.547
2.606
Aroclor-1016
2.982
3.121
3.352
3.594
3.716
3.757
3.807
Aroclor-1260
3.971
4.091
Aroclor-1260
4.255
4.341
Aroclor-1260
4.505
4.547
4.626
4.731
4.764
4.802
4.892
4.966
Aroclor-1260
5.222
5.282
5.357
5.527
5.616
5.801
Aroclor-1260
6.129
Decachlorobiphenyl
6.802
Data File: \\slsvr01\gc_lab\Gcp1\P050509A.b\PCAL939.D
Injection Date: 09-MAY-2005 19:07
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 1.184 to 6.873 Min

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b/PCAL939.D
Report Date: 05/10/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PCAL939.D
Analysis Type: SOIL

Injection Date: 09-MAY-2005 19:07
Lab Sample ID: CCAL1000
Method File: \\slsvr01\gc_lab\Gcp.i\P050509B.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	934.3231	6.6	15.0
29 Aroclor-1260	1000.0000	975.3976	2.5	15.0
34 Decachlorobiphenyl	50.0000	46.7400	6.5	15.0

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PCAL939.D
Report Date: 10-May-2005 11:33

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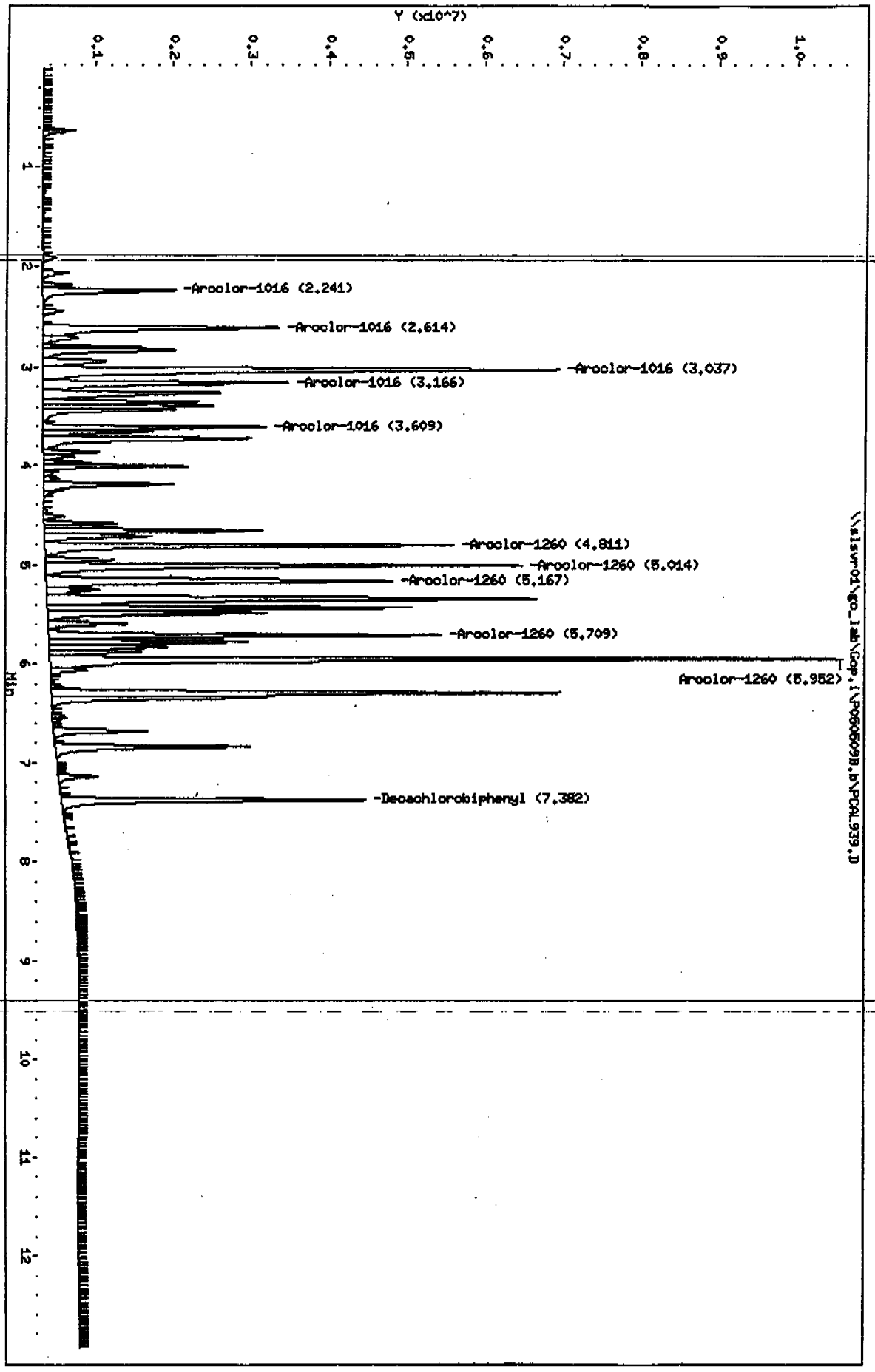
Data file : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PCAL939.D
Lab Smp Id: CCAL1000
Inj Date : 09-MAY-2005 19:07
Operator : BLO Inst ID: Gcp.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Meth Date : 10-May-2005 11:31 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 14 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

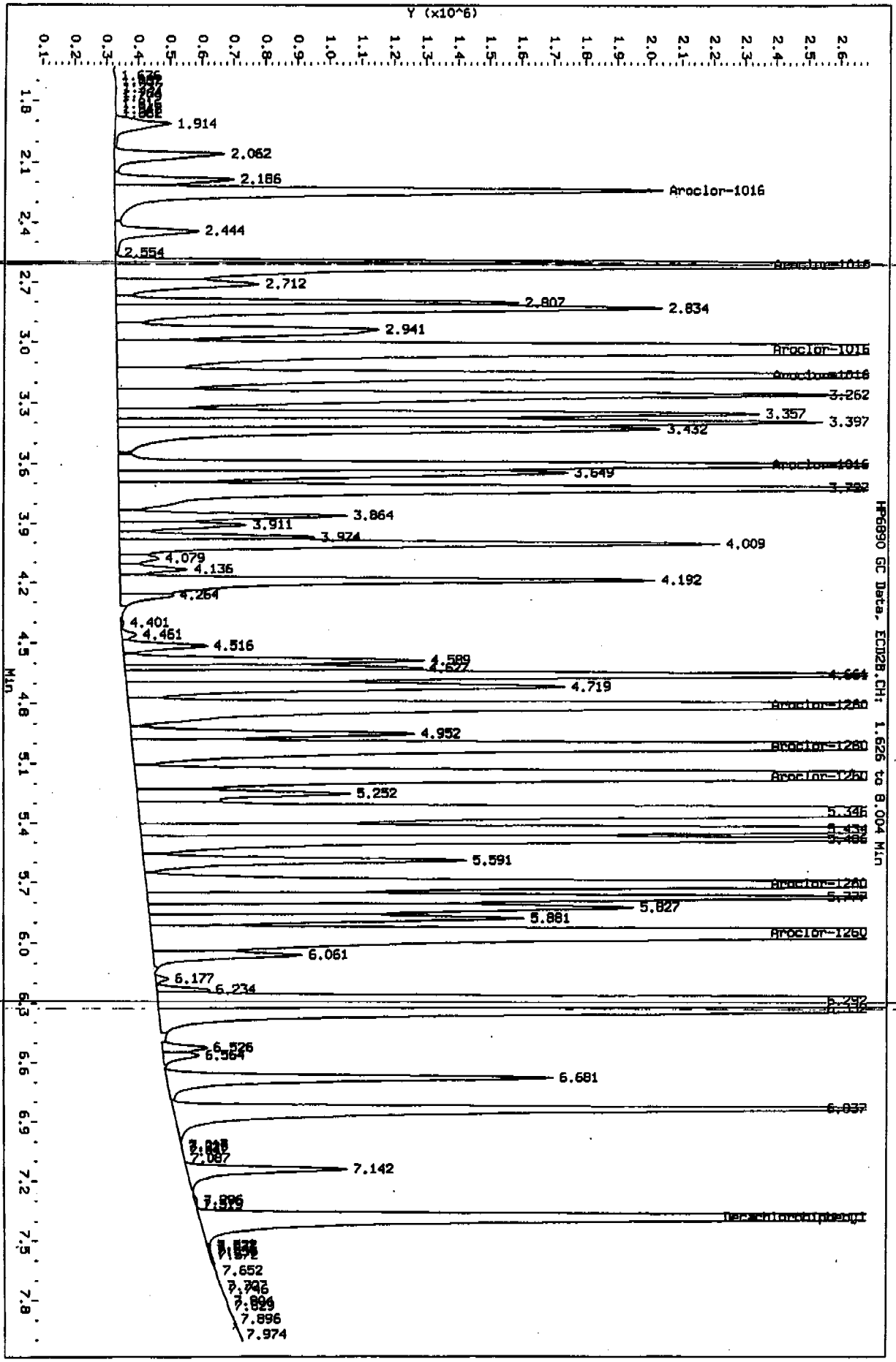
Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.240	2.223	0.017	4372529	1000.00	874.6	80.00- 120.00	100.00
2.614	2.598	0.016	8752831	1000.00	912.9	160.14- 240.21	200.18
3.037	3.016	0.021	18793093	1000.00	977.1	343.84- 515.76	429.80
3.165	3.145	0.020	7899397	1000.00	962.4	144.53- 216.79	180.66
3.609	3.590	0.019	5805582	1000.00	944.6	106.22- 159.33	132.77
Average of Peak Amounts =					934.3		
28 Aroclor-1260					CAS #: 11096-82-5		
4.810	4.788	0.022	11836715	1000.00	957.8	80.00- 120.00	100.00
5.014	5.019	-0.005	13849894	1000.00	981.7	93.61- 140.41	117.01
5.167	5.140	0.027	12885817	1000.00	966.3	87.09- 130.64	108.86
5.709	5.685	0.024	11140624	1000.00	950.3	75.30- 112.94	94.12
5.952	5.959	-0.007	24461726	1000.00	1021	165.33- 247.99	206.66
Average of Peak Amounts =					975.4		
$ 32 Decachlorobiphenyl					CAS #:		
7.382	7.391	-0.009	9114453	50.0000	46.74		

BLO 5-10-05


Y (x10^7)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1
2
3
4
5
6
7
8
9
10
11
12
Min
-Aroclor-1016 (2.241)
-Aroclor-1016 (2.614)
-Aroclor-1016 (3.037)
-Aroclor-1016 (3.166)
-Aroclor-1016 (3.609)
-Aroclor-1260 (4.811)
-Aroclor-1260 (5.014)
-Aroclor-1260 (5.167)
-Aroclor-1260 (5.709)
Aroclor-1260 (5.952)
-Decachlorobiphenyl (7.382)
Data File: \\slsvr01\go_lab\Gop.i\P0505093.b\PCAL939.D
Date : 09-MAY-2005 19:07
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-2
\\slsvr01\go_lab\Gop.i\P0505093.b\PCAL939.D
Instrument: Gop.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
Data File: \\slsvr01\gc_lab\Gcp_1\P050509B.b\PCAL939.D
Injection Date: 09-MAY-2005 19:07
Instrument: Gcp_1
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 1.626 to 8.004 Min
1.914
2.062
2.186
Aroclor-1016
2.444
2.554
2.712
2.807
2.834
2.941
Aroclor-1016
3.262
3.357
3.397
3.432
3.649
3.864
3.911
3.974
4.009
4.079
4.136
4.192
4.264
4.401
4.461
4.516
4.589
4.627
4.719
4.952
5.252
5.346
5.591
Aroclor-1260
5.827
5.881
Aroclor-1260
6.061
6.177
6.234
6.526
6.564
6.681
7.087
7.142
Decachlorobiphenyl
7.652
7.829
7.896
7.974

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b/PCAL950.D
Report Date: 05/10/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PCAL950.D
Analysis Type: SOIL

Injection Date: 09-MAY-2005 22:08
Lab Sample ID: CCAL1000
Method File: \\slsvr01\gc_lab\Gcp.i\P050509A.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	942.4074	5.8	15.0
29 Aroclor-1260	1000.0000	965.8430	3.4	15.0
34 Decachlorobiphenyl	50.0000	49.6075	0.8	15.0

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL950.D Page 1
Report Date: 10-May-2005 09:46

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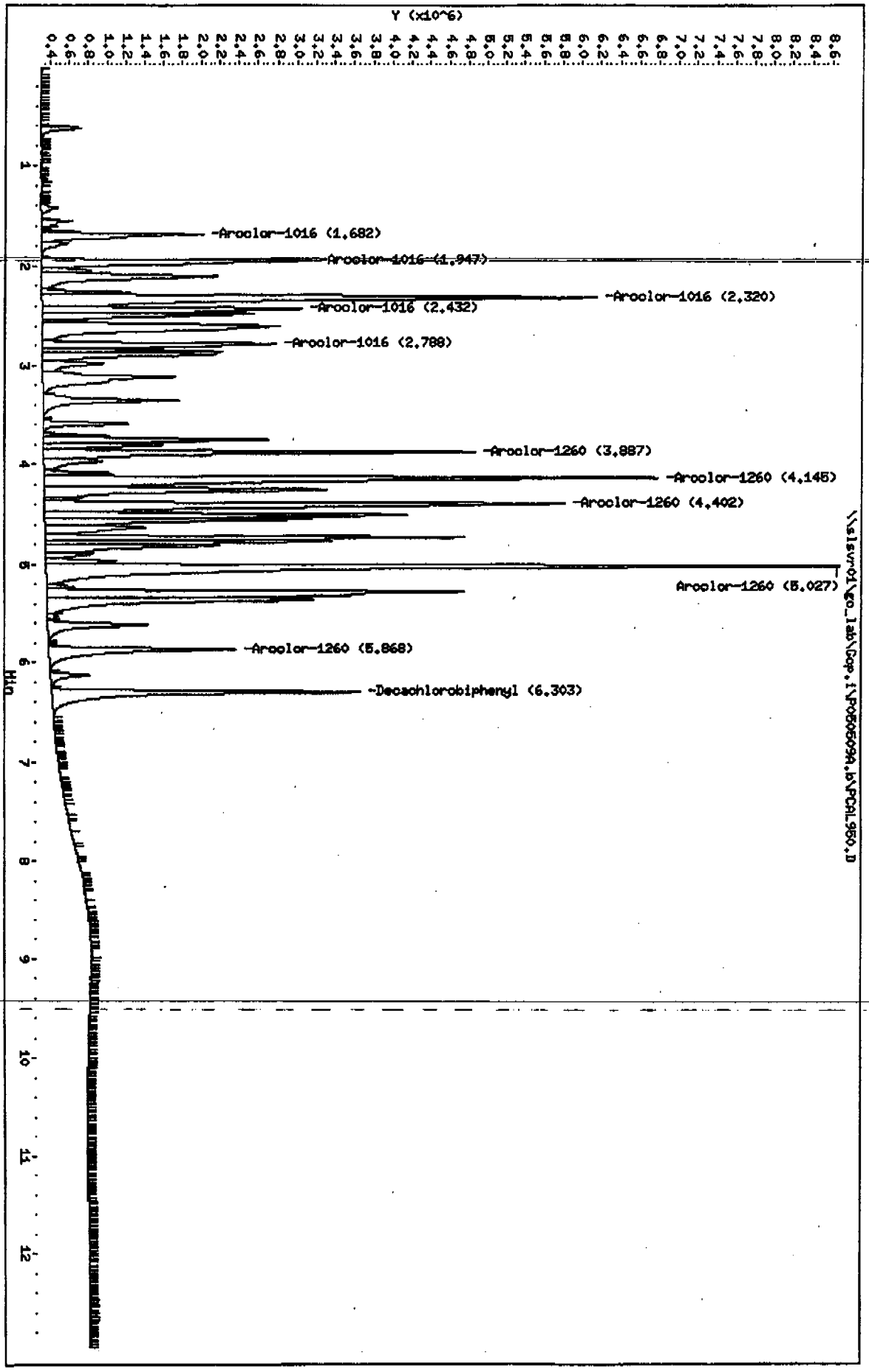
Data file : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL950.D
Lab Smp Id: CCAL1000
Inj Date : 09-MAY-2005 22:08
Operator : BLO Inst ID: Gcp.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Meth Date : 10-May-2005 09:43 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 14 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

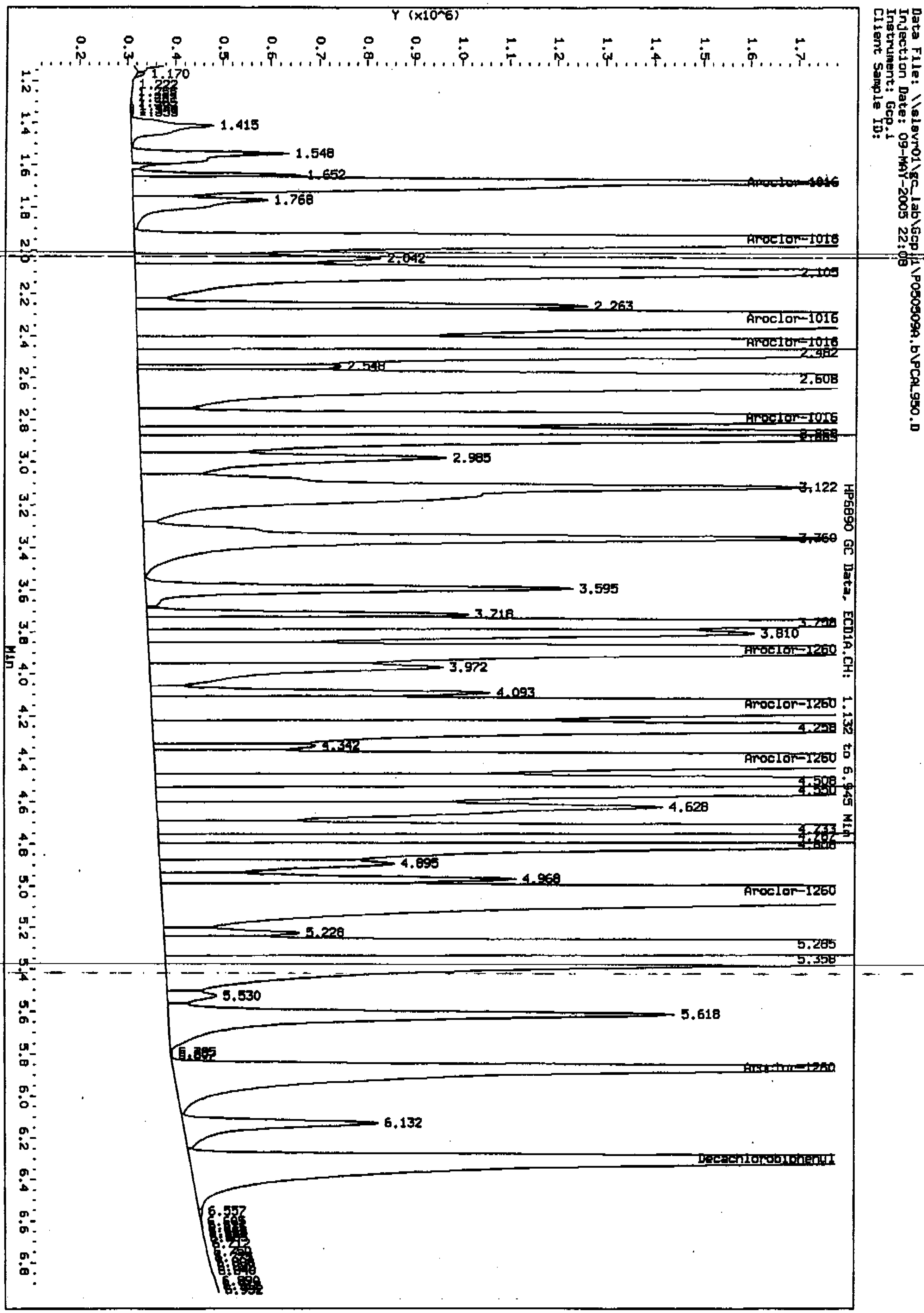
Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.681	1.668	0.013	4432390	1000.00	907.6	80.00- 120.00	100.00
1.946	1.933	0.013	8450650	1000.00	924.4	152.53- 228.79	190.66
2.319	2.303	0.016	20043444	1000.00	979.8	361.76- 542.64	452.20
2.431	2.413	0.018	7192879	1000.00	962.0	129.82- 194.74	162.28
2.788	2.768	0.020	7472641	1000.00	938.2	134.87- 202.31	168.59
		Average of Peak Amounts =			942.4		
28 Aroclor-1260					CAS #: 11096-82-5		
3.886	3.896	-0.010	11450043	1000.00	959.2	80.00- 120.00	100.00
4.144	4.156	-0.012	19738784	1000.00	945.9	137.91- 206.87	172.39
4.401	4.412	-0.011	17095458	1000.00	932.5	119.44- 179.17	149.30
5.026	5.039	-0.013	27145981	1000.00	1018	189.67- 284.50	237.08
5.868	5.882	-0.014	6573048	1000.00	973.6	45.93- 68.89	57.41
		Average of Peak Amounts =			965.8		
$ 32 Decachlorobiphenyl					CAS #:		
6.303	6.273	0.030	10037116	50.0000	49.61		

BLO 5/10/05


Y (x10^6)
Aroclor-1016 (1,682)
Aroclor-1016 (1,947)
Aroclor-1016 (2,320)
Aroclor-1016 (2,432)
Aroclor-1016 (2,788)
Aroclor-1260 (3,887)
Aroclor-1260 (4,145)
Aroclor-1260 (4,402)
Aroclor-1260 (5,027)
Aroclor-1260 (5,868)
Decachlorobiphenyl (6,303)
\\slsvr01\go_lab\Gcp.i\P060609A.b\PCBL960.D
HLO
Data File: \\slsvr01\go_lab\Gcp.i\P060609A.b\PCBL960.D
Date : 09-MAY-2006 22:08
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL950.D
Injection Date: 09-MAY-2005 22:08
Instrument: Gcp.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 1.132 to 6.945 Min
Y (x10^6)
Min
1.170
1.415
1.548
1.652
Aroclor-1016
1.768
Aroclor-1016
2.042
2.105
2.263
Aroclor-1016
Aroclor-1016
2.482
2.548
2.608
Aroclor-1016
2.985
3.122
3.360
3.595
3.718
3.810
Aroclor-1260
3.972
4.093
Aroclor-1260
4.258
4.342
Aroclor-1260
4.628
4.895
4.968
Aroclor-1260
5.228
5.285
5.358
5.530
5.618
6.132
Decachlorobiphenyl
6.557

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b/PCAL961.D
Report Date: 05/10/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PCAL961.D
Analysis Type: SOIL

Injection Date: 10-MAY-2005 01:10
Lab Sample ID: CCAL1000
Method File: \\slsvr01\gc_lab\Gcp.i\P050509A.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	974.7110	2.5	15.0
29 Aroclor-1260	1000.0000	1000.1829	0.0	15.0
34 Decachlorobiphenyl	50.0000	50.2869	0.6	15.0

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL961.D Page 1
Report Date: 10-May-2005 09:47

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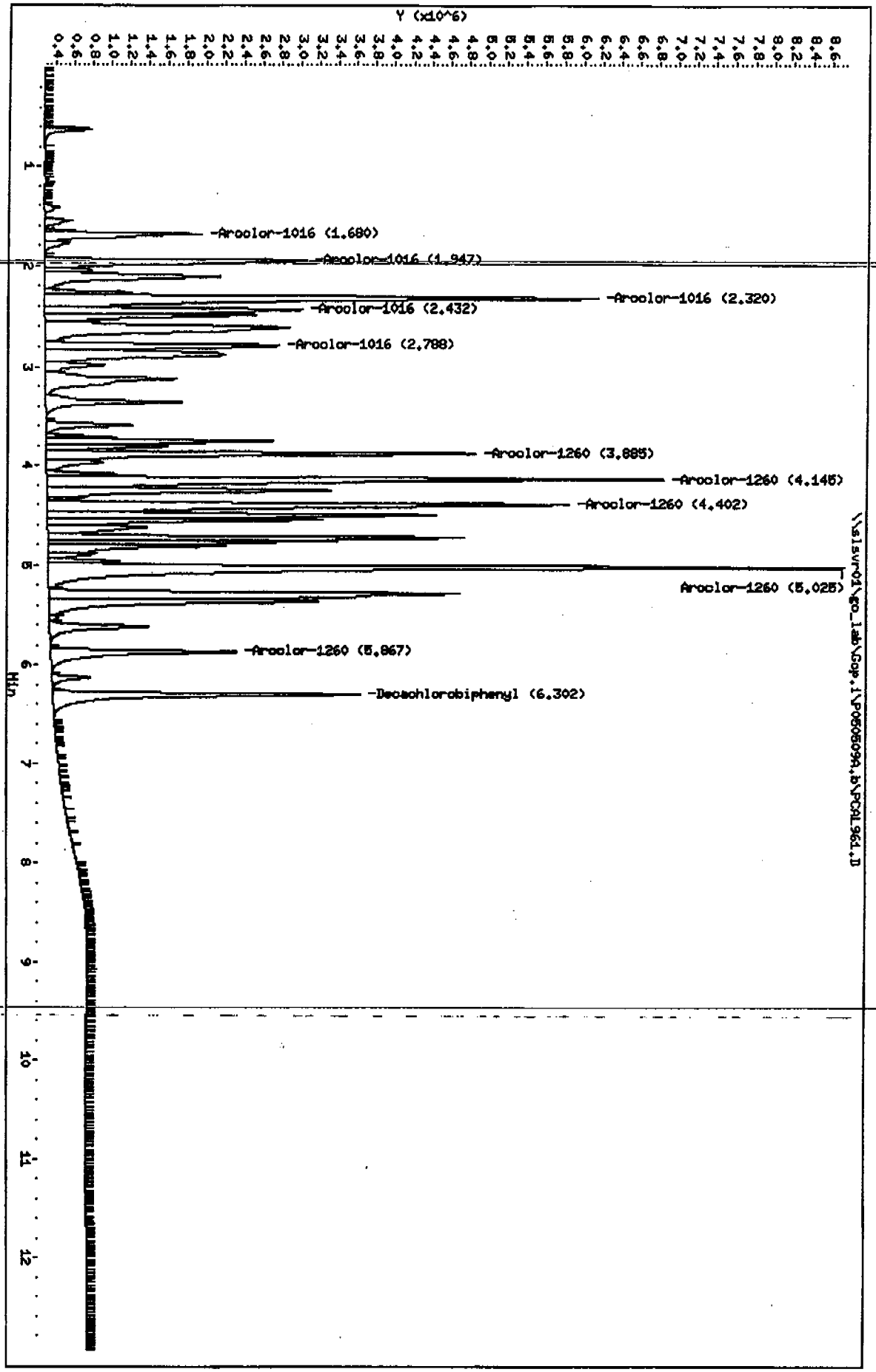
Data file : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL961.D
Lab Smp Id: CCAL1000
Inj Date : 10-MAY-2005 01:10
Operator : BLO Inst ID: Gcp.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Meth Date : 10-May-2005 09:43 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 35 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

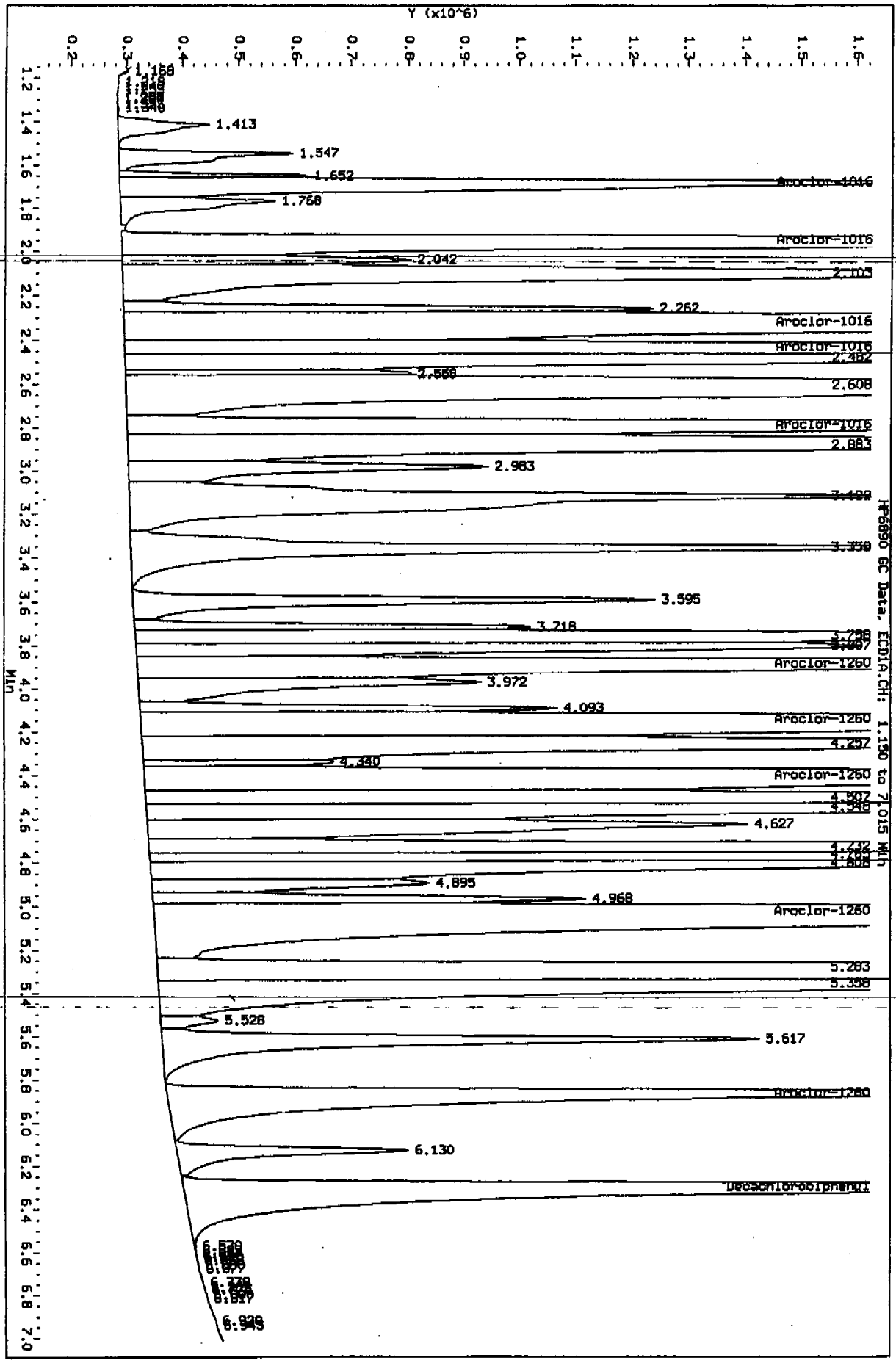
				AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.679	1.668	0.011	4548243	1000.00	931.3	80.00- 120.00	100.00
1.946	1.933	0.013	8669058	1000.00	948.3	152.48- 228.72	190.60
2.319	2.303	0.016	20702588	1000.00	1012	364.14- 546.21	455.18
2.431	2.413	0.018	7511657	1000.00	1004	132.12- 198.19	165.16
2.788	2.768	0.020	7783648	1000.00	977.3	136.91- 205.36	171.14
	Average of Peak Amounts =				974.7		
28 Aroclor-1260					CAS #: 11096-82-5		
3.884	3.896	-0.012	11763752	1000.00	985.4	80.00- 120.00	100.00
4.144	4.156	-0.012	20381994	1000.00	976.7	138.61- 207.91	173.26
4.401	4.412	-0.011	18035213	1000.00	983.8	122.65- 183.97	153.31
5.024	5.039	-0.015	28343962	1000.00	1063	192.75- 289.13	240.94
5.866	5.882	-0.016	6697329	1000.00	992.0	45.55- 68.32	56.93
	Average of Peak Amounts =				1000		
$ 32 Decachlorobiphenyl					CAS #:		
6.301	6.273	0.028	10174573	50.0000	50.29		

BLO 5/10/05



Data File: \\slsvr01\go_lab\Gop.i\P0608094.b\PCAL961.D
Date : 10-MAY-2006 01:10
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gop.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
Data File: \\slsvr01\gc_lab\Gcp_1\P050509A.b\PCAL961.D
Injection Date: 10-MAY-2005 01:10
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 1.150 to 7.015 Min
1.413
1.547
1.652
Aroclor-1016
1.768
Aroclor-1016
2.042
2.262
Aroclor-1016
Aroclor-1016
2.608
Aroclor-1016
2.983
3.595
3.218
Aroclor-1260
3.972
4.093
Aroclor-1260
4.340
Aroclor-1260
4.627
4.895
4.968
Aroclor-1260
5.283
5.358
5.528
5.617
Aroclor-1260
6.130
Decachlorobiphenyl

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b/PCAL961.D
Report Date: 05/10/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PCAL961.D
Analysis Type: SOIL

Injection Date: 10-MAY-2005 01:10
Lab Sample ID: CCAL1000
Method File: \\slsvr01\gc_lab\Gcp.i\P050509B.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	961.0706	3.9	15.0
29 Aroclor-1260	1000.0000	1002.9723	0.3	15.0
34 Decachlorobiphenyl	50.0000	47.6462	4.7	15.0

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PCAL961.D Page 1
Report Date: 10-May-2005 11:34

STL St. Louis

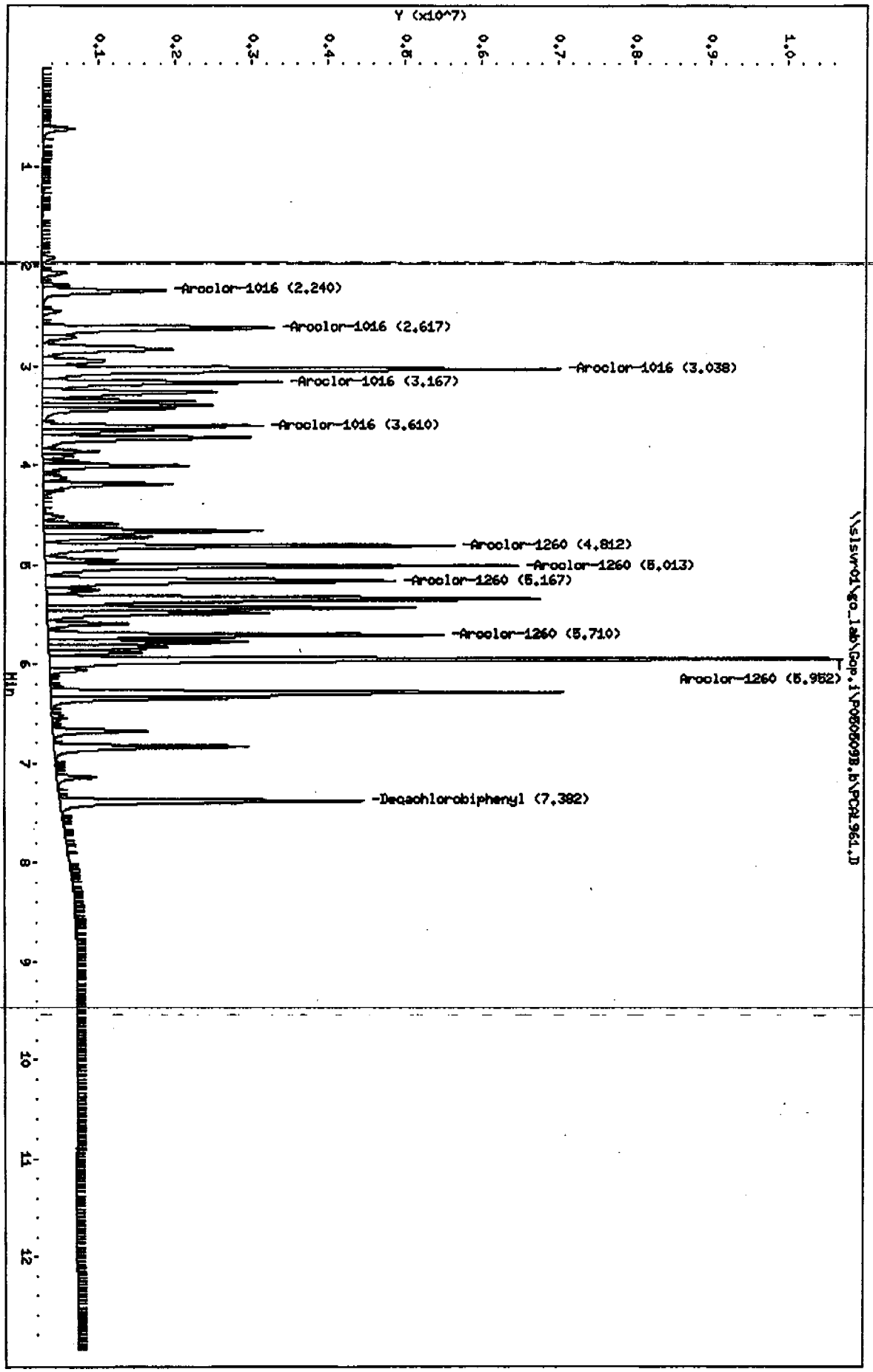
Data file : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PCAL961.D
Lab Smp Id: CCAL1000
Inj Date : 10-MAY-2005 01:10
Operator : BLO Inst ID: Gcp.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Meth Date : 10-May-2005 11:31 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 35 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

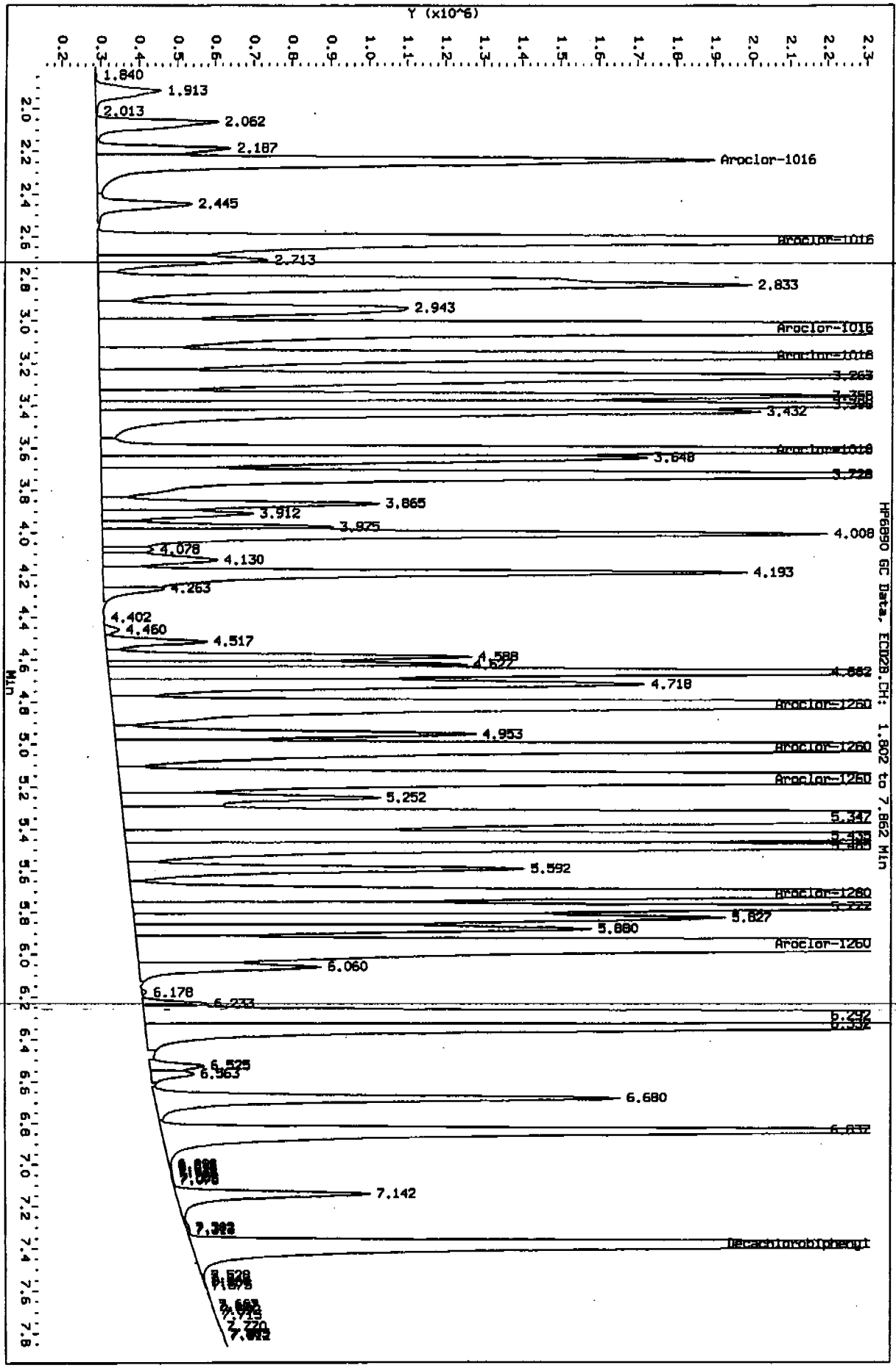
Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.240	2.223	0.017	4496916	1000.00	899.5	80.00- 120.00	100.00
2.616	2.598	0.018	9017601	1000.00	940.5	160.42- 240.63	200.53
3.038	3.016	0.022	19384058	1000.00	1008	344.84- 517.26	431.05
3.166	3.145	0.021	8094705	1000.00	986.2	144.00- 216.01	180.01
3.610	3.590	0.020	5969816	1000.00	971.3	106.20- 159.30	132.75
		Average of Peak Amounts =			961.1		
28 Aroclor-1260					CAS #: 11096-82-5		
4.811	4.788	0.023	12166971	1000.00	984.5	80.00- 120.00	100.00
5.013	5.019	-0.006	14236544	1000.00	1009	93.61- 140.41	117.01
5.166	5.140	0.026	13252411	1000.00	993.8	87.14- 130.71	108.92
5.710	5.685	0.025	11455573	1000.00	977.2	75.32- 112.98	94.15
5.951	5.959	-0.008	25165882	1000.00	1050	165.47- 248.21	206.84
		Average of Peak Amounts =			1003		
$ 32 Decachlorobiphenyl					CAS #:		
7.381	7.391	-0.010	9291155	50.0000	47.65		

BLO 5-10-05


Y (x10^7)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Min
1
2
3
4
5
6
7
8
9
10
11
12
-Aroclor-1016 (2.240)
-Aroclor-1016 (2.617)
-Aroclor-1016 (3.038)
-Aroclor-1016 (3.167)
-Aroclor-1016 (3.610)
-Aroclor-1260 (4.812)
-Aroclor-1260 (5.013)
-Aroclor-1260 (5.167)
-Aroclor-1260 (5.710)
Aroclor-1260 (5.952)
-Decachlorobiphenyl (7.382)
Data File: \\slsvr01\go_lab\Gop.1\P050609B.b\PCAL964.D
Date : 10-MAY-2005 01:10
Client ID:
Sample Info: CCAL1000
Volume Injected (ul): 2.0
Column phase: CLPEST-2
\\slsvr01\go_lab\Gop.1\P050609B.b\PCAL964.D
Instrument: Gop.1
Operator: BLG
Column diameter: 0.53
Page 2


Y (x10^6)
Data File: \\alevr01\gc_lab\Gcp_1\P050509B.b\PCAL961.D
Injection Date: 10-MAY-2005 01:10
Instrument: Gcp_1
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 1.802 to 7.862 Min
Min
1.840
1.913
2.013
2.062
2.187
Aroclor-1016
2.445
Aroclor-1016
2.713
2.833
2.943
Aroclor-1016
Aroclor-1016
3.263
3.432
Aroclor-1016
3.648
3.728
3.865
3.912
3.925
4.008
4.078
4.130
4.193
4.263
4.402
4.460
4.517
4.588
4.627
4.662
4.718
Aroclor-1260
4.953
Aroclor-1260
Aroclor-1260
5.252
5.347
5.592
Aroclor-1260
5.827
5.880
Aroclor-1260
6.060
6.178
6.233
6.297
6.525
6.563
6.680
6.832
7.142
Decachlorobiphenyl

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b/PCAL971.D
Report Date: 05/10/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PCAL971.D
Analysis Type: SOIL

Injection Date: 10-MAY-2005 03:54
Lab Sample ID: CCAL1000
Method File: \\slsvr01\gc_lab\Gcp.i\P050509A.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
23 Aroclor-1016	1000.0000	963.0547	3.7	15.0	
29 Aroclor-1260	1000.0000	903.0970	9.7	15.0	
34 Decachlorobiphenyl	50.0000	41.8466	16.3	15.0	<-

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL971.D
Report Date: 10-May-2005 09:47

STL St. Louis

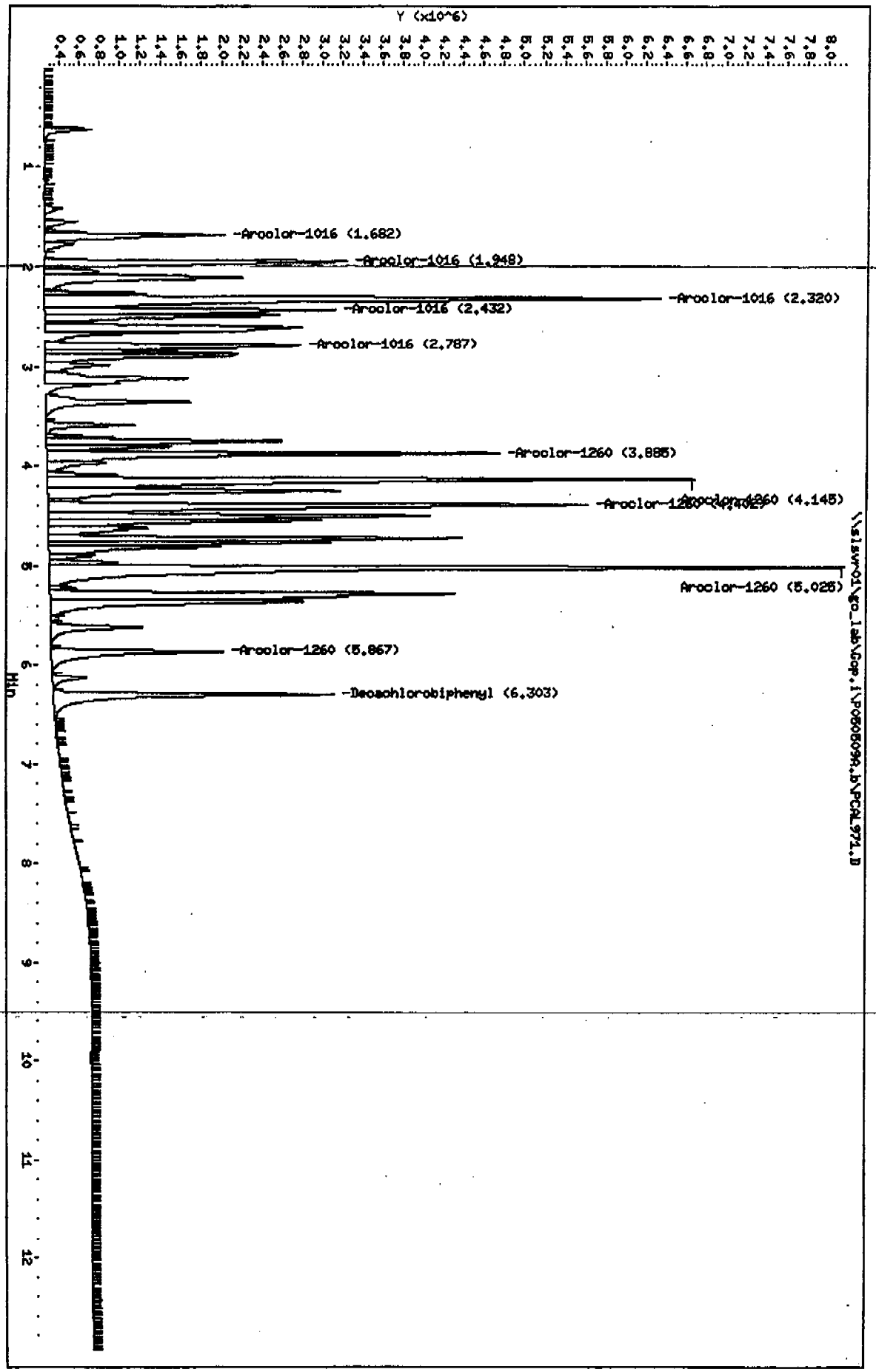
Data file : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL971.D
Lab Smp Id: CCAL1000
Inj Date : 10-MAY-2005 03:54
Operator : BLO Inst ID: Gcp.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Meth Date : 10-May-2005 09:43 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 35 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

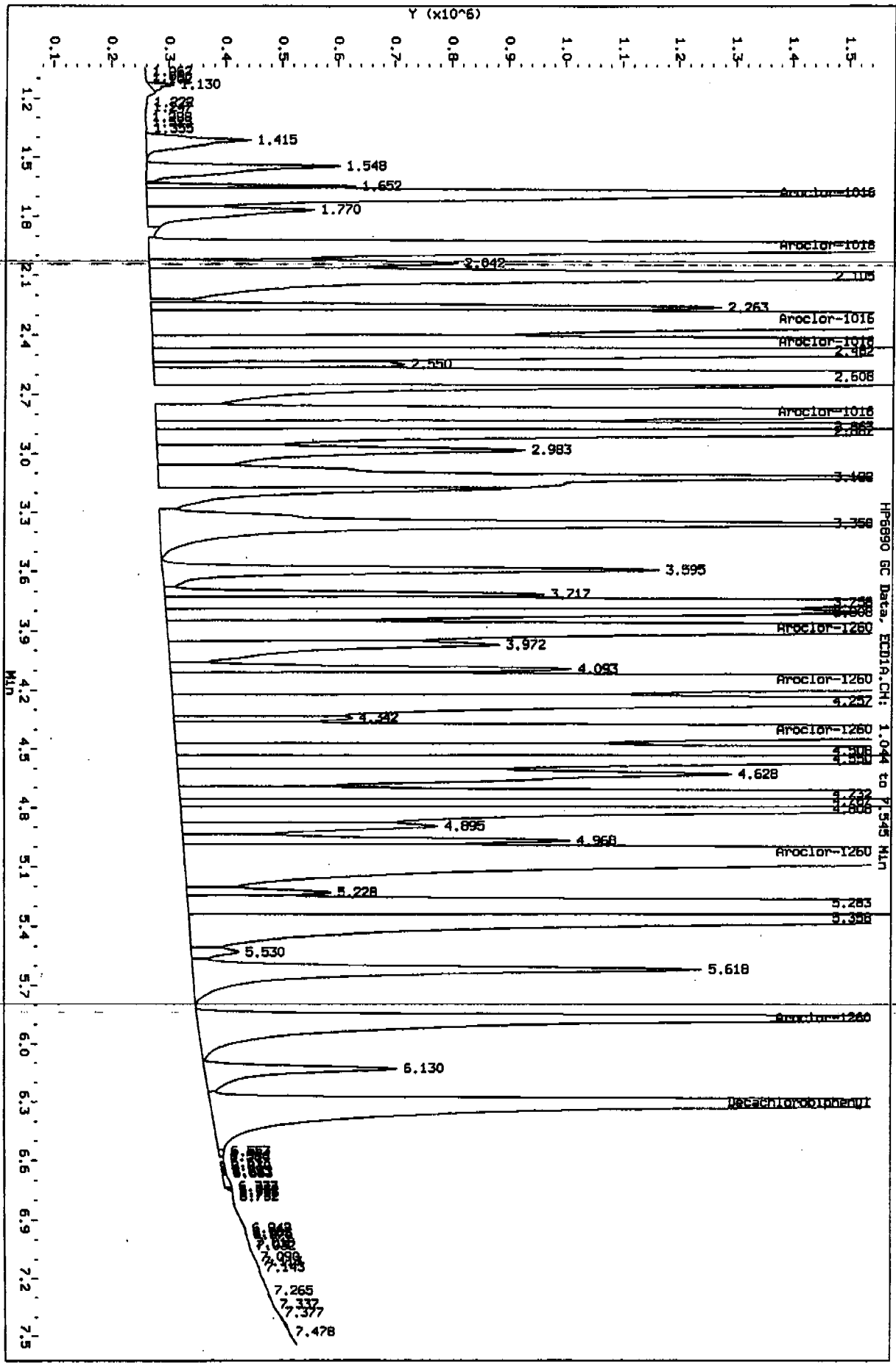
Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.681	1.668	0.013	4584474	1000.00	938.7	80.00- 120.00	100.00
1.948	1.933	0.015	8687523	1000.00	950.3	151.60- 227.40	189.50
2.319	2.303	0.016	20434591	1000.00	999.0	356.59- 534.88	445.73
2.431	2.411	0.018	7331288	1000.00	980.5	127.93- 191.90	159.92
2.786	2.768	0.018	7540755	1000.00	946.8	131.59- 197.38	164.48
		Average of Peak Amounts =			963.1		
28 Aroclor-1260					CAS #: 11096-82-5		
3.884	3.896	-0.012	11184588	1000.00	936.9	80.00- 120.00	100.00
4.144	4.156	-0.012	19267170	1000.00	923.3	137.81- 206.72	172.27
4.401	4.412	-0.011	16500858	1000.00	900.1	118.03- 177.04	147.53
5.024	5.039	-0.015	25005300	1000.00	937.8	178.86- 268.28	223.57
5.866	5.882	-0.016	5518639	1000.00	817.4	39.47- 59.21	49.34
		Average of Peak Amounts =			903.1		
$ 32 Decachlorobiphenyl					CAS #:		
6.303	6.273	0.030	8466845	50.0000	41.85		

BLO 5/10/05


Y (x10^6)
Aroclor-1016 (1.682)
Aroclor-1016 (1.948)
Aroclor-1016 (2.320)
Aroclor-1016 (2.432)
Aroclor-1016 (2.787)
Aroclor-1260 (3.885)
Aroclor-1260 (4.145)
Aroclor-1260 (5.025)
Aroclor-1260 (5.867)
Decachlorobiphenyl (6.303)
Min
Data File: \\slsvr01\go_lab\Gop.i\P0505094.b\PCAL971.D
Date : 10-MAY-2005 03:54
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-2
\\slsvr01\go_lab\Gop.i\P0505094.b\PCAL971.D
Instrument: Gop.i
Operator: BLD
Column diameter: 0.53


Y (x10^6)
Min
1.130
1.415
1.548
1.652
Aroclor-1016
1.770
Aroclor-1016
2.042
2.105
2.263
Aroclor-1016
Aroclor-1016
2.550
2.608
Aroclor-1016
2.983
3.358
3.595
3.717
Aroclor-1260
3.972
4.093
Aroclor-1260
4.257
4.442
Aroclor-1260
4.628
4.895
4.968
Aroclor-1260
5.228
5.283
5.530
5.618
Aroclor-1260
6.130
Decachlorobiphenyl
7.265
7.337
7.377
7.478
Data File: \\alsvr01\gc_lab\Gcp_1\P050509A.b\PCAL971.D
Injection Date: 10-MAY-2005 03:54
Instrument: Gcp_1
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 1.044 to 7.545 Min

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b/PCAL971.D
Report Date: 05/10/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PCAL971.D
Analysis Type: SOIL

Injection Date: 10-MAY-2005 03:54
Lab Sample ID: CCAL1000
Method File: \\slsvr01\gc_lab\Gcp.i\P050509B.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
23 Aroclor-1016	1000.0000	940.7308	5.9	15.0	
29 Aroclor-1260	1000.0000	892.9667	10.7	15.0	
34 Decachlorobiphenyl	50.0000	39.4769	21.0	15.0	<-

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PCAL971.D Page 1
Report Date: 10-May-2005 11:35

STL St. Louis

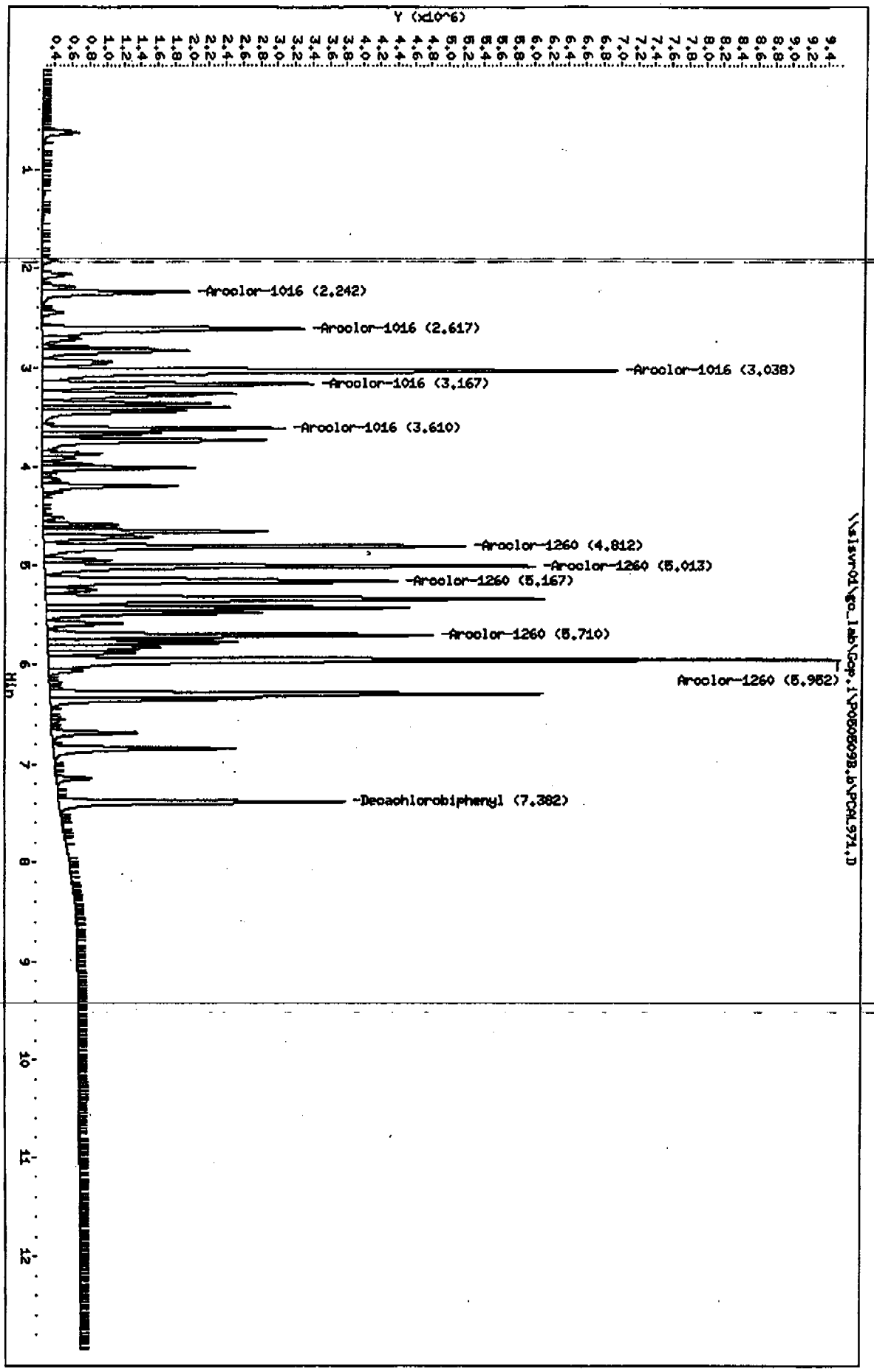
Data file : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PCAL971.D
Lab Smp Id: CCAL1000
Inj Date : 10-MAY-2005 03:54
Operator : BLO Inst ID: Gcp.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Meth Date : 10-May-2005 11:31 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 35 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

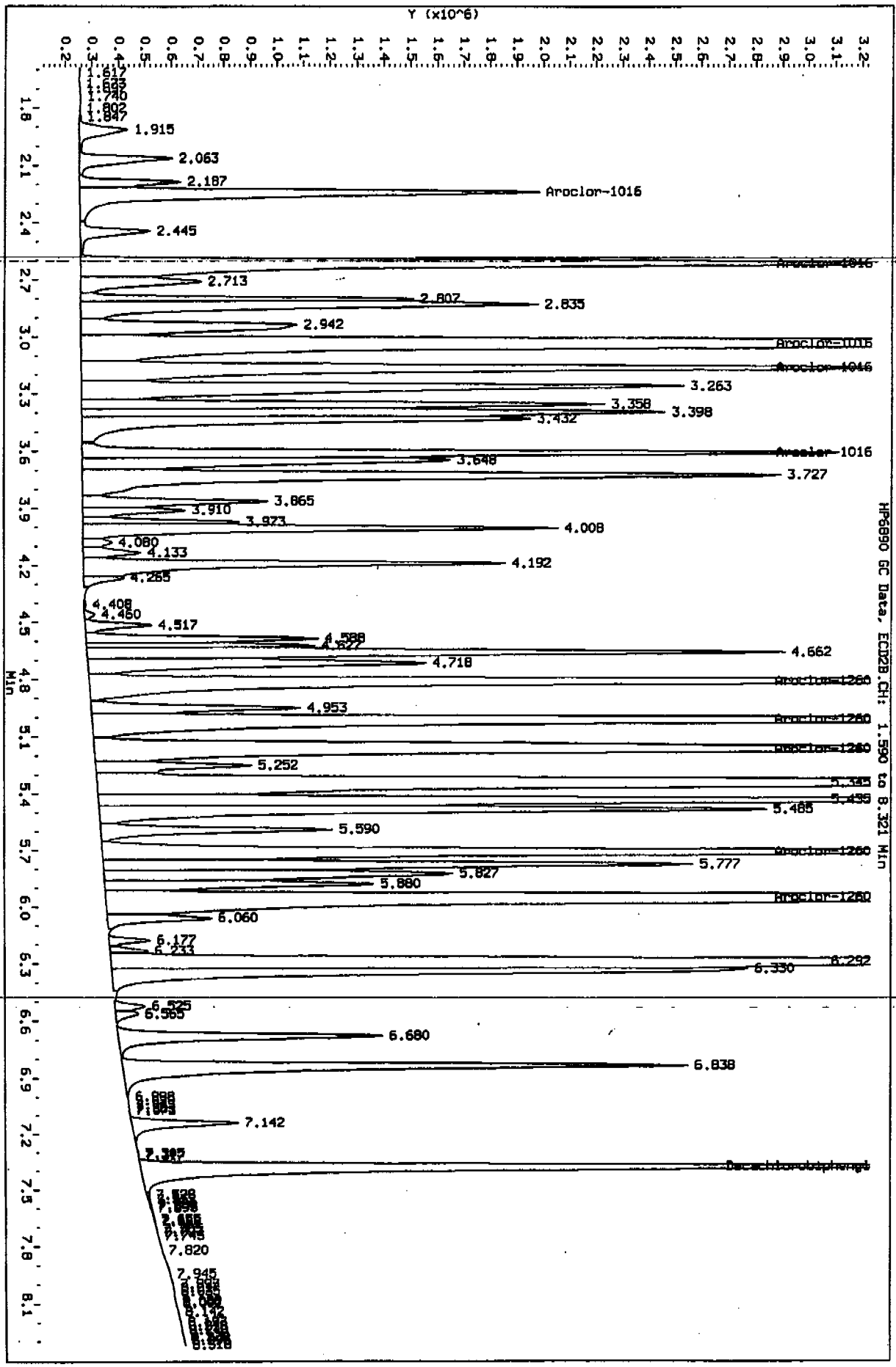
Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.241	2.223	0.018	4484424	1000.00	897.0	80.00- 120.00	100.00
2.616	2.598	0.018	8937980	1000.00	932.2	159.45- 239.17	199.31
3.038	3.016	0.022	19021328	1000.00	989.0	339.33- 509.00	424.16
3.166	3.145	0.021	7923393	1000.00	965.4	141.35- 212.02	176.69
3.610	3.590	0.020	5655357	1000.00	920.2	100.89- 151.33	126.11
	Average of Peak Amounts =				940.7		
28 Aroclor-1260					CAS #: 11096-82-5		
4.811	4.788	0.023	11083799	1000.00	896.8	80.00- 120.00	100.00
5.013	5.019	-0.006	12897287	1000.00	914.2	93.09- 139.63	116.36
5.166	5.140	0.026	11864657	1000.00	889.7	85.64- 128.45	107.05
5.710	5.685	0.025	9893543	1000.00	843.9	71.41- 107.11	89.26
5.951	5.959	-0.008	22047522	1000.00	920.2	159.13- 238.70	198.92
	Average of Peak Amounts =				893		
$ 32 Decachlorobiphenyl					CAS #:		
7.381	7.391	-0.010	7698112	50.0000	39.48		

BLO 5-10-05


Y (x10^6)
Data File: \\slsvr01\gc_lab\Gcp.i\P0505093.b\PCAL974.D
Date : 10-MAY-2005 03:54
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53
\\slsvr01\gc_lab\Gcp.i\P0505093.b\PCAL974.D
-Aroclor-1016 (2.242)
-Aroclor-1016 (2.617)
-Aroclor-1016 (3.038)
-Aroclor-1016 (3.167)
-Aroclor-1016 (3.610)
-Aroclor-1260 (4.812)
-Aroclor-1260 (5.013)
-Aroclor-1260 (5.167)
-Aroclor-1260 (5.710)
Aroclor-1260 (5.952)
-Decachlorobiphenyl (7.382)
Min


Y (x10^6)
Data File: \\elsvr01\gc_lab\Gcp.1\P0505098.b\PCAL971.D
Injection Date: 10-MAY-2005 03:54
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 1.590 to 8.321 Min
Min
1.915
2.063
2.187
Aroclor-1016
2.445
2.713
2.807
2.835
2.942
3.263
3.358
3.398
3.432
3.648
3.727
3.865
3.910
3.973
4.008
4.080
4.133
4.192
4.265
4.406
4.460
4.517
4.662
4.718
4.953
5.252
5.345
5.435
5.485
5.590
5.777
5.827
5.880
6.060
6.177
6.233
6.292
6.330
6.525
6.565
6.680
6.838
7.142
7.820
7.945

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b/PCAL978.D
Report Date: 05/10/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PCAL978.D
Analysis Type: SOIL

Injection Date: 10-MAY-2005 05:49
Lab Sample ID: CCAL1000
Method File: \\slsvr01\gc_lab\Gcp.i\P050509A.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	1002.7388	0.3	15.0
29 Aroclor-1260	1000.0000	946.9730	5.3	15.0
34 Decachlorobiphenyl	50.0000	43.0382	13.9	15.0

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL978.D Page 1
Report Date: 10-May-2005 09:48

STL St. Louis

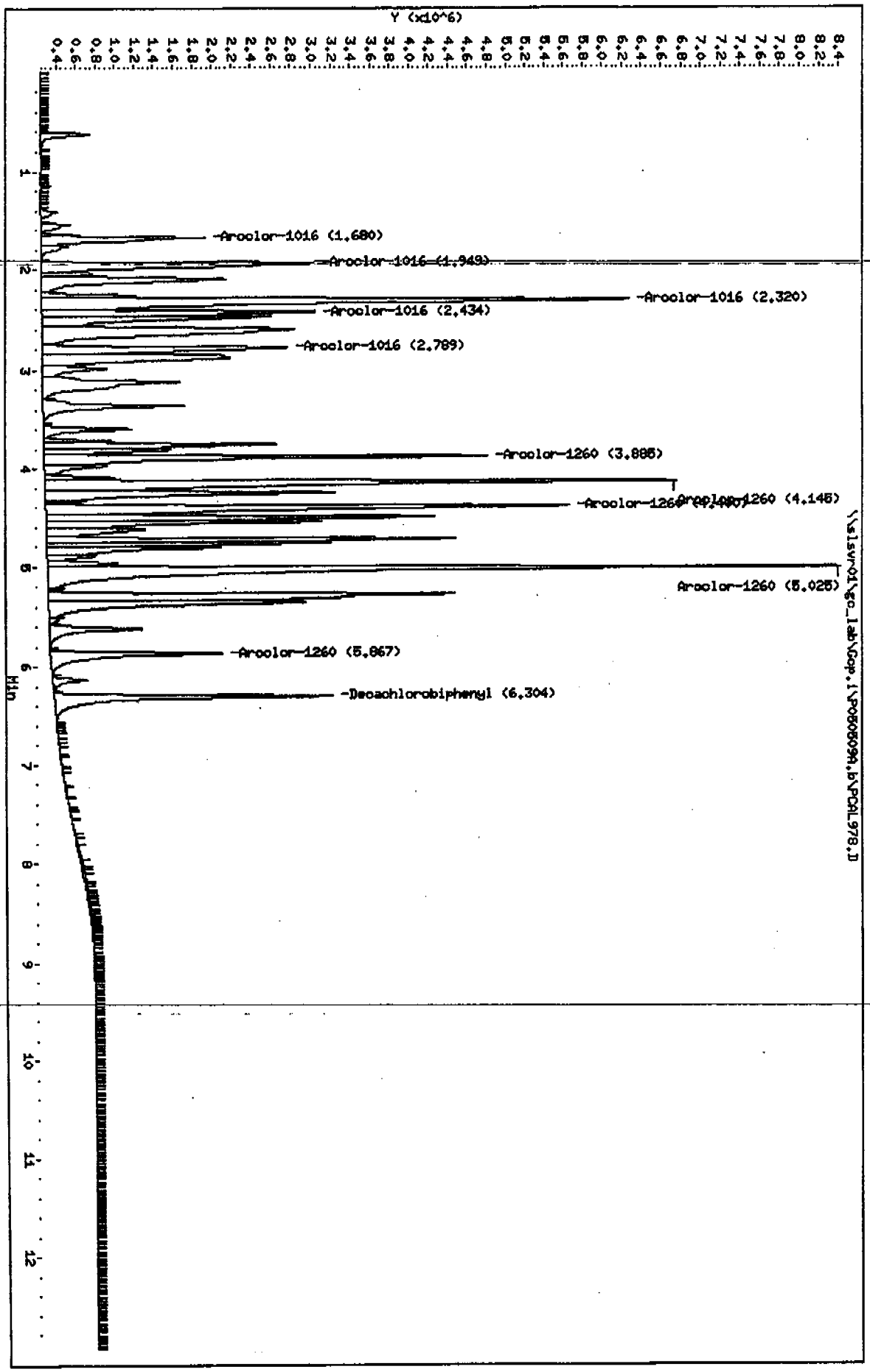
Data file : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL978.D
Lab Smp Id: CCAL1000
Inj Date : 10-MAY-2005 05:49
Operator : BLO Inst ID: Gcp.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Meth Date : 10-May-2005 09:43 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 51 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

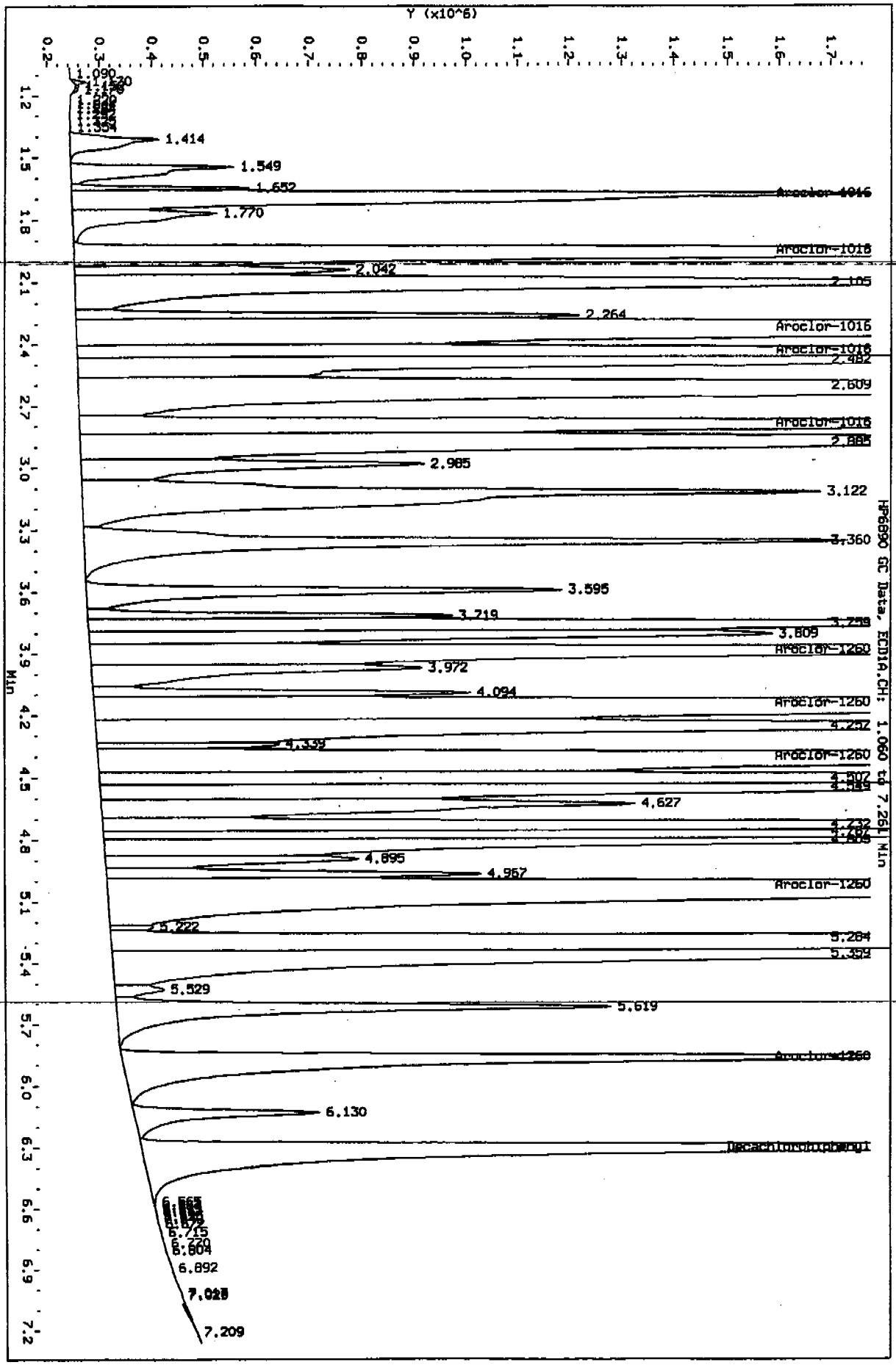
Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.680	1.668	0.012	4759275	1000.00	974.5	80.00- 120.00	100.00
1.948	1.933	0.015	8999866	1000.00	984.5	151.28- 226.92	189.10
2.320	2.303	0.017	21432008	1000.00	1048	360.26- 540.38	450.32
2.433	2.413	0.020	7563432	1000.00	1012	127.14- 190.70	158.92
2.788	2.768	0.020	7928268	1000.00	995.4	133.27- 199.90	166.59
		Average of Peak Amounts =			1003		
28 Aroclor-1260					CAS #: 11096-82-5		
3.885	3.896	-0.011	11733143	1000.00	982.9	80.00- 120.00	100.00
4.145	4.156	-0.011	19946053	1000.00	955.8	136.00- 204.00	170.00
4.400	4.412	-0.012	17420544	1000.00	950.2	118.78- 178.17	148.47
5.025	5.039	-0.014	26487399	1000.00	993.4	180.60- 270.90	225.75
5.867	5.882	-0.015	5755923	1000.00	852.6	39.25- 58.87	49.06
		Average of Peak Amounts =			947		
$ 32 Decachlorobiphenyl					CAS #:		
6.303	6.273	0.030	8707953	50.0000	43.04		

BLO 5/10/05


Y (x10^6)
Aroclor-1016 (1,680)
Aroclor-1016 (1,949)
Aroclor-1016 (2,320)
Aroclor-1016 (2,434)
Aroclor-1016 (2,789)
Aroclor-1260 (3,885)
Aroclor-1260 (4,146)
Aroclor-1260 (5,025)
Aroclor-1260 (5,867)
Decachlorobiphenyl (6,304)
Min
\\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL978.D
Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL978.D
Date : 10-MAY-2005 08:49
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Data File: \\slavr01\gc_lab\Gcp.i\P050509A.b\PCAL978.D
Injection Date: 10-MAY-2005 05:49
Instrument: Gcp.i
Client Sample ID:
1.414
1.549
1.652
Aroclor-1016
1.770
Aroclor-1016
2.042
2.105
2.264
Aroclor-1016
Aroclor-1016
2.482
2.609
Aroclor-1016
2.885
2.985
3.122
3.360
3.595
3.719
3.809
Aroclor-1260
3.972
4.094
Aroclor-1260
4.252
4.339
Aroclor-1260
4.627
4.895
4.957
Aroclor-1260
5.222
5.284
5.392
5.529
5.619
Aroclor-1260
6.130
Decachlorobiphenyl
6.715
6.804
6.892
7.209
HP6890 GC Data, ECD1A.CH: 1.060 to 7.261 Min
Min

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b/PCAL978.D
Report Date: 05/10/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PCAL978.D
Analysis Type: SOIL

Injection Date: 10-MAY-2005 05:49
Lab Sample ID: CCAL1000
Method File: \\slsvr01\gc_lab\Gcp.i\P050509B.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
23 Aroclor-1016	1000.0000	981.8169	1.8	15.0	
29 Aroclor-1260	1000.0000	945.8896	5.4	15.0	
34 Decachlorobiphenyl	50.0000	40.5757	18.8	15.0	<-

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PCAL978.D
Report Date: 10-May-2005 11:35

STL St. Louis

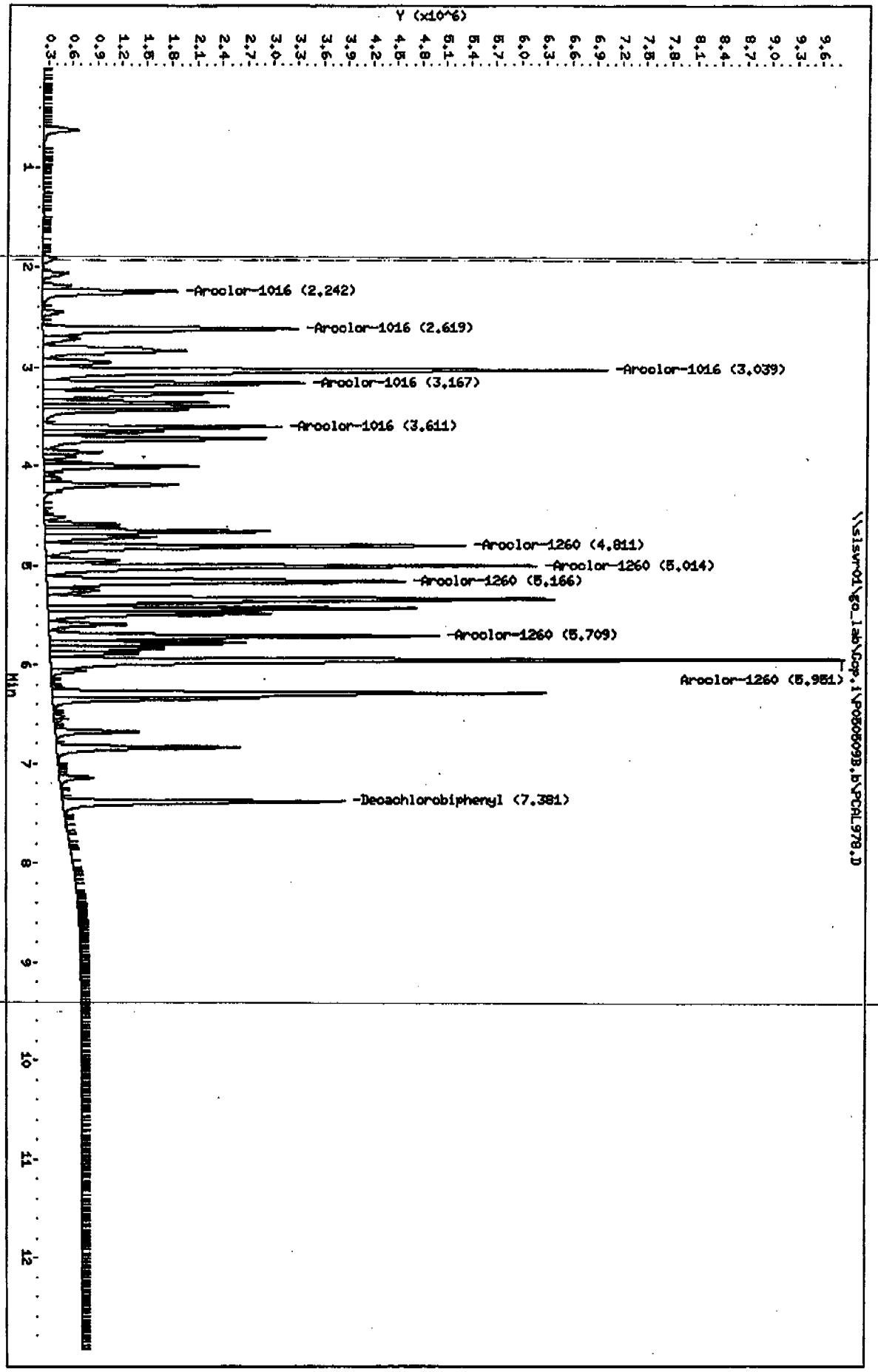
Data file : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PCAL978.D
Lab Smp Id: CCAL1000
Inj Date : 10-MAY-2005 05:49
Operator : BLO Inst ID: Gcp.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Meth Date : 10-May-2005 11:31 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 51 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

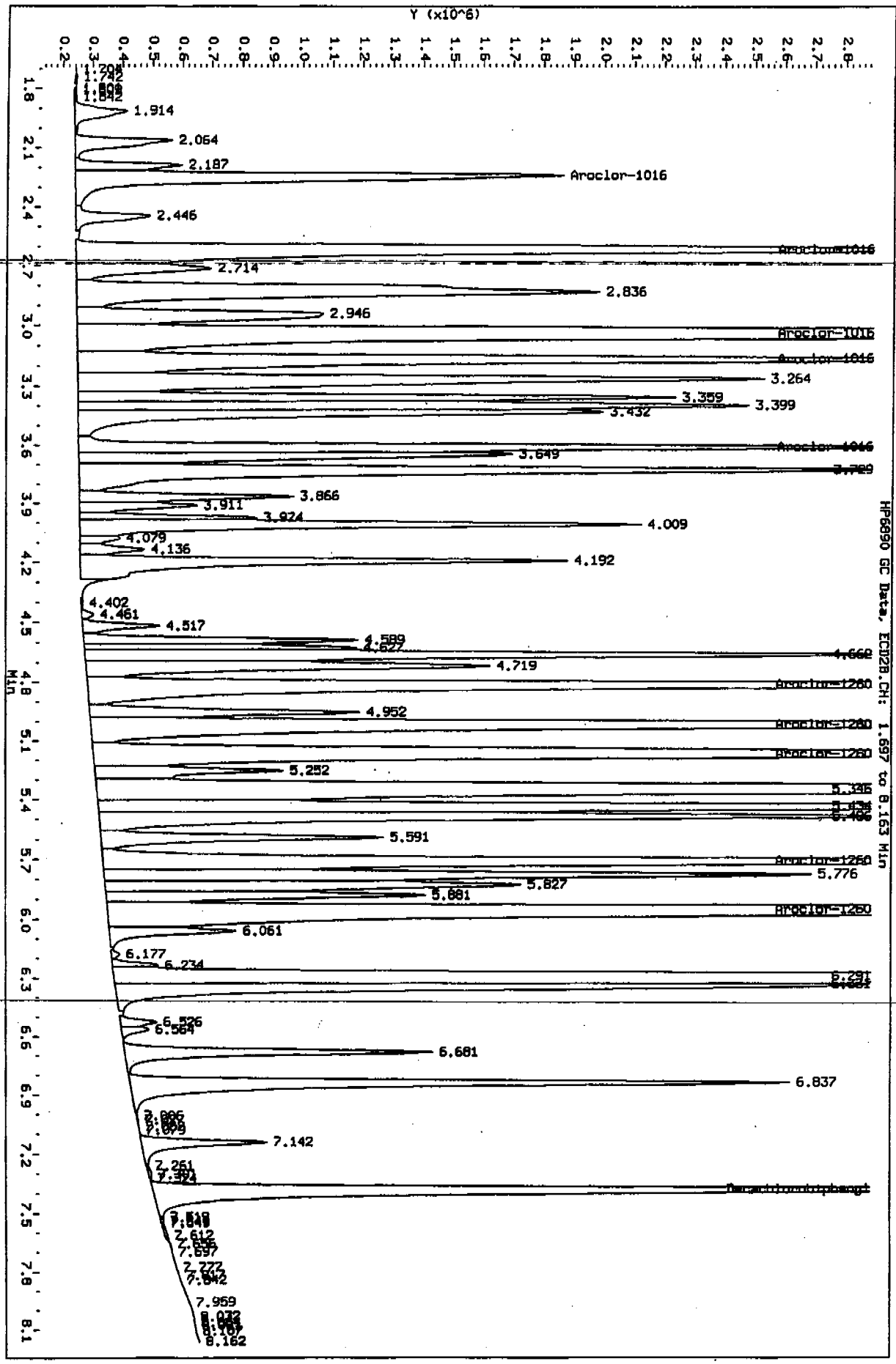
Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.242	2.223	0.019	4669810	1000.00	934.0	80.00- 120.00	100.00
2.618	2.598	0.020	9260579	1000.00	965.8	158.65- 237.97	198.31
3.038	3.016	0.022	19805975	1000.00	1030	339.30- 508.95	424.13
3.167	3.145	0.022	8271548	1000.00	1008	141.70- 212.55	177.13
3.610	3.590	0.020	5971816	1000.00	971.6	102.31- 153.46	127.88
		Average of Peak Amounts =			981.8		
28 Aroclor-1260					CAS #: 11096-82-5		
4.810	4.788	0.022	11785174	1000.00	953.6	80.00- 120.00	100.00
5.013	5.019	-0.006	13755289	1000.00	975.0	93.37- 140.06	116.72
5.165	5.140	0.025	12627412	1000.00	946.9	85.72- 128.58	107.15
5.708	5.685	0.023	10511899	1000.00	896.7	71.36- 107.04	89.20
5.950	5.959	-0.009	22936503	1000.00	957.3	155.70- 233.55	194.62
		Average of Peak Amounts =			945.9		
$ 32 Decachlorobiphenyl					CAS #:		
7.380	7.391	-0.011	7912392	50.0000	40.58		

BLO 5-10-05


Y (x10^6)
Data File: \\slsvr01\go_lab\Gcp.i\P050509B.b\PCAL978.D
Date : 10-MAY-2005 08:49
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53
\\slsvr01\go_lab\Gcp.i\P050509B.b\PCAL978.D
Aroclor-1016 (2,242)
Aroclor-1016 (2,619)
Aroclor-1016 (3,039)
Aroclor-1016 (3,167)
Aroclor-1016 (3,611)
Aroclor-1260 (4,811)
Aroclor-1260 (5,014)
Aroclor-1260 (5,166)
Aroclor-1260 (5,709)
Aroclor-1260 (5,951)
Decachlorobiphenyl (7,381)
Min


Y (x10^6)
Min
Aroclor-1016
Aroclor-1260
HP6890 GC Data, EC02B.CH: 1.697 to 8.163 Min
Data File: \\elsvr01\gc_lab\Gcp_1\P0505098.b\PCAL978.D
Injection Date: 10-MAY-2005 05:49
Instrument: Gcp_1
Client Sample ID:

GC RAW SAMPLE DATA

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PSMP938.D
Report Date: 10-May-2005 10:50

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PSMP938.D
Lab Smp Id: G81GA1AD Client Smp ID: RE73-05-58879
Inj Date : 09-MAY-2005 18:50
Operator : BLO Inst ID: Gcp.i
Smp Info : G81GA1AD
Misc Info : F5D220273-002
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Meth Date : 10-May-2005 09:43 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: son05.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.522	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng/mL)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
27 Aroclor-1254					CAS #: 11097-69-1		
3.120	3.102	0.018	4625989	608.551	199.4	80.00- 120.00	100.00(M)
3.357	3.337	0.020	16457801	804.061	263.4	215.41- 323.11	355.77
3.713	3.694	0.019	18356274	1133.49	371.4	170.43- 255.65	396.81
4.142	4.121	0.021	13159272	1131.77	370.8	122.36- 183.55	284.46
4.400	4.376	0.024	26983935	1605.69	526.1	176.86- 265.29	583.31
		Average of Peak Concentrations =			346.2		
$ 32 Decachlorobiphenyl					CAS #:		
6.300	6.273	0.027	8518352	42.1011	13.79		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 5/10/05

QC Flag Legend

M - Compound response manually integrated.

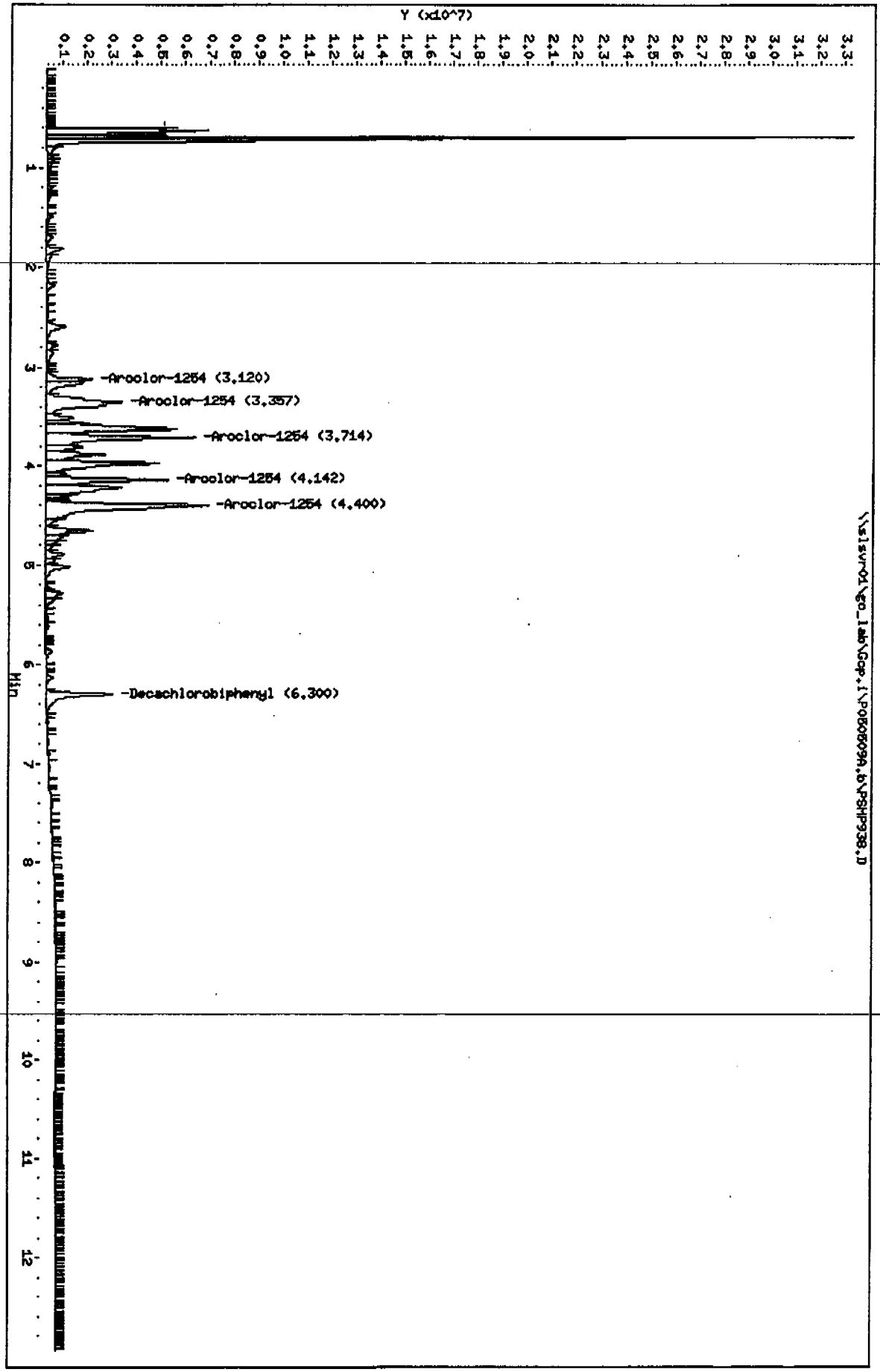
Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PSMP938.D
Report Date: 10-May-2005 10:50

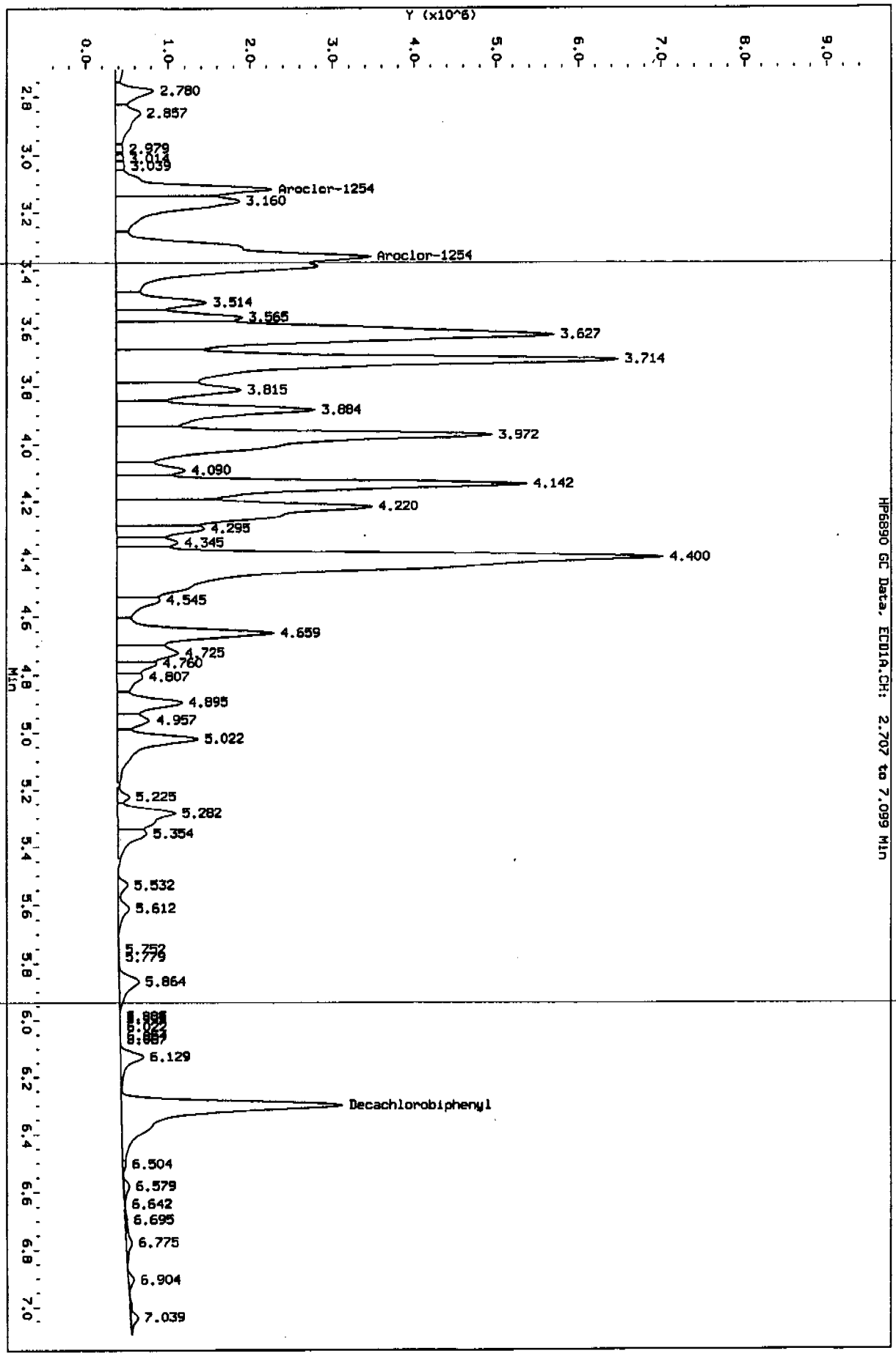
STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 22-APR-2005 00:00 Client SDG: F5D2202
Sample Matrix: SOLID Fraction: PCB
Lab Smp Id: G81GA1AD Client Smp ID: RE73-05-58879
Level: LOW Operator: BLO
Data Type: GC MULTI COMP SampleType: SAMPLE
SpikeList File: SOILSPKPCB.spk Quant Type: ESTD
Sublist File: son05.sub
Method File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Misc Info: F5D220273-002

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 32 Decachlorobiphenyl	13.10	13.79	105.25	30-150


Y (x10^7)
Min
-Aroclor-1254 (3.120)
-Aroclor-1254 (3.357)
-Aroclor-1254 (3.714)
-Aroclor-1254 (4.142)
-Aroclor-1254 (4.400)
-Decachlorobiphenyl (6.300)
\\slsvr01\gc_lab\Gcp.i\P050509A.b\PSHP938.D
Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PSHP938.D
Date : 09-MAY-2005 18:50
Client ID: RE73-05-58879
Sample Info: CB1CA1AD
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
Min
2.8
3.0
3.2
3.4
3.6
3.8
4.0
4.2
4.4
4.6
4.8
5.0
5.2
5.4
5.6
5.8
6.0
6.2
6.4
6.6
6.8
7.0
2.780
2.857
2.979
3.014
3.039
Aroclor-1254
3.160
Aroclor-1254
3.514
3.565
3.627
3.714
3.815
3.884
3.972
4.090
4.142
4.220
4.295
4.345
4.400
4.545
4.659
4.725
4.760
4.807
4.895
4.957
5.022
5.225
5.282
5.354
5.532
5.612
5.752
5.779
5.864
6.129
Decachlorobiphenyl
6.504
6.579
6.642
6.695
6.775
6.904
7.039
Data File: \\slevr01\gc_lab\Gcp1_1\P050509A.b\PSMP938.D
Injection Date: 09-MAY-2005 18:50
Instrument: Gcp.1
Client Sample ID: RE73-05-58879
HP6890 GC Data, ECDiA.CH: 2.707 to 7.099 Min

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PSMP938.D
Report Date: 10-May-2005 11:20

STL St. Louis

CONFIRMATION DATA

Data file : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PSMP938.D
Lab Smp Id: G81GA1AD Client Smp ID: RE73-05-58879
Inj Date : 09-MAY-2005 18:50
Operator : BLO Inst ID: Gcp.i
Smp Info : G81GA1AD
Misc Info : F5D220273-002
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Meth Date : 09-May-2005 12:12 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: son05.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.522	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng/mL)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO	
27 Aroclor-1254					CAS #: 11097-69-1			
4.007	3.987	0.020	5334013	556.336	182.3	80.00- 120.00	100.00	(M)
4.190	4.167	0.023	8429226	827.821	271.2	84.96- 127.44	158.03	
4.625	4.602	0.023	14830094	915.910	300.1	135.10- 202.65	278.03	
~~5.168~~	~~5.141~~	~~0.027~~	~~14620203~~	~~1108.37~~	~~363.1~~	~~110.06- 165.09~~	~~274.09~~	
5.347	5.322	0.025	24144010	1447.20	474.2	139.20- 208.81	452.64	
Average of Peak Concentrations =					318.2			
$ 32 Decachlorobiphenyl					CAS #:			
7.380	7.391	-0.011	8635609	44.2845	14.51			

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 5/10/05

QC Flag Legend

M - Compound response manually integrated.

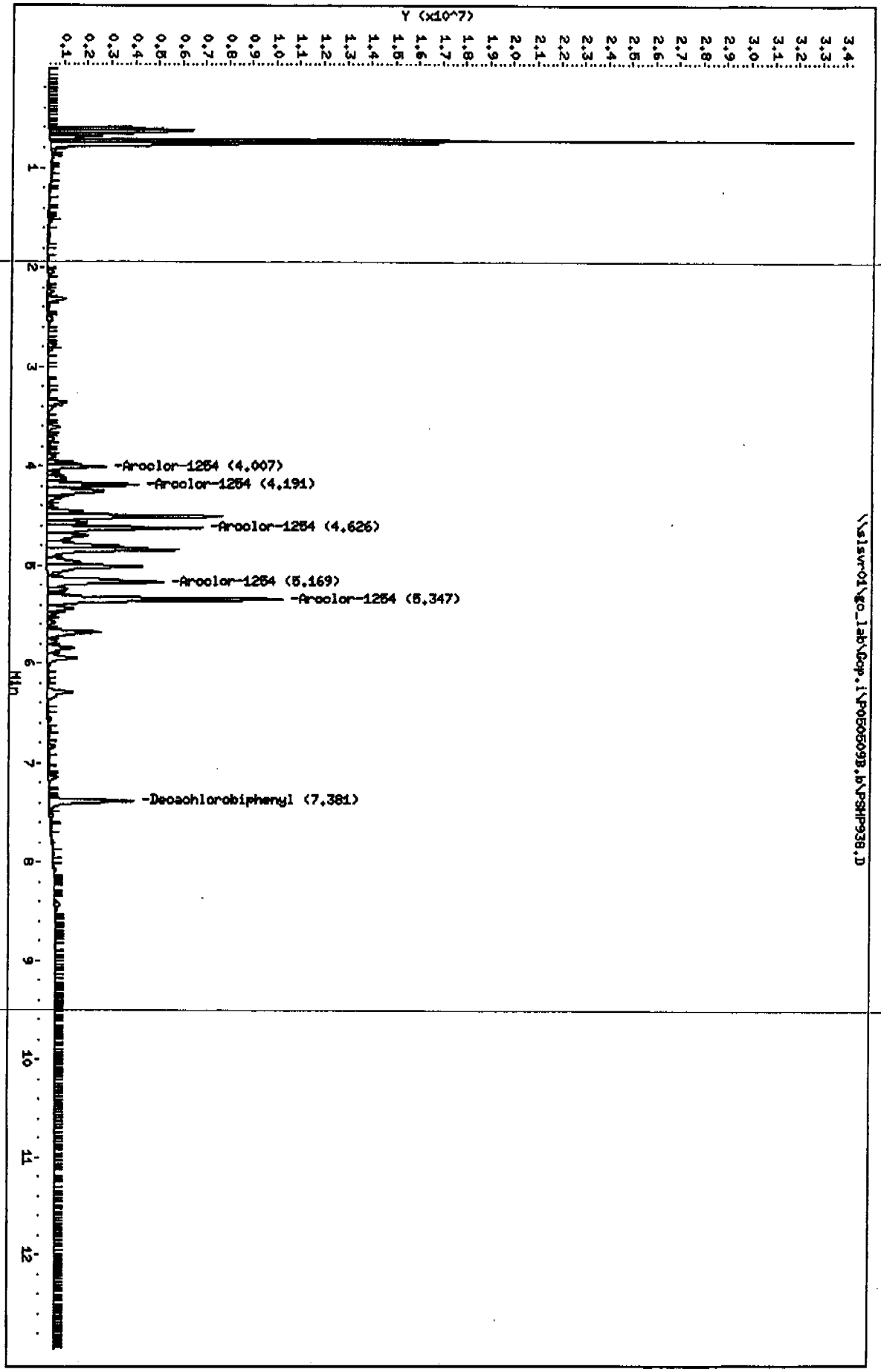
Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PSMP938.D Page 2
Report Date: 10-May-2005 11:20

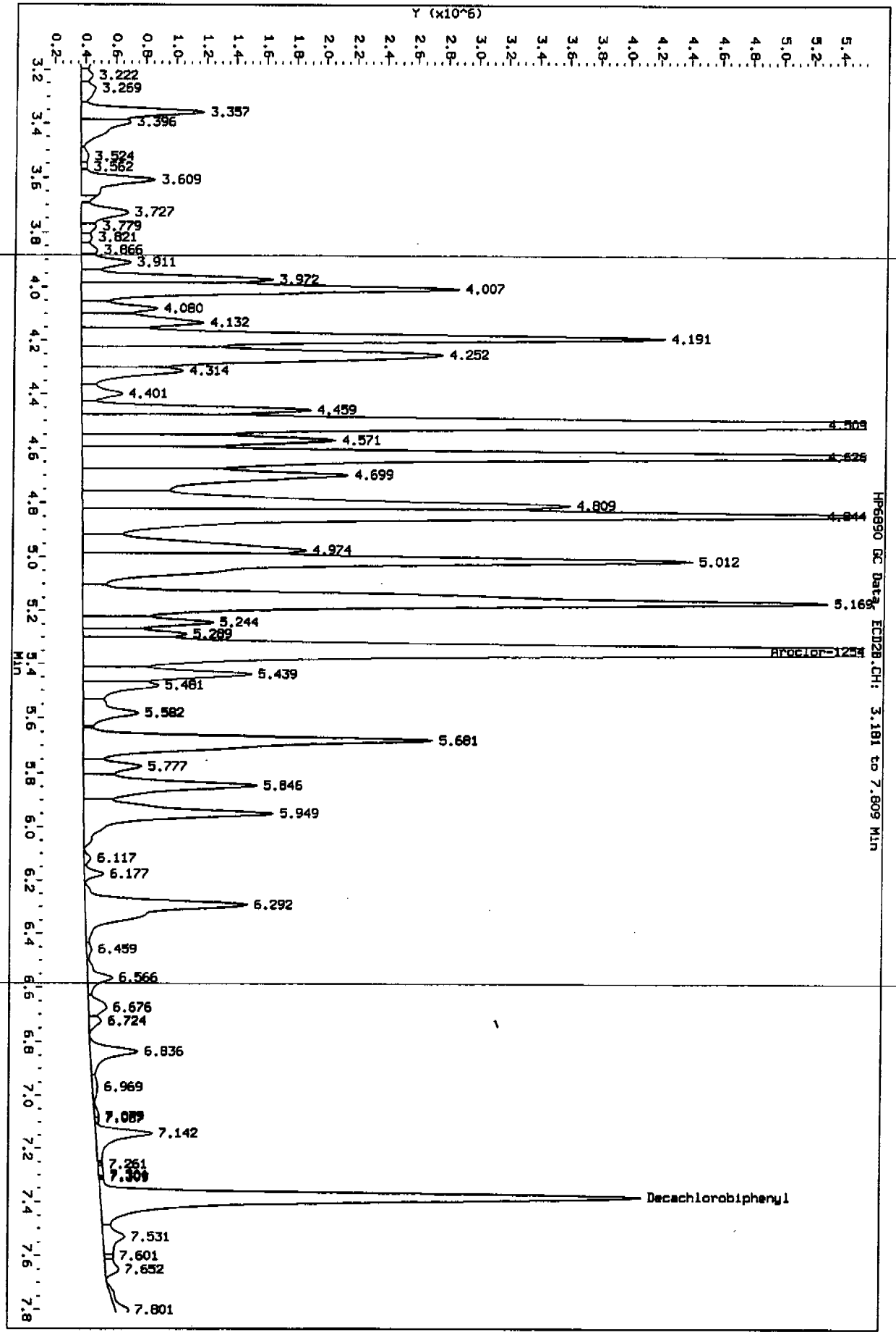
STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 22-APR-2005 00:00 Client SDG: F5D2202
Sample Matrix: SOLID Fraction: PCB
Lab Smp Id: G81GA1AD Client Smp ID: RE73-05-58879
Level: LOW Operator: BLO
Data Type: GC MULTI COMP SampleType: SAMPLE
SpikeList File: SOILSPKPCB.spk Quant Type: ESTD
Sublist File: son05.sub
Method File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Misc Info: F5D220273-002

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 32 Decachlorobiphenyl	13.10	14.51	110.71	30-150


Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PSHP938.D
Date : 09-MAY-2005 18:50
Client ID: RE73-05-59879
Sample Info: C8LCAMAD
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gcp.i
Operator: BLG
Column diameter: 0.53
\\slsvr01\gc_lab\Gcp.i\P050509B.b\PSHP938.D
Y (x10^7)
Min
-Aroclor-1254 (4.007)
-Aroclor-1254 (4.191)
-Aroclor-1254 (4.626)
-Aroclor-1254 (5.169)
-Aroclor-1254 (5.347)
-Decachlorobiphenyl (7.381)


Y (x10^6)
Min
3.222
3.269
3.357
3.396
3.524
3.562
3.609
3.727
3.779
3.821
3.866
3.911
3.972
4.007
4.080
4.132
4.191
4.252
4.314
4.401
4.459
4.509
4.571
4.626
4.699
4.809
4.844
4.974
5.012
5.169
5.244
5.289
Aroclor-1254
5.439
5.481
5.582
5.681
5.777
5.846
5.949
6.117
6.177
6.292
6.459
6.566
6.676
6.724
6.836
6.969
7.089
7.142
7.261
7.309
Decachlorobiphenyl
7.531
7.601
7.652
7.801
Data File: \\alsvr01\gc_lab\Gcp_1\P0505098.b\PSMP938.D
Injection Date: 09-MAY-2005 18:50
Instrument: Gcp_1
Client Sample ID: RE73-05-58879
HP6890 GC Data, ECD2B.CH: 3.181 to 7.809 Min

GC RAW QC DATA

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PBLK931.D Page 1
Report Date: 10-May-2005 10:17

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PBLK931.D
Lab Smp Id: G9HD11AA Client Smp ID: INTRA-LAB BLANK
Inj Date : 09-MAY-2005 16:55
Operator : BLO Inst ID: Gcp.i
Smp Info : G9HD11AA
Misc Info : F5D290000-298B
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Meth Date : 10-May-2005 09:43 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: QCson05.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ug/Kg)	TARGET RANGE	RATIO
$ 32 Decachlorobiphenyl					CAS #:		
6.303	6.273	0.030	8644034	42.7223	14.24		

BLO 5/10/05

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PBLK931.D Page 2
Report Date: 10-May-2005 10:17

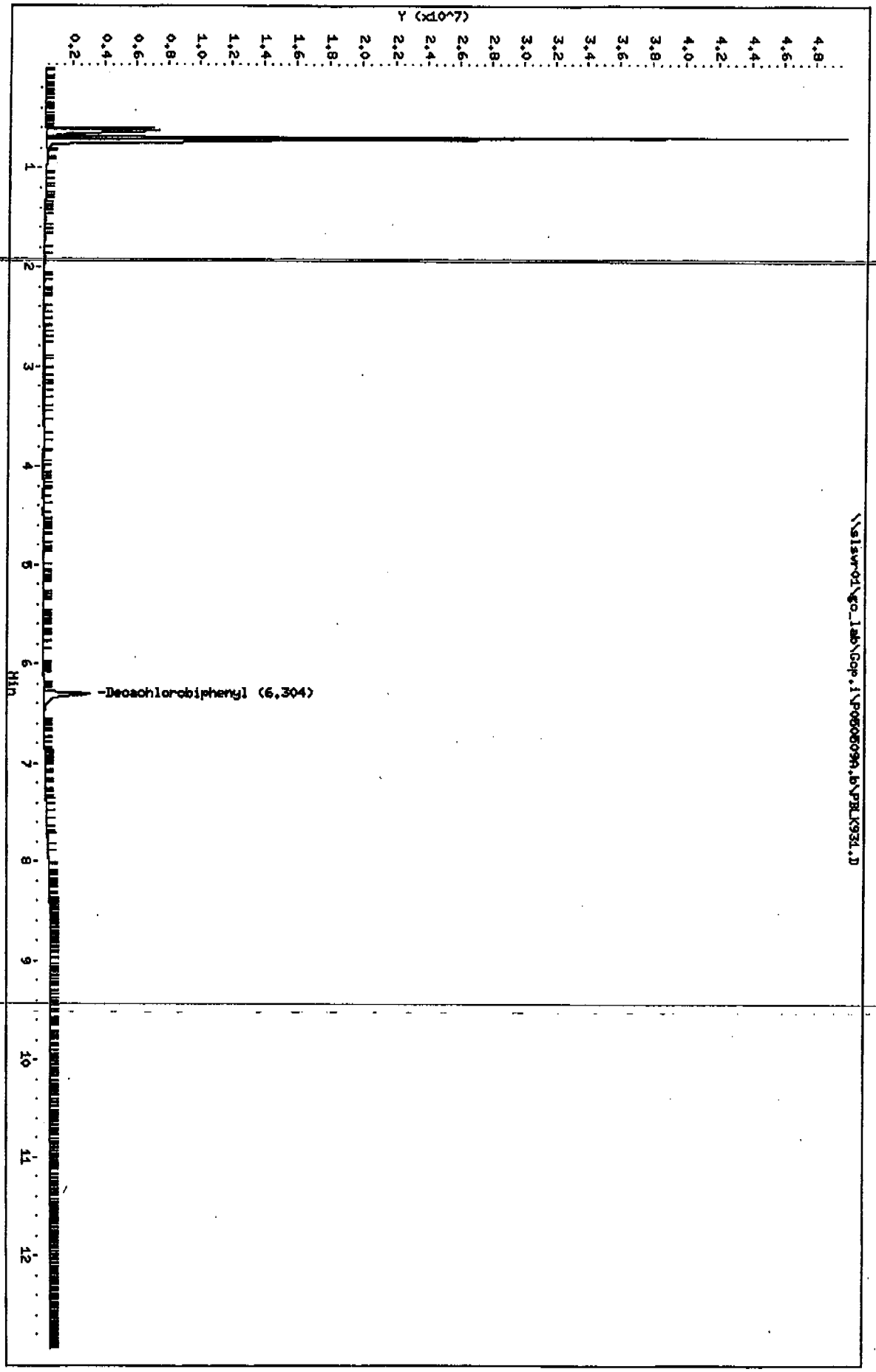
STL St. Louis

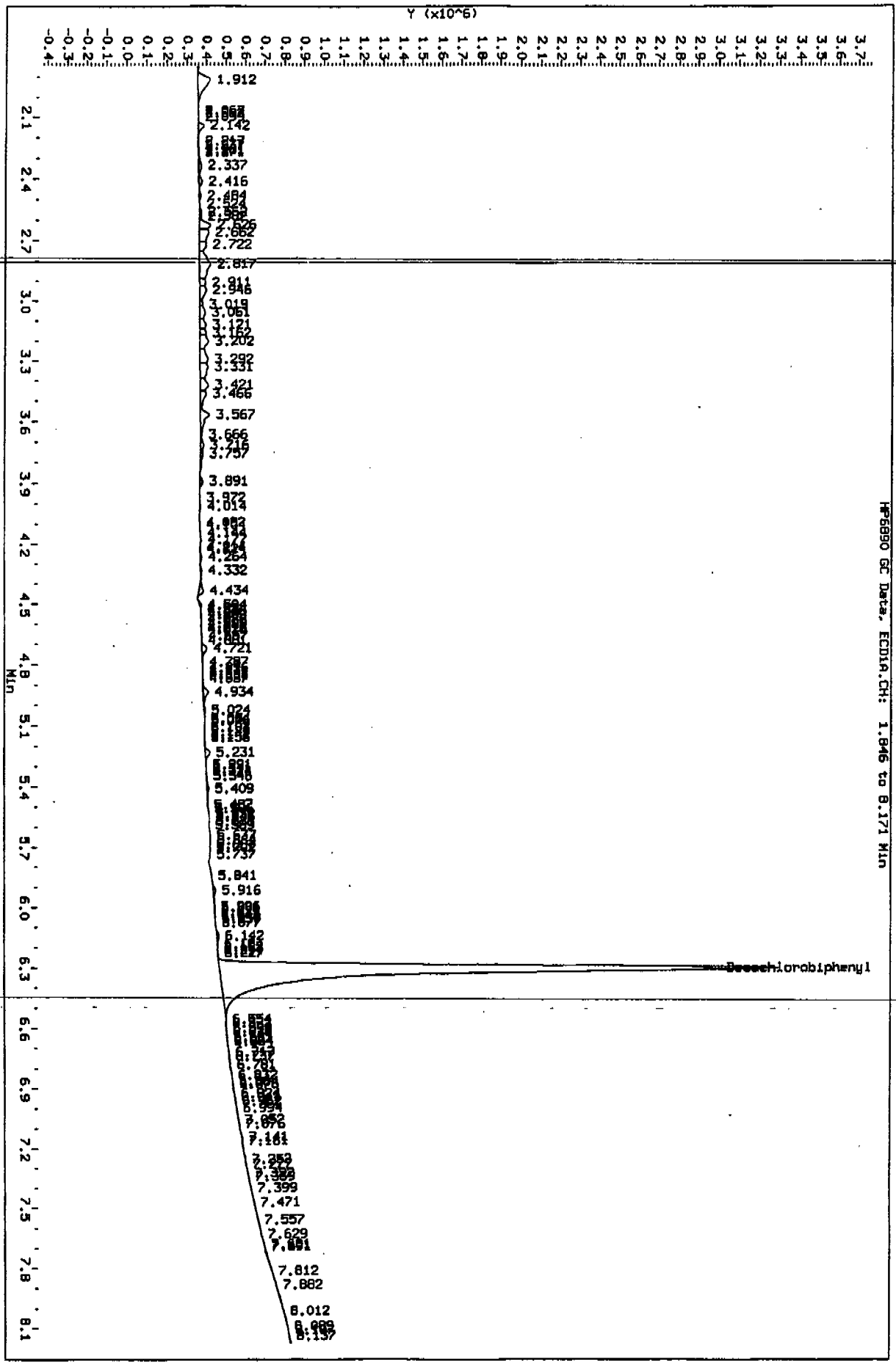
RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: G9HD11AA
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: SOILSPKPCB.spk
Sublist File: QCson05.sub
Method File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Misc Info: F5D290000-298B

Client SDG: F5D290000
Fraction: PCB
Client Smp ID: INTRA-LAB BLANK
Operator: BLO
SampleType: BLANK
Quant Type: ESTD

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 32 Decachlorobiphenyl	13.33	14.24	106.81	73-150


Y (x10^7)
Min
-Decachlorobiphenyl (6,304)
\\slsvr01\gc_lab\Gcp.i\P0605096.b\PBLK931.D
Data File: \\slsvr01\gc_lab\Gcp.i\P0605096.b\PBLK931.D
Date : 09-MAY-2005 16:55
Client ID: INTRA-LAB BLANK
Sample Info: C9HD1AA
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gcp.i
Operator: BLD
Column diameter: 0.53


Y (x10^6)
Data File: \\alsvr01\gc_lab\Gcp1\P0505098.b\PBLK931.D
Injection Date: 09-MAY-2005 16:55
Instrument: Gcp.i
Client Sample ID: INTRA-LAB BLANK
HP6890 GC Data, ECD1A.CH: 1.846 to 8.171 Min
Min
Decachlorobiphenyl
1.912
2.142
2.337
2.416
2.626
2.662
2.722
2.817
2.911
2.946
3.019
3.061
3.121
3.202
3.292
3.331
3.421
3.466
3.567
3.666
3.757
3.891
4.014
4.144
4.264
4.332
4.434
4.721
4.934
5.024
5.231
5.409
5.737
5.841
5.916
6.142
7.076
7.141
7.259
7.399
7.471
7.557
7.629
7.812
7.882
8.012

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PBLK931.D Page 1
Report Date: 10-May-2005 11:01

CONFIRMATION DATA

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PBLK931.D
Lab Smp Id: G9HD11AA Client Smp ID: INTRA-LAB BLANK
Inj Date : 09-MAY-2005 16:55
Operator : BLO Inst ID: Gcp.i
Smp Info : G9HD11AA
Misc Info : F5D290000-298B
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Meth Date : 09-May-2005 12:12 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: QCson05.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ug/Kg)	TARGET RANGE	RATIO
$ 32 Decachlorobiphenyl					CAS #:		
7.382	7.391	-0.009	8194592	42.0229	14.01		

BLO 5/10/05

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PBLK931.D
Report Date: 10-May-2005 11:01

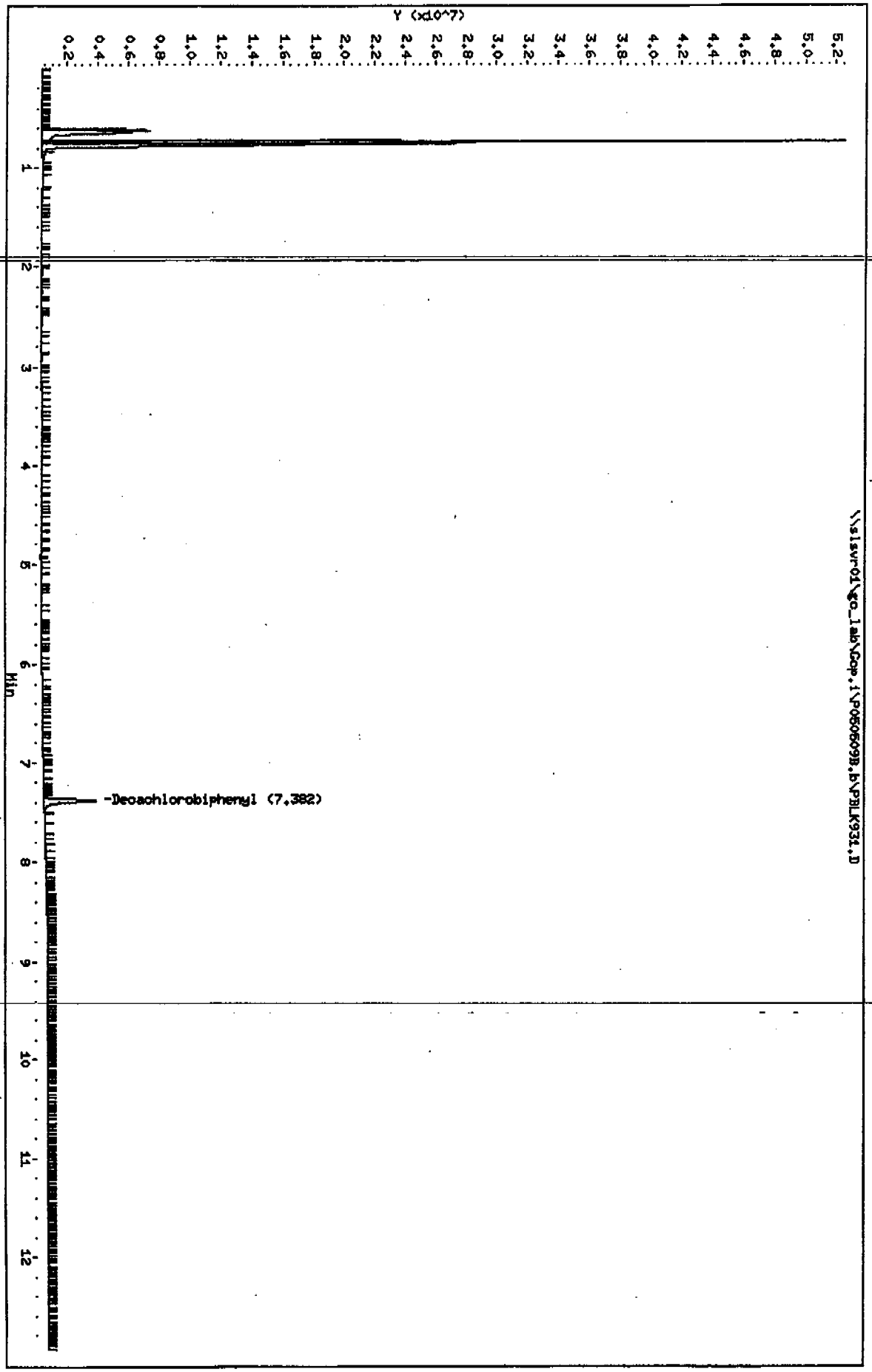
STL St. Louis

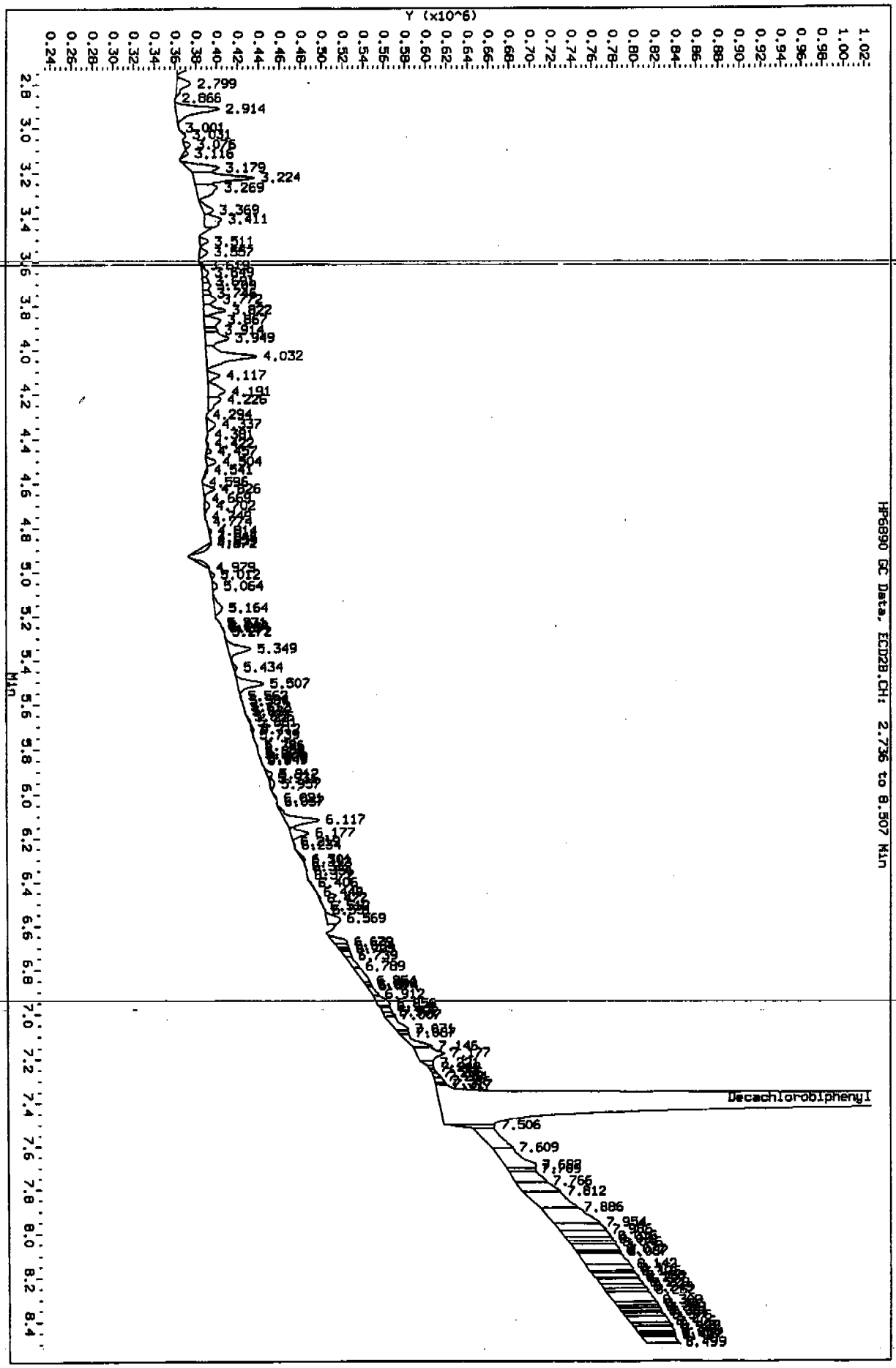
RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: G9HD11AA
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: SOILSPKPCB.spk
Sublist File: QCson05.sub
Method File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Misc Info: F5D290000-298B

Client SDG: F5D290000
Fraction: PCB
Client Smp ID: INTRA-LAB BLANK
Operator: BLO
SampleType: BLANK
Quant Type: ESTD

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 32 Decachlorobiphenyl	13.33	14.01	105.06	73-150


Data File: \\slsvr01\gc_lab\Gcp.i\P0506609B.b\PBLK931.D
Date : 09-MAY-2005 16:55
Client ID: INTRA-LAB BLANK
Sample Info: C9HDD1AA
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gcp.i
Operator: ELO
Column diameter: 0.53
\\slsvr01\gc_lab\Gcp.i\P0506609B.b\PBLK931.D
Y (x10^7)
Min
-Decachlorobiphenyl (7.382)


Data File: \\elsvr01\gc_lab\Gcp1\PCB05098.b\PBLK931.D
Injection Date: 09-MAY-2005 16:55
Instrument: Gcp.i
Client Sample ID: INTRA-LAB BLANK
HP6890 GC Data, ECD2B.CH: 2.736 to 8.507 Min
Y (x10^6)
Min
Decachlorobiphenyl

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PLCS932.D
Report Date: 10-May-2005 10:19

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PLCS932.D
Lab Smp Id: G9HD11AC Client Smp ID: INTRA-LAB CHECK
Inj Date : 09-MAY-2005 17:11
Operator : BLO Inst ID: Gcp.i
Smp Info : G9HD11AC
Misc Info : F5D290000-298C
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Meth Date : 10-May-2005 09:43 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 7 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: QCson05.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng/mL)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.680	1.668	0.012	4428601	906.806	302.3	80.00- 120.00	100.00
1.946	1.933	0.013	8851324	968.242	322.7	151.28- 226.92	199.87
2.320	2.303	0.017	20670492	1010.51	336.8	360.26- 540.38	466.75
2.431	2.413	0.018	7639185	1021.65	340.6	127.14- 190.70	172.50
2.786	2.768	0.018	7976352	1001.46	333.8	133.27- 199.90	180.11
Average of Peak Concentrations =					327.2		
28 Aroclor-1260					CAS #: 11096-82-5		
3.886	3.896	-0.010	12287037	1029.27	343.1	80.00- 120.00	100.00
4.145	4.156	-0.011	21336671	1022.47	340.8	136.00- 204.00	173.65
4.401	4.412	-0.011	20763772	1132.62	377.5	118.78- 178.17	168.99
5.026	5.039	-0.013	25885254	970.769	323.6	180.60- 270.90	210.67
5.868	5.882	-0.014	5960118	882.802	294.3	39.25- 58.87	48.51
Average of Peak Concentrations =					335.9		
$ 32 Decachlorobiphenyl					CAS #:		
6.303	6.273	0.030	8857525	43.7775	14.59		

BLO 5/10/05

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PLCS932.D
Report Date: 10-May-2005 10:19

STL St. Louis

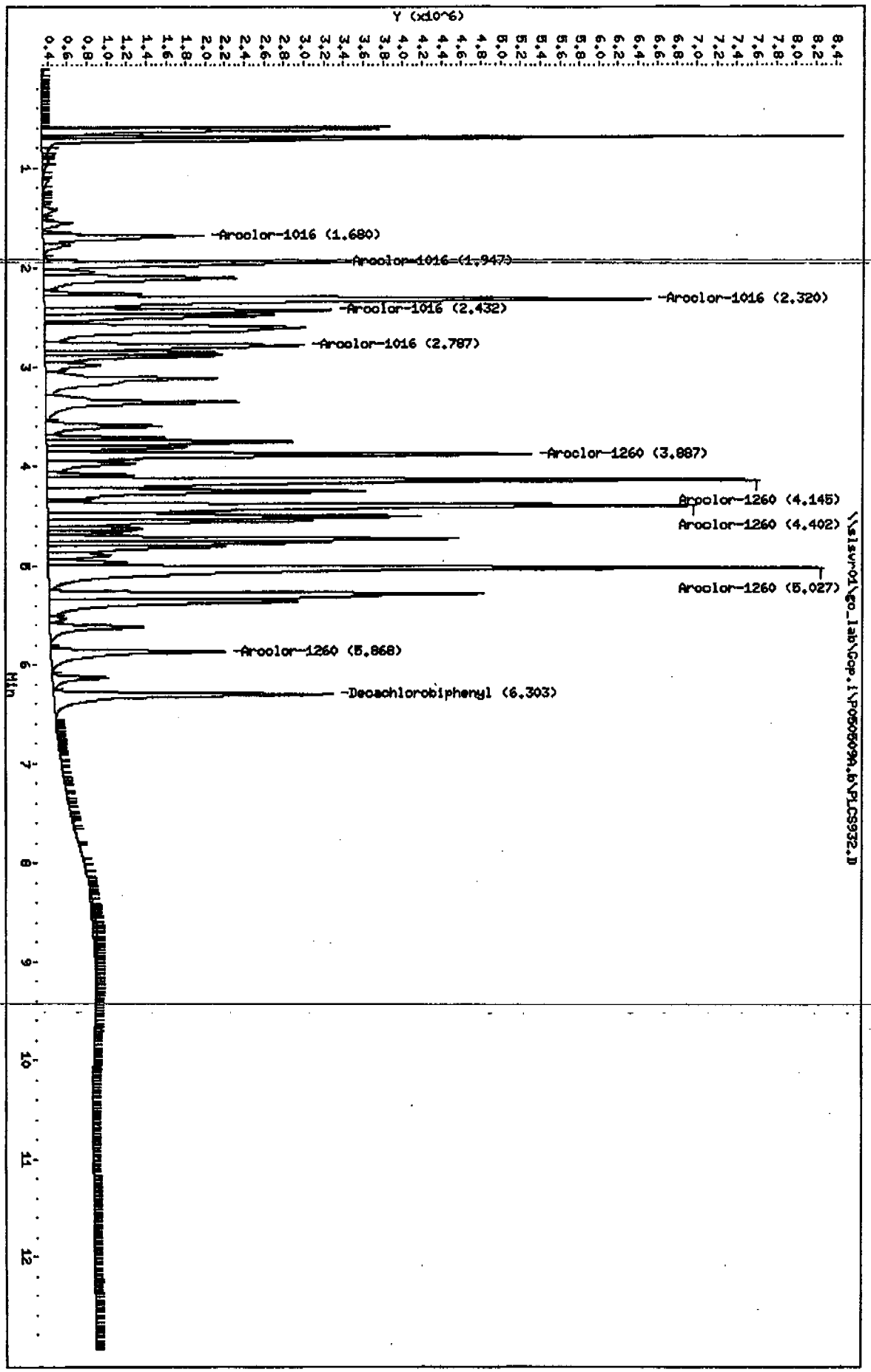
RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: G9HD11AC
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: son05lcs.spk
Sublist File: QCson05.sub
Method File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Misc Info: F5D290000-298C

Client SDG: F5D290000
Fraction: PCB
Client Smp ID: INTRA-LAB CHECK
Operator: BLO
SampleType: LCS
Quant Type: ESTD

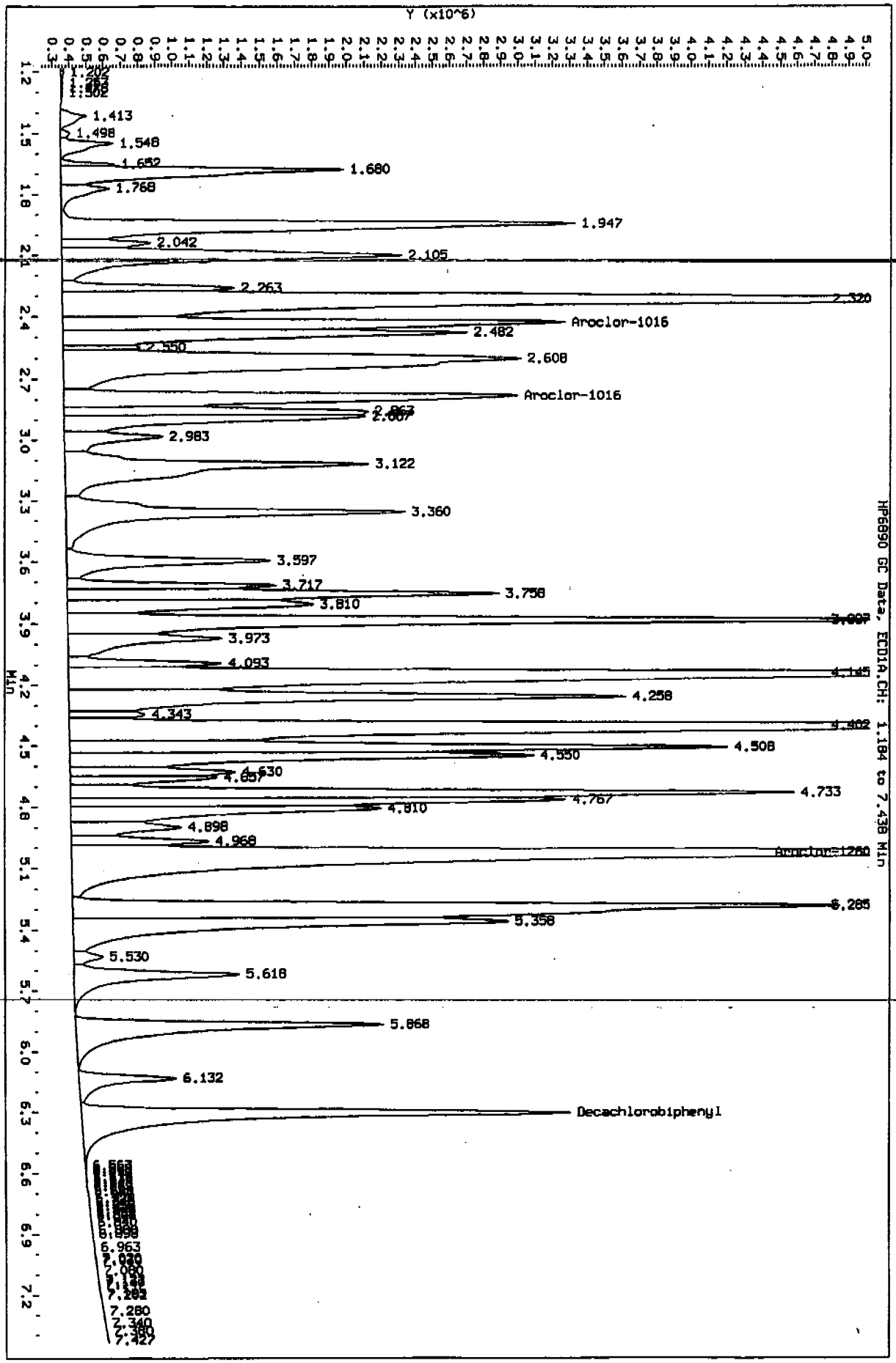
SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
22 Aroclor-1016	333.3	327.2	98.16	73-141
28 Aroclor-1260	333.3	335.9	100.77	72-144

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 32 Decachlorobiphenyl	13.33	14.59	109.44	73-150



Data File: \\slsvr01\go_lab\Gop.i\P0606090.b\PLCS932.D
Date : 09-MAY-2006 17:11
Client ID: INTRA-LAB CHECK
Sample Info: G3MD11AC
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gop.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
Data File: \\alsvr01\gc_lab\Gcp1\P050509A.b\PLCS932.D
Injection Date: 09-MAY-2005 17:11
Instrument: Gcp.1
Client Sample ID: INTRA-LAB CHECK
HP6890 GC Data, ECD1A.CH: 1.184 to 7.438 Min
1.413
1.498
1.548
1.652
1.680
1.768
1.947
2.042
2.105
2.263
2.320
Aroclor-1016
2.482
2.550
2.608
Aroclor-1016
2.983
3.122
3.360
3.597
3.717
3.756
3.810
3.973
4.093
4.258
4.343
4.508
4.550
4.733
4.767
4.810
4.898
4.968
Aroclor-1260
5.265
5.358
5.530
5.618
5.868
6.132
Decachlorobiphenyl
6.963
7.280
7.340
7.427

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PLCS932.D Page 1
Report Date: 10-May-2005 11:02

CONFIRMATION DATA

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PLCS932.D
Lab Smp Id: G9HD11AC Client Smp ID: INTRA-LAB CHECK
Inj Date : 09-MAY-2005 17:11
Operator : BLO Inst ID: Gcp.i
Smp Info : G9HD11AC
Misc Info : F5D290000-298C
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Meth Date : 09-May-2005 12:12 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 7 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: QCson05.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng/mL)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.241	2.223	0.018	4365071	873.095	291.0	80.00- 120.00	100.00
2.616	2.598	0.018	9152821	954.582	318.2	159.64- 239.46	209.68
3.040	3.016	0.024	19781550	1028.49	342.8	341.61- 512.42	453.18
3.168	3.145	0.023	8333980	1015.41	338.5	142.58- 213.87	190.92
3.611	3.590	0.021	5991622	974.880	325.0	104.73- 157.09	137.26
		Average of Peak Concentrations =			323.1		
28 Aroclor-1260					CAS #: 11096-82-5		
4.811	4.788	0.023	13283331	1074.80	358.3	80.00- 120.00	100.00
5.013	5.019	-0.006	14974871	1061.49	353.8	93.73- 140.59	112.73
5.166	5.140	0.026	14226977	1066.83	355.6	87.79- 131.68	107.10
5.710	5.685	0.025	11184225	954.011	318.0	76.27- 114.40	84.20
5.951	5.959	-0.008	23235912	969.778	323.2	167.38- 251.07	174.93
		Average of Peak Concentrations =			341.8		
$ 32 Decachlorobiphenyl					CAS #:		
7.383	7.391	-0.008	8129072	41.6869	13.90		

BLO 5/10/05

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PLCS932.D
Report Date: 10-May-2005 11:02

STL St. Louis

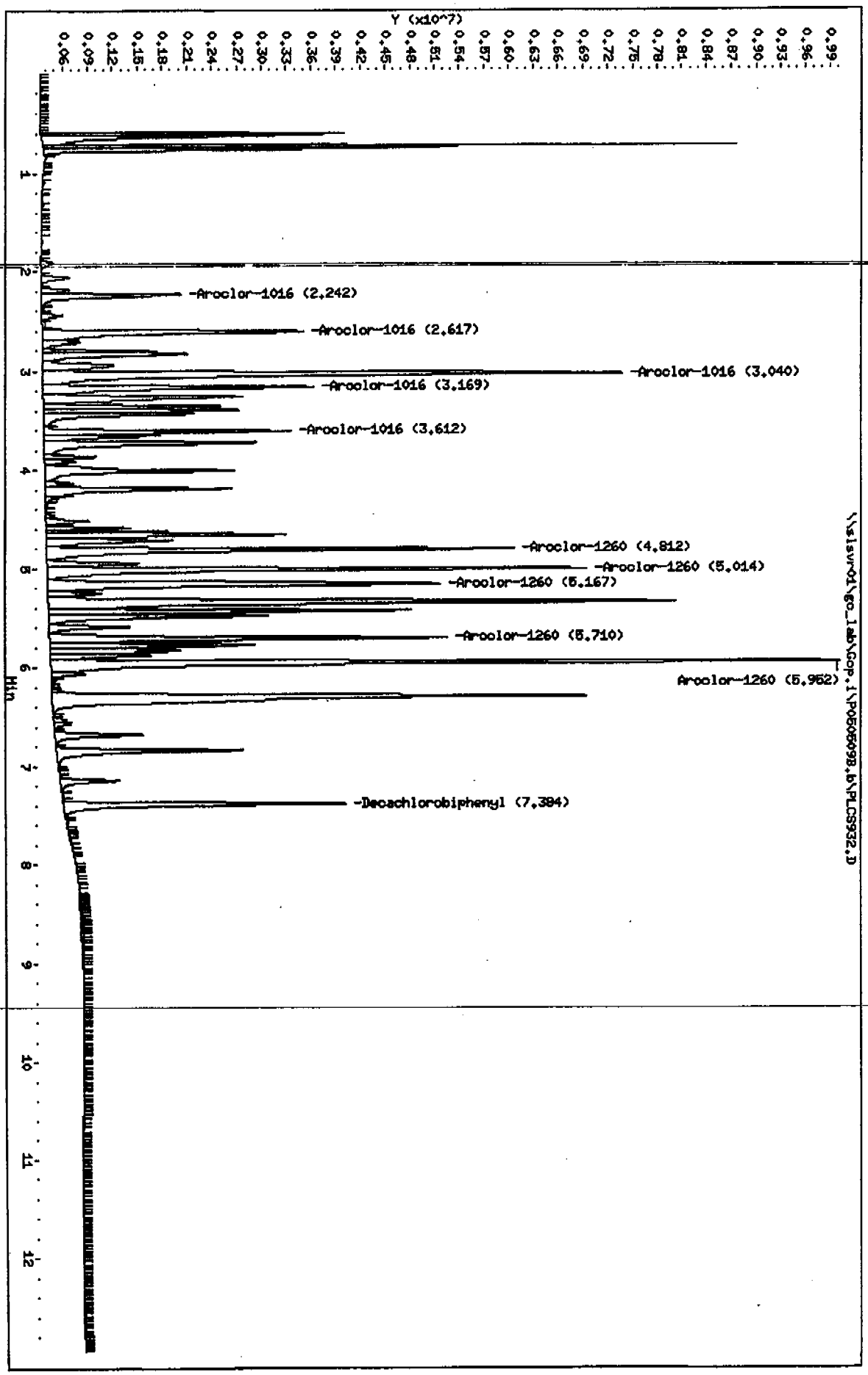
RECOVERY REPORT

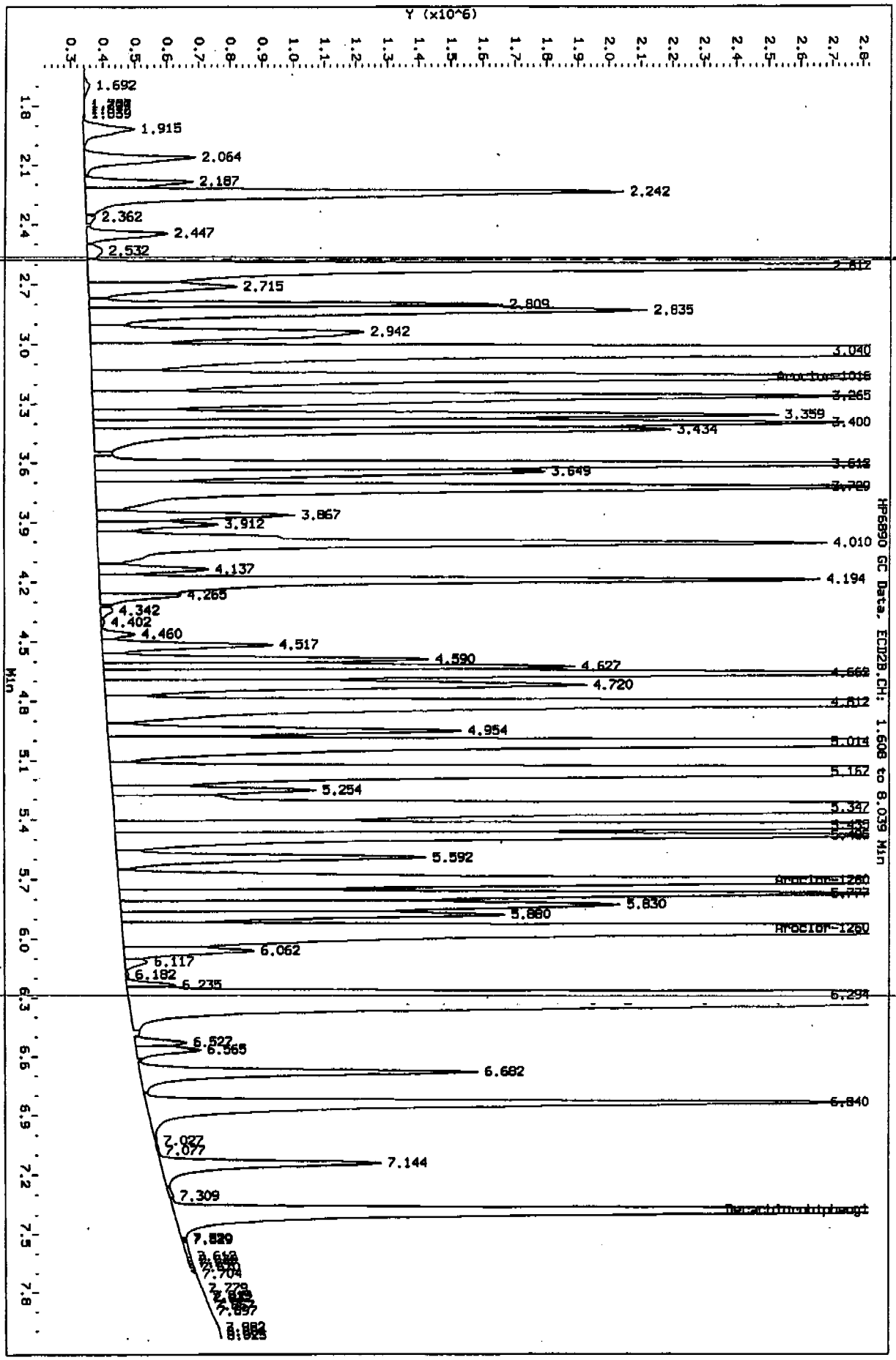
Client Name:
Sample Matrix: SOLID
Lab Smp Id: G9HD11AC
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: son05lcs.spk
Sublist File: QCson05.sub
Method File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Misc Info: F5D290000-298C

Client SDG: F5D290000
Fraction: PCB
Client Smp ID: INTRA-LAB CHECK
Operator: BLO
SampleType: LCS
Quant Type: ESTD

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
22 Aroclor-1016	333.3	323.1	96.93	73-141
28 Aroclor-1260	333.3	341.8	102.54	72-144

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 32 Decachlorobiphenyl	13.33	13.90	104.22	73-150


Y (x10^7)
0.06 0.09 0.12 0.15 0.18 0.21 0.24 0.27 0.30 0.33 0.36 0.39 0.42 0.45 0.48 0.51 0.54 0.57 0.60 0.63 0.66 0.69 0.72 0.75 0.78 0.81 0.84 0.87 0.90 0.93 0.96 0.99
Min
1 2 3 4 5 6 7 8 9 10 11 12
-Aroclor-1016 (2,242)
-Aroclor-1016 (2,617)
-Aroclor-1016 (3,040)
-Aroclor-1016 (3,169)
-Aroclor-1016 (3,612)
-Aroclor-1260 (4,812)
-Aroclor-1260 (5,014)
-Aroclor-1260 (5,167)
-Aroclor-1260 (5,710)
Aroclor-1260 (5,962)
-Decachlorobiphenyl (7,384)
\\slsvr01\gc_lab\Gcp.i\P0B05098.b\PLCS932.D
Data File: \\slsvr01\gc_lab\Gcp.i\P0B05098.b\PLCS932.D
Date : 09-MAY-2005 17:11
Client ID: INTRA-LAB CHECK
Sample Info: C9HD1AC
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
1.692
1.915
2.064
2.187
2.242
2.362
2.447
2.532
2.715
2.809
2.835
2.942
3.040
3.265
3.359
3.400
3.434
3.649
3.867
3.912
4.010
4.137
4.194
4.265
4.342
4.402
4.460
4.517
4.590
4.627
4.720
4.954
5.162
5.254
5.592
5.830
5.880
6.062
6.117
6.182
6.235
6.522
6.565
6.682
6.840
7.027
7.077
7.144
7.309
7.704
7.779
7.897
7.982
Aroclor-1260
HP6890 GC Data. ECD2B.CH: 1.608 to 8.039 Min
Data File: \\slowr01\gc_lab\Gcp.i\P0505098.b\PLCS932.D
Injection Date: 09-MAY-2005 17:11
Instrument: Gcp.i
Client Sample ID: INTRA-LAB CHECK

GC MISCELLANEOUS DATA

LOT# F5D220273

STL ST. LOUIS

SEVERN TRENT **STL**

Organic Prep Report for Batch #5119298

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Prep Method: SW846 3550B

SOP Number: STL-OP-0002, Rev 4

Prep Description: SONICATION w/ACID STRIP (PCB)

Matrix: SOLID

Extraction Date: 4/29/2005

			Initials: JW			Initials:		Initials: JW		Initials:	
						Concentration 1		Cleanup 1		Cleanup 2	
Lot Number	WorkOrder No	Wt/Vol	pH 1	pH 2	Extr Unit	Volume	Date	Method	Date 05-06-05	Method	Date
F5D200213-001	G8QE31A8	30.034 g				10 mL			~~05-06-05~~	3640	5-8-5
F5D200213-001D	G8QE31CV	30.18 g				10 mL					
F5D200213-001S	G8QE31CU	30.513 g				10 mL					
F5D210380-001	G8WXJ1AE	30.37 g				5 ~~10 mL~~		3640A	05-06-05		
F5D210380-002	G8WXV1AE	30.049 g				5 ~~10 mL~~					
F5D210380-003	G8WXX1AE	30.877 g				5 ~~10 mL~~					
F5D210380-003D	G8WXX1AG	30.511 g				5 ~~10 mL~~					
F5D210380-003S	G8WXX1AF	30.256 g				5 ~~10 mL~~					
F5D220273-002	G81GA1AD	30.522 g				5 ~~10 mL~~					
F5D290000-298B	G9HD11AA	30 g				5 ~~10 mL~~					
F5D290000-298C	G9HD11AC	30 g				5 ~~10 mL~~					

BJ 5.18 ANL 5-12 5.10 SDD 5-9-5

Spike Information

Name	Standard ID	Exp Date	Vol Added
PCB SPIKE	OP0181-05	9/28/2005	1000 uL
PCB SURR	OP0179-05	9/25/2005	1000 uL

Spiking verified by: SL

Miscellaneous Information

Start: Stop:

Extr 1:

Extr 2:

Conc Method: steam bath

Conc Temp C: 95

Chemical Lot Information

Chemical	Lot Number
Acetone	B08E10
Hexane	B05E59
Methylene Chloride	B08E10
Methylene Chloride	B12E02
Sodium Sulfate	A51621

Comments: For samples processed through GPC, final concentration is equivalent to 10mL due to 1/2 of extract being lost due to cleanup. JWM 05-06-05

Custody Information

Relinquished By: SDD **Review/Received By:** BLO **Date of Transfer:** 5.9.5

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.15, updated 10/20/2004

LOT# F5D220273

Logbook No.: 2646 — Instrument ID No.: GC P

STL St. Louis
GC Runlog

#	Data File	Clock	Lab I.D.	DIL	STD#	Date	Oper.	Matrix	Method
1	PSMP106	P050402A	B G6TQE2AC	10x		4-2-05	BLD	SOLID	8082
2	↓ 107		↓ H2AC	20x				SOIL	
3	RCAL108		CCAL1000	4x	GC0946D4				
4	PSMP109		G6TQN2AC	10x					
5	QCAL110	↓	CCAL1000	4x	GC0946D4	↓	↓	↓	↓
6	PCNO111	P050404A	B cnd std	1x		4-4-05	BLD		8082
7	PHEX112		hex						
8	PCAL113		ICAL 1	80x	GC0946D5				
9	114		2	40x					
10	115		3	16x					
11	116		4	8x					
12	117		5	4x					
13	118		6	2.75x					
14	119		7	1.7x					
15	↓ 120		8	1x					
16	PHEX120								
17	PICV121		Verification	10x					
18	PCAL122		1232	8x					
19	123		1242						
20	124		1248						
21	125		2 1254						
22	126		1262						
23	↓ 127		1268	↓					
24	PSMP128		G6X6J2AE	10x					
25	129		↓ M2AE	40x					
26	130		G6DCQ2AE	10x					
27	131		↓ T2AE	10x					
28	132		G62WG2AE	50x					
29	133		G6TNG2AC	100x					
30	134		G6TNR2AC	50x					
31	↓ 135		↓ 62AC	50x					
32	PCAL136	↓	CCAL1000	4x	GC0946D4	↓	↓		↓
33									
34									
35									

Review documented on next page.
QC Types: BLK or B = Blank; LCS or C = Laboratory Control Sample; LCSD or L = Laboratory Control Sample Duplicate; S = Matrix Spike; D = Matrix Spike Duplicate; SMP = Sample, Matrix Spike or Matrix Spike Duplicate, CAL = Calibration Standard or Continuing Calibration Standard.

Form: SL-ORG-0008, Rev. 1/4/05
SOP References: STL-GC-0015, current revisions.

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Logbook No.: 2648 — Instrument ID No.: GC P

STL St. Louis
GC Runlog

Batch #	Comments		#
5090194	FSC 230213-018 (10x) 1254 (J)	B	1
	-019 (20x) 1254 (>5ppm)	B,A	2
	ICCAL B: 1260 ↓, B:OK	B,A	3
	-020 (10x) 1254 (J)	B	4
	ICCAL A: 1260 ↓ DC01; B:OK	B,A	5
			6
	ICAL Data - Good on Both 100 ppb - 4000 ppb		7
	↓		8
			9
			10
			11
			12
			13
			14
			15
			16
	2nd Source verification good on both Ind. Aroclor Data		17
	↓		18
			19
			20
			21
			22
			23
5089416	FSC240276-002 (10x) 1254	A	24
	-003 (40x) 1254		25
	FSC240286-002 (10x) 1254		26
	-007 (10x) 1254		27
↓	FSC250210-002 (50x) 1254	↓	28
5089416	FSC230208-019 (100x) 1254 (>50ppm)	A,B	29
5090194	FSC230213-002 (50x) 1254		30
↓	-004 (50x) 1254 (>50ppm)	↓	31
	CCAL A:OK		32
			33
			34
			35

Reviewed By: _____
QC Types: BLK or B = Blank; LCS or C = Laboratory Control Sample; LCSD or L = Laboratory Control Sample Duplicate; S = Matrix Spike; D = Matrix Spike Duplicate; SMP = Sample, Matrix Spike or Matrix Spike Duplicate, CAL = Calibration Standard or Continuing Calibration Standard.

Form: SL-ORG-0008, Rev. 1/4/05
SOP References: STL-GC-0015, current revisions.

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STL ST. LOUIS

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LOT# F5D220273

Logbook No.: 2646 — Instrument ID No.: GC P

STL St. Louis
GC Runlog

#	Data File	Clock	Lab I.D.	Dil.	STD#	Date	Oper.	Matrix	Method
1	PSMP910	0951 5/26	G4DR11AC	10x		5/26/05	BLB	SOLID SOIL	8082
2	911		7IAC						
3	912		8IAC						
4	913		G9DTC1AC						
5	914		G1AC						
6	915		L1AC						
7	916		Q1AC						
8	917		X1AC	1x					
9	918		X1AD						
10	919		X1AE						
11	PCAL920		CCAL1000	Ax	GC0946-04				
12	PSMP921		G9DT31AC	10x					
13	922		51AC						
14	923		71AC						
15	PCAL924		CCAL1000	Ax	GC0946-04				
16	PCND925	0950 5/26	Cnd. Std.	1x		5-09-05	BLB		8082
17	PHEX926		hex						
18	PCAL927		CCAL1000	Ax	GC0946-04				
19	PSMP928		G9DRW2AC	100x				SOLID SOIL	
20	929		G9DVR2AC	100x					
21	PCAL930		CCAL1000	Ax	GC0946-04				
22	PBLK931		G9HDI1BA					SOLID SOIL	
23	PLCS932		11AC						
24	PSMP933		G8WXJ1AE						
25	934		V1AE						
26	935		X1AE						
27	936		X1AF						
28	937		X1AG						
29	938		G81GA1AD						
30	PCAL939		CCAL1000	Ax	GC0946-04				
31	PSMP940		G8QE31A8						
32	941		31CW						
33	942		31CV						
34	PBLK943		G9PX51AA						
35	PLCS944		51AC						

Review documented on next page.
QC Types: BLK or B = Blank; LCS or C = Laboratory Control Sample; LCSD or L = Laboratory Control Sample Duplicate; S = Matrix Spike; D = Matrix Spike Duplicate; SMP = Sample, Matrix Spike or Matrix Spike Duplicate, CAL = Calibration Standard or Continuing Calibration Standard.
SOP References: STL-GC-0015, current revisions.

Form: SL-ORG-0008, Rev. 1/4/05

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Logbook No.: 2646 — Instrument ID No.: GC P

STL St. Louis
GC Runlog

Batch #	Comments	#
5123340	FSD 280194-009 No hits	A 1
	-011 No hits	2
	-012 1254 (J)	3
	-013 1254 (>5ppm)	A,B 4
	-014 1254 (>5ppm)	5
	-015 1254 (>5ppm)	6
	-016 1254 (J)	A 7
	-017 1254 (J)	8
	-017S 1016 154 160 RPD OK	9
	-017D 1016 154 160 RPD OK	10
	CCAL A:OK ; B:OK	A,B 11
	-018 No hits	A 12
	-019 1254 (>5ppm)	A,B 13
	-020 No hits	A 14
	CCAL A:OK ; B:OK	A,B 15
		16
		17
	CCAL A:OK ; B:OK	A,B 18
5123340	FSD280194-007 (100x) 1254 (>50ppm)	19
5123470	FSD280202-020 (100x) 1254 (>50ppm)	20
	CCAL A:OK ; B:OK	A,B 21
5119298	FSD290000-298B (GPC clean-up) OK on Both	A,B 22
	-298C OK on Both	23
	FSD210380-001 No hits	24
	-002 1254	25
	-003 1254 (-2PK on B)	26
	-003S 1016 154 160 DCBT A,B RPD OK	27
	-003D 1016 154 160 OK on A,B	28
	FSD220273-002 ↓ 1254	29
	CCAL A:OK ; B:OK	A,B 30
	FSD200213-001 No hits	A 31
	-001S 1016 1260 OK	32
	-001D 1016 1260 OK RPD Good	33
5123324	FSE030000-324B OK	34
	-324C OK	35

Reviewed By: Dennis Vreeland 5/31/05

QC Types: BLK or B = Blank; LCS or C = Laboratory Control Sample; LCSD or L = Laboratory Control Sample Duplicate; S = Matrix Spike; D = Matrix Spike Duplicate; SMP = Sample, Matrix Spike or Matrix Spike Duplicate, CAL = Calibration Standard or Continuing Calibration Standard.
SOP References: STL-GC-0015, current revisions.

Form: SL-ORG-0008, Rev. 1/4/05

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STL ST. LOUIS

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LOT# FSD220273

Logbook No.: 2648 — Instrument ID No.: GC P

STL St. Louis
GC Runlog

#	Data File	Clock	Lab I.D.	Dil.	STD#	Date	Oper.	Matrix	Method
1	PSMP945	065509	G9DQDIAC			5-9-05	BLD	SOLID	8082
2	946		DIAE					SOIL	
3	947		DIAF						
4	948		7IAC						
5	949		9IAC						
6	PCAL950		CCAL1000	4x	000946-04				
7	PSMP951		G9DRAIAC						
8	952		G8104IAE						
9	953		G811WIAE						
10	954		IIAE						
11	955		G813AIAE						
12	956		DIAE						
13	957		HIAE						
14	958		NIAE						
15	959		PIAE						
16	960		G9APUIAD						
17	PCAL961		CCAL1000	4x	000946-04				
18	PBLK962		G9VA9IAA						
19	PLCS963		9IAC						
20	PSMP964		G88W@IA9						
21	965		5IAL						
22	966		7IAL						
23	967		G88XAIAL						
24	968		CIAL						
25	969		DIAL						
26	970		EIAL						
27	PCAL971		CCAL1000	4x	000946-04				
28	PSMP972		G896EIA7						
29	973		G8985IAJ						
30	974		G899LIAJ						
31	975		LIA2						
32	976		LIA3						
33	977		G9GG2IAW						
34	PCAL978	↓	CCAL1000	4x	000946-04	↓	↓	↓	↓
35					5-10-05				

Review documented on next page.

QC Types: BLK or B = Blank; LCS or C = Laboratory Control Sample; LCSD or L = Laboratory Contol Sample Duplicate; S = Matrix Spike; D = Matrix Spike Duplicate; SMP = Sample, Matrix Spike or Matrix Spike Duplicate, CAL = Calibration Standard or Continuing Calibration Standard.

SOP References: STL-GC-0015, current revisions.

Form: SL-ORG-0008, Rev. 1/4/05

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Logbook No.: 2648 — Instrument ID No.: GC P

STL St. Louis
GC Runlog

#	Batch #	Comments	
1	5123324	FSD280191-001 No hits	A
2		-0015 OK RPD OK	
3		-001D OK	
4		-002 No hits	
5		-003 No hits	
6		CCAL A:OK	A
7		-004 No hits	A
8		FSD220333-001 No hits	
9		-002 No hits	
10		-003 No hits	
11		-004 No hits	
12		-005 No hits	
13		-006 No hits	
14		-007 No hits	
15		-008 No hits	
16	↓	FSD280189-001 No hits	↓
17		CCAL A:OK; B:OK	A,B
18	5124531	FSE040000-531B OK on Both	A,B
19		-531C OK on Both	↓
20		FSD270110-001 1254/60	A,B
21		-002 1254/60	
22		-003 1254/60	
23		-004 1254/60 DCBTA	
24		-005 1254/60	
25		-006 1254/60	
26		-007 1254/60	↓
27		CCAL A: DCB↓; B: DCB↓	A,B
28		FSD270229-011 1254/60	A,B
29		-012 1254/60	
30		-013 1254/60	
31		-013S 1016/54/60 RPD OK	
32		-013D 1016/54/60 DCBTA	↓
33		FSD290140-006 No hits	A
34		CCAL A:OK; B: DCB↓	A,B
35	↓	BLD 5-10-05	

Reviewed By: Dennis Vanyo 5/10/05

QC Types: BLK or B = Blank; LCS or C = Laboratory Control Sample; LCSD or L = Laboratory Contol Sample Duplicate; S = Matrix Spike; D = Matrix Spike Duplicate; SMP = Sample, Matrix Spike or Matrix Spike Duplicate, CAL = Calibration Standard or Continuing Calibration Standard.

SOP References: STL-GC-0015, current revisions.

Form: SL-ORG-0008, Rev. 1/4/05

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STL ST. LOUIS

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GC/MS SAMPLE AND QC DATA SUMMARY – FORM I
SEMIVOLATILES

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D200213 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.415 / g Date Received: 04/20/05
Work Order: G8QE31A9 Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:20

QC Batch: 5119285

Client Sample Id: INTRA-LAB QC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	410	U
111-44-4	bis(2-Chloroethyl) ether	410	U
95-57-8	2-Chlorophenol	410	U
95-48-7	2-Methylphenol	410	U
65794-96-9	3-Methylphenol & 4-Methylphe	830	U
108-60-1	2,2'-oxybis(1-Chloropropane)	410	U
621-64-7	N-Nitrosodi-n-propylamine	410	U
67-72-1	Hexachloroethane	410	U
98-95-3	Nitrobenzene	410	U
78-59-1	Isophorone	410	U
88-75-5	2-Nitrophenol	410	U
105-67-9	2,4-Dimethylphenol	410	U
111-91-1	bis(2-Chloroethoxy)methane	410	U
120-83-2	2,4-Dichlorophenol	410	U
120-82-1	1,2,4-Trichlorobenzene	410	U
91-20-3	Naphthalene	410	U
106-47-8	4-Chloroaniline	410	U
87-68-3	Hexachlorobutadiene	410	U
59-50-7	4-Chloro-3-methylphenol	410	U
91-57-6	2-Methylnaphthalene	410	U
77-47-4	Hexachlorocyclopentadiene	2000	U
88-06-2	2,4,6-Trichlorophenol	410	U
95-95-4	2,4,5-Trichlorophenol	410	U
88-74-4	2-Nitroaniline	2000	U
131-11-3	Dimethyl phthalate	410	U
208-96-8	Acenaphthylene	410	U
606-20-2	2,6-Dinitrotoluene	410	U
99-09-2	3-Nitroaniline	2000	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D200213 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.415 / g
Work Order: G8QE31A9
Dilution factor: 1
Moisture %:20

Date Received: 04/20/05
Date Extracted:04/29/05
Date Analyzed: 05/10/05

QC Batch: 5119285

Client Sample Id: INTRA-LAB QC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
83-32-9	Acenaphthene	410	U
51-28-5	2,4-Dinitrophenol	2000	U
100-02-7	4-Nitrophenol	2000	U
53-70-3	Dibenz(a,h)anthracene	410	U
132-64-9	Dibenzofuran	410	U
121-14-2	2,4-Dinitrotoluene	410	U
84-66-2	Diethyl phthalate	410	U
86-73-7	Fluorene	410	U
7005-72-3	4-Chlorophenyl phenyl ether	410	U
100-01-6	4-Nitroaniline	2000	U
534-52-1	4,6-Dinitro-2-methylphenol	2000	U
86-30-6	N-Nitrosodiphenylamine	410	U
129-00-0	Pyrene	410	U
101-55-3	4-Bromophenyl phenyl ether	410	U
118-74-1	Hexachlorobenzene	410	U
87-86-5	Pentachlorophenol	2000	U
85-01-8	Phenanthrene	410	U
120-12-7	Anthracene	410	U
86-74-8	Carbazole	410	U
84-74-2	Di-n-butyl phthalate	410	U
206-44-0	Fluoranthene	410	U
85-68-7	Butyl benzyl phthalate	410	U
56-55-3	Benzo(a)anthracene	410	U
91-94-1	3,3'-Dichlorobenzidine	2000	U
218-01-9	Chrysene	410	U
117-81-7	bis(2-Ethylhexyl) phthalate	410	U
117-84-0	Di-n-octyl phthalate	410	U
205-99-2	Benzo(b)fluoranthene	410	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D200213 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.415 / g Date Received: 04/20/05
Work Order: G8QE31A9 Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:20

QC Batch: 5119285

Client Sample Id: INTRA-LAB QC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
207-08-9	Benzo(k)fluoranthene	410	U
50-32-8	Benzo(a)pyrene	410	U
193-39-5	Indeno(1,2,3-cd)pyrene	410	U
191-24-2	Benzo(ghi)perylene	410	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	65	(40 - 103)
Phenol-d5	65	(36 - 105)
Nitrobenzene-d5	71	(45 - 114)
2-Fluorobiphenyl	67	(49 - 120)
2,4,6-Tribromophenol	76	(39 - 114)
Terphenyl-d14	65	(42 - 108)

FORM I

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.134 / g Date Received: 04/21/05
Work Order: G8WXJ2AD Date Extracted:05/11/05
Dilution factor: 1 Date Analyzed: 05/12/05
Moisture %:20

QC Batch: 5131374

Client Sample Id: INTRA-LAB QC -RE 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	830	U
111-44-4	bis(2-Chloroethyl) ether	830	U
			U
			U
95-48-7	2-Methylphenol	[illegible]	U
65794-96-9	3-Methylphenol & 4-Methylphe	830	U
108-60-1	2,2'-oxybis(1-Chloropropane)	830	U
621-64-7	N-Nitrosodi-n-propylamine	830	U
67-72-1	Hexachloroethane	830	U
98-95-3	Nitrobenzene	830	U
78-59-1	Isophorone	830	U
88-75-5	2-Nitrophenol	830	U
105-67-9	2,4-Dimethylphenol	830	U
111-91-1	bis(2-Chloroethoxy)methane	830	U
120-83-2	2,4-Dichlorophenol	830	U
120-82-1	1,2,4-Trichlorobenzene	830	U
91-20-3	Naphthalene	830	U
106-47-8	4-Chloroaniline	830	U
87-68-3	Hexachlorobutadiene	830	U
59-50-7	4-Chloro-3-methylphenol	830	U
91-57-6	2-Methylnaphthalene	830	U
77-47-4	Hexachlorocyclopentadiene	4000	U
88-06-2	2,4,6-Trichlorophenol	830	U
95-95-4	2,4,5-Trichlorophenol	830	U
88-74-4	2-Nitroaniline	4000	U
131-11-3	Dimethyl phthalate	830	U
208-96-8	Acenaphthylene	830	U
606-20-2	2,6-Dinitrotoluene	830	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.134 / g Date Received: 04/21/05
Work Order: G8WXJ2AD Date Extracted:05/11/05
Dilution factor: 1 Date Analyzed: 05/12/05
Moisture %:20

QC Batch: 5131374

Client Sample Id: INTRA-LAB QC -RE 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
99-09-2	3-Nitroaniline	4000	U
83-32-9	Acenaphthene	830	U
51-28-5	2,4-Dinitrophenol	4000	U
100-02-7	4-Nitrophenol	4000	U
53-70-3	Dibenz(a,h)anthracene	830	U
132-64-9	Dibenzofuran	830	U
121-14-2	2,4-Dinitrotoluene	830	U
84-66-2	Diethyl phthalate	830	U
86-73-7	Fluorene	830	U
7005-72-3	4-Chlorophenyl phenyl ether	830	U
100-01-6	4-Nitroaniline	4000	U
534-52-1	4,6-Dinitro-2-methylphenol	4000	U
86-30-6	N-Nitrosodiphenylamine	830	U
129-00-0	Pyrene	830	U
101-55-3	4-Bromophenyl phenyl ether	830	U
118-74-1	Hexachlorobenzene	830	U
87-86-5	Pentachlorophenol	4000	U
85-01-8	Phenanthrene	830	U
120-12-7	Anthracene	830	U
84-74-2	**Di-n-butyl phthalate**	**500**	**J**
206-44-0	Fluoranthene	830	U
85-68-7	Butyl benzyl phthalate	830	U
56-55-3	Benzo(a)anthracene	830	U
91-94-1	3,3'-Dichlorobenzidine	4000	U
218-01-9	Chrysene	830	U
117-81-7	bis(2-Ethylhexyl) phthalate	830	U
117-84-0	Di-n-octyl phthalate	830	U
205-99-2	Benzo(b)fluoranthene	830	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.134 / g Date Received: 04/21/05
Work Order: G8WXJ2AD Date Extracted:05/11/05
Dilution factor: 1 Date Analyzed: 05/12/05
Moisture %:20

QC Batch: 5131374

Client Sample Id: INTRA-LAB QC -RE 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
207-08-9	Benzo(k)fluoranthene	830	U
50-32-8	Benzo(a)pyrene	830	U
		830	U
		420	J

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	78	(40 - 103)
Phenol-d5	79	(36 - 105)
Nitrobenzene-d5	90	(45 - 114)
2-Fluorobiphenyl	89	(49 - 120)
2,4,6-Tribromophenol	75	(39 - 114)
Terphenyl-d14	89	(42 - 108)

FORM I

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D220273 002
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.613 / g
Work Order: G81GA1AC
Dilution factor: 1
Moisture %:8.5

Date Received: 04/22/05
Date Extracted:04/29/05
Date Analyzed: 05/10/05

QC Batch: 5119285

Client Sample Id: RE73-05-58879

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
62-75-9	N-Nitrosodimethylamine	360	U
108-95-2	Phenol	360	U
62-53-3	Aniline	360	U
111-44-4	bis(2-Chloroethyl) ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
100-51-6	Benzyl alcohol	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
65794-96-9	3-Methylphenol & 4-Methylphe	360	U
108-60-1	2,2'-oxybis(1-Chloropropane)	360	U
621-64-7	N-Nitrosodi-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
111-91-1	bis(2-Chloroethoxy)methane	360	U
65-85-0	Benzoic acid	1700	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	1700	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Lab Sample ID:F5D220273 002

Sample WT/Vol: 30.613 / g
Work Order: G81GA1AC
Dilution factor: 1
Moisture %:8.5

Date Received: 04/22/05
Date Extracted:04/29/05
Date Analyzed: 05/10/05

QC Batch: 5119285

Client Sample Id: RE73-05-58879

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	360	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	1700	U
131-11-3	Dimethyl phthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	1700	U
83-32-9	Acenaphthene	360	U
51-28-5	2,4-Dinitrophenol	1700	U
100-02-7	4-Nitrophenol	1700	U
53-70-3	Dibenz(a,h)anthracene	360	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethyl phthalate	360	U
86-73-7	Fluorene	360	U
7005-72-3	4-Chlorophenyl phenyl ether	360	U
100-01-6	4-Nitroaniline	1700	U
534-52-1	4,6-Dinitro-2-methylphenol	1700	U
86-30-6	N-Nitrosodiphenylamine	360	U
103-33-3	Azobenzene	360	U
129-00-0	Pyrene	360	U
101-55-3	4-Bromophenyl phenyl ether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	1700	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
84-74-2	Di-n-butyl phthalate	360	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Lab Sample ID:F5D220273 002

Sample WT/Vol: 30.613 / g
Work Order: G81GA1AC
Dilution factor: 1
Moisture %:8.5

Date Received: 04/22/05
Date Extracted:04/29/05
Date Analyzed: 05/10/05

QC Batch: 5119285

Client Sample Id: RE73-05-58879

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
206-44-0	Fluoranthene	360	U
85-68-7	Butyl benzyl phthalate	360	U
56		360	U
91-		1700	U
218-01-9	Chrysene	360	U
117-81-7	**bis(2-Ethylhexyl) phthalate**	**330**	**J**
117-84-0	Di-n-octyl phthalate	360	U
20	Benzo(b)fluoranthene	360	U
2	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	360	U
193-39-5	Indeno(1,2,3-cd)pyrene	360	U
191-24-2	Benzo(ghi)perylene	360	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	61	(40 - 103)
Phenol-d5	66	(36 - 105)
Nitrobenzene-d5	73	(45 - 114)
2-Fluorobiphenyl	68	(49 - 120)
2,4,6-Tribromophenol	69	(39 - 114)
Terphenyl-d14	69	(42 - 108)

FORM I

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D220273 002
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.118 / g
Work Order: G81GA2AC
Dilution factor: 1
Moisture %:8.5

Date Received: 04/22/05
Date Extracted:05/11/05
Date Analyzed: 05/14/05

QC Batch: 5131374

Client Sample Id: RE73-05-58879 -RE 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
62-75-9	N-Nitrosodimethylamine	720	U
108-95-2	Phenol	720	U
67	[illegible]	720	U
11	Bis(2-chloroethyl) ether	720	U
95-57-8	2-Chlorophenol	720	U
541-73-1	1,3-Dichlorobenzene	720	U
106-46-7	1,4-Dichlorobenzene	720	U
100-51-6	Benzyl alcohol	720	U
95-50-1	1,2-Dichlorobenzene	720	U
95-48-7	2-Methylphenol	720	U
65794-96-9	3-Methylphenol & 4-Methylphe	720	U
108-60-1	2,2'-oxybis(1-Chloropropane)	720	U
621-64-7	N-Nitrosodi-n-propylamine	720	U
67-72-1	Hexachloroethane	720	U
98-95-3	Nitrobenzene	720	U
78-59-1	Isophorone	720	U
88-75-5	2-Nitrophenol	720	U
105-67-9	2,4-Dimethylphenol	720	U
111-91-1	bis(2-Chloroethoxy)methane	720	U
65-85-0	Benzoic acid	3500	U
120-83-2	2,4-Dichlorophenol	720	U
120-82-1	1,2,4-Trichlorobenzene	720	U
91-20-3	Naphthalene	720	U
106-47-8	4-Chloroaniline	720	U
87-68-3	Hexachlorobutadiene	720	U
59-50-7	4-Chloro-3-methylphenol	720	U
91-57-6	2-Methylnaphthalene	720	U
77-47-4	Hexachlorocyclopentadiene	3500	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D220273 002
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.118 / g
Work Order: G81GA2AC
Dilution factor: 1
Moisture %:8.5

Date Received: 04/22/05
Date Extracted:05/11/05
Date Analyzed: 05/14/05

QC Batch: 5131374

Client Sample Id: RE73-05-58879 -RE 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
88-06-2	2,4,6-Trichlorophenol	720	U
95-95-4	2,4,5-Trichlorophenol	720	U
91-58-7	2-Chloronaphthalene	720	U
88-74-4	2-Nitroaniline	3500	U
131-11-3	Dimethyl phthalate	720	U
208-96-8	Acenaphthylene	720	U
606-20-2	2,6-Dinitrotoluene	720	U
99-09-2	3-Nitroaniline	3500	U
83-32-9	Acenaphthene	720	U
51-28-5	2,4-Dinitrophenol	3500	U
100-02-7	4-Nitrophenol	3500	U
53-70-3	Dibenz(a,h)anthracene	720	U
132-64-9	Dibenzofuran	720	U
121-14-2	2,4-Dinitrotoluene	720	U
84-66-2	Diethyl phthalate	720	U
86-73-7	Fluorene	720	U
7005-72-3	4-Chlorophenyl phenyl ether	720	U
100-01-6	4-Nitroaniline	3500	U
534-52-1	4,6-Dinitro-2-methylphenol	3500	U
86-30-6	N-Nitrosodiphenylamine	720	U
103-33-3	Azobenzene	720	U
129-00-0	Pyrene	720	U
101-55-3	4-Bromophenyl phenyl ether	720	U
118-74-1	Hexachlorobenzene	720	U
87-86-5	Pentachlorophenol	3500	U
85-01-8	Phenanthrene	720	U
120-12-7	Anthracene	720	U
84-74-2	Di-n-butyl phthalate	720	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D220273 002
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.118 / g Date Received: 04/22/05
Work Order: G81GA2AC Date Extracted:05/11/05
Dilution factor: 1 Date Analyzed: 05/14/05
Moisture %:8.5

QC Batch: 5131374

Client Sample Id: RE73-05-58879 -RE 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
206-44-0	Fluoranthene	720	U
85-68-7	Butyl benzyl phthalate	720	U
56-55-3	Benzo(a)anthracene	720	U
91-94-1	3,3'-Dichlorobenzidine	3500	U
218-01-9	Chrysene	720	U
117-81-7	bis(2-Ethylhexyl) phthalate	720	U
117-84-0	Di-n-octyl phthalate	720	U
205-99-2	Benzo(b)fluoranthene	720	U
207-08-9	Benzo(k)fluoranthene	720	U
50-32-8	Benzo(a)pyrene	720	U
193-39-5	Indeno(1,2,3-cd)pyrene	720	U
191-24-2	Benzo(ghi)perylene	720	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	71	(40 - 103)
Phenol-d5	76	(36 - 105)
Nitrobenzene-d5	78	(45 - 114)
2-Fluorobiphenyl	74	(49 - 120)
2,4,6-Tribromophenol	72	(39 - 114)
Terphenyl-d14	70	(42 - 108)

FORM I

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D290000 285
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30 / g
Work Order: G9HAL1AA
Dilution factor: 1
Moisture %:NA

Date Received: 04/21/05
Date Extracted:04/29/05
Date Analyzed: 05/09/05

QC Batch: 5119285

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
62-75-9	N-Nitrosodimethylamine	330	U
108-95-2	Phenol	330	U
62-53-3	Aniline	330	U
111-44-4	bis(2-Chloroethyl) ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
100-51-6	Benzyl alcohol	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
65794-96-9	3-Methylphenol & 4-Methylphe	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
621-64-7	N-Nitrosodi-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
65-85-0	Benzoic acid	1600	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	1600	U

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D290000 285
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30 / g
Work Order: G9HAL1AA
Dilution factor: 1
Moisture %:NA

Date Received: 04/21/05
Date Extracted:04/29/05
Date Analyzed: 05/09/05

QC Batch: 5119285

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	330	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethyl phthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	330	U
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
53-70-3	Dibenz(a,h)anthracene	330	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethyl phthalate	330	U
86-73-7	Fluorene	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine	330	U
103-33-3	Azobenzene	330	U
129-00-0	Pyrene	330	U
101-55-3	4-Bromophenyl phenyl ether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
84-74-2	Di-n-butyl phthalate	330	U

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Lab Sample ID:F5D290000 285

Sample WT/Vol: 30 / g
Work Order: G9HAL1AA
Dilution factor: 1
Moisture %:NA

Date Received: 04/21/05
Date Extracted:04/29/05
Date Analyzed: 05/09/05

QC Batch: 5119285

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
206-44-0	Fluoranthene	330	U
85-68-7	Butyl benzyl phthalate	330	U
56-55-3	Benzo(a)anthracene	330	U
91-94-1	3,3'-Dichlorobenzidine	1600	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl) phthalate	330	U
117-84-0	Di-n-octyl phthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
191-24-2	Benzo(ghi)perylene	330	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	81	(40 - 103)
Phenol-d5	80	(36 - 105)
Nitrobenzene-d5	72	(45 - 114)
2-Fluorobiphenyl	62	(49 - 120)
2,4,6-Tribromophenol	46	(39 - 114)
Terphenyl-d14	60	(42 - 108)

FORM I

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Lab Sample ID:F5E110000 374

Sample WT/Vol: 30 / g
Work Order: HAAT21AA
Dilution factor: 1
Moisture %:NA

Date Received: 04/21/05
Date Extracted:05/11/05
Date Analyzed: 05/12/05

QC Batch: 5131374

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
62-75-9	N-Nitrosodi[illegible]ylamine	660	U
108-95-2	Phenol	660	U
	[illegible]		U
95-57-8	2-Chlorophenol	660	U
541-73-1	1,3-Dichlorobenz[illegible]	660	U
106-46-7	1,4-Dichloroben[illegible]	660	U
100-51-6	Benzyl alcohol	660	U
95-50-1	1,2-Dichlorobenze[illegible]	660	U
95-48-7	2-Methylphenol	660	U
65794-96-9	3-Methylphenol & 4-Methylphe	660	U
[illegible]	2,2'-oxybis(1-Chloropropane)	660	U
[illegible]	Nitrosodi-n-propylamine	660	U
67-72-1	Hexachloroethane	660	U
98-95-3	Nitrobenzene	660	U
78-59-1	Isophorone	660	U
88-75-5	2-Nitrophenol	660	U
105-67-9	2,4-Dimethylphenol	660	U
111-91-1	bis(2-Chloroethoxy)methane	660	U
65-85-0	Benzoic acid	3200	U
120-83-2	2,4-Dichlorophenol	660	U
120-82-1	1,2,4-Trichlorobenzene	660	U
91-20-3	Naphthalene	660	U
106-47-8	4-Chloroaniline	660	U
87-68-3	Hexachlorobutadiene	660	U
59-50-7	4-Chloro-3-methylphenol	660	U
91-57-6	2-Methylnaphthalene	660	U
77-47-4	Hexachlorocyclopentadiene	3200	U

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5E110000 374
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30 / g
Work Order: HAAT21AA
Dilution factor: 1
Moisture %:NA

Date Received: 04/21/05
Date Extracted:05/11/05
Date Analyzed: 05/12/05

QC Batch: 5131374

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
88-06-2	2,4,6-Trichlorophenol	660	U
95-95-4	2,4,5-Trichlorophenol	660	U
91-58-7	2-Chloronaphthalene	660	U
88-74-4	2-Nitroaniline	3200	U
131-11-3	Dimethyl phthalate	660	U
208-96-8	Acenaphthylene	660	U
606-20-2	2,6-Dinitrotoluene	660	U
99-09-2	3-Nitroaniline	3200	U
83-32-9	Acenaphthene	660	U
51-28-5	2,4-Dinitrophenol	3200	U
100-02-7	4-Nitrophenol	3200	U
53-70-3	Dibenz(a,h)anthracene	660	U
132-64-9	Dibenzofuran	660	U
121-14-2	2,4-Dinitrotoluene	660	U
84-66-2	Diethyl phthalate	660	U
86-73-7	Fluorene	660	U
7005-72-3	4-Chlorophenyl phenyl ether	660	U
100-01-6	4-Nitroaniline	3200	U
534-52-1	4,6-Dinitro-2-methylphenol	3200	U
86-30-6	N-Nitrosodiphenylamine	660	U
103-33-3	Azobenzene	660	U
129-00-0	Pyrene	660	U
101-55-3	4-Bromophenyl phenyl ether	660	U
118-74-1	Hexachlorobenzene	660	U
87-86-5	Pentachlorophenol	3200	U
85-01-8	Phenanthrene	660	U
120-12-7	Anthracene	660	U
84-74-2	Di-n-butyl phthalate	660	U

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Lab Sample ID:F5E110000 374

Sample WT/Vol: 30 / g
Work Order: HAAT21AA
Dilution factor: 1
Moisture %:NA

Date Received: 04/21/05
Date Extracted:05/11/05
Date Analyzed: 05/12/05

QC Batch: 5131374

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
206-44-0	Fluoranthene	660	U
85-68-7	Butyl benzyl phthalate	660	U
[illegible]	Benzo(a)anthracene	660	U
91-[illegible]	3,3'-Dichlorobenzidine	3200	U
218-01-9	Chrysene	660	U
117-81-7	bis(2-Ethylhexyl) phthalate	660	U
117-84-0	Di-n-octyl phthalate	660	U
205-99-2	Benzo(b)fluoranthene	660	U
207-08-9	Benzo(k)fluoranthene	660	U
50-32-8	Benzo(a)pyrene	660	U
193-39-5	Indeno(1,2,3-cd)pyrene	660	U
191-24-2	Benzo(ghi)perylene	660	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	85	(40 - 103)
Phenol-d5	82	(36 - 105)
Nitrobenzene-d5	92	(45 - 114)
2-Fluorobiphenyl	85	(49 - 120)
2,4,6-Tribromophenol	74	(39 - 114)
Terphenyl-d14	74	(42 - 108)

FORM I

LOS ALAMOS NATIONAL LABORATORY
CHECK SAMPLE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D290000 285
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30 / g
Work Order: G9HAL1AC
Dilution factor: 1
Moisture %:NA

Date Received: 04/21/05
Date Extracted:04/29/05
Date Analyzed: 05/09/05

QC Batch: 5119285

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	5390	
111-44-4	bis(2-Chloroethyl) ether	5190	
95-57-8	2-Chlorophenol	5130	
95-48-7	2-Methylphenol	4580	
65794-96-9	3-Methylphenol & 4-Methylphe	4740	
108-60-1	2,2'-oxybis(1-Chloropropane)	4810	
621-64-7	N-Nitrosodi-n-propylamine	5210	
67-72-1	Hexachloroethane	3140	
98-95-3	Nitrobenzene	4200	
78-59-1	Isophorone	5470	
88-75-5	2-Nitrophenol	4310	
105-67-9	2,4-Dimethylphenol	5140	
111-91-1	bis(2-Chloroethoxy)methane	5210	
120-83-2	2,4-Dichlorophenol	5090	
120-82-1	1,2,4-Trichlorobenzene	3820	
91-20-3	Naphthalene	3930	
106-47-8	4-Chloroaniline	1340	a
87-68-3	Hexachlorobutadiene	4020	
59-50-7	4-Chloro-3-methylphenol	5080	
91-57-6	2-Methylnaphthalene	3950	
77-47-4	Hexachlorocyclopentadiene	4900	
88-06-2	2,4,6-Trichlorophenol	4550	
95-95-4	2,4,5-Trichlorophenol	5310	
88-74-4	2-Nitroaniline	4730	
131-11-3	Dimethyl phthalate	5250	
208-96-8	Acenaphthylene	4280	
606-20-2	2,6-Dinitrotoluene	5090	
99-09-2	3-Nitroaniline	2490	

LOS ALAMOS NATIONAL LABORATORY
CHECK SAMPLE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D290000 285
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30 / g
Work Order: G9HAL1AC
Dilution factor: 1
Moisture %:NA

Date Received: 04/21/05
Date Extracted:04/29/05
Date Analyzed: 05/09/05

Client Sample Id: CHECK SAMPLE

QC Batch: 5119285

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
83-32-9	Acenaphthene	3950	
51-28-5	2,4-Dinitrophenol	4350	
100-02-7	4-Nitrophenol	5610	
53-70-3	Dibenz(a,h)anthracene	4040	
132-64-9	Dibenzofuran	4040	
121-14-2	2,4-Dinitrotoluene	5310	
84-66-2	Diethyl phthalate	5340	
86-73-7	Fluorene	4100	
7005-72-3	4-Chlorophenyl phenyl ether	4270	
100-01-6	4-Nitroaniline	4640	
534-52-1	4,6-Dinitro-2-methylphenol	6330	
86-30-6	N-Nitrosodiphenylamine	5240	
129-00-0	Pyrene	2670	a
101-55-3	4-Bromophenyl phenyl ether	4340	
118-74-1	Hexachlorobenzene	3120	a
87-86-5	Pentachlorophenol	3010	
85-01-8	Phenanthrene	3850	
120-12-7	Anthracene	3900	
84-74-2	Di-n-butyl phthalate	5040	
206-44-0	Fluoranthene	3440	a
85-68-7	Butyl benzyl phthalate	5300	
56-55-3	Benzo(a)anthracene	3900	
91-94-1	3,3'-Dichlorobenzidine	2840	
218-01-9	Chrysene	3840	
117-81-7	bis(2-Ethylhexyl) phthalate	5160	
117-84-0	Di-n-octyl phthalate	5330	
205-99-2	Benzo(b)fluoranthene	3950	
207-08-9	Benzo(k)fluoranthene	3980	

LOS ALAMOS NATIONAL LABORATORY
CHECK SAMPLE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Lab Sample ID:F5D290000 285

Sample WT/Vol: 30 / g
Work Order: G9HAL1AC
Dilution factor: 1
Moisture %:NA

Date Received: 04/21/05
Date Extracted:04/29/05
Date Analyzed: 05/09/05

QC Batch: 5119285

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
50-32-8	Benzo(a)pyrene	1670	a
193-39-5	Indeno(1,2,3-cd)pyrene	2030	a
191-24-2	Benzo(ghi)perylene	177	a

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	77	(50 - 98)
Phenol-d5	81	(51 - 95)
Nitrobenzene-d5	69	(50 - 111)
2-Fluorobiphenyl	69	(57 - 117)
2,4,6-Tribromophenol	59	(53 - 108)
Terphenyl-d14	60	(49 - 107)

FORM I

LOS ALAMOS NATIONAL LABORATORY
CHECK SAMPLE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5E110000 374
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30 / g
Work Order: HAAT21AC
Dilution factor: 1
Moisture %:NA

Date Received: 04/21/05
Date Extracted:05/11/05
Date Analyzed: 05/12/05

QC Batch: 5131374

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	5170	
111-44-4	bis(2-Chloroethyl) ether	5040	
95-57-8	2-Chlorophenol	5740	
95-48-7	2-Methylphenol	5420	
65794-96-9	3-Methylphenol & 4-Methylphe	5240	
108-60-1	2,2'-oxybis(1-Chloropropane)	5540	
621-64-7	N-Nitrosodi-n-propylamine	6180	
67-72-1	Hexachloroethane	5820	
98-95-3	Nitrobenzene	5690	
78-59-1	Isophorone	6000	
88-75-5	2-Nitrophenol	5660	
105-67-9	2,4-Dimethylphenol	5970	
111-91-1	bis(2-Chloroethoxy)methane	5740	
120-83-2	2,4-Dichlorophenol	5700	
120-82-1	1,2,4-Trichlorobenzene	5900	
91-20-3	Naphthalene	5810	
106-47-8	4-Chloroaniline	3320	
87-68-3	Hexachlorobutadiene	6040	
59-50-7	4-Chloro-3-methylphenol	6060	
91-57-6	2-Methylnaphthalene	7680	a
77-47-4	Hexachlorocyclopentadiene	7050	
88-06-2	2,4,6-Trichlorophenol	5940	
95-95-4	2,4,5-Trichlorophenol	5700	
88-74-4	2-Nitroaniline	5450	
131-11-3	Dimethyl phthalate	5890	
208-96-8	Acenaphthylene	6350	
606-20-2	2,6-Dinitrotoluene	5740	
99-09-2	3-Nitroaniline	3420	

LOS ALAMOS NATIONAL LABORATORY
CHECK SAMPLE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Lab Sample ID:F5E110000 374

Sample WT/Vol: 30 / g
Work Order: HAAT21AC
Dilution factor: 1
Moisture %:NA

Date Received: 04/21/05
Date Extracted:05/11/05
Date Analyzed: 05/12/05

QC Batch: 5131374

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
83-32-9	Acenaphthene	5810	
51-28-5	2,4-Dinitrophenol	2680	
100-02-7	4-Nitrophenol	5720	
53-70-3	Dibenz(a,h)anthracene	5610	
132-64-9	Dibenzofuran	5710	
121-14-2	2,4-Dinitrotoluene	5780	
84-66-2	Diethyl phthalate	5930	
86-73-7	Fluorene	6030	
7005-72-3	4-Chlorophenyl phenyl ether	6040	
100-01-6	4-Nitroaniline	5360	
534-52-1	4,6-Dinitro-2-methylphenol	5360	
86-30-6	N-Nitrosodiphenylamine	6520	
129-00-0	Pyrene	5710	
101-55-3	4-Bromophenyl phenyl ether	5970	
118-74-1	Hexachlorobenzene	6170	
87-86-5	Pentachlorophenol	3560	
85-01-8	Phenanthrene	5640	
120-12-7	Anthracene	5700	
84-74-2	Di-n-butyl phthalate	5700	
206-44-0	Fluoranthene	5300	
85-68-7	Butyl benzyl phthalate	5920	
56-55-3	Benzo(a)anthracene	5640	
91-94-1	3,3'-Dichlorobenzidine	4080	
218-01-9	Chrysene	5710	
117-81-7	bis(2-Ethylhexyl) phthalate	5720	
117-84-0	Di-n-octyl phthalate	6060	
205-99-2	Benzo(b)fluoranthene	6130	
207-08-9	Benzo(k)fluoranthene	5960	

LOS ALAMOS NATIONAL LABORATORY
CHECK SAMPLE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Lab Sample ID:F5E110000 374

Sample WT/Vol: 30 / g
Work Order: HAAT21AC
Dilution factor: 1
Moisture %:NA

Date Received: 04/21/05
Date Extracted:05/11/05
Date Analyzed: 05/12/05

QC Batch: 5131374

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
50-32-8	Benzo(a)pyrene	5760	
193-39-5	Indeno(1,2,3-cd)pyrene	5380	
191-24-2	Benzo(ghi)perylene	4370	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	86	(50 - 98)
Phenol-d5	83	(51 - 95)
Nitrobenzene-d5	89	(50 - 111)
2-Fluorobiphenyl	90	(57 - 117)
2,4,6-Tribromophenol	100	(53 - 108)
Terphenyl-d14	78	(49 - 107)

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Lab Sample ID:F5D200213 001

Sample WT/Vol: 30.659 / g
Work Order: G8QE31CX
Dilution factor: 1
Moisture %:20

Date Received: 04/20/05
Date Extracted:04/29/05
Date Analyzed: 05/10/05

QC Batch: 5119285

Client Sample Id: LAB MS/MSD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	5980	
111-44-4	bis(2-Chloroethyl) ether	5830	
95-57-8	2-Chlorophenol	5800	
95-48-7	2-Methylphenol	5550	
65794-96-9	3-Methylphenol & 4-Methylphe	5660	
108-60-1	2,2'-oxybis(1-Chloropropane)	5770	
621-64-7	N-Nitrosodi-n-propylamine	6790	
67-72-1	Hexachloroethane	5700	
98-95-3	Nitrobenzene	6080	
78-59-1	Isophorone	6850	
88-75-5	2-Nitrophenol	6070	
105-67-9	2,4-Dimethylphenol	5360	
111-91-1	bis(2-Chloroethoxy)methane	6170	
120-83-2	2,4-Dichlorophenol	6060	
120-82-1	1,2,4-Trichlorobenzene	6090	
91-20-3	Naphthalene	5840	
106-47-8	4-Chloroaniline	3560	
87-68-3	Hexachlorobutadiene	5890	
59-50-7	4-Chloro-3-methylphenol	6450	
91-57-6	2-Methylnaphthalene	5830	
77-47-4	Hexachlorocyclopentadiene	6590	
88-06-2	2,4,6-Trichlorophenol	6290	
95-95-4	2,4,5-Trichlorophenol	6520	
88-74-4	2-Nitroaniline	6400	
131-11-3	Dimethyl phthalate	6470	
208-96-8	Acenaphthylene	6590	
606-20-2	2,6-Dinitrotoluene	6440	
99-09-2	3-Nitroaniline	5110	

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Lab Sample ID:F5D200213 001

Sample WT/Vol: 30.659 / g
Work Order: G8QE31CX
Dilution factor: 1
Moisture %:20

Date Received: 04/20/05
Date Extracted:04/29/05
Date Analyzed: 05/10/05

QC Batch: 5119285

Client Sample Id: LAB MS/MSD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
83-32-9	Acenaphthene	6200	
51-28-5	2,4-Dinitrophenol	3610	
100-02-7	4-Nitrophenol	7430	
53-70-3	Dibenz(a,h)anthracene	6530	
132-64-9	Dibenzofuran	6290	
121-14-2	2,4-Dinitrotoluene	6970	
84-66-2	Diethyl phthalate	6770	
86-73-7	Fluorene	6440	
7005-72-3	4-Chlorophenyl phenyl ether	6610	
100-01-6	4-Nitroaniline	6410	
534-52-1	4,6-Dinitro-2-methylphenol	5520	
86-30-6	N-Nitrosodiphenylamine	6670	
129-00-0	Pyrene	5980	
101-55-3	4-Bromophenyl phenyl ether	6100	
118-74-1	Hexachlorobenzene	6470	
87-86-5	Pentachlorophenol	5490	
85-01-8	Phenanthrene	5960	
120-12-7	Anthracene	6080	
84-74-2	Di-n-butyl phthalate	5990	
206-44-0	Fluoranthene	5640	
85-68-7	Butyl benzyl phthalate	6390	
56-55-3	Benzo(a)anthracene	6240	
91-94-1	3,3'-Dichlorobenzidine	4600	
218-01-9	Chrysene	6370	
117-81-7	bis(2-Ethylhexyl) phthalate	6090	
117-84-0	Di-n-octyl phthalate	6160	
205-99-2	Benzo(b)fluoranthene	6270	
207-08-9	Benzo(k)fluoranthene	6320	

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc. SDG Number: F5D220273

Matrix: (soil/water) SOLID
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Lab Sample ID: F5D200213 001

Sample WT/Vol: 30.659 / g
Work Order: G8QE31CX
Dilution factor: 1
Moisture %: 20

Date Received: 04/20/05
Date Extracted: 04/29/05
Date Analyzed: 05/10/05

QC Batch: 5119285

Client Sample Id: LAB MS/MSD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
50-32-8	Benzo(a)pyrene	6230	
193-39-5	Indeno(1,2,3-cd)pyrene	5950	
191-24-2	Benzo(ghi)perylene	6090	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	68	(40 - 103)
Phenol-d5	74	(36 - 105)
Nitrobenzene-d5	74	(45 - 114)
2-Fluorobiphenyl	75	(49 - 120)
2,4,6-Tribromophenol	83	(39 - 114)
Terphenyl-d14	66	(42 - 108)

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Lab Sample ID:F5D210380 001

Sample WT/Vol: 30.085 / g
Work Order: G8WXJ1AL
Dilution factor: 1
Moisture %:20

Date Received: 04/21/05
Date Extracted:05/11/05
Date Analyzed: 05/12/05

QC Batch: 5131374

Client Sample Id: LAB MS/MSD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-	Phenol	6570	
111-44-4	bis(2-Chloroethyl) ether	6640	
95-57-8	2-Chlorophenol	6940	
95-48-7	2-Methylphenol	5870	
65794-96-	3-Methylphenol & 4-Methylphe	5740	
108-	2,2'-oxybis(1-Chloropropane)	7300	
621-64-7	N-Nitrosodi-n-propylamine	8380	
67-72-1	Hexachloroethane	7610	
98-95-3	Nitrobenzene	7280	
78-59-1	Isophorone	8040	
88-75-5	2-Nitrophenol	7410	
105-67-9	2,4-Dimethylphenol	3620	
111-91-1	bis(2-Chloroethoxy)methane	7710	
120-83-2	2,4-Dichlorophenol	6920	
120-82-1	1,2,4-Trichlorobenzene	7700	
91-20-3	Naphthalene	7500	
106-47-8	4-Chloroaniline	2920	
87-68-3	Hexachlorobutadiene	7860	
59-50-7	4-Chloro-3-methylphenol	7380	
91-57-6	2-Methylnaphthalene	9550	
77-47-4	Hexachlorocyclopentadiene	9000	
88-06-2	2,4,6-Trichlorophenol	7180	
95-95-4	2,4,5-Trichlorophenol	7150	
88-74-4	2-Nitroaniline	7150	
131-11-3	Dimethyl phthalate	7930	
208-96-8	Acenaphthylene	8240	
606-20-2	2,6-Dinitrotoluene	7730	
99-09-2	3-Nitroaniline	4480	

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.085 / g
Work Order: G8WXJ1AL
Dilution factor: 1
Moisture %:20

Date Received: 04/21/05
Date Extracted:05/11/05
Date Analyzed: 05/12/05

QC Batch: 5131374

Client Sample Id: LAB MS/MSD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
83-32-9	Acenaphthene	7550	
51-28-5	2,4-Dinitrophenol	2290	
100-02-7	4-Nitrophenol	7100	
53-70-3	Dibenz(a,h)anthracene	7720	
132-64-9	Dibenzofuran	7200	
121-14-2	2,4-Dinitrotoluene	7380	
84-66-2	Diethyl phthalate	7710	
86-73-7	Fluorene	7550	
7005-72-3	4-Chlorophenyl phenyl ether	7750	
100-01-6	4-Nitroaniline	6010	
534-52-1	4,6-Dinitro-2-methylphenol	5180	
86-30-6	N-Nitrosodiphenylamine	7830	
129-00-0	Pyrene	9120	
101-55-3	4-Bromophenyl phenyl ether	7890	
118-74-1	Hexachlorobenzene	8070	
87-86-5	Pentachlorophenol	2790	
85-01-8	Phenanthrene	6940	
120-12-7	Anthracene	7030	
84-74-2	Di-n-butyl phthalate	6940	
206-44-0	Fluoranthene	5610	
85-68-7	Butyl benzyl phthalate	8110	
56-55-3	Benzo(a)anthracene	7090	
91-94-1	3,3'-Dichlorobenzidine	3310	
218-01-9	Chrysene	6590	
117-81-7	bis(2-Ethylhexyl) phthalate	7790	
117-84-0	Di-n-octyl phthalate	6650	
205-99-2	Benzo(b)fluoranthene	6440	
207-08-9	Benzo(k)fluoranthene	6780	

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Lab Sample ID:F5D210380 001

Sample WT/Vol: 30.085 / g
Work Order: G8WXJ1AL
Dilution factor: 1
Moisture %:20

Date Received: 04/21/05
Date Extracted:05/11/05
Date Analyzed: 05/12/05

QC Batch: 5131374

Client Sample Id: LAB MS/MSD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
50-32-8	Benzo(a)pyrene	5950	
193-39-5	Indeno(1,2,3-cd)pyrene	6550	
191-24-2	Benzo(ghi)perylene	7070	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	83	(40 - 103)
Phenol-d5	82	(36 - 105)
Nitrobenzene-d5	92	(45 - 114)
2-Fluorobiphenyl	96	(49 - 120)
2,4,6-Tribromophenol	85	(39 - 114)
Terphenyl-d14	92	(42 - 108)

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Lab Sample ID:F5D200213 001

Sample WT/Vol: 30.079 / g
Work Order: G8QE31CW
Dilution factor: 1
Moisture %:20

Date Received: 04/20/05
Date Extracted:04/29/05
Date Analyzed: 05/10/05

QC Batch: 5119285

Client Sample Id: LAB MS/MSD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	7070	
111-44-4	bis(2-Chloroethyl) ether	6660	
95-57-8	2-Chlorophenol	6800	
95-48-7	2-Methylphenol	6420	
65794-96-9	3-Methylphenol & 4-Methylphe	6720	
108-60-1	2,2'-oxybis(1-Chloropropane)	6410	
621-64-7	N-Nitrosodi-n-propylamine	7730	
67-72-1	Hexachloroethane	6450	
98-95-3	Nitrobenzene	6730	
78-59-1	Isophorone	7580	
88-75-5	2-Nitrophenol	6870	
105-67-9	2,4-Dimethylphenol	6210	
111-91-1	bis(2-Chloroethoxy)methane	7010	
120-83-2	2,4-Dichlorophenol	7210	
120-82-1	1,2,4-Trichlorobenzene	6830	
91-20-3	Naphthalene	6610	
106-47-8	4-Chloroaniline	3700	
87-68-3	Hexachlorobutadiene	6630	
59-50-7	4-Chloro-3-methylphenol	7590	
91-57-6	2-Methylnaphthalene	6690	
77-47-4	Hexachlorocyclopentadiene	7580	
88-06-2	2,4,6-Trichlorophenol	7380	
95-95-4	2,4,5-Trichlorophenol	7780	
88-74-4	2-Nitroaniline	7330	
131-11-3	Dimethyl phthalate	7590	
208-96-8	Acenaphthylene	7640	
606-20-2	2,6-Dinitrotoluene	7580	
99-09-2	3-Nitroaniline	5740	

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Lab Sample ID:F5D200213 001

Sample WT/Vol: 30.079 / g
Work Order: G8QE31CW
Dilution factor: 1
Moisture %:20

Date Received: 04/20/05
Date Extracted:04/29/05
Date Analyzed: 05/10/05

QC Batch: 5119285

Client Sample Id: LAB MS/MSD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
83-32-9	Acenaphthene	7190	
51-28-5	2,4-Dinitrophenol	4520	
100-02-7	4-Nitrophenol	9020	
53-70-3	Dibenz(a,h)anthracene	7640	
132-64-9	Dibenzofuran	7420	
121-14-2	2,4-Dinitrotoluene	8250	
84-66-2	Diethyl phthalate	8070	
86-73-7	Fluorene	7590	
7005-72-3	4-Chlorophenyl phenyl ether	7860	
100-01-6	4-Nitroaniline	7320	
534-52-1	4,6-Dinitro-2-methylphenol	6700	
86-30-6	N-Nitrosodiphenylamine	8000	
129-00-0	Pyrene	7230	
101-55-3	4-Bromophenyl phenyl ether	7260	
118-74-1	Hexachlorobenzene	7630	
87-86-5	Pentachlorophenol	6540	
85-01-8	Phenanthrene	7000	
120-12-7	Anthracene	7150	
84-74-2	Di-n-butyl phthalate	7140	
206-44-0	Fluoranthene	6780	
85-68-7	Butyl benzyl phthalate	7480	
56-55-3	Benzo(a)anthracene	7340	
91-94-1	3,3'-Dichlorobenzidine	5280	
218-01-9	Chrysene	7540	
117-81-7	bis(2-Ethylhexyl) phthalate	7120	
117-84-0	Di-n-octyl phthalate	7250	
205-99-2	Benzo(b)fluoranthene	7650	
207-08-9	Benzo(k)fluoranthene	7700	

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Lab Sample ID:F5D200213 001

Sample WT/Vol: 30.079 / g
Work Order: G8QE31CW
Dilution factor: 1
Moisture %:20

Date Received: 04/20/05
Date Extracted:04/29/05
Date Analyzed: 05/10/05

QC Batch: 5119285

Client Sample Id: LAB MS/MSD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
50-32-8	Benzo(a)pyrene	7330	
193-39-5	Indeno(1,2,3-cd)pyrene	7010	
191-24-2	Benzo(ghi)perylene	7070	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	79	(40 - 103)
Phenol-d5	87	(36 - 105)
Nitrobenzene-d5	82	(45 - 114)
2-Fluorobiphenyl	88	(49 - 120)
2,4,6-Tribromophenol	98	(39 - 114)
Terphenyl-d14	76	(42 - 108)

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Lab Sample ID:F5D210380 001

Sample WT/Vol: 30.648 / g
Work Order: G8WXJ1AK
Dilution factor: 1
Moisture %:20

Date Received: 04/21/05
Date Extracted:05/11/05
Date Analyzed: 05/12/05

QC Batch: 5131374

Client Sample Id: LAB MS/MSD

CAS No.	Analyte	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
[illegible]	Phen[illegible]	6690	
[illegible]	b[illegible]ethyl) ether	6990	
95-[illegible]	[illegible]	7260	
95-48-7	[illegible]	5880	
65794-9[illegible]	& 4-Methylphe	5810	
108-60-[illegible]	hloropropane)	7280	
621-64-7	N-Nitrosodi[illegible]propylamine	8160	
[illegible]	xachloroethane	7670	
98[illegible]	trobenzene	7290	
78-59-1	Isophorone	7950	
88-75-5	2-Nitrophenol	7290	
105-67-9	2,4-Dimethylphenol	4070	
111-91-1	bis(2-Chloroethoxy)methane	7620	
120-83-2	2,4-Dichlorophenol	7050	
120-82-1	1,2,4-Trichlorobenzene	7770	
91-20-3	Naphthalene	7700	
106-47-8	4-Chloroaniline	3010	
87-68-3	Hexachlorobutadiene	7910	
59-50-7	4-Chloro-3-methylphenol	7430	
91-57-6	2-Methylnaphthalene	9540	
77-47-4	Hexachlorocyclopentadiene	9620	
88-06-2	2,4,6-Trichlorophenol	7390	
95-95-4	2,4,5-Trichlorophenol	7300	
88-74-4	2-Nitroaniline	7040	
131-11-3	Dimethyl phthalate	8000	
208-96-8	Acenaphthylene	8420	
606-20-2	2,6-Dinitrotoluene	7640	
99-09-2	3-Nitroaniline	4050	

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.648 / g
Work Order: G8WXJ1AK
Dilution factor: 1
Moisture %:20

Date Received: 04/21/05
Date Extracted:05/11/05
Date Analyzed: 05/12/05

QC Batch: 5131374

Client Sample Id: LAB MS/MSD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
83-32-9	Acenaphthene	7660	
51-28-5	2,4-Dinitrophenol	2640	
[illegible]	[illegible]Nitrophenol	7160	
[illegible]	Dibenz(a,h)anthracene	7990	
132-64-9	Dibenzofuran	7240	
121-14-2	2,4-Dinitrotoluene	7290	
84-66-2	Diethyl phthalate	7770	
86-73-7	Fluorene	7540	
7005-72-3	4-Chlorophenyl phenyl ether	7980	
100-01-6	4-Nitroaniline	5790	
534-52-1	4,6-Dinitro-2-methylphenol	6230	
86-30-6	N-Nitrosodiphenylamine	8740	
129-00-0	Pyrene	8600	
101-55-3	4-Bromophenyl phenyl ether	8400	
118-74-1	Hexachlorobenzene	8410	
87-86-5	Pentachlorophenol	3410	
85-01-8	Phenanthrene	7210	
120-12-7	Anthracene	7230	
84-74-2	Di-n-butyl phthalate	6660	
206-44-0	Fluoranthene	5380	
85-68-7	Butyl benzyl phthalate	8030	
56-55-3	Benzo(a)anthracene	7120	
91-94-1	3,3'-Dichlorobenzidine	3380	
218-01-9	Chrysene	6960	
117-81-7	bis(2-Ethylhexyl) phthalate	7950	
117-84-0	Di-n-octyl phthalate	7140	
205-99-2	Benzo(b)fluoranthene	6860	
207-08-9	Benzo(k)fluoranthene	7310	

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Lab Sample ID:F5D210380 001

Sample WT/Vol: 30.648 / g
Work Order: G8WXJ1AK
Dilution factor: 1
Moisture %:20

Date Received: 04/21/05
Date Extracted:05/11/05
Date Analyzed: 05/12/05

QC Batch: 5131374

Client Sample Id: LAB MS/MSD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
50-32-8	Benzo(a)pyrene	6350	
193-39-5	Indeno(1,2,3-cd)pyrene	6900	
191-24-2	Benzo(ghi)perylene	7070	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	83	(40 - 103)
Phenol-d5	87	(36 - 105)
Nitrobenzene-d5	91	(45 - 114)
2-Fluorobiphenyl	97	(49 - 120)
2,4,6-Tribromophenol	87	(39 - 114)
Terphenyl-d14	90	(42 - 108)

GC/MS ADDITIONAL QC DATA SUMMARY
FORMS 2 THROUGH 4
SEMIVOLATILES

SW846 8270C SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Lot #: F5D220273

Extraction: XXA13QL01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
01	INTRA-LAB QC	65	65	71	67	76	65	00
02	INTRA-LAB QC RE-1	78	79	90	89	75	89	00
03	RE73-05-58879	61	66	73	68	69	69	00
04	RE73-05-58879 RE-1	71	76	78	74	72	70	00
05	METHOD BLK. G9HAL1AA	81	80	72	62	46	60	00
06	METHOD BLK. HAAT21AA	85	82	92	85	74	74	00
07	LCS G9HAL1AC	77	81	69	69	59	60	00
08	LCS HAAT21AC	86	83	89	90	100	78	00
09	LAB MS/MSD D	68	74	74	75	83	66	00
10	LAB MS/MSD D	83	82	92	96	85	92	00
11	LAB MS/MSD S	79	87	82	88	98	76	00
12	LAB MS/MSD S	83	87	91	97	87	90	00

SURROGATES		QC LIMITS
SRG01	= 2-Fluorophenol	(40-103)
SRG02	= Phenol-d5	(36-105)
SRG03	= Nitrobenzene-d5	(45-114)
SRG04	= 2-Fluorobiphenyl	(49-120)
SRG05	= 2,4,6-Tribromophenol	(39-114)
SRG06	= Terphenyl-d14	(42-108)

\# Column to be used to flag recovery values
* Values outside of required QC Limits
D System monitoring Compound diluted out

FORM II

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Matrix Spike ID: LAB MS/MSD Level:(low/med) LOW

Lot #: F5D200213 WO #: G8QE31CW
BATCH: 5119285

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Phenol	8350	ND	7070	85	41- 97	
bis(2-Chloroethyl) ether	8350	ND	6660	80	38- 98	
2-Chlorophenol	8350	ND	6800	81	41- 96	
2-Methylphenol	8350	ND	6420	77	43- 95	
2,2'-oxybis(1-Chloropropa	8350	ND	6410	77	41- 102	
3-Methylphenol & 4-Methyl	8350	ND	6720	81	41- 103	
N-Nitrosodi-n-propylamine	8350	ND	7730	93	51- 109	
Hexachloroethane	8350	ND	6450	77	36- 99	
Nitrobenzene	8350	ND	6730	81	45- 105	
Isophorone	8350	ND	7580	91	47- 117	
2-Nitrophenol	8350	ND	6870	82	36- 108	
2,4-Dimethylphenol	8350	ND	6210	74	36- 105	
bis(2-Chloroethoxy)methan	8350	ND	7010	84	46- 107	
2,4-Dichlorophenol	8350	ND	7210	86	40- 105	
1,2,4-Trichlorobenzene	8350	ND	6830	82	44- 102	
Naphthalene	8350	ND	6610	79	10- 150	
4-Chloroaniline	8350	ND	3700	44	11- 99	
Hexachlorobutadiene	8350	ND	6630	79	40- 105	
4-Chloro-3-methylphenol	8350	ND	7590	91	41- 107	
2-Methylnaphthalene	8350	ND	6690	80	35- 118	
Hexachlorocyclopentadiene	8350	ND	7580	91	10- 120	
2,4,6-Trichlorophenol	8350	ND	7380	88	40- 105	
2,4,5-Trichlorophenol	8350	ND	7780	93	39- 108	
2-Nitroaniline	8350	ND	7330	88	42- 114	
Dimethyl phthalate	8350	ND	7590	91	46- 110	
Acenaphthylene	8350	ND	7640	92	48- 110	
2,6-Dinitrotoluene	8350	ND	7580	91	47- 111	
3-Nitroaniline	8350	ND	5740	69	23- 102	

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SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Matrix Spike ID: LAB MS/MSD Level:(low/med) LOW

Lot #: F5D200213 WO #: G8QE31CW
BATCH: 5119285

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Acenaphthene	8350	ND	7190	86	48 - 112	
2,4-Dinitrophenol	8350	ND	4520	54	10 - 109	
4-Nitrophenol	8350	ND	9020	108	33 - 114	
Dibenzofuran	8350	ND	7420	89	46 - 107	
2,4-Dinitrotoluene	8350	ND	8250	99	47 - 120	
Diethyl phthalate	8350	ND	8070	97	46 - 115	
4-Chlorophenyl phenyl ether	8350	ND	7860	94	47 - 109	
Fluorene	8350	ND	7590	91	47 - 109	
4-Nitroaniline	8350	ND	7320	88	21 - 116	
4,6-Dinitro-2-methylpheno	8350	ND	6700	80	10 - 108	
N-Nitrosodiphenylamine	8350	ND	8000	96	47 - 120	
4-Bromophenyl phenyl ethe	8350	ND	7260	87	46 - 110	
Hexachlorobenzene	8350	ND	7630	91	48 - 115	
Pentachlorophenol	8350	ND	6540	78	11 - 110	
Phenanthrene	8350	ND	7000	84	39 - 122	
Anthracene	8350	ND	7150	86	46 - 111	
Di-n-butyl phthalate	8350	ND	7140	86	45 - 114	
Fluoranthene	8350	ND	6780	81	39 - 116	
Pyrene	8350	ND	7230	87	41 - 121	
Butyl benzyl phthalate	8350	ND	7480	90	44 - 121	
3,3'-Dichlorobenzidine	8350	ND	5280	63	10 - 116	
Benzo(a)anthracene	8350	ND	7340	88	46 - 117	
Chrysene	8350	ND	7540	90	43 - 119	
bis(2-Ethylhexyl) phthala	8350	ND	7120	85	43 - 118	
Di-n-octyl phthalate	8350	ND	7250	87	35 - 120	
Benzo(b)fluoranthene	8350	ND	7650	92	39 - 124	
Benzo(k)fluoranthene	8350	ND	7700	92	43 - 131	
Benzo(a)pyrene	8350	ND	7330	88	43 - 114	

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SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Matrix Spike ID: LAB MS/MSD Level: (low/med) LOW

Lot #: F5D200213 WO #: G8QE31CW
BATCH: 5119285

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Indeno(1,2,3-cd)pyrene	8350	ND	7010	84	31 - 129	
Dibenz(a,h)anthracene	8350	ND	7640	92	33 - 131	
Benzo(ghi)perylene	8350	ND	7070	85	26 - 140	

NOTES(S):

Results and reporting limits have been adjusted for dry weight.

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 59 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Matrix Spike ID: LAB MS/MSD Level: (low/med) LOW

Lot #: F5D210380 WO #: G8WXJ1AK

BATCH: 5131374

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Phenol	8170	ND	6690	82	41 - 97	
bis(2-Chloroethyl) ether	8170	ND	6990	86	38 - 98	
2-Chlorophenol	8170	ND	7260	89	41 - 96	
2-Methylphenol	8170	ND	5880	72	43 - 95	
2,2'-oxybis(1-Chloropropa	8170	ND	7280	89	41 - 102	
3-Methylphenol & 4-Methyl	8170	ND	5810	71	41 - 103	
N-Nitrosodi-n-propylamine	8170	ND	8160	100	51 - 109	
Hexachloroethane	8170	ND	7670	94	36 - 99	
Nitrobenzene	8170	ND	7290	89	45 - 105	
Isophorone	8170	ND	7950	97	47 - 117	
2-Nitrophenol	8170	ND	7290	89	36 - 108	
2,4-Dimethylphenol	8170	ND	4070	50	36 - 105	
bis(2-Chloroethoxy)methan	8170	ND	7620	93	46 - 107	
2,4-Dichlorophenol	8170	ND	7050	86	40 - 105	
1,2,4-Trichlorobenzene	8170	ND	7770	95	44 - 102	
Naphthalene	8170	ND	7700	94	10 - 150	
4-Chloroaniline	8170	ND	3010	37	11 - 99	
Hexachlorobutadiene	8170	ND	7910	97	40 - 105	
4-Chloro-3-methylphenol	8170	ND	7430	91	41 - 107	
2-Methylnaphthalene	8170	ND	9540	117	35 - 118	
Hexachlorocyclopentadiene	8170	ND	9620	118	10 - 120	
2,4,6-Trichlorophenol	8170	ND	7390	90	40 - 105	
2,4,5-Trichlorophenol	8170	ND	7300	89	39 - 108	
2-Nitroaniline	8170	ND	7040	86	42 - 114	
Dimethyl phthalate	8170	ND	8000	98	46 - 110	
Acenaphthylene	8170	ND	8420	103	48 - 110	
2,6-Dinitrotoluene	8170	ND	7640	93	47 - 111	
3-Nitroaniline	8170	ND	4050	50	23 - 102	

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SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Matrix Spike ID: LAB MS/MSD Level: (low/med) LOW

Lot #: F5D210380 WO #: G8WXJ1AK
BATCH: 5131374

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Acenaphthene	8170	ND	7660	94	48 - 112	
2,4-Dinitrophenol	8170	ND	2640	32	10 - 109	
4-Nitrophenol	8170	ND	7160	88	33 - 114	
Dibenzofuran	8170	ND	7240	89	46 - 107	
2,4-Dinitrotoluene	8170	ND	7290	89	47 - 120	
Diethyl phthalate	8170	ND	7770	95	46 - 115	
4-Chlorophenyl phenyl eth	8170	ND	7980	98	47 - 109	
Fluorene	8170	ND	7540	92	47 - 109	
4-Nitroaniline	8170	ND	5790	71	21 - 116	
4,6-Dinitro-2-methylpheno	8170	ND	6230	76	10 - 108	
N-Nitrosodiphenylamine	8170	ND	8740	107	47 - 120	
4-Bromophenyl phenyl ethe	8170	ND	8400	103	46 - 110	
Hexachlorobenzene	8170	ND	8410	103	48 - 115	
Pentachlorophenol	8170	ND	3410	42	11 - 110	
Phenanthrene	8170	ND	7210	88	39 - 122	
Anthracene	8170	ND	7230	88	46 - 111	
Di-n-butyl phthalate	8170	500	6660	75	45 - 114	
Fluoranthene	8170	ND	5380	66	39 - 116	
Pyrene	8170	ND	8600	105	41 - 121	
Butyl benzyl phthalate	8170	ND	8030	98	44 - 121	
3,3'-Dichlorobenzidine	8170	ND	3380	41	10 - 116	
Benzo(a)anthracene	8170	ND	7120	87	46 - 117	
Chrysene	8170	ND	6960	85	43 - 119	
bis(2-Ethylhexyl) phthala	8170	ND	7950	97	43 - 118	
Di-n-octyl phthalate	8170	ND	7140	87	35 - 120	
Benzo(b)fluoranthene	8170	ND	6860	84	39 - 124	
Benzo(k)fluoranthene	8170	ND	7310	89	43 - 131	
Benzo(a)pyrene	8170	ND	6350	78	43 - 114	

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SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Matrix Spike ID: LAB MS/MSD Level: (low/med) LOW

Lot #: F5D210380 WO #: G8WXJ1AK
BATCH: 5131374

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Indeno(1,2,3-cd)pyrene	8170	ND	6900	85	31 - 129	
Dibenz(a,h)anthracene	8170	ND	7990	98	33 - 131	
Benzo(ghi)perylene	8170	420	7070	81	26 - 140	

NOTES(S):

Results and reporting limits have been adjusted for dry weight.

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 59 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Matrix Spike ID: LAB MS/MSD Level:(low/med) LOW

Lot #: F5D200213 WO #: G8QE31CX
BATCH: 5119285

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
Phenol	8190	5980	73	17	30	41 - 97	
bis(2-Chloroethyl) ether	8190	5830	71	13	30	38 - 98	
2-Chlorophenol	8190	5800	71	16	30	41 - 96	
2-Methylphenol	8190	5550	68	15	30	43 - 95	
2,2'-oxybis(1-Chloropropa	8190	5770	70	11	30	41 - 102	
3-Methylphenol & 4-Methyl	7810	5660	72	17	30	41 - 103	
N-Nitrosodi-n-propylamine	8190	6790	83	13	30	51 - 109	
Hexachloroethane	8190	5700	70	12	30	36 - 99	
Nitrobenzene	8190	6080	74	10	30	45 - 105	
Isophorone	8190	6850	84	10	30	47 - 117	
2-Nitrophenol	8190	6070	74	12	30	36 - 108	
2,4-Dimethylphenol	8190	5360	65	15	30	36 - 105	
bis(2-Chloroethoxy)methan	8190	6170	75	13	30	46 - 107	
2,4-Dichlorophenol	8190	6060	74	17	30	40 - 105	
1,2,4-Trichlorobenzene	8190	6090	74	11	30	44 - 102	
Naphthalene	8190	5840	71	12	30	10 - 150	
4-Chloroaniline	8190	3560	43	3.9	30	11 - 99	
Hexachlorobutadiene	8190	5890	72	12	30	40 - 105	
4-Chloro-3-methylphenol	8190	6450	79	16	30	41 - 107	
2-Methylnaphthalene	8190	5830	71	14	30	35 - 118	
Hexachlorocyclopentadiene	8190	6590	80	14	30	10 - 120	
2,4,6-Trichlorophenol	8190	6290	77	16	30	40 - 105	
2,4,5-Trichlorophenol	8190	6520	80	18	30	39 - 108	
2-Nitroaniline	8190	6400	78	14	30	42 - 114	
Dimethyl phthalate	8190	6470	79	16	30	46 - 110	
Acenaphthylene	8190	6590	81	15	30	48 - 110	
2,6-Dinitrotoluene	8190	6440	79	16	30	47 - 111	
3-Nitroaniline	8190	5110	62	12	30	23 - 102	

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SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Matrix Spike ID: LAB MS/MSD Level: (low/med) LOW

Lot #: F5D200213 WO #: G8QE31CX

BATCH: 5119285

COMPOUND	SPIKE ADDED	MSD CONCENT.	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
Acenaphthene	8190	6200	76	15	30	48 - 112	
2,4-Dinitrophenol	8190	3610	44	22	30	10 - 109	
4-Nitrophenol	8190	7430	91	19	30	33 - 114	
Dibenzofuran	8190	6290	77	16	30	46 - 107	
2,4-Dinitrotoluene	8190	6970	85	17	30	47 - 120	
Diethyl phthalate	8190	6770	83	18	30	46 - 115	
4-Chlorophenyl phenyl eth	8190	6610	81	17	30	47 - 109	
Fluorene	8190	6440	79	16	30	47 - 109	
4-Nitroaniline	8190	6410	78	13	30	21 - 116	
4,6-Dinit[illegible]methylphenol	8190	5520	67	19	30	10 - 108	
N-Nitroso[illegible]	[illegible]0	6670	81	18	30	47 - 120	
4-Bromophenyl phenyl ether	8190	6100	75	17	30	46 - 110	
Hexachlorobenzene	8190	6470	79	16	30	48 - 115	
Pentachlorophenol	8190	5490	67	18	30	11 - 110	
Phenanthrene	8190	5960	73	16	30	39 - 122	
Anthracene	8190	6080	74	16	30	46 - 111	
Di-n-butyl phthalate	8190	5990	73	17	30	45 - 114	
Fluoranthene	8190	5640	69	18	30	39 - 116	
Pyrene	8190	5980	73	19	30	41 - 121	
Butyl benzyl phthalate	8190	6390	78	16	30	44 - 121	
3,3'-Dichlorobenzidine	8190	4600	56	14	30	10 - 116	
Benzo(a)anthracene	8190	6240	76	16	30	46 - 117	
Chrysene	8190	6370	78	17	30	43 - 119	
bis(2-Ethylhexyl) phthala	8190	6090	74	16	30	43 - 118	
Di-n-octyl phthalate	8190	6160	75	16	30	35 - 120	
Benzo(b)fluoranthene	8190	6270	77	20	30	39 - 124	
Benzo(k)fluoranthene	8190	6320	77	20	30	43 - 131	
Benzo(a)pyrene	8190	6230	76	16	30	43 - 114	

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SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Matrix Spike ID: LAB MS/MSD Level: (low/med) LOW

Lot #: F5D200213 WO #: G8QE31CX
BATCH: 5119285

COMPOUND	SPIKE ADDED	MSD CONCENT.	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
Indeno(1,2,3-cd)pyrene	8190	5950	73	16	30	31 - 129	
Dibenz(a,h)anthracene	8190	6530	80	16	30	33 - 131	
Benzo(ghi)perylene	8190	6090	74	15	30	26 - 140	

NOTES(S):

Results and reporting limits have been adjusted for dry weight.

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 59 outside limits
Spike Recovery: 0 out of 59 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Matrix Spike ID: LAB MS/MSD Level:(low/med) LOW

Lot #: F5D210380 WO #: G8WXJ1AL
BATCH: 5131374

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
Phenol	8320	6570	79	1.9	30	41 - 97	
bis(2-Chloroethyl) ether	8320	6640	80	5.1	30	38 - 98	
2-Chlorophenol	8320	6940	83	4.4	30	41 - 96	
2-Methylphenol	8320	5870	71	0.17	30	43 - 95	
2,2'-oxybis(1-Chloropropa	8320	7300	88	0.17	30	41 - 102	
3-Methylphenol & 4-Methyl	8320	5740	69	1.2	30	41 - 103	
N-Nitrosodi-n-propylamine	8320	8380	101	2.7	30	51 - 109	
Hexachloroethane	8320	7610	91	0.75	30	36 - 99	
Nitrobenzene	8320	7280	88	0.030	30	45 - 105	
Isophorone	8320	8040	97	1.1	30	47 - 117	
2-Nitrophenol	8320	7410	89	1.6	30	36 - 108	
2,4-Dimethylphenol	8320	3620	44	12	30	36 - 105	
bis(2-Chloroethoxy)methan	8320	7710	93	1.3	30	46 - 107	
2,4-Dichlorophenol	8320	6920	83	1.8	30	40 - 105	
1,2,4-Trichlorobenzene	8320	7700	93	0.90	30	44 - 102	
Naphthalene	8320	7500	90	2.7	30	10 - 150	
4-Chloroaniline	8320	2920	35	2.9	30	11 - 99	
Hexachlorobutadiene	8320	7860	95	0.63	30	40 - 105	
4-Chloro-3-methylphenol	8320	7380	89	0.60	30	41 - 107	
2-Methylnaphthalene	8320	9550	115	0.14	30	35 - 118	
Hexachlorocyclopentadiene	8320	9000	108	6.7	30	10 - 120	
2,4,6-Trichlorophenol	8320	7180	86	2.9	30	40 - 105	
2,4,5-Trichlorophenol	8320	7150	86	2.0	30	39 - 108	
2-Nitroaniline	8320	7150	86	1.6	30	42 - 114	
Dimethyl phthalate	8320	7930	95	0.92	30	46 - 110	
Acenaphthylene	8320	8240	99	2.2	30	48 - 110	
2,6-Dinitrotoluene	8320	7730	93	1.2	30	47 - 111	
3-Nitroaniline	8320	4480	54	10	30	23 - 102	

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SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Matrix Spike ID: LAB MS/MSD Level:(low/med) LOW

Lot #: F5D210380 WO #: G8WXJ1AL
BATCH: 5131374

COMPOUND	SPIKE ADDED	MSD CONCENT.	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
Acenaphthene	8320	7550	91	1.5	30	48 - 112	
2,4-Dinitrophenol	8320	2290	27	14	30	10 - 109	
4-Nitrophenol	8320	7100	85	0.91	30	33 - 114	
Dibenzofuran	8320	7200	87	0.53	30	46 - 107	
2,4-Dinitrotoluene	8320	7380	89	1.2	30	47 - 120	
Diethyl phthalate	8320	7710	93	0.72	30	46 - 115	
4-Chlorophenyl phenyl eth	8320	7750	93	2.9	30	47 - 109	
Fluorene	8320	7550	91	0.13	30	47 - 109	
4-Nitroaniline	8320	6010	72	3.7	30	21 - 116	
4,6-Dinitro-2-methylpheno	8320	5180	62	18	30	10 - 108	
N-Nitrosodiphenylamine	8320	7830	94	11	30	47 - 120	
4-Bromophenyl phenyl ethe	8320	7890	95	6.3	30	46 - 110	
Hexachlorobenzene	8320	8070	97	4.1	30	48 - 115	
Pentachlorophenol	8320	2790	33	20	30	11 - 110	
Phenanthrene	8320	6940	83	3.8	30	39 - 122	
Anthracene	8320	7030	84	2.8	30	46 - 111	
Di-n-butyl phthalate	8320	6940	77	4.2	30	45 - 114	
Fluoranthene	8320	5610	67	4.2	30	39 - 116	
Pyrene	8320	9120	110	5.9	30	41 - 121	
Butyl benzyl phthalate	8320	8110	97	1.0	30	44 - 121	
3,3'-Dichlorobenzidine	8320	3310	40	2.1	30	10 - 116	
Benzo(a)anthracene	8320	7090	85	0.35	30	46 - 117	
Chrysene	8320	6590	79	5.4	30	43 - 119	
bis(2-Ethylhexyl) phthala	8320	7790	94	2.0	30	43 - 118	
Di-n-octyl phthalate	8320	6650	80	7.1	30	35 - 120	
Benzo(b)fluoranthene	8320	6440	77	6.4	30	39 - 124	
Benzo(k)fluoranthene	8320	6780	81	7.6	30	43 - 131	
Benzo(a)pyrene	8320	5950	72	6.4	30	43 - 114	

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SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Matrix Spike ID: LAB MS/MSD Level:(low/med) LOW

Lot #: F5D210380 WO #: G8WXJ1AL
BATCH: 5131374

COMPOUND	SPIKE ADDED	MSD CONCENT.	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
Indeno(1,2,3-cd)pyrene	8320	6550	79	5.3	30	31 - 129	
Dibenz(a,h)anthracene	8320	7720	93	3.4	30	33 - 131	
Benzo(ghi)perylene	8320	7070	80	0.030	30	26 - 140	

NOTES(S):

Results and reporting limits have been adjusted for dry weight.

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 59 outside limits
Spike Recovery: 0 out of 59 outside limits

COMMENTS:

FORM III

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Lot #: F5D290000 WO #: G9HAL1AC

BATCH: 5119285

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
Phenol	6670	5390	81	49- 92	
bis(2-Chloroethyl) ether	6670	5190	78	43- 94	
2-Chlorophenol	6670	5130	77	49- 92	
2-Methylphenol	6670	4580	69	48- 92	
2,2'-oxybis(1-Chloropropa	6670	4810	72	44- 102	
3-Methylphenol & 4-Methyl	6670	4740	71	47- 100	
N-Nitrosodi-n-propylamine	6670	5210	78	55- 108	
Hexachloroethane	6670	3140	47	43- 100	
Nitrobenzene	6670	4200	63	50- 102	
Isophorone	6670	5470	82	57- 110	
2-Nitrophenol	6670	4310	65	50- 99	
2,4-Dimethylphenol	6670	5140	77	48- 97	
bis(2-Chloroethoxy)methan	6670	5210	78	53- 103	
2,4-Dichlorophenol	6670	5090	76	51- 98	
1,2,4-Trichlorobenzene	6670	3820	57	50- 101	
Naphthalene	6670	3930	59	52- 102	
4-Chloroaniline	6670	1340	20*	21- 96	a
Hexachlorobutadiene	6670	4020	60	50- 102	
4-Chloro-3-methylphenol	6670	5080	76	52- 100	
2-Methylnaphthalene	6670	3950	59	38- 112	
Hexachlorocyclopentadiene	6670	4900	73	41- 117	
2,4,6-Trichlorophenol	6670	4550	68	52- 100	
2,4,5-Trichlorophenol	6670	5310	80	53- 101	
2-Nitroaniline	6670	4730	71	45- 114	
Dimethyl phthalate	6670	5250	79	55- 105	
Acenaphthylene	6670	4280	64	56- 107	
2,6-Dinitrotoluene	6670	5090	76	55- 108	
3-Nitroaniline	6670	2490	37	30- 94	
Acenaphthene	6670	3950	59	56- 107	
2,4-Dinitrophenol	6670	4350	65	10- 91	
4-Nitrophenol	6670	5610	84	44- 109	

(Continued on next page)

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Lot #: F5D290000 WO #: G9HAL1AC

BATCH: 5119285

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
Dibenzofuran	6670	4040	61	46 - 108	
2,4-Dinitrotoluene	6670	5310	80	56 - 117	
Diethyl phthalate	6670	5340	80	56 - 111	
4-Chlorophenyl phenyl eth	6670	4270	64	56 - 105	
Fluorene	6670	4100	61	56 - 105	
4-Nitroaniline	6670	4640	70	42 - 109	
4,6-Dinitro-2-methylpheno	6670	6330	95	27 - 100	
N-Nitrosodiphenylamine	6670	5240	79	58 - 114	
4-Bromophenyl phenyl ethe	6670	4340	65	54 - 106	
Hexachlorobenzene	6670	3120	47*	57 - 111	a
Pentachlorophenol	6670	3010	45	37 - 102	
Phenanthrene	6670	3850	58	57 - 108	
Anthracene	6670	3900	59	55 - 107	
Di-n-butyl phthalate	6670	5040	76	55 - 109	
Fluoranthene	6670	3440	52*	56 - 106	a
Pyrene	6670	2670	40*	54 - 114	a
Butyl benzyl phthalate	6670	5300	80	55 - 115	
3,3'-Dichlorobenzidine	6670	2840	43	32 - 95	
Benzo(a)anthracene	6670	3900	58	56 - 112	
Chrysene	6670	3840	58	55 - 112	
bis(2-Ethylhexyl) phthala	6670	5160	77	53 - 112	
Di-n-octyl phthalate	6670	5330	80	49 - 112	
Benzo(b)fluoranthene	6670	3950	59	53 - 112	
Benzo(k)fluoranthene	6670	3980	60	60 - 126	
Benzo(a)pyrene	6670	1670	25*	54 - 109	a
Indeno(1,2,3-cd)pyrene	6670	2030	30*	42 - 129	a
Dibenz(a,h)anthracene	6670	4040	61	42 - 133	
Benzo(ghi)perylene	6670	177	2*	37 - 139	a

NOTES(S):

a Spiked analyte recovery is outside stated control limits.

* Values outside of QC limits

Spike Recovery: 7 out of 59 outside limits

COMMENTS:

FORM III

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Lot #: F5E110000 WO #: HAAT21AC

BATCH: 5131374

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
Phenol	6670	5170	78	49 - 92	
bis(2-Chloroethyl) ether	6670	5040	76	43 - 94	
2-Chlorophenol	6670	5740	86	49 - 92	
2-Methylphenol	6670	5420	81	48 - 92	
2,2'-oxybis(1-Chloropropa	6670	5540	83	44 - 102	
3-Methylphenol & 4-Methyl	6670	5240	79	47 - 100	
N-Nitrosodi-n-propylamine	6670	6180	93	55 - 108	
Hexachloroethane	6670	5820	87	43 - 100	
Nitrobenzene	6670	5690	85	50 - 102	
Isophorone	6670	6000	90	57 - 110	
2-Nitrophenol	6670	5660	85	50 - 99	
2,4-Dimethylphenol	6670	5970	89	48 - 97	
bis(2-Chloroethoxy)methan	6670	5740	86	53 - 103	
2,4-Dichlorophenol	6670	5700	86	51 - 98	
1,2,4-Trichlorobenzene	6670	5900	89	50 - 101	
Naphthalene	6670	5810	87	52 - 102	
4-Chloroaniline	6670	3320	50	21 - 96	
Hexachlorobutadiene	6670	6040	91	50 - 102	
4-Chloro-3-methylphenol	6670	6060	91	52 - 100	
2-Methylnaphthalene	6670	7680	115*	38 - 112	a
Hexachlorocyclopentadiene	6670	7050	106	41 - 117	
2,4,6-Trichlorophenol	6670	5940	89	52 - 100	
2,4,5-Trichlorophenol	6670	5700	85	53 - 101	
2-Nitroaniline	6670	5450	82	45 - 114	
Dimethyl phthalate	6670	5890	88	55 - 105	
Acenaphthylene	6670	6350	95	56 - 107	
2,6-Dinitrotoluene	6670	5740	86	55 - 108	
3-Nitroaniline	6670	3420	51	30 - 94	
Acenaphthene	6670	5810	87	56 - 107	
2,4-Dinitrophenol	6670	2680	40	10 - 91	
4-Nitrophenol	6670	5720	86	44 - 109	

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SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Lot #: F5E110000 WO #: HAAT21AC

BATCH: 5131374

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
Dibenzofuran	6670	5710	86	46 - 108	
2,4-Dinitrotoluene	6670	5780	87	56 - 117	
Diethyl phthalate	6670	5930	89	56 - 111	
4-Chlorophenyl phenyl eth	6670	6040	91	56 - 105	
Fluorene	6670	6030	90	56 - 105	
4-Nitroaniline	6670	5360	80	42 - 109	
4,6-Dinitro-2-methylpheno	6670	5360	80	27 - 100	
N-Nitrosodiphenylamine	6670	6520	98	58 - 114	
4-Bromophenyl phenyl ethe	6670	5970	90	54 - 106	
Hexachlorobenzene	6670	6170	93	57 - 111	
Pentachlorophenol	6670	3560	53	37 - 102	
Phenanthrene	6670	5640	85	57 - 108	
Anthracene	6670	5700	85	55 - 107	
Di-n-butyl phthalate	6670	5700	86	55 - 109	
Fluoranthene	6670	5300	79	56 - 106	
Pyrene	6670	5710	86	54 - 114	
Butyl benzyl phthalate	6670	5920	89	55 - 115	
3,3'-Dichlorobenzidine	6670	4080	61	32 - 95	
Benzo(a)anthracene	6670	5640	85	56 - 112	
Chrysene	6670	5710	86	55 - 112	
bis(2-Ethylhexyl) phthala	6670	5720	86	53 - 112	
Di-n-octyl phthalate	6670	6060	91	49 - 112	
Benzo(b)fluoranthene	6670	6130	92	53 - 112	
Benzo(k)fluoranthene	6670	5960	89	60 - 126	
Benzo(a)pyrene	6670	5760	86	54 - 109	
Indeno(1,2,3-cd)pyrene	6670	5380	81	42 - 129	
Dibenz(a,h)anthracene	6670	5610	84	42 - 133	
Benzo(ghi)perylene	6670	4370	66	37 - 139	

NOTES(S):

a Spiked analyte recovery is outside stated control limits.

* Values outside of QC limits

Spike Recovery: 1 out of 59 outside limits

COMMENTS:

FORM III

SW846 8270C METHOD BLANK SUMMARY

BLANK WORKORDER NO.: G9HAL1AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: STLSTL

SDG Number: F5D220273

Lab File ID: KBLK3007

Lot Number: F5D220273

Date Analyzed: 05/09/05

Time Analyzed: 18:37

Matrix: SOLID

Date Extracted: 04/29/05

GC Column: RTX-5MS ID: .25

Extraction Method: 3550B

Instrument ID: MSK

Level: (low/med) LOW

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS, LCSD, MS , MSD:

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	INTRA-LAB QC	G8QE31A9	KSMP3021	05/10/05	02:03
02	LAB MS/MSD	G8QE31CW S	KSMP3022	05/10/05	02:35
03	LAB MS/MSD	G8QE31CX D	KSMP3023	05/10/05	03:06
04	RE73-05-58879	G81GA1AC	KSMP3046	05/10/05	19:55
05	CHECK SAMPLE	G9HAL1AC C	KLCS3008	05/09/05	19:09
06					
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27					
28					
29					
30					

COMMENTS:

FORM IV

SW846 8270C METHOD BLANK SUMMARY

BLANK WORKORDER NO.: HAAT21AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: STLSTL

SDG Number: F5D220273

Lab File ID: KBLK3104

Lot Number: F5D220273

Date Analyzed: 05/12/05

Time Analyzed: 18:00

Matrix: SOLID

Date Extracted: 05/11/05

GC Column: RTX-5MS ID: .25

Extraction Method: 3550B

Instrument ID: MSK

Level: (low/med) LOW

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS, LCSD, MS , MSD:

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	LAB MS/MSD	G8WXJ1AK S	KSMP3113	05/12/05	22:46
02	LAB MS/MSD	G8WXJ1AL D	KSMP3114	05/12/05	23:18
03	INTRA-LAB QC	G8WXJ2AD	KSMP3112	05/12/05	22:14
04	RE73-05-58879	G81GA2AC	KSMP3149	05/14/05	15:48
05	CHECK SAMPLE	HAAT21AC C	KLCS3105	05/12/05	18:32
06					
07					
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28					
29					
30					

COMMENTS:

FORM IV

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220273

Lab File ID: KDFT2578 DFTPP Injection Date: 04/28/05

Instrument ID: MSK DFTPP Injection Time: 1120

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	45.2
68	Less than 2.0% of mass 69	0.5 (0.9)1
69	Mass 69 relative abundance	52.5
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	47.7
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.4
275	10.0 - 30.0% of mass 198	27.3
365	Greater than 1.0% of mass 198	4.0
441	Present, but less than mass 443	10.8
442	Greater than 40.0% of mass 198	82.7
443	17.0 - 23.0% of mass 442	15.1 (18.3)2

1-Value is % of mass 69 2-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050APPIX	SSTD050APPIX	KCAL2579	04/28/05	1141
02	SSTD200APPIX	SSTD200APPIX	KCAL2580	04/28/05	1215
03	SSTD160APPIX	SSTD160APPIX	KCAL2581	04/28/05	1250
04	SSTD120APPIX	SSTD120APPIX	KCAL2582	04/28/05	1324
05	SSTD080APPIX	SSTD080APPIX	KCAL2583	04/28/05	1359
06	SSTD020APPIX	SSTD020APPIX	KCAL2584	04/28/05	1433
07	SSTD010APPIX	SSTD010APPIX	KCAL2585	04/28/05	1508
08	SSTD002APPIX	SSTD002APPIX	KCAL2586	04/28/05	1542
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220273

Lab File ID: KDFT2993 DFTPP Injection Date: 05/09/05

Instrument ID: MSK DFTPP Injection Time: 1140

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	46.8
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	55.2
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	48.4
197	Less than 1.0% of mass 198	0.4
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.3
275	10.0 - 30.0% of mass 198	25.1
365	Greater than 1.0% of mass 198	3.2
441	Present, but less than mass 443	10.1
442	Greater than 40.0% of mass 198	59.4
443	17.0 - 23.0% of mass 442	12.1 (20.4)2

1-Value is % of mass 69 2-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	SSTD050	KCAL2994	05/09/05	1201
02	SSTD160	SSTD160	KCAL2995	05/09/05	1233
03	SSTD120	SSTD120	KCAL2996	05/09/05	1304
04	SSTD080	SSTD080	KCAL2997	05/09/05	1336
05	SSTD020	SSTD020	KCAL2998	05/09/05	1408
06	SSTD010	SSTD010	KCAL2999	05/09/05	1440
07	SSTD002	SSTD002	KCAL3000	05/09/05	1512
08	SSTD050 ICV	SSTD050 ICV	KCAL3001	05/09/05	1544
09					
10					
11					
12					
13					
14					
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16					
17					
18					
19					
20					
21					
22					

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220273

Lab File ID: KDFT3002 DFTPP Injection Date: 05/09/05

Instrument ID: MSK DFTPP Injection Time: 1609

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	46.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	53.8
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	49.6
197	Less than 1.0% of mass 198	0.2
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.8
275	10.0 - 30.0% of mass 198	27.3
365	Greater than 1.0% of mass 198	3.4
441	Present, but less than mass 443	11.7
442	Greater than 40.0% of mass 198	69.6
443	17.0 - 23.0% of mass 442	12.9 (18.5)2

1-Value is % of mass 69 2-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	SSTD050	KCAL3003	05/09/05	1630
02	SSTD050APPIX	SSTD050APPIX	KCAL3004	05/09/05	1702
03	SVBLKK129A	G9HAL1AA	KBLK3007	05/09/05	1837
04	SVLCSK129A	G9HAL1AC	KLCS3008	05/09/05	1909
05					
06					
07					
08					
09					
10					
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21					
22					

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220273

Lab File ID: KDFT3031 DFTPP Injection Date: 05/10/05

Instrument ID: MSK DFTPP Injection Time: 1159

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	47.5
68	Less than 2.0% of mass 69	0.5 (0.8)1
69	Mass 69 relative abundance	54.9
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	49.1
197	Less than 1.0% of mass 198	0.3
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	7.0
275	10.0 - 30.0% of mass 198	26.6
365	Greater than 1.0% of mass 198	3.5
441	Present, but less than mass 443	9.4
442	Greater than 40.0% of mass 198	65.8
443	17.0 - 23.0% of mass 442	11.8 (17.9)2

1-Value is % of mass 69 2-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	SSTD050	KCAL3033	05/10/05	1253
02	58879	G81GA1AC	KSMP3046	05/10/05	1955
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
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22					

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220273

Lab File ID: KDFT3092 DFTPP Injection Date: 05/12/05

Instrument ID: MSK DFTPP Injection Time: 1148

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	44.7
68	Less than 2.0% of mass 69	0.8 (1.5)1
69	Mass 69 relative abundance	54.0
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	49.0
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	7.0
275	10.0 - 30.0% of mass 198	26.2
365	Greater than 1.0% of mass 198	3.1
441	Present, but less than mass 443	10.3
442	Greater than 40.0% of mass 198	67.1
443	17.0 - 23.0% of mass 442	12.3 (18.3)2

1-Value is % of mass 69 2-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	SSTD050	KCAL3094	05/12/05	1241
02	SVBLKK132D	HAAT21AA	KBLK3104	05/12/05	1800
03	SVLCSK132E	HAAT21AC	KLCS3105	05/12/05	1832
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220273

Lab File ID: KDFT3125 DFTPP Injection Date: 05/13/05

Instrument ID: MSK DFTPP Injection Time: 1049

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	39.3
68	Less than 2.0% of mass 69	0.3 (0.6)1
69	Mass 69 relative abundance	49.1
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	44.7
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.5
275	10.0 - 30.0% of mass 198	26.3
365	Greater than 1.0% of mass 198	3.3
441	Present, but less than mass 443	12.5
442	Greater than 40.0% of mass 198	74.4
443	17.0 - 23.0% of mass 442	13.5 (18.1)2

1-Value is % of mass 69 2-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	SSTD050	KCAL3128	05/13/05	1214
02	SSTD160	SSTD160	KCAL3129	05/13/05	1318
03	SSTD120	SSTD120	KCAL3130	05/13/05	1350
04	SSTD080	SSTD080	KCAL3131	05/13/05	1422
05	SSTD020	SSTD020	KCAL3132	05/13/05	1454
06	SSTD010	SSTD010	KCAL3133	05/13/05	1526
07	SSTD002	SSTD002	KCAL3134	05/13/05	1558
08	SSTD050ICV	SSTD050ICV	KCAL3135	05/13/05	1630
09					
10					
11					
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22					

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220273

Lab File ID: KDFT3136 DFTPP Injection Date: 05/14/05

Instrument ID: MSK DFTPP Injection Time: 0836

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	38.2
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	46.1
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	45.9
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.2
275	10.0 - 30.0% of mass 198	28.6
365	Greater than 1.0% of mass 198	4.0
441	Present, but less than mass 443	13.5
442	Greater than 40.0% of mass 198	81.8
443	17.0 - 23.0% of mass 442	15.5 (18.9)2

1-Value is % of mass 69 2-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	SSTD050	KCAL3140	05/14/05	1032
02	SSTD050ICV	SSTD050ICV	KCAL3139A	05/14/05	1135
03	58879RE	G81GA2AC	KSMP3149	05/14/05	1548
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8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220273

Lab File ID (Standard): KCAL3003 Date Analyzed: 05/09/05

Instrument ID: MSK Time Analyzed: 1630

		IS1 (ANT) AREA #	RT	IS2 (DCB) AREA #	RT	IS3 (CRY) AREA #	RT
	12 HOUR STD	276841	8.83	138615	4.56	445673	16.65
	UPPER LIMIT	553682	9.33	277230	5.06	891346	17.15
	LOWER LIMIT	138421	8.33	69308	4.06	222837	16.15
	EPA SAMPLE NO.						
01	SVBLKK129A	229870	8.82	114522	4.55	316826	16.64
02	SVLCSK129A	290157	8.82	171483	4.56	334742	16.65
03							
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22							

IS1 (ANT) = Acenaphthene-d10
IS2 (DCB) = 1,4-Dichlorobenzene-d4
IS3 (CRY) = Chrysene-d12

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk.

FORM VIII SV-1 1/87 Rev.

8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220273

Lab File ID (Standard): KCAL3003 Date Analyzed: 05/09/05

Instrument ID: MSK Time Analyzed: 1630

		IS4(NPT) AREA #	RT	IS5(PRY) AREA #	RT	IS6(PHN) AREA #	RT
	12 HOUR STD	492644	6.14	381519	19.27	505686	11.49
	UPPER LIMIT	985288	6.64	763038	19.77	1011372	11.99
	LOWER LIMIT	246322	5.64	190760	18.77	252843	10.99
	EPA SAMPLE NO.						
01	SVBLKK129A	409624	6.13	277586	19.25	374225	11.48
02	SVLCSK129A	565666	6.14	253365	19.25	455143	11.48
03							
04							
05							
06							
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IS4 (NPT) = Naphthalene-d8
IS5 (PRY) = Perylene-d12
IS6 (PHN) = Phenanthrene-d10

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk.

FORM VIII SV-2 1/87 Rev.

8B

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220273

Lab File ID (Standard): KCAL3033 Date Analyzed: 05/10/05

Instrument ID: MSK Time Analyzed: 1253

		IS1 (ANT) AREA #	RT	IS2 (DCB) AREA #	RT	IS3 (CRY) AREA #	RT
	12 HOUR STD	251365	8.79	121829	4.53	406157	16.62
	UPPER LIMIT	502730	9.29	243658	5.03	812314	17.12
	LOWER LIMIT	125683	8.29	60915	4.03	203079	16.12
	EPA SAMPLE NO.						
01	58879	195850	8.80	97744	4.54	184828*	16.62
02							
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22							

IS1 (ANT) = Acenaphthene-d10
IS2 (DCB) = 1,4-Dichlorobenzene-d4
IS3 (CRY) = Chrysene-d12

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk.

FORM VIII SV-1 1/87 Rev.

8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220273

Lab File ID (Standard): KCAL3033 Date Analyzed: 05/10/05

Instrument ID: MSK Time Analyzed: 1253

		IS4 (NPT) AREA #	RT	IS5 (PRY) AREA #	RT	IS6 (PHN) AREA #	RT
	12 HOUR STD	427782	6.12	339675	19.22	466667	11.45
	UPPER LIMIT	855564	6.62	679350	19.72	933334	11.95
	LOWER LIMIT	213891	5.62	169838	18.72	233334	10.95
	EPA SAMPLE NO.						
01	58879	352412	6.12	157696*	19.23	325507	11.46
02							
03							
04							
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22							

IS4 (NPT) = Naphthalene-d8
IS5 (PRY) = Perylene-d12
IS6 (PHN) = Phenanthrene-d10

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk.

FORM VIII SV-2 1/87 Rev.

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220273

Lab File ID (Standard): KCAL3094 Date Analyzed: 05/12/05

Instrument ID: MSK Time Analyzed: 1241

		IS1 (ANT) AREA #	RT	IS2 (DCB) AREA #	RT	IS3 (CRY) AREA #	RT
	12 HOUR STD	335274	8.80	167849	4.54	548402	16.63
	UPPER LIMIT	670548	9.30	335698	5.04	1096804	17.13
	LOWER LIMIT	167637	8.30	83925	4.04	274201	16.13
	EPA SAMPLE NO.						
01	SVBLKK132D	275418	8.78	144365	4.53	386698	16.60
02	SVLCSK132E	375784	8.79	209213	4.53	471640	16.62
03							
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22							

IS1 (ANT) = Acenaphthene-d10
IS2 (DCB) = 1,4-Dichlorobenzene-d4
IS3 (CRY) = Chrysene-d12

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk.

FORM VIII SV-1 1/87 Rev.

8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220273

Lab File ID (Standard): KCAL3094 Date Analyzed: 05/12/05

Instrument ID: MSK Time Analyzed: 1241

		IS4 (NPT) AREA #	RT	IS5 (PRY) AREA #	RT	IS6 (PHN) AREA #	RT
	12 HOUR STD	587608	6.12	477098	19.23	627534	11.46
	UPPER LIMIT	1175216	6.62	954196	19.73	1255068	11.96
	LOWER LIMIT	293804	5.62	238549	18.73	313767	10.96
	EPA SAMPLE NO.						
01	SVBLKK132D	517624	6.10	329928	19.22	467610	11.44
02	SVLCSK132E	714988	6.11	349220	19.23	642751	11.45
03							
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22							

IS4 (NPT) = Naphthalene-d8
IS5 (PRY) = Perylene-d12
IS6 (PHN) = Phenanthrene-d10

UPPER LIMIT = +100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk.

FORM VIII SV-2 1/87 Rev.

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220273

Lab File ID (Standard): KCAL3140 Date Analyzed: 05/14/05

Instrument ID: MSK Time Analyzed: 1032

		IS1 (ANT) AREA #	RT	IS2 (DCB) AREA #	RT	IS3 (CRY) AREA #	RT
	12 HOUR STD	342243	8.75	175542	4.51	515242	16.56
	UPPER LIMIT	684486	9.25	351084	5.01	1030484	17.06
	LOWER LIMIT	171122	8.25	87771	4.01	257621	16.06
	EPA SAMPLE NO.						
01	58879RE	288642	8.77	141919	4.52	335478	16.57
02							
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22							

IS1 (ANT) = Acenaphthene-d10
IS2 (DCB) = 1,4-Dichlorobenzene-d4
IS3 (CRY) = Chrysene-d12

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk.

FORM VIII SV-1 1/87 Rev.

8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220273

Lab File ID (Standard): KCAL3140 Date Analyzed: 05/14/05

Instrument ID: MSK Time Analyzed: 1032

		IS4 (NPT) AREA #	RT	IS5 (PRY) AREA #	RT	IS6 (PHN) AREA #	RT
	12 HOUR STD	614562	6.09	429113	19.17	614709	11.41
	UPPER LIMIT	1229124	6.59	858226	19.67	1229418	11.91
	LOWER LIMIT	307281	5.59	214557	18.67	307355	10.91
	EPA SAMPLE NO.						
01	58879RE	520732	6.10	272673	19.18	496891	11.42
02							
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22							

IS4 (NPT) = Naphthalene-d8
IS5 (PRY) = Perylene-d12
IS6 (PHN) = Phenanthrene-d10

UPPER LIMIT = +100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk.

FORM VIII SV-2 1/87 Rev.

GC/MS STANDARDS DATA
SEMIVOLATILES

DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	45.22		PASS
68	Less than 2% of mass 69	0.49	(0.93)	PASS
69	Mass 69 relative abundance	52.53		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	47.71		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.42		PASS
275	10 - 30% of mass 198	27.32		PASS
365	Greater than 1% of mass 198	4.06		PASS
441	Present, but less than mass 443	10.78	(71.35)	PASS
442	Greater than 40% of mass 198	82.70		PASS
443	17 - 23% of mass 442	15.10	(18.26)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.1570776	5.000	PASS
Benzidine	1.0036036	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	165399			N/A
4,4-DDE	11531	6.5	15.0	PASS
4,4-DDD	1112	0.7	15.0	PASS
4,4-DDD + DDE	12643	7.1	15.0	PASS

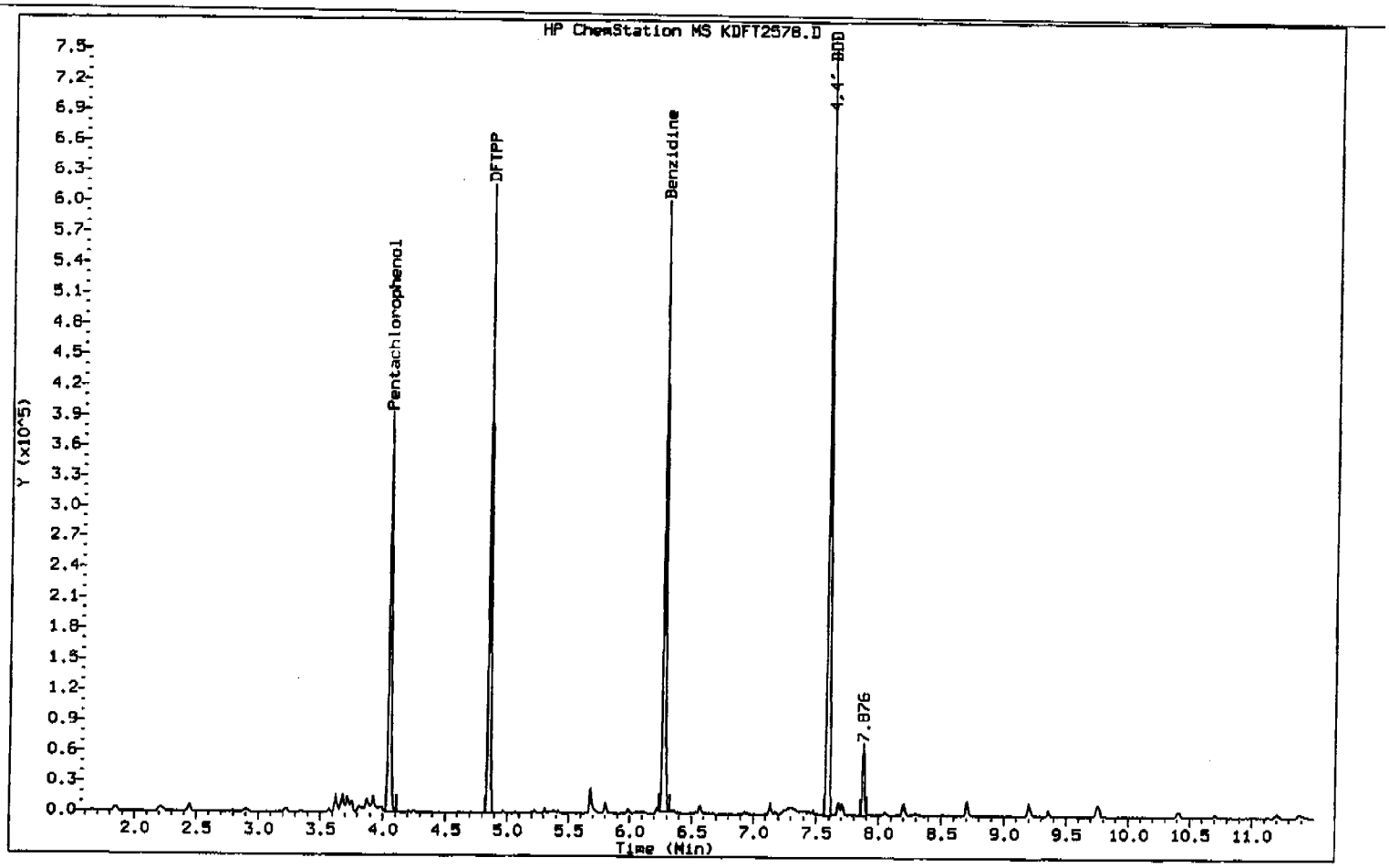
****
Tuning Sample, //Slsvr01/BNA_LAB/MSK.i/K050428B.B/KDFT2578.D/KDFT2578.D,*** PASSED
****

04/28/05

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

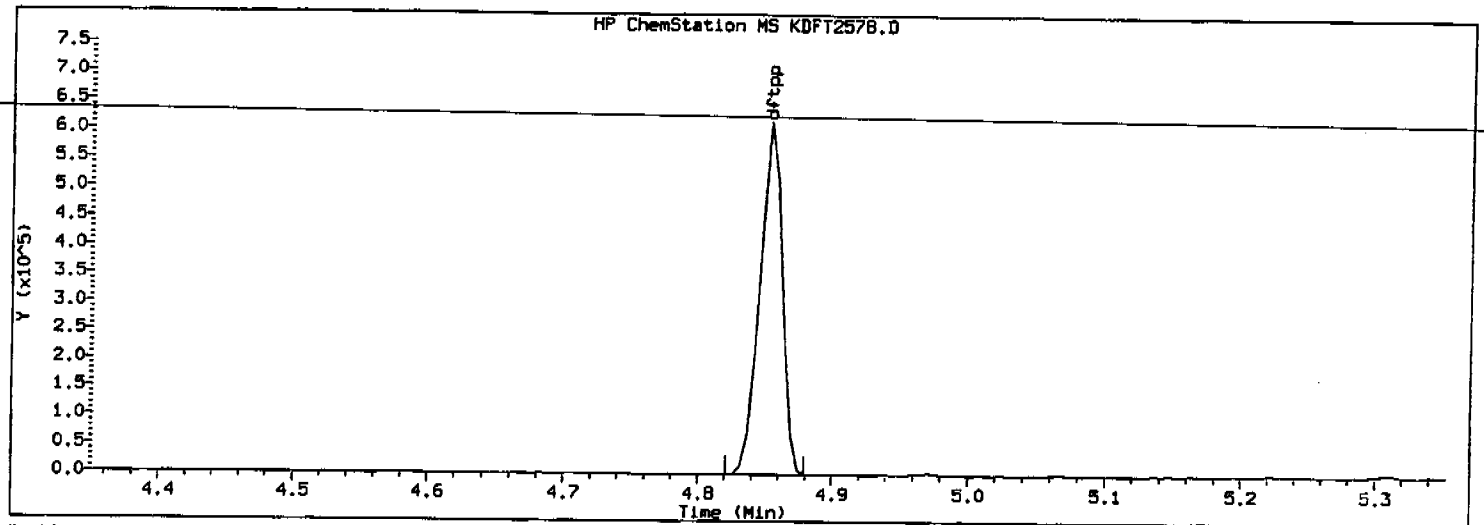
Report Date: 04/28/2005 15:23

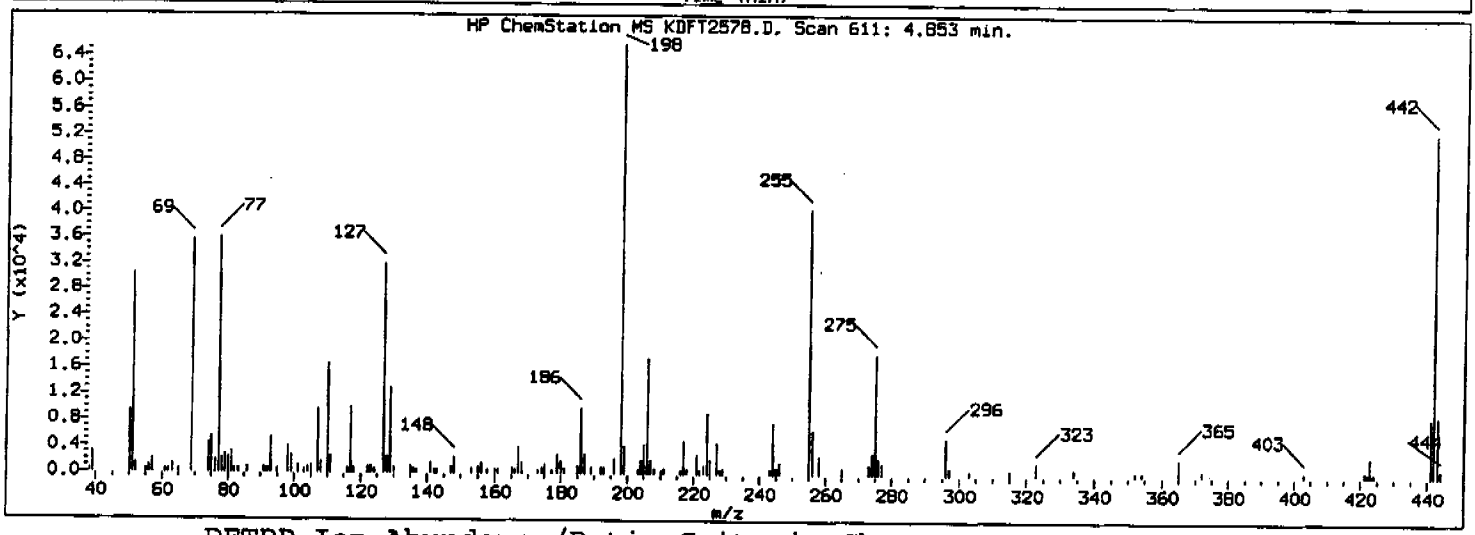
Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050428B.B/KDFT2578.D/KDFT2578.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050428B.B\sw846tun.m Inst: MSK
Injection Date: 28-APR-2005 11:20 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0193-05 (50NG)



Report Date: 04/28/2005 15:23

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050428B.B/KDFT2578.D/KDFT2578.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050428B.B\sw846tun.m Inst: MSK
Injection Date: 28-APR-2005 11:20 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0193-05 (50NG)



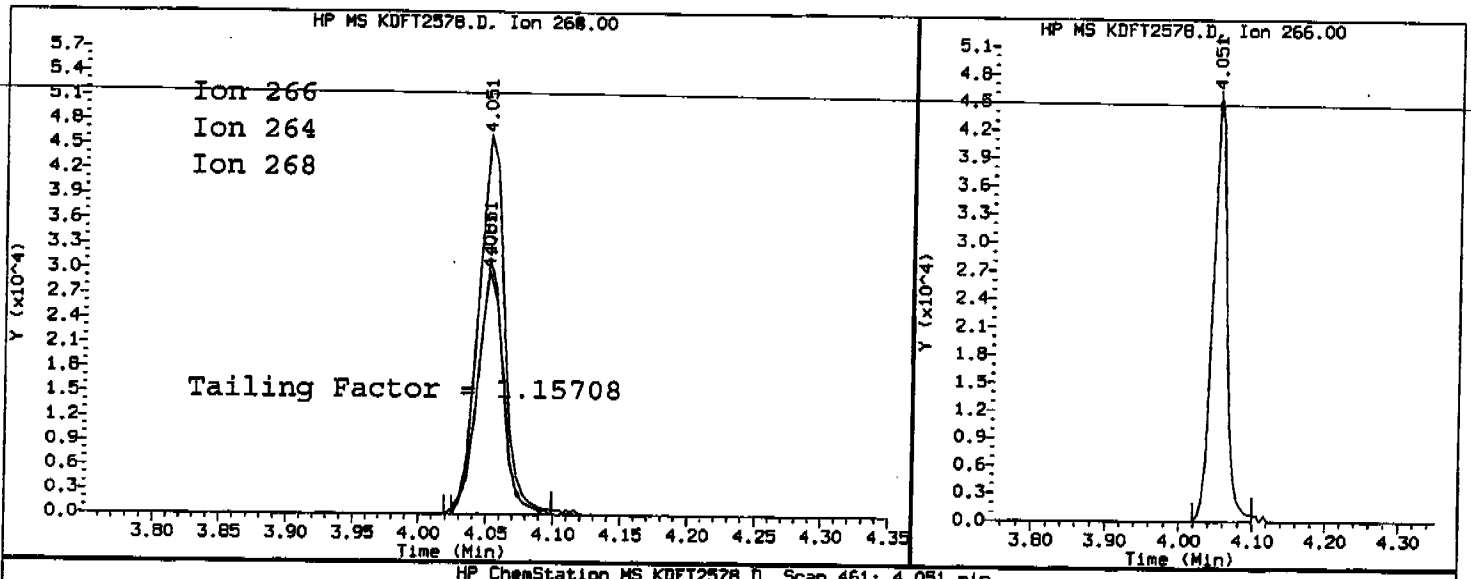


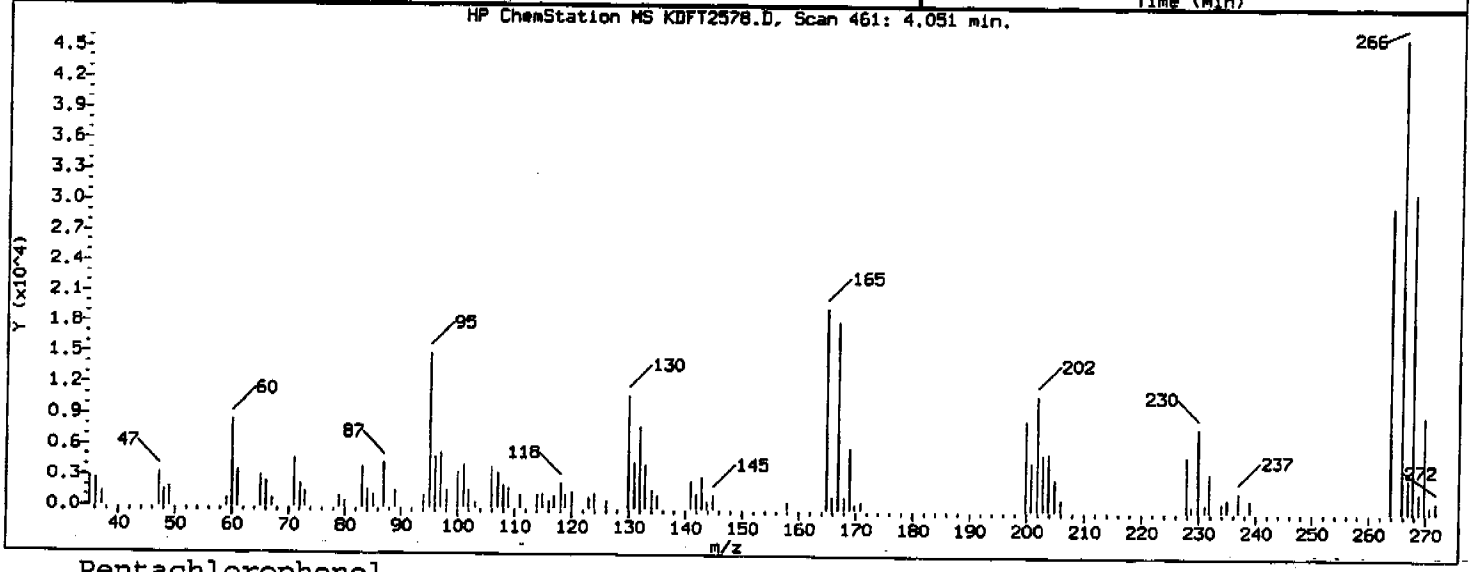
DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	45.22		PASS
68	Less than 2% of mass 69	0.49	(0.93)	PASS
69	Mass 69 relative abundance	52.53		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	47.71		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.42		PASS
275	10 - 30% of mass 198	27.32		PASS
365	Greater than 1% of mass 198	4.06		PASS
441	Present, but less than mass 443	10.78	(71.35)	PASS
442	Greater than 40% of mass 198	82.70		PASS
443	17 - 23% of mass 442	15.10	(18.26)	PASS

Report Date: 04/28/2005 15:23

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050428B.B/KDFT2578.D/KDFT2578.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050428B.B\sw846tun.m\resolut.m Inst:
Injection Date: 28-APR-2005 11:20 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)





Pentachlorophenol

Exp. RT = 4.063
Found RT = 4.051

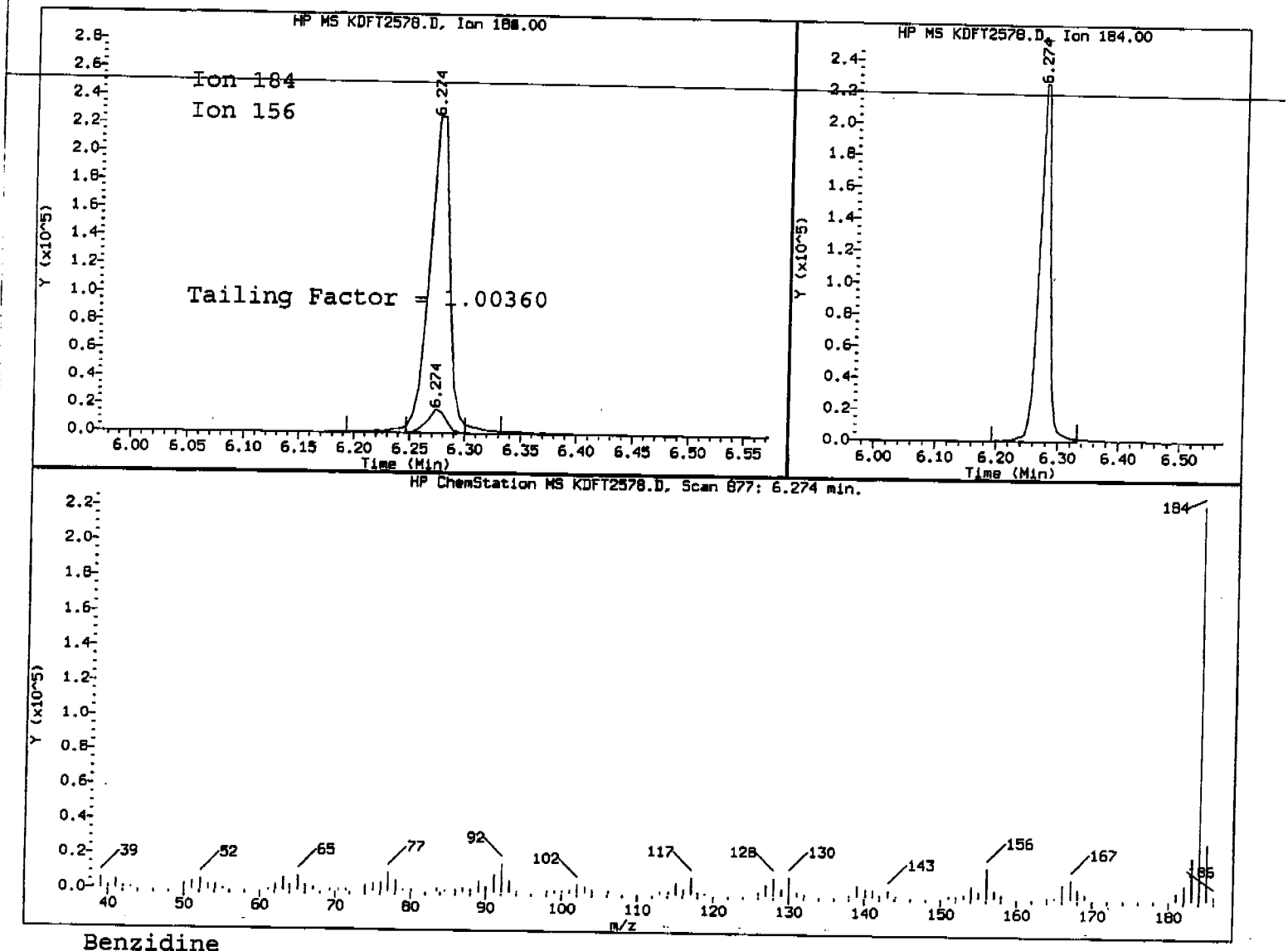
Mass	Area	Ratio
266	62964	100.00
264	39801	63.21
268	41066	65.22

Tailing factor for Pentachlorophenol OK

Tail Factor = 1.157 Maximum Allowed = 5.0

Report Date: 04/28/2005 15:23

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050428B.B/KDFT2578.D/KDFT2578.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050428B.B\sw846tun.m\resolut.m Inst:
Injection Date: 28-APR-2005 11:20 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)



Benzidine

Exp. RT = 6.285
Found RT = 6.274

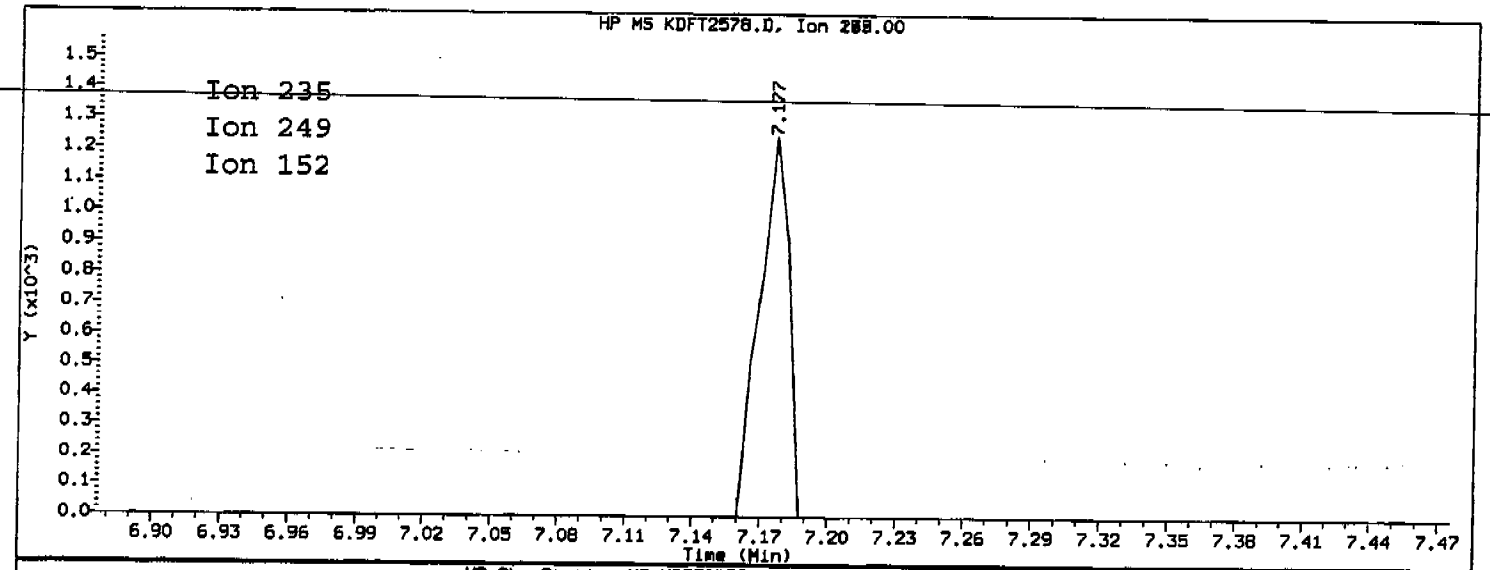
Mass	Area	Ratio
184	297080	100.00
156	20138	6.78

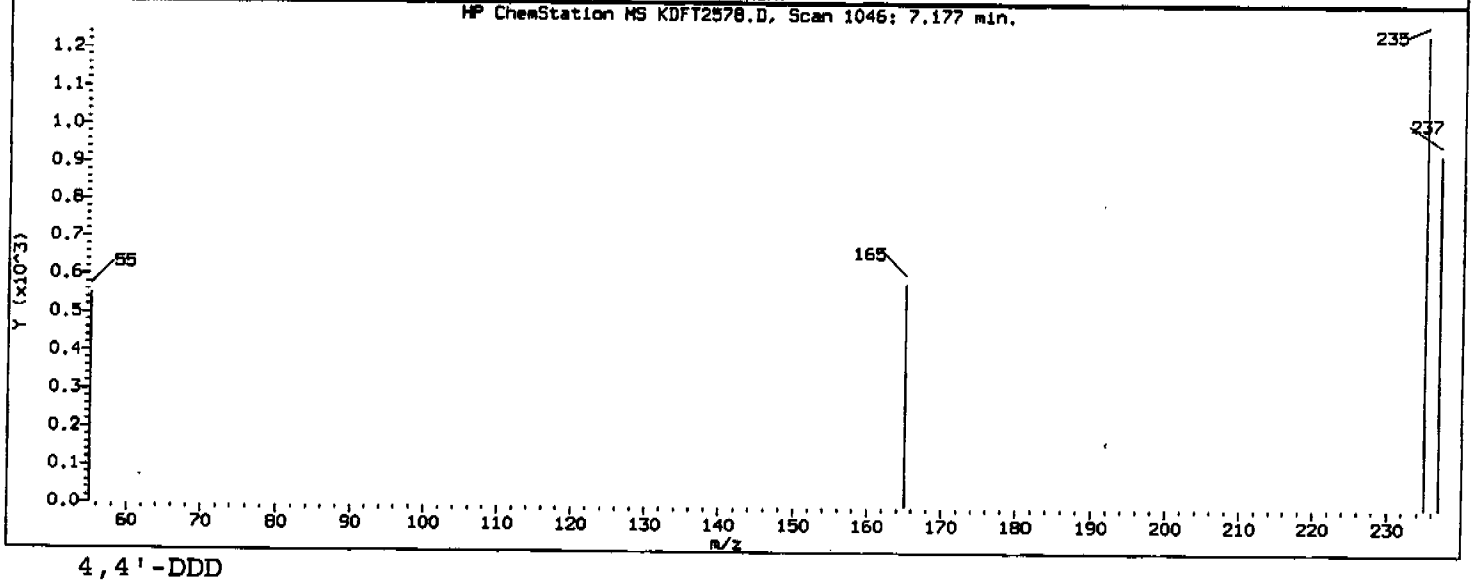
Tailing factor for Benzidine OK

Tail Factor = 1.004 Maximum Allowed = 3.0

Report Date: 04/28/2005 15:23

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050428B.B/KDFT2578.D/KDFT2578.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050428B.B\sw846tun.m\resolut.m Inst:
Injection Date: 28-APR-2005 11:20 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)





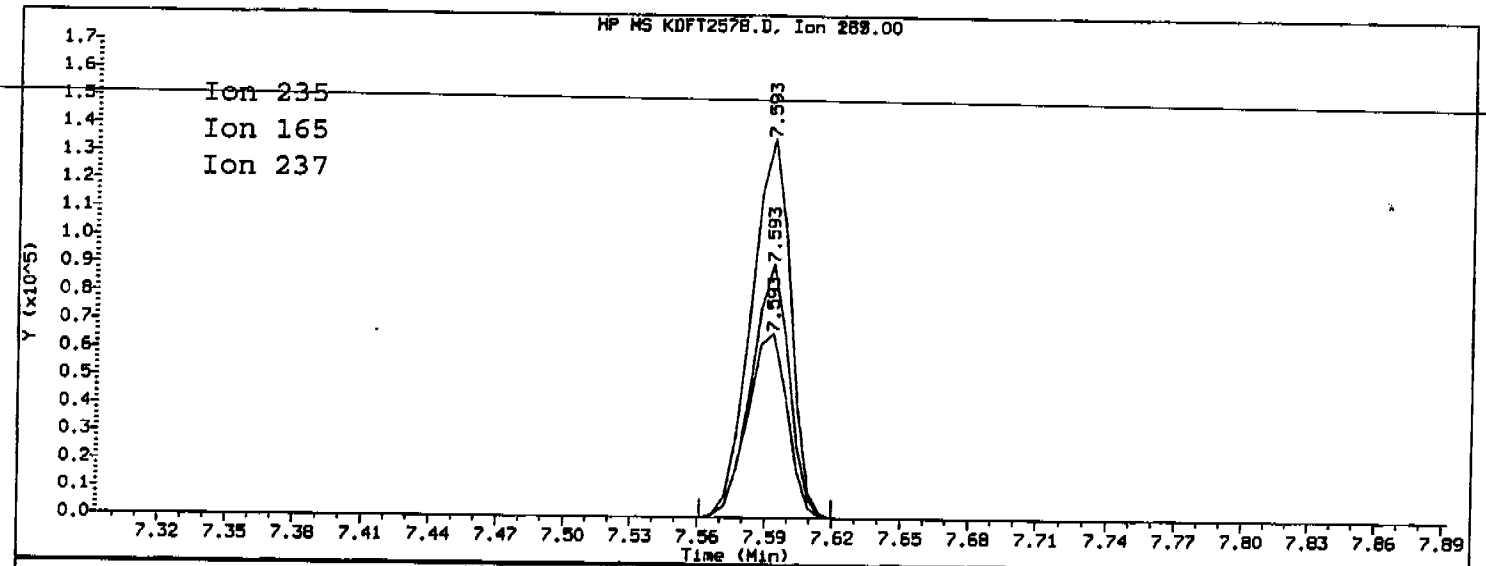
4,4'-DDD

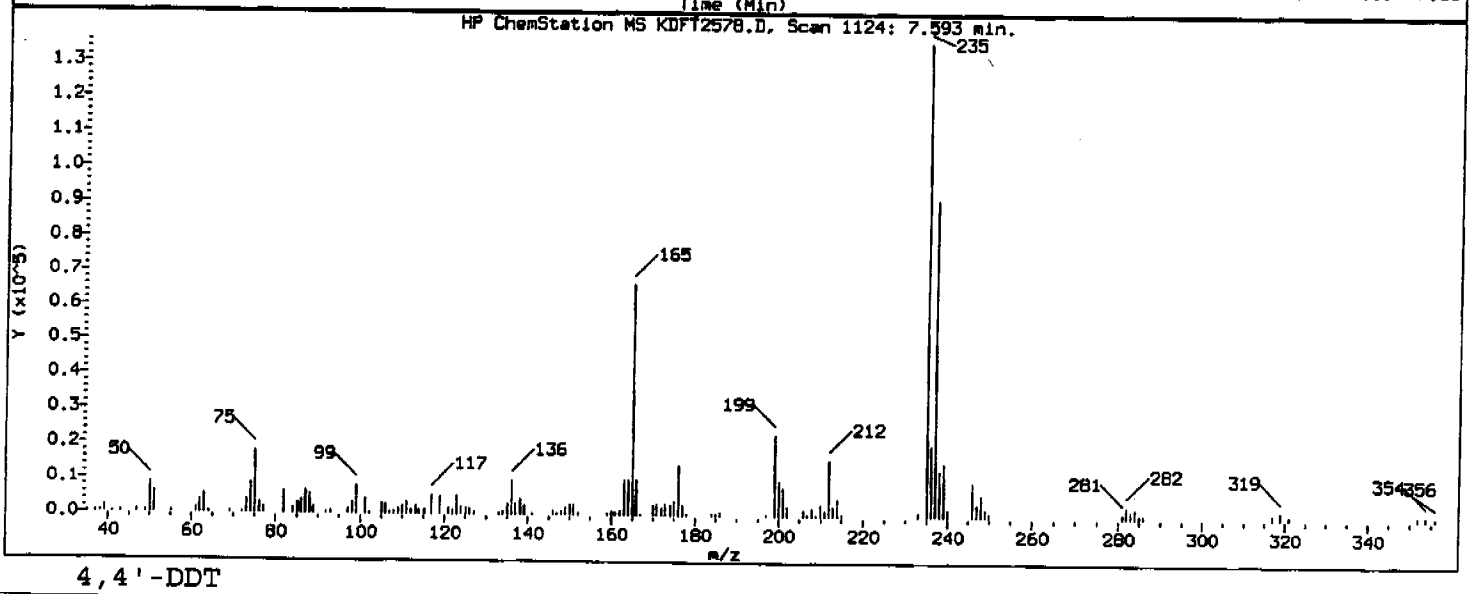
Exp. RT = 6.734
Found RT = 7.177

Mass	Area	Ratio
235	1112	100.00
249	0	0.00
152	1277	114.77

Report Date: 04/28/2005 15:23

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050428B.B/KDFT2578.D/KDFT2578.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050428B.B\sw846tun.m\resolut.m Inst:
Injection Date: 28-APR-2005 11:20 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)





4,4'-DDT
========

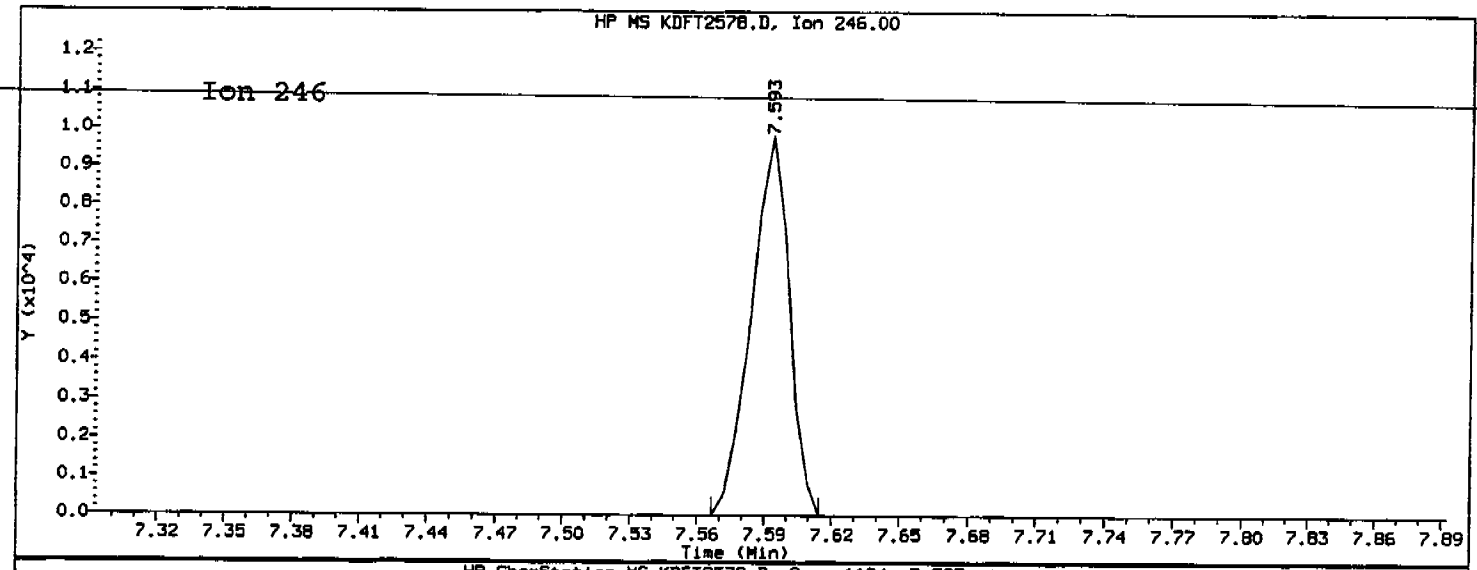
Exp. RT = 7.600
Found RT = 7.593

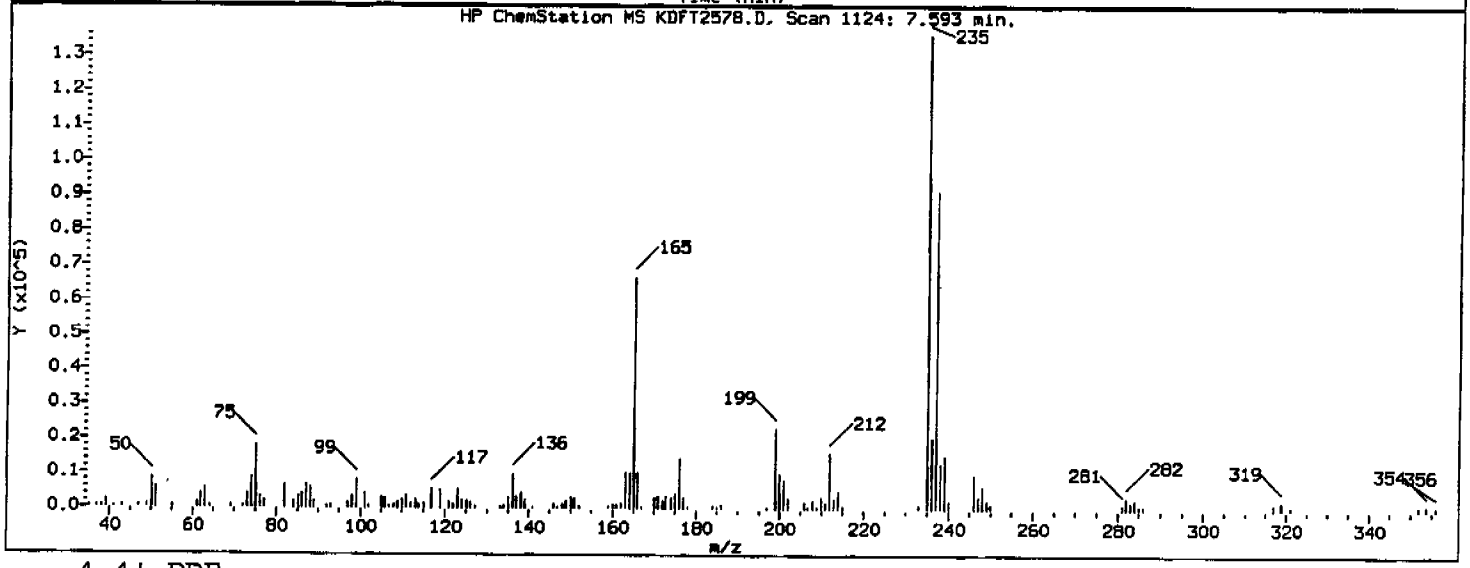
Mass	Area	Ratio
235	165399	100.00
165	82214	49.71
237	106341	64.29

STL ST. LOUIS

Report Date: 04/28/2005 15:23

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050428B.B/KDFT2578.D/KDFT2578.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050428B.B\sw846tun.m\resolut.m Inst:
Injection Date: 28-APR-2005 11:20 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)

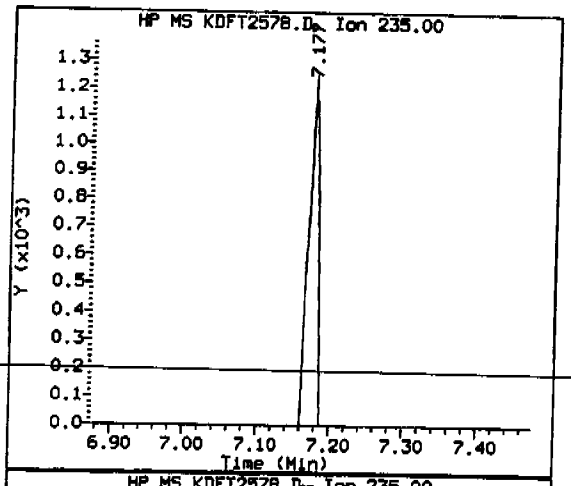




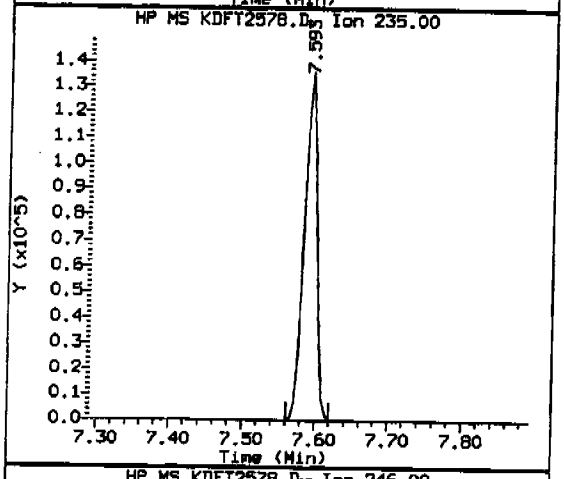
4,4'-DDE

Exp. RT = 8.000
Found RT = 7.593

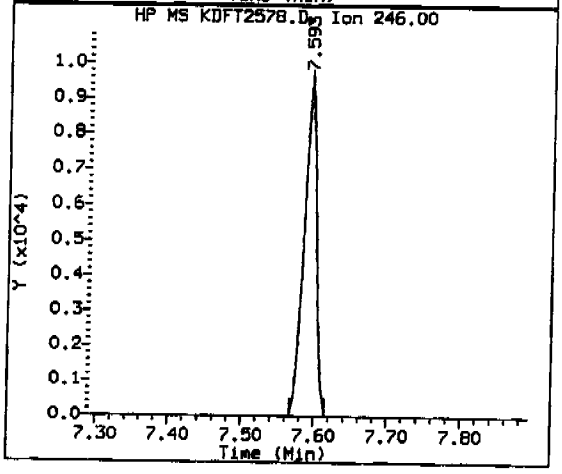
Mass	Area	Ratio
246	11531	100.00



Compound: 4,4'-DDD
Quant Mass: 235
RT: 7.177
Area: 1112



Compound: 4,4'-DDT
Quant Mass: 235
RT: 7.593
Area: 165399



Compound: 4,4'-DDE
Quant Mass: 246
RT: 7.593
Area: 11531

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	165399			N/A
4,4-DDE	11531	6.5	15.0	PASS
4,4-DDD	1112	0.7	15.0	PASS
4,4-DDD + DDE	12643	7.1	15.0	PASS

TUNE SAMPLE ********** *** PASSED *** ********** DDT BREAKDOWN TEST

Report Date : 29-Apr-2005 10:26

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 29-APR-2005 01:44
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Calibration File Names:
Level 1: \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\KCAL2601.D
Level 2: \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\KCAL2600.D
Level 3: \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\KCAL2599.D
Level 4: \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\KCAL2595.D
Level 5: \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\KCAL2598.D
Level 6: \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\KCAL2597.D
Level 7: \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\KCAL2596.D

04/29/05

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
1 1,4-Dioxane	0.37860	0.43472	0.42645	0.38576	0.43423	0.42074			
	0.43063						0.41588	5.675	
2 Methyl methacrylate	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
3 Pyridine	+++++	1.28795	1.40374	1.26051	1.29997	1.25121			
	1.35686						1.31004	4.513	<-
4 N-Nitrosodimethylamine	0.70861	0.74519	0.74513	0.69246	0.75157	0.74567			
	0.74317						0.73312	3.122	
5 Dimethylformamide	0.80592	0.88454	0.94889	0.89923	0.93709	0.94499			
	0.92505						0.90653	5.554	
6 Ethyl methacrylate	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
7 2-Picoline	1.11672	1.19222	1.23144	1.30096	1.31132	1.30450			
	1.39292						1.26430	7.204	
8 N-Nitrosomethylethylamine	0.46950	0.57796	0.56912	0.57845	0.60310	0.58248			
	0.59178						0.56748	7.853	
9 Methyl methanesulfonate	0.35479	0.41151	0.41103	0.41324	0.46135	0.46437			
	0.49021						0.42950	10.596	
11 Cyclohexanol	1.13159	1.24663	1.34703	1.34793	1.44324	1.47767			
	1.45606						1.35002	9.303	

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INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 29-APR-2005 01:44
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
12 N-Nitrosodiethylamine	0.61009	0.64225	0.62511	0.63051	0.70280	0.70476	0.71974	0.66218	6.828	
13 Ethyl Methanesulfonate	1.10180	1.07409	1.10510	1.05473	1.17698	1.15933	1.19896	1.12443	4.846	
14 Benzaldehyde	1.16166	1.23901	1.24283	1.29144	1.30102	1.36353	1.39704	1.28522	6.202	
16 Phenol	1.59182	1.65799	1.78303	1.78168	1.89286	1.96944	1.93915	1.80228	7.873	
17 Aniline	2.08985	2.12108	2.23541	2.05933	2.19179	2.21418	2.13936	2.15014	3.059	
18 Pentachloroethane	0.51171	0.48710	0.50536	0.53152	0.54099	0.55718	0.58367	0.53108	6.205	
19 Bis(2-chloroethyl)ether	1.42044	1.43863	1.43338	1.49434	1.54137	1.59087	1.59782	1.50241	5.015	
20 2-Chlorophenol	1.28743	1.29925	1.32343	1.32585	1.40017	1.43353	1.40842	1.35401	4.325	
21 1,3-Dichlorobenzene	1.52475	1.48639	1.46266	1.47287	1.54872	1.57694	1.59821	1.52436	3.462	
23 1,4-Dichlorobenzene	1.54939	1.55653	1.55992	1.59034	1.66583	1.68150	1.69627	1.61425	3.997	
24 Benzenethiol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
25 Benzyl Alcohol	0.20792	0.56942	0.67392	0.74425	0.77275	0.89502	0.79588	0.66559	33.933	<-
26 1,2-Dichlorobenzene	1.42590	1.38985	1.41334	1.47439	1.56405	1.58796	1.63615	1.49880	6.455	

STL St. Louis

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Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD
27 2-Methylphenol	1.11759	1.06078	1.16201	1.11714	1.18554	1.21224	1.20803	1.15190	4.848
28 2,2-oxybis(1-Chloropropane)	1.59518	1.44250	1.51851	1.51069	1.52027	1.52384	1.52052	1.51879	2.914
29 3 and 4-Methylphenol	1.10198	1.21132	1.26515	1.28160	1.34240	1.39381	1.36611	1.28034	7.868
30 Acetophenone	0.52107	0.53512	0.55618	0.57812	0.59620	0.62523	0.65259	0.58065	8.209
31 N-Nitrosopyrrolidine	0.17843	0.18370	0.18226	0.18768	0.19258	0.19901	0.21721	0.19155	6.907
32 N-Nitrosodinpropylamine	1.17472	1.17979	1.26477	1.29461	1.31770	1.31229	1.29274	1.26237	4.799
33 N-Nitrosomorpholine	0.06774	0.07645	0.07726	0.08065	0.08961	0.09511	0.10449	0.08447	14.906
34 O-Toluidine	0.56236	0.55680	0.56227	0.60066	0.63366	0.66229	0.71711	0.61359	9.900
35 Hexachloroethane	0.69167	0.65406	0.66038	0.69598	0.72422	0.72017	0.73528	0.69739	4.518
37 Nitrobenzene	0.57795	0.54753	0.52882	0.55654	0.55527	0.57193	0.57827	0.55947	3.229
38 N-Nitrosopiperidine	0.16432	0.16882	0.17079	0.17616	0.18096	0.18588	0.19442	0.17733	5.933
39 Isophorone	0.75985	0.74151	0.77064	0.77514	0.76787	0.77803	0.77937	0.76749	1.727
40 2-Nitrophenol	0.18384	0.19376	0.20079	0.20500	0.21118	0.21588	0.21957	0.20429	6.181

STL St. Louis

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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
41 2,4-Dimethylphenol	0.36687	0.39732	0.41399	0.44987	0.45674	0.47620			
	0.47283						0.43340	9.563	
42 Bis(2-chloroethoxy)methane	0.46695	0.45137	0.46047	0.48273	0.48105	0.49765			
	0.50608						0.47804	4.135	
43 o,o,o-Triethyl-Phosphorothioa	0.21535	0.22497	0.22572	0.23460	0.25461	0.26744			
	0.27953						0.24317	9.968	
44 Benzoic Acid	+++++	0.15128	0.18577	0.20987	0.23413	0.23921			
	0.24655						0.21113	17.465	
45 2,4-Dichlorophenol	0.24137	0.31577	0.31239	0.33166	0.33816	0.35171			
	0.35348						0.32065	11.976	
46 a,a-Dimethyl-phenethylamine	0.51145	0.76309	0.77322	0.78410	0.80856	0.82953			
	0.87545						0.76363	15.399	
47 1,2,4-Trichlorobenzene	0.35599	0.36527	0.35831	0.37853	0.39270	0.40331			
	0.41205						0.38088	5.863	
49 4-Chlorobenzenethiol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
50 Naphthalene	1.01653	1.01021	1.01516	1.08561	1.12092	1.18774			
	1.22348						1.09424	7.966	
51 4-Chloroaniline	0.36882	0.41649	0.44559	0.44690	0.48477	0.51837			
	0.51096						0.45598	11.705	
52 2,6-Dichlorophenol	0.25469	0.24292	0.25839	0.31185	0.29618	0.31378			
	0.32831						0.28659	11.858	
53 Hexachloropropene	0.31733	0.32521	0.33376	0.35006	0.35945	0.38047			
	0.38884						0.35073	7.781	
54 Hexachlorobutadiene	0.27711	0.26631	0.25418	0.27483	0.28212	0.29209			
	0.29748						0.27773	5.319	

STL St. Louis

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
55 Benzothiazole	0.50139	0.46477	0.48632	0.49913	0.53104	0.55241			
	0.59151						0.51808	8.350	
56 Caprolactam	0.10983	0.13715	0.14068	0.13986	0.07457	0.14270			
	0.14775						0.12751	20.686	
57 n-Nitrosodi-n-butylamine	0.31342	0.29750	0.30099	0.31842	0.31943	0.33002			
	0.35040						0.31860	5.621	
58 p-Phenylenediamine	0.21874	0.29578	0.28872	0.36365	0.28733	0.27992			
	0.31741						0.29308	14.829	
59 4-Chloro-3-Methylphenol	0.27808	0.34113	0.38324	0.38943	0.39827	0.41002			
	0.41138						0.37308	12.893	
60 p-Chlorophenyl methyl sulfide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
61 Safrole	0.25500	0.27963	0.29140	0.29580	0.30963	0.32648			
	0.34629						0.30061	10.041	
62 2-Methylnaphthalene	0.79005	0.77460	0.80188	0.80540	0.82653	0.86454			
	0.87146						0.81921	4.504	
63 Phthalic anhydride	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
64 cis-Isosafrole	0.04748	0.05826	0.05654	0.05553	0.05574	0.05770			
	0.05995						0.05589	7.184	
65 1,2,4,5-Tetrachlorobenzene	1.42931	1.31274	1.32205	1.39168	1.47308	1.54004			
	1.62334						1.44175	7.870	
66 Hexachlorocyclopentadiene	0.22609	0.37005	0.39916	0.44764	0.46898	0.49181			
	0.51922						0.41756	23.679	
67 2,4,6-Trichlorophenol	0.40347	0.44812	0.45383	0.47650	0.47896	0.50316			
	0.52140						0.46935	8.264	

STL St. Louis

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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
68 2,4,5-Trichlorophenol	0.36628	0.45864	0.48372	0.52869	0.54048	0.56219			
	0.59062						0.50438	14.983	
70 trans-Isosafrole	0.56648	0.54163	0.54100	0.56420	0.59728	0.65850			
	0.75581						0.60356	12.995	
71 Biphenyl	1.54419	1.44874	1.47932	1.53624	1.66716	1.76228			
	1.79160						1.60422	8.519	
72 2-Chloronaphthalene	1.25515	1.23404	1.24704	1.29040	1.30943	1.38174			
	1.41165						1.30421	5.273	
73 2-Nitroaniline	0.48861	0.52007	0.54325	0.55904	0.55542	0.57208			
	0.58880						0.54675	6.131	
74 1,4-Naphthoquinone	0.27176	0.36890	0.37704	0.33375	0.21032	0.17342			
	0.12916						0.26634	36.895	<-
75 1,4-Dinitrobenzene	0.07763	0.12369	0.12115	0.12521	0.13042	0.13540			
	0.14150						0.12214	17.086	
76 Dimethylphthalate	1.45815	1.46456	1.50902	1.54752	1.58543	1.66616			
	1.69761						1.56121	6.025	
77 1,3-Dinitrobenzene	0.16587	0.22945	0.23025	0.24388	0.24166	0.24971			
	0.25601						0.23098	13.109	
78 N-(hydroxymethyl) phthalimide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
79 Acenaphthylene	1.75108	1.80726	1.83748	1.93134	1.98476	2.10600			
	2.17096						1.94127	8.057	
80 2,6-Dinitrotoluene	0.27499	0.31443	0.32749	0.33945	0.34305	0.35873			
	0.36389						0.33172	9.117	
81 3-Nitroaniline	0.24423	0.31322	0.32741	0.34492	0.35639	0.37039			
	0.36835						0.33213	13.258	

STL St. Louis

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Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
83 Acenaphthene	1.21878	1.13268	1.15338	1.22752	1.25002	1.31922			
	1.35473						1.23662	6.527	
84 2,4-Dinitrophenol	+++++	0.14781	0.19757	0.22407	0.24736	0.26118			
	0.26135						0.22322	19.856	<-
85 4-Nitrophenol	+++++	0.23727	0.27068	0.33499	0.33003	0.34462			
	0.34414						0.31029	14.573	
86 Dibenzofuran	1.72238	1.80014	1.77031	1.85902	1.87922	1.98809			
	2.03288						1.86458	6.079	
87 Pentachlorobenzene	0.70728	0.65613	0.66649	0.68327	0.70614	0.73519			
	0.75466						0.70131	5.086	
88 2,4-Dinitrotoluene	0.35745	0.42076	0.43608	0.45496	0.45904	0.47489			
	0.48091						0.44058	9.574	
89 1-Naphthylamine	1.03800	1.06591	1.04498	1.10302	1.05391	1.16285			
	1.16394						1.09037	4.961	
90 2-Naphthylamine	0.97677	0.98368	0.94490	1.00433	0.88786	1.05261			
	1.06727						0.98820	6.232	
91 Phenyl sulfide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
92 2,3,4,6-Tetrachlorophenol	0.22811	0.28943	0.32362	0.39276	0.41144	0.42643			
	0.46069						0.36178	23.112	
93 Diethylphthalate	1.41548	1.46650	1.48688	1.54557	1.60229	1.68658			
	1.73510						1.56263	7.554	
94 Fluorene	1.36651	1.41878	1.43699	1.51034	1.54068	1.61649			
	1.66344						1.50761	7.166	
95 4-Chlorophenyl-phenylether	0.76544	0.78936	0.79757	0.81479	0.85758	0.90175			
	0.93474						0.83732	7.491	

STL St. Louis

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Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD
	160.000 Level 7							
96 Thionazin	0.23139	0.25240	0.25864	0.26567	0.28537	0.29086		
	0.29032						0.26781	8.348
97 5-Nitro-o-toluidine	0.15995	0.20034	0.19875	0.21045	0.21494	0.21816		
	0.22533						0.20399	10.587
98 4-Nitroaniline	0.23718	0.30399	0.34479	0.34033	0.35333	0.35639		
	0.36113						0.32816	13.516
99 4,6-Dinitro-2-methylphenol	0.09625	0.15210	0.16791	0.18306	0.19296	0.20080		
	0.20396						0.17101	22.084
100 N-Nitrosodiphenylamine	0.54329	0.53324	0.53718	0.57973	0.61558	0.65237		
	0.66501						0.58949	9.412
101 tri-n-butylphosphate	1.52154	1.63086	1.65030	1.71460	1.82251	1.87783		
	2.01075						1.74692	9.553
102 Azobenzene	1.15917	1.09995	1.11092	1.18849	1.28315	1.31452		
	1.35621						1.21606	8.384
103 Benzal Chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++ <-
105 Sulfotepp	0.13055	0.14332	0.15072	0.15105	0.16041	0.16417		
	0.16883						0.15272	8.604
106 Diallate (peak 1)	0.27906	0.28345	0.29123	0.30014	0.31100	0.32036		
	0.33572						0.30299	6.788
107 1,3,5-Trinitrobenzene	0.05460	0.08597	0.09688	0.10024	0.10572	0.10753		
	0.11048						0.09449	20.515
108 Phorate	0.49946	0.50445	0.50760	0.53049	0.56947	0.58636		
	0.62513						0.54614	8.860
109 4-Bromophenyl-phenylether	0.25303	0.26866	0.26842	0.28618	0.29408	0.30240		
	0.30815						0.28299	7.152

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 29-APR-2005 01:44
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
110 Phenacetin	0.38624	0.41341	0.42268	0.42532	0.42504	0.42869	0.43971	0.42015	4.015	
111 Diallate (peak 2)	0.06683	0.06004	0.06289	0.06373	0.06488	0.06546	0.06814	0.06457	4.135	
112 Hexachlorobenzene	0.28686	0.29871	0.29767	0.30893	0.31951	0.32920	0.33236	0.31046	5.537	
113 Dimethoate	0.27185	0.28949	0.28826	0.27480	0.21882	0.21567	0.18694	0.24940	16.564	
114 Atrazine	0.22048	0.24204	0.23940	0.24289	0.25564	0.25595	0.26658	0.24614	6.060	
115 tris(2-chloroethyl)phosphate	0.22625	0.21717	0.22304	0.21944	0.21858	0.22085	0.22796	0.22190	1.817	
116 4-Aminobiphenyl	0.70998	0.67001	0.68070	0.79368	0.77334	0.82627	0.87380	0.76111	10.111	
117 Pentachlorophenol	+++++	0.13566	0.16827	0.19160	0.20843	0.21816	0.21672	0.18981	17.112	
118 Pronamide	0.37755	0.36975	0.37320	0.37153	0.37705	0.38333	0.39158	0.37771	2.012	
119 Pentachloronitrobenzene	0.11754	0.12476	0.12783	0.13205	0.13537	0.13783	0.13768	0.13044	5.767	
120 Phenyl disulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
122 Phenanthrene	1.20008	1.16461	1.15560	1.20830	1.25524	1.28359	1.29872	1.22373	4.615	
123 Disulfoton	0.35737	0.36108	0.36643	0.37668	0.39485	0.40708	0.42916	0.38466	6.946	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
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Quant Method : ISTD
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Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
124 Anthracene	1.10677	1.13662	1.12604	1.17583	1.21539	1.24242			
	1.24655						1.17852	4.866	
125 Dinoseb	0.13116	0.20289	0.23168	0.24451	0.26321	0.27373			
	0.28489						0.23315	22.611	
126 Carbazole	0.91819	0.96755	0.98977	1.02265	1.04991	1.07633			
	1.07010						1.01350	5.742	
127 Phenyl sulfone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
128 Methyl Parathion	0.22472	0.25273	0.25605	0.24165	0.20186	0.19848			
	0.17806						0.22194	13.501	
129 Di-n-Butylphthalate	1.17605	1.24618	1.26765	1.32252	1.36383	1.39771			
	1.40499						1.31127	6.499	
130 Parathion	0.13719	0.18275	0.18212	0.18480	0.18353	0.18558			
	0.18900						0.17785	10.162	
131 4-Nitroquinoline-1-oxide	+++++	0.06721	0.07979	0.10710	0.08542	0.08685			
	0.08235						0.08479	15.310	<-
132 Methapyrilene	0.34073	0.34857	0.33447	0.27766	0.21659	0.20104			
	0.18189						0.27156	26.360	
133 Isodrin	0.14938	0.13071	0.13659	0.12878	0.13896	0.13984			
	0.14629						0.13865	5.427	
134 Fluoranthene	1.19499	1.27310	1.28215	1.34880	1.38469	1.42778			
	1.40738						1.33127	6.332	
135 Benzidine	0.33912	0.41910	0.54791	0.48481	0.58860	0.56062			
	0.54024						0.49720	17.998	
136 Bis (4-chlorophenyl) disulfid	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 29-APR-2005 01:44
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
137 Pyrene	1.35449	1.40228	1.45272	1.58969	1.57324	1.61414			
	1.70160						1.52688	8.240	
138 4-chlorophenyl sulfone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
140 Aramite (peak 1)	0.05375	0.06879	0.07594	0.07526	0.07359	0.07265			
	0.07371						0.07053	10.986	
141 Kepone	+++++	0.00357	0.00453	0.00668	0.00729	0.00747			
	0.00748						0.00617	27.492	<-
142 Aramite (peak 2)	0.08770	0.10236	0.10922	0.11671	0.11420	0.11097			
	0.11134						0.10750	9.129	
143 p-(Dimethylamino)azobenzene	0.29047	0.32717	0.33641	0.34730	0.34129	0.34067			
	0.34674						0.33286	5.977	
144 Chlorobenzilate	0.40399	0.42688	0.44410	0.45660	0.49105	0.50109			
	0.53020						0.46484	9.587	
145 3,3-Dimethylbenzidine	0.44768	0.57060	0.62408	0.55179	0.62907	0.63004			
	0.62720						0.58292	11.596	
146 Butylbenzylphthalate	0.56589	0.56619	0.59126	0.58216	0.60822	0.61084			
	0.64514						0.59567	4.745	
147 Acrylamide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
148 2-Acetylaminofluorene(1)	0.44078	0.49973	0.51625	0.54235	0.55089	0.55882			
	0.56140						0.52432	8.256	
(2)	0.35522	0.39267	0.39584	0.41786	0.42490	0.43100			
	0.43659						0.40773	7.007	
149 Famphur	+++++	0.02197	0.03377	0.05429	0.01871	0.01486			
	0.00621						0.02497	67.953	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 29-APR-2005 01:44
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
150 Benzo(a)Anthracene	1.28334	1.27385	1.29850	1.37124	1.42584	1.44876			
	1.49673						1.37118	6.471	
151 4,4'-Methylenebis(2-Chloroani	0.10305	0.10187	0.11221	0.12299	0.11640	0.12512			
	0.13117						0.11611	9.589	
152 3,3'-Dichlorobenzidine	0.43617	0.42622	0.48158	0.52939	0.61023	0.62557			
	0.65260						0.53739	17.346	
154 Chrysene	1.19485	1.16590	1.19487	1.28390	1.35974	1.41466			
	1.45936						1.29618	9.039	
155 bis(2-ethylhexyl)Phthalate	0.66987	0.67984	0.68614	0.73988	0.75919	0.78014			
	0.82384						0.73413	7.905	
M 156 Toluenediamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
157 Triethylamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
158 Di-n-octylphthalate	1.20577	1.35313	1.39312	1.44437	1.55177	1.58020			
	1.55559						1.44057	9.405	
159 1,2-Dinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
160 Benzo(b)fluoranthene	1.23246	1.39824	1.38832	1.49419	1.57091	1.70833			
	1.63839						1.49012	11.004	
161 Benzo(k)fluoranthene	1.52204	1.42449	1.42726	1.44412	1.54371	1.49258			
	1.57284						1.48958	3.982	
162 7,12-Dimethylbenz(a)anthracen	0.63206	0.67147	0.70278	0.74963	0.79123	0.82571			
	0.80112						0.73914	9.807	
163 Hexachlorophene	+++++	0.00594	0.00928	0.01407	0.00882	0.00689			
	0.09695						0.02366	152.219	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 29-APR-2005 01:44
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
164 N,N-Dimethylamine	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-
165 Benzo(a)pyrene	1.21296	1.27868	1.32447	1.35229	1.40893	1.45743			
	1.46739						1.35745	6.919	
167 Carbofuran Phenol	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-
168 2,3- and 3,5-Diaminotoluene	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-
169 3-methylcholanthrene	0.67245	0.68361	0.68395	0.73820	0.79182	0.82758			
	0.85552						0.75045	10.005	
170 2,6- and 2,4-Diaminotoluene	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-
171 Limonene	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-
172 n-Decane	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-
173 Indeno(1,2,3-cd)pyrene	1.00017	1.16843	1.21446	1.31979	1.50474	1.68529			
	1.82842						1.38876	21.388	
174 Dibenzo(a,h)anthracene	1.11032	1.14511	1.25654	1.37646	1.49801	1.68131			
	1.80231						1.41001	18.762	
175 Dibenz(e,a) Pyrene	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-
176 n-tridecane	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-
177 Benzo(g,h,i)perylene	1.12458	1.13862	1.17441	1.24352	1.37253	1.56810			
	1.63125						1.32186	15.727	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 29-APR-2005 01:44
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
179 Phthalic Acid	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-
180 n-Dodecane	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-
M 181 Isosafrole	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	
$ 10 2-Fluorophenol	1.16730	1.16660	1.22691	1.23825	1.31981	1.35326			
	1.33401						1.25802	6.209	
$ 15 Phenol-d5	1.40728	1.53966	1.63802	1.70991	1.81475	1.87254			
	1.85644						1.69123	10.304	
$ 36 Nitrobenzene-d5	0.51707	0.51455	0.51984	0.53587	0.53545	0.54672			
	0.55055						0.53144	2.728	
$ 69 2-Fluorobiphenyl	1.39007	1.44968	1.46792	1.55481	1.60295	1.67991			
	1.75634						1.55738	8.465	
$ 104 2,4,6-Tribromophenol	0.19239	0.25734	0.27614	0.27826	0.28395	0.30209			
	0.30120						0.27019	13.920	
$ 139 Terphenyl-d14	1.05246	1.12964	1.15253	1.28007	1.27584	1.30784			
	1.37605						1.22492	9.392	
$ 178 2,4,6-Trichlorophenol-d2	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B/KCAL2579.D
Report Date: 04/29/2005

INITIAL CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL2579.D
Analysis Type: WATER

Injection Date: 28-APR-2005 11:41
Lab Sample ID: SSTD050APPIX
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270

COMPOUND	%RSD
2-Picoline	7.2
N-Nitrosomethylethylamine	7.9
Methyl methanesulfonate	10.6
N-Nitrosodiethylamine	6.8
Methyl methacrylate	0.0
Ethyl methacrylate	0.0
Ethyl Methanesulfonate	4.8
Pentachloroethane	6.2
Acetophenone	7.4
N-Nitrosopyrrolidine	6.9
N-Nitrosomorpholine	14.9
O-Toluidine	9.9
N-Nitrosopiperidine	5.9
o,o,o-Triethyl-Phosphorothioa	10.0
a,a-Dimethyl-phenethylamine	15.4
Hexachloropropene	7.8
2,6-Dichlorophenol	11.9
Benzothiazole	8.3
p-Phenylenediamine	14.8
n-Nitrosodi-n-butylamine	5.6
Safrole	10.0
1,2,4,5-Tetrachlorobenzene	7.9
cis-Isosafrole	7.2
trans-Isosafrole	13.0
1,4-Naphthoquinone	36.9
1,4-Dinitrobenzene	17.1
1,3-Dinitrobenzene	13.1
Pentachlorobenzene	5.1
1-Naphthylamine	5.0
2-Naphthylamine	6.2
2,3,4,6-Tetrachlorophenol	23.1
Thionazin	8.3
5-Nitro-o-toluidine	10.6
tri-n-butylphosphate	9.6
Sulfotepp	8.6
Diallate (peak 1)	6.8
Phorate	8.9
1,3,5-Trinitrobenzene	20.5
Diallate (peak 2)	4.1

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B/KCAL2579.D
Report Date: 04/29/2005

INITIAL CALIBRATION REPORT

Instrument ID: MSK.i
Injection Date: 28-APR-2005 11:41
Lab File ID: KCAL2579.D
Lab Sample ID: SSTD050APPIX
Analysis Type: WATER
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050428A

COMPOUND	%RSD
Phenacetin	4.0
Dimethoate	16.6
4-Aminobiphenyl	10.1
tris(2-chloroethyl)phosphate	1.8
Pentachloronitrobenzene	5.8
Pronamide	2.0
Disulfoton	6.9
Dinoseb	22.6
Methyl Parathion	13.5
4-Nitroquinoline-1-oxide	15.3
Parathion	10.2
Methapyrilene	26.4
Isodrin	5.4
Kepone	27.5
Aramite (peak 1)	11.0
Aramite (peak 2)	9.1
p-(Dimethylamino)azobenzene	6.0
Chlorobenzilate	9.6
2-Acetylaminofluorene	8.3
Famphur	68.0
4,4'-Methylenebis(2-Chloroani	9.6
7,12-Dimethylbenz(a)anthracen	9.8
Hexachlorophene	152.2
3-methylcholanthrene	10.0

The average of all %RSD's in the initial calibration is 13.4

04/29/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2579.D Page 1
Report Date: 29-Apr-2005 09:06

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2579.D
Lab Smp Id: SSTD050APPIX Client Smp ID: SSTD050APPIX
Inj Date : 28-APR-2005 11:41
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD050APPIX
Misc Info : SV0185-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Meth Date : 29-Apr-2005 09:06 hongs Quant Type: ISTD
Cal Date : 28-APR-2005 16:17 Cal File: KCAL2587.D
Als bottle: 3 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIX.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
7 2-Picoline	93	2.541	2.541	(0.550)	263681	50.0000	51.45
8 N-Nitrosomethylethylamine	88	2.733	2.733	(0.592)	117240	50.0000	50.96(M)
9 Methyl methanesulfonate	80	3.102	3.102	(0.672)	83757	50.0000	48.11
12 N-Nitrosodiethylamine	102	3.492	3.492	(0.756)	127793	50.0000	47.61
13 Ethyl Methanesulfonate	79	3.871	3.871	(0.838)	213773	50.0000	46.90
18 Pentachloroethane	117	4.277	4.277	(0.926)	107729	50.0000	50.04
* 22 1,4-Dichlorobenzene-d4	152	4.619	4.619	(1.000)	162145	40.0000	
30 Acetophenone	105	5.159	5.159	(0.831)	380454	50.0000	49.30
31 N-Nitrosopyrrolidine	100	5.180	5.180	(0.835)	125730	50.0000	48.99
33 N-Nitrosomorpholine	116	5.212	5.212	(0.840)	54028	50.0000	47.74
34 O-Toluidine	106	5.228	5.228	(0.842)	402395	50.0000	48.94
38 N-Nitrosopiperidine	114	5.565	5.565	(0.897)	118015	50.0000	49.67
43 o,o,o-Triethyl-Phosphorothioa	198	5.987	5.987	(0.965)	157161	50.0000	48.24
* 48 Naphthalene-d8	136	6.206	6.206	(1.000)	535939	40.0000	
46 a,a-Dimethyl-phenethylamine	58	6.083	6.083	(0.980)	525288	50.0000	51.34(M)
52 2,6-Dichlorophenol	162	6.393	6.393	(1.030)	208918	50.0000	54.41
53 Hexachloropropene	213	6.387	6.387	(1.029)	234511	50.0000	49.90
55 Benzothiazole	135	6.596	6.596	(1.063)	334378	50.0000	48.17
58 p-Phenylenediamine	108	6.879	6.879	(1.108)	243620	50.0000	62.04
57 n-Nitrosodi-n-butylamine	84	6.884	6.884	(1.109)	213314	50.0000	49.97
61 Safrole	162	7.124	7.124	(1.148)	198165	50.0000	49.20

04/29/05

	Compounds	QUANT-SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
65	1,2,4,5-Tetrachlorobenzene	216	7.525	7.525	(0.845)	535105	50.0000	48.26
64	cis-Isosafrole	162	7.563	7.563	(0.849)	21352	50.0000	49.68(M)
70	trans-Isosafrole	162	7.920	7.920	(0.889)	216935	50.0000	46.74
74	1,4-Naphthoquinone	158	8.278	8.278	(0.929)	128327	50.0000	62.66
75	1,4-Dinitrobenzene	168	8.444	8.444	(1.361)	83882	50.0000	51.26
77	1,3-Dinitrobenzene	168	8.636	8.636	(0.969)	93774	50.0000	52.79
* 82	Acenaphthene-d10	164	8.909	8.909	(1.000)	307602	40.0000	
87	Pentachlorobenzene	250	9.283	9.283	(1.042)	262718	50.0000	48.71
89	1-Naphthylamine	143	9.422	9.422	(1.058)	424114	50.0000	50.58
90	2-Naphthylamine	143	9.560	9.560	(1.073)	386166	50.0000	50.82
92	2,3,4,6-Tetrachlorophenol	232	9.598	9.598	(1.077)	151016	50.0000	54.28
96	Thionazin	107	10.020	10.020	(1.125)	102152	50.0000	49.60
97	5-Nitro-o-toluidine	152	10.025	10.025	(0.866)	151109	50.0000	51.58
101	tri-n-butylphosphate	99	10.303	10.303	(1.156)	659269	50.0000	49.08
105	Sulfotepp	97	10.709	10.709	(0.925)	108455	50.0000	49.45
106	Diallate (peak 1)	86	10.778	10.778	(0.931)	215506	50.0000	49.53
108	Phorate	75	10.795	10.795	(0.932)	380896	50.0000	48.57
111	Diallate (peak 2)	86	10.917	10.917	(0.943)	45759	50.0000	49.35
107	1,3,5-Trinitrobenzene	213	10.875	10.875	(0.939)	71975	50.0000	53.04
110	Phenacetin	108	10.923	10.923	(0.943)	305382	50.0000	50.61
113	Dimethoate	87	11.158	11.158	(0.964)	197308	50.0000	55.09
116	4-Aminobiphenyl	169	11.329	11.329	(0.978)	569868	50.0000	52.14
115	tris(2-chloroethyl)phosphate	63	11.393	11.393	(0.984)	157558	50.0000	49.44
119	Pentachloronitrobenzene	237	11.542	11.542	(0.997)	94810	50.0000	50.62
118	Pronamide	173	11.596	11.596	(1.001)	266760	50.0000	49.18
* 121	Phenanthrene-d10	188	11.580	11.580	(1.000)	574409	40.0000	
123	Disulfoton	88	11.783	11.783	(1.018)	270463	50.0000	48.96
125	Dinoseb	211	11.826	11.826	(1.021)	175561	50.0000	52.44
128	Methyl Parathion	109	12.509	12.509	(1.080)	173505	50.0000	54.44
131	4-Nitroquinoline-1-oxide	190	13.236	13.236	(1.143)	76901	50.0000	63.16
130	Parathion	97	13.300	13.300	(1.149)	132687	50.0000	51.95
132	Methapyrilene	97	13.487	13.487	(1.165)	199360	50.0000	51.12(M)
133	Isodrin	193	13.637	13.637	(1.178)	92464	50.0000	46.44
141	Kepone	272	14.790	14.790	(0.884)	4340	50.0000	54.16
140	Aramite (peak 1)	185	14.876	14.876	(0.889)	48864	50.0000	53.36
142	Aramite (peak 2)	185	15.031	15.031	(0.898)	75776	50.0000	54.28
143	p-(Dimethylamino)azobenzene	120	15.106	15.106	(0.903)	225484	50.0000	52.17
144	Chlorobenzilate	251	15.245	15.245	(0.911)	296445	50.0000	49.11
148	2-Acetylaminofluorene	181	16.308	16.308	(0.974)	352117	50.0000	51.72
149	Famphur	218	16.698	16.698	(0.998)	35246	50.0000	108.7(M)
* 153	Chrysene-d12	240	16.735	16.735	(1.000)	519397	40.0000	
151	4,4'-Methylenebis(2-Chloroani	266	16.815	16.815	(1.005)	79848	50.0000	52.96
162	7,12-Dimethylbenz(a)anthracen	256	18.760	18.760	(0.970)	412760	50.0000	50.71
163	Hexachlorophene	196	19.198	19.198	(0.992)	7749	50.0000	29.74
* 166	Perylene-d12	264	19.347	19.347	(1.000)	440492	40.0000	
169	3-methylcholanthrene	268	19.898	19.898	(1.028)	406465	50.0000	49.18

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2579.D Page 3
Report Date: 29-Apr-2005 08:42

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

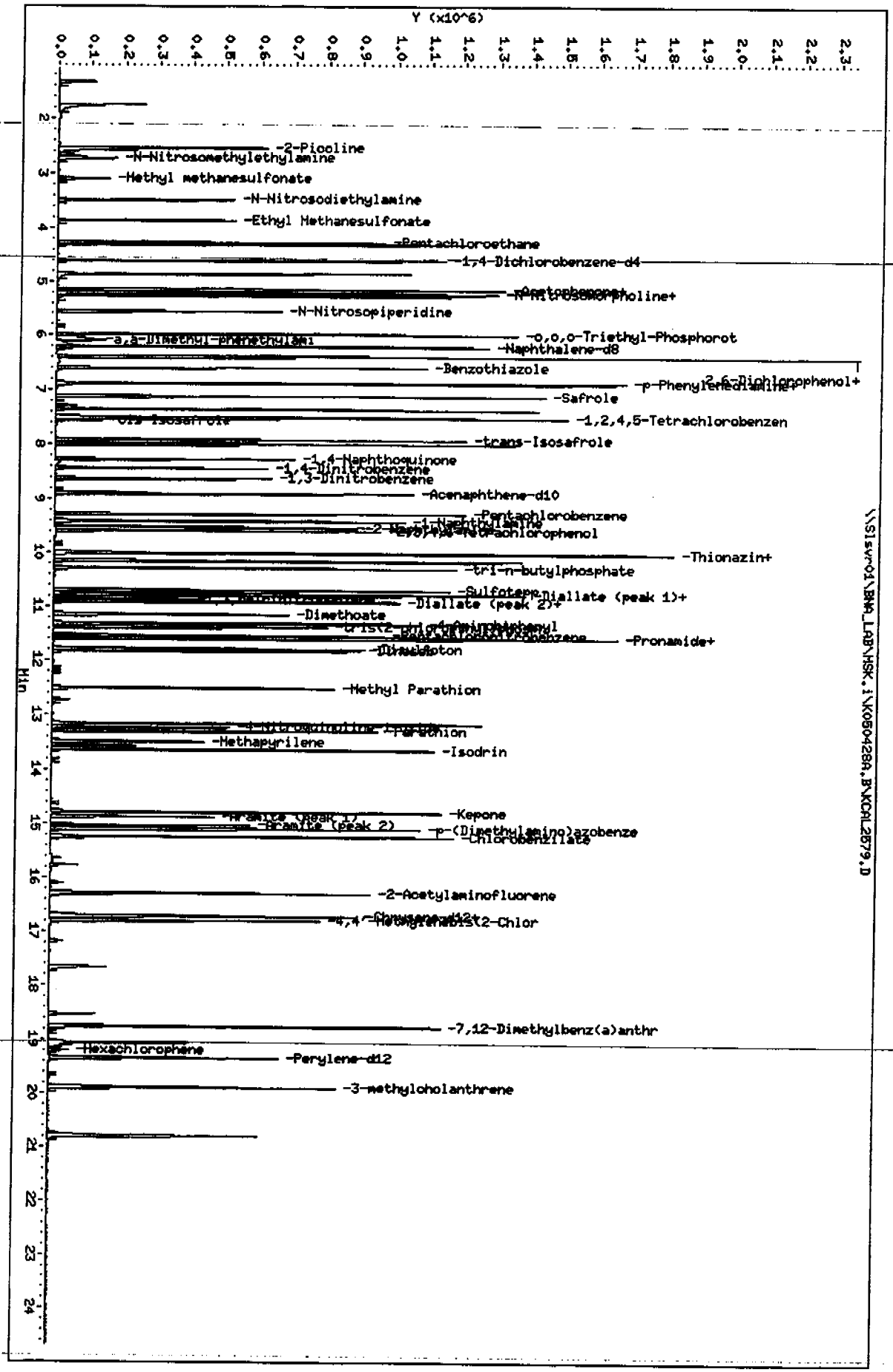
Instrument ID: MSK.i
Lab File ID: KCAL2579.D
Lab Smp Id: SSTD050APPIX
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Misc Info: SV0185-05

Calibration Date: 28-APR-2005
Calibration Time: 11:41
Client Smp ID: SSTD050APPIX
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	162145	81073	324290	162145	0.00
48 Naphthalene-d8	535939	267970	1071878	535939	0.00
82 Acenaphthene-d10	307602	153801	615204	307602	0.00
121 Phenanthrene-d10	574409	287205	1148818	574409	0.00
153 Chrysene-d12	519397	259699	1038794	519397	0.00
166 Perylene-d12	440492	220246	880984	440492	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.62	4.12	5.12	4.62	0.00
48 Naphthalene-d8	6.21	5.71	6.71	6.21	0.00
82 Acenaphthene-d10	8.91	8.41	9.41	8.91	0.00
121 Phenanthrene-d10	11.58	11.08	12.08	11.58	0.00
153 Chrysene-d12	16.74	16.24	17.24	16.74	0.00
166 Perylene-d12	19.35	18.85	19.85	19.35	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.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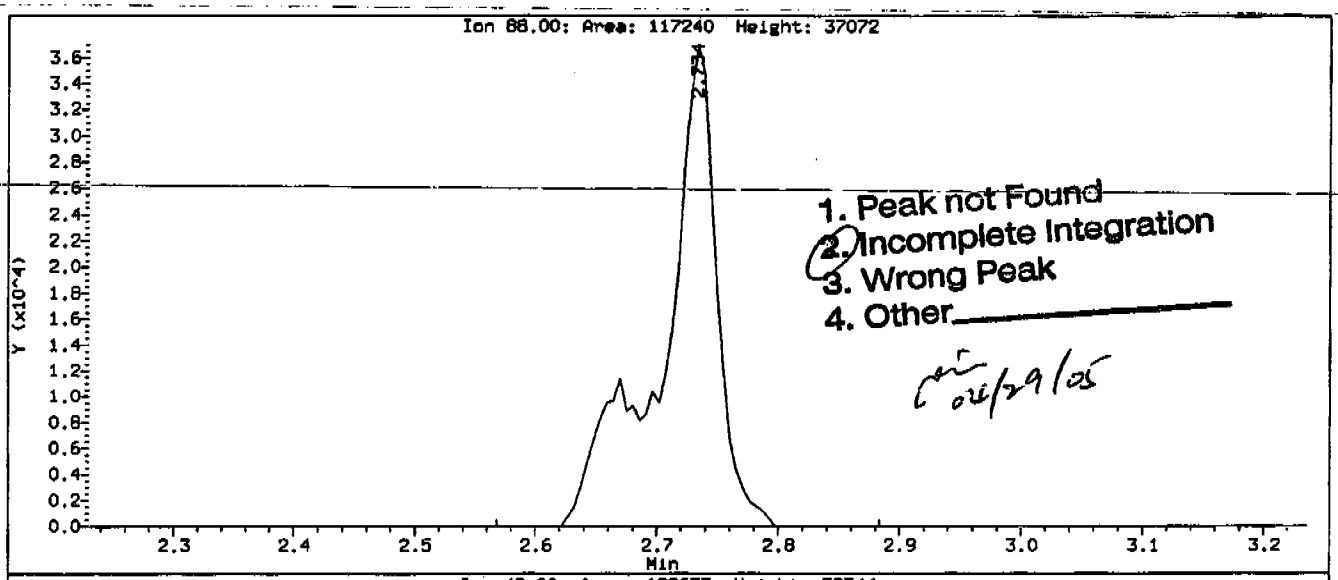
0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2.0 2.1 2.2 2.3
Min
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
-2-Picoline
-N-Nitrosomethylethylamine
-Methyl methanesulfonate
-N-Nitrosodiethylamine
-Ethyl Methanesulfonate
-Pentachloroethane
-1,4-Dichlorobenzene-d4
-N-Nitrosopiperidine
-o,o,o-Triethyl-Phosphorot
-Naphthalene-d8
-Benzothiazole
-p-Phenylenediamine+
2,6-Dichlorophenol+
-Safrole
-1,2,4,5-Tetrachlorobenzen
-trans-Isosafrole
-1,4-Naphthoquinone
-1,3-Dinitrobenzene
-Acenaphthene-d10
-Pentachlorobenzene
-Thionazin+
-tri-n-butylphosphate
-Diallate (peak 1)+
-Dimethoate
-Pronamide+
-Methyl Parathion
-Methapyrilene
-Isodrin
-Kepone
-p-(Dimethylamino)azobenze
-Chlorobenzilate
-2-Acetylaminofluorene
-7,12-Dimethylbenz(a)anthr
-Perylene-d12
-3-methyloholanthrene
\\Slsvr01\BNA_LAB\HSK.i\K050428A.B\KCAL2579.D
Data File: \\Slsvr01\BNA_LAB\HSK.i\K050428A.B\KCAL2579.D
Date : 28-APR-2005 11:41
Client ID: SSTD050APPIX
Sample Info: SSTD050APPIX
Volume Injected (uL): 1.0
Column phase:
Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

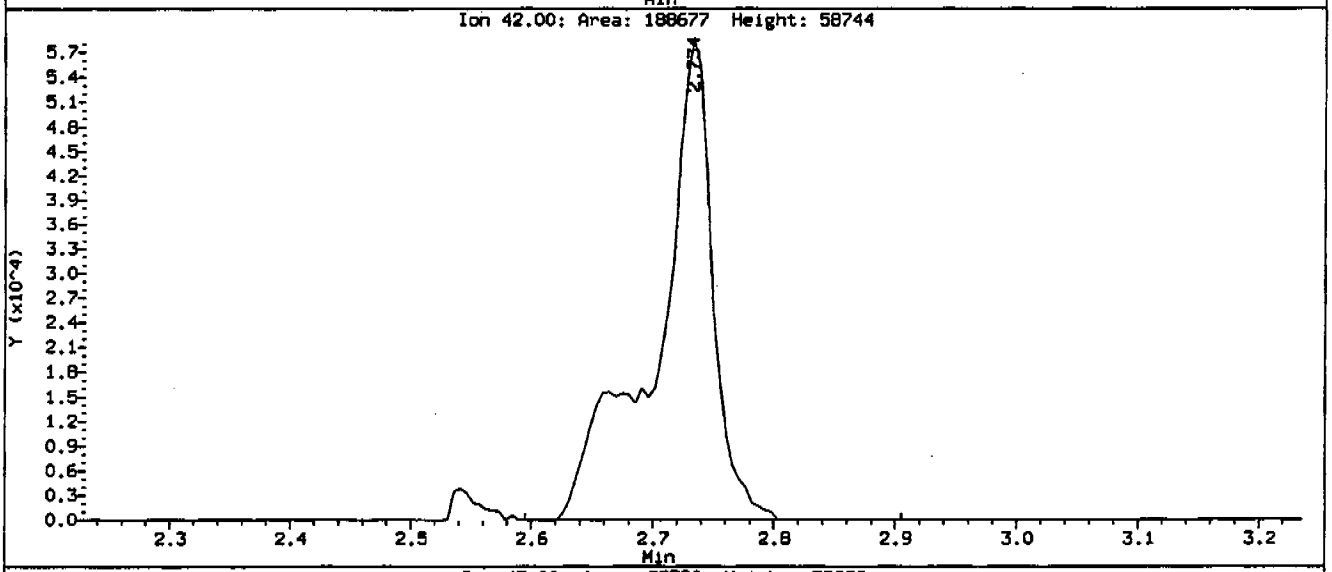
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2579.D
Injection Date: 28-APR-2005 11:41
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

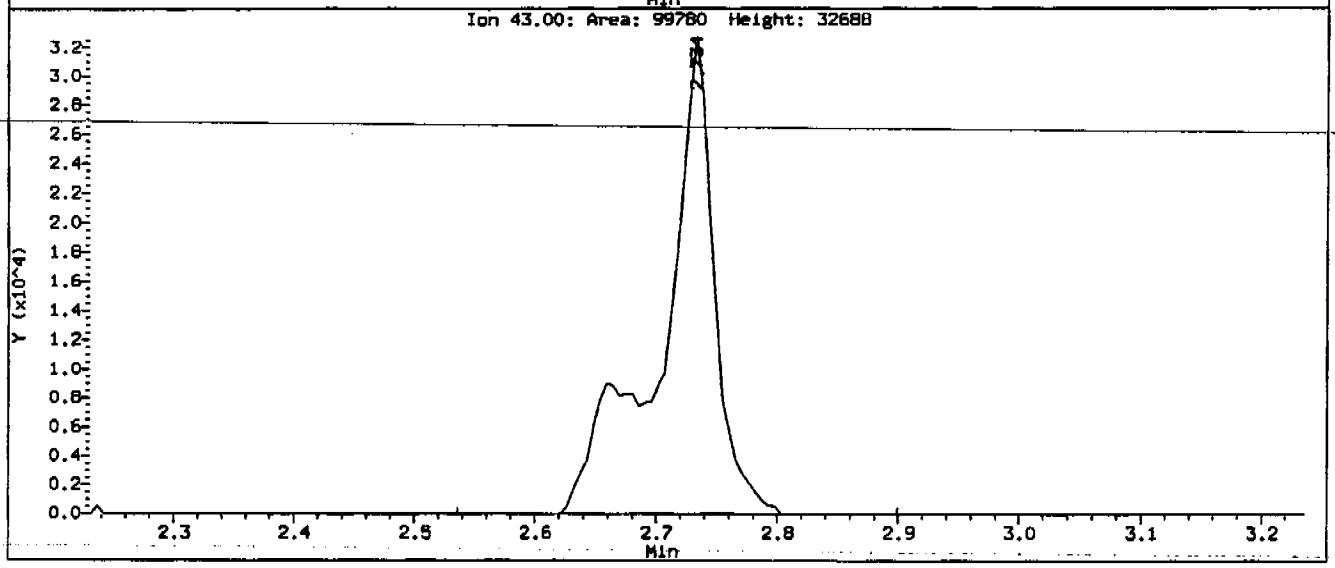
Compound: N-Nitrosomethylethylamine
CAS Number: 10595-95-6



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

[illegible] 04/29/05





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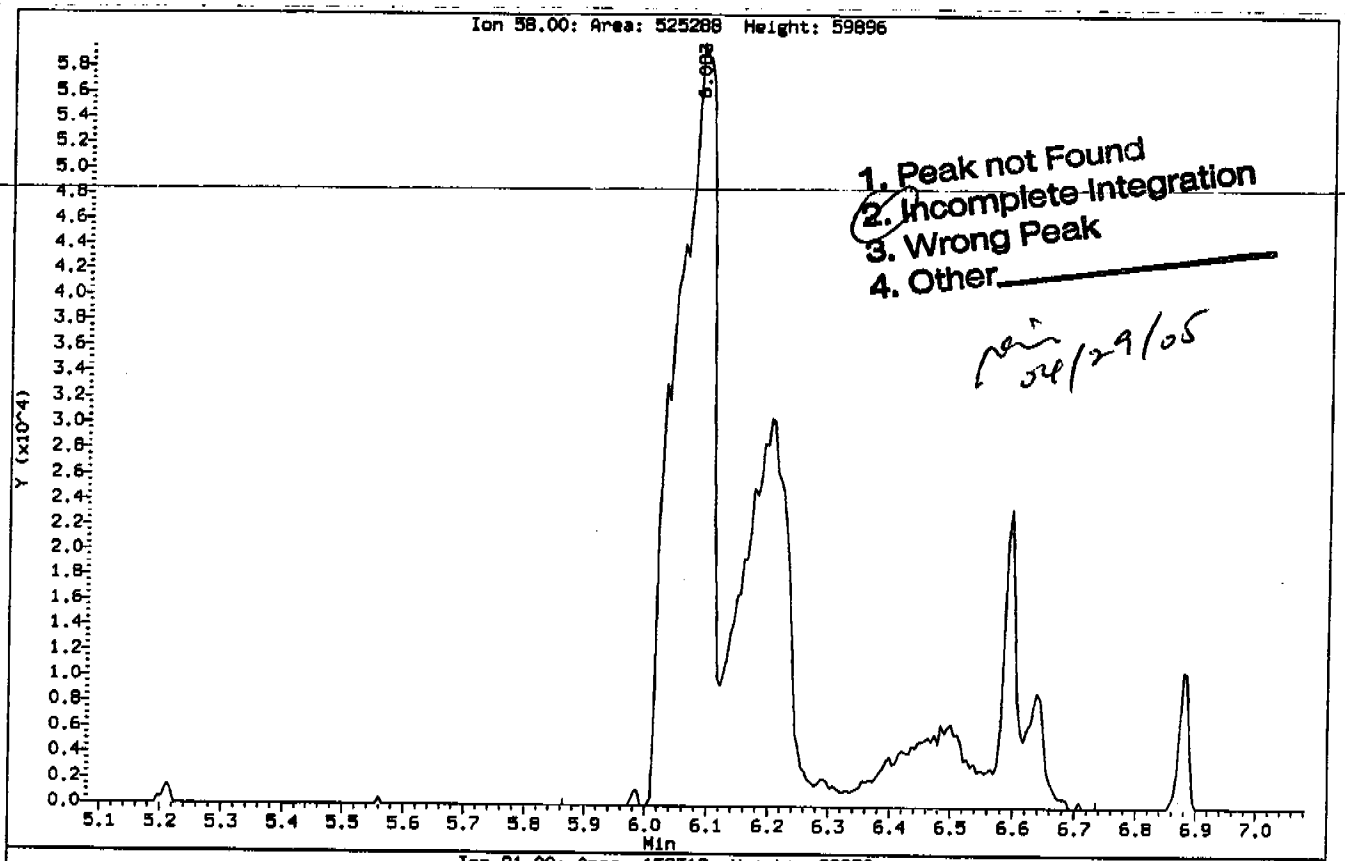
Injection Date: 28-APR-2005 11:41
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

Compound: a,a-Dimethyl-phenethylamine
CAS Number: 122-09-8



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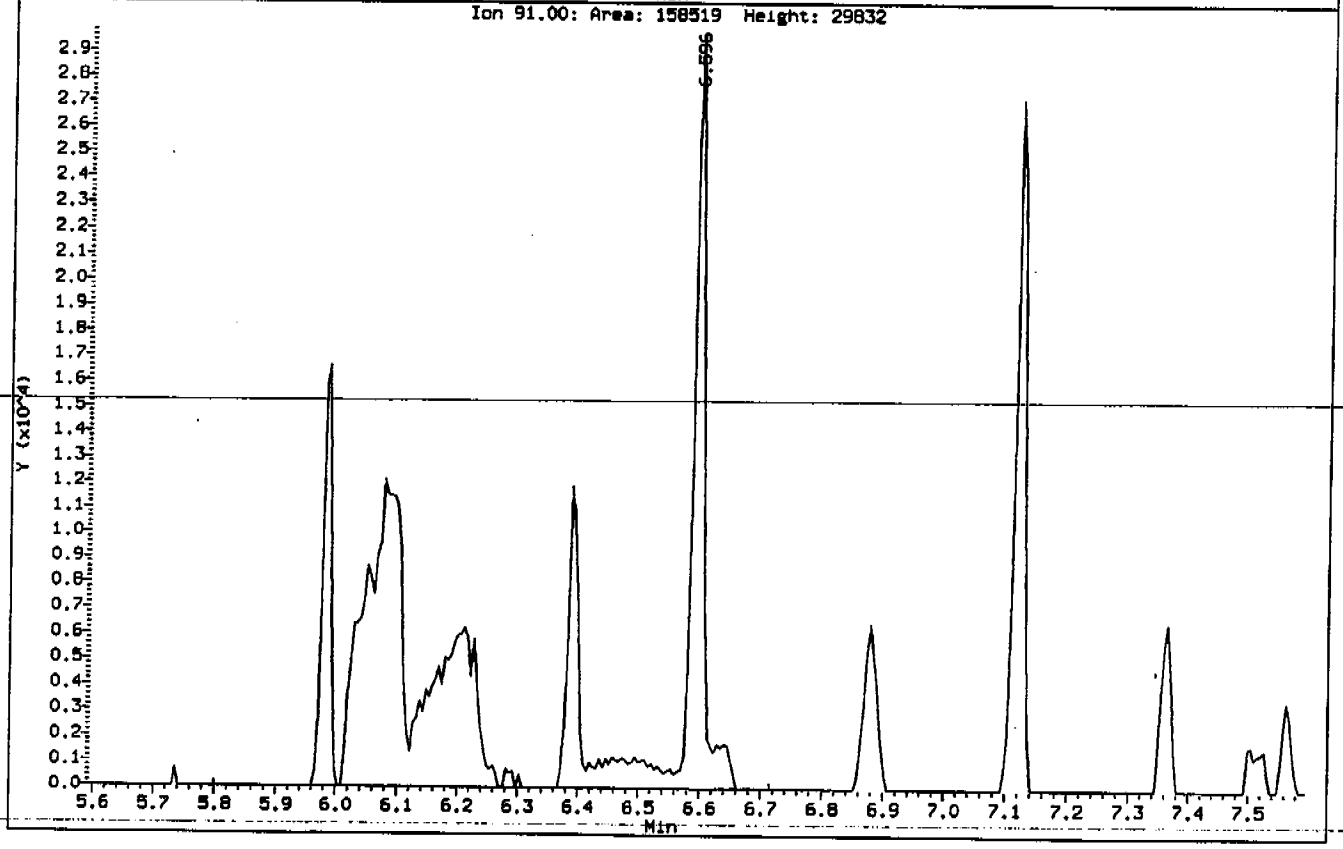
3. Wrong Peak
4. Other _____

[signature] 5/29/05



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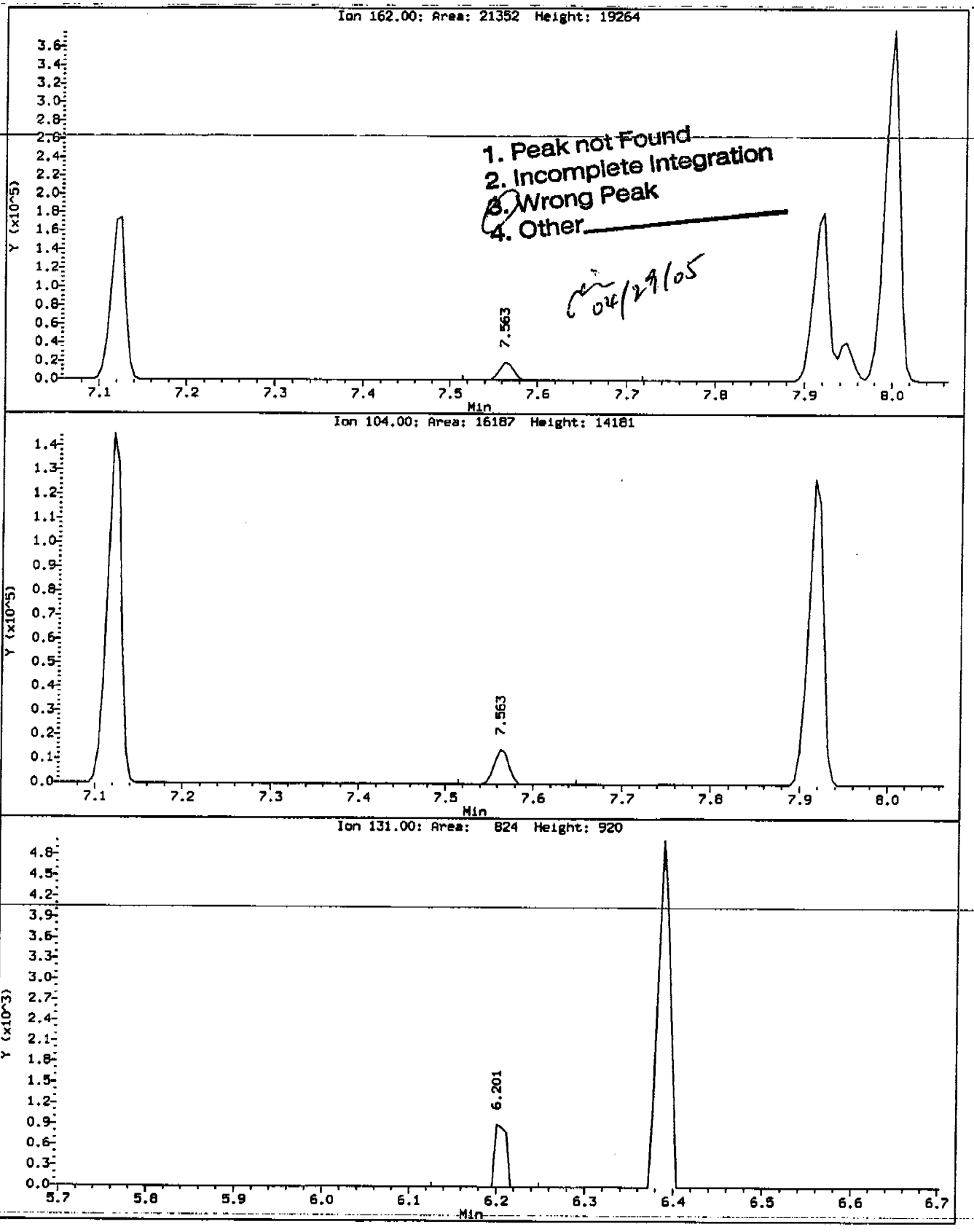
Injection Date: 28-APR-2005 11:41
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

Compound: cis-Isosafrole
CAS Number: 120-58-1



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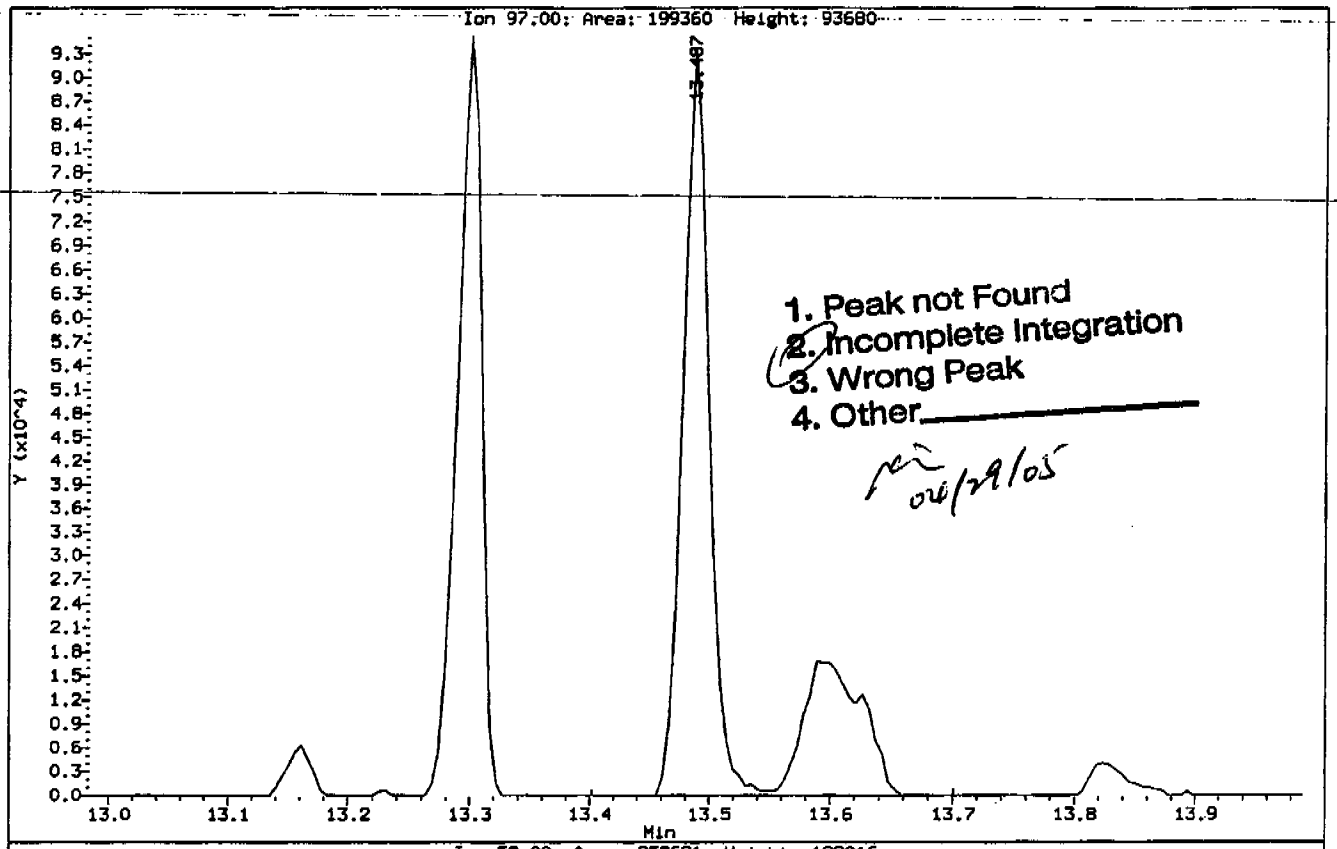
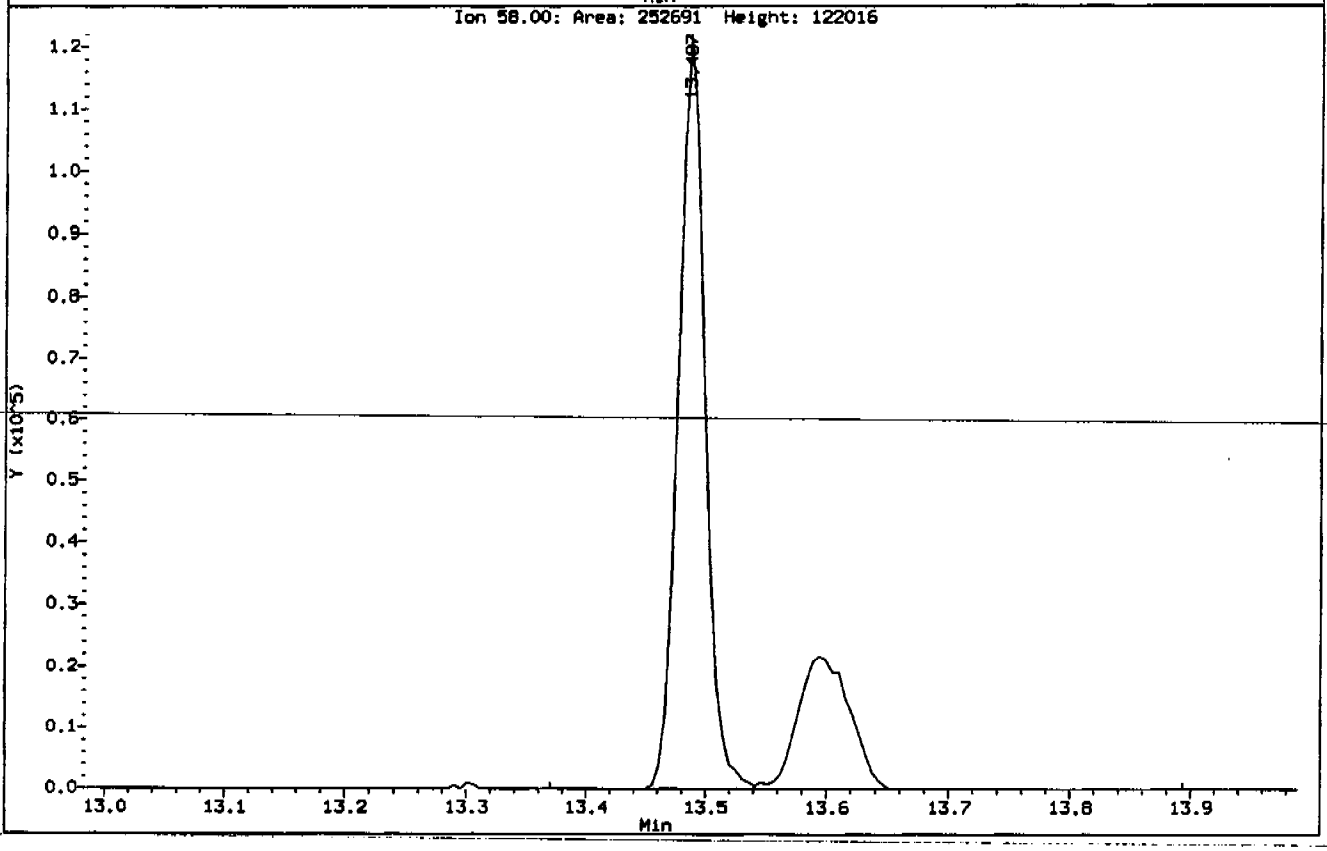
Injection Date: 28-APR-2005 11:41
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

Compound: Methapyrilene
CAS Number: 91-80-5





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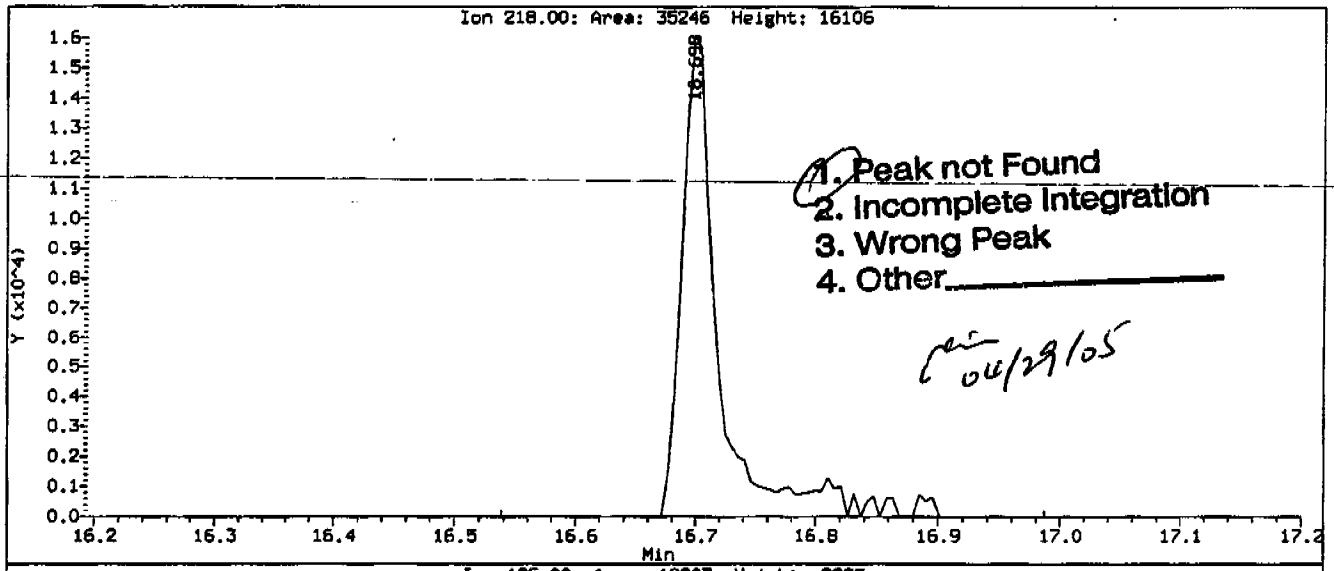
Injection Date: 28-APR-2005 11:41
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

Compound: Famphur
CAS Number: 52-85-7



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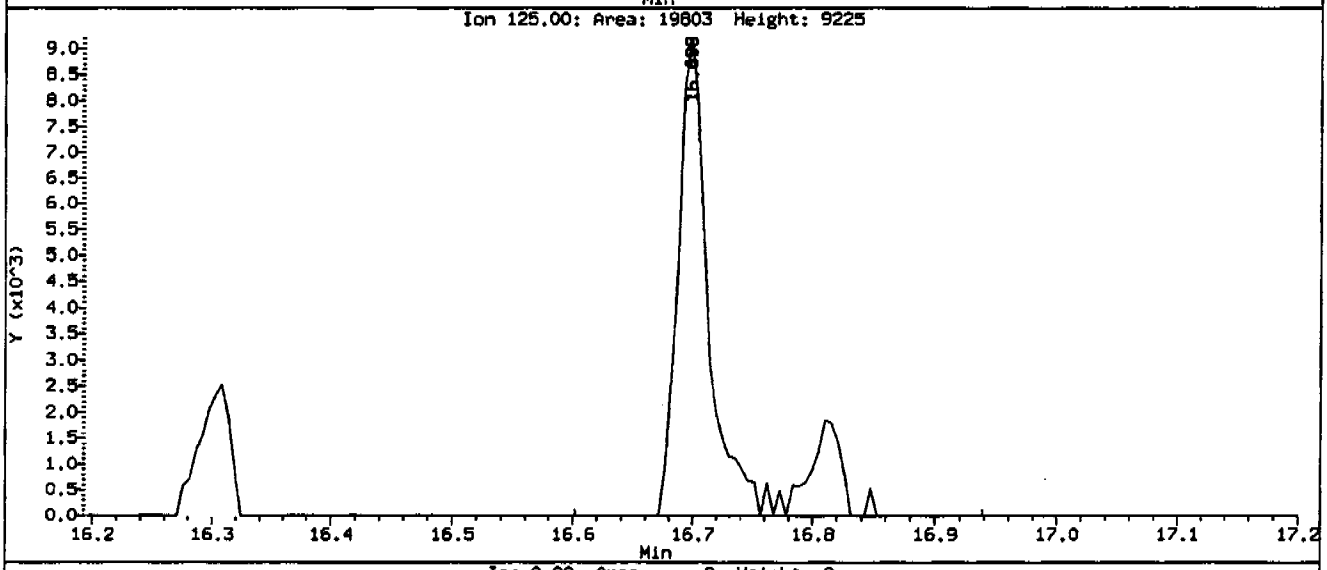
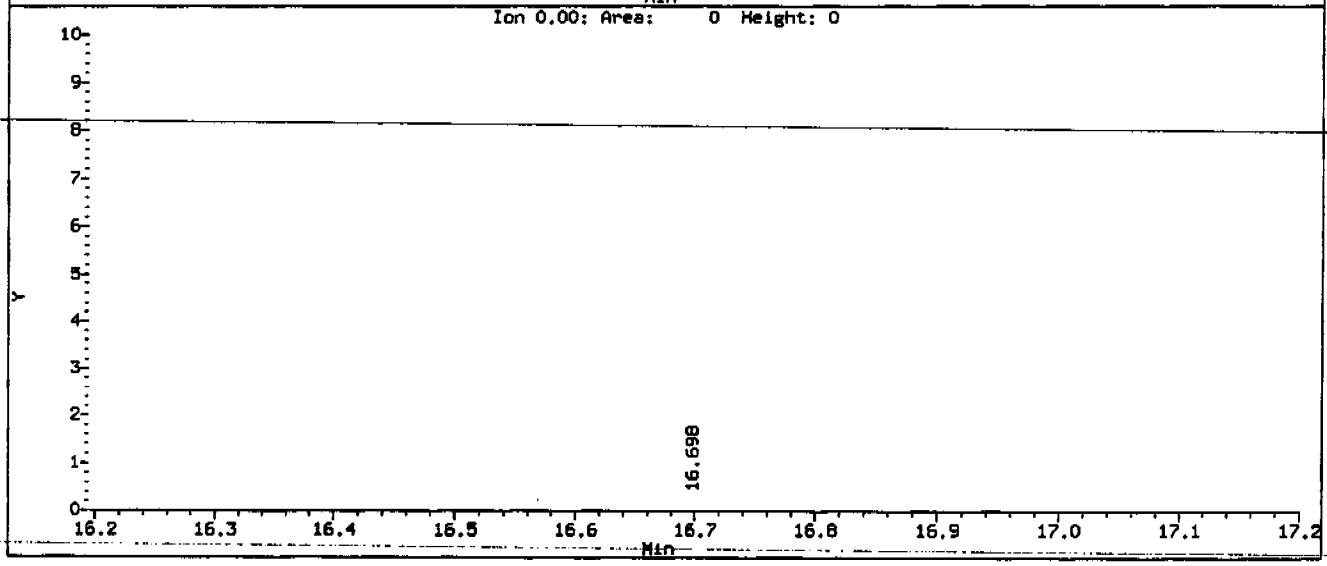
2. Incomplete Integration
3. Wrong Peak
4. Other_____

06/29/05





Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2581.D Page 1
Report Date: 29-Apr-2005 09:08

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2581.D
Lab Smp Id: SSTD160APPIX Client Smp ID: SSTD160APPIX
Inj Date : 28-APR-2005 12:50
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD160APPIX
Misc Info : SV0188-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Meth Date : 29-Apr-2005 09:07 hongs Quant Type: ISTD
Cal Date : 28-APR-2005 12:50 Cal File: KCAL2581.D
Als bottle: 5 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIX.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
7	2-Picoline	93	2.527	2.527	(0.548)	876346	160.000	176.3(A)
8	N-Nitrosomethylethylamine	88	2.730	2.730	(0.592)	372315	160.000	166.8(AM)
9	Methyl methanesulfonate	80	3.098	3.098	(0.672)	308410	160.000	182.6(A)
12	N-Nitrosodiethylamine	102	3.493	3.493	(0.758)	452820	160.000	173.9(A)
13	Ethyl Methanesulfonate	79	3.883	3.883	(0.842)	754320	160.000	170.6(A)
18	Pentachloroethane	117	4.268	4.268	(0.926)	367211	160.000	175.8(A)
* 22	1,4-Dichlorobenzene-d4	152	4.610	4.610	(1.000)	157286	40.0000	
30	Acetophenone	105	5.160	5.160	(0.833)	1458049	160.000	180.3(A)
31	N-Nitrosopyrrolidine	100	5.219	5.219	(0.843)	485296	160.000	181.4(A)
33	N-Nitrosomorpholine	116	5.235	5.235	(0.846)	233456	160.000	197.9(A)
34	O-Toluidine	106	5.235	5.235	(0.846)	1602194	160.000	187.0(A)
38	N-Nitrosopiperidine	114	5.572	5.572	(0.900)	434379	160.000	175.4(A)
43	o,o,o-Triethyl-Phosphorothioa	198	5.983	5.983	(0.966)	624538	160.000	183.9(A)
* 48	Naphthalene-d8	136	6.191	6.191	(1.000)	558559	40.0000	
46	a,a-Dimethyl-phenethylamine	58	6.074	6.074	(0.981)	1955959	160.000	183.4(AM)
52	2,6-Dichlorophenol	162	6.405	6.405	(1.035)	733515	160.000	183.3(A)
53	Hexachloropropene	213	6.378	6.378	(1.030)	868770	160.000	177.4(A)
55	Benzothiazole	135	6.597	6.597	(1.066)	1321579	160.000	182.7(A)
58	p-Phenylenediamine	108	6.902	6.902	(1.115)	709176	160.000	173.3(A)
57	n-Nitrosodi-n-butylamine	84	6.891	6.891	(1.113)	782887	160.000	176.0(A)
61	Safrole	162	7.121	7.121	(1.150)	773703	160.000	184.3(A)

04/29/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2581.D
Report Date: 29-Apr-2005 09:08

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
65	1,2,4,5-Tetrachlorobenzene	216	7.527	7.527	(0.846)	2151431	160.000	180.2(A)
64	cis-Isosafrole	162	7.554	7.554	(0.849)	79454	160.000	171.6(AM)
70	trans-Isosafrole	162	7.922	7.922	(0.891)	1001681	160.000	200.4(A)
74	1,4-Naphthoquinone	158	8.264	8.264	(0.929)	171180	160.000	77.59
75	1,4-Dinitrobenzene	168	8.451	8.451	(1.365)	316148	160.000	185.4(A)
77	1,3-Dinitrobenzene	168	8.643	8.643	(0.972)	339294	160.000	177.3(A)
* 82	Acenaphthene-d10	164	8.894	8.894	(1.000)	331327	40.0000	
87	Pentachlorobenzene	250	9.284	9.284	(1.044)	1000152	160.000	172.2(A)
89	1-Naphthylamine	143	9.429	9.429	(1.060)	1542575	160.000	170.8(A)
90	2-Naphthylamine	143	9.573	9.573	(1.076)	1414457	160.000	172.8(A)
92	2,3,4,6-Tetrachlorophenol	232	9.605	9.605	(1.080)	610558	160.000	203.7(A)
96	Thionazin	107	10.048	10.048	(1.130)	384758	160.000	173.4(A)
97	5-Nitro-o-toluidine	152	10.070	10.070	(0.869)	564722	160.000	176.7(A)
101	tri-n-butylphosphate	99	10.326	10.326	(1.161)	2664863	160.000	184.2(A)
105	Sulfotepp	97	10.721	10.721	(0.925)	423104	160.000	176.9(A)
106	Diallate (peak 1)	86	10.775	10.775	(0.929)	841377	160.000	177.3(A)
108	Phorate	75	10.802	10.802	(0.932)	1566675	160.000	183.1(A)
111	Diallate (peak 2)	86	10.908	10.908	(0.941)	170770	160.000	168.8(A)
107	1,3,5-Trinitrobenzene	213	10.898	10.898	(0.940)	276885	160.000	187.1(A)
110	Phenacetin	108	10.994	10.994	(0.948)	1101975	160.000	167.4(A)
113	Dimethoate	87	11.202	11.202	(0.966)	468512	160.000	119.9
116	4-Aminobiphenyl	169	11.346	11.346	(0.979)	2189894	160.000	183.7(A)
115	tris(2-chloroethyl)phosphate	63	11.437	11.437	(0.987)	571306	160.000	164.4(A)
119	Pentachloronitrobenzene	237	11.544	11.544	(0.996)	345040	160.000	168.9(A)
118	Pronamide	173	11.630	11.630	(1.003)	981361	160.000	165.9(A)
* 121	Phenanthrene-d10	188	11.592	11.592	(1.000)	626541	40.0000	
123	Disulfoton	88	11.790	11.790	(1.017)	1075549	160.000	178.5(A)
125	Dinoseb	211	11.843	11.843	(1.022)	713987	160.000	195.5(A)
128	Methyl Parathion	109	12.511	12.511	(1.079)	446238	160.000	128.4
131	4-Nitroquinoline-1-oxide	190	13.248	13.248	(1.143)	206373	160.000	155.4
130	Parathion	97	13.312	13.312	(1.148)	473659	160.000	170.0(A)
132	Methapyrilene	97	13.515	13.515	(1.166)	455839	160.000	107.2(M)
133	Isodrin	193	13.633	13.633	(1.176)	366639	160.000	168.8(A)
141	Kepone	272	14.781	14.781	(0.884)	16008	160.000	194.0(A)
140	Aramite (peak 1)	185	14.872	14.872	(0.889)	157712	160.000	167.2(A)
142	Aramite (peak 2)	185	15.033	15.033	(0.899)	238217	160.000	165.7(A)
143	p-(Dimethylamino)azobenzene	120	15.113	15.113	(0.904)	741843	160.000	166.7(A)
144	Chlorobenzilate	251	15.252	15.252	(0.912)	1134368	160.000	182.5(A)
148	2-Acetylaminofluorene	181	16.347	16.347	(0.978)	1201114	160.000	171.3(A)
149	Famphur	218	16.721	16.721	(1.000)	13284	160.000	39.79(M)
* 153	Chrysene-d12	240	16.721	16.721	(1.000)	534877	40.0000	
151	4,4'-Methylenebis(2-Chloroani	266	16.822	16.822	(1.006)	280639	160.000	180.7(A)
162	7,12-Dimethylbenz(a)anthracen	256	18.767	18.767	(0.970)	1455402	160.000	173.4(A)
163	Hexachlorophene	196	19.205	19.205	(0.993)	176125	160.000	655.6(A)
* 166	Perylene-d12	264	19.338	19.338	(1.000)	454175	40.0000	
169	3-methylcholanthrene	268	19.921	19.921	(1.030)	1554224	160.000	182.4(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2581.D
Report Date: 29-Apr-2005 08:42

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

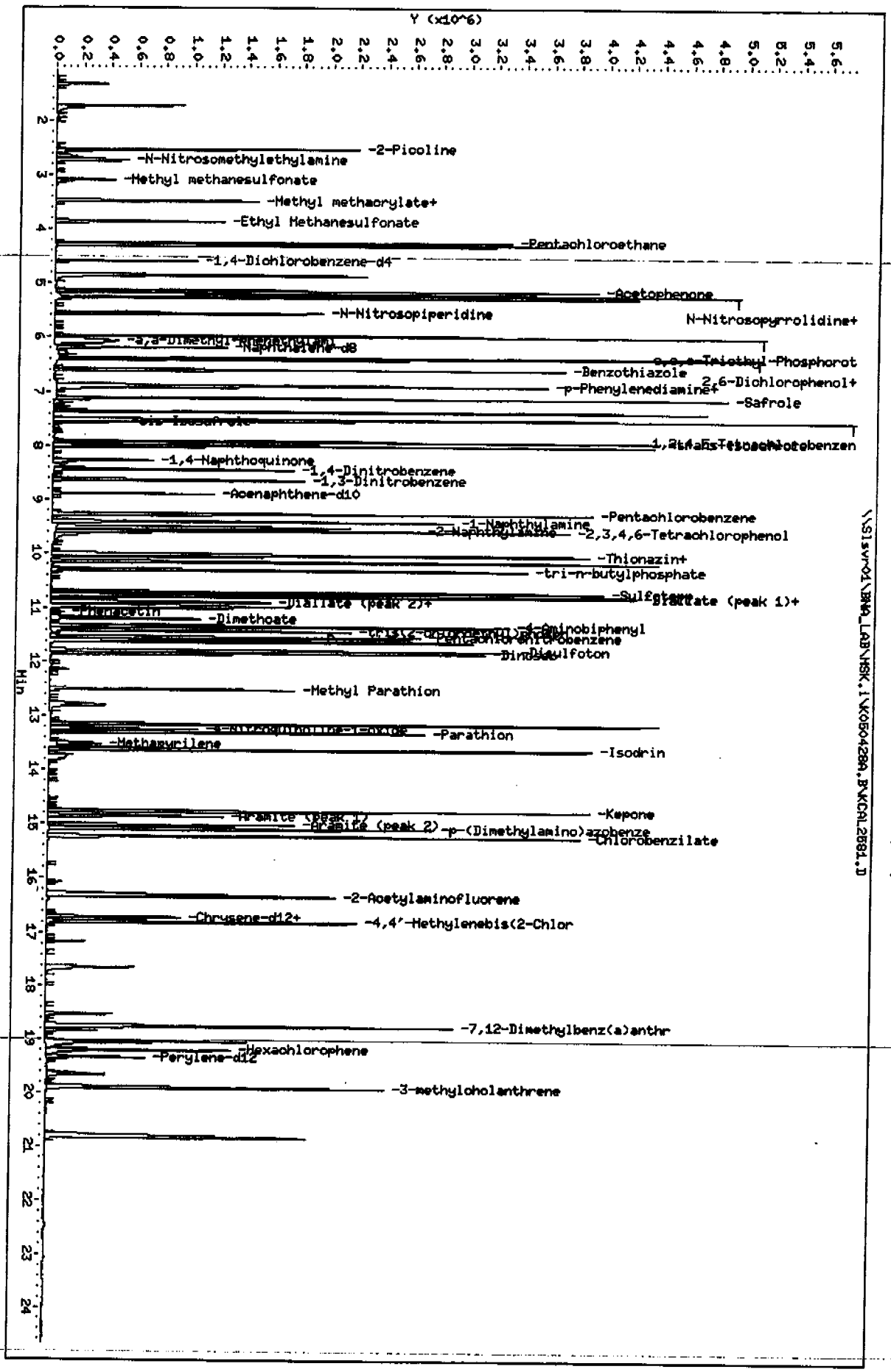
Instrument ID: MSK.i
Lab File ID: KCAL2581.D
Lab Smp Id: SSTD160APPIX
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Misc Info: SV0188-05

Calibration Date: 28-APR-2005
Calibration Time: 11:41
Client Smp ID: SSTD160APPIX
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	162145	81073	324290	157286	-3.00
48 Naphthalene-d8	535939	267970	1071878	558559	4.22
82 Acenaphthene-d10	307602	153801	615204	331327	7.71
121 Phenanthrene-d10	574409	287205	1148818	626541	9.08
153 Chrysene-d12	519397	259699	1038794	534877	2.98
166 Perylene-d12	440492	220246	880984	454175	3.11

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.62	4.12	5.12	4.61	-0.20
48 Naphthalene-d8	6.21	5.71	6.71	6.19	-0.23
82 Acenaphthene-d10	8.91	8.41	9.41	8.89	-0.16
121 Phenanthrene-d10	11.58	11.08	12.08	11.59	0.11
153 Chrysene-d12	16.74	16.24	17.24	16.72	-0.09
166 Perylene-d12	19.35	18.85	19.85	19.34	-0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.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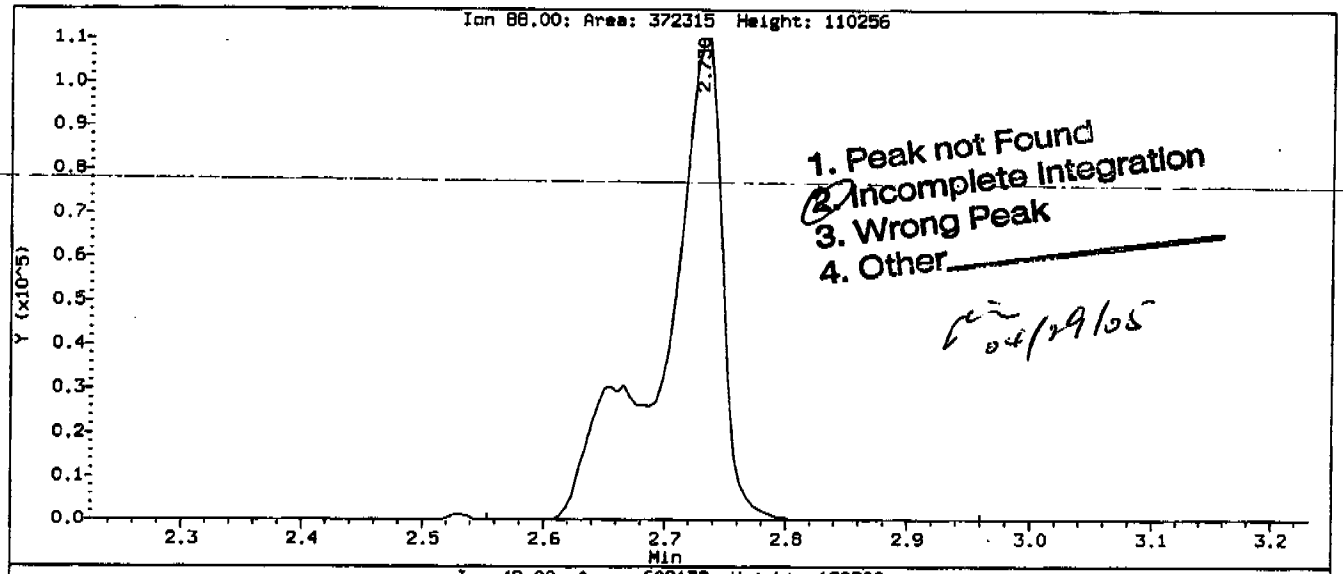
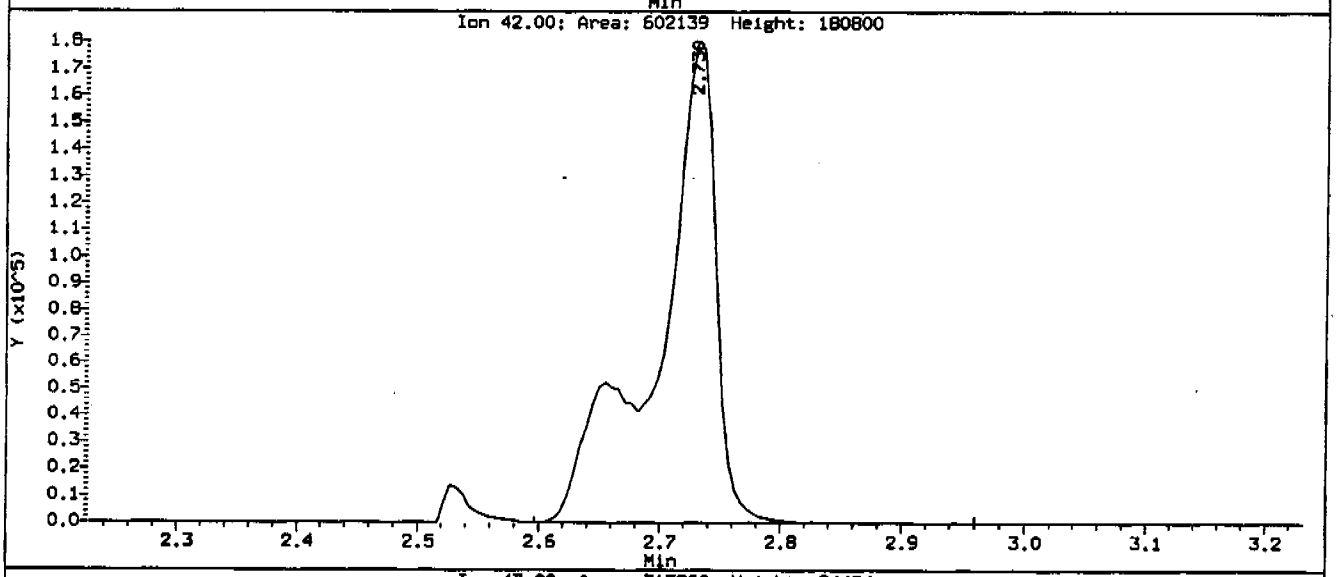
0.0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0 3.2 3.4 3.6 3.8 4.0 4.2 4.4 4.6 4.8 5.0 5.2 5.4 5.6
Min
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
-2-Picoline
-N-Nitrosomethylethylamine
-Methyl methanesulfonate
-Methyl methacrylate+
-Ethyl Methanesulfonate
-Pentachloroethane
-1,4-Dichlorobenzene-d4
-Acetophenone
-N-Nitrosopiperidine
N-Nitrosopyrrolidine+
-Benzothiazole
-p-Phenylenediamine+
2,6-Dichlorophenol+
-Safrole
-1,4-Naphthoquinone
-1,4-Dinitrobenzene
-1,3-Dinitrobenzene
-Acenaphthene-d10
-Pentachlorobenzene
-1-Naphthylamine
-2,3,4,6-Tetrachlorophenol
-Thionazin+
-tri-n-butylphosphate
-Diallate (peak 2)+
-Diallate (peak 1)+
-Dimethoate
-4-Aminobiphenyl
-Dinoseb
-Methyl Parathion
-Parathion
-Isodrin
-Kepone
-Chlorobenzilate
-2-Acetylaminofluorene
-4,4'-Methylenebis(2-Chlor
-7,12-Dimethylbenz(a)anthr
-Hexachlorophene
-Perylene-d12
-3-methylcholanthrene
Data File: \\Slsvr01\BNA_LAB\HSK.i\K050428A.B\KCAL2881.D
Date : 28-APR-2005 12:50
Client ID: SSTD160APPIX
Sample Info: SSTD160APPIX
Volume Injected (uL): 1.0
Column phase:
\\Slsvr01\BNA_LAB\HSK.i\K050428A.B\KCAL2881.D
Instrument: HSK.i
Operator: XIA
Column diameter: 2.00
Page 4

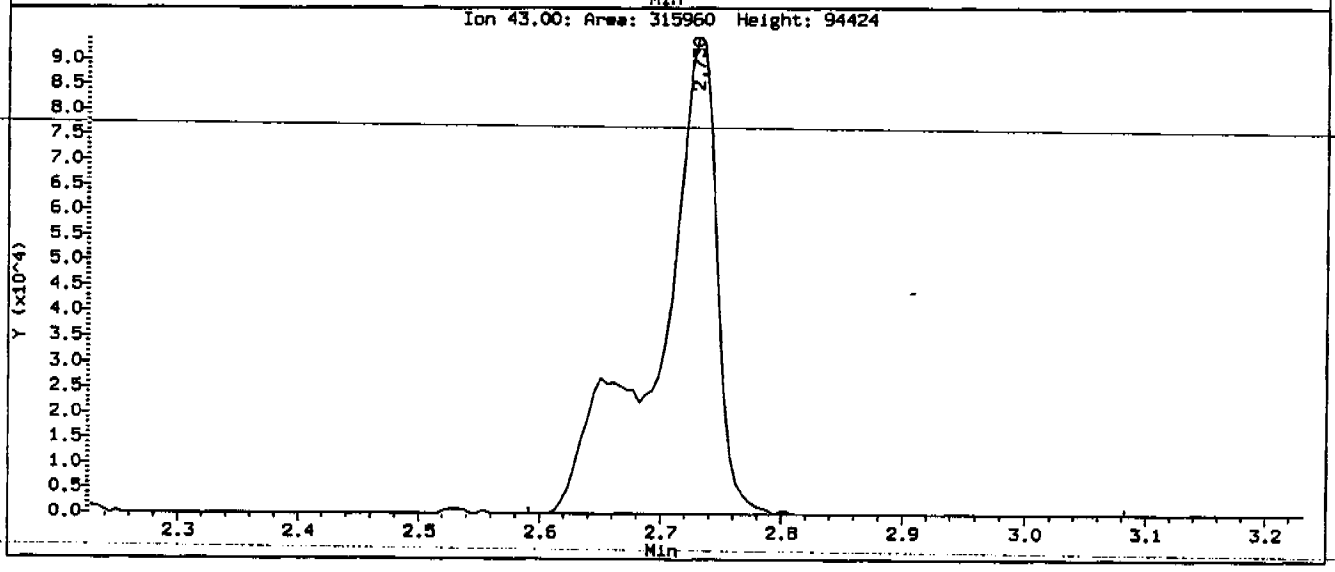
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2581.D
Injection Date: 28-APR-2005 12:50
Instrument: MSK.i
Client Sample ID: SSTD160APPIX

Compound: N-Nitrosomethylethylamine
CAS Number: 10595-95-6



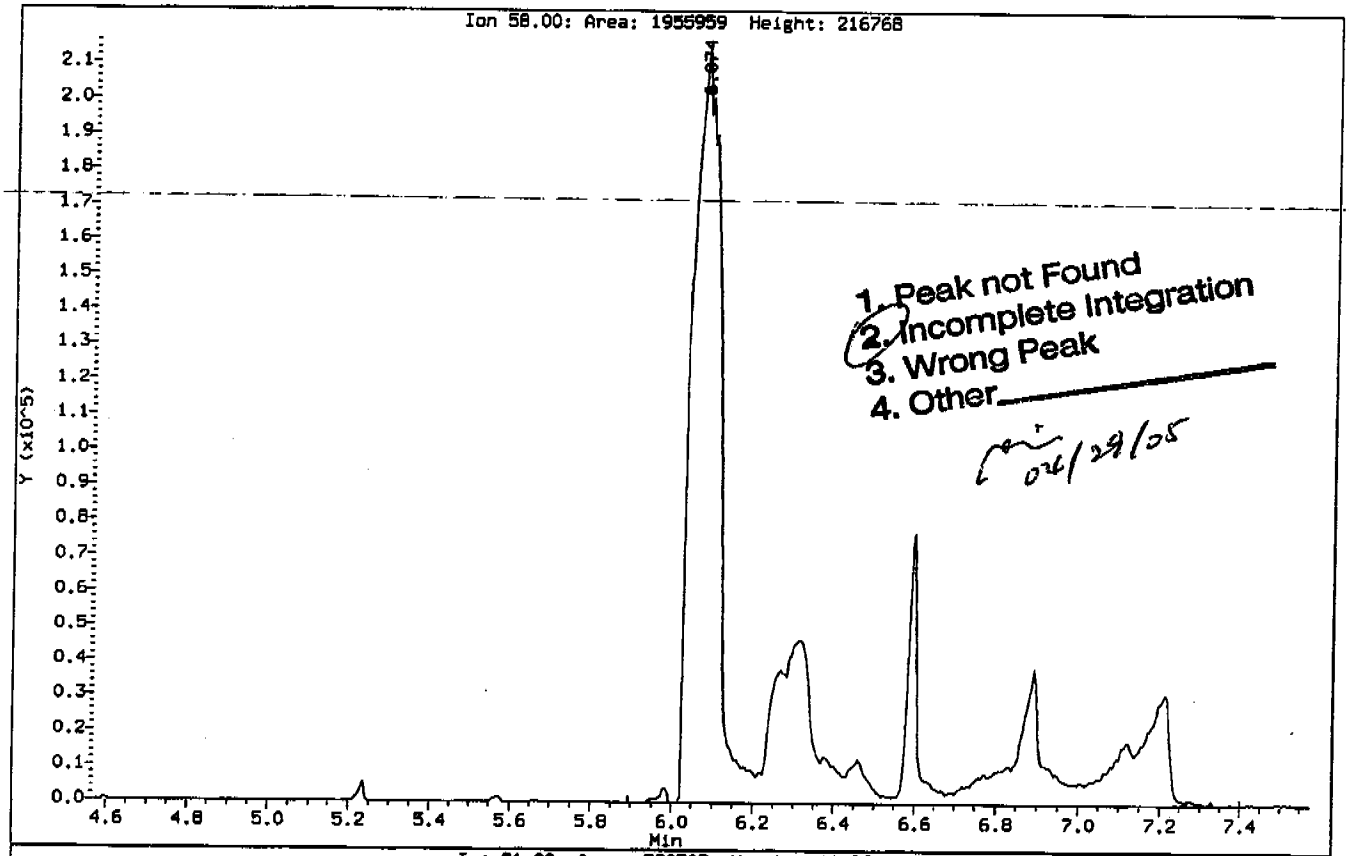
1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

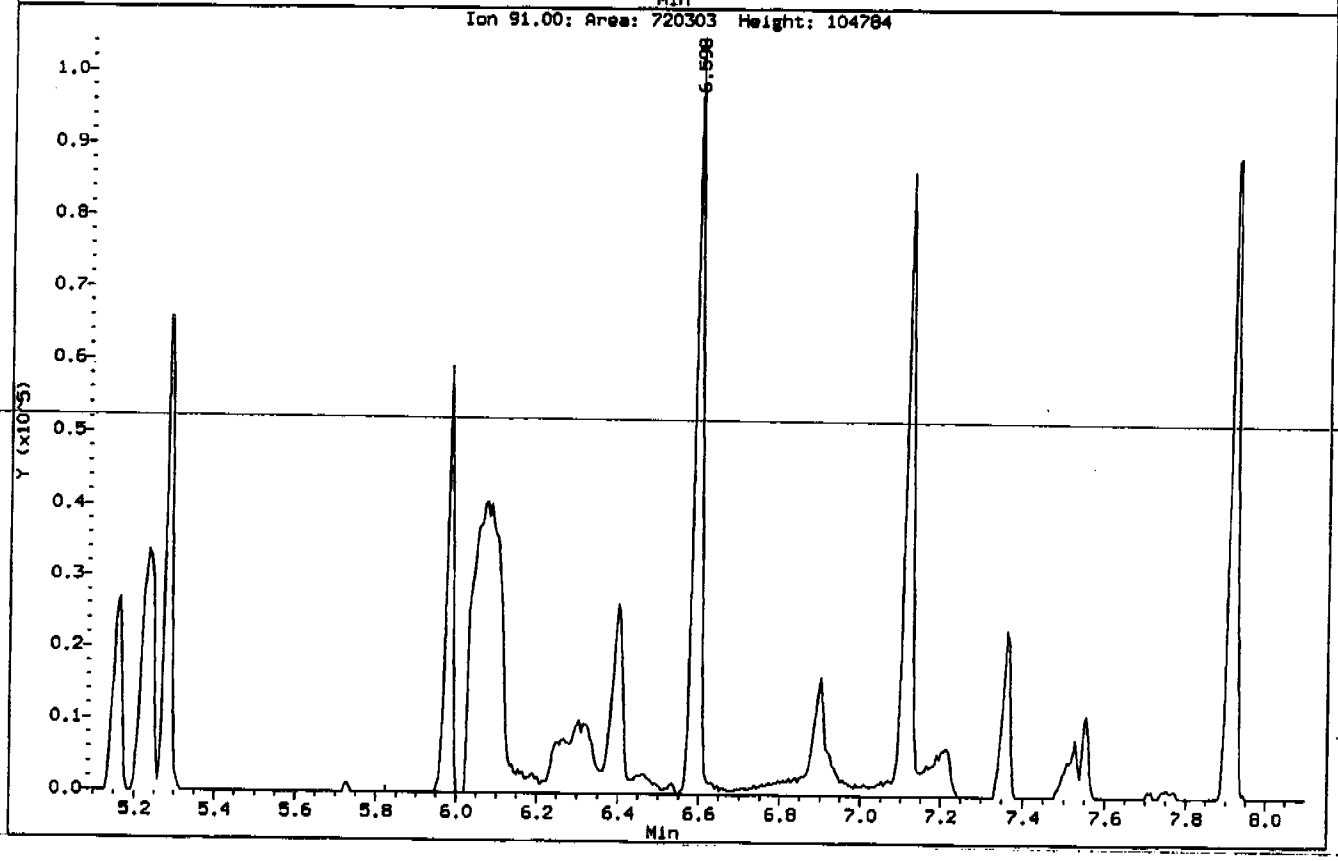




Data File: \\Slavr01\BNA_LAB\MSK.i\K050428A.B\KCAL2581.D
Injection Date: 28-APR-2005 12:50
Instrument: MSK.i
Client Sample ID: SSTD160APPIX

Compound: a,a-Dimethyl-phenethylamine
CAS Number: 122-09-8

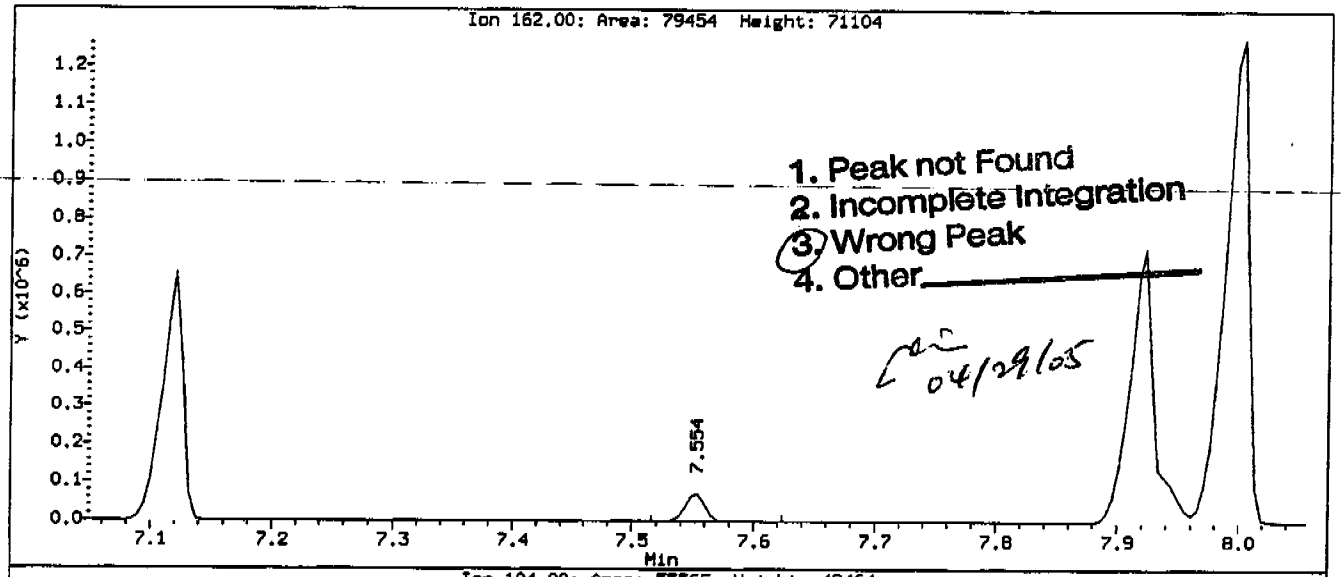




LOT# F5D220273

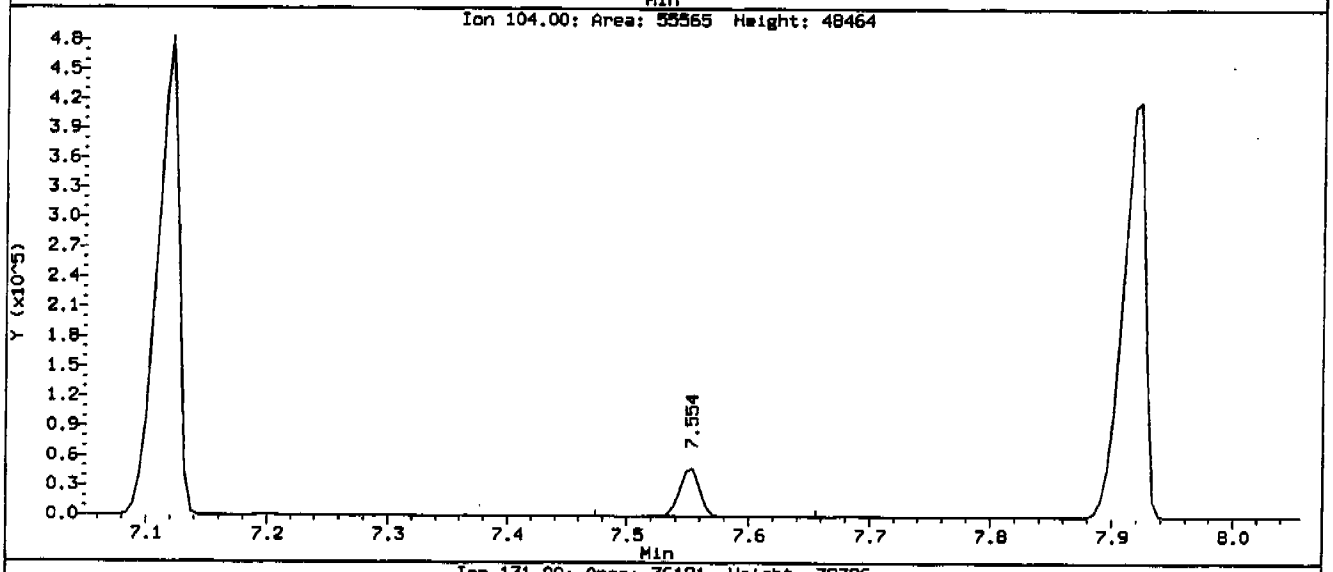
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2501.D
Injection Date: 28-APR-2005 12:50
Instrument: MSK.i
Client Sample ID: SSTD160APPIX

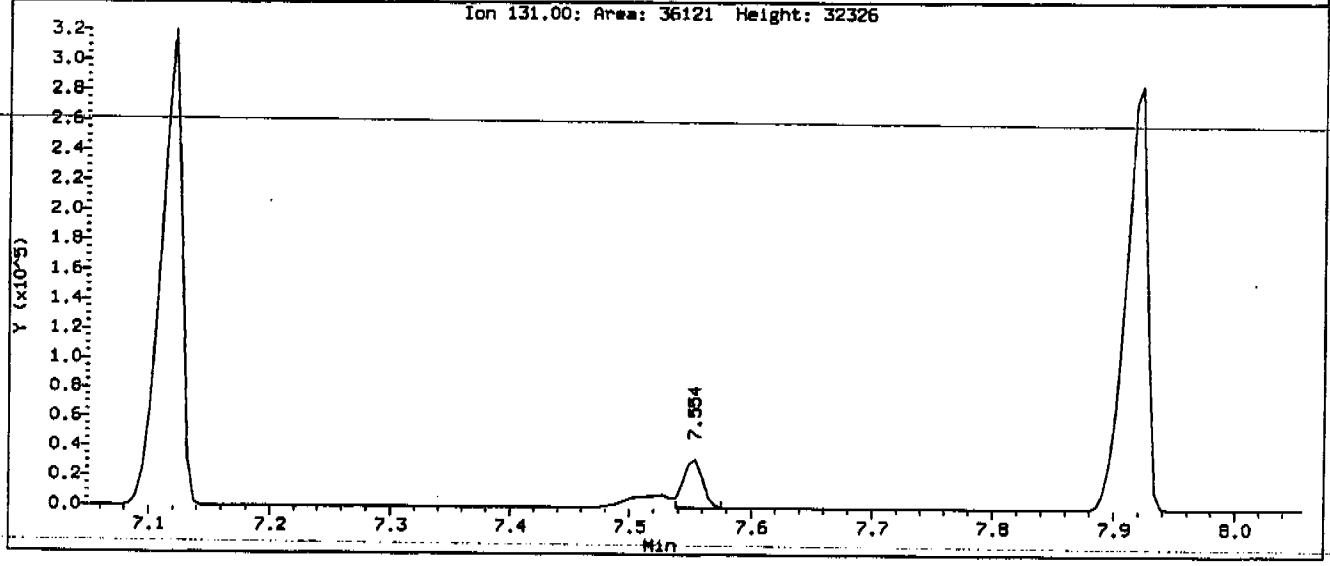
Compound: cis-Isosafrole
CAS Number: 120-58-1



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

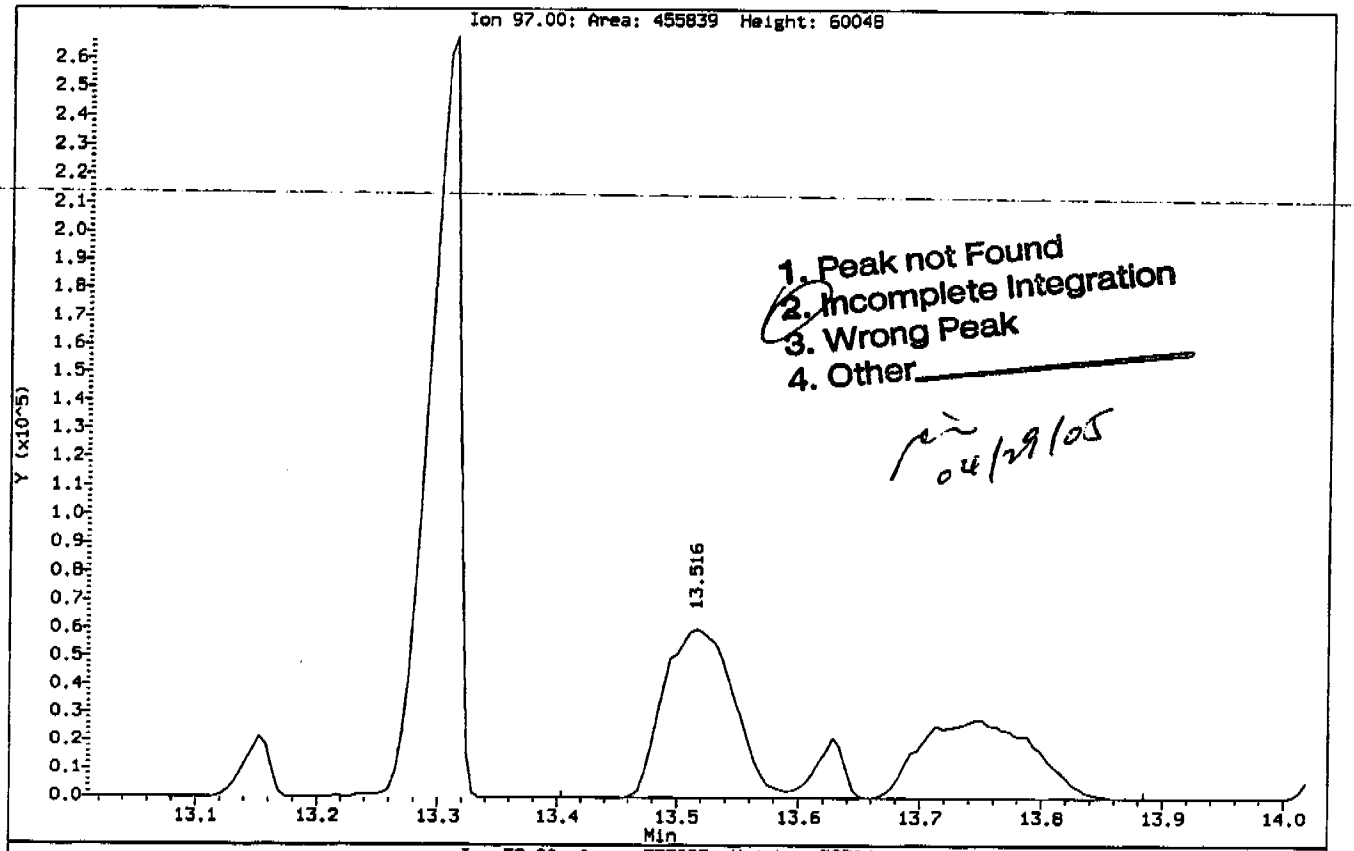
04/29/05





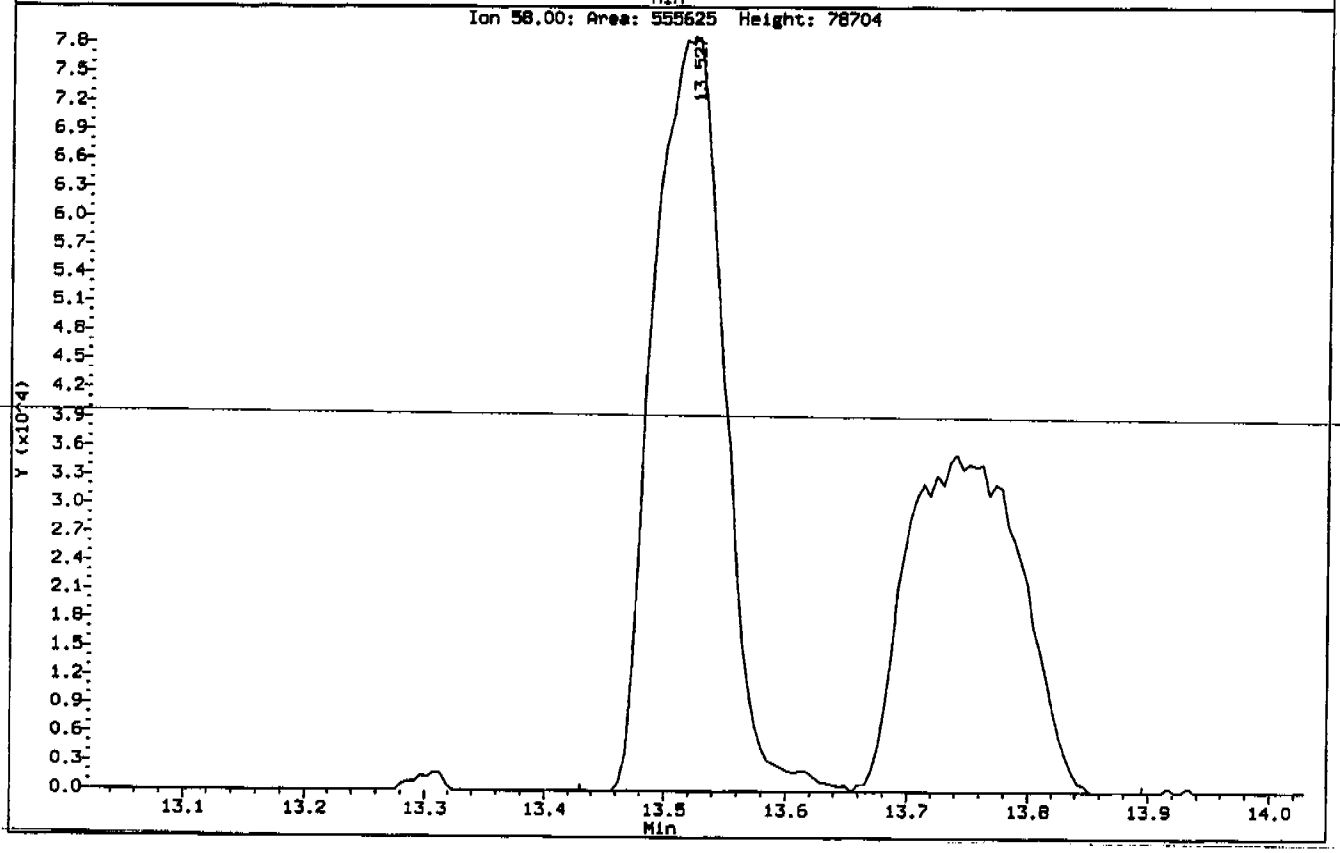
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2581.D
Injection Date: 28-APR-2005 12:50
Instrument: MSK.i
Client Sample ID: SSTD160APPIX

Compound: Methapyrilene
CAS Number: 91-80-5



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

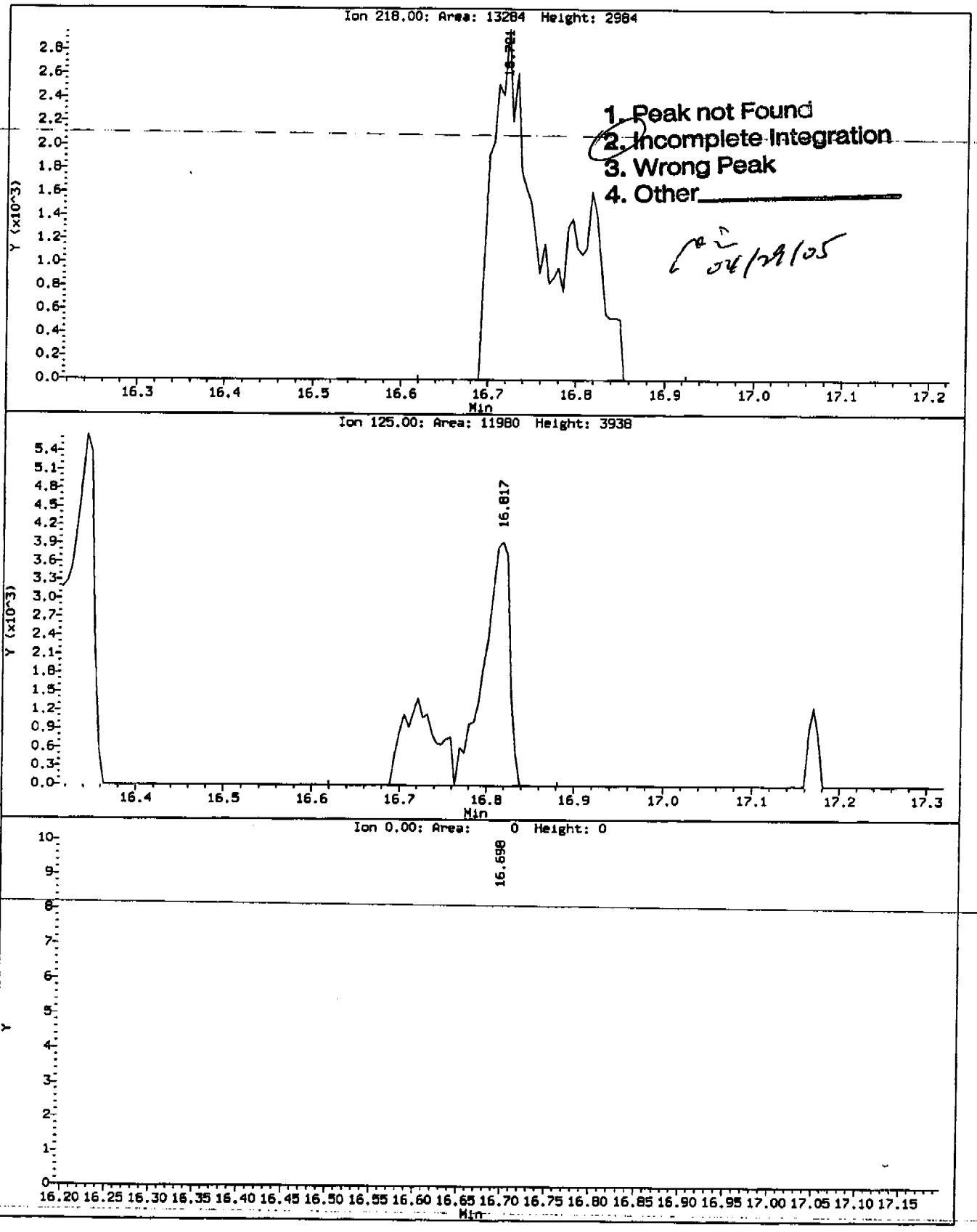
04/29/05



LOT# F5D220273

Data File: \\Slavr01\BNA_LAB\MSK.i\K050428A.B\KCAL2581.D
Injection Date: 28-APR-2005 12:50
Instrument: MSK.i
Client Sample ID: SSTD160APPIX

Compound: Famphur
CAS Number: 52-85-7



STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2582.D
Lab Smp Id: SSTD120APPIX Client Smp ID: SSTD120APPIX
Inj Date : 28-APR-2005 13:24
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD120APPIX
Misc Info : SV0187-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Meth Date : 29-Apr-2005 08:42 hongs Quant Type: ISTD
Cal Date : 28-APR-2005 13:24 Cal File: KCAL2582.D
Als bottle: 6 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIX.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
7	2-Picoline	93	2.530	2.530	(0.549)	632693	120.000	124.4
8	N-Nitrosomethylethylamine	88	2.727	2.727	(0.592)	282509	120.000	123.6(M)
9	Methyl methanesulfonate	80	3.096	3.096	(0.672)	225225	120.000	128.9
12	N-Nitrosodiethylamine	102	3.491	3.491	(0.758)	341812	120.000	126.7
13	Ethyl Methanesulfonate	79	3.876	3.876	(0.841)	562282	120.000	122.4
18	Pentachloroethane	117	4.271	4.271	(0.927)	270238	120.000	125.9
* 22	1,4-Dichlorobenzene-d4	152	4.608	4.608	(1.000)	161669	40.0000	
30	Acetophenone	105	5.158	5.158	(0.833)	1068225	120.000	126.9
31	N-Nitrosopyrrolidine	100	5.206	5.206	(0.840)	340903	120.000	124.2
33	N-Nitrosomorpholine	116	5.227	5.227	(0.844)	162928	120.000	134.1
34	O-Toluidine	106	5.238	5.238	(0.846)	1134515	120.000	129.1
38	N-Nitrosopiperidine	114	5.569	5.569	(0.899)	318413	120.000	125.6
43	o,o,o-Triethyl-Phosphorothioa	198	5.981	5.981	(0.966)	458138	120.000	131.2
* 48	Naphthalene-d8	136	6.194	6.194	(1.000)	571006	40.0000	
46	a,a-Dimethyl-phenethylamine	58	6.071	6.071	(0.980)	1420992	120.000	130.9(M)
52	2,6-Dichlorophenol	162	6.397	6.397	(1.033)	537519	120.000	133.3
53	Hexachloropropene	213	6.381	6.381	(1.030)	651747	120.000	130.1(M)
55	Benzothiazole	135	6.595	6.595	(1.065)	946286	120.000	127.2
58	p-Phenylenediamine	108	6.894	6.894	(1.113)	479505	120.000	119.4
57	n-Nitrosodi-n-butylamine	84	6.889	6.889	(1.112)	565324	120.000	124.3
61	Safrole	162	7.118	7.118	(1.149)	559272	120.000	130.0

04/29/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
65	1,2,4,5-Tetrachlorobenzene	216	7.524	7.524	(0.846)	1545981	120.000	127.4
64	cis-Isosafrole	162	7.556	7.556	(0.849)	57922	120.000	123.8(M)
70	trans-Isosafrole	162	7.920	7.920	(0.890)	661037	120.000	129.5
74	1,4-Naphthoquinone	158	8.267	8.267	(0.929)	174093	120.000	81.58
75	1,4-Dinitrobenzene	168	8.443	8.443	(1.363)	231938	120.000	133.6
77	1,3-Dinitrobenzene	168	8.641	8.641	(0.971)	250675	120.000	131.0
* 82	Acenaphthene-d10	164	8.897	8.897	(1.000)	334620	40.0000	
87	Pentachlorobenzene	250	9.282	9.282	(1.043)	738024	120.000	125.3
89	1-Naphthylamine	143	9.426	9.426	(1.059)	1167335	120.000	128.2
90	2-Naphthylamine	143	9.570	9.570	(1.076)	1056669	120.000	128.2
92	2,3,4,6-Tetrachlorophenol	232	9.603	9.603	(1.079)	428079	120.000	143.5
96	Thionazin	107	10.035	10.035	(1.128)	291978	120.000	130.2
97	5-Nitro-o-toluidine	152	10.046	10.046	(0.867)	409426	120.000	129.0
101	tri-n-butylphosphate	99	10.313	10.313	(1.159)	1885082	120.000	128.6
105	Sulfotepp	97	10.714	10.714	(0.925)	308094	120.000	128.8
106	Diallate (peak 1)	86	10.772	10.772	(0.930)	601217	120.000	126.7
108	Phorate	75	10.794	10.794	(0.932)	1100425	120.000	128.2
111	Diallate (peak 2)	86	10.906	10.906	(0.941)	122849	120.000	121.4
107	1,3,5-Trinitrobenzene	213	10.885	10.885	(0.940)	201804	120.000	138.0
110	Phenacetin	108	10.970	10.970	(0.947)	804532	120.000	122.7
113	Dimethoate	87	11.189	11.189	(0.966)	404758	120.000	105.6
116	4-Aminobiphenyl	169	11.339	11.339	(0.979)	1550673	120.000	131.2
115	tris(2-chloroethyl)phosphate	63	11.419	11.419	(0.986)	414473	120.000	119.2
119	Pentachloronitrobenzene	237	11.547	11.547	(0.997)	258669	120.000	127.1
118	Pronamide	173	11.616	11.616	(1.003)	719402	120.000	121.4
* 121	Phenanthrene-d10	188	11.584	11.584	(1.000)	625572	40.0000	
123	Disulfoton	88	11.782	11.782	(1.017)	763969	120.000	126.6
125	Dinoseb	211	11.836	11.836	(1.022)	513710	120.000	142.0
128	Methyl Parathion	109	12.509	12.509	(1.080)	372484	120.000	108.9
131	4-Nitroquinoline-1-oxide	190	13.241	13.241	(1.143)	162994	120.000	129.8
130	Parathion	97	13.305	13.305	(1.148)	348277	120.000	126.0
132	Methapyrilene	97	13.497	13.497	(1.165)	377298	120.000	89.17(M)
133	Isodrin	193	13.630	13.630	(1.177)	262442	120.000	119.6
141	Kepone	272	14.779	14.779	(0.884)	12345	120.000	147.7
140	Aramite (peak 1)	185	14.870	14.870	(0.889)	120048	120.000	125.0
142	Aramite (peak 2)	185	15.030	15.030	(0.899)	183382	120.000	125.7
143	p-(Dimethylamino)azobenzene	120	15.105	15.105	(0.903)	562960	120.000	123.7
144	Chlorobenzilate	251	15.249	15.249	(0.912)	828063	120.000	129.0
148	2-Acetylaminofluorene	181	16.334	16.334	(0.977)	923451	120.000	128.6
149	Famphur	218	16.702	16.702	(0.999)	24563	120.000	93.37(M)
* 153	Chrysene-d12	240	16.724	16.724	(1.000)	550836	40.0000	
151	4,4'-Methylenebis(2-Chloroani	266	16.814	16.814	(1.005)	206761	120.000	130.6
162	7,12-Dimethylbenz(a)anthracen	256	18.764	18.764	(0.970)	1109134	120.000	134.4
163	Hexachlorophene	196	19.047	19.047	(0.985)	9258	120.000	32.34(H)
* 166	Perylene-d12	264	19.341	19.341	(1.000)	447751	40.0000	
169	3-methylcholanthrene	268	19.907	19.907	(1.029)	1111655	120.000	132.0

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2582.D
Report Date: 29-Apr-2005 08:42

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

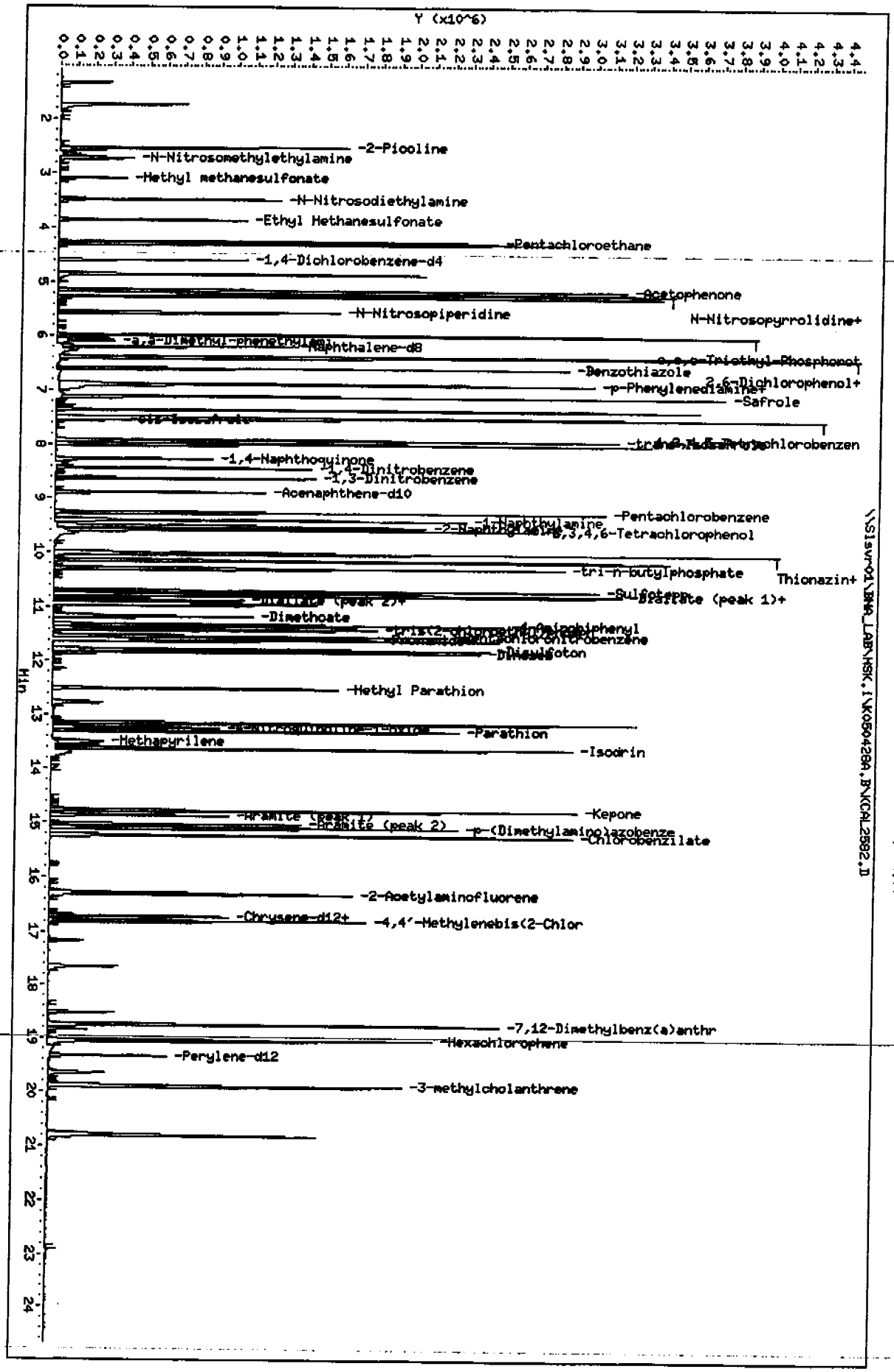
Instrument ID: MSK.i
Lab File ID: KCAL2582.D
Lab Smp Id: SSTD120APPIX
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Misc Info: SV0187-05

Calibration Date: 28-APR-2005
Calibration Time: 11:41
Client Smp ID: SSTD120APPIX
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	162145	81073	324290	161669	-0.29
48 Naphthalene-d8	535939	267970	1071878	571006	6.54
82 Acenaphthene-d10	307602	153801	615204	334620	8.78
121 Phenanthrene-d10	574409	287205	1148818	625572	8.91
153 Chrysene-d12	519397	259699	1038794	550836	6.05
166 Perylene-d12	440492	220246	880984	447751	1.65

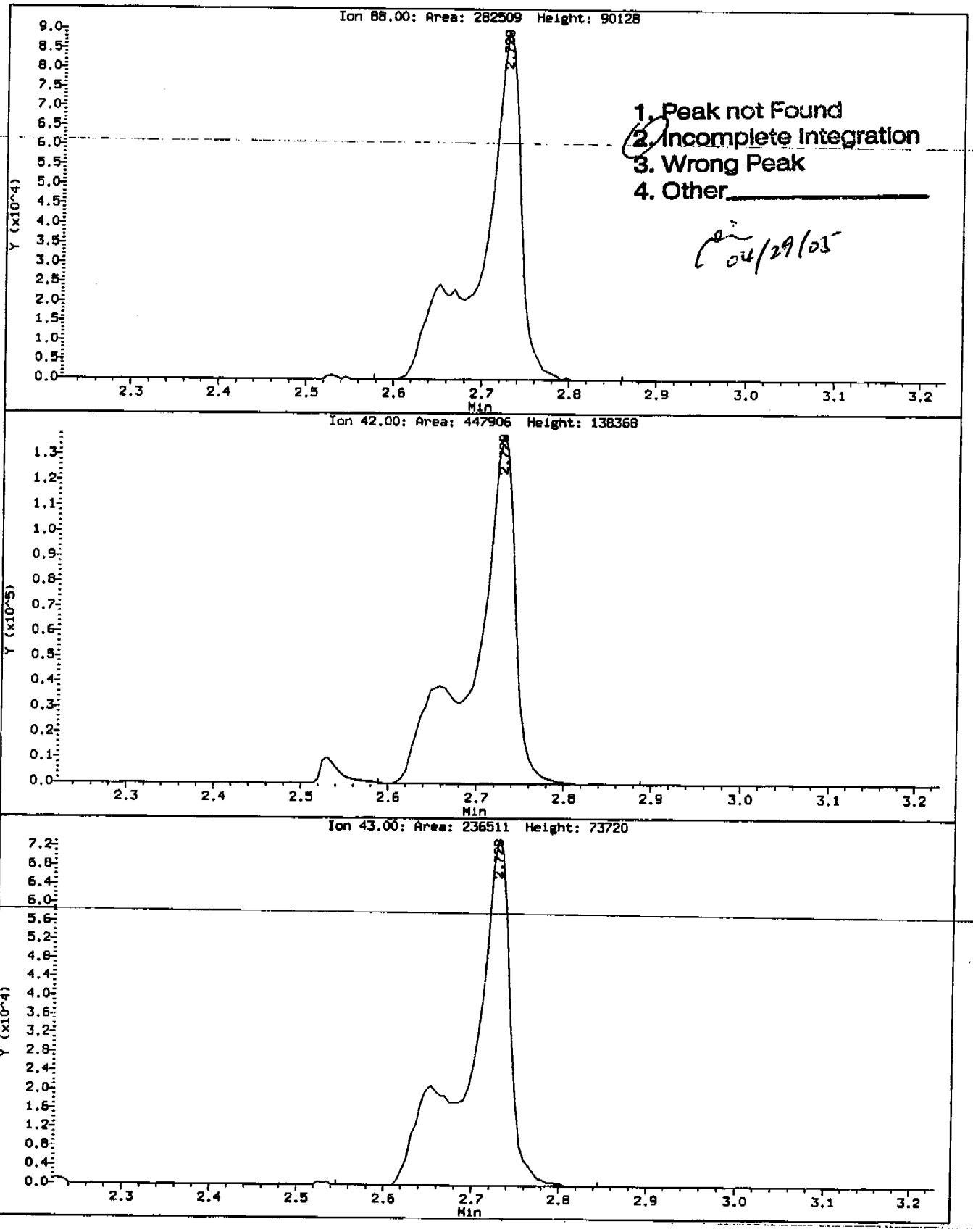
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.62	4.12	5.12	4.61	-0.25
48 Naphthalene-d8	6.21	5.71	6.71	6.19	-0.18
82 Acenaphthene-d10	8.91	8.41	9.41	8.90	-0.13
121 Phenanthrene-d10	11.58	11.08	12.08	11.58	0.04
153 Chrysene-d12	16.74	16.24	17.24	16.72	-0.07
166 Perylene-d12	19.35	18.85	19.85	19.34	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^6)
Min
-2-Picoline
-N-Nitrosomethylethylamine
-Methyl methanesulfonate
-N-Nitrosodiethylamine
-Ethyl Methanesulfonate
-Pentachloroethane
-1,4-Dichlorobenzene-d4
-Acetophenone
-N-Nitrosopiperidine
N-Nitrosopyrrolidine+
-Naphthalene-d8
-Benzothiazole
-p-Phenylenediamine+
2,6-Dichlorophenol+
-Safrole
-1,4-Naphthoquinone
-1,4-Dinitrobenzene
-1,3-Dinitrobenzene
-Acenaphthene-d10
-Pentachlorobenzene
-1-Naphthylamine
2,3,4,6-Tetrachlorophenol
Thionazin+
-tri-n-butylphosphate
-Dimethoate
-Methyl Parathion
-Parathion
-Methapyrilene
-Isodrin
-Kepone
-Aramite (peak 2)
-p-(Dimethylamino)azobenze
-Chlorobenzilate
-2-Acetylaminofluorene
-Chrysene-d12+
-4,4'-Methylenebis(2-Chlor
-7,12-Dimethylbenz(a)anthr
-Hexachlorophene
-Perylene-d12
-3-methylcholanthrene
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2592.D
Date : 28-APR-2005 13:24
Client ID: SSTD120APPIX
Sample Info: SSTD120APPIX
Volume Injected (uL): 1.0
Column phase:
\\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2592.D
Instrument: MSK.i
Operator: XIA
Column diameter: 2.00

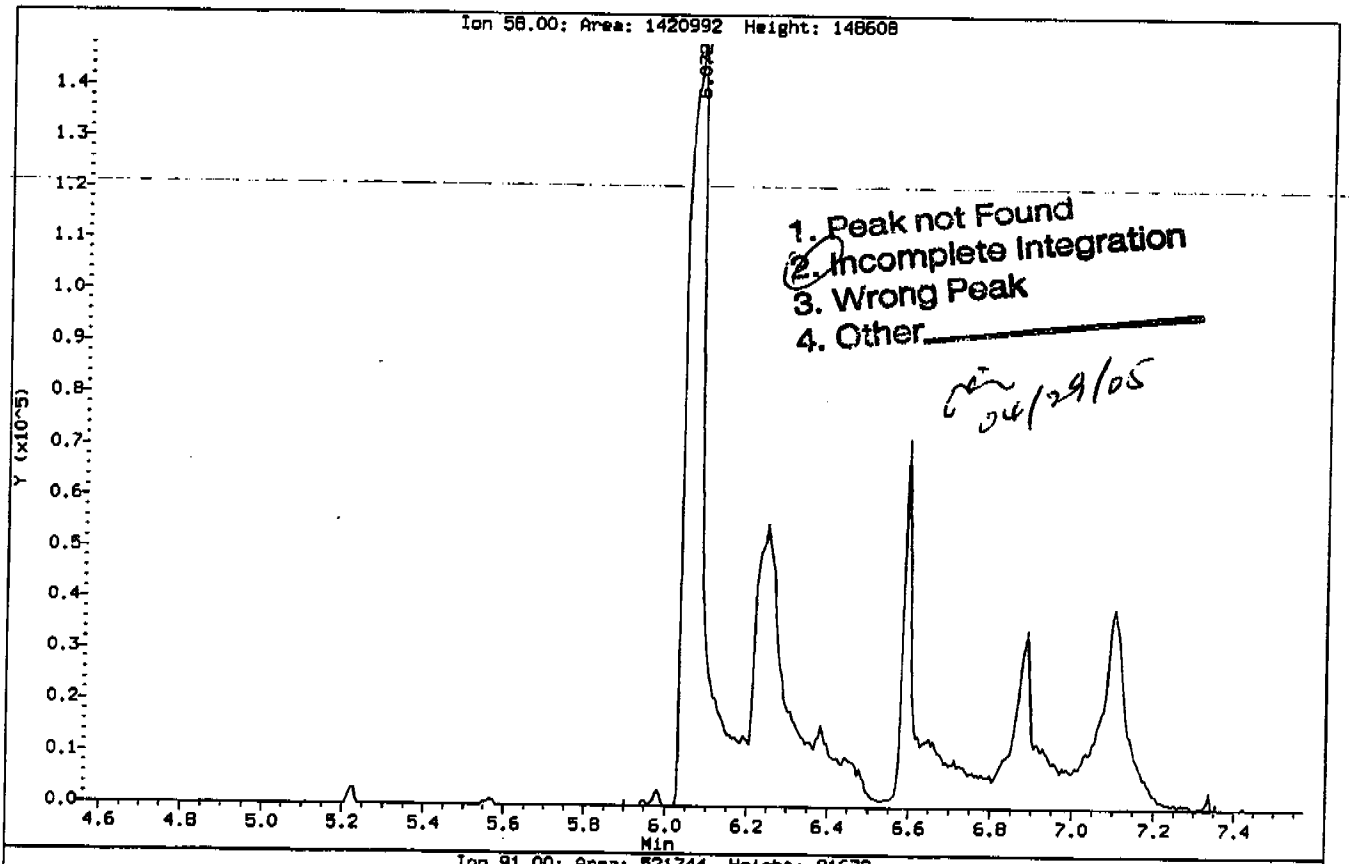
Data File: \\Slsvr01\BNA_LAB\MSK.1\K050428A.B\KCAL2582.D
Injection Date: 28-APR-2005 13:24
Instrument: MSK.1
Client Sample ID: SSTD120APPIX

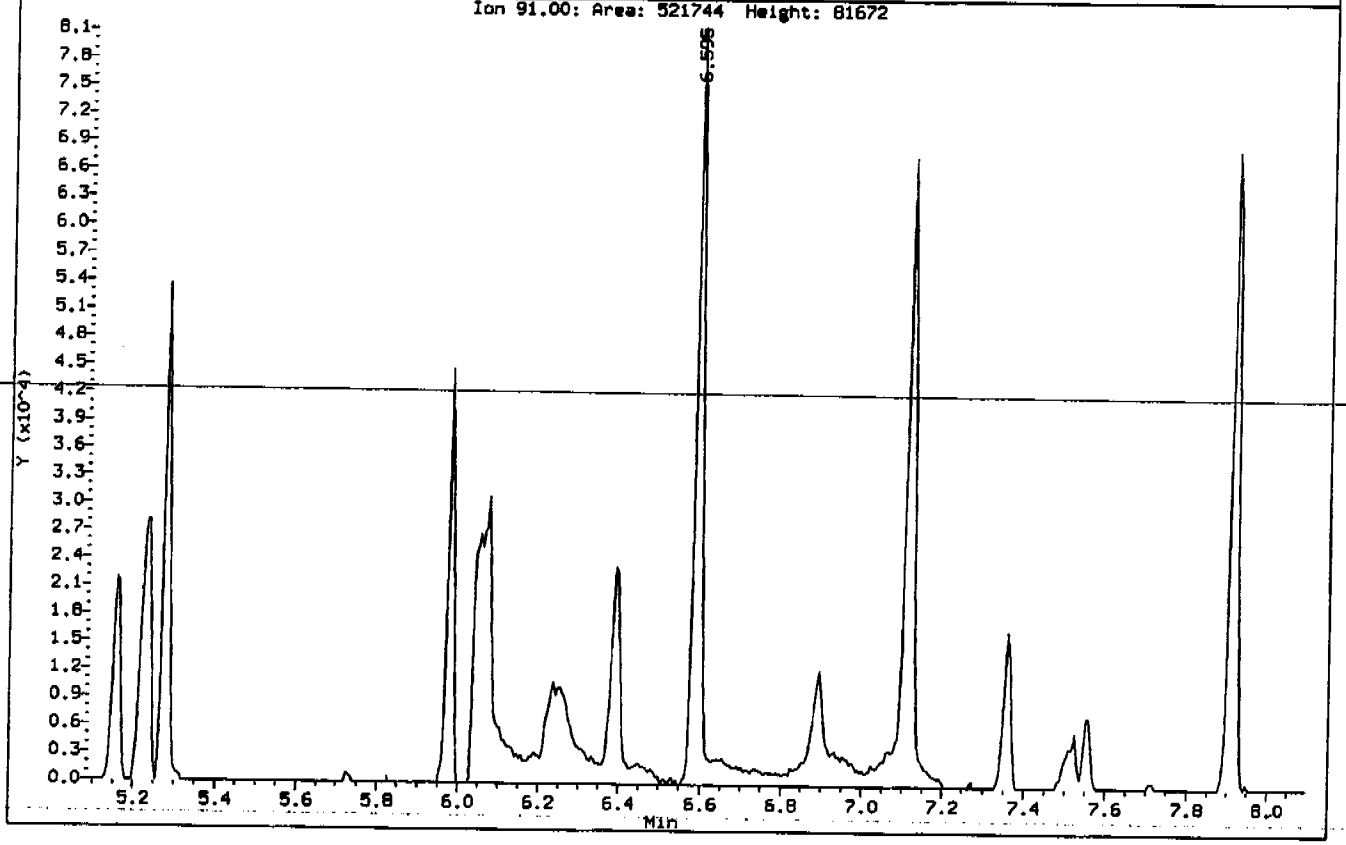
Compound: N-Nitrosomethylethylamine
CAS Number: 10595-95-6



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2582.D
Injection Date: 28-APR-2005 13:24
Instrument: MSK.i
Client Sample ID: SSTD120APPIX

Compound: a,a-Dimethyl-phenethylamine
CAS Number: 122-09-8

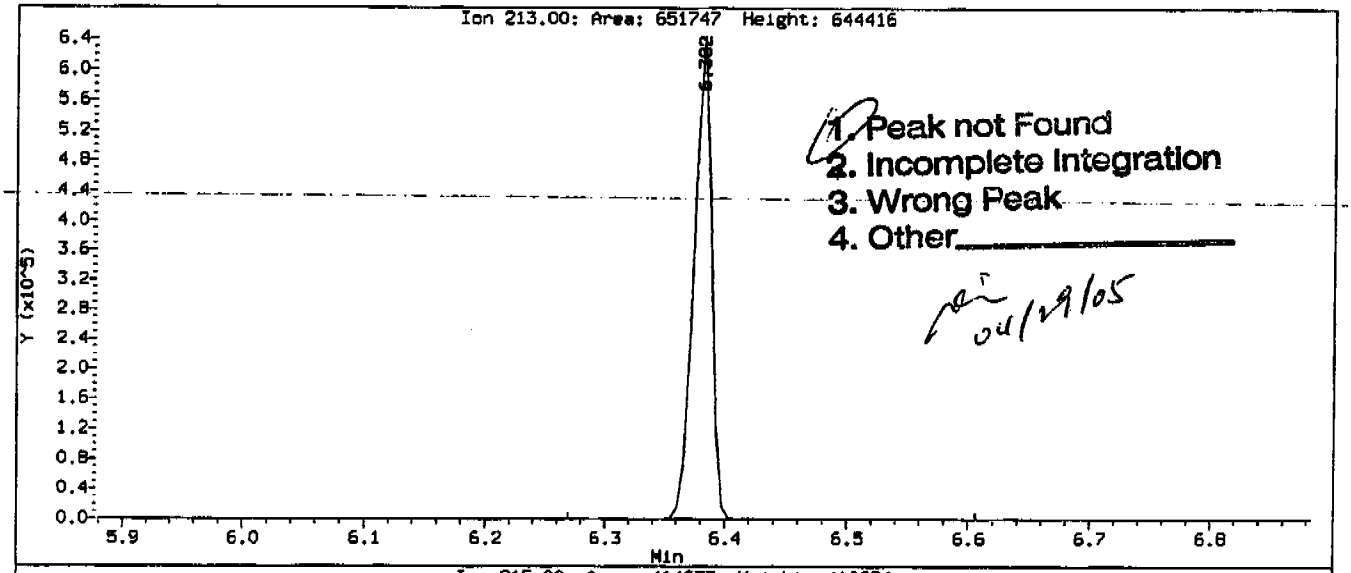




LOT# F5D220273

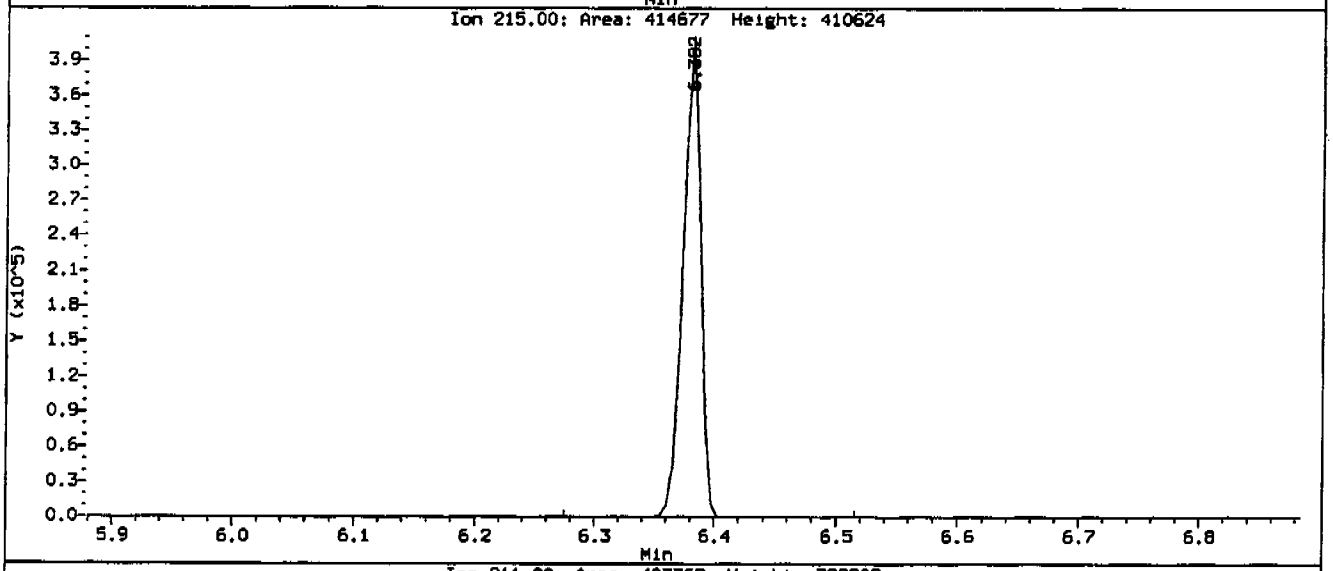
Data File: \\Slavr01\BNA_LAB\MSK.i\K050428A.B\KCAL2582.D
Injection Date: 28-APR-2005 13:24
Instrument: MSK.i
Client Sample ID: SSTD120APPIX

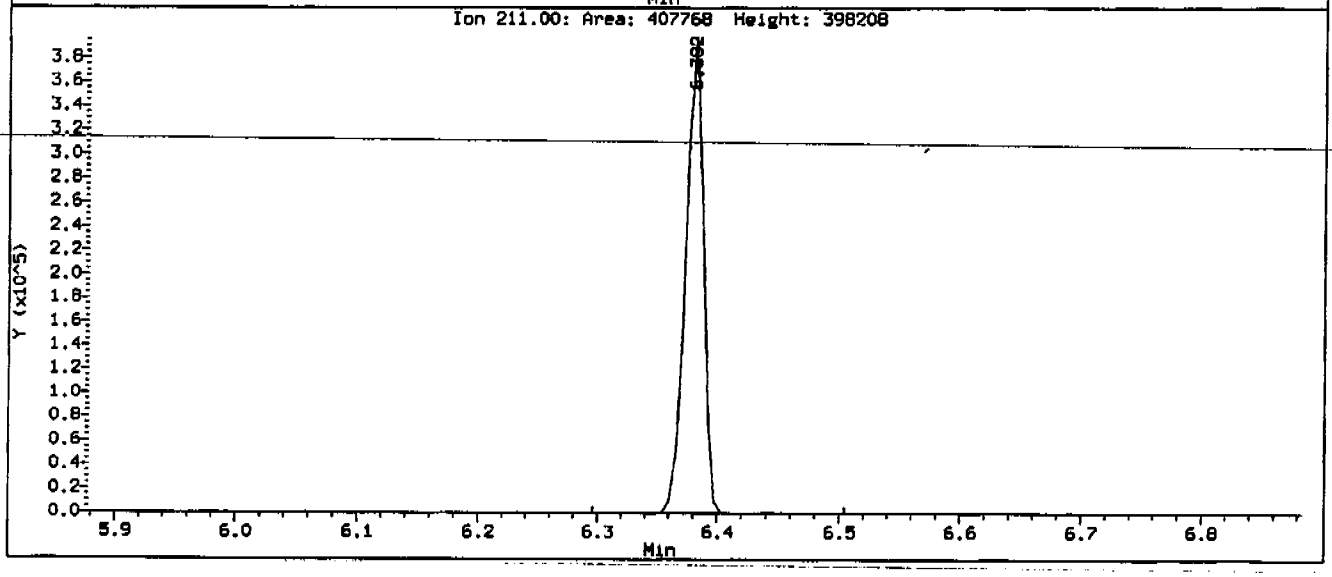
Compound: Hexachloropropene
CAS Number: 1888-71-7



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

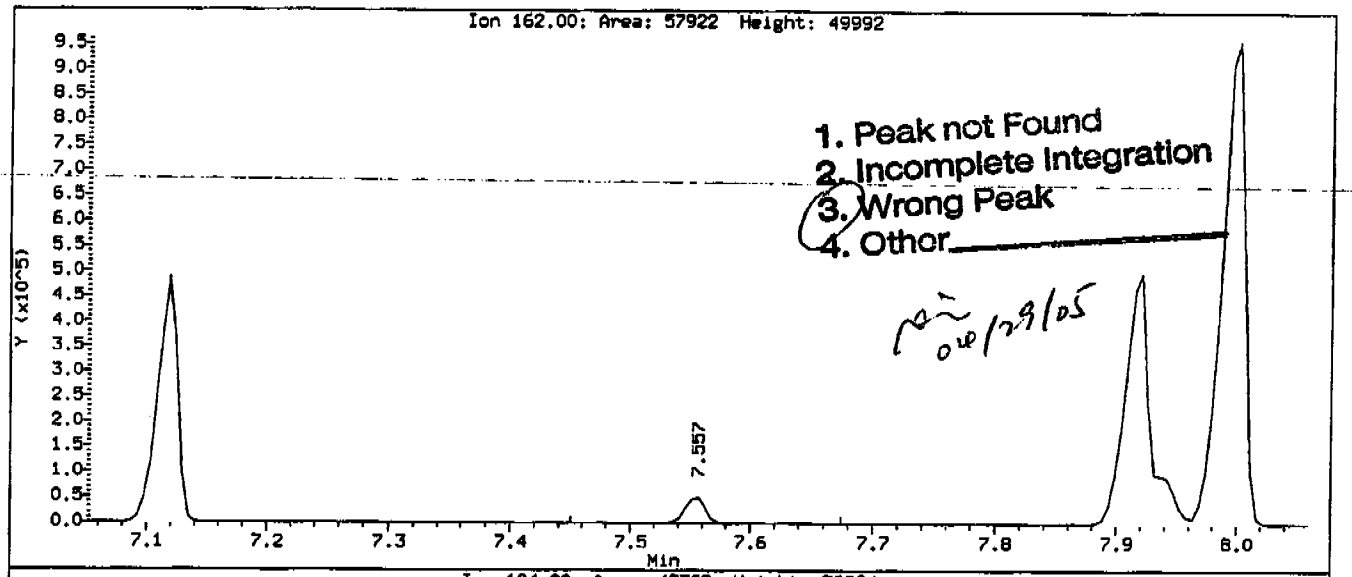
04/29/05





Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2582.D
Injection Date: 28-APR-2005 13:24
Instrument: MSK.i
Client Sample ID: SSTD120APPIX

Compound: cis-Isosafrole
CAS Number: 120-58-1



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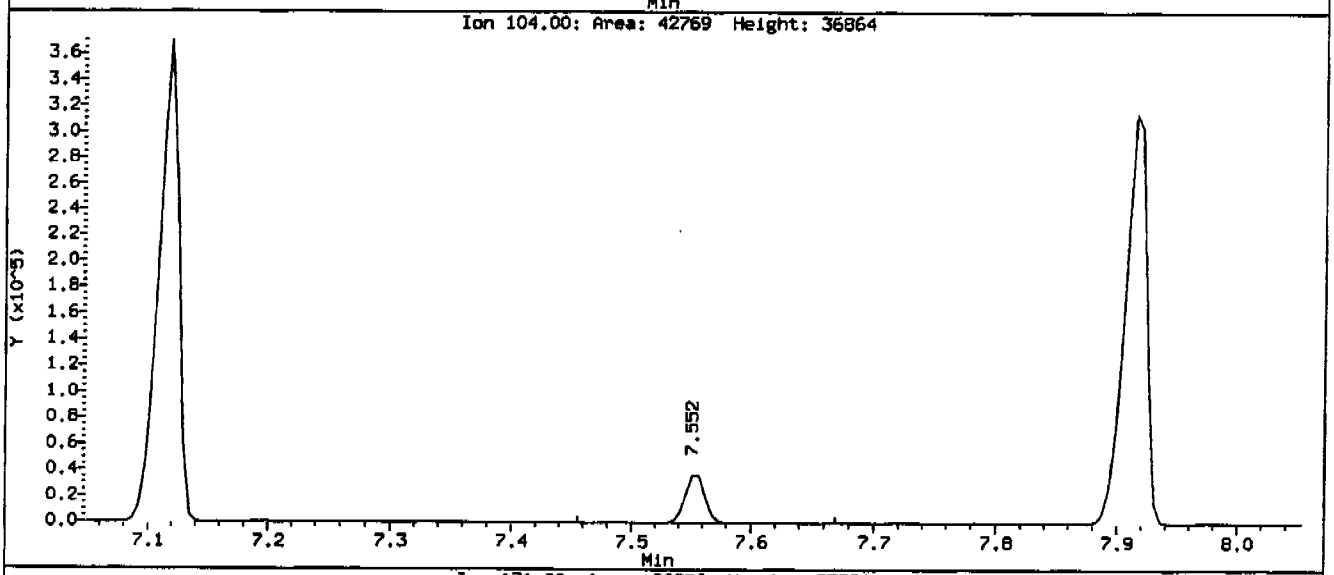
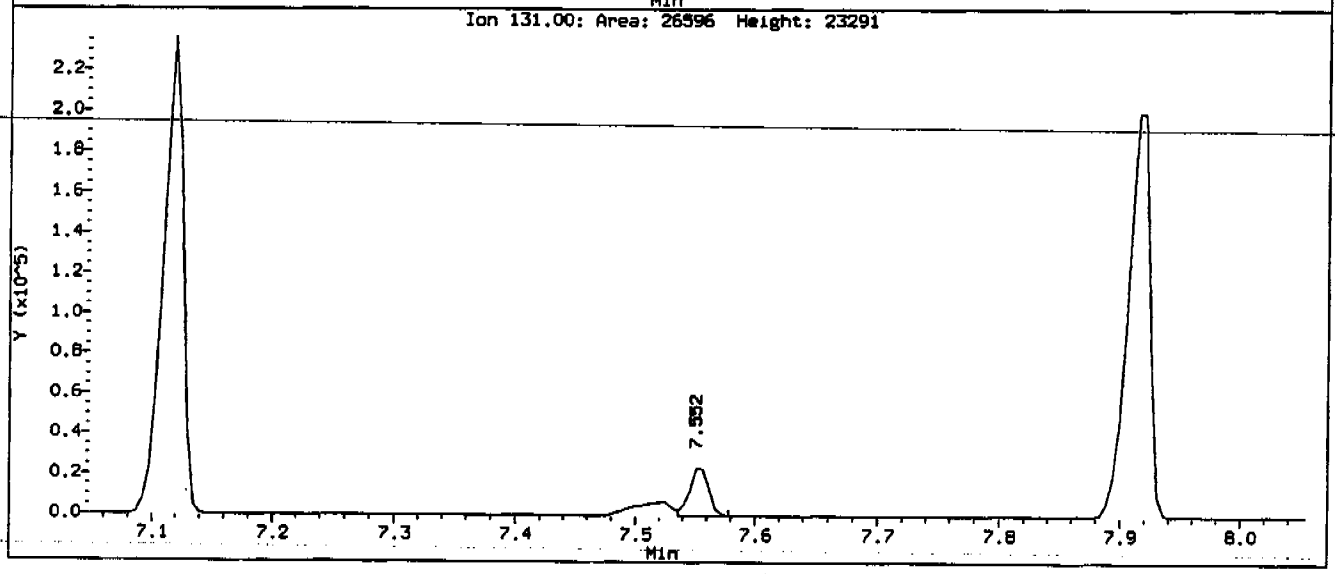
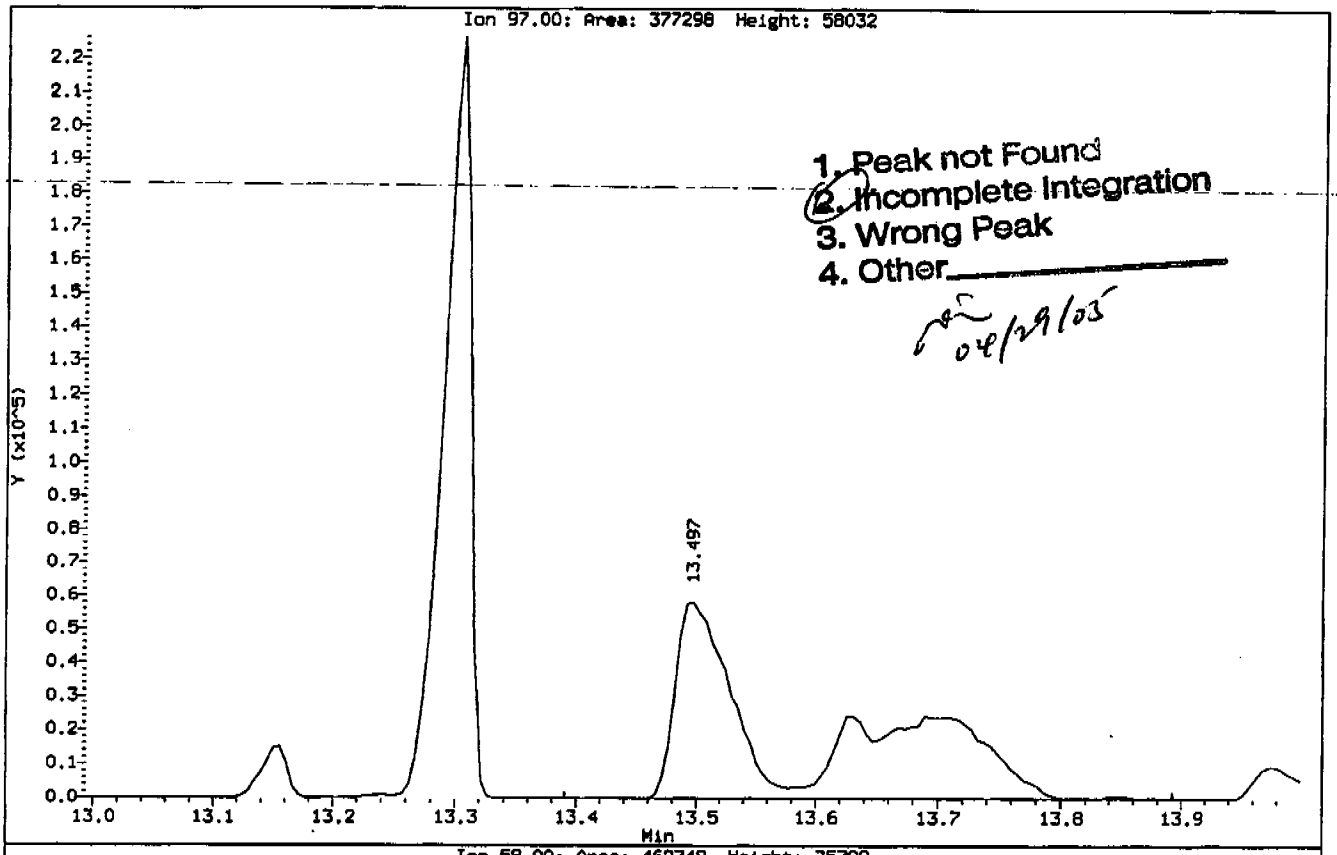
3. Wrong Peak
4. Other





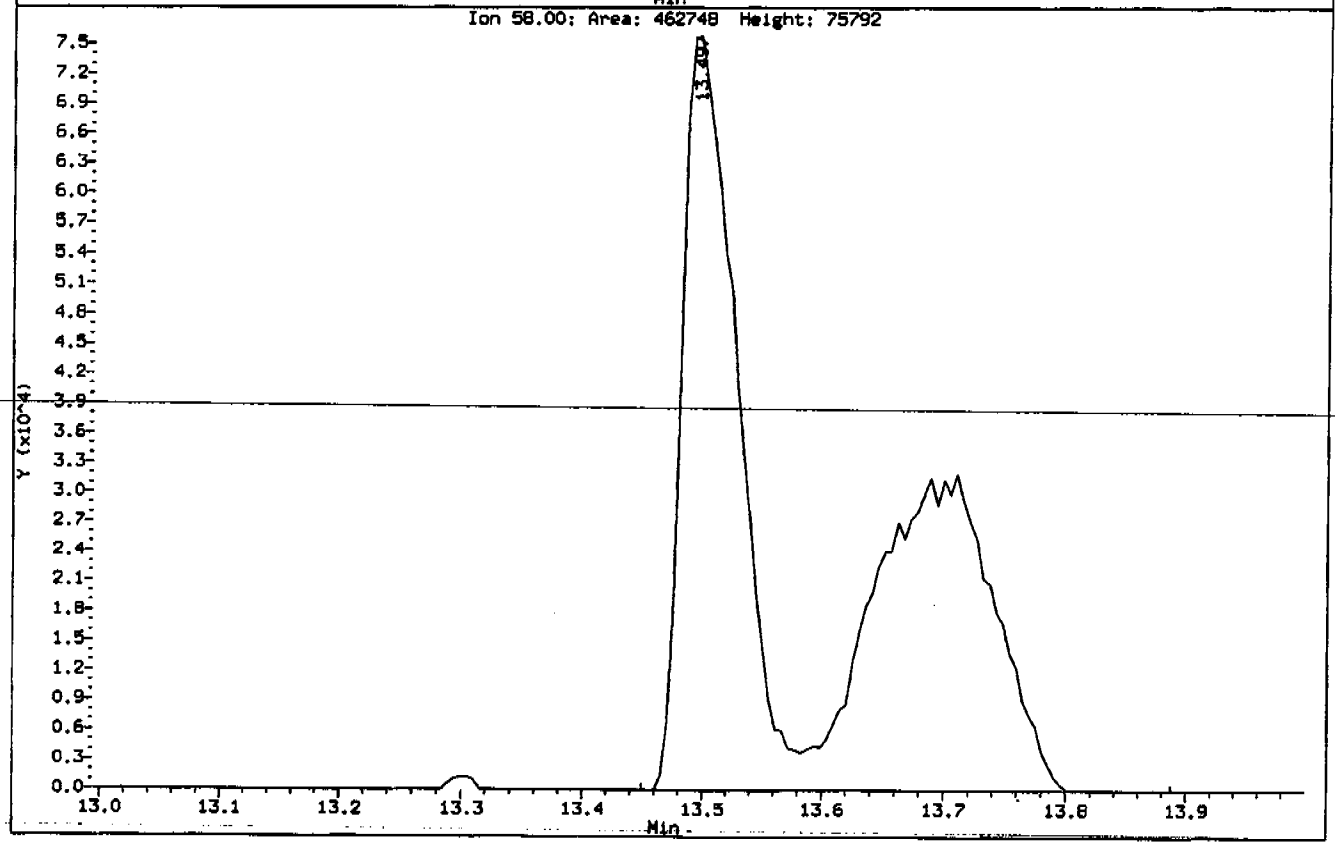
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2582.D
Injection Date: 28-APR-2005 13:24
Instrument: MSK.i
Client Sample ID: SSTD120APPIX

Compound: Methapyrilene
CAS Number: 91-80-5



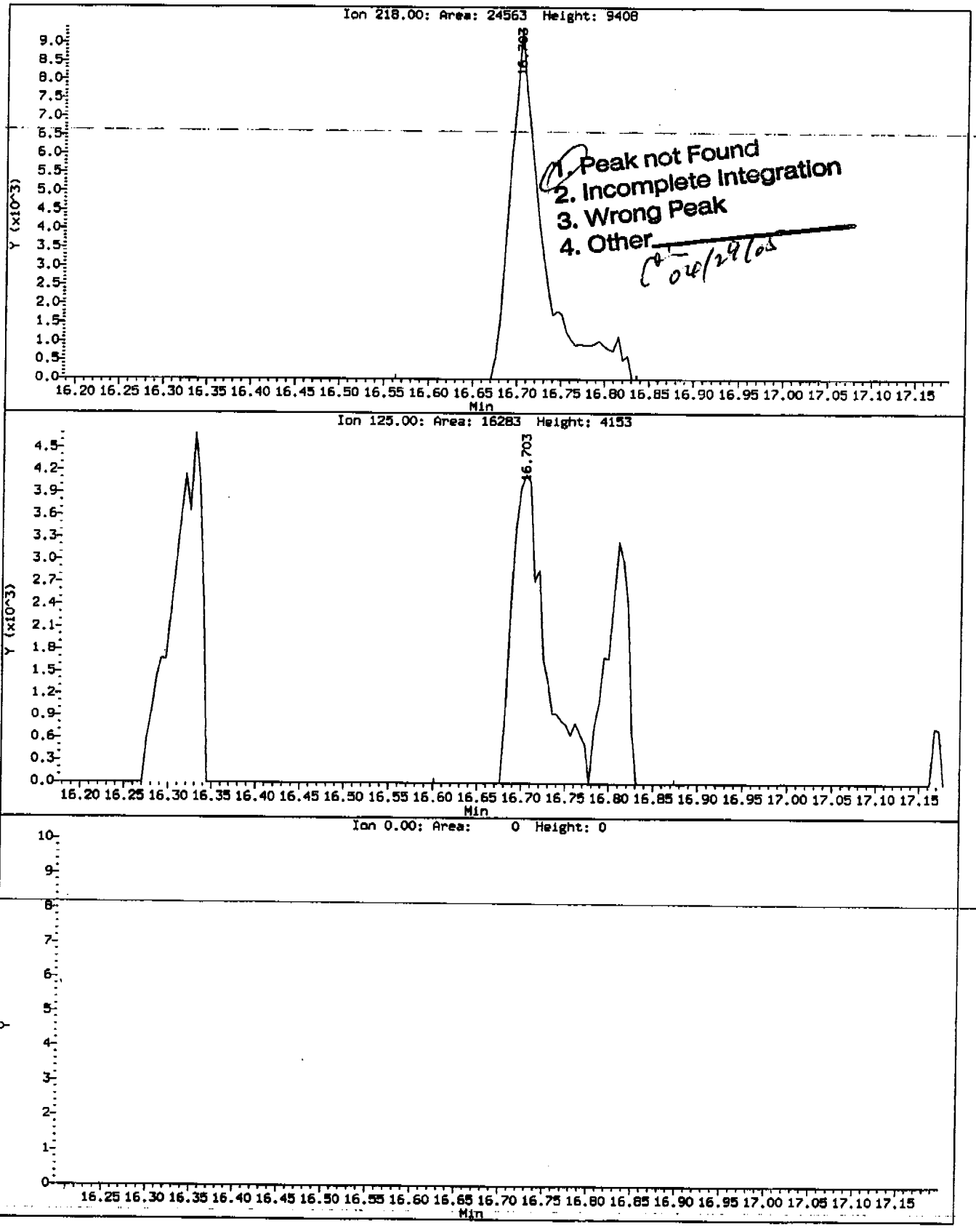
1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other _____

04/29/05



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2582.D
Injection Date: 28-APR-2005 13:24
Instrument: MSK.i
Client Sample ID: SSTD120APPIX

Compound: Famphur
CAS Number: 52-85-7



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2583.D
Report Date: 29-Apr-2005 08:42

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2583.D
Lab Smp Id: SSTD080APPIX Client Smp ID: SSTD080APPIX
Inj Date : 28-APR-2005 13:59
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD080APPIX
Misc Info : SV0186-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Meth Date : 29-Apr-2005 08:42 hongs Quant Type: ISTD
Cal Date : 28-APR-2005 13:59 Cal File: KCAL2583.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIX.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
7	2-Picoline	93	2.529	2.529	(0.549)	542817	80.0000	83.38
8	N-Nitrosomethylethylamine	88	2.727	2.727	(0.592)	249649	80.0000	85.29(M)
9	Methyl methanesulfonate	80	3.090	3.090	(0.671)	190976	80.0000	85.39
12	N-Nitrosodiethylamine	102	3.485	3.485	(0.757)	290922	80.0000	84.24
13	Ethyl Methanesulfonate	79	3.870	3.870	(0.840)	487207	80.0000	82.88
18	Pentachloroethane	117	4.265	4.265	(0.926)	223939	80.0000	81.50
* 22	1,4-Dichlorobenzene-d4	152	4.607	4.607	(1.000)	206973	40.0000	
30	Acetophenone	105	5.152	5.152	(0.832)	903227	80.0000	81.52
31	N-Nitrosopyrrolidine	100	5.195	5.195	(0.839)	289442	80.0000	80.16
33	N-Nitrosomorpholine	116	5.216	5.216	(0.842)	134677	80.0000	84.23
34	O-Toluidine	106	5.227	5.227	(0.844)	952376	80.0000	82.33
38	N-Nitrosopiperidine	114	5.564	5.564	(0.898)	271976	80.0000	81.54
43	o,o,o-Triethyl-Phosphorothioa	198	5.980	5.980	(0.966)	382674	80.0000	83.27
* 48	Naphthalene-d8	136	6.194	6.194	(1.000)	751488	40.0000	
46	a,a-Dimethyl-phenethylamine	58	6.071	6.071	(0.980)	1215241	80.0000	85.09(M)
52	2,6-Dichlorophenol	162	6.386	6.386	(1.031)	445156	80.0000	83.91
53	Hexachloropropene	213	6.376	6.376	(1.029)	540244	80.0000	81.96(M)
55	Benzothiazole	135	6.589	6.589	(1.064)	798146	80.0000	81.50
58	p-Phenylenediamine	108	6.888	6.888	(1.112)	431852	80.0000	81.71
57	n-Nitrosodi-n-butylamine	84	6.883	6.883	(1.111)	480097	80.0000	80.20
61	Safrole	162	7.113	7.113	(1.148)	465364	80.0000	82.18

04/29/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
65	1,2,4,5-Tetrachlorobenzene	216	7.519	7.519	(0.846)	1289990	80.0000	81.27
64	cis-Isosafrole	162	7.551	7.551	(0.849)	48813	80.0000	79.71(M)
70	trans-Isosafrole	162	7.909	7.909	(0.889)	523046	80.0000	78.32
74	1,4-Naphthoquinone	158	8.261	8.261	(0.929)	184181	80.0000	65.96
75	1,4-Dinitrobenzene	168	8.438	8.438	(1.362)	196025	80.0000	85.78
77	1,3-Dinitrobenzene	168	8.630	8.630	(0.971)	211623	80.0000	84.49
* 82	Acenaphthene-d10	164	8.892	8.892	(1.000)	437854	40.0000	
87	Pentachlorobenzene	250	9.276	9.276	(1.043)	618369	80.0000	80.21
89	1-Naphthylamine	143	9.415	9.415	(1.059)	922915	80.0000	77.47
90	2-Naphthylamine	143	9.554	9.554	(1.074)	777503	80.0000	72.07
92	2,3,4,6-Tetrachlorophenol	232	9.592	9.592	(1.079)	360302	80.0000	92.30
96	Thionazin	107	10.024	10.024	(1.127)	249899	80.0000	85.13
97	5-Nitro-o-toluidine	152	10.035	10.035	(0.867)	348398	80.0000	84.74
101	tri-n-butylphosphate	99	10.307	10.307	(1.159)	1595987	80.0000	83.20
105	Sulfotepp	97	10.708	10.708	(0.925)	260012	80.0000	83.87
106	Diallate (peak 1)	86	10.767	10.767	(0.930)	504111	80.0000	81.98
108	Phorate	75	10.788	10.788	(0.932)	923069	80.0000	83.02
111	Diallate (peak 2)	86	10.900	10.900	(0.941)	105163	80.0000	80.21
107	1,3,5-Trinitrobenzene	213	10.879	10.879	(0.940)	171358	80.0000	90.42
110	Phenacetin	108	10.954	10.954	(0.946)	688956	80.0000	81.10
113	Dimethoate	87	11.173	11.173	(0.965)	354688	80.0000	71.40
116	4-Aminobiphenyl	169	11.333	11.333	(0.979)	1253532	80.0000	81.87
115	tris(2-chloroethyl)phosphate	63	11.408	11.408	(0.985)	354305	80.0000	78.66
119	Pentachloronitrobenzene	237	11.536	11.536	(0.996)	219429	80.0000	83.20
118	Pronamide	173	11.606	11.606	(1.002)	611165	80.0000	79.64
* 121	Phenanthrene-d10	188	11.579	11.579	(1.000)	810464	40.0000	
123	Disulfoton	88	11.776	11.776	(1.017)	640017	80.0000	81.83
125	Dinoseb	211	11.825	11.825	(1.021)	426638	80.0000	91.05
128	Methyl Parathion	109	12.503	12.503	(1.080)	327207	80.0000	73.86
131	4-Nitroquinoline-1-oxide	190	13.230	13.230	(1.143)	138460	80.0000	85.08
130	Parathion	97	13.294	13.294	(1.148)	297494	80.0000	83.10
132	Methapyrilene	97	13.486	13.486	(1.165)	351070	80.0000	64.04(M)
133	Isodrin	193	13.619	13.619	(1.176)	225244	80.0000	79.24
141	Kepone	272	14.773	14.773	(0.884)	10335	80.0000	96.10
140	Aramite (peak 1)	185	14.864	14.864	(0.889)	104338	80.0000	84.42
142	Aramite (peak 2)	185	15.024	15.024	(0.899)	161918	80.0000	86.22
143	p-(Dimethylamino)azobenzene	120	15.099	15.099	(0.903)	483880	80.0000	82.62
144	Chlorobenzilate	251	15.238	15.238	(0.911)	696198	80.0000	84.26
148	2-Acetylaminofluorene	181	16.317	16.317	(0.976)	781046	80.0000	84.54
149	Famphur	218	16.691	16.691	(0.998)	26526	80.0000	78.35(M)
* 153	Chrysene-d12	240	16.718	16.718	(1.000)	708894	40.0000	
151	4,4'-Methylenebis(2-Chloroani	266	16.809	16.809	(1.005)	165025	80.0000	80.99
162	7,12-Dimethylbenz(a)anthracen	256	18.753	18.753	(0.970)	932901	80.0000	85.84
163	Hexachlorophene	196	19.042	19.042	(0.985)	10398	80.0000	27.58(H)
* 166	Perylene-d12	264	19.341	19.341	(1.000)	589528	40.0000	
169	3-methylcholanthrene	268	19.897	19.897	(1.029)	933604	80.0000	84.18

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2583.D
Report Date: 29-Apr-2005 08:42

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

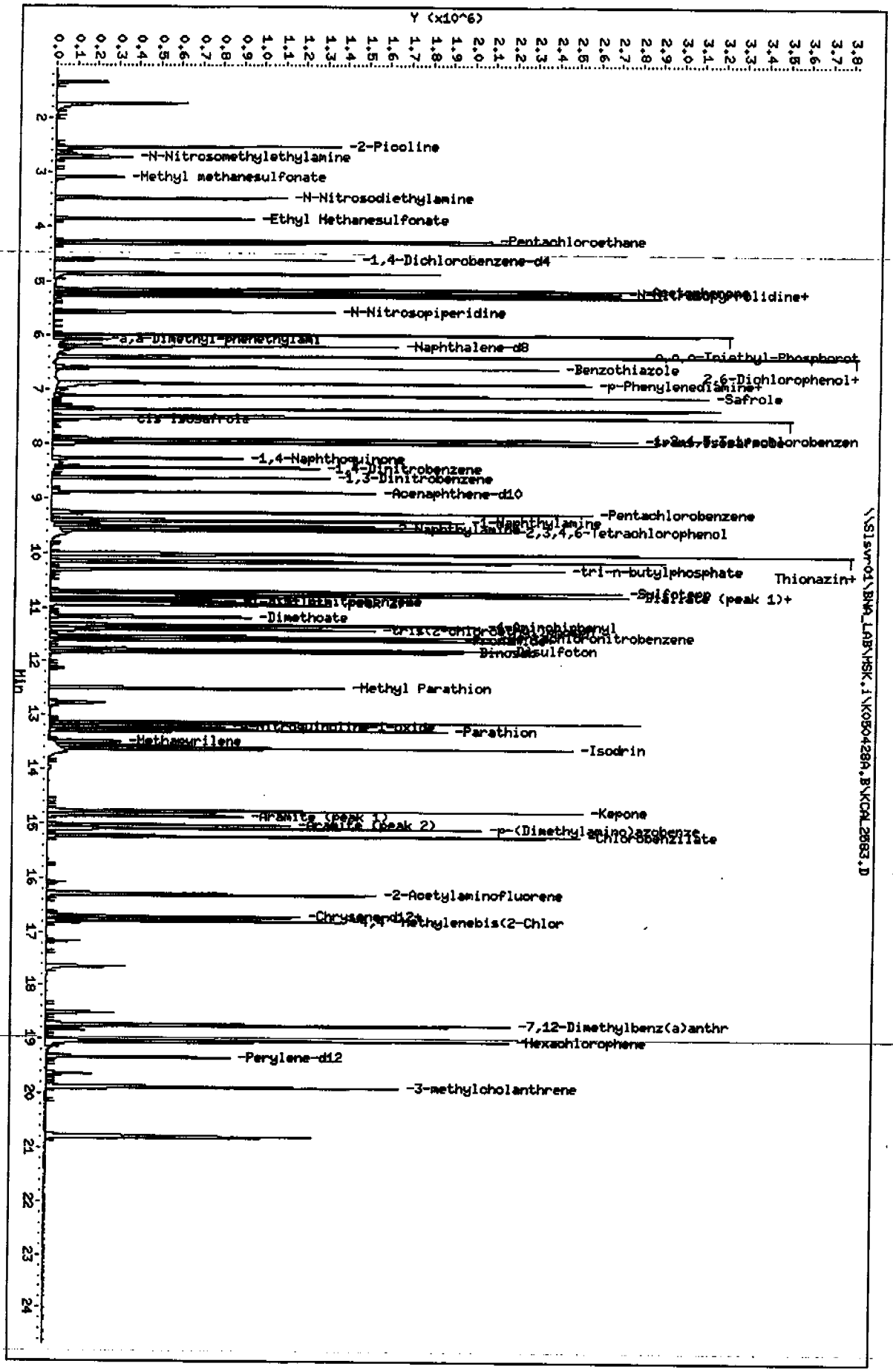
Instrument ID: MSK.i
Lab File ID: KCAL2583.D
Lab Smp Id: SSTD080APPIX
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Misc Info: SV0186-05

Calibration Date: 28-APR-2005
Calibration Time: 11:41
Client Smp ID: SSTD080APPIX
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	162145	81073	324290	206973	27.65
48 Naphthalene-d8	535939	267970	1071878	751488	40.22
82 Acenaphthene-d10	307602	153801	615204	437854	42.34
121 Phenanthrene-d10	574409	287205	1148818	810464	41.10
153 Chrysene-d12	519397	259699	1038794	708894	36.48
166 Perylene-d12	440492	220246	880984	589528	33.83

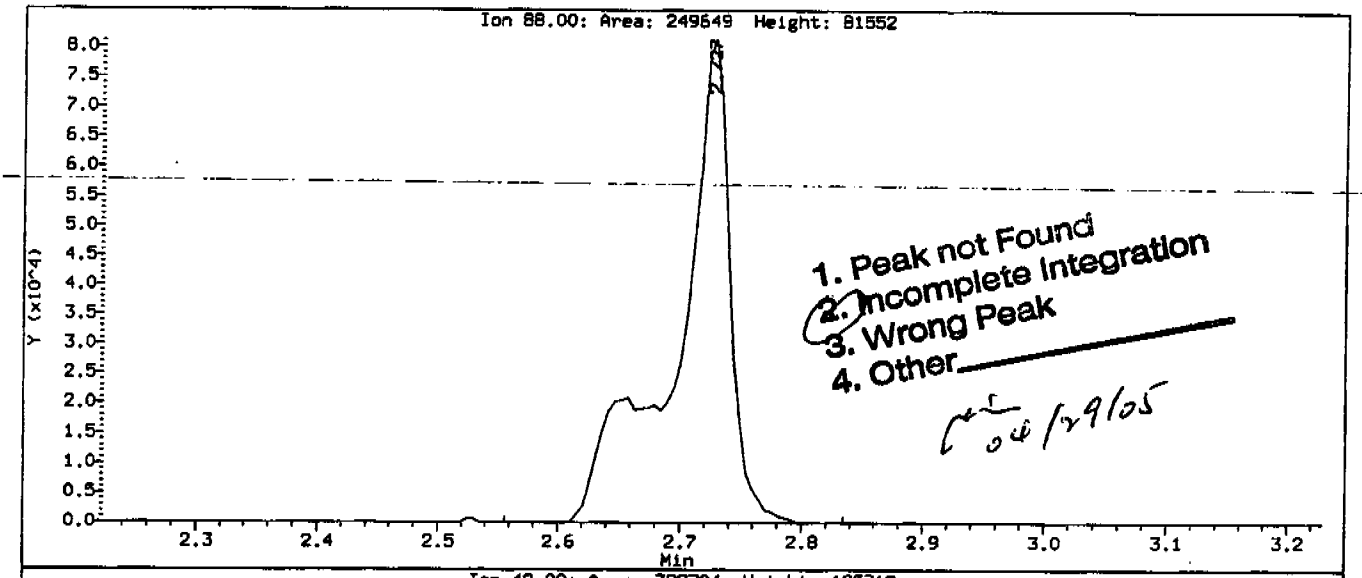
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.62	4.12	5.12	4.61	-0.25
48 Naphthalene-d8	6.21	5.71	6.71	6.19	-0.19
82 Acenaphthene-d10	8.91	8.41	9.41	8.89	-0.19
121 Phenanthrene-d10	11.58	11.08	12.08	11.58	-0.01
153 Chrysene-d12	16.74	16.24	17.24	16.72	-0.10
166 Perylene-d12	19.35	18.85	19.85	19.34	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^6)
Min
-2-Picoline
-N-Nitrosomethylethylamine
-Methyl methanesulfonate
-N-Nitrosodiethylamine
-Ethyl Methanesulfonate
-Pentachloroethane
-1,4-Dichlorobenzene-d4
-N-Nitrosopiperidine
-Naphthalene-d8
-Benzothiazole
-p-Phenylenediamine+
2,6-Dichlorophenol+
-Safrole
-1,4-Naphthoquinone
-1,4-Dinitrobenzene
-1,3-Dinitrobenzene
-Acenaphthene-d10
-Pentachlorobenzene
1-Naphthylamine
2,3,4,6-Tetrachlorophenol
-tri-n-butylphosphate
Thionazin+
-Dimethoate
-Methyl Parathion
-Parathion
-Methapyrilene
-Isodrin
-Kepone
-p-(Dimethylamino)azobenzene
-2-Acetylaminofluorene
-7,12-Dimethylbenz(a)anthr
-Hexachlorophene
-Perylene-d12
-3-methylcholanthrene
\\Slsvr01\BNA_LAB\HSK.i\K050428A.B\KCAL2683.D
Data File: \\Slsvr01\BNA_LAB\HSK.i\K050428A.B\KCAL2683.D
Date : 28-APR-2005 13:59
Client ID: SSTD080PPIX
Sample Info: SSTD080PPIX
Volume Injected (uL): 1.0
Column phase:
Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

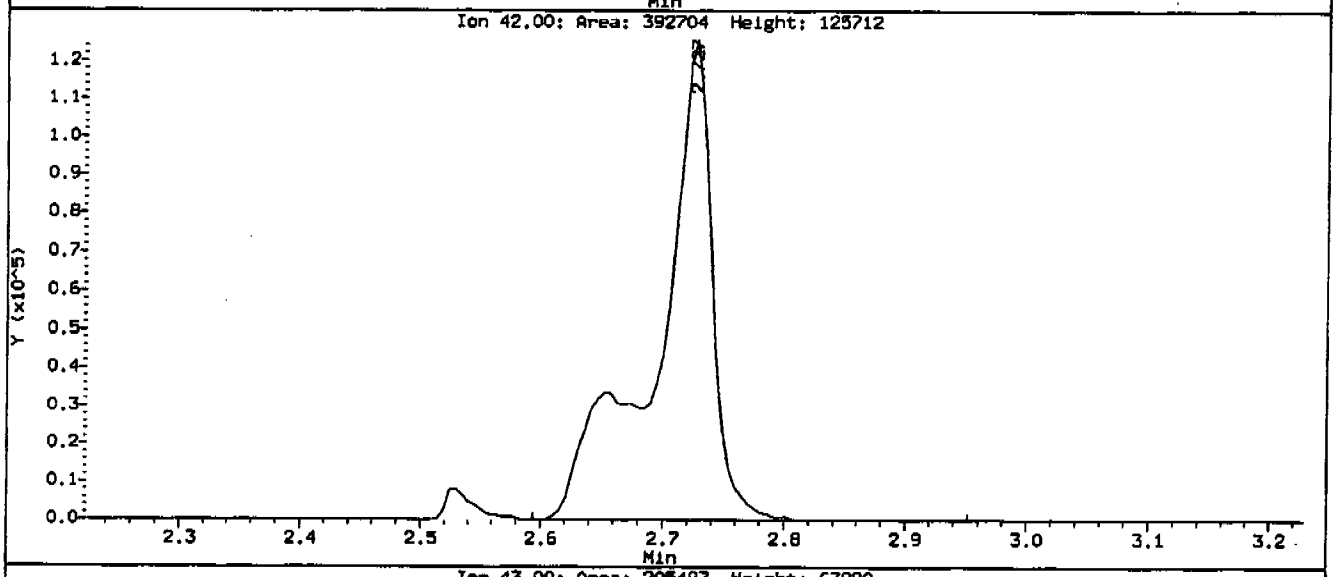
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2583.D
Injection Date: 28-APR-2005 13:59
Instrument: MSK.i
Client Sample ID: SSTD080APPIX

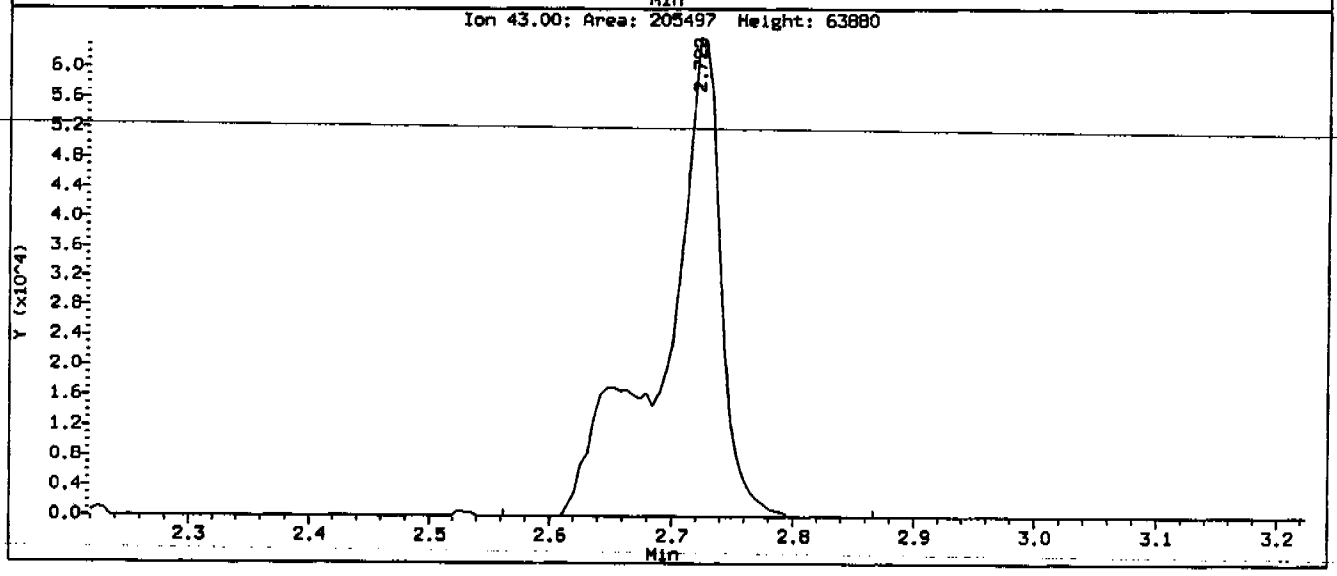
Compound: N-Nitrosomethylethylamine
CAS Number: 10595-95-6



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other _____

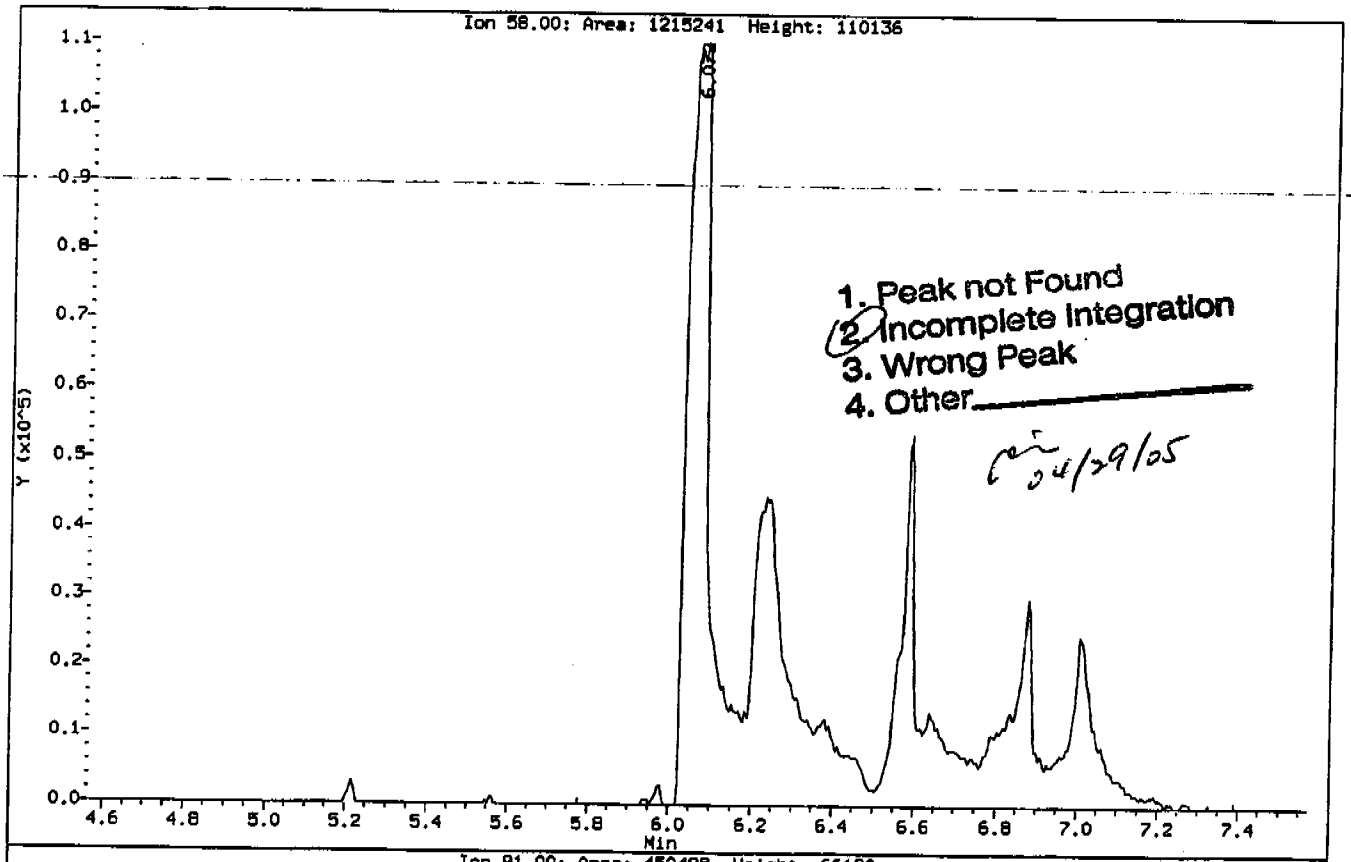
[illegible] 04/29/05

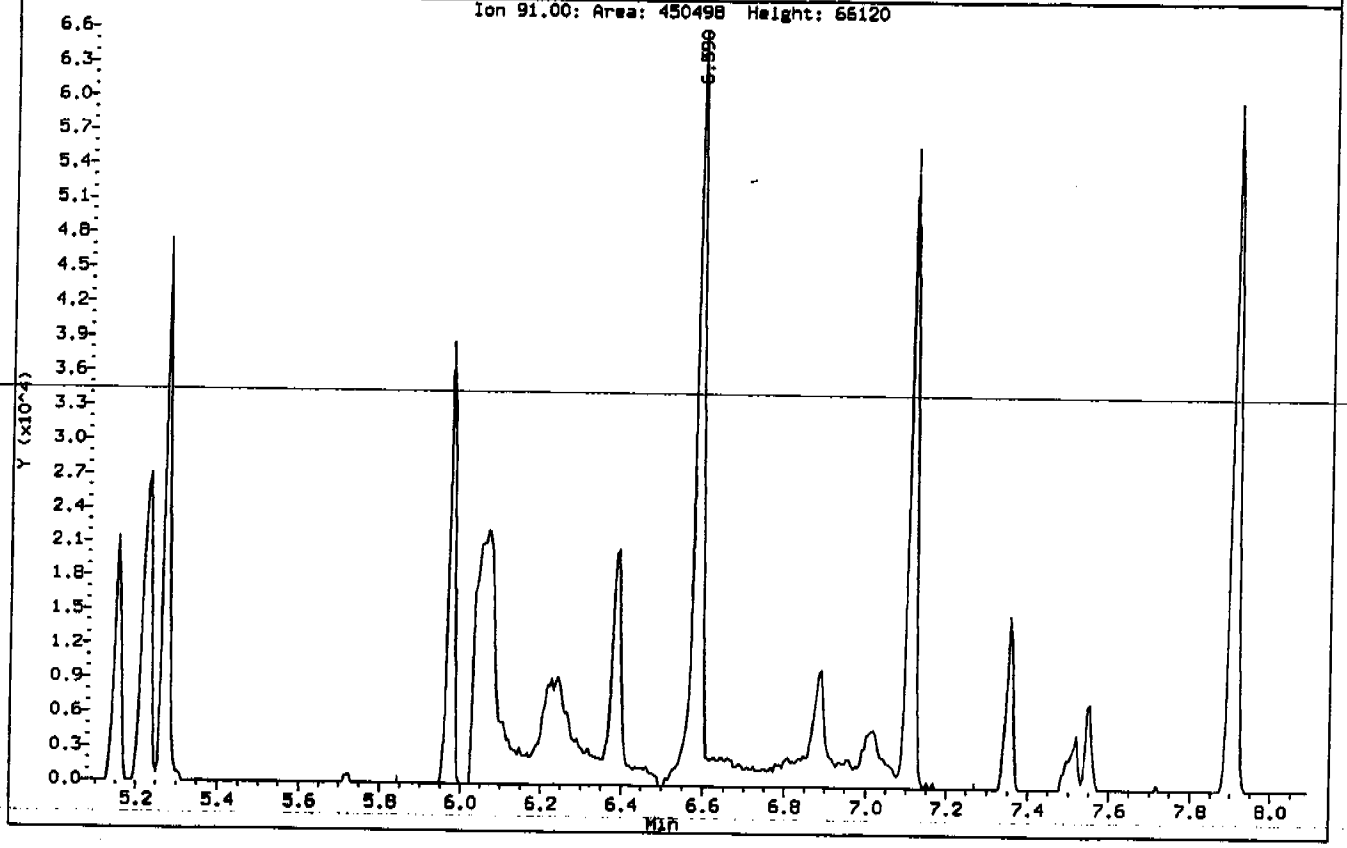




Data File: \\Slavr01\BNA_LAB\MSK.i\K050428A.B\KCAL2583.D
Injection Date: 28-APR-2005 13:59
Instrument: MSK.i
Client Sample ID: SSTD080APPIX

Compound: a,a-Dimethyl-phenethylamine
CAS Number: 122-09-8

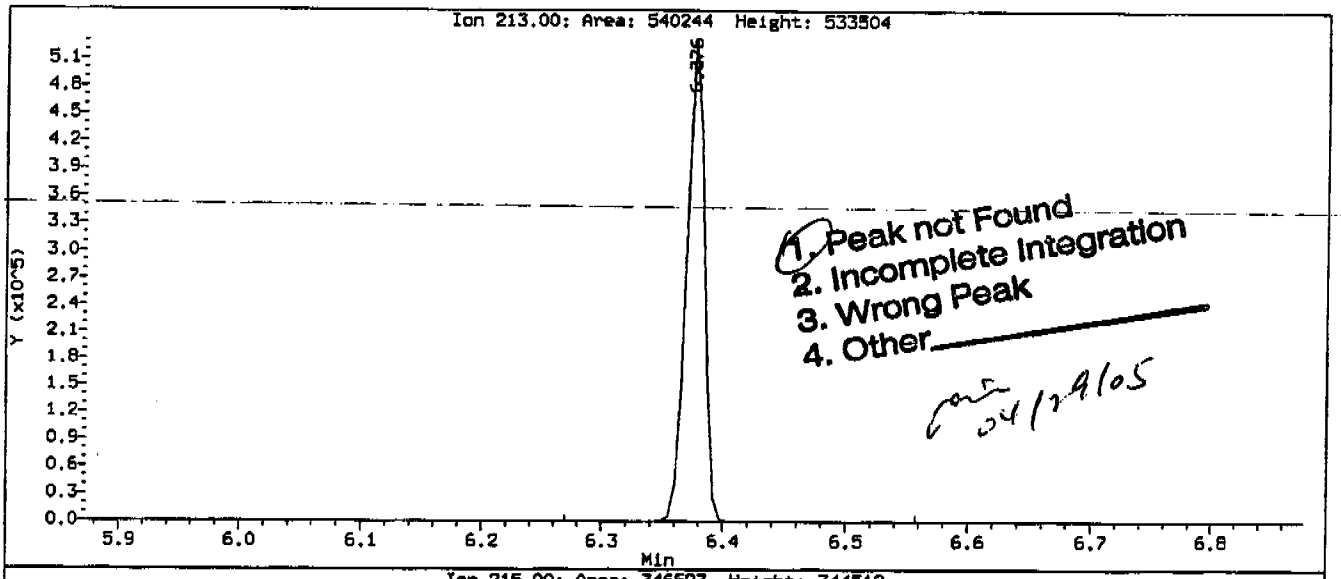




LOT# F5D220273

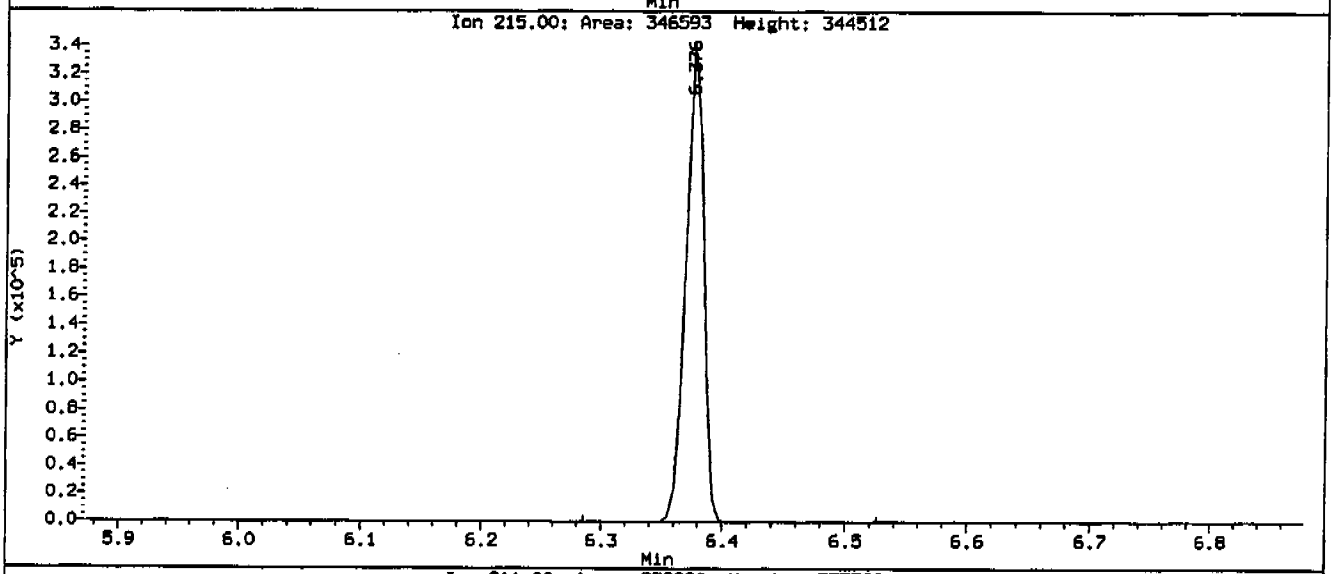
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2583.D
Injection Date: 28-APR-2005 13:59
Instrument: MSK.i
Client Sample ID: SSTD080APPIX

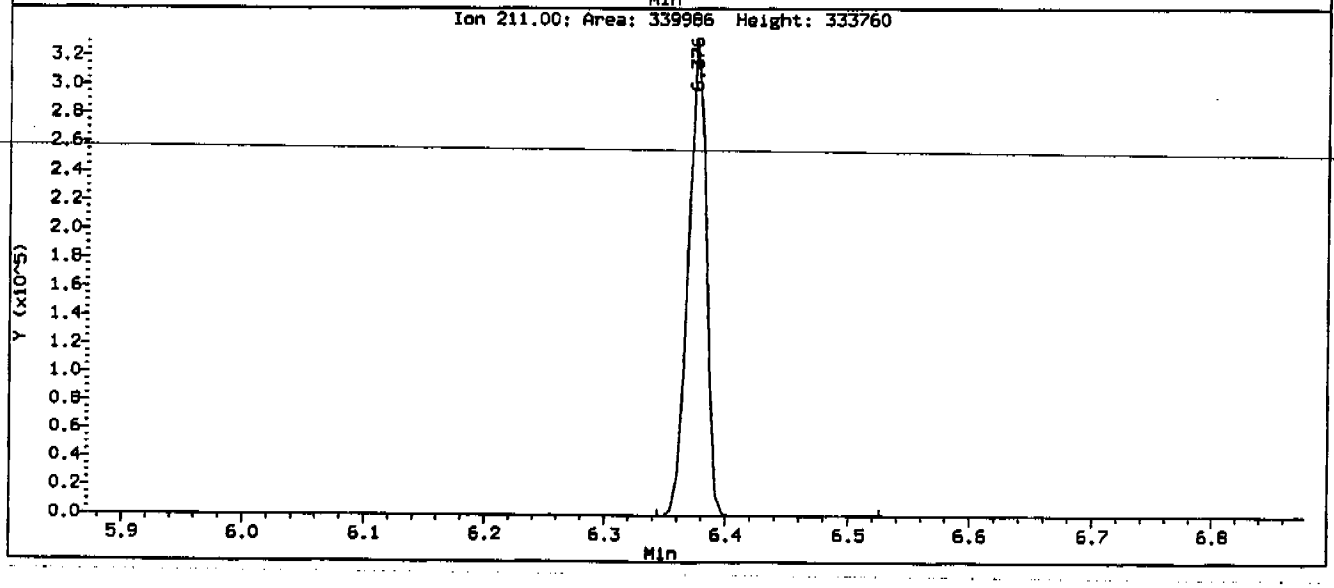
Compound: Hexachloropropene
CAS Number: 1888-71-7



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

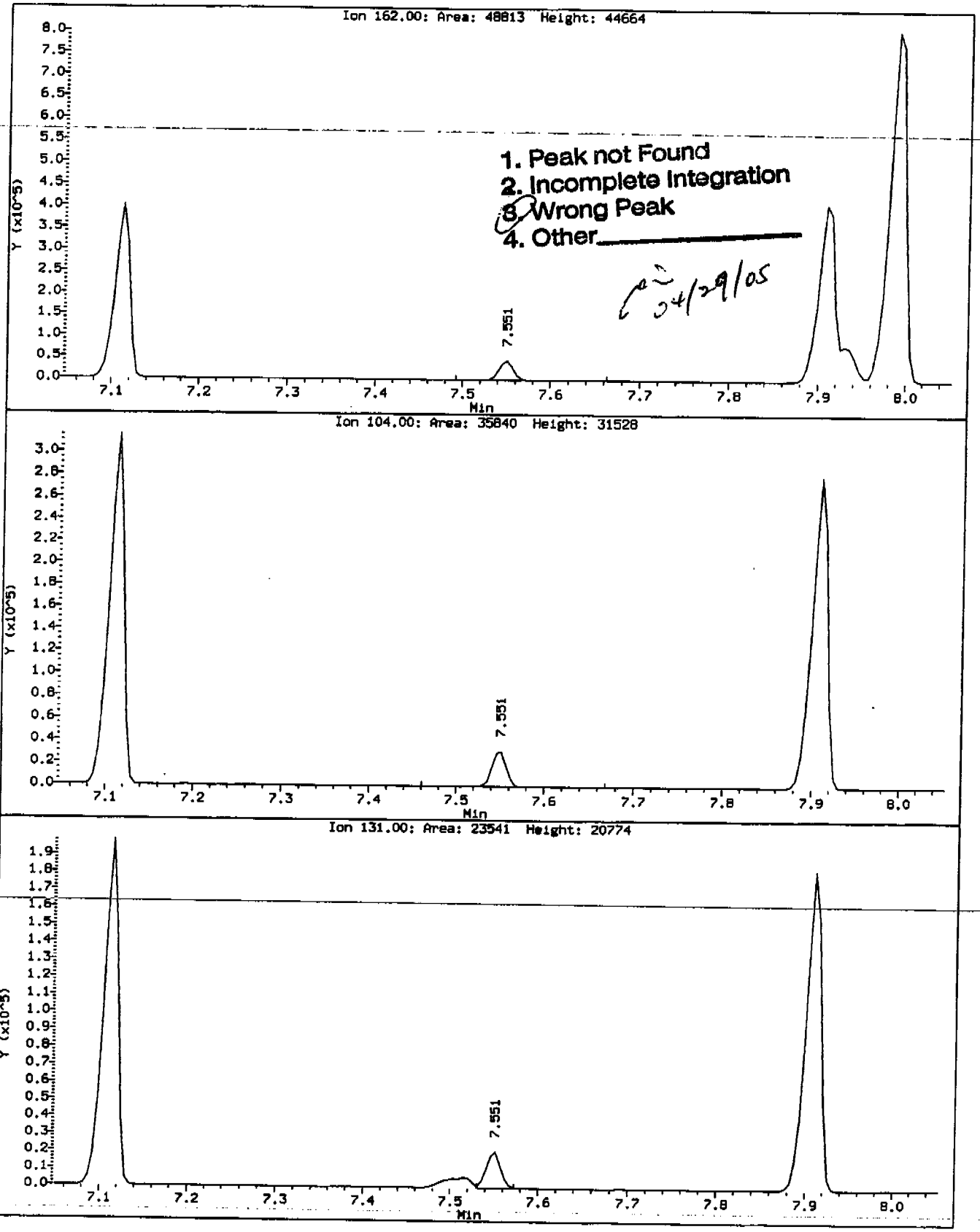
04/29/05





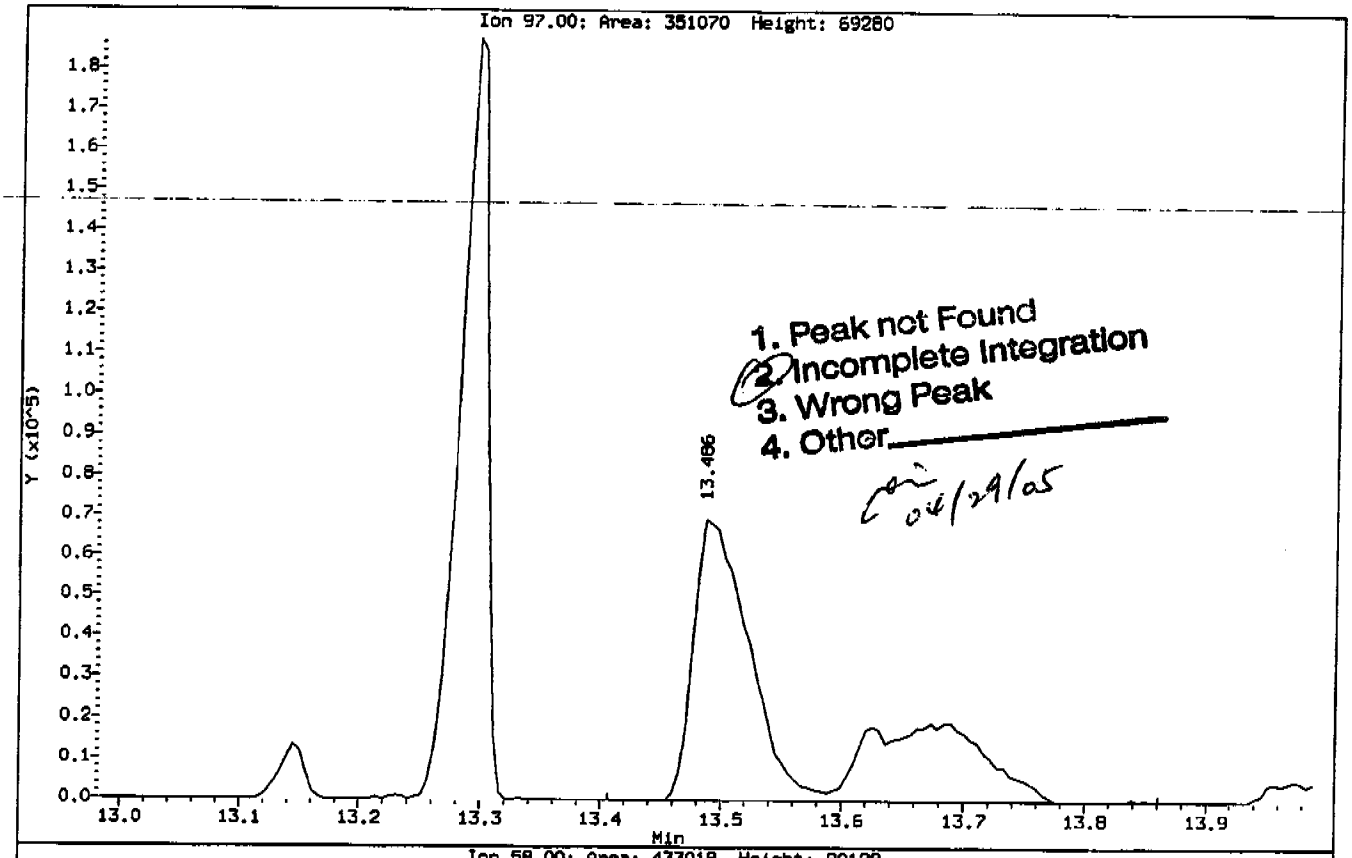
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2583.D
Injection Date: 28-APR-2005 13:59
Instrument: MSK.i
Client Sample ID: SSTD080APPIX

Compound: cis-Isosafrole
CAS Number: 120-58-1



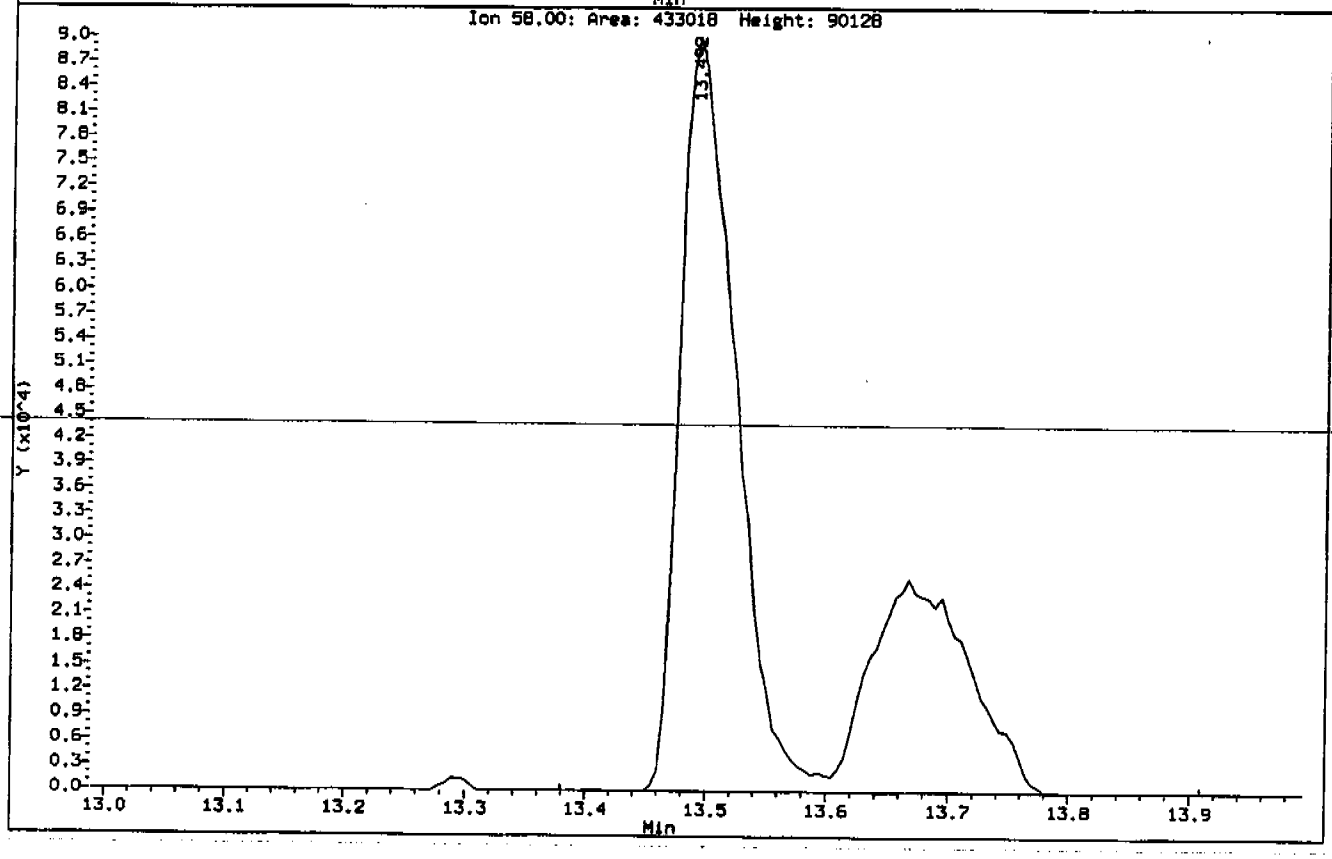
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2583.D
Injection Date: 28-APR-2005 13:59
Instrument: MSK.i
Client Sample ID: SSTD080APPIX

Compound: Methapyrilene
CAS Number: 91-80-5



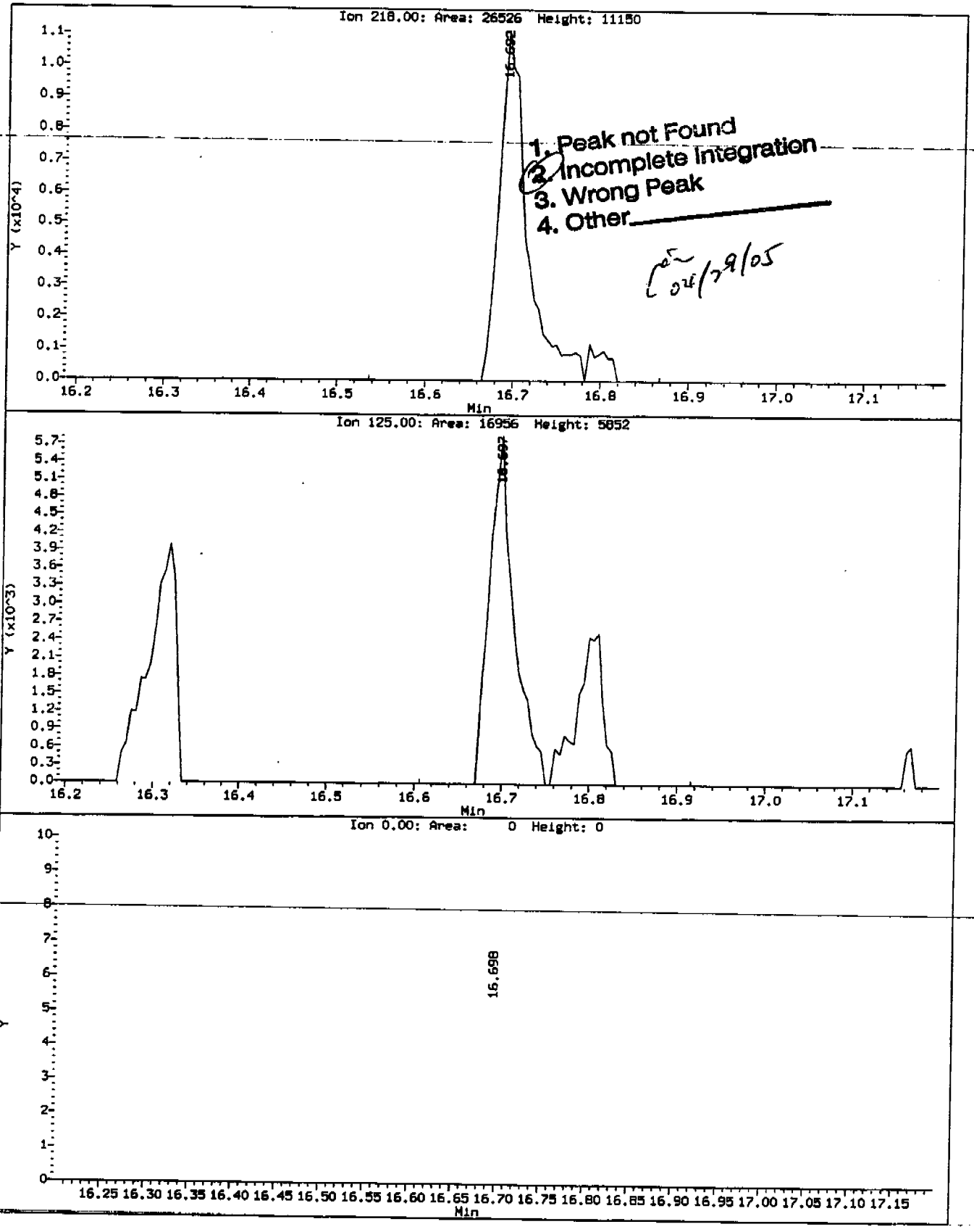
1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

04/29/05



Data File: \\Slavr01\BNA_LAB\MSK.i\K050428A.B\KCAL2583.D
Injection Date: 28-APR-2005 13:59
Instrument: MSK.i
Client Sample ID: SSTD080APPIX

Compound: Famphur
CAS Number: 52-85-7



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other _____

[illegible] 04/29/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2584.D
Report Date: 29-Apr-2005 08:43

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2584.D
Lab Smp Id: SSTD020APPIX Client Smp ID: SSTD020APPIX
Inj Date : 28-APR-2005 14:33
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD020APPIX
Misc Info : SV0184-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Meth Date : 29-Apr-2005 08:42 hongs Quant Type: ISTD
Cal Date : 28-APR-2005 14:33 Cal File: KCAL2584.D
Als bottle: 8 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIX.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
7	2-Picoline	93	2.553	2.553	(0.553)	81734	20.0000	19.57
8	N-Nitrosomethylethylamine	88	2.735	2.735	(0.593)	37774	20.0000	20.12(M)
9	Methyl methanesulfonate	80	3.098	3.098	(0.671)	27281	20.0000	19.02
12	N-Nitrosodiethylamine	102	3.488	3.488	(0.756)	41490	20.0000	18.73
13	Ethyl Methanesulfonate	79	3.862	3.862	(0.837)	73348	20.0000	19.46
18	Pentachloroethane	117	4.273	4.273	(0.926)	33542	20.0000	19.03
* 22	1,4-Dichlorobenzene-d4	152	4.615	4.615	(1.000)	132745	40.0000	
30	Acetophenone	105	5.155	5.155	(0.832)	133053	20.0000	18.92
31	N-Nitrosopyrrolidine	100	5.171	5.171	(0.834)	43456	20.0000	18.96
33	N-Nitrosomorpholine	116	5.197	5.197	(0.839)	18421	20.0000	18.16
34	O-Toluidine	106	5.219	5.219	(0.842)	134064	20.0000	18.26
38	N-Nitrosopiperidine	114	5.550	5.550	(0.896)	40721	20.0000	19.24
43	o,o,o-Triethyl-Phosphorothioa	198	5.977	5.977	(0.965)	53818	20.0000	18.46
* 48	Naphthalene-d8	136	6.196	6.196	(1.000)	476866	40.0000	
46	a,a-Dimethyl-phenethylamine	58	6.581	6.581	(1.062)	184361	20.0000	20.34(M)
52	2,6-Dichlorophenol	162	6.378	6.378	(1.029)	61609	20.0000	18.30
53	Hexachloropropene	213	6.383	6.383	(1.030)	79579	20.0000	19.03(M)
55	Benzothiazole	135	6.586	6.586	(1.063)	115955	20.0000	18.66
58	p-Phenylenediamine	108	6.869	6.869	(1.109)	68841	20.0000	20.53
57	n-Nitrosodi-n-butylamine	84	6.869	6.869	(1.109)	71767	20.0000	18.89
61	Safrole	162	7.115	7.115	(1.148)	69479	20.0000	19.34

5/4/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
65	1,2,4,5-Tetrachlorobenzene	216	7.510	7.510	(0.844)	186190	20.0000	18.23
64	cis-Isosafrole	162	7.559	7.559	(0.849)	7963	20.0000	20.21(M)
70	trans-Isosafrole	162	7.906	7.906	(0.888)	76191	20.0000	17.73
74	1,4-Naphthoquinone	158	8.269	8.269	(0.929)	53100	20.0000	29.56
75	1,4-Dinitrobenzene	168	8.435	8.435	(1.361)	28885	20.0000	19.92
77	1,3-Dinitrobenzene	168	8.622	8.622	(0.969)	32427	20.0000	20.12
* 82	Acenaphthene-d10	164	8.899	8.899	(1.000)	281668	40.0000	
87	Pentachlorobenzene	250	9.273	9.273	(1.042)	93864	20.0000	18.92
89	1-Naphthylamine	143	9.407	9.407	(1.057)	147169	20.0000	19.20
90	2-Naphthylamine	143	9.540	9.540	(1.072)	133074	20.0000	19.18
92	2,3,4,6-Tetrachlorophenol	232	9.594	9.594	(1.078)	45577	20.0000	18.15
96	Thionazin	107	10.000	10.000	(1.124)	36425	20.0000	19.29
97	5-Nitro-o-toluidine	152	10.005	10.005	(0.865)	51440	20.0000	19.59
101	tri-n-butylphosphate	99	10.294	10.294	(1.157)	232419	20.0000	18.84
105	Sulfotepp	97	10.694	10.694	(0.925)	39009	20.0000	19.70
106	Diallate (peak 1)	86	10.764	10.764	(0.931)	75374	20.0000	19.19
108	Phorate	75	10.780	10.780	(0.932)	131374	20.0000	18.50
111	Diallate (peak 2)	86	10.908	10.908	(0.943)	16276	20.0000	19.44
107	1,3,5-Trinitrobenzene	213	10.865	10.865	(0.939)	25075	20.0000	20.72
110	Phenacetin	108	10.892	10.892	(0.942)	109395	20.0000	20.16
113	Dimethoate	87	11.132	11.132	(0.963)	74605	20.0000	23.51
116	4-Aminobiphenyl	169	11.314	11.314	(0.978)	176174	20.0000	18.02
115	tris(2-chloroethyl)phosphate	63	11.367	11.367	(0.983)	57727	20.0000	20.07
119	Pentachloronitrobenzene	237	11.528	11.528	(0.997)	33084	20.0000	19.64
118	Pronamide	173	11.576	11.576	(1.001)	96589	20.0000	19.71
* 121	Phenanthrene-d10	188	11.565	11.565	(1.000)	517629	40.0000	
123	Disulfoton	88	11.774	11.774	(1.018)	94837	20.0000	18.99
125	Dinoseb	211	11.811	11.811	(1.021)	59961	20.0000	20.04
128	Methyl Parathion	109	12.495	12.495	(1.080)	66269	20.0000	23.42
131	4-Nitroquinoline-1-oxide	190	13.216	13.216	(1.143)	20651	20.0000	19.87
130	Parathion	97	13.285	13.285	(1.149)	47136	20.0000	20.61
132	Methapyrilene	97	13.478	13.478	(1.165)	86566	20.0000	24.72(M)
133	Isodrin	193	13.627	13.627	(1.178)	35352	20.0000	19.47
141	Kepone	272	14.781	14.781	(0.884)	1123	20.0000	14.94
140	Aramite (peak 1)	185	14.867	14.867	(0.889)	18807	20.0000	21.78
142	Aramite (peak 2)	185	15.022	15.022	(0.898)	27049	20.0000	20.61
143	p-(Dimethylamino)azobenzene	120	15.091	15.091	(0.902)	83312	20.0000	20.36
144	Chlorobenzilate	251	15.235	15.235	(0.911)	109981	20.0000	19.05
148	2-Acetylaminofluorene	181	16.282	16.282	(0.973)	127850	20.0000	19.80
149	Famphur	218	16.688	16.688	(0.998)	8362	20.0000	35.35(M)
* 153	Chrysene-d12	240	16.726	16.726	(1.000)	495300	40.0000	
151	4,4'-Methylenebis(2-chloroani	266	16.800	16.800	(1.004)	27789	20.0000	19.52
162	7,12-Dimethylbenz(a)anthracen	256	18.740	18.740	(0.969)	149973	20.0000	19.06
163	Hexachlorophene	196	19.044	19.044	(0.985)	1981	20.0000	7.259
* 166	Perylene-d12	264	19.338	19.338	(1.000)	426799	40.0000	
169	3-methylcholanthrene	268	19.872	19.872	(1.028)	145954	20.0000	18.18

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2584.D
Report Date: 29-Apr-2005 08:43

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

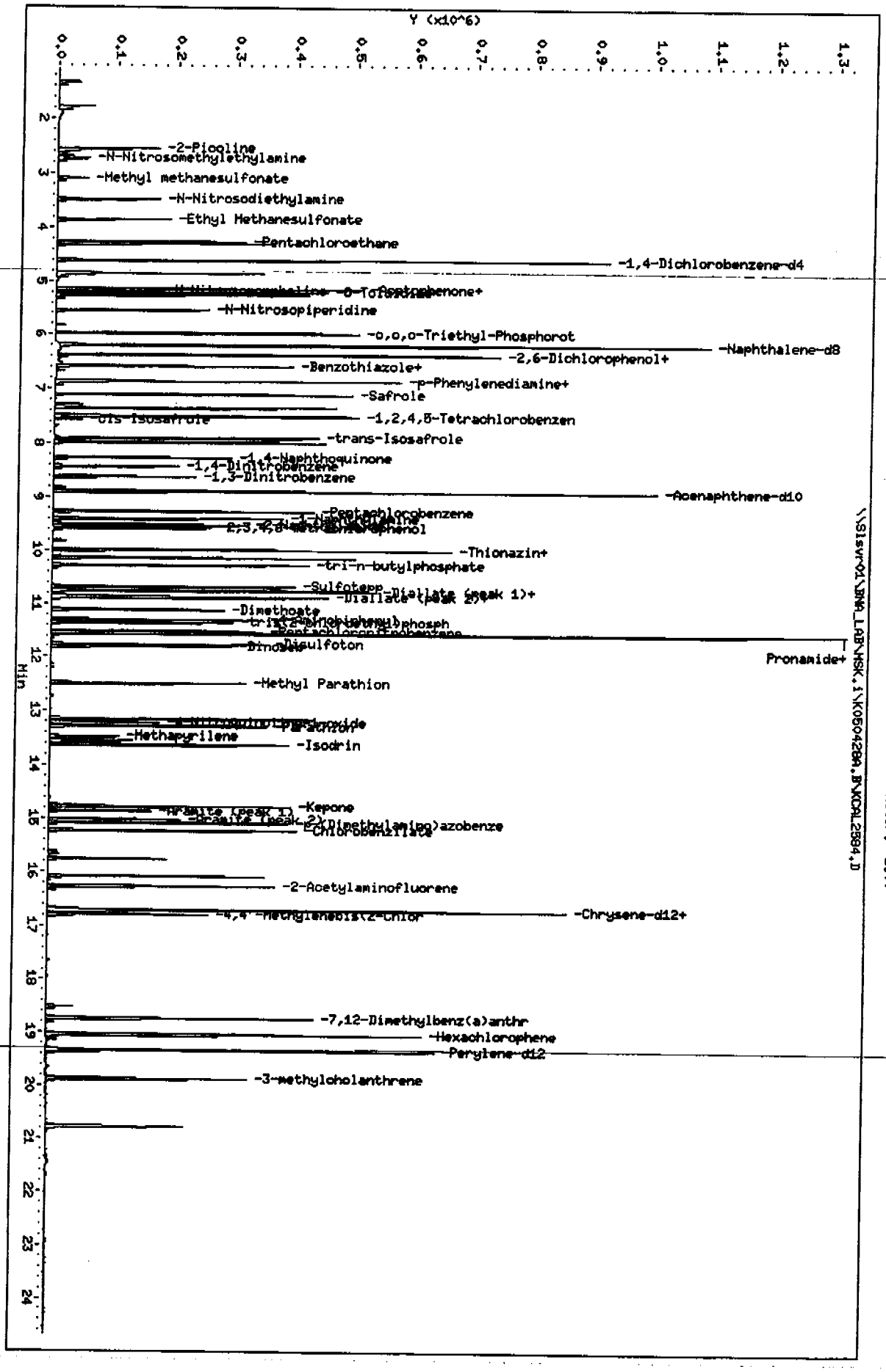
Instrument ID: MSK.i
Lab File ID: KCAL2584.D
Lab Smp Id: SSTD020APPIX
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Misc Info: SV0184-05

Calibration Date: 28-APR-2005
Calibration Time: 11:41
Client Smp ID: SSTD020APPIX
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	162145	81073	324290	132745	-18.13
48 Naphthalene-d8	535939	267970	1071878	476866	-11.02
82 Acenaphthene-d10	307602	153801	615204	281668	-8.43
121 Phenanthrene-d10	574409	287205	1148818	517629	-9.88
153 Chrysene-d12	519397	259699	1038794	495300	-4.64
166 Perylene-d12	440492	220246	880984	426799	-3.11

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.62	4.12	5.12	4.62	-0.09
48 Naphthalene-d8	6.21	5.71	6.71	6.20	-0.15
82 Acenaphthene-d10	8.91	8.41	9.41	8.90	-0.10
121 Phenanthrene-d10	11.58	11.08	12.08	11.57	-0.13
153 Chrysene-d12	16.74	16.24	17.24	16.73	-0.06
166 Perylene-d12	19.35	18.85	19.85	19.34	-0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

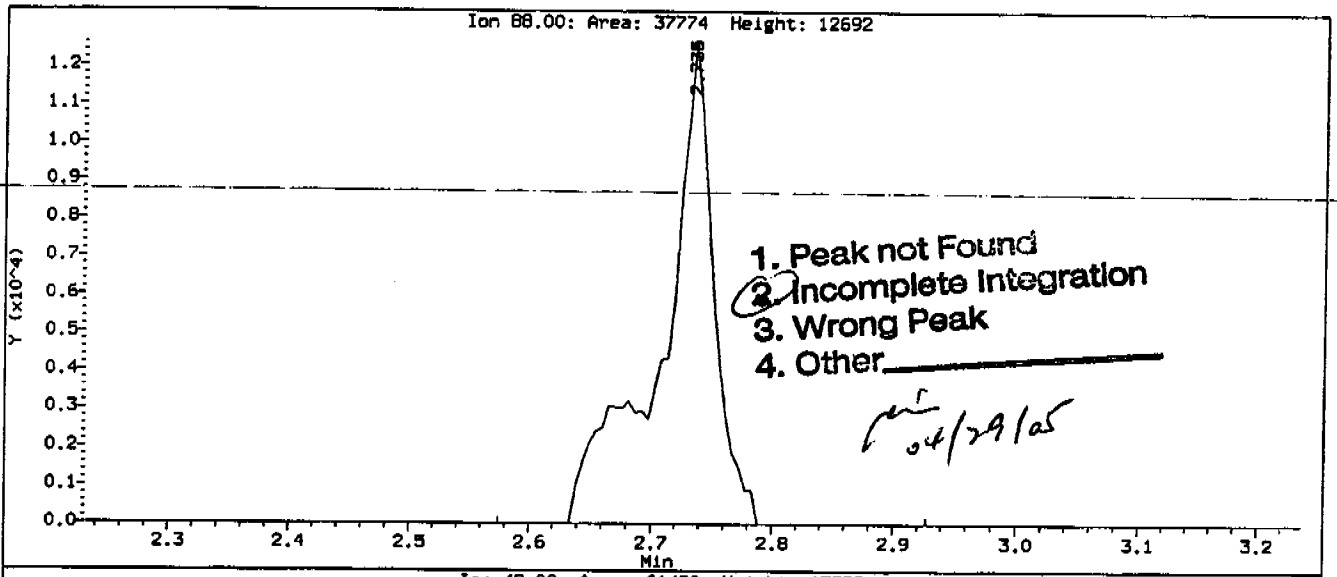


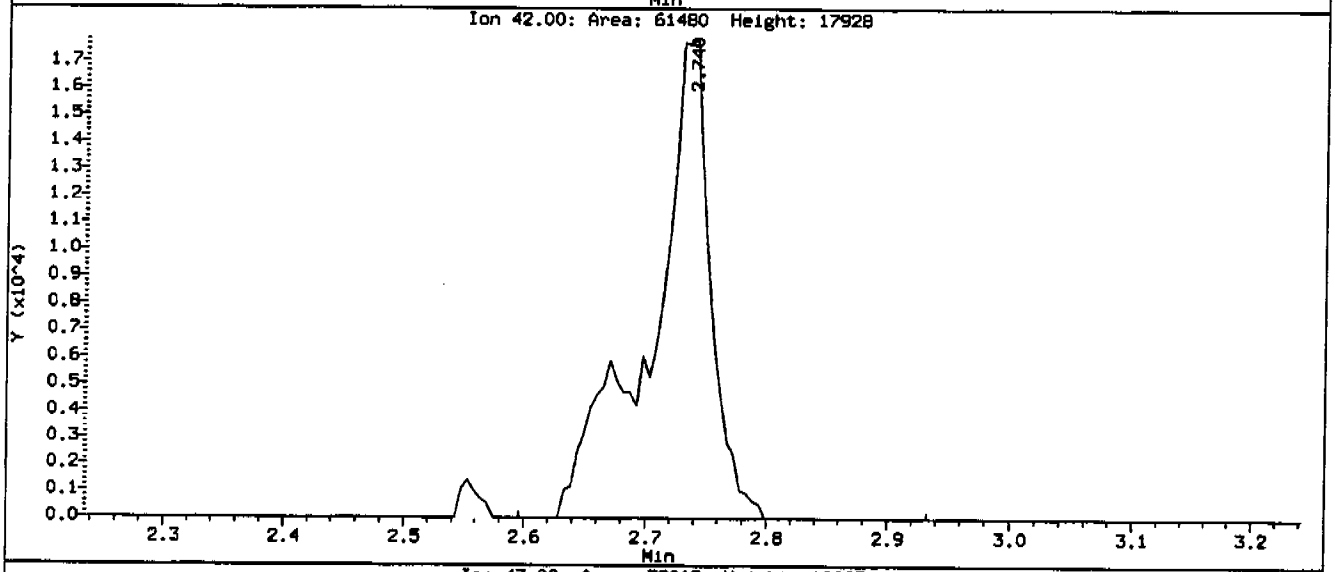
Data File: \\Sisvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2584.D
Date : 28-APR-2005 14:33
Client ID: SSTD020APPIX
Sample Info: SSTD020APPIX
Volume Injected (uL): 1.0
Column phase:

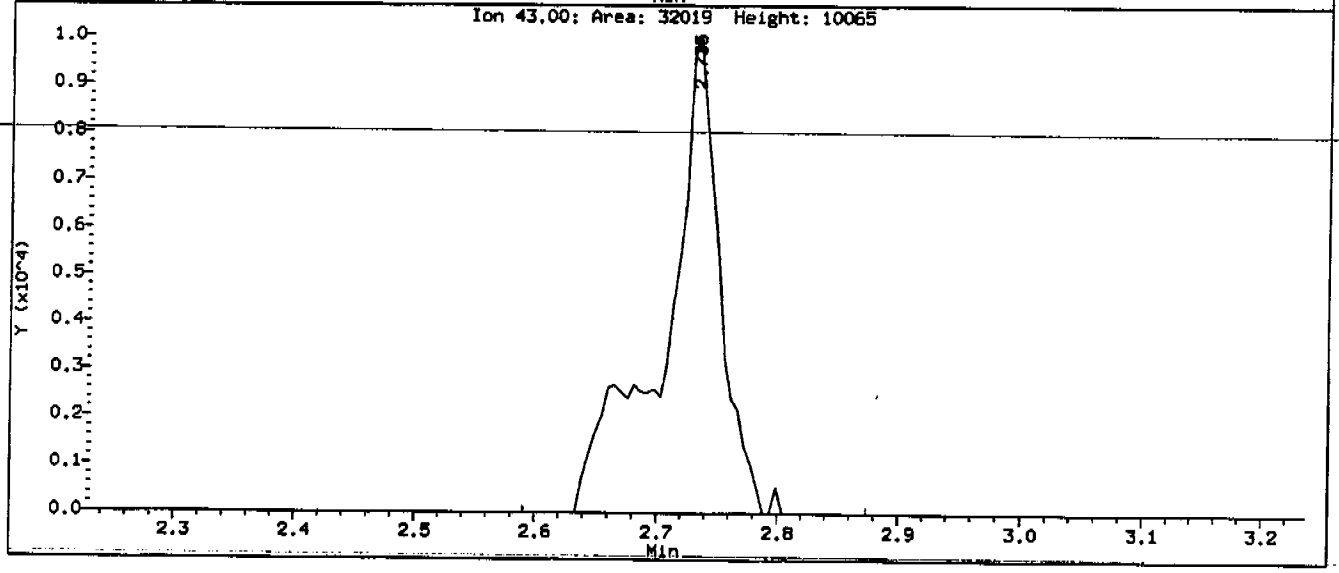
Instrument: MSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2584.D
Injection Date: 28-APR-2005 14:33
Instrument: MSK.i
Client Sample ID: SSTD020APPIX

Compound: N-Nitrosomethylethylamine
CAS Number: 10595-95-6



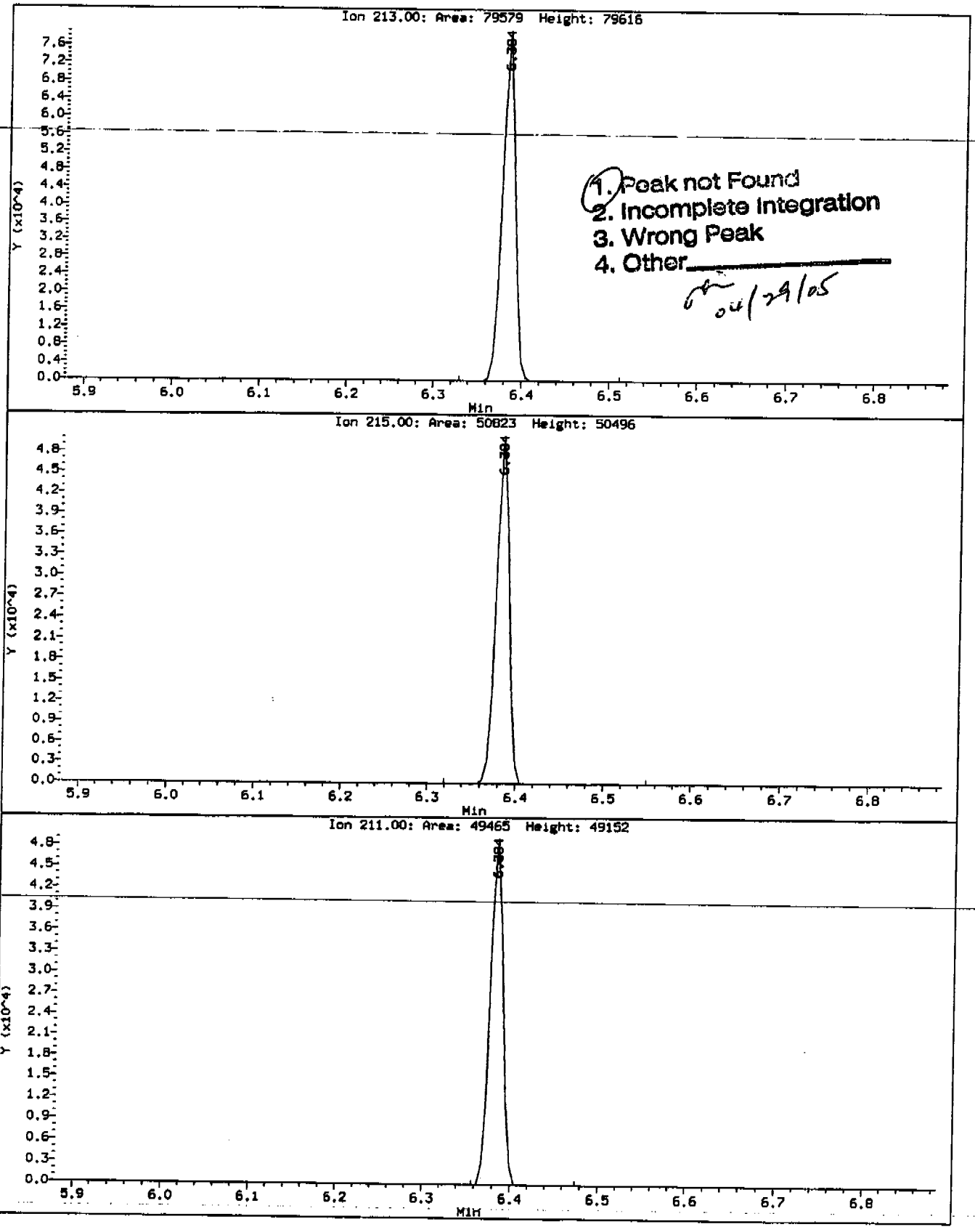




LOT# F5D220273

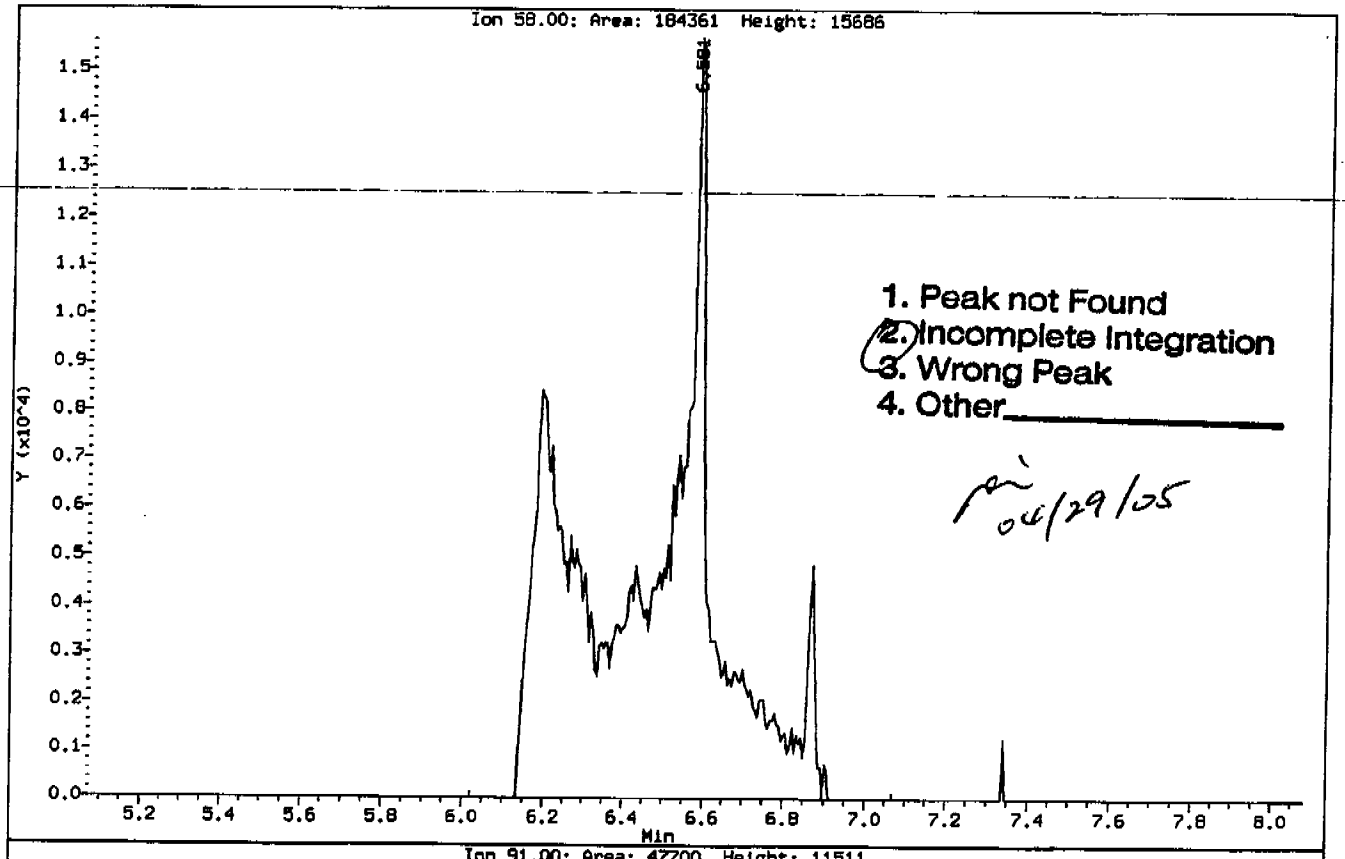
Data File: \\Slavr01\BNA_LAB\MSK.i\K050428A.B\KCAL2584.D
Injection Date: 28-APR-2005 14:33
Instrument: MSK.i
Client Sample ID: SSTD020APPIX

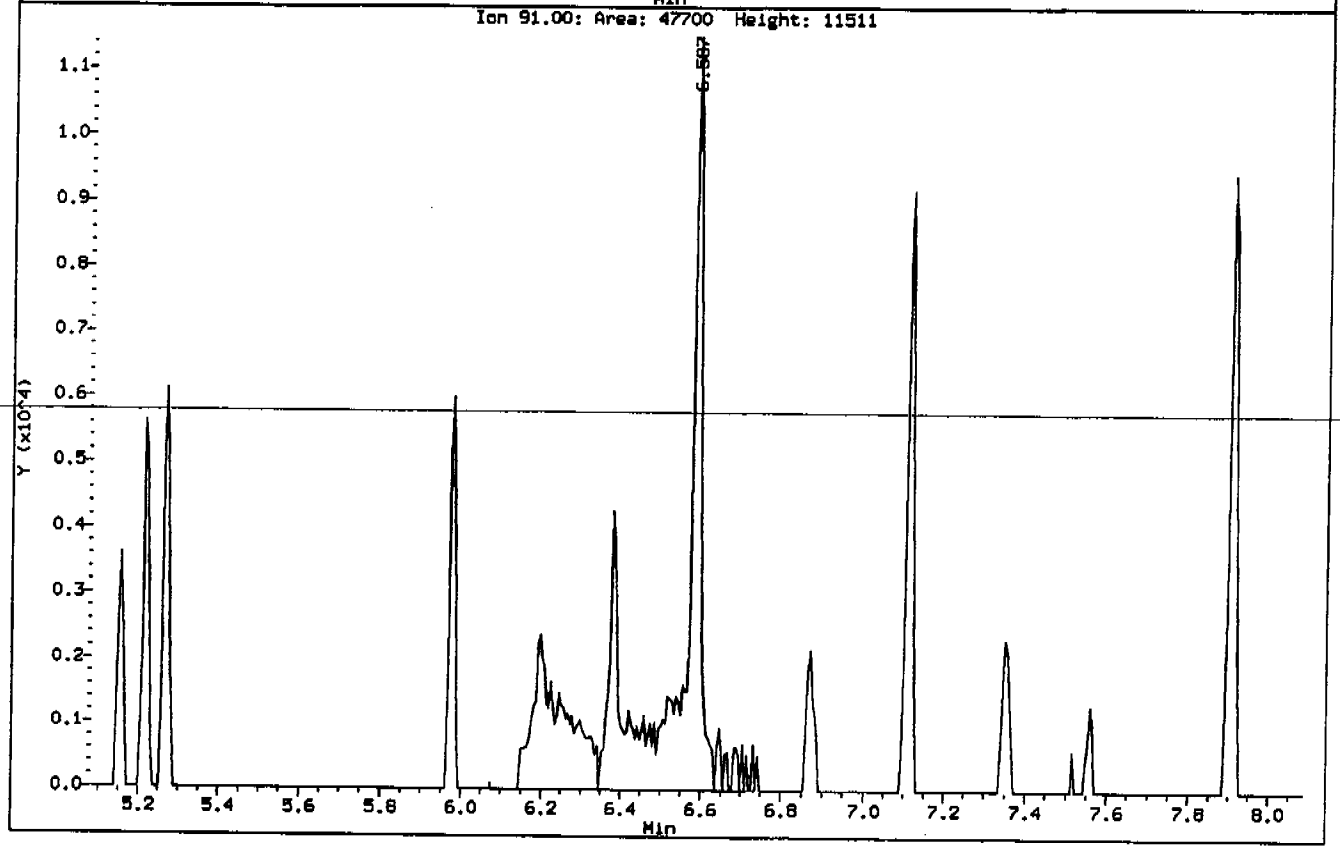
Compound: Hexachloropropene
CAS Number: 1888-71-7



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2584.D
Injection Date: 28-APR-2005 14:33
Instrument: MSK.i
Client Sample ID: SSTD020APPIX

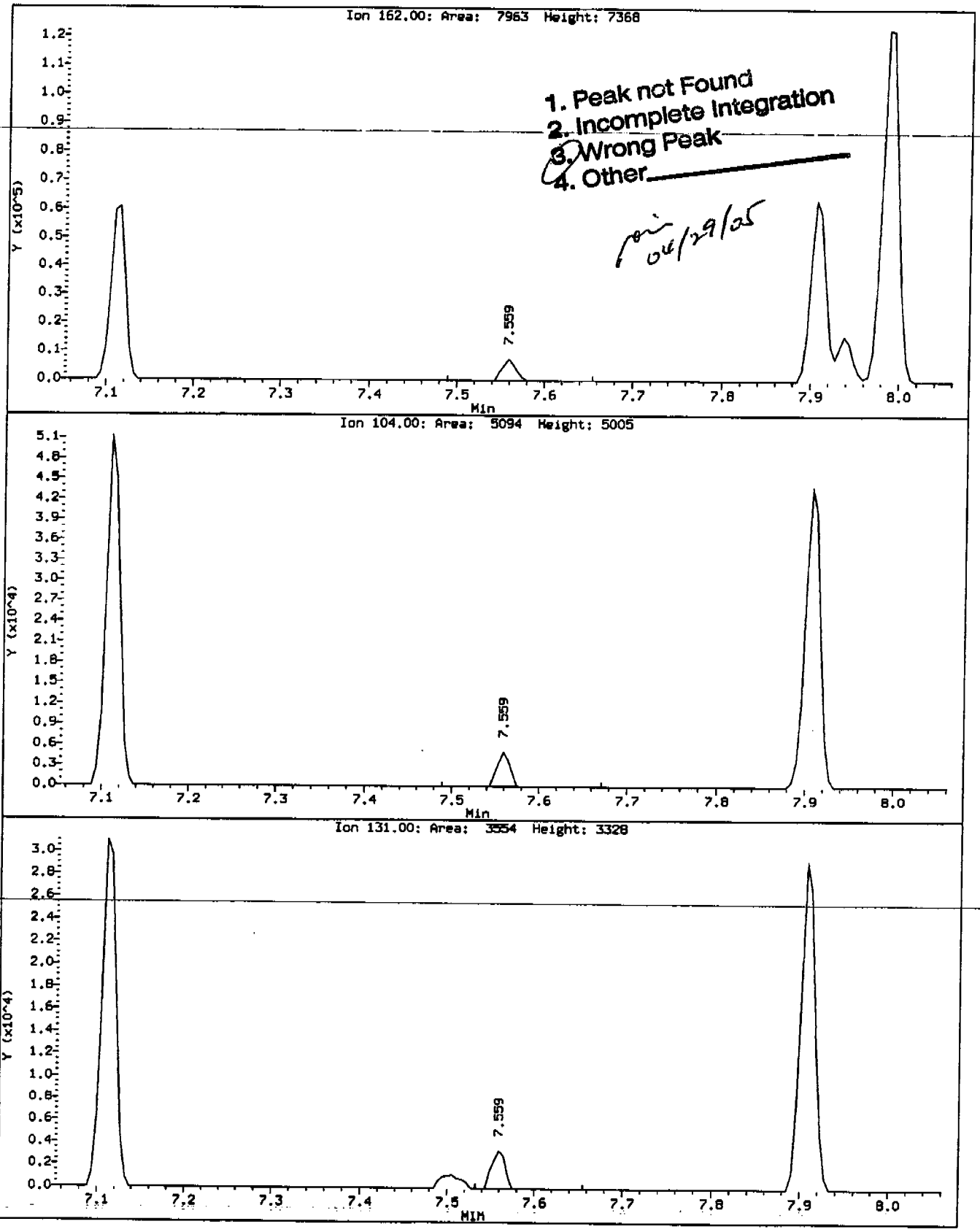
Compound: a,a-Dimethyl-phenethylamine
CAS Number: 122-09-8





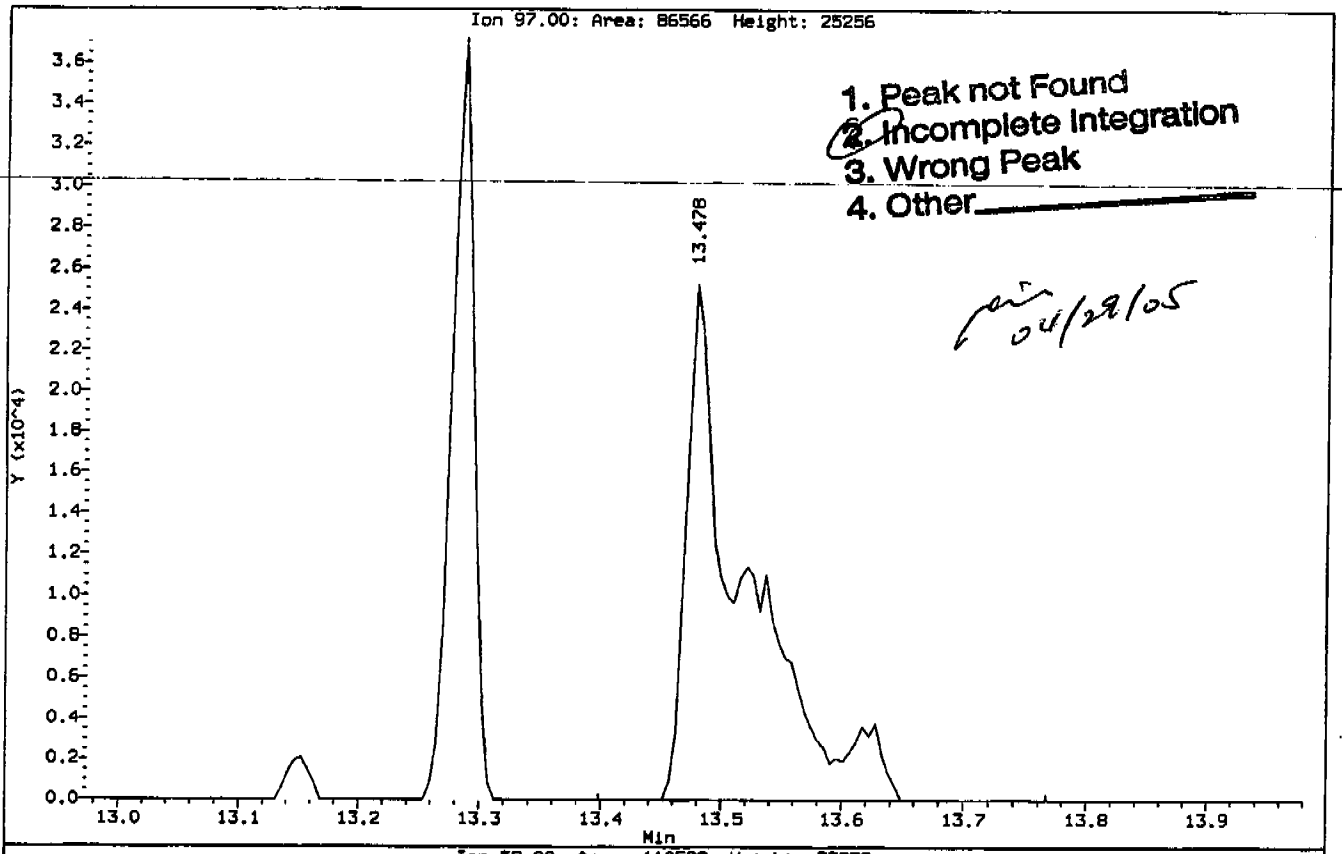
Data File: \\Slevr01\BNA_LAB\MSK.i\K050428A.B\KCAL2584.D
Injection Date: 28-APR-2005 14:33
Instrument: MSK.i
Client Sample ID: SSTD020APPIX

Compound: cis-Isosafrole
CAS Number: 120-58-1



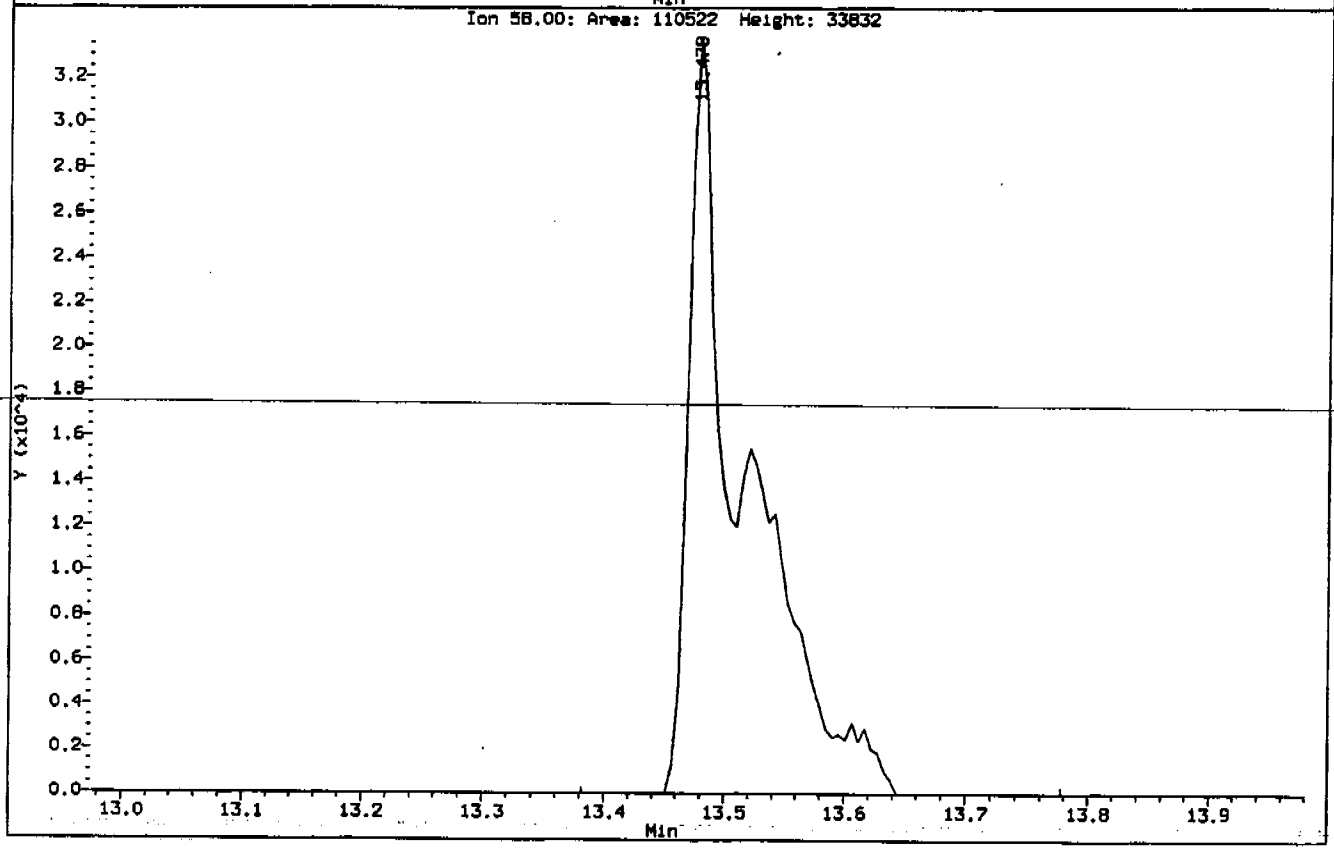
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2584.D
Injection Date: 28-APR-2005 14:33
Instrument: MSK.i
Client Sample ID: SSTD020APPIX

Compound: Methapyrilene
CAS Number: 91-80-5



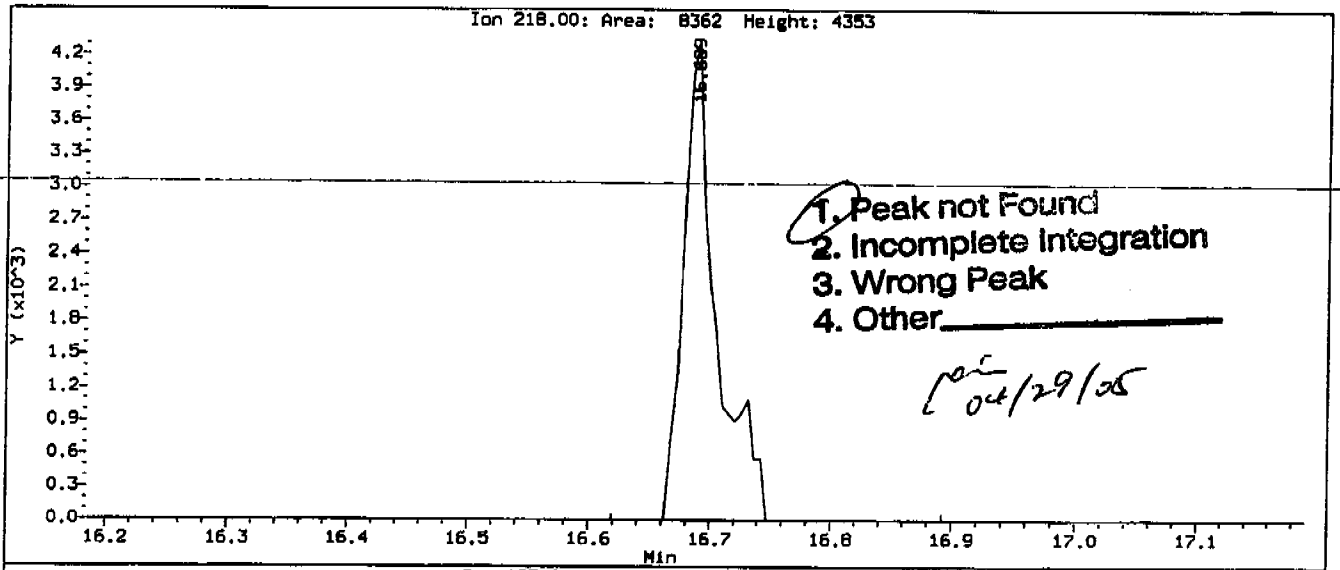
1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

04/29/05



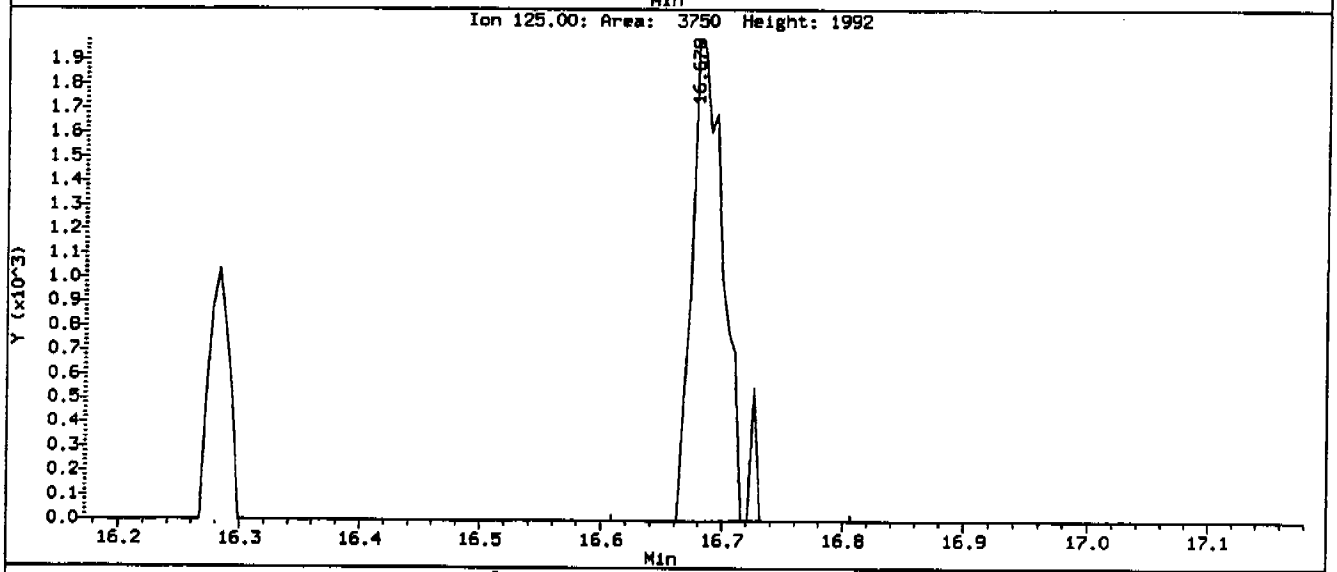
Data File: \\Slavr01\BNA_LAB\MSK.i\K050428A.B\KCAL2584.D
Injection Date: 28-APR-2005 14:33
Instrument: MSK.i
Client Sample ID: SSTD020APPIX

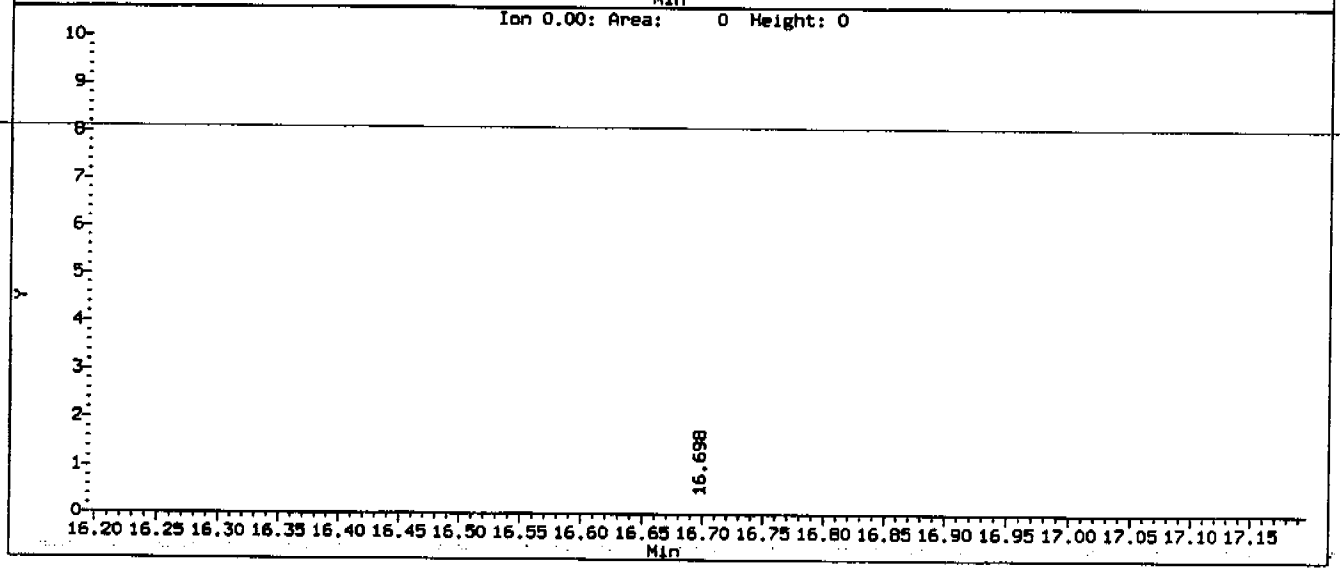
Compound: Famphur
CAS Number: 52-85-7



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

[illegible] 04/29/05





Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2585.D
Report Date: 29-Apr-2005 08:43

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2585.D
Lab Smp Id: SSTD010APPIX Client Smp ID: SSTD010APPIX
Inj Date : 28-APR-2005 15:08
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD010APPIX
Misc Info : SV0183-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Meth Date : 29-Apr-2005 08:43 hongs Quant Type: ISTD
Cal Date : 28-APR-2005 15:08 Cal File: KCAL2585.D
Als bottle: 9 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIX.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	7 2-Picoline	93	2.563	2.563	(0.555)	41702	10.0000	9.476(a)
	8 N-Nitrosomethylethylamine	88	2.740	2.740	(0.594)	20216	10.0000	10.22(M)
	9 Methyl methanesulfonate	80	3.103	3.103	(0.672)	14394	10.0000	9.521
	12 N-Nitrosodiethylamine	102	3.487	3.487	(0.756)	22465	10.0000	9.622
	13 Ethyl Methanesulfonate	79	3.861	3.861	(0.837)	37570	10.0000	9.455
	18 Pentachloroethane	117	4.273	4.273	(0.926)	17038	10.0000	9.173
*	22 1,4-Dichlorobenzene-d4	152	4.615	4.615	(1.000)	139914	40.0000	
	30 Acetophenone	105	5.149	5.149	(0.831)	69882	10.0000	9.375
	31 N-Nitrosopyrrolidine	100	5.159	5.159	(0.833)	23217	10.0000	9.558
	33 N-Nitrosomorpholine	116	5.192	5.192	(0.838)	9662	10.0000	8.982
	34 O-Toluidine	106	5.213	5.213	(0.841)	70372	10.0000	9.043
	38 N-Nitrosopiperidine	114	5.549	5.549	(0.896)	21337	10.0000	9.510
	43 o,o,o-Triethyl-Phosphorothioa	198	5.971	5.971	(0.964)	28433	10.0000	9.197
*	48 Naphthalene-d8	136	6.196	6.196	(1.000)	505544	40.0000	
	46 a,a-Dimethyl-phenethylamine	58	6.436	6.436	(1.039)	96444	10.0000	10.04(M)
	52 2,6-Dichlorophenol	162	6.377	6.377	(1.029)	30702	10.0000	8.603
	53 Hexachloropropene	213	6.377	6.377	(1.029)	41102	10.0000	9.269(M)
	55 Benzothiazole	135	6.580	6.580	(1.062)	58740	10.0000	8.916(a)
	58 p-Phenylenediamine	108	6.864	6.864	(1.108)	37382	10.0000	10.51
	57 n-Nitrosodi-n-butylamine	84	6.864	6.864	(1.108)	37600	10.0000	9.337
	61 Safrole	162	7.109	7.109	(1.147)	35341	10.0000	9.277

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
65	1,2,4,5-Tetrachlorobenzene	216	7.505	7.505	(0.844)	98617	10.0000	9.053
64	cis-Isosafrole	162	7.553	7.553	(0.849)	4377	10.0000	10.41
70	trans-Isosafrole	162	7.900	7.900	(0.888)	40689	10.0000	8.878
74	1,4-Naphthoquinone	158	8.263	8.263	(0.929)	27713	10.0000	14.46
75	1,4-Dinitrobenzene	168	8.424	8.424	(1.360)	15633	10.0000	10.17
77	1,3-Dinitrobenzene	168	8.616	8.616	(0.969)	17237	10.0000	10.03
* 82	Acenaphthene-d10	164	8.894	8.894	(1.000)	300491	40.0000	
87	Pentachlorobenzene	250	9.268	9.268	(1.042)	49290	10.0000	9.316
89	1-Naphthylamine	143	9.401	9.401	(1.057)	80074	10.0000	9.794
90	2-Naphthylamine	143	9.535	9.535	(1.072)	73897	10.0000	9.981
92	2,3,4,6-Tetrachlorophenol	232	9.588	9.588	(1.078)	21743	10.0000	8.116
96	Thionazin	107	9.989	9.989	(1.123)	18961	10.0000	9.412(a)
97	5-Nitro-o-toluidine	152	9.994	9.994	(0.865)	28198	10.0000	9.873
101	tri-n-butylphosphate	99	10.283	10.283	(1.156)	122515	10.0000	9.307
105	Sulfotepp	97	10.689	10.689	(0.925)	20173	10.0000	9.367
106	Diallate (peak 1)	86	10.758	10.758	(0.931)	39897	10.0000	9.340
108	Phorate	75	10.769	10.769	(0.932)	71003	10.0000	9.193
111	Diallate (peak 2)	86	10.902	10.902	(0.943)	8451	10.0000	9.279
107	1,3,5-Trinitrobenzene	213	10.865	10.865	(0.940)	12101	10.0000	9.192(a)
110	Phenacetin	108	10.876	10.876	(0.941)	58189	10.0000	9.860(a)
113	Dimethoate	87	11.116	11.116	(0.962)	40747	10.0000	11.81
116	4-Aminobiphenyl	169	11.303	11.303	(0.978)	94306	10.0000	8.866
115	tris(2-chloroethyl)phosphate	63	11.356	11.356	(0.982)	30567	10.0000	9.769
119	Pentachloronitrobenzene	237	11.522	11.522	(0.997)	17560	10.0000	9.584
118	Pronamide	173	11.565	11.565	(1.000)	52043	10.0000	9.762
* 121	Phenanthrene-d10	188	11.559	11.559	(1.000)	563013	40.0000	
123	Disulfoton	88	11.762	11.762	(1.018)	50823	10.0000	9.354
125	Dinoseb	211	11.805	11.805	(1.021)	28558	10.0000	8.773
128	Methyl Parathion	109	12.489	12.489	(1.080)	35573	10.0000	11.56
131	4-Nitroquinoline-1-oxide	190	13.205	13.205	(1.142)	9460	10.0000	8.367
130	Parathion	97	13.274	13.274	(1.148)	25722	10.0000	10.34
132	Methapyrilene	97	13.477	13.477	(1.166)	49062	10.0000	12.88(M)
133	Isodrin	193	13.616	13.616	(1.178)	18398	10.0000	9.317
141	Kepone	272	14.775	14.775	(0.884)	495	10.0000	5.875
140	Aramite (peak 1)	185	14.855	14.855	(0.888)	9551	10.0000	9.864
142	Aramite (peak 2)	185	15.010	15.010	(0.898)	14213	10.0000	9.660
143	p-(Dimethylamino)azobenzene	120	15.080	15.080	(0.902)	45427	10.0000	9.900
144	Chlorobenzilate	251	15.224	15.224	(0.911)	59272	10.0000	9.156
148	2-Acetylaminofluorene	181	16.271	16.271	(0.973)	69387	10.0000	9.586
149	Famphur	218	16.677	16.677	(0.997)	3050	10.0000	11.50(M)
* 153	Chrysene-d12	240	16.720	16.720	(1.000)	555393	40.0000	
151	4,4'-Methylenebis(2-Chloroani	266	16.795	16.795	(1.004)	14144	10.0000	8.860(a)
162	7,12-Dimethylbenz(a)anthracen	256	18.729	18.729	(0.969)	81942	10.0000	9.106
163	Hexachlorophene	196	19.033	19.033	(0.985)	725	10.0000	2.323(M)
* 166	Perylene-d12	264	19.332	19.332	(1.000)	488134	40.0000	
169	3-methylcholanthrene	268	19.861	19.861	(1.027)	83423	10.0000	9.085

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2585.D
Report Date: 29-Apr-2005 08:43

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

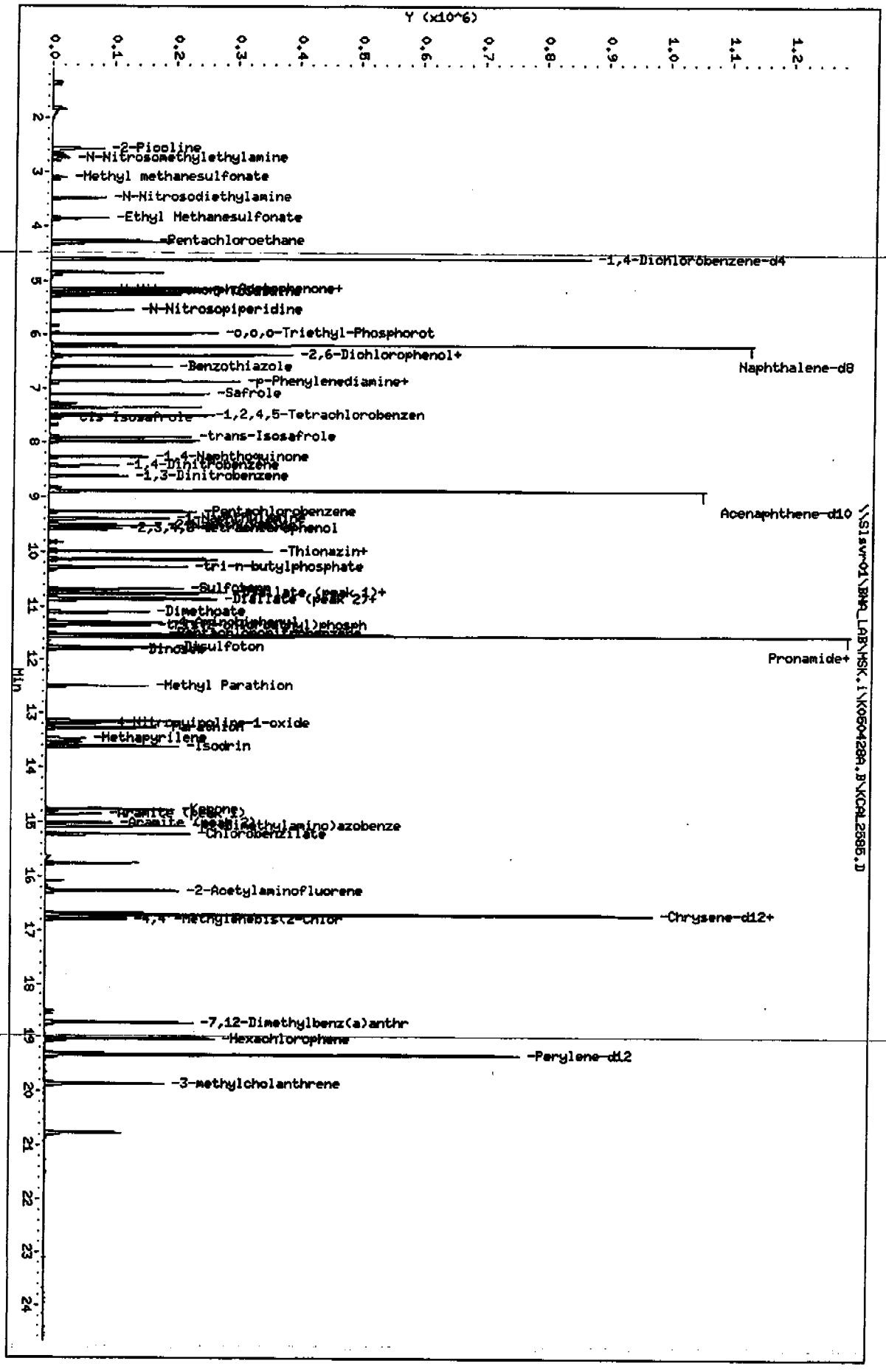
Instrument ID: MSK.i
Lab File ID: KCAL2585.D
Lab Smp Id: SSTD010APPIX
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Misc Info: SV0183-05

Calibration Date: 28-APR-2005
Calibration Time: 11:41
Client Smp ID: SSTD010APPIX
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	162145	81073	324290	139914	-13.71
48 Naphthalene-d8	535939	267970	1071878	505544	-5.67
82 Acenaphthene-d10	307602	153801	615204	300491	-2.31
121 Phenanthrene-d10	574409	287205	1148818	563013	-1.98
153 Chrysene-d12	519397	259699	1038794	555393	6.93
166 Perylene-d12	440492	220246	880984	488134	10.82

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.62	4.12	5.12	4.62	-0.10
48 Naphthalene-d8	6.21	5.71	6.71	6.20	-0.16
82 Acenaphthene-d10	8.91	8.41	9.41	8.89	-0.17
121 Phenanthrene-d10	11.58	11.08	12.08	11.56	-0.18
153 Chrysene-d12	16.74	16.24	17.24	16.72	-0.09
166 Perylene-d12	19.35	18.85	19.85	19.33	-0.08

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.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1.1
1.2
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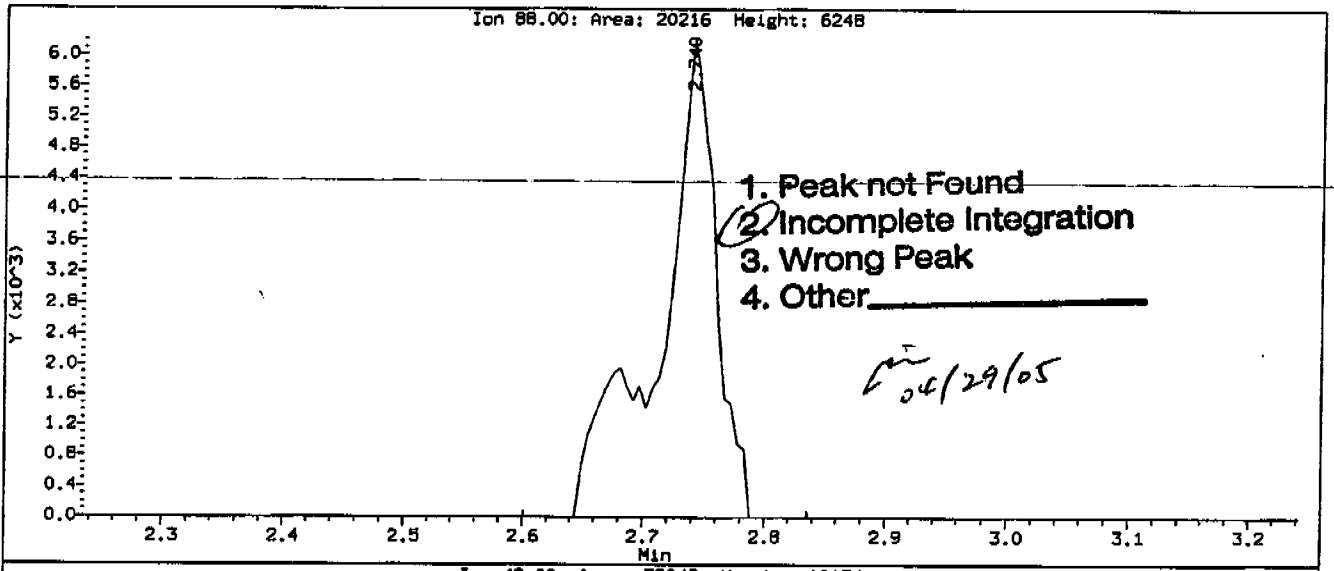
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
-2-Picoline
-N-Nitrosomethylethylamine
-Methyl methanesulfonate
-N-Nitrosodiethylamine
-Ethyl Methanesulfonate
-Pentachloroethane
-1,4-Dichlorobenzene-d4
-N-Nitrosopiperidine
-o,o,o-Triethyl-Phosphorot
-2,6-Dichlorophenol+
-Benzothiazole
-p-Phenylenediamine+
-Safrole
-1,2,4,5-Tetrachlorobenzen
-trans-Isosafrole
-1,4-Dinitrobenzene
-1,3-Dinitrobenzene
Naphthalene-d8
Acenaphthene-d10
-Thionazin+
-tri-n-butylphosphate
-Dimethoate
-Disulfoton
Pronamide+
-Methyl Parathion
-Isodrin
-Chlorobenzilate
-2-Acetylaminofluorene
-Chrysene-d12+
-7,12-Dimethylbenz(a)anthr
-Perylene-d12
-3-methylcholanthrene
Data File: \\Slsvr01\BNA_LAB\HSK.i\K050428A.B\KCAL2586.D
Date : 28-APR-2006 15:08
Client ID: SSTD010APPIX
Sample Info: SSTD010APPIX
Volume Injected (uL): 1.0
Column phase:
\\Slsvr01\BNA_LAB\HSK.i\K050428A.B\KCAL2586.D
Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

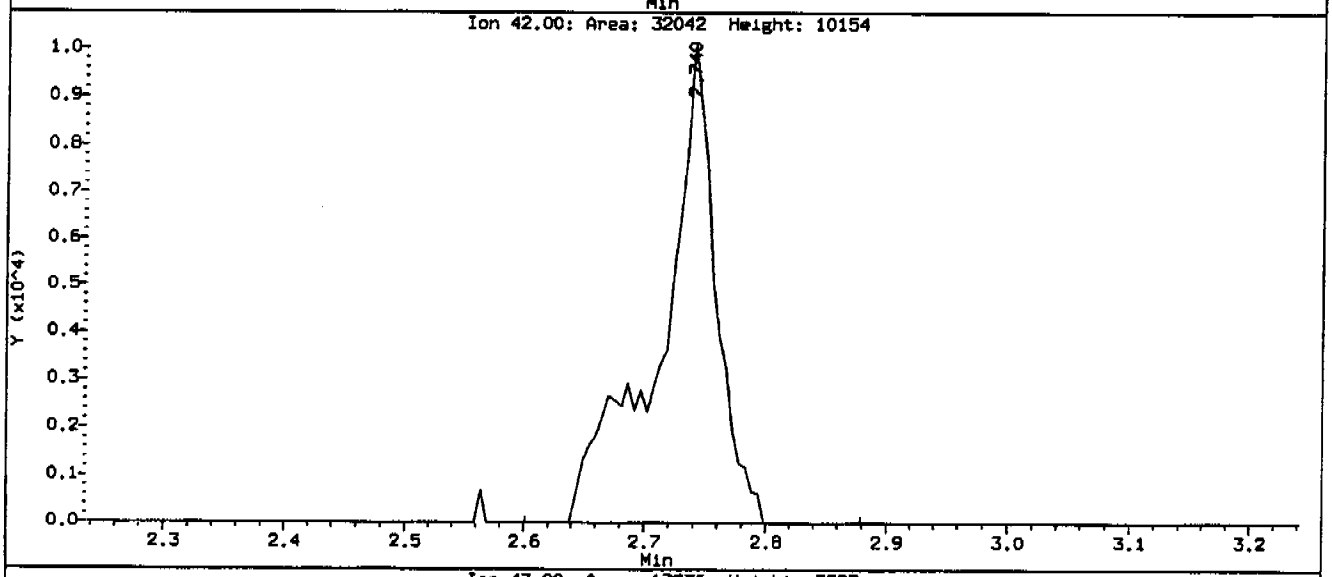
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2585.D
Injection Date: 28-APR-2005 15:08
Instrument: MSK.i
Client Sample ID: SSTD010APPIX

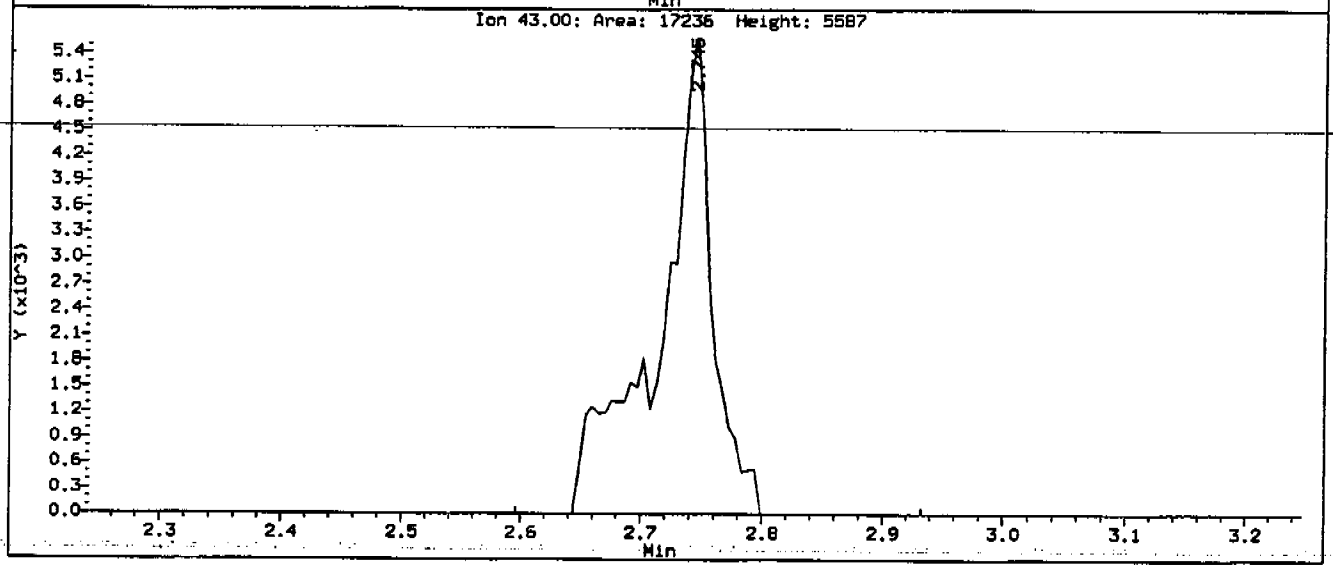
Compound: N-Nitrosomethylethylamine
CAS Number: 10595-95-6



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

06/29/05





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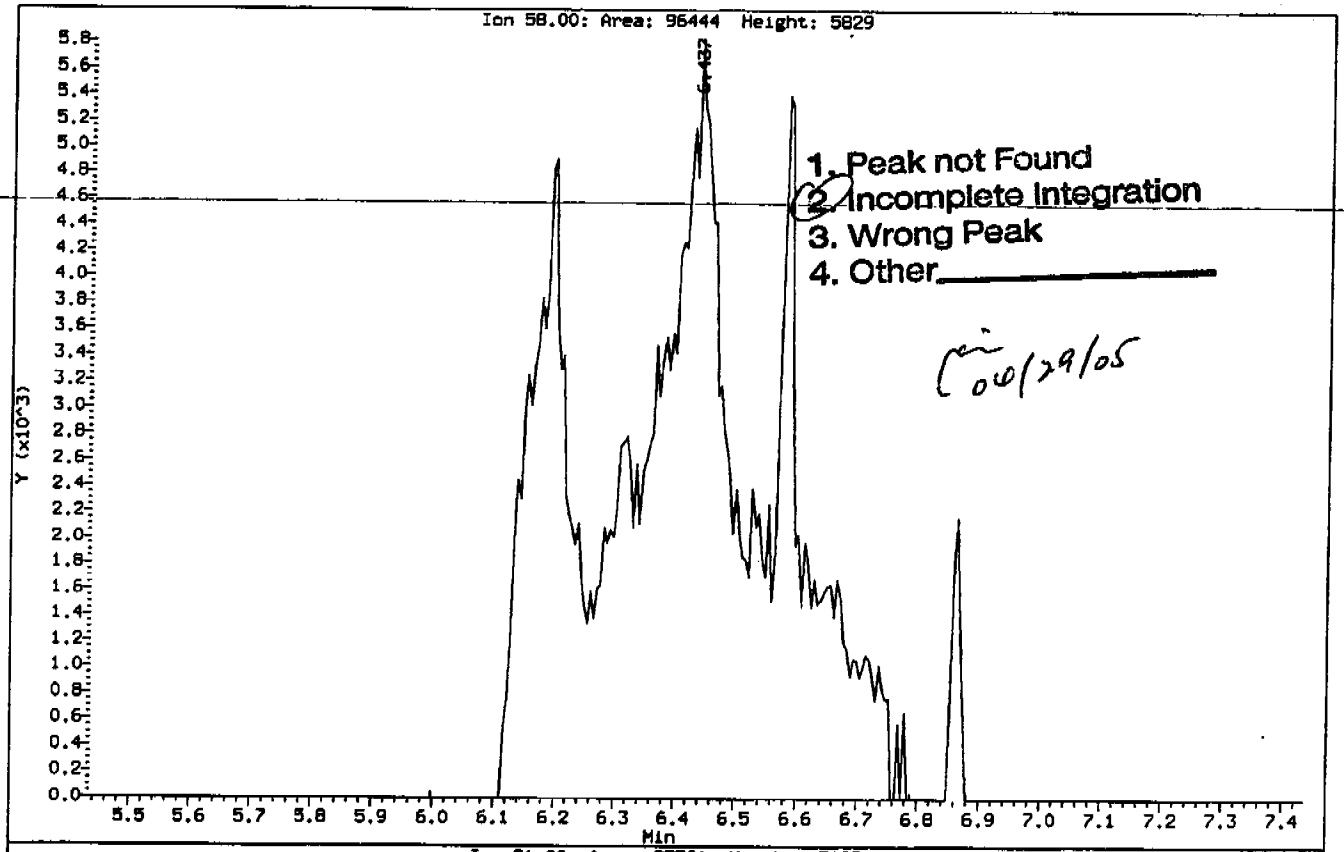
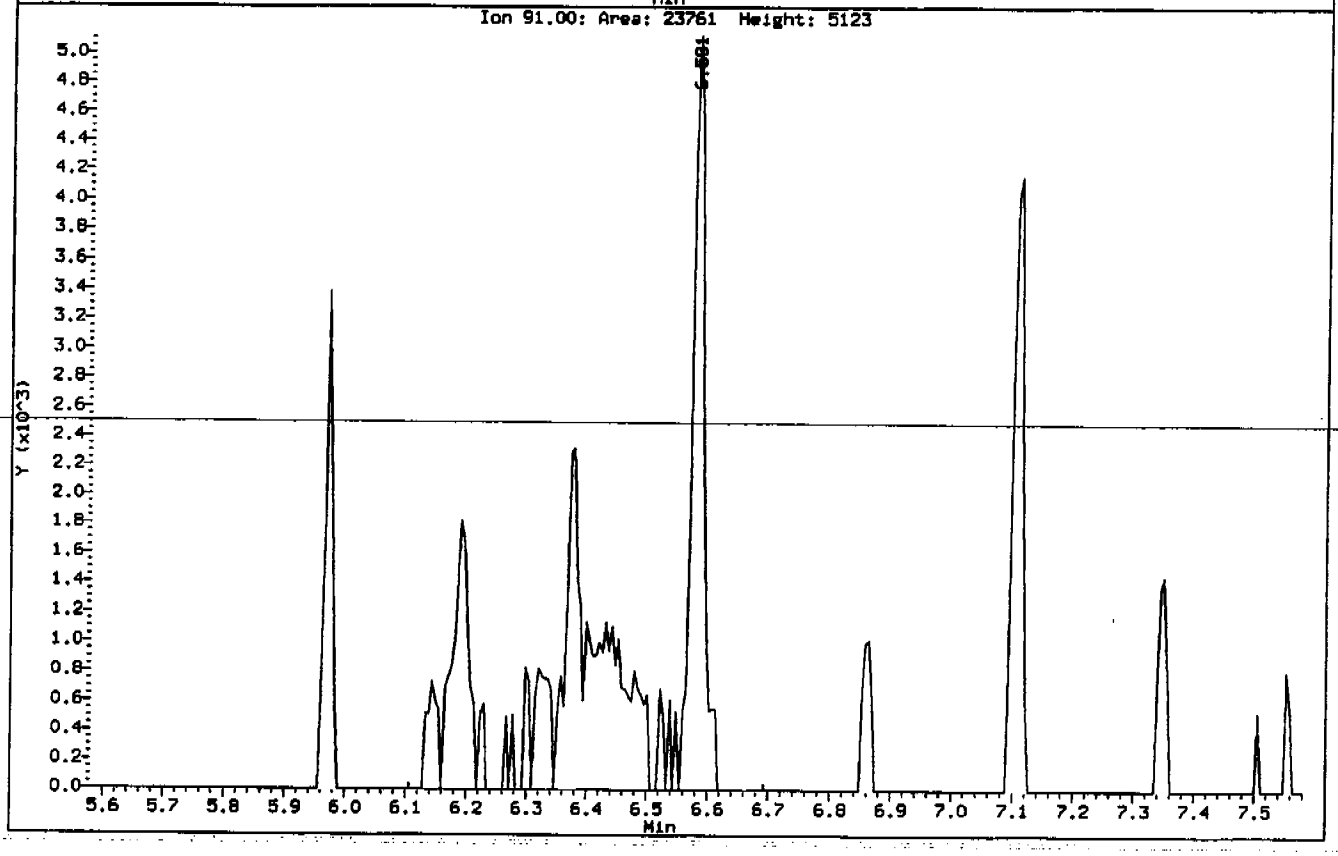
Injection Date: 28-APR-2005 15:08
Instrument: MSK.i
Client Sample ID: SSTD010APPIX

Compound: a,a-Dimethyl-phenethylamine
CAS Number: 122-09-8





LOT# F5D220273

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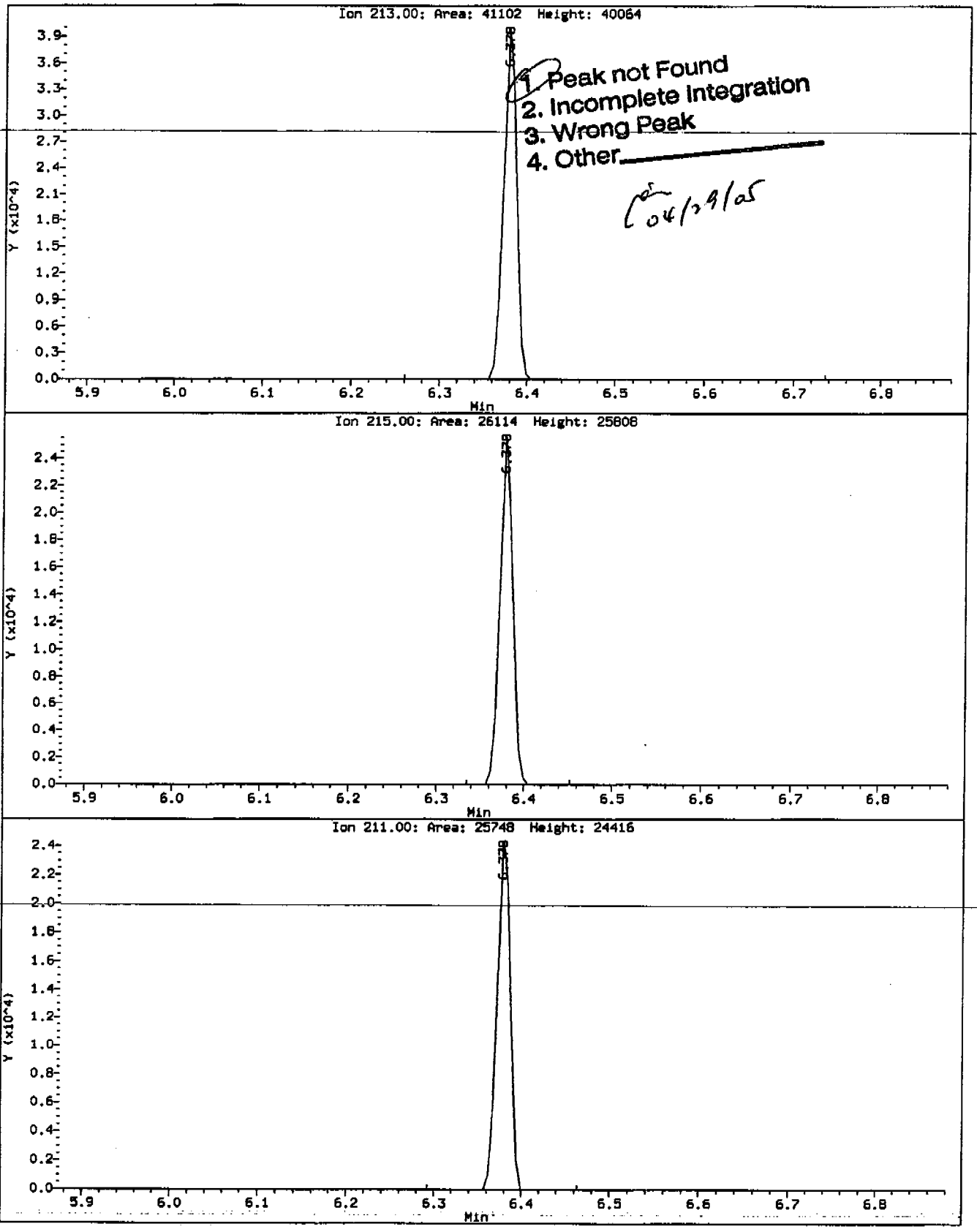
Injection Date: 28-APR-2005 15:08
Instrument: MSK,i
Client Sample ID: SSTD010APPIX

Compound: Hexachloropropene
CAS Number: 1888-71-7



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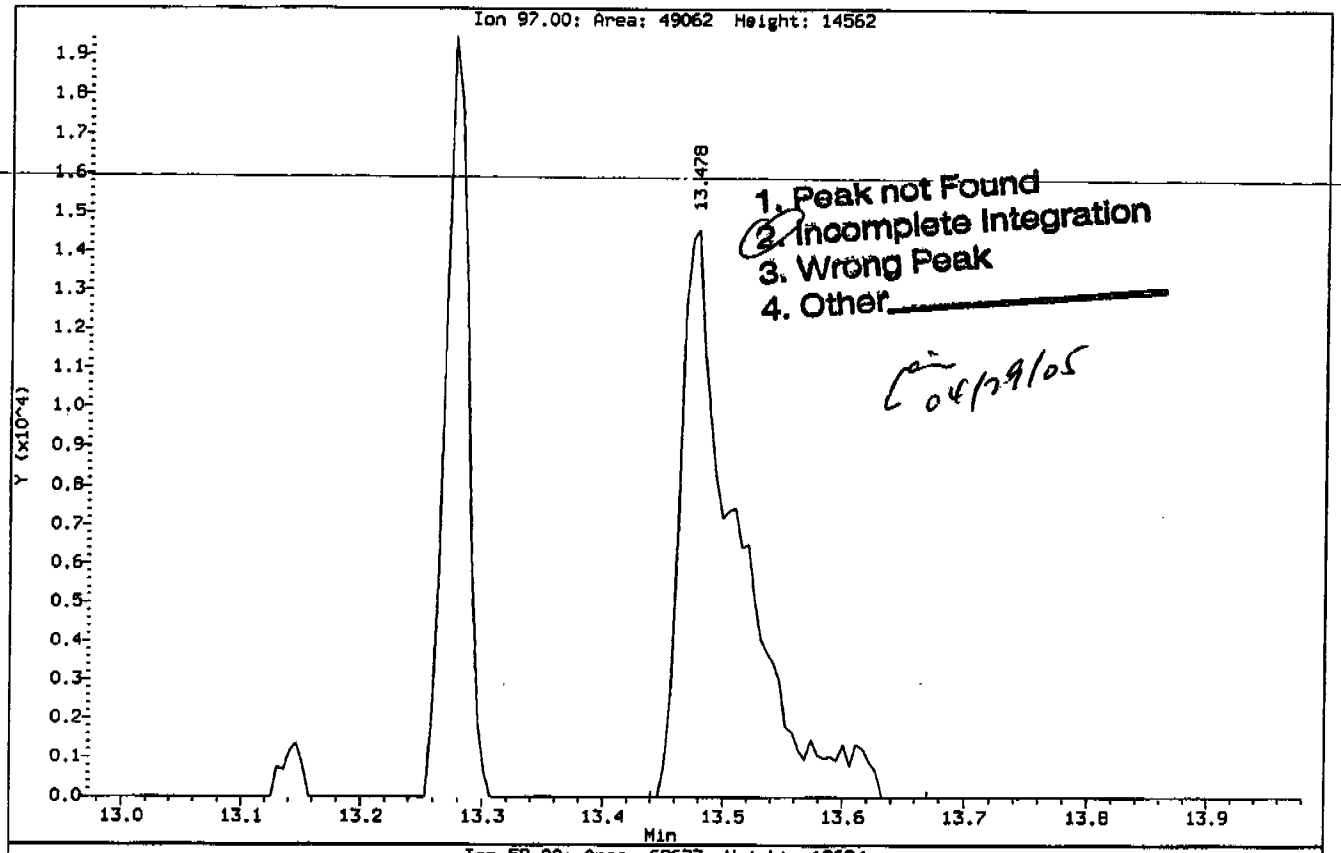
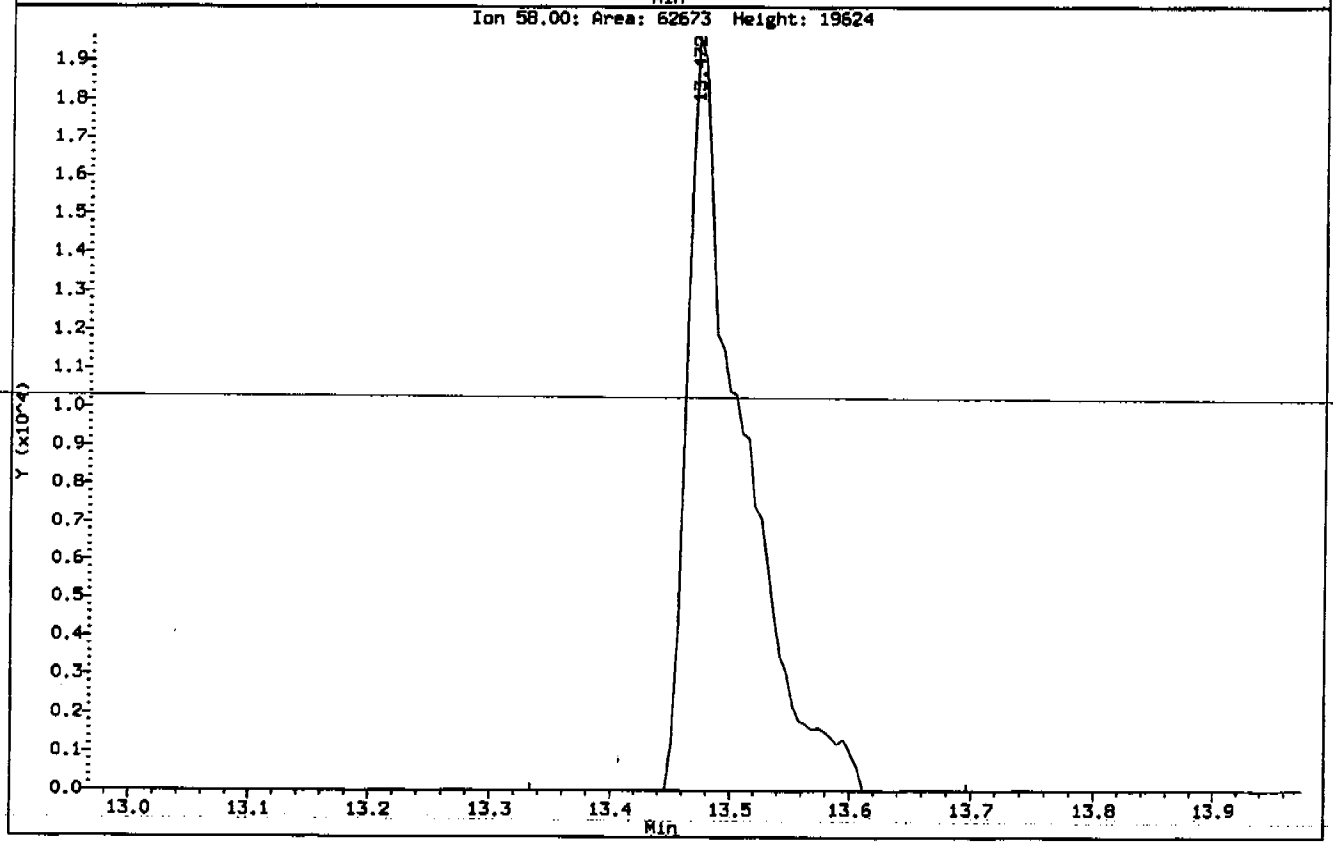
Injection Date: 28-APR-2005 15:08
Instrument: MSK.i
Client Sample ID: SSTD010APPIX

Compound: Methapyrilene
CAS Number: 91-80-5





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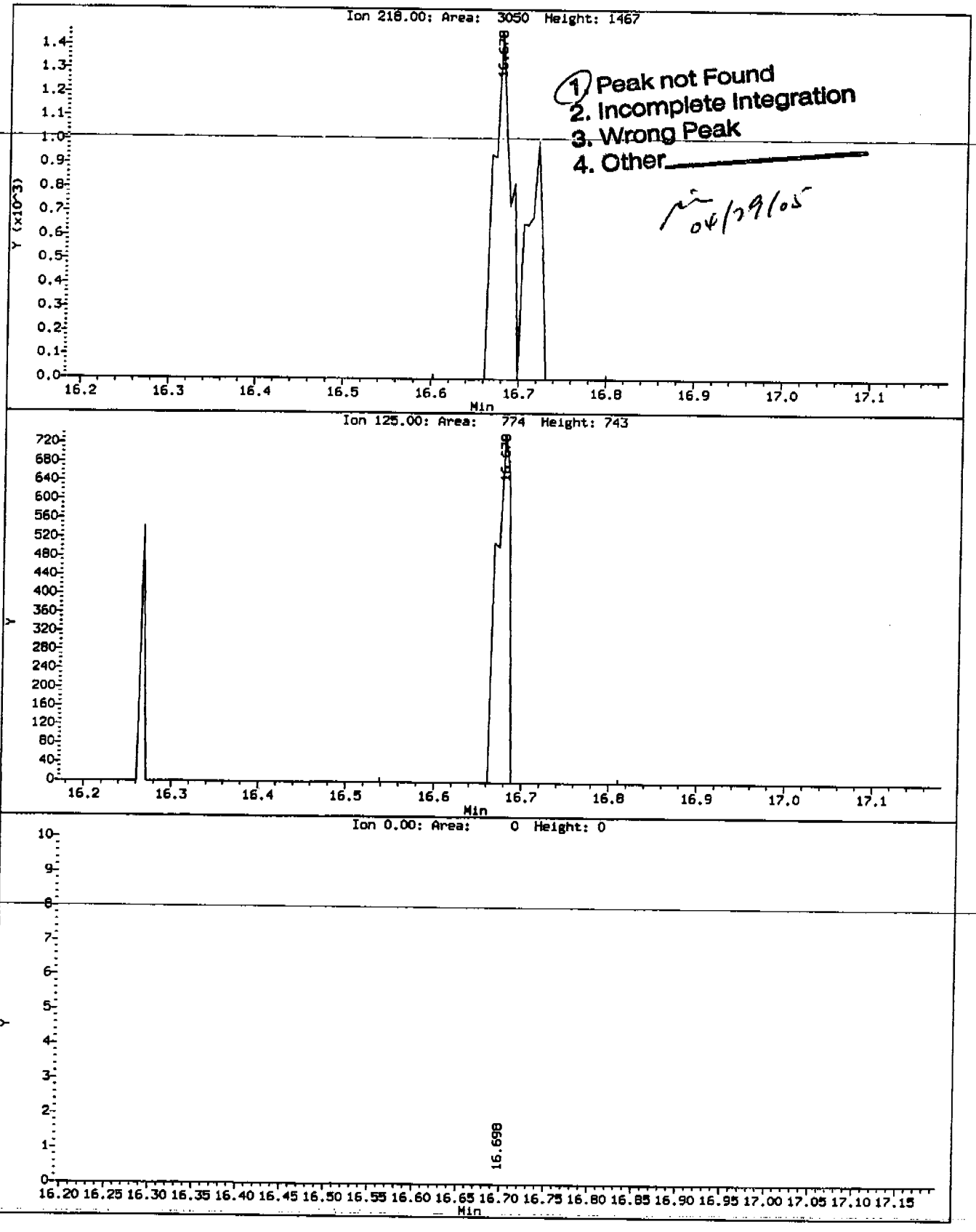
Injection Date: 28-APR-2005 15:08
Instrument: MSK.i
Client Sample ID: SSTD010APPIX

Compound: Famphur
CAS Number: 52-85-7



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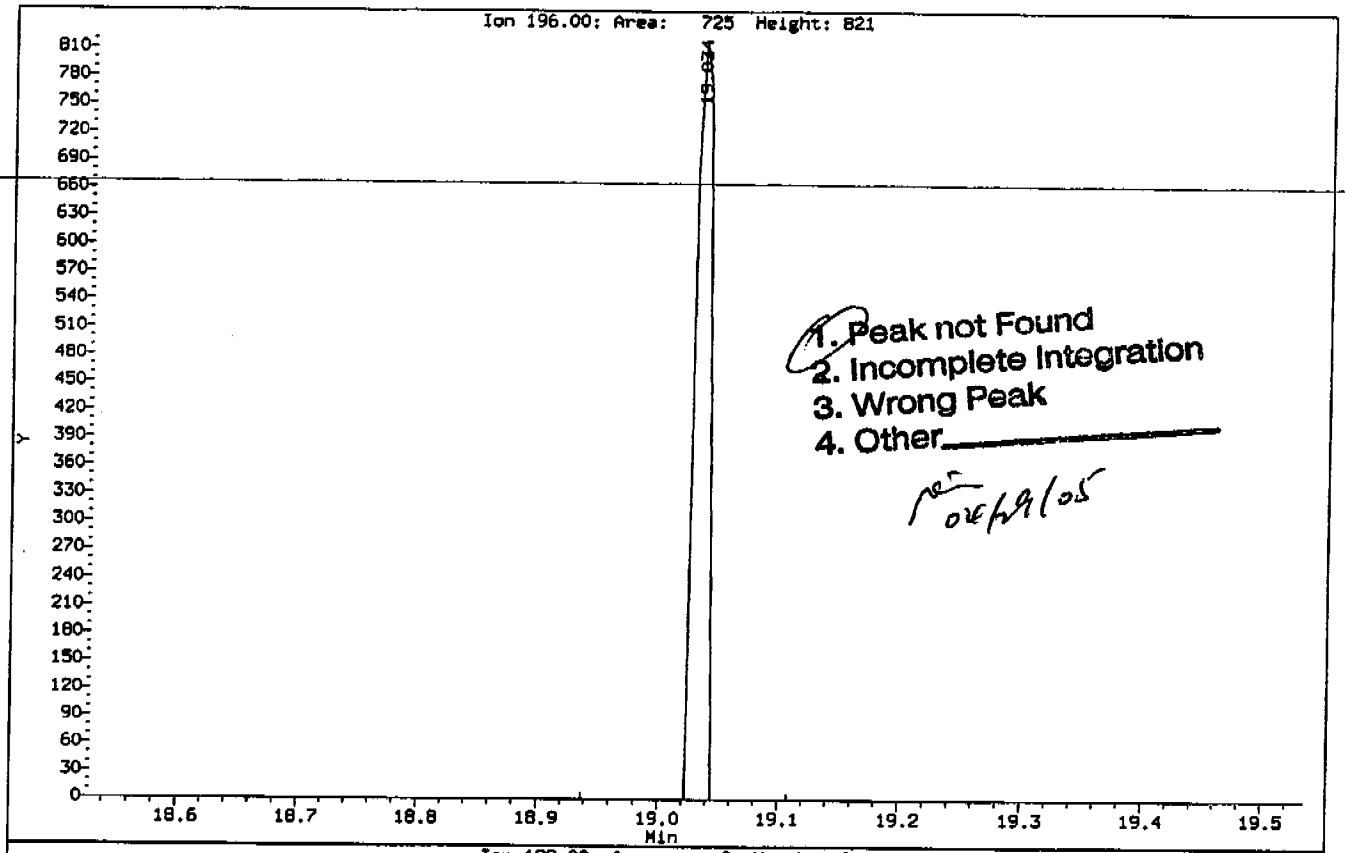
Injection Date: 28-APR-2005 15:08
Instrument: MSK.i
Client Sample ID: SSTD010APPIX

Compound: Hexachlorophene
CAS Number: 70-30-7



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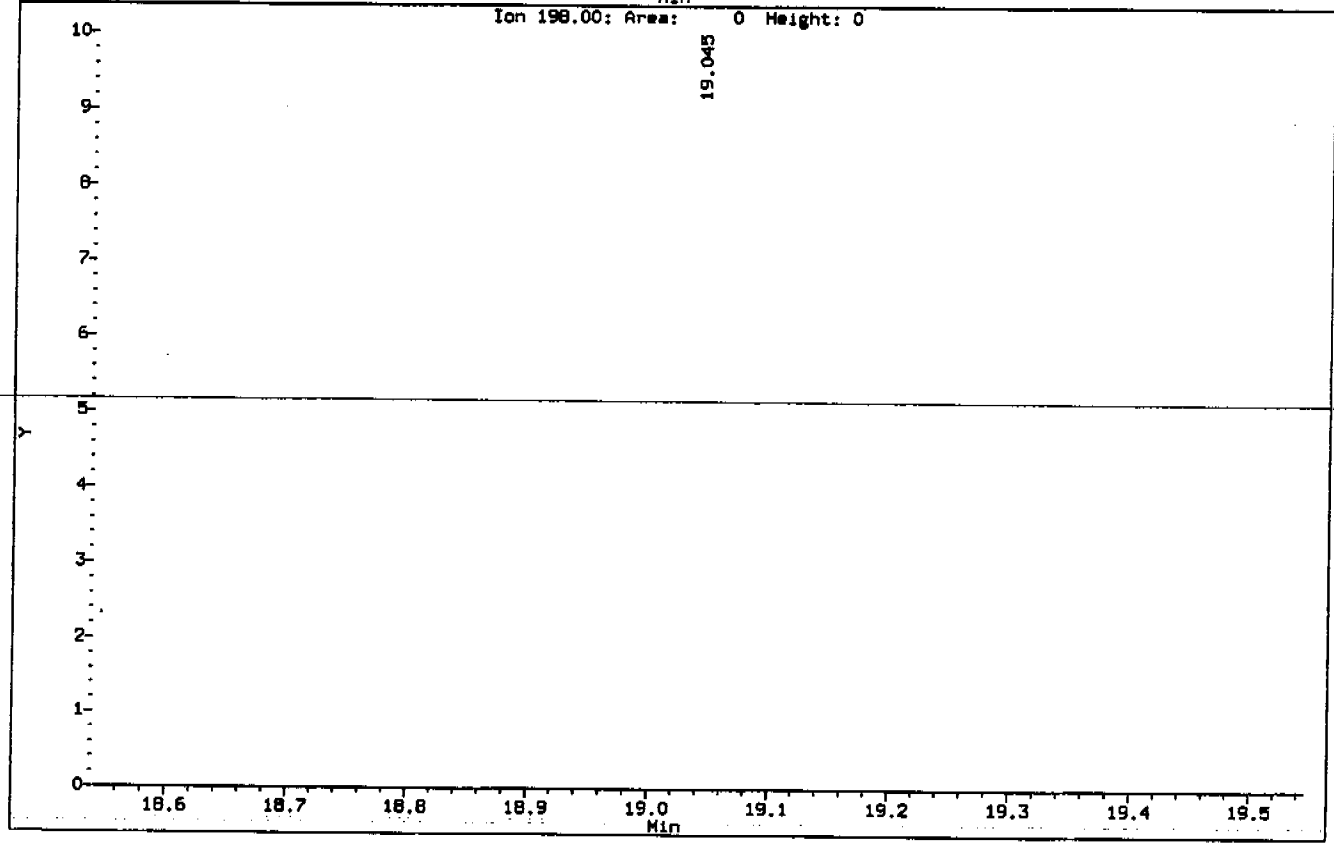
2. Incomplete Integration
3. Wrong Peak
4. Other _____

MC 04/29/05



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D
Report Date: 29-Apr-2005 08:43

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D
Lab Smp Id: SSTD002APPIX Client Smp ID: SSTD002APPIX
Inj Date : 28-APR-2005 15:42
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD002APPIX
Misc Info : SV0182-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Meth Date : 29-Apr-2005 08:43 hongs Quant Type: ISTD
Cal Date : 28-APR-2005 15:42 Cal File: KCAL2586.D
Als bottle: 10 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIX.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
7	2-Picoline	93	2.597	2.597	(0.563)	7038	2.00000	1.775(a)
8	N-Nitrosomethylethylamine	88	2.747	2.747	(0.596)	2959	2.00000	1.660(aM)
9	Methyl methanesulfonate	80	3.110	3.110	(0.674)	2236	2.00000	1.642(aM)
12	N-Nitrosodiethylamine	102	3.495	3.495	(0.758)	3845	2.00000	1.828(a)
13	Ethyl Methanesulfonate	79	3.863	3.863	(0.838)	6944	2.00000	1.940(a)
18	Pentachloroethane	117	4.269	4.269	(0.926)	3225	2.00000	1.927(a)
* 22	1,4-Dichlorobenzene-d4	152	4.611	4.611	(1.000)	126048	40.0000	
30	Acetophenone	105	5.151	5.151	(0.832)	12525	2.00000	1.867(a)
31	N-Nitrosopyrrolidine	100	5.162	5.162	(0.834)	4059	2.00000	1.857(a)
33	N-Nitrosomorpholine	116	5.194	5.194	(0.839)	1541	2.00000	1.592(a)
34	O-Toluidine	106	5.210	5.210	(0.841)	12793	2.00000	1.826(a)
38	N-Nitrosopiperidine	114	5.552	5.552	(0.896)	3738	2.00000	1.851(a)
43	o,o,o-Triethyl-Phosphorothioa	198	5.974	5.974	(0.965)	4899	2.00000	1.761(a)
* 48	Naphthalene-d8	136	6.193	6.193	(1.000)	454977	40.0000	
46	a,a-Dimethyl-phenethylamine	58	6.267	6.267	(1.012)	11635	2.00000	1.346(aM)
52	2,6-Dichlorophenol	162	6.374	6.374	(1.029)	5794	2.00000	1.804(a)
53	Hexachloropropene	213	6.380	6.380	(1.030)	7219	2.00000	1.809(aM)
55	Benzothiazole	135	6.583	6.583	(1.063)	11406	2.00000	1.924(a)
58	p-Phenylenediamine	108	6.871	6.871	(1.110)	4976	2.00000	1.555(a)
57	n-Nitrosodi-n-butylamine	84	6.860	6.860	(1.108)	7130	2.00000	1.967(a)
61	Safrole	162	7.106	7.106	(1.148)	5801	2.00000	1.692(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
65	1,2,4,5-Tetrachlorobenzene	216	7.501	7.501	(0.844)	18303	2.00000	1.971(aM)
64	cis-Isosafrole	162	7.560	7.560	(0.850)	608	2.00000	1.697(aM)
70	trans-Isosafrole	162	7.902	7.902	(0.889)	7254	2.00000	1.857(a)
74	1,4-Naphthoquinone	158	8.265	8.265	(0.930)	3480	2.00000	2.130
75	1,4-Dinitrobenzene	168	8.426	8.426	(1.361)	1766	2.00000	1.276(a)
77	1,3-Dinitrobenzene	168	8.618	8.618	(0.969)	2124	2.00000	1.450(a)
* 82	Acenaphthene-d10	164	8.890	8.890	(1.000)	256109	40.0000	
87	Pentachlorobenzene	250	9.270	9.270	(1.043)	9057	2.00000	2.008
89	1-Naphthylamine	143	9.398	9.398	(1.057)	13292	2.00000	1.908(a)
90	2-Naphthylamine	143	9.531	9.531	(1.072)	12508	2.00000	1.982(a)
92	2,3,4,6-Tetrachlorophenol	232	9.585	9.585	(1.078)	2921	2.00000	1.279(a)
96	Thionazin	107	9.991	9.991	(1.124)	2963	2.00000	1.726(a)
97	5-Nitro-o-toluidine	152	9.996	9.996	(0.865)	3662	2.00000	1.576(a)
101	tri-n-butylphosphate	99	10.285	10.285	(1.157)	19484	2.00000	1.737(a)
105	Sulfotepp	97	10.685	10.685	(0.925)	2989	2.00000	1.706(a)
106	Diallate (peak 1)	86	10.755	10.755	(0.931)	6389	2.00000	1.839(a)
108	Phorate	75	10.771	10.771	(0.932)	11435	2.00000	1.820(a)
111	Diallate (peak 2)	86	10.894	10.894	(0.943)	1530	2.00000	2.066
107	1,3,5-Trinitrobenzene	213	10.862	10.862	(0.940)	1250	2.00000	1.167(aM)
110	Phenacetin	108	10.862	10.862	(0.940)	8843	2.00000	1.842(a)
113	Dimethoate	87	11.107	11.107	(0.961)	6224	2.00000	2.218
116	4-Aminobiphenyl	169	11.300	11.300	(0.978)	16255	2.00000	1.879(a)
115	tris(2-chloroethyl)phosphate	63	11.353	11.353	(0.982)	5180	2.00000	2.035
119	Pentachloronitrobenzene	237	11.519	11.519	(0.997)	2691	2.00000	1.806(a)
118	Pronamide	173	11.561	11.561	(1.000)	8644	2.00000	1.994(a)
* 121	Phenanthrene-d10	188	11.556	11.556	(1.000)	457899	40.0000	
123	Disulfoton	88	11.759	11.759	(1.018)	8182	2.00000	1.852(a)
125	Dinoseb	211	11.802	11.802	(1.021)	3003	2.00000	1.134(a)
128	Methyl Parathion	109	12.486	12.486	(1.080)	5145	2.00000	2.056
130	Parathion	97	13.276	13.276	(1.149)	3141	2.00000	1.553(a)
132	Methapyrilene	97	13.485	13.485	(1.167)	7801	2.00000	2.519
133	Isodrin	193	13.613	13.613	(1.178)	3420	2.00000	2.129
140	Aramite (peak 1)	185	14.858	14.858	(0.889)	1208	2.00000	1.542(a)
142	Aramite (peak 2)	185	15.013	15.013	(0.898)	1971	2.00000	1.655(a)
143	p-(Dimethylamino)azobenzene	120	15.077	15.077	(0.902)	6528	2.00000	1.758(a)
144	Chlorobenzilate	251	15.221	15.221	(0.911)	9079	2.00000	1.733(a)
148	2-Acetylaminofluorene	181	16.263	16.263	(0.973)	9906	2.00000	1.691(a)
* 153	Chrysene-d12	240	16.717	16.717	(1.000)	449472	40.0000	
151	4,4'-Methylenebis(2-Chloroani	266	16.797	16.797	(1.005)	2316	2.00000	1.793(a)
162	7,12-Dimethylbenz(a)anthracen	256	18.731	18.731	(0.969)	13129	2.00000	1.714(a)
* 166	Perylene-d12	264	19.329	19.329	(1.000)	415435	40.0000	
169	3-methylcholanthrene	268	19.858	19.858	(1.027)	13968	2.00000	1.787(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D Page 3
Report Date: 29-Apr-2005 08:43

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

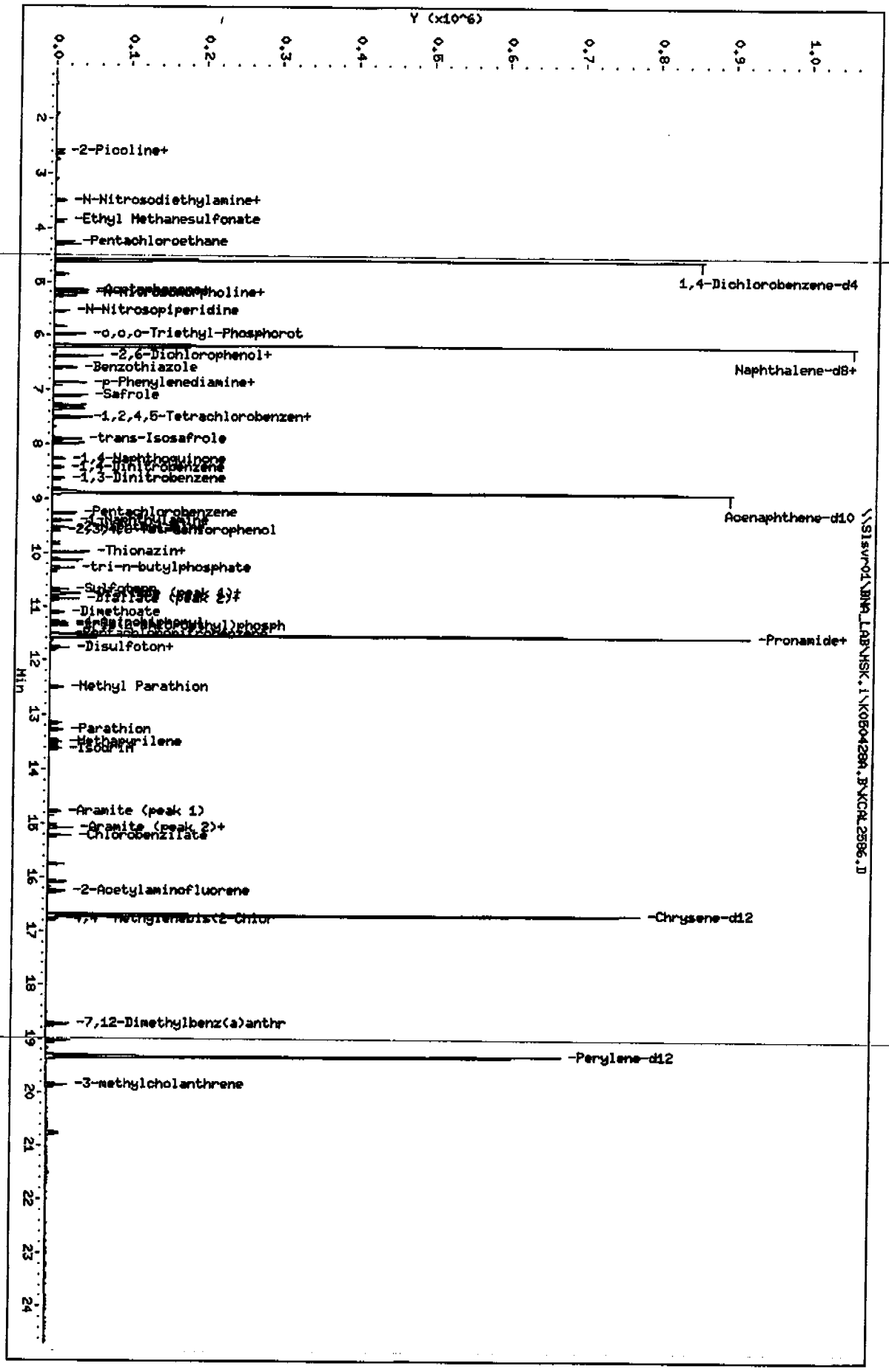
Instrument ID: MSK.i
Lab File ID: KCAL2586.D
Lab Smp Id: SSTD002APPIX
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Misc Info: SV0182-05

Calibration Date: 28-APR-2005
Calibration Time: 11:41
Client Smp ID: SSTD002APPIX
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	162145	81073	324290	126048	-22.26
48 Naphthalene-d8	535939	267970	1071878	454977	-15.11
82 Acenaphthene-d10	307602	153801	615204	256109	-16.74
121 Phenanthrene-d10	574409	287205	1148818	457899	-20.28
153 Chrysene-d12	519397	259699	1038794	449472	-13.46
166 Perylene-d12	440492	220246	880984	415435	-5.69

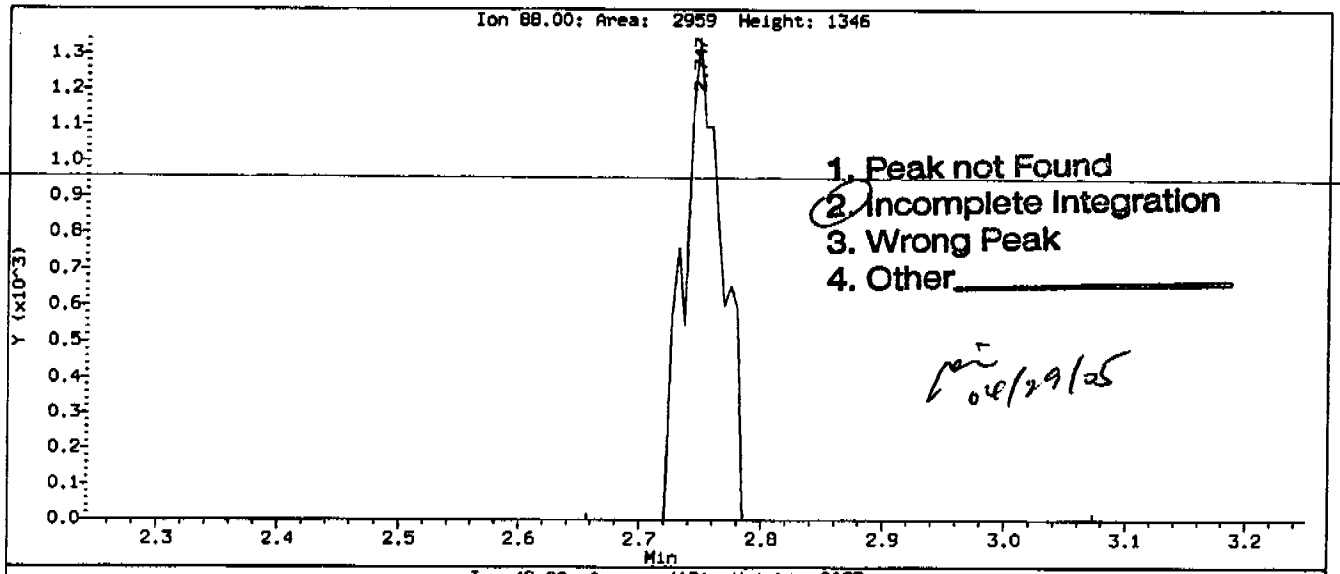
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.62	4.12	5.12	4.61	-0.17
48 Naphthalene-d8	6.21	5.71	6.71	6.19	-0.21
82 Acenaphthene-d10	8.91	8.41	9.41	8.89	-0.21
121 Phenanthrene-d10	11.58	11.08	12.08	11.56	-0.20
153 Chrysene-d12	16.74	16.24	17.24	16.72	-0.11
166 Perylene-d12	19.35	18.85	19.85	19.33	-0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^6)
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Min
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
-2-Picoline+
-N-Nitrosodiethylamine+
-Ethyl Methanesulfonate
-Pentachloroethane
1,4-Dichlorobenzene-d4
-N-Nitrosopiperidine
-o,o,o-Triethyl-Phosphorot
-2,6-Dichlorophenol+
-Benzothiazole
Naphthalene-d8+
-p-Phenylenediamine+
-Safrole
-1,2,4,5-Tetrachlorobenzen+
-trans-Isosafrole
-1,3-Dinitrobenzene
Acenaphthene-d10
-Pentachlorobenzene
-Thionazin+
-tri-n-butylphosphate
-Dimethoate
-Pronamide+
-Disulfoton+
-Methyl Parathion
-Parathion
-Aramite (peak 1)
-Aramite (peak 2)+
-Chlorobenzilate
-2-Acetylaminofluorene
-Chrysene-d12
-7,12-Dimethylbenz(a)anthr
-Perylene-d12
-3-methylcholanthrene
Data File: \\Slsvr01\BNA_LAB\HSK.i\K050428A.B\KCAL2886.D
Date : 28-APR-2005 15:42
Client ID: SSTD002APPIX
Sample Info: SSTD002APPIX
Volume Injected (uL): 1.0
Column phase:
\\Slsvr01\BNA_LAB\HSK.i\K050428A.B\KCAL2886.D
Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

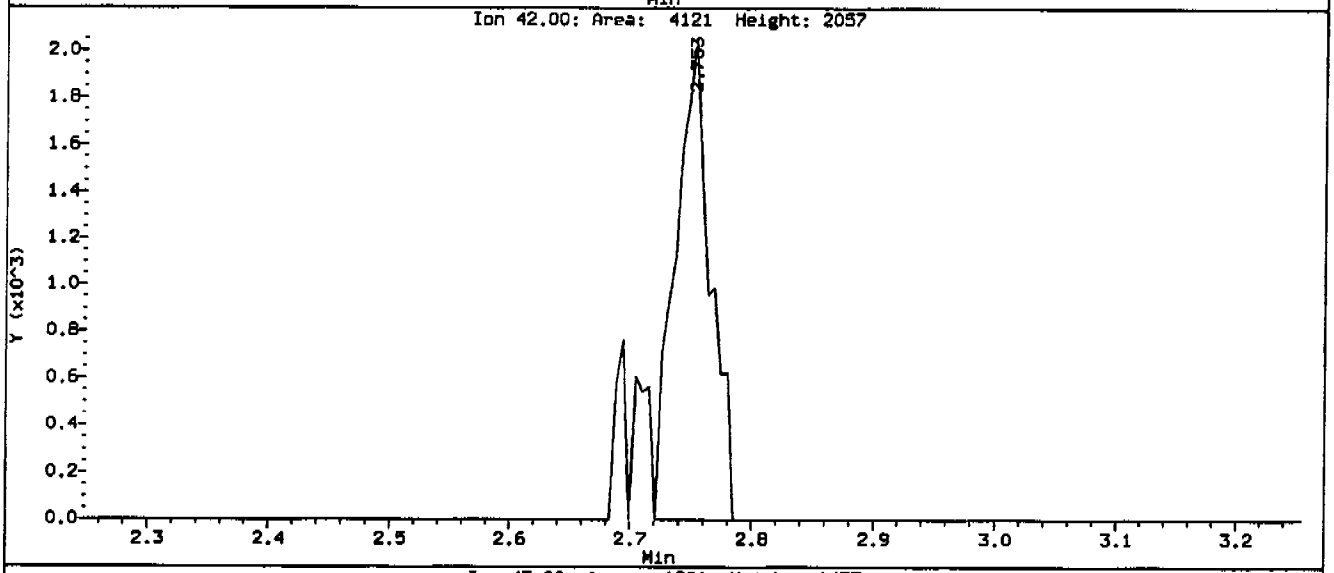
Data File: \\Slavr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D
Injection Date: 28-APR-2005 15:42
Instrument: MSK.i
Client Sample ID: SSTD002APPIX

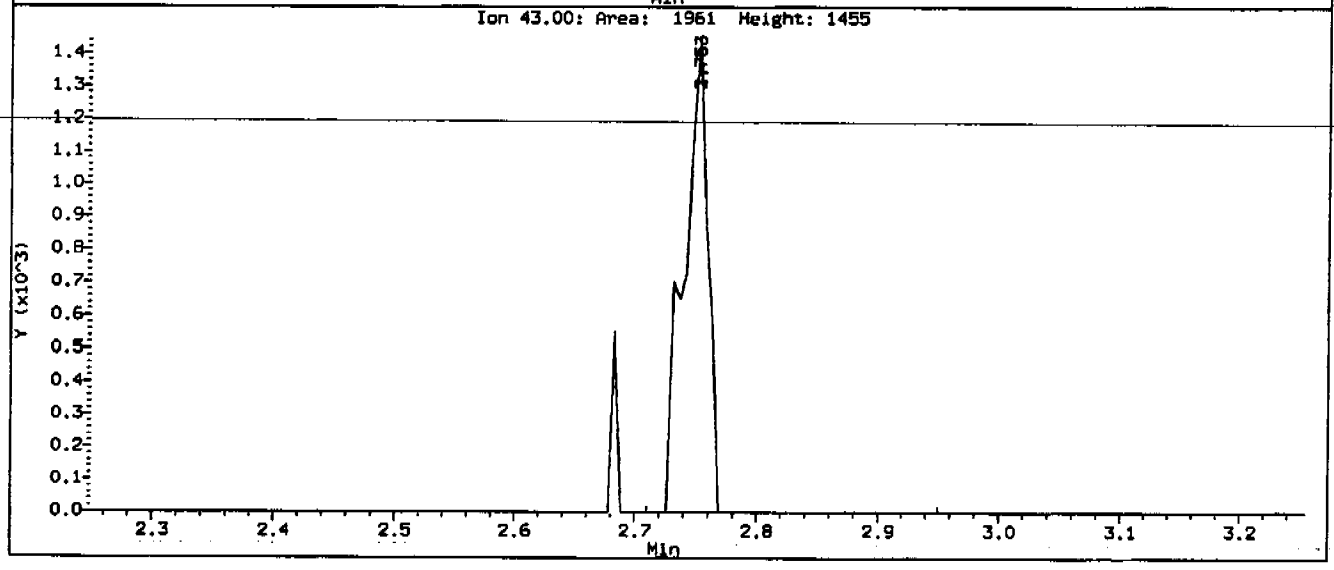
Compound: N-Nitrosomethylethylamine
CAS Number: 10595-95-6



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

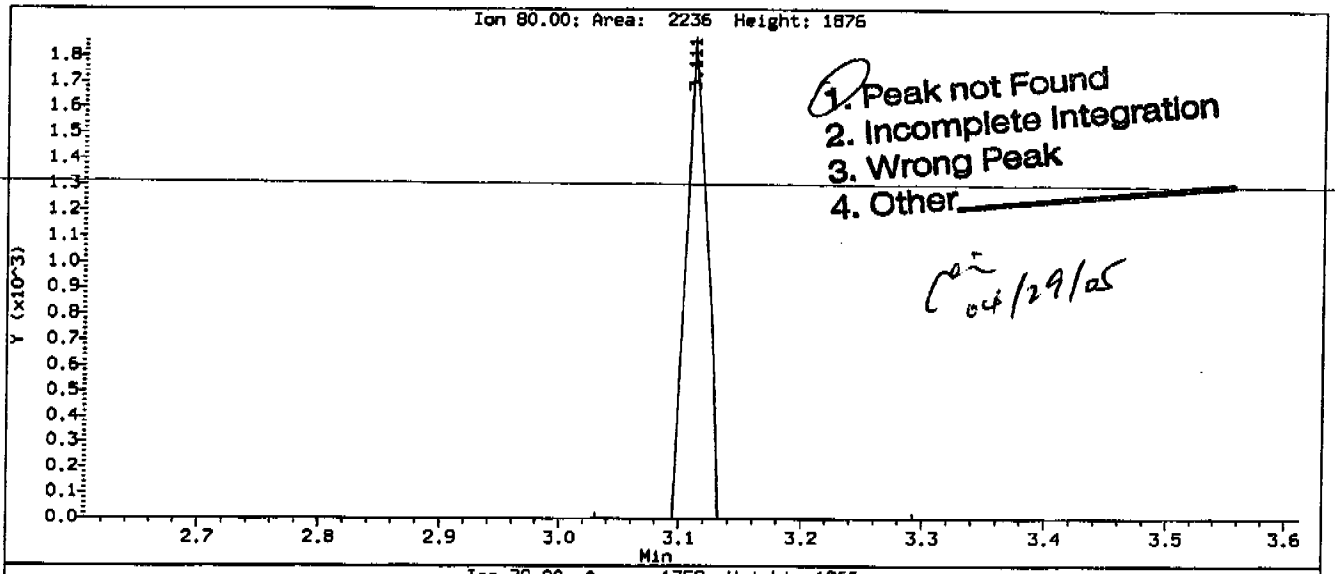
04/29/05





Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D
Injection Date: 28-APR-2005 15:42
Instrument: MSK.i
Client Sample ID: SSTD002APPIX

Compound: Methyl methanesulfonate
CAS Number: 66-27-3



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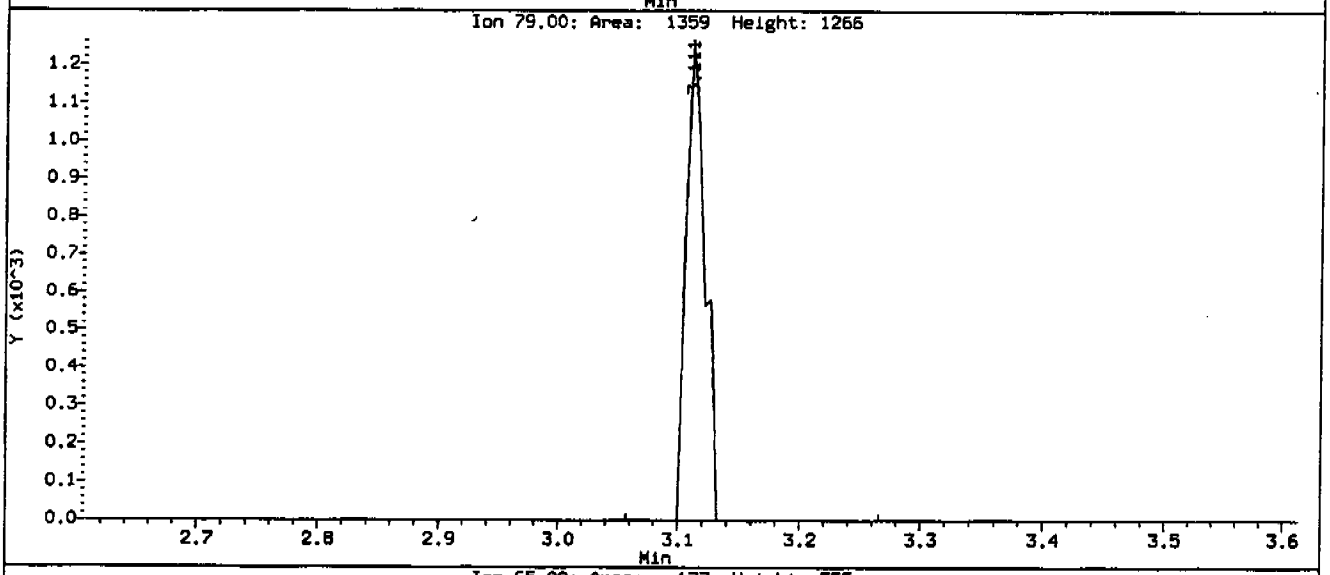
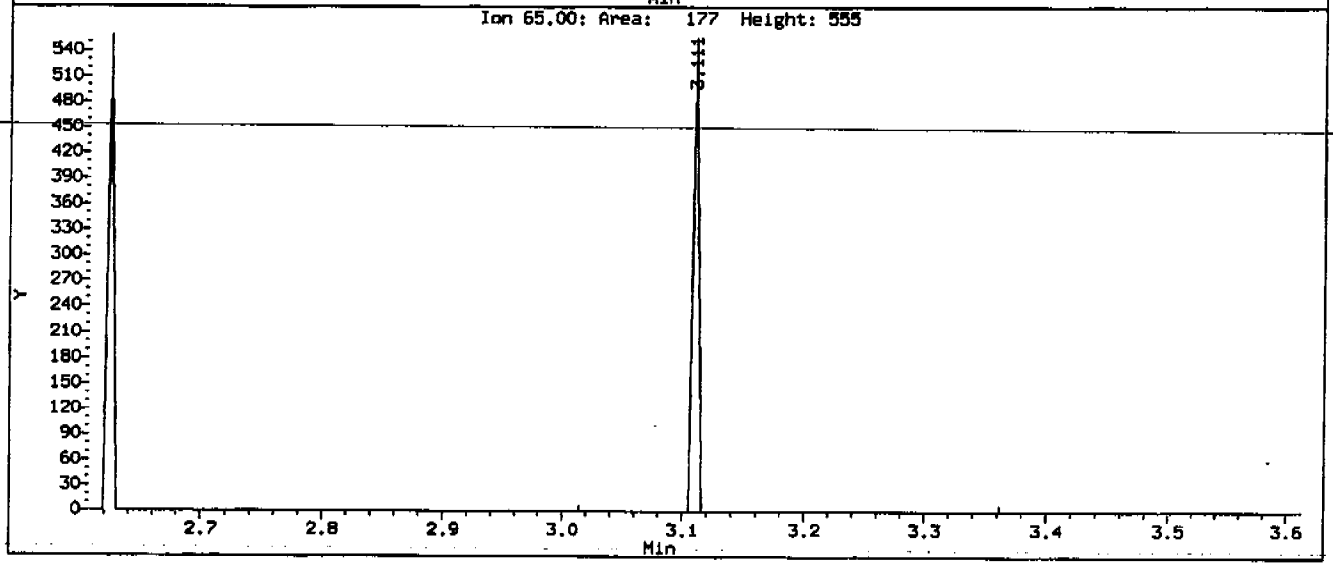
2. Incomplete Integration
3. Wrong Peak
4. Other

10/29/05





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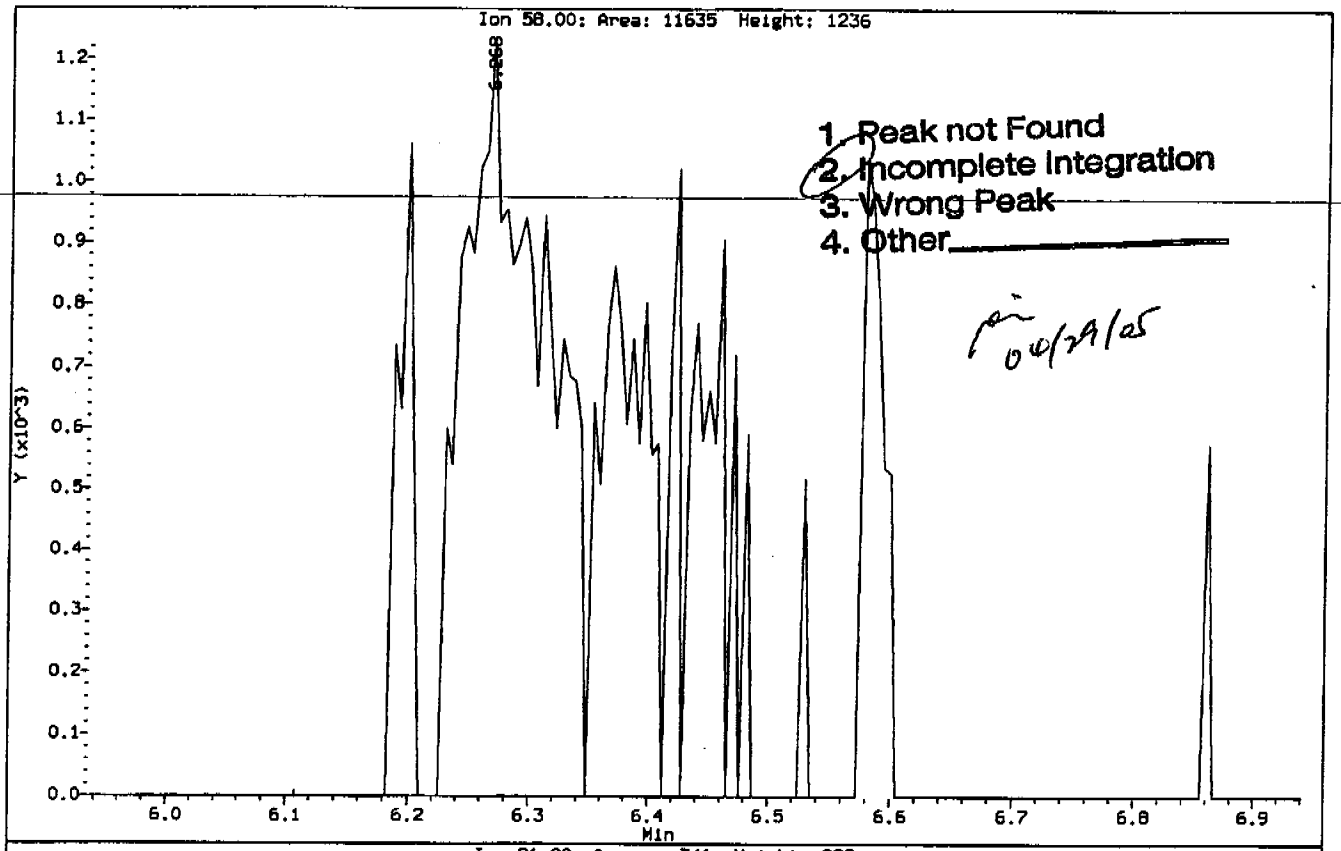
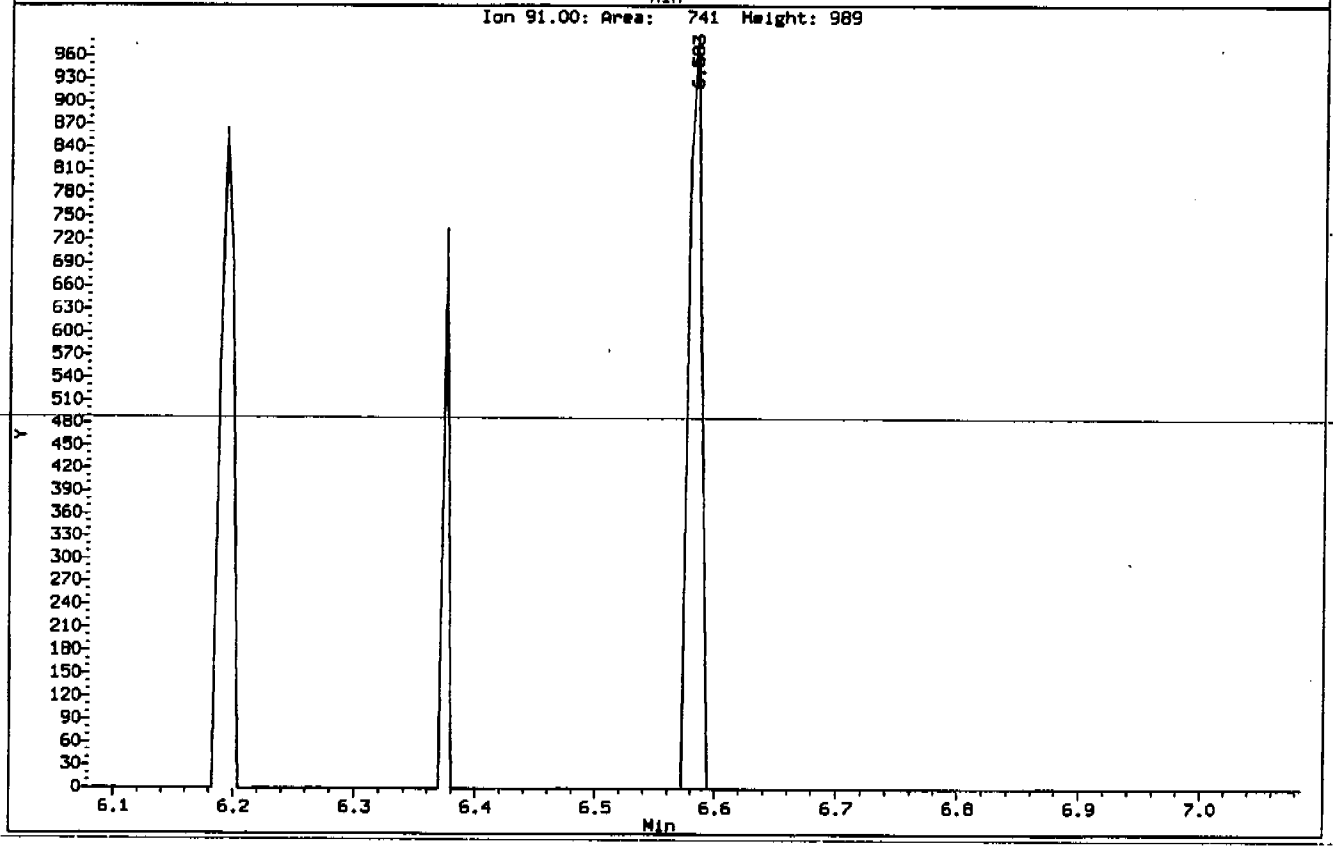
Injection Date: 28-APR-2005 15:42
Instrument: MSK.i
Client Sample ID: SSTD002APPIX

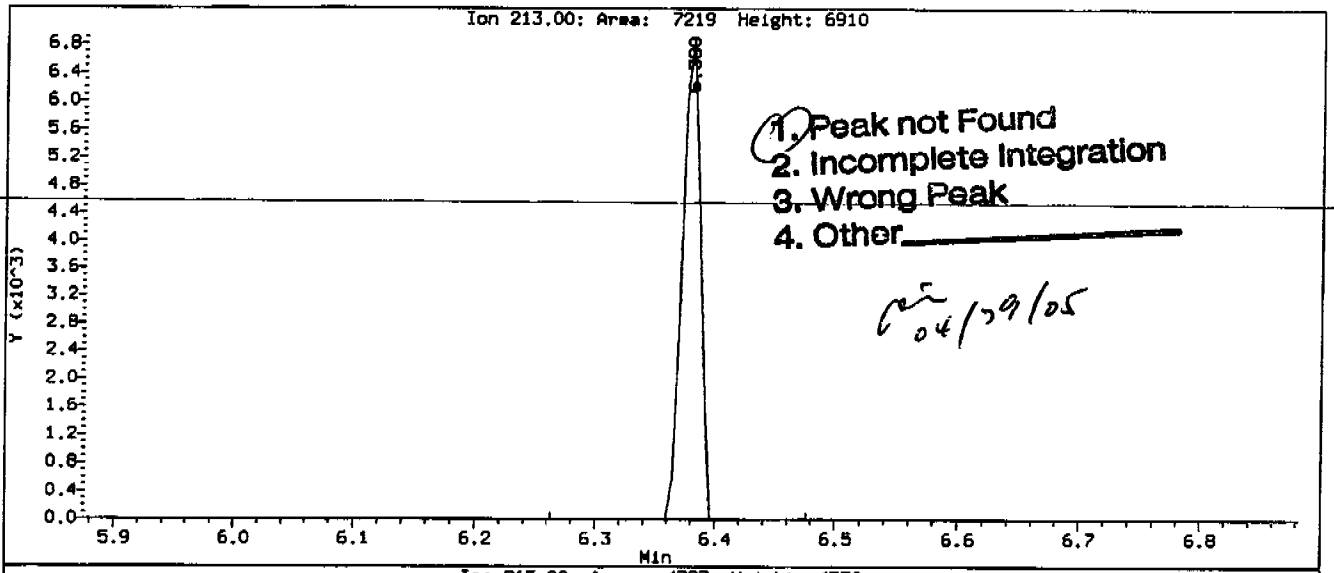
Compound: a,a-Dimethyl-phenethylamine
CAS Number: 122-09-8





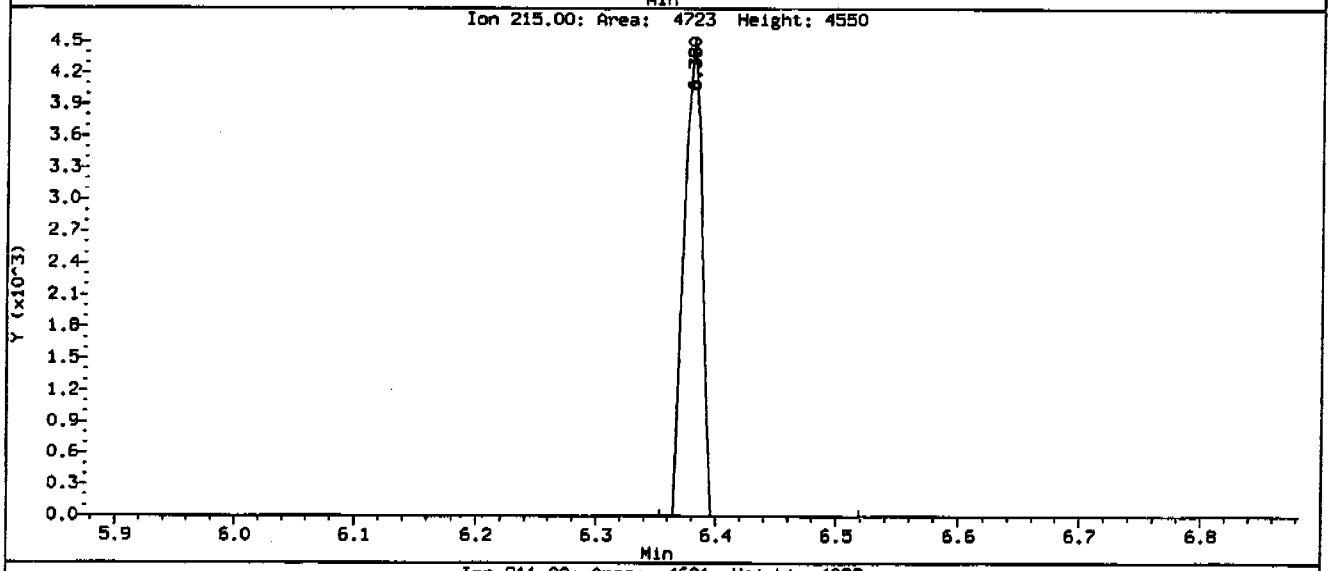
Data File: \\Slavr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D
Injection Date: 28-APR-2005 15:42
Instrument: MSK.i
Client Sample ID: SSTD002APPIX

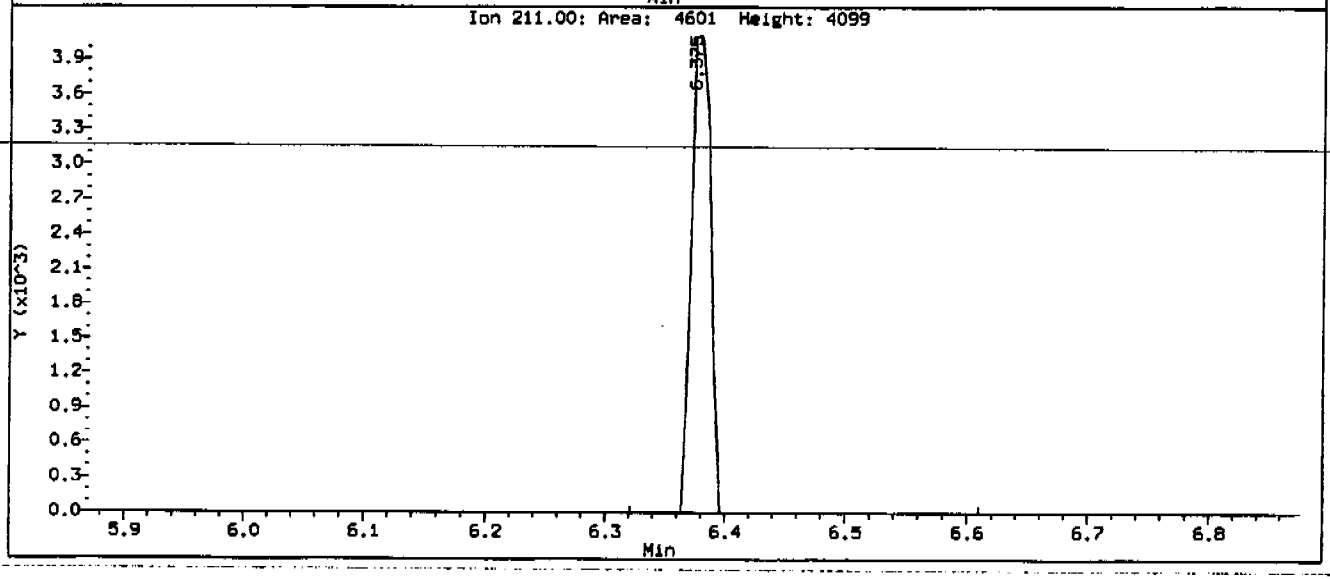
Compound: Hexachloropropene
CAS Number: 1888-71-7



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other _____

04/29/05





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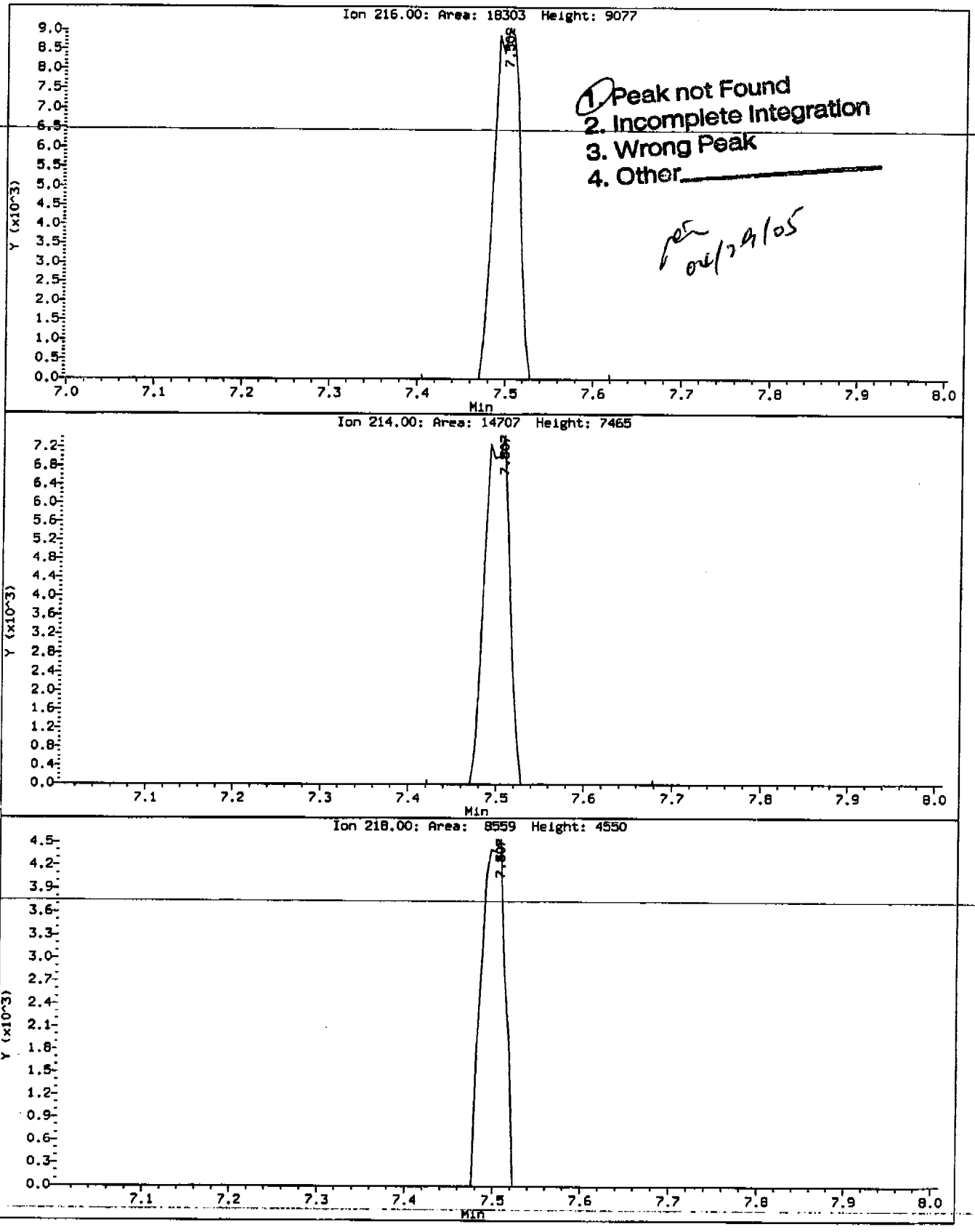
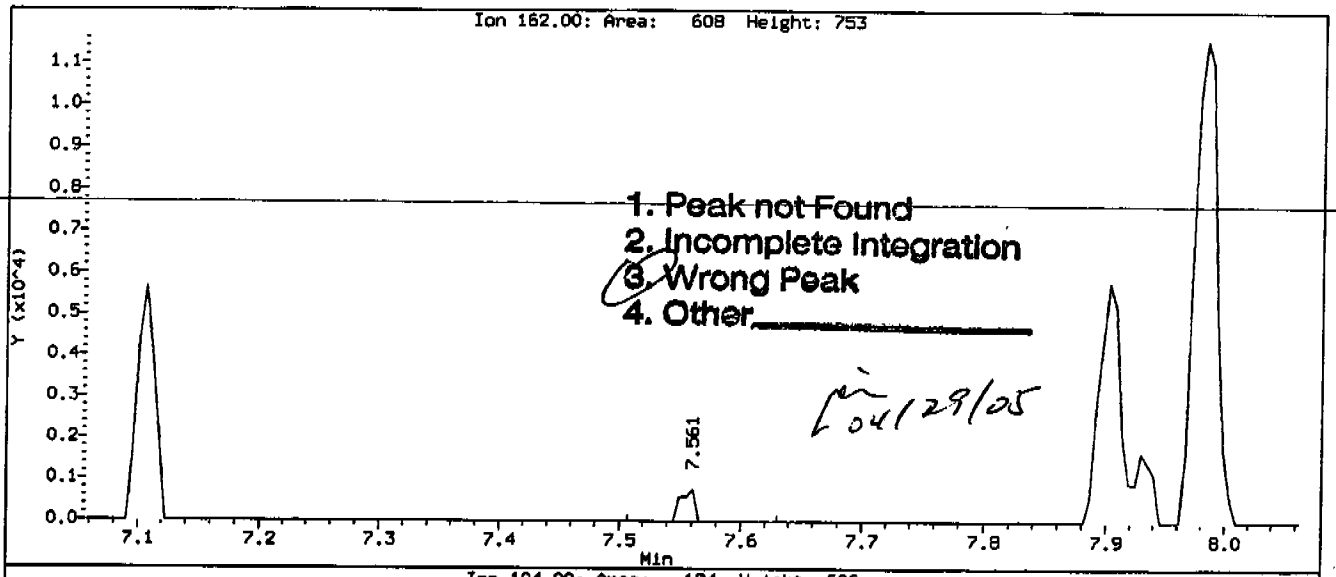
Injection Date: 28-APR-2005 15:42
Instrument: MSK.i
Client Sample ID: SSTD002APPIX

Compound: 1,2,4,5-Tetrachlorobenzene
CAS Number: 95-94-3



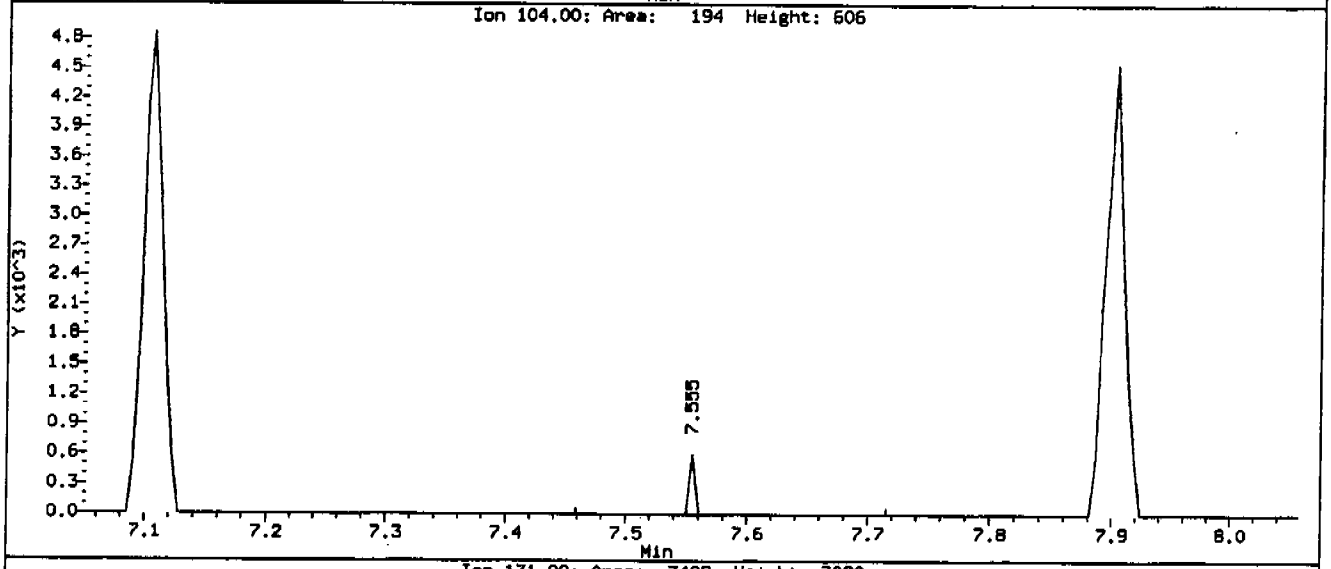
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D
Injection Date: 28-APR-2005 15:42
Instrument: MSK.i
Client Sample ID: SSTD002APPIX

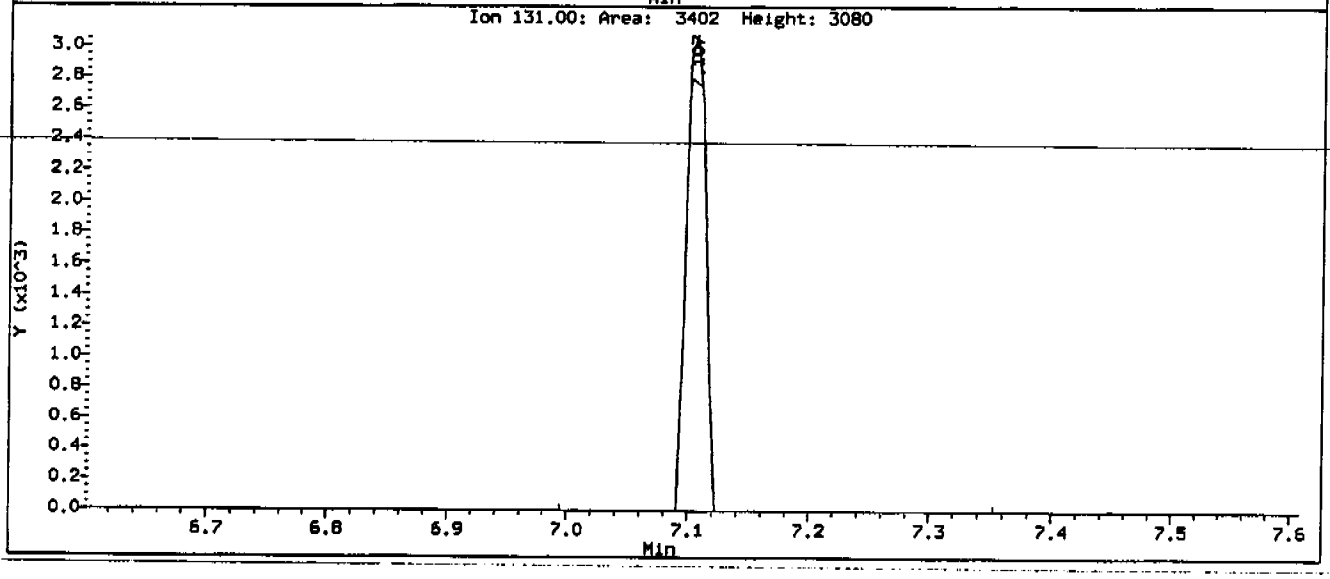
Compound: cis-Isosafrole
CAS Number: 120-58-1



1. ~~Peak not Found~~
2. Incomplete Integration
3. Wrong Peak
4. Other _____

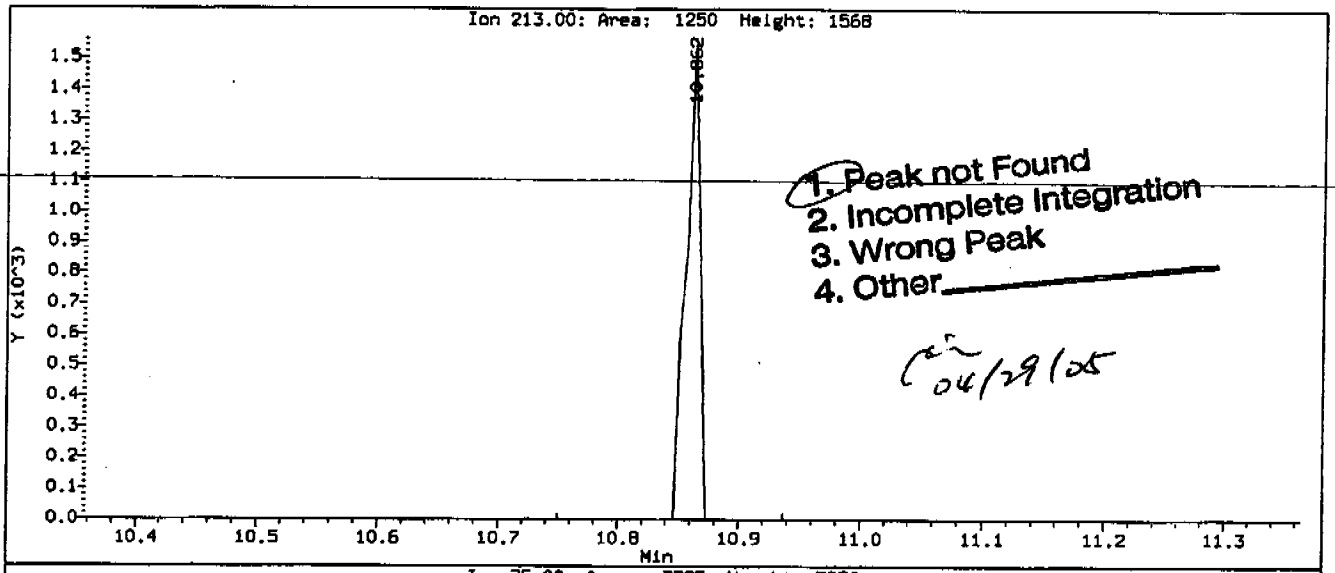
[illegible] 04/29/05





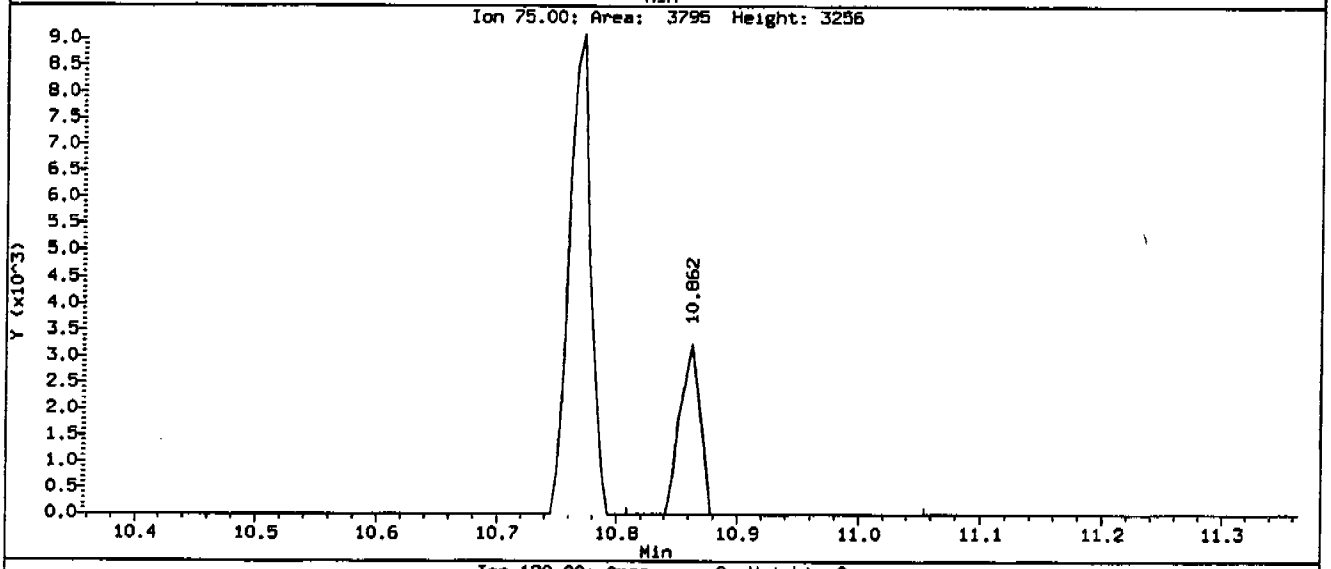
Data File: \\Slavr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D
Injection Date: 28-APR-2005 15:42
Instrument: MSK.i
Client Sample ID: SSTD002APPIX

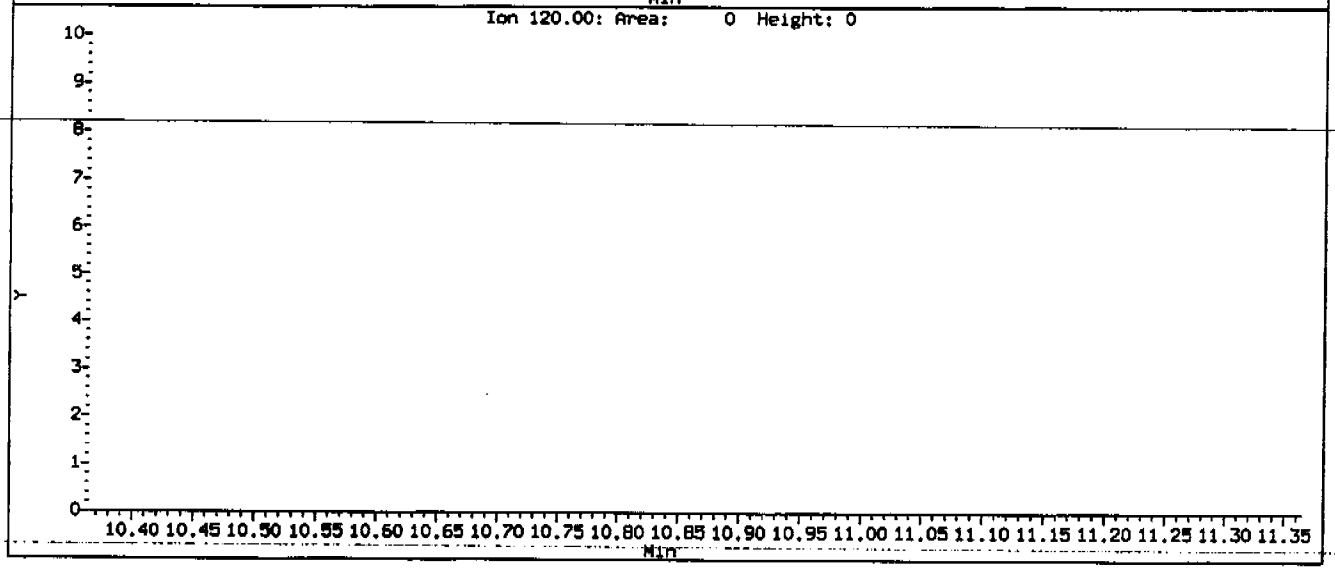
Compound: 1,3,5-Trinitrobenzene
CAS Number: 99-35-4



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other _____

04/29/05





DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	46.77		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	55.18		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	48.39		PASS
197	0 - 1% of mass 198	0.43		PASS
199	5 - 9% of mass 198	6.30		PASS
275	10 - 30% of mass 198	25.11		PASS
365	Greater than 1% of mass 198	3.20		PASS
441	Present, but less than mass 443	10.10	(83.21)	PASS
442	Greater than 40% of mass 198	59.38		PASS
443	17 - 23% of mass 442	12.13	(20.43)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.6370614	5.000	PASS
Benzidine	0.7718855	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	251287			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	3331	1.3	15.0	PASS
4,4-DDD + DDE	3331	1.3	15.0	PASS

****

Tuning Sample, //Slsvr01/BNA_LAB/MSK.i/K050509B.B/KDFT2993.D/KDFT2993.D,*** PASSED

****

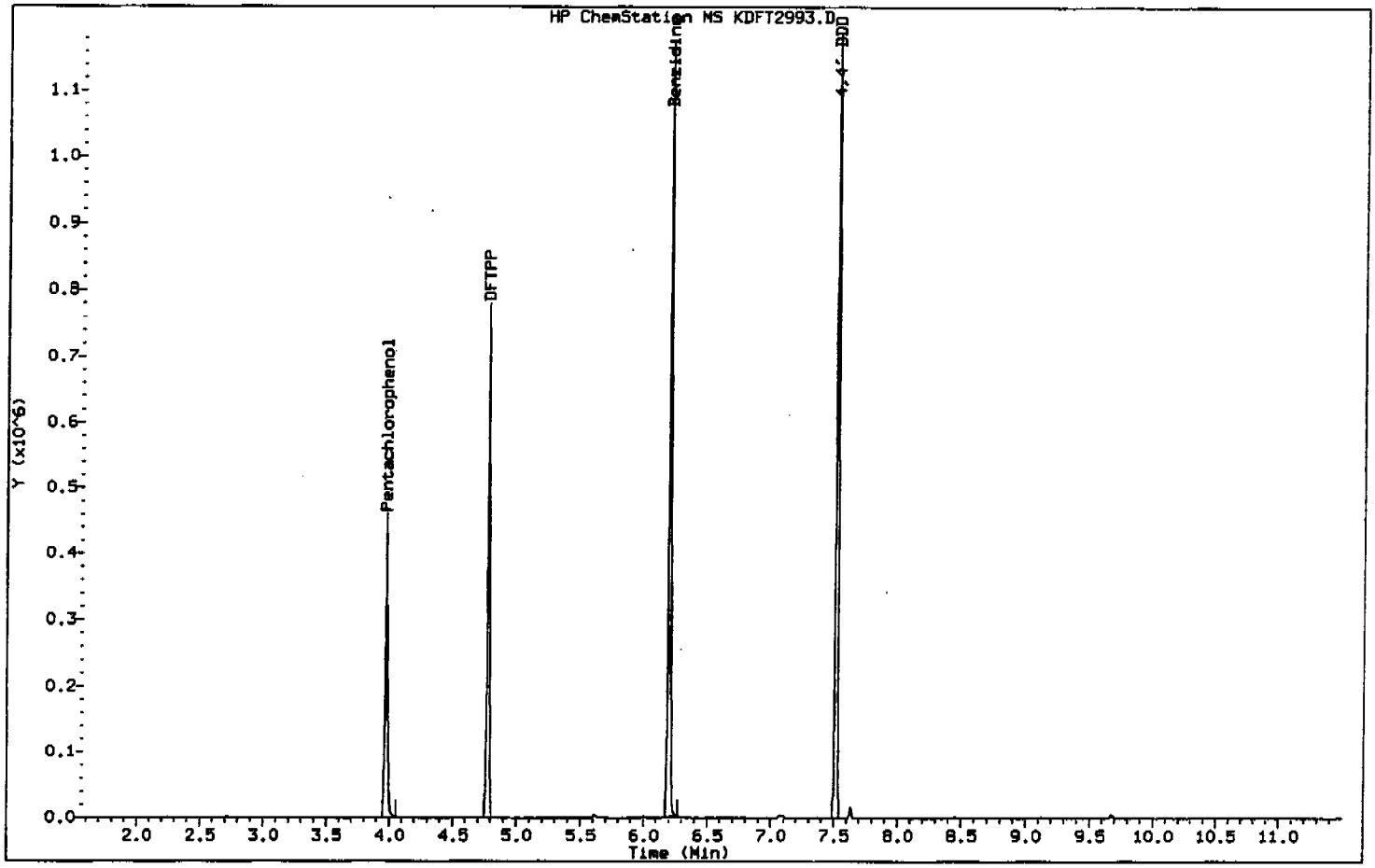
05/10/05

STL ST. LOUIS

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 05/09/2005 18:48

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509B.B/KDFT2993.D/KDFT2993.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509B.B\sw846tun.m Inst: MSK
Injection Date: 09-MAY-2005 11:40 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0193-05 (50NG)

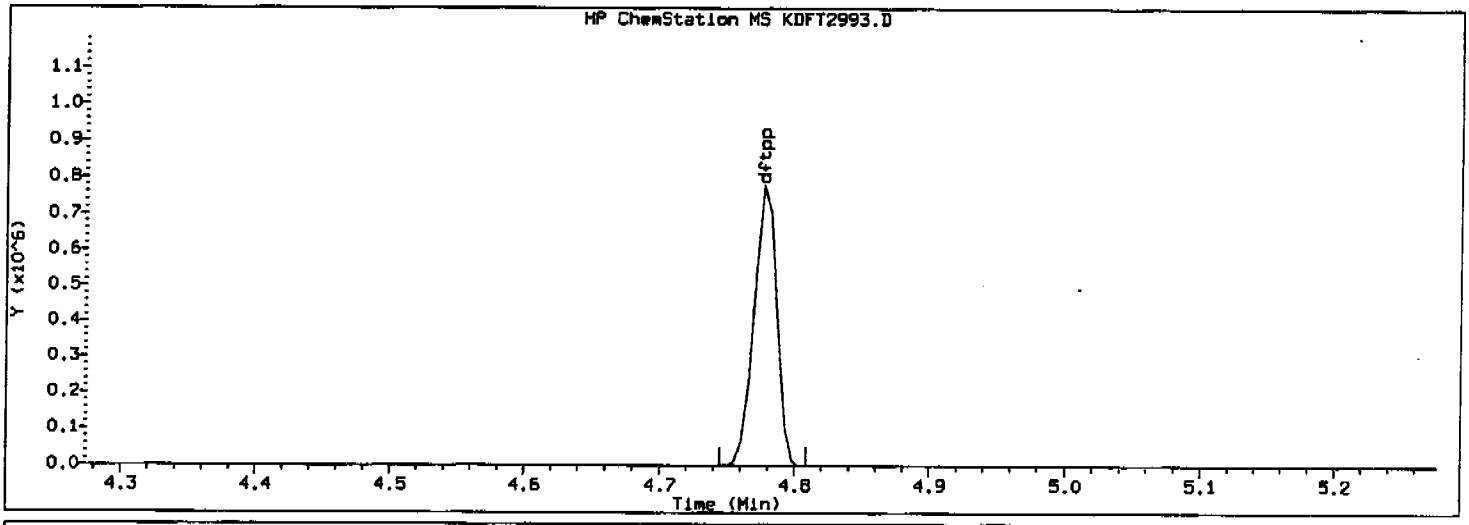


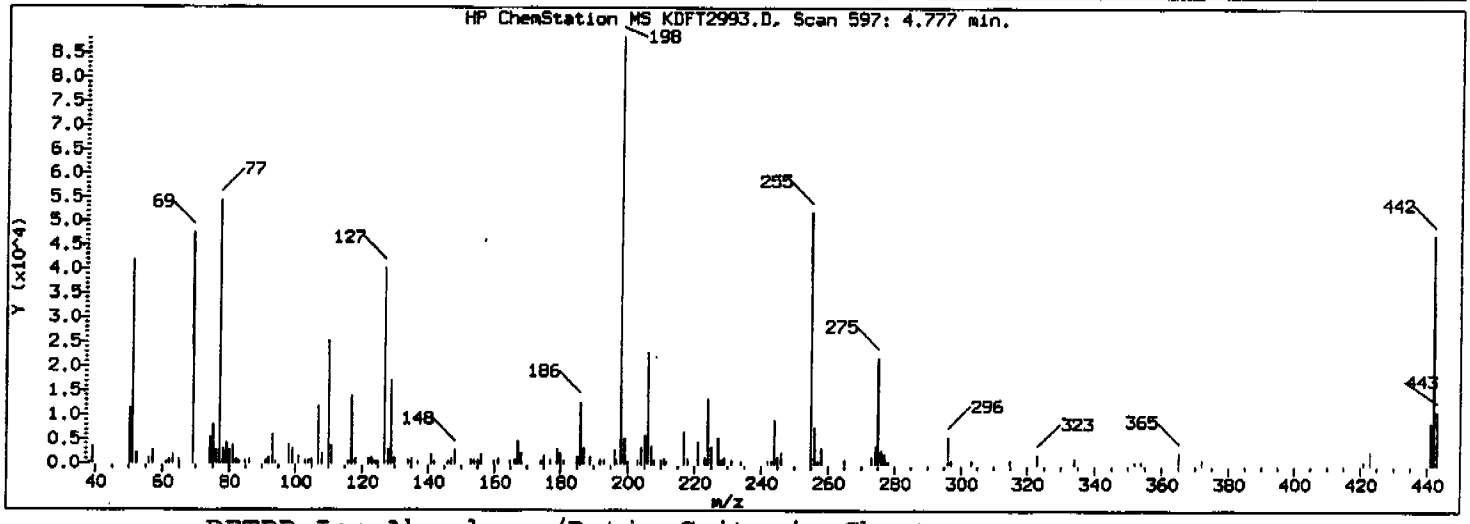
LOT# F5D220273

STL ST. LOUIS

Report Date: 05/09/2005 18:48

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509B.B/KDFT2993.D/KDFT2993.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509B.B\sw846tun.m Inst: MSK
Injection Date: 09-MAY-2005 11:40 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0193-05 (50NG)

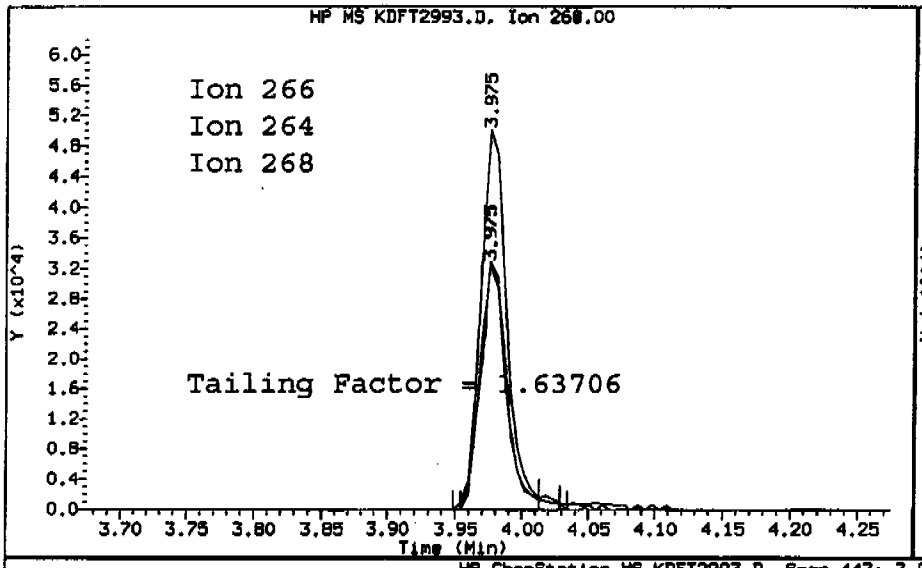


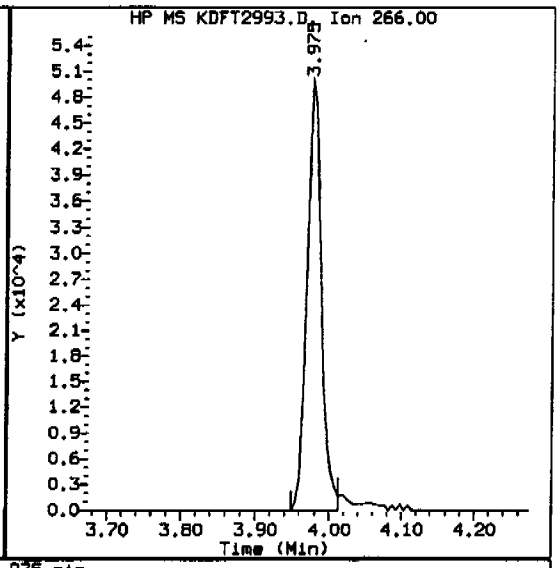


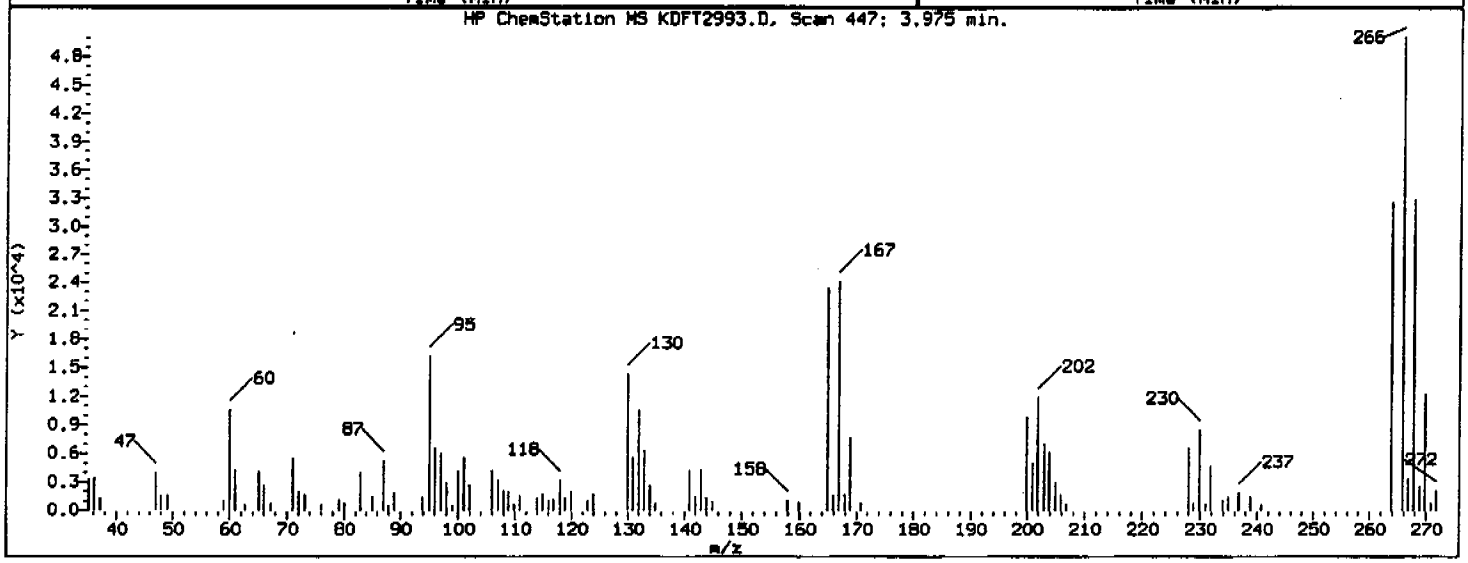
DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	46.77		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	55.18		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	48.39		PASS
197	0 - 1% of mass 198	0.43		PASS
199	5 - 9% of mass 198	6.30		PASS
275	10 - 30% of mass 198	25.11		PASS
365	Greater than 1% of mass 198	3.20		PASS
441	Present, but less than mass 443	10.10	(83.21)	PASS
442	Greater than 40% of mass 198	59.38		PASS
443	17 - 23% of mass 442	12.13	(20.43)	PASS

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509B.B/KDFT2993.D/KDFT2993.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509B.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 11:40 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)







Pentachlorophenol
==========
Exp. RT = 3.975
Found RT = 3.975

Mass	Area	Ratio
266	68571	100.00
264	43740	63.79
268	46831	68.30

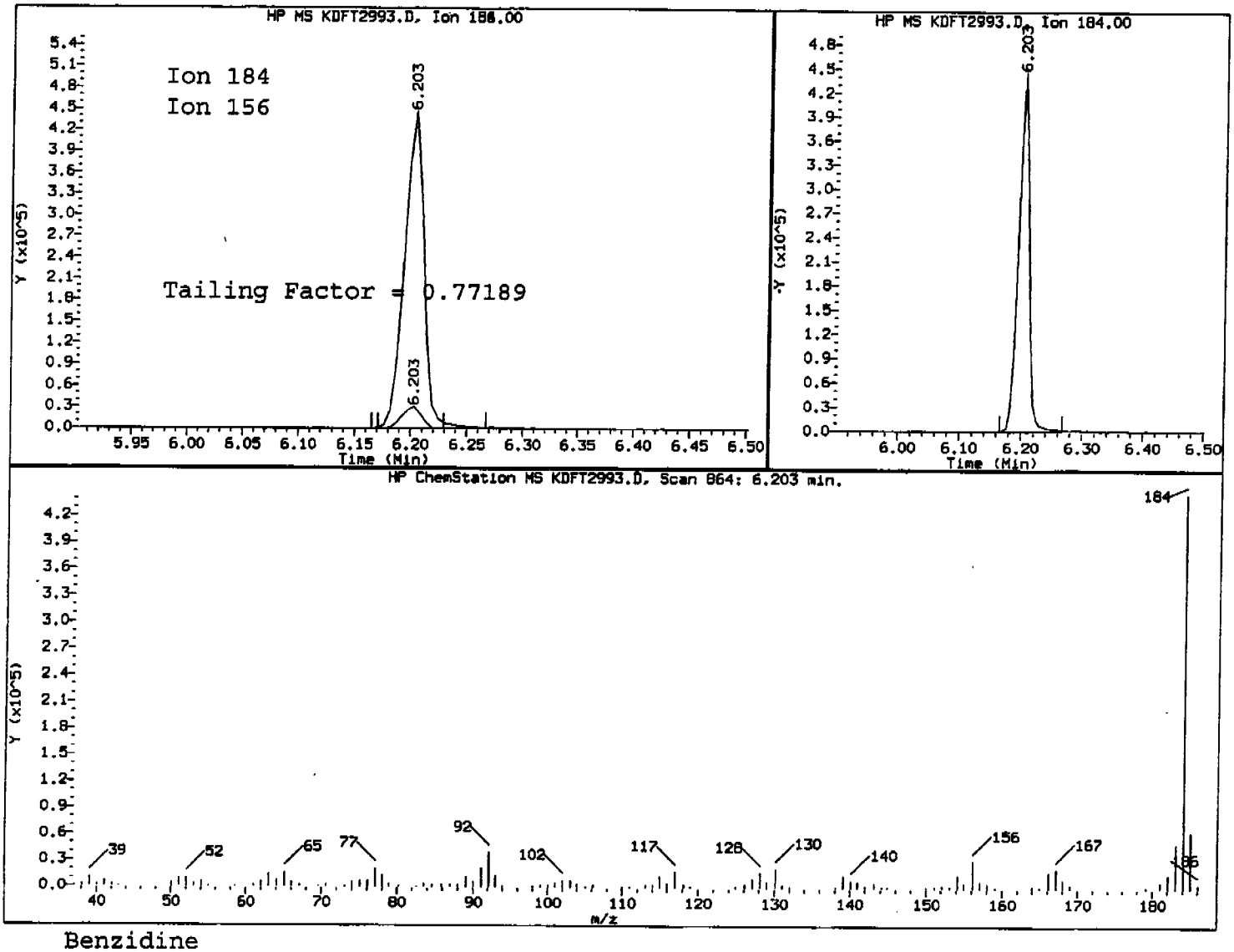
Tailing factor for Pentachlorophenol OK

Tail Factor = 1.637 Maximum Allowed = 5.0

STL ST. LOUIS

Report Date: 05/09/2005 18:48

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509B.B/KDFT2993.D/KDFT2993.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509B.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 11:40 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)



Benzidine
=========
Exp. RT = 6.203
Found RT = 6.203

Mass	Area	Ratio
184	536527	100.00
156	37459	6.98

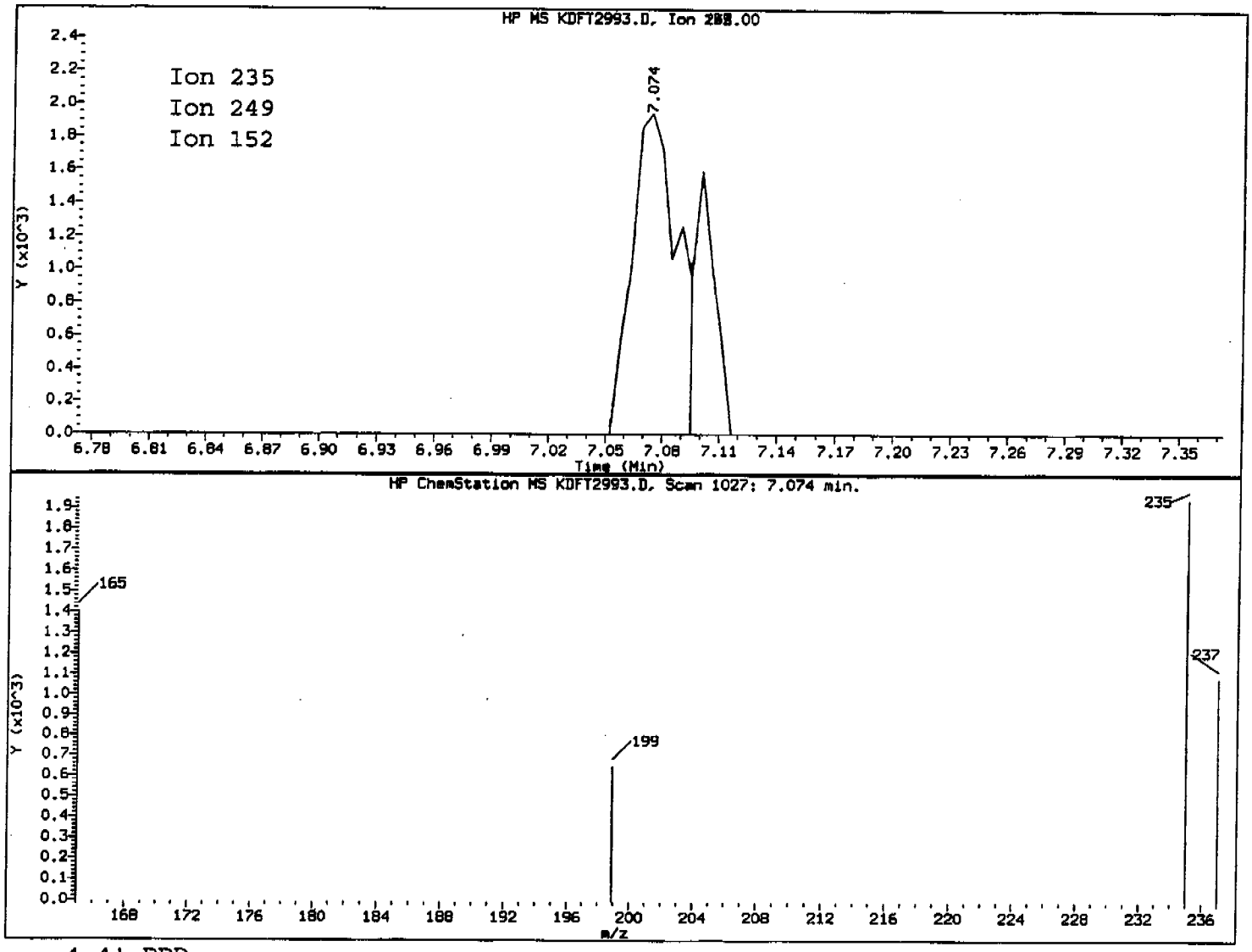
Tailing factor for Benzidine OK

Tail Factor = 0.772 Maximum Allowed = 3.0

STL ST. LOUIS

Report Date: 05/09/2005 18:48

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509B.B/KDFT2993.D/KDFT2993.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509B.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 11:40 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)

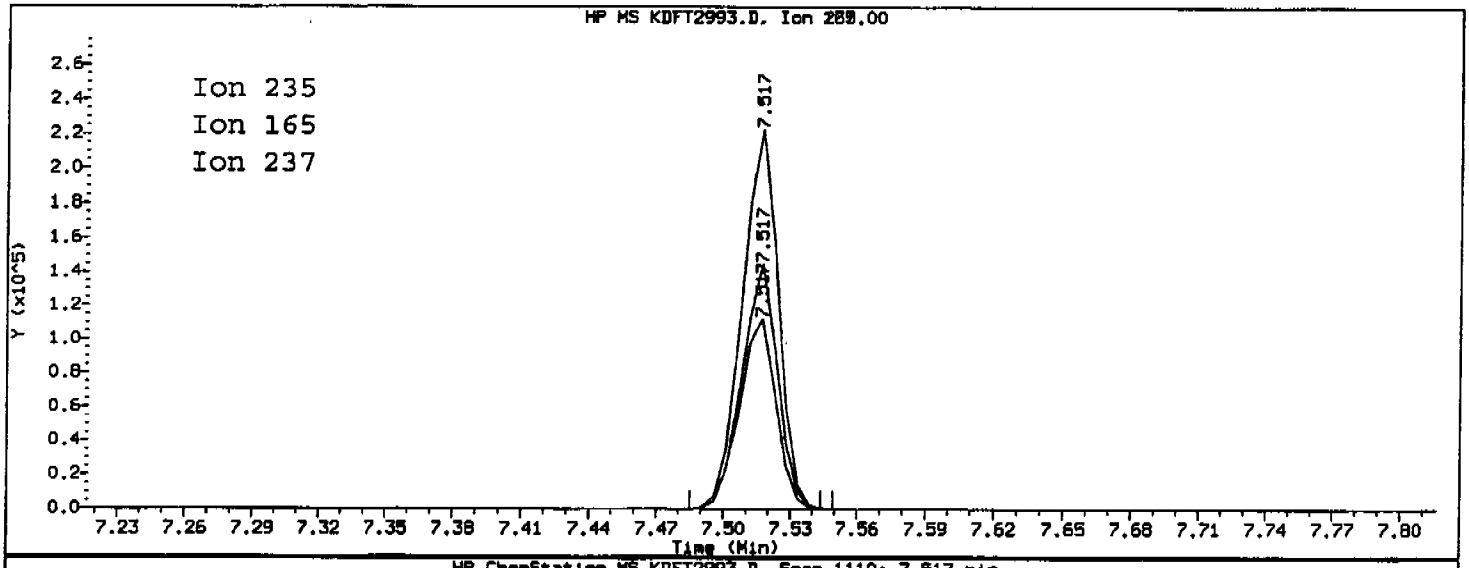


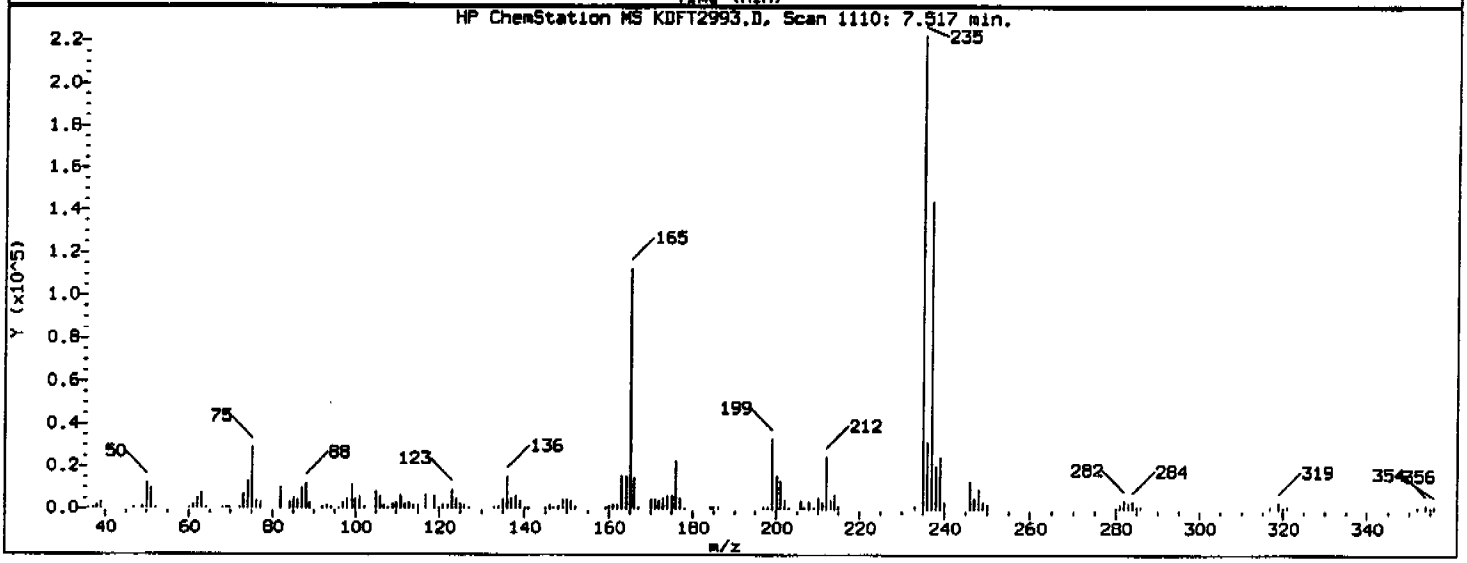
4,4'-DDD
========
Exp. RT = 6.734
Found RT = 7.074

Mass	Area	Ratio
235	3331	100.00
249	0	0.00
152	0	0.00

Report Date: 05/09/2005 18:48

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509B.B/KDFT2993.D/KDFT2993.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509B.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 11:40 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)



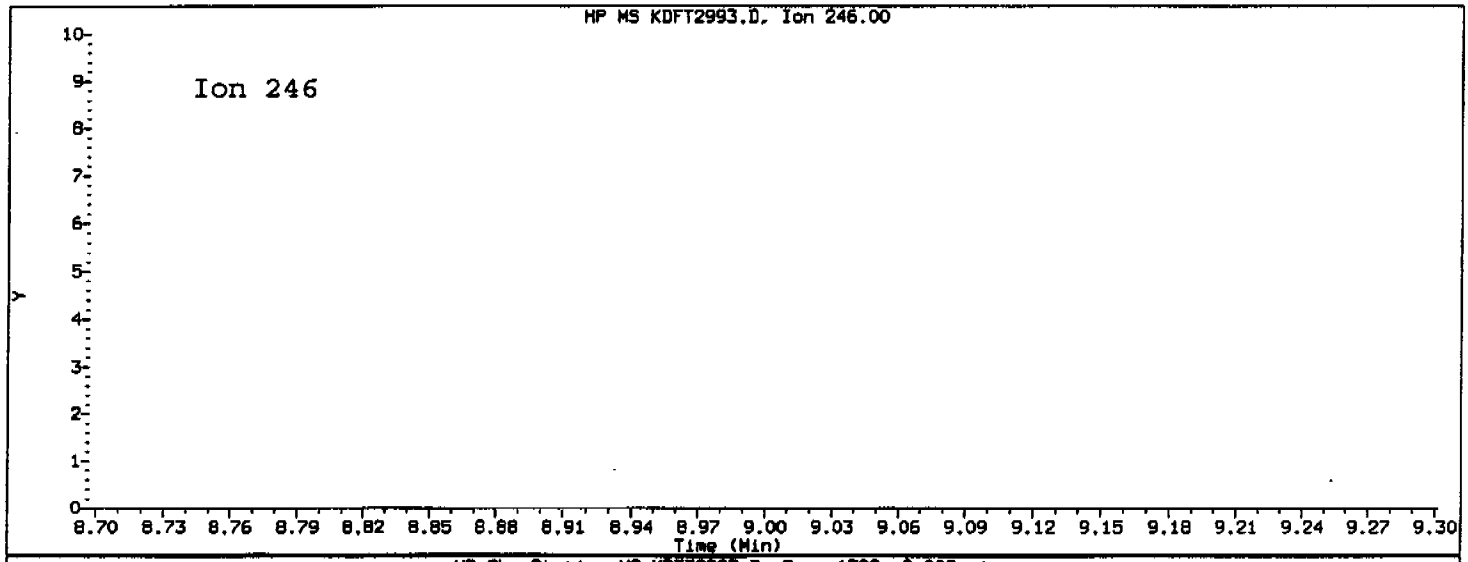


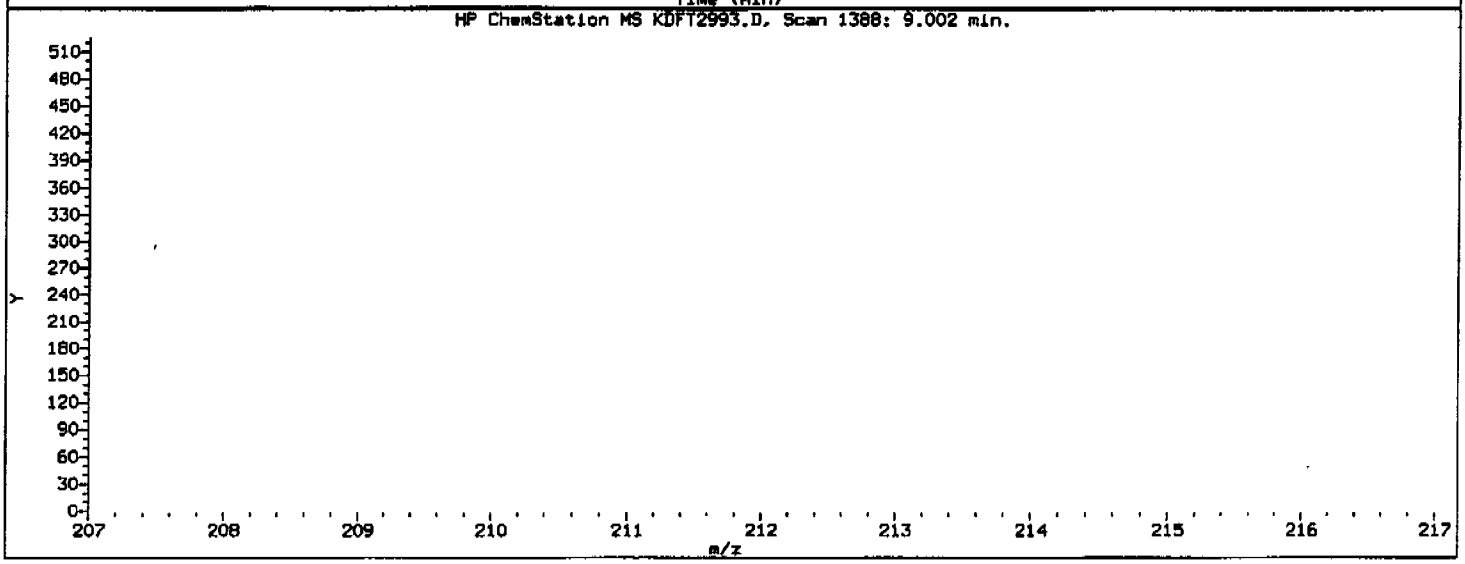
4,4'-DDT
========
Exp. RT = 7.517
Found RT = 7.517

Mass	Area	Ratio
235	251287	100.00
165	128167	51.00
237	161136	64.12

Report Date: 05/09/2005 18:48

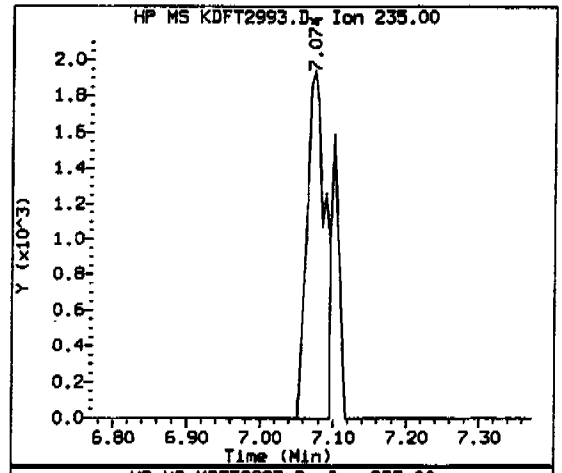
Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509B.B/KDFT2993.D/KDFT2993.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509B.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 11:40 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)



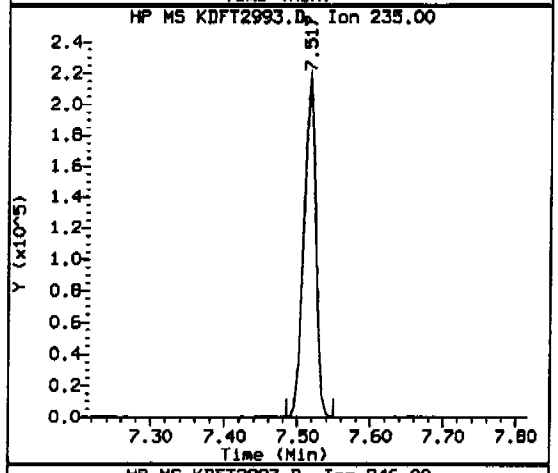


4,4'-DDE
========
Exp. RT = 9.000
Found RT = 0.000

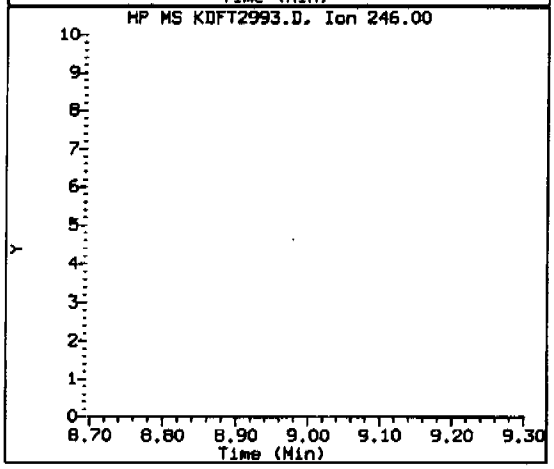
Mass	Area	Ratio
246	0	0.00



Compound: 4,4'-DDD
Quant Mass: 235
RT: 7.074
Area: 3331



Compound: 4,4'-DDT
Quant Mass: 235
RT: 7.517
Area: 251287



Compound: 4,4'-DDE
Quant Mass: 246
RT: 0.000
Area: 0

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	251287			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	3331	1.3	15.0	PASS
4,4-DDD + DDE	3331	1.3	15.0	PASS

****
TUNE SAMPLE *** PASSED *** DDT BREAKDOWN TEST
****

Report Date : 10-May-2005 11:11

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 09-MAY-2005 15:12
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Calibration File Names:
Level 1: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3000.D
Level 2: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2999.D
Level 3: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2998.D
Level 4: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2994.D
Level 5: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2997.D
Level 6: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2996.D
Level 7: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D

05/10/05

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
1 1,4-Dioxane	0.32546	0.33816	0.32341	0.50359	0.35085	0.35544	0.35011	0.36386	17.282	
2 Methyl methacrylate	0.39326	0.35373	0.33429	0.32307	0.34005	0.34871	0.35814	0.35018	6.411	
3 Pyridine	+++++	1.11948	1.14510	1.48184	1.03085	1.12933	1.19771	1.18405	13.139	<- ✓
4 N-Nitrosodimethylamine	0.61845	0.66640	0.64576	0.81336	0.63292	0.65133	0.66872	0.67099	9.721	
5 Dimethylformamide	0.83086	0.96586	0.87552	0.95582	0.87657	0.84417	0.86133	0.88716	5.972	
6 Ethyl methacrylate	1.06706	1.00921	1.00424	1.00134	1.03952	1.06985	1.11023	1.04307	3.955	
7 2-Picoline	1.11672	1.19222	1.23144	1.30096	1.31132	1.30450	1.39292	1.26430	7.204	
8 N-Nitrosomethylethylamine	0.46950	0.57796	0.56912	0.57845	0.60310	0.58248	0.59178	0.56748	7.853	
9 Methyl methanesulfonate	0.35479	0.41151	0.41103	0.41324	0.46135	0.46437	0.49021	0.42950	10.596	
11 Cyclohexanol	1.05566	1.27759	1.36047	1.55265	1.46743	1.45101	1.51047	1.38218	13.376	

STL St. Louis

INITIAL CALIBRATION DATA

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Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
12 N-Nitrosodiethylamine	0.61009	0.64225	0.62511	0.63051	0.70280	0.70476	0.71974	0.66218	6.828	
13 Ethyl Methanesulfonate	1.10180	1.07409	1.10510	1.05473	1.17698	1.15933	1.19896	1.12443	4.846	
14 Benzaldehyde	1.16166	1.23901	1.24283	1.29144	1.30102	1.36353	1.39704	1.28522	6.202	
16 Phenol	1.75195	1.80726	1.80491	1.85564	1.92061	1.93297	2.03172	1.87215	5.112	
17 Aniline	2.24940	2.24921	2.20195	2.21999	2.19252	2.09327	2.16052	2.19527	2.503	
18 Pentachloroethane	0.51171	0.48710	0.50536	0.53152	0.54099	0.55718	0.58367	0.53108	6.205	
19 Bis(2-chloroethyl)ether	1.42232	1.47518	1.46771	1.55891	1.62362	1.63312	1.69518	1.55372	6.546	
20 2-Chlorophenol	1.28515	1.30101	1.32448	1.34175	1.38475	1.38970	1.44860	1.35363	4.237	
21 1,3-Dichlorobenzene	1.52181	1.46761	1.48915	1.52485	1.59798	1.57360	1.66128	1.54804	4.344	
23 1,4-Dichlorobenzene	1.55923	1.55572	1.56936	1.62612	1.67774	1.73057	1.78914	1.64398	5.584	
24 Benzenethiol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
25 Benzyl Alcohol	+++++	0.49127	0.58220	0.78070	0.64756	0.69172	0.79794	0.66523	17.674	<- ✓
26 1,2-Dichlorobenzene	1.43601	1.42040	1.42896	1.48191	1.57067	1.60879	1.69602	1.52039	7.010	

STL St. Louis

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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD
	160.000 Level 7							
27 2-Methylphenol	1.34278	1.17468	1.16266	1.18079	1.19779	1.12644		
	1.20617						1.19876	5.722
28 2,2-oxybis(1-Chloropropane)	1.67111	1.59997	1.59493	1.59685	1.59156	1.56857		
	1.62414						1.60673	2.035
29 3 and 4-Methylphenol	1.21193	1.26835	1.25588	1.26547	1.29313	1.29765		
	1.35632						1.27839	3.477
30 Acetophenone	0.52107	0.53512	0.55618	0.57812	0.59620	0.62523		
	0.65259						0.58065	8.209
31 N-Nitrosopyrrolidine	0.17843	0.18370	0.18226	0.18768	0.19258	0.19901		
	0.21721						0.19155	6.907
32 N-Nitrosodinpropylamine	1.38412	1.32641	1.26395	1.26954	1.26179	1.14049		
	1.16971						1.25943	6.672
33 N-Nitrosomorpholine	0.06774	0.07645	0.07726	0.08065	0.08961	0.09511		
	0.10449						0.08447	14.906
34 O-Toluidine	0.56236	0.55680	0.56227	0.60066	0.63366	0.66229		
	0.71711						0.61359	9.900
35 Hexachloroethane	0.70621	0.69185	0.70131	0.71315	0.73556	0.73034		
	0.75336						0.71883	3.022
37 Nitrobenzene	0.63400	0.57304	0.55569	0.57990	0.56649	0.57833		
	0.58613						0.58194	4.297
38 N-Nitrosopiperidine	0.16432	0.16882	0.17079	0.17616	0.18096	0.18588		
	0.19442						0.17733	5.933
39 Isophorone	0.79023	0.78961	0.74316	0.78684	0.73887	0.73151		
	0.73022						0.75864	3.777
40 2-Nitrophenol	0.17199	0.19185	0.20165	0.21063	0.20833	0.21370		
	0.21316						0.20162	7.519

STL St. Louis

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD
	160.000 Level 7							
41 2,4-Dimethylphenol	0.39464	0.37840	0.42507	0.44929	0.44026	0.45231		
	0.45507						0.42786	7.082
42 Bis(2-chloroethoxy)methane	0.46580	0.48169	0.45850	0.48935	0.48546	0.49802		
	0.50632						0.48359	3.492
43 o,o,o-Triethyl-Phosphorothioa	0.21535	0.22497	0.22572	0.23460	0.25461	0.26744		
	0.27953						0.24317	9.968
44 Benzoic Acid	+++++	0.14938	0.18186	0.21149	0.21321	0.21904		
	0.22206						0.19951	14.257
45 2,4-Dichlorophenol	0.30283	0.30485	0.29951	0.31953	0.31683	0.32533		
	0.33330						0.31460	4.011
46 a,a-Dimethyl-phenethylamine	0.51145	0.76309	0.77322	0.78410	0.80856	0.82953		
	0.87545						0.76363	15.399
47 1,2,4-Trichlorobenzene	0.34185	0.35746	0.35339	0.37615	0.38417	0.40103		
	0.40951						0.37479	6.739
49 4-Chlorobenzenethiol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++ <-
50 Naphthalene	1.08753	1.03581	1.04396	1.10589	1.13745	1.25732		
	1.25971						1.13252	8.197
51 4-Chloroaniline	0.42703	0.43777	0.42550	0.46414	0.46498	0.49216		
	0.49838						0.45857	6.485
52 2,6-Dichlorophenol	0.25469	0.24292	0.25839	0.31185	0.29618	0.31378		
	0.32831						0.28659	11.858
53 Hexachloropropene	0.31733	0.32521	0.33376	0.35006	0.35945	0.38047		
	0.38884						0.35073	7.781
54 Hexachlorobutadiene	0.24195	0.24282	0.24506	0.25838	0.26695	0.28293		
	0.28415						0.26032	7.019

STL St. Louis

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
55 Benzothiazole	0.50139	0.46477	0.48632	0.49913	0.53104	0.55241			
	0.59151						0.51808	8.350	
56 Caprolactam	0.10983	0.13715	0.14068	0.13986	0.07457	0.14270			
	0.14775						0.12751	20.686	
57 n-Nitrosodi-n-butylamine	0.31342	0.29750	0.30099	0.31842	0.31943	0.33002			
	0.35040						0.31860	5.621	
58 p-Phenylenediamine	0.21874	0.29578	0.28872	0.36365	0.28733	0.27992			
	0.31741						0.29308	14.829	
59 4-Chloro-3-Methylphenol	0.35913	0.37813	0.35270	0.37066	0.36191	0.36373			
	0.37227						0.36550	2.376	
60 p-Chlorophenyl methyl sulfide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
61 Safrole	0.25500	0.27963	0.29140	0.29580	0.30963	0.32648			
	0.34629						0.30061	10.041	
62 2-Methylnaphthalene	0.88794	0.77032	0.78270	0.76612	0.79672	0.83407			
	0.83285						0.81010	5.427	
63 Phthalic anhydride	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
64 cis-Isosafrole	0.04748	0.05826	0.05654	0.05553	0.05574	0.05770			
	0.05995						0.05589	7.184	
65 1,2,4,5-Tetrachlorobenzene	1.42931	1.31274	1.32205	1.39168	1.47308	1.54004			
	1.62334						1.44175	7.870	
66 Hexachlorocyclopentadiene	+++++	0.29082	0.35057	0.42042	0.45653	0.51871			
	0.52918						0.42770	21.970	<- ✓
67 2,4,6-Trichlorophenol	0.40366	0.42817	0.43253	0.47073	0.47695	0.50392			
	0.51562						0.46165	8.996	

STL St. Louis

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
68 2,4,5-Trichlorophenol	0.36126	0.43572	0.45465	0.50975	0.52709	0.55460	0.57227	0.48790	15.302	
70 trans-Isosafrole	0.56648	0.54163	0.54100	0.56420	0.59728	0.65850	0.75581	0.60356	12.995	
71 Biphenyl	1.54419	1.44874	1.47932	1.53624	1.66716	1.76228	1.79160	1.60422	8.519	
72 2-Chloronaphthalene	1.28459	1.25429	1.24868	1.32305	1.37165	1.45131	1.49304	1.34666	7.145	
73 2-Nitroaniline	0.56068	0.59450	0.57200	0.58974	0.57864	0.58108	0.58409	0.58010	1.943	
74 1,4-Naphthoquinone	0.27176	0.36890	0.37704	0.33375	0.21032	0.17342	0.12916	0.26634	36.895	<-
75 1,4-Dinitrobenzene	0.07763	0.12369	0.12115	0.12521	0.13042	0.13540	0.14150	0.12214	17.086	
76 Dimethylphthalate	1.57249	1.50395	1.43024	1.51359	1.54841	1.59042	1.63647	1.54223	4.349	
77 1,3-Dinitrobenzene	0.16587	0.22945	0.23025	0.24388	0.24166	0.24971	0.25601	0.23098	13.109	
78 N-(hydroxymethyl) phthalimide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
79 Acenaphthylene	1.78264	1.85350	1.83334	1.95068	2.03538	2.19201	2.25001	1.98537	9.151	
80 2,6-Dinitrotoluene	0.30857	0.32443	0.31805	0.33652	0.33313	0.34221	0.34386	0.32954	3.966	
81 3-Nitroaniline	0.25688	0.31276	0.31966	0.34362	0.33774	0.34638	0.34913	0.32374	10.054	

STL St. Louis

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Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
83 Acenaphthene	1.19257	1.18915	1.16644	1.23299	1.27111	1.34989	1.37401	1.25374	6.511	
84 2,4-Dinitrophenol	+++++	0.13442	0.15447	0.20910	0.21489	0.22765	0.24059	0.19685	21.590	<- ✓
85 4-Nitrophenol	0.15488	0.28040	0.26095	0.29424	0.29900	0.29630	0.30603	0.27026	19.615	
86 Dibenzofuran	1.78899	1.75960	1.76044	1.83238	1.86554	1.95736	2.00179	1.85230	5.169	
87 Pentachlorobenzene	0.70728	0.65613	0.66649	0.68327	0.70614	0.73519	0.75466	0.70131	5.086	
88 2,4-Dinitrotoluene	0.38300	0.41425	0.42398	0.43887	0.43395	0.42886	0.44351	0.42378	4.817	
89 1-Naphthylamine	1.03800	1.06591	1.04498	1.10302	1.05391	1.16285	1.16394	1.09037	4.961	
90 2-Naphthylamine	0.97677	0.98368	0.94490	1.00433	0.88786	1.05261	1.06727	0.98820	6.232	
91 Phenyl sulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
92 2,3,4,6-Tetrachlorophenol	0.22811	0.28943	0.32362	0.39276	0.41144	0.42643	0.46069	0.36178	23.112	
93 Diethylphthalate	1.56646	1.51584	1.44594	1.50369	1.52783	1.59118	1.65448	1.54363	4.364	
94 Fluorene	1.39067	1.44170	1.39895	1.46920	1.50943	1.57478	1.59250	1.48246	5.410	
95 4-Chlorophenyl-phenylether	0.73220	0.77757	0.74123	0.78963	0.80878	0.85753	0.89151	0.79978	7.294	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 09-MAY-2005 15:12
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
96 Thionazin	0.23139	0.25240	0.25864	0.26567	0.28537	0.29086	0.29032	0.26781	8.348	
97 5-Nitro-o-toluidine	0.15995	0.20034	0.19875	0.21045	0.21494	0.21816	0.22533	0.20399	10.587	
98 4-Nitroaniline	0.25531	0.32144	0.31357	0.34297	0.32244	0.32011	0.33335	0.31560	8.966	
99 4,6-Dinitro-2-methylphenol	0.07096	0.14315	0.16182	0.17810	0.19059	0.20299	0.21255	0.16574	28.998	
100 N-Nitrosodiphenylamine	0.54502	0.54591	0.55655	0.59577	0.63362	0.68390	0.70231	0.60901	10.793	
101 tri-n-butylphosphate	1.52154	1.63086	1.65030	1.71460	1.82251	1.87783	2.01075	1.74692	9.553	
102 Azobenzene	1.28418	1.25396	1.25360	1.32115	1.40244	1.51255	1.53490	1.36611	8.724	
103 Benzal Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
105 Sulfotepp	0.13055	0.14332	0.15072	0.15105	0.16041	0.16417	0.16883	0.15272	8.604	
106 Diallate (peak 1)	0.27906	0.28345	0.29123	0.30014	0.31100	0.32036	0.33572	0.30299	6.788	
107 1,3,5-Trinitrobenzene	0.05460	0.08597	0.09688	0.10024	0.10572	0.10753	0.11048	0.09449	20.515	
108 Phorate	0.49946	0.50445	0.50760	0.53049	0.56947	0.58636	0.62513	0.54614	8.860	
109 4-Bromophenyl-phenylether	0.25905	0.25934	0.26729	0.27474	0.28488	0.30609	0.30705	0.27978	7.282	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
110 Phenacetin	0.38624	0.41341	0.42268	0.42532	0.42504	0.42869	0.43971	0.42015	4.015	
111 Diallate (peak 2)	0.06683	0.06004	0.06289	0.06373	0.06488	0.06546	0.06814	0.06457	4.135	
112 Hexachlorobenzene	0.25197	0.27497	0.27003	0.28362	0.29496	0.31040	0.31347	0.28563	7.789	
113 Dimethoate	0.27185	0.28949	0.28826	0.27480	0.21882	0.21567	0.18694	0.24940	16.564	
114 Atrazine	0.22048	0.24204	0.23940	0.24289	0.25564	0.25595	0.26658	0.24614	6.060	
115 tris(2-chloroethyl)phosphate	0.22625	0.21717	0.22304	0.21944	0.21858	0.22085	0.22796	0.22190	1.817	
116 4-Aminobiphenyl	0.70998	0.67001	0.68070	0.79368	0.77334	0.82627	0.87380	0.76111	10.111	
117 Pentachlorophenol	+++++	0.09961	0.13222	0.16057	0.17722	0.19094	0.19524	0.15930	23.341	<- ✓
118 Pronamide	0.37755	0.36975	0.37320	0.37153	0.37705	0.38333	0.39158	0.37771	2.012	
119 Pentachloronitrobenzene	0.11754	0.12476	0.12783	0.13205	0.13537	0.13783	0.13768	0.13044	5.767	
120 Phenyl disulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
122 Phenanthrene	1.21323	1.16781	1.16800	1.21492	1.25092	1.29887	1.33464	1.23548	5.134	
123 Disulfoton	0.35737	0.36108	0.36643	0.37668	0.39485	0.40708	0.42916	0.38466	6.946	

STL St. Louis

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Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
124 Anthracene	1.13256	1.14117	1.14674	1.19216	1.20907	1.25945	1.27953	1.19438	4.909	
125 Dinoseb	0.13116	0.20289	0.23168	0.24451	0.26321	0.27373	0.28489	0.23315	22.611	
126 Carbazole	1.00112	0.99272	0.98565	1.01718	1.02179	1.05115	1.07363	1.02046	3.134	
127 Phenyl sulfone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
128 Methyl Parathion	0.22472	0.25273	0.25605	0.24165	0.20186	0.19848	0.17806	0.22194	13.501	
129 Di-n-Butylphthalate	1.23844	1.28428	1.29851	1.34131	1.36909	1.40220	1.42548	1.33705	5.027	
130 Parathion	0.13719	0.18275	0.18212	0.18480	0.18353	0.18558	0.18900	0.17785	10.162	
131 4-Nitroquinoline-1-oxide	+++++	0.06721	0.07979	0.10710	0.08542	0.08685	0.08235	0.08479	15.310	<- ✓
132 Methapyrilene	0.34073	0.34857	0.33447	0.27766	0.21659	0.20104	0.18189	0.27156	26.360	
133 Isodrin	0.14938	0.13071	0.13659	0.12878	0.13896	0.13984	0.14629	0.13865	5.427	
134 Fluoranthene	1.21184	1.25632	1.24105	1.28408	1.28872	1.31276	1.34336	1.27688	3.478	
135 Benzidine	+++++	0.56417	0.62359	0.60667	0.62876	0.61166	0.60503	0.60665	3.765	<- ✓
136 Bis (4-chlorophenyl) disulfid	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-

STL St. Louis

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Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
137 Pyrene	1.44013	1.49471	1.52186	1.60419	1.69360	1.79125			
	1.83598						1.62596	9.363	
138 4-chlorophenyl sulfone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
140 Aramite (peak 1)	0.05375	0.06879	0.07594	0.07526	0.07359	0.07265			
	0.07371						0.07053	10.986	
141 Kepone	+++++	0.00357	0.00453	0.00668	0.00729	0.00747			
	0.00748						0.00617	27.492	<-
142 Aramite (peak 2)	0.08770	0.10236	0.10922	0.11671	0.11420	0.11097			
	0.11134						0.10750	9.129	
143 p-(Dimethylamino)azobenzene	0.29047	0.32717	0.33641	0.34730	0.34129	0.34067			
	0.34674						0.33286	5.977	
144 Chlorobenzilate	0.40399	0.42688	0.44410	0.45660	0.49105	0.50109			
	0.53020						0.46484	9.587	
145 3,3-Dimethylbenzidine	0.51683	0.65871	0.66384	0.65632	0.68561	0.66412			
	0.66962						0.64501	8.888	
146 Butylbenzylphthalate	0.61722	0.65246	0.65102	0.67786	0.68656	0.70064			
	0.72090						0.67238	5.180	
147 Acrylamide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
148 2-Acetylaminofluorene(1)	0.44078	0.49973	0.51625	0.54235	0.55089	0.55882			
	0.56140						0.52432	8.256	
(2)	0.35522	0.39267	0.39584	0.41786	0.42490	0.43100			
	0.43659						0.40773	7.007	
149 Famphur	+++++	0.02197	0.03377	0.05429	0.01871	0.01486			
	0.00621						0.02497	67.953	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 09-MAY-2005 15:12
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
150 Benzo(a)Anthracene	1.33032	1.33059	1.34078	1.40754	1.43063	1.45272			
	1.51202						1.40066	5.006	
151 4,4'-Methylenebis(2-Chloroani	0.10305	0.10187	0.11221	0.12299	0.11640	0.12512			
	0.13117						0.11611	9.589	
152 3,3'-Dichlorobenzidine	0.38645	0.46904	0.50749	0.55099	0.58964	0.62806			
	0.64364						0.53933	17.052	
154 Chrysene	1.24032	1.23554	1.25004	1.31476	1.36190	1.43672			
	1.49079						1.33287	7.614	
155 bis(2-ethylhexyl)Phthalate	0.77256	0.78002	0.79798	0.83297	0.86561	0.89738			
	0.94556						0.84173	7.673	
M 156 Toluenediamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
157 Triethylamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
158 Di-n-octylphthalate	1.48067	1.57388	1.62112	1.70384	1.73235	1.85490			
	1.96432						1.70444	9.730	
159 1,2-Dinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
160 Benzo(b)fluoranthene	1.39885	1.41621	1.46035	1.50973	1.61109	1.70381			
	1.77235						1.55320	9.373	
161 Benzo(k)fluoranthene	1.44545	1.46282	1.50254	1.54138	1.54230	1.60109			
	1.70323						1.54269	5.715	
162 7,12-Dimethylbenz(a)anthracen	0.63206	0.67147	0.70278	0.74963	0.79123	0.82571			
	0.80112						0.73914	9.807	
163 Hexachlorophene	+++++	0.00594	0.00928	0.01407	0.00882	0.00689			
	0.09695						0.02366	152.219	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
164 N,N-Dimethylamine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
165 Benzo(a)pyrene	1.23142	1.31720	1.35705	1.40635	1.45618	1.49417	1.55026	1.40180	7.800	
167 Carbofuran Phenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
168 2,3- and 3,5-Diaminotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
169 3-methylcholanthrene	0.67245	0.68361	0.68395	0.73820	0.79182	0.82758	0.85552	0.75045	10.005	
170 2,6- and 2,4-Diaminotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
171 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
172 n-Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
173 Indeno(1,2,3-cd)pyrene	1.20009	1.14841	1.17194	1.21828	1.41867	1.44023	1.49853	1.29945	11.293	
174 Dibenzo(a,h)anthracene	1.08721	1.10761	1.17629	1.24035	1.36991	1.39823	1.44700	1.26094	11.521	
175 Dibenz(e,a) Pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
176 n-tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
177 Benzo(g,h,i)perylene	1.08831	1.11124	1.08242	1.09329	1.22378	1.25186	1.26999	1.16013	7.262	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
179 Phthalic Acid	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
180 n-Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
M 181 Isosafrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
$ 10 2-Fluorophenol	0.96999	1.19014	1.19591	1.29262	1.25592	1.24397	1.30984	1.20834	9.450	
$ 15 Phenol-d5	1.43393	1.65988	1.64749	1.73098	1.76944	1.74661	1.85043	1.69125	7.830	
$ 36 Nitrobenzene-d5	0.52895	0.54117	0.53680	0.56299	0.54978	0.55813	0.56579	0.54909	2.547	
$ 69 2-Fluorobiphenyl	1.47081	1.43281	1.46322	1.59566	1.67063	1.80245	1.83885	1.61063	10.315	
$ 104 2,4,6-Tribromophenol	0.19056	0.22276	0.21223	0.22962	0.22832	0.23715	0.24461	0.22361	7.970	
$ 139 Terphenyl-d14	1.09963	1.13587	1.18869	1.25768	1.32471	1.39043	1.44767	1.26353	10.347	
$ 178 2,4,6-Trichlorophenol-d2	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-

Report Date : 10-May-2005 11:32

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAY-2005 12:01
End Cal Date : 09-MAY-2005 15:12
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\8270K.m
Cal Date : 10-May-2005 11:31 hongs
Curve Type : Average

Calibration File Names:
Level 1: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\KCAL3000.D
Level 2: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\KCAL2999.D
Level 3: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\KCAL2998.D
Level 4: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\KCAL2994.D
Level 5: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\KCAL2997.D
Level 6: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\KCAL2996.D
Level 7: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\KCAL2995.D

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3			.000 6	RRF	% RSD	
	160.000 Level 7								
1 1,4-Dioxane	0.32546	0.33816	0.3			5544			
	0.35011						0.36386	17.282	
2 Methyl methacrylate	+++++	+++++	+++++		+++++	+++++			
	+++++						+++++	+++++	<-
3 Pyridine	+++++	1.11948	1.14510	1.48184	1.03085	1.12933			
	1.19771						1.18405	13.139	<-
4 N-Nitrosodimethylamine	0.61845	0.66640	0.64576	0.81336	0.63292	0.65133			
	0.66872						0.67099	9.721	
5 Dimethylformamide	0.83086	0.96586	0.87552	0.95582	0.87657	0.84417			
	0.86133						0.88716	5.972	
6 Ethyl methacrylate	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
7 2-Picoline	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
8 N-Nitrosomethylethylamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
9 Methyl methanesulfonate	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
11 Cyclohexanol	1.05566	1.27759	1.36047	1.55265	1.46743	1.45101			
	1.51047						1.38218	12.376	

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INITIAL CALIBRATION DATA

Start Cal Date : 09-MAY-2005 12:01
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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\8270K.m
Cal Date : 10-May-2005 11:31 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
12 N-Nitrosodiethylamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
13 Ethyl Methanesulfonate	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
14 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
16 Phenol	1.75195	1.80726	1.80491	1.85564	1.92061	1.93297			
	2.03172						1.87215	5.112	
17 Aniline	2.24940	2.24921	2.20195	2.21999	2.19252	2.09327			
	2.16052						2.19527	2.503	
18 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
19 Bis(2-chloroethyl)ether	1.42232	1.47518	1.46771	1.55891	1.62362	1.63312			
	1.69518						1.55372	6.546	
20 2-Chlorophenol	1.28515	1.30101	1.32448	1.34175	1.38475	1.38970			
	1.44860						1.35363	4.237	
21 1,3-Dichlorobenzene	1.52181	1.46761	1.48915	1.52485	1.59798	1.57360			
	1.66128						1.54804	4.344	
23 1,4-Dichlorobenzene	1.55923	1.55572	1.56936	1.62612	1.67774	1.73057			
	1.78914						1.64398	5.584	
24 Benzenethiol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
25 Benzyl Alcohol	+++++	0.49127	0.58220	0.78070	0.64756	0.69172			
	0.79794						0.66523	17.674	<-
26 1,2-Dichlorobenzene	1.43601	1.42040	1.42896	1.48191	1.57067	1.60879			
	1.69602						1.52039	7.010	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAY-2005 12:01
End Cal Date : 09-MAY-2005 15:12
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\8270K.m
Cal Date : 10-May-2005 11:31 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
27 2-Methylphenol	1.34278	1.17468	1.16266	1.18079	1.19779	1.12644			
	1.20617						1.19876	5.722	
28 2,2-oxybis(1-Chloropropane)	1.67111	1.59997	1.59493	1.59685	1.59156	1.56857			
	1.62414						1.60673	2.035	
29 3 and 4-Methylphenol	1.21193	1.26835	1.25588	1.26547	1.29313	1.29765			
	1.35632						1.27839	3.477	
30 Acetophenone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
31 N-Nitrosopyrrolidine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
32 N-Nitrosodinpropylamine	1.38412	1.32641	1.26395	1.26954	1.26179	1.14049			
	1.16971						1.25943	6.672	
33 N-Nitrosomorpholine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
34 O-Toluidine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
35 Hexachloroethane	0.70621	0.69185	0.70131	0.71315	0.73556	0.73034			
	0.75336						0.71883	3.022	
37 Nitrobenzene	0.63400	0.57304	0.55569	0.57990	0.56649	0.57833			
	0.58613						0.58194	4.297	
38 N-Nitrosopiperidine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
39 Isophorone	0.79023	0.78961	0.74316	0.78684	0.73887	0.73151			
	0.73022						0.75864	3.777	
40 2-Nitrophenol	0.17199	0.19185	0.20165	0.21063	0.20833	0.21370			
	0.21316						0.20162	7.519	

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Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
41 2,4-Dimethylphenol	0.39464	0.37840	0.42507	0.44929	0.44026	0.45231			
	0.45507						0.42786	7.082	
42 Bis(2-chloroethoxy)methane	0.46580	0.48169	0.45850	0.48935	0.48546	0.49802			
	0.50632						0.48359	3.492	
43 o,o,o-Triethyl-Phosphorothioa	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
44 Benzoic Acid	+++++	0.14938	0.18186	0.21149	0.21321	0.21904			
	0.22206						0.19951	14.257	
45 2,4-Dichlorophenol	0.30283	0.30485	0.29951	0.31953	0.31683	0.32533			
	0.33330						0.31460	4.011	
46 a,a-Dimethyl-phenethylamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
47 1,2,4-Trichlorobenzene	0.34185	0.35746	0.35339	0.37615	0.38417	0.40103			
	0.40951						0.37479	6.739	
49 4-Chlorobenzenethiol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
50 Naphthalene	1.08753	1.03581	1.04396	1.10589	1.13745	1.25732			
	1.25971						1.13252	8.197	
51 4-Chloroaniline	0.42703	0.43777	0.42550	0.46414	0.46498	0.49216			
	0.49838						0.45857	6.485	
52 2,6-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
53 Hexachloropropene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
54 Hexachlorobutadiene	0.24195	0.24282	0.24506	0.25838	0.26695	0.28293			
	0.28415						0.26032	7.019	

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Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
55 Benzothiazole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
56 Caprolactam	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
57 n-Nitrosodi-n-butylamine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
58 p-Phenylenediamine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
59 4-Chloro-3-Methylphenol	0.35913	0.37813	0.35270	0.37066	0.36191	0.36373	0.37227	0.36550	2.376	
60 p-Chlorophenyl methyl sulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
61 Safrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
62 2-Methylnaphthalene	0.88794	0.77032	0.78270	0.76612	0.79672	0.83407	0.83285	0.81010	5.427	
63 Phthalic anhydride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
64 cis-Isosafrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
65 1,2,4,5-Tetrachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
66 Hexachlorocyclopentadiene	+++++	0.29082	0.35057	0.42042	0.45653	0.51871	0.52918	0.42770	21.970	<-
67 2,4,6-Trichlorophenol	0.40366	0.42817	0.43253	0.47073	0.47695	0.50392	0.51562	0.46165	8.996	

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Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
68 2,4,5-Trichlorophenol	0.36126	0.43572	0.45465	0.50975	0.52709	0.55460			
	0.57227						0.48790	15.302	
70 trans-Isosafrole	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
71 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
72 2-Chloronaphthalene	1.28459	1.25429	1.24868	1.32305	1.37165	1.45131			
	1.49304						1.34666	7.145	
73 2-Nitroaniline	0.56068	0.59450	0.57200	0.58974	0.57864	0.58108			
	0.58409						0.58010	1.943	
74 1,4-Naphthoquinone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
75 1,4-Dinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
76 Dimethylphthalate	1.57249	1.50395	1.43024	1.51359	1.54841	1.59042			
	1.63647						1.54223	4.349	
77 1,3-Dinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
78 N-(hydroxymethyl) phthalimide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
79 Acenaphthylene	1.78264	1.85350	1.83334	1.95068	2.03538	2.19201			
	2.25001						1.98537	9.151	
80 2,6-Dinitrotoluene	0.30857	0.32443	0.31805	0.33652	0.33313	0.34221			
	0.34386						0.32954	3.966	
81 3-Nitroaniline	0.25688	0.31276	0.31966	0.34362	0.33774	0.34638			
	0.34913						0.32374	10.054	

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Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
83 Acenaphthene	1.19257	1.18915	1.16644	1.23299	1.27111	1.34989			
	1.37401						1.25374	6.511	
84 2,4-Dinitrophenol	+++++	0.13442	0.15447	0.20910	0.21489	0.22765			
	0.24059						0.19685	21.590	<-
85 4-Nitrophenol	0.15488	0.28040	0.26095	0.29424	0.29900	0.29630			
	0.30603						0.27026	19.615	
86 Dibenzofuran	1.78899	1.75960	1.76044	1.83238	1.86554	1.95736			
	2.00179						1.85230	5.169	
87 Pentachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
88 2,4-Dinitrotoluene	0.38300	0.41425	0.42398	0.43887	0.43395	0.42886			
	0.44351						0.42378	4.817	
89 1-Naphthylamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
90 2-Naphthylamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
91 Phenyl sulfide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
92 2,3,4,6-Tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
93 Diethylphthalate	1.56646	1.51584	1.44594	1.50369	1.52783	1.59118			
	1.65448						1.54363	4.364	
94 Fluorene	1.39067	1.44170	1.39895	1.46920	1.50943	1.57478			
	1.59250						1.48246	5.410	
95 4-Chlorophenyl-phenylether	0.73220	0.77757	0.74123	0.78963	0.80878	0.85753			
	0.89151						0.79978	7.294	

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Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
96 Thionazin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
97 5-Nitro-o-toluidine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
98 4-Nitroaniline	0.25531	0.32144	0.31357	0.34297	0.32244	0.32011	0.33335	0.31560	8.966	
99 4,6-Dinitro-2-methylphenol	0.07096	0.14315	0.16182	0.17810	0.19059	0.20299	0.21255	0.16574	28.998	
100 N-Nitrosodiphenylamine	0.54502	0.54591	0.55655	0.59577	0.63362	0.68390	0.70231	0.60901	10.793	
101 tri-n-butylphosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
102 Azobenzene	1.28418	1.25396	1.25360	1.32115	1.40244	1.51255	1.53490	1.36611	8.724	
103 Benzal Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
105 Sulfotepp	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
106 Diallate (peak 1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
107 1,3,5-Trinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
108 Phorate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
109 4-Bromophenyl-phenylether	0.25905	0.25934	0.26729	0.27474	0.28488	0.30609	0.30705	0.27978	7.282	

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Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
110 Phenacetin	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
111 Diallate (peak 2)	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
112 Hexachlorobenzene	0.25197	0.27497	0.27003	0.28362	0.29496	0.31040			
	0.31347						0.28563	7.789	
113 Dimethoate	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
114 Atrazine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
115 tris(2-chloroethyl)phosphate	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
116 4-Aminobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
117 Pentachlorophenol	+++++	0.09961	0.13222	0.16057	0.17722	0.19094			
	0.19524						0.15930	23.341	<-
118 Pronamide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
119 Pentachloronitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
120 Phenyl disulfide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
122 Phenanthrene	1.21323	1.16781	1.16800	1.21492	1.25092	1.29887			
	1.33464						1.23548	5.134	
123 Disulfoton	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-

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Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	___ RRF	% RSD	
124 Anthracene	1.13256	1.14117	1.14674	1.19216	1.20907	1.25945	1.27953	1.19438	4.909	
125 Dinoseb	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
126 Carbazole	1.00112	0.99272	0.98565	1.01718	1.02179	1.05115	1.07363	1.02046	3.134	
127 Phenyl sulfone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
128 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
129 Di-n-Butylphthalate	1.23844	1.28428	1.29851	1.34131	1.36909	1.40220	1.42548	1.33705	5.027	
130 Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
131 4-Nitroquinoline-1-oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
132 Methapyrilene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
133 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
134 Fluoranthene	1.21184	1.25632	1.24105	1.28408	1.28872	1.31276	1.34336	1.27688	3.478	
135 Benzidine	+++++	0.56417	0.62359	0.60667	0.62876	0.61166	0.60503	0.60665	3.765	<-
136 Bis (4-chlorophenyl) disulfid	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-

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Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
137 Pyrene	1.44013	1.49471	1.52186	1.60419	1.69360	1.79125			
	1.83598						1.62596	9.363	
138 4-chlorophenyl sulfone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
140 Aramite (peak 1)	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
141 Kepone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
142 Aramite (peak 2)	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
143 p-(Dimethylamino)azobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
144 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
145 3,3-Dimethylbenzidine	0.51683	0.65871	0.66384	0.65632	0.68561	0.66412			
	0.66962						0.64501	8.888	
146 Butylbenzylphthalate	0.61722	0.65246	0.65102	0.67786	0.68656	0.70064			
	0.72090						0.67238	5.180	
147 Acrylamide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
148 2-Acetylaminofluorene(1)	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
(2)	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
149 Famphur	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-

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Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
150 Benzo(a)Anthracene	1.33032	1.33059	1.34078	1.40754	1.43063	1.45272			
	1.51202						1.40066	5.006	
151 4,4'-Methylenebis(2-Chloroani	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
152 3,3'-Dichlorobenzidine	0.38645	0.46904	0.50749	0.55099	0.58964	0.62806			
	0.64364						0.53933	17.052	
154 Chrysene	1.24032	1.23554	1.25004	1.31476	1.36190	1.43672			
	1.49079						1.33287	7.614	
155 bis(2-ethylhexyl)Phthalate	0.77256	0.78002	0.79798	0.83297	0.86561	0.89738			
	0.94556						0.84173	7.673	
M 156 Toluenediamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
157 Triethylamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
158 Di-n-octylphthalate	1.48067	1.57388	1.62112	1.70384	1.73235	1.85490			
	1.96432						1.70444	9.730	
159 1,2-Dinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
160 Benzo(b)fluoranthene	1.39885	1.41621	1.46035	1.50973	1.61109	1.70381			
	1.77235						1.55320	9.373	
161 Benzo(k)fluoranthene	1.44545	1.46282	1.50254	1.54138	1.54230	1.60109			
	1.70323						1.54269	5.715	
162 7,12-Dimethylbenz(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
163 Hexachlorophene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAY-2005 12:01
End Cal Date : 09-MAY-2005 15:12
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\8270K.m
Cal Date : 10-May-2005 11:31 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
164 N,N-Dimethylamine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
165 Benzo(a)pyrene	1.23142	1.31720	1.35705	1.40635	1.45618	1.49417	1.55026	1.40180	7.800	
167 Carbofuran Phenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
168 2,3- and 3,5-Diaminotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
169 3-methylcholanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
170 2,6- and 2,4-Diaminotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
171 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
172 n-Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
173 Indeno(1,2,3-cd)pyrene	1.20009	1.14841	1.17194	1.21828	1.41867	1.44023	1.49853	1.29945	11.293	
174 Dibenzo(a,h)anthracene	1.08721	1.10761	1.17629	1.24035	1.36991	1.39823	1.44700	1.26094	11.521	
175 Dibens(e,a) Pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
176 n-tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
177 Benzo(g,h,i)perylene	1.08831	1.11124	1.08242	1.09329	1.22378	1.25186	1.26999	1.16013	7.262	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAY-2005 12:01
End Cal Date : 09-MAY-2005 15:12
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\8270K.m
Cal Date : 10-May-2005 11:31 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
179 Phthalic Acid	*****	*****	*****	*****	*****	*****	*****	*****	*****	<-
180 n-Dodecane	*****	*****	*****	*****	*****	*****	*****	*****	*****	<-
M 181 Isosafrole	*****	*****	*****	*****	*****	*****	*****	*****	*****	
$ 10 2-Fluorophenol	0.96999	1.19014	1.19591	1.29262	1.25592	1.24397	1.30984	1.20834	9.450	
$ 15 Phenol-d5	1.43393	1.65988	1.64749	1.73098	1.76944	1.74661	1.85043	1.69125	7.830	
$ 36 Nitrobenzene-d5	0.52895	0.54117	0.53680	0.56299	0.54978	0.55813	0.56579	0.54909	2.547	
$ 69 2-Fluorobiphenyl	1.47081	1.43281	1.46322	1.59566	1.67063	1.80245	1.83885	1.61063	10.315	
$ 104 2,4,6-Tribromophenol	0.19056	0.22276	0.21223	0.22962	0.22832	0.23715	0.24461	0.22361	7.970	
$ 139 Terphenyl-d14	1.09963	1.13587	1.18869	1.25768	1.32471	1.39043	1.44767	1.26353	10.347	
$ 178 2,4,6-Trichlorophenol-d2	*****	*****	*****	*****	*****	*****	*****	*****	*****	<-

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B/KCAL2994.D
Report Date: 05/10/2005

INITIAL CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL2994.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 12:01
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270

COMPOUND	%RSD
1,4-Dioxane	17.3
Pyridine	13.1
N-Nitrosodimethylamine	9.7
Dimethylformamide	6.0
2-Fluorophenol	9.5
Cyclohexanol	12.4
Aniline	2.5
Phenol-d5	7.8
Bis(2-chloroethyl)ether	6.5
Phenol	5.1
2-Chlorophenol	4.2
1,3-Dichlorobenzene	4.3
1,4-Dichlorobenzene	5.6
1,2-Dichlorobenzene	7.0
Benzyl Alcohol	17.7
2,2-oxybis(1-Chloropropane)	2.0
2-Methylphenol	5.7
N-Nitrosodinpropylamine	6.7
Hexachloroethane	3.0
3 and 4-Methylphenol	3.5
Nitrobenzene-d5	2.5
Nitrobenzene	4.3
Isophorone	3.8
2-Nitrophenol	7.5
2,4-Dimethylphenol	7.1
Bis(2-chloroethoxy)methane	3.5
2,4-Dichlorophenol	4.0
1,2,4-Trichlorobenzene	6.7
Benzoic Acid	14.3
Naphthalene	8.2
4-Chloroaniline	6.5
Hexachlorobutadiene	7.0
4-Chloro-3-Methylphenol	2.4
2-Methylnaphthalene	5.4
Hexachlorocyclopentadiene	22.0
2,4,6-Trichlorophenol	9.0
2,4,5-Trichlorophenol	15.3
2-Fluorobiphenyl	10.3
2-Chloronaphthalene	7.1

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B/KCAL2994.D
Report Date: 05/10/2005

INITIAL CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL2994.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 12:01
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A

COMPOUND	%RSD
2-Nitroaniline	1.9
Dimethylphthalate	4.3
Acenaphthylene	9.2
2,6-Dinitrotoluene	4.0
Acenaphthene	6.5
3-Nitroaniline	10.1
2,4-Dinitrophenol	21.6
Dibenzofuran	5.2
2,4-Dinitrotoluene	4.8
4-Nitrophenol	19.6
Fluorene	5.4
Diethylphthalate	4.4
4-Chlorophenyl-phenylether	7.3
4-Nitroaniline	9.0
4,6-Dinitro-2-methylphenol	29.0
N-Nitrosodiphenylamine	10.8
Azobenzene	8.7
2,4,6-Tribromophenol	8.0
4-Bromophenyl-phenylether	7.3
Hexachlorobenzene	7.8
Pentachlorophenol	23.3
Phenanthrene	5.1
Anthracene	4.9
Carbazole	3.1
Di-n-Butylphthalate	5.0
Fluoranthene	3.5
Benzidine	3.8
Pyrene	9.4
Terphenyl-d14	10.3
3,3-Dimethylbenzidine	8.9
Butylbenzylphthalate	5.2
Benzo(a)Anthracene	5.0
Chrysene	7.6
3,3'-Dichlorobenzidine	17.1
bis(2-ethylhexyl)Phthalate	7.7
Di-n-octylphthalate	9.7
Benzo(b)fluoranthene	9.4
Benzo(k)fluoranthene	5.7
Benzo(a)pyrene	7.8

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B/KCAL2994.D
Report Date: 05/10/2005

INITIAL CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL2994.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 12:01
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A

COMPOUND	%RSD
Indeno(1,2,3-cd)pyrene	11.3
Dibenzo(a,h)anthracene	11.5
Benzo(g,h,i)perylene	7.3
Dibenz(e,a) Pyrene	0.0

The average of all %RSD's in the initial calibration is 8.1

05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2994.D
Report Date: 10-May-2005 09:44

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2994.D
Lab Smp Id: SSTD050 Client Smp ID: SSTD050
Inj Date : 09-MAY-2005 12:01
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD050
Misc Info : SV0220-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Meth Date : 10-May-2005 09:44 hongs Quant Type: ISTD
Cal Date : 07-MAY-2005 22:18 Cal File: KCAL2963.D
Als bottle: 3 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 1,4-Dioxane	88	1.260	1.260	(0.277)	121671	50.0000	69.20
	4 N-Nitrosodimethylamine	74	1.693	1.693	(0.372)	196514	50.0000	60.61
	3 Pyridine	79	1.672	1.672	(0.367)	358024	50.0000	62.58
	5 Dimethylformamide	44	2.136	2.136	(0.469)	230934	50.0000	53.87(M)
$	10 2-Fluorophenol	112	3.237	3.237	(0.710)	312307	50.0000	53.49
	11 Cyclohexanol	57	3.258	3.258	(0.715)	375133	50.0000	56.17
	17 Aniline	93	4.252	4.252	(0.933)	536367	50.0000	50.56
	19 Bis(2-chloroethyl)ether	93	4.327	4.327	(0.950)	376645	50.0000	50.17
$	15 Phenol-d5	99	4.321	4.321	(0.948)	418217	50.0000	51.17
	16 Phenol	94	4.332	4.332	(0.951)	448336	50.0000	49.56
	20 2-Chlorophenol	128	4.385	4.385	(0.962)	324176	50.0000	49.56
	21 1,3-Dichlorobenzene	146	4.508	4.508	(0.989)	368416	50.0000	49.25
*	22 1,4-Dichlorobenzene-d4	152	4.556	4.556	(1.000)	193286	40.0000	
	23 1,4-Dichlorobenzene	146	4.578	4.578	(1.005)	392882	50.0000	49.46
	26 1,2-Dichlorobenzene	146	4.797	4.797	(1.053)	358040	50.0000	48.73
	25 Benzyl Alcohol	108	4.807	4.807	(1.055)	188623	50.0000	58.68
	28 2,2-oxybis(1-Chloropropane)	45	4.968	4.968	(1.090)	385812	50.0000	49.69
	27 2-Methylphenol	108	5.010	5.010	(1.100)	285287	50.0000	49.25
	35 Hexachloroethane	117	5.155	5.155	(1.131)	172303	50.0000	49.60
	32 N-Nitrosodinpropylamine	70	5.155	5.155	(1.131)	306731	50.0000	50.40
	29 3 and 4-Methylphenol	108	5.203	5.203	(1.142)	611494	100.000	98.99

05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2994.D Page 2
Report Date: 10-May-2005 09:44

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.283	5.283	(0.860)	462544	50.0000	51.26
	37 Nitrobenzene	77	5.304	5.304	(0.863)	476435	50.0000	49.82
	39 Isophorone	82	5.598	5.598	(0.911)	646454	50.0000	51.86
	40 2-Nitrophenol	139	5.705	5.705	(0.929)	173054	50.0000	52.24
	41 2,4-Dimethylphenol	107	5.833	5.833	(0.950)	369130	50.0000	52.50
	42 Bis(2-chloroethoxy)methane	93	5.913	5.913	(0.963)	402042	50.0000	50.60
	45 2,4-Dichlorophenol	162	6.041	6.041	(0.983)	262524	50.0000	50.78
	47 1,2,4-Trichlorobenzene	180	6.095	6.095	(0.992)	309040	50.0000	50.18
*	48 Naphthalene-d8	136	6.143	6.143	(1.000)	657267	40.0000	
	44 Benzoic Acid	122	6.111	6.111	(0.995)	173756	50.0000	53.00
	50 Naphthalene	128	6.164	6.164	(1.003)	908585	50.0000	48.82
	51 4-Chloroaniline	127	6.319	6.319	(1.029)	381333	50.0000	50.61
	54 Hexachlorobutadiene	225	6.415	6.415	(1.044)	212280	50.0000	49.63
	62 2-Methylnaphthalene	142	7.131	7.131	(1.161)	629429	50.0000	47.28
	59 4-Chloro-3-Methylphenol	107	7.083	7.083	(1.153)	304532	50.0000	50.70
	66 Hexachlorocyclopentadiene	237	7.473	7.473	(0.847)	184654	50.0000	49.15
	67 2,4,6-Trichlorophenol	196	7.660	7.660	(0.868)	206752	50.0000	50.98
	68 2,4,5-Trichlorophenol	196	7.746	7.746	(0.878)	223889	50.0000	52.24
$	69 2-Fluorobiphenyl	172	7.756	7.756	(0.879)	700840	50.0000	49.54
	72 2-Chloronaphthalene	162	7.874	7.874	(0.892)	581107	50.0000	49.12
	73 2-Nitroaniline	65	8.168	8.168	(0.926)	259023	50.0000	50.83
	76 Dimethylphthalate	163	8.536	8.536	(0.967)	664795	50.0000	49.07
	79 Acenaphthylene	152	8.558	8.558	(0.970)	856771	50.0000	49.13
	80 2,6-Dinitrotoluene	165	8.654	8.654	(0.981)	147807	50.0000	51.06
*	82 Acenaphthene-d10	164	8.825	8.825	(1.000)	351374	40.0000	
	83 Acenaphthene	153	8.883	8.883	(1.007)	541550	50.0000	49.17
	81 3-Nitroaniline	138	8.889	8.889	(1.007)	150922	50.0000	53.07
	84 2,4-Dinitrophenol	184	9.070	9.070	(1.028)	91839	50.0000	53.11
	86 Dibenzofuran	168	9.161	9.161	(1.038)	804815	50.0000	49.46
	88 2,4-Dinitrotoluene	165	9.332	9.332	(1.058)	192761	50.0000	51.78
	85 4-Nitrophenol	109	9.380	9.380	(1.063)	129235	50.0000	50.82
	93 Diethylphthalate	149	9.802	9.802	(1.111)	660447	50.0000	48.71
	94 Fluorene	166	9.776	9.776	(1.108)	645297	50.0000	49.55
	95 4-Chlorophenyl-phenylether	204	9.824	9.824	(1.113)	346818	50.0000	49.36
	98 4-Nitroaniline	138	10.011	10.011	(1.134)	150637	50.0000	54.34
	99 4,6-Dinitro-2-methylphenol	198	10.064	10.064	(0.876)	136357	50.0000	53.73
	100 N-Nitrosodiphenylamine	169	10.091	10.091	(0.878)	456129	50.0000	48.91
	102 Azobenzene	77	10.107	10.107	(0.880)	1011491	50.0000	48.35
$	104 2,4,6-Tribromophenol	330	10.278	10.278	(1.165)	100852	50.0000	51.34
	109 4-Bromophenyl-phenylether	248	10.705	10.705	(0.932)	210343	50.0000	49.10
	112 Hexachlorobenzene	284	10.935	10.935	(0.952)	217142	50.0000	49.65
	117 Pentachlorophenol	266	11.341	11.341	(0.987)	122937	50.0000	50.40
*	121 Phenanthrene-d10	188	11.490	11.490	(1.000)	612492	40.0000	
	122 Phenanthrene	178	11.533	11.533	(1.004)	930158	50.0000	49.17
	124 Anthracene	178	11.619	11.619	(1.011)	912739	50.0000	49.91
	126 Carbazole	167	12.019	12.019	(1.046)	778766	50.0000	49.84
	129 Di-n-Butylphthalate	149	12.906	12.906	(1.123)	1026929	50.0000	50.16
	134 Fluoranthene	202	13.830	13.830	(1.204)	983110	50.0000	50.28
	135 Benzidine	184	14.226	14.226	(0.854)	375164	50.0000	50.00
	137 Pyrene	202	14.247	14.247	(0.855)	992029	50.0000	49.33
$	139 Terphenyl-d14	244	14.690	14.690	(0.882)	777748	50.0000	49.77
	145 3,3-Dimethylbenzidine	212	15.689	15.689	(0.942)	405868	50.0000	50.88
	146 Butylbenzylphthalate	149	15.812	15.812	(0.949)	419190	50.0000	50.41
	150 Benzo(a)Anthracene	228	16.624	16.624	(0.998)	870421	50.0000	50.24

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2994.D Page 3
Report Date: 10-May-2005 09:44

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.656	16.656	(1.000)	494718	40.0000	
152 3,3'-Dichlorobenzidine	252	16.720	16.720	(1.004)	340729	50.0000	51.08
154 Chrysene	228	16.710	16.710	(1.003)	813043	50.0000	49.32
155 bis(2-ethylhexyl)Phthalate	149	17.036	17.036	(1.023)	515108	50.0000	49.48
158 Di-n-octylphthalate	149	18.184	18.184	(0.944)	871339	50.0000	49.98
160 Benzo(b)fluoranthene	252	18.628	18.628	(0.967)	772068	50.0000	48.60
161 Benzo(k)fluoranthene	252	18.676	18.676	(0.969)	788255	50.0000	49.96
165 Benzo(a)pyrene	252	19.167	19.167	(0.995)	719204	50.0000	50.16
* 166 Perylene-d12	264	19.269	19.269	(1.000)	409117	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.989	20.989	(1.089)	623024	50.0000	46.88
174 Dibenzo(a,h)anthracene	278	21.031	21.031	(1.091)	634309	50.0000	49.18
177 Benzo(g,h,i)perylene	276	21.443	21.443	(1.113)	559104	50.0000	47.12

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2994.D Page 1
Report Date: 10-May-2005 09:44

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

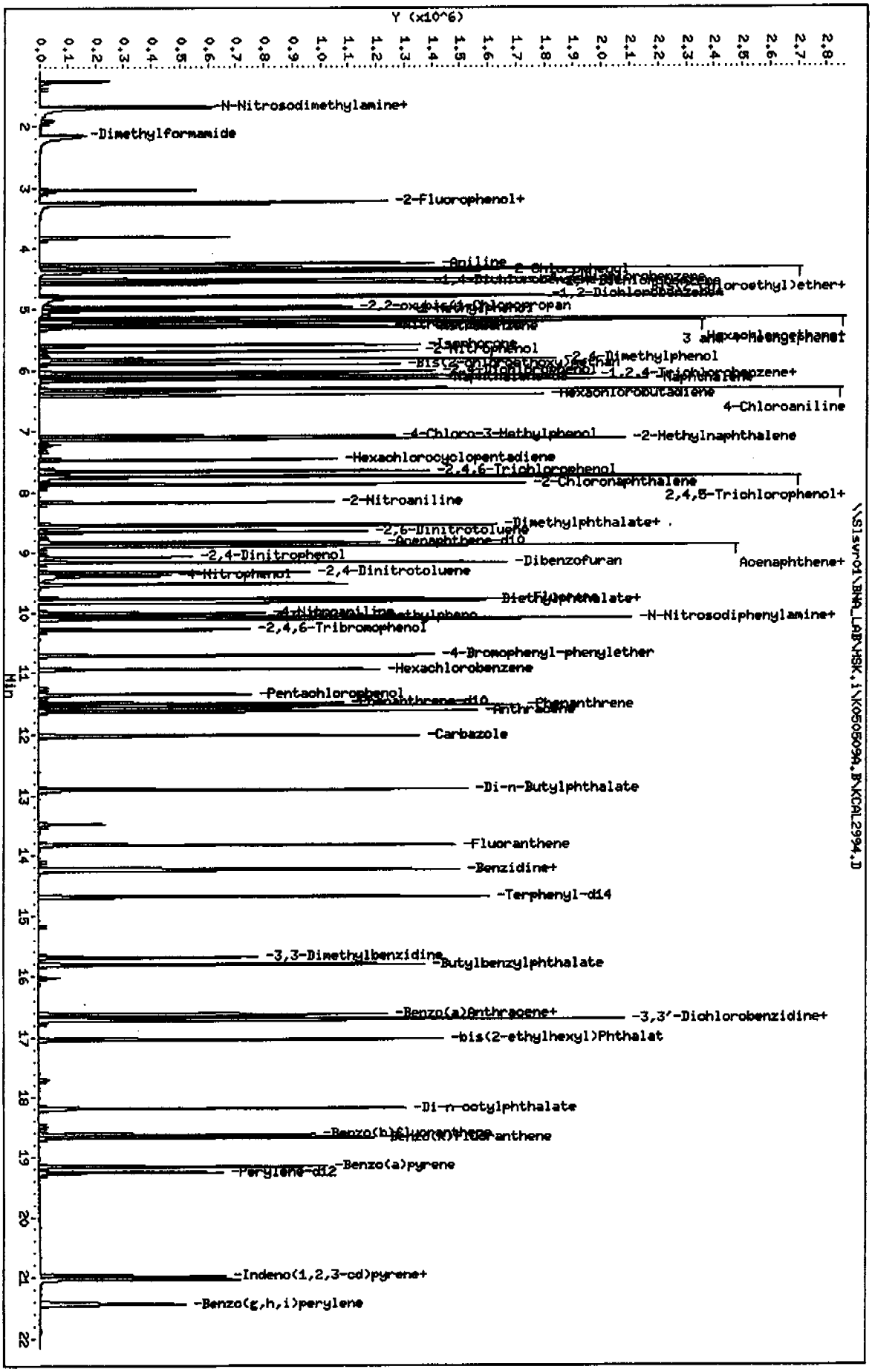
Instrument ID: MSK.i
Lab File ID: KCAL2994.D
Lab Smp Id: SSTD050
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Misc Info: SV0220-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD050
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	193286	0.00
48 Naphthalene-d8	657267	328634	1314534	657267	0.00
82 Acenaphthene-d10	351374	175687	702748	351374	0.00
121 Phenanthrene-d10	612492	306246	1224984	612492	0.00
153 Chrysene-d12	494718	247359	989436	494718	0.00
166 Perylene-d12	409117	204559	818234	409117	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.56	0.00
48 Naphthalene-d8	6.14	5.64	6.64	6.14	0.00
82 Acenaphthene-d10	8.83	8.33	9.33	8.83	0.00
121 Phenanthrene-d10	11.49	10.99	11.99	11.49	0.00
153 Chrysene-d12	16.66	16.16	17.16	16.66	0.00
166 Perylene-d12	19.27	18.77	19.77	19.27	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

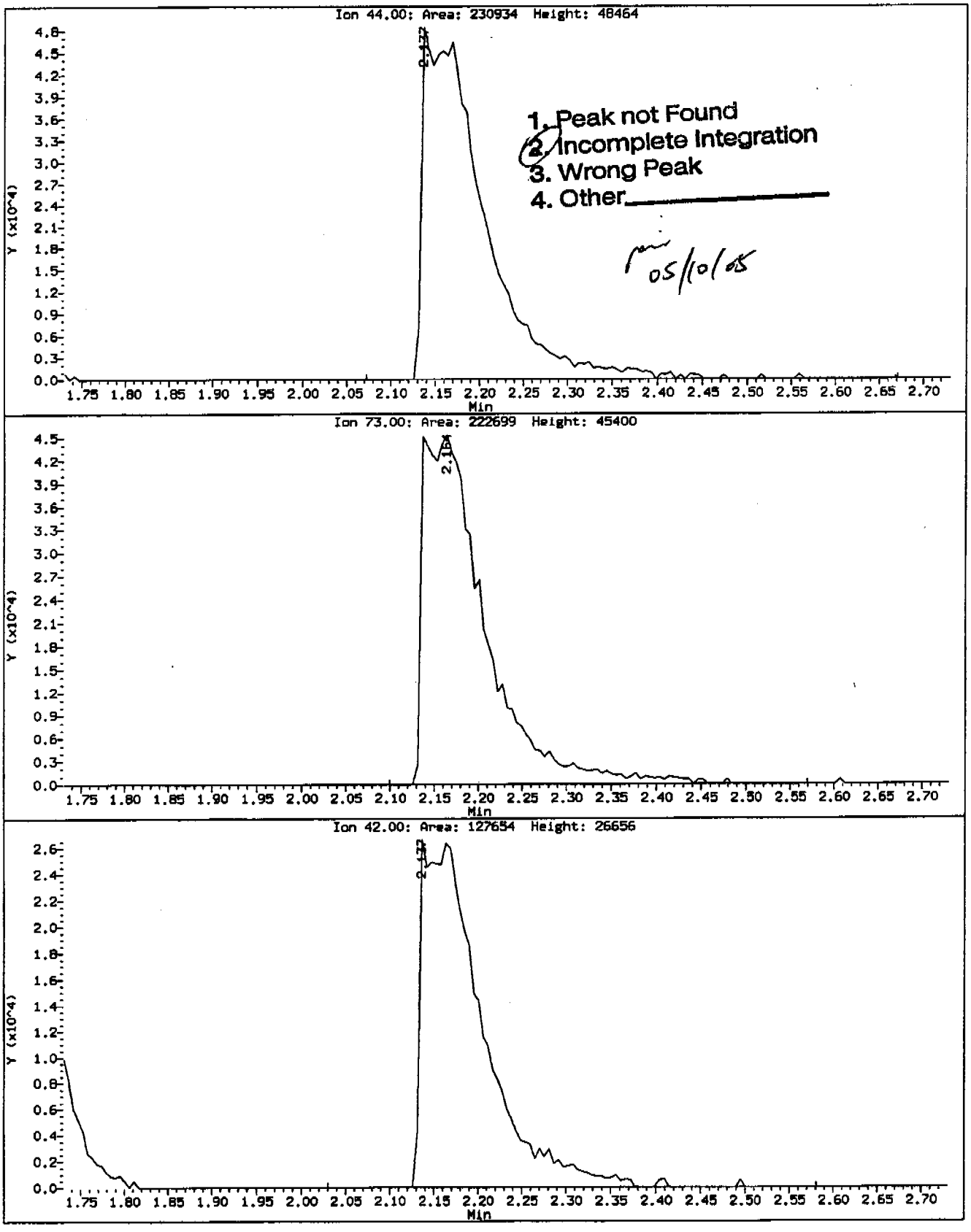


Data File: \\Slsvr01\BNA_LAB\HSK.i\K050509A.B\KCAL2994.D
Date : 09-MAY-2005 12:01
Client ID: SSTD060
Sample Info: SSTD060
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slevr01\BNA_LAB\MSK.i\K050509A.B\KCAL2994.D
Injection Date: 09-MAY-2005 12:01
Instrument: MSK.i
Client Sample ID: SSTD050

Compound: Dimethylformamide
CAS Number: 68-12-2



STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D
Lab Smp Id: SSTD160 Client Smp ID: SSTD160
Inj Date : 09-MAY-2005 12:33
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD160
Misc Info : SV0218-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Meth Date : 10-May-2005 09:41 hongs Quant Type: ISTD
Cal Date : 07-MAY-2005 22:49 Cal File: KCAL2964.D
Als bottle: 4 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	1.353	1.353	(0.297)	267010	160.000	174.9(AM)
4	N-Nitrosodimethylamine	74	1.812	1.812	(0.397)	509995	160.000	171.9(AM)
3	Pyridine	79	1.786	1.786	(0.391)	913431	160.000	176.6(AM)
5	Dimethylformamide	44	2.272	2.272	(0.498)	656888	160.000	160.1(AM)
$ 10	2-Fluorophenol	112	3.276	3.276	(0.718)	998948	160.000	176.2(A)
11	Cyclohexanol	57	3.281	3.281	(0.719)	1151960	160.000	179.0(AM)
17	Aniline	93	4.270	4.270	(0.936)	1647716	160.000	157.9
19	Bis(2-chloroethyl)ether	93	4.350	4.350	(0.953)	1292825	160.000	174.9(A)
$ 15	Phenol-d5	99	4.344	4.344	(0.952)	1411227	160.000	175.0(A)
16	Phenol	94	4.355	4.355	(0.954)	1549489	160.000	174.1(A)
20	2-Chlorophenol	128	4.409	4.409	(0.966)	1104771	160.000	170.9(A)
21	1,3-Dichlorobenzene	146	4.521	4.521	(0.991)	1266969	160.000	171.6(A)
* 22	1,4-Dichlorobenzene-d4	152	4.563	4.563	(1.000)	190662	40.0000	
23	1,4-Dichlorobenzene	146	4.585	4.585	(1.005)	1364483	160.000	174.3(A)
26	1,2-Dichlorobenzene	146	4.809	4.809	(1.054)	1293464	160.000	177.8(A)
25	Benzyl Alcohol	108	4.836	4.836	(1.060)	608544	160.000	191.4(A)
28	2,2-oxybis(1-Chloropropane)	45	4.975	4.975	(1.090)	1238647	160.000	162.4(A)
27	2-Methylphenol	108	5.023	5.023	(1.101)	919886	160.000	160.1(A)
35	Hexachloroethane	117	5.156	5.156	(1.130)	574546	160.000	167.5(A)
32	N-Nitrosodinpropylamine	70	5.183	5.183	(1.136)	892076	160.000	147.9
29	3 and 4-Methylphenol	108	5.231	5.231	(1.146)	2068790	320.000	336.4(A)

05/10/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.301	5.301	(0.863)	1461871	160.000	166.3(A)
	37 Nitrobenzene	77	5.327	5.327	(0.867)	1514410	160.000	162.2(A)
	39 Isophorone	82	5.627	5.627	(0.916)	1886717	160.000	155.0
	40 2-Nitrophenol	139	5.717	5.717	(0.930)	550746	160.000	169.8(A)
	41 2,4-Dimethylphenol	107	5.851	5.851	(0.952)	1175775	160.000	170.6(A)
	42 Bis(2-chloroethoxy)methane	93	5.926	5.926	(0.964)	1308198	160.000	168.4(A)
	45 2,4-Dichlorophenol	162	6.049	6.049	(0.984)	861154	160.000	169.7(A)
	47 1,2,4-Trichlorobenzene	180	6.102	6.102	(0.993)	1058079	160.000	175.1(A)
*	48 Naphthalene-d8	136	6.145	6.145	(1.000)	645937	40.0000	
	44 Benzoic Acid	122	6.177	6.177	(1.005)	573755	160.000	180.1(AM)
	50 Naphthalene	128	6.177	6.177	(1.005)	3254779	160.000	178.2(A)
	51 4-Chloroaniline	127	6.337	6.337	(1.031)	1287687	160.000	174.6(A)
	54 Hexachlorobutadiene	225	6.417	6.417	(1.044)	734169	160.000	175.0(A)
	62 2-Methylnaphthalene	142	7.138	7.138	(1.162)	2151870	160.000	163.8(A)
	59 4-Chloro-3-Methylphenol	107	7.090	7.090	(1.154)	961862	160.000	162.7(A)
	66 Hexachlorocyclopentadiene	237	7.475	7.475	(0.847)	686031	160.000	199.3(A)
	67 2,4,6-Trichlorophenol	196	7.667	7.667	(0.869)	668451	160.000	178.9(A)
	68 2,4,5-Trichlorophenol	196	7.747	7.747	(0.878)	741890	160.000	187.7(A)
$	69 2-Fluorobiphenyl	172	7.769	7.769	(0.880)	2383905	160.000	183.1(A)
	72 2-Chloronaphthalene	162	7.886	7.886	(0.893)	1935583	160.000	177.5(A)
	73 2-Nitroaniline	65	8.185	8.185	(0.927)	757215	160.000	162.1(A)
	76 Dimethylphthalate	163	8.559	8.559	(0.970)	2121539	160.000	169.6(A)
	79 Acenaphthylene	152	8.570	8.570	(0.971)	2916936	160.000	181.2(A)
	80 2,6-Dinitrotoluene	165	8.672	8.672	(0.982)	445782	160.000	166.8(A)
*	82 Acenaphthene-d10	164	8.826	8.826	(1.000)	324102	40.0000	
	83 Acenaphthene	153	8.891	8.891	(1.007)	1781284	160.000	175.1(A)
	81 3-Nitroaniline	138	8.912	8.912	(1.010)	452616	160.000	172.0(A)
	84 2,4-Dinitrophenol	184	9.088	9.088	(1.030)	311902	160.000	196.4(A)
	86 Dibenzofuran	168	9.174	9.174	(1.039)	2595137	160.000	172.6(A)
	88 2,4-Dinitrotoluene	165	9.350	9.350	(1.059)	574969	160.000	166.3(A)
	85 4-Nitrophenol	109	9.387	9.387	(1.064)	396744	160.000	170.0(A)
	93 Diethylphthalate	149	9.825	9.825	(1.113)	2144878	160.000	170.6(A)
	94 Fluorene	166	9.788	9.788	(1.109)	2064525	160.000	171.0(A)
	95 4-Chlorophenyl-phenylether	204	9.836	9.836	(1.114)	1155756	160.000	177.8(A)
	98 4-Nitroaniline	138	10.061	10.061	(1.140)	432152	160.000	168.7(A)
	99 4,6-Dinitro-2-methylphenol	198	10.103	10.103	(0.879)	458082	160.000	205.5(A)
	100 N-Nitrosodiphenylamine	169	10.114	10.114	(0.880)	1513586	160.000	184.9(A)
	102 Azobenzene	77	10.119	10.119	(0.881)	3307965	160.000	180.6(A)
$	104 2,4,6-Tribromophenol	330	10.290	10.290	(1.166)	317115	160.000	173.9(A)
	109 4-Bromophenyl-phenylether	248	10.718	10.718	(0.933)	661751	160.000	175.4(A)
	112 Hexachlorobenzene	284	10.947	10.947	(0.953)	675585	160.000	175.9(A)
	117 Pentachlorophenol	266	11.353	11.353	(0.988)	420779	160.000	196.9(A)
*	121 Phenanthrene-d10	188	11.492	11.492	(1.000)	538792	40.0000	
	122 Phenanthrene	178	11.546	11.546	(1.005)	2876383	160.000	172.6(A)
	124 Anthracene	178	11.631	11.631	(1.012)	2757609	160.000	171.1(A)
	126 Carbazole	167	12.037	12.037	(1.047)	2313859	160.000	167.9(A)
	129 Di-n-Butylphthalate	149	12.913	12.913	(1.124)	3072143	160.000	170.6(A)
	134 Fluoranthene	202	13.843	13.843	(1.205)	2895172	160.000	167.7(A)
	135 Benzidine	184	14.233	14.233	(0.854)	948875	160.000	160.4(A)
	137 Pyrene	202	14.259	14.259	(0.856)	2879391	160.000	180.3(A)
$	139 Terphenyl-d14	244	14.697	14.697	(0.882)	2270400	160.000	183.1(A)
	145 3,3-Dimethylbenzidine	212	15.702	15.702	(0.942)	1050179	160.000	165.6(A)
	146 Butylbenzylphthalate	149	15.819	15.819	(0.949)	1130601	160.000	172.4(A)
	150 Benzo(a)Anthracene	228	16.637	16.637	(0.998)	2371324	160.000	173.2(A)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.663	16.663	(1.000)	392079	40.0000	
152 3,3'-Dichlorobenzidine	252	16.728	16.728	(1.004)	1009432	160.000	193.1(A)
154 Chrysene	228	16.722	16.722	(1.004)	2338031	160.000	179.3(A)
155 bis(2-ethylhexyl)Phthalate	149	17.037	17.037	(1.022)	1482940	160.000	181.2(A)
158 Di-n-octylphthalate	149	18.191	18.191	(0.944)	2386651	160.000	180.8(A)
160 Benzo(b)fluoranthene	252	18.645	18.645	(0.968)	2153409	160.000	178.2(A)
161 Benzo(k)fluoranthene	252	18.693	18.693	(0.970)	2069426	160.000	172.8(A)
165 Benzo(a)pyrene	252	19.185	19.185	(0.996)	1883560	160.000	176.9(A)
* 166 Perylene-d12	264	19.265	19.265	(1.000)	303750	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	21.007	21.007	(1.090)	1820713	160.000	193.4(A)
174 Dibenzo(a,h)anthracene	278	21.060	21.060	(1.093)	1758104	160.000	192.2(A)
177 Benzo(g,h,i)perylene	276	21.477	21.477	(1.115)	1543039	160.000	183.0(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D Page 4
Report Date: 10-May-2005 09:41

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

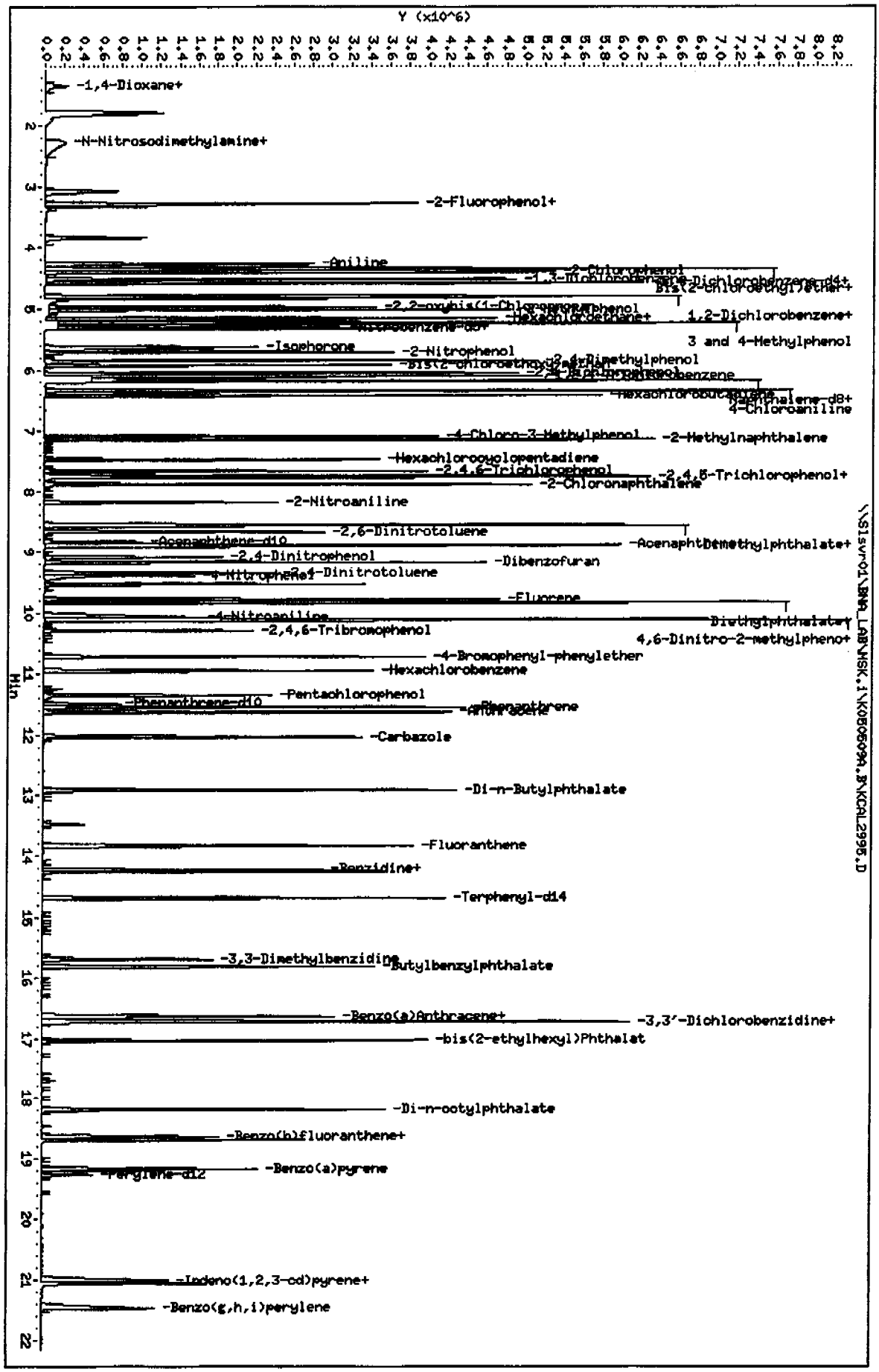
Instrument ID: MSK.i
Lab File ID: KCAL2995.D
Lab Smp Id: SSTD160
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Misc Info: SV0218-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD160
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	190662	-1.36
48 Naphthalene-d8	657267	328634	1314534	645937	-1.72
82 Acenaphthene-d10	351374	175687	702748	324102	-7.76
121 Phenanthrene-d10	612492	306246	1224984	538792	-12.03
153 Chrysene-d12	494718	247359	989436	392079	-20.75
166 Perylene-d12	409117	204559	818234	303750	-25.75

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.56	0.16
48 Naphthalene-d8	6.14	5.64	6.64	6.15	0.03
82 Acenaphthene-d10	8.83	8.33	9.33	8.83	0.02
121 Phenanthrene-d10	11.49	10.99	11.99	11.49	0.02
153 Chrysene-d12	16.66	16.16	17.16	16.66	0.04
166 Perylene-d12	19.27	18.77	19.77	19.27	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

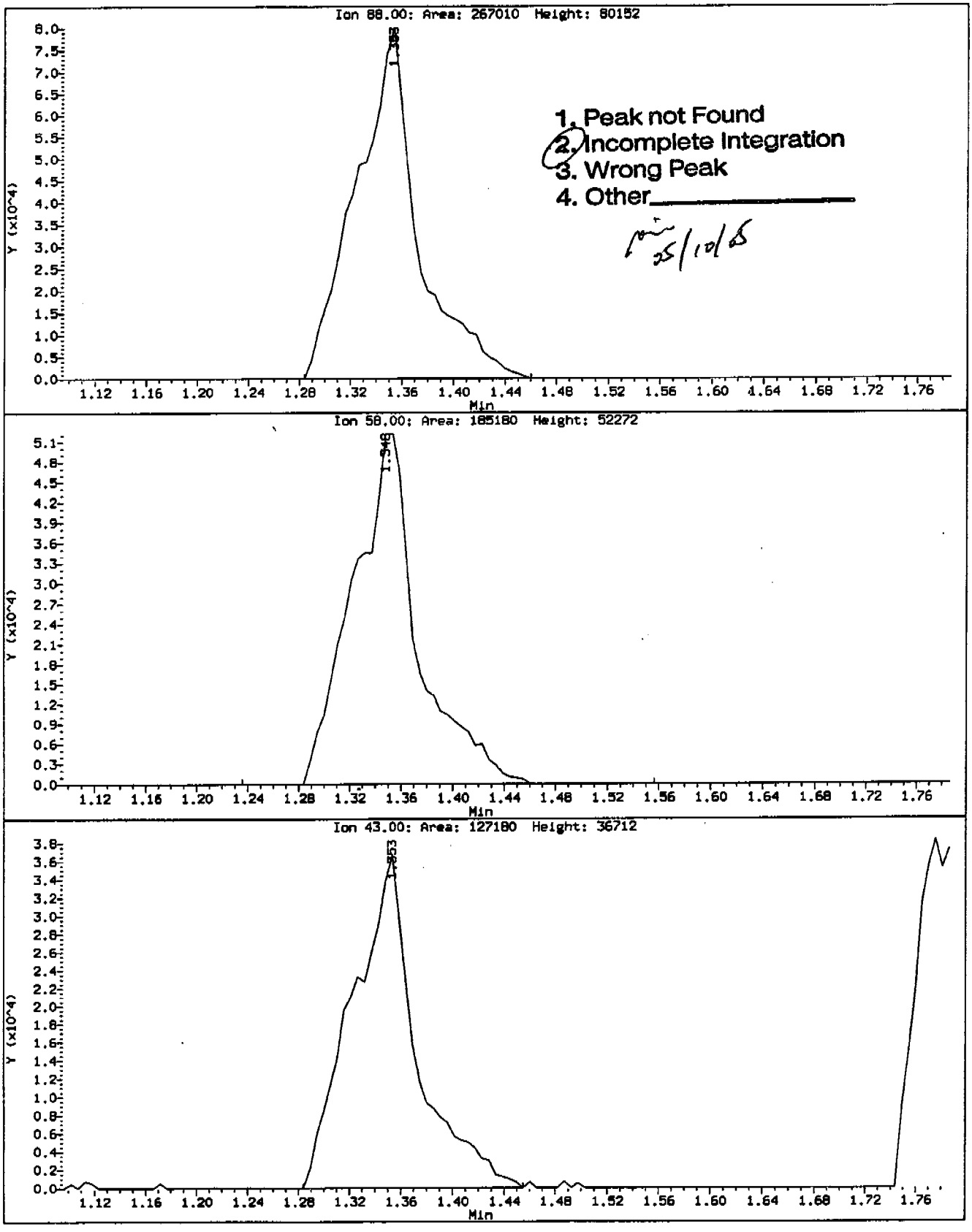


Data File: \\Slsvr01\BNA_LAB\HSK.i\K050509A.B\KCAL2995.D
Date : 09-MAY-2005 12:33
Client ID: SSTD160
Sample Info: SSTD160
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

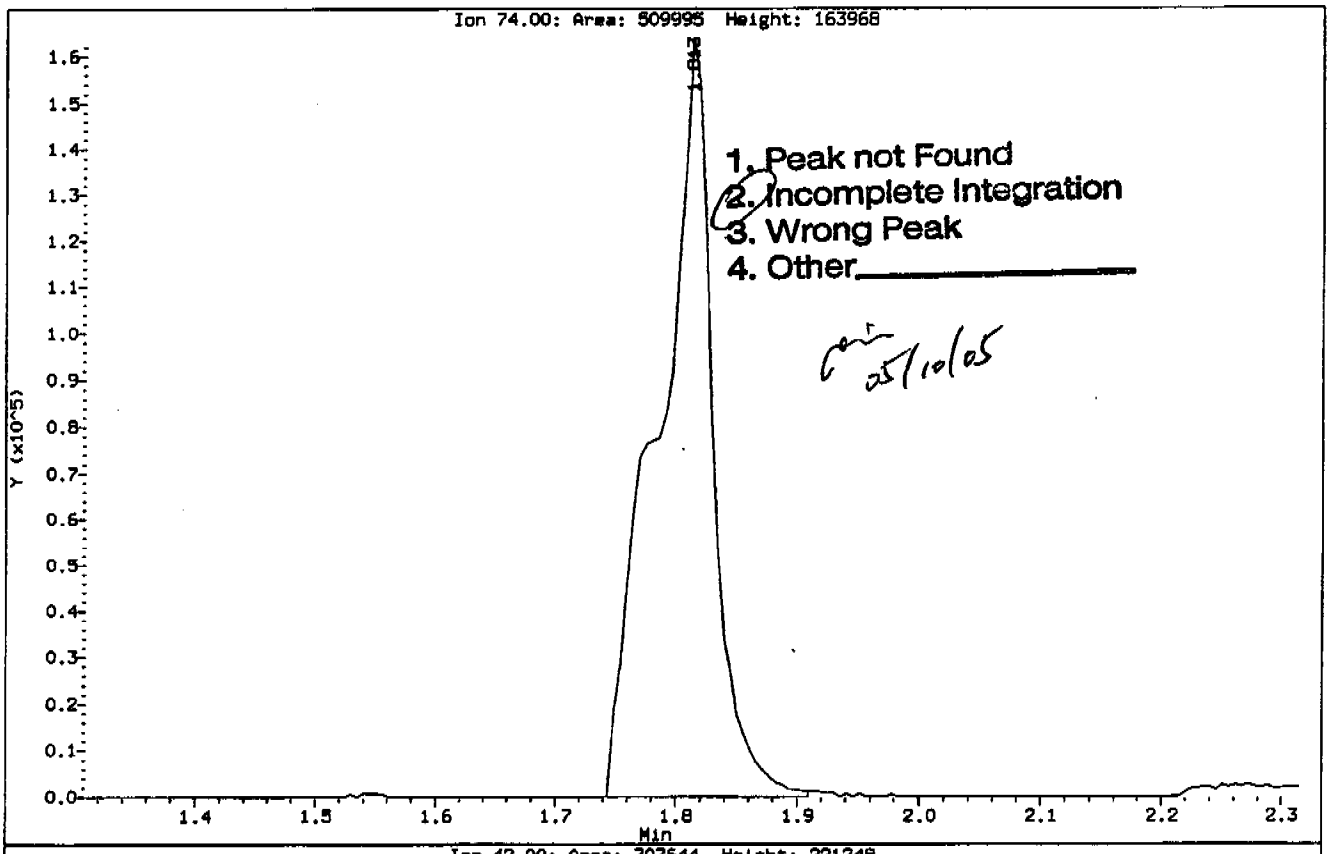
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D
Injection Date: 09-MAY-2005 12:33
Instrument: MSK.i
Client Sample ID: SSTD160

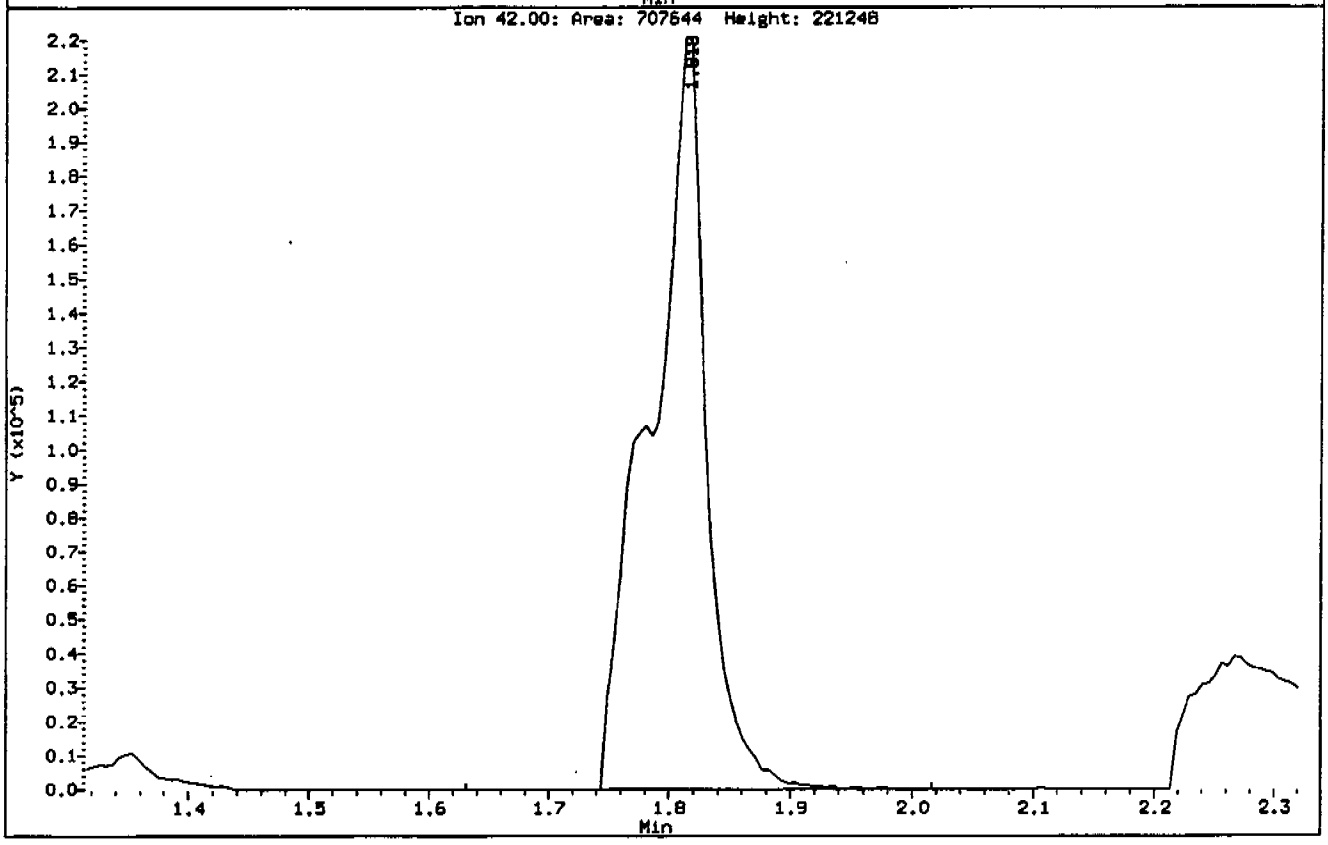
Compound: 1,4-Dioxane
CAS Number:



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D
Injection Date: 09-MAY-2005 12:33
Instrument: MSK.i
Client Sample ID: SSTD160

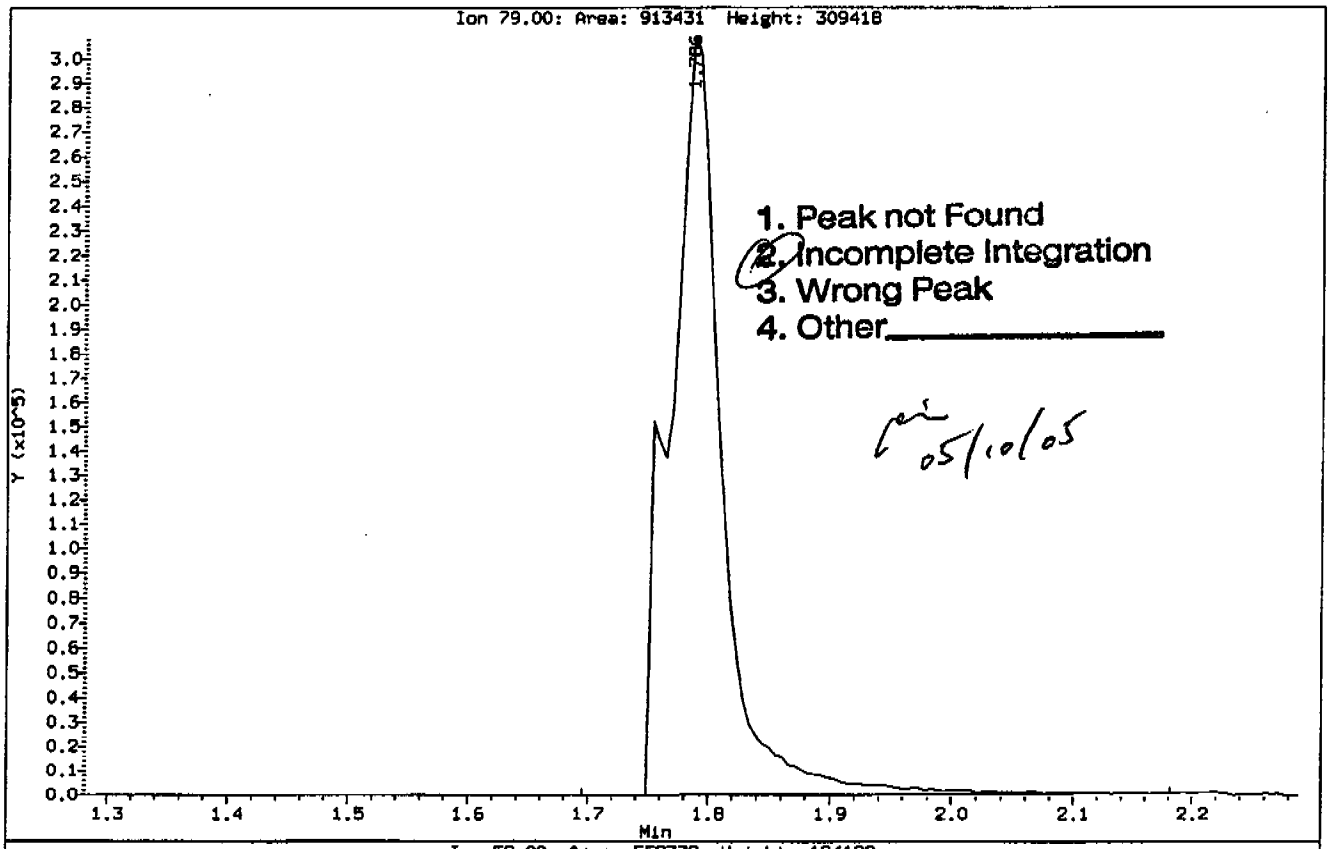
Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9

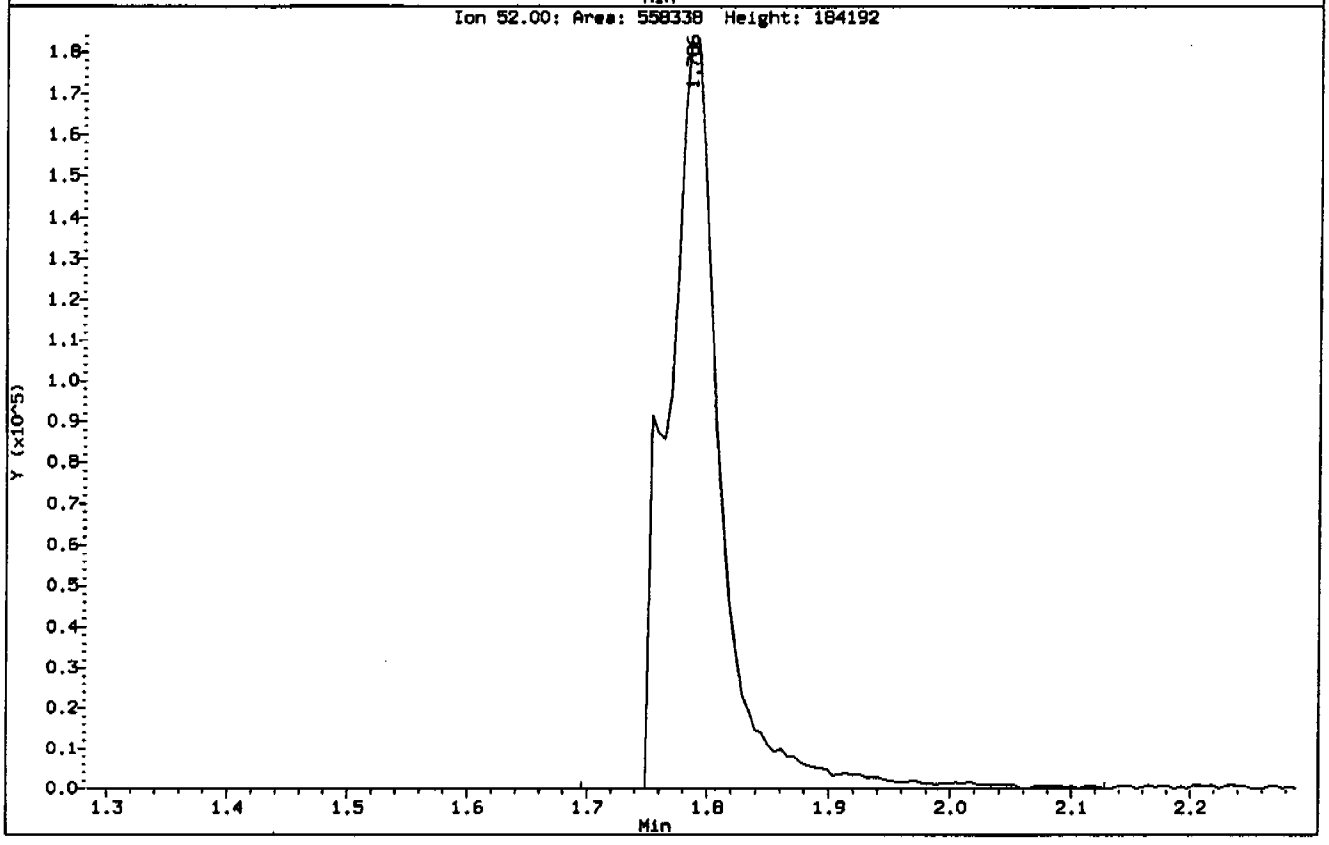




Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D
Injection Date: 09-MAY-2005 12:33
Instrument: MSK.i
Client Sample ID: SSTD160

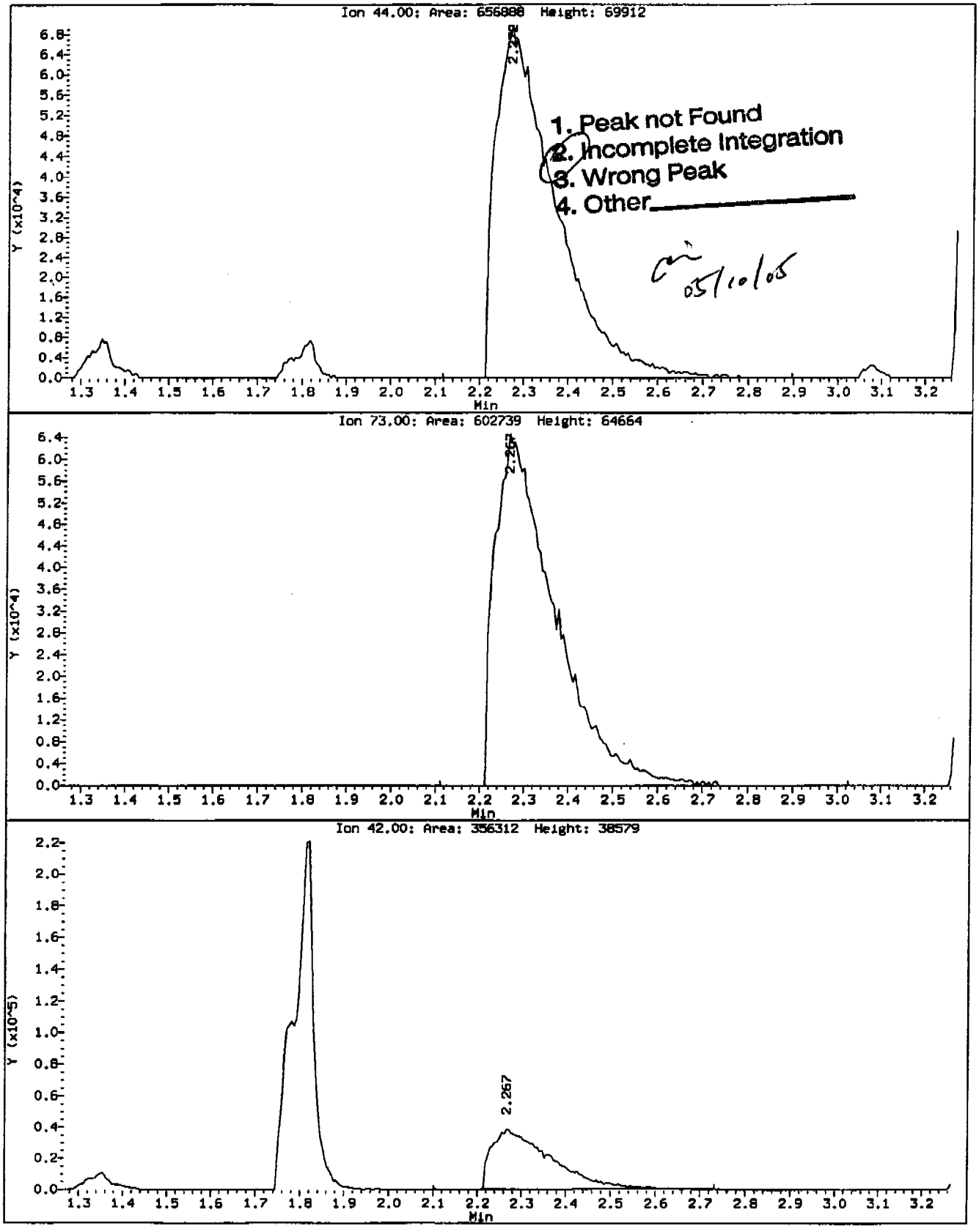
Compound: Pyridine
CAS Number: 110-86-1





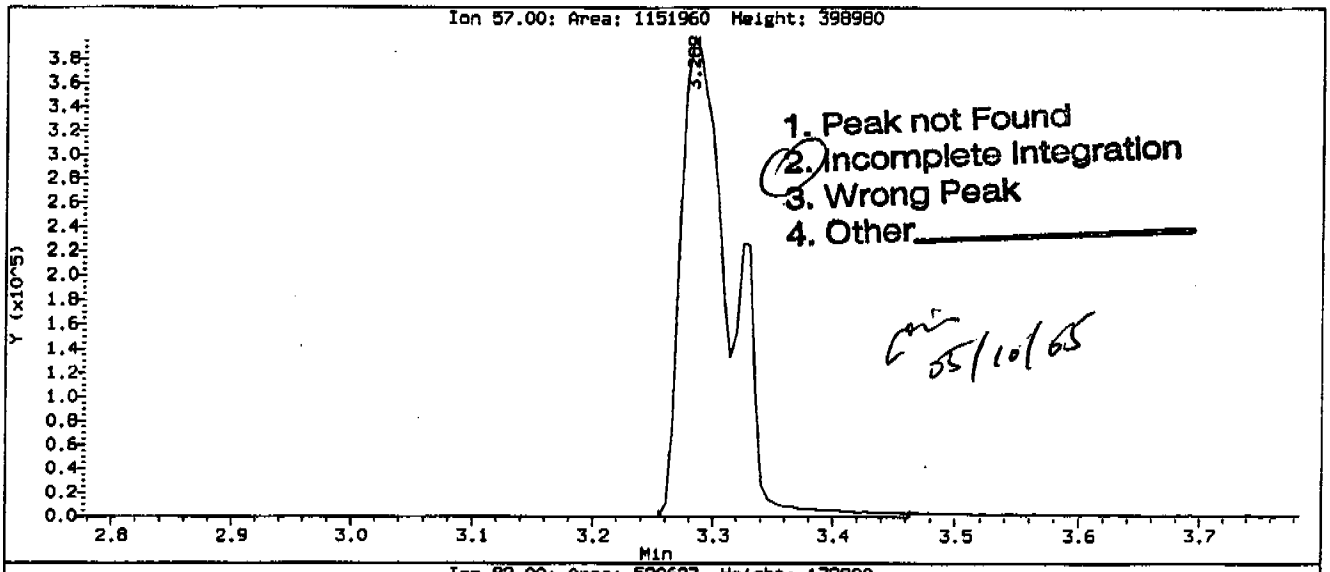
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D
Injection Date: 09-MAY-2005 12:33
Instrument: MSK.i
Client Sample ID: SSTD160

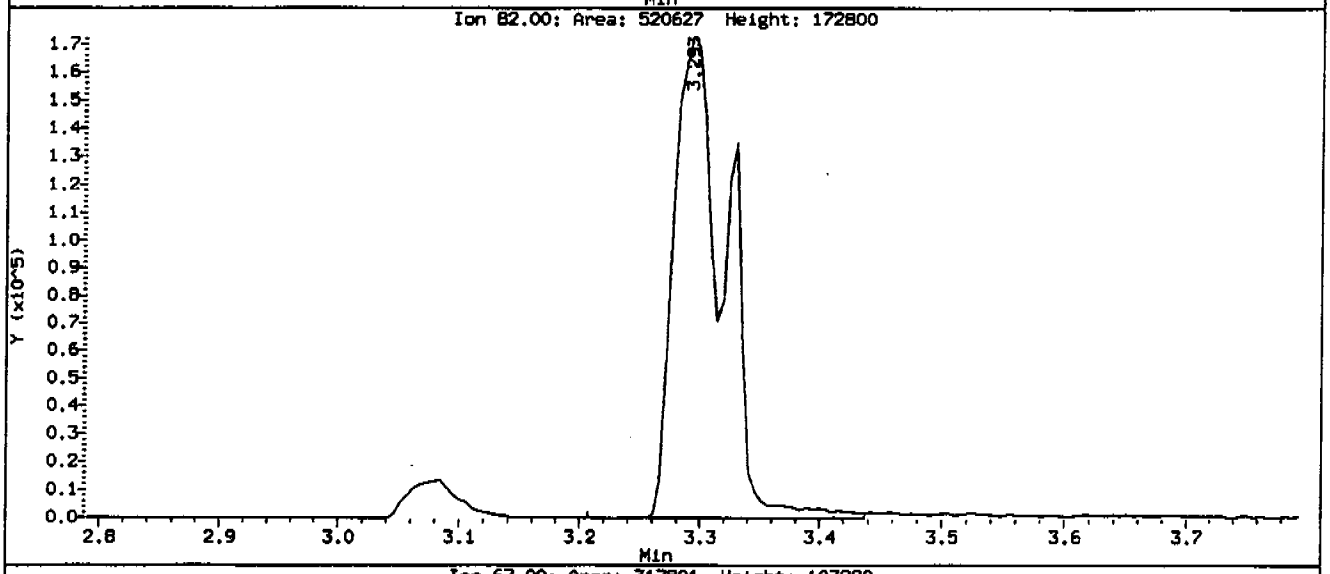
Compound: Dimethylformamide
CAS Number: 68-12-2

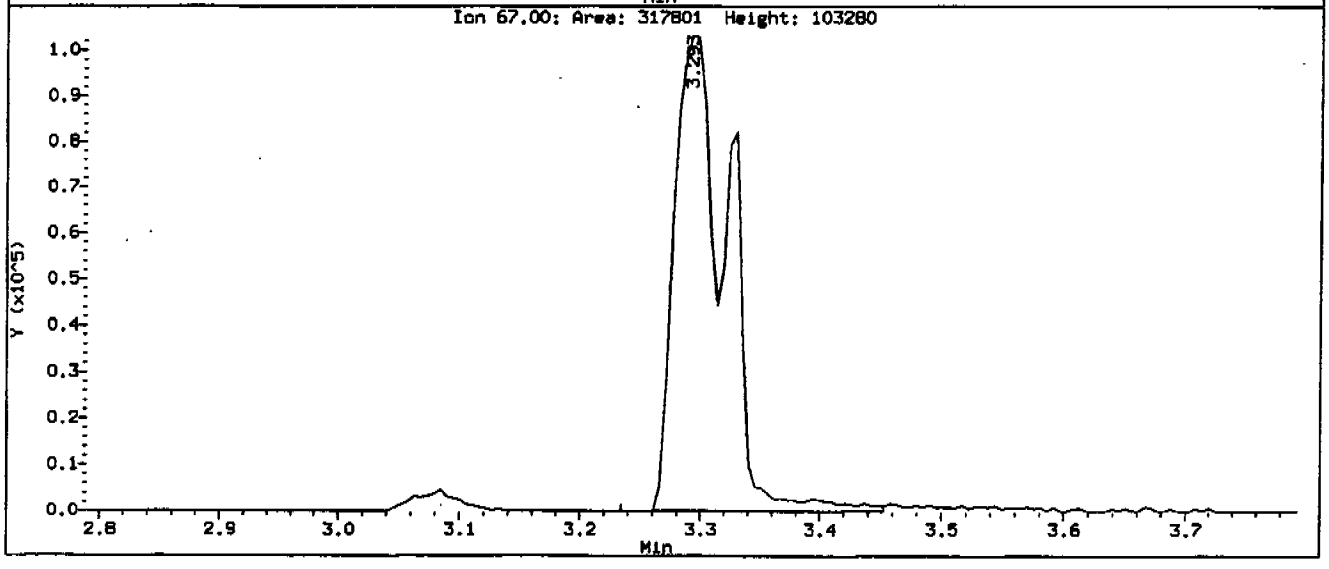


Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D
Injection Date: 09-MAY-2005 12:33
Instrument: MSK.i
Client Sample ID: SSTD160

Compound: Cyclohexanol
CAS Number:

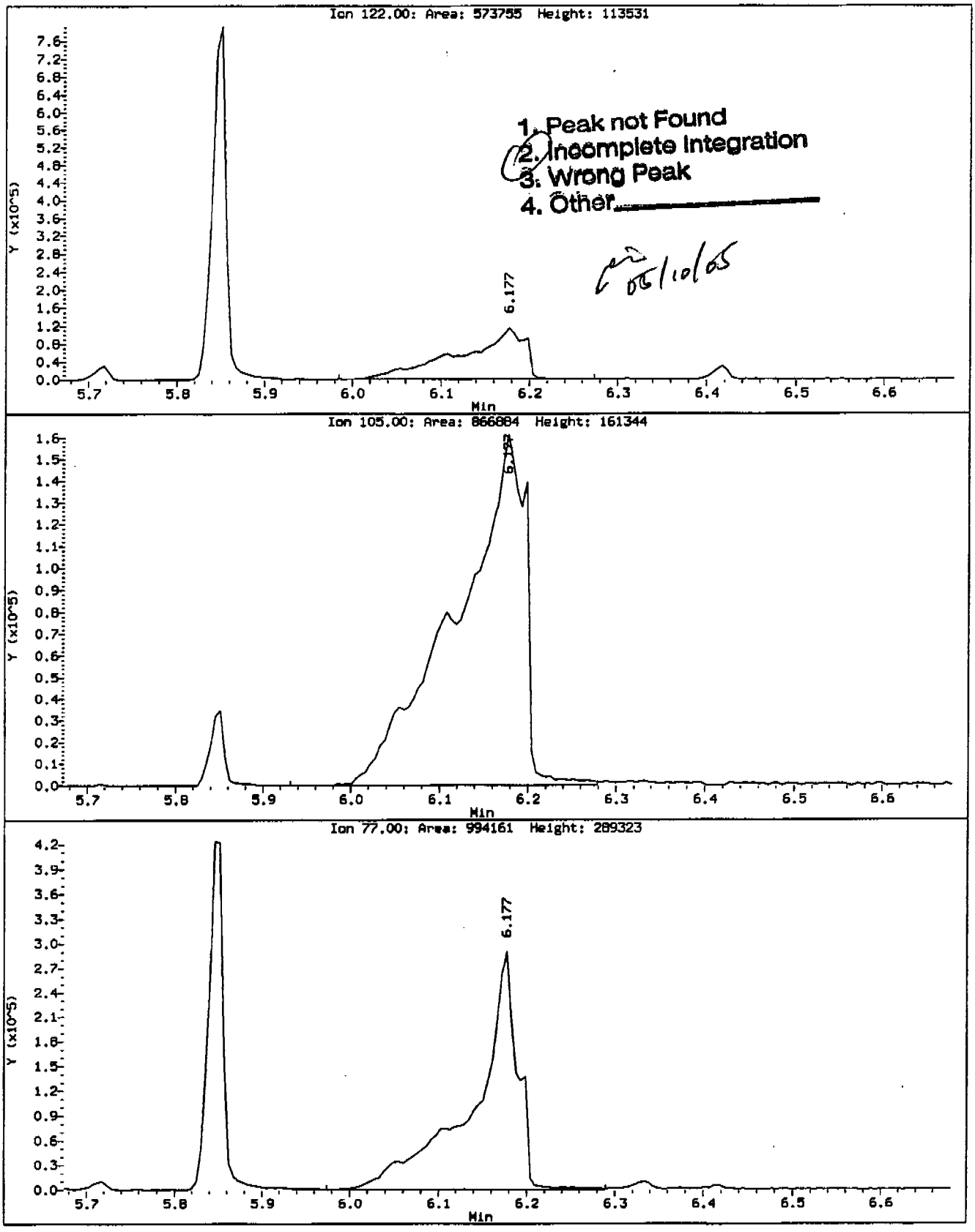






Data File: \\Slevr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D
Injection Date: 09-MAY-2005 12:33
Instrument: MSK.i
Client Sample ID: SSTD160

Compound: Benzoic Acid
CAS Number: 65-85-0



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2996.D Page 1
Report Date: 10-May-2005 09:41

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GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2996.D
Lab Smp Id: SSTD120 Client Smp ID: SSTD120
Inj Date : 09-MAY-2005 13:04
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD120
Misc Info : SV0217-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Meth Date : 10-May-2005 09:41 hongs Quant Type: ISTD
Cal Date : 07-MAY-2005 23:21 Cal File: KCAL2965.D
Als bottle: 5 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 1,4-Dioxane	88	1.347	1.347	(0.295)	256244	120.000	133.1
	4 N-Nitrosodimethylamine	74	1.806	1.806	(0.395)	469566	120.000	125.6
	3 Pyridine	79	1.774	1.774	(0.388)	814171	120.000	124.9
	5 Dimethylformamide	44	2.271	2.271	(0.497)	608591	120.000	117.7(M)
$	10 2-Fluorophenol	112	3.275	3.275	(0.717)	896818	120.000	125.5
	11 Cyclohexanol	57	3.280	3.280	(0.718)	1046076	120.000	128.9(M)
	17 Aniline	93	4.274	4.274	(0.936)	1509104	120.000	114.7
	19 Bis(2-chloroethyl)ether	93	4.349	4.349	(0.952)	1177364	120.000	126.4
$	15 Phenol-d5	99	4.343	4.343	(0.951)	1259183	120.000	123.9
	16 Phenol	94	4.354	4.354	(0.953)	1393535	120.000	124.2
	20 2-Chlorophenol	128	4.408	4.408	(0.965)	1001875	120.000	122.9
	21 1,3-Dichlorobenzene	146	4.520	4.520	(0.989)	1134454	120.000	121.9
*	22 1,4-Dichlorobenzene-d4	152	4.568	4.568	(1.000)	240310	40.0000	
	23 1,4-Dichlorobenzene	146	4.589	4.589	(1.005)	1247621	120.000	126.5
	26 1,2-Dichlorobenzene	146	4.808	4.808	(1.053)	1159824	120.000	126.5
	25 Benzyl Alcohol	108	4.835	4.835	(1.058)	498679	120.000	124.4
	28 2,2-oxybis(1-Chloropropane)	45	4.974	4.974	(1.089)	1130826	120.000	117.6
	27 2-Methylphenol	108	5.022	5.022	(1.099)	812085	120.000	112.1
	35 Hexachloroethane	117	5.161	5.161	(1.130)	526521	120.000	121.8
	32 N-Nitrosodinpropylamine	70	5.182	5.182	(1.134)	822211	120.000	108.2
	29 3 and 4-Methylphenol	108	5.230	5.230	(1.145)	1871029	240.000	241.4(A)

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Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2996.D Page 2
Report Date: 10-May-2005 09:41

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.300	5.300	(0.862)	1325489	120.000	123.0
	37 Nitrobenzene	77	5.326	5.326	(0.866)	1373484	120.000	120.0
	39 Isophorone	82	5.626	5.626	(0.915)	1737253	120.000	116.5
	40 2-Nitrophenol	139	5.716	5.716	(0.930)	507512	120.000	127.7
	41 2,4-Dimethylphenol	107	5.850	5.850	(0.951)	1074185	120.000	127.2
	42 Bis(2-chloroethoxy)methane	93	5.925	5.925	(0.964)	1182746	120.000	124.2
	45 2,4-Dichlorophenol	162	6.048	6.048	(0.983)	772628	120.000	124.2
	47 1,2,4-Trichlorobenzene	180	6.101	6.101	(0.992)	952409	120.000	128.6
*	48 Naphthalene-d8	136	6.149	6.149	(1.000)	791632	40.0000	
	44 Benzoic Acid	122	6.181	6.181	(1.005)	520186	120.000	133.2(M)
	50 Naphthalene	128	6.176	6.176	(1.004)	2986007	120.000	133.4
	51 4-Chloroaniline	127	6.336	6.336	(1.030)	1168839	120.000	129.3
	54 Hexachlorobutadiene	225	6.422	6.422	(1.044)	671937	120.000	130.7
	62 2-Methylnaphthalene	142	7.137	7.137	(1.161)	1980827	120.000	123.1
	59 4-Chloro-3-Methylphenol	107	7.089	7.089	(1.153)	863827	120.000	119.2
	66 Hexachlorocyclopentadiene	237	7.474	7.474	(0.847)	619963	120.000	146.5
	67 2,4,6-Trichlorophenol	196	7.666	7.666	(0.869)	602283	120.000	131.1
	68 2,4,5-Trichlorophenol	196	7.746	7.746	(0.878)	662861	120.000	136.4
$	69 2-Fluorobiphenyl	172	7.762	7.762	(0.880)	2154301	120.000	134.6
	72 2-Chloronaphthalene	162	7.885	7.885	(0.893)	1734620	120.000	129.4
	73 2-Nitroaniline	65	8.184	8.184	(0.927)	694512	120.000	121.0
	76 Dimethylphthalate	163	8.553	8.553	(0.969)	1900885	120.000	123.7
	79 Acenaphthylene	152	8.569	8.569	(0.971)	2619906	120.000	132.4
	80 2,6-Dinitrotoluene	165	8.671	8.671	(0.982)	409009	120.000	124.5
*	82 Acenaphthene-d10	164	8.826	8.826	(1.000)	398402	40.0000	
	83 Acenaphthene	153	8.890	8.890	(1.007)	1613401	120.000	129.0
	81 3-Nitroaniline	138	8.911	8.911	(1.010)	414000	120.000	127.9
	84 2,4-Dinitrophenol	184	9.087	9.087	(1.030)	272087	120.000	139.4
	86 Dibenzofuran	168	9.173	9.173	(1.039)	2339446	120.000	126.5
	88 2,4-Dinitrotoluene	165	9.349	9.349	(1.059)	512576	120.000	120.6
	85 4-Nitrophenol	109	9.386	9.386	(1.064)	354145	120.000	123.5
	93 Diethylphthalate	149	9.819	9.819	(1.113)	1901787	120.000	123.1
	94 Fluorene	166	9.787	9.787	(1.109)	1882183	120.000	126.8
	95 4-Chlorophenyl-phenylether	204	9.830	9.830	(1.114)	1024928	120.000	128.3
	98 4-Nitroaniline	138	10.054	10.054	(1.139)	382600	120.000	121.5
	99 4,6-Dinitro-2-methylphenol	198	10.097	10.097	(0.879)	396980	120.000	147.2
	100 N-Nitrosodiphenylamine	169	10.108	10.108	(0.880)	1337473	120.000	135.0
	102 Azobenzene	77	10.118	10.118	(0.881)	2958046	120.000	133.5
$	104 2,4,6-Tribromophenol	330	10.289	10.289	(1.166)	283446	120.000	126.5
	109 4-Bromophenyl-phenylether	248	10.717	10.717	(0.933)	598607	120.000	131.2
	112 Hexachlorobenzene	284	10.946	10.946	(0.953)	607039	120.000	130.7
	117 Pentachlorophenol	266	11.352	11.352	(0.988)	373419	120.000	144.4
*	121 Phenanthrene-d10	188	11.491	11.491	(1.000)	651890	40.0000	
	122 Phenanthrene	178	11.545	11.545	(1.005)	2540162	120.000	126.0
	124 Anthracene	178	11.630	11.630	(1.012)	2463069	120.000	126.3
	126 Carbazole	167	12.031	12.031	(1.047)	2055697	120.000	123.3
	129 Di-n-Butylphthalate	149	12.912	12.912	(1.124)	2742246	120.000	125.8
	134 Fluoranthene	202	13.836	13.836	(1.204)	2567323	120.000	122.9
	135 Benzidine	184	14.232	14.232	(0.854)	879145	120.000	121.6
	137 Pyrene	202	14.258	14.258	(0.856)	2574568	120.000	131.9
$	139 Terphenyl-d14	244	14.697	14.697	(0.882)	1998477	120.000	131.9
	145 3,3-Dimethylbenzidine	212	15.695	15.695	(0.942)	954543	120.000	123.2
	146 Butylbenzylphthalate	149	15.818	15.818	(0.949)	1007040	120.000	125.7
	150 Benzo(a)Anthracene	228	16.636	16.636	(0.998)	2088005	120.000	124.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.662	16.662	(1.000)	479102	40.0000	
152 3,3'-Dichlorobenzidine	252	16.727	16.727	(1.004)	902708	120.000	141.3
154 Chrysene	228	16.721	16.721	(1.004)	2065002	120.000	129.6
155 bis(2-ethylhexyl)Phthalate	149	17.036	17.036	(1.022)	1289803	120.000	129.0
158 Di-n-octylphthalate	149	18.190	18.190	(0.944)	2138603	120.000	128.1
160 Benzo(b)fluoranthene	252	18.644	18.644	(0.968)	1964404	120.000	128.5
161 Benzo(k)fluoranthene	252	18.692	18.692	(0.970)	1845977	120.000	121.8
165 Benzo(a)pyrene	252	19.184	19.184	(0.996)	1722701	120.000	127.9
* 166 Perylene-d12	264	19.269	19.269	(1.000)	384316	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	21.006	21.006	(1.090)	1660507	120.000	139.4
174 Dibenzo(a,h)anthracene	278	21.059	21.059	(1.093)	1612090	120.000	139.3
177 Benzo(g,h,i)perylene	276	21.476	21.476	(1.114)	1443328	120.000	135.2

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2996.D Page 4
Report Date: 10-May-2005 09:41

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

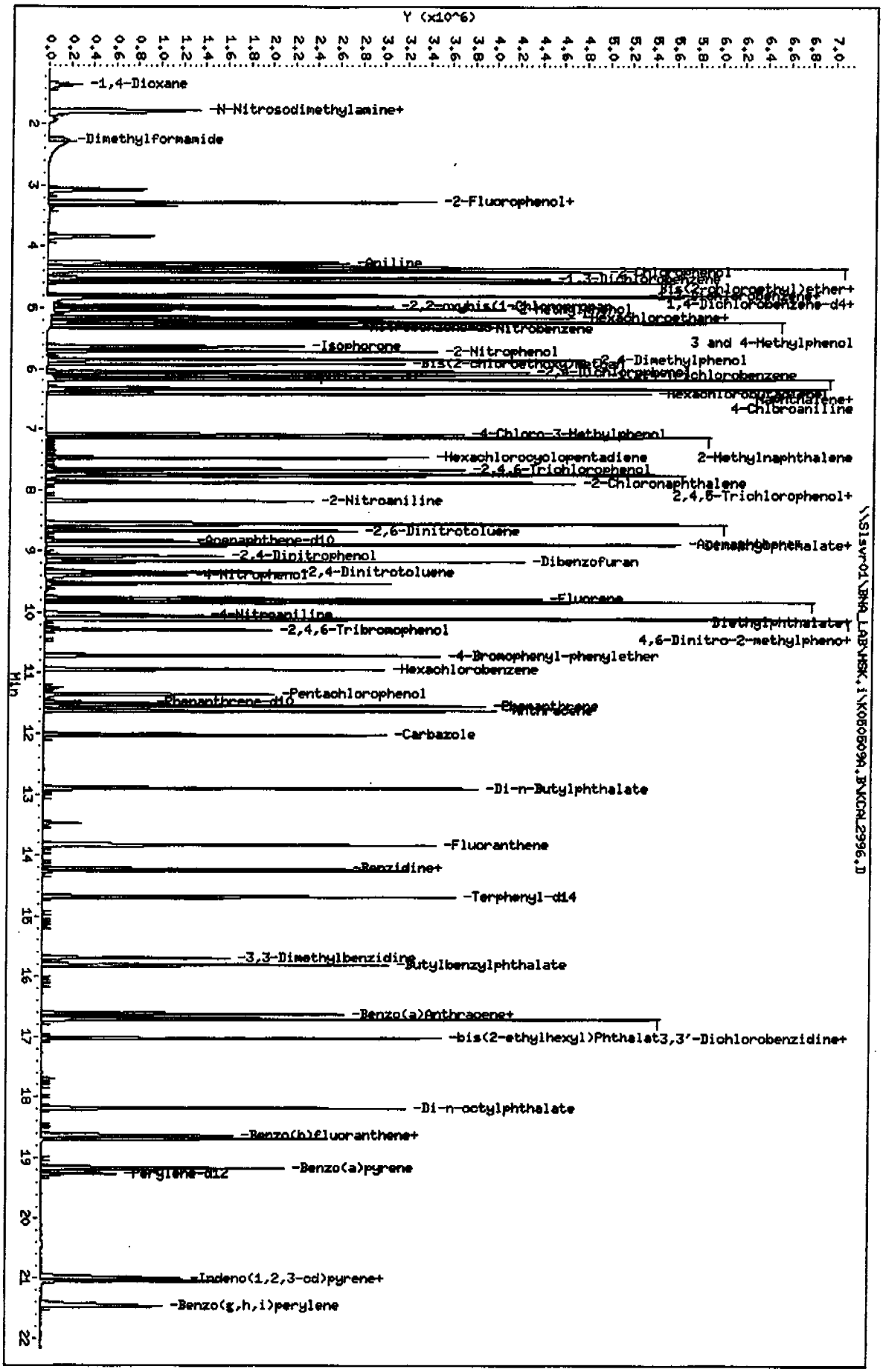
Instrument ID: MSK.i
Lab File ID: KCAL2996.D
Lab Smp Id: SSTD120
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Misc Info: SV0217-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD120
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	240310	24.33
48 Naphthalene-d8	657267	328634	1314534	791632	20.44
82 Acenaphthene-d10	351374	175687	702748	398402	13.38
121 Phenanthrene-d10	612492	306246	1224984	651890	6.43
153 Chrysene-d12	494718	247359	989436	479102	-3.16
166 Perylene-d12	409117	204559	818234	384316	-6.06

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.57	0.25
48 Naphthalene-d8	6.14	5.64	6.64	6.15	0.10
82 Acenaphthene-d10	8.83	8.33	9.33	8.83	0.01
121 Phenanthrene-d10	11.49	10.99	11.99	11.49	0.01
153 Chrysene-d12	16.66	16.16	17.16	16.66	0.04
166 Perylene-d12	19.27	18.77	19.77	19.27	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

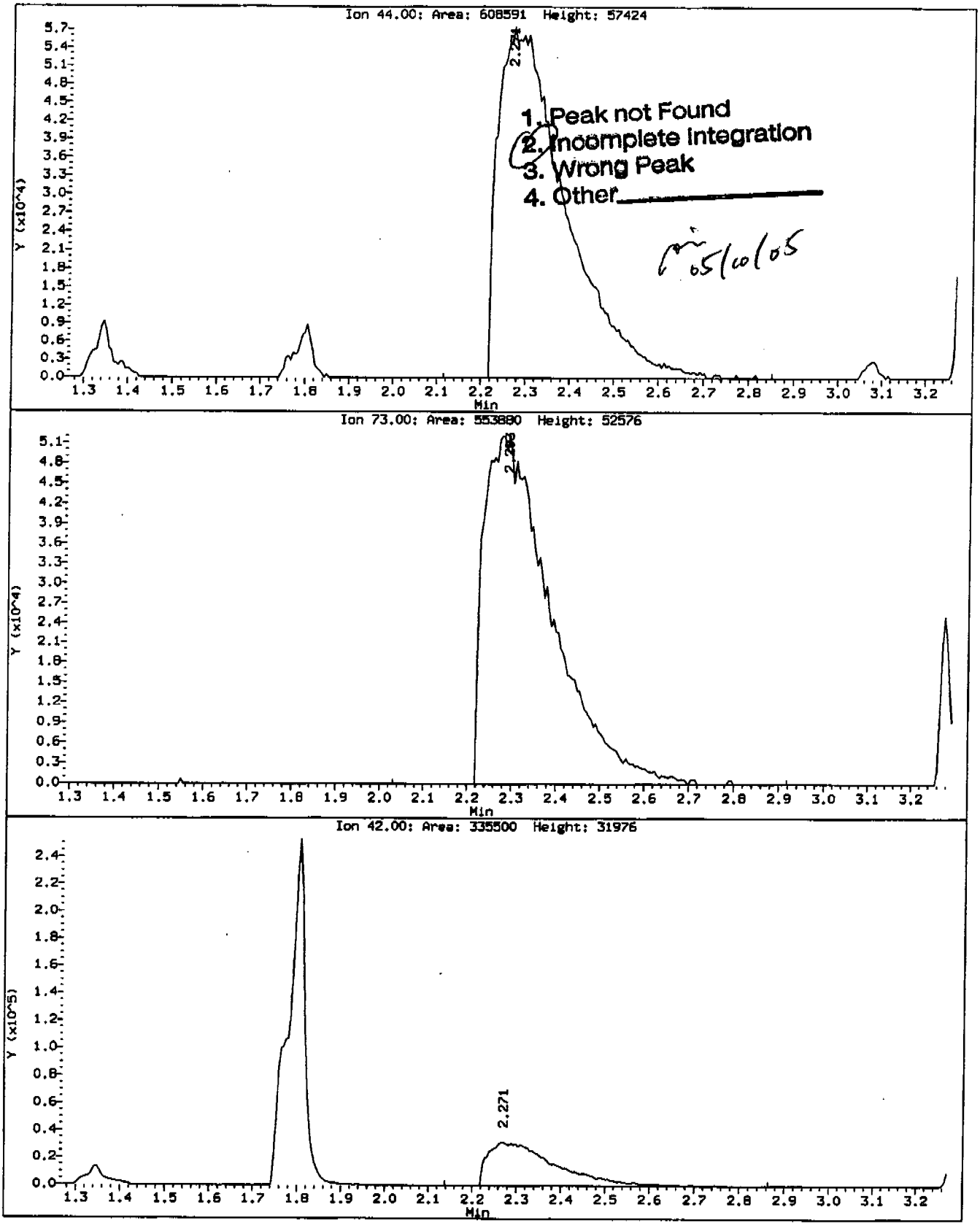


Data File: \\Slsvr01\RNA_LAB\HSK.i\K0505094.B\KCAL2996.D
Date : 09-MAY-2005 13:04
Client ID: SSTD120
Sample Info: SSTD120
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: KIA
Column diameter: 2.00

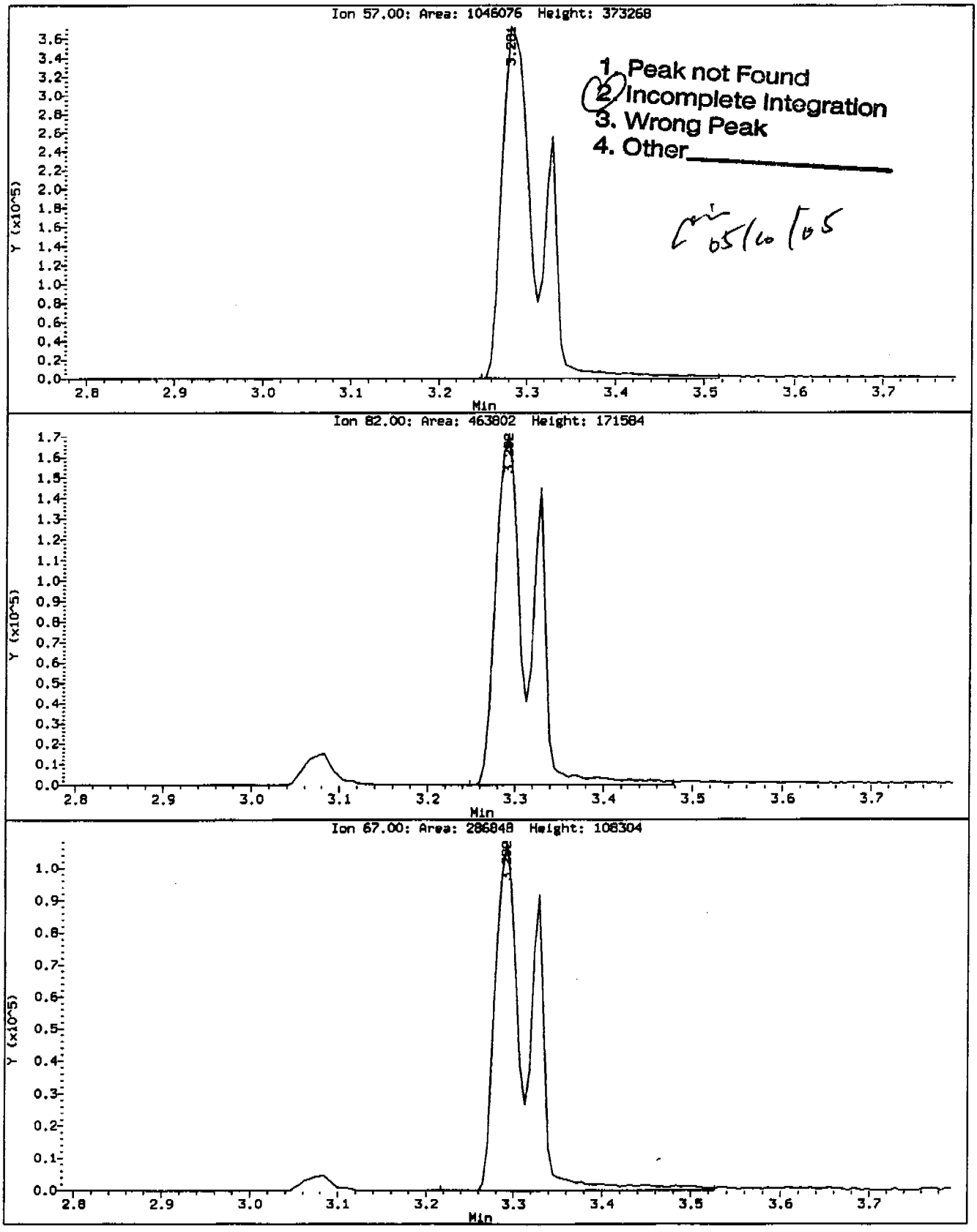
Data File: \\Slavr01\BNA_LAB\MSK.i\K050509A.B\KCAL2996.D
Injection Date: 09-MAY-2005 13:04
Instrument: MSK.i
Client Sample ID: SSTD120

Compound: Dimethylformamide
CAS Number: 68-12-2



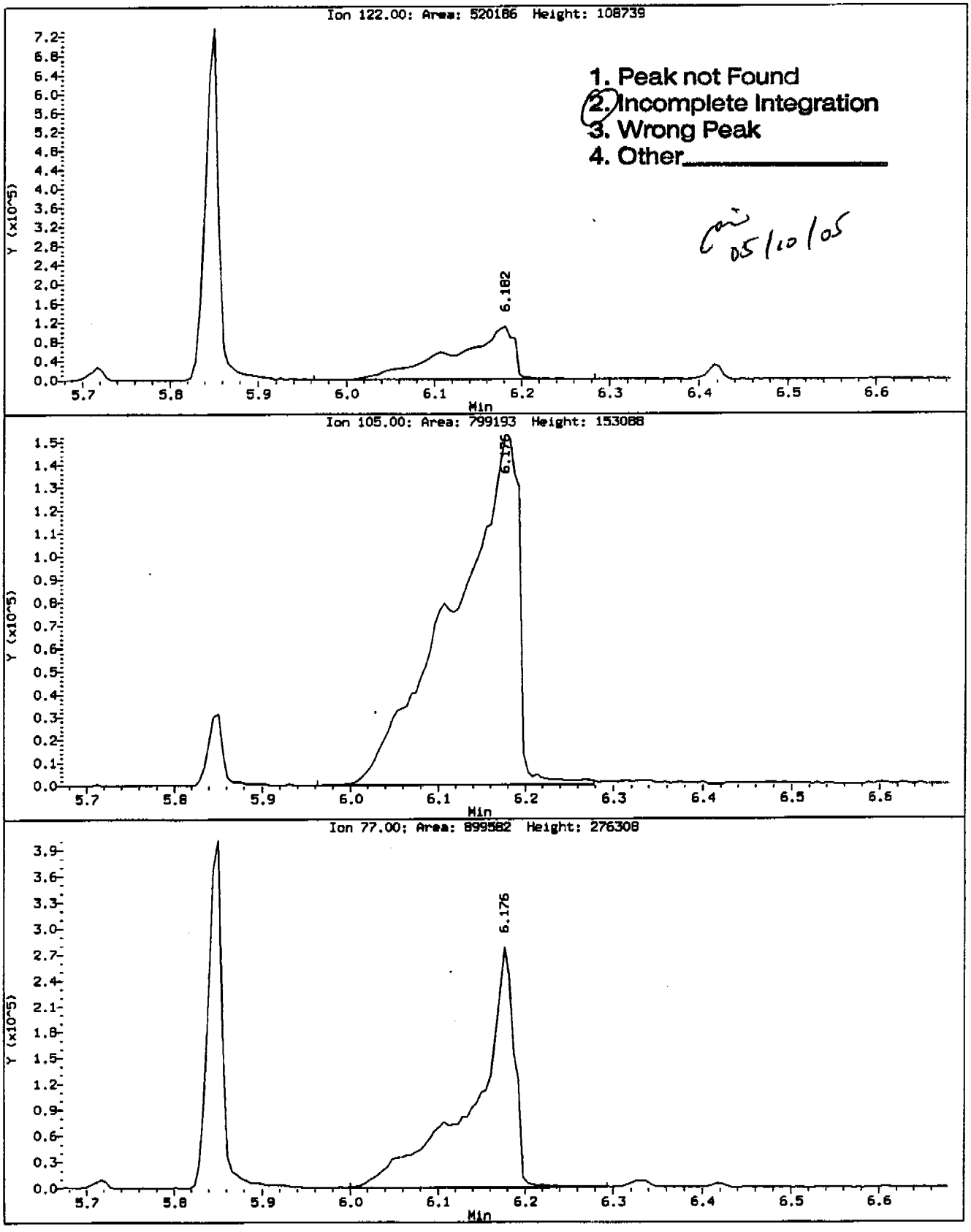
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2996.D
Injection Date: 09-MAY-2005 13:04
Instrument: MSK.i
Client Sample ID: SSTD120

Compound: Cyclohexanol
CAS Number:



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2996.D
Injection Date: 09-MAY-2005 13:04
Instrument: MSK.i
Client Sample ID: SSTD120

Compound: Benzoic Acid
CAS Number: 65-85-0



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2997.D
Report Date: 10-May-2005 09:41

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2997.D
Lab Smp Id: SSTD080 Client Smp ID: SSTD080
Inj Date : 09-MAY-2005 13:36
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD080
Misc Info : SV0216-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Meth Date : 10-May-2005 09:41 hongs Quant Type: ISTD
Cal Date : 07-MAY-2005 23:52 Cal File: KCAL2966.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	1 1,4-Dioxane	88	1.292	1.292	(0.284)	150283	80.0000	87.62
	4 N-Nitrosodimethylamine	74	1.725	1.725	(0.379)	271108	80.0000	81.36
	3 Pyridine	79	1.687	1.687	(0.371)	441556	80.0000	75.99
	5 Dimethylformamide	44	2.211	2.211	(0.486)	375473	80.0000	81.48(M)
$	10 2-Fluorophenol	112	3.247	3.247	(0.714)	537962	80.0000	84.48
	11 Cyclohexanol	57	3.263	3.263	(0.717)	628563	80.0000	86.94(M)
	17 Aniline	93	4.251	4.251	(0.934)	939148	80.0000	80.12
	19 Bis(2-chloroethyl)ether	93	4.326	4.326	(0.951)	695464	80.0000	83.78
$	15 Phenol-d5	99	4.321	4.321	(0.950)	757925	80.0000	83.67
	16 Phenol	94	4.337	4.337	(0.953)	822676	80.0000	82.29
	20 2-Chlorophenol	128	4.385	4.385	(0.964)	593146	80.0000	81.67
	21 1,3-Dichlorobenzene	146	4.508	4.508	(0.991)	684483	80.0000	82.53
*	22 1,4-Dichlorobenzene-d4	152	4.551	4.551	(1.000)	214171	40.0000	
	23 1,4-Dichlorobenzene	146	4.572	4.572	(1.005)	718646	80.0000	81.74
	26 1,2-Dichlorobenzene	146	4.796	4.796	(1.054)	672785	80.0000	82.35
	25 Benzyl Alcohol	108	4.812	4.812	(1.058)	277377	80.0000	77.67
	28 2,2-oxybis(1-Chloropropane)	45	4.962	4.962	(1.090)	681730	80.0000	79.57
	27 2-Methylphenol	108	5.005	5.005	(1.100)	513065	80.0000	79.49
	35 Hexachloroethane	117	5.149	5.149	(1.131)	315071	80.0000	81.79
	32 N-Nitrosodinpropylamine	70	5.154	5.154	(1.133)	540476	80.0000	79.79
	29 3 and 4-Methylphenol	108	5.208	5.208	(1.144)	1107804	160.000	160.4(A)

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2997.D Page 2
Report Date: 10-May-2005 09:41

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.282	5.282	(0.861)	827697	80.0000	80.80
	37 Nitrobenzene	77	5.304	5.304	(0.865)	852849	80.0000	78.40
	39 Isophorone	82	5.603	5.603	(0.914)	1112366	80.0000	78.42
	40 2-Nitrophenol	139	5.699	5.699	(0.929)	313638	80.0000	82.99
	41 2,4-Dimethylphenol	107	5.833	5.833	(0.951)	662810	80.0000	82.54
	42 Bis(2-chloroethoxy)methane	93	5.907	5.907	(0.963)	730860	80.0000	80.71
	45 2,4-Dichlorophenol	162	6.036	6.036	(0.984)	476989	80.0000	80.64
	47 1,2,4-Trichlorobenzene	180	6.089	6.089	(0.993)	578366	80.0000	82.12
*	48 Naphthalene-d8	136	6.132	6.132	(1.000)	752750	40.0000	
	44 Benzoic Acid	122	6.142	6.142	(1.002)	320981	80.0000	86.47(M)
	50 Naphthalene	128	6.164	6.164	(1.005)	1712436	80.0000	80.44
	51 4-Chloroaniline	127	6.319	6.319	(1.030)	700021	80.0000	81.47
	54 Hexachlorobutadiene	225	6.404	6.404	(1.044)	401894	80.0000	82.21
	62 2-Methylnaphthalene	142	7.125	7.125	(1.162)	1199456	80.0000	78.37
	59 4-Chloro-3-Methylphenol	107	7.072	7.072	(1.153)	544849	80.0000	79.10
	66 Hexachlorocyclopentadiene	237	7.462	7.462	(0.847)	360749	80.0000	85.96
	67 2,4,6-Trichlorophenol	196	7.654	7.654	(0.868)	376888	80.0000	82.74
	68 2,4,5-Trichlorophenol	196	7.734	7.734	(0.878)	416508	80.0000	86.46
$	69 2-Fluorobiphenyl	172	7.745	7.745	(0.879)	1320142	80.0000	83.18
	72 2-Chloronaphthalene	162	7.868	7.868	(0.893)	1083887	80.0000	81.54
	73 2-Nitroaniline	65	8.167	8.167	(0.927)	457240	80.0000	80.31
	76 Dimethylphthalate	163	8.536	8.536	(0.968)	1223560	80.0000	80.26
	79 Acenaphthylene	152	8.552	8.552	(0.970)	1608365	80.0000	81.96
	80 2,6-Dinitrotoluene	165	8.648	8.648	(0.981)	263240	80.0000	80.78
*	82 Acenaphthene-d10	164	8.814	8.814	(1.000)	395102	40.0000	
	83 Acenaphthene	153	8.872	8.872	(1.007)	1004433	80.0000	81.00
	81 3-Nitroaniline	138	8.888	8.888	(1.008)	266880	80.0000	83.17
	84 2,4-Dinitrophenol	184	9.065	9.065	(1.028)	169807	80.0000	87.72
	86 Dibenzofuran	168	9.155	9.155	(1.039)	1474158	80.0000	80.41
	88 2,4-Dinitrotoluene	165	9.326	9.326	(1.058)	342909	80.0000	81.36
	85 4-Nitrophenol	109	9.369	9.369	(1.063)	236269	80.0000	83.06
	93 Diethylphthalate	149	9.802	9.802	(1.112)	1207295	80.0000	78.78
	94 Fluorene	166	9.764	9.764	(1.108)	1192761	80.0000	81.02
	95 4-Chlorophenyl-phenylether	204	9.813	9.813	(1.113)	639104	80.0000	80.65
	98 4-Nitroaniline	138	10.021	10.021	(1.137)	254791	80.0000	81.61
	99 4,6-Dinitro-2-methylphenol	198	10.069	10.069	(0.877)	256005	80.0000	92.15
	100 N-Nitrosodiphenylamine	169	10.085	10.085	(0.879)	851106	80.0000	83.39
	102 Azobenzene	77	10.101	10.101	(0.880)	1883800	80.0000	82.53
$	104 2,4,6-Tribromophenol	330	10.267	10.267	(1.165)	180419	80.0000	81.18
	109 4-Bromophenyl-phenylether	248	10.699	10.699	(0.932)	382658	80.0000	81.38
	112 Hexachlorobenzene	284	10.924	10.924	(0.952)	396201	80.0000	82.78
	117 Pentachlorophenol	266	11.335	11.335	(0.987)	238053	80.0000	89.38
*	121 Phenanthrene-d10	188	11.479	11.479	(1.000)	671617	40.0000	
	122 Phenanthrene	178	11.527	11.527	(1.004)	1680282	80.0000	80.88
	124 Anthracene	178	11.607	11.607	(1.011)	1624068	80.0000	80.84
	126 Carbazole	167	12.013	12.013	(1.047)	1372503	80.0000	79.92
	129 Di-n-Butylphthalate	149	12.895	12.895	(1.123)	1839014	80.0000	81.91
	134 Fluoranthene	202	13.819	13.819	(1.204)	1731055	80.0000	80.44
	135 Benzidine	184	14.214	14.214	(0.854)	638851	80.0000	83.36
	137 Pyrene	202	14.236	14.236	(0.855)	1720770	80.0000	83.16
$	139 Terphenyl-d14	244	14.679	14.679	(0.882)	1345965	80.0000	83.79
	145 3,3-Dimethylbenzidine	212	15.678	15.678	(0.942)	696606	80.0000	84.76
	146 Butylbenzylphthalate	149	15.801	15.801	(0.949)	697571	80.0000	82.10
	150 Benzo(a)Anthracene	228	16.613	16.613	(0.998)	1453581	80.0000	81.92

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.645	16.645	(1.000)	508021	40.0000	
152 3,3'-Dichlorobenzidine	252	16.709	16.709	(1.004)	599098	80.0000	88.45
154 Chrysene	228	16.699	16.699	(1.003)	1383746	80.0000	81.89
155 bis(2-ethylhexyl)Phthalate	149	17.024	17.024	(1.023)	879499	80.0000	82.95
158 Di-n-octylphthalate	149	18.173	18.173	(0.944)	1453848	80.0000	79.74
160 Benzo(b)fluoranthene	252	18.622	18.622	(0.967)	1352082	80.0000	81.02
161 Benzo(k)fluoranthene	252	18.670	18.670	(0.970)	1294351	80.0000	78.25
165 Benzo(a)pyrene	252	19.161	19.161	(0.995)	1222080	80.0000	83.10
* 166 Perylene-d12	264	19.252	19.252	(1.000)	419618	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.978	20.978	(1.090)	1190598	80.0000	91.53
174 Dibenzo(a,h)anthracene	278	21.026	21.026	(1.092)	1149677	80.0000	90.96
177 Benzo(g,h,i)perylene	276	21.437	21.437	(1.113)	1027037	80.0000	88.15

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2997.D Page 4
Report Date: 10-May-2005 09:41

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

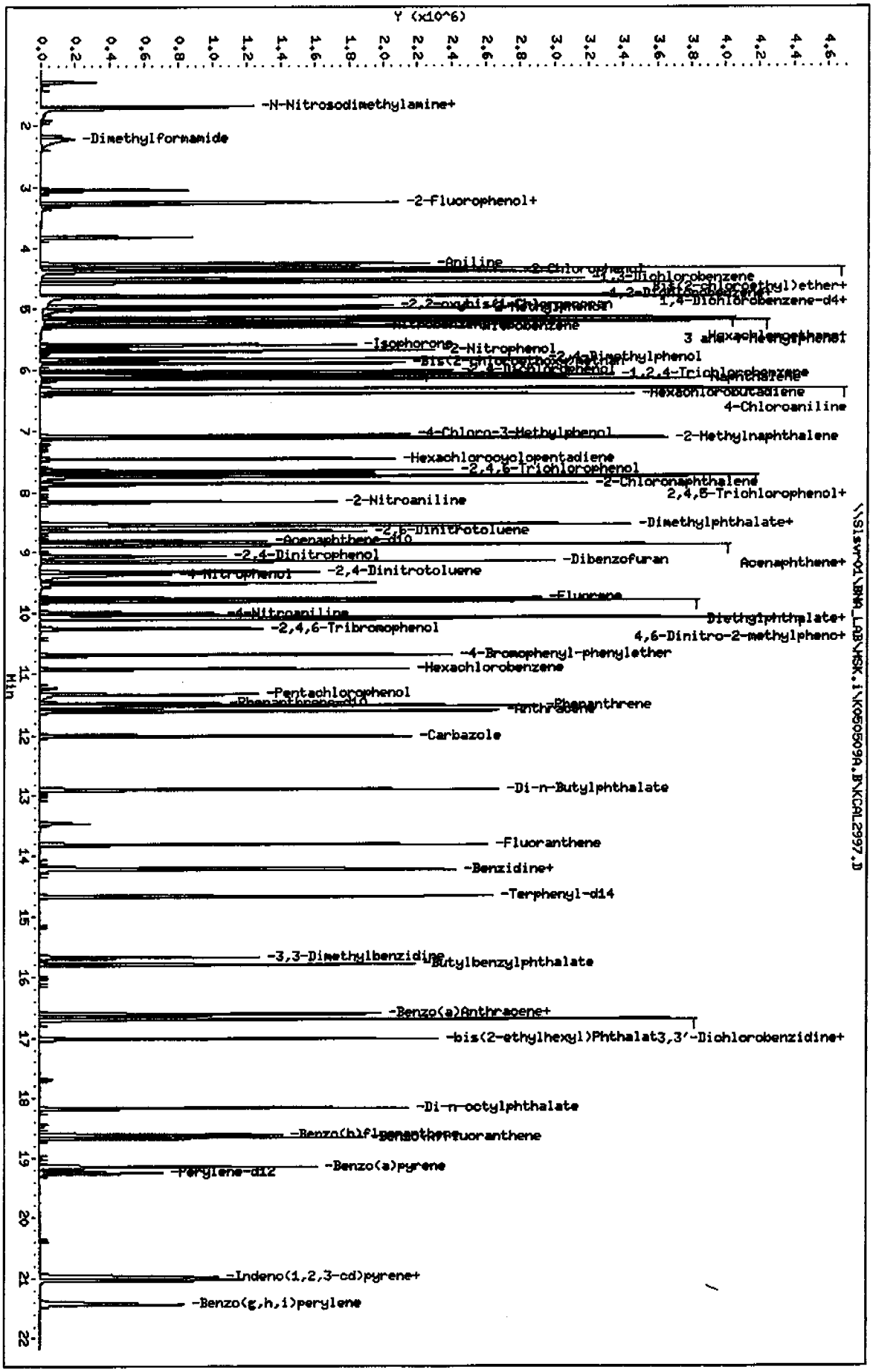
Instrument ID: MSK.i
Lab File ID: KCAL2997.D
Lab Smp Id: SSTD080
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Misc Info: SV0216-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD080
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	214171	10.81
48 Naphthalene-d8	657267	328634	1314534	752750	14.53
82 Acenaphthene-d10	351374	175687	702748	395102	12.44
121 Phenanthrene-d10	612492	306246	1224984	671617	9.65
153 Chrysene-d12	494718	247359	989436	508021	2.69
166 Perylene-d12	409117	204559	818234	419618	2.57

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.55	-0.13
48 Naphthalene-d8	6.14	5.64	6.64	6.13	-0.18
82 Acenaphthene-d10	8.83	8.33	9.33	8.81	-0.13
121 Phenanthrene-d10	11.49	10.99	11.99	11.48	-0.10
153 Chrysene-d12	16.66	16.16	17.16	16.65	-0.07
166 Perylene-d12	19.27	18.77	19.77	19.25	-0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

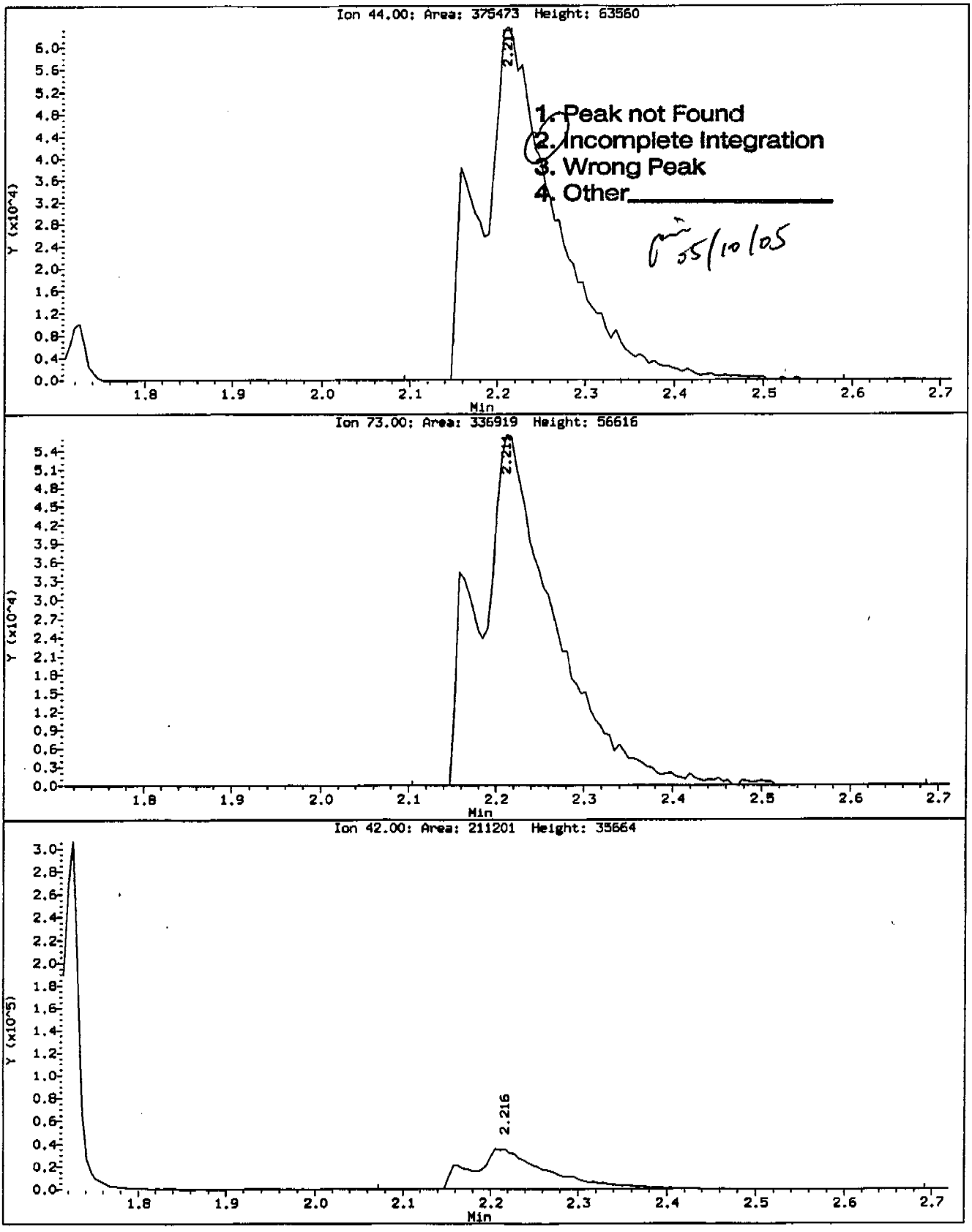


Data File: \\Slsvr01\BNA_LAB\HSK.i\K050509A.B\KCAL2997.D
Date : 09-MAY-2005 13:36
Client ID: SSTD080
Sample Info: SSTD080
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

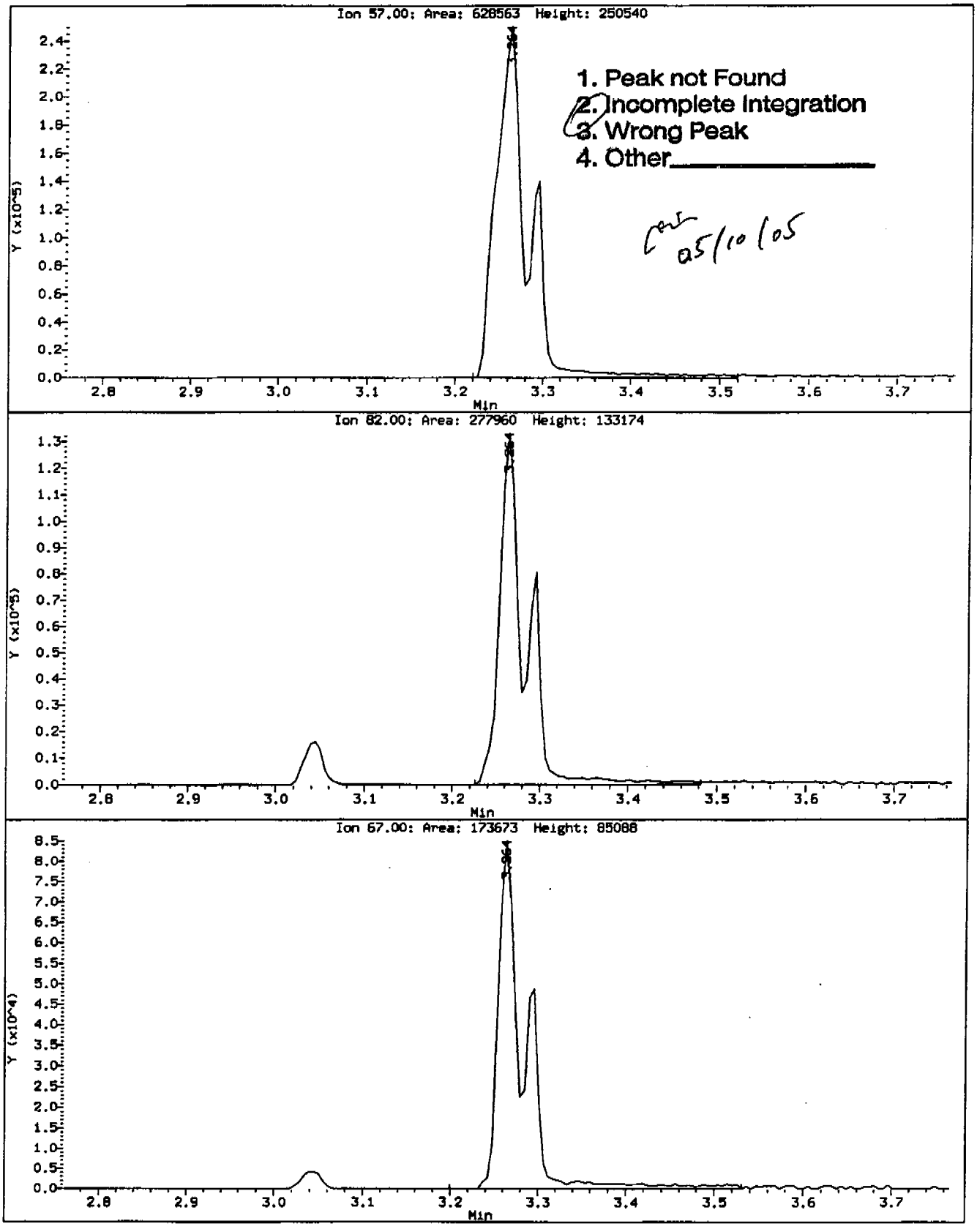
Data File: \\Slavr01\BNA_LAB\MSK.i\K050509A.B\KCAL2997.D
Injection Date: 09-MAY-2005 13:36
Instrument: MSK.i
Client Sample ID: SSTD080

Compound: Dimethylformamide
CAS Number: 68-12-2



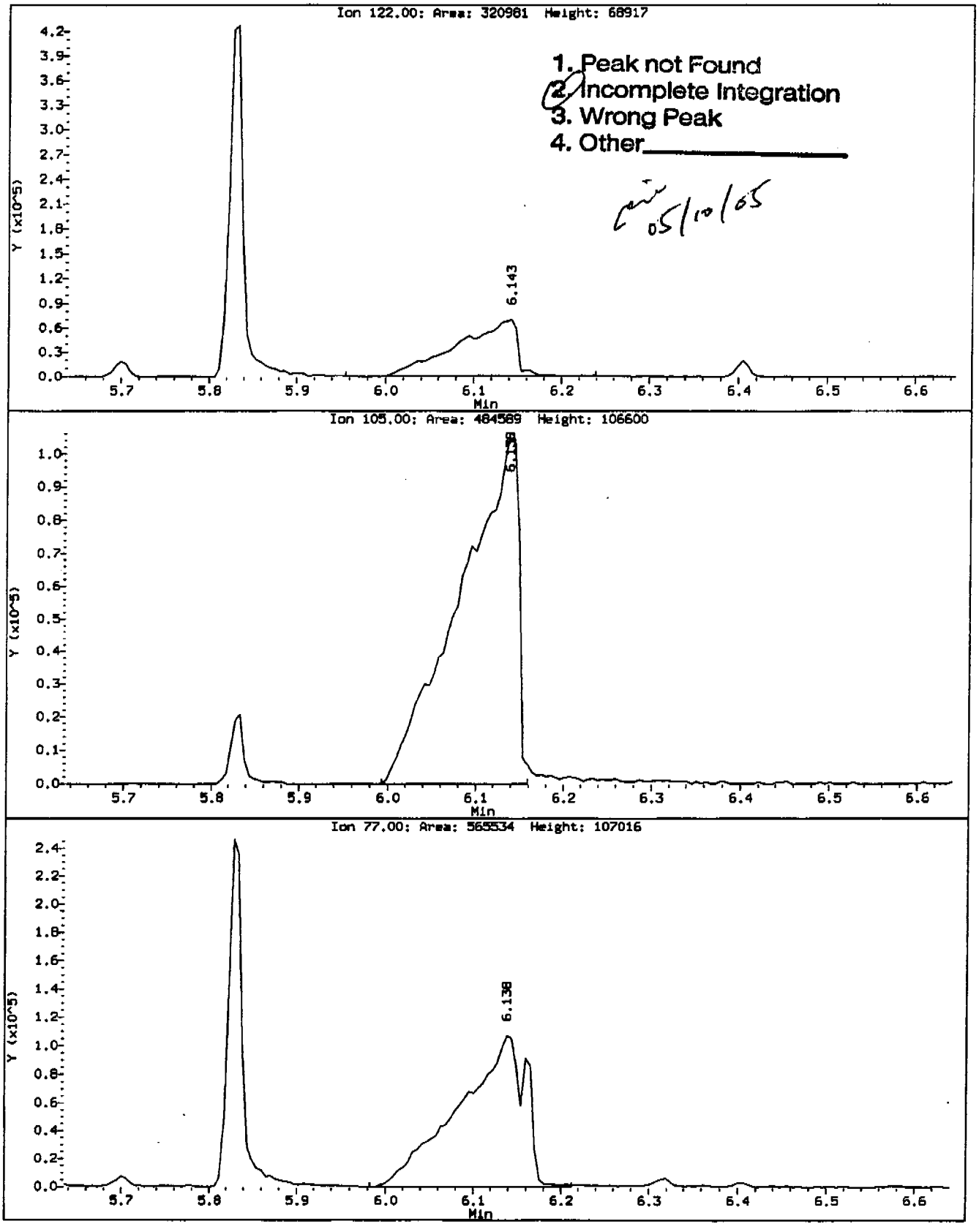
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2997.D
Injection Date: 09-MAY-2005 13:36
Instrument: MSK.i
Client Sample ID: SSTD080

Compound: Cyclohexanol
CAS Number:



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2997.D
Injection Date: 09-MAY-2005 13:36
Instrument: MSK.i
Client Sample ID: SSTD080

Compound: Benzoic Acid
CAS Number: 65-85-0



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2998.D
Report Date: 10-May-2005 09:41

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2998.D
Lab Smp Id: SSTD020 Client Smp ID: SSTD020
Inj Date : 09-MAY-2005 14:08
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD020
Misc Info : SV0214-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Meth Date : 10-May-2005 09:41 hongs Quant Type: ISTD
Cal Date : 08-MAY-2005 00:24 Cal File: KCAL2967.D
Als bottle: 7 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	1.269	1.269	(0.279)	29079	20.0000	20.19
4	N-Nitrosodimethylamine	74	1.691	1.691	(0.372)	58063	20.0000	20.75
3	Pyridine	79	1.680	1.680	(0.370)	102961	20.0000	21.10(M)
5	Dimethylformamide	44	2.134	2.134	(0.470)	78722	20.0000	20.35(M)
$ 10	2-Fluorophenol	112	3.224	3.224	(0.710)	107530	20.0000	20.11
11	Cyclohexanol	57	3.245	3.245	(0.714)	122326	20.0000	20.15
17	Aniline	93	4.239	4.239	(0.933)	197987	20.0000	20.12
19	Bis(2-chloroethyl)ether	93	4.314	4.314	(0.949)	131968	20.0000	18.93
$ 15	Phenol-d5	99	4.308	4.308	(0.948)	148133	20.0000	19.48(a)
16	Phenol	94	4.324	4.324	(0.952)	162288	20.0000	19.33(a)
20	2-Chlorophenol	128	4.372	4.372	(0.962)	119090	20.0000	19.53(a)
21	1,3-Dichlorobenzene	146	4.495	4.495	(0.989)	133896	20.0000	19.23(a)
* 22	1,4-Dichlorobenzene-d4	152	4.543	4.543	(1.000)	179829	40.0000	
23	1,4-Dichlorobenzene	146	4.565	4.565	(1.005)	141108	20.0000	19.11(a)
26	1,2-Dichlorobenzene	146	4.784	4.784	(1.053)	128484	20.0000	18.73
25	Benzyl Alcohol	108	4.789	4.789	(1.054)	52348	20.0000	17.46(a)
28	2,2-oxybis(1-Chloropropane)	45	4.955	4.955	(1.091)	143407	20.0000	19.93
27	2-Methylphenol	108	4.997	4.997	(1.100)	104540	20.0000	19.29(a)
35	Hexachloroethane	117	5.142	5.142	(1.132)	63058	20.0000	19.50(a)
32	N-Nitrosodinpropylamine	70	5.131	5.131	(1.129)	113647	20.0000	19.98
29	3 and 4-Methylphenol	108	5.190	5.190	(1.142)	225844	40.0000	38.93

CAW 05/10/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.270	5.270	(0.860)	176284	20.0000	19.72(a)
	37 Nitrobenzene	77	5.291	5.291	(0.864)	182487	20.0000	19.23(a)
	39 Isophorone	82	5.580	5.580	(0.911)	244054	20.0000	19.72(a)
	40 2-Nitrophenol	139	5.692	5.692	(0.929)	66222	20.0000	20.08
	41 2,4-Dimethylphenol	107	5.815	5.815	(0.949)	139592	20.0000	19.92(a)
	42 Bis(2-chloroethoxy)methane	93	5.895	5.895	(0.962)	150571	20.0000	19.06(a)
	45 2,4-Dichlorophenol	162	6.028	6.028	(0.984)	98358	20.0000	19.06(a)
	47 1,2,4-Trichlorobenzene	180	6.082	6.082	(0.993)	116052	20.0000	18.88(a)
*	48 Naphthalene-d8	136	6.125	6.125	(1.000)	656798	40.0000	
	44 Benzoic Acid	122	6.050	6.050	(0.988)	59723	20.0000	18.44
	50 Naphthalene	128	6.151	6.151	(1.004)	342835	20.0000	18.46(a)
	51 4-Chloroaniline	127	6.301	6.301	(1.029)	139735	20.0000	18.64(a)
	54 Hexachlorobutadiene	225	6.402	6.402	(1.045)	80479	20.0000	18.87(a)
	62 2-Methylnaphthalene	142	7.113	7.113	(1.161)	257037	20.0000	19.25
	59 4-Chloro-3-Methylphenol	107	7.075	7.075	(1.155)	115826	20.0000	19.27(a)
	66 Hexachlorocyclopentadiene	237	7.460	7.460	(0.847)	63417	20.0000	16.50(a)
	67 2,4,6-Trichlorophenol	196	7.647	7.647	(0.868)	78242	20.0000	18.76(a)
	68 2,4,5-Trichlorophenol	196	7.738	7.738	(0.879)	82243	20.0000	18.64(a)
$	69 2-Fluorobiphenyl	172	7.733	7.733	(0.878)	264688	20.0000	18.21(a)
	72 2-Chloronaphthalene	162	7.855	7.855	(0.892)	225879	20.0000	18.56(a)
	73 2-Nitroaniline	65	8.149	8.149	(0.925)	103471	20.0000	19.85(a)
	76 Dimethylphthalate	163	8.518	8.518	(0.967)	258723	20.0000	18.53(a)
	79 Acenaphthylene	152	8.539	8.539	(0.970)	331641	20.0000	18.46(a)
	80 2,6-Dinitrotoluene	165	8.630	8.630	(0.980)	57534	20.0000	19.28(a)
*	82 Acenaphthene-d10	164	8.806	8.806	(1.000)	361789	40.0000	
	83 Acenaphthene	153	8.860	8.860	(1.006)	211003	20.0000	18.58(a)
	81 3-Nitroaniline	138	8.865	8.865	(1.007)	57825	20.0000	19.68
	84 2,4-Dinitrophenol	184	9.052	9.052	(1.028)	27942	20.0000	15.76(a)
	86 Dibenzofuran	168	9.143	9.143	(1.038)	318454	20.0000	18.97(a)
	88 2,4-Dinitrotoluene	165	9.309	9.309	(1.057)	76696	20.0000	19.87(a)
	85 4-Nitrophenol	109	9.373	9.373	(1.064)	47204	20.0000	18.12
	93 Diethylphthalate	149	9.773	9.773	(1.110)	261563	20.0000	18.64(a)
	94 Fluorene	166	9.752	9.752	(1.107)	253062	20.0000	18.77(a)
	95 4-Chlorophenyl-phenylether	204	9.805	9.805	(1.113)	134085	20.0000	18.48(a)
	98 4-Nitroaniline	138	9.976	9.976	(1.133)	56723	20.0000	19.84(a)
	99 4,6-Dinitro-2-methylphenol	198	10.035	10.035	(0.875)	51467	20.0000	19.56(a)
	100 N-Nitrosodiphenylamine	169	10.062	10.062	(0.877)	177010	20.0000	18.31(a)
	102 Azobenzene	77	10.083	10.083	(0.879)	398707	20.0000	18.44(a)
$	104 2,4,6-Tribromophenol	330	10.254	10.254	(1.164)	38392	20.0000	18.86(a)
	109 4-Bromophenyl-phenylether	248	10.687	10.687	(0.932)	85013	20.0000	19.09(a)
	112 Hexachlorobenzene	284	10.911	10.911	(0.951)	85884	20.0000	18.94(a)
	117 Pentachlorophenol	266	11.322	11.322	(0.987)	42051	20.0000	16.67(a)
*	121 Phenanthrene-d10	188	11.472	11.472	(1.000)	636100	40.0000	
	122 Phenanthrene	178	11.509	11.509	(1.003)	371481	20.0000	18.88(a)
	124 Anthracene	178	11.590	11.590	(1.010)	364721	20.0000	19.17(a)
	126 Carbazole	167	11.996	11.996	(1.046)	313486	20.0000	19.27(a)
	129 Di-n-Butylphthalate	149	12.882	12.882	(1.123)	412990	20.0000	19.42(a)
	134 Fluoranthene	202	13.801	13.801	(1.203)	394716	20.0000	19.37(a)
	135 Benzidine	184	14.202	14.202	(0.854)	163298	20.0000	20.67
	137 Pyrene	202	14.218	14.218	(0.855)	398526	20.0000	18.68(a)
$	139 Terphenyl-d14	244	14.667	14.667	(0.882)	311279	20.0000	18.80(a)
	145 3,3-Dimethylbenzidine	212	15.666	15.666	(0.942)	173839	20.0000	20.52
	146 Butylbenzylphthalate	149	15.789	15.789	(0.949)	170482	20.0000	19.46(a)
	150 Benzo(a)Anthracene	228	16.601	16.601	(0.998)	351106	20.0000	19.19(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.638	16.638	(1.000)	523735	40.0000	
152 3,3'-Dichlorobenzidine	252	16.697	16.697	(1.004)	132894	20.0000	19.03(a)
154 Chrysene	228	16.681	16.681	(1.003)	327346	20.0000	18.79(a)
155 bis(2-ethylhexyl)Phthalate	149	17.017	17.017	(1.023)	208965	20.0000	19.12(a)
158 Di-n-octylphthalate	149	18.160	18.160	(0.944)	352302	20.0000	18.65(a)
160 Benzo(b)fluoranthene	252	18.604	18.604	(0.967)	317363	20.0000	18.36(a)
161 Benzo(k)fluoranthene	252	18.641	18.641	(0.969)	326532	20.0000	19.06(a)
165 Benzo(a)pyrene	252	19.138	19.138	(0.994)	294915	20.0000	19.36(a)
* 166 Perylene-d12	264	19.245	19.245	(1.000)	434641	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.949	20.949	(1.089)	254686	20.0000	18.90(a)
174 Dibenzo(a,h)anthracene	278	20.997	20.997	(1.091)	255631	20.0000	19.53(a)
177 Benzo(g,h,i)perylene	276	21.398	21.398	(1.112)	235233	20.0000	19.49(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2998.D Page 4
Report Date: 10-May-2005 09:41

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

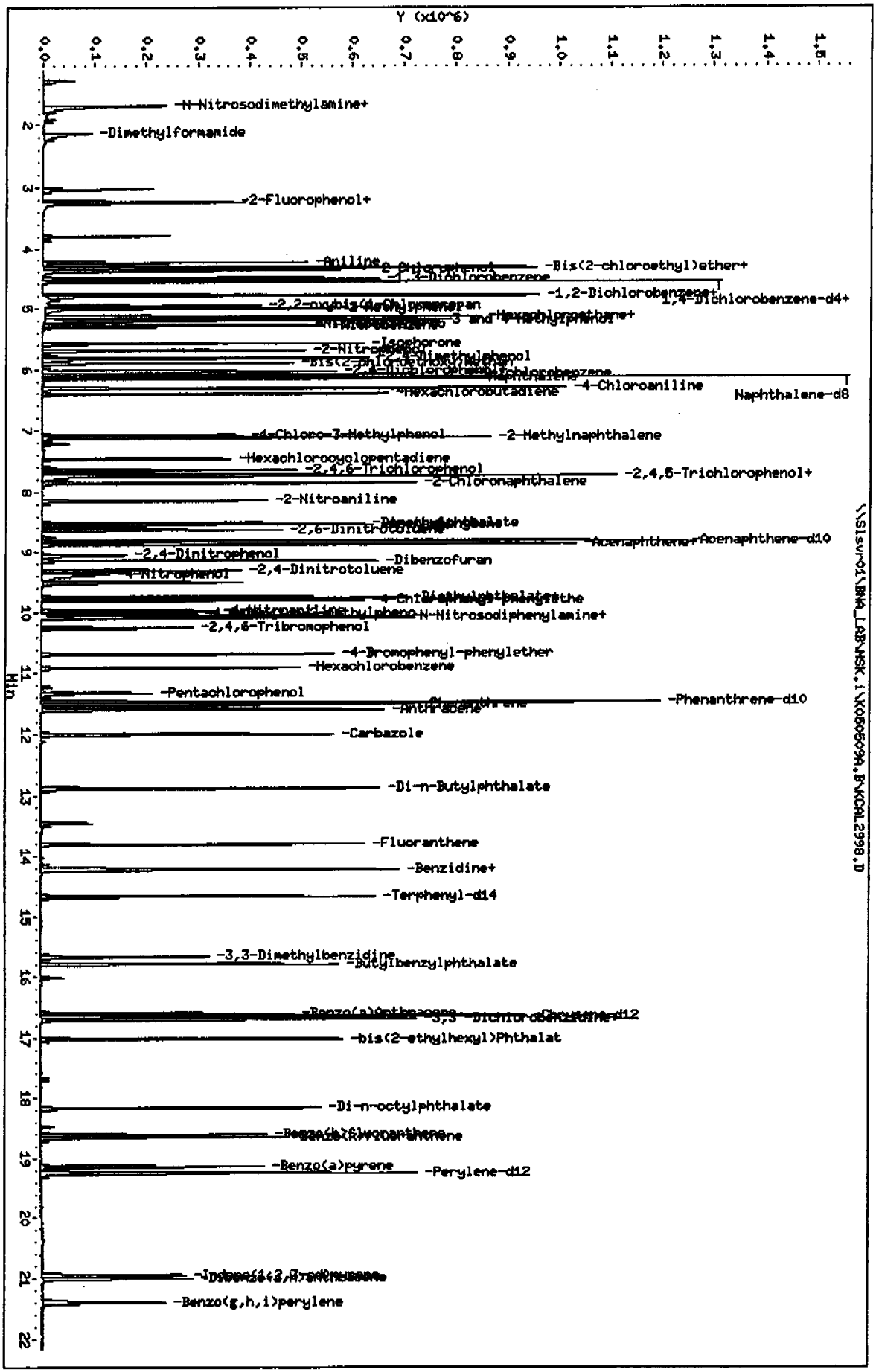
Instrument ID: MSK.i
Lab File ID: KCAL2998.D
Lab Smp Id: SSTD020
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Misc Info: SV0214-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD020
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	179829	-6.96
48 Naphthalene-d8	657267	328634	1314534	656798	-0.07
82 Acenaphthene-d10	351374	175687	702748	361789	2.96
121 Phenanthrene-d10	612492	306246	1224984	636100	3.85
153 Chrysene-d12	494718	247359	989436	523735	5.87
166 Perylene-d12	409117	204559	818234	434641	6.24

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.54	-0.29
48 Naphthalene-d8	6.14	5.64	6.64	6.13	-0.30
82 Acenaphthene-d10	8.83	8.33	9.33	8.81	-0.21
121 Phenanthrene-d10	11.49	10.99	11.99	11.47	-0.16
153 Chrysene-d12	16.66	16.16	17.16	16.64	-0.11
166 Perylene-d12	19.27	18.77	19.77	19.25	-0.12

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

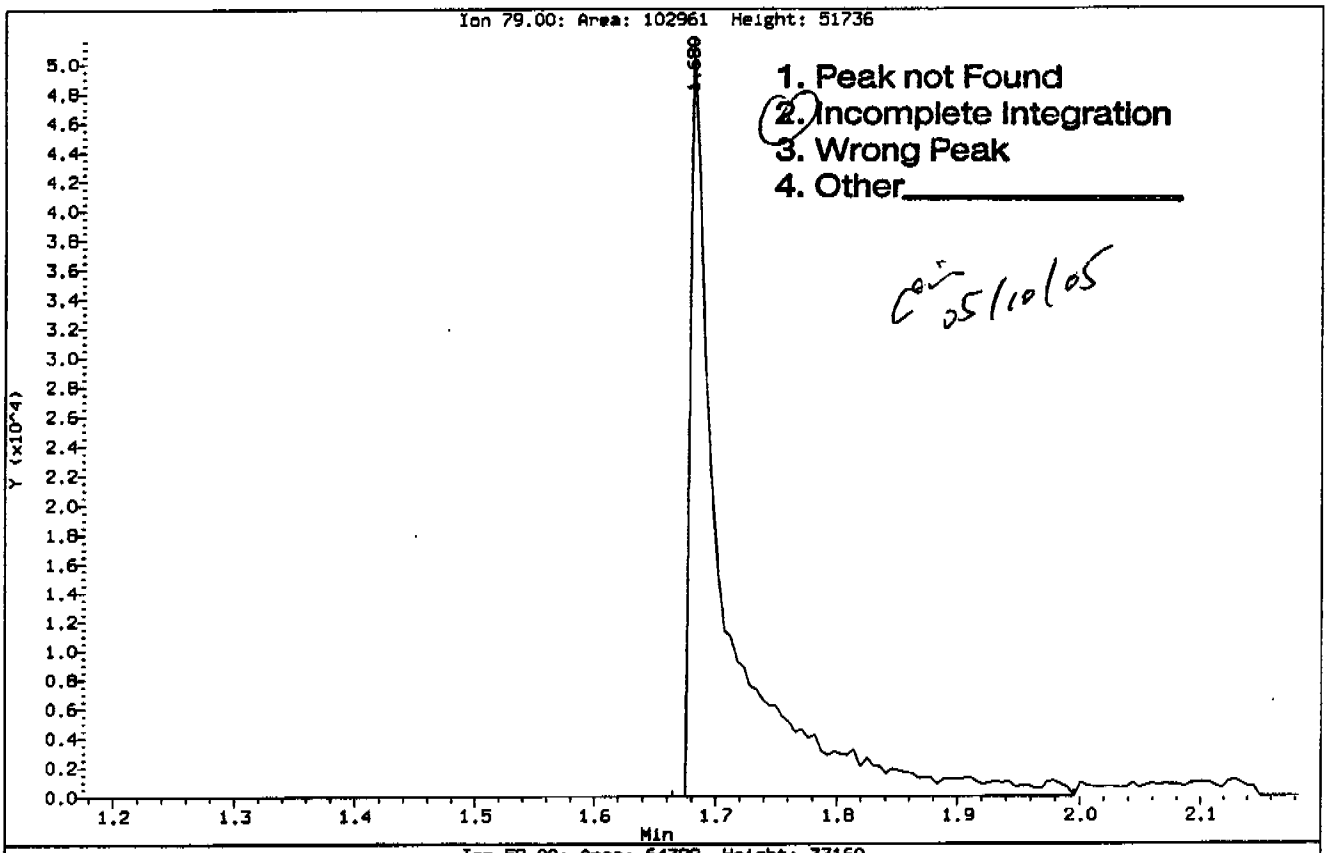


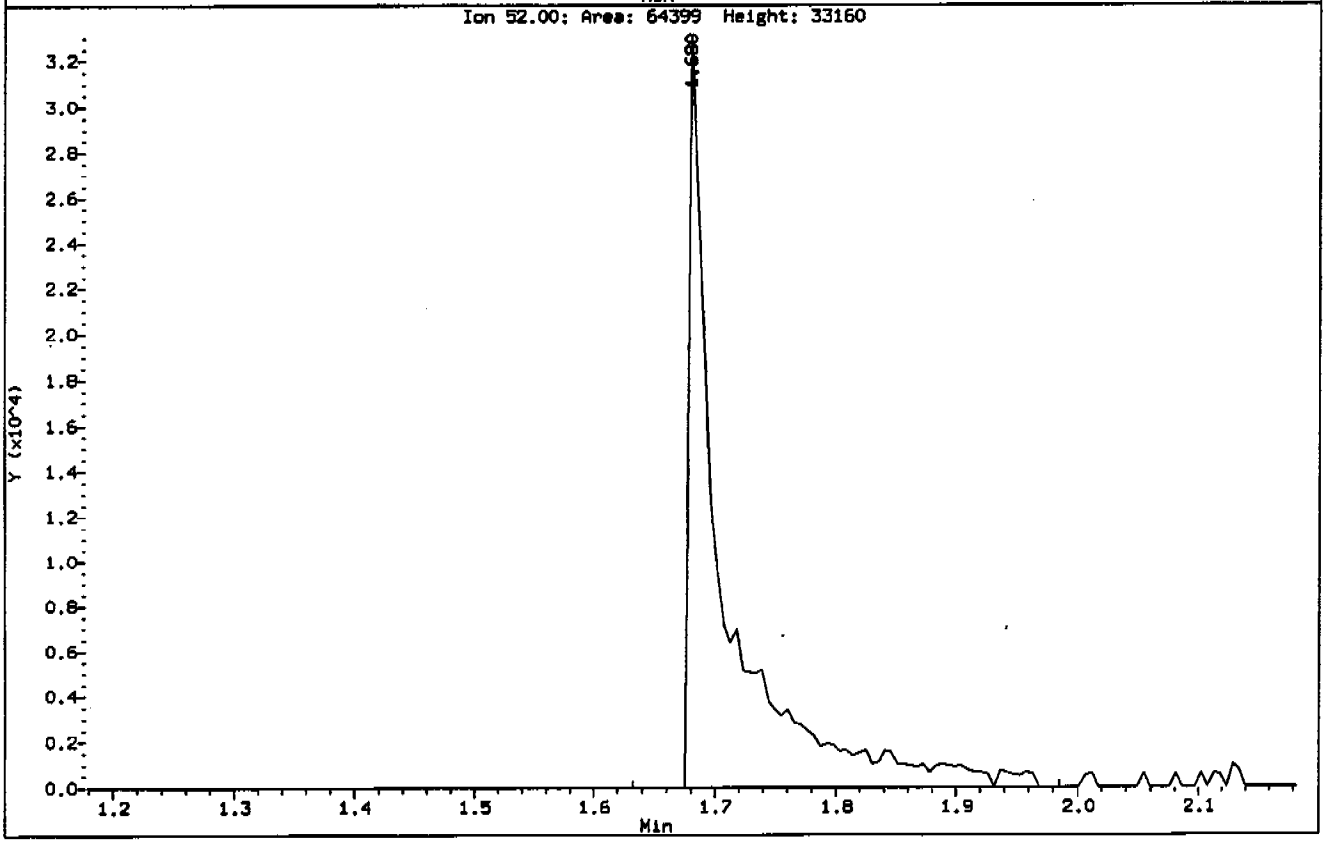
Data File: \\Slsvr01\BNA_LAB\HSK.i\K050509A.B\KCAL2998.D
Date : 09-MAY-2005 14:08
Client ID: SSTD020
Sample Info: SSTD020
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2998.D
Injection Date: 09-MAY-2005 14:08
Instrument: MSK.i
Client Sample ID: SSTD020

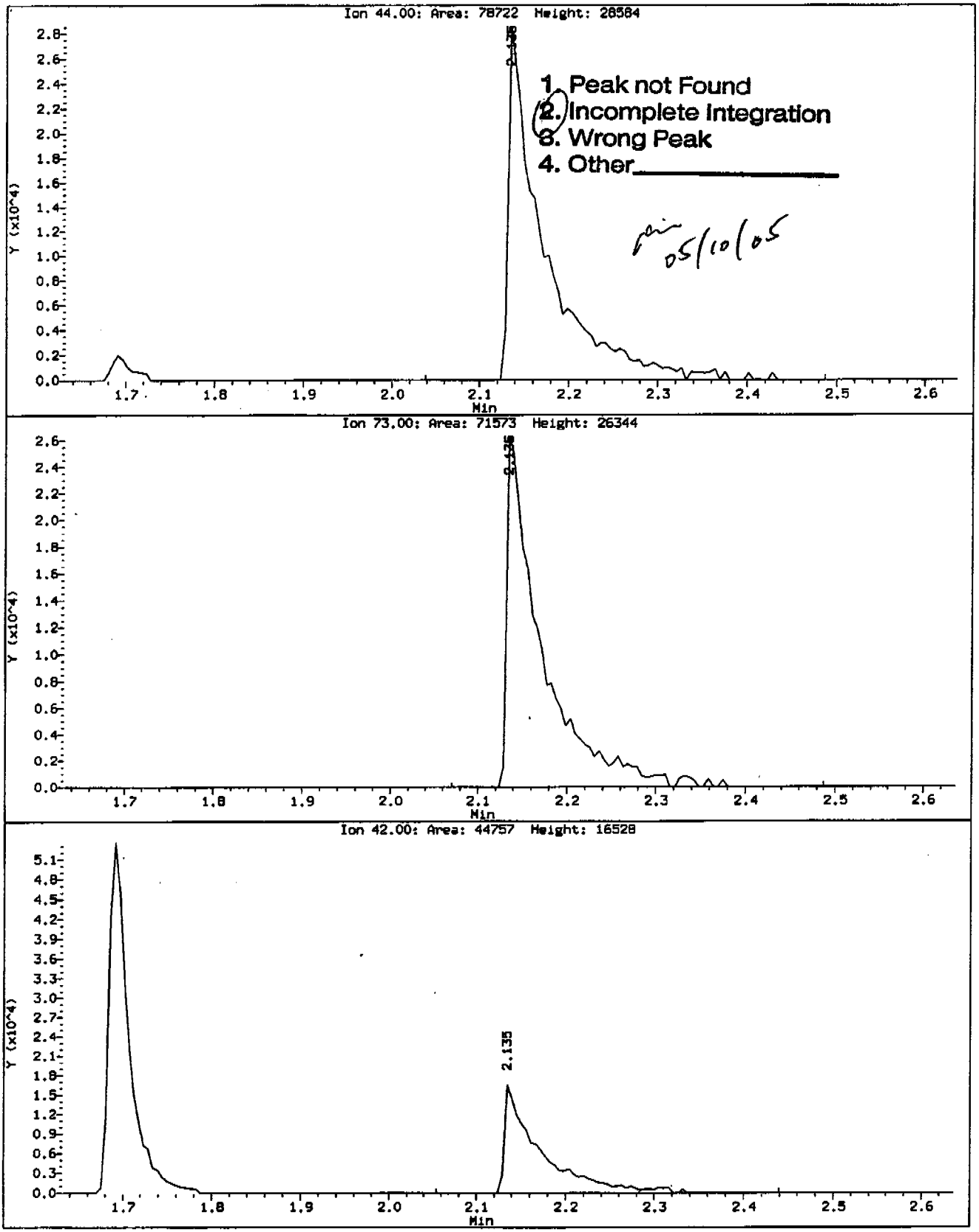
Compound: Pyridine
CAS Number: 110-86-1





Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2998.D
Injection Date: 09-MAY-2005 14:08
Instrument: MSK.i
Client Sample ID: SSTD020

Compound: Dimethylformamide
CAS Number: 68-12-2



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2999.D
Report Date: 10-May-2005 09:41

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2999.D
Lab Smp Id: SSTD010 Client Smp ID: SSTD010
Inj Date : 09-MAY-2005 14:40
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD010
Misc Info : SV0213-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Meth Date : 10-May-2005 09:41 hongs Quant Type: ISTD
Cal Date : 08-MAY-2005 00:55 Cal File: KCAL2968.D
Als bottle: 8 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	1.282	1.282	(0.282)	13457	10.0000	10.56
4	N-Nitrosodimethylamine	74	1.704	1.704	(0.375)	26519	10.0000	10.71(a)
3	Pyridine	79	1.720	1.720	(0.379)	44549	10.0000	10.32(M)
5	Dimethylformamide	44	2.158	2.158	(0.475)	38436	10.0000	11.22(aM)
$ 10	2-Fluorophenol	112	3.227	3.227	(0.711)	47361	10.0000	10.01(a)
11	Cyclohexanol	57	3.243	3.243	(0.714)	50841	10.0000	9.461(a)
17	Aniline	93	4.236	4.236	(0.933)	89506	10.0000	10.27
19	Bis(2-chloroethyl)ether	93	4.311	4.311	(0.949)	58704	10.0000	9.515(a)
$ 15	Phenol-d5	99	4.311	4.311	(0.949)	66054	10.0000	9.811(a)
16	Phenol	94	4.322	4.322	(0.952)	71919	10.0000	9.680(a)
20	2-Chlorophenol	128	4.370	4.370	(0.962)	51773	10.0000	9.591(a)
21	1,3-Dichlorobenzene	146	4.493	4.493	(0.989)	58403	10.0000	9.474(a)
* 22	1,4-Dichlorobenzene-d4	152	4.541	4.541	(1.000)	159178	40.0000	
23	1,4-Dichlorobenzene	146	4.562	4.562	(1.005)	61909	10.0000	9.474(a)
26	1,2-Dichlorobenzene	146	4.781	4.781	(1.053)	56524	10.0000	9.309(a)
25	Benzyl Alcohol	108	4.786	4.786	(1.054)	19550	10.0000	7.366(a)
28	2,2-oxybis(1-Chloropropane)	45	4.952	4.952	(1.091)	63670	10.0000	9.999(a)
27	2-Methylphenol	108	4.995	4.995	(1.100)	46746	10.0000	9.745(a)
35	Hexachloroethane	117	5.139	5.139	(1.132)	27532	10.0000	9.616(a)
32	N-Nitrosodinpropylamine	70	5.123	5.123	(1.128)	52784	10.0000	10.48
29	3 and 4-Methylphenol	108	5.182	5.182	(1.141)	100947	20.0000	19.66

05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2999.D Page 2
Report Date: 10-May-2005 09:41

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.262	5.262	(0.860)	79356	10.0000	9.941(a)
	37 Nitrobenzene	77	5.283	5.283	(0.863)	84029	10.0000	9.913(a)
	39 Isophorone	82	5.572	5.572	(0.910)	115786	10.0000	10.48(a)
	40 2-Nitrophenol	139	5.689	5.689	(0.929)	28132	10.0000	9.554(a)
	41 2,4-Dimethylphenol	107	5.812	5.812	(0.949)	55487	10.0000	8.867(a)
	42 Bis(2-chloroethoxy)methane	93	5.892	5.892	(0.962)	70633	10.0000	10.01(a)
	45 2,4-Dichlorophenol	162	6.026	6.026	(0.984)	44702	10.0000	9.699(a)
	47 1,2,4-Trichlorobenzene	180	6.079	6.079	(0.993)	52416	10.0000	9.551(a)
*	48 Naphthalene-d8	136	6.122	6.122	(1.000)	586546	40.0000	
	44 Benzoic Acid	122	6.020	6.020	(0.983)	21905	10.0000	7.573(a)
	50 Naphthalene	128	6.143	6.143	(1.003)	151887	10.0000	9.157(a)
	51 4-Chloroaniline	127	6.298	6.298	(1.029)	64193	10.0000	9.588(a)
	54 Hexachlorobutadiene	225	6.394	6.394	(1.044)	35607	10.0000	9.347(a)
	62 2-Methylnaphthalene	142	7.110	7.110	(1.161)	112957	10.0000	9.471(a)
	59 4-Chloro-3-Methylphenol	107	7.073	7.073	(1.155)	55447	10.0000	10.33(a)
	66 Hexachlorocyclopentadiene	237	7.452	7.452	(0.846)	24292	10.0000	6.845(a)
	67 2,4,6-Trichlorophenol	196	7.639	7.639	(0.868)	35765	10.0000	9.285(a)
	68 2,4,5-Trichlorophenol	196	7.735	7.735	(0.879)	36396	10.0000	8.934(a)
$	69 2-Fluorobiphenyl	172	7.730	7.730	(0.878)	119684	10.0000	8.917(a)
	72 2-Chloronaphthalene	162	7.847	7.847	(0.891)	104772	10.0000	9.321(a)
	73 2-Nitroaniline	65	8.141	8.141	(0.925)	49659	10.0000	10.31(a)
	76 Dimethylphthalate	163	8.510	8.510	(0.967)	125626	10.0000	9.745(a)
	79 Acenaphthylene	152	8.531	8.531	(0.969)	154824	10.0000	9.329(a)
	80 2,6-Dinitrotoluene	165	8.622	8.622	(0.979)	27100	10.0000	9.833(a)
*	82 Acenaphthene-d10	164	8.804	8.804	(1.000)	334123	40.0000	
	83 Acenaphthene	153	8.852	8.852	(1.005)	99331	10.0000	9.473(a)
	81 3-Nitroaniline	138	8.857	8.857	(1.006)	26125	10.0000	9.627(a)
	84 2,4-Dinitrophenol	184	9.044	9.044	(1.027)	11228	10.0000	6.858(a)
	86 Dibenzofuran	168	9.135	9.135	(1.038)	146981	10.0000	9.480(a)
	88 2,4-Dinitrotoluene	165	9.301	9.301	(1.056)	34603	10.0000	9.708(a)
	85 4-Nitrophenol	109	9.381	9.381	(1.066)	23422	10.0000	9.736(aM)
	93 Diethylphthalate	149	9.765	9.765	(1.109)	126619	10.0000	9.770(a)
	94 Fluorene	166	9.744	9.744	(1.107)	120426	10.0000	9.673(a)
	95 4-Chlorophenyl-phenylether	204	9.797	9.797	(1.113)	64951	10.0000	9.692(a)
	98 4-Nitroaniline	138	9.958	9.958	(1.131)	26850	10.0000	10.17(a)
	99 4,6-Dinitro-2-methylphenol	198	10.027	10.027	(0.875)	22033	10.0000	8.652(a)
	100 N-Nitrosodiphenylamine	169	10.054	10.054	(0.877)	84023	10.0000	8.981(a)
	102 Azobenzene	77	10.075	10.075	(0.879)	193002	10.0000	9.224(a)
$	104 2,4,6-Tribromophenol	330	10.246	10.246	(1.164)	18607	10.0000	9.900(a)
	109 4-Bromophenyl-phenylether	248	10.684	10.684	(0.932)	39916	10.0000	9.260(a)
	112 Hexachlorobenzene	284	10.903	10.903	(0.951)	42322	10.0000	9.646(a)
	117 Pentachlorophenol	266	11.315	11.315	(0.987)	15331	10.0000	6.279(a)
*	121 Phenanthrene-d10	188	11.464	11.464	(1.000)	615657	40.0000	
	122 Phenanthrene	178	11.501	11.501	(1.003)	179743	10.0000	9.439(a)
	124 Anthracene	178	11.582	11.582	(1.010)	175642	10.0000	9.537(a)
	126 Carbazole	167	11.988	11.988	(1.046)	152794	10.0000	9.706(a)
	129 Di-n-Butylphthalate	149	12.874	12.874	(1.123)	197669	10.0000	9.605(a)
	134 Fluoranthene	202	13.793	13.793	(1.203)	193365	10.0000	9.802(a)
	135 Benzidine	184	14.194	14.194	(0.854)	74647	10.0000	9.349(a)
	137 Pyrene	202	14.210	14.210	(0.854)	197771	10.0000	9.174(a)
$	139 Terphenyl-d14	244	14.659	14.659	(0.881)	150292	10.0000	8.981(a)
	145 3,3-Dimethylbenzidine	212	15.663	15.663	(0.942)	87156	10.0000	10.18
	146 Butylbenzylphthalate	149	15.781	15.781	(0.949)	86330	10.0000	9.754(a)
	150 Benzo(a)Anthracene	228	16.593	16.593	(0.998)	176056	10.0000	9.524(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.630	16.630	(1.000)	529256	40.0000	
152 3,3'-Dichlorobenzidine	252	16.689	16.689	(1.004)	62060	10.0000	8.795(a)
154 Chrysene	228	16.667	16.667	(1.002)	163479	10.0000	9.287(a)
155 bis(2-ethylhexyl)Phthalate	149	17.009	17.009	(1.023)	103208	10.0000	9.344(a)
158 Di-n-octylphthalate	149	18.152	18.152	(0.944)	178439	10.0000	9.055(a)
160 Benzo(b)fluoranthene	252	18.590	18.590	(0.966)	160563	10.0000	8.902(a)
161 Benzo(k)fluoranthene	252	18.633	18.633	(0.969)	165847	10.0000	9.277(a)
165 Benzo(a)pyrene	252	19.125	19.125	(0.994)	149337	10.0000	9.396(a)
* 166 Perylene-d12	264	19.237	19.237	(1.000)	453500	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.936	20.936	(1.088)	130201	10.0000	9.262(a)
174 Dibenzo(a,h)anthracene	278	20.984	20.984	(1.091)	125575	10.0000	9.193(a)
177 Benzo(g,h,i)perylene	276	21.384	21.384	(1.112)	125987	10.0000	10.00(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2999.D Page 4
Report Date: 10-May-2005 09:41

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

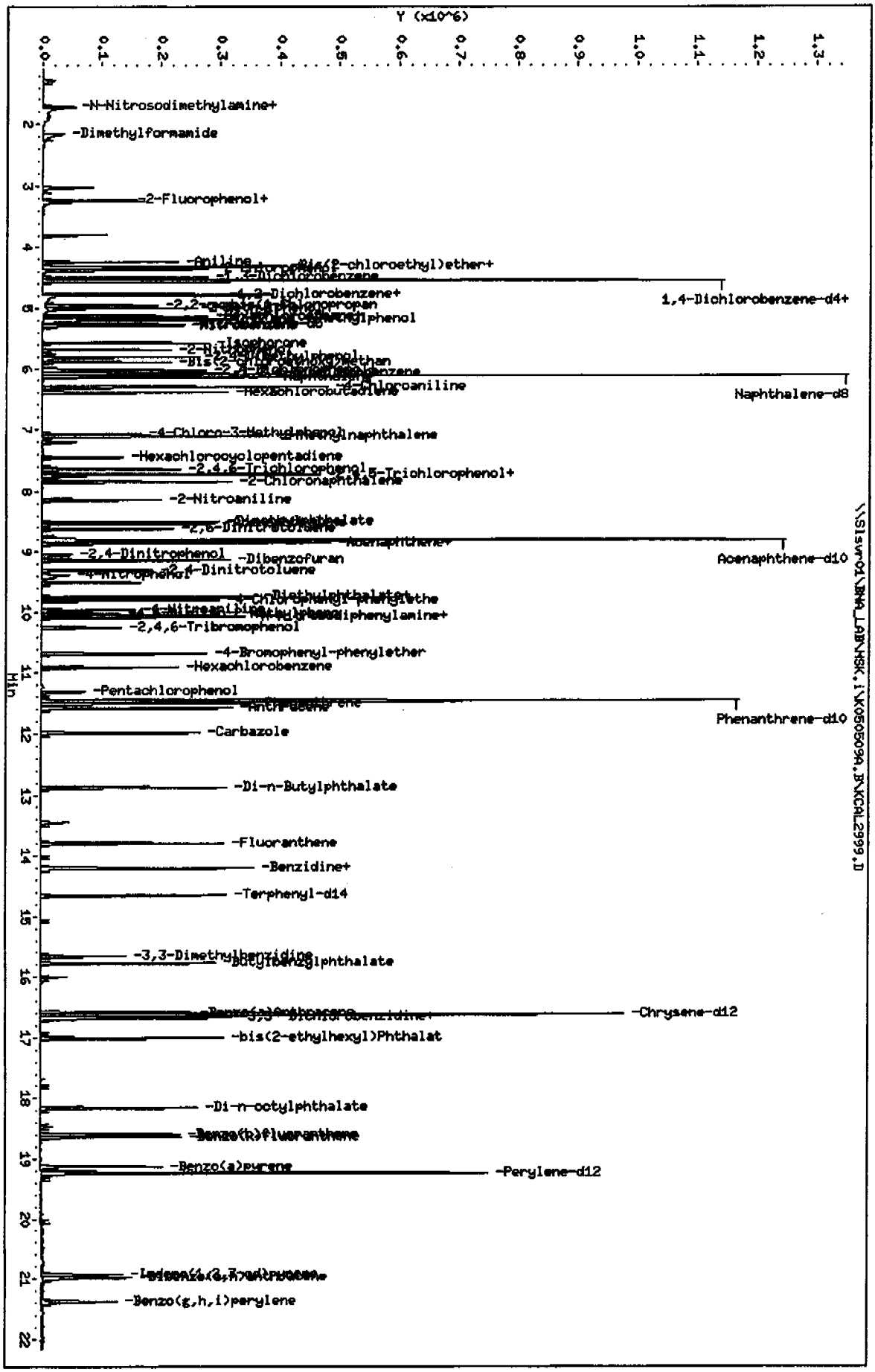
Instrument ID: MSK.i
Lab File ID: KCAL2999.D
Lab Smp Id: SSTD010
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Misc Info: SV0213-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD010
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	159178	-17.65
48 Naphthalene-d8	657267	328634	1314534	586546	-10.76
82 Acenaphthene-d10	351374	175687	702748	334123	-4.91
121 Phenanthrene-d10	612492	306246	1224984	615657	0.52
153 Chrysene-d12	494718	247359	989436	529256	6.98
166 Perylene-d12	409117	204559	818234	453500	10.85

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.54	-0.34
48 Naphthalene-d8	6.14	5.64	6.64	6.12	-0.34
82 Acenaphthene-d10	8.83	8.33	9.33	8.80	-0.24
121 Phenanthrene-d10	11.49	10.99	11.99	11.46	-0.23
153 Chrysene-d12	16.66	16.16	17.16	16.63	-0.16
166 Perylene-d12	19.27	18.77	19.77	19.24	-0.16

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

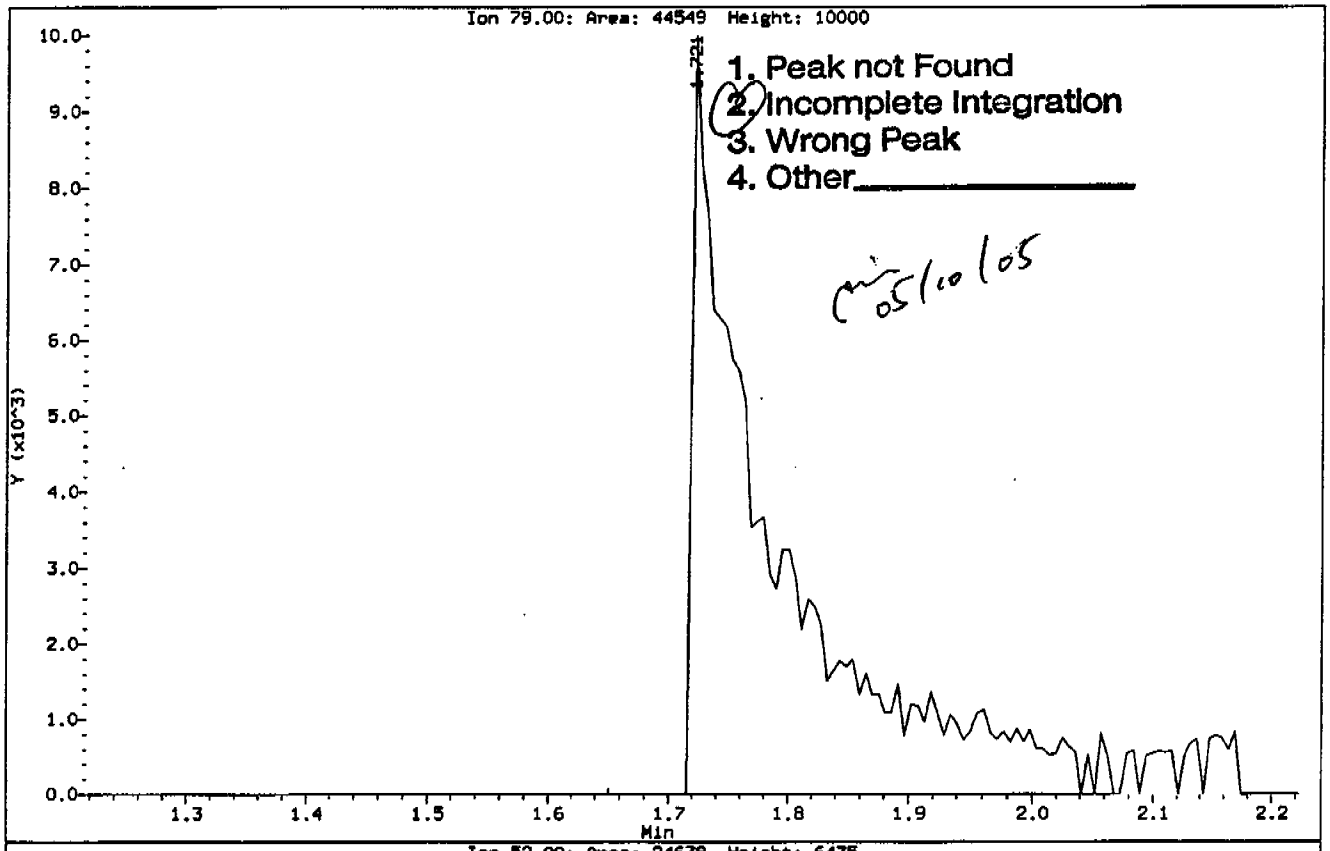


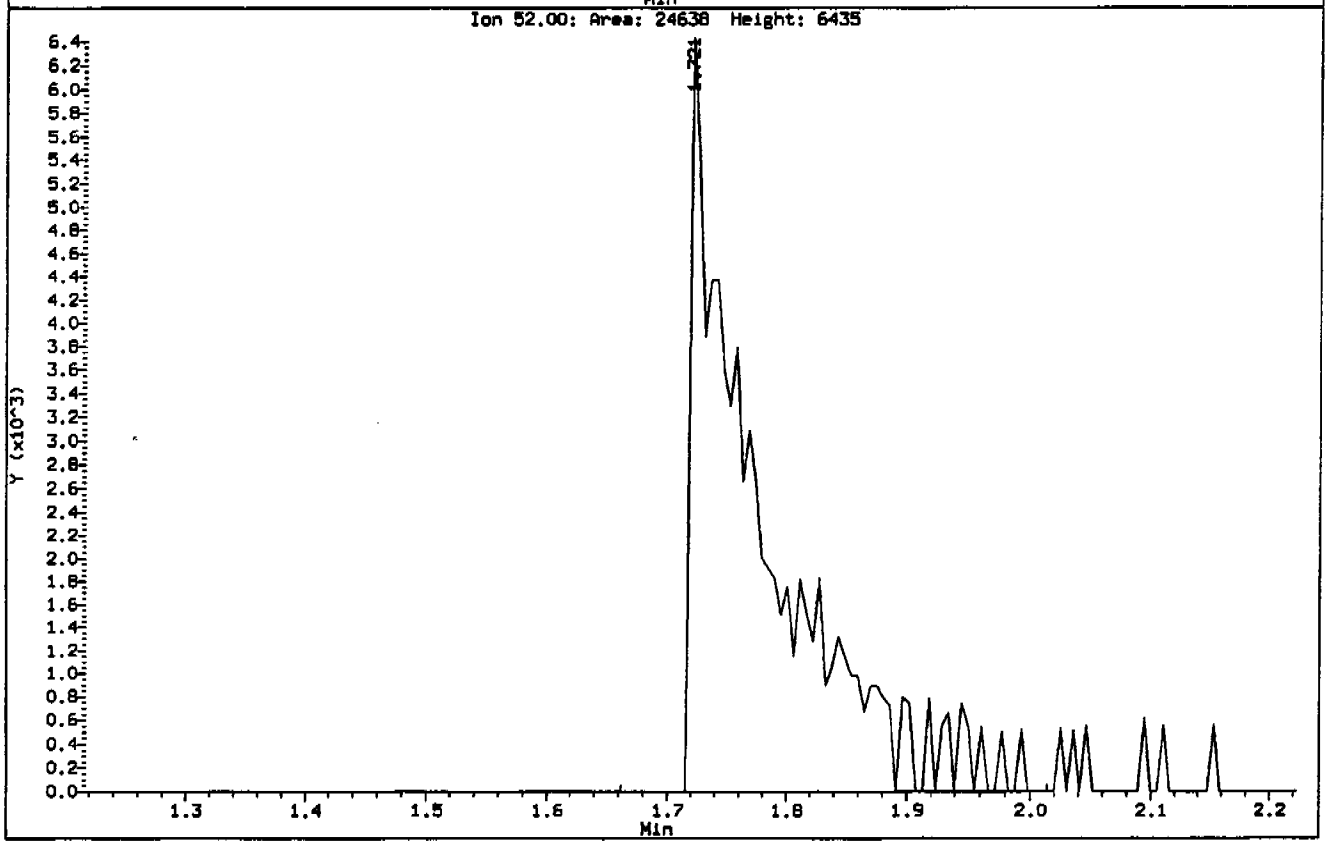
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2999.D
Date : 09-MAY-2005 14:40
Client ID: SSTD010
Sample Info: SSTD010
Volume Injected (uL): 1.0
Column phase:

Instrument: MSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slevr01\BNA_LAB\MSK.i\K050509A.B\KCAL2999.D
Injection Date: 09-MAY-2005 14:40
Instrument: MSK.i
Client Sample ID: SSTD010

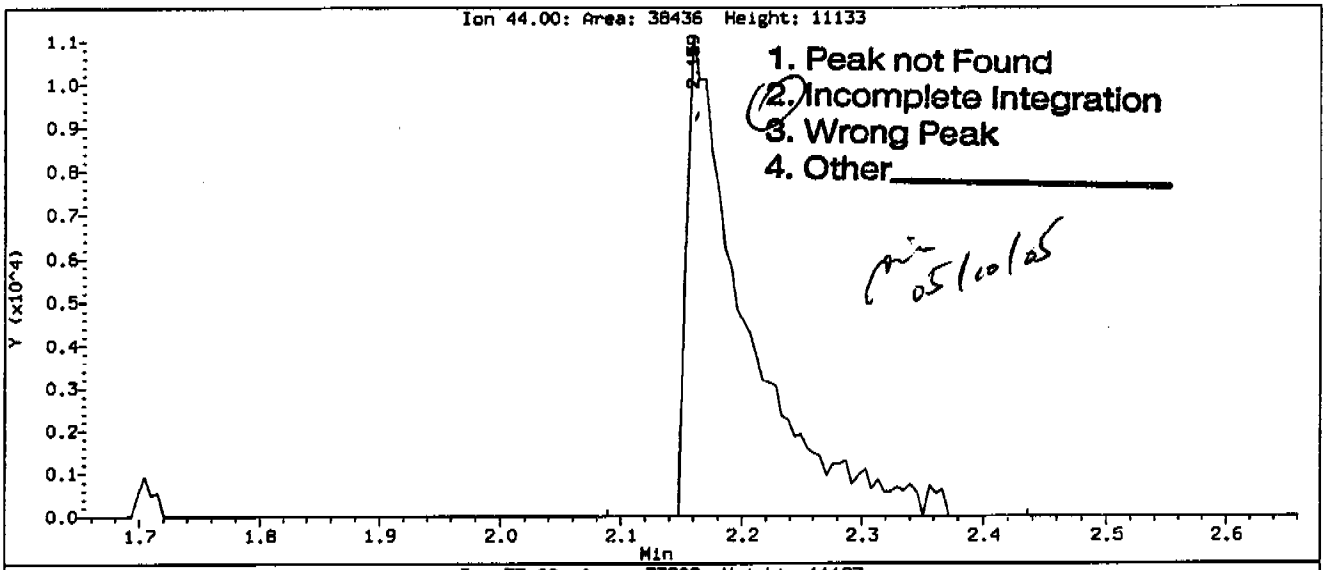
Compound: Pyridine
CAS Number: 110-86-1





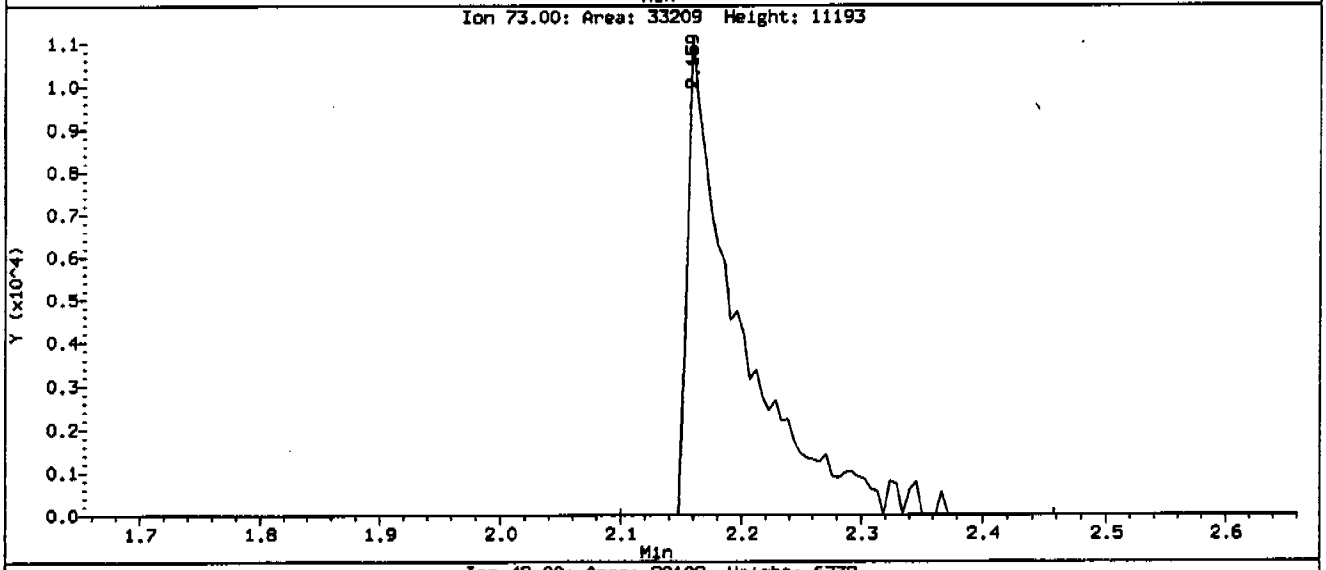
Data File: \\Slevr01\BNA_LAB\MSK.i\K050509A.B\KCAL2999.D
Injection Date: 09-MAY-2005 14:40
Instrument: MSK.i
Client Sample ID: SSTD010

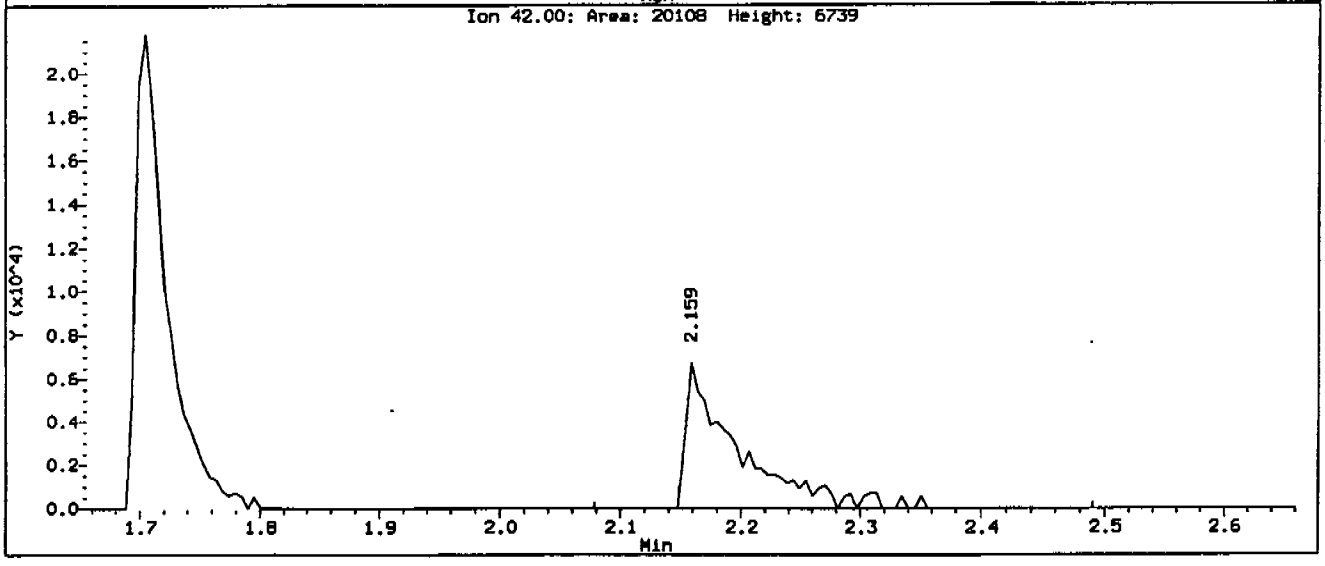
Compound: Dimethylformamide
CAS Number: 68-12-2



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

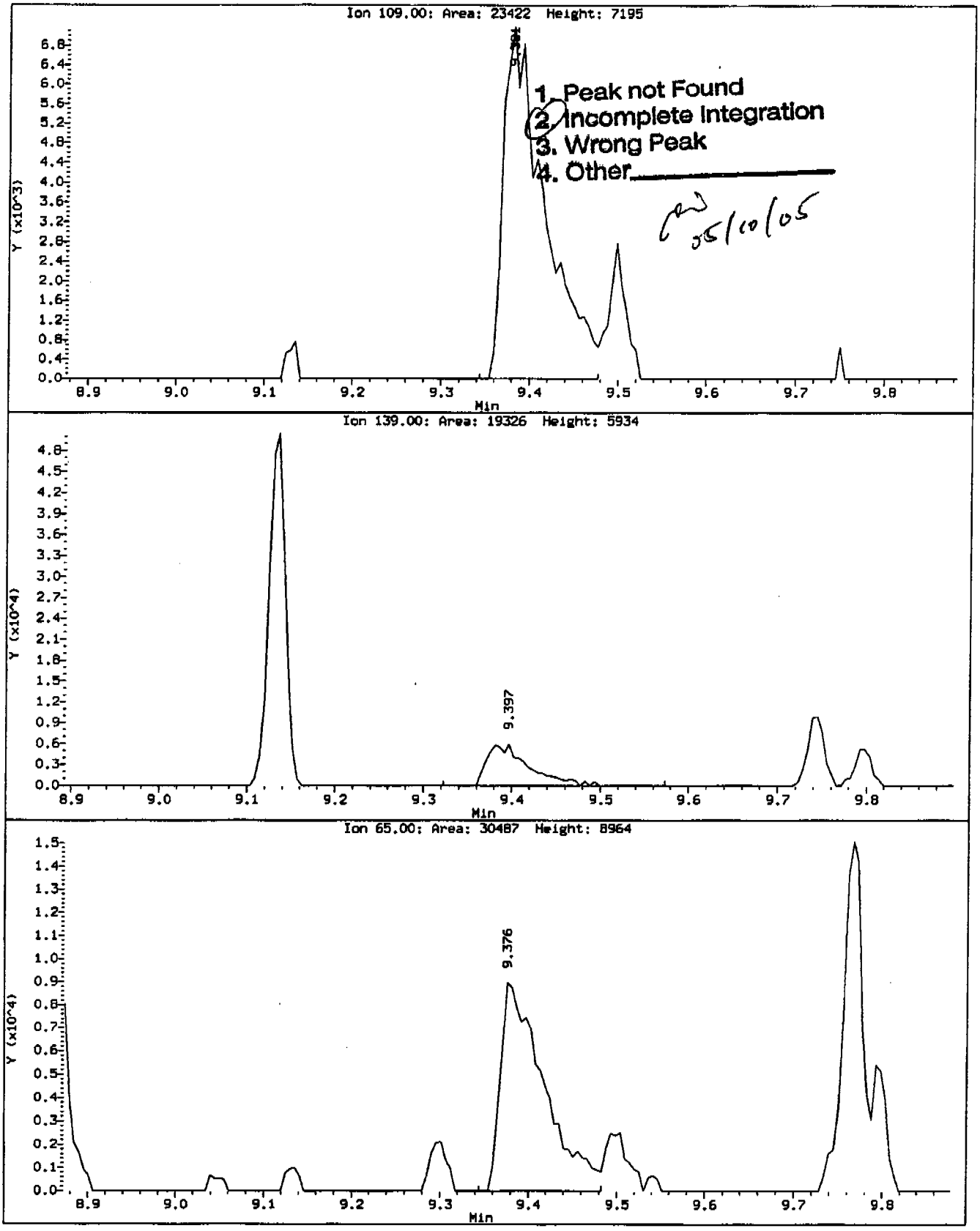
pm 05/10/05





Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2999.D
Injection Date: 09-MAY-2005 14:40
Instrument: MSK.i
Client Sample ID: SSTD010

Compound: 4-Nitrophenol
CAS Number: 100-02-7



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3000.D Page 1
Report Date: 10-May-2005 09:42

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3000.D
Lab Smp Id: SSTD002 Client Smp ID: SSTD002
Inj Date : 09-MAY-2005 15:12
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD002
Misc Info : SV0212-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Meth Date : 10-May-2005 09:41 hongs Quant Type: ISTD
Cal Date : 08-MAY-2005 01:27 Cal File: KCAL2969.D
Als bottle: 9 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	1.286	1.286	(0.283)	2496	2.00000	2.032(a)
4	N-Nitrosodimethylamine	74	1.724	1.724	(0.379)	4743	2.00000	1.987(a)
5	Dimethylformamide	44	2.232	2.232	(0.491)	6372	2.00000	1.931(aM)
11	Cyclohexanol	57	3.263	3.263	(0.717)	8096	2.00000	1.564(a)
17	Aniline	93	4.251	4.251	(0.934)	17251	2.00000	2.055(a)
19	Bis(2-chloroethyl)ether	93	4.320	4.320	(0.950)	10908	2.00000	1.835(a)
16	Phenol	94	4.342	4.342	(0.954)	13436	2.00000	1.877(a)
20	2-Chlorophenol	128	4.390	4.390	(0.965)	9856	2.00000	1.895(a)
21	1,3-Dichlorobenzene	146	4.502	4.502	(0.989)	11671	2.00000	1.965(a)
* 22	1,4-Dichlorobenzene-d4	152	4.550	4.550	(1.000)	153383	40.0000	
23	1,4-Dichlorobenzene	146	4.566	4.566	(1.004)	11958	2.00000	1.899(a)
26	1,2-Dichlorobenzene	146	4.791	4.791	(1.053)	11013	2.00000	1.882(a)
28	2,2-oxybis(1-Chloropropane)	45	4.962	4.962	(1.090)	12816	2.00000	2.089(a)
27	2-Methylphenol	108	5.010	5.010	(1.101)	10298	2.00000	2.228(a)
35	Hexachloroethane	117	5.148	5.148	(1.131)	5416	2.00000	1.963(a)
32	N-Nitrosodinpropylamine	70	5.138	5.138	(1.129)	10615	2.00000	2.188(aM)
29	3 and 4-Methylphenol	108	5.202	5.202	(1.143)	18589	4.00000	3.757(a)
37	Nitrobenzene	77	5.298	5.298	(0.864)	17871	2.00000	2.194(a)
39	Isophorone	82	5.587	5.587	(0.911)	22275	2.00000	2.097(a)
40	2-Nitrophenol	139	5.704	5.704	(0.930)	4848	2.00000	1.713(a)
41	2,4-Dimethylphenol	107	5.827	5.827	(0.950)	11124	2.00000	1.850(a)

05/10/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	42 Bis(2-chloroethoxy)methane	93	5.902	5.902	(0.963)	13130	2.00000	1.936(a)
	45 2,4-Dichlorophenol	162	6.046	6.046	(0.986)	8536	2.00000	1.927(a)
	47 1,2,4-Trichlorobenzene	180	6.089	6.089	(0.993)	9636	2.00000	1.827(a)
*	48 Naphthalene-d8	136	6.131	6.131	(1.000)	563757	40.0000	
	50 Naphthalene	128	6.153	6.153	(1.003)	30655	2.00000	1.923(a)
	51 4-Chloroaniline	127	6.308	6.308	(1.029)	12037	2.00000	1.870(a)
	54 Hexachlorobutadiene	225	6.409	6.409	(1.045)	6820	2.00000	1.863(a)
	62 2-Methylnaphthalene	142	7.120	7.120	(1.161)	25029	2.00000	2.183(a)
	59 4-Chloro-3-Methylphenol	107	7.098	7.098	(1.158)	10123	2.00000	1.962(aM)
	67 2,4,6-Trichlorophenol	196	7.659	7.659	(0.869)	6427	2.00000	1.751(a)
	68 2,4,5-Trichlorophenol	196	7.761	7.761	(0.880)	5752	2.00000	1.481(a)
$	69 2-Fluorobiphenyl	172	7.739	7.739	(0.878)	23418	2.00000	1.831(a)
	72 2-Chloronaphthalene	162	7.862	7.862	(0.892)	20453	2.00000	1.909(a)
	73 2-Nitroaniline	65	8.161	8.161	(0.925)	8927	2.00000	1.946(a)
	76 Dimethylphthalate	163	8.519	8.519	(0.966)	25037	2.00000	2.038(a)
	79 Acenaphthylene	152	8.546	8.546	(0.969)	28383	2.00000	1.794(a)
	80 2,6-Dinitrotoluene	165	8.637	8.637	(0.979)	4913	2.00000	1.870(a)
*	82 Acenaphthene-d10	164	8.819	8.819	(1.000)	318437	40.0000	
	83 Acenaphthene	153	8.867	8.867	(1.005)	18988	2.00000	1.900(a)
	81 3-Nitroaniline	138	8.872	8.872	(1.006)	4090	2.00000	1.581(a)
	86 Dibenzofuran	168	9.150	9.150	(1.038)	28484	2.00000	1.928(a)
	88 2,4-Dinitrotoluene	165	9.315	9.315	(1.056)	6098	2.00000	1.795(a)
	85 4-Nitrophenol	109	9.465	9.465	(1.073)	2466	2.00000	1.076(aM)
	93 Diethylphthalate	149	9.780	9.780	(1.109)	24941	2.00000	2.019(a)
	94 Fluorene	166	9.759	9.759	(1.107)	22142	2.00000	1.866(a)
	95 4-Chlorophenyl-phenylether	204	9.812	9.812	(1.113)	11658	2.00000	1.825(a)
	98 4-Nitroaniline	138	9.978	9.978	(1.131)	4065	2.00000	1.615(a)
	99 4,6-Dinitro-2-methylphenol	198	10.042	10.042	(0.875)	2054	2.00000	0.8577(a)
	100 N-Nitrosodiphenylamine	169	10.069	10.069	(0.877)	15777	2.00000	1.793(a)
	102 Azobenzene	77	10.085	10.085	(0.879)	37174	2.00000	1.889(a)
	109 4-Bromophenyl-phenylether	248	10.694	10.694	(0.932)	7499	2.00000	1.850(a)
	112 Hexachlorobenzene	284	10.918	10.918	(0.951)	7294	2.00000	1.768(a)
*	121 Phenanthrene-d10	188	11.479	11.479	(1.000)	578952	40.0000	
	122 Phenanthrene	178	11.516	11.516	(1.003)	35120	2.00000	1.961(a)
	124 Anthracene	178	11.596	11.596	(1.010)	32785	2.00000	1.893(a)
	126 Carbazole	167	12.002	12.002	(1.046)	28980	2.00000	1.958(a)
	129 Di-n-Butylphthalate	149	12.889	12.889	(1.123)	35850	2.00000	1.852(a)
	134 Fluoranthene	202	13.813	13.813	(1.203)	35080	2.00000	1.891(a)
	137 Pyrene	202	14.225	14.225	(0.855)	36982	2.00000	1.768(a)
$	139 Terphenyl-d14	244	14.674	14.674	(0.882)	28238	2.00000	1.739(a)
	145 3,3-Dimethylbenzidine	212	15.678	15.678	(0.942)	13272	2.00000	1.597(a)
	146 Butylbenzylphthalate	149	15.790	15.790	(0.949)	15850	2.00000	1.845(a)
	150 Benzo(a)Anthracene	228	16.607	16.607	(0.998)	34162	2.00000	1.904(a)
*	153 Chrysene-d12	240	16.639	16.639	(1.000)	513592	40.0000	
	152 3,3'-Dichlorobenzidine	252	16.704	16.704	(1.004)	9924	2.00000	1.449(a)
	154 Chrysene	228	16.682	16.682	(1.003)	31851	2.00000	1.864(a)
	155 bis(2-ethylhexyl)Phthalate	149	17.019	17.019	(1.023)	19839	2.00000	1.851(a)
	158 Di-n-octylphthalate	149	18.167	18.167	(0.943)	33553	2.00000	1.704(aM)
	160 Benzo(b)fluoranthene	252	18.605	18.605	(0.966)	31699	2.00000	1.759(a)
	161 Benzo(k)fluoranthene	252	18.643	18.643	(0.968)	32755	2.00000	1.833(a)
	165 Benzo(a)pyrene	252	19.145	19.145	(0.994)	27905	2.00000	1.757(a)
*	166 Perylene-d12	264	19.257	19.257	(1.000)	453215	40.0000	
	173 Indeno(1,2,3-cd)pyrene	276	20.951	20.951	(1.088)	27195	2.00000	1.936(a)
	174 Dibenzo(a,h)anthracene	278	21.004	21.004	(1.091)	24637	2.00000	1.805(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
177 Benzo(g,h,i)perylene	276	21.405	21.405	(1.112)	24662	2.00000	1.960(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3000.D Page 4
Report Date: 10-May-2005 09:42

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

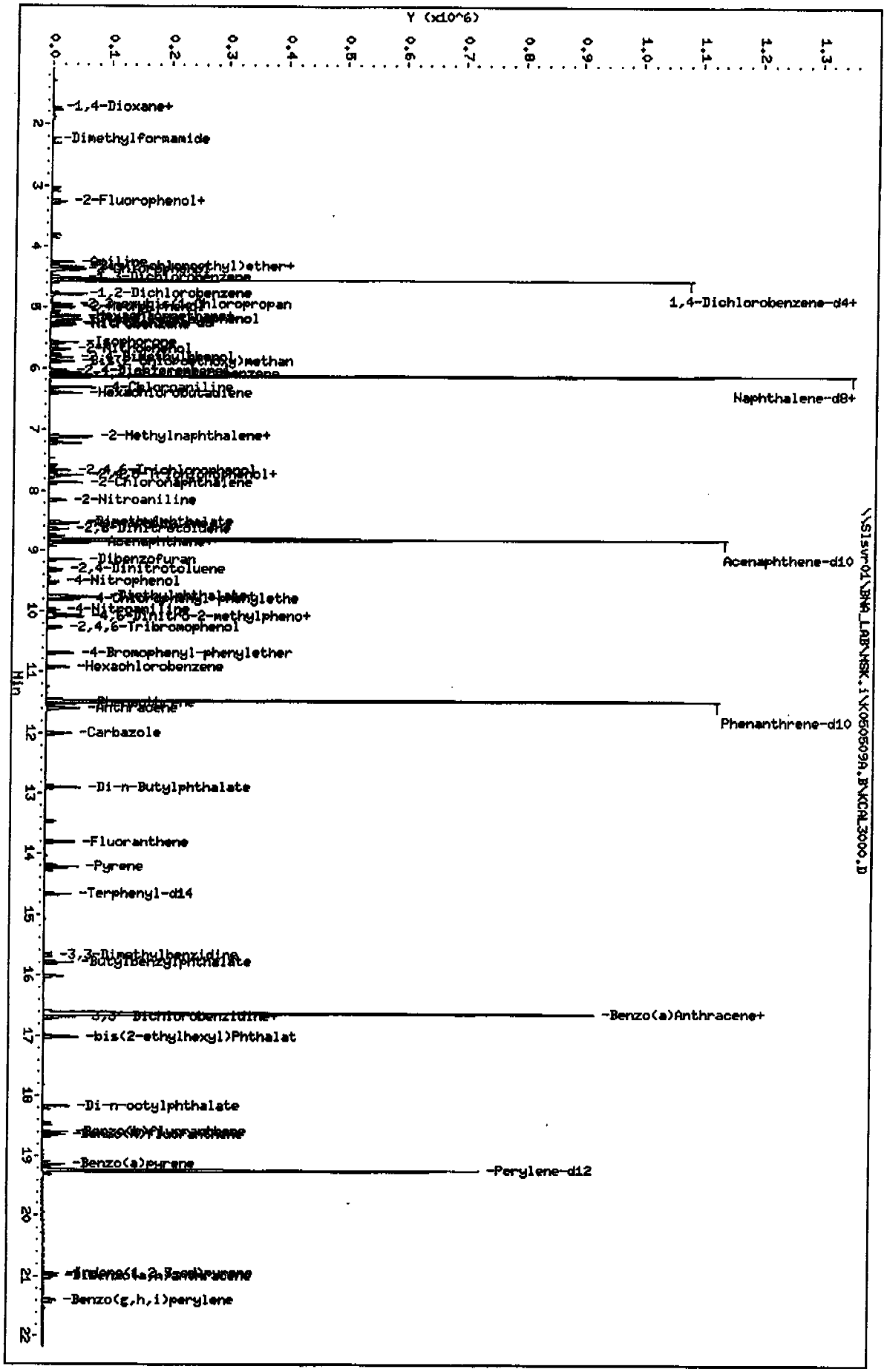
Instrument ID: MSK.i
Lab File ID: KCAL3000.D
Lab Smp Id: SSTD002
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Misc Info: SV0212-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD002
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	153383	-20.64
48 Naphthalene-d8	657267	328634	1314534	563757	-14.23
82 Acenaphthene-d10	351374	175687	702748	318437	-9.37
121 Phenanthrene-d10	612492	306246	1224984	578952	-5.48
153 Chrysene-d12	494718	247359	989436	513592	3.82
166 Perylene-d12	409117	204559	818234	453215	10.78

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.55	-0.14
48 Naphthalene-d8	6.14	5.64	6.64	6.13	-0.19
82 Acenaphthene-d10	8.83	8.33	9.33	8.82	-0.07
121 Phenanthrene-d10	11.49	10.99	11.99	11.48	-0.10
153 Chrysene-d12	16.66	16.16	17.16	16.64	-0.10
166 Perylene-d12	19.27	18.77	19.77	19.26	-0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

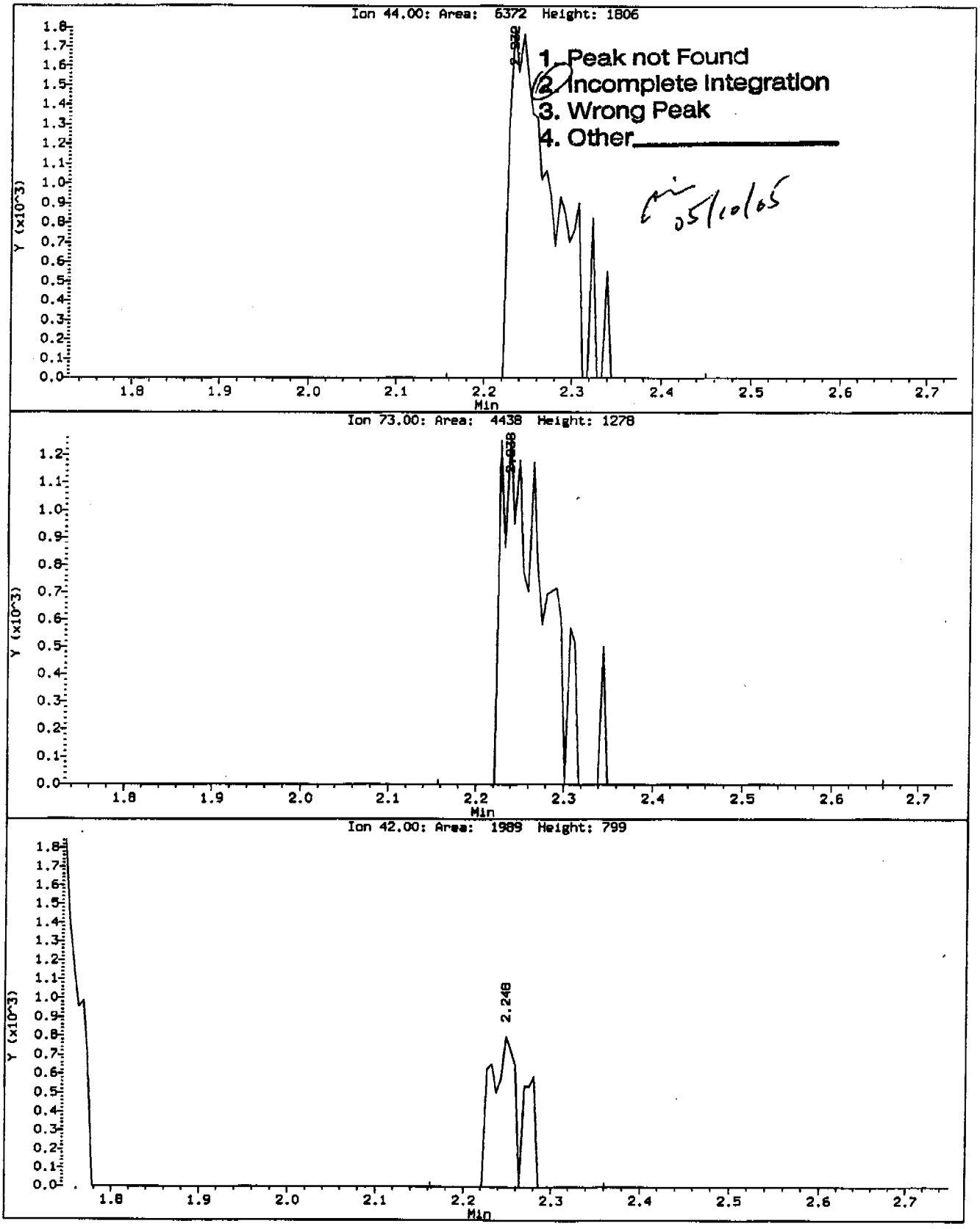


Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3000.D
Date : 09-MAY-2005 15:12
Client ID: SSTD002
Sample Info: SSTD002
Volume Injected (uL): 1.0
Column phase:

Instrument: MSK.i
Operator: XIA
Column diameter: 2.00

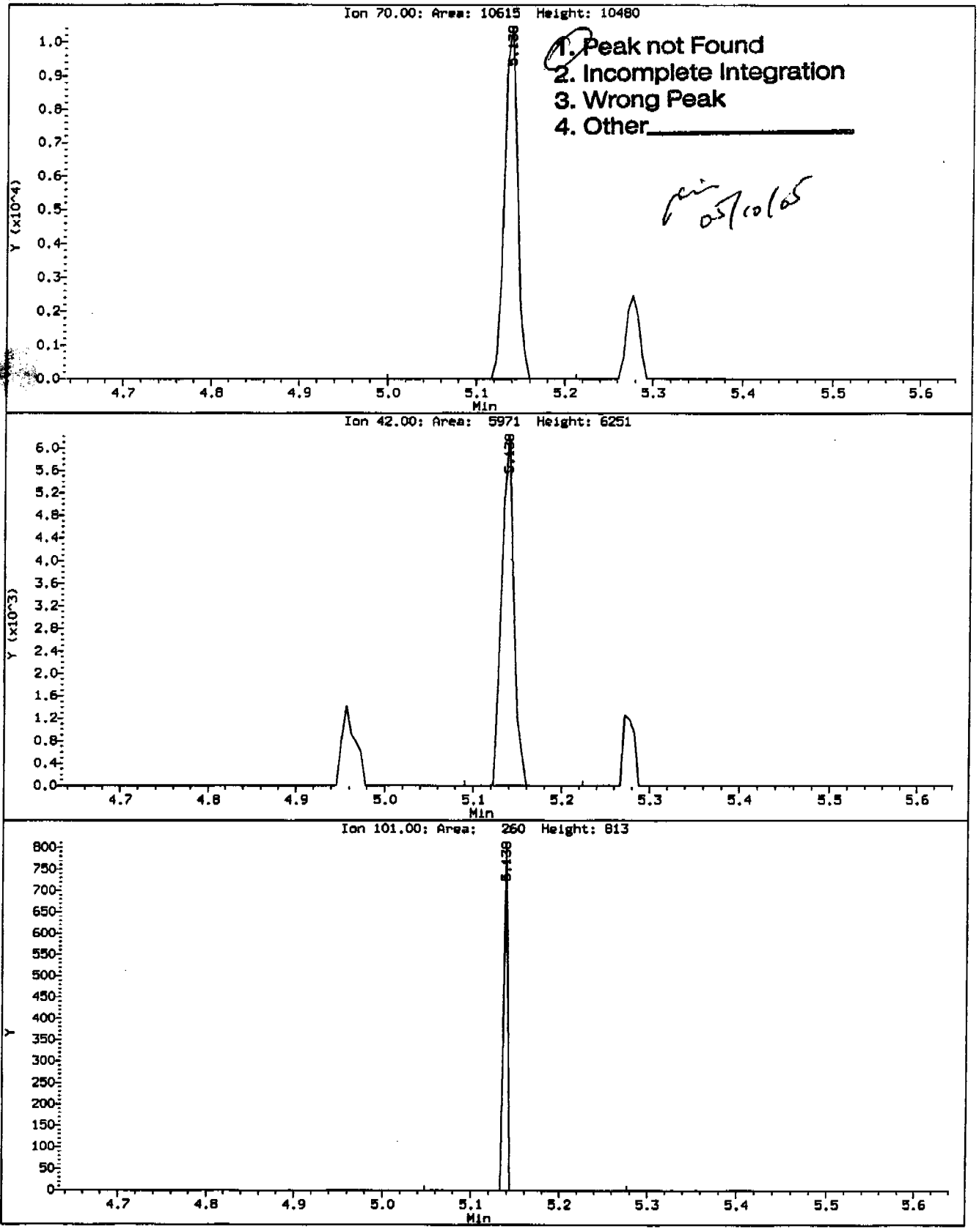
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3000.D
Injection Date: 09-MAY-2005 15:12
Instrument: MSK.i
Client Sample ID: SSTD002

Compound: Dimethylformamide
CAS Number: 68-12-2



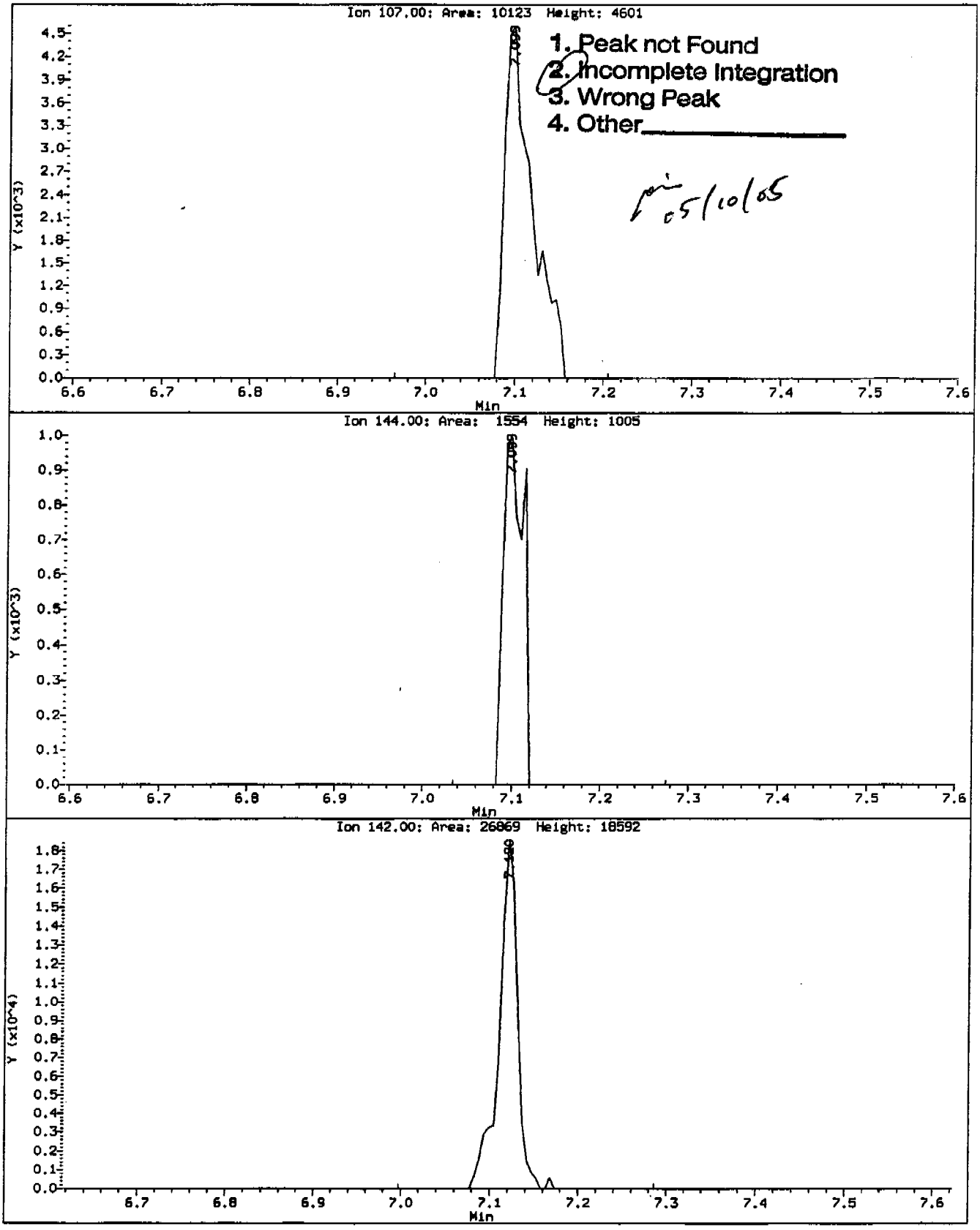
Data File: \\Slevr01\BNA_LAB\MSK.i\K050509A.B\KCAL3000.D
Injection Date: 09-MAY-2005 15:12
Instrument: MSK.i
Client Sample ID: SSTD002

Compound: N-Nitrosodinpropylamine
CAS Number: 621-64-7



Data File: \\Slavr01\BNA_LAB\MSK.i\K050509A.B\KCAL3000.D
Injection Date: 09-MAY-2005 15:12
Instrument: MSK.i
Client Sample ID: SSTD002

Compound: 4-Chloro-3-Methylphenol
CAS Number: 59-50-7

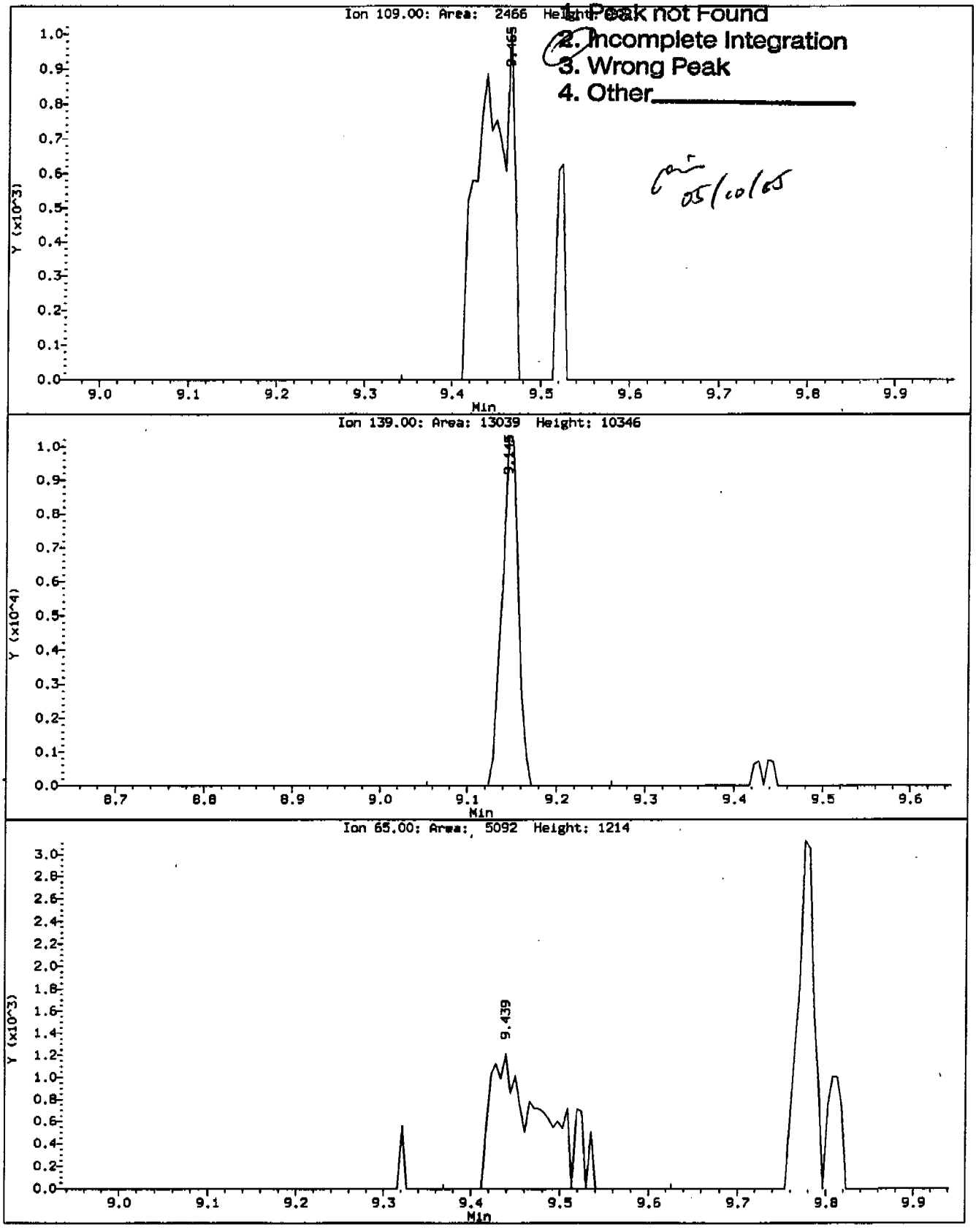


Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3000.D
Injection Date: 09-MAY-2005 15:12
Instrument: MSK.i
Client Sample ID: SSTD002

Compound: 4-Nitrophenol
CAS Number: 100-02-7

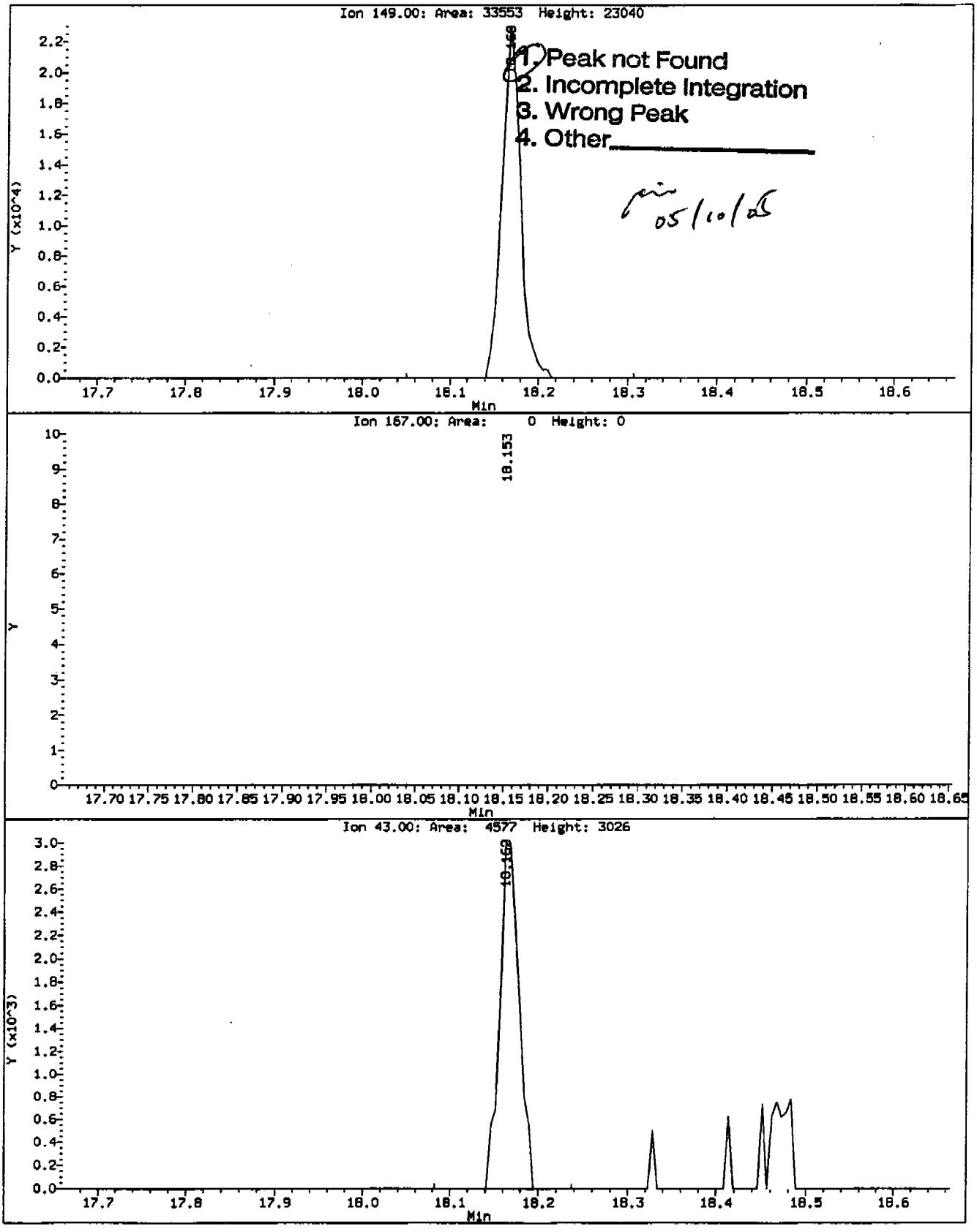
1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

05/10/05



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3000.D
Injection Date: 09-MAY-2005 15:12
Instrument: MSK.i
Client Sample ID: SSTD002

Compound: Di-n-octylphthalate
CAS Number: 117-84-0



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3001.D Page 1
Report Date: 10-May-2005 11:19

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i Injection Date: 09-MAY-2005 15:44
Lab File ID: KCAL3001.D Init. Cal. Date(s): 28-APR-2005 09-MAY-2005
Analysis Type: WATER Init. Cal. Times: 11:41 15:12
Lab Sample ID: SSTD050 ICV Quant Type: ISTD
Method: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m

			MIN		MAX	
COMPOUND	RRF / AMOUNT	RFS0	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
3 Pyridine	1.18405	1.06280	0.010	10.24006	60.00000	Averaged
4 N-Nitrosodimethylamine	0.67099	0.66420	0.010	1.01160	60.00000	Averaged
16 Phenol	1.87215	1.67271	0.010	10.65310	20.00000	Averaged
17 Aniline	2.19527	1.64590	0.010	25.02511	60.00000	Averaged
19 Bis(2-chloroethyl)ether	1.55372	1.39051	0.010	10.50411	60.00000	Averaged
20 2-Chlorophenol	1.35363	1.22899	0.010	9.20788	60.00000	Averaged
21 1,3-Dichlorobenzene	1.54804	1.45721	0.010	5.86750	60.00000	Averaged
23 1,4-Dichlorobenzene	1.64398	1.49999	0.010	8.75897	20.00000	Averaged
25 Benzyl Alcohol	0.66523	0.56023	0.010	15.78438	60.00000	Averaged
26 1,2-Dichlorobenzene	1.52039	1.39846	0.010	8.01975	60.00000	Averaged
27 2-Methylphenol	1.19876	1.05197	0.010	12.24528	60.00000	Averaged
28 2,2-oxybis(1-Chloropropane)	1.60673	1.52631	0.010	5.00525	60.00000	Averaged
29 3 and 4-Methylphenol	1.27839	1.19156	0.010	6.79260	60.00000	Averaged
32 N-Nitrosodinpropylamine	1.25943	1.35997	0.010	-7.98337	60.00000	Averaged
35 Hexachloroethane	0.71883	0.67952	0.010	5.46847	60.00000	Averaged
37 Nitrobenzene	0.58194	0.54845	0.010	5.75527	60.00000	Averaged
39 Isophorone	0.75864	0.77508	0.010	-2.16739	60.00000	Averaged
40 2-Nitrophenol	0.20162	0.18658	0.010	7.45577	20.00000	Averaged
41 2,4-Dimethylphenol	0.42786	0.38515	0.010	9.98164	60.00000	Averaged
42 Bis(2-chloroethoxy)methane	0.48359	0.45359	0.010	6.20445	60.00000	Averaged
44 Benzoic Acid	0.19951	0.19718	0.010	1.16556	60.00000	Averaged
45 2,4-Dichlorophenol	0.31460	0.28939	0.010	8.01092	20.00000	Averaged
47 1,2,4-Trichlorobenzene	0.37479	0.34434	0.010	8.12648	60.00000	Averaged
50 Naphthalene	1.13252	1.02520	0.010	9.47687	60.00000	Averaged
51 4-Chloroaniline	0.45857	0.33989	0.010	25.87888	60.00000	Averaged
54 Hexachlorobutadiene	0.26032	0.23890	0.010	8.22692	20.00000	Averaged
59 4-Chloro-3-Methylphenol	0.36550	0.34728	0.010	4.98607	20.00000	Averaged
62 2-Methylnaphthalene	0.81010	0.72506	0.010	10.49802	60.00000	Averaged
66 Hexachlorocyclopentadiene	0.42770	0.43177	0.010	-0.94995	60.00000	Averaged
67 2,4,6-Trichlorophenol	0.46165	0.40974	0.010	11.24484	20.00000	Averaged
68 2,4,5-Trichlorophenol	0.48790	0.43052	0.010	11.76164	60.00000	Averaged
72 2-Chloronaphthalene	1.34666	1.19855	0.010	10.99843	60.00000	Averaged
73 2-Nitroaniline	0.58010	0.52251	0.010	9.92746	60.00000	Averaged
76 Dimethylphthalate	1.54223	1.35328	0.010	12.25155	60.00000	Averaged
79 Acenaphthylene	1.98537	1.89571	0.010	4.51600	60.00000	Averaged
80 2,6-Dinitrotoluene	0.32954	0.30516	0.010	7.39848	60.00000	Averaged
81 3-Nitroaniline	0.32374	0.29251	0.010	9.64753	60.00000	Averaged
83 Acenaphthene	1.25374	1.15247	0.010	8.07772	20.00000	Averaged
84 2,4-Dinitrophenol	0.19685	0.18564	0.010	5.69283	60.00000	Averaged
85 4-Nitrophenol	0.27026	0.26209	0.010	3.02151	60.00000	Averaged
86 Dibenzofuran	1.85230	1.65041	0.010	10.89935	60.00000	Averaged
88 2,4-Dinitrotoluene	0.42378	0.41413	0.010	2.27670	60.00000	Averaged

05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3001.D
Report Date: 10-May-2005 11:19

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i
Lab File ID: KCAL3001.D
Analysis Type: WATER
Lab Sample ID: SSTD050 ICV
Method: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m

Injection Date: 09-MAY-2005 15:44
Init. Cal. Date(s): 28-APR-2005 09-MAY-2005
Init. Cal. Times: 11:41 15:12
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
93	Diethylphthalate	1.54363	1.43694	0.010	6.91171	60.00000	Averaged
94	Fluorene	1.48246	1.41494	0.010	4.55432	60.00000	Averaged
95	4-Chlorophenyl-phenylether	0.79978	0.73202	0.010	8.47167	60.00000	Averaged
98	4-Nitroaniline	0.31560	0.28998	0.010	8.11578	60.00000	Averaged
99	4,6-Dinitro-2-methylphenol	0.16574	0.16089	0.010	2.92711	60.00000	Averaged
100	N-Nitrosodiphenylamine	0.60901	0.59265	0.010	2.68550	20.00000	Averaged
102	Azobenzene	1.36611	1.20009	0.010	12.15278	60.00000	Averaged
109	4-Bromophenyl-phenylether	0.27978	0.24895	0.010	11.01973	60.00000	Averaged
112	Hexachlorobenzene	0.28563	0.27139	0.010	4.98466	60.00000	Averaged
117	Pentachlorophenol	0.15930	0.13403	0.010	15.86074	20.00000	Averaged
122	Phenanthrene	1.23548	1.10027	0.010	10.94400	60.00000	Averaged
124	Anthracene	1.19438	1.06485	0.010	10.84544	60.00000	Averaged
126	Carbazole	1.02046	0.90651	0.010	11.16721	60.00000	Averaged
129	Di-n-Butylphthalate	1.33705	1.25693	0.010	5.99179	60.00000	Averaged
134	Fluoranthene	1.27688	1.21064	0.010	5.18714	20.00000	Averaged
135	Benzidine	0.60665	0.07765	0.010	87.20027	100	Averaged
137	Pyrene	1.62596	1.37557	0.010	15.39978	60.00000	Averaged
146	Butylbenzylphthalate	0.67238	0.61596	0.010	8.39160	60.00000	Averaged
150	Benzo(a)Anthracene	1.40066	1.26605	0.010	9.61027	60.00000	Averaged
152	3,3'-Dichlorobenzidine	0.53933	0.46193	0.010	14.35060	60.00000	Averaged
154	Chrysene	1.33287	1.15064	0.010	13.67193	60.00000	Averaged
155	bis(2-ethylhexyl)Phthalate	0.84173	0.74134	0.010	11.92668	60.00000	Averaged
158	Di-n-octylphthalate	1.70444	1.61732	0.010	5.11152	20.00000	Averaged
160	Benzo(b)fluoranthene	1.55320	1.52120	0.010	2.06032	60.00000	Averaged
161	Benzo(k)fluoranthene	1.54269	1.43396	0.010	7.04813	60.00000	Averaged
165	Benzo(a)pyrene	1.40180	1.28979	0.010	7.99070	20.00000	Averaged
173	Indeno(1,2,3-cd)pyrene	1.29945	1.15572	0.010	11.06052	60.00000	Averaged
174	Dibenzo(a,h)anthracene	1.26094	1.19655	0.010	5.10626	60.00000	Averaged
177	Benzo(g,h,i)perylene	1.16013	1.07534	0.010	7.30843	60.00000	Averaged

STL ST. LOUIS

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B/KCAL3001.D
Report Date: 05/10/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3001.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 15:44
Lab Sample ID: SSTD050 ICV
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270

COMPOUND	%D
Pyridine	10.2
N-Nitrosodimethylamine	1.0
Aniline	25.0
Bis(2-chloroethyl)ether	10.5
Phenol	10.7
2-Chlorophenol	9.2
1,3-Dichlorobenzene	5.9
1,4-Dichlorobenzene	8.8
1,2-Dichlorobenzene	8.0
Benzyl Alcohol	15.8
2,2-oxybis(1-Chloropropane)	5.0
2-Methylphenol	12.2
N-Nitrosodinpropylamine	8.0
Hexachloroethane	5.5
3 and 4-Methylphenol	6.8
Nitrobenzene	5.8
Isophorone	2.2
2-Nitrophenol	7.5
2,4-Dimethylphenol	10.0
Bis(2-chloroethoxy)methane	6.2
2,4-Dichlorophenol	8.0
1,2,4-Trichlorobenzene	8.1
Benzoic Acid	1.2
Naphthalene	9.5
4-Chloroaniline	25.9
Hexachlorobutadiene	8.2
4-Chloro-3-Methylphenol	5.0
2-Methylnaphthalene	10.5
Hexachlorocyclopentadiene	0.9
2,4,6-Trichlorophenol	11.2
2,4,5-Trichlorophenol	11.8
2-Chloronaphthalene	11.0
2-Nitroaniline	9.9
Dimethylphthalate	12.3
Acenaphthylene	4.5
2,6-Dinitrotoluene	7.4
Acenaphthene	8.1
3-Nitroaniline	9.6
2,4-Dinitrophenol	5.7

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B/KCAL3001.D
Report Date: 05/10/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3001.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 15:44
Lab Sample ID: SSTD050 ICV
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A

COMPOUND	%D
Dibenzofuran	10.9
2,4-Dinitrotoluene	2.3
4-Nitrophenol	3.0
Fluorene	4.6
Diethylphthalate	6.9
4-Chlorophenyl-phenylether	8.5
4-Nitroaniline	8.1
4,6-Dinitro-2-methylphenol	2.9
N-Nitrosodiphenylamine	2.7
Azobenzene	12.2
4-Bromophenyl-phenylether	11.0
Hexachlorobenzene	5.0
Pentachlorophenol	15.9
Phenanthrene	10.9
Anthracene	10.8
Carbazole	11.2
Di-n-Butylphthalate	6.0
Fluoranthene	5.2
Benzidine	87.2
Pyrene	15.4
Butylbenzylphthalate	8.4
Benzo(a)Anthracene	9.6
Chrysene	13.7
3,3'-Dichlorobenzidine	14.4
bis(2-ethylhexyl)Phthalate	11.9
Di-n-octylphthalate	5.1
Benzo(b)fluoranthene	2.1
Benzo(k)fluoranthene	7.0
Benzo(a)pyrene	8.0
Indeno(1,2,3-cd)pyrene	11.1
Dibenzo(a,h)anthracene	5.1
Benzo(g,h,i)perylene	7.3

The average of %D's in the continuing calibration is 9.7

05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3001.D
Report Date: 10-May-2005 11:19

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3001.D
Lab Smp Id: SSTD050 ICV Client Smp ID: SSTD050 ICV
Inj Date : 09-MAY-2005 15:44
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD050 ICV
Misc Info : OP0052-05 2X
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Meth Date : 10-May-2005 11:19 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12 Cal File: KCAL3000.D
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270ICV.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
3	Pyridine	79	1.724	1.724	(0.379)	192054	50.0000	44.88
4	N-Nitrosodimethylamine	74	1.745	1.745	(0.383)	120025	50.0000	49.49
16	Phenol	94	4.331	4.331	(0.951)	302267	50.0000	44.67
17	Aniline	93	4.251	4.251	(0.933)	297422	50.0000	37.49
19	Bis(2-chloroethyl)ether	93	4.325	4.325	(0.950)	251273	50.0000	44.75
20	2-Chlorophenol	128	4.384	4.384	(0.962)	222085	50.0000	45.40
21	1,3-Dichlorobenzene	146	4.507	4.507	(0.989)	263325	50.0000	47.07
* 22	1,4-Dichlorobenzene-d4	152	4.555	4.555	(1.000)	144564	40.0000	
23	1,4-Dichlorobenzene	146	4.577	4.577	(1.005)	271055	50.0000	45.62
25	Benzyl Alcohol	108	4.801	4.801	(1.054)	101236	50.0000	42.11
26	1,2-Dichlorobenzene	146	4.796	4.796	(1.053)	252709	50.0000	45.99
27	2-Methylphenol	108	5.009	5.009	(1.100)	190096	50.0000	43.88
28	2,2-oxybis(1-Chloropropane)	45	4.961	4.961	(1.089)	275812	50.0000	47.50
29	3 and 4-Methylphenol	108	5.196	5.196	(1.141)	430640	100.000	93.21
32	N-Nitrosodinpropylamine	70	5.148	5.148	(1.130)	245754	50.0000	53.99
35	Hexachloroethane	117	5.148	5.148	(1.130)	122792	50.0000	47.26
37	Nitrobenzene	77	5.298	5.298	(0.864)	356837	50.0000	47.12
39	Isophorone	82	5.592	5.592	(0.912)	504290	50.0000	51.08
40	2-Nitrophenol	139	5.698	5.698	(0.929)	121397	50.0000	46.27
41	2,4-Dimethylphenol	107	5.827	5.827	(0.950)	250593	50.0000	45.01
42	Bis(2-chloroethoxy)methane	93	5.907	5.907	(0.963)	295118	50.0000	46.90

05/10/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	44 Benzoic Acid	122	6.094	6.094	(0.994)	128292	50.0000	49.42
	45 2,4-Dichlorophenol	162	6.035	6.035	(0.984)	188289	50.0000	45.99
	47 1,2,4-Trichlorobenzene	180	6.088	6.088	(0.993)	224036	50.0000	45.94
*	48 Naphthalene-d8	136	6.131	6.131	(1.000)	520505	40.0000	
	50 Naphthalene	128	6.158	6.158	(1.004)	667025	50.0000	45.26
	51 4-Chloroaniline	127	6.307	6.307	(1.029)	221146	50.0000	37.06
	54 Hexachlorobutadiene	225	6.409	6.409	(1.045)	155439	50.0000	45.89
	59 4-Chloro-3-Methylphenol	107	7.077	7.077	(1.154)	225951	50.0000	47.51
	62 2-Methylnaphthalene	142	7.119	7.119	(1.161)	471744	50.0000	44.75
	66 Hexachlorocyclopentadiene	237	7.467	7.467	(0.847)	159938	50.0000	50.47
	67 2,4,6-Trichlorophenol	196	7.648	7.648	(0.868)	151779	50.0000	44.38
	68 2,4,5-Trichlorophenol	196	7.739	7.739	(0.878)	159476	50.0000	44.12
	72 2-Chloronaphthalene	162	7.862	7.862	(0.892)	443975	50.0000	44.50
	73 2-Nitroaniline	65	8.156	8.156	(0.925)	193553	50.0000	45.04
	76 Dimethylphthalate	163	8.530	8.530	(0.968)	501292	50.0000	43.87
	79 Acenaphthylene	152	8.551	8.551	(0.970)	702222	50.0000	47.74
	80 2,6-Dinitrotoluene	165	8.642	8.642	(0.981)	113039	50.0000	46.30
	81 3-Nitroaniline	138	8.877	8.877	(1.007)	108352	50.0000	45.18
*	82 Acenaphthene-d10	164	8.813	8.813	(1.000)	296342	40.0000	
	83 Acenaphthene	153	8.872	8.872	(1.007)	426905	50.0000	45.96
	84 2,4-Dinitrophenol	184	9.059	9.059	(1.028)	68768	50.0000	47.15
	85 4-Nitrophenol	109	9.374	9.374	(1.064)	97086	50.0000	48.49
	86 Dibenzofuran	168	9.149	9.149	(1.038)	611358	50.0000	44.55
	88 2,4-Dinitrotoluene	165	9.315	9.315	(1.057)	153404	50.0000	48.86
	93 Diethylphthalate	149	9.785	9.785	(1.110)	532282	50.0000	46.54
	94 Fluorene	166	9.758	9.758	(1.107)	524134	50.0000	47.72
	95 4-Chlorophenyl-phenylether	204	9.812	9.812	(1.113)	271162	50.0000	45.76
	98 4-Nitroaniline	138	9.993	9.993	(1.134)	107418	50.0000	45.94
	99 4,6-Dinitro-2-methylphenol	198	10.047	10.047	(0.875)	103028	50.0000	48.54
	100 N-Nitrosodiphenylamine	169	10.074	10.074	(0.878)	379525	50.0000	48.66
	102 Azobenzene	77	10.095	10.095	(0.879)	768515	50.0000	43.92
	109 4-Bromophenyl-phenylether	248	10.693	10.693	(0.932)	159421	50.0000	44.49
	112 Hexachlorobenzene	284	10.923	10.923	(0.952)	173796	50.0000	47.51
	117 Pentachlorophenol	266	11.329	11.329	(0.987)	85833	50.0000	42.07
*	121 Phenanthrene-d10	188	11.479	11.479	(1.000)	512305	40.0000	
	122 Phenanthrene	178	11.521	11.521	(1.004)	704594	50.0000	44.53
	124 Anthracene	178	11.601	11.601	(1.011)	681909	50.0000	44.58
	126 Carbazole	167	12.007	12.007	(1.046)	580509	50.0000	44.42
	129 Di-n-Butylphthalate	149	12.894	12.894	(1.123)	804916	50.0000	47.00
	134 Fluoranthene	202	13.813	13.813	(1.203)	775273	50.0000	47.41
	135 Benzidine	184	14.208	14.208	(0.854)	43983	50.0000	6.400(a)
	137 Pyrene	202	14.230	14.230	(0.855)	779165	50.0000	42.30
	146 Butylbenzylphthalate	149	15.795	15.795	(0.949)	348899	50.0000	45.80
	150 Benzo(a)Anthracene	228	16.612	16.612	(0.998)	717132	50.0000	45.19
*	153 Chrysene-d12	240	16.644	16.644	(1.000)	453146	40.0000	
	152 3,3'-Dichlorobenzidine	252	16.703	16.703	(1.004)	261653	50.0000	42.82
	154 Chrysene	228	16.693	16.693	(1.003)	651759	50.0000	43.16
	155 bis(2-ethylhexyl)Phthalate	149	17.024	17.024	(1.023)	419917	50.0000	44.04
	158 Di-n-octylphthalate	149	18.172	18.172	(0.944)	695232	50.0000	47.44
	160 Benzo(b)fluoranthene	252	18.616	18.616	(0.967)	653913	50.0000	48.97
	161 Benzo(k)fluoranthene	252	18.658	18.658	(0.969)	616411	50.0000	46.48
	165 Benzo(a)pyrene	252	19.150	19.150	(0.995)	554439	50.0000	46.00
*	166 Perylene-d12	264	19.251	19.251	(1.000)	343894	40.0000	
	173 Indeno(1,2,3-cd)pyrene	276	20.966	20.966	(1.089)	496808	50.0000	44.47

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
174 Dibenzo(a,h)anthracene	278	21.014	21.014	(1.092)	514360	50.0000	47.45
177 Benzo(g,h,i)perylene	276	21.420	21.420	(1.113)	462254	50.0000	46.34

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3001.D Page 4
Report Date: 10-May-2005 10:45

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

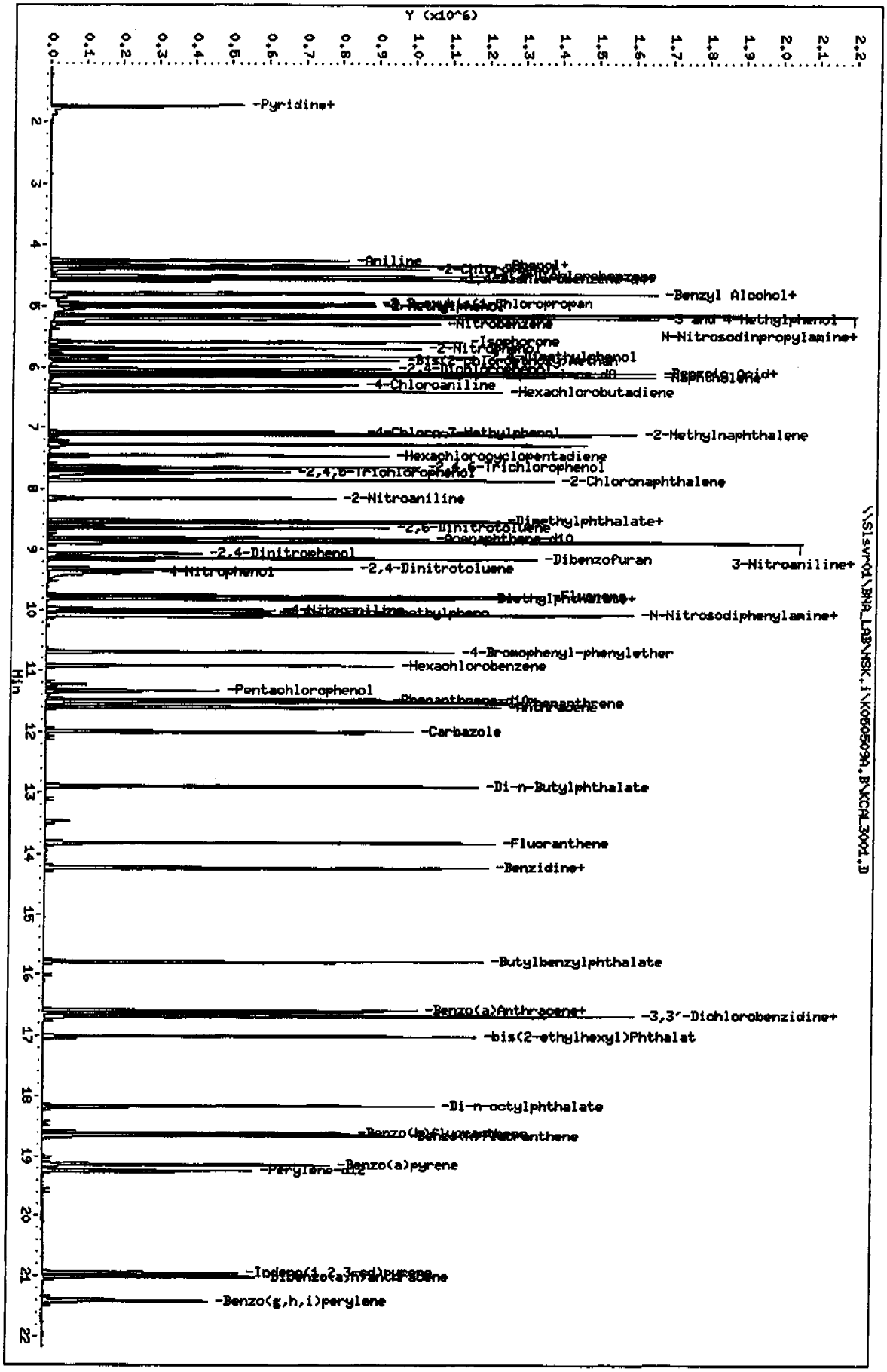
Instrument ID: MSK.i
Lab File ID: KCAL3001.D
Lab Smp Id: SSTD050 ICV
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Misc Info: OP0052-05 2X

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD050 ICV
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	144564	-25.21
48 Naphthalene-d8	657267	328634	1314534	520505	-20.81
82 Acenaphthene-d10	351374	175687	702748	296342	-15.66
121 Phenanthrene-d10	612492	306246	1224984	512305	-16.36
153 Chrysene-d12	494718	247359	989436	453146	-8.40
166 Perylene-d12	409117	204559	818234	343894	-15.94

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.56	-0.03
48 Naphthalene-d8	6.14	5.64	6.64	6.13	-0.19
82 Acenaphthene-d10	8.83	8.33	9.33	8.81	-0.13
121 Phenanthrene-d10	11.49	10.99	11.99	11.48	-0.10
153 Chrysene-d12	16.66	16.16	17.16	16.64	-0.07
166 Perylene-d12	19.27	18.77	19.77	19.25	-0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



Data File: \\Slsvr01\BNA_LAB\MSK.i\K0505096.B\KCAL3001.D
Date : 09-MAY-2005 15:44
Client ID: SSTD050 ICV
Sample Info: SSTD050 ICV
Volume Injected (uL): 1.0
Column phase:

Instrument: MSK.i
Operator: XIA
Column diameter: 2.00

DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	39.30		PASS
68	Less than 2% of mass 69	0.30	(0.60)	PASS
69	Mass 69 relative abundance	49.09		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	44.68		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.51		PASS
275	10 - 30% of mass 198	26.27		PASS
365	Greater than 1% of mass 198	3.35		PASS
441	Present, but less than mass 443	12.49	(92.61)	PASS
442	Greater than 40% of mass 198	74.40		PASS
443	17 - 23% of mass 442	13.49	(18.13)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.1073298	5.000	PASS
Benzidine	0.7302738	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	339046			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	2403	0.7	15.0	PASS
4,4-DDD + DDE	2403	0.7	15.0	PASS

****
Tuning Sample, //Slsvr01/BNA_LAB/MSK.i/K050513B.B/KDFT3125.D/KDFT3125.D,*** PASSED
****

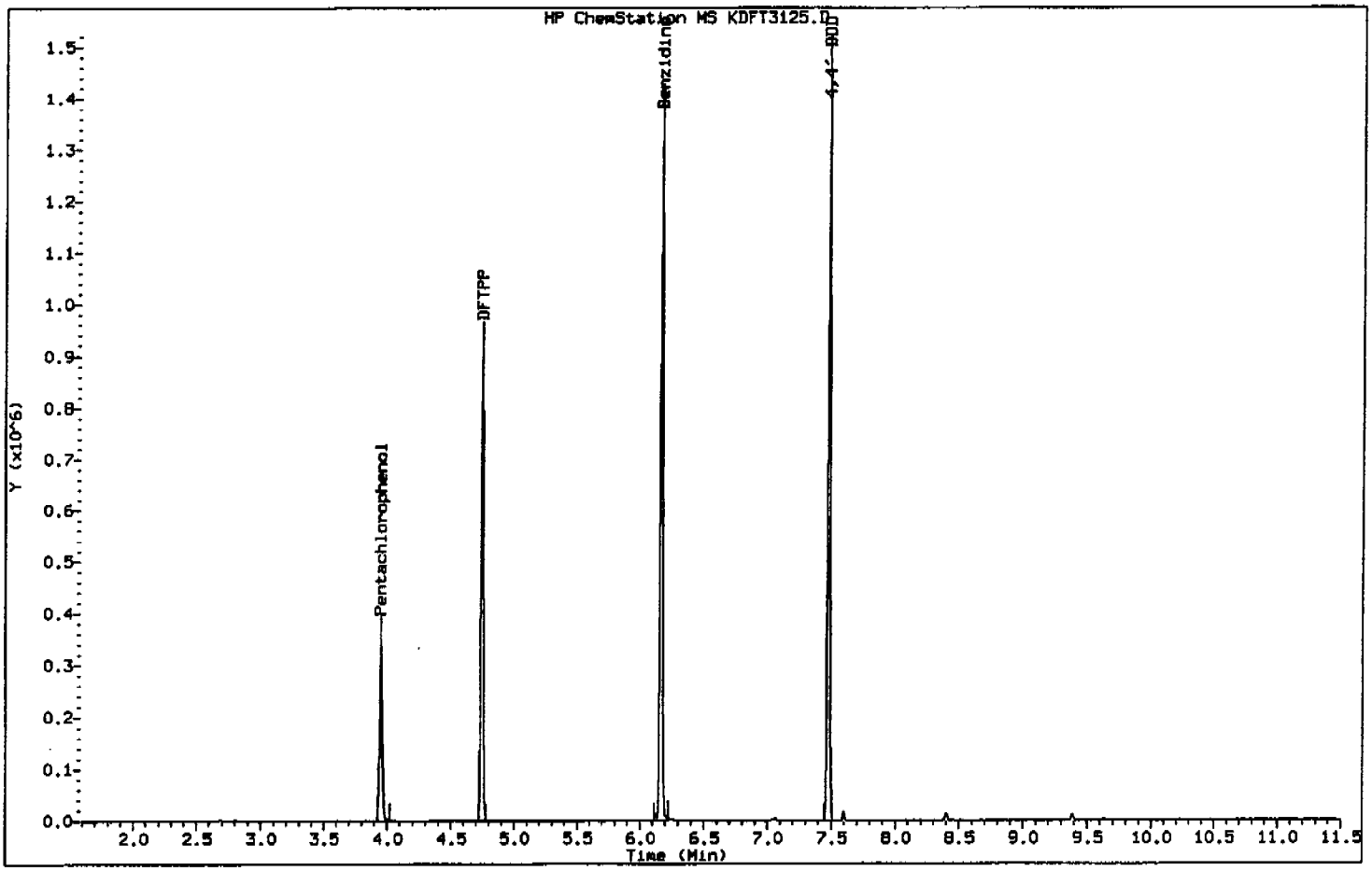
05/14/13

STL ST. LOUIS

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 05/14/2005 09:32

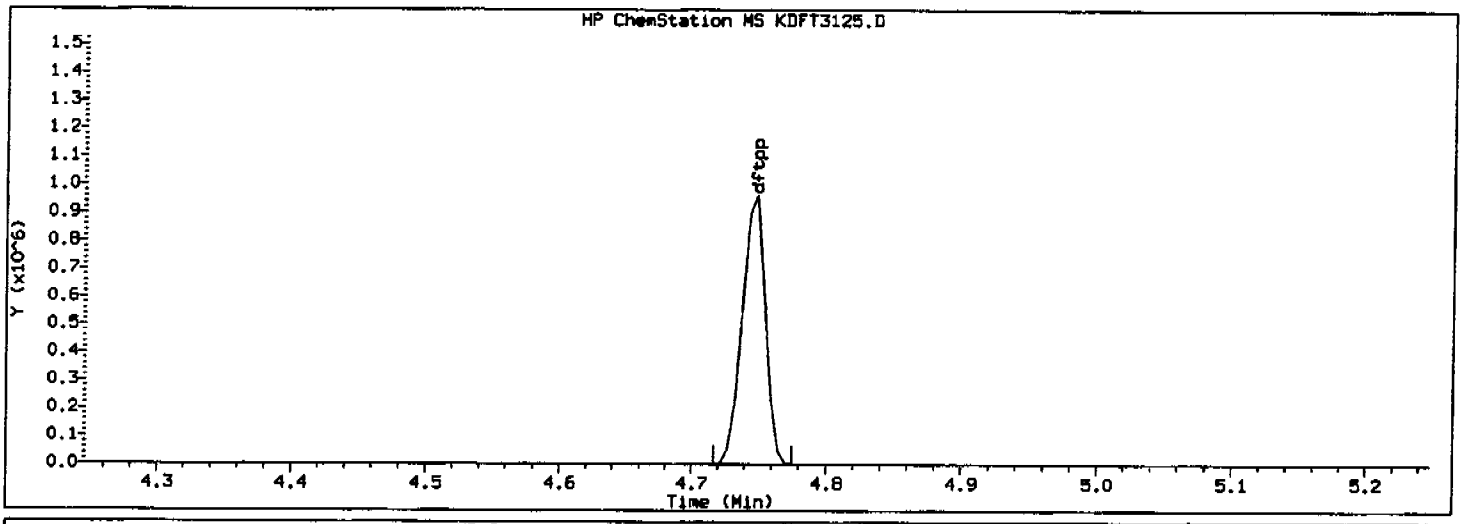
Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050513B.B/KDFT3125.D/KDFT3125.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050513B.B\sw846tun.m Inst: MSK
Injection Date: 13-MAY-2005 10:49 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0232-05 (50NG)

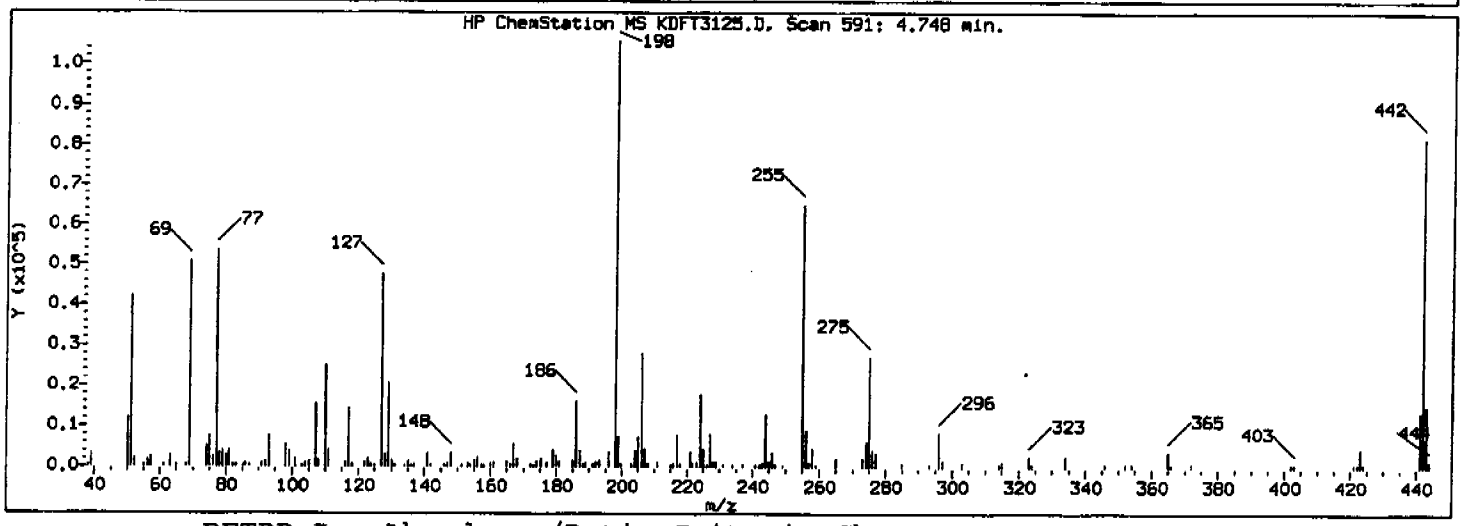


STL ST. LOUIS

Report Date: 05/14/2005 09:32

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050513B.B/KDFT3125.D/KDFT3125.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050513B.B\sw846tun.m Inst: MSK
Injection Date: 13-MAY-2005 10:49 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0232-05 (50NG)



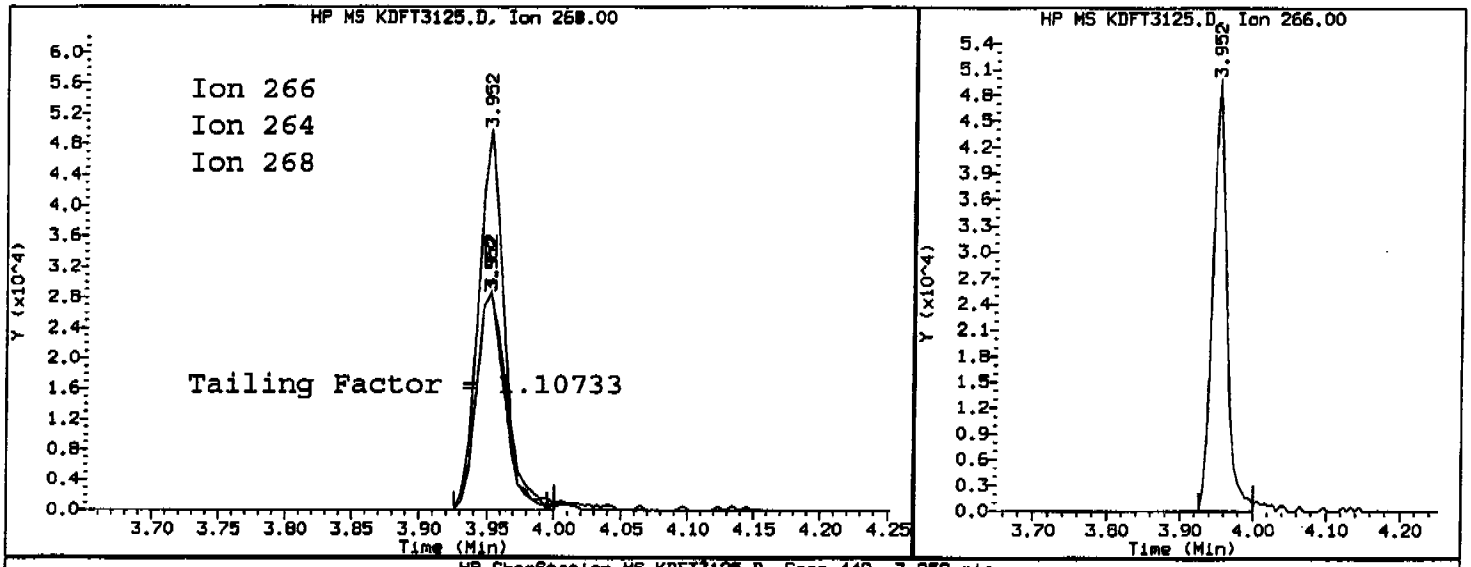


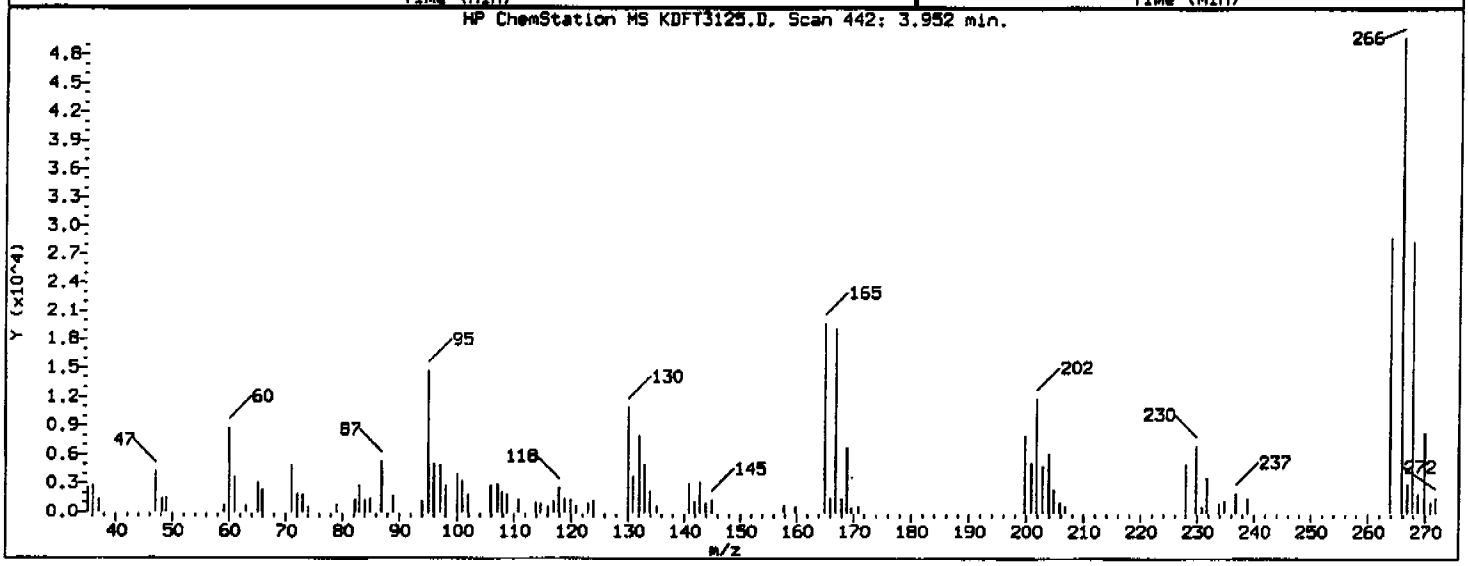
DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	39.30		PASS
68	Less than 2% of mass 69	0.30	(0.60)	PASS
69	Mass 69 relative abundance	49.09		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	44.68		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.51		PASS
275	10 - 30% of mass 198	26.27		PASS
365	Greater than 1% of mass 198	3.35		PASS
441	Present, but less than mass 443	12.49	(92.61)	PASS
442	Greater than 40% of mass 198	74.40		PASS
443	17 - 23% of mass 442	13.49	(18.13)	PASS

Report Date: 05/14/2005 09:32

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050513B.B/KDFT3125.D/KDFT3125.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050513B.B\sw846tun.m\resolut.m Inst:
Injection Date: 13-MAY-2005 10:49 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)





Pentachlorophenol
==========
Exp. RT = 3.952
Found RT = 3.952

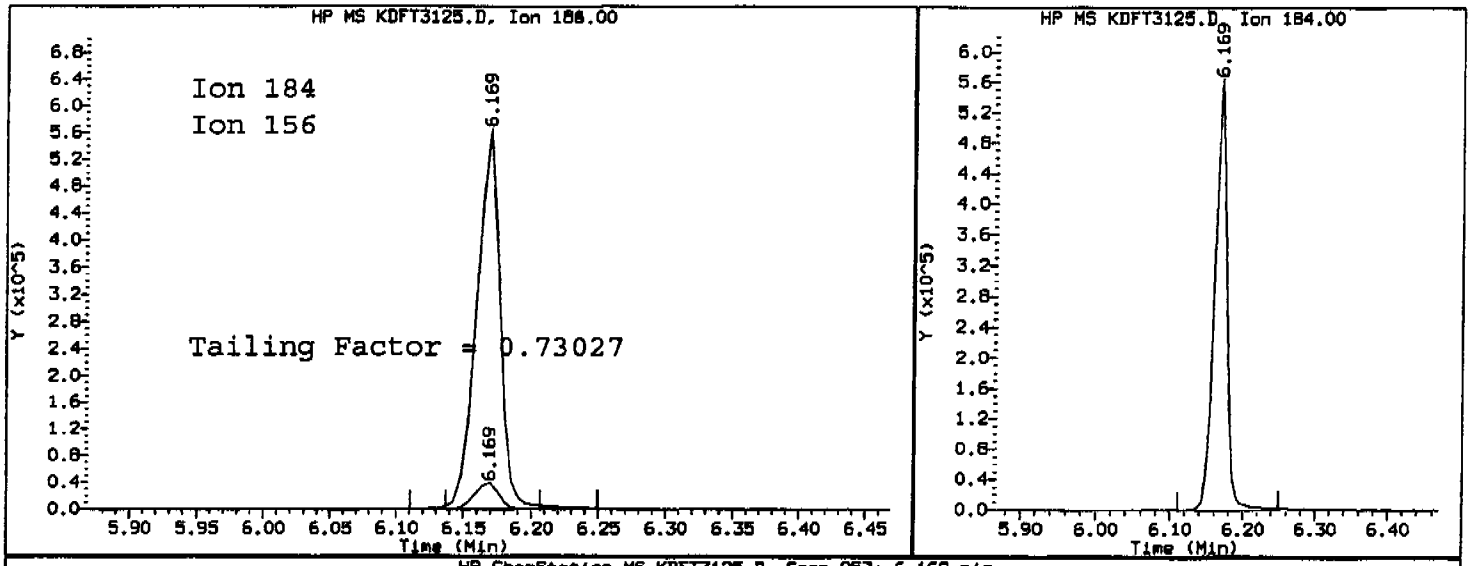
Mass	Area	Ratio
266	68194	100.00
264	42309	62.04
268	43378	63.61

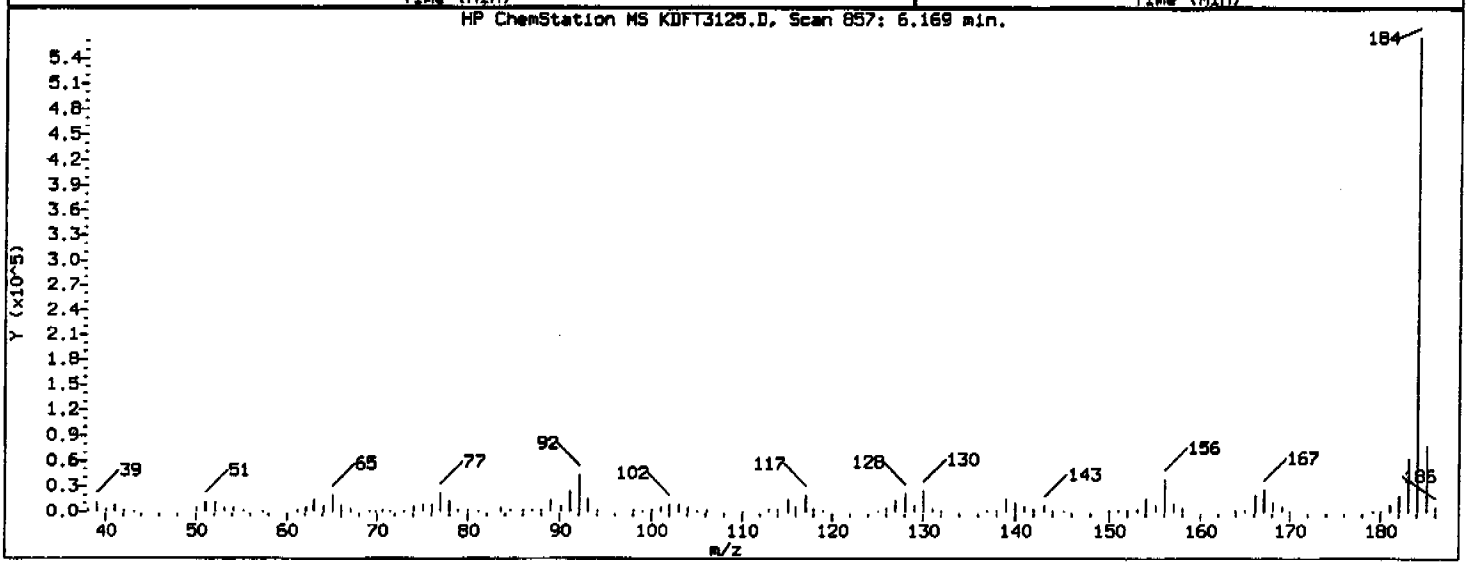
Tailing factor for Pentachlorophenol OK

Tail Factor = 1.107 Maximum Allowed = 5.0

Report Date: 05/14/2005 09:32

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050513B.B/KDFT3125.D/KDFT3125.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050513B.B\sw846tun.m\resolut.m Inst:
Injection Date: 13-MAY-2005 10:49 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)





Benzidine
=========
Exp. RT = 6.169
Found RT = 6.169

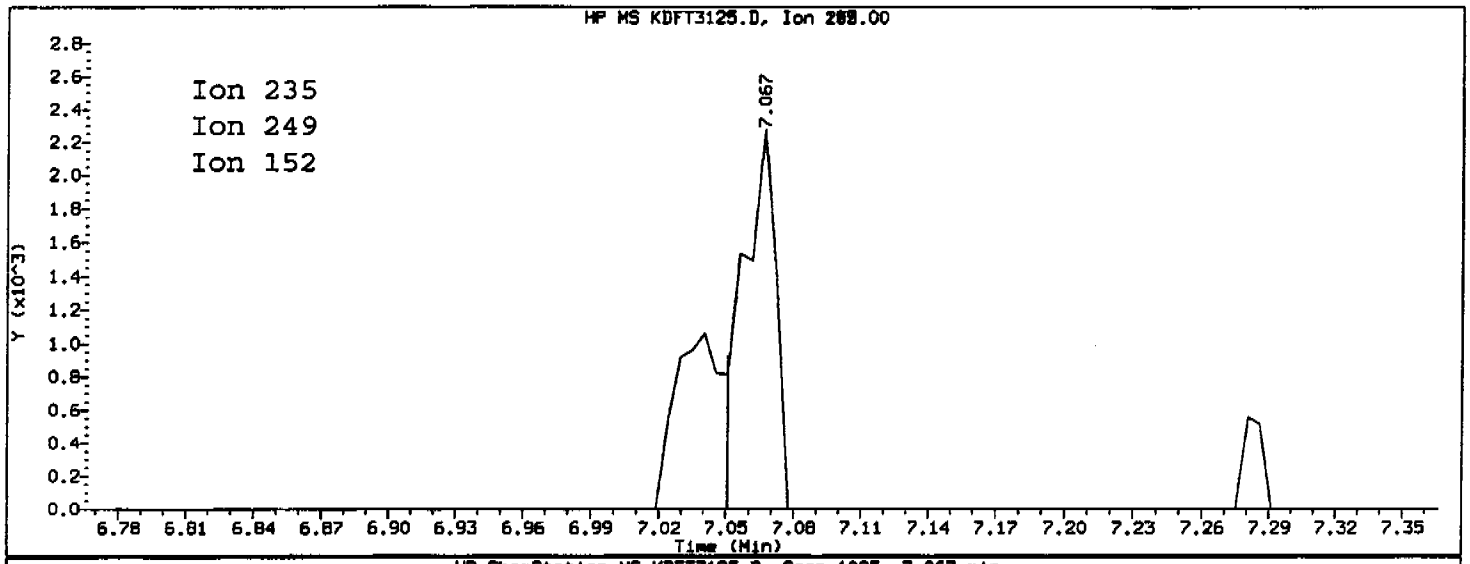
Mass	Area	Ratio
184	680984	100.00
156	48451	7.11

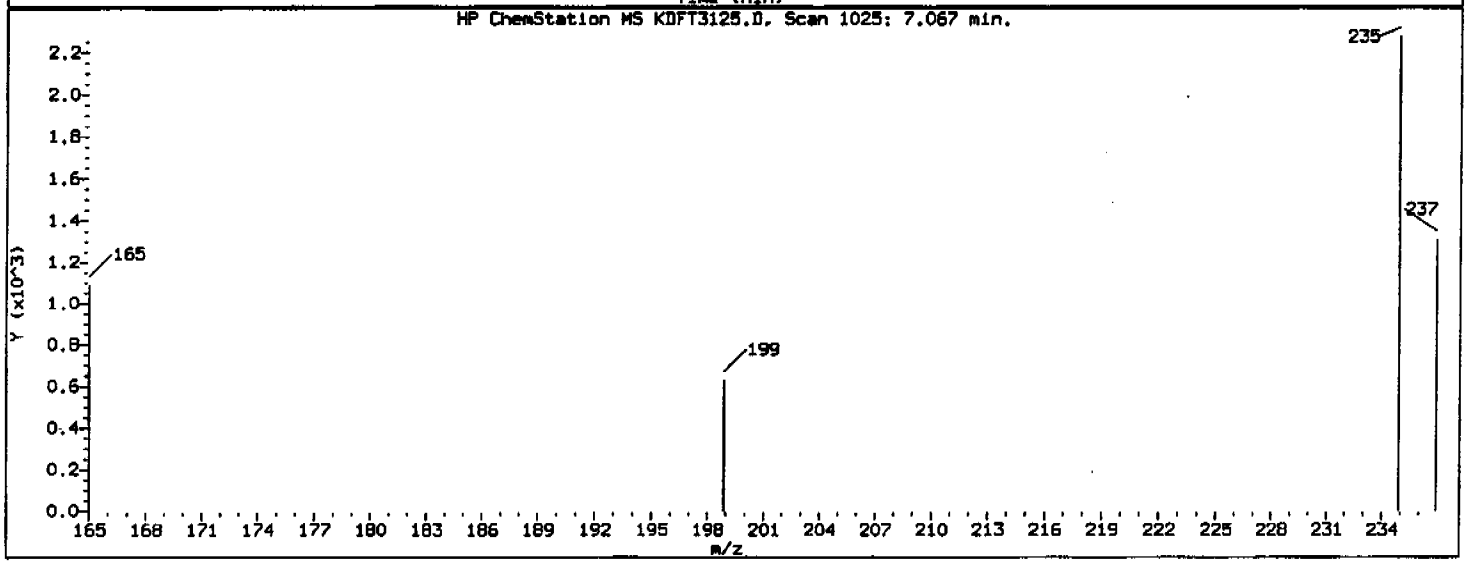
Tailing factor for Benzidine OK

Tail Factor = 0.730 Maximum Allowed = 3.0

STL ST. LOUIS
Report Date: 05/14/2005 09:32

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050513B.B/KDFT3125.D/KDFT3125.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050513B.B\sw846tun.m\resolut.m Inst:
Injection Date: 13-MAY-2005 10:49 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)





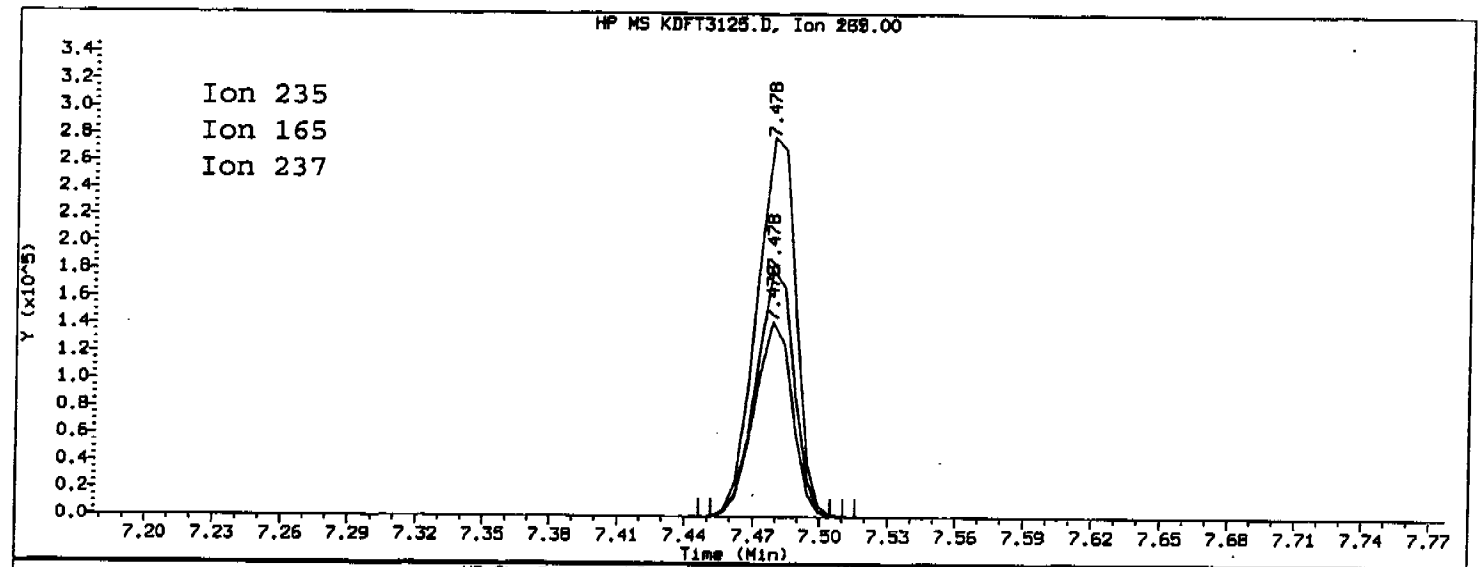
4,4'-DDD
========
Exp. RT = 7.074
Found RT = 7.067

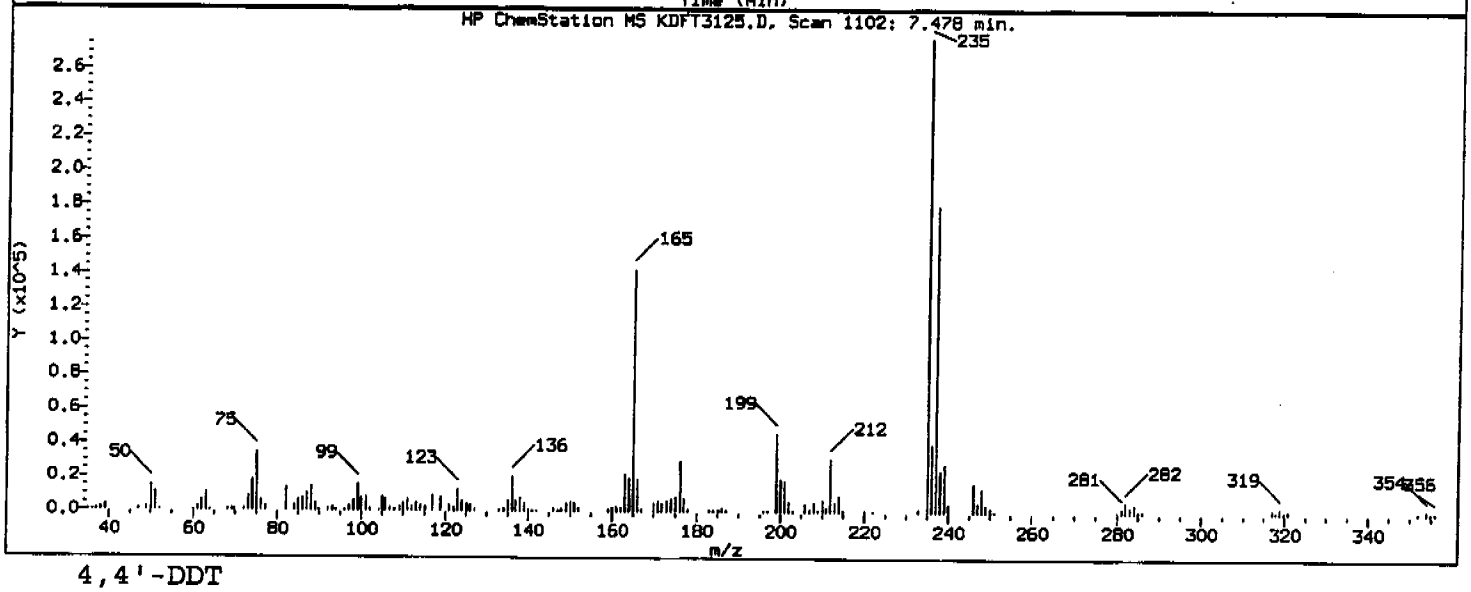
Mass	Area	Ratio
235	2403	100.00
249	5626	234.12
152	2338	97.30

STL ST. LOUIS

Report Date: 05/14/2005 09:32

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050513B.B/KDFT3125.D/KDFT3125.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050513B.B\sw846tun.m\resolut.m Inst:
Injection Date: 13-MAY-2005 10:49 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)





4,4'-DDT
========

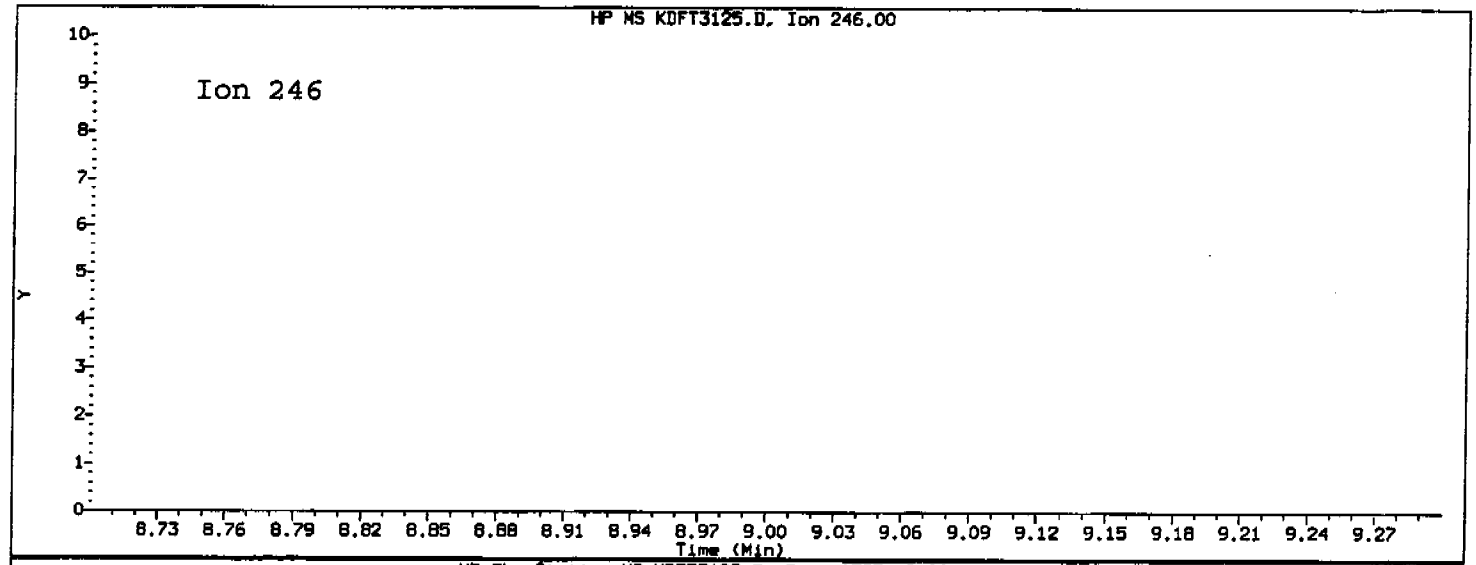
Exp. RT = 7.478
Found RT = 7.478

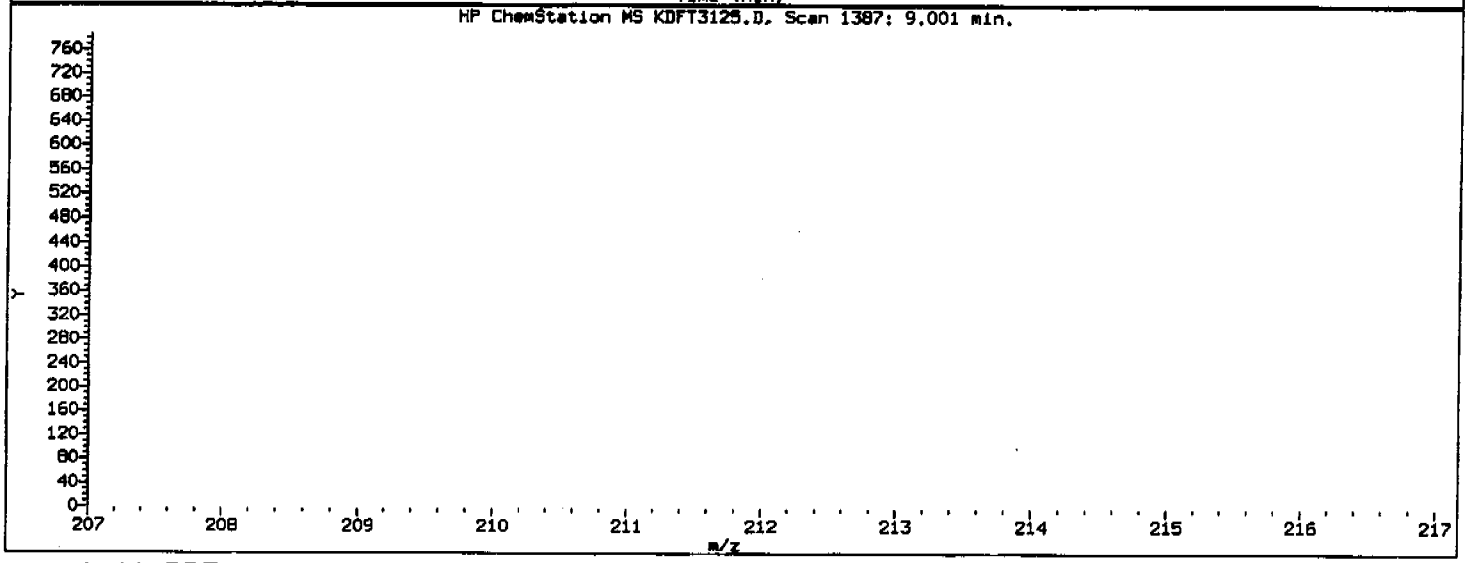
Mass	Area	Ratio
235	339046	100.00
165	169460	49.98
237	214215	63.18

STL ST. LOUIS

Report Date: 05/14/2005 09:32

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050513B.B/KDFT3125.D/KDFT3125.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050513B.B\sw846tun.m\resolut.m Inst:
Injection Date: 13-MAY-2005 10:49 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)

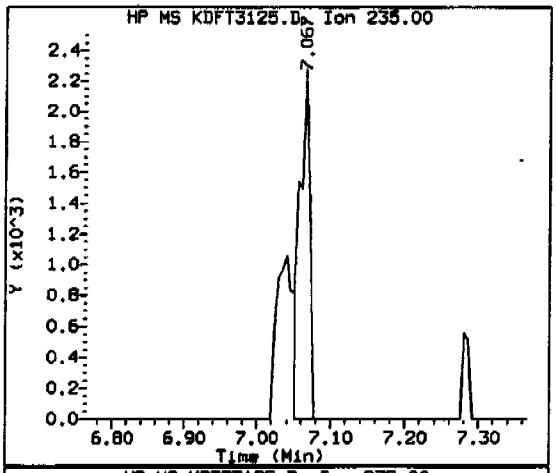




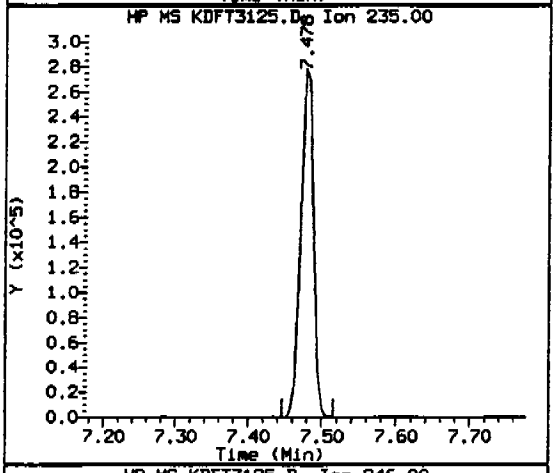
4,4'-DDE
========

Exp. RT =	9.000
Found RT =	0.000

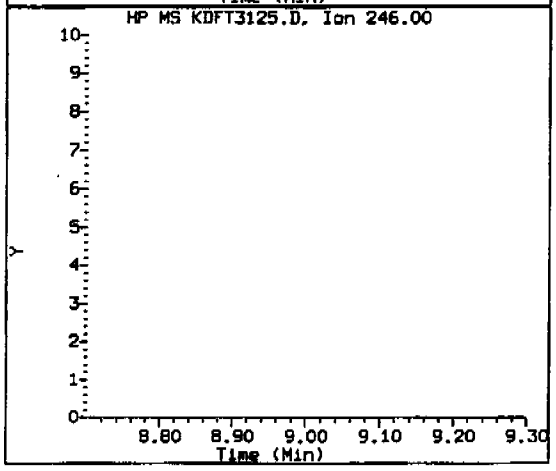
Mass	Area	Ratio
246	0	0.00



Compound: 4,4'-DDD
Quant Mass: 235
RT: 7.067
Area: 2403



Compound: 4,4'-DDT
Quant Mass: 235
RT: 7.478
Area: 339046



Compound: 4,4'-DDE
Quant Mass: 246
RT: 0.000
Area: 0

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	339046			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	2403	0.7	15.0	PASS
4,4-DDD + DDE	2403	0.7	15.0	PASS

****

TUNE SAMPLE *** PASSED *** DDT BREAKDOWN TEST

****

Report Date : 16-May-2005 10:02

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 13-MAY-2005 15:58
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Cal Date : 14-May-2005 09:51 hongs
Curve Type : Average

Calibration File Names:
Level 1: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3134.D
Level 2: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3133.D
Level 3: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3132.D
Level 4: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3128.D
Level 5: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3131.D
Level 6: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3130.D
Level 7: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3129.D

05/16/05

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD
1 1,4-Dioxane	0.37862	0.32816	0.35442	0.34835	0.37303	0.41020	0.39818	0.37014	7.764
2 Methyl methacrylate	0.39326	0.35373	0.33429	0.32307	0.34005	0.34871	0.35814	0.35018	6.411
3 Pyridine	0.76874	1.15077	1.10698	1.31678	1.26606	1.28389	1.22882	1.16029	16.196
4 N-Nitrosodimethylamine	0.54706	0.66485	0.62129	0.63232	0.64197	0.69892	0.66426	0.63867	7.486
5 Dimethylformamide	0.83190	0.89234	0.83166	0.89436	0.85963	0.90961	0.82106	0.86294	4.161
6 Ethyl methacrylate	1.06706	1.00921	1.00424	1.00134	1.03952	1.06985	1.11023	1.04307	3.955
7 2-Picoline	1.11672	1.19222	1.23144	1.30096	1.31132	1.30450	1.39292	1.26430	7.204
8 N-Nitrosomethylethylamine	0.46950	0.57796	0.56912	0.57845	0.60310	0.58248	0.59178	0.56748	7.853
9 Methyl methanesulfonate	0.35479	0.41151	0.41103	0.41324	0.46135	0.46437	0.49021	0.42950	10.596
11 Cyclohexanol	1.14284	1.28527	1.26472	1.41967	1.23002	1.26739	1.36333	1.28189	6.989

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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Cal Date : 14-May-2005 09:51 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
12 N-Nitrosodiethylamine	0.61009	0.64225	0.62511	0.63051	0.70280	0.70476	0.71974	0.66218	6.828	
13 Ethyl Methanesulfonate	1.10180	1.07409	1.10510	1.05473	1.17698	1.15933	1.19896	1.12443	4.846	
14 Benzaldehyde	1.16166	1.23901	1.24283	1.29144	1.30102	1.36353	1.39704	1.28522	6.202	
16 Phenol	1.53303	1.63969	1.59972	1.70345	1.71918	1.73714	1.73171	1.66627	4.673	
17 Aniline	1.88911	2.10603	2.03553	2.12064	2.12742	2.06643	1.98660	2.04739	4.204	
18 Pentachloroethane	0.51171	0.48710	0.50536	0.53152	0.54099	0.55718	0.58367	0.53108	6.205	
19 Bis(2-chloroethyl)ether	1.33671	1.31862	1.33970	1.38758	1.44667	1.54236	1.48880	1.40863	6.095	
20 2-Chlorophenol	1.20022	1.27654	1.26087	1.31241	1.39128	1.44545	1.43953	1.33233	7.109	
21 1,3-Dichlorobenzene	1.47668	1.52710	1.47174	1.48777	1.57680	1.64380	1.62720	1.54444	4.666	
23 1,4-Dichlorobenzene	1.50041	1.54886	1.54349	1.58473	1.70985	1.77960	1.77490	1.63455	7.175	
24 Benzenethiol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
25 Benzyl Alcohol	+++++	0.46952	0.50089	0.73159	0.70409	0.60631	0.71534	0.62129	18.439	<-
26 1,2-Dichlorobenzene	1.35598	1.42034	1.40106	1.47216	1.57273	1.66249	1.66998	1.50782	8.468	

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Cal Date : 14-May-2005 09:51 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD
	160.000 Level 7							
27 2-Methylphenol	1.16708	1.06962	1.01701	1.15013	1.11660	1.03739		
	1.06963						1.08964	5.190
28 2,2-oxybis(1-Chloropropane)	1.45185	1.45657	1.40122	1.45772	1.48577	1.63728		
	1.45175						1.47745	5.063
29 3 and 4-Methylphenol	1.10277	1.17577	1.10881	1.21768	1.30946	1.30063		
	1.30412						1.21703	7.470
30 Acetophenone	0.52107	0.53512	0.55618	0.57812	0.59620	0.62523		
	0.65259						0.58065	8.209
31 N-Nitrosopyrrolidine	0.17843	0.18370	0.18226	0.18768	0.19258	0.19901		
	0.21721						0.19155	6.907
32 N-Nitrosodinpropylamine	1.13965	1.17494	1.16333	1.24110	1.21205	1.09218		
	0.94666						1.13856	8.548
33 N-Nitrosomorpholine	0.06774	0.07645	0.07726	0.08065	0.08961	0.09511		
	0.10449						0.08447	14.906
34 O-Toluidine	0.56236	0.55680	0.56227	0.60066	0.63366	0.66229		
	0.71711						0.61359	9.900
35 Hexachloroethane	0.69979	0.66205	0.66976	0.69589	0.72599	0.75711		
	0.73027						0.70584	4.834
37 Nitrobenzene	0.54798	0.54566	0.53528	0.55584	0.55743	0.60197		
	0.57574						0.55999	3.989
38 N-Nitrosopiperidine	0.16432	0.16882	0.17079	0.17616	0.18096	0.18588		
	0.19442						0.17733	5.933
39 Isophorone	0.73002	0.72558	0.71129	0.76330	0.73584	0.72957		
	0.69965						0.72789	2.749
40 2-Nitrophenol	0.18204	0.19465	0.19793	0.20823	0.20679	0.20565		
	0.20996						0.20075	4.967

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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Cal Date : 14-May-2005 09:51 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
41 2,4-Dimethylphenol	0.34888	0.38212	0.39699	0.44252	0.45133	0.45371	0.45572	0.41875	10.184	
42 Bis(2-chloroethoxy)methane	0.45307	0.45244	0.44062	0.46937	0.47763	0.49256	0.47093	0.46523	3.792	
43 o,o,o-Triethyl-Phosphorothioa	0.21535	0.22497	0.22572	0.23460	0.25461	0.26744	0.27953	0.24317	9.968	
44 Benzoic Acid	+++++	0.14181	0.17137	0.18919	0.21255	0.19597	0.19621	0.18452	13.434	
45 2,4-Dichlorophenol	0.26343	0.31056	0.30704	0.32147	0.32633	0.32267	0.33650	0.31257	7.607	
46 a,a-Dimethyl-phenethylamine	0.51145	0.76309	0.77322	0.78410	0.80856	0.82953	0.87545	0.76363	15.399	
47 1,2,4-Trichlorobenzene	0.36821	0.36433	0.37242	0.38796	0.39915	0.40189	0.42712	0.38873	5.789	
49 4-Chlorobenzenethiol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
50 Naphthalene	1.01288	1.02591	1.01947	1.09141	1.17800	1.21790	1.26700	1.11608	9.376	
51 4-Chloroaniline	0.37261	0.42887	0.42081	0.44828	0.47982	0.49069	0.50694	0.44972	10.381	
52 2,6-Dichlorophenol	0.25469	0.24292	0.25839	0.31185	0.29618	0.31378	0.32831	0.28659	11.858	
53 Hexachloropropene	0.31733	0.32521	0.33376	0.35006	0.35945	0.38047	0.38884	0.35073	7.781	
54 Hexachlorobutadiene	0.27122	0.26958	0.26663	0.27961	0.28863	0.28529	0.30689	0.28112	4.991	

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Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
55 Benzothiazole	0.50139	0.46477	0.48632	0.49913	0.53104	0.55241	0.59151	0.51808	8.350	
56 Caprolactam	0.10983	0.13715	0.14068	0.13986	0.07457	0.14270	0.14775	0.12751	20.686	
57 n-Nitrosodi-n-butylamine	0.31342	0.29750	0.30099	0.31842	0.31943	0.33002	0.35040	0.31860	5.621	
58 p-Phenylenediamine	0.21874	0.29578	0.28872	0.36365	0.28733	0.27992	0.31741	0.29308	14.829	
59 4-Chloro-3-Methylphenol	0.29775	0.33931	0.35279	0.39258	0.38181	0.37267	0.37936	0.35947	9.104	
60 p-Chlorophenyl methyl sulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
61 Safrole	0.25500	0.27963	0.29140	0.29580	0.30963	0.32648	0.34629	0.30061	10.041	
62 2-Methylnaphthalene	0.93483	0.95814	0.97833	1.06312	1.10176	0.85354	0.95881	0.97836	8.416	
63 Phthalic anhydride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
64 cis-Isosafrole	0.04748	0.05826	0.05654	0.05553	0.05574	0.05770	0.05995	0.05589	7.184	
65 1,2,4,5-Tetrachlorobenzene	1.42931	1.31274	1.32205	1.39168	1.47308	1.54004	1.62334	1.44175	7.870	
66 Hexachlorocyclopentadiene	0.19007	0.30694	0.40058	0.44486	0.48746	0.54587	0.56963	0.42077	32.094	<-
67 2,4,6-Trichlorophenol	0.38970	0.42616	0.43931	0.47761	0.49780	0.51137	0.52967	0.46738	10.828	

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Cal Date : 14-May-2005 09:51 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
68 2,4,5-Trichlorophenol	0.36241	0.44920	0.48184	0.49971	0.50763	0.54884			
	0.56451						0.48773	13.854	
70 trans-Isosafrole	0.56648	0.54163	0.54100	0.56420	0.59728	0.65850			
	0.75581						0.60356	12.995	
71 Biphenyl	1.54419	1.44874	1.47932	1.53624	1.66716	1.76228			
	1.79160						1.60422	8.519	
72 2-Chloronaphthalene	1.21989	1.24431	1.23798	1.32319	1.37430	1.48708			
	1.52425						1.34443	9.155	
73 2-Nitroaniline	0.46201	0.53797	0.51708	0.56564	0.55165	0.60849			
	0.54883						0.54166	8.309	
74 1,4-Naphthoquinone	0.27176	0.36890	0.37704	0.33375	0.21032	0.17342			
	0.12916						0.26634	36.895	<-
75 1,4-Dinitrobenzene	0.07763	0.12369	0.12115	0.12521	0.13042	0.13540			
	0.14150						0.12214	17.086	
76 Dimethylphthalate	1.36788	1.45850	1.43897	1.54384	1.59126	1.63664			
	1.65331						1.52720	7.080	
77 1,3-Dinitrobenzene	0.16587	0.22945	0.23025	0.24388	0.24166	0.24971			
	0.25601						0.23098	13.109	
78 N-(hydroxymethyl) phthalimide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
79 Acenaphthylene	1.80849	1.86172	1.83355	1.94960	2.08728	2.26639			
	2.33200						2.01986	10.543	
80 2,6-Dinitrotoluene	0.28268	0.31173	0.30838	0.33640	0.33591	0.33070			
	0.33444						0.32003	6.303	
81 3-Nitroaniline	+++++	0.28756	0.30743	0.33203	0.32860	0.32821			
	0.32259						0.31774	5.401	<-

STL St. Louis

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Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6			
	160.000 Level 7						RRF	% RSD	
83 Acenaphthene	1.10718	1.16325	1.15913	1.21146	1.25389	1.35133			
	1.37954						1.23225	8.284	
84 2,4-Dinitrophenol	+++++	0.03524	0.12609	0.13104	0.17042	0.18665			
	0.19482						0.14071	41.866	<-
85 4-Nitrophenol	0.15552	0.20972	0.29984	0.34019	0.33108	0.33756			
	0.33039						0.28633	25.756	
86 Dibenzofuran	1.72543	1.77903	1.73945	1.83161	1.89687	1.95602			
	2.01842						1.84955	6.041	
87 Pentachlorobenzene	0.70728	0.65613	0.66649	0.68327	0.70614	0.73519			
	0.75466						0.70131	5.086	
88 2,4-Dinitrotoluene	0.30137	0.40022	0.40091	0.44395	0.43251	0.42113			
	0.42306						0.40331	11.813	
89 1-Naphthylamine	1.03800	1.06591	1.04498	1.10302	1.05391	1.16285			
	1.16394						1.09037	4.961	
90 2-Naphthylamine	0.97677	0.98368	0.94490	1.00433	0.88786	1.05261			
	1.06727						0.98820	6.232	
91 Phenyl sulfide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
92 2,3,4,6-Tetrachlorophenol	0.22811	0.28943	0.32362	0.39276	0.41144	0.42643			
	0.46069						0.36178	23.112	
93 Diethylphthalate	1.37912	1.48082	1.42529	1.53633	1.57757	1.65726			
	1.64336						1.52853	6.938	
94 Fluorene	1.30627	1.42107	1.41091	1.50082	1.54058	1.59073			
	1.62452						1.48498	7.554	
95 4-Chlorophenyl-phenylether	0.73873	0.79821	0.77569	0.82196	0.87067	0.90277			
	0.95621						0.83775	9.092	

STL St. Louis

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Cal Date : 14-May-2005 09:51 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
96 Thionazin	0.23139	0.25240	0.25864	0.26567	0.28537	0.29086			
	0.29032						0.26781	8.348	
97 5-Nitro-o-toluidine	0.15995	0.20034	0.19875	0.21045	0.21494	0.21816			
	0.22533						0.20399	10.587	
98 4-Nitroaniline	0.20949	0.29382	0.29170	0.32846	0.32232	0.29738			
	0.30206						0.29218	13.395	
99 4,6-Dinitro-2-methylphenol	0.04779	0.10523	0.13547	0.15673	0.18126	0.19632			
	0.20289						0.14652	37.941	<-
100 N-Nitrosodiphenylamine	0.54054	0.54211	0.54805	0.58125	0.63751	0.70539			
	0.71117						0.60943	12.386	
101 tri-n-butylphosphate	1.52154	1.63086	1.65030	1.71460	1.82251	1.87783			
	2.01075						1.74692	9.553	
102 Azobenzene	1.19507	1.14605	1.18220	1.24135	1.35295	1.65149			
	1.50509						1.32489	14.324	
103 Benzal Chloride	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
105 Sulfotepp	0.13055	0.14332	0.15072	0.15105	0.16041	0.16417			
	0.16883						0.15272	8.604	
106 Diallate (peak 1)	0.27906	0.28345	0.29123	0.30014	0.31100	0.32036			
	0.33572						0.30299	6.788	
107 1,3,5-Trinitrobenzene	0.05460	0.08597	0.09688	0.10024	0.10572	0.10753			
	0.11048						0.09449	20.515	
108 Phorate	0.49946	0.50445	0.50760	0.53049	0.56947	0.58636			
	0.62513						0.54614	8.860	
109 4-Bromophenyl-phenylether	0.25938	0.27319	0.27535	0.28709	0.30058	0.31682			
	0.32395						0.29091	8.209	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 13-MAY-2005 15:58
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Cal Date : 14-May-2005 09:51 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
110 Phenacetin	0.38624	0.41341	0.42268	0.42532	0.42504	0.42869	0.43971	0.42015	4.015	
111 Diallate (peak 2)	0.06683	0.06004	0.06289	0.06373	0.06488	0.06546	0.06814	0.06457	4.135	
112 Hexachlorobenzene	0.29255	0.28996	0.28657	0.29560	0.30801	0.31934	0.33506	0.30387	5.884	
113 Dimethoate	0.27185	0.28949	0.28826	0.27480	0.21882	0.21567	0.18694	0.24940	16.564	
114 Atrazine	0.22048	0.24204	0.23940	0.24289	0.25564	0.25595	0.26658	0.24614	6.060	
115 tris(2-chloroethyl)phosphate	0.22625	0.21717	0.22304	0.21944	0.21858	0.22085	0.22796	0.22190	1.817	
116 4-Aminobiphenyl	0.70998	0.67001	0.68070	0.79368	0.77334	0.82627	0.87380	0.76111	10.111	
117 Pentachlorophenol	+++++	+++++	0.09373	0.11849	0.15127	0.15538	0.16249	0.13627	21.405	
118 Pronamide	0.37755	0.36975	0.37320	0.37153	0.37705	0.38333	0.39158	0.37771	2.012	
119 Pentachloronitrobenzene	0.11754	0.12476	0.12783	0.13205	0.13537	0.13783	0.13768	0.13044	5.767	
120 Phenyl disulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
122 Phenanthrene	1.16212	1.17324	1.15781	1.20946	1.24682	1.31784	1.33193	1.22846	5.929	
123 Disulfoton	0.35737	0.36108	0.36643	0.37668	0.39485	0.40708	0.42916	0.38466	6.946	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 13-MAY-2005 15:58
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Cal Date : 14-May-2005 09:51 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
124 Anthracene	1.11462	1.12807	1.12308	1.16790	1.20838	1.24988			
	1.28307						1.18214	5.636	
125 Dinoseb	0.13116	0.20289	0.23168	0.24451	0.26321	0.27373			
	0.28489						0.23315	22.611	
126 Carbazole	0.87731	0.96630	0.94610	0.99346	1.01497	1.02311			
	1.03577						0.97957	5.631	
127 Phenyl sulfone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
128 Methyl Parathion	0.22472	0.25273	0.25605	0.24165	0.20186	0.19848			
	0.17806						0.22194	13.501	
129 Di-n-Butylphthalate	1.16636	1.24010	1.24212	1.30012	1.33986	1.41074			
	1.39822						1.29964	6.903	
130 Parathion	0.13719	0.18275	0.18212	0.18480	0.18353	0.18558			
	0.18900						0.17785	10.162	
131 4-Nitroquinoline-1-oxide	+++++	0.06721	0.07979	0.10710	0.08542	0.08685			
	0.08235						0.08479	15.310	<-
132 Methapyrilene	0.34073	0.34857	0.33447	0.27766	0.21659	0.20104			
	0.18189						0.27156	26.360	
133 Isodrin	0.14938	0.13071	0.13659	0.12878	0.13896	0.13984			
	0.14629						0.13865	5.427	
134 Fluoranthene	1.18791	1.25088	1.21835	1.27716	1.29265	1.27906			
	1.32234						1.26119	3.636	
135 Benzidine	0.44820	0.50969	0.56913	0.57976	0.57370	0.60014			
	0.57432						0.55071	9.638	
136 Bis (4-chlorophenyl) disulfid	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 13-MAY-2005 15:58
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Cal Date : 14-May-2005 09:51 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
137 Pyrene	1.41800	1.47049	1.57296	1.57235	1.68981	1.87286			
	1.87066						1.63816	11.060	
138 4-chlorophenyl sulfone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
140 Aramite (peak 1)	0.05375	0.06879	0.07594	0.07526	0.07359	0.07265			
	0.07371						0.07053	10.986	
141 Kepone	+++++	0.00357	0.00453	0.00668	0.00729	0.00747			
	0.00748						0.00617	27.492	<-
142 Aramite (peak 2)	0.08770	0.10236	0.10922	0.11671	0.11420	0.11097			
	0.11134						0.10750	9.129	
143 p-(Dimethylamino)azobenzene	0.29047	0.32717	0.33641	0.34730	0.34129	0.34067			
	0.34674						0.33286	5.977	
144 Chlorobenzilate	0.40399	0.42688	0.44410	0.45660	0.49105	0.50109			
	0.53020						0.46484	9.587	
145 3,3-Dimethylbenzidine	0.53327	0.58984	0.63308	0.66866	0.63590	0.65696			
	0.64732						0.62358	7.535	
146 Butylbenzylphthalate	0.59089	0.59833	0.60904	0.62580	0.64754	0.72733			
	0.69909						0.64258	8.146	
147 Acrylamide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
148 2-Acetylaminofluorene(1)	0.44078	0.49973	0.51625	0.54235	0.55089	0.55882			
	0.56140						0.52432	8.256	
(2)	0.35522	0.39267	0.39584	0.41786	0.42490	0.43100			
	0.43659						0.40773	7.007	
149 Famphur	+++++	0.02197	0.03377	0.05429	0.01871	0.01486			
	0.00621						0.02497	67.953	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 13-MAY-2005 15:58
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Cal Date : 14-May-2005 09:51 hongs
Curve Type : Average

Compound	2.000 Level 1 / 160.000 Level 7	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
150 Benzo(a)Anthracene	1.27172 / 1.51169	1.29369	1.32369	1.36431	1.40964	1.49131	1.38086	6.819	
151 4,4'-Methylenebis(2-Chloroani	0.10305 / 0.13117	0.10187	0.11221	0.12299	0.11640	0.12512	0.11611	9.589	
152 3,3'-Dichlorobenzidine	0.40230 / 0.63950	0.40459	0.46392	0.54703	0.57830	0.61752	0.52188	18.874	
154 Chrysene	1.25069 / 1.47540	1.15490	1.20813	1.26121	1.36371	1.43428	1.30690	9.158	
155 bis(2-ethylhexyl)Phthalate	0.69639 / 0.87118	0.74430	0.76016	0.78178	0.82025	0.90163	0.79653	9.093	
M 156 Toluenediamine	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
157 Triethylamine	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
158 Di-n-octylphthalate	1.28664 / 1.97856	1.43409	1.53192	1.63301	1.70704	1.97908	1.65005	15.888	
159 1,2-Dinitrobenzene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
160 Benzo(b)fluoranthene	1.36955 / 1.87761	1.41553	1.48683	1.58665	1.56414	1.79131	1.58452	11.902	
161 Benzo(k)fluoranthene	1.38387 / 1.75652	1.46898	1.44154	1.57245	1.63200	1.65836	1.55910	8.564	
162 7,12-Dimethylbenz(a)anthracen	0.63206 / 0.80112	0.67147	0.70278	0.74963	0.79123	0.82571	0.73914	9.807	
163 Hexachlorophene	+++++ / 0.09695	0.00594	0.00928	0.01407	0.00882	0.00689	0.02366	152.219	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 13-MAY-2005 15:58
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Cal Date : 14-May-2005 09:51 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	___ RRF	% RSD	
164 N,N-Dimethylamine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
165 Benzo(a)pyrene	1.24103	1.26672	1.34384	1.40159	1.47692	1.52883	1.60172	1.40867	9.562	
167 Carbofuran Phenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
168 2,3- and 3,5-Diaminotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
169 3-methylcholanthrene	0.67245	0.68361	0.68395	0.73820	0.79182	0.82758	0.85552	0.75045	10.005	
170 2,6- and 2,4-Diaminotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
171 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
172 n-Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
173 Indeno(1,2,3-cd)pyrene	1.05173	1.16814	1.17303	1.29456	1.44432	1.54132	1.60916	1.32604	15.851	
174 Dibenzo(a,h)anthracene	1.05388	1.08075	1.20397	1.27535	1.38727	1.45376	1.50707	1.28029	13.895	
175 Dibens(e,a) Pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
176 n-tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
177 Benzo(g,h,i)perylene	1.03350	1.06863	1.09531	1.11693	1.23843	1.29015	1.30745	1.16434	9.608	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 13-MAY-2005 15:58
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Cal Date : 14-May-2005 09:51 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6			
	160.000 Level 7						RRF	% RSD	
179 Phthalic Acid	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-
180 n-Dodecane	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-
M 181 Isosafrole	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	
$ 10 2-Fluorophenol	1.10733	1.17138	1.14442	1.22320	1.28159	1.24663			
	1.20069						1.19646	5.036	
$ 15 Phenol-d5	1.63460	1.42481	1.41421	1.56052	1.63148	1.63063			
	1.62474						1.56014	6.377	
$ 36 Nitrobenzene-d5	0.51993	0.52727	0.52076	0.54335	0.53671	0.57465			
	0.54499						0.53824	3.526	
$ 69 2-Fluorobiphenyl	1.44061	1.46663	1.47215	1.54037	1.64876	1.82670			
	1.92208						1.61676	11.807	
$ 104 2,4,6-Tribromophenol	0.18392	0.23304	0.22560	0.24780	0.25341	0.22899			
	0.25981						0.23322	10.838	
$ 139 Terphenyl-d14	1.13987	1.14470	1.22684	1.24992	1.33349	1.44169			
	1.46938						1.28656	10.343	
$ 178 2,4,6-Trichlorophenol-d2	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B/KCAL3128.D
Report Date: 05/14/2005

INITIAL CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3128.D
Analysis Type: WATER

Injection Date: 13-MAY-2005 12:14
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270

COMPOUND	%RSD
1,4-Dioxane	7.8
Pyridine	16.2
N-Nitrosodimethylamine	7.5
Dimethylformamide	4.2
Cyclohexanol	7.0
2-Fluorophenol	5.0
Aniline	4.2
Bis(2-chloroethyl)ether	6.1
Phenol-d5	6.4
Phenol	4.7
2-Chlorophenol	7.1
1,3-Dichlorobenzene	4.7
1,4-Dichlorobenzene	7.2
1,2-Dichlorobenzene	8.5
Benzyl Alcohol	18.4
2,2-oxybis(1-Chloropropane)	5.1
2-Methylphenol	5.2
N-Nitrosodinpropylamine	8.5
Hexachloroethane	4.8
3 and 4-Methylphenol	7.5
Nitrobenzene-d5	3.5
Nitrobenzene	4.0
Isophorone	2.7
2-Nitrophenol	5.0
2,4-Dimethylphenol	10.2
Bis(2-chloroethoxy)methane	3.8
2,4-Dichlorophenol	7.6
1,2,4-Trichlorobenzene	5.8
Benzoic Acid	13.4
Naphthalene	9.4
4-Chloroaniline	10.4
Hexachlorobutadiene	5.0
4-Chloro-3-Methylphenol	9.1
2-Methylnaphthalene	8.4
Hexachlorocyclopentadiene	32.1
2,4,6-Trichlorophenol	10.8
2-Fluorobiphenyl	11.8
2,4,5-Trichlorophenol	13.9
2-Chloronaphthalene	9.2

STL ST. LOUIS

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B/KCAL3128.D
Report Date: 05/14/2005

INITIAL CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3128.D
Analysis Type: WATER

Injection Date: 13-MAY-2005 12:14
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050513A

COMPOUND	%RSD
2-Nitroaniline	8.3
Dimethylphthalate	7.1
Acenaphthylene	10.5
2,6-Dinitrotoluene	6.3
Acenaphthene	8.3
3-Nitroaniline	5.4
2,4-Dinitrophenol	41.9
Dibenzofuran	6.0
2,4-Dinitrotoluene	11.8
4-Nitrophenol	25.8
Fluorene	7.6
Diethylphthalate	6.9
4-Chlorophenyl-phenylether	9.1
4-Nitroaniline	13.4
4,6-Dinitro-2-methylphenol	37.9
N-Nitrosodiphenylamine	12.4
Azobenzene	14.3
2,4,6-Tribromophenol	10.8
4-Bromophenyl-phenylether	8.2
Hexachlorobenzene	5.9
Pentachlorophenol	21.4
Phenanthrene	5.9
Anthracene	5.6
Carbazole	5.6
Di-n-Butylphthalate	6.9
Fluoranthene	3.6
Benzidine	9.6
Pyrene	11.1
Terphenyl-d14	10.3
3,3-Dimethylbenzidine	7.5
Butylbenzylphthalate	8.1
Benzo(a)Anthracene	6.8
Chrysene	9.2
3,3'-Dichlorobenzidine	18.9
bis(2-ethylhexyl)Phthalate	9.1
Di-n-octylphthalate	15.9
Benzo(b)fluoranthene	11.9
Benzo(k)fluoranthene	8.6
Benzo(a)pyrene	9.6

STL ST. LOUIS

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B/KCAL3128.D
Report Date: 05/14/2005

INITIAL CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3128.D
Analysis Type: WATER

Injection Date: 13-MAY-2005 12:14
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050513A

COMPOUND	%RSD
Indeno(1,2,3-cd)pyrene	15.9
Dibenzo(a,h)anthracene	13.9
Benzo(g,h,i)perylene	9.6
Dibenz(e,a) Pyrene	0.0

The average of all %RSD's in the initial calibration is 9.8

05/16/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3128.D Page 1
Report Date: 14-May-2005 09:51

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3128.D
Lab Smp Id: SSTD050 Client Smp ID: SSTD050
Inj Date : 13-MAY-2005 12:14
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD050
Misc Info : SV0222-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Meth Date : 14-May-2005 09:51 hongs Quant Type: ISTD
Cal Date : 13-MAY-2005 12:14 Cal File: KCAL3128.D
Als bottle: 3 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 1,4-Dioxane	88	1.233	1.233	(0.273)	78844	50.0000	47.06
	4 N-Nitrosodimethylamine	74	1.660	1.660	(0.367)	143115	50.0000	49.50
	3 Pyridine	79	1.639	1.639	(0.362)	298031	50.0000	56.74(M)
	5 Dimethylformamide	44	2.136	2.136	(0.472)	202423	50.0000	51.82(M)
$	10 2-Fluorophenol	112	3.231	3.231	(0.714)	276851	50.0000	51.12
	11 Cyclohexanol	57	3.231	3.231	(0.714)	321317	50.0000	55.37
	17 Aniline	93	4.219	4.219	(0.933)	479969	50.0000	51.79
	19 Bis(2-chloroethyl)ether	93	4.294	4.294	(0.949)	314055	50.0000	49.25
$	15 Phenol-d5	99	4.315	4.315	(0.954)	353196	50.0000	50.01
	16 Phenol	94	4.331	4.331	(0.957)	385546	50.0000	51.12
	20 2-Chlorophenol	128	4.369	4.369	(0.966)	297041	50.0000	49.25
	21 1,3-Dichlorobenzene	146	4.476	4.476	(0.989)	336731	50.0000	48.16
*	22 1,4-Dichlorobenzene-d4	152	4.524	4.524	(1.000)	181066	40.0000	
	23 1,4-Dichlorobenzene	146	4.545	4.545	(1.005)	358677	50.0000	48.48
	26 1,2-Dichlorobenzene	146	4.764	4.764	(1.053)	333198	50.0000	48.82
	25 Benzyl Alcohol	108	4.780	4.780	(1.057)	165583	50.0000	58.88
	28 2,2-oxybis(1-Chloropropane)	45	4.935	4.935	(1.091)	329929	50.0000	49.33
	27 2-Methylphenol	108	5.004	5.004	(1.106)	260311	50.0000	52.78
	35 Hexachloroethane	117	5.122	5.122	(1.132)	157503	50.0000	49.30
	32 N-Nitrosodinpropylamine	70	5.122	5.122	(1.132)	280901	50.0000	54.50
	29 3 and 4-Methylphenol	108	5.186	5.186	(1.146)	551201	100.000	100.0

05/16/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3128.D
Report Date: 14-May-2005 09:51

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.250	5.250	(0.860)	426189	50.0000	50.47
	37 Nitrobenzene	77	5.272	5.272	(0.864)	435986	50.0000	49.63
	39 Isophorone	82	5.565	5.565	(0.912)	598717	50.0000	52.43
	40 2-Nitrophenol	139	5.672	5.672	(0.929)	163329	50.0000	51.86
	41 2,4-Dimethylphenol	107	5.811	5.811	(0.952)	347101	50.0000	52.84
	42 Bis(2-chloroethoxy)methane	93	5.881	5.881	(0.963)	368159	50.0000	50.44
	45 2,4-Dichlorophenol	162	6.030	6.030	(0.988)	252154	50.0000	51.42
	47 1,2,4-Trichlorobenzene	180	6.062	6.062	(0.993)	304306	50.0000	49.90
*	48 Naphthalene-d8	136	6.105	6.105	(1.000)	627500	40.0000	
	44 Benzoic Acid	122	6.094	6.094	(0.998)	148395	50.0000	51.27
	50 Naphthalene	128	6.132	6.132	(1.004)	856074	50.0000	48.89
	51 4-Chloroaniline	127	6.287	6.287	(1.030)	351620	50.0000	49.84
	54 Hexachlorobutadiene	225	6.377	6.377	(1.045)	219321	50.0000	49.73
	62 2-Methylnaphthalene	142	7.088	7.088	(1.161)	833882	50.0000	54.33
	59 4-Chloro-3-Methylphenol	107	7.072	7.072	(1.158)	307932	50.0000	54.61
	66 Hexachlorocyclopentadiene	237	7.430	7.430	(0.847)	199340	50.0000	52.86
	67 2,4,6-Trichlorophenol	196	7.627	7.627	(0.869)	214016	50.0000	51.10
	68 2,4,5-Trichlorophenol	196	7.745	7.745	(0.883)	223916	50.0000	51.23
$	69 2-Fluorobiphenyl	172	7.708	7.708	(0.878)	690232	50.0000	47.64
	72 2-Chloronaphthalene	162	7.830	7.830	(0.892)	592916	50.0000	49.21
	73 2-Nitroaniline	65	8.130	8.130	(0.926)	253459	50.0000	52.21
	76 Dimethylphthalate	163	8.493	8.493	(0.968)	691788	50.0000	50.54
	79 Acenaphthylene	152	8.509	8.509	(0.970)	873604	50.0000	48.26
	80 2,6-Dinitrotoluene	165	8.610	8.610	(0.981)	150741	50.0000	52.56
*	82 Acenaphthene-d10	164	8.776	8.776	(1.000)	358476	40.0000	
	83 Acenaphthene	153	8.829	8.829	(1.006)	542851	50.0000	49.16
	81 3-Nitroaniline	138	8.845	8.845	(1.008)	148779	50.0000	52.25
	84 2,4-Dinitrophenol	184	9.027	9.027	(1.029)	58720	50.0000	46.56
	86 Dibenzofuran	168	9.113	9.113	(1.038)	820734	50.0000	49.52
	88 2,4-Dinitrotoluene	165	9.284	9.284	(1.058)	198934	50.0000	55.04
	85 4-Nitrophenol	109	9.428	9.428	(1.074)	152439	50.0000	59.40 (M)
	93 Diethylphthalate	149	9.748	9.748	(1.111)	688424	50.0000	50.26
	94 Fluorene	166	9.722	9.722	(1.108)	672512	50.0000	50.53
	95 4-Chlorophenyl-phenylether	204	9.775	9.775	(1.114)	368317	50.0000	49.06
	98 4-Nitroaniline	138	9.962	9.962	(1.135)	147180	50.0000	56.21
	99 4,6-Dinitro-2-methylphenol	198	10.015	10.015	(0.876)	128368	50.0000	53.48
	100 N-Nitrosodiphenylamine	169	10.037	10.037	(0.878)	476075	50.0000	47.69
	102 Azobenzene	77	10.053	10.053	(0.879)	1016740	50.0000	46.85
$	104 2,4,6-Tribromophenol	330	10.229	10.229	(1.166)	111038	50.0000	53.12
	109 4-Bromophenyl-phenylether	248	10.656	10.656	(0.932)	235144	50.0000	49.34
	112 Hexachlorobenzene	284	10.881	10.881	(0.952)	242114	50.0000	48.64
	117 Pentachlorophenol	266	11.298	11.298	(0.988)	97051	50.0000	43.48
*	121 Phenanthrene-d10	188	11.431	11.431	(1.000)	655247	40.0000	
	122 Phenanthrene	178	11.474	11.474	(1.004)	990615	50.0000	49.23
	124 Anthracene	178	11.559	11.559	(1.011)	956577	50.0000	49.40
	126 Carbazole	167	11.971	11.971	(1.047)	813702	50.0000	50.71
	129 Di-n-Butylphthalate	149	12.852	12.852	(1.124)	1064872	50.0000	50.02
	134 Fluoranthene	202	13.766	13.766	(1.204)	1046067	50.0000	50.63
	135 Benzidine	184	14.166	14.166	(0.854)	387867	50.0000	52.64
	137 Pyrene	202	14.182	14.182	(0.855)	1051918	50.0000	47.99
$	139 Terphenyl-d14	244	14.631	14.631	(0.882)	836207	50.0000	48.58
	145 3,3-Dimethylbenzidine	212	15.630	15.630	(0.942)	447342	50.0000	53.62
	146 Butylbenzylphthalate	149	15.753	15.753	(0.949)	418665	50.0000	48.69
	150 Benzo(a)Anthracene	228	16.560	16.560	(0.998)	912733	50.0000	49.40

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.592	16.592	(1.000)	535207	40.0000	
152 3,3'-Dichlorobenzidine	252	16.661	16.661	(1.004)	365968	50.0000	52.41
154 Chrysene	228	16.645	16.645	(1.003)	843758	50.0000	48.25
155 bis(2-ethylhexyl)Phthalate	149	16.976	16.976	(1.023)	523019	50.0000	49.07
158 Di-n-octylphthalate	149	18.125	18.125	(0.944)	871684	50.0000	49.48
160 Benzo(b)fluoranthene	252	18.563	18.563	(0.967)	846934	50.0000	50.07
161 Benzo(k)fluoranthene	252	18.606	18.606	(0.969)	839355	50.0000	50.43
165 Benzo(a)pyrene	252	19.097	19.097	(0.995)	748153	50.0000	49.75
* 166 Perylene-d12	264	19.199	19.199	(1.000)	427031	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.903	20.903	(1.089)	691023	50.0000	48.81
174 Dibenzo(a,h)anthracene	278	20.951	20.951	(1.091)	680769	50.0000	49.81
177 Benzo(g,h,i)perylene	276	21.351	21.351	(1.112)	596207	50.0000	47.96

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3128.D Page 4
Report Date: 14-May-2005 09:51

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

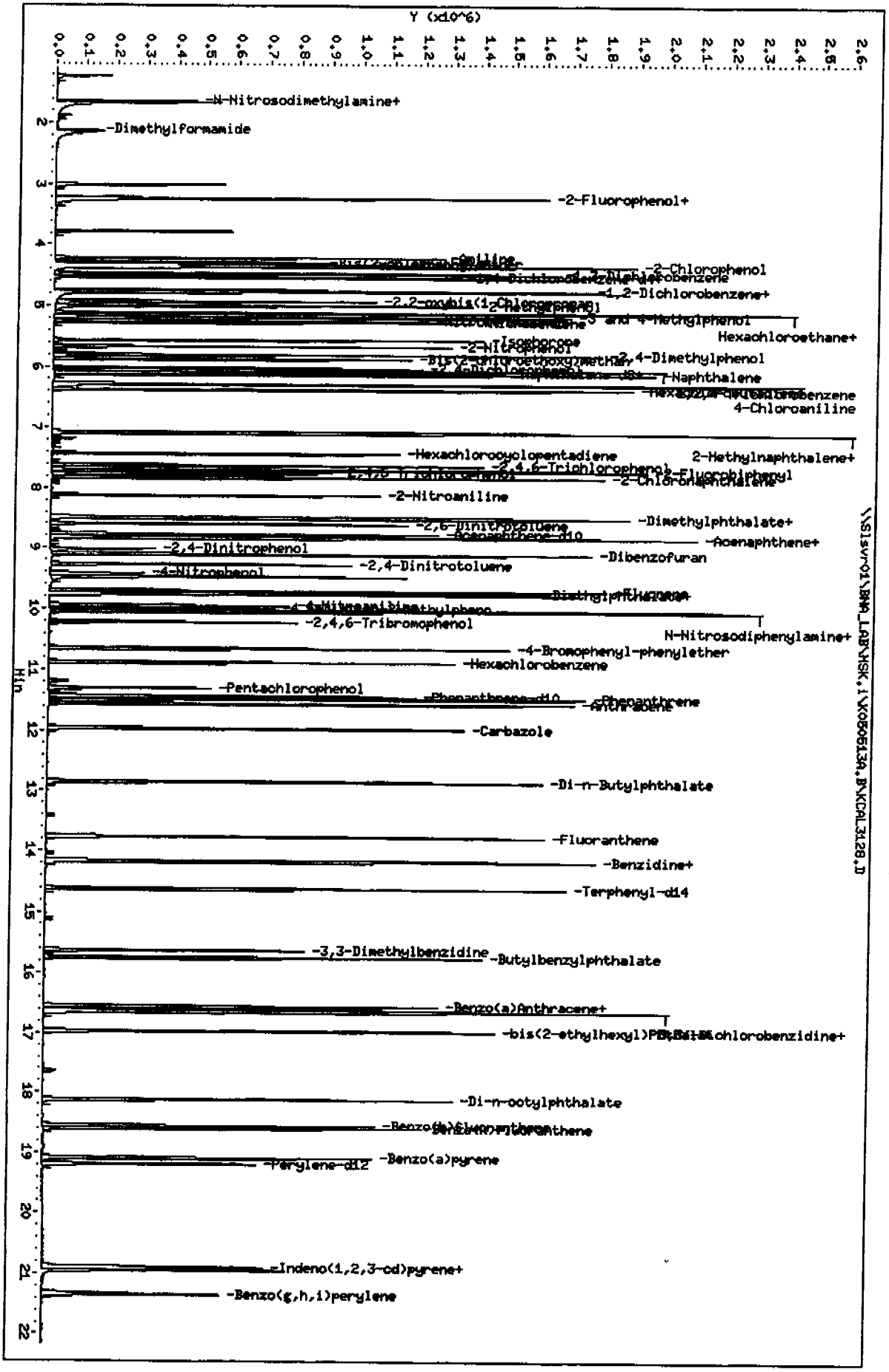
Instrument ID: MSK.i
Lab File ID: KCAL3128.D
Lab Smp Id: SSTD050
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Misc Info: SV0222-05

Calibration Date: 13-MAY-2005
Calibration Time: 12:14
Client Smp ID: SSTD050
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	181066	90533	362132	181066	0.00
48 Naphthalene-d8	627500	313750	1255000	627500	0.00
82 Acenaphthene-d10	358476	179238	716952	358476	0.00
121 Phenanthrene-d10	655247	327624	1310494	655247	0.00
153 Chrysene-d12	535207	267604	1070414	535207	0.00
166 Perylene-d12	427031	213516	854062	427031	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.52	4.02	5.02	4.52	0.00
48 Naphthalene-d8	6.11	5.61	6.61	6.11	0.00
82 Acenaphthene-d10	8.78	8.28	9.28	8.78	0.00
121 Phenanthrene-d10	11.43	10.93	11.93	11.43	0.00
153 Chrysene-d12	16.59	16.09	17.09	16.59	0.00
166 Perylene-d12	19.20	18.70	19.70	19.20	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



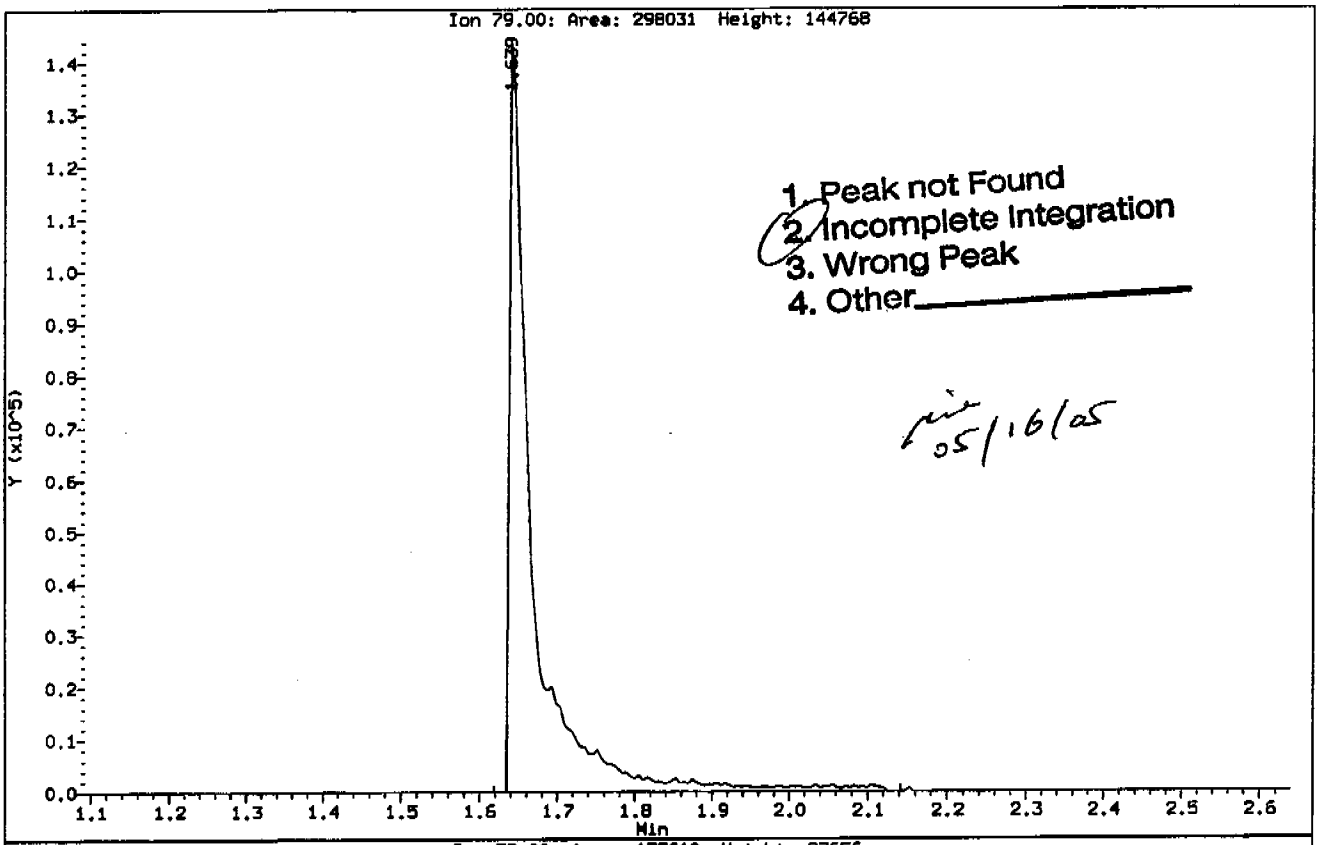
Data File: \\Slsvr01\BNA_LAB\MSK,i\K050513A,B\KCAL3128,D
Date : 13-MAY-2005 12:14
Client ID: SSTD050
Sample Info: SSTD050
Volume Injected (uL): 1.0
Column phase:

Instrument: MSK,i
Operator: XIA
Column diameter: 2.00

Page 5

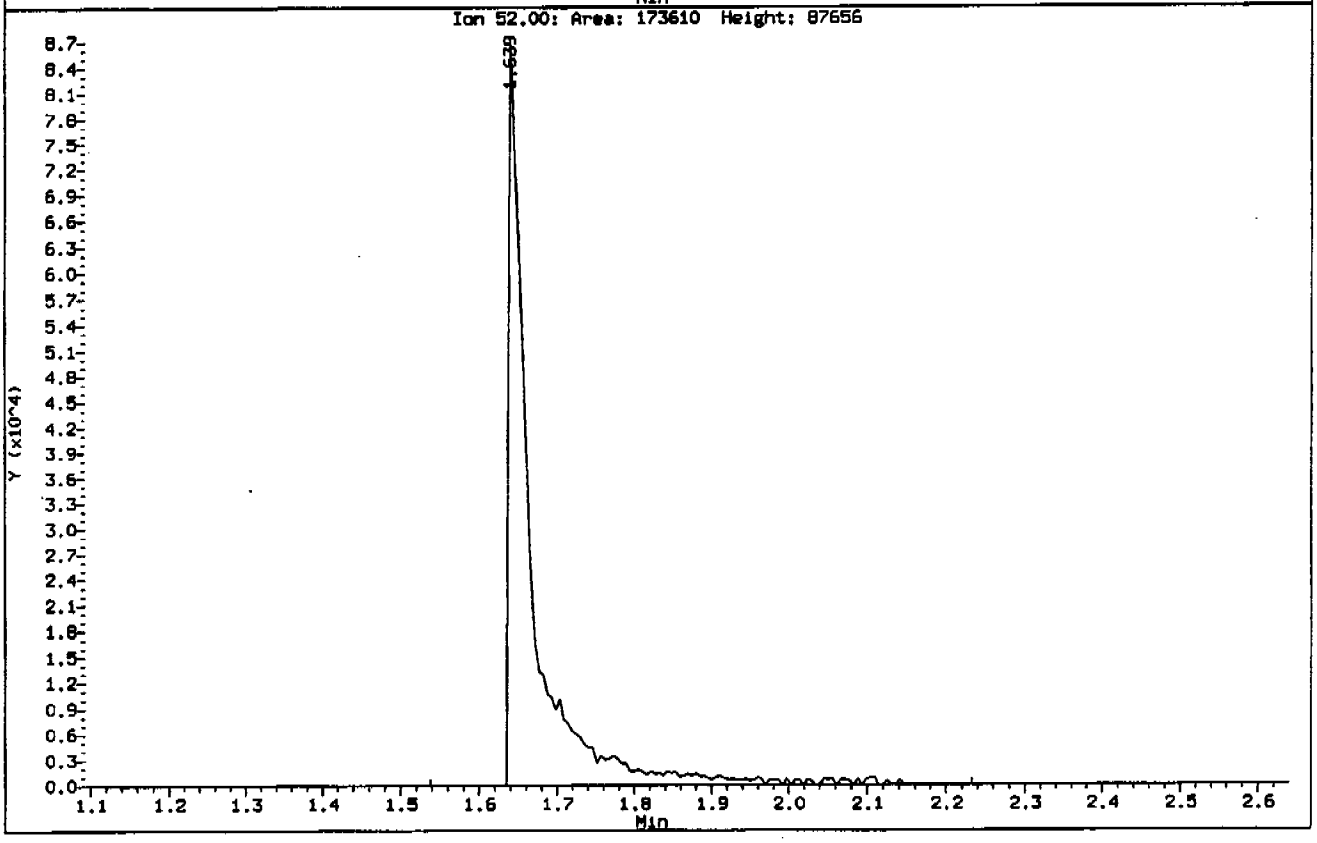
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3128.D
Injection Date: 13-MAY-2005 12:14
Instrument: MSK.i
Client Sample ID: SSTD050

Compound: Pyridine
CAS Number: 110-86-1



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

5/16/05



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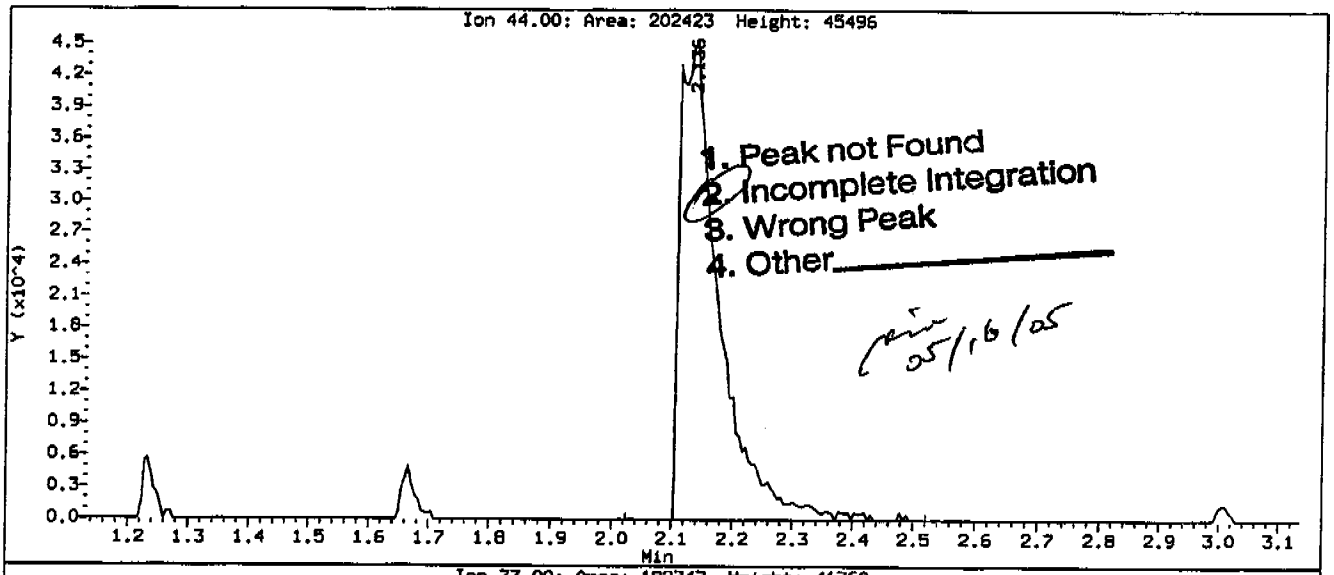
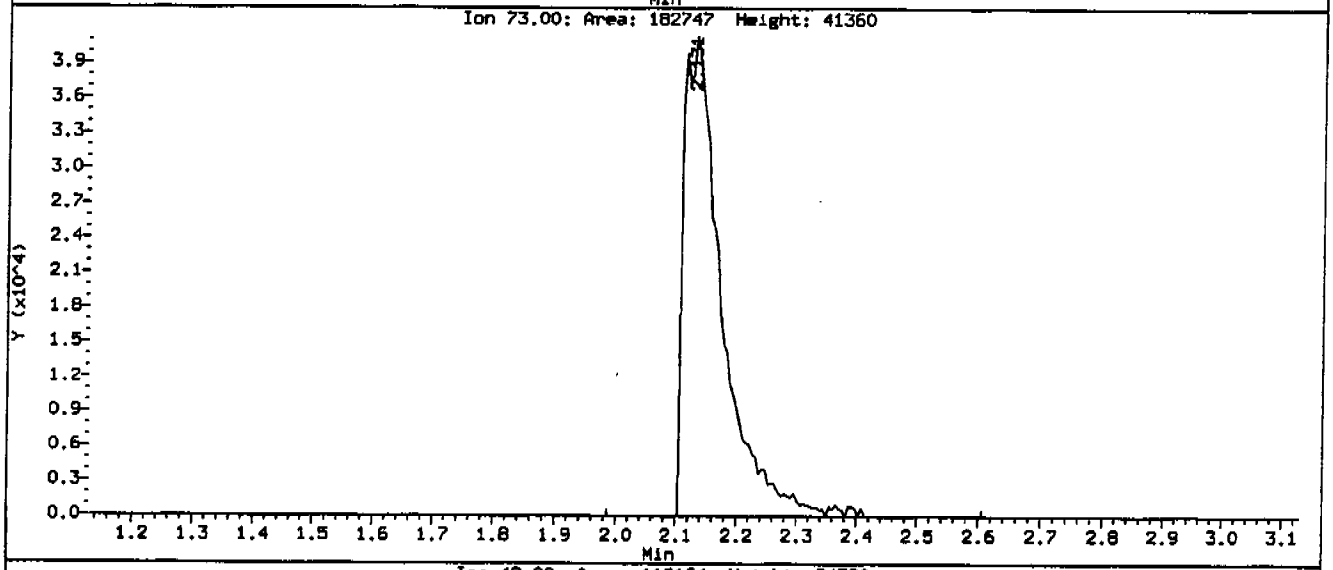
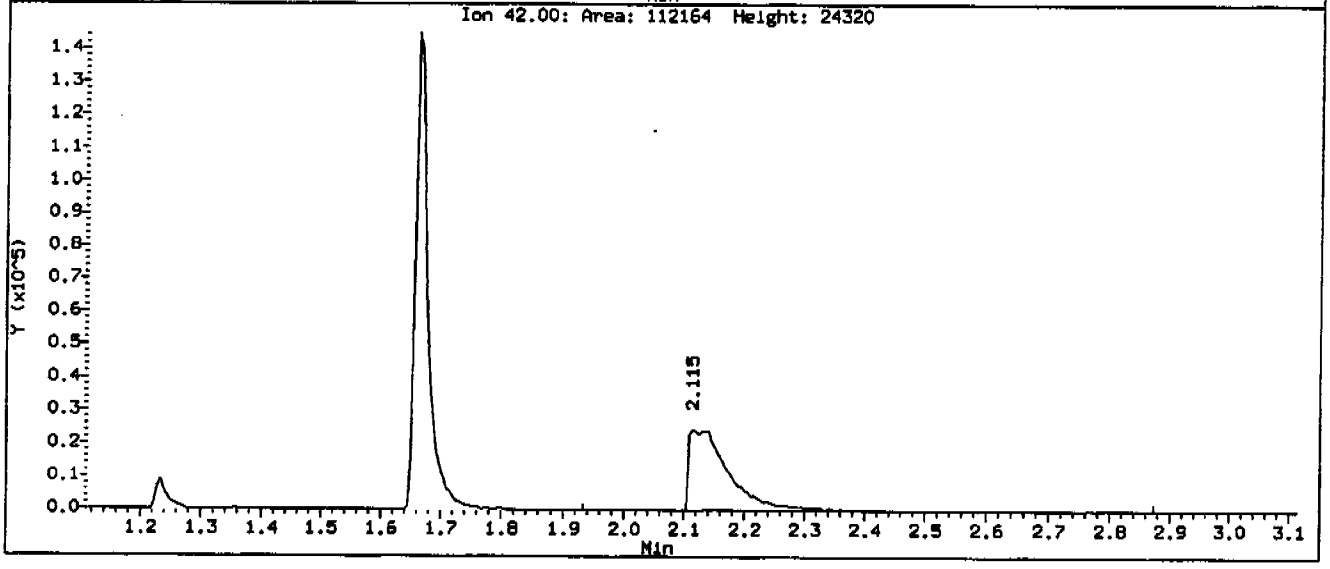
Injection Date: 13-MAY-2005 12:14
Instrument: MSK.i
Client Sample ID: SSTD050

Compound: Dimethylformamide
CAS Number: 68-12-2

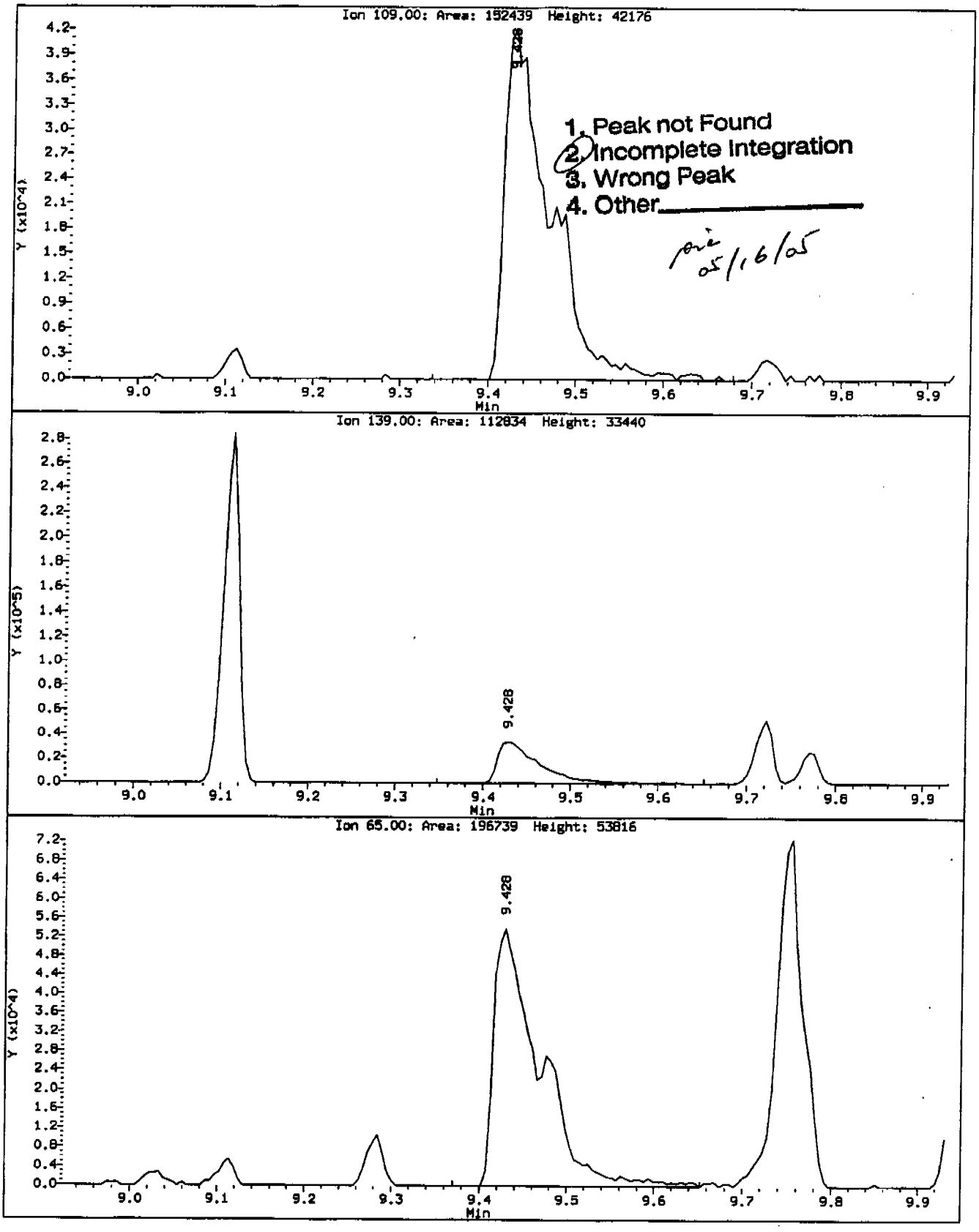






Data File: \\Slavr01\BNA_LAB\MSK.i\K050513A.B\KCAL3128.D
Injection Date: 13-MAY-2005 12:14
Instrument: MSK.i
Client Sample ID: SSTD050

Compound: 4-Nitrophenol
CAS Number: 100-02-7



ok 05/16/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3129.D Page 1
Report Date: 14-May-2005 09:51

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3129.D
Lab Smp Id: SSTD160 Client Smp ID: SSTD160
Inj Date : 13-MAY-2005 13:18
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD160
Misc Info : SV0218-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Meth Date : 14-May-2005 09:51 hongs Quant Type: ISTD
Cal Date : 13-MAY-2005 13:18 Cal File: KCAL3129.D
Als bottle: 5 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	1.347	1.347	(0.297)	378690	160.000	172.1(AM)
4	N-Nitrosodimethylamine	74	1.812	1.812	(0.400)	631740	160.000	166.4(AM)
3	Pyridine	79	1.785	1.785	(0.394)	1168662	160.000	169.4(AM)
5	Dimethylformamide	44	2.245	2.245	(0.495)	780862	160.000	152.2(M)
$ 10	2-Fluorophenol	112	3.265	3.265	(0.721)	1141905	160.000	160.6(A)
11	Cyclohexanol	57	3.265	3.265	(0.721)	1296588	160.000	170.2(AM)
17	Aniline	93	4.237	4.237	(0.935)	1889342	160.000	155.2
19	Bis(2-chloroethyl)ether	93	4.301	4.301	(0.949)	1415910	160.000	169.1(AM)
$ 15	Phenol-d5	99	4.323	4.323	(0.954)	1545197	160.000	166.6(A)
16	Phenol	94	4.339	4.339	(0.958)	1646934	160.000	166.3(A)
20	2-Chlorophenol	128	4.382	4.382	(0.967)	1369058	160.000	172.9(A)
21	1,3-Dichlorobenzene	146	4.483	4.483	(0.989)	1547535	160.000	168.6(A)
* 22	1,4-Dichlorobenzene-d4	152	4.531	4.531	(1.000)	237761	40.0000	
23	1,4-Dichlorobenzene	146	4.553	4.553	(1.005)	1688007	160.000	173.7(A)
26	1,2-Dichlorobenzene	146	4.772	4.772	(1.053)	1588221	160.000	177.2(A)
25	Benzyl Alcohol	108	4.804	4.804	(1.060)	680320	160.000	184.2(A)
28	2,2-oxybis(1-Chloropropane)	45	4.942	4.942	(1.091)	1380677	160.000	157.2
27	2-Methylphenol	108	5.001	5.001	(1.104)	1017263	160.000	157.1
35	Hexachloroethane	117	5.119	5.119	(1.130)	694520	160.000	165.5(A)
32	N-Nitrosodinpropylamine	70	5.151	5.151	(1.137)	900311	160.000	133.0
29	3 and 4-Methylphenol	108	5.210	5.210	(1.150)	2480547	320.000	342.9(A)

05/16/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.263	5.263	(0.862)	1697999	160.000	162.0(A)
	37 Nitrobenzene	77	5.290	5.290	(0.866)	1793788	160.000	164.5(A)
	39 Isophorone	82	5.600	5.600	(0.917)	2179838	160.000	153.8
	40 2-Nitrophenol	139	5.685	5.685	(0.931)	654147	160.000	167.3(A)
	41 2,4-Dimethylphenol	107	5.824	5.824	(0.954)	1419847	160.000	174.1(A)
	42 Bis(2-chloroethoxy)methane	93	5.893	5.893	(0.965)	1467237	160.000	162.0(A)
	45 2,4-Dichlorophenol	162	6.027	6.027	(0.987)	1048394	160.000	172.2(A)
	47 1,2,4-Trichlorobenzene	180	6.064	6.064	(0.993)	1330754	160.000	175.8(A)
*	48 Naphthalene-d8	136	6.107	6.107	(1.000)	778906	40.0000	
	44 Benzoic Acid	122	6.139	6.139	(1.005)	611319	160.000	170.1(AM)
	50 Naphthalene	128	6.139	6.139	(1.005)	3947501	160.000	181.6(A)
	51 4-Chloroaniline	127	6.299	6.299	(1.031)	1579421	160.000	180.4(A)
	54 Hexachlorobutadiene	225	6.380	6.380	(1.045)	956149	160.000	174.7(A)
	62 2-Methylnaphthalene	142	7.095	7.095	(1.162)	2987282	160.000	156.8
	59 4-Chloro-3-Methylphenol	107	7.063	7.063	(1.157)	1181933	160.000	168.8(AM)
	66 Hexachlorocyclopentadiene	237	7.427	7.427	(0.847)	903487	160.000	216.6(A)
	67 2,4,6-Trichlorophenol	196	7.630	7.630	(0.870)	840117	160.000	181.3(A)
	68 2,4,5-Trichlorophenol	196	7.720	7.720	(0.880)	895364	160.000	185.2(A)
$	69 2-Fluorobiphenyl	172	7.715	7.715	(0.879)	3048608	160.000	190.2(A)
	72 2-Chloronaphthalene	162	7.838	7.838	(0.893)	2417616	160.000	181.4(A)
	73 2-Nitroaniline	65	8.142	8.142	(0.928)	870492	160.000	162.1(A)
	76 Dimethylphthalate	163	8.511	8.511	(0.970)	2622309	160.000	173.2(A)
	79 Acenaphthylene	152	8.516	8.516	(0.971)	3698789	160.000	184.7(A)
	80 2,6-Dinitrotoluene	165	8.629	8.629	(0.984)	530459	160.000	167.2(A)
*	82 Acenaphthene-d10	164	8.773	8.773	(1.000)	396525	40.0000	
	83 Acenaphthene	153	8.842	8.842	(1.008)	2188087	160.000	179.1(A)
	81 3-Nitroaniline	138	8.869	8.869	(1.011)	511655	160.000	162.4(A)
	84 2,4-Dinitrophenol	184	9.045	9.045	(1.031)	309007	160.000	221.5(A)
	86 Dibenzofuran	168	9.125	9.125	(1.040)	3201412	160.000	174.6(A)
	88 2,4-Dinitrotoluene	165	9.302	9.302	(1.060)	671022	160.000	167.8(A)
	85 4-Nitrophenol	109	9.398	9.398	(1.071)	524034	160.000	184.6(AM)
	93 Diethylphthalate	149	9.777	9.777	(1.114)	2606531	160.000	172.0(A)
	94 Fluorene	166	9.734	9.734	(1.110)	2576645	160.000	175.0(A)
	95 4-Chlorophenyl-phenylether	204	9.782	9.782	(1.115)	1516644	160.000	182.6(A)
	98 4-Nitroaniline	138	10.018	10.018	(1.142)	479101	160.000	165.4(A)
	99 4,6-Dinitro-2-methylphenol	198	10.050	10.050	(0.879)	532681	160.000	221.5(AM)
	100 N-Nitrosodiphenylamine	169	10.060	10.060	(0.880)	1867167	160.000	186.7(A)
	102 Azobenzene	77	10.066	10.066	(0.880)	3951603	160.000	181.8(A)
$	104 2,4,6-Tribromophenol	330	10.237	10.237	(1.167)	412078	160.000	178.2(A)
	109 4-Bromophenyl-phenylether	248	10.659	10.659	(0.932)	850524	160.000	178.2(A)
	112 Hexachlorobenzene	284	10.888	10.888	(0.952)	879685	160.000	176.4(A)
	117 Pentachlorophenol	266	11.310	11.310	(0.989)	426620	160.000	190.8(A)
*	121 Phenanthrene-d10	188	11.433	11.433	(1.000)	656372	40.0000	
	122 Phenanthrene	178	11.487	11.487	(1.005)	3496955	160.000	173.5(A)
	124 Anthracene	178	11.572	11.572	(1.012)	3368691	160.000	173.7(A)
	126 Carbazole	167	11.978	11.978	(1.048)	2719412	160.000	169.2(A)
	129 Di-n-Butylphthalate	149	12.854	12.854	(1.124)	3671009	160.000	172.1(A)
	134 Fluoranthene	202	13.778	13.778	(1.205)	3471786	160.000	167.8(A)
	135 Benzidine	184	14.168	14.168	(0.854)	1064449	160.000	166.9(A)
	137 Pyrene	202	14.195	14.195	(0.855)	3467095	160.000	182.7(A)
$	139 Terphenyl-d14	244	14.633	14.633	(0.882)	2723361	160.000	182.7(A)
	145 3,3-Dimethylbenzidine	212	15.637	15.637	(0.942)	1199754	160.000	166.1(A)
	146 Butylbenzylphthalate	149	15.755	15.755	(0.949)	1295711	160.000	174.1(A)
	150 Benzo(a)Anthracene	228	16.572	16.572	(0.999)	2801780	160.000	175.2(A)

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3129.D
Report Date: 14-May-2005 09:51

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.594	16.594	(1.000)	463353	40.0000	
152 3,3'-Dichlorobenzidine	252	16.663	16.663	(1.004)	1185265	160.000	196.1(A)
154 Chrysene	228	16.658	16.658	(1.004)	2734530	160.000	180.6(A)
155 bis(2-ethylhexyl)Phthalate	149	16.978	16.978	(1.023)	1614658	160.000	175.0(A)
158 Di-n-octylphthalate	149	18.127	18.127	(0.944)	2624373	160.000	191.8(A)
160 Benzo(b)fluoranthene	252	18.576	18.576	(0.968)	2490477	160.000	189.6(A)
161 Benzo(k)fluoranthene	252	18.624	18.624	(0.970)	2329862	160.000	180.2(A)
165 Benzo(a)pyrene	252	19.115	19.115	(0.996)	2124537	160.000	181.9(A)
* 166 Perylene-d12	264	19.195	19.195	(1.000)	331602	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.921	20.921	(1.090)	2134402	160.000	194.2(A)
174 Dibenzo(a,h)anthracene	278	20.969	20.969	(1.092)	1998993	160.000	188.3(A)
177 Benzo(g,h,i)perylene	276	21.375	21.375	(1.114)	1734207	160.000	179.7(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3129.D
Report Date: 14-May-2005 09:51

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

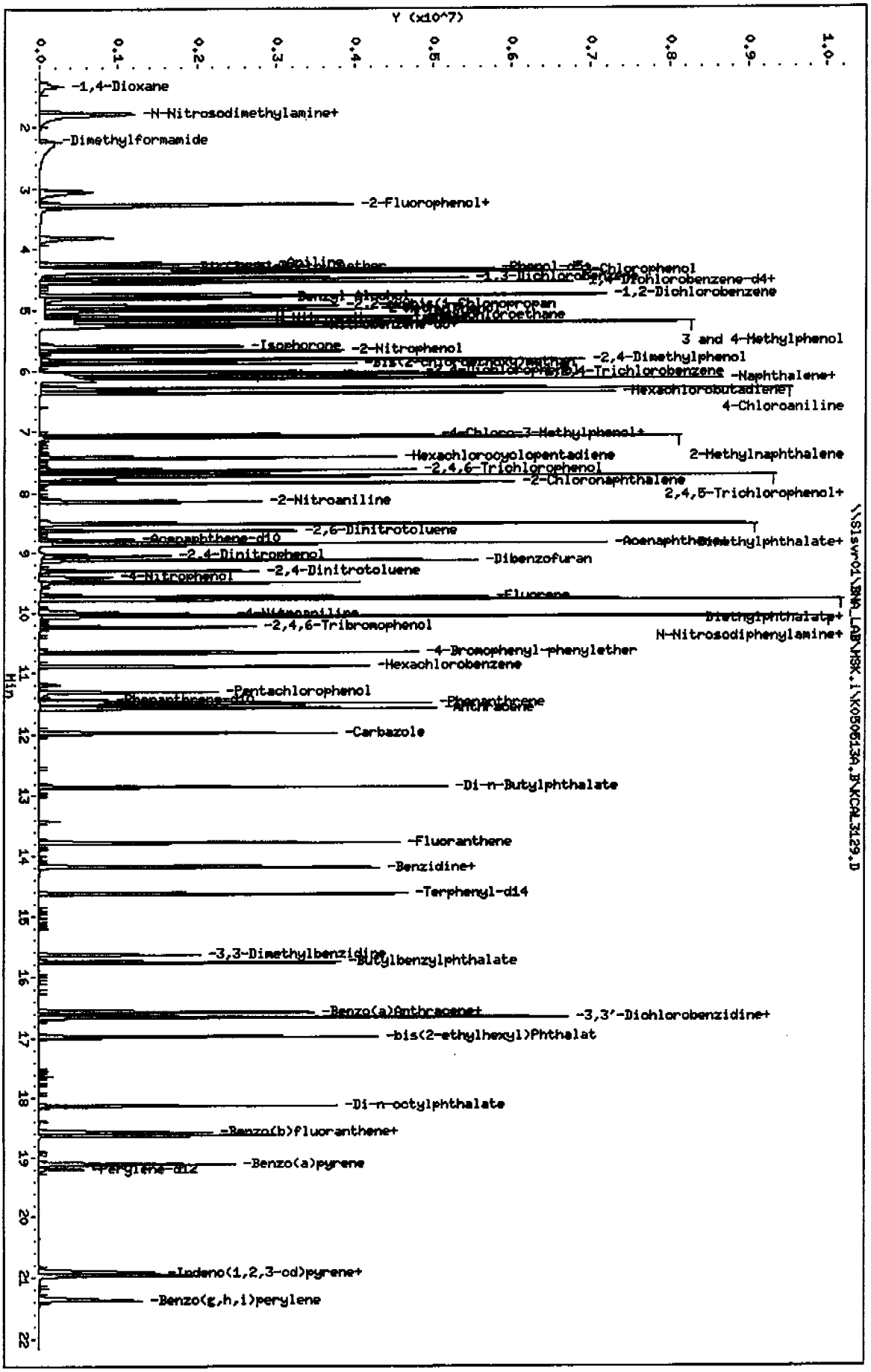
Instrument ID: MSK.i
Lab File ID: KCAL3129.D
Lab Smp Id: SSTD160
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Misc Info: SV0218-05

Calibration Date: 13-MAY-2005
Calibration Time: 12:14
Client Smp ID: SSTD160
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	181066	90533	362132	237761	31.31
48 Naphthalene-d8	627500	313750	1255000	778906	24.13
82 Acenaphthene-d10	358476	179238	716952	396525	10.61
121 Phenanthrene-d10	655247	327624	1310494	656372	0.17
153 Chrysene-d12	535207	267604	1070414	463353	-13.43
166 Perylene-d12	427031	213516	854062	331602	-22.35

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.52	4.02	5.02	4.53	0.16
48 Naphthalene-d8	6.11	5.61	6.61	6.11	0.03
82 Acenaphthene-d10	8.78	8.28	9.28	8.77	-0.04
121 Phenanthrene-d10	11.43	10.93	11.93	11.43	0.02
153 Chrysene-d12	16.59	16.09	17.09	16.59	0.01
166 Perylene-d12	19.20	18.70	19.70	19.20	-0.02

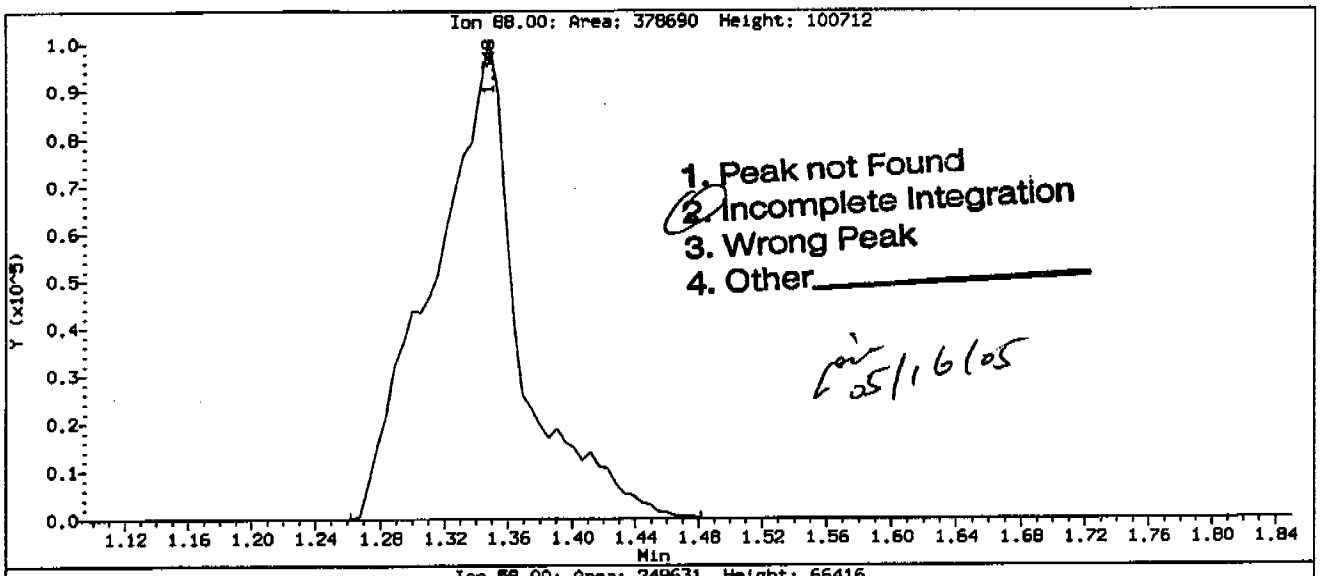
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



Data File: \\Slsvr01\BNA_LAB\HSK.i\K050513A.B\KCAL3129.D
Date : 13-MAY-2005 13:18
Client ID: SSTD160
Sample Info: SSTD160
Volume Injected (uL): 1.0
Column phase:
Instrument: HSK.i
Operator: KIA
Column diameter: 2.00

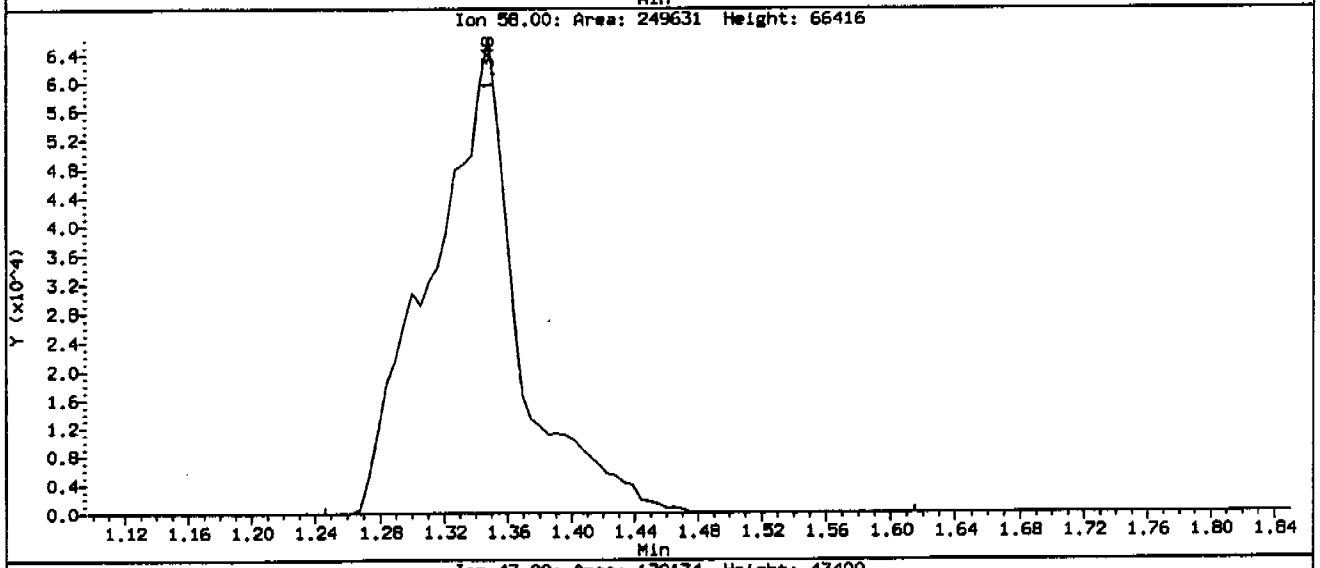
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3129.D
Injection Date: 13-MAY-2005 13:18
Instrument: MSK.i
Client Sample ID: SSTD160

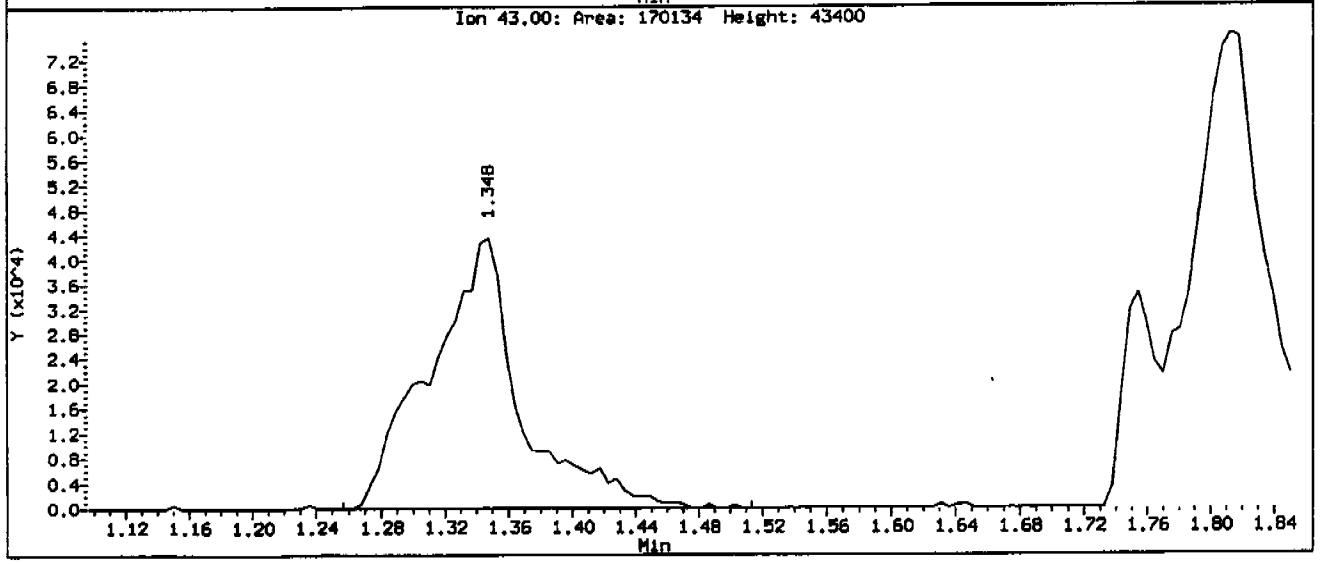
Compound: 1,4-Dioxane
CAS Number:



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other _____

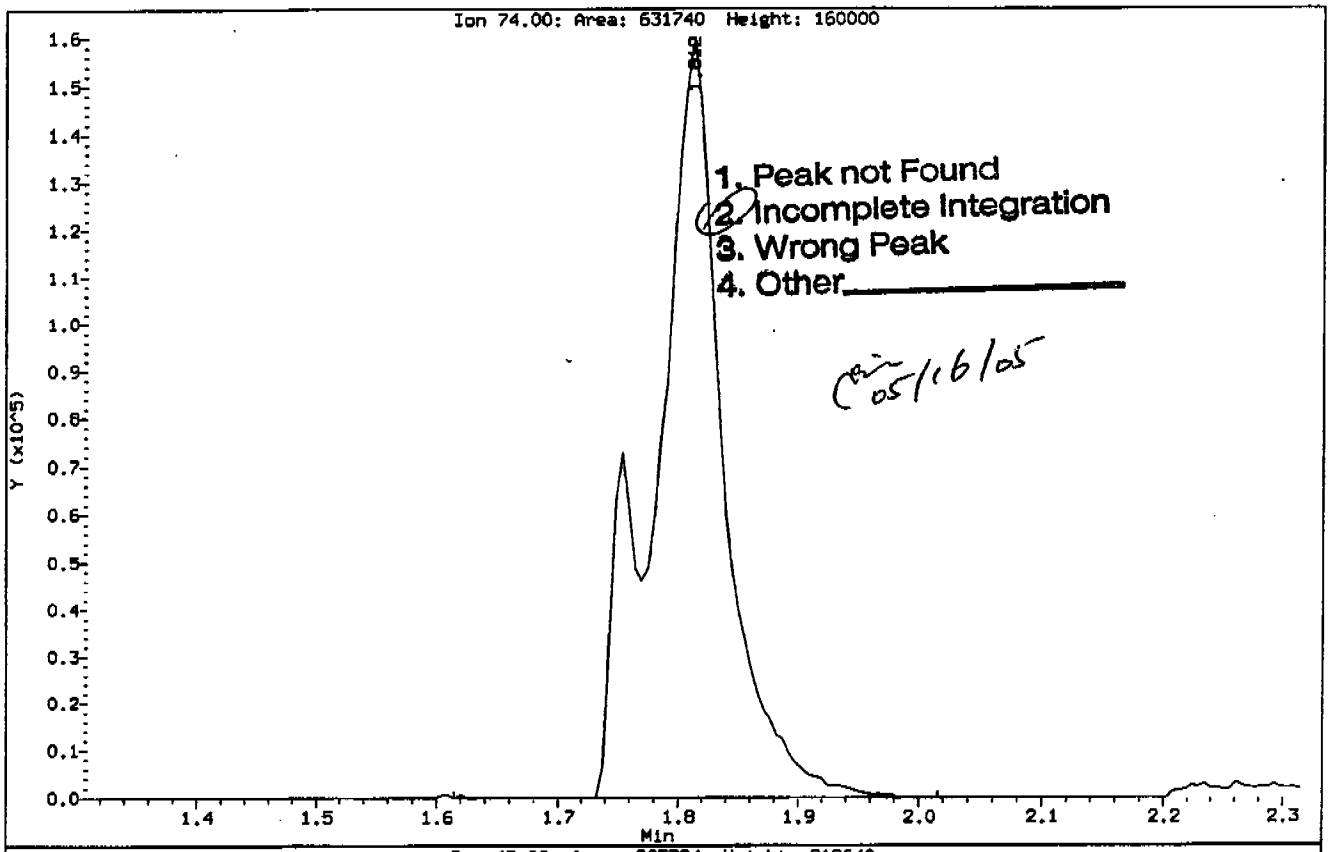
5/16/05

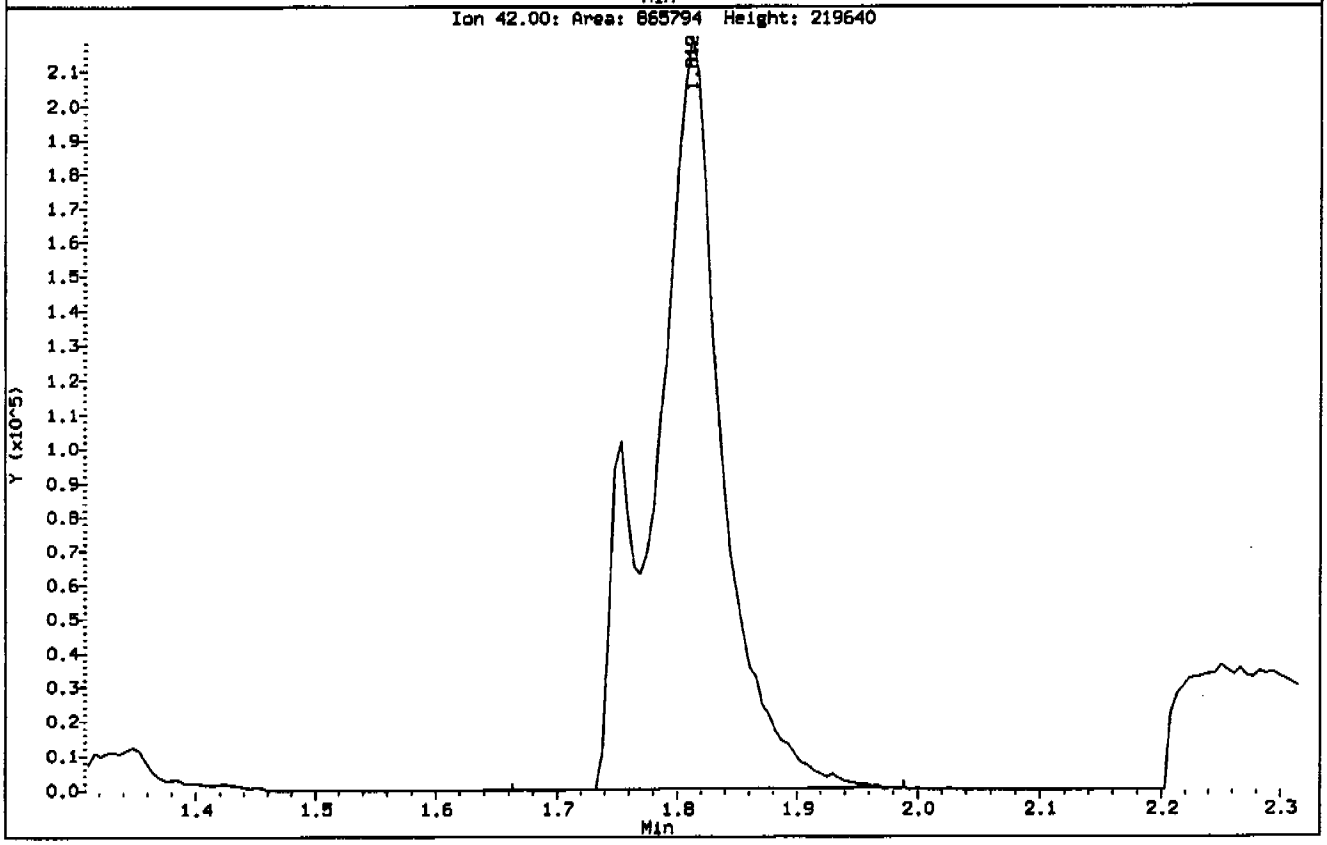




Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3129.D
Injection Date: 13-MAY-2005 13:18
Instrument: MSK.i
Client Sample ID: SSTD160

Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9





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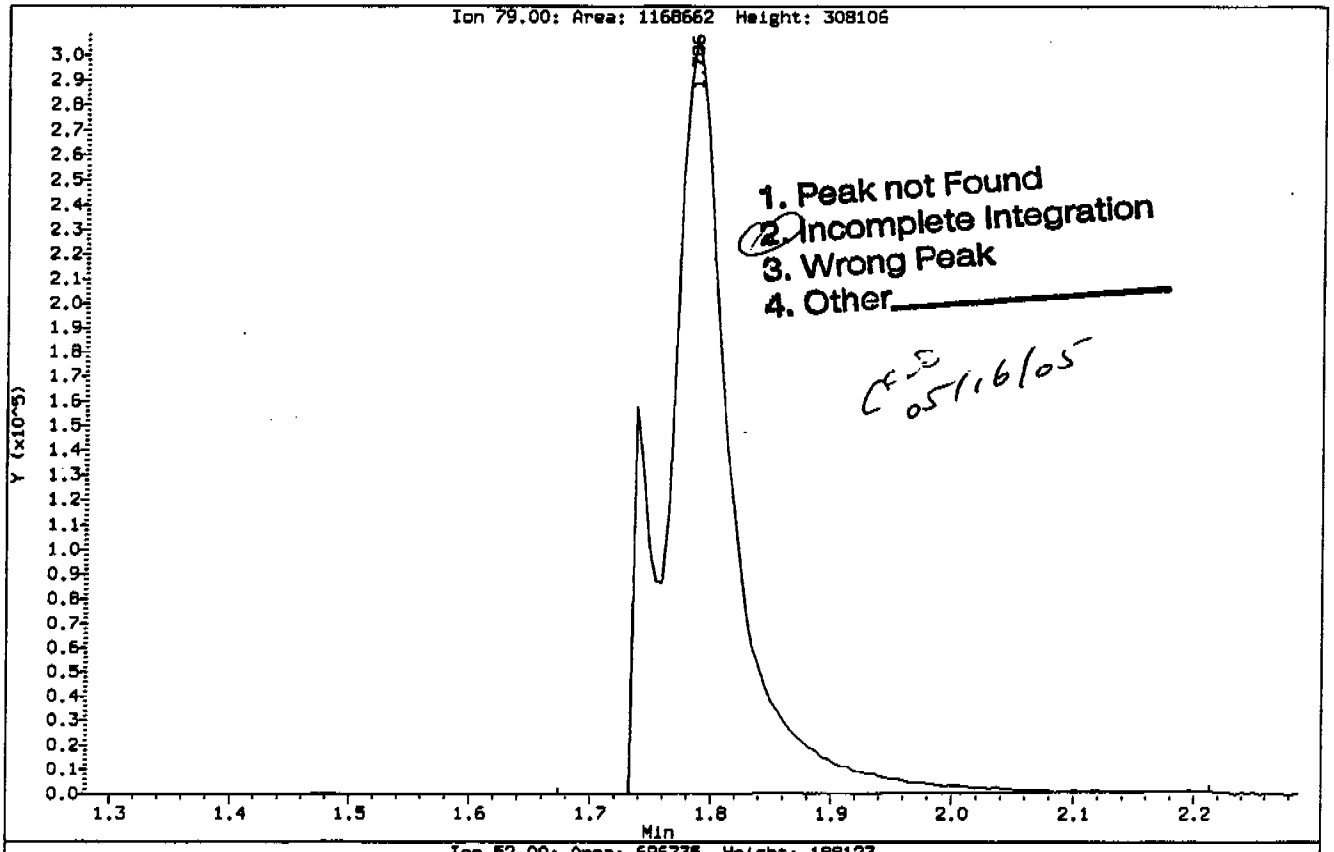
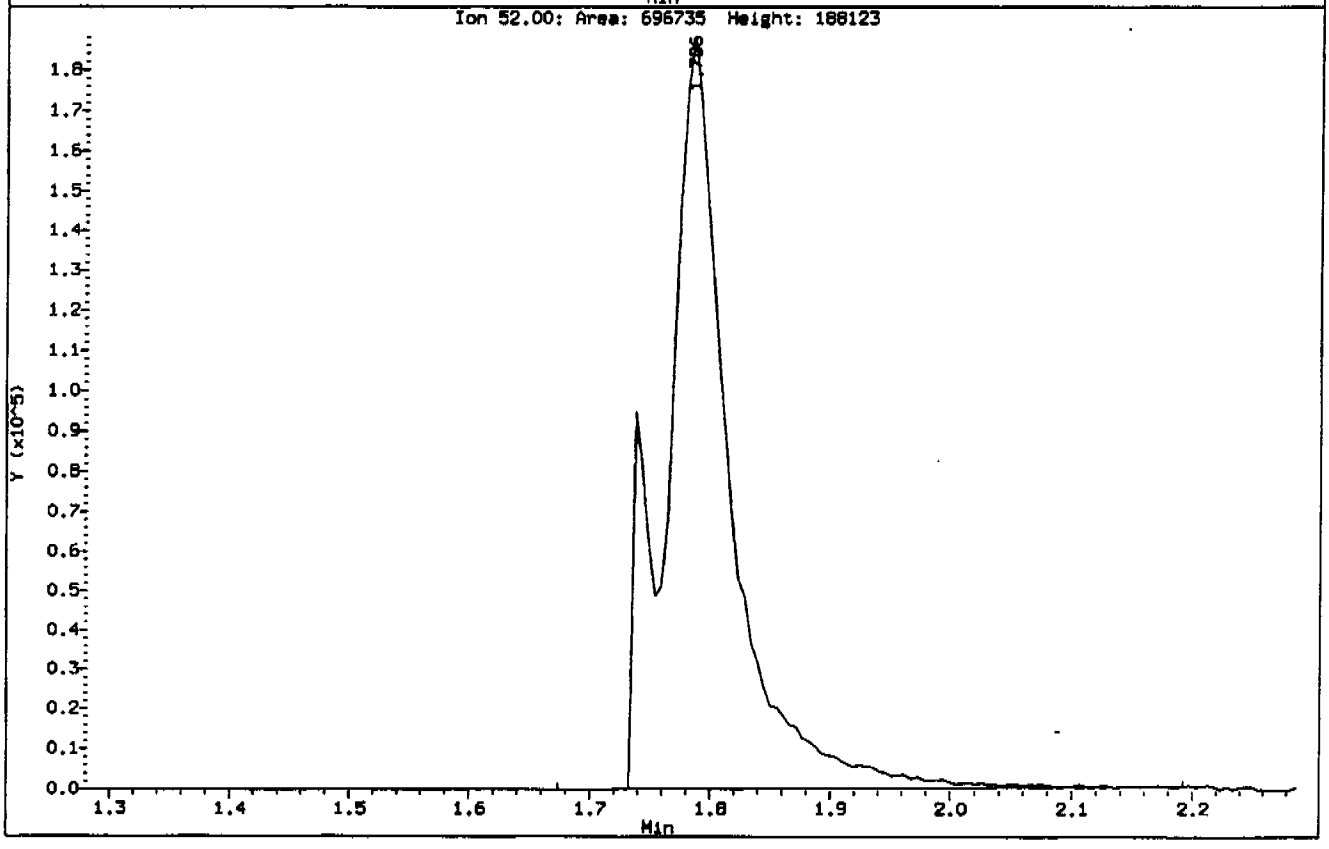
Injection Date: 13-MAY-2005 13:18
Instrument: MSK.i
Client Sample ID: SSTD160

Compound: Pyridine
CAS Number: 110-86-1





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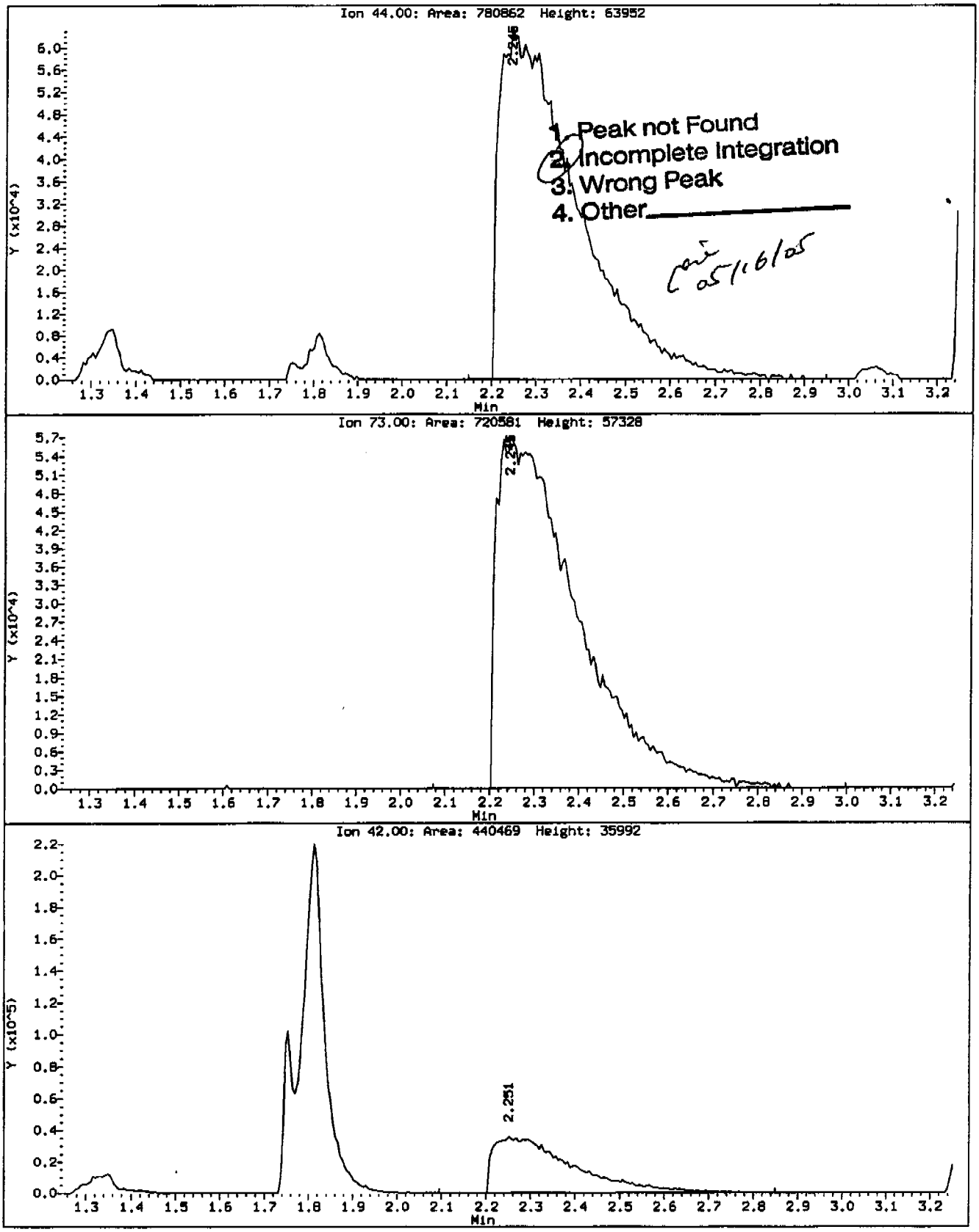
Injection Date: 13-MAY-2005 13:18
Instrument: MSK.i
Client Sample ID: SSTD160

Compound: Dimethylformamide
CAS Number: 68-12-2



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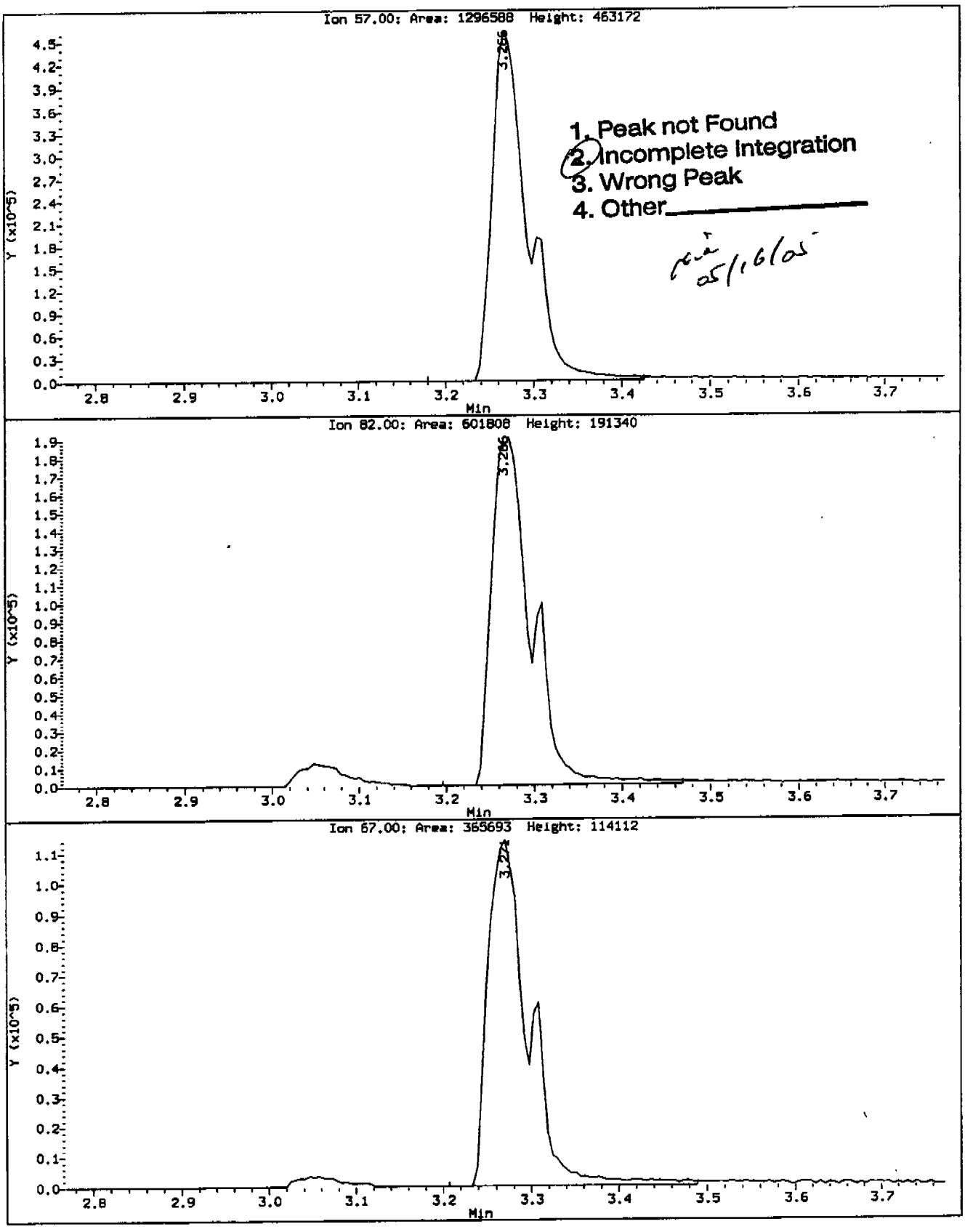
Injection Date: 13-MAY-2005 13:18
Instrument: MSK.i
Client Sample ID: SSTD160

Compound: Cyclohexanol
CAS Number:



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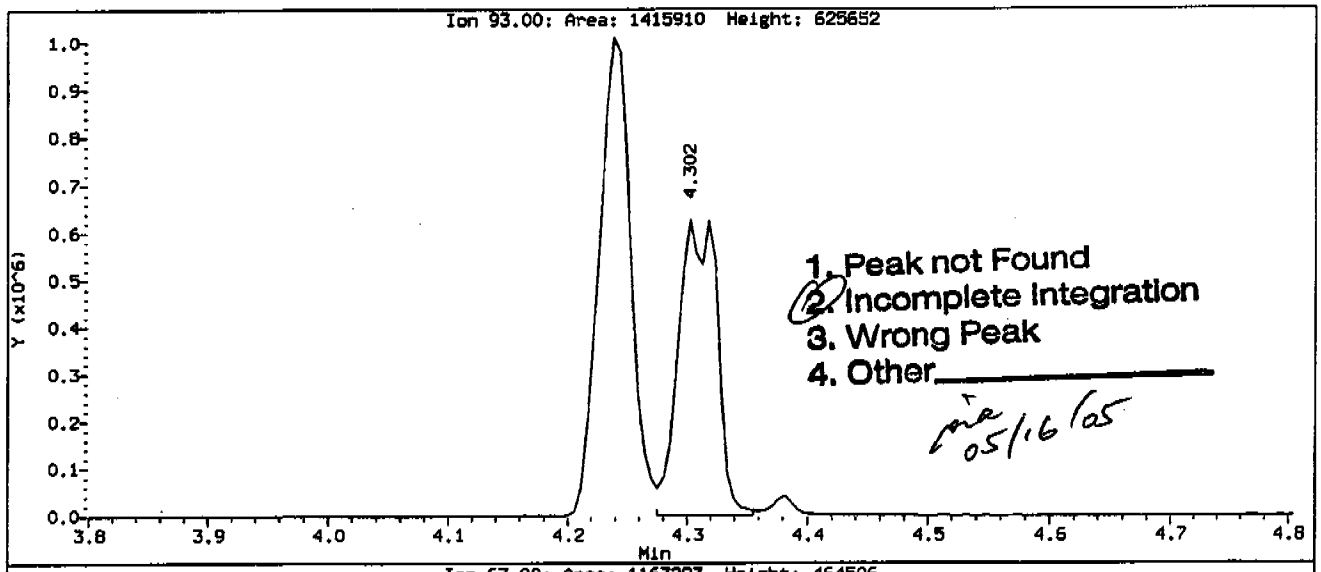
Injection Date: 13-MAY-2005 13:18
Instrument: MSK.i
Client Sample ID: SSTD160

Compound: Bis(2-chloroethyl)ether
CAS Number: 111-44-4



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other _____

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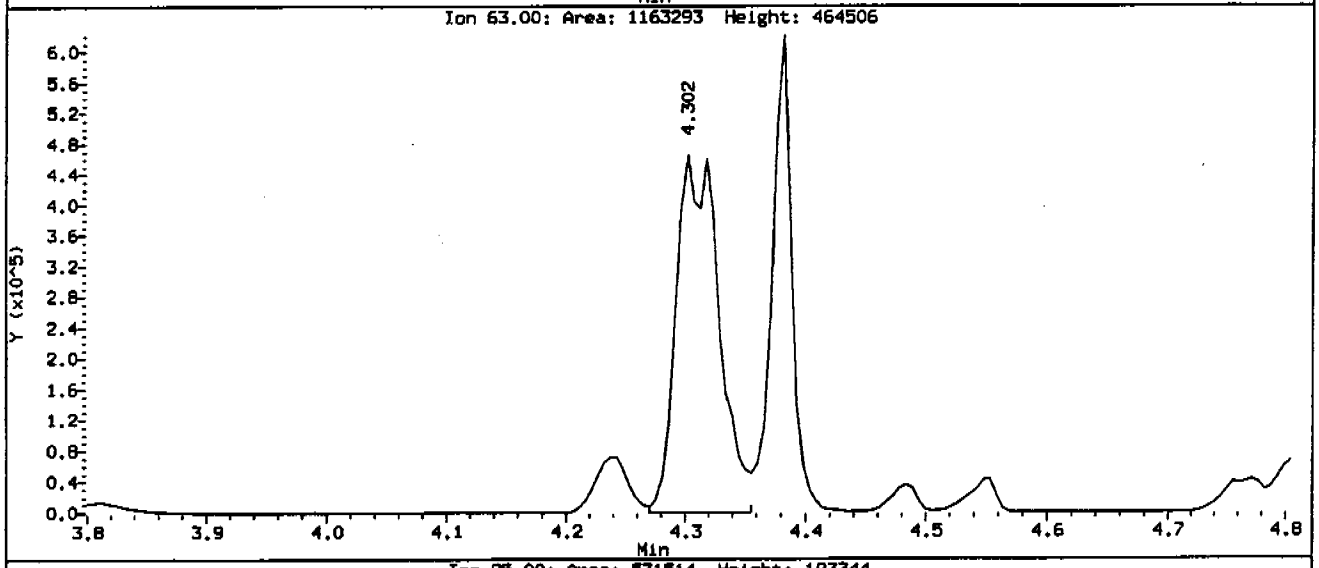

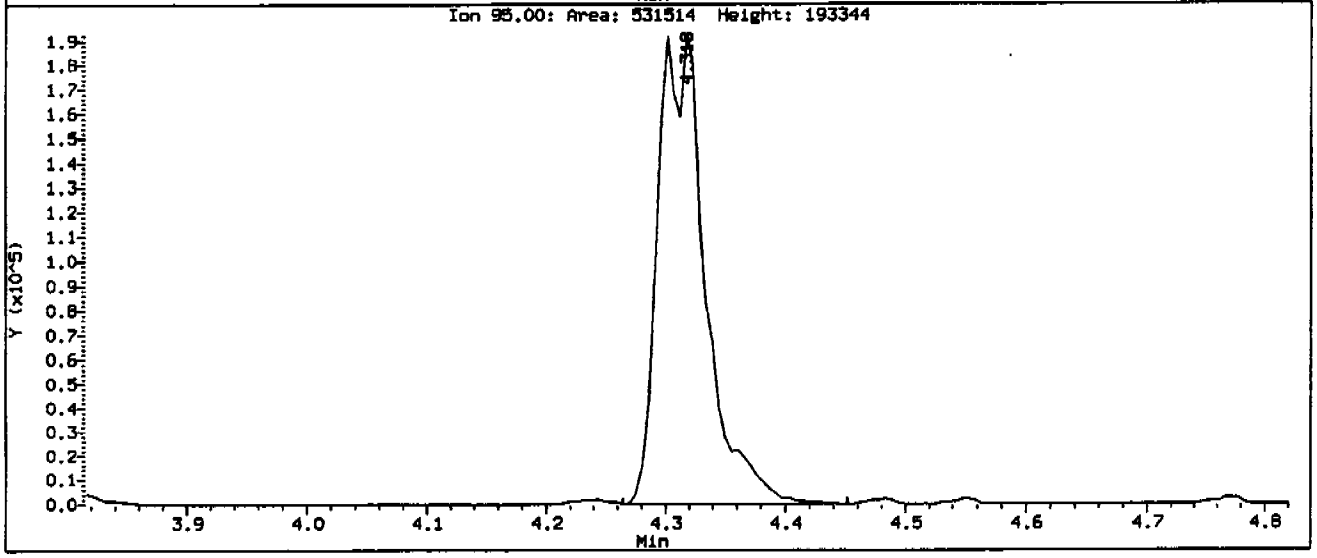

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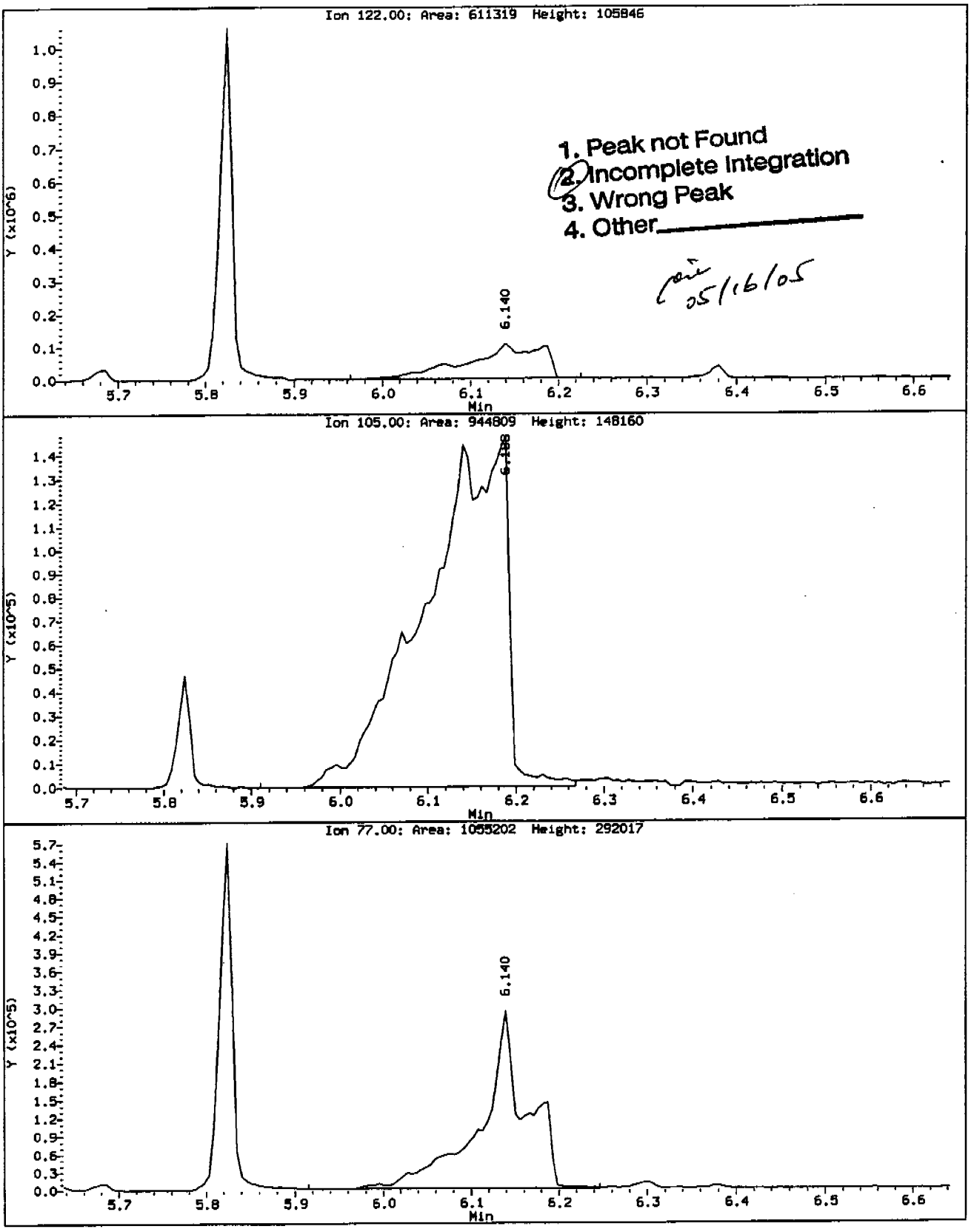
Injection Date: 13-MAY-2005 13:18
Instrument: MSK.i
Client Sample ID: SSTD160

Compound: Benzoic Acid
CAS Number: 65-85-0



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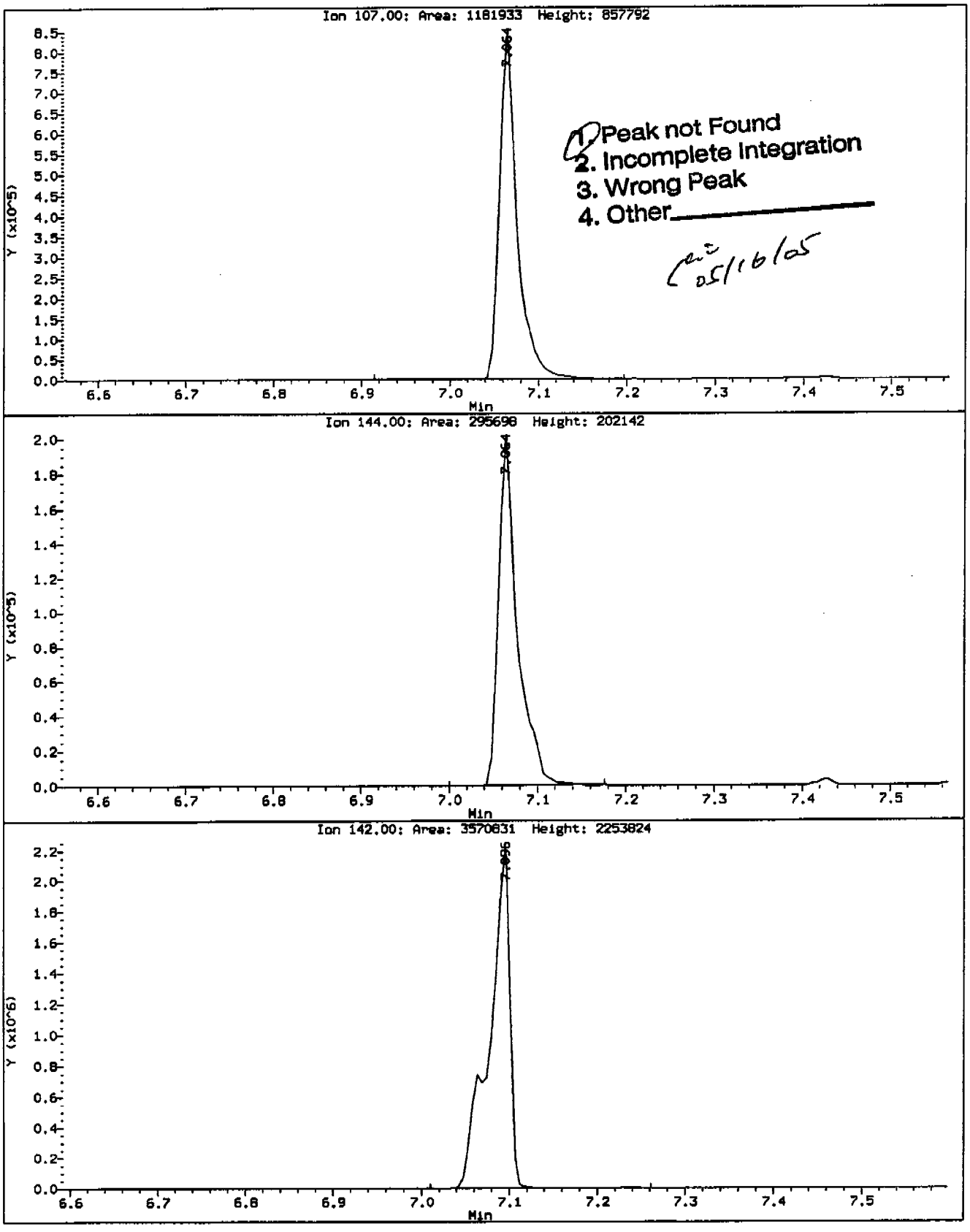
Injection Date: 13-MAY-2005 13:18
Instrument: MSK.i
Client Sample ID: SSTD160

Compound: 4-Chloro-3-Methylphenol
CAS Number: 59-50-7



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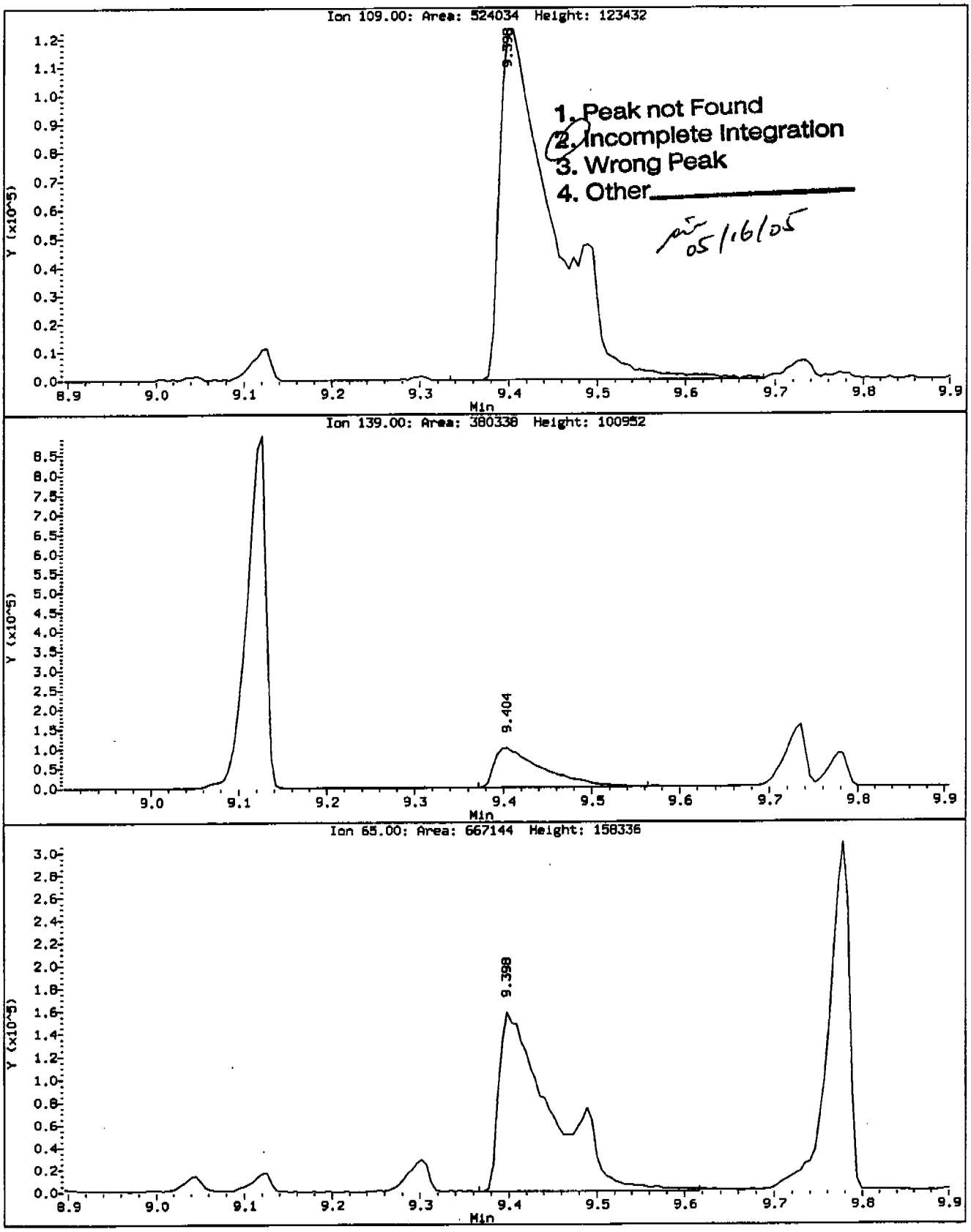
Injection Date: 13-MAY-2005 13:18
Instrument: MSK.i
Client Sample ID: SSTD160

Compound: 4-Nitrophenol
CAS Number: 100-02-7



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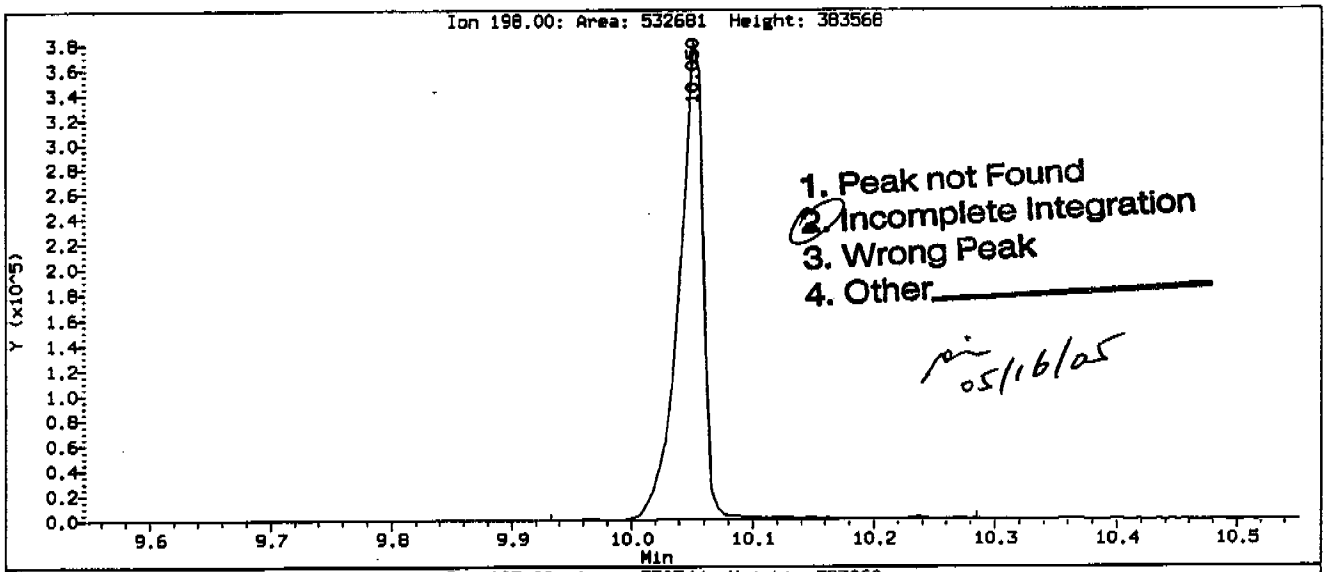
Injection Date: 13-MAY-2005 13:18
Instrument: MSK.i
Client Sample ID: SSTD160

Compound: 4,6-Dinitro-2-methylphenol
CAS Number: 534-52-1



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other _____

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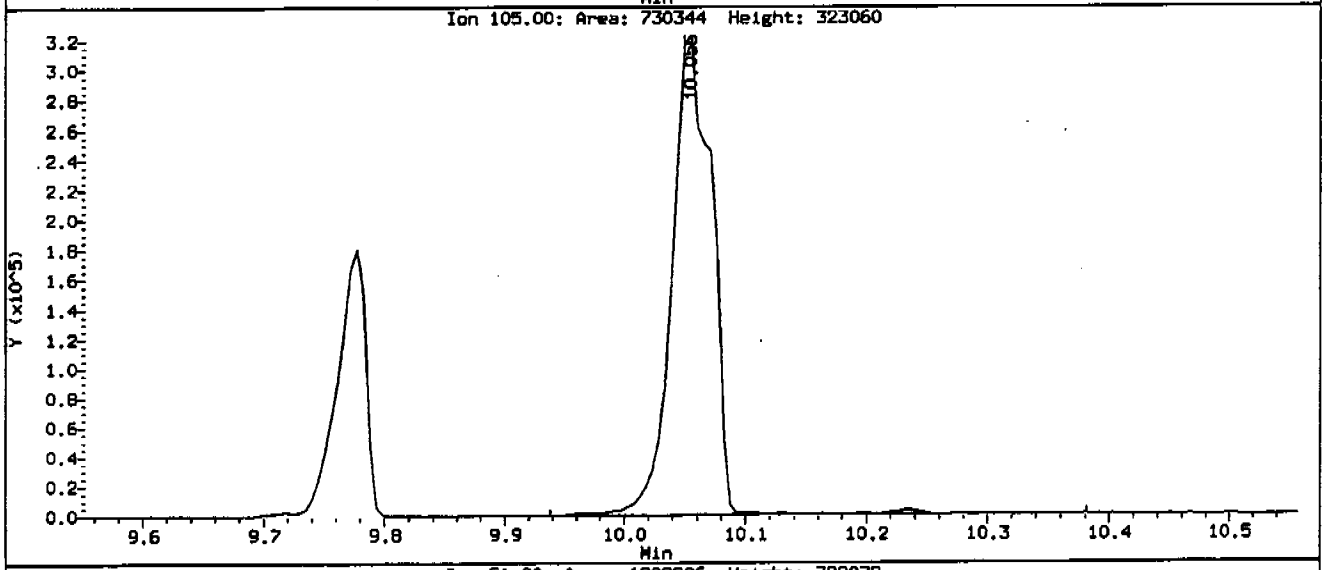
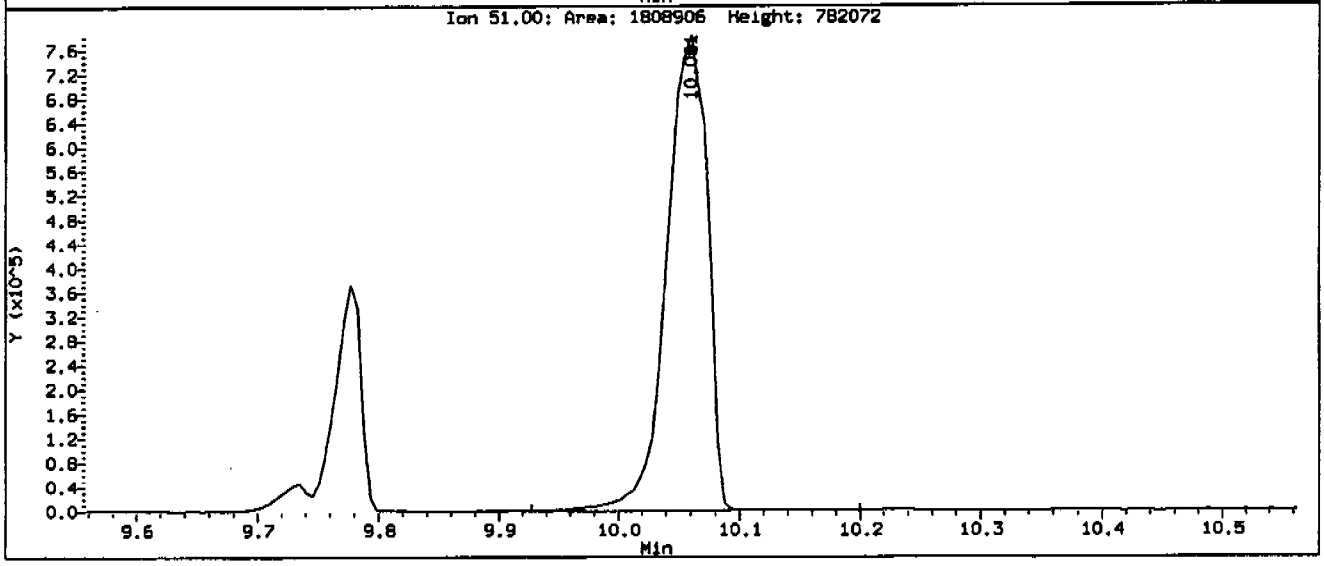




Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3130.D
Report Date: 14-May-2005 09:51

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3130.D
Lab Smp Id: SSTD120 Client Smp ID: SSTD120
Inj Date : 13-MAY-2005 13:50
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD120
Misc Info : SV0217-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Meth Date : 14-May-2005 09:51 hongs Quant Type: ISTD
Cal Date : 13-MAY-2005 13:50 Cal File: KCAL3130.D
Als bottle: 6 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	1.347	1.347	(0.297)	315333	120.000	133.0(M)
4	N-Nitrosodimethylamine	74	1.812	1.812	(0.399)	537283	120.000	131.3
3	Pyridine	79	1.785	1.785	(0.393)	986967	120.000	132.8(M)
5	Dimethylformamide	44	2.261	2.261	(0.498)	699244	120.000	126.5(M)
$ 10	2-Fluorophenol	112	3.270	3.270	(0.720)	958323	120.000	125.0
11	Cyclohexanol	57	3.270	3.270	(0.720)	974284	120.000	118.6
17	Aniline	93	4.248	4.248	(0.935)	1588531	120.000	121.1
19	Bis(2-chloroethyl)ether	93	4.312	4.312	(0.949)	1185659	120.000	131.4(M)
$ 15	Phenol-d5	99	4.333	4.333	(0.954)	1253514	120.000	125.4
16	Phenol	94	4.344	4.344	(0.956)	1335396	120.000	125.1
20	2-Chlorophenol	128	4.392	4.392	(0.967)	1111161	120.000	130.2
21	1,3-Dichlorobenzene	146	4.494	4.494	(0.989)	1263641	120.000	127.7
* 22	1,4-Dichlorobenzene-d4	152	4.542	4.542	(1.000)	256244	40.0000	
23	1,4-Dichlorobenzene	146	4.558	4.558	(1.004)	1368038	120.000	130.6
26	1,2-Dichlorobenzene	146	4.782	4.782	(1.053)	1278008	120.000	132.3
25	Benzyl Alcohol	108	4.814	4.814	(1.060)	466089	120.000	117.1
28	2,2-oxybis(1-Chloropropane)	45	4.953	4.953	(1.091)	1258630	120.000	133.0
27	2-Methylphenol	108	5.012	5.012	(1.103)	797478	120.000	114.2
35	Hexachloroethane	117	5.129	5.129	(1.129)	582014	120.000	128.7
32	N-Nitrosodinpropylamine	70	5.161	5.161	(1.136)	839594	120.000	115.1
29	3 and 4-Methylphenol	108	5.220	5.220	(1.149)	1999669	240.000	256.5(A)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.273	5.273	(0.862)	1468099	120.000	128.1
	37 Nitrobenzene	77	5.300	5.300	(0.866)	1537898	120.000	129.0
	39 Isophorone	82	5.605	5.605	(0.916)	1863896	120.000	120.3
	40 2-Nitrophenol	139	5.690	5.690	(0.930)	525388	120.000	122.9
	41 2,4-Dimethylphenol	107	5.834	5.834	(0.954)	1159120	120.000	130.0
	42 Bis(2-chloroethoxy)methane	93	5.904	5.904	(0.965)	1258382	120.000	127.0
	45 2,4-Dichlorophenol	162	6.037	6.037	(0.987)	824346	120.000	123.9
	47 1,2,4-Trichlorobenzene	180	6.075	6.075	(0.993)	1026743	120.000	124.1
*	48 Naphthalene-d8	136	6.118	6.118	(1.000)	851595	40.0000	
	44 Benzoic Acid	122	6.150	6.150	(1.005)	500658	120.000	127.4(M)
	50 Naphthalene	128	6.150	6.150	(1.005)	3111485	120.000	130.9
	51 4-Chloroaniline	127	6.310	6.310	(1.031)	1253597	120.000	130.9
	54 Hexachlorobutadiene	225	6.390	6.390	(1.045)	728848	120.000	121.8
	62 2-Methylnaphthalene	142	7.106	7.106	(1.162)	2180611	120.000	104.7
	59 4-Chloro-3-Methylphenol	107	7.074	7.074	(1.156)	952085	120.000	124.4(M)
	66 Hexachlorocyclopentadiene	237	7.442	7.442	(0.847)	677409	120.000	155.7
	67 2,4,6-Trichlorophenol	196	7.645	7.645	(0.870)	634600	120.000	131.3
	68 2,4,5-Trichlorophenol	196	7.736	7.736	(0.880)	681095	120.000	135.0
$	69 2-Fluorobiphenyl	172	7.731	7.731	(0.880)	2266899	120.000	135.6
	72 2-Chloronaphthalene	162	7.854	7.854	(0.894)	1845435	120.000	132.7
	73 2-Nitroaniline	65	8.153	8.153	(0.928)	755120	120.000	134.8
	76 Dimethylphthalate	163	8.522	8.522	(0.970)	2031042	120.000	128.6
	79 Acenaphthylene	152	8.532	8.532	(0.971)	2812547	120.000	134.6
	80 2,6-Dinitrotoluene	165	8.639	8.639	(0.983)	410387	120.000	124.0
*	82 Acenaphthene-d10	164	8.789	8.789	(1.000)	413660	40.0000	
	83 Acenaphthene	153	8.853	8.853	(1.007)	1676968	120.000	131.6
	81 3-Nitroaniline	138	8.879	8.879	(1.010)	407305	120.000	124.0
	84 2,4-Dinitrophenol	184	9.056	9.056	(1.030)	231630	120.000	159.2
	86 Dibenzofuran	168	9.136	9.136	(1.040)	2427386	120.000	126.9
	88 2,4-Dinitrotoluene	165	9.312	9.312	(1.060)	522620	120.000	125.3
	85 4-Nitrophenol	109	9.419	9.419	(1.072)	418904	120.000	141.5(M)
	93 Diethylphthalate	149	9.788	9.788	(1.114)	2056626	120.000	130.1
	94 Fluorene	166	9.745	9.745	(1.109)	1974065	120.000	128.5
	95 4-Chlorophenyl-phenylether	204	9.793	9.793	(1.114)	1120314	120.000	129.3
	98 4-Nitroaniline	138	10.028	10.028	(1.141)	369041	120.000	122.1
	99 4,6-Dinitro-2-methylphenol	198	10.060	10.060	(0.879)	392495	120.000	160.8(AM)
	100 N-Nitrosodiphenylamine	169	10.071	10.071	(0.880)	1410288	120.000	138.9
	102 Azobenzene	77	10.081	10.081	(0.881)	3301828	120.000	149.6
$	104 2,4,6-Tribromophenol	330	10.252	10.252	(1.167)	284172	120.000	117.8
	109 4-Bromophenyl-phenylether	248	10.674	10.674	(0.932)	633421	120.000	130.7
	112 Hexachlorobenzene	284	10.904	10.904	(0.952)	638459	120.000	126.1
	117 Pentachlorophenol	266	11.321	11.321	(0.989)	310649	120.000	136.8
*	121 Phenanthrene-d10	188	11.449	11.449	(1.000)	666434	40.0000	
	122 Phenanthrene	178	11.502	11.502	(1.005)	2634766	120.000	128.7
	124 Anthracene	178	11.588	11.588	(1.012)	2498894	120.000	126.9
	126 Carbazole	167	11.994	11.994	(1.048)	2045508	120.000	125.3
	129 Di-n-Butylphthalate	149	12.870	12.870	(1.124)	2820501	120.000	130.2
	134 Fluoranthene	202	13.789	13.789	(1.204)	2557231	120.000	121.7
	135 Benzidine	184	14.184	14.184	(0.854)	820460	120.000	130.8
	137 Pyrene	202	14.211	14.211	(0.856)	2560403	120.000	137.2
$	139 Terphenyl-d14	244	14.649	14.649	(0.882)	1970958	120.000	134.5
	145 3,3-Dimethylbenzidine	212	15.653	15.653	(0.942)	898144	120.000	126.4
	146 Butylbenzylphthalate	149	15.771	15.771	(0.950)	994341	120.000	135.8
	150 Benzo(a)Anthracene	228	16.583	16.583	(0.998)	2038786	120.000	129.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.609	16.609	(1.000)	455704	40.0000	
152 3,3'-Dichlorobenzidine	252	16.679	16.679	(1.004)	844213	120.000	142.0
154 Chrysene	228	16.674	16.674	(1.004)	1960817	120.000	131.7
155 bis(2-ethylhexyl)Phthalate	149	16.994	16.994	(1.023)	1232628	120.000	135.8
158 Di-n-octylphthalate	149	18.143	18.143	(0.944)	2027409	120.000	143.9
160 Benzo(b)fluoranthene	252	18.591	18.591	(0.968)	1835058	120.000	135.7
161 Benzo(k)fluoranthene	252	18.639	18.639	(0.970)	1698860	120.000	127.6
165 Benzo(a)pyrene	252	19.131	19.131	(0.996)	1566165	120.000	130.2
* 166 Perylene-d12	264	19.211	19.211	(1.000)	341474	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.942	20.942	(1.090)	1578959	120.000	139.5
174 Dibenzo(a,h)anthracene	278	20.990	20.990	(1.093)	1489265	120.000	136.2
177 Benzo(g,h,i)perylene	276	21.396	21.396	(1.114)	1321659	120.000	133.0

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3130.D Page 4
Report Date: 14-May-2005 09:51

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

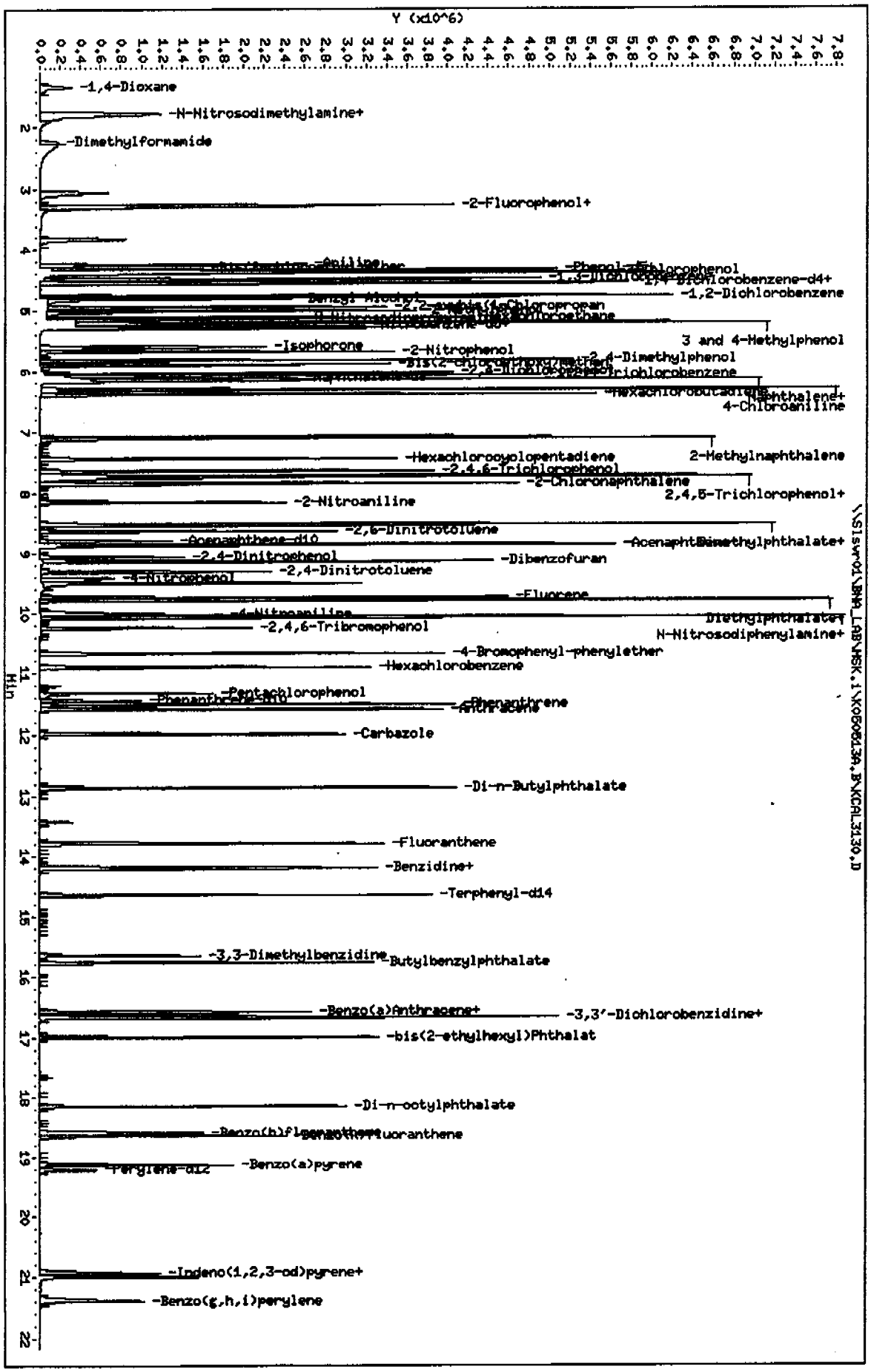
Instrument ID: MSK.i
Lab File ID: KCAL3130.D
Lab Smp Id: SSTD120
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Misc Info: SV0217-05

Calibration Date: 13-MAY-2005
Calibration Time: 12:14
Client Smp ID: SSTD120
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	181066	90533	362132	256244	41.52
48 Naphthalene-d8	627500	313750	1255000	851595	35.71
82 Acenaphthene-d10	358476	179238	716952	413660	15.39
121 Phenanthrene-d10	655247	327624	1310494	666434	1.71
153 Chrysene-d12	535207	267604	1070414	455704	-14.85
166 Perylene-d12	427031	213516	854062	341474	-20.04

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.52	4.02	5.02	4.54	0.40
48 Naphthalene-d8	6.11	5.61	6.61	6.12	0.21
82 Acenaphthene-d10	8.78	8.28	9.28	8.79	0.14
121 Phenanthrene-d10	11.43	10.93	11.93	11.45	0.16
153 Chrysene-d12	16.59	16.09	17.09	16.61	0.11
166 Perylene-d12	19.20	18.70	19.70	19.21	0.07

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

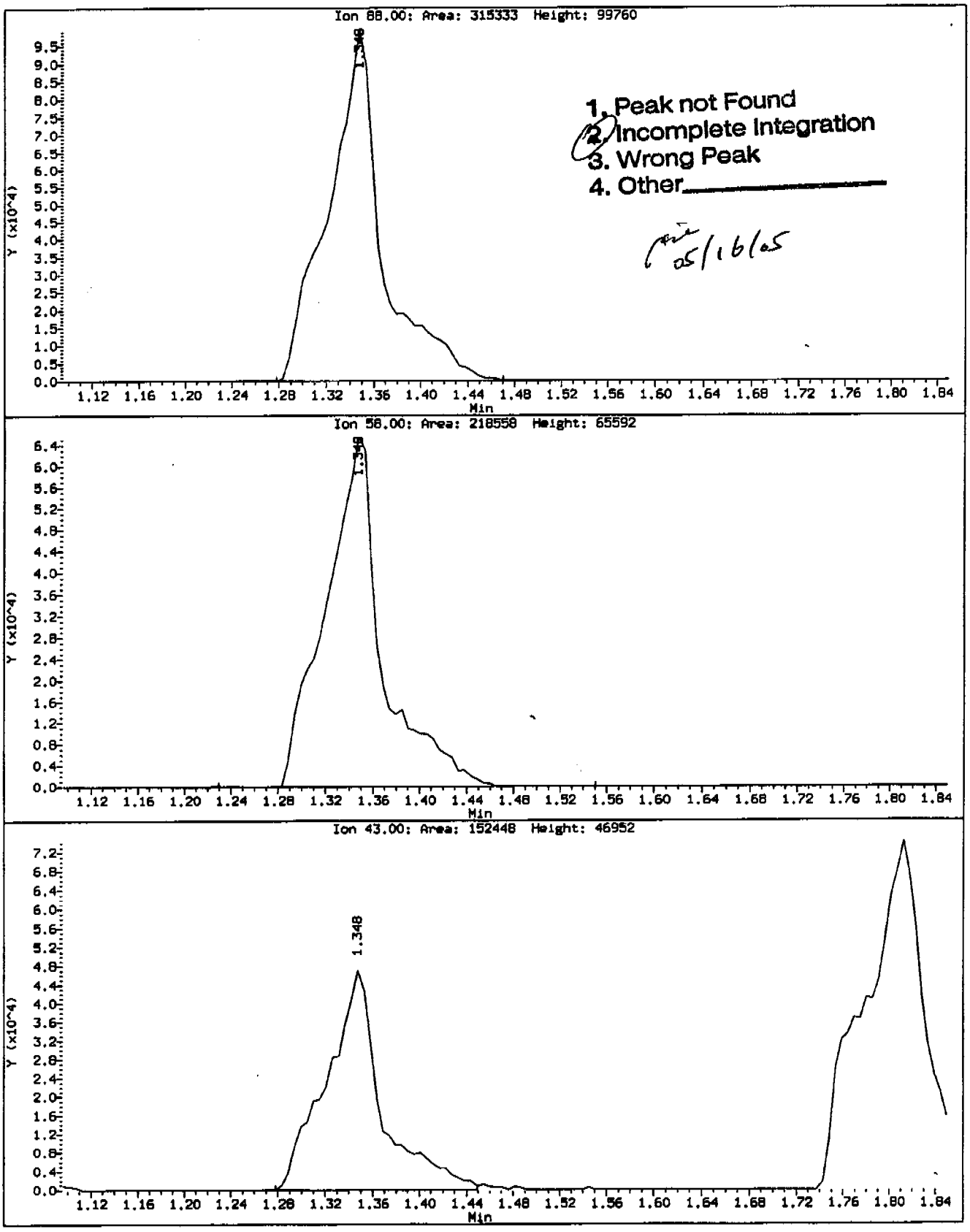


Data File: \\Slsvr01\BNA_LAB\HSK.i\K0605L30A,B\KCAL3130.D
Date : 13-MAY-2005 13:50
Client ID: SSTD120
Sample Info: SSTD120
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3130.D
Injection Date: 13-MAY-2005 13:50
Instrument: MSK.i
Client Sample ID: SSTD120

Compound: 1,4-Dioxane
CAS Number:



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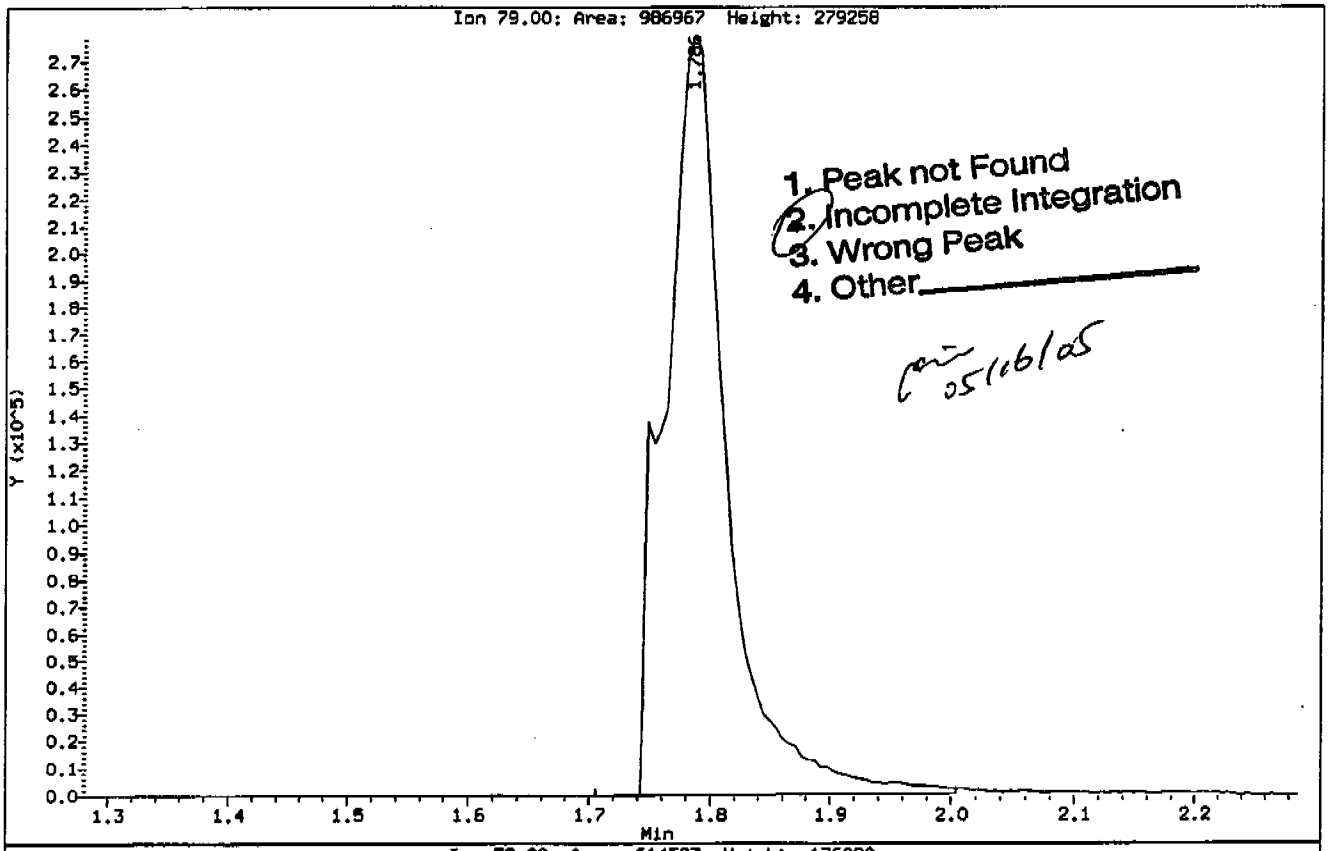
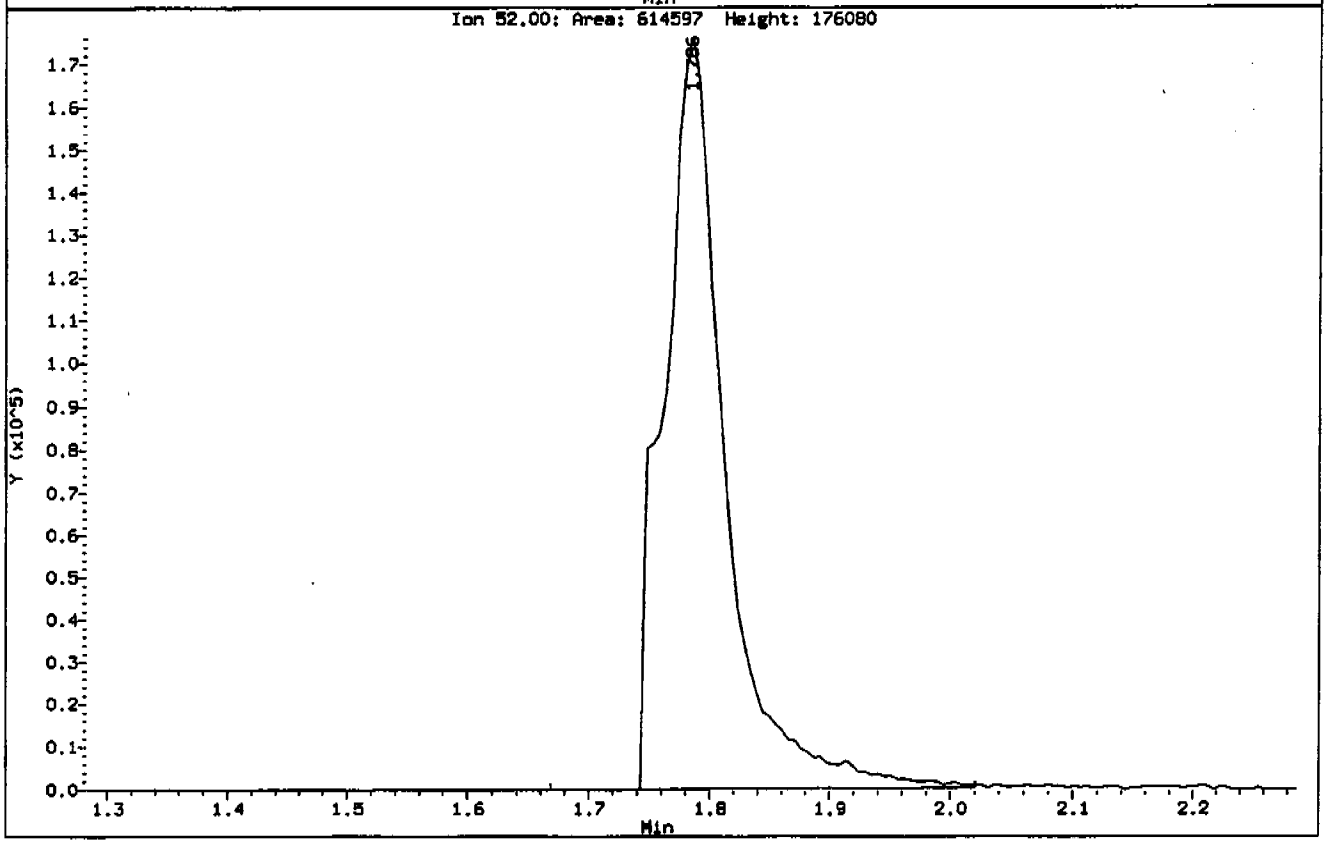
Injection Date: 13-MAY-2005 13:50
Instrument: MSK.i
Client Sample ID: SSTD120

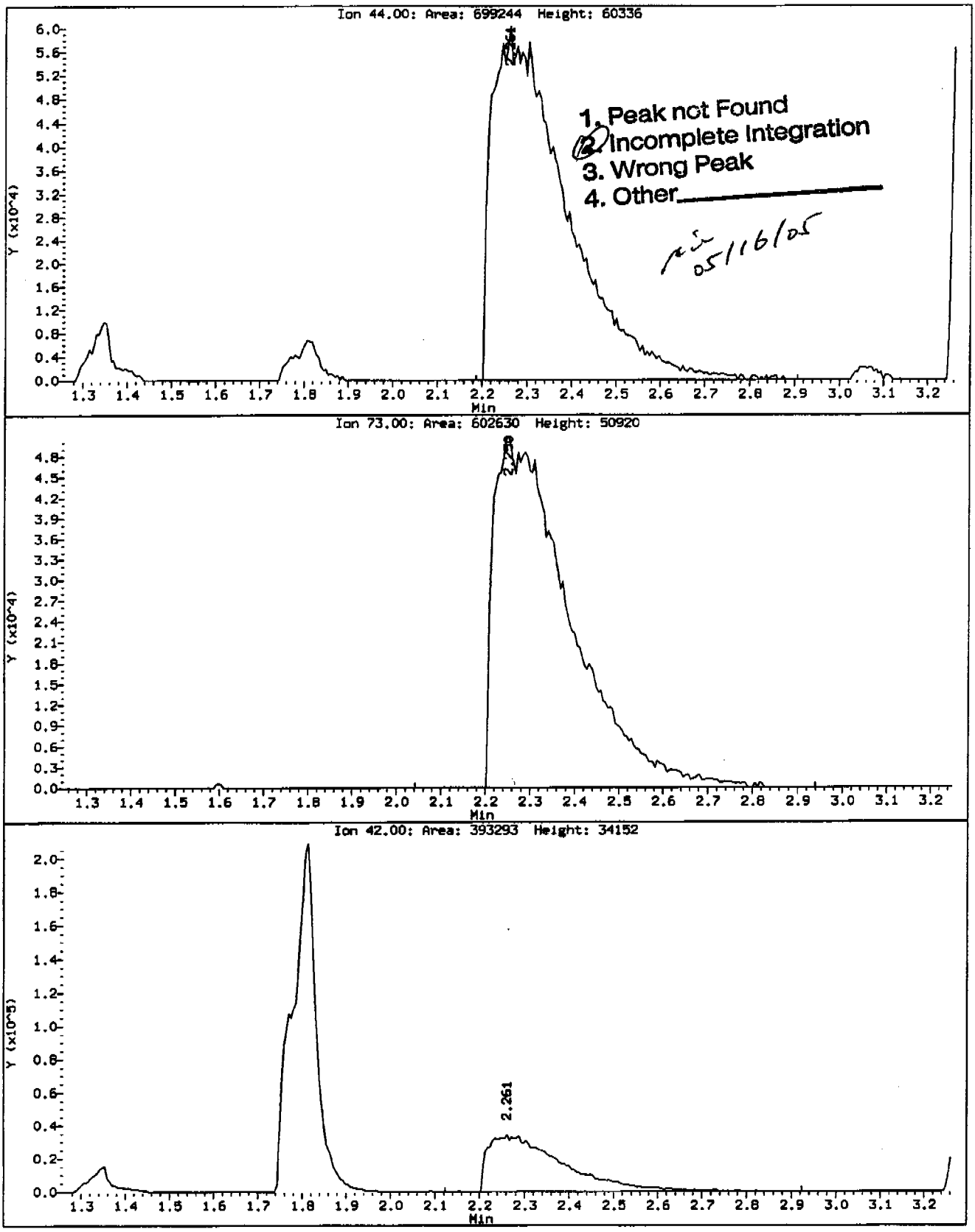
Compound: Pyridine
CAS Number: 110-86-1





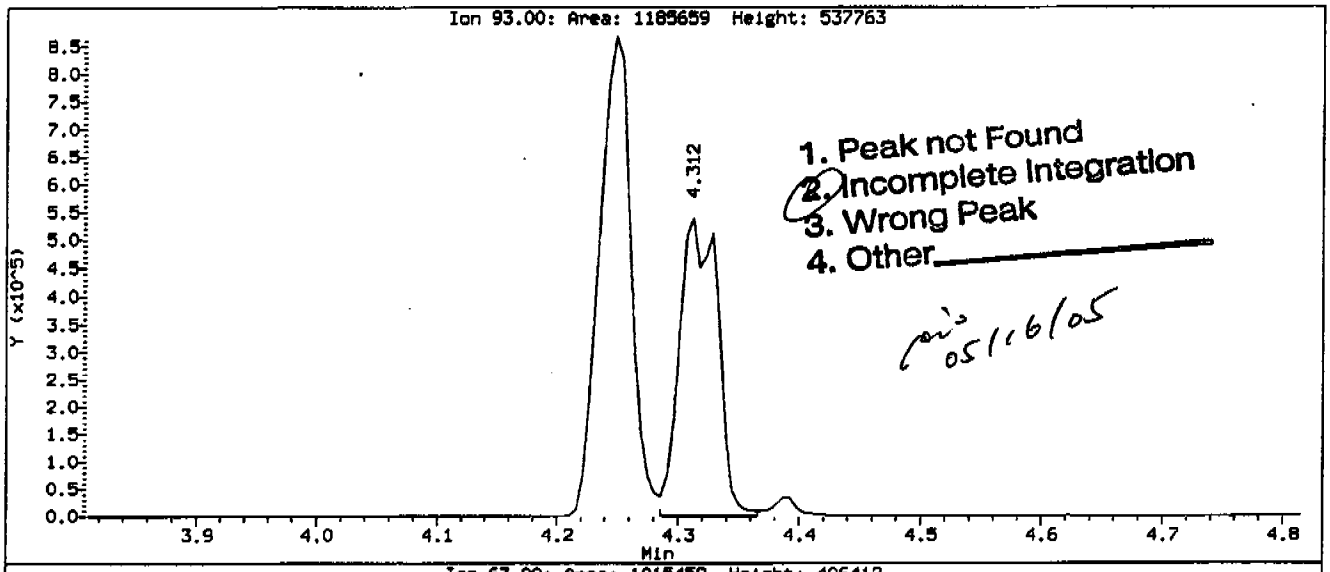
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3130.D
Injection Date: 13-MAY-2005 13:50
Instrument: MSK.i
Client Sample ID: SSTD120

Compound: Dimethylformamide
CAS Number: 68-12-2



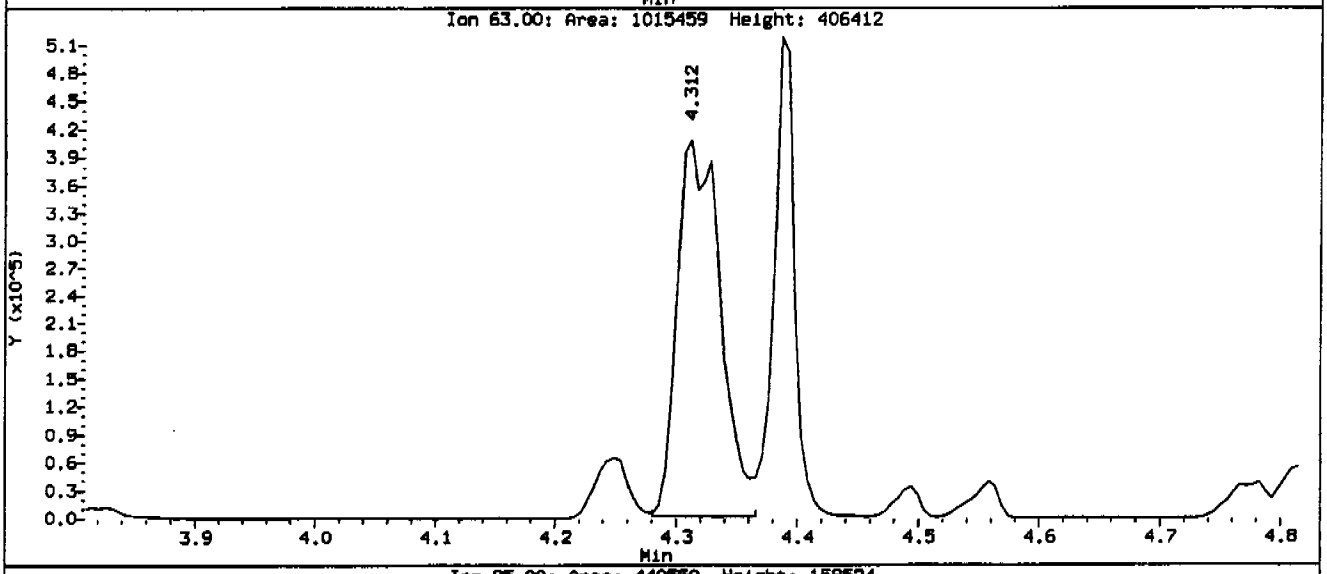
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3130.D
Injection Date: 13-MAY-2005 13:50
Instrument: MSK.i
Client Sample ID: SSTD120

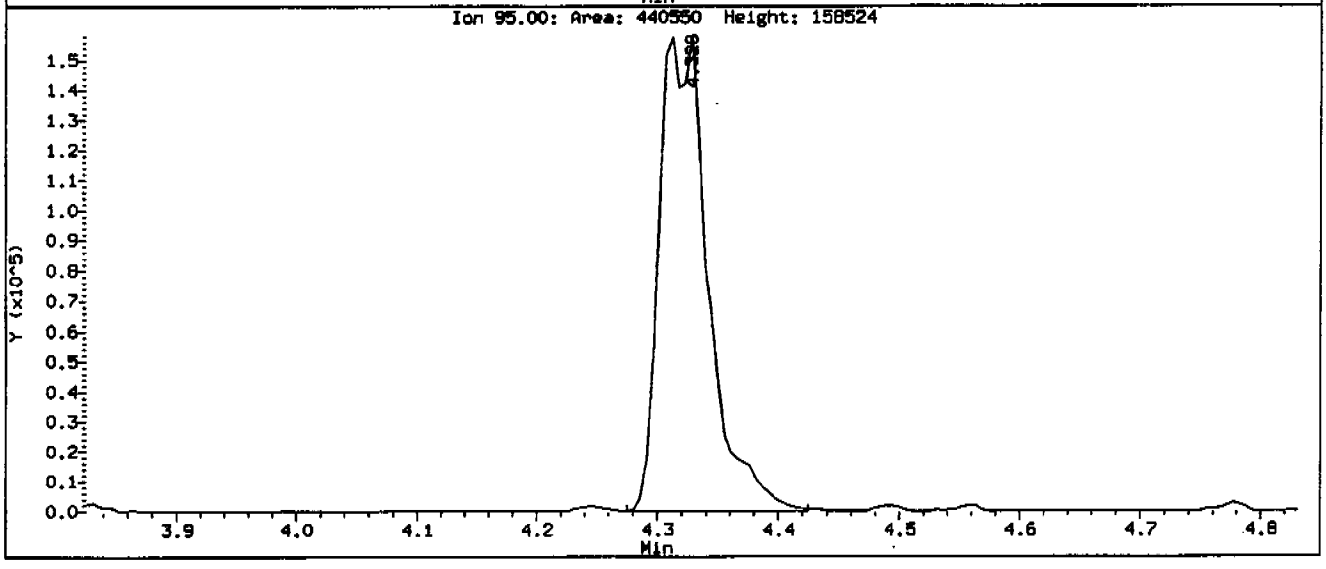
Compound: Bis(2-chloroethyl)ether
CAS Number: 111-44-4



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other _____

5/16/05





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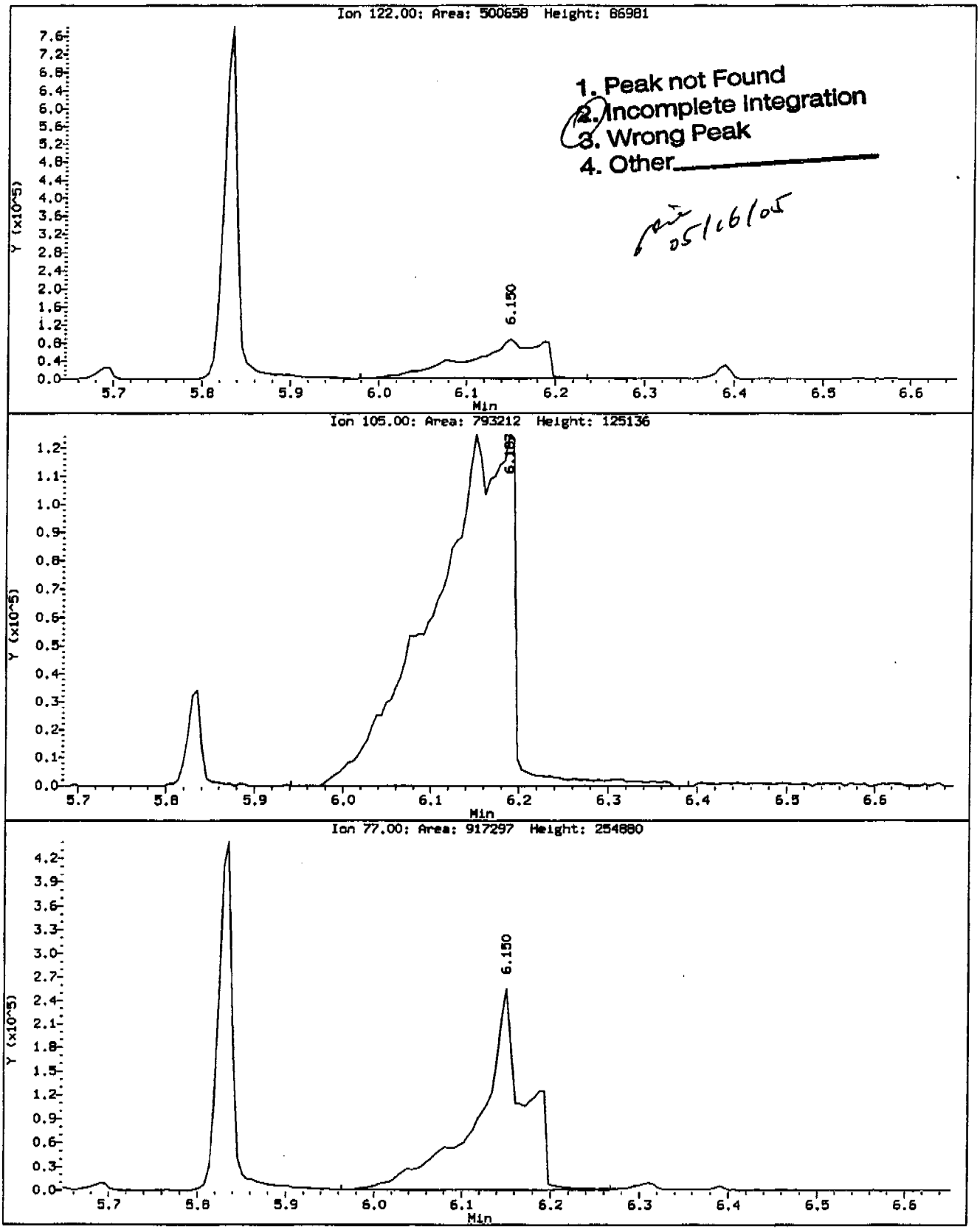
Injection Date: 13-MAY-2005 13:50
Instrument: MSK.i
Client Sample ID: SSTD120

Compound: Benzoic Acid
CAS Number: 65-85-0



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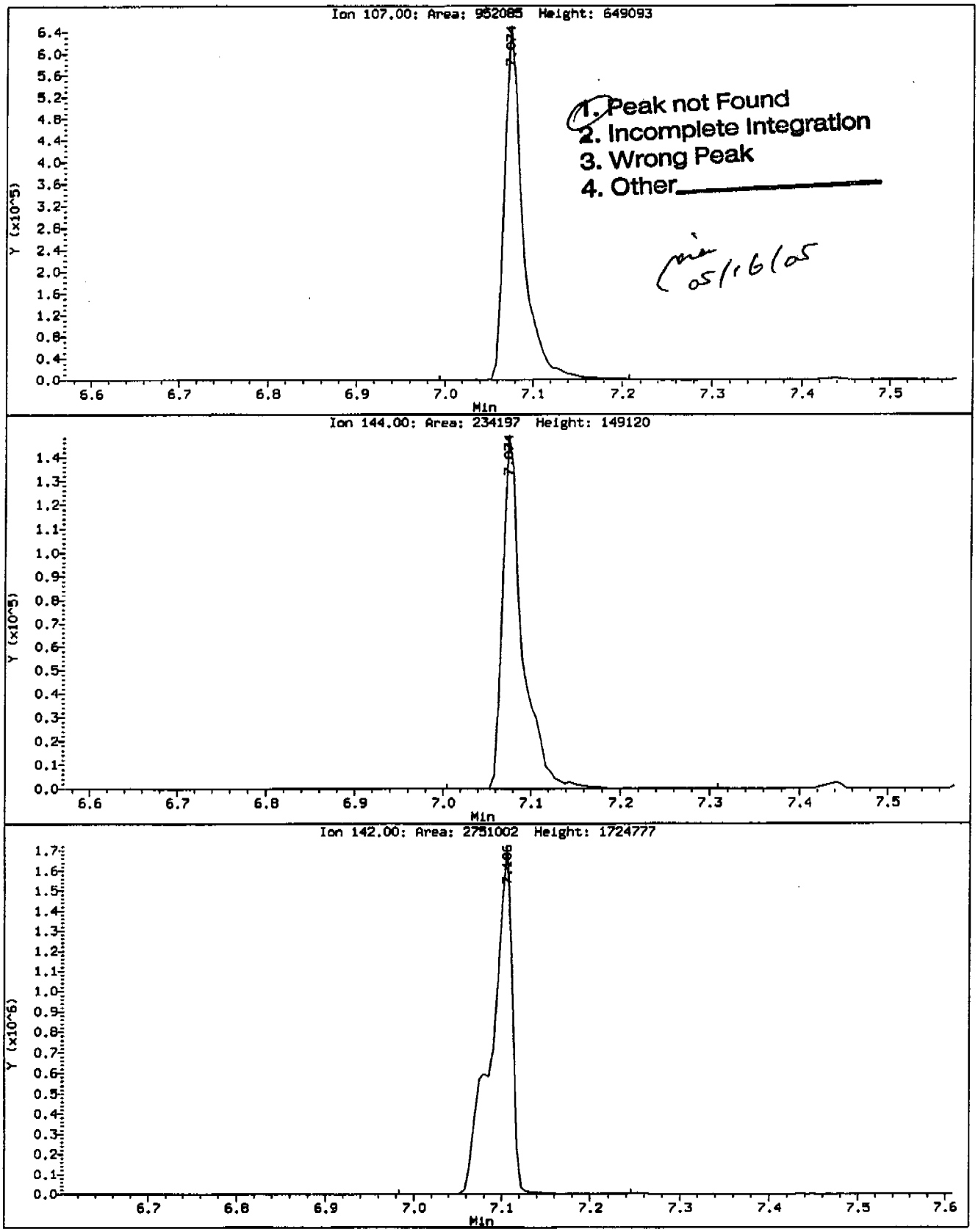
Injection Date: 13-MAY-2005 13:50
Instrument: MSK.i
Client Sample ID: SSTD120

Compound: 4-Chloro-3-Methylphenol
CAS Number: 59-50-7



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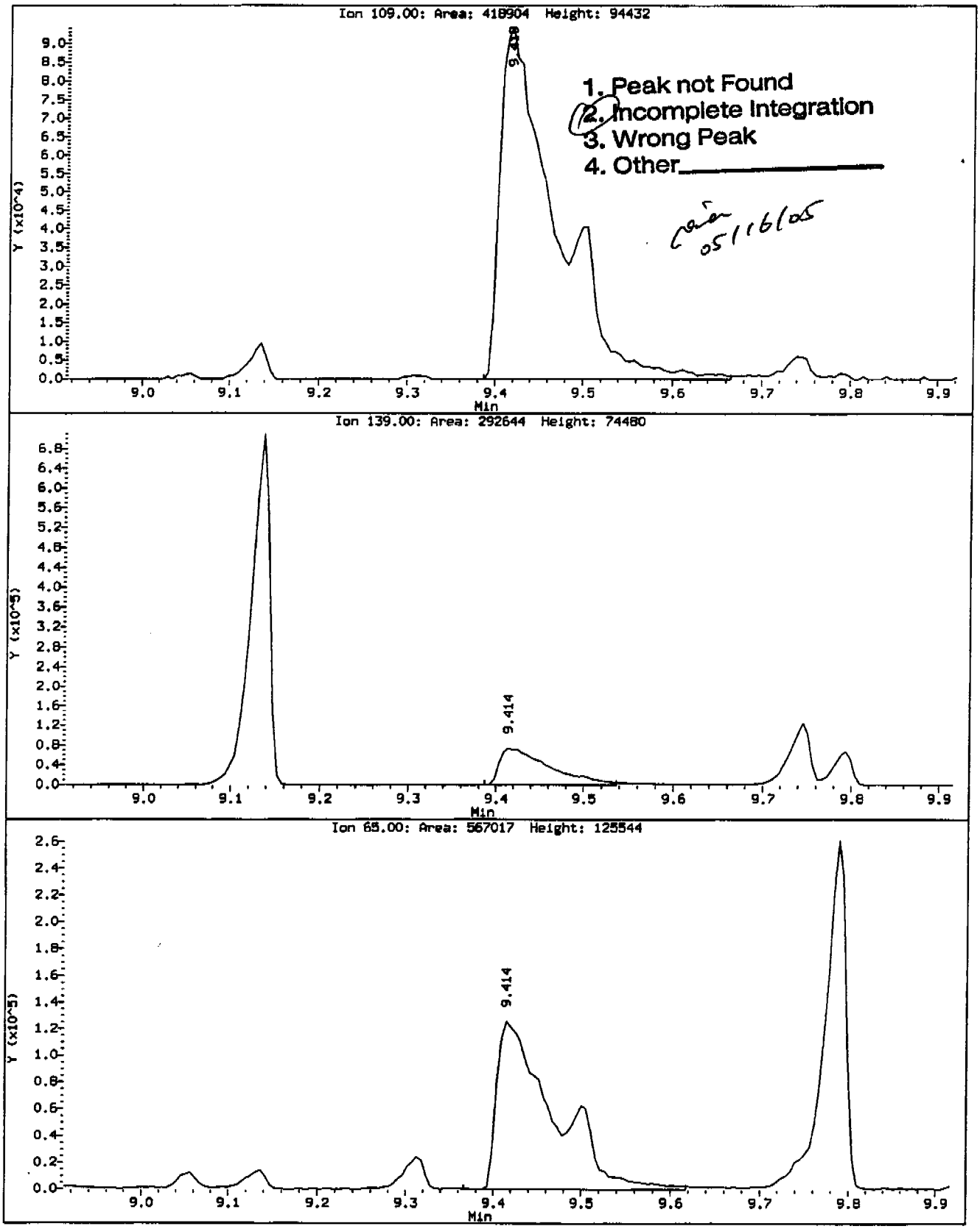
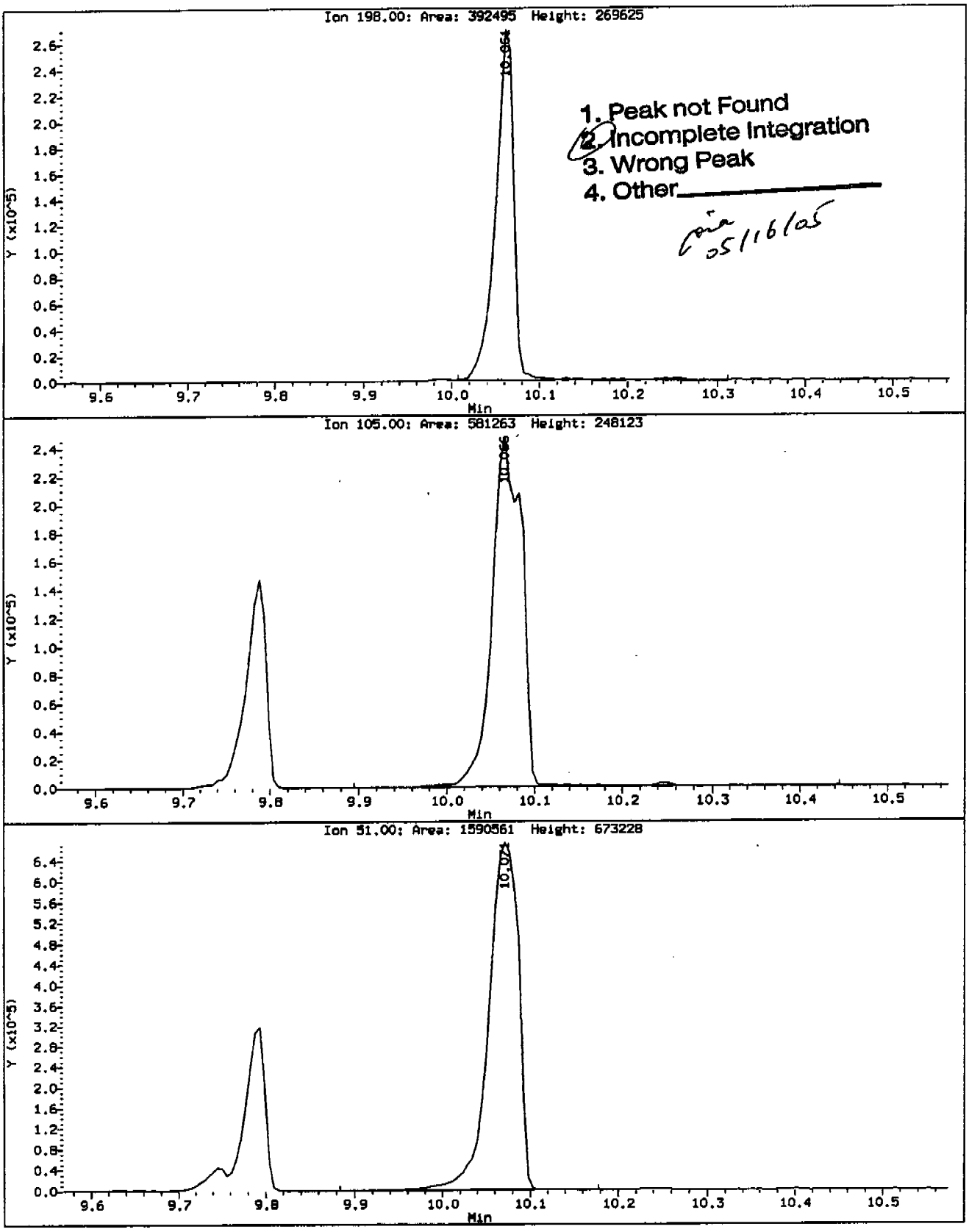
Injection Date: 13-MAY-2005 13:50
Instrument: MSK.i
Client Sample ID: SSTD120

Compound: 4-Nitrophenol
CAS Number: 100-02-7



Data File: \\Slevr01\BNA_LAB\MSK.i\K050513A.B\KCAL3130.D
Injection Date: 13-MAY-2005 13:50
Instrument: MSK.i
Client Sample ID: SSTD120

Compound: 4,6-Dinitro-2-methylphenol
CAS Number: 534-52-1



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3131.D
Report Date: 14-May-2005 09:51

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3131.D
Lab Smp Id: SSTD080 Client Smp ID: SSTD080
Inj Date : 13-MAY-2005 14:22
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD080
Misc Info : SV0216-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Meth Date : 14-May-2005 09:51 hongs Quant Type: ISTD
Cal Date : 13-MAY-2005 14:22 Cal File: KCAL3131.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	1.248	1.248	(0.276)	182106	80.0000	80.62
4	N-Nitrosodimethylamine	74	1.686	1.686	(0.372)	313399	80.0000	80.41
3	Pyridine	79	1.649	1.649	(0.364)	618072	80.0000	87.29(M)
5	Dimethylformamide	44	2.183	2.183	(0.482)	419660	80.0000	79.69(M)
$ 10	2-Fluorophenol	112	3.230	3.230	(0.713)	625652	80.0000	85.69
11	Cyclohexanol	57	3.236	3.236	(0.715)	600474	80.0000	76.76
17	Aniline	93	4.224	4.224	(0.933)	1038572	80.0000	83.13
19	Bis(2-chloroethyl)ether	93	4.299	4.299	(0.949)	706241	80.0000	82.16
$ 15	Phenol-d5	99	4.309	4.309	(0.952)	796463	80.0000	83.66
16	Phenol	94	4.325	4.325	(0.955)	839275	80.0000	82.54
20	2-Chlorophenol	128	4.368	4.368	(0.965)	679202	80.0000	83.54
21	1,3-Dichlorobenzene	146	4.480	4.480	(0.989)	769767	80.0000	81.68
* 22	1,4-Dichlorobenzene-d4	152	4.528	4.528	(1.000)	244092	40.0000	
23	1,4-Dichlorobenzene	146	4.544	4.544	(1.004)	834721	80.0000	83.68
26	1,2-Dichlorobenzene	146	4.769	4.769	(1.053)	767781	80.0000	83.44
25	Benzyl Alcohol	108	4.790	4.790	(1.058)	343726	80.0000	90.66
28	2,2-oxybis(1-Chloropropane)	45	4.934	4.934	(1.090)	725329	80.0000	80.45
27	2-Methylphenol	108	4.998	4.998	(1.104)	545107	80.0000	81.98
35	Hexachloroethane	117	5.121	5.121	(1.131)	354415	80.0000	82.28
32	N-Nitrosodinpropylamine	70	5.137	5.137	(1.134)	591703	80.0000	85.16
29	3 and 4-Methylphenol	108	5.196	5.196	(1.147)	1278514	160.000	172.2(A)

5/16/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3131.D
Report Date: 14-May-2005 09:51

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.255	5.255	(0.861)	918435	80.0000	79.77
	37 Nitrobenzene	77	5.282	5.282	(0.865)	953903	80.0000	79.64
	39 Isophorone	82	5.581	5.581	(0.914)	1259197	80.0000	80.87
	40 2-Nitrophenol	139	5.677	5.677	(0.930)	353865	80.0000	82.41
	41 2,4-Dimethylphenol	107	5.816	5.816	(0.953)	772338	80.0000	86.22
	42 Bis(2-chloroethoxy)methane	93	5.885	5.885	(0.964)	817341	80.0000	82.13
	45 2,4-Dichlorophenol	162	6.024	6.024	(0.987)	558429	80.0000	83.52
	47 1,2,4-Trichlorobenzene	180	6.062	6.062	(0.993)	683047	80.0000	82.14
*	48 Naphthalene-d8	136	6.104	6.104	(1.000)	855620	40.0000	
	44 Benzoic Acid	122	6.136	6.136	(1.005)	363720	80.0000	92.15(M)
	50 Naphthalene	128	6.136	6.136	(1.005)	2015844	80.0000	84.44
	51 4-Chloroaniline	127	6.291	6.291	(1.031)	821094	80.0000	85.36
	54 Hexachlorobutadiene	225	6.377	6.377	(1.045)	493913	80.0000	82.14
	62 2-Methylnaphthalene	142	7.093	7.093	(1.162)	1885368	80.0000	90.09
	59 4-Chloro-3-Methylphenol	107	7.066	7.066	(1.158)	653363	80.0000	84.97
	66 Hexachlorocyclopentadiene	237	7.429	7.429	(0.847)	460472	80.0000	92.68
	67 2,4,6-Trichlorophenol	196	7.627	7.627	(0.869)	470240	80.0000	85.21
	68 2,4,5-Trichlorophenol	196	7.734	7.734	(0.881)	479520	80.0000	83.26
$	69 2-Fluorobiphenyl	172	7.712	7.712	(0.879)	1557465	80.0000	81.58
	72 2-Chloronaphthalene	162	7.835	7.835	(0.893)	1298204	80.0000	81.78
	73 2-Nitroaniline	65	8.134	8.134	(0.927)	521102	80.0000	81.47
	76 Dimethylphthalate	163	8.503	8.503	(0.969)	1503152	80.0000	83.36
	79 Acenaphthylene	152	8.514	8.514	(0.970)	1971704	80.0000	82.67
	80 2,6-Dinitrotoluene	165	8.615	8.615	(0.982)	317308	80.0000	83.97
*	82 Acenaphthene-d10	164	8.775	8.775	(1.000)	472315	40.0000	
	83 Acenaphthene	153	8.834	8.834	(1.007)	1184466	80.0000	81.40
	81 3-Nitroaniline	138	8.856	8.856	(1.009)	310407	80.0000	82.74
	84 2,4-Dinitrophenol	184	9.032	9.032	(1.029)	160987	80.0000	96.89
	86 Dibenzofuran	168	9.117	9.117	(1.039)	1791838	80.0000	82.05
	88 2,4-Dinitrotoluene	165	9.294	9.294	(1.059)	408561	80.0000	85.79
	85 4-Nitrophenol	109	9.406	9.406	(1.072)	312750	80.0000	92.50(M)
	93 Diethylphthalate	149	9.764	9.764	(1.113)	1490216	80.0000	82.57
	94 Fluorene	166	9.726	9.726	(1.108)	1455277	80.0000	83.00
	95 4-Chlorophenyl-phenylether	204	9.774	9.774	(1.114)	822457	80.0000	83.14
	98 4-Nitroaniline	138	9.993	9.993	(1.139)	304476	80.0000	88.25
	99 4,6-Dinitro-2-methylphenol	198	10.031	10.031	(0.878)	299526	80.0000	98.96(M)
	100 N-Nitrosodiphenylamine	169	10.052	10.052	(0.879)	1053491	80.0000	83.68
	102 Azobenzene	77	10.057	10.057	(0.880)	2235769	80.0000	81.69
$	104 2,4,6-Tribromophenol	330	10.234	10.234	(1.166)	239382	80.0000	86.92
	109 4-Bromophenyl-phenylether	248	10.656	10.656	(0.932)	496709	80.0000	82.66
	112 Hexachlorobenzene	284	10.886	10.886	(0.952)	508989	80.0000	81.09
	117 Pentachlorophenol	266	11.302	11.302	(0.989)	249973	80.0000	88.80
*	121 Phenanthrene-d10	188	11.430	11.430	(1.000)	826255	40.0000	
	122 Phenanthrene	178	11.484	11.484	(1.005)	2060377	80.0000	81.20
	124 Anthracene	178	11.564	11.564	(1.012)	1996867	80.0000	81.78
	126 Carbazole	167	11.975	11.975	(1.048)	1677254	80.0000	82.89
	129 Di-n-Butylphthalate	149	12.851	12.851	(1.124)	2214124	80.0000	82.48
	134 Fluoranthene	202	13.770	13.770	(1.205)	2136121	80.0000	82.00
	135 Benzidine	184	14.171	14.171	(0.854)	731828	80.0000	83.34
	137 Pyrene	202	14.187	14.187	(0.855)	2155550	80.0000	82.52
$	139 Terphenyl-d14	244	14.630	14.630	(0.882)	1701021	80.0000	82.92
	145 3,3-Dimethylbenzidine	212	15.635	15.635	(0.942)	811168	80.0000	81.58
	146 Butylbenzylphthalate	149	15.758	15.758	(0.949)	826021	80.0000	80.62
	150 Benzo(a)Anthracene	228	16.564	16.564	(0.998)	1798170	80.0000	81.67

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3131.D
Report Date: 14-May-2005 09:51

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.596	16.596	(1.000)	637810	40.0000	
152 3,3'-Dichlorobenzidine	252	16.660	16.660	(1.004)	737693	80.0000	88.65
154 Chrysene	228	16.650	16.650	(1.003)	1739582	80.0000	83.48
155 bis(2-ethylhexyl)Phthalate	149	16.981	16.981	(1.023)	1046329	80.0000	82.38
158 Di-n-octylphthalate	149	18.124	18.124	(0.944)	1750660	80.0000	82.76
160 Benzo(b)fluoranthene	252	18.573	18.573	(0.967)	1604105	80.0000	78.97
161 Benzo(k)fluoranthene	252	18.621	18.621	(0.970)	1673700	80.0000	83.74
165 Benzo(a)pyrene	252	19.107	19.107	(0.995)	1514663	80.0000	83.88
* 166 Perylene-d12	264	19.198	19.198	(1.000)	512776	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.918	20.918	(1.090)	1481228	80.0000	87.14
174 Dibenzo(a,h)anthracene	278	20.966	20.966	(1.092)	1422713	80.0000	86.68
177 Benzo(g,h,i)perylene	276	21.372	21.372	(1.113)	1270074	80.0000	85.09

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3131.D
Report Date: 14-May-2005 09:51

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

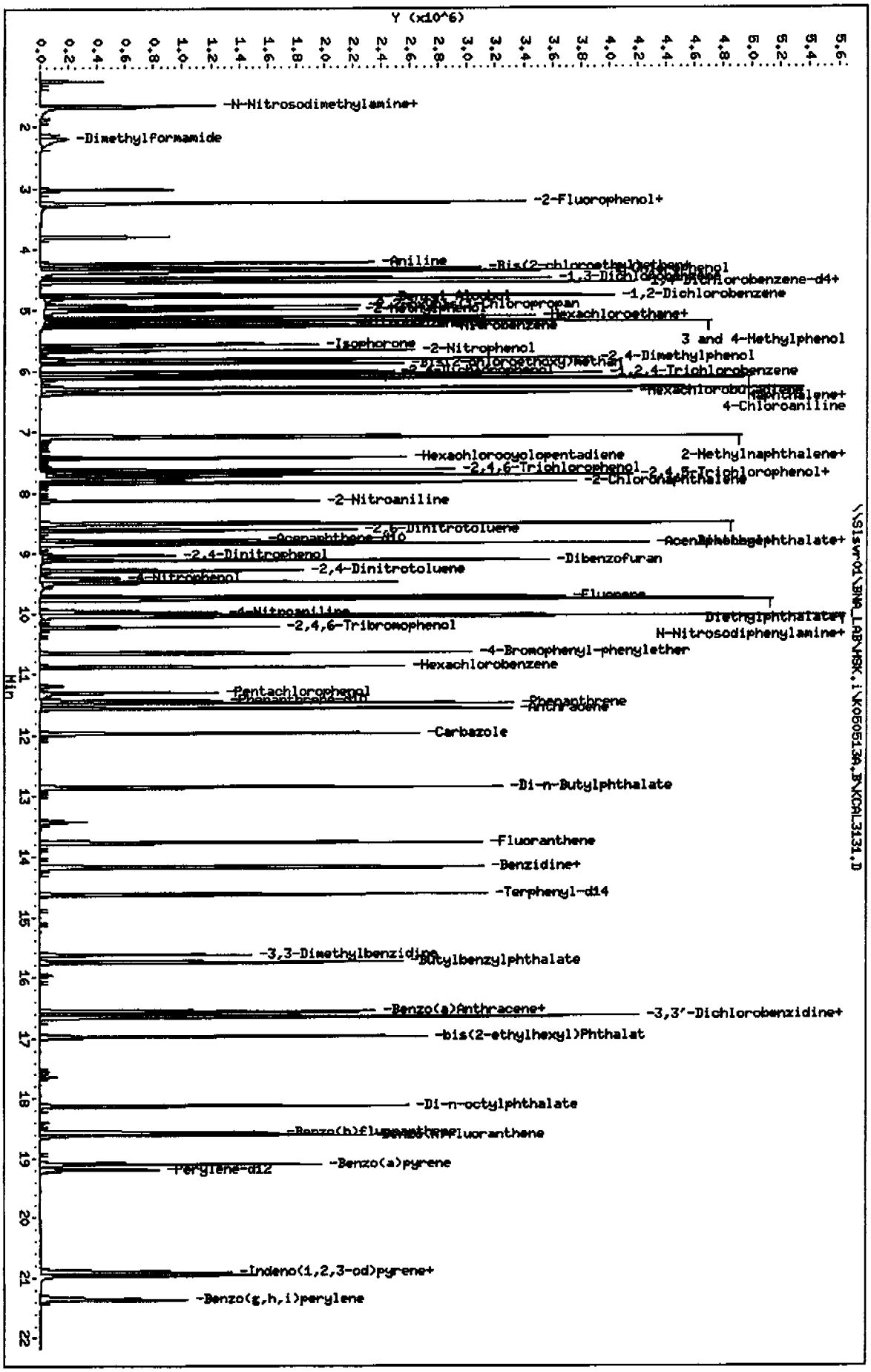
Instrument ID: MSK.i
Lab File ID: KCAL3131.D
Lab Smp Id: SSTD080
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Misc Info: SV0216-05

Calibration Date: 13-MAY-2005
Calibration Time: 12:14
Client Smp ID: SSTD080
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	181066	90533	362132	244092	34.81
48 Naphthalene-d8	627500	313750	1255000	855620	36.35
82 Acenaphthene-d10	358476	179238	716952	472315	31.76
121 Phenanthrene-d10	655247	327624	1310494	826255	26.10
153 Chrysene-d12	535207	267604	1070414	637810	19.17
166 Perylene-d12	427031	213516	854062	512776	20.08

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.52	4.02	5.02	4.53	0.10
48 Naphthalene-d8	6.11	5.61	6.61	6.10	-0.01
82 Acenaphthene-d10	8.78	8.28	9.28	8.78	-0.01
121 Phenanthrene-d10	11.43	10.93	11.93	11.43	-0.01
153 Chrysene-d12	16.59	16.09	17.09	16.60	0.03
166 Perylene-d12	19.20	18.70	19.70	19.20	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

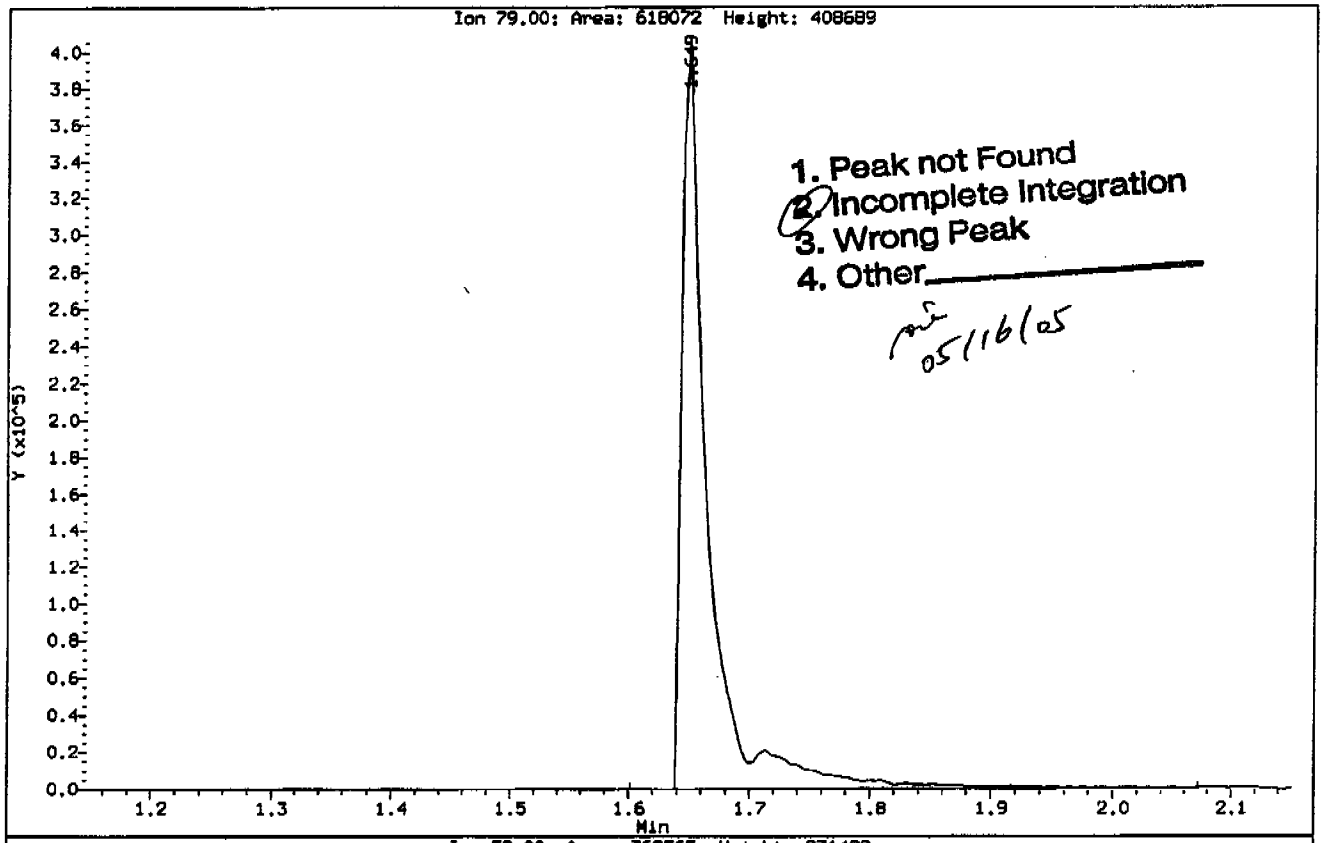


Data File: \\Slsvr01\BNA_LAB\HSK.i\K060513A.B\KCAL3134.D
Date : 13-MAY-2006 14:22
Client ID: SSTD080
Sample Info: SSTD080
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

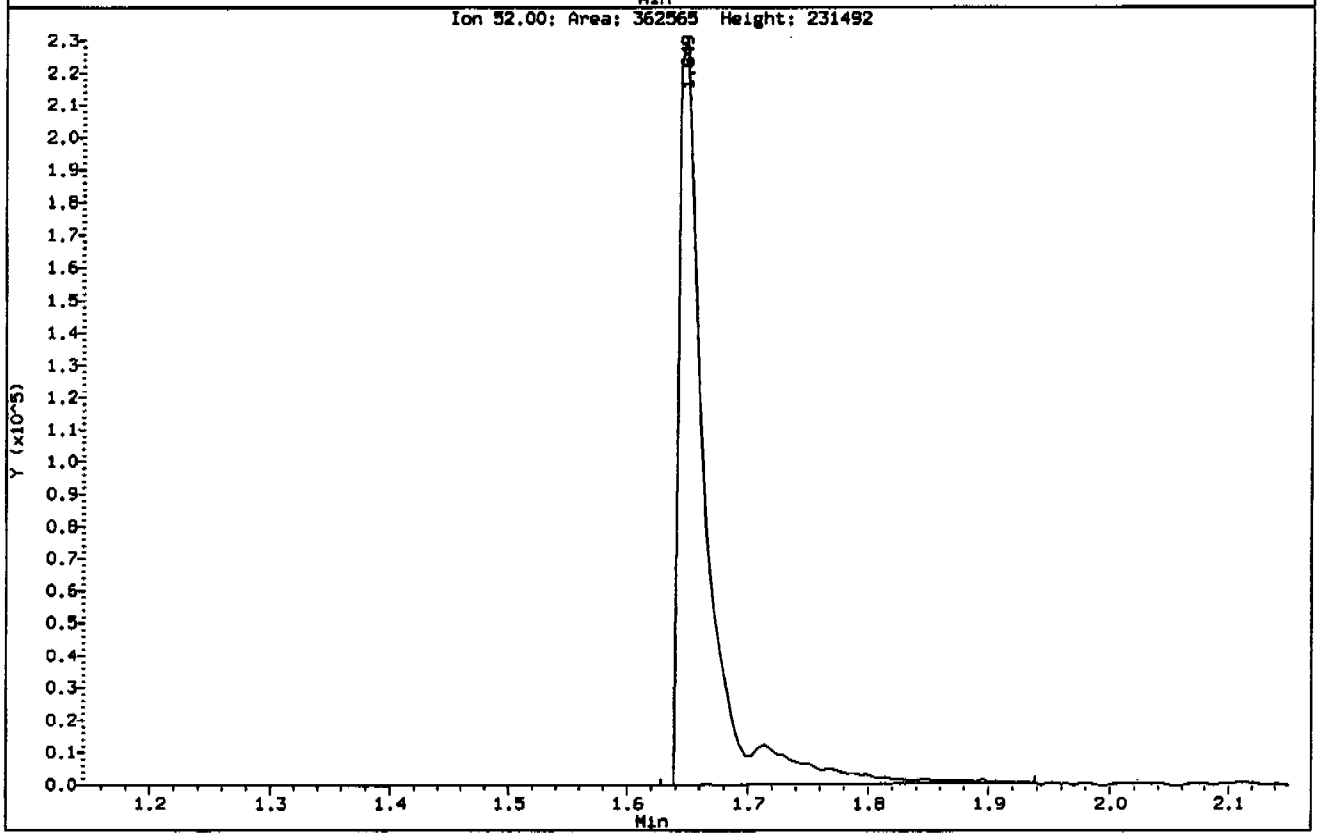
Data File: \\Slevr01\BNA_LAB\MSK.i\K050513A.B\KCAL3131.D
Injection Date: 13-MAY-2005 14:22
Instrument: MSK.i
Client Sample ID: SSTD080

Compound: Pyridine
CAS Number: 110-86-1



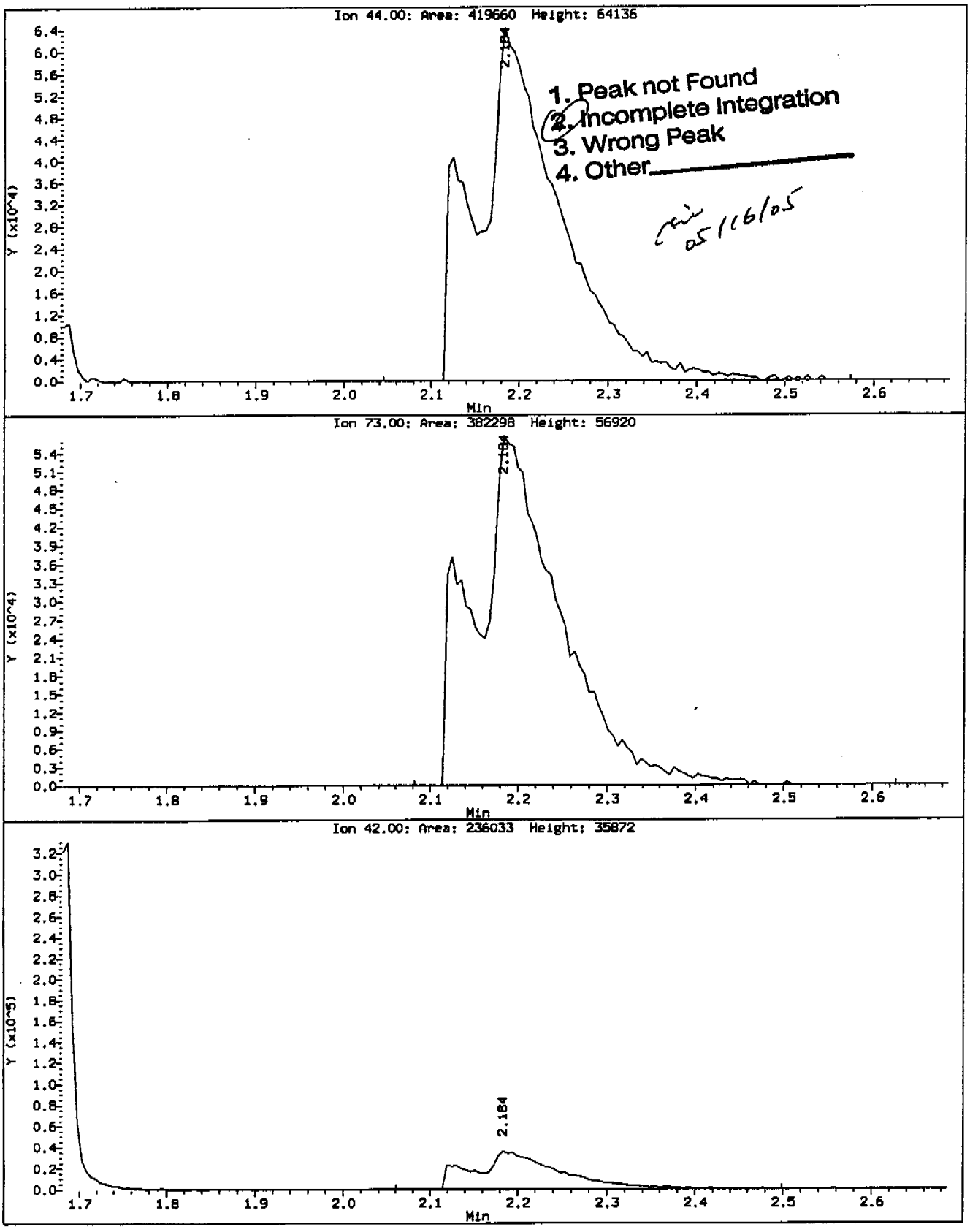
1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

05/16/05



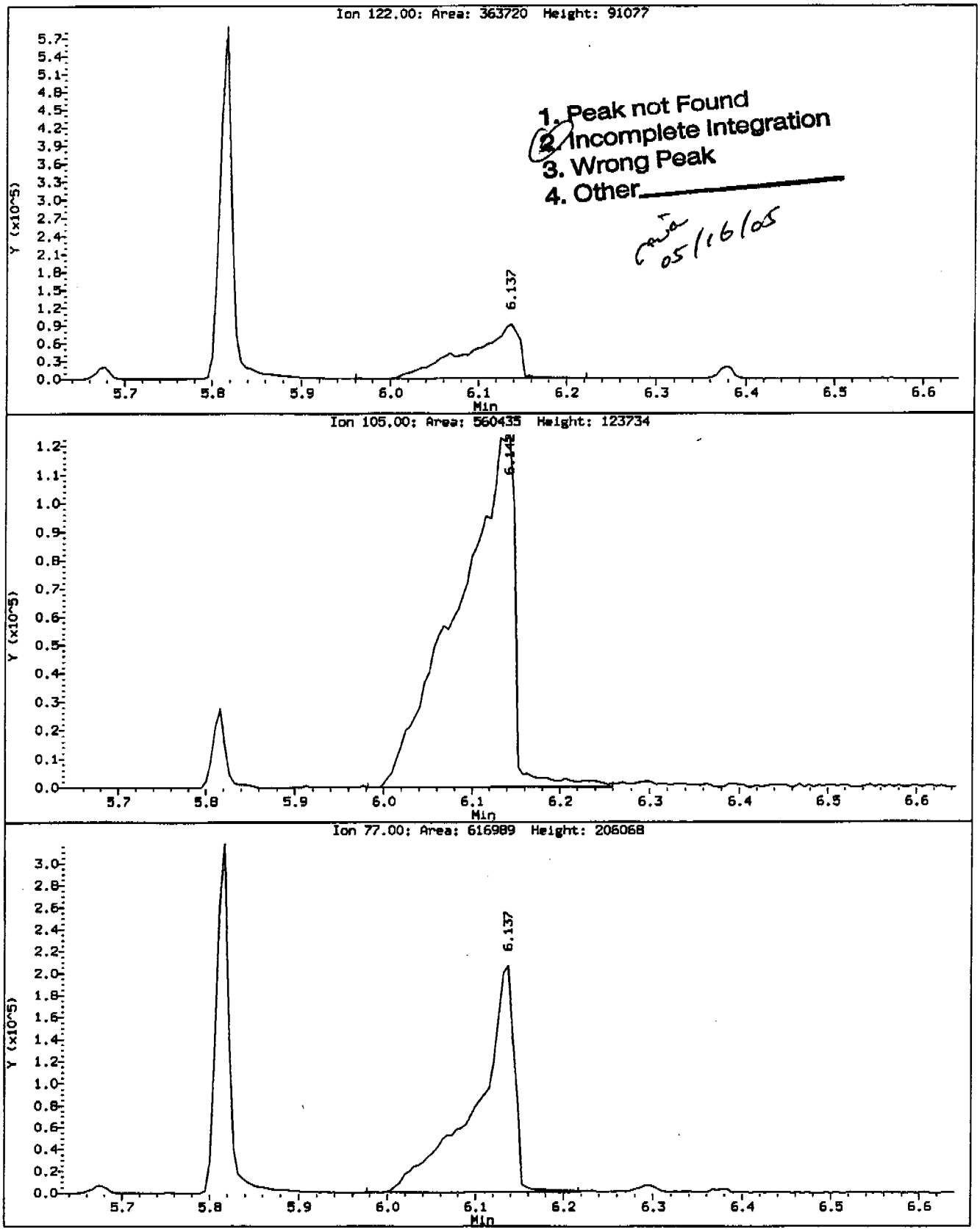
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3131.D
Injection Date: 13-MAY-2005 14:22
Instrument: MSK.i
Client Sample ID: SSTD080

Compound: Dimethylformamide
CAS Number: 68-12-2



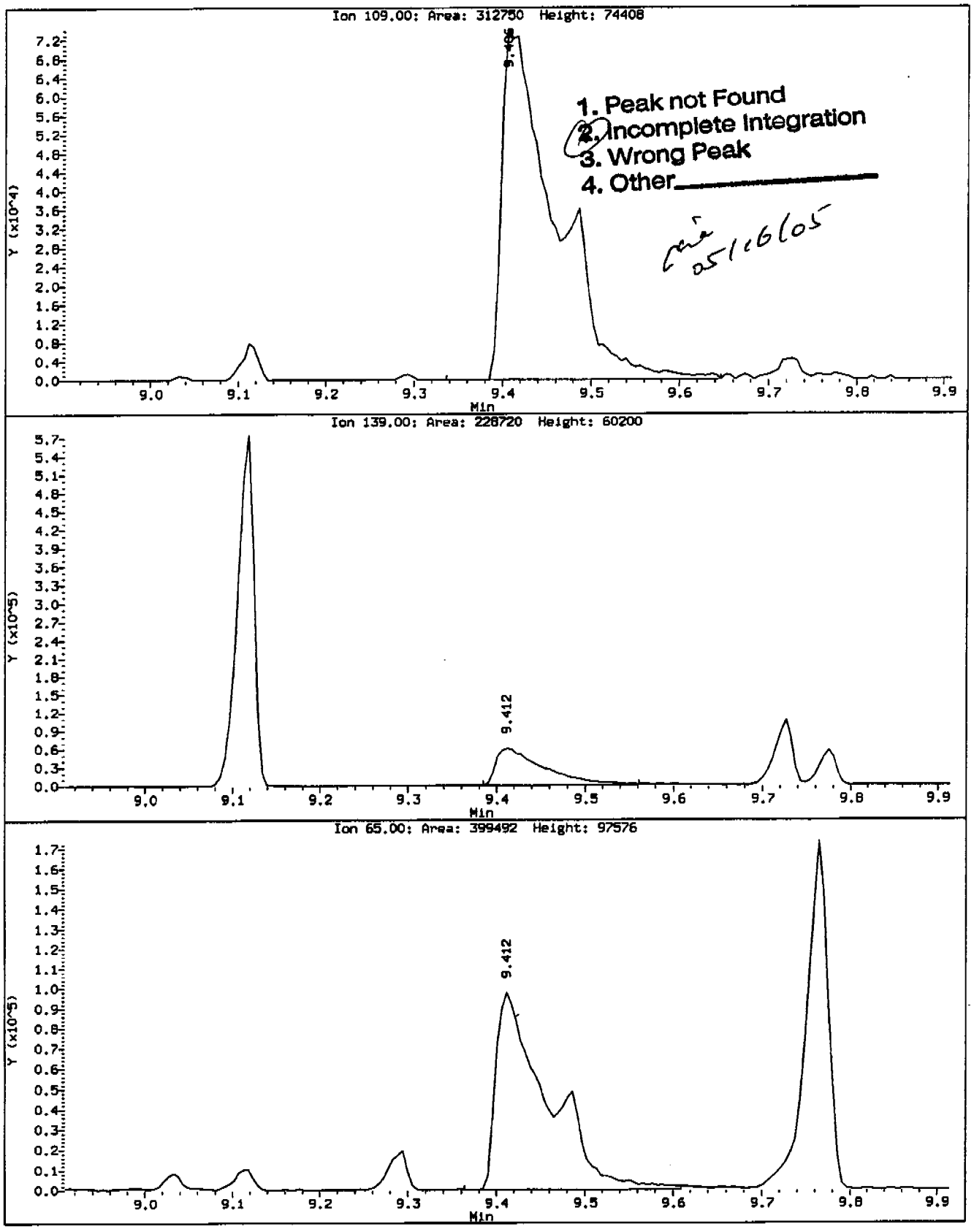
Data File: \\Slevr01\BNA_LAB\MSK.i\K050513A.B\KCAL3131.D
Injection Date: 13-MAY-2005 14:22
Instrument: MSK.i
Client Sample ID: SSTD080

Compound: Benzoic Acid
CAS Number: 65-85-0



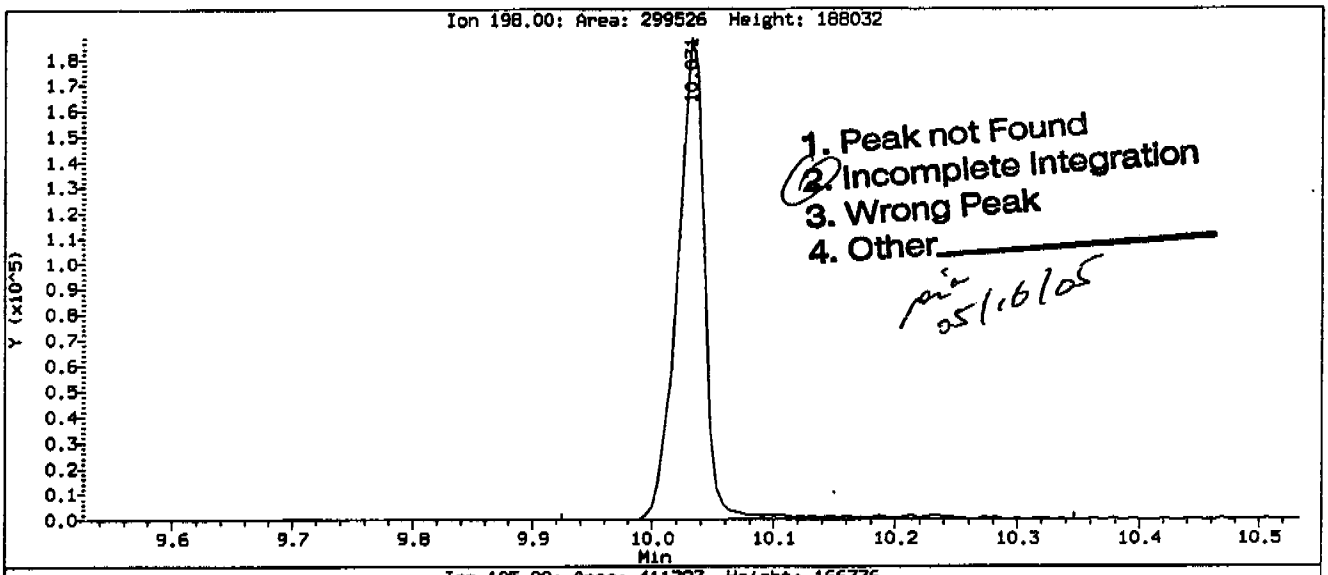
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3131.D
Injection Date: 13-MAY-2005 14:22
Instrument: MSK.i
Client Sample ID: SSTD080

Compound: 4-Nitrophenol
CAS Number: 100-02-7



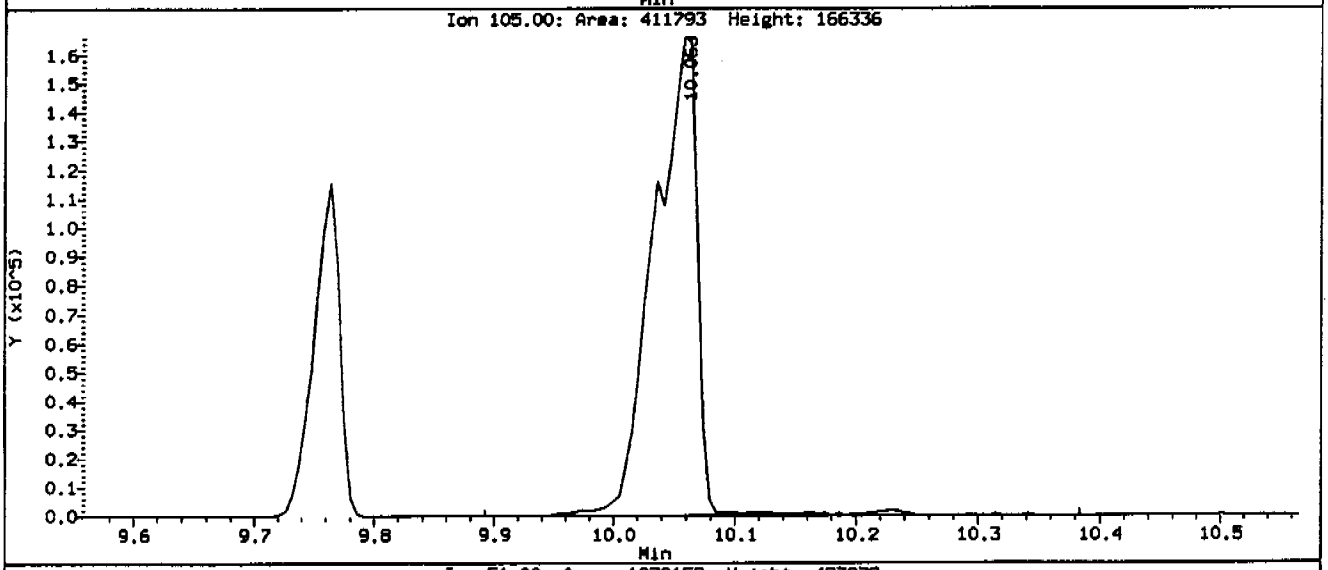
Data File: \\Slavr01\BNA_LAB\MSK.i\K050513A.B\KCAL3131.D
Injection Date: 13-MAY-2005 14:22
Instrument: MSK.i
Client Sample ID: SSTD080

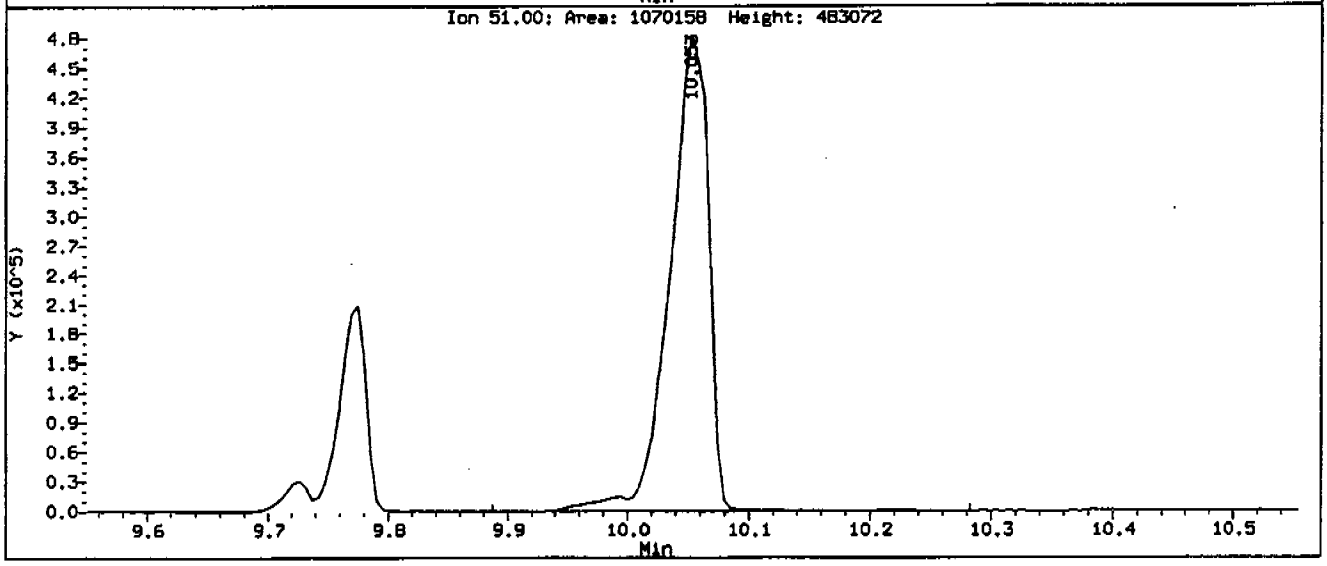
Compound: 4,6-Dinitro-2-methylphenol
CAS Number: 534-52-1



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

pia 05/16/05





Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3132.D Page 1
Report Date: 14-May-2005 09:51

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3132.D
Lab Smp Id: SSTD020 Client Smp ID: SSTD020
Inj Date : 13-MAY-2005 14:54
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD020
Misc Info : SV0214-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Meth Date : 14-May-2005 09:51 hongs Quant Type: ISTD
Cal Date : 13-MAY-2005 14:54 Cal File: KCAL3132.D
Als bottle: 8 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	1.238	1.238	(0.274)	52436	20.0000	19.15
4	N-Nitrosodimethylamine	74	1.665	1.665	(0.369)	91918	20.0000	19.46(a)
3	Pyridine	79	1.649	1.649	(0.365)	163775	20.0000	19.08(M)
5	Dimethylformamide	44	2.109	2.109	(0.467)	123042	20.0000	19.28(aM)
$ 10	2-Fluorophenol	112	3.230	3.230	(0.715)	169313	20.0000	19.13(a)
11	Cyclohexanol	57	3.225	3.225	(0.714)	187112	20.0000	19.73(a)
17	Aniline	93	4.213	4.213	(0.933)	301150	20.0000	19.88
19	Bis(2-chloroethyl)ether	93	4.288	4.288	(0.949)	198205	20.0000	19.02
$ 15	Phenol-d5	99	4.315	4.315	(0.955)	209228	20.0000	18.13(a)
16	Phenol	94	4.331	4.331	(0.959)	236674	20.0000	19.20(a)
20	2-Chlorophenol	128	4.363	4.363	(0.966)	186542	20.0000	18.93(a)
21	1,3-Dichlorobenzene	146	4.470	4.470	(0.989)	217739	20.0000	19.06(a)
* 22	1,4-Dichlorobenzene-d4	152	4.518	4.518	(1.000)	295894	40.0000	
23	1,4-Dichlorobenzene	146	4.539	4.539	(1.005)	228354	20.0000	18.88(a)
26	1,2-Dichlorobenzene	146	4.758	4.758	(1.053)	207282	20.0000	18.58
25	Benzyl Alcohol	108	4.774	4.774	(1.057)	74105	20.0000	16.12(a)
28	2,2-oxybis(1-Chloropropane)	45	4.929	4.929	(1.091)	207306	20.0000	18.97
27	2-Methylphenol	108	4.999	4.999	(1.106)	150464	20.0000	18.67(a)
35	Hexachloroethane	117	5.116	5.116	(1.132)	99089	20.0000	18.98(a)
32	N-Nitrosodinpropylamine	70	5.111	5.111	(1.131)	172111	20.0000	20.44
29	3 and 4-Methylphenol	108	5.186	5.186	(1.148)	328091	40.0000	36.44

05/16/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.244	5.244	(0.860)	268744	20.0000	19.35(a)
	37 Nitrobenzene	77	5.266	5.266	(0.863)	276240	20.0000	19.12(a)
	39 Isophorone	82	5.560	5.560	(0.912)	367073	20.0000	19.54(a)
	40 2-Nitrophenol	139	5.666	5.666	(0.929)	102146	20.0000	19.72(a)
	41 2,4-Dimethylphenol	107	5.805	5.805	(0.952)	204872	20.0000	18.96(a)
	42 Bis(2-chloroethoxy)methane	93	5.875	5.875	(0.963)	227390	20.0000	18.94(a)
	45 2,4-Dichlorophenol	162	6.024	6.024	(0.988)	158450	20.0000	19.64(a)
	47 1,2,4-Trichlorobenzene	180	6.056	6.056	(0.993)	192195	20.0000	19.16(a)
*	48 Naphthalene-d8	136	6.099	6.099	(1.000)	1032129	40.0000	
	44 Benzoic Acid	122	6.062	6.062	(0.994)	88436	20.0000	18.57
	50 Naphthalene	128	6.126	6.126	(1.004)	526114	20.0000	18.27(a)
	51 4-Chloroaniline	127	6.275	6.275	(1.029)	217166	20.0000	18.71(a)
	54 Hexachlorobutadiene	225	6.372	6.372	(1.045)	137597	20.0000	18.97(a)
	62 2-Methylnaphthalene	142	7.082	7.082	(1.161)	504881	20.0000	20.00
	59 4-Chloro-3-Methylphenol	107	7.077	7.077	(1.160)	182063	20.0000	19.63(a)
	66 Hexachlorocyclopentadiene	237	7.424	7.424	(0.847)	115837	20.0000	19.04(a)
	67 2,4,6-Trichlorophenol	196	7.622	7.622	(0.869)	127037	20.0000	18.80(a)
	68 2,4,5-Trichlorophenol	196	7.750	7.750	(0.884)	139336	20.0000	19.76(a)
$	69 2-Fluorobiphenyl	172	7.702	7.702	(0.878)	425707	20.0000	18.21(a)
	72 2-Chloronaphthalene	162	7.819	7.819	(0.892)	357989	20.0000	18.42(a)
	73 2-Nitroaniline	65	8.118	8.118	(0.926)	149526	20.0000	19.09(a)
	76 Dimethylphthalate	163	8.482	8.482	(0.967)	416112	20.0000	18.84(a)
	79 Acenaphthylene	152	8.503	8.503	(0.970)	530213	20.0000	18.16(a)
	80 2,6-Dinitrotoluene	165	8.599	8.599	(0.981)	89174	20.0000	19.27(a)
*	82 Acenaphthene-d10	164	8.770	8.770	(1.000)	578346	40.0000	
	83 Acenaphthene	153	8.824	8.824	(1.006)	335188	20.0000	18.81(a)
	81 3-Nitroaniline	138	8.834	8.834	(1.007)	88900	20.0000	19.35
	84 2,4-Dinitrophenol	184	9.016	9.016	(1.028)	36463	20.0000	17.92(aM)
	86 Dibenzofuran	168	9.101	9.101	(1.038)	503002	20.0000	18.81(a)
	88 2,4-Dinitrotoluene	165	9.272	9.272	(1.057)	115933	20.0000	19.88(a)
	85 4-Nitrophenol	109	9.438	9.438	(1.076)	86707	20.0000	20.94(M)
	93 Diethylphthalate	149	9.737	9.737	(1.110)	412154	20.0000	18.65(a)
	94 Fluorene	166	9.710	9.710	(1.107)	407997	20.0000	19.00(a)
	95 4-Chlorophenyl-phenylether	204	9.764	9.764	(1.113)	224309	20.0000	18.52(a)
	98 4-Nitroaniline	138	9.945	9.945	(1.134)	84353	20.0000	19.97(a)
	99 4,6-Dinitro-2-methylphenol	198	9.999	9.999	(0.875)	69577	20.0000	18.49(a)
	100 N-Nitrosodiphenylamine	169	10.026	10.026	(0.878)	281473	20.0000	17.98(a)
	102 Azobenzene	77	10.042	10.042	(0.879)	607161	20.0000	17.85(a)
$	104 2,4,6-Tribromophenol	330	10.218	10.218	(1.165)	65238	20.0000	19.35(a)
	109 4-Bromophenyl-phenylether	248	10.645	10.645	(0.932)	141418	20.0000	18.93(a)
	112 Hexachlorobenzene	284	10.870	10.870	(0.951)	147179	20.0000	18.86(a)
	117 Pentachlorophenol	266	11.292	11.292	(0.988)	48139	20.0000	13.76(a)
*	121 Phenanthrene-d10	188	11.425	11.425	(1.000)	1027175	40.0000	
	122 Phenanthrene	178	11.468	11.468	(1.004)	594638	20.0000	18.85(a)
	124 Anthracene	178	11.548	11.548	(1.011)	576799	20.0000	19.00(a)
	126 Carbazole	167	11.954	11.954	(1.046)	485903	20.0000	19.32(a)
	129 Di-n-Butylphthalate	149	12.841	12.841	(1.124)	637935	20.0000	19.11(a)
	134 Fluoranthene	202	13.754	13.754	(1.204)	625731	20.0000	19.32(a)
	135 Benzidine	184	14.160	14.160	(0.854)	232312	20.0000	20.67
	137 Pyrene	202	14.171	14.171	(0.854)	642062	20.0000	19.20(a)
$	139 Terphenyl-d14	244	14.620	14.620	(0.881)	500783	20.0000	19.07(a)
	145 3,3-Dimethylbenzidine	212	15.624	15.624	(0.942)	258416	20.0000	20.30
	146 Butylbenzylphthalate	149	15.742	15.742	(0.949)	248604	20.0000	18.96(a)
	150 Benzo(a)Anthracene	228	16.548	16.548	(0.998)	540314	20.0000	19.17(a)

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3132.D Page 3
Report Date: 14-May-2005 09:51

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.586	16.586	(1.000)	816376	40.0000	
152 3,3'-Dichlorobenzidine	252	16.650	16.650	(1.004)	189368	20.0000	17.78(a)
154 Chrysene	228	16.634	16.634	(1.003)	493145	20.0000	18.49(a)
155 bis(2-ethylhexyl)Phthalate	149	16.970	16.970	(1.023)	310287	20.0000	19.09(a)
158 Di-n-octylphthalate	149	18.114	18.114	(0.944)	519866	20.0000	18.57(a)
160 Benzo(b)fluoranthene	252	18.552	18.552	(0.966)	504564	20.0000	18.77(a)
161 Benzo(k)fluoranthene	252	18.594	18.594	(0.969)	489196	20.0000	18.49(a)
165 Benzo(a)pyrene	252	19.086	19.086	(0.994)	456041	20.0000	19.08(a)
* 166 Perylene-d12	264	19.198	19.198	(1.000)	678712	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.892	20.892	(1.088)	398075	20.0000	17.69(aH)
174 Dibenzo(a,h)anthracene	278	20.934	20.934	(1.090)	408573	20.0000	18.81(a)
177 Benzo(g,h,i)perylene	276	21.330	21.330	(1.111)	371699	20.0000	18.81(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3132.D Page 4
Report Date: 14-May-2005 09:51

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

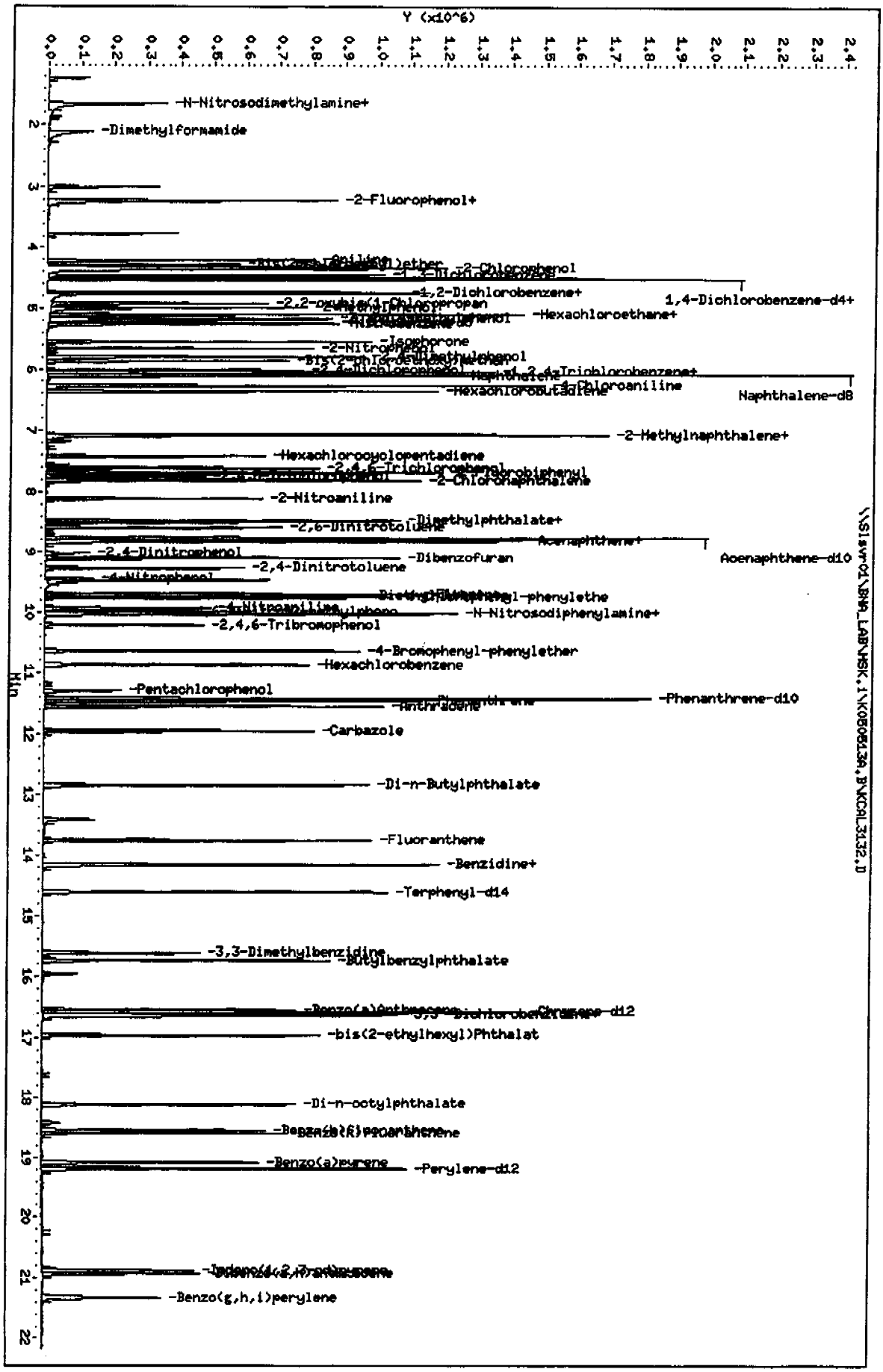
Instrument ID: MSK.i
Lab File ID: KCAL3132.D
Lab Smp Id: SSTD020
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Misc Info: SV0214-05

Calibration Date: 13-MAY-2005
Calibration Time: 12:14
Client Smp ID: SSTD020
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	181066	90533	362132	295894	63.42
48 Naphthalene-d8	627500	313750	1255000	1032129	64.48
82 Acenaphthene-d10	358476	179238	716952	578346	61.33
121 Phenanthrene-d10	655247	327624	1310494	1027175	56.76
153 Chrysene-d12	535207	267604	1070414	816376	52.53
166 Perylene-d12	427031	213516	854062	678712	58.94

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.52	4.02	5.02	4.52	-0.13
48 Naphthalene-d8	6.11	5.61	6.61	6.10	-0.10
82 Acenaphthene-d10	8.78	8.28	9.28	8.77	-0.07
121 Phenanthrene-d10	11.43	10.93	11.93	11.43	-0.05
153 Chrysene-d12	16.59	16.09	17.09	16.59	-0.04
166 Perylene-d12	19.20	18.70	19.70	19.20	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

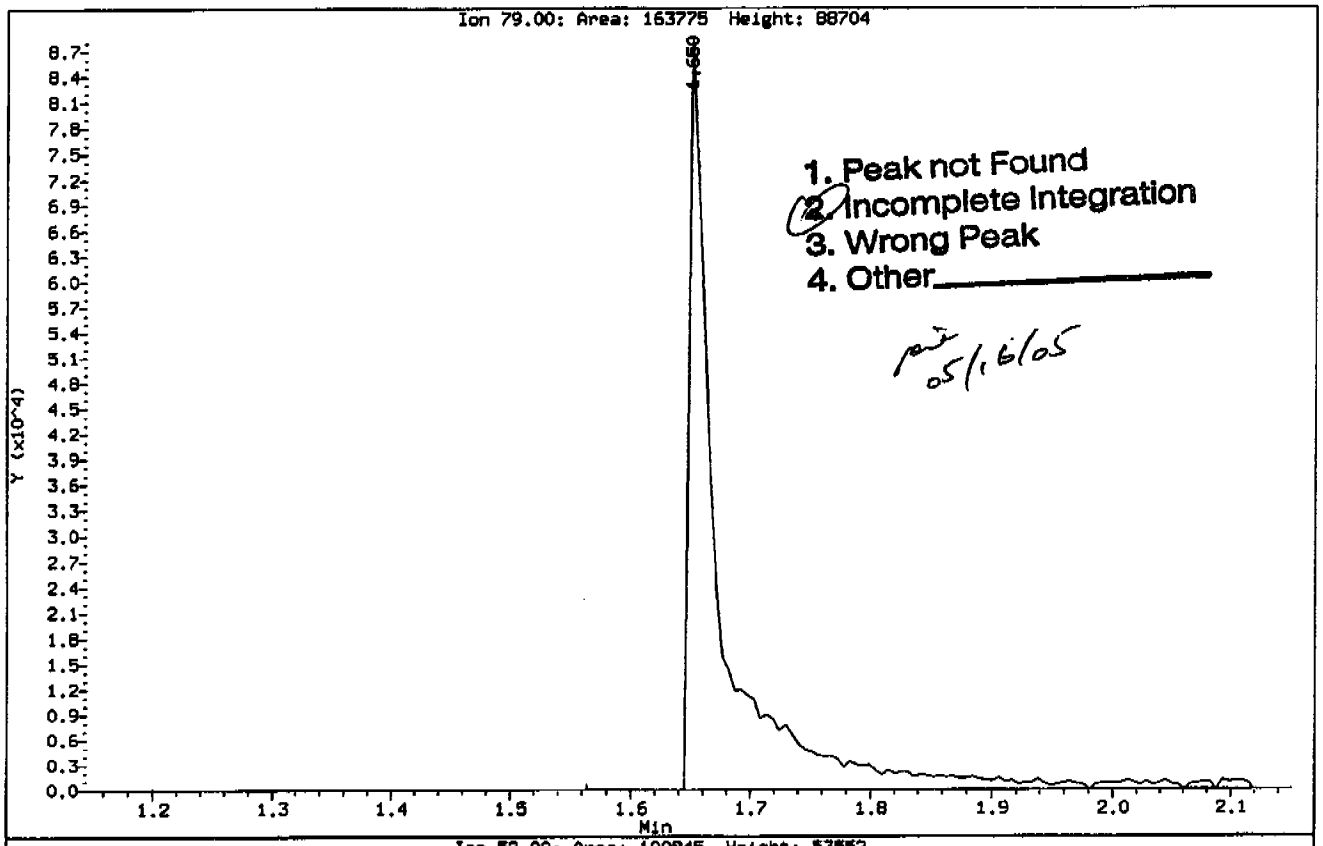


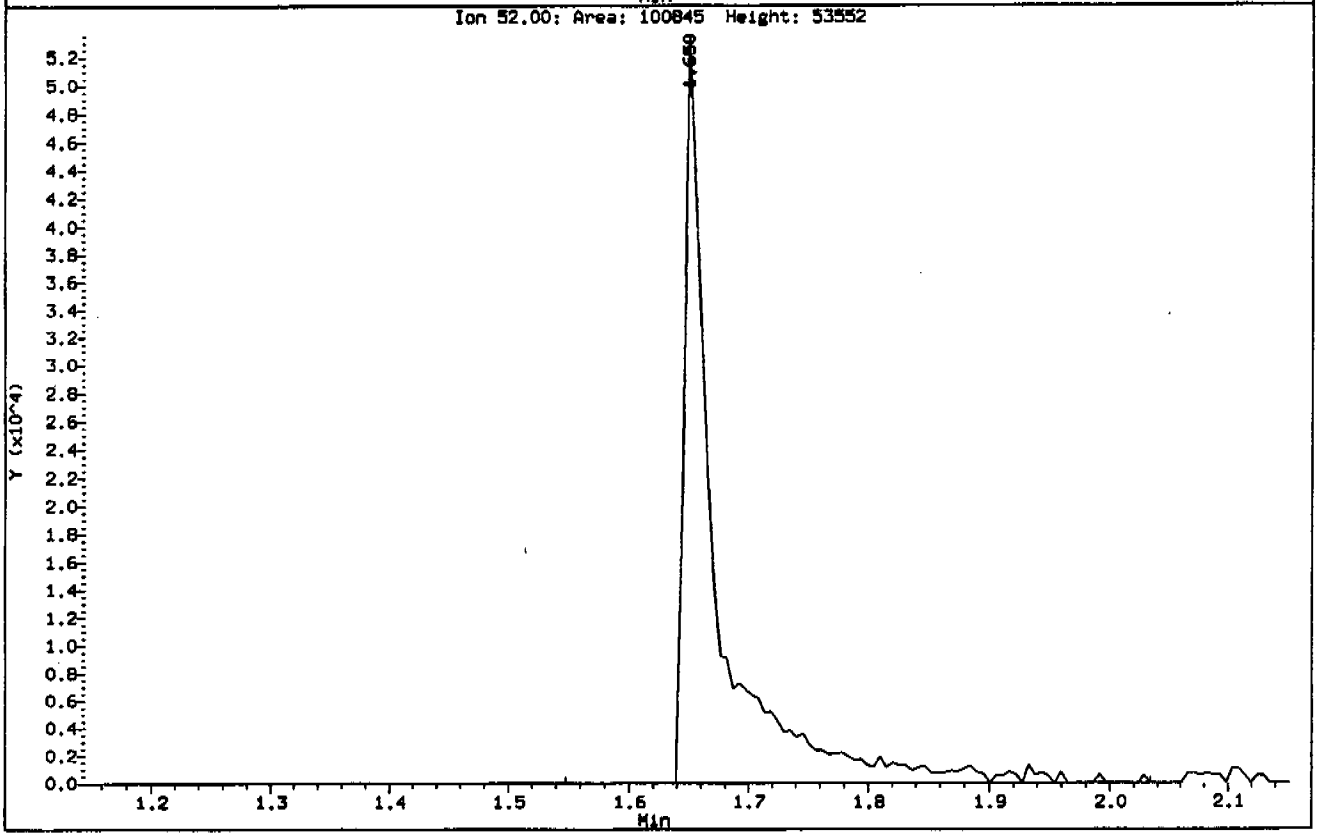
Data File: \\Slsvr01\BNA_LAB\HSK.i\K050513A.B\KCAL3132.D
Date : 13-MAY-2005 14:54
Client ID: SSTD020
Sample Info: SSTD020
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slevr01\BNA_LAB\MSK.i\K050513A.B\KCAL3133.D
Injection Date: 13-MAY-2005 14:54
Instrument: MSK.i
Client Sample ID: SSTD020

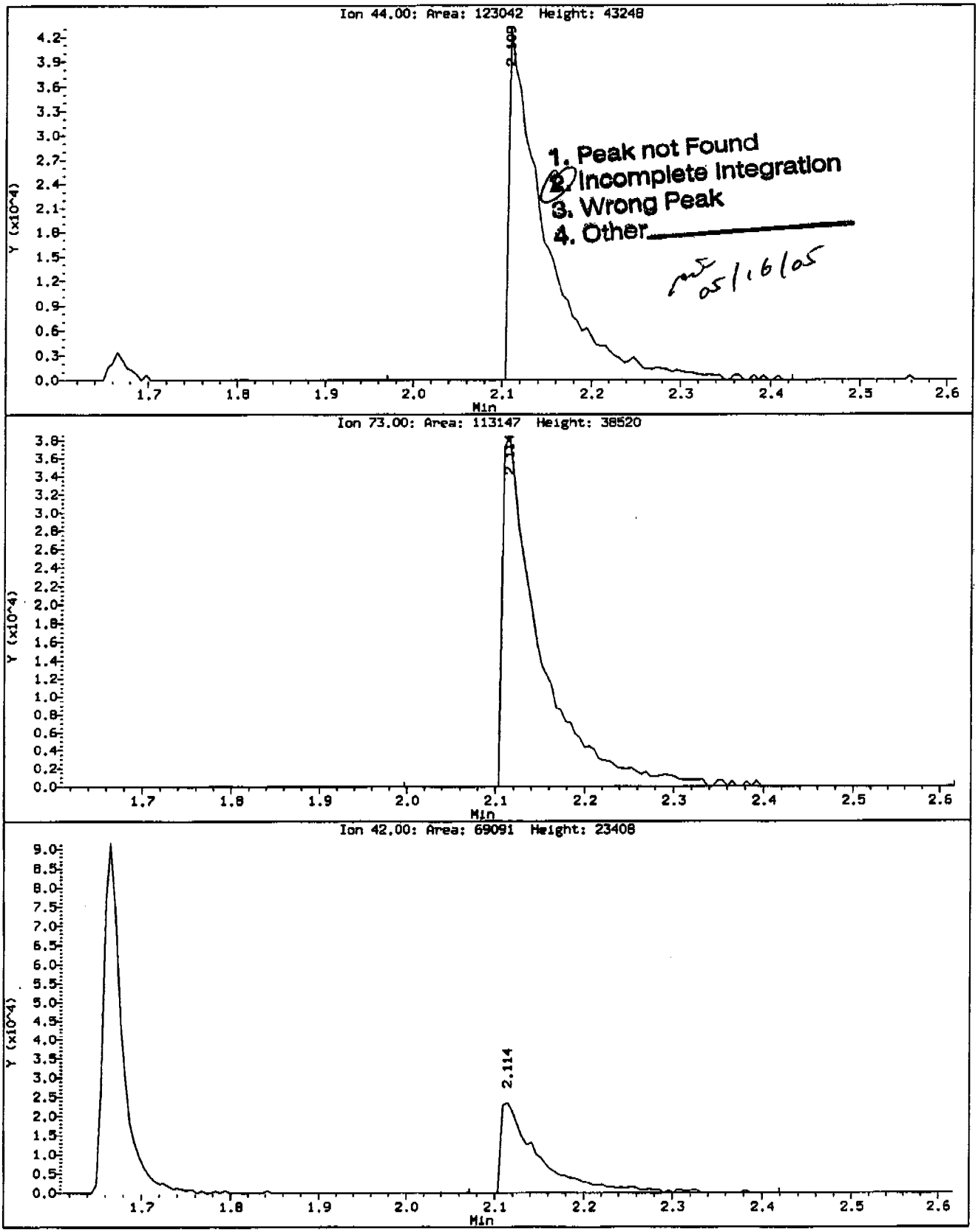
Compound: Pyridine
CAS Number: 110-86-1





Data File: \\Slavr01\BNA_LAB\MSK.i\K050513A.B\KCAL3133.D
Injection Date: 13-MAY-2005 14:54
Instrument: MSK.i
Client Sample ID: SSTD020

Compound: Dimethylformamide
CAS Number: 68-12-2



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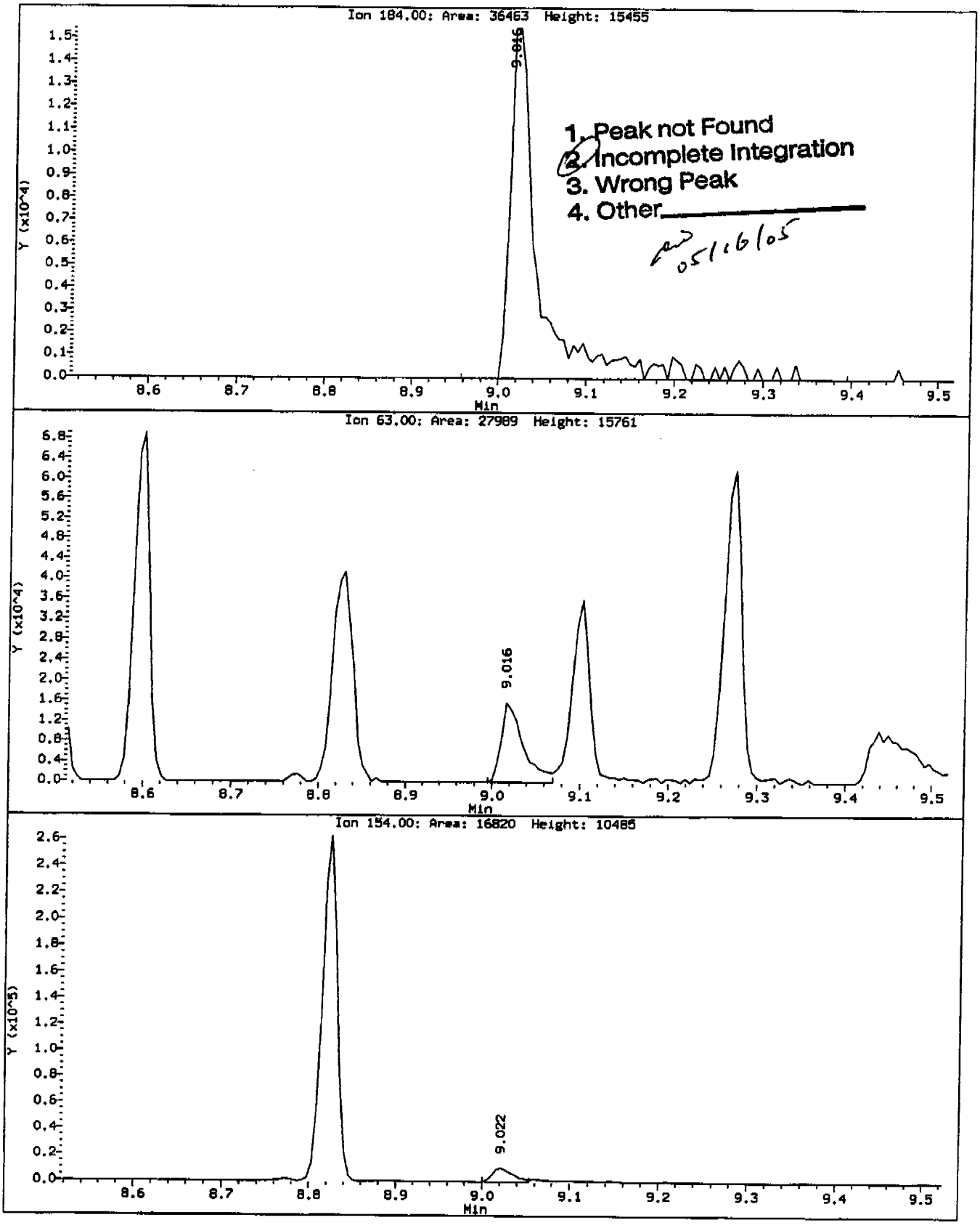
Injection Date: 13-MAY-2005 14:54
Instrument: MSK.i
Client Sample ID: SSTD020

Compound: 2,4-Dinitrophenol
CAS Number: 51-28-5



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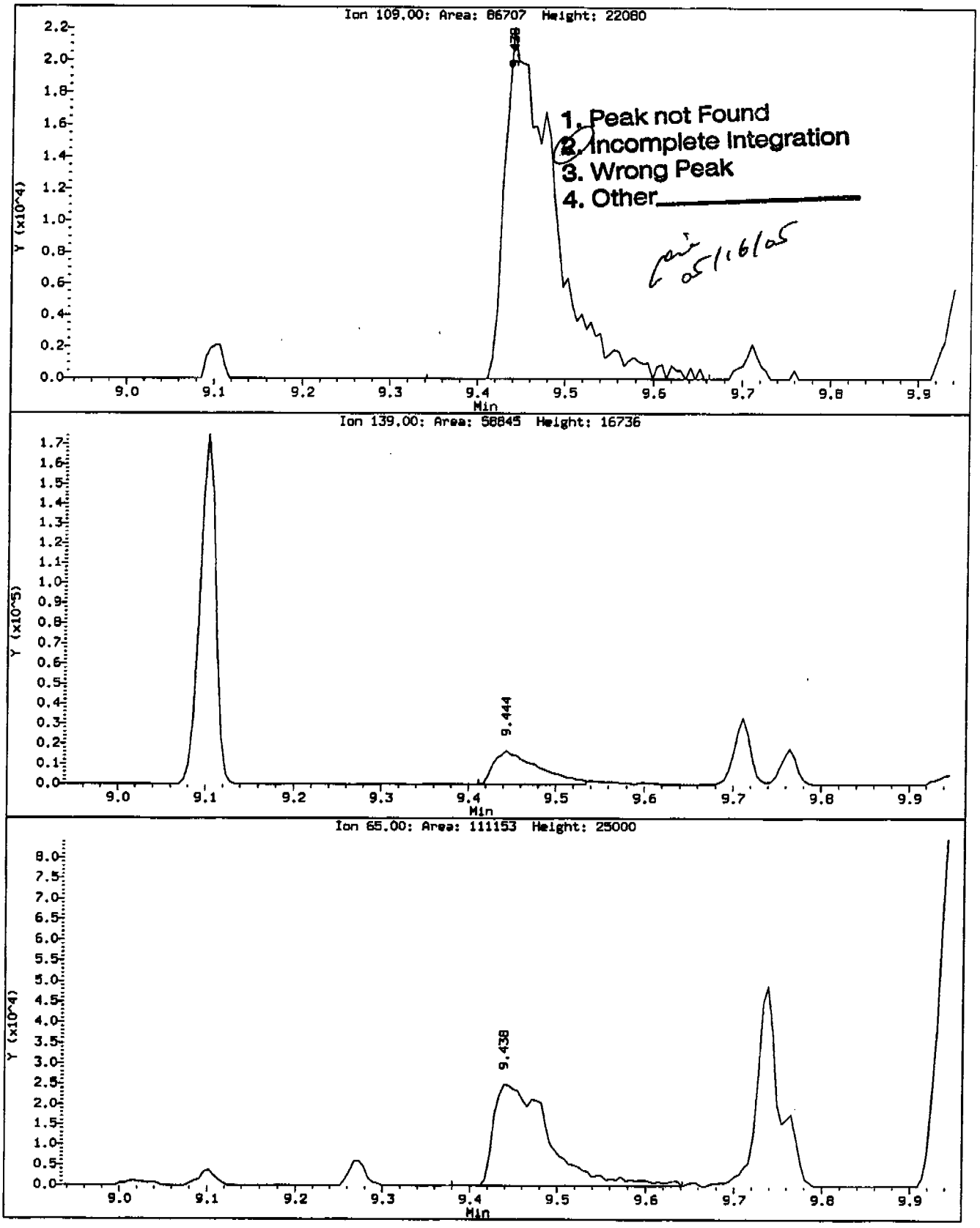
Injection Date: 13-MAY-2005 14:54
Instrument: MSK.i
Client Sample ID: SSTD020

Compound: 4-Nitrophenol
CAS Number: 100-02-7



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3133.D Page 1
Report Date: 14-May-2005 09:51

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GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3133.D
Lab Smp Id: SSTD010 Client Smp ID: SSTD010
Inj Date : 13-MAY-2005 15:26
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD010
Misc Info : SV0213-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Meth Date : 14-May-2005 09:51 hongs Quant Type: ISTD
Cal Date : 13-MAY-2005 15:26 Cal File: KCAL3133.D
Als bottle: 9 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 1,4-Dioxane	88	1.235	1.235	(0.273)	17328	10.0000	8.866(a)
	4 N-Nitrosodimethylamine	74	1.667	1.667	(0.368)	35106	10.0000	10.41(a)
	3 Pyridine	79	1.673	1.673	(0.370)	60764	10.0000	9.918(aM)
	5 Dimethylformamide	44	2.127	2.127	(0.470)	47118	10.0000	10.34(aM)
$	10 2-Fluorophenol	112	3.243	3.243	(0.717)	61852	10.0000	9.790(a)
	11 Cyclohexanol	57	3.227	3.227	(0.713)	67866	10.0000	10.03(a)
	17 Aniline	93	4.221	4.221	(0.933)	111204	10.0000	10.29
	19 Bis(2-chloroethyl)ether	93	4.296	4.296	(0.949)	69627	10.0000	9.361(a)
$	15 Phenol-d5	99	4.333	4.333	(0.958)	75234	10.0000	9.132(a)
	16 Phenol	94	4.349	4.349	(0.961)	86580	10.0000	9.840(a)
	20 2-Chlorophenol	128	4.376	4.376	(0.967)	67405	10.0000	9.581(a)
	21 1,3-Dichlorobenzene	146	4.477	4.477	(0.989)	80635	10.0000	9.888(a)
*	22 1,4-Dichlorobenzene-d4	152	4.525	4.525	(1.000)	211211	40.0000	
	23 1,4-Dichlorobenzene	146	4.547	4.547	(1.005)	81784	10.0000	9.476(a)
	26 1,2-Dichlorobenzene	146	4.766	4.766	(1.053)	74998	10.0000	9.420(a)
	25 Benzyl Alcohol	108	4.776	4.776	(1.055)	24792	10.0000	7.557(a)
	28 2,2-oxybis(1-Chloropropane)	45	4.937	4.937	(1.091)	76911	10.0000	9.859(a)
	27 2-Methylphenol	108	5.006	5.006	(1.106)	56479	10.0000	9.816(a)
	35 Hexachloroethane	117	5.124	5.124	(1.132)	34958	10.0000	9.380(a)
	32 N-Nitrosodinpropylamine	70	5.113	5.113	(1.130)	62040	10.0000	10.32
	29 3 and 4-Methylphenol	108	5.193	5.193	(1.148)	124168	20.0000	19.32

rev 05/16/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.246	5.246	(0.859)	99912	10.0000	9.796(a)
	37 Nitrobenzene	77	5.273	5.273	(0.864)	103396	10.0000	9.744(a)
	39 Isophorone	82	5.562	5.562	(0.911)	137488	10.0000	9.968(a)
	40 2-Nitrophenol	139	5.674	5.674	(0.929)	36884	10.0000	9.696(a)
	41 2,4-Dimethylphenol	107	5.813	5.813	(0.952)	72407	10.0000	9.125(a)
	42 Bis(2-chloroethoxy)methane	93	5.877	5.877	(0.962)	85732	10.0000	9.725(a)
	45 2,4-Dichlorophenol	162	6.037	6.037	(0.989)	58847	10.0000	9.936(a)
	47 1,2,4-Trichlorobenzene	180	6.064	6.064	(0.993)	69037	10.0000	9.372(a)
*	48 Naphthalene-d8	136	6.107	6.107	(1.000)	757952	40.0000	
	44 Benzoic Acid	122	6.037	6.037	(0.989)	26871	10.0000	7.685(a)
	50 Naphthalene	128	6.128	6.128	(1.003)	194397	10.0000	9.192(a)
	51 4-Chloroaniline	127	6.283	6.283	(1.029)	81265	10.0000	9.536(a)
	54 Hexachlorobutadiene	225	6.379	6.379	(1.045)	51082	10.0000	9.589(a)
	62 2-Methylnaphthalene	142	7.090	7.090	(1.161)	181556	10.0000	9.793(a)
	59 4-Chloro-3-Methylphenol	107	7.090	7.090	(1.161)	64296	10.0000	9.439(a)
	66 Hexachlorocyclopentadiene	237	7.437	7.437	(0.847)	32879	10.0000	7.295(a)
	67 2,4,6-Trichlorophenol	196	7.629	7.629	(0.869)	45650	10.0000	9.118(a)
	68 2,4,5-Trichlorophenol	196	7.768	7.768	(0.885)	48117	10.0000	9.210(a)
$	69 2-Fluorobiphenyl	172	7.709	7.709	(0.878)	157103	10.0000	9.071(a)
	72 2-Chloronaphthalene	162	7.827	7.827	(0.892)	133288	10.0000	9.255(a)
	73 2-Nitroaniline	65	8.126	8.126	(0.926)	57626	10.0000	9.932(a)
	76 Dimethylphthalate	163	8.489	8.489	(0.967)	156232	10.0000	9.550(a)
	79 Acenaphthylene	152	8.511	8.511	(0.970)	199424	10.0000	9.217(a)
	80 2,6-Dinitrotoluene	165	8.601	8.601	(0.980)	33392	10.0000	9.740(a)
*	82 Acenaphthene-d10	164	8.778	8.778	(1.000)	428473	40.0000	
	83 Acenaphthene	153	8.831	8.831	(1.006)	124605	10.0000	9.440(a)
	81 3-Nitroaniline	138	8.842	8.842	(1.007)	30803	10.0000	9.050(a)
	84 2,4-Dinitrophenol	184	9.034	9.034	(1.029)	3775	10.0000	2.504(aM)
	86 Dibenzofuran	168	9.109	9.109	(1.038)	190567	10.0000	9.619(a)
	88 2,4-Dinitrotoluene	165	9.280	9.280	(1.057)	42871	10.0000	9.923(a)
	85 4-Nitrophenol	109	9.483	9.483	(1.080)	22465	10.0000	7.324(a)
	93 Diethylphthalate	149	9.739	9.739	(1.110)	158623	10.0000	9.688(a)
	94 Fluorene	166	9.718	9.718	(1.107)	152222	10.0000	9.570(a)
	95 4-Chlorophenyl-phenylether	204	9.771	9.771	(1.113)	85503	10.0000	9.528(a)
	98 4-Nitroaniline	138	9.942	9.942	(1.133)	31474	10.0000	10.06(a)
	99 4,6-Dinitro-2-methylphenol	198	10.001	10.001	(0.875)	20689	10.0000	7.182(a)
	100 N-Nitrosodiphenylamine	169	10.028	10.028	(0.877)	106582	10.0000	8.895(a)
	102 Azobenzene	77	10.049	10.049	(0.879)	225321	10.0000	8.650(a)
$	104 2,4,6-Tribromophenol	330	10.225	10.225	(1.165)	24963	10.0000	9.992(a)
	109 4-Bromophenyl-phenylether	248	10.653	10.653	(0.932)	53710	10.0000	9.391(a)
	112 Hexachlorobenzene	284	10.877	10.877	(0.951)	57008	10.0000	9.542(a)
	117 Pentachlorophenol	266	11.299	11.299	(0.988)	9726	10.0000	3.630(aM)
*	121 Phenanthrene-d10	188	11.433	11.433	(1.000)	786425	40.0000	
	122 Phenanthrene	178	11.470	11.470	(1.003)	230667	10.0000	9.550(a)
	124 Anthracene	178	11.556	11.556	(1.011)	221786	10.0000	9.542(a)
	126 Carbazole	167	11.967	11.967	(1.047)	189980	10.0000	9.864(a)
	129 Di-n-Butylphthalate	149	12.848	12.848	(1.124)	243812	10.0000	9.542(a)
	134 Fluoranthene	202	13.762	13.762	(1.204)	245931	10.0000	9.918(a)
	135 Benzidine	184	14.168	14.168	(0.854)	87679	10.0000	9.255(a)
	137 Pyrene	202	14.179	14.179	(0.854)	252960	10.0000	8.976(a)
$	139 Terphenyl-d14	244	14.627	14.627	(0.882)	196916	10.0000	8.897(a)
	145 3,3-Dimethylbenzidine	212	15.632	15.632	(0.942)	101467	10.0000	9.459(a)
	146 Butylbenzylphthalate	149	15.749	15.749	(0.949)	102927	10.0000	9.311(a)
	150 Benzo(a)Anthracene	228	16.556	16.556	(0.998)	222546	10.0000	9.369(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.593	16.593	(1.000)	688097	40.0000	
152 3,3'-Dichlorobenzidine	252	16.657	16.657	(1.004)	69600	10.0000	7.753(a)
154 Chrysene	228	16.636	16.636	(1.003)	198671	10.0000	8.837(a)
155 bis(2-ethylhexyl)Phthalate	149	16.978	16.978	(1.023)	128038	10.0000	9.344(a)
158 Di-n-octylphthalate	149	18.121	18.121	(0.944)	214397	10.0000	8.691(a)
160 Benzo(b)fluoranthene	252	18.554	18.554	(0.966)	211623	10.0000	8.934(a)
161 Benzo(k)fluoranthene	252	18.596	18.596	(0.968)	219614	10.0000	9.422(a)
165 Benzo(a)pyrene	252	19.093	19.093	(0.994)	189376	10.0000	8.992(a)
* 166 Perylene-d12	264	19.205	19.205	(1.000)	598003	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.894	20.894	(1.088)	174638	10.0000	8.809(aH)
174 Dibenzo(a,h)anthracene	278	20.942	20.942	(1.090)	161573	10.0000	8.441(a)
177 Benzo(g,h,i)perylene	276	21.332	21.332	(1.111)	159761	10.0000	9.178(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3133.D
Report Date: 14-May-2005 09:51

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

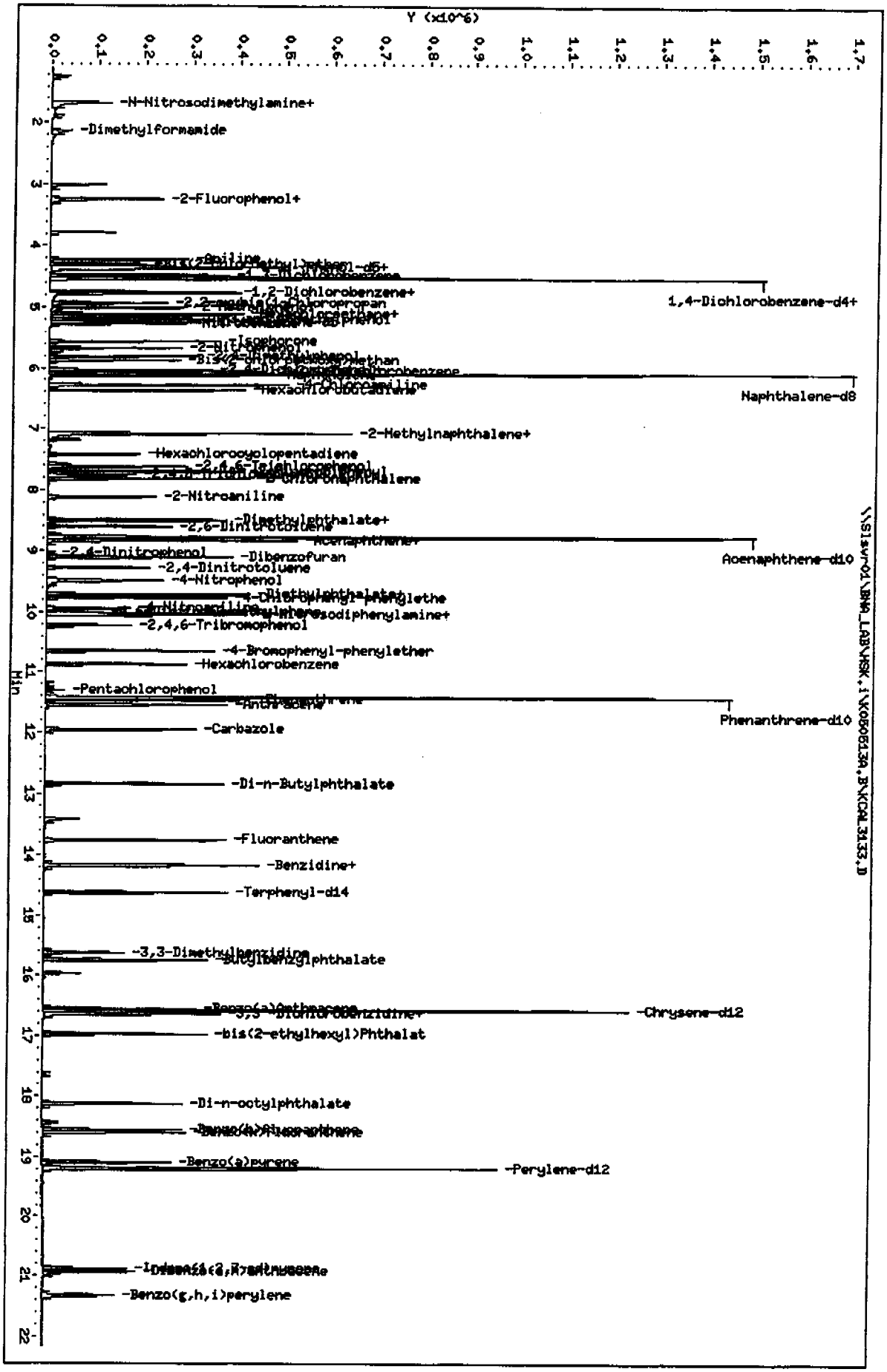
Instrument ID: MSK.i
Lab File ID: KCAL3133.D
Lab Smp Id: SSTD010
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Misc Info: SV0213-05

Calibration Date: 13-MAY-2005
Calibration Time: 12:14
Client Smp ID: SSTD010
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	181066	90533	362132	211211	16.65
48 Naphthalene-d8	627500	313750	1255000	757952	20.79
82 Acenaphthene-d10	358476	179238	716952	428473	19.53
121 Phenanthrene-d10	655247	327624	1310494	786425	20.02
153 Chrysene-d12	535207	267604	1070414	688097	28.57
166 Perylene-d12	427031	213516	854062	598003	40.04

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.52	4.02	5.02	4.53	0.04
48 Naphthalene-d8	6.11	5.61	6.61	6.11	0.03
82 Acenaphthene-d10	8.78	8.28	9.28	8.78	0.02
121 Phenanthrene-d10	11.43	10.93	11.93	11.43	0.01
153 Chrysene-d12	16.59	16.09	17.09	16.59	0.01
166 Perylene-d12	19.20	18.70	19.70	19.21	0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

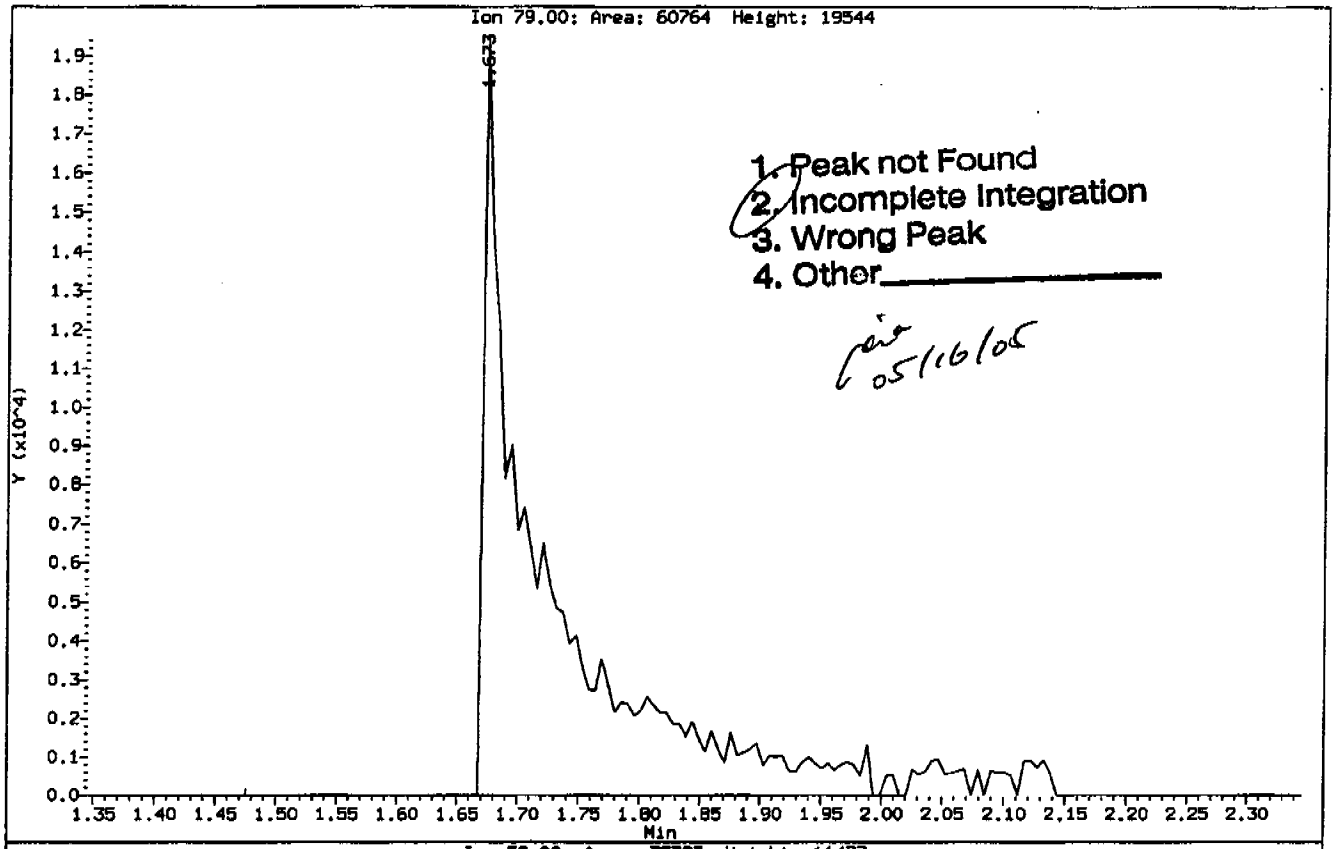


Data File: \\Slsvr01\BNA_LAB\HSK.i\K060613A.B\KCAL3133.D
Date : 13-MAY-2006 15:26
Client ID: SSTD010
Sample Info: SSTD010
Volume Injected (uL): 1.0
Column phase:

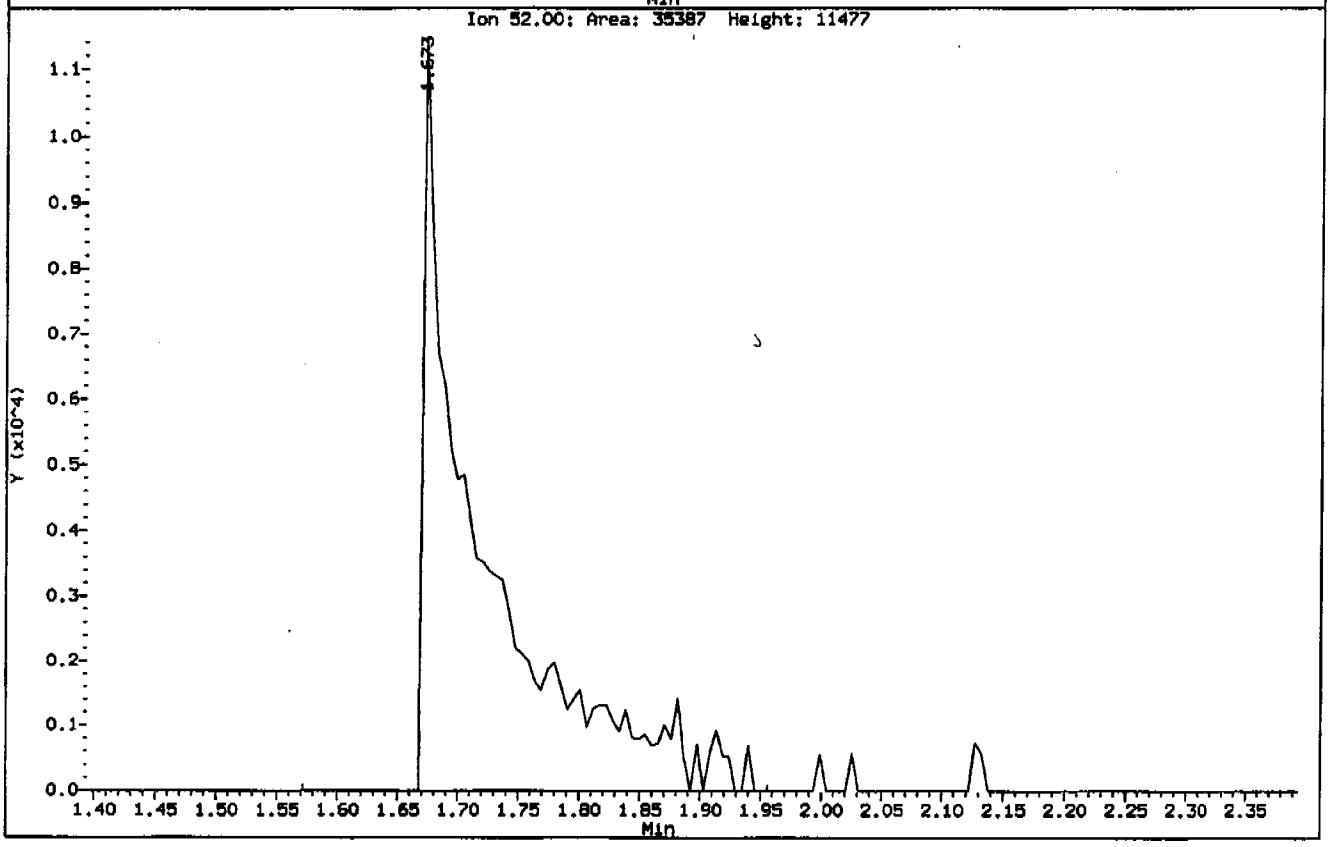
Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3133.D
Injection Date: 13-MAY-2005 15:26
Instrument: MSK.i
Client Sample ID: SSTD010

Compound: Pyridine
CAS Number: 110-86-1

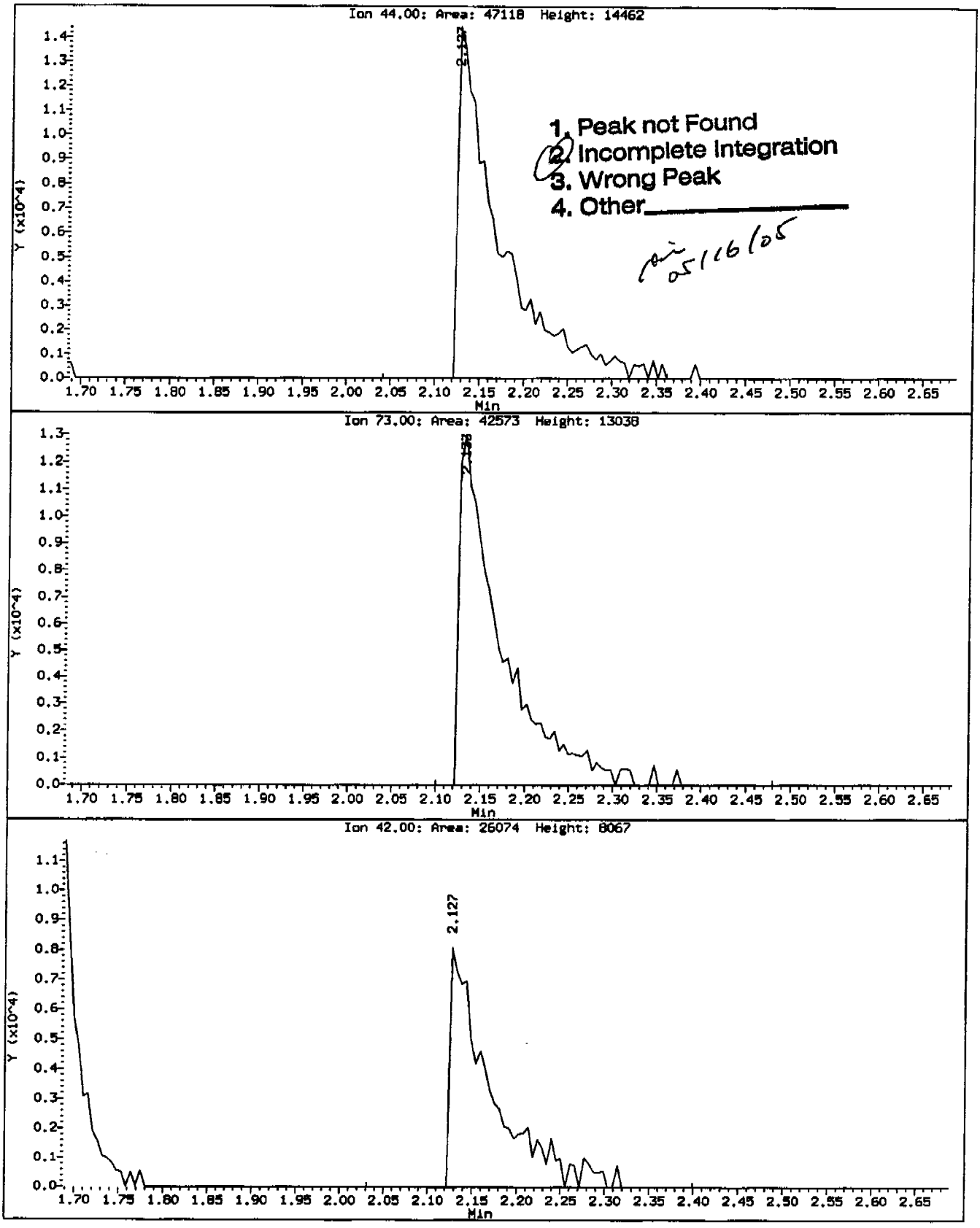


05/16/05



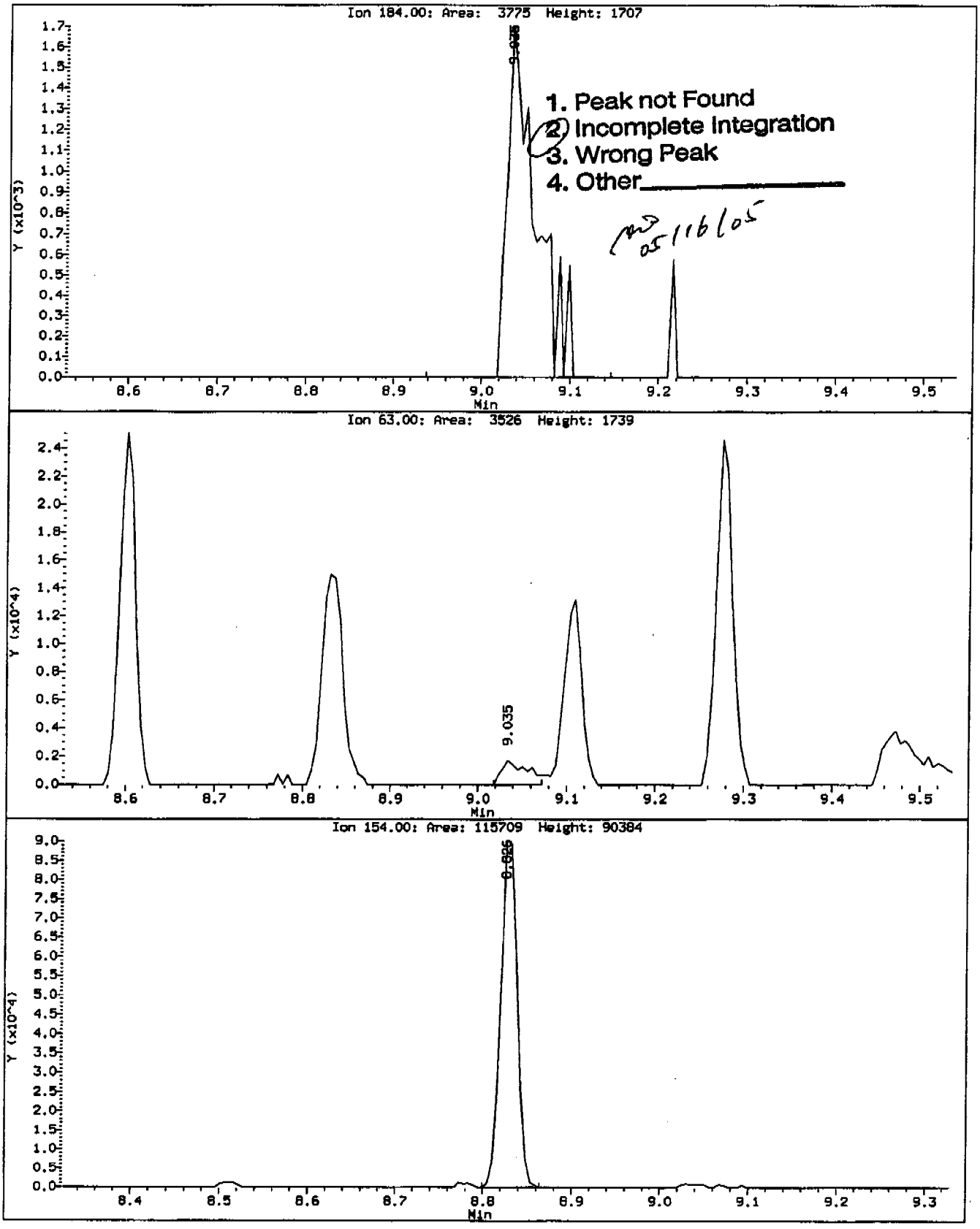
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3133.D
Injection Date: 13-MAY-2005 15:26
Instrument: MSK.i
Client Sample ID: SSTD010

Compound: Dimethylformamide
CAS Number: 68-12-2



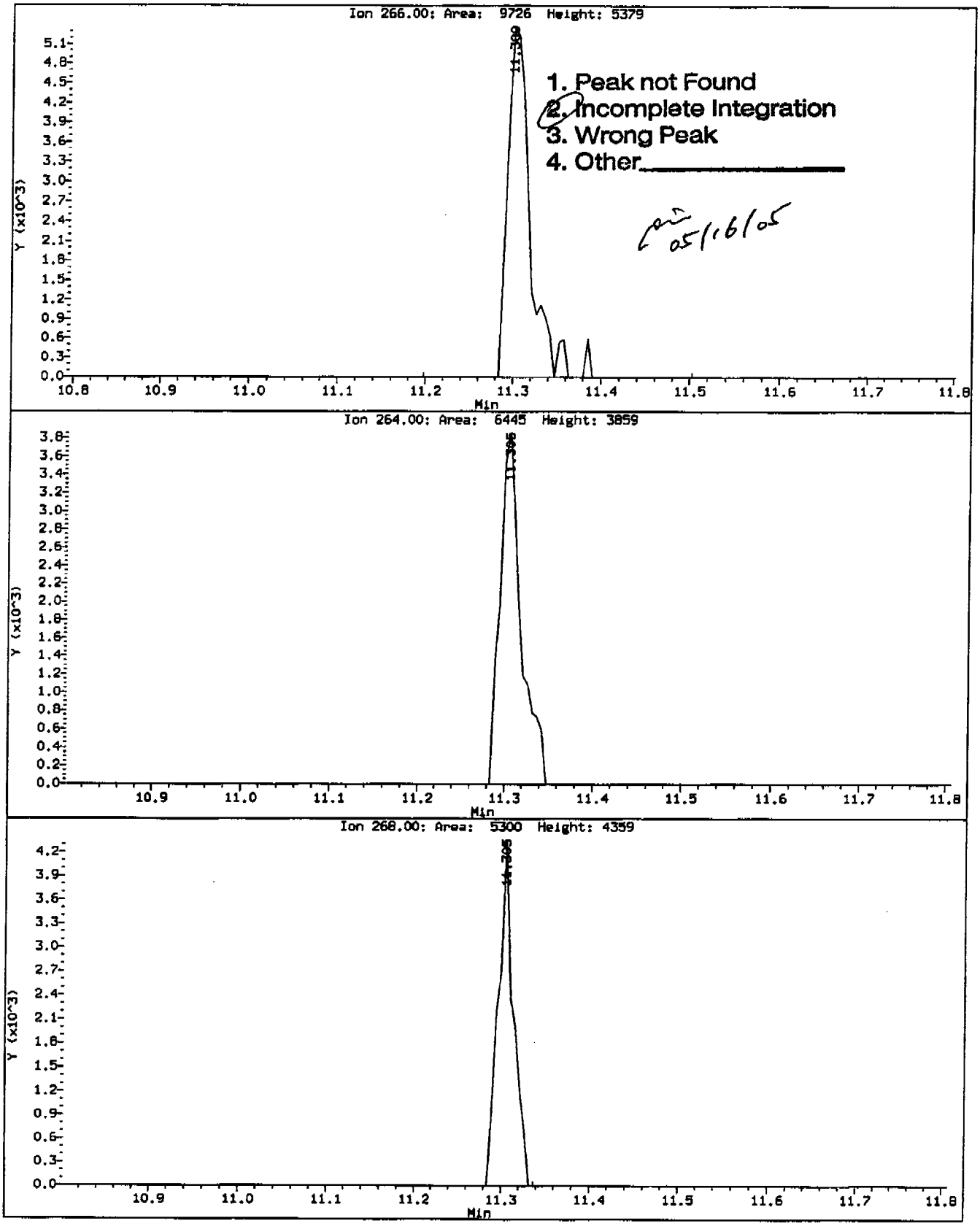
Data File: \\Slavr01\BNA_LAB\MSK.i\K050513A.B\KCAL3133.D
Injection Date: 13-MAY-2005 15:26
Instrument: MSK.i
Client Sample ID: SSTD010

Compound: 2,4-Dinitrophenol
CAS Number: 51-28-5



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3133.D
Injection Date: 13-MAY-2005 15:26
Instrument: MSK.i
Client Sample ID: SSTD010

Compound: Pentachlorophenol
CAS Number: 87-86-5



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GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3134.D
Lab Smp Id: SSTD002 Client Smp ID: SSTD002
Inj Date : 13-MAY-2005 15:58
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD002
Misc Info : SV0212-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Meth Date : 14-May-2005 09:51 hongs Quant Type: ISTD
Cal Date : 13-MAY-2005 15:58 Cal File: KCAL3134.D
Als bottle: 10 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	1.251	1.251	(0.277)	5107	2.00000	2.046(a)
4	N-Nitrosodimethylamine	74	1.689	1.689	(0.374)	7379	2.00000	1.713(a)
3	Pyridine	79	1.844	1.844	(0.408)	10369	2.00000	1.325(aM)
5	Dimethylformamide	44	2.186	2.186	(0.484)	11221	2.00000	1.928(aM)
11	Cyclohexanol	57	3.233	3.233	(0.715)	15415	2.00000	1.783(a)
17	Aniline	93	4.221	4.221	(0.934)	25481	2.00000	1.845(a)
19	Bis(2-chloroethyl)ether	93	4.296	4.296	(0.950)	18030	2.00000	1.898(a)
$ 15	Phenol-d5	99	4.344	4.344	(0.961)	22048	2.00000	2.095(aM)
16	Phenol	94	4.360	4.360	(0.965)	20678	2.00000	1.840(a)
20	2-Chlorophenol	128	4.376	4.376	(0.968)	16189	2.00000	1.802(a)
21	1,3-Dichlorobenzene	146	4.478	4.478	(0.991)	19918	2.00000	1.912(a)
* 22	1,4-Dichlorobenzene-d4	152	4.520	4.520	(1.000)	269767	40.0000	
23	1,4-Dichlorobenzene	146	4.542	4.542	(1.005)	20238	2.00000	1.836(a)
26	1,2-Dichlorobenzene	146	4.761	4.761	(1.053)	18290	2.00000	1.799(a)
28	2,2-oxybis(1-Chloropropane)	45	4.932	4.932	(1.091)	19583	2.00000	1.965(a)
27	2-Methylphenol	108	5.012	5.012	(1.109)	15742	2.00000	2.142(a)
35	Hexachloroethane	117	5.119	5.119	(1.132)	9439	2.00000	1.983(a)
32	N-Nitrosodinpropylamine	70	5.108	5.108	(1.130)	15372	2.00000	2.002(a)
29	3 and 4-Methylphenol	108	5.204	5.204	(1.151)	29749	4.00000	3.624(a)
37	Nitrobenzene	77	5.268	5.268	(0.863)	26397	2.00000	1.957(a)
39	Isophorone	82	5.557	5.557	(0.911)	35166	2.00000	2.006(a)

05/16/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3134.D Page 2
Report Date: 14-May-2005 09:51

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
40	2-Nitrophenol	139	5.669	5.669	(0.929)	8769	2.00000	1.814(a)
41	2,4-Dimethylphenol	107	5.819	5.819	(0.954)	16806	2.00000	1.666(a)
42	Bis(2-chloroethoxy)methane	93	5.872	5.872	(0.962)	21825	2.00000	1.948(a)
45	2,4-Dichlorophenol	162	6.048	6.048	(0.991)	12690	2.00000	1.686(a)
47	1,2,4-Trichlorobenzene	180	6.059	6.059	(0.993)	17737	2.00000	1.894(a)
* 48	Naphthalene-d8	136	6.102	6.102	(1.000)	963429	40.0000	
44	Benzoic Acid	122	6.022	6.022	(0.987)	3432	2.00000	0.7722(aM)
50	Naphthalene	128	6.123	6.123	(1.004)	48792	2.00000	1.815(a)
51	4-Chloroaniline	127	6.278	6.278	(1.029)	17949	2.00000	1.657(a)
54	Hexachlorobutadiene	225	6.374	6.374	(1.045)	13065	2.00000	1.930(a)
62	2-Methylnaphthalene	142	7.085	7.085	(1.161)	45032	2.00000	1.911(a)
59	4-Chloro-3-Methylphenol	107	7.101	7.101	(1.164)	14343	2.00000	1.657(a)
66	Hexachlorocyclopentadiene	237	7.432	7.432	(0.847)	4973	2.00000	0.9034(aM)
67	2,4,6-Trichlorophenol	196	7.630	7.630	(0.870)	10196	2.00000	1.668(a)
68	2,4,5-Trichlorophenol	196	7.779	7.779	(0.887)	9482	2.00000	1.486(a)
$ 69	2-Fluorobiphenyl	172	7.699	7.699	(0.878)	37692	2.00000	1.782(a)
72	2-Chloronaphthalene	162	7.822	7.822	(0.892)	31917	2.00000	1.815(a)
73	2-Nitroaniline	65	8.121	8.121	(0.926)	12088	2.00000	1.706(a)
76	Dimethylphthalate	163	8.479	8.479	(0.967)	35789	2.00000	1.791(aM)
79	Acenaphthylene	152	8.506	8.506	(0.970)	47317	2.00000	1.791(a)
80	2,6-Dinitrotoluene	165	8.597	8.597	(0.980)	7396	2.00000	1.766(a)
* 82	Acenaphthene-d10	164	8.773	8.773	(1.000)	523277	40.0000	
83	Acenaphthene	153	8.821	8.821	(1.005)	28968	2.00000	1.797(a)
86	Dibenzofuran	168	9.104	9.104	(1.038)	45144	2.00000	1.866(a)
88	2,4-Dinitrotoluene	165	9.275	9.275	(1.057)	7885	2.00000	1.494(a)
85	4-Nitrophenol	109	9.510	9.510	(1.084)	4069	2.00000	1.086(aM)
93	Diethylphthalate	149	9.734	9.734	(1.110)	36083	2.00000	1.804(a)
94	Fluorene	166	9.708	9.708	(1.107)	34177	2.00000	1.759(a)
95	4-Chlorophenyl-phenylether	204	9.766	9.766	(1.113)	19328	2.00000	1.764(a)
98	4-Nitroaniline	138	9.948	9.948	(1.134)	5481	2.00000	1.434(aM)
99	4,6-Dinitro-2-methylphenol	198	10.002	10.002	(0.875)	2129	2.00000	0.6522(aM)
100	N-Nitrosodiphenylamine	169	10.023	10.023	(0.877)	24083	2.00000	1.774(a)
102	Azobenzene	77	10.039	10.039	(0.878)	53244	2.00000	1.804(a)
109	4-Bromophenyl-phenylether	248	10.648	10.648	(0.932)	11556	2.00000	1.783(a)
112	Hexachlorobenzene	284	10.872	10.872	(0.951)	13034	2.00000	1.925(a)
* 121	Phenanthrene-d10	188	11.428	11.428	(1.000)	891064	40.0000	
122	Phenanthrene	178	11.465	11.465	(1.003)	51776	2.00000	1.892(a)
124	Anthracene	178	11.545	11.545	(1.010)	49660	2.00000	1.886(a)
126	Carbazole	167	11.957	11.957	(1.046)	39087	2.00000	1.791(a)
129	Di-n-Butylphthalate	149	12.844	12.844	(1.124)	51965	2.00000	1.795(a)
134	Fluoranthene	202	13.757	13.757	(1.204)	52925	2.00000	1.884(a)
135	Benzidine	184	14.168	14.168	(0.854)	16708	2.00000	1.628(a)
137	Pyrene	202	14.174	14.174	(0.854)	52860	2.00000	1.731(a)
$ 139	Terphenyl-d14	244	14.622	14.622	(0.881)	42492	2.00000	1.772(a)
145	3,3-Dimethylbenzidine	212	15.627	15.627	(0.942)	19879	2.00000	1.710(a)
146	Butylbenzylphthalate	149	15.744	15.744	(0.949)	22027	2.00000	1.839(a)
150	Benzo(a)Anthracene	228	16.551	16.551	(0.998)	47407	2.00000	1.842(a)
* 153	Chrysene-d12	240	16.588	16.588	(1.000)	745557	40.0000	
152	3,3'-Dichlorobenzidine	252	16.658	16.658	(1.004)	14997	2.00000	1.542(a)
154	Chrysene	228	16.626	16.626	(1.002)	46623	2.00000	1.914(a)
155	bis(2-ethylhexyl)Phthalate	149	16.973	16.973	(1.023)	25960	2.00000	1.748(a)
158	Di-n-octylphthalate	149	18.116	18.116	(0.944)	41977	2.00000	1.560(aM)
160	Benzo(b)fluoranthene	252	18.549	18.549	(0.966)	44682	2.00000	1.729(a)
161	Benzo(k)fluoranthene	252	18.592	18.592	(0.968)	45149	2.00000	1.775(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
165 Benzo(a)pyrene	252	19.088	19.088	(0.994)	40489	2.00000	1.762(a)
* 166 Perylene-d12	264	19.201	19.201	(1.000)	652504	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.883	20.883	(1.088)	34313	2.00000	1.586(a)
174 Dibenzo(a,h)anthracene	278	20.937	20.937	(1.090)	34383	2.00000	1.646(a)
177 Benzo(g,h,i)perylene	276	21.327	21.327	(1.111)	33718	2.00000	1.775(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3134.D Page 4
Report Date: 14-May-2005 09:51

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

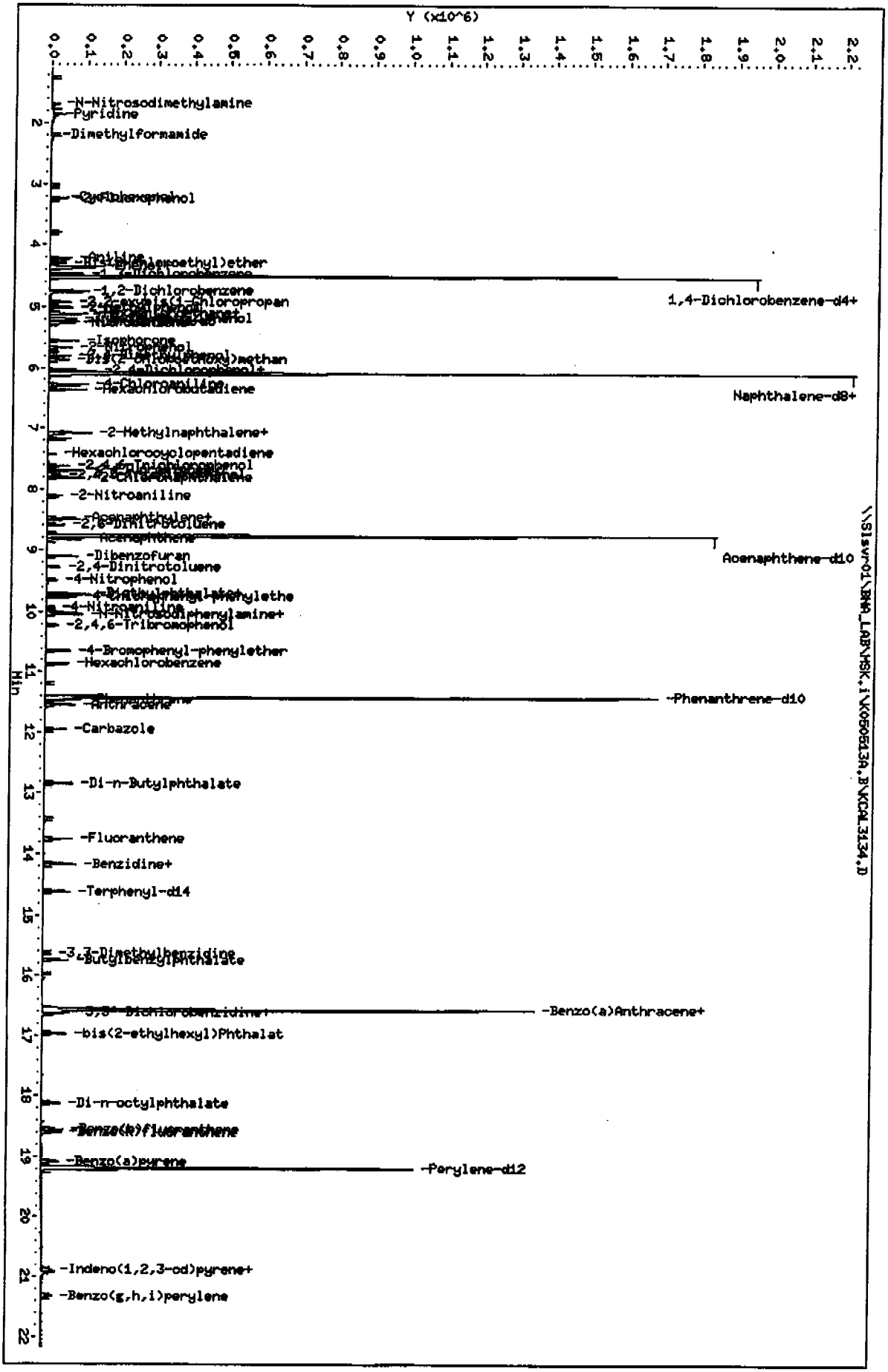
Instrument ID: MSK.i
Lab File ID: KCAL3134.D
Lab Smp Id: SSTD002
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Misc Info: SV0212-05

Calibration Date: 13-MAY-2005
Calibration Time: 12:14
Client Smp ID: SSTD002
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	181066	90533	362132	269767	48.99
48 Naphthalene-d8	627500	313750	1255000	963429	53.53
82 Acenaphthene-d10	358476	179238	716952	523277	45.97
121 Phenanthrene-d10	655247	327624	1310494	891064	35.99
153 Chrysene-d12	535207	267604	1070414	745557	39.30
166 Perylene-d12	427031	213516	854062	652504	52.80

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.52	4.02	5.02	4.52	-0.07
48 Naphthalene-d8	6.11	5.61	6.61	6.10	-0.05
82 Acenaphthene-d10	8.78	8.28	9.28	8.77	-0.04
121 Phenanthrene-d10	11.43	10.93	11.93	11.43	-0.03
153 Chrysene-d12	16.59	16.09	17.09	16.59	-0.02
166 Perylene-d12	19.20	18.70	19.70	19.20	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

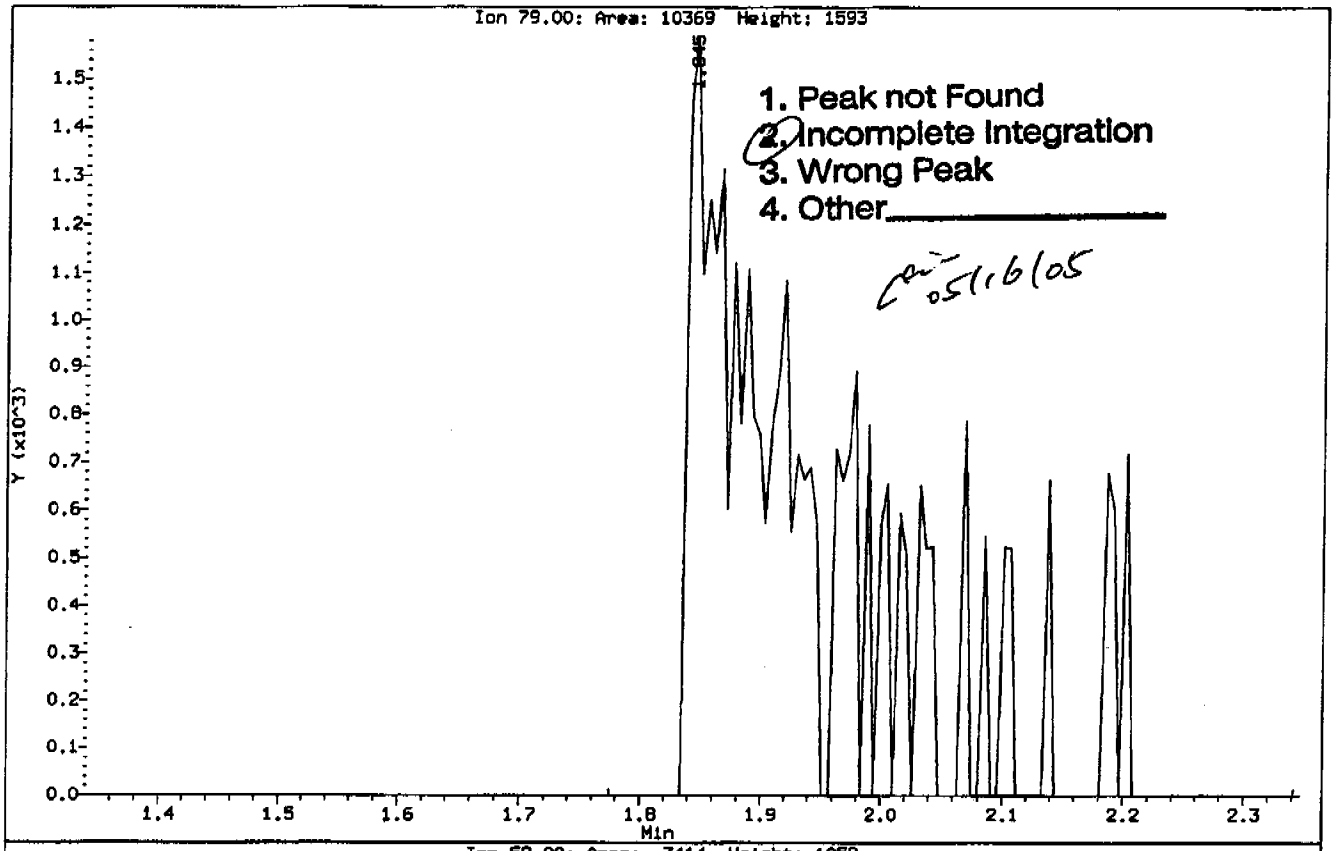


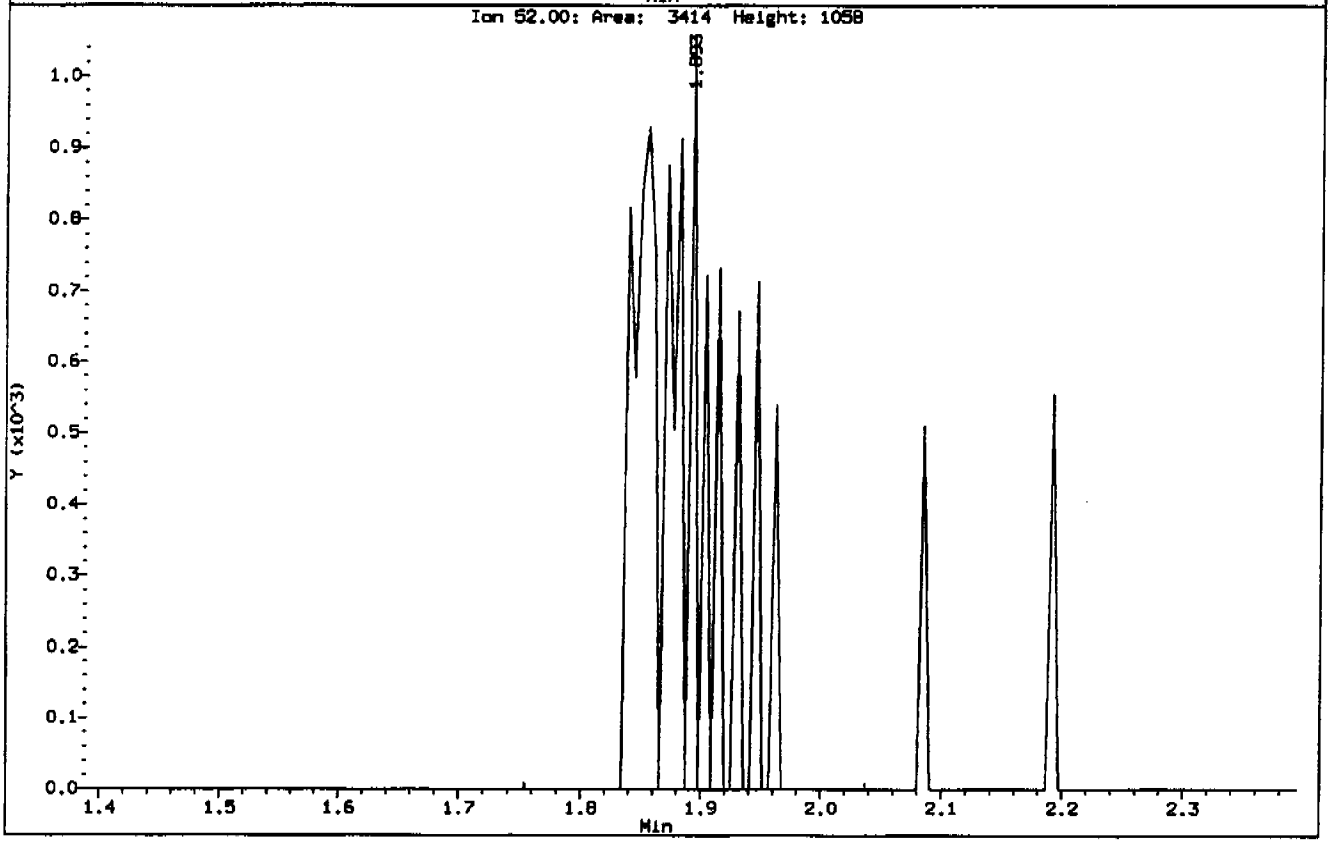
Data File: \\Slsvr01\DNA_LAB\HSK.i\K060513A.B\KCAL3134.D
Date : 13-MAY-2006 15:58
Client ID: SSTD002
Sample Info: SSTD002
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slavr01\BNA_LAB\MSK.i\K050513A.B\KCAL3134.D
Injection Date: 13-MAY-2005 15:58
Instrument: MSK.i
Client Sample ID: SSTD002

Compound: Pyridine
CAS Number: 110-86-1





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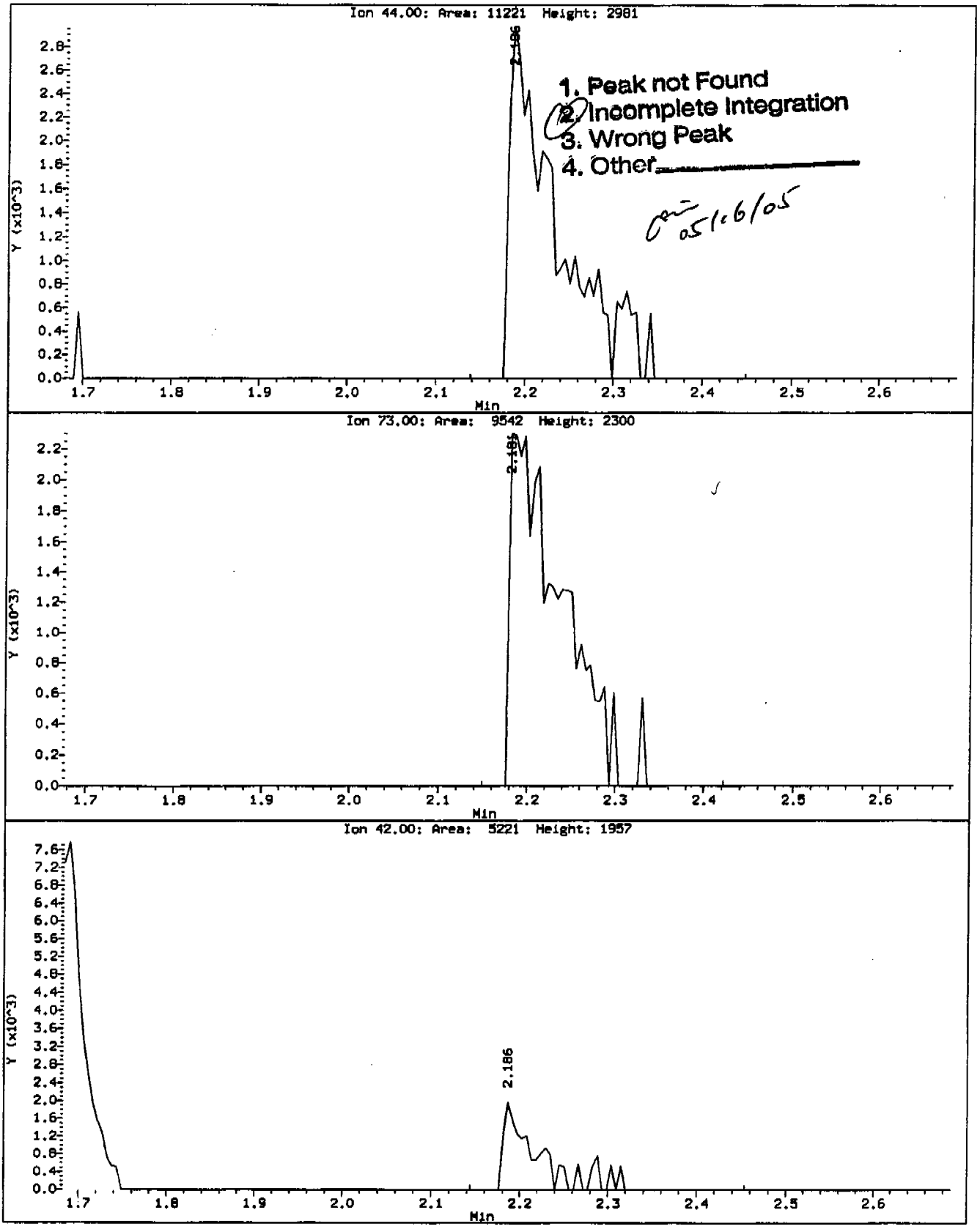
Injection Date: 13-MAY-2005 15:58
Instrument: MSK.i
Client Sample ID: SSTD002

Compound: Dimethylformamide
CAS Number: 68-12-2



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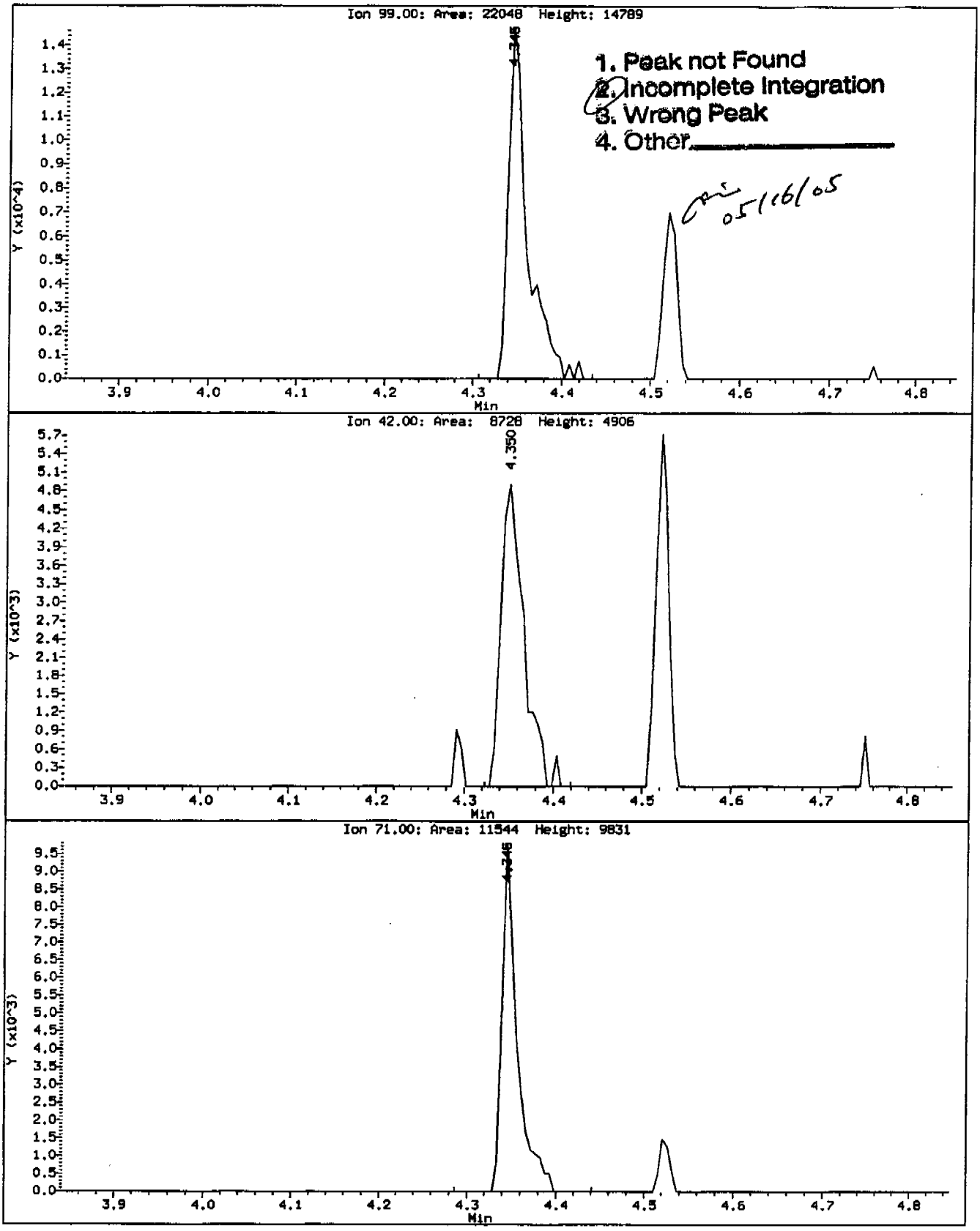
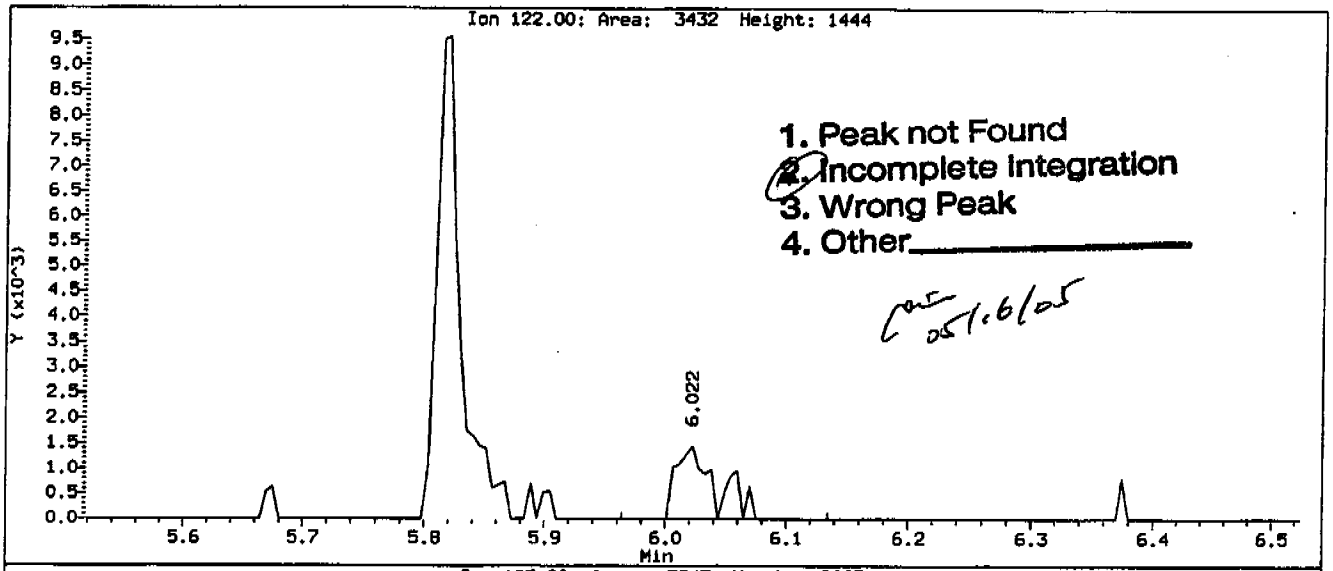
Injection Date: 13-MAY-2005 15:58
Instrument: MSK.i
Client Sample ID: SSTD002

Compound: Phenol-d5
CAS Number: 4165-62-2



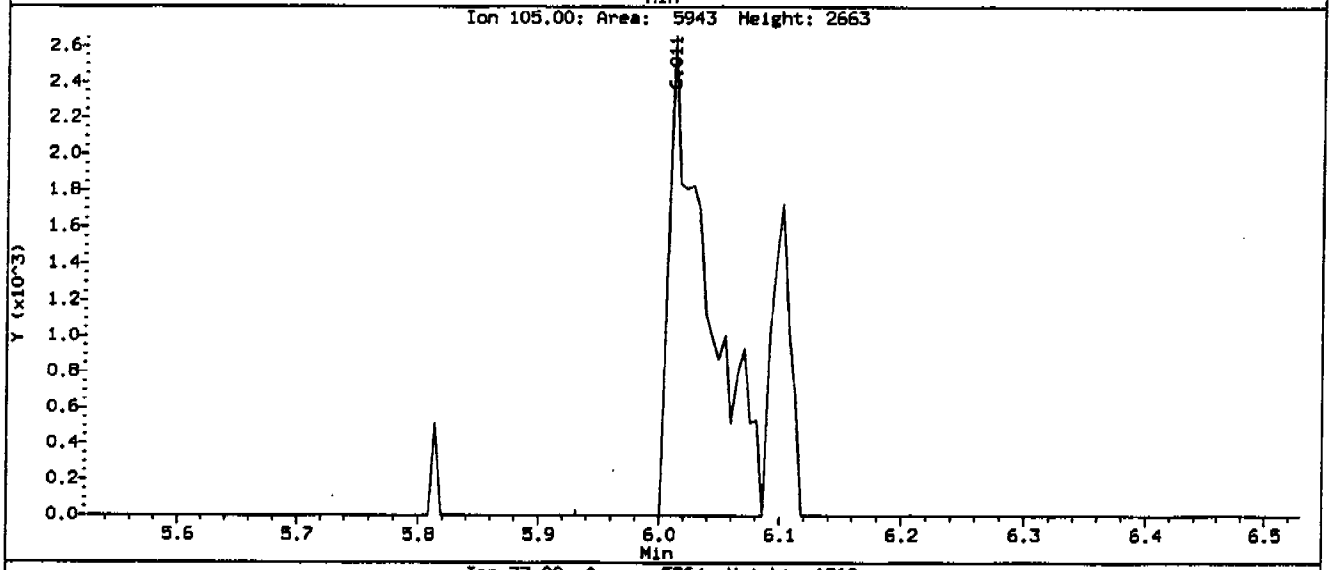
Data File: \\SlevrO1\BNA_LAB\MSK.i\K050513A.B\KCAL3134.D
Injection Date: 13-MAY-2005 15:58
Instrument: MSK.i
Client Sample ID: SSTD002

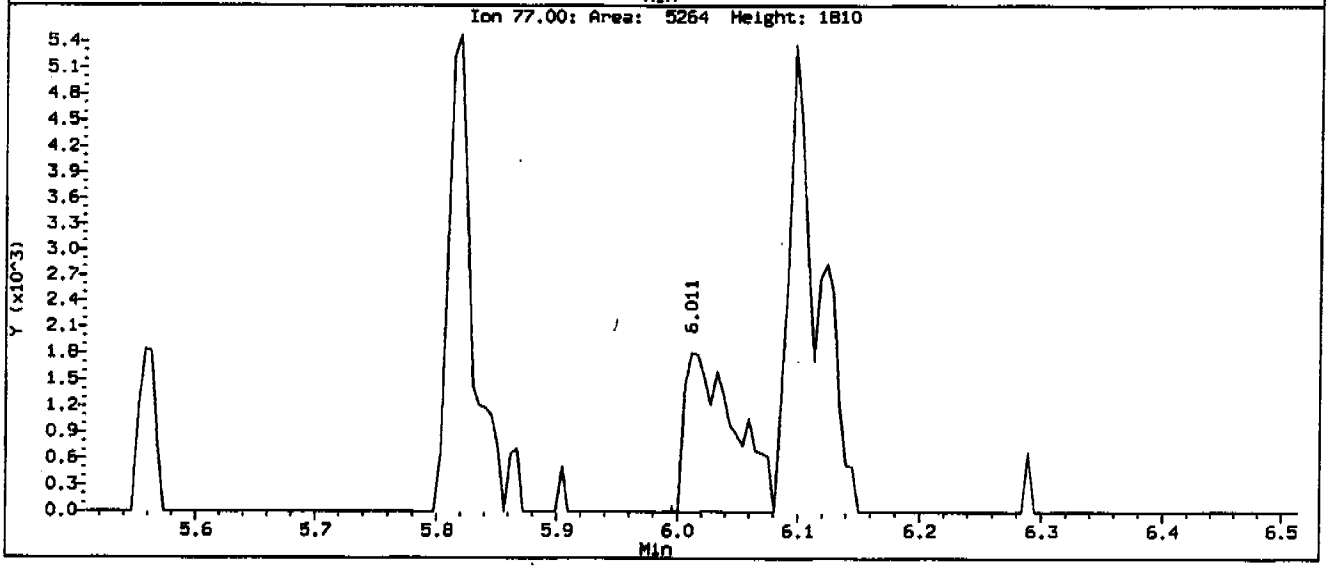
Compound: Benzoic Acid
CAS Number: 65-85-0



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

5/16/05





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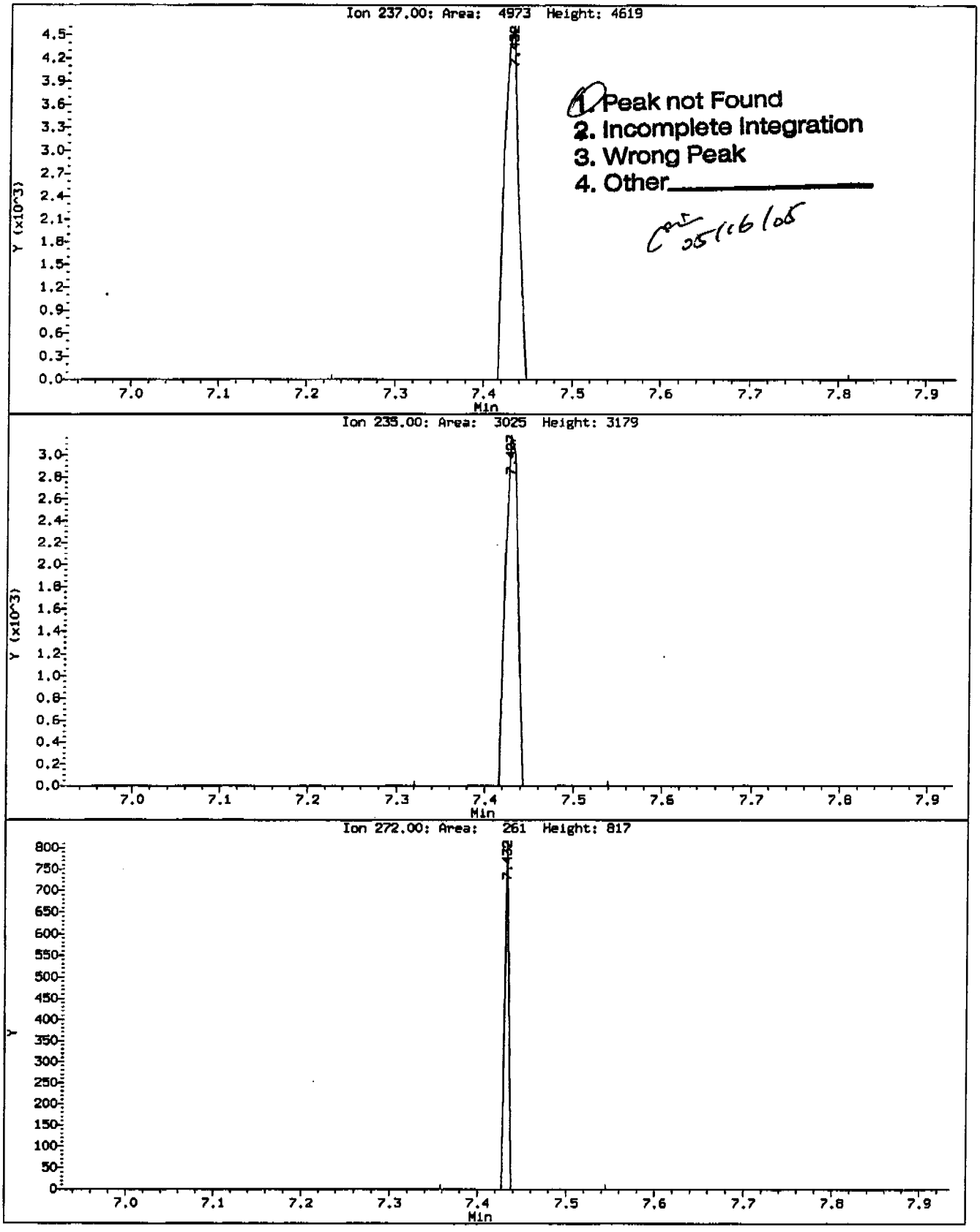
Injection Date: 13-MAY-2005 15:58
Instrument: MSK.i
Client Sample ID: SSTD002

Compound: Hexachlorocyclopentadiene
CAS Number: 77-47-4



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2. Incomplete Integration
3. Wrong Peak
4. Other_____

Cnt 05/16/05

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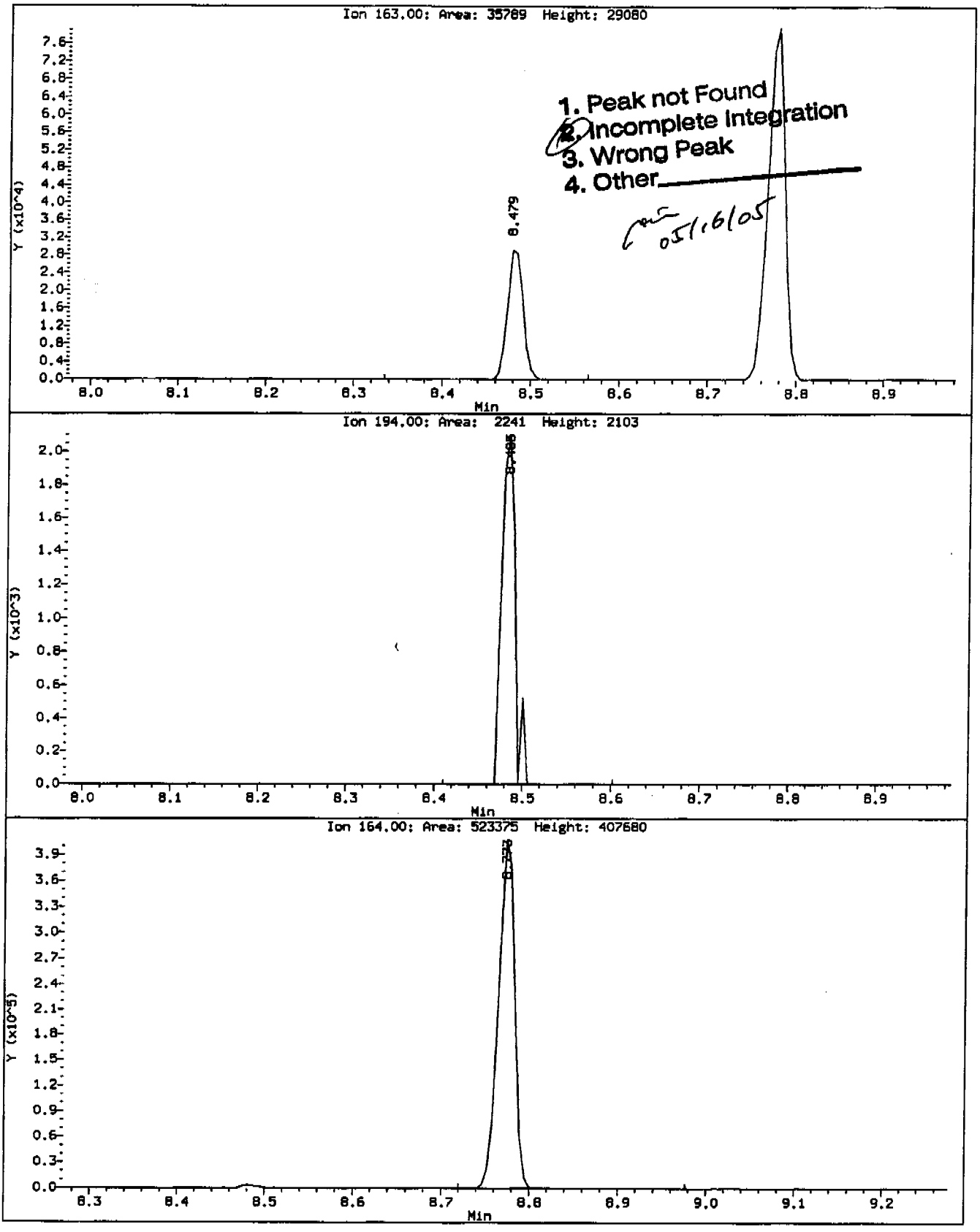
Injection Date: 13-MAY-2005 15:58
Instrument: MSK.i
Client Sample ID: SSTD002

Compound: Dimethylphthalate
CAS Number: 131-11-3



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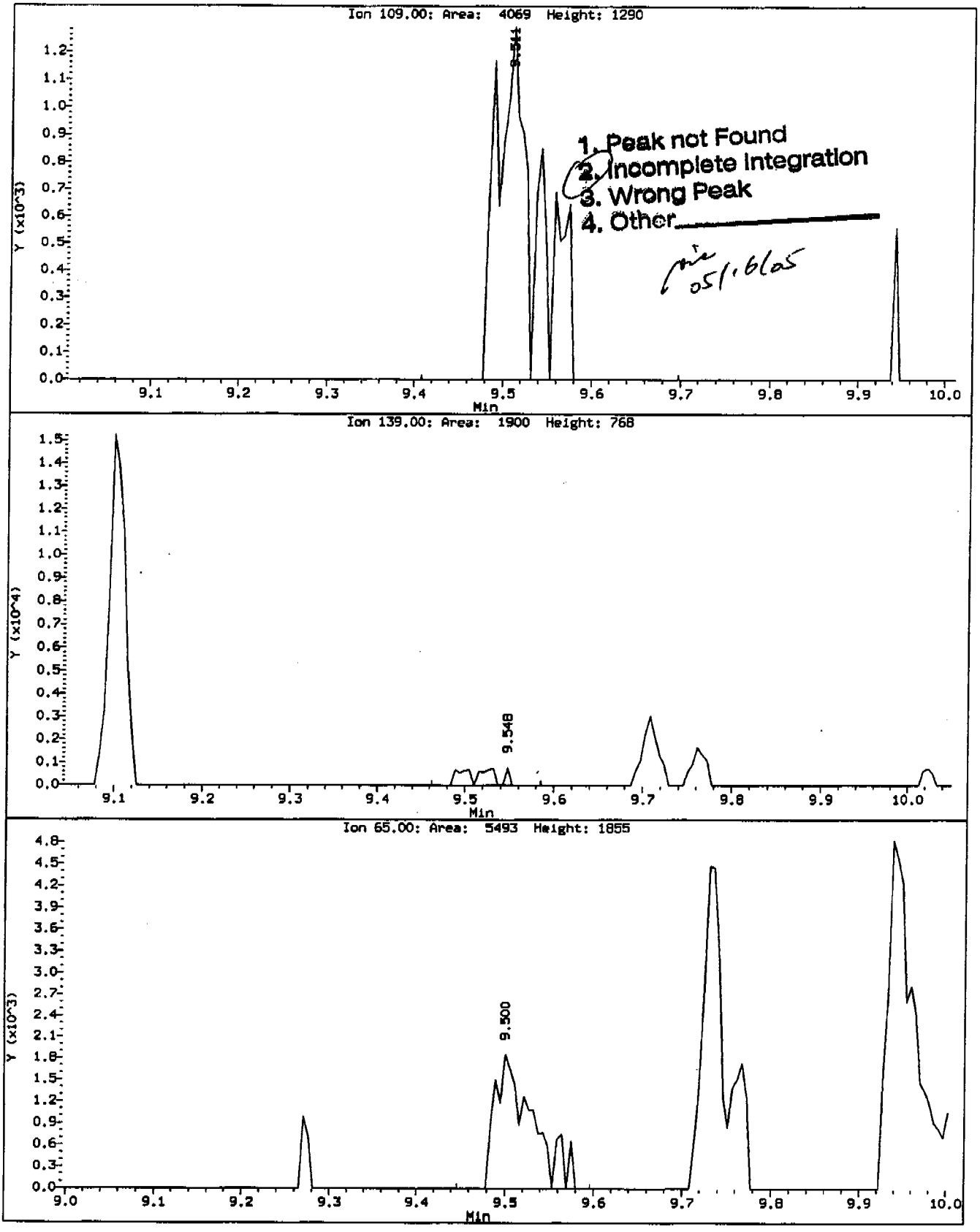
Injection Date: 13-MAY-2005 15:58
Instrument: MSK.i
Client Sample ID: SSTD002

Compound: 4-Nitrophenol
CAS Number: 100-02-7



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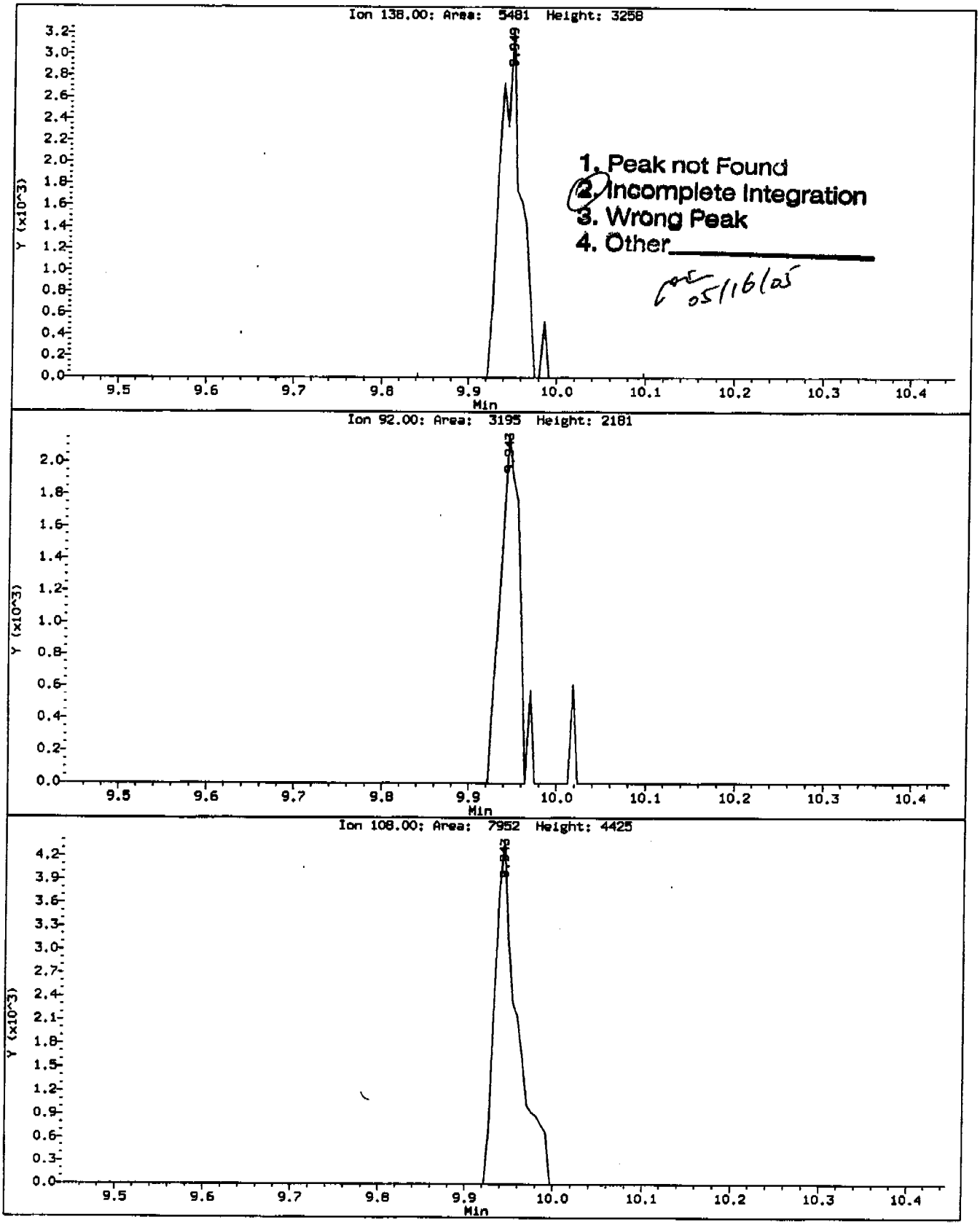
Injection Date: 13-MAY-2005 15:58
Instrument: MSK.i
Client Sample ID: SSTD002

Compound: 4-Nitroaniline
CAS Number: 100-01-6



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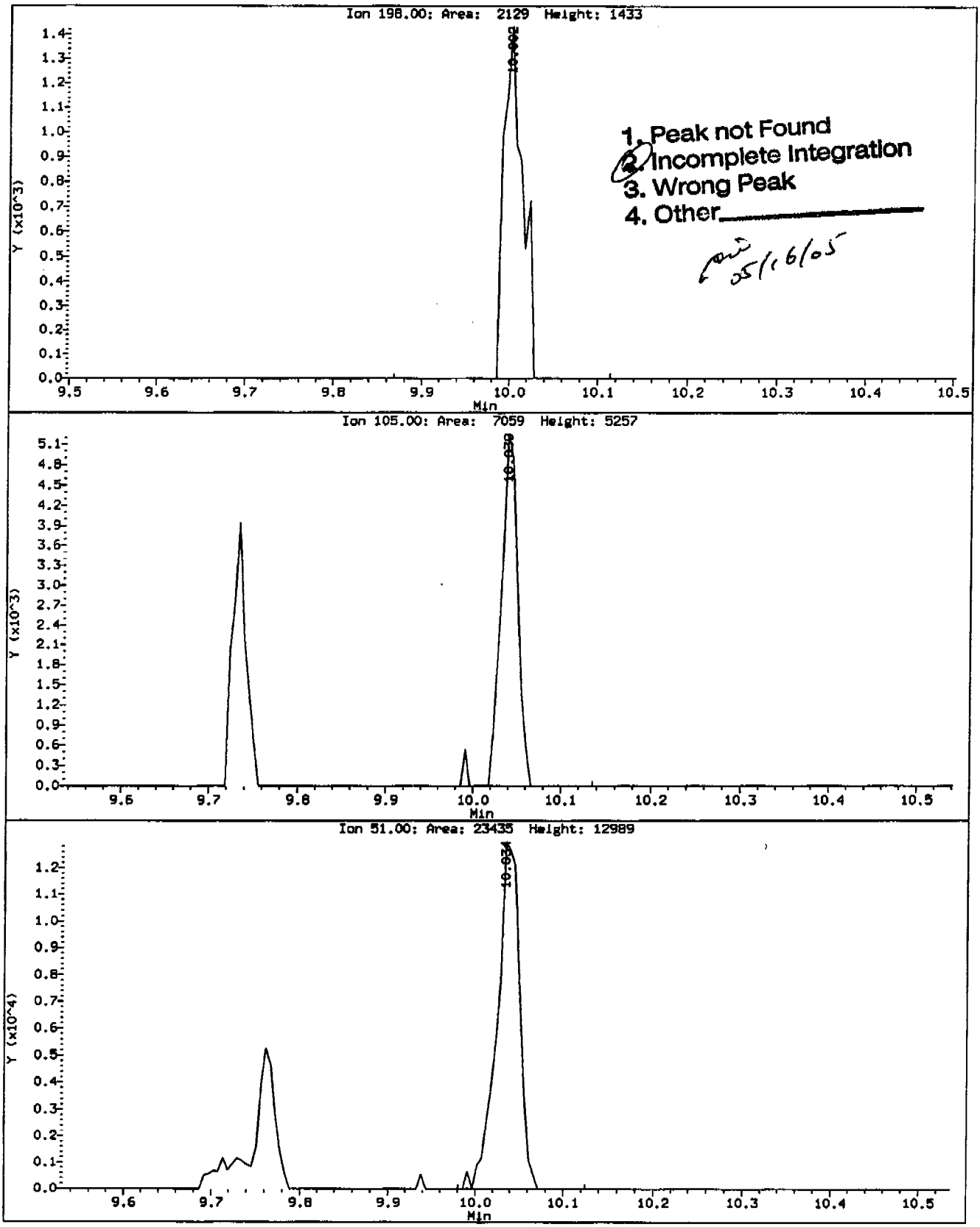
Injection Date: 13-MAY-2005 15:58
Instrument: MSK.i
Client Sample ID: SSTD002

Compound: 4,6-Dinitro-2-methylphenol
CAS Number: 534-52-1



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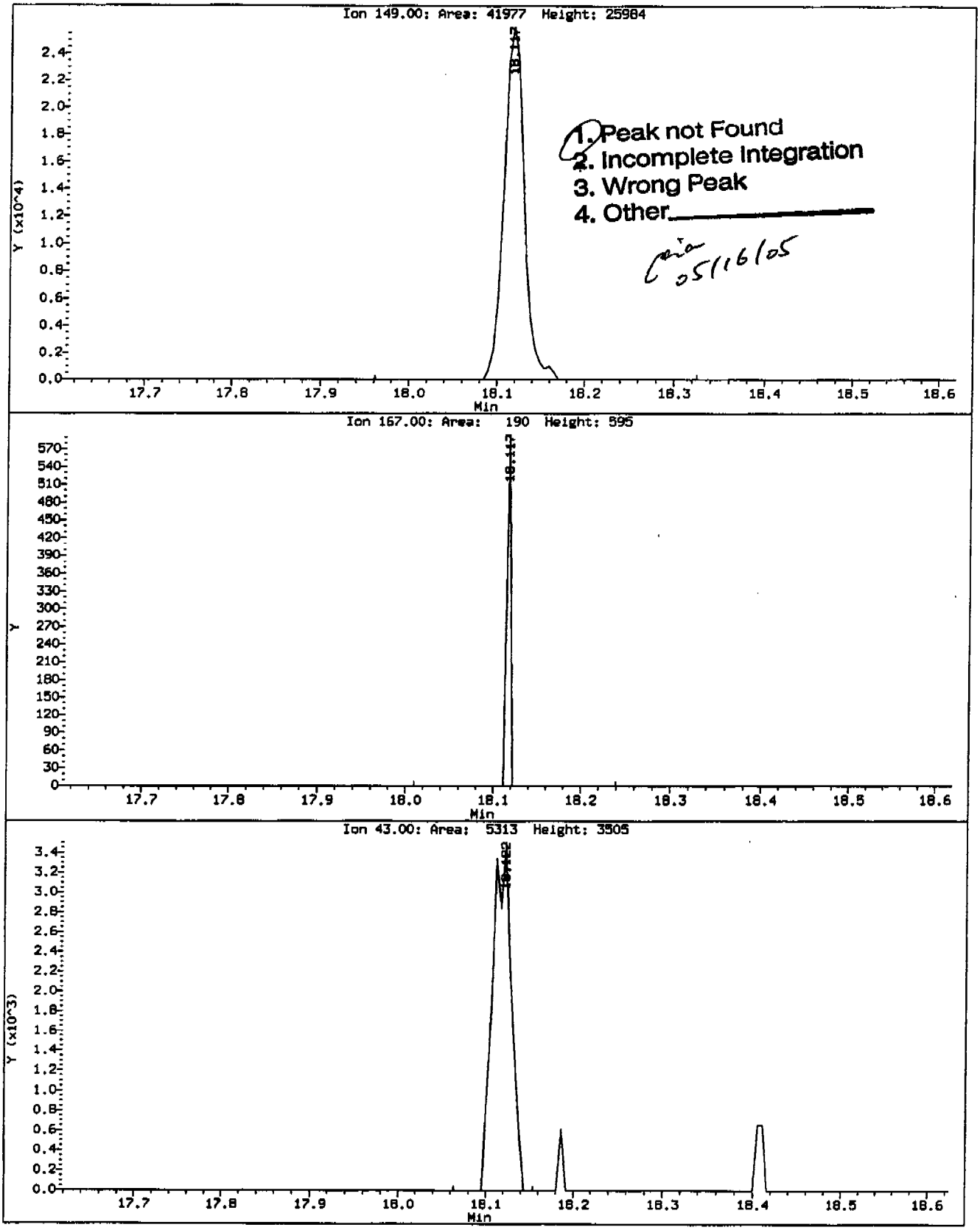
Injection Date: 13-MAY-2005 15:58
Instrument: MSK.i
Client Sample ID: SSTD002

Compound: Di-n-octylphthalate
CAS Number: 117-84-0



DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	38.17		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	46.07		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	45.94		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.23		PASS
275	10 - 30% of mass 198	28.64		PASS
365	Greater than 1% of mass 198	3.96		PASS
441	Present, but less than mass 443	13.47	(86.95)	PASS
442	Greater than 40% of mass 198	81.79		PASS
443	17 - 23% of mass 442	15.49	(18.94)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.8965885	5.000	PASS
Benzidine	0.8384548	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	394051			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	3048	0.8	15.0	PASS
4,4-DDD + DDE	3048	0.8	15.0	PASS

****

Tuning Sample, //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D,*** PASSED

****

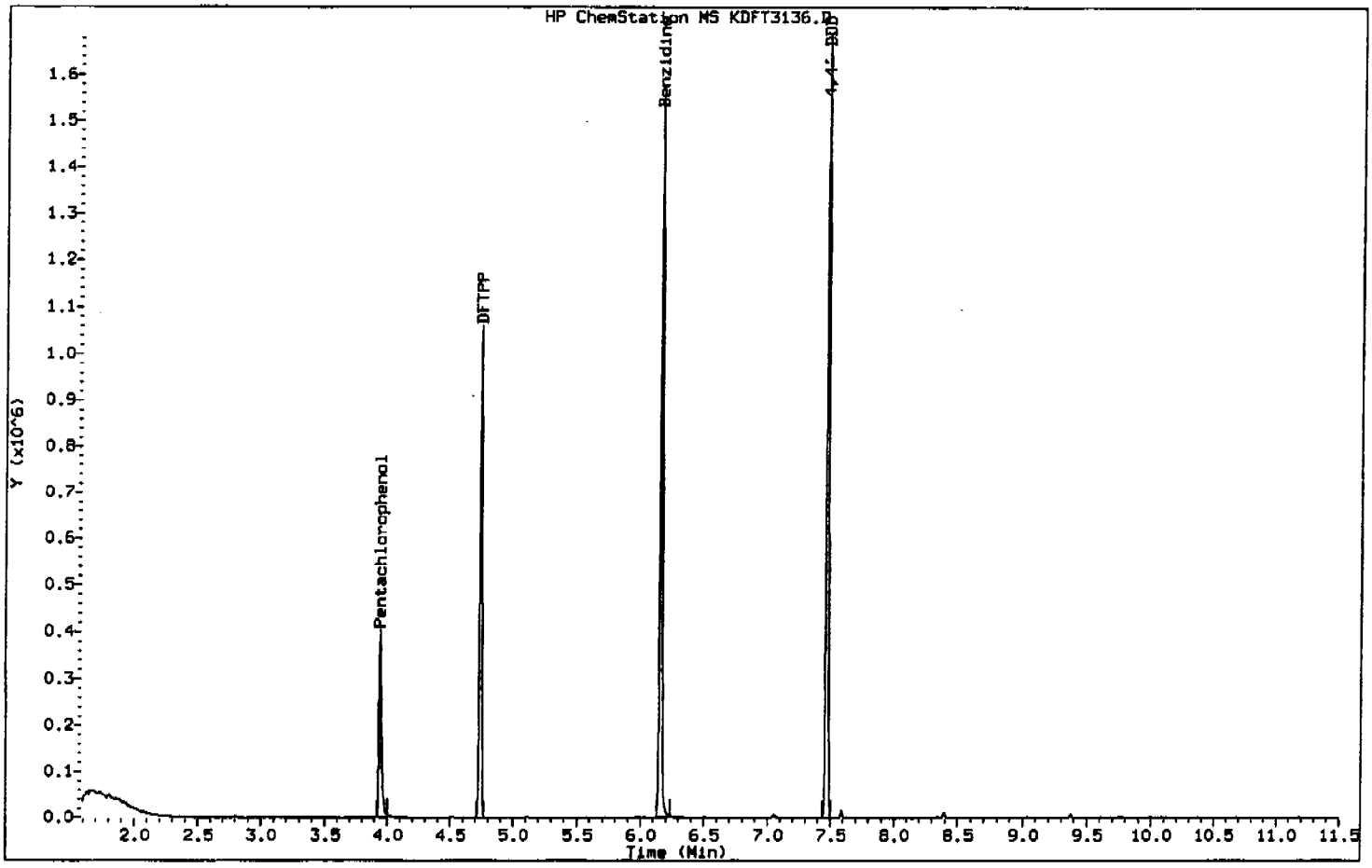
05/16/05

STL ST. LOUIS

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 05/16/2005 10:10

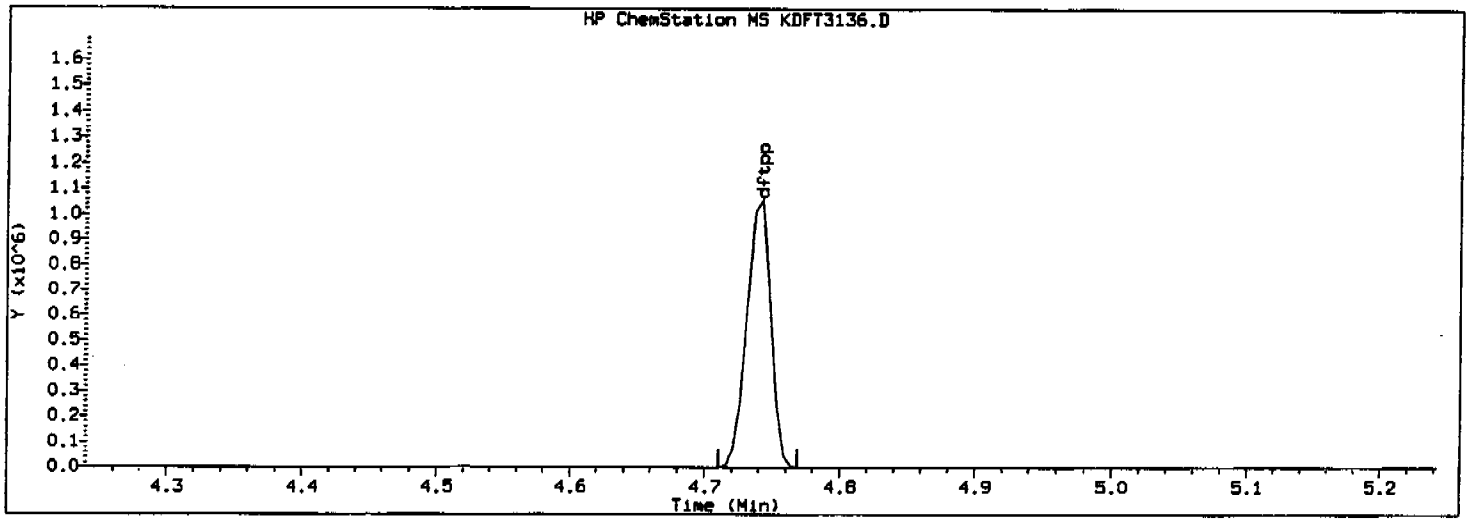
Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m Inst: MSK
Injection Date: 14-MAY-2005 08:36 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0232-05 (50NG)

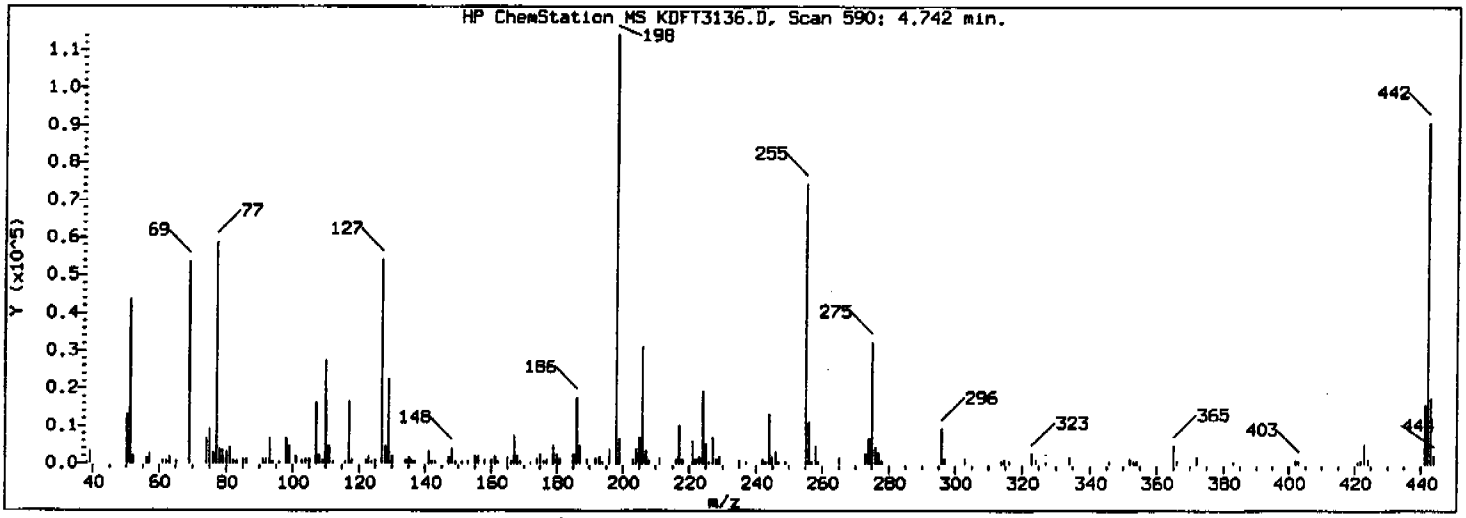


STL ST. LOUIS

Report Date: 05/16/2005 10:10

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m Inst: MSK
Injection Date: 14-MAY-2005 08:36 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0232-05 (50NG)





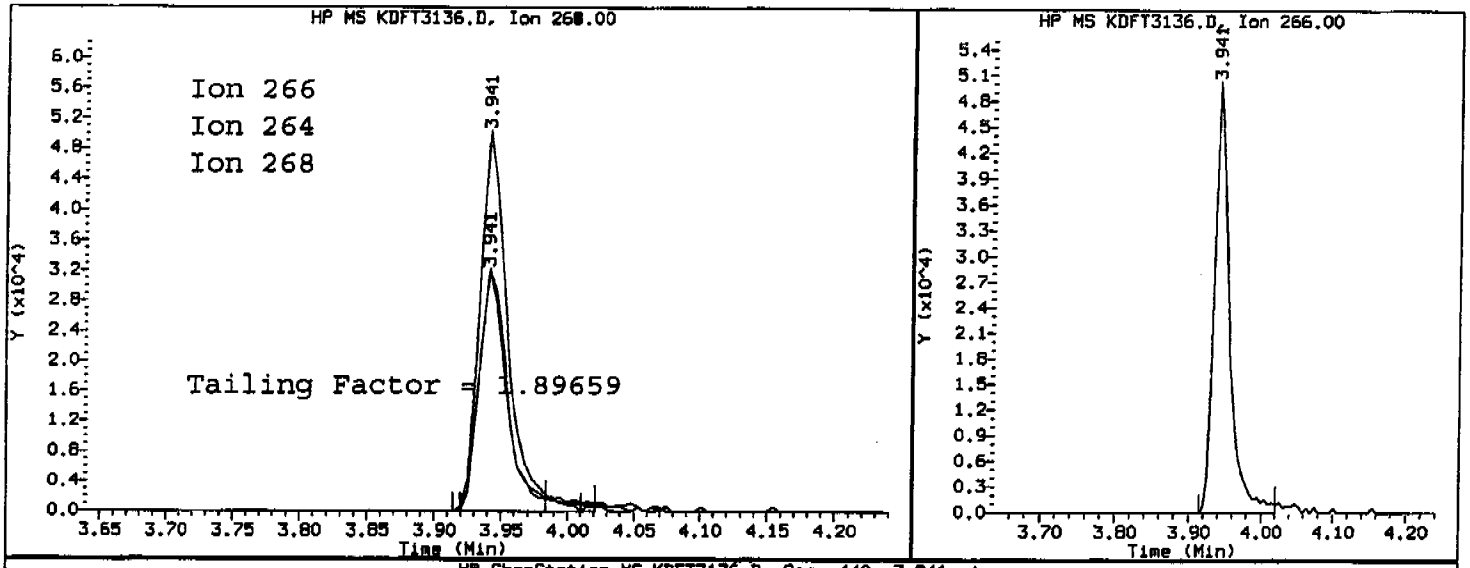
DFTPP Ion Abundance/Ratio Criteria Chart

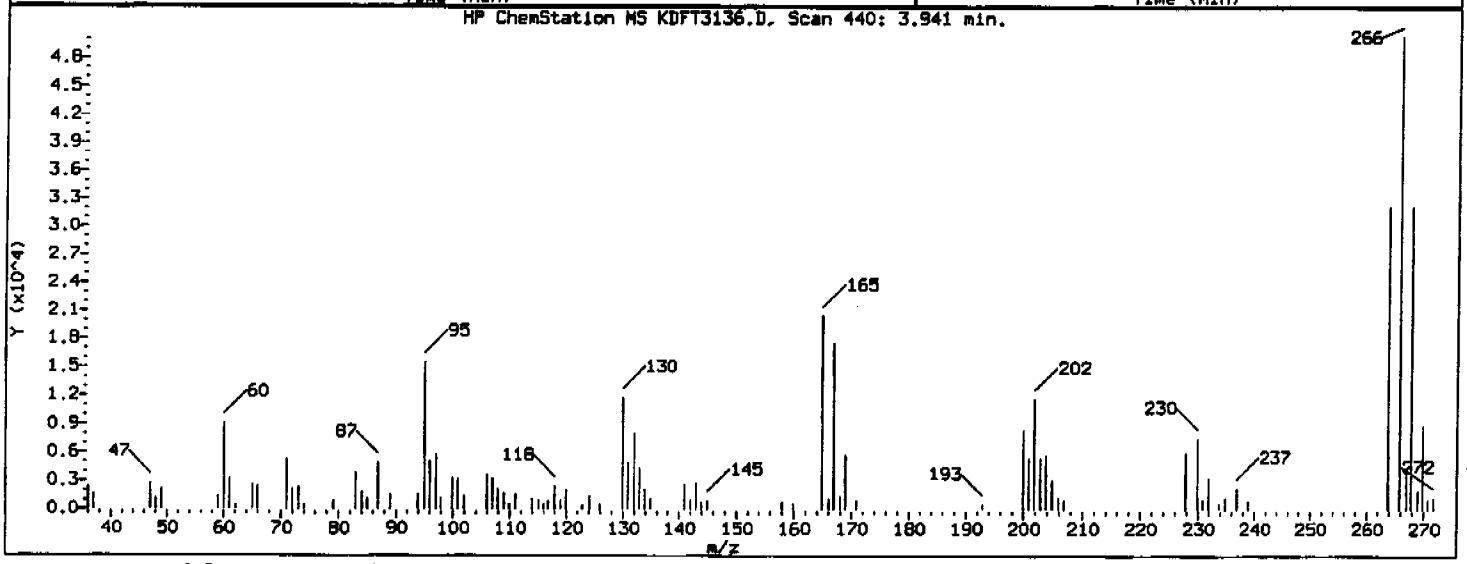
Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	38.17		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	46.07		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	45.94		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.23		PASS
275	10 - 30% of mass 198	28.64		PASS
365	Greater than 1% of mass 198	3.96		PASS
441	Present, but less than mass 443	13.47	(86.95)	PASS
442	Greater than 40% of mass 198	81.79		PASS
443	17 - 23% of mass 442	15.49	(18.94)	PASS

STL ST. LOUIS

Report Date: 05/16/2005 10:10

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m\resolut.m Inst:
Injection Date: 14-MAY-2005 08:36 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)





Pentachlorophenol

Exp. RT = 3.952
Found RT = 3.941

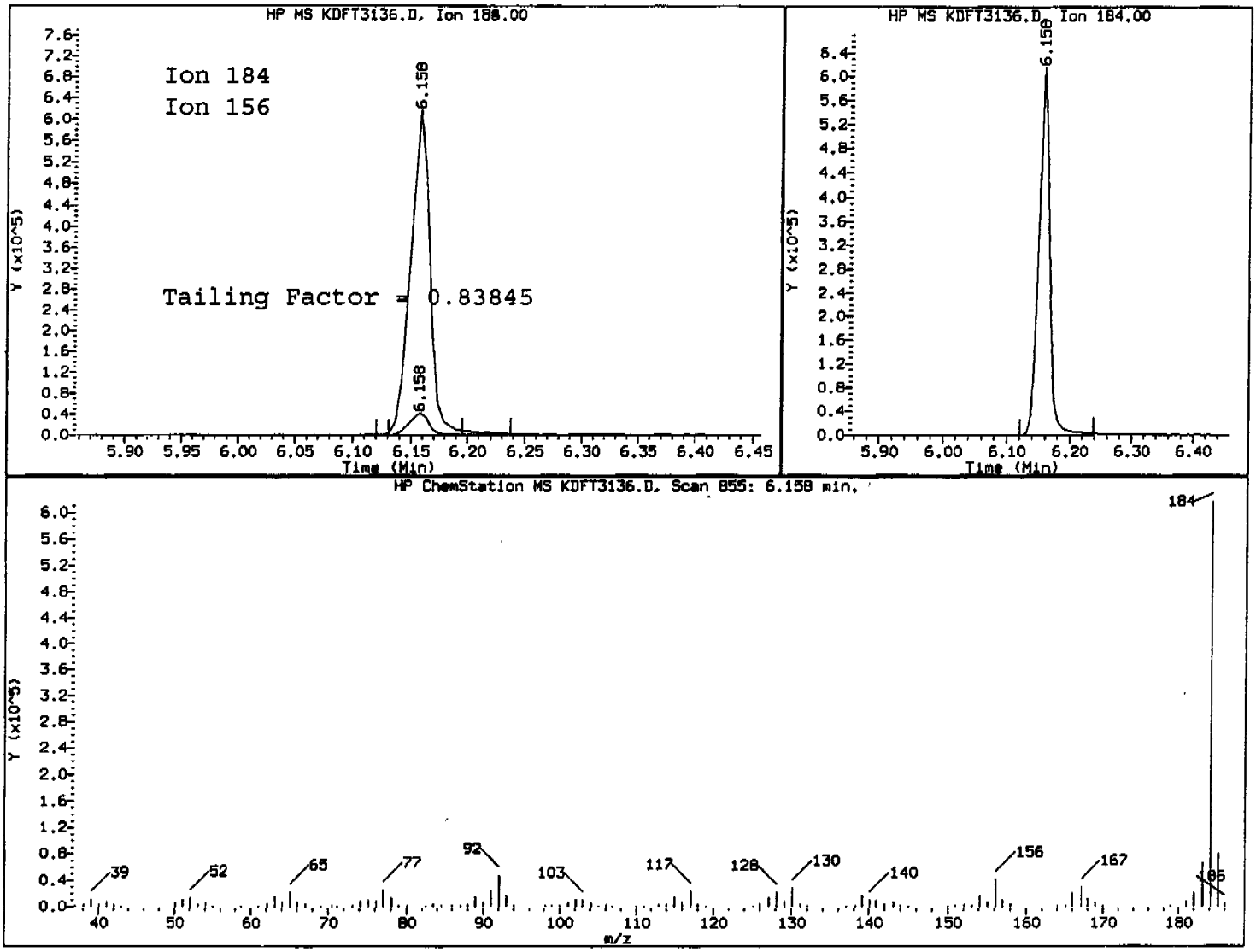
Mass	Area	Ratio
266	75398	100.00
264	47882	63.51
268	47165	62.56

Tailing factor for Pentachlorophenol OK

Tail Factor = 1.897 Maximum Allowed = 5.0

Report Date: 05/16/2005 10:10

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m\resolut.m Inst:
Injection Date: 14-MAY-2005 08:36 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



Benzidine
=========
Exp. RT = 6.169
Found RT = 6.158

Mass	Area	Ratio
184	742279	100.00
156	50775	6.84

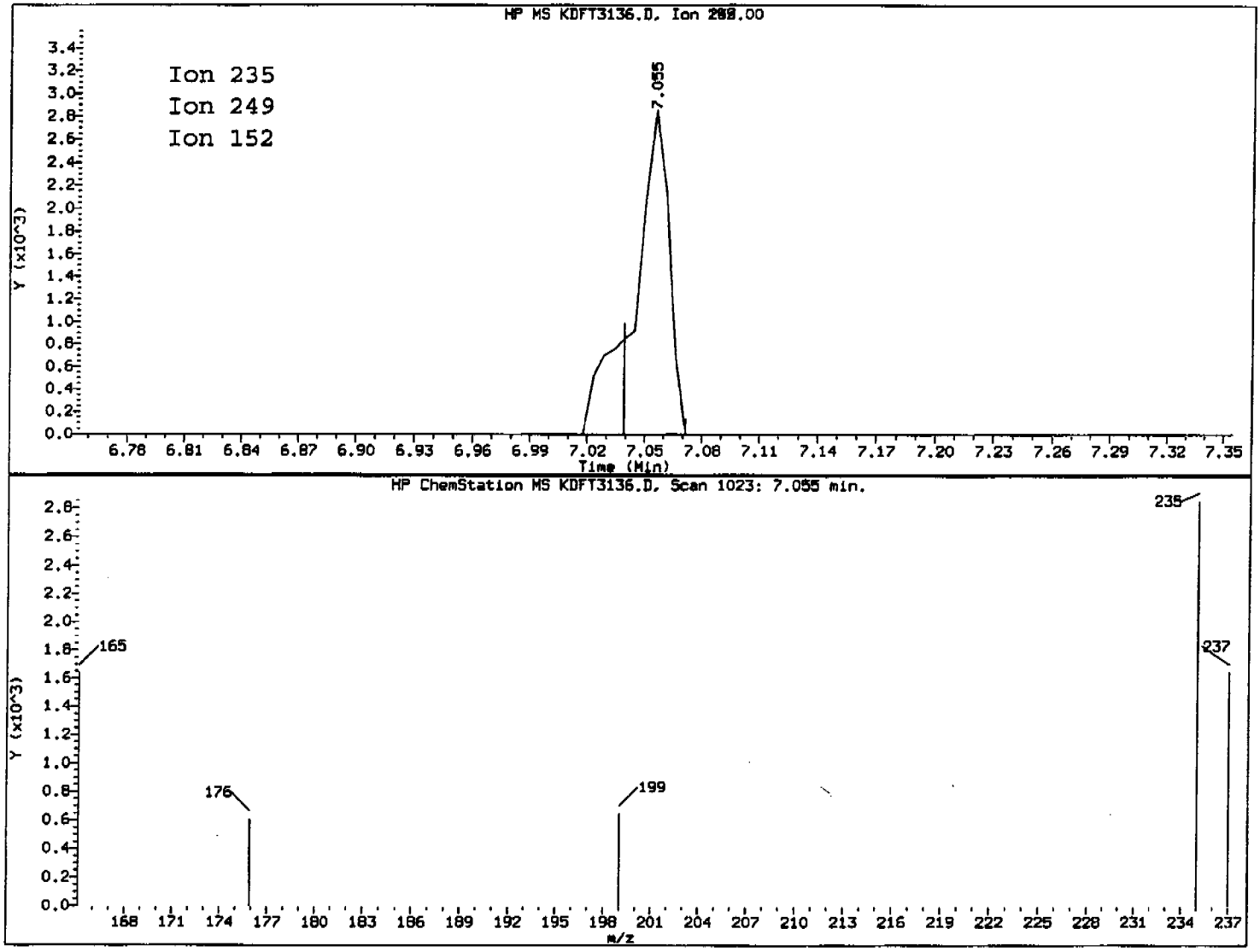
Tailing factor for Benzidine OK

Tail Factor = 0.838 Maximum Allowed = 3.0

STL ST. LOUIS

Report Date: 05/16/2005 10:10

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m\resolut.m Inst:
Injection Date: 14-MAY-2005 08:36 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)

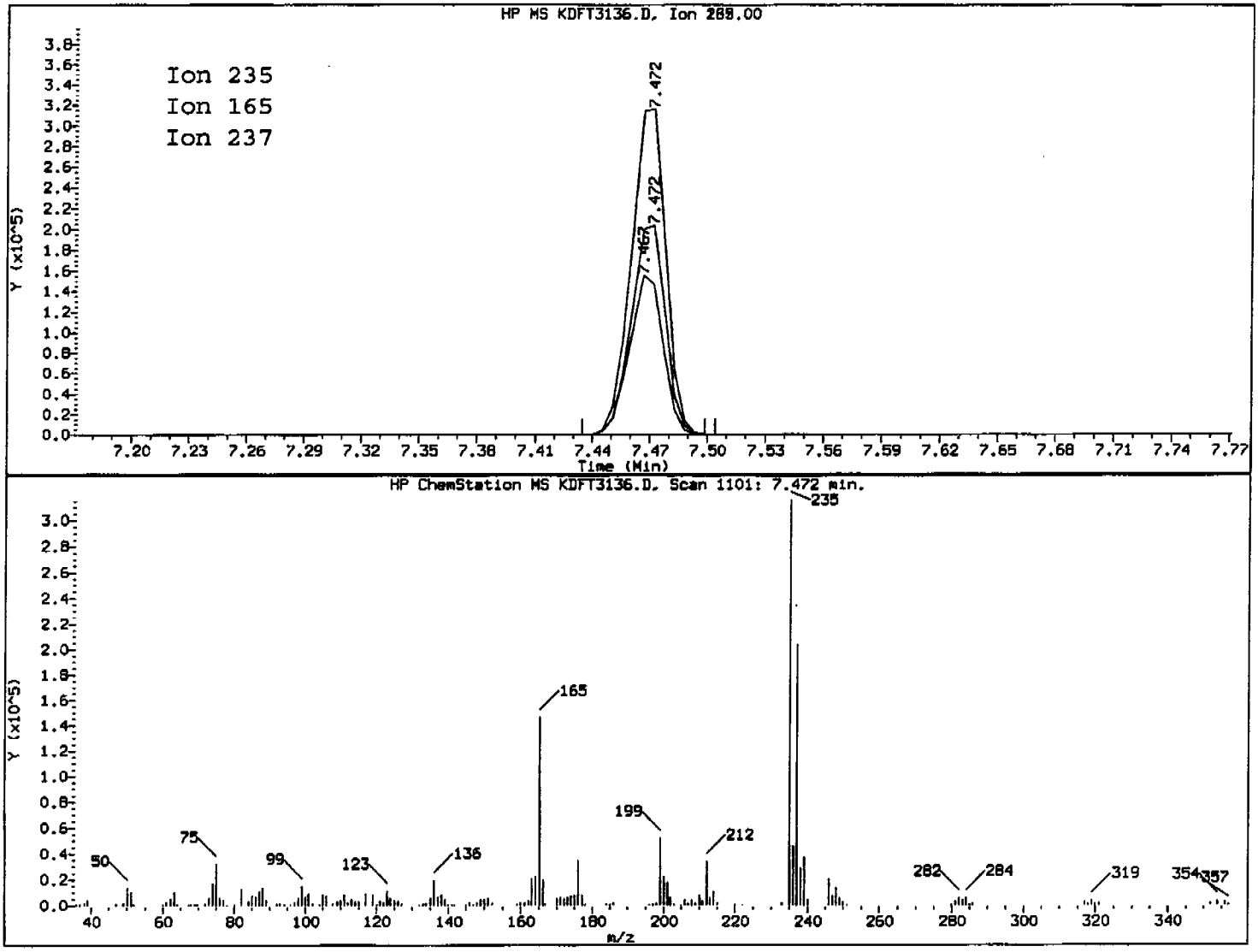


4,4'-DDD
========
Exp. RT = 7.074
Found RT = 7.055

Mass	Area	Ratio
235	3048	100.00
249	6148	201.72
152	2277	74.71

STL ST. LOUIS
Report Date: 05/16/2005 10:10

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m\resolut.m Inst:
Injection Date: 14-MAY-2005 08:36 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)

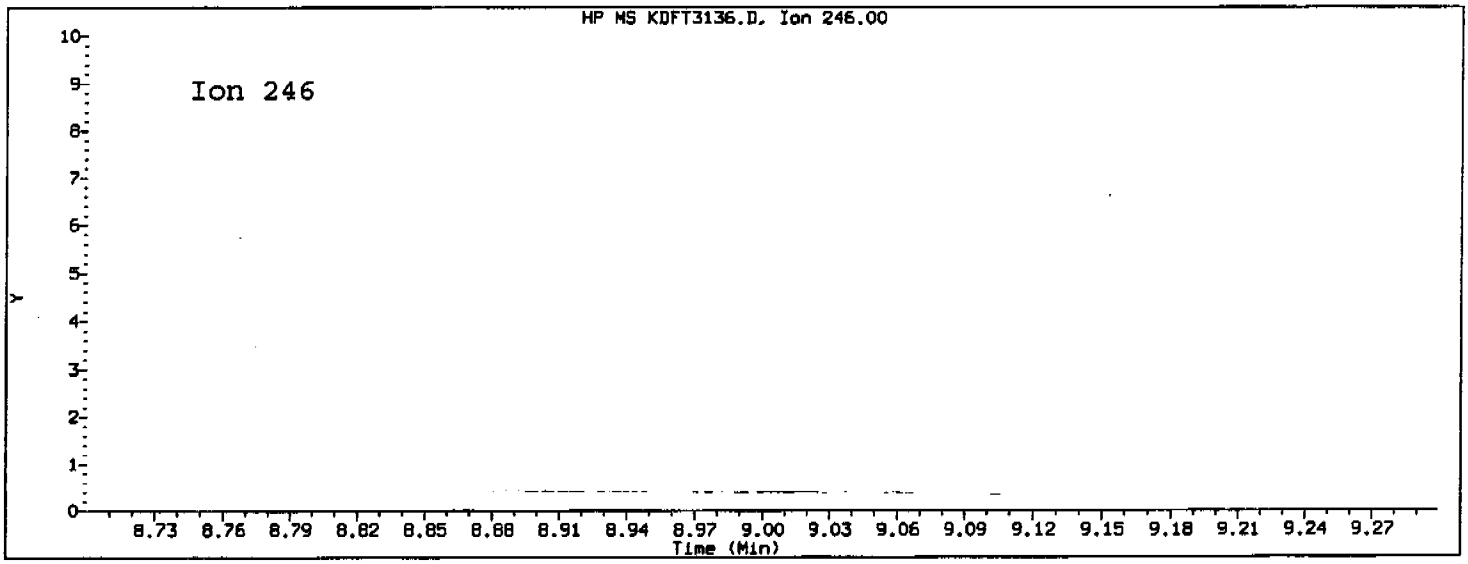


4,4'-DDT
========
Exp. RT = 7.478
Found RT = 7.472

Mass	Area	Ratio
235	394051	100.00
165	189423	48.07
237	252444	64.06

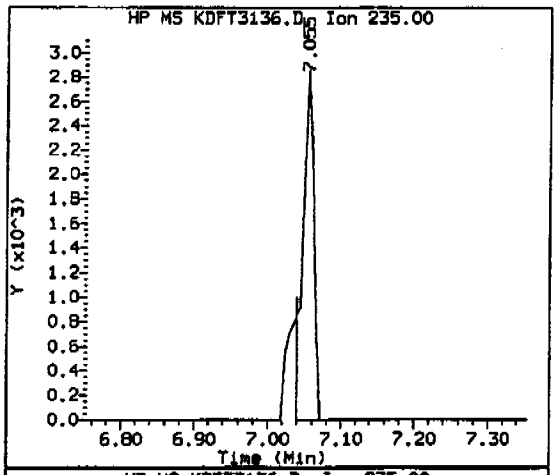
STL ST. LOUIS
Report Date: 05/16/2005 10:10

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m\resolut.m Inst:
Injection Date: 14-MAY-2005 08:36 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)

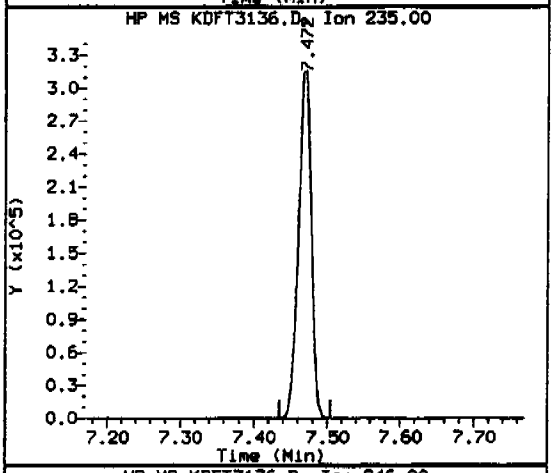


4,4'-DDE
========
Exp. RT = 9.000
Found RT = 0.000

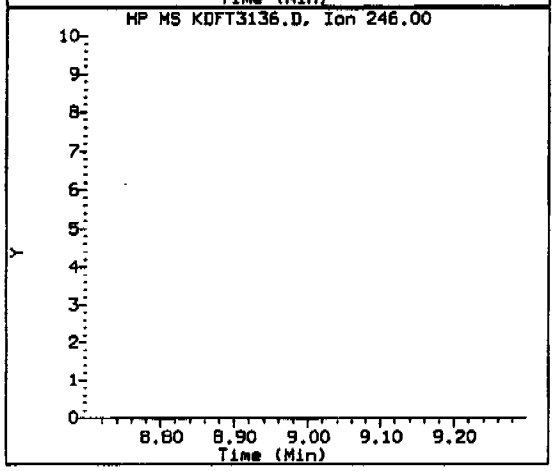
Mass	Area	Ratio
246	0	0.00



Compound: 4,4'-DDD
Quant Mass: 235
RT: 7.055
Area: 3048



Compound: 4,4'-DDT
Quant Mass: 235
RT: 7.472
Area: 394051



Compound: 4,4'-DDE
Quant Mass: 246
RT: 0.000
Area: 0

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	394051			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	3048	0.8	15.0	PASS
4,4-DDD + DDE	3048	0.8	15.0	PASS

****

TUNE SAMPLE *** PASSED *** DDT BREAKDOWN TEST

****

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3139A.D
Report Date: 16-May-2005 10:07

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i
Lab File ID: KCAL3139A.D
Analysis Type: WATER
Lab Sample ID: SSTD050ICV
Method: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270K.m

Injection Date: 14-MAY-2005 11:35
Init. Cal. Date(s): 28-APR-2005 13-MAY-2005
Init. Cal. Times: 11:41 15:58
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
3	Pyridine	1.16029	1.13775	0.010	1.94327	60.00000	Averaged
4	N-Nitrosodimethylamine	0.63867	0.75524	0.010	-18.25195	60.00000	Averaged
16	Phenol	1.66627	1.41584	0.010	15.02935	20.00000	Averaged
17	Aniline	2.04739	1.57265	0.010	23.18777	60.00000	Averaged
19	Bis(2-chloroethyl)ether	1.40863	1.30386	0.010	7.43808	60.00000	Averaged
20	2-Chlorophenol	1.33233	1.14469	0.010	14.08377	60.00000	Averaged
21	1,3-Dichlorobenzene	1.54444	1.43681	0.010	6.96869	60.00000	Averaged
23	1,4-Dichlorobenzene	1.63455	1.51781	0.010	7.14217	20.00000	Averaged
25	Benzyl Alcohol	0.62129	0.63601	0.010	-2.36918	60.00000	Averaged
26	1,2-Dichlorobenzene	1.50782	1.37336	0.010	8.91737	60.00000	Averaged
27	2-Methylphenol	1.08964	0.94117	0.010	13.62539	60.00000	Averaged
28	2,2-oxybis(1-Chloropropane)	1.47745	1.40382	0.010	4.98360	60.00000	Averaged
29	3 and 4-Methylphenol	1.21703	1.07243	0.010	11.88179	60.00000	Averaged
32	N-Nitrosodinpropylamine	1.13856	1.21319	0.050	-6.55539	60.00000	Averaged
35	Hexachloroethane	0.70584	0.66550	0.010	5.71457	60.00000	Averaged
37	Nitrobenzene	0.55999	0.53697	0.010	4.11084	60.00000	Averaged
39	Isophorone	0.72789	0.74174	0.010	-1.90262	60.00000	Averaged
40	2-Nitrophenol	0.20075	0.18496	0.010	7.86287	20.00000	Averaged
41	2,4-Dimethylphenol	0.41875	0.38660	0.010	7.67867	60.00000	Averaged
42	Bis(2-chloroethoxy)methane	0.46523	0.43849	0.010	5.74843	60.00000	Averaged
44	Benzoic Acid	0.18452	0.17182	0.010	6.87785	60.00000	Averaged
45	2,4-Dichlorophenol	0.31257	0.28390	0.010	9.17252	20.00000	Averaged
47	1,2,4-Trichlorobenzene	0.38873	0.36137	0.010	7.03877	60.00000	Averaged
50	Naphthalene	1.11608	1.02497	0.010	8.16347	60.00000	Averaged
51	4-Chloroaniline	0.44972	0.35549	0.010	20.95202	60.00000	Averaged
54	Hexachlorobutadiene	0.28112	0.25345	0.050	9.84229	20.00000	Averaged
59	4-Chloro-3-Methylphenol	0.35947	0.33428	0.010	7.00757	20.00000	Averaged
62	2-Methylnaphthalene	0.97836	0.90745	0.010	7.24796	60.00000	Averaged
66	Hexachlorocyclopentadiene	0.42077	0.48640	0.010	-15.59650	60.00000	Averaged
67	2,4,6-Trichlorophenol	0.46738	0.42509	0.010	9.04797	20.00000	Averaged
68	2,4,5-Trichlorophenol	0.48773	0.42951	0.010	11.93687	60.00000	Averaged
72	2-Chloronaphthalene	1.34443	1.22540	0.010	8.85362	60.00000	Averaged
73	2-Nitroaniline	0.54166	0.50555	0.010	6.66805	60.00000	Averaged
76	Dimethylphthalate	1.52720	1.39312	0.010	8.77927	60.00000	Averaged
79	Acenaphthylene	2.01986	1.93295	0.010	4.30293	60.00000	Averaged
80	2,6-Dinitrotoluene	0.32003	0.29524	0.010	7.74624	60.00000	Averaged
81	3-Nitroaniline	0.31774	0.28138	0.010	11.44196	60.00000	Averaged
83	Acenaphthene	1.23225	1.15891	0.010	5.95223	20.00000	Averaged
84	2,4-Dinitrophenol	0.14071	0.14540	0.050	-3.33066	60.00000	Averaged
85	4-Nitrophenol	0.28633	0.26627	0.050	7.00638	60.00000	Averaged
86	Dibenzofuran	1.84955	1.64550	0.010	11.03238	60.00000	Averaged
88	2,4-Dinitrotoluene	0.40331	0.39744	0.010	1.45603	60.00000	Averaged

Cai 051,6105

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3139A.D
Report Date: 16-May-2005 10:07

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i
Lab File ID: KCAL3139A.D
Analysis Type: WATER
Lab Sample ID: SSTD050ICV
Method: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270K.m

Injection Date: 14-MAY-2005 11:35
Init. Cal. Date(s): 28-APR-2005 13-MAY-2005
Init. Cal. Times: 11:41 15:58
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
93 Diethylphthalate	1.52853	1.44782	0.010	5.28049	60.00000	Averaged
94 Fluorene	1.48498	1.41628	0.010	4.62669	60.00000	Averaged
95 4-Chlorophenyl-phenylether	0.83775	0.73813	0.010	11.89138	60.00000	Averaged
98 4-Nitroaniline	0.29218	0.27112	0.010	7.20781	60.00000	Averaged
99 4,6-Dinitro-2-methylphenol	0.14652	0.14745	0.010	-0.63423	60.00000	Averaged
100 N-Nitrosodiphenylamine	0.60943	0.59367	0.010	2.58671	20.00000	Averaged
102 Azobenzene	1.32489	1.26192	0.010	4.75290	60.00000	Averaged
109 4-Bromophenyl-phenylether	0.29091	0.25877	0.010	11.04619	60.00000	Averaged
112 Hexachlorobenzene	0.30387	0.28059	0.010	7.66266	60.00000	Averaged
117 Pentachlorophenol	0.13627	0.11625	0.010	14.69184	20.00000	Averaged
122 Phenanthrene	1.22846	1.07876	0.010	12.18558	60.00000	Averaged
124 Anthracene	1.18214	1.04970	0.010	11.20367	60.00000	Averaged
126 Carbazole	0.97957	0.86352	0.010	11.84782	60.00000	Averaged
129 Di-n-Butylphthalate	1.29964	1.23476	0.010	4.99260	60.00000	Averaged
134 Fluoranthene	1.26119	1.17664	0.010	6.70389	20.00000	Averaged
135 Benzidine	0.55071	0.07389	0.010	86.58328	100	Averaged
137 Pyrene	1.63816	1.46448	0.010	10.60240	60.00000	Averaged
146 Butylbenzylphthalate	0.64258	0.63546	0.010	1.10656	60.00000	Averaged
150 Benzo(a)Anthracene	1.38086	1.28615	0.010	6.85931	60.00000	Averaged
152 3,3'-Dichlorobenzidine	0.52188	0.43086	0.010	17.44028	60.00000	Averaged
154 Chrysene	1.30690	1.18321	0.010	9.46432	60.00000	Averaged
155 bis(2-ethylhexyl)Phthalate	0.79653	0.75810	0.010	4.82389	60.00000	Averaged
158 Di-n-octylphthalate	1.65005	1.71039	0.010	-3.65727	20.00000	Averaged
160 Benzo(b)fluoranthene	1.58452	1.51176	0.010	4.59164	60.00000	Averaged
161 Benzo(k)fluoranthene	1.55910	1.59484	0.010	-2.29210	60.00000	Averaged
165 Benzo(a)pyrene	1.40867	1.33158	0.010	5.47195	20.00000	Averaged
173 Indeno(1,2,3-cd)pyrene	1.32604	1.22423	0.010	7.67733	60.00000	Averaged
174 Dibenzo(a,h)anthracene	1.28029	1.25124	0.010	2.26884	60.00000	Averaged
177 Benzo(g,h,i)perylene	1.16434	1.13873	0.010	2.20007	60.00000	Averaged

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B/KCAL3139A.D
Report Date: 05/16/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3139A.D
Analysis Type: WATER

Injection Date: 14-MAY-2005 11:35
Lab Sample ID: SSTD050ICV
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270

COMPOUND	%D
Pyridine	1.9
N-Nitrosodimethylamine	18.3
Aniline	23.2
Bis(2-chloroethyl)ether	7.4
Phenol	15.0
2-Chlorophenol	14.1
1,3-Dichlorobenzene	7.0
1,4-Dichlorobenzene	7.1
1,2-Dichlorobenzene	8.9
Benzyl Alcohol	2.4
2,2-oxybis(1-Chloropropane)	5.0
2-Methylphenol	13.6
Hexachloroethane	5.7
N-Nitrosodinpropylamine	6.6
3 and 4-Methylphenol	11.9
Nitrobenzene	4.1
Isophorone	1.9
2-Nitrophenol	7.9
2,4-Dimethylphenol	7.7
Bis(2-chloroethoxy)methane	5.7
2,4-Dichlorophenol	9.2
1,2,4-Trichlorobenzene	7.0
Benzoic Acid	6.9
Naphthalene	8.2
4-Chloroaniline	21.0
Hexachlorobutadiene	9.8
4-Chloro-3-Methylphenol	7.0
2-Methylnaphthalene	7.2
Hexachlorocyclopentadiene	15.6
2,4,6-Trichlorophenol	9.0
2,4,5-Trichlorophenol	11.9
2-Chloronaphthalene	8.9
2-Nitroaniline	6.7
Dimethylphthalate	8.8
Acenaphthylene	4.3
2,6-Dinitrotoluene	7.7
Acenaphthene	6.0
3-Nitroaniline	11.4
2,4-Dinitrophenol	3.3

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B/KCAL3139A.D
Report Date: 05/16/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3139A.D
Analysis Type: WATER

Injection Date: 14-MAY-2005 11:35
Lab Sample ID: SSTD050ICV
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050514A

COMPOUND	%D
Dibenzofuran	11.0
2,4-Dinitrotoluene	1.5
4-Nitrophenol	7.0
Fluorene	4.6
Diethylphthalate	5.3
4-Chlorophenyl-phenylether	11.9
4-Nitroaniline	7.2
4,6-Dinitro-2-methylphenol	0.6
N-Nitrosodiphenylamine	2.6
Azobenzene	4.8
4-Bromophenyl-phenylether	11.0
Hexachlorobenzene	7.7
Pentachlorophenol	14.7
Phenanthrene	12.2
Anthracene	11.2
Carbazole	11.8
Di-n-Butylphthalate	5.0
Fluoranthene	6.7
Benzidine	86.6
Pyrene	10.6
Butylbenzylphthalate	1.1
Benzo(a)Anthracene	6.9
Chrysene	9.5
3,3'-Dichlorobenzidine	17.4
bis(2-ethylhexyl)Phthalate	4.8
Di-n-octylphthalate	3.7
Benzo(b)fluoranthene	4.6
Benzo(k)fluoranthene	2.3
Benzo(a)pyrene	5.5
Indeno(1,2,3-cd)pyrene	7.7
Dibenzo(a,h)anthracene	2.3
Benzo(g,h,i)perylene	2.2

The average of %D's in the continuing calibration is 9.1

05/16/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3139A.D Page 1
Report Date: 16-May-2005 10:07

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3139A.D
Lab Smp Id: SSTD050ICV Client Smp ID: SSTD050ICV
Inj Date : 14-MAY-2005 11:35
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD050ICV
Misc Info : OP052-05 2X
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270K.m
Meth Date : 16-May-2005 10:04 hongs Quant Type: ISTD
Cal Date : 13-MAY-2005 15:58 Cal File: KCAL3134.D
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270ICV.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
3	Pyridine	79	1.785	1.785	(0.395)	354193	50.0000	49.03
4	N-Nitrosodimethylamine	74	1.806	1.806	(0.400)	235114	50.0000	59.12(M)
16	Phenol	94	4.317	4.317	(0.955)	440768	50.0000	42.48
17	Aniline	93	4.221	4.221	(0.934)	489583	50.0000	38.41
19	Bis(2-chloroethyl)ether	93	4.290	4.290	(0.949)	405906	50.0000	46.28
20	2-Chlorophenol	128	4.359	4.359	(0.965)	356354	50.0000	42.96
21	1,3-Dichlorobenzene	146	4.472	4.472	(0.989)	447296	50.0000	46.52
* 22	1,4-Dichlorobenzene-d4	152	4.520	4.520	(1.000)	249049	40.0000	
23	1,4-Dichlorobenzene	146	4.541	4.541	(1.005)	472510	50.0000	46.43
25	Benzyl Alcohol	108	4.771	4.771	(1.056)	197997	50.0000	51.18
26	1,2-Dichlorobenzene	146	4.760	4.760	(1.053)	427543	50.0000	45.54
27	2-Methylphenol	108	4.984	4.984	(1.103)	292997	50.0000	43.19
28	2,2-oxybis(1-Chloropropane)	45	4.926	4.926	(1.090)	437025	50.0000	47.51
29	3 and 4-Methylphenol	108	5.171	5.171	(1.144)	667718	100.000	88.12
32	N-Nitrosodinpropylamine	70	5.118	5.118	(1.132)	377681	50.0000	53.28
35	Hexachloroethane	117	5.113	5.113	(1.131)	207178	50.0000	47.14
37	Nitrobenzene	77	5.268	5.268	(0.864)	555765	50.0000	47.94
39	Isophorone	82	5.561	5.561	(0.912)	767710	50.0000	50.95
40	2-Nitrophenol	139	5.668	5.668	(0.930)	191440	50.0000	46.07
41	2,4-Dimethylphenol	107	5.796	5.796	(0.951)	400132	50.0000	46.16
42	Bis(2-chloroethoxy)methane	93	5.871	5.871	(0.963)	453839	50.0000	47.12

05/16/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	44 Benzoic Acid	122	6.090	6.090	(0.999)	177840	50.0000	46.56
	45 2,4-Dichlorophenol	162	6.010	6.010	(0.986)	293839	50.0000	45.41
	47 1,2,4-Trichlorobenzene	180	6.053	6.053	(0.993)	374017	50.0000	46.48
*	48 Naphthalene-d8	136	6.096	6.096	(1.000)	828008	40.0000	
	50 Naphthalene	128	6.122	6.122	(1.004)	1060856	50.0000	45.92
	51 4-Chloroaniline	127	6.272	6.272	(1.029)	367937	50.0000	39.52
	54 Hexachlorobutadiene	225	6.368	6.368	(1.045)	262325	50.0000	45.08
	59 4-Chloro-3-Methylphenol	107	7.047	7.047	(1.156)	345980	50.0000	46.50
	62 2-Methylnaphthalene	142	7.079	7.079	(1.161)	939218	50.0000	46.38(M)
	66 Hexachlorocyclopentadiene	237	7.420	7.420	(0.846)	277192	50.0000	57.80
	67 2,4,6-Trichlorophenol	196	7.607	7.607	(0.868)	242252	50.0000	45.48
	68 2,4,5-Trichlorophenol	196	7.714	7.714	(0.880)	244773	50.0000	44.03
	72 2-Chloronaphthalene	162	7.816	7.816	(0.892)	698337	50.0000	45.57
	73 2-Nitroaniline	65	8.115	8.115	(0.926)	288104	50.0000	46.66
	76 Dimethylphthalate	163	8.484	8.484	(0.968)	793922	50.0000	45.61
	79 Acenaphthylene	152	8.500	8.500	(0.970)	1101560	50.0000	47.85
	80 2,6-Dinitrotoluene	165	8.601	8.601	(0.981)	168255	50.0000	46.13
	81 3-Nitroaniline	138	8.831	8.831	(1.007)	160355	50.0000	44.28
*	82 Acenaphthene-d10	164	8.767	8.767	(1.000)	455909	40.0000	
	83 Acenaphthene	153	8.820	8.820	(1.006)	660445	50.0000	47.02
	84 2,4-Dinitrophenol	184	9.012	9.012	(1.028)	82861	50.0000	51.66
	85 4-Nitrophenol	109	9.376	9.376	(1.069)	151743	50.0000	46.50(M)
	86 Dibenzofuran	168	9.098	9.098	(1.038)	937747	50.0000	44.48
	88 2,4-Dinitrotoluene	165	9.274	9.274	(1.058)	226494	50.0000	49.27
	93 Diethylphthalate	149	9.744	9.744	(1.112)	825093	50.0000	47.36
	94 Fluorene	166	9.707	9.707	(1.107)	807118	50.0000	47.69
	95 4-Chlorophenyl-phenylether	204	9.760	9.760	(1.113)	420649	50.0000	44.05
	98 4-Nitroaniline	138	9.953	9.953	(1.135)	154506	50.0000	46.40
	99 4,6-Dinitro-2-methylphenol	198	10.001	10.001	(0.876)	143414	50.0000	50.32
	100 N-Nitrosodiphenylamine	169	10.027	10.027	(0.878)	577401	50.0000	48.71
	102 Azobenzene	77	10.043	10.043	(0.879)	1227339	50.0000	47.62
	109 4-Bromophenyl-phenylether	248	10.642	10.642	(0.932)	251683	50.0000	44.48
	112 Hexachlorobenzene	284	10.866	10.866	(0.951)	272897	50.0000	46.17
	117 Pentachlorophenol	266	11.277	11.277	(0.987)	113066	50.0000	42.65
*	121 Phenanthrene-d10	188	11.422	11.422	(1.000)	778080	40.0000	
	122 Phenanthrene	178	11.464	11.464	(1.004)	1049206	50.0000	43.91
	124 Anthracene	178	11.545	11.545	(1.011)	1020939	50.0000	44.40
	126 Carbazole	167	11.951	11.951	(1.046)	839856	50.0000	44.08
	129 Di-n-Butylphthalate	149	12.837	12.837	(1.124)	1200926	50.0000	47.50
	134 Fluoranthene	202	13.751	13.751	(1.204)	1144404	50.0000	46.65
	135 Benzidine	184	14.152	14.152	(0.854)	57239	50.0000	6.708(a)
	137 Pyrene	202	14.168	14.168	(0.855)	1134507	50.0000	44.70
	146 Butylbenzylphthalate	149	15.738	15.738	(0.949)	492285	50.0000	49.45
	150 Benzo(a)Anthracene	228	16.545	16.545	(0.998)	996358	50.0000	46.57
*	153 Chrysene-d12	240	16.577	16.577	(1.000)	619748	40.0000	
	152 3,3'-Dichlorobenzidine	252	16.641	16.641	(1.004)	333784	50.0000	41.28
	154 Chrysene	228	16.630	16.630	(1.003)	916618	50.0000	45.27
	155 bis(2-ethylhexyl)Phthalate	149	16.962	16.962	(1.023)	587292	50.0000	47.59
	158 Di-n-octylphthalate	149	18.110	18.110	(0.944)	948508	50.0000	51.83
	160 Benzo(b)fluoranthene	252	18.548	18.548	(0.967)	838355	50.0000	47.70
	161 Benzo(k)fluoranthene	252	18.591	18.591	(0.969)	884426	50.0000	51.15
	165 Benzo(a)pyrene	252	19.082	19.082	(0.995)	738437	50.0000	47.26
*	166 Perylene-d12	264	19.184	19.184	(1.000)	443644	40.0000	
	173 Indeno(1,2,3-cd)pyrene	276	20.883	20.883	(1.089)	678905	50.0000	46.16

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
174 Dibenzo(a,h)anthracene	278	20.925	20.925	(1.091)	693884	50.0000	48.86
177 Benzo(g,h,i)perylene	276	21.326	21.326	(1.112)	631486	50.0000	48.90

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3139A.D Page 4
Report Date: 16-May-2005 10:07

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

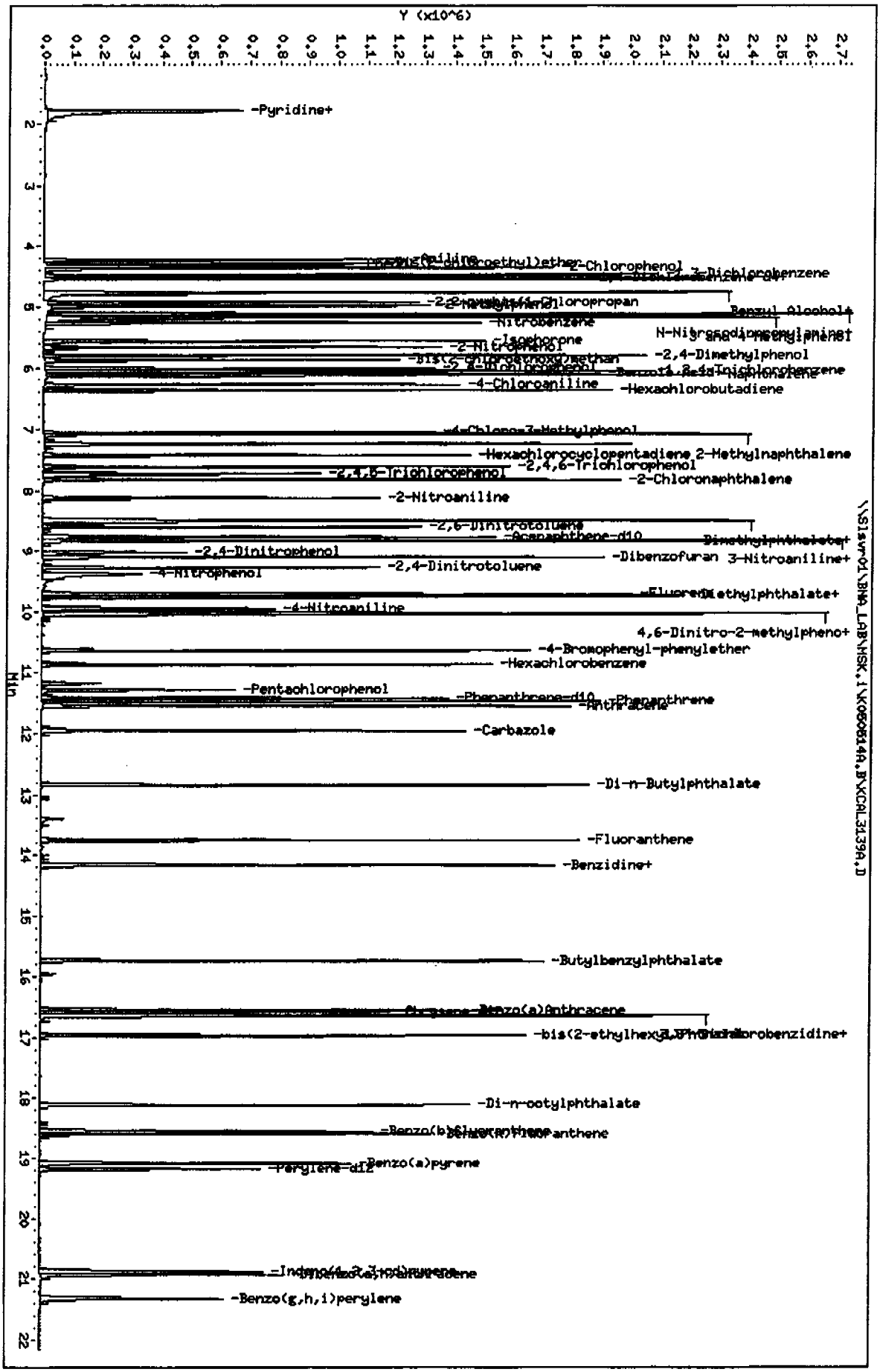
Instrument ID: MSK.i
Lab File ID: KCAL3139A.D
Lab Smp Id: SSTD050ICV
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270K.m
Misc Info: OP052-05 2X

Calibration Date: 13-MAY-2005
Calibration Time: 12:14
Client Smp ID: SSTD050ICV
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	181066	90533	362132	249049	37.55
48 Naphthalene-d8	627500	313750	1255000	828008	31.95
82 Acenaphthene-d10	358476	179238	716952	455909	27.18
121 Phenanthrene-d10	655247	327624	1310494	778080	18.75
153 Chrysene-d12	535207	267604	1070414	619748	15.80
166 Perylene-d12	427031	213516	854062	443644	3.89

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.52	4.02	5.02	4.52	-0.09
48 Naphthalene-d8	6.11	5.61	6.61	6.10	-0.15
82 Acenaphthene-d10	8.78	8.28	9.28	8.77	-0.11
121 Phenanthrene-d10	11.43	10.93	11.93	11.42	-0.08
153 Chrysene-d12	16.59	16.09	17.09	16.58	-0.09
166 Perylene-d12	19.20	18.70	19.70	19.18	-0.08

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

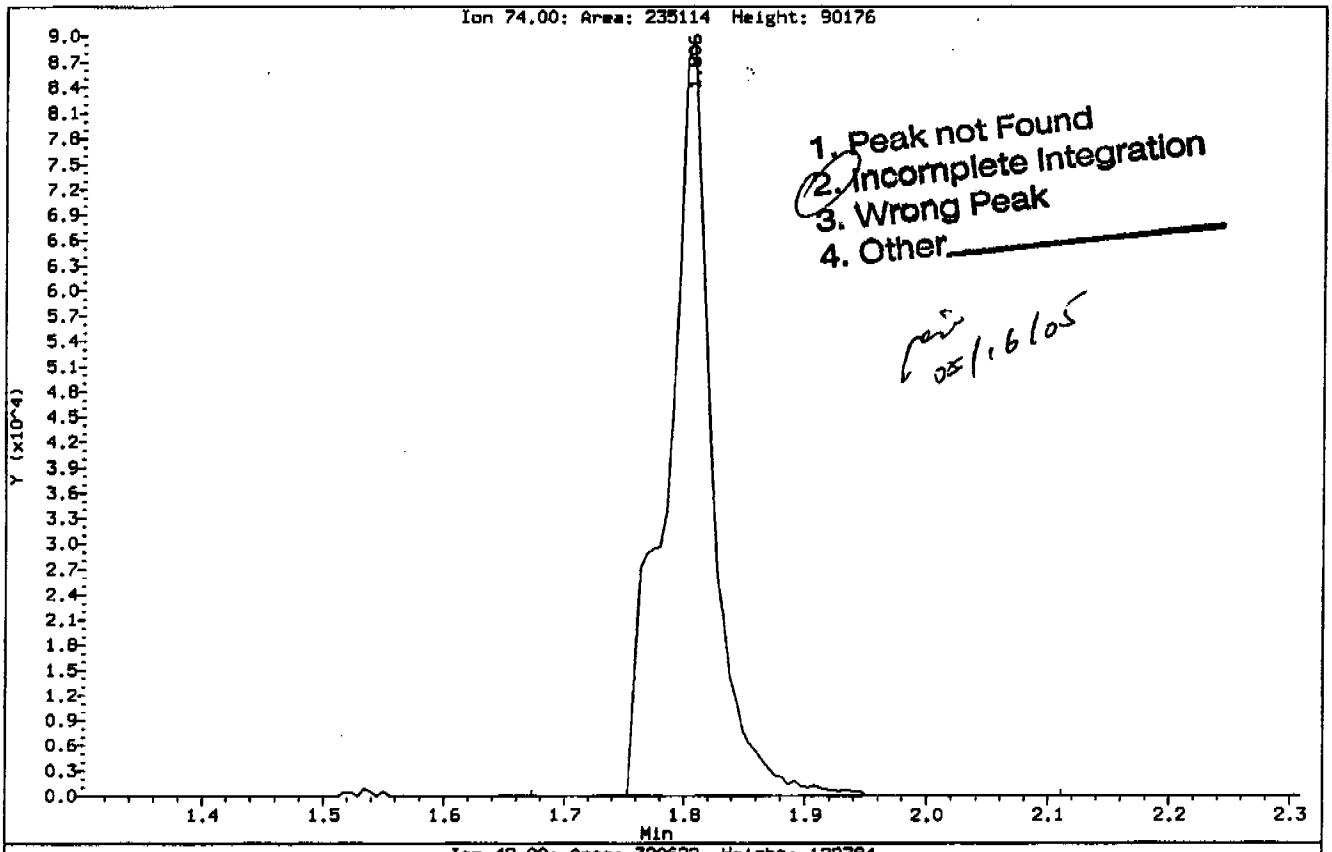


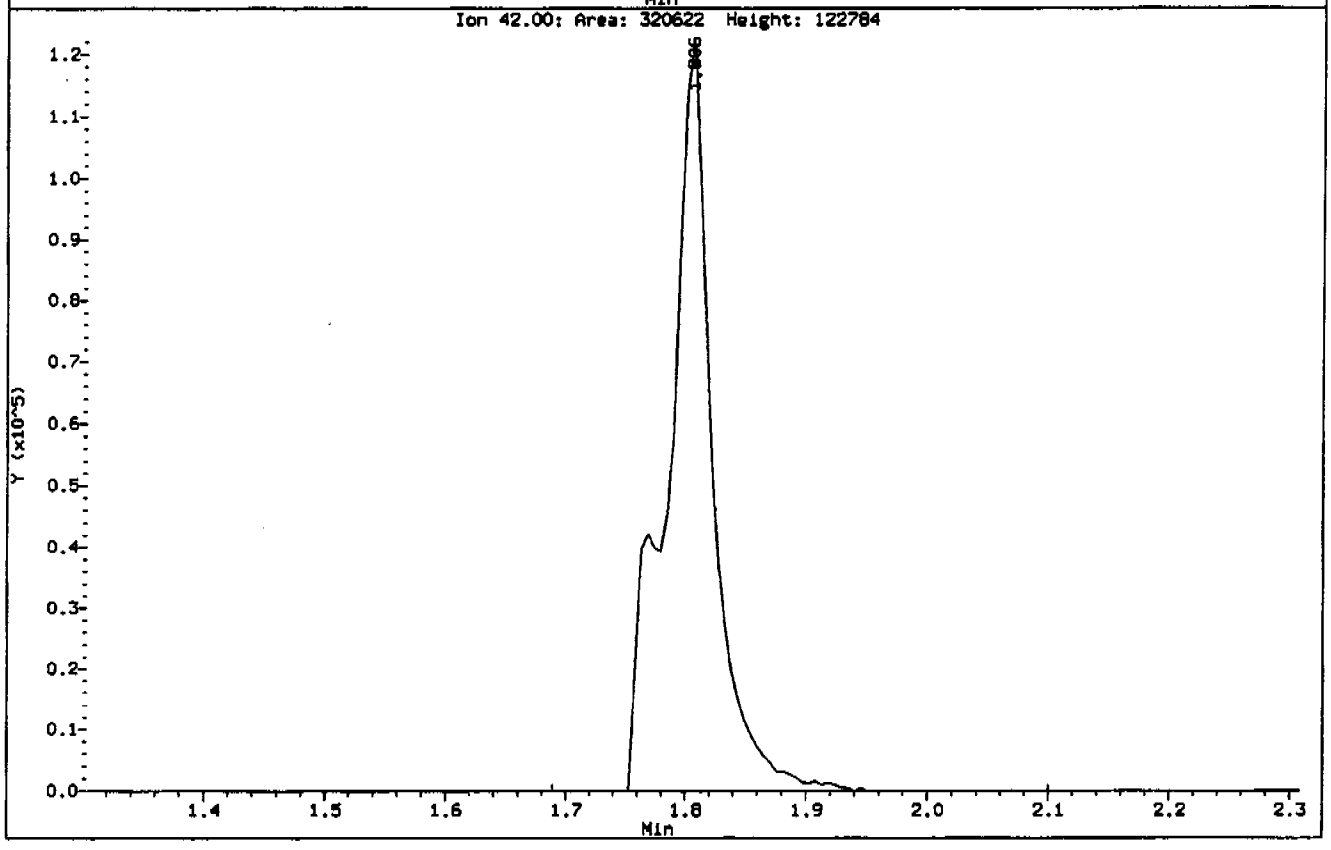
Data File: \\Slsvr01\BNA_LAB\HSK.i\K060614A.B\KCAL3139A.D
Date : 14-MAY-2005 11:35
Client ID: SSTD060ICV
Sample Info: SSTD060ICV
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3139A.D
Injection Date: 14-MAY-2005 11:35
Instrument: MSK.i
Client Sample ID: SSTD050ICV

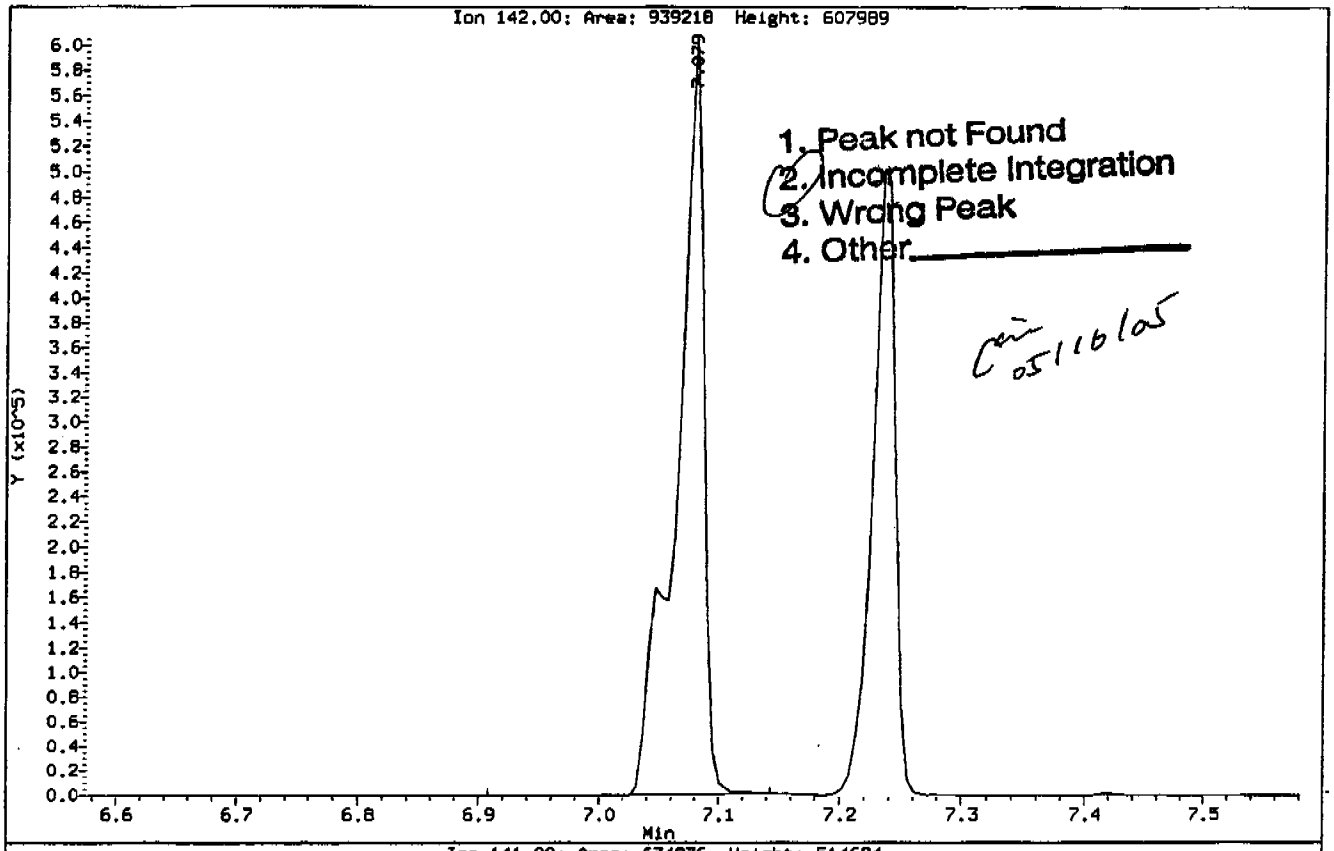
Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9

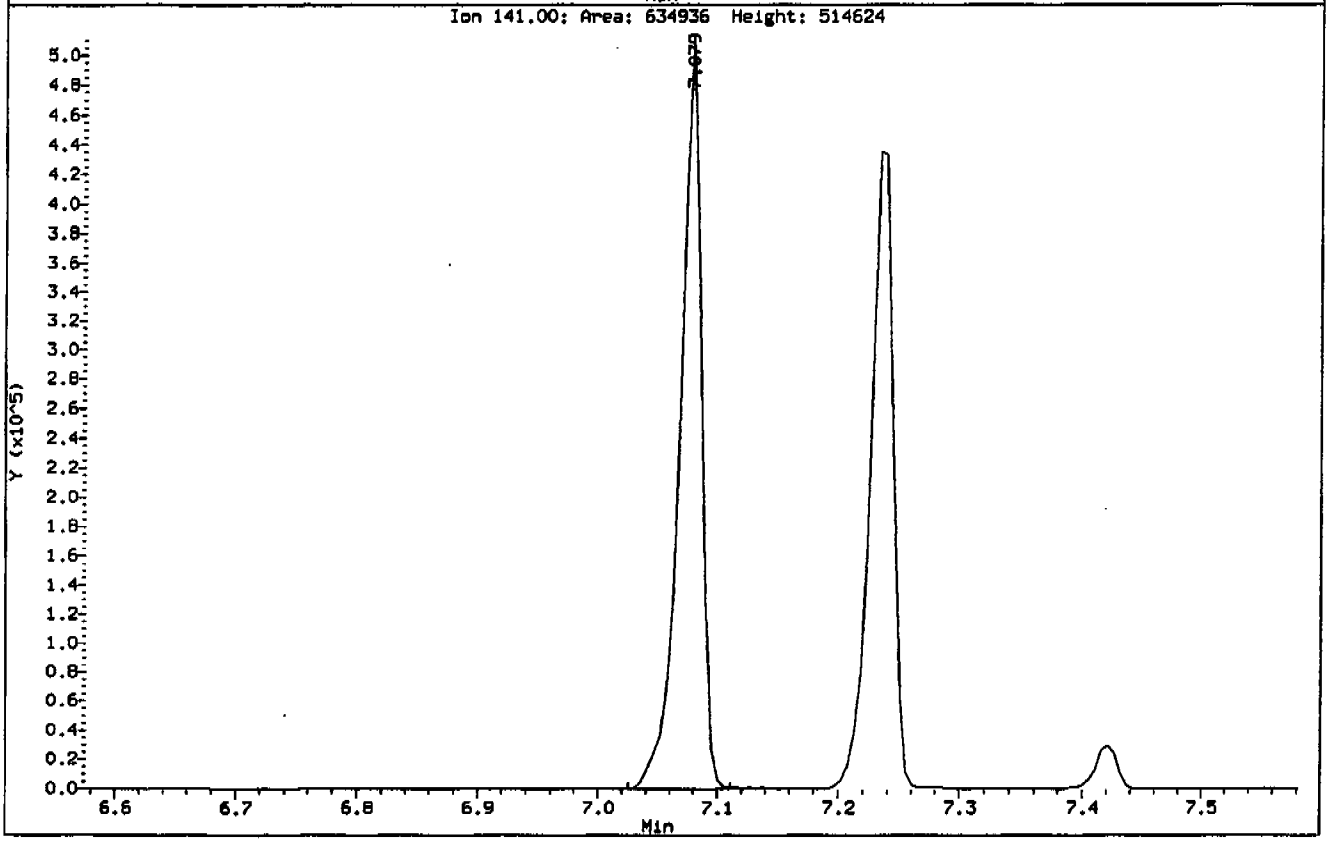




Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3139A.D
Injection Date: 14-MAY-2005 11:35
Instrument: MSK.i
Client Sample ID: SSTD050ICV

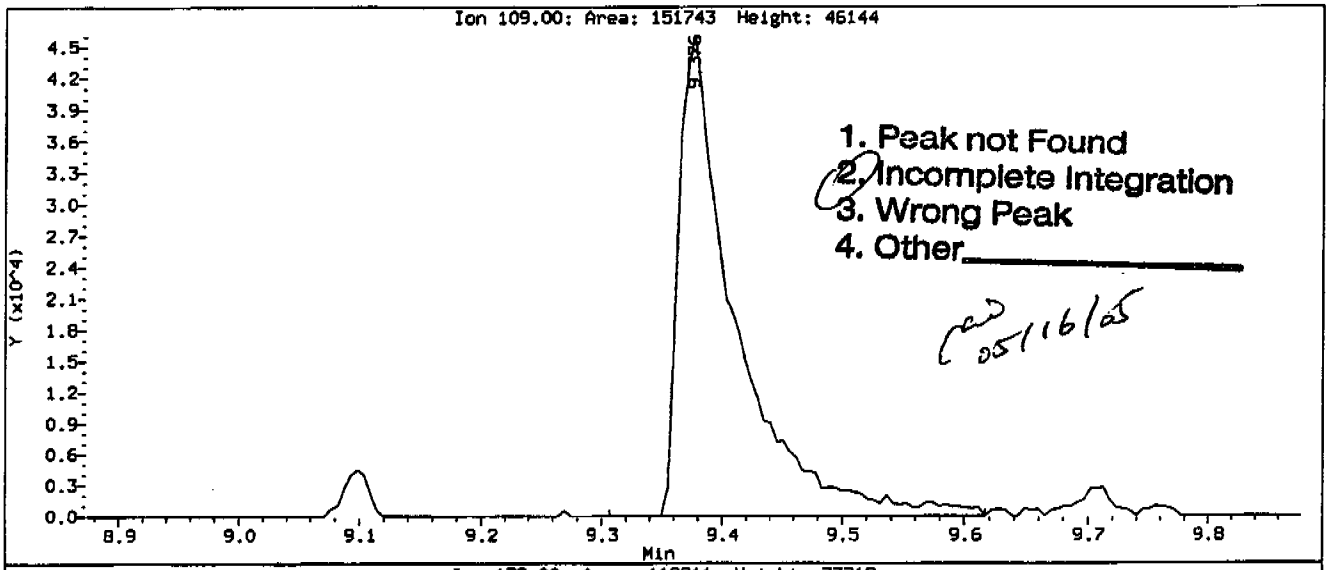
Compound: 2-Methylnaphthalene
CAS Number: 91-57-6





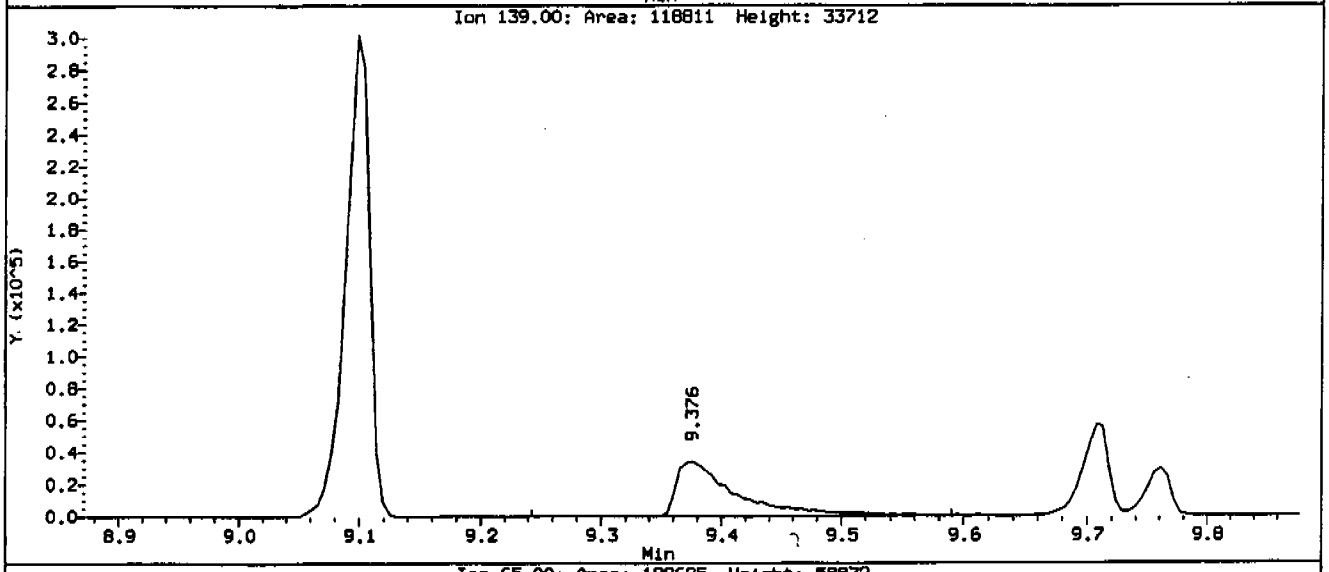
Data File: \\Slavr01\BNA_LAB\MSK.i\K050514A.B\KCAL3139A.D
Injection Date: 14-MAY-2005 11:35
Instrument: MSK.i
Client Sample ID: SSTD050ICV

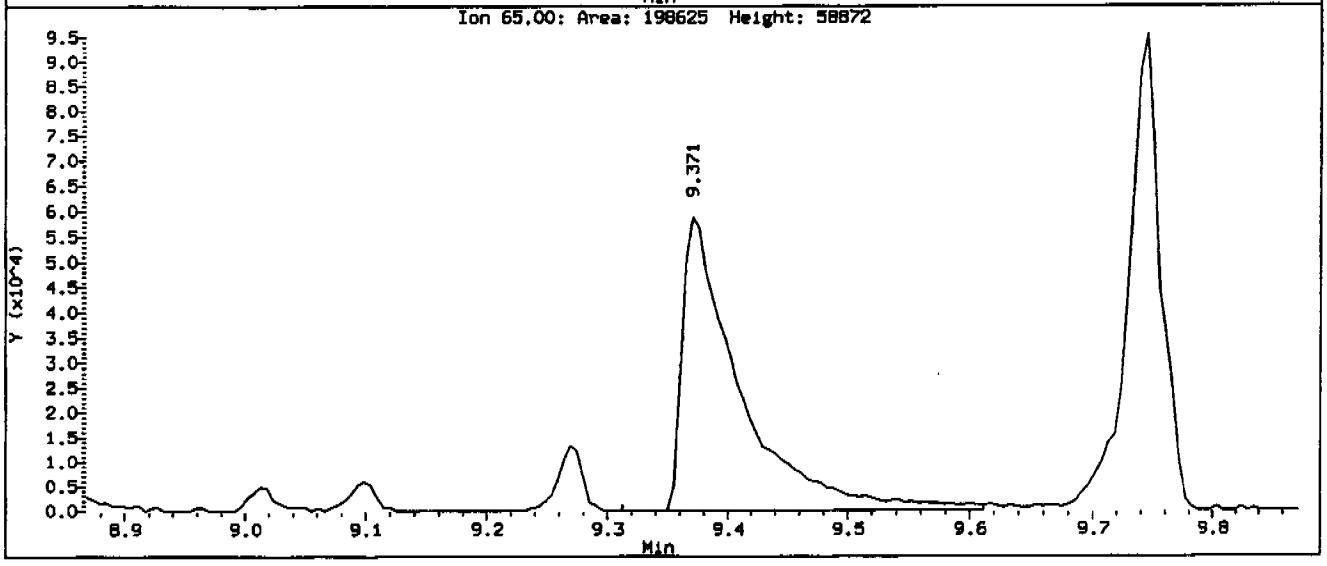
Compound: 4-Nitrophenol
CAS Number: 100-02-7



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

05/16/05





DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	46.63		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	53.75		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	49.63		PASS
197	0 - 1% of mass 198	0.20		PASS
199	5 - 9% of mass 198	6.79		PASS
275	10 - 30% of mass 198	27.30		PASS
365	Greater than 1% of mass 198	3.38		PASS
441	Present, but less than mass 443	11.73	(91.21)	PASS
442	Greater than 40% of mass 198	69.63		PASS
443	17 - 23% of mass 442	12.86	(18.47)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.7361894	5.000	PASS
Benzidine	0.8528897	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	308167			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	801	0.3	15.0	PASS
4,4-DDD + DDE	801	0.3	15.0	PASS

****

Tuning Sample, //Slsvr01/BNA_LAB/MSK.i/K050509D.B/KDFT3002.D/KDFT3002.D,*** PASSED

****

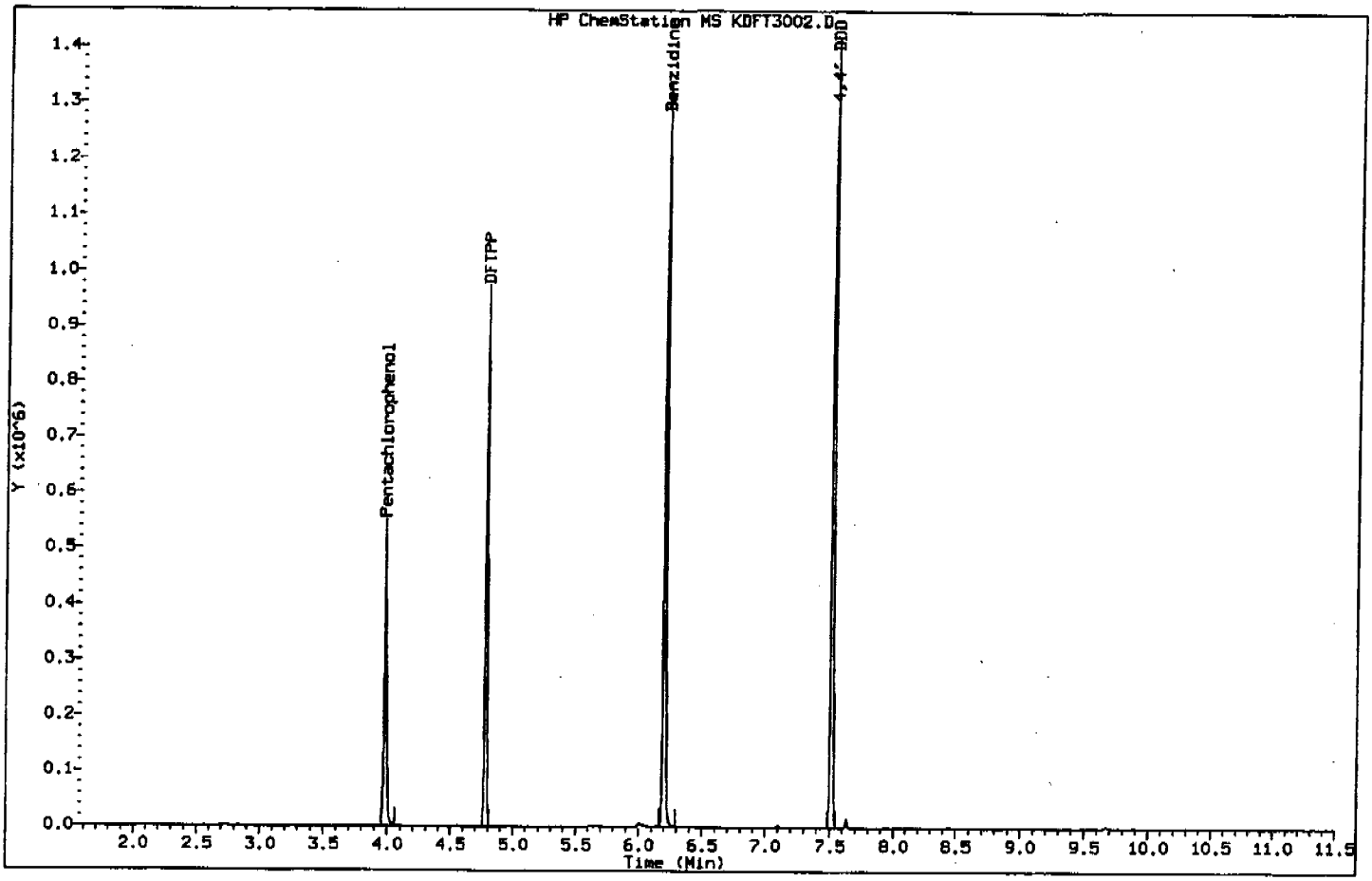
5/10/05

STL ST. LOUIS

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 05/09/2005 18:49

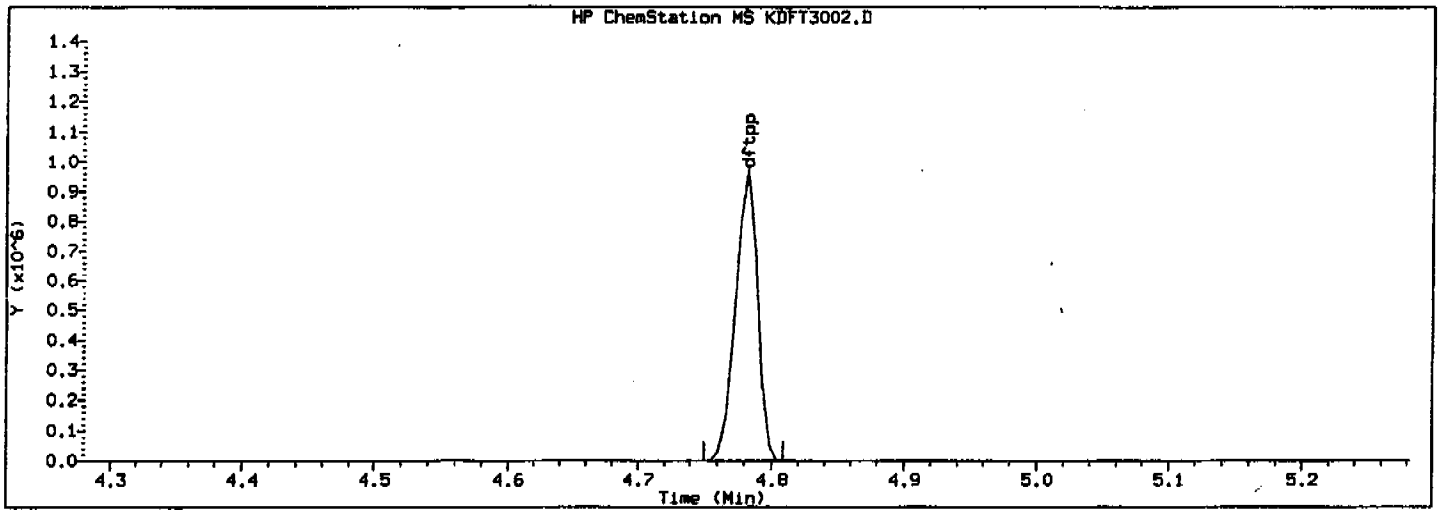
Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509D.B/KDFT3002.D/KDFT3002.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509D.B\sw846tun.m Inst: MSK
Injection Date: 09-MAY-2005 16:09 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0232-05 (50NG)

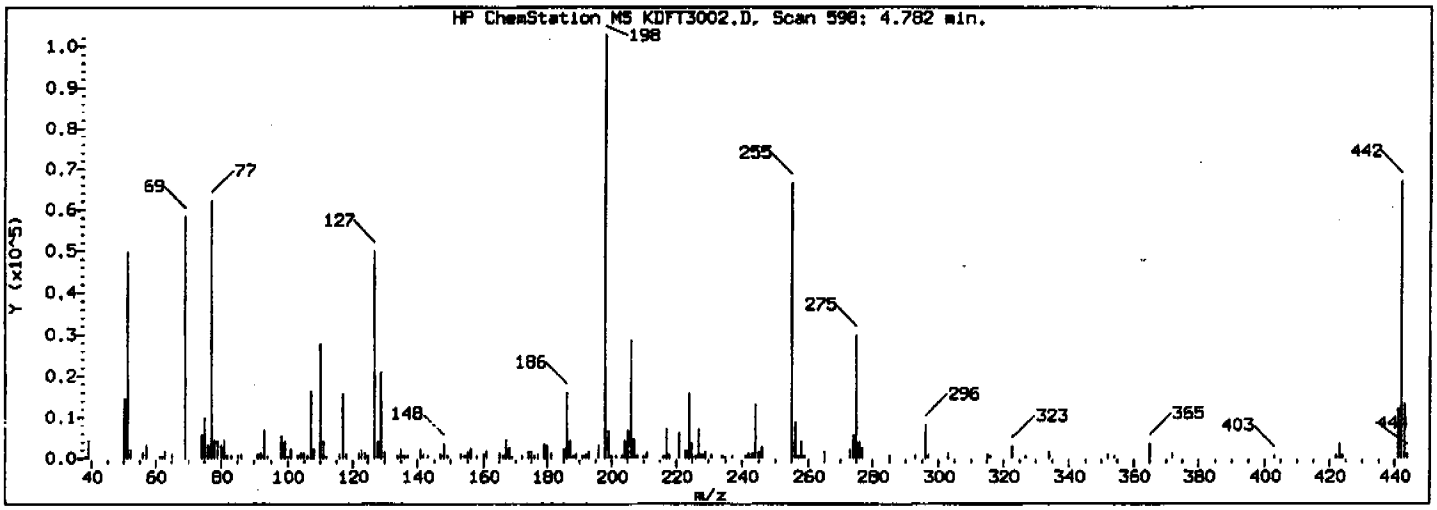


LOT# F5D220273

Report Date: 05/09/2005 18:49

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509D.B/KDFT3002.D/KDFT3002.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509D.B\sw846tun.m Inst: MSK
Injection Date: 09-MAY-2005 16:09 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0232-05 (50NG)



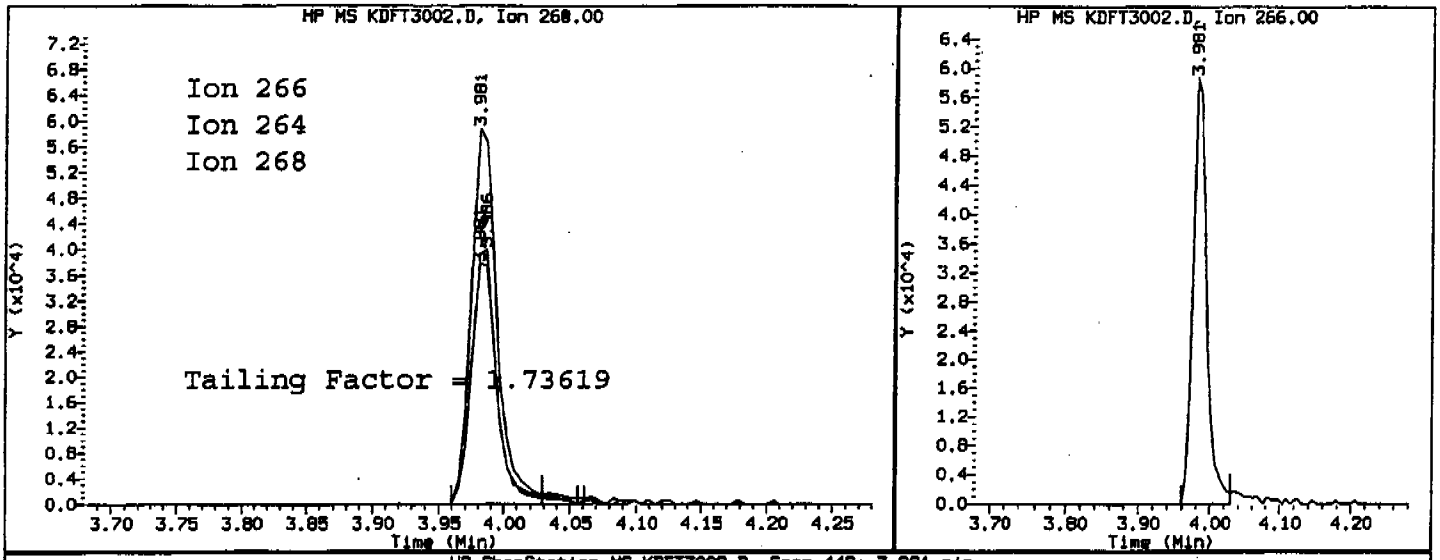


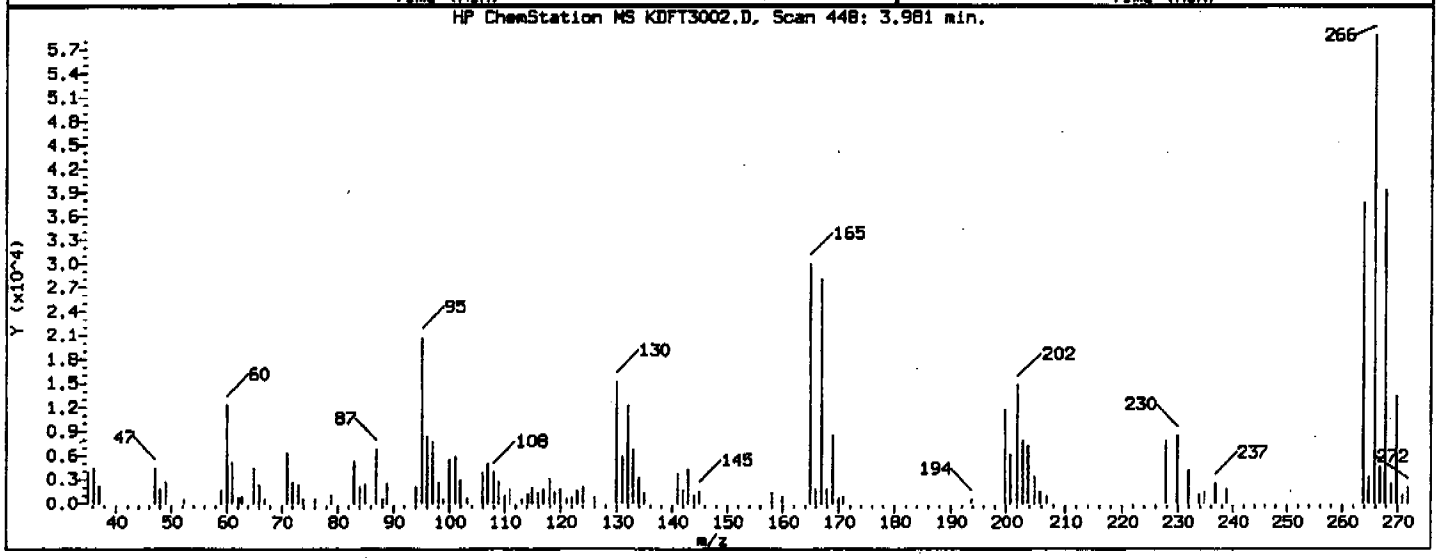
DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	46.63		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	53.75		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	49.63		PASS
197	0 - 1% of mass 198	0.20		PASS
199	5 - 9% of mass 198	6.79		PASS
275	10 - 30% of mass 198	27.30		PASS
365	Greater than 1% of mass 198	3.38		PASS
441	Present, but less than mass 443	11.73	(91.21)	PASS
442	Greater than 40% of mass 198	69.63		PASS
443	17 - 23% of mass 442	12.86	(18.47)	PASS

Report Date: 05/09/2005 18:49

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509D.B/KDFT3002.D/KDFT3002.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509D.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 16:09 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)





Pentachlorophenol
==========

Exp. RT = 3.975
Found RT = 3.981

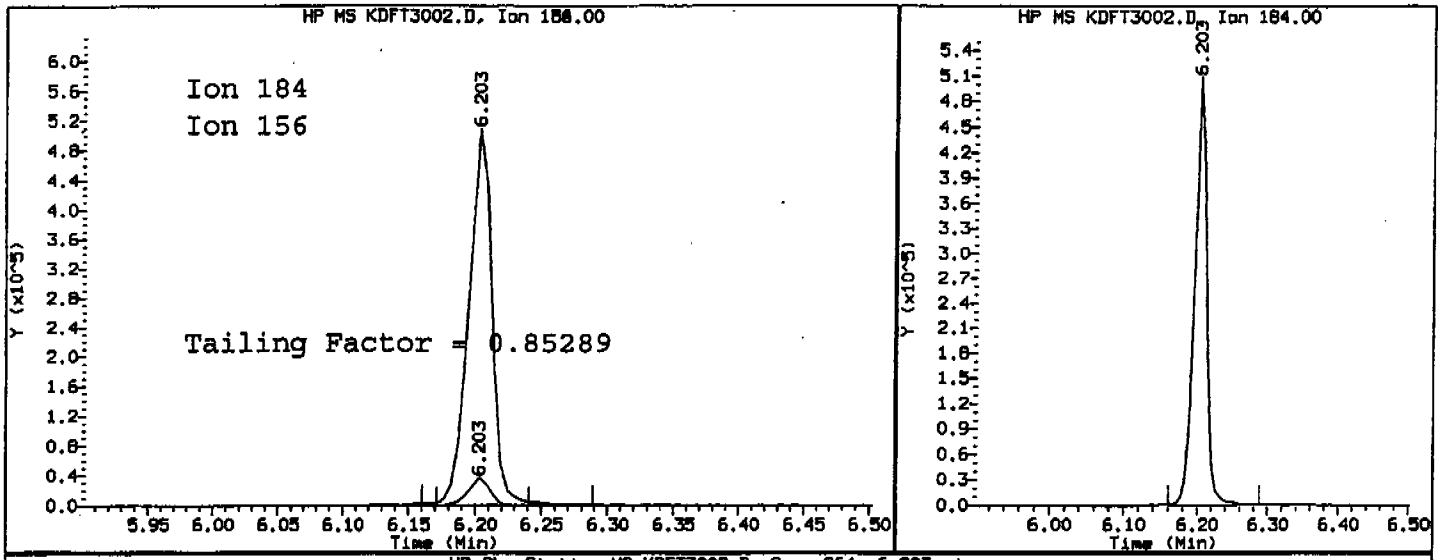
Mass	Area	Ratio
266	82286	100.00
264	53687	65.25
268	56009	68.07

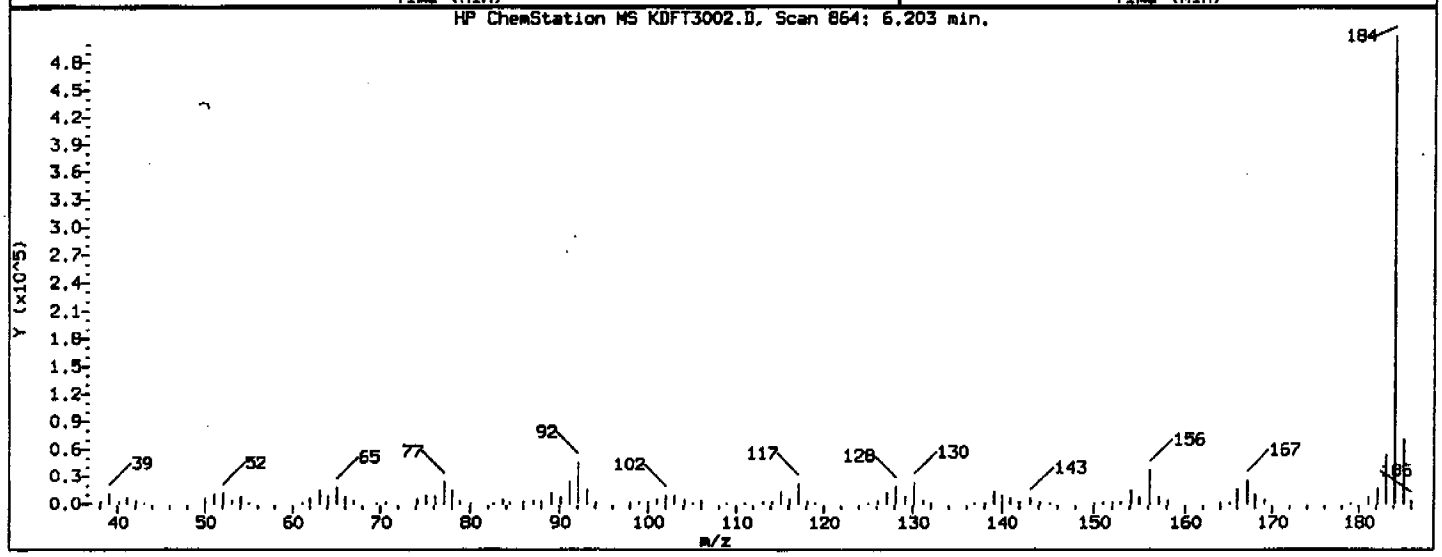
Tailing factor for Pentachlorophenol OK

Tail Factor = 1.736 Maximum Allowed = 5.0

Report Date: 05/09/2005 18:49

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509D.B/KDFT3002.D/KDFT3002.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509D.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 16:09 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)





Benzidine
=========
Exp. RT = 6.203
Found RT = 6.203

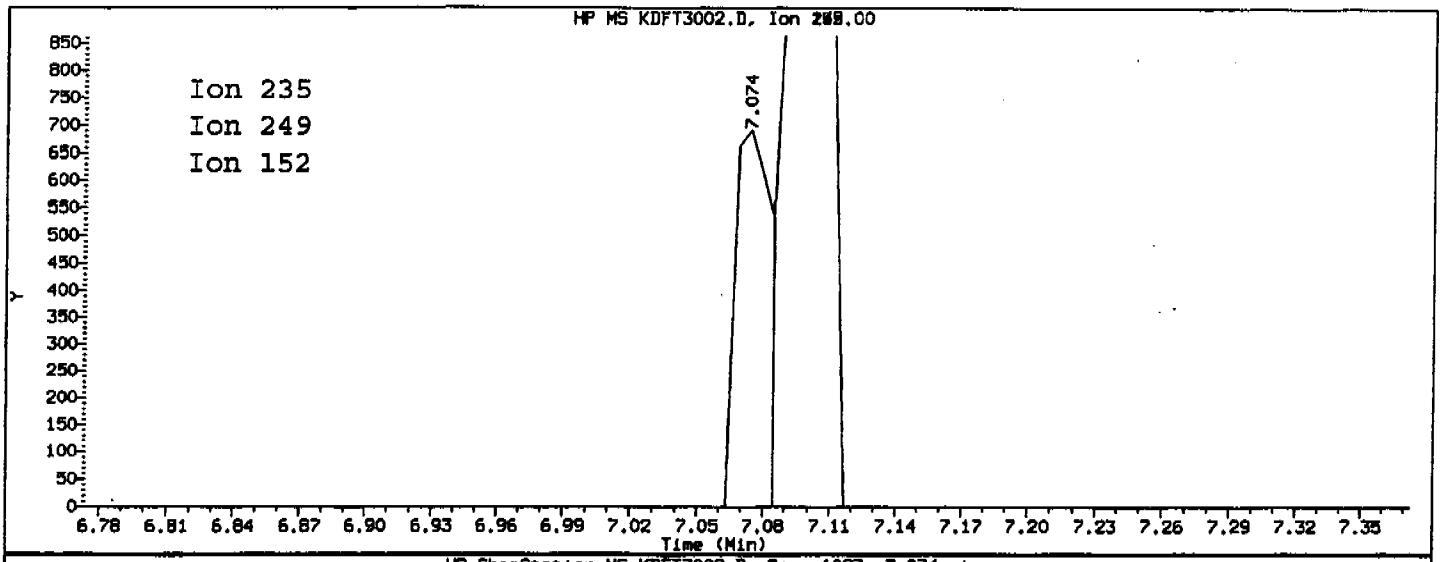
Mass	Area	Ratio
184	614002	100.00
156	42723	6.96

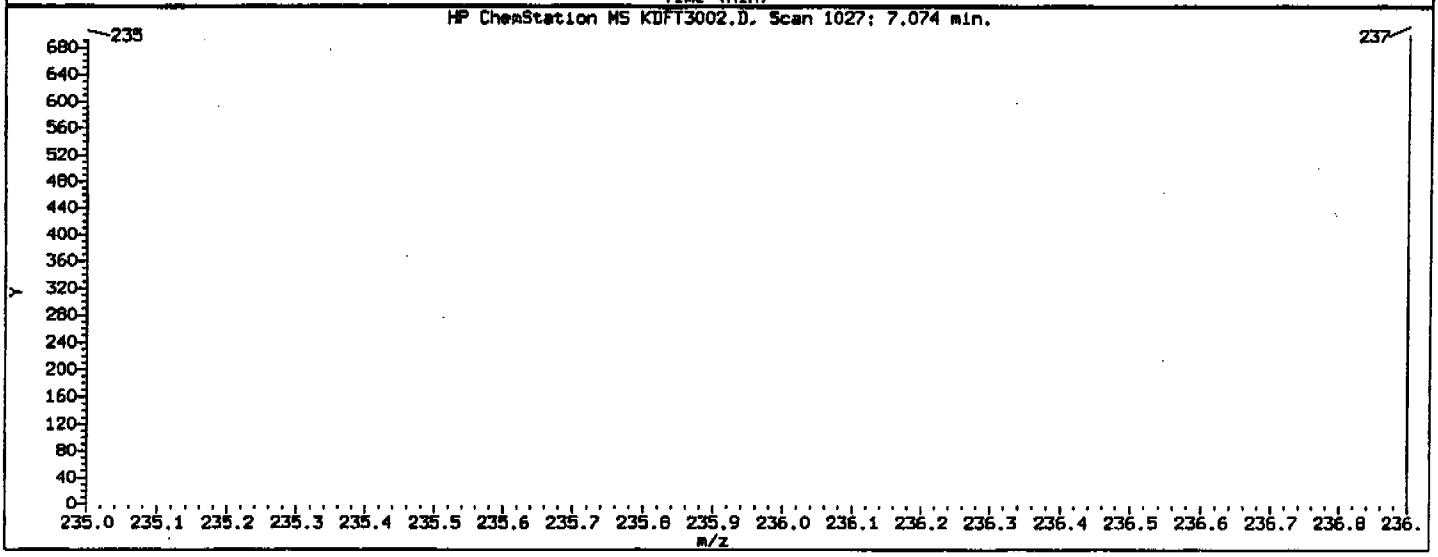
Tailing factor for Benzidine OK

Tail Factor = 0.853 Maximum Allowed = 3.0

Report Date: 05/09/2005 18:49

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509D.B/KDFT3002.D/KDFT3002.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509D.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 16:09 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)





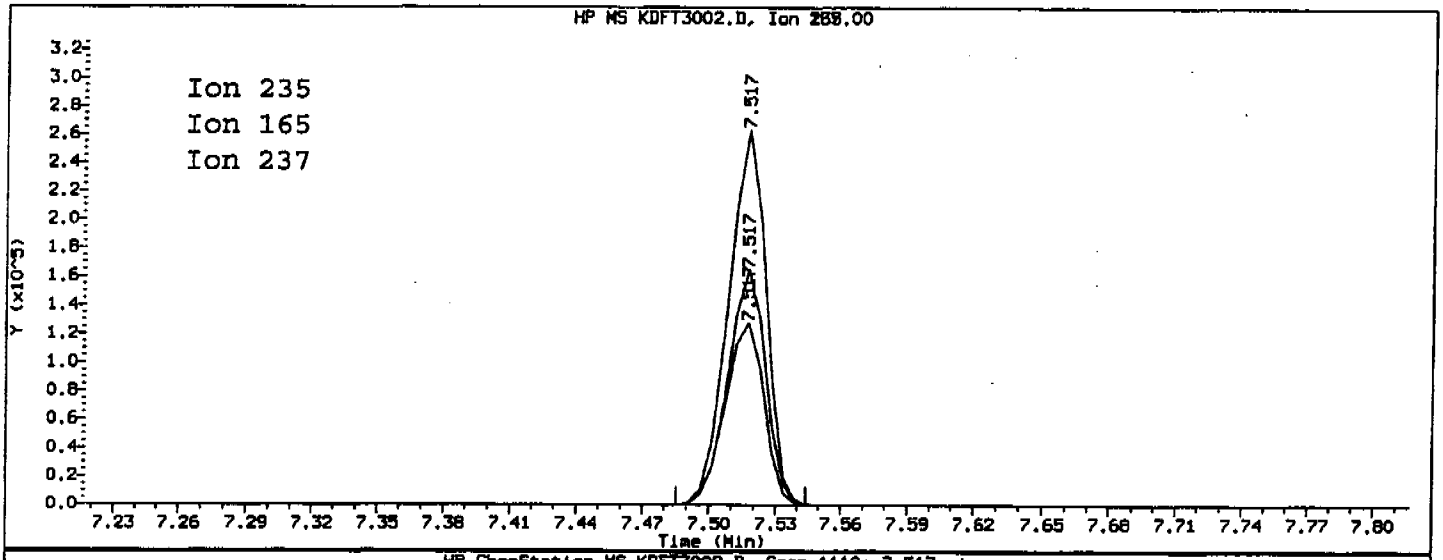
4,4'-DDD

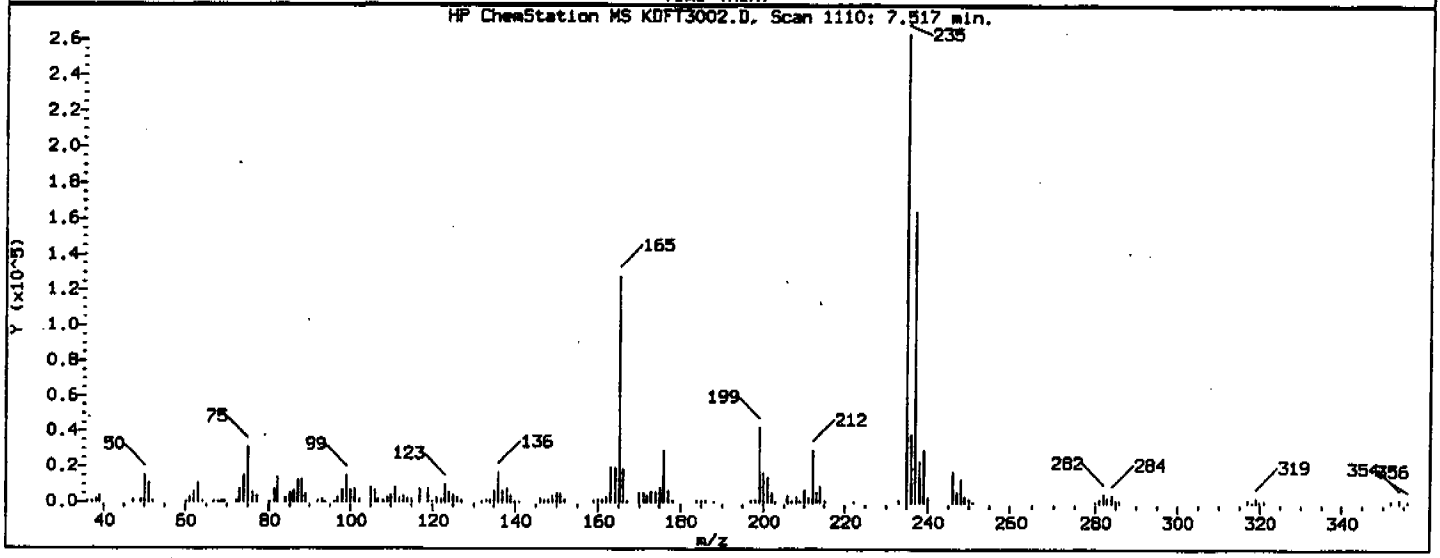
Exp. RT = 6.734
Found RT = 7.074

Mass	Area	Ratio
235	801	100.00
249	0	0.00
152	0	0.00

Report Date: 05/09/2005 18:49

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509D.B/KDFT3002.D/KDFT3002.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509D.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 16:09 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



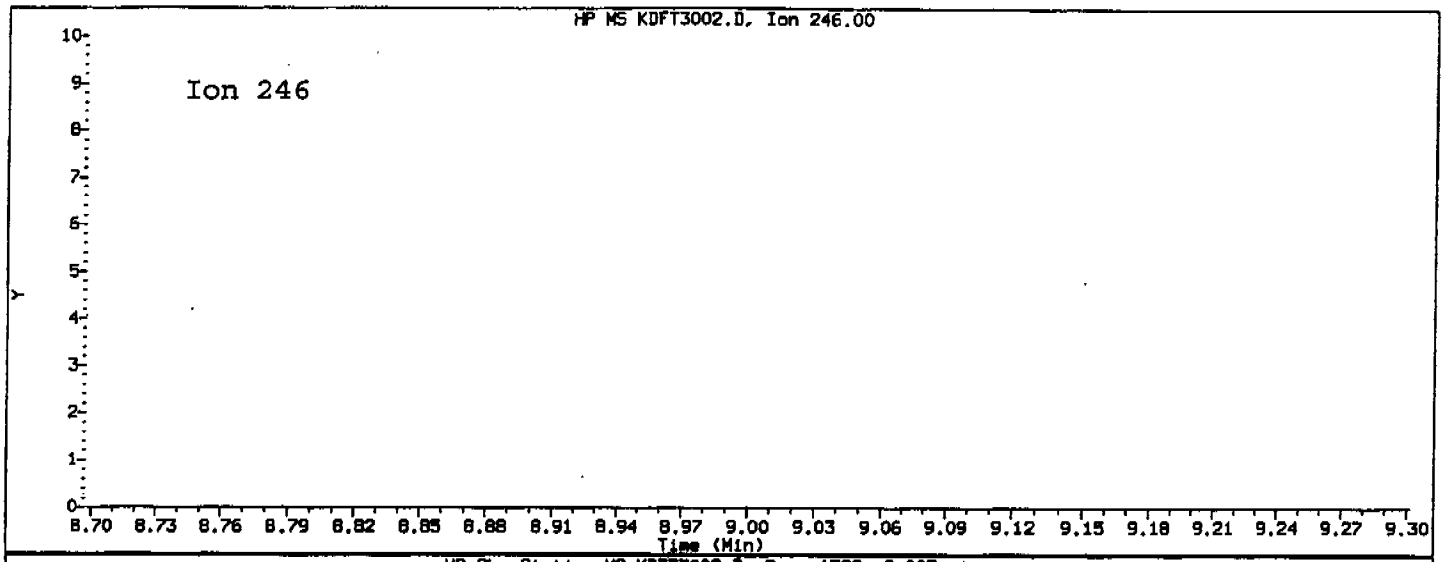


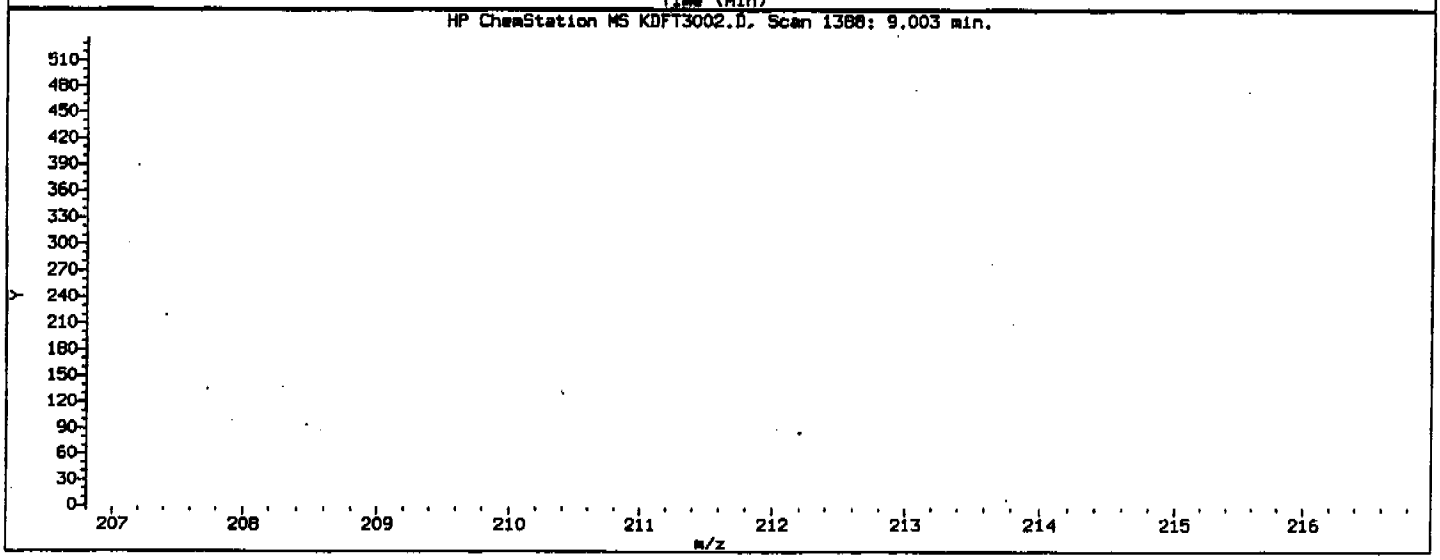
4,4'-DDT
========
Exp. RT = 7.517
Found RT = 7.517

Mass	Area	Ratio
235	308167	100.00
165	156087	50.65
237	194611	63.15

Report Date: 05/09/2005 18:49

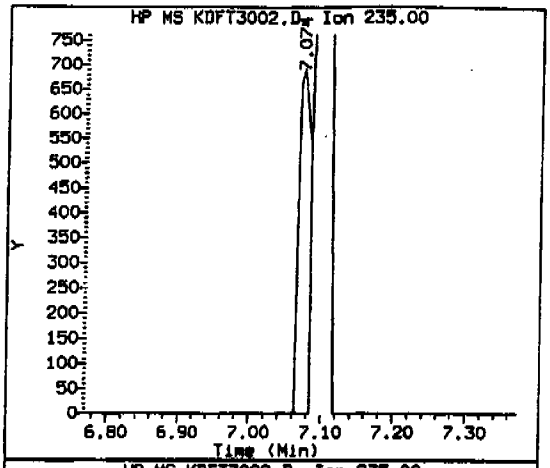
Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509D.B/KDFT3002.D/KDFT3002.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509D.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 16:09 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



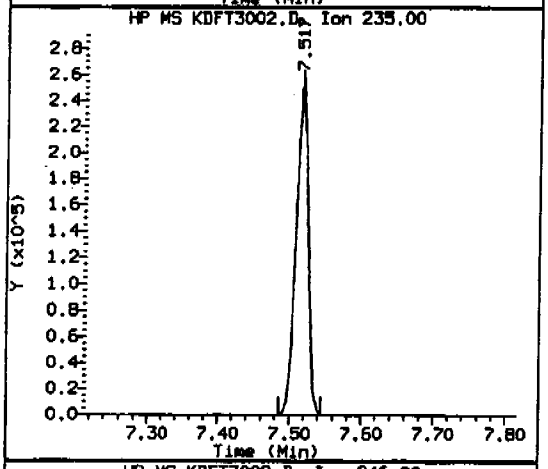


4,4'-DDE
========
Exp. RT = 9.000
Found RT = 0.000

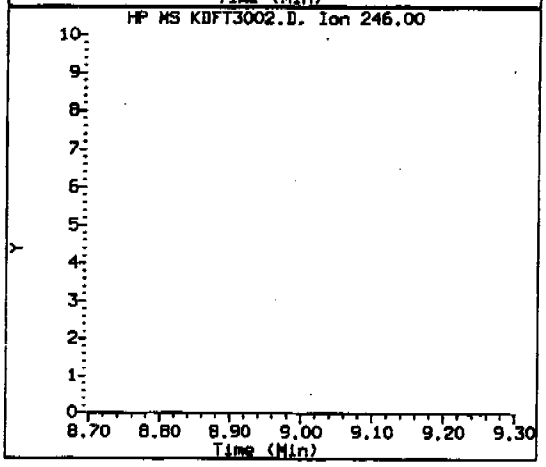
Mass	Area	Ratio
246	0	0.00



Compound: 4,4'-DDD
Quant Mass: 235
RT: 7.074
Area: 801



Compound: 4,4'-DDT
Quant Mass: 235
RT: 7.517
Area: 308167



Compound: 4,4'-DDE
Quant Mass: 246
RT: 0.000
Area: 0

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	308167			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	801	0.3	15.0	PASS
4,4-DDD + DDE	801	0.3	15.0	PASS

****
TUNE SAMPLE *** PASSED *** DDT BREAKDOWN TEST
****

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3003.D Page 1
Report Date: 10-May-2005 11:12

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i Injection Date: 09-MAY-2005 16:30
Lab File ID: KCAL3003.D Init. Cal. Date(s): 28-APR-2005 09-MAY-2005
Analysis Type: WATER Init. Cal. Times: 11:41 15:12
Lab Sample ID: SSTD050 Quant Type: ISTD
Method: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m

	COMPOUND	RRF / AMOUNT	RPSO	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	1 1,4-Dioxane	0.36386	0.50663	0.010	-39.23785	60.00000	Averaged
	4 N-Nitrosodimethylamine	0.67099	0.83858	0.010	-24.97558	60.00000	Averaged
	3 Pyridine	1.18405	1.34863	0.010	-13.89987	60.00000	Averaged
	5 Dimethylformamide	0.88716	1.03657	0.010	-16.84088	60.00000	Averaged
$	10 2-Fluorophenol	1.20834	1.28294	0.010	-6.17335	40.00000	Averaged
	11 Cyclohexanol	1.38218	1.52736	0.010	-10.50307	60.00000	Averaged
	17 Aniline	2.19527	2.27159	0.010	-3.47688	60.00000	Averaged
	19 Bis(2-chloroethyl)ether	1.55372	1.54112	0.010	0.81089	60.00000	Averaged
$	15 Phenol-d5	1.69125	1.73291	0.010	-2.46358	40.00000	Averaged
	16 Phenol	1.87215	1.88299	0.010	-0.57912	20.00000	Averaged
	20 2-Chlorophenol	1.35363	1.36577	0.010	-0.89695	60.00000	Averaged
	21 1,3-Dichlorobenzene	1.54804	1.52239	0.010	1.65683	60.00000	Averaged
	23 1,4-Dichlorobenzene	1.64398	1.60727	0.010	2.23336	20.00000	Averaged
	26 1,2-Dichlorobenzene	1.52039	1.47987	0.010	2.66503	60.00000	Averaged
	25 Benzyl Alcohol	0.66523	0.74125	0.010	-11.42801	60.00000	Averaged
	28 2,2-oxybis(1-Chloropropane)	1.60673	1.63313	0.010	-1.64284	60.00000	Averaged
	27 2-Methylphenol	1.19876	1.23079	0.010	-2.67169	60.00000	Averaged
	35 Hexachloroethane	0.71883	0.70023	0.010	2.58685	60.00000	Averaged
	32 N-Nitrosodinpropylamine	1.25943	1.33482	0.010	-5.98634	60.00000	Averaged
	29 3 and 4-Methylphenol	1.27839	1.30207	0.010	-1.85221	60.00000	Averaged
$	36 Nitrobenzene-d5	0.54909	0.56874	0.010	-3.57902	40.00000	Averaged
	37 Nitrobenzene	0.58194	0.57972	0.010	0.38182	60.00000	Averaged
	39 Isophorone	0.75864	0.80201	0.010	-5.71685	60.00000	Averaged
	40 2-Nitrophenol	0.20162	0.20832	0.010	-3.32746	20.00000	Averaged
	41 2,4-Dimethylphenol	0.42786	0.44536	0.010	-4.08872	60.00000	Averaged
	42 Bis(2-chloroethoxy)methane	0.48359	0.48404	0.010	-0.09202	60.00000	Averaged
	45 2,4-Dichlorophenol	0.31460	0.32447	0.010	-3.13836	20.00000	Averaged
	47 1,2,4-Trichlorobenzene	0.37479	0.37174	0.010	0.81541	60.00000	Averaged
	44 Benzoic Acid	0.19951	0.22097	0.010	-10.75894	60.00000	Averaged
	50 Naphthalene	1.13252	1.07973	0.010	4.66168	60.00000	Averaged
	51 4-Chloroaniline	0.45857	0.46054	0.010	-0.43080	60.00000	Averaged
	54 Hexachlorobutadiene	0.26032	0.25642	0.010	1.49849	20.00000	Averaged
	62 2-Methylnaphthalene	0.81010	0.79832	0.010	1.45448	60.00000	Averaged
	59 4-Chloro-3-Methylphenol	0.36550	0.38676	0.010	-5.81566	20.00000	Averaged
	66 Hexachlorocyclopentadiene	0.42770	0.38659	0.010	9.61316	60.00000	Averaged
	67 2,4,6-Trichlorophenol	0.46165	0.46748	0.010	-1.26175	20.00000	Averaged
	68 2,4,5-Trichlorophenol	0.48790	0.51049	0.010	-4.62929	60.00000	Averaged
$	69 2-Fluorobiphenyl	1.61063	1.52859	0.010	5.09379	40.00000	Averaged
	72 2-Chloronaphthalene	1.34666	1.28880	0.010	4.29645	60.00000	Averaged
	73 2-Nitroaniline	0.58010	0.61700	0.010	-6.36032	60.00000	Averaged
	76 Dimethylphthalate	1.54223	1.55842	0.010	-1.04999	60.00000	Averaged
	79 Acenaphthylene	1.98537	1.92794	0.010	2.89233	60.00000	Averaged

MW 05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3003.D
Report Date: 10-May-2005 11:12

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i
Lab File ID: KCAL3003.D
Analysis Type: WATER
Lab Sample ID: SSTD050
Method: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m

Injection Date: 09-MAY-2005 16:30
Init. Cal. Date(s): 28-APR-2005 09-MAY-2005
Init. Cal. Times: 11:41 15:12
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RPSD	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
80	2,6-Dinitrotoluene	0.32954	0.33779	0.010	-2.50495	60.00000	Averaged
83	Acenaphthene	1.25374	1.21995	0.010	2.69513	20.00000	Averaged
81	3-Nitroaniline	0.32374	0.34996	0.010	-8.09967	60.00000	Averaged
84	2,4-Dinitrophenol	0.19685	0.22366	0.010	-13.61751	60.00000	Averaged
86	Dibenzofuran	1.85230	1.82840	0.010	1.29050	60.00000	Averaged
88	2,4-Dinitrotoluene	0.42378	0.45817	0.010	-8.11681	60.00000	Averaged
85	4-Nitrophenol	0.27026	0.32435	0.010	-20.01541	60.00000	Averaged
93	Diethylphthalate	1.54363	1.56163	0.010	-1.16602	60.00000	Averaged
94	Fluorene	1.48246	1.50068	0.010	-1.22923	60.00000	Averaged
95	4-Chlorophenyl-phenylether	0.79978	0.80006	0.010	-0.03520	60.00000	Averaged
98	4-Nitroaniline	0.31560	0.35225	0.010	-11.61243	60.00000	Averaged
99	4,6-Dinitro-2-methylphenol	0.16574	0.18472	0.010	-11.45589	60.00000	Averaged
100	N-Nitrosodiphenylamine	0.60901	0.58024	0.010	4.72325	20.00000	Averaged
102	Azobenzene	1.36611	1.30190	0.010	4.70030	60.00000	Averaged
$ 104	2,4,6-Tribromophenol	0.22361	0.23768	0.010	-6.29452	40.00000	Averaged
109	4-Bromophenyl-phenylether	0.27978	0.27375	0.010	2.15303	60.00000	Averaged
112	Hexachlorobenzene	0.28563	0.27963	0.010	2.10045	60.00000	Averaged
117	Pentachlorophenol	0.15930	0.16669	0.010	-4.63974	20.00000	Averaged
122	Phenanthrene	1.23548	1.22276	0.010	1.02999	60.00000	Averaged
124	Anthracene	1.19438	1.18909	0.010	0.44340	60.00000	Averaged
126	Carbazole	1.02046	1.02865	0.010	-0.80196	60.00000	Averaged
129	Di-n-Butylphthalate	1.33705	1.35998	0.010	-1.71537	60.00000	Averaged
134	Fluoranthene	1.27688	1.32780	0.010	-3.98786	20.00000	Averaged
135	Benzidine	0.60665	0.60339	0.010	0.53606	100	Averaged
137	Pyrene	1.62596	1.52498	0.010	6.21025	60.00000	Averaged
$ 139	Terphenyl-d14	1.26353	1.19387	0.010	5.51310	40.00000	Averaged
145	3,3-Dimethylbenzidine	0.64501	0.66446	0.010	-3.01621	60.00000	Averaged
146	Butylbenzylphthalate	0.67238	0.65828	0.010	2.09737	60.00000	Averaged
150	Benzo(a)Anthracene	1.40066	1.38240	0.010	1.30347	60.00000	Averaged
152	3,3'-Dichlorobenzidine	0.53933	0.55489	0.010	-2.88559	60.00000	Averaged
154	Chrysene	1.33287	1.27881	0.010	4.05568	60.00000	Averaged
155	bis(2-ethylhexyl)Phthalate	0.84173	0.81999	0.010	2.58283	60.00000	Averaged
158	Di-n-octylphthalate	1.70444	1.65468	0.010	2.91940	20.00000	Averaged
160	Benzo(b)fluoranthene	1.55320	1.56410	0.010	-0.70203	60.00000	Averaged
161	Benzo(k)fluoranthene	1.54269	1.56410	0.010	-1.38816	60.00000	Averaged
165	Benzo(a)pyrene	1.40180	1.38181	0.010	1.42611	20.00000	Averaged
173	Indeno(1,2,3-cd)pyrene	1.29945	1.27426	0.010	1.93863	60.00000	Averaged
174	Dibenzo(a,h)anthracene	1.26094	1.29028	0.010	-2.32704	60.00000	Averaged
177	Benzo(g,h,i)perylene	1.16013	1.15239	0.010	0.66722	60.00000	Averaged

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B/KCAL3003.D
Report Date: 05/10/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3003.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 16:30
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270

COMPOUND	%D
1,4-Dioxane	39.2
Pyridine	13.9
N-Nitrosodimethylamine	25.0
Dimethylformamide	16.8
2-Fluorophenol	6.2
Cyclohexanol	10.5
Aniline	3.5
Bis(2-chloroethyl)ether	0.8
Phenol-d5	2.5
Phenol	0.6
2-Chlorophenol	0.9
1,3-Dichlorobenzene	1.7
1,4-Dichlorobenzene	2.2
1,2-Dichlorobenzene	2.7
Benzyl Alcohol	11.4
2,2-oxybis(1-Chloropropane)	1.6
2-Methylphenol	2.7
N-Nitrosodinpropylamine	6.0
Hexachloroethane	2.6
3 and 4-Methylphenol	1.9
Nitrobenzene-d5	3.6
Nitrobenzene	0.4
Isophorone	5.7
2-Nitrophenol	3.3
2,4-Dimethylphenol	4.1
Bis(2-chloroethoxy)methane	0.1
2,4-Dichlorophenol	3.1
1,2,4-Trichlorobenzene	0.8
Benzoic Acid	10.8
Naphthalene	4.7
4-Chloroaniline	0.4
Hexachlorobutadiene	1.5
4-Chloro-3-Methylphenol	5.8
2-Methylnaphthalene	1.5
Hexachlorocyclopentadiene	9.6
2,4,6-Trichlorophenol	1.3
2,4,5-Trichlorophenol	4.6
2-Fluorobiphenyl	5.1
2-Chloronaphthalene	4.3

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B/KCAL3003.D
Report Date: 05/10/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3003.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 16:30
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C

COMPOUND	%D
2-Nitroaniline	6.4
Dimethylphthalate	1.0
Acenaphthylene	2.9
2,6-Dinitrotoluene	2.5
Acenaphthene	2.7
3-Nitroaniline	8.1
2,4-Dinitrophenol	13.6
Dibenzofuran	1.3
2,4-Dinitrotoluene	8.1
4-Nitrophenol	20.0
Fluorene	1.2
Diethylphthalate	1.2
4-Chlorophenyl-phenylether	0.0
4-Nitroaniline	11.6
4,6-Dinitro-2-methylphenol	11.5
N-Nitrosodiphenylamine	4.7
Azobenzene	4.7
2,4,6-Tribromophenol	6.3
4-Bromophenyl-phenylether	2.2
Hexachlorobenzene	2.1
Pentachlorophenol	4.6
Phenanthrene	1.0
Anthracene	0.4
Carbazole	0.8
Di-n-Butylphthalate	1.7
Fluoranthene	4.0
Benzidine	0.5
Pyrene	6.2
Terphenyl-d14	5.5
3,3-Dimethylbenzidine	3.0
Butylbenzylphthalate	2.1
Benzo(a)Anthracene	1.3
Chrysene	4.1
3,3'-Dichlorobenzidine	2.9
bis(2-ethylhexyl)Phthalate	2.6
Di-n-octylphthalate	2.9
Benzo(k)fluoranthene	1.4
Benzo(b)fluoranthene	0.7
Benzo(a)pyrene	1.4

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B/KCAL3003.D
Report Date: 05/10/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3003.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 16:30
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C

COMPOUND	%D
Indeno(1,2,3-cd)pyrene	1.9
Dibenzo(a,h)anthracene	2.3
Benzo(g,h,i)perylene	0.7
Dibenz(e,a) Pyrene	100.0

The average of %D's in the continuing calibration is 5.9

05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3003.D Page 1
Report Date: 10-May-2005 11:12

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GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3003.D
Lab Smp Id: SSTD050 Client Smp ID: SSTD050
Inj Date : 09-MAY-2005 16:30
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD050
Misc Info : SV0220-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Meth Date : 10-May-2005 11:12 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12 Cal File: KCAL3000.D
Als bottle: 12 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	1.279	1.279	(0.281)	87783	50.0000	69.62
4	N-Nitrosodimethylamine	74	1.706	1.706	(0.374)	145299	50.0000	62.49
3	Pyridine	79	1.690	1.690	(0.371)	233676	50.0000	56.95
5	Dimethylformamide	44	2.144	2.144	(0.470)	179605	50.0000	58.42(M)
$ 10	2-Fluorophenol	112	3.245	3.245	(0.712)	222293	50.0000	53.09
11	Cyclohexanol	57	3.261	3.261	(0.715)	264643	50.0000	55.25
17	Aniline	93	4.254	4.254	(0.933)	393596	50.0000	51.74
19	Bis(2-chloroethyl)ether	93	4.324	4.324	(0.948)	267028	50.0000	49.59
$ 15	Phenol-d5	99	4.324	4.324	(0.948)	300260	50.0000	51.23
16	Phenol	94	4.334	4.334	(0.951)	326264	50.0000	50.29
20	2-Chlorophenol	128	4.388	4.388	(0.963)	236646	50.0000	50.45
21	1,3-Dichlorobenzene	146	4.511	4.511	(0.989)	263783	50.0000	49.17
* 22	1,4-Dichlorobenzene-d4	152	4.559	4.559	(1.000)	138615	40.0000	
23	1,4-Dichlorobenzene	146	4.575	4.575	(1.004)	278489	50.0000	48.88
26	1,2-Dichlorobenzene	146	4.799	4.799	(1.053)	256416	50.0000	48.67
25	Benzyl Alcohol	108	4.804	4.804	(1.054)	128436	50.0000	55.71(H)
28	2,2-oxybis(1-Chloropropane)	45	4.965	4.965	(1.089)	282970	50.0000	50.82
27	2-Methylphenol	108	5.013	5.013	(1.100)	213257	50.0000	51.34
35	Hexachloroethane	117	5.157	5.157	(1.131)	121328	50.0000	48.71
32	N-Nitrosodinpropylamine	70	5.152	5.152	(1.130)	231283	50.0000	52.99
29	3 and 4-Methylphenol	108	5.205	5.205	(1.142)	451216	100.000	101.8

ok 05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3003.D Page 2
Report Date: 10-May-2005 11:12

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.285	5.285	(0.861)	350233	50.0000	51.79
	37 Nitrobenzene	77	5.307	5.307	(0.864)	356993	50.0000	49.81
	39 Isophorone	82	5.595	5.595	(0.911)	493879	50.0000	52.86
	40 2-Nitrophenol	139	5.702	5.702	(0.929)	128287	50.0000	51.66
	41 2,4-Dimethylphenol	107	5.830	5.830	(0.950)	274252	50.0000	52.04
	42 Bis(2-chloroethoxy)methane	93	5.910	5.910	(0.963)	298072	50.0000	50.05
	45 2,4-Dichlorophenol	162	6.038	6.038	(0.983)	199810	50.0000	51.57
	47 1,2,4-Trichlorobenzene	180	6.097	6.097	(0.993)	228918	50.0000	49.59
*	48 Naphthalene-d8	136	6.140	6.140	(1.000)	492644	40.0000	
	44 Benzoic Acid	122	6.097	6.097	(0.993)	136075	50.0000	55.38
	50 Naphthalene	128	6.167	6.167	(1.004)	664903	50.0000	47.67
	51 4-Chloroaniline	127	6.316	6.316	(1.029)	283604	50.0000	50.22
	54 Hexachlorobutadiene	225	6.412	6.412	(1.044)	157905	50.0000	49.25
	62 2-Methylnaphthalene	142	7.128	7.128	(1.161)	491608	50.0000	49.27
	59 4-Chloro-3-Methylphenol	107	7.080	7.080	(1.153)	238169	50.0000	52.91
	66 Hexachlorocyclopentadiene	237	7.475	7.475	(0.847)	133779	50.0000	45.19
	67 2,4,6-Trichlorophenol	196	7.662	7.662	(0.868)	161771	50.0000	50.63
	68 2,4,5-Trichlorophenol	196	7.748	7.748	(0.878)	176656	50.0000	52.31
$	69 2-Fluorobiphenyl	172	7.753	7.753	(0.878)	528971	50.0000	47.45
	72 2-Chloronaphthalene	162	7.876	7.876	(0.892)	445991	50.0000	47.85
	73 2-Nitroaniline	65	8.170	8.170	(0.926)	213513	50.0000	53.18
	76 Dimethylphthalate	163	8.539	8.539	(0.967)	539293	50.0000	50.52
	79 Acenaphthylene	152	8.560	8.560	(0.970)	667167	50.0000	48.55
	80 2,6-Dinitrotoluene	165	8.651	8.651	(0.980)	116894	50.0000	51.25
*	82 Acenaphthene-d10	164	8.827	8.827	(1.000)	276841	40.0000	
	83 Acenaphthene	153	8.880	8.880	(1.006)	422165	50.0000	48.65
	81 3-Nitroaniline	138	8.886	8.886	(1.007)	121104	50.0000	54.05
	84 2,4-Dinitrophenol	184	9.067	9.067	(1.027)	77397	50.0000	56.81
	86 Dibenzofuran	168	9.158	9.158	(1.038)	632719	50.0000	49.35
	88 2,4-Dinitrotoluene	165	9.329	9.329	(1.057)	158551	50.0000	54.06
	85 4-Nitrophenol	109	9.377	9.377	(1.062)	112242	50.0000	60.01
	93 Diethylphthalate	149	9.799	9.799	(1.110)	540404	50.0000	50.58
	94 Fluorene	166	9.773	9.773	(1.107)	519313	50.0000	50.61
	95 4-Chlorophenyl-phenylether	204	9.821	9.821	(1.113)	276862	50.0000	50.02
	98 4-Nitroaniline	138	10.008	10.008	(1.134)	121895	50.0000	55.81
	99 4,6-Dinitro-2-methylphenol	198	10.061	10.061	(0.876)	116765	50.0000	55.73
	100 N-Nitrosodiphenylamine	169	10.088	10.088	(0.878)	366777	50.0000	47.64
	102 Azobenzene	77	10.104	10.104	(0.880)	822940	50.0000	47.65
$	104 2,4,6-Tribromophenol	330	10.275	10.275	(1.164)	82250	50.0000	53.15
	109 4-Bromophenyl-phenylether	248	10.707	10.707	(0.932)	173042	50.0000	48.92
	112 Hexachlorobenzene	284	10.932	10.932	(0.952)	176758	50.0000	48.95
	117 Pentachlorophenol	266	11.338	11.338	(0.987)	105367	50.0000	52.32
*	121 Phenanthrene-d10	188	11.487	11.487	(1.000)	505686	40.0000	
	122 Phenanthrene	178	11.530	11.530	(1.004)	772915	50.0000	49.48
	124 Anthracene	178	11.616	11.616	(1.011)	751632	50.0000	49.78
	126 Carbazole	167	12.016	12.016	(1.046)	650215	50.0000	50.40
	129 Di-n-Butylphthalate	149	12.903	12.903	(1.123)	859654	50.0000	50.86
	134 Fluoranthene	202	13.827	13.827	(1.204)	839310	50.0000	51.99
	135 Benzidine	184	14.223	14.223	(0.854)	336146	50.0000	49.73
	137 Pyrene	202	14.244	14.244	(0.855)	849555	50.0000	46.89
$	139 Terphenyl-d14	244	14.687	14.687	(0.882)	665093	50.0000	47.24
	145 3,3-Dimethylbenzidine	212	15.686	15.686	(0.942)	370166	50.0000	51.51
	146 Butylbenzylphthalate	149	15.809	15.809	(0.949)	366722	50.0000	48.95
	150 Benzo(a)Anthracene	228	16.621	16.621	(0.998)	770123	50.0000	49.35

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3003.D Page 3
Report Date: 10-May-2005 11:12

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.653	16.653	(1.000)	445673	40.0000	
152 3,3'-Dichlorobenzidine	252	16.717	16.717	(1.004)	309125	50.0000	51.44
154 Chrysene	228	16.707	16.707	(1.003)	712414	50.0000	47.97
155 bis(2-ethylhexyl)Phthalate	149	17.038	17.038	(1.023)	456807	50.0000	48.71
158 Di-n-octylphthalate	149	18.181	18.181	(0.944)	789115	50.0000	48.54
160 Benzo(b)fluoranthene	252	18.630	18.630	(0.967)	745918	50.0000	50.35
161 Benzo(k)fluoranthene	252	18.630	18.630	(0.967)	745918	50.0000	50.69
165 Benzo(a)pyrene	252	19.164	19.164	(0.995)	658985	50.0000	49.29
* 166 Perylene-d12	264	19.266	19.266	(1.000)	381519	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.986	20.986	(1.089)	607692	50.0000	49.03
174 Dibenzo(a,h)anthracene	278	21.034	21.034	(1.092)	615335	50.0000	51.16
177 Benzo(g,h,i)perylene	276	21.440	21.440	(1.113)	549572	50.0000	49.67

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3003.D Page 1
Report Date: 12-May-2005 08:53

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

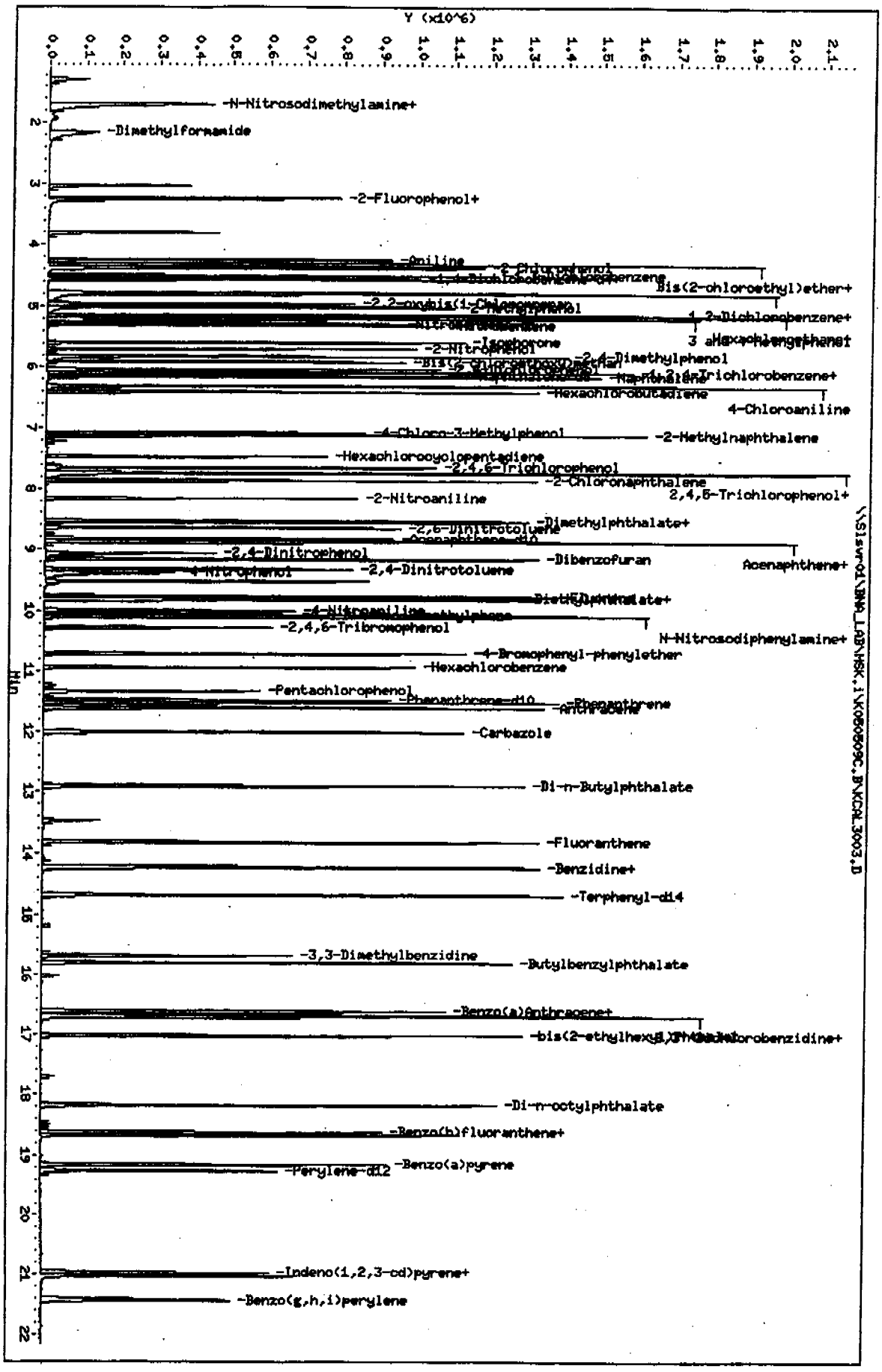
Instrument ID: MSK.i
Lab File ID: KCAL3003.D
Lab Smp Id: SSTD050
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Misc Info: SV0220-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD050
Level: LOW
Sample Type: WATER

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	138615	-28.29
48 Naphthalene-d8	657267	328634	1314534	492644	-25.05
82 Acenaphthene-d10	351374	175687	702748	276841	-21.21
121 Phenanthrene-d10	612492	306246	1224984	505686	-17.44
153 Chrysene-d12	494718	247359	989436	445673	-9.91
166 Perylene-d12	409117	204559	818234	381519	-6.75

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.56	0.05
48 Naphthalene-d8	6.14	5.64	6.64	6.14	-0.05
82 Acenaphthene-d10	8.83	8.33	9.33	8.83	0.03
121 Phenanthrene-d10	11.49	10.99	11.99	11.49	-0.03
153 Chrysene-d12	16.66	16.16	17.16	16.65	-0.02
166 Perylene-d12	19.27	18.77	19.77	19.27	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

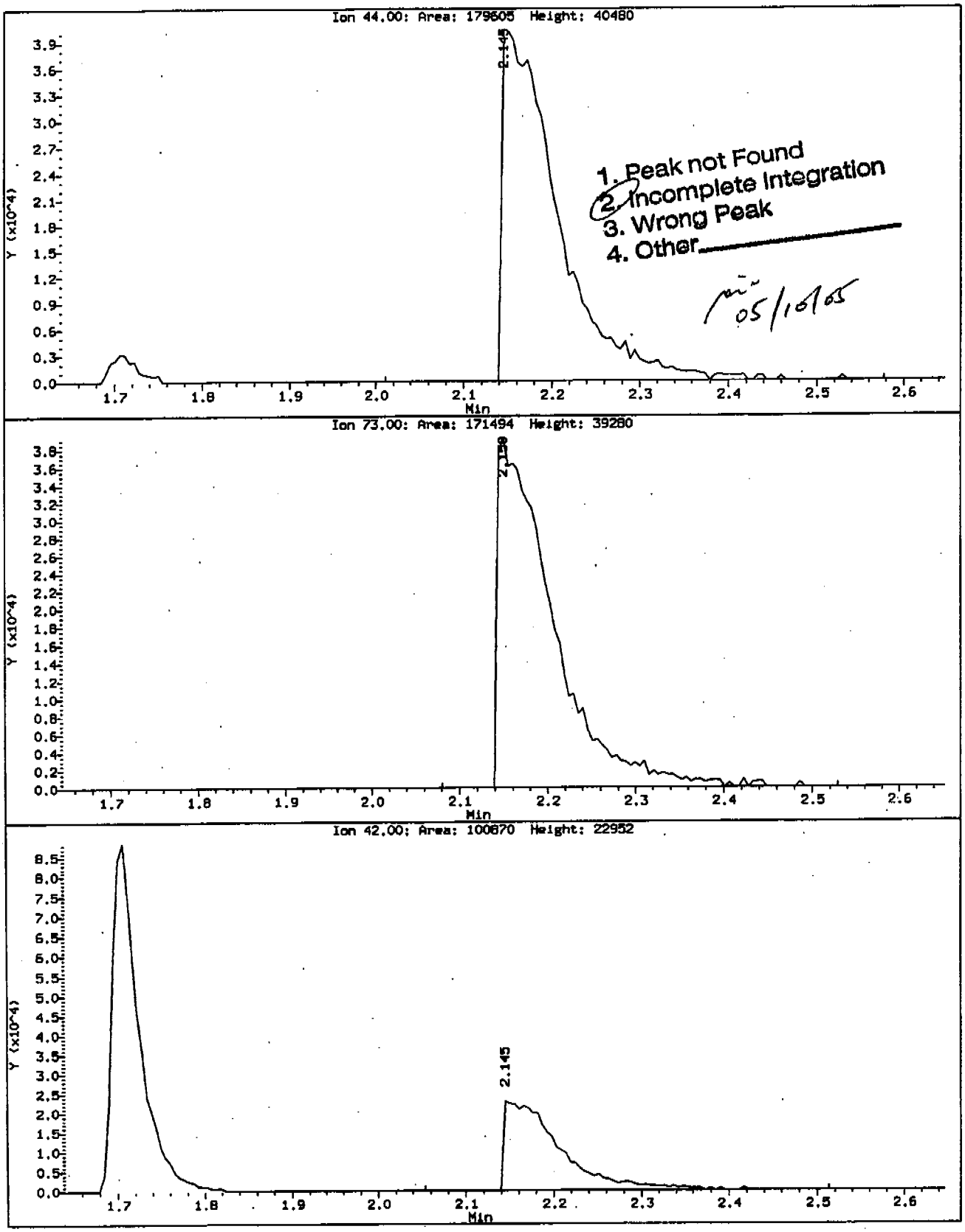


Data File: \\Slsvr01\RNA_LAB\HSK.i\K050509C.B\KCAL3003.D
Date : 09-MAY-2005 16:30
Client ID: SSTD050
Sample Info: SSTD050
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slevr01\BNA_LAB\MSK.i\K050509C.B\KCAL3003.D
Injection Date: 09-MAY-2005 16:30
Instrument: MSK.i
Client Sample ID: SSTD050

Compound: Dimethylformamide
CAS Number: 68-12-2



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX\KCAL3004.D Page 4
Report Date: 09-May-2005 18:52

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i Injection Date: 09-MAY-2005 17:02
Lab File ID: KCAL3004.D Init. Cal. Date(s): 28-APR-2005 28-APR-2005
Analysis Type: WATER Init. Cal. Times: 11:41 19:44
Lab Sample ID: SSTD050APPIX Quant Type: ISTD
Method: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX\8270K.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
7 2-Picoline	1.26430	1.25278	0.010	0.91105	60.00000	Averaged
8 N-Nitrosomethylethylamine	0.56748	0.59613	0.010	-5.04741	60.00000	Averaged
9 Methyl methanesulfonate	0.42950	0.43359	0.010	-0.95166	60.00000	Averaged
12 N-Nitrosodiethylamine	0.66218	0.65186	0.010	1.55915	60.00000	Averaged
13 Ethyl Methanesulfonate	1.12443	1.16495	0.010	-3.60436	60.00000	Averaged
18 Pentachloroethane	0.53108	0.53142	0.010	-0.06525	60.00000	Averaged
30 Acetophenone	0.57919	0.59435	0.010	-2.61825	60.00000	Averaged
31 N-Nitrosopyrrolidine	0.19155	0.19842	0.010	-3.58405	60.00000	Averaged
33 N-Nitrosomorpholine	0.08447	0.08079	0.010	4.35597	60.00000	Averaged
34 O-Toluidine	0.61359	0.62153	0.010	-1.29307	60.00000	Averaged
38 N-Nitrosopiperidine	0.17733	0.18320	0.010	-3.30667	60.00000	Averaged
43 o,o,o-Triethyl-Phosphorothi	0.24317	0.22688	0.010	6.69931	60.00000	Averaged
46 a,a-Dimethyl-phenethylamine	0.76363	0.85988	0.010	-12.60496	60.00000	Averaged
52 2,6-Dichlorophenol	0.28659	0.30934	0.010	-7.93915	60.00000	Averaged
53 Hexachloropropene	0.35073	0.33545	0.010	4.35656	60.00000	Averaged
55 Benzothiazole	0.51808	0.50766	0.010	2.01143	60.00000	Averaged
58 p-Phenylenediamine	0.29308	0.32257	0.010	-10.06313	60.00000	Averaged
57 n-Nitrosodi-n-butylamine	0.31860	0.33118	0.010	-3.94866	60.00000	Averaged
61 Safrole	0.30061	0.29464	0.010	1.98482	60.00000	Averaged
65 1,2,4,5-Tetrachlorobenzene	1.44175	1.35812	0.010	5.80097	60.00000	Averaged
64 cis-Isosafrole	0.05589	0.05601	0.010	-0.21525	60.00000	Averaged
70 trans-Isosafrole	0.60356	0.58249	0.010	3.49017	60.00000	Averaged
74 1,4-Naphthoquinone	0.26634	0.34721	0.010	-30.36314	60.00000	Averaged
75 1,4-Dinitrobenzene	0.12214	0.12855	0.010	-5.24526	60.00000	Averaged
77 1,3-Dinitrobenzene	0.23098	0.24173	0.010	-4.65728	60.00000	Averaged
87 Pentachlorobenzene	0.70131	0.63686	0.050	9.18921	60.00000	Averaged
89 1-Naphthylamine	1.09037	1.08682	0.050	0.32606	60.00000	Averaged
90 2-Naphthylamine	0.98820	0.94361	0.010	4.51234	60.00000	Averaged
92 2,3,4,6-Tetrachlorophenol	0.36178	0.35716	0.010	1.27856	60.00000	Averaged
96 Thionazin	0.26781	0.28534	0.010	-6.54852	60.00000	Averaged
97 5-Nitro-o-toluidine	0.20399	0.21709	0.010	-6.42346	60.00000	Averaged
101 tri-n-butylphosphate	1.74692	1.88792	0.010	-8.07138	60.00000	Averaged
105 Sulfotepp	0.15272	0.16893	0.010	-10.61648	60.00000	Averaged
106 Diallate (peak 1)	0.30299	0.33021	0.010	-8.98295	60.00000	Averaged
108 Phorate	0.54614	0.59768	0.010	-9.43802	60.00000	Averaged
111 Diallate (peak 2)	0.06457	0.07243	0.010	-12.18188	60.00000	Averaged
107 1,3,5-Trinitrobenzene	0.09449	0.10096	0.010	-6.84396	60.00000	Averaged
110 Phenacetin	0.42015	0.45938	0.010	-9.33687	60.00000	Averaged
113 Dimethoate	0.24940	0.29402	0.010	-17.88836	60.00000	Averaged
116 4-Aminobiphenyl	0.76111	0.79024	0.010	-3.82713	60.00000	Averaged
115 tris(2-chloroethyl)phosphat	0.22190	0.24742	0.010	-11.50121	60.00000	Averaged
119 Pentachloronitrobenzene	0.13044	0.12779	0.010	2.03077	60.00000	Averaged

05/10/06

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX\KCAL3004.D Page 5
Report Date: 09-May-2005 18:52

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i Injection Date: 09-MAY-2005 17:02
Lab File ID: KCAL3004.D Init. Cal. Date(s): 28-APR-2005 28-APR-2005
Analysis Type: WATER Init. Cal. Times: 11:41 19:44
Lab Sample ID: SSTD050APPIX Quant Type: ISTD
Method: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX\8270K.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
118 Pronamide	0.37771	0.38546	0.010	-2.05086	60.00000	Averaged	
123 Disulfoton	0.38466	0.41321	0.010	-7.42009	60.00000	Averaged	
125 Dinoseb	0.23315	0.24275	0.010	-4.11665	60.00000	Averaged	
128 Methyl Parathion	0.22194	0.25576	0.010	-15.24128	60.00000	Averaged	
131 4-Nitroquinoline-1-oxide	0.08479	0.09277	0.010	-9.41121	60.00000	Averaged	
130 Parathion	0.17785	0.20199	0.010	-13.57219	60.00000	Averaged	
132 Methapyrilene	0.27156	0.32754	0.010	-20.61413	60.00000	Averaged	
133 Isodrin	0.13865	0.13306	0.010	4.03141	60.00000	Averaged	
141 Kepone	0.00617	0.00621	0.010	-0.62094	100	Averaged	<-
140 Aramite (peak 1)	0.07053	0.08044	0.010	-14.05726	60.00000	Averaged	
142 Aramite (peak 2)	0.10750	0.11975	0.010	-11.39577	60.00000	Averaged	
143 p-(Dimethylamino)azobenzene	0.33286	0.38033	0.010	-14.26081	60.00000	Averaged	
144 Chlorobenzilate	0.46484	0.44559	0.010	4.14259	60.00000	Averaged	
148 2-Acetylaminofluorene	0.52432	0.58243	0.010	-11.08395	60.00000	Averaged	
149 Famphur	0.02497	0.04577	0.010	-83.31413	100	Averaged	
151 4,4'-Methylenebis(2-Chloroa	0.11611	0.12194	0.010	-5.01579	60.00000	Averaged	
162 7,12-Dimethylbenz(a)anthrac	0.73914	0.74614	0.010	-0.94645	60.00000	Averaged	
163 Hexachlorophene	0.02366	0.00546	0.010	76.90311	100	Averaged	<-
169 3-methylcholanthrene	0.75045	0.73444	0.010	2.13362	60.00000	Averaged	

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX/KCAL3004.D
Report Date: 05/09/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3004.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 17:02
Lab Sample ID: SSTD050APPIX
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPI

COMPOUND	%D
2-Picoline	0.9
N-Nitrosomethylethylamine	5.0
Methyl methanesulfonate	1.0
N-Nitrosodiethylamine	1.6
Methyl methacrylate	100.0
Ethyl methacrylate	100.0
Ethyl Methanesulfonate	3.6
Pentachloroethane	0.1
Acetophenone	2.6
N-Nitrosopyrrolidine	3.6
N-Nitrosomorpholine	4.4
O-Toluidine	1.3
N-Nitrosopiperidine	3.3
o,o,o-Triethyl-Phosphorothioa	6.7
a,a-Dimethyl-phenethylamine	12.6
Hexachloropropene	4.4
2,6-Dichlorophenol	7.9
Benzothiazole	2.0
p-Phenylenediamine	10.1
n-Nitrosodi-n-butylamine	3.9
Safrole	2.0
1,2,4,5-Tetrachlorobenzene	5.8
cis-Isosafrole	0.2
trans-Isosafrole	3.5
1,4-Naphthoquinone	30.4
1,4-Dinitrobenzene	5.2
1,3-Dinitrobenzene	4.7
Pentachlorobenzene	9.2
1-Naphthylamine	0.3
2-Naphthylamine	4.5
2,3,4,6-Tetrachlorophenol	1.3
Thionazin	6.5
5-Nitro-o-toluidine	6.4
tri-n-butylphosphate	8.1
Sulfotepp	10.6
Diallate (peak 1)	9.0
Phorate	9.4
1,3,5-Trinitrobenzene	6.8
Diallate (peak 2)	12.2

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX/KCAL3004.D
Report Date: 05/09/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3004.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 17:02
Lab Sample ID: SSTD050APPIX
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C

COMPOUND	%D
Phenacetin	9.3
Dimethoate	17.9
4-Aminobiphenyl	3.8
tris(2-chloroethyl)phosphate	11.5
Pentachloronitrobenzene	2.0
Pronamide	2.1
Disulfoton	7.4
Dinoseb	4.1
Methyl Parathion	15.2
4-Nitroquinoline-1-oxide	9.4
Parathion	13.6
Methapyrilene	20.6
Isodrin	4.0
Kepone	0.6
Aramite (peak 1)	14.1
Aramite (peak 2)	11.4
p-(Dimethylamino)azobenzene	14.3
Chlorobenzilate	4.1
2-Acetylaminofluorene	11.1
Famphur	83.3
4,4'-Methylenebis(2-Chloroani	5.0
7,12-Dimethylbenz(a)anthracen	0.9
Hexachlorophene	76.9
3-methylcholanthrene	2.1

The average of %D's in the continuing calibration is 12.0

05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX\KCAL3004.D Page 1
Report Date: 09-May-2005 18:52

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX\KCAL3004.D
Lab Smp Id: SSTD050APPIX Client Smp ID: SSTD050APPIX
Inj Date : 09-MAY-2005 17:02
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD050APPIX
Misc Info : SV0190-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX\8270K.m
Meth Date : 09-May-2005 18:52 hongs Quant Type: ISTD
Cal Date : 28-APR-2005 16:52 Cal File: KCAL2588.D
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIX.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
7	2-Picoline	93	2.467	2.467	(0.543)	279384	50.0000	49.54
8	N-Nitrosomethylethylamine	88	2.670	2.670	(0.587)	132943	50.0000	52.52(M)
9	Methyl methanesulfonate	80	3.028	3.028	(0.666)	96695	50.0000	50.48
12	N-Nitrosodiethylamine	102	3.418	3.418	(0.752)	145371	50.0000	49.22
13	Ethyl Methanesulfonate	79	3.797	3.797	(0.835)	259798	50.0000	51.80
18	Pentachloroethane	117	4.203	4.203	(0.925)	118513	50.0000	50.03
* 22	1,4-Dichlorobenzene-d4	152	4.545	4.545	(1.000)	178409	40.0000	
30	Acetophenone	105	5.084	5.084	(0.831)	466345	50.0000	51.31
31	N-Nitrosopyrrolidine	100	5.106	5.106	(0.834)	155683	50.0000	51.79
33	N-Nitrosomorpholine	116	5.132	5.132	(0.839)	63392	50.0000	47.82
34	O-Toluidine	106	5.154	5.154	(0.842)	487668	50.0000	50.65
38	N-Nitrosopiperidine	114	5.485	5.485	(0.896)	143743	50.0000	51.65
43	o,o,o-Triethyl-Phosphorothioa	198	5.907	5.907	(0.965)	178019	50.0000	46.65
* 48	Naphthalene-d8	136	6.121	6.121	(1.000)	627703	40.0000	
46	a,a-Dimethyl-phenethylamine	58	6.035	6.035	(0.986)	674689	50.0000	56.30(M)
52	2,6-Dichlorophenol	162	6.308	6.308	(1.031)	242720	50.0000	53.97
53	Hexachloropropene	213	6.302	6.302	(1.030)	263205	50.0000	47.82(M)
55	Benzothiazole	135	6.511	6.511	(1.064)	398325	50.0000	48.99
58	p-Phenylenediamine	108	6.794	6.794	(1.110)	253099	50.0000	55.03
57	n-Nitrosodi-n-butylamine	84	6.799	6.799	(1.111)	259852	50.0000	51.97
61	Safrole	162	7.034	7.034	(1.149)	231182	50.0000	49.01

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
65	1,2,4,5-Tetrachlorobenzene	216	7.435	7.435	(0.844)	610247	50.0000	47.10
64	cis-Isosafrole	162	7.478	7.478	(0.849)	25166	50.0000	50.11(M)
70	trans-Isosafrole	162	7.825	7.825	(0.888)	261733	50.0000	48.25(M)
74	1,4-Naphthoquinone	158	8.188	8.188	(0.930)	156011	50.0000	65.18
75	1,4-Dinitrobenzene	168	8.354	8.354	(1.365)	100864	50.0000	52.62
77	1,3-Dinitrobenzene	168	8.546	8.546	(0.970)	108619	50.0000	52.33
* 82	Acenaphthene-d10	164	8.808	8.808	(1.000)	359467	40.0000	
87	Pentachlorobenzene	250	9.187	9.187	(1.043)	286163	50.0000	45.40
89	1-Naphthylamine	143	9.321	9.321	(1.058)	488343	50.0000	49.84
90	2-Naphthylamine	143	9.459	9.459	(1.074)	423996	50.0000	47.74
92	2,3,4,6-Tetrachlorophenol	232	9.502	9.502	(1.079)	160483	50.0000	49.36
96	Thionazin	107	9.919	9.919	(1.126)	128214	50.0000	53.27
97	5-Nitro-o-toluidine	152	9.930	9.930	(0.865)	179164	50.0000	53.21
101	tri-n-butylphosphate	99	10.202	10.202	(1.158)	848304	50.0000	54.04
105	Sulfotepp	97	10.608	10.608	(0.925)	139420	50.0000	55.31
106	Diallate (peak 1)	86	10.677	10.677	(0.931)	272521	50.0000	54.49
108	Phorate	75	10.688	10.688	(0.932)	493259	50.0000	54.72
111	Diallate (peak 2)	86	10.811	10.811	(0.942)	59777	50.0000	56.09
107	1,3,5-Trinitrobenzene	213	10.795	10.795	(0.941)	83318	50.0000	53.42(M)
110	Phenacetin	108	10.832	10.832	(0.944)	379125	50.0000	54.67
113	Dimethoate	87	11.051	11.051	(0.963)	242651	50.0000	58.94
116	4-Aminobiphenyl	169	11.228	11.228	(0.979)	652177	50.0000	51.91
115	tris(2-chloroethyl)phosphate	63	11.292	11.292	(0.984)	204193	50.0000	55.75
119	Pentachloronitrobenzene	237	11.441	11.441	(0.997)	105461	50.0000	48.98
118	Pronamide	173	11.495	11.495	(1.002)	318114	50.0000	51.02
* 121	Phenanthrene-d10	188	11.473	11.473	(1.000)	660232	40.0000	
123	Disulfoton	88	11.682	11.682	(1.018)	341015	50.0000	53.71
125	Dinoseb	211	11.730	11.730	(1.022)	200340	50.0000	52.06
128	Methyl Parathion	109	12.403	12.403	(1.081)	211077	50.0000	57.62
131	4-Nitroquinoline-1-oxide	190	13.135	13.135	(1.145)	76559	50.0000	54.70
130	Parathion	97	13.194	13.194	(1.150)	166701	50.0000	56.79
132	Methapyrilene	97	13.381	13.381	(1.166)	270318	50.0000	60.31(M)
133	Isodrin	193	13.525	13.525	(1.179)	109814	50.0000	47.98
141	Kepone	272	14.679	14.679	(0.883)	4550	50.0000	50.31
140	Aramite (peak 1)	185	14.770	14.770	(0.888)	58945	50.0000	57.03
142	Aramite (peak 2)	185	14.930	14.930	(0.898)	87751	50.0000	55.70
143	p-(Dimethylamino)azobenzene	120	14.999	14.999	(0.902)	278694	50.0000	57.13
144	Chlorobenzilate	251	15.138	15.138	(0.910)	326509	50.0000	47.93
148	2-Acetylaminofluorene	181	16.207	16.207	(0.975)	426784	50.0000	55.54
149	Famphur	218	16.591	16.591	(0.998)	33537	50.0000	91.66(M)
* 153	Chrysene-d12	240	16.629	16.629	(1.000)	586209	40.0000	
151	4,4'-Methylenebis(2-Chloroani	266	16.709	16.709	(1.005)	89352	50.0000	52.51
162	7,12-Dimethylbenz(a)anthracen	256	18.648	18.648	(0.969)	461918	50.0000	50.47
163	Hexachlorophene	196	18.947	18.947	(0.985)	3383	50.0000	11.55
* 166	Perylene-d12	264	19.241	19.241	(1.000)	495262	40.0000	
169	3-methylcholanthrene	268	19.791	19.791	(1.029)	454673	50.0000	48.93

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX\KCAL3004.D Page 3
Report Date: 09-May-2005 18:52

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

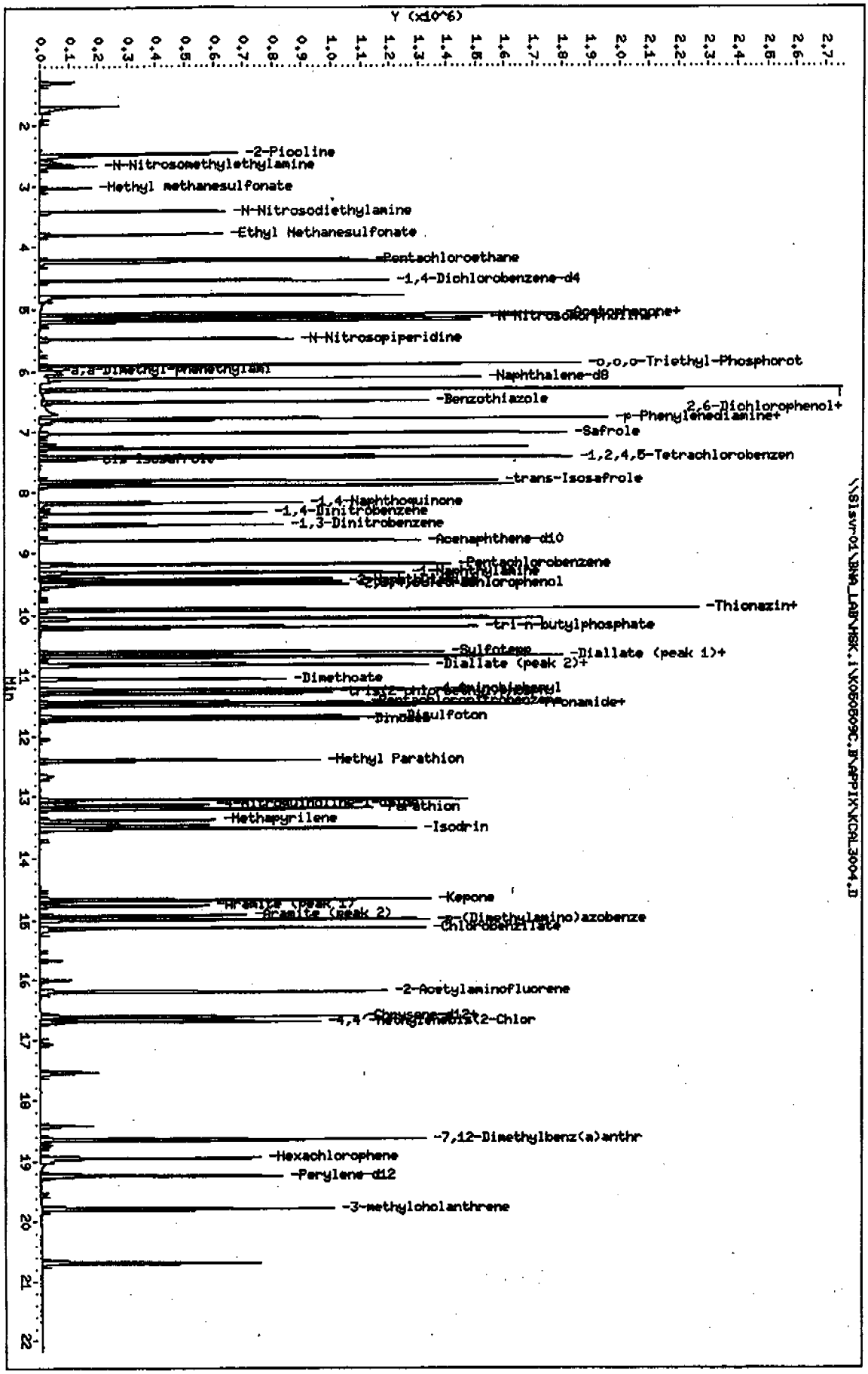
Instrument ID: MSK.i
Lab File ID: KCAL3004.D
Lab Smp Id: SSTD050APPIX
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX\8270K.m
Misc Info: SV0190-05

Calibration Date: 28-APR-2005
Calibration Time: 11:41
Client Smp ID: SSTD050APPIX
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	162145	81073	324290	178409	10.03
48 Naphthalene-d8	535939	267970	1071878	627703	17.12
82 Acenaphthene-d10	307602	153801	615204	359467	16.86
121 Phenanthrene-d10	574409	287205	1148818	660232	14.94
153 Chrysene-d12	519397	259699	1038794	586209	12.86
166 Perylene-d12	440492	220246	880984	495262	12.43

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.62	4.12	5.12	4.55	-1.61
48 Naphthalene-d8	6.21	5.71	6.71	6.12	-1.37
82 Acenaphthene-d10	8.91	8.41	9.41	8.81	-1.13
121 Phenanthrene-d10	11.58	11.08	12.08	11.47	-0.92
153 Chrysene-d12	16.74	16.24	17.24	16.63	-0.64
166 Perylene-d12	19.35	18.85	19.85	19.24	-0.55

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

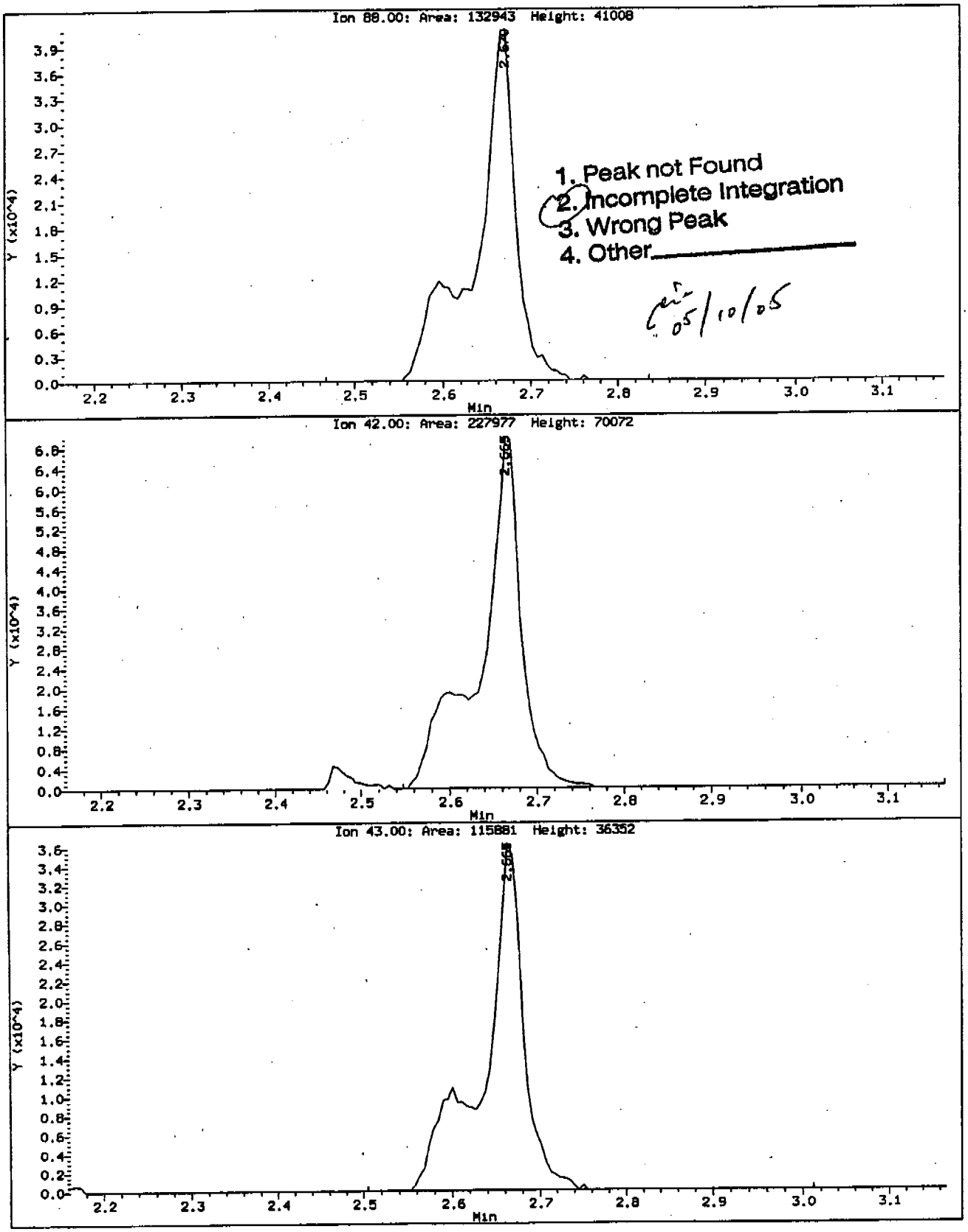


Data File: \\Slsvr01\BNA_LAB\HSK.i\K060609C.B\APPIX\KC9L3004.D
Date : 09-MAY-2006 17:02
Client ID: SSTD050APPIX
Sample Info: SSTD050APPIX
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

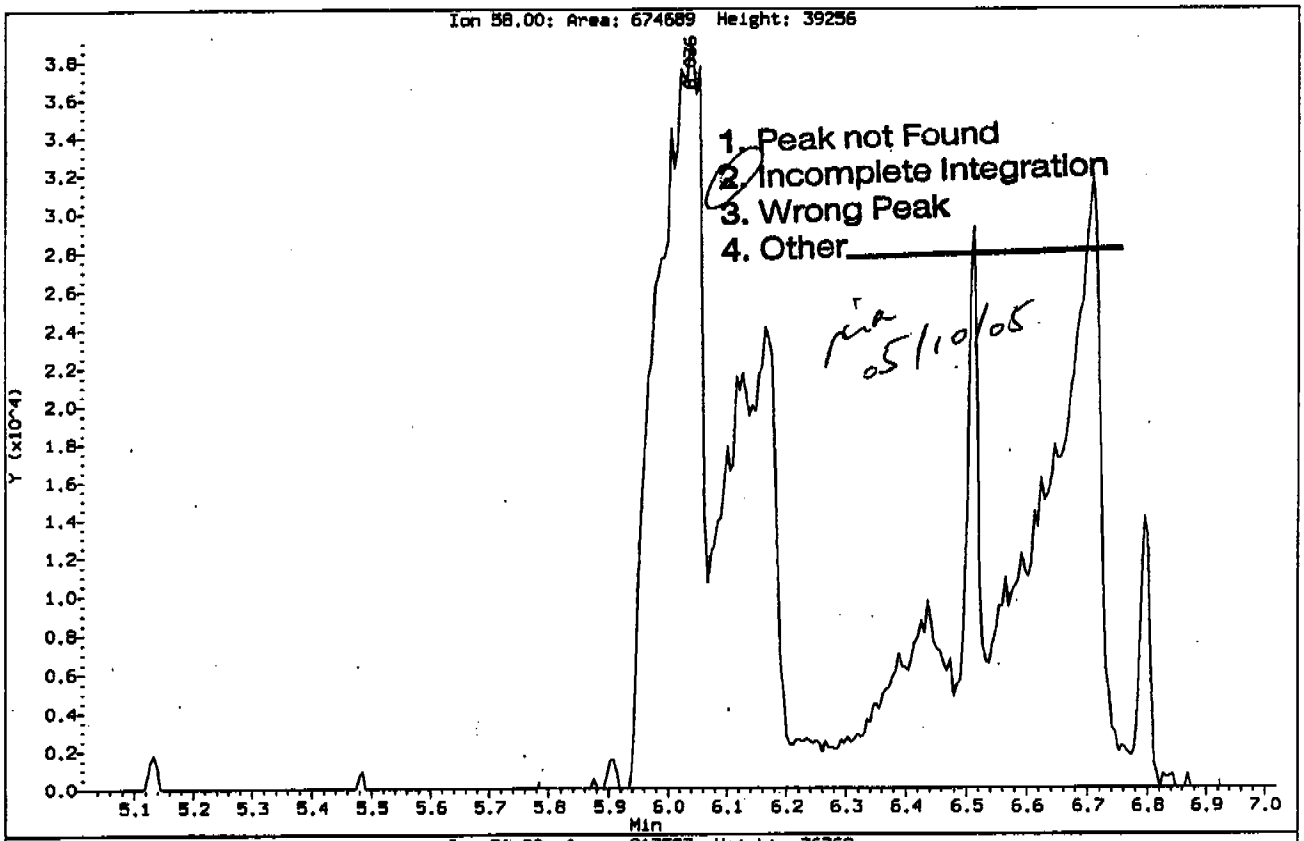
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3004.D
Injection Date: 09-MAY-2005 17:02
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

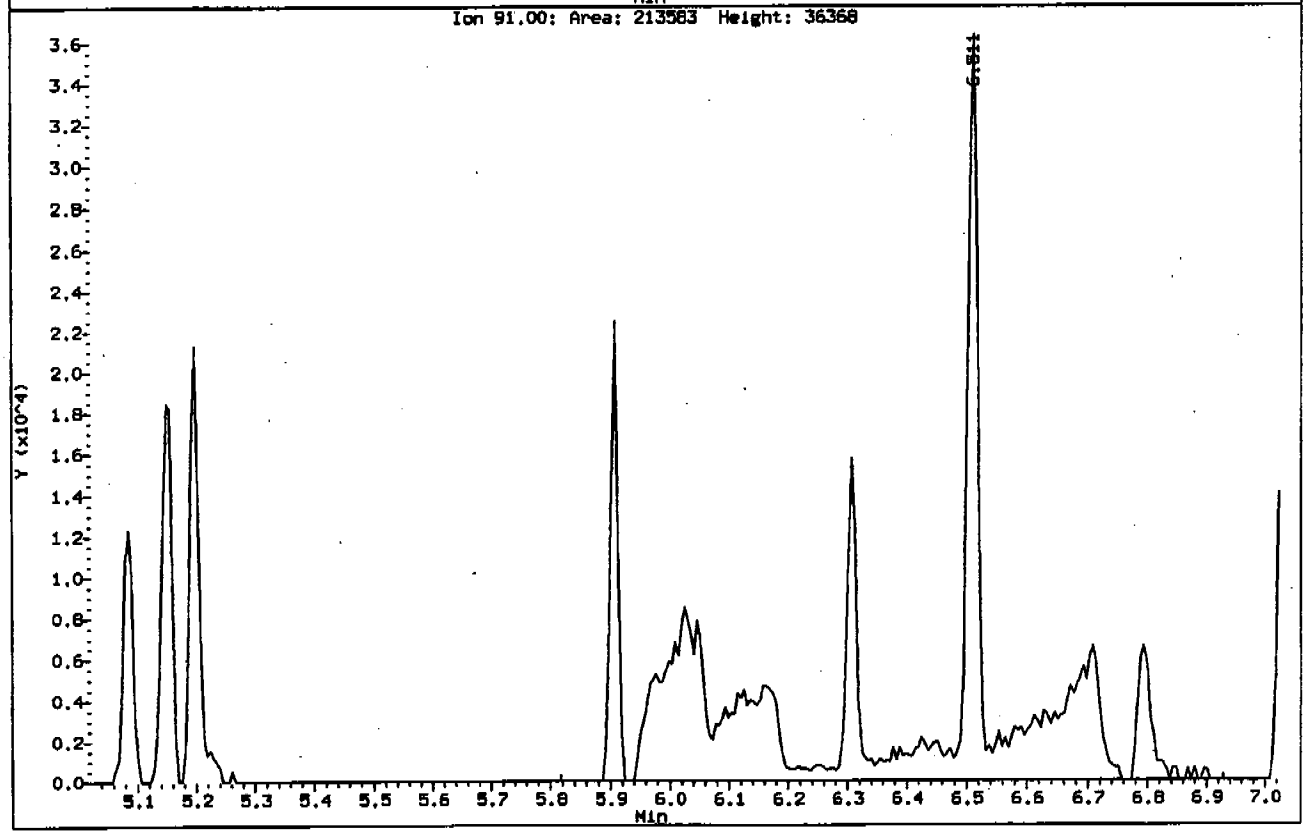
Compound: N-Nitrosomethylethylamine
CAS Number: 10595-95-6



Data File: \\Slevr01\BNA_LAB\MSK.i\K050509C.B\KCAL3004.D
Injection Date: 09-MAY-2005 17:02
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

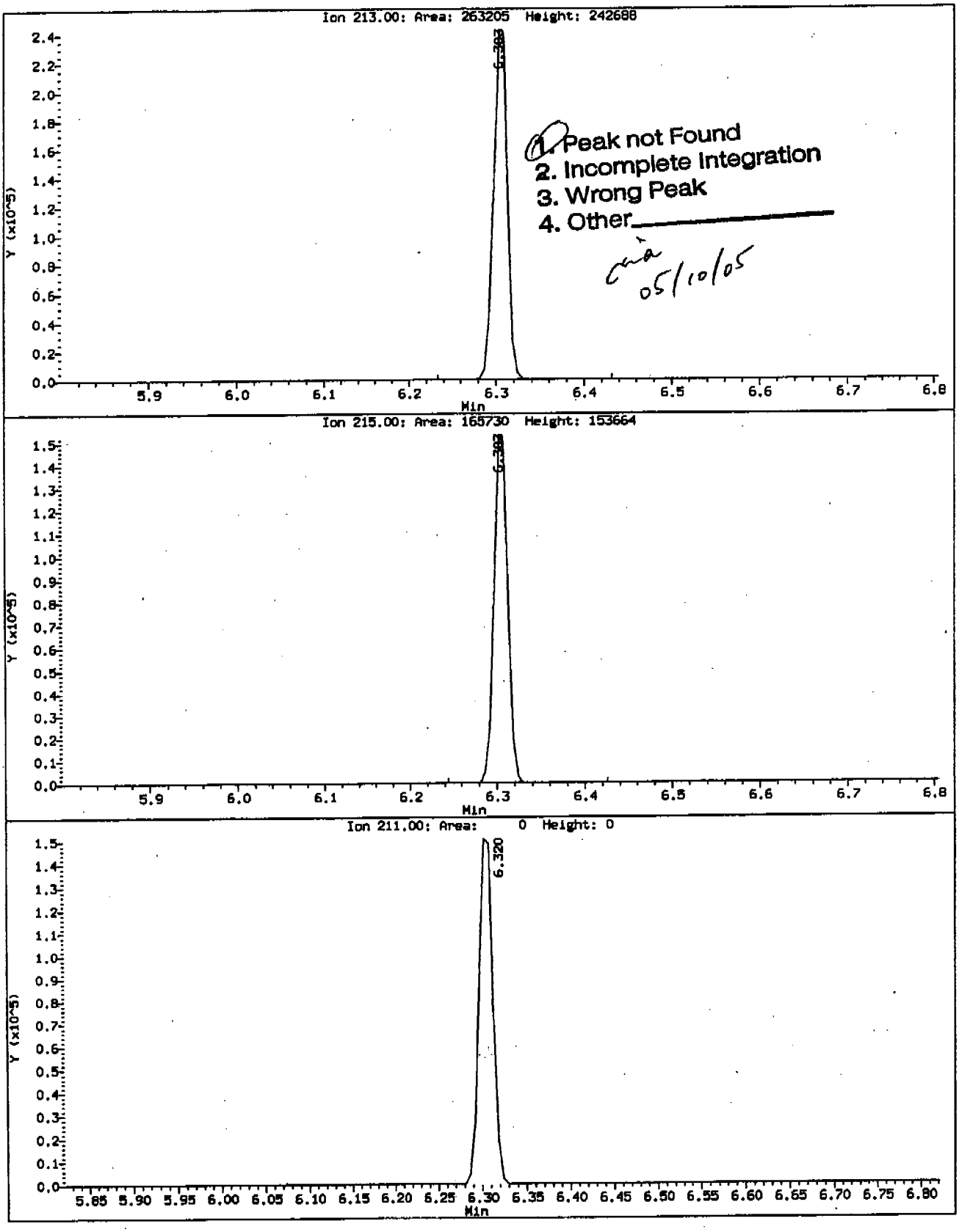
Compound: a,a-Dimethyl-phenethylamine
CAS Number: 122-09-8





Data File: \\Slavr01\BNA_LAB\MSK.i\K050509C.B\KCAL3004.D
Injection Date: 09-MAY-2005 17:02
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

Compound: Hexachloropropene
CAS Number: 1888-71-7

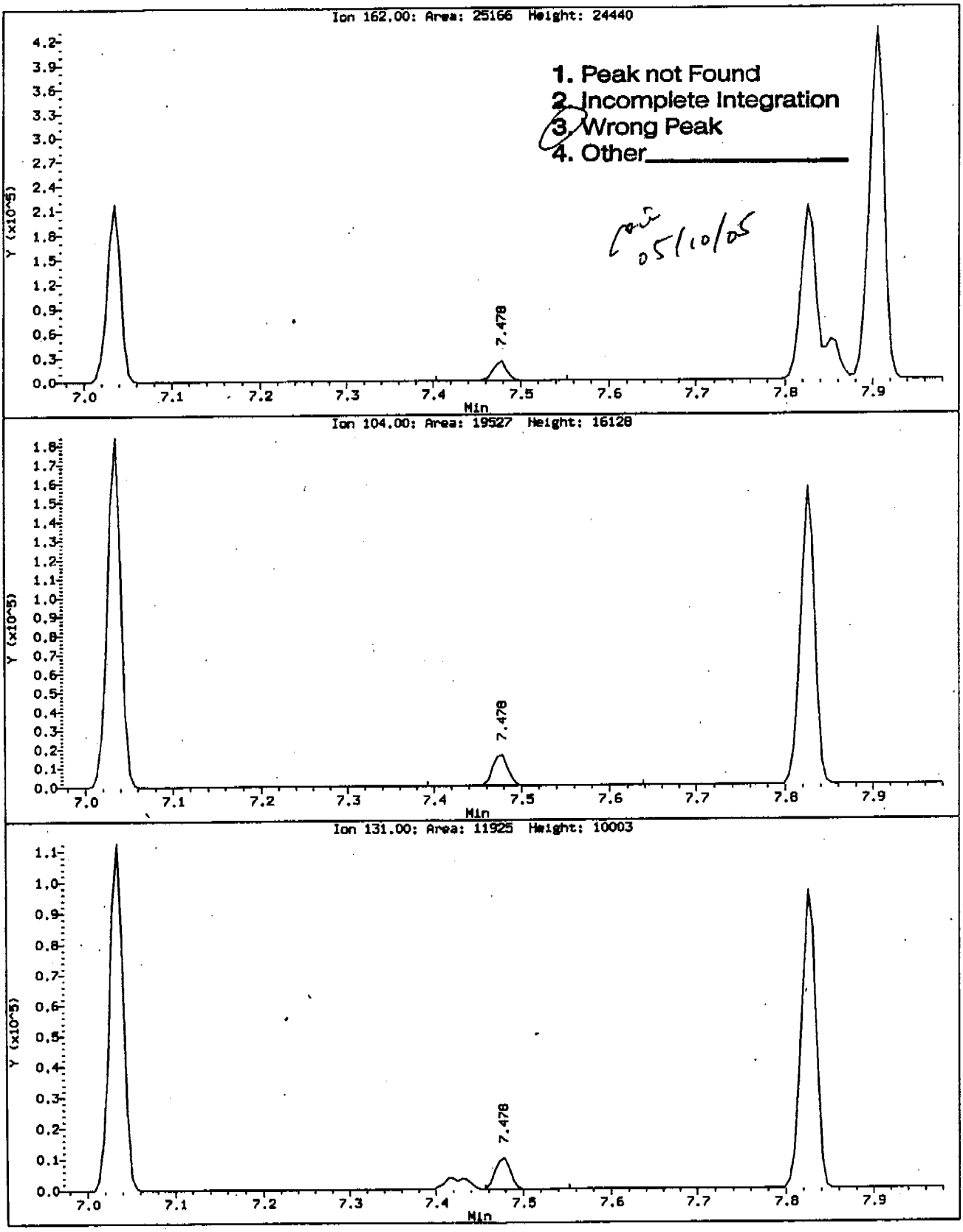


1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other _____

CMA 05/10/05

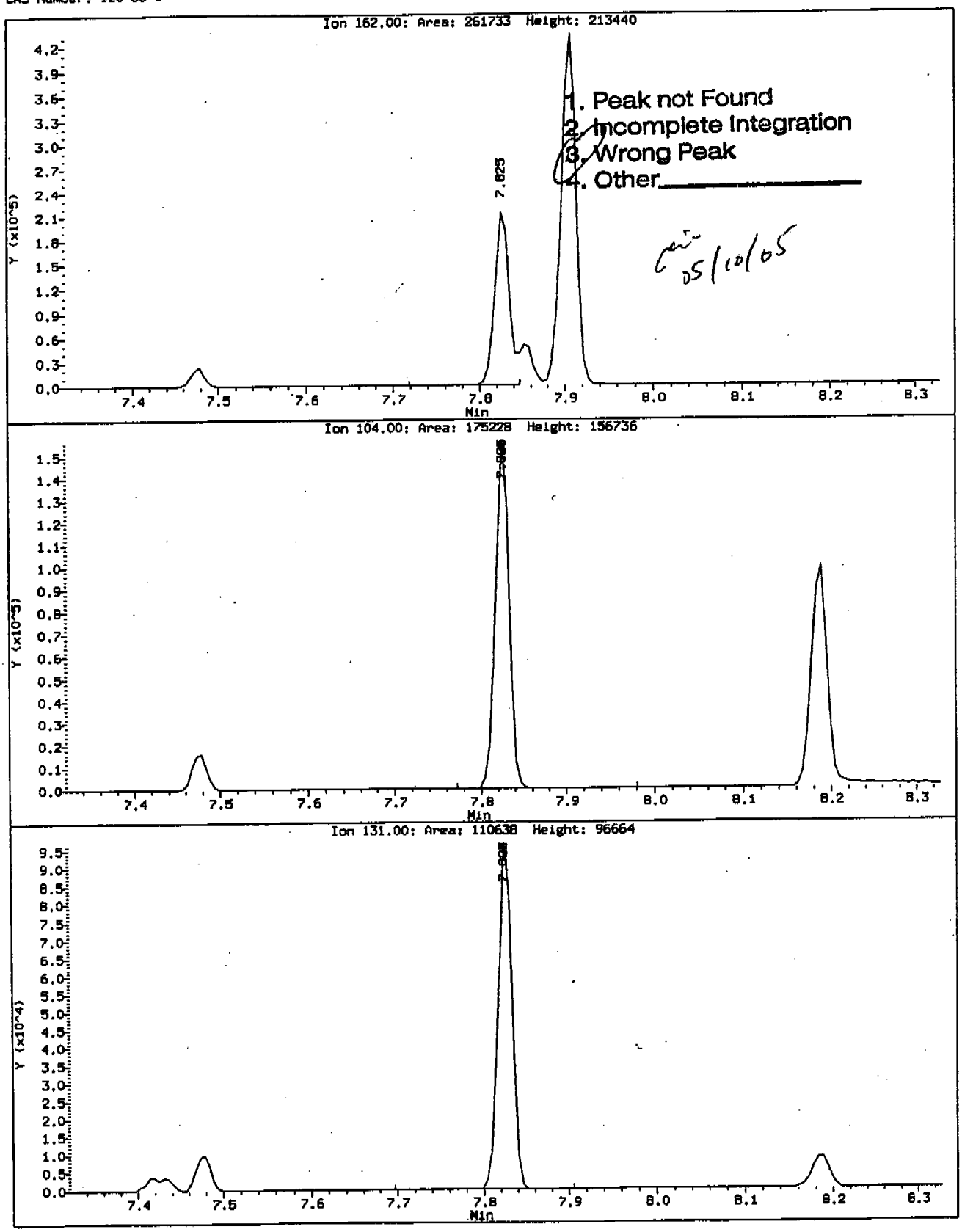
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3004.D
Injection Date: 09-MAY-2005 17:02
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

Compound: cis-Isosafrole
CAS Number: 120-58-1



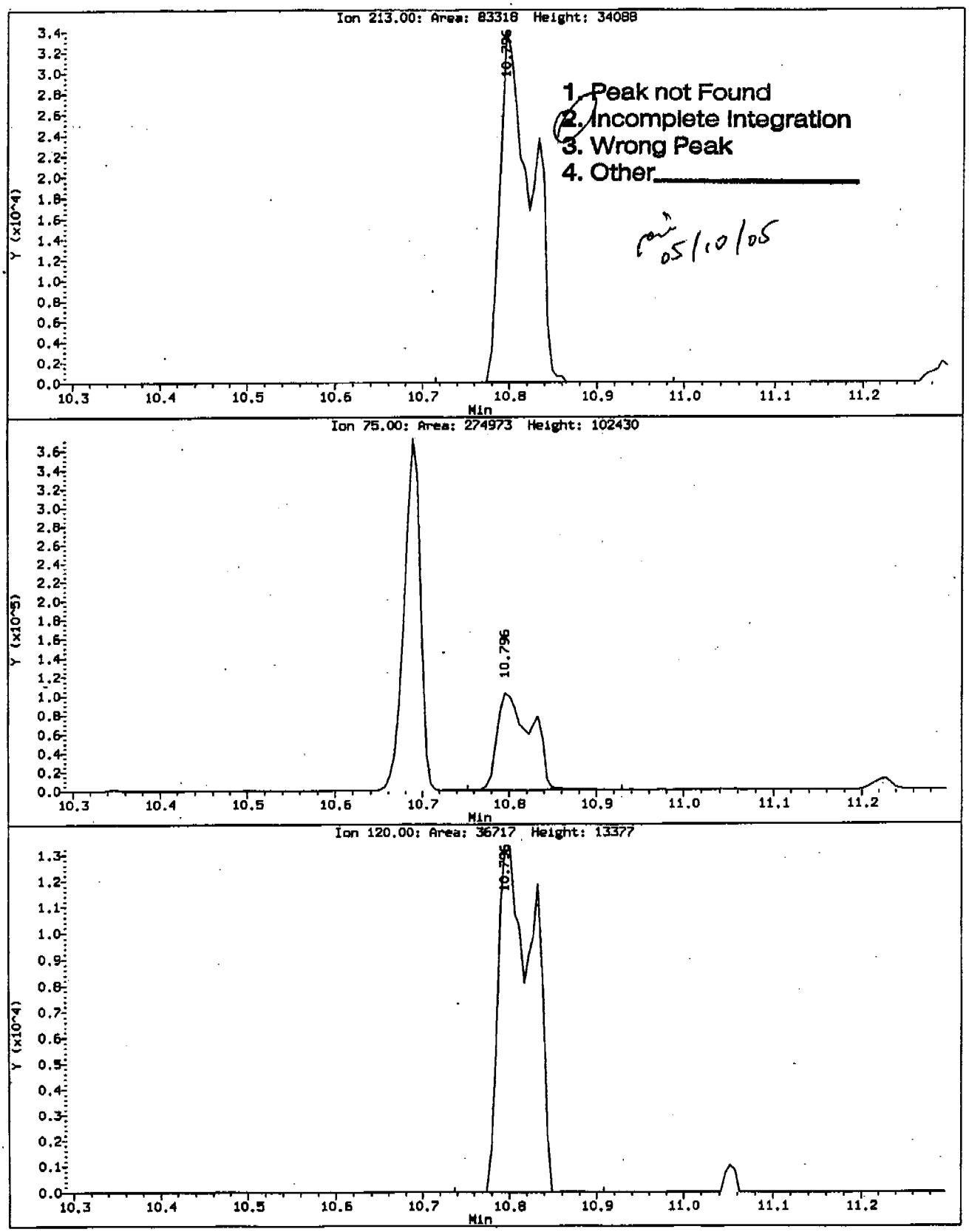
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3004.D
Injection Date: 09-MAY-2005 17:02
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

Compound: trans-Isosafrole
CAS Number: 120-58-1



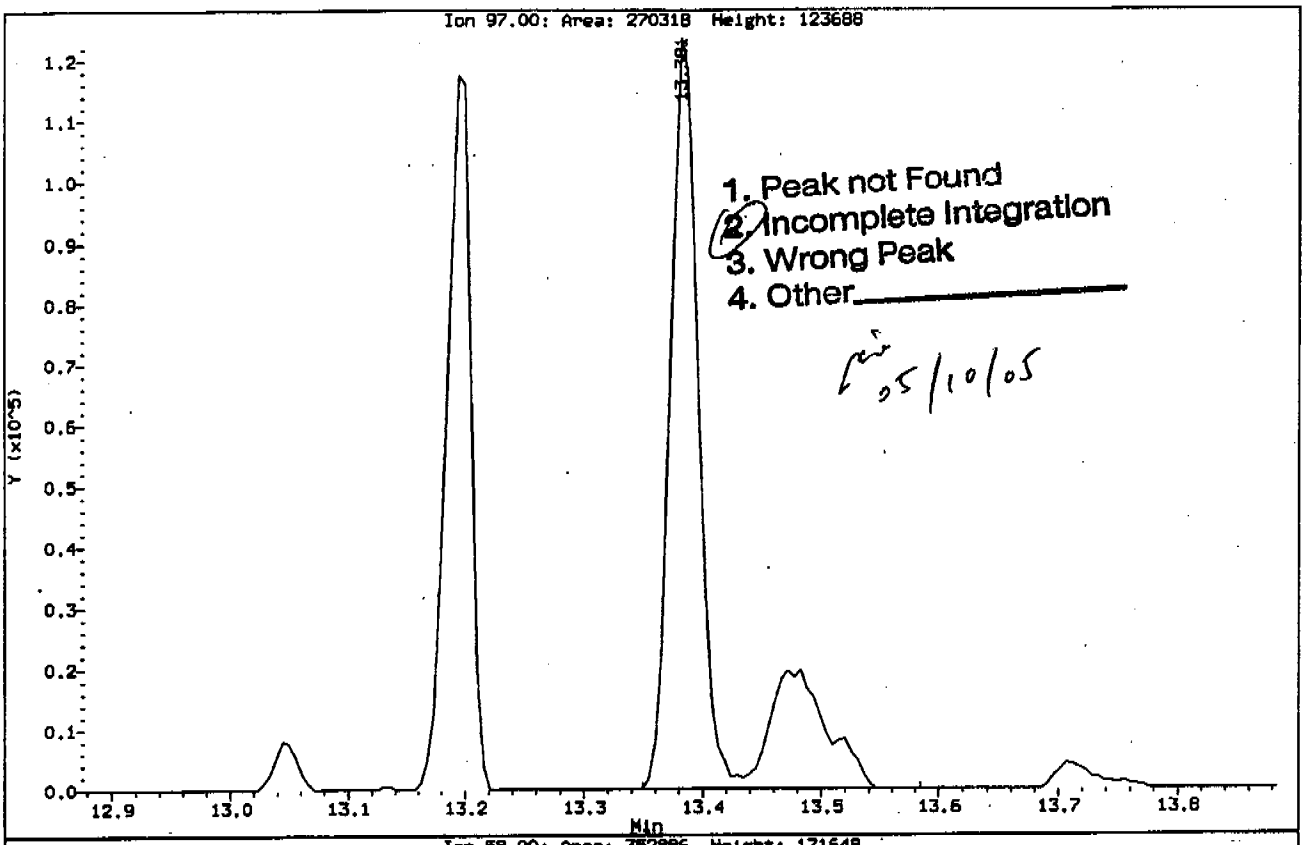
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3004.D
Injection Date: 09-MAY-2005 17:02
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

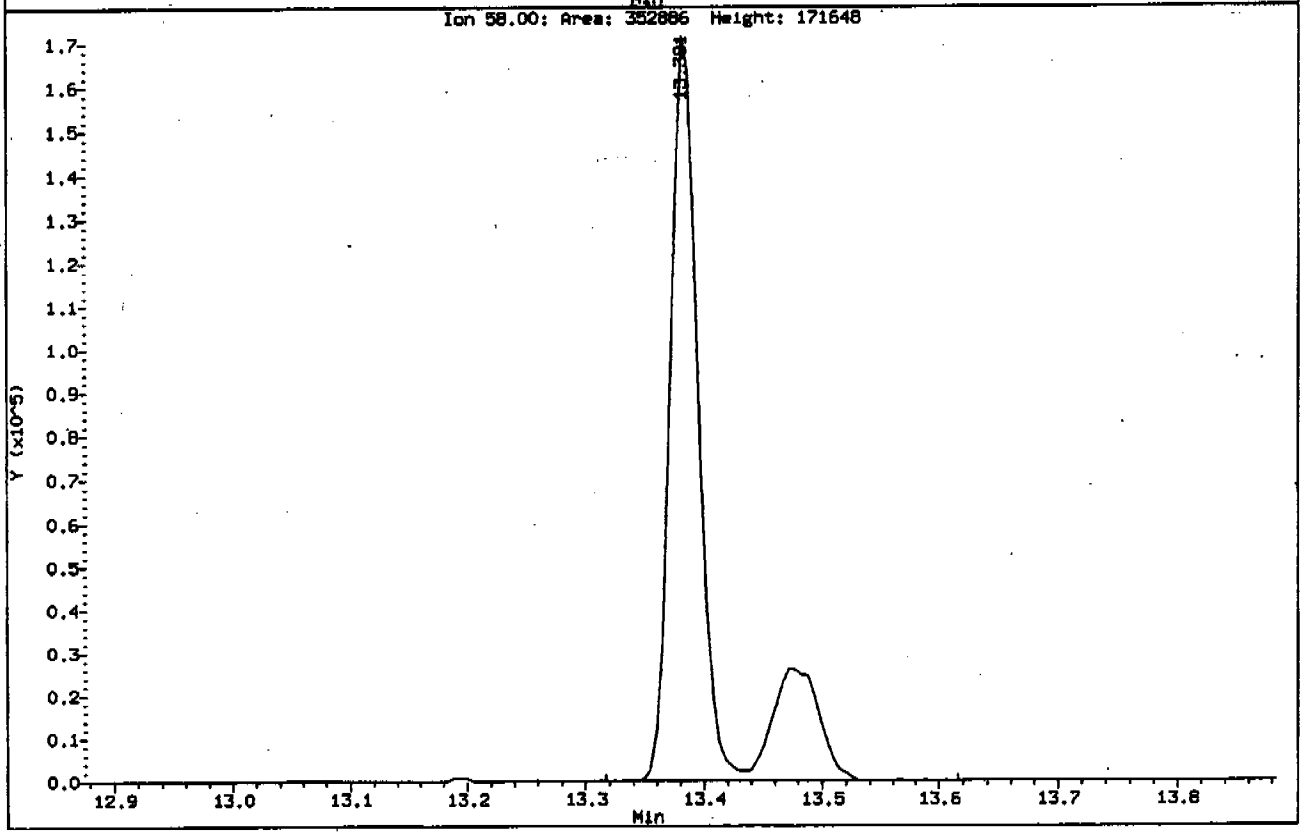
Compound: 1,3,5-Trinitrobenzene
CAS Number: 99-35-4



Data File: \\Slavr01\BNA_LAB\MSK.i\K050509C.B\KCAL3004.D
Injection Date: 09-MAY-2005 17:02
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

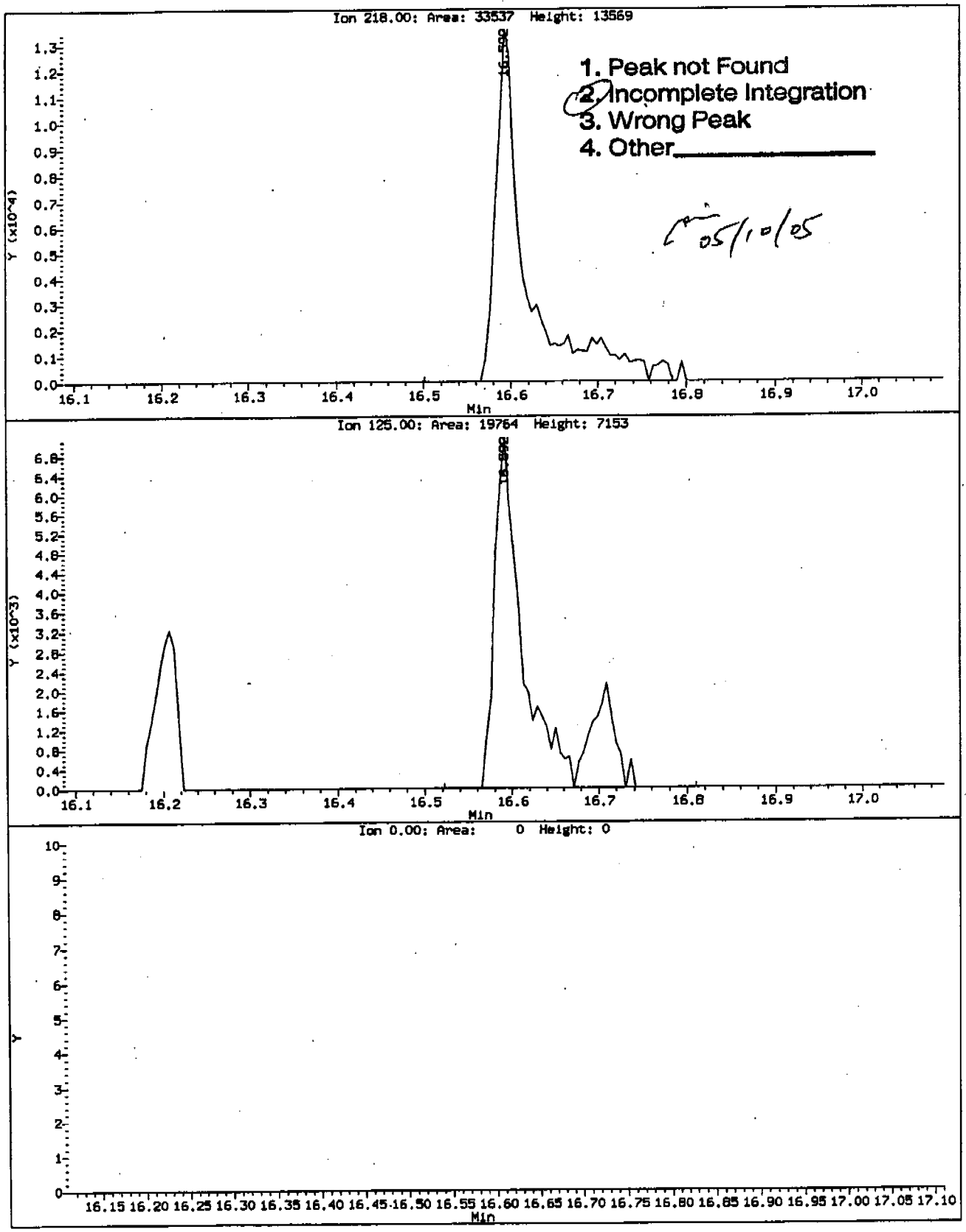
Compound: Methapyrilene
CAS Number: 91-80-5





Data File: \\Slavr01\BNA_LAB\MSK.i\K050509C.B\KCAL3004.D
Injection Date: 09-MAY-2005 17:02
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

Compound: Famphur
CAS Number: 52-85-7



DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	47.49		PASS
68	Less than 2% of mass 69	0.47	(0.86)	PASS
69	Mass 69 relative abundance	54.92		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	49.11		PASS
197	0 - 1% of mass 198	0.32		PASS
199	5 - 9% of mass 198	7.02		PASS
275	10 - 30% of mass 198	26.65		PASS
365	Greater than 1% of mass 198	3.49		PASS
441	Present, but less than mass 443	9.43	(79.94)	PASS
442	Greater than 40% of mass 198	65.81		PASS
443	17 - 23% of mass 442	11.80	(17.93)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.0417029	5.000	PASS
Benzidine	0.9857955	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	267935			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	882	0.3	15.0	PASS
4,4-DDD + DDE	882	0.3	15.0	PASS

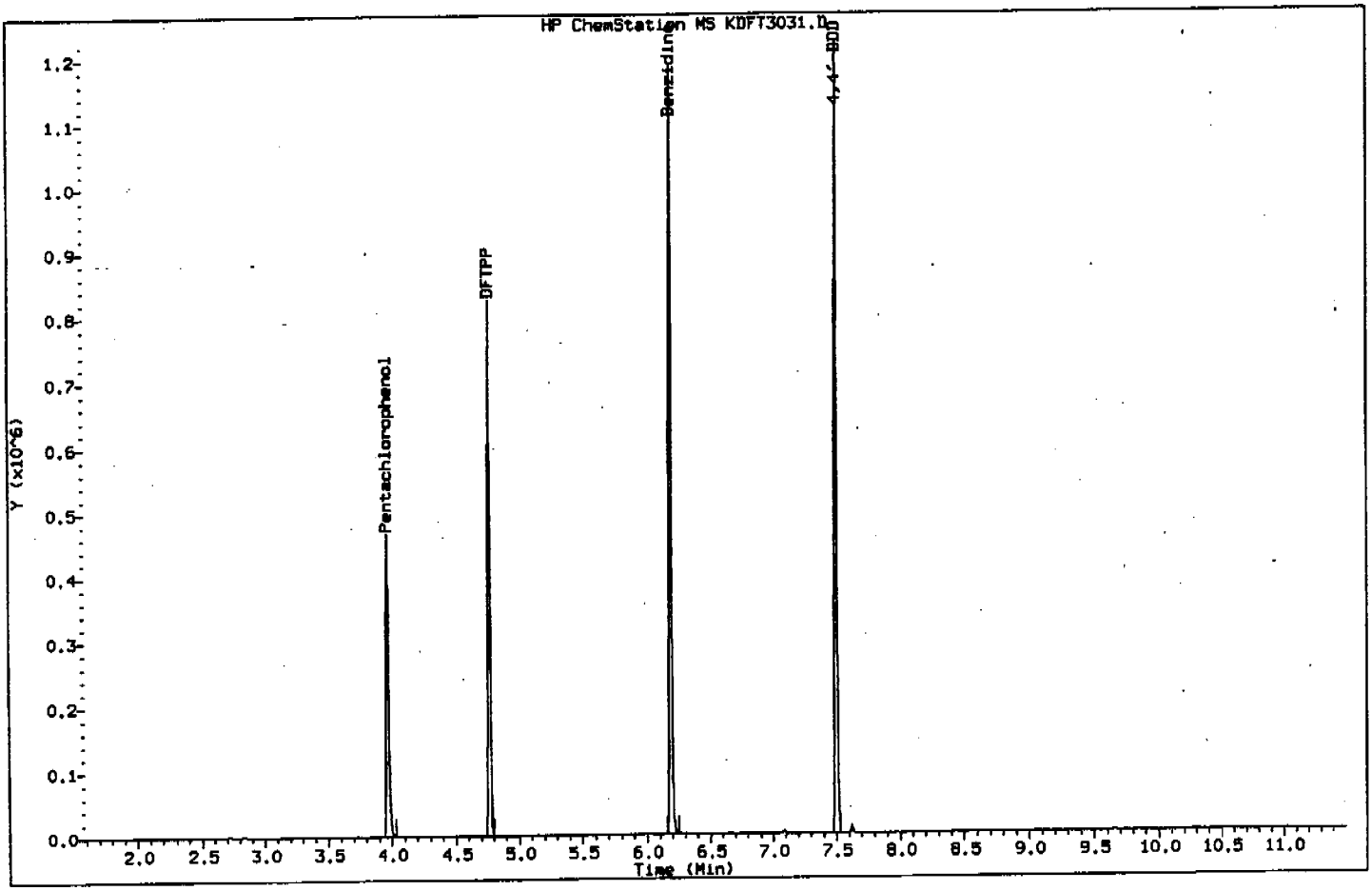
****
Tuning Sample, //Slsvr01/ENA_LAB/MSK.i/K050510B.B/KDFT3031.D/KDFT3031.D,*** PASSED
****

05/11/05

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

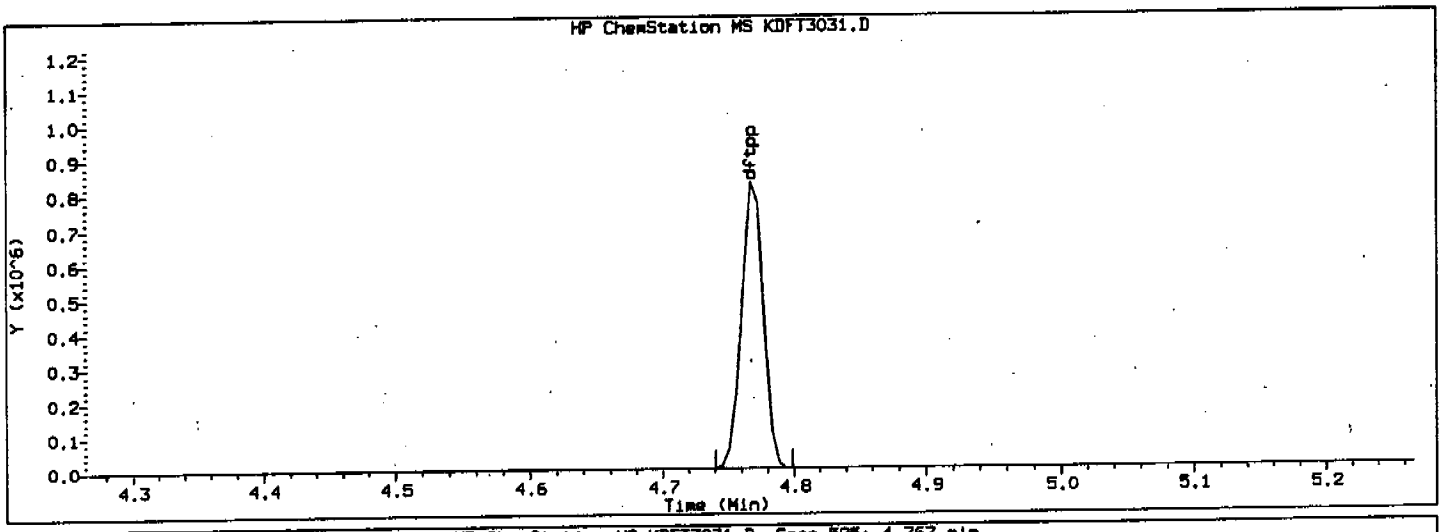
Report Date: 05/11/2005 08:51

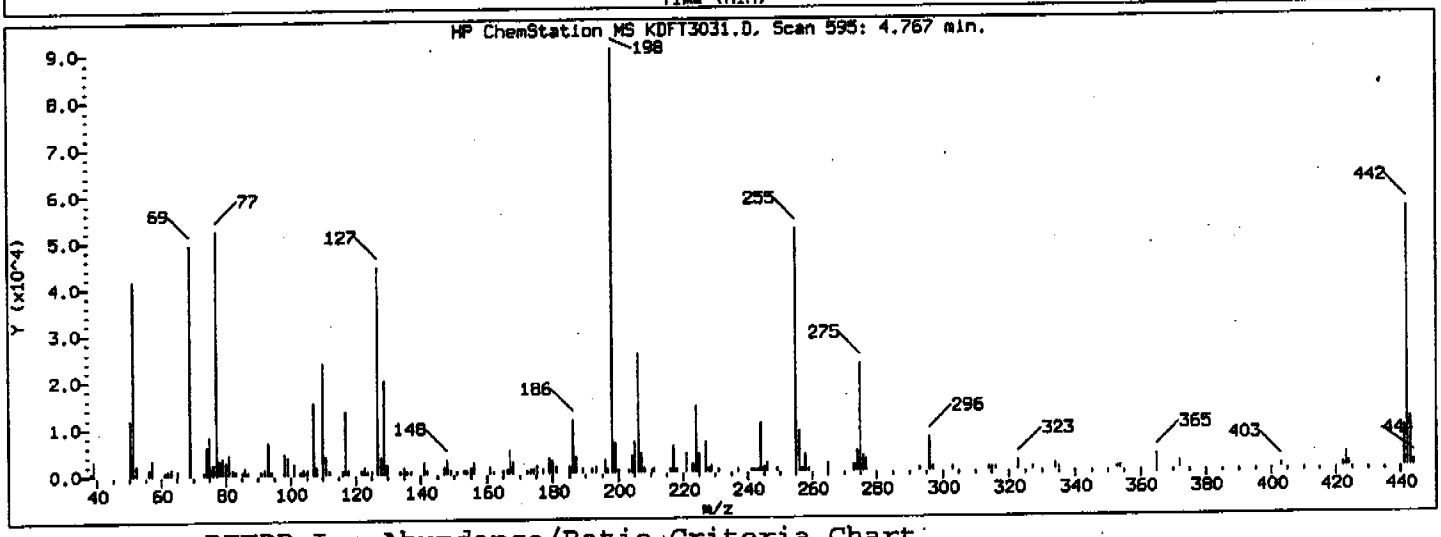
Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050510B.B/KDFT3031.D/KDFT3031.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050510B.B\sw846tun.m Inst: MSK
Injection Date: 10-MAY-2005 11:59 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0232-05 (50NG)



Report Date: 05/11/2005 08:51

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050510B.B/KDFT3031.D/KDFT3031.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050510B.B\sw846tun.m Inst: MSK
Injection Date: 10-MAY-2005 11:59 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0232-05 (50NG)



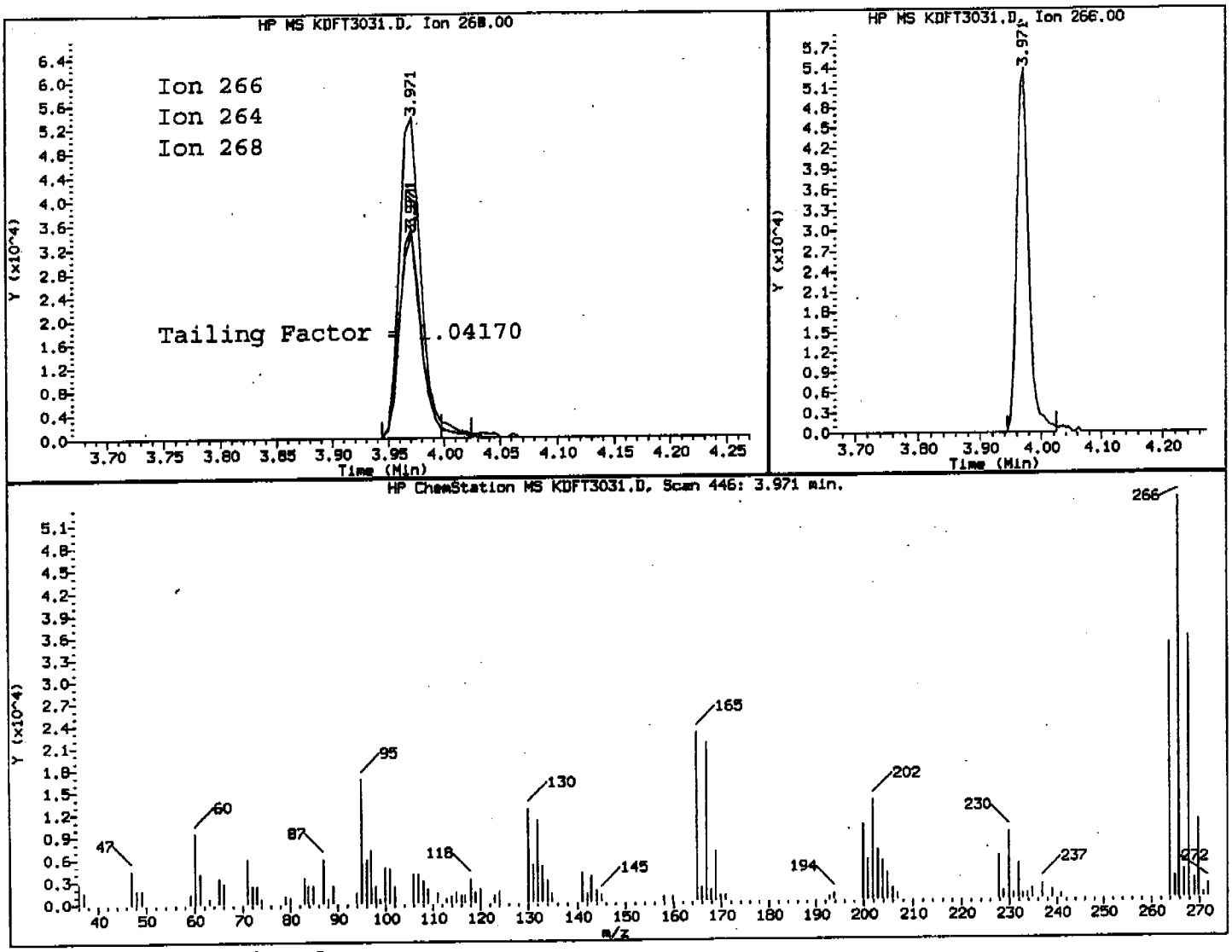


DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	47.49		PASS
68	Less than 2% of mass 69	0.47	(0.86)	PASS
69	Mass 69 relative abundance	54.92		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	49.11		PASS
197	0 - 1% of mass 198	0.32		PASS
199	5 - 9% of mass 198	7.02		PASS
275	10 - 30% of mass 198	26.65		PASS
365	Greater than 1% of mass 198	3.49		PASS
441	Present, but less than mass 443	9.43	(79.94)	PASS
442	Greater than 40% of mass 198	65.81		PASS
443	17 - 23% of mass 442	11.80	(17.93)	PASS

Report Date: 05/11/2005 08:51

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050510B.B/KDFT3031.D/KDFT3031.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050510B.B\sw846tun.m\resolut.m Inst:
Injection Date: 10-MAY-2005 11:59 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



Pentachlorophenol

Exp. RT =	3.965
Found RT =	3.971

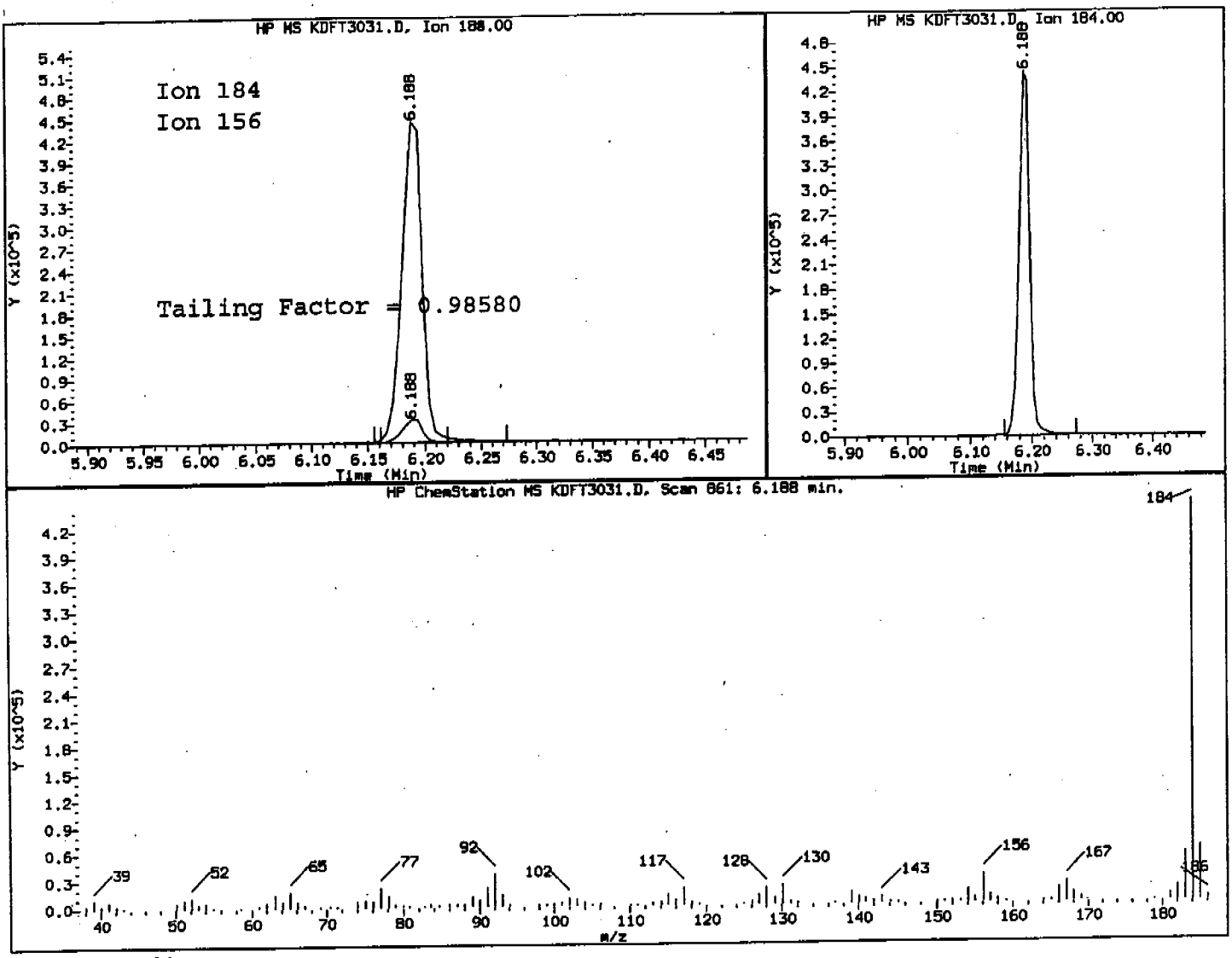
Mass	Area	Ratio
266	73899	100.00
264	46343	62.71
268	46939	63.52

Tailing factor for Pentachlorophenol OK

Tail Factor = 1.042 Maximum Allowed = 5.0

Report Date: 05/11/2005 08:51

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050510B.B/KDFT3031.D/KDFT3031.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050510B.B\sw846tun.m\resolut.m Inst:
Injection Date: 10-MAY-2005 11:59 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



Benzidine
=========
Exp. RT = 6.188
Found RT = 6.188

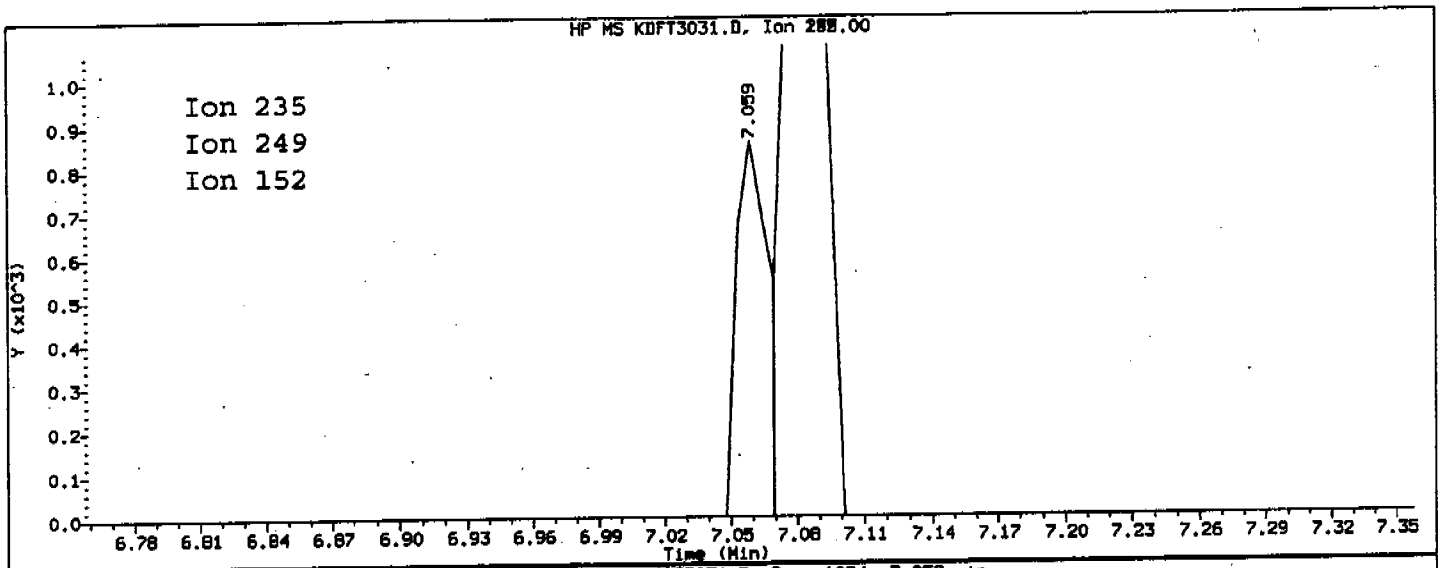
Mass	Area	Ratio
184	549382	100.00
156	39208	7.14

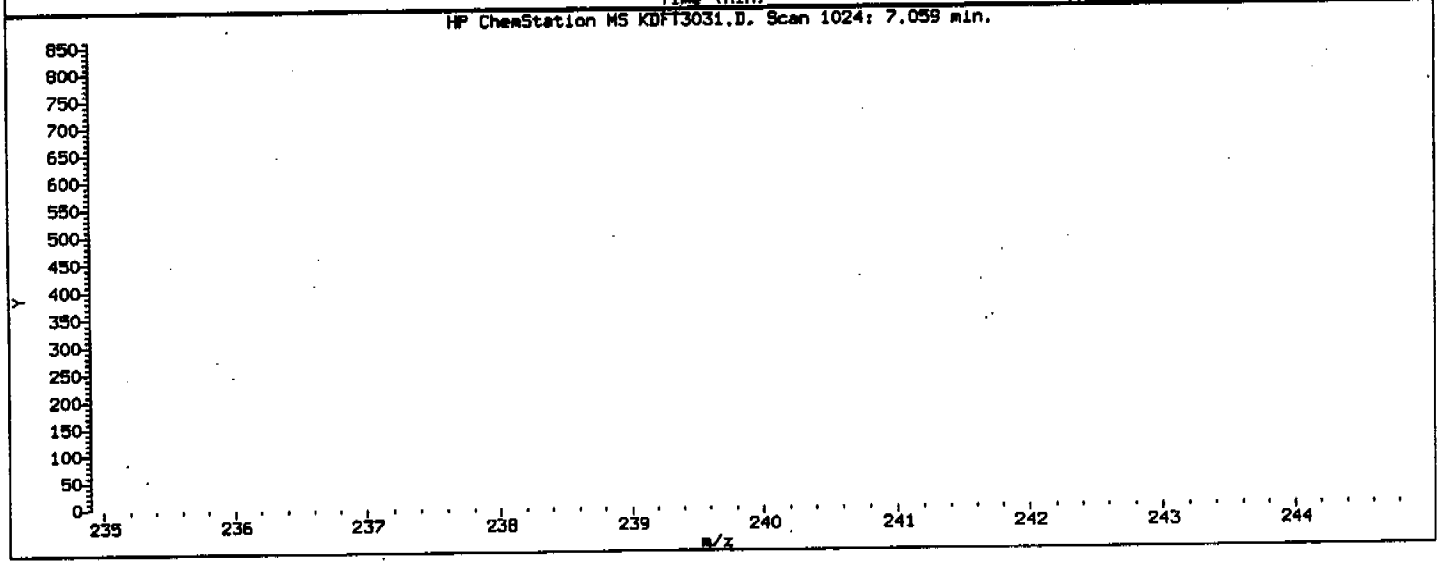
Tailing factor for Benzidine OK

Tail Factor = 0.986 Maximum Allowed = 3.0

Report Date: 05/11/2005 08:51

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050510B.B/KDFT3031.D/KDFT3031.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050510B.B\sw846tun.m\resolut.m Inst:
Injection Date: 10-MAY-2005 11:59 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



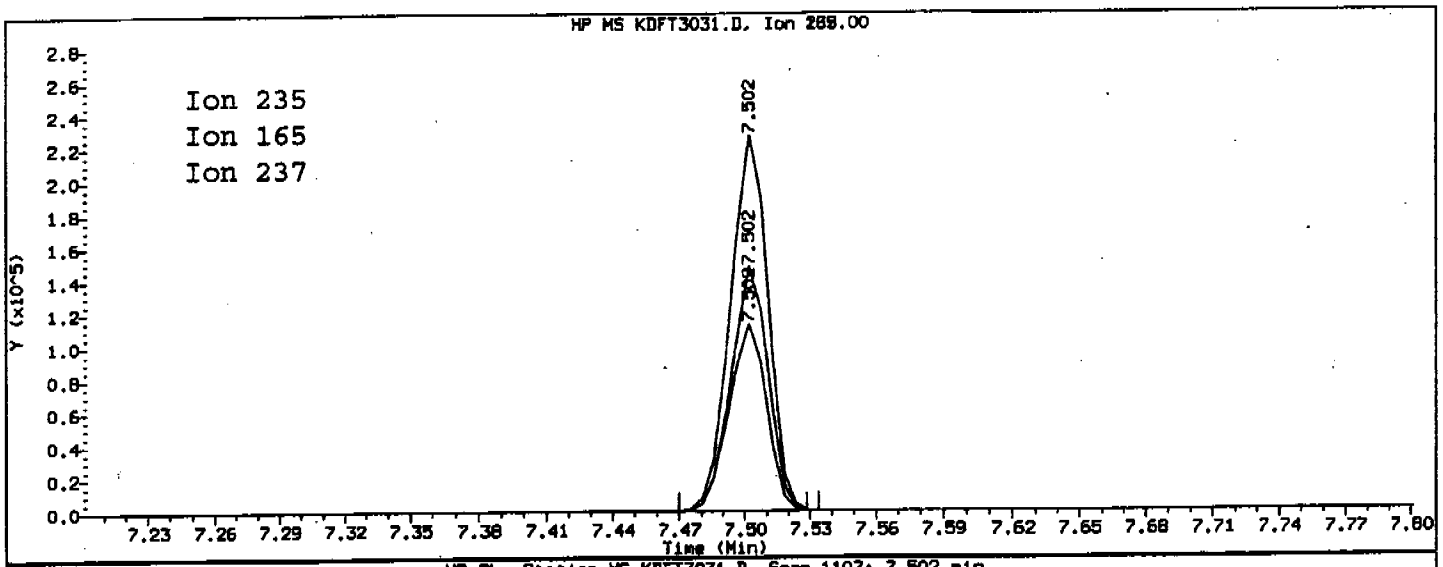


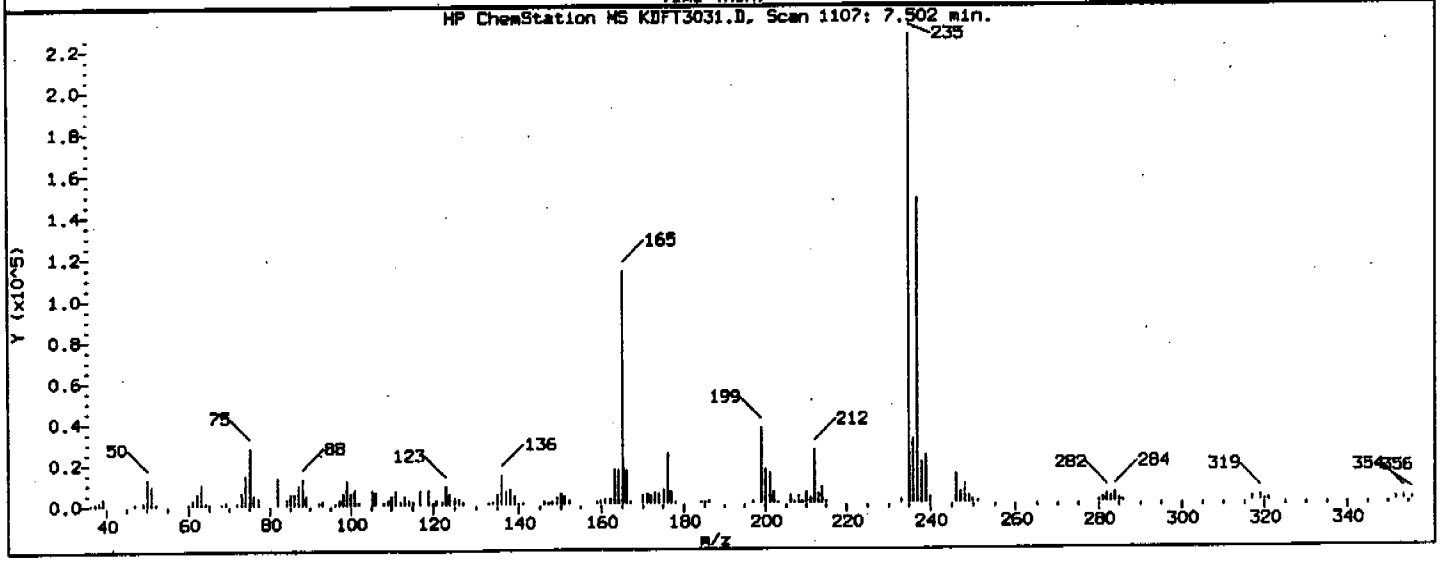
4,4'-DDD
========
Exp. RT = 7.074
Found RT = 7.059

Mass	Area	Ratio
235	882	100.00
249	3544	401.66
152	1511	171.36

Report Date: 05/11/2005 08:51

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050510B.B/KDFT3031.D/KDFT3031.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050510B.B\sw846tun.m\resolut.m Inst:
Injection Date: 10-MAY-2005 11:59 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



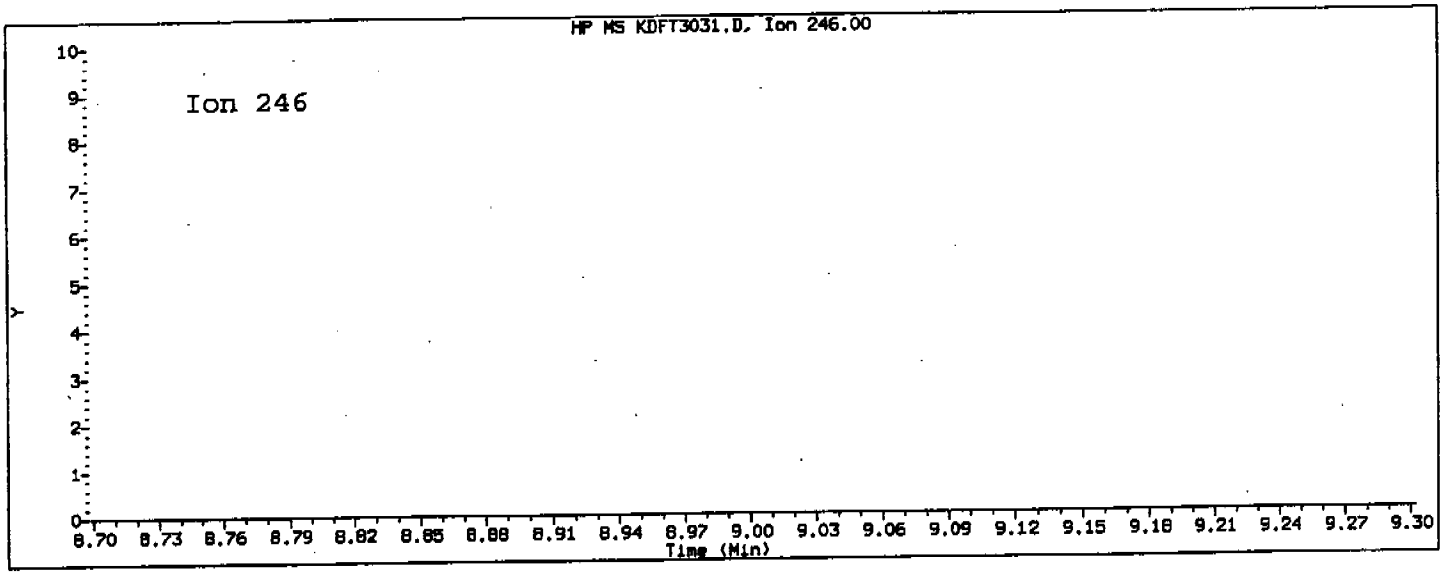


4,4'-DDT
========
Exp. RT = 7.502
Found RT = 7.502

Mass	Area	Ratio
235	267935	100.00
165	133704	49.90
237	171867	64.14

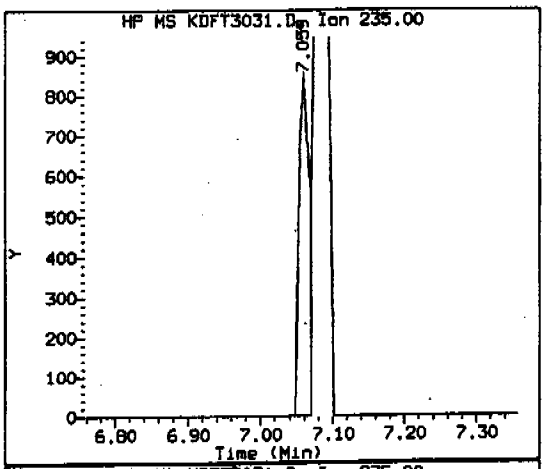
Report Date: 05/11/2005 08:51

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050510B.B/KDFT3031.D/KDFT3031.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050510B.B\sw846tun.m\resolut.m Inst:
Injection Date: 10-MAY-2005 11:59 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)

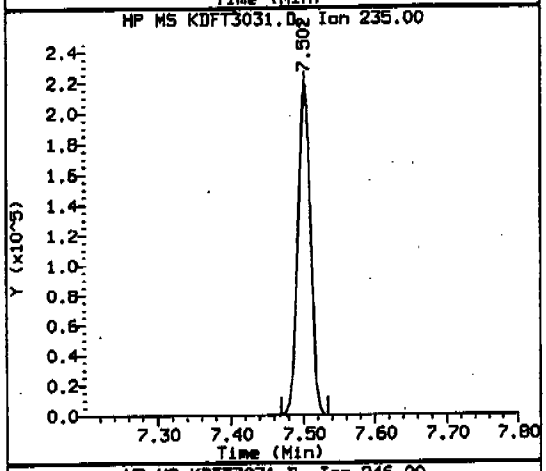


4,4'-DDE
========
Exp. RT = 9.000
Found RT = 0.000

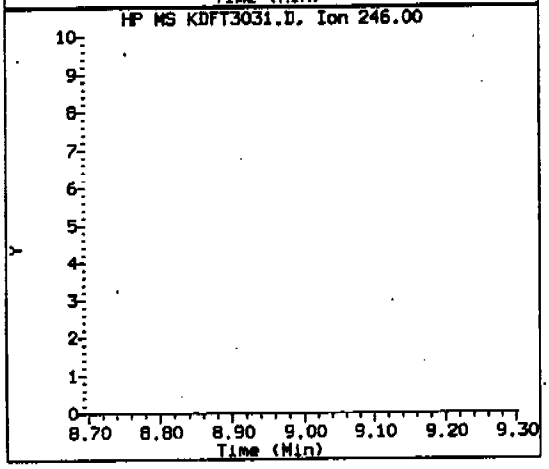
Mass	Area	Ratio
246	0	0.00



Compound: 4;4'-DDD
Quant Mass: 235
RT: 7.059
Area: 882



Compound: 4,4'-DDT
Quant Mass: 235
RT: 7.502
Area: 267935



Compound: 4,4'-DDE
Quant Mass: 246
RT: 0.000
Area: 0

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	267935			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	882	0.3	15.0	PASS
4,4-DDD + DDE	882	0.3	15.0	PASS

****
TUNE SAMPLE *** PASSED *** DDT BREAKDOWN TEST
****

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B\KCAL3033.D
Report Date: 11-May-2005 08:56

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i
Lab File ID: KCAL3033.D
Analysis Type: WATER
Lab Sample ID: SSTD050
Method: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B\8270K.m

Injection Date: 10-MAY-2005 12:53
Init. Cal. Date(s): 28-APR-2005 09-MAY-2005
Init. Cal. Times: 11:41 15:12
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	1 1,4-Dioxane	0.36386	0.28094	0.010	22.78746	60.00000	Averaged
	4 N-Nitrosodimethylamine	0.67099	0.62495	0.010	6.86204	60.00000	Averaged
	3 Pyridine	1.18405	1.14608	0.010	3.20705	60.00000	Averaged
	5 Dimethylformamide	0.88716	0.90618	0.010	-2.14303	60.00000	Averaged
$	10 2-Fluorophenol	1.20834	1.15760	0.010	4.19965	40.00000	Averaged
	11 Cyclohexanol	1.38218	1.47823	0.010	-6.94882	60.00000	Averaged
	17 Aniline	2.19527	2.14688	0.010	2.20419	60.00000	Averaged
	19 Bis(2-chloroethyl)ether	1.55372	1.49797	0.010	3.58822	60.00000	Averaged
$	15 Phenol-d5	1.69125	1.68281	0.010	0.49895	40.00000	Averaged
	16 Phenol	1.87215	1.80058	0.010	3.82282	20.00000	Averaged
	20 2-Chlorophenol	1.35363	1.30490	0.010	3.60031	60.00000	Averaged
	21 1,3-Dichlorobenzene	1.54804	1.47778	0.010	4.53892	60.00000	Averaged
	23 1,4-Dichlorobenzene	1.64398	1.56471	0.010	4.82189	20.00000	Averaged
	26 1,2-Dichlorobenzene	1.52039	1.43807	0.010	5.41430	60.00000	Averaged
	25 Bensyl Alcohol	0.66523	0.87163	0.010	-31.02749	60.00000	Averaged
	28 2,2-oxybis(1-Chloropropane)	1.60673	1.53944	0.010	4.18834	60.00000	Averaged
	27 2-Methylphenol	1.19876	1.20117	0.010	-0.20065	60.00000	Averaged
	35 Hexachloroethane	0.71883	0.71140	0.010	1.03243	60.00000	Averaged
	32 N-Nitrosodinpropylamine	1.25943	1.30699	0.010	-3.77663	60.00000	Averaged
	29 3 and 4-Methylphenol	1.27839	1.28424	0.010	-0.45746	60.00000	Averaged
$	36 Nitrobenzene-d5	0.54909	0.56288	0.010	-2.51095	40.00000	Averaged
	37 Nitrobenzene	0.58194	0.57207	0.010	1.69648	60.00000	Averaged
	39 Isophorone	0.75864	0.78862	0.010	-3.95272	60.00000	Averaged
	40 2-Nitrophenol	0.20162	0.20767	0.010	-3.00132	20.00000	Averaged
	41 2,4-Dimethylphenol	0.42786	0.45022	0.010	-5.22614	60.00000	Averaged
	42 Bis(2-chloroethoxy)methane	0.48359	0.48611	0.010	-0.51990	60.00000	Averaged
	45 2,4-Dichlorophenol	0.31460	0.32473	0.010	-3.22051	20.00000	Averaged
	47 1,2,4-Trichlorobenzene	0.37479	0.38330	0.010	-2.26902	60.00000	Averaged
	44 Benzoic Acid	0.19951	0.21762	0.010	-9.07802	60.00000	Averaged
	50 Naphthalene	1.13252	1.09647	0.010	3.18333	60.00000	Averaged
	51 4-Chloroaniline	0.45857	0.47106	0.010	-2.72460	60.00000	Averaged
	54 Hexachlorobutadiene	0.26032	0.26236	0.010	-0.78161	20.00000	Averaged
	62 2-Methylnaphthalene	0.81010	0.78785	0.010	2.74617	60.00000	Averaged
	59 4-Chloro-3-Methylphenol	0.36550	0.39667	0.010	-8.52720	20.00000	Averaged
	66 Hexachlorocyclopentadiene	0.42770	0.40038	0.010	6.38824	60.00000	Averaged
	67 2,4,6-Trichlorophenol	0.46165	0.45901	0.010	0.57219	20.00000	Averaged
	68 2,4,5-Trichlorophenol	0.48790	0.51533	0.010	-5.62117	60.00000	Averaged
$	69 2-Fluorobiphenyl	1.61063	1.53274	0.010	4.83631	40.00000	Averaged
	72 2-Chloronaphthalene	1.34666	1.26773	0.010	5.86102	60.00000	Averaged
	73 2-Nitroaniline	0.58010	0.59843	0.010	-3.15977	60.00000	Averaged
	76 Dimethylphthalate	1.54223	1.53315	0.010	0.58858	60.00000	Averaged
	79 Acenaphthylene	1.98537	1.93584	0.010	2.49456	60.00000	Averaged

ok 05/11/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B\KCAL3033.D
Report Date: 11-May-2005 08:56

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i
Lab File ID: KCAL3033.D
Analysis Type: WATER
Lab Sample ID: SSTD050
Method: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B\8270K.m

Injection Date: 10-MAY-2005 12:53
Init. Cal. Date(s): 28-APR-2005 09-MAY-2005
Init. Cal. Times: 11:41 15:12
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	80 2,6-Dinitrotoluene	0.32954	0.33880	0.010	-2.81018	60.00000	Averaged
	83 Acenaphthene	1.25374	1.21728	0.010	2.90804	20.00000	Averaged
	81 3-Nitroaniline	0.32374	0.34464	0.010	-6.45641	60.00000	Averaged
	84 2,4-Dinitrophenol	0.19685	0.19975	0.010	-1.47298	60.00000	Averaged
	86 Dibenzofuran	1.85230	1.81514	0.010	2.00608	60.00000	Averaged
	88 2,4-Dinitrotoluene	0.42378	0.45956	0.010	-8.44386	60.00000	Averaged
	85 4-Nitrophenol	0.27026	0.32391	0.010	-19.85402	60.00000	Averaged
	93 Diethylphthalate	1.54363	1.55913	0.010	-1.00419	60.00000	Averaged
	94 Fluorene	1.48246	1.50926	0.010	-1.80764	60.00000	Averaged
	95 4-Chlorophenyl-phenylether	0.79978	0.79657	0.010	0.40176	60.00000	Averaged
	98 4-Nitroaniline	0.31560	0.35107	0.010	-11.24058	60.00000	Averaged
	99 4,6-Dinitro-2-methylphenol	0.16574	0.17497	0.010	-5.56909	60.00000	Averaged
	100 N-Nitrosodiphenylamine	0.60901	0.57993	0.010	4.77456	20.00000	Averaged
	102 Azobenzene	1.36611	1.24768	0.010	8.66951	60.00000	Averaged
$	104 2,4,6-Tribromophenol	0.22361	0.25430	0.010	-13.72702	40.00000	Averaged
	109 4-Bromophenyl-phenylether	0.27978	0.26846	0.010	4.04575	60.00000	Averaged
	112 Hexachlorobenzene	0.28563	0.28274	0.010	1.01370	60.00000	Averaged
	117 Pentachlorophenol	0.15930	0.15853	0.010	0.48677	20.00000	Averaged
	122 Phenanthrene	1.23548	1.20623	0.010	2.36792	60.00000	Averaged
	124 Anthracene	1.19438	1.17076	0.010	1.97811	60.00000	Averaged
	126 Carbazole	1.02046	1.04262	0.010	-2.17158	60.00000	Averaged
	129 Di-n-Butylphthalate	1.33705	1.33123	0.010	0.43487	60.00000	Averaged
	134 Fluoranthene	1.27688	1.32964	0.010	-4.13187	20.00000	Averaged
	135 Benzidine	0.60665	0.62073	0.010	-2.32171	100	Averaged
	137 Pyrene	1.62596	1.55891	0.010	4.12380	60.00000	Averaged
$	139 Terphenyl-d14	1.26353	1.21536	0.010	3.81220	40.00000	Averaged
	145 3,3-Dimethylbenzidine	0.64501	0.67833	0.010	-5.16607	60.00000	Averaged
	146 Butylbenzylphthalate	0.67238	0.65540	0.010	2.52514	60.00000	Averaged
	150 Benzo(a)Anthracene	1.40066	1.38522	0.010	1.10242	60.00000	Averaged
	152 3,3'-Dichlorobenzidine	0.53933	0.55337	0.010	-2.60432	60.00000	Averaged
	154 Chrysene	1.33287	1.28262	0.010	3.77005	60.00000	Averaged
	155 bis(2-ethylhexyl)Phthalate	0.84173	0.80900	0.010	3.88807	60.00000	Averaged
	158 Di-n-octylphthalate	1.70444	1.64068	0.010	3.74059	20.00000	Averaged
	160 Benzo(b)fluoranthene	1.55320	1.48709	0.010	4.25624	60.00000	Averaged
	161 Benzo(k)fluoranthene	1.54269	1.57780	0.010	-2.27613	60.00000	Averaged
	165 Benzo(a)pyrene	1.40180	1.39746	0.010	0.31022	20.00000	Averaged
	173 Indeno(1,2,3-cd)pyrene	1.29945	1.17286	0.010	9.74196	60.00000	Averaged
	174 Dibenzo(a,h)anthracene	1.26094	1.20392	0.010	4.52251	60.00000	Averaged
	177 Benzo(g,h,i)perylene	1.16013	1.06566	0.010	8.14299	60.00000	Averaged

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B/KCAL3033.D
Report Date: 05/11/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3033.D
Analysis Type: WATER

Injection Date: 10-MAY-2005 12:53
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B\8270

COMPOUND	%D
1,4-Dioxane	22.8
Pyridine	3.2
N-Nitrosodimethylamine	6.9
Dimethylformamide	2.1
2-Fluorophenol	4.2
Cyclohexanol	6.9
Aniline	2.2
Phenol-d5	0.5
Bis(2-chloroethyl)ether	3.6
Phenol	3.8
2-Chlorophenol	3.6
1,3-Dichlorobenzene	4.5
1,4-Dichlorobenzene	4.8
1,2-Dichlorobenzene	5.4
Benzyl Alcohol	31.0
2,2-oxybis(1-Chloropropane)	4.2
2-Methylphenol	0.2
N-Nitrosodinpropylamine	3.8
Hexachloroethane	1.0
3 and 4-Methylphenol	0.5
Nitrobenzene-d5	2.5
Nitrobenzene	1.7
Isophorone	4.0
2-Nitrophenol	3.0
2,4-Dimethylphenol	5.2
Bis(2-chloroethoxy)methane	0.5
2,4-Dichlorophenol	3.2
1,2,4-Trichlorobenzene	2.3
Benzoic Acid	9.1
Naphthalene	3.2
4-Chloroaniline	2.7
Hexachlorobutadiene	0.8
4-Chloro-3-Methylphenol	8.5
2-Methylnaphthalene	2.7
Hexachlorocyclopentadiene	6.4
2,4,6-Trichlorophenol	0.6
2,4,5-Trichlorophenol	5.6
2-Fluorobiphenyl	4.8
2-Chloronaphthalene	5.9

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B/KCAL3033.D
Report Date: 05/11/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3033.D
Analysis Type: WATER

Injection Date: 10-MAY-2005 12:53
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050510A

COMPOUND	%D
2-Nitroaniline	3.2
Dimethylphthalate	0.6
Acenaphthylene	2.5
2,6-Dinitrotoluene	2.8
Acenaphthene	2.9
3-Nitroaniline	6.5
2,4-Dinitrophenol	1.5
Dibenzofuran	2.0
2,4-Dinitrotoluene	8.4
4-Nitrophenol	19.9
Fluorene	1.8
Diethylphthalate	1.0
4-Chlorophenyl-phenylether	0.4
4-Nitroaniline	11.2
4,6-Dinitro-2-methylphenol	5.6
N-Nitrosodiphenylamine	4.8
Azobenzene	8.7
2,4,6-Tribromophenol	13.7
4-Bromophenyl-phenylether	4.0
Hexachlorobenzene	1.0
Pentachlorophenol	0.5
Phenanthrene	2.4
Anthracene	2.0
Carbazole	2.2
Di-n-Butylphthalate	0.4
Fluoranthene	4.1
Benzidine	2.3
Pyrene	4.1
Terphenyl-d14	3.8
3,3-Dimethylbenzidine	5.2
Butylbenzylphthalate	2.5
Benzo(a)Anthracene	1.1
Chrysene	3.8
3,3'-Dichlorobenzidine	2.6
bis(2-ethylhexyl)Phthalate	3.9
Di-n-octylphthalate	3.7
Benzo(b)fluoranthene	4.3
Benzo(k)fluoranthene	2.3
Benzo(a)pyrene	0.3

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B/KCAL3033.D
Report Date: 05/11/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3033.D
Analysis Type: WATER

Injection Date: 10-MAY-2005 12:53
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050510A

COMPOUND	%D
Indeno(1,2,3-cd)pyrene	9.7
Dibenzo(a,h)anthracene	4.5
Benzo(g,h,i)perylene	8.1
Dibenz(e,a) Pyrene	100.0

The average of %D's in the continuing calibration is 5.7

05/11/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B\KCAL3033.D
Report Date: 11-May-2005 08:56

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050510A.B\KCAL3033.D
Lab Smp Id: SSTD050 Client Smp ID: SSTD050
Inj Date : 10-MAY-2005 12:53
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD050
Misc Info : SV0220-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050510A.B\8270K.m
Meth Date : 11-May-2005 08:55 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12 Cal File: KCAL3000.D
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	1.259	1.259	(0.278)	42784	50.0000	38.61
4	N-Nitrosodimethylamine	74	1.681	1.681	(0.371)	95171	50.0000	46.57
3	Pyridine	79	1.670	1.670	(0.368)	174532	50.0000	48.40(M)
5	Dimethylformamide	44	2.124	2.124	(0.469)	137998	50.0000	51.07(M)
$ 10	2-Fluorophenol	112	3.219	3.219	(0.710)	176286	50.0000	47.90
11	Cyclohexanol	57	3.235	3.235	(0.714)	225114	50.0000	53.47
17	Aniline	93	4.229	4.229	(0.933)	326940	50.0000	48.90
19	Bis(2-chloroethyl)ether	93	4.304	4.304	(0.949)	228120	50.0000	48.20
$ 15	Phenol-d5	99	4.298	4.298	(0.948)	256269	50.0000	49.75
16	Phenol	94	4.314	4.314	(0.952)	274204	50.0000	48.09
20	2-Chlorophenol	128	4.362	4.362	(0.962)	198718	50.0000	48.20
21	1,3-Dichlorobenzene	146	4.485	4.485	(0.989)	225045	50.0000	47.73
* 22	1,4-Dichlorobenzene-d4	152	4.533	4.533	(1.000)	121829	40.0000	
23	1,4-Dichlorobenzene	146	4.555	4.555	(1.005)	238284	50.0000	47.59
26	1,2-Dichlorobenzene	146	4.774	4.774	(1.053)	218999	50.0000	47.29
25	Benzyl Alcohol	108	4.784	4.784	(1.055)	132738	50.0000	65.51
28	2,2-oxybis(1-Chloropropane)	45	4.945	4.945	(1.091)	234435	50.0000	47.90
27	2-Methylphenol	108	4.993	4.993	(1.101)	182921	50.0000	50.10
35	Hexachloroethane	117	5.132	5.132	(1.132)	108337	50.0000	49.48
32	N-Nitrosodinpropylamine	70	5.132	5.132	(1.132)	199037	50.0000	51.89
29	3 and 4-Methylphenol	108	5.180	5.180	(1.143)	391144	100.000	100.4

05/11/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B\KCAL3033.D
Report Date: 11-May-2005 08:56

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.260	5.260	(0.860)	300985	50.0000	51.26
	37 Nitrobenzene	77	5.281	5.281	(0.864)	305900	50.0000	49.15
	39 Isophorone	82	5.575	5.575	(0.912)	421698	50.0000	51.98
	40 2-Nitrophenol	139	5.682	5.682	(0.929)	111045	50.0000	51.50
	41 2,4-Dimethylphenol	107	5.805	5.805	(0.949)	240746	50.0000	52.61
	42 Bis(2-chloroethoxy)methane	93	5.890	5.890	(0.963)	259934	50.0000	50.26
	45 2,4-Dichlorophenol	162	6.013	6.013	(0.983)	173641	50.0000	51.61
	47 1,2,4-Trichlorobenzene	180	6.072	6.072	(0.993)	204960	50.0000	51.13
*	48 Naphthalene-d8	136	6.115	6.115	(1.000)	427782	40.0000	
	44 Benzoic Acid	122	6.072	6.072	(0.993)	116366	50.0000	54.54
	50 Naphthalene	128	6.141	6.141	(1.004)	586314	50.0000	48.41
	51 4-Chloroaniline	127	6.296	6.296	(1.030)	251889	50.0000	51.36
	54 Hexachlorobutadiene	225	6.392	6.392	(1.045)	140289	50.0000	50.39
	62 2-Methylnaphthalene	142	7.103	7.103	(1.162)	421287	50.0000	48.63
	59 4-Chloro-3-Methylphenol	107	7.055	7.055	(1.154)	212111	50.0000	54.26
	66 Hexachlorocyclopentadiene	237	7.445	7.445	(0.847)	125802	50.0000	46.80
	67 2,4,6-Trichlorophenol	196	7.632	7.632	(0.868)	144224	50.0000	49.71
	68 2,4,5-Trichlorophenol	196	7.717	7.717	(0.878)	161920	50.0000	52.81
$	69 2-Fluorobiphenyl	172	7.723	7.723	(0.878)	481596	50.0000	47.58
	72 2-Chloronaphthalene	162	7.846	7.846	(0.892)	398329	50.0000	47.07
	73 2-Nitroaniline	65	8.139	8.139	(0.926)	188031	50.0000	51.58
	76 Dimethylphthalate	163	8.508	8.508	(0.968)	481725	50.0000	49.70
	79 Acenaphthylene	152	8.529	8.529	(0.970)	608253	50.0000	48.75
	80 2,6-Dinitrotoluene	165	8.620	8.620	(0.981)	106453	50.0000	51.40
*	82 Acenaphthene-d10	164	8.791	8.791	(1.000)	251365	40.0000	
	83 Acenaphthene	153	8.850	8.850	(1.007)	382477	50.0000	48.54
	81 3-Nitroaniline	138	8.855	8.855	(1.007)	108288	50.0000	53.23
	84 2,4-Dinitrophenol	184	9.037	9.037	(1.028)	62763	50.0000	50.74
	86 Dibenzofuran	168	9.128	9.128	(1.038)	570329	50.0000	49.00
	88 2,4-Dinitrotoluene	165	9.299	9.299	(1.058)	144396	50.0000	54.22
	85 4-Nitrophenol	109	9.347	9.347	(1.063)	101776	50.0000	59.93
	93 Diethylphthalate	149	9.769	9.769	(1.111)	489889	50.0000	50.50
	94 Fluorene	166	9.737	9.737	(1.108)	474218	50.0000	50.90
	95 4-Chlorophenyl-phenylether	204	9.790	9.790	(1.114)	250286	50.0000	49.80
	98 4-Nitroaniline	138	9.972	9.972	(1.134)	110309	50.0000	55.62
	99 4,6-Dinitro-2-methylphenol	198	10.025	10.025	(0.875)	102064	50.0000	52.78
	100 N-Nitrosodiphenylamine	169	10.057	10.057	(0.878)	338294	50.0000	47.61
	102 Azobenzene	77	10.068	10.068	(0.879)	727811	50.0000	45.66
$	104 2,4,6-Tribromophenol	330	10.239	10.239	(1.165)	79903	50.0000	56.86
	109 4-Bromophenyl-phenylether	248	10.672	10.672	(0.932)	156601	50.0000	47.98
	112 Hexachlorobenzene	284	10.896	10.896	(0.951)	164930	50.0000	49.49
	117 Pentachlorophenol	266	11.307	11.307	(0.987)	92473	50.0000	49.76
*	121 Phenanthrene-d10	188	11.451	11.451	(1.000)	466667	40.0000	
	122 Phenanthrene	178	11.494	11.494	(1.004)	703634	50.0000	48.82
	124 Anthracene	178	11.580	11.580	(1.011)	682943	50.0000	49.01
	126 Carbazole	167	11.980	11.980	(1.046)	608197	50.0000	51.08
	129 Di-n-Butylphthalate	149	12.867	12.867	(1.124)	776552	50.0000	49.78
	134 Fluoranthene	202	13.786	13.786	(1.204)	775621	50.0000	52.06
	135 Benzidine	184	14.187	14.187	(0.854)	315143	50.0000	51.16
	137 Pyrene	202	14.203	14.203	(0.855)	791452	50.0000	47.94
$	139 Terphenyl-d14	244	14.651	14.651	(0.882)	617033	50.0000	48.09
	145 3,3-Dimethylbenzidine	212	15.650	15.650	(0.942)	344385	50.0000	52.58
	146 Butylbenzylphthalate	149	15.773	15.773	(0.949)	332746	50.0000	48.74
	150 Benzo(a)Anthracene	228	16.585	16.585	(0.998)	703269	50.0000	49.45

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B\KCAL3033.D
Report Date: 11-May-2005 08:56

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.617	16.617	(1.000)	406157	40.0000	
152 3,3'-Dichlorobenzidine	252	16.681	16.681	(1.004)	280946	50.0000	51.30
154 Chrysene	228	16.665	16.665	(1.003)	651180	50.0000	48.11
155 bis(2-ethylhexyl)Phthalate	149	16.997	16.997	(1.023)	410726	50.0000	48.06
158 Di-n-octylphthalate	149	18.145	18.145	(0.944)	696624	50.0000	48.13
160 Benzo(b)fluoranthene	252	18.589	18.589	(0.967)	631409	50.0000	47.87
161 Benzo(k)fluoranthene	252	18.631	18.631	(0.969)	669924	50.0000	51.14
165 Benzo(a)pyrene	252	19.123	19.123	(0.995)	593351	50.0000	49.84
* 166 Perylene-d12	264	19.224	19.224	(1.000)	339675	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.934	20.934	(1.089)	497988	50.0000	45.13
174 Dibenzo(a,h)anthracene	278	20.982	20.982	(1.091)	511175	50.0000	47.74
177 Benzo(g,h,i)perylene	276	21.383	21.383	(1.112)	452472	50.0000	45.93

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B\KCAL3033.D
Report Date: 11-May-2005 08:56

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

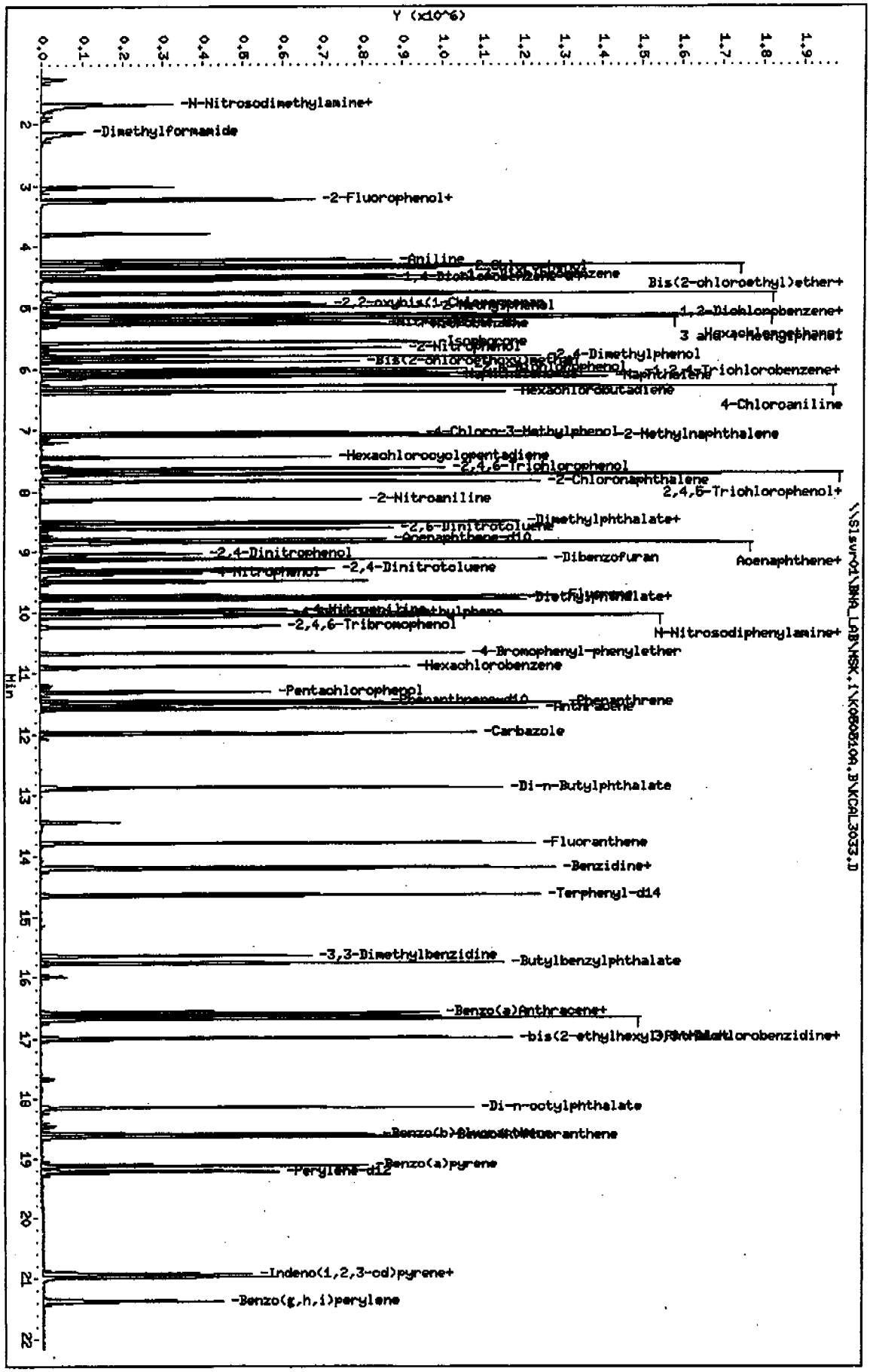
Instrument ID: MSK.i
Lab File ID: KCAL3033.D
Lab Smp Id: SSTD050
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B\8270K.m
Misc Info: SV0220-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD050
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	121829	-36.97
48 Naphthalene-d8	657267	328634	1314534	427782	-34.92
82 Acenaphthene-d10	351374	175687	702748	251365	-28.46
121 Phenanthrene-d10	612492	306246	1224984	466667	-23.81
153 Chrysene-d12	494718	247359	989436	406157	-17.90
166 Perylene-d12	409117	204559	818234	339675	-16.97

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.53	-0.50
48 Naphthalene-d8	6.14	5.64	6.64	6.12	-0.46
82 Acenaphthene-d10	8.83	8.33	9.33	8.79	-0.38
121 Phenanthrene-d10	11.49	10.99	11.99	11.45	-0.34
153 Chrysene-d12	16.66	16.16	17.16	16.62	-0.23
166 Perylene-d12	19.27	18.77	19.77	19.22	-0.23

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

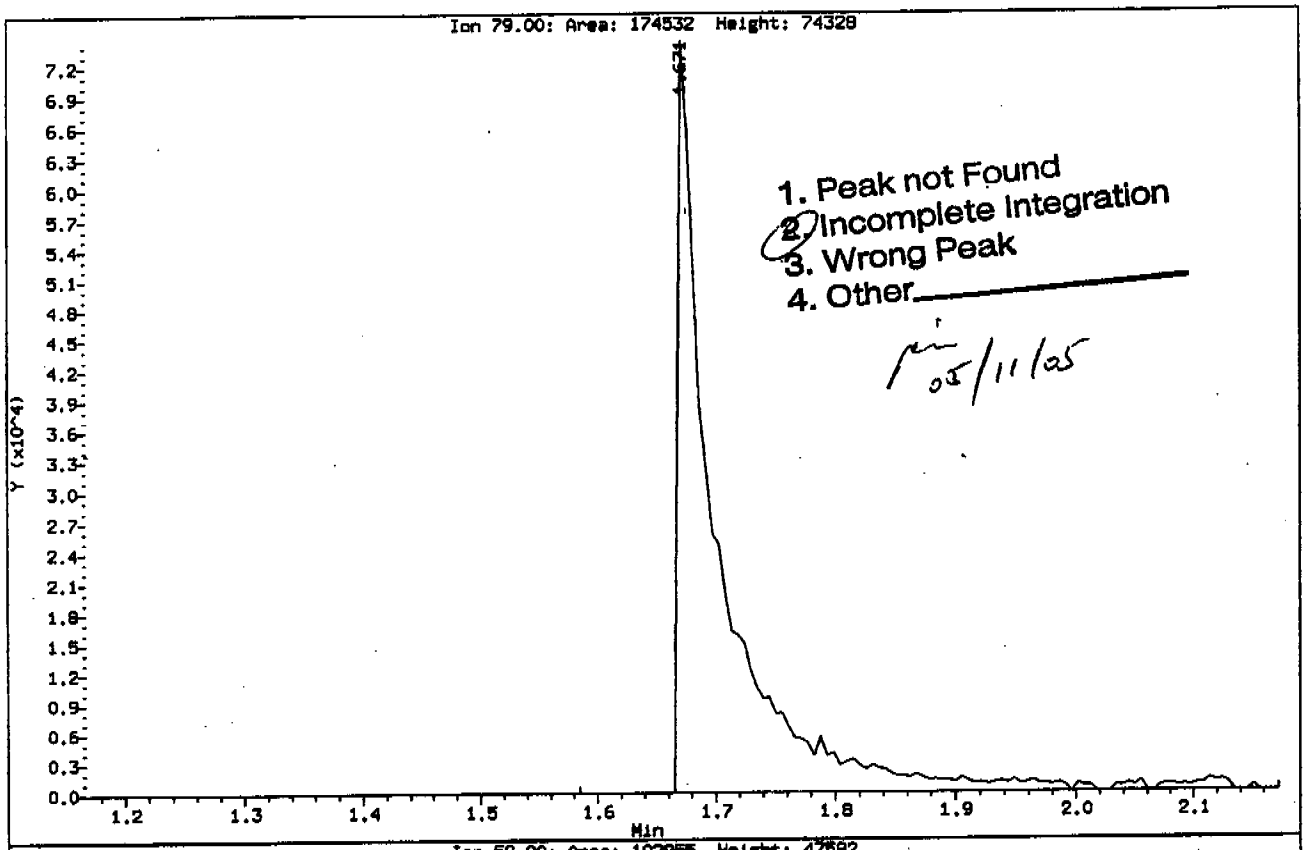


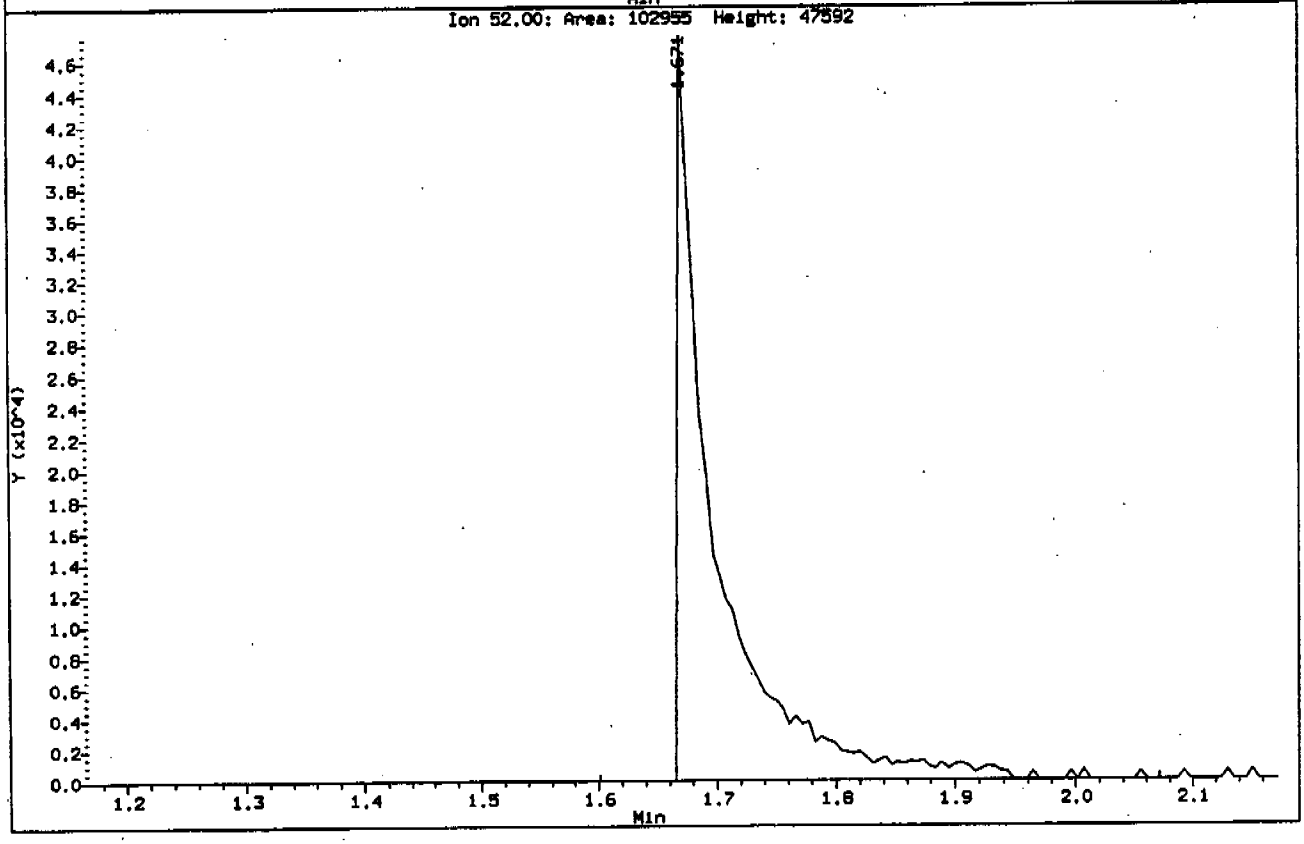
Data File: \\Slsvr01\BNA_LAB\HSK.i\K050810A.B\KCAL3033.D
Date : 10-MAY-2006 12:53
Client ID: SSTD050
Sample Info: SSTD050
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.I\K050510A.B\KCAL3033.D
Injection Date: 10-MAY-2005 12:53
Instrument: MSK.i
Client Sample ID: SSTD050

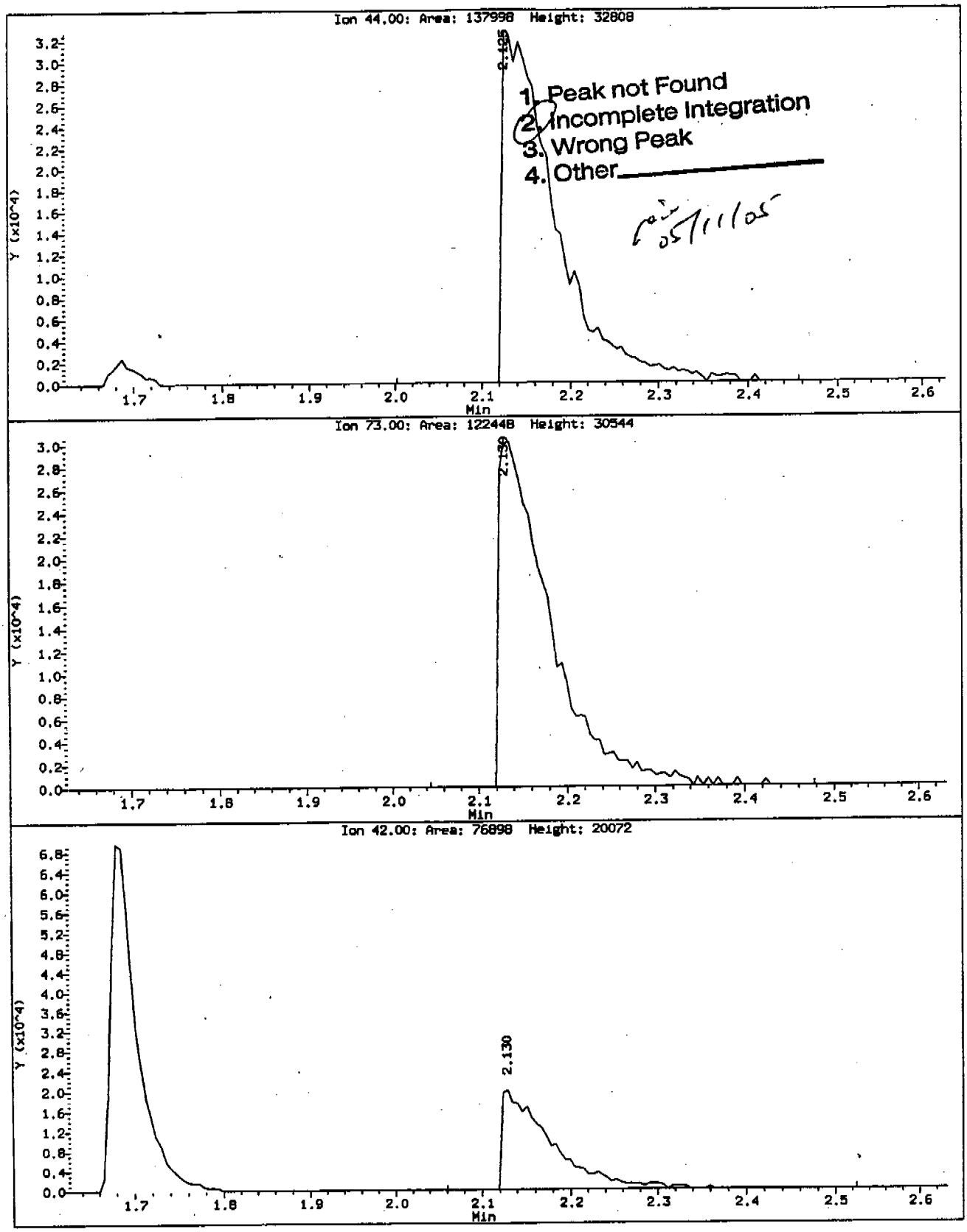
Compound: Pyridine
CAS Number: 110-86-1





Data File: \\Slsvr01\BNA_LAB\MSK.I\K050510A.B\KCAL3033.D
Injection Date: 10-MAY-2005 12:53
Instrument: MSK.i
Client Sample ID: SSTD050

Compound: Dimethylformamide
CAS Number: 68-12-2



DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	44.69		PASS
68	Less than 2% of mass 69	0.84	(1.55)	PASS
69	Mass 69 relative abundance	54.00		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	49.04		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	7.01		PASS
275	10 - 30% of mass 198	26.22		PASS
365	Greater than 1% of mass 198	3.09		PASS
441	Present, but less than mass 443	10.34	(84.00)	PASS
442	Greater than 40% of mass 198	67.11		PASS
443	17 - 23% of mass 442	12.31	(18.34)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.6408297	5.000	PASS
Benzidine	0.7773038	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	288111			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	2430	0.8	15.0	PASS
4,4-DDD + DDE	2430	0.8	15.0	PASS

****

Tuning Sample, //Slsvr01/BNA_LAB/MSK.i/K050512B.B/KDFT3092.D/KDFT3092.D,*** PASSED

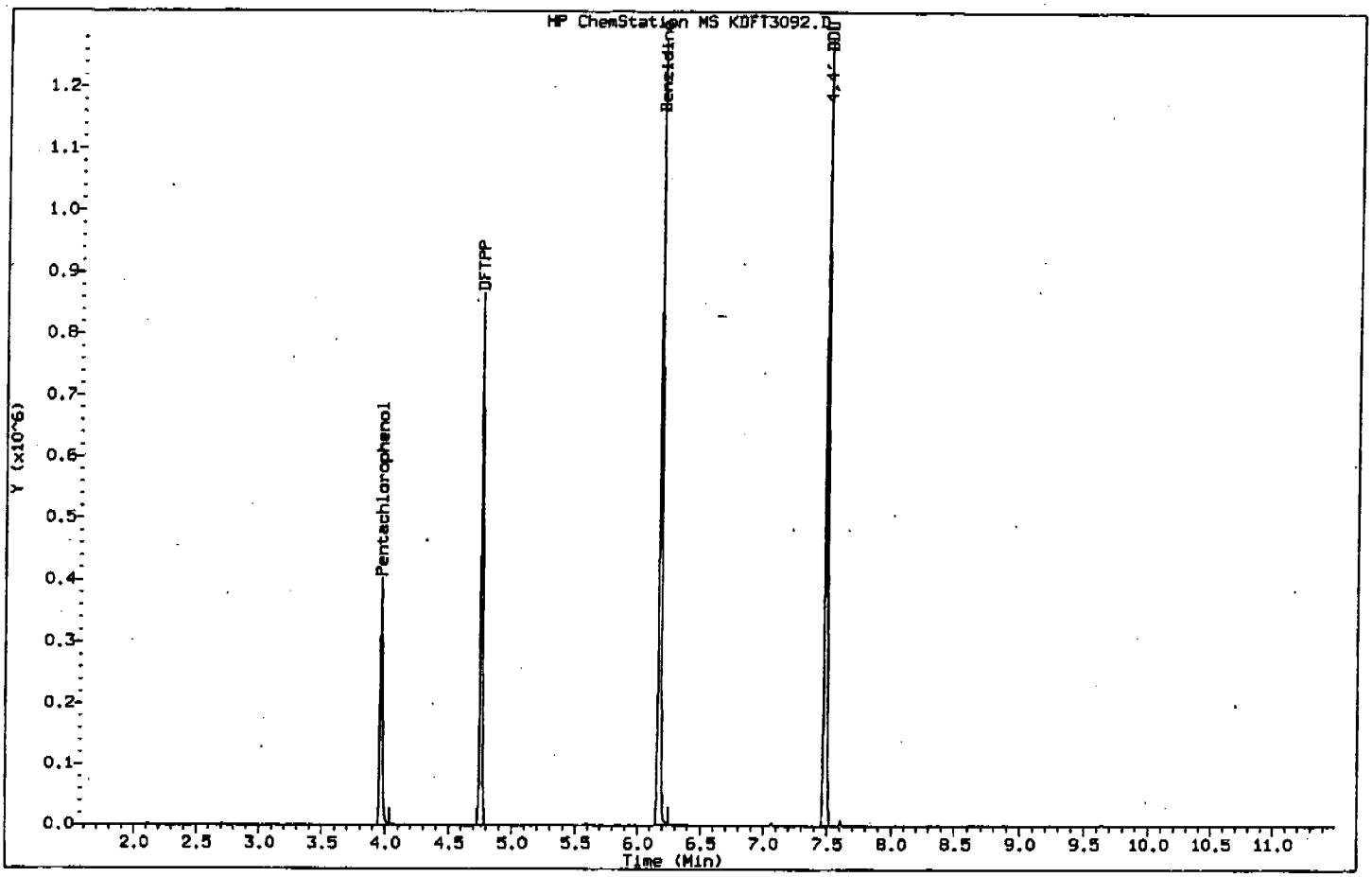
****

05/12/05

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

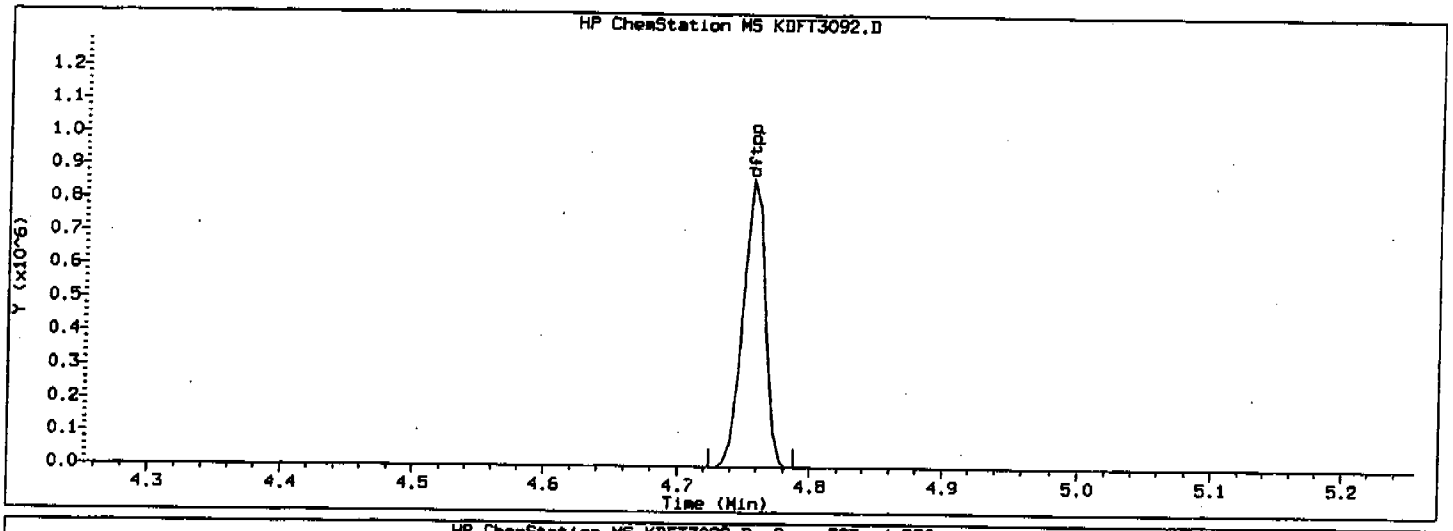
Report Date: 05/12/2005 15:06

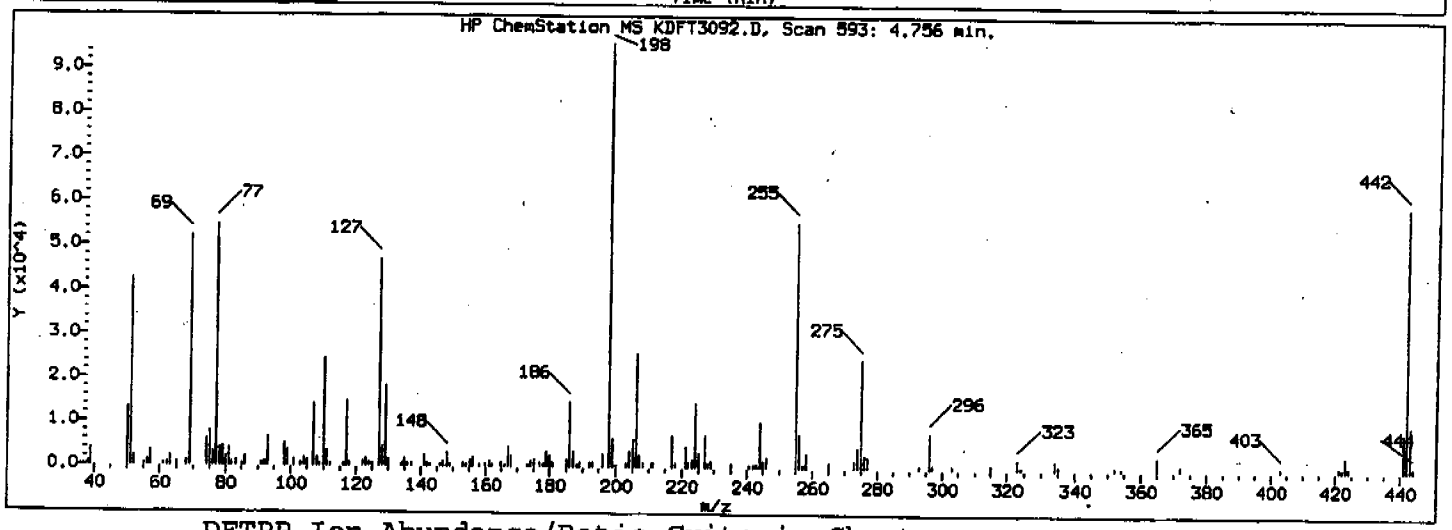
Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050512B.B/KDFT3092.D/KDFT3092.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050512B.B\sw846tun.m Inst: MSK
Injection Date: 12-MAY-2005 11:48 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0232-05 (50NG)



Report Date: 05/12/2005 15:06

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050512B.B/KDFT3092.D/KDFT3092.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050512B.B\sw846tun.m Inst: MSK
Injection Date: 12-MAY-2005 11:48 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0232-05 (50NG)



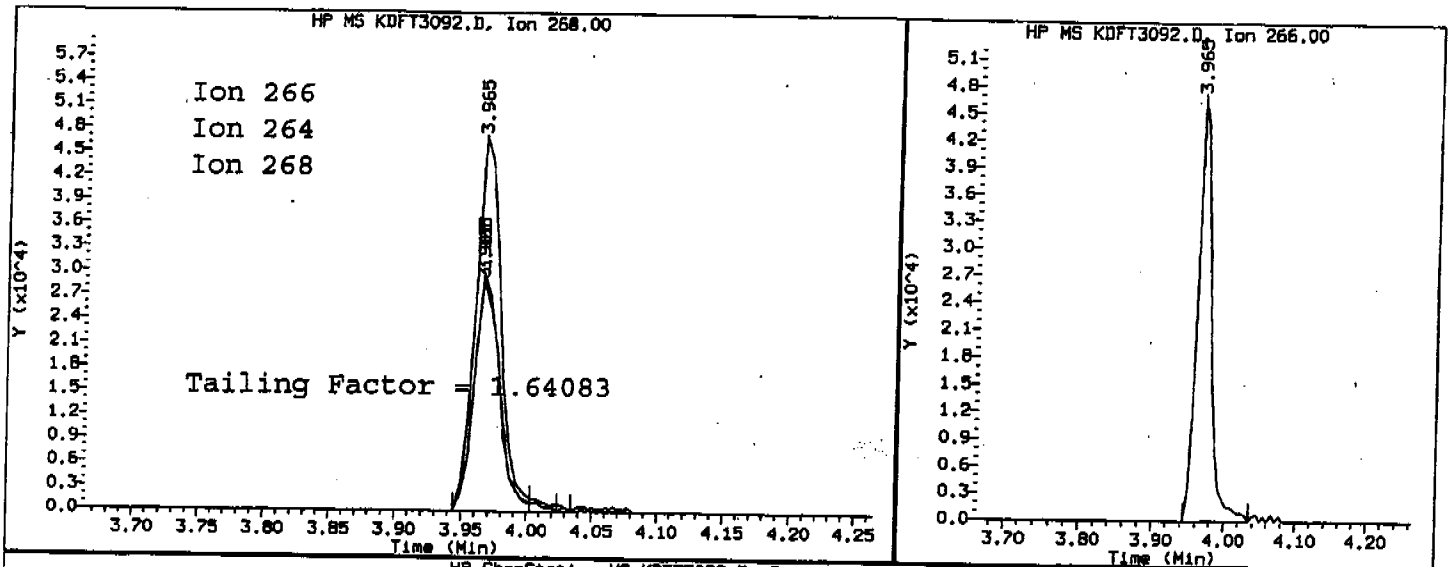


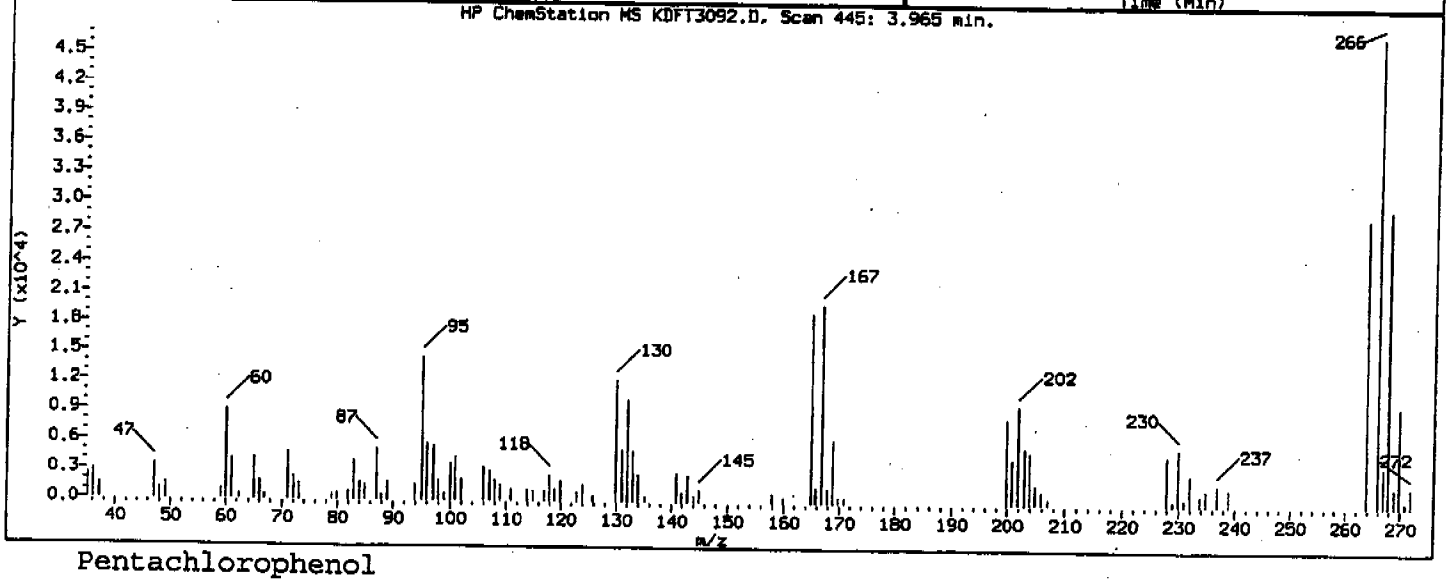
DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	44.69		PASS
68	Less than 2% of mass 69	0.84	(1.55)	PASS
69	Mass 69 relative abundance	54.00		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	49.04		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	7.01		PASS
275	10 - 30% of mass 198	26.22		PASS
365	Greater than 1% of mass 198	3.09		PASS
441	Present, but less than mass 443	10.34	(84.00)	PASS
442	Greater than 40% of mass 198	67.11		PASS
443	17 - 23% of mass 442	12.31	(18.34)	PASS

Report Date: 05/12/2005 15:06

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050512B.B/KDFT3092.D/KDFT3092.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050512B.B\sw846tun.m\resolut.m Inst:
Injection Date: 12-MAY-2005 11:48 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)





Pentachlorophenol
==========

Exp. RT =	3.965
Found RT =	3.965

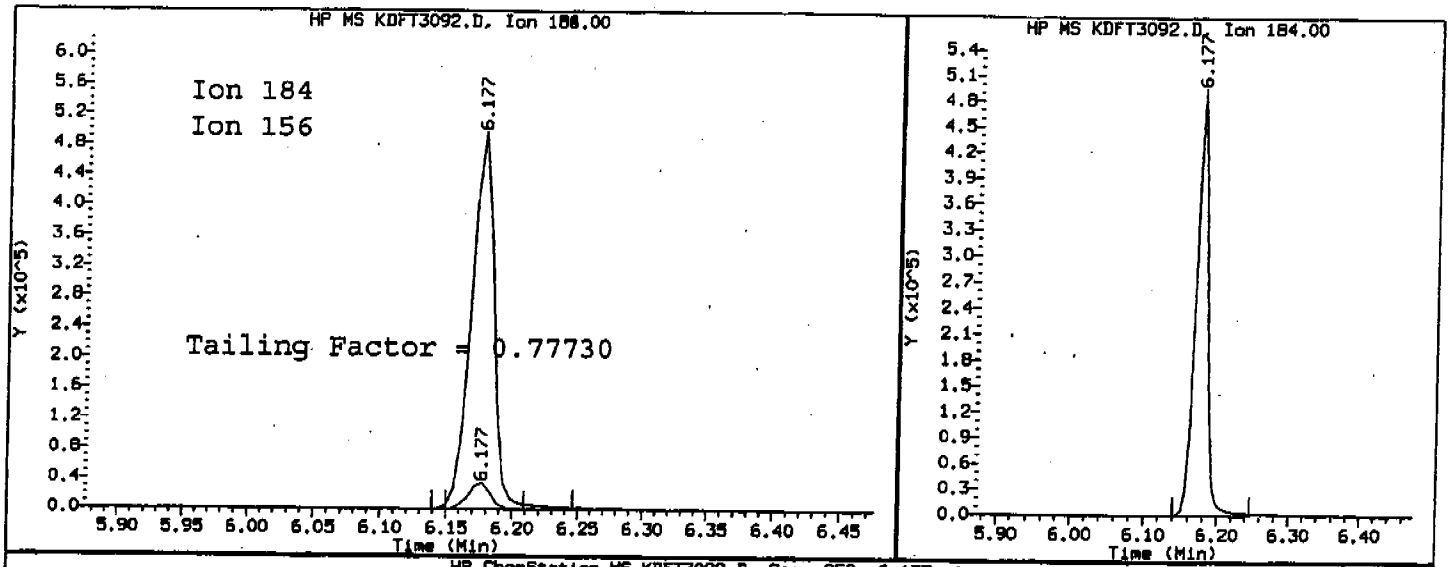
Mass	Area	Ratio
266	64801	100.00
264	38872	59.99
268	41352	63.81

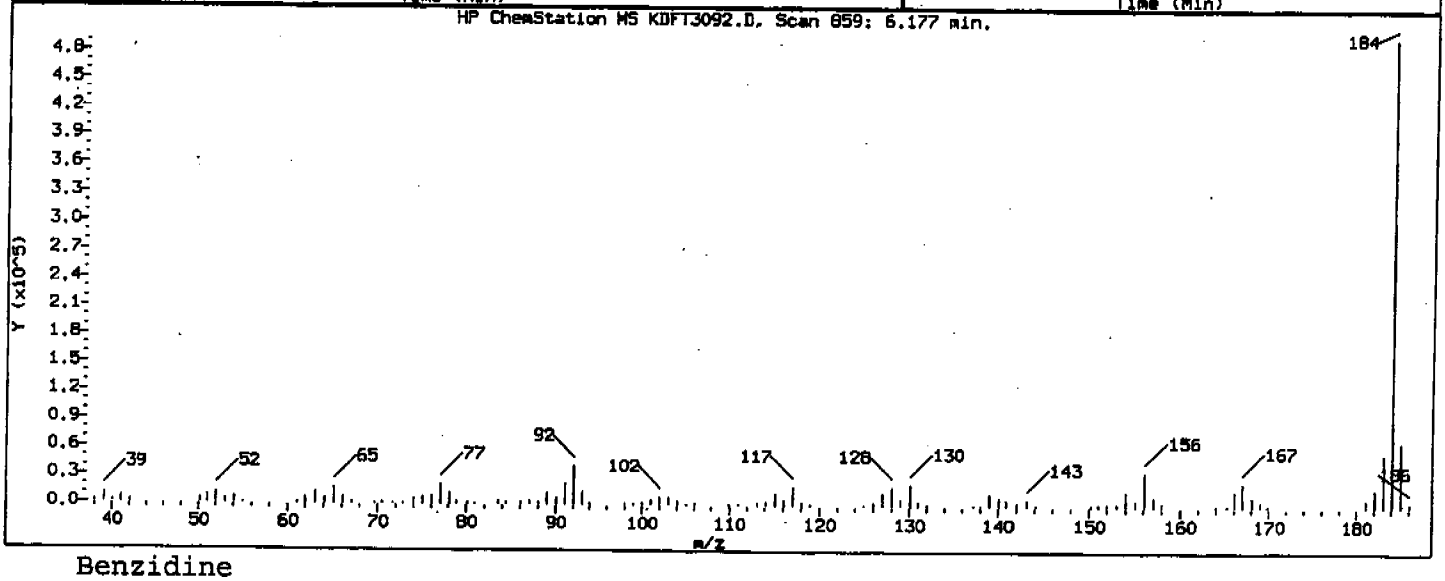
Tailing factor for Pentachlorophenol OK

Tail Factor = 1.641 Maximum Allowed = 5.0

Report Date: 05/12/2005 15:06

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050512B.B/KDFT3092.D/KDFT3092.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050512B.B\sw846tun.m\resolut.m Inst:
Injection Date: 12-MAY-2005 11:48 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)





Benzidine
=========
Exp. RT = 6.188
Found RT = 6.177

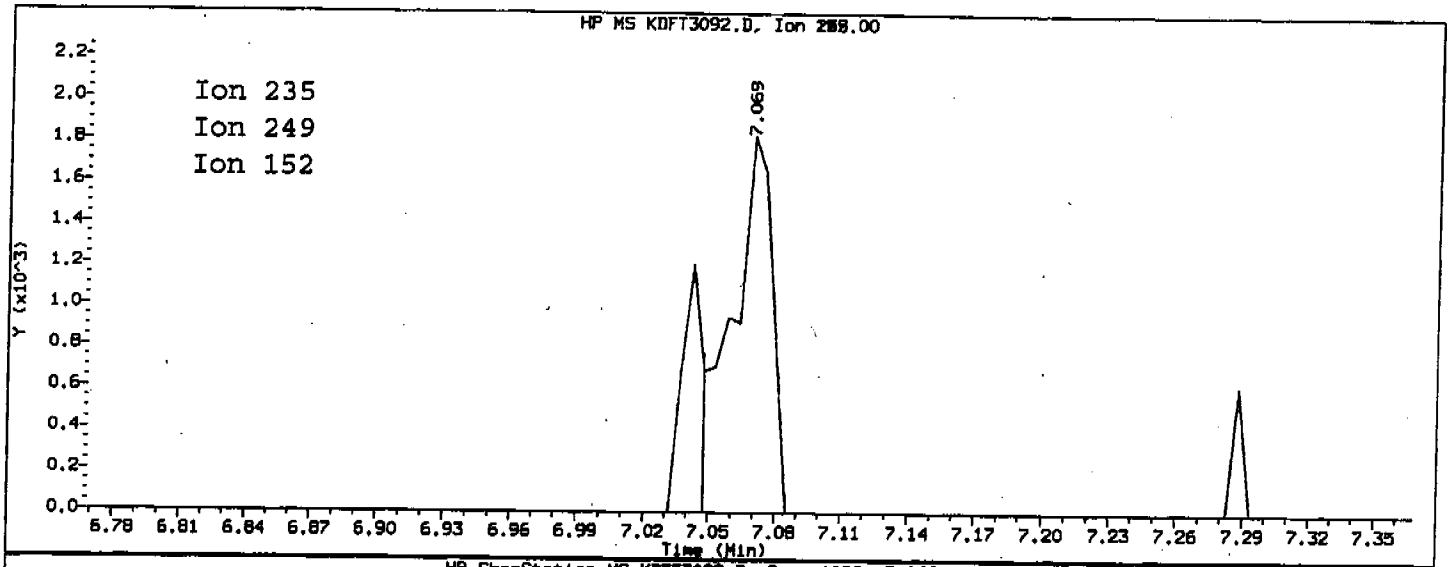
Mass	Area	Ratio
184	588964	100.00
156	40738	6.92

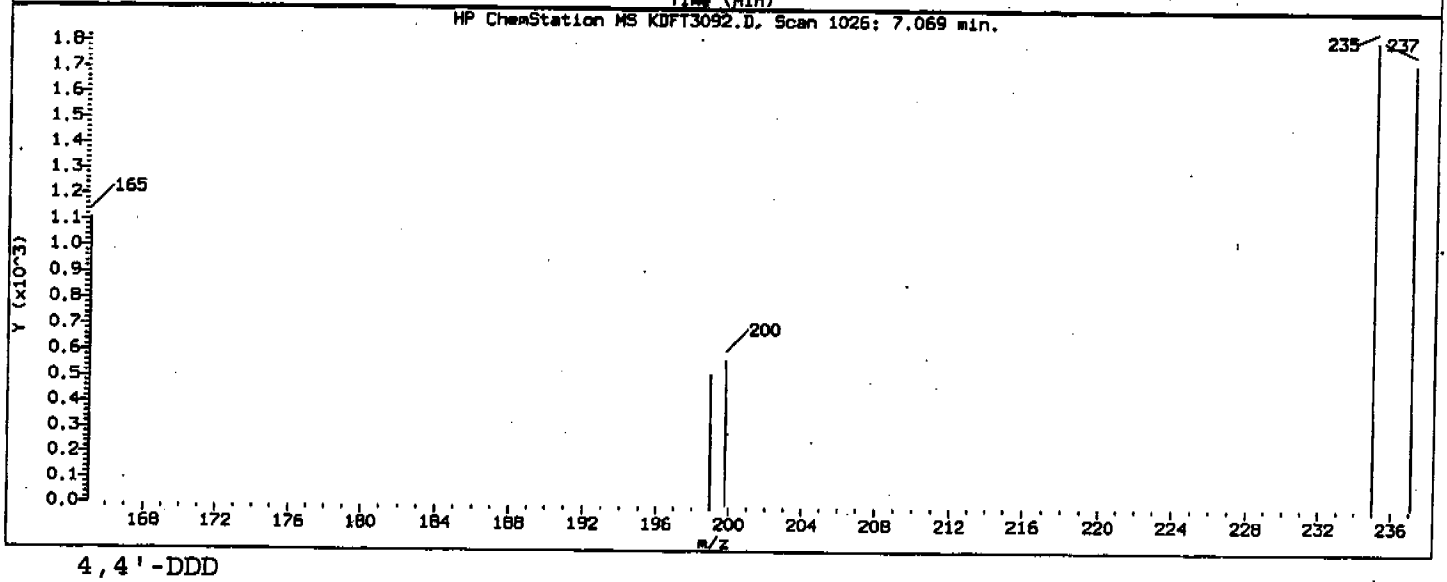
Tailing factor for Benzidine OK

Tail Factor = 0.777 Maximum Allowed = 3.0

Report Date: 05/12/2005 15:06

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050512B.B/KDFT3092.D/KDFT3092.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050512B.B\sw846tun.m\resolut.m Inst:
Injection Date: 12-MAY-2005 11:48 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



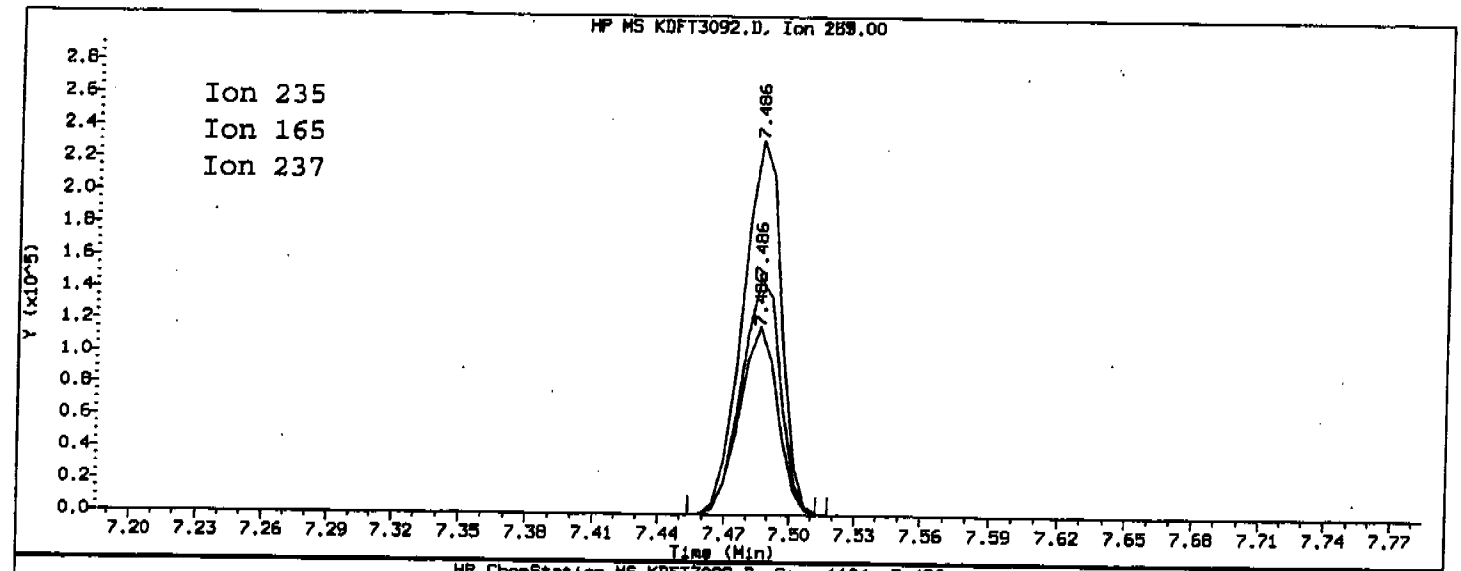


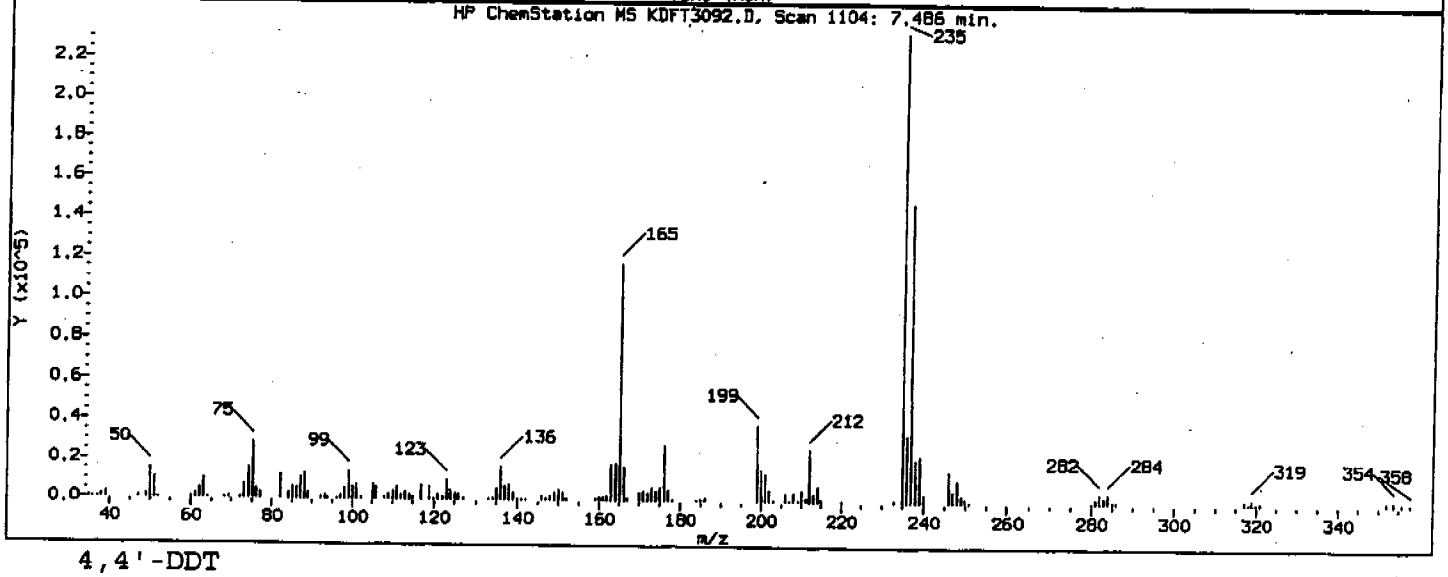
4,4'-DDD
========
Exp. RT = 7.074
Found RT = 7.069

Mass	Area	Ratio
235	2430	100.00
249	4545	187.04
152	1669	68.68

Report Date: 05/12/2005 15:06

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050512B.B/KDFT3092.D/KDFT3092.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050512B.B\sw846tun.m\resolut.m Inst:
Injection Date: 12-MAY-2005 11:48 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



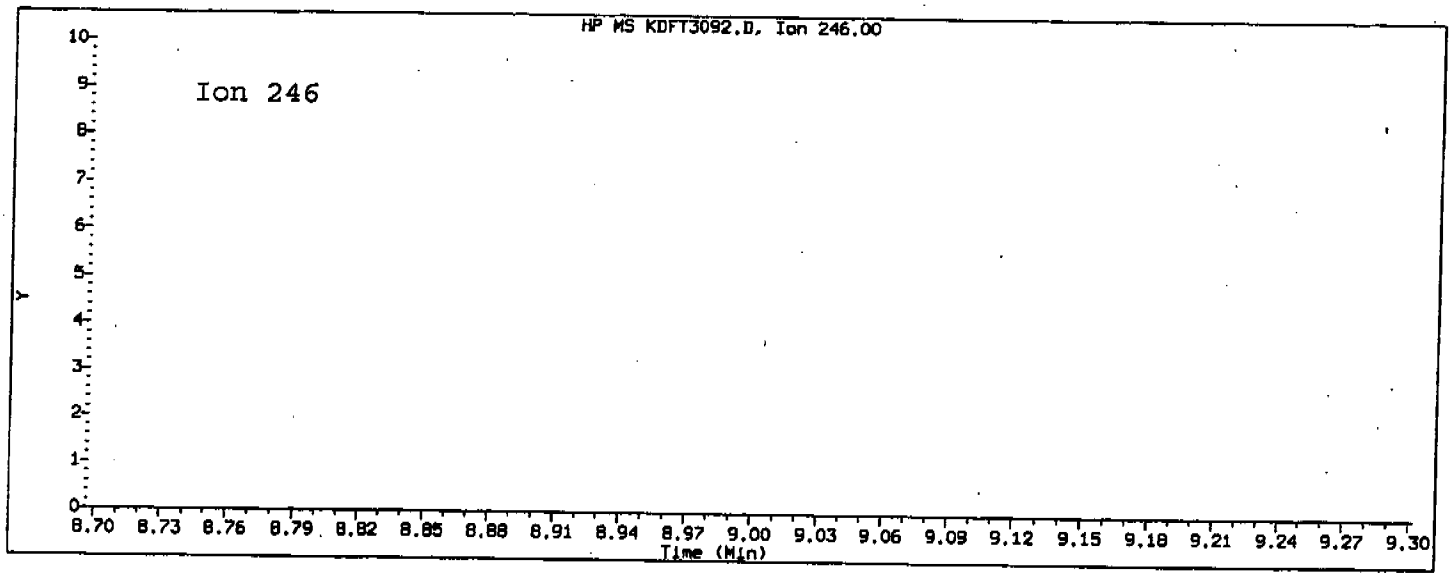


4,4'-DDT
========
Exp. RT = 7.502
Found RT = 7.486

Mass	Area	Ratio
235	288111	100.00
165	143760	49.90
237	183452	63.67

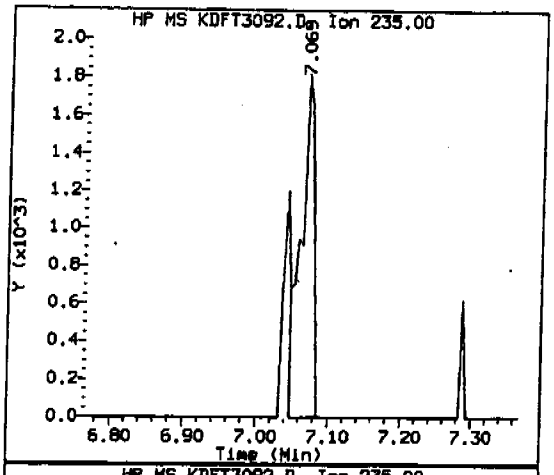
Report Date: 05/12/2005 15:06

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050512B.B/KDFT3092.D/KDFT3092.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050512B.B\sw846tun.m\resolut.m Inst:
Injection Date: 12-MAY-2005 11:48 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)

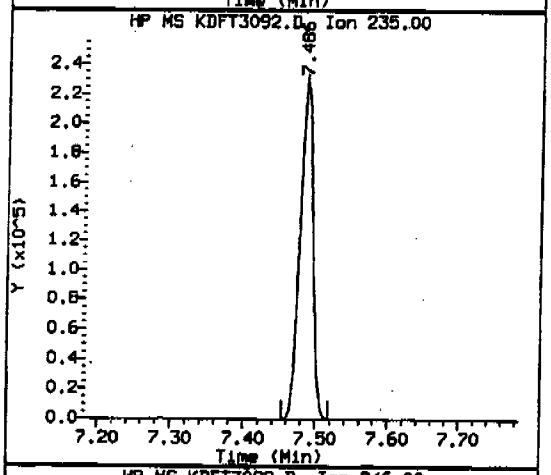


4,4'-DDE
========
Exp. RT = 9.000
Found RT = 0.000

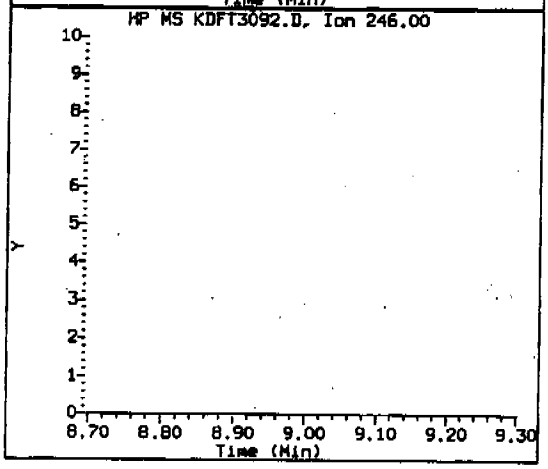
Mass	Area	Ratio
246	0	0.00



Compound: 4,4'-DDD
Quant Mass: 235
RT: 7.069
Area: 2430



Compound: 4,4'-DDT
Quant Mass: 235
RT: 7.486
Area: 288111



Compound: 4,4'-DDE
Quant Mass: 246
RT: 0.000
Area: 0

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	288111			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	2430	0.8	15.0	PASS
4,4-DDD + DDE	2430	0.8	15.0	PASS

****
TUNE SAMPLE *** PASSED *** DDT BREAKDOWN TEST
****

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KCAL3094.D
Report Date: 12-May-2005 14:58

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i
Lab File ID: KCAL3094.D
Analysis Type: WATER
Lab Sample ID: SSTD050
Method: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m

Injection Date: 12-MAY-2005 12:41
Init. Cal. Date(s): 28-APR-2005 09-MAY-2005
Init. Cal. Times: 11:41 15:12
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	1 1,4-Dioxane	0.36386	0.37463	0.010	-2.96081	60.00000	Averaged
	4 N-Nitrosodimethylamine	0.67099	0.66935	0.010	0.24409	60.00000	Averaged
	3 Pyridine	1.18405	1.16304	0.010	1.77451	60.00000	Averaged
	5 Dimethylformamide	0.88716	0.87049	0.010	1.87913	60.00000	Averaged
$	10 2-Fluorophenol	1.20834	1.19131	0.010	1.40966	40.00000	Averaged
	11 Cyclohexanol	1.38218	1.43741	0.010	-3.99530	60.00000	Averaged
	17 Aniline	2.19527	2.08709	0.010	4.92746	60.00000	Averaged
	19 Bis(2-chloroethyl)ether	1.55372	1.34853	0.010	13.20656	60.00000	Averaged
$	15 Phenol-d5	1.69125	1.68726	0.010	0.23593	40.00000	Averaged
	16 Phenol	1.87215	1.68060	0.010	10.23184	20.00000	Averaged
	20 2-Chlorophenol	1.35363	1.30045	0.010	3.92856	60.00000	Averaged
	21 1,3-Dichlorobenzene	1.54804	1.50121	0.010	3.02508	60.00000	Averaged
	23 1,4-Dichlorobenzene	1.64398	1.57960	0.010	3.91619	20.00000	Averaged
	26 1,2-Dichlorobenzene	1.52039	1.46484	0.010	3.65385	60.00000	Averaged
	25 Benzyl Alcohol	0.66523	0.78805	0.010	-18.46287	60.00000	Averaged
	28 2,2-oxybis(1-Chloropropane)	1.60673	1.45390	0.010	9.51184	60.00000	Averaged
	27 2-Methylphenol	1.19876	1.14486	0.010	4.49654	60.00000	Averaged
	35 Hexachloroethane	0.71883	0.69290	0.010	3.60673	60.00000	Averaged
	32 N-Nitrosodinpropylamine	1.25943	1.20233	0.050	4.53383	60.00000	Averaged
	29 3 and 4-Methylphenol	1.27839	1.19966	0.010	6.15850	60.00000	Averaged
$	36 Nitrobenzene-d5	0.54909	0.53617	0.010	2.35271	40.00000	Averaged
	37 Nitrobenzene	0.58194	0.54893	0.010	5.67224	60.00000	Averaged
	39 Isophorone	0.75864	0.76092	0.010	-0.30179	60.00000	Averaged
	40 2-Nitrophenol	0.20162	0.20259	0.010	-0.48112	20.00000	Averaged
	41 2,4-Dimethylphenol	0.42786	0.44048	0.010	-2.94960	60.00000	Averaged
	42 Bis(2-chloroethoxy)methane	0.48359	0.46164	0.010	4.53873	60.00000	Averaged
	45 2,4-Dichlorophenol	0.31460	0.32134	0.010	-2.14251	20.00000	Averaged
	47 1,2,4-Trichlorobenzene	0.37479	0.38182	0.010	-1.87589	60.00000	Averaged
	44 Benzoic Acid	0.19951	0.20517	0.010	-2.83932	60.00000	Averaged
	50 Naphthalene	1.13252	1.07681	0.010	4.91922	60.00000	Averaged
	51 4-Chloroaniline	0.45857	0.44947	0.010	1.98342	60.00000	Averaged
	54 Hexachlorobutadiene	0.26032	0.26843	0.050	-3.11302	20.00000	Averaged
	62 2-Methylnaphthalene	0.81010	1.04954	0.010	-29.55701	60.00000	Averaged
	59 4-Chloro-3-Methylphenol	0.36550	0.38474	0.010	-5.26275	20.00000	Averaged
	66 Hexachlorocyclopentadiene	0.42770	0.42441	0.010	0.76996	60.00000	Averaged
	67 2,4,6-Trichlorophenol	0.46165	0.46739	0.010	-1.24205	20.00000	Averaged
	68 2,4,5-Trichlorophenol	0.48790	0.50015	0.010	-2.50979	60.00000	Averaged
$	69 2-Fluorobiphenyl	1.61063	1.50387	0.010	6.62892	40.00000	Averaged
	72 2-Chloronaphthalene	1.34666	1.28086	0.010	4.88588	60.00000	Averaged
	73 2-Nitroaniline	0.58010	0.57106	0.010	1.55907	60.00000	Averaged
	76 Dimethylphthalate	1.54223	1.53012	0.010	0.78480	60.00000	Averaged
	79 Acenaphthylene	1.98537	1.92755	0.010	2.91232	60.00000	Averaged

05/12/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KCAL3094.D
Report Date: 12-May-2005 14:58

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i
Lab File ID: KCAL3094.D
Analysis Type: WATER
Lab Sample ID: SSTD050
Method: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m

Injection Date: 12-MAY-2005 12:41
Init. Cal. Date(s): 28-APR-2005 09-MAY-2005
Init. Cal. Times: 11:41 15:12
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	80 2,6-Dinitrotoluene	0.32954	0.34154	0.010	-3.64038	60.00000	Averaged
	83 Acenaphthene	1.25374	1.19290	0.010	4.85271	20.00000	Averaged
	81 3-Nitroaniline	0.32374	0.32974	0.010	-1.85503	60.00000	Averaged
	84 2,4-Dinitrophenol	0.19685	0.15362	0.050	21.96142	60.00000	Averaged
	86 Dibenzofuran	1.85230	1.82454	0.010	1.49846	60.00000	Averaged
	88 2,4-Dinitrotoluene	0.42378	0.45052	0.010	-6.31138	60.00000	Averaged
	85 4-Nitrophenol	0.27026	0.34804	0.050	-28.78086	60.00000	Averaged
	93 Diethylphthalate	1.54363	1.55730	0.010	-0.88555	60.00000	Averaged
	94 Fluorene	1.48246	1.49348	0.010	-0.74319	60.00000	Averaged
	95 4-Chlorophenyl-phenylether	0.79978	0.80545	0.010	-0.70874	60.00000	Averaged
	98 4-Nitroaniline	0.31560	0.34779	0.010	-10.20204	60.00000	Averaged
	99 4,6-Dinitro-2-methylphenol	0.16574	0.15962	0.010	3.69271	60.00000	Averaged
	100 N-Nitrosodiphenylamine	0.60901	0.57843	0.010	5.02197	20.00000	Averaged
	102 Azobenzene	1.36611	1.21662	0.010	10.94304	60.00000	Averaged
$	104 2,4,6-Tribromophenol	0.22361	0.24973	0.010	-11.68385	40.00000	Averaged
	109 4-Bromophenyl-phenylether	0.27978	0.27583	0.010	1.41235	60.00000	Averaged
	112 Hexachlorobenzene	0.28563	0.29242	0.010	-2.37484	60.00000	Averaged
	117 Pentachlorophenol	0.15930	0.12903	0.010	18.99922	20.00000	Averaged
	122 Phenanthrene	1.23548	1.21702	0.010	1.49487	60.00000	Averaged
	124 Anthracene	1.19438	1.17218	0.010	1.85915	60.00000	Averaged
	126 Carbazole	1.02046	1.01042	0.010	0.98388	60.00000	Averaged
	129 Di-n-Butylphthalate	1.33705	1.32815	0.010	0.66503	60.00000	Averaged
	134 Fluoranthene	1.27688	1.32403	0.010	-3.69317	20.00000	Averaged
	135 Benzidine	0.60665	0.54515	0.010	10.13758	100	Averaged
	137 Pyrene	1.62596	1.54028	0.010	5.26929	60.00000	Averaged
$	139 Terphenyl-d14	1.26353	1.22952	0.010	2.69177	40.00000	Averaged
	145 3,3-Dimethylbenzidine	0.64501	0.59326	0.010	8.02211	60.00000	Averaged
	146 Butylbenzylphthalate	0.67238	0.61739	0.010	8.17859	60.00000	Averaged
	150 Benzo(a)Anthracene	1.40066	1.37782	0.010	1.63016	60.00000	Averaged
	152 3,3'-Dichlorobenzidine	0.53933	0.50733	0.010	5.93218	60.00000	Averaged
	154 Chrysene	1.33287	1.27898	0.010	4.04262	60.00000	Averaged
	155 bis(2-ethylhexyl)Phthalate	0.84173	0.78303	0.010	6.97316	60.00000	Averaged
	158 Di-n-octylphthalate	1.70444	1.55790	0.010	8.59731	20.00000	Averaged
	160 Benzo(b)fluoranthene	1.55320	1.51139	0.010	2.69165	60.00000	Averaged
	161 Benzo(k)fluoranthene	1.54269	1.52553	0.010	1.11202	60.00000	Averaged
	165 Benzo(a)pyrene	1.40180	1.39964	0.010	0.15474	20.00000	Averaged
	173 Indeno(1,2,3-cd)pyrene	1.29945	1.33110	0.010	-2.43577	60.00000	Averaged
	174 Dibenzo(a,h)anthracene	1.26094	1.32113	0.010	-4.77307	60.00000	Averaged
	177 Benzo(g,h,i)perylene	1.16013	1.17368	0.010	-1.16795	60.00000	Averaged

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B/KCAL3094.D
Report Date: 05/12/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3094.D
Analysis Type: WATER

Injection Date: 12-MAY-2005 12:41
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270

COMPOUND	%D
1,4-Dioxane	3.0
Pyridine	1.8
N-Nitrosodimethylamine	0.2
Dimethylformamide	1.9
Cyclohexanol	4.0
2-Fluorophenol	1.4
Aniline	4.9
Bis(2-chloroethyl)ether	13.2
Phenol-d5	0.2
Phenol	10.2
2-Chlorophenol	3.9
1,3-Dichlorobenzene	3.0
1,4-Dichlorobenzene	3.9
1,2-Dichlorobenzene	3.7
Benzyl Alcohol	18.5
2,2-oxybis(1-Chloropropane)	9.5
2-Methylphenol	4.5
N-Nitrosodinpropylamine	4.5
Hexachloroethane	3.6
3 and 4-Methylphenol	6.2
Nitrobenzene-d5	2.4
Nitrobenzene	5.7
Isophorone	0.3
2-Nitrophenol	0.5
2,4-Dimethylphenol	2.9
Bis(2-chloroethoxy)methane	4.5
2,4-Dichlorophenol	2.1
1,2,4-Trichlorobenzene	1.9
Benzoic Acid	2.8
Naphthalene	4.9
4-Chloroaniline	2.0
Hexachlorobutadiene	3.1
4-Chloro-3-Methylphenol	5.3
2-Methylnaphthalene	29.6
Hexachlorocyclopentadiene	0.8
2,4,6-Trichlorophenol	1.2
2-Fluorobiphenyl	6.6
2,4,5-Trichlorophenol	2.5
2-Chloronaphthalene	4.9

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B/KCAL3094.D
Report Date: 05/12/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3094.D
Analysis Type: WATER

Injection Date: 12-MAY-2005 12:41
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050512A

COMPOUND	%D
2-Nitroaniline	1.6
Dimethylphthalate	0.8
Acenaphthylene	2.9
2,6-Dinitrotoluene	3.6
Acenaphthene	4.9
3-Nitroaniline	1.9
2,4-Dinitrophenol	22.0
Dibenzofuran	1.5
2,4-Dinitrotoluene	6.3
4-Nitrophenol	28.8
Fluorene	0.7
Diethylphthalate	0.9
4-Chlorophenyl-phenylether	0.7
4-Nitroaniline	10.2
4,6-Dinitro-2-methylphenol	3.7
N-Nitrosodiphenylamine	5.0
Azobenzene	10.9
2,4,6-Tribromophenol	11.7
4-Bromophenyl-phenylether	1.4
Hexachlorobenzene	2.4
Pentachlorophenol	19.0
Phenanthrene	1.5
Anthracene	1.9
Carbazole	1.0
Di-n-Butylphthalate	0.7
Fluoranthene	3.7
Benzidine	10.1
Pyrene	5.3
Terphenyl-d14	2.7
3,3-Dimethylbenzidine	8.0
Butylbenzylphthalate	8.2
Benzo(a)Anthracene	1.6
Chrysene	4.0
3,3'-Dichlorobenzidine	5.9
bis(2-ethylhexyl)Phthalate	7.0
Di-n-octylphthalate	8.6
Benzo(b)fluoranthene	2.7
Benzo(k)fluoranthene	1.1
Benzo(a)pyrene	0.2

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B/KCAL3094.D
Report Date: 05/12/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3094.D
Analysis Type: WATER

Injection Date: 12-MAY-2005 12:41
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050512A

COMPOUND	%D
Indeno(1,2,3-cd)pyrene	2.4
Dibenzo(a,h)anthracene	4.8
Benzo(g,h,i)perylene	1.2
Dibenz(e,a) Pyrene	100.0

The average of %D's in the continuing calibration is 6.2

05/12/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KCAL3094.D
Report Date: 12-May-2005 14:58

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KCAL3094.D
Lab Smp Id: SSTD050 Client Smp ID: SSTD050
Inj Date : 12-MAY-2005 12:41
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD050
Misc Info : SV0221-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m
Meth Date : 12-May-2005 14:58 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 12:01 Cal File: KCAL2994.D
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 1,4-Dioxane	88	1.251	1.251	(0.276)	78602	50.0000	51.48
	4 N-Nitrosodimethylamine	74	1.678	1.678	(0.370)	140438	50.0000	49.88
	3 Pyridine	79	1.662	1.662	(0.366)	244019	50.0000	49.11(M)
	5 Dimethylformamide	44	2.121	2.121	(0.468)	182639	50.0000	49.06(M)
$	10 2-Fluorophenol	112	3.254	3.254	(0.717)	249950	50.0000	49.30
	11 Cyclohexanol	57	3.243	3.243	(0.715)	301584	50.0000	52.00
	17 Aniline	93	4.232	4.232	(0.933)	437896	50.0000	47.54
	19 Bis(2-chloroethyl)ether	93	4.306	4.306	(0.949)	282936	50.0000	43.40
$	15 Phenol-d5	99	4.333	4.333	(0.955)	354006	50.0000	49.88
	16 Phenol	94	4.349	4.349	(0.959)	352608	50.0000	44.88
	20 2-Chlorophenol	128	4.381	4.381	(0.966)	272850	50.0000	48.04
	21 1,3-Dichlorobenzene	146	4.488	4.488	(0.989)	314971	50.0000	48.49
*	22 1,4-Dichlorobenzene-d4	152	4.536	4.536	(1.000)	167849	40.0000	
	23 1,4-Dichlorobenzene	146	4.557	4.557	(1.005)	331418	50.0000	48.04
	26 1,2-Dichlorobenzene	146	4.777	4.777	(1.053)	307340	50.0000	48.17
	25 Benzyl Alcohol	108	4.793	4.793	(1.057)	165342	50.0000	59.23
	28 2,2-oxybis(1-Chloropropane)	45	4.947	4.947	(1.091)	305045	50.0000	45.24
	27 2-Methylphenol	108	5.017	5.017	(1.106)	240204	50.0000	47.75
	35 Hexachloroethane	117	5.134	5.134	(1.132)	145378	50.0000	48.20
	32 N-Nitrosodinpropylamine	70	5.129	5.129	(1.131)	252262	50.0000	47.73
	29 3 and 4-Methylphenol	108	5.204	5.204	(1.147)	503405	100.000	93.84

5/11/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KCAL3094.D
Report Date: 12-May-2005 14:58

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.263	5.263	(0.860)	393822	50.0000	48.82
	37 Nitrobensene	77	5.284	5.284	(0.864)	403195	50.0000	47.16
	39 Isophorone	82	5.583	5.583	(0.913)	558907	50.0000	50.15
	40 2-Nitrophenol	139	5.685	5.685	(0.929)	148801	50.0000	50.24
	41 2,4-Dimethylphenol	107	5.824	5.824	(0.952)	323538	50.0000	51.47
	42 Bis(2-chloroethoxy)methane	93	5.888	5.888	(0.962)	339081	50.0000	47.73
	45 2,4-Dichlorophenol	162	6.043	6.043	(0.988)	236025	50.0000	51.07
	47 1,2,4-Trichlorobenzene	180	6.075	6.075	(0.993)	280454	50.0000	50.94
*	48 Naphthalene-d8	136	6.117	6.117	(1.000)	587608	40.0000	
	44 Benzoic Acid	122	6.112	6.112	(0.999)	150700	50.0000	51.42(M)
	50 Naphthalene	128	6.139	6.139	(1.003)	790930	50.0000	47.54
	51 4-Chloroaniline	127	6.299	6.299	(1.030)	330141	50.0000	49.01
	54 Hexachlorobutadiene	225	6.390	6.390	(1.045)	197161	50.0000	51.56
	62 2-Methylnaphthalene	142	7.100	7.100	(1.161)	770899	50.0000	64.78
	59 4-Chloro-3-Methylphenol	107	7.095	7.095	(1.160)	282595	50.0000	52.63
	66 Hexachlorocyclopentadiene	237	7.448	7.448	(0.846)	177867	50.0000	49.62
	67 2,4,6-Trichlorophenol	196	7.645	7.645	(0.869)	195878	50.0000	50.62
	68 2,4,5-Trichlorophenol	196	7.779	7.779	(0.884)	209609	50.0000	51.25
$	69 2-Fluorobiphenyl	172	7.725	7.725	(0.878)	630259	50.0000	46.68
	72 2-Chloronaphthalene	162	7.848	7.848	(0.892)	536800	50.0000	47.56
	73 2-Nitroaniline	65	8.147	8.147	(0.926)	239326	50.0000	49.22
	76 Dimethylphthalate	163	8.516	8.516	(0.968)	641263	50.0000	49.61
	79 Acenaphthylene	152	8.532	8.532	(0.970)	807820	50.0000	48.54
	80 2,6-Dinitrotoluene	165	8.628	8.628	(0.981)	143135	50.0000	51.82
*	82 Acenaphthene-d10	164	8.799	8.799	(1.000)	335274	40.0000	
	83 Acenaphthene	153	8.853	8.853	(1.006)	499935	50.0000	47.57
	81 3-Nitroaniline	138	8.869	8.869	(1.008)	138193	50.0000	50.93
	84 2,4-Dinitrophenol	184	9.050	9.050	(1.029)	64381	50.0000	39.02
	86 Dibenzofuran	168	9.130	9.130	(1.038)	764653	50.0000	49.25
	88 2,4-Dinitrotoluene	165	9.307	9.307	(1.058)	188810	50.0000	53.16
	85 4-Nitrophenol	109	9.462	9.462	(1.075)	145861	50.0000	64.39(M)
	93 Diethylphthalate	149	9.771	9.771	(1.110)	652653	50.0000	50.44
	94 Fluorene	166	9.745	9.745	(1.107)	625905	50.0000	50.37
	95 4-Chlorophenyl-phenylether	204	9.793	9.793	(1.113)	337557	50.0000	50.35
	98 4-Nitroaniline	138	9.990	9.990	(1.135)	145758	50.0000	55.10
	99 4,6-Dinitro-2-methylphenol	198	10.033	10.033	(0.876)	125206	50.0000	48.15
	100 N-Nitrosodiphenylamine	169	10.065	10.065	(0.878)	453727	50.0000	47.49
	102 Azobenzene	77	10.076	10.076	(0.879)	954335	50.0000	44.53
$	104 2,4,6-Tribromophenol	330	10.252	10.252	(1.165)	104661	50.0000	55.84
	109 4-Bromophenyl-phenylether	248	10.680	10.680	(0.932)	216363	50.0000	49.29
	112 Hexachlorobenzene	284	10.904	10.904	(0.952)	229376	50.0000	51.19
	117 Pentachlorophenol	266	11.326	11.326	(0.988)	101217	50.0000	40.50
*	121 Phenanthrene-d10	188	11.460	11.460	(1.000)	627534	40.0000	
	122 Phenanthrene	178	11.502	11.502	(1.004)	954648	50.0000	49.25
	124 Anthracene	178	11.588	11.588	(1.011)	919478	50.0000	49.07
	126 Carbazole	167	11.994	11.994	(1.047)	792593	50.0000	49.51
	129 Di-n-Butylphthalate	149	12.881	12.881	(1.124)	1041827	50.0000	49.67
	134 Fluoranthene	202	13.799	13.799	(1.204)	1038595	50.0000	51.85
	135 Benzidine	184	14.195	14.195	(0.854)	373700	50.0000	44.93
	137 Pyrene	202	14.211	14.211	(0.855)	1055868	50.0000	47.36
$	139 Terphenyl-d14	244	14.659	14.659	(0.882)	842836	50.0000	48.65
	145 3,3-Dimethylbenzidine	212	15.664	15.664	(0.942)	406684	50.0000	45.99
	146 Butylbenzylphthalate	149	15.781	15.781	(0.949)	423223	50.0000	45.91
	150 Benzo(a)Anthracene	228	16.593	16.593	(0.998)	944502	50.0000	49.18

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KCAL3094.D
Report Date: 12-May-2005 14:58

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.625	16.625	(1.000)	548402	40.0000	
152 3,3'-Dichlorobenzidine	252	16.689	16.689	(1.004)	347779	50.0000	47.03
154 Chrysene	228	16.679	16.679	(1.003)	876747	50.0000	47.98
155 bis(2-ethylhexyl)Phthalate	149	17.005	17.005	(1.023)	536770	50.0000	46.51
158 Di-n-octylphthalate	149	18.159	18.159	(0.944)	929091	50.0000	45.70
160 Benzo(b)fluoranthene	252	18.597	18.597	(0.967)	901352	50.0000	48.65
161 Benzo(k)fluoranthene	252	18.645	18.645	(0.969)	909785	50.0000	49.44
165 Benzo(a)pyrene	252	19.136	19.136	(0.995)	834704	50.0000	49.92
* 166 Perylene-d12	264	19.232	19.232	(1.000)	477098	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.947	20.947	(1.089)	793832	50.0000	51.22
174 Dibenzo(a,h)anthracene	278	20.995	20.995	(1.092)	787884	50.0000	52.39
177 Benzo(g,h,i)perylene	276	21.401	21.401	(1.113)	699949	50.0000	50.58

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KCAL3094.D
Report Date: 12-May-2005 14:58

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

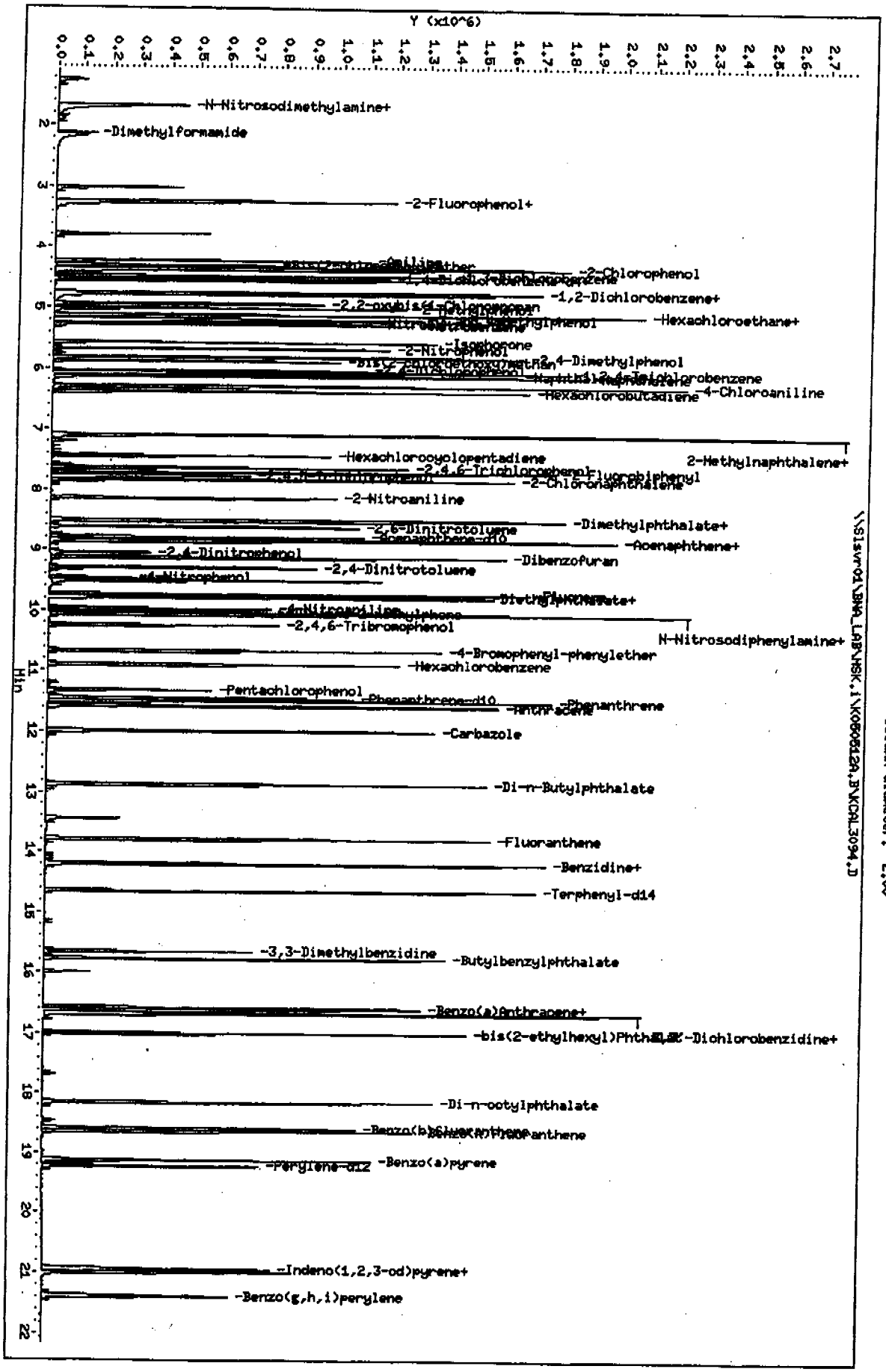
Instrument ID: MSK.i
Lab File ID: KCAL3094.D
Lab Smp Id: SSTD050
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m
Misc Info: SV0221-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD050
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	167849	-13.16
48 Naphthalene-d8	657267	328634	1314534	587608	-10.60
82 Acenaphthene-d10	351374	175687	702748	335274	-4.58
121 Phenanthrene-d10	612492	306246	1224984	627534	2.46
153 Chrysene-d12	494718	247359	989436	548402	10.85
166 Perylene-d12	409117	204559	818234	477098	16.62

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.54	-0.44
48 Naphthalene-d8	6.14	5.64	6.64	6.12	-0.42
82 Acenaphthene-d10	8.83	8.33	9.33	8.80	-0.29
121 Phenanthrene-d10	11.49	10.99	11.99	11.46	-0.27
153 Chrysene-d12	16.66	16.16	17.16	16.63	-0.19
166 Perylene-d12	19.27	18.77	19.77	19.23	-0.19

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

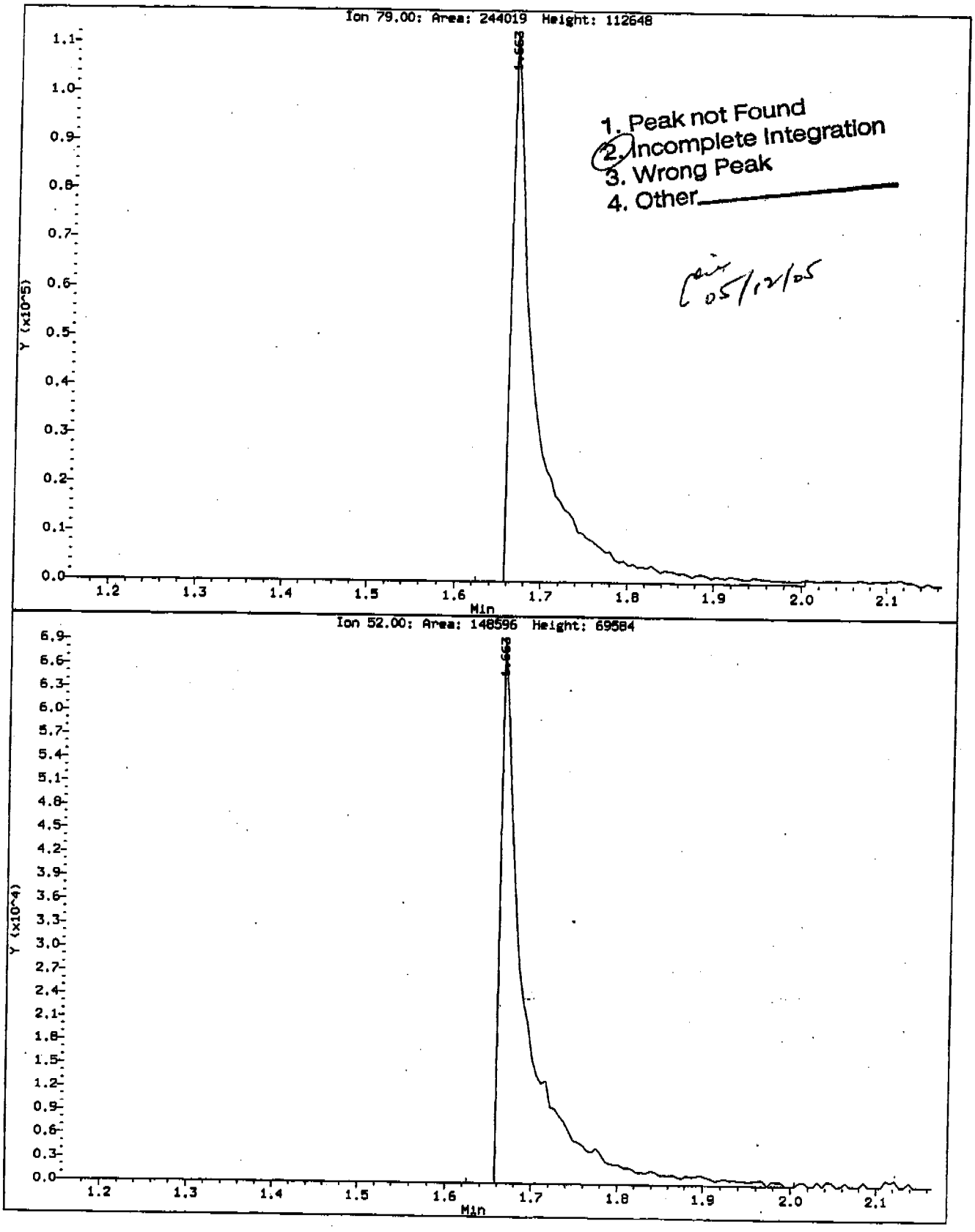


Data File: \\Sisvr01\BNA_LAB\MSK.i\K050512A.B\KCAL3094.D
Date : 12-MAY-2005 12:41
Client ID: SSTD050
Sample Info: SSTD050
Volume Injected (uL): 1.0
Column phase:

Instrument: MSK.i
Operator: XIA
Column diameter: 2.00

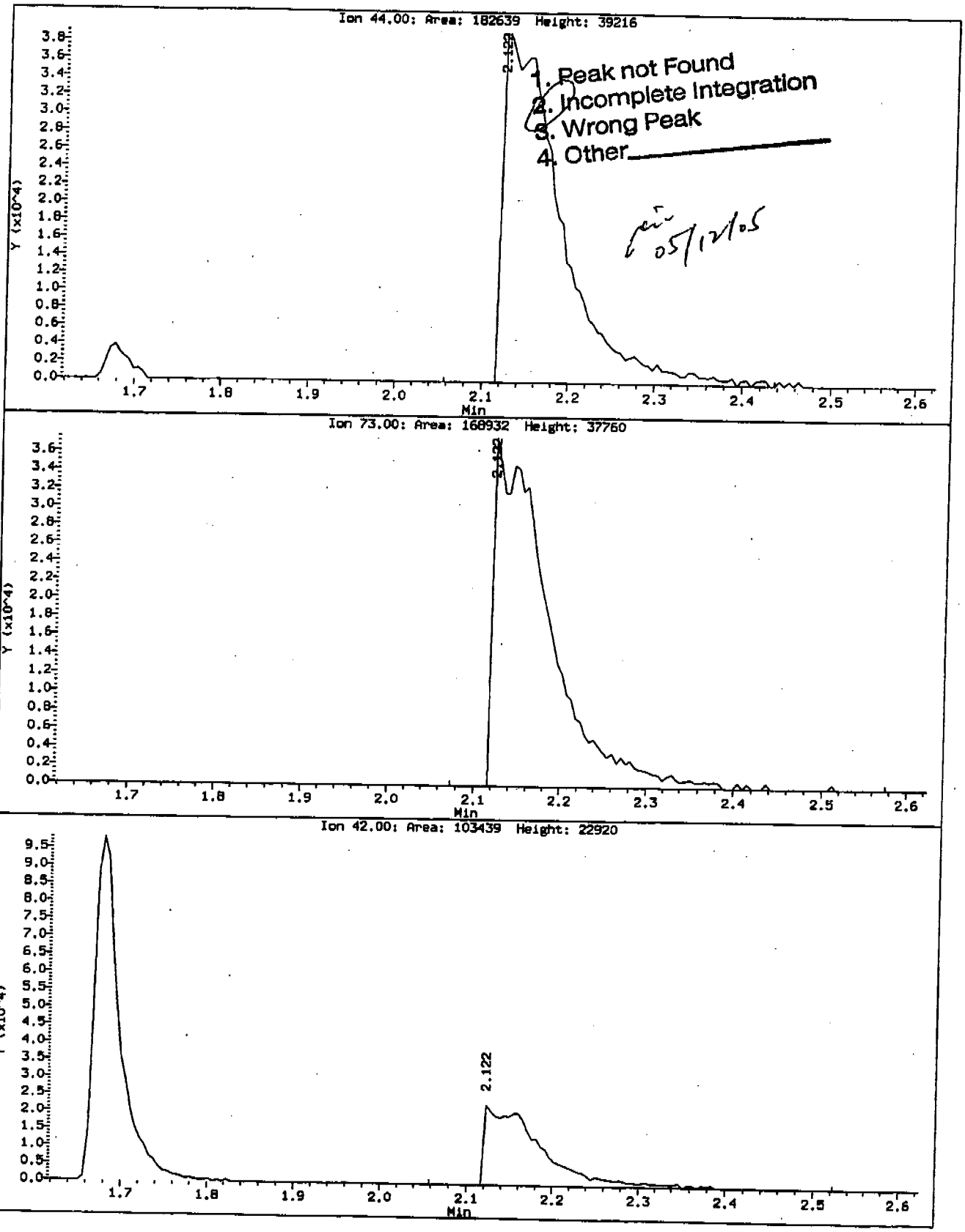
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KCAL3094.D
Injection Date: 12-MAY-2005 12:41
Instrument: MSK.i
Client Sample ID: SSTD050

Compound: Pyridine
CAS Number: 110-86-1



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KCAL3094.D
Injection Date: 12-MAY-2005 12:41
Instrument: MSK.i
Client Sample ID: SSTD050

Compound: Dimethylformamide
CAS Number: 68-12-2



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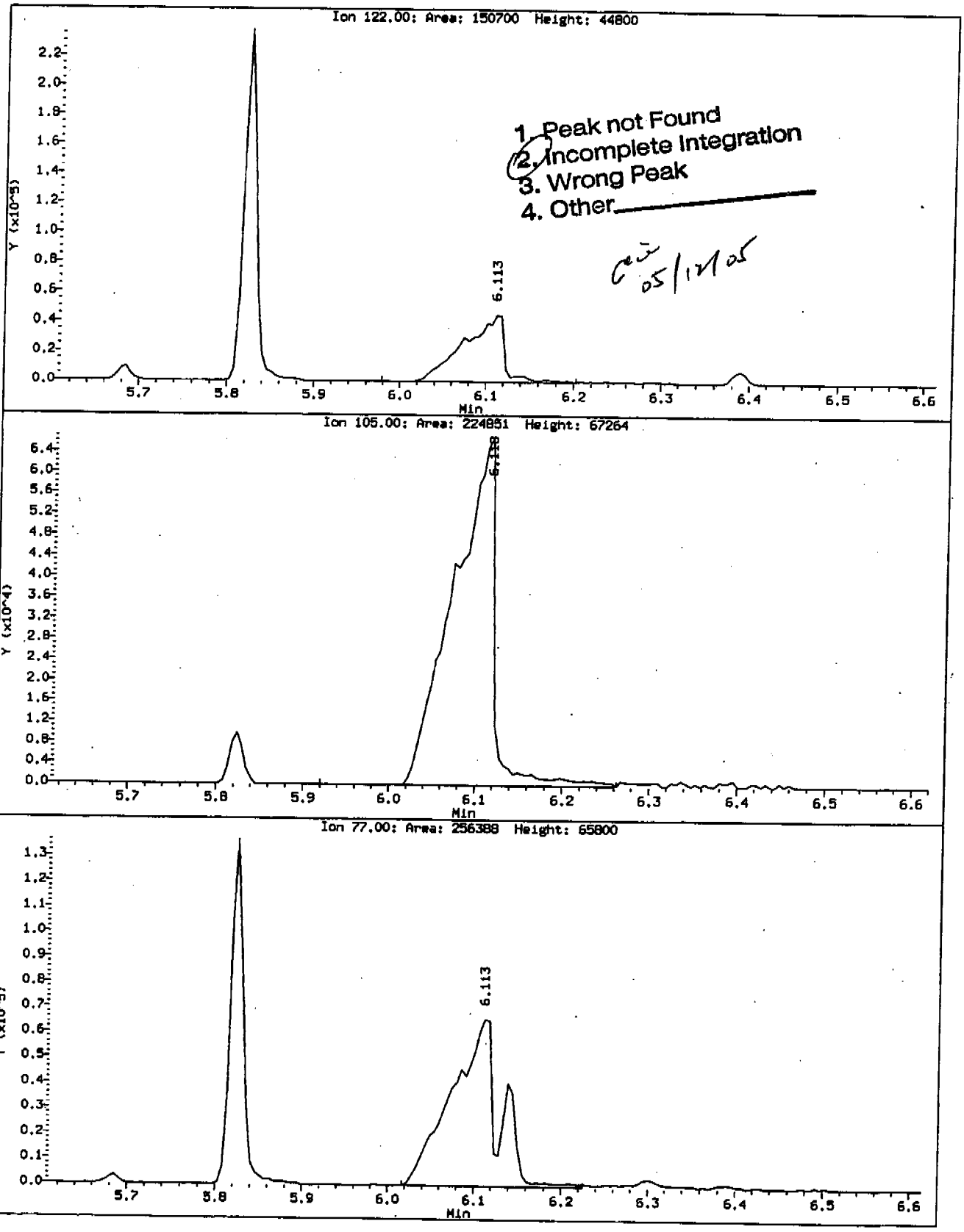
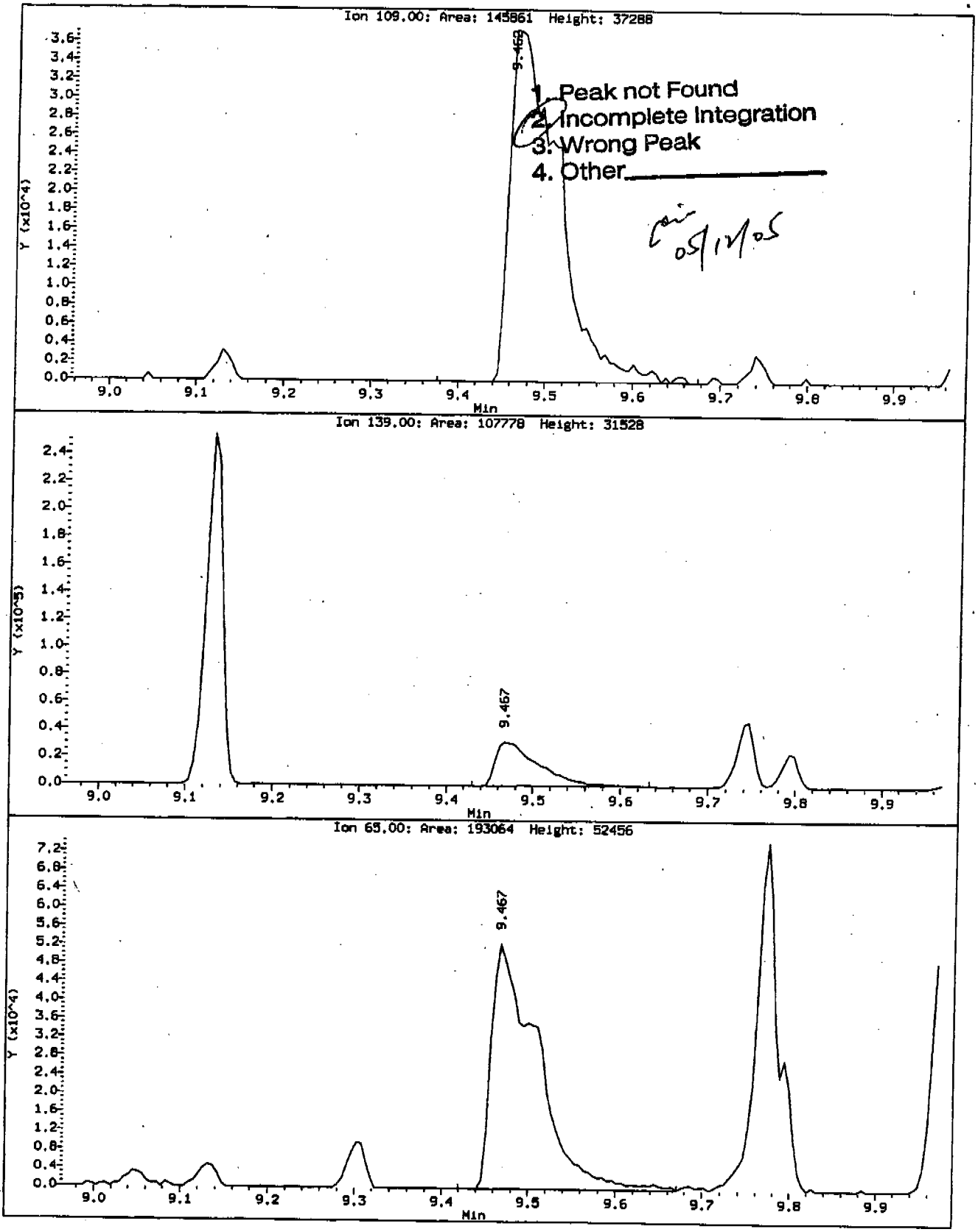
Injection Date: 12-MAY-2005 12:41
Instrument: MSK.i
Client Sample ID: SSTD050

Compound: Benzoic Acid
CAS Number: 65-85-0



Data File: \\Slavr01\BNA_LAB\MSK.i\K050512A.B\KCAL3094.D
Injection Date: 12-MAY-2005 12:41
Instrument: MSK.i
Client Sample ID: SSTD050

Compound: 4-Nitrophenol
CAS Number: 100-02-7



DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	38.17		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	46.07		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	45.94		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.23		PASS
275	10 - 30% of mass 198	28.64		PASS
365	Greater than 1% of mass 198	3.96		PASS
441	Present, but less than mass 443	13.47	(86.95)	PASS
442	Greater than 40% of mass 198	81.79		PASS
443	17 - 23% of mass 442	15.49	(18.94)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.8965885	5.000	PASS
Benzidine	0.8384548	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	394051			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	3048	0.8	15.0	PASS
4,4-DDD + DDE	3048	0.8	15.0	PASS

****
Tuning Sample, //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D,*** PASSED
****

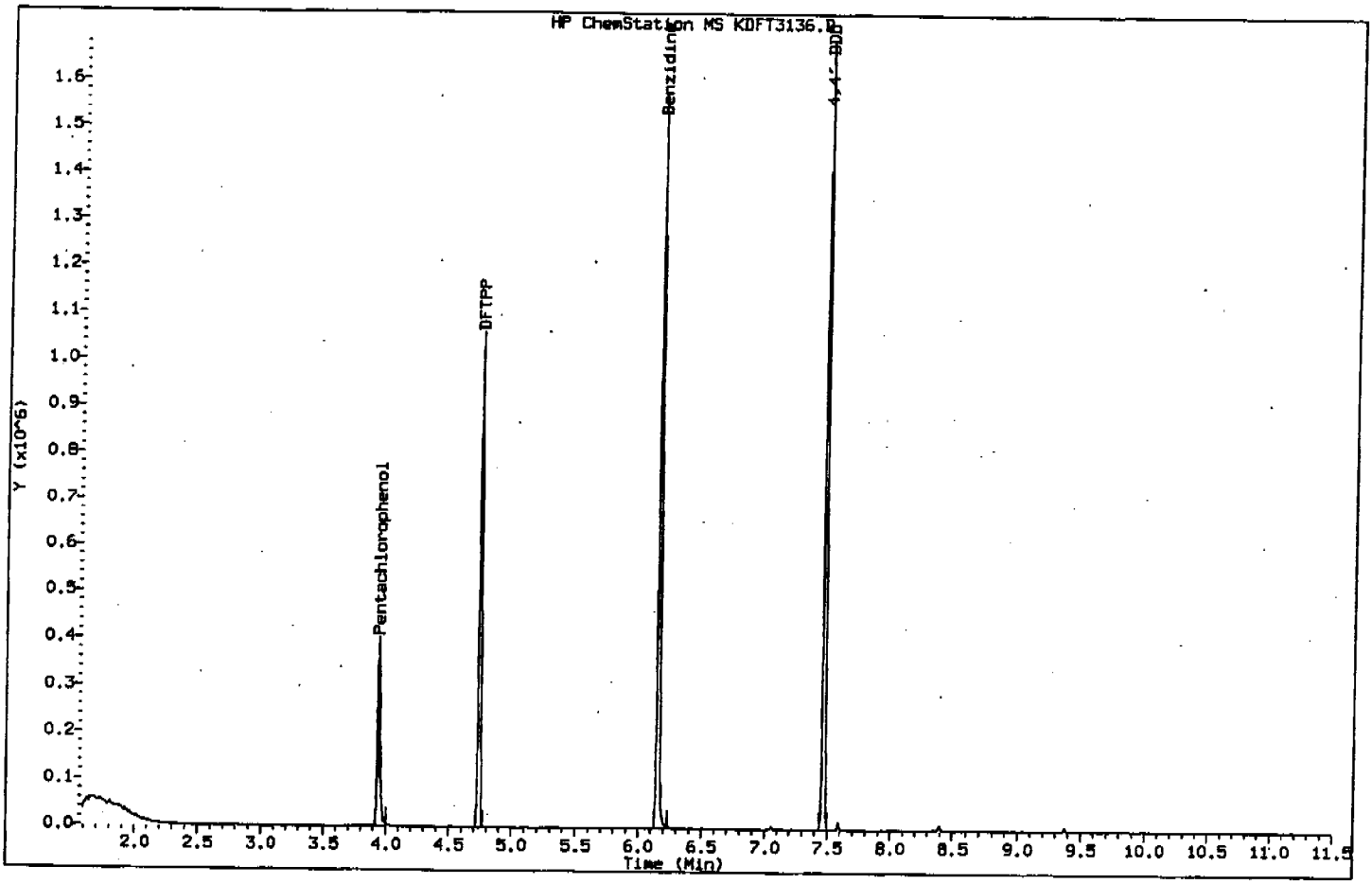
05/16/05

STL ST. LOUIS

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 05/16/2005 10:10

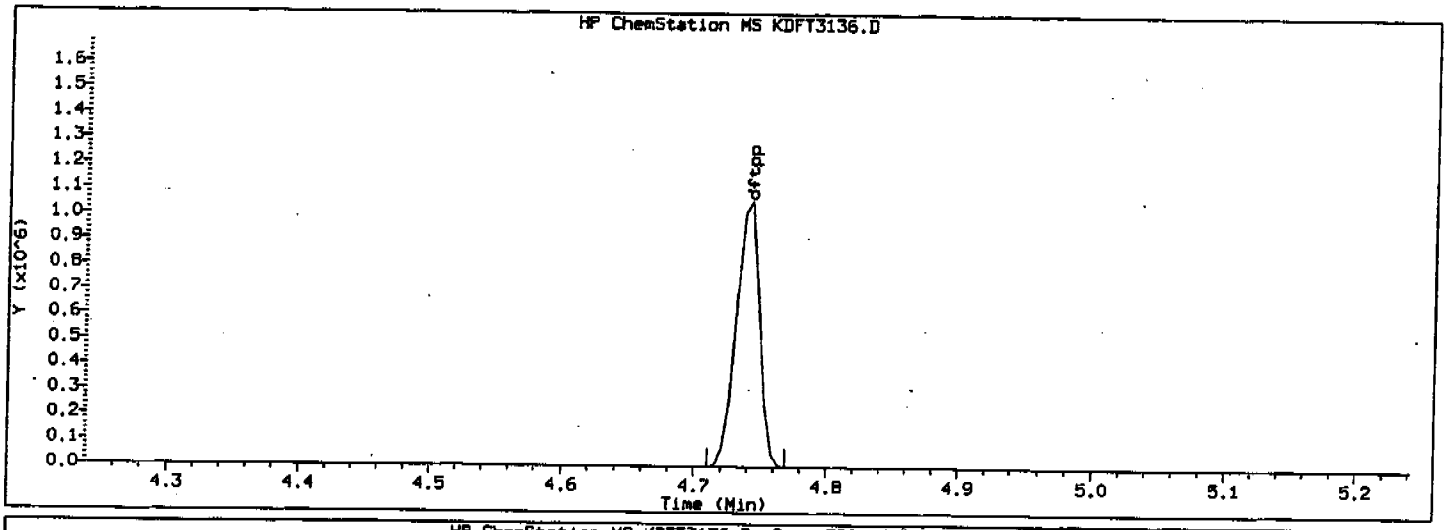
Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m Inst: MSK
Injection Date: 14-MAY-2005 08:36 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0232-05 (50NG)

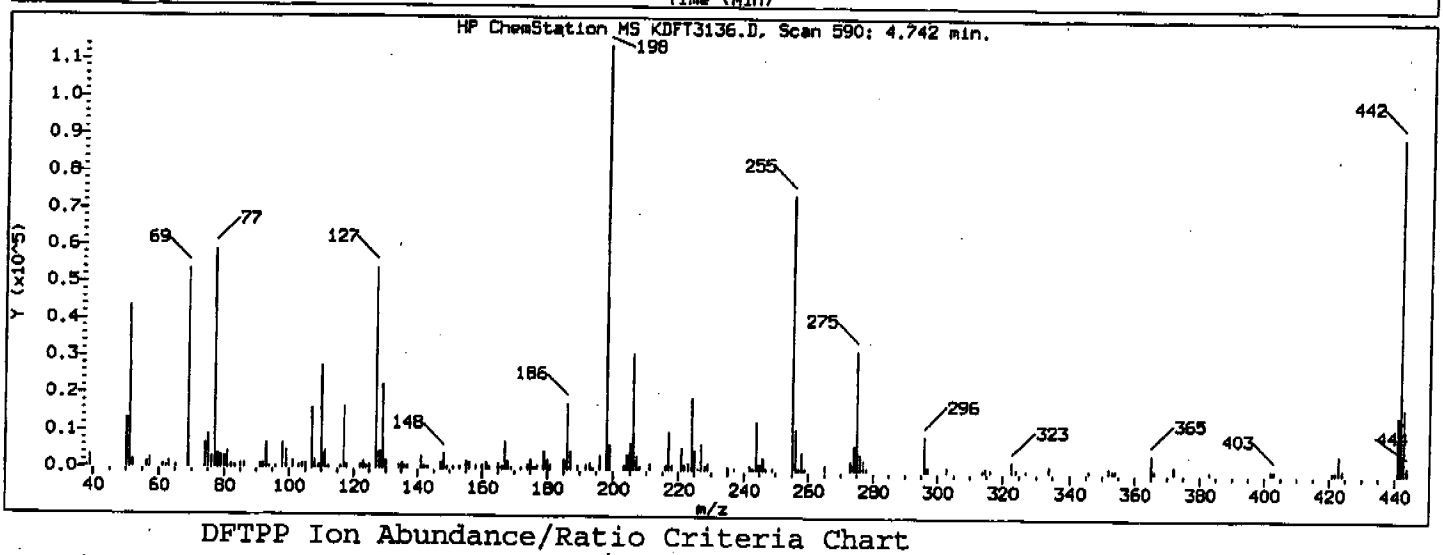


LOT# F5D220273

Report Date: 05/16/2005 10:10

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m Inst: MSK
Injection Date: 14-MAY-2005 08:36 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0232-05 (50NG)



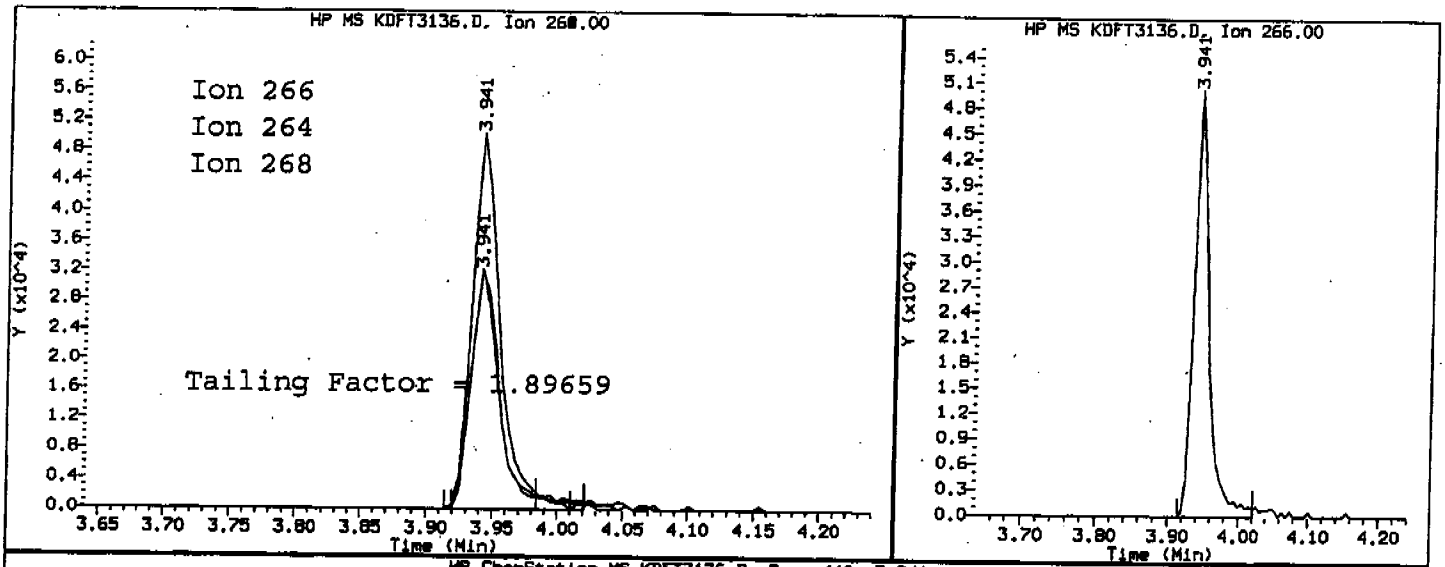


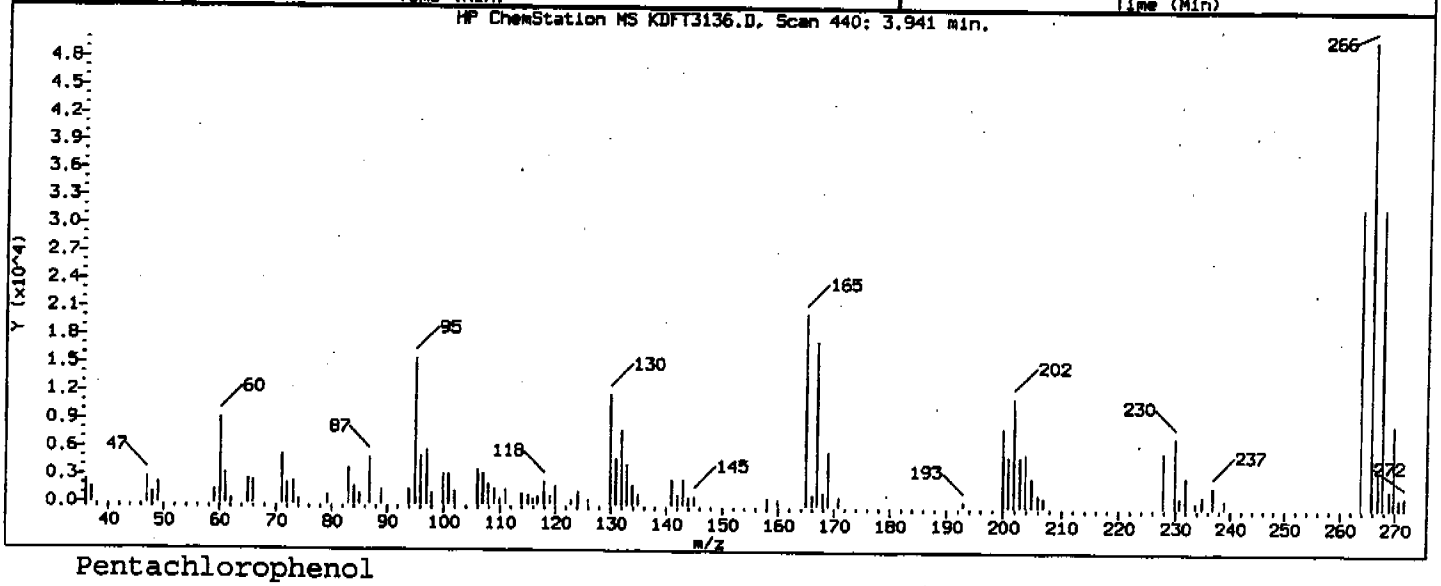
DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	38.17		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	46.07		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	45.94		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.23		PASS
275	10 - 30% of mass 198	28.64		PASS
365	Greater than 1% of mass 198	3.96		PASS
441	Present, but less than mass 443	13.47	(86.95)	PASS
442	Greater than 40% of mass 198	81.79		PASS
443	17 - 23% of mass 442	15.49	(18.94)	PASS

Report Date: 05/16/2005 10:10

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m\resolut.m Inst:
Injection Date: 14-MAY-2005 08:36 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)





Pentachlorophenol
==========
Exp. RT = 3.952
Found RT = 3.941

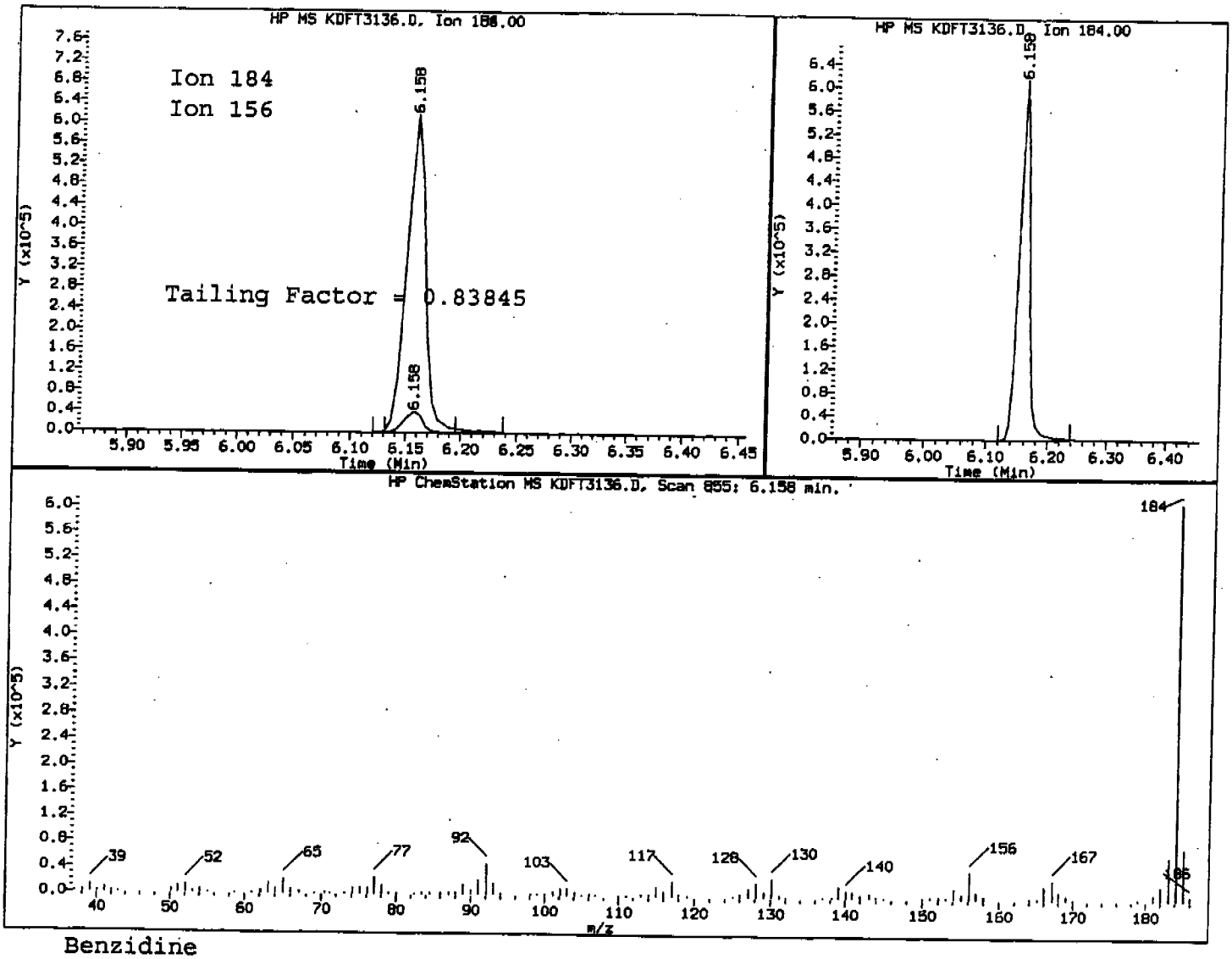
Mass	Area	Ratio
266	75398	100.00
264	47882	63.51
268	47165	62.56

Tailing factor for Pentachlorophenol OK

Tail Factor = 1.897 Maximum Allowed = 5.0

Report Date: 05/16/2005 10:10

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m\resolut.m Inst:
Injection Date: 14-MAY-2005 08:36 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



Benzidine
=========
Exp. RT = 6.169
Found RT = 6.158

Mass	Area	Ratio
184	742279	100.00
156	50775	6.84

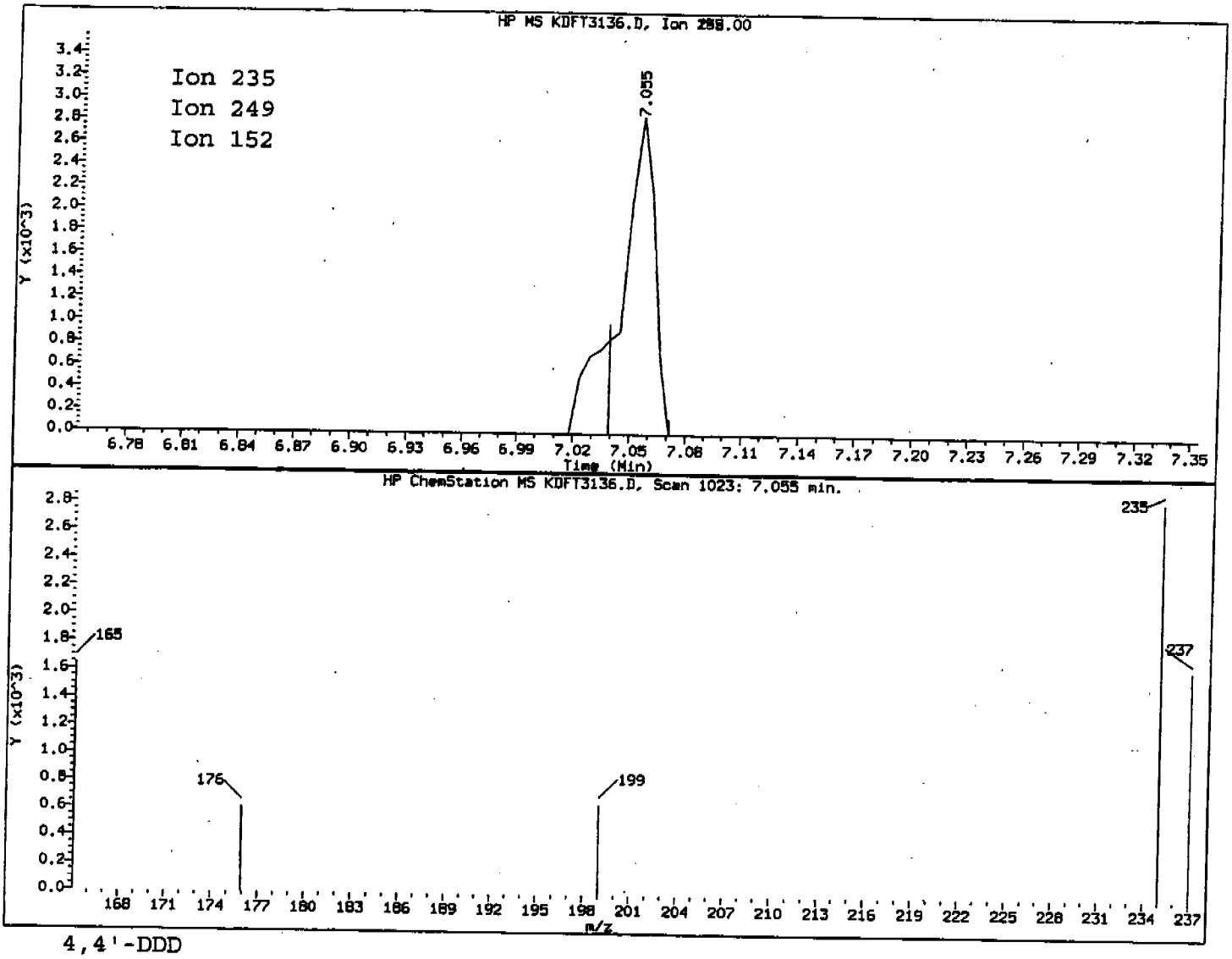
Tailing factor for Benzidine OK

Tail Factor = 0.838 Maximum Allowed = 3.0

STL ST. LOUIS

Report Date: 05/16/2005 10:10

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m\resolut.m Inst:
Injection Date: 14-MAY-2005 08:36 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



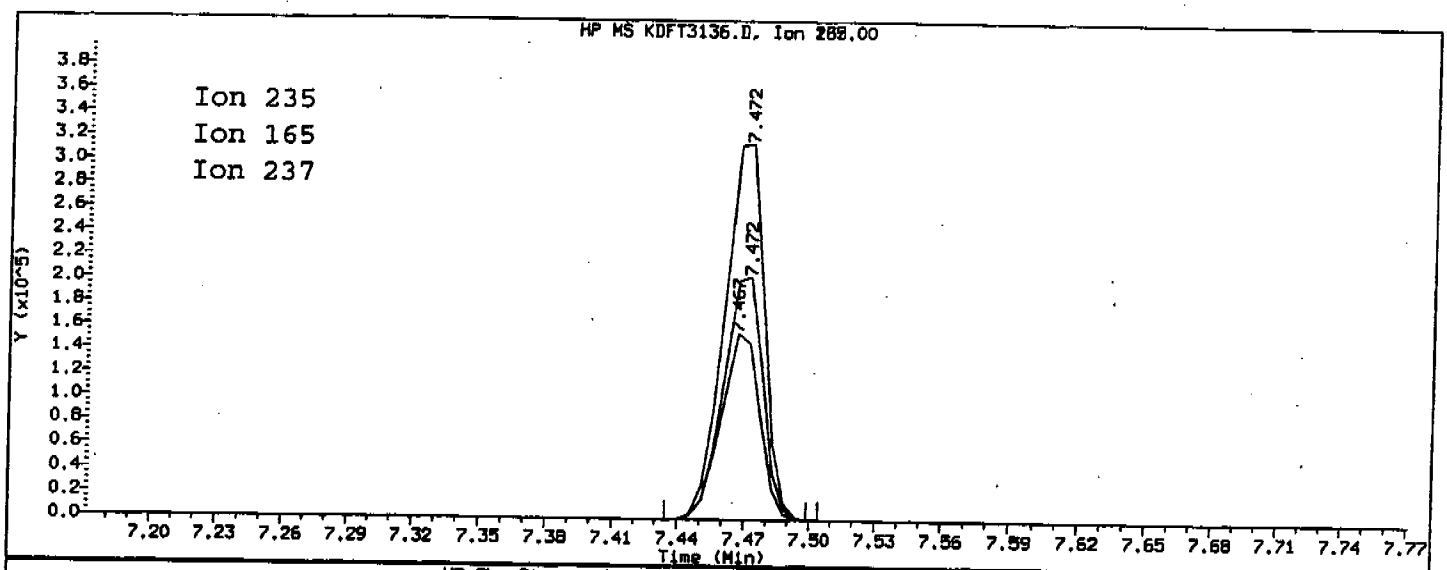
4,4'-DDD
========
Exp. RT = 7.074
Found RT = 7.055

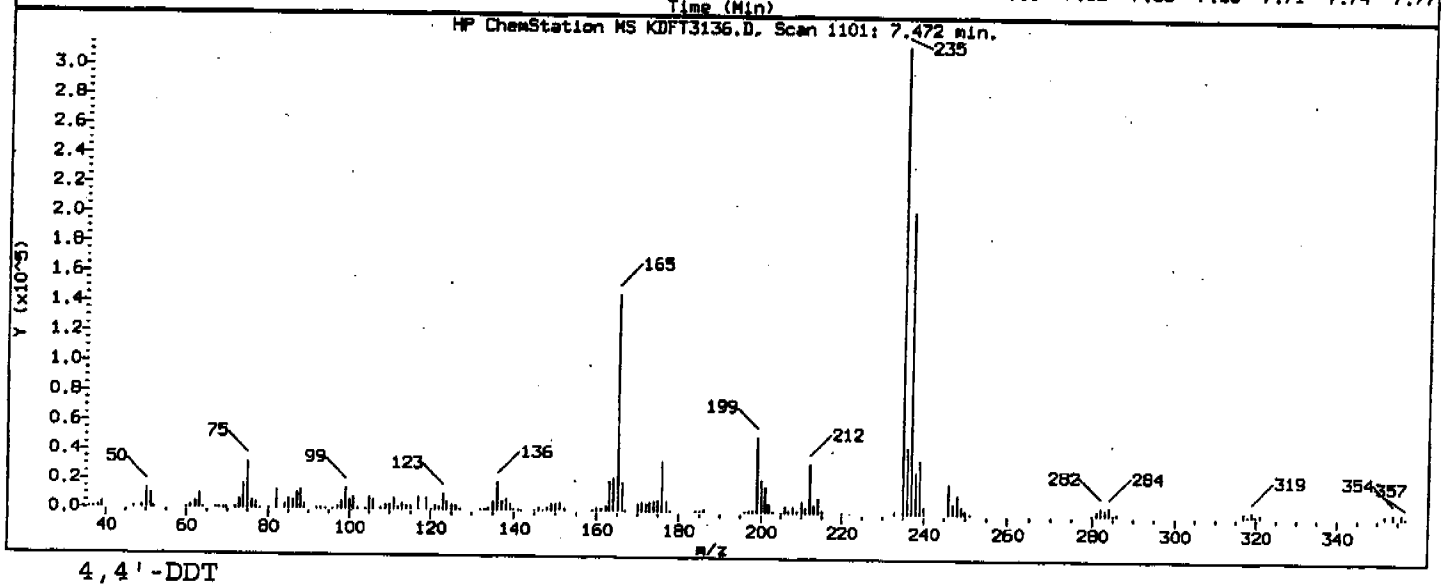
Mass	Area	Ratio
235	3048	100.00
249	6148	201.72
152	2277	74.71

LOT# F5D220273

Report Date: 05/16/2005 10:10

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m\resolut.m Inst:
Injection Date: 14-MAY-2005 08:36 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



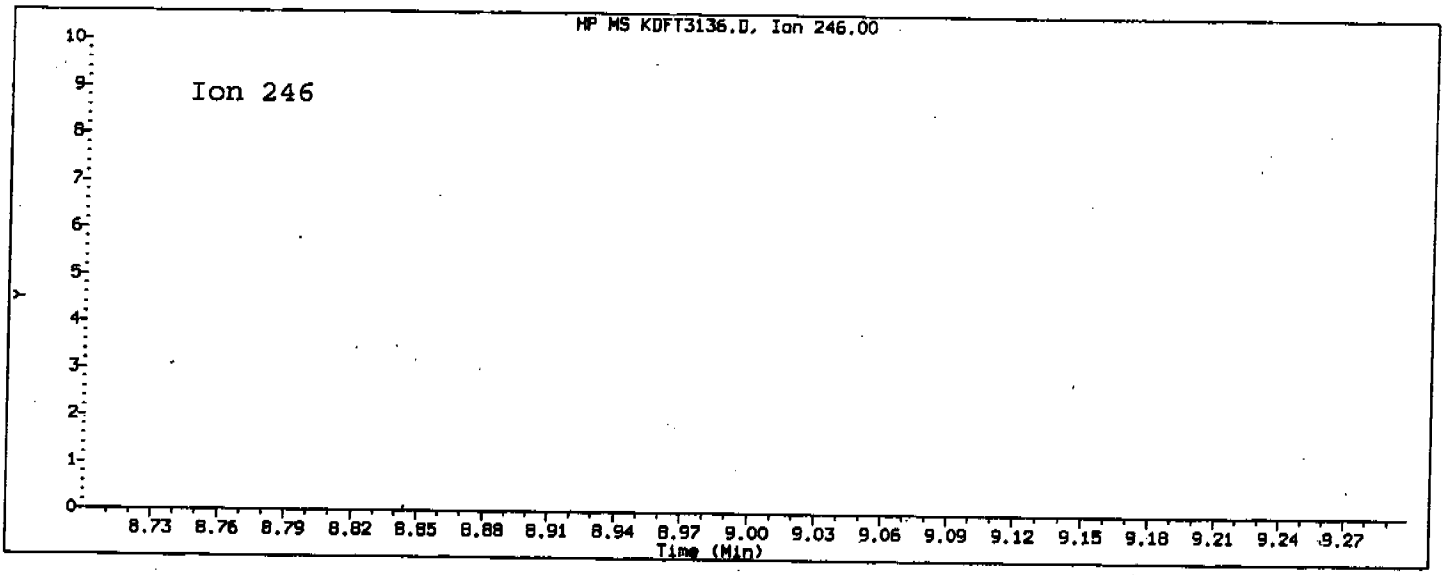


4,4'-DDT
========
Exp. RT = 7.478
Found RT = 7.472

Mass	Area	Ratio
235	394051	100.00
165	189423	48.07
237	252444	64.06

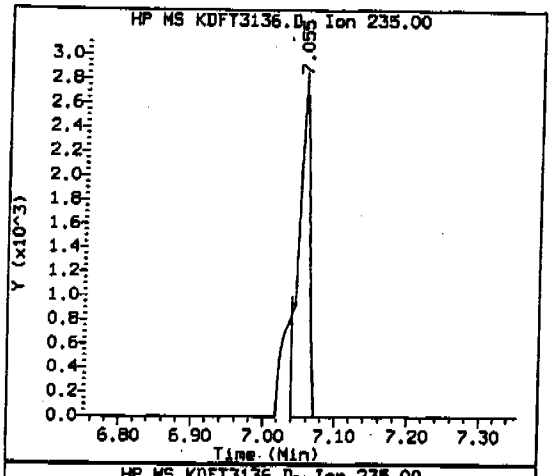
Report Date: 05/16/2005 10:10

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m\resolut.m Inst:
Injection Date: 14-MAY-2005 08:36 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)

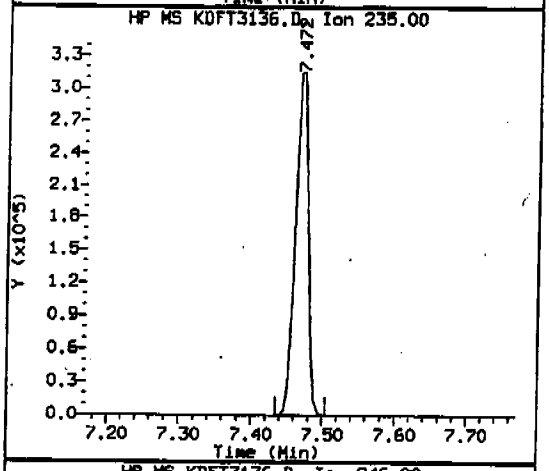


4,4'-DDE
========
Exp. RT = 9.000
Found RT = 0.000

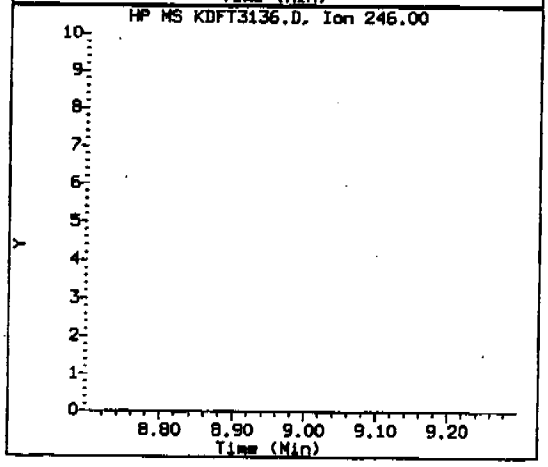
Mass	Area	Ratio
246	0	0.00



Compound: 4,4'-DDD
Quant Mass: 235
RT: 7.055
Area: 3048



Compound: 4,4'-DDT
Quant Mass: 235
RT: 7.472
Area: 394051



Compound: 4,4'-DDE
Quant Mass: 246
RT: 0.000
Area: 0

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	394051			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	3048	0.8	15.0	PASS
4,4-DDD + DDE	3048	0.8	15.0	PASS

****
TUNE SAMPLE *** PASSED *** DDT BREAKDOWN TEST
****

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3140.D
Report Date: 16-May-2005 10:12

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i
Lab File ID: KCAL3140.D
Analysis Type: WATER
Lab Sample ID: SSTD050
Method: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270K.m

Injection Date: 14-MAY-2005 10:32
Init. Cal. Date(s): 28-APR-2005 13-MAY-2005
Init. Cal. Times: 11:41 15:58
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	1 1,4-Dioxane	0.37014	0.47431	0.010	-28.14277	60.00000	Averaged
	4 N-Nitrosodimethylamine	0.63867	0.73464	0.010	-15.02669	60.00000	Averaged
	3 Pyridine	1.16029	1.33882	0.010	-15.38599	60.00000	Averaged
	5 Dimethylformamide	0.86294	1.01555	0.010	-17.68537	60.00000	Averaged
$	10 2-Fluorophenol	1.19646	1.24422	0.010	-3.99162	40.00000	Averaged
	11 Cyclohexanol	1.28189	1.53863	0.010	-20.02783	60.00000	Averaged
	17 Aniline	2.04739	2.21057	0.010	-7.97004	60.00000	Averaged
	19 Bis(2-chloroethyl)ether	1.40863	1.52719	0.010	-8.41652	60.00000	Averaged
$	15 Phenol-d5	1.56014	1.64849	0.010	-5.66295	40.00000	Averaged
	16 Phenol	1.66627	1.78165	0.010	-6.92449	20.00000	Averaged
	20 2-Chlorophenol	1.33233	1.31660	0.010	1.18068	60.00000	Averaged
	21 1,3-Dichlorobenzene	1.54444	1.52921	0.010	0.98633	60.00000	Averaged
	23 1,4-Dichlorobenzene	1.63455	1.61795	0.010	1.01565	20.00000	Averaged
	26 1,2-Dichlorobenzene	1.50782	1.47848	0.010	1.94589	60.00000	Averaged
	25 Benzyl Alcohol	0.62129	0.80156	0.010	-29.01588	60.00000	Averaged
	28 2,2-oxybis(1-Chloropropane)	1.47745	1.58282	0.010	-7.13209	60.00000	Averaged
	27 2-Methylphenol	1.08964	1.11733	0.010	-2.54142	60.00000	Averaged
	35 Hexachloroethane	0.70584	0.73022	0.010	-3.45494	60.00000	Averaged
	32 N-Nitrosodinpropylamine	1.13856	1.31600	0.050	-15.58463	60.00000	Averaged
	29 3 and 4-Methylphenol	1.21703	1.22237	0.010	-0.43806	60.00000	Averaged
$	36 Nitrobenzene-d5	0.53824	0.56739	0.010	-5.41596	40.00000	Averaged
	37 Nitrobenzene	0.55999	0.58826	0.010	-5.04911	60.00000	Averaged
	39 Isophorone	0.72789	0.78922	0.010	-8.42520	60.00000	Averaged
	40 2-Nitrophenol	0.20075	0.20186	0.010	-0.55513	20.00000	Averaged
	41 2,4-Dimethylphenol	0.41875	0.43649	0.010	-4.23482	60.00000	Averaged
	42 Bis(2-chloroethoxy)methane	0.46523	0.48858	0.010	-5.01868	60.00000	Averaged
	45 2,4-Dichlorophenol	0.31257	0.30419	0.010	2.68170	20.00000	Averaged
	47 1,2,4-Trichlorobenzene	0.38873	0.37407	0.010	3.77007	60.00000	Averaged
	44 Benzoic Acid	0.18452	0.19918	0.010	-7.94669	60.00000	Averaged
	50 Naphthalene	1.11608	1.07804	0.010	3.40884	60.00000	Averaged
	51 4-Chloroaniline	0.44972	0.45799	0.010	-1.84043	60.00000	Averaged
	54 Hexachlorobutadiene	0.28112	0.26416	0.050	6.03144	20.00000	Averaged
	62 2-Methylnaphthalene	0.97836	0.84959	0.010	13.16139	60.00000	Averaged
	59 4-Chloro-3-Methylphenol	0.35947	0.38212	0.010	-6.30204	20.00000	Averaged
	66 Hexachlorocyclopentadiene	0.42077	0.41471	0.010	1.44008	60.00000	Averaged
	67 2,4,6-Trichlorophenol	0.46738	0.47120	0.010	-0.81753	20.00000	Averaged
	68 2,4,5-Trichlorophenol	0.48773	0.48870	0.010	-0.19767	60.00000	Averaged
$	69 2-Fluorobiphenyl	1.61676	1.55226	0.010	3.98913	40.00000	Averaged
	72 2-Chloronaphthalene	1.34443	1.31353	0.010	2.29839	60.00000	Averaged
	73 2-Nitroaniline	0.54166	0.60928	0.010	-12.48356	60.00000	Averaged
	76 Dimethylphthalate	1.52720	1.55552	0.010	-1.85413	60.00000	Averaged
	79 Acenaphthylene	2.01986	1.95778	0.010	3.07368	60.00000	Averaged

ma 05/16/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3140.D
Report Date: 16-May-2005 10:12

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i
Lab File ID: KCAL3140.D
Analysis Type: WATER
Lab Sample ID: SSTD050
Method: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270K.m

Injection Date: 14-MAY-2005 10:32
Init. Cal. Date(s): 28-APR-2005 13-MAY-2005
Init. Cal. Times: 11:41 15:58
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
80	2,6-Dinitrotoluene	0.32003	0.33349	0.010	-4.20518	60.00000	Averaged
83	Acenaphthene	1.23225	1.23335	0.010	-0.08867	20.00000	Averaged
81	3-Nitroaniline	0.31774	0.33393	0.010	-5.09633	60.00000	Averaged
84	2,4-Dinitrophenol	0.14071	0.16007	0.050	-13.75750	60.00000	Averaged
86	Dibenzofuran	1.84955	1.83643	0.010	0.70932	60.00000	Averaged
88	2,4-Dinitrotoluene	0.40331	0.44284	0.010	-9.80059	60.00000	Averaged
85	4-Nitrophenol	0.28633	0.27592	0.050	3.63545	60.00000	Averaged
93	Diethylphthalate	1.52853	1.55402	0.010	-1.66707	60.00000	Averaged
94	Fluorene	1.48498	1.49290	0.010	-0.53283	60.00000	Averaged
95	4-Chlorophenyl-phenylether	0.83775	0.81637	0.010	2.55186	60.00000	Averaged
98	4-Nitroaniline	0.29218	0.33125	0.010	-13.37153	60.00000	Averaged
99	4,6-Dinitro-2-methylphenol	0.14652	0.16667	0.010	-13.74595	60.00000	Averaged
100	N-Nitrosodiphenylamine	0.60943	0.59872	0.010	1.75835	20.00000	Averaged
102	Azobenzene	1.32489	1.35536	0.010	-2.29993	60.00000	Averaged
$ 104	2,4,6-Tribromophenol	0.23322	0.24194	0.010	-3.73616	40.00000	Averaged
109	4-Bromophenyl-phenylether	0.29091	0.28470	0.010	2.13457	60.00000	Averaged
112	Hexachlorobenzene	0.30387	0.28754	0.010	5.37376	60.00000	Averaged
117	Pentachlorophenol	0.13627	0.13223	0.010	2.96502	20.00000	Averaged
122	Phenanthrene	1.22846	1.22335	0.010	0.41550	60.00000	Averaged
124	Anthracene	1.18214	1.17646	0.010	0.48060	60.00000	Averaged
126	Carbazole	0.97957	1.00437	0.010	-2.53150	60.00000	Averaged
129	Di-n-Butylphthalate	1.29964	1.34633	0.010	-3.59193	60.00000	Averaged
134	Fluoranthene	1.26119	1.28805	0.010	-2.12950	20.00000	Averaged
135	Benzidine	0.55071	0.59000	0.010	-7.13418	100	Averaged
137	Pyrene	1.63816	1.56273	0.010	4.60445	60.00000	Averaged
$ 139	Terphenyl-d14	1.28656	1.22493	0.010	4.79027	40.00000	Averaged
145	3,3-Dimethylbenzidine	0.62358	0.66493	0.010	-6.63162	60.00000	Averaged
146	Butylbenzylphthalate	0.64258	0.64648	0.010	-0.60838	60.00000	Averaged
150	Benzo(a)Anthracene	1.38086	1.37996	0.010	0.06530	60.00000	Averaged
152	3,3'-Dichlorobenzidine	0.52188	0.53793	0.010	-3.07502	60.00000	Averaged
154	Chrysene	1.30690	1.27995	0.010	2.06226	60.00000	Averaged
155	bis(2-ethylhexyl)Phthalate	0.79653	0.80701	0.010	-1.31563	60.00000	Averaged
158	Di-n-octylphthalate	1.65005	1.66989	0.010	-1.20280	20.00000	Averaged
160	Benzo(b)fluoranthene	1.58452	1.56005	0.010	1.54427	60.00000	Averaged
161	Benzo(k)fluoranthene	1.55910	1.51423	0.010	2.87785	60.00000	Averaged
165	Benzo(a)pyrene	1.40867	1.40488	0.010	0.26883	20.00000	Averaged
173	Indeno(1,2,3-cd)pyrene	1.32604	1.34270	0.010	-1.25616	60.00000	Averaged
174	Dibenzo(a,h)anthracene	1.28029	1.37615	0.010	-7.48734	60.00000	Averaged
177	Benzo(g,h,i)perylene	1.16434	1.23130	0.010	-5.75079	60.00000	Averaged

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B/KCAL3140.D
Report Date: 05/16/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3140.D
Analysis Type: WATER

Injection Date: 14-MAY-2005 10:32
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270

COMPOUND	%D
1,4-Dioxane	28.1
Pyridine	15.4
N-Nitrosodimethylamine	15.0
Dimethylformamide	17.7
2-Fluorophenol	4.0
Cyclohexanol	20.0
Aniline	8.0
Bis(2-chloroethyl)ether	8.4
Phenol-d5	5.7
Phenol	6.9
2-Chlorophenol	1.2
1,3-Dichlorobenzene	1.0
1,4-Dichlorobenzene	1.0
1,2-Dichlorobenzene	1.9
Benzyl Alcohol	29.0
2,2-oxybis(1-Chloropropane)	7.1
2-Methylphenol	2.5
Hexachloroethane	3.5
N-Nitrosodinpropylamine	15.6
3 and 4-Methylphenol	0.4
Nitrobenzene-d5	5.4
Nitrobenzene	5.0
Isophorone	8.4
2-Nitrophenol	0.6
2,4-Dimethylphenol	4.2
Bis(2-chloroethoxy)methane	5.0
2,4-Dichlorophenol	2.7
1,2,4-Trichlorobenzene	3.8
Benzoic Acid	7.9
Naphthalene	3.4
4-Chloroaniline	1.8
Hexachlorobutadiene	6.0
4-Chloro-3-Methylphenol	6.3
2-Methylnaphthalene	13.2
Hexachlorocyclopentadiene	1.4
2,4,6-Trichlorophenol	0.8
2-Fluorobiphenyl	4.0
2,4,5-Trichlorophenol	0.2
2-Chloronaphthalene	2.3

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B/KCAL3140.D
Report Date: 05/16/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3140.D
Analysis Type: WATER

Injection Date: 14-MAY-2005 10:32
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050514A

COMPOUND	%D
2-Nitroaniline	12.5
Dimethylphthalate	1.9
Acenaphthylene	3.1
2,6-Dinitrotoluene	4.2
Acenaphthene	0.1
3-Nitroaniline	5.1
2,4-Dinitrophenol	13.8
Dibenzofuran	0.7
2,4-Dinitrotoluene	9.8
4-Nitrophenol	3.6
Fluorene	0.5
Diethylphthalate	1.7
4-Chlorophenyl-phenylether	2.6
4-Nitroaniline	13.4
4,6-Dinitro-2-methylphenol	13.7
N-Nitrosodiphenylamine	1.8
Azobenzene	2.3
2,4,6-Tribromophenol	3.7
4-Bromophenyl-phenylether	2.1
Hexachlorobenzene	5.4
Pentachlorophenol	3.0
Phenanthrene	0.4
Anthracene	0.5
Carbazole	2.5
Di-n-Butylphthalate	3.6
Fluoranthene	2.1
Benzidine	7.1
Pyrene	4.6
Terphenyl-d14	4.8
3,3-Dimethylbenzidine	6.6
Butylbenzylphthalate	0.6
Benzo(a)Anthracene	0.1
Chrysene	2.1
3,3'-Dichlorobenzidine	3.1
bis(2-ethylhexyl)Phthalate	1.3
Di-n-octylphthalate	1.2
Benzo(b)fluoranthene	1.5
Benzo(k)fluoranthene	2.9
Benzo(a)pyrene	0.3

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B/KCAL3140.D
Report Date: 05/16/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3140.D
Analysis Type: WATER

Injection Date: 14-MAY-2005 10:32
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050514A

COMPOUND	%D
Indeno(1,2,3-cd)pyrene	1.3
Dibenzo(a,h)anthracene	7.5
Benzo(g,h,i)perylene	5.8
Dibenz(e,a) Pyrene	100.0

The average of %D's in the continuing calibration is 6.6

05/16/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3140.D
Report Date: 16-May-2005 10:12

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3140.D
Lab Smp Id: SSTD050 Client Smp ID: SSTD050
Inj Date : 14-MAY-2005 10:32
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD050
Misc Info : SV0220-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270K.m
Meth Date : 16-May-2005 10:11 hongs Quant Type: ISTD
Cal Date : 13-MAY-2005 15:58 Cal File: KCAL3134.D
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	1.227	1.227	(0.272)	104076	50.0000	64.07
4	N-Nitrosodimethylamine	74	1.654	1.654	(0.367)	161200	50.0000	57.51
3	Pyridine	79	1.627	1.627	(0.361)	293773	50.0000	57.69
5	Dimethylformamide	44	2.130	2.130	(0.473)	222840	50.0000	58.84(M)
$ 10	2-Fluorophenol	112	3.203	3.203	(0.711)	273016	50.0000	52.00
11	Cyclohexanol	57	3.214	3.214	(0.713)	337617	50.0000	60.01
17	Aniline	93	4.202	4.202	(0.932)	485060	50.0000	53.98
19	Bis(2-chloroethyl)ether	93	4.282	4.282	(0.950)	335108	50.0000	54.21
$ 15	Phenol-d5	99	4.282	4.282	(0.950)	361724	50.0000	52.83
16	Phenol	94	4.298	4.298	(0.954)	390944	50.0000	53.46
20	2-Chlorophenol	128	4.347	4.347	(0.964)	288898	50.0000	49.41
21	1,3-Dichlorobenzene	146	4.464	4.464	(0.991)	335550	50.0000	49.51
* 22	1,4-Dichlorobenzene-d4	152	4.507	4.507	(1.000)	175542	40.0000	
23	1,4-Dichlorobenzene	146	4.528	4.528	(1.005)	355022	50.0000	49.49
26	1,2-Dichlorobenzene	146	4.747	4.747	(1.053)	324419	50.0000	49.03
25	Benzyl Alcohol	108	4.763	4.763	(1.057)	175885	50.0000	64.51
28	2,2-oxybis(1-Chloropropane)	45	4.918	4.918	(1.091)	347315	50.0000	53.57
27	2-Methylphenol	108	4.977	4.977	(1.104)	245173	50.0000	51.27
35	Hexachloroethane	117	5.105	5.105	(1.133)	160231	50.0000	51.73
32	N-Nitrosodinpropylamine	70	5.110	5.110	(1.134)	288766	50.0000	57.79
29	3 and 4-Methylphenol	108	5.164	5.164	(1.146)	536441	100.000	100.4

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Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3140.D Page 2
Report Date: 16-May-2005 10:12

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.239	5.239	(0.860)	435869	50.0000	52.71
	37 Nitrobenzene	77	5.260	5.260	(0.864)	451903	50.0000	52.52
	39 Isophorone	82	5.549	5.549	(0.911)	606280	50.0000	54.21
	40 2-Nitrophenol	139	5.655	5.655	(0.929)	155072	50.0000	50.28
	41 2,4-Dimethylphenol	107	5.789	5.789	(0.951)	335309	50.0000	52.12
	42 Bis(2-chloroethoxy)methane	93	5.864	5.864	(0.963)	375328	50.0000	52.51
	45 2,4-Dichlorophenol	162	6.003	6.003	(0.986)	233678	50.0000	48.66
	47 1,2,4-Trichlorobenzene	180	6.045	6.045	(0.993)	287363	50.0000	48.11
*	48 Naphthalene-d8	136	6.088	6.088	(1.000)	614562	40.0000	
	44 Benzoic Acid	122	6.077	6.077	(0.998)	153009	50.0000	53.97(M)
	50 Naphthalene	128	6.115	6.115	(1.004)	828151	50.0000	48.30
	51 4-Chloroaniline	127	6.270	6.270	(1.030)	351831	50.0000	50.92
	54 Hexachlorobutadiene	225	6.361	6.361	(1.045)	202932	50.0000	46.98
	62 2-Methylnaphthalene	142	7.071	7.071	(1.161)	652660	50.0000	43.42
	59 4-Chloro-3-Methylphenol	107	7.039	7.039	(1.156)	293546	50.0000	53.15
	66 Hexachlorocyclopentadiene	237	7.413	7.413	(0.847)	177416	50.0000	49.28
	67 2,4,6-Trichlorophenol	196	7.600	7.600	(0.868)	201580	50.0000	50.41
	68 2,4,5-Trichlorophenol	196	7.707	7.707	(0.880)	209066	50.0000	50.10
$	69 2-Fluorobiphenyl	172	7.691	7.691	(0.879)	664064	50.0000	48.00
	72 2-Chloronaphthalene	162	7.808	7.808	(0.892)	561932	50.0000	48.85
	73 2-Nitroaniline	65	8.107	8.107	(0.926)	260654	50.0000	56.24
	76 Dimethylphthalate	163	8.476	8.476	(0.968)	665456	50.0000	50.93
	79 Acenaphthylene	152	8.492	8.492	(0.970)	837544	50.0000	48.46
	80 2,6-Dinitrotoluene	165	8.588	8.588	(0.981)	142669	50.0000	52.10
*	82 Acenaphthene-d10	164	8.754	8.754	(1.000)	342243	40.0000	
	83 Acenaphthene	153	8.813	8.813	(1.007)	527630	50.0000	50.04
	81 3-Nitroaniline	138	8.823	8.823	(1.008)	142856	50.0000	52.55
	84 2,4-Dinitrophenol	184	9.005	9.005	(1.029)	68479	50.0000	56.88
	86 Dibenzofuran	168	9.090	9.090	(1.038)	785631	50.0000	49.64
	88 2,4-Dinitrotoluene	165	9.261	9.261	(1.058)	189447	50.0000	54.90
	85 4-Nitrophenol	109	9.363	9.363	(1.070)	118040	50.0000	48.18
	93 Diethylphthalate	149	9.731	9.731	(1.112)	664814	50.0000	50.83
	94 Fluorene	166	9.699	9.699	(1.108)	638667	50.0000	50.27
	95 4-Chlorophenyl-phenylether	204	9.753	9.753	(1.114)	349246	50.0000	48.72
	98 4-Nitroaniline	138	9.940	9.940	(1.135)	141708	50.0000	56.68
	99 4,6-Dinitro-2-methylphenol	198	9.993	9.993	(0.876)	128064	50.0000	56.87
	100 N-Nitrosodiphenylamine	169	10.020	10.020	(0.878)	460045	50.0000	49.12
	102 Azobenzene	77	10.031	10.031	(0.879)	1041438	50.0000	51.15
$	104 2,4,6-Tribromophenol	330	10.202	10.202	(1.165)	103502	50.0000	51.87
	109 4-Bromophenyl-phenylether	248	10.629	10.629	(0.932)	218758	50.0000	48.93
	112 Hexachlorobenzene	284	10.859	10.859	(0.952)	220942	50.0000	47.31
	117 Pentachlorophenol	266	11.270	11.270	(0.988)	101605	50.0000	48.52
*	121 Phenanthrene-d10	188	11.409	11.409	(1.000)	614709	40.0000	
	122 Phenanthrene	178	11.452	11.452	(1.004)	940009	50.0000	49.79
	124 Anthracene	178	11.537	11.537	(1.011)	903978	50.0000	49.76
	126 Carbazole	167	11.938	11.938	(1.046)	771746	50.0000	51.26
	129 Di-n-Butylphthalate	149	12.830	12.830	(1.125)	1034499	50.0000	51.80
	134 Fluoranthene	202	13.743	13.743	(1.205)	989720	50.0000	51.06
	135 Benzidine	184	14.139	14.139	(0.854)	379988	50.0000	53.57
	137 Pyrene	202	14.155	14.155	(0.855)	1006481	50.0000	47.70
$	139 Terphenyl-d14	244	14.603	14.603	(0.882)	788917	50.0000	47.60
	145 3,3-Dimethylbenzidine	212	15.602	15.602	(0.942)	428250	50.0000	53.32
	146 Butylbenzylphthalate	149	15.731	15.731	(0.950)	416370	50.0000	50.30
	150 Benzo(a)Anthracene	228	16.532	16.532	(0.998)	888768	50.0000	49.97

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3140.D Page 3
Report Date: 16-May-2005 10:12

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.564	16.564	(1.000)	515242	40.0000	
152 3,3'-Dichlorobenzidine	252	16.633	16.633	(1.004)	346455	50.0000	51.54
154 Chrysene	228	16.617	16.617	(1.003)	824356	50.0000	48.97
155 bis(2-ethylhexyl)Phthalate	149	16.954	16.954	(1.024)	519755	50.0000	50.66
158 Di-n-octylphthalate	149	18.097	18.097	(0.944)	895717	50.0000	50.60
160 Benzo(b)fluoranthene	252	18.535	18.535	(0.967)	836796	50.0000	49.23
161 Benzo(k)fluoranthene	252	18.578	18.578	(0.969)	812222	50.0000	48.56
165 Benzo(a)pyrene	252	19.069	19.069	(0.995)	753565	50.0000	49.86
* 166 Perylene-d12	264	19.171	19.171	(1.000)	429113	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.870	20.870	(1.089)	720210	50.0000	50.63
174 Dibenzo(a,h)anthracene	278	20.913	20.913	(1.091)	738156	50.0000	53.74
177 Benzo(g,h,i)perylene	276	21.313	21.313	(1.112)	660459	50.0000	52.88

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3140.D Page 4
Report Date: 16-May-2005 10:12

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

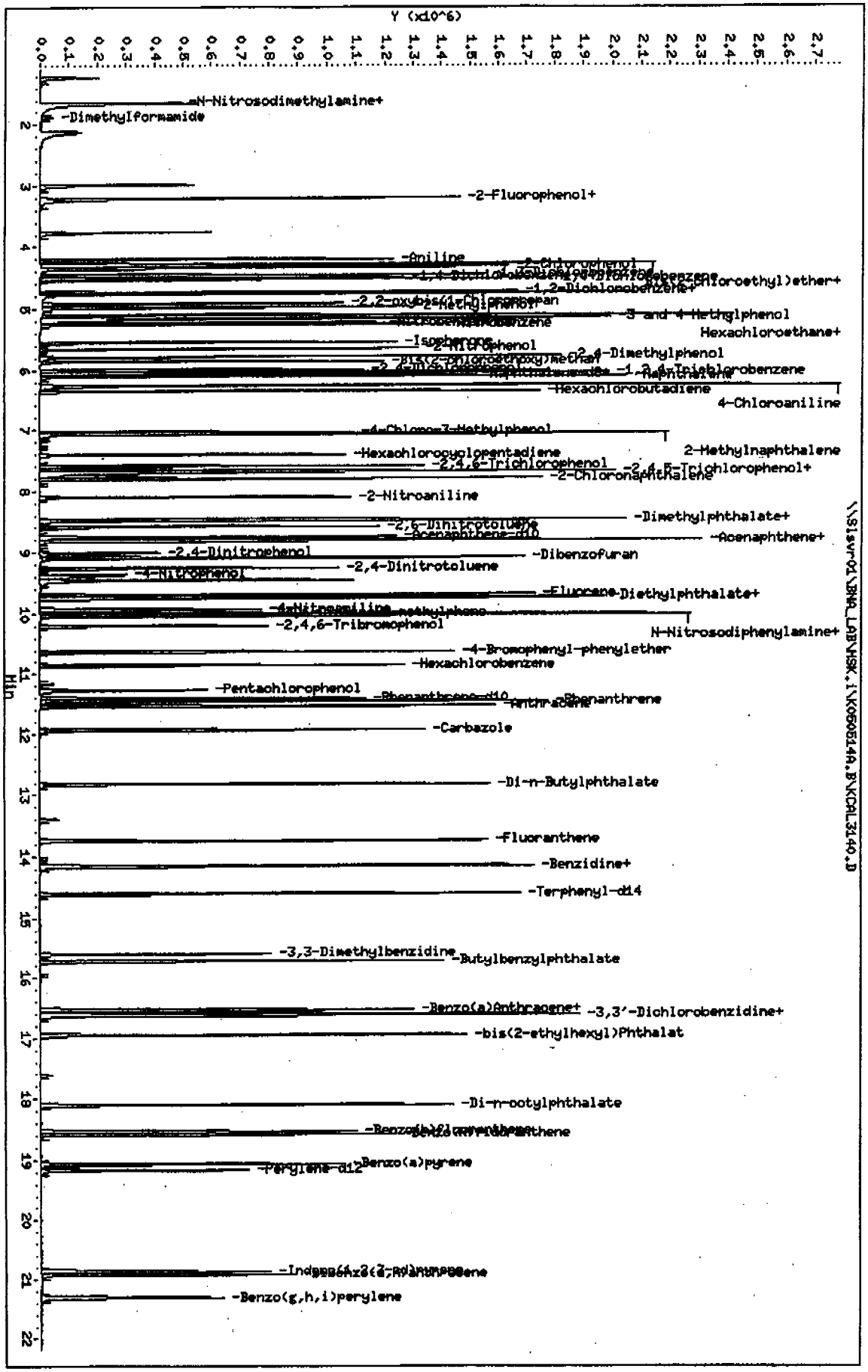
Instrument ID: MSK.i
Lab File ID: KCAL3140.D
Lab Smp Id: SSTD050
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270K.m
Misc Info: SV0220-05

Calibration Date: 13-MAY-2005
Calibration Time: 12:14
Client Smp ID: SSTD050
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	181066	90533	362132	175542	-3.05
48 Naphthalene-d8	627500	313750	1255000	614562	-2.06
82 Acenaphthene-d10	358476	179238	716952	342243	-4.53
121 Phenanthrene-d10	655247	327624	1310494	614709	-6.19
153 Chrysene-d12	535207	267604	1070414	515242	-3.73
166 Perylene-d12	427031	213516	854062	429113	0.49

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.52	4.02	5.02	4.51	-0.37
48 Naphthalene-d8	6.11	5.61	6.61	6.09	-0.28
82 Acenaphthene-d10	8.78	8.28	9.28	8.75	-0.25
121 Phenanthrene-d10	11.43	10.93	11.93	11.41	-0.19
153 Chrysene-d12	16.59	16.09	17.09	16.56	-0.17
166 Perylene-d12	19.20	18.70	19.70	19.17	-0.14

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

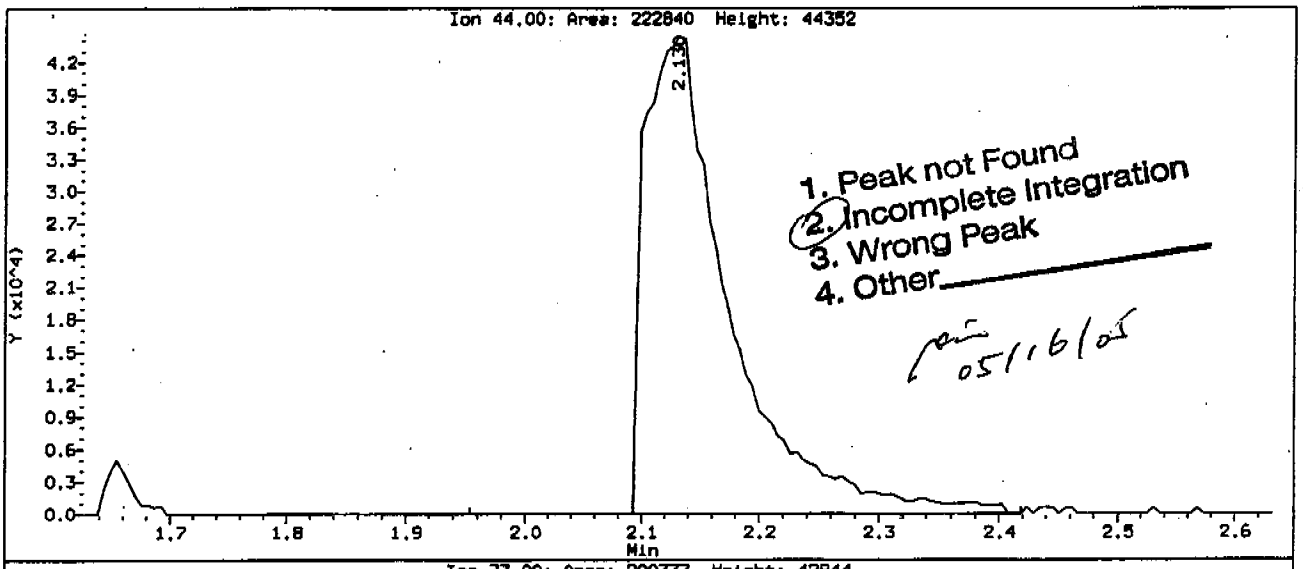


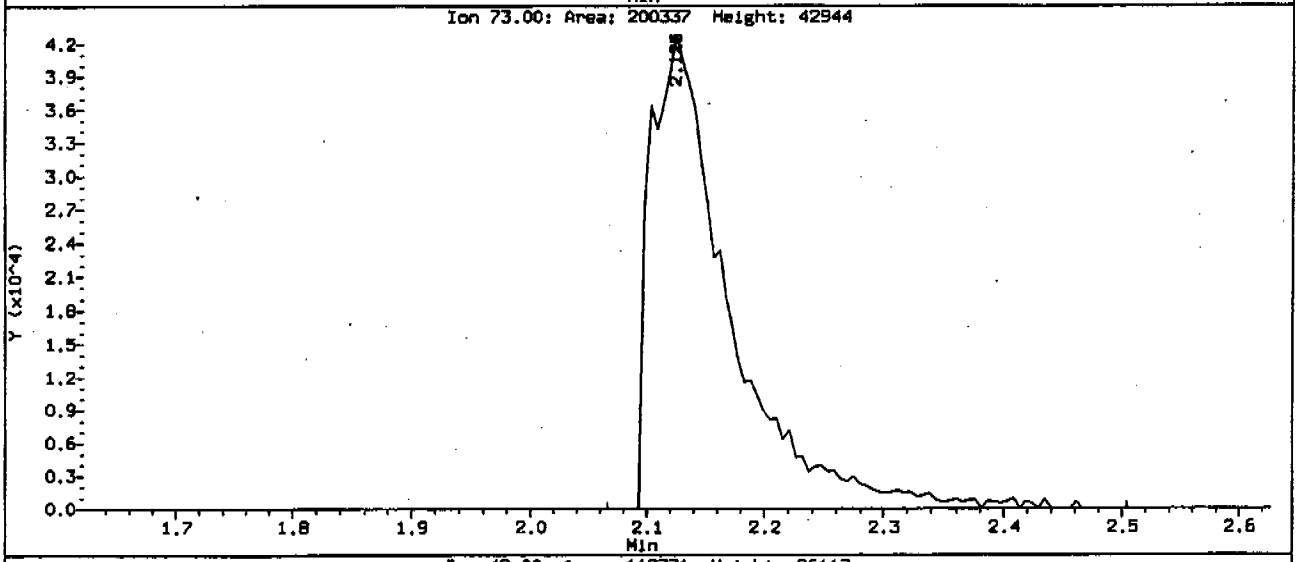
Data File: \\Slsvr01\BNA_LAB\HSK.i\K060514A.B\KCAL3140.D
Date : 14-MAY-2005 10:32
Client ID: SSTD050
Sample Info: SSTD050
Volume Injected (uL): 1.0
Column phase:

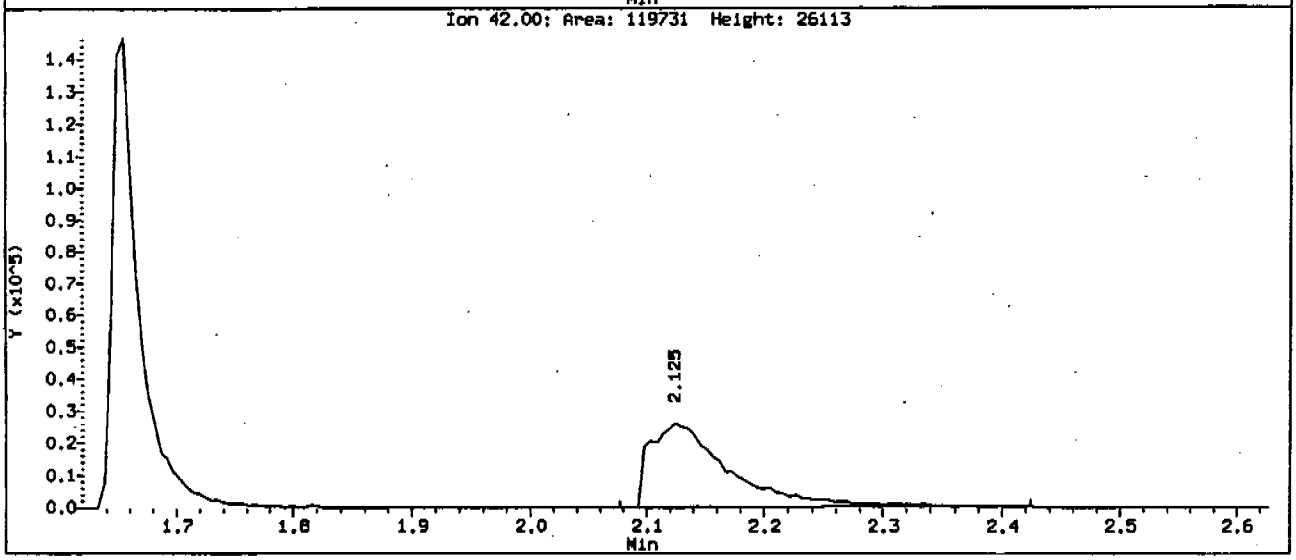
Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3140.D
Injection Date: 14-MAY-2005 10:32
Instrument: MSK.i
Client Sample ID: SSTD050

Compound: Dimethylformamide
CAS Number: 68-12-2

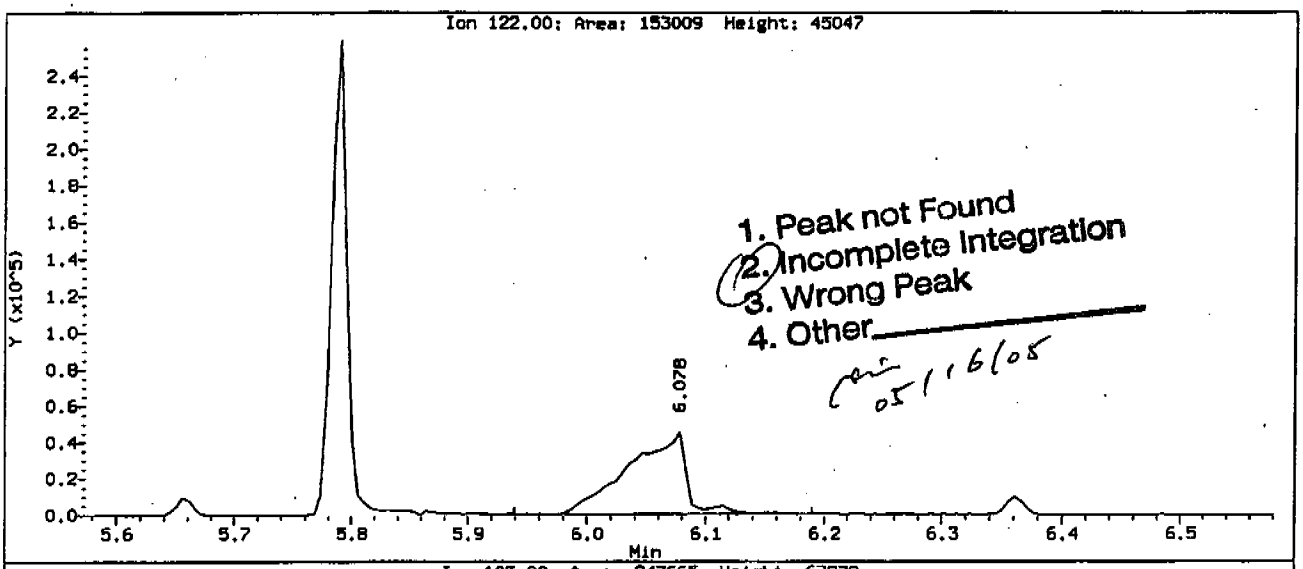






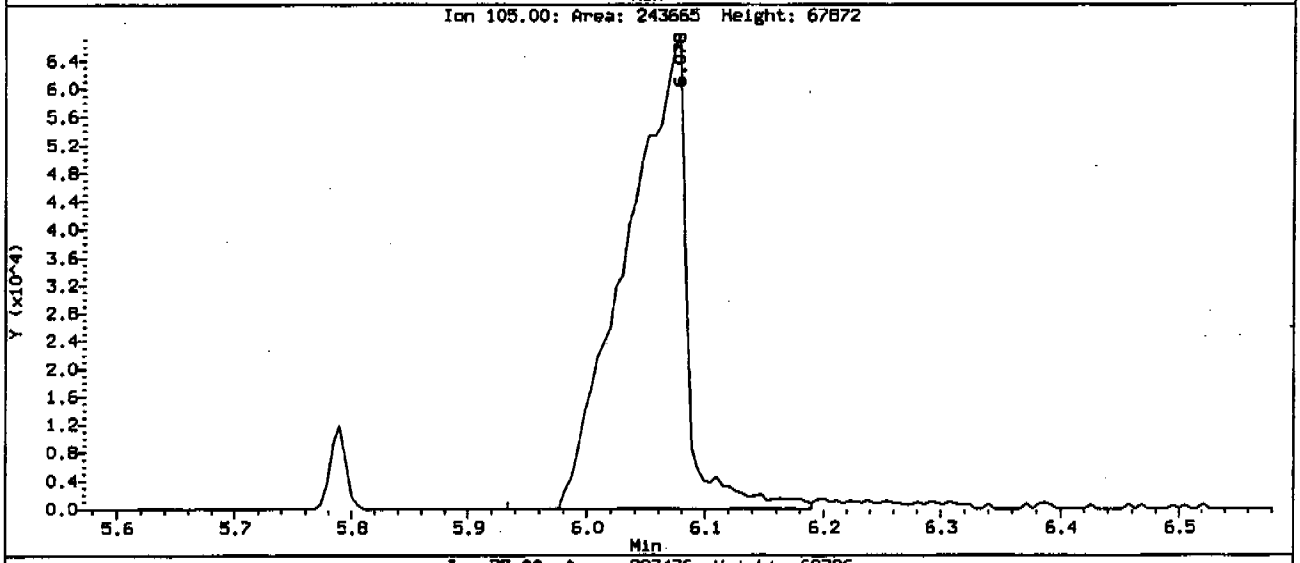
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3140.D
Injection Date: 14-MAY-2005 10:32
Instrument: MSK.i
Client Sample ID: SSTD050

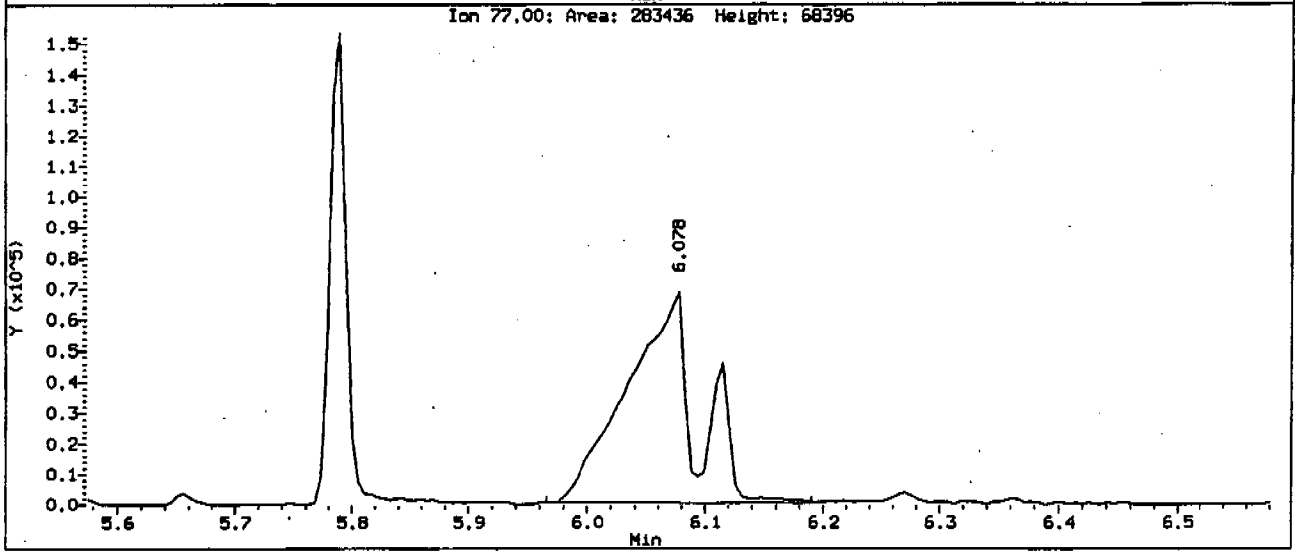
Compound: Benzoic Acid
CAS Number: 65-85-0



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

CAL 5/16/05





GC/MS RAW SAMPLE DATA

Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3046.D
Report Date: 11-May-2005 13:07

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3046.D
Lab Smp Id: G81GA1AC
Client Smp ID: RE73-05-58879
Inj Date : 10-MAY-2005 19:55
Operator : XIA
Inst ID: MSK.i
Smp Info : G81GA1AC
Misc Info : F5D220273-002 (5119285) SON
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\050510A.B\8270K.m
Meth Date : 11-May-2005 10:34 hongs
Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12
Cal File: KCAL3000.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: SONMS04.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Uf*Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume Injected
Ws	30.613	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
$ 10 2-Fluorophenol	112	3.224	3.219	(0.710)	271292	91.8791	3001
$ 15 Phenol-d5	99	4.308	4.298	(0.949)	406370	98.3295	3212
* 22 1,4-Dichlorobenzene-d4	152	4.538	4.533	(1.000)	97744	40.0000	
$ 36 Nitrobenzene-d5	82	5.265	5.260	(0.860)	350789	72.5126	2369
* 48 Naphthalene-d8	136	6.119	6.115	(1.000)	352412	40.0000	
$ 69 2-Fluorobiphenyl	172	7.727	7.723	(0.879)	534894	67.8277	2216
* 82 Acenaphthene-d10	164	8.796	8.791	(1.000)	195850	40.0000	
$ 104 2,4,6-Tribromophenol	330	10.249	10.239	(1.165)	113273	103.461	3380
* 121 Phenanthrene-d10	188	11.456	11.451	(1.000)	325507	40.0000	
$ 139 Terphenyl-d14	244	14.661	14.651	(0.882)	404633	69.3057	2264
* 153 Chrysene-d12	240	16.622	16.617	(1.000)	184828	40.0000	
155 bis(2-ethylhexyl)Phthalate	149	17.007	16.997	(1.023)	35536	9.13671	298.4(a)
* 166 Perylene-d12	264	19.234	19.224	(1.000)	157696	40.0000	

5/11/05

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3046.D Page 2
Report Date: 11-May-2005 13:07

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSK.i
Lab File ID: KSMP3046.D
Lab Smp Id: G81GA1AC
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\8270K.m
Misc Info: F5D220273-002 (5119285) SON

Calibration Date: 10-MAY-2005
Calibration Time: 12:53
Client Smp ID: RE73-05-58879
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
22 1,4-Dichlorobenze	121829	60915	243658	97744	-19.77	
48 Naphthalene-d8	427782	213891	855564	352412	-17.62	
82 Acenaphthene-d10	251365	125683	502730	195850	-22.09	
121 Phenanthrene-d10	466667	233334	933334	325507	-30.25	
153 Chrysene-d12	406157	203079	812314	184828	-54.49	<
166 Perylene-d12	339675	169838	679350	157696	-53.57	<

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.53	4.03	5.03	4.54	0.10
48 Naphthalene-d8	6.12	5.62	6.62	6.12	0.07
82 Acenaphthene-d10	8.79	8.29	9.29	8.80	0.05
121 Phenanthrene-d10	11.45	10.95	11.95	11.46	0.04
153 Chrysene-d12	16.62	16.12	17.12	16.62	0.03
166 Perylene-d12	19.22	18.72	19.72	19.23	0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

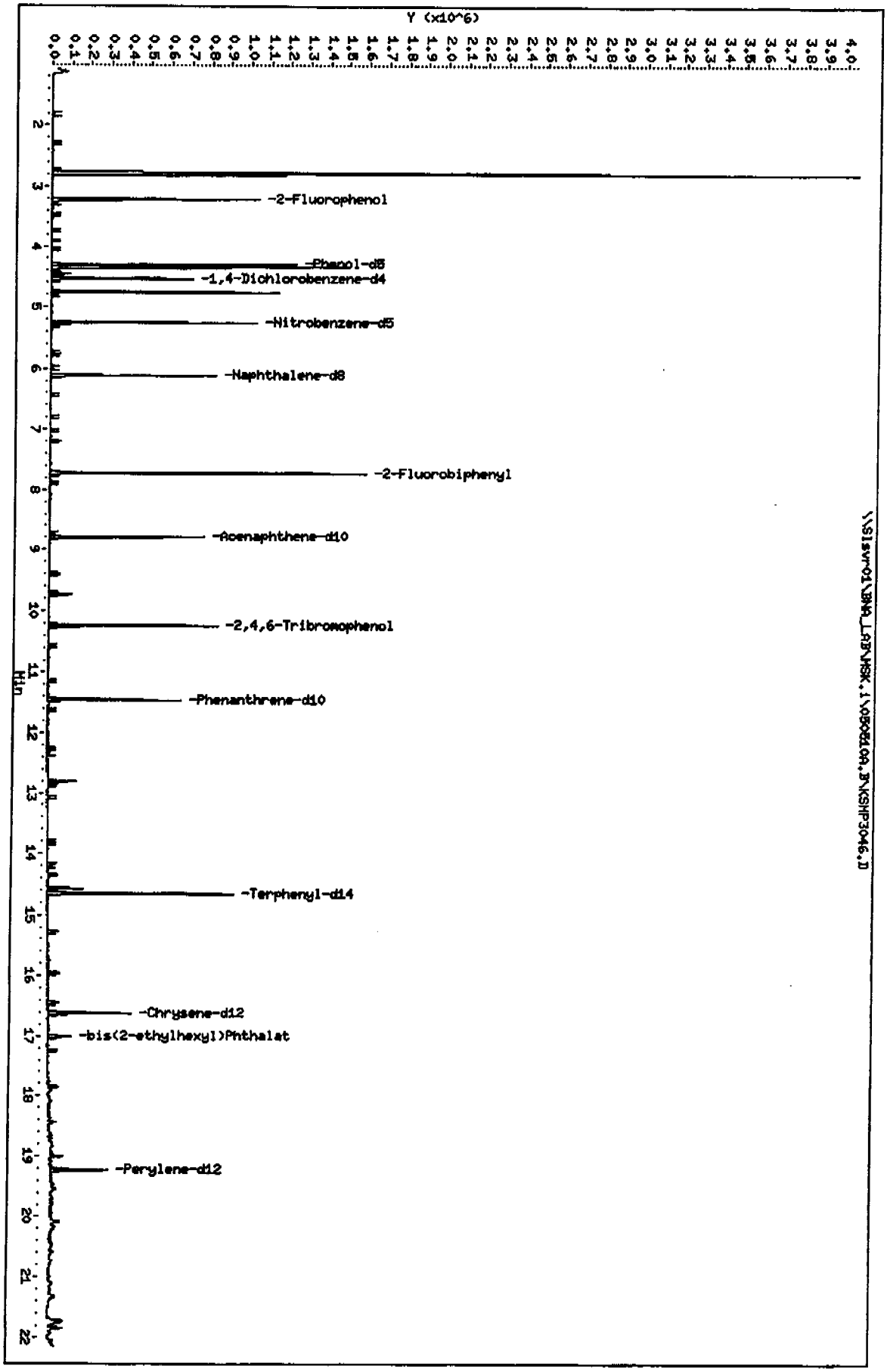
Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3046.D Page 3
Report Date: 11-May-2005 13:07

STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 22-APR-2005 00:00 Client SDG: F5D2202
Sample Matrix: SOLID Fraction: SV
Lab Smp Id: G81GA1AC Client Smp ID: RE73-05-58879
Level: LOW Operator: XIA
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: Quant Type: ISTD
Sublist File: SONMS04.sub
Method File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\8270K.m
Misc Info: F5D220273-002 (5119285) SON

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 10 2-Fluorophenol	4900	3001	61.25	40-103
$ 15 Phenol-d5	4900	3212	65.55	36-105
$ 36 Nitrobenzene-d5	3266	2369	72.51	45-114
$ 69 2-Fluorobiphenyl	3266	2216	67.83	49-120
$ 104 2,4,6-Tribromophen	4900	3380	68.97	39-114
$ 139 Terphenyl-d14	3266	2264	69.31	42-108


Y (x10^6)
-2-Fluorophenol
-Phenol-d5
-1,4-Dichlorobenzene-d4
-Nitrobenzene-d5
-Naphthalene-d8
-2-Fluorobiphenyl
-Acenaphthene-d10
-2,4,6-Tribromophenol
-Phenanthrene-d10
-Terphenyl-d14
-Chrysene-d12
-bis(2-ethylhexyl)Phthalat
-Perylene-d12
Min
\\Slsvr01\BNA_LAB\HSK.i\050510A.B\KSHP3046.D
Data File: \\Slsvr01\BNA_LAB\HSK.i\050510A.B\KSHP3046.D
Date : 10-MAY-2005 19:55
Client ID: RE73-05-88879
Sample Info: GBSLGMAC
Volume Injected (uL): 1.0
Column phase:
Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\HSK.i\050510A.B\KSMP3046.D

Date : 10-MAY-2005 19:55

Client ID: RE73-05-68879

Instrument: HSK.i

Sample Info: GB1GA1AC

Volume Injected (uL): 1.0

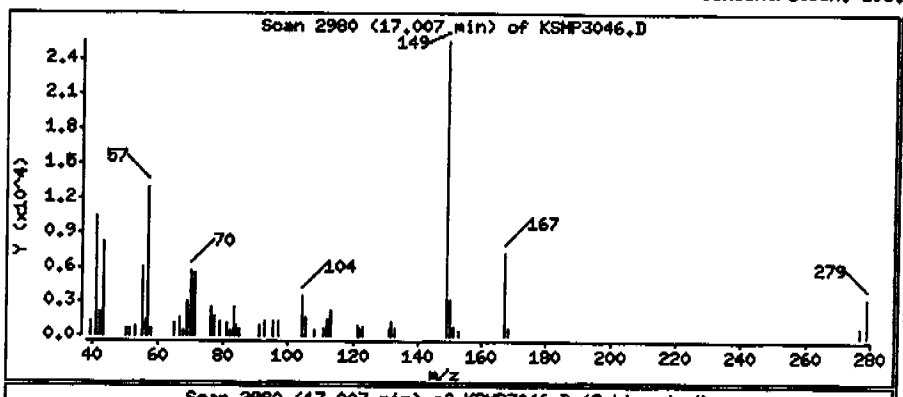
Operator: XIA

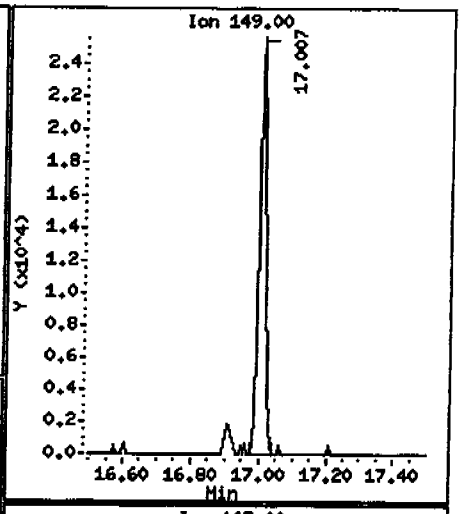
Column phase:

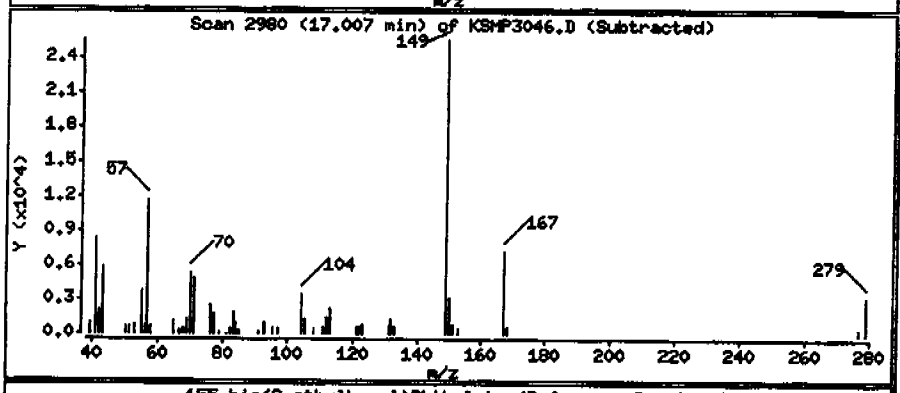
Column diameter: 2.00

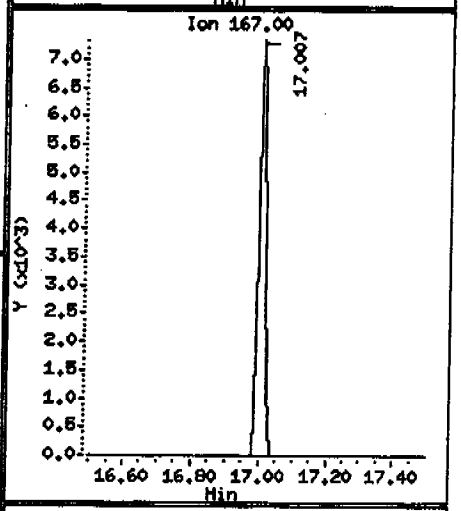
155 bis(2-ethylhexyl)Phthalate

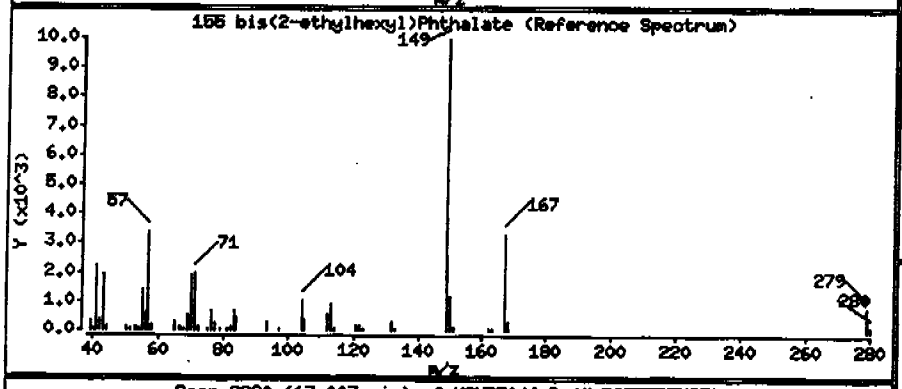
Concentration: 298.4 ug/Kg

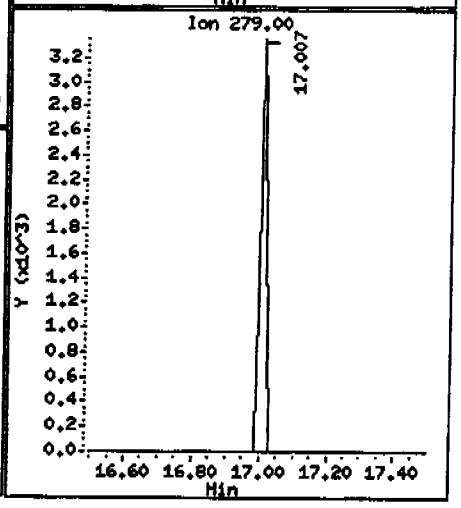


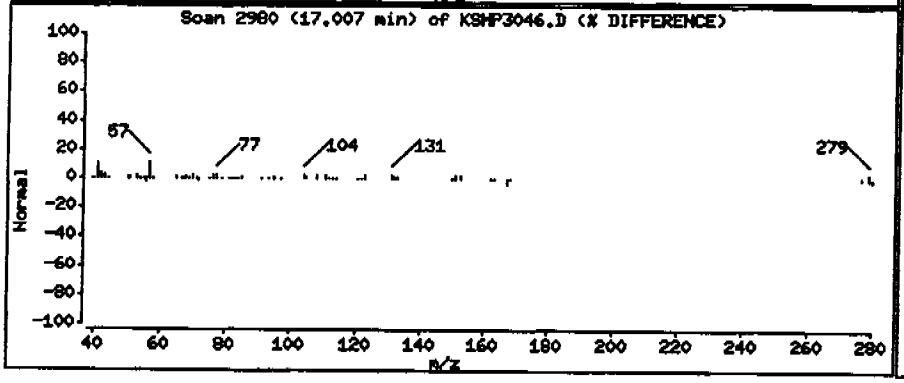












Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KSMP3149.D Page 1
Report Date: 16-May-2005 10:51

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KSMP3149.D
Lab Smp Id: G81GA2AC Client Smp ID: RE73-05-58879
Inj Date : 14-MAY-2005 15:48
Operator : XIA Inst ID: MSK.i
Smp Info : G81GA2AC
Misc Info : F5D220273-002RE (5131374) SON GPC
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270K.m
Meth Date : 16-May-2005 10:26 hongs Quant Type: ISTD
Cal Date : 13-MAY-2005 15:58 Cal File: KCAL3134.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SONMS04.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Uf*Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Factor
Vt	2000.000	Volume of final extract (uL)
Vi	1.000	Volume Injected
Ws	30.118	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
$ 10 2-Fluorophenol	112	3.222	3.203	(0.713)	226287	53.3065	3540
$ 15 Phenol-d5	99	4.301	4.282	(0.952)	315519	57.0009	3785
* 22 1,4-Dichlorobenzene-d4	152	4.520	4.507	(1.000)	141919	40.0000	
$ 36 Nitrobenzene-d5	82	5.242	5.239	(0.860)	273339	39.0098	2590
* 48 Naphthalene-d8	136	6.096	6.088	(1.000)	520732	40.0000	
$ 69 2-Fluorobiphenyl	172	7.699	7.691	(0.878)	431950	37.0245	2459
* 82 Acenaphthene-d10	164	8.767	8.754	(1.000)	288642	40.0000	
$ 104 2,4,6-Tribromophenol	330	10.210	10.202	(1.165)	90671	53.8759	3578
* 121 Phenanthrene-d10	188	11.417	11.409	(1.000)	496891	40.0000	
$ 139 Terphenyl-d14	244	14.617	14.603	(0.882)	375657	34.8144	2312
* 153 Chrysene-d12	240	16.572	16.564	(1.000)	335478	40.0000	
* 166 Perylene-d12	264	19.179	19.171	(1.000)	272673	40.0000	

05/16/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KSMP3149.D Page 2
Report Date: 16-May-2005 10:51

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSK.i
Lab File ID: KSMP3149.D
Lab Smp Id: G81GA2AC
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270K.m
Misc Info: F5D220273-002RE (5131374) SON GPC

Calibration Date: 14-MAY-2005
Calibration Time: 10:32
Client Smp ID: RE73-05-58879
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	175542	87771	351084	141919	-19.15
48 Naphthalene-d8	614562	307281	1229124	520732	-15.27
82 Acenaphthene-d10	342243	171122	684486	288642	-15.66
121 Phenanthrene-d10	614709	307355	1229418	496891	-19.17
153 Chrysene-d12	515242	257621	1030484	335478	-34.89
166 Perylene-d12	429113	214557	858226	272673	-36.46

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.51	4.01	5.01	4.52	0.30
48 Naphthalene-d8	6.09	5.59	6.59	6.10	0.13
82 Acenaphthene-d10	8.75	8.25	9.25	8.77	0.15
121 Phenanthrene-d10	11.41	10.91	11.91	11.42	0.07
153 Chrysene-d12	16.56	16.06	17.06	16.57	0.05
166 Perylene-d12	19.17	18.67	19.67	19.18	0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

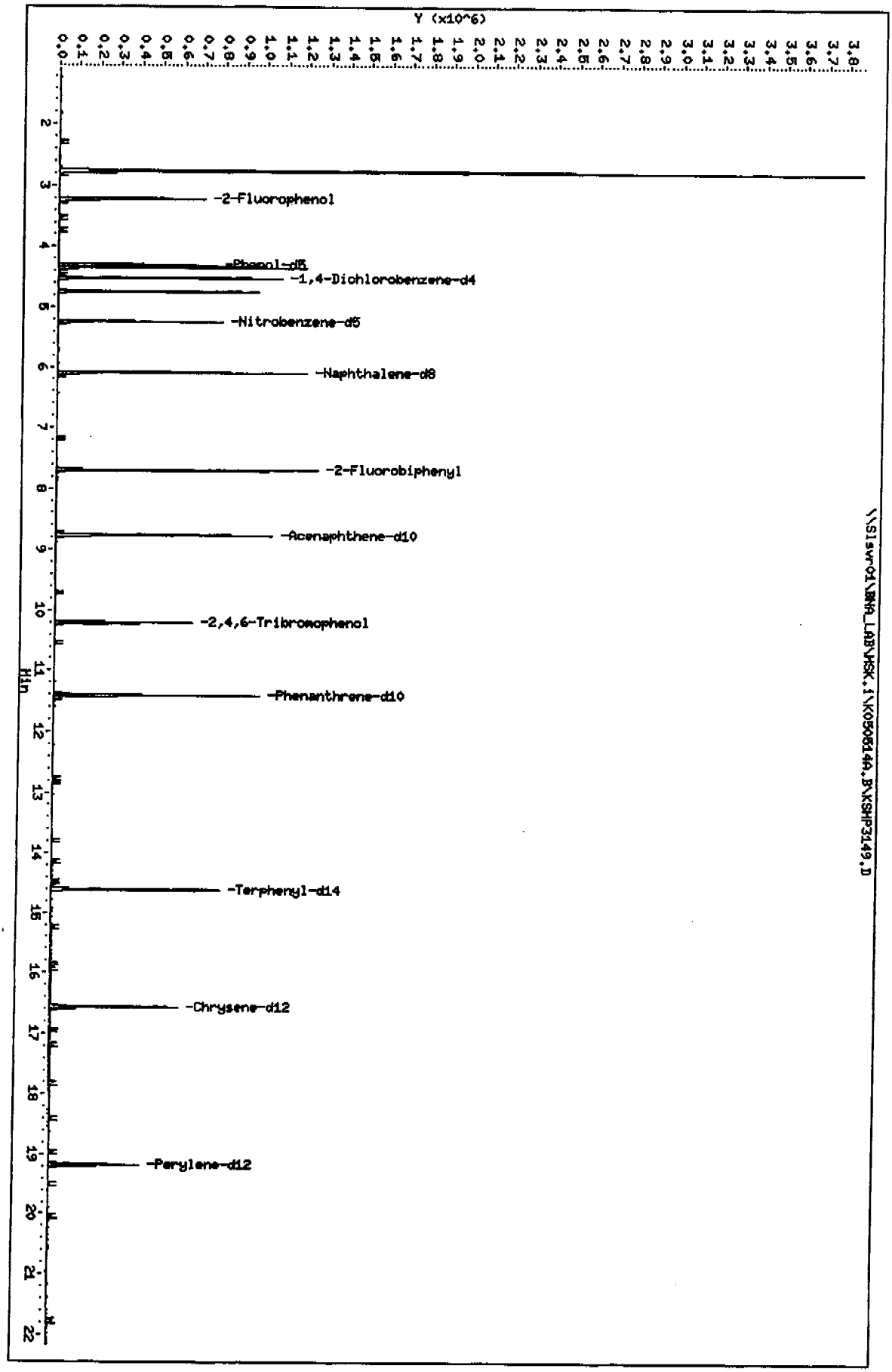
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KSMP3149.D Page 3
Report Date: 16-May-2005 10:51

STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 22-APR-2005 00:00 Client SDG: F5D2202
Sample Matrix: SOLID Fraction: SV
Lab Smp Id: G81GA2AC Client Smp ID: RE73-05-58879
Level: LOW Operator: XIA
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: Quant Type: ISTD
Sublist File: SONMS04.sub
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270K.m
Misc Info: F5D220273-002RE (5131374) SON GPC

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 10 2-Fluorophenol	4980	3540	71.08	40-103
$ 15 Phenol-d5	4980	3785	76.00	36-105
$ 36 Nitrobenzene-d5	3320	2590	78.02	45-114
$ 69 2-Fluorobiphenyl	3320	2459	74.05	49-120
$ 104 2,4,6-Tribromophen	4980	3578	71.83	39-114
$ 139 Terphenyl-d14	3320	2312	69.63	42-108



Data File: \\Slsvr01\BNA_LAB\HSK.i\K050614A.B\KSHP3149.D
Date : 14-MAY-2005 15:48
Client ID: RE73-05-88879
Sample Info: GSLGA2AC
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

GC/MS RAW QC DATA

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KBLK3007.D Page 1
Report Date: 10-May-2005 16:47

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KBLK3007.D
Lab Smp Id: G9HAL1AA Client Smp ID: SVBLKK129A
Inj Date : 09-MAY-2005 18:37
Operator : XIA Inst ID: MSK.i
Smp Info : G9HAL1AA
Misc Info : F5D290000-285B (5119285) APPIX SON
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Meth Date : 10-May-2005 11:13 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12 Cal File: KCAL3000.D
Als bottle: 16 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIXSONLCS04.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Uf*Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume Injected
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
$ 10 2-Fluorophenol	112	3.234	3.245	(0.710)	419034	121.124	4037
$ 15 Phenol-d5	99	4.318	4.324	(0.948)	583769	120.560	4019
* 22 1,4-Dichlorobenzene-d4	152	4.553	4.559	(1.000)	114522	40.0000	
$ 36 Nitrobenzene-d5	82	5.274	5.285	(0.861)	404978	72.0218	2401
* 48 Naphthalene-d8	136	6.129	6.140	(1.000)	409624	40.0000	
$ 69 2-Fluorobiphenyl	172	7.742	7.753	(0.878)	576892	62.3269	2078
* 82 Acenaphthene-d10	164	8.816	8.827	(1.000)	229870	40.0000	
$ 104 2,4,6-Tribromophenol	330	10.264	10.275	(1.164)	89074	69.3177	2310(R)
* 121 Phenanthrene-d10	188	11.476	11.487	(1.000)	374225	40.0000	
$ 139 Terphenyl-d14	244	14.682	14.687	(0.882)	600000	59.9523	1998
* 153 Chrysene-d12	240	16.637	16.653	(1.000)	316826	40.0000	
* 166 Perylene-d12	264	19.249	19.266	(1.000)	277586	40.0000	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KBLK3007.D Page 2
Report Date: 10-May-2005 16:11

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

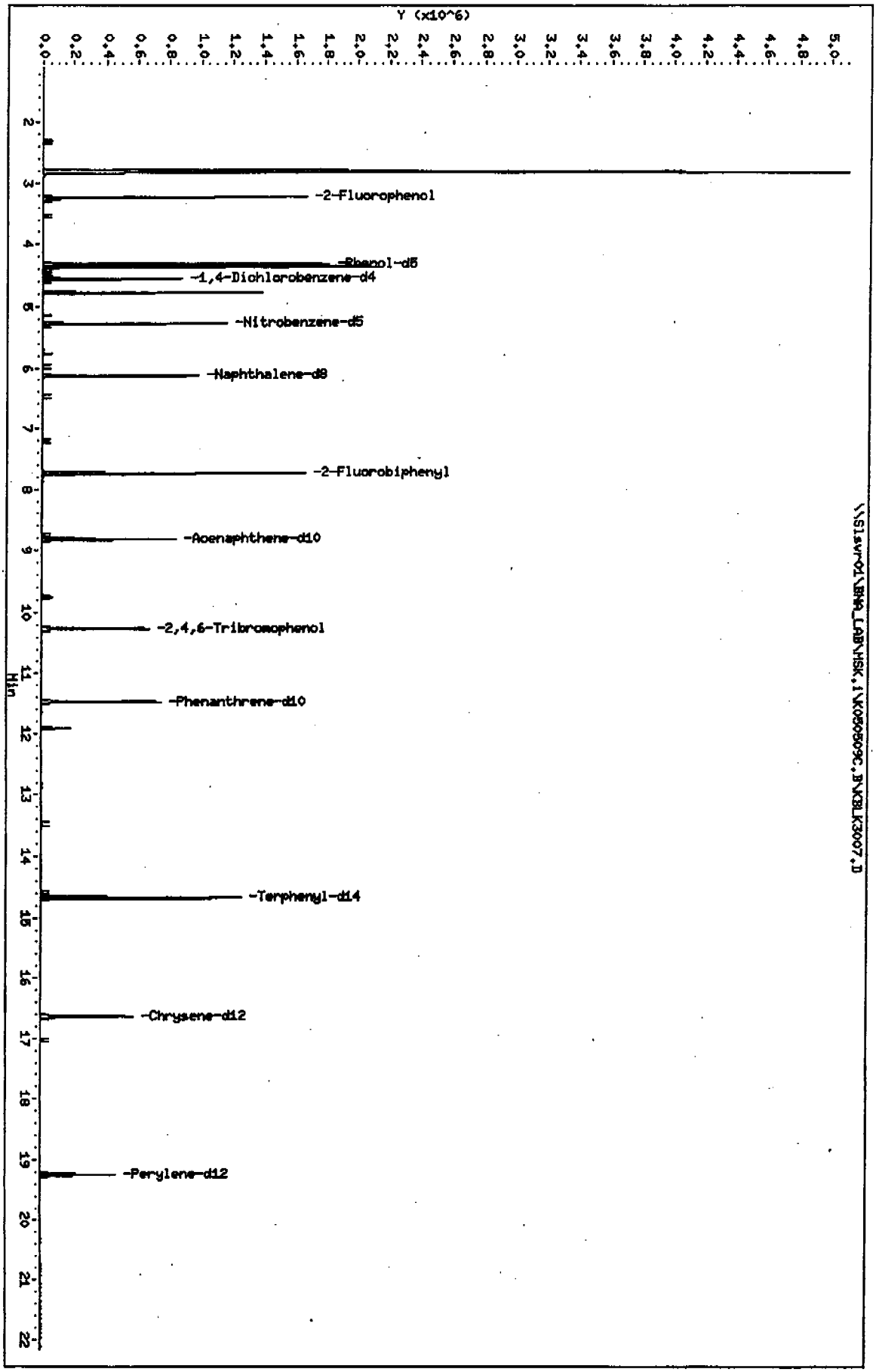
Instrument ID: MSK.i
Lab File ID: KBLK3007.D
Lab Smp Id: G9HAL1AA
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Misc Info: F5D290000-285B (5119285) APPIX SON

Calibration Date: 09-MAY-2005
Calibration Time: 16:30
Client Smp ID: SVBLKK129A
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	138615	69308	277230	114522	-17.38
48 Naphthalene-d8	492644	246322	985288	409624	-16.85
82 Acenaphthene-d10	276841	138421	553682	229870	-16.97
121 Phenanthrene-d10	505686	252843	1011372	374225	-26.00
153 Chrysene-d12	445673	222837	891346	316826	-28.91
166 Perylene-d12	381519	190760	763038	277586	-27.24

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.55	-0.12
48 Naphthalene-d8	6.14	5.64	6.64	6.13	-0.18
82 Acenaphthene-d10	8.83	8.33	9.33	8.82	-0.12
121 Phenanthrene-d10	11.49	10.99	11.99	11.48	-0.10
153 Chrysene-d12	16.65	16.15	17.15	16.64	-0.10
166 Perylene-d12	19.27	18.77	19.77	19.25	-0.08

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



Data File: \\Slsvr01\BNA_LAB\HSK.i\K080509C.B\KBLK3007.D
Date : 09-MAY-2008 18:37
Client ID: SVBLK3129A
Sample Info: C9HBL1AA
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: KIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KBLK3007.D Page 1
Report Date: 10-May-2005 16:47

STL St. Louis

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: G9HAL1AA
Level: LOW
Data Type: MS DATA
SpikeList File:
Client SDG: F5D290000
Fraction: SV
Client Smp ID: SVBLKK129A
Operator: XIA
SampleType: BLANK
Quant Type: ISTD
Sublist File: APPIXSONLCS04.sub
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Misc Info: F5D290000-285B (5119285) APPIX SON

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 10 2-Fluorophenol	5000	4037	80.75	50-98
$ 15 Phenol-d5	5000	4019	80.37	51-95
$ 36 Nitrobenzene-d5	3333	2401	72.02	50-111
$ 69 2-Fluorobiphenyl	3333	2078	62.33	57-117
$ 104 2,4,6-Tribromophen	5000	2310	46.21*	53-108
$ 139 Terphenyl-d14	3333	1998	59.95	49-107

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KBLK3007.D Page 1
Report Date: 10-May-2005 16:47

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KBLK3007.D
Lab Smp Id: G9HAL1AA Client Smp ID: SVBLKK129A
Inj Date : 09-MAY-2005 18:37
Operator : XIA Inst ID: MSK.i
Smp Info : G9HAL1AA
Misc Info : F5D290000-285B (5119285) APPIX SON
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Meth Date : 10-May-2005 11:13 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12 Cal File: KCAL3000.D
Als bottle: 16 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIXSONLCS04.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Uf*Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume Injected
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 22 1,4-Dichlorobenzene-d4	4.554	889394	40.000
* 121 Phenanthrene-d10	11.477	1039426	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ug/mL)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.828	9874350	444.092949	14800	0		0	22
Unknown				CAS #:			
11.915	234504	9.02435097	300.8	0		0	121

5/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KBLK3007.D

Date : 09-MAY-2005 18:37

Client ID: SVBLKK129A

Instrument: MSK.i

Sample Info: G9HAL1AA

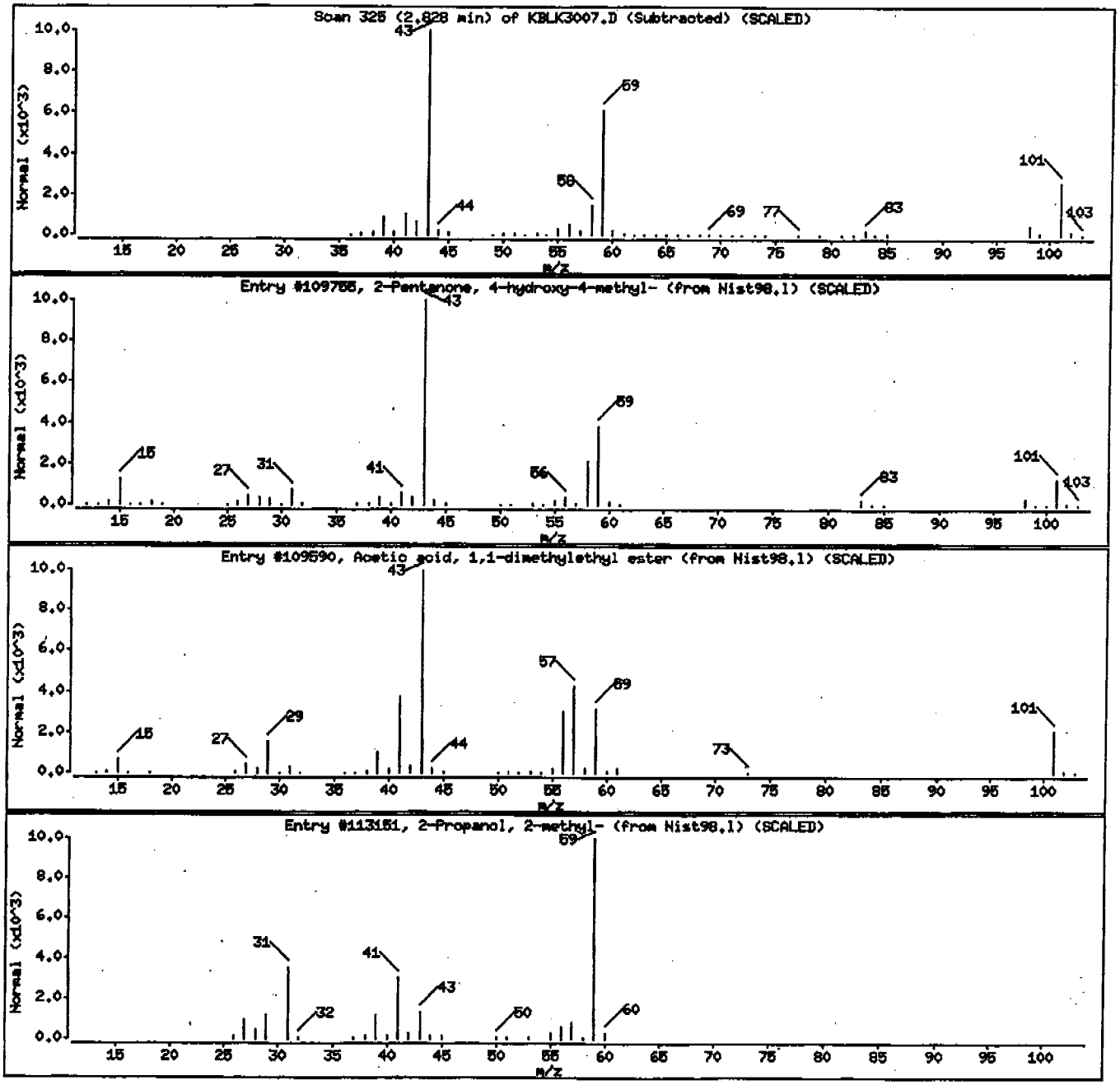
Volume Injected (uL): 1.0

Operator: XIA

Column phase:

Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	Nist98.l	109755	50	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	Nist98.l	109890	33	C6H12O2	116
2-Propanol, 2-methyl-	75-65-0	Nist98.l	113151	17	C4H10O	74



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KBLK3007.D

Date : 09-MAY-2005 18:37

Client ID: SVBLKK129A

Instrument: MSK.i

Sample Info: G9HAL1AA

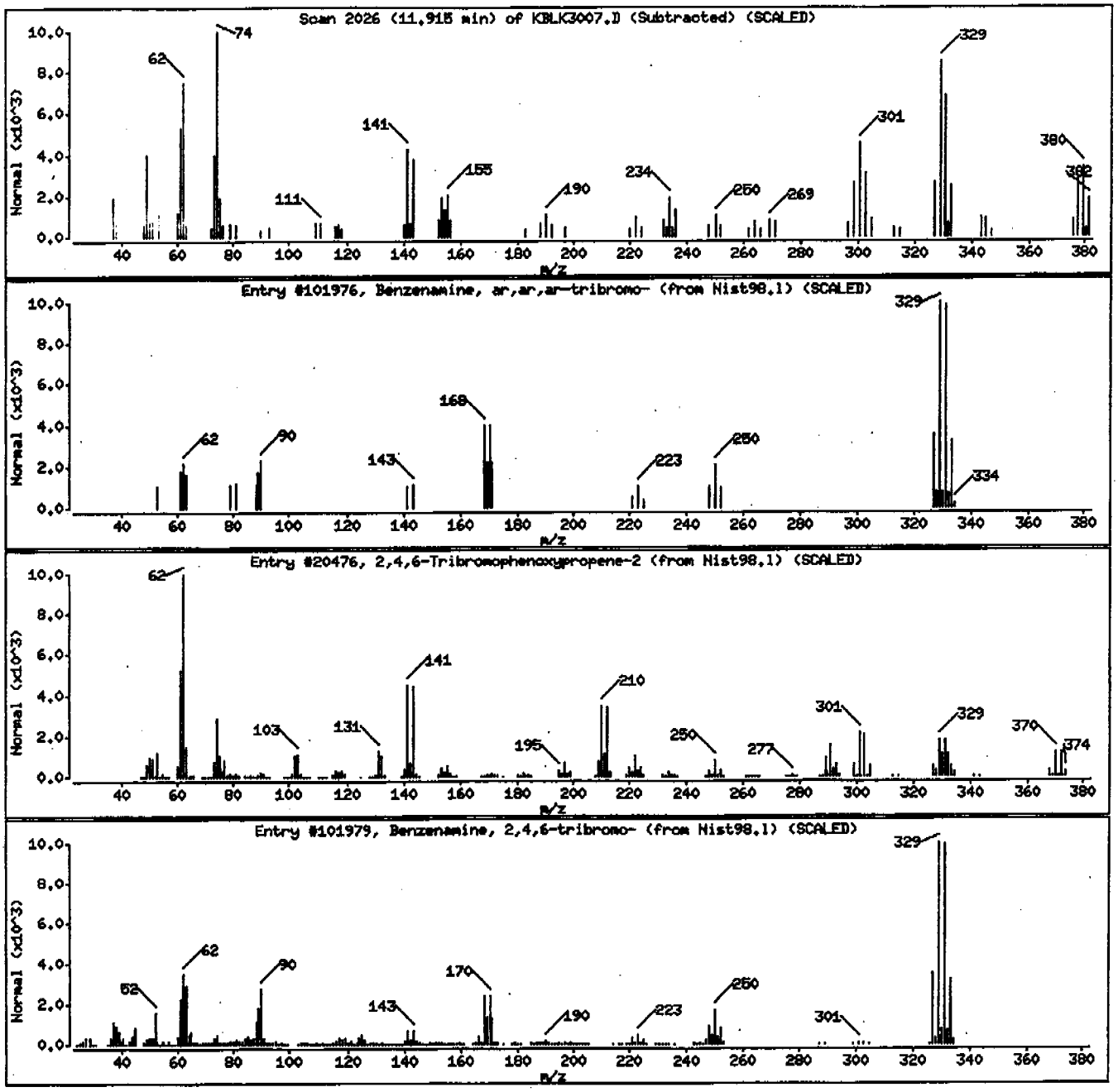
Volume Injected (uL): 1.0

Operator: XIA

Column phase:

Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzenamine, ar,ar,ar-tribromo-	62628-37-2	Nist98.l	101976	43	C6H4Br3N	327
2,4,6-Tribromophenoxypropene-2	1000077-77-8	Nist98.l	20476	38	C9H7Br3O	368
Benzenamine, 2,4,6-tribromo-	147-82-0	Nist98.l	101979	35	C6H4Br3N	327



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KBLK3104.D Page 1
Report Date: 13-May-2005 10:53

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KBLK3104.D
Lab Smp Id: HAAT21AA Client Smp ID: SVBLKK132D
Inj Date : 12-MAY-2005 18:00
Operator : XIA Inst ID: MSK.i
Smp Info : HAAT21AA
Misc Info : F5E110000-374B (5131374) SON GPC
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m
Meth Date : 12-May-2005 16:05 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 12:01 Cal File: KCAL2994.D
Als bottle: 12 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SONLCS04.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Uf*Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Factor
Vt	2000.000	Volume of final extract (uL)
Vi	1.000	Volume Injected
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
$ 10 2-Fluorophenol	112	3.246	3.254	(0.717)	276862	63.4850	4232
$ 15 Phenol-d5	99	4.336	4.333	(0.958)	375460	61.5112	4101
* 22 1,4-Dichlorobenzene-d4	152	4.528	4.536	(1.000)	144365	40.0000	
$ 36 Nitrobenzene-d5	82	5.249	5.263	(0.860)	326014	45.8817	3059
* 48 Naphthalene-d8	136	6.104	6.117	(1.000)	517624	40.0000	
$ 69 2-Fluorobiphenyl	172	7.712	7.725	(0.878)	471004	42.4713	2831
* 82 Acenaphthene-d10	164	8.780	8.799	(1.000)	275418	40.0000	
$ 104 2,4,6-Tribromophenol	330	10.239	10.252	(1.166)	85328	55.4210	3695
* 121 Phenanthrene-d10	188	11.441	11.460	(1.000)	467610	40.0000	
$ 139 Terphenyl-d14	244	14.646	14.659	(0.882)	450552	36.8849	2459
* 153 Chrysene-d12	240	16.601	16.625	(1.000)	386698	40.0000	
* 166 Perylene-d12	264	19.219	19.232	(1.000)	329928	40.0000	

05/13/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KBLK3104.D Page 2
Report Date: 13-May-2005 09:43

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSK.i
Lab File ID: KBLK3104.D
Lab Smp Id: HAAT21AA
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Calibration Date: 12-MAY-2005
Calibration Time: 12:41
Client Smp ID: SVBLKK132D
Level: LOW
Sample Type: SOIL
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m
Misc Info: F5E110000-374B (5131374) SON GPC

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	167849	83925	335698	144365	-13.99
48 Naphthalene-d8	587608	293804	1175216	517624	-11.91
82 Acenaphthene-d10	335274	167637	670548	275418	-17.85
121 Phenanthrene-d10	627534	313767	1255068	467610	-25.48
153 Chrysene-d12	548402	274201	1096804	386698	-29.49
166 Perylene-d12	477098	238549	954196	329928	-30.85

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.54	4.04	5.04	4.53	-0.18
48 Naphthalene-d8	6.12	5.62	6.62	6.10	-0.22
82 Acenaphthene-d10	8.80	8.30	9.30	8.78	-0.21
121 Phenanthrene-d10	11.46	10.96	11.96	11.44	-0.17
153 Chrysene-d12	16.63	16.13	17.13	16.60	-0.15
166 Perylene-d12	19.23	18.73	19.73	19.22	-0.07

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

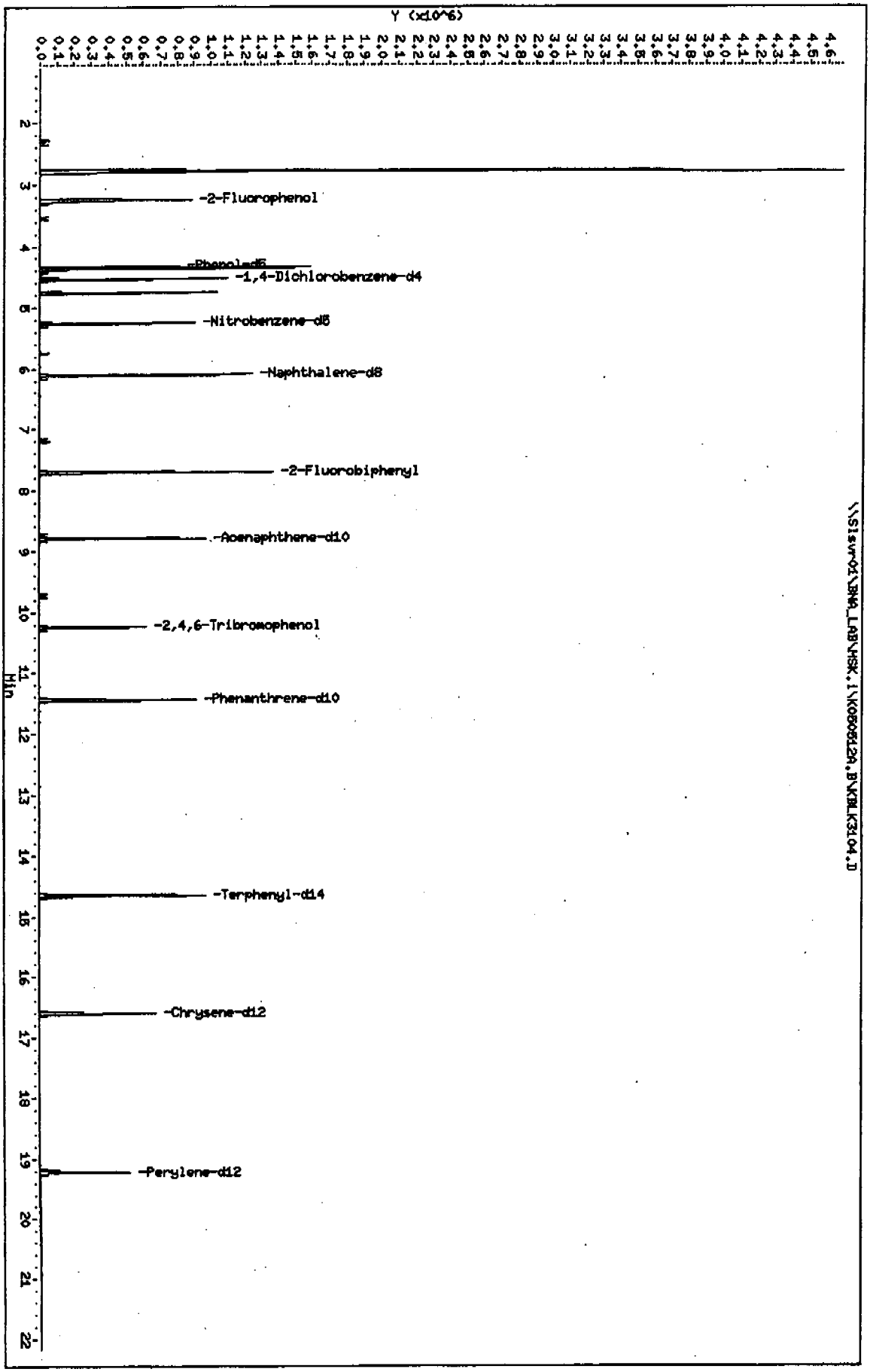
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KBLK3104.D Page 1
Report Date: 13-May-2005 10:53

STL St. Louis

RECOVERY REPORT

Client Name:
Client SDG: F5E110000
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: HAAT21AA
Client Smp ID: SVBLKK132D
Level: LOW
Operator: XIA
Data Type: MS DATA
SampleType: BLANK
SpikeList File:
Quant Type: ISTD
Sublist File: SONLCS04.sub
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m
Misc Info: F5E110000-374B (5131374) SON GPC

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 10 2-Fluorophenol	5000	4232	84.65	50-98
$ 15 Phenol-d5	5000	4101	82.01	51-95
$ 36 Nitrobenzene-d5	3333	3059	91.76	50-111
$ 69 2-Fluorobiphenyl	3333	2831	84.94	57-117
$ 104 2,4,6-Tribromophen	5000	3695	73.89	53-108
$ 139 Terphenyl-d14	3333	2459	73.77	49-107



Data File: \\Slsvr01\BNA_LAB\HSK.i\K050512A.B\KBLK3104.D
Date : 12-MAY-2005 18:00
Client ID: SVBLKK1320
Sample Info: MAAT2104
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: KIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KBLK3104.D Page 1
Report Date: 13-May-2005 10:53

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KBLK3104.D
Lab Smp Id: HAAT21AA Client Smp ID: SVBLKK132D
Inj Date : 12-MAY-2005 18:00
Operator : XIA Inst ID: MSK.i
Smp Info : HAAT21AA
Misc Info : F5E110000-374B (5131374) SON GPC
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m
Meth Date : 12-May-2005 16:05 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 12:01 Cal File: KCAL2994.D
Als bottle: 12 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SONLCS04.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Uf*Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Factor
Vt	2000.000	Volume of final extract (uL)
Vi	1.000	Volume Injected
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 22 1,4-Dichlorobenzene-d4	4.528	1107823	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/mL)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate			CAS #:				
2.798	8294957	299.504697	19970	0		0	22

05/13/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KBLK3104.D

Date : 12-MAY-2005 18:00

Client ID: SVBLKK132D

Instrument: MSK.i

Sample Info: HAAT21AA

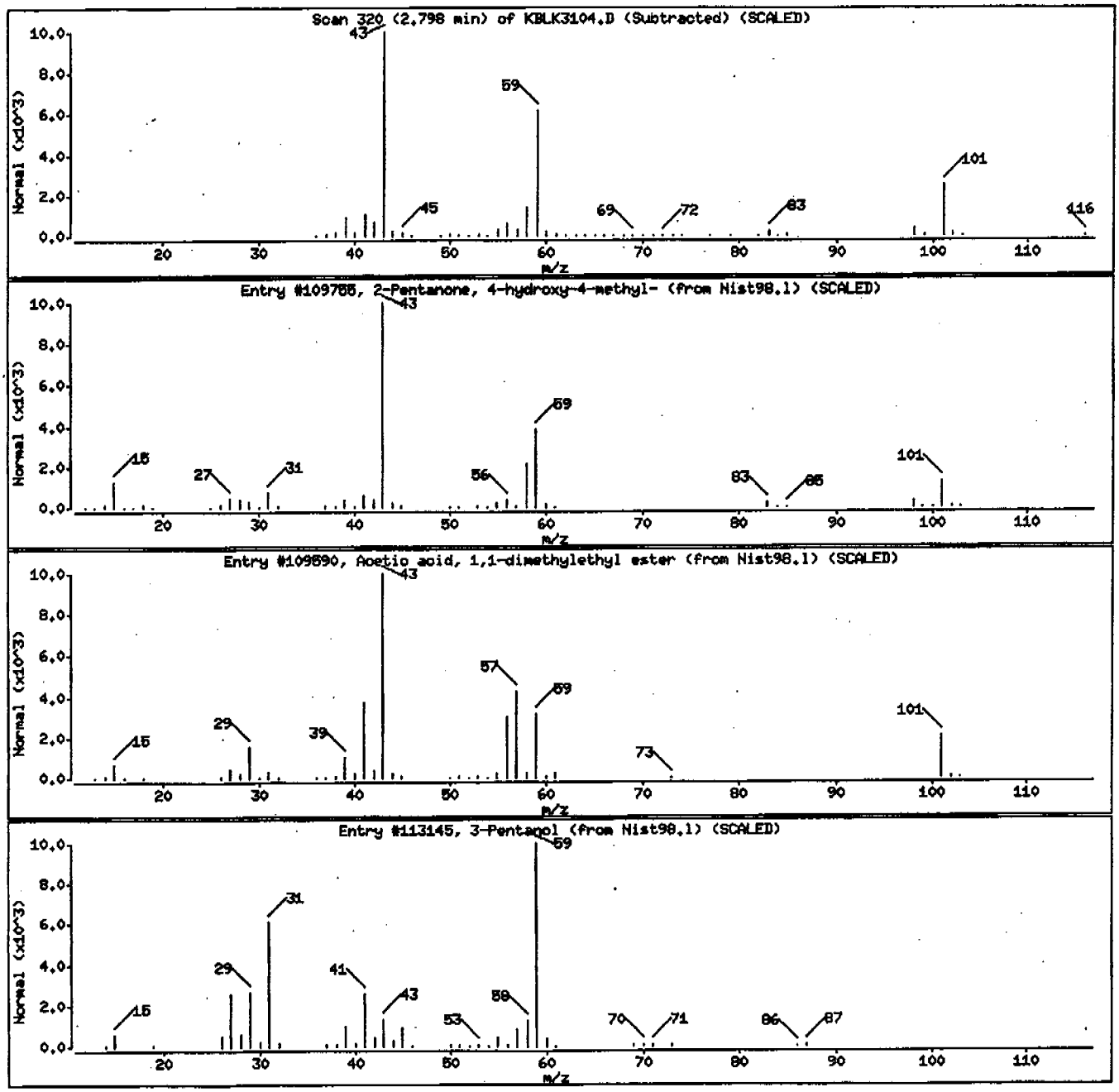
Volume Injected (uL): 1.0

Operator: XIA

Column phase:

Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	Nist98.l	109755	50	C6H1202	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	Nist98.l	109890	33	C6H1202	116
3-Pentanol	584-02-1	Nist98.l	113145	17	C5H120	88



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KLCS3008.D Page 1
Report Date: 10-May-2005 16:16

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KLCS3008.D
Lab Smp Id: G9HAL1AC Client Smp ID: SVLCSK129A
Inj Date : 09-MAY-2005 19:09
Operator : XIA Inst ID: MSK.i
Smp Info : G9HAL1AC
Misc Info : F5D290000-285C (5119285) APPIX SON
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Meth Date : 10-May-2005 11:13 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12 Cal File: KCAL3000.D
Als bottle: 17 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIXSONLCS04.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Uf*Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume Injected
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
	4 N-Nitrosodimethylamine	74	1.753	1.706	(0.385)	460154	159.965	5332
	3 Pyridine	79	1.710	1.690	(0.375)	463827	91.3743	3046
$	10 2-Fluorophenol	112	3.238	3.245	(0.710)	600371	115.896	3863
	17 Aniline	93	4.258	4.254	(0.934)	1005239	106.812	3560
	19 Bis(2-chloroethyl)ether	93	4.338	4.324	(0.952)	1037610	155.776	5192
$	15 Phenol-d5	99	4.328	4.324	(0.950)	876283	120.858	4029
	16 Phenol	94	4.338	4.334	(0.952)	1297882	161.709	5390(A)
	20 2-Chlorophenol	128	4.392	4.388	(0.964)	892683	153.828	5128
	21 1,3-Dichlorobenzene	146	4.515	4.511	(0.991)	727758	109.659	3655
*	22 1,4-Dichlorobenzene-d4	152	4.557	4.559	(1.000)	171483	40.0000	
	23 1,4-Dichlorobenzene	146	4.579	4.575	(1.005)	767807	108.942	3631
	26 1,2-Dichlorobenzene	146	4.798	4.799	(1.053)	735220	112.798	3760
	25 Benzyl Alcohol	108	4.819	4.804	(1.057)	517771	181.553	6052(A)
	28 2,2-oxybis(1-Chloropropane)	45	4.969	4.965	(1.090)	994464	144.373	4812
	27 2-Methylphenol	108	5.011	5.013	(1.100)	705391	137.258	4575
	35 Hexachloroethane	117	5.150	5.157	(1.130)	289836	94.0520	3135
	32 N-Nitrosodinpropylamine	70	5.172	5.152	(1.135)	843532	156.231	5208
	29 3 and 4-Methylphenol	108	5.204	5.205	(1.142)	779718	142.270	4742
$	36 Nitrobenzene-d5	82	5.284	5.285	(0.861)	534334	68.8130	2294
	37 Nitrobenzene	77	5.311	5.307	(0.865)	1036428	125.939	4198

5/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KLCS3008.D Page 2
Report Date: 10-May-2005 16:16

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	39 Isophorone	82	5.610	5.595	(0.914)	1759336	163.989	5466(A)
	40 2-Nitrophenol	139	5.706	5.702	(0.930)	368720	129.322	4311
	41 2,4-Dimethylphenol	107	5.839	5.830	(0.951)	933959	154.356	5145
	42 Bis(2-chloroethoxy)methane	93	5.920	5.910	(0.964)	1068042	156.174	5206
	45 2,4-Dichlorophenol	162	6.037	6.038	(0.983)	679548	152.745	5091
	47 1,2,4-Trichlorobenzene	180	6.096	6.097	(0.993)	607363	114.592	3820
*	48 Naphthalene-d8	136	6.139	6.140	(1.000)	565666	40.0000	
	44 Benzoic Acid	122	6.096	6.097	(0.993)	165996	58.8357	1961
	50 Naphthalene	128	6.165	6.167	(1.004)	1886189	117.771	3926
	51 4-Chloroaniline	127	6.315	6.316	(1.029)	260361	40.1489	1338(R)
	54 Hexachlorobutadiene	225	6.411	6.412	(1.044)	443688	120.522	4017
	62 2-Methylnaphthalene	142	7.127	7.128	(1.161)	1357588	118.503	3950
	59 4-Chloro-3-Methylphenol	107	7.090	7.080	(1.155)	787947	152.442	5081
	66 Hexachlorocyclopentadiene	237	7.469	7.475	(0.847)	455604	146.849	4895
	67 2,4,6-Trichlorophenol	196	7.661	7.662	(0.869)	456941	136.450	4548
$	69 2-Fluorobiphenyl	172	7.752	7.753	(0.879)	805422	68.9372	2298
	68 2,4,5-Trichlorophenol	196	7.741	7.748	(0.878)	563853	159.316	5310
	72 2-Chloronaphthalene	162	7.875	7.876	(0.893)	1194590	122.289	4076
	73 2-Nitroaniline	65	8.179	8.170	(0.927)	596980	141.867	4729
	76 Dimethylphthalate	163	8.548	8.539	(0.969)	1762393	157.537	5251
	79 Acenaphthylene	152	8.559	8.560	(0.970)	1847019	128.250	4275
	80 2,6-Dinitrotoluene	165	8.665	8.651	(0.982)	365199	152.774	5092
*	82 Acenaphthene-d10	164	8.820	8.827	(1.000)	290157	40.0000	
	83 Acenaphthene	153	8.879	8.880	(1.007)	1077865	118.518	3950
	81 3-Nitroaniline	138	8.890	8.886	(1.008)	175414	74.6960	2490
	84 2,4-Dinitrophenol	184	9.077	9.067	(1.029)	186397	130.535	4351
	86 Dibenzofuran	168	9.162	9.158	(1.039)	1629822	121.299	4043
	88 2,4-Dinitrotoluene	165	9.339	9.329	(1.059)	489695	159.301	5310
	85 4-Nitrophenol	109	9.376	9.377	(1.063)	329695	168.175	5606(A)
	94 Fluorene	166	9.777	9.773	(1.108)	1321424	122.881	4096
	93 Diethylphthalate	149	9.814	9.799	(1.113)	1792505	160.082	5336(A)
	95 4-Chlorophenyl-phenylether	204	9.819	9.821	(1.113)	742900	128.052	4268
	98 4-Nitroaniline	138	10.049	10.008	(1.139)	318910	139.304	4643
	99 4,6-Dinitro-2-methylphenol	198	10.086	10.061	(0.879)	357921	189.793	6326(AQM)
	100 N-Nitrosodiphenylamine	169	10.102	10.088	(0.880)	1088839	157.127	5238
	102 Azobenzene	77	10.108	10.104	(0.880)	2284109	146.941	4898
$	104 2,4,6-Tribromophenol	330	10.279	10.275	(1.165)	143471	88.4518	2948
	109 4-Bromophenyl-phenylether	248	10.706	10.707	(0.933)	414904	130.331	4344
	112 Hexachlorobenzene	284	10.931	10.932	(0.952)	304726	93.7593	3125(R)
	117 Pentachlorophenol	266	11.337	11.338	(0.987)	163457	90.1776	3006
*	121 Phenanthrene-d10	188	11.481	11.487	(1.000)	455143	40.0000	
	122 Phenanthrene	178	11.534	11.530	(1.005)	1624926	115.587	3853
	124 Anthracene	178	11.620	11.616	(1.012)	1590918	117.062	3902
	126 Carbazole	167	12.015	12.016	(1.047)	1042150	89.7522	2992(R)
	129 Di-n-Butylphthalate	149	12.907	12.903	(1.124)	2300283	151.198	5040
	134 Fluoranthene	202	13.826	13.827	(1.204)	1499583	103.213	3440(R)
	135 Benzidine	184	14.211	14.223	(0.854)	210206	41.4056	1380
	137 Pyrene	202	14.237	14.244	(0.855)	1089477	80.0678	2669(R)
$	139 Terphenyl-d14	244	14.675	14.687	(0.882)	637496	60.2897	2010
	146 Butylbenzylphthalate	149	15.808	15.809	(0.950)	895247	159.102	5303
	150 Benzo(a)Anthracene	228	16.620	16.621	(0.998)	1370106	116.889	3896
*	153 Chrysene-d12	240	16.647	16.653	(1.000)	334742	40.0000	
	154 Chrysene	228	16.705	16.707	(1.004)	1286473	115.336	3844
	152 3,3'-Dichlorobenzidine	252	16.711	16.717	(1.004)	383882	85.0539	2835

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KLCS3008.D Page 3
Report Date: 10-May-2005 16:16

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
155	bis(2-ethylhexyl)Phthalate	149	17.037	17.038	(1.023)	1089793	154.712	5157
158	Di-n-octylphthalate	149	18.180	18.181	(0.944)	1726365	159.906	5330
160	Benzo(b)fluoranthene	252	18.629	18.630	(0.968)	1165280	118.445	3948
161	Benzo(k)fluoranthene	252	18.629	18.630	(0.968)	1165280	119.252	3975(R)
165	Benzo(a)pyrene	252	19.152	19.164	(0.995)	444778	50.0921	1670(R)
* 166	Perylene-d12	264	19.254	19.266	(1.000)	253365	40.0000	
173	Indeno(1,2,3-cd)pyrene	276	20.968	20.986	(1.089)	500531	60.8114	2027(R)
174	Dibenzo(a,h)anthracene	278	21.032	21.034	(1.092)	969051	121.329	4044
177	Benzo(g,h,i)perylene	276	21.401	21.440	(1.112)	39041	5.31286	177.1(aRH)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KLCS3008.D Page 4
Report Date: 10-May-2005 16:16

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSK.i
Lab File ID: KLCS3008.D
Lab Smp Id: G9HAL1AC
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Misc Info: F5D290000-285C (5119285) APPIX SON

Calibration Date: 09-MAY-2005
Calibration Time: 16:30
Client Smp ID: SVLCSK129A
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	138615	69308	277230	171483	23.71
48 Naphthalene-d8	492644	246322	985288	565666	14.82
82 Acenaphthene-d10	276841	138421	553682	290157	4.81
121 Phenanthrene-d10	505686	252843	1011372	455143	-9.99
153 Chrysene-d12	445673	222837	891346	334742	-24.89
166 Perylene-d12	381519	190760	763038	253365	-33.59

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.56	-0.03
48 Naphthalene-d8	6.14	5.64	6.64	6.14	-0.02
82 Acenaphthene-d10	8.83	8.33	9.33	8.82	-0.08
121 Phenanthrene-d10	11.49	10.99	11.99	11.48	-0.06
153 Chrysene-d12	16.65	16.15	17.15	16.65	-0.04
166 Perylene-d12	19.27	18.77	19.77	19.25	-0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KLCS3008.D Page 5
Report Date: 10-May-2005 16:16

STL St. Louis

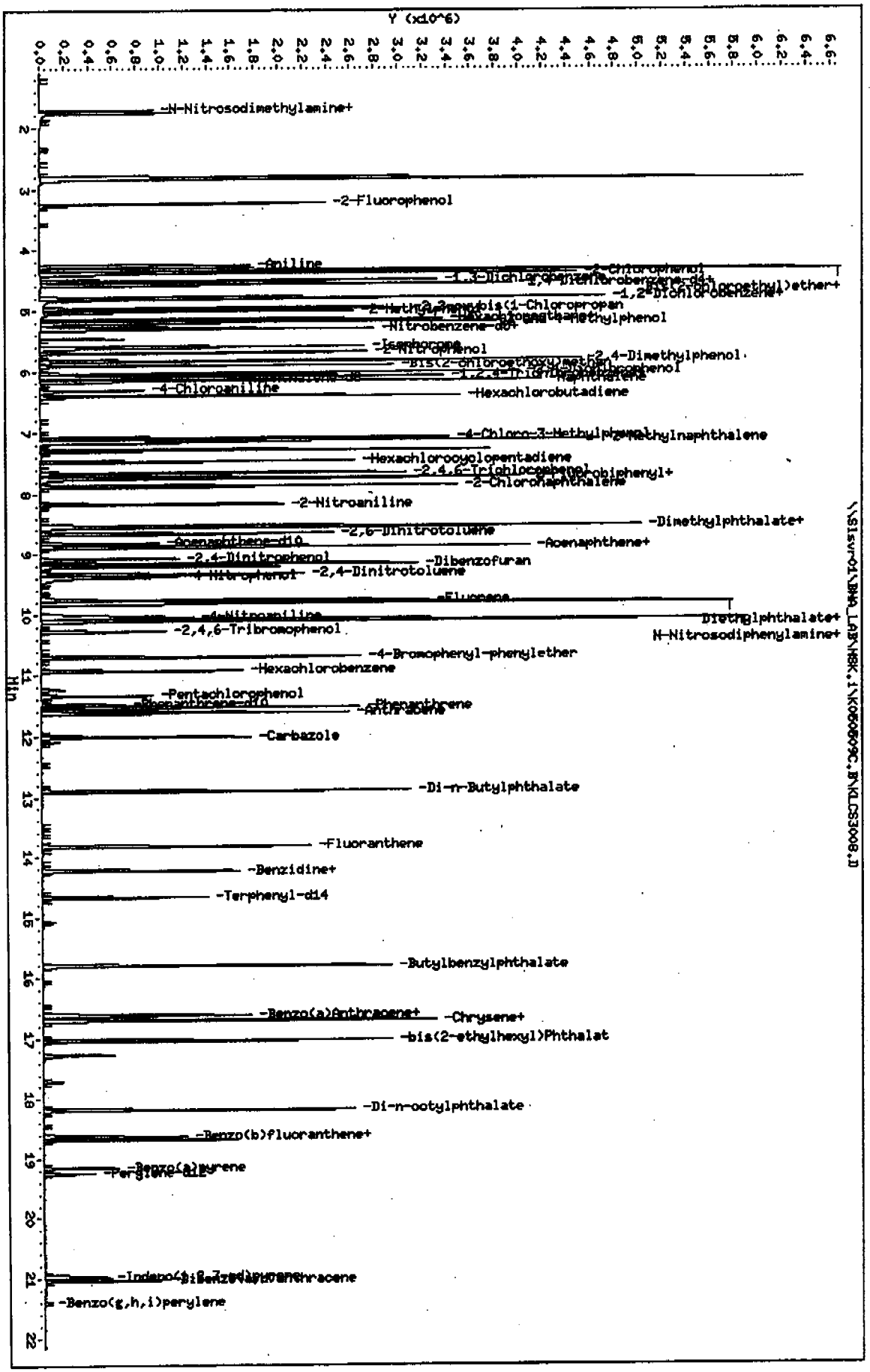
RECOVERY REPORT

Client Name:
Client SDG: F5D290000
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: G9HAL1AC
Client Smp ID: SVLCSK129A
Level: LOW
Operator: XIA
Data Type: MS DATA
SampleType: LCS
SpikeList File: SONLCS04.spk
Quant Type: ISTD
Sublist File: APPIXSONLCS04.sub
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Misc Info: F5D290000-285C (5119285) APPIX SON

SPIKE	COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
83	Acenaphthene	6667	3950	59.26	56-107
79	Acenaphthylene	6667	4275	64.13	56-107
124	Anthracene	6667	3902	58.53	55-107
150	Benzo(a)Anthracene	6667	3896	58.44	56-112
160	Benzo(b)fluoranthe	6667	3948	59.22	53-112
161	Benzo(k)fluoranthe	6667	3975	59.63*	60-126
177	Benzo(g,h,i)peryle	6667	177.1	2.66*	37-139
165	Benzo(a)pyrene	6667	1670	25.05*	54-109
42	Bis(2-chloroethoxy	6667	5206	78.09	53-103
19	Bis(2-chloroethyl)	6667	5192	77.89	43-94
155	bis(2-ethylhexyl)P	6667	5157	77.36	53-112
109	4-Bromophenyl-phen	6667	4344	65.17	54-106
146	Butylbenzylphthala	6667	5303	79.55	55-115
126	Carbazole	6667	2992	44.88*	45-112
51	4-Chloroaniline	6667	1338	20.07*	21-96
59	4-Chloro-3-Methylp	6667	5081	76.22	52-100
20	2-Chlorophenol	6667	5128	76.91	49-92
95	4-Chlorophenyl-phe	6667	4268	64.03	56-105
154	Chrysene	6667	3844	57.67	55-112
174	Dibenzo(a,h)anthra	6667	4044	60.66	42-133
86	Dibenzofuran	6667	4043	60.65	46-108
129	Di-n-Butylphthalat	6667	5040	75.60	55-109
152	3,3'-Dichlorobenzi	6667	2835	42.53	32-95
45	2,4-Dichlorophenol	6667	5091	76.37	51-98
93	Diethylphthalate	6667	5336	80.04	56-111
41	2,4-Dimethylphenol	6667	5145	77.18	48-97
76	Dimethylphthalate	6667	5251	78.77	55-105
99	4,6-Dinitro-2-meth	6667	6326	94.90	27-100
84	2,4-Dinitrophenol	6667	4351	65.27	10-91
88	2,4-Dinitrotoluene	6667	5310	79.65	56-117
80	2,6-Dinitrotoluene	6667	5092	76.39	55-108
158	Di-n-octylphthalat	6667	5330	79.95	49-112
134	Fluoranthene	6667	3440	51.61*	56-106
94	Fluorene	6667	4096	61.44	56-105
112	Hexachlorobenzene	6667	3125	46.88*	57-111
54	Hexachlorobutadien	6667	4017	60.26	50-102
66	Hexachlorocyclopen	6667	4895	73.42	41-117
35	Hexachloroethane	6667	3135	47.03	43-100
173	Indeno(1,2,3-cd)py	6667	2027	30.41*	42-129
39	Isophorone	6667	5466	81.99	57-110

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
62 2-Methylnaphthalen	6667	3950	59.25	38-112
27 2-Methylphenol	6667	4575	68.63	48-92
29 3 and 4-Methylphen	6667	4742	71.13	47-100
50 Naphthalene	6667	3926	58.89	52-102
73 2-Nitroaniline	6667	4729	70.93	45-114
81 3-Nitroaniline	6667	2490	37.35	30-94
98 4-Nitroaniline	6667	4643	69.65	42-109
37 Nitrobenzene	6667	4198	62.97	50-102
40 2-Nitrophenol	6667	4311	64.66	50-99
85 4-Nitrophenol	6667	5606	84.09	44-109
100 N-Nitrosodiphenyla	6667	5238	78.56	58-114
32 N-Nitrosodinpropyl	6667	5208	78.12	55-108
28 2,2-oxybis(1-Chlor	6667	4812	72.19	44-102
117 Pentachlorophenol	6667	3006	45.09	37-102
122 Phenanthrene	6667	3853	57.79	57-108
16 Phenol	6667	5390	80.85	49-92
137 Pyrene	6667	2669	40.03*	54-114
47 1,2,4-Trichloroben	6667	3820	57.30	50-101
68 2,4,5-Trichlorophe	6667	5310	79.66	53-101
67 2,4,6-Trichlorophe	6667	4548	68.22	52-100

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 10 2-Fluorophenol	5000	3863	77.26	50-98
$ 15 Phenol-d5	5000	4029	80.57	51-95
$ 36 Nitrobenzene-d5	3333	2294	68.81	50-111
$ 69 2-Fluorobiphenyl	3333	2298	68.94	57-117
$ 104 2,4,6-Tribromophen	5000	2948	58.97	53-108
$ 139 Terphenyl-d14	3333	2010	60.29	49-107

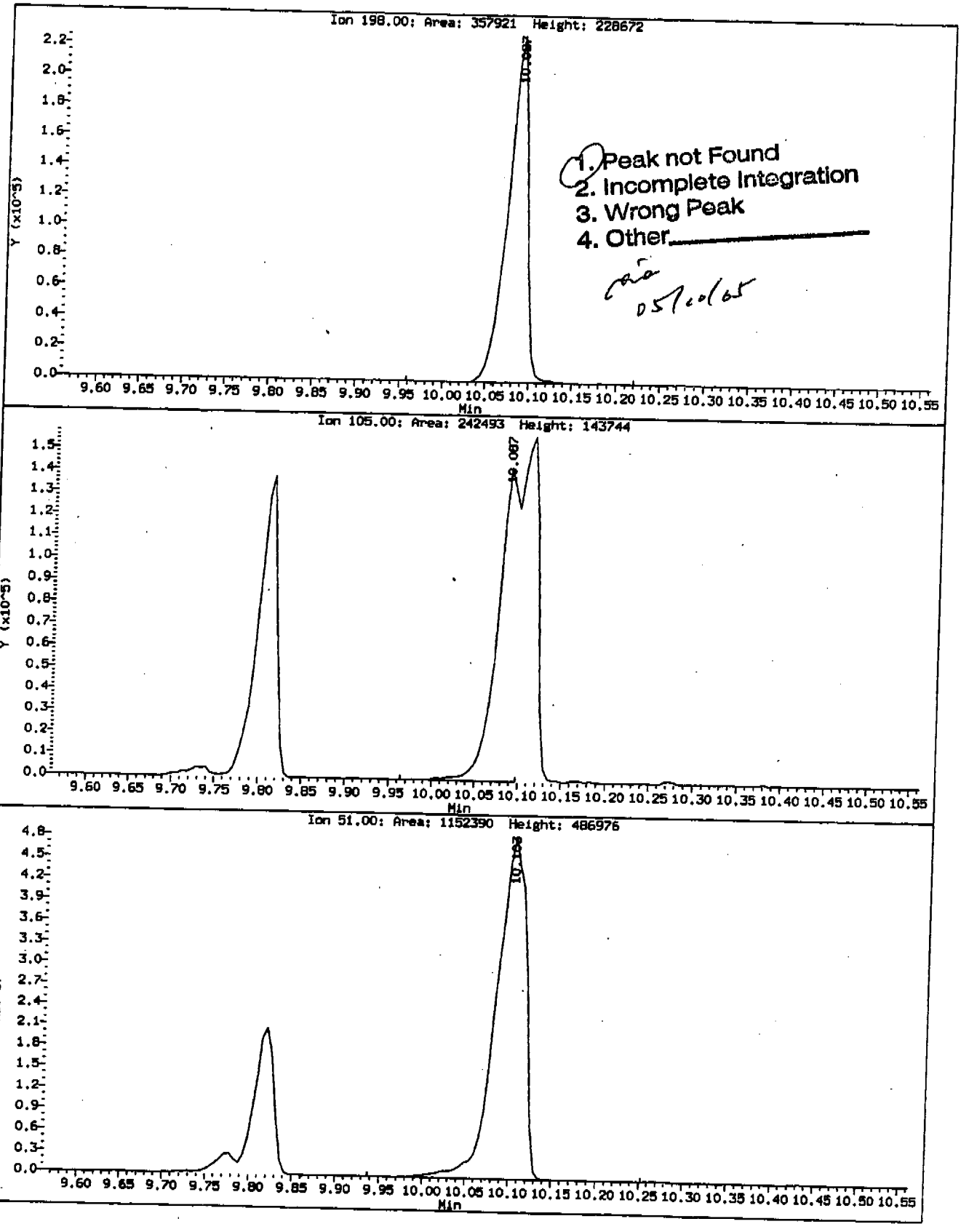


Data File: \\Slsvr01\BNA_LAB\HSK.i\K050509C.B\KLCS3008.D
Date : 09-MAY-2005 19:09
Client ID: SVLCSK1290
Sample Info: C9HL1AC
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slavr01\BNA_LAB\MSK.i\K050509C.B\KLCS3008.D
Injection Date: 09-MAY-2005 19:09
Instrument: MSK.i
Client Sample ID: SVLCSK129A

Compound: 4,6-Dinitro-2-methylphenol
CAS Number: 534-52-1



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KLCS3105.D Page 1
Report Date: 13-May-2005 10:27

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KLCS3105.D
Lab Smp Id: HAAT21AC Client Smp ID: SVLCSK132E
Inj Date : 12-MAY-2005 18:32
Operator : XIA Inst ID: MSK.i
Smp Info : HAAT21AC
Misc Info : F5E110000-374C (5131374) SON GPC
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m
Meth Date : 12-May-2005 16:05 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 12:01 Cal File: KCAL2994.D
Als bottle: 13 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SONLCS04.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Uf*Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Factor
Vt	2000.000	Volume of final extract (uL)
Vi	1.000	Volume Injected
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	4 N-Nitrosodimethylamine	74	1.729	1.678	(0.381)	324406	92.4364	6162
	3 Pyridine	79	1.697	1.662	(0.374)	433821	70.0505	4670
$	10 2-Fluorophenol	112	3.246	3.254	(0.716)	409956	64.8662	4324
	17 Aniline	93	4.235	4.232	(0.934)	740515	64.4938	4300
	19 Bis(2-chloroethyl)ether	93	4.304	4.306	(0.949)	615023	75.6816	5045
$	15 Phenol-d5	99	4.326	4.333	(0.954)	551759	62.3754	4158
	16 Phenol	94	4.336	4.349	(0.956)	759752	77.5893	5173
	20 2-Chlorophenol	128	4.379	4.381	(0.966)	609674	86.1129	5741
	21 1,3-Dichlorobenzene	146	4.491	4.488	(0.991)	698387	86.2552	5750
*	22 1,4-Dichlorobenzene-d4	152	4.534	4.536	(1.000)	209213	40.0000	
	23 1,4-Dichlorobenzene	146	4.555	4.557	(1.005)	746514	86.8185	5788
	25 Benzyl Alcohol	108	4.796	4.793	(1.058)	400479	115.101	7673
	26 1,2-Dichlorobenzene	146	4.774	4.777	(1.053)	702849	88.3848	5892
	28 2,2-oxybis(1-Chloropropane)	45	4.945	4.947	(1.091)	698483	83.1158	5541
	27 2-Methylphenol	108	5.015	5.017	(1.106)	509477	81.2575	5417
	35 Hexachloroethane	117	5.127	5.134	(1.131)	328053	87.2554	5817
	32 N-Nitrosodinpropylamine	70	5.143	5.129	(1.134)	610237	92.6395	6176
	29 3 and 4-Methylphenol	108	5.196	5.204	(1.146)	525878	78.6489	5243
$	36 Nitrobenzene-d5	82	5.260	5.263	(0.861)	438652	44.6930	2980
	37 Nitrobenzene	77	5.287	5.284	(0.865)	887472	85.3175	5688

rev 05/13/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KLCS3105.D
Report Date: 13-May-2005 10:27

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	39 Isophorone	82	5.581	5.583	(0.913)	1220874	90.0324	6002
	40 2-Nitrophenol	139	5.682	5.685	(0.930)	306134	84.9472	5663
	41 2,4-Dimethylphenol	107	5.821	5.824	(0.953)	684374	89.4853	5966
	42 Bis(2-chloroethoxy)methane	93	5.891	5.888	(0.964)	743758	86.0428	5736
	45 2,4-Dichlorophenol	162	6.030	6.043	(0.987)	480880	85.5154	5701
	47 1,2,4-Trichlorobenzene	180	6.067	6.075	(0.993)	593359	88.5699	5905
*	48 Naphthalene-d8	136	6.110	6.117	(1.000)	714988	40.0000	
	44 Benzoic Acid	122	6.126	6.112	(1.003)	214681	60.2003	4013(M)
	50 Naphthalene	128	6.142	6.139	(1.005)	1763366	87.1076	5807
	51 4-Chloroaniline	127	6.291	6.299	(1.030)	407805	49.7521	3317
	54 Hexachlorobutadiene	225	6.382	6.390	(1.045)	421702	90.6269	6042
	62 2-Methylnaphthalene	142	7.098	7.100	(1.162)	1668826	115.248	7683(R)
	59 4-Chloro-3-Methylphenol	107	7.087	7.095	(1.160)	593726	90.8773	6058
	66 Hexachlorocyclopentadiene	237	7.440	7.448	(0.846)	424684	105.693	7046
	67 2,4,6-Trichlorophenol	196	7.643	7.645	(0.869)	386284	89.0663	5938
$	69 2-Fluorobiphenyl	172	7.718	7.725	(0.878)	683033	45.1405	3009
	68 2,4,5-Trichlorophenol	196	7.761	7.779	(0.883)	391678	85.4508	5697
	72 2-Chloronaphthalene	162	7.846	7.848	(0.892)	1109949	87.7338	5849
	73 2-Nitroaniline	65	8.150	8.147	(0.927)	445783	81.7977	5453
	76 Dimethylphthalate	163	8.514	8.516	(0.968)	1280900	88.4074	5894
	79 Acenaphthylene	152	8.530	8.532	(0.970)	1776413	95.2412	6349
	80 2,6-Dinitrotoluene	165	8.631	8.628	(0.982)	266328	86.0264	5735
*	82 Acenaphthene-d10	164	8.792	8.799	(1.000)	375784	40.0000	
	83 Acenaphthene	153	8.850	8.853	(1.007)	1027210	87.2115	5814
	81 3-Nitroaniline	138	8.866	8.869	(1.009)	156164	51.3463	3423
	84 2,4-Dinitrophenol	184	9.048	9.050	(1.029)	74409	40.2354	2682
	86 Dibenzofuran	168	9.128	9.130	(1.038)	1490631	85.6605	5711
	88 2,4-Dinitrotoluene	165	9.304	9.307	(1.058)	345255	86.7214	5781
	85 4-Nitrophenol	109	9.449	9.462	(1.075)	217947	85.8410	5723
	94 Fluorene	166	9.742	9.745	(1.108)	1260403	90.4999	6033
	93 Diethylphthalate	149	9.775	9.771	(1.112)	1289977	88.9529	5930
	95 4-Chlorophenyl-phenylether	204	9.791	9.793	(1.114)	680280	90.5398	6036
	98 4-Nitroaniline	138	10.004	9.990	(1.138)	238238	80.3526	5357
	99 4,6-Dinitro-2-methylphenol	198	10.047	10.033	(0.877)	214143	80.4086	5360(QM)
	100 N-Nitrosodiphenylamine	169	10.063	10.065	(0.879)	957590	97.8527	6524
	102 Azobenzene	77	10.074	10.076	(0.880)	1934892	88.1431	5876
$	104 2,4,6-Tribromophenol	330	10.250	10.252	(1.166)	156798	74.6410	4976
	109 4-Bromophenyl-phenylether	248	10.672	10.680	(0.932)	402407	89.5096	5967
	112 Hexachlorobenzene	284	10.902	10.904	(0.952)	424717	92.5357	6169
	117 Pentachlorophenol	266	11.324	11.326	(0.989)	136865	53.4678	3564
*	121 Phenanthrene-d10	188	11.452	11.460	(1.000)	642751	40.0000	
	122 Phenanthrene	178	11.500	11.502	(1.004)	1680998	84.6735	5645
	124 Anthracene	178	11.585	11.588	(1.012)	1639963	85.4490	5697
	126 Carbasole	167	11.997	11.994	(1.048)	1322395	80.6457	5376
	129 Di-n-Butylphthalate	149	12.878	12.881	(1.125)	1838077	85.5529	5704
	134 Fluoranthene	202	13.797	13.799	(1.205)	1630354	79.4603	5297
	135 Benzidine	184	14.187	14.195	(0.854)	135938	19.0044	1267
	137 Pyrene	202	14.208	14.211	(0.855)	1641825	85.6380	5709
$	139 Terphenyl-d14	244	14.647	14.659	(0.881)	582829	39.1207	2608
	146 Butylbenzylphthalate	149	15.779	15.781	(0.950)	704007	88.7994	5920
	150 Benzo(a)Anthracene	228	16.586	16.593	(0.998)	1398421	84.6750	5645
*	153 Chrysene-d12	240	16.618	16.625	(1.000)	471640	40.0000	
	152 3,3'-Dichlorobenzidine	252	16.682	16.689	(1.004)	389349	61.2259	4082
	154 Chrysene	228	16.671	16.679	(1.003)	1345368	85.6059	5707

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KLCS3105.D
Report Date: 13-May-2005 10:27

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
155 bis(2-ethylhexyl)Phthalate	149	17.002	17.005	(1.023)	851863	85.8318	5722
158 Di-n-octylphthalate	149	18.151	18.159	(0.944)	1352681	90.9022	6060
160 Benzo(b)fluoranthene	252	18.594	18.597	(0.967)	1245981	91.8852	6126
161 Benzo(k)fluoranthene	252	18.642	18.645	(0.970)	1203772	89.3773	5958
165 Benzo(a)pyrene	252	19.134	19.136	(0.995)	1057750	86.4284	5762
* 166 Perylene-d12	264	19.225	19.232	(1.000)	349220	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.940	20.947	(1.089)	915635	80.7094	5381
174 Dibenzo(a,h)anthracene	278	20.993	20.995	(1.092)	926157	84.1299	5609
177 Benzo(g,h,i)perylene	276	21.394	21.401	(1.113)	663710	65.5290	4368

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KLCS3105.D Page 4
Report Date: 13-May-2005 10:27

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSK.i
Lab File ID: KLCS3105.D
Lab Smp Id: HAAT21AC
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m
Misc Info: F5E110000-374C (5131374) SON GPC

Calibration Date: 12-MAY-2005
Calibration Time: 12:41
Client Smp ID: SVLCSK132E
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	167849	83925	335698	209213	24.64
48 Naphthalene-d8	587608	293804	1175216	714988	21.68
82 Acenaphthene-d10	335274	167637	670548	375784	12.08
121 Phenanthrene-d10	627534	313767	1255068	642751	2.42
153 Chrysene-d12	548402	274201	1096804	471640	-14.00
166 Perylene-d12	477098	238549	954196	349220	-26.80

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.54	4.04	5.04	4.53	-0.05
48 Naphthalene-d8	6.12	5.62	6.62	6.11	-0.12
82 Acenaphthene-d10	8.80	8.30	9.30	8.79	-0.09
121 Phenanthrene-d10	11.46	10.96	11.96	11.45	-0.07
153 Chrysene-d12	16.63	16.13	17.13	16.62	-0.05
166 Perylene-d12	19.23	18.73	19.73	19.23	-0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KLCS3105.D Page 5
Report Date: 13-May-2005 10:27

STL St. Louis

RECOVERY REPORT

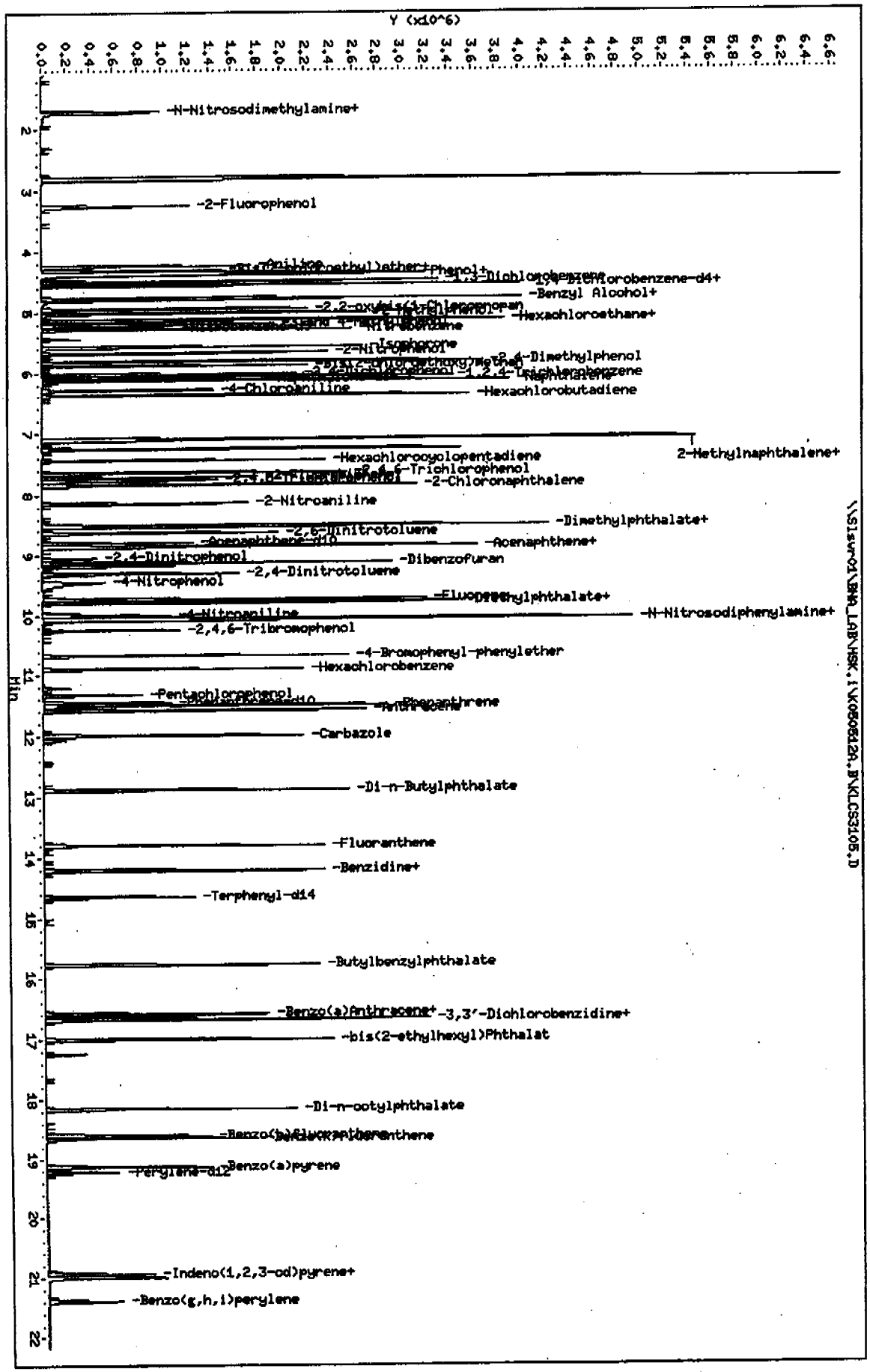
Client Name:
Sample Matrix: SOLID
Lab Smp Id: HAAT21AC
Level: LOW
Data Type: MS DATA
SpikeList File: SONLCS04.spk
Sublist File: SONLCS04.sub
Client SDG: F5E110000
Fraction: SV
Client Smp ID: SVLCSK132E
Operator: XIA
SampleType: LCS
Quant Type: ISTD
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m
Misc Info: F5E110000-374C (5131374) SON GPC

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
83 Acenaphthene	6667	5814	87.21	56-107
79 Acenaphthylene	6667	6349	95.24	56-107
124 Anthracene	6667	5697	85.45	55-107
150 Benzo(a)Anthracene	6667	5645	84.68	56-112
160 Benzo(b)fluoranthe	6667	6126	91.89	53-112
161 Benzo(k)fluoranthe	6667	5958	89.38	60-126
177 Benzo(g,h,i)peryle	6667	4368	65.53	37-139
165 Benzo(a)pyrene	6667	5762	86.43	54-109
42 Bis(2-chloroethoxy	6667	5736	86.04	53-103
19 Bis(2-chloroethyl)	6667	5045	75.68	43-94
155 bis(2-ethylhexyl)P	6667	5722	85.83	53-112
109 4-Bromophenyl-phen	6667	5967	89.51	54-106
146 Butylbenzylphthala	6667	5920	88.80	55-115
126 Carbazole	6667	5376	80.65	45-112
51 4-Chloroaniline	6667	3317	49.75	21-96
59 4-Chloro-3-Methylp	6667	6058	90.88	52-100
20 2-Chlorophenol	6667	5741	86.11	49-92
95 4-Chlorophenyl-phe	6667	6036	90.54	56-105
154 Chrysene	6667	5707	85.61	55-112
174 Dibenzo(a,h)anthra	6667	5609	84.13	42-133
86 Dibenzofuran	6667	5711	85.66	46-108
129 Di-n-Butylphthalat	6667	5704	85.55	55-109
152 3,3'-Dichlorobenzi	6667	4082	61.23	32-95
45 2,4-Dichlorophenol	6667	5701	85.52	51-98
93 Diethylphthalate	6667	5930	88.95	56-111
41 2,4-Dimethylphenol	6667	5966	89.49	48-97
76 Dimethylphthalate	6667	5894	88.41	55-105
99 4,6-Dinitro-2-meth	6667	5360	80.41	27-100
84 2,4-Dinitrophenol	6667	2682	40.24	10-91
88 2,4-Dinitrotoluene	6667	5781	86.72	56-117
80 2,6-Dinitrotoluene	6667	5735	86.03	55-108
158 Di-n-octylphthalat	6667	6060	90.90	49-112
134 Fluoranthene	6667	5297	79.46	56-106
94 Fluorene	6667	6033	90.50	56-105
112 Hexachlorobenzene	6667	6169	92.54	57-111
54 Hexachlorobutadien	6667	6042	90.63	50-102
66 Hexachlorocyclopen	6667	7046	105.69	41-117
35 Hexachloroethane	6667	5817	87.26	43-100
173 Indeno(1,2,3-cd)py	6667	5381	80.71	42-129
39 Isophorone	6667	6002	90.03	57-110

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KLCS3105.D
Report Date: 13-May-2005 10:27

	SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
62	2-Methylnaphthalen	6667	7683	115.25*	38-112
27	2-Methylphenol	6667	5417	81.26	48-92
29	3 and 4-Methylphen	6667	5243	78.65	47-100
50	Naphthalene	6667	5807	87.11	52-102
73	2-Nitroaniline	6667	5453	81.80	45-114
81	3-Nitroaniline	6667	3423	51.35	30-94
98	4-Nitroaniline	6667	5357	80.35	42-109
37	Nitrobenzene	6667	5688	85.32	50-102
40	2-Nitrophenol	6667	5663	84.95	50-99
85	4-Nitrophenol	6667	5723	85.84	44-109
100	N-Nitrosodiphenyla	6667	6524	97.85	58-114
32	N-Nitrosodinpropyl	6667	6176	92.64	55-108
28	2,2-oxybis(1-Chlor	6667	5541	83.12	44-102
117	Pentachlorophenol	6667	3564	53.47	37-102
122	Phenanthrene	6667	5645	84.67	57-108
16	Phenol	6667	5173	77.59	49-92
137	Pyrene	6667	5709	85.64	54-114
47	1,2,4-Trichloroben	6667	5905	88.57	50-101
68	2,4,5-Trichlorophe	6667	5697	85.45	53-101
67	2,4,6-Trichlorophe	6667	5938	89.07	52-100

	SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 10	2-Fluorophenol	5000	4324	86.49	50-98
$ 15	Phenol-d5	5000	4158	83.17	51-95
$ 36	Nitrobenzene-d5	3333	2980	89.39	50-111
$ 69	2-Fluorobiphenyl	3333	3009	90.28	57-117
$ 104	2,4,6-Tribromophen	5000	4976	99.52	53-108
$ 139	Terphenyl-d14	3333	2608	78.24	49-107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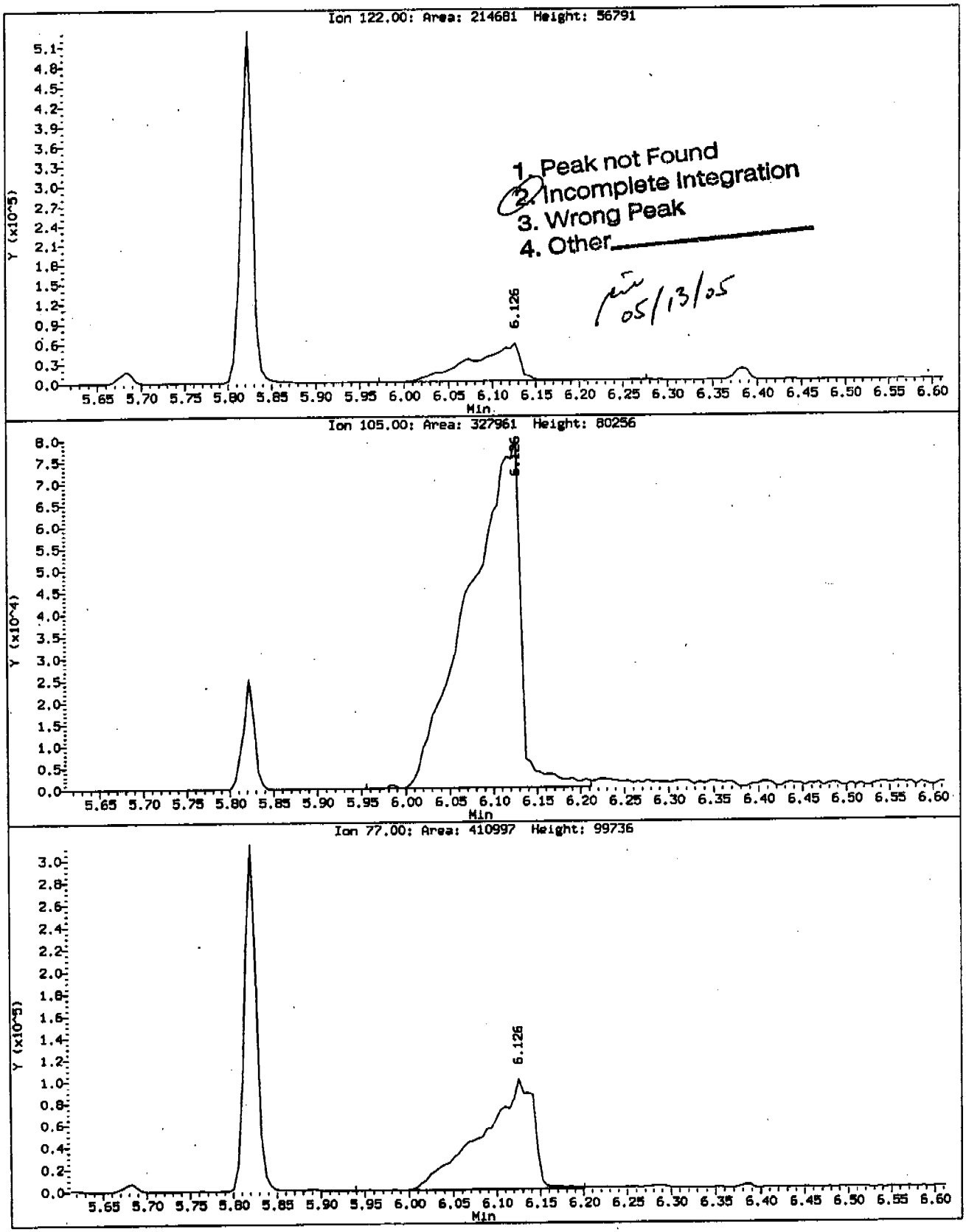
Data File: \\Slsvr01\BNA_LAB\HSK.i\K0508A2A.B\KLCS3105.D
Date : 12-MAY-2005 18:32
Client ID: SMLCSK132E
Sample Info: MAAT21AC
Volume Injected (uL): 1.0
Column phase:
Instrument: HSK.1
Operator: KIA
Column diameter: 2.00
\\Slsvr01\BNA_LAB\HSK.i\K0508A2A.B\KLCS3105.D
Min
-N-Nitrosodimethylamine+
-2-Fluorophenol
-Benzyl Alcohol+
-Hexachloroethane+
-2-Nitrophenol
-2,4-Dimethylphenol
-4-Chloroaniline
-Hexachlorobutadiene
-Hexachlorocyclopentadiene
2-Methylnaphthalene+
-2-Chloronaphthalene
-2-Nitroaniline
-Dimethylphthalate+
-2,6-Dinitrotoluene
-Acenaphthene+
-2,4-Dinitrophenol
-Dibenzofuran
-2,4-Dinitrotoluene
-4-Nitrophenol
-N-Nitrosodiphenylamine+
-2,4,6-Tribromophenol
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Pentachlorophenol
-Carbazole
-Di-n-Butylphthalate
-Fluoranthene
-Benzidine+
-Terphenyl-d14
-Butylbenzylphthalate
-Benzo(a)Anthracene+
-3,3'-Dichlorobenzidine+
-bis(2-ethylhexyl)Phthalat
-Di-n-ootylphthalate
-Benzo(a)pyrene
-Indeno(1,2,3-cd)pyrene+
-Benzo(g,h,i)perylene

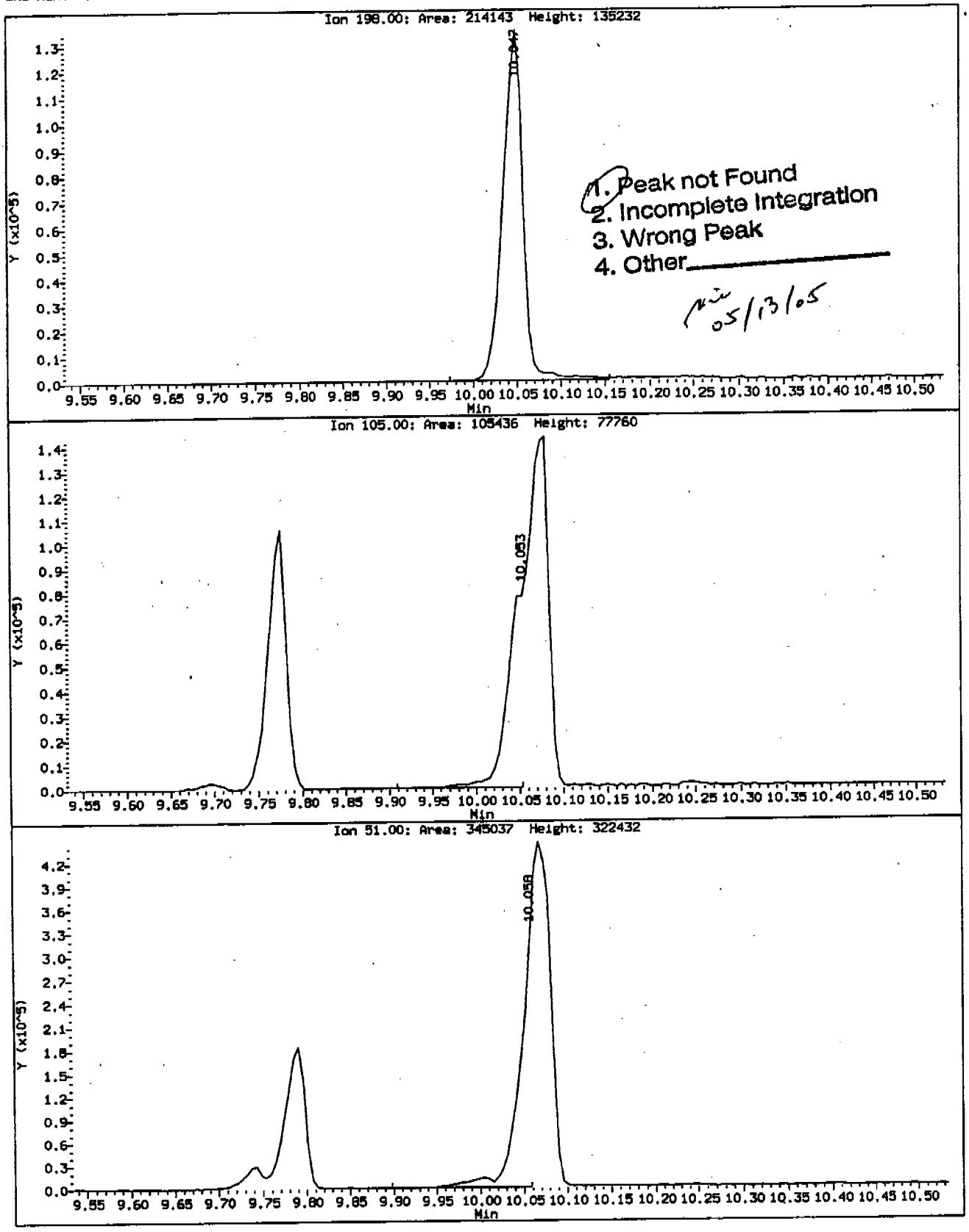
Data File: \\Slavr01\BNA_LAB\MSK.i\K050512A.B\KLCS3105.D
Injection Date: 12-MAY-2005 18:32
Instrument: MSK.i
Client Sample ID: SVLCSK132E

Compound: Benzoic Acid
CAS Number: 65-85-0



Data File: \\Slmvr01\BNA_LAB\MSK.i\K050512A.B\KLCS3105.D
Injection Date: 12-MAY-2005 18:32
Instrument: MSK.i
Client Sample ID: SVLCSK132E

Compound: 4,6-Dinitro-2-methylphenol
CAS Number: 534-52-1



GC/MS MISCELLANEOUS DATA

LOT# F5D220273

STL ST. LOUIS

Organic Prep Report for Batch #5119285

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Prep Method: SW846 3550B
Prep Description: SONICATION - Low Level

SOP Number: STL-OP-0002, Rev 4
Matrix: SOLID
Extraction Date: 4/29/2005

Lot Number	WorkOrder No	Initials: JW Wt/Vol	pH 1	pH 2	Extr Unit	Initials: SL Concentration 1 Volume	Date	Initials: JW Cleanup 1 Method	Date	Initials: Cleanup 2 Method	Date
F5D200213-001	G8QE31A9	30.415 g	Re-ex			~~0.5 mL~~ 1 mL SL	5/4/05	3640A JW 05-03-05		Applx/tics/CAST	
F5D200213-001D	G8QE31CX	30.659 g				~~0.5 mL~~ 1 mL SL					
F5D200213-001S	G8QE31CW	30.079 g				~~0.5 mL~~ 1 mL SL					
F5D210380-001	G8WXJ1AD	30.805 g	re-ex			0.5 mL		3640A	05-03-05	8270C/notics/CAM	
F5D210380-001D	G8WXJ1AJ	30.421 g				0.5 mL					
F5D210380-001S	G8WXJ1AH	30.06 g				0.5 mL					
F5D210380-002	G8WXV1AD	30.108 g	re-ex			0.5 mL					
F5D210380-003	G8WXX1AD	30.5 g	re-ex			0.5 mL					
F5D220273-002	G81GA1AC	30.613 g	re-ex			0.5 mL					/CAM
F5D290000-285B	G9HAL1AA	30 g				0.5 mL					
F5D290000-285C	G9HAL1AC	30 g				0.5 mL					

Spike Information

Name	Standard ID	Exp Date	Vol Added
BNA SPIKE	OP0242-05	10/22/2005	2000 uL
BNA SURR	OP0241-05	10/22/2005	1000 uL

Spiking verified by: JW

Miscellaneous Information

Start: Stop:
Extr 1:
Extr 2:
Conc Method: steam bath
Conc Temp C: 89.9

Tray #1 38

Chemical Lot Information

Chemical	Lot Number
Acetone	B08E10
Methylene Chloride	B08E10
Methylene Chloride	B12E02
Sodium Sulfate	A51621

Comments: For samples processed through GPC, final concentration is equivalent to 1ml due to 1/2 sample extract being lost during cleanup. JW 05-05-05

Custody Information

Relinquished By: SL
Review/Received By: MAH
Date of Transfer: 5/4/05

QC Suffix B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate
PrepSheet Generator 1.15, updated 10/20/2004

LOT# F5D220273

SEVERN TRENT **STL**

Organic Prep Report for Batch #5131374

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

CleanupMethod: GPC **Method No:** SW846 3640A

SOP Number: STL-OP-0002, Rev 4

Prep Method: SW846 3550B

Matrix: SOLID

Prep Description: SONICATION - Low Level

Extraction Date: 5/11/2005

		Initials: jw				Initials: jk/bh		Initials: JK/BH		Initials:	
						Concentration 1		Cleanup 1		Cleanup 2	
Lot Number	WorkOrder No	Wt/Vol	pH 1	pH 2	Extr Unit	Volume	Date	Method	Date	Method	Date
F5D210380-001	G8WXJ2AD	30.134 g				1 mL	5/12/2005	GPC	5/11/2005	8270	
F5D210380-001D	G8WXJ1AL	30.085 g				1 mL	5/12/2005				
F5D210380-001S	G8WXJ1AK	30.648 g				1 mL	5/12/2005				
F5D210380-002	G8WXV2AD	30.21 g				1 mL	5/12/2005				
F5D210380-003	G8WXX2AD	30.2 g				1 mL	5/12/2005				
F5D220273-002	G81GA2AC	30.116 g				1 mL	5/12/2005				
F5E110000-374B	HAAT21AA	30 g				1 mL	5/12/2005				
F5E110000-374C	HAAT21AC	30 g				1 mL	5/12/2005				

Spike Information

Name	Standard ID	Exp Date	Vol Added
BNA Full Mix Spike	gc0200-05	11/10/2005	2000 uL
BNA Surr.	op0241-05	10/22/2005	1000 uL

Spiking verified by: TJW

Miscellaneous Information

Start: Stop:

Extr 1:

Extr 2:

Conc Method: steam bath

Conc Temp C: 89.9

Chemical Lot Information

Chemical	Lot Number
Methylene Chloride	b14e37
Sodium Hydroxide	5032-08
Sodium Sulfate	a51621
Sulfuric Acid	5557a50h02

Comments: Samples should be processed as 2ml final concentration. JK 05-12-05

Custody Information

Relinquished By: **Review/Received By:** **Date of Transfer:** 5/12/05

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.15, updated 10/20/2004

799 of 1038

STL ST. LOUIS

LOT# F5D220273

STL ST. LOUIS

Logbook No.: 2660 — STL St. Louis Laboratory — Instrument ID No.: MSK

GCMS-Semivolatile Runlog

#	Data File	Clock	Lab I.D.	Dil.	STD#	Date	Oper	Matrix
1	KDFT 2578	11:20	DFTPP		SV193-05	04-28-05	K/A	
2	KCAL 2579	K0418A	SSTD050 Appix A		SV195-05			
3	2580		SSTD200		SV197-05			
4	2581		SSTD160		SV188-05			
5	2582		SSTD120		SV187-05			
6	2583		SSTD080		SV186-05			
7	2584		SSTD020		SV194-05			
8	2585		SSTD010		SV183-05			
9	2586		SSTD002		SV182-05			
10	2587		SSTD050 CCP		SV209-05			
11	2587		SSTD160		SV0052-05			
12	2588		SSTD120		SV0031-05			
13	2590		SSTD080		SV0030-05			
14	2591		SSTD020		SV0028-05			
15	2592		SSTD010		SV0027-05			
16	2593		SSTD002		SV0026-05			
17	KDFT 2594	20:12	DFTPP		SV0193-05			
18	KCAL 2595	K0418C	SSTD050		SV2195-05			
19	2596		SSTD160		SV218-05			
20	2597		SSTD120		SV217-05			
21	2598		SSTD080		SV216-05			
22	2599		SSTD020		SV214-05			
23	2600		SSTD010		SV213-05			
24	2601		SSTD002		SV211-05			
25	2602		SSTD050 Appix IV	2X	0P0052-05			
26	2603		SSTD050 CCP Appix		SV185-05			
27	2604		SSTD050 CCP		SV209-05			low
28	KBLK 2605		GTTXR1AA	1X				↓
29	KLCS 2606		GTTXR1AC					WEAK
30	KBLK 2607		GTTMBW1AD					
31	KSmp 2608		GTTCW1AC					
32	2609		GTTCW1AK					
33	2610		GTTCW1AI					
34	2611		GTTDW1AL					
35	2612		GTTD91AC					

Review documented on next page.

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

Form: SL-ORG-0006, Rev. 5/8/03

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Logbook No.: 2660 — STL St. Louis Laboratory — Instrument ID No.: MSK

GCMS-Semivolatile Runlog

#	Batch No.	Comments
1		OK
2		OK
3		OK
4		OK
5		OK
6		OK
7		OK
8		OK
9		OK
10		OK
11		OK
12		OK
13		OK
14		OK
15		OK
16		OK
17		OK
18		OK
19		OK
20		OK
21		OK
22		OK
23		OK
24		OK
25		OK
26		OK
27		IS ↑ not needed. 04/29/05
28	5096495	F5D06wwo-495B OK
29	↓	↓ 495C OK
30	5095187	F5D05wwo-187B OK
31		F5C30312-1002 OK
32		0025 NCIM06-52573 OK
33		0020 ↓ OK
34		0023 2 acid surr 0020 NCIM06-52574 OK
35	↓	0016 OK

Reviewed By: Melissa Kuenzi 04-29-05

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

Form: SL-ORG-0006, Rev. 5/8/03

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Logbook No.: 2660 | STL St. Louis Laboratory | Instrument ID No.: MSK

GCMS-Semivolatile Runlog

#	Data File	Clock	Lab I.D.	Dil.	STD#	Date	Oper	Matrix
1	KCAL 2961	K0507A	SSTD 050	—	SV220-05	05-07-25	X/A	
2	2962		SSTD 050 ICV	2X	SV048-05			
3	2963		SSTD 050 Appix B		SV048-05			
4	2964		SSTD 160		SV131-5			
5	2965		SSTD 120		SV150-05			
6	2966		SSTD 080		SV149-05			
7	2967		SSTD 020		SV147-05			
8	2968		SSTD 010		SV146-05			
9	2969	✓	SSTD 002		SV145-05			
10	KDFT 2970	(11:52)	DFTPP		SV332-05			
11	KBAL 2971	K0507C	SSTD 050		SV220-05			
12	2972		SSTD 050 Appix		SV150-05			
13	✓ 2973		SSTD 050 LCS		SV0033-05			
14	KBLK 2974		GBLI71AA	1X	—			water
15	KLCS 2975		GBRJK1AC					✓
16	KSMP 2976		G783X1CD					soil
17	2977		GBLLW1AF					
18	2978		GBLLL1AF					
19	2979		GB13K1AF ~5/19/05					
20	2980		GB13M1AF ~5/19/05					
21	2981		GB13N1AF					
22	2982		GB13P1AF					
23	2983		GB13A1AF					✓
24	2984		GBHQE1A3					water
25	2985		GBRJD1A7					
26	2986		GBTA81A9					
27	2987		GBTCC1AT					
28	2988		GBTCG1AL					✓
29	2989		GBJDL1A9	✓				soil
30	2990		GBJD21AL	10X				
31	✓ 2991	(12:45)	GBJFF1AL	1X	—	✓	✓	✓
32	KSMP 2992	—	SSTD 160 SIM	—	—	05-09-25	X/A	
33	KDFT 2993	(11:40)	DFTPP		SV332-05			
34	KCAL 2994	K0508A	SSTD 050		SV220-05			
35	✓ 2995	✓	SSTD 160		SV048-05	✓	✓	✓

Review documented on next page.

Form: SL-ORG-0006, Rev. 6/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

Logbook No.: 2660 | STL St. Louis Laboratory | Instrument ID No.: MSK

GCMS-Semivolatile Runlog

Batch No.	Comments	#
		ok 1
		ok 2
		ok 3
		ok 4
		ok 5
		ok 6
		ok 7
		ok 8
		ok 9
		ok 10
		ok 11
		ok 12
	3 IS ↑. rinst need. not	ok 13
5119442	F5D220000-0435 report 2933	ok 14
5119433	F5D220000-0276	ok 15
5169990	F5D130145-0040 IS #153, #166 ↓ see K2974 → report	ok 16
5122336	F5D220333-002 IS #153, 166 ↓ report K2951	ok 17
	003 IS #166 ↓ 2938	ok 18
	005	ok 19
	006 IS #153, 166 ↓ report K2940	ok 20
	007 IS #153, 166 ↓ 2941	ok 21
	008 IS #153, 166 ↓ 2942	ok 22
	004 IS #153 ↓ 2943	ok 23
5119442	F5D160137-001 see K2947	ok 24
	F5D220221-005	ok 25
	006	ok 26
	007	ok 27
	008	ok 28
5109990	F5D160154-001	ok 29
	002 WCH06.53146	ok 30
	005	ok 31
	Conditioning blank	32
		ok 33
		ok 34
		ok 35

Reviewed By: [signature] 5/9/05

Form: SL-ORG-0006, Rev. 6/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

Logbook No.: 2668 | STL St. Louis Laboratory | Instrument ID No.: MSK

GCMS-Semivolatile Runlog

#	Data File	Clock	Lab I.D.	Dil.	STD#	Date	Oper	Matrix
1	KCAL2996	KA09AA	SSTD110		SV217-05	05-09-05	KAB	
2	2997		SSTD080		SV216-05			
3	2998		SSTD020		SV214-05			
4	2999		SSTD010		SV217-05			
5	3000		SSTD002		SV211-05			
6	3001	↓	SSTD050 ICV	2X	01216-05			
7	3002	(16:09)	DFTPP		SV032-05			
8	3003	KA09AC	SSTD050		SV220-05			
9	3004		SSTD050 APPIX A		SV190-05			
10	3005		SSTD050 CCP		SV053-05			
11	↓ 3006		SSTD050 APPIX B		SV148-05			
12	KBIK 3007		G9HA61AA	1X				soil
13	KLL5 3008		G9HA61AC					↓
14	KBIK 3009		G9DL01AA					water
15	KLL5 3010		G9DL01AC					
16	KBIK 5011		G9MA61AD					
17	KSSMP 3012		G8784ZAC					
18	3013		G8788IAC					
19	3014		GRV 3P1AA					
20	3015		GRV 46IAA					
21	3016		G8V06IAA					
22	3016	↓ 5/10/05	G8V06IAL					
23	3018		G78V06IAM					
24	3018	5/10/05	G8V09IAC					
25	3019	5/10/05	G81751AA					↓
26	3020	5/10/05	GRRE31A9					soil
27	3021	5/10/05	GRRE31CW					
28	3022	5/10/05	GRRE31CX					
29	3024	↓	G8WXV1AD					↓
30	3025	(04:10)	G8WXX1AD	↓				↓
31	↓ 3026	—	SSTD160 5ng					
32	KOFT 3027	(5:07)	DFTPP		SV032-05			
33	KCHL 3028	→	SSTD050		SV220-05			
34	↓ 3029	↓	SSTD050 APPIX		SV053-05	↓	↓	↓
35	↓ 3030	—	SSTD160 5ng	—	—	05-10-05	KAB	—

Review documented on next page.

Form: SL-ORG-0006, Rev. 5/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Contol Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

Logbook No.: 2668 | STL St. Louis Laboratory | Instrument ID No.: MSK

GCMS-Semivolatile Runlog

Batch No.	Comments	#
		1
	ok	2
	ok	3
	ok	4
	ok	5
	ok	6
	ok	7
	ok	8
	ok	9
	ok ~~5/10/05~~ 5/11/05	10
	NCM06-53749 ~~285~~ 5/10/05	11
5119285	F5D290000 - 285B	12
5119285	↓ - 285C (9hi) <100% NCM06-53748 Re-inj	13
5117669	F5D270000 - 669B	14
↓	↓ 669C NCM06-53745	15
5119211	F5D290000 - 211B	16
	F5D260337 - 001	17
	↓ 002	18
5117669	F5D210281 - 001	19
	↓ 002 2-Flu <100% NCM06-53746 Re-ex	20
	F5D220218 - 001	21
	005 NCM06-53747	22
	010 ↓	23
	↓ 002	24
	F5D220349-001 Is 31.66 L. NCM06-53748 20010 5-Cl 2.00% insuf	25
5119285	F5D200213 - 001	26
	005	27
	↓ 010	28
	F5D210380-002	29
	↓ 003 VOC Re-inj	30
		31
	DNT Istak elem = 19.8% Failed	32
		33
	Instrument stopped	34
	Corrective Action	35

Reviewed By: [signature] 5/10/05

Form: SL-ORG-0006, Rev. 5/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Contol Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

Logbook No.: 2660 STL St. Louis Laboratory Instrument ID No.: MSK

GCMS-Semivolatile Runlog

#	Data File	Clock	Lab I.D.	Dil.	STD#	Date	Oper	Matrix
1	KDFTPP 3031	11:59	DFTPP		5U232-05	05-10-05	SA	
2	KCAL 3032	—	SS70050 8270 + APPIX					
3	KCAL 3033	K0510A	SS70050		5U220-05			
4	KBLK 3034		G8BTK1AA	1X				Water
5	KLCS 3035		G8BTK1AC					
6	3036		G8BTK1AD					
7	KBLK 3037		G947P1AA					
8	KLCS 3038		G947P1AC					
9	3039		G947P1AD					
10	3040		G9HAL1AC					soil
11	KSMP 3041		G8C041AA					water
12	3042		G8WXJ1AD					soil
13	3043		G8WXJ1AH					
14	3044		G8WXJ1AT					
15	3045		G8WXX1AD					
16	3046		G81GA1AC					
17	3047		G81372AC					water
18	3048		G817K1AA					
19	3049		G9WAN1AM					
20	3050		G9WAP1AM					
21	3051		G9WAW1AM					
22	3052		G9WA51AM					
23	3053	23:38	G9WCA1AM					
24	3054	00:10	G9WCE1AM					
25	KSMP 3055	—	SSTD160 Slug					
26	KDFTPP 3056	11:06	DFTPP		5U231-05			
27	KCAL 3057	K0510C	SS70050		5U220-05			
28	KBLK 3058		G947P1AA	1X				water
29	KSMP 3059		G9V961AAM					
30	3060		G9WCC1AM					
31	3061		G9WCR1AM					
32	3062		G9WCU1AM					
33	3063		G9WJ91AC	10x				
34	3064		G9WCJ1AM	1X				
35	3065		G9WAL1AM	1X				

Review documented on next page.

Form: SL-ORG-0006, Rev. 8/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

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Logbook No.: 2660 STL St. Louis Laboratory Instrument ID No.: MSK

GCMS-Semivolatile Runlog

Batch No.	Comments	#
	ok	1
	Test 12.2? used.	2
	ok	3
5110427	F5D22[illegible]-477B ok	4
	477C ok	5
	477L ok	6
5129205	F5E090000-255B No Surr spiked. NCM06-53278 ok	7
	255C ok	8
	255L ok	9
5119285	F5D[illegible]-285C ok	10
5110477	F5D140184-001 ok	11
5119285	F5D210380-001 IS #153.166↓ NCM06-53285 ok	12
	002S NCM06-53283, 284 ok	13
	002D IS# 153.166↓ ↓285 ok	14
	003 ok	15
	F5D220273-001 IS # 153.166↓ Re-i	16
3[illegible]	F5D220333-010RE NCM06-52891 ok	17
5117669	F5D220349-001 2 acid Surr <10%. NCM06-53248 ok	18
5129205	F5E050138-003 ok	19
	004 ok	20
	005 ok	21
	006 ok	22
	007 ok	23
	008 10C Re-inj	24
	Conditioning	25
	Tune. DFTPP is ok DDT break down 10%	26
		27
5129205	F5E090000-253B No Surr see K3037	28
	F5E050138-001 QC o/c	29
	010	30
	011	31
	012	32
	F5E050213-001 Two diluted.	33
	F5E050138-009	34
	002	35

Reviewed By: [signature] 05-11-05 Form: SL-ORG-0006, Rev. 8/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

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Logbook No.: 2660 STL St. Louis Laboratory Instrument ID No.: MSK

GCMS-Semivolatile Runlog

#	Data File	Clock	Lab I.D.	Dil.	STD#	Date	Oper	Matrix
1	KSmp3091	—	SSTD160 5ing	—	—	05-12-05	KIA	
2	KIDFT3092	11:48	IDF701		SV232-05			
3	KCAL3093	KAC1206	SSTD050		SV231-05			
4	3094		SSTD020		SV231-02			
5	3095		SSTD080 Appix A		SV232-08			
6	KBLK3096		G99R31AA	IX				leach
7	KLCS 3097		G99R31AC					
8	3098		G99R31AD					
9	KSmp 3099		G9P3M1AH					
10	KBIK 3100		G97V11AA					Soil
11	KLCS 3101		G97V11AC					
12	KBIK 3102		G97V11AA					
13	KLCS 3103		G97V11AC					
14	KBIK 3104		HAAT21AA					
15	KLCS 3105		HAAT21AC					
16	KSmp3106		G9HF71CA					
17	3107		G9KRP1AD					
18	3108		G9K0P1AZ					
19	3109		G9KRP1AE					
20	3110		G92G71CA					
21	3111		G92XN1AN					
22	3112		G8WJ71AD					
23	3113		G8WJX1AK					
24	3114		G8WJX1AL					
25	3115	23:50	G8WJXV2AD					
26	3116	00:22	G8WJXX2AD					
27	3117	00:54	G81GA2AC					
28	KBIK 3118		HACKJ1AA					Water
29	KLCS 3119		HACKJ1AC					
30	KSmp3120		G9WM11AH					
31	3121		G9WM11AH					
32	3122	(3:32)	G9WM11AJ					
33	KSmp 3123		SSTD160 5ing			05-13-05	KIA	
34	3124							
35	KIDFT3125	10:49	IDF7DP		SV232-05			

Review documented on next page.

Form: SL-ORG-0008, Rev. 5/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

Logbook No.: 2660 STL St. Louis Laboratory Instrument ID No.: MSK

GCMS-Semivolatile Runlog

Batch No.	Comments	#
	Conditioning only	1
	ICP 22080 OK	2
		3
		4
		5
5130688	FSE000000-60813	6
	6086	7
	6086 re-analyze	8
	FSE030234-004² IS #153.166.121 ↓ see K3087	9
5130884	FSF000000-38463 IS out	10
	3846C ↓ re-ini	11
	3846B	12
	3846C	13
5131374	FSZ000000-37463 GPC clean	14
	3746C	15
5130884	FSD290249-001 IS #153.166 ↓ see K3156.67 OK re-ini	16
	FSD300140-001 IS #166 ↓	17
	0015 IS #166 ↓	18
	0010	19
	FSE060282-001 IS #166 ↓ see K3167. GF OK re-ini	20
	FSE060337-001	21
5131374	FSD210380-001RE IS #153.166 ↓ GPC clean	22
	0015 IS #166 ↓	23
	0010 IS #153.166 ↓	24
	002RE RC OK 00C Re-inj	25
	003RE IS #166 ↓ Surr OK	26
	FSD220273-002 RC OK	27
5131473	FSE000000-47313 625	28
	4731C	29
	FSE030169-001	30
	0015	31
	0010	32
	Conditioning only	33
		34
		35

Reviewed By: [signature] 05-13-05

Form: SL-ORG-0008, Rev. 5/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

STL ST. LOUIS

LOT# F5D220273

STL ST. LOUIS

Logbook No.: 2668 STL St. Louis Laboratory Instrument ID No.: MSK

GCMS-Semivolatile Runlog

#	Data File	Clock	Lab I.D.	Dil.	STD#	Date	Oper	Matrix
1	KAA63126	Ka513A	SSTD050		SV220-05	05-12-05	X/A	
2	3127		SSTD050 Appix		SV190-05			
3	3128		SSTD050		SV220-05			
4	3129		SSTD160		SV218-05			
5	3130		SSTD120		SV217-05			
6	3131		SSTD080		SV216-05			
7	3132		SSTD020		SV214-05	5/17/05		
8	3133		SSTD010		SV213-05	5/19/05		
9	3134		SSTD002		SV215-05	5/21/05		
10	3135		SSTD050 ICV		opas1-05			
11	KDFT 3136	(8:36)	DFTPP		SV232-05	05-14-05	X/A	
12	KAAL 3137	Ka514A	SSTD010		SV215-05			
13	3138		SSTD050 ICV		opas2-05			
14	3139/A		SSTD050 ICV		↓			
15	3140		SSTD050		SV220-05			
16	3141		SSTD050 ICV		opas2-05			
17	3141		SSTD050 Appix A		SV190-05			
18	3142		SSTD050 Appix B		SV198-05			
19	KAIK 3143		HACKN1AA	1X				
20	KLCS 3144		HACKN1AC					
21	KAIK 3145		HADWR1AA					
22	KLCS 3146		HADWR1AC					
23	KSLP 3147		G8WXV2AD					
24	3148		G8WXX2AD					
25	3149		G81GA2AC					
26	3150		G81RE32A9					
27	3151		G92G42CA					
28	3152		G9HVV1AA					
29	3153		G99P11CA					
30	3154		G99211107					
31	3155		G99P11108					
32	3156		G9HF71CA					
33	3157	✓	G92GT1CA					
34	3158	(20:33)	G9VUL2AA					
35	3159	—	SLIB SSTD160	✓	—	✓	✓	

Review documented on next page.

Form: SL-ORG-0006, Rev. 5/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Contol Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

Logbook No.: 2668 STL St. Louis Laboratory Instrument ID No.: MSK

GCMS-Semivolatile Runlog

Batch No.	Comments	#
	PCP > 20%. failed.	1
	not used.	2
		3
		4
		5
		6
		7
		8
		9
	PCP > 20% not used.	10
		11
		12
	PCP < 20% 3.15 ↑ not used RR	13
	PCP > 20% ↓	14
		15
		16
		17
		18
5131476	F5E110000-47613	19
✓	↓ 4746 NCM06-53498	20
5132284	F5E240000-2843	21
✓	↓ 284C	22
5131374	F5D210380-002RE GPC clean	23
✓	↓ 008RE ↓	24
	F5D220273-002RE	25
5132384	F5D220213-001RE	26
	F5E060282-002	27
	F5E090104-001	28
	F5E110160-001 75 @ 166.6	29
	↓ 0015 75 @ 153, 166.6	30
✓	↓ 0010 75 @ 166.6 ↓	31
5130384	F5D290249-001 75 @ 153.166.6 see K3:06 reported	32
✓	F5E060282-001 " see K3:10 ↓	33
5131476	F5D210281-002RE	34
—	↓ ≈ 05/16/05	35

Reviewed By: Michael Kiesow 05-16-05

Form: SL-ORG-0006, Rev. 5/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Contol Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

GC/MS SAMPLE AND QC DATA SUMMARY-FORM 1

VOLATILES

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D220273 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5.02 / g Date Received: 04/22/05
Work Order: G81F81AC Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 04/28/05
Moisture %:0.18

QC Batch: 5118107

Client Sample Id: RE73-05-58878

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
76-13-1	Trichlorotrifluoroethane	5.0	U
67-64-1	**Acetone**	**26**	
75-35-4	1,1-Dichloroethene	5.0	U
74-88-4	Iodomethane	5.0	U
75-09-2	**Methylene chloride**	**14**	**B**
75-15-0	Carbon disulfide	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
78-93-3	**2-Butanone (MEK)**	**3.9**	**J**
594-20-7	2,2-Dichloropropane	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
67-66-3	Chloroform	5.0	U
74-97-5	Bromochloromethane	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
74-95-3	Dibromomethane	5.0	U
108-10-1	4-Methyl-2-pentanone	20	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D220273 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5.02 / g Date Received: 04/22/05
Work Order: G81F81AC Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 04/28/05
Moisture %:0.18

QC Batch: 5118107

Client Sample Id: RE73-05-58878

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
591-78-6	2-Hexanone	20	U
142-28-9	1,3-Dichloropropane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
124-48-1	Chlorodibromomethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Xylenes (total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
108-86-1	Bromobenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	p-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D220273 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5.02 / g Date Received: 04/22/05
Work Order: G81F81AC Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 04/28/05
Moisture %:0.18

QC Batch: 5118107

Client Sample Id: RE73-05-58878

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	10	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Toluene-d8	64	(60 - 148)
Dibromofluoromethane	69	(61 - 140)
1,2-Dichloroethane-d4	67	(56 - 149)
4-Bromofluorobenzene	69	(56 - 150)

FORM I

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D220273 002
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 4.95 / g Date Received: 04/22/05
Work Order: G81GA1AE Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 04/28/05
Moisture %:8.5

QC Batch: 5118107

Client Sample Id: RE73-05-58879

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	11	U
74-87-3	Chloromethane	11	U
74-83-9	**Bromomethane**	**3.0**	**J**
75-00-3	Chloroethane	11	U
75-69-4	Trichlorofluoromethane	11	U
76-13-1	Trichlorotrifluoroethane	5.5	U
67-64-1	Acetone	22	U
75-35-4	1,1-Dichloroethene	5.5	U
74-88-4	Iodomethane	5.5	U
75-09-2	**Methylene chloride**	**31**	**B**
75-15-0	Carbon disulfide	5.5	U
75-34-3	1,1-Dichloroethane	5.5	U
78-93-3	2-Butanone (MEK)	22	U
594-20-7	2,2-Dichloropropane	5.5	U
540-59-0	1,2-Dichloroethene (total)	5.5	U
67-66-3	Chloroform	5.5	U
74-97-5	Bromochloromethane	5.5	U
71-55-6	1,1,1-Trichloroethane	5.5	U
563-58-6	1,1-Dichloropropene	5.5	U
56-23-5	Carbon tetrachloride	5.5	U
107-06-2	1,2-Dichloroethane	5.5	U
71-43-2	Benzene	5.5	U
79-01-6	Trichloroethene	5.5	U
78-87-5	1,2-Dichloropropane	5.5	U
75-27-4	Bromodichloromethane	5.5	U
74-95-3	Dibromomethane	5.5	U
108-10-1	4-Methyl-2-pentanone	22	U
10061-01-5	cis-1,3-Dichloropropene	5.5	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D220273 002
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 4.95 / g Date Received: 04/22/05
Work Order: G81GA1AE Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 04/28/05
Moisture %:8.5

QC Batch: 5118107

Client Sample Id: RE73-05-58879

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-88-3	Toluene	5.5	U
10061-02-6	trans-1,3-Dichloropropene	5.5	U
79-00-5	1,1,2-Trichloroethane	5.5	U
591-78-6	2-Hexanone	22	U
142-28-9	1,3-Dichloropropane	5.5	U
127-18-4	Tetrachloroethene	5.5	U
124-48-1	Chlorodibromomethane	5.5	U
106-93-4	1,2-Dibromoethane	5.5	U
108-90-7	Chlorobenzene	5.5	U
630-20-6	1,1,1,2-Tetrachloroethane	5.5	U
100-41-4	Ethylbenzene	5.5	U
75-01-4	Vinyl chloride	5.5	U
1330-20-7	**Xylenes (total)**	**3.7**	**J**
100-42-5	Styrene	5.5	U
75-25-2	Bromoform	5.5	U
98-82-8	Isopropylbenzene	5.5	U
79-34-5	1,1,2,2-Tetrachloroethane	5.5	U
96-18-4	1,2,3-Trichloropropane	5.5	U
103-65-1	n-Propylbenzene	5.5	U
108-86-1	Bromobenzene	5.5	U
95-49-8	2-Chlorotoluene	5.5	U
108-67-8	1,3,5-Trimethylbenzene	5.5	U
106-43-4	4-Chlorotoluene	5.5	U
98-06-6	tert-Butylbenzene	5.5	U
95-63-6	1,2,4-Trimethylbenzene	5.5	U
135-98-8	sec-Butylbenzene	5.5	U
99-87-6	p-Isopropyltoluene	5.5	U
541-73-1	1,3-Dichlorobenzene	5.5	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D220273 002
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 4.95 / g Date Received: 04/22/05
Work Order: G81GA1AE Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 04/28/05
Moisture %:8.5

QC Batch: 5118107

Client Sample Id: RE73-05-58879

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
106-46-7	**1,4-Dichlorobenzene**	**2.5**	**J**
104-51-8	n-Butylbenzene	5.5	U
95-50-1	1,2-Dichlorobenzene	5.5	U
96-12-8	1,2-Dibromo-3-chloropropane	11	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Toluene-d8	78	(60 - 148)
Dibromofluoromethane	136	(61 - 140)
1,2-Dichloroethane-d4	120	(56 - 149)
4-Bromofluorobenzene	51	(56 - 150)

FORM I

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D280000 107
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / g Date Received: 04/22/05
Work Order: G9G7W1AA Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 04/28/05
Moisture %:NA

QC Batch: 5118107

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
76-13-1	Trichlorotrifluoroethane	5.0	U
67-64-1	Acetone	20	U
75-35-4	1,1-Dichloroethene	5.0	U
74-88-4	Iodomethane	5.0	U
75-09-2	Methylene chloride	3.0	J
75-15-0	Carbon disulfide	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
78-93-3	2-Butanone (MEK)	20	U
594-20-7	2,2-Dichloropropane	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
67-66-3	Chloroform	5.0	U
74-97-5	Bromochloromethane	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
74-95-3	Dibromomethane	5.0	U
108-10-1	4-Methyl-2-pentanone	20	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D280000 107
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / g Date Received: 04/22/05
Work Order: G9G7W1AA Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 04/28/05
Moisture %:NA

QC Batch: 5118107

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
591-78-6	2-Hexanone	20	U
142-28-9	1,3-Dichloropropane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
124-48-1	Chlorodibromomethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Xylenes (total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
108-86-1	Bromobenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	p-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D280000 107
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / g Date Received: 04/22/05
Work Order: G9G7W1AA Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 04/28/05
Moisture %:NA

QC Batch: 5118107

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	10	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Toluene-d8	80	(60 - 148)
Dibromofluoromethane	97	(61 - 140)
1,2-Dichloroethane-d4	90	(56 - 149)
4-Bromofluorobenzene	96	(56 - 150)

FORM I

LOS ALAMOS NATIONAL LABORATORY
CHECK SAMPLE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D280000 107
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / g Date Received: 04/22/05
Work Order: G9G7W1AC Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 04/27/05
Moisture %:NA

QC Batch: 5118107

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	69.7	
74-87-3	Chloromethane	44.2	
74-83-9	Bromomethane	34.6	
75-00-3	Chloroethane	54.6	
75-69-4	Trichlorofluoromethane	47.7	
76-13-1	Trichlorotrifluoroethane	46.8	
67-64-1	Acetone	36.8	
75-35-4	1,1-Dichloroethene	48.1	
75-09-2	Methylene chloride	50.2	
75-15-0	Carbon disulfide	46.5	
75-34-3	1,1-Dichloroethane	46.4	
78-93-3	2-Butanone (MEK)	58.0	
594-20-7	2,2-Dichloropropane	46.5	
540-59-0	1,2-Dichloroethene (total)	98.1	
67-66-3	Chloroform	44.8	
74-97-5	Bromochloromethane	48.7	
71-55-6	1,1,1-Trichloroethane	46.7	
563-58-6	1,1-Dichloropropene	48.2	
56-23-5	Carbon tetrachloride	47.2	
107-06-2	1,2-Dichloroethane	46.4	
71-43-2	Benzene	48.1	
79-01-6	Trichloroethene	47.4	
78-87-5	1,2-Dichloropropane	48.3	
75-27-4	Bromodichloromethane	48.1	
108-10-1	4-Methyl-2-pentanone	35.4	
10061-01-5	cis-1,3-Dichloropropene	50.7	
108-88-3	Toluene	42.4	
10061-02-6	trans-1,3-Dichloropropene	45.9	

FORM I

LOS ALAMOS NATIONAL LABORATORY
CHECK SAMPLE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D280000 107
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / g Date Received: 04/22/05
Work Order: G9G7W1AC Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 04/27/05
Moisture %:NA

QC Batch: 5118107

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
79-00-5	1,1,2-Trichloroethane	43.2	
591-78-6	2-Hexanone	44.0	
142-28-9	1,3-Dichloropropane	44.8	
127-18-4	Tetrachloroethene	43.4	
124-48-1	Chlorodibromomethane	47.5	
106-93-4	1,2-Dibromoethane	50.3	
108-90-7	Chlorobenzene	49.9	
630-20-6	1,1,1,2-Tetrachloroethane	51.3	
100-41-4	Ethylbenzene	49.2	
75-01-4	Vinyl chloride	50.9	
100-42-5	Styrene	52.2	
75-25-2	Bromoform	54.7	
98-82-8	Isopropylbenzene	54.7	
79-34-5	1,1,2,2-Tetrachloroethane	51.8	
103-65-1	n-Propylbenzene	48.6	
108-86-1	Bromobenzene	49.8	
95-49-8	2-Chlorotoluene	45.7	
108-67-8	1,3,5-Trimethylbenzene	48.3	
106-43-4	4-Chlorotoluene	46.5	
98-06-6	tert-Butylbenzene	40.3	
135-98-8	sec-Butylbenzene	47.6	
99-87-6	p-Isopropyltoluene	53.7	
541-73-1	1,3-Dichlorobenzene	47.9	
106-46-7	1,4-Dichlorobenzene	47.7	
104-51-8	n-Butylbenzene	51.9	
95-50-1	1,2-Dichlorobenzene	51.5	
96-12-8	1,2-Dibromo-3-chloropropane	60.3	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Toluene-d8	79	(72 - 131)
Dibromofluoromethane	93	(74 - 128)
1,2-Dichloroethane-d4	88	(69 - 134)
4-Bromofluorobenzene	99	(70 - 131)

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D220273 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5.04 / g
Work Order: G81F81AE
Dilution factor: 1
Moisture %:0.18

Date Received: 04/22/05
Date Extracted:04/27/05
Date Analyzed: 04/28/05

QC Batch: 5118107

Client Sample Id: RE73-05-58878

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	53.5	
74-87-3	Chloromethane	43.2	
74-83-9	Bromomethane	35.5	
75-00-3	Chloroethane	51.8	
75-69-4	Trichlorofluoromethane	41.6	
76-13-1	Trichlorotrifluoroethane	41.0	
67-64-1	Acetone	73.1	
75-35-4	1,1-Dichloroethene	49.2	
75-09-2	Methylene chloride	54.5	
75-15-0	Carbon disulfide	47.3	
75-34-3	1,1-Dichloroethane	48.6	
78-93-3	2-Butanone (MEK)	72.3	
594-20-7	2,2-Dichloropropane	43.4	
540-59-0	1,2-Dichloroethene (total)	95.6	
67-66-3	Chloroform	43.3	
74-97-5	Bromochloromethane	52.4	
71-55-6	1,1,1-Trichloroethane	41.8	
563-58-6	1,1-Dichloropropene	48.1	
56-23-5	Carbon tetrachloride	39.6	
107-06-2	1,2-Dichloroethane	44.0	
71-43-2	Benzene	49.4	
79-01-6	Trichloroethene	57.4	
78-87-5	1,2-Dichloropropane	52.6	
75-27-4	Bromodichloromethane	45.6	
108-10-1	4-Methyl-2-pentanone	43.0	
10061-01-5	cis-1,3-Dichloropropene	51.2	
108-88-3	Toluene	43.0	
10061-02-6	trans-1,3-Dichloropropene	46.5	

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D220273 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5.04 / g
Work Order: G81F81AE
Dilution factor: 1
Moisture %:0.18

Date Received: 04/22/05
Date Extracted:04/27/05
Date Analyzed: 04/28/05

QC Batch: 5118107

Client Sample Id: RE73-05-58878

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
79-00-5	1,1,2-Trichloroethane	47.7	
591-78-6	2-Hexanone	55.2	
142-28-9	1,3-Dichloropropane	48.6	
127-18-4	Tetrachloroethene	42.9	
124-48-1	Chlorodibromomethane	43.8	
106-93-4	1,2-Dibromoethane	52.2	
108-90-7	Chlorobenzene	51.6	
630-20-6	1,1,1,2-Tetrachloroethane	49.8	
100-41-4	Ethylbenzene	51.2	
75-01-4	Vinyl chloride	49.4	
100-42-5	Styrene	51.9	
75-25-2	Bromoform	57.1	
98-82-8	Isopropylbenzene	53.5	
79-34-5	1,1,2,2-Tetrachloroethane	42.1	
103-65-1	n-Propylbenzene	51.3	
108-86-1	Bromobenzene	52.0	
95-49-8	2-Chlorotoluene	50.2	
108-67-8	1,3,5-Trimethylbenzene	49.7	
106-43-4	4-Chlorotoluene	48.7	
98-06-6	tert-Butylbenzene	39.9	
135-98-8	sec-Butylbenzene	48.6	
99-87-6	p-Isopropyltoluene	53.0	
541-73-1	1,3-Dichlorobenzene	50.5	
106-46-7	1,4-Dichlorobenzene	49.2	
104-51-8	n-Butylbenzene	51.9	
95-50-1	1,2-Dichlorobenzene	52.5	
96-12-8	1,2-Dibromo-3-chloropropane	70.9	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Toluene-d8	86	(60 - 148)
Dibromofluoromethane	87	(61 - 140)
1,2-Dichloroethane-d4	91	(56 - 149)
4-Bromofluorobenzene	102	(56 - 150)

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D220273 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5.01 / g
Work Order: G81F81AD
Dilution factor: 1
Moisture %:0.18

Date Received: 04/22/05
Date Extracted:04/27/05
Date Analyzed: 04/28/05

QC Batch: 5118107

Client Sample Id: RE73-05-58878

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	57.8	
74-87-3	Chloromethane	48.4	
74-83-9	Bromomethane	41.7	
75-00-3	Chloroethane	60.9	
75-69-4	Trichlorofluoromethane	43.2	
76-13-1	Trichlorotrifluoroethane	44.9	
67-64-1	Acetone	70.7	
75-35-4	1,1-Dichloroethene	55.7	
75-09-2	Methylene chloride	65.6	
75-15-0	Carbon disulfide	52.8	
75-34-3	1,1-Dichloroethane	52.3	
78-93-3	2-Butanone (MEK)	66.7	
594-20-7	2,2-Dichloropropane	45.6	
540-59-0	1,2-Dichloroethene (total)	109	
67-66-3	Chloroform	46.3	
74-97-5	Bromochloromethane	56.3	
71-55-6	1,1,1-Trichloroethane	44.8	
563-58-6	1,1-Dichloropropene	50.6	
56-23-5	Carbon tetrachloride	44.0	
107-06-2	1,2-Dichloroethane	45.2	
71-43-2	Benzene	55.8	
79-01-6	Trichloroethene	63.3	
78-87-5	1,2-Dichloropropane	56.9	
75-27-4	Bromodichloromethane	48.6	
108-10-1	4-Methyl-2-pentanone	38.5	
10061-01-5	cis-1,3-Dichloropropene	54.6	
108-88-3	Toluene	50.1	
10061-02-6	trans-1,3-Dichloropropene	47.3	

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D220273

Matrix: (soil/water) SOLID Lab Sample ID:F5D220273 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5.01 / g
Work Order: G81F81AD
Dilution factor: 1
Moisture %:0.18

Date Received: 04/22/05
Date Extracted:04/27/05
Date Analyzed: 04/28/05

QC Batch: 5118107

Client Sample Id: RE73-05-58878

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
79-00-5	1,1,2-Trichloroethane	48.7	
591-78-6	2-Hexanone	47.5	
142-28-9	1,3-Dichloropropane	49.4	
127-18-4	Tetrachloroethene	45.8	
124-48-1	Chlorodibromomethane	49.8	
106-93-4	1,2-Dibromoethane	54.4	
108-90-7	Chlorobenzene	56.5	
630-20-6	1,1,1,2-Tetrachloroethane	55.2	
100-41-4	Ethylbenzene	58.1	
75-01-4	Vinyl chloride	58.7	
100-42-5	Styrene	58.4	
75-25-2	Bromoform	56.5	
98-82-8	Isopropylbenzene	60.6	
79-34-5	1,1,2,2-Tetrachloroethane	44.9	
103-65-1	n-Propylbenzene	55.9	
108-86-1	Bromobenzene	59.5	
95-49-8	2-Chlorotoluene	52.6	
108-67-8	1,3,5-Trimethylbenzene	54.9	
106-43-4	4-Chlorotoluene	51.0	
98-06-6	tert-Butylbenzene	45.3	
135-98-8	sec-Butylbenzene	52.3	
99-87-6	p-Isopropyltoluene	57.5	
541-73-1	1,3-Dichlorobenzene	53.9	
106-46-7	1,4-Dichlorobenzene	53.6	
104-51-8	n-Butylbenzene	53.5	
95-50-1	1,2-Dichlorobenzene	57.4	
96-12-8	1,2-Dibromo-3-chloropropane	66.2	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Toluene-d8	94	(60 - 148)
Dibromofluoromethane	100	(61 - 140)
1,2-Dichloroethane-d4	96	(56 - 149)
4-Bromofluorobenzene	110	(56 - 150)

GC/MS ADDITIONAL QC SUMMARY DATA
FORMS 2 THROUGH 4

SW846 8260B SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Lot #: F5D220273

Extraction: XXA15QK01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
01	RE73-05-58878	64	69	67	69	00
02	RE73-05-58879	78	136	120	51 *	01
03	METHOD BLK. G9G7W1AA	80	97	90	96	00
04	LCS G9G7W1AC	79	93	88	99	00
05	RE73-05-58878 D	86	87	91	102	00
06	RE73-05-58878 S	94	100	96	110	00

SURROGATES		QC LIMITS
SRG01	= Toluene-d8	(60-148)
SRG02	= Dibromofluoromethane	(61-140)
SRG03	= 1,2-Dichloroethane-d4	(56-149)
SRG04	= 4-Bromofluorobenzene	(56-150)

\# Column to be used to flag recovery values
* Values outside of required QC Limits
D System monitoring Compound diluted out

FORM II

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Matrix Spike ID: RE73-05-58878 Level:(low/med) LOW

Lot #: F5D220273 WO #: G81F81AD
BATCH: 5118107

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
1,3,5-Trimethylbenzene	50.0	ND	54.9	110	30- 150	
cis-1,3-Dichloropropene	50.0	ND	54.6	109	56- 141	
Chloromethane	50.0	ND	48.4	97	30- 150	
Vinyl chloride	50.0	ND	58.7	117	37- 150	
Bromomethane	50.0	ND	41.7	83	30- 150	
Chloroethane	50.0	ND	60.9	122	42- 150	
Acetone	50.0	26	70.7	89	30- 150	
1,1-Dichloroethene	50.0	ND	55.7	111	39- 144	
Methylene chloride	50.0	14	65.6	103	30- 143	
Carbon disulfide	50.0	ND	52.8	106	30- 150	
1,1-Dichloroethane	50.0	ND	52.3	105	52- 141	
1,2-Dichloroethene (total	100	ND	109	109	41- 150	
Chloroform	50.0	ND	46.3	93	57- 140	
1,1,1-Trichloroethane	50.0	ND	44.8	90	55- 145	
Carbon tetrachloride	50.0	ND	44.0	88	52- 147	
1,2-Dichloroethane	50.0	ND	45.2	90	55- 150	
Benzene	50.0	ND	55.8	112	59- 135	
Trichloroethene	50.0	ND	63.3	127	30- 150	
1,2-Dichloropropane	50.0	ND	56.9	114	55- 143	
Bromodichloromethane	50.0	ND	48.6	97	51- 145	
1,1,2-Trichloroethane	50.0	ND	48.7	97	41- 150	
trans-1,3-Dichloropropene	50.0	ND	47.3	95	51- 150	
Toluene	50.0	ND	50.1	100	53- 146	
1,3-Dichlorobenzene	50.0	ND	53.9	108	57- 136	
1,4-Dichlorobenzene	50.0	ND	53.6	107	51- 133	
1,2-Dichlorobenzene	50.0	ND	57.4	115	53- 141	
2-Hexanone	50.0	ND	47.5	95	30- 150	
4-Methyl-2-pentanone	50.0	ND	38.5	77	30- 150	

(Continued on next page)

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Matrix Spike ID: RE73-05-58878 Level: (low/med) LOW

Lot #: F5D220273 WO #: G81F81AD
BATCH: 5118107

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Chlorobenzene	50.0	ND	56.5	113	60 - 136	
Bromoform	50.0	ND	56.5	113	51 - 150	
Ethylbenzene	50.0	ND	58.1	116	60 - 134	
Styrene	50.0	ND	58.4	117	58 - 138	
1,1,2,2-Tetrachloroethane	50.0	ND	44.9	90	40 - 163	
Tetrachloroethene	50.0	ND	45.8	92	30 - 136	
2-Butanone (MEK)	50.0	3.9	66.7	126	30 - 150	
Chlorodibromomethane	50.0	ND	49.8	100	51 - 150	
Bromobenzene	50.0	ND	59.5	119	30 - 150	
Bromochloromethane	50.0	ND	56.3	113	57 - 147	
n-Butylbenzene	50.0	ND	53.5	107	34 - 150	
sec-Butylbenzene	50.0	ND	52.3	105	42 - 150	
tert-Butylbenzene	50.0	ND	45.3	91	32 - 148	
2-Chlorotoluene	50.0	ND	52.6	105	30 - 150	
4-Chlorotoluene	50.0	ND	51.0	102	45 - 150	
1,2-Dibromo-3-chloropropa	50.0	ND	66.2	132	30 - 150	
1,2-Dibromoethane	50.0	ND	54.4	109	50 - 150	
Dichlorodifluoromethane	50.0	ND	57.8	116	30 - 150	
1,3-Dichloropropane	50.0	ND	49.4	99	41 - 150	
2,2-Dichloropropane	50.0	ND	45.6	91	51 - 148	
1,1-Dichloropropene	50.0	ND	50.6	101	61 - 139	
Trichlorotrifluoroethane	50.0	ND	44.9	90	54 - 136	
Isopropylbenzene	50.0	ND	60.6	121	61 - 150	
p-Isopropyltoluene	50.0	ND	57.5	115	49 - 150	
n-Propylbenzene	50.0	ND	55.9	112	35 - 150	
1,1,1,2-Tetrachloroethane	50.0	ND	55.2	110	55 - 148	
Trichlorofluoromethane	50.0	ND	43.2	86	48 - 145	

NOTES(S):

Results and reporting limits have been adjusted for dry weight.

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 55 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Matrix Spike ID: RE73-05-58878 Level:(low/med) LOW

Lot #: F5D220273 WO #: G81F81AE
BATCH: 5118107

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
cis-1,3-Dichloropropene	49.7	51.2	103	6.4	30	56- 141	
Chloromethane	49.7	43.2	87	11	30	30- 150	
Vinyl chloride	49.7	49.4	99	17	30	37- 150	
Bromomethane	49.7	35.5	71	16	30	30- 150	
Chloroethane	49.7	51.8	104	16	30	42- 150	
Acetone	49.7	73.1	94	3.2	30	30- 150	
1,1-Dichloroethene	49.7	49.2	99	12	30	39- 144	
Methylene chloride	49.7	54.5	82	18	30	30- 143	
Carbon disulfide	49.7	47.3	95	11	30	30- 150	
1,1-Dichloroethane	49.7	48.6	98	7.4	30	52- 141	
1,2-Dichloroethene (total	99.4	95.6	96	13	30	41- 150	
Chloroform	49.7	43.3	87	6.8	30	57- 140	
1,1,1-Trichloroethane	49.7	41.8	84	6.8	30	55- 145	
Carbon tetrachloride	49.7	39.6	80	10	30	52- 147	
1,2-Dichloroethane	49.7	44.0	89	2.6	30	55- 150	
Benzene	49.7	49.4	99	12	30	59- 135	
Trichloroethene	49.7	57.4	115	9.8	30	30- 150	
1,2-Dichloropropane	49.7	52.6	106	7.9	30	55- 143	
Bromodichloromethane	49.7	45.6	92	6.2	30	51- 145	
1,1,2-Trichloroethane	49.7	47.7	96	2.1	30	41- 150	
trans-1,3-Dichloropropene	49.7	46.5	94	1.7	30	51- 150	
Toluene	49.7	43.0	86	15	30	53- 146	
1,3-Dichlorobenzene	49.7	50.5	102	6.5	30	57- 136	
1,4-Dichlorobenzene	49.7	49.2	99	8.4	30	51- 133	
1,2-Dichlorobenzene	49.7	52.5	106	8.9	30	53- 141	
2-Hexanone	49.7	55.2	111	15	30	30- 150	
4-Methyl-2-pentanone	49.7	43.0	87	11	30	30- 150	
Chlorobenzene	49.7	51.6	104	9.2	30	60- 136	

(Continued on next page)

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Matrix Spike ID: RE73-05-58878 Level: (low/med) LOW

Lot #: F5D220273 WO #: G81F81AE
BATCH: 5118107

COMPOUND	SPIKE ADDED	MSD CONCENT.	MSD % REC	% RPD		QC LIMITS RPD	QC LIMITS REC	QUAL
Bromoform	49.7	57.1	115	0.98		30	51 - 150	
Ethylbenzene	49.7	51.2	103	13		30	60 - 134	
Styrene	49.7	51.9	104	12		30	58 - 138	
1,1,2,2-Tetrachloroethane	49.7	42.1	85	6.5		30	40 - 163	
Tetrachloroethene	49.7	42.9	86	6.4		30	30 - 136	
2-Butanone (MEK)	49.7	72.3	138	8.0		30	30 - 150	
Chlorodibromomethane	49.7	43.8	88	13		30	51 - 150	
Bromobenzene	49.7	52.0	105	13		30	30 - 150	
Bromochloromethane	49.7	52.4	105	7.3		30	57 - 147	
n-Butylbenzene	49.7	51.9	105	3.0		30	34 - 150	
sec-Butylbenzene	49.7	48.6	98	7.2		30	42 - 150	
tert-Butylbenzene	49.7	39.9	80	13		30	32 - 148	
2-Chlorotoluene	49.7	50.2	101	4.6		30	30 - 150	
4-Chlorotoluene	49.7	48.7	98	4.6		30	45 - 150	
1,2-Dibromo-3-chloropropa	49.7	70.9	143	6.8		30	30 - 150	
1,2-Dibromoethane	49.7	52.2	105	4.2		30	50 - 150	
Dichlorodifluoromethane	49.7	53.5	108	7.7		30	30 - 150	
1,3-Dichloropropane	49.7	48.6	98	1.7		30	41 - 150	
2,2-Dichloropropane	49.7	43.4	87	5.1		30	51 - 148	
1,1-Dichloropropene	49.7	48.1	97	5.2		30	61 - 139	
Trichlorotrifluoroethane	49.7	41.0	83	9.1		30	54 - 136	
Isopropylbenzene	49.7	53.5	108	12		30	61 - 150	
p-Isopropyltoluene	49.7	53.0	107	8.0		30	49 - 150	
n-Propylbenzene	49.7	51.3	103	8.6		30	35 - 150	
1,1,1,2-Tetrachloroethane	49.7	49.8	100	10		30	55 - 148	
Trichlorofluoromethane	49.7	41.6	84	3.9		30	48 - 145	
1,3,5-Trimethylbenzene	49.7	49.7	100	9.8		30	30 - 150	

NOTES(S):

Results and reporting limits have been adjusted for dry weight.

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 55 outside limits
Spike Recovery: 0 out of 55 outside limits

COMMENTS:

FORM III

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Lot #: F5D280000 WO #: G9G7W1AC

BATCH: 5118107

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
cis-1,3-Dichloropropene	50.0	50.7	101	77 - 125	
Chlorodibromomethane	50.0	47.5	95	73 - 125	
Chloromethane	50.0	44.2	88	30 - 150	
Vinyl chloride	50.0	50.9	102	48 - 148	
Bromomethane	50.0	34.6	69	30 - 142	
Chloroethane	50.0	54.6	109	57 - 145	
Acetone	50.0	36.8	74	30 - 150	
1,1-Dichloroethene	50.0	48.1	96	56 - 130	
Methylene chloride	50.0	50.2	100	31 - 148	
Carbon disulfide	50.0	46.5	93	45 - 150	
1,1-Dichloroethane	50.0	46.4	93	68 - 126	
2-Butanone (MEK)	50.0	58.0	116	31 - 150	
1,2-Dichloroethene (total	100	98.1	98	72 - 125	
Chloroform	50.0	44.8	90	72 - 125	
1,1,1-Trichloroethane	50.0	46.7	93	68 - 133	
Carbon tetrachloride	50.0	47.2	94	65 - 136	
1,2-Dichloroethane	50.0	46.4	93	66 - 132	
Benzene	50.0	48.1	96	77 - 115	
Trichloroethene	50.0	47.4	95	74 - 120	
1,2-Dichloropropane	50.0	48.3	97	75 - 122	
Bromodichloromethane	50.0	48.1	96	72 - 124	
1,1,2-Trichloroethane	50.0	43.2	86	75 - 117	
trans-1,3-Dichloropropene	50.0	45.9	92	81 - 137	
Toluene	50.0	42.4	85	73 - 122	
1,3-Dichlorobenzene	50.0	47.9	96	82 - 114	
1,4-Dichlorobenzene	50.0	47.7	95	79 - 109	
2-Hexanone	50.0	44.0	88	54 - 143	
4-Methyl-2-pentanone	50.0	35.4	71	30 - 144	
Chlorobenzene	50.0	49.9	100	81 - 116	
Bromoform	50.0	54.7	109	69 - 133	
Ethylbenzene	50.0	49.2	98	81 - 116	

(Continued on next page)

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D220273

Lot #: F5D280000 WO #: G9G7W1AC
BATCH: 5118107

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
Styrene	50.0	52.2	104	76 - 125	
1,1,2,2-Tetrachloroethane	50.0	51.8	104	64 - 134	
Tetrachloroethene	50.0	43.4	87	48 - 125	
1,2-Dichlorobenzene	50.0	51.5	103	82 - 115	
Bromobenzene	50.0	49.8	100	75 - 125	
Bromochloromethane	50.0	48.7	97	77 - 122	
n-Butylbenzene	50.0	51.9	104	77 - 128	
sec-Butylbenzene	50.0	47.6	95	76 - 115	
tert-Butylbenzene	50.0	40.3	81	53 - 123	
2-Chlorotoluene	50.0	45.7	91	65 - 127	
4-Chlorotoluene	50.0	46.5	93	67 - 130	
1,2-Dibromo-3-chloropropa	50.0	60.3	121	72 - 133	
1,2-Dibromoethane	50.0	50.3	101	79 - 121	
Dichlorodifluoromethane	50.0	69.7	139	30 - 150	
1,3-Dichloropropane	50.0	44.8	90	74 - 122	
2,2-Dichloropropane	50.0	46.5	93	64 - 141	
1,1-Dichloropropene	50.0	48.2	96	77 - 126	
Trichlorotrifluoroethane	50.0	46.8	94	60 - 139	
Isopropylbenzene	50.0	54.7	109	80 - 143	
p-Isopropyltoluene	50.0	53.7	107	80 - 127	
n-Propylbenzene	50.0	48.6	97	69 - 129	
1,1,1,2-Tetrachloroethane	50.0	51.3	103	80 - 119	
Trichlorofluoromethane	50.0	47.7	95	57 - 142	
1,3,5-Trimethylbenzene	50.0	48.3	97	70 - 126	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 55 outside limits

COMMENTS:

FORM III

SW846 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.: G9G7W1AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: STLSTL

SDG Number:F5D220273

Lab File ID: GBLK5462

Lot Number: F5D220273

Date Analyzed: 04/28/05

Time Analyzed: 00:38

Matrix: SOLID

Date Extracted:04/27/05

GC Column: RTX-502.2 ID: .53

Extraction Method: 5030B/8260B

Instrument ID: MSG

Level:(low/med) LOW

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS, LCSD, MS , MSD:

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	RE73-05-58878	G81F81AC	GSMP5463	04/28/05	01:11
02	RE73-05-58878	G81F81AD S	GSMP5464	04/28/05	01:45
03	RE73-05-58878	G81F81AE D	GSMP5465	04/28/05	02:19
04	RE73-05-58879	G81GA1AE	GSMP5473	04/28/05	06:51
05	CHECK SAMPLE	G9G7W1AC C	GLCS5460	04/27/05	22:45
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

FORM IV

5A
VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220273

Lab File ID: GBFB5157 BFB Injection Date: 04/17/05

Instrument ID: MSG BFB Injection Time: 2149

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.8
75	30.0 - 60.0% of mass 95	55.3
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.5 (0.9)1
174	Greater than 50.0% of mass 95	58.2
175	5.0 - 9.0% of mass 174	4.4 (7.5)1
176	Greater than 95.0%, but less than 101.0% of mass 174	57.3 (98.5)1
177	5.0 - 9.0% of mass 176	4.2 (7.2)2

1-Value is % of mass 174 2-Value is % of mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	GCAL5160	04/17/05	2327
02	VSTD020	VSTD020	GCAL5161	04/18/05	0001
03	VSTD010	VSTD010	GCAL5162	04/18/05	0035
04	VSTD005	VSTD005	GCAL5163	04/18/05	0108
05	VSTD002.5	VSTD002.5	GCAL5164	04/18/05	0143
06	VSTD0200	VSTD100	GCAL5165	04/18/05	0217
07	VSTD0100	VSTD200	GCAL5166	04/18/05	0251
08	ICV050	ICV050	GLCS5172	04/18/05	0936
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220273

Lab File ID: GBFB5458 BFB Injection Date: 04/27/05

Instrument ID: MSG BFB Injection Time: 2118

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.1
75	30.0 - 60.0% of mass 95	54.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.6
173	Less than 2.0% of mass 174	0.6 (0.9)1
174	Greater than 50.0% of mass 95	66.8
175	5.0 - 9.0% of mass 174	4.8 (7.3)1
176	Greater than 95.0%, but less than 101.0% of mass 174	65.5 (98.1)1
177	5.0 - 9.0% of mass 176	3.8 (5.9)2

1-Value is % of mass 174 2-Value is % of mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	GCAL5459	04/27/05	2142
02	VLCSG117A	G9G7W1AC	GLCS5460	04/27/05	2245
03	VBLKG117B	G9G7W1AA	GBLK5462	04/28/05	0038
04	58878	G81F81AC	GSMP5463	04/28/05	0111
05	58878MS	G81F81AD	GSMP5464	04/28/05	0145
06	58878MSD	G81F81AE	GSMP5465	04/28/05	0219
07	58879	G81GA1AE	GSMP5473	04/28/05	0651
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM V VOA 1/87 Rev.

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D220273

Lab File ID (Standard): GCAL5459 Date Analyzed: 04/27/05

Instrument ID: MSG Time Analyzed: 2142

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

		IS1 AREA #	RT	IS2(CBZ) AREA #	RT	IS3 AREA #	RT
	12 HOUR STD	3117196	9.34	2287097	17.50	1536763	24.36
	UPPER LIMIT	6234392	9.84	4574194	18.00	3073526	24.86
	LOWER LIMIT	1558598	8.84	1143549	17.00	768382	23.86
	EPA SAMPLE NO.						
01	VLCSG117A	3061986	9.39	2341839	17.59	1422296	24.41
02	VBLKG117B	3124724	9.44	2625962	17.62	1450768	24.41
03	58878	2985281	9.42	2180383	17.59	1248986	24.41
04	58878MS	3345096	9.41	2504665	17.59	1448847	24.41
05	58878MSD	3794784	9.39	2819661	17.57	1621068	24.39
06	58879	639275*	9.36	246010*	17.58	61206*	24.38
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = Fluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 = 1,4 Dichlorobenzene-d4

UPPER LIMIT = +100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk.

FORM VIII VOA 1/87 Rev.

GC/MS STANDARDS DATA

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GBFB0107.D

Date : 17-APR-2005 21:49

Client ID: VBFB

Instrument: MSG.i

Sample Info: 50ng BFB;G050417A.b

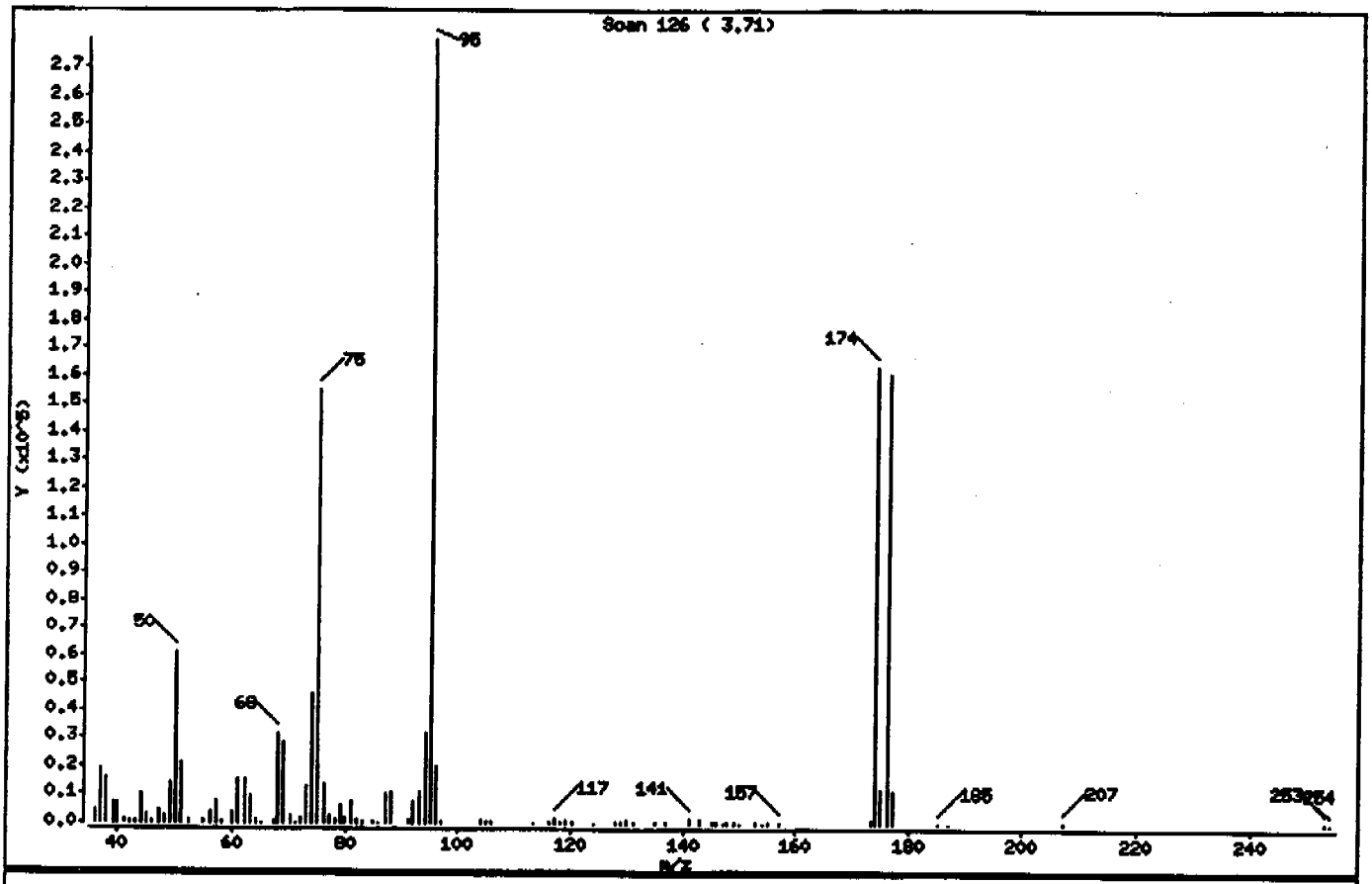
Volume Injected (uL): 2.0

Operator: JDH

Column phase: RTX-502.2

Column diameter: 0.53

1 BFB



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.80
75	30.00 - 60.00% of mass 95	55.27
96	5.00 - 9.00% of mass 95	7.12
173	Less than 2.00% of mass 174	0.52 (0.89)
174	Greater than 50.00% of mass 95	58.20
175	5.00 - 9.00% of mass 174	4.38 (7.53)
176	95.00 - 101.00% of mass 174	57.33 (98.51)
177	5.00 - 9.00% of mass 176	4.15 (7.24)

4/20/05

Data File: \\slsvr01\chem\MSC.i\G050417A.b\GBFB5157.D

Date : 17-APR-2005 21:49

Client ID: VBFB

Instrument: MSC.i

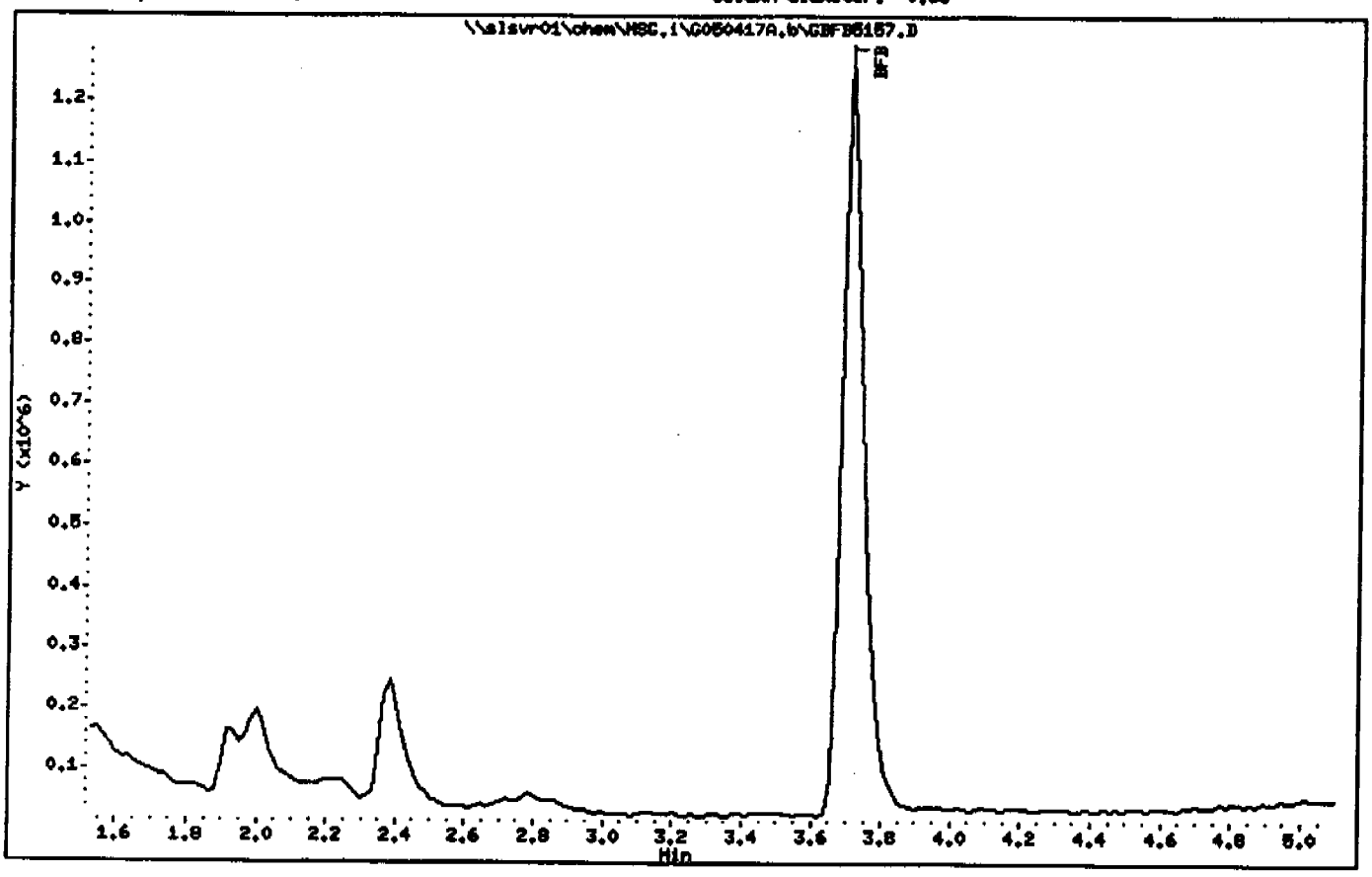
Sample Info: 50ng BFB;G050417A.b

Volume Injected (uL): 2.0

Operator: JDH

Column phase: RTX-502.2

Column diameter: 0.53



Data File: \\slsvr01\chem\HSC.i\C050417A.b\GBFB5157.D

Date : 17-APR-2005 21:49

Client ID: VBFB

Instrument: HSC.i

Sample Info: 50ng BFB;C050417A.b

Volume Injected (uL): 2.0

Operator: JDH

Column phase: RTX-502.2

Column diameter: 0.53

Data File: GBFB5157.D
Spectrum: Scan 126 (3.71)
Location of Maximum: 95.15
Number of points: 93

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	4283	63.10	9657	91.15	1832	143.05	1698
37.10	19336	64.20	1090	92.05	7721	145.15	373
38.10	16384	65.10	287	93.15	11236	145.95	425
39.10	6807	67.20	880	94.15	31872	147.15	266
40.00	7394	68.10	31544	95.15	279872	147.95	561
41.10	1189	69.05	28128	96.15	19920	149.15	415
42.20	379	70.15	2864	97.15	937	150.05	255
43.20	603	71.15	250	104.00	1082	153.05	535
44.00	10354	72.05	1697	105.00	497	154.25	297
45.10	3197	73.05	12713	105.90	924	155.15	471
46.00	329	74.05	45600	113.20	293	157.05	591
47.10	4696	75.05	154688	116.20	512	173.20	1449
48.10	2461	76.15	13834	117.10	1747	174.10	162880
49.10	13915	77.15	2367	118.00	924	176.10	12263
50.10	61000	78.05	1528	119.00	1396	176.10	160448
51.10	21192	79.05	6661	120.30	336	177.10	11618
52.20	1108	79.95	1971	124.10	263	185.10	282
55.00	990	81.05	7449	127.90	891	187.00	252
56.10	3896	81.95	976	129.10	598	207.15	830
57.10	8001	83.15	384	130.00	1005	253.30	470
58.20	377	85.05	702	131.10	438	254.10	294
60.10	3657	85.85	309	134.95	665		
61.10	15381	87.05	10348	136.95	326		
62.10	15278	88.05	10987	141.05	2165		

Report Date : 20-Apr-2005 11:06

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 17-APR-2005 23:27
End Cal Date : 18-APR-2005 02:51
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Cal Date : 20-Apr-2005 10:59 hanw

Calibration File Names:
Level 2: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5164.D
Level 3: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5163.D
Level 4: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5162.D
Level 5: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5161.D
Level 6: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5160.D
Level 7: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5165.D
Level 8: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5166.D

WH 4/20/05

Compound	2.5000 Level 2	5.0000 Level 3	10.0000 Level 4	20.0000 Level 5	50.0000 Level 6	100.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	200.0000 Level 8										
1 Dichlorodifluoromethane	0.45442	0.44841	0.45608	0.47063	0.35697	0.30085					
	0.23846						AVRG		0.38940		23.54287
2 Freon-114	0.20649	0.23139	0.20389	0.18405	0.14458	0.13702					
	0.10901						AVRG		0.17378		25.51964
3 Chloromethane	0.28682	0.29619	0.28315	0.28304	0.26665	0.25141					
	0.22180						AVRG		0.26986		9.55721
4 Vinyl Chloride	0.23263	0.22853	0.22075	0.20842	0.17231	0.16214					
	0.12960						AVRG		0.19348		20.28083

Report Date : 20-Apr-2005 11:06

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 17-APR-2005 23:27
End Cal Date : 18-APR-2005 02:51
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Cal Date : 20-Apr-2005 10:59 hanw

Compound	2.5000 Level 2	5.0000 Level 3	10.0000 Level 4	20.0000 Level 5	50.0000 Level 6	100.0000 Level 7	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
	200.0000 Level 8										
5 Bromomethane	0.36168	0.36436	0.33222	0.29241	0.23719	0.19841					
	0.12728						AVRG		0.27622		33.71902
6 Chloroethane	0.16003	0.16271	0.15121	0.15150	0.12997	0.10779					
	0.07399						AVRG		0.13389		24.41166
7 Trichlorofluoromethane	0.82935	0.84906	0.79724	0.79396	0.74540	0.67035					
	0.50514						AVRG		0.74150		16.15408
8 Diethyl ether	0.18207	0.19102	0.18513	0.17509	0.16556	0.16520					
	0.13467						AVRG		0.17125		10.98267
9 1,1,2-Trichlorofluoroethane	0.69075	0.69663	0.66036	0.63993	0.61001	0.61028					
	0.53677						AVRG		0.63496		8.73525
10 Acrolein	0.01840	0.01705	0.01686	0.01500	0.01456	0.01634					
	0.01354						AVRG		0.01597		10.49200
11 Acetone	0.10293	0.08554	0.07094	0.07001	0.05841	0.06407					
	0.04693						AVRG		0.07126		25.73121

Report Date : 20-Apr-2005 11:06

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 17-APR-2005 23:27
End Cal Date : 18-APR-2005 02:51
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Cal Date : 20-Apr-2005 10:59 hanw

Compound	2.5000 Level 2	5.0000 Level 3	10.0000 Level 4	20.0000 Level 5	50.0000 Level 6	100.0000 Level 7	200.0000 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
12 1,1-Dichloroethene	46265	83491	171415	320541	763560	1735454	3185146	LINR	0.000e+000	0.23307		0.99025
13 Acetonitrile	0.01138	0.01144	0.00947	0.01021	0.00961	0.01079	0.00823	AVRG		0.01016		11.38672
14 Iodomethane	0.21192	0.21123	0.22573	0.20845	0.21047	0.22982	0.20564	AVRG		0.21475		4.28849
15 Methyl acetate	0.03932	0.04468	0.04119	0.03579	0.03294	0.03525	0.02884	AVRG		0.03686		14.41724
16 Allyl chloride	0.33518	0.36961	0.36556	0.32063	0.33366	0.29945	0.26356	AVRG		0.32681		11.33771
17 Methylene Chloride	0.42289	0.36969	0.30435	0.27159	0.27027	0.27719	0.23490	AVRG		0.30727		21.44718
18 Carbon Disulfide	0.72753	0.81628	0.75578	0.77872	0.79792	0.75997	0.65769	AVRG		0.75627		6.91254

Report Date : 20-Apr-2005 11:06

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 17-APR-2005 23:27
End Cal Date : 18-APR-2005 02:51
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Cal Date : 20-Apr-2005 10:59 hanw

Compound	2.5000 Level 2	5.0000 Level 3	10.0000 Level 4	20.0000 Level 5	50.0000 Level 6	100.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	200.0000 Level 8										
19 Acrylonitrile	0.04337	0.04739	0.04185	0.03916	0.04477	0.04793					
	0.03939						AVRG		0.04341		8.13343
20 MTBE	0.74483	0.82076	0.80978	0.75381	0.73780	0.70544					
	0.61397						AVRG		0.74091		9.33184
21 trans-1,2-Dichloroethene	0.32333	0.35273	0.33694	0.32385	0.30344	0.30370					
	0.25133						AVRG		0.31362		10.37609
22 n-Hexane	0.51702	0.51891	0.46523	0.47620	0.41824	0.43888					
	0.36526						AVRG		0.45682		12.00513
23 1,1-Dichloroethane	0.72291	0.75301	0.72024	0.71253	0.70073	0.68573					
	0.58162						AVRG		0.69668		7.87124
24 Vinyl acetate	0.55796	0.59542	0.54837	0.55298	0.54576	0.58224					
	0.50210						AVRG		0.55498		5.36366
25 2-Chloro-1,3-butadiene	0.53059	0.59250	0.63339	0.57201	0.56690	0.56273					
	0.48672						AVRG		0.56355		8.19188

Report Date : 20-Apr-2005 11:06

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 17-APR-2005 23:27
End Cal Date : 18-APR-2005 02:51
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Cal Date : 20-Apr-2005 10:59 hanw

Compound	2.5000 Level 2	5.0000 Level 3	10.0000 Level 4	20.0000 Level 5	50.0000 Level 6	100.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	200.0000 Level 8										
26 2-Butoxyethanol	0.00052	0.00061	0.00064	0.00056	0.00042	0.00058					
	0.00041						AVRG		0.00054		16.57794
27 2-Butanone	0.07722	0.09071	0.08016	0.08000	0.08498	0.09624					
	0.09362						AVRG		0.08613		8.65040
28 Propionitrile	0.01407	0.02046	0.02117	0.01713	0.01836	0.01906					
	0.01573						AVRG		0.01800		14.11166
29 2,2-Dichloropropane	0.68014	0.69036	0.67747	0.69869	0.71409	0.64433					
	0.55394						AVRG		0.66557		8.07509
30 cis-1,2-Dichloroethene	0.37482	0.38261	0.36602	0.34711	0.33758	0.35830					
	0.29871						AVRG		0.35216		8.00301
31 Ethyl acetate	0.24242	0.30158	0.26093	0.25311	0.24984	0.27359					
	0.22093						AVRG		0.25749		9.84558
32 Methacrylonitrile	0.15245	0.17131	0.16473	0.15600	0.15474	0.16398					
	0.13346						AVRG		0.15667		7.78897

Report Date : 20-Apr-2005 11:06

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 17-APR-2005 23:27
End Cal Date : 18-APR-2005 02:51
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Cal Date : 20-Apr-2005 10:59 hanw

Compound	2.5000 Level 2	5.0000 Level 3	10.0000 Level 4	20.0000 Level 5	50.0000 Level 6	100.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	200.0000 Level 8										
33 Chloroform	0.94997	0.91080	0.87948	0.82924	0.81792	0.82534					
	0.69712						AVRG		0.84427		9.64311
34 Bromochloromethane	0.20058	0.22364	0.20706	0.19725	0.19684	0.20478					
	0.16932						AVRG		0.19993		8.14387
35 Isobutanol	0.01736	0.01912	0.01590	0.01636	0.01629	0.01738					
	0.01314						AVRG		0.01651		11.08254
37 Tetrahydrofuran	0.02136	0.02487	0.02220	0.02117	0.02068	0.02449					
	0.01836						AVRG		0.02187		10.30165
M 38 1,2-Dichloroethene (total)	0.34908	0.36767	0.35148	0.33548	0.32051	0.33100					
	0.27502						AVRG		0.33289		8.95298
39 1,1,1-Trichloroethane	0.72845	0.76759	0.75329	0.75088	0.73249	0.74946					
	0.64108						AVRG		0.73189		5.75928
40 Cyclohexane	0.36460	0.37904	0.41202	0.32945	0.36611	0.34662					
	0.29614						AVRG		0.35628		10.38934

Report Date : 20-Apr-2005 11:06

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 17-APR-2005 23:27
End Cal Date : 18-APR-2005 02:51
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Cal Date : 20-Apr-2005 10:59 hanw

Compound	2.5000 Level 2	5.0000 Level 3	10.0000 Level 4	20.0000 Level 5	50.0000 Level 6	100.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	200.0000 Level 8										
41 1,1-Dichloropropene	0.59933	0.61333	0.58019	0.58960	0.59815	0.56962					
	0.48586						AVRG		0.57658		7.35645
42 Carbon Tetrachloride	0.65115	0.68635	0.67744	0.63497	0.64826	0.70448					
	0.59638						AVRG		0.65700		5.48936
44 n-Heptane	0.44941	0.46243	0.46750	0.46014	0.48026	0.47978					
	0.43047						AVRG		0.46143		3.78891
45 n-Butanol	0.01784	0.02121	0.01763	0.01870	0.02042	0.02205					
	0.01867						AVRG		0.01950		8.84992
46 1,2-Dichloroethane	0.54518	0.58053	0.53125	0.52692	0.52605	0.51988					
	0.44751						AVRG		0.52533		7.60032
47 Benzene	0.98062	0.99686	0.93601	0.87723	0.85957	0.90390					
	0.75706						AVRG		0.90161		9.02894
49 Trichloroethene	0.44785	0.46920	0.42579	0.39974	0.40662	0.42407					
	0.35444						AVRG		0.41824		8.79156

Report Date : 20-Apr-2005 11:06

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 17-APR-2005 23:27
End Cal Date : 18-APR-2005 02:51
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Cal Date : 20-Apr-2005 10:59 hanw

Compound	2.5000 Level 2	5.0000 Level 3	10.0000 Level 4	20.0000 Level 5	50.0000 Level 6	100.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	200.0000 Level 8										
50 Methylcyclohexane	0.53114	0.56513	0.58599	0.50105	0.50993	0.48812					
	0.41990						AVRG		0.51447		10.58633
51 1,2-Dichloropropane	0.43429	0.44085	0.40950	0.39893	0.39807	0.39501					
	0.33996						AVRG		0.40237		8.19906
52 Methyl methacrylate	0.18463	0.22182	0.21659	0.18564	0.19169	0.20064					
	0.17633						AVRG		0.19676		8.68053
53 Bromodichloromethane	0.77240	0.83677	0.82863	0.84949	0.86659	0.86299					
	0.75012						AVRG		0.82386		5.49296
54 Dibromomethane	0.37964	0.40352	0.37563	0.35939	0.36347	0.37795					
	0.31344						AVRG		0.36758		7.55292
55 1,4-Dioxane	0.00142	0.00264	0.00257	0.00231	0.00220	0.00269					
	0.00220						AVRG		0.00229		19.09476
56 2-Nitropropane	0.29961	0.34188	0.27430	0.27668	0.29416	0.30231					
	0.26550						AVRG		0.29349		8.67840

Report Date : 20-Apr-2005 11:06

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 17-APR-2005 23:27
End Cal Date : 18-APR-2005 02:51
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Cal Date : 20-Apr-2005 10:59 hanw

Compound	2.5000 Level 2	5.0000 Level 3	10.0000 Level 4	20.0000 Level 5	50.0000 Level 6	100.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2	
	200.0000 Level 8											
57 2-chloroethyl vinyl ether	+++++	24845	32278	166453	542313	1131679						
	+++++						LINR	0.08271	0.18326		0.99359	<-
58 4-Methyl-2-pentanone	0.34746	0.43287	0.34170	0.42993	0.48296	0.47877						
	0.34716						AVRG		0.40869		15.30847	
59 cis-1,3-Dichloropropene	0.54594	0.59155	0.56693	0.61058	0.61487	0.59981						
	0.52626						AVRG		0.57942		5.84987	
60 Dimethyl disulfide	26696	69636	166301	400723	1183435	2989969						
	6126155						LINR	0.05192	0.43784		0.99835	
62 Toluene	185403	337539	649351	1219013	2975378	6922190						
	12700658						LINR	-0.02982	1.53174		0.99257	
63 trans-1,3-Dichloropropene	0.64370	0.72088	0.76110	0.83690	0.70569	0.83434						
	0.75166						AVRG		0.75061		9.24600	
64 Ethyl methacrylate	0.61277	0.71268	0.74815	0.78008	0.62883	0.71563						
	0.66533						AVRG		0.69478		8.87714	

Report Date : 20-Apr-2005 11:06

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 17-APR-2005 23:27
End Cal Date : 18-APR-2005 02:51
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Cal Date : 20-Apr-2005 10:59 hanw

Compound	2.5000 Level 2	5.0000 Level 3	10.0000 Level 4	20.0000 Level 5	50.0000 Level 6	100.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2	
	200.0000 Level 8											
65 1,1,2-Trichloroethane	0.48688	0.53714	0.52804	0.54133	0.43546	0.43228						
	0.45053						AVRG		0.48738		9.95672	
66 2-Hexanone	+++++	+++++	0.30802	0.33125	0.28511	0.29934						
	0.25197						AVRG		0.29514		9.95299	<-
67 1,3-Dichloropropane	0.83334	0.87060	0.88955	0.94055	0.74437	0.71049						
	0.60014						AVRG		0.79843		14.89860	
68 Tetrachloroethene	0.60746	0.64463	0.67655	0.66067	0.53837	0.52734						
	0.43450						AVRG		0.58422		15.03823	
69 Chlorodibromomethane	0.63354	0.71120	0.86156	0.87079	0.71572	0.82277						
	0.69562						AVRG		0.75874		12.15043	
70 1,2-Dibromoethane	0.53556	0.58418	0.72550	0.66106	0.58064	0.64146						
	0.53003						AVRG		0.60835		11.69781	
72 Chlorobenzene	1.08109	1.04975	1.07722	1.13422	1.12139	1.06792						
	0.91074						AVRG		1.06319		6.91096	

Report Date : 20-Apr-2005 11:06

STL St. Louis

INITIAL CALIBRATION DATA

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Quant Method : ISTD
Target Version : 4.10
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Method file : \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Cal Date : 20-Apr-2005 10:59 hanw

Compound	2.5000 Level 2	5.0000 Level 3	10.0000 Level 4	20.0000 Level 5	50.0000 Level 6	100.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	200.0000 Level 8										
73 1,1,1,2-Tetrachloroethane	0.53277	0.56502	0.57722	0.57781	0.59479	0.61662					
	0.53393						AVRG		0.57116		5.35086
74 Ethylbenzene	0.48982	0.46552	0.46551	0.47846	0.47622	0.46437					
	0.40400						AVRG		0.46342		5.99261
75 m,p-Xylenes	0.59249	0.60916	0.59539	0.61287	0.60354	0.60602					
	0.50970						AVRG		0.58988		6.11782
76 o-Xylene	0.56397	0.57932	0.58352	0.57319	0.58123	0.58505					
	0.50761						AVRG		0.56770		4.83689
77 Styrene	0.91514	0.92784	0.95332	0.89854	0.93522	1.00134					
	0.86141						AVRG		0.92755		4.72785
M 78 Xylenes (total)	0.58298	0.59922	0.59143	0.59964	0.59610	0.59903					
	0.50900						AVRG		0.58249		5.65653
79 Bromoform	0.37168	0.44872	0.45711	0.53692	0.55277	0.58539					
	0.50963						AVRG		0.49460		14.82612

Report Date : 20-Apr-2005 11:06

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INITIAL CALIBRATION DATA

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Quant Method : ISTD
Target Version : 4.10
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Method file : \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Cal Date : 20-Apr-2005 10:59 hanw

Compound	2.5000 Level 2	5.0000 Level 3	10.0000 Level 4	20.0000 Level 5	50.0000 Level 6	100.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	200.0000 Level 8										
80 Isopropylbenzene	1.62971	1.64482	1.70359	1.67988	1.69050	1.69916					
	1.47344						AVRG		1.64587		4.91824
81 Cyclohexanone	0.03235	0.03649	0.03442	0.03296	0.02955	0.02880					
	0.01674						AVRG		0.03019		21.51838
82 1,1,2,2-Tetrachloroethane	0.64647	0.68831	0.66163	0.69161	0.71394	0.73551					
	0.62088						AVRG		0.67976		5.82102
84 1,2,3-Trichloropropane	0.30463	0.33774	0.29338	0.29677	0.29539	0.31976					
	0.27288						AVRG		0.30293		6.85412
85 Bromobenzene	0.97369	0.96094	0.91506	0.84395	0.85405	0.94875					
	0.79035						AVRG		0.89811		7.74062
86 n-Propylbenzene	3.95903	4.10235	3.79907	3.72181	3.58287	3.76209					
	3.23100						AVRG		3.73689		7.46802
87 2-Chlorotoluene	2.87690	2.96422	2.84442	2.75621	2.53457	2.67505					
	2.35710						AVRG		2.71550		7.79759

Report Date : 20-Apr-2005 11:06

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INITIAL CALIBRATION DATA

Start Cal Date : 17-APR-2005 23:27
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Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Cal Date : 20-Apr-2005 10:59 hanw

Compound	2.5000 Level 2	5.0000 Level 3	10.0000 Level 4	20.0000 Level 5	50.0000 Level 6	100.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	200.0000 Level 8										
88 trans-1,4-dichloro-2-butene	0.08874	0.12394	0.11484	0.11484	0.11362	0.10953					
	0.09414						AVRG		0.10852		11.54906
89 1,3,5-Trimethylbenzene	2.69009	2.68671	2.59184	2.41560	2.44937	2.58179					
	2.23731						AVRG		2.52182		6.50542
90 4-Chlorotoluene	3.09991	3.17702	3.21345	2.99690	2.94305	3.02873					
	2.75682						AVRG		3.03084		5.10137
91 t-Butylbenzene	3.13232	3.26863	3.06317	2.80761	2.73837	3.02620					
	2.54384						AVRG		2.94002		8.59034
92 Pentachloroethane	0.55789	0.64794	0.70523	0.61488	0.67050	0.71534					
	0.62832						AVRG		0.64859		8.42572
93 1,2,4-Trimethylbenzene	2.78492	2.73346	2.52981	2.39471	2.39539	2.50174					
	2.11473						AVRG		2.49354		9.06772
94 sec-Butylbenzene	3.67751	3.64724	3.49933	3.21777	3.36654	3.49358					
	2.97270						AVRG		3.41067		7.30914

Report Date : 20-Apr-2005 11:06

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INITIAL CALIBRATION DATA

Start Cal Date : 17-APR-2005 23:27
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Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Cal Date : 20-Apr-2005 10:59 hanw

Compound	2.5000 Level 2	5.0000 Level 3	10.0000 Level 4	20.0000 Level 5	50.0000 Level 6	100.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	200.0000 Level 8										
95 4-Isopropyltoluene	2.65213	2.69575	2.58605	2.36162	2.40759	2.63070					
	2.23524						AVRG		2.50987		6.95922
96 1,3-Dichlorobenzene	1.81504	1.70523	1.56455	1.52707	1.54863	1.54220					
	1.32888						AVRG		1.57594		9.66935
98 1,4-Dichlorobenzene	1.92266	1.90605	1.64586	1.62750	1.64176	1.63288					
	1.40945						AVRG		1.68374		10.58786
99 n-Butylbenzene	2.87390	2.96797	2.75956	2.59129	2.14663	2.77343					
	2.42996						AVRG		2.64896		10.71875
100 1,2-Dichlorobenzene	1.65587	1.62222	1.42412	1.39590	1.13566	1.42598					
	1.20932						AVRG		1.40987		13.63364
101 1,2-Dibromo-3-chloropropane	0.17146	0.21651	0.19860	0.21493	0.16171	0.26253					
	0.22242						AVRG		0.20974		14.29639
102 1,3,5-Trichlorobenzene	1.34789	1.40880	1.34771	1.19547	0.98476	1.40754					
	1.24161						AVRG		1.27625		11.87165

Report Date : 20-Apr-2005 11:06

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INITIAL CALIBRATION DATA

Start Cal Date : 17-APR-2005 23:27
End Cal Date : 18-APR-2005 02:51
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Cal Date : 20-Apr-2005 10:59 hanw

Compound	2.5000 Level 2	5.0000 Level 3	10.0000 Level 4	20.0000 Level 5	50.0000 Level 6	100.0000 Level 7	200.0000 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2	
103 1,2,4-Trichlorobenzene	1.35824	1.27930	1.11573	1.02280	0.79239	1.14444	0.95505	AVRG		1.09542		17.57973	
104 Hexachlorobutadiene	1.08685	1.05306	0.97712	0.75736	0.64301	0.96654	0.77832	AVRG		0.89461		18.79954	
105 Naphthalene	1.66289	1.75737	1.52658	1.51957	1.21466	1.53865	1.31466	AVRG		1.50491		12.45960	
106 1,2,3-Trichlorobenzene	1.28689	1.17315	0.97794	0.93733	0.69707	1.02675	0.84995	AVRG		0.99273		19.77937	
107 4-Chlorophenyl methyl sulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
$ 36 Dibromofluoromethane	0.60250	0.58497	0.53608	0.55891	0.56214	0.58334	0.55263	AVRG		0.56865		3.98605	
$ 43 1,2-Dichloroethane-d4	0.22084	0.22395	0.20251	0.19518	0.19863	0.20481	0.18836	AVRG		0.20490		6.39532	

Report Date : 20-Apr-2005 11:06

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INITIAL CALIBRATION DATA

Start Cal Date : 17-APR-2005 23:27
End Cal Date : 18-APR-2005 02:51
Quant Method : ISTD
Target Version : 4.10
Integrator : HP RTE
Method file : \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Cal Date : 20-Apr-2005 10:59 hanw

Compound	2.5000 Level 2	5.0000 Level 3	10.0000 Level 4	20.0000 Level 5	50.0000 Level 6	100.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	200.0000 Level 8										
$ 61 Toluene-d8	1.50859	1.34933	1.33410	1.53309	1.25272	1.43520					
	1.39558						AVRG		1.40123		7.09815
$ 83 4-Bromofluorobenzene	1.90052	1.76764	1.65914	1.59833	1.68607	1.73663					
	1.66347						AVRG		1.71597		5.72347

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response

Data File: \\slsvr01\chem\MSG.i\G050417A.b/GCAL5160.D
Report Date: 04/20/2005

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INITIAL CALIBRATION REPORT

Instrument ID: MSG.i
Lab File ID: GCAL5160.D
Analysis Type: WATER

Injection Date: 17-APR-2005 23:27
Lab Sample ID: VSTD050
Method File: \\slsvr01\chem\MSG.i\G050417A.b\8260B-U

COMPOUND	%RSD
Dichlorodifluoromethane	23.5
Freon-114	25.5
Chloromethane	9.6
Vinyl Chloride	20.3
Bromomethane	33.7
Chloroethane	24.4
Trichlorofluoromethane	16.2
Diethyl ether	11.0
1,1,2-Trichlorofluoroethane	8.7
Acrolein	10.5
Acetone	25.7
1,1-Dichloroethene	1.0
Acetonitrile	11.4
Iodomethane	4.3
Methyl acetate	14.4
Allyl chloride	11.3
Methylene Chloride	21.4
Carbon Disulfide	6.9
Acrylonitrile	8.1
MTBE	9.3
trans-1,2-Dichloroethene	10.4
n-Hexane	12.0
1,1-Dichloroethane	7.9
Vinyl acetate	5.4
2-Chloro-1,3-butadiene	8.2
2-Butoxyethanol	16.6
2-Butanone	8.7
Propionitrile	14.1
2,2-Dichloropropane	8.1
cis-1,2-Dichloroethene	8.0
Ethyl acetate	9.8
Methacrylonitrile	7.8
Chloroform	9.6
Bromochloromethane	8.1
Tetrahydrofuran	10.3
Dibromofluoromethane	4.0
Isobutanol	11.1
1,2-Dichloroethene (total)	9.0
1,1,1-Trichloroethane	5.8

Data File: \\slsvr01\chem\MSG.i\G050417A.b/GCAL5160.D
Report Date: 04/20/2005

INITIAL CALIBRATION REPORT

Instrument ID: MSG.i
Lab File ID: GCAL5160.D
Analysis Type: WATER

Injection Date: 17-APR-2005 23:27
Lab Sample ID: VSTD050
Method File: \\slsvr01\chem\MSG.i\G050417A.b\

COMPOUND	%RSD
Cyclohexane	10.4
1,1-Dichloropropene	7.4
Carbon Tetrachloride	5.5
1,2-Dichloroethane-d4	6.4
n-Butanol	8.8
n-Heptane	3.8
1,2-Dichloroethane	7.6
Benzene	9.0
Trichloroethene	8.8
Methylcyclohexane	10.6
1,2-Dichloropropane	8.2
Methyl methacrylate	8.7
Bromodichloromethane	5.5
Dibromomethane	7.6
1,4-Dioxane	19.1
2-Nitropropane	8.7
2-chloroethyl vinyl ether	1.0
4-Methyl-2-pentanone	15.3
cis-1,3-Dichloropropene	5.8
Dimethyl disulfide	1.0
Toluene-d8	7.1
Toluene	1.0
trans-1,3-Dichloropropene	9.2
Ethyl methacrylate	8.9
1,1,2-Trichloroethane	10.0
2-Hexanone	10.0
1,3-Dichloropropane	14.9
Tetrachloroethene	15.0
Chlorodibromomethane	12.2
1,2-Dibromoethane	11.7
Chlorobenzene	6.9
1,1,1,2-Tetrachloroethane	5.4
Ethylbenzene	6.0
m,p-Xylenes	6.1
o-Xylene	4.8
Styrene	4.7
Xylenes (total)	5.7
Bromoform	14.8
Isopropylbenzene	4.9

Data File: \\slsvr01\chem\MSG.i\G050417A.b/GCAL5160.D
Report Date: 04/20/2005

INITIAL CALIBRATION REPORT

Instrument ID: MSG.i
Lab File ID: GCAL5160.D
Analysis Type: WATER

Injection Date: 17-APR-2005 23:27
Lab Sample ID: VSTD050
Method File: \\slsvr01\chem\MSG.i\G050417A.b\

COMPOUND	%RSD
Cyclohexanone	21.5
1,1,2,2-Tetrachloroethane	5.8
4-Bromofluorobenzene	5.7
1,2,3-Trichloropropane	6.9
Bromobenzene	7.7
n-Propylbenzene	7.5
2-Chlorotoluene	7.8
trans-1,4-dichloro-2-butene	11.5
1,3,5-Trimethylbenzene	6.5
4-Chlorotoluene	5.1
t-Butylbenzene	8.6
Pentachloroethane	8.4
1,2,4-Trimethylbenzene	9.1
sec-Butylbenzene	7.3
4-Isopropyltoluene	7.0
1,3-Dichlorobenzene	9.7
1,4-Dichlorobenzene	10.6
n-Butylbenzene	10.7
1,2-Dichlorobenzene	13.6
1,2-Dibromo-3-chloropropane	14.3
1,3,5-Trichlorobenzene	11.9
1,2,4-Trichlorobenzene	17.6
Hexachlorobutadiene	18.8
Naphthalene	12.5
1,2,3-Trichlorobenzene	19.8
4-Chlorophenyl methyl sulfide	0.0

The average of all %RSD's in the initial calibration is 10.2

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5160.D
Report Date: 20-Apr-2005 10:59

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSG.i\G050417A.b\GCAL5160.D
Lab Smp Id: VSTD050 Client Smp ID: VSTD050
Inj Date : 17-APR-2005 23:27
Operator : JDH Inst ID: MSG.i
Smp Info : VSTD050;G050417A.b
Misc Info : VBLKG107A.B;
Comment : NONE
Method : \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Meth Date : 20-Apr-2005 10:59 hanw Quant Type: ISTD
Cal Date : 17-APR-2005 23:27 Cal File: GCAL5160.D
Als bottle: 3 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLVOA04

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume
Vo	5.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	2.218	2.218	(0.237)	1044049	50.0000	45.84 (M)
2 Freon-114	135	2.323	2.323	(0.248)	422861	50.0000	41.60 (M)
3 Chloromethane	50	2.479	2.479	(0.265)	779874	50.0000	49.40
4 Vinyl Chloride	62	2.584	2.584	(0.276)	503959	50.0000	44.53
5 Bromomethane	94	3.071	3.071	(0.328)	693704	50.0000	42.93
6 Chloroethane	64	3.158	3.158	(0.338)	380137	50.0000	48.54
7 Trichlorofluoromethane	101	3.454	3.454	(0.369)	2180096	50.0000	50.26
8 Diethyl ether	59	3.837	3.837	(0.410)	968429	100.000	96.68
9 1,1,2-Trichlorofluoroethane	101	3.976	3.976	(0.425)	1784111	50.0000	48.04
10 Acrolein	56	3.994	3.994	(0.427)	212962	250.000	228.0
11 Acetone	43	4.081	4.081	(0.436)	170835	50.0000	40.98
12 1,1-Dichloroethene	96	4.220	4.220	(0.451)	763560	50.0000	56.00
13 Acetonitrile	41	4.429	4.429	(0.473)	140512	250.000	236.4
14 Iodomethane	142	4.638	4.638	(0.496)	615559	50.0000	49.00
15 Methyl acetate	74	4.708	4.708	(0.503)	96350	50.0000	44.69
16 Allyl chloride	39	4.708	4.708	(0.503)	975872	50.0000	51.05
17 Methylene Chloride	84	4.864	4.864	(0.520)	790479	50.0000	43.98
18 Carbon Disulfide	76	4.882	4.882	(0.522)	2333710	50.0000	52.75
19 Acrylonitrile	53	5.090	5.090	(0.544)	654717	250.000	257.8
20 MTBE	73	5.125	5.125	(0.548)	2157867	50.0000	49.79
21 trans-1,2-Dichloroethene	96	5.299	5.299	(0.566)	887471	50.0000	48.38
22 n-Hexane	57	5.386	5.386	(0.576)	1223223	50.0000	45.78

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Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5160.D
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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	5.961	5.961	(0.637)	2049431	50.0000	50.29
	24 Vinyl acetate	43	5.996	5.996	(0.641)	1596193	50.0000	49.17
	25 2-Chloro-1,3-butadiene	53	6.117	6.117	(0.654)	1658036	50.0000	50.30
	26 2-Butoxyethanol	57	6.553	6.553	(0.700)	62009	2500.00	1980 (A)
	27 2-Butanone	43	6.727	6.727	(0.719)	248534	50.0000	49.33
	28 Propionitrile	54	6.831	6.831	(0.730)	268462	250.000	255.0
	29 2,2-Dichloropropane	77	6.901	6.901	(0.738)	2088506	50.0000	53.64
	30 cis-1,2-Dichloroethene	96	7.005	7.005	(0.749)	987323	50.0000	47.93
	31 Ethyl acetate	43	7.023	7.023	(0.751)	1461441	100.000	97.03
	32 Methacrylonitrile	41	7.179	7.179	(0.767)	2262858	250.000	246.9
	33 Chloroform	83	7.284	7.284	(0.779)	2392190	50.0000	48.44
	34 Bromochloromethane	128	7.597	7.597	(0.812)	575715	50.0000	49.23
	35 Isobutanol	42	7.701	7.701	(0.823)	952693	1000.00	986.6
$	36 Dibromofluoromethane	113	7.701	7.701	(0.823)	1644092	50.0000	49.43
	37 Tetrahydrofuran	71	7.684	7.684	(0.821)	302390	250.000	236.3
N	38 1,2-Dichloroethene (total)	96				1874794	100.000	96.31
	39 1,1,1-Trichloroethane	97	8.032	8.032	(0.859)	2142334	50.0000	50.04
	40 Cyclohexane	84	8.067	8.067	(0.862)	1070763	50.0000	51.38
	41 1,1-Dichloropropene	75	8.345	8.345	(0.892)	1749414	50.0000	51.87
	42 Carbon Tetrachloride	117	8.537	8.537	(0.913)	1895971	50.0000	49.33
$	43 1,2-Dichloroethane-d4	67	8.694	8.694	(0.929)	580931	50.0000	48.47
	44 n-Heptane	43	8.711	8.711	(0.931)	1404628	50.0000	52.04
	45 n-Butanol	56	8.711	8.711	(0.931)	597328	500.000	523.6
	46 1,2-Dichloroethane	62	8.868	8.868	(0.948)	1538557	50.0000	50.07
	47 Benzene	78	8.885	8.885	(0.950)	2513993	50.0000	47.67
*	48 Fluorobenzene	96	9.355	9.355	(1.000)	2924725	50.0000	
	49 Trichloroethene	130	10.243	10.243	(1.095)	1189254	50.0000	48.61
	50 Methylcyclohexane	55	10.347	10.347	(1.106)	1491392	50.0000	49.56
	51 1,2-Dichloropropane	63	10.660	10.660	(1.140)	1164237	50.0000	49.46
	52 Methyl methacrylate	69	10.887	10.887	(1.164)	560632	50.0000	48.71
	53 Bromodichloromethane	83	11.200	11.200	(1.197)	2534529	50.0000	52.59
	54 Dibromomethane	93	11.305	11.305	(1.208)	1063061	50.0000	49.44
	55 1,4-Dioxane	88	11.339	11.339	(1.212)	128817	1000.00	961.6
	56 2-Nitropropane	43	11.426	11.426	(1.221)	860333	50.0000	50.11 (M)
	57 2-chloroethyl vinyl ether	63	12.070	12.070	(1.290)	542313	50.0000	54.72
	58 4-Methyl-2-pentanone	43	12.123	12.123	(1.296)	1412531	50.0000	59.09
	59 cis-1,3-Dichloropropene	75	12.627	12.627	(1.350)	1798324	50.0000	53.06
	60 Dimethyl disulfide	94	13.028	13.028	(1.393)	1183435	50.0000	48.80
$	61 Toluene-d8	98	13.237	13.237	(0.755)	2674652	50.0000	44.70
	62 Toluene	91	13.411	13.411	(0.765)	2975378	50.0000	44.00
	63 trans-1,3-Dichloropropene	75	13.985	13.985	(0.797)	1506707	50.0000	47.01
	64 Ethyl methacrylate	69	14.090	14.090	(0.803)	1342596	50.0000	45.25
	65 1,1,2-Trichloroethane	97	14.403	14.403	(0.821)	929745	50.0000	44.67
	66 2-Hexanone	43	14.542	14.542	(0.829)	608725	50.0000	48.30
	67 1,3-Dichloropropane	76	15.134	15.134	(0.863)	1589285	50.0000	46.61
	68 Tetrachloroethene	164	15.221	15.221	(0.868)	1149466	50.0000	46.08
	69 Chlorodibromomethane	129	15.778	15.778	(0.900)	1528123	50.0000	47.16
	70 1,2-Dibromoethane	107	16.370	16.370	(0.933)	1239707	50.0000	47.72
*	71 Chlorobenzene-d5	117	17.536	17.536	(1.000)	2135082	50.0000	
	72 Chlorobenzene	112	17.640	17.640	(1.006)	2394249	50.0000	52.74
	73 1,1,1,2-Tetrachloroethane	131	17.815	17.815	(1.016)	1269933	50.0000	52.07
	74 Ethylbenzene	106	17.884	17.884	(1.020)	1016766	50.0000	51.38
	75 m,p-Xylenes	106	18.145	18.145	(1.035)	2577222	100.000	102.3
	76 o-Xylene	106	19.486	19.486	(1.111)	1240964	50.0000	51.19

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	77 Styrene	104	19.607	19.607	(1.118)	1996765	50.0000	50.41
M	78 Xylenes (total)	106				3818186	150.000	153.5
	79 Bromoform	173	20.547	20.547	(1.172)	1180200	50.0000	55.88
	80 Isopropylbenzene	105	20.704	20.704	(1.181)	3609357	50.0000	51.36
	81 Cyclohexanone	55	20.826	20.826	(1.188)	630863	500.000	489.4
	82 1,1,2,2-Tetrachloroethane	83	21.278	21.278	(1.213)	1524311	50.0000	52.51
$	83 4-Bromofluorobenzene	95	21.470	21.470	(0.881)	2265983	50.0000	49.13 (M)
	84 1,2,3-Trichloropropane	110	21.766	21.766	(0.894)	396985	50.0000	48.75
	85 Bromobenzene	156	21.992	21.992	(0.903)	1147800	50.0000	47.55
	86 n-Propylbenzene	91	22.044	22.044	(0.905)	4815175	50.0000	47.94
	87 2-Chlorotoluene	91	22.497	22.497	(0.924)	3406324	50.0000	46.67
	88 trans-1,4-dichloro-2-butene	53	22.584	22.584	(0.927)	152695	50.0000	52.35
	89 1,3,5-Trimethylbenzene	105	22.584	22.584	(0.927)	3291818	50.0000	48.56
	90 4-Chlorotoluene	91	22.636	22.636	(0.929)	3955298	50.0000	48.55 (M)
	91 t-Butylbenzene	119	23.454	23.454	(0.963)	3680212	50.0000	46.57
	92 Pentachloroethane	167	23.472	23.472	(0.964)	901115	50.0000	51.69
	93 1,2,4-Trimethylbenzene	105	23.489	23.489	(0.964)	3219265	50.0000	48.03
	94 sec-Butylbenzene	105	23.872	23.872	(0.980)	4524443	50.0000	49.35
	95 4-Isopropyltoluene	119	24.150	24.150	(0.991)	3235662	50.0000	47.96
	96 1,3-Dichlorobenzene	146	24.220	24.220	(0.994)	2081277	50.0000	49.13
*	97 1,4 Dichlorobenzene-d4	152	24.359	24.359	(1.000)	1343943	50.0000	
	98 1,4-Dichlorobenzene	146	24.412	24.412	(1.002)	2206428	50.0000	48.75
	99 n-Butylbenzene	91	24.829	24.829	(1.019)	2884946	50.0000	40.52
	100 1,2-Dichlorobenzene	146	24.986	24.986	(1.026)	1526256	50.0000	40.28
	101 1,2-Dibromo-3-chloropropane	157	26.065	26.065	(1.070)	244211	50.0000	43.32
	102 1,3,5-Trichlorobenzene	180	26.344	26.344	(1.081)	1323461	50.0000	38.58
	103 1,2,4-Trichlorobenzene	180	27.040	27.040	(1.110)	1064930	50.0000	36.17
	104 Hexachlorobutadiene	225	27.214	27.214	(1.117)	864164	50.0000	35.94
	105 Naphthalene	128	27.301	27.301	(1.121)	1632429	50.0000	40.36
	106 1,2,3-Trichlorobenzene	180	27.562	27.562	(1.131)	936816	50.0000	35.11

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5160.D
Report Date: 20-Apr-2005 10:59

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

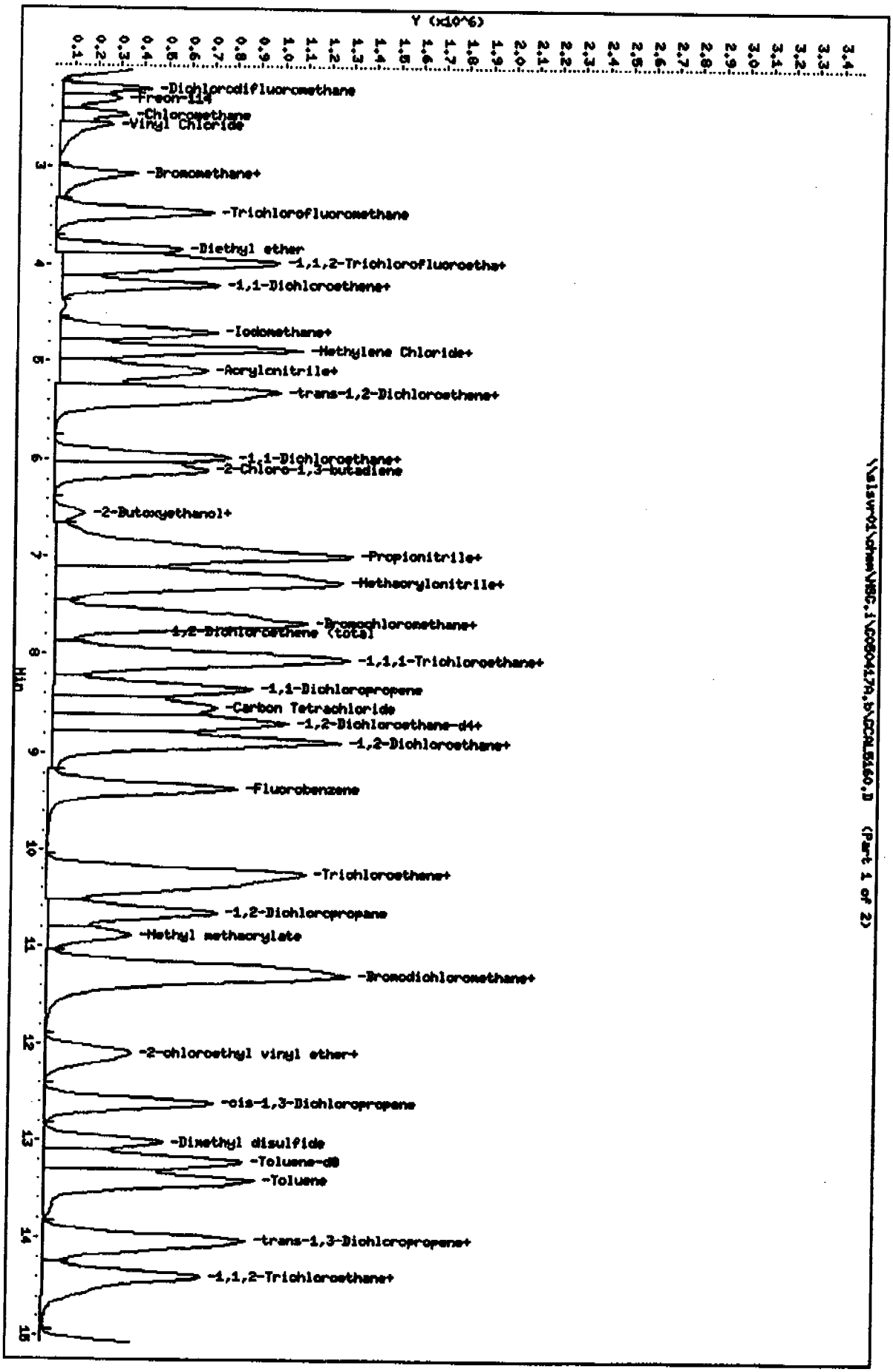
Instrument ID: MSG.i
Lab File ID: GCAL5160.D
Lab Smp Id: VSTD050
Analysis Type: VOA
Quant Type: ISTD
Operator: JDH
Method File: \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Misc Info: VBLKG107A.B;

Calibration Date: 17-APR-2005
Calibration Time: 23:27
Client Smp ID: VSTD050
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	2924725	1462363	5849450	2924725	0.00
71 Chlorobenzene-d5	2135082	1067541	4270164	2135082	0.00
97 1,4 Dichlorobenze	1343943	671972	2687886	1343943	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	9.36	8.86	9.86	9.36	0.00
71 Chlorobenzene-d5	17.54	17.04	18.04	17.54	0.00
97 1,4 Dichlorobenze	24.36	23.86	24.86	24.36	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.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-Dichlorodifluoromethane
-Freon-114
-Chloroethane
-Vinyl Chloride
-Bromomethane+
-Trichlorofluoromethane
-Diethyl ether
-1,1,2-Trichlorofluoroetha+
-1,1-Dichloroethene+
-Iodomethane+
-Methylene Chloride+
-Acrylonitrile+
-trans-1,2-Dichloroethene+
-1,1-Dichloroethane+
-2-Chloro-1,3-butadiene
-2-Butoxyethanol+
-Propionitrile+
-Methacrylonitrile+
-Bromochloromethane+
1,2-Dichloroethene (total)
-1,1,1-Trichloroethane+
-1,1-Dichloropropene
-Carbon Tetrachloride
-1,2-Dichloroethane-d4+
-1,2-Dichloroethane+
-Fluorobenzene
-Trichloroethene+
-1,2-Dichloropropane
-Methyl methacrylate
-Bromodichloromethane+
-2-chloroethyl vinyl ether+
-cis-1,3-Dichloropropene
-Dimethyl disulfide
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane+
Min
3 4 5 6 7 8 9 10 11 12 13 14 15
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Date : 17-APR-2005 23:27
Client ID: VSTD060
Sample Info: VSTD060:020041?0.b
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: MSC.i
Operator: JDH
Column diameter: 0.53
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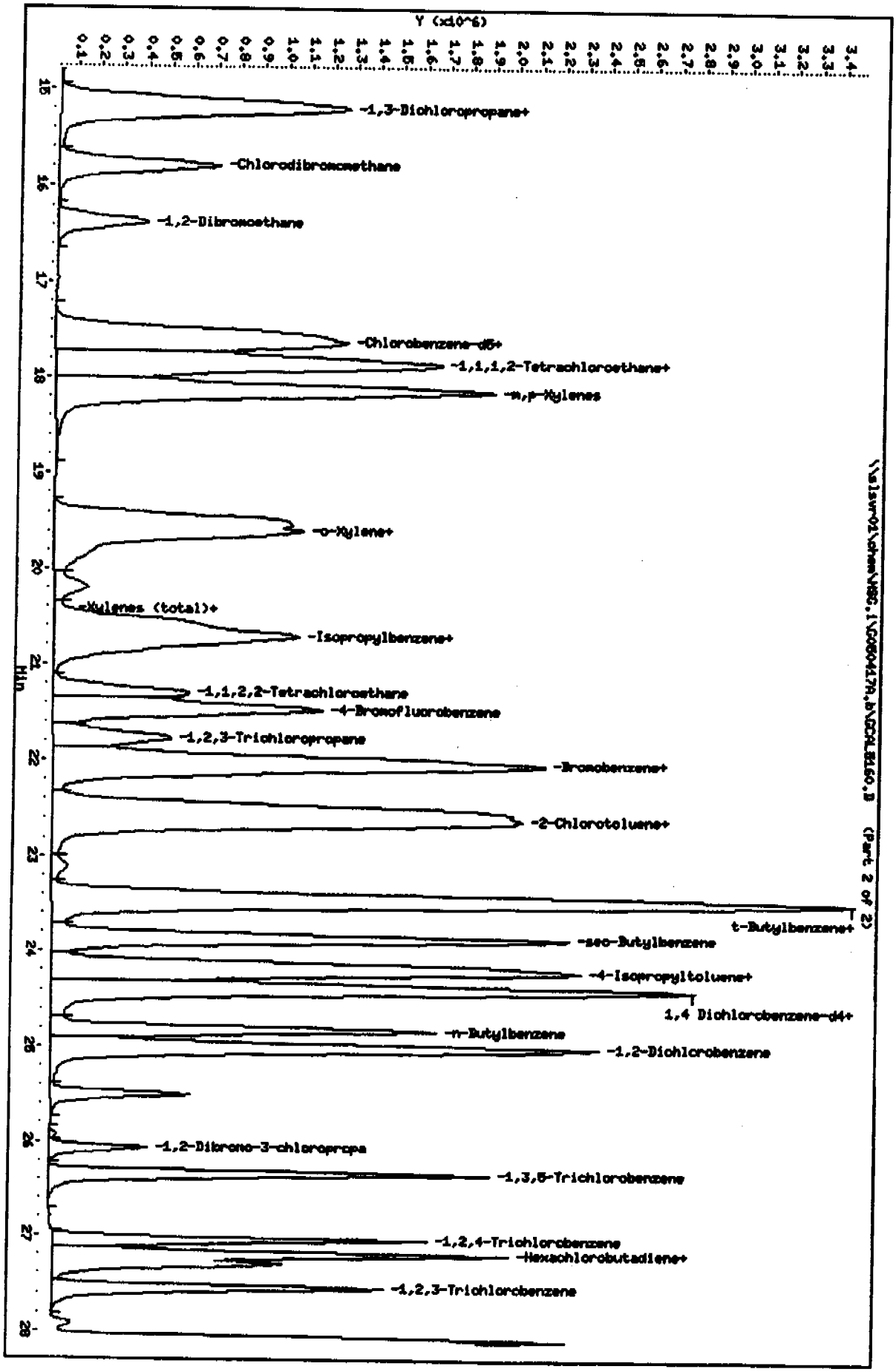
Y (x10^6)
Min
-1,3-Dichloropropane+
-Chlorodibromomethane
-1,2-Dibromoethane
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
-o-Xylene+
-Xylenes (total)+
-Isopropylbenzene+
-1,1,2,2-Tetrachloroethane
-4-Bromofluorobenzene
-1,2,3-Trichloropropane
-Bromobenzene+
-2-Chlorotoluene+
t-Butylbenzene+
-sec-Butylbenzene
-4-Isopropyltoluene+
1,4 Dichlorobenzene-d4+
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloroprope
-1,3,5-Trichlorobenzene
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene+
-1,2,3-Trichlorobenzene
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Date : 17-APR-2008 23:27
Client ID: VSTD060
Sample Info: VSTD060;G0804178.b
Purge Volume: 5.0
Column phase: RTX-502.2
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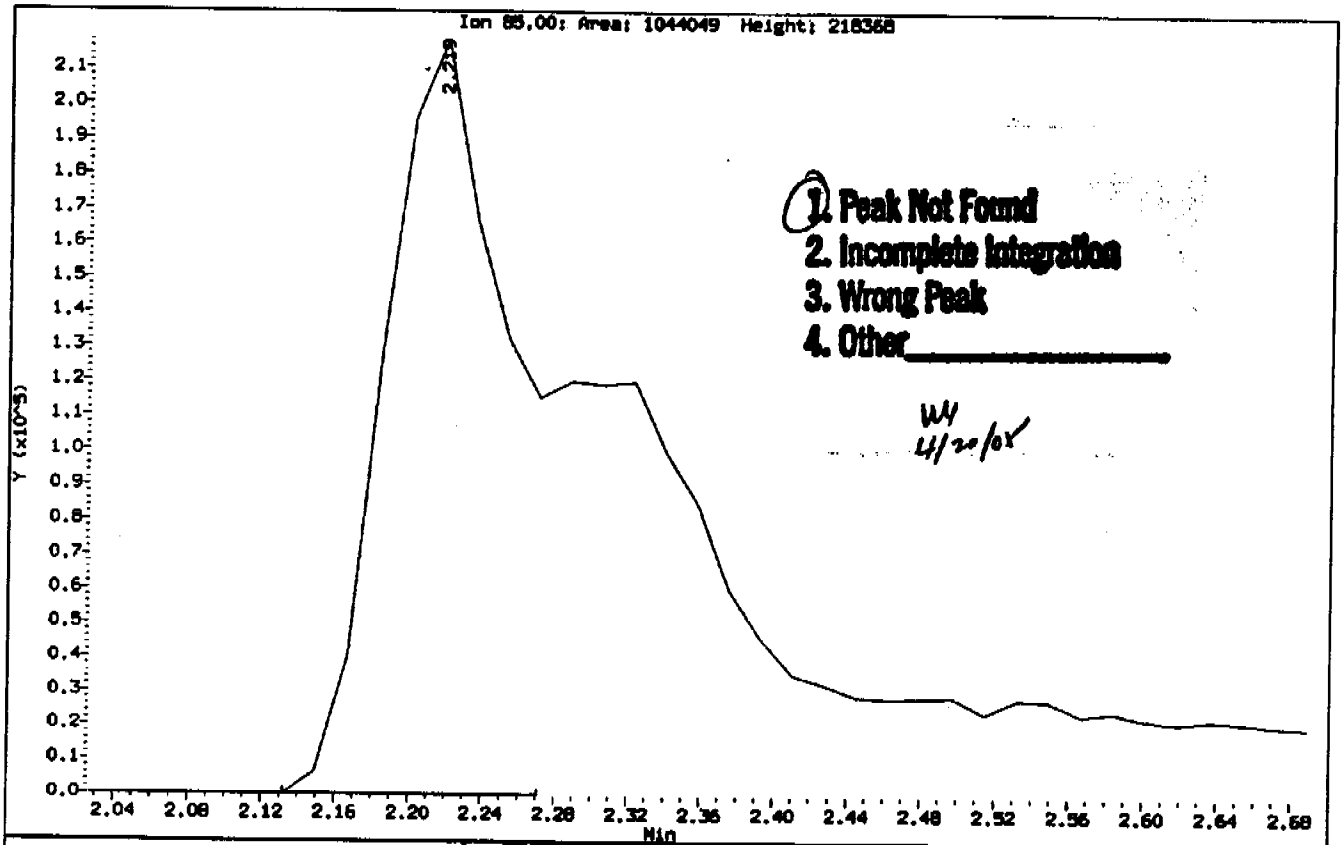
Instrument: HSC.i
Operator: JDH
Column diameter: 0.53

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5160.D
Injection Date: 17-APR-2005 23:27
Instrument: MSG.i
Client Sample ID: VSTD050

Compound: Dichlorodifluoromethane
CAS Number: 75-71-8



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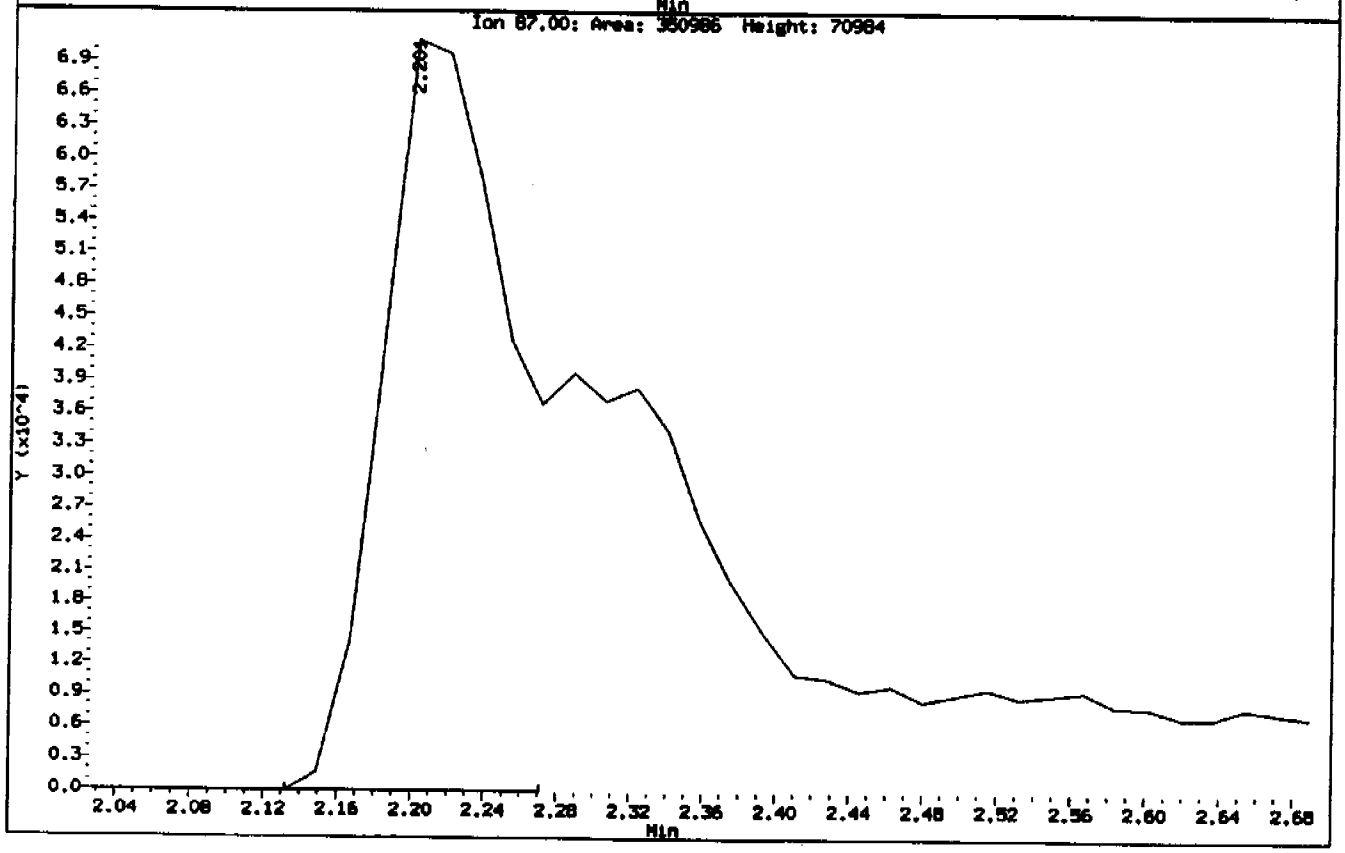

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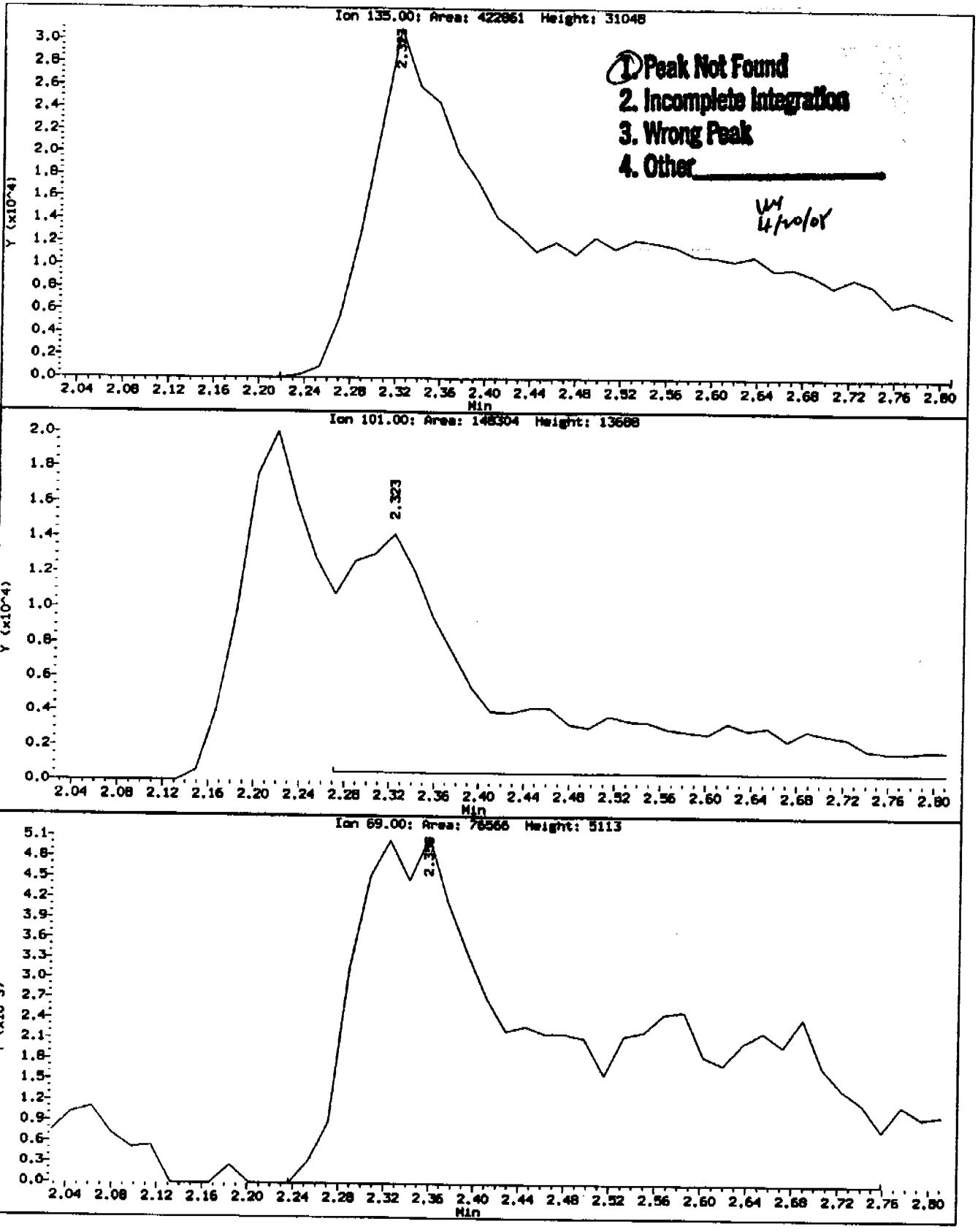
Injection Date: 17-APR-2005 23:27
Instrument: MSG.i
Client Sample ID: VSTD050

Compound: Freon-114
CAS Number: 374-07-2



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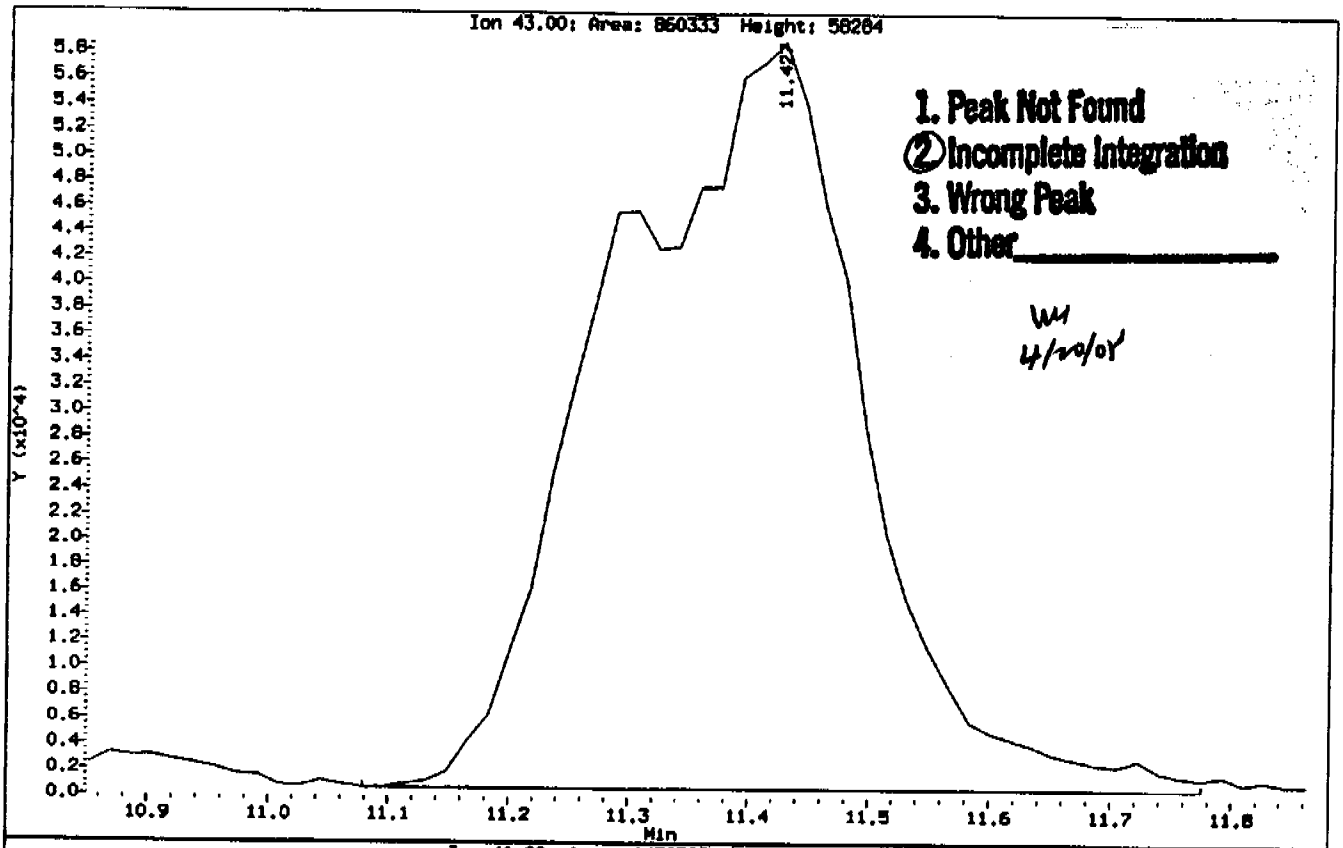
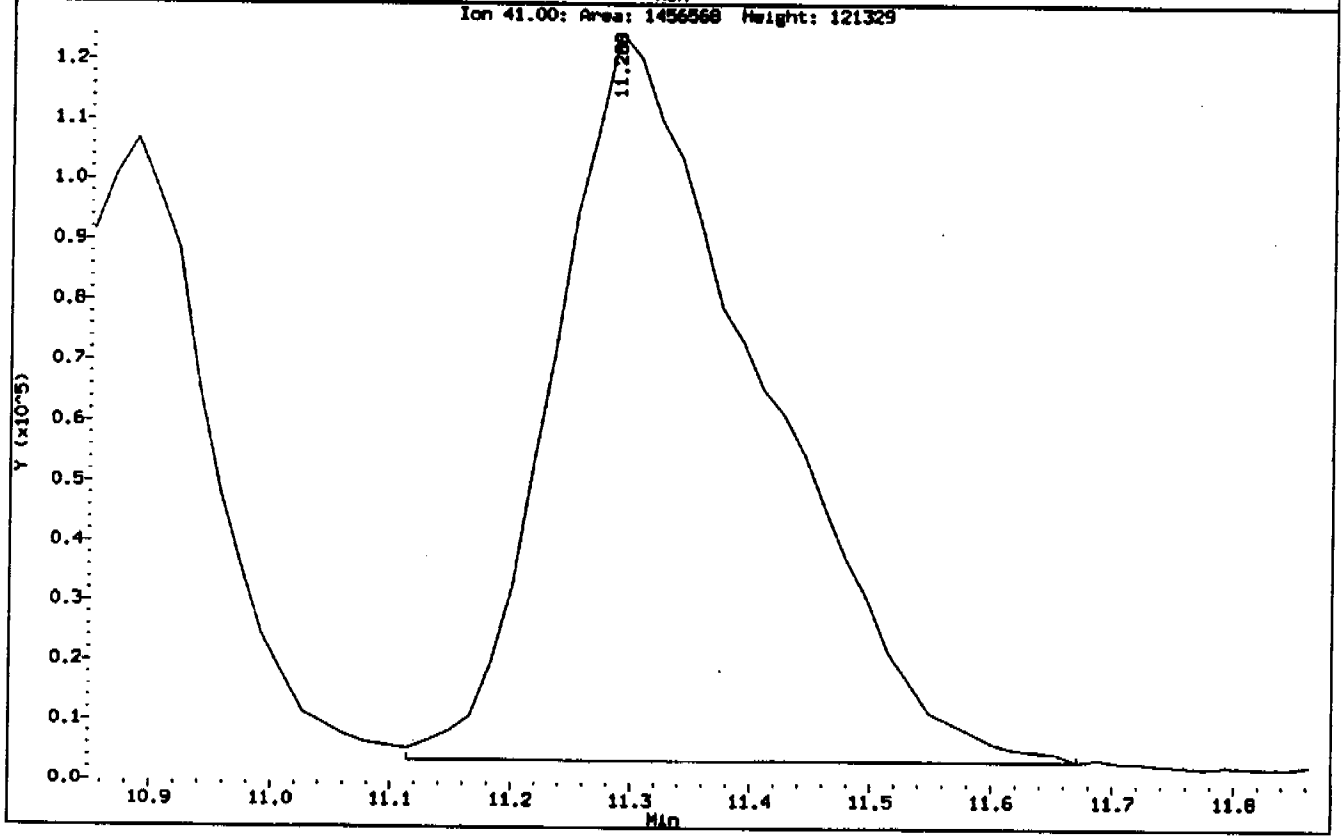
Instrument: MSG.i
Client Sample ID: VSTD050

Compound: 2-Nitropropane
CAS Number: 79-46-9





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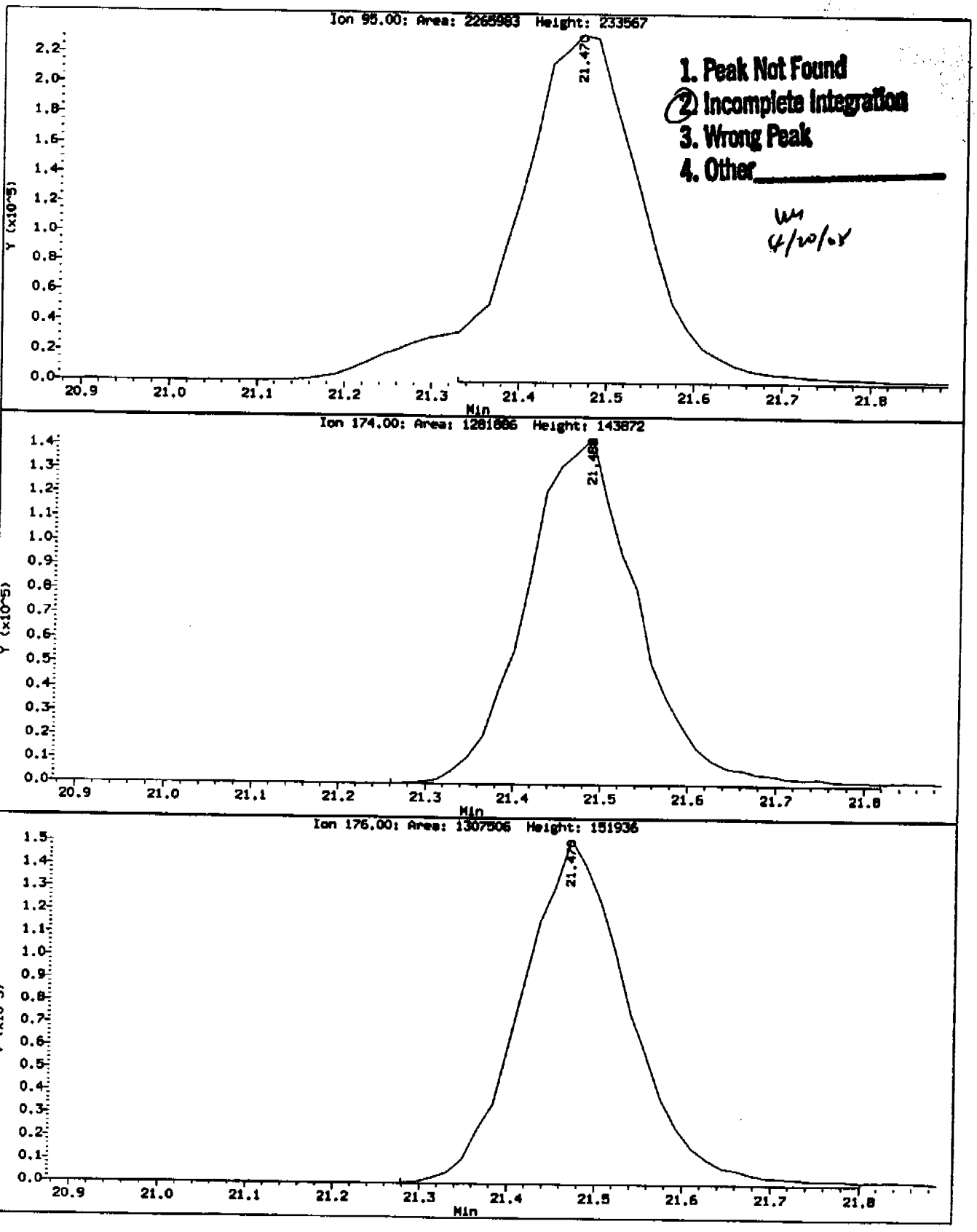
Injection Date: 17-APR-2005 23:27
Instrument: MSG.i
Client Sample ID: VSTD050

Compound: 4-Bromofluorobenzene
CAS Number: 460-00-4



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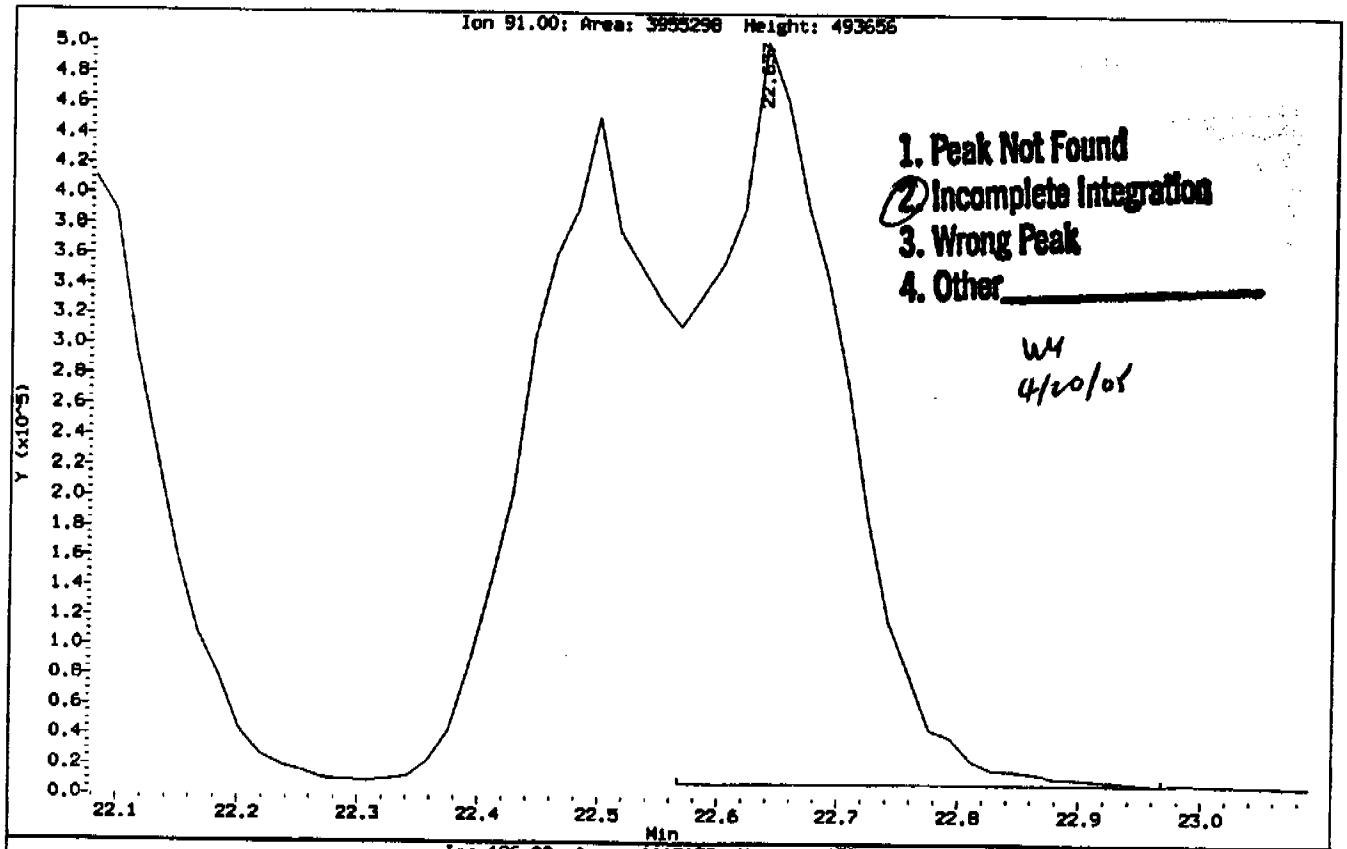
Injection Date: 17-APR-2005 23:27
Instrument: MSG.i
Client Sample ID: VSTD050

Compound: 4-Chlorotoluene
CAS Number: 106-43-4



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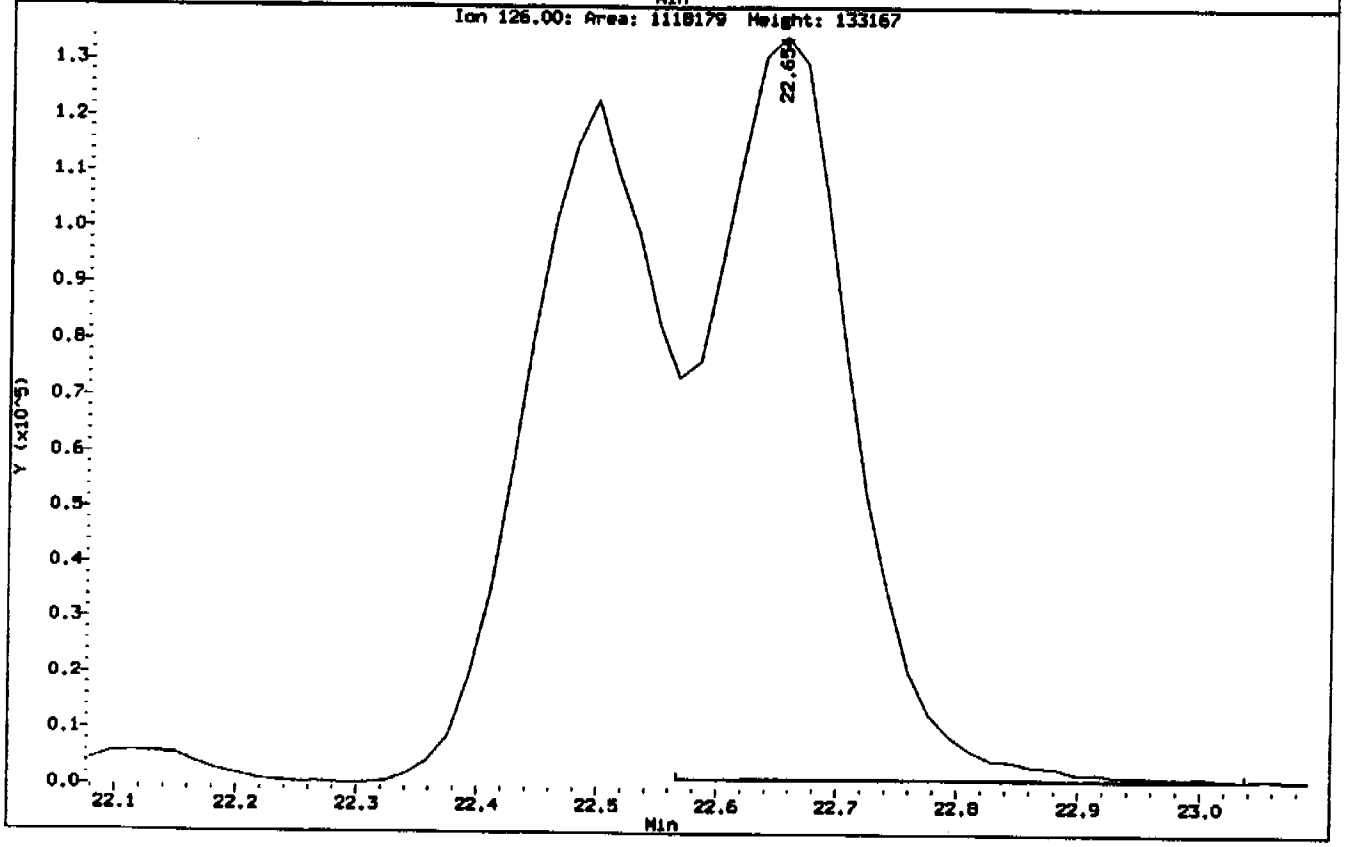

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Report Date: 20-Apr-2005 10:59

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GC/MS VOLATILES

Data file : \\slsvr01\chem\MSG.i\G050417A.b\GCAL5161.D
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Inj Date : 18-APR-2005 00:01
Operator : JDH Inst ID: MSG.i
Smp Info : VSTD020;G050417A.b
Misc Info : VBLKG107A.B;
Comment : NONE
Method : \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Meth Date : 20-Apr-2005 10:59 hanw Quant Type: ISTD
Cal Date : 18-APR-2005 00:01 Cal File: GCAL5161.D
Als bottle: 4 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLVOA04

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume
Vo	5.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	2.216	2.216	(0.237)	567376	20.0000	24.17
2 Freon-114	135	2.338	2.338	(0.250)	221890	20.0000	21.18(M)
3 Chloromethane	50	2.477	2.477	(0.265)	341221	20.0000	20.98
4 Vinyl Chloride	62	2.582	2.582	(0.276)	251263	20.0000	21.54
5 Bromomethane	94	3.069	3.069	(0.328)	352525	20.0000	21.17
6 Chloroethane	64	3.156	3.156	(0.337)	182647	20.0000	22.63
7 Trichlorofluoromethane	101	3.452	3.452	(0.369)	957176	20.0000	21.41
8 Diethyl ether	59	3.817	3.817	(0.408)	422174	40.0000	40.90
9 1,1,2-Trichlorofluoroethane	101	3.974	3.974	(0.425)	771490	20.0000	20.16
10 Acrolein	56	3.991	3.991	(0.427)	90392	100.000	93.93(a)
11 Acetone	43	4.078	4.078	(0.436)	84400	20.0000	19.65(a)
12 1,1-Dichloroethene	96	4.218	4.218	(0.451)	320541	20.0000	22.82
13 Acetonitrile	41	4.409	4.409	(0.471)	61543	100.000	100.5
14 Iodomethane	142	4.635	4.635	(0.496)	251305	20.0000	19.41
15 Methyl acetate	74	4.670	4.670	(0.499)	43147	20.0000	19.42
16 Allyl chloride	39	4.705	4.705	(0.503)	386540	20.0000	19.62
17 Methylene Chloride	84	4.879	4.879	(0.522)	327421	20.0000	17.68
18 Carbon Disulfide	76	4.879	4.879	(0.522)	938805	20.0000	20.59
19 Acrylonitrile	53	5.088	5.088	(0.544)	236064	100.000	90.21(a)
20 MTBE	73	5.105	5.105	(0.546)	908780	20.0000	20.35
21 trans-1,2-Dichloroethene	96	5.297	5.297	(0.566)	390426	20.0000	20.65
22 n-Hexane	57	5.384	5.384	(0.576)	571691	20.0000	20.76

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5161.D
Report Date: 20-Apr-2005 10:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	5.958	5.958	(0.637)	859008	20.0000	20.45
	24 Vinyl acetate	43	5.976	5.976	(0.639)	666662	20.0000	19.93
	25 2-Chloro-1,3-butadiene	53	6.098	6.098	(0.652)	689604	20.0000	20.30
	26 2-Butoxyethanol	57	6.550	6.550	(0.700)	33737	1000.00	1045 (A)
	27 2-Butanone	43	6.707	6.707	(0.717)	96452	20.0000	18.58 (a)
	28 Propionitrile	54	6.829	6.829	(0.730)	103287	100.000	95.20
	29 2,2-Dichloropropane	77	6.898	6.898	(0.738)	842330	20.0000	21.00
	30 cis-1,2-Dichloroethene	96	6.985	6.985	(0.747)	418467	20.0000	19.71
	31 Ethyl acetate	43	7.020	7.020	(0.751)	610289	40.0000	39.32
	32 Methacrylonitrile	41	7.177	7.177	(0.767)	940372	100.000	99.58 (a)
	33 Chloroform	83	7.281	7.281	(0.779)	999712	20.0000	19.64
	34 Bromochloromethane	128	7.595	7.595	(0.812)	237796	20.0000	19.73
	35 Isobutanol	42	7.682	7.682	(0.821)	394523	400.000	396.5
$	36 Dibromofluoromethane	113	7.699	7.699	(0.823)	673812	20.0000	19.66
	37 Tetrahydrofuran	71	7.699	7.699	(0.823)	127587	100.000	96.76
M	38 1,2-Dichloroethene (total)	96				808893	40.0000	40.36
	39 1,1,1-Trichloroethane	97	8.047	8.047	(0.860)	905249	20.0000	20.52
	40 Cyclohexane	84	8.030	8.030	(0.859)	397178	20.0000	18.49
	41 1,1-Dichloropropene	75	8.343	8.343	(0.892)	710812	20.0000	20.45
	42 Carbon Tetrachloride	117	8.535	8.535	(0.913)	765508	20.0000	19.33
$	43 1,2-Dichloroethane-d4	67	8.674	8.674	(0.927)	235301	20.0000	19.05
	44 n-Heptane	43	8.691	8.691	(0.929)	554739	20.0000	19.94
	45 n-Butanol	56	8.691	8.691	(0.929)	225441	200.000	191.8 (a)
	46 1,2-Dichloroethane	62	8.865	8.865	(0.948)	635249	20.0000	20.06
	47 Benzene	78	8.900	8.900	(0.952)	1057575	20.0000	19.46
*	48 Fluorobenzene	96	9.353	9.353	(1.000)	3013945	50.0000	
	49 Trichloroethene	130	10.240	10.240	(1.095)	481916	20.0000	19.12
	50 Methylcyclohexane	55	10.362	10.362	(1.108)	604057	20.0000	19.48
	51 1,2-Dichloropropane	63	10.641	10.641	(1.138)	480940	20.0000	19.83
	52 Methyl methacrylate	69	10.884	10.884	(1.164)	223809	20.0000	18.87
	53 Bromodichloromethane	83	11.198	11.198	(1.197)	1024125	20.0000	20.62
	54 Dibromomethane	93	11.302	11.302	(1.208)	433278	20.0000	19.55
	55 1,4-Dioxane	88	11.302	11.302	(1.208)	55690	400.000	403.4 (a)
	56 2-Nitropropane	43	11.407	11.407	(1.220)	333554	20.0000	18.85 (M)
	57 2-chloroethyl vinyl ether	63	12.051	12.051	(1.288)	166453	20.0000	19.20 (a)
	58 4-Methyl-2-pentanone	43	12.103	12.103	(1.294)	516316	20.0000	21.04
	59 cis-1,3-Dichloropropene	75	12.590	12.590	(1.346)	736097	20.0000	21.08
	60 Dimethyl disulfide	94	13.008	13.008	(1.391)	400723	20.0000	17.78 (M)
$	61 Toluene-d8	98	13.217	13.217	(0.755)	1063753	20.0000	21.88
	62 Toluene	91	13.426	13.426	(0.766)	1219013	20.0000	21.45
	63 trans-1,3-Dichloropropene	75	13.965	13.965	(0.797)	580694	20.0000	22.30
	64 Ethyl methacrylate	69	14.070	14.070	(0.803)	541270	20.0000	22.46
	65 1,1,2-Trichloroethane	97	14.383	14.383	(0.821)	375609	20.0000	22.21
	66 2-Hexanone	43	14.540	14.540	(0.830)	229839	20.0000	22.45
	67 1,3-Dichloropropane	76	15.114	15.114	(0.863)	652611	20.0000	23.56
	68 Tetrachloroethene	164	15.201	15.201	(0.868)	458414	20.0000	22.62
	69 Chlorodibromomethane	129	15.776	15.776	(0.901)	604207	20.0000	22.95
	70 1,2-Dibromoethane	107	16.350	16.350	(0.933)	458688	20.0000	21.73
*	71 Chlorobenzene-d5	117	17.516	17.516	(1.000)	1734658	50.0000	
	72 Chlorobenzene	112	17.638	17.638	(1.007)	786992	20.0000	21.34
	73 1,1,1,2-Tetrachloroethane	131	17.812	17.812	(1.017)	400919	20.0000	20.23
	74 Ethylbenzene	106	17.882	17.882	(1.021)	331988	20.0000	20.65
	75 m,p-Xylenes	106	18.125	18.125	(1.035)	850498	40.0000	41.56
	76 o-Xylene	106	19.466	19.466	(1.111)	397714	20.0000	20.19

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Report Date: 20-Apr-2005 10:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	77 Styrene	104	19.605	19.605	(1.119)	623466	20.0000	19.37
M	78 Xylenes (total)	106				1248212	60.0000	61.75
	79 Bromoform	173	20.562	20.562	(1.174)	372552	20.0000	21.71
	80 Isopropylbenzene	105	20.702	20.702	(1.182)	1165604	20.0000	20.41
	81 Cyclohexanone	55	20.823	20.823	(1.189)	228665	200.000	218.3
	82 1,1,2,2-Tetrachloroethane	83	21.293	21.293	(1.216)	479886	20.0000	20.35
$	83 4-Bromofluorobenzene	95	21.467	21.467	(0.881)	694713	20.0000	18.63
	84 1,2,3-Trichloropropane	110	21.781	21.781	(0.894)	128989	20.0000	19.59
	85 Bromobenzene	156	22.007	22.007	(0.904)	366822	20.0000	18.79
	86 n-Propylbenzene	91	22.042	22.042	(0.905)	1617678	20.0000	19.92
	87 2-Chlorotoluene	91	22.477	22.477	(0.923)	1197981	20.0000	20.30
	88 trans-1,4-dichloro-2-butene	53	22.564	22.564	(0.926)	49917	20.0000	21.16
	89 1,3,5-Trimethylbenzene	105	22.564	22.564	(0.926)	1049935	20.0000	19.16
	90 4-Chlorotoluene	91	22.616	22.616	(0.929)	1302595	20.0000	19.78
	91 t-Butylbenzene	119	23.434	23.434	(0.962)	1220320	20.0000	19.10
	92 Pentachloroethane	167	23.469	23.469	(0.964)	267255	20.0000	18.96
	93 1,2,4-Trimethylbenzene	105	23.487	23.487	(0.964)	1040856	20.0000	19.21
	94 sec-Butylbenzene	105	23.852	23.852	(0.979)	1398597	20.0000	18.87
	95 4-Isopropyltoluene	119	24.131	24.131	(0.991)	1026475	20.0000	18.82
	96 1,3-Dichlorobenzene	146	24.218	24.218	(0.994)	663740	20.0000	19.38
*	97 1,4 Dichlorobenzene-d4	152	24.357	24.357	(1.000)	1086620	50.0000	
	98 1,4-Dichlorobenzene	146	24.409	24.409	(1.002)	707390	20.0000	19.33
	99 n-Butylbenzene	91	24.827	24.827	(1.019)	1126298	20.0000	19.56
	100 1,2-Dichlorobenzene	146	24.984	24.984	(1.026)	606725	20.0000	19.80
	101 1,2-Dibromo-3-chloropropane	157	26.063	26.063	(1.070)	93420	20.0000	20.50
	102 1,3,5-Trichlorobenzene	180	26.341	26.341	(1.081)	519610	20.0000	18.73
	103 1,2,4-Trichlorobenzene	180	27.038	27.038	(1.110)	444558	20.0000	18.67
	104 Hexachlorobutadiene	225	27.194	27.194	(1.116)	329184	20.0000	16.93
	105 Naphthalene	128	27.299	27.299	(1.121)	660476	20.0000	20.19
	106 1,2,3-Trichlorobenzene	180	27.560	27.560	(1.131)	407410	20.0000	18.88

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5161.D
Report Date: 20-Apr-2005 10:59

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

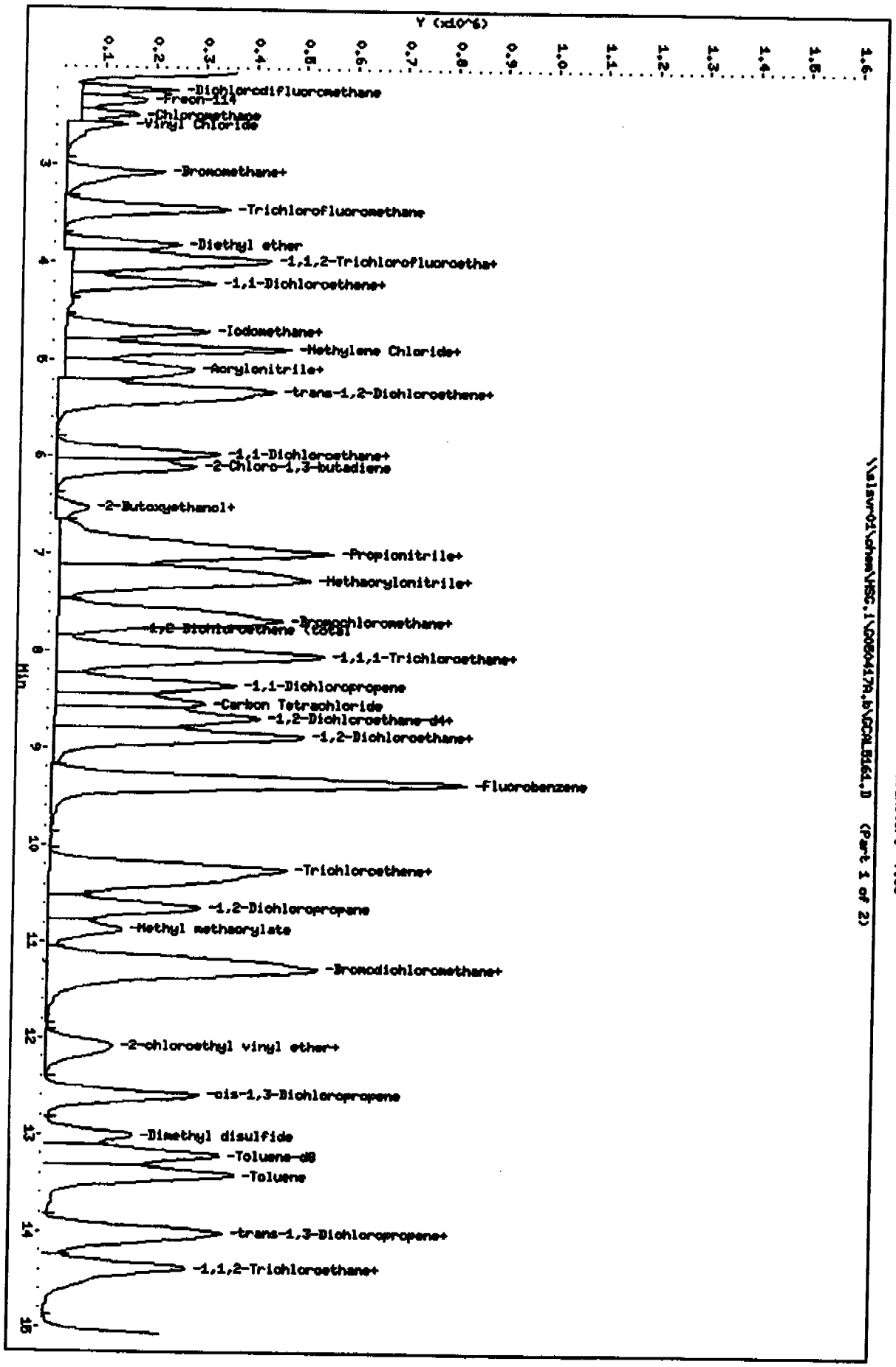
Instrument ID: MSG.i
Lab File ID: GCAL5161.D
Lab Smp Id: VSTD020
Analysis Type: VOA
Quant Type: ISTD
Operator: JDH
Method File: \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Misc Info: VBLKG107A.B;

Calibration Date: 17-APR-2005
Calibration Time: 23:27
Client Smp ID: VSTD020
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	2924725	1462363	5849450	3013945	3.05
71 Chlorobenzene-d5	2135082	1067541	4270164	1734658	-18.75
97 1,4 Dichlorobenze	1343943	671972	2687886	1086620	-19.15

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	9.36	8.86	9.86	9.35	-0.03
71 Chlorobenzene-d5	17.54	17.04	18.04	17.52	-0.11
97 1,4 Dichlorobenze	24.36	23.86	24.86	24.36	-0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.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0.5
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0.8
0.9
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1.1
1.2
1.3
1.4
1.5
1.6
Min
3
4
5
6
7
8
9
10
11
12
13
14
15
-Dichlorodifluoromethane
-Freon-114
-Chloromethane
-Vinyl Chloride
-Bromomethane+
-Trichlorofluoromethane
-Diethyl ether
-1,1,2-Trichlorofluoretha+
-1,1-Dichloroethene+
-Iodomethane+
-Methylene Chloride+
-Acrylonitrile+
-trans-1,2-Dichloroethene+
-1,1-Dichloroethane+
-2-Chloro-1,3-butadiene
-2-Butoxyethanol+
-Propionitrile+
-Methacrylonitrile+
-Bromochloromethane+
-1,2-Dichloroethene (COCS)
-1,1,1-Trichloroethane+
-1,1-Dichloropropene
-Carbon Tetrachloride
-1,2-Dichloroethane-d4+
-1,2-Dichloroethane+
-Fluorobenzene
-Trichloroethene+
-1,2-Dichloropropane
-Methyl methacrylate
-Bromodichloromethane+
-2-chloroethyl vinyl ether+
-cis-1,3-Dichloropropene
-Dimethyl disulfide
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane+
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Date : 18-APR-2006 00:01
Client ID: VSTD020
Sample Info: VSTD020;20060417A.b
Purge Volume: 5.0
Column phase: RTX-502.2
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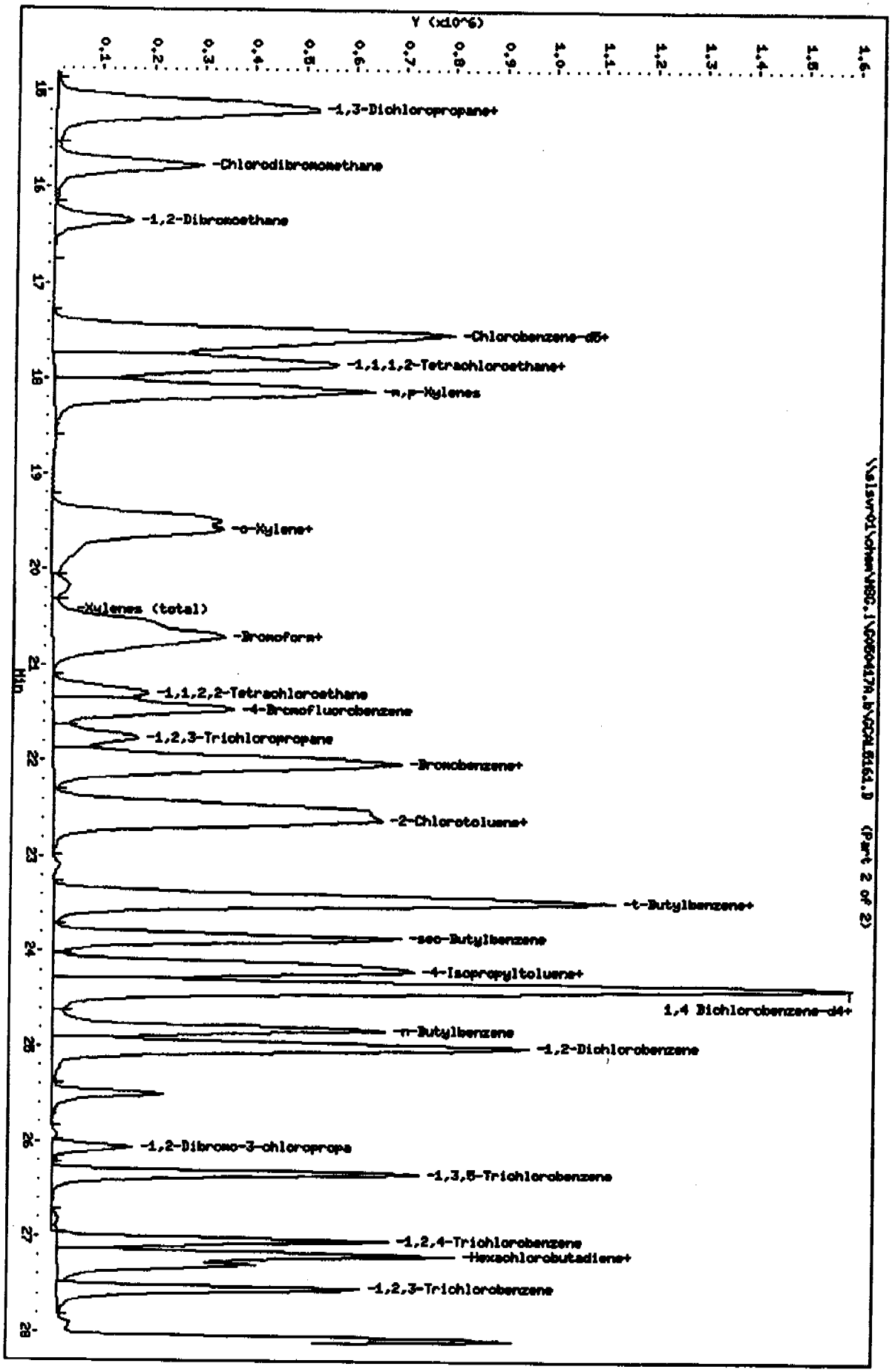
Instrument: HSC.i
Operator: JDH
Column diameter: 0.53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1.1
1.2
1.3
1.4
1.5
1.6
Min
15
16
17
18
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20
21
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23
24
25
26
27
28
1,3-Dichloropropane+
Chlorodibromomethane
1,2-Dibromoethane
Chlorobenzene-d5+
1,1,1,2-Tetrachloroethane+
m,p-Xylenes
o-Xylene+
Xylenes (total)
Bromoform+
1,1,2,2-Tetrachloroethane
4-Bromofluorobenzene
1,2,3-Trichloropropane
Bromobenzene+
2-Chlorotoluene+
t-Butylbenzene+
sec-Butylbenzene
4-Isopropyltoluene+
1,4 Dichlorobenzene-d4+
n-Butylbenzene
1,2-Dichlorobenzene
1,2-Dibromo-3-chloroprope
1,3,5-Trichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene+
1,2,3-Trichlorobenzene
Data File: \\nlsvr01\chem\HSC.i\G050417R.b\GC5L5163.D
Date : 18-APR-2005 00:04
Client ID: VSTD020
Sample Info: VSTD020|G050417R.b
Purge Volume: 5.0
Column phase: RTX-502.2
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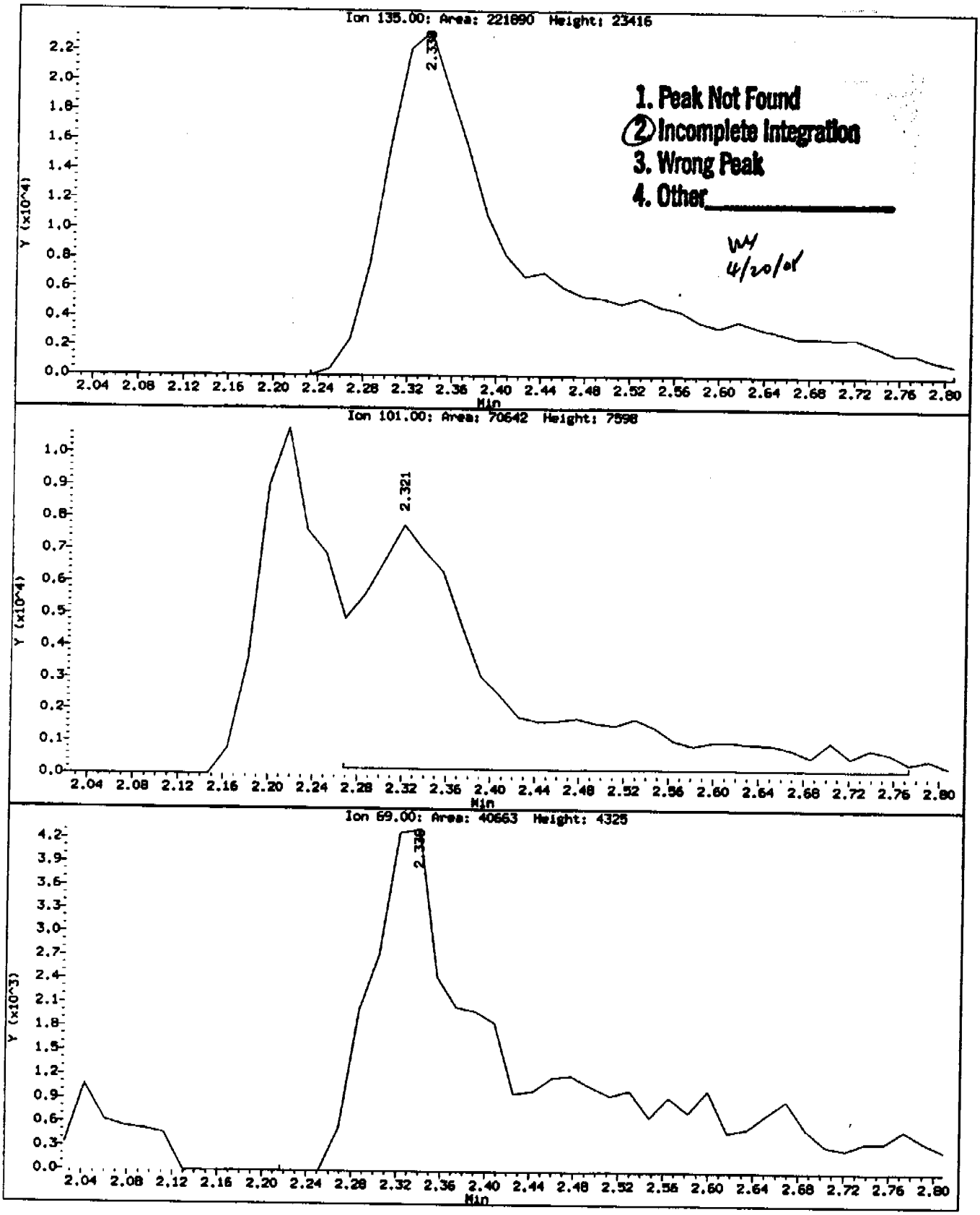
Instrument: HSC.i
Operator: JDH
Column diameter: 0.53

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5161.D
Injection Date: 18-APR-2005 00:01
Instrument: MSG.i
Client Sample ID: VSTD020

Compound: Freon-114
CAS Number: 374-07-2



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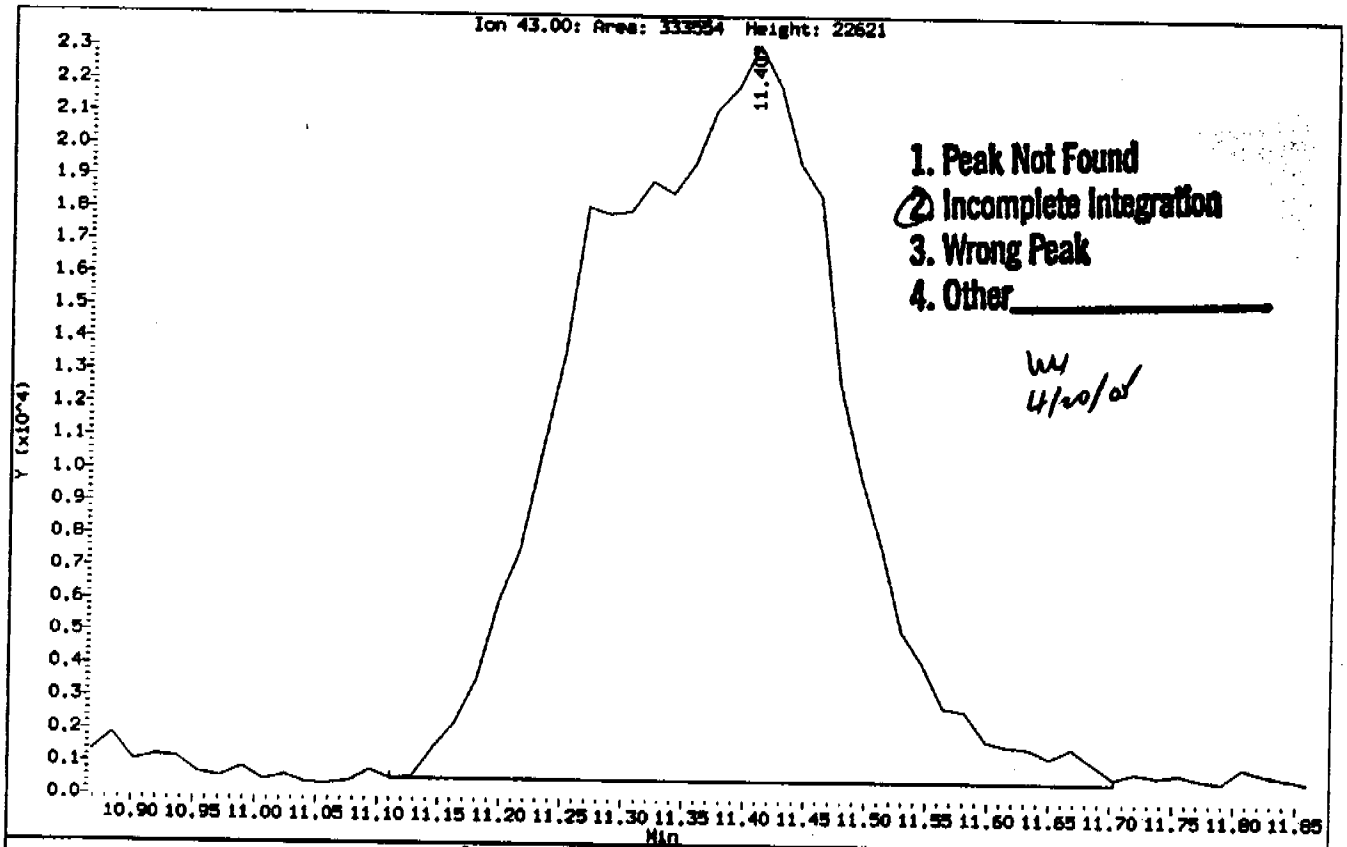
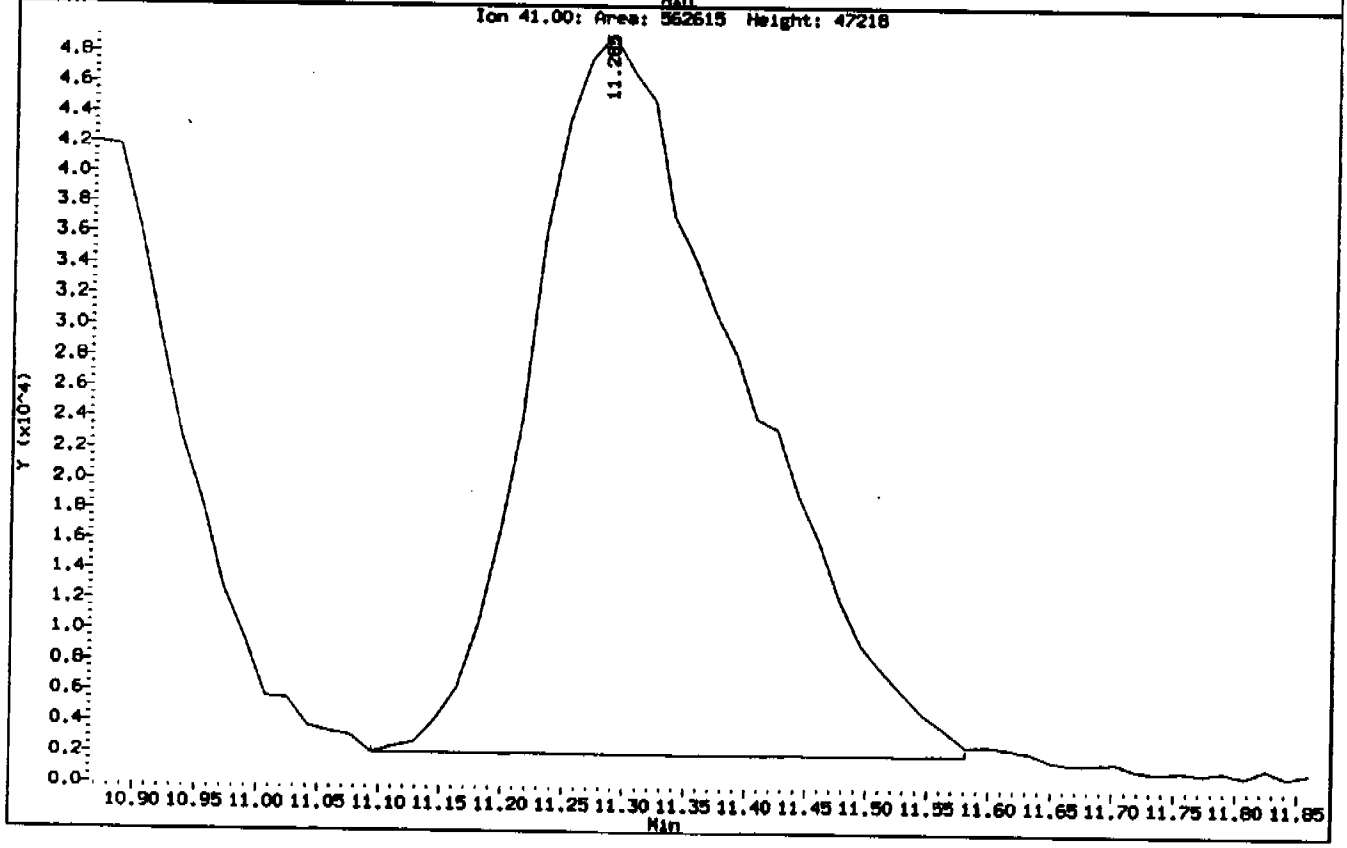
Injection Date: 18-APR-2005 00:01
Instrument: MSG.1
Client Sample ID: VSTD020

Compound: 2-Nitropropane
CAS Number: 79-46-9



WH 4/20/05



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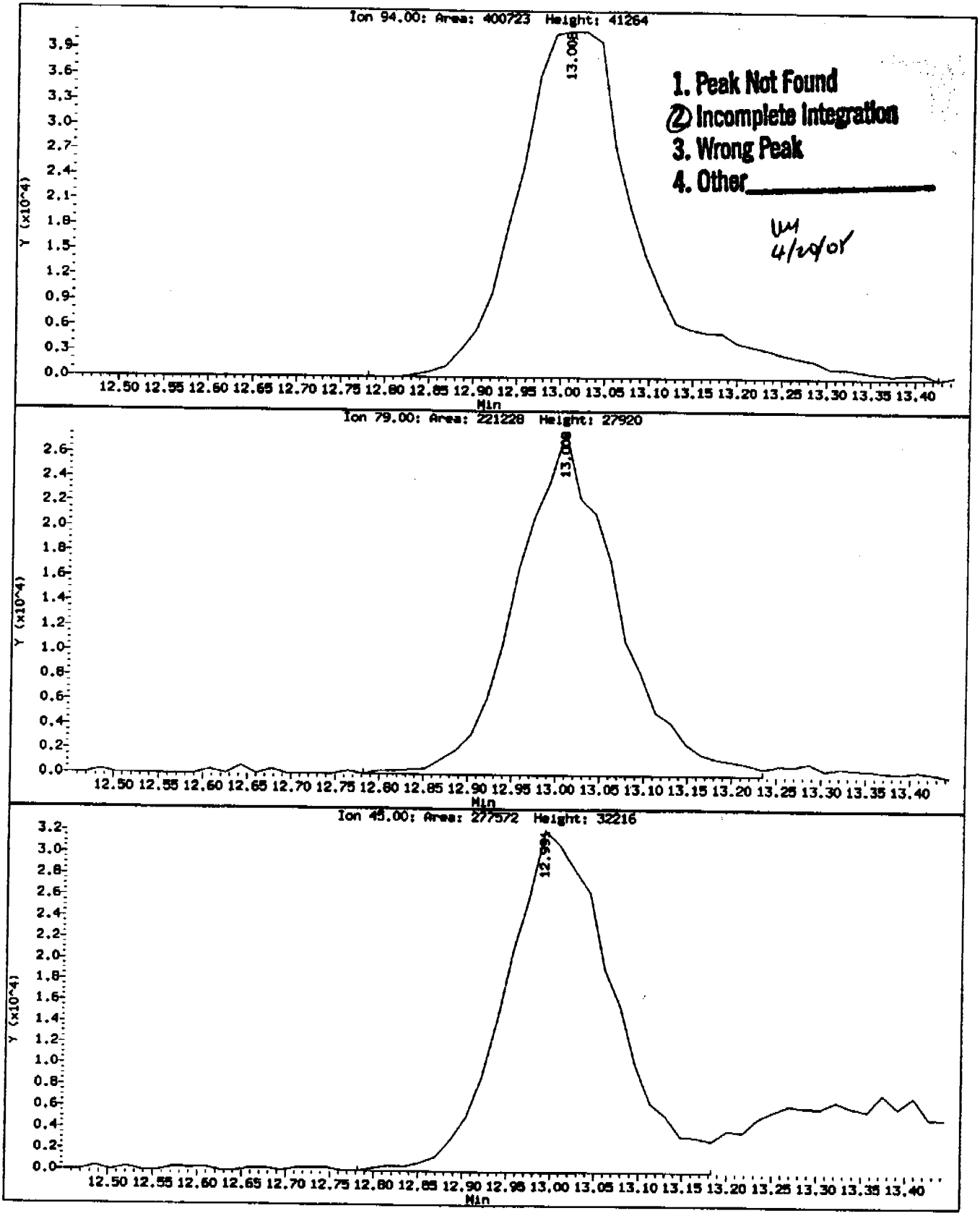
Injection Date: 18-APR-2005 00:01
Instrument: MSG.i
Client Sample ID: VSTD020

Compound: Dimethyl disulfide
CAS Number: 624-92-0



Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5162.D
Report Date: 20-Apr-2005 10:59

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSG.i\G050417A.b\GCAL5162.D
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Inj Date : 18-APR-2005 00:35
Operator : JDH Inst ID: MSG.i
Smp Info : VSTD010;G050417A.b
Misc Info : VBLKG107A.B;
Comment : NONE
Method : \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Meth Date : 20-Apr-2005 10:59 hanw Quant Type: ISTD
Cal Date : 18-APR-2005 00:35 Cal File: GCAL5162.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLVOA04

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume
Vo	5.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	2.216	2.216	(0.237)	280053	10.0000	11.71
2 Freon-114	135	2.321	2.321	(0.249)	125196	10.0000	11.73(M)
3 Chloromethane	50	2.478	2.478	(0.265)	173866	10.0000	10.49
4 Vinyl Chloride	62	2.582	2.582	(0.277)	135549	10.0000	11.41
5 Bromomethane	94	3.069	3.069	(0.329)	204000	10.0000	12.03
6 Chloroethane	64	3.156	3.156	(0.338)	92849	10.0000	11.29
7 Trichlorofluoromethane	101	3.452	3.452	(0.370)	489541	10.0000	10.75
8 Diethyl ether	59	3.800	3.800	(0.407)	227362	20.0000	21.62
9 1,1,2-Trichlorofluoroethane	101	3.975	3.975	(0.426)	405488	10.0000	10.40
10 Acrolein	56	3.975	3.975	(0.426)	51770	50.0000	52.81(a)
11 Acetone	43	4.044	4.044	(0.433)	43561	10.0000	9.955(a)
12 1,1-Dichloroethene	96	4.201	4.201	(0.450)	171415	10.0000	11.98
13 Acetonitrile	41	4.410	4.410	(0.472)	29071	50.0000	46.60(a)
14 Iodomethane	142	4.619	4.619	(0.495)	138606	10.0000	10.51
15 Methyl acetate	74	4.671	4.671	(0.500)	25294	10.0000	11.18
16 Allyl chloride	39	4.706	4.706	(0.504)	224468	10.0000	11.18
17 Methylene Chloride	84	4.862	4.862	(0.521)	186883	10.0000	9.905
18 Carbon Disulfide	76	4.880	4.880	(0.523)	464085	10.0000	9.994
19 Acrylonitrile	53	5.054	5.054	(0.541)	128494	50.0000	48.20(a)
20 MTBE	73	5.106	5.106	(0.547)	497240	10.0000	10.93
21 trans-1,2-Dichloroethene	96	5.297	5.297	(0.567)	206893	10.0000	10.74
22 n-Hexane	57	5.367	5.367	(0.575)	285670	10.0000	10.18

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Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5162.D
Report Date: 20-Apr-2005 10:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23	1,1-Dichloroethane	63	5.941	5.941	(0.636)	442261	10.0000	10.34
24	Vinyl acetate	43	5.976	5.976	(0.640)	336725	10.0000	9.881(a)
25	2-Chloro-1,3-butadiene	53	6.098	6.098	(0.653)	388927	10.0000	11.24
26	2-Butoxyethanol	57	6.533	6.533	(0.700)	19657	500.000	598.0(AM)
27	2-Butanone	43	6.690	6.690	(0.717)	49221	10.0000	9.306(a)
28	Propionitrile	54	6.812	6.812	(0.730)	64992	50.0000	58.81
29	2,2-Dichloropropane	77	6.899	6.899	(0.739)	415995	10.0000	10.18
30	cis-1,2-Dichloroethene	96	6.986	6.986	(0.748)	224751	10.0000	10.39
31	Ethyl acetate	43	6.986	6.986	(0.748)	320440	20.0000	20.27
32	Methacrylonitrile	41	7.177	7.177	(0.769)	505767	50.0000	52.57(a)
33	Chloroform	83	7.264	7.264	(0.778)	540039	10.0000	10.42
34	Bromochloromethane	128	7.560	7.560	(0.810)	127142	10.0000	10.36
35	Isobutanol	42	7.665	7.665	(0.821)	195321	200.000	192.7(a)
$ 36	Dibromofluoromethane	113	7.682	7.682	(0.823)	329178	10.0000	9.427
37	Tetrahydrofuran	71	7.665	7.665	(0.821)	68161	50.0000	50.74
M 38	1,2-Dichloroethene (total)	96				431644	20.0000	21.14
39	1,1,1-Trichloroethane	97	8.013	8.013	(0.858)	462555	10.0000	10.29
40	Cyclohexane	84	8.030	8.030	(0.860)	252998	10.0000	11.56
41	1,1-Dichloropropene	75	8.326	8.326	(0.892)	356261	10.0000	10.06
42	Carbon Tetrachloride	117	8.518	8.518	(0.912)	415981	10.0000	10.31
$ 43	1,2-Dichloroethane-d4	67	8.657	8.657	(0.927)	124353	10.0000	9.884
44	n-Heptane	43	8.692	8.692	(0.931)	287063	10.0000	10.13
45	n-Butanol	56	8.692	8.692	(0.931)	108240	100.000	90.38(a)
46	1,2-Dichloroethane	62	8.866	8.866	(0.950)	326208	10.0000	10.11
47	Benzene	78	8.866	8.866	(0.950)	574752	10.0000	10.38
* 48	Fluorobenzene	96	9.336	9.336	(1.000)	3070221	50.0000	
49	Trichloroethene	130	10.223	10.223	(1.095)	261451	10.0000	10.18
50	Methylcyclohexane	55	10.328	10.328	(1.106)	359826	10.0000	11.39
51	1,2-Dichloropropane	63	10.641	10.641	(1.140)	251454	10.0000	10.18
52	Methyl methacrylate	69	10.867	10.867	(1.164)	132998	10.0000	11.01
53	Bromodichloromethane	83	11.181	11.181	(1.198)	508817	10.0000	10.06
54	Dibromomethane	93	11.285	11.285	(1.209)	230653	10.0000	10.22
55	1,4-Dioxane	88	11.337	11.337	(1.214)	31611	200.000	224.8(aN)
56	2-Nitropropane	43	11.372	11.372	(1.218)	168430	10.0000	9.346(M)
57	2-chloroethyl vinyl ether	63	12.069	12.069	(1.293)	32278	10.0000	7.004(a)
58	4-Methyl-2-pentanone	43	12.138	12.138	(1.300)	209818	10.0000	8.361(a)
59	cis-1,3-Dichloropropene	75	12.591	12.591	(1.349)	348121	10.0000	9.784
60	Dimethyl disulfide	94	13.008	13.008	(1.393)	166301	10.0000	8.782(M)
$ 61	Toluene-d8	98	13.200	13.200	(0.754)	499376	10.0000	9.521
62	Toluene	91	13.409	13.409	(0.765)	649351	10.0000	9.834
63	trans-1,3-Dichloropropene	75	13.983	13.983	(0.798)	284891	10.0000	10.14
64	Ethyl methacrylate	69	14.070	14.070	(0.803)	280047	10.0000	10.77
65	1,1,2-Trichloroethane	97	14.366	14.366	(0.820)	197654	10.0000	10.83
66	2-Hexanone	43	14.540	14.540	(0.830)	115297	10.0000	10.44(a)
67	1,3-Dichloropropane	76	15.097	15.097	(0.862)	332973	10.0000	11.14
68	Tetrachloroethene	164	15.202	15.202	(0.868)	253245	10.0000	11.58
69	Chlorodibromomethane	129	15.776	15.776	(0.901)	322497	10.0000	11.36
70	1,2-Dibromoethane	107	16.350	16.350	(0.933)	271569	10.0000	11.92
* 71	Chlorobenzene-d5	117	17.517	17.517	(1.000)	1871586	50.0000	
72	Chlorobenzene	112	17.639	17.639	(1.007)	403222	10.0000	10.13
73	1,1,1,2-Tetrachloroethane	131	17.795	17.795	(1.016)	216063	10.0000	10.11
74	Ethylbenzene	106	17.865	17.865	(1.020)	174250	10.0000	10.04
75	m,p-Xylenes	106	18.109	18.109	(1.034)	445728	20.0000	20.19
76	o-Xylene	106	19.449	19.449	(1.110)	218420	10.0000	10.28

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5162.D
Report Date: 20-Apr-2005 10:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	77 Styrene	104	19.588	19.588	(1.118)	356845	10.0000	10.28
M	78 Xylenes (total)	106				664148	30.0000	30.46
	79 Bromoform	173	20.545	20.545	(1.173)	171103	10.0000	9.242
	80 Isopropylbenzene	105	20.667	20.667	(1.180)	637683	10.0000	10.35
	81 Cyclohexanone	55	20.807	20.807	(1.188)	128839	100.000	114.0
	82 1,1,2,2-Tetrachloroethane	83	21.277	21.277	(1.215)	247659	10.0000	9.733
$	83 4-Bromofluorobenzene	95	21.451	21.451	(0.881)	374394	10.0000	9.669(M)
	84 1,2,3-Trichloropropane	110	21.746	21.746	(0.893)	66202	10.0000	9.684
	85 Bromobenzene	156	21.990	21.990	(0.903)	206488	10.0000	10.19
	86 n-Propylbenzene	91	22.025	22.025	(0.904)	857279	10.0000	10.17
	87 2-Chlorotoluene	91	22.478	22.478	(0.923)	641858	10.0000	10.47
	88 trans-1,4-dichloro-2-butene	53	22.530	22.530	(0.925)	25914	10.0000	10.58(M)
	89 1,3,5-Trimethylbenzene	105	22.547	22.547	(0.926)	584861	10.0000	10.28
	90 4-Chlorotoluene	91	22.617	22.617	(0.929)	725130	10.0000	10.60
	91 t-Butylbenzene	119	23.417	23.417	(0.961)	691219	10.0000	10.42
	92 Pentachloroethane	167	23.452	23.452	(0.963)	159139	10.0000	10.87
	93 1,2,4-Trimethylbenzene	105	23.487	23.487	(0.964)	570865	10.0000	10.14
	94 sec-Butylbenzene	105	23.853	23.853	(0.979)	789642	10.0000	10.25
	95 4-Isopropyltoluene	119	24.131	24.131	(0.991)	583555	10.0000	10.30
	96 1,3-Dichlorobenzene	146	24.218	24.218	(0.994)	353048	10.0000	9.928
*	97 1,4 Dichlorobenzene-d4	152	24.357	24.357	(1.000)	1128275	50.0000	
	98 1,4-Dichlorobenzene	146	24.392	24.392	(1.001)	371397	10.0000	9.775
	99 n-Butylbenzene	91	24.810	24.810	(1.019)	622708	10.0000	10.42
	100 1,2-Dichlorobenzene	146	24.967	24.967	(1.025)	321359	10.0000	10.10
	101 1,2-Dibromo-3-chloropropane	157	26.063	26.063	(1.070)	44816	10.0000	9.469(m)
	102 1,3,5-Trichlorobenzene	180	26.342	26.342	(1.081)	304117	10.0000	10.56
	103 1,2,4-Trichlorobenzene	180	27.038	27.038	(1.110)	251771	10.0000	10.18
	104 Hexachlorobutadiene	225	27.195	27.195	(1.116)	220491	10.0000	10.92
	105 Naphthalene	128	27.299	27.299	(1.121)	344481	10.0000	10.14
	106 1,2,3-Trichlorobenzene	180	27.543	27.543	(1.131)	220677	10.0000	9.851

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5162.D
Report Date: 20-Apr-2005 10:59

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

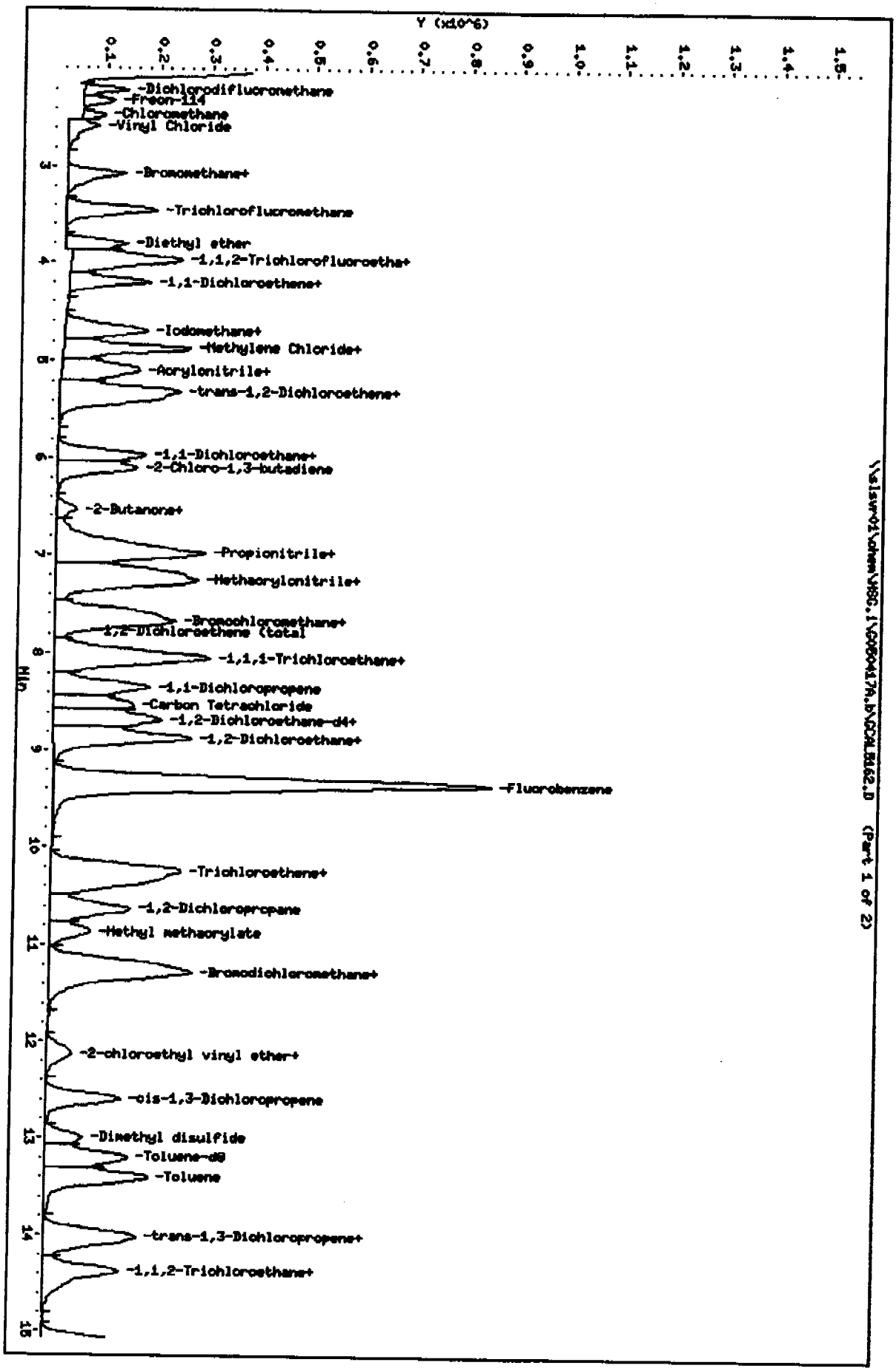
Instrument ID: MSG.i
Lab File ID: GCAL5162.D
Lab Smp Id: VSTD010
Analysis Type: VOA
Quant Type: ISTD
Operator: JDH
Method File: \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Misc Info: VBLKG107A.B;

Calibration Date: 17-APR-2005
Calibration Time: 23:27
Client Smp ID: VSTD010
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	2924725	1462363	5849450	3070221	4.97
71 Chlorobenzene-d5	2135082	1067541	4270164	1871586	-12.34
97 1,4 Dichlorobenze	1343943	671972	2687886	1128275	-16.05

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	9.36	8.86	9.86	9.34	-0.21
71 Chlorobenzene-d5	17.54	17.04	18.04	17.52	-0.11
97 1,4 Dichlorobenze	24.36	23.86	24.86	24.36	-0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^6)
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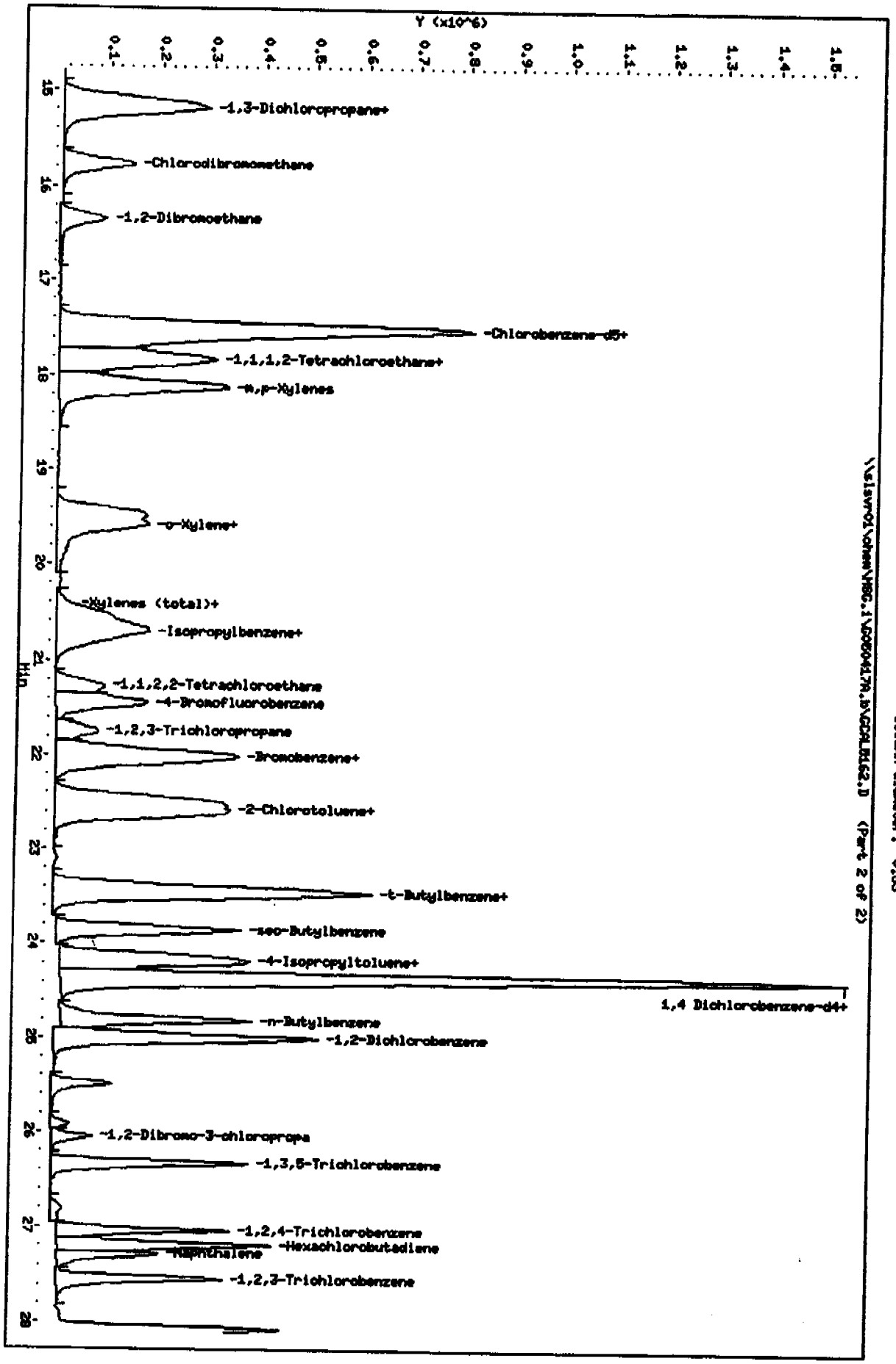
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
Min
-Dichlorodifluoromethane
-Freon-114
-Chloromethane
-Vinyl Chloride
-Bromomethane+
-Trichlorofluoromethane
-Diethyl ether
-1,1,2-Trichlorofluoroethe+
-1,1-Dichloroethene+
-Iodomethane+
-Methylene Chloride+
-Acrylonitrile+
-trans-1,2-Dichloroethene+
-1,1-Dichloroethane+
-2-Chloro-1,3-butadiene
-2-Butanone+
-Propionitrile+
-Methacrylonitrile+
-Bromochloromethane+
1,2-Dichloroethene (total
-1,1,1-Trichloroethane+
-1,1-Dichloropropene
-Carbon Tetrachloride
-1,2-Dichloroethane-d4+
-1,2-Dichloroethane+
-Fluorobenzene
-Trichloroethene+
-1,2-Dichloropropane
-Methyl methacrylate
-Bromodichloromethane+
-2-chloroethyl vinyl ether+
-cis-1,3-Dichloropropene
-Dimethyl disulfide
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane+
Data File: \\slswr01\chem\HSC.i\20050417A.b\GCMLB162.D
Date : 18-APR-2005 00:38
Client ID: VSTD010
Sample Info: VSTD010;20050417A.b
Purge Volume: 5.0
Column phase: RTX-502.2
\\slswr01\chem\HSC.i\20050417A.b\GCMLB162.D (Part 1 of 2)
Instrument: HSC.i
Operator: JDH
Column diameter: 0.53


Y (x10^6)
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0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
Min
15
16
17
18
19
20
21
22
23
24
25
26
27
28
-1,3-Dichloropropane+
-Chlorodibromomethane
-1,2-Dibromoethane
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
-o-Xylene+
-Xylenes (total)+
-Isopropylbenzene+
-1,1,2,2-Tetrachloroethane
-4-Bromofluorobenzene
-1,2,3-Trichloropropane
-Bromobenzene+
-2-Chlorotoluene+
-t-Butylbenzene+
-sec-Butylbenzene
-4-Isopropyltoluene+
1,4 Dichlorobenzene-d4+
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloroprope
-1,3,5-Trichlorobenzene
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene
-1,2,3-Trichlorobenzene
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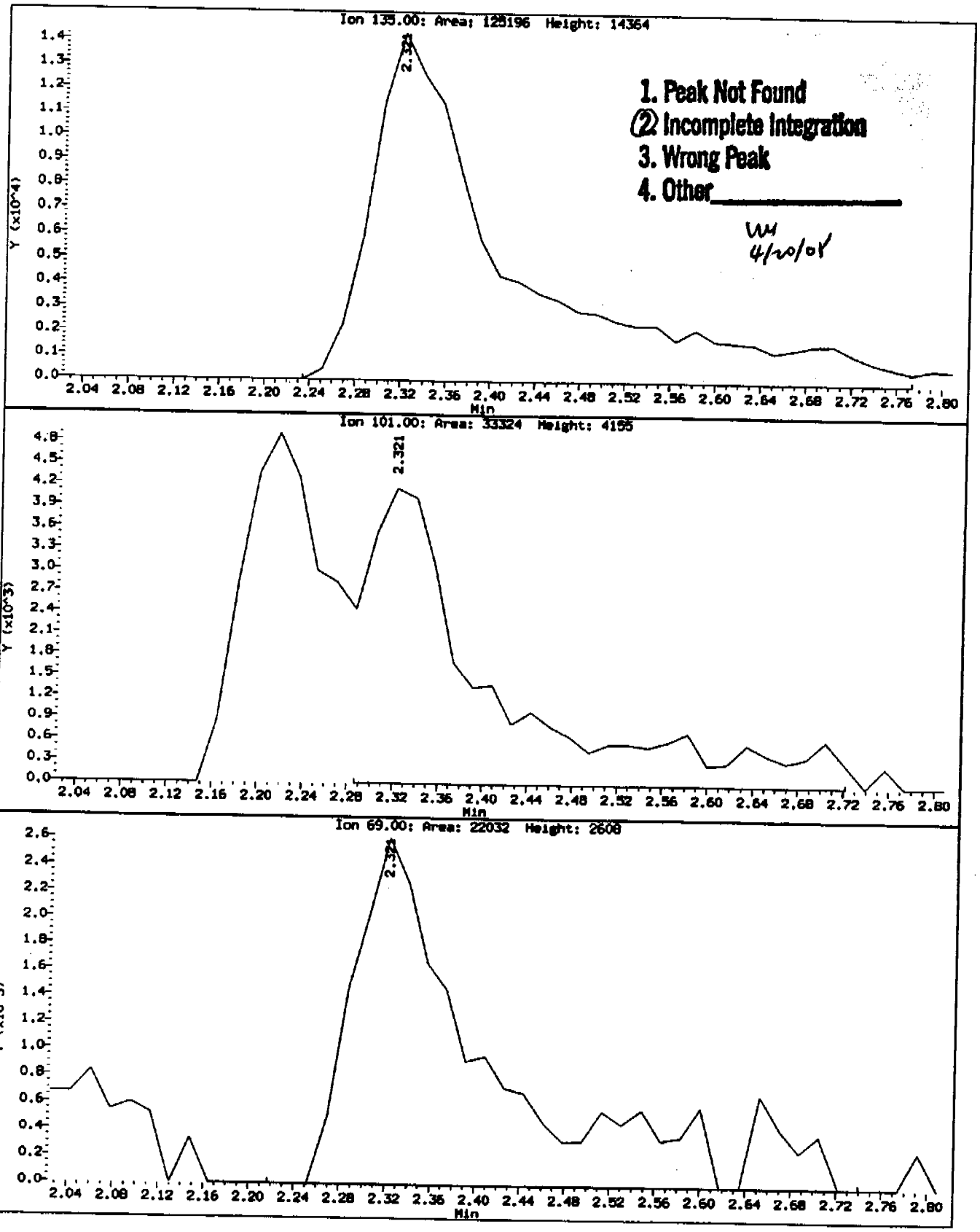
Data File: \\slsvr01\chem\HSG.i\020041?A.b\GC0LBA62.D
Date : 19-APR-2005 00:38
Client ID: VSTD010
Sample Info: VSTD010;020041?A.b
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: HSG.i
Operator: JDH
Column diameter: 0.53

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5162.D
Injection Date: 18-APR-2005 00:35
Instrument: MSG.i
Client Sample ID: VSTD010

Compound: Freon-114
CAS Number: 374-07-2



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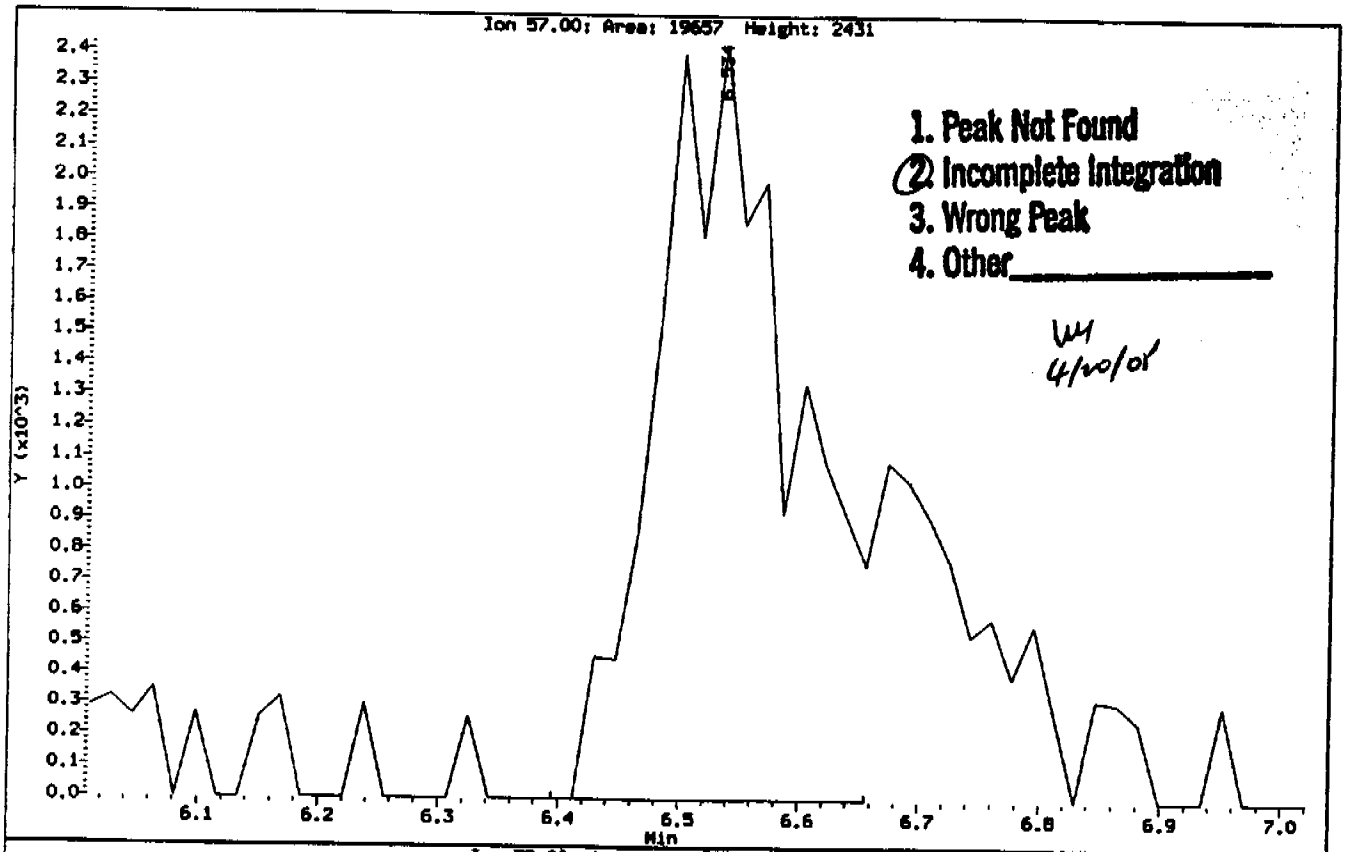
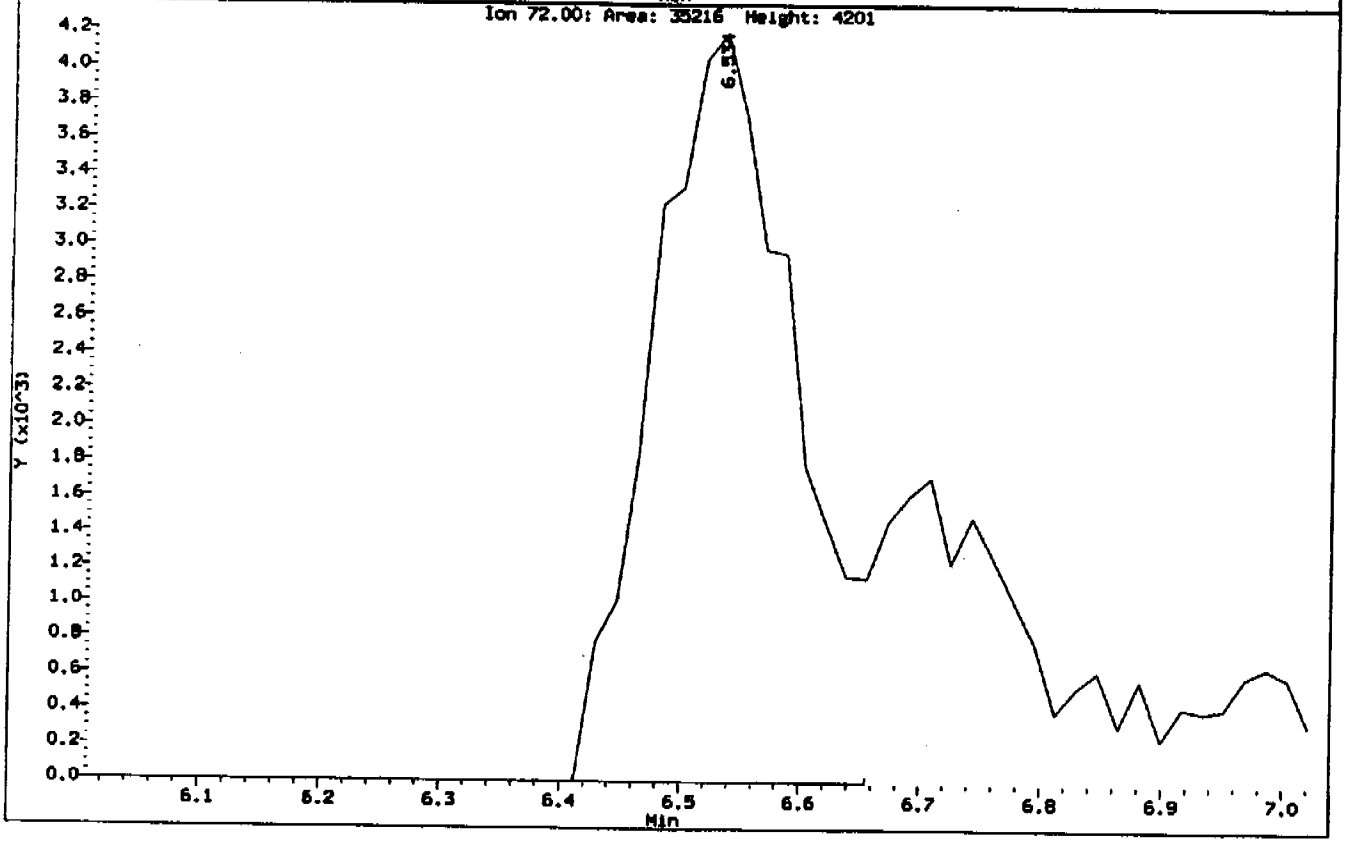
Injection Date: 18-APR-2005 00:35
Instrument: MSG.i
Client Sample ID: VSTD010

Compound: 2-Butoxyethanol
CAS Number: 111-76-2





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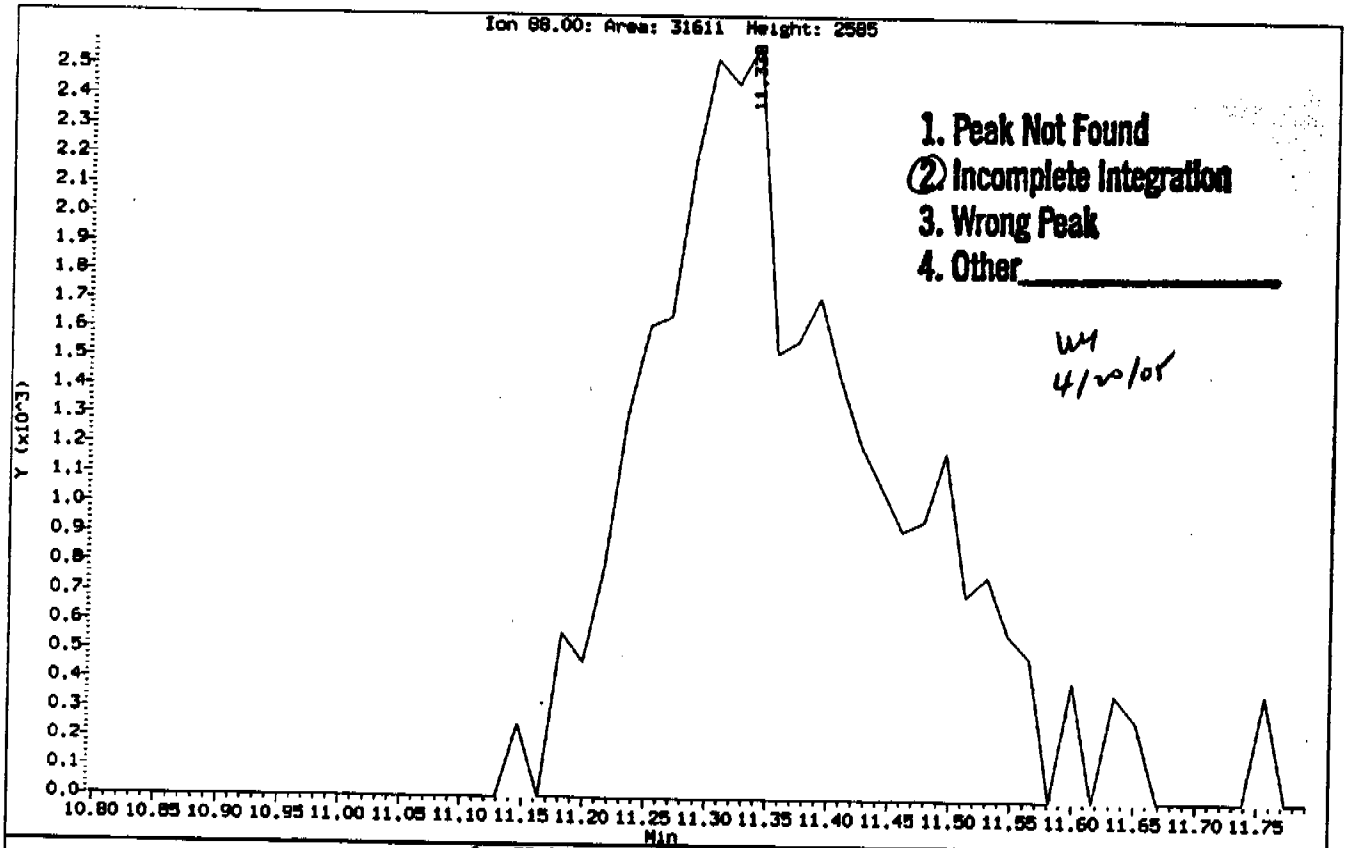
Injection Date: 18-APR-2005 00:35
Instrument: MSG.i
Client Sample ID: VSTD010

Compound: 1,4-Dioxane
CAS Number: 123-91-1



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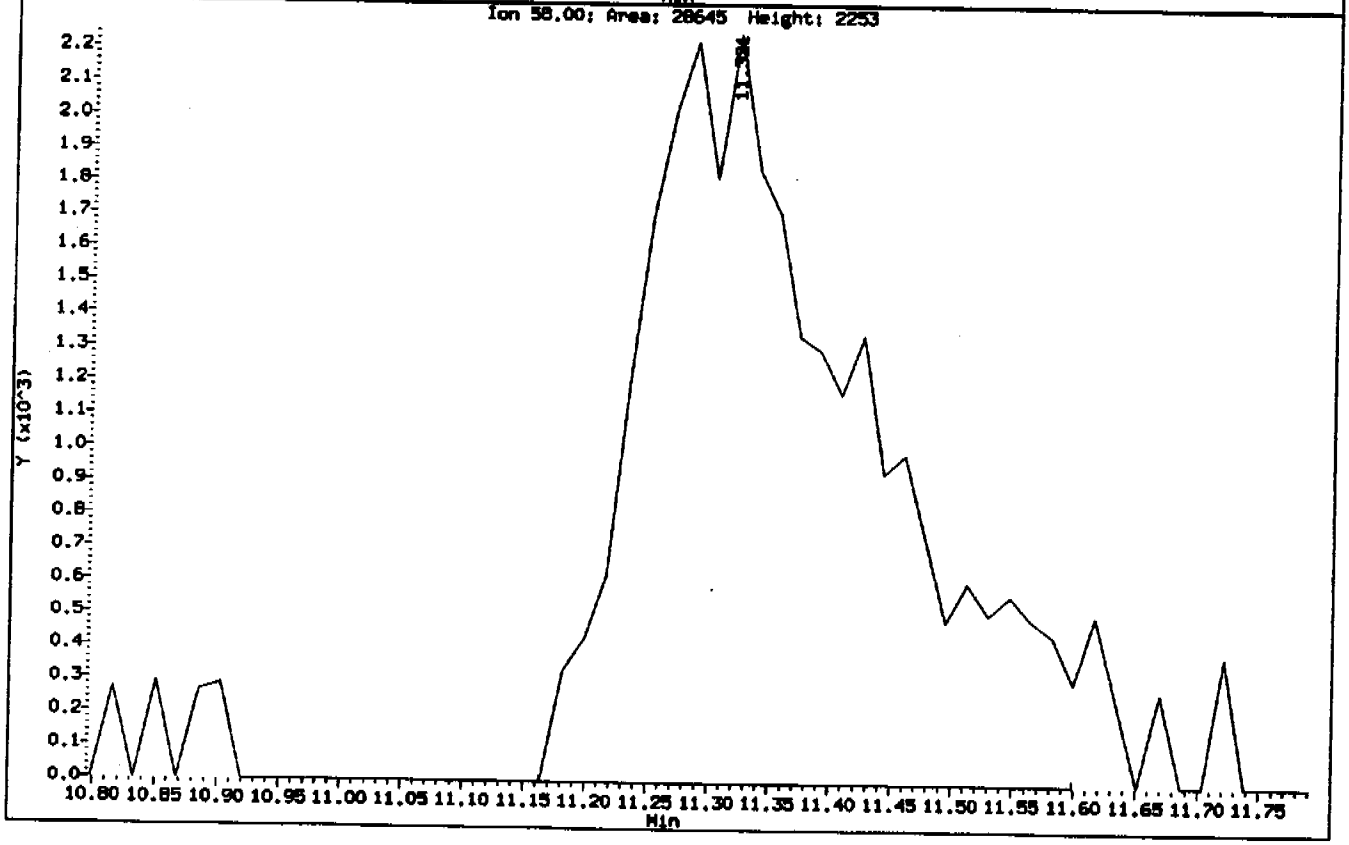

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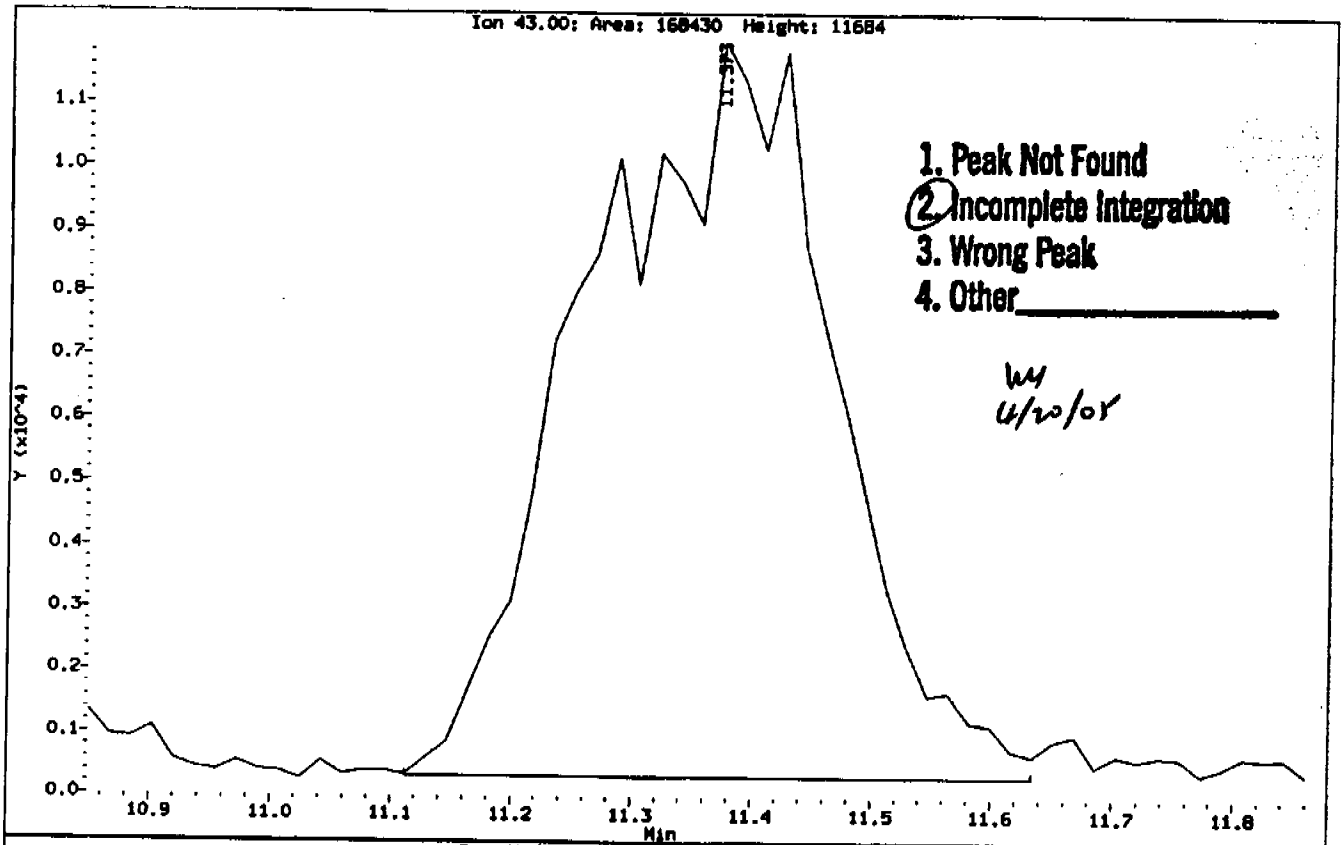
Injection Date: 18-APR-2005 00:35
Instrument: MSG.i
Client Sample ID: VSTD010

Compound: 2-Nitropropane
CAS Number: 79-46-9



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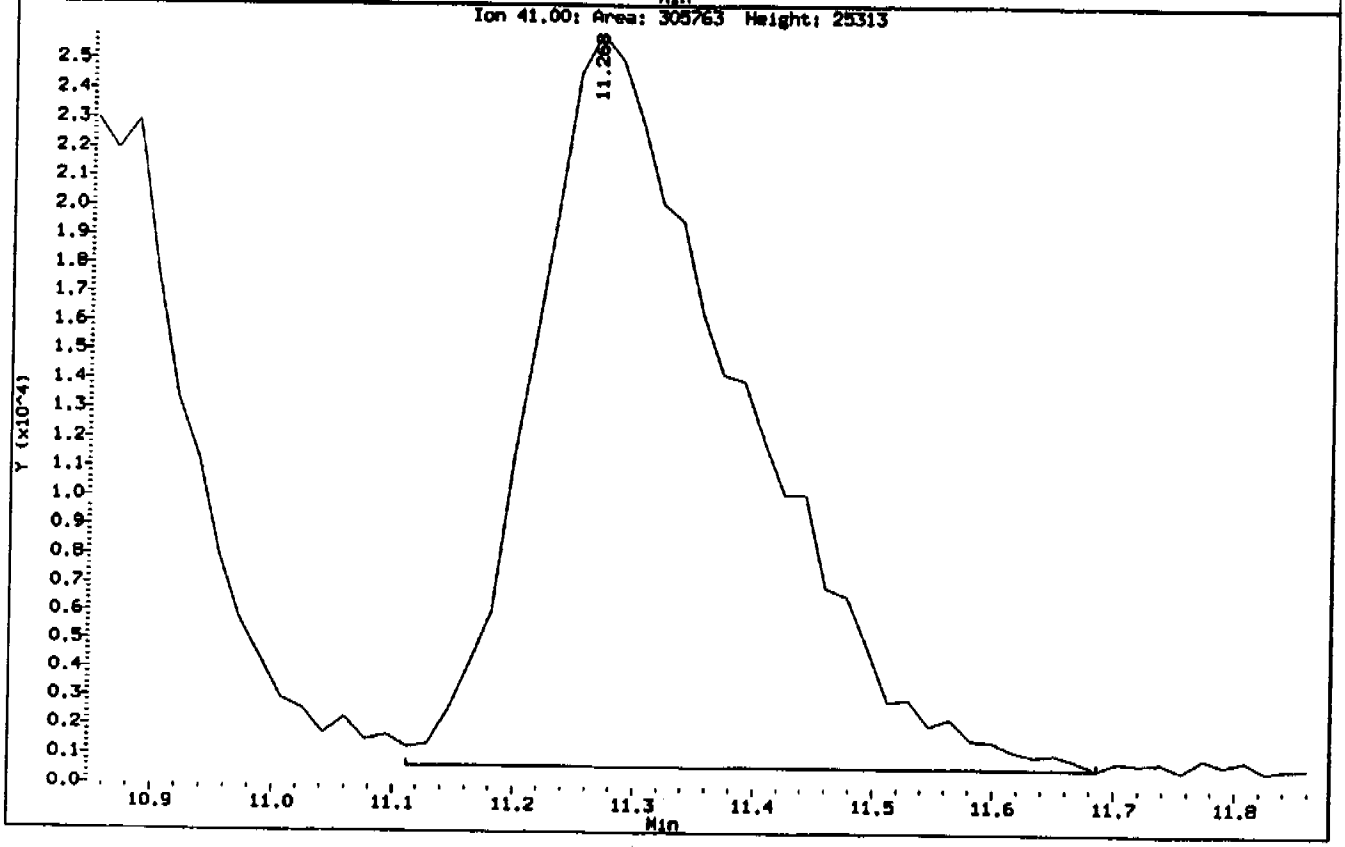

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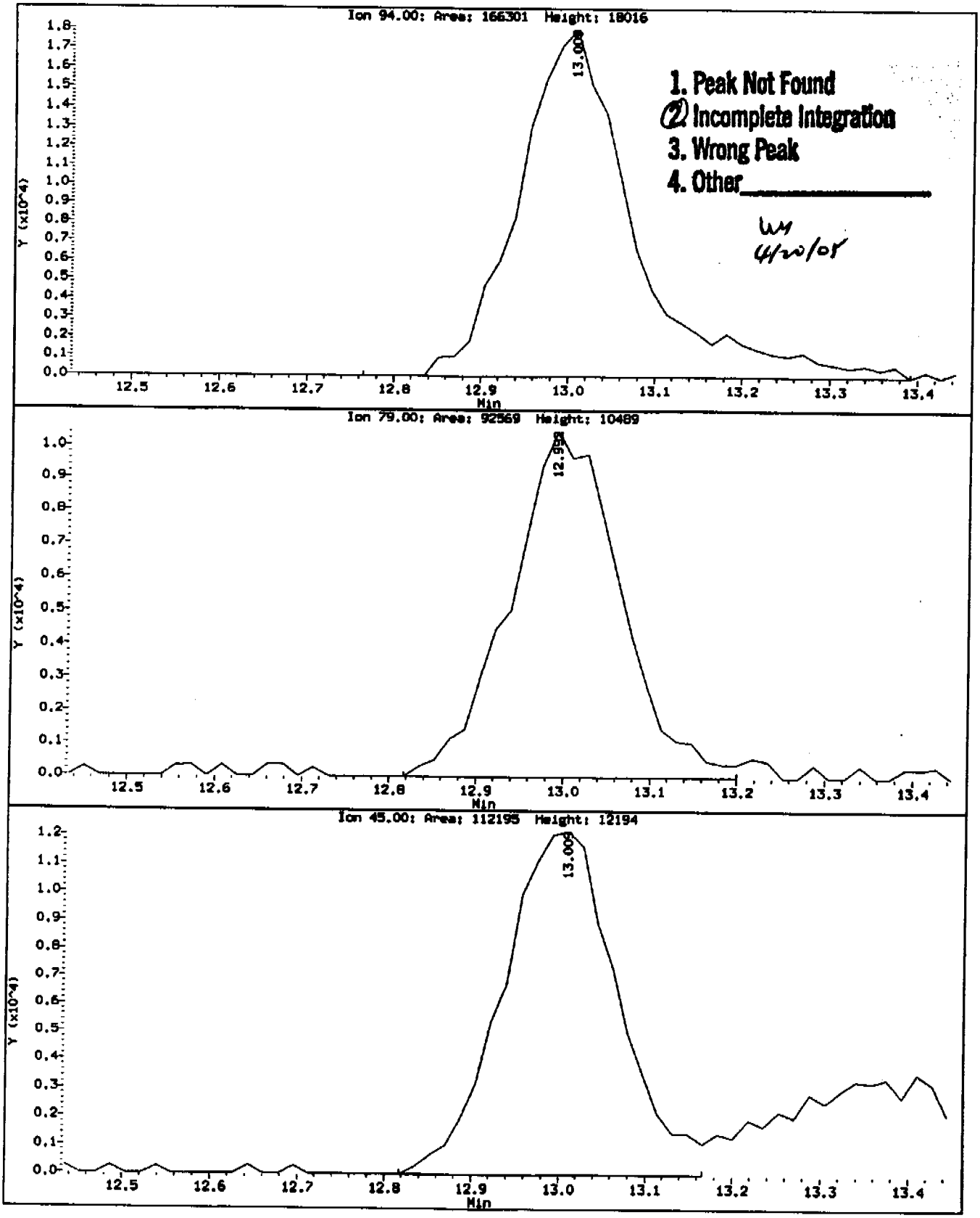
Injection Date: 18-APR-2005 00:35
Instrument: MSG.i
Client Sample ID: VSTD010

Compound: Dimethyl disulfide
CAS Number: 624-92-0



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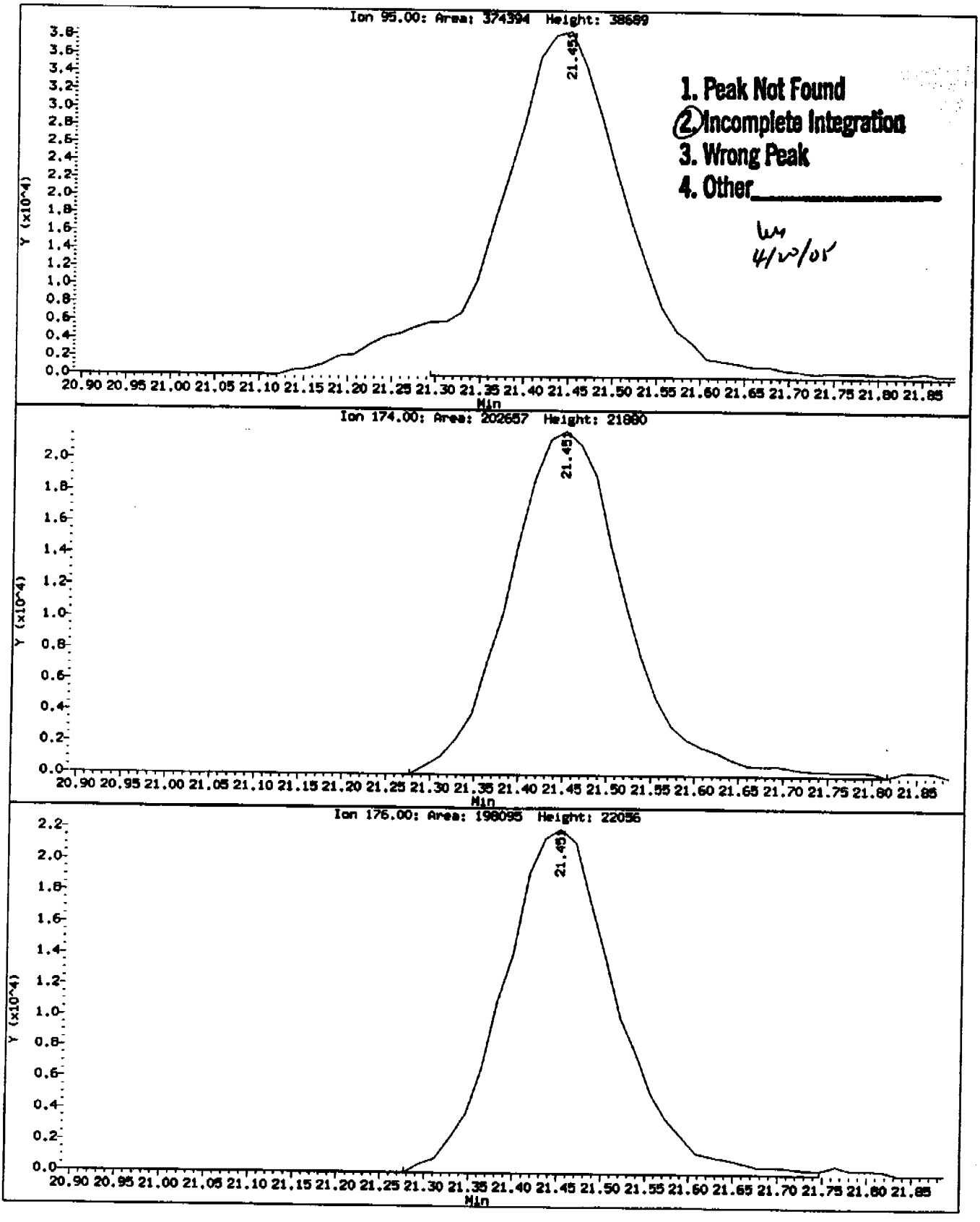
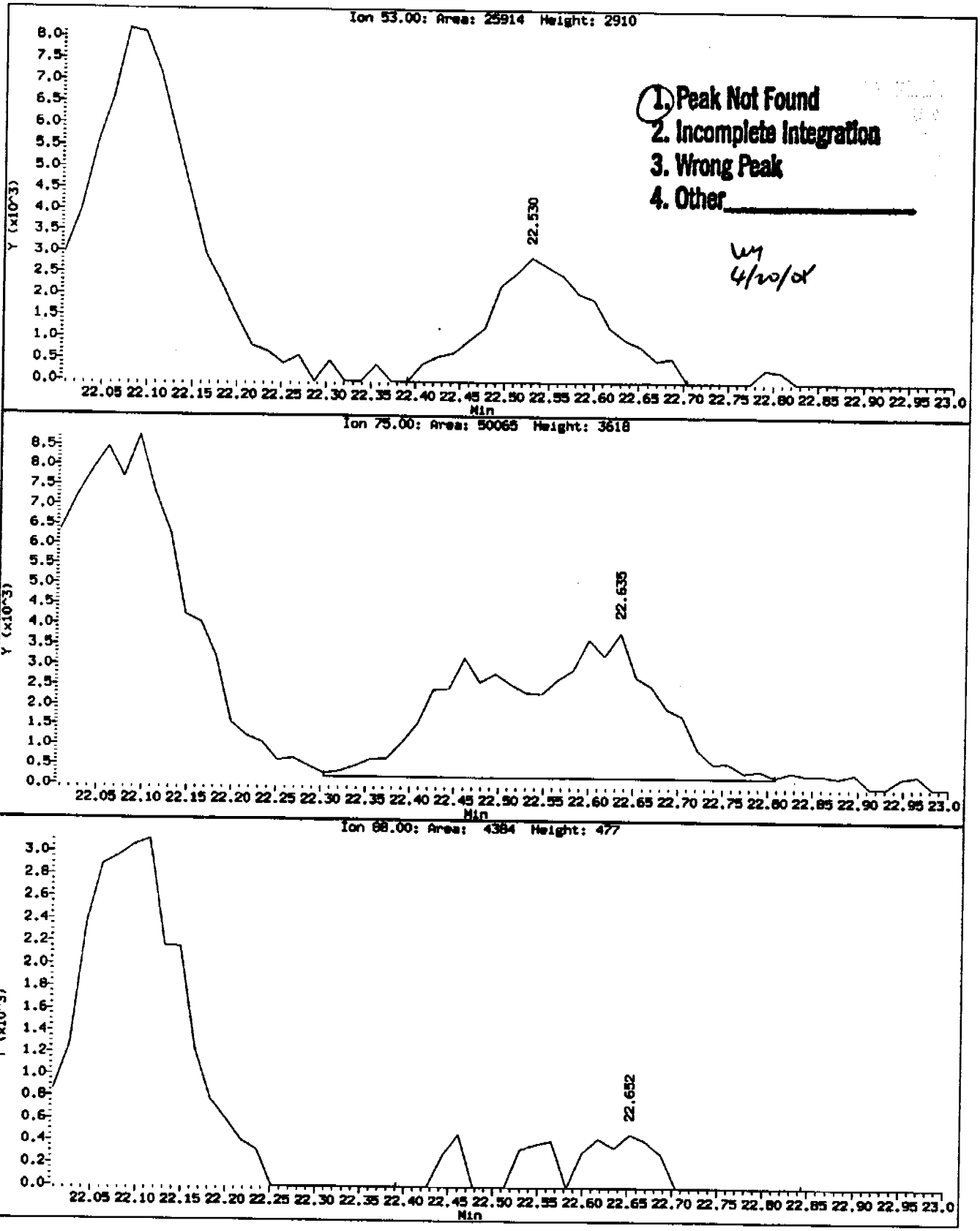
Injection Date: 18-APR-2005 00:35
Instrument: MSG.i
Client Sample ID: VSTD010

Compound: 4-Bromofluorobenzene
CAS Number: 460-00-4



Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5162.D
Injection Date: 18-APR-2005 00:35
Instrument: MSG.i
Client Sample ID: VSTD010

Compound: trans-1,4-dichloro-2-butene
CAS Number: 110-57-6



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Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5163.D
Report Date: 20-Apr-2005 10:59

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GC/MS VOLATILES

Data file : \\slsvr01\chem\MSG.i\G050417A.b\GCAL5163.D
Lab Smp Id: VSTD005 Client Smp ID: VSTD005
Inj Date : 18-APR-2005 01:08
Operator : JDH Inst ID: MSG.i
Smp Info : VSTD005;G050417A.b
Misc Info : VBLKG107A.B;
Comment : NONE
Method : \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Meth Date : 20-Apr-2005 10:59 hanw Quant Type: ISTD
Cal Date : 18-APR-2005 01:08 Cal File: GCAL5163.D
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLVOA04

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume
Vo	5.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	2.199	2.199	(0.236)	131971	5.00000	5.758(aM)
2 Freon-114	135	2.321	2.321	(0.249)	68100	5.00000	6.658(M)
3 Chloromethane	50	2.478	2.478	(0.265)	87171	5.00000	5.488(a)
4 Vinyl Chloride	62	2.565	2.565	(0.275)	67259	5.00000	5.906(a)
5 Bromomethane	94	3.052	3.052	(0.327)	107234	5.00000	6.595(a)
6 Chloroethane	64	3.157	3.157	(0.338)	47886	5.00000	6.076(a)
7 Trichlorofluoromethane	101	3.435	3.435	(0.368)	249883	5.00000	5.725(a)
8 Diethyl ether	59	3.801	3.801	(0.407)	112437	10.0000	11.15
9 1,1,2-Trichlorofluoroethane	101	3.957	3.957	(0.424)	205022	5.00000	5.486
10 Acrolein	56	3.957	3.957	(0.424)	25095	25.0000	26.70(a)
11 Acetone	43	4.062	4.062	(0.435)	25174	5.00000	6.002(a)
12 1,1-Dichloroethene	96	4.201	4.201	(0.450)	83491	5.00000	6.086
13 Acetonitrile	41	4.427	4.427	(0.474)	16828	25.0000	28.14(a)
14 Iodomethane	142	4.619	4.619	(0.495)	62167	5.00000	4.918(a)
15 Methyl acetate	74	4.671	4.671	(0.500)	13150	5.00000	6.061
16 Allyl chloride	39	4.671	4.671	(0.500)	108778	5.00000	5.655
17 Methylene Chloride	84	4.845	4.845	(0.519)	108801	5.00000	6.016
18 Carbon Disulfide	76	4.863	4.863	(0.521)	240236	5.00000	5.397
19 Acrylonitrile	53	5.037	5.037	(0.539)	69742	25.0000	27.29(a)
20 MTBE	73	5.089	5.089	(0.545)	241555	5.00000	5.539
21 trans-1,2-Dichloroethene	96	5.280	5.280	(0.566)	103810	5.00000	5.624
22 n-Hexane	57	5.367	5.367	(0.575)	152718	5.00000	5.680

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	23 1,1-Dichloroethane	63	5.942	5.942	(0.636)	221617	5.00000	5.404
	24 Vinyl acetate	43	5.977	5.977	(0.640)	175235	5.00000	5.364(a)
	25 2-Chloro-1,3-butadiene	53	6.098	6.098	(0.653)	174376	5.00000	5.257
	26 2-Butoxyethanol	57	6.516	6.516	(0.698)	8984	250.000	285.1(A)
	27 2-Butanone	43	6.690	6.690	(0.717)	26698	5.00000	5.266(a)
	28 Propionitrile	54	6.812	6.812	(0.730)	30112	25.0000	28.42
	29 2,2-Dichloropropane	77	6.882	6.882	(0.737)	203179	5.00000	5.186
	30 cis-1,2-Dichloroethene	96	6.986	6.986	(0.748)	112604	5.00000	5.432
	31 Ethyl acetate	43	6.986	6.986	(0.748)	177514	10.0000	11.71(a)
	32 Methacrylonitrile	41	7.178	7.178	(0.769)	252092	25.0000	27.34(a)
	33 Chloroform	83	7.265	7.265	(0.778)	268054	5.00000	5.394
	34 Bromochloromethane	128	7.561	7.561	(0.810)	65820	5.00000	5.593
	35 Isobutanol	42	7.682	7.682	(0.823)	112543	100.000	115.8(a)
$	36 Dibromofluoromethane	113	7.665	7.665	(0.821)	172160	5.00000	5.143
	37 Tetrahydrofuran	71	7.665	7.665	(0.821)	36597	25.0000	28.42
M	38 1,2-Dichloroethene (total)	96				216414	10.0000	11.06
	39 1,1,1-Trichloroethane	97	8.013	8.013	(0.858)	225906	5.00000	5.244
	40 Cyclohexane	84	8.013	8.013	(0.858)	111553	5.00000	5.319
	41 1,1-Dichloropropene	75	8.326	8.326	(0.892)	180508	5.00000	5.319
	42 Carbon Tetrachloride	117	8.500	8.500	(0.911)	201999	5.00000	5.223
$	43 1,2-Dichloroethane-d4	67	8.657	8.657	(0.927)	65911	5.00000	5.465
	44 n-Heptane	43	8.675	8.675	(0.929)	136096	5.00000	5.011
	45 n-Butanol	56	8.692	8.692	(0.931)	62428	50.0000	54.38(a)
	46 1,2-Dichloroethane	62	8.849	8.849	(0.948)	170853	5.00000	5.525
	47 Benzene	78	8.866	8.866	(0.950)	293384	5.00000	5.528
*	48 Fluorobenzene	96	9.336	9.336	(1.000)	2943071	50.0000	
	49 Trichloroethene	130	10.206	10.206	(1.093)	138088	5.00000	5.609
	50 Methylcyclohexane	55	10.346	10.346	(1.108)	166321	5.00000	5.492(M)
	51 1,2-Dichloropropane	63	10.624	10.624	(1.138)	129745	5.00000	5.478
	52 Methyl methacrylate	69	10.850	10.850	(1.162)	65284	5.00000	5.637
	53 Bromodichloromethane	83	11.181	11.181	(1.198)	246266	5.00000	5.078
	54 Dibromomethane	93	11.285	11.285	(1.209)	118760	5.00000	5.489
	55 1,4-Dioxane	88	11.285	11.285	(1.209)	15532	100.000	115.2(aM)
	56 2-Nitropropane	43	11.355	11.355	(1.216)	100619	5.00000	5.824(M)
	57 2-chloroethyl vinyl ether	63	12.034	12.034	(1.289)	24845	5.00000	6.439(aM)
	58 4-Methyl-2-pentanone	43	12.121	12.121	(1.298)	127398	5.00000	5.296(aM)
	59 cis-1,3-Dichloropropene	75	12.591	12.591	(1.349)	174098	5.00000	5.105
	60 Dimethyl disulfide	94	12.991	12.991	(1.392)	69636	5.00000	5.298(M)
$	61 Toluene-d8	98	13.183	13.183	(0.753)	260941	5.00000	4.815(a)
	62 Toluene	91	13.392	13.392	(0.765)	337539	5.00000	4.206(a)
	63 trans-1,3-Dichloropropene	75	13.949	13.949	(0.797)	139408	5.00000	4.802(a)
	64 Ethyl methacrylate	69	14.053	14.053	(0.803)	137822	5.00000	5.129
	65 1,1,2-Trichloroethane	97	14.366	14.366	(0.821)	103875	5.00000	5.510
	66 2-Hexanone	43	14.523	14.523	(0.830)	63839	5.00000	5.592(a)
	67 1,3-Dichloropropane	76	15.097	15.097	(0.863)	168362	5.00000	5.452
	68 Tetrachloroethene	164	15.185	15.185	(0.868)	124663	5.00000	5.517
	69 Chlorodibromomethane	129	15.759	15.759	(0.901)	137537	5.00000	4.687(a)
	70 1,2-Dibromoethane	107	16.333	16.333	(0.933)	112972	5.00000	4.801(a)
*	71 Chlorobenzene-d5	117	17.500	17.500	(1.000)	1933860	50.0000	
	72 Chlorobenzene	112	17.604	17.604	(1.006)	203007	5.00000	4.937(a)
	73 1,1,1,2-Tetrachloroethane	131	17.795	17.795	(1.017)	109266	5.00000	4.946(a)
	74 Ethylbenzene	106	17.848	17.848	(1.020)	90026	5.00000	5.023
	75 m,p-Xylenes	106	18.091	18.091	(1.034)	235607	10.0000	10.33
	76 o-Xylene	106	19.432	19.432	(1.110)	112033	5.00000	5.102

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	77 Styrene	104	19.588	19.588	(1.119)	179432	5.00000	5.002
M	78 Xylenes (total)	106				347640	15.0000	15.43
	79 Bromoform	173	20.546	20.546	(1.174)	86776	5.00000	4.536(a)
	80 Isopropylbenzene	105	20.668	20.668	(1.181)	318086	5.00000	4.997(a)
	81 Cyclohexanone	55	20.789	20.789	(1.188)	70570	50.0000	60.44(a)
	82 1,1,2,2-Tetrachloroethane	83	21.259	21.259	(1.215)	133109	5.00000	5.063
$	83 4-Bromofluorobenzene	95	21.451	21.451	(0.881)	190974	5.00000	5.150
	84 1,2,3-Trichloropropane	110	21.747	21.747	(0.893)	36489	5.00000	5.574
	85 Bromobenzene	156	21.956	21.956	(0.902)	103819	5.00000	5.350
	86 n-Propylbenzene	91	21.990	21.990	(0.903)	443213	5.00000	5.489
	87 2-Chlorotoluene	91	22.460	22.460	(0.923)	320251	5.00000	5.458
	88 trans-1,4-dichloro-2-butene	53	22.530	22.530	(0.926)	13390	5.00000	5.710(M)
	89 1,3,5-Trimethylbenzene	105	22.530	22.530	(0.926)	290269	5.00000	5.327
	90 4-Chlorotoluene	91	22.600	22.600	(0.928)	343241	5.00000	5.241
	91 t-Butylbenzene	119	23.418	23.418	(0.962)	353139	5.00000	5.559
	92 Pentachloroethane	167	23.453	23.453	(0.964)	70003	5.00000	4.995(a)
	93 1,2,4-Trimethylbenzene	105	23.470	23.470	(0.964)	295320	5.00000	5.481
	94 sec-Butylbenzene	105	23.835	23.835	(0.979)	394043	5.00000	5.347
	95 4-Isopropyltoluene	119	24.131	24.131	(0.991)	291245	5.00000	5.370
	96 1,3-Dichlorobenzene	146	24.201	24.201	(0.994)	184231	5.00000	5.410
*	97 1,4 Dichlorobenzene-d4	152	24.340	24.340	(1.000)	1080387	50.0000	
	98 1,4-Dichlorobenzene	146	24.392	24.392	(1.002)	205927	5.00000	5.660
	99 n-Butylbenzene	91	24.793	24.793	(1.019)	320656	5.00000	5.602
	100 1,2-Dichlorobenzene	146	24.967	24.967	(1.026)	175263	5.00000	5.753
	101 1,2-Dibromo-3-chloropropane	157	26.046	26.046	(1.070)	23391	5.00000	5.161(a)
	102 1,3,5-Trichlorobenzene	180	26.325	26.325	(1.082)	152205	5.00000	5.519
	103 1,2,4-Trichlorobenzene	180	27.021	27.021	(1.110)	138214	5.00000	5.839
	104 Hexachlorobutadiene	225	27.178	27.178	(1.117)	113771	5.00000	5.886
	105 Naphthalene	128	27.282	27.282	(1.121)	189864	5.00000	5.839
	106 1,2,3-Trichlorobenzene	180	27.543	27.543	(1.132)	126746	5.00000	5.909

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5163.D
Report Date: 20-Apr-2005 10:59

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

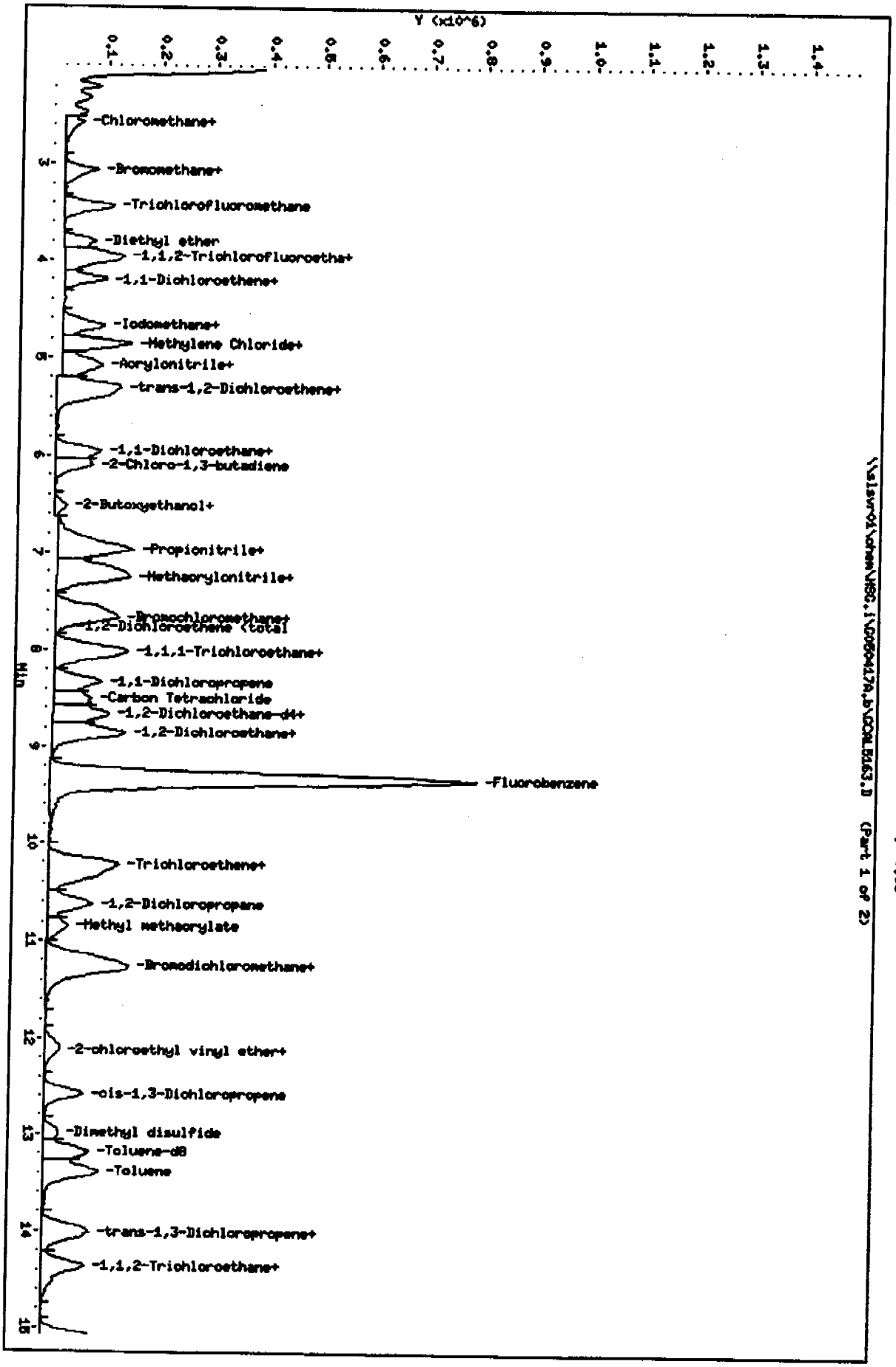
Instrument ID: MSG.i
Lab File ID: GCAL5163.D
Lab Smp Id: VSTD005
Analysis Type: VOA
Quant Type: ISTD
Operator: JDH
Method File: \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Misc Info: VBLKG107A.B;

Calibration Date: 17-APR-2005
Calibration Time: 23:27
Client Smp ID: VSTD005
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	2924725	1462363	5849450	2943071	0.63
71 Chlorobenzene-d5	2135082	1067541	4270164	1933860	-9.42
97 1,4 Dichlorobenze	1343943	671972	2687886	1080387	-19.61

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	9.36	8.86	9.86	9.34	-0.20
71 Chlorobenzene-d5	17.54	17.04	18.04	17.50	-0.21
97 1,4 Dichlorobenze	24.36	23.86	24.86	24.34	-0.08

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.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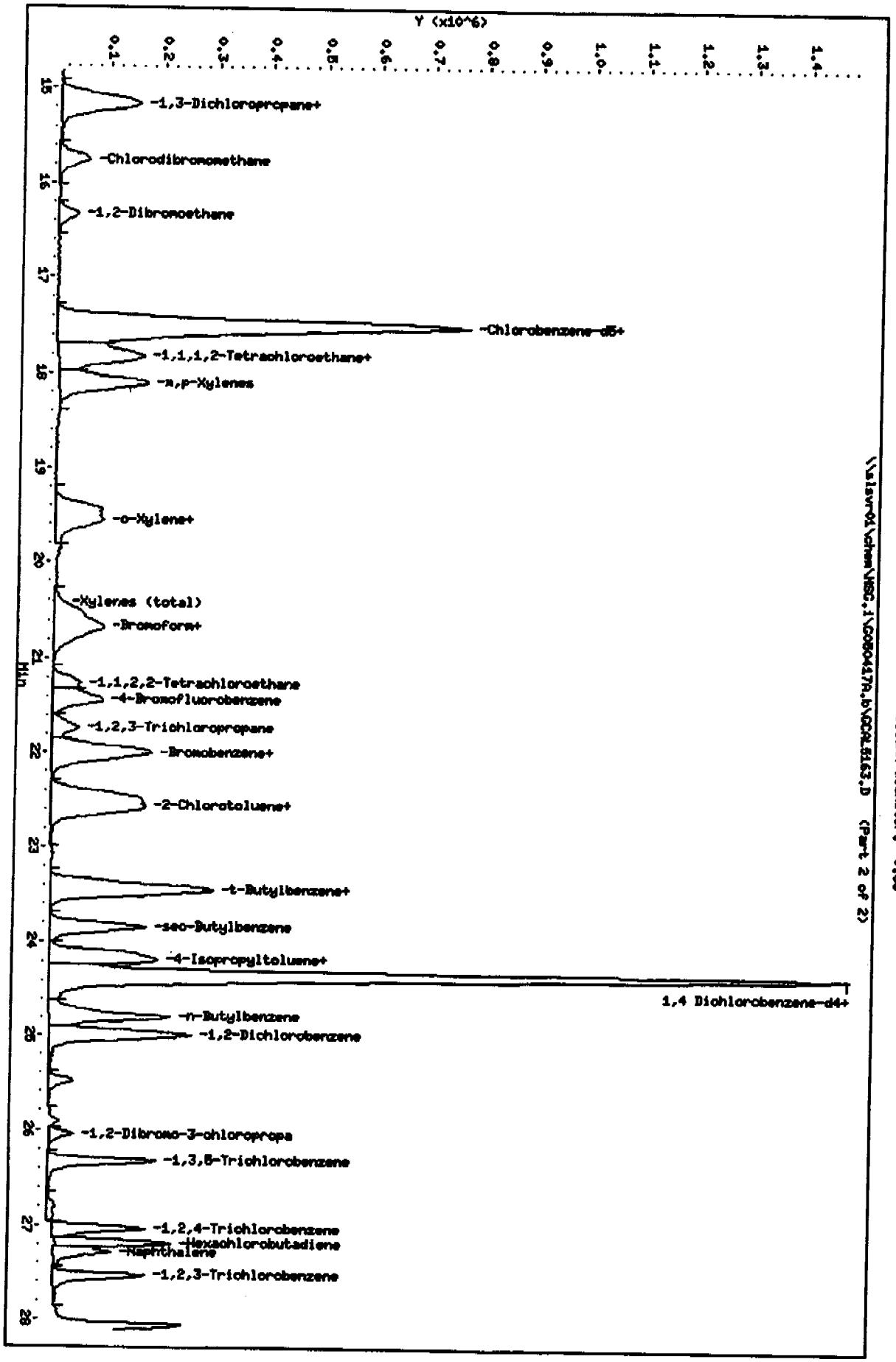
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
Min
3
4
5
6
7
8
9
10
11
12
13
14
15
-Chloromethane+
-Bromomethane+
-Trichlorofluoromethane
-Diethyl ether
-1,1,2-Trichlorofluoroetha+
-1,1-Dichloroethene+
-Iodomethane+
-Methylene Chloride+
-Acrylonitrile+
-trans-1,2-Dichloroethene+
-1,1-Dichloroethane+
-2-Chloro-1,3-butadiene
-2-Butoxyethanol+
-Propionitrile+
-Methacrylonitrile+
-Bromochloromethane+
-1,2-Dichloroethene (total
-1,1,1-Trichloroethane+
-1,1-Dichloropropene
-Carbon Tetrachloride
-1,2-Dichloroethane-d4+
-1,2-Dichloroethane+
-Fluorobenzene
-Trichloroethene+
-1,2-Dichloropropane
-Methyl methacrylate
-Bromodichloromethane+
-2-chloroethyl vinyl ether+
-cis-1,3-Dichloropropene
-Dimethyl disulfide
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane+
Data File: \\slsvr01\chem\HSC.i\00804170.b\GCHL5163.D
Date : 18-APR-2008 04:08
Client ID: VSTD005
Sample Info: VSTD005;00804170.b
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: HSC.i
Operator: JDH
Column diameter: 0.53
\\slsvr01\chem\HSC.i\00804170.b\GCHL5163.D (Part 1 of 2)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0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
Min
15
16
17
18
19
20
21
22
23
24
25
26
27
28
-1,3-Dichloropropane+
-Chlorodibromomethane
-1,2-Dibromoethane
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
-o-Xylene+
-Xylenes (total)
-Bromoform+
-1,1,2,2-Tetrachloroethane
-4-Bromofluorobenzene
-1,2,3-Trichloropropane
-Bromobenzene+
-2-Chlorotoluene+
-t-Butylbenzene+
-sec-Butylbenzene
-4-Isopropyltoluene+
1,4 Dichlorobenzene-d4+
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,3,5-Trichlorobenzene
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene
-1,2,3-Trichlorobenzene
Data File: \\slsvr01\chem\HSC.i\G080417A.b\GC2L5163.D
Date : 18-APR-2008 01:08
Client ID: VSTD005
Sample Info: VSTD005;G080417A.b
Purge Volume: 5.0
Column phase: RTX-502.2
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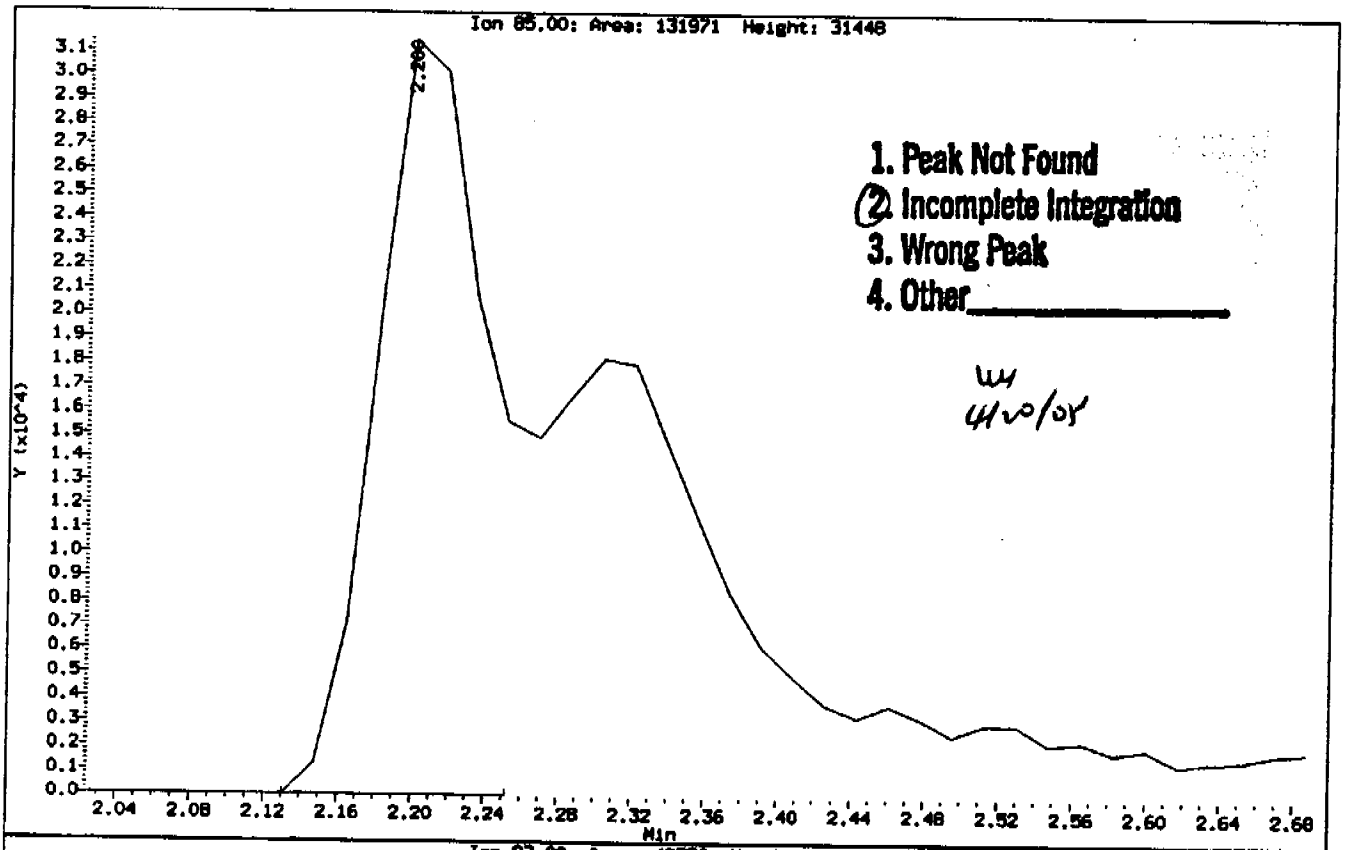
Instrument: HSC.i
Operator: JBH
Column diameter: 0.53

Data File: \\elsvr01\chem\MSG.i\G050417A.b\GCAL5163.D
Injection Date: 18-APR-2005 01:08
Instrument: MSG.i
Client Sample ID: VSTD005

Compound: Dichlorodifluoromethane
CAS Number: 75-71-8



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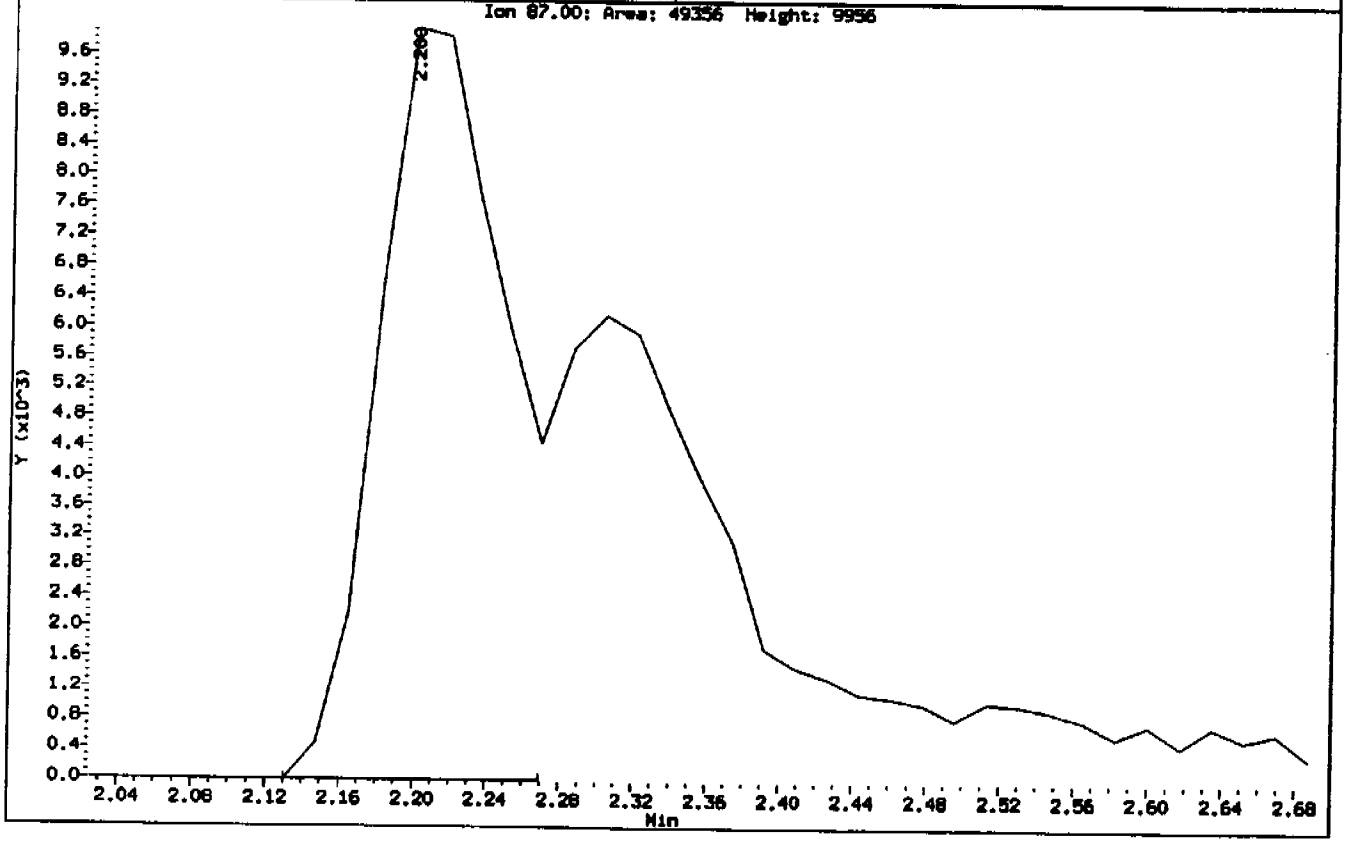

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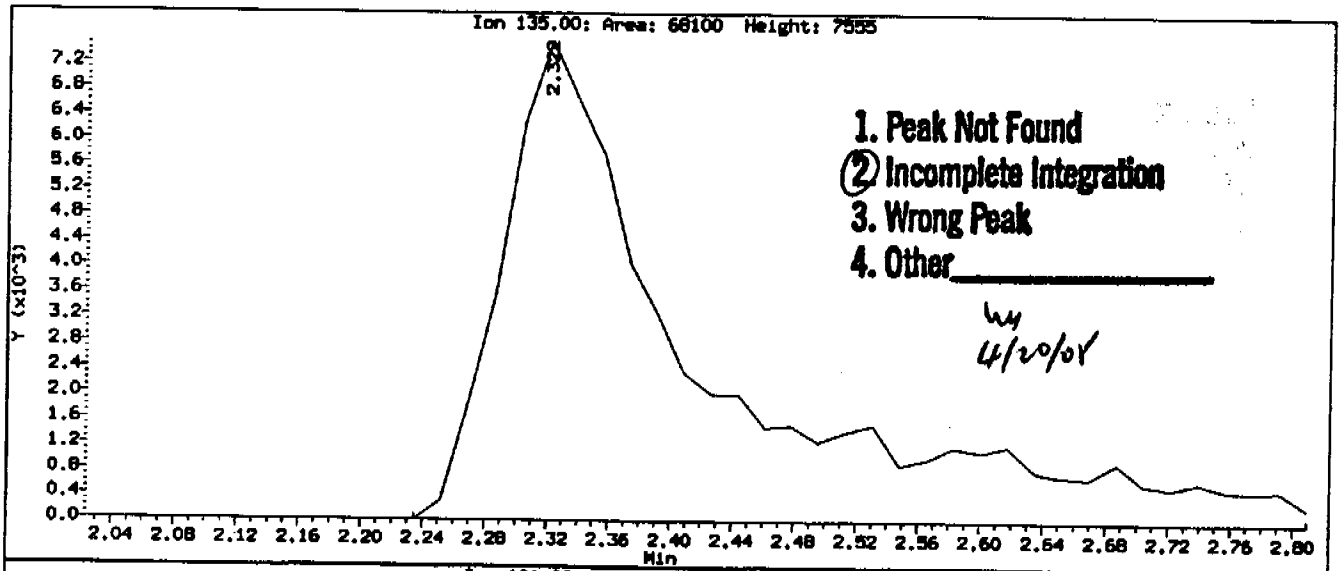
Injection Date: 18-APR-2005 01:08
Instrument: MSG.i
Client Sample ID: VSTD005

Compound: Freon-114
CAS Number: 374-07-2



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(2) Incomplete Integration
3. Wrong Peak
4. Other_____

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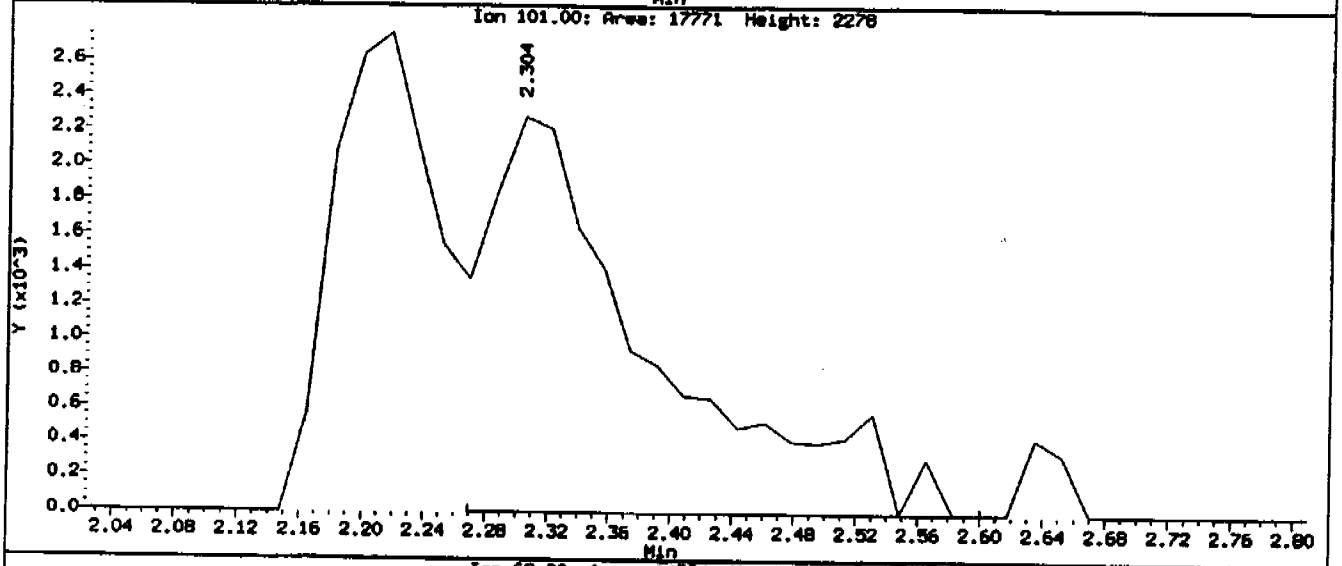

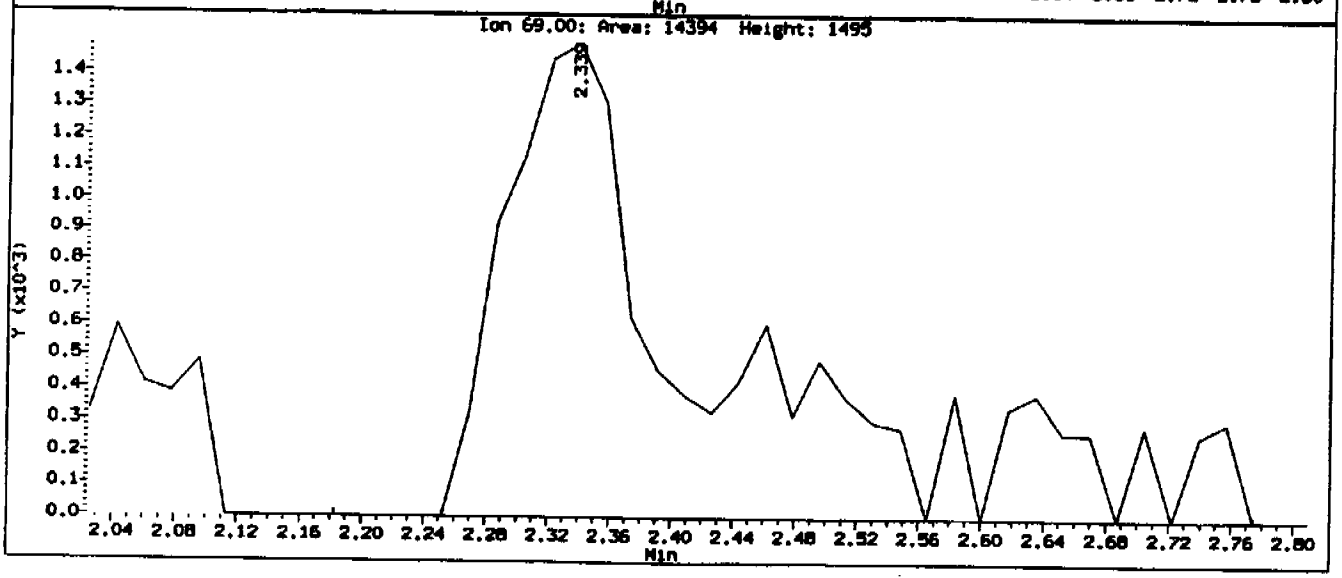

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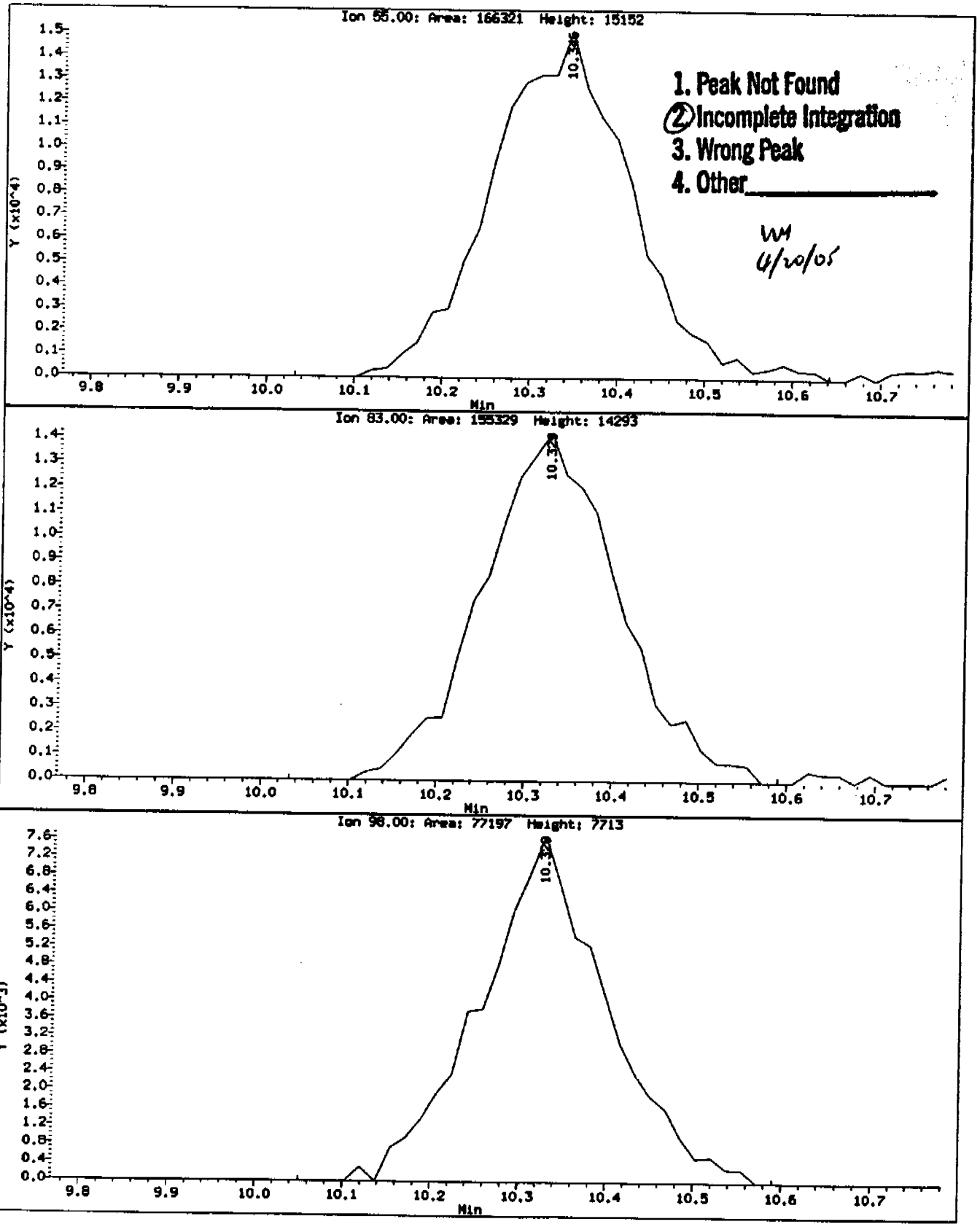
Injection Date: 18-APR-2005 01:08
Instrument: MSG.i
Client Sample ID: VSTD005

Compound: Methylcyclohexane
CAS Number: 108-87-2



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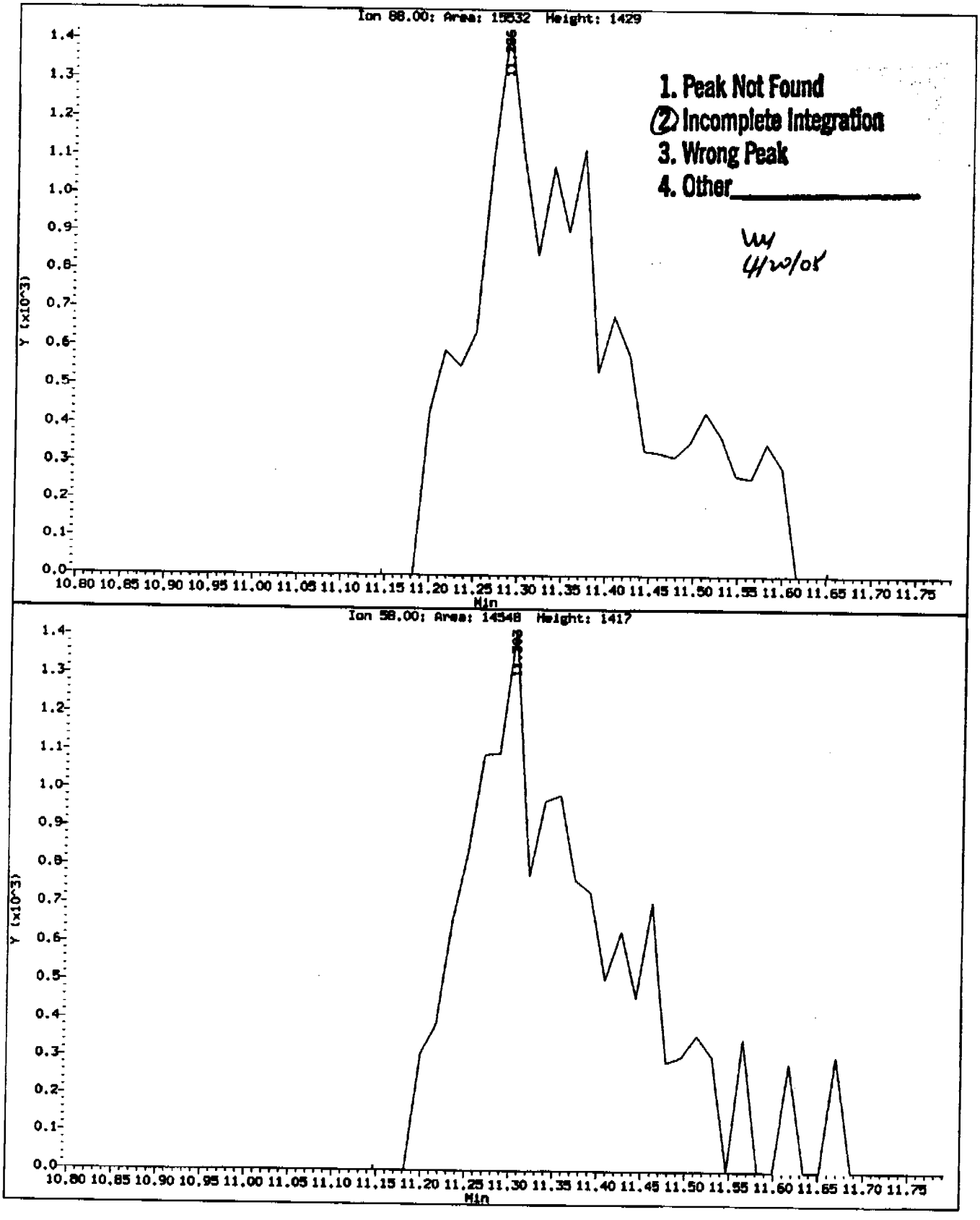
Injection Date: 18-APR-2005 01:08
Instrument: MSG.i
Client Sample ID: VSTD005

Compound: 1,4-Dioxane
CAS Number: 123-91-1



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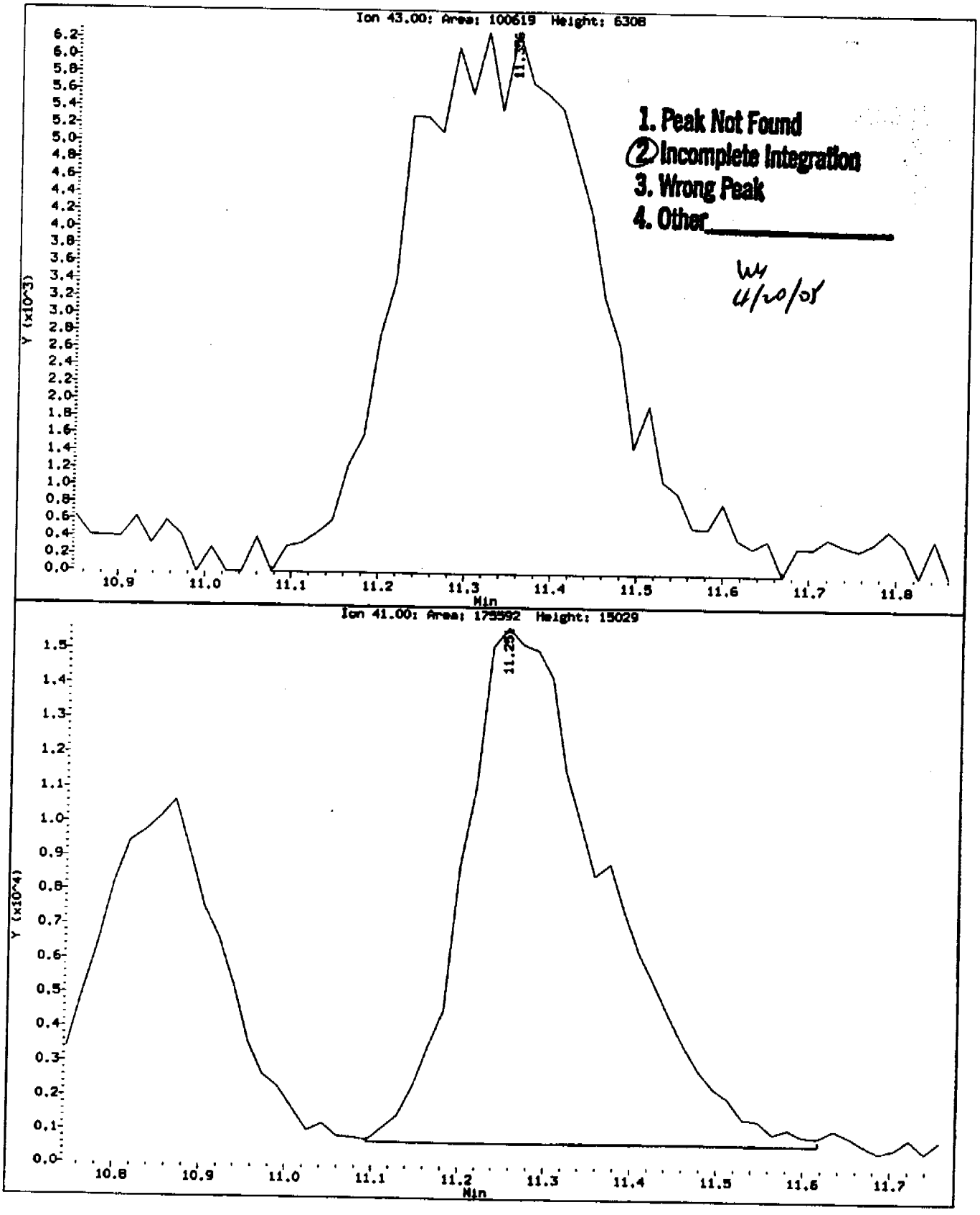
Injection Date: 18-APR-2005 01:08
Instrument: MSG.i
Client Sample ID: VSTD005

Compound: 2-Nitropropane
CAS Number: 79-46-9



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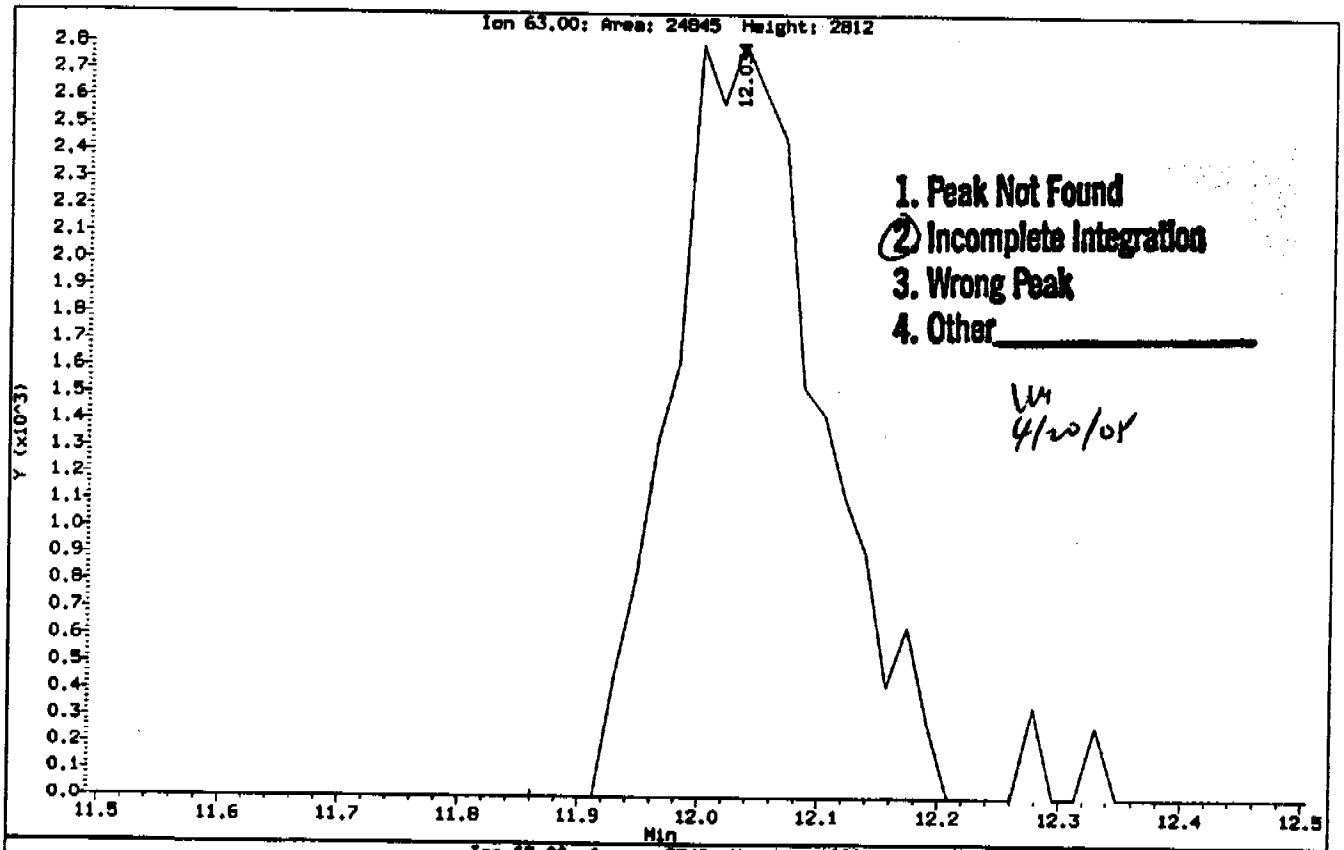
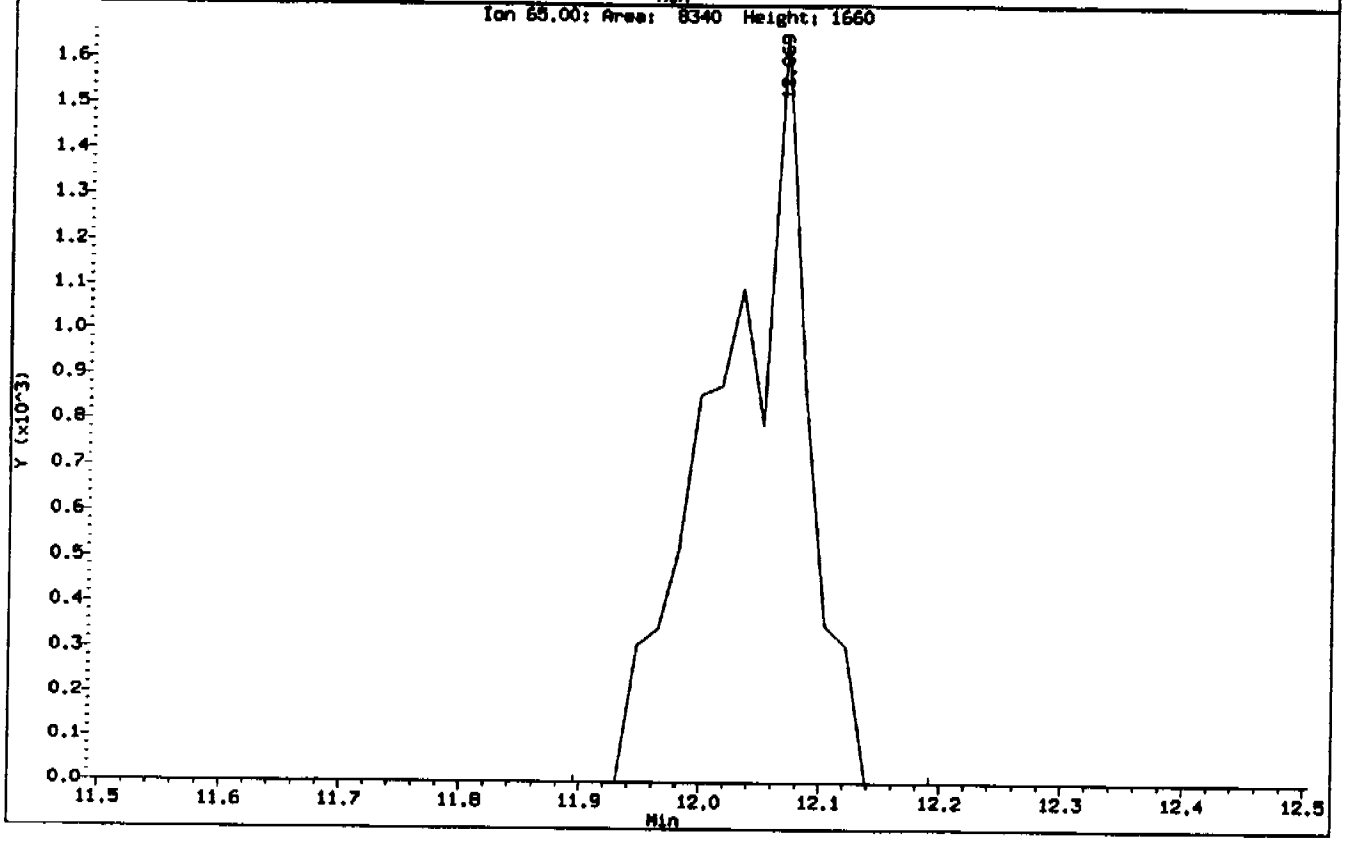
Data File: \\elsvr01\chem\MSG.i\G050417A.b\GCAL5163.D
Injection Date: 18-APR-2005 01:08
Instrument: MSG.i
Client Sample ID: VSTD005

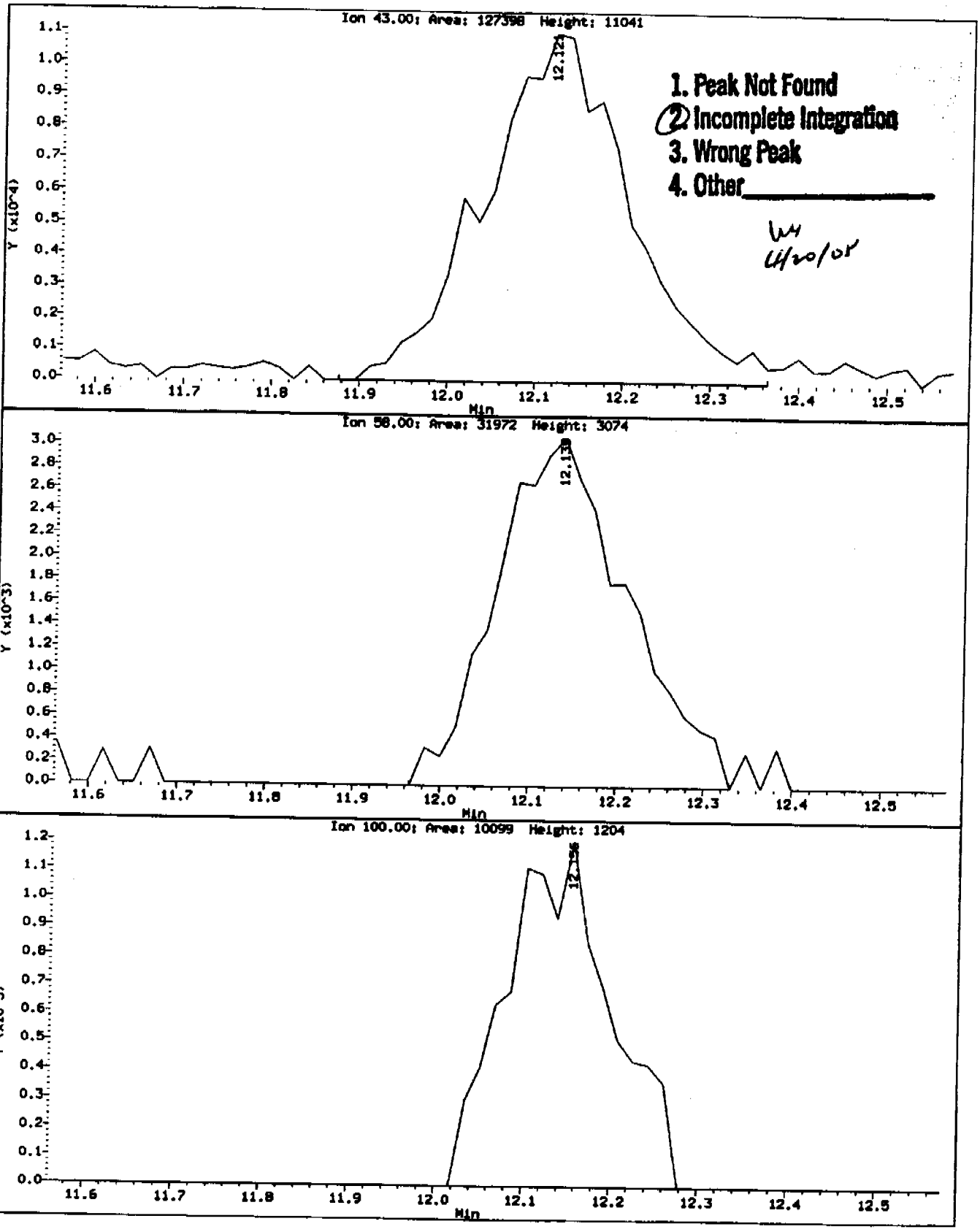
Compound: 2-chloroethyl vinyl ether
CAS Number: 110-75-8





Data File: \\stlvr01\chem\MSG.i\G050417A.b\GCAL5163.D
Injection Date: 18-APR-2005 01:08
Instrument: MSG.i
Client Sample ID: VSTD005

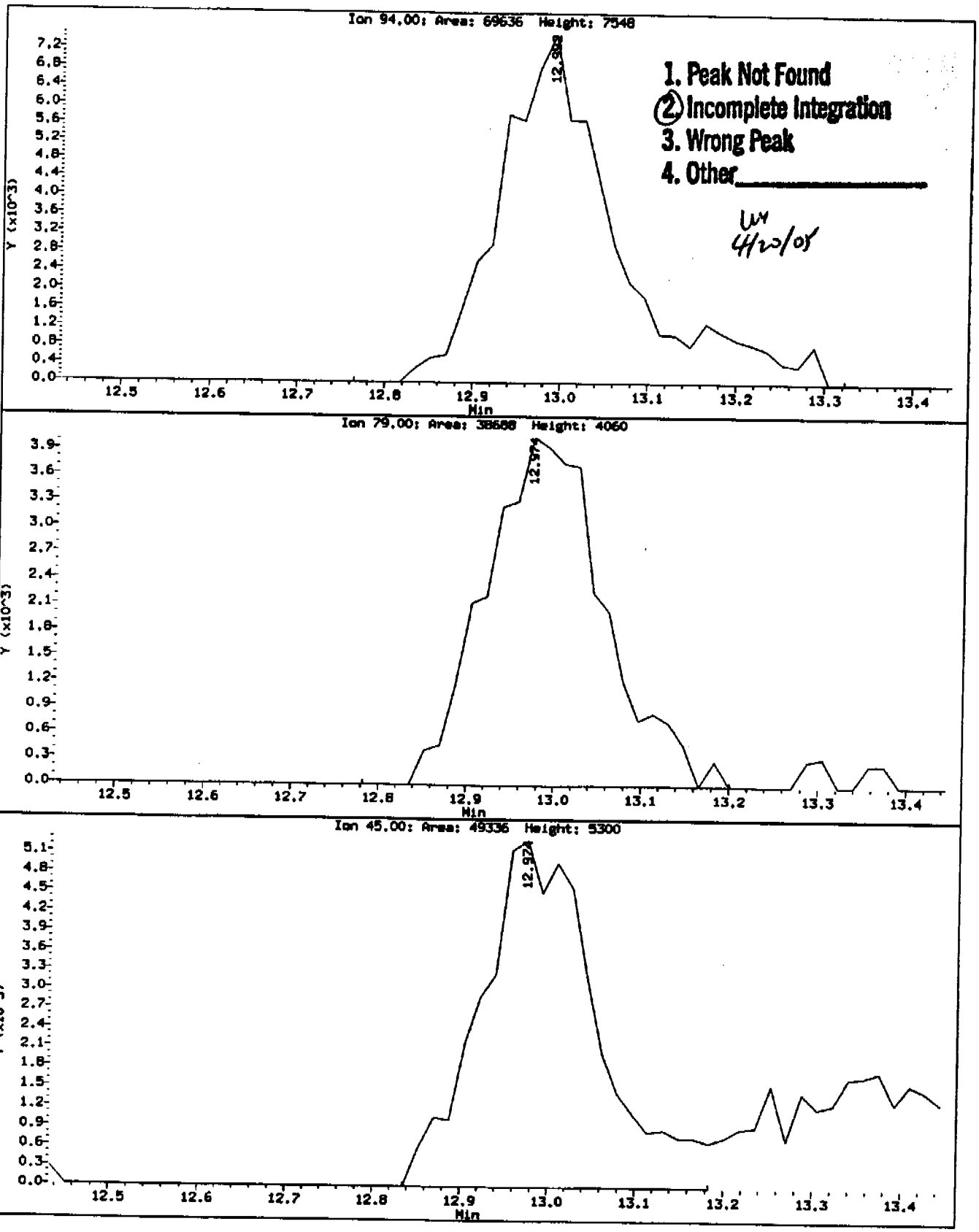
Compound: 4-Methyl-2-pentanone
CAS Number: 108-10-1



LOT# F5D220273

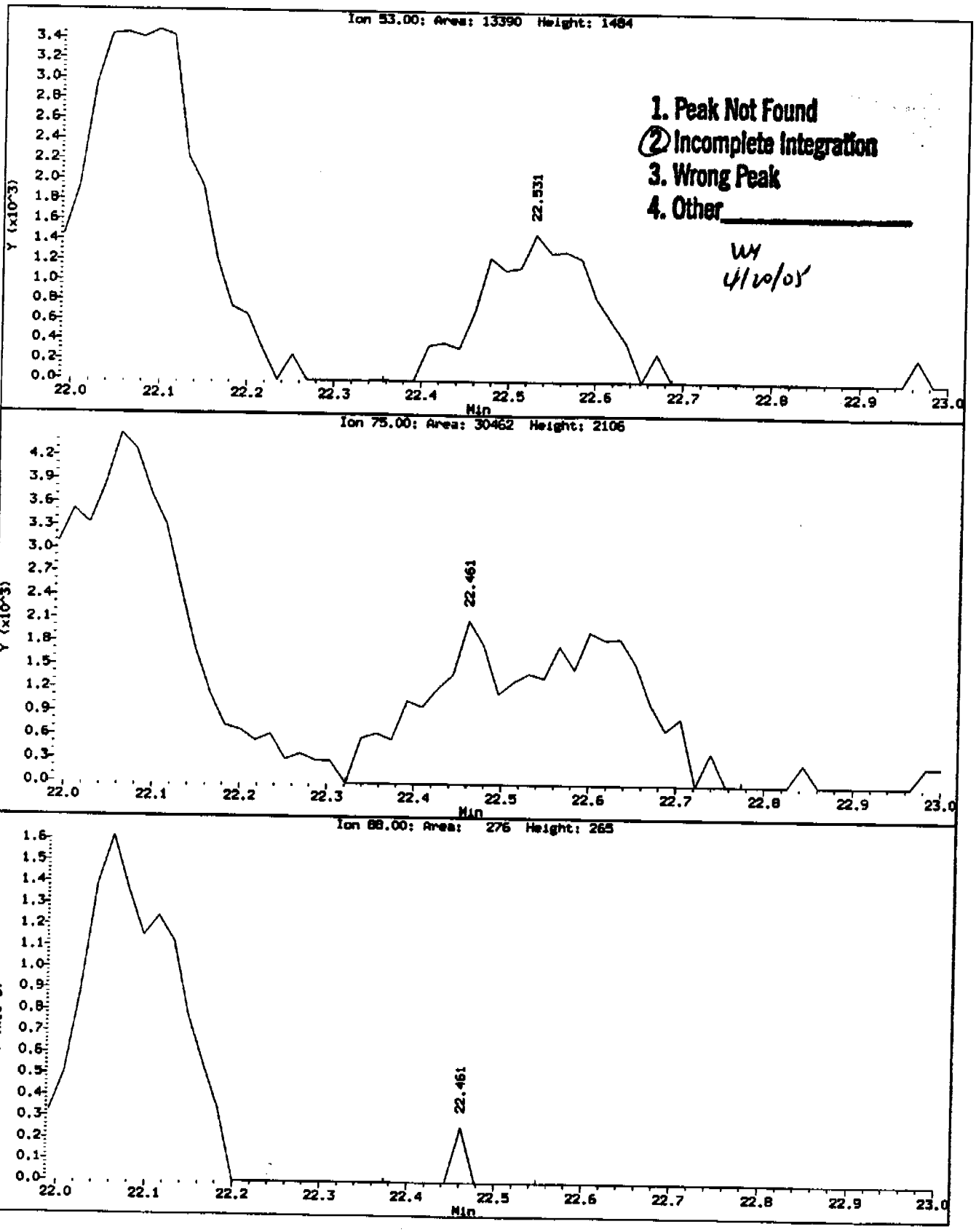
Data File: \\elsvr01\chem\MSG.i\G050417A.b\GCAL5163.D
Injection Date: 18-APR-2005 01:08
Instrument: MSG.i
Client Sample ID: VSTD005

Compound: Dimethyl disulfide
CAS Number: 624-92-0



Data File: \\stlsvr01\chem\MSG.i\G050417A.b\GCAL5163.D
Injection Date: 18-APR-2005 01:08
Instrument: MSG.i
Client Sample ID: VSTD005

Compound: trans-1,4-dichloro-2-butene
CAS Number: 110-57-6



LOT# F5D220273

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5164.D
Report Date: 20-Apr-2005 10:59

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSG.i\G050417A.b\GCAL5164.D
Lab Smp Id: VSTD002.5 Client Smp ID: VSTD002.5
Inj Date : 18-APR-2005 01:43
Operator : JDH Inst ID: MSG.i
Smp Info : VSTD002.5;G050417A.b
Misc Info : VBLKG107A.B;
Comment : NONE
Method : \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Meth Date : 20-Apr-2005 10:59 hanw Quant Type: ISTD
Cal Date : 18-APR-2005 01:43 Cal File: GCAL5164.D
Als bottle: 7 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLVOA04

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume
Vo	5.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	2.199	2.199	(0.236)	73047	2.50000	2.917(a)
2 Freon-114	135	2.321	2.321	(0.249)	33193	2.50000	2.971(aM)
3 Chloromethane	50	2.460	2.460	(0.264)	46105	2.50000	2.657(a)
4 Vinyl Chloride	62	2.565	2.565	(0.275)	37394	2.50000	3.006(a)
5 Bromomethane	94	3.052	3.052	(0.328)	61354	2.50000	3.454(a)
6 Chloroethane	64	3.139	3.139	(0.337)	25725	2.50000	2.988(a)
7 Trichlorofluoromethane	101	3.435	3.435	(0.369)	133316	2.50000	2.796(a)
8 Diethyl ether	59	3.783	3.783	(0.406)	58534	5.00000	5.316(a)
9 1,1,2-Trichlorofluoroethane	101	3.957	3.957	(0.425)	111036	2.50000	2.720(a)
10 Acrolein	56	3.975	3.975	(0.427)	14791	12.5000	14.41(a)
11 Acetone	43	4.044	4.044	(0.434)	16546	2.50000	3.611(a)
12 1,1-Dichloroethene	96	4.183	4.183	(0.449)	46265	2.50000	3.087(a)
13 Acetonitrile	41	4.410	4.410	(0.473)	9146	12.5000	14.00(a)
14 Iodomethane	142	4.601	4.601	(0.494)	34066	2.50000	2.467(a)
15 Methyl acetate	74	4.619	4.619	(0.496)	6320	2.50000	2.667(aM)
16 Allyl chloride	39	4.688	4.688	(0.503)	53880	2.50000	2.564(a)
17 Methylene Chloride	84	4.845	4.845	(0.520)	67979	2.50000	3.441(a)
18 Carbon Disulfide	76	4.862	4.862	(0.522)	116949	2.50000	2.405(a)
19 Acrylonitrile	53	5.054	5.054	(0.542)	34859	12.5000	12.49(a)
20 MTBE	73	5.071	5.071	(0.544)	119729	2.50000	2.513(a)
22 n-Hexane	57	5.350	5.350	(0.574)	83109	2.50000	2.829(a)
23 1,1-Dichloroethane	63	5.941	5.941	(0.638)	116206	2.50000	2.594(a)

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5164.D
Report Date: 20-Apr-2005 10:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 Vinyl acetate	43	5.959	5.959	(0.639)	89691	2.50000	2.513 (a)
	25 2-Chloro-1,3-butadiene	53	6.063	6.063	(0.651)	85291	2.50000	2.354 (a)
	26 2-Butoxyethanol	57	6.498	6.498	(0.697)	4192	125.000	121.8 (M)
	27 2-Butanone	43	6.690	6.690	(0.718)	12413	2.50000	2.241 (a)
	28 Propionitrile	54	6.829	6.829	(0.733)	11310	12.5000	9.773
	29 2,2-Dichloropropane	77	6.864	6.864	(0.737)	109331	2.50000	2.555 (a)
	30 cis-1,2-Dichloroethene	96	6.968	6.968	(0.748)	60252	2.50000	2.661
	31 Ethyl acetate	43	6.968	6.968	(0.748)	77938	5.00000	4.708 (a)
	32 Methacrylonitrile	41	7.142	7.142	(0.767)	122528	12.5000	12.16 (a)
	33 Chloroform	83	7.247	7.247	(0.778)	152705	2.50000	2.813 (a)
	34 Bromochloromethane	128	7.543	7.543	(0.809)	32243	2.50000	2.508 (a)
	35 Isobutanol	42	7.647	7.647	(0.821)	55816	50.0000	52.59 (a)
$	36 Dibromofluoromethane	113	7.630	7.630	(0.819)	96851	2.50000	2.649 (a)
	37 Tetrahydrofuran	71	7.682	7.682	(0.824)	17166	12.5000	12.20 (a)
M	38 1,2-Dichloroethene (total)	96				112227	5.00000	5.238
	39 1,1,1-Trichloroethane	97	7.995	7.995	(0.858)	117097	2.50000	2.488 (a)
	40 Cyclohexane	84	8.013	8.013	(0.860)	58609	2.50000	2.558 (a)
	41 1,1-Dichloropropene	75	8.309	8.309	(0.892)	96341	2.50000	2.599 (a)
	42 Carbon Tetrachloride	117	8.483	8.483	(0.910)	104670	2.50000	2.478 (a)
$	43 1,2-Dichloroethane-d4	67	8.622	8.622	(0.925)	35499	2.50000	2.694 (a)
	44 n-Heptane	43	8.692	8.692	(0.933)	72242	2.50000	2.435 (a)
	45 n-Butanol	56	8.674	8.674	(0.931)	28681	25.0000	22.87 (a)
	46 1,2-Dichloroethane	62	8.813	8.813	(0.946)	87637	2.50000	2.594 (a)
	47 Benzene	78	8.848	8.848	(0.950)	157632	2.50000	2.719 (a)
*	48 Fluorobenzene	96	9.318	9.318	(1.000)	3214949	50.0000	
	49 Trichloroethene	130	10.189	10.189	(1.093)	71991	2.50000	2.677 (a)
	50 Methylcyclohexane	55	10.345	10.345	(1.110)	85380	2.50000	2.581 (aM)
	51 1,2-Dichloropropane	63	10.572	10.572	(1.134)	69811	2.50000	2.698 (a)
	52 Methyl methacrylate	69	10.850	10.850	(1.164)	29679	2.50000	2.346 (a)
	53 Bromodichloromethane	83	11.146	11.146	(1.196)	124162	2.50000	2.344 (a)
	54 Dibromomethane	93	11.268	11.268	(1.209)	61026	2.50000	2.582 (a)
	55 1,4-Dioxane	88	11.320	11.320	(1.215)	4552	50.0000	30.91 (aM)
	56 2-Nitropropane	43	11.355	11.355	(1.219)	48161	2.50000	2.552 (aM)
	58 4-Methyl-2-pentanone	43	12.121	12.121	(1.301)	55853	2.50000	2.125 (a)
	59 cis-1,3-Dichloropropene	75	12.556	12.556	(1.347)	87758	2.50000	2.356 (a)
	60 Dimethyl disulfide	94	12.956	12.956	(1.390)	26696	2.50000	3.544 (aM)
$	61 Toluene-d8	98	13.165	13.165	(0.753)	152539	2.50000	2.692 (a)
	62 Toluene	91	13.374	13.374	(0.765)	185403	2.50000	1.502 (a)
	63 trans-1,3-Dichloropropene	75	13.948	13.948	(0.798)	65087	2.50000	2.144 (a)
	64 Ethyl methacrylate	69	14.035	14.035	(0.803)	61959	2.50000	2.205 (a)
	65 1,1,2-Trichloroethane	97	14.349	14.349	(0.821)	49230	2.50000	2.497 (a)
	67 1,3-Dichloropropane	76	15.097	15.097	(0.864)	84262	2.50000	2.609 (a)
	68 Tetrachloroethene	164	15.149	15.149	(0.867)	61423	2.50000	2.599 (a)
	69 Chlorodibromomethane	129	15.724	15.724	(0.899)	64060	2.50000	2.087 (a)
	70 1,2-Dibromoethane	107	16.316	16.316	(0.933)	54152	2.50000	2.201 (a)
*	71 Chlorobenzene-d5	117	17.482	17.482	(1.000)	2022273	50.0000	
	72 Chlorobenzene	112	17.604	17.604	(1.007)	109313	2.50000	2.542 (a)
	73 1,1,1,2-Tetrachloroethane	131	17.760	17.760	(1.016)	53870	2.50000	2.332 (a)
	74 Ethylbenzene	106	17.830	17.830	(1.020)	49527	2.50000	2.642 (a)
	75 m,p-Xylenes	106	18.074	18.074	(1.034)	119817	5.00000	5.022
	76 o-Xylene	106	19.431	19.431	(1.112)	57025	2.50000	2.484 (a)
	77 Styrene	104	19.553	19.553	(1.118)	92533	2.50000	2.466 (a)
M	78 Xylenes (total)	106				176842	7.50000	7.506
	79 Bromoform	173	20.493	20.493	(1.172)	37582	2.50000	1.879 (a)

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5164.D
Report Date: 20-Apr-2005 10:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
80	Isopropylbenzene	105	20.632	20.632	(1.180)	164786	2.50000	2.475(a)
81	Cyclohexanone	55	20.772	20.772	(1.188)	32710	25.0000	26.79(a)
82	1,1,2,2-Tetrachloroethane	83	21.259	21.259	(1.216)	65367	2.50000	2.378(a)
$ 83	4-Bromofluorobenzene	95	21.398	21.398	(0.880)	109135	2.50000	2.769(a)
84	1,2,3-Trichloropropane	110	21.694	21.694	(0.892)	17493	2.50000	2.514(a)
85	Bromobenzene	156	21.955	21.955	(0.903)	55913	2.50000	2.710(a)
86	n-Propylbenzene	91	22.008	22.008	(0.905)	227342	2.50000	2.649(a)
87	2-Chlorotoluene	91	22.443	22.443	(0.923)	165202	2.50000	2.648(a)
88	trans-1,4-dichloro-2-butene	53	22.495	22.495	(0.925)	5096	2.50000	2.044(a)
89	1,3,5-Trimethylbenzene	105	22.512	22.512	(0.926)	154475	2.50000	2.667(a)
90	4-Chlorotoluene	91	22.599	22.599	(0.929)	178008	2.50000	2.557(a)
91	t-Butylbenzene	119	23.400	23.400	(0.962)	179869	2.50000	2.664(a)
92	Pentachloroethane	167	23.435	23.435	(0.964)	32036	2.50000	2.150(a)
93	1,2,4-Trimethylbenzene	105	23.470	23.470	(0.965)	159920	2.50000	2.792(a)
94	sec-Butylbenzene	105	23.835	23.835	(0.980)	211176	2.50000	2.696(a)
95	4-Isopropyltoluene	119	24.114	24.114	(0.991)	152295	2.50000	2.642(a)
96	1,3-Dichlorobenzene	146	24.183	24.183	(0.994)	104226	2.50000	2.879(a)
* 97	1,4 Dichlorobenzene-d4	152	24.323	24.323	(1.000)	1148473	50.0000	
98	1,4-Dichlorobenzene	146	24.392	24.392	(1.003)	110406	2.50000	2.855(a)
99	n-Butylbenzene	91	24.793	24.793	(1.019)	165030	2.50000	2.712(a)
100	1,2-Dichlorobenzene	146	24.949	24.949	(1.026)	95086	2.50000	2.936(a)
101	1,2-Dibromo-3-chloropropane	157	26.028	26.028	(1.070)	9846	2.50000	2.044(a)
102	1,3,5-Trichlorobenzene	180	26.324	26.324	(1.082)	77401	2.50000	2.640(a)
103	1,2,4-Trichlorobenzene	180	27.021	27.021	(1.111)	77995	2.50000	3.100(a)
104	Hexachlorobutadiene	225	27.177	27.177	(1.117)	62411	2.50000	3.037(a)
105	Naphthalene	128	27.282	27.282	(1.122)	95489	2.50000	2.762(a)
106	1,2,3-Trichlorobenzene	180	27.525	27.525	(1.132)	73898	2.50000	3.241(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5164.D
Report Date: 20-Apr-2005 10:59

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

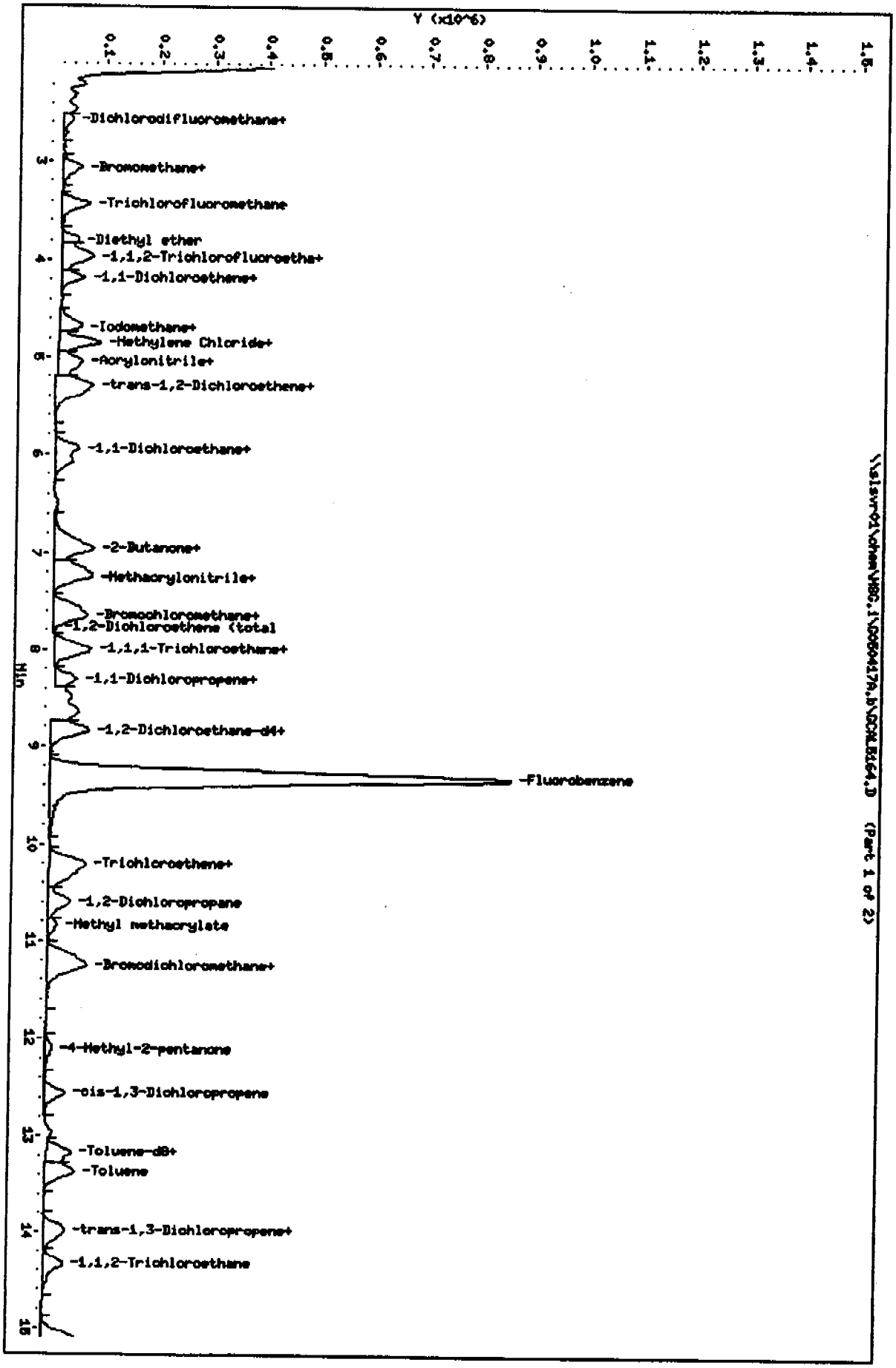
Instrument ID: MSG.i
Lab File ID: GCAL5164.D
Lab Smp Id: VSTD002.5
Analysis Type: VOA
Quant Type: ISTD
Operator: JDH
Method File: \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Misc Info: VBLKG107A.B;

Calibration Date: 17-APR-2005
Calibration Time: 23:27
Client Smp ID: VSTD002.5
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	2924725	1462363	5849450	3214949	9.92
71 Chlorobenzene-d5	2135082	1067541	4270164	2022273	-5.28
97 1,4 Dichlorobenze	1343943	671972	2687886	1148473	-14.54

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	9.36	8.86	9.86	9.32	-0.39
71 Chlorobenzene-d5	17.54	17.04	18.04	17.48	-0.31
97 1,4 Dichlorobenze	24.36	23.86	24.86	24.32	-0.15

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.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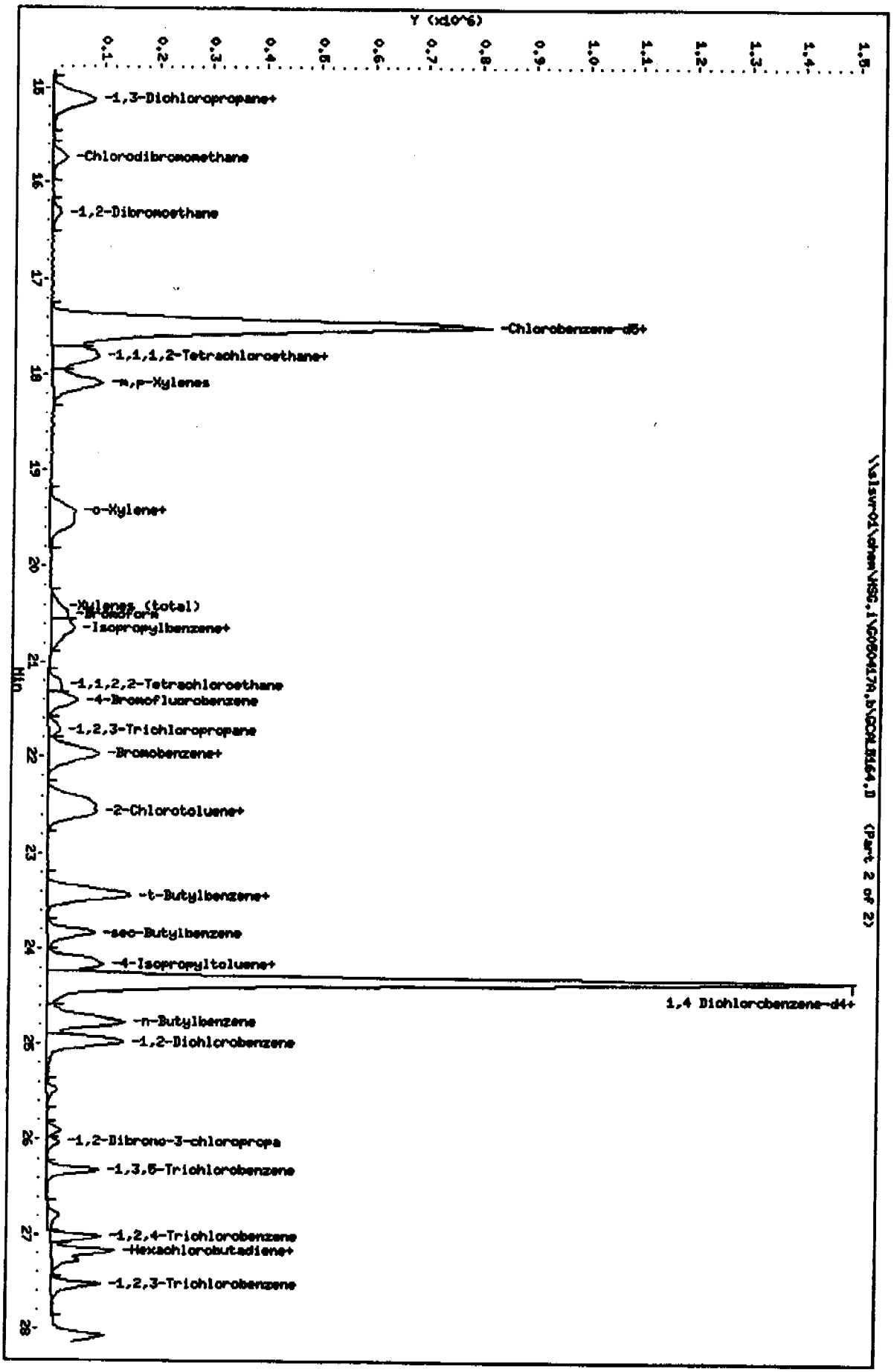
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
Min
3
4
5
6
7
8
9
10
11
12
13
14
15
-Dichlorodifluoromethane+
-Bromomethane+
-Trichlorofluoromethane+
-Diethyl ether
-1,1,2-Trichlorofluoroetha+
-1,1-Dichloroethene+
-Iodomethane+
-Methylene Chloride+
-Acrylonitrile+
-trans-1,2-Dichloroethene+
-1,1-Dichloroethane+
-2-Butanone+
-Methacrylonitrile+
-Bromochloromethane+
-1,2-Dichloroethene (total
-1,1,1-Trichloroethane+
-1,1-Dichloropropene+
-1,2-Dichloroethane-d4+
-Fluorobenzene
-Trichloroethene+
-1,2-Dichloropropane
-Methyl methacrylate
-Bromodichloromethane+
-4-Methyl-2-pentanone
-cis-1,3-Dichloropropene
-Toluene-d8+
-Toluene
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane
Data File: \\slsvr01\chem\HSC.i\060417b.b\GCHLB164.D
Date : 18-APR-2006 01:43
Client ID: VSTD002.5
Sample Info: VSTD002.5,i060417b,b
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: HSC.i
Operator: JDH
Column diameter: 0.53
\\slsvr01\chem\HSC.i\060417b.b\GCHLB164.D (Part 1 of 2)


Y (x10^6)
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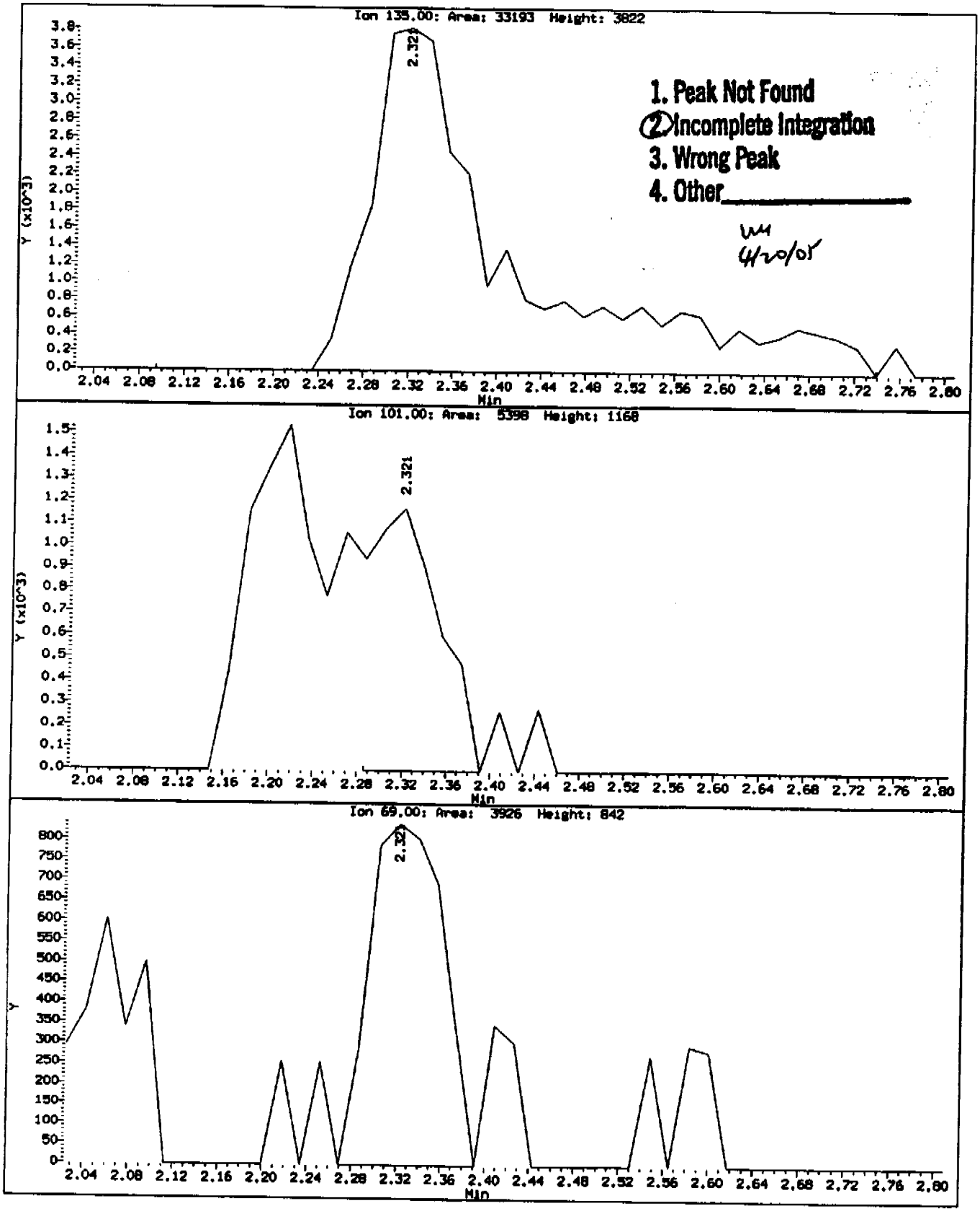
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
Min
15
16
17
18
19
20
21
22
23
24
25
26
27
28
-1,3-Dichloropropane+
-Chlorodibromomethane
-1,2-Dibromoethane
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
-o-Xylene+
-Xylenes (total)
-Isopropylbenzene+
-1,1,2,2-Tetrachloroethane
-4-Bromofluorobenzene
-1,2,3-Trichloropropane
-Bromobenzene+
-2-Chlorotoluene+
-t-Butylbenzene+
-sec-Butylbenzene
-4-Isopropyltoluene+
1,4 Dichlorobenzene-d4+
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloroprop
-1,3,5-Trichlorobenzene
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene+
-1,2,3-Trichlorobenzene
Data File: \\slsvr01\chem\MSG.i\G050417h.b\GCRL5164.D
Date : 18-APR-2005 01:43
Client ID: VSTD002.5
Sample Info: VSTD002.5;G050417h.b
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: MSG.i
Operator: JDH
Column diameter: 0.53
\\slsvr01\chem\MSG.i\G050417h.b\GCRL5164.D (Part 2 of 2)

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5164.D
Injection Date: 18-APR-2005 01:43
Instrument: MSG.i
Client Sample ID: VSTD002.5

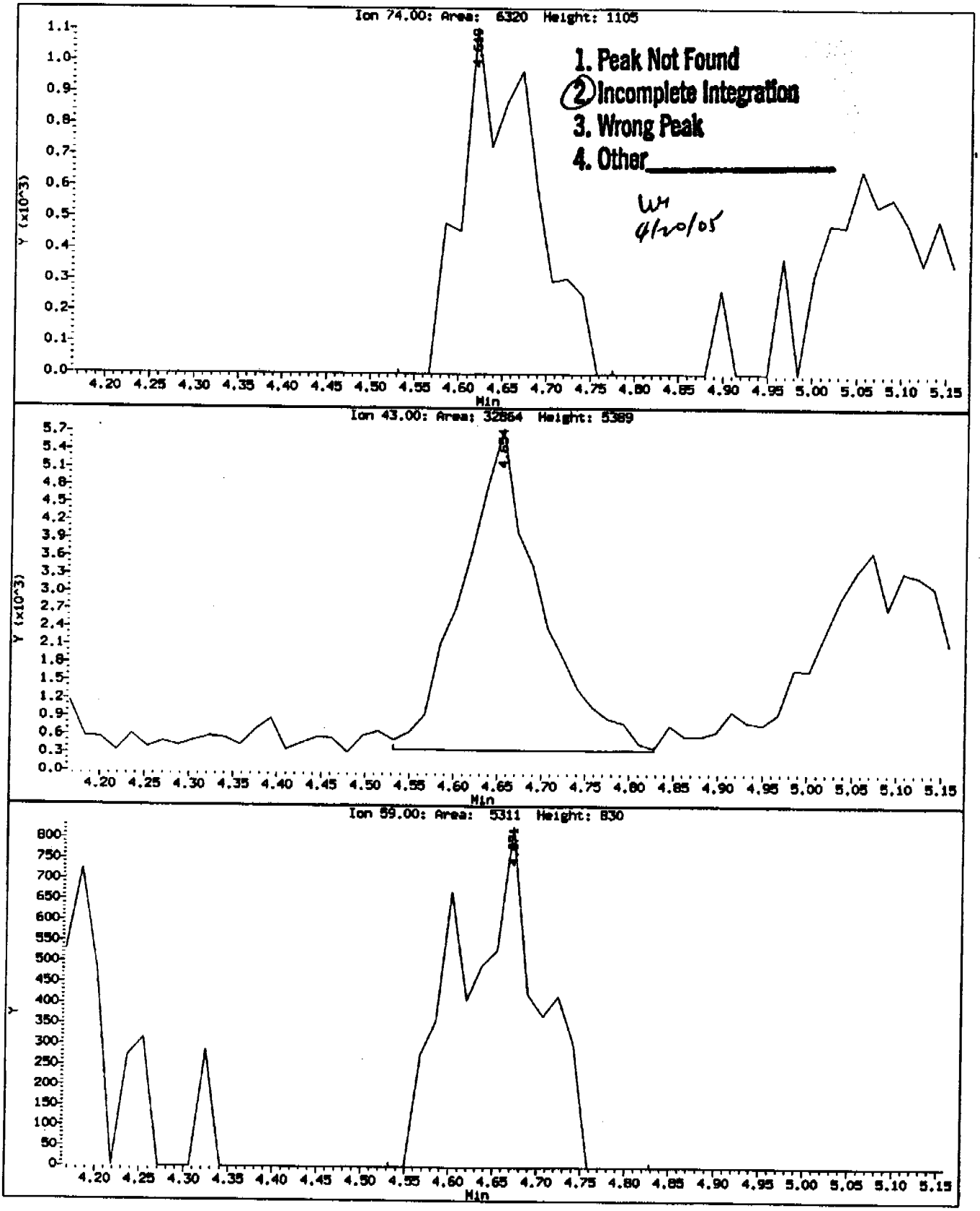
Compound: Freon-114
CAS Number: 374-07-2



LOT# F5D220273

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5164.D
Injection Date: 18-APR-2005 01:43
Instrument: MSG.i
Client Sample ID: VSTD002.5

Compound: Methyl acetate
CAS Number: 79-20-9



LOT# F5D220273

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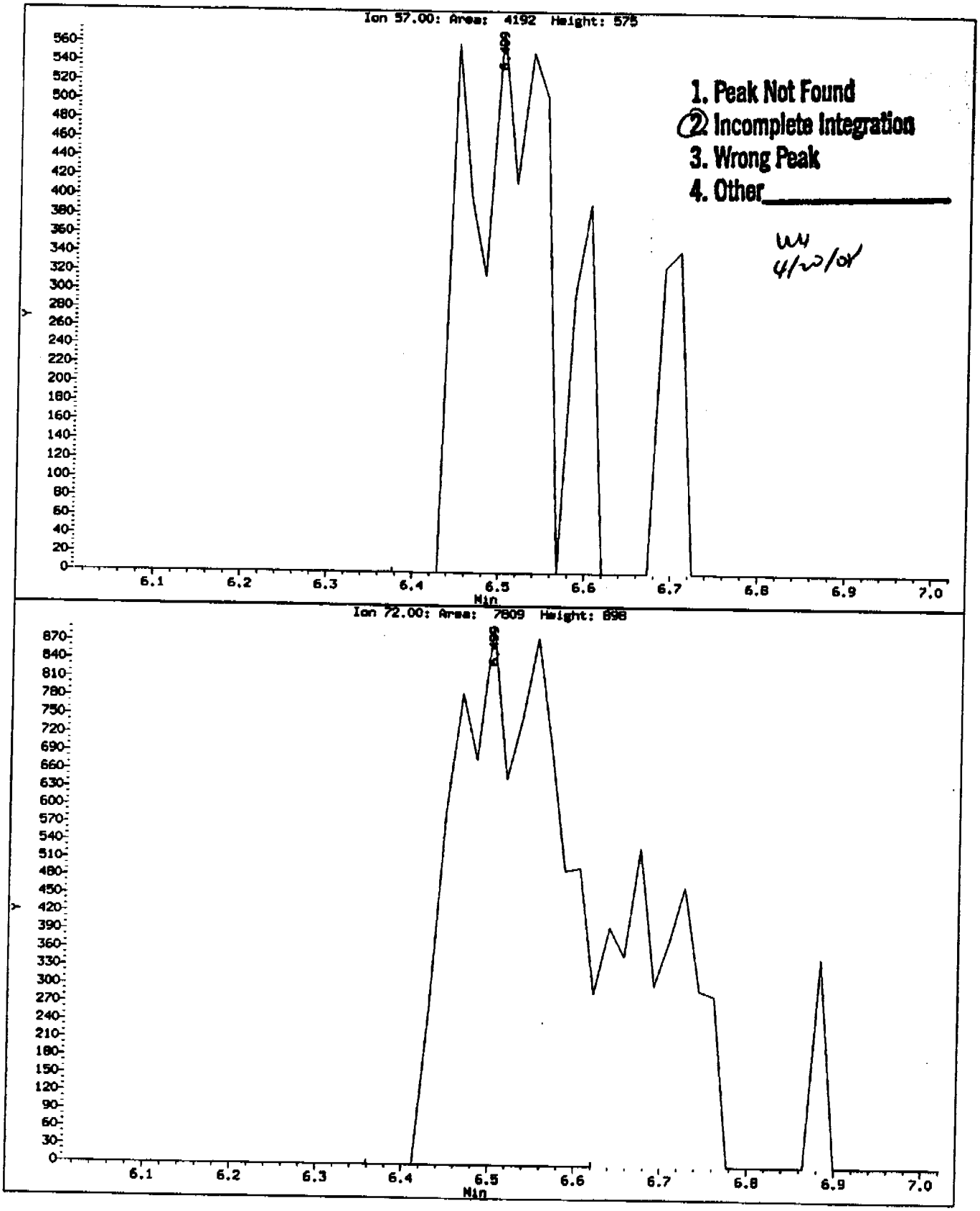
Injection Date: 18-APR-2005 01:43
Instrument: MSG.i
Client Sample ID: VSTD002.5

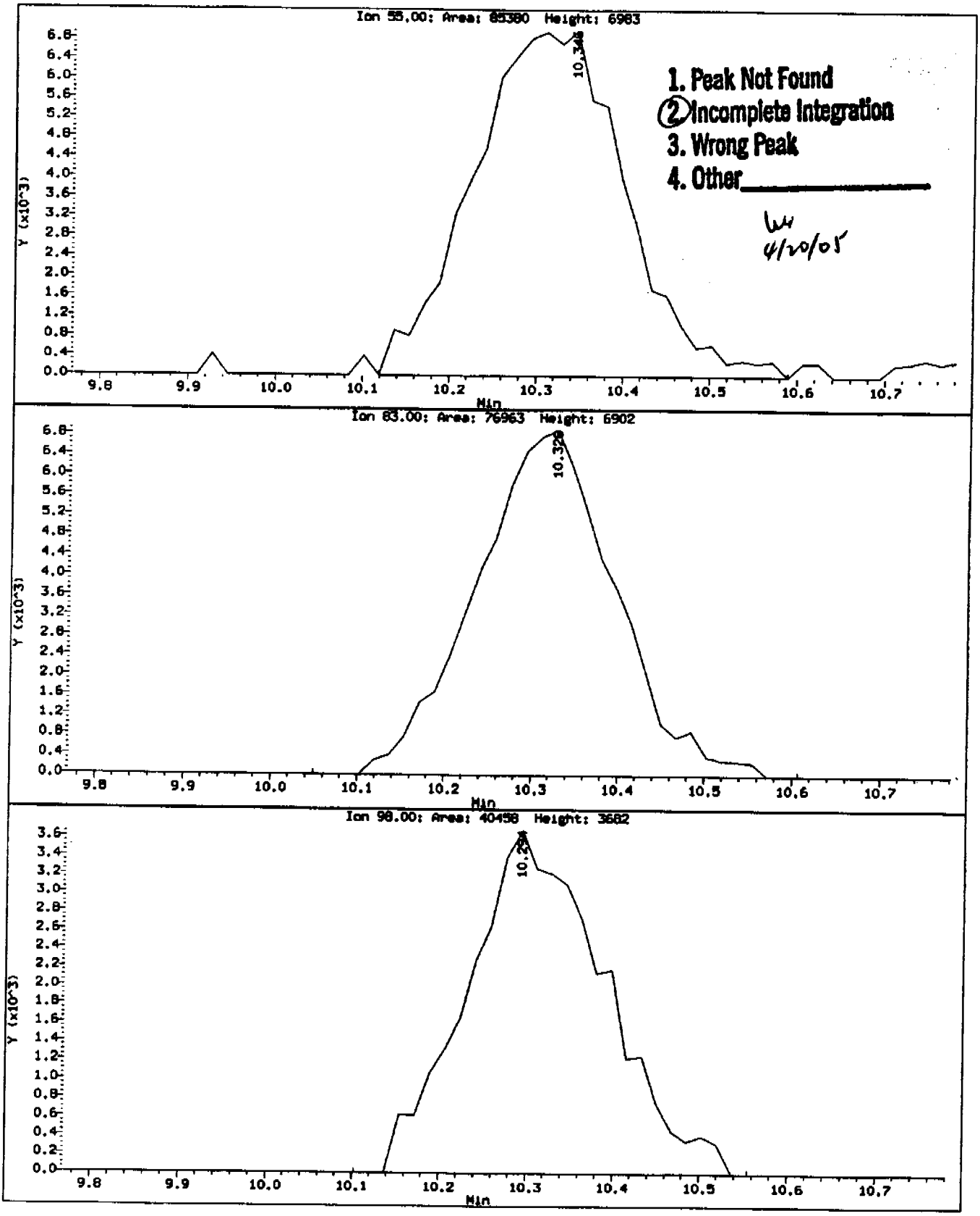
Compound: 2-Butoxyethanol
CAS Number: 111-76-2



WH
4/20/05

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5164.D
Injection Date: 18-APR-2005 01:43
Instrument: MSG.i
Client Sample ID: VSTD002.5

Compound: Methylcyclohexane
CAS Number: 108-87-2



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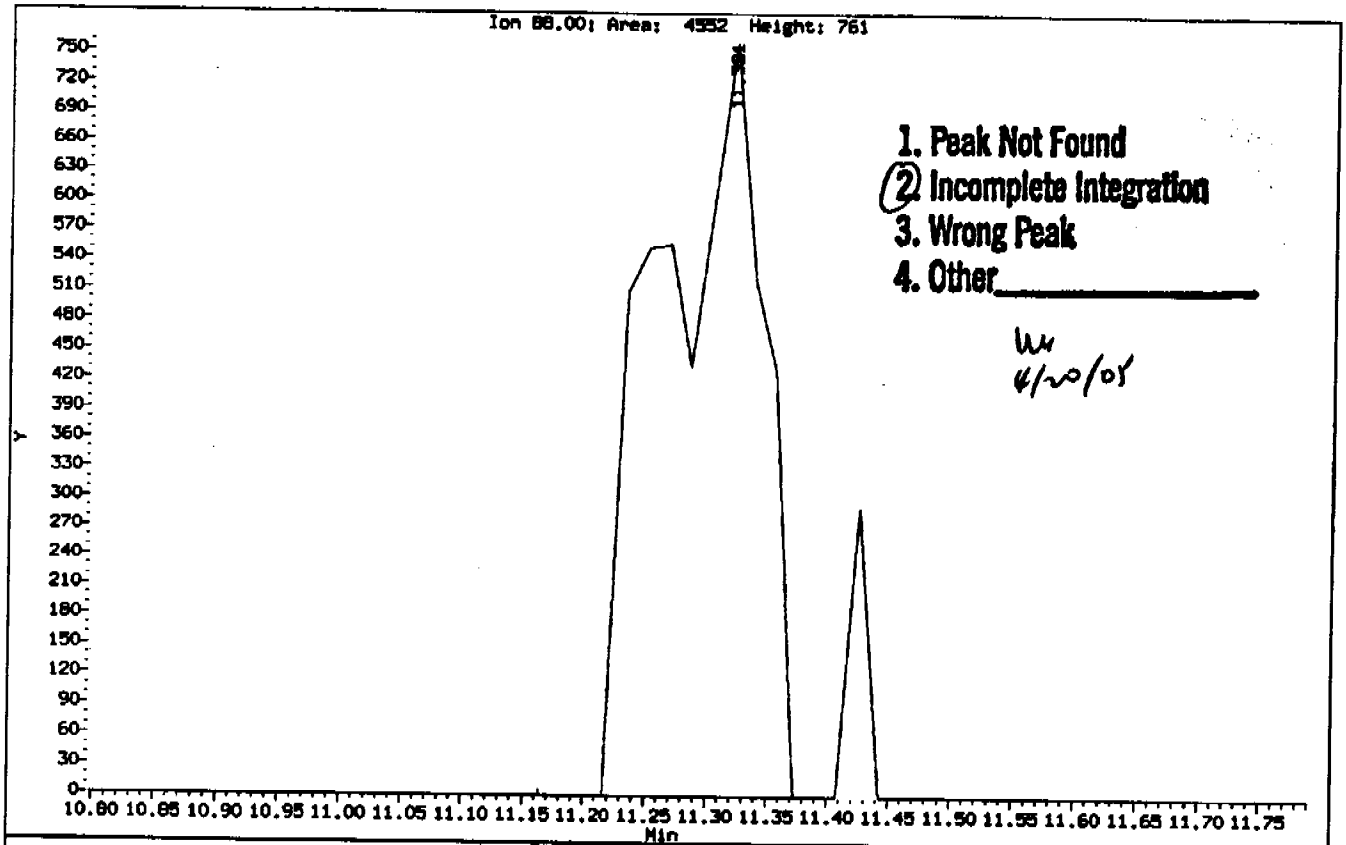
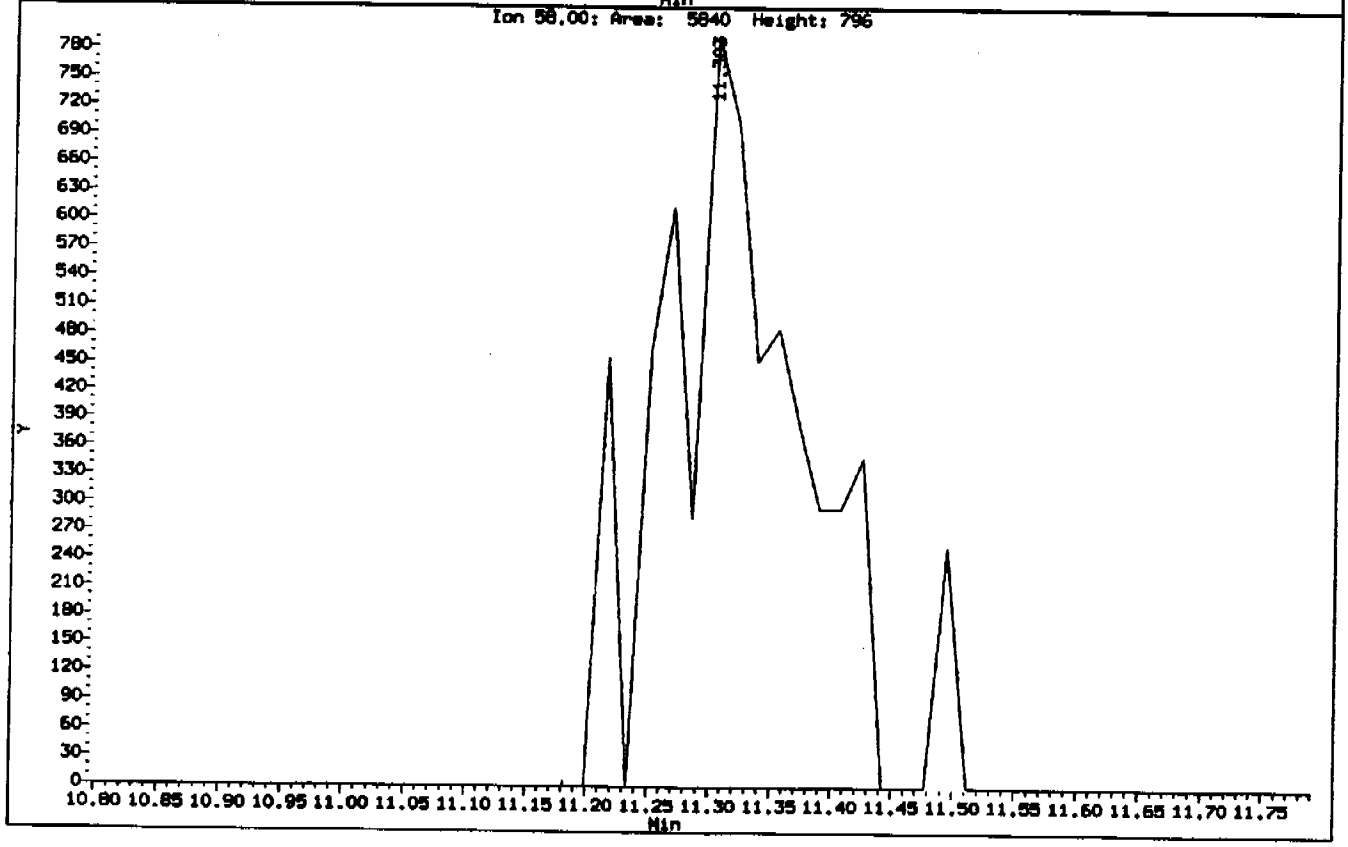
Injection Date: 18-APR-2005 01:43
Instrument: MSG.i
Client Sample ID: VSTD002.5

Compound: 1,4-Dioxane
CAS Number: 123-91-1

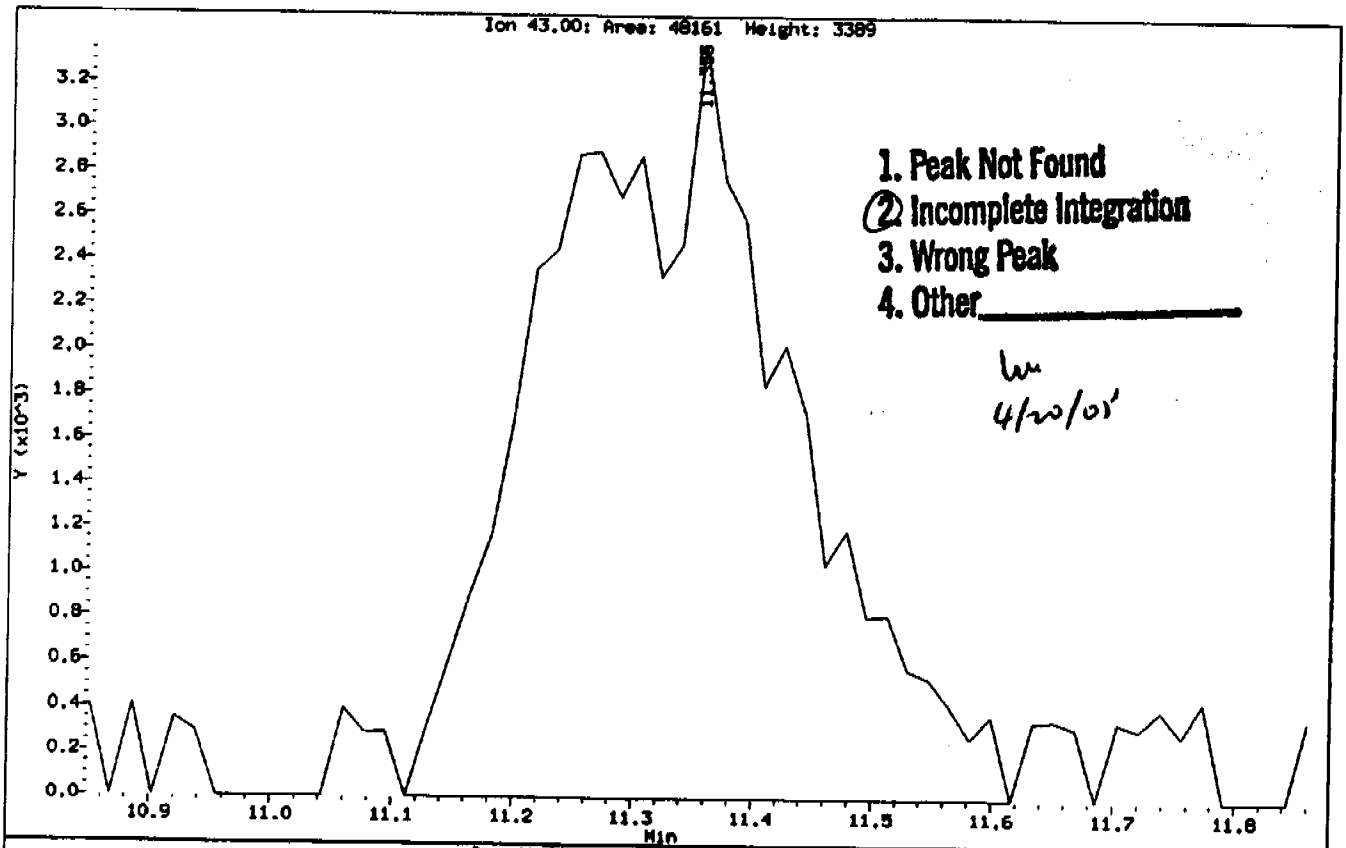




LOT# F5D220273

Data File: \\slevr01\chem\MSG.i\G050417A.b\GCAL5164.D
Injection Date: 18-APR-2005 01:43
Instrument: MSG.i
Client Sample ID: VSTD002.5

Compound: 2-Nitropropane
CAS Number: 79-46-9



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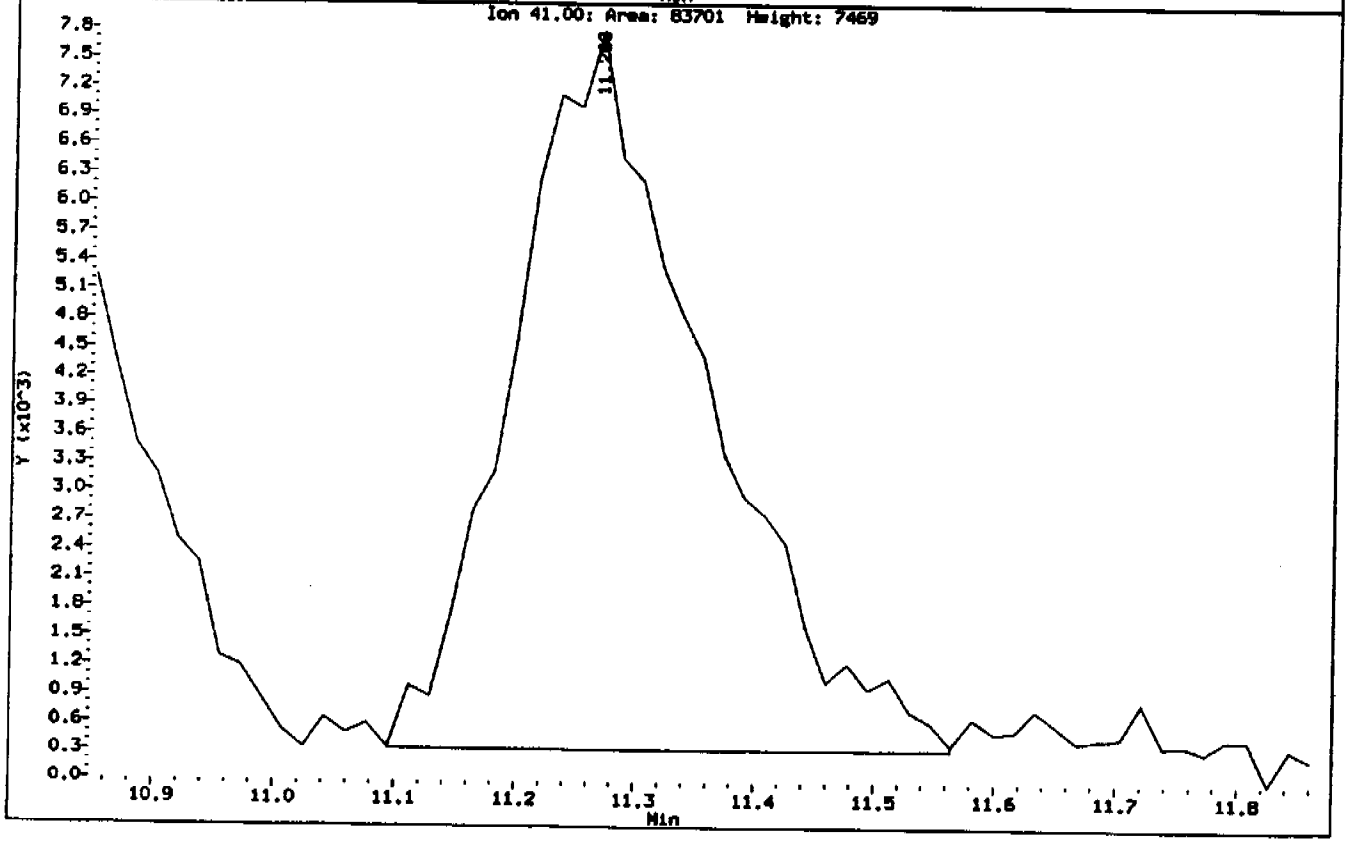
4/20/05



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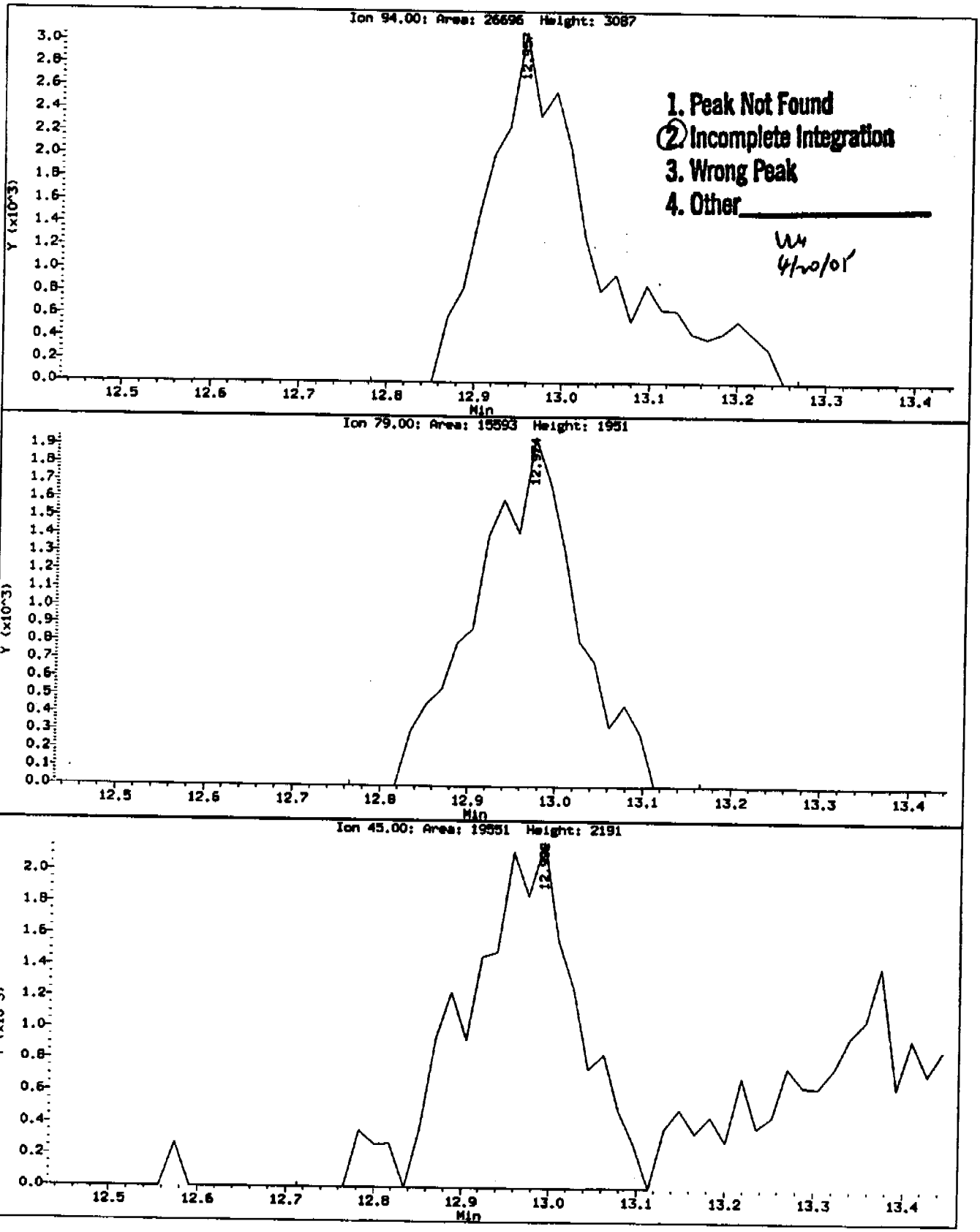
Injection Date: 18-APR-2005 01:43
Instrument: MSG.i
Client Sample ID: VSTD002.5

Compound: Dimethyl disulfide
CAS Number: 624-92-0



Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5165.D
Report Date: 20-Apr-2005 10:59

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSG.i\G050417A.b\GCAL5165.D
Lab Smp Id: VSTD100 Client Smp ID: VSTD0200
Inj Date : 18-APR-2005 02:17
Operator : JDH Inst ID: MSG.i
Smp Info : VSTD100;G050417A.b
Misc Info : VBLKG107A.B;
Comment : NONE
Method : \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Meth Date : 20-Apr-2005 10:59 hanw Quant Type: ISTD
Cal Date : 18-APR-2005 02:17 Cal File: GCAL5165.D
Als bottle: 8 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLVOA04

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume
Vo	5.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	2.186	2.186	(0.235)	1987154	100.000	77.26(M)
2 Freon-114	135	2.308	2.308	(0.248)	905054	100.000	78.85(M)
3 Chloromethane	50	2.464	2.464	(0.265)	1660581	100.000	93.16
4 Vinyl Chloride	62	2.551	2.551	(0.274)	1070940	100.000	83.80
5 Bromomethane	94	3.039	3.039	(0.327)	1310533	100.000	71.83
6 Chloroethane	64	3.126	3.126	(0.336)	711936	100.000	80.50
7 Trichlorofluoromethane	101	3.422	3.422	(0.368)	4427756	100.000	90.40
8 Diethyl ether	59	3.805	3.805	(0.409)	2182393	200.000	192.9
9 1,1,2-Trichlorofluoroethane	101	3.944	3.944	(0.424)	4030970	100.000	96.11
10 Acrolein	56	3.961	3.961	(0.426)	539494	500.000	511.6
11 Acetone	43	4.066	4.066	(0.437)	423181	100.000	89.91
12 1,1-Dichloroethene	96	4.170	4.170	(0.448)	1735454	100.000	112.7
13 Acetonitrile	41	4.414	4.414	(0.474)	356199	500.000	530.8
14 Iodomethane	142	4.588	4.588	(0.493)	1517964	100.000	107.0
15 Methyl acetate	74	4.657	4.657	(0.501)	232840	100.000	95.64
16 Allyl chloride	39	4.657	4.657	(0.501)	1977873	100.000	91.63
17 Methylene Chloride	84	4.832	4.832	(0.519)	1830875	100.000	90.21
18 Carbon Disulfide	76	4.849	4.849	(0.521)	5019697	100.000	100.5
19 Acrylonitrile	53	5.040	5.040	(0.542)	1583018	500.000	552.1
20 MTBE	73	5.093	5.093	(0.547)	4659521	100.000	95.21
21 trans-1,2-Dichloroethene	96	5.267	5.267	(0.566)	2006004	100.000	96.84
22 n-Hexane	57	5.336	5.336	(0.574)	2898837	100.000	96.07

HW 4/20/05

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5165.D
Report Date: 20-Apr-2005 10:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	5.911	5.911	(0.635)	4529349	100.000	98.43
	24 Vinyl acetate	43	5.946	5.946	(0.639)	3845763	100.000	104.9
	25 2-Chloro-1,3-butadiene	53	6.067	6.067	(0.652)	3716897	100.000	99.85
	26 2-Butoxyethanol	57	6.520	6.520	(0.701)	191577	5000.00	5418 (A)
	27 2-Butanone	43	6.677	6.677	(0.718)	635655	100.000	111.7
	28 Propionitrile	54	6.798	6.798	(0.731)	629510	500.000	529.5
	29 2,2-Dichloropropane	77	6.851	6.851	(0.736)	4255848	100.000	96.81
	30 cis-1,2-Dichloroethene	96	6.938	6.938	(0.746)	2366633	100.000	101.7
	31 Ethyl acetate	43	6.990	6.990	(0.751)	3614203	200.000	212.5 (A)
	32 Methacrylonitrile	41	7.129	7.129	(0.766)	5415461	500.000	523.3
	33 Chloroform	83	7.251	7.251	(0.779)	5451467	100.000	97.76
	34 Bromochloromethane	128	7.547	7.547	(0.811)	1352606	100.000	102.4
	35 Isobutanol	42	7.651	7.651	(0.822)	2295551	2000.00	2105
$	36 Dibromofluoromethane	113	7.634	7.634	(0.820)	3853038	100.000	102.6
	37 Tetrahydrofuran	71	7.651	7.651	(0.822)	808831	500.000	559.8
M	38 1,2-Dichloroethene (total)	96				4372637	200.000	198.6
	39 1,1,1-Trichloroethane	97	7.982	7.982	(0.858)	4950300	100.000	102.4
	40 Cyclohexane	84	7.982	7.982	(0.858)	2289499	100.000	97.29
	41 1,1-Dichloropropene	75	8.295	8.295	(0.892)	3762393	100.000	98.79
	42 Carbon Tetrachloride	117	8.469	8.469	(0.910)	4653165	100.000	107.2
$	43 1,2-Dichloroethane-d4	67	8.626	8.626	(0.927)	1352823	100.000	99.96
	44 n-Heptane	43	8.661	8.661	(0.931)	3169034	100.000	104.0
	45 n-Butanol	56	8.661	8.661	(0.931)	1456544	1000.00	1131
	46 1,2-Dichloroethane	62	8.818	8.818	(0.948)	3433843	100.000	98.96
	47 Benzene	78	8.835	8.835	(0.949)	5970371	100.000	100.2
*	48 Fluorobenzene	96	9.305	9.305	(1.000)	3302559	50.0000	
	49 Trichloroethene	130	10.175	10.175	(1.094)	2801022	100.000	101.4
	50 Methylcyclohexane	55	10.280	10.280	(1.105)	3224116	100.000	94.88
	51 1,2-Dichloropropane	63	10.593	10.593	(1.138)	2609062	100.000	98.17
	52 Methyl methacrylate	69	10.837	10.837	(1.165)	1325227	100.000	102.0
	53 Bromodichloromethane	83	11.133	11.133	(1.196)	5700151	100.000	104.8
	54 Dibromomethane	93	11.237	11.237	(1.208)	2496400	100.000	102.8
	55 1,4-Dioxane	88	11.289	11.289	(1.213)	355985	2000.00	2353
	56 2-Nitropropane	43	11.359	11.359	(1.221)	1996761	100.000	103.0 (M)
	57 2-chloroethyl vinyl ether	63	12.003	12.003	(1.290)	1131679	100.000	97.63
	58 4-Methyl-2-pentanone	43	12.073	12.073	(1.297)	3162323	100.000	117.1
	59 cis-1,3-Dichloropropene	75	12.543	12.543	(1.348)	3961791	100.000	103.5
	60 Dimethyl disulfide	94	12.943	12.943	(1.391)	2989969	100.000	106.0
$	61 Toluene-d8	98	13.152	13.152	(0.753)	5686070	100.000	102.4
	62 Toluene	91	13.361	13.361	(0.765)	6922190	100.000	112.6
	63 trans-1,3-Dichloropropene	75	13.918	13.918	(0.797)	3305553	100.000	111.2
	64 Ethyl methacrylate	69	14.022	14.022	(0.803)	2835239	100.000	103.0
	65 1,1,2-Trichloroethane	97	14.318	14.318	(0.820)	1712646	100.000	88.70
	66 2-Hexanone	43	14.492	14.492	(0.830)	1185931	100.000	101.4
	67 1,3-Dichloropropane	76	15.049	15.049	(0.861)	2814856	100.000	88.98
	68 Tetrachloroethene	164	15.136	15.136	(0.866)	2089240	100.000	90.26
	69 Chlorodibromomethane	129	15.711	15.711	(0.899)	3259695	100.000	108.4
	70 1,2-Dibromoethane	107	16.302	16.302	(0.933)	2541378	100.000	105.4
*	71 Chlorobenzene-d5	117	17.469	17.469	(1.000)	1980931	50.0000	
	72 Chlorobenzene	112	17.573	17.573	(1.006)	4230941	100.000	100.4
	73 1,1,1,2-Tetrachloroethane	131	17.747	17.747	(1.016)	2442972	100.000	108.0
	74 Ethylbenzene	106	17.817	17.817	(1.020)	1839770	100.000	100.2
	75 m,p-Xylenes	106	18.060	18.060	(1.034)	4801934	200.000	205.5
	76 o-Xylene	106	19.418	19.418	(1.112)	2317869	100.000	103.0

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5165.D
Report Date: 20-Apr-2005 10:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	77 Styrene	104	19.523	19.523	(1.118)	3967184	100.000	108.0
M	78 Xylenes (total)	106				7119803	300.000	308.5
	79 Bromoform	173	20.480	20.480	(1.172)	2319253	100.000	118.4
	80 Isopropylbenzene	105	20.637	20.637	(1.181)	6731847	100.000	103.2
	81 Cyclohexanone	55	20.776	20.776	(1.189)	1141191	1000.00	954.2
	82 1,1,2,2-Tetrachloroethane	83	21.228	21.228	(1.215)	2914002	100.000	108.2
$	83 4-Bromofluorobenzene	95	21.385	21.385	(0.879)	4242806	100.000	101.2 (M)
	84 1,2,3-Trichloropropane	110	21.698	21.698	(0.892)	781211	100.000	105.6
	85 Bromobenzene	156	21.925	21.925	(0.901)	2317911	100.000	105.6
	86 n-Propylbenzene	91	21.977	21.977	(0.903)	9191286	100.000	100.7
	87 2-Chlorotoluene	91	22.429	22.429	(0.922)	6535501	100.000	98.51
	88 trans-1,4-dichloro-2-butene	53	22.499	22.499	(0.925)	267600	100.000	100.9
	89 1,3,5-Trimethylbenzene	105	22.516	22.516	(0.926)	6307647	100.000	102.4
	90 4-Chlorotoluene	91	22.586	22.586	(0.928)	7399575	100.000	99.93
	91 t-Butylbenzene	119	23.369	23.369	(0.961)	7393412	100.000	102.9
	92 Pentachloroethane	167	23.422	23.422	(0.963)	1747664	100.000	110.3
	93 1,2,4-Trimethylbenzene	105	23.456	23.456	(0.964)	6112078	100.000	100.3
	94 sec-Butylbenzene	105	23.822	23.822	(0.979)	8535267	100.000	102.4
	95 4-Isopropyltoluene	119	24.100	24.100	(0.991)	6427145	100.000	104.8
	96 1,3-Dichlorobenzene	146	24.170	24.170	(0.994)	3767799	100.000	97.86
*	97 1,4 Dichlorobenzene-d4	152	24.327	24.327	(1.000)	1221565	50.0000	
	98 1,4-Dichlorobenzene	146	24.379	24.379	(1.002)	3989329	100.000	96.98
	99 n-Butylbenzene	91	24.797	24.797	(1.019)	6775860	100.000	104.7
	100 1,2-Dichlorobenzene	146	24.953	24.953	(1.026)	3483850	100.000	101.1
	101 1,2-Dibromo-3-chloropropane	157	26.033	26.033	(1.070)	641384	100.000	125.2
	102 1,3,5-Trichlorobenzene	180	26.311	26.311	(1.082)	3438793	100.000	110.3
	103 1,2,4-Trichlorobenzene	180	27.025	27.025	(1.111)	2796019	100.000	104.5
	104 Hexachlorobutadiene	225	27.181	27.181	(1.117)	2361392	100.000	108.0
	105 Naphthalene	128	27.268	27.268	(1.121)	3759116	100.000	102.2
	106 1,2,3-Trichlorobenzene	180	27.529	27.529	(1.132)	2508487	100.000	103.4

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5165.D
Report Date: 20-Apr-2005 10:59

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

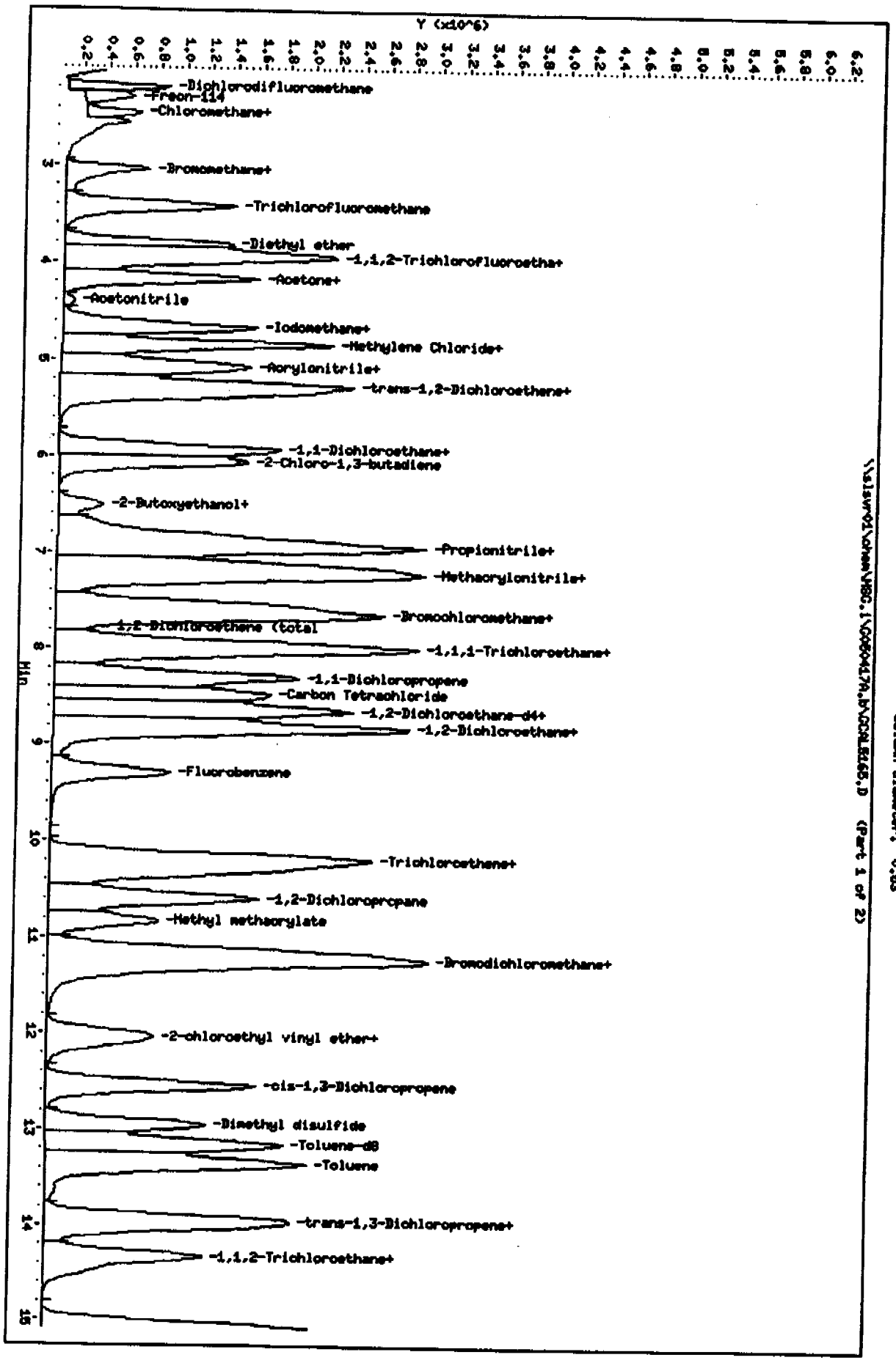
Instrument ID: MSG.i
Lab File ID: GCAL5165.D
Lab Smp Id: VSTD100
Analysis Type: VOA
Quant Type: ISTD
Operator: JDH
Method File: \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Misc Info: VBLKG107A.B;

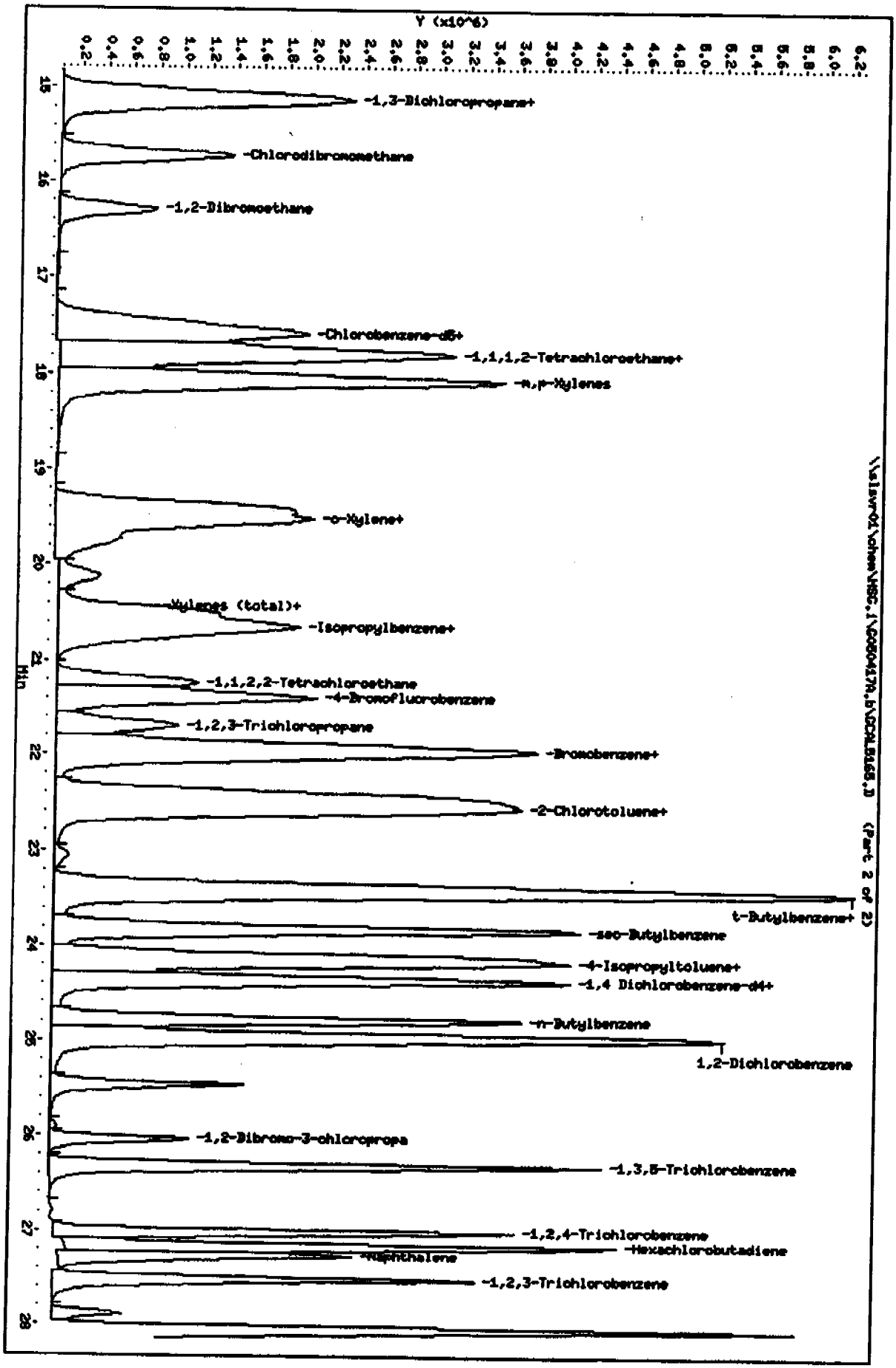
Calibration Date: 17-APR-2005
Calibration Time: 23:27
Client Smp ID: VSTD0200
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	2924725	1462363	5849450	3302559	12.92
71 Chlorobenzene-d5	2135082	1067541	4270164	1980931	-7.22
97 1,4 Dichlorobenze	1343943	671972	2687886	1221565	-9.11

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	9.36	8.86	9.86	9.31	-0.53
71 Chlorobenzene-d5	17.54	17.04	18.04	17.47	-0.38
97 1,4 Dichlorobenze	24.36	23.86	24.86	24.33	-0.13

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^6)
Min
-Dichlorodifluoromethane
-Freon-114
-Chloromethane+
-Bromomethane+
-Trichlorofluoromethane
-Diethyl ether
-1,1,2-Trichlorofluoroetha+
-Acetone+
-Acetonitrile
-Iodomethane+
-Methylene Chloride+
-Acrylonitrile+
-trans-1,2-Dichloroethene+
-1,1-Dichloroethane+
-2-Chloro-1,3-butadiene
-2-Butoxyethanol+
-Propionitrile+
-Methacrylonitrile+
-Bromochloromethane+
1,2-Dichloroethene (total
-1,1,1-Trichloroethane+
-1,1-Dichloropropene
-Carbon Tetrachloride
-1,2-Dichloroethane-d4+
-1,2-Dichloroethane+
-Fluorobenzene
-Trichloroethene+
-1,2-Dichloropropane
-Methyl methacrylate
-Bromodichloromethane+
-2-chloroethyl vinyl ether+
-cis-1,3-Dichloropropene
-Dimethyl disulfide
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane+
\\slsvr01\chem\HSG.i\006041?A.b\GCNL8168.D (Part 1 of 2)
Data File: \\slsvr01\chem\HSG.i\006041?A.b\GCNL8168.D
Date : 18-APR-2006 02:17
Client ID: VSTD0200
Sample Info: VSTDL005G0041?A.b
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: HSG.i
Operator: JBH
Column diameter: 0.53


Y (x10^6)
0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0 3.2 3.4 3.6 3.8 4.0 4.2 4.4 4.6 4.8 5.0 5.2 5.4 5.6 5.8 6.0 6.2
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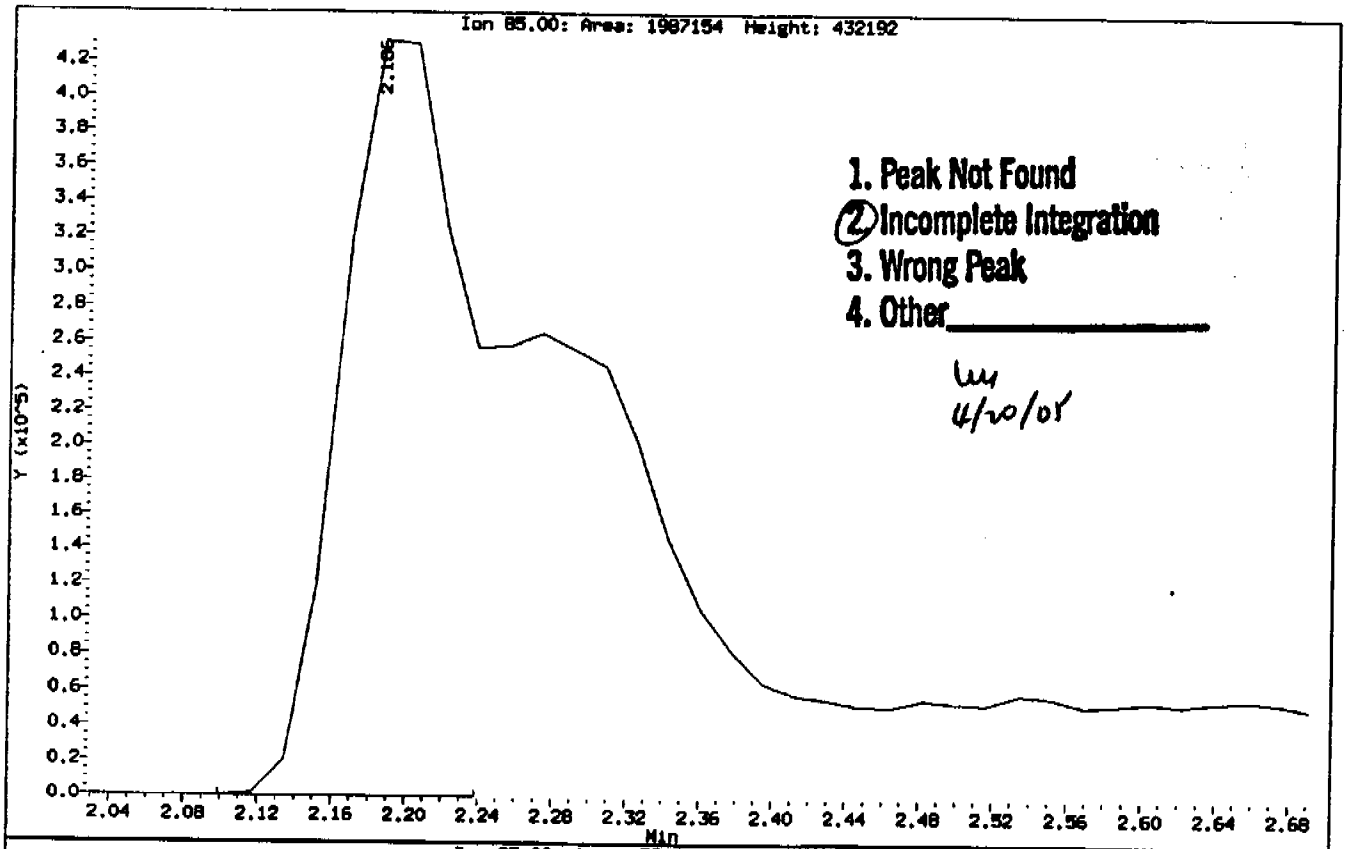
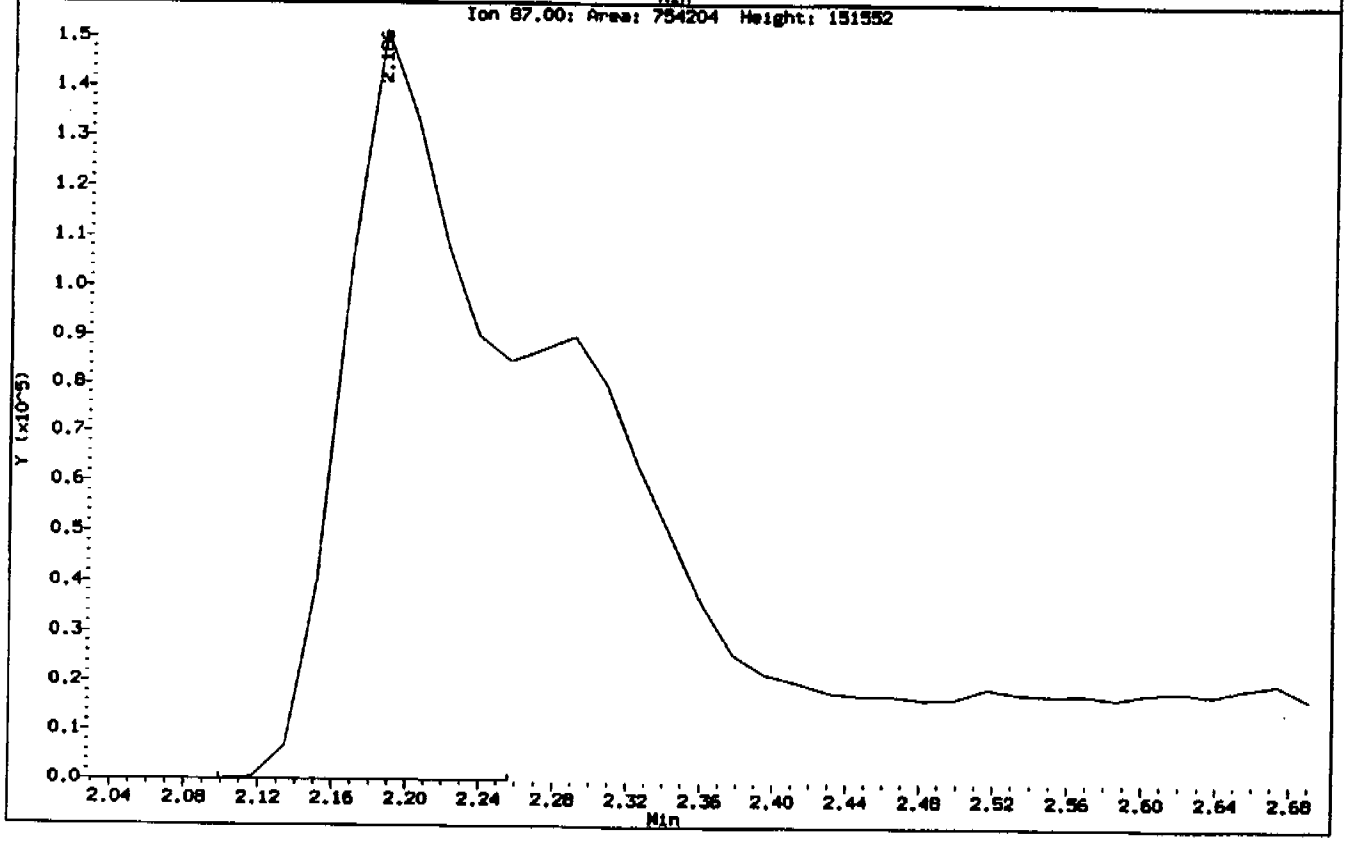
27
28
Min
-1,3-Dichloropropane+
-Chlorodibromomethane
-1,2-Dibromoethane
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
-o-Xylene+
-Xylenes (total)+
-Isopropylbenzene+
-1,1,2,2-Tetrachloroethane
-4-Bromofluorobenzene
-1,2,3-Trichloropropane
-Bromobenzene+
-2-Chlorotoluene+
t-Butylbenzene+
-sec-Butylbenzene
-4-Isopropyltoluene+
-1,4 Dichlorobenzene-d4+
-n-Butylbenzene
1,2-Dichlorobenzene
-1,2-Dibromo-3-chloroprope
-1,3,5-Trichlorobenzene
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene
-1,2,3-Trichlorobenzene
\\stlsvr01\chem\HSC.i\00504178.b\GCMS168.D (Part 2 of 2)
Data File: \\stlsvr01\chem\HSC.i\00504178.b\GCMS168.D
Date : 18-APR-2005 02:17
Client ID: VSTD0200
Sample Info: VSTD100/00504178.b
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: HSC.i
Operator: JDH
Column diameter: 0.53

Data File: \\elsvr01\chem\MSG.i\G050417A.b\GCAL5165.D
Injection Date: 18-APR-2005 02:17
Instrument: MSG.i
Client Sample ID: VSTD0200

Compound: Dichlorodifluoromethane
CAS Number: 75-71-8





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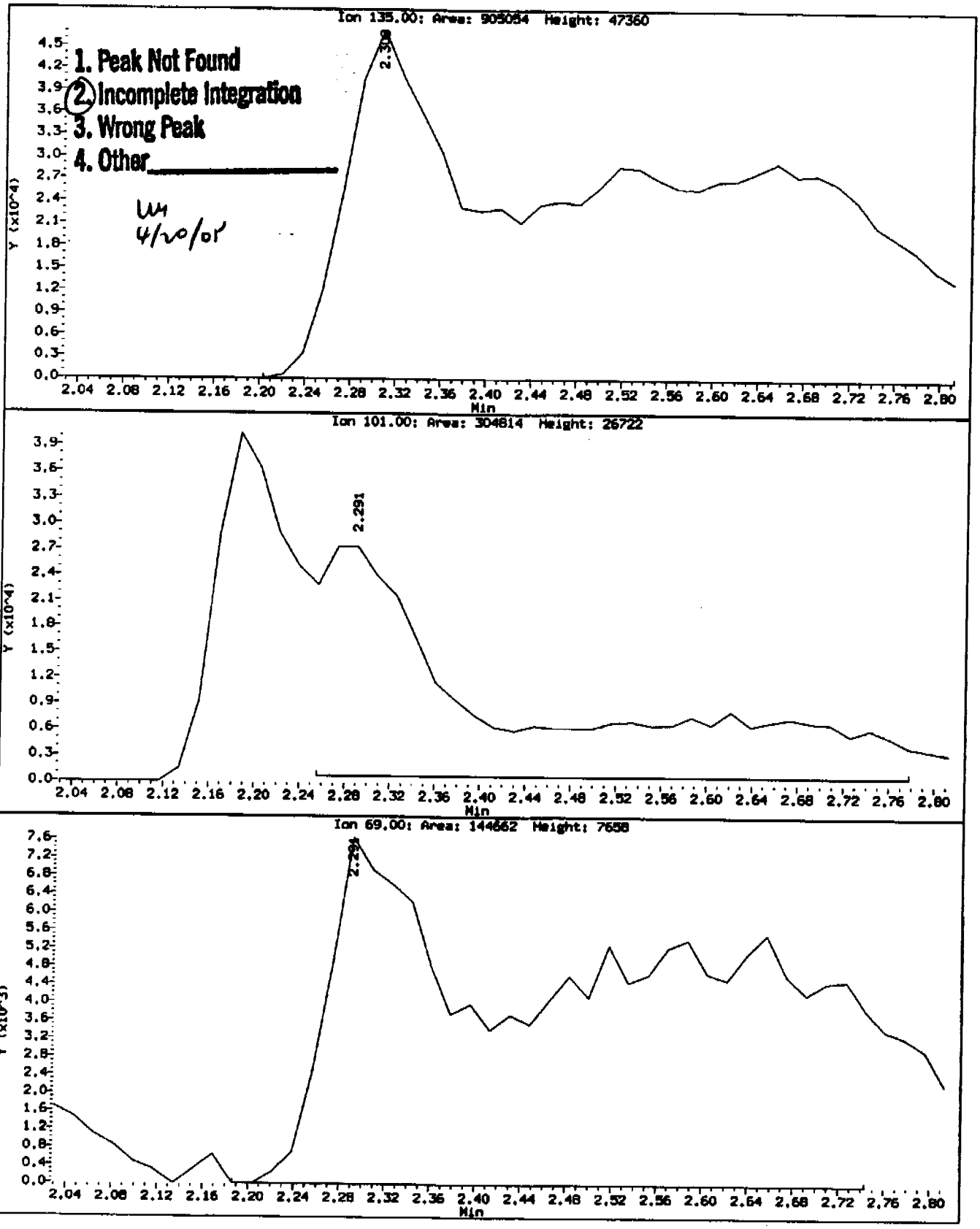
Injection Date: 18-APR-2005 02:17
Instrument: MSG.i
Client Sample ID: VSTD0200

Compound: Freon-114
CAS Number: 374-07-2



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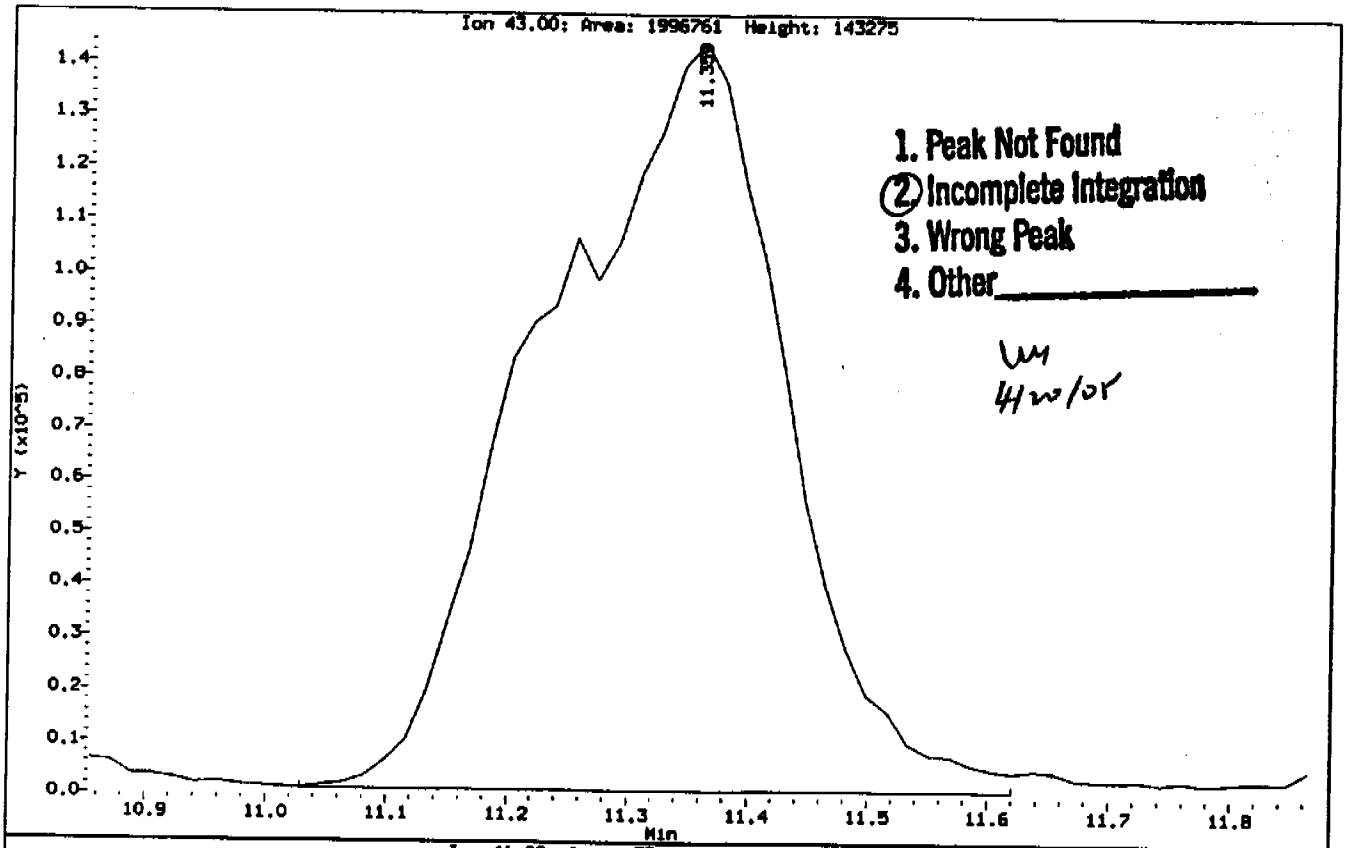
Injection Date: 18-APR-2005 02:17
Instrument: MSG.i
Client Sample ID: VSTD0200

Compound: 2-Nitropropane
CAS Number: 79-46-9



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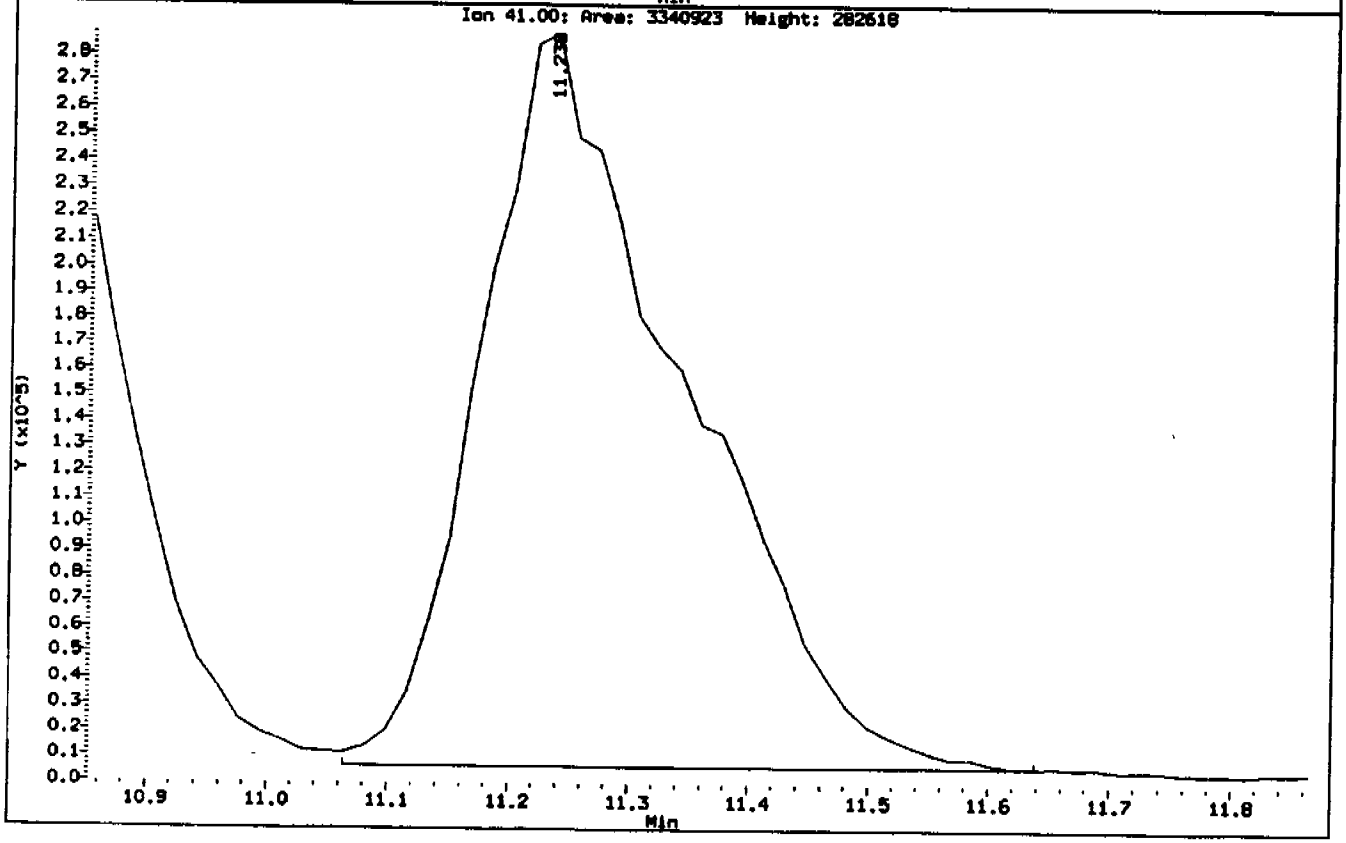
4/20/05



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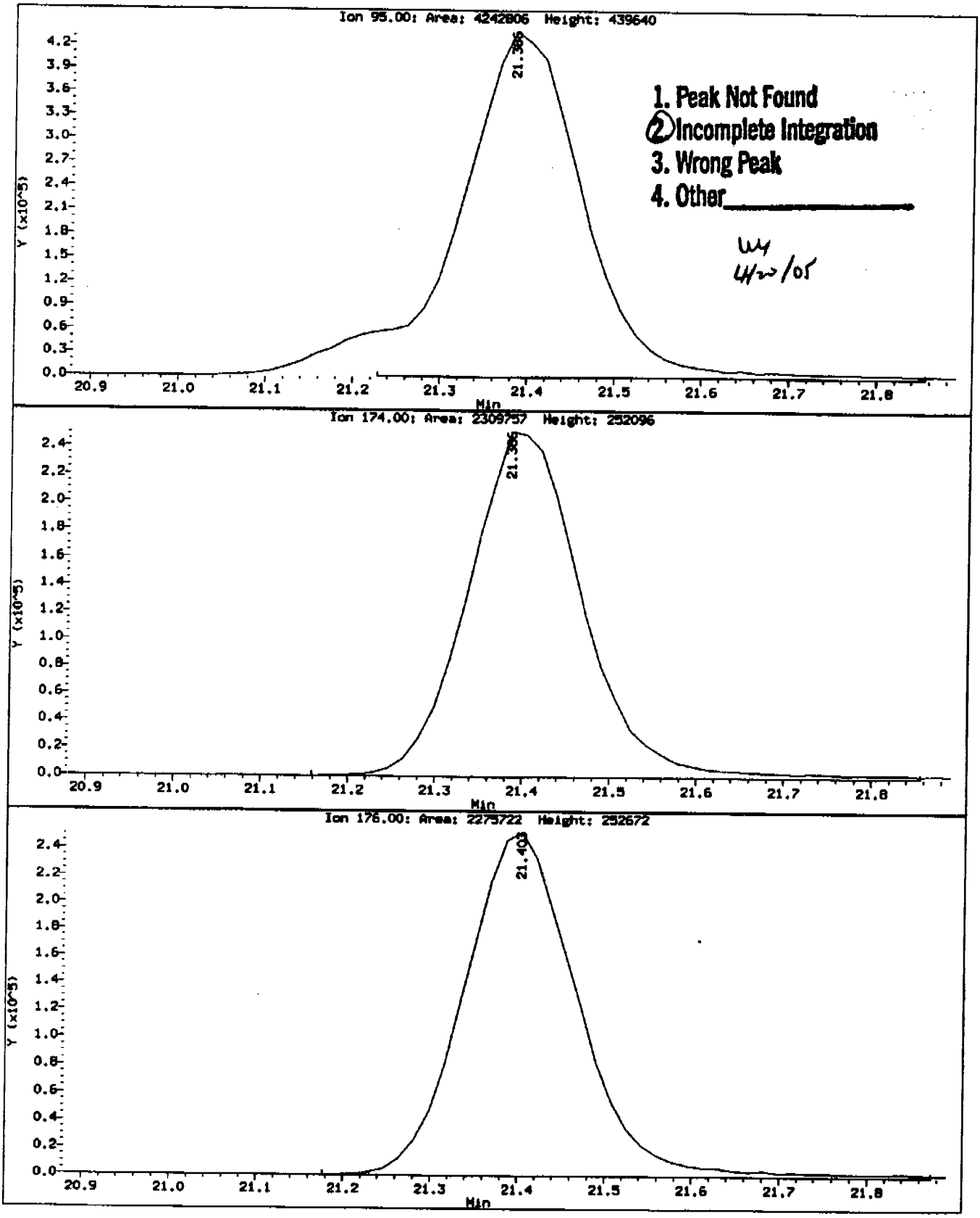
Injection Date: 18-APR-2005 02:17
Instrument: MSG.i
Client Sample ID: VSTD0200

Compound: 4-Bromofluorobenzene
CAS Number: 460-00-4



LOT# F5D220273

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5166.D
Report Date: 20-Apr-2005 10:59

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSG.i\G050417A.b\GCAL5166.D
Lab Smp Id: VSTD200 Client Smp ID: VSTD0100
Inj Date : 18-APR-2005 02:51
Operator : JDH Inst ID: MSG.i
Smp Info : VSTD200;G050417A.b
Misc Info : VBLKG107A.B;
Comment : NONE
Method : \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Meth Date : 20-Apr-2005 10:59 hanw Quant Type: ISTD
Cal Date : 18-APR-2005 02:51 Cal File: GCAL5166.D
Als bottle: 9 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: SLVOA04

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume
Vo	5.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	2.186	2.186	(0.235)	3427097	200.000	122.5 (M)
2 Freon-114	135	2.656	2.656	(0.286)	1566617	200.000	125.4 (M)
3 Chloromethane	50	2.447	2.447	(0.264)	3187649	200.000	164.4
4 Vinyl Chloride	62	2.552	2.552	(0.275)	1862589	200.000	134.0
5 Bromomethane	94	3.021	3.021	(0.325)	1829220	200.000	92.16
6 Chloroethane	64	3.265	3.265	(0.352)	1063292	200.000	110.5
7 Trichlorofluoromethane	101	3.404	3.404	(0.367)	7259642	200.000	136.2
8 Diethyl ether	59	3.822	3.822	(0.412)	3870842	400.000	314.6 (A)
9 1,1,2-Trichlorofluoroethane	101	3.927	3.927	(0.423)	7714132	200.000	169.1
10 Acrolein	56	3.979	3.979	(0.428)	973259	1000.00	848.4
11 Acetone	43	4.101	4.101	(0.442)	674463	200.000	131.7
12 1,1-Dichloroethene	96	4.153	4.153	(0.447)	3185146	200.000	190.2
13 Acetonitrile	41	4.431	4.431	(0.477)	591123	1000.00	809.7
14 Iodomethane	142	4.588	4.588	(0.494)	2955318	200.000	191.5
15 Methyl acetate	74	4.675	4.675	(0.503)	414419	200.000	156.5
16 Allyl chloride	39	4.658	4.658	(0.502)	3787791	200.000	161.3
17 Methylene Chloride	84	4.832	4.832	(0.520)	3375844	200.000	152.9
18 Carbon Disulfide	76	4.814	4.814	(0.518)	9451989	200.000	173.9
19 Acrylonitrile	53	5.058	5.058	(0.545)	2830653	1000.00	907.4
20 MTBE	73	5.110	5.110	(0.550)	8823631	200.000	165.7
21 trans-1,2-Dichloroethene	96	5.249	5.249	(0.565)	3612035	200.000	160.3
22 n-Hexane	57	5.319	5.319	(0.573)	5249305	200.000	159.9

HW 4/20/05

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5166.D
Report Date: 20-Apr-2005 10:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	5.911	5.911	(0.636)	8358744	200.000	167.0
	24 Vinyl acetate	43	5.946	5.946	(0.640)	7215873	200.000	180.9
	25 2-Chloro-1,3-butadiene	53	6.050	6.050	(0.651)	6994929	200.000	172.7
	26 2-Butoxyethanol	57	6.520	6.520	(0.702)	295440	10000.0	7680 (A)
	27 2-Butanone	43	6.694	6.694	(0.721)	1345401	200.000	217.4 (AM)
	28 Propionitrile	54	6.816	6.816	(0.734)	1130148	1000.00	873.9
	29 2,2-Dichloropropane	77	6.851	6.851	(0.738)	7960987	200.000	166.4
	30 cis-1,2-Dichloroethene	96	6.938	6.938	(0.747)	4292854	200.000	169.6
	31 Ethyl acetate	43	6.990	6.990	(0.753)	6350261	400.000	343.2 (A)
	32 Methacrylonitrile	41	7.147	7.147	(0.769)	9590192	1000.00	851.9
	33 Chloroform	83	7.234	7.234	(0.779)	10018681	200.000	165.1
	34 Bromochloromethane	128	7.530	7.530	(0.811)	2433439	200.000	169.4
	35 Isobutanol	42	7.669	7.669	(0.826)	3776935	4000.00	3184
$	36 Dibromofluoromethane	113	7.634	7.634	(0.822)	7942149	200.000	194.4
	37 Tetrahydrofuran	71	7.669	7.669	(0.826)	1319385	1000.00	839.4
M	38 1,2-Dichloroethene (total)	96				7904889	400.000	329.9
	39 1,1,1-Trichloroethane	97	7.982	7.982	(0.859)	9213274	200.000	175.2
	40 Cyclohexane	84	7.965	7.965	(0.858)	4255925	200.000	166.2
	41 1,1-Dichloropropene	75	8.278	8.278	(0.891)	6982532	200.000	168.5
	42 Carbon Tetrachloride	117	8.470	8.470	(0.912)	8570921	200.000	181.5
$	43 1,2-Dichloroethane-d4	67	8.609	8.609	(0.927)	2706973	200.000	183.8
	44 n-Heptane	43	8.644	8.644	(0.931)	6186471	200.000	186.6
	45 n-Butanol	56	8.679	8.679	(0.934)	2683338	2000.00	1915
	46 1,2-Dichloroethane	62	8.818	8.818	(0.949)	6431358	200.000	170.4
	47 Benzene	78	8.835	8.835	(0.951)	10880070	200.000	167.9
*	48 Fluorobenzene	96	9.288	9.288	(1.000)	3592875	50.0000	
	49 Trichloroethene	130	10.158	10.158	(1.094)	5093820	200.000	169.5
	50 Methylcyclohexane	55	10.280	10.280	(1.107)	6034645	200.000	163.2
	51 1,2-Dichloropropane	63	10.576	10.576	(1.139)	4885700	200.000	169.0
	52 Methyl methacrylate	69	10.820	10.820	(1.165)	2534103	200.000	179.2
	53 Bromodichloromethane	83	11.133	11.133	(1.199)	10780410	200.000	182.1
	54 Dibromomethane	93	11.237	11.237	(1.210)	4504608	200.000	170.5
	55 1,4-Dioxane	88	11.290	11.290	(1.216)	630941	4000.00	3834
	56 2-Nitropropane	43	11.342	11.342	(1.221)	3815576	200.000	180.9
	57 2-chloroethyl vinyl ether	63	11.986	11.986	(1.290)	1215580	200.000	96.44
	58 4-Methyl-2-pentanone	43	12.073	12.073	(1.300)	4989264	200.000	169.9
	59 cis-1,3-Dichloropropene	75	12.543	12.543	(1.350)	7563129	200.000	181.6
	60 Dimethyl disulfide	94	12.943	12.943	(1.394)	6126155	200.000	197.3
$	61 Toluene-d8	98	13.135	13.135	(0.753)	11842553	200.000	199.2
	62 Toluene	91	13.343	13.343	(0.765)	12700658	200.000	193.9
	63 trans-1,3-Dichloropropene	75	13.918	13.918	(0.798)	6378400	200.000	200.3 (A)
	64 Ethyl methacrylate	69	14.005	14.005	(0.802)	5645791	200.000	191.5
	65 1,1,2-Trichloroethane	97	14.318	14.318	(0.820)	3823058	200.000	184.9
	66 2-Hexanone	43	14.492	14.492	(0.830)	2138143	200.000	170.7
	67 1,3-Dichloropropane	76	15.049	15.049	(0.862)	5092636	200.000	150.3
	68 Tetrachloroethene	164	15.136	15.136	(0.867)	3687090	200.000	148.7
	69 Chlorodibromomethane	129	15.711	15.711	(0.900)	5902843	200.000	183.4
	70 1,2-Dibromoethane	107	16.285	16.285	(0.933)	4497714	200.000	174.2
*	71 Chlorobenzene-d5	117	17.451	17.451	(1.000)	2121435	50.0000	
	72 Chlorobenzene	112	17.573	17.573	(1.007)	7728303	200.000	171.3
	73 1,1,1,2-Tetrachloroethane	131	17.747	17.747	(1.017)	4530772	200.000	187.0
	74 Ethylbenzene	106	17.817	17.817	(1.021)	3428239	200.000	174.4
	75 m,p-Xylenes	106	18.061	18.061	(1.035)	8650312	400.000	345.6
	76 o-Xylene	106	19.401	19.401	(1.112)	4307443	200.000	178.8

LOT# F5D220273

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5166.D
Report Date: 20-Apr-2005 10:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	77 Styrene	104	19.540	19.540	(1.120)	7309701	200.000	185.7
M	78 Xylenes (total)	106				12957755	600.000	524.4
	79 Bromoform	173	20.480	20.480	(1.174)	4324619	200.000	206.1 (A)
	80 Isopropylbenzene	105	20.637	20.637	(1.183)	12503200	200.000	179.0
	81 Cyclohexanone	55	20.759	20.759	(1.190)	1420461	2000.00	1109
	82 1,1,2,2-Tetrachloroethane	83	21.229	21.229	(1.216)	5268586	200.000	182.7
$	83 4-Bromofluorobenzene	95	21.385	21.385	(0.879)	8610571	200.000	193.9 (M)
	84 1,2,3-Trichloropropane	110	21.699	21.699	(0.892)	1412522	200.000	180.2
	85 Bromobenzene	156	21.925	21.925	(0.901)	4091088	200.000	176.0
	86 n-Propylbenzene	91	21.977	21.977	(0.903)	16724574	200.000	172.9
	87 2-Chlorotoluene	91	22.430	22.430	(0.922)	12201023	200.000	173.6
	88 trans-1,4-dichloro-2-butene	53	22.499	22.499	(0.925)	487296	200.000	173.5
	89 1,3,5-Trimethylbenzene	105	22.517	22.517	(0.926)	11580938	200.000	177.4
	90 4-Chlorotoluene	91	22.586	22.586	(0.928)	14270080	200.000	181.9
	91 t-Butylbenzene	119	23.387	23.387	(0.961)	13167647	200.000	173.0
	92 Pentachloroethane	167	23.422	23.422	(0.963)	3252343	200.000	193.7
	93 1,2,4-Trimethylbenzene	105	23.457	23.457	(0.964)	10946435	200.000	169.6
	94 sec-Butylbenzene	105	23.822	23.822	(0.979)	15387563	200.000	174.3
	95 4-Isopropyltoluene	119	24.101	24.101	(0.991)	11570238	200.000	178.1
	96 1,3-Dichlorobenzene	146	24.170	24.170	(0.994)	6878649	200.000	168.6
*	97 1,4 Dichlorobenzene-d4	152	24.327	24.327	(1.000)	1294071	50.0000	
	98 1,4-Dichlorobenzene	146	24.379	24.379	(1.002)	7295715	200.000	167.4
	99 n-Butylbenzene	91	24.779	24.779	(1.019)	12578185	200.000	183.5
	100 1,2-Dichlorobenzene	146	24.936	24.936	(1.025)	6259774	200.000	171.6
	101 1,2-Dibromo-3-chloropropane	157	26.033	26.033	(1.070)	1151310	200.000	212.1 (A)
	102 1,3,5-Trichlorobenzene	180	26.311	26.311	(1.082)	6426928	200.000	194.6
	103 1,2,4-Trichlorobenzene	180	27.008	27.008	(1.110)	4943610	200.000	174.4
	104 Hexachlorobutadiene	225	27.164	27.164	(1.117)	4028786	200.000	174.0
	105 Naphthalene	128	27.269	27.269	(1.121)	6805140	200.000	174.7
	106 1,2,3-Trichlorobenzene	180	27.512	27.512	(1.131)	4399592	200.000	171.2

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5166.D
Report Date: 20-Apr-2005 10:59

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

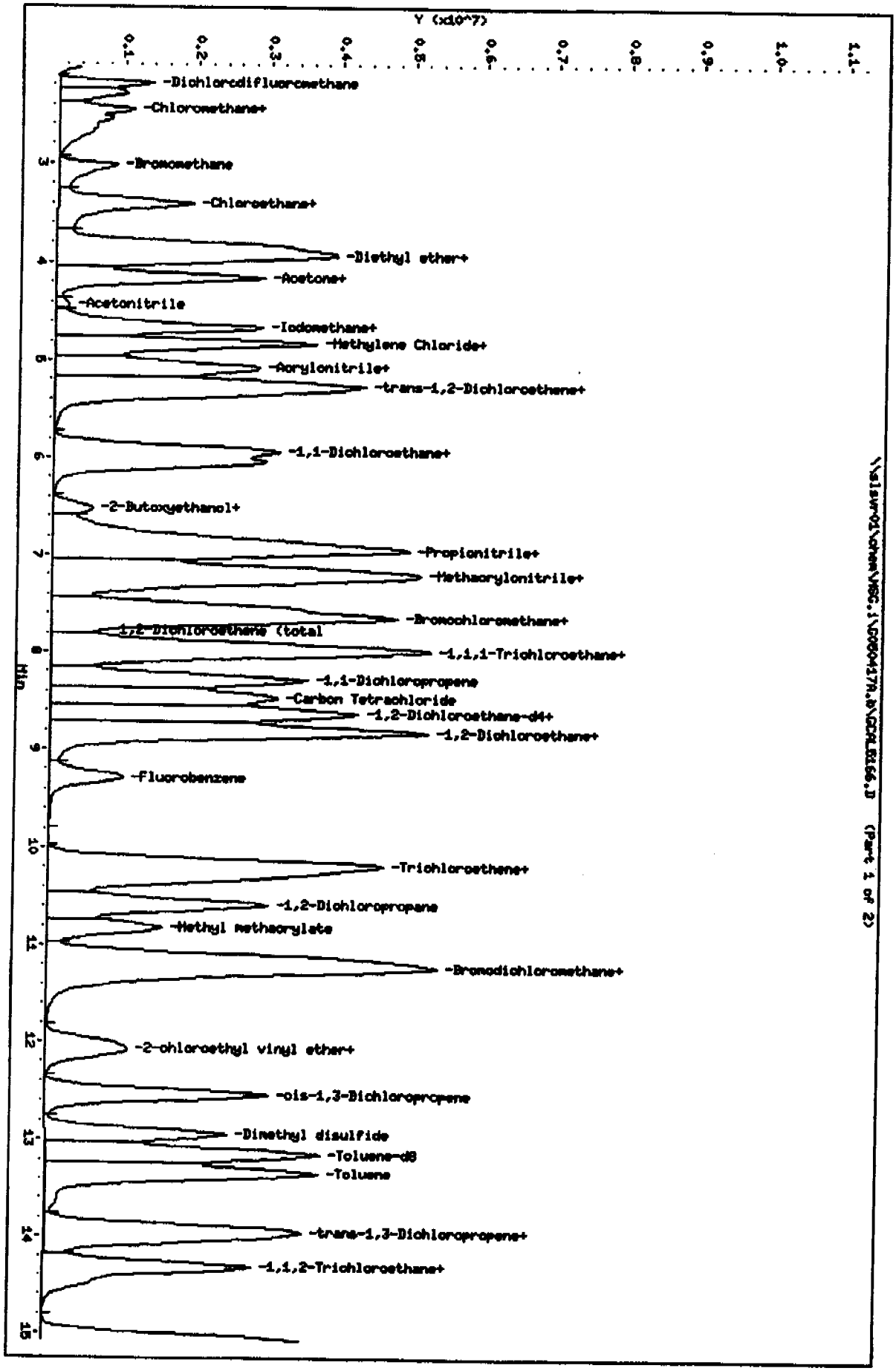
Instrument ID: MSG.i
Lab File ID: GCAL5166.D
Lab Smp Id: VSTD200
Analysis Type: VOA
Quant Type: ISTD
Operator: JDH
Method File: \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Misc Info: VBLKG107A.B;

Calibration Date: 17-APR-2005
Calibration Time: 23:27
Client Smp ID: VSTD0100
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	2924725	1462363	5849450	3592875	22.84
71 Chlorobenzene-d5	2135082	1067541	4270164	2121435	-0.64
97 1,4 Dichlorobenze	1343943	671972	2687886	1294071	-3.71

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	9.36	8.86	9.86	9.29	-0.72
71 Chlorobenzene-d5	17.54	17.04	18.04	17.45	-0.48
97 1,4 Dichlorobenze	24.36	23.86	24.86	24.33	-0.13

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.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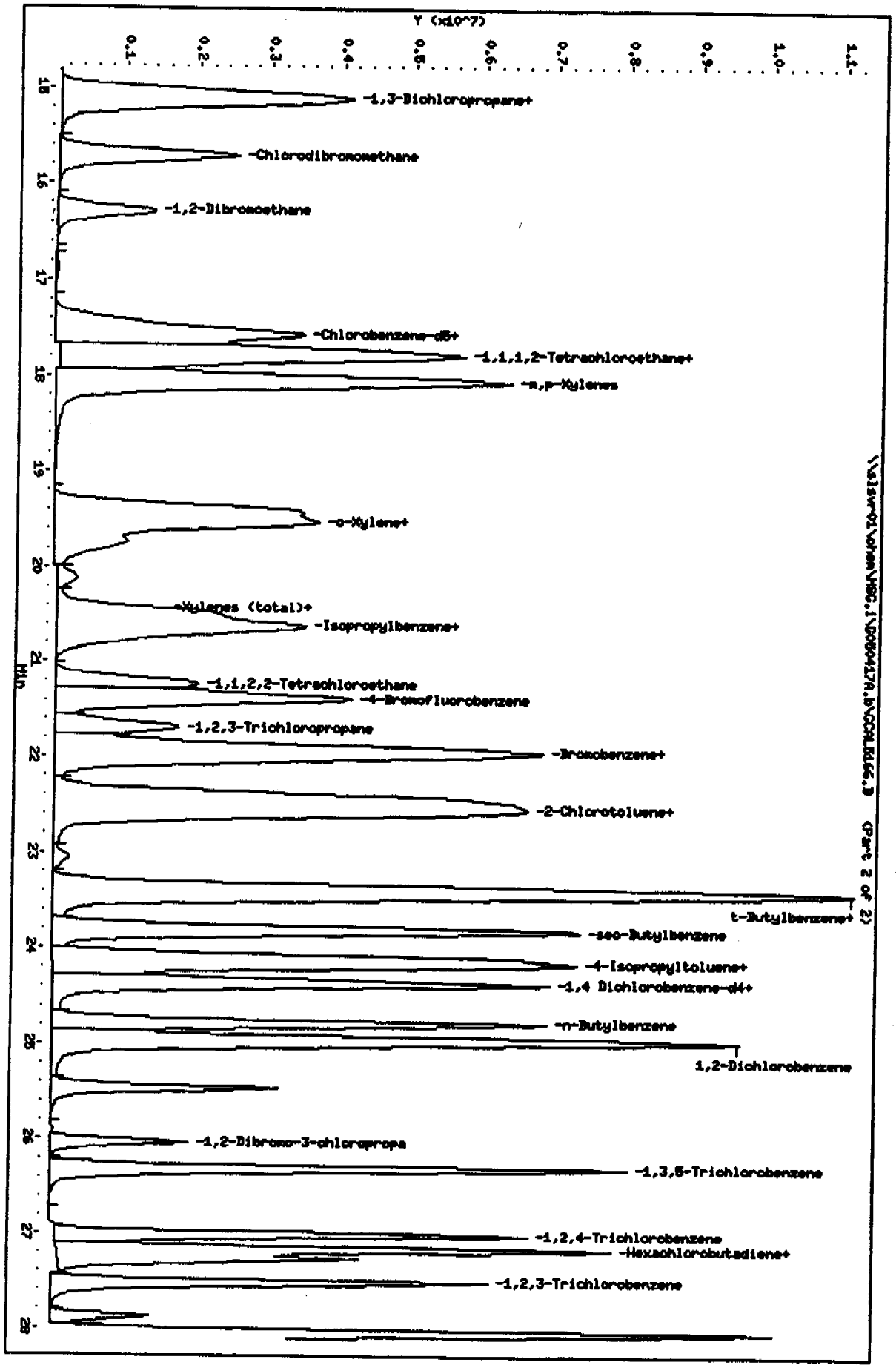
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
Min
3
4
5
6
7
8
9
10
11
12
13
14
15
-Dichlorodifluoromethane
-Chloromethane+
-Bromomethane
-Chloroethane+
-Diethyl ether+
-Acetone+
-Acetonitrile
-Iodomethane+
-Methylene Chloride+
-Acrylonitrile+
-trans-1,2-Dichloroethene+
-1,1-Dichloroethane+
-2-Butoxyethanol+
-Propionitrile+
-Methacrylonitrile+
-Bromochloromethane+
1,2-Dichloroethene (total
-1,1,1-Trichloroethane+
-1,1-Dichloropropene
-Carbon Tetrachloride
-1,2-Dichloroethane-d4+
-1,2-Dichloroethane+
-Fluorobenzene
-Trichloroethene+
-1,2-Dichloropropane
-Methyl methacrylate
-Bromodichloromethane+
-2-chloroethyl vinyl ether+
-cis-1,3-Dichloropropene
-Dimethyl disulfide
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane+
Data File: \\alsvr01\chem\MSC.i\G080417A.b\GC8L8166.D
Date : 18-APR-2008 02:51
Client ID: VSTD0100
Sample Info: VSTB200;G080417A.b
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: MSC.i
Operator: JBH
Column diameter: 0.53
\\alsvr01\chem\MSC.i\G080417A.b\GC8L8166.D (Part 1 of 2)


Y (x10^7)
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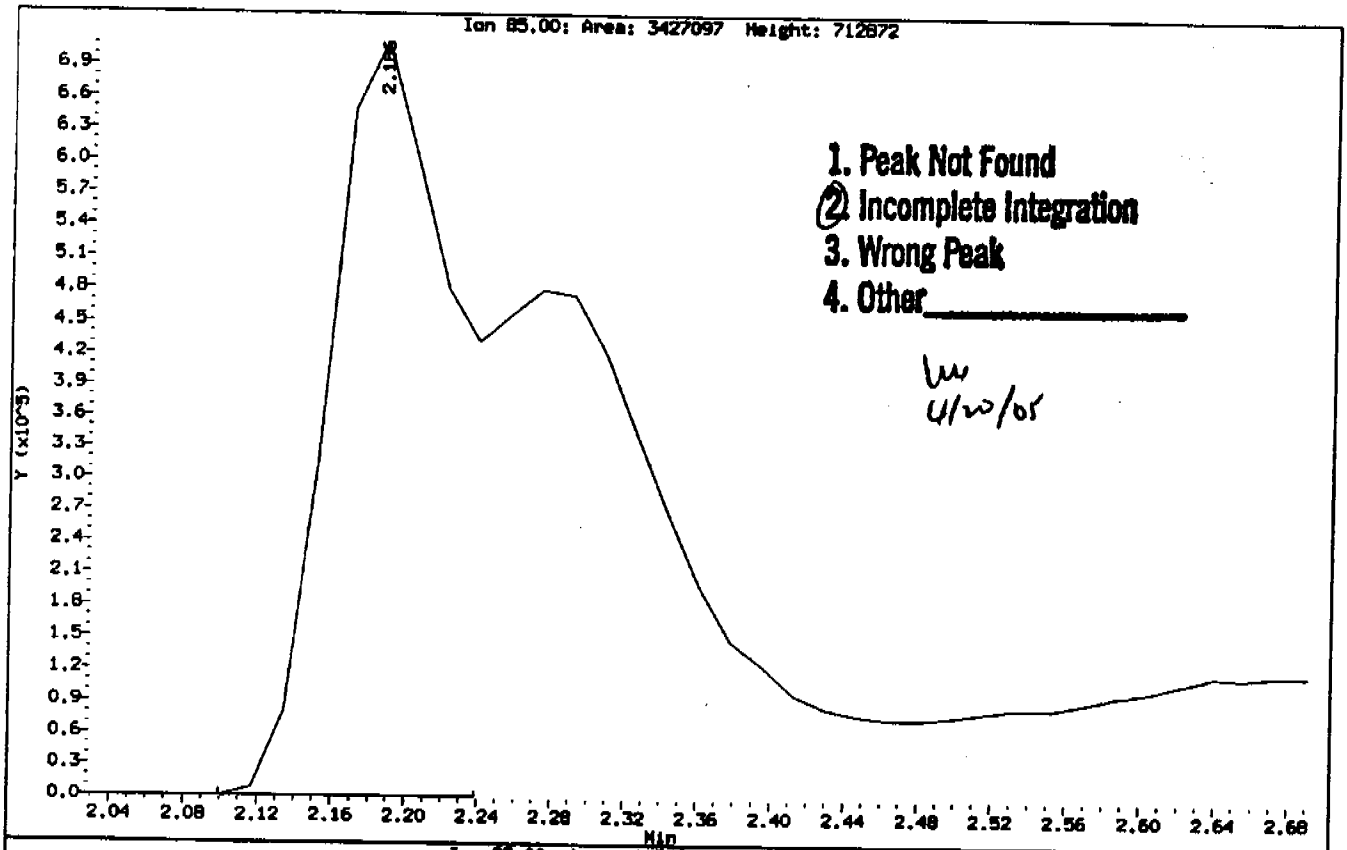
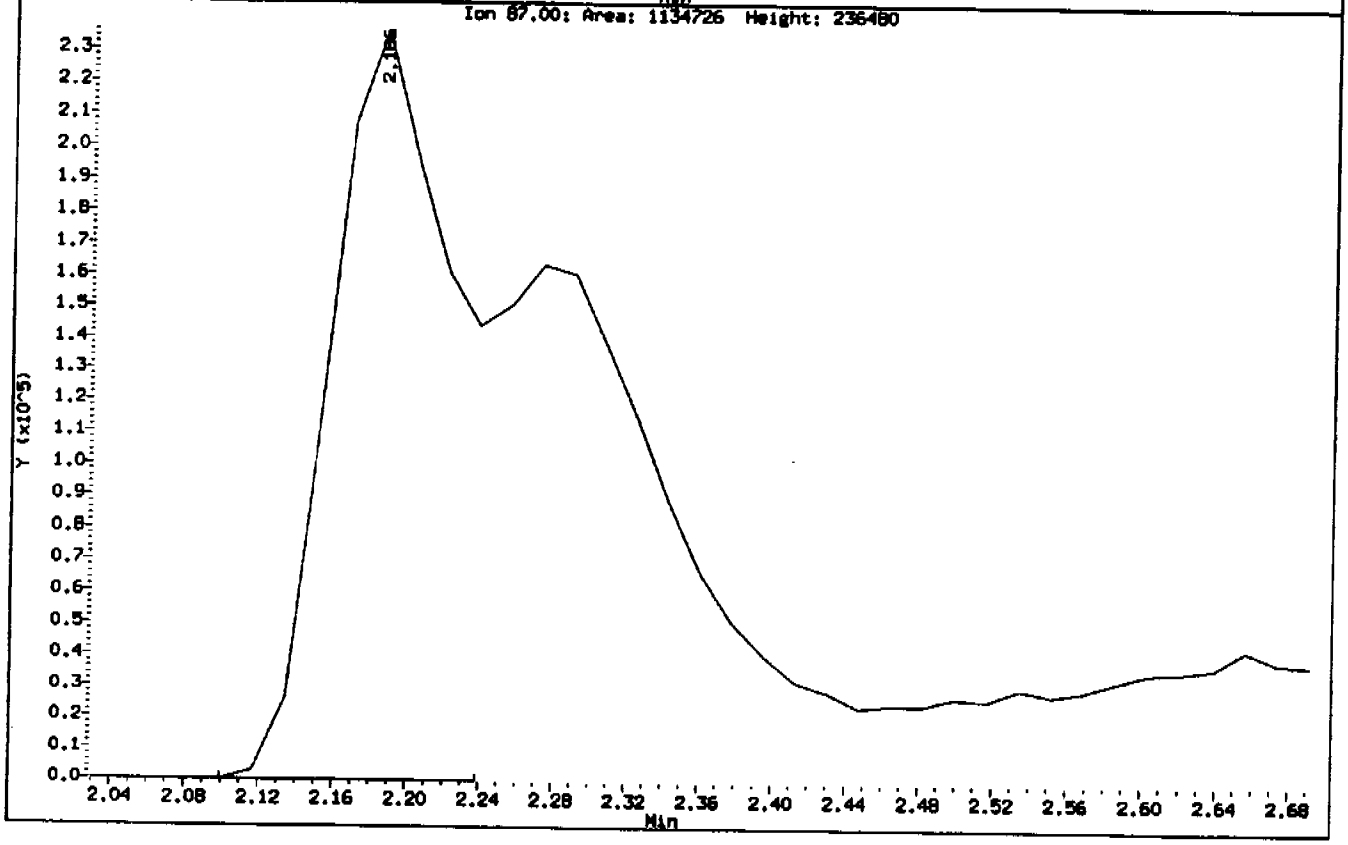
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
Min
15
16
17
18
19
20
21
22
23
24
25
26
27
28
1,3-Dichloropropane+
Chlorodibromomethane
1,2-Dibromoethane
Chlorobenzene-d5+
1,1,1,2-Tetrachloroethane+
m,p-Xylenes
o-Xylene+
Xylenes (total)+
Isopropylbenzene+
1,1,2,2-Tetrachloroethane
4-Bromofluorobenzene
1,2,3-Trichloropropane
Bromobenzene+
2-Chlorotoluene+
t-Butylbenzene+
sec-Butylbenzene
4-Isopropyltoluene+
1,4 Dichlorobenzene-d4+
n-Butylbenzene
1,2-Dichlorobenzene
1,2-Dibromo-3-chloroprope
1,3,5-Trichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene+
1,2,3-Trichlorobenzene
Data File: \\slsvrol\chem\MSC.i\00804170.b\CCHLB166.D
Date : 19-APR-2006 02:51
Client ID: VSTB0100
Sample Info: VSTB200;G0804170.b
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: MSC.i
Operator: JDH
Column diameter: 0.53
\\slsvrol\chem\MSC.i\00804170.b\CCHLB166.D (Part 2 of 2)

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5166.D
Injection Date: 18-APR-2005 02:51
Instrument: MSG.i
Client Sample ID: VSTD0100

Compound: Dichlorodifluoromethane
CAS Number: 75-71-8

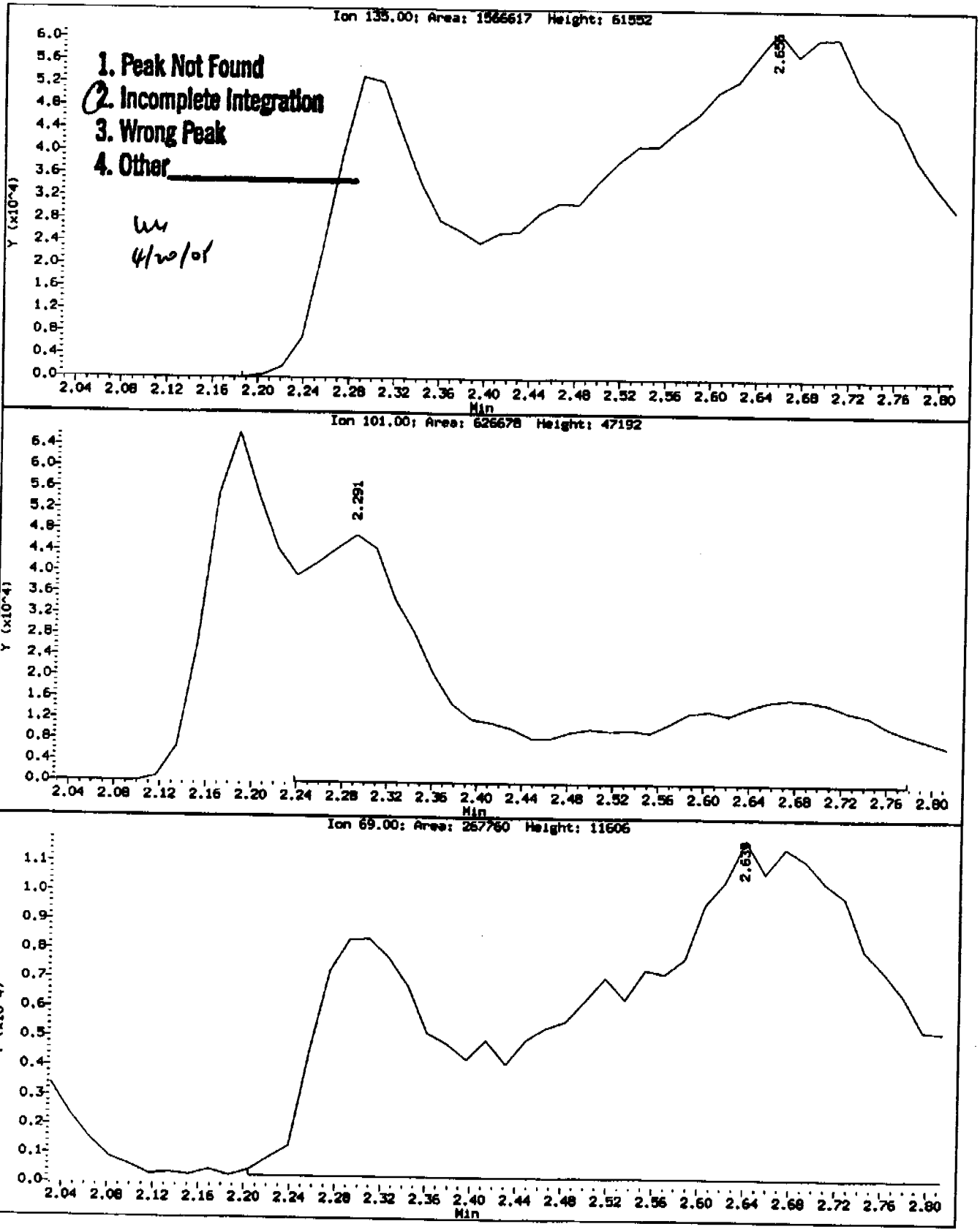




LOT# F5D220273

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5186.D
Injection Date: 18-APR-2005 02:51
Instrument: MSG.i
Client Sample ID: VSTD0100

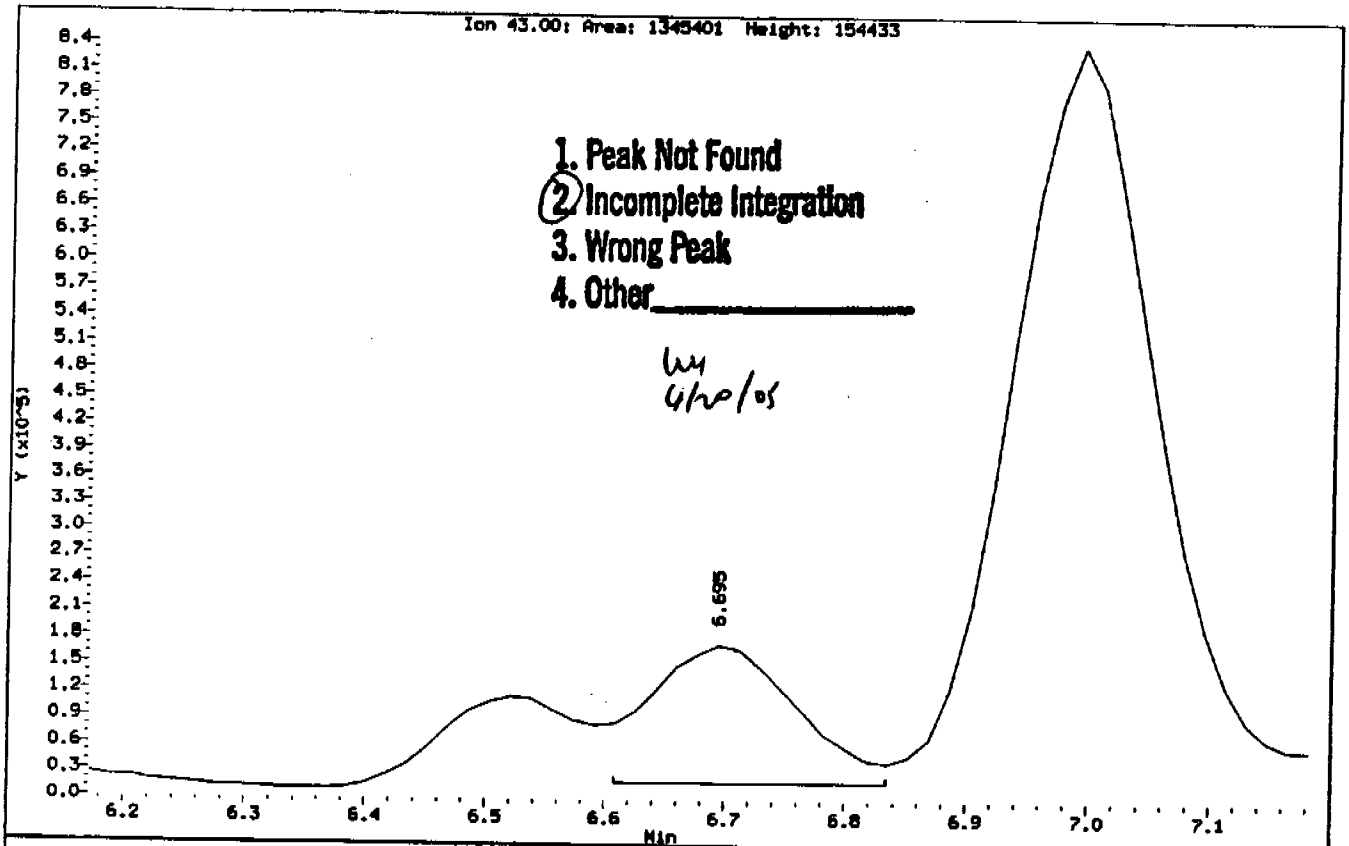
Compound: Freon-114
CAS Number: 374-07-2



LOT# F5D220273

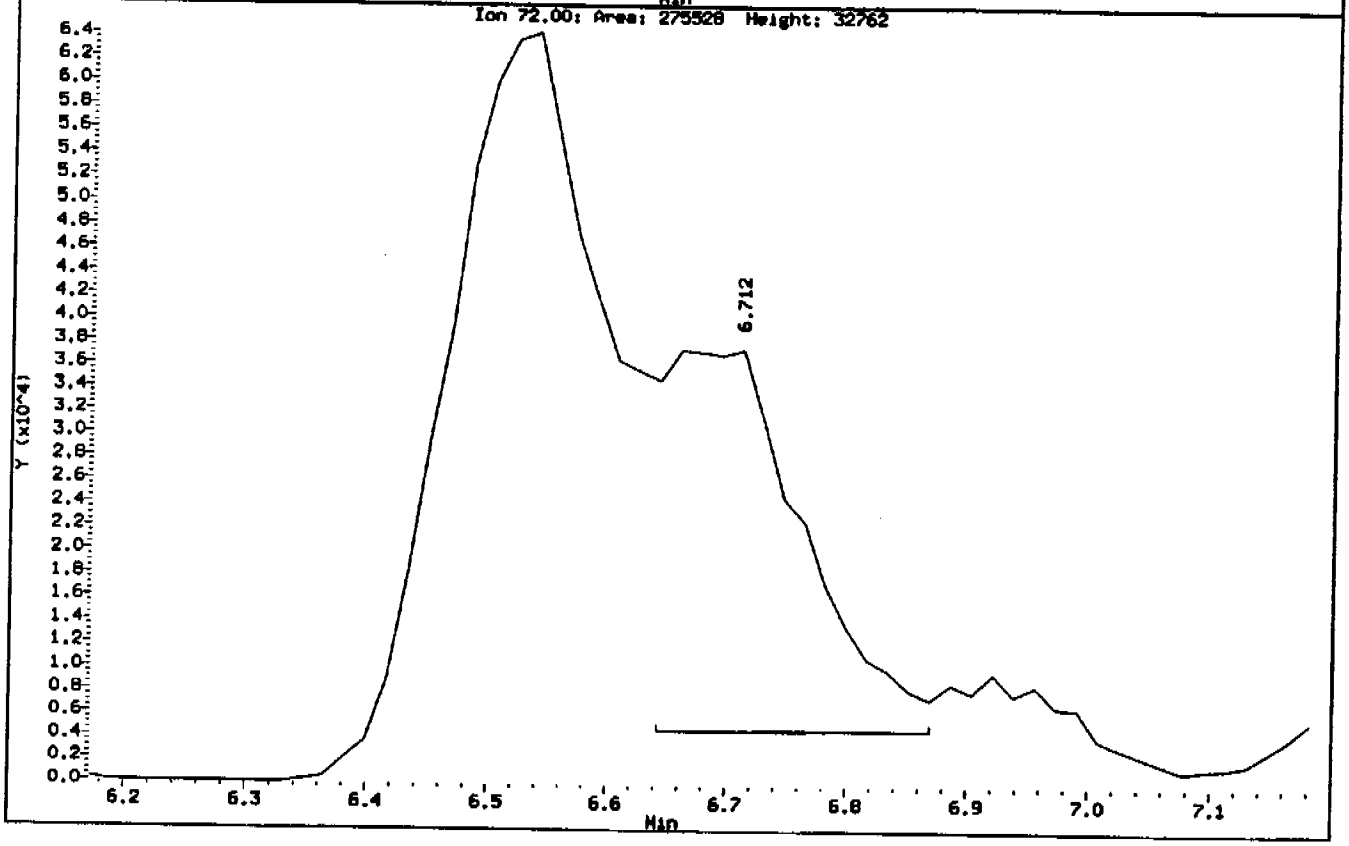
Data File: \\stlvr01\chem\MSG.i\G050417A.b\GCAL5166.D
Injection Date: 18-APR-2005 02:51
Instrument: MSG.i
Client Sample ID: VSTD0100

Compound: 2-Butanone
CAS Number: 78-93-3



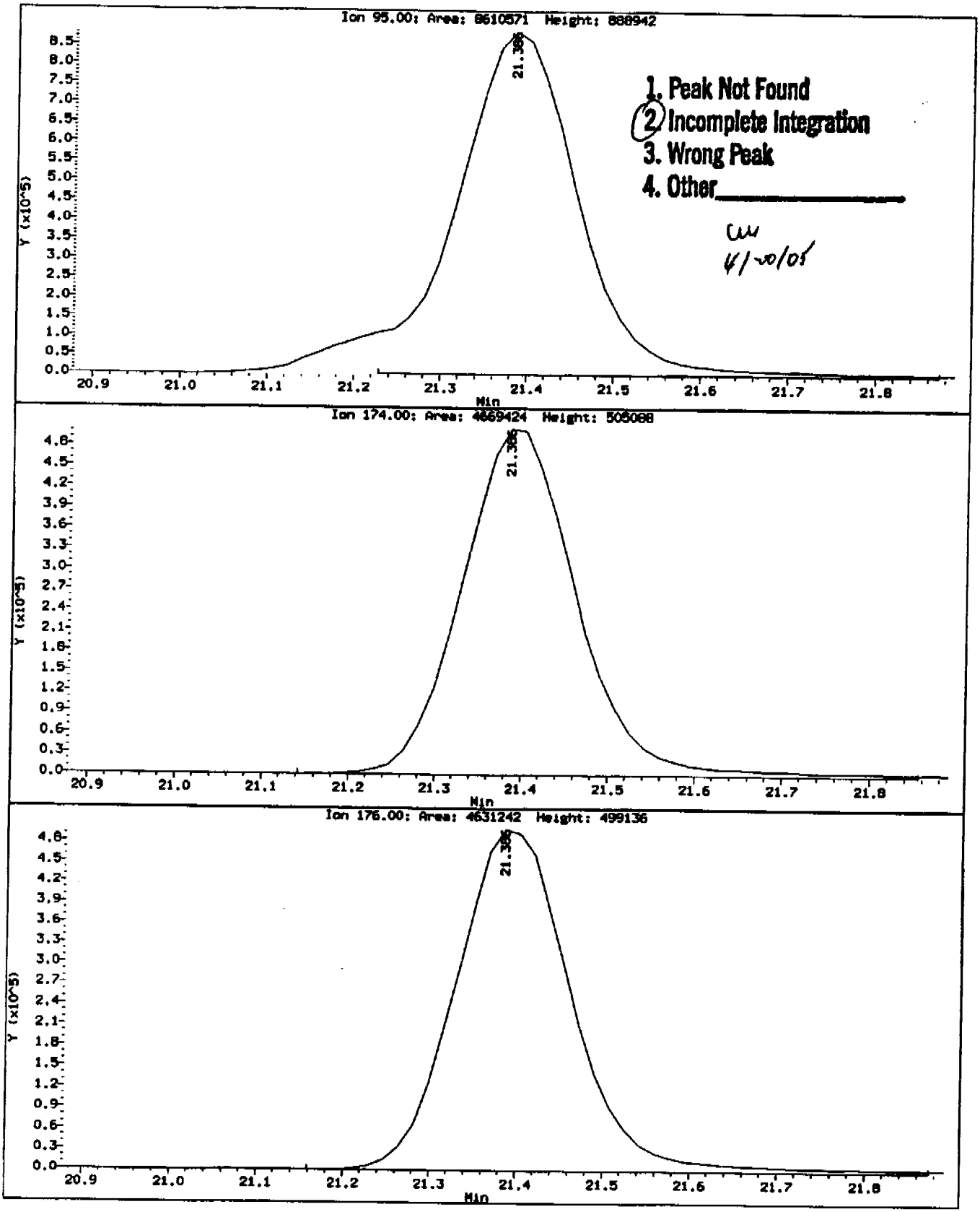
1. Peak Not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

WH
4/20/05



Data File: \\slsvr01\chem\MSG.i\G050417A.b\GCAL5166.D
Injection Date: 18-APR-2005 02:51
Instrument: MSG.i
Client Sample ID: VSTD0100

Compound: 4-Bromofluorobenzene
CAS Number: 460-00-4



Data File: \\slsvr01\chem\MSG.i\G050417A.b\GLCS5172.D
Report Date: 20-Apr-2005 11:17

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSG.i
Lab File ID: GLCS5172.D
Analysis Type: WATER
Lab Sample ID: ICV050
Method: \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m

Injection Date: 18-APR-2005 09:36
Init. Cal. Date(s): 17-APR-2005 18-APR-2005
Init. Cal. Times: 23:27 02:51
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	1 Dichlorodifluoromethane	0.38940	0.55063	0.55063	0.000	-41.40307	60.00000	Averaged
	3 Chloromethane	0.26986	0.24122	0.24122	0.100	10.61409	60.00000	Averaged
	4 Vinyl Chloride	0.19348	0.20931	0.20931	0.000	-8.17910	20.00000	Averaged
	5 Bromomethane	0.27622	0.22088	0.22088	0.000	20.03688	60.00000	Averaged
	6 Chloroethane	0.13389	0.14934	0.14934	0.000	-11.54678	60.00000	Averaged
	7 Trichlorofluoromethane	0.74150	0.80039	0.80039	0.000	-7.94213	60.00000	Averaged
	8 Diethyl ether	0.17125	0.14102	0.07035	0.000	17.8	60.00000	Averaged
	12 1,1-Dichloroethene	50.00000	40.39022	0.18828	0.000	19.21955	0.000e+000	Linear <-
	18 Carbon Disulfide	0.75627	0.33316	0.33316	0.000	55.94745	60.00000	Averaged
	9 1,1,2-Trichlorofluoroethane	0.63496	0.52143	0.52143	0.000	17.88042	60.00000	Averaged
M	38 1,2-Dichloroethene (total)	0.33289	0.27650	0.27650	0.000	16.94064	120	Averaged
	16 Allyl chloride	0.32681	0.25865	0.25865	0.000	20.85565	60.00000	Averaged
	17 Methylene Chloride	0.30727	0.40700	0.40700	0.000	-32.45840	60.00000	Averaged
	11 Acetone	0.07126	0.06456	0.06456	0.000	9.40947	60.00000	Averaged
	21 trans-1,2-Dichloroethene	0.31362	0.23176	0.23176	0.000	26.10099	60.00000	Averaged
	20 MTBE	0.74091	0.66137	0.66137	0.000	10.73519	60.00000	Averaged
	22 n-Hexane	0.45682	0.25391	0.25391	0.000	44.41738	60.00000	Averaged
	23 1,1-Dichloroethane	0.69668	0.63093	0.63093	0.100	9.43848	60.00000	Averaged
	30 cis-1,2-Dichloroethene	0.35216	0.32123	0.32123	0.000	8.78296	60.00000	Averaged
	29 2,2-Dichloropropane	0.66557	0.62860	0.62860	0.000	5.55483	60.00000	Averaged
	34 Bromochloromethane	0.19993	0.18561	0.18561	0.000	7.15842	60.00000	Averaged
	33 Chloroform	0.84427	0.78995	0.78995	0.000	6.43331	20.00000	Averaged
	42 Carbon Tetrachloride	0.65700	0.60910	0.60910	0.000	7.29085	60.00000	Averaged
	37 Tetrahydrofuran	0.02187	0.01946	0.00388	0.000	11.3	60.00000	Averaged <-
$	36 Dibromofluoromethane	0.56865	0.55028	0.55028	0.000	3.23114	60.00000	Averaged
	39 1,1,1-Trichloroethane	0.73189	0.68768	0.68768	0.000	6.04146	60.00000	Averaged
	27 2-Butanone	0.08613	0.10110	0.10110	0.000	-17.37880	60.00000	Averaged
	41 1,1-Dichloropropene	0.57658	0.48386	0.48386	0.000	16.08123	60.00000	Averaged
	47 Benzene	0.90161	0.79996	0.79996	0.000	11.27457	60.00000	Averaged
$	43 1,2-Dichloroethane-d4	0.20490	0.18887	0.18887	0.000	7.82300	60.00000	Averaged
	46 1,2-Dichloroethane	0.52533	0.48031	0.48031	0.000	8.57075	60.00000	Averaged
	49 Trichloroethene	0.41824	0.36525	0.36525	0.000	12.67074	60.00000	Averaged
	54 Dibromomethane	0.36758	0.36097	0.36097	0.000	1.79704	60.00000	Averaged
	51 1,2-Dichloropropane	0.40237	0.39372	0.39372	0.000	2.15018	20.00000	Averaged
	53 Bromodichloromethane	0.82386	0.83166	0.83166	0.000	-0.94706	60.00000	Averaged
	52 Methyl methacrylate	0.19676	0.20544	0.20544	0.000	-4.41137	60.00000	Averaged
	59 cis-1,3-Dichloropropene	0.57942	0.58028	0.58028	0.000	-0.14929	60.00000	Averaged
$	61 Toluene-d8	1.40123	1.14762	1.14762	0.000	18.09883	60.00000	Averaged
	62 Toluene	50.00000	41.59864	1.32004	0.000	16.80272	0.000e+000	Linear <-
	58 4-Methyl-2-pentanone	0.40869	0.25534	0.25534	0.000	37.52347	60.00000	Averaged
	68 Tetrachloroethene	0.58422	0.46312	0.46312	0.000	20.72749	60.00000	Averaged
	63 trans-1,3-Dichloropropene	0.75061	0.71008	0.71008	0.000	5.39970	60.00000	Averaged
M	78 Xylenes (total)	0.58249	0.59576	0.59576	0.000	-2.27813	180	Averaged

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GLCS5172.D
Report Date: 20-Apr-2005 11:17

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSG.i
Lab File ID: GLCS5172.D
Analysis Type: WATER
Lab Sample ID: ICV050
Method: \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m

Injection Date: 18-APR-2005 09:36
Init. Cal. Date(s): 17-APR-2005 18-APR-2005
Init. Cal. Times: 23:27 02:51
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	65 1,1,2-Trichloroethane	0.48738	0.44449	0.44449	0.000	8.80054	60.00000	Averaged
	64 Ethyl methacrylate	0.69478	0.53218	0.53218	0.000	23.40279	60.00000	Averaged
	69 Chlorodibromomethane	0.75874	0.79243	0.79243	0.000	-4.43949	60.00000	Averaged
	67 1,3-Dichloropropane	0.79843	0.72952	0.72952	0.000	8.63100	60.00000	Averaged
	70 1,2-Dibromoethane	0.60835	0.62259	0.62259	0.000	-2.34035	60.00000	Averaged
	66 2-Hexanone	0.29514	0.23398	0.23398	0.000	20.71984	60.00000	Averaged
	72 Chlorobenzene	1.06319	1.06365	1.06365	0.300	-0.04376	60.00000	Averaged
	74 Ethylbenzene	0.46342	0.47071	0.47071	0.000	-1.57366	20.00000	Averaged
	73 1,1,1,2-Tetrachloroethane	0.57116	0.62012	0.62012	0.000	-8.57077	60.00000	Averaged
	75 m,p-Xylenes	0.58988	0.60187	0.60187	0.000	-2.03245	60.00000	Averaged
	76 o-Xylene	0.56770	0.58353	0.58353	0.000	-2.78869	60.00000	Averaged
	77 Styrene	0.92755	0.99568	0.99568	0.000	-7.34551	60.00000	Averaged
	79 Bromoform	0.49460	0.44469	0.44469	0.100	10.09188	60.00000	Averaged
	80 Isopropylbenzene	1.64587	1.51176	1.51176	0.000	8.14823	60.00000	Averaged
	81 Cyclohexanone	0.03019	0.01302	0.01302	0.000	56.86371	100	Averaged
$	83 4-Bromofluorobenzene	1.71597	1.81160	1.81160	0.000	-5.57303	60.00000	Averaged
	85 Bromobenzene	0.89811	0.94841	0.94841	0.000	-5.60021	60.00000	Averaged
	86 n-Propylbenzene	3.73689	3.87939	3.87939	0.000	-3.81322	60.00000	Averaged
	82 1,1,2,2-Tetrachloroethane	0.67976	0.60313	0.60313	0.300	11.27299	60.00000	Averaged
	87 2-Chlorotoluene	2.71550	2.88924	2.88924	0.000	-6.39801	60.00000	Averaged
	84 1,2,3-Trichloropropane	0.30293	0.32543	0.32543	0.000	-7.42605	60.00000	Averaged
	89 1,3,5-Trimethylbenzene	2.52182	2.69301	2.69301	0.000	-6.78842	60.00000	Averaged
	88 trans-1,4-dichloro-2-butene	0.10852	0.11751	0.11751	0.000	-8.28671	60.00000	Averaged
	90 4-Chlorotoluene	3.03084	3.21516	3.21516	0.000	-6.08163	60.00000	Averaged
	91 t-Butylbenzene	2.94002	2.62904	2.62904	0.000	10.57749	60.00000	Averaged
	93 1,2,4-Trimethylbenzene	2.49354	2.61374	2.61374	0.000	-4.82076	60.00000	Averaged
	94 sec-Butylbenzene	3.41067	3.54548	3.54548	0.000	-3.95255	60.00000	Averaged
	95 4-Isopropyltoluene	2.50987	2.87687	2.87687	0.000	-14.62225	60.00000	Averaged
	96 1,3-Dichlorobenzene	1.57594	1.62817	1.62817	0.000	-3.31389	60.00000	Averaged
	98 1,4-Dichlorobenzene	1.68374	1.70070	1.70070	0.000	-1.00741	60.00000	Averaged
	99 n-Butylbenzene	2.64896	3.02761	3.02761	0.000	-14.29415	60.00000	Averaged
	100 1,2-Dichlorobenzene	1.40987	1.53009	1.53009	0.000	-8.52706	60.00000	Averaged
	101 1,2-Dibromo-3-chloropropane	0.20974	0.25482	0.25482	0.000	-21.49636	60.00000	Averaged
	104 Hexachlorobutadiene	0.89461	0.97202	0.97202	0.000	-8.65346	60.00000	Averaged
	103 1,2,4-Trichlorobenzene	1.09542	1.19335	1.19335	0.000	-8.93945	60.00000	Averaged
	105 Naphthalene	1.50491	1.61047	1.61047	0.000	-7.01408	60.00000	Averaged
	106 1,2,3-Trichlorobenzene	0.99273	1.06302	1.06302	0.000	-7.08108	60.00000	Averaged

Data File: \\slsvr01\chem\MSG.i\G050417A.b/GLCS5172.D
Report Date: 04/20/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSG.i
Lab File ID: GLCS5172.D
Analysis Type: WATER

Injection Date: 18-APR-2005 09:36
Lab Sample ID: ICV050
Method File: \\slsvr01\chem\MSG.i\G050417A.b\8260B-U

COMPOUND	%D
Dichlorodifluoromethane	41.4
Chloromethane	10.6
Vinyl Chloride	8.2
Bromomethane	20.0
Chloroethane	11.5
Trichlorofluoromethane	7.9
Diethyl ether	~~50.9~~ 17.8
1,1,2-Trichlorofluoroethane	17.9
Acetone	9.4
1,1-Dichloroethene	19.2
Allyl chloride	20.9
Methylene Chloride	32.5
Carbon Disulfide	55.9
MTBE	10.7
trans-1,2-Dichloroethene	26.1
n-Hexane	44.4
1,1-Dichloroethane	9.4
2-Butanone	17.4
2,2-Dichloropropane	5.6
cis-1,2-Dichloroethene	8.8
Chloroform	6.4
Bromochloromethane	7.2
Dibromofluoromethane	3.2
Tetrahydrofuran	~~82.3~~ 11.3
1,2-Dichloroethene (total)	17.4
1,1,1-Trichloroethane	6.0
1,1-Dichloropropene	16.1
Carbon Tetrachloride	7.3
1,2-Dichloroethane-d4	7.8
Benzene	11.3
1,2-Dichloroethane	8.6
Trichloroethene	12.7
1,2-Dichloropropane	2.2
Methyl methacrylate	4.4
Bromodichloromethane	0.9
Dibromomethane	1.8
4-Methyl-2-pentanone	37.5
cis-1,3-Dichloropropene	0.1
Toluene-d8	18.1

LOT# F5D220273

STL ST. LOUIS

Data File: \\slsvr01\chem\MSG.i\G050417A.b/GLCS5172.D
Report Date: 04/20/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSG.i
Lab File ID: GLCS5172.D
Analysis Type: WATER

Injection Date: 18-APR-2005 09:36
Lab Sample ID: ICV050
Method File: \\slsvr01\chem\MSG.i\G050417A.b\

COMPOUND	%D
Toluene	16.8
trans-1,3-Dichloropropene	5.4
Ethyl methacrylate	23.4
1,1,2-Trichloroethane	8.8
2-Hexanone	20.7
1,3-Dichloropropane	8.6
Tetrachloroethene	20.7
Chlorodibromomethane	4.4
1,2-Dibromoethane	2.3
Chlorobenzene	0.0
1,1,1,2-Tetrachloroethane	8.6
Ethylbenzene	1.6
m,p-Xylenes	2.0
o-Xylene	2.8
Styrene	7.3
Xylenes (total)	2.3
Bromoform	10.1
Isopropylbenzene	8.1
Cyclohexanone	56.9
1,1,2,2-Tetrachloroethane	11.3
4-Bromofluorobenzene	5.6
1,2,3-Trichloropropane	7.4
Bromobenzene	5.6
n-Propylbenzene	3.8
2-Chlorotoluene	6.4
trans-1,4-dichloro-2-butene	8.3
1,3,5-Trimethylbenzene	6.8
4-Chlorotoluene	6.1
t-Butylbenzene	10.6
1,2,4-Trimethylbenzene	4.8
sec-Butylbenzene	4.0
4-Isopropyltoluene	14.6
1,3-Dichlorobenzene	3.3
1,4-Dichlorobenzene	1.0
n-Butylbenzene	14.3
1,2-Dichlorobenzene	8.5
1,2-Dibromo-3-chloropropane	21.5
1,2,4-Trichlorobenzene	8.9
Hexachlorobutadiene	8.7

LOT# F5D220273

STL ST. LOUIS

Data File: \\slsvr01\chem\MSG.i\G050417A.b/GLCS5172.D
Report Date: 04/20/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSG.i
Lab File ID: GLCS5172.D
Analysis Type: WATER

Injection Date: 18-APR-2005 09:36
Lab Sample ID: ICV050
Method File: \\slsvr01\chem\MSG.i\G050417A.b\

COMPOUND	%D
Naphthalene	7.0
1,2,3-Trichlorobenzene	7.1

The average of %D's in the continuing calibration is ~~13~~ 12.0

WM
4/20/05

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GLCS5172.D
Report Date: 20-Apr-2005 11:17

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSG.i\G050417A.b\GLCS5172.D
Lab Smp Id: ICV050 Client Smp ID: ICV050
Inj Date : 18-APR-2005 09:36
Operator : WH Inst ID: MSG.i
Smp Info : ICV050;G050417A.b
Misc Info : VBLKG107A.B;
Comment : NONE
Method : \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Meth Date : 20-Apr-2005 11:15 hanw Quant Type: ISTD
Cal Date : 18-APR-2005 02:51 Cal File: GCAL5166.D
Als bottle: 15 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICV.sub
Target Version: 4.10
Processing Host: SLVOA04

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume
Vo	5.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	2.181	2.181	(0.235)	1798167	50.0000	70.70
3	Chloromethane	50	2.442	2.442	(0.263)	787745	50.0000	44.69
4	Vinyl Chloride	62	2.546	2.546	(0.274)	683526	50.0000	54.09
5	Bromomethane	94	3.051	3.051	(0.329)	721305	50.0000	39.98
6	Chloroethane	64	3.138	3.138	(0.338)	487709	50.0000	55.77
7	Trichlorofluoromethane	101	3.417	3.417	(0.368)	2613803	50.0000	53.97
8	Diethyl ether	59	3.782	3.782	(0.407)	459460	100.000	41.08
12	1,1-Dichloroethene	96	4.165	4.165	(0.449)	614853	50.0000	40.39
18	Carbon Disulfide	76	4.826	4.826	(0.520)	1087976	50.0000	22.03
9	1,1,2-Trichlorofluoroethane	101	3.939	3.939	(0.424)	1702801	50.0000	41.06
M 38	1,2-Dichloroethene (total)	96				1805887	100.000	82.56
16	Allyl chloride	39	4.652	4.652	(0.501)	844659	50.0000	39.57
17	Methylene Chloride	84	4.826	4.826	(0.520)	1329132	50.0000	66.23
11	Acetone	43	4.026	4.026	(0.434)	210817	50.0000	45.30
21	trans-1,2-Dichloroethene	96	5.262	5.262	(0.567)	756849	50.0000	36.95
20	MTBE	73	5.070	5.070	(0.546)	2159822	50.0000	44.63
22	n-Hexane	57	5.331	5.331	(0.574)	829188	50.0000	27.79 (M)
23	1,1-Dichloroethane	63	5.906	5.906	(0.636)	2060388	50.0000	45.28
30	cis-1,2-Dichloroethene	96	6.933	6.933	(0.747)	1049038	50.0000	45.61
29	2,2-Dichloropropane	77	6.863	6.863	(0.739)	2052803	50.0000	47.22
34	Bromochloromethane	128	7.524	7.524	(0.811)	606152	50.0000	46.42
33	Chloroform	83	7.229	7.229	(0.779)	2579714	50.0000	46.78

4/20/05

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GLCS5172.D
Report Date: 20-Apr-2005 11:17

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	42 Carbon Tetrachloride	117	8.464	8.464	(0.912)	1989125	50.0000	46.35
	37 Tetrahydrofuran	71	7.629	7.629	(0.822)	63354	250.000	44.34
$	36 Dibromofluoromethane	113	7.629	7.629	(0.822)	1797025	50.0000	48.38
	39 1,1,1-Trichloroethane	97	7.960	7.960	(0.857)	2245715	50.0000	46.98
	27 2-Butanone	43	6.672	6.672	(0.719)	330162	50.0000	58.69(M)
	41 1,1-Dichloropropene	75	8.290	8.290	(0.893)	1580125	50.0000	41.96
	47 Benzene	78	8.812	8.812	(0.949)	2612381	50.0000	44.36
$	43 1,2-Dichloroethane-d4	67	8.604	8.604	(0.927)	616779	50.0000	46.09
	46 1,2-Dichloroethane	62	8.812	8.812	(0.949)	1568516	50.0000	45.71
*	48 Fluorobenzene	96	9.282	9.282	(1.000)	3265659	50.0000	
	49 Trichloroethene	130	10.153	10.153	(1.094)	1192777	50.0000	43.66
	54 Dibromomethane	93	11.232	11.232	(1.210)	1178815	50.0000	49.10
	51 1,2-Dichloropropane	63	10.588	10.588	(1.141)	1285756	50.0000	48.92
	53 Bromodichloromethane	83	11.128	11.128	(1.199)	2715913	50.0000	50.47
	52 Methyl methacrylate	69	10.797	10.797	(1.163)	670908	50.0000	52.20
	59 cis-1,3-Dichloropropene	75	12.537	12.537	(1.351)	1895009	50.0000	50.07
$	61 Toluene-d8	98	13.129	13.129	(0.752)	2793086	50.0000	40.95
	62 Toluene	91	13.356	13.356	(0.765)	3212720	50.0000	41.60
	58 4-Methyl-2-pentanone	43	12.085	12.085	(1.302)	833846	50.0000	31.24
	68 Tetrachloroethene	164	15.131	15.131	(0.866)	1127154	50.0000	39.64
	63 trans-1,3-Dichloropropene	75	13.913	13.913	(0.797)	1728192	50.0000	47.30
M	78 Xylenes (total)	106				4349855	150.000	153.4
	65 1,1,2-Trichloroethane	97	14.313	14.313	(0.820)	1081794	50.0000	45.60
	64 Ethyl methacrylate	69	14.000	14.000	(0.802)	1295227	50.0000	38.30
	69 Chlorodibromomethane	129	15.705	15.705	(0.899)	1928612	50.0000	52.22
	67 1,3-Dichloropropane	76	15.044	15.044	(0.861)	1775507	50.0000	45.68
	70 1,2-Dibromoethane	107	16.280	16.280	(0.932)	1515248	50.0000	51.17
	66 2-Hexanone	43	14.470	14.470	(0.829)	569470	50.0000	39.64
*	71 Chlorobenzene-d5	117	17.463	17.463	(1.000)	2433801	50.0000	
	72 Chlorobenzene	112	17.568	17.568	(1.006)	2588722	50.0000	50.02
	74 Ethylbenzene	106	17.829	17.829	(1.021)	1145609	50.0000	50.79
	73 1,1,1,2-Tetrachloroethane	131	17.759	17.759	(1.017)	1509243	50.0000	54.28
	75 m,p-Xylenes	106	18.073	18.073	(1.035)	2929664	100.000	102.0
	76 o-Xylene	106	19.430	19.430	(1.113)	1420191	50.0000	51.39
	77 Styrene	104	19.552	19.552	(1.120)	2423283	50.0000	53.67
	79 Bromoform	173	20.510	20.510	(1.174)	1082284	50.0000	44.95
	80 Isopropylbenzene	105	20.649	20.649	(1.182)	3679328	50.0000	45.92
	81 Cyclohexanone	55	20.788	20.788	(1.190)	316917	500.000	215.7
$	83 4-Bromofluorobenzene	95	21.432	21.432	(0.881)	2109166	50.0000	52.79
	85 Bromobenzene	156	21.954	21.954	(0.902)	1104190	50.0000	52.80
	86 n-Propylbenzene	91	21.989	21.989	(0.903)	4516587	50.0000	51.91
	82 1,1,2,2-Tetrachloroethane	83	21.241	21.241	(1.216)	1467908	50.0000	44.36
	87 2-Chlorotoluene	91	22.442	22.442	(0.922)	3363801	50.0000	53.20
	84 1,2,3-Trichloropropane	110	21.711	21.711	(0.892)	378884	50.0000	53.71
	89 1,3,5-Trimethylbenzene	105	22.529	22.529	(0.926)	3135342	50.0000	53.39
	88 trans-1,4-dichloro-2-butene	53	22.529	22.529	(0.926)	136817	50.0000	54.14
	90 4-Chlorotoluene	91	22.598	22.598	(0.928)	3743263	50.0000	53.04
	91 t-Butylbenzene	119	23.399	23.399	(0.961)	3060867	50.0000	44.71
	93 1,2,4-Trimethylbenzene	105	23.469	23.469	(0.964)	3043060	50.0000	52.41
	94 sec-Butylbenzene	105	23.834	23.834	(0.979)	4127832	50.0000	51.98
	95 4-Isopropyltoluene	119	24.113	24.113	(0.991)	3349402	50.0000	57.31
	96 1,3-Dichlorobenzene	146	24.200	24.200	(0.994)	1895600	50.0000	51.66
*	97 1,4 Dichlorobenzene-d4	152	24.339	24.339	(1.000)	1164253	50.0000	
	98 1,4-Dichlorobenzene	146	24.391	24.391	(1.002)	1980043	50.0000	50.50

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GLCS5172.D
Report Date: 20-Apr-2005 11:17

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
99 n-Butylbenzene	91	24.809	24.809	(1.019)	3524905	50.0000	57.15
100 1,2-Dichlorobenzene	146	24.966	24.966	(1.026)	1781407	50.0000	54.26
101 1,2-Dibromo-3-chloropropane	157	26.045	26.045	(1.070)	296679	50.0000	60.75
104 Hexachlorobutadiene	225	27.176	27.176	(1.117)	1131679	50.0000	54.33
103 1,2,4-Trichlorobenzene	180	27.020	27.020	(1.110)	1389358	50.0000	54.47
105 Naphthalene	128	27.281	27.281	(1.121)	1874992	50.0000	53.51
106 1,2,3-Trichlorobenzene	180	27.524	27.524	(1.131)	1237627	50.0000	53.54

QC Flag Legend

M - Compound response manually integrated.

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GLCS5172.D
Report Date: 20-Apr-2005 11:17

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

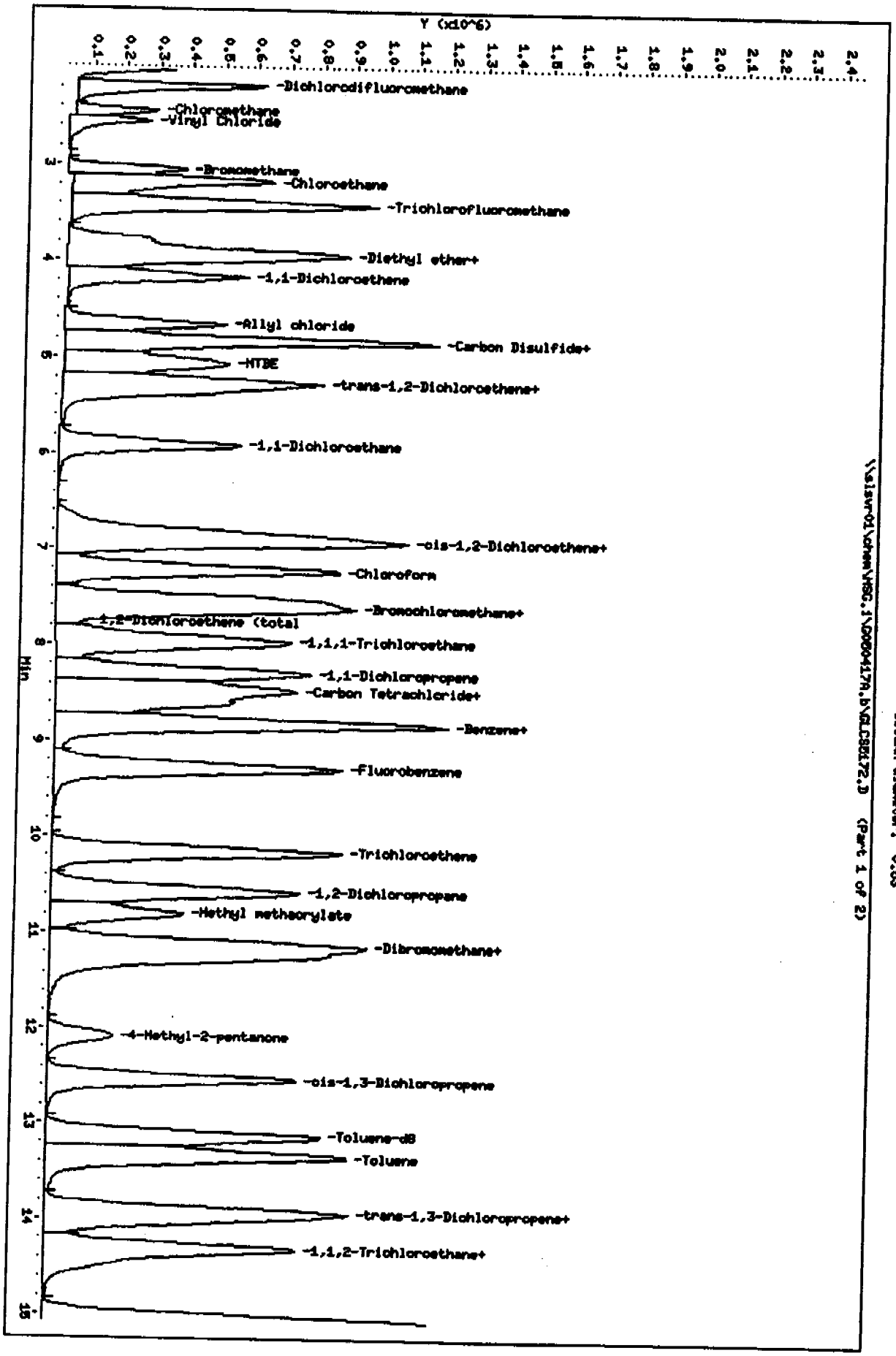
Instrument ID: MSG.i
Lab File ID: GLCS5172.D
Lab Smp Id: ICV050
Analysis Type: VOA
Quant Type: ISTD
Operator: WH
Method File: \\slsvr01\chem\MSG.i\G050417A.b\8260B-URS.m
Misc Info: VBLKG107A.B;

Calibration Date: 17-APR-2005
Calibration Time: 23:27
Client Smp ID: ICV050
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	2924725	1462363	5849450	3265659	11.66
71 Chlorobenzene-d5	2135082	1067541	4270164	2433801	13.99
97 1,4 Dichlorobenze	1343943	671972	2687886	1164253	-13.37

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	9.36	8.86	9.86	9.28	-0.78
71 Chlorobenzene-d5	17.54	17.04	18.04	17.46	-0.41
97 1,4 Dichlorobenze	24.36	23.86	24.86	24.34	-0.08

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^6)
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0.4
0.5
0.6
0.7
0.8
0.9
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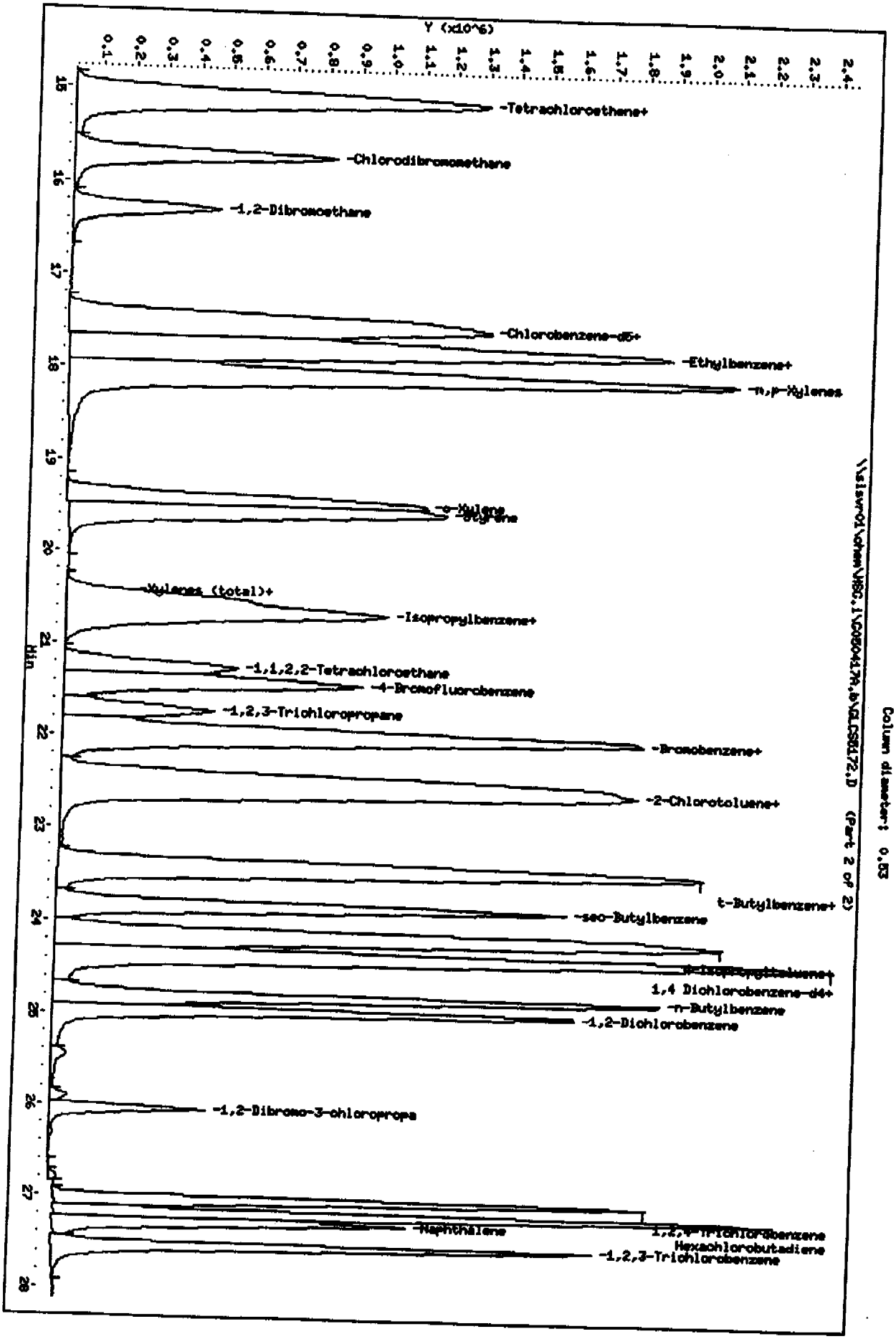
1.1
1.2
1.3
1.4
1.5
1.6
1.7
1.8
1.9
2.0
2.1
2.2
2.3
2.4
Min
3
4
5
6
7
8
9
10
11
12
13
14
15
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-Diethyl ether+
-1,1-Dichloroethene
-Allyl chloride
-Carbon Disulfide+
-MTBE
-trans-1,2-Dichloroethene+
-1,1-Dichloroethane
-cis-1,2-Dichloroethene+
-Chloroform
-Bromochloromethane+
1,2-Dichloroethene (total
-1,1,1-Trichloroethane
-1,1-Dichloropropene
-Carbon Tetrachloride+
-Benzene+
-Fluorobenzene
-Trichloroethene
-1,2-Dichloropropane
-Methyl methacrylate
-Dibromomethane+
-4-Methyl-2-pentanone
-cis-1,3-Dichloropropene
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane+
Data File: \\slsvr01\chem\MSC.i\Q0804178.b\GLC8172.D
Date : 19-APR-2006 09:36
Client ID: ICV080
Sample Info: ICV80;Q0804178.b
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: MSC.i
Operator: MH
Column diameter: 0.53
\\slsvr01\chem\MSC.i\Q0804178.b\GLC8172.D (Part 1 of 2)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15
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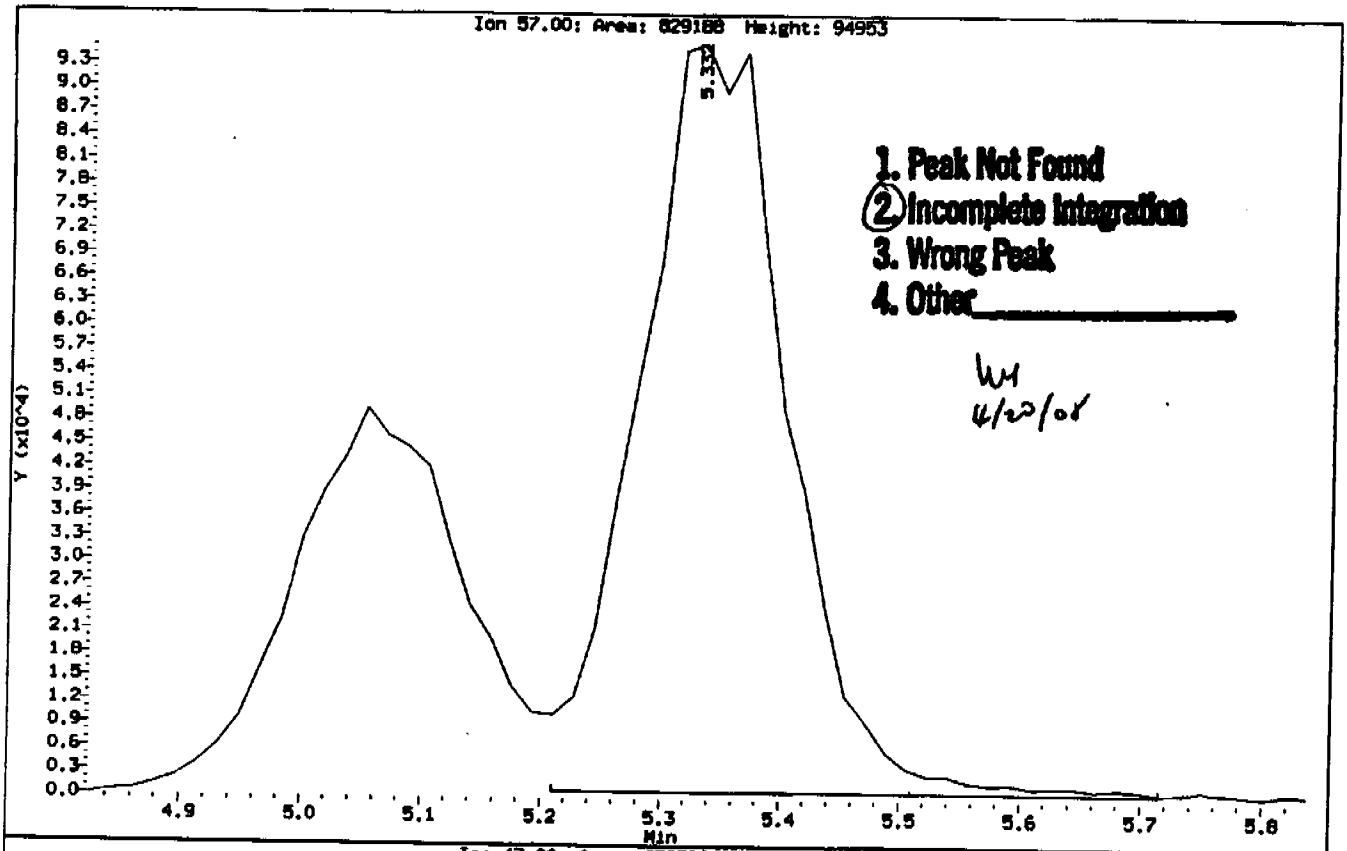
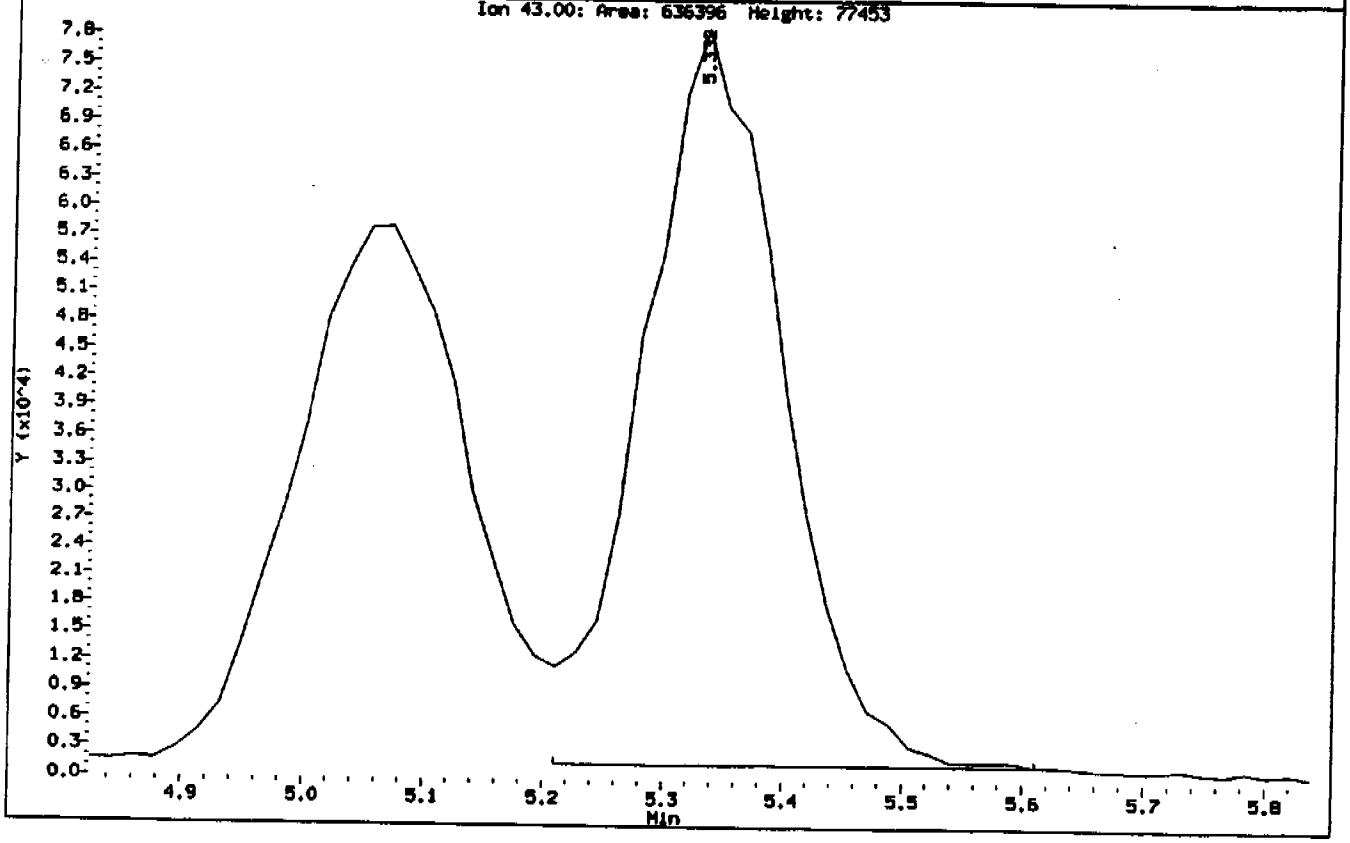
28
Min
Data File: \\slsvr01\chem\MSC.i\VG080417A.b\VGL080172.D
Date : 18-APR-2008 09:36
Client ID: ICV050
Sample Info: ICV050:VG080417A,b
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: MSC.i
Operator: MH
Column diameter: 0.53
\\slsvr01\chem\MSC.i\VG080417A.b\VGL080172.D (Part 2 of 2)
-Tetrachloroethene+
-Chlorodibromomethane
-1,2-Dibromoethane
-Chlorobenzene-d5+
-Ethylbenzene+
-m,p-Xylenes
-o-Xylene
Styrene
Xylenes (total)+
-Isopropylbenzene+
-1,1,2,2-Tetrachloroethane
-4-Bromofluorobenzene
-1,2,3-Trichloropropane
-Bromobenzene+
-2-Chlorotoluene+
t-Butylbenzene+
-sec-Butylbenzene
p-Isopropyltoluene+
1,4 Dichlorobenzene-d4+
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-Naphthalene
1,2,4-Trichlorobenzene
Hexachlorobutadiene
-1,2,3-Trichlorobenzene

Data File: \\slsvr01\chem\MSG.i\G050417A.b\GLCS5172.D
Injection Date: 18-APR-2005 09:36
Instrument: MSG.i
Client Sample ID: ICV050

Compound: n-Hexane
CAS Number:

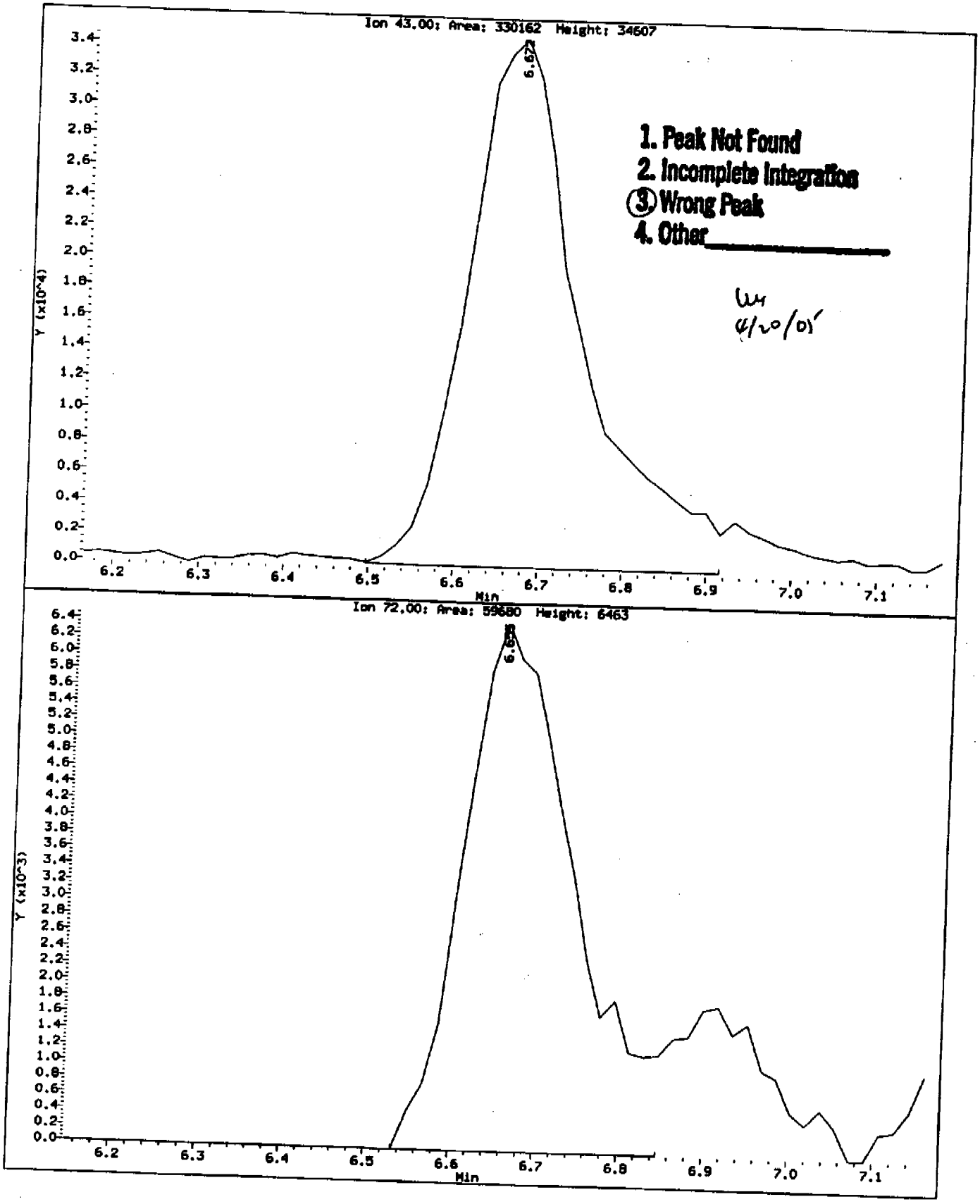


WM
4/20/05



Data File: \\slsvr01\chem\MSG.i\G050417A.b\GLC55172.D
Injection Date: 18-APR-2005 09:36
Instrument: MSG.i
Client Sample ID: ICV050

Compound: 2-Butanone
CAS Number: 78-93-3



LOT# F5D220273

Data File: \\slsvr01\ohem\MSC.i\C050427B.b\CBFB5458.D

Date : 27-APR-2005 21:18

Client ID: VBFB

Instrument: MSC.i

Sample Info: 50ng BFB;C050427B.b

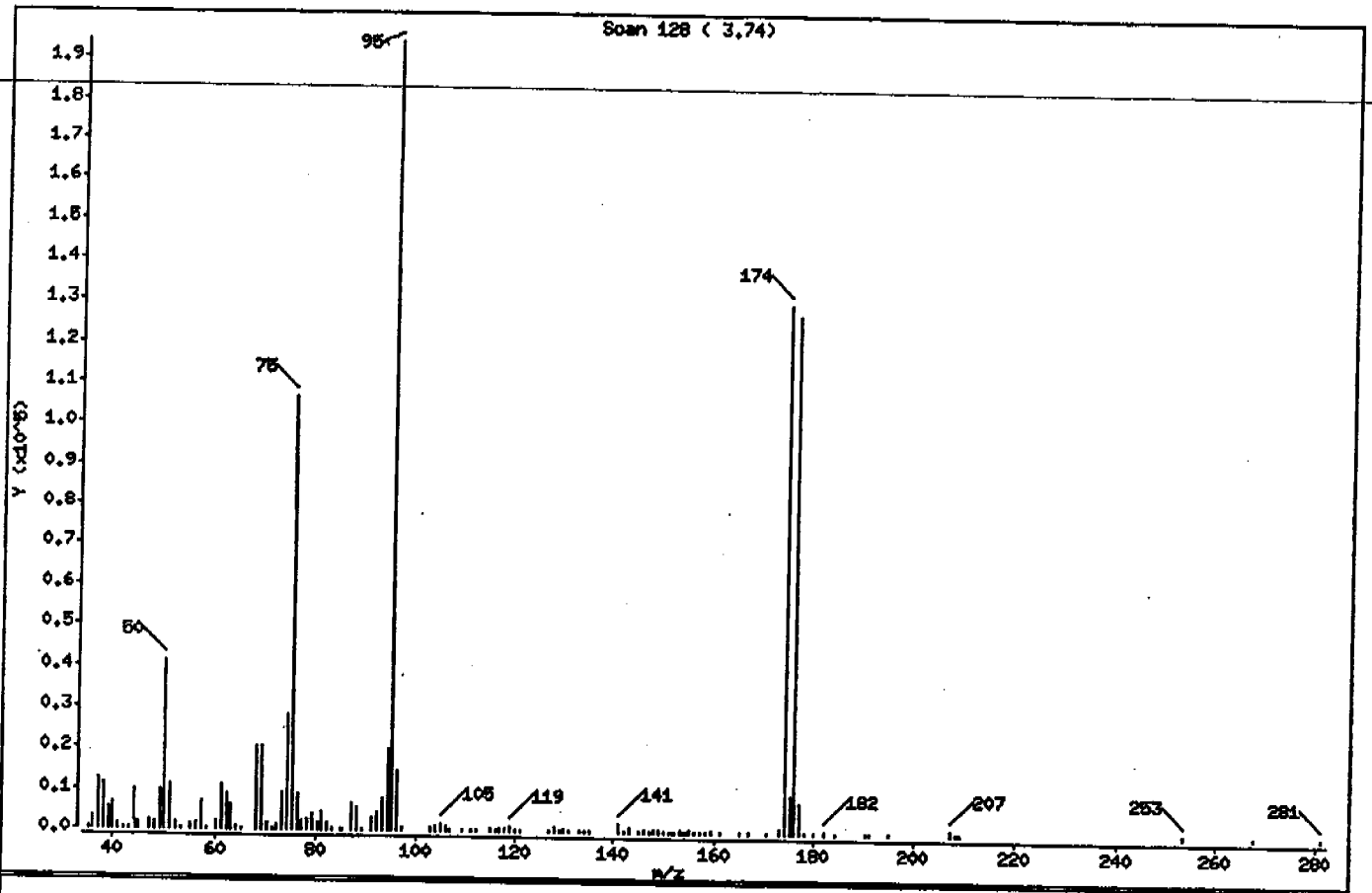
Volume Injected (uL): 2.0

Operator: JDH

Column phase: RTX-502.2

Column diameter: 0.53

1 BFB

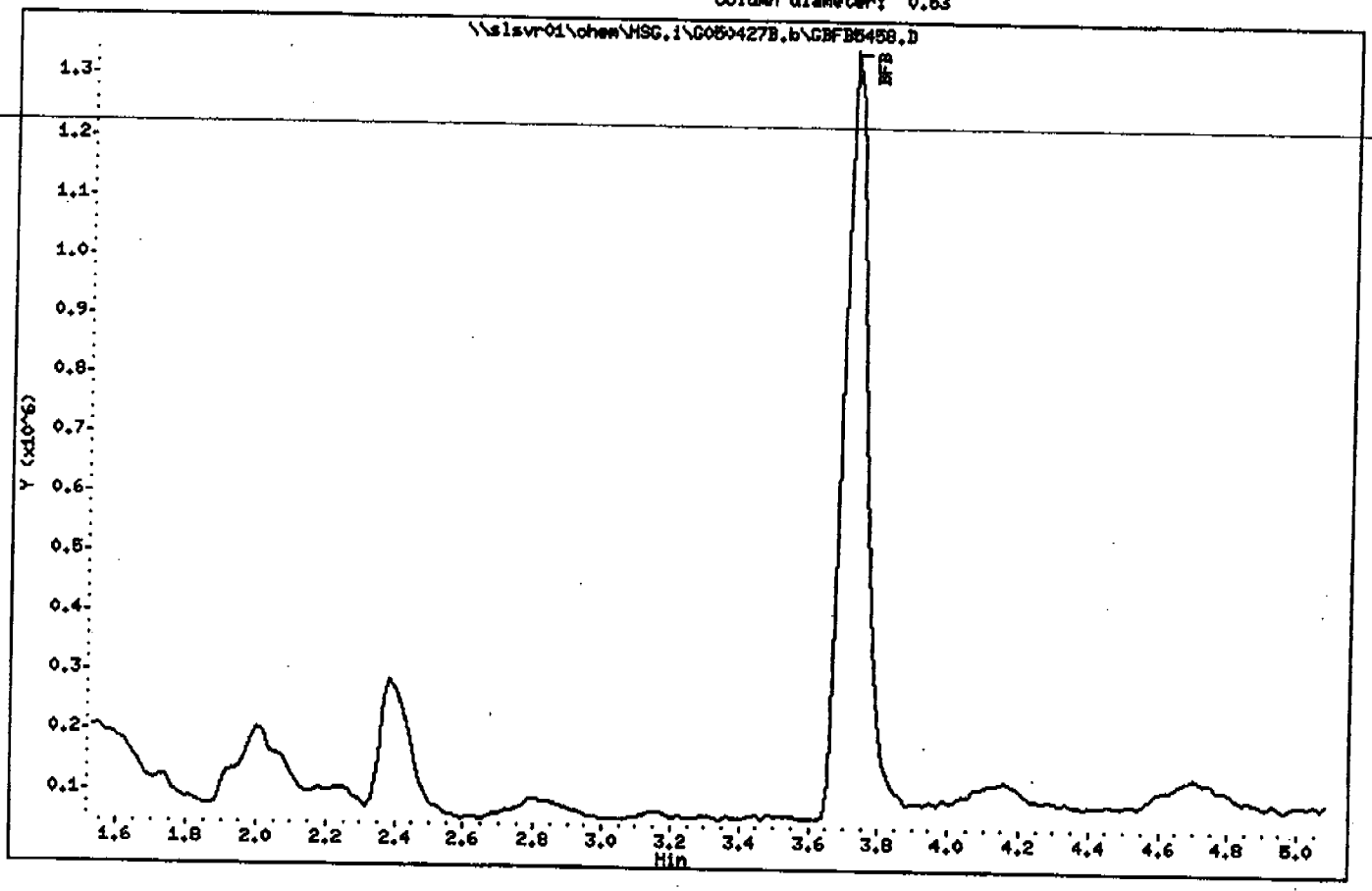


m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.08
75	30.00 - 60.00% of mass 95	54.79
96	5.00 - 9.00% of mass 95	7.58
173	Less than 2.00% of mass 174	0.89 (0.89)
174	Greater than 50.00% of mass 95	66.75
175	5.00 - 9.00% of mass 174	4.85 (7.27)
176	95.00 - 101.00% of mass 174	65.47 (98.08)
177	5.00 - 9.00% of mass 176	3.85 (5.89)

WH 4/29/05

STL ST. LOUIS

Data File: \\slsvr01\ohem\MSC.i\C050427B.b\CBFB5458.D
Date : 27-APR-2005 21:18
Client ID: VBFB
Instrument: MSC.i
Sample Info: 50ng BFB;C050427B.b
Volume Injected (uL): 2.0
Operator: JDH
Column phase: RTX-502.2
Column diameter: 0.53



LOT# F5D220273

Data File: \\slsvr01\chem\MSC.i\C050427B.b\GBFB5458.D
Date : 27-APR-2005 21:18
Client ID: VBFB
Instrument: MSC.i
Sample Info: 50ng BFB;C050427B.b
Volume Injected (uL): 2.0
Operator: JDH
Column phase: RTX-502.2
Column diameter: 0.53

Data File: GBFB5458.D
Spectrum: Scan 128 (3.74)
Location of Maximum: 95.15
Number of points: 123

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.15	257	71.15	610	111.00	290	154.35	309
36.10	2928	71.95	1214	112.20	350	154.65	269
37.10	12487	73.05	9444	115.30	944	155.25	1098
38.10	10990	74.15	28232	116.20	591	156.05	409
39.10	5146	75.15	106382	117.10	965	156.25	414
40.00	6820	76.15	8948	118.00	779	157.15	471
41.00	1333	77.05	2385	119.20	1455	158.15	264
42.20	347	78.15	2497	120.30	361	159.25	686
43.10	598	79.05	4193	121.30	281	161.05	414
44.10	9907	80.05	1993	127.00	471	165.20	433
45.10	1797	81.05	4655	128.20	1288	167.10	339
47.10	2222	82.05	1966	129.00	597	170.40	303
48.20	1622	83.15	577	130.00	890	173.10	1147
49.10	10049	84.95	321	131.00	501	174.10	129576
50.10	40928	85.15	345	133.05	311	175.10	9417
51.10	11160	87.05	6499	134.15	586	176.10	127088
52.10	1719	88.05	5780	135.25	613	177.10	7483
53.10	400	89.15	309	141.15	2168	178.00	344
55.00	1556	91.15	2914	142.15	499	180.10	471
56.20	1954	92.15	4406	143.05	1514	182.20	787
57.10	7230	93.15	9034	145.15	524	184.20	322
58.20	279	94.15	19920	146.05	747	190.20	261
60.20	2344	95.15	194112	147.05	664	191.00	426
61.10	11199	96.15	14705	148.05	721	195.20	374
62.10	8932	97.05	1078	149.15	1009	207.25	1538
63.10	6209	103.00	839	150.05	538	208.25	434
64.20	1112	104.00	1134	151.05	333	209.05	401
65.20	385	105.20	1710	151.95	413	253.30	843
68.10	20760	106.20	1228	152.25	423	267.25	307
69.05	20408	107.00	432	153.15	880	281.15	311
70.15	1620	109.20	328	153.95	314		

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GCAL5459.D
Report Date: 27-Apr-2005 22:14

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSG.i
Lab File ID: GCAL5459.D
Analysis Type: WATER
Lab Sample ID: VSTD050
Method: \\slsvr01\chem\MSG.i\G050427B.b\8260B-URS.m

Injection Date: 27-APR-2005 21:42
Init. Cal. Date(s): 17-APR-2005 18-APR-2005
Init. Cal. Times: 23:27 02:51
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
M	38 1,2-Dichloroethene (total)	0.33289	0.33245	0.33245	0.000	0.13289	120	Averaged
M	78 Xylenes (total)	0.58249	0.60085	0.60085	0.000	-3.15297	180	Averaged
	1 Dichlorodifluoromethane	0.38940	0.40674	0.40674	0.000	-4.45077	60.00000	Averaged
	3 Chloromethane	0.26986	0.22823	0.22823	0.100	15.42850	60.00000	Averaged
	4 Vinyl Chloride	0.19348	0.17542	0.17542	0.000	9.33455	20.00000	Averaged
	5 Bromomethane	0.27622	0.25293	0.25293	0.000	8.43097	60.00000	Averaged
	6 Chloroethane	0.13389	0.13482	0.13482	0.000	-0.70144	60.00000	Averaged
	7 Trichlorofluoromethane	0.74150	0.71322	0.71322	0.000	3.81363	60.00000	Averaged
	8 Diethyl ether	0.17125	0.16446	0.16446	0.000	3.96726	60.00000	Averaged
	10 Acrolein	0.01597	0.01434	0.01434	0.000	10.18217	60.00000	Averaged
	9 1,1,2-Trichlorofluoroethane	0.63496	0.62080	0.62080	0.000	2.23043	60.00000	Averaged
	11 Acetone	0.07126	0.05920	0.05920	0.000	16.92883	60.00000	Averaged
	12 1,1-Dichloroethene	50.00000	56.42210	0.26301	0.000	-12.84420	0.000e+000	Linear <- OK
	13 Acetonitrile	0.01016	0.01097	0.01097	0.000	-7.96888	60.00000	Averaged
	14 Iodomethane	0.21475	0.18903	0.18903	0.000	11.97899	60.00000	Averaged
	16 Allyl chloride	0.32681	0.31623	0.31623	0.000	3.23655	60.00000	Averaged
	15 Methyl acetate	0.03686	0.04092	0.04092	0.000	-11.03159	60.00000	Averaged
	17 Methylene Chloride	0.30727	0.34672	0.34672	0.000	-12.83968	60.00000	Averaged
	18 Carbon Disulfide	0.75627	0.77950	0.77950	0.000	-3.07164	60.00000	Averaged
	19 Acrylonitrile	0.04341	0.04884	0.04884	0.000	-12.51803	60.00000	Averaged
	20 MTBE	0.74091	0.77323	0.77323	0.000	-4.36160	60.00000	Averaged
	21 trans-1,2-Dichloroethene	0.31362	0.30939	0.30939	0.000	1.34770	60.00000	Averaged
	22 n-Hexane	0.45682	0.39550	0.39550	0.000	13.42269	60.00000	Averaged
	23 1,1-Dichloroethane	0.69668	0.69631	0.69631	0.100	0.05344	60.00000	Averaged
	27 2-Butanone	0.08613	0.10644	0.10644	0.000	-23.57468	60.00000	Averaged
	28 Propionitrile	0.01800	0.01937	0.01937	0.000	-7.60534	60.00000	Averaged
	29 2,2-Dichloropropane	0.66557	0.68788	0.68788	0.000	-3.35077	60.00000	Averaged
	30 cis-1,2-Dichloroethene	0.35216	0.35551	0.35551	0.000	-0.94895	60.00000	Averaged
	31 Ethyl acetate	0.25749	0.28645	0.28645	0.000	-11.25041	60.00000	Averaged
	32 Methacrylonitrile	0.15667	0.16780	0.16780	0.000	-7.10701	60.00000	Averaged
	35 Isobutanol	0.01651	0.01828	0.01828	0.000	-10.70915	100	Averaged
	33 Chloroform	0.84427	0.83194	0.83194	0.000	1.45960	20.00000	Averaged
	34 Bromochloromethane	0.19993	0.20618	0.20618	0.000	-3.12888	60.00000	Averaged
	37 Tetrahydrofuran	0.02187	0.02422	0.02422	0.000	-10.73997	60.00000	Averaged
$	36 Dibromofluoromethane	0.56865	0.54832	0.54832	0.000	3.57535	60.00000	Averaged
	39 1,1,1-Trichloroethane	0.73189	0.72309	0.72309	0.000	1.20320	60.00000	Averaged
	40 Cyclohexane	0.35628	0.35475	0.35475	0.000	0.43039	60.00000	Averaged
	41 1,1-Dichloropropene	0.57658	0.58521	0.58521	0.000	-1.49649	60.00000	Averaged
	42 Carbon Tetrachloride	0.65700	0.62601	0.62601	0.000	4.71816	60.00000	Averaged
	45 n-Butanol	0.01950	0.00601	0.00601	0.000	69.18543	100	Averaged
$	43 1,2-Dichloroethane-d4	0.20490	0.19371	0.19371	0.000	5.46124	60.00000	Averaged
	46 1,2-Dichloroethane	0.52533	0.52334	0.52334	0.000	0.37917	60.00000	Averaged

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GCAL5459.D
Report Date: 27-Apr-2005 22:14

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSG.i
Lab File ID: GCAL5459.D
Analysis Type: WATER
Lab Sample ID: VSTD050
Method: \\slsvr01\chem\MSG.i\G050427B.b\8260B-URS.m

Injection Date: 27-APR-2005 21:42
Init. Cal. Date(s): 17-APR-2005 18-APR-2005
Init. Cal. Times: 23:27 02:51
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	47 Benzene	0.90161	0.84476	0.84476	0.000	6.30491	60.00000	Averaged	
	49 Trichloroethene	0.41824	0.40625	0.40625	0.000	2.86839	60.00000	Averaged	
	50 Methylcyclohexane	0.51447	0.24457	0.24457	0.000	52.46227	60.00000	Averaged	
	51 1,2-Dichloropropane	0.40237	0.38786	0.38786	0.000	3.60781	20.00000	Averaged	
	52 Methyl methacrylate	0.19676	0.19615	0.19615	0.000	0.31046	60.00000	Averaged	
	53 Bromodichloromethane	0.82386	0.83801	0.83801	0.000	-1.71745	60.00000	Averaged	
	54 Dibromomethane	0.36758	0.36647	0.36647	0.000	0.30070	60.00000	Averaged	
	55 1,4-Dioxane	0.00229	0.00274	0.00274	0.000	-19.84812	100	Averaged	
	56 2-Nitropropane	0.29349	0.17812	0.17812	0.000	39.31012	60.00000	Averaged	
	58 4-Methyl-2-pentanone	0.40869	0.50436	0.50436	0.000	-23.40681	60.00000	Averaged	
	59 cis-1,3-Dichloropropene	0.57942	0.61062	0.61062	0.000	-5.38557	60.00000	Averaged	
$	61 Toluene-d8	1.40123	1.12485	1.12485	0.000	19.72430	60.00000	Averaged	
	62 Toluene	50.00000	42.16177	1.33729	0.000	15.67646	0.000e+000	Linear	<- OK
	63 trans-1,3-Dichloropropene	0.75061	0.70819	0.70819	0.000	5.65203	60.00000	Averaged	
	64 Ethyl methacrylate	0.69478	0.63582	0.63582	0.000	8.48650	60.00000	Averaged	
	65 1,1,2-Trichloroethane	0.48738	0.46040	0.46040	0.000	5.53625	60.00000	Averaged	
	66 2-Hexanone	0.29514	0.31845	0.31845	0.000	-7.89868	60.00000	Averaged	
	67 1,3-Dichloropropane	0.79843	0.77529	0.77529	0.000	2.89893	60.00000	Averaged	
	68 Tetrachloroethene	0.58422	0.52849	0.52849	0.000	9.53957	60.00000	Averaged	
	69 Chlorodibromomethane	0.75874	0.71772	0.71772	0.000	5.40691	60.00000	Averaged	
	70 1,2-Dibromoethane	0.60835	0.61511	0.61511	0.000	-1.11122	60.00000	Averaged	
	72 Chlorobenzene	1.06319	1.13518	1.13518	0.300	-6.77172	60.00000	Averaged	
	73 1,1,1,2-Tetrachloroethane	0.57116	0.59356	0.59356	0.000	-3.92134	60.00000	Averaged	
	74 Ethylbenzene	0.46342	0.48137	0.48137	0.000	-3.87463	20.00000	Averaged	
	75 m,p-Xylenes	0.58988	0.60394	0.60394	0.000	-2.38262	60.00000	Averaged	
	76 o-Xylene	0.56770	0.59468	0.59468	0.000	-4.75390	60.00000	Averaged	
	77 Styrene	0.92755	0.95520	0.95520	0.000	-2.98102	60.00000	Averaged	
	79 Bromoform	0.49460	0.63911	0.63911	0.100	-29.21596	60.00000	Averaged	
	80 Isopropylbenzene	1.64587	1.67999	1.67999	0.000	-2.07268	60.00000	Averaged	
	82 1,1,2,2-Tetrachloroethane	0.67976	0.78282	0.78282	0.300	-15.16104	60.00000	Averaged	
$	83 4-Bromofluorobenzene	1.71597	1.66337	1.66337	0.000	-3.06537	60.00000	Averaged	
	84 1,2,3-Trichloropropane	0.30293	0.31870	0.31870	0.000	-5.20469	60.00000	Averaged	
	85 Bromobenzene	0.89811	0.84458	0.84458	0.000	5.96104	60.00000	Averaged	
	86 n-Propylbenzene	3.73689	3.37278	3.37278	0.000	9.74361	60.00000	Averaged	
	88 trans-1,4-dichloro-2-butene	0.10852	0.10323	0.10323	0.000	4.87759	60.00000	Averaged	
	87 2-Chlorotoluene	2.71550	2.26731	2.26731	0.000	16.50477	60.00000	Averaged	
	89 1,3,5-Trimethylbenzene	2.52182	2.37936	2.37936	0.000	5.64890	60.00000	Averaged	
	90 4-Chlorotoluene	3.03084	2.53823	2.53823	0.000	16.25326	60.00000	Averaged	
	91 t-Butylbenzene	2.94002	2.50912	2.50912	0.000	14.65626	60.00000	Averaged	
	93 1,2,4-Trimethylbenzene	2.49354	2.24109	2.24109	0.000	10.12419	60.00000	Averaged	
	94 sec-Butylbenzene	3.41067	3.08258	3.08258	0.000	9.61935	60.00000	Averaged	
	95 4-Isopropyltoluene	2.50987	2.30761	2.30761	0.000	8.05835	60.00000	Averaged	

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GCAL5459.D
Report Date: 27-Apr-2005 22:14

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSG.i
Lab File ID: GCAL5459.D
Analysis Type: WATER
Lab Sample ID: VSTD050
Method: \\slsvr01\chem\MSG.i\G050427B.b\8260B-URS.m

Injection Date: 27-APR-2005 21:42
Init. Cal. Date(s): 17-APR-2005 18-APR-2005
Init. Cal. Times: 23:27 02:51
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
96 1,3-Dichlorobenzene	1.57594	1.49156	1.49156	0.000	5.35467	60.00000	Averaged
98 1,4-Dichlorobenzene	1.60374	1.54914	1.54914	0.000	7.99392	60.00000	Averaged
99 n-Butylbenzene	2.64896	2.47426	2.47426	0.000	6.59531	60.00000	Averaged
100 1,2-Dichlorobenzene	1.40987	1.35148	1.35148	0.000	4.14089	60.00000	Averaged
103 1,2,4-Trichlorobenzene	1.09542	1.01970	1.01970	0.000	6.91261	60.00000	Averaged
104 Hexachlorobutadiene	0.89461	0.73776	0.73776	0.000	17.53252	60.00000	Averaged
101 1,2-Dibromo-3-chloropropane	0.20974	0.25381	0.25381	0.000	-21.01523	60.00000	Averaged
105 Naphthalene	1.50491	1.71646	1.71646	0.000	-14.05686	60.00000	Averaged
106 1,2,3-Trichlorobenzene	0.99273	0.94369	0.94369	0.000	4.94006	60.00000	Averaged

Data File: \\slsvr01\chem\MSG.i\G050427B.b/GCAL5459.D
Report Date: 04/27/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSG.i
Lab File ID: GCAL5459.D
Analysis Type: WATER

Injection Date: 27-APR-2005 21:42
Lab Sample ID: VSTD050
Method File: \\slsvr01\chem\MSG.i\G050427B.b\8260B-U

COMPOUND	%D
Dichlorodifluoromethane	4.5
Chloromethane	15.4
Vinyl Chloride	9.3
Bromomethane	8.4
Chloroethane	0.7
Trichlorofluoromethane	3.8
Diethyl ether	4.0
Acrolein	10.2
1,1,2-Trichlorofluoroethane	2.2
Acetone	16.9
1,1-Dichloroethene	12.8
Acetonitrile	8.0
Iodomethane	12.0
Methyl acetate	11.0
Allyl chloride	3.2
Methylene Chloride	12.8
Carbon Disulfide	3.1
Acrylonitrile	12.5
MTBE	4.4
trans-1,2-Dichloroethene	1.3
n-Hexane	13.4
1,1-Dichloroethane	0.1
2-Butanone	23.6
Propionitrile	7.6
2,2-Dichloropropane	3.4
cis-1,2-Dichloroethene	0.9
Ethyl acetate	11.3
Methacrylonitrile	7.1
Chloroform	1.5
Bromochloromethane	3.1
Isobutanol	10.7
Dibromofluoromethane	3.6
Tetrahydrofuran	10.7
1,2-Dichloroethene (total)	0.2
1,1,1-Trichloroethane	1.2
Cyclohexane	0.4
1,1-Dichloropropene	1.5
Carbon Tetrachloride	4.7
n-Butanol	69.2

Data File: \\slsvr01\chem\MSG.i\G050427B.b/GCAL5459.D
Report Date: 04/27/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSG.i
Lab File ID: GCAL5459.D
Analysis Type: WATER

Injection Date: 27-APR-2005 21:42
Lab Sample ID: VSTD050
Method File: \\slsvr01\chem\MSG.i\G050427B.b\

COMPOUND	%D
1,2-Dichloroethane-d4	5.5
1,2-Dichloroethane	0.4
Benzene	6.3
Trichloroethene	2.9
Methylcyclohexane	52.5
1,2-Dichloropropane	3.6
Methyl methacrylate	0.3
Bromodichloromethane	1.7
Dibromomethane	0.3
1,4-Dioxane	19.8
2-Nitropropane	39.3
4-Methyl-2-pentanone	23.4
cis-1,3-Dichloropropene	5.4
Toluene-d8	19.7
Toluene	15.7
trans-1,3-Dichloropropene	5.7
Ethyl methacrylate	8.5
1,1,2-Trichloroethane	5.5
2-Hexanone	7.9
1,3-Dichloropropane	2.9
Tetrachloroethene	9.5
Chlorodibromomethane	5.4
1,2-Dibromoethane	1.1
Chlorobenzene	6.8
1,1,1,2-Tetrachloroethane	3.9
Ethylbenzene	3.9
m,p-Xylenes	2.4
o-Xylene	4.8
Styrene	3.0
Xylenes (total)	3.2
Bromoform	29.2
Isopropylbenzene	2.1
1,1,2,2-Tetrachloroethane	15.2
4-Bromofluorobenzene	3.1
1,2,3-Trichloropropane	5.2
Bromobenzene	6.0
n-Propylbenzene	9.7
2-Chlorotoluene	16.5
1,3,5-Trimethylbenzene	5.6

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Data File: \\slsvr01\chem\MSG.i\G050427B.b/GCAL5459.D
Report Date: 04/27/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSG.i
Lab File ID: GCAL5459.D
Analysis Type: WATER

Injection Date: 27-APR-2005 21:42
Lab Sample ID: VSTD050
Method File: \\slsvr01\chem\MSG.i\G050427B.b\

COMPOUND	%D
trans-1,4-dichloro-2-butene	4.9
4-Chlorotoluene	16.3
t-Butylbenzene	14.7
1,2,4-Trimethylbenzene	10.1
sec-Butylbenzene	9.6
4-Isopropyltoluene	8.1
1,3-Dichlorobenzene	5.4
1,4-Dichlorobenzene	8.0
n-Butylbenzene	6.6
1,2-Dichlorobenzene	4.1
1,2-Dibromo-3-chloropropane	21.0
1,2,4-Trichlorobenzene	6.9
Hexachlorobutadiene	17.5
Naphthalene	14.1
1,2,3-Trichlorobenzene	4.9

The average of %D's in the continuing calibration is 9.1

WI
4/29/05

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GCAL5459.D
Report Date: 27-Apr-2005 22:14

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSG.i\G050427B.b\GCAL5459.D
Lab Smp Id: VSTD050 Client Smp ID: VSTD050
Inj Date : 27-APR-2005 21:42
Operator : JDH Inst ID: MSG.i
Smp Info : VSTD050;G050427B.b
Misc Info : VBLKG117B.B;
Comment : NONE
Method : \\slsvr01\chem\MSG.i\G050427B.b\8260B-URS.m
Meth Date : 27-Apr-2005 22:14 hannj Quant Type: ISTD
Cal Date : 18-APR-2005 02:51 Cal File: GCAL5166.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.10
Processing Host: SLVOA04

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume
Vo	5.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
M 38 1,2-Dichloroethene (total)	96				2072611	100.000	99.80
M 78 Xylenes (total)	106				4122619	150.000	154.8
1 Dichlorodifluoromethane	85	2.199	2.199	(0.236)	1267874	50.0000	52.22
3 Chloromethane	50	2.478	2.478	(0.265)	711433	50.0000	42.28
4 Vinyl Chloride	62	2.565	2.565	(0.275)	546823	50.0000	45.33
5 Bromomethane	94	3.052	3.052	(0.327)	788444	50.0000	45.78
6 Chloroethane	64	3.139	3.139	(0.336)	420274	50.0000	50.35
7 Trichlorofluoromethane	101	3.435	3.435	(0.368)	2223252	50.0000	48.09
8 Diethyl ether	59	3.800	3.800	(0.407)	1025283	100.000	96.03
10 Acrolein	56	3.975	3.975	(0.426)	223497	250.000	224.5
9 1,1,2-Trichlorofluoroethane	101	3.975	3.975	(0.426)	1935148	50.0000	48.88
11 Acetone	43	4.062	4.062	(0.435)	184529	50.0000	41.54
12 1,1-Dichloroethene	96	4.201	4.201	(0.450)	819856	50.0000	56.42
13 Acetonitrile	41	4.410	4.410	(0.472)	170957	250.000	269.9
14 Iodomethane	142	4.619	4.619	(0.495)	589229	50.0000	44.01
16 Allyl chloride	39	4.688	4.688	(0.502)	985748	50.0000	48.38
15 Methyl acetate	74	4.671	4.671	(0.500)	127570	50.0000	55.52
17 Methylene Chloride	84	4.845	4.845	(0.519)	1080796	50.0000	56.42
18 Carbon Disulfide	76	4.862	4.862	(0.521)	2429857	50.0000	51.54
19 Acrylonitrile	53	5.054	5.054	(0.541)	761297	250.000	281.3
20 MTBE	73	5.089	5.089	(0.545)	2410303	50.0000	52.18
21 trans-1,2-Dichloroethene	96	5.280	5.280	(0.566)	964431	50.0000	49.33

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Data File: \\slsvr01\chem\MSG.i\G050427B.b\GCAL5459.D
Report Date: 27-Apr-2005 22:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	22 n-Hexane	57	5.367	5.367	(0.575)	1232853	50.0000	43.29
	23 1,1-Dichloroethane	63	5.941	5.941	(0.636)	2170533	50.0000	49.97
	27 2-Butanone	43	6.707	6.707	(0.718)	331788	50.0000	61.79
	28 Propionitrile	54	6.829	6.829	(0.732)	301848	250.000	269.0
	29 2,2-Dichloropropane	77	6.899	6.899	(0.739)	2144246	50.0000	51.68
	30 cis-1,2-Dichloroethene	96	6.968	6.968	(0.746)	1108180	50.0000	50.47
	31 Ethyl acetate	43	7.003	7.003	(0.750)	1785872	100.000	111.2
	32 Methacrylonitrile	41	7.160	7.160	(0.767)	2615364	250.000	267.8
	35 Isobutanol	42	7.665	7.665	(0.821)	1139355	1000.00	1107
	33 Chloroform	83	7.264	7.264	(0.778)	2593331	50.0000	49.27
	34 Bromochloromethane	128	7.560	7.560	(0.810)	642706	50.0000	51.56
	37 Tetrahydrofuran	71	7.700	7.700	(0.825)	377560	250.000	276.8
$	36 Dibromofluoromethane	113	7.665	7.665	(0.821)	1709227	50.0000	48.21
	39 1,1,1-Trichloroethane	97	8.013	8.013	(0.858)	2254003	50.0000	49.40
	40 Cyclohexane	84	8.048	8.048	(0.862)	1105822	50.0000	49.78
	41 1,1-Dichloropropene	75	8.326	8.326	(0.892)	1824218	50.0000	50.75
	42 Carbon Tetrachloride	117	8.518	8.518	(0.912)	1951385	50.0000	47.64
	45 n-Butanol	56	8.657	8.657	(0.927)	187345	500.000	154.1(a)
$	43 1,2-Dichloroethane-d4	67	8.657	8.657	(0.927)	603823	50.0000	47.27
	46 1,2-Dichloroethane	62	8.848	8.848	(0.948)	1631350	50.0000	49.81
	47 Benzene	78	8.866	8.866	(0.950)	2633289	50.0000	46.85
*	48 Fluorobenzene	96	9.336	9.336	(1.000)	3117196	50.0000	
	49 Trichloroethene	130	10.223	10.223	(1.095)	1266349	50.0000	48.56
	50 Methylcyclohexane	55	10.310	10.310	(1.104)	762360	50.0000	23.77
	51 1,2-Dichloropropane	63	10.606	10.606	(1.136)	1209020	50.0000	48.20
	52 Methyl methacrylate	69	10.867	10.867	(1.164)	611446	50.0000	49.84
	53 Bromodichloromethane	83	11.181	11.181	(1.198)	2612227	50.0000	50.86
	54 Dibromomethane	93	11.285	11.285	(1.209)	1142369	50.0000	49.85
	55 1,4-Dioxane	88	11.320	11.320	(1.213)	171108	1000.00	1198
	56 2-Nitropropane	43	11.407	11.407	(1.222)	555229	50.0000	30.34
	58 4-Methyl-2-pentanone	43	12.103	12.103	(1.296)	1572177	50.0000	61.70
	59 cis-1,3-Dichloropropene	75	12.591	12.591	(1.349)	1903434	50.0000	52.69
$	61 Toluene-d8	98	13.183	13.183	(0.753)	2572632	50.0000	40.14
	62 Toluene	91	13.409	13.409	(0.766)	3058520	50.0000	42.16
	63 trans-1,3-Dichloropropene	75	13.966	13.966	(0.798)	1619688	50.0000	47.17
	64 Ethyl methacrylate	69	14.053	14.053	(0.803)	1454178	50.0000	45.76
	65 1,1,2-Trichloroethane	97	14.366	14.366	(0.821)	1052972	50.0000	47.23
	66 2-Hexanone	43	14.505	14.505	(0.829)	728319	50.0000	53.95
	67 1,3-Dichloropropane	76	15.097	15.097	(0.863)	1773156	50.0000	48.55
	68 Tetrachloroethene	164	15.184	15.184	(0.868)	1208700	50.0000	45.23
	69 Chlorodibromomethane	129	15.759	15.759	(0.901)	1641493	50.0000	47.30
	70 1,2-Dibromoethane	107	16.333	16.333	(0.933)	1406810	50.0000	50.56
*	71 Chlorobenzene-d5	117	17.499	17.499	(1.000)	2287097	50.0000	
	72 Chlorobenzene	112	17.621	17.621	(1.007)	2596277	50.0000	53.38(A)
	73 1,1,1,2-Tetrachloroethane	131	17.795	17.795	(1.017)	1357533	50.0000	51.96
	74 Ethylbenzene	106	17.865	17.865	(1.021)	1100941	50.0000	51.94
	75 m,p-Xylenes	106	18.109	18.109	(1.035)	2762519	100.000	102.4
	76 o-Xylene	106	19.449	19.449	(1.111)	1360100	50.0000	52.38
	77 Styrene	104	19.588	19.588	(1.119)	2184625	50.0000	51.49
	79 Bromoform	173	20.528	20.528	(1.173)	1461699	50.0000	64.61
	80 Isopropylbenzene	105	20.667	20.667	(1.181)	3842289	50.0000	51.04
	82 1,1,2,2-Tetrachloroethane	83	21.259	21.259	(1.215)	1790391	50.0000	57.58
$	83 4-Bromofluorobenzene	95	21.433	21.433	(0.880)	2556208	50.0000	48.47
	84 1,2,3-Trichloropropane	110	21.746	21.746	(0.893)	489769	50.0000	52.60

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GCAL5459.D
Report Date: 27-Apr-2005 22:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
85	Bromobenzene	156	21.990	21.990	(0.903)	1297915	50.0000	47.02
86	n-Propylbenzene	91	22.025	22.025	(0.904)	5183167	50.0000	45.13
88	trans-1,4-dichloro-2-butene	53	22.547	22.547	(0.926)	158638	50.0000	47.56
87	2-Chlorotoluene	91	22.460	22.460	(0.922)	3484320	50.0000	41.75
89	1,3,5-Trimethylbenzene	105	22.530	22.530	(0.925)	3656514	50.0000	47.18
90	4-Chlorotoluene	91	22.634	22.634	(0.929)	3900656	50.0000	41.87
91	t-Butylbenzene	119	23.400	23.400	(0.961)	3855927	50.0000	42.67
93	1,2,4-Trimethylbenzene	105	23.487	23.487	(0.964)	3444019	50.0000	44.94
94	sec-Butylbenzene	105	23.853	23.853	(0.979)	4737201	50.0000	45.19
95	4-Isopropyltoluene	119	24.131	24.131	(0.991)	3546257	50.0000	45.97
96	1,3-Dichlorobenzene	146	24.201	24.201	(0.994)	2292169	50.0000	47.32
* 97	1,4 Dichlorobenzene-d4	152	24.357	24.357	(1.000)	1536763	50.0000	
98	1,4-Dichlorobenzene	146	24.410	24.410	(1.002)	2380660	50.0000	46.00
99	n-Butylbenzene	91	24.810	24.810	(1.019)	3802346	50.0000	46.70
100	1,2-Dichlorobenzene	146	24.967	24.967	(1.025)	2076912	50.0000	47.93
103	1,2,4-Trichlorobenzene	180	27.038	27.038	(1.110)	1567037	50.0000	46.54
104	Hexachlorobutadiene	225	27.195	27.195	(1.116)	1133762	50.0000	41.23
101	1,2-Dibromo-3-chloropropane	157	26.063	26.063	(1.070)	390052	50.0000	60.51
105	Naphthalene	128	27.299	27.299	(1.121)	2637785	50.0000	57.03
106	1,2,3-Trichlorobenzene	180	27.543	27.543	(1.131)	1450220	50.0000	47.53

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GCAL5459.D
Report Date: 27-Apr-2005 22:14

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

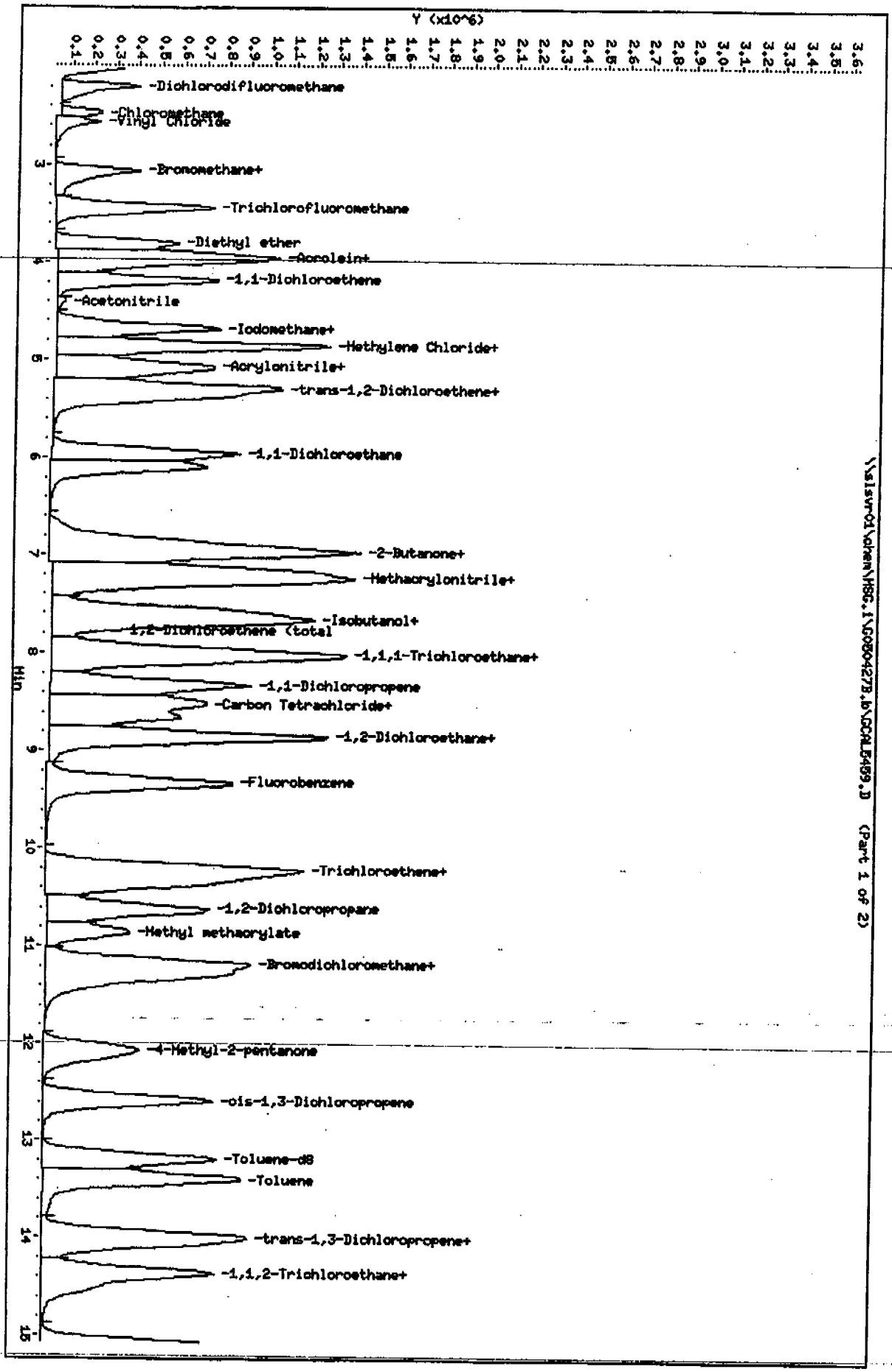
Instrument ID: MSG.i
Lab File ID: GCAL5459.D
Lab Smp Id: VSTD050
Analysis Type: VOA
Quant Type: ISTD
Operator: JDH
Method File: \\slsvr01\chem\MSG.i\G050427B.b\8260B-URS.m
Misc Info: VBLKG117B.B;

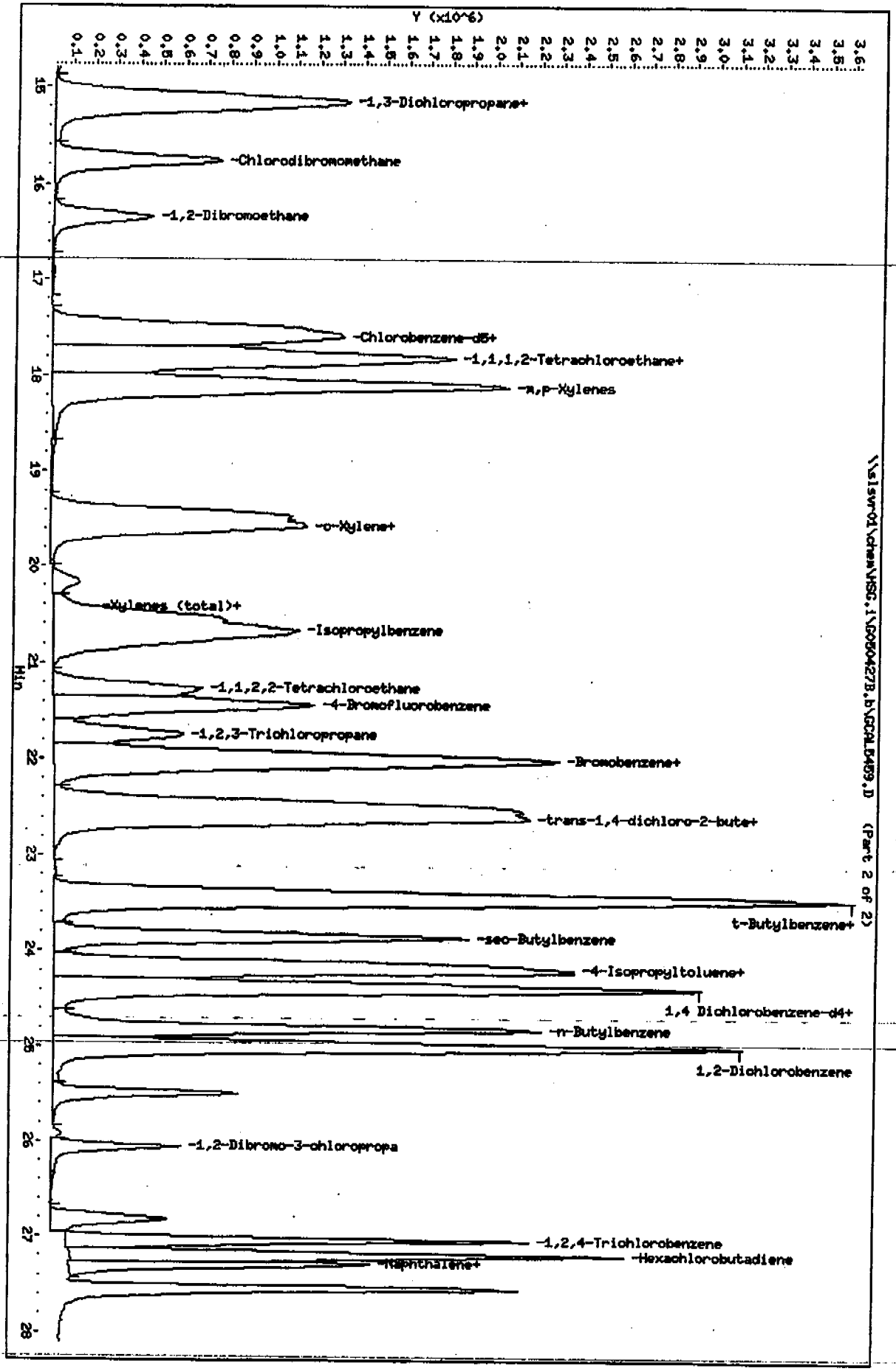
Calibration Date: 17-APR-2005
Calibration Time: 23:27
Client Smp ID: VSTD050
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	2924725	1462363	5849450	3117196	6.58
71 Chlorobenzene-d5	2135082	1067541	4270164	2287097	7.12
97 1,4 Dichlorobenze	1343943	671972	2687886	1536763	14.35

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	9.36	8.86	9.86	9.34	-0.21
71 Chlorobenzene-d5	17.54	17.04	18.04	17.50	-0.21
97 1,4 Dichlorobenze	24.36	23.86	24.86	24.36	-0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^6)
Min
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane+
-Trichlorofluoromethane
-Diethyl ether
-Acrolein+
-1,1-Dichloroethene
-Acetonitrile
-Iodomethane+
-Methylene Chloride+
-Acrylonitrile+
-trans-1,2-Dichloroethene+
-1,1-Dichloroethane
-2-Butanone+
-Methacrylonitrile+
-Isobutanol+
1,2-Dichloroethene (total
-1,1,1-Trichloroethane+
-1,1-Dichloropropene
-Carbon Tetrachloride+
-1,2-Dichloroethane+
-Fluorobenzene
-Trichloroethene+
-1,2-Dichloropropane
-Methyl methacrylate
-Bromodichloromethane+
-4-Methyl-2-pentanone
-cis-1,3-Dichloropropene
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane+
Data File: \\slsvr01\chem\MSC.i\G0804278.b\GCALB459.D
Date : 27-APR-2005 21:42
Client ID: VSTD050
Sample Info: VSTD050;G0804278.b
Purge Volume: 5.0
Column phase: RTX-502.2
\\slsvr01\chem\MSC.i\G0804278.b\GCALB459.D (Part 1 of 2)
Instrument: MSC.i
Operator: JDH
Column diameter: 0.53


Y (x10^6)
Min
-1,3-Dichloropropane+
-Chlorodibromomethane
-1,2-Dibromoethane
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
-o-Xylene+
-Xylenes (total)+
-Isopropylbenzene
-1,1,2,2-Tetrachloroethane
-4-Bromofluorobenzene
-1,2,3-Trichloropropane
-Bromobenzene+
-trans-1,4-dichloro-2-bute+
t-Butylbenzene+
-sec-Butylbenzene
-4-Isopropyltoluene+
1,4 Dichlorobenzene-d4+
-n-Butylbenzene
1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene+
\\slsvr01\chem\MSG.i\G0804278.b\GCAL5459.D (Part 2 of 2)
Data File: \\slsvr01\chem\MSG.i\G0804278.b\GCAL5459.D
Date : 27-APR-2008 21:42
Client ID: VSTD050
Sample Info: VSTD050;G0804278.b
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: MSG.i
Operator: JDH
Column diameter: 0.53

GC/MS RAW SAMPLE DATA

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GSMP5463.D
Report Date: 02-May-2005 16:48

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSG.i\G050427B.b\GSMP5463.D
Lab Smp Id: G81F81AC Client Smp ID: RE73-05-58878
Inj Date : 28-APR-2005 01:11
Operator : JDH Inst ID: MSG.i
Smp Info : G81F81AC;G050427B.b
Misc Info : VBLKG117B.B; F5D220273-001;5.02G;5118107
Comment : NONE
Method : \\slsvr01\chem\MSG.i\G050427B.b\8260B-URS.m
Meth Date : 27-Apr-2005 22:14 hannj Quant Type: ISTD
Cal Date : 18-APR-2005 02:51 Cal File: GCAL5166.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOIL.sub
Target Version: 4.10
Processing Host: SLVOA04

Concentration Formula: Amt * DF * Wsd/Ws* * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Wsd	5.000	DefSampleWeight
Ws	5.020	SampleWeight
Va	100.000	AliquotVolume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	11 Acetone	43	4.114	4.062	(0.437)	111518	26.2106	26.11
	17 Methylene Chloride	84	4.897	4.845	(0.520)	256389	13.9755	13.92
	22 n-Hexane	57	5.454	5.367	(0.579)	71186	2.60997	2.600(a)
	27 2-Butanone	43	6.760	6.707	(0.717)	20217	3.93128	3.916(a)
$	36 Dibromofluoromethane	113	7.735	7.665	(0.821)	1164789	34.3071	34.17
	40 Cyclohexane	84	8.117	8.048	(0.861)	8767	0.41214	0.4105(a)
$	43 1,2-Dichloroethane-d4	67	8.744	8.657	(0.928)	407589	33.3174	33.18
*	48 Fluorobenzene	96	9.423	9.336	(1.000)	2985281	50.0000	
$	61 Toluene-d8	98	13.287	13.183	(0.756)	1950261	31.9169	31.79
*	71 Chlorobenzene-d5	117	17.587	17.499	(1.000)	2180383	50.0000	
$	83 4-Bromofluorobenzene	95	21.538	21.433	(0.882)	1485045	34.6451	34.51
	93 1,2,4-Trimethylbenzene	105	23.557	23.487	(0.965)	35173	0.56468	0.5624(a)
*	97 1,4 Dichlorobenzene-d4	152	24.410	24.357	(1.000)	1248986	50.0000	
	105 Naphthalene	128	27.334	27.299	(1.120)	139678	3.71560	3.701(a)

WM 5/4/05

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GSMP5463.D
Report Date: 02-May-2005 16:48

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSG.i
Lab File ID: GSMP5463.D
Lab Smp Id: G81F81AC
Analysis Type: VOA
Quant Type: ISTD
Operator: JDH
Method File: \\slsvr01\chem\MSG.i\G050427B.b\8260B-URS.m
Misc Info: VBLKG117B.B; F5D220273-001;5.02G;5118107

Calibration Date: 27-APR-2005
Calibration Time: 21:42
Client Smp ID: RE73-05-58878
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	3117196	1558598	6234392	2985281	-4.23
71 Chlorobenzene-d5	2287097	1143549	4574194	2180383	-4.67
97 1,4 Dichlorobenze	1536763	768382	3073526	1248986	-18.73

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	9.34	8.84	9.84	9.42	0.93
71 Chlorobenzene-d5	17.50	17.00	18.00	17.59	0.50
97 1,4 Dichlorobenze	24.36	23.86	24.86	24.41	0.22

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

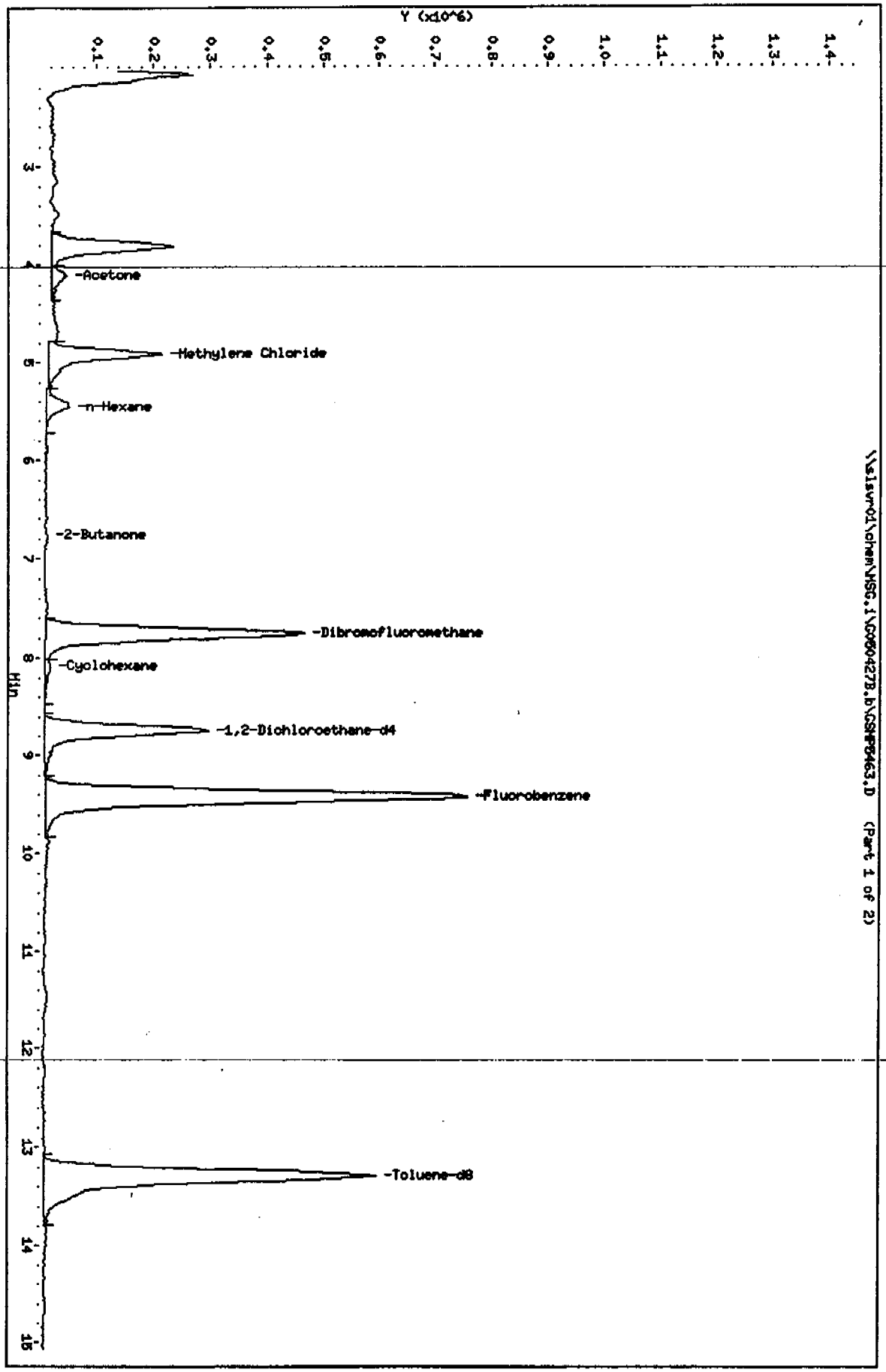
Data File: \\slsvr01\chem\MSG.i\G050427B.b\GSMP5463.D
Report Date: 02-May-2005 16:48

STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 22-APR-2005 00:00 Client SDG: F5D2202
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: G81F81AC Client Smp ID: RE73-05-58878
Level: LOW Operator: JDH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: soilms.spk Quant Type: ISTD
Sublist File: SOIL.sub
Method File: \\slsvr01\chem\MSG.i\G050427B.b\8260B-URS.m
Misc Info: VBLKG117B.B; F5D220273-001;5.02G;5118107

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 36 Dibromofluorometha	49.80	34.17	68.61	61-140
$ 43 1,2-Dichloroethane	49.80	33.18	66.63	56-149
$ 61 Toluene-d8	49.80	31.79	63.83	60-148
$ 83 4-Bromofluorobenze	49.80	34.51	69.29	56-150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0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
Min
3
4
5
6
7
8
9
10
11
12
13
14
15
-Acetone
-Methylene Chloride
-n-Hexane
-2-Butanone
-Dibromofluoromethane
-Cyclohexane
-1,2-Dichloroethane-d4
-Fluorobenzene
-Toluene-d8
Data File: \\slsvr01\chem\MSG.i\G0804273.b\GSHF8463.D
Date : 28-APR-2008 01:11
Client ID: RE73-05-68878
Sample Info: GSLF81AC;G0804273,b
Column phase: RTX-502.2
Instrument: MSG.i
Operator: JDH
Column diameter: 0.53
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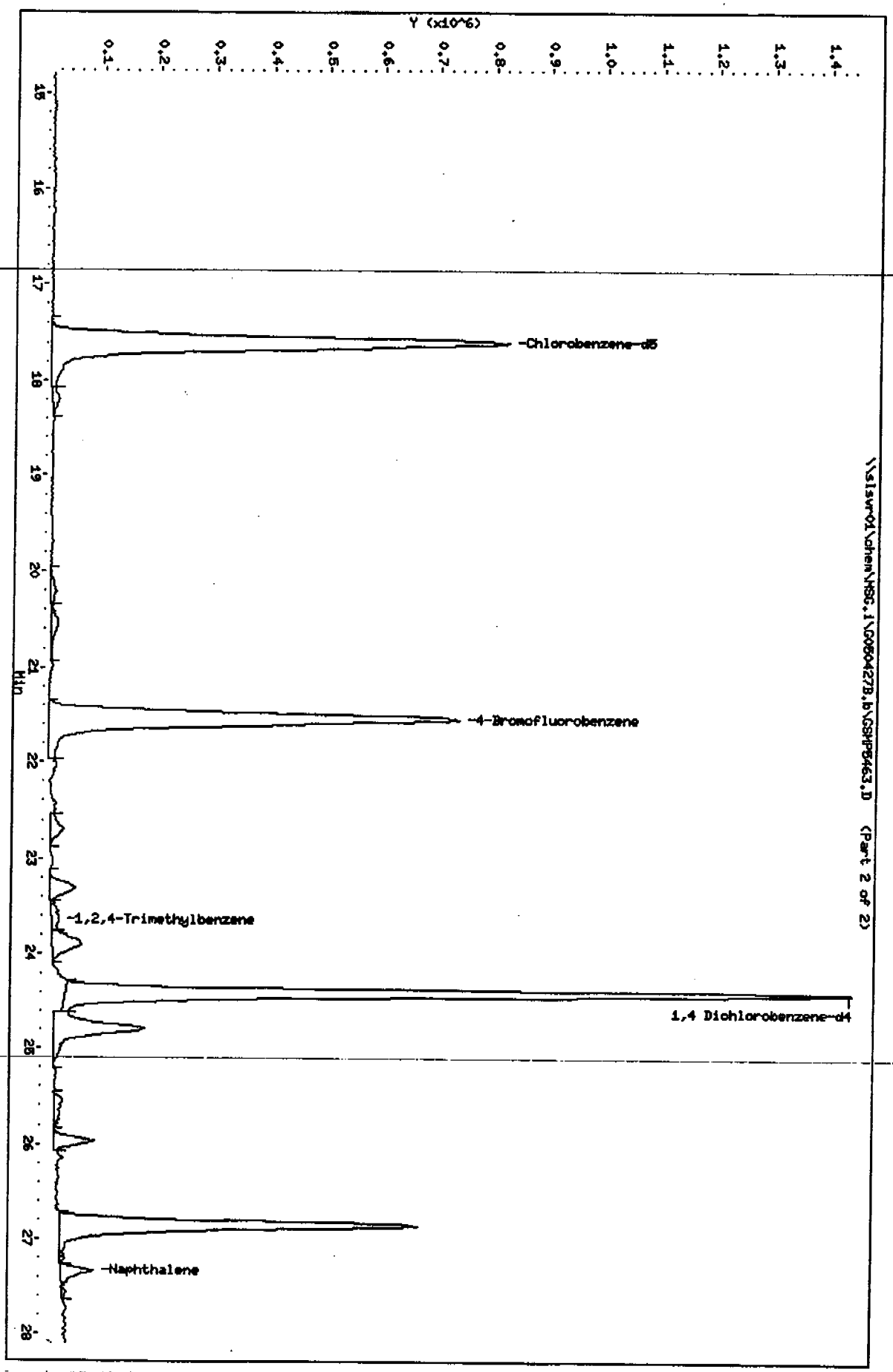
Y (x10^6)
0.1
0.2
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0.4
0.5
0.6
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0.8
0.9
1.0
1.1
1.2
1.3
1.4
15
16
17
18
19
20
21
22
23
24
25
26
27
28
Min
-Chlorobenzene-d5
-4-Bromofluorobenzene
-1,2,4-Trimethylbenzene
1,4 Dichlorobenzene-d4
-Naphthalene
\\slsvr01\chem\MSC.i\00604278.b\GSHP8463.D (Part 2 of 2)
Data File: \\slsvr01\chem\MSC.i\00604278.b\GSHP8463.D
Date : 28-APR-2006 04:11
Client ID: RE73-05-58878
Sample Info: GSLFSLAC;00604278.b
Column phase: RTX-502.2
Instrument: MSC.i
Operator: JMH
Column diameter: 0.53

Data File: \\slsvr01\chem\HSC.i\G050427B.b\GSMP5463.D

Date : 28-APR-2005 01:11

Client ID: RE73-05-58878

Instrument: HSC.i

Sample Info: GS1FB1AC;G050427B.b

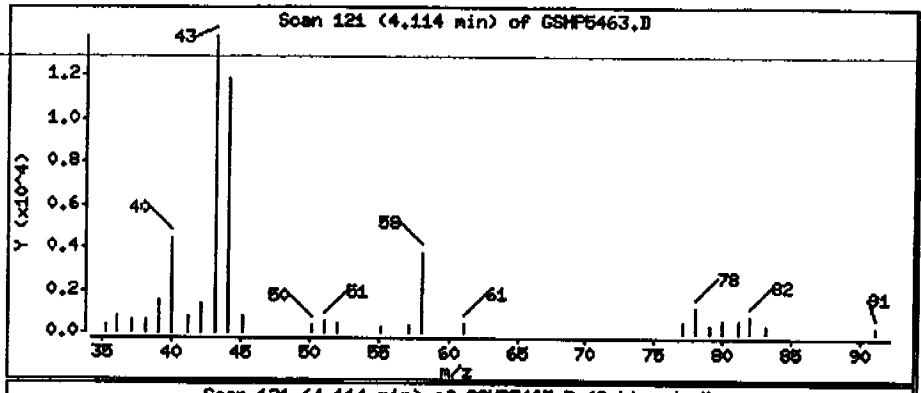
Operator: JIH

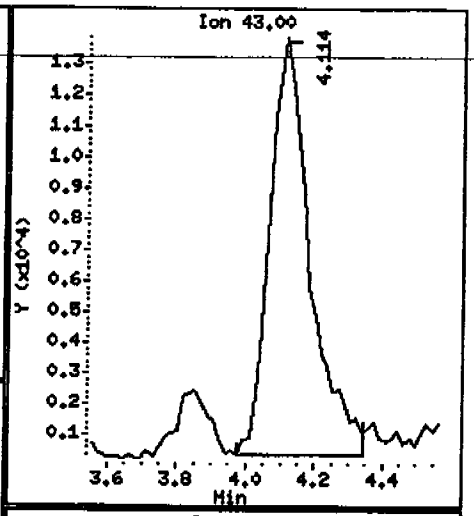
Column phase: RTX-502.2

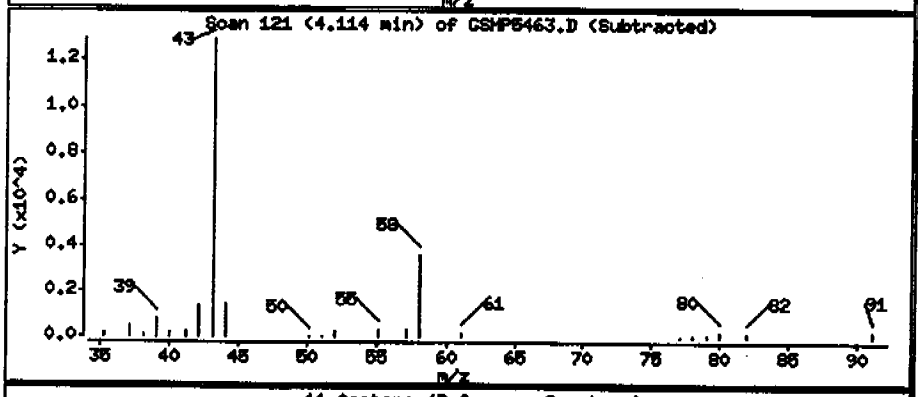
Column diameter: 0.53

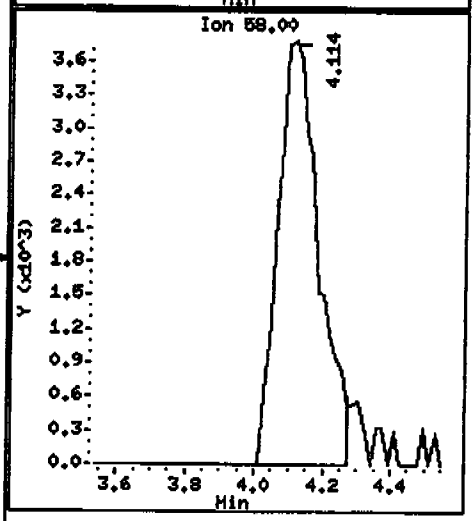
11 Acetone

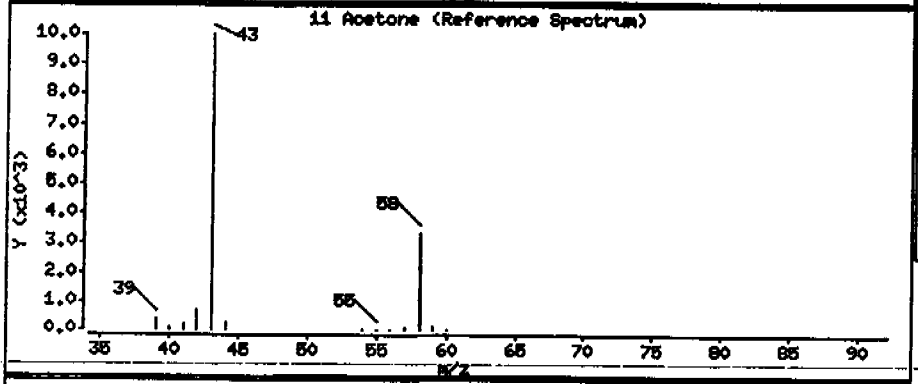
Concentration: 26.11 ug/Kg

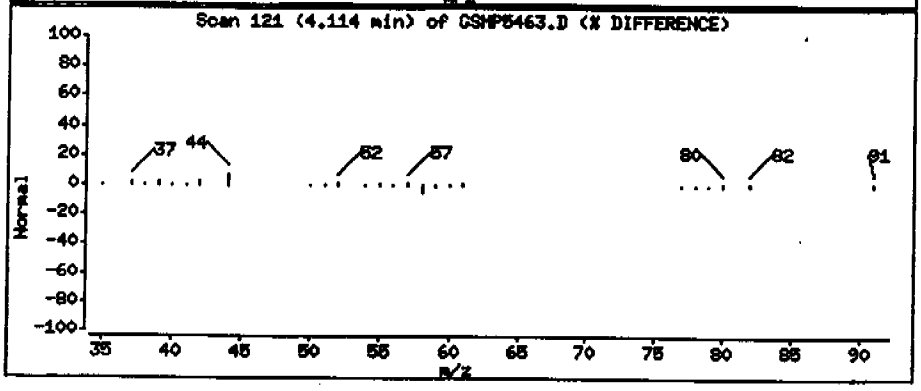












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Date : 28-APR-2005 01:11

Client ID: RE73-05-58878

Instrument: MSC.i

Sample Info: G81F81AC;C050427B.b

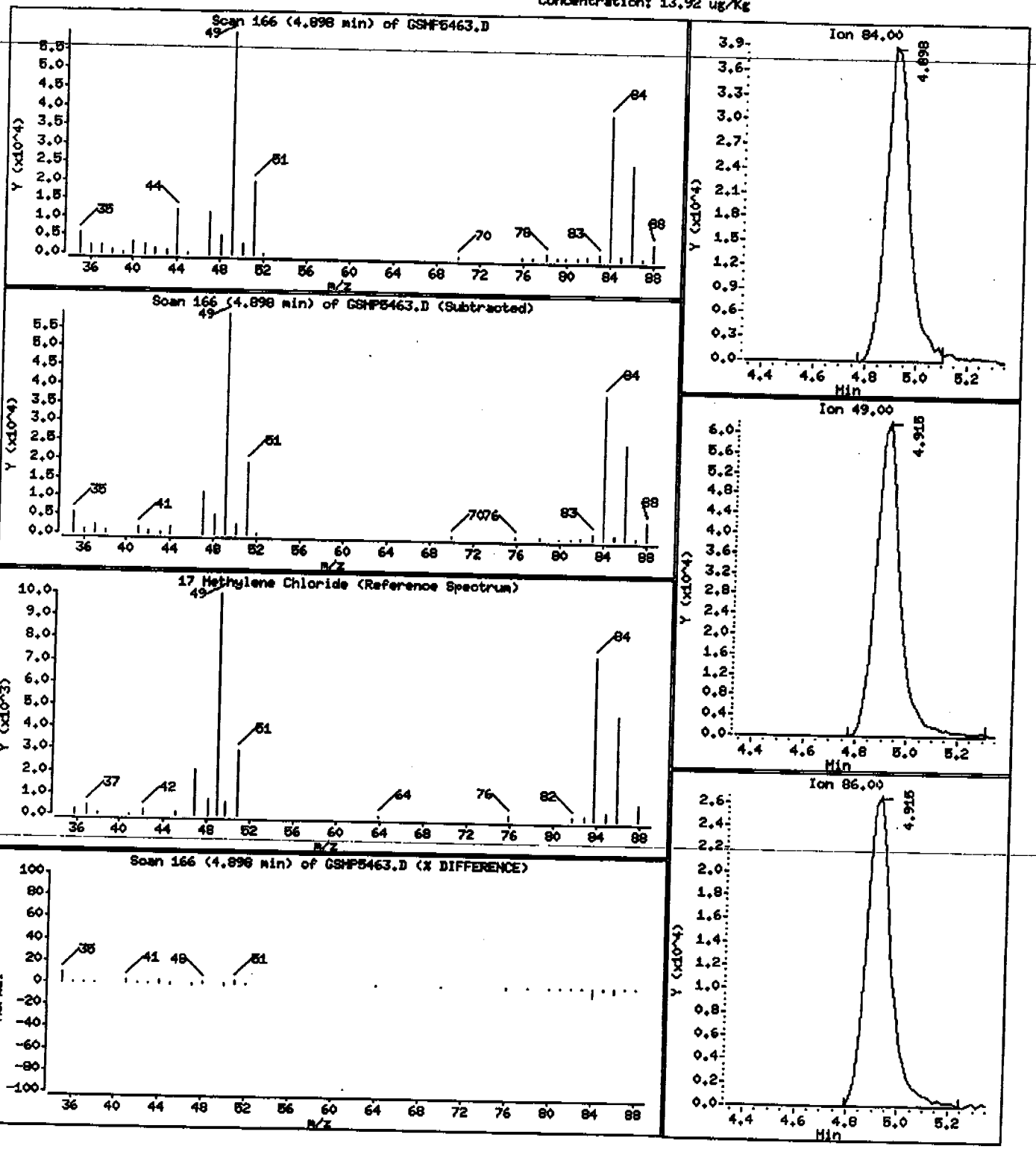
Operator: JDH

Column phase: RTX-502.2

Column diameter: 0.53

17 Methylene Chloride

Concentration: 13.92 ug/Kg



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Date : 28-APR-2005 01:11

Client ID: RE73-05-68878

Instrument: HSC.i

Sample Info: C81F81AC;C050427B.b

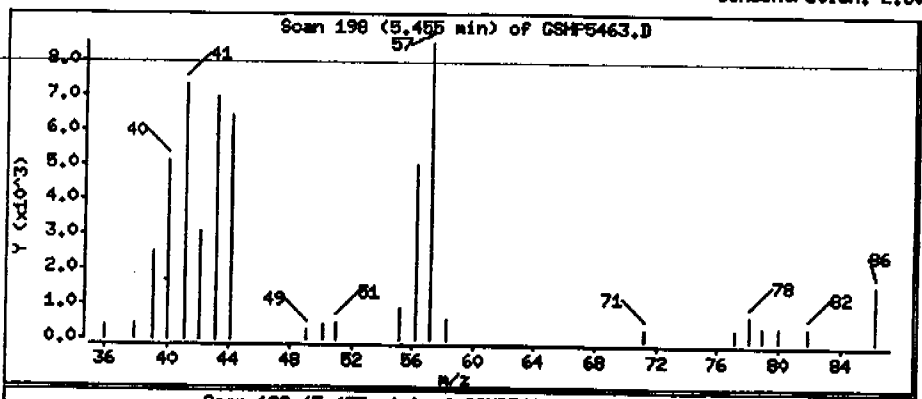
Operator: JDH

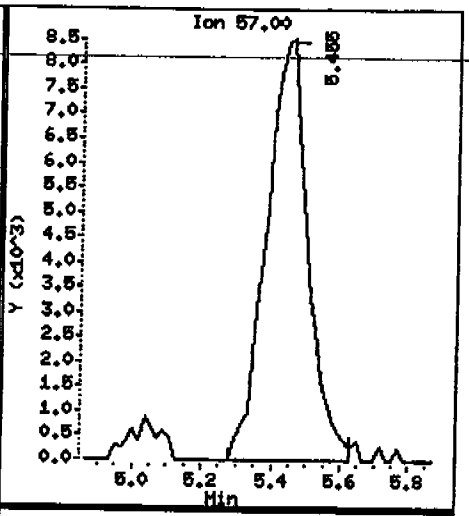
Column phase: RTX-502.2

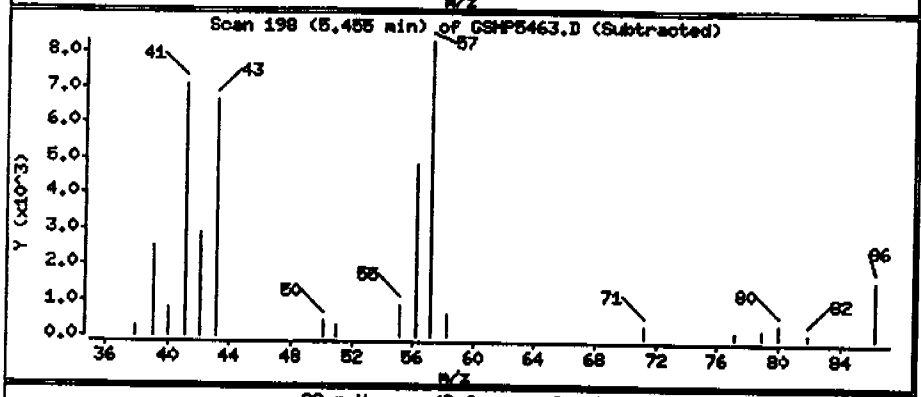
Column diameter: 0.53

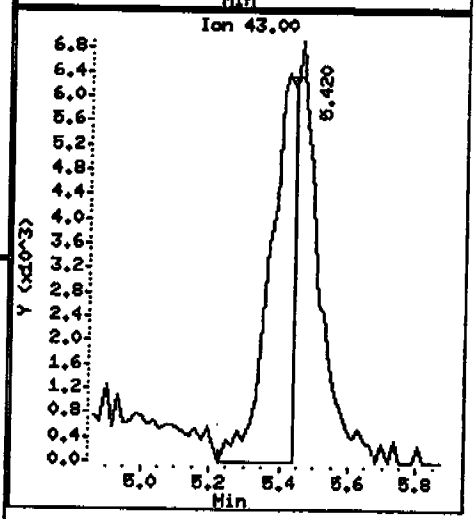
22 n-Hexane

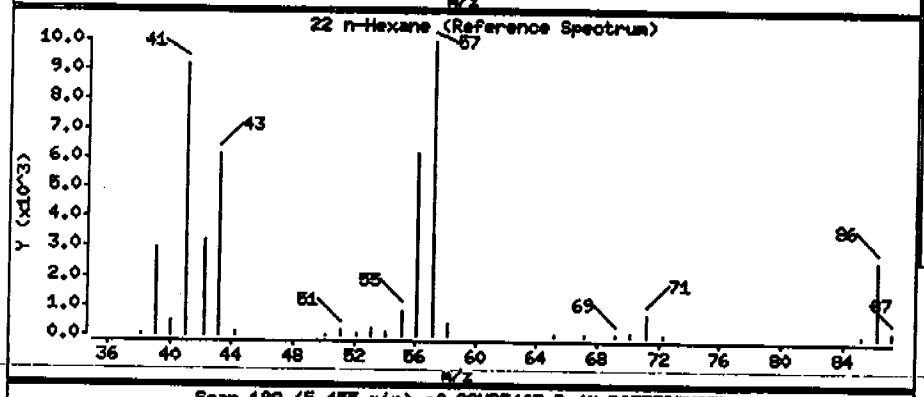
Concentration: 2.600 ug/Kg

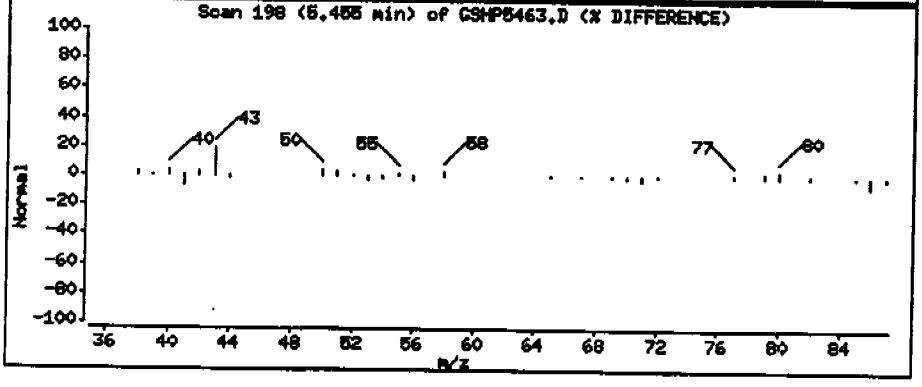












Data File: \\slsvr01\chem\MSG.i\G050427B.b\GSMP5463.D

Date : 28-APR-2005 01:11

Client ID: RE73-05-58878

Instrument: MSG.i

Sample Info: CS1F81AC;G050427B.b

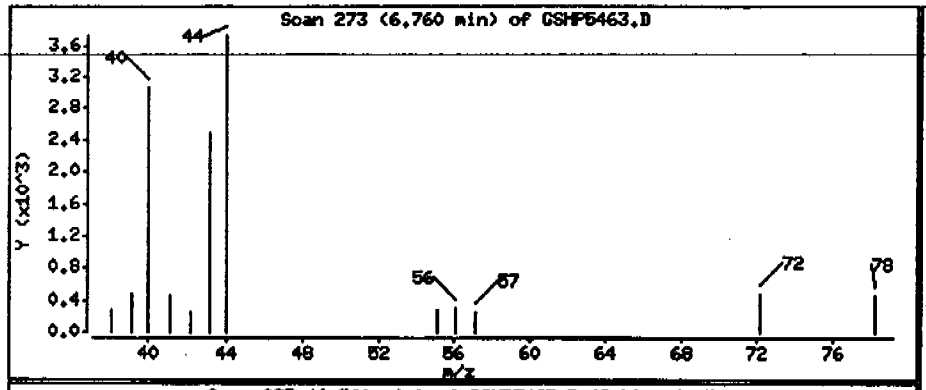
Operator: JIH

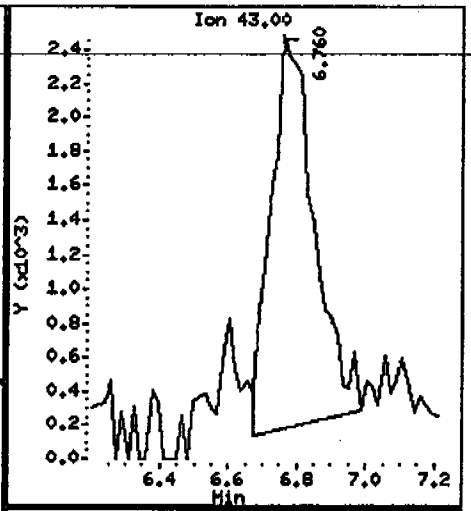
Column phase: RTX-502.2

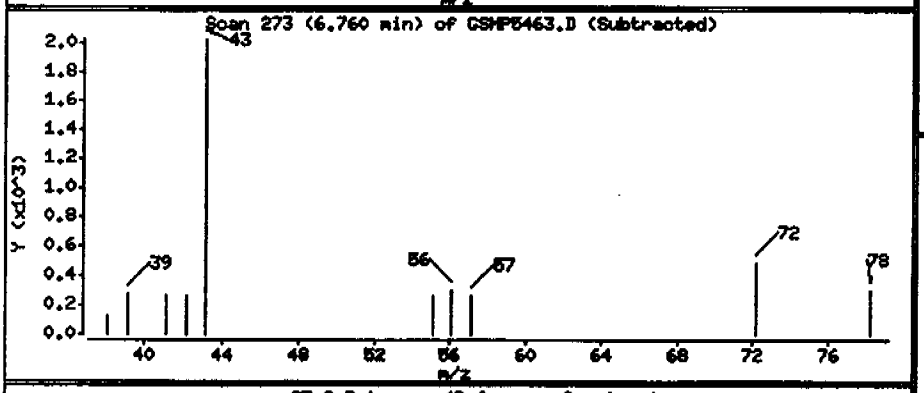
Column diameter: 0.53

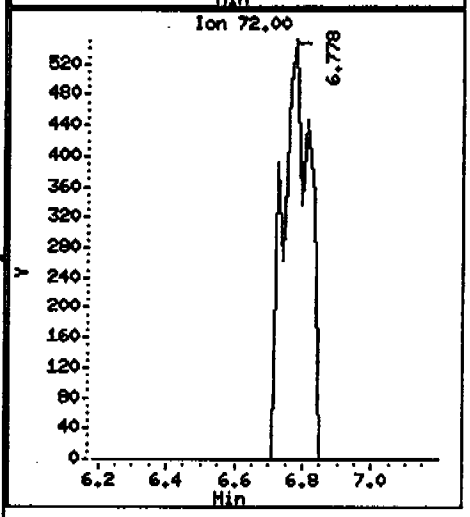
27 2-Butanone

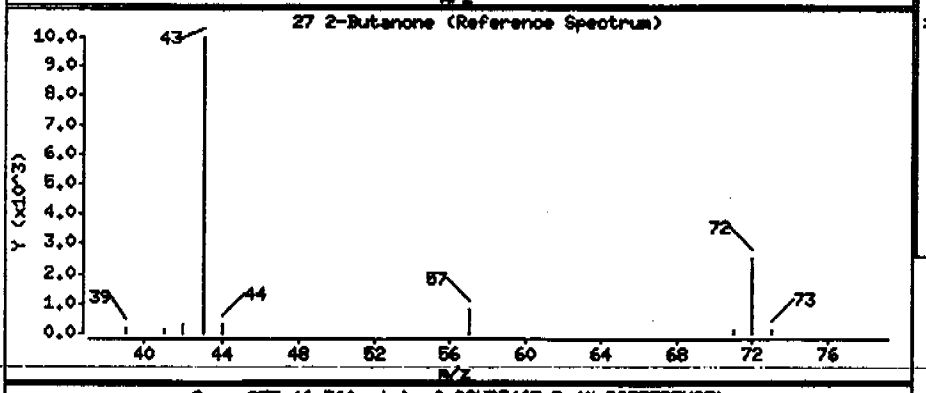
Concentration: 3.916 ug/Kg

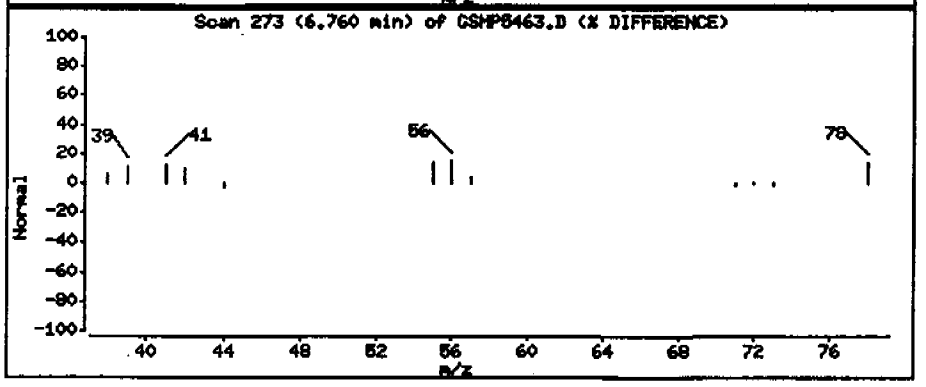












Data File: \\slsvr01\chem\MSC.i\G050427B.b\GSMP5463.D

Date : 29-APR-2005 01:11

Client ID: RE73-05-58878

Instrument: MSC.i

Sample Info: G81F81AC;G050427B.b

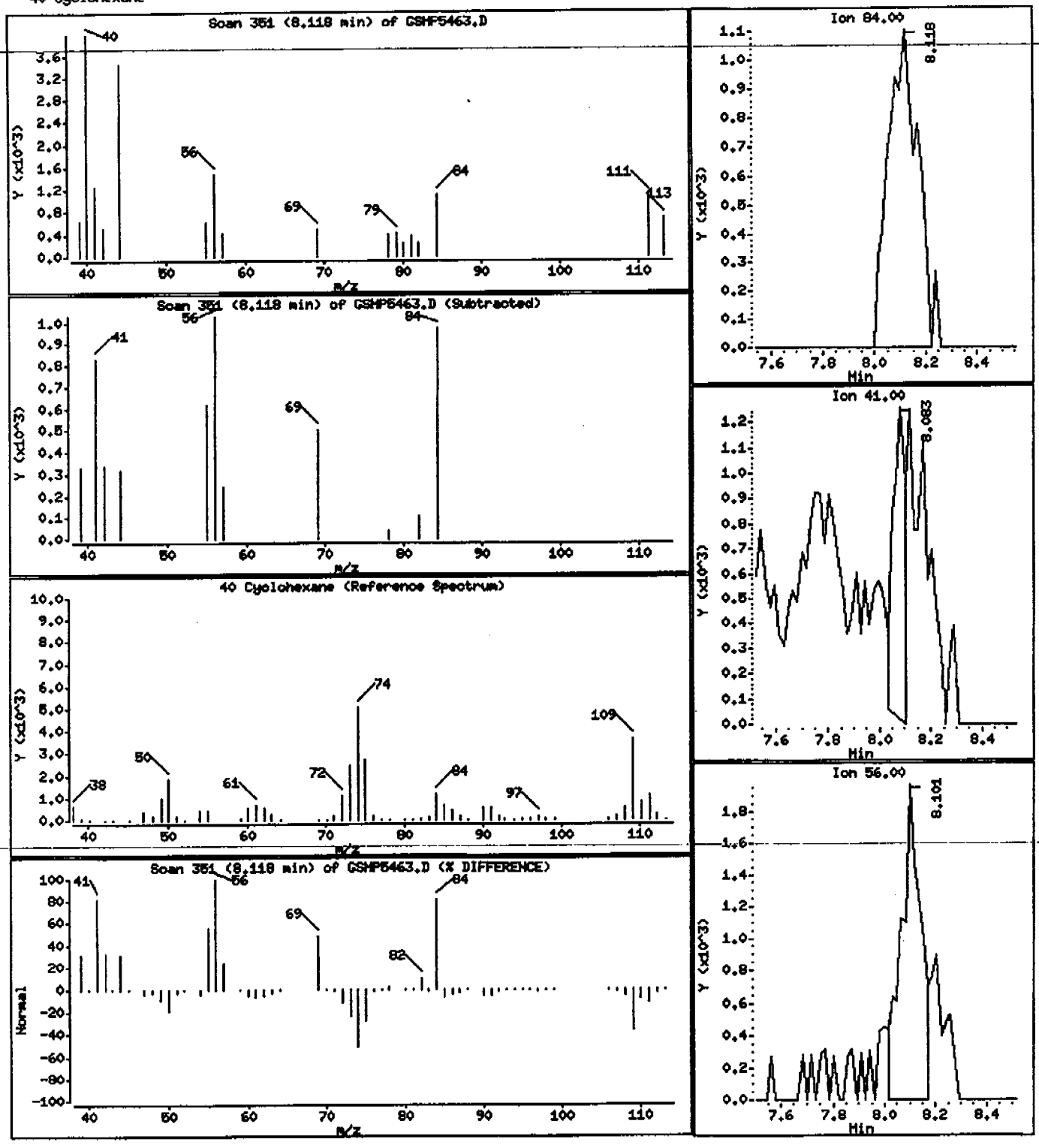
Operator: JDH

Column phase: RTX-502.2

Column diameter: 0.53

40 Cyclohexane

Concentration: 0.4105 ug/Kg



Data File: \\slsvr01\chem\MSG.i\G050427B.b\GSMP5463.D

Date : 28-APR-2005 01:11

Client ID: RE73-05-58878

Instrument: MSG.i

Sample Info: G81F81AC;G050427B.b

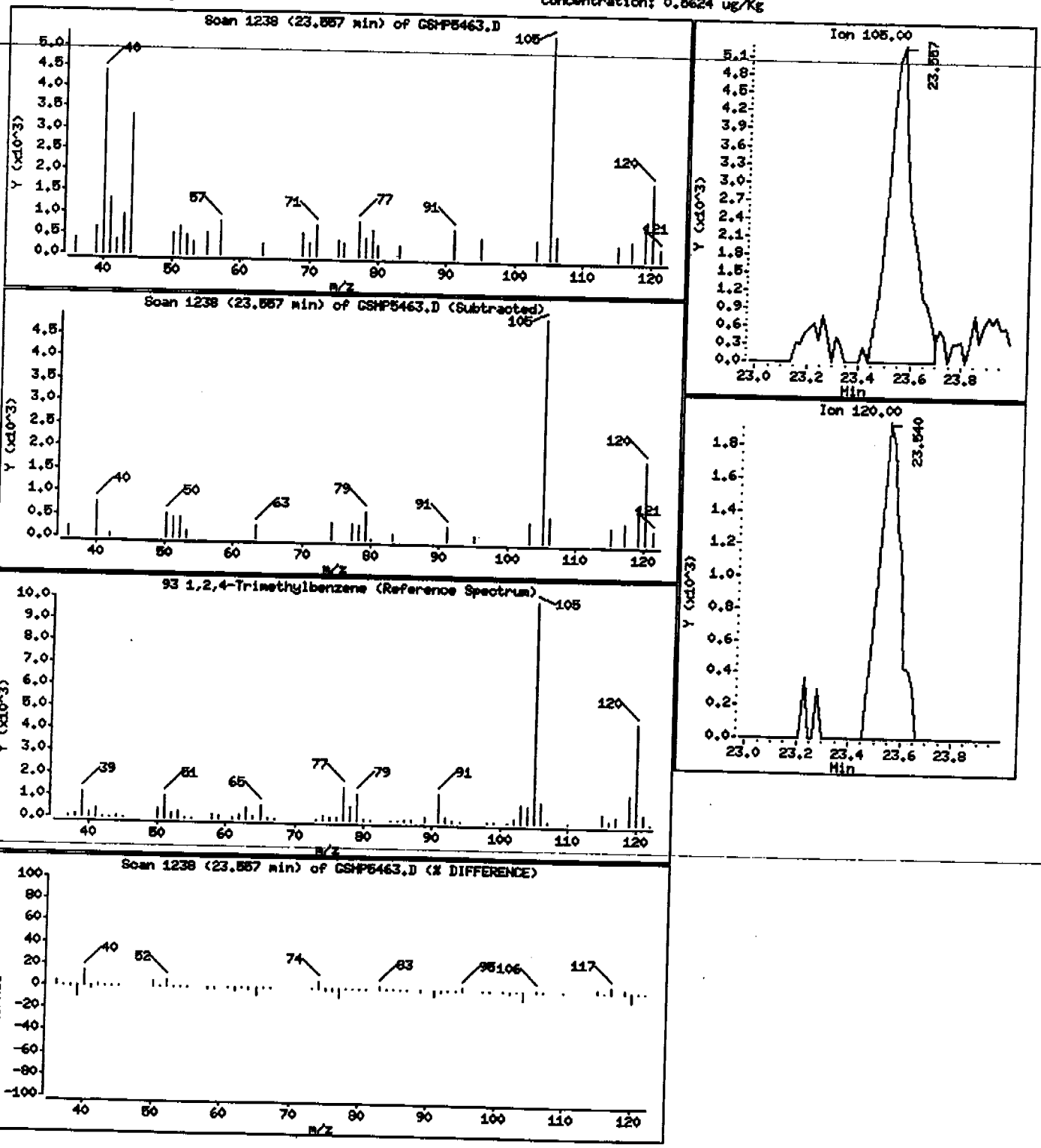
Operator: JDH

Column phase: RTX-502.2

Column diameter: 0.53

93 1,2,4-Trimethylbenzene

Concentration: 0.5624 ug/Kg



Data File: \\slsvr01\chem\MSC.i\C050427B.b\CSMP5463.D

Date : 28-APR-2005 01:11

Client ID: RE73-05-58878

Instrument: MSC.i

Sample Info: C81F81AC;C050427B.b

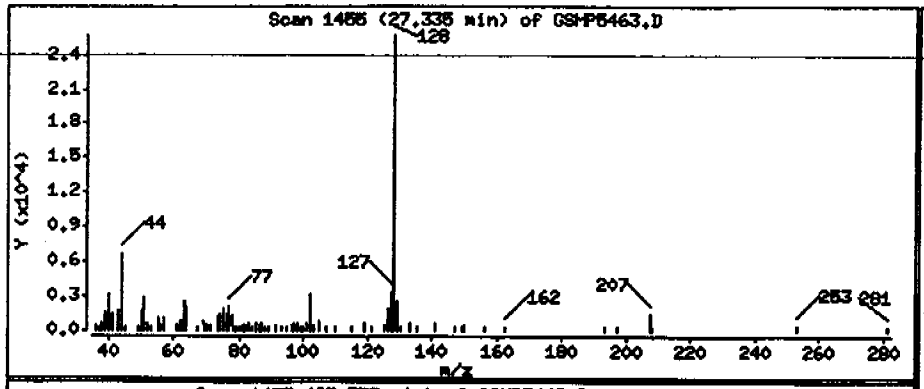
Operator: JDH

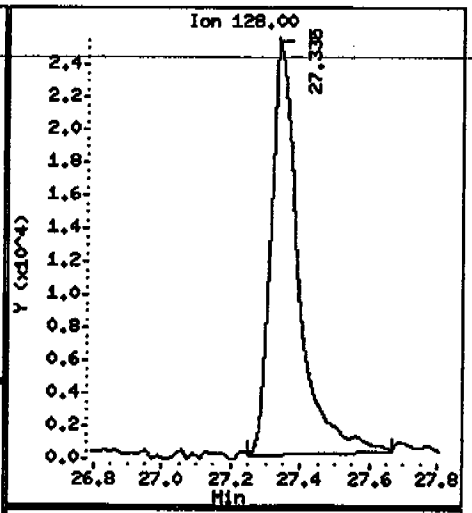
Column phase: RTX-502.2

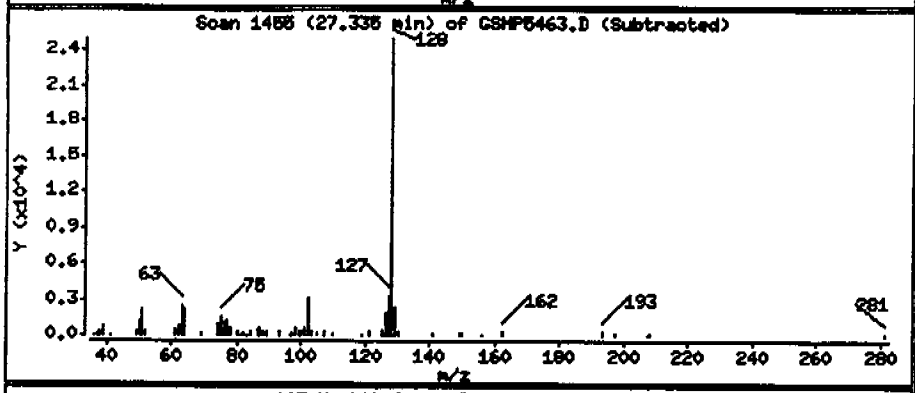
Column diameter: 0.53

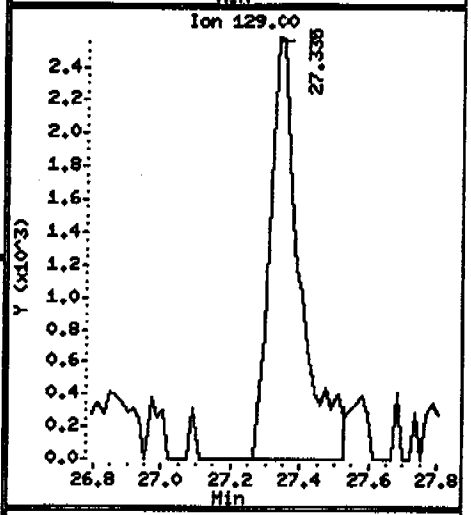
105 Naphthalene

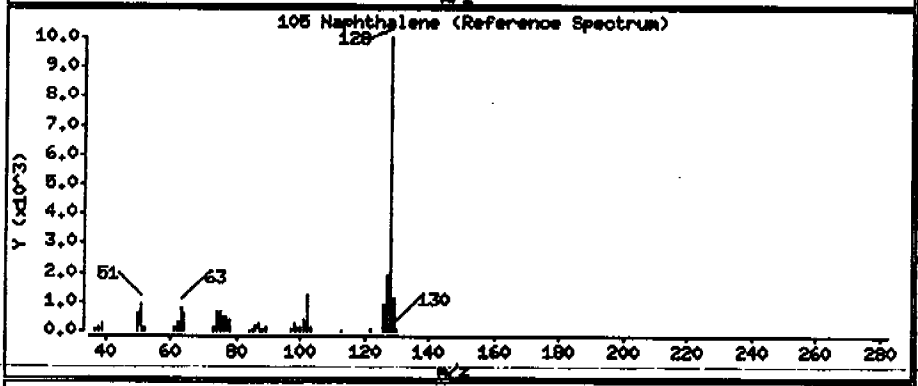
Concentration: 3.701 ug/Kg

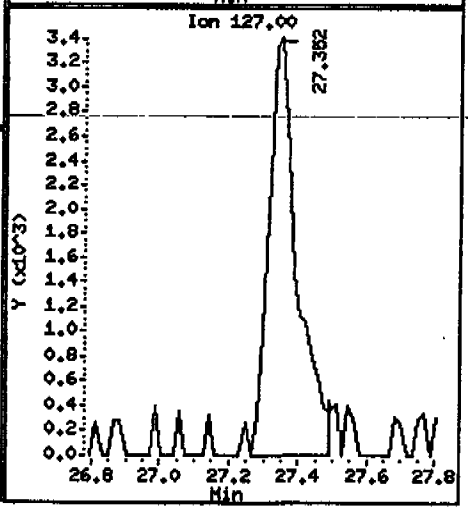


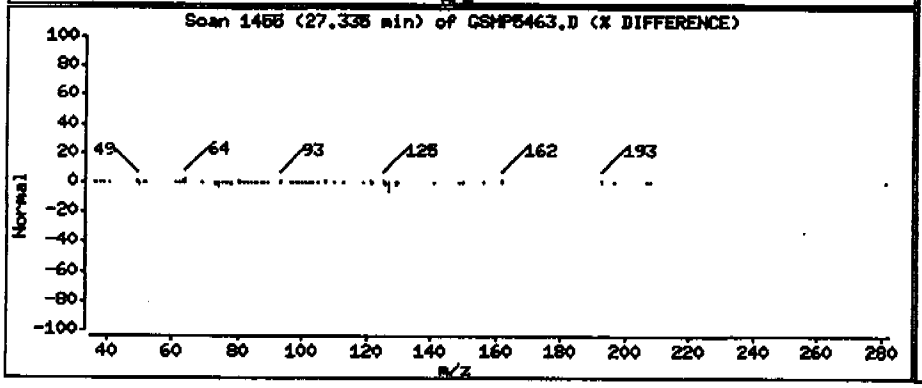












Data File: \\slsvr01\chem\MSG.i\G050427B.b\GSMP5473.D
Report Date: 02-May-2005 16:48

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSG.i\G050427B.b\GSMP5473.D
Lab Smp Id: G81GA1AE Client Smp ID: RE73-05-58879
Inj Date : 28-APR-2005 06:51
Operator : JDH Inst ID: MSG.i
Smp Info : G81GA1AE;G050427B.b
Misc Info : VBLKG117B.B; F5D220273-002;4.95G;5118107
Comment : NONE
Method : \\slsvr01\chem\MSG.i\G050427B.b\8260B-URS.m
Meth Date : 27-Apr-2005 22:14 hannj Quant Type: ISTD
Cal Date : 18-APR-2005 02:51 Cal File: GCAL5166.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOIL.sub
Target Version: 4.10
Processing Host: SLVOA04

Concentration Formula: Amt * DF * Wsd/Ws* * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Wsd	5.000	DefSampleWeight
Ws	4.950	SampleWeight
Va	100.000	AliquotVolume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	5 Bromomethane	94	3.110	3.052	(0.332)	9653	2.73329	2.761(a)
	17 Methylene Chloride	84	4.886	4.845	(0.522)	109666	27.9149	28.20
$	36 Dibromofluoromethane	113	7.723	7.665	(0.825)	495723	68.1826	68.87
$	43 1,2-Dichloroethane-d4	67	8.698	8.657	(0.929)	156780	59.8462	60.45
*	48 Fluorobenzene	96	9.359	9.336	(1.000)	639275	50.0000	
$	61 Toluene-d8	98	13.241	13.183	(0.753)	267462	38.7945	39.19
*	71 Chlorobenzene-d5	117	17.575	17.499	(1.000)	246010	50.0000	
	75 m,p-Xylenes	106	18.201	18.109	(1.036)	9691	3.33904	3.373(aM)
M	78 Xylenes (total)	106				9691	3.33904	3.373(a)
$	83 4-Bromofluorobenzene	95	21.509	21.433	(0.882)	53612	25.5228	25.78(R)
*	97 1,4 Dichlorobenzene-d4	152	24.381	24.357	(1.000)	61206	50.0000	
	98 1,4-Dichlorobenzene	146	24.450	24.410	(1.003)	4614	2.23862	2.261(a)
	103 1,2,4-Trichlorobenzene	180	27.079	27.038	(1.111)	3911	2.91664	2.946(a)

WH 5/4/05

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GSMP5473.D
Report Date: 02-May-2005 16:48

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSG.i
Lab File ID: GSMP5473.D
Lab Smp Id: G81GA1AE
Analysis Type: VOA
Quant Type: ISTD
Operator: JDH
Method File: \\slsvr01\chem\MSG.i\G050427B.b\8260B-URS.m
Misc Info: VBLKG117B.B; F5D220273-002;4.95G;5118107

Calibration Date: 27-APR-2005
Calibration Time: 21:42
Client Smp ID: RE73-05-58879
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
48 Fluorobenzene	3117196	1558598	6234392	639275	-79.49	<
71 Chlorobenzene-d5	2287097	1143549	4574194	246010	-89.24	<
97 1,4 Dichlorobenze	1536763	768382	3073526	61206	-96.02	<

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	9.34	8.84	9.84	9.36	0.25
71 Chlorobenzene-d5	17.50	17.00	18.00	17.58	0.43
97 1,4 Dichlorobenze	24.36	23.86	24.86	24.38	0.10

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

active carbon NCM: 52719

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GSMP5473.D
Report Date: 02-May-2005 16:48

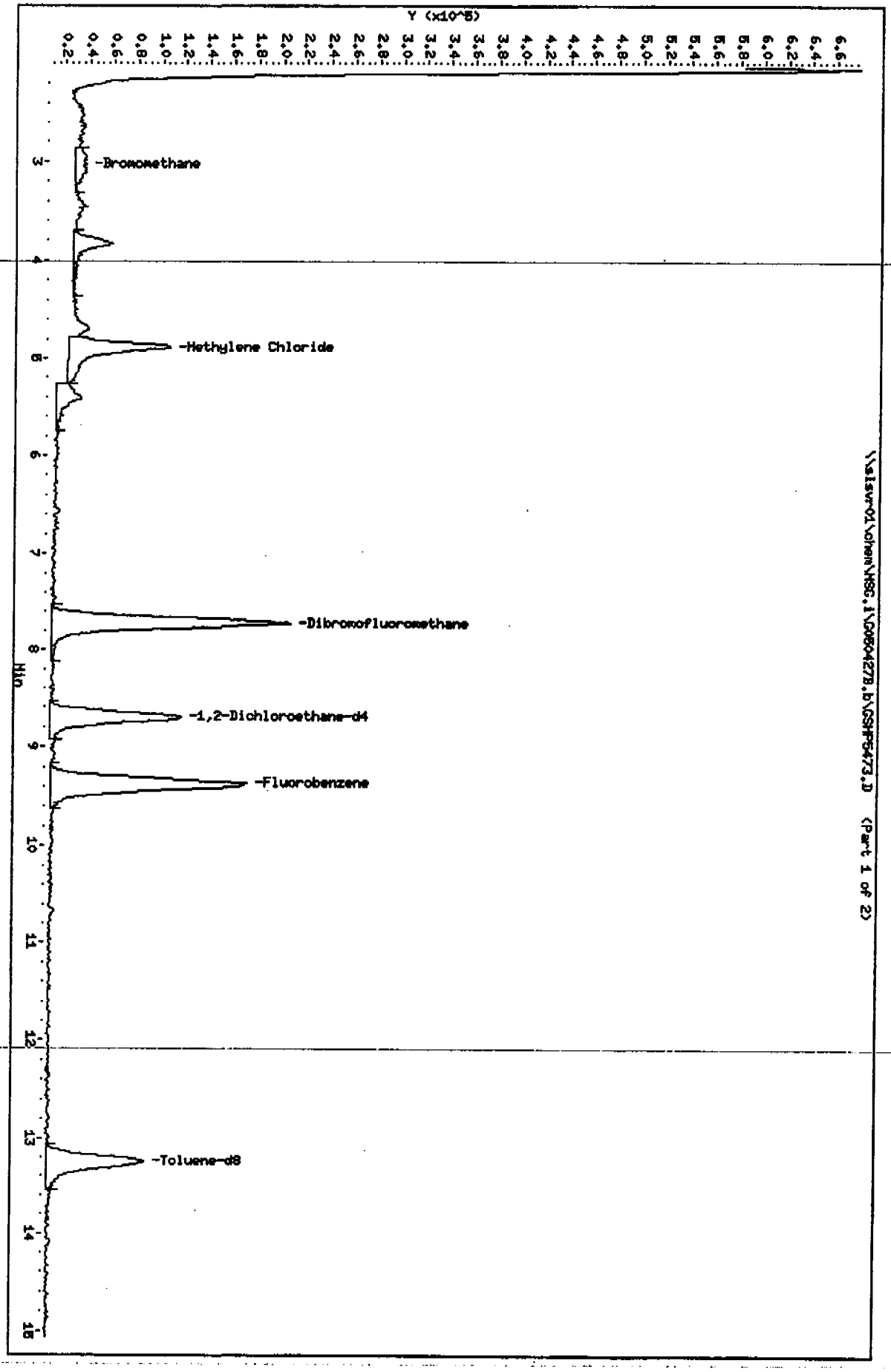
STL St. Louis

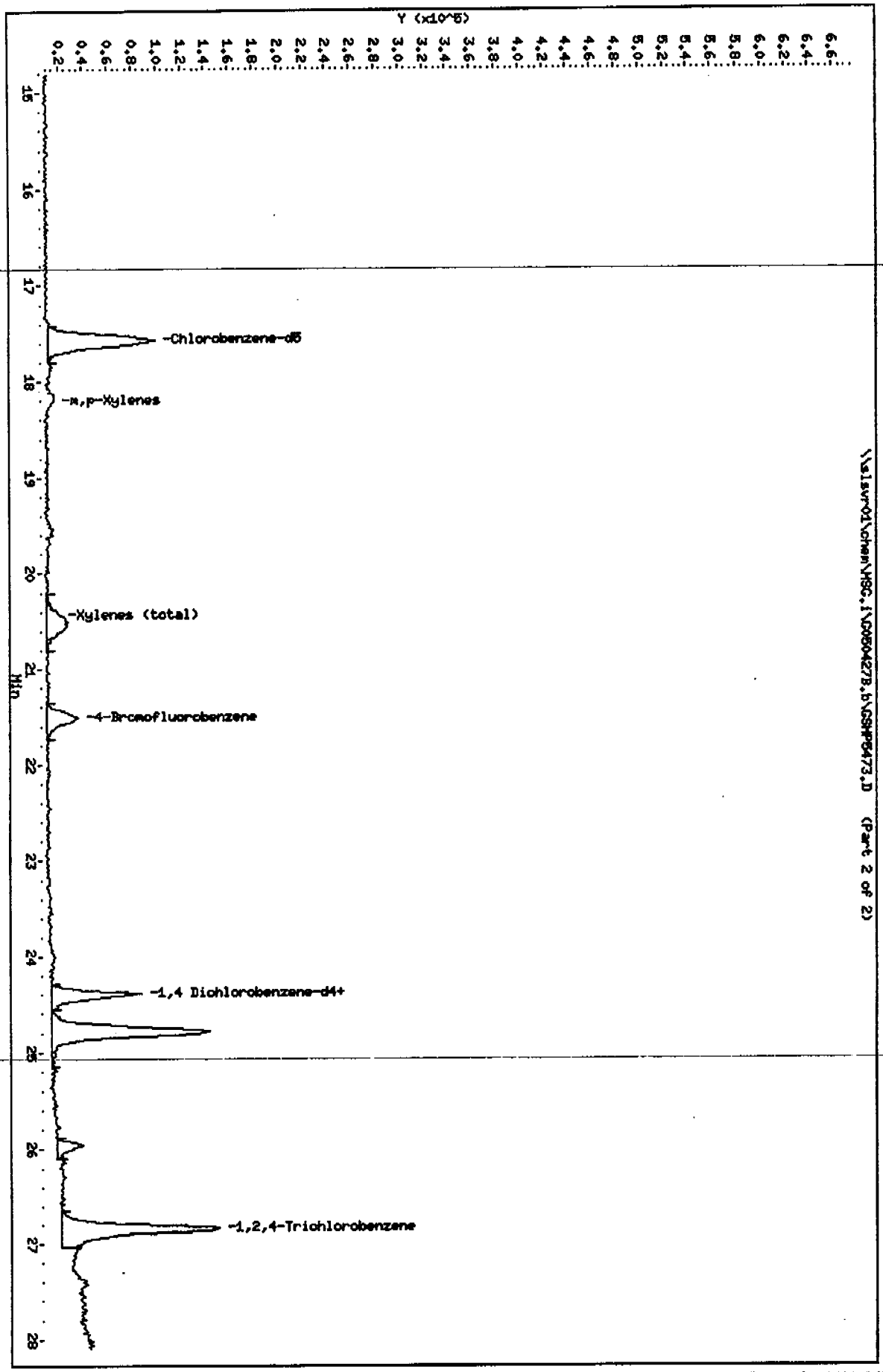
RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 22-APR-2005 00:00 Client SDG: F5D2202
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: G81GA1AE Client Smp ID: RE73-05-58879
Level: LOW Operator: JDH
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: soilms.spk Quant Type: ISTD
Sublist File: SOIL.sub
Method File: \\slsvr01\chem\MSG.i\G050427B.b\8260B-URS.m
Misc Info: VBLKG117B.B; F5D220273-002;4.95G;5118107

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 36 Dibromofluorometha	50.50	68.87	136.37	61-140
$ 43 1,2-Dichloroethane	50.50	60.45	119.69	56-149
$ 61 Toluene-d8	50.50	39.19	77.59	60-148
$ 83 4-Bromofluorobenze	50.50	25.78	51.05*	56-150

NCM 52719


Y (x10^5)
Data File: \\slsvr01\chem\MSG.i\G0604278.b\GSH#5473.D
Date : 28-APR-2006 06:51
Client ID: RE73-05-68879
Sample Info: 681GA1AE;G0604278.b
Column phase: RTX-502.2
Instrument: MSG.i
Operator: JDH
Column diameter: 0.53
\\slsvr01\chem\MSG.i\G0604278.b\GSH#5473.D (Part 1 of 2)
-Bromomethane
-Methylene Chloride
-Dibromofluoromethane
-1,2-Dichloroethane-d4
-Fluorobenzene
-Toluene-d8
Min


Data File: \\slsvr01\chem\MSC.i\G0504278.b\GSMF5473.D
Date : 28-APR-2005 06:54
Client ID: RE73-05-58879
Sample Info: GB1DA1AE;G0504278,b
Column phase: RTX-502.2
Instrument: MSC.i
Operator: JDH
Column diameter: 0.53
Y (x10^5)
-Chlorobenzene-d5
-m,p-Xylenes
-Xylenes (total)
-4-Bromofluorobenzene
-1,4 Dichlorobenzene-d4+
-1,2,4-Trichlorobenzene
Min
\\slsvr01\chem\MSC.i\G0504278.b\GSMF5473.D (Part 2 of 2)

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GSMP5473.D

Date : 28-APR-2005 06:51

Client ID: RE73-05-58879

Instrument: MSG.i

Sample Info: G81GA1AE;G050427B.b

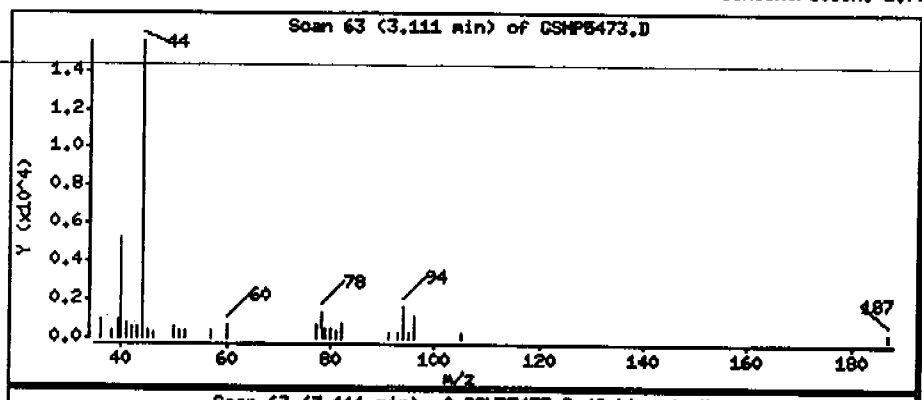
Operator: JDH

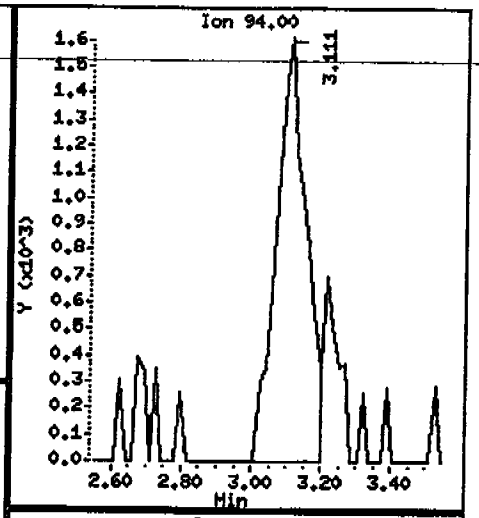
Column phase: RTX-502.2

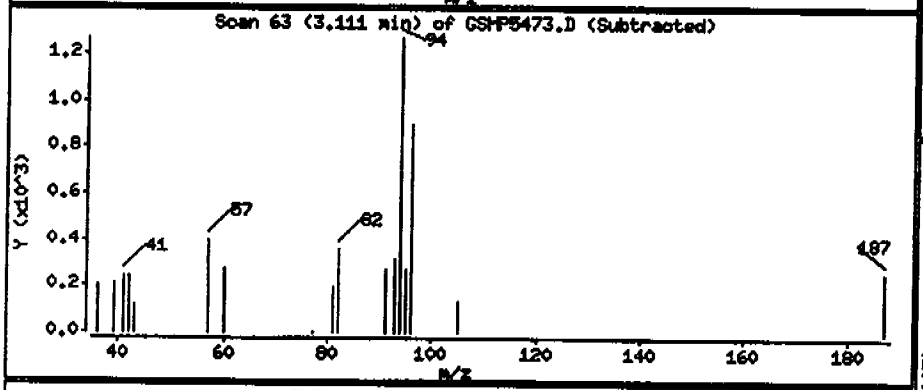
Column diameter: 0.53

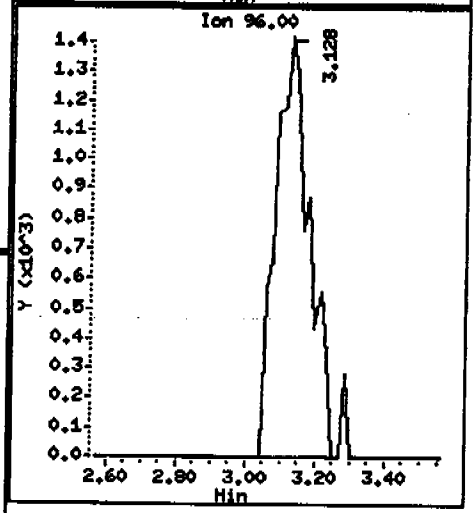
5 Bromomethane

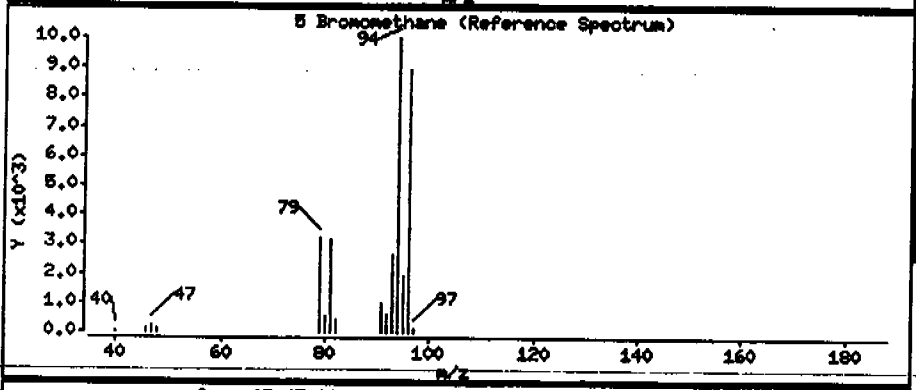
Concentration: 2.761 ug/Kg

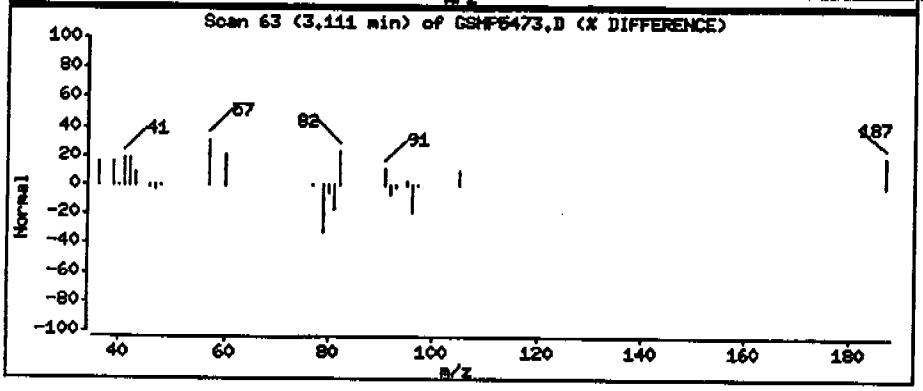












Data File: \\slsvr01\chem\MSC.i\G050427B.b\GSMP5473.D

Date : 28-APR-2005 06:51

Client ID: RE73-05-59879

Instrument: MSC.i

Sample Info: G81GA1AE;G050427B,b

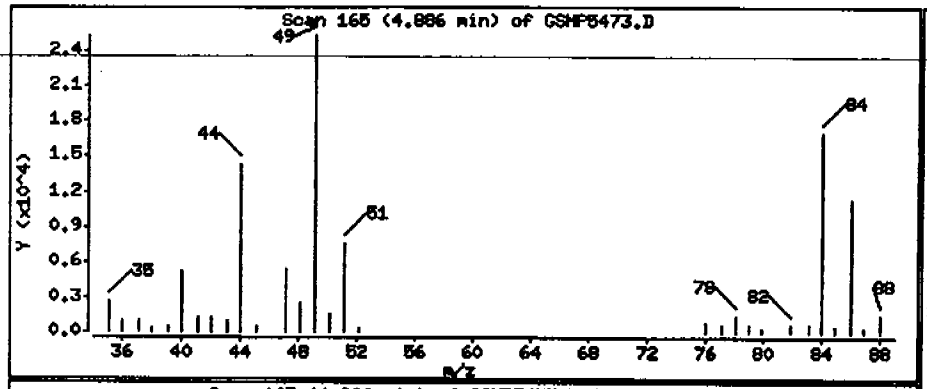
Operator: JDH

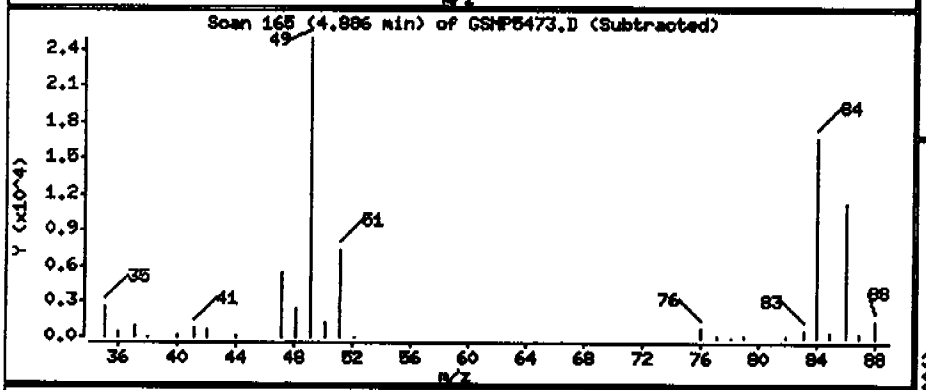
Column phase: RTX-502.2

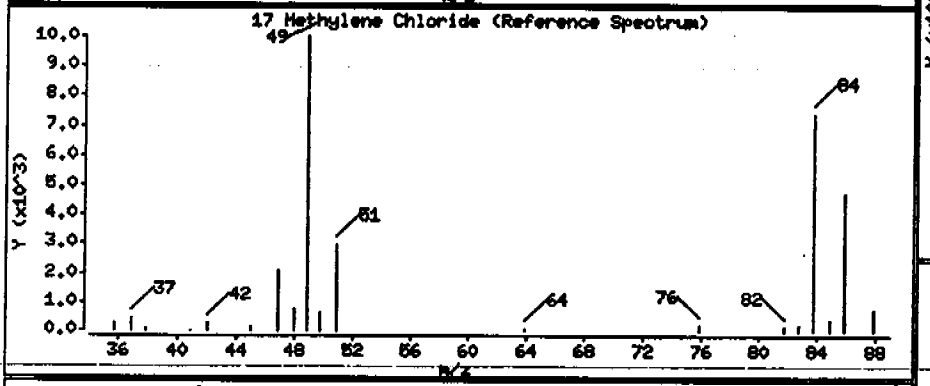
Column diameter: 0.53

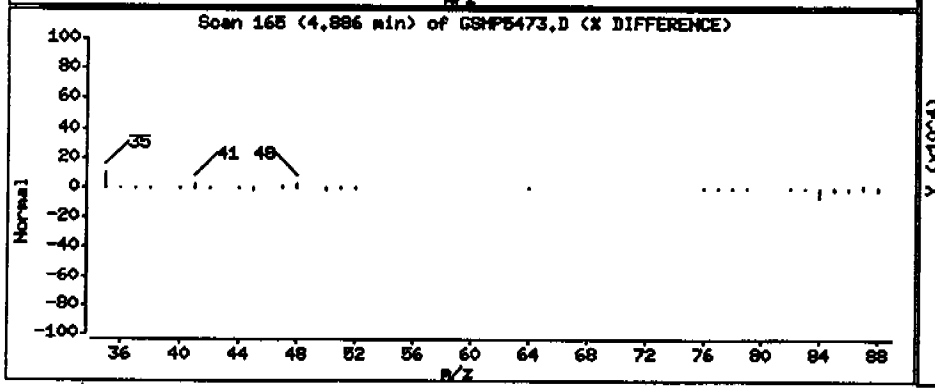
17 Methylene Chloride

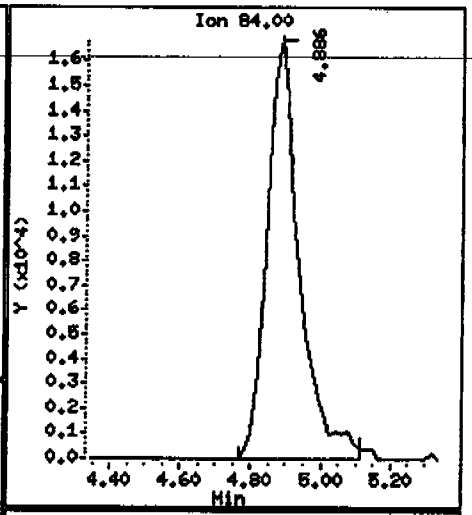
Concentration: 28.20 ug/Kg

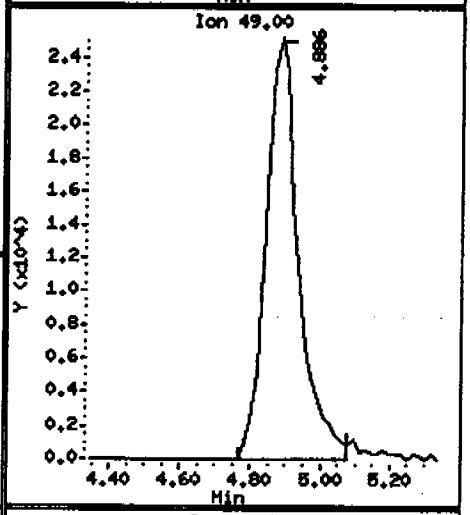


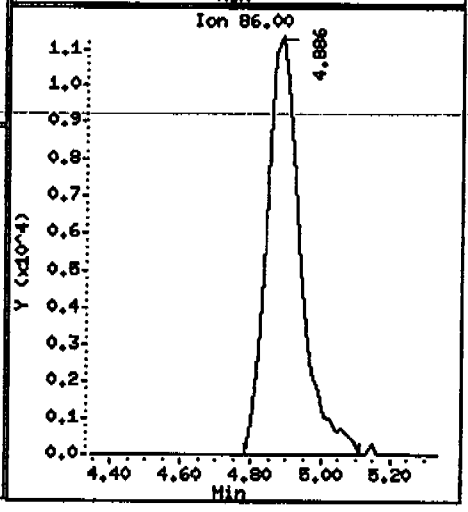












Data File: \\slsvr01\chem\MSC.i\C050427B.b\CSMP5473.D

Date : 28-APR-2005 06:51

Client ID: RE73-05-58879

Instrument: MSC.i

Sample Info: CB1CA1AE;C050427B.b

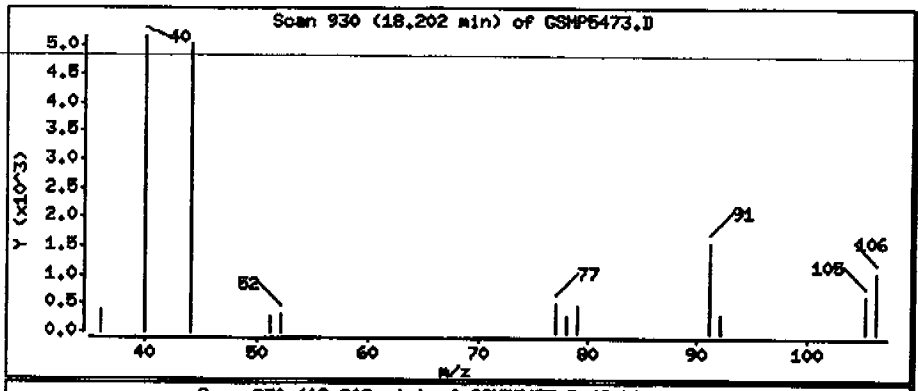
Operator: JDH

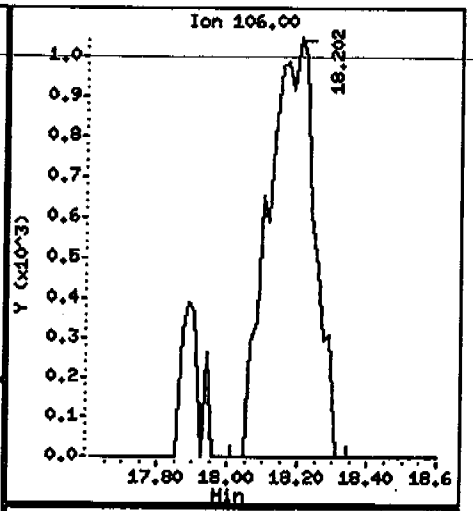
Column phase: RTX-502.2

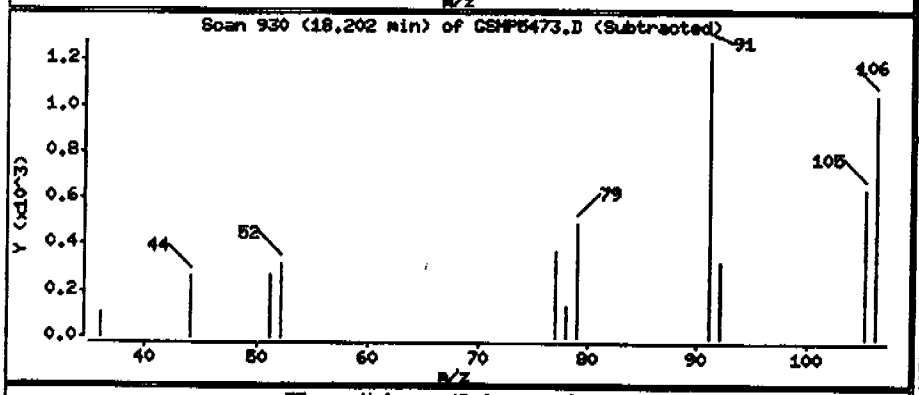
Column diameter: 0.53

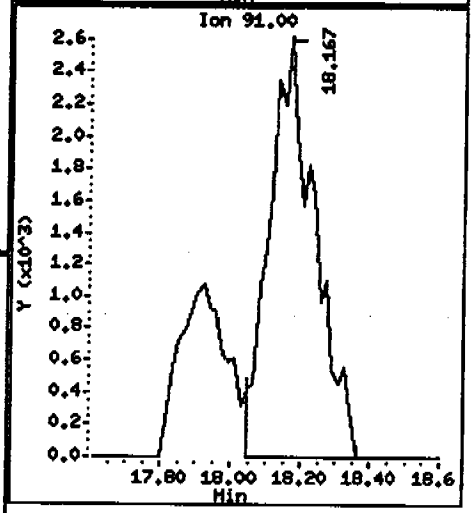
75 m,p-Xylenes

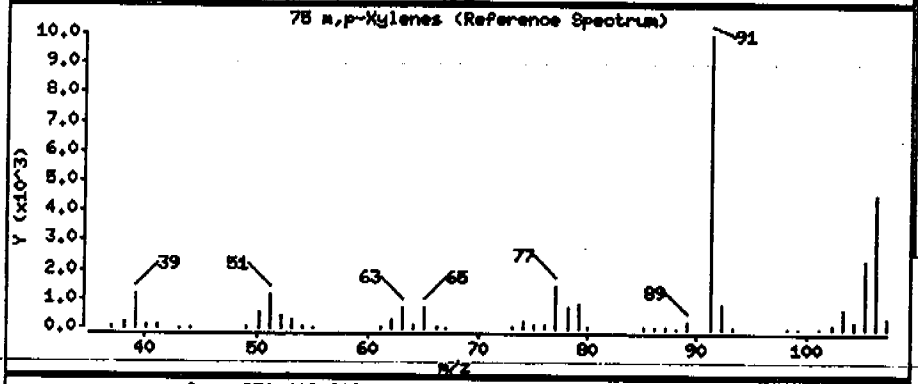
Concentration: 3.373 ug/Kg

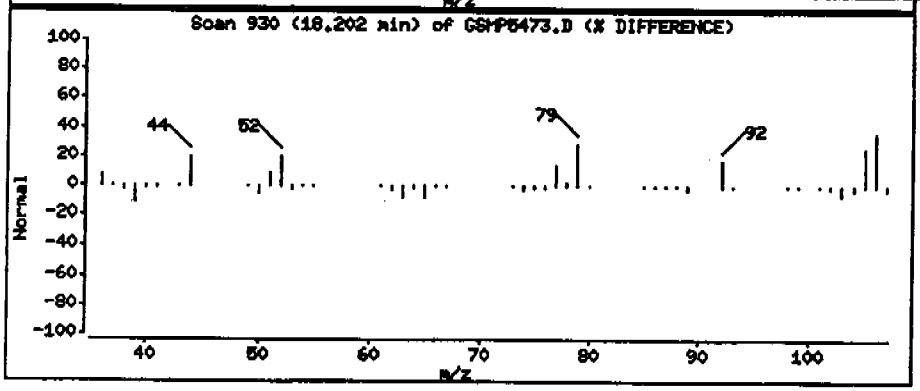












Data File: \\slsvr01\chem\HSG.i\G050427B.b\GSMP5473.D

Date : 28-APR-2005 06:51

Client ID: RE73-05-58879

Instrument: HSG.i

Sample Info: G81GA1AE;G050427B.b

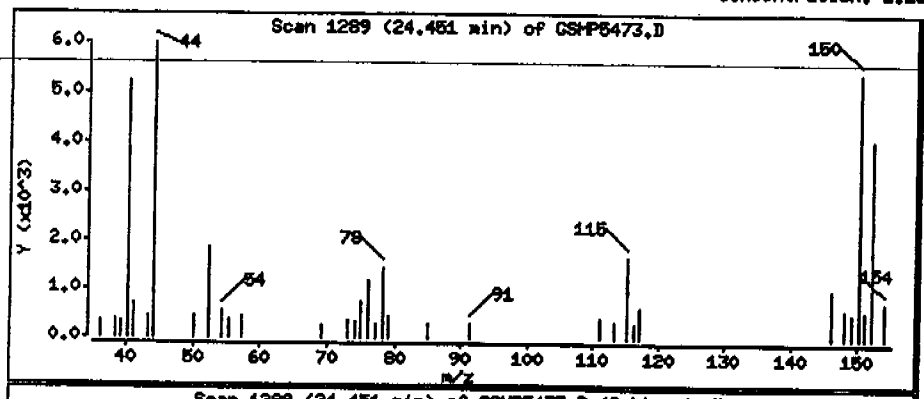
Operator: JDH

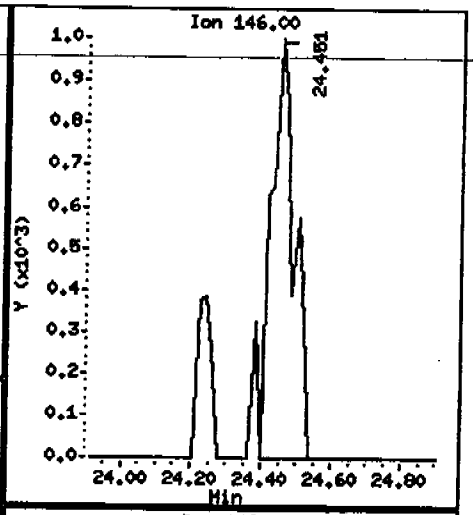
Column phase: RTX-502.2

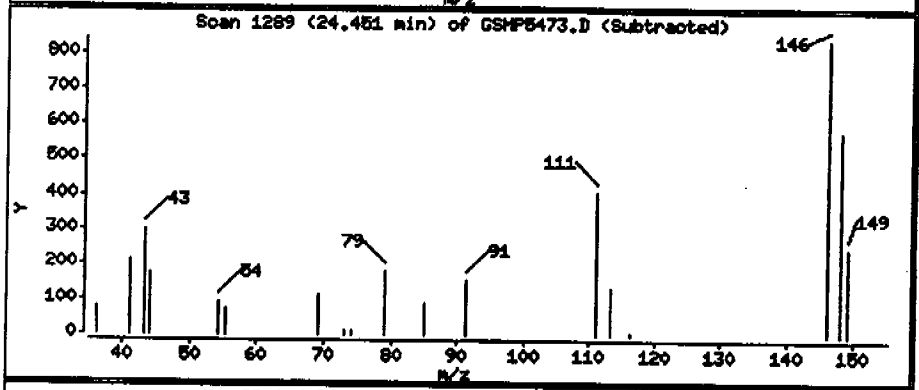
Column diameter: 0.53

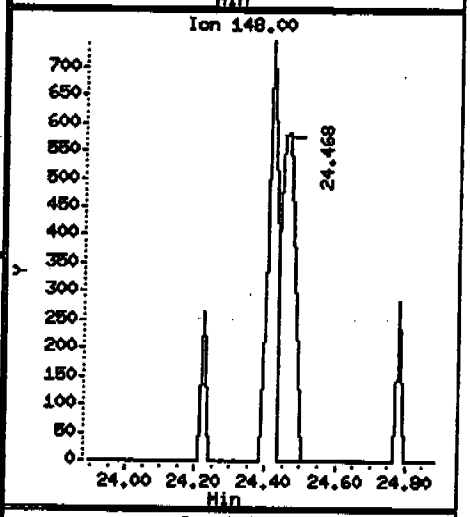
98 1,4-Dichlorobenzene

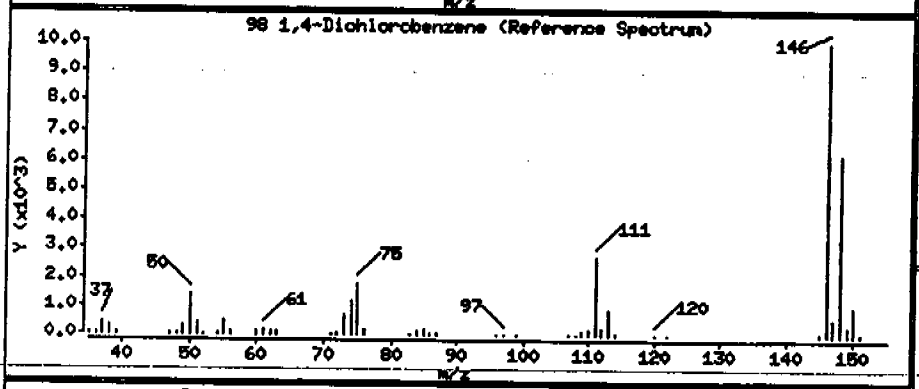
Concentration: 2.261 ug/Kg

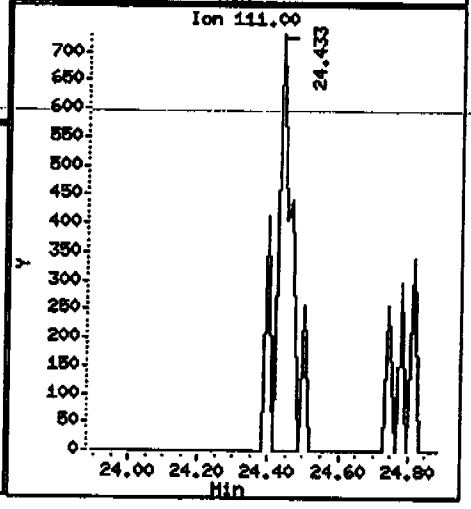


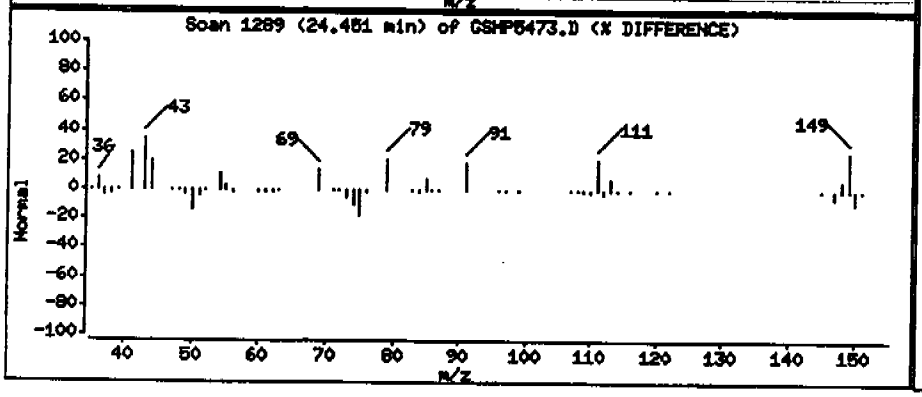












LOT# F5D220273

Data File: \\alsvr01\chem\MSC.i\G050427B.b\GSHP5473.D

Date : 28-APR-2005 06:51

Client ID: RE73-05-58879

Instrument: MSC.i

Sample Info: G81GA1AE;G050427B.b

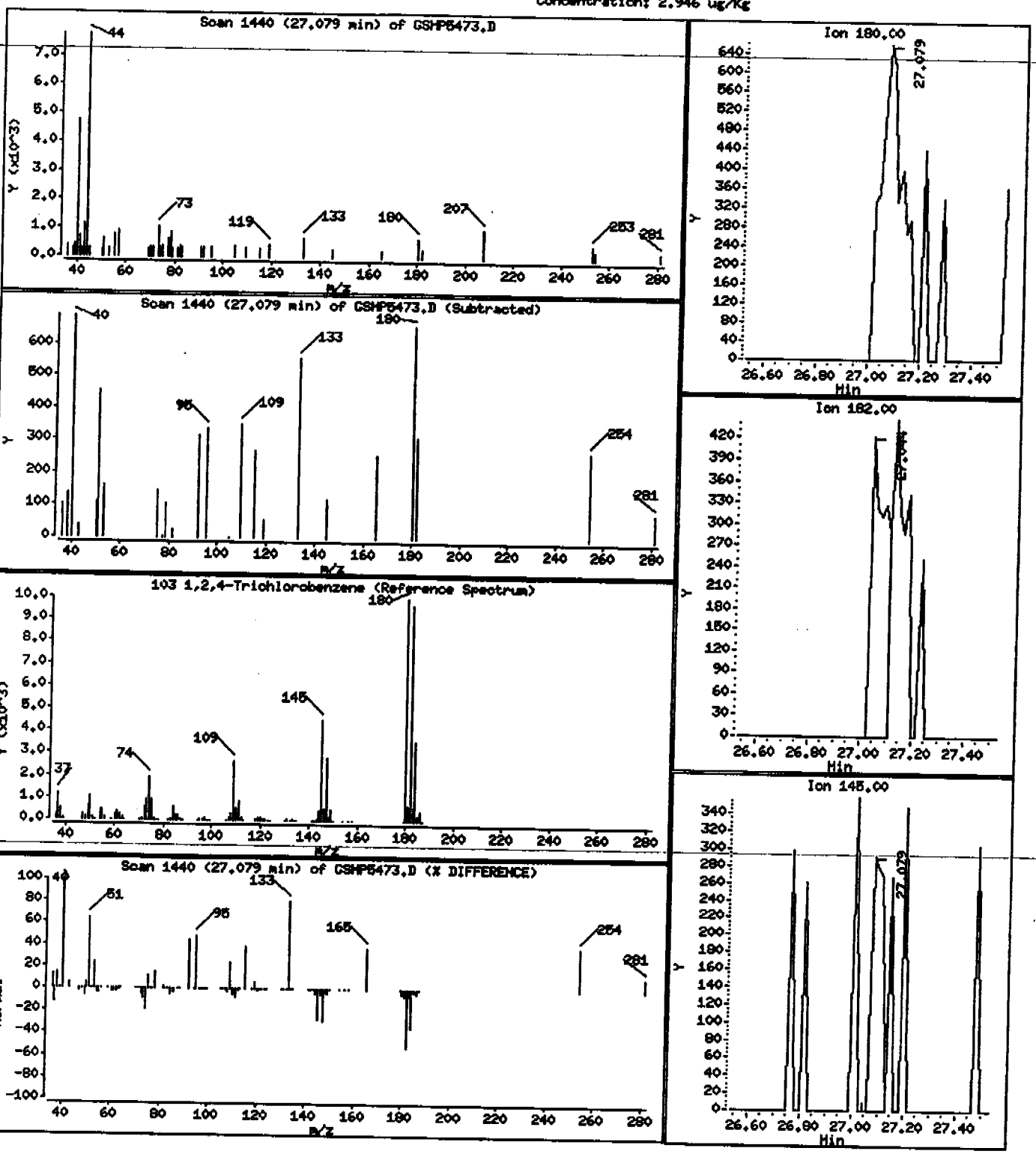
Operator: JIH

Column phase: RTX-502.2

Column diameter: 0.53

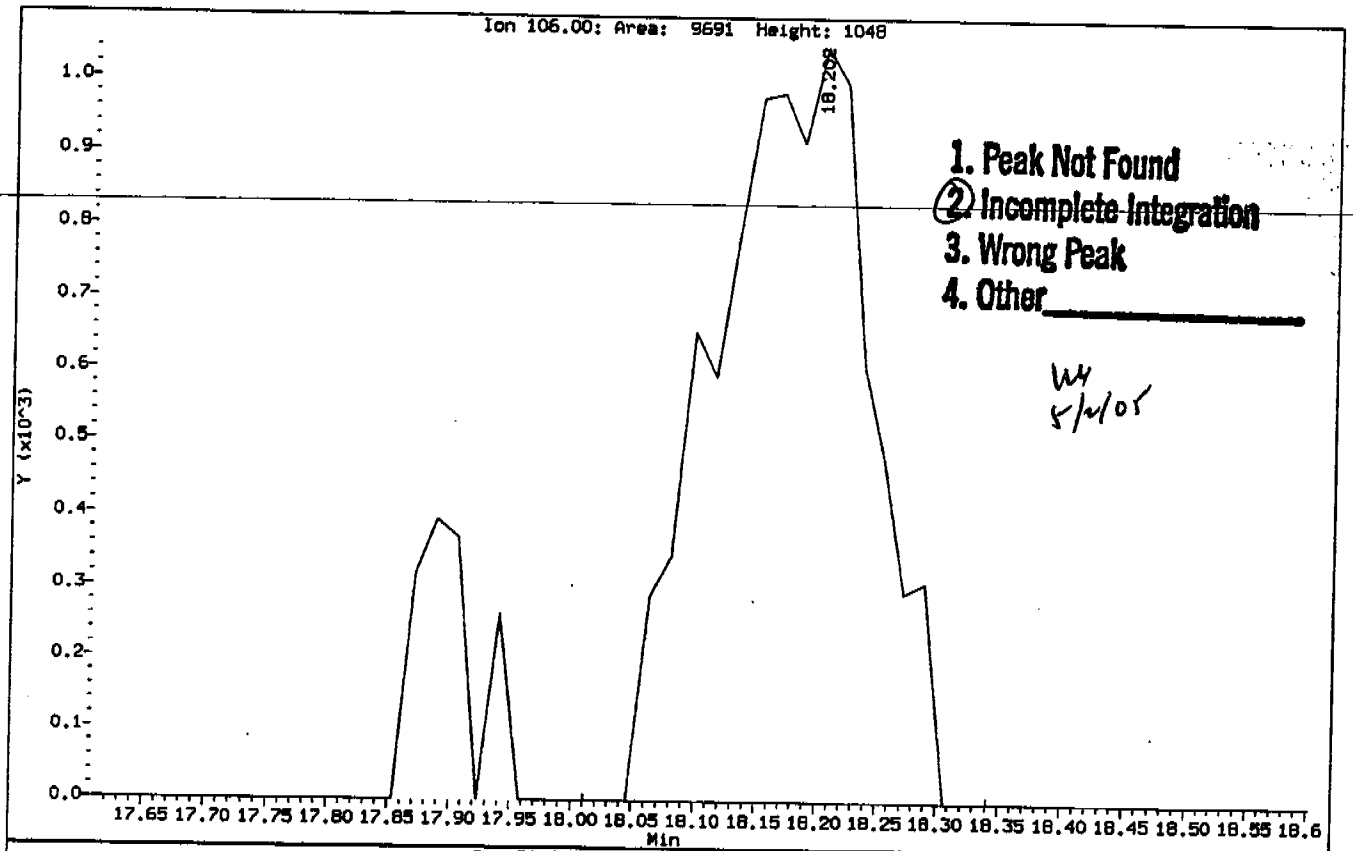
103 1,2,4-Trichlorobenzene

Concentration: 2.946 ug/Kg



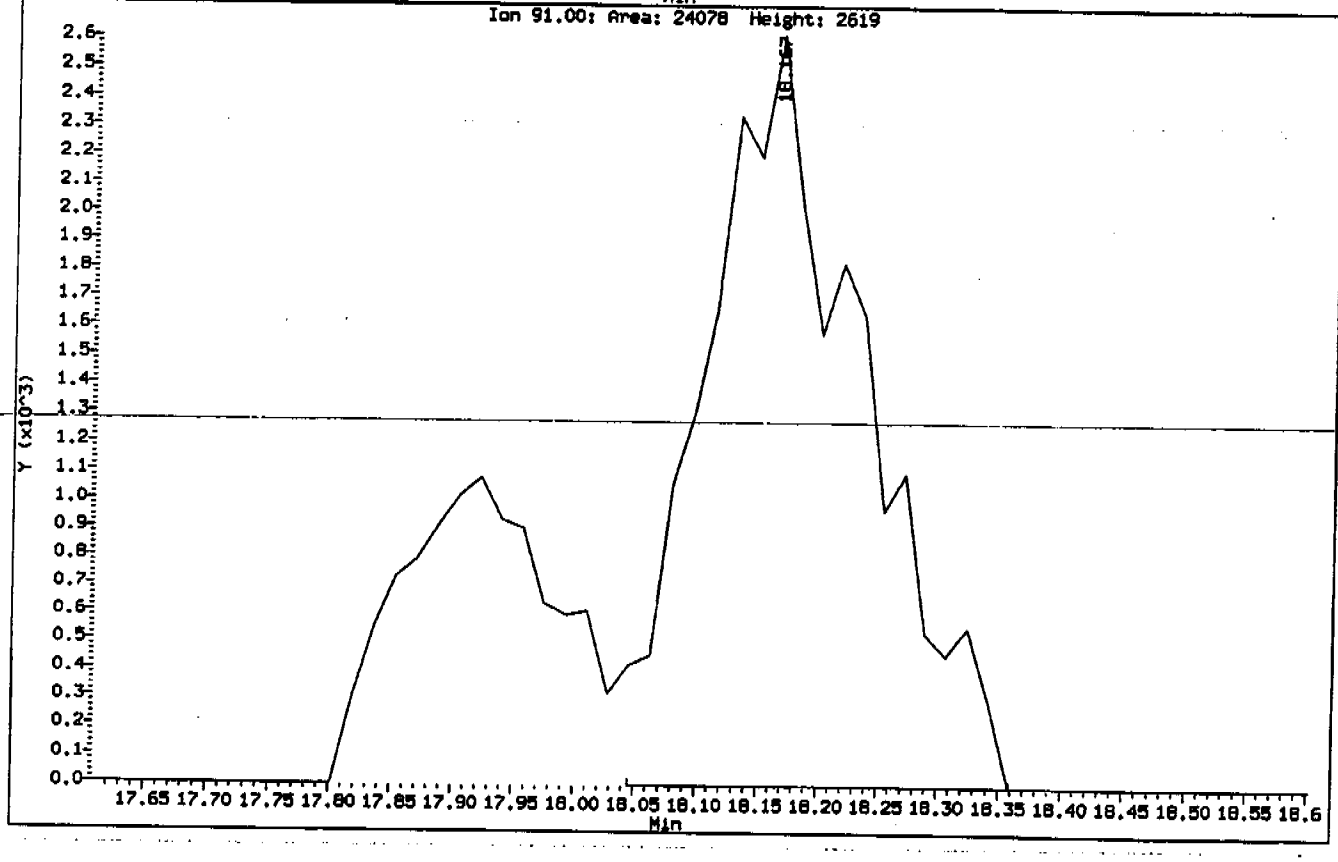
Data File: \\slsvr01\chem\MSG.i\G050427B.b\GSMP5473.D
Injection Date: 28-APR-2005 06:51
Instrument: MSG.i
Client Sample ID: RE73-05-58879

Compound: m,p-Xylenes
CAS Number: 1330-20-7



1. Peak Not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

WH
5/4/05



GC/MS RAW QC DATA

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GBLK5462.D
Report Date: 02-May-2005 16:48

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSG.i\G050427B.b\GBLK5462.D
Lab Smp Id: G9G7W1AA Client Smp ID: VBLKG117B
Inj Date : 28-APR-2005 00:38
Operator : JDH Inst ID: MSG.i
Smp Info : G9G7W1AA;G050427B.b
Misc Info : VBLKG117B.B;F5D280000-107B;5118107
Comment : NONE
Method : \\slsvr01\chem\MSG.i\G050427B.b\8260B-URS.m
Meth Date : 27-Apr-2005 22:14 hannj Quant Type: ISTD
Cal Date : 18-APR-2005 02:51 Cal File: GCAL5166.D
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOIL.sub
Target Version: 4.10
Processing Host: SLVOA04

Concentration Formula: Amt * DF * Wsd/Ws* * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Wsd	5.000	DefSampleWeight
Ws	5.000	SampleWeight
Va	100.000	AliquotVolume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	17 Methylene Chloride	84	4.916	4.845	(0.521)	57582	2.99866	2.999(a)
$	36 Dibromofluoromethane	113	7.771	7.665	(0.823)	1720534	48.4143	48.41
$	43 1,2-Dichloroethane-d4	67	8.763	8.657	(0.928)	575229	44.9224	44.92
*	48 Fluorobenzene	96	9.442	9.336	(1.000)	3124724	50.0000	
$	61 Toluene-d8	98	13.306	13.183	(0.755)	2947640	40.0541	40.05
*	71 Chlorobenzene-d5	117	17.623	17.499	(1.000)	2625962	50.0000	
$	83 4-Bromofluorobenzene	95	21.557	21.433	(0.883)	2378654	47.7741	47.77
*	97 1,4 Dichlorobenzene-d4	152	24.412	24.357	(1.000)	1450768	50.0000	

WM 5/4/05

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GBLK5462.D
Report Date: 02-May-2005 16:48

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSG.i
Lab File ID: GBLK5462.D
Lab Smp Id: G9G7W1AA
Analysis Type: VOA
Quant Type: ISTD
Operator: JDH
Method File: \\slsvr01\chem\MSG.i\G050427B.b\8260B-URS.m
Misc Info: VBLKG117B.B;F5D280000-107B;5118107

Calibration Date: 27-APR-2005
Calibration Time: 21:42
Client Smp ID: VBLKG117B
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	3117196	1558598	6234392	3124724	0.24
71 Chlorobenzene-d5	2287097	1143549	4574194	2625962	14.82
97 1,4 Dichlorobenze	1536763	768382	3073526	1450768	-5.60

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	9.34	8.84	9.84	9.44	1.14
71 Chlorobenzene-d5	17.50	17.00	18.00	17.62	0.71
97 1,4 Dichlorobenze	24.36	23.86	24.86	24.41	0.22

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GBLK5462.D
Report Date: 02-May-2005 16:48

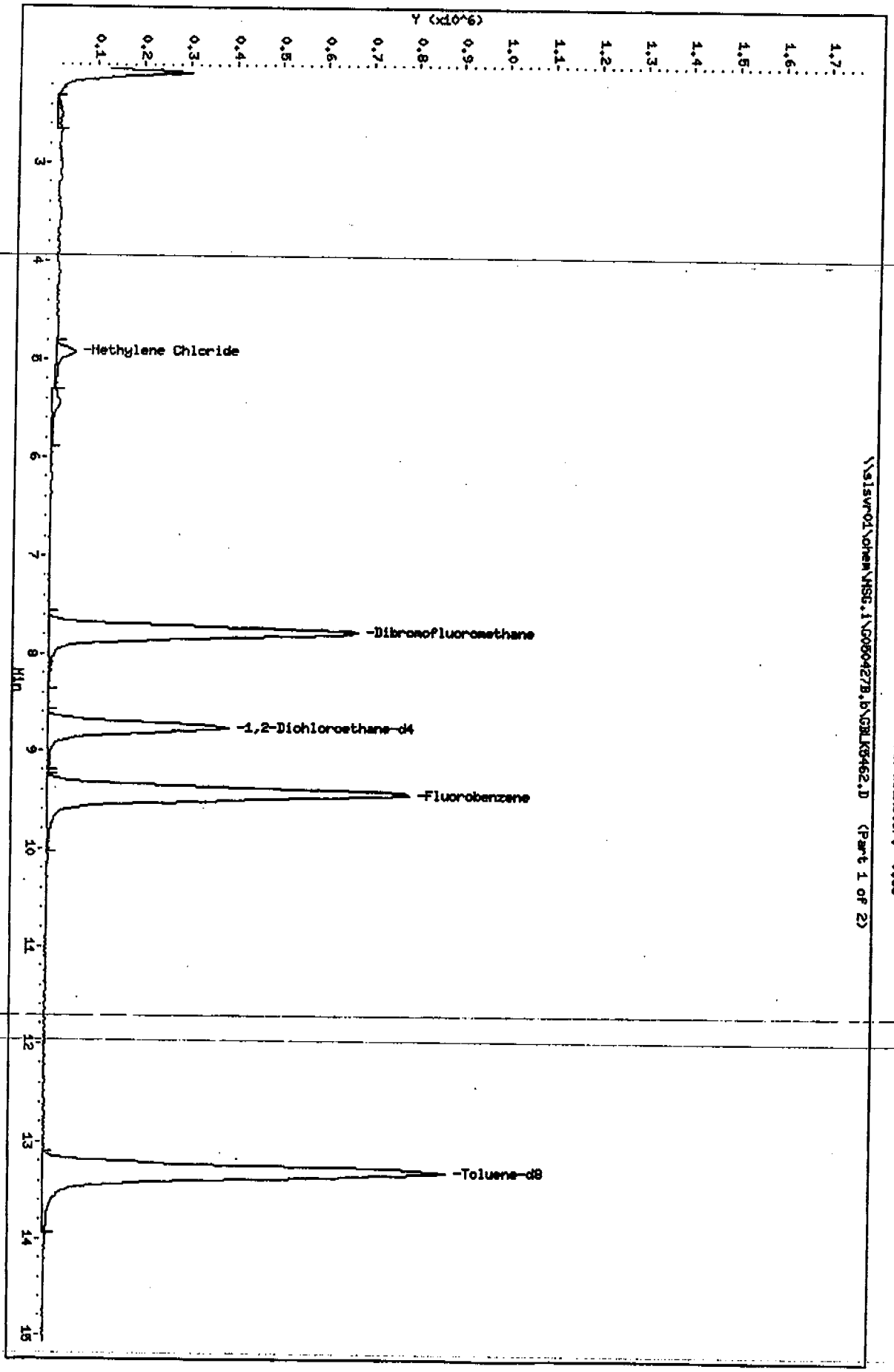
STL St. Louis

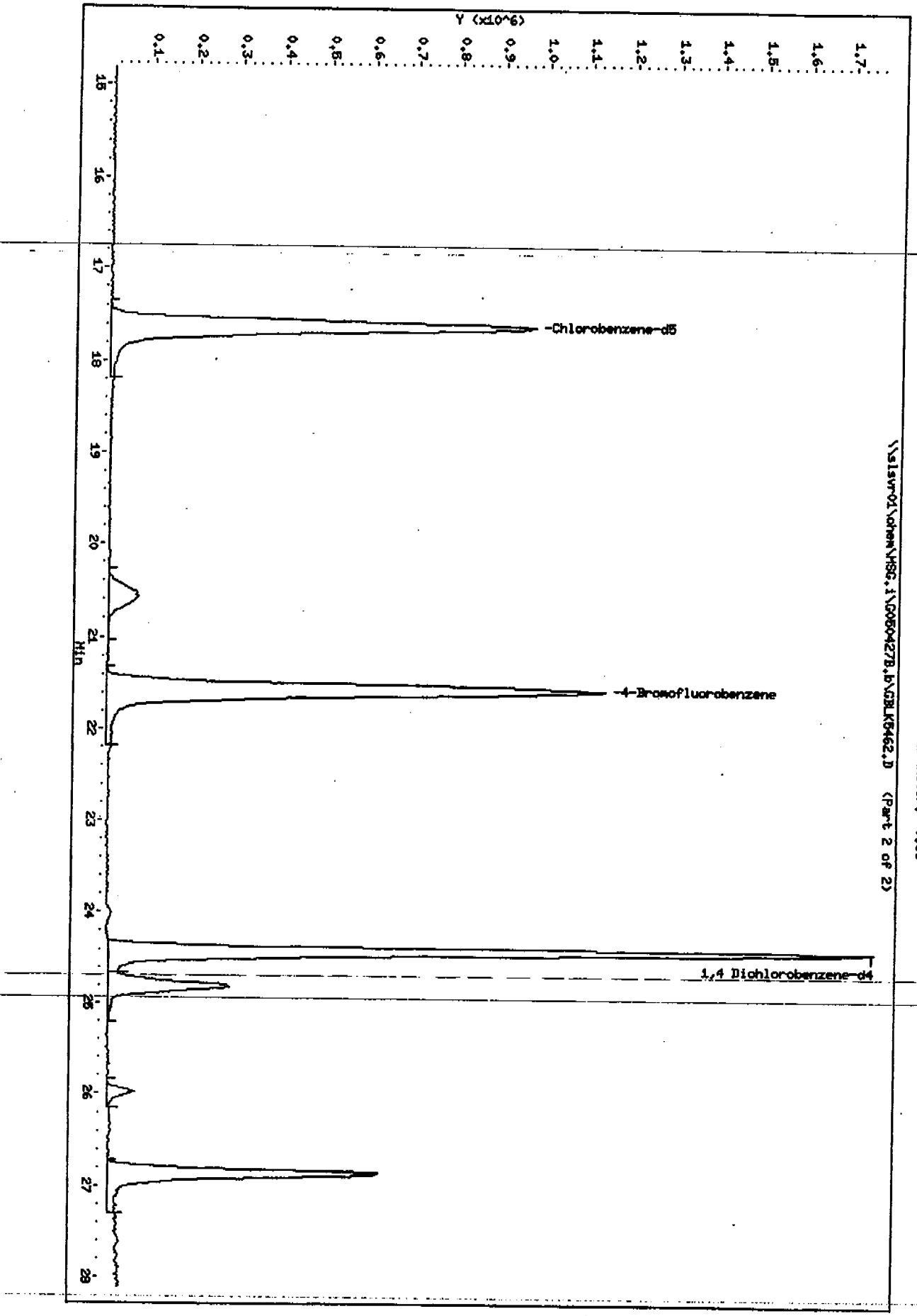
RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: G9G7W1AA
Level: LOW
Data Type: MS DATA
SpikeList File: soilms.spk
Sublist File: SOIL.sub
Method File: \\slsvr01\chem\MSG.i\G050427B.b\8260B-URS.m
Misc Info: VBLKG117B.B;F5D280000-107B;5118107

Client SDG: SDGa00861
Fraction: VOA
Client Smp ID: VBLKG117B
Operator: JDH
SampleType: BLANK
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 36 Dibromofluorometha	50.00	48.41	96.83	61-140
$ 43 1,2-Dichloroethane	50.00	44.92	89.84	56-149
$ 61 Toluene-d8	50.00	40.05	80.11	60-148
$ 83 4-Bromofluorobenze	50.00	47.77	95.55	56-150


Y (x10^6)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
Min
3
4
5
6
7
8
9
10
11
12
13
14
15
-Methylene Chloride
-Dibromofluoromethane
-1,2-Dichloroethane-d4
-Fluorobenzene
-Toluene-d8
Data File: \\slsvr01\chem\MSG.i\G0804278.b\GBLK5462.D
Date : 28-APR-2005 00:38
Client ID: VBLKG5178
Sample Info: G967MLAA;G0804278.b
Column phase: RTX-502.2
\\slsvr01\chem\MSG.i\G0804278.b\GBLK5462.D (Part 1 of 2)
Instrument: MSG.i
Operator: JDH
Column diameter: 0.53


Data File: \\slsvr01\chem\HSG.i\G0504277B.b\GBLK5462.D
Date : 28-APR-2005 00:38
Client ID: VBLKG1178
Sample Info: G5G7MBAG;G0504277B,b
Column phase: RTX-502.2
Instrument: HSG.i
Operator: JDH
Column diameter: 0.53
Y (x10^6)
Chlorobenzene-d5
4-Bromofluorobenzene
1,4 Dichlorobenzene-d4
Min
\\slsvr01\chem\HSG.i\G0504277B.b\GBLK5462.D (Part 2 of 2)

Data File: \\slsvr01\ohem\MSG.i\G050427B.b\GBLK5462.D

Date : 28-APR-2005 00:38

Client ID: VBLKG117B

Instrument: MSG.i

Sample Info: G9G7WLAA;G050427B.b

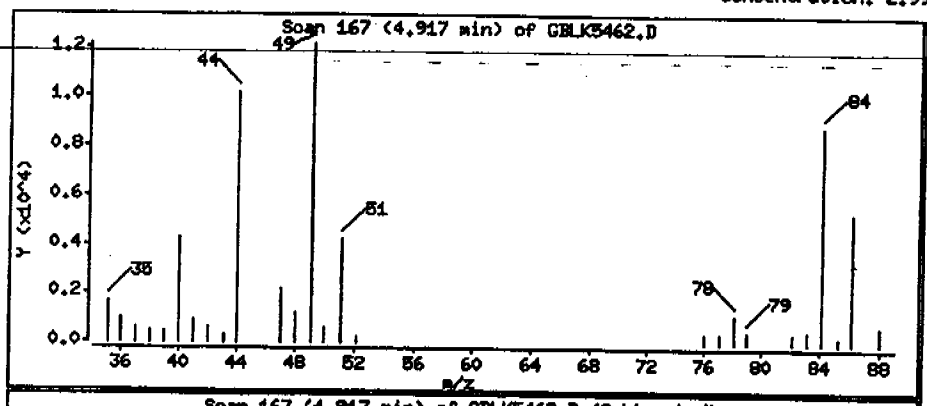
Operator: JDH

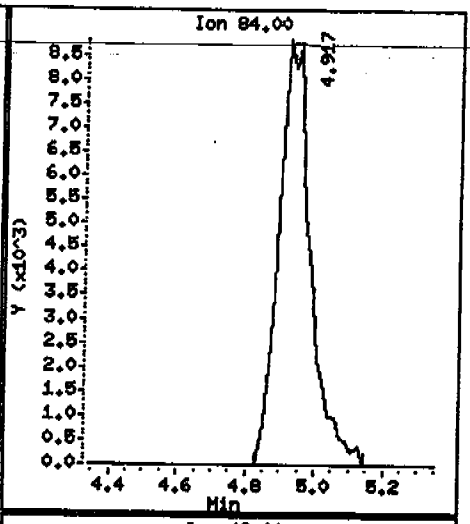
Column phase: RTX-502.2

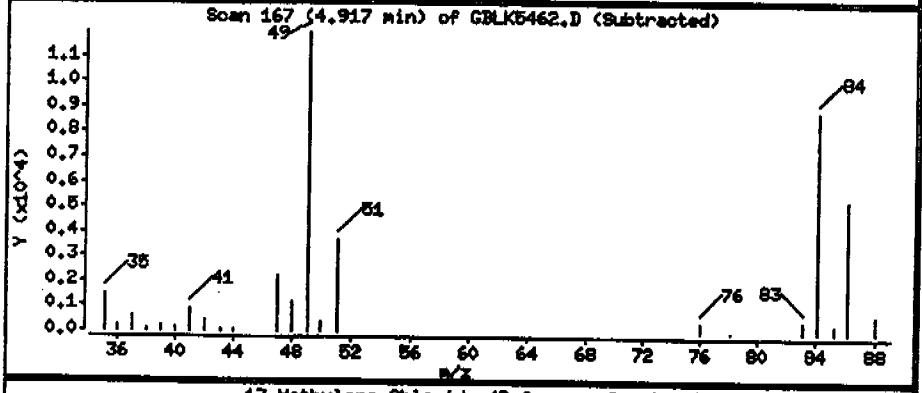
Column diameter: 0.53

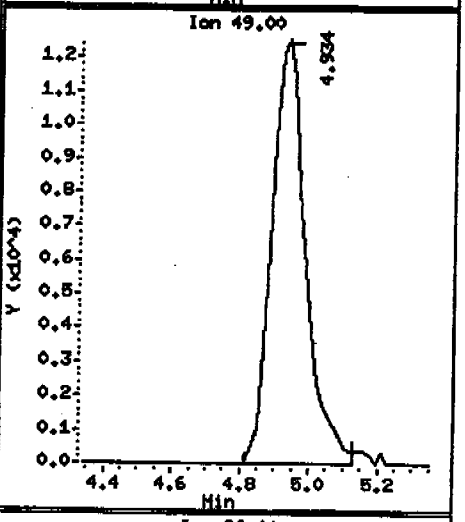
17 Methylene Chloride

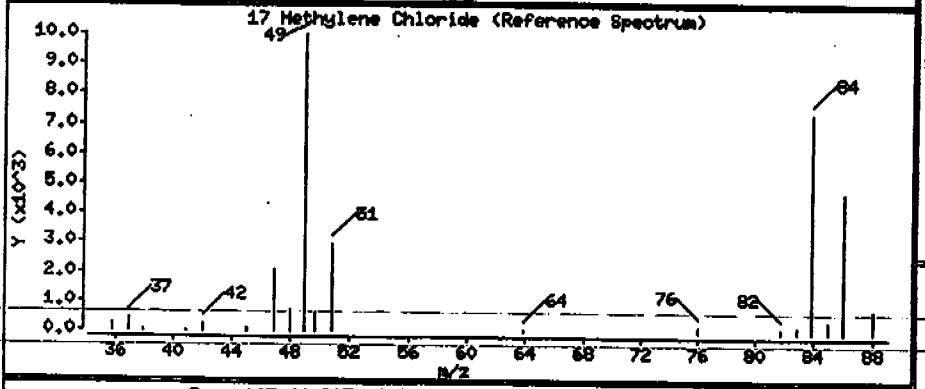
Concentration: 2.999 ug/Kg

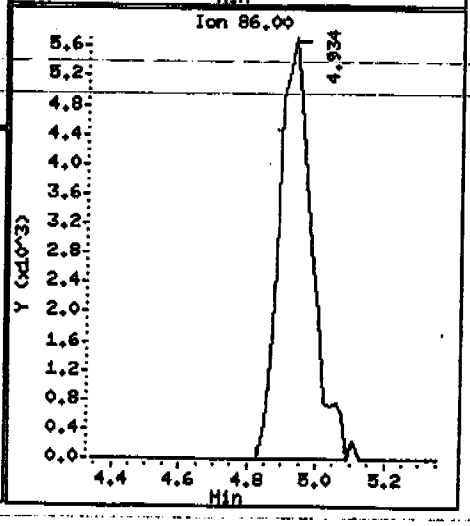


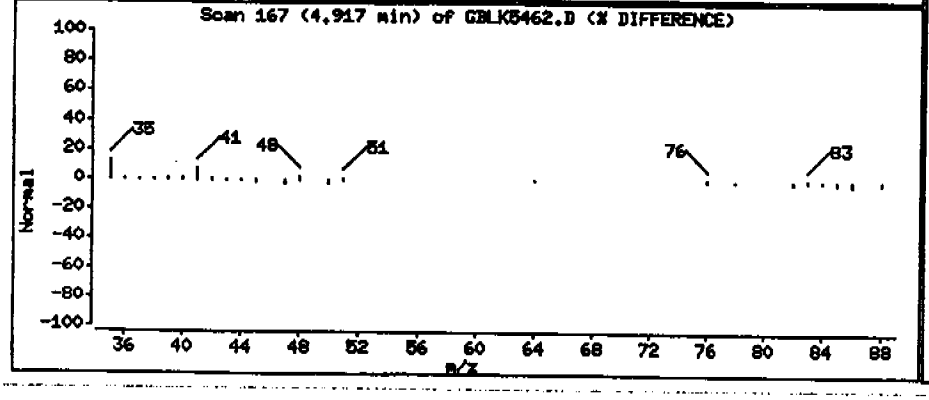












Data File: \\slsvr01\chem\MSG.i\G050427B.b\GBLK5462.D
Report Date: 02-May-2005 16:48

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSG.i\G050427B.b\GBLK5462.D
Lab Smp Id: G9G7W1AA Client Smp ID: VBLKG117B
Inj Date : 28-APR-2005 00:38
Operator : JDH Inst ID: MSG.i
Smp Info : G9G7W1AA;G050427B.b
Misc Info : VBLKG117B.B;F5D280000-107B;5118107
Comment : NONE
Method : \\slsvr01\chem\MSG.i\G050427B.b\8260B-URS.m
Meth Date : 27-Apr-2005 22:14 hannj Quant Type: ISTD
Cal Date : 18-APR-2005 02:51 Cal File: GCAL5166.D
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOIL.sub
Target Version: 4.10
Processing Host: SLVOA04

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

WW
5/2/05

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GLCS5460.D
Report Date: 02-May-2005 16:48

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSG.i\G050427B.b\GLCS5460.D
Lab Smp Id: G9G7W1AC Client Smp ID: VLCSG117A
Inj Date : 27-APR-2005 22:45
Operator : JDH Inst ID: MSG.i
Smp Info : G9G7W1AC;G050427B.b
Misc Info : VBLKG117B.B;F5D280000-107C;5118107
Comment : NONE
Method : \\slsvr01\chem\MSG.i\G050427B.b\8260B-URS.m
Meth Date : 27-Apr-2005 22:14 hannj Quant Type: ISTD
Cal Date : 18-APR-2005 02:51 Cal File: GCAL5166.D
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: QC-SOIL.sub
Target Version: 4.10
Processing Host: SLVOA04

Concentration Formula: Amt * DF * Wsd/Ws* * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Wsd	5.000	DefSampleWeight
Ws	5.000	SampleWeight
Va	100.000	AliquotVolume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	2.217	2.199	(0.236)	1661452	69.6714	69.67
3	Chloromethane	50	2.478	2.478	(0.264)	731246	44.2471	44.25
4	Vinyl Chloride	62	2.600	2.565	(0.277)	603131	50.9023	50.90
5	Bromomethane	94	3.087	3.052	(0.329)	585763	34.6282	34.63
6	Chloroethane	64	3.174	3.139	(0.338)	448094	54.6516	54.65
7	Trichlorofluoromethane	101	3.470	3.435	(0.370)	2168031	47.7443	47.74
8	Diethyl ether	59	3.836	3.800	(0.409)	524042	49.9692	49.97
9	1,1,2-Trichlorofluoroethane	101	3.992	3.975	(0.425)	1818760	46.7731	46.77
11	Acetone	43	4.097	4.062	(0.436)	160574	36.7951	36.80
12	1,1-Dichloroethene	96	4.236	4.201	(0.451)	686820	48.1189	48.12
16	Allyl chloride	39	4.723	4.688	(0.503)	915521	45.7451	45.74
18	Carbon Disulfide	76	4.915	4.862	(0.524)	2154172	46.5125	46.51
17	Methylene Chloride	84	4.897	4.845	(0.522)	944043	50.1696	50.17
M 38	1,2-Dichloroethene (total)	96				1996741	98.0714	98.07
20	MTBE	73	5.141	5.089	(0.548)	2190131	48.2692	48.27
21	trans-1,2-Dichloroethene	96	5.315	5.280	(0.566)	962544	50.1173	50.12
22	n-Hexane	57	5.420	5.367	(0.577)	1236130	44.1863	44.19
23	1,1-Dichloroethane	63	5.977	5.941	(0.637)	1978281	46.3682	46.37
27	2-Butanone	43	6.760	6.707	(0.720)	305777	57.9701	57.97
29	2,2-Dichloropropane	77	6.934	6.899	(0.739)	1896606	46.5315	46.53
30	cis-1,2-Dichloroethene	96	7.021	6.968	(0.748)	1034197	47.9541	47.95

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GLCS5460.D
Report Date: 02-May-2005 16:48

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	33 Chloroform	83	7.317	7.264	(0.779)	2313866	44.7534	44.75
	35 Isobutanol	42	7.717	7.665	(0.822)	200064	197.904	197.9 (a)
	34 Bromochloromethane	128	7.630	7.560	(0.813)	595766	48.6602	48.66
	37 Tetrahydrofuran	71	7.735	7.700	(0.824)	63003	47.0306	47.03
$	36 Dibromofluoromethane	113	7.717	7.665	(0.822)	1611437	46.2735	46.27
	39 1,1,1-Trichloroethane	97	8.065	8.013	(0.859)	2093316	46.7040	46.70
	41 1,1-Dichloropropene	75	8.379	8.326	(0.892)	1702361	48.2122	48.21
	42 Carbon Tetrachloride	117	8.570	8.518	(0.913)	1900486	47.2349	47.23
$	43 1,2-Dichloroethane-d4	67	8.709	8.657	(0.928)	551288	43.9349	43.93
	47 Benzene	78	8.918	8.866	(0.950)	2653451	48.0574	48.06
	46 1,2-Dichloroethane	62	8.901	8.848	(0.948)	1491841	46.3721	46.37
*	48 Fluorobenzene	96	9.388	9.336	(1.000)	3061986	50.0000	
	49 Trichloroethene	130	10.259	10.223	(1.093)	1213035	47.3600	47.36
	51 1,2-Dichloropropane	63	10.694	10.606	(1.139)	1190629	48.3187	48.32
	52 Methyl methacrylate	69	10.920	10.867	(1.163)	596741	49.5232	49.52
	53 Bromodichloromethane	83	11.233	11.181	(1.197)	2425290	48.0706	48.07
	54 Dibromomethane	93	11.355	11.285	(1.209)	1092956	48.5534	48.55
	56 2-Nitropropane	43	11.460	11.407	(1.221)	247437	13.7670	13.77
	58 4-Methyl-2-pentanone	43	12.173	12.103	(1.297)	885354	35.3741	35.37
	59 cis-1,3-Dichloropropene	75	12.643	12.591	(1.347)	1799215	50.7058	50.70
$	61 Toluene-d8	98	13.252	13.183	(0.754)	2585944	39.4024	39.40
	62 Toluene	91	13.479	13.409	(0.766)	3150690	42.4261	42.43
	63 trans-1,3-Dichloropropene	75	14.036	13.966	(0.798)	1614576	45.9258	45.92
	64 Ethyl methacrylate	69	14.105	14.053	(0.802)	1313981	40.3789	40.38
	65 1,1,2-Trichloroethane	97	14.436	14.366	(0.821)	986725	43.2257	43.22
	66 2-Hexanone	43	14.575	14.505	(0.829)	608137	43.9940	43.99
	67 1,3-Dichloropropane	76	15.167	15.097	(0.862)	1677394	44.8549	44.85
	68 Tetrachloroethene	164	15.272	15.184	(0.868)	1188763	43.4443	43.44
	69 Chlorodibromomethane	129	15.829	15.759	(0.900)	1688971	47.5270	47.53
M	78 Xylenes (total)	106				4171392	152.895	152.9
	70 1,2-Dibromoethane	107	16.420	16.333	(0.934)	1433871	50.3236	50.32
*	71 Chlorobenzene-d5	117	17.587	17.499	(1.000)	2341839	50.0000	
	72 Chlorobenzene	112	17.691	17.621	(1.006)	2485889	49.9211	49.92
	73 1,1,1,2-Tetrachloroethane	131	17.865	17.795	(1.016)	1371765	51.2780	51.28
	74 Ethylbenzene	106	17.935	17.865	(1.020)	1068197	49.2146	49.21
	75 m,p-Xylenes	106	18.178	18.109	(1.034)	2820204	102.077	102.1
	76 o-Xylene	106	19.536	19.449	(1.111)	1351188	50.8174	50.82
	77 Styrene	104	19.658	19.588	(1.118)	2267219	52.1881	52.19
	79 Bromoform	173	20.633	20.528	(1.173)	1267828	54.7288	54.73
	80 Isopropylbenzene	105	20.772	20.667	(1.181)	4216559	54.6985	54.70
	81 Cyclohexanone	55	20.894	20.826	(1.188)	324865	229.773	229.8
	82 1,1,2,2-Tetrachloroethane	83	21.364	21.259	(1.215)	1649458	51.8079	51.81
$	83 4-Bromofluorobenzene	95	21.538	21.433	(0.882)	2407717	49.3259	49.32
	84 1,2,3-Trichloropropane	110	21.834	21.746	(0.894)	445238	51.6682	51.67
	85 Bromobenzene	156	22.078	21.990	(0.904)	1271649	49.7755	49.78
	86 n-Propylbenzene	91	22.112	22.025	(0.906)	5165834	48.5971	48.60
	88 trans-1,4-dichloro-2-butene	53	22.617	22.547	(0.927)	144846	46.9212	46.92
	87 2-Chlorotoluene	91	22.547	22.460	(0.924)	3527959	45.6724	45.67
	89 1,3,5-Trimethylbenzene	105	22.617	22.530	(0.927)	3463902	48.2872	48.29
	90 4-Chlorotoluene	91	22.687	22.634	(0.929)	4012421	46.5397	46.54
	91 t-Butylbenzene	119	23.487	23.400	(0.962)	3367439	40.2652	40.26
	93 1,2,4-Trimethylbenzene	105	23.540	23.487	(0.964)	3445767	48.5792	48.58
	94 sec-Butylbenzene	105	23.905	23.853	(0.979)	4617831	47.5969	47.60
	95 4-Isopropyltoluene	119	24.184	24.131	(0.991)	3832617	53.6815	53.68

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GLCS5460.D
Report Date: 02-May-2005 16:48

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)	
96	1,3-Dichlorobenzene	146	24.271	24.201	(0.994)	2147502	47.9041	47.90	
* 97	1,4 Dichlorobenzene-d4	152	24.410	24.357	(1.000)	1422296	50.0000		
98	1,4-Dichlorobenzene	146	24.462	24.410	(1.002)	2285657	47.7218	47.72	
99	n-Butylbenzene	91	24.863	24.810	(1.019)	3911874	51.9145	51.91	
100	1,2-Dichlorobenzene	146	25.019	24.967	(1.025)	2066684	51.5319	51.53	
101	1,2-Dibromo-3-chloropropane	157	26.116	26.063	(1.070)	359538	60.2627	60.26	
103	1,2,4-Trichlorobenzene	180	27.091	27.038	(1.110)	1607273	51.5808	51.58	
104	Hexachlorobutadiene	225	27.247	27.195	(1.116)	1189124	46.7277	46.73	
105	Naphthalene	128	27.352	27.299	(1.121)	2368769	55.3339	55.33	
106	1,2,3-Trichlorobenzene	180	27.595	27.543	(1.130)	1439716	50.9832	50.98	
107	4-Chlorophenyl methyl sulfide	159	28.013	28.052	(2.984)	1186			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GLCS5460.D
Report Date: 02-May-2005 16:48

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSG.i
Lab File ID: GLCS5460.D
Lab Smp Id: G9G7W1AC
Analysis Type: VOA
Quant Type: ISTD
Operator: JDH
Method File: \\slsvr01\chem\MSG.i\G050427B.b\8260B-URS.m
Misc Info: VBLKG117B.B;F5D280000-107C;5118107

Calibration Date: 27-APR-2005
Calibration Time: 21:42
Client Smp ID: VLCSG117A
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	3117196	1558598	6234392	3061986	-1.77
71 Chlorobenzene-d5	2287097	1143549	4574194	2341839	2.39
97 1,4 Dichlorobenze	1536763	768382	3073526	1422296	-7.45

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	9.34	8.84	9.84	9.39	0.56
71 Chlorobenzene-d5	17.50	17.00	18.00	17.59	0.50
97 1,4 Dichlorobenze	24.36	23.86	24.86	24.41	0.22

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GLCS5460.D
Report Date: 02-May-2005 16:48

STL St. Louis

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: G9G7W1AC
Level: LOW
Data Type: MS DATA
SpikeList File: SOILLCS.spk
Sublist File: QC-SOIL.sub
Method File: \\slsvr01\chem\MSG.i\G050427B.b\8260B-URS.m
Misc Info: VBLKG117B.B;F5D280000-107C;5118107

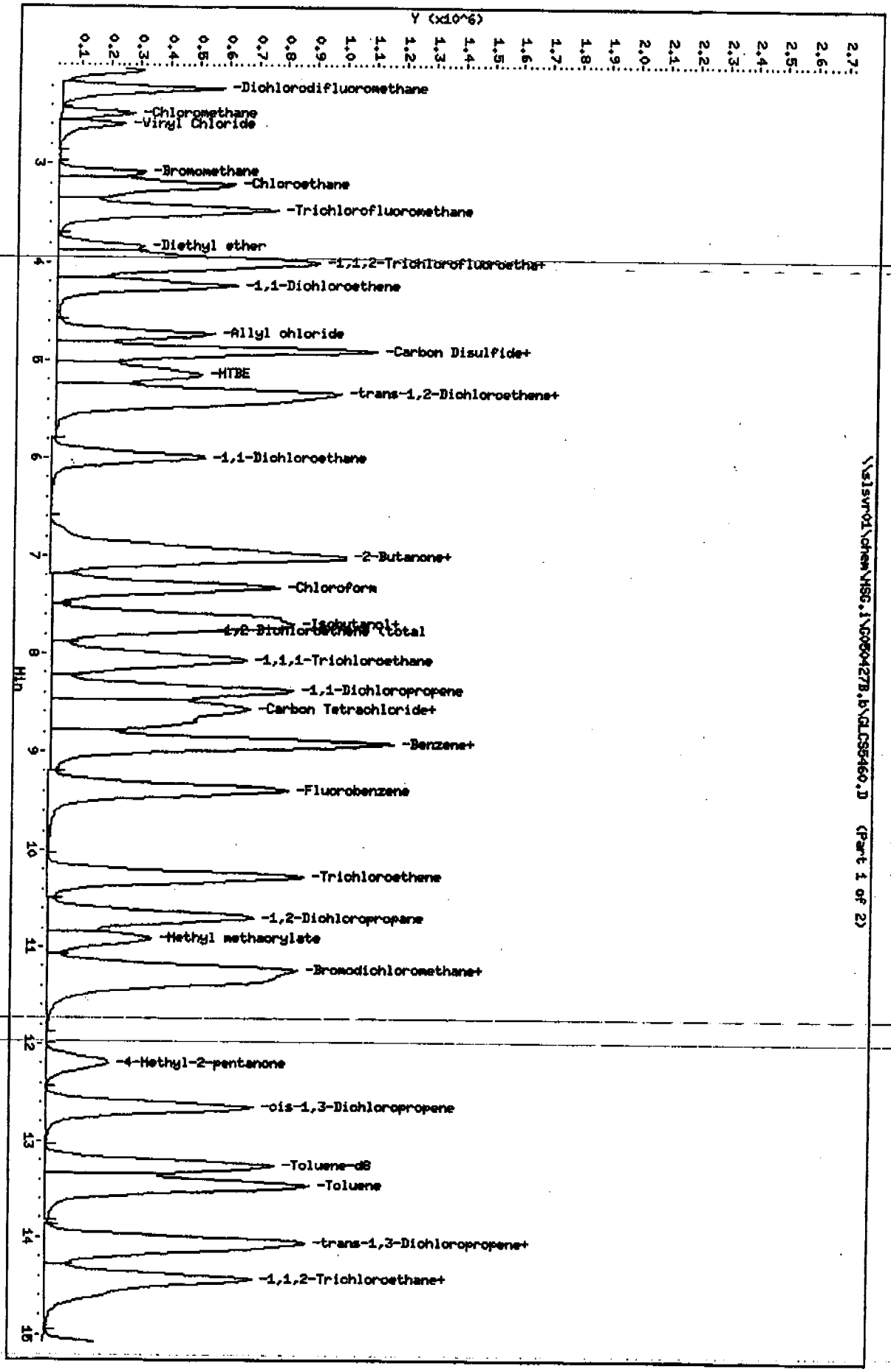
Client SDG: SDGa00861
Fraction: VOA
Client Smp ID: VLCSG117A
Operator: JDH
SampleType: LCS
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
	1 Dichlorodifluorome	50.00	69.67	139.34	30-150
	3 Chloromethane	50.00	44.25	88.49	30-150
	4 Vinyl Chloride	50.00	50.90	101.80	48-148
	5 Bromomethane	50.00	34.63	69.26	30-142
	6 Chloroethane	50.00	54.65	109.30	57-145
	7 Trichlorofluoromet	50.00	47.74	95.49	57-142
	8 Diethyl ether	50.00	49.97	99.94	61-138
	9 1,1,2-Trichloroflu	50.00	46.77	93.55	60-139
	11 Acetone	50.00	36.80	73.59	30-150
	12 1,1-Dichloroethene	50.00	48.12	96.24	56-130
	16 Allyl chloride	50.00	45.74	91.49	54-147
	18 Carbon Disulfide	50.00	46.51	93.03	45-150
	17 Methylene Chloride	50.00	50.17	100.34	31-148
M	38 1,2-Dichloroethene	100.0	98.07	98.07	72-125
	20 MTBE	50.00	48.27	96.54	61-133
	21 trans-1,2-Dichloro	50.00	50.12	100.23	68-130
	22 n-Hexane	50.00	44.19	88.37	53-125
	23 1,1-Dichloroethane	50.00	46.37	92.74	68-126
	27 2-Butanone	50.00	57.97	115.94	31-150
	29 2,2-Dichloropropan	50.00	46.53	93.06	64-141
	30 cis-1,2-Dichloroet	50.00	47.95	95.91	73-125
	33 Chloroform	50.00	44.75	89.51	72-125
	34 Bromochloromethane	50.00	48.66	97.32	77-122
	37 Tetrahydrofuran	50.00	47.03	94.06	42-134
	39 1,1,1-Trichloroeth	50.00	46.70	93.41	68-133
	41 1,1-Dichloropropen	50.00	48.21	96.42	77-126
	42 Carbon Tetrachlori	50.00	47.23	94.47	65-136
	47 Benzene	50.00	48.06	96.11	77-115
	46 1,2-Dichloroethane	50.00	46.37	92.74	66-132
	49 Trichloroethene	50.00	47.36	94.72	74-120
	51 1,2-Dichloropropan	50.00	48.32	96.64	75-122
	52 Methyl methacrylat	50.00	49.52	99.05	68-136
	53 Bromodichlorometha	50.00	48.07	96.14	72-124
	54 Dibromomethane	50.00	48.55	97.11	50-150
	56 2-Nitropropane	25.00	13.77	55.07	30-143
	58 4-Methyl-2-pentano	50.00	35.37	70.75	30-144
	59 cis-1,3-Dichloropr	50.00	50.70	101.41	77-125
	62 Toluene	50.00	42.43	84.85	73-122
	63 trans-1,3-Dichloro	50.00	45.92	91.85	81-137
	64 Ethyl methacrylate	50.00	40.38	80.76	70-123

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GLCS5460.D
Report Date: 02-May-2005 16:48

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
65 1,1,2-Trichloroeth	50.00	43.22	86.45	75-117
66 2-Hexanone	50.00	43.99	87.99	54-143
67 1,3-Dichloropropan	50.00	44.85	89.71	74-122
68 Tetrachloroethene	50.00	43.44	86.89	48-125
69 Chlorodibromometha	50.00	47.53	95.05	73-125
70 1,2-Dibromoethane	50.00	50.32	100.65	80-133
72 Chlorobenzene	50.00	49.92	99.84	81-116
73 1,1,1,2-Tetrachlor	50.00	51.28	102.56	80-119
74 Ethylbenzene	50.00	49.21	98.43	81-116
75 m,p-Xylenes	100.0	102.1	102.08	82-117
76 o-Xylene	50.00	50.82	101.63	79-123
77 Styrene	50.00	52.19	104.38	76-125
79 Bromoform	50.00	54.73	109.46	69-133
80 Isopropylbenzene	50.00	54.70	109.40	80-143
81 Cyclohexanone	500.0	229.8	45.95	30-150
82 1,1,2,2-Tetrachlor	50.00	51.81	103.62	64-134
85 Bromobenzene	50.00	49.78	99.55	75-125
86 n-Propylbenzene	50.00	48.60	97.19	69-129
88 trans-1,4-dichloro	50.00	46.92	93.84	43-133
87 2-Chlorotoluene	50.00	45.67	91.34	65-127
89 1,3,5-Trimethylben	50.00	48.29	96.57	70-126
90 4-Chlorotoluene	50.00	46.54	93.08	67-130
91 t-Butylbenzene	50.00	40.26	80.53	53-123
94 sec-Butylbenzene	50.00	47.60	95.19	76-115
95 4-Isopropyltoluene	50.00	53.68	107.36	80-127
96 1,3-Dichlorobenzen	50.00	47.90	95.81	82-115
98 1,4-Dichlorobenzen	50.00	47.72	95.44	79-109
99 n-Butylbenzene	50.00	51.91	103.83	77-128
100 1,2-Dichlorobenzen	50.00	51.53	103.06	82-115
103 1,2,4-Trichloroben	50.00	51.58	103.16	70-127
101 1,2-Dibromo-3-chlo	50.00	60.26	120.53	72-133
104 Hexachlorobutadien	50.00	46.73	93.46	56-140
105 Naphthalene	50.00	55.33	110.67	61-131
106 1,2,3-Trichloroben	50.00	50.98	101.97	65-126

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 36 Dibromofluorometha	50.00	46.27	92.55	74-128
$ 43 1,2-Dichloroethane	50.00	43.93	87.87	69-134
$ 61 Toluene-d8	50.00	39.40	78.80	72-131
$ 83 4-Bromofluorobenze	50.00	49.32	98.65	70-131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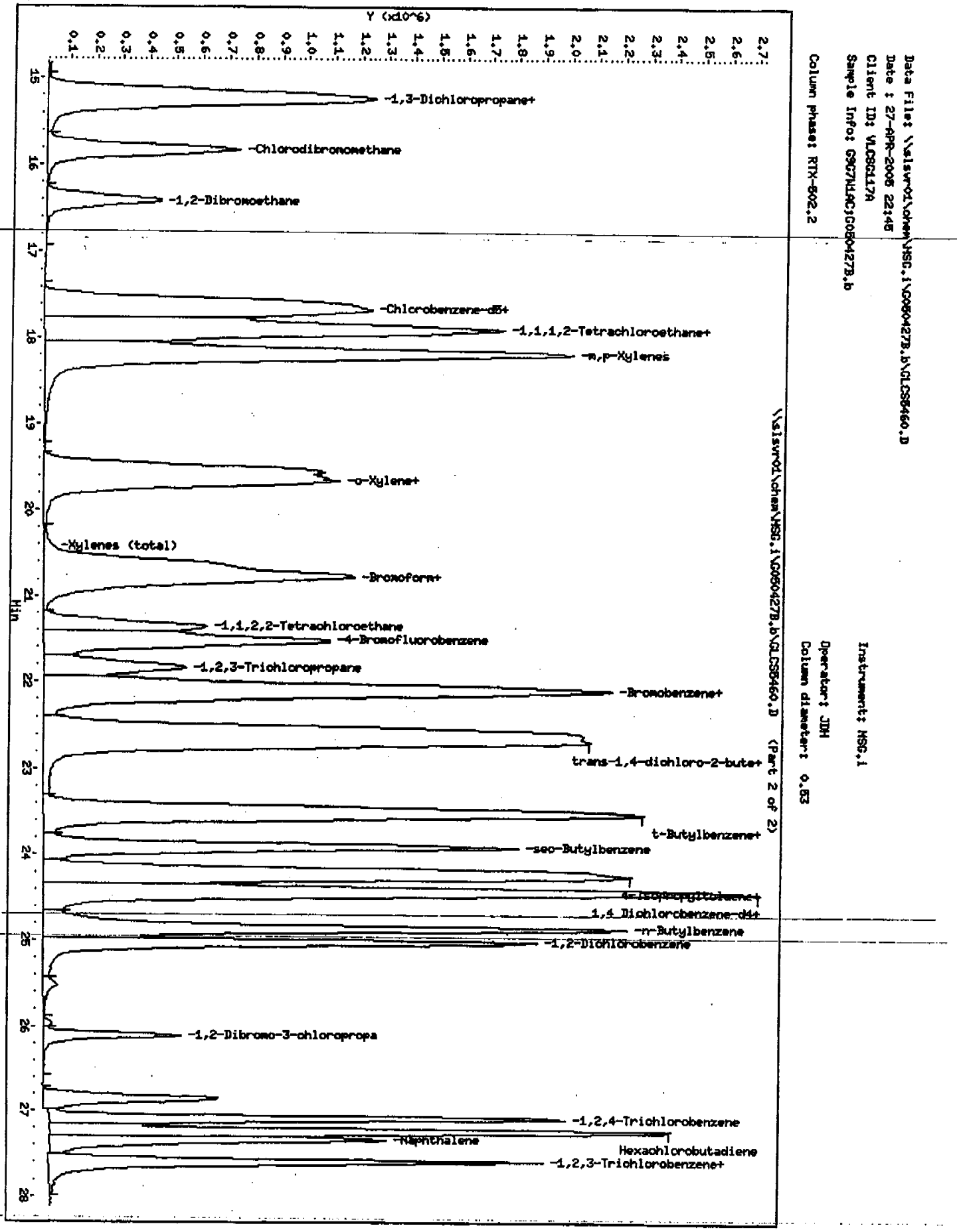
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-Diethyl ether
-1,1,2-Trichlorofluoroetha+
-1,1-Dichloroethene
-Allyl chloride
-Carbon Disulfide+
-MTBE
-trans-1,2-Dichloroethene+
-1,1-Dichloroethane
-2-Butanone+
-Chloroform
-Isobutanol
1,2-Dichloroethene (total
-1,1,1-Trichloroethane
-1,1-Dichloropropene
-Carbon Tetrachloride+
-Benzene+
-Fluorobenzene
-Trichloroethene
-1,2-Dichloropropane
-Methyl methacrylate
-Bromodichloromethane+
-4-Methyl-2-pentanone
-cis-1,3-Dichloropropene
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane+
Min
3 4 5 6 7 8 9 10 11 12 13 14 15
\\slsvr01\chem\HSG.i\G0804278.b\GLCS8460.D (Part 1 of 2)
Data File: \\slsvr01\chem\HSG.i\G0804278.b\GLCS8460.D
Date : 27-APR-2005 22:45
Client ID: VLCS8417A
Sample Info: G967HLAC;G0804278.b
Column phase: RTX-502.2
Instrument: HSG.i
Operator: JDH
Column diameter: 0.53


Y (x10^6)
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15 16 17 18 19 20 21 22 23 24 25 26 27 28
Min
Data File: \\slsvr01\chem\MSG.i\G0504278.b\GLCS8460.D
Date : 27-APR-2005 22:45
Client ID: VLCSG117A
Sample Info: G5G7N14C;G0504278.b
Column phase: RTX-502.2
Instrument: MSG.i
Operator: JDH
Column diameter: 0.53
\\slsvr01\chem\MSG.i\G0504278.b\GLCS8460.D (Part 2 of 2)
-1,3-Dichloropropane+
-Chlorodibromomethane
-1,2-Dibromoethane
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
-o-Xylene+
-Xylenes (total)
-Bromoform+
-1,1,2,2-Tetrachloroethane
-4-Bromofluorobenzene
-1,2,3-Trichloropropane
-Bromobenzene+
trans-1,4-dichloro-2-bute+
t-Butylbenzene+
-sec-Butylbenzene
4-Isopropyltoluene+
1,4-Dichlorobenzene-d4+
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Naphthalene
Hexachlorobutadiene
-1,2,3-Trichlorobenzene+

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GSMP5464.D
Report Date: 02-May-2005 16:48

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSG.i\G050427B.b\GSMP5464.D
Lab Smp Id: G81F81AD Client Smp ID: RE73-05-58878
Inj Date : 28-APR-2005 01:45
Operator : JDH Inst ID: MSG.i
Smp Info : G81F81AD;G050427B.b
Misc Info : VBLKG117B.B; F5D220273-001S;5.01G;5118107
Comment : NONE
Method : \\slsvr01\chem\MSG.i\G050427B.b\8260B-URS.m
Meth Date : 27-Apr-2005 22:14 hannj Quant Type: ISTD
Cal Date : 18-APR-2005 02:51 Cal File: GCAL5166.D
Als bottle: 6 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOIL.sub
Target Version: 4.10
Processing Host: SLVOA04

Concentration Formula: Amt * DF * Wsd/Ws* * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Wsd	5.000	DefSampleWeight
Ws	5.010	SampleWeight
Va	100.000	AliquotVolume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
1 Dichlorodifluoromethane	85	2.218	2.199	(0.236)	1505899	57.8039	57.69
3 Chloromethane	50	2.497	2.478	(0.265)	873488	48.3807	48.28
4 Vinyl Chloride	62	2.601	2.565	(0.277)	760034	58.7156	58.60
5 Bromomethane	94	3.106	3.052	(0.330)	770319	41.6844	41.60
6 Chloroethane	64	3.193	3.139	(0.339)	545327	60.8815	60.76
7 Trichlorofluoromethane	101	3.472	3.435	(0.369)	2144955	43.2383	43.15
8 Diethyl ether	59	3.837	3.800	(0.408)	714214	62.3389	62.21
9 1,1,2-Trichlorofluoroethane	101	4.011	3.975	(0.426)	1909061	44.9402	44.85
11 Acetone	43	4.098	4.062	(0.436)	337371	70.7648	70.62
12 1,1-Dichloroethene	96	4.238	4.201	(0.450)	868972	55.7279	55.62
16 Allyl chloride	39	4.725	4.688	(0.502)	1032732	47.2344	47.14
17 Methylene Chloride	84	4.899	4.845	(0.521)	1347999	65.5742	65.44
18 Carbon Disulfide	76	4.916	4.862	(0.523)	2670820	52.7872	52.68
20 MTBE	73	5.143	5.089	(0.547)	2374535	47.9042	47.81
21 trans-1,2-Dichloroethene	96	5.334	5.280	(0.567)	1136345	54.1592	54.05
22 n-Hexane	57	5.421	5.367	(0.576)	1178154	38.5496	38.47
23 1,1-Dichloroethane	63	5.996	5.941	(0.637)	2439664	52.3428	52.24
27 2-Butanone	43	6.744	6.707	(0.717)	384595	66.7417	66.61(M)
29 2,2-Dichloropropane	77	6.953	6.899	(0.739)	2031531	45.6235	45.53
30 cis-1,2-Dichloroethene	96	7.040	6.968	(0.748)	1283106	54.4602	54.35
33 Chloroform	83	7.318	7.264	(0.778)	2616264	46.3195	46.23

MW 5/10/05

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GSMP5464.D
Report Date: 02-May-2005 16:48

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	34 Bromochloromethane	128	7.632	7.560	(0.811)	753642	56.3454	56.23
	37 Tetrahydrofuran	71	7.736	7.700	(0.822)	82313	56.2448	56.13
$	36 Dibromofluoromethane	113	7.719	7.665	(0.821)	1908121	50.1556	50.06
	35 Isobutanol	42	7.736	7.665	(0.822)	238516	215.972	215.5
M	38 1,2-Dichloroethene (total)	96				2419451	108.619	108.4
	39 1,1,1-Trichloroethane	97	8.067	8.013	(0.858)	2193901	44.8055	44.72
	41 1,1-Dichloropropene	75	8.398	8.326	(0.893)	1953410	50.6400	50.54
	42 Carbon Tetrachloride	117	8.572	8.518	(0.911)	1933221	43.9819	43.89
$	43 1,2-Dichloroethane-d4	67	8.711	8.657	(0.926)	655349	47.8077	47.71
	46 1,2-Dichloroethane	62	8.902	8.848	(0.946)	1587146	45.1591	45.07
	47 Benzene	78	8.937	8.866	(0.950)	3366594	55.8129	55.70
*	48 Fluorobenzene	96	9.407	9.336	(1.000)	3345096	50.0000	
	49 Trichloroethene	130	10.278	10.223	(1.093)	1772429	63.3434	63.22
	51 1,2-Dichloropropane	63	10.695	10.606	(1.137)	1532444	56.9270	56.81
	52 Methyl methacrylate	69	10.939	10.867	(1.163)	694683	52.7720	52.67
	53 Bromodichloromethane	83	11.252	11.181	(1.196)	2677043	48.5697	48.47
	54 Dibromomethane	93	11.374	11.285	(1.209)	1308825	53.2222	53.12
	56 2-Nitropropane	43	11.479	11.407	(1.220)	235488	11.9933	11.97
	58 4-Methyl-2-pentanone	43	12.210	12.103	(1.298)	1052817	38.5049	38.43
	59 cis-1,3-Dichloropropene	75	12.662	12.591	(1.346)	2118050	54.6393	54.53
$	61 Toluene-d8	98	13.271	13.183	(0.755)	3310327	47.1609	47.07
	62 Toluene	91	13.480	13.409	(0.766)	3955699	50.0626	49.96
	63 trans-1,3-Dichloropropene	75	14.055	13.966	(0.799)	1778633	47.3034	47.21
	64 Ethyl methacrylate	69	14.124	14.053	(0.803)	1533847	44.0712	43.98
	65 1,1,2-Trichloroethane	97	14.455	14.366	(0.822)	1189921	48.7384	48.64
	66 2-Hexanone	43	14.594	14.505	(0.830)	703086	47.5562	47.46
	67 1,3-Dichloropropane	76	15.169	15.097	(0.862)	1977349	49.4385	49.34
	68 Tetrachloroethene	164	15.273	15.184	(0.868)	1340442	45.8029	45.71
	69 Chlorodibromomethane	129	15.848	15.759	(0.901)	1891593	49.7683	49.67
	70 1,2-Dibromoethane	107	16.422	16.333	(0.934)	1658940	54.4376	54.33
*	71 Chlorobenzene-d5	117	17.588	17.499	(1.000)	2504665	50.0000	
	72 Chlorobenzene	112	17.710	17.621	(1.007)	3011646	56.5476	56.43
	73 1,1,1,2-Tetrachloroethane	131	17.884	17.795	(1.017)	1579477	55.2042	55.09
	74 Ethylbenzene	106	17.954	17.865	(1.021)	1348508	58.0903	57.97
	75 m,p-Xylenes	106	18.197	18.109	(1.035)	3415112	115.574	115.3
	76 o-Xylene	106	19.555	19.449	(1.112)	1650988	58.0561	57.94
	77 Styrene	104	19.694	19.588	(1.120)	2714869	58.4298	58.31
M	78 Xylenes (total)	106				5066100	173.630	173.3
	79 Bromoform	173	20.617	20.528	(1.172)	1400927	56.5430	56.43
	80 Isopropylbenzene	105	20.756	20.667	(1.180)	4997058	60.6092	60.49
	81 Cyclohexanone	55	20.895	20.826	(1.188)	365894	241.968	241.5
	82 1,1,2,2-Tetrachloroethane	83	21.348	21.259	(1.214)	1529745	44.9243	44.83
$	83 4-Bromofluorobenzene	95	21.522	21.433	(0.882)	2731978	54.9432	54.83
	84 1,2,3-Trichloropropane	110	21.835	21.746	(0.894)	496421	56.5520	56.44
	85 Bromobenzene	156	22.079	21.990	(0.904)	1549106	59.5247	59.40
	86 n-Propylbenzene	91	22.114	22.025	(0.906)	6058194	55.9475	55.84
	87 2-Chlorotoluene	91	22.549	22.460	(0.924)	4137220	52.5783	52.47
	88 trans-1,4-dichloro-2-butene	53	22.601	22.547	(0.926)	165000	52.4703	52.36
	89 1,3,5-Trimethylbenzene	105	22.619	22.530	(0.927)	4010468	54.8819	54.77
	90 4-Chlorotoluene	91	22.688	22.634	(0.929)	4482156	51.0354	50.93
	91 t-Butylbenzene	119	23.472	23.400	(0.961)	3862310	45.3361	45.24
	93 1,2,4-Trimethylbenzene	105	23.541	23.487	(0.964)	3943357	54.5755	54.47
	94 sec-Butylbenzene	105	23.907	23.853	(0.979)	5167824	52.2896	52.18
	95 4-Isopropyltoluene	119	24.185	24.131	(0.991)	4180249	57.4776	57.36

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GSMP5464.D
Report Date: 02-May-2005 16:48

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	96 1,3-Dichlorobenzene	146	24.255	24.201	(0.994)	2462043	53.9141	53.81
*	97 1,4 Dichlorobenzene-d4	152	24.412	24.357	(1.000)	1448847	50.0000	
	98 1,4-Dichlorobenzene	146	24.446	24.410	(1.001)	2614112	53.5794	53.47
	99 n-Butylbenzene	91	24.864	24.810	(1.019)	4108103	53.5196	53.41
	100 1,2-Dichlorobenzene	146	25.021	24.967	(1.025)	2344275	57.3823	57.27
	101 1,2-Dibromo-3-chloropropane	157	26.100	26.063	(1.069)	402444	66.2181	66.08
	103 1,2,4-Trichlorobenzene	180	27.075	27.038	(1.109)	1625579	51.2123	51.11
	104 Hexachlorobutadiene	225	27.231	27.195	(1.116)	1047629	40.4131	40.33
	105 Naphthalene	128	27.336	27.299	(1.120)	2764710	63.3995	63.27
	106 1,2,3-Trichlorobenzene	180	27.580	27.543	(1.130)	1502239	52.2224	52.12

QC Flag Legend

M - Compound response manually integrated.

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GSMP5464.D
Report Date: 02-May-2005 16:48

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSG.i
Lab File ID: GSMP5464.D
Lab Smp Id: G81F81AD
Analysis Type: VOA
Quant Type: ISTD
Operator: JDH
Method File: \\slsvr01\chem\MSG.i\G050427B.b\8260B-URS.m
Misc Info: VBLKG117B.B; F5D220273-001S;5.01G;5118107

Calibration Date: 27-APR-2005
Calibration Time: 21:42
Client Smp ID: RE73-05-58878
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	3117196	1558598	6234392	3345096	7.31
71 Chlorobenzene-d5	2287097	1143549	4574194	2504665	9.51
97 1,4 Dichlorobenze	1536763	768382	3073526	1448847	-5.72

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	9.34	8.84	9.84	9.41	0.77
71 Chlorobenzene-d5	17.50	17.00	18.00	17.59	0.51
97 1,4 Dichlorobenze	24.36	23.86	24.86	24.41	0.22

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GSMP5464.D
Report Date: 02-May-2005 16:48

STL St. Louis

RECOVERY REPORT

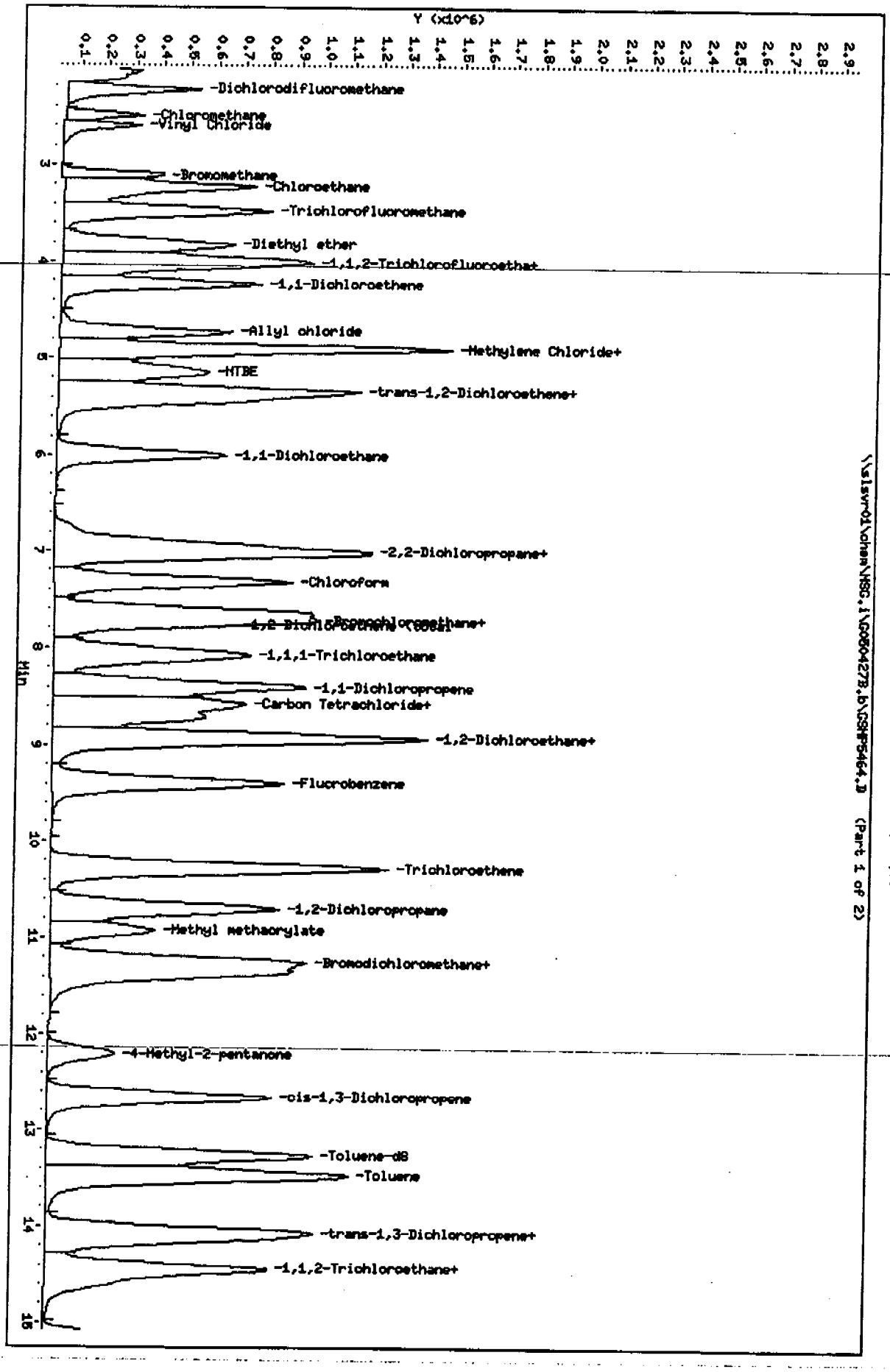
Client Name: LOS ALAMOS NATIONAL 22-APR-2005 00:00 Client SDG: F5D2202
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: G81F81AD Client Smp ID: RE73-05-58878
Level: LOW Operator: JDH
Data Type: MS DATA SampleType: MS
SpikeList File: SOILMS-MSD.spk Quant Type: ISTD
Sublist File: SOIL.sub
Method File: \\slsvr01\chem\MSG.i\G050427B.b\8260B-URS.m
Misc Info: VBLKG117B.B; F5D220273-001S;5.01G;5118107

	SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
	1 Dichlorodifluorome	49.90	57.69	115.61	30-150
	3 Chloromethane	49.90	48.28	96.76	10-150
	4 Vinyl Chloride	49.90	58.60	117.43	37-150
	5 Bromomethane	49.90	41.60	83.37	30-150
	6 Chloroethane	49.90	60.76	121.76	42-150
	7 Trichlorofluoromet	49.90	43.15	86.48	48-145
	8 Diethyl ether	49.90	62.21	124.68	51-150
	9 1,1,2-Trichloroflu	49.90	44.85	89.88	54-136
	11 Acetone	49.90	70.62	141.53	30-150
	12 1,1-Dichloroethene	49.90	55.62	111.46	39-144
	16 Allyl chloride	49.90	47.14	94.47	40-150
	18 Carbon Disulfide	49.90	52.68	105.57	30-150
	17 Methylene Chloride	49.90	65.44	131.15	30-143
M	38 1,2-Dichloroethene	99.80	108.4	108.62	41-150
	20 MTBE	49.90	47.81	95.81	52-143
	21 trans-1,2-Dichloro	49.90	54.05	108.32	48-142
	22 n-Hexane	49.90	38.47	77.10	30-130
	23 1,1-Dichloroethane	49.90	52.24	104.69	52-141
	27 2-Butanone	49.90	66.61	133.48	30-150
	29 2,2-Dichloropropan	49.90	45.53	91.25	51-148
	30 cis-1,2-Dichloroet	49.90	54.35	108.92	45-150
	33 Chloroform	49.90	46.23	92.64	57-140
	34 Bromochloromethane	49.90	56.23	112.69	57-147
	37 Tetrahydrofuran	49.90	56.13	112.49	34-150
	39 1,1,1-Trichloroeth	49.90	44.72	89.61	55-145
	41 1,1-Dichloropropen	49.90	50.54	101.28	61-139
	42 Carbon Tetrachlori	49.90	43.89	87.96	52-147
	47 Benzene	49.90	55.70	111.63	59-135
	46 1,2-Dichloroethane	49.90	45.07	90.32	55-150
	49 Trichloroethene	49.90	63.22	126.69	30-150
	51 1,2-Dichloropropan	49.90	56.81	113.85	55-143
	52 Methyl methacrylat	49.90	52.67	105.54	47-150
	53 Bromodichlorometha	49.90	48.47	97.14	51-145
	54 Dibromomethane	49.90	53.12	106.44	50-150
	56 2-Nitropropane	24.95	11.97	47.97	30-150
	58 4-Methyl-2-pentano	49.90	38.43	77.01	30-150
	59 cis-1,3-Dichloropr	49.90	54.53	109.28	56-141
	62 Toluene	49.90	49.96	100.13	53-146
	63 trans-1,3-Dichloro	49.90	47.21	94.61	51-150
	64 Ethyl methacrylate	49.90	43.98	88.14	30-150

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GSMP5464.D
Report Date: 02-May-2005 16:48

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
65 1,1,2-Trichloroeth	49.90	48.64	97.48	41-150
66 2-Hexanone	49.90	47.46	95.11	30-150
67 1,3-Dichloropropan	49.90	49.34	98.88	41-150
68 Tetrachloroethene	49.90	45.71	91.61	30-136
69 Chlorodibromometha	49.90	49.67	99.54	51-150
70 1,2-Dibromoethane	49.90	54.33	108.88	50-150
72 Chlorobenzene	49.90	56.43	113.10	60-136
73 1,1,1,2-Tetrachlor	49.90	55.09	110.41	55-148
74 Ethylbenzene	49.90	57.97	116.18	61-134
75 m,p-Xylenes	99.80	115.3	115.57	65-131
76 o-Xylene	49.90	57.94	116.11	44-150
77 Styrene	49.90	58.31	116.86	58-138
79 Bromoform	49.90	56.43	113.09	51-150
80 Isopropylbenzene	49.90	60.49	121.22	61-150
81 Cyclohexanone	499.0	241.5	48.39	30-150
82 1,1,2,2-Tetrachlor	49.90	44.83	89.85	40-163
85 Bromobenzene	49.90	59.40	119.05	30-150
86 n-Propylbenzene	49.90	55.84	111.89	35-150
88 trans-1,4-dichloro	49.90	52.36	104.94	30-150
87 2-Chlorotoluene	49.90	52.47	105.16	30-150
89 1,3,5-Trimethylben	49.90	54.77	109.76	30-150
90 4-Chlorotoluene	49.90	50.93	102.07	45-150
91 t-Butylbenzene	49.90	45.24	90.67	32-148
94 sec-Butylbenzene	49.90	52.18	104.58	42-150
95 4-Isopropyltoluene	49.90	57.36	114.96	49-150
96 1,3-Dichlorobenzen	49.90	53.81	107.83	57-136
98 1,4-Dichlorobenzen	49.90	53.47	107.16	51-133
99 n-Butylbenzene	49.90	53.41	107.04	34-150
100 1,2-Dichlorobenzen	49.90	57.27	114.76	53-141
103 1,2,4-Trichloroben	49.90	51.11	102.42	30-150
101 1,2-Dibromo-3-chlo	49.90	66.08	132.44	30-150
104 Hexachlorobutadien	49.90	40.33	80.83	30-150
105 Naphthalene	49.90	63.27	126.80	30-150
106 1,2,3-Trichloroben	49.90	52.12	104.44	30-150

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 36 Dibromofluorometha	49.90	50.06	100.31	61-140
$ 43 1,2-Dichloroethane	49.90	47.71	95.62	56-149
$ 61 Toluene-d8	49.90	47.07	94.32	60-148
$ 83 4-Bromofluorobenze	49.90	54.83	109.89	56-150


Y (x10^6)
Min
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-Diethyl ether
-1,1,2-Trichlorofluoroethat
-1,1-Dichloroethene
-Allyl chloride
-Methylene Chloride+
-MTBE
-trans-1,2-Dichloroethene+
-1,1-Dichloroethane
-2,2-Dichloropropane+
-Chloroform
-Bromochloromethane+
-1,1,1-Trichloroethane
-1,1-Dichloropropene
-Carbon Tetrachloride+
-1,2-Dichloroethane+
-Flucrobenzene
-Trichloroethene
-1,2-Dichloropropane
-Methyl methacrylate
-Bromodichloromethane+
-4-Methyl-2-pentanone
-cis-1,3-Dichloropropene
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane+
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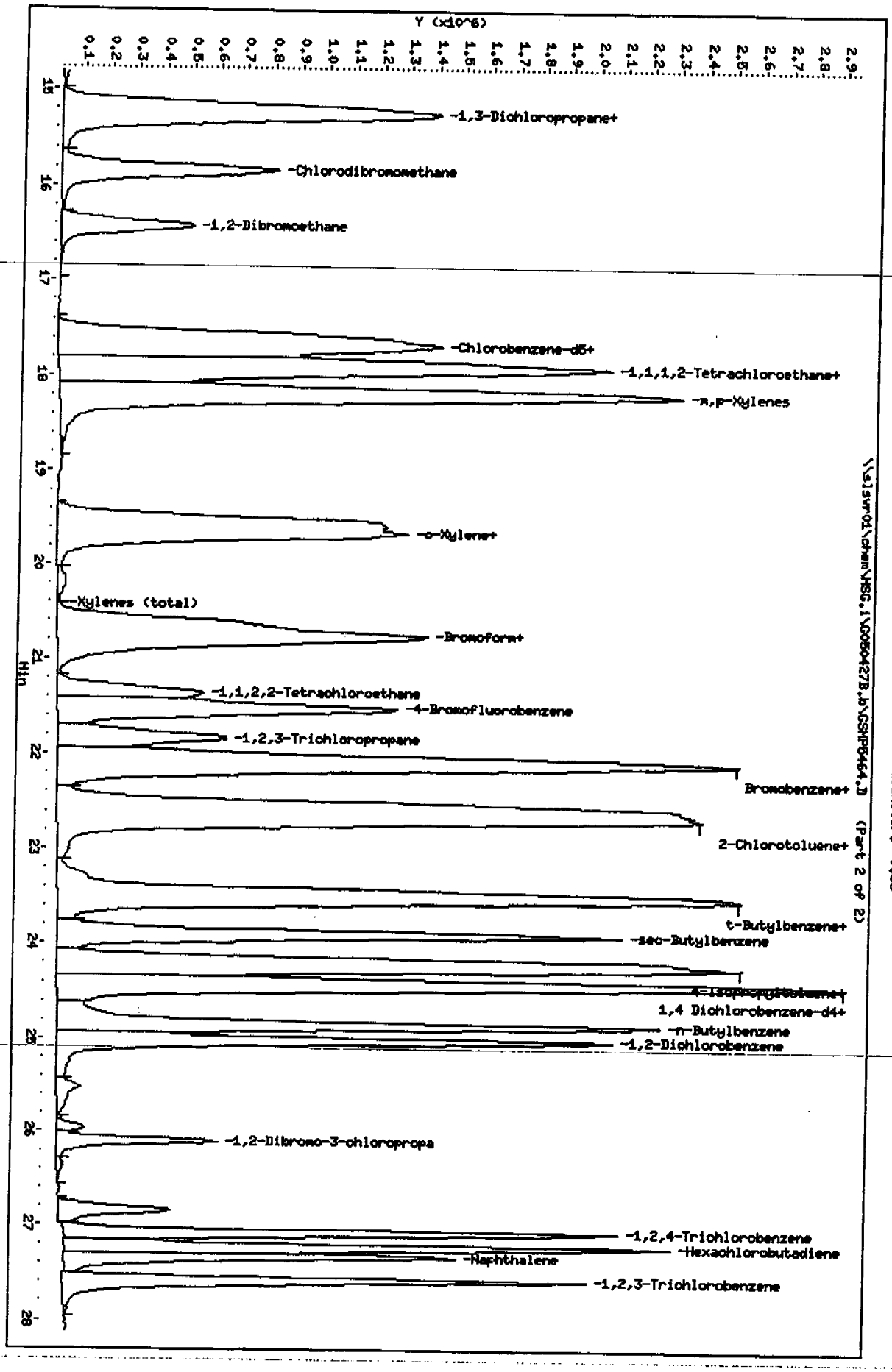
Data File: \\slsvr01\chen\HSC.i\G0804278.b\GSHF5464.D
Date : 28-APR-2008 01:45
Client ID: RE73-05-88878
Sample Info: G8LF81AD;G0804278.b
Column phase: RTX-502.2
Instrument: HSC.i
Operator: JBH
Column diameter: 0.53


Y (x10^6)
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15
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25
26
27
28
Min
1,3-Dichloropropane+
Chlorodibromomethane
1,2-Dibromoethane
Chlorobenzene-d5+
1,1,1,2-Tetrachloroethane+
m,p-Xylenes
o-Xylene+
Xylenes (total)
Bromoform+
1,1,2,2-Tetrachloroethane
4-Bromofluorobenzene
1,2,3-Trichloropropane
Bromobenzene+
2-Chlorotoluene+
t-Butylbenzene+
sec-Butylbenzene
4-Isopropyltoluene+
1,4 Dichlorobenzene-d4+
n-Butylbenzene
1,2-Dichlorobenzene
1,2-Dibromo-3-chloropropa
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene
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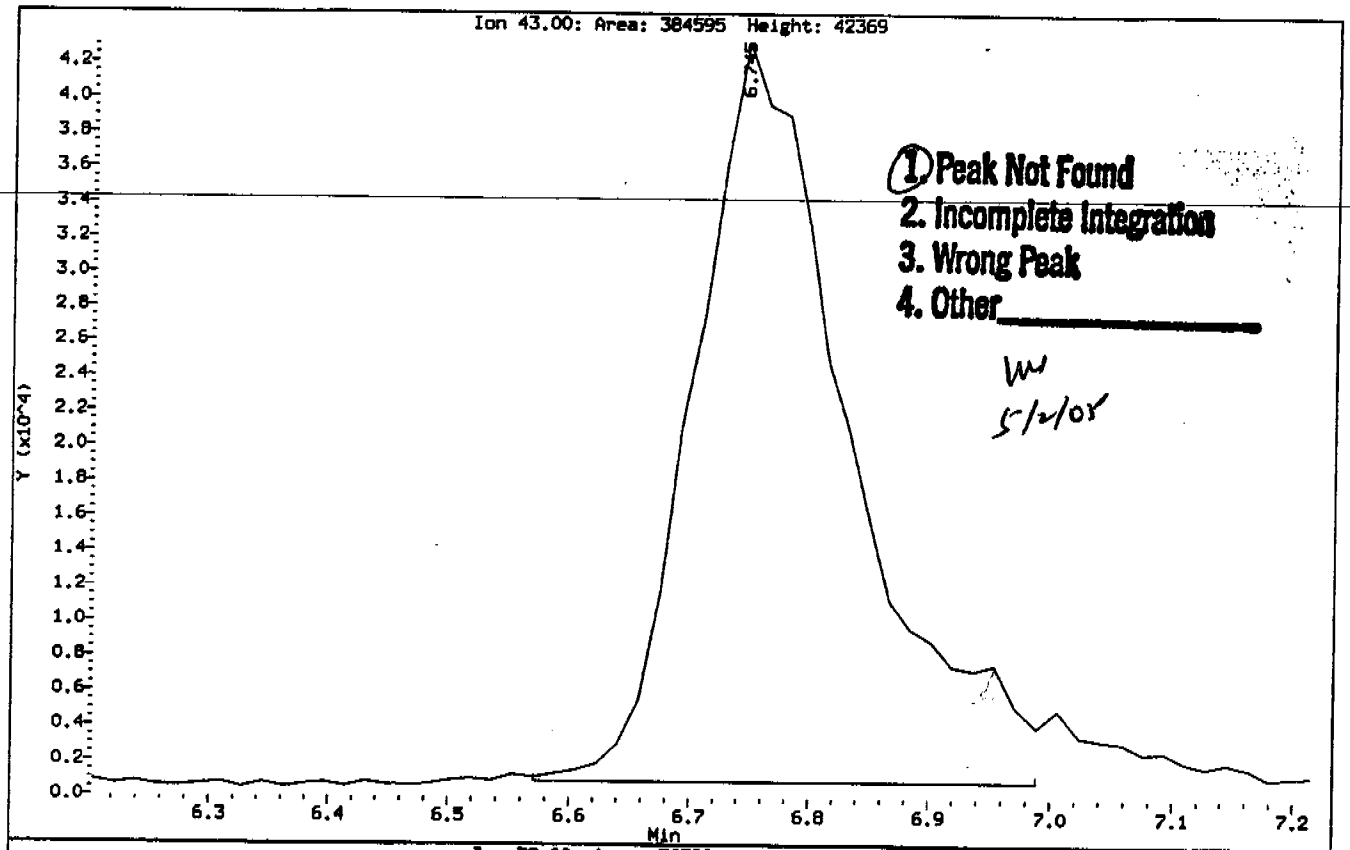
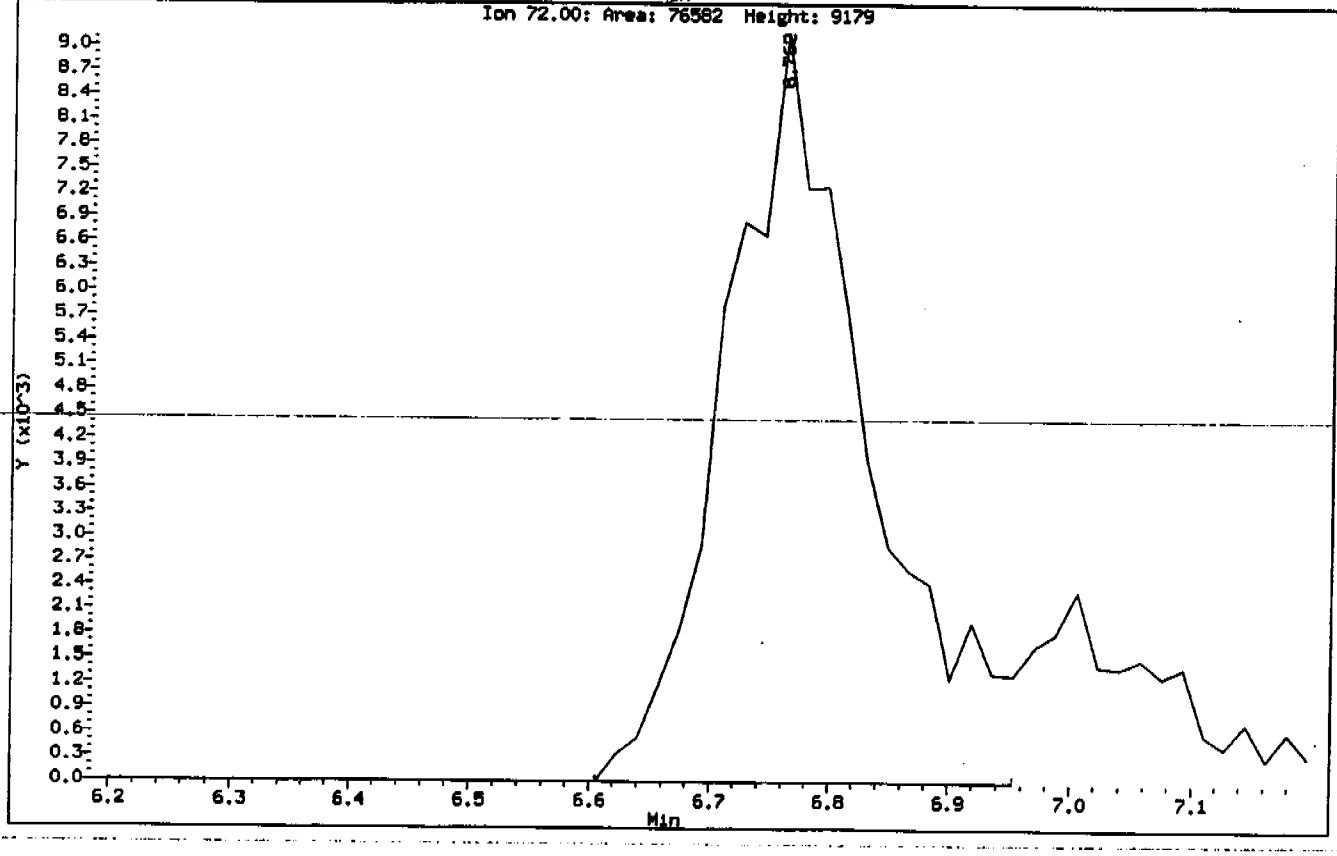
Data File: \\slsvr01\chem\MSG.i\G0504278.b\GSHF8464.D
Date : 28-APR-2005 01:45
Client ID: RE73-08-88878
Sample Info: GSLF81AD;G0504278.b
Column phase: RTX-502.2
Instrument: MSG.i
Operator: JDH
Column diameter: 0.53

Data File: \\stlsvr01\chem\MSG.i\G050427B.b\GSMP5464.D
Injection Date: 28-APR-2005 01:45
Instrument: MSG.i
Client Sample ID: RE73-05-58878

Compound: 2-Butanone
CAS Number: 78-93-3





Data File: \\slsvr01\chem\MSG.i\G050427B.b\GSMP5465.D
Report Date: 02-May-2005 16:48

STL St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSG.i\G050427B.b\GSMP5465.D
Lab Smp Id: G81F81AE Client Smp ID: RE73-05-58878
Inj Date : 28-APR-2005 02:19
Operator : JDH Inst ID: MSG.i
Smp Info : G81F81AE;G050427B.b
Misc Info : VBLKG117B.B; F5D220273-001D;5.04G;5118107
Comment : NONE
Method : \\slsvr01\chem\MSG.i\G050427B.b\8260B-URS.m
Meth Date : 27-Apr-2005 22:14 hannj Quant Type: ISTD
Cal Date : 18-APR-2005 02:51 Cal File: GCAL5166.D
Als bottle: 7 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOIL.sub
Target Version: 4.10
Processing Host: SLVOA04

Concentration Formula: Amt * DF * Wsd/Ws* * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Wsd	5.000	DefSampleWeight
Ws	5.040	SampleWeight
Va	100.000	AliquotVolume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
1 Dichlorodifluoromethane	85	2.217	2.199	(0.236)	1590472	53.8157	53.39
3 Chloromethane	50	2.495	2.478	(0.266)	889537	43.4311	43.09
4 Vinyl Chloride	62	2.583	2.565	(0.275)	729417	49.6727	49.28
5 Bromomethane	94	3.087	3.052	(0.329)	747781	35.6697	35.39
6 Chloroethane	64	3.174	3.139	(0.338)	529616	52.1208	51.71
7 Trichlorofluoromethane	101	3.470	3.435	(0.370)	2353165	41.8142	41.48
8 Diethyl ether	59	3.836	3.800	(0.409)	746206	57.4131	56.96
9 1,1,2-Trichlorofluoroethane	101	3.992	3.975	(0.425)	1989368	41.2811	40.95
11 Acetone	43	4.097	4.062	(0.436)	397597	73.5147	72.93
12 1,1-Dichloroethene	96	4.236	4.201	(0.451)	876265	49.5364	49.14
16 Allyl chloride	39	4.723	4.688	(0.503)	1068403	43.0752	42.73
17 Methylene Chloride	84	4.880	4.845	(0.520)	1278525	54.8245	54.39
18 Carbon Disulfide	76	4.915	4.862	(0.524)	2734484	47.6410	47.26
20 MTBE	73	5.141	5.089	(0.548)	2661083	47.3232	46.95
21 trans-1,2-Dichloroethene	96	5.315	5.280	(0.566)	1112017	46.7191	46.35
22 n-Hexane	57	5.420	5.367	(0.577)	1004407	28.9701	28.74
23 1,1-Dichloroethane	63	5.977	5.941	(0.637)	2585126	48.8911	48.50
27 2-Butanone	43	6.760	6.707	(0.720)	475662	72.7635	72.19(M)/
29 2,2-Dichloropropane	77	6.934	6.899	(0.739)	2203567	43.6227	43.28
30 cis-1,2-Dichloroethene	96	7.021	6.968	(0.748)	1323319	49.5112	49.12
33 Chloroform	83	7.317	7.264	(0.779)	2788820	43.5235	43.18

WY 5/10/05

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GSMP5465.D
Report Date: 02-May-2005 16:48

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	34 Bromochloromethane	128	7.630	7.560	(0.813)	799485	52.6896	52.27
	37 Tetrahydrofuran	71	7.752	7.700	(0.826)	101970	61.4197	60.93
$	36 Dibromofluoromethane	113	7.717	7.665	(0.822)	1886838	43.7190	43.37
	35 Isobutanol	42	7.735	7.665	(0.824)	299379	238.959	237.1
M	38 1,2-Dichloroethene (total)	96				2435336	96.2303	95.47
	39 1,1,1-Trichloroethane	97	8.066	8.013	(0.859)	2338696	42.1026	41.77
	41 1,1-Dichloropropene	75	8.379	8.326	(0.892)	2117546	48.3899	48.00
	42 Carbon Tetrachloride	117	8.570	8.518	(0.913)	1988167	39.8719	39.56
$	43 1,2-Dichloroethane-d4	67	8.710	8.657	(0.928)	709912	45.6511	45.29
	46 1,2-Dichloroethane	62	8.901	8.848	(0.948)	1764657	44.2599	43.91
	47 Benzene	78	8.918	8.866	(0.950)	3403925	49.7445	49.35
*	48 Fluorobenzene	96	9.388	9.336	(1.000)	3794784	50.0000	
	49 Trichloroethene	130	10.276	10.223	(1.095)	1832674	57.7350	57.28
	51 1,2-Dichloropropane	63	10.711	10.606	(1.141)	1615051	52.8861	52.47
	52 Methyl methacrylate	69	10.903	10.867	(1.161)	837055	56.0522	55.61
	53 Bromodichloromethane	83	11.233	11.181	(1.197)	2869651	45.8945	45.53
	54 Dibromomethane	93	11.355	11.285	(1.209)	1414859	50.7161	50.31
	56 2-Nitropropane	43	11.477	11.407	(1.222)	281710	12.6472	12.55
	57 2-chloroethyl vinyl ether	63	12.156	12.070	(1.295)	2438	4.31091	4.277(a)
	58 4-Methyl-2-pentanone	43	12.191	12.103	(1.298)	1342953	43.2958	42.95
	59 cis-1,3-Dichloropropene	75	12.643	12.591	(1.347)	2267092	51.5537	51.14
$	61 Toluene-d8	98	13.253	13.183	(0.754)	3383583	42.8194	42.48
	62 Toluene	91	13.462	13.409	(0.766)	3862526	43.2247	42.88
	63 trans-1,3-Dichloropropene	75	14.036	13.966	(0.799)	1980596	46.7902	46.42
	64 Ethyl methacrylate	69	14.123	14.053	(0.804)	1764183	45.0266	44.67
	65 1,1,2-Trichloroethane	97	14.436	14.366	(0.822)	1319865	48.0215	47.64
	66 2-Hexanone	43	14.593	14.505	(0.831)	924374	55.5392	55.10
	67 1,3-Dichloropropane	76	15.167	15.097	(0.863)	2200706	48.8761	48.49
	68 Tetrachloroethene	164	15.272	15.184	(0.869)	1423258	43.1997	42.86
	69 Chlorodibromomethane	129	15.846	15.759	(0.902)	1885535	44.0669	43.72
	70 1,2-Dibromoethane	107	16.421	16.333	(0.935)	1801746	52.5188	52.10
*	71 Chlorobenzene-d5	117	17.569	17.499	(1.000)	2819661	50.0000	
	72 Chlorobenzene	112	17.691	17.621	(1.007)	3110304	51.8759	51.46
	73 1,1,1,2-Tetrachloroethane	131	17.865	17.795	(1.017)	1615210	50.1465	49.75
	74 Ethylbenzene	106	17.935	17.865	(1.021)	1346583	51.5271	51.12
	75 m,p-Xylenes	106	18.179	18.109	(1.035)	3497896	105.152	104.3
	76 o-Xylene	106	19.519	19.449	(1.111)	1678116	52.4178	52.00
	77 Styrene	104	19.658	19.588	(1.119)	2732946	52.2479	51.83
M	78 Xylenes (total)	106				5176012	157.569	156.3
	79 Bromoform	173	20.616	20.528	(1.173)	1602279	57.4452	56.99
	80 Isopropylbenzene	105	20.755	20.667	(1.181)	4997481	53.8429	53.42
	81 Cyclohexanone	55	20.877	20.826	(1.188)	478101	280.850	278.6
	82 1,1,2,2-Tetrachloroethane	83	21.347	21.259	(1.215)	1622389	42.3224	41.99
$	83 4-Bromofluorobenzene	95	21.521	21.433	(0.882)	2838482	51.0205	50.62
	84 1,2,3-Trichloropropane	110	21.834	21.746	(0.895)	570551	58.0917	57.63
	85 Bromobenzene	156	22.043	21.990	(0.904)	1524440	52.3537	51.94
	86 n-Propylbenzene	91	22.095	22.025	(0.906)	6257095	51.6453	51.24
	87 2-Chlorotoluene	91	22.530	22.460	(0.924)	4445349	50.4923	50.09
	88 trans-1,4-dichloro-2-butene	53	22.617	22.547	(0.927)	172201	48.9426	48.55(M)
	89 1,3,5-Trimethylbenzene	105	22.617	22.530	(0.927)	4092966	50.0603	49.66
	90 4-Chlorotoluene	91	22.687	22.634	(0.930)	4816123	49.0121	48.62
	91 t-Butylbenzene	119	23.453	23.400	(0.961)	3830600	40.1870	39.87
	93 1,2,4-Trimethylbenzene	105	23.540	23.487	(0.965)	4120357	50.9668	50.56
	94 sec-Butylbenzene	105	23.888	23.853	(0.979)	5411704	48.9399	48.55

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GSMP5465.D
Report Date: 02-May-2005 16:48

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
95	4-Isopropyltoluene	119	24.166	24.131	(0.991)	4342128	53.3606	52.94
96	1,3-Dichlorobenzene	146	24.253	24.201	(0.994)	2596197	50.8119	50.41
* 97	1,4 Dichlorobenzene-d4	152	24.393	24.357	(1.000)	1621068	50.0000	
98	1,4-Dichlorobenzene	146	24.445	24.410	(1.002)	2704341	49.5400	49.15
99	n-Butylbenzene	91	24.845	24.810	(1.019)	4487497	52.2513	51.84
100	1,2-Dichlorobenzene	146	25.002	24.967	(1.025)	2413805	52.8072	52.39
101	1,2-Dibromo-3-chloropropane	157	26.099	26.063	(1.070)	484943	71.3154	70.75
103	1,2,4-Trichlorobenzene	180	27.073	27.038	(1.110)	1680517	47.3184	46.94
104	Hexachlorobutadiene	225	27.230	27.195	(1.116)	1131018	38.9947	38.68
105	Naphthalene	128	27.334	27.299	(1.121)	3223946	66.0762	65.55
106	1,2,3-Trichlorobenzene	180	27.578	27.543	(1.131)	1565112	48.6278	48.24

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GSMP5465.D
Report Date: 02-May-2005 16:48

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSG.i
Lab File ID: GSMP5465.D
Lab Smp Id: G81F81AE
Analysis Type: VOA
Quant Type: ISTD
Operator: JDH
Method File: \\slsvr01\chem\MSG.i\G050427B.b\8260B-URS.m
Misc Info: VBLKG117B.B; F5D220273-001D;5.04G;5118107

Calibration Date: 27-APR-2005
Calibration Time: 21:42
Client Smp ID: RE73-05-58878
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	3117196	1558598	6234392	3794784	21.74
71 Chlorobenzene-d5	2287097	1143549	4574194	2819661	23.29
97 1,4 Dichlorobenze	1536763	768382	3073526	1621068	5.49

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	9.34	8.84	9.84	9.39	0.56
71 Chlorobenzene-d5	17.50	17.00	18.00	17.57	0.40
97 1,4 Dichlorobenze	24.36	23.86	24.86	24.39	0.14

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GSMP5465.D
Report Date: 02-May-2005 16:48

STL St. Louis

RECOVERY REPORT

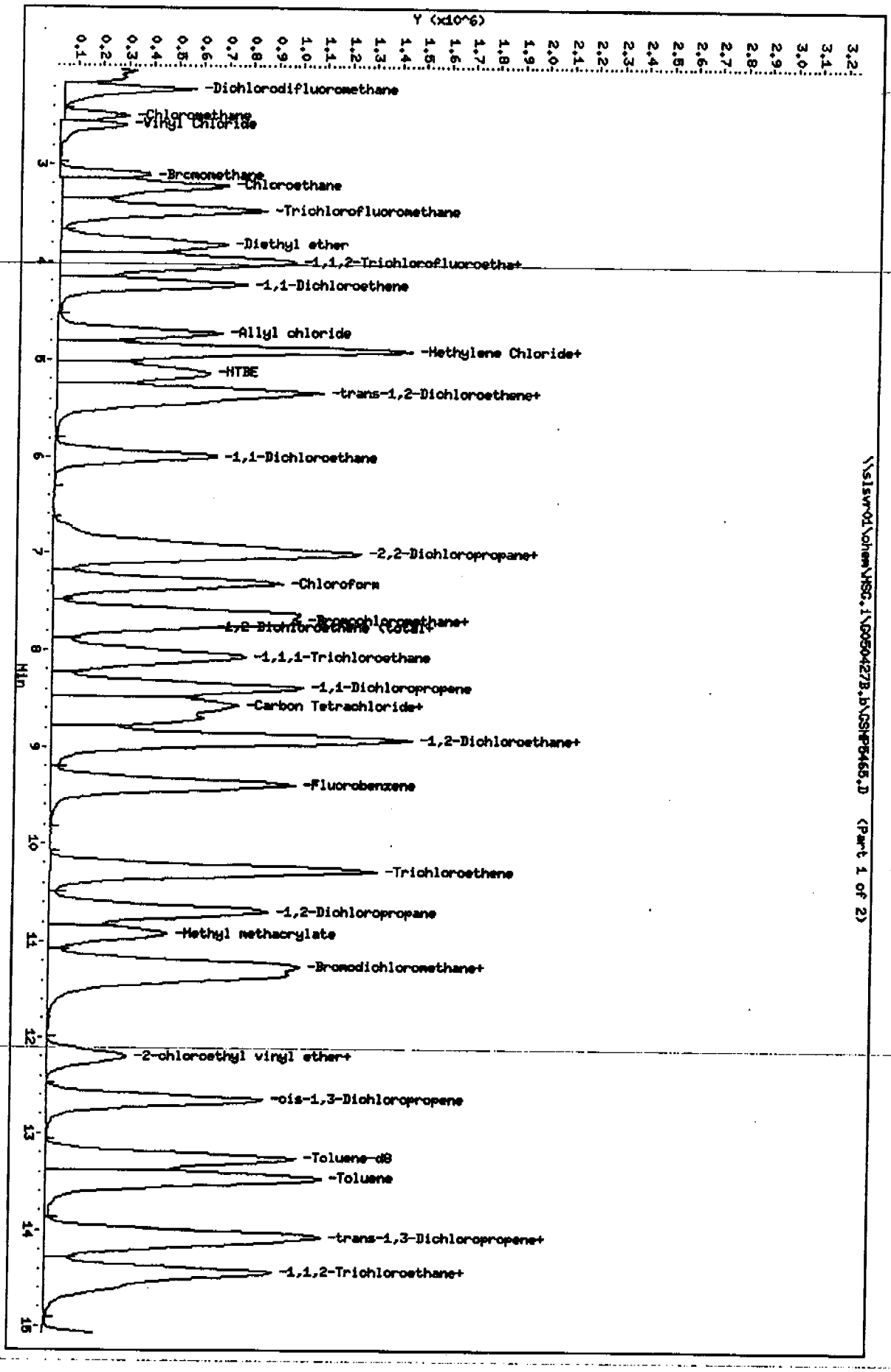
Client Name: LOS ALAMOS NATIONAL 22-APR-2005 00:00 Client SDG: F5D2202
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: G81F81AE Client Smp ID: RE73-05-58878
Level: LOW Operator: JDH
Data Type: MS DATA SampleType: MSD
SpikeList File: SOILMS-MSD.spk Quant Type: ISTD
Sublist File: SOIL.sub
Method File: \\slsvr01\chem\MSG.i\G050427B.b\8260B-URS.m
Misc Info: VBLKG117B.B; F5D220273-001D;5.04G;5118107

	SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
	1 Dichlorodifluorome	49.60	53.39	107.63	30-150
	3 Chloromethane	49.60	43.09	86.86	10-150
	4 Vinyl Chloride	49.60	49.28	99.35	37-150
	5 Bromomethane	49.60	35.39	71.34	30-150
	6 Chloroethane	49.60	51.71	104.24	42-150
	7 Trichlorofluoromet	49.60	41.48	83.63	48-145
	8 Diethyl ether	49.60	56.96	114.83	51-150
	9 1,1,2-Trichloroflu	49.60	40.95	82.56	54-136
	11 Acetone	49.60	72.93	147.03	30-150
	12 1,1-Dichloroethene	49.60	49.14	99.07	39-144
	16 Allyl chloride	49.60	42.73	86.15	40-150
	18 Carbon Disulfide	49.60	47.26	95.28	30-150
	17 Methylene Chloride	49.60	54.39	109.65	30-143
M	38 1,2-Dichloroethene	99.21	95.47	96.23	41-150
	20 MTBE	49.60	46.95	94.65	52-143
	21 trans-1,2-Dichloro	49.60	46.35	93.44	48-142
	22 n-Hexane	49.60	28.74	57.94	30-130
	23 1,1-Dichloroethane	49.60	48.50	97.78	52-141
	27 2-Butanone	49.60	72.19	145.53	30-150
	29 2,2-Dichloropropan	49.60	43.28	87.25	51-148
	30 cis-1,2-Dichloroet	49.60	49.12	99.02	45-150
	33 Chloroform	49.60	43.18	87.05	57-140
	34 Bromochloromethane	49.60	52.27	105.38	57-147
	37 Tetrahydrofuran	49.60	60.93	122.84	34-150
	39 1,1,1-Trichloroeth	49.60	41.77	84.21	55-145
	41 1,1-Dichloropropen	49.60	48.00	96.78	61-139
	42 Carbon Tetrachlori	49.60	39.56	79.74	52-147
	47 Benzene	49.60	49.35	99.49	59-135
	46 1,2-Dichloroethane	49.60	43.91	88.52	55-150
	49 Trichloroethene	49.60	57.28	115.47	30-150
	51 1,2-Dichloropropan	49.60	52.47	105.77	55-143
	52 Methyl methacrylat	49.60	55.61	112.10	47-150
	53 Bromodichlorometha	49.60	45.53	91.79	51-145
	54 Dibromomethane	49.60	50.31	101.43	50-150
	56 2-Nitropropane	24.80	12.55	50.59	30-150
	58 4-Methyl-2-pentano	49.60	42.95	86.59	30-150
	59 cis-1,3-Dichloropr	49.60	51.14	103.11	56-141
	62 Toluene	49.60	42.88	86.45	53-146
	63 trans-1,3-Dichloro	49.60	46.42	93.58	51-150
	64 Ethyl methacrylate	49.60	44.67	90.05	30-150

Data File: \\slsvr01\chem\MSG.i\G050427B.b\GSMP5465.D
Report Date: 02-May-2005 16:48

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
65 1,1,2-Trichloroeth	49.60	47.64	96.04	41-150
66 2-Hexanone	49.60	55.10	111.08	30-150
67 1,3-Dichloropropan	49.60	48.49	97.75	41-150
68 Tetrachloroethene	49.60	42.86	86.40	30-136
69 Chlorodibromometha	49.60	43.72	88.13	51-150
70 1,2-Dibromoethane	49.60	52.10	105.04	50-150
72 Chlorobenzene	49.60	51.46	103.75	60-136
73 1,1,1,2-Tetrachlor	49.60	49.75	100.29	55-148
74 Ethylbenzene	49.60	51.12	103.05	61-134
75 m,p-Xylenes	99.21	104.3	105.15	65-131
76 o-Xylene	49.60	52.00	104.84	44-150
77 Styrene	49.60	51.83	104.50	58-138
79 Bromoform	49.60	56.99	114.89	51-150
80 Isopropylbenzene	49.60	53.42	107.69	61-150
81 Cyclohexanone	496.0	278.6	56.17	30-150
82 1,1,2,2-Tetrachlor	49.60	41.99	84.64	40-163
85 Bromobenzene	49.60	51.94	104.71	30-150
86 n-Propylbenzene	49.60	51.24	103.29	35-150
88 trans-1,4-dichloro	49.60	48.55	97.89	30-150
87 2-Chlorotoluene	49.60	50.09	100.98	30-150
89 1,3,5-Trimethylben	49.60	49.66	100.12	30-150
90 4-Chlorotoluene	49.60	48.62	98.02	45-150
91 t-Butylbenzene	49.60	39.87	80.37	32-148
94 sec-Butylbenzene	49.60	48.55	97.88	42-150
95 4-Isopropyltoluene	49.60	52.94	106.72	49-150
96 1,3-Dichlorobenzen	49.60	50.41	101.62	57-136
98 1,4-Dichlorobenzen	49.60	49.15	99.08	51-133
99 n-Butylbenzene	49.60	51.84	104.50	34-150
100 1,2-Dichlorobenzen	49.60	52.39	105.61	53-141
103 1,2,4-Trichloroben	49.60	46.94	94.64	30-150
101 1,2-Dibromo-3-chlo	49.60	70.75	142.63	30-150
104 Hexachlorobutadien	49.60	38.68	77.99	30-150
105 Naphthalene	49.60	65.55	132.15	30-150
106 1,2,3-Trichloroben	49.60	48.24	97.26	30-150

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 36 Dibromofluorometha	49.60	43.37	87.44	61-140
$ 43 1,2-Dichloroethane	49.60	45.29	91.30	56-149
$ 61 Toluene-d8	49.60	42.48	85.64	60-148
$ 83 4-Bromofluorobenze	49.60	50.62	102.04	56-150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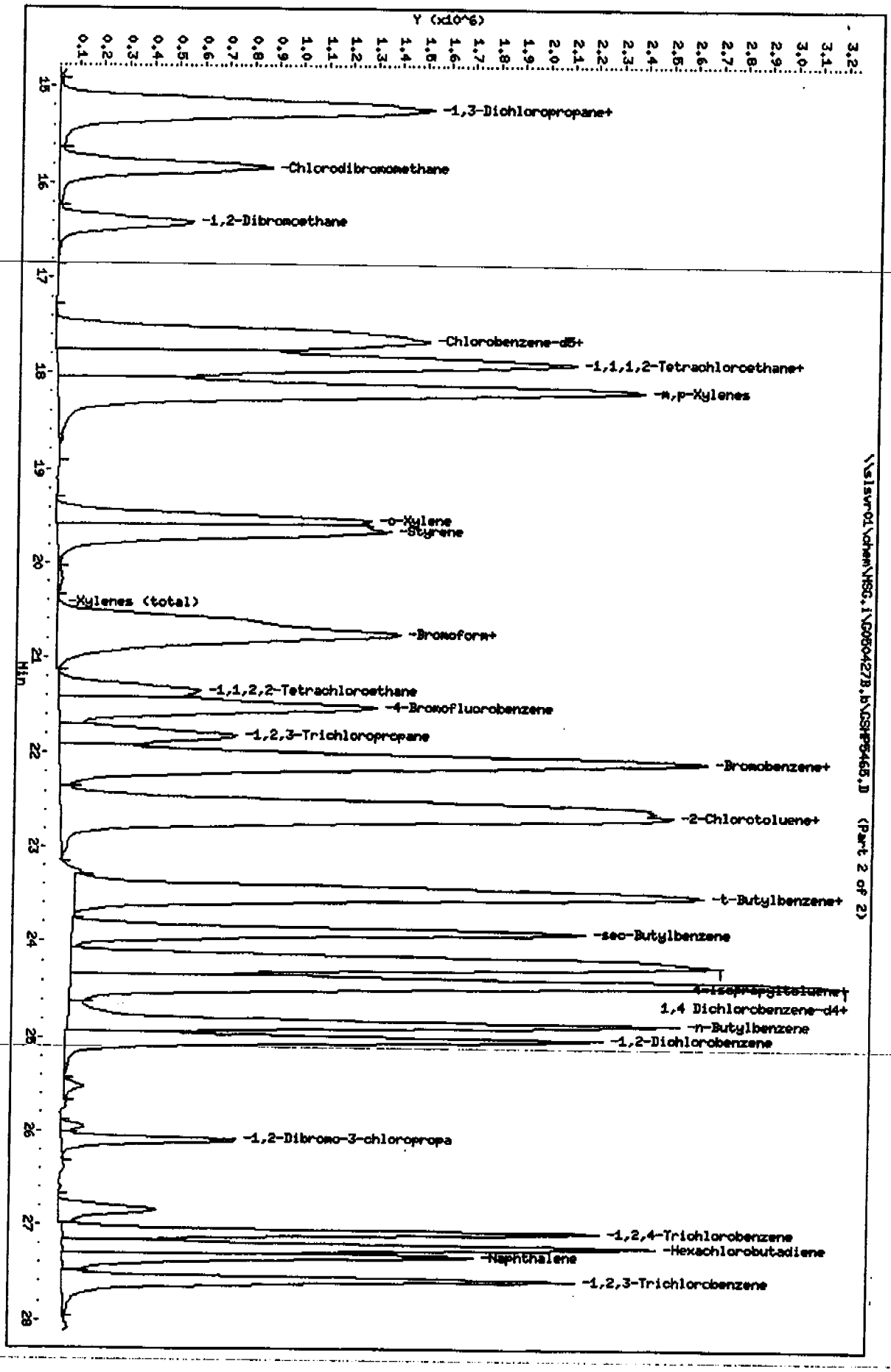
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-Diethyl ether
-1,1,2-Trichlorofluoroetha+
-1,1-Dichloroethene
-Allyl chloride
-Methylene Chloride+
-MTBE
-trans-1,2-Dichloroethene+
-1,1-Dichloroethane
-2,2-Dichloropropane+
-Chloroform
-Bromochloromethane+
-1,1,1-Trichloroethane
-1,1-Dichloropropene
-Carbon Tetrachloride+
-1,2-Dichloroethane+
-Fluorobenzene
-Trichloroethene
-1,2-Dichloropropane
-Methyl methacrylate
-Bromodichloromethane+
-2-chloroethyl vinyl ether+
-cis-1,3-Dichloropropene
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane+
Min
3 4 5 6 7 8 9 10 11 12 13 14 15
Data File: \\slsvr01\chem\HSG.i\G0504278.b\GSHP5465.D
Date : 28-APR-2005 02:19
Client ID: RE73-05-58878
Sample Info: CSLFB1AE;G0504278.b
Column phase: RTX-502.2
Instrument: HSG.i
Operator: JDH
Column diameter: 0.53
\\slsvr01\chem\HSG.i\G0504278.b\GSHP5465.D (Part 1 of 2)


Y (x10^6)
Min
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-Chlorodibromomethane
-1,2-Dibromoethane
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
-o-Xylene
-Styrene
-Xylenes (total)
-Bromoform+
-1,1,2,2-Tetrachloroethane
-4-Bromofluorobenzene
-1,2,3-Trichloropropane
-Bromobenzene+
-2-Chlorotoluene+
-t-Butylbenzene+
-sec-Butylbenzene
4-Isopropyltoluene+
1,4 Dichlorobenzene-d4+
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene
-1,2,3-Trichlorobenzene
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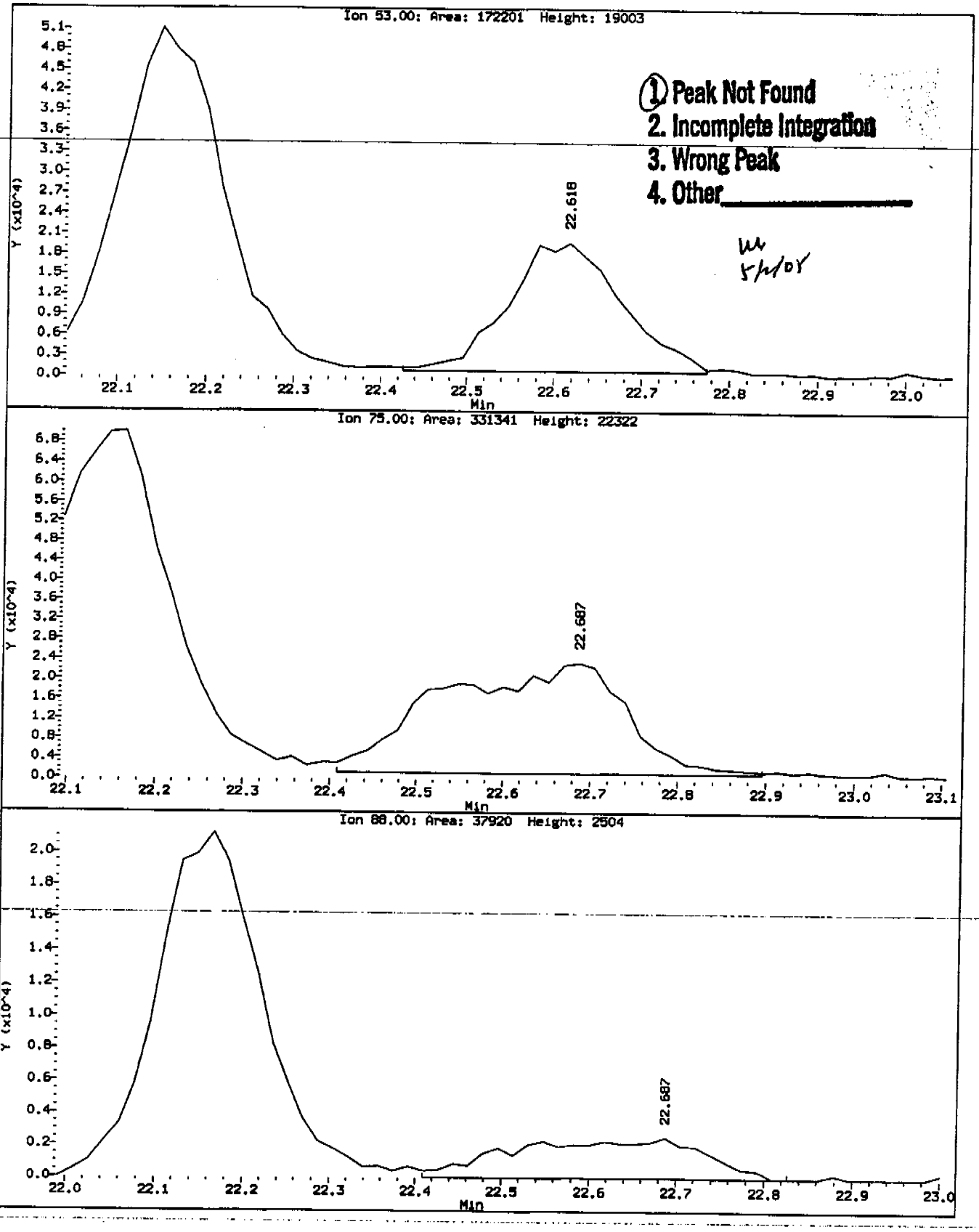
Date : 28-APR-2005 02:19
Client ID: RE72-05-58878
Sample Info: GSLF81AE;G0504278.b
Column phase: RTX-502.2
Instrument: MSG.i
Operator: JDH
Column diameter: 0.53

Data File: \\slsvr01\chem\MSG.i\G0504278.b\GSMP5465.D
Injection Date: 28-APR-2005 02:19
Instrument: MSG.i
Client Sample ID: RE73-05-58878

Compound: trans-1,4-dichloro-2-butene
CAS Number: 110-57-6

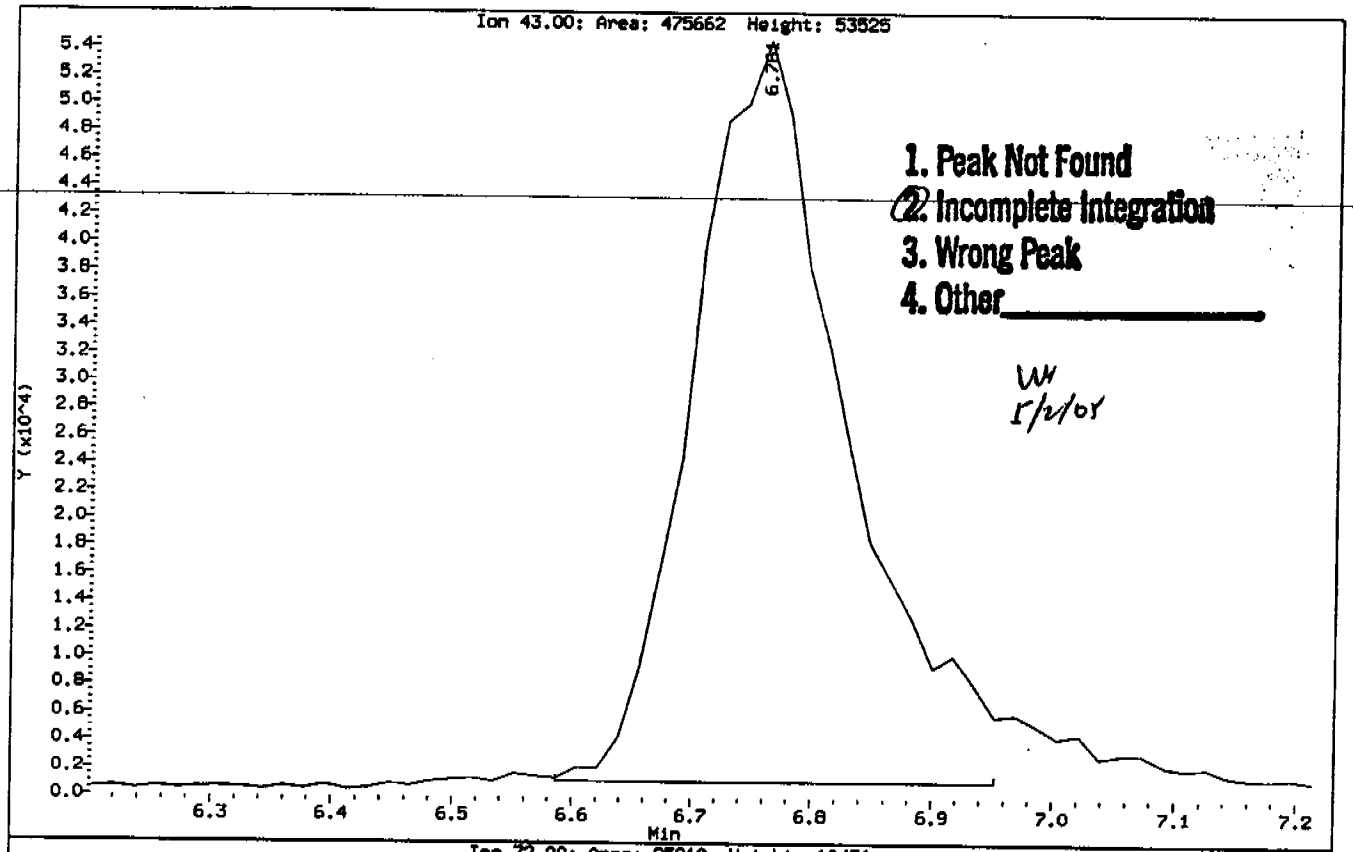


1. Peak Not Found
2. Incomplete Integration
3. Wrong Peak
4. Other _____

W
5/4/05

Data File: \\slsvr01\chem\MSG.i\G0504278.b\GSMP5465.D
Injection Date: 28-APR-2005 02:19
Instrument: MSG.i
Client Sample ID: RE73-05-58878

Compound: 2-Butanone
CAS Number: 78-93-3



1. Peak Not Found
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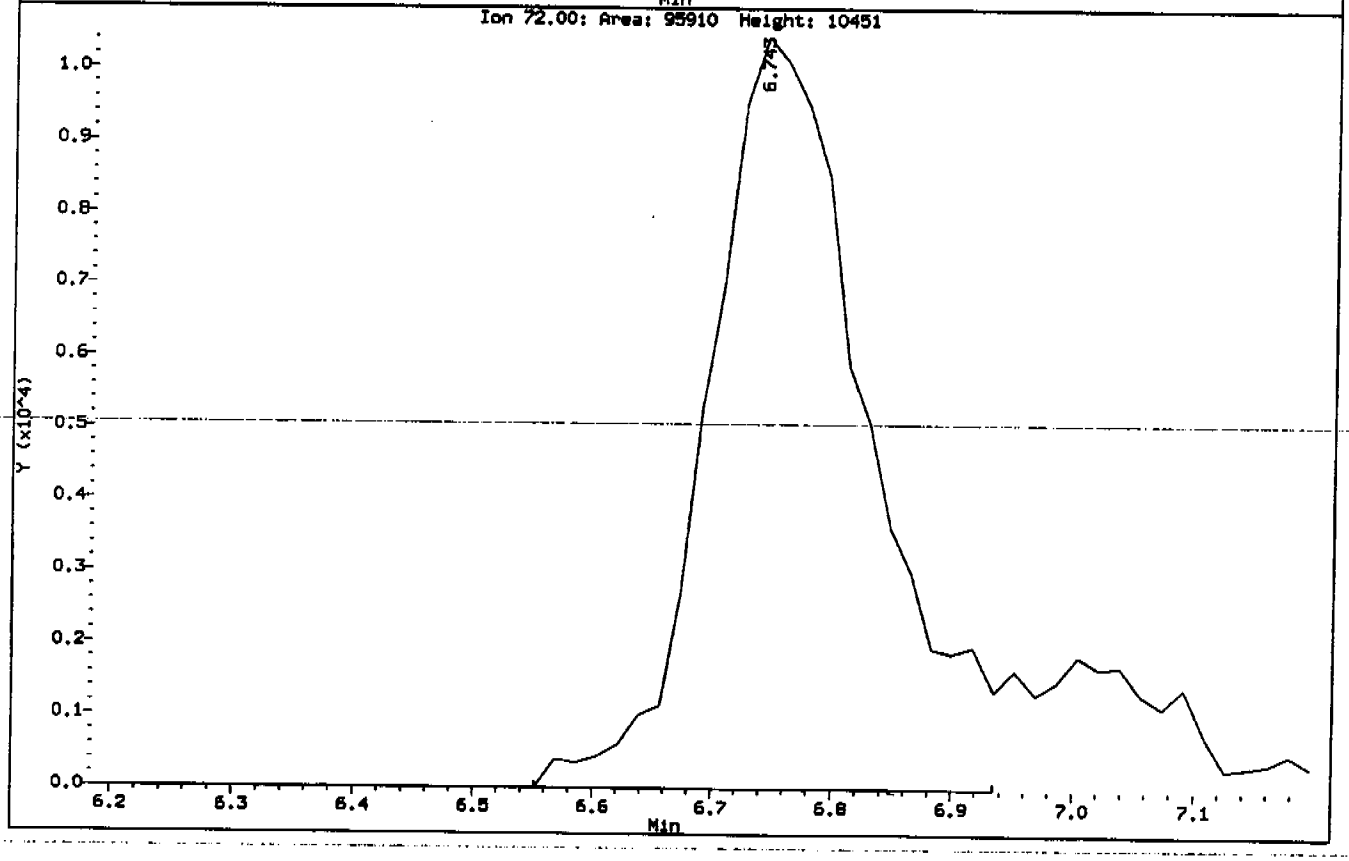
3. Wrong Peak
4. Other _____

W
5/2/05



GC/MS MISCELLANEOUS DATA

STL St. Louis GC/MS Volatiles Runlog

Instrument: MSG Date: 4-17-05A Operator: JDH Batch #: Logbook No.: 2645

Data File	Time	Pos.	Lot Number	Method	Lab ID	Matrix	pH	Wt/Vol g/ml	MeOH Vol.	Dil. Factor	Comments	
GBFB5151					50ng BFB							OK
GCAL5152				8260B	VSTD050							RR
↓ 5153				↓	VSTD050							RR
GBFB5154					50ng BFB							OK
GCAL5155				8260B	VSTD050							RR
↓ 5156				↓	VSTD050							RR
GBFB5157	21:49				50ng BFB						2/DBE 3/40	OK
GCAL5158	cont'd	1		8260B	VSTD050							RR
↓ 5159		2			VSTD050							RR
5160		3			VSTD050						8260 envlo	OK
5161		4			VSTD020							OK
5162		5			VSTD010							OK
5163		6			VSTD005							OK
5164		7			VSTD002.5							OK
↓ 5165		8			VSTD200 VSTD100							OK
GCAL GSMP 5166		9			SXS BLANK VSTD050							OK
GSMP GLCS 5167		10			SXS BLANK							-
GLCS 5168		11		↓	ICV050						Toll	RR
GSMP 5169		12			SBLK							-
↓ 5170		13			SBLK							-
GLCS 5171	↓	14			QCLCS						1,1DCE	RR
↓ 5172	9:36	15		↓	QCLCS							OK
					MM 4-18-05							

IS	VA0261-05	BFB	VA0212-05
Custom	VA0240-05	CAL	VA0253-05
LCS/MS/MSD/QC Check	VA0255-05	SURR	VA0256-05
Other	VA0247-05	Other	VA0270-05

Note: Concentrations for standards can be found in the standards log.
Form: SL-ORG-0021, Rev. 3/7/05; SOP Reference: STL-MS-0002, current revision
Definitions: QCLCS or LCS – Laboratory Control Sample; QCBLK or BLK – Method Blank;
MeOH Lot#:

QC Reviewed By/Date: MM/4-18-05 Spiking Verified By: Clock Review Assigned To:

STL St. Louis GC/MS Volatiles Runlog

Instrument: MSG Date: 4-27-05B Operator: JDH Batch #: 5118107 Logbook No.: 2645

Data File	Time	Pos.	Lot Number	Method	Lab ID	Matrix	pH	Wt/Vol g/ml	MeOH Vol.	Dil. Factor	Comments	
GBFB5454					50ng BFB							RR
↓ 5455					50ng BFB						2/88	OK
GCAL5456		1		8260B	VSTD050							RR
↓ 5457		2		↓	VSTD050							RR
GBFB5458	21:18				50ng BFB						2/88	OK
GCAL5459	cont'd	1		8260B	VSTD050							OK
LCS5460		2			QCLCS							OK
GBLK5461		3			QCBLK							OK
↓ 5462		4	FSD280000-107		QCBLK (G9G7W)						CH_2Cl_2 ↑	RR
GSMPS5463		5	FSD220273-1		GB1FB1AC	SOIL	NA	5.02g	NA	1X		OK
5464		6	↓ -15		↓ 1AD (MS)			5.01g				OK
5465		7	↓ -16		↓ 1AE (MSD)			5.04g				OK
5466		8			SYS.BLANK							-
5467		9	FSD220161-7		GB0DF1AC			5.04g				OK
5468		10	-9		GB0DJ1AC			5.05g				OK
5469		11	-11		GB0DM1AC			4.98g				OK
5470		12	-13		GB0DQ1AC			4.97g				OK
5471		13	-15		GB0DW1AC			5.04g				OK
5472		14	↓ -17		GB0D01AC			4.95g				OK
5473		15	FSD220273-2		GB1GA1AE			4.95g			IS. active Carbon	OK
5474		16	FSD230132-1		GB29L1AC			4.99g			LSV, Rep G5483. No/Rep 5721	RRIX
5475		17	-3		GB29Q1AC			4.98g				OK
5476	↓	18	-5		GB29V1AC			4.97g				OK
5477	9:07	19	↓ -7	↓	GB29Ø1AC	↓	↓	4.98g	↓	↓		OK
~~5478~~	NOT	USED	JDH 4-27-05									-

IS VA0299-05
Custom VA0292-05
BCS/MS/MSD/QC Check VA0296-05
Other NA

BFB VA0281-05
CAL VA0297-05
SURR VA0291-05
Other NA

Note: Concentrations for standards can be found in the standards log.
Form: SL-ORG-0021, Rev. 3/7/05; SOP Reference: STL-MS-0002, current revision
Definitions: QCLCS or LCS – Laboratory Control Sample; QCBLK or BLK – Method Blank;
MeOH Lot#:

QC Reviewed By/Date: VM /4-28/05

Spiking Verified By:

Clock Review Assigned To:

STL ST. LOUIS
FSD220273
1038

Sheet1

Severn Trent St. Louis
Percent Total Solid/Percent Moisture Logsheet
STL-WC-0005, current revision

Analysis: %Moisture Time In: 11:20 Batch: 5115140

Prep Date: 04/25/05 Time Out: 2:30 Analyst: sdb

Anal Date: 04/26/05 Balance 1 SN: L22450 Reviewed By: SW 4/26/05

Balance 2 SN: L22450

Pan Number	Sample Id	Pan wt	Wet Sam + Pan g	Dry Sam + Pan wt	Results Total Solids %	Results MS %	Comments
1	G826H-001	1.0130	11.7054	9.5116	79.48	20.52	
2	G827R-001	1.0114	12.8143	11.8728	92.02	7.98	
3	G80CL-001	1.0190	5.9196	5.7331	96.19	3.81	
4	G80C5-001	1.0130	9.8263	9.0187	90.84	9.16	
5	G80C9-001	1.0210	10.3048	10.2308	99.20	0.80	
6	G80DE-001	1.0138	8.6790	8.5527	98.35	1.65	
7	G80DG-001	1.0185	8.1894	8.0347	97.84	2.16	
8	G80DL-001	1.0198	6.6268	6.3906	95.79	4.21	
9	G80DP-001	1.0158	8.3903	8.1948	97.35	2.65	
10	G80DV-001	1.0110	7.0334	6.8695	97.28	2.72	
11	G80DX-001	1.0075	6.6784	6.5561	97.84	2.16	
12	G80D1-001	1.0019	7.1447	6.6245	91.53	8.47	
13	G80D1x	1.0073	7.9508	7.3457	91.29	8.71	
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Sheet1

Severn Trent St. Louis

Percent Total Solid/Percent Moisture Logsheet

STL-WC-0005, current revision

Analysis: %Moisture Time In: 6:00 Batch: 5115209

Prep Date: 04/26/05 Time Out: 8:00 Analyst: sdb

Anal Date: 04/27/05 Balance 1 SN: L22450 Reviewed By: SW 5/2/05

Balance 2 SN: L22450

Pan Number	Sample Id	Pan wt	Wet Sam + Pan g	Dry Sam + Pan wt	Results Total Solids %	Results MS %	Comments
1	G80A7	0.9991	5.6439	5.4098	94.96	5.04	
2	G80CJ	0.9979	5.1205	5.1130	99.82	0.18	
3	G827Q	0.9986	9.9360	9.4860	94.96	5.04	
4	G8275	0.9984	9.4212	8.2637	86.26	13.74	
5	G8277	0.9979	8.9952	8.1684	89.66	10.34	
6	G8278	0.9998	9.8896	9.0204	90.22	9.78	
7	G828C	0.9940	11.3163	10.2582	89.75	10.25	
8	G828E	0.9956	12.2194	11.7645	95.95	4.05	
9	G828M	0.9976	7.8134	7.3222	92.79	7.21	
10	G828Q	0.9922	11.0936	10.5614	94.73	5.27	
11	G828V	0.9948	12.4890	11.3413	90.01	9.99	
12	G8280	0.9988	6.5994	5.4251	79.03	20.97	
13	G8285	0.9918	5.4054	3.8077	63.80	36.20	
14	G8288	0.9924	7.4649	6.4222	83.89	16.11	
15	G829F	0.9904	5.7697	5.6594	97.69	2.31	
16	G829FX	0.9897	2.8052	2.7427	96.56	3.44	
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Sheet1

Severn Trent St. Louis

Percent Total Solid/Percent Moisture Logsheet

STL-WC-0005, current revision

Analysis: %Moisture Time In: 6:00 Batch: 5115210

Prep Date: 04/26/05 Time Out: 8:00 Analyst: sdb

Anal Date: 04/27/05 Balance 1 SN: L22450 Reviewed By: 5/2/05

Balance 2 SN: L22450

Pan Number	Sample Id	Pan wt	Wet Sam + Pan g	Dry Sam + Pan wt	Results Total Solids %	Results MS %	Comments
1	G80C1	0.9867	6.1273	6.0514	98.52	1.48	
2	G80C7	0.9882	8.3531	8.3402	99.82	0.18	
3	G80DD	0.9864	8.1734	8.1539	99.73	0.27	
4	G80DF	0.9868	6.7159	6.6969	99.67	0.33	
5	G80DJ	0.9830	7.2101	7.1739	99.42	0.58	
6	G80DM	0.9833	6.9188	6.8973	99.64	0.36	
7	G80DQ	0.9807	10.0241	9.9788	99.50	0.50	
8	G80DW	0.9843	7.5373	7.4505	98.68	1.32	
9	G80D0	0.9756	4.5512	4.4881	98.24	1.76	
10	G80D0X	0.9763	4.2190	4.1866	99.00	1.00	
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File: Qstlmo05\Wet Chem Results\%moist042506b.xls, modified 11/11/2002

Sheet1

Severn Trent St. Louis

Percent Total Solid/Percent Moisture Logsheet

STL-WC-0005, current revision

Analysis: %Moisture Time In: 6:00 Batch: 5115211

Prep Date: 04/26/05 Time Out: 8:00 Analyst: sdb

Anal Date: 04/27/05 Balance 1 SN: L22450 Reviewed By: SDW 4/28/05

Balance 2 SN: L22450

Pan Number	Sample Id	Pan wt	Wet Sam + Pan g	Dry Sam + Pan wt	Results Total Solids %	Results MS %	Comments
1	G829L	0.9730	2.5856	2.5220	96.06	3.94	
2	G829P	1.1123	9.3635	9.1701	97.66	2.34	
3	G829Q	1.0991	5.8621	5.8403	99.54	0.46	
4	G829R	1.1222	5.1381	5.0945	98.91	1.09	
5	G829V	1.0965	6.5969	6.5744	99.59	0.41	
6	G829W	1.0927	5.6300	5.5952	99.23	0.77	
7	G8290	1.0844	7.7086	7.6290	98.80	1.20	
8	G8295	1.0864	7.9390	7.8840	99.20	0.80	
9	G83AF	1.0907	6.9733	6.9372	99.39	0.61	
10	G83AJ	1.0989	12.3115	12.2184	99.17	0.83	
11	G83AL	1.0966	7.4449	7.3863	99.08	0.92	
12	G83AR	1.0889	8.5192	8.4472	99.03	0.97	
13	G83AV	1.0894	4.6207	4.5781	98.79	1.21	
14	G83AX	1.0972	8.2332	8.1506	98.84	1.16	
15	G83A1	1.1057	5.2160	5.1653	98.77	1.23	
16	G83A2	1.0985	12.0046	11.7227	97.42	2.58	
17	G83A2X	1.0919	11.1595	10.9801	98.22	1.78	
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F5D220273

CLIENT ANALYSIS SUMMARY

Storage Loc: VS45

Project Manager: EK | Quote #: 44975 | SDG: F5D220273 | Date Received: 2005-04-22

Project: 3163S | Los Alamos Non-Rad | Analytical Due Date: 2005-05-10 / 12

PO#: 126310021 | Report to: Joylene Valdez or Keith | Report Due Date: 2005-05-10 / 12

Client: 108581 LOS ALAMOS NATIONAL LABORATORY | Report Type: D Expanded Deliverable

#SMPS in LOT: 2 | EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
1	RE73-05-58878			2005-04-20 / 0	G81F8	SOLID

SAMPLE COMMENTS:

	XX	QK	SW846	8260B	Volatile Organics, GC/MS (8260B)	15	PURGE AND TRAP - 5 mL purge	01	STANDARD TEST SET	PROT: A	WRK LOC	06	TIC: N
	XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	XX	QK	SW846	8260B	Volatile Organics, GC/MS (8260B)	15	PURGE AND TRAP - 5 mL purge	01	STANDARD TEST SET	PROT: A	WRK LOC	06	TIC: N
S	XX	QK	SW846	8260B	Volatile Organics, GC/MS (8260B)	15	PURGE AND TRAP - 5 mL purge	01	STANDARD TEST SET	PROT: A	WRK LOC	06	TIC: N

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
2	RE73-05-58879			2005-04-20 / 0	G81GA	SOLID

SAMPLE COMMENTS:

	XX	QH	SW846	8082	PCBs (8082)	71	SONICATION w/ACID STRIP (PCB)	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
	XX	QL	SW846	8270C	Base/Neutrals and Acids (8270C)	13	SONICATION - Low Level	01	STANDARD TEST SET	PROT: A	WRK LOC	06	TIC: N
	XX	QK	SW846	8260B	Volatile Organics, GC/MS (8260B)	15	PURGE AND TRAP - 5 mL purge	01	STANDARD TEST SET	PROT: A	WRK LOC	06	TIC: N
	XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	XX	QH	SW846	8082	PCBs (8082)	71	SONICATION w/ACID STRIP (PCB)	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
D	XX	QL	SW846	8270C	Base/Neutrals and Acids (8270C)	13	SONICATION - Low Level	01	STANDARD TEST SET	PROT: A	WRK LOC	06	TIC: N
S	XX	QH	SW846	8082	PCBs (8082)	71	SONICATION w/ACID STRIP (PCB)	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
S	XX	QL	SW846	8270C	Base/Neutrals and Acids (8270C)	13	SONICATION - Low Level	01	STANDARD TEST SET	PROT: A	WRK LOC	06	TIC: N

F5D220273

CLIENT COMMENTS SUMMARY

Storage Loc: VS45

Project Manager: EK | Quote #: 44975 | SDG: F5D220273 | Date Received: 2005-04-22

Project: 3183S | Los Alamos Non-Rad | Analytical Due Date: 2005-05-13

PO#: 126310021 | Report to: Joylene Valdez or Keith | Report Due Date: 2005-05-16

Client: 108581 LOS ALAMOS NATIONAL LABORATORY | Report Type: D Expanded Deliverable

#SMPS in LOT: 2 | EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMEN
Enter COC NUMBER on sample sample header in the COC Fi
SDG = "Lot Number"
Project Name = "Request number"

********** METALS AND WETCHEMISTRY **********
Can batch multiple Lots together and report Client specific
Batch QC: Matrix Spike and Sample Duplicate
Met Prep: GFAA Spike Level and Standard Spike Level
Sb spike at 100 ppb
Pb - Spike Solids at 100 ppb, spike Waters at 20
- Perform analytical spike when matrix spike is swamped with indigenous analyte.
********** GC/MS ORGANICS **********
Can batch multiple Lots together and report Client specific
Batch QC MS and MSD
Clouseau observations for:
- Dilutions and elevated detection limits
- Unknown aldol condensate in TIC report
USE GPC for sample extracts as required.
Put client ID on all raw data
Client requires qualifiers
********** GC/HPLC **********
Can batch multiple Lots together and report Client specific
Batch QC
USE GPC for sample extracts as required.
Client requires Qualifiers for both GC and HPLC
- No averaging of CCV compounds
- Include Form Xs in data packages
********** Radiochemistry **********
Rad Chem with no tracers require MS (spk <= 100 pCi/L or g) and sample duplicate ..... Gamma does not require MS.
Radium 228 requires MS and Sample Duplicate
Radiological: "Do not include control chart, standard certif certificates, or calibration data as part of data package"
- Tracers need to be added at a level to yield at least 400
- Report 1 sigma uncertainty
Gross Alpha/Beta requires a total digestion.

STL ST. LOUIS

Thursday, April 21, 2005

Los Alamos
NATIONAL LABORATORY

CHAIN OF CUSTODY DOCUMENT NUMBER: 3163SC

REQUEST NUMBER: 3163S

ANALYSIS TYPE: ORGANIC

ATTN: Mark Loeb
Severn Trent Laboraties, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION 40mL	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58878	1	~~125 SEPTUM AMBER GLASS~~	8260B	ICE	S
RE73-05-58879	1	250 ML AMBER GLASS	8270C+8082	ICE	S
RE73-05-58879	2	~~125 SEPTUM AMBER GLASS~~ 16 oz. Jar	8260B	ICE	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3163S

SW 4.22.05

Relinquished By:		Date	Time	Received By:		Date	Time
		4/21/05	2130	Steve Wilson		4-22-05	0910
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

PRINTED NAME SIGNATURE

LOT# FED220273

Thursday, April 21, 2005

curb 13

REQUEST NUMBER: 3163S

ANALYSIS TYPE: ORGANIC

Los Alamos
NATIONAL LABORATORY

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

These samples are on:

SHIP DATE: 04/21/2005
REPORT DUE: 05/06/2005
TURN AROUND REQ'D: 15

LANL Request Number: 3163S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

RAD SCREENING: NOT REQ
COMMENTS: NOTE: Please do the GPC for all 8270 +8082.

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:8260B	RE73-05-58878	1	S	04/20/2005	
SW-846:8082	RE73-05-58879	1	S	04/20/2005	
SW-846:8270C	RE73-05-58879	1	S	04/20/2005	
SW-846:8260B	RE73-05-58879	2	S	04/20/2005	

Final Page of REQUEST NUMBER 3163S

SEVERN TRENT **STL**

Lot No: F5D220273

Condition Upon Receipt Form
St. Louis Laboratory

Client: LANL

Date: 4.22.05 Time: 0900

Quote No: 44975

Initiated by: SV

Shipper/No: FedEx 6954 7789 2939

COC/RFA Numbers: Below

Condition/Variance (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	(Y) N	Sample received in undamaged condition?	7.	(Y) N	Sample received with Chain of Custody?
2.	(Y) N	Sample received within 4-C ± 2-C* ?	8.	(Y) N	Chain of Custody matches sample IDs on containers?
		Record ____	9.	(Y) N N/A	Custody seal received intact on cooler.?
3.	(Y) N N/A	Sample received with proper pH [1]?	10.	(Y) N N/A	Custody seal tamper evident on cooler.?
4.	Y N	If N/A - Was pH taken by original STL lab?	11.	(Y) N N/A	Custody seal on bottles received intact?
5.	(Y) N	Sample received in proper containers?	12.	(Y) N N/A	Custody seal tamper evident on bottles?
6.	(Y) N	Sample volume sufficient for analysis?	13.	Y N	Was CUR (equivalent) rec' d from original STL lab?

* Temperature Variance Does Not Affect the Following Analyses: ____

[1]For DOE-AL (Pantex, LANL, Sandia) sites, verify pH all containers received, except for VOA, TOX, and soils.

Notes: 2861SC, 3163SC thru 68SC.

Chain 3163SC - containers received were different than C-O-C.

Corrective Action:

☐ Client's Name: ____ Informed by: ____ By: ____

☐ Sample(s) processed "as is". ____

☐ Sample(s) on hold until: ____ If released, notify: ____

Project Management Review: Tom Lahey Date: 4/25/05

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED
IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIALS AND THE DATE NEXT TO THAT ITEM

ADMIN-0004, Revised 2/17/04
\\Stsvr01\QA\FORMS\ST-LOUIS\ADMIN\Admin004 rev7.doc

Thursday, April 21, 2005

REQUEST NUMBER: 3162S

ANALYSIS TYPE: ORGANIC

Los Alamos
NATIONAL LABORATORY

ATTN: Shelly Weagraff
Alta Analytical Lab Incorporated
5070 Robert J. Mathews Parkway
El Dorado Hills, CA 95762

Please analyze the enclosed samples according to the schedule indicated:

SHIP DATE: 04/21/2005
REPORT DUE: 05/06/2005
TURN AROUND REQ'D: 15

RAD SCREENING: NOT REQ
COMMENTS:

These samples are on:

LANL Request Number: 3162S
Per Agreement Number: 176450010
Project Cost Code: MT3R0223KGT0

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:8290	RE73-05-58879	3	S	04/20/2005	
SW-846:8290	RE73-05-58879	4	S	04/20/2005	

Final Page of REQUEST NUMBER 3162S

Thursday, April 21, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3162SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3162S

ANALYSIS TYPE: ORGANIC

ATTN: Shelly Weagraff
Alta Analytical Lab Incorporated
5070 Robert J. Mathews Parkway
El Dorado Hills, CA 95762

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58879	3	125 ML GLASS	8290	ICE	S
RE73-05-58879	4	125 ML GLASS	8290	ICE	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3162S

Relinquished By:		Date	Time	Received By:		Date	Time
M Rivera	M Rivera	4-21-05	1400				
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		

Received for DISPOSAL By:		Date	Time	Remarks:
PRINTED NAME	SIGNATURE			

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218682 Event ID:4802

SAMPLE ID: RE73-05-58878 ER TEAM LEADER: Terry Rust DESTINATION: SMO

SAMPLE ORDER MATRIX: Soil FIELD TEAM LEADER: John Tymkowych DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
1	8260B	125 SEPTUM AMBER GLASS	Ice	Y		

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.20.05 1520	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/20/05 1520	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218862 Event ID:4802

SAMPLE ID: RE73-05-58844

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4-20-05 1520	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 42005 1520	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

EVENT NAME: TA-73 Ash Pile

FIELD CHAIN OF CUSTODY

COC ID: 218852 Event ID:4802

SAMPLE ID: RE73-05-58843
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): K Reeves (signature):	Date/Time: 4.20.05 1520	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/20/05 1520	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

EVENT NAME: TA-73 Ash Pile

FIELD CHAIN OF CUSTODY

COC ID: 218872 Event ID:4802

SAMPLE ID: RE73-05-58845
SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4-20-05 1530	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/20/05 1530	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218882 Event ID:4802

SAMPLE ID: RE73-05-58846

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4-20-05 1530	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/20/05 1530	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

EVENT NAME: TA-73 Ash Pile

FIELD CHAIN OF CUSTODY

COC ID: 218842 Event ID:4802

SAMPLE ID: RE73-05-58842
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4-20-05 1530	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/20/05 1530	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 219172 Event ID:4802

SAMPLE ID: RE73-05-58879 | ER TEAM LEADER: Terry Rust | DESTINATION: SMO

SAMPLE ORDER MATRIX: Soil | FIELD TEAM LEADER: John Tymkowych | DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	8260B	~~125 SEPTUM AMBER GLASS~~ 2"x6" SS TUBE	Ice	Y		
1	8270C+8082	250 ML AMBER GLASS	Ice	Y		
3	8290	125 ML GLASS	Ice	Y		
4	8290	125 ML GLASS	Ice	Y		
5	PSDA+PROP-DBS	~~PROTECCORE BAG~~ 2"x6" SS TUBE	Ice	Y		
6	RC+RS+ph+PF+I	500 ML POLY	Ice	Y		

RELINQUISHED BY (printed name): (signature):	Date/Time:	RELINQUISHED BY (printed name): (signature):	Date/Time:
	4-20-05 1530		
RECEIVED BY (printed name): (signature):	**Date/Time:**	**RECEIVED BY (printed name): (signature):**	**Date/Time:**
	4/20/05 1530		

Rad Screening Data Release Form

The Following samples were received at the Field Support Facility (FSF) without screening data (list sample number):

These samples will not be shipped until radiological screening data documentation arrives at the FSF. I understand that it is my responsibility to ensure this information arrives at the FSF in a timely manner. If holding times are missed because screening data does not arrive, I will pick up the samples.

The following samples do not require rad screening data for the reasons stated (list sample numbers):

~~SAMPLES WERE~~ ALL

RE73-05- 58842
- 58843
- 58844
- 58845
- 58846
- 58879
- 58878

Reason: SAMPLES WERE SCREENED IN THE FIELD READINGS RECORDED ON SCL.

Print Last Name LEONARD Signature [signature] Date 4/20/05

ALTA

4/22/2005

Alta Project ID: 26084

Ms. Joylene Valdez
Los Alamos National Laboratory
ER Sample Management Office
TA-3, Building 271, DP O1-U
Los Alamos, NM 87545

Dear Ms. Valdez,

The samples listed in the sample inventory were received by Alta Analytical Laboratory on 4/22/2005.

Please find attached:

- Terms and Conditions (reverse side of letter)
- Sample Inventory Report
- Chain-of-Custody
- Additional sample documentation (if applicable).
- Sample Log-In Checklist

Analytical results are scheduled to be reported to you on: 5/13/2005. All sample containers and their contents will be disposed of 90 days subsequent to issuance of a final report.

If you have any questions regarding the status of the work associated with these samples, please contact me at (916) 933-1640.

Sincerely,

Martha Maier

Martha M. Maier
Alta Analytical Laboratory

Alta Analytical Laboratory Inc.
1104 Windfield Way
El Dorado Hills, CA 95762
FAX (916) 673-0106
(916) 933-1640

TERMS AND CONDITIONS

ACCEPTANCE

These terms and conditions are incorporated into, and made a part of, every agreement for services between **ALTA ANALYTICAL LABORATORY, INC.** ("ALTA") and its client ("CLIENT"). The CLIENT accepts these terms and conditions by agreeing to purchase services from ALTA or by sending samples to ALTA.

PAYMENT

The CLIENT shall pay in full within 30 days after the date that ALTA invoices it for services rendered. No payment terms or conditions of purchase orders different from the terms of ALTA will become part of any sales agreement, purchase order, or other document unless specifically approved in writing by ALTA. Should suit be instituted to collect any debts of the undersigned, the client is responsible to pay all actual costs of collection and attorney's fees and interests on the past due amount at the highest rate legally available.

TURNAROUND TIME

Standard turnaround time is 21 days unless a shorter turnaround time is expressly agreed to by ALTA. Turnaround time is defined as the number of calendar days between the first business day after ALTA receives a sample or is authorized by the CLIENT to perform an analysis on a sample, whichever occurs last, and the date that ALTA transmits the final report for that sample to the CLIENT. Rush orders, i.e., those that the CLIENT requests to have analyzed in less than the standard turnaround time, will be subject to the additional charges set forth in the applicable quotation. Delays caused by acts of God, natural disasters, governmental actions, fires, floods and accidents, and other circumstances for which ALTA is not responsible, shall not be counted in determining turnaround time.

SHIPPING

The CLIENT is responsible for delivering its samples to ALTA in good condition and the CLIENT shall bear the risk of any loss of or damage to its samples during shipping. ALTA reserves the right to refuse to accept delivery of, to refuse to analyze and/or to return any sample to the CLIENT that is not delivered to ALTA in good condition or that poses a health or safety risk. The CLIENT shall pay the cost of returning such samples to it.

LIMITATION OF LIABILITY

ALTA makes no representations, guarantees or warranties, express or implied, regarding the fitness of its reports for any particular use or purpose and ALTA shall not be liable for consequential damages under any circumstance. The client's sole remedy is a refund of the amount that is paid ALTA to analyze the sample in question. If ALTA loses or damages a sample, after accepting it for analysis, ALTA's liability shall not exceed the lessor of $50 or the amount that the CLIENT expended to obtain the sample.

INDEMNITY

The CLIENT agrees to indemnify and defend ALTA, and to hold ALTA harmless, against any and all claims, actions, lawsuits, arbitration awards, judgements, damages, liabilities, expenses and costs, including attorneys' fees and court costs, arising out of, or related in any way to, the use to ALTA's reports by the CLIENT or by any third party who obtains ALTA's reports from the CLIENT.

ALTA

Section I: Sample Inventory Report

Date Received: **4/22/2005**

Alta Lab. ID	Client Sample ID
26084-001	RE73-05-58879

Thursday, April 21, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3162SC

Los Alamos
NATIONAL LABORATORY

EXACT COPY OF ORIGINAL
Init BSL 04.22.05

REQUEST NUMBER: 3162S

ANALYSIS TYPE: ORGANIC

26084 2.9°C

ATTN: Shelly Weagraff
Alta Analytical Lab Incorporated
5070 Robert J. Mathews Parkway
El Dorado Hills, CA 95762

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58879	3	125 ML GLASS	8290	ICE	S
RE73-05-58879	4	125 ML GLASS	8290	ICE	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3162S

Relinquished By:		Date	Time	Received By:		Date	Time
M Rivera	M Rivera	4-21-05	1400	B. Benedict	Bettina L. Benedict	4/22/05	0850
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

PRINTED NAME SIGNATURE

EXACT COPY OF ORIGINAL
Init YBB 04/22/05

Attachment 10.B.1

SAMPLE LOG-IN CHECKLIST

ALTA Project No.: 26084

1. Date Samples Arrived: 4/22/05 0850 Initials: YBB Location: WR-2			
2. Time / Date logged in: 1505 4/22/05 Initials: YBB Location: WR-2			
3. Samples Arrived By: (circle) (FedEx) UPS World Courier Other:			
4. Shipping Preservation: (circle) Ice / (Blue Ice) / Dry Ice / None Temp °C 2.9			
	YES	**NO**	**NA**
5. Shipping Container(s) Intact? If not, describe condition in comment section.	✓		
6. Shipping Container(s) Custody Seals Present?	✓		
Intact? If not intact, describe condition in comment section.	✓		
7. Shipping Documentation Present? (circle) Shipping Label (Airbill)	✓		
Tracking Number 6954 7789 2950			
8. Sample Custody Seal(s) Present? No. of Seals 2 or Seal No.	✓		
Intact? If not intact, describe condition in comment section.	✓		
9. Sample Container Intact? If no, indicate sample condition in comment section.	✓		
10. Chain of Custody (COC) or other Sample Documentation Present?	✓		
11. COC/Documentation Acceptable? If no, complete COC Anomaly Form.	✓		
12. Shipping Container (circle): ALTA (Client) Retain or (Return) or Disposed			
13. Container(s) and/or Bottle(s) Requested?		✓	
14. Drinking Water Sample? (HRMS Only) If yes, Acceptable Preservation? Y or N			✓
Preservation Info From? (circle) COC or Sample Container or None Noted			

Comments:

Data Validation Cover Sheet

Section I. Data Record Package Identification

Request Number: 3162S Validation Date: 08-Jun-05 Lab Code: ATLC

Contract Laboratory Name: ALTA Analytical

Validator: Keith Greene Organization: ENV-ECR

Analytical Suite(s): (check all that apply)

- ☐ Volatile Organics
- ☐ Semivolatile Organics
- ☐ Organochlorine Pesticides/Polychlorinated Biphenyls
- ☒ Other: 8290 (describe)
- ☐ High Explosives
- ☐ Inorganics
- ☐ Radiochemistry

Section II. Completeness Check

Yes	No	n/a	(check one)	Yes	No	n/a	(check one)
☒	☐	☐	1. Chain-of-custody form(s)	☒	☐	☐	6. Raw/BSS data
☒	☐	☐	2. Case narrative	☒	☐	☐	7. Quality control forms
☒	☐	☐	3. Sample result forms	☒	☐	☐	8. Quantitation reports
☒	☐	☐	4. Sample chromatograms	☐	☐	☒	9. TICs forms
☒	☐	☐	5. Standard chromatograms	☐	☐	☒	10. TICs mass spectra

Identify any samples in the assigned Request Number that are missing:

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed upon date of resolution and contract laboratory point of contact): No qualification needed.

(Attach additional comment sheets as necessary)

Validator's signature: _____ Date: 6/8/05

ALTA

Sample ID: RE73-05-58879 — **EPA Method 8290**

Client Data		Sample Data		Laboratory Data			
Name:	Los Alamos National Laboratory	Matrix:	Soil	Lab Sample:	26084-001	Date Received:	22-Apr-05
Project:	3162S	Sample Size:	13.69 g	QC Batch No.:	6769	Date Extracted:	6-May-05
Date Collected:	20-Apr-05	%Solids:	73.2	Date Analyzed DB-5:	8-May-05	Date Analyzed DB-225:	10-May-05
Time Collected:	1000						

Analyte	Conc. (pg/g)	DL [a]	EMPC[b]	Qualifiers
2,3,7,8-TCDD	3.22			
1,2,3,7,8-PeCDD	8.40			
1,2,3,4,7,8-HxCDD	7.90			
1,2,3,6,7,8-HxCDD	27.9			
1,2,3,7,8,9-HxCDD	20.9			
1,2,3,4,6,7,8-HpCDD	505			
OCDD	2320			B
2,3,7,8-TCDF	17.1			
1,2,3,7,8-PeCDF	10.0			
2,3,4,7,8-PeCDF	15.4			
1,2,3,4,7,8-HxCDF	12.3			
1,2,3,6,7,8-HxCDF	10.2			
2,3,4,6,7,8-HxCDF	13.0			
1,2,3,7,8,9-HxCDF	3.07			
1,2,3,4,6,7,8-HpCDF	90.8			B
1,2,3,4,7,8,9-HpCDF	4.97			
OCDF	73.5			

	Labeled Standard	%R	LCL-UCL[d]	Qualifiers
IS	13C-2,3,7,8-TCDD	99.5	40 - 135	
	13C-1,2,3,7,8-PeCDD	93.6	40 - 135	
	13C-1,2,3,4,7,8-HxCDD	96.3	40 - 135	
	13C-1,2,3,6,7,8-HxCDD	92.5	40 - 135	
	13C-1,2,3,4,6,7,8-HpCDD	88.8	40 - 135	
	13C-OCDD	82.3	40 - 135	
	13C-2,3,7,8-TCDF	95.6	40 - 135	
	13C-1,2,3,7,8-PeCDF	96.6	40 - 135	
	13C-2,3,4,7,8-PeCDF	93.7	40 - 135	
	13C-1,2,3,4,7,8-HxCDF	97.5	40 - 135	
	13C-1,2,3,6,7,8-HxCDF	94.5	40 - 135	
	13C-2,3,4,6,7,8-HxCDF	96.0	40 - 135	
	13C-1,2,3,7,8,9-HxCDF	88.7	40 - 135	
	13C-1,2,3,4,6,7,8-HpCDF	96.6	40 - 135	
	13C-1,2,3,4,7,8,9-HpCDF	79.9	40 - 135	
	13C-OCDF	72.7	40 - 135	
CRS	37Cl-2,3,7,8-TCDD	103	40 - 135	

Totals		
Total TCDD	96.7	
Total PeCDD	121	
Total HxCDD	299	
Total HpCDD	1040	
Total TCDF	326	D
Total PeCDF	177	D
Total HxCDF	147	B
Total HpCDF	174	B

Toxic Equivalent Quotient (TEQ) Data [e]

TEQ (Min): 35.3

a. Sample specific estimated detection limit.

b. Estimated maximum possible concentration.

c. Method detection limit.

d. Lower control limit - upper control limit.

e. Toxic Equivalent Quotient (TEQ) based on International Toxic Equivalent Factors (ITEF).

Analyst: JMH

Approved By: Martha M. Maier 10-May-2005 14:45

REQUEST NUMBER: 3162S

AMENDED

ANALYSIS TYPE: ORGANIC

26084 2.9°C

Los Alamos
NATIONAL LABORATORY

ATTN: Shelly Weagraff
Alta Analytical Lab Incorporated
5070 Robert J. Mathews Parkway
El Dorado Hills, CA 95762

Please analyze the enclosed samples according to the schedule indicated:

SHIP DATE: 04/21/2005
REPORT DUE: 05/06/2005
TURN AROUND REQ'D: 15

RAD SCREENING: NOT REQ
COMMENTS:

These samples are on:

LANL Request Number: 3162S
Per Agreement Number: 176450010
Project Cost Code: MT3R0223KGT0

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:8290	RE73-05-58879	3	S	04/20/2005	
SW-846:8290	RE73-05-58879	4	S	04/20/2005	

Final Page of REQUEST NUMBER 3162S

DATA VALIDATION COVER SHEET (Example)

SECTION I.

REQUEST NUMBER: 31625 COST CODE: _____

VALIDATION DATE: _____

LAB NAME: ATA LAB CODE: _____

VALIDATOR: _____ ORGANIZATION: _____

ANALYTICAL SUITE: ___ VOLATILES ___ HIGH EXPLOSIVES

___ SEMIVOLATILES ___ INORGANICS

___ PESTICIDES/AROCLORS ___ RADIOCHEMISTRY

OTHER (describe) _____

SECTION II. COMPLETENESS CHECKLIST

Item	Present? (Y/N/NA)	Item	Present? (Y/N/NA)
1. COC form(s)		2. Case Narrative	
3. Sample Results		4. Sample Chromatograms	
5. Standard Chromatograms		6. Quantitation Reports	
7. QC Forms			

Identify any samples in the assigned Request Number that are missing:

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

Comments: include information about requests to the laboratory and agreed upon date of resolution and lab contact: (Attach additional comment sheets as necessary)

_____

_____

_____

Signature/1st validation: _____ Date/1st validation: _____

Signature/2nd validation: _____ Date/2nd validation: _____

ALTA

May 10, 2005

Alta Project I.D.: 26084

Ms. Joylene Valdez
Los Alamos National Laboratory
ER Sample Management Office
TA-3, Building 271, DP O1-U
Los Alamos, NM 87545

RECD MAY 12 2005

Dear Ms. Valdez,

Enclosed are the results for the one soil sample received at Alta Analytical Laboratory on April 22, 2005 under your Project Name "3162S". This sample was extracted and analyzed using EPA Method 8290 for tetra-through-octa chlorinated dioxins and furans. A standard turnaround time was provided for this work.

The following report consists of a Sample Inventory (Section I), Analytical Results (Section II) and the Appendix, which contains the chain-of-custody, a list of data qualifiers and abbreviations, Alta's current certifications, and copies of the raw data (if requested).

Alta Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-933-1640 or by email at mmaier@altalab.com. Thank you for choosing Alta as part of your analytical support team.

Sincerely,

Martha Maier

Martha M. Maier
Director of HRMS Services

ACCREDITED IN ACCORDANCE WITH nelac

Alta Analytical Laboratory certifies that the report herein meets all the requirements set forth by NELAC for those applicable test methods. This report should not be reproduced except in full without the written approval of ALTA.

Section I: Sample Inventory Report

Date Received: **4/22/2005**

Alta Lab. ID	Client Sample ID
26084-001	RE73-05-58879

SECTION II

ALTA

Method Blank — **EPA Method 8290**

Matrix: Soil | QC Batch No.: 6769 | Lab Sample: 0-MB001

Sample Size: 10 g | Date Extracted: 6-May-05 | Date Analyzed DB-5: 8-May-05 | Date Analyzed DB-225: NA

Analyte	Conc. (pg/g)	DL [a]	EMPC [b]	Qualifiers
2,3,7,8-TCDD	ND	0.0669		
1,2,3,7,8-PeCDD	ND	0.0617		
1,2,3,4,7,8-HxCDD	ND	0.108		
1,2,3,6,7,8-HxCDD	ND	0.103		
1,2,3,7,8,9-HxCDD	ND	0.0996		
1,2,3,4,6,7,8-HpCDD	ND	0.0881		
OCDD	0.596			J
2,3,7,8-TCDF	ND	0.0683		
1,2,3,7,8-PeCDF	ND	0.121		
2,3,4,7,8-PeCDF	ND	0.109		
1,2,3,4,7,8-HxCDF	ND		0.0899	
1,2,3,6,7,8-HxCDF	ND	0.0527		
2,3,4,6,7,8-HxCDF	ND	0.0312		
1,2,3,7,8,9-HxCDF	ND	0.0553		
1,2,3,4,6,7,8-HpCDF	0.202			J
1,2,3,4,7,8,9-HpCDF	ND	0.0849		
OCDF	ND	0.256		

Labeled Standard		%R	LCL-UCL [d]	Qualifiers
IS	13C-2,3,7,8-TCDD	96.1	40 - 135	
	13C-1,2,3,7,8-PeCDD	91.9	40 - 135	
	13C-1,2,3,4,7,8-HxCDD	93.3	40 - 135	
	13C-1,2,3,6,7,8-HxCDD	93.1	40 - 135	
	13C-1,2,3,4,6,7,8-HpCDD	82.6	40 - 135	
	13C-OCDD	66.0	40 - 135	
	13C-2,3,7,8-TCDF	93.3	40 - 135	
	13C-1,2,3,7,8-PeCDF	95.7	40 - 135	
	13C-2,3,4,7,8-PeCDF	91.9	40 - 135	
	13C-1,2,3,4,7,8-HxCDF	99.8	40 - 135	
	13C-1,2,3,6,7,8-HxCDF	100	40 - 135	
	13C-2,3,4,6,7,8-HxCDF	96.7	40 - 135	
	13C-1,2,3,7,8,9-HxCDF	89.3	40 - 135	
	13C-1,2,3,4,6,7,8-HpCDF	89.5	40 - 135	
	13C-1,2,3,4,7,8,9-HpCDF	69.6	40 - 135	
	13C-OCDF	61.1	40 - 135	
CRS	37Cl-2,3,7,8-TCDD	95.2	40 - 135	

Totals

Total TCDD	ND	0.0669	
Total PeCDD	ND	0.0617	
Total HxCDD	ND	0.103	
Total HpCDD	ND	0.0881	
Total TCDF	ND	0.0683	
Total PeCDF	ND	0.115	
Total HxCDF	0.156		0.246
Total HpCDF	0.202		

Toxic Equivalent Quotient (TEQ) Data [e]

TEQ (Min): 0.00262

a. Sample specific estimated detection limit.

b. Estimated maximum possible concentration.

c. Method detection limit.

d. Lower control limit - upper control limit.

e. Toxic Equivalent Quotient (TEQ) based on International Toxic Equivalent Factors (ITEF).

Analyst: RAS

Approved By: Martha M. Maier 10-May-2005 14:45

ALTA

OPR Results **EPA Method 8290**

Matrix:	Soil	QC Batch No.:	6769	Lab Sample:	0-OPR001
Sample Size:	10 g	Date Extracted:	6-May-05	Date Analyzed DB-5:	8-May-05
				Date Analyzed DB-225:	NA

Analyte	Spike Conc.	Conc. (ng/mL)	OPR Limits
2,3,7,8-TCDD	10.0	9.97	7 - 13
1,2,3,7,8-PeCDD	50.0	50.5	35 - 65
1,2,3,4,7,8-HxCDD	50.0	50.0	35 - 65
1,2,3,6,7,8-HxCDD	50.0	51.2	35 - 65
1,2,3,7,8,9-HxCDD	50.0	49.2	35 - 65
1,2,3,4,6,7,8-HpCDD	50.0	50.3	35 - 65
OCDD	100	100	70 - 130
2,3,7,8-TCDF	10.0	10.2	7 - 13
1,2,3,7,8-PeCDF	50.0	50.7	35 - 65
2,3,4,7,8-PeCDF	50.0	50.5	35 - 65
1,2,3,4,7,8-HxCDF	50.0	49.6	35 - 65
1,2,3,6,7,8-HxCDF	50.0	51.1	35 - 65
2,3,4,6,7,8-HxCDF	50.0	49.7	35 - 65
1,2,3,7,8,9-HxCDF	50.0	51.0	35 - 65
1,2,3,4,6,7,8-HpCDF	50.0	49.7	35 - 65
1,2,3,4,7,8,9-HpCDF	50.0	50.4	35 - 65
OCDF	100	99.8	70 - 130

	Labeled Standard	%R	LCL-UCL
IS	13C-2,3,7,8-TCDD	100	40 - 135
	13C-1,2,3,7,8-PeCDD	93.7	40 - 135
	13C-1,2,3,4,7,8-HxCDD	93.3	40 - 135
	13C-1,2,3,6,7,8-HxCDD	92.0	40 - 135
	13C-1,2,3,4,6,7,8-HpCDD	76.3	40 - 135
	13C-OCDD	64.0	40 - 135
	13C-2,3,7,8-TCDF	94.7	40 - 135
	13C-1,2,3,7,8-PeCDF	96.7	40 - 135
	13C-2,3,4,7,8-PeCDF	93.5	40 - 135
	13C-1,2,3,4,7,8-HxCDF	94.9	40 - 135
	13C-1,2,3,6,7,8-HxCDF	93.8	40 - 135
	13C-2,3,4,6,7,8-HxCDF	96.4	40 - 135
	13C-1,2,3,7,8,9-HxCDF	85.7	40 - 135
	13C-1,2,3,4,6,7,8-HpCDF	88.0	40 - 135
	13C-1,2,3,4,7,8,9-HpCDF	68.0	40 - 135
	13C-OCDF	59.2	40 - 135
CRS	37Cl-2,3,7,8-TCDD	102	40 - 135

Analyst: RAS

Approved By: Martha M. Maier 10-May-2005 14:45

ALTA

Sample ID: RE73-05-58879 **EPA Method 8290**

Client Data		Sample Data		Laboratory Data			
Name:	Los Alamos National Laboratory	Matrix:	Soil	Lab Sample:	26084-001	Date Received:	22-Apr-05
Project:	3162S	Sample Size:	13.69 g	QC Batch No.:	6769	Date Extracted:	6-May-05
Date Collected:	20-Apr-05	%Solids:	73.2	Date Analyzed DB-5:	8-May-05	Date Analyzed DB-225:	10-May-05
Time Collected:	1000						

Analyte	Conc. (pg/g)	DL [a]	EMPC[b]	Qualifiers
2,3,7,8-TCDD	3.22			
1,2,3,7,8-PeCDD	8.40			
1,2,3,4,7,8-HxCDD	7.90			
1,2,3,6,7,8-HxCDD	27.9			
1,2,3,7,8,9-HxCDD	20.9			
1,2,3,4,6,7,8-HpCDD	505			
OCDD	2320			B
2,3,7,8-TCDF	17.1			
1,2,3,7,8-PeCDF	10.0			
2,3,4,7,8-PeCDF	15.4			
1,2,3,4,7,8-HxCDF	12.3			
1,2,3,6,7,8-HxCDF	10.2			
2,3,4,6,7,8-HxCDF	13.0			
1,2,3,7,8,9-HxCDF	3.07			
1,2,3,4,6,7,8-HpCDF	90.8			B
1,2,3,4,7,8,9-HpCDF	4.97			
OCDF	73.5			

	Labeled Standard	%R	LCL-UCL[d]	Qualifiers
IS	13C-2,3,7,8-TCDD	99.5	40 - 135	
	13C-1,2,3,7,8-PeCDD	93.6	40 - 135	
	13C-1,2,3,4,7,8-HxCDD	96.3	40 - 135	
	13C-1,2,3,6,7,8-HxCDD	92.5	40 - 135	
	13C-1,2,3,4,6,7,8-HpCDD	88.8	40 - 135	
	13C-OCDD	82.3	40 - 135	
	13C-2,3,7,8-TCDF	95.6	40 - 135	
	13C-1,2,3,7,8-PeCDF	96.6	40 - 135	
	13C-2,3,4,7,8-PeCDF	93.7	40 - 135	
	13C-1,2,3,4,7,8-HxCDF	97.5	40 - 135	
	13C-1,2,3,6,7,8-HxCDF	94.5	40 - 135	
	13C-2,3,4,6,7,8-HxCDF	96.0	40 - 135	
	13C-1,2,3,7,8,9-HxCDF	88.7	40 - 135	
	13C-1,2,3,4,6,7,8-HpCDF	96.6	40 - 135	
	13C-1,2,3,4,7,8,9-HpCDF	79.9	40 - 135	
	13C-OCDF	72.7	40 - 135	
CRS	37Cl-2,3,7,8-TCDD	103	40 - 135	

Totals		
Total TCDD	96.7	
Total PeCDD	121	
Total HxCDD	299	
Total HpCDD	1040	
Total TCDF	326	D
Total PeCDF	177	D
Total HxCDF	147	B
Total HpCDF	174	B

Toxic Equivalent Quotient (TEQ) Data [e]

TEQ (Min): 35.3

a. Sample specific estimated detection limit.

b. Estimated maximum possible concentration.

c. Method detection limit.

d. Lower control limit - upper control limit.

e. Toxic Equivalent Quotient (TEQ) based on International Toxic Equivalent Factors (ITEF).

Analyst: JMH

Approved By: Martha M. Maier 10-May-2005 14:45

APPENDIX

DATA QUALIFIERS & ABBREVIATIONS

B	**This compound was also detected in the method blank.**
D	**The amount reported is the maximum possible concentration due to possible chlorinated diphenylether interference.**
H	**The signal-to-noise ratio is greater than 10:1.**
I	**Chemical Interference**
J	**The amount detected is below the Lower Calibration Limit of the instrument.**
P	**Homologue totals include any coplanar PCBs detected at concentrations less than the reporting limit.**
*	**See Cover Letter**
Conc.	**Concentration**
DL	**Sample-specific estimated detection limit**
MDL	**The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero in the matrix tested.**
EMPC	**Estimated Maximum Possible Concentration**
NA	**Not applicable**
RL	**Reporting Limit – concentrations that correspond to low calibration point**
ND	**Not Detected**
TEQ	**Toxic Equivalency**

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

The control limits are "interim limits only" until in-house limits are utilized.

NELAP — (Primary AA: California, Certificate No. 02102CA)

Department of the Navy

U.S. Army Corps of Engineers

U.S. EPA Region 5

Bureau of Reclamation — Mid-Pacific Region — (MP-470, Res-1.10)

Commonwealth of Kentucky — (Certificate No. 90063)

Commonwealth of Virginia — (Certificate No. 00013)

State of Alaska, Department of Environmental Conservation — (Certificate No. OS-00197)

State of Arizona — (Certificate No. AZ0639)

State of Arkansas, Department of Health — (Approval granted through CA certification)

State of Arkansas, Department of Environmental Quality

State of California — (Certificate No. 1640)

State of Colorado

State of Connecticut — (Certificate No. PH-0182)

State of Florida — (Certificate No. 87456)

State of Louisiana, Department of Health and Hospitals — (Certificate No. LA000014)

State of Louisiana, Department of Environmental Quality

State of Maine

State of Michigan (Certificate No. 81178087)

State of Mississippi — (Approval granted through CA certification)

State of Nevada — (Certificate No. CA413)

State of New Jersey — (Certificate No. CA003)

State of New York, Department of Health — (Certificate No. 11411)

State of North Carolina — (Certification No. 06700)

State of North Dakota, Department of Health — (Certificate No. R-078)

State of New Mexico

State of Oklahoma – (D9919)

State of Oregon – (Certificate No. CA413)

State of Pennsylvania — (Certificate No. 68-490)

State of South Carolina — (Certificate No. 87002001)

State of Tennessee — (Certificate No. 02996)

State of Texas — (Certificate No. TX247-1000A

State of Utah — (Certificate No. E-201)

State of Washington – (Certification No. C091)

State of Wisconsin — (Certificate No. 998036160)

State of Wyoming — (USEPA Region 8 Ref: 8TMS-Q)

Attachment 10.B.1

SAMPLE LOG-IN CHECKLIST

ALTA Project No.: 26084

1. Date Samples Arrived: 4/28/05 0850 Initials: RLB Location: WR-2				
2. Time / Date logged in: 1505 4/28/05 Initials: RLB Location: WR-2				
3. Samples Arrived By: (circle) (FedEx) UPS World Courier Other:				
4. Shipping Preservation: (circle) Ice / (Blue Ice) / Dry Ice / None Temp °C 2.9				
	YES	**NO**	**NA**	
5. Shipping Container(s) Intact? If not, describe condition in comment section.	✓			
6. Shipping Container(s) Custody Seals Present?	✓			
Intact? If not intact, describe condition in comment section.	✓			
7. Shipping Documentation Present? (circle) Shipping Label (Airbill)	✓			
Tracking Number 6954 7789 2950				
8. Sample Custody Seal(s) Present? No. of Seals 2 or Seal No.	✓			
Intact? If not intact, describe condition in comment section.	✓			
9. Sample Container Intact? If no, indicate sample condition in comment section.	✓			
10. Chain of Custody (COC) or other Sample Documentation Present?	✓			
11. COC/Documentation Acceptable? If no, complete COC Anomaly Form.	✓			
12. Shipping Container (circle): ALTA (Client) Retain or (Return) or Disposed				
13. Container(s) and/or Bottle(s) Requested?		✓		
14. Drinking Water Sample? (HRMS Only) If yes, Acceptable Preservation? Y or N			✓	
Preservation Info From? (circle) COC or Sample Container or None Noted				

Comments:

AMENDED

Los Alamos
NATIONAL LABORATORY

ANALYSIS TYPE: ORGANIC

26084 2.9°C

ATTN: Shelly Weagraff
Alta Analytical Lab Incorporated
5070 Robert J. Mathews Parkway
El Dorado Hills, CA 95762

Please analyze the enclosed samples according to the schedule indicated:

SHIP DATE: 04/21/2005
REPORT DUE: 05/06/2005
TURN AROUND REQ'D: 15

RAD SCREENING: NOT REQ
COMMENTS:

These samples are on:

LANL Request Number: 3162S
Per Agreement Number: 176450010
Project Cost Code: MT3R0223KGT0

LANL ER SMO CONTACT:
Signature: Taylor Ag.

Page 1

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:8290	RE73-05-58879	3	S	04/20/2005	
SW-846:8290	RE73-05-58879	4	S	04/20/2005	

Final Page of REQUEST NUMBER 3162S Page 1

EXTRACTION INFORMATION

PROCESS SHEET

Project No.-AR: 26084-1 of 1

Prep Due: 5/2/2005
Hold Due: 5/4/2005
Project Due: 5/13/2005
TAT: 21
Client: Los Alamos National Laboratory(LOANM01A
Client Manager: Martha M. Maier
Method: EPA Method 8290 | PCDD/F (Tetra - Octa)

Split Type: 6769

Matrix: Soil

LabID	Recon	Client-ID	Description	Date Received	SLoc
001	☑	RE73-05-58879		4/22/2005	WR-2

% SOLID AKR 4/27/05

Instructions:

Report Options

Report Level:
EDD Type:
Report Group: Dioxins NoMDL
Vial Box ID: Scranchie

TEQ Type: EPA(Default) : Min
Samples Reconciled By: AKR 4/27/05

Date Requested 5/2/2005

% Solids

Procedures:

- Tare Balance.
- Add boat and weigh. Record "Boat Wt".
- Add the sample (2-10 g) to the boat and , record "Wet Wt. + Boat Wt." (total).
- Dry in oven overnight @ 107 C.
- Tare Balance.
- Return dish to toploader, record "Residue + Boat Wt.".

Project: 26084-1

ALTA Sample ID	Boat Wt.	Wet Wt. + Boat Wt.	CHEM/DATE	Residue + Boat Wt.	CHEM/DATE	COMMENTS
26084-001	1.25	4.05	[illegible] 4/27/05	3.30	4.28.05	

NOTES:

HRMSGenSolids.rpt

Extraction Set: 6769

Project: 26084

Method(s): EPA Method 8290 | PCDD/F (Tetra - Octa)

Chemist: Christina Vredeveld 5/6/05

C	ALTA Sample ID	G Eqv	Sample Amt. (g)	IS/NS CHEM/ WIT DATE	CRS CHEM/WIT DATE	AP CHEM/Date	ABSG CHEM/Date	AA CHEM/Date	Florisil CHEM/Date	RS CHEM/WIT DATE
☐	0_6769_MB001	(10.00)	(10.00)	CV MK 5/6/05	CV MK 5/7/05	NA	CV 5/7/05	CV 5/7/05	CV 5/7/05	CV MK 5/7/05
☐	0_6769_OPR001	↓	↓	↓	↓	↓	↓	↓	↓	↓
☐	26084_6769_001	13.66	13.69	↓	↓	↓	↓	↓	↓	↓

IS Name

PCDD/F 050420A 10µL (v12)

PCB

PAH

NS Name

PCDD/F 050420B 10µL (v6)

PCB

PAH

CRS Name

PCDD/F 050420C 10µL (v12)

PCB

PAH

RS Name

PCDD/F 050420D 10µL (v10)

PCB

PAH

Cycle Time

5/6

Start: 1630

Stop: 5/7 0836

APP.: SEFUN SOX (SDS)

SOLV: Toluene

Other: N/A

Final Volume(s): 20µL

Check Out:
Chemist: CV 5/6/05

Check-In:
Chemist: CV 5/6/05

Comments:

CALIBRATION DATA

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.: CCAL ID: ST050507D2-1

Contract No.: SAS No.:

Initial Calibration Date: 4-23-05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050507D2 S#1 Analysis Date: 8-MAY-05 Time: 02:34:21

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	10.4	7.8 - 12.9 8.2 - 12.3 (4)
1,2,3,7,8-PeCDD	M+2/M+4	0.63	0.54-0.72	y	49.4	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	49.7	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	48.5	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05-1.43	y	48.1	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	48.2	43.0 - 58.0
OCDD	M+2/M+4	0.91	0.76-1.02	y	99.3	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	y	10.1	8.4 - 12.0 8.6 - 11.6 (4)
1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	51.5	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	50.4	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	50.0	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.27	1.05-1.43	y	48.4	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.29	1.05-1.43	y	48.7	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.29	1.05-1.43	y	49.6	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.05	0.88-1.20	y	48.8	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.04	0.88-1.20	y	49.7	43.0 - 58.0
OCDF	M+2/M+4	0.92	0.76-1.02	y	97.9	63.0 - 159.0

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) Contract-required concentration range as specified in Table 6a, Method 1613, for tetras only.

Analyst: [signature]

Date: 5/9/05

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4-23-05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050507D2 S#1 Analysis Date: 8-MAY-05 Time: 02:34:21

LABELED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	y	101	82.0 - 121.0 85.0 - 117.0 (5)
13C-1,2,3,7,8-PeCDD	M+2/M+4	0.64	0.54-0.72	y	105	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.35	1.05-1.43	y	107	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.20	1.05-1.43	y	110	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	110	72.0 - 138.0
13C-OCDD	M+2/M+4	0.91	0.76-1.02	y	194	96.0 - 415.0
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	y	97.5	71.0 - 140.0 76.0 - 131.0 (5)
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	109	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	102	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.54	0.43-0.59	y	125	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	127	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	116	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.53	0.43-0.59	y	108	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37-0.51	y	114	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.46	0.37-0.51	y	112	77.0 - 129.0
13C-OCDF	M+2/M+4	0.90	0.76-1.02	y	194	96.0 - 415.0
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					8.84	7.9 - 12.7 8.3 - 12.1 (5)

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range, as specified in Table 6, Method 1613.

(4) No ion abundance ratio; report concentration found.

(5) Contract-required concentration range, as specified in Table 6a, Method 1613, for tetras only.

Analyst: [signature]

Date: 5/8/05

EPA METHOD 8290

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.: CCAL ID: ST050507D2-1

Contract No.: SAS No.:

Initial Calibration Date: 4-23-05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050507D2 S#1 Analysis Date: 8-MAY-05 Time: 02:34:21

	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	10.4	8.00 - 12.0
1,2,3,7,8-PeCDD	M+2/M+4	0.63	0.54-0.72	y	49.4	40.0 - 60.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	49.7	40.0 - 60.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	48.5	40.0 - 60.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05-1.43	y	48.1	40.0 - 60.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	48.2	40.0 - 60.0
OCDD	M+2/M+4	0.91	0.76-1.02	y	99.3	80.0 - 120
2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	y	10.1	8.00 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	51.5	40.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	50.4	40.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	50.0	40.0 - 60.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.27	1.05-1.43	y	48.4	40.0 - 60.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.29	1.05-1.43	y	48.7	40.0 - 60.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.29	1.05-1.43	y	49.6	40.0 - 60.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.05	0.88-1.20	y	48.8	40.0 - 60.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.04	0.88-1.20	y	49.7	40.0 - 60.0
OCDF	M+2/M+4	0.92	0.76-1.02	y	97.9	80.0 - 120

Analyst: [signature]

Date: 5/8/05

EPA METHOD 8290

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4-23-05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050507D2 S#1 Analysis Date: 8-MAY-05 Time: 02:34:21

LABELED COMPOUNDS	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	y	101	70.0 - 130
13C-1,2,3,7,8-PeCDD	M+2/M+4	0.64	0.54-0.72	y	105	70.0 - 130
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.35	1.05-1.43	y	107	70.0 - 130
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.20	1.05-1.43	y	110	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	110	70.0 - 130
13C-OCDD	M+2/M+4	0.91	0.76-1.02	y	194	140 - 260
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	y	97.5	70.0 - 130
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	109	70.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	102	70.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.54	0.43-0.59	y	125	70.0 - 130
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	127	70.0 - 130
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	116	70.0 - 130
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.53	0.43-0.59	y	108	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37-0.51	y	114	70.0 - 130
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.46	0.37-0.51	y	112	70.0 - 130
13C-OCDF	M+2/M+4	0.90	0.76-1.02	y	194	140 - 260
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD					8.84	7.00 - 13.0

Analyst: [signature]

Date: 5/10/05

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: VG-7 Initial Calibration Date: 4-23-04

RT Window Data Filename: 050507D2 S#1 Analysis Date: 8-MAY-05 Time: 02:34:21

DB-5 IS Data Filename: 050507D2 S#1 Analysis Date: 8-MAY-05 Time: 02:34:21

DB_225 IS Data Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:12	1,3,6,8-TCDF (F)	20:58
1,2,8,9-TCDD (L)	27:51	1,2,8,9-TCDF (L)	28:00
1,2,4,7,9-PeCDD (F)	29:31	1,3,4,6,8-PeCDF (F)	27:56
1,2,3,8,9-PeCDD (L)	32:01	1,2,3,8,9-PeCDF (L)	32:17
1,2,4,6,7,9-HxCDD (F)	33:27	1,2,3,4,6,8-HxCDF (F)	32:54
1,2,3,7,8,9-HxCDD (L)	35:26	1,2,3,7,8,9-HxCDF (L)	35:50
1,2,3,4,6,7,9-HpCDD (F)	38:02	1,2,3,4,6,7,8-HpCDF (F)	37:38
1,2,3,4,6,7,8-HpCDD (L)	38:57	1,2,3,4,7,8,9-HpCDF (L)	39:31

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5).

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

COMPARED PEAKS (1)	% VALLEY HEIGHT BETWEEN
	<25%

(1) To meet contract requirements, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: [signature] WJC

Date: 5-9-05

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4-23-05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050507D2 S#1 Analysis Date: 8-MAY-05 Time: 02:34:21

Compounds Using 13C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.001	0.999-1.002
LABELED COMPOUNDS			
13C-2,3,7,8-TCDF	13C-1,2,3,4-TCDD	0.993	0.923-1.103
13C-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.024	0.976-1.043
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.025	0.989-1.052
13C-1,2,3,7,8-PeCDF	13C-1,2,3,4-TCDD	1.158	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.193	1.011-1.526
13C-1,2,3,7,8-PeCDD	13C-1,2,3,4-TCDD	1.204	1.000-1.567

(1) Contract-required limits for
Relative Retention Times (RRT)
as specified in Table 2, Method 1613. 10/94

Analyst: [signature]

Date: 5/8/05

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4-23-05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050507D2 S#1 Analysis Date: 8-MAY-05 Time: 02:34:21

Compounds Using 13C-123789-HxCDD as Internal Standard

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.000	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.000	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.000	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.001	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.000	0.999-1.001
OCDD	13C-OCDD	1.001	0.999-1.001
OCDF	13C-OCDD	1.006	0.999-1.008
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDF	13C-1,2,3,7,8,9-HxCDD	0.963	0.944-0.970
13C-1,2,3,6,7,8-HxCDF	13C-1,2,3,7,8,9-HxCDD	0.966	0.949-0.975
13C-2,3,4,6,7,8-HxCDF	13C-1,2,3,7,8,9-HxCDD	0.984	0.959-1.021
13C-1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDD	1.011	0.977-1.047
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.988	0.977-1.000
13C-1,2,3,6,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.991	0.981-1.003
13C-1,2,3,4,6,7,8-HpCDF	13C-1,2,3,7,8,9-HxCDD	1.063	1.043-1.085
13C-1,2,3,4,6,7,8-HpCDD	13C-1,2,3,7,8,9-HxCDD	1.100	1.086-1.110
13C-1,2,3,4,7,8,9-HpCDF	13C-1,2,3,7,8,9-HxCDD	1.116	1.057-1.151
13C-OCDD	13C-1,2,3,7,8,9-HxCDD	1.193	1.032-1.311
13C-OCDF	13C-1,2,3,7,8,9-HxCDD	1.199	1.032-1.311

(1) Contract-required limits for
Relative Retention Times (RRT)
as specified in Table 2, Method 1613. 10/94

Analyst: [signature]

Date: 5/16/01

Client ID: 1613 CS3 050420H Filename: 050507D2 S:1 Acq: 8-MAY-05 02:34:21
Lab ID: ST050507D2-1 GC Column ID: db-5 ICal: 1613VG7-4-23-05 wt/vol: 1.000

ConCal: ST050507D2-1
EndCAL: ST050507D2-2

	Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL
	2,3,7,8-TCDD	8.62e+06	0.79 y	1.06	26:56	10.4			* 2.5	*
	1,2,3,7,8-PeCDD	3.16e+07	0.63 y	0.99	31:39	49.4			* 2.5	*
	1,2,3,4,7,8-HxCDD	2.28e+07	1.25 y	1.11	34:59	49.7			* 2.5	*
	1,2,3,6,7,8-HxCDD	2.61e+07	1.28 y	1.07	35:07	48.5			* 2.5	*
	1,2,3,7,8,9-HxCDD	2.54e+07	1.27 y	1.15	35:26	48.1			* 2.5	*
	1,2,3,4,6,7,8-HpCDD	2.12e+07	1.04 y	1.05	38:57	48.2			* 2.5	*
	OCDD	3.41e+07	0.91 y	1.04	42:16	99.3			* 2.5	
	2,3,7,8-TCDF	1.11e+07	0.77 y	1.05	26:06	10.1			* 2.5	*
	1,2,3,7,8-PeCDF	5.07e+07	1.59 y	0.95	30:26	51.5			* 2.5	*
	2,3,4,7,8-PeCDF	5.11e+07	1.59 y	1.08	31:22	50.4			* 2.5	*
	1,2,3,4,7,8-HxCDF	4.31e+07	1.25 y	1.19	34:06	50.0			* 2.5	*
	1,2,3,6,7,8-HxCDF	4.85e+07	1.27 y	1.22	34:14	48.4			* 2.5	*
	2,3,4,6,7,8-HxCDF	4.03e+07	1.29 y	1.20	34:51	48.7			* 2.5	*
	1,2,3,7,8,9-HxCDF	3.11e+07	1.29 y	1.13	35:50	49.6			* 2.5	*
	1,2,3,4,6,7,8-HpCDF	3.55e+07	1.05 y	1.38	37:38	48.8			* 2.5	*
	1,2,3,4,7,8,9-HpCDF	2.76e+07	1.04 y	1.23	39:31	49.7			* 2.5	*
	OCDF	4.19e+07	0.92 y	1.02	42:29	97.9			* 2.5	*
IS	13C-2,3,7,8-TCDD	7.86e+07	0.78 y	1.12	26:55	101				
IS	13C-1,2,3,7,8-PeCDD	6.47e+07	0.64 y	0.89	31:38	105				
IS	13C-1,2,3,4,7,8-HxCDD	4.12e+07	1.35 y	0.83	34:59	107				
IS	13C-1,2,3,6,7,8-HxCDD	5.03e+07	1.20 y	1.00	35:05	110				
IS	13C-1,2,3,4,6,7,8-HpCDD	4.20e+07	1.06 y	0.82	38:57	110				
IS	13C-OCDD	6.63e+07	0.91 y	0.74	42:15	194				
IS	13C-2,3,7,8-TCDF	1.04e+08	0.79 y	1.02	26:05	97.5				
IS	13C-1,2,3,7,8-PeCDF	1.03e+08	1.58 y	0.90	30:25	109				
IS	13C-2,3,4,7,8-PeCDF	9.41e+07	1.58 y	0.87	31:21	102				
IS	13C-1,2,3,4,7,8-HxCDF	7.28e+07	0.54 y	1.27	34:05	125				
IS	13C-1,2,3,6,7,8-HxCDF	8.22e+07	0.51 y	1.40	34:13	127				
IS	13C-2,3,4,6,7,8-HxCDF	6.89e+07	0.52 y	1.29	34:50	116				
IS	13C-1,2,3,7,8,9-HxCDF	5.57e+07	0.53 y	1.12	35:48	108				
IS	13C-1,2,3,4,6,7,8-HpCDF	5.29e+07	0.45 y	1.01	37:37	114				
IS	13C-1,2,3,4,7,8,9-HpCDF	4.52e+07	0.46 y	0.88	39:30	112				
IS	13C-OCDF	8.39e+07	0.90 y	0.94	42:28	194				
C/Up	37Cl-2,3,7,8-TCDD	3.80e+06		0.62	26:56	8.84				
RS/RT	13C-1,2,3,4-TCDD	6.91e+07	0.80 y	1.00	26:17	100				
RS	13C-1,2,3,4-TCDF	1.05e+08	0.78 y	1.00	24:43	100				
RS/RT	13C-1,2,3,7,8,9-HxCDD	4.61e+07	1.26 y	1.00	35:24	100				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	47.9	48.4		*	*
Total Penta-Dioxins	143	143		*	*
Total Hexa-Dioxins	205	206		*	*
Total Hepta-Dioxins	96.5	97.8		*	*
Total Tetra-Furans	30.3	30.6		*	*
Total Penta-Furans	183	186		*	*
Total Hexa-Furans	247	249		*	*
Total Hepta-Furans	98.9	101		*	*

Rec	Qual
101	
105	
107	
110	
110	
96.8	
97.5	
109	
102	
125	
127	
116	
108	
114	
112	
97.0	
22.1	

Intergrations by Analyst: 4/c

Date: 5/8/07

Alta Analytical Laboratory - Injection Log Run file: 050507D2 Instrument ID: VG-7 GC Column ID: db-5

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
050507D2	1	ST050507D2-1 1613 CS3 050420H	DMS	8-MAY-05	02:34:21	ST050507D2-1	ST050507D2-2
050507D2	2	0_6769_OPR001	DMS	8-MAY-05	03:23:27	ST050507D2-1	ST050507D2-2
050507D2	3	SOLVENT BLANK	DMS	8-MAY-05	04:12:32	ST050507D2-1	ST050507D2-2
050507D2	4	0_6769_MB001	DMS	8-MAY-05	05:01:38	ST050507D2-1	ST050507D2-2
050507D2	5	26080_6769_001 1 0g	DMS	8-MAY-05	05:50:46	ST050507D2-1	ST050507D2-2
050507D2	6	26080_6769_002 2 0g	DMS	8-MAY-05	06:39:52	ST050507D2-1	ST050507D2-2
050507D2	7	26080_6769_003 3 0g	DMS	8-MAY-05	07:29:00	ST050507D2-1	ST050507D2-2
050507D2	8	26080_6769_004 4 0g	DMS	8-MAY-05	08:18:06	ST050507D2-1	ST050507D2-2
050507D2	9	26084_6769_001 RE73-05-58879 0g	DMS	8-MAY-05	09:07:13	ST050507D2-1	ST050507D2-2
050507D2	10	26100_6769_001 MD54-05-57952 0g	DMS	8-MAY-05	09:56:19	ST050507D2-1	ST050507D2-2
050507D2	11	26100_6769_002 MD54-05-57959 0g	DMS	8-MAY-05	10:45:24	ST050507D2-1	ST050507D2-2
050507D2	12	26101_6769_001 MD54-05-58185 0g	DMS	8-MAY-05	11:34:30	ST050507D2-1	ST050507D2-2
050507D2	13	26101_6769_002 MD54-05-58192 0g	DMS	8-MAY-05	12:23:35	ST050507D2-1	ST050507D2-2
050507D2	14	26111_6769_001 SLUDGE 0g	DMS	8-MAY-05	13:12:41	ST050507D2-1	ST050507D2-2
050507D2	15	SOLVENT BLANK	DMS	8-MAY-05	14:01:44	ST050507D2-1	ST050507D2-2
050507D2	16	ST050507D2-2 1613 CS3 050420H	DMS	8-MAY-05	14:50:50	ST050507D2-1	ST050507D2-2

HRMS STANDARDS REVIEW CHECKLIST

Attachment 7.F.2

Beginning Calibration ID: ST050702-1 Ending Calibration ID: ST050702-2

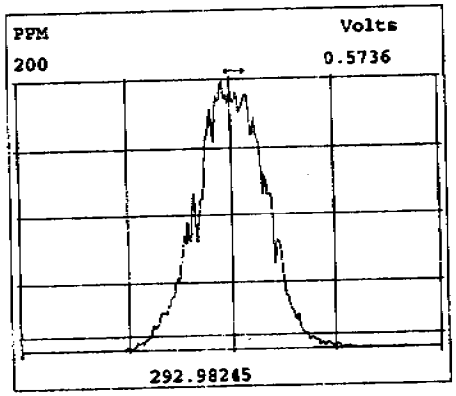
	Beg.CAL	End. CAL	COMMENTS
Calibration Verification/Form 4A/B: Ion abundance within QC limits?	✓	✓	
Calibration Verification/Form 4A/B: Conc within Conc. range?	✓	✓	
Form 5: First and last eluters present? (N/A for DB225)	✓	✓	
Form 6A/6B: Relative Retention Times within limits? (N/A for M23, TO9, 1668, DB225)	✓	✓	
Cal. Ver. Named correctly? (Ex. ST-Year-Month-Day-VG ID)	✓	✓	
Cal. Verification forms signed and dated for review?	✓	✓	
Appropriate ICAL referenced?	✓	✓	
Run log: Standards named correctly? Correct Instrument listed?	✓	✓	
Run log: Samples within 12-hour shift?		✓	
Mass resolution > 10,000	✓	✓	
2378-TCDD/TCDF valley < 25% (N/A for 1668)	✓	✓	
All appropriate peaks integrated correctly?	✓	✓	
Manual integrations included?	✓	✓	
8280: Ratios within limits?		N/A	
8280: S/N > 2.5:1		↓	
8280: CS1 within 12 hrs?		↓	

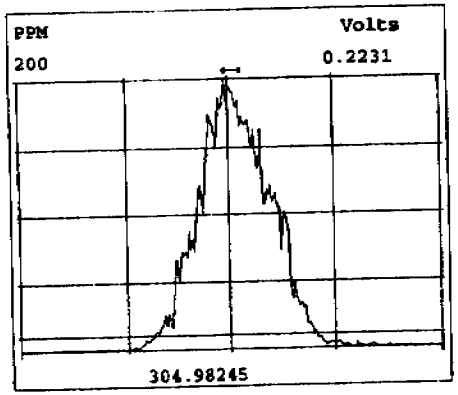
Reviewer Initial/Date: MS 5/9/05 QA* (Random 5% Check) Initial/Date: _____

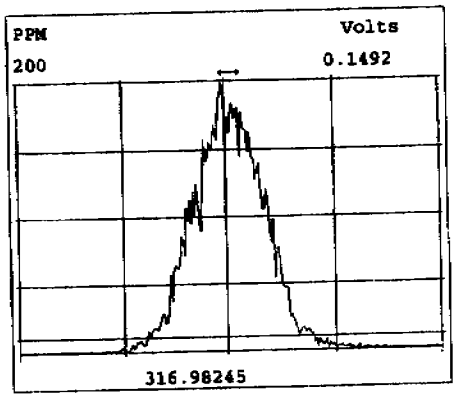
Alta Analytical Laboratory
El Dorado Hills, CA 95762

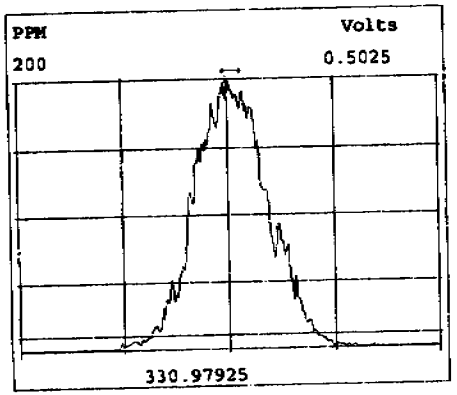
Peak Locate Examination: 8-MAY-2005:02:29 File:RES_CHECK

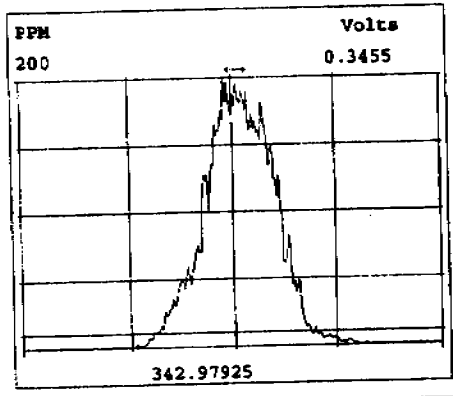
Experiment:OCDD_DB5 Function:1 Reference:PFK

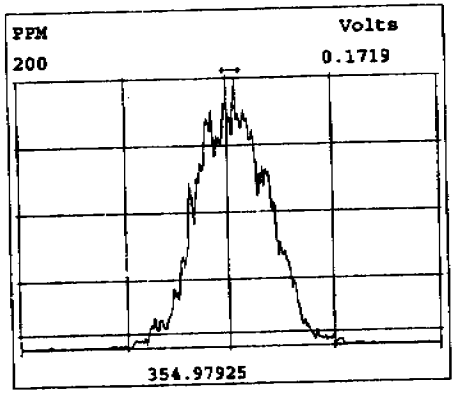


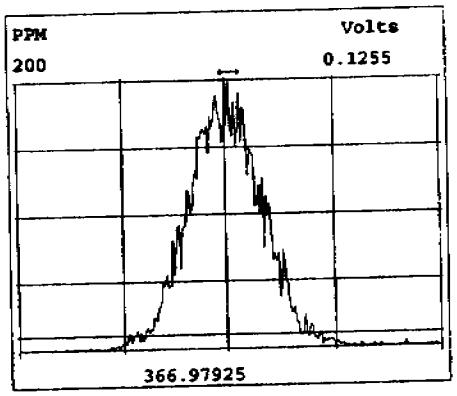


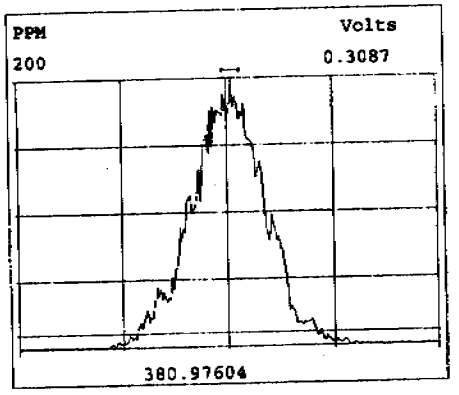


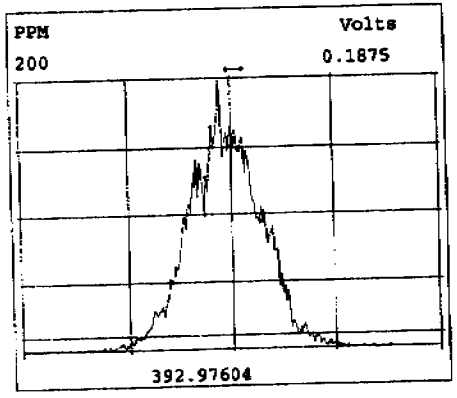


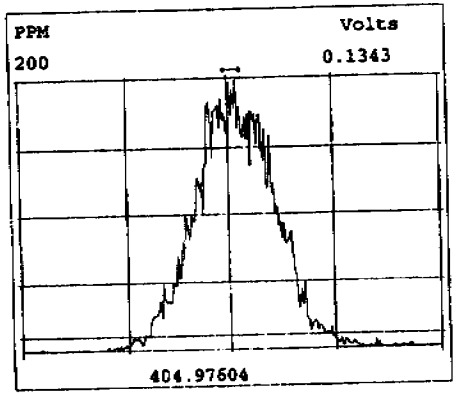


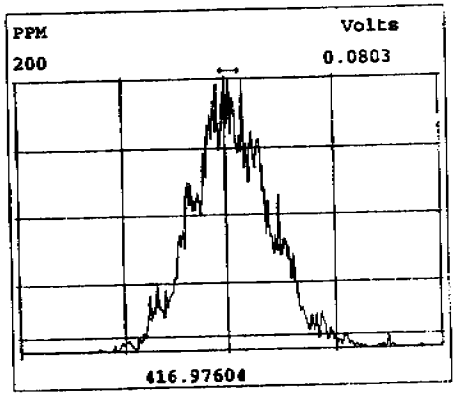






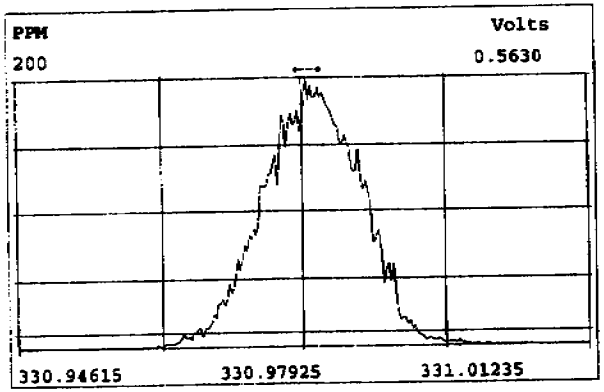


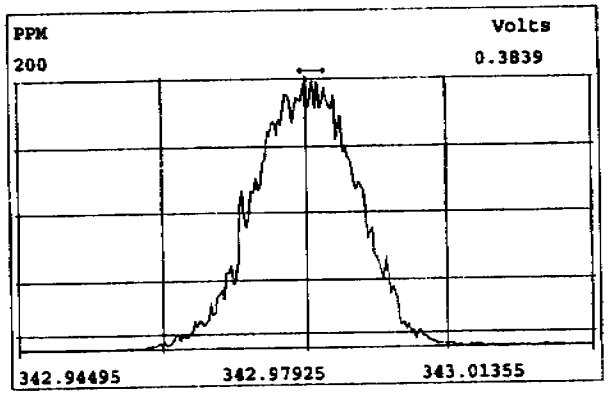


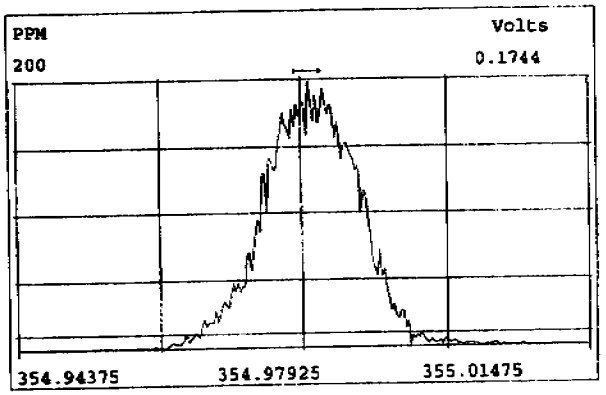


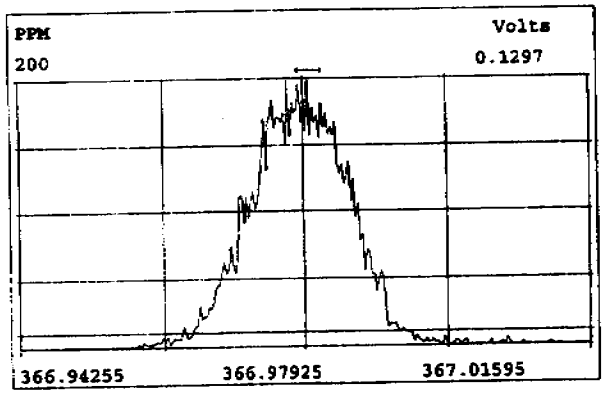
Peak Locate Examination: 8-MAY-2005:02:30 File:RES_CHECK

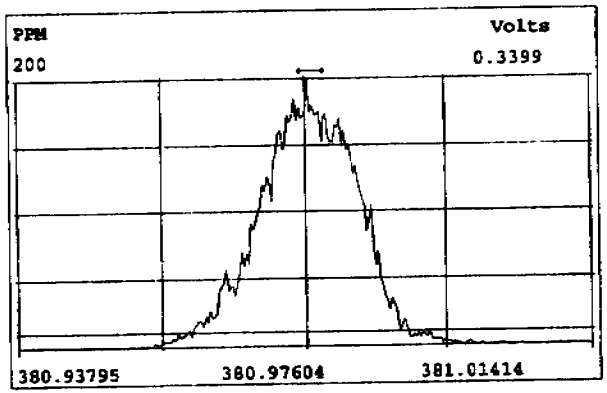
Experiment:OCDD_DB5 Function:2 Reference:PFK

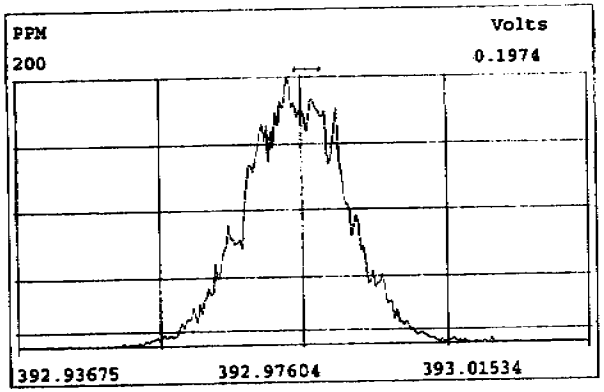


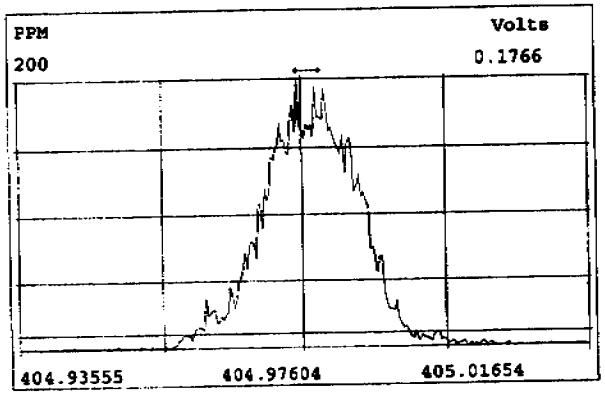


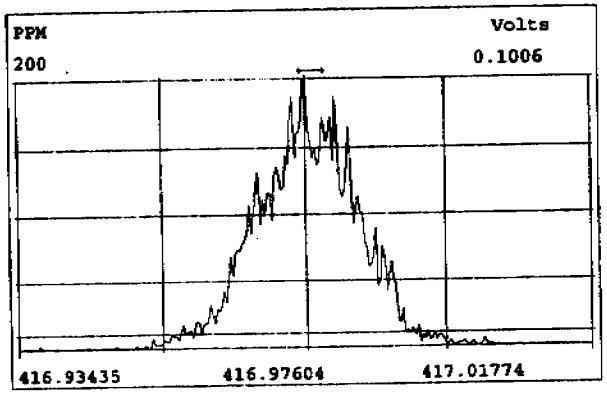






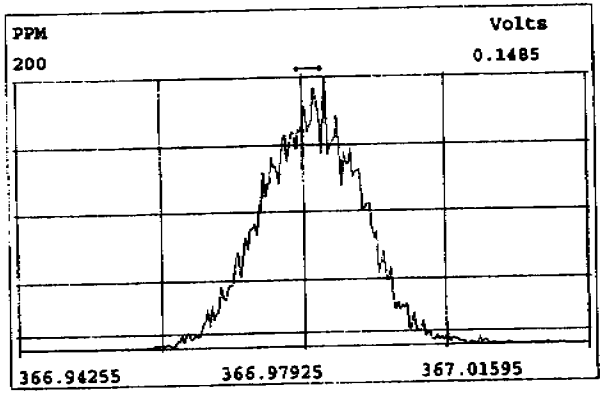


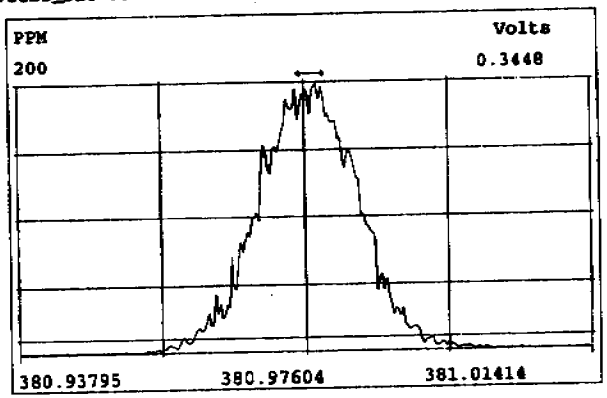


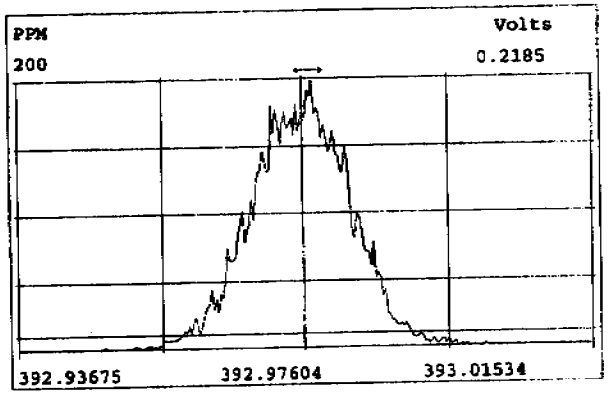


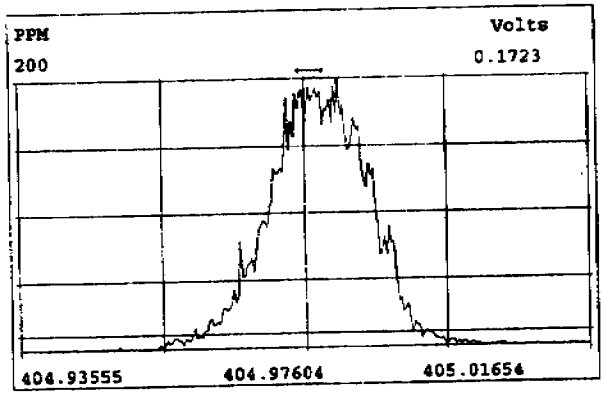
Peak Locate Examination: 8-MAY-2005:02:31 File:RES_CHECK

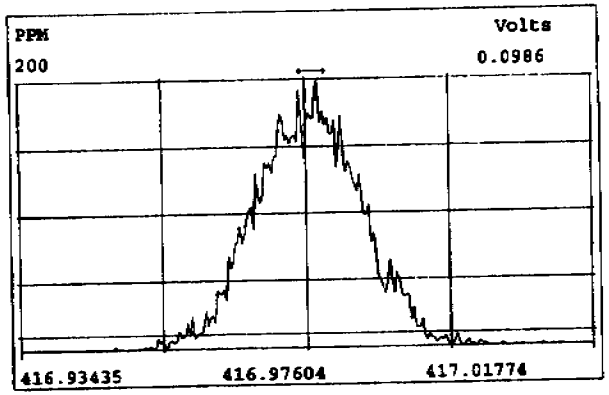
Experiment:OCDD_DB5 Function:3 Reference:PFK

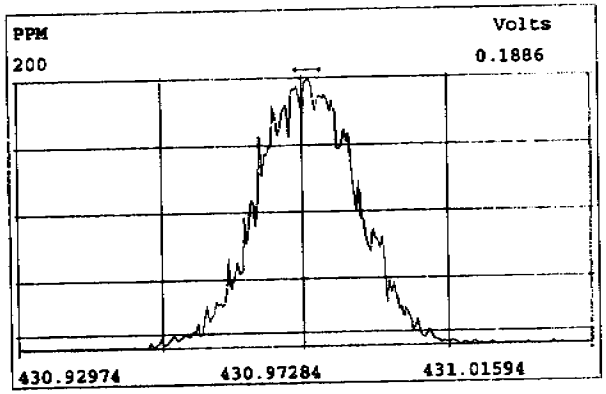


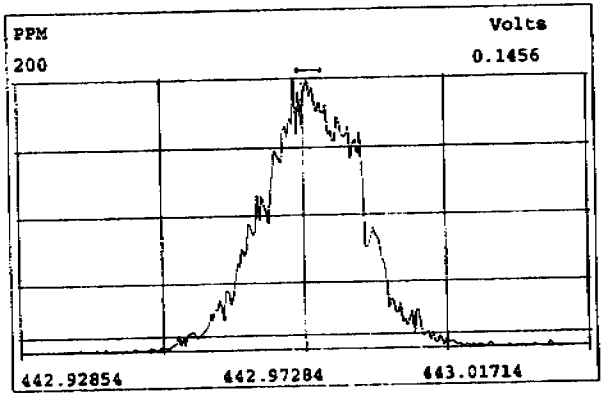


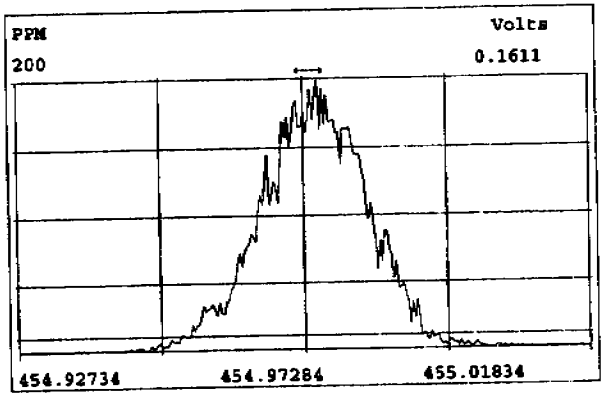






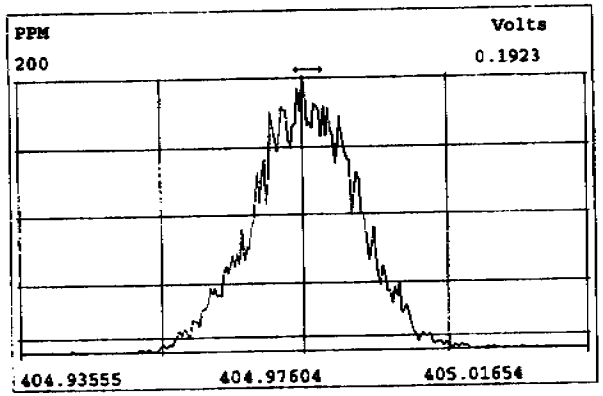


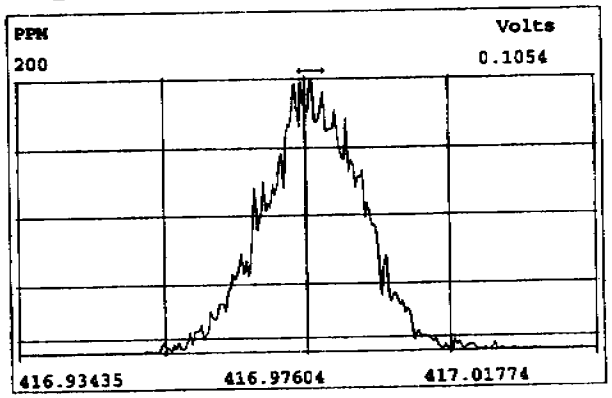


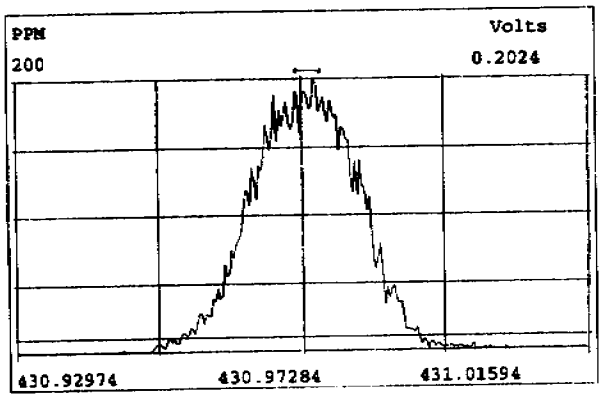


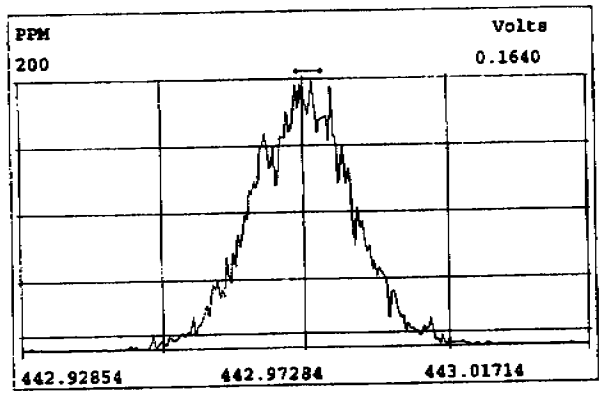
Peak Locate Examination: 8-MAY-2005:02:32 File:RES_CHECK

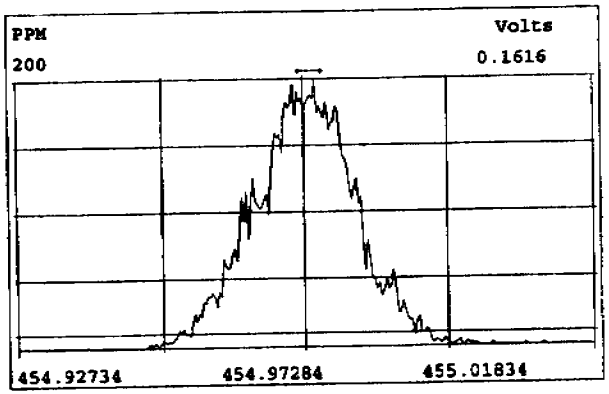
Experiment:OCDD_DB5 Function:4 Reference:PFK

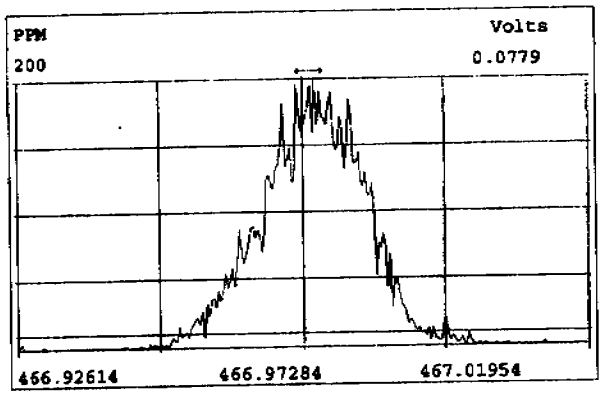


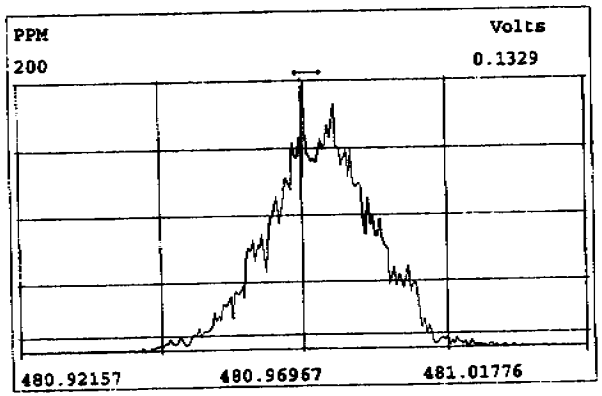






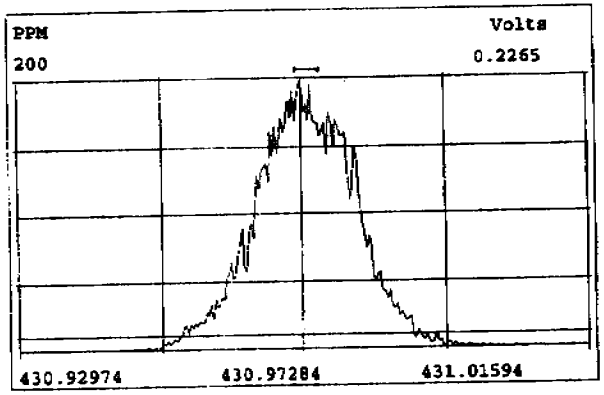


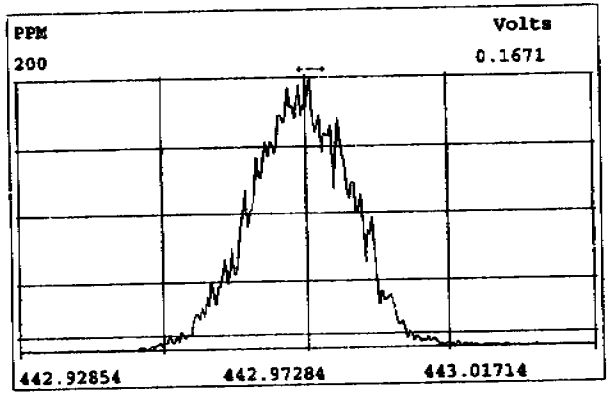


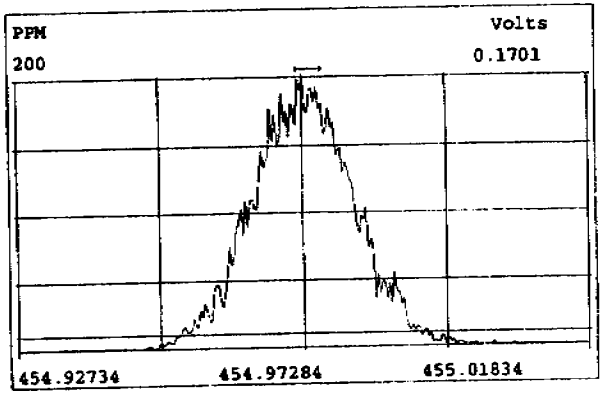


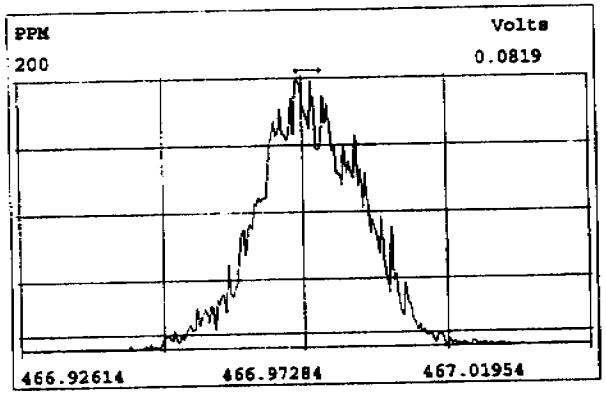
Peak Locate Examination: 8-MAY-2005:02:33 File:RES_CHECK

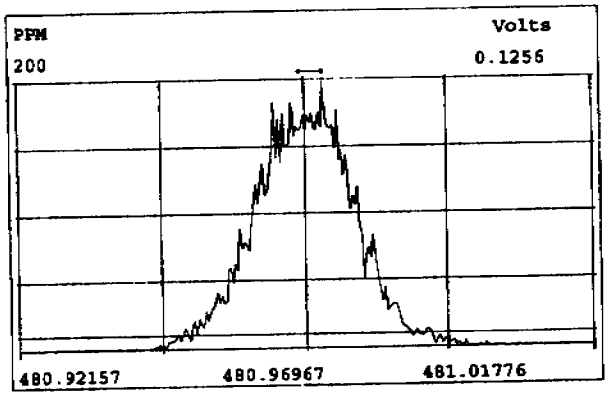
Experiment:OCDD_DB5 Function:5 Reference:PFK

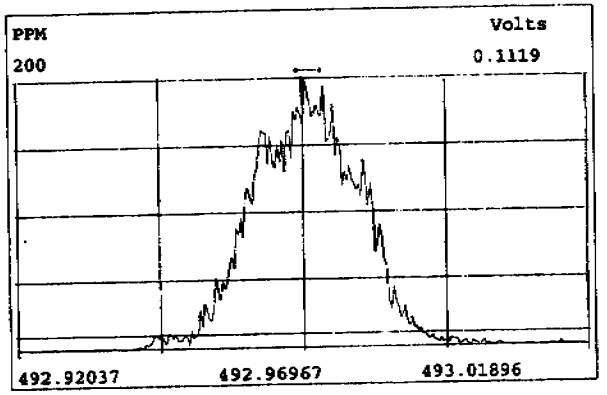


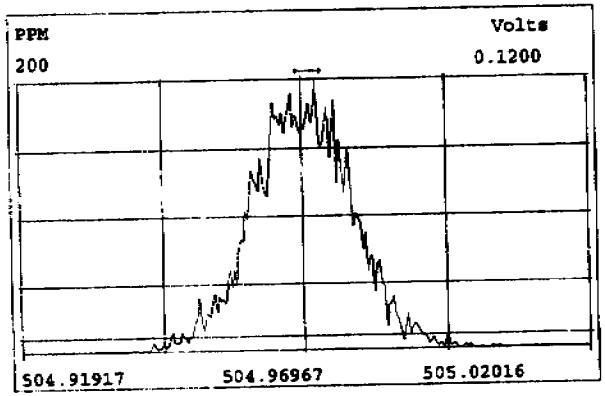


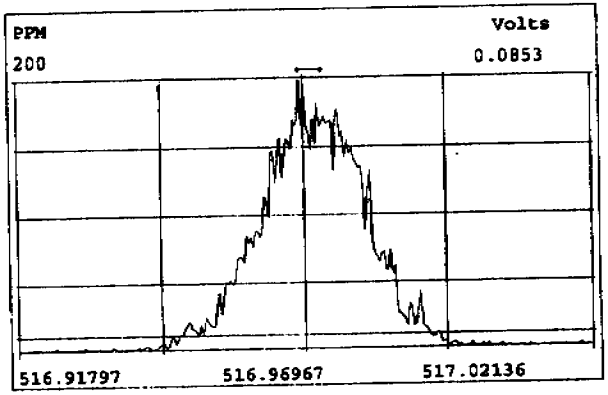




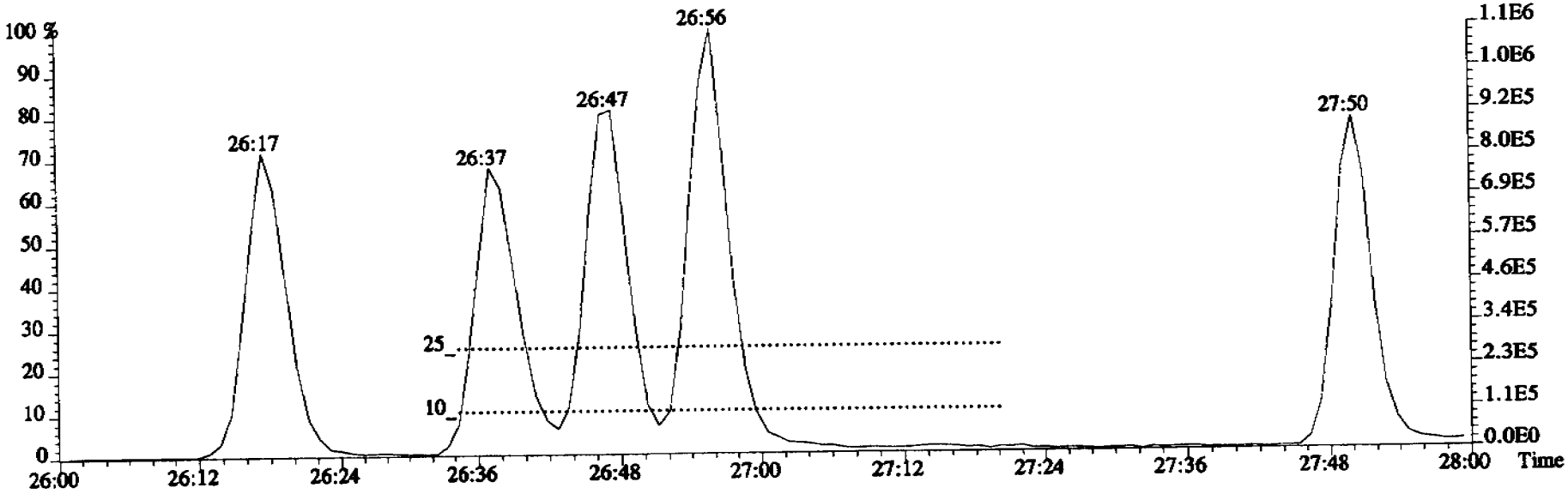




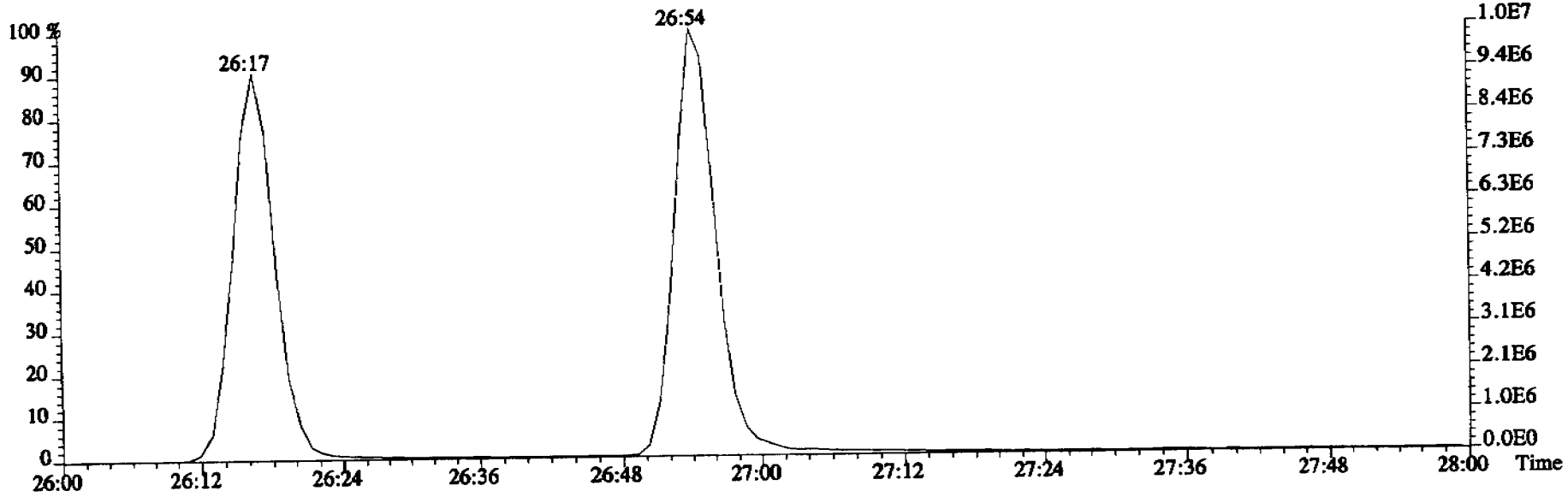




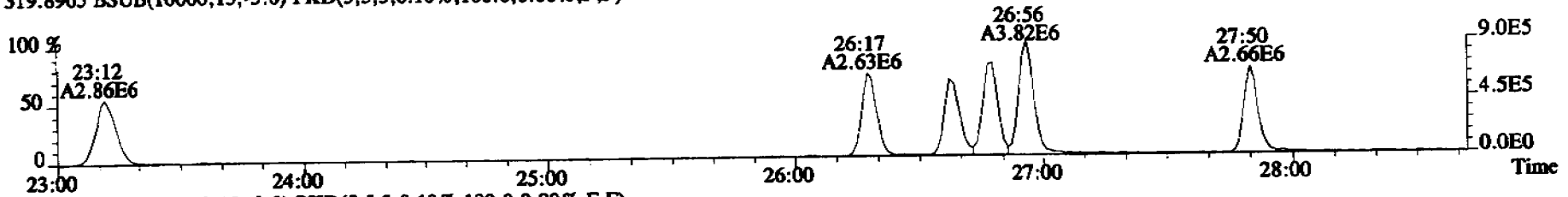
File:050507D2 #1-558 Acq: 8-MAY-2005 02:34:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050507D2-1 1613 CS3 050420H Exp:OCDD_DB5
321.8936



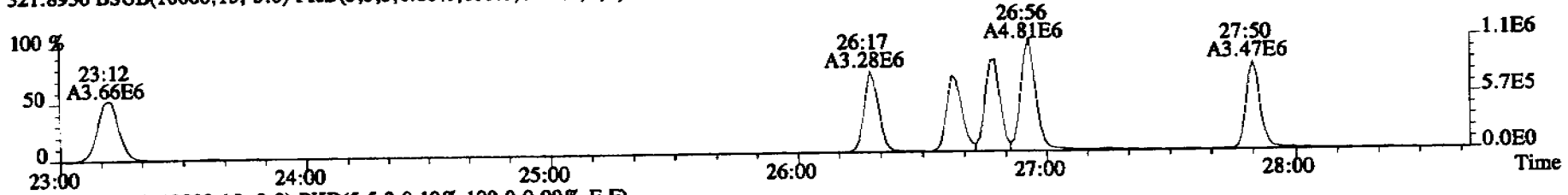
333.9339



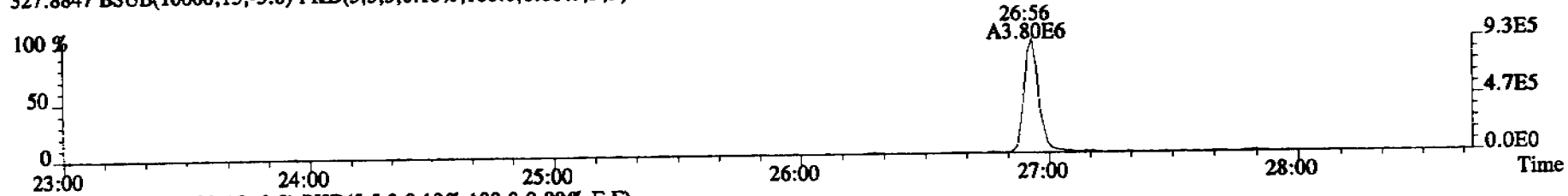
File:050507D2 #1-558 Acq: 8-MAY-2005 02:34:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050507D2-1 1613 CS3 050420H Exp:OCDD_DB5
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



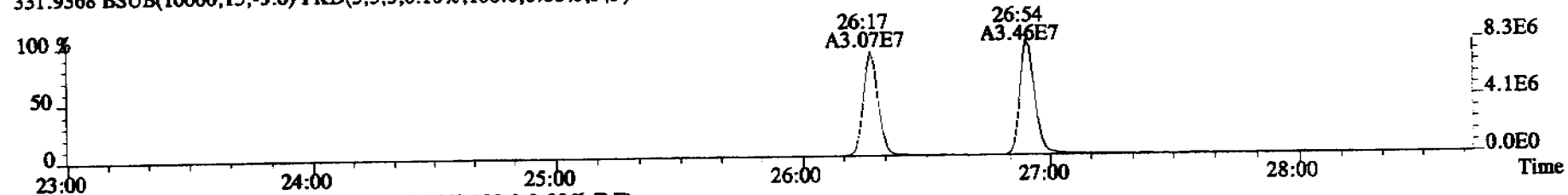
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



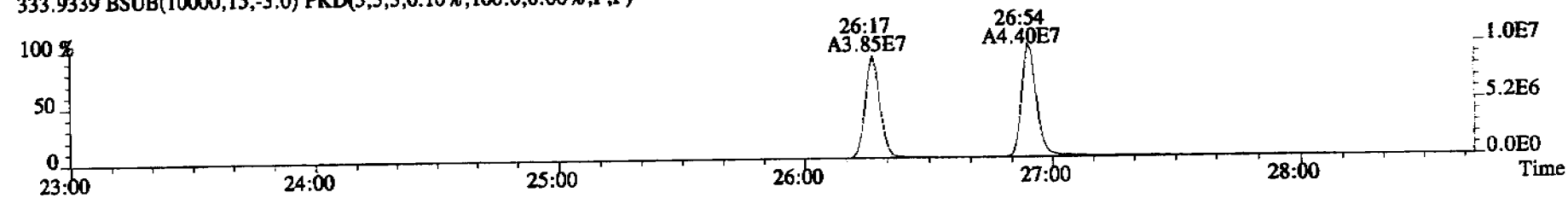
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

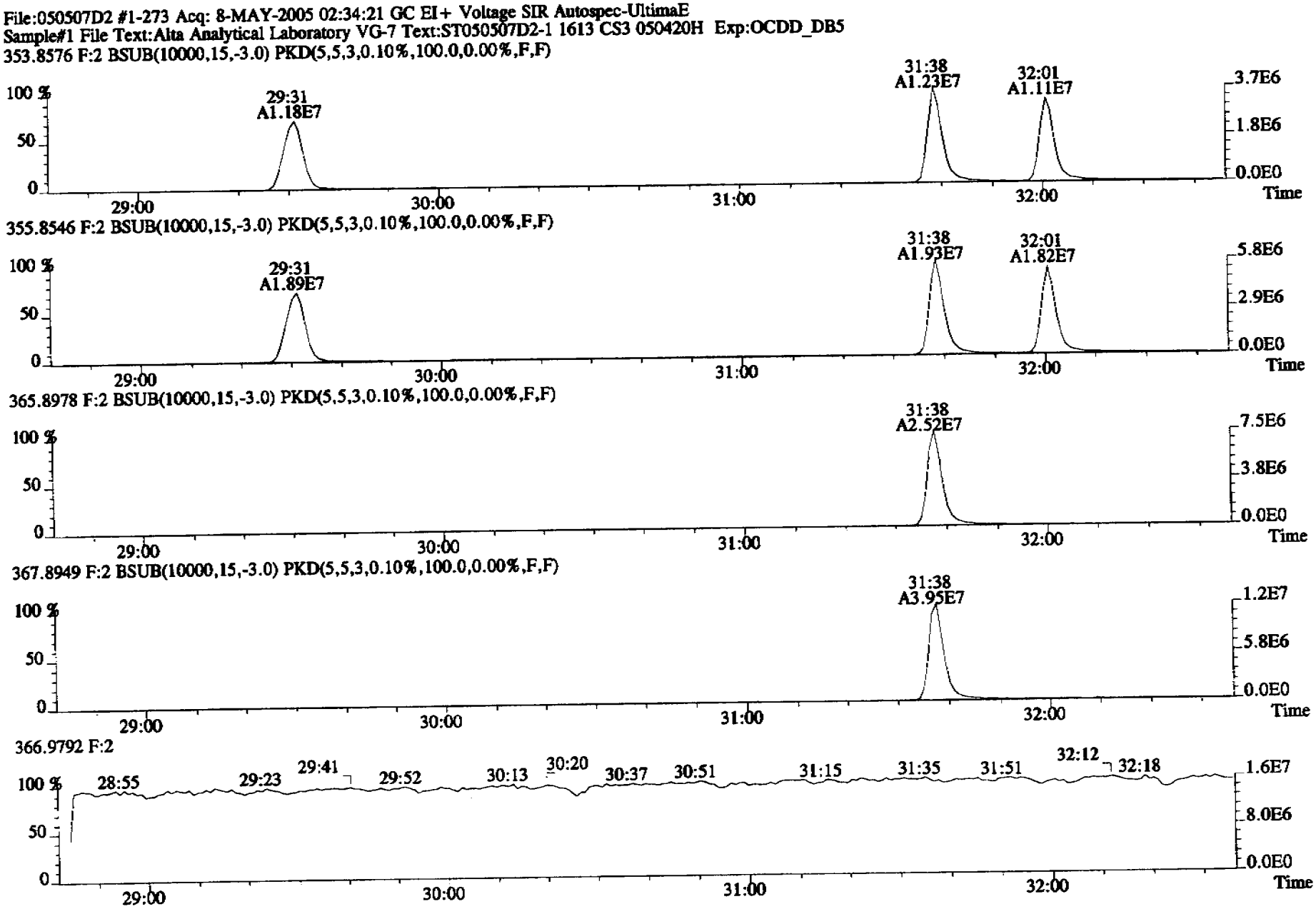


331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



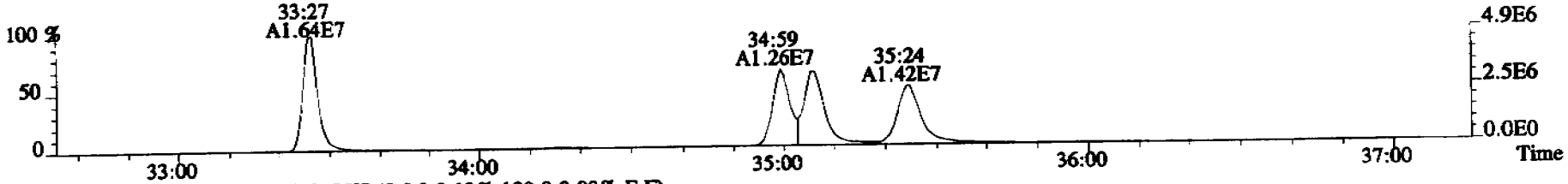
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



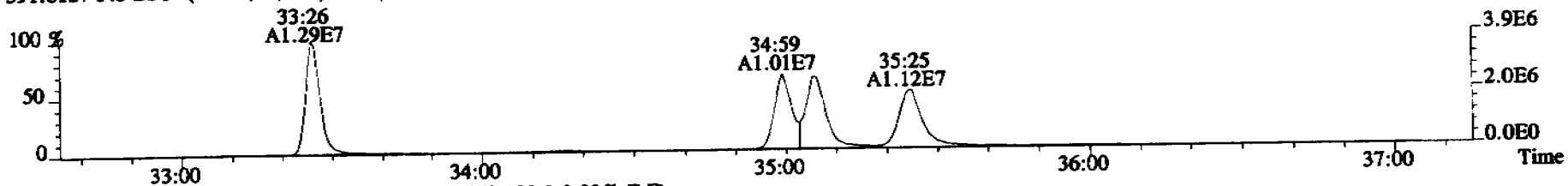

File:050507D2 #1-273 Acq: 8-MAY-2005 02:34:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050507D2-1 1613 CS3 050420H Exp:OCDD_DB5
353.8576 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
29:31 A1.18E7
31:38 A1.23E7
32:01 A1.11E7
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
29:31 A1.89E7
31:38 A1.93E7
32:01 A1.82E7
365.8978 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
31:38 A2.52E7
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
31:38 A3.95E7
366.9792 F:2
28:55
29:23
29:41
29:52
30:13
30:20
30:37
30:51
31:15
31:35
31:51
32:12
32:18
100 %
50
0
29:00
30:00
31:00
32:00
Time
3.7E6
1.8E6
0.0E0
5.8E6
2.9E6
7.5E6
3.8E6
1.2E7
5.8E6
1.6E7
8.0E6

File:050507D2 #1-398 Acq: 8-MAY-2005 02:34:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050507D2-1 1613 CS3 050420H Exp:OCDD_DB5

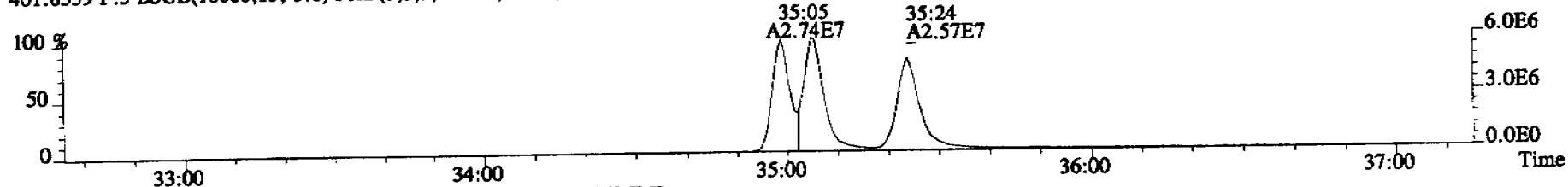
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



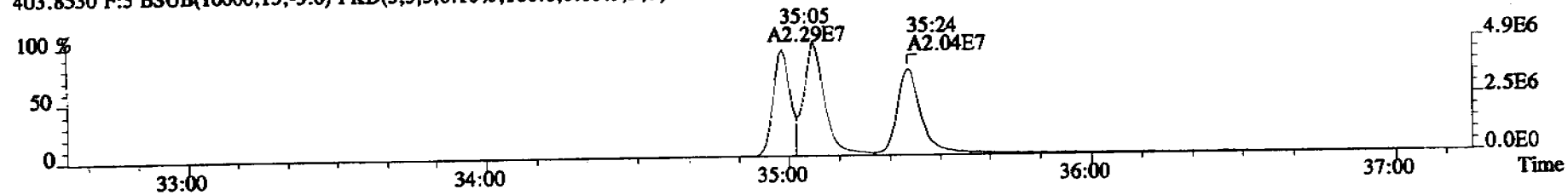
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



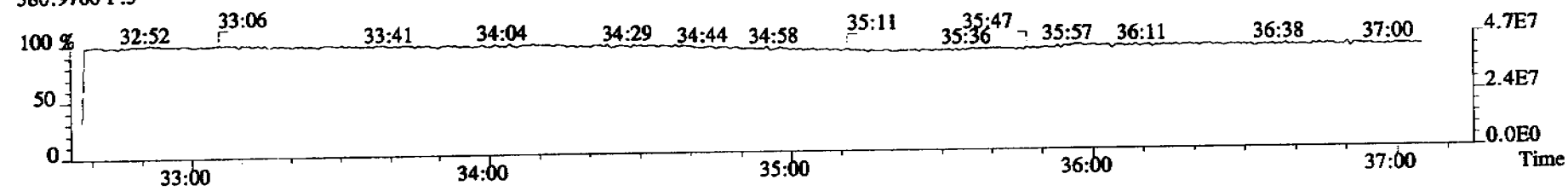
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

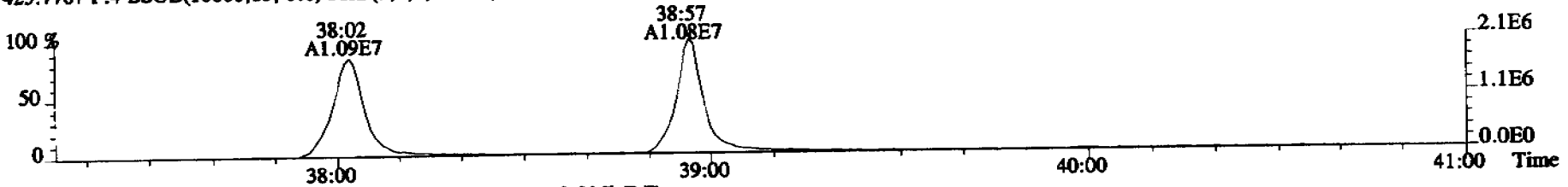


380.9760 F:3

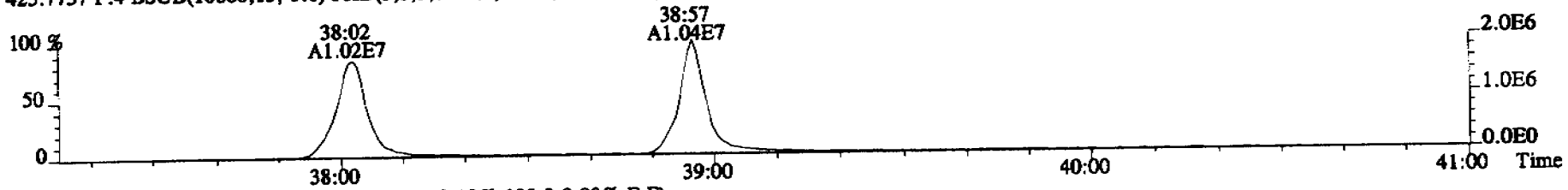


File:050507D2 #1-348 Acq: 8-MAY-2005 02:34:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050507D2-1 1613 CS3 050420H Exp:OCDD_DB5

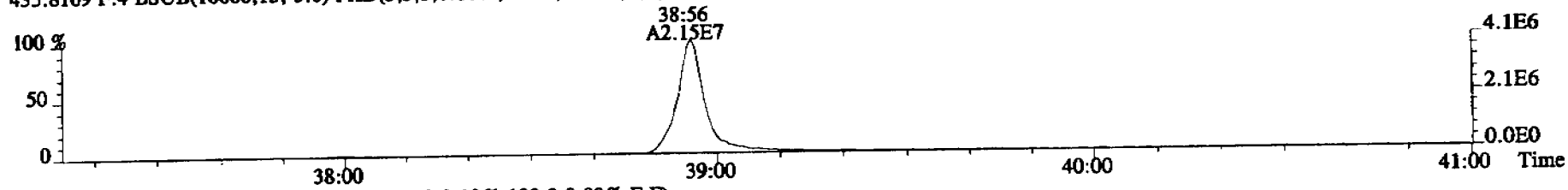
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



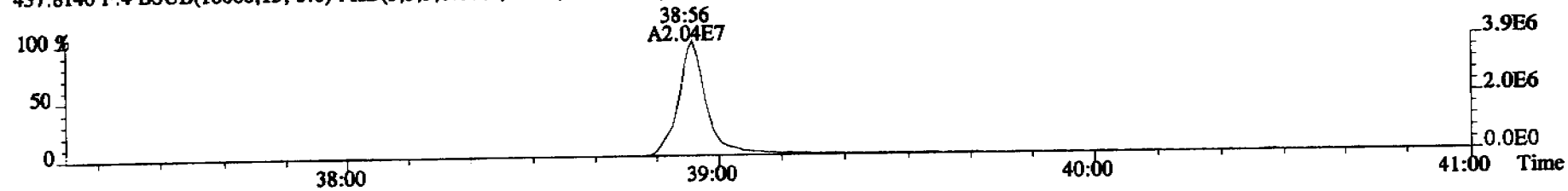
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



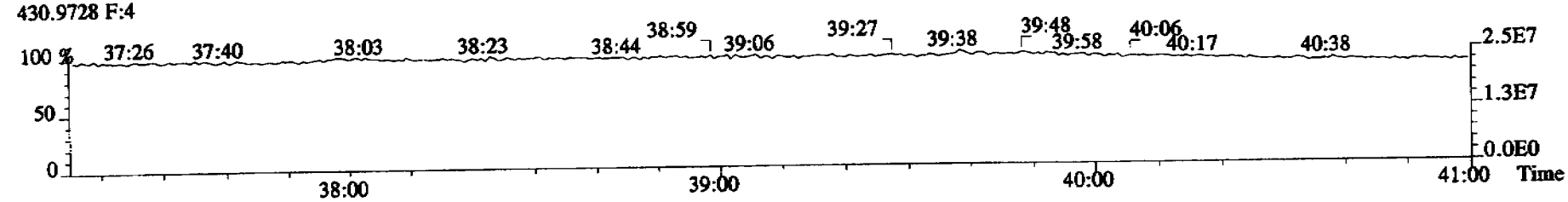
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

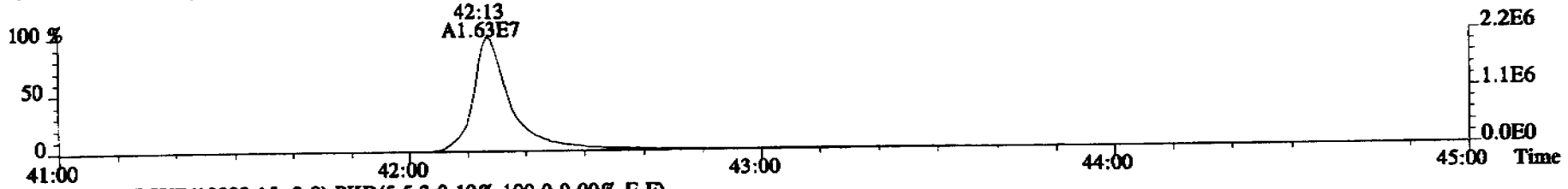


430.9728 F:4

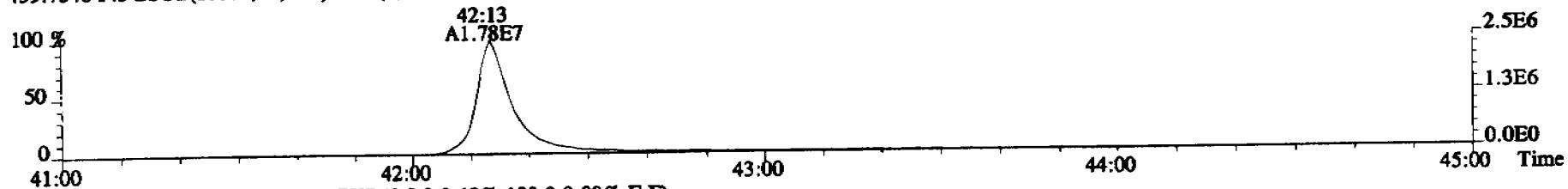


File:050507D2 #1-345 Acq: 8-MAY-2005 02:34:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050507D2-1 1613 CS3 050420H Exp:OCDD_DB5

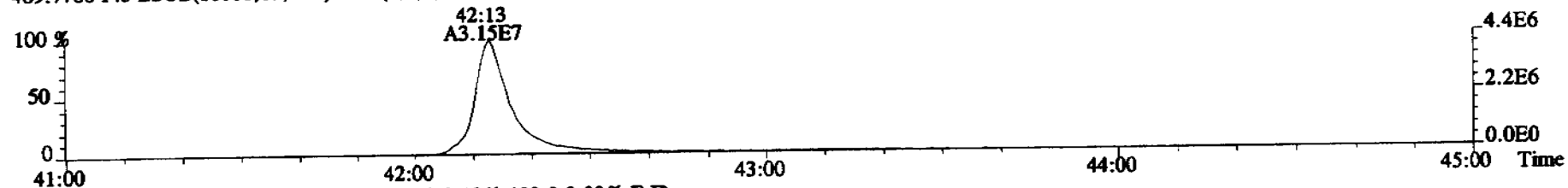
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



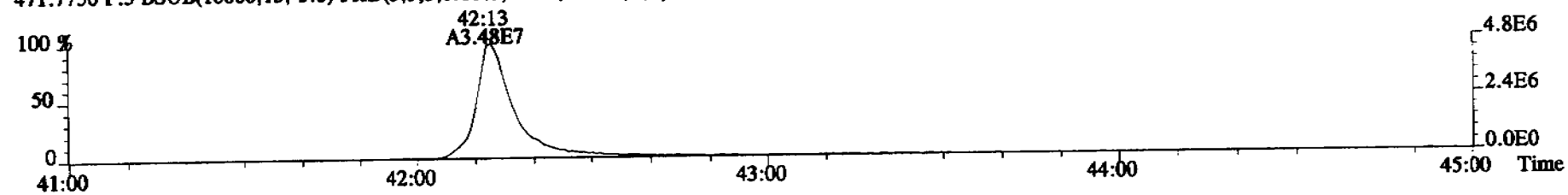
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



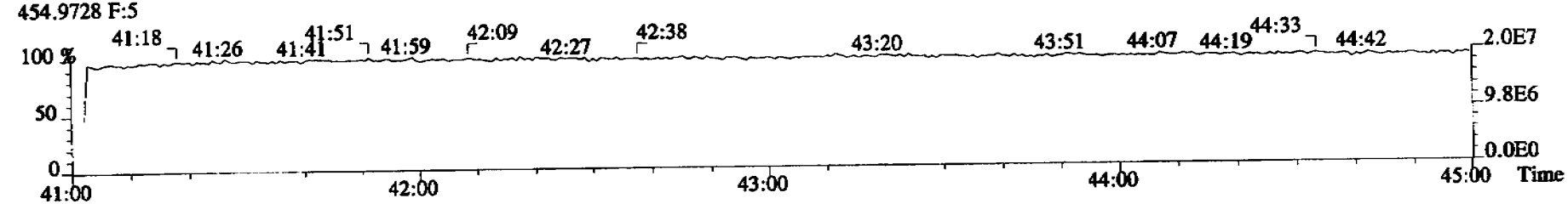
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

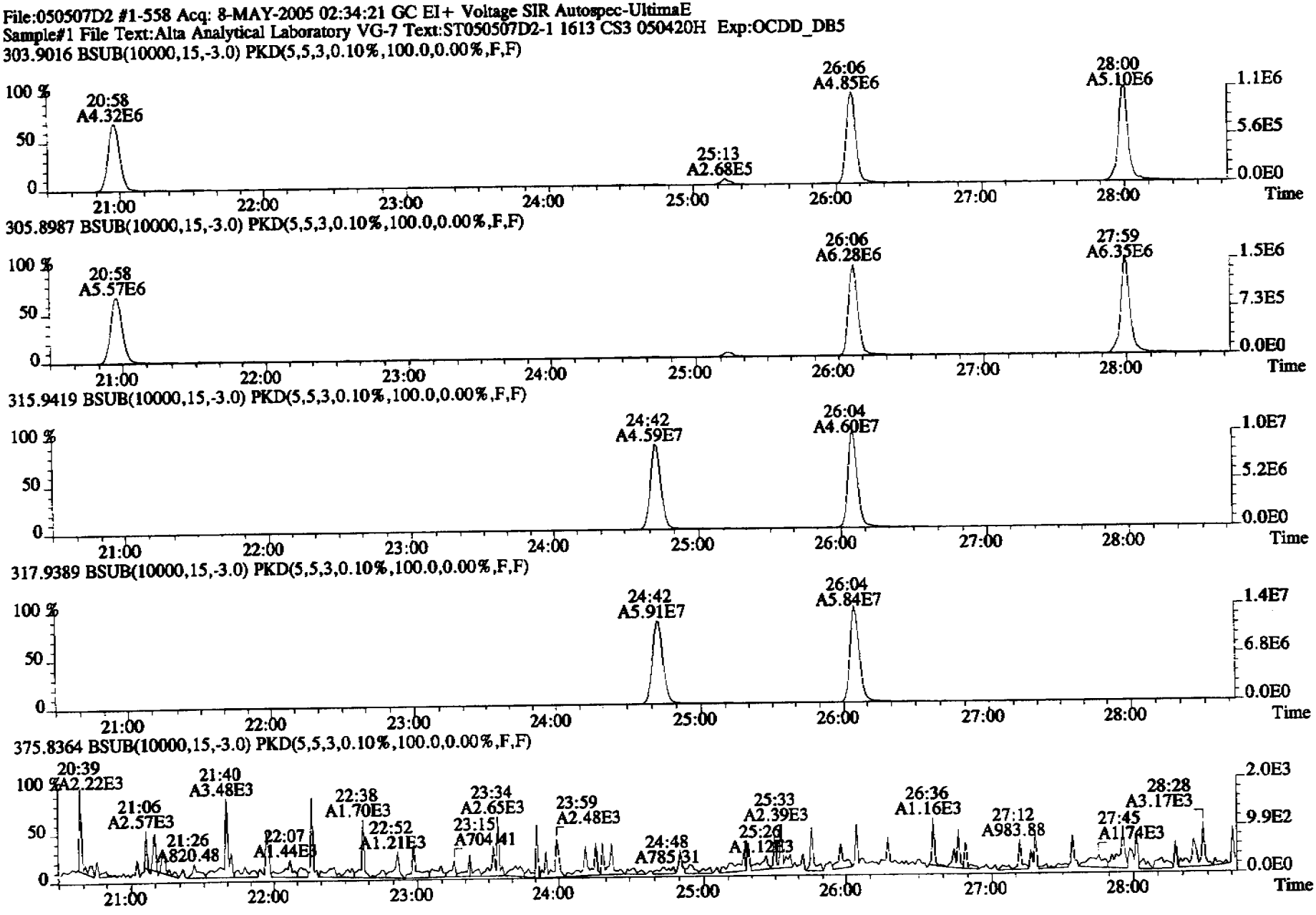


471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

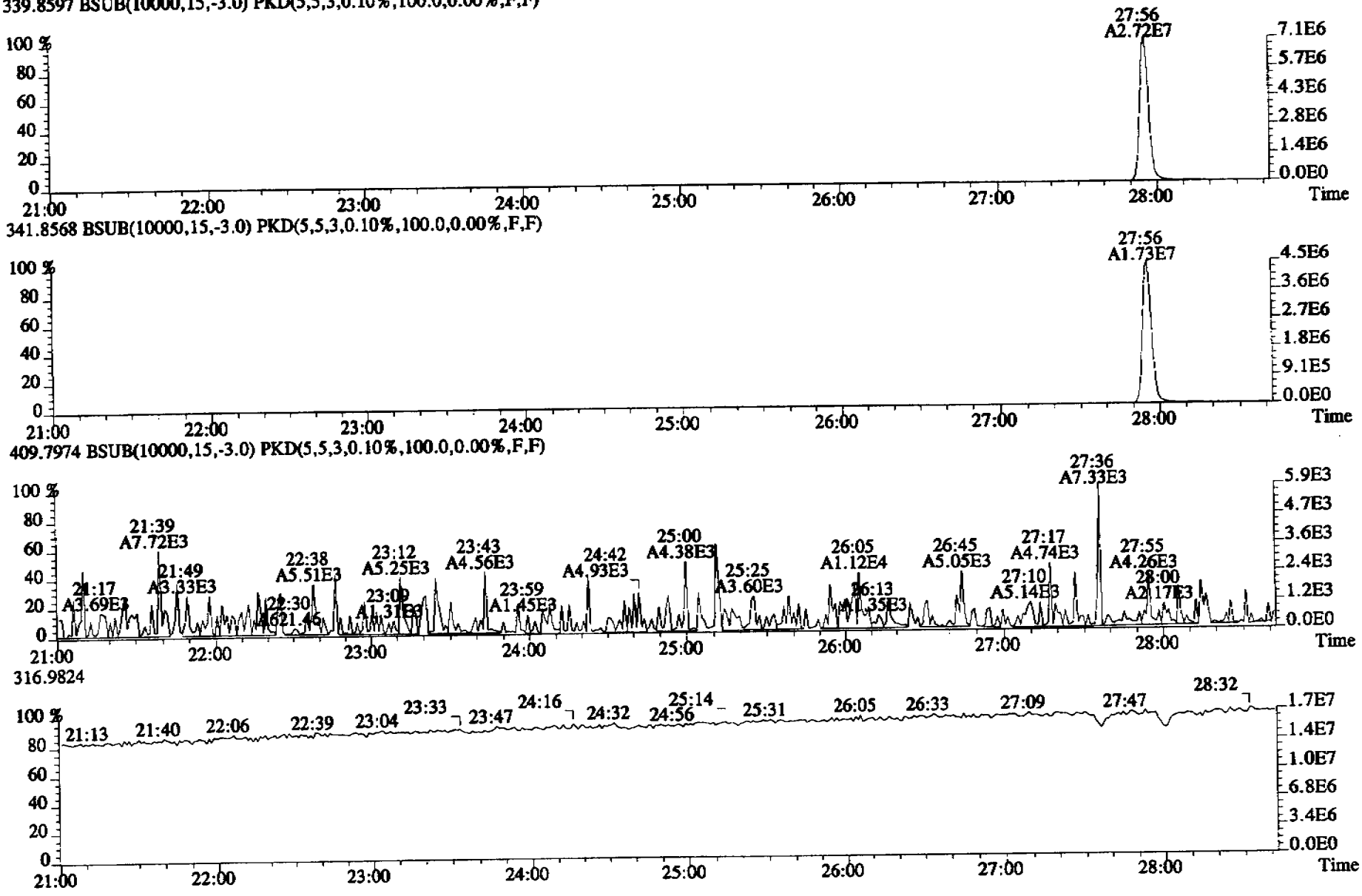


454.9728 F:5

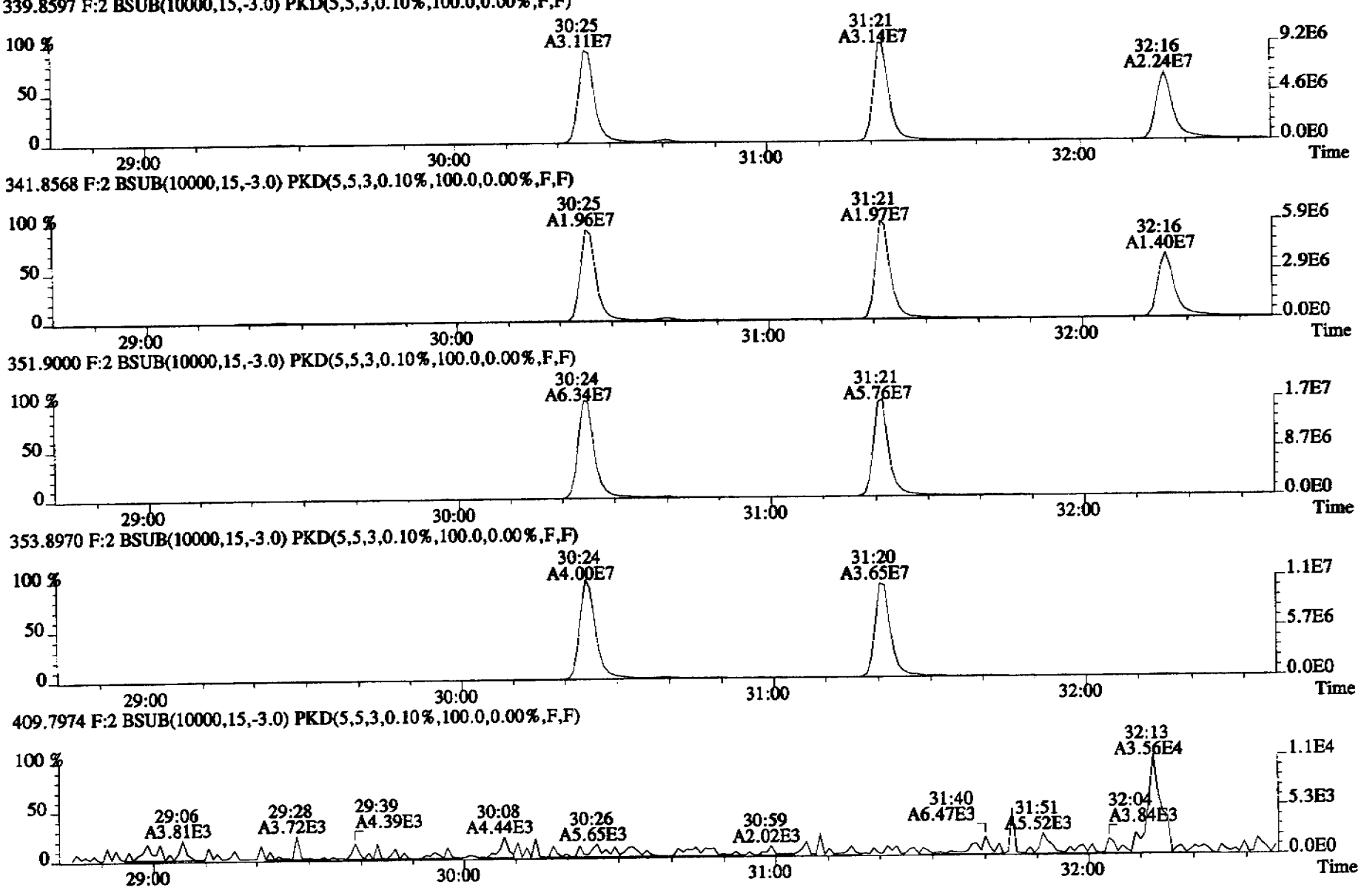



File:050507D2 #1-558 Acq: 8-MAY-2005 02:34:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050507D2-1 1613 CS3 050420H Exp:OCDD_DB5
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
20:58 A4.32E6
25:13 A2.68E5
26:06 A4.85E6
28:00 A5.10E6
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
20:58 A5.57E6
26:06 A6.28E6
27:59 A6.35E6
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
24:42 A4.59E7
26:04 A4.60E7
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
24:42 A5.91E7
26:04 A5.84E7
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
20:39 A2.22E3
21:06 A2.57E3
21:26 A820.48
21:40 A3.48E3
22:07 A1.44E3
22:38 A1.70E3
22:52 A1.21E3
23:15 A704.41
23:34 A2.65E3
23:59 A2.48E3
24:48 A785.31
25:33 A2.39E3
25:26 A1.12E3
26:36 A1.16E3
27:12 A983.88
27:45 A1.74E3
28:28 A3.17E3
100 %
50
0
Time
21:00
22:00
23:00
24:00
25:00
26:00
27:00
28:00
1.1E6
5.6E5
0.0E0
1.5E6
7.3E5
1.0E7
5.2E6
1.4E7
6.8E6
2.0E3
9.9E2

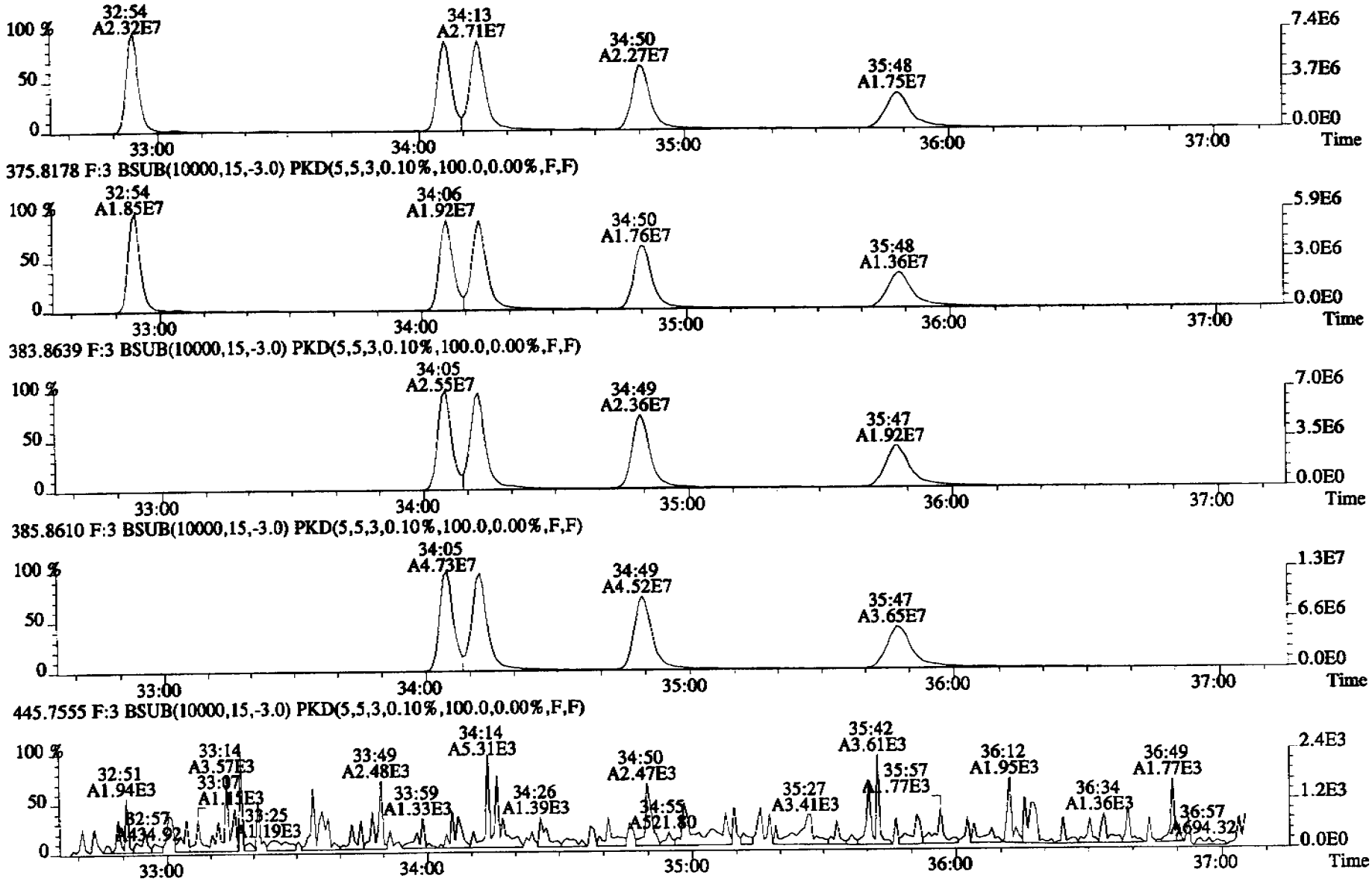
File:050507D2 #1-558 Acq: 8-MAY-2005 02:34:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050507D2-1 1613 CS3 050420H Exp:OCDD_DB5



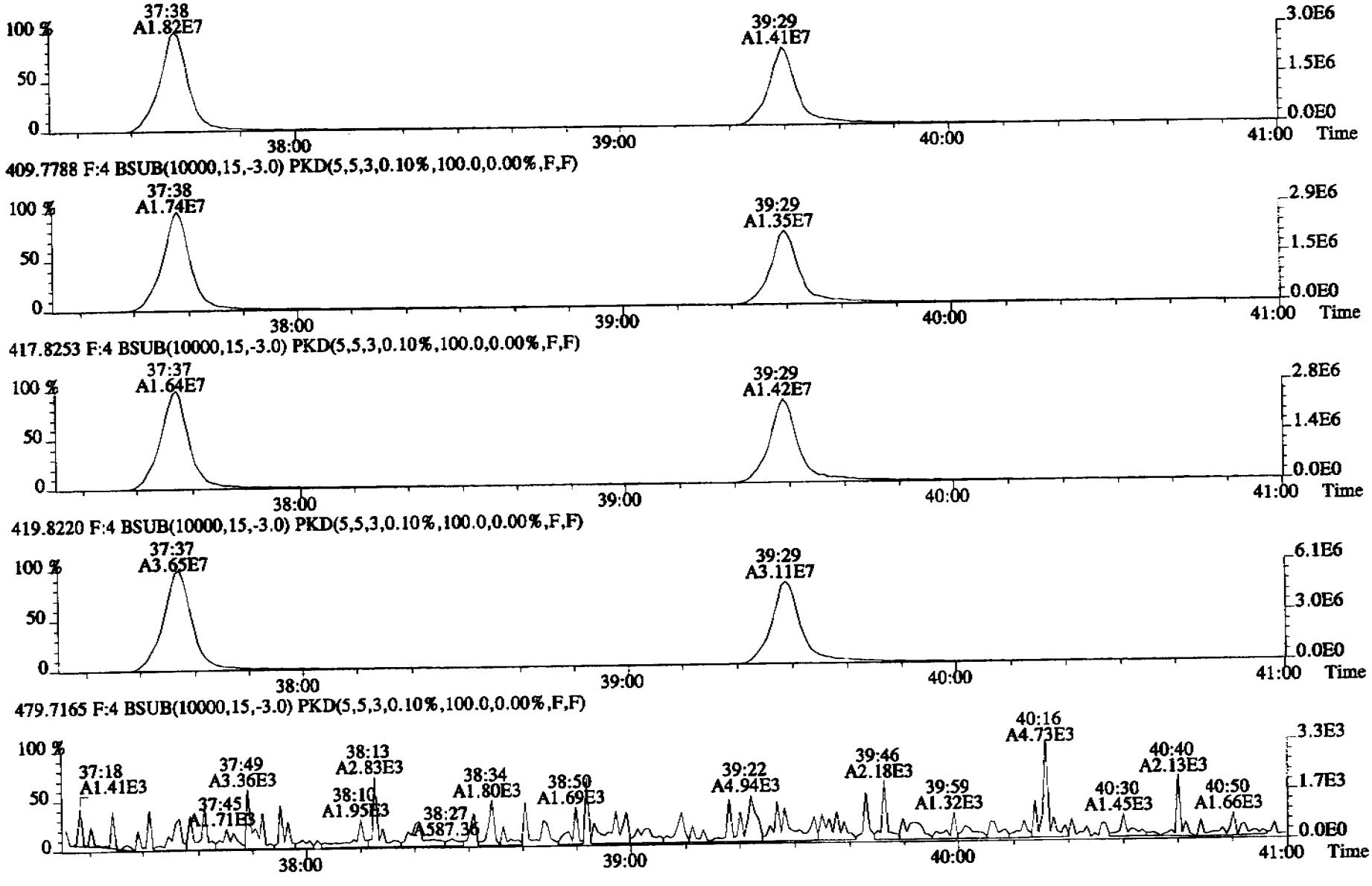
File:050507D2 #1-273 Acq: 8-MAY-2005 02:34:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050507D2-1 1613 CS3 050420H Exp:OCDD_DB5



File:050507D2 #1-398 Acq: 8-MAY-2005 02:34:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050507D2-1 1613 CS3 050420H Exp:OCDD_DB5

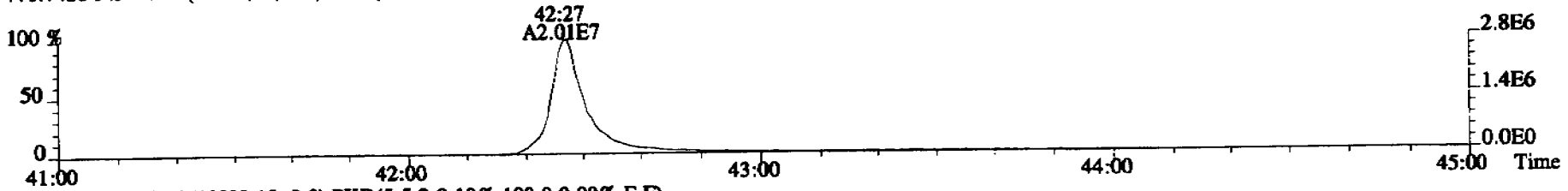


File:050507D2 #1-348 Acq: 8-MAY-2005 02:34:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050507D2-1 1613 CS3 050420H Exp:OCDD_DB5

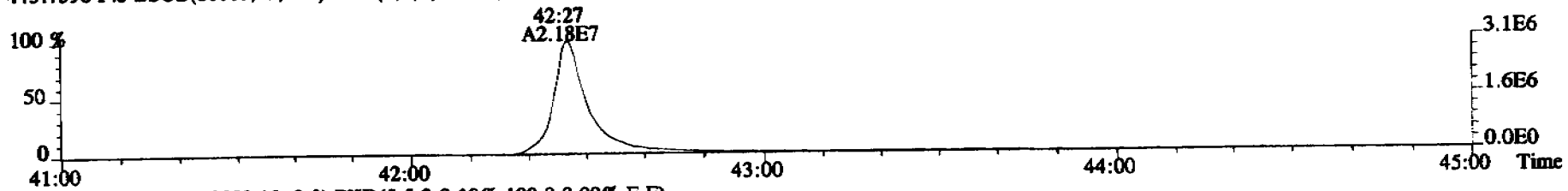


File:050507D2 #1-345 Acq: 8-MAY-2005 02:34:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050507D2-1 1613 CS3 050420H Exp:OCDD_DB5

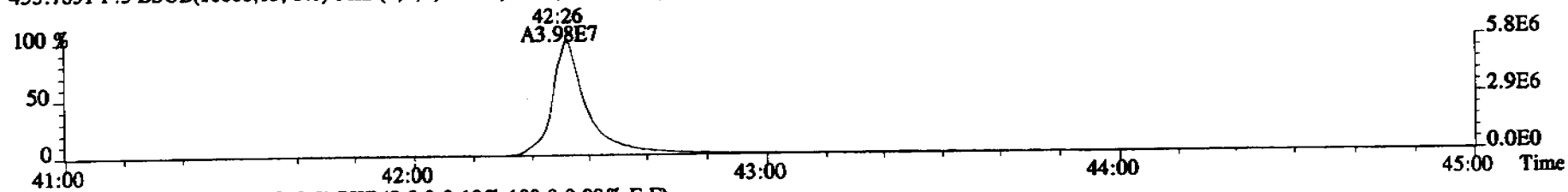
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



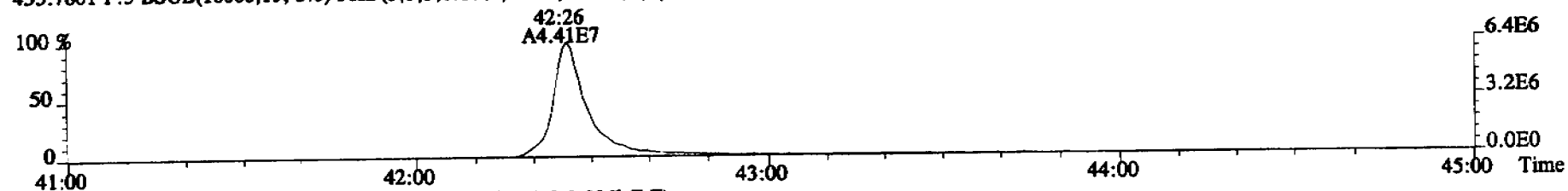
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



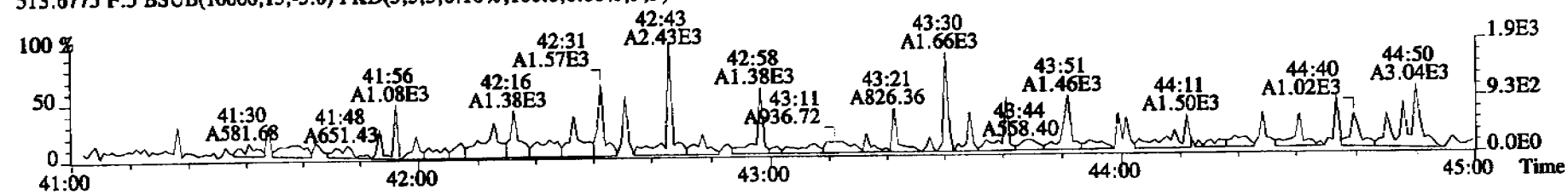
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.: CCAL ID: ST050507D2-2

Contract No.: SAS No.:

Initial Calibration Date: 4/23/05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050507D2 S#16 Analysis Date: 8-MAY-05 Time: 14:50:50

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.76	0.65-0.89	y	10.3	7.8 - 12.9 8.2 - 12.3 (4)
1,2,3,7,8-PeCDD	M+2/M+4	0.62	0.54-0.72	y	47.5	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	48.2	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	y	49.8	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.29	1.05-1.43	y	50.1	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	49.3	43.0 - 58.0
OCDD	M+2/M+4	0.90	0.76-1.02	y	97.8	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	y	9.94	8.4 - 12.0 8.6 - 11.6 (4)
1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	50.7	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	48.9	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.26	1.05-1.43	y	48.7	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	49.3	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.26	1.05-1.43	y	48.2	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.27	1.05-1.43	y	49.2	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.05	0.88-1.20	y	48.7	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.05	0.88-1.20	y	49.8	43.0 - 58.0
OCDF	M+2/M+4	0.92	0.76-1.02	y	96.7	63.0 - 159.0

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) Contract-required concentration range as specified in Table 6a, Method 1613, for tetras only.

Analyst: [signature]

Date: 5-9-05

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4/23/05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050507D2 S#16 Analysis Date: 8-MAY-05 Time: 14:50:50

LABELED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	y	104	82.0 - 121.0 85.0 - 117.0 (5)
13C-1,2,3,7,8-PeCDD	M+2/M+4	0.63	0.54-0.72	y	111	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	103	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	101	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	y	103	72.0 - 138.0
13C-OCDD	M+2/M+4	0.90	0.76-1.02	y	201	96.0 - 415.0
13C-2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	106	71.0 - 140.0 76.0 - 131.0 (5)
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	111	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	107	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	102	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.54	0.43-0.59	y	97.6	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.54	0.43-0.59	y	102	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43-0.59	y	100	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37-0.51	y	103	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.45	0.37-0.51	y	106	77.0 - 129.0
13C-OCDF	M+2/M+4	0.90	0.76-1.02	y	196	96.0 - 415.0
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					9.09	7.9 - 12.7 8.3 - 12.1 (5)

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range, as specified in Table 6, Method 1613.

(4) No ion abundance ratio; report concentration found.

(5) Contract-required concentration range, as specified in Table 6a, Method 1613, for tetras only.

Analyst: [signature]

Date: 5-9-05

EPA METHOD 8290

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.: CCAL ID: ST050507D2-2

Contract No.: SAS No.:

Initial Calibration Date: 4/23/05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050507D2 S#16 Analysis Date: 8-MAY-05 Time: 14:50:50

	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.76	0.65-0.89	y	10.3	8.00 - 12.0
1,2,3,7,8-PeCDD	M+2/M+4	0.62	0.54-0.72	y	47.5	40.0 - 60.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	48.2	40.0 - 60.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	y	49.8	40.0 - 60.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.29	1.05-1.43	y	50.1	40.0 - 60.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	49.3	40.0 - 60.0
OCDD	M+2/M+4	0.90	0.76-1.02	y	97.8	80.0 - 120
2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	y	9.94	8.00 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	50.7	40.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	48.9	40.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.26	1.05-1.43	y	48.7	40.0 - 60.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	49.3	40.0 - 60.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.26	1.05-1.43	y	48.2	40.0 - 60.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.27	1.05-1.43	y	49.2	40.0 - 60.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.05	0.88-1.20	y	48.7	40.0 - 60.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.05	0.88-1.20	y	49.8	40.0 - 60.0
OCDF	M+2/M+4	0.92	0.76-1.02	y	96.7	80.0 - 120

Analyst: _____

Date: 5-9-05

EPA METHOD 8290

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4/23/05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050507D2 S#16 Analysis Date: 8-MAY-05 Time: 14:50:50

LABELED COMPOUNDS	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	y	104	70.0 - 130
13C-1,2,3,7,8-PeCDD	M+2/M+4	0.63	0.54-0.72	y	111	70.0 - 130
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	103	70.0 - 130
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	101	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	y	103	70.0 - 130
13C-OCDD	M+2/M+4	0.90	0.76-1.02	y	201	140 - 260
13C-2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	106	70.0 - 130
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	111	70.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	107	70.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	102	70.0 - 130
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.54	0.43-0.59	y	97.6	70.0 - 130
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.54	0.43-0.59	y	102	70.0 - 130
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43-0.59	y	100	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37-0.51	y	103	70.0 - 130
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.45	0.37-0.51	y	106	70.0 - 130
13C-OCDF	M+2/M+4	0.90	0.76-1.02	y	196	140 - 260
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD					9.09	7.00 - 13.0

Analyst: [signature]

Date: 5-9-05

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: VG-7 Initial Calibration Date: 4/23/05

RT Window Data Filename: 050507D2 S#16 Analysis Date: 8-MAY-05 Time: 14:50:50

DB-5 IS Data Filename: 050507D2 S#16 Analysis Date: 8-MAY-05 Time: 14:50:50

DB_225 IS Data Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:12	1,3,6,8-TCDF (F)	20:58
1,2,8,9-TCDD (L)	27:51	1,2,8,9-TCDF (L)	28:00
1,2,4,7,9-PeCDD (F)	29:31	1,3,4,6,8-PeCDF (F)	27:56
1,2,3,8,9-PeCDD (L)	32:01	1,2,3,8,9-PeCDF (L)	32:17
1,2,4,6,7,9-HxCDD (F)	33:26	1,2,3,4,6,8-HxCDF (F)	32:54
1,2,3,7,8,9-HxCDD (L)	35:25	1,2,3,7,8,9-HxCDF (L)	35:49
1,2,3,4,6,7,9-HpCDD (F)	38:02	1,2,3,4,6,7,8-HpCDF (F)	37:38
1,2,3,4,6,7,8-HpCDD (L)	38:56	1,2,3,4,7,8,9-HpCDF (L)	39:30

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5).

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

COMPARED PEAKS (1)	% VALLEY HEIGHT BETWEEN
	<25%

(1) To meet contract requirements, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: [signature]

Date: 5-9-05

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4/23/05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050507D2 S#16 Analysis Date: 8-MAY-05 Time: 14:50:50

Compounds Using 13C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.001	0.999-1.002
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.000	0.999-1.002
LABELED COMPOUNDS			
13C-2,3,7,8-TCDF	13C-1,2,3,4-TCDD	0.993	0.923-1.103
13C-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.024	0.976-1.043
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.025	0.989-1.052
13C-1,2,3,7,8-PeCDF	13C-1,2,3,4-TCDD	1.158	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.193	1.011-1.526
13C-1,2,3,7,8-PeCDD	13C-1,2,3,4-TCDD	1.204	1.000-1.567

(1) Contract-required limits for
Relative Retention Times (RRT)
as specified in Table 2, Method 1613. 10/94

Analyst:

Date: 5-9-05

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4/23/05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050507D2 S#16 Analysis Date: 8-MAY-05 Time: 14:50:50

Compounds Using 13C-123789-HxCDD as Internal Standard

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.001	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.000	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.000	0.999-1.001
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.000	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.001	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.001	0.999-1.001
OCDD	13C-OCDD	1.000	0.999-1.001
OCDF	13C-OCDD	1.005	0.999-1.008
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDF	13C-1,2,3,7,8,9-HxCDD	0.962	0.944-0.970
13C-1,2,3,6,7,8-HxCDF	13C-1,2,3,7,8,9-HxCDD	0.966	0.949-0.975
13C-2,3,4,6,7,8-HxCDF	13C-1,2,3,7,8,9-HxCDD	0.984	0.959-1.021
13C-1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDD	1.011	0.977-1.047
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.988	0.977-1.000
13C-1,2,3,6,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.991	0.981-1.003
13C-1,2,3,4,6,7,8-HpCDF	13C-1,2,3,7,8,9-HxCDD	1.062	1.043-1.085
13C-1,2,3,4,6,7,8-HpCDD	13C-1,2,3,7,8,9-HxCDD	1.099	1.086-1.110
13C-1,2,3,4,7,8,9-HpCDF	13C-1,2,3,7,8,9-HxCDD	1.115	1.057-1.151
13C-OCDD	13C-1,2,3,7,8,9-HxCDD	1.193	1.032-1.311
13C-OCDF	13C-1,2,3,7,8,9-HxCDD	1.199	1.032-1.311

(1) Contract-required limits for
Relative Retention Times (RRT)
as specified in Table 2, Method 1613. 10/94

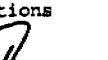
Analyst: _____

Date: 5-9-05

Client ID: 1613 CS3 050420H Filename: 050507D2 S:16 Acq: 8-MAY-05 14:50:50 ConCal: ST050507D2-1
Lab ID: ST050507D2-2 GC Column ID: db-5 ICal: 1613VG7-4-23-05 wt/vol: 1.000 EndCAL: ST050507D2-2

	Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Rec	Qual
	2,3,7,8-TCDD	9.27e+06	0.76 y	1.06	26:56	10.3		0.00	2.5	0.00	104	
	1,2,3,7,8-PeCDD	3.38e+07	0.62 y	0.99	31:39	47.5		0.00	2.5	0.00	111	
	1,2,3,4,7,8-HxCDD	2.96e+07	1.25 y	1.11	34:59	48.2		0.00	2.5	0.00	103	
	1,2,3,6,7,8-HxCDD	3.44e+07	1.24 y	1.07	35:06	49.8		0.00	2.5	0.00	101	
	1,2,3,7,8,9-HxCDD	3.46e+07	1.29 y	1.15	35:25	50.1		0.00	2.5	0.00	103	
	1,2,3,4,6,7,8-HpCDD	2.82e+07	1.04 y	1.05	38:56	49.3		0.00	2.5	0.00	101	
	OCDD	4.88e+07	0.90 y	1.04	42:15	97.8		0.00	2.5	0.00	106	
	2,3,7,8-TCDF	1.19e+07	0.79 y	1.05	26:07	9.94		0.00	2.5	0.00	111	
	1,2,3,7,8-PeCDF	5.08e+07	1.59 y	0.95	30:26	50.7		0.00	2.5	0.00	107	
	2,3,4,7,8-PeCDF	5.20e+07	1.59 y	1.08	31:22	48.9		0.00	2.5	0.00	102	
	1,2,3,4,7,8-HxCDF	4.79e+07	1.26 y	1.19	34:06	48.7		0.00	2.5	0.00	97.6	
	1,2,3,6,7,8-HxCDF	5.29e+07	1.25 y	1.22	34:13	49.3		0.00	2.5	0.00	102	
	2,3,4,6,7,8-HxCDF	4.91e+07	1.26 y	1.20	34:51	48.2		0.00	2.5	0.00	100	
	1,2,3,7,8,9-HxCDF	4.01e+07	1.27 y	1.13	35:49	49.2		0.00	2.5	0.00	103	
	1,2,3,4,6,7,8-HpCDF	4.49e+07	1.05 y	1.38	37:38	48.7		0.00	2.5	0.00	106	
	1,2,3,4,7,8,9-HpCDF	3.65e+07	1.05 y	1.23	39:30	49.8		0.00	2.5	0.00	97.8	
	OCDF	5.82e+07	0.92 y	1.02	42:28	96.7		0.00	2.5	0.00		
IS	13C-2,3,7,8-TCDD	8.53e+07	0.78 y	1.12	26:55	104					22.7	
IS	13C-1,2,3,7,8-PeCDD	7.19e+07	0.63 y	0.89	31:38	111						
IS	13C-1,2,3,4,7,8-HxCDD	5.51e+07	1.26 y	0.83	34:59	103						
IS	13C-1,2,3,6,7,8-HxCDD	6.46e+07	1.26 y	1.00	35:05	101						
IS	13C-1,2,3,4,6,7,8-HpCDD	5.44e+07	1.05 y	0.82	38:56	103						
IS	13C-OCDD	9.63e+07	0.90 y	0.74	42:14	201						
IS	13C-2,3,7,8-TCDF	1.13e+08	0.78 y	1.02	26:05	106						
IS	13C-1,2,3,7,8-PeCDF	1.05e+08	1.57 y	0.90	30:25	111						
IS	13C-2,3,4,7,8-PeCDF	9.86e+07	1.57 y	0.87	31:21	107						
IS	13C-1,2,3,4,7,8-HxCDF	8.29e+07	0.53 y	1.27	34:05	102						
IS	13C-1,2,3,6,7,8-HxCDF	8.82e+07	0.54 y	1.40	34:13	97.6						
IS	13C-2,3,4,6,7,8-HxCDF	8.47e+07	0.54 y	1.29	34:50	102						
IS	13C-1,2,3,7,8,9-HxCDF	7.24e+07	0.52 y	1.12	35:48	100						
IS	13C-1,2,3,4,6,7,8-HpCDF	6.71e+07	0.45 y	1.01	37:37	103						
IS	13C-1,2,3,4,7,8,9-HpCDF	5.98e+07	0.45 y	0.88	39:29	106						
IS	13C-OCDF	1.18e+08	0.90 y	0.94	42:27	196						
C/Up	37Cl-2,3,7,8-TCDD	4.11e+06		0.62	26:56	9.09						
RS/RT	13C-1,2,3,4-TCDD	7.28e+07	0.80 y	1.00	26:16	100						
RS	13C-1,2,3,4-TCDF	1.05e+08	0.78 y	1.00	24:43	100						
RS/RT	13C-1,2,3,7,8,9-HxCDD	6.43e+07	1.28 y	1.00	35:25	100						

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	46.9	47.2		0.00	0.00
Total Penta-Dioxins	135	136		0.00	0.00
Total Hexa-Dioxins	199	200		0.00	0.00
Total Hepta-Dioxins	94.3	95.3		0.00	0.00
Total Tetra-Furans	28.6	28.8		0.00	0.00
Total Penta-Furans	185	185		0.00	0.00
Total Hexa-Furans	244	245		0.00	0.00
Total Hepta-Furans	99.1	99.4		0.00	0.00

Intergrations by Analyst: 

Date: 5-9-05

Alta Analytical Laboratory - Injection Log Run file: 050507D2 Instrument ID: VG-7 GC Column ID: db-5

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	BCal
050507D2	1	ST050507D2-1 1613 CS3 050420H	DMS	8-MAY-05	02:34:21	ST050507D2-1	ST050507D2-2
050507D2	2	0_6769_OPR001	DMS	8-MAY-05	03:23:27	ST050507D2-1	ST050507D2-2
050507D2	3	SOLVENT BLANK	DMS	8-MAY-05	04:12:32	ST050507D2-1	ST050507D2-2
050507D2	4	0_6769_MB001	DMS	8-MAY-05	05:01:38	ST050507D2-1	ST050507D2-2
050507D2	5	26080_6769_001 1 0g	DMS	8-MAY-05	05:50:46	ST050507D2-1	ST050507D2-2
050507D2	6	26080_6769_002 2 0g	DMS	8-MAY-05	06:39:52	ST050507D2-1	ST050507D2-2
050507D2	7	26080_6769_003 3 0g	DMS	8-MAY-05	07:29:00	ST050507D2-1	ST050507D2-2
050507D2	8	26080_6769_004 4 0g	DMS	8-MAY-05	08:18:06	ST050507D2-1	ST050507D2-2
050507D2	9	26084_6769_001 RE73-05-58879 0g	DMS	8-MAY-05	09:07:13	ST050507D2-1	ST050507D2-2
050507D2	10	26100_6769_001 MD54-05-57952 0g	DMS	8-MAY-05	09:56:19	ST050507D2-1	ST050507D2-2
050507D2	11	26100_6769_002 MD54-05-57959 0g	DMS	8-MAY-05	10:45:24	ST050507D2-1	ST050507D2-2
050507D2	12	26101_6769_001 MD54-05-58185 0g	DMS	8-MAY-05	11:34:30	ST050507D2-1	ST050507D2-2
050507D2	13	26101_6769_002 MD54-05-58192 0g	DMS	8-MAY-05	12:23:35	ST050507D2-1	ST050507D2-2
050507D2	14	26111_6769_001 SLUDGE 0g	DMS	8-MAY-05	13:12:41	ST050507D2-1	ST050507D2-2
050507D2	15	SOLVENT BLANK	DMS	8-MAY-05	14:01:44	ST050507D2-1	ST050507D2-2
050507D2	16	ST050507D2-2 1613 CS3 050420H	DMS	8-MAY-05	14:50:50	ST050507D2-1	ST050507D2-2

HRMS STANDARDS REVIEW CHECKLIST

Attachment 7.F.2

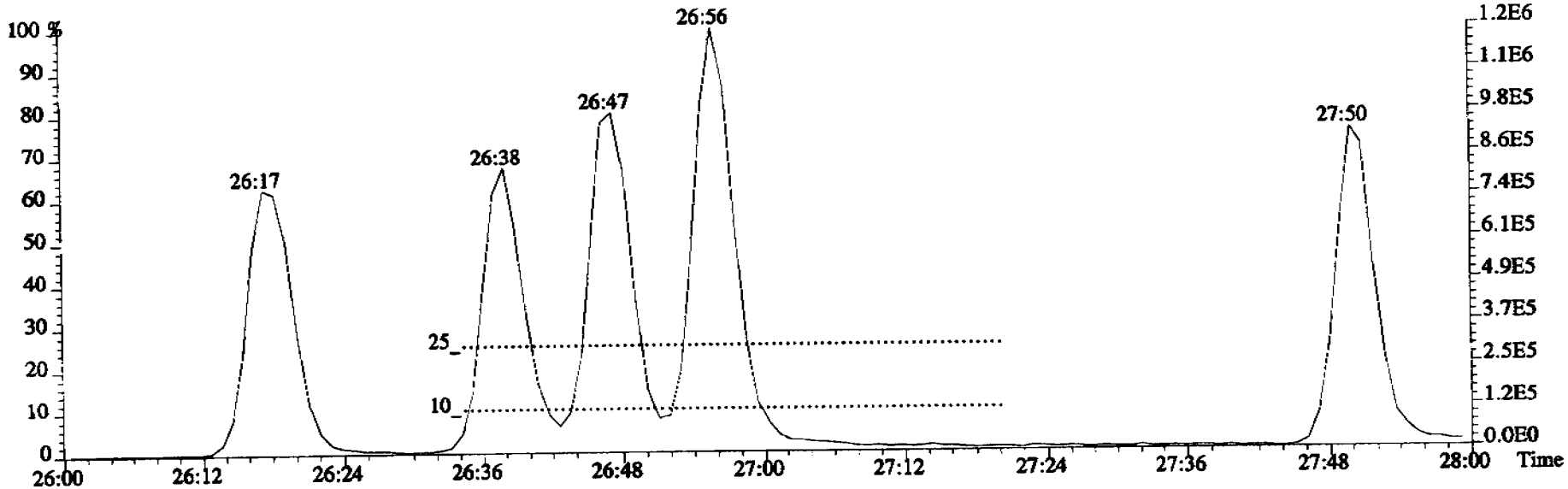
Beginning Calibration ID: ST050507D2-1 Ending Calibration ID: ST050507D2-2

	Beg.CAL	End. CAL	COMMENTS
Calibration Verification/Form 4A/B: Ion abundance within QC limits?	✓	✓	
Calibration Verification/Form 4A/B: Conc within Conc. range?	✓	✓	
Form 5: First and last eluters present? (N/A for DB225)	✓	✓	
Form 6A/6B: Relative Retention Times within limits? (N/A for M23, TO9, 1668, DB225)	✓	✓	
Cal. Ver. Named correctly? (Ex. ST-Year-Month-Day-VG ID)	✓	✓	
Cal. Verification forms signed and dated for review?	✓	✓	
Appropriate ICAL referenced?	✓	✓	
Run log: Standards named correctly? Correct Instrument listed?	✓	✓	
Run log: Samples within 12-hour shift?		✓	
Mass resolution > 10,000	✓	✓	
2378-TCDD/TCDF valley < 25% (N/A for 1668)	✓	✓	
All appropriate peaks integrated correctly?	✓	✓	
Manual integrations included?	✓	✓	
8280: Ratios within limits?		NA	
8280: S/N > 2.5:1		↓	
8280: CS1 within 12 hrs?		↓	

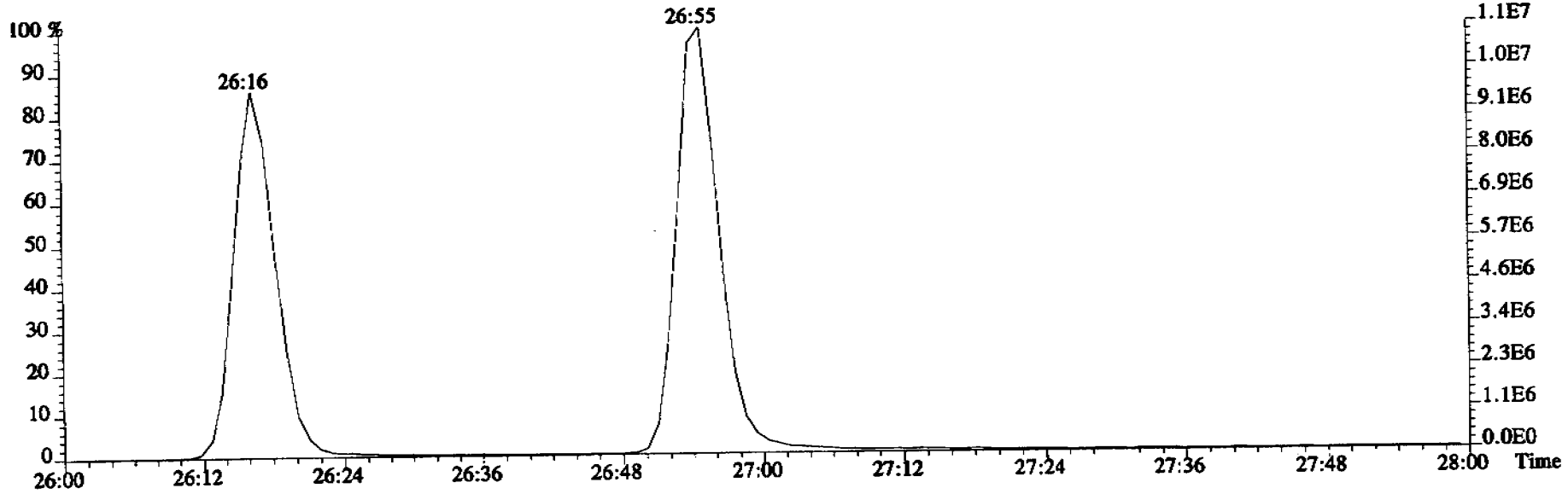
Reviewer Initial/Date: MJ 5/9/05 QA* (Random 5% Check) Initial/Date: _____

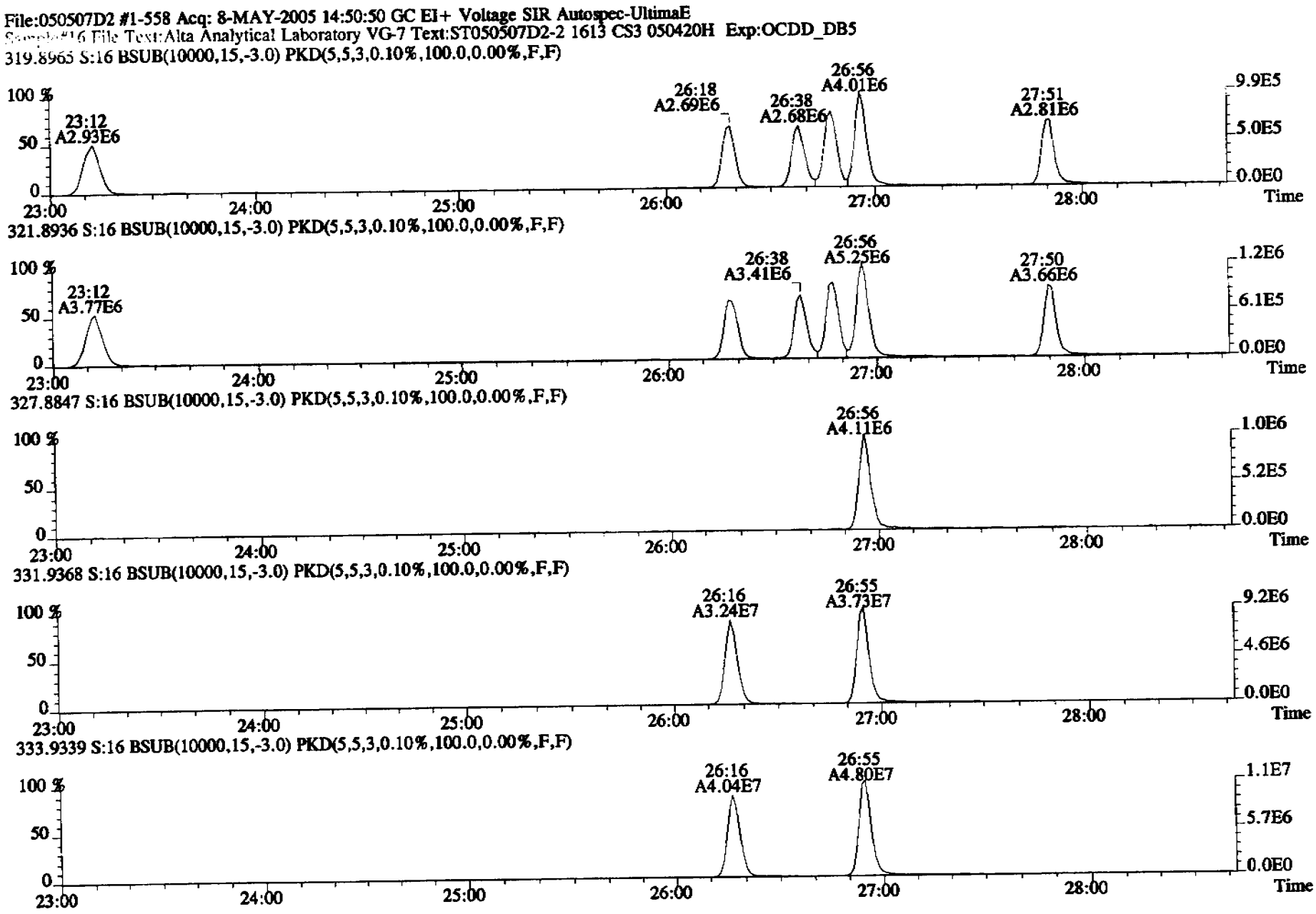
Alta Analytical Laboratory
El Dorado Hills, CA 95762

File:050507D2 #1-558 Acq: 8-MAY-2005 14:50:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#16 File Text:Alta Analytical Laboratory VG-7 Text:ST050507D2-2 1613 CS3 050420H Exp:OCDD_DB5
321.8936 S:16

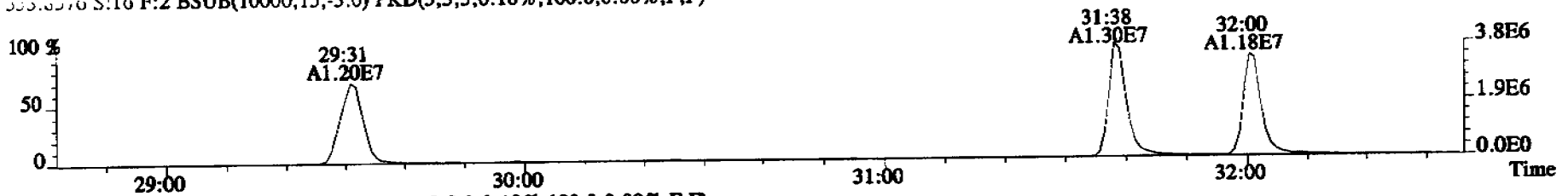


333.9339 S:16

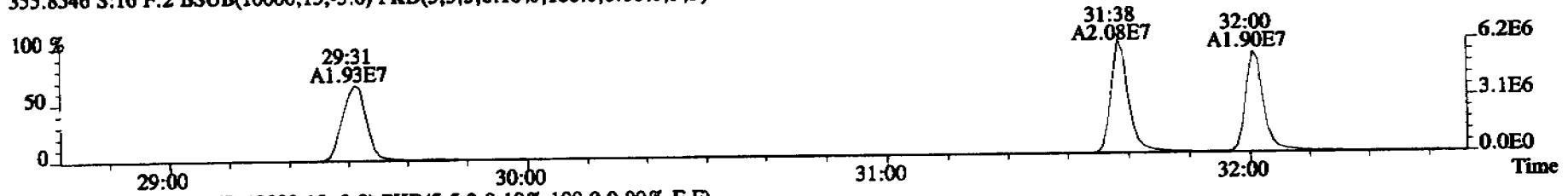



File:050507D2 #1-558 Acq: 8-MAY-2005 14:50:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#16 File Text:Alta Analytical Laboratory VG-7 Text:ST050507D2-2 1613 CS3 050420H Exp:OCDD_DB5
319.8965 S:16 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
23:12 A2.93E6
26:18 A2.69E6
26:38 A2.68E6
26:56 A4.01E6
27:51 A2.81E6
9.9E5
5.0E5
0.0E0
Time
321.8936 S:16 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
23:12 A3.77E6
26:38 A3.41E6
26:56 A5.25E6
27:50 A3.66E6
1.2E6
6.1E5
0.0E0
Time
327.8847 S:16 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:56 A4.11E6
1.0E6
5.2E5
0.0E0
Time
331.9368 S:16 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:16 A3.24E7
26:55 A3.73E7
9.2E6
4.6E6
0.0E0
Time
333.9339 S:16 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:16 A4.04E7
26:55 A4.80E7
1.1E7
5.7E6
0.0E0
Time
100 %
50
0
23:00
24:00
25:00
26:00
27:00
28:00

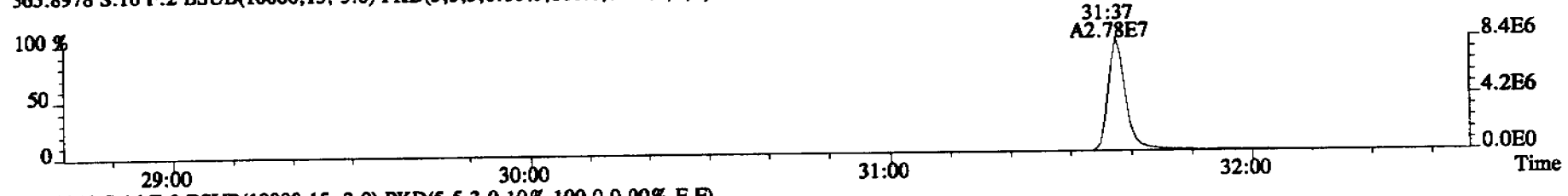
File:050507D2 #1-273 Acq: 8-MAY-2005 14:50:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample:16 File Text:Alta Analytical Laboratory VG-7 Text:ST050507D2-2 1613 CS3 050420H Exp:OCDD_DB5
353.8576 S:16 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



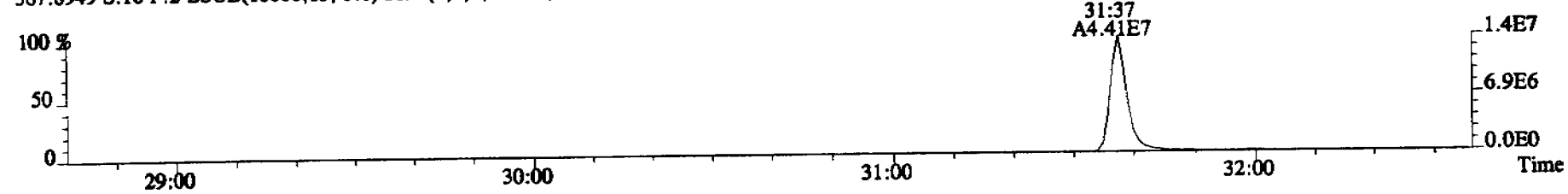
355.8546 S:16 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



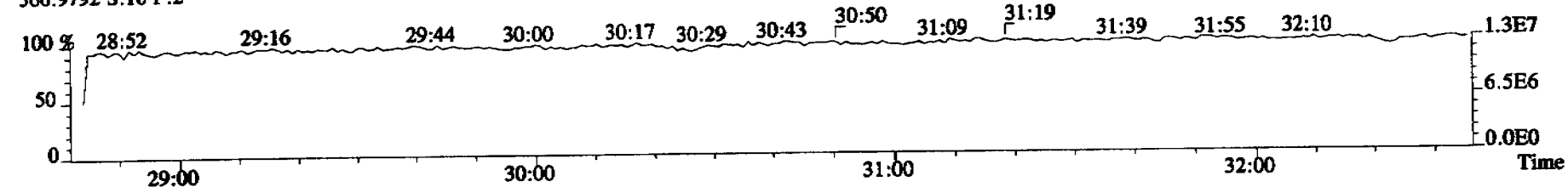
365.8978 S:16 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

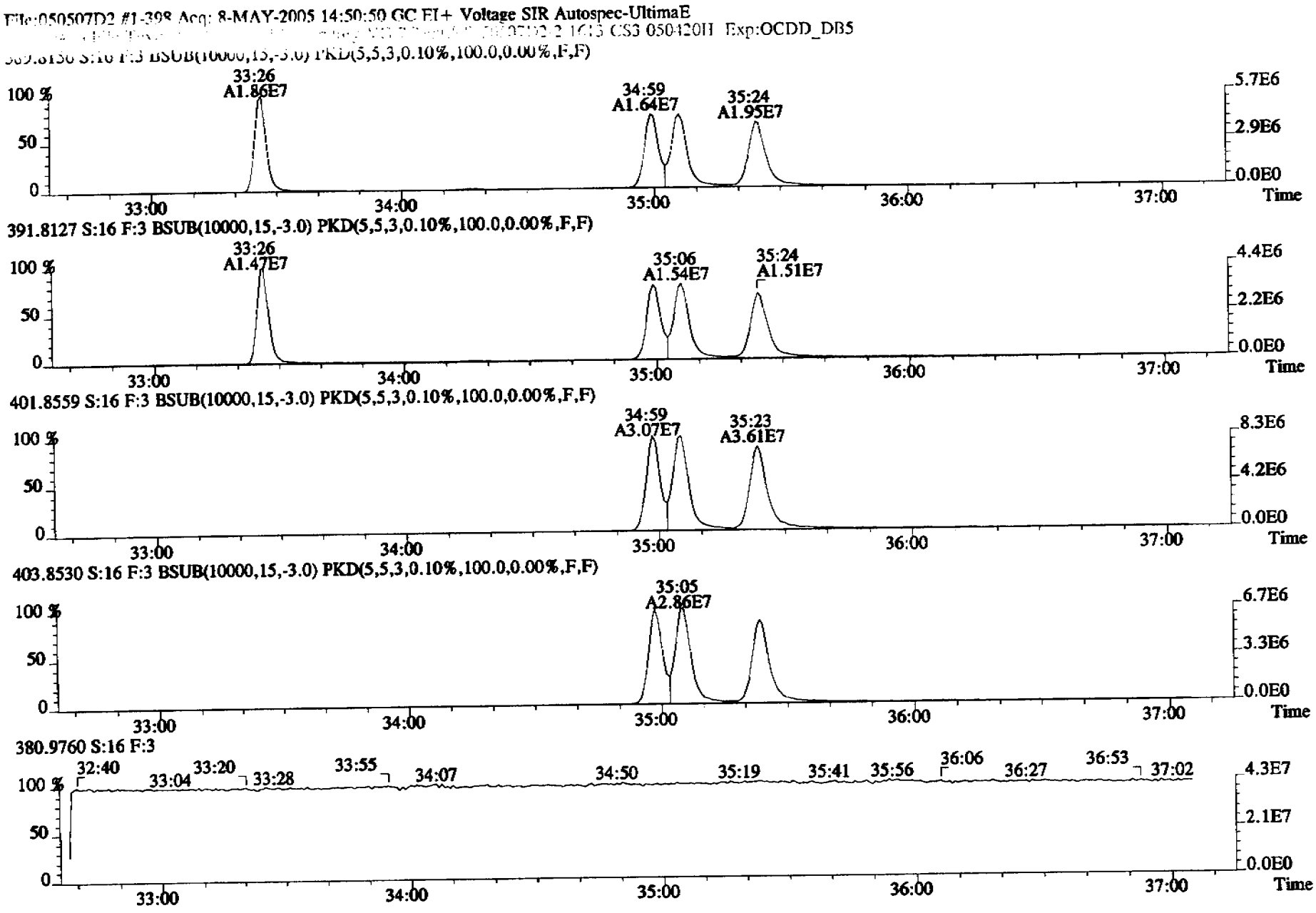


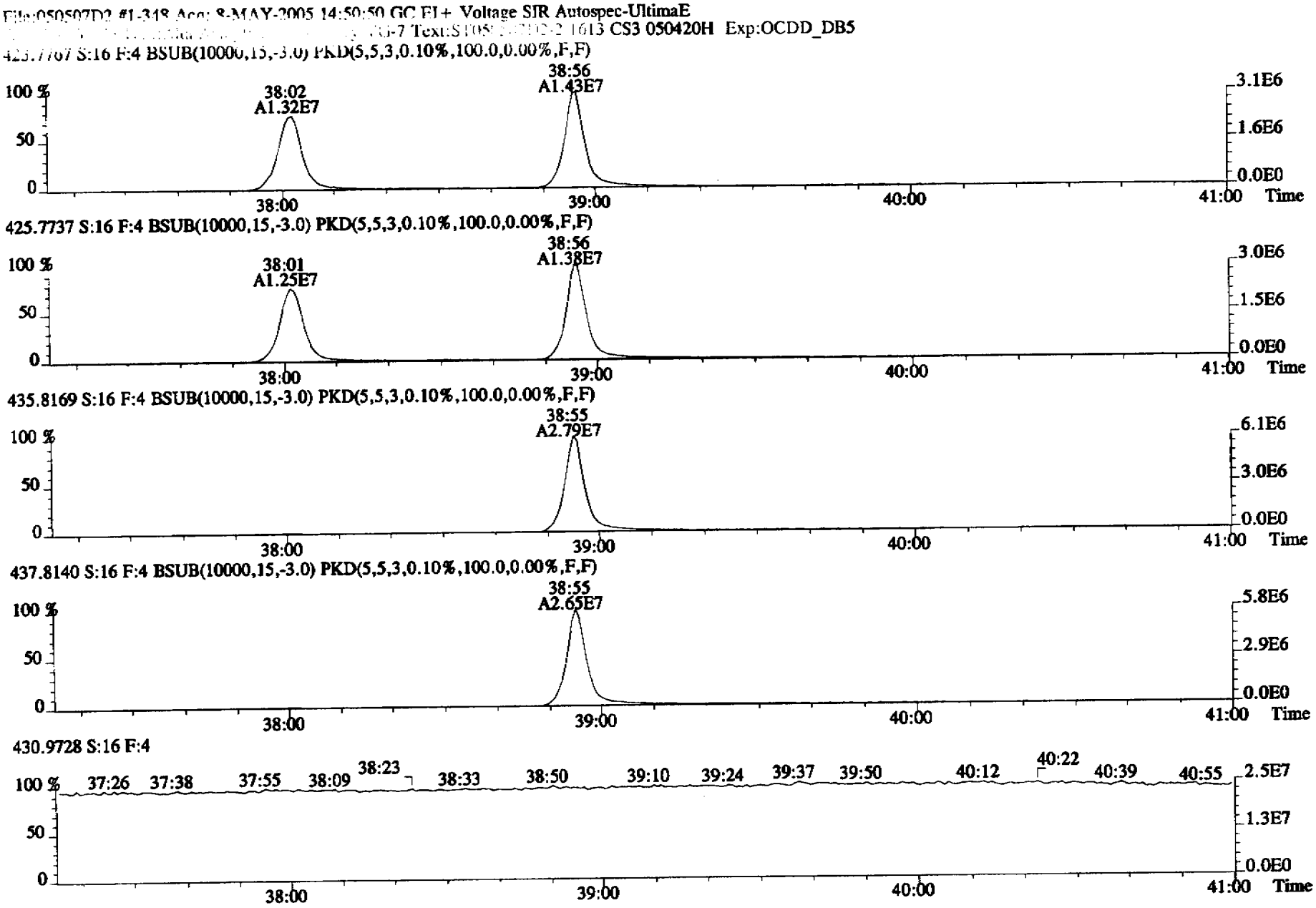
367.8949 S:16 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

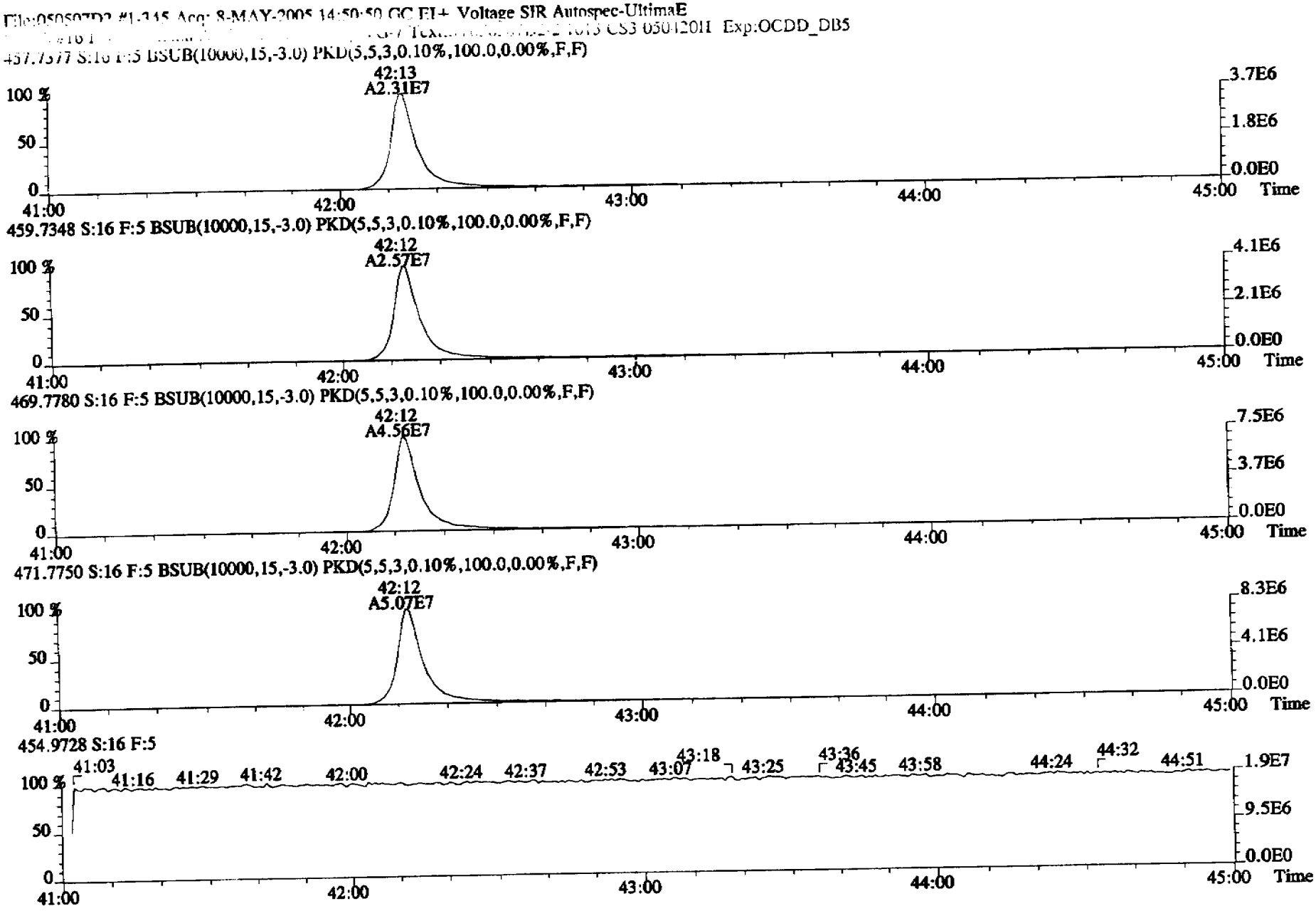


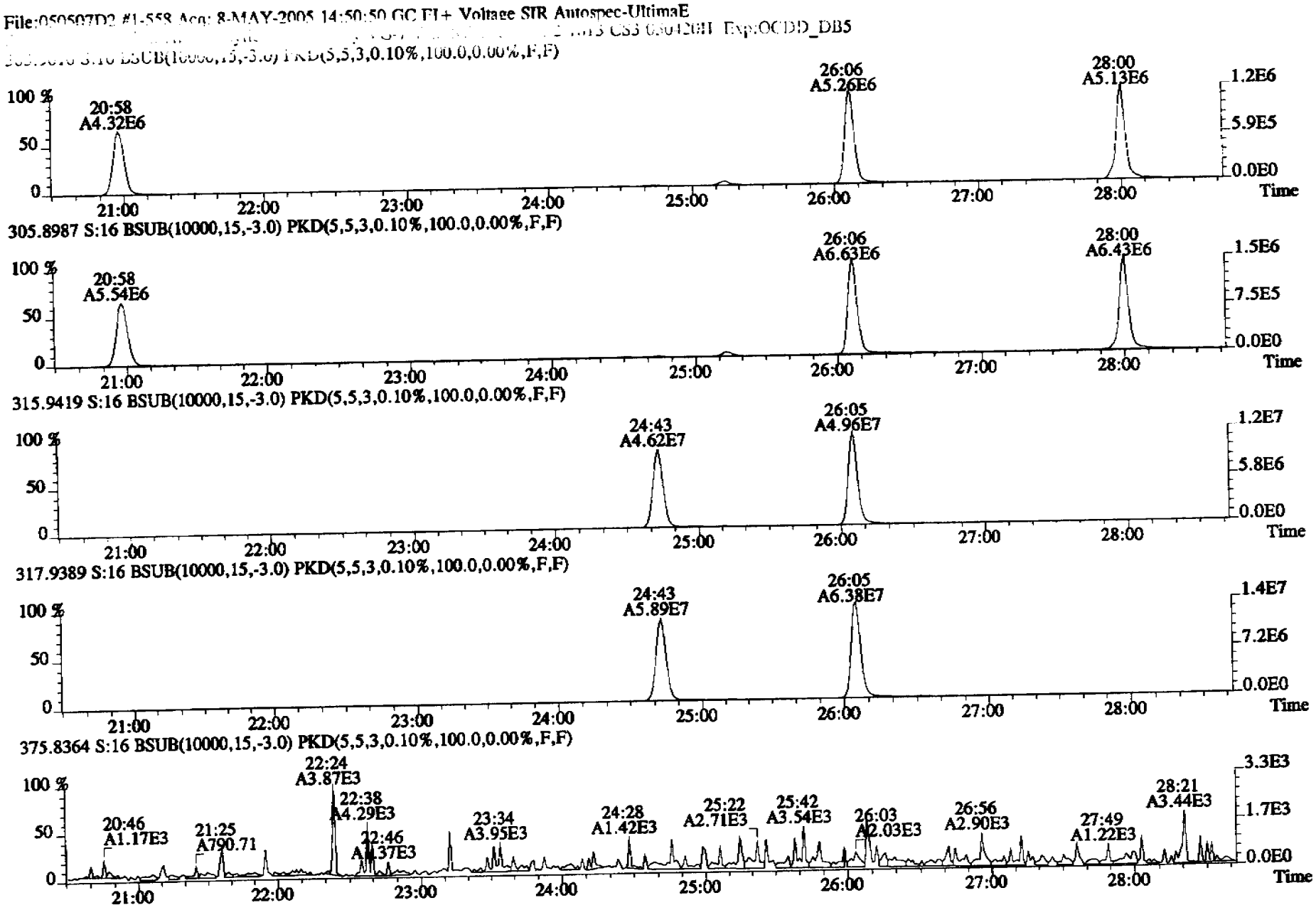
366.9792 S:16 F:2

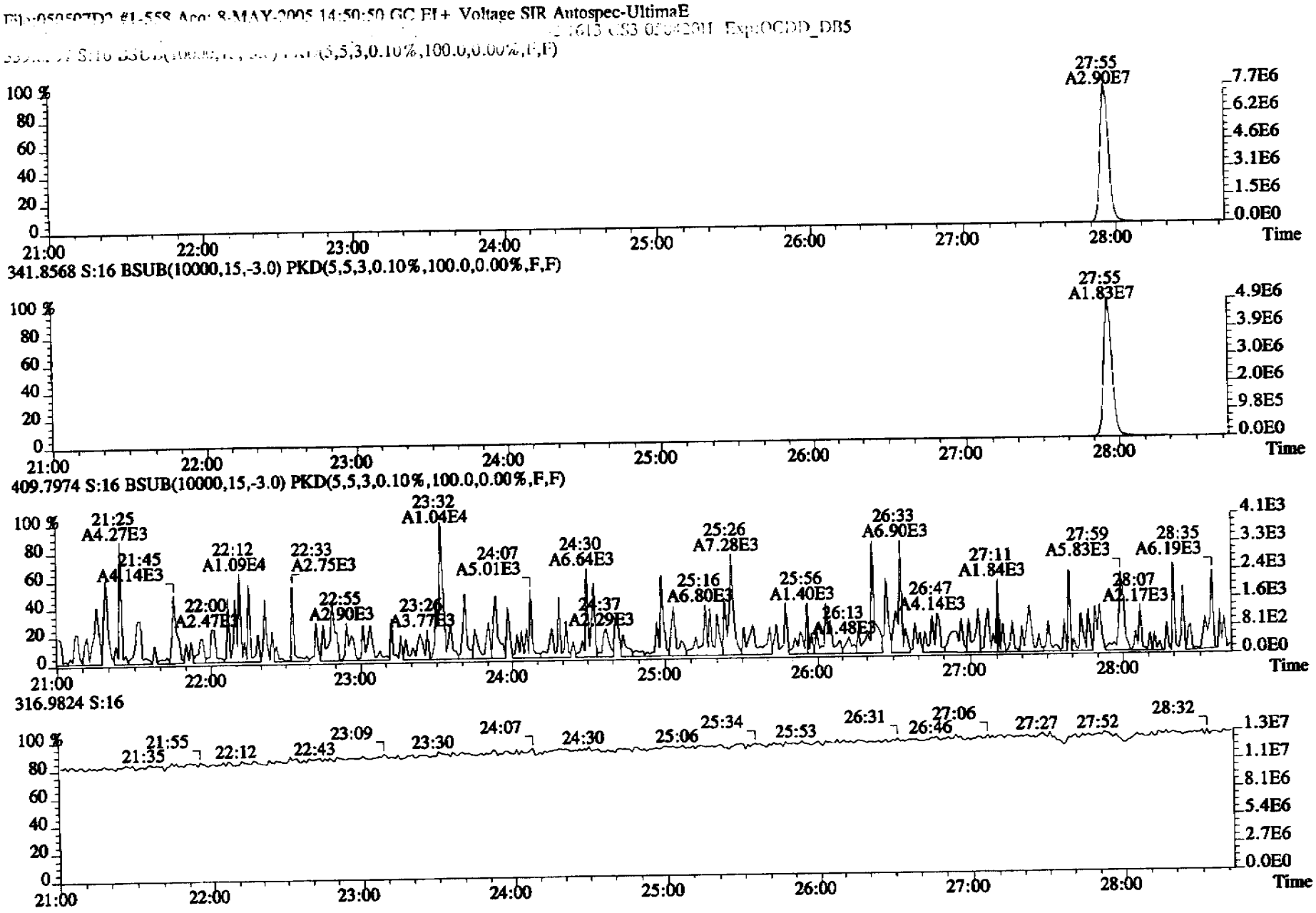


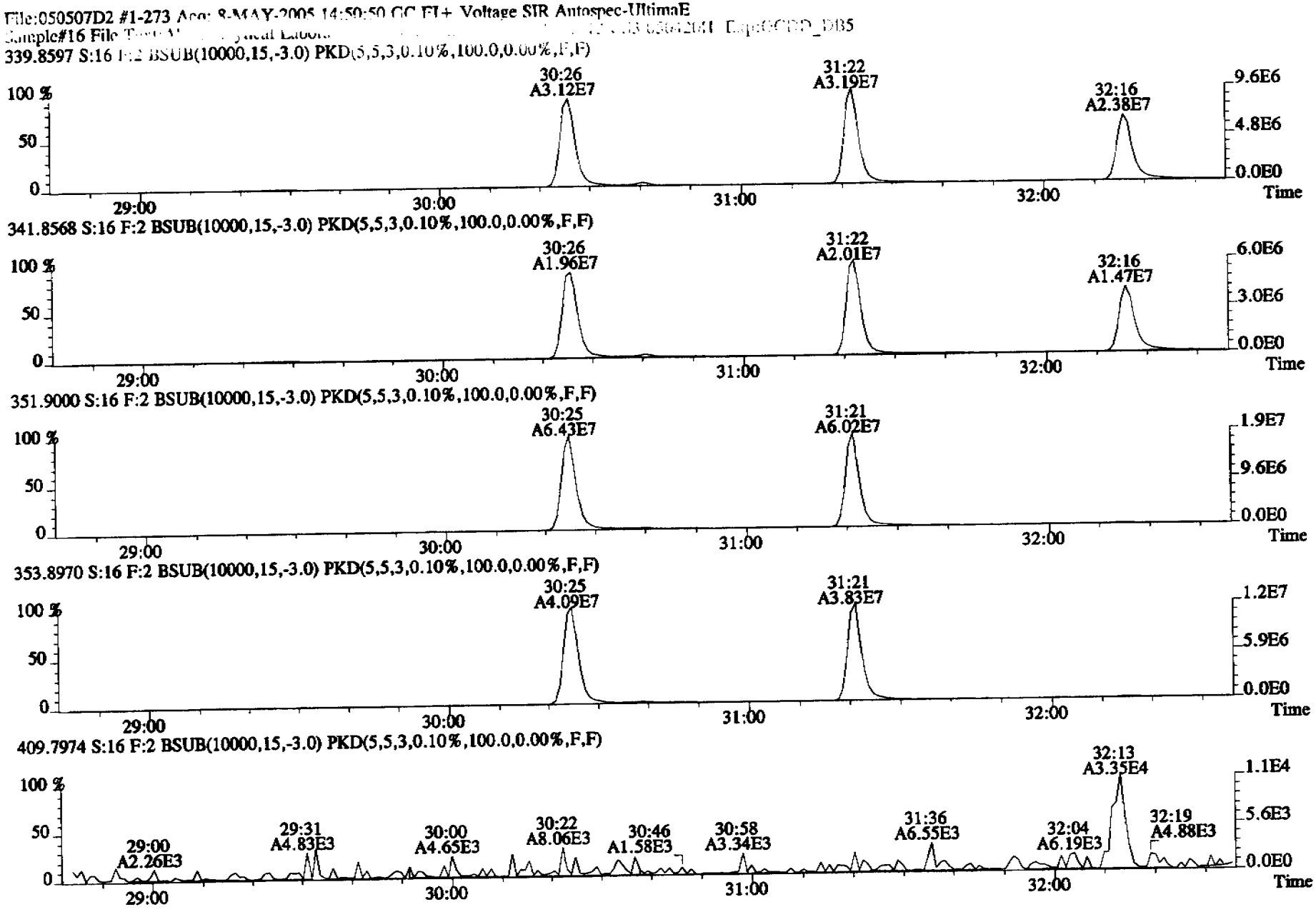

File:050507D2 #1-398 Acq: 8-MAY-2005 14:50:50 GC EI+ Voltage SIR Autospec-UltimaE
Exp:OCDD_DB5
389.8156 S:16 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
33:26
A1.86E7
34:59
A1.64E7
35:24
A1.95E7
5.7E6
2.9E6
0.0E0
Time
391.8127 S:16 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
33:26
A1.47E7
35:06
A1.54E7
35:24
A1.51E7
4.4E6
2.2E6
0.0E0
Time
401.8559 S:16 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:59
A3.07E7
35:23
A3.61E7
8.3E6
4.2E6
0.0E0
Time
403.8530 S:16 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
35:05
A2.86E7
6.7E6
3.3E6
0.0E0
Time
380.9760 S:16 F:3
32:40
33:04
33:20
33:28
33:55
34:07
34:50
35:19
35:41
35:56
36:06
36:27
36:53
37:02
4.3E7
2.1E7
0.0E0
Time
100 %
50
0
33:00
34:00
35:00
36:00
37:00

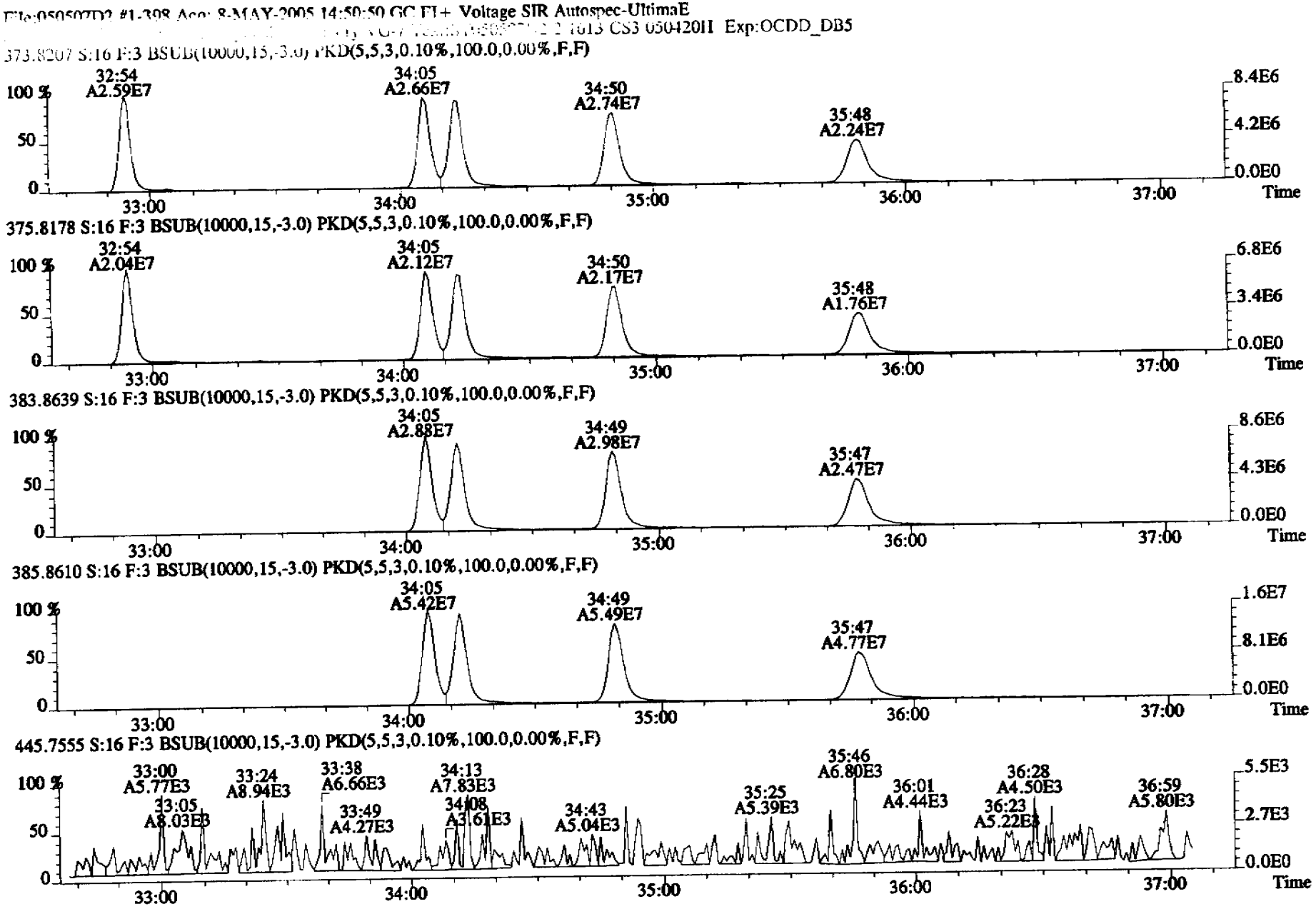

File:050507D2 #1-348 Acq: 8-MAY-2005 14:50:50 GC EI+ Voltage SIR Autospec-UltimaE
Text:S105 1613 CS3 050420H Exp:OCDD_DB5
425.7737 S:16 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
38:02
A1.32E7
38:56
A1.43E7
3.1E6
1.6E6
0.0E0
100 %
50
0
38:00
39:00
40:00
41:00
Time
425.7737 S:16 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
38:01
A1.25E7
38:56
A1.38E7
3.0E6
1.5E6
0.0E0
435.8169 S:16 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
38:55
A2.79E7
6.1E6
3.0E6
0.0E0
437.8140 S:16 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
38:55
A2.65E7
5.8E6
2.9E6
0.0E0
430.9728 S:16 F:4
37:26
37:38
37:55
38:09
38:23
38:33
38:50
39:10
39:24
39:37
39:50
40:12
40:22
40:39
40:55
2.5E7
1.3E7
0.0E0

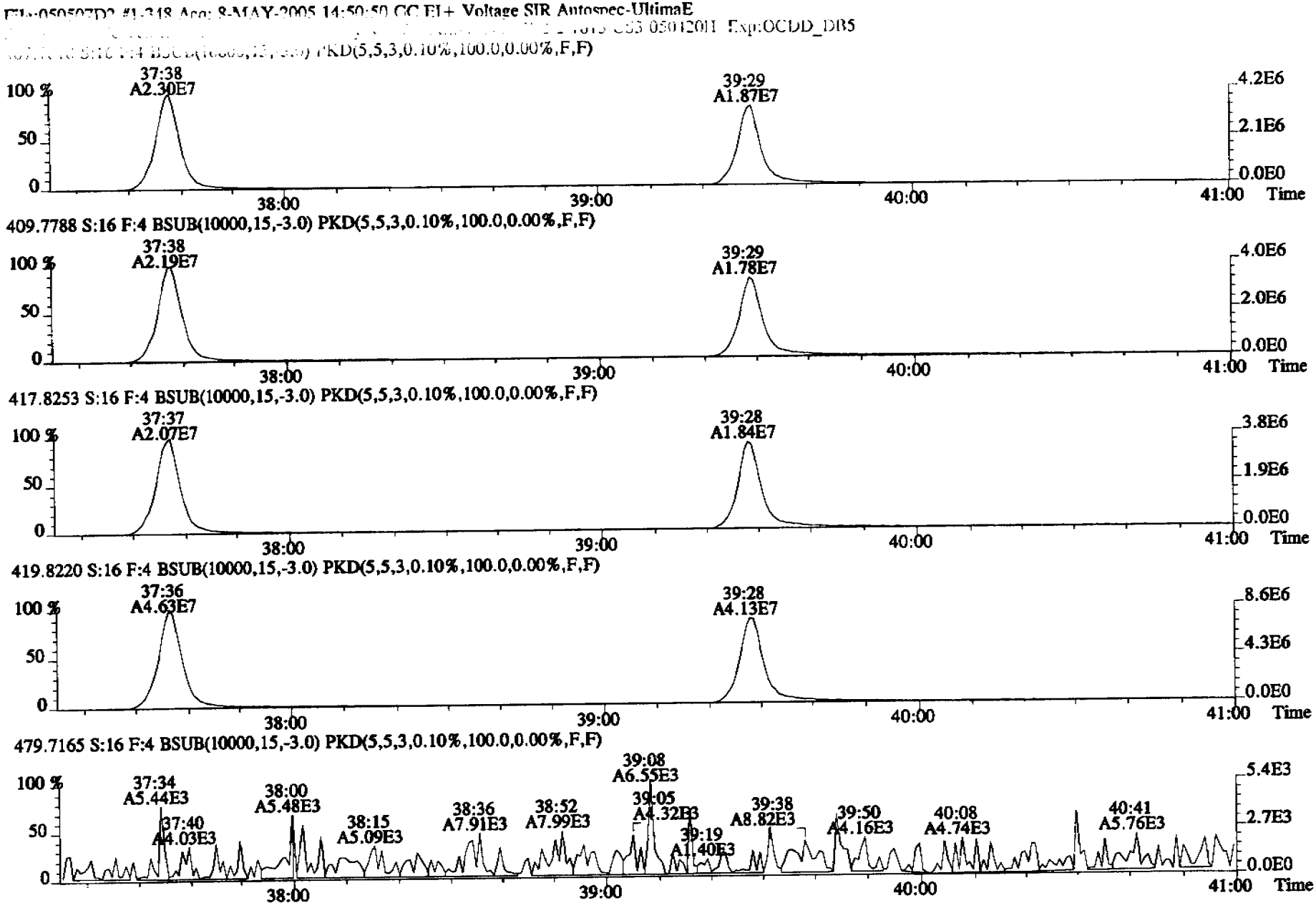

457.7377 S:16 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
42:13
A2.31E7
459.7348 S:16 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
42:12
A2.57E7
469.7780 S:16 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
42:12
A4.56E7
471.7750 S:16 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
42:12
A5.07E7
454.9728 S:16 F:5
100 %
50
0
41:00
42:00
43:00
44:00
45:00
Time
3.7E6
1.8E6
0.0E0
4.1E6
2.1E6
7.5E6
3.7E6
8.3E6
4.1E6
1.9E7
9.5E6

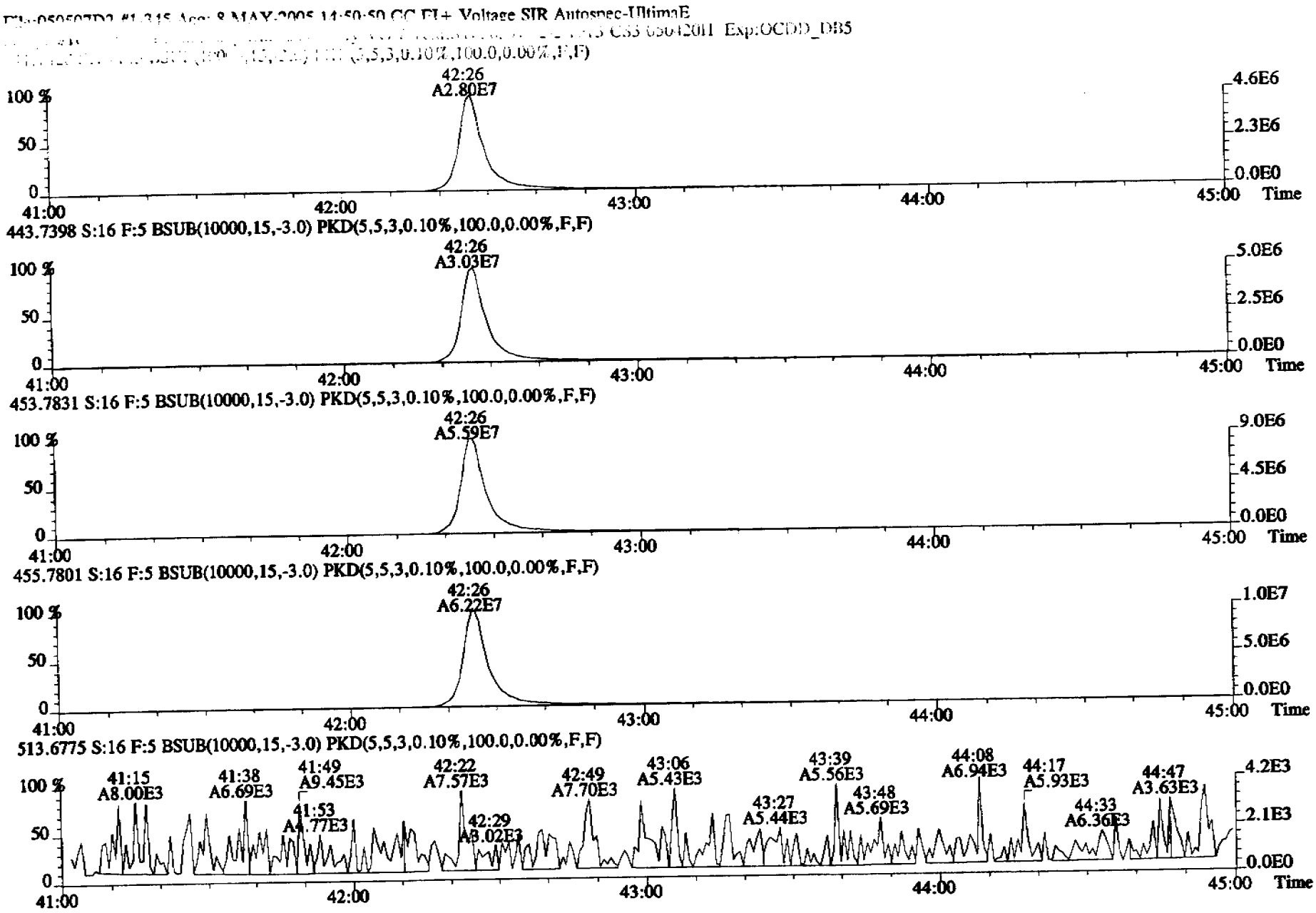

305.8987 S:16 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
315.9419 S:16 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
317.9389 S:16 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
375.8364 S:16 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
20:58 A4.32E6
26:06 A5.26E6
28:00 A5.13E6
20:58 A5.54E6
26:06 A6.63E6
28:00 A6.43E6
24:43 A4.62E7
26:05 A4.96E7
24:43 A5.89E7
26:05 A6.38E7
22:24 A3.87E3
22:38 A4.29E3
20:46 A1.17E3
21:25 A790.71
22:46 A1.37E3
23:34 A3.95E3
24:28 A1.42E3
25:22 A2.71E3
25:42 A3.54E3
26:03 A2.03E3
26:56 A2.90E3
27:49 A1.22E3
28:21 A3.44E3
Time


Exp:OCDD_DB5
(5,5,3,0.10%,100.0,0.00%,F,F)
27:55
A2.90E7
7.7E6
6.2E6
4.6E6
3.1E6
1.5E6
0.0E0
Time
341.8568 S:16 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
27:55
A1.83E7
4.9E6
3.9E6
3.0E6
2.0E6
9.8E5
0.0E0
Time
409.7974 S:16 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:25
A4.27E3
21:45
A4.14E3
22:00
A2.47E3
22:12
A1.09E4
22:33
A2.75E3
22:55
A2.90E3
23:26
A3.77E3
23:32
A1.04E4
24:07
A5.01E3
24:30
A6.64E3
24:37
A2.29E3
25:16
A6.80E3
25:26
A7.28E3
25:56
A1.40E3
26:13
A1.48E3
26:33
A6.90E3
26:47
A4.14E3
27:11
A1.84E3
27:59
A5.83E3
28:07
A2.17E3
28:35
A6.19E3
4.1E3
3.3E3
2.4E3
1.6E3
8.1E2
0.0E0
Time
316.9824 S:16
21:35
21:55
22:12
22:43
23:09
23:30
24:07
24:30
25:06
25:34
25:53
26:31
26:46
27:06
27:27
27:52
28:32
1.3E7
1.1E7
8.1E6
5.4E6
2.7E6
0.0E0
Time


File:050507D2 #1-273 Acq: 8-MAY-2005 14:50:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#16 File
339.8597 S:16 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
30:26 A3.12E7
31:22 A3.19E7
32:16 A2.38E7
9.6E6
4.8E6
0.0E0
100 %
50
0
29:00
30:00
31:00
32:00
Time
341.8568 S:16 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
30:26 A1.96E7
31:22 A2.01E7
32:16 A1.47E7
6.0E6
3.0E6
0.0E0
351.9000 S:16 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
30:25 A6.43E7
31:21 A6.02E7
1.9E7
9.6E6
0.0E0
353.8970 S:16 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
30:25 A4.09E7
31:21 A3.83E7
1.2E7
5.9E6
0.0E0
409.7974 S:16 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
32:13 A3.35E4
1.1E4
5.6E3
0.0E0
29:00 A2.26E3
29:31 A4.83E3
30:00 A4.65E3
30:22 A8.06E3
30:46 A1.58E3
30:58 A3.34E3
31:36 A6.55E3
32:04 A6.19E3
32:19 A4.88E3

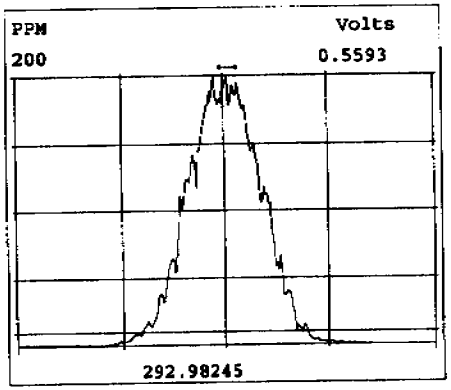

Voltage SIR Autospec-UltimaE
Exp:OCDD_DB5
373.8207 S:16 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
32:54 A2.59E7
34:05 A2.66E7
34:50 A2.74E7
35:48 A2.24E7
8.4E6
4.2E6
0.0E0
Time
375.8178 S:16 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
32:54 A2.04E7
34:05 A2.12E7
34:50 A2.17E7
35:48 A1.76E7
6.8E6
3.4E6
0.0E0
Time
383.8639 S:16 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:05 A2.88E7
34:49 A2.98E7
35:47 A2.47E7
8.6E6
4.3E6
0.0E0
Time
385.8610 S:16 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:05 A5.42E7
34:49 A5.49E7
35:47 A4.77E7
1.6E7
8.1E6
0.0E0
Time
445.7555 S:16 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
33:00 A5.77E3
33:05 A8.03E3
33:24 A8.94E3
33:38 A6.66E3
33:49 A4.27E3
34:13 A7.83E3
34:08 A3.61E3
34:43 A5.04E3
35:25 A5.39E3
35:46 A6.80E3
36:01 A4.44E3
36:23 A5.22E3
36:28 A4.50E3
36:59 A5.80E3
5.5E3
2.7E3
0.0E0
Time

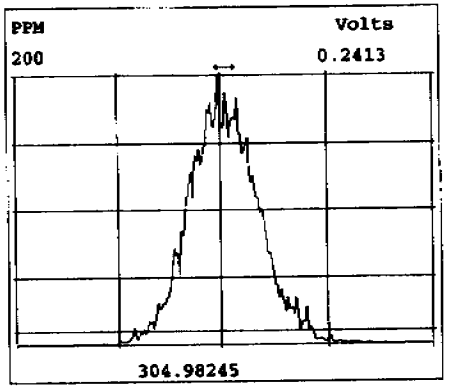

Exp:OCDD_DB5
PKD(5,5,3,0.10%,100.0,0.00%,F,F)
37:38
A2.30E7
39:29
A1.87E7
4.2E6
2.1E6
0.0E0
100 %
50
0
38:00
39:00
40:00
41:00
Time
409.7788 S:16 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
37:38
A2.19E7
39:29
A1.78E7
4.0E6
2.0E6
0.0E0
417.8253 S:16 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
37:37
A2.07E7
39:28
A1.84E7
3.8E6
1.9E6
0.0E0
419.8220 S:16 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
37:36
A4.63E7
39:28
A4.13E7
8.6E6
4.3E6
0.0E0
479.7165 S:16 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
39:08
A6.55E3
37:34
A5.44E3
38:00
A5.48E3
37:40
A4.03E3
38:15
A5.09E3
38:36
A7.91E3
38:52
A7.99E3
39:05
A4.32E3
39:19
A1.40E3
39:38
A8.82E3
39:50
A4.16E3
40:08
A4.74E3
40:41
A5.76E3
5.4E3
2.7E3
0.0E0

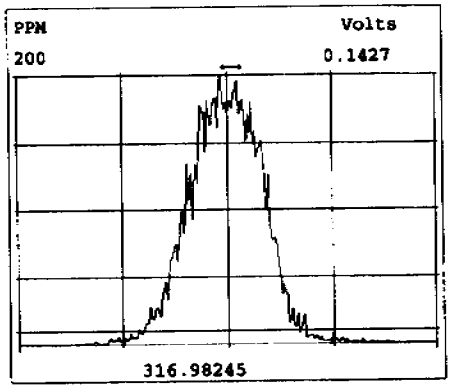

Voltage SIR Autospec-UltimaE
Exp:OCDD_DB5
(5,5,3,0.10%,100.0,0.00%,F,F)
42:26
A2.80E7
4.6E6
2.3E6
0.0E0
100 %
50
0
41:00
42:00
43:00
44:00
45:00
Time
443.7398 S:16 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
42:26
A3.03E7
5.0E6
2.5E6
0.0E0
453.7831 S:16 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
42:26
A5.59E7
9.0E6
4.5E6
0.0E0
455.7801 S:16 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
42:26
A6.22E7
1.0E7
5.0E6
0.0E0
513.6775 S:16 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
41:15
A8.00E3
41:38
A6.69E3
41:49
A9.45E3
41:53
A4.77E3
42:22
A7.57E3
42:29
A8.02E3
42:49
A7.70E3
43:06
A5.43E3
43:27
A5.44E3
43:39
A5.56E3
43:48
A5.69E3
44:08
A6.94E3
44:17
A5.93E3
44:33
A6.36E3
44:47
A3.63E3
4.2E3
2.1E3
0.0E0

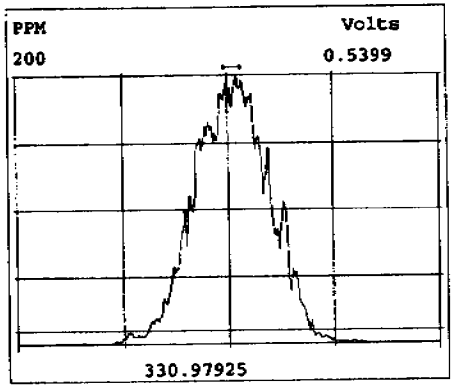
Peak Locate Examination: 8-MAY-2005:15:49 File:RES_CHECK

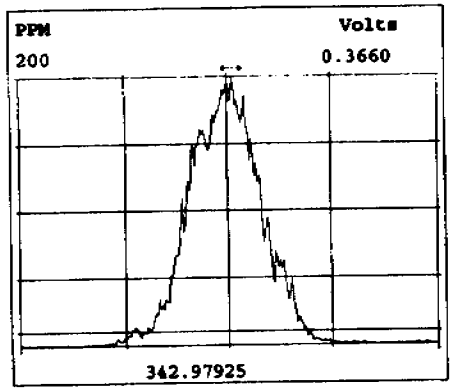
Experiment:OCDD_DB5 Function:1 Reference:PFK

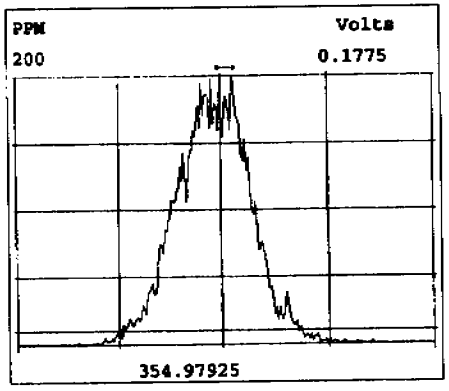


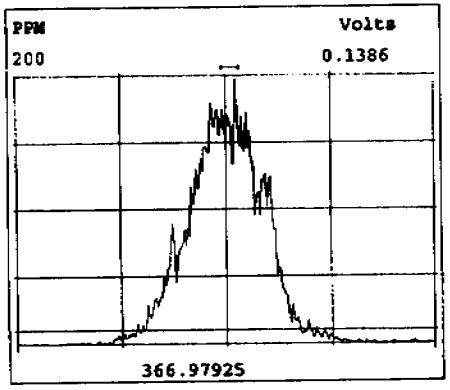


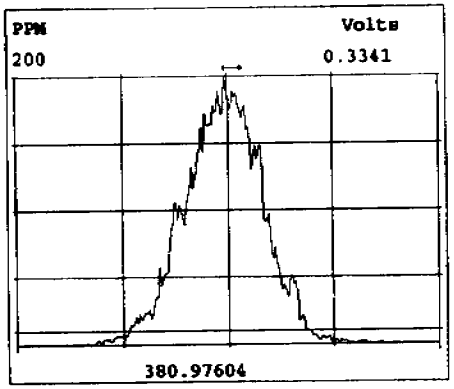


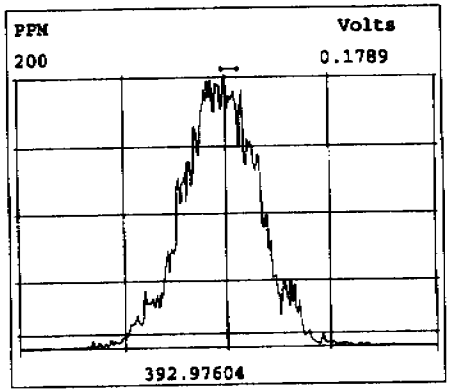


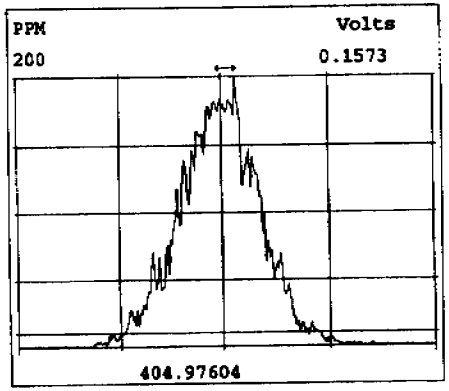


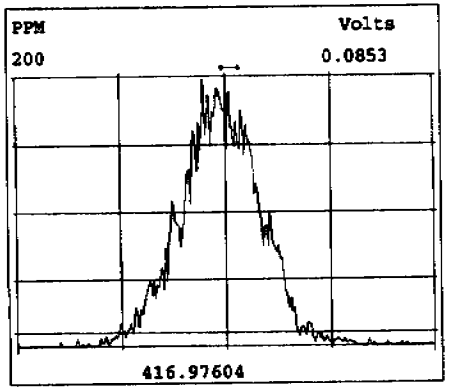






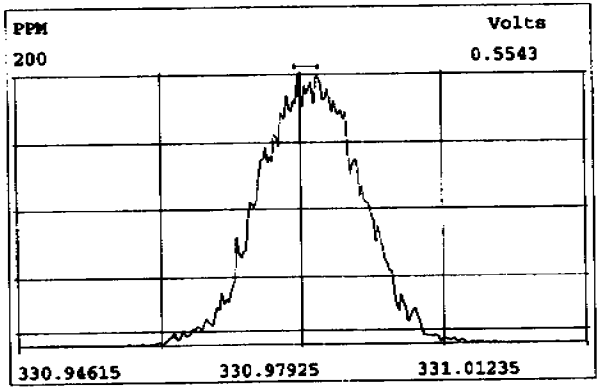


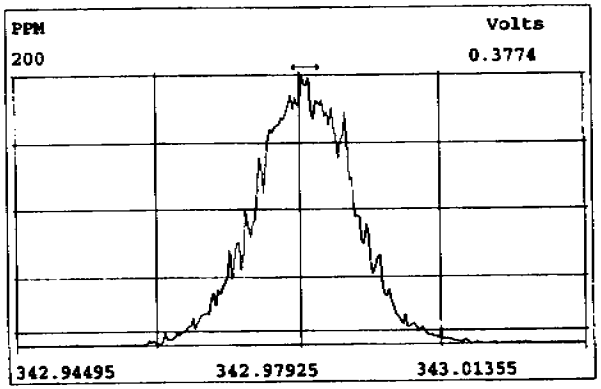


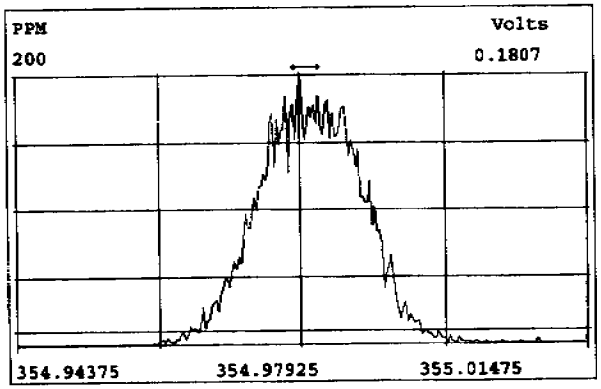


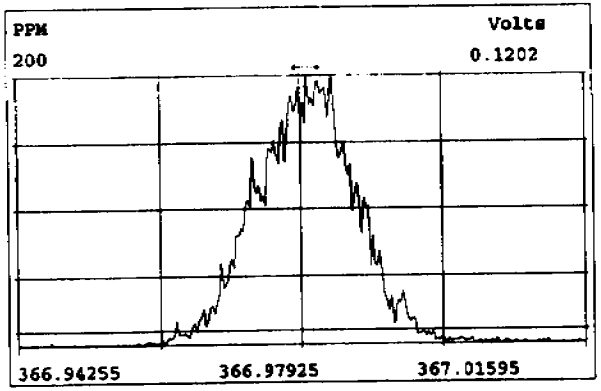
Peak Locate Examination: 8-MAY-2005:15:50 File:RES_CHECK

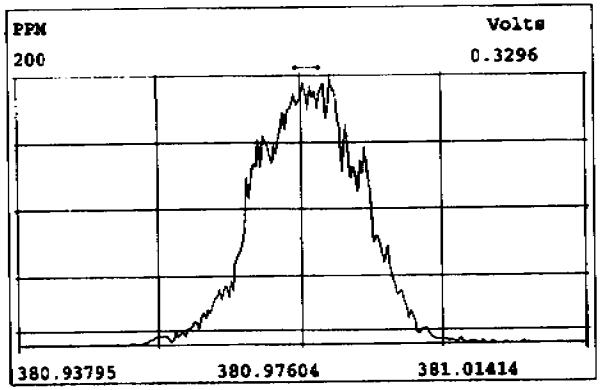
Experiment:OCDD_DB5 Function:2 Reference:PFK

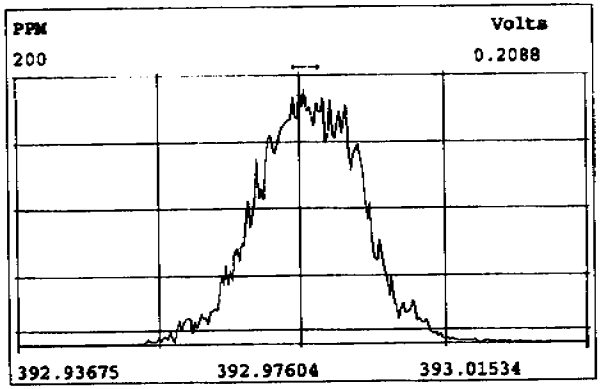


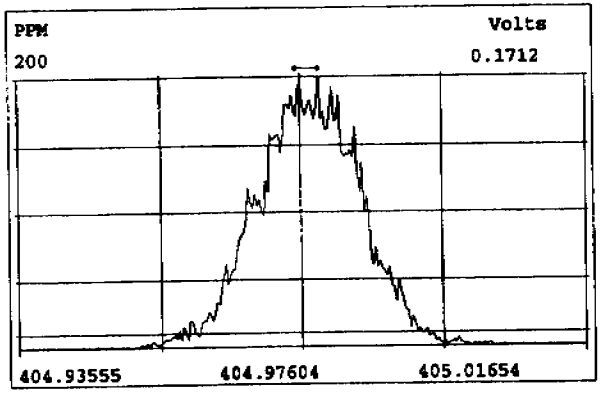


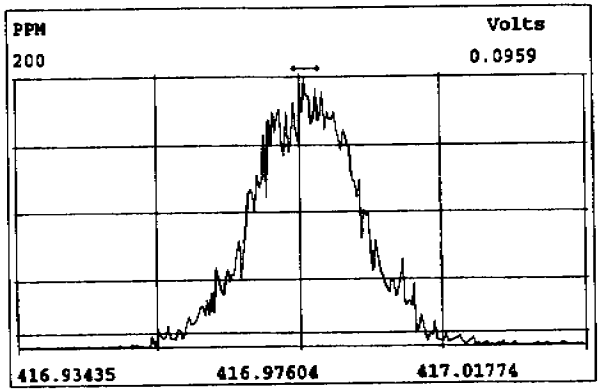






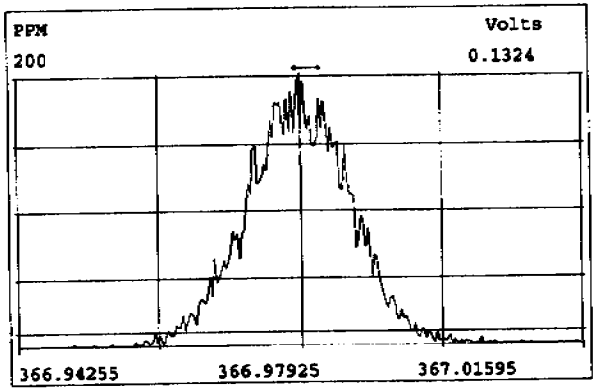


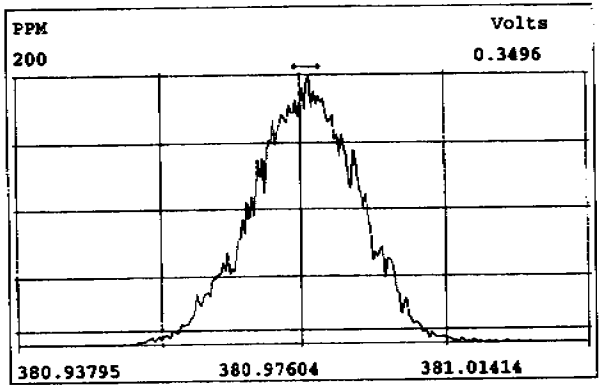


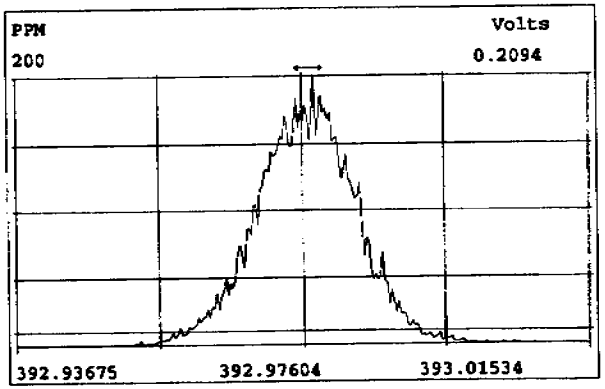


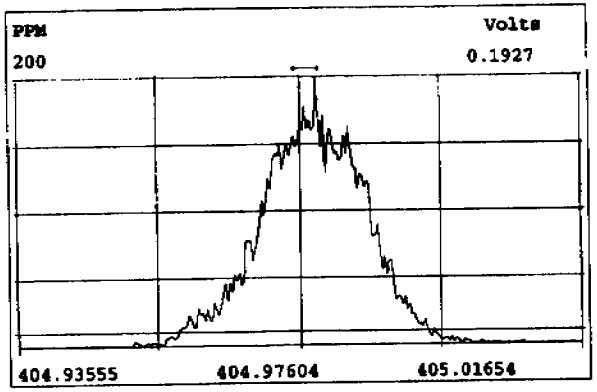
Peak Locate Examination: 8-MAY-2005:15:51 File:RES_CHECK

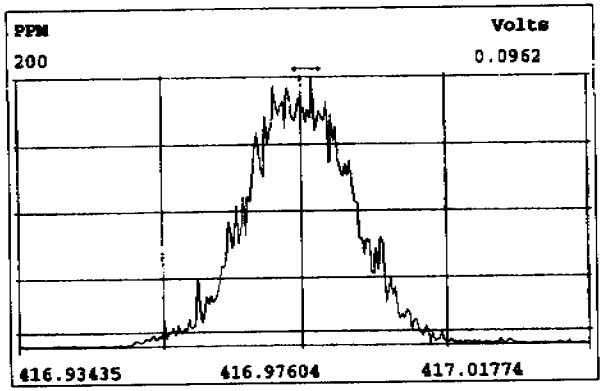
Experiment:OCDD_DB5 Function:3 Reference:PFK

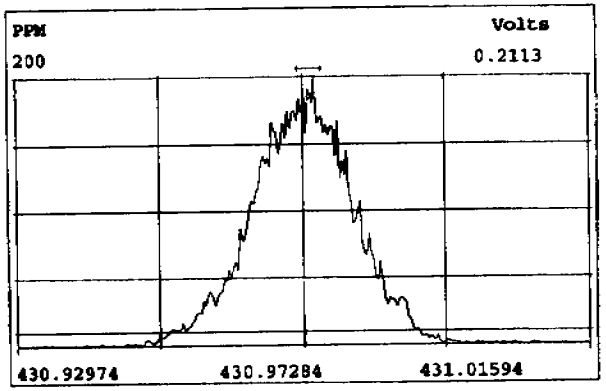


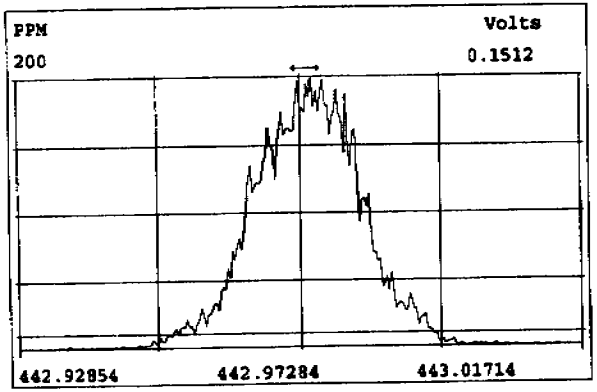


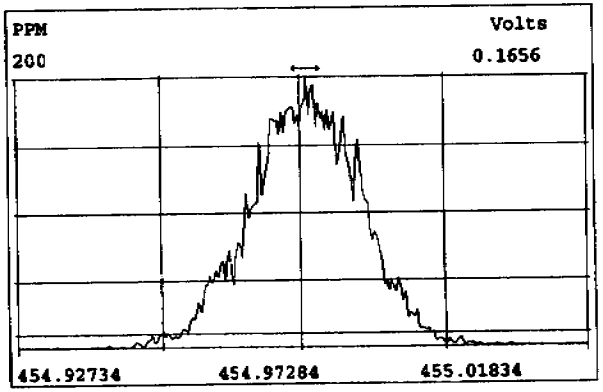






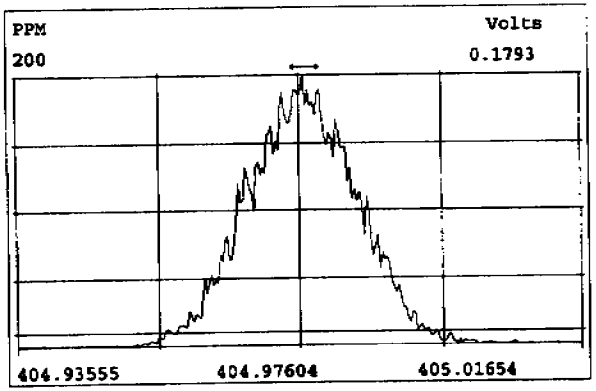


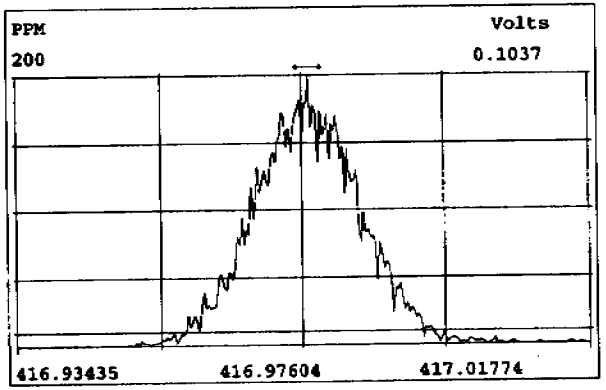


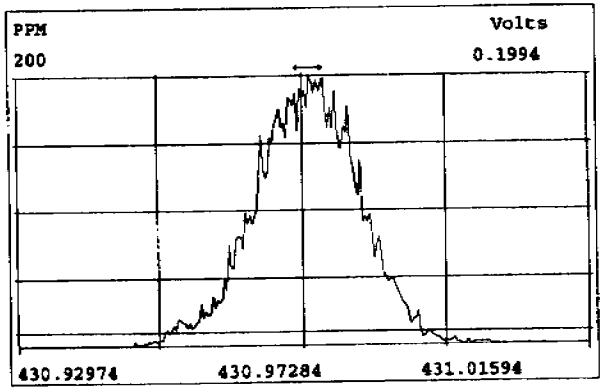


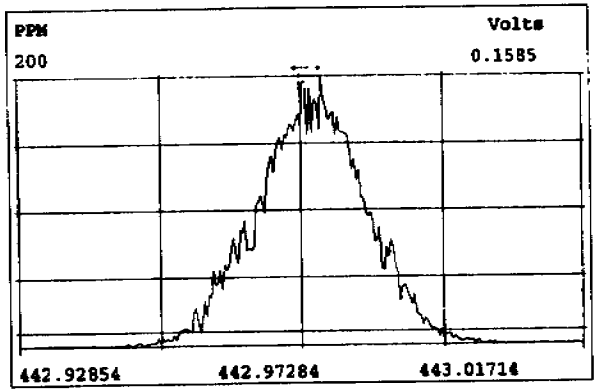
Peak Locate Examination: 8-MAY-2005:15:52 File:RES_CHECK

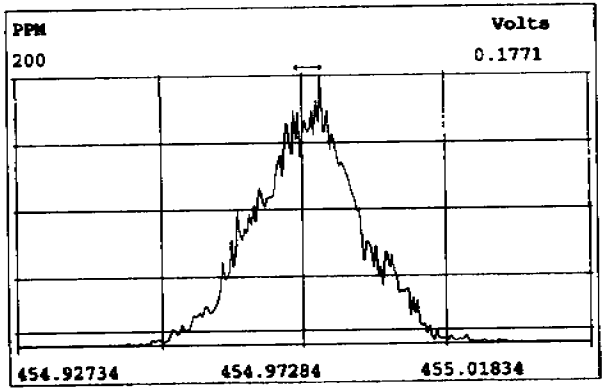
Experiment:OCDD_DB5 Function:4 Reference:PFK

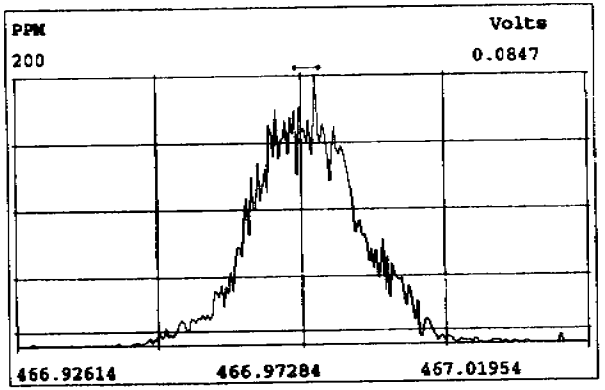


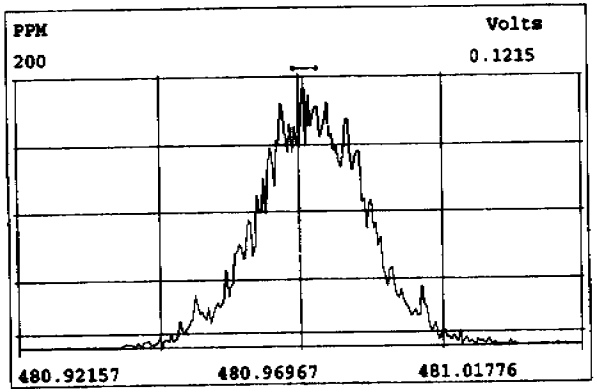






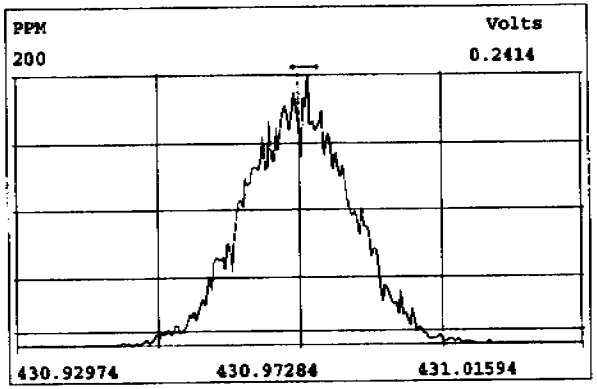


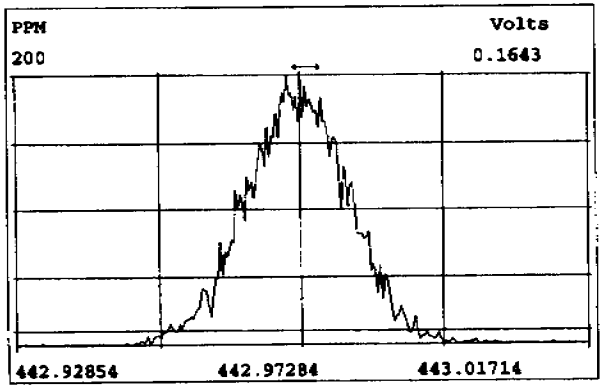


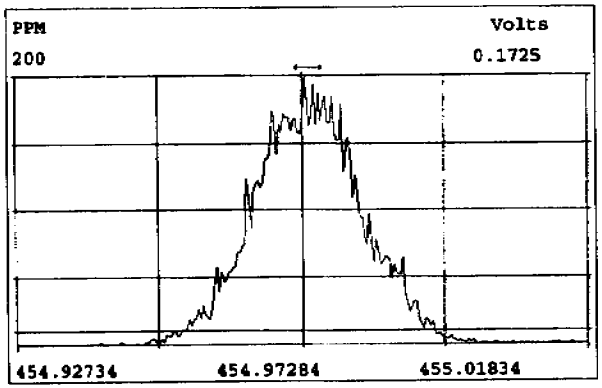


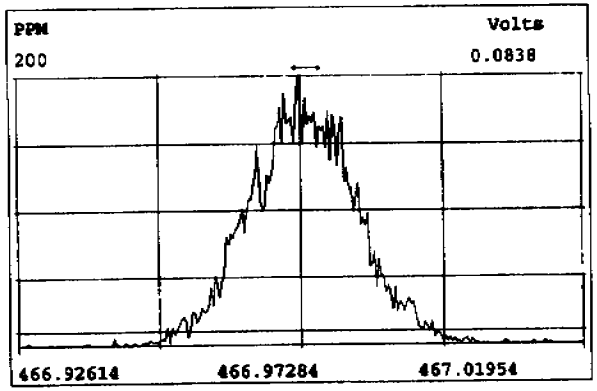
Peak Locate Examination: 8-MAY-2005:15:53 File:RES_CHECK

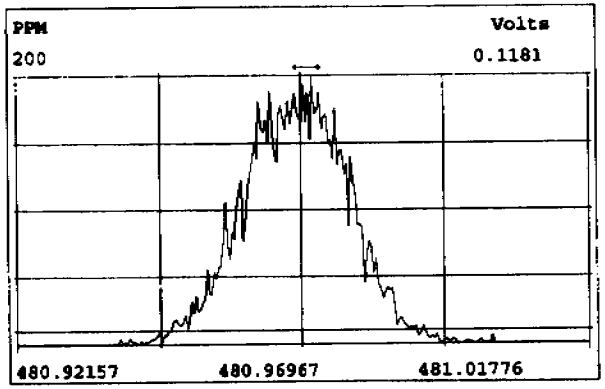
Experiment:OCDD_DB5 Function:5 Reference:PFK

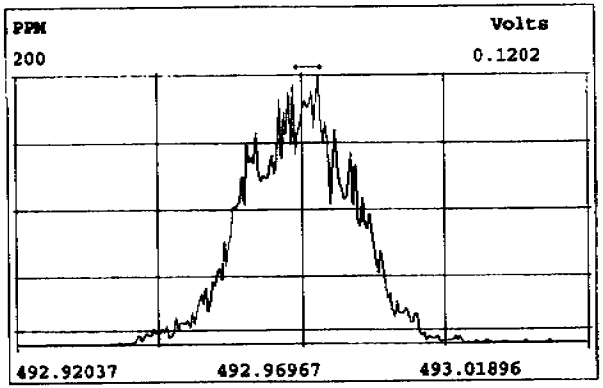


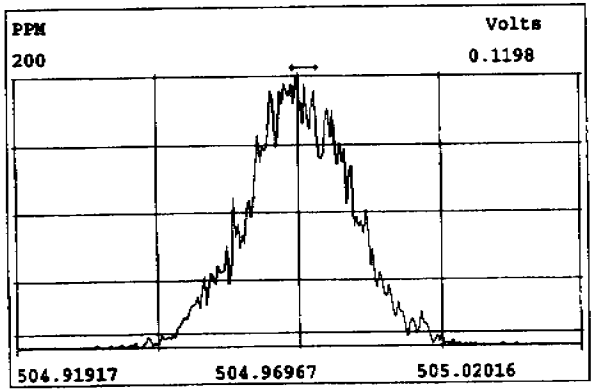


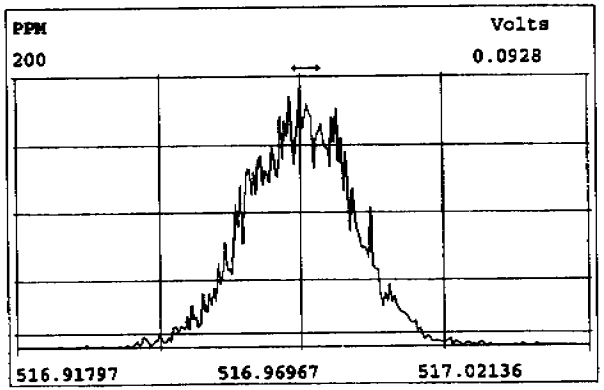












FORM 4A/4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory

CCAL ID: ST050509A2-1

Initial Calibration Date: 4-29-05

Instrument ID: VG-6 GC Column ID: DB-225

VER Data Filename: 050509A2 S#2 Analysis Date: 9-MAY-05 Time: 23:40:56

ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CONC. FOUND	CONC. RANGE (3) (ng/mL)
2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	10.6	8.6 - 11.6 8.0 - 12.0 (8290)
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	97.6	76.0 - 131.0 70.0 - 130 (8290)

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6a, Method 1613, under VER.

10/94

Analyst: DMS

Date: 5/10/05

USEPA - ITD

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: VG-6 Initial Calibration Date: 4-29-05

DB-225 IS Data Filename: 050509A2 S#1 Analysis Date: 9-MAY-05 Time: 22:59:59

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

ISOMERS	% VALLEY HEIGHT BETWEEN COMPARED PEAKS (1)
2347-TCDF 2378-TCDF	<25%
2378-TCDF 1239-TCDF	<25%

(1) To meet contract requirements, %Valley Height Between Compared Peaks shall not exceed 25% (section 14.4.2.2, Method 1613.

Analyst: DMS

Date: 5/10/05

Client ID: 1613 CS3 050420H Filename: 050509A2 S:2 Acq: 9-MAY-05 23:40:56 ConCal: ST050509A2-1
Lab ID: ST050509A2-1 GC Column ID: DB-225 ICal: 1613TCDFVG6-4-29-05 wt/vol: 1.000 EndCAL: ST050509A2-2

Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	4.61e+07	0.78 y	19:39	1.00	100.0	-
13C-2,3,7,8-TCDF	4.68e+07	0.79 y	23:09	1.04	97.60	97.6
2,3,7,8-TCDF	5.31e+06	0.77 y	23:10	1.07	10.59	

Analyst: DMS

Date: 5/10/05

Alta Analytical Laboratory - Injection Log Run file: 050509A2 Instrument ID: VG-6 GC Column ID: DB-225

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
050509A2	1	CP050509A2-1 DB-225 CPSM	DMS	9-MAY-05	22:59:59	ST050509A2-1	ST050509A2-2
050509A2	2	ST050509A2-1 1613 CS3 050420H	DMS	9-MAY-05	23:40:56	ST050509A2-1	ST050509A2-2
050509A2	3	SOLVENT BLANK	DMS	10-MAY-05	00:21:52	ST050509A2-1	ST050509A2-2
050509A2	4	26084_6769_001 RE73-05-58879 10.02g	DMS	10-MAY-05	01:02:50	ST050509A2-1	ST050509A2-2
050509A2	5	26111_6769_001 SLUDGE 9.998g	DMS	10-MAY-05	01:43:47	ST050509A2-1	ST050509A2-2
050509A2	6	SOLVENT BLANK	DMS	10-MAY-05	02:24:43	ST050509A2-1	ST050509A2-2
050509A2	7	ST050509A2-2 1613 CS3 050420H	DMS	10-MAY-05	03:05:45	ST050509A2-1	ST050509A2-2

HRMS STANDARDS REVIEW CHECKLIST

Attachment 7.F.2

Beginning Calibration ID: STO50509A2-1 Ending Calibration ID: STO50509A2-2

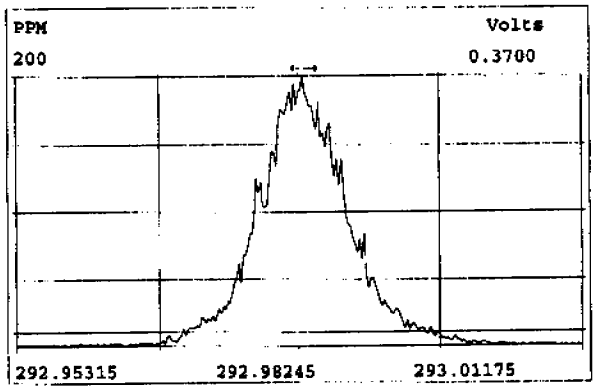
	Beg.CAL	End. CAL	COMMENTS
Calibration Verification/Form 4A/B: Ion abundance within QC limits?	✓	✓	
Calibration Verification/Form 4A/B: Conc within Conc. range?	✓	✓	
Form 5: First and last eluters present? (N/A for DB225)	N/A	N/A	
Form 6A/6B: Relative Retention Times within limits? (N/A for M23, TO9, 1668, DB225)	↓	↓	
Cal. Ver. Named correctly? (Ex. ST-Year-Month-Day-VG ID)	✓	✓	
Cal. Verification forms signed and dated for review?	✓	✓	
Appropriate ICAL referenced?	✓	✓	
Run log: Standards named correctly? Correct Instrument listed?	✓	✓	
Run log: Samples within 12-hour shift?		✓	
Mass resolution > 10,000	✓	✓	
2378-TCDD/TCDF valley < 25% (N/A for 1668)	✓	N/A	
All appropriate peaks integrated correctly?	✓	✓	
Manual integrations included?	✓	✓	
8280: Ratios within limits?		N/A	
8280: S/N > 2.5:1		↓	
8280: CS1 within 12 hrs?		↓	

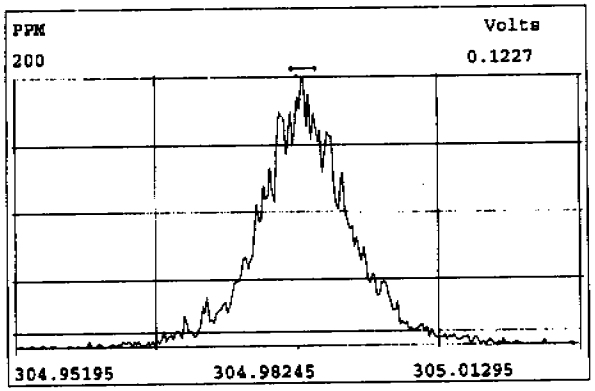
Reviewer Initial/Date: AS 5/10/05 QA* (Random 5% Check) Initial/Date: _____

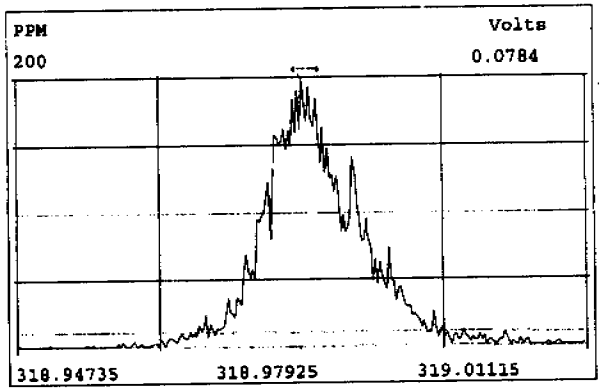
Alta Analytical Laboratory
El Dorado Hills, CA 95762

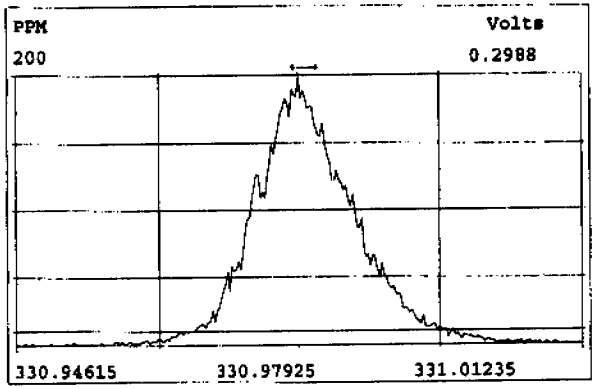
Peak Locate Examination: 9-MAY-2005:22:59 File:RES_CHECK

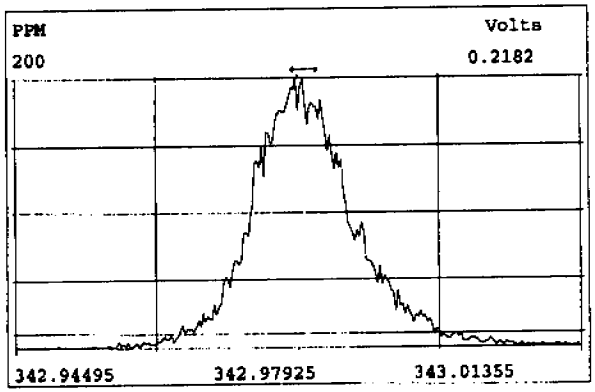
Experiment:TCDF_DB225 Function:1 Reference:PFK

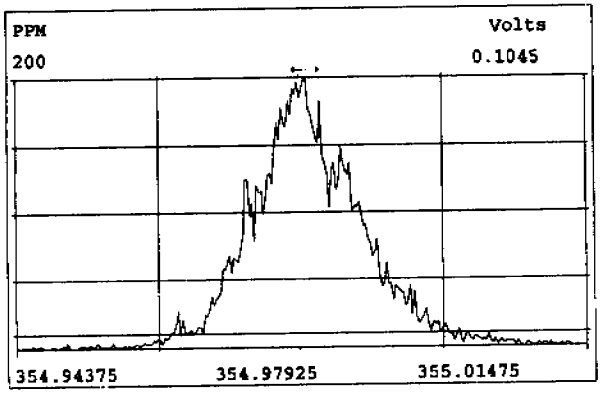


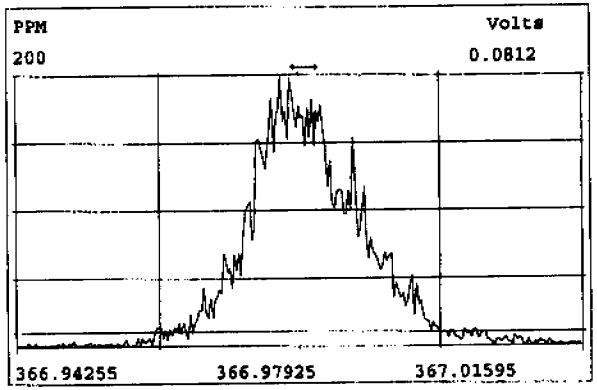


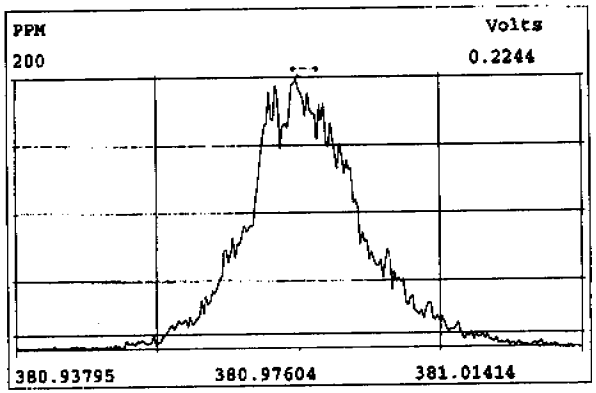




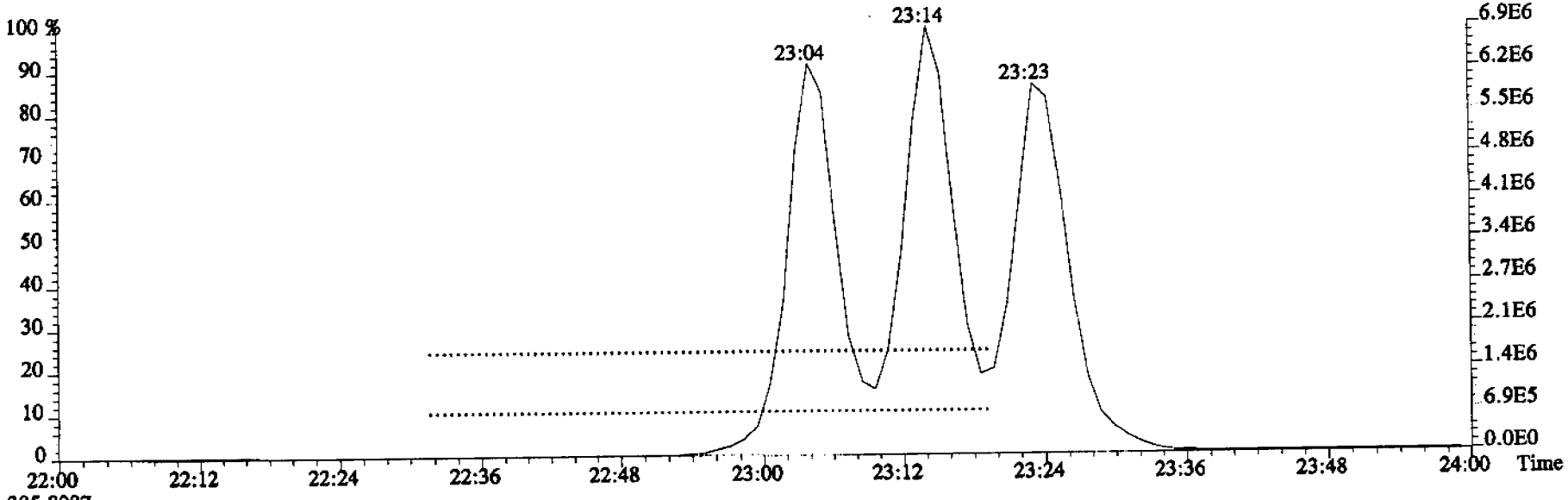




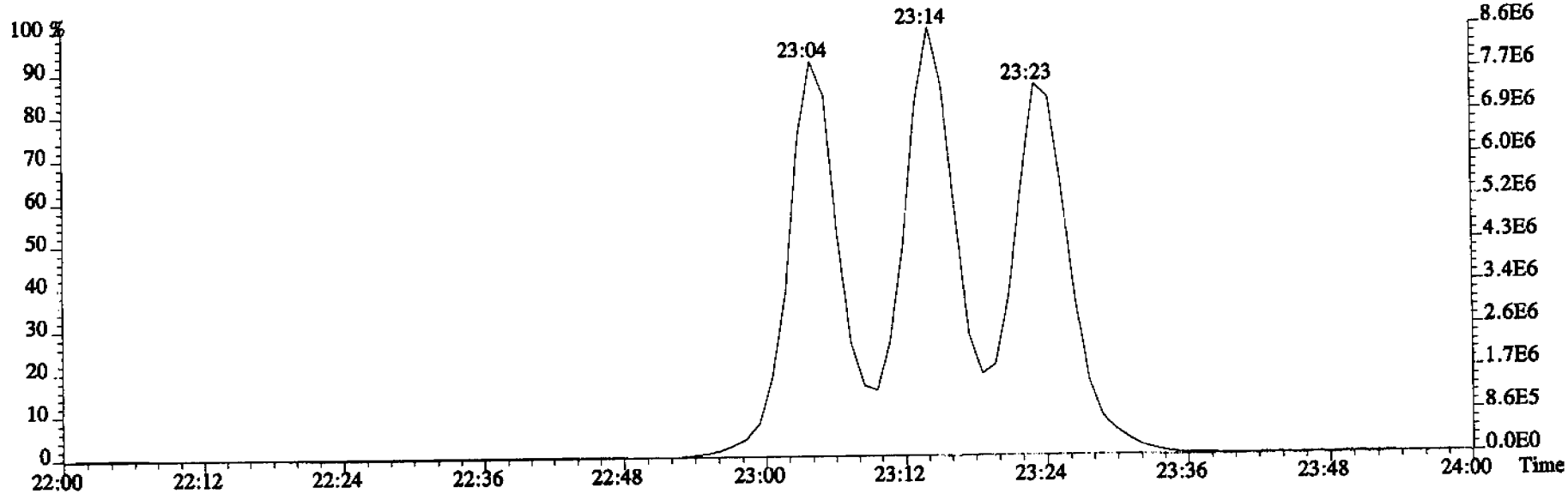




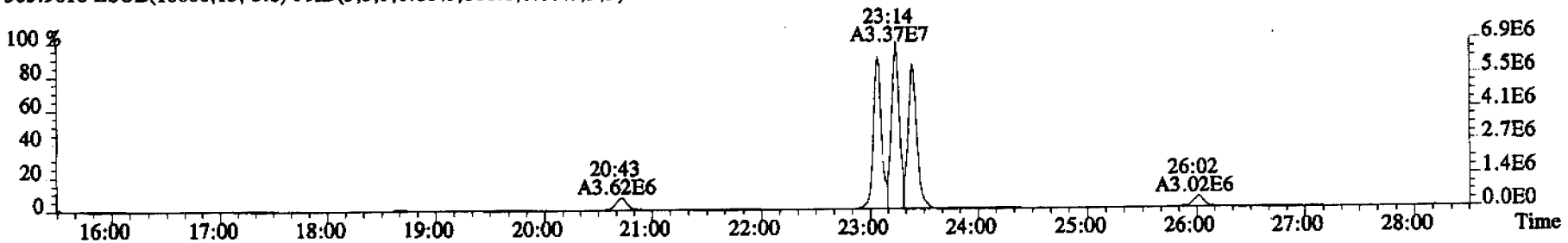
File:050509A2 #1-1174 Acq: 9-MAY-2005 22:59:59 GC El+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory Text:CP050509A2-1 DB-225 CPSM Exp:TCDF_DB225
303.9016



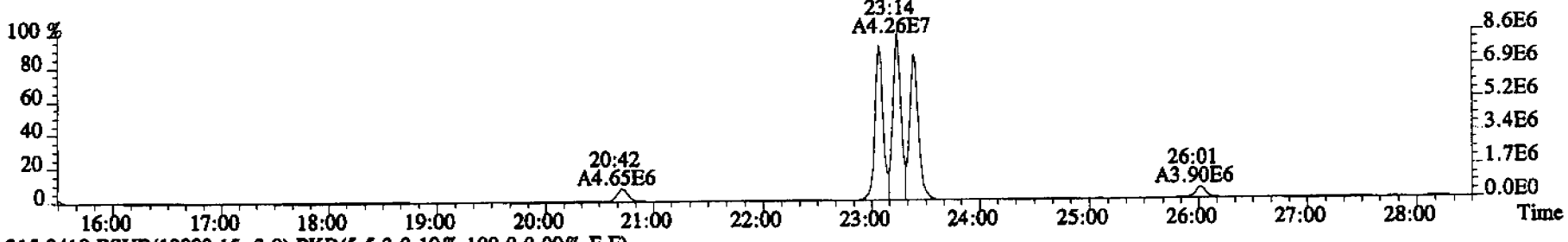
305.8987



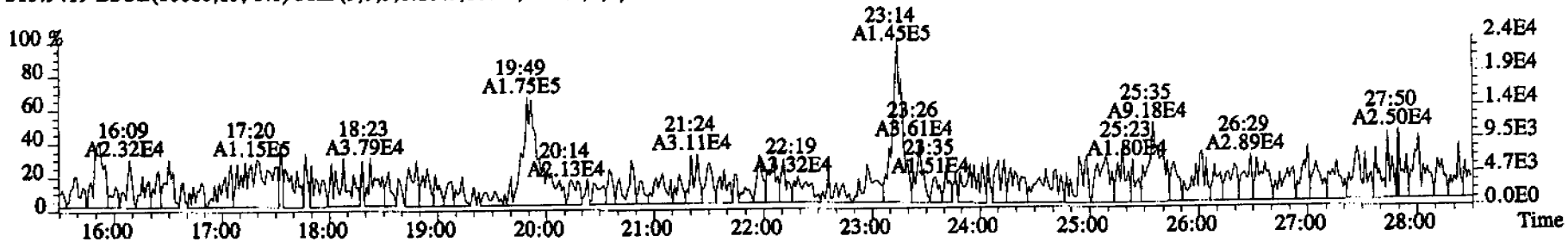
File:050509A2 #1-1174 Acq: 9-MAY-2005 22:59:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory Text:CP050509A2-1 DB-225 CPSM Exp:TCDF_DB225
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



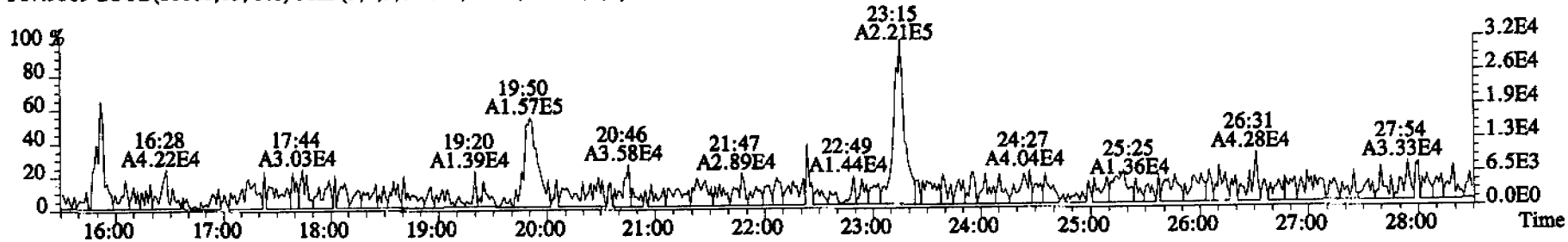
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



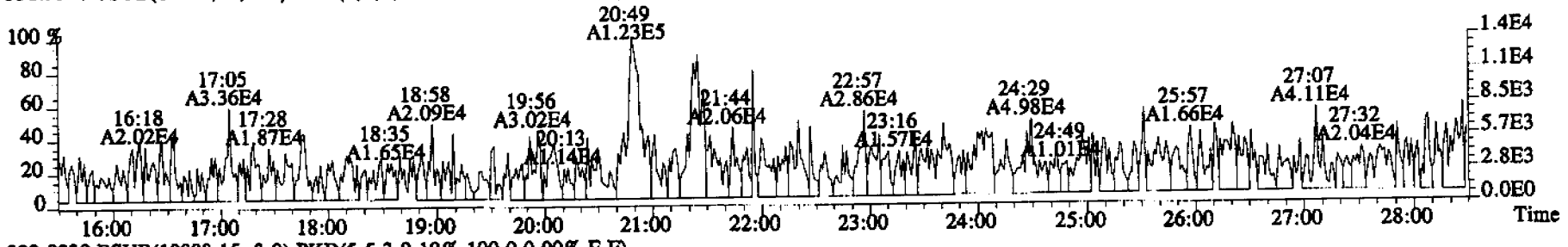
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



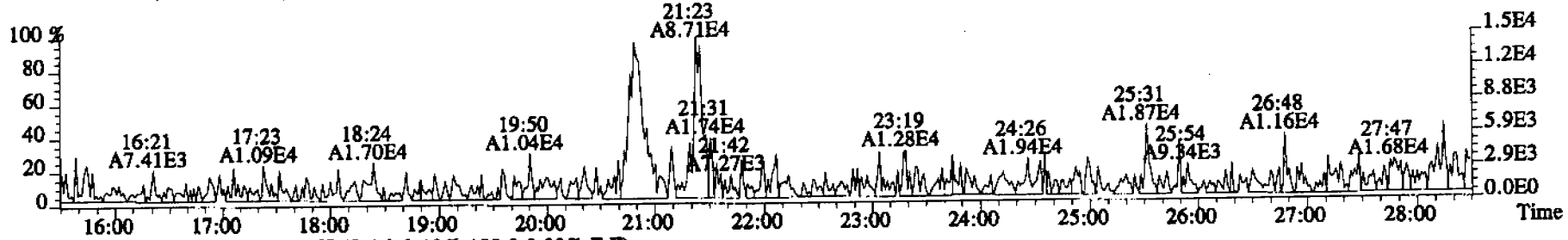
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



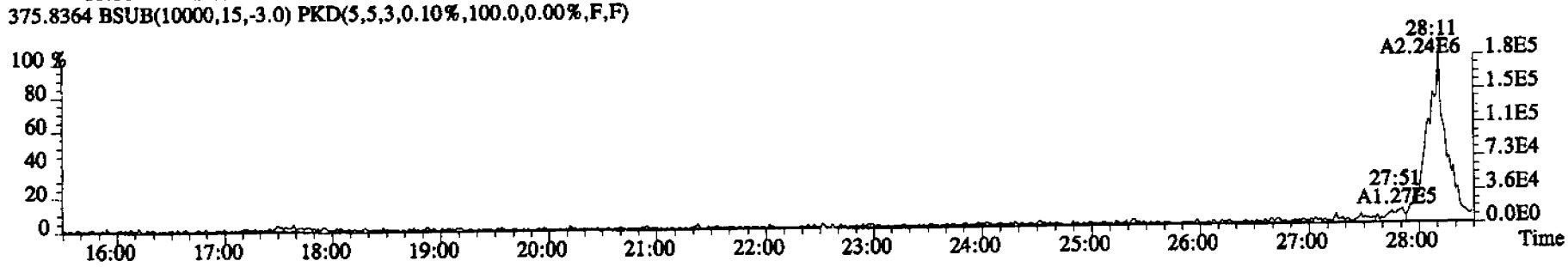
File:050509A2 #1-1174 Acq: 9-MAY-2005 22:59:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory Text:CP050509A2-1 DB-225 CPSM Exp:TCDF_DB225
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

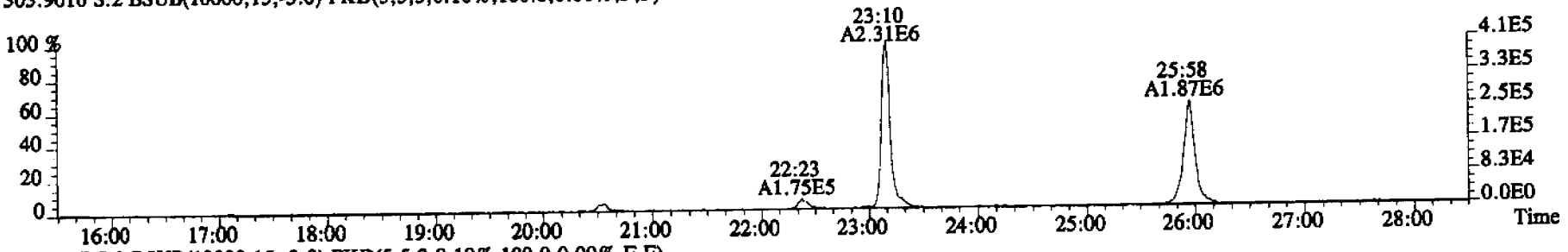


375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

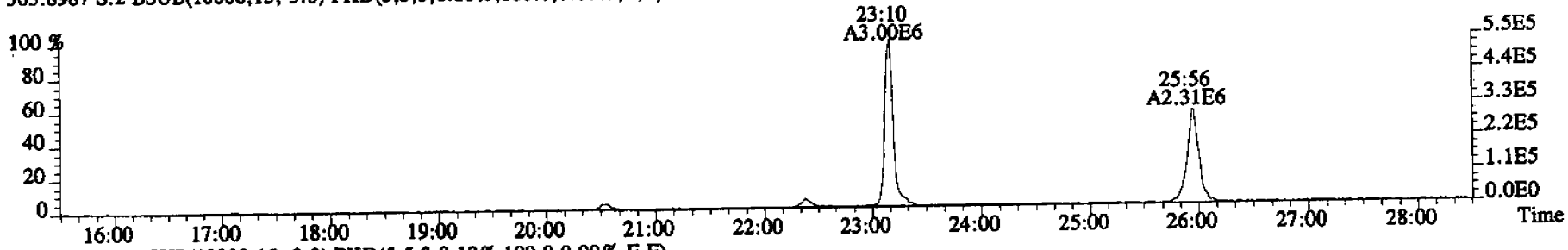


318.9792

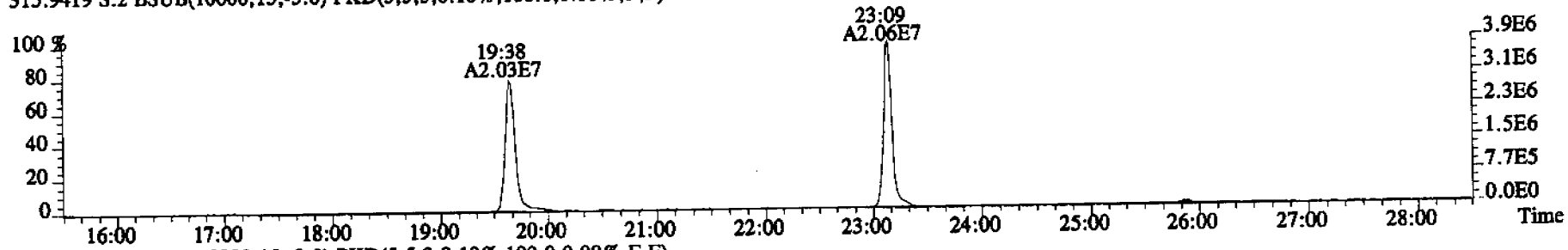
File:050509A2 #1-1173 Acq: 9-MAY-2005 23:40:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory Text:ST050509A2-1 1613 CS3 050420H Exp:TCDF_DB225
303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



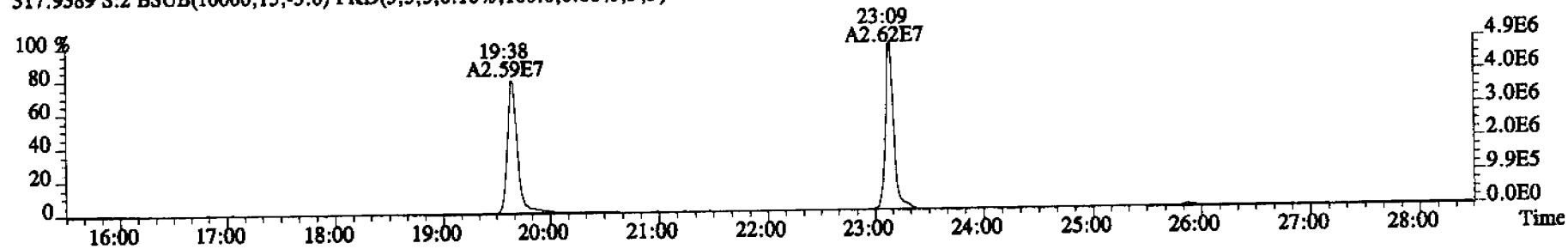
305.8987 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

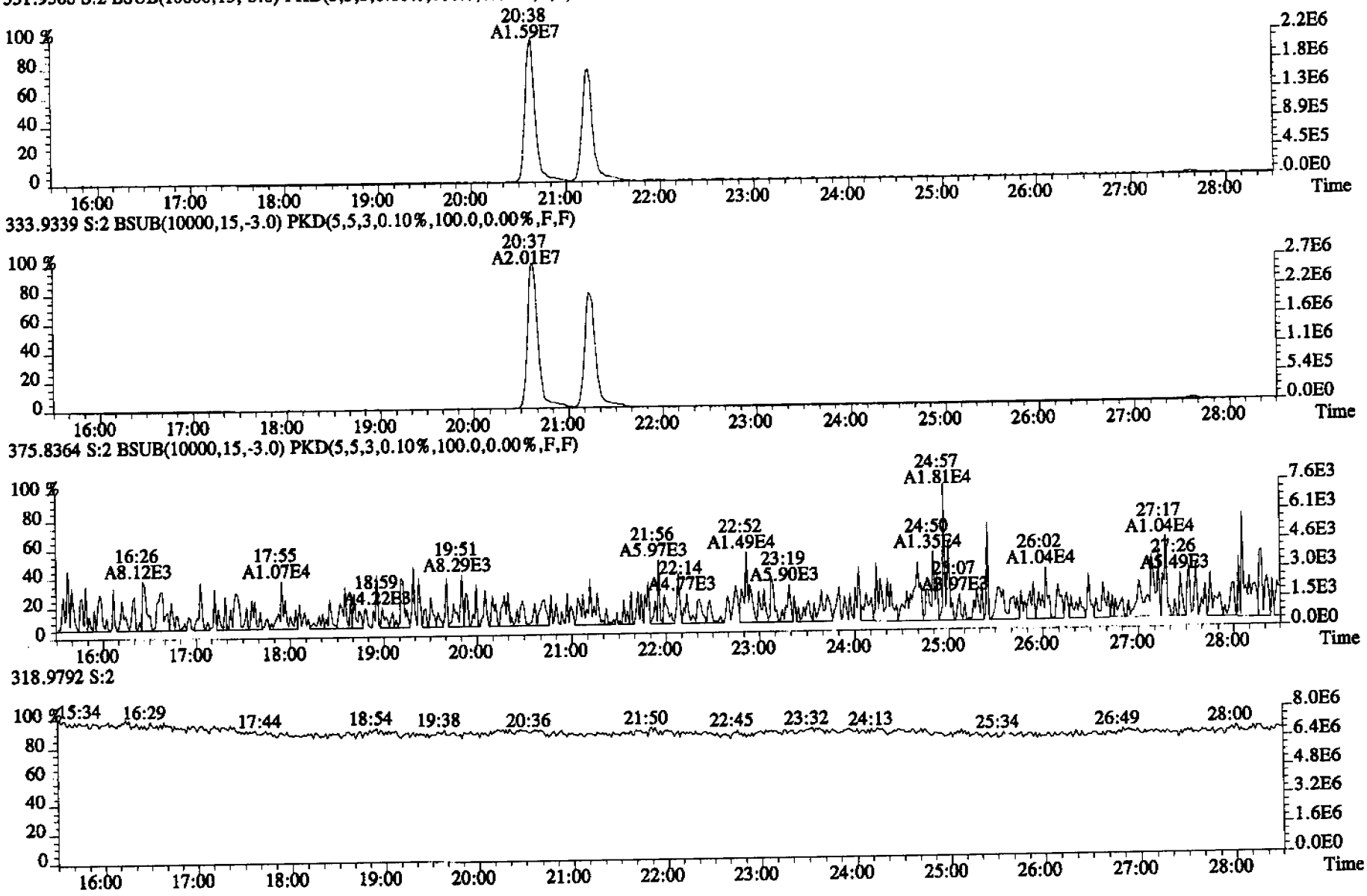


315.9419 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



317.9389 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)




File:050509A2 #1-1173 Acq: 9-MAY-2005 23:40:56 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory Text:ST050509A2-1 1613 CS3 050420H Exp:TCDF_DB225
331.9368 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
20:38
A1.59E7
333.9339 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
20:37
A2.01E7
375.8364 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
16:26
A8.12E3
17:55
A1.07E4
18:59
19:51
A8.29E3
21:56
A5.97E3
22:14
22:52
A1.49E4
23:19
A5.90E3
24:57
A1.81E4
24:50
A1.35E4
26:02
A1.04E4
27:17
A1.04E4
27:26
318.9792 S:2
15:34
16:29
17:44
18:54
19:38
20:36
21:50
22:45
23:32
24:13
25:34
26:49
28:00
Time

FORM 4A/4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory

CCAL ID: ST050509A2-2

Initial Calibration Date: 4-29-05

Instrument ID: VG-6 GC Column ID: DB-225

VER Data Filename: 050509A2 S#7 Analysis Date: 10-MAY-05 Time: 03:05:45

ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CONC. FOUND	CONC. RANGE (3) (ng/mL)
2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	10.3	8.6 - 11.6 8.0 - 12.0 (8290)
13C-2,3,7,8-TCDF	M/M+2	0.81	0.65-0.89	99.0	76.0 - 131.0 70.0 - 130 (8290)

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6a, Method 1613, under VER.

10/94

Analyst: DMS

Date: 5/10/05

Client ID: 1613 CS3 050420H Filename: 050509A2 S:7 Acq:10-MAY-05 03:05:45 ConCal: ST050509A2-1
Lab ID: ST050509A2-2 GC Column ID: DB-225 ICal: 1613TCDFVG6-4-29-05 wt/vol: 1.000 EndCAL: ST050509A2-2

Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	4.73e+07	0.80 y	19:40	1.00	100.0	-
13C-2,3,7,8-TCDF	4.87e+07	0.81 y	23:09	1.04	98.98	99.0
2,3,7,8-TCDF	5.36e+06	0.78 y	23:10	1.07	10.29	

Analyst: DMS

Date: 5/10/05

Alta Analytical Laboratory - Injection Log Run file: 050509A2 Instrument ID: VG-6 GC Column ID: DB-225

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
050509A2	1	CP050509A2-1 DB-225 CPSM	DMS	9-MAY-05	22:59:59	ST050509A2-1	ST050509A2-2
050509A2	2	ST050509A2-1 1613 CS3 050420H	DMS	9-MAY-05	23:40:56	ST050509A2-1	ST050509A2-2
050509A2	3	SOLVENT BLANK	DMS	10-MAY-05	00:21:52	ST050509A2-1	ST050509A2-2
050509A2	4	26084_6769_001 RE73-05-58879 10.02g	DMS	10-MAY-05	01:02:50	ST050509A2-1	ST050509A2-2
050509A2	5	26111_6769_001 SLUDGE 9.998g	DMS	10-MAY-05	01:43:47	ST050509A2-1	ST050509A2-2
050509A2	6	SOLVENT BLANK	DMS	10-MAY-05	02:24:43	ST050509A2-1	ST050509A2-2
050509A2	7	ST050509A2-2 1613 CS3 050420H	DMS	10-MAY-05	03:05:45	ST050509A2-1	ST050509A2-2

HRMS STANDARDS REVIEW CHECKLIST

Attachment 7.F.2

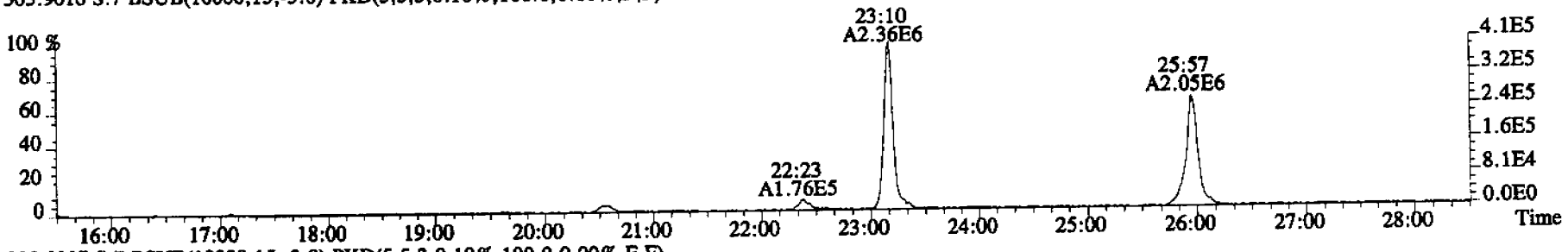
Beginning Calibration ID: STO50509A2-1 Ending Calibration ID: STO50509A2-2

	Beg.CAL	End. CAL	COMMENTS
Calibration Verification/Form 4A/B: Ion abundance within QC limits?	✓	✓	
Calibration Verification/Form 4A/B: Conc within Conc. range?	✓	✓	
Form 5: First and last eluters present? (N/A for DB225)	N/A	N/A	
Form 6A/6B: Relative Retention Times within limits? (N/A for M23, TO9, 1668, DB225)	↓	↓	
Cal. Ver. Named correctly? (Ex. ST-Year-Month-Day-VG ID)	✓	✓	
Cal. Verification forms signed and dated for review?	✓	✓	
Appropriate ICAL referenced?	✓	✓	
Run log: Standards named correctly? Correct Instrument listed?	✓	✓	
Run log: Samples within 12-hour shift?		✓	
Mass resolution > 10,000	✓	✓	
2378-TCDD/TCDF valley < 25% (N/A for 1668)	✓	N/A	
All appropriate peaks integrated correctly?	✓	✓	
Manual integrations included?	✓	✓	
8280: Ratios within limits?		N/A	
8280: S/N > 2.5:1		↓	
8280: CS1 within 12 hrs?		↓	

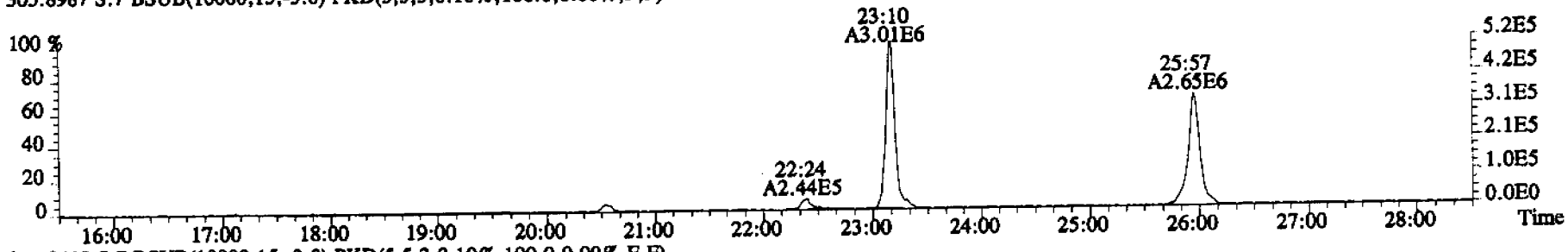
Reviewer Initial/Date: MS 5/10/05 QA* (Random 5% Check) Initial/Date: _____

Alta Analytical Laboratory
El Dorado Hills, CA 95762

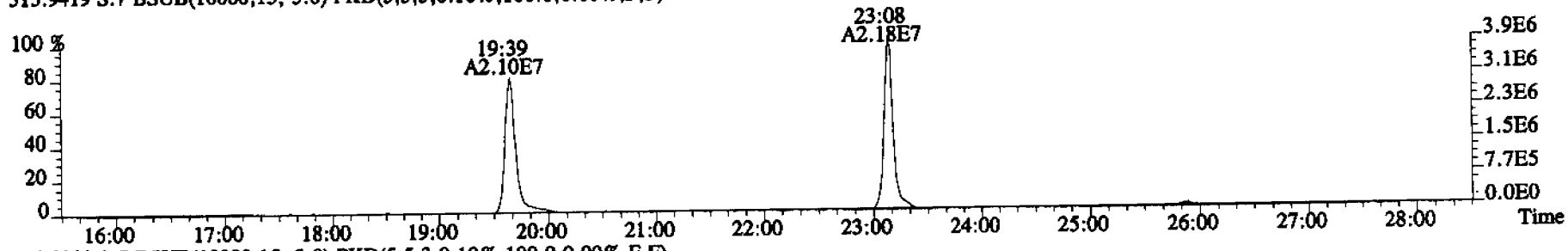
File:050509A2 #1-1173 Acq:10-MAY-2005 03:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory Text:ST050509A2-2 1613 CS3 050420H Exp:TCDF_DB225
303.9016 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



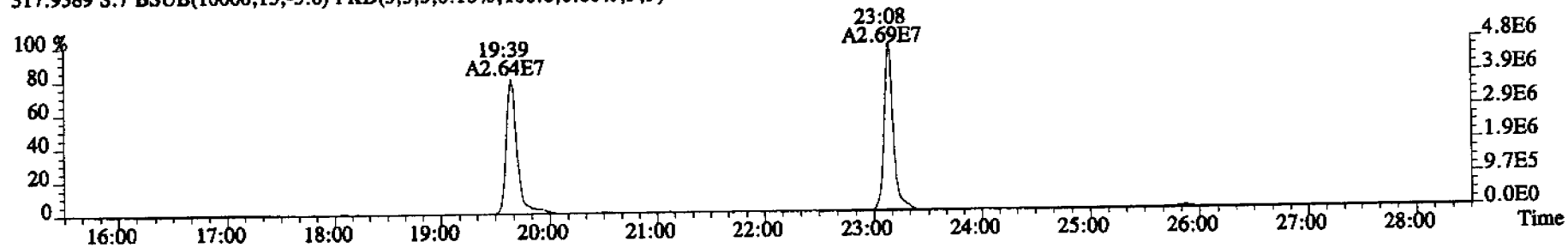
305.8987 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

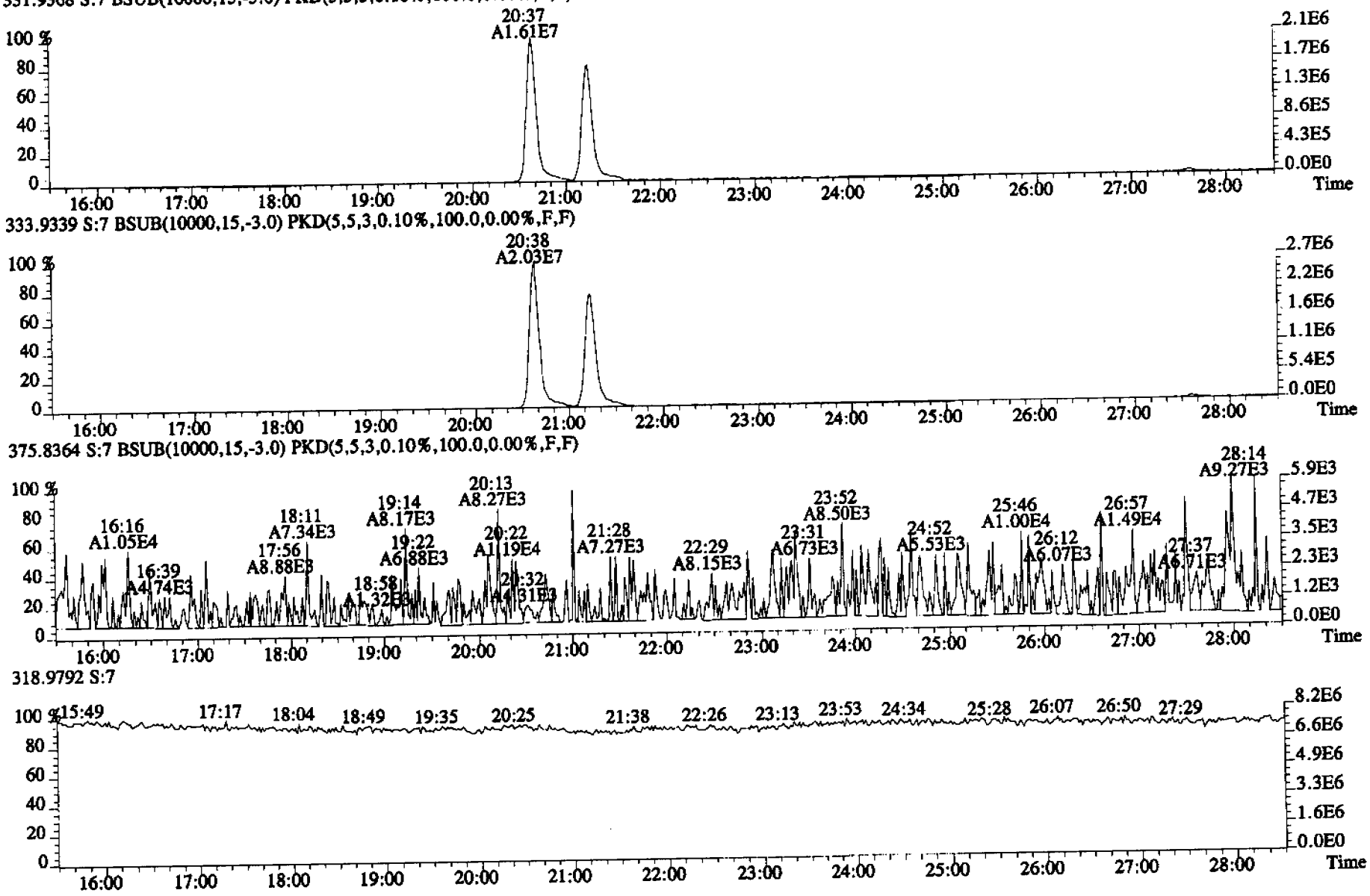


315.9419 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



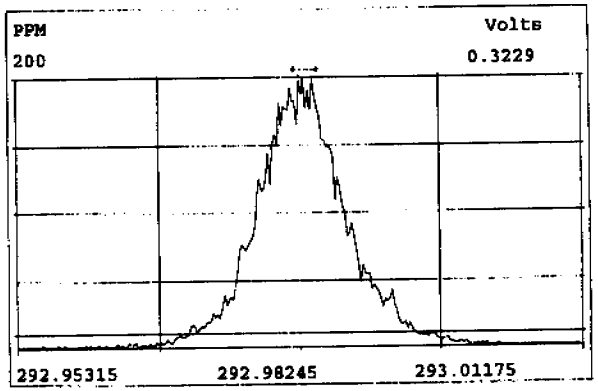
317.9389 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

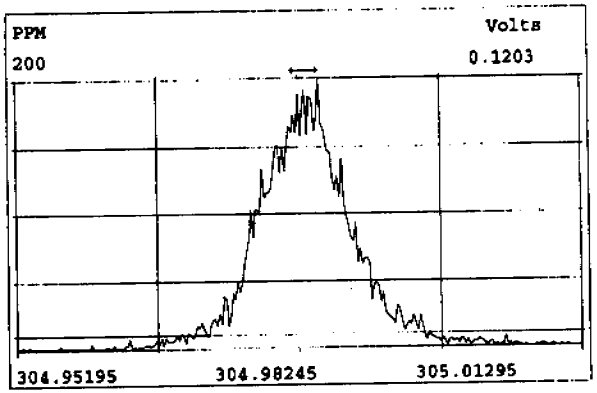


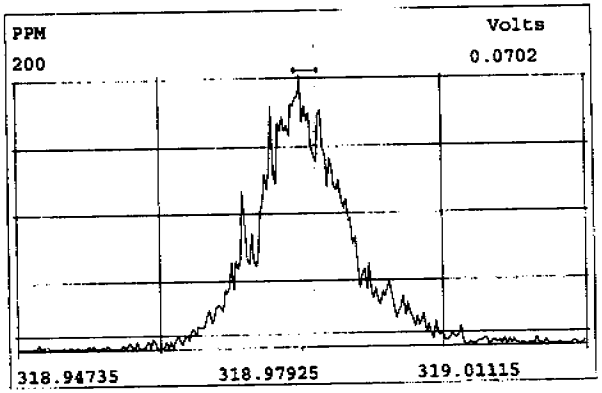

File:050509A2 #1-1173 Acq:10-MAY-2005 03:05:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory Text:ST050509A2-2 1613 CS3 050420H Exp:TCDF_DB225
331.9368 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
20:37
A1.61E7
333.9339 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
20:38
A2.03E7
375.8364 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
16:16
A1.05E4
16:39
A4.74E3
17:56
A8.88E3
18:11
A7.34E3
18:58
A1.32E3
19:14
A8.17E3
19:22
A6.88E3
20:13
A8.27E3
20:22
A1.19E4
20:32
A4.31E3
21:28
A7.27E3
22:29
A8.15E3
23:31
A6.73E3
23:52
A8.50E3
24:52
A5.53E3
25:46
A1.00E4
26:12
A6.07E3
26:57
A1.49E4
27:37
A6.71E3
28:14
A9.27E3
318.9792 S:7
15:49
17:17
18:04
18:49
19:35
20:25
21:38
22:26
23:13
23:53
24:34
25:28
26:07
26:50
27:29
Time

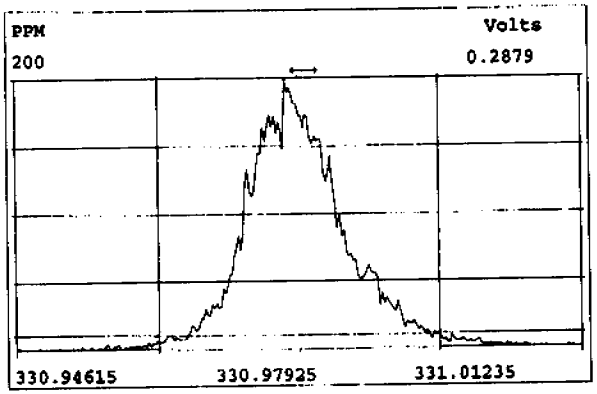
Peak Locate Examination:10-MAY-2005:03:53 File:RES_CHECK

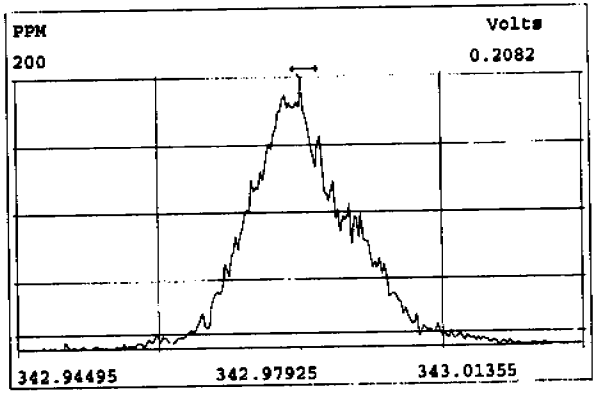
Experiment:TCDF_DB225 Function:1 Reference:PFK

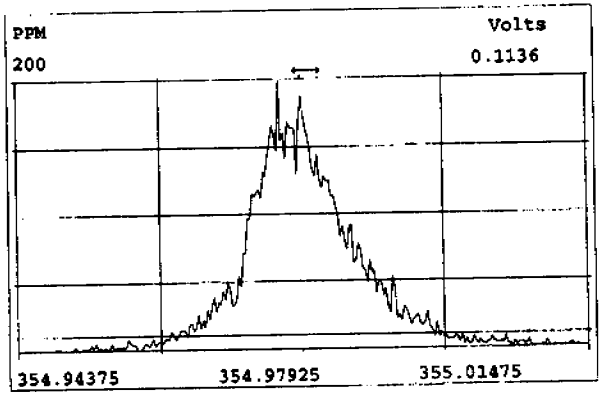


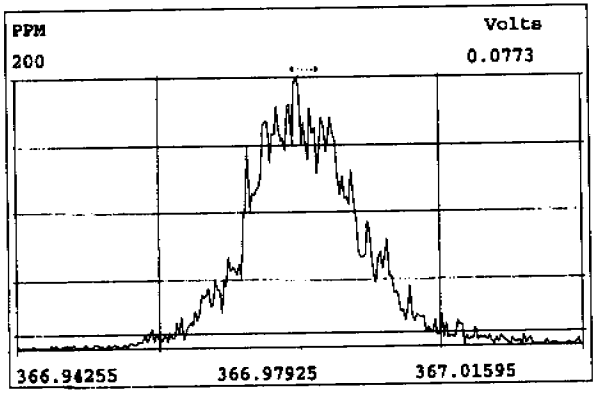


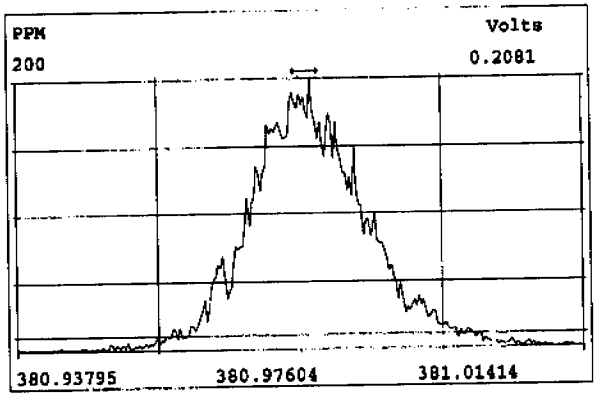












SAMPLE DATA

Client ID: 0_6769_MB001 Filename: 050507D2 S:4 Acq:8-MAY-05 05:01:38
Lab ID: 0_6769_MB001 GC Column ID: db-5 ICal: 1613VG7-4-23-05 wt/vol:10.000

ConCal: ST050507D2-1
EndCAL: ST050507D2-2

	Name	Resp	RA		RRF	RT	Conc	Qual	noise	Fac	DL
	2,3,7,8-TCDD	*	*	n	1.06	NotF¶	*		1490	2.5	0.0669
	1,2,3,7,8-PeCDD	*	*	n	0.99	NotF¶	*		1290	2.5	0.0617
	1,2,3,4,7,8-HxCDD	*	*	n	1.11	NotF¶	*		1100	2.5	0.108
	1,2,3,6,7,8-HxCDD	*	*	n	1.07	NotF¶	*		1100	2.5	0.103
	1,2,3,7,8,9-HxCDD	*	*	n	1.15	NotF¶	*		1100	2.5	0.0996
	1,2,3,4,6,7,8-HpCDD	*	*	n	1.05	NotF¶	*		656	2.5	0.0881
	OCDD	7.47e+04	0.82	y	1.04	42:14	0.596		0.00	2.5	0.00
	2,3,7,8-TCDF	*	*	n	1.05	NotF¶	*		1810	2.5	0.0683
	1,2,3,7,8-PeCDF	*	*	n	0.95	NotF¶	*		2460	2.5	0.121
	2,3,4,7,8-PeCDF	*	*	n	1.08	NotF¶	*		2460	2.5	0.109
	1,2,3,4,7,8-HxCDF	3.32e+04	0.93	n	1.19	34:05	0.0899		0.00	2.5	0.00
	1,2,3,6,7,8-HxCDF	*	*	n	1.22	NotF¶	*		1530	2.5	0.0527
	2,3,4,6,7,8-HxCDF	*	*	n	1.20	NotF¶	*		742	2.5	0.0312
	1,2,3,7,8,9-HxCDF	*	*	n	1.13	NotF¶	*		742	2.5	0.0553
	1,2,3,4,6,7,8-HpCDF	6.19e+04	1.05	y	1.38	37:37	0.202		0.00	2.5	0.00
	1,2,3,4,7,8,9-HpCDF	*	*	n	1.23	NotF¶	*		822	2.5	0.0849
	OCDF	*	*	n	1.02	NotF¶	*		1200	2.5	0.256
IS	13C-2,3,7,8-TCDD	7.75e+07	0.79	y	1.12	26:55	192				
IS	13C-1,2,3,7,8-PeCDD	5.84e+07	0.65	y	0.89	31:39	184				
IS	13C-1,2,3,4,7,8-HxCDD	3.82e+07	1.28	y	0.83	34:58	187				
IS	13C-1,2,3,6,7,8-HxCDD	4.56e+07	1.26	y	1.00	35:05	186				
IS	13C-1,2,3,4,6,7,8-HpCDD	3.35e+07	1.08	y	0.82	38:56	165				
IS	13C-OCDD	4.84e+07	0.90	y	0.74	42:14	264				
IS	13C-2,3,7,8-TCDF	1.01e+08	0.80	y	1.02	26:06	187				
IS	13C-1,2,3,7,8-PeCDF	9.18e+07	1.59	y	0.90	30:25	191				
IS	13C-2,3,4,7,8-PeCDF	8.54e+07	1.59	y	0.87	31:22	184				
IS	13C-1,2,3,4,7,8-HxCDF	6.22e+07	0.52	y	1.27	34:04	200				
IS	13C-1,2,3,6,7,8-HxCDF	6.92e+07	0.53	y	1.40	34:13	200				
IS	13C-2,3,4,6,7,8-HxCDF	6.15e+07	0.53	y	1.29	34:50	193				
IS	13C-1,2,3,7,8,9-HxCDF	4.92e+07	0.53	y	1.12	35:48	179				
IS	13C-1,2,3,4,6,7,8-HpCDF	4.45e+07	0.44	y	1.01	37:37	179				
IS	13C-1,2,3,4,7,8,9-HpCDF	3.01e+07	0.44	y	0.88	39:29	139				
IS	13C-OCDF	5.64e+07	0.90	y	0.94	42:27	244				
C/Up	37Cl-2,3,7,8-TCDD	1.70e+07			0.62	26:56	76.2				
RS/RT	13C-1,2,3,4-TCDD	7.18e+07	0.80	y	1.00	26:17	200				
RS	13C-1,2,3,4-TCDF	1.06e+08	0.78	y	1.00	24:43	200				
RS/RT	13C-1,2,3,7,8,9-HxCDD	4.92e+07	1.27	y	1.00	35:24	200				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	*	*		1490	0.0669
Total Penta-Dioxins	*	*		1290	0.0617
Total Hexa-Dioxins	*	*		1100	0.103
Total Hepta-Dioxins	*	*		656	0.0881
Total Tetra-Furans	*	*		1810	0.0683
Total Penta-Furans	0.00	0.00		2460	0.115
Total Hexa-Furans	0.156	0.246		0.00	0.00
Total Hepta-Furans	0.202	0.202		0.00	0.00

Rec	Qual
96.1	
91.9	
93.3	
93.1	
82.6	
66.0	
93.3	
95.7	
91.9	
99.8	
100	
96.7	
89.3	
89.5	
69.6	
61.1	
95.2	

Intergrations by Analyst:

Date: 5-10-05

Totals class: HxCDF EMPC Entry #: 33

Run: 10 File: 050507D2 S: 4 I: 1 P: 3
Acquired: 8-MAY-05 05:01:38 Processed: 9-MAY-05 08:14:12

Total Concentration: 0.24634 Unnamed Concentration: 0.156

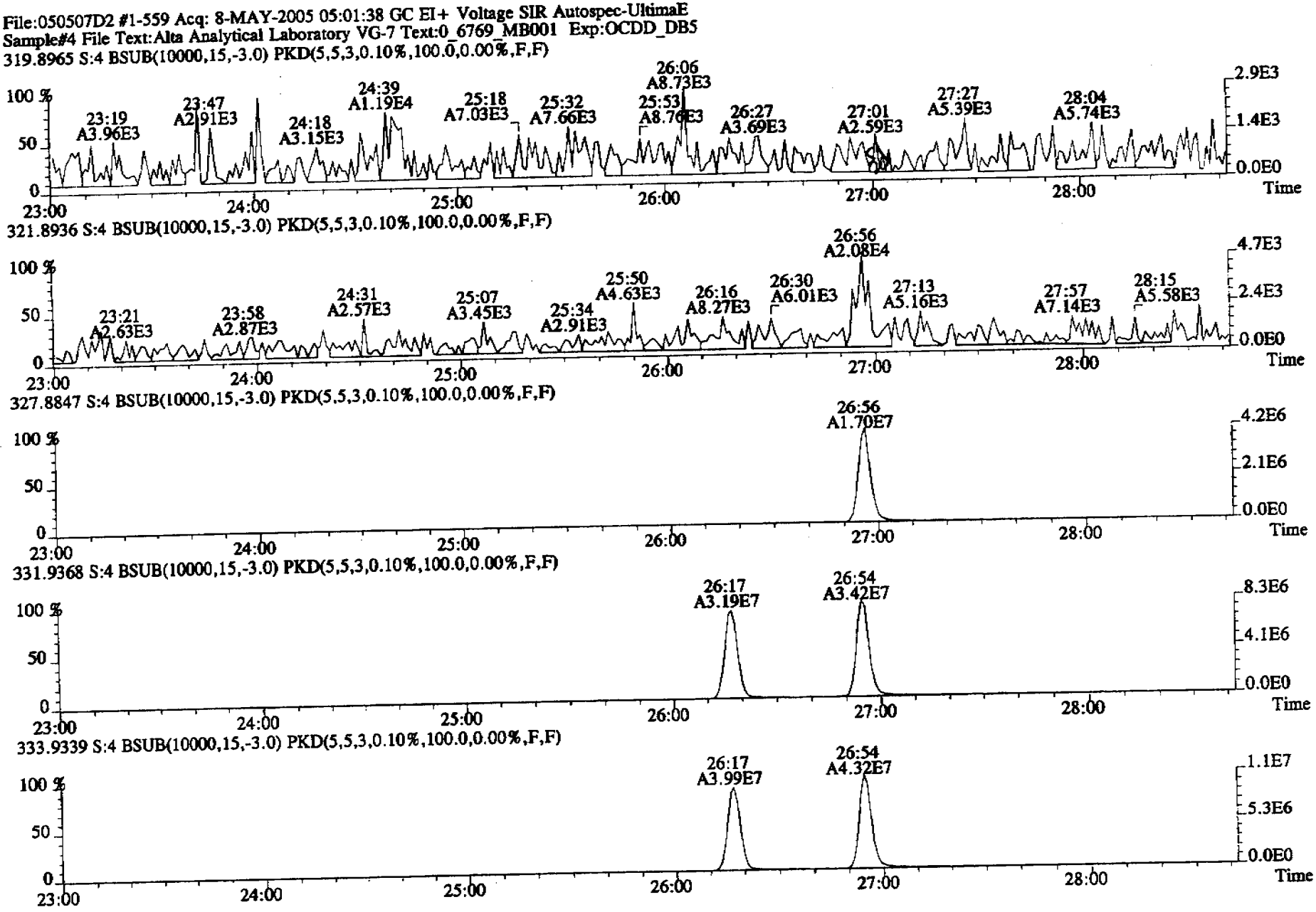
RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
33:04	3.288e+04	2.324e+04	1.41	y	5.612e+04	0.15648	
34:05	1.836e+04	1.970e+04	0.93	n	3.317e+04	0.089862	1,2,3,4,7,8-HxCDF

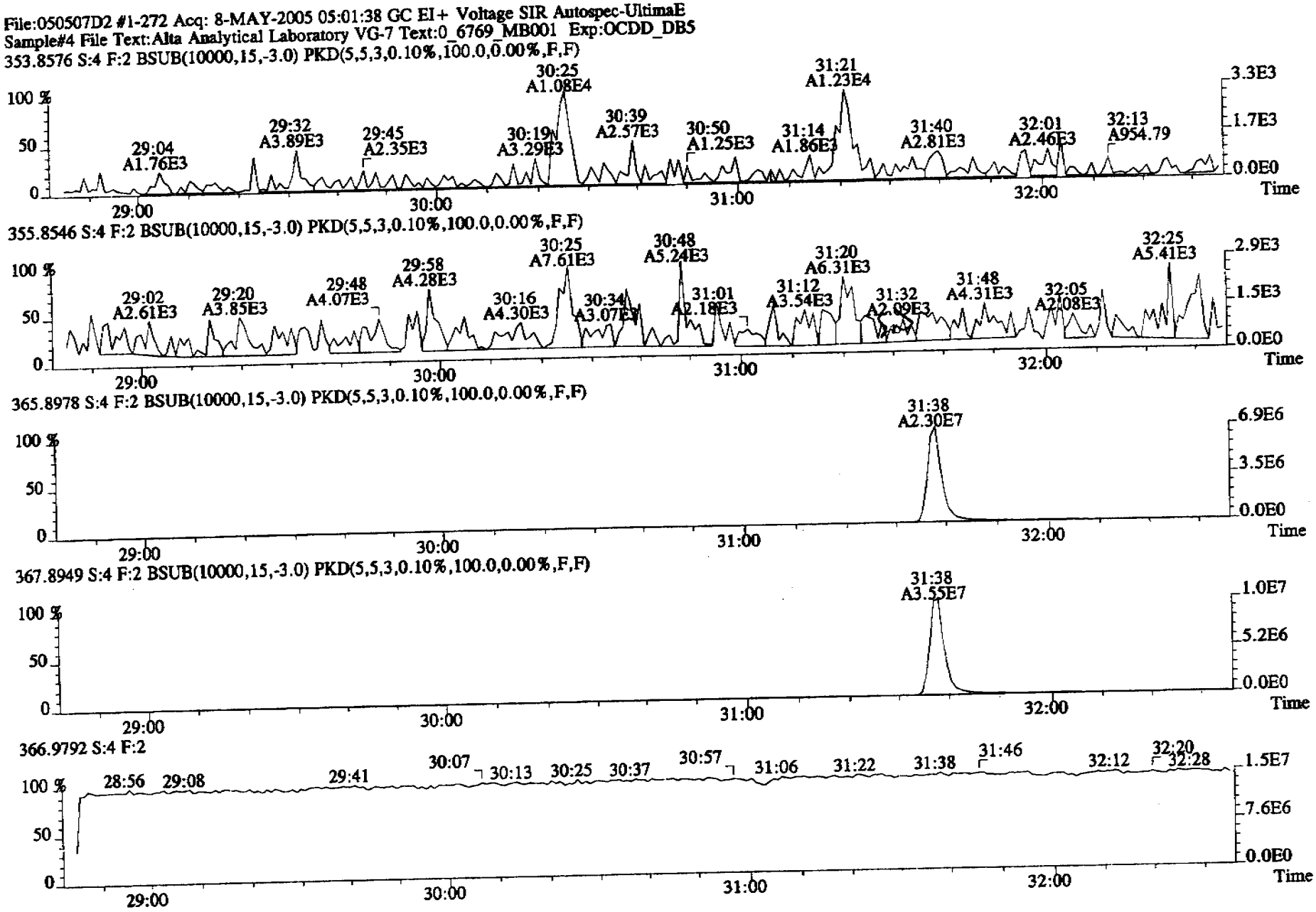
Totals class: HpCDF EMPC Entry #: 35

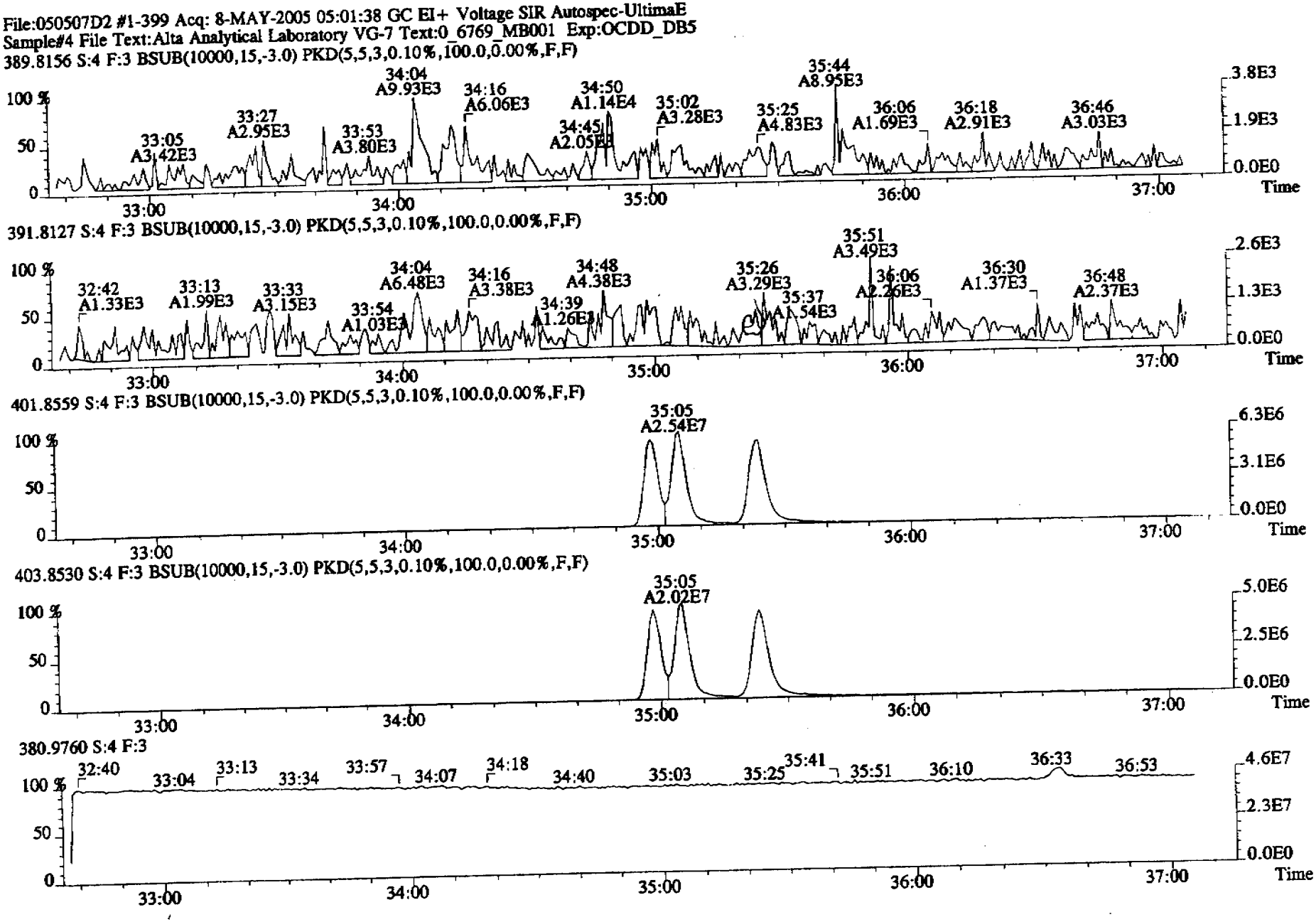
Run: 10 File: 050507D2 S: 4 I: 1 F: 4
Acquired: 8-MAY-05 05:01:38 Processed: 9-MAY-05 08:14:12

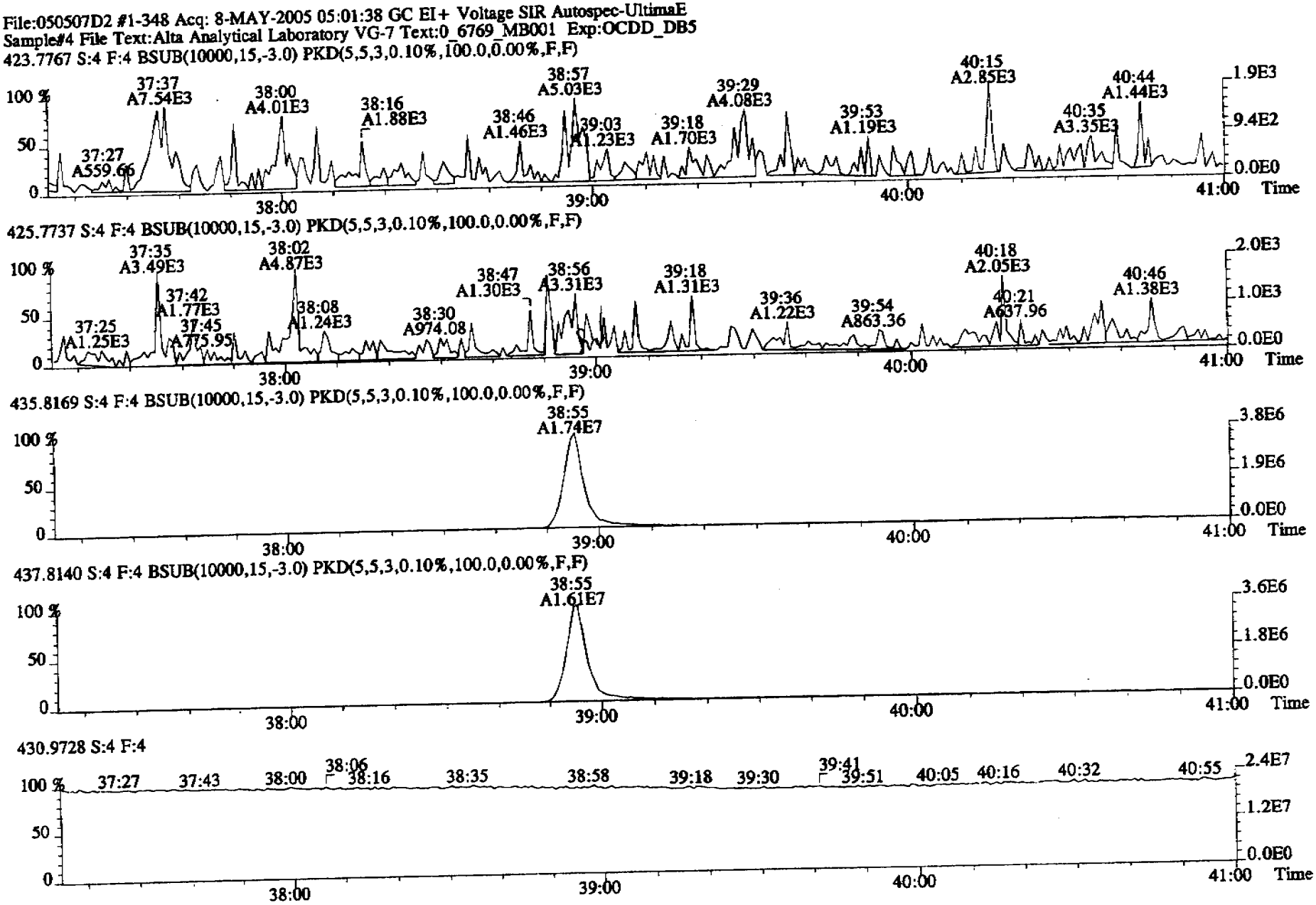
Total Concentration: 0.20231 Unnamed Concentration: *

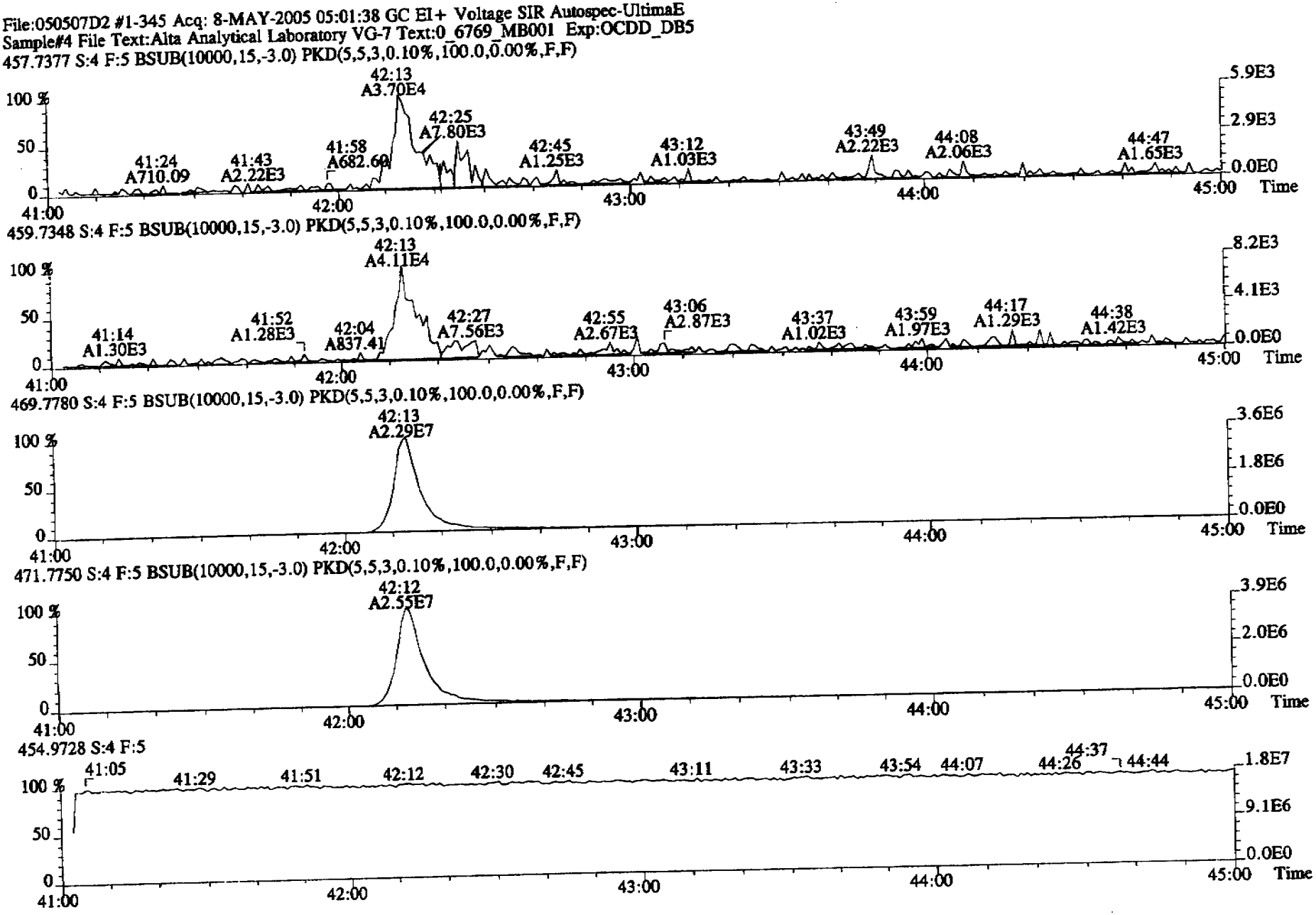
RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
37:37	3.179e+04	3.015e+04	1.05 y	6.194e+04	0.20231	1,2,3,4,6,7,8-HpCDF


File:050507D2 #1-559 Acq: 8-MAY-2005 05:01:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:0_6769_MB001 Exp:OCDD_DB5
319.8965 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
23:19 A3.96E3
23:47 A2.91E3
24:18 A3.15E3
24:39 A1.19E4
25:18 A7.03E3
25:32 A7.66E3
26:06 A8.73E3
25:53 A8.76E3
26:27 A3.69E3
27:01 A2.59E3
27:27 A5.39E3
28:04 A5.74E3
321.8936 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
23:21 A2.63E3
23:58 A2.87E3
24:31 A2.57E3
25:07 A3.45E3
25:34 A2.91E3
25:50 A4.63E3
26:16 A8.27E3
26:30 A6.01E3
26:56 A2.08E4
27:13 A5.16E3
27:57 A7.14E3
28:15 A5.58E3
327.8847 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:56 A1.70E7
331.9368 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:17 A3.19E7
26:54 A3.42E7
333.9339 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:17 A3.99E7
26:54 A4.32E7
100 %
50
0
23:00
24:00
25:00
26:00
27:00
28:00
Time
2.9E3
1.4E3
0.0E0
4.7E3
2.4E3
4.2E6
2.1E6
8.3E6
4.1E6
1.1E7
5.3E6

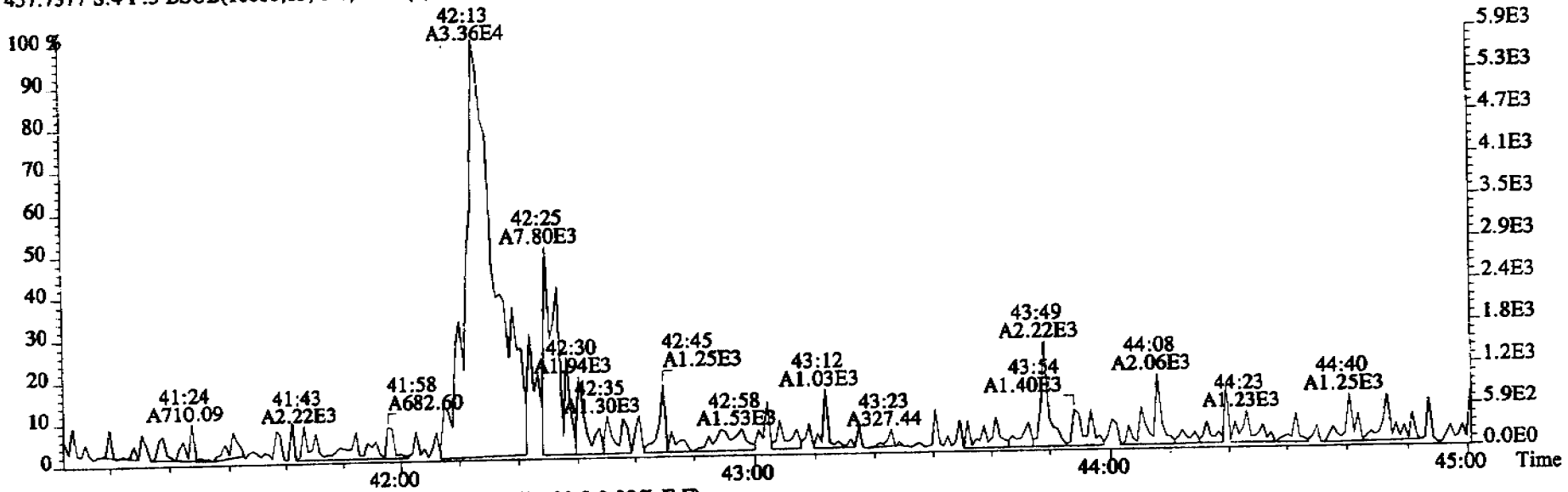

File:050507D2 #1-272 Acq: 8-MAY-2005 05:01:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:0_6769_MB001 Exp:OCDD_DB5
353.8576 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
29:04 A1.76E3
29:32 A3.89E3
29:45 A2.35E3
30:19 A3.29E3
30:25 A1.08E4
30:39 A2.57E3
30:50 A1.25E3
31:14 A1.86E3
31:21 A1.23E4
31:40 A2.81E3
32:01 A2.46E3
32:13 A954.79
355.8546 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
29:02 A2.61E3
29:20 A3.85E3
29:48 A4.07E3
29:58 A4.28E3
30:16 A4.30E3
30:25 A7.61E3
30:34 A3.07E3
30:48 A5.24E3
31:01 A2.18E3
31:12 A3.54E3
31:20 A6.31E3
31:32 A2.09E3
31:48 A4.31E3
32:05 A2.08E3
32:25 A5.41E3
365.8978 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
31:38 A2.30E7
367.8949 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
31:38 A3.55E7
366.9792 S:4 F:2
28:56 29:08 29:41 30:07 30:13 30:25 30:37 30:57 31:06 31:22 31:38 31:46 32:12 32:20 32:28
100 %
50
0
29:00
30:00
31:00
32:00
Time
3.3E3
1.7E3
0.0E0
2.9E3
1.5E3
6.9E6
3.5E6
1.0E7
5.2E6
7.6E6


File:050507D2 #1-399 Acq: 8-MAY-2005 05:01:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:0_6769_MB001 Exp:OCDD_DB5
389.8156 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
33:05 A3.42E3
33:27 A2.95E3
33:53 A3.80E3
34:04 A9.93E3
34:16 A6.06E3
34:45 A2.05E3
34:50 A1.14E4
35:02 A3.28E3
35:25 A4.83E3
35:44 A8.95E3
36:06 A1.69E3
36:18 A2.91E3
36:46 A3.03E3
391.8127 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
32:42 A1.33E3
33:13 A1.99E3
33:33 A3.15E3
33:54 A1.03E3
34:04 A6.48E3
34:16 A3.38E3
34:39 A1.26E3
34:48 A4.38E3
35:26 A3.29E3
35:37 A1.54E3
35:51 A3.49E3
36:06 A2.26E3
36:30 A1.37E3
36:48 A2.37E3
401.8559 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
35:05 A2.54E7
403.8530 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
35:05 A2.02E7
380.9760 S:4 F:3
32:40
33:04
33:13
33:34
33:57
34:07
34:18
34:40
35:03
35:25
35:41
35:51
36:10
36:33
36:53
100 %
50
0
33:00
34:00
35:00
36:00
37:00
Time
3.8E3
1.9E3
0.0E0
2.6E3
1.3E3
6.3E6
3.1E6
5.0E6
2.5E6
4.6E7
2.3E7

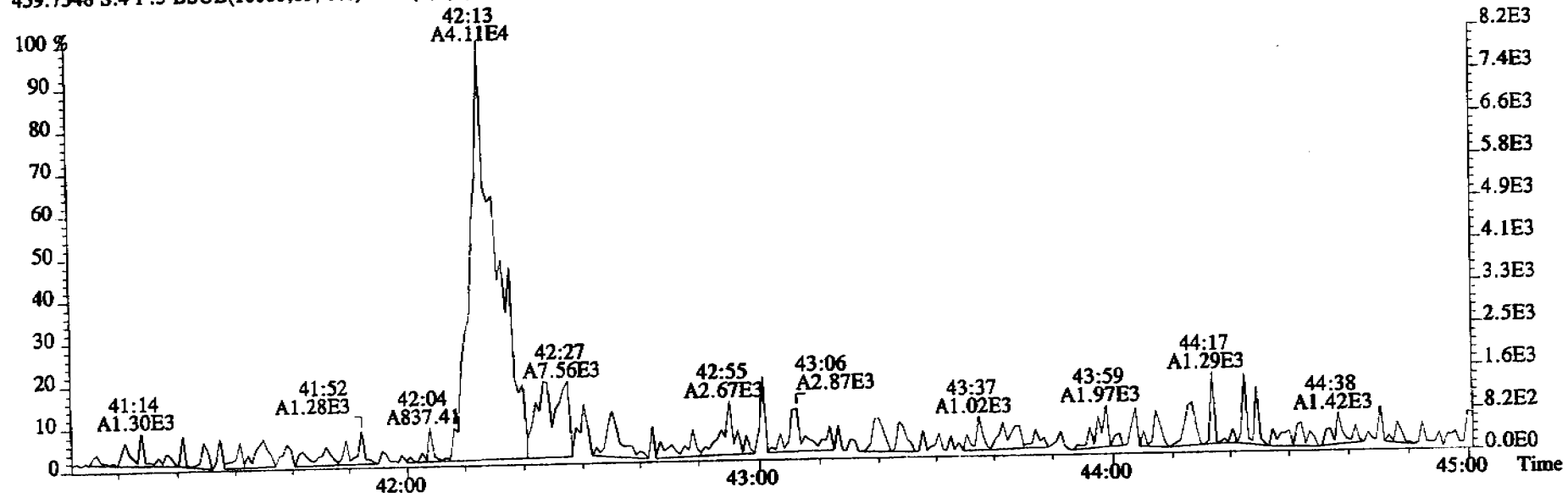

File:050507D2 #1-348 Acq: 8-MAY-2005 05:01:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:0_6769_MB001 Exp:OCDD_DB5
423.7767 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
37:27 A559.66
37:37 A7.54E3
38:00 A4.01E3
38:16 A1.88E3
38:46 A1.46E3
38:57 A5.03E3
39:03 A1.23E3
39:18 A1.70E3
39:29 A4.08E3
39:53 A1.19E3
40:15 A2.85E3
40:35 A3.35E3
40:44 A1.44E3
425.7737 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
37:25 A1.25E3
37:35 A3.49E3
37:42 A1.77E3
37:45 A775.95
38:02 A4.87E3
38:08 A1.24E3
38:30 A974.08
38:47 A1.30E3
38:56 A3.31E3
39:18 A1.31E3
39:36 A1.22E3
39:54 A863.36
40:18 A2.05E3
40:21 A637.96
40:46 A1.38E3
435.8169 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
38:55 A1.74E7
437.8140 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
38:55 A1.61E7
430.9728 S:4 F:4
37:27
37:43
38:00
38:06
38:16
38:35
38:58
39:18
39:30
39:41
39:51
40:05
40:16
40:32
40:55
100 %
50
0
38:00
39:00
40:00
41:00
Time
1.9E3
9.4E2
0.0E0
2.0E3
1.0E3
3.8E6
1.9E6
3.6E6
1.8E6
2.4E7
1.2E7

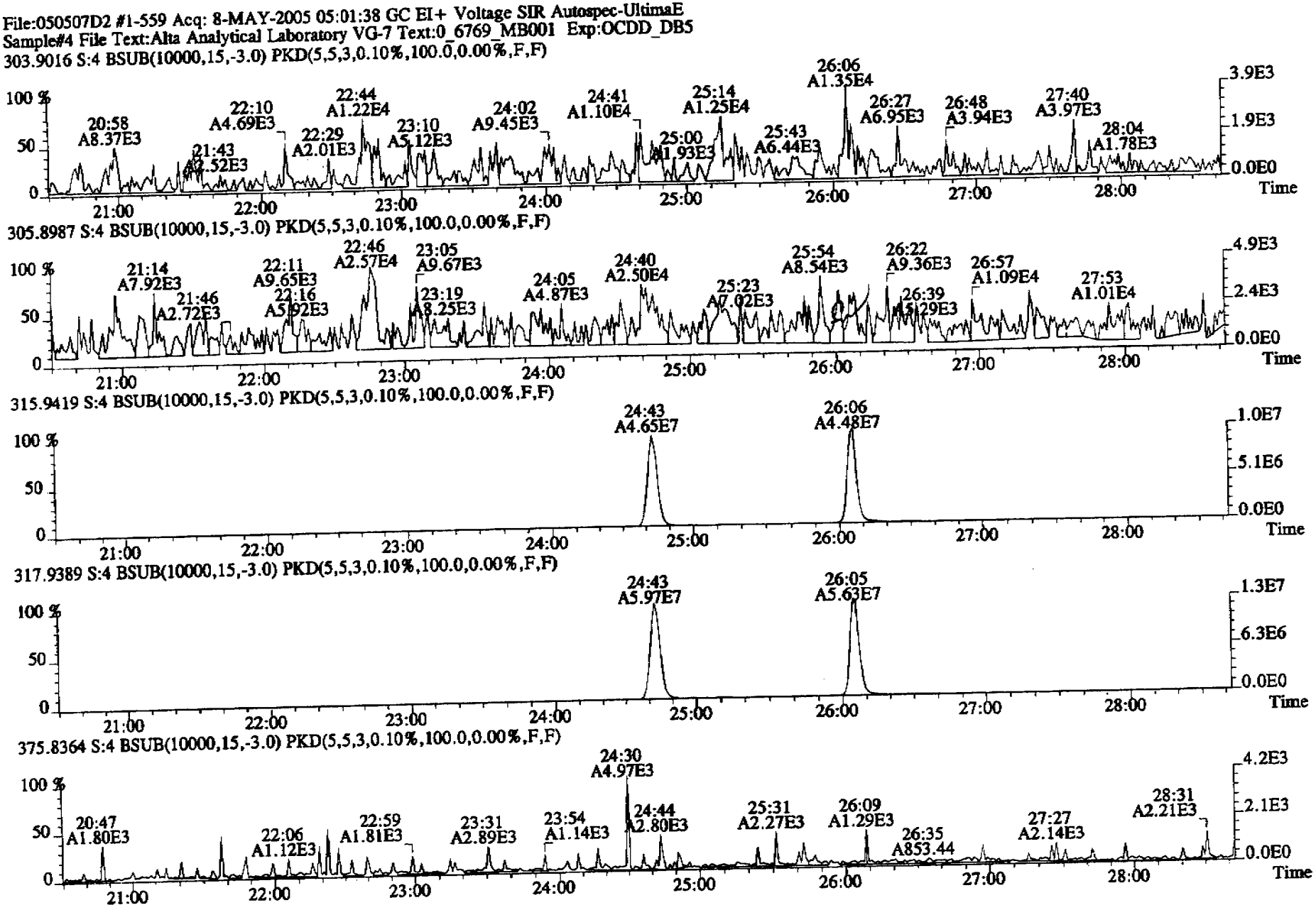

File:050507D2 #1-345 Acq: 8-MAY-2005 05:01:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:0_6769_MB001 Exp:OCDD_DB5
457.7377 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
42:13 A3.70E4
42:25 A7.80E3
41:24 A710.09
41:43 A2.22E3
41:58 A682.60
42:45 A1.25E3
43:12 A1.03E3
43:49 A2.22E3
44:08 A2.06E3
44:47 A1.65E3
5.9E3
2.9E3
0.0E0
Time
459.7348 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
42:13 A4.11E4
41:14 A1.30E3
41:52 A1.28E3
42:04 A837.41
42:27 A7.56E3
42:55 A2.67E3
43:06 A2.87E3
43:37 A1.02E3
43:59 A1.97E3
44:17 A1.29E3
44:38 A1.42E3
8.2E3
4.1E3
0.0E0
Time
469.7780 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
42:13 A2.29E7
3.6E6
1.8E6
0.0E0
Time
471.7750 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
42:12 A2.55E7
3.9E6
2.0E6
0.0E0
Time
454.9728 S:4 F:5
41:05
41:29
41:51
42:12
42:30
42:45
43:11
43:33
43:54
44:07
44:26
44:37
44:44
1.8E7
9.1E6
0.0E0
Time

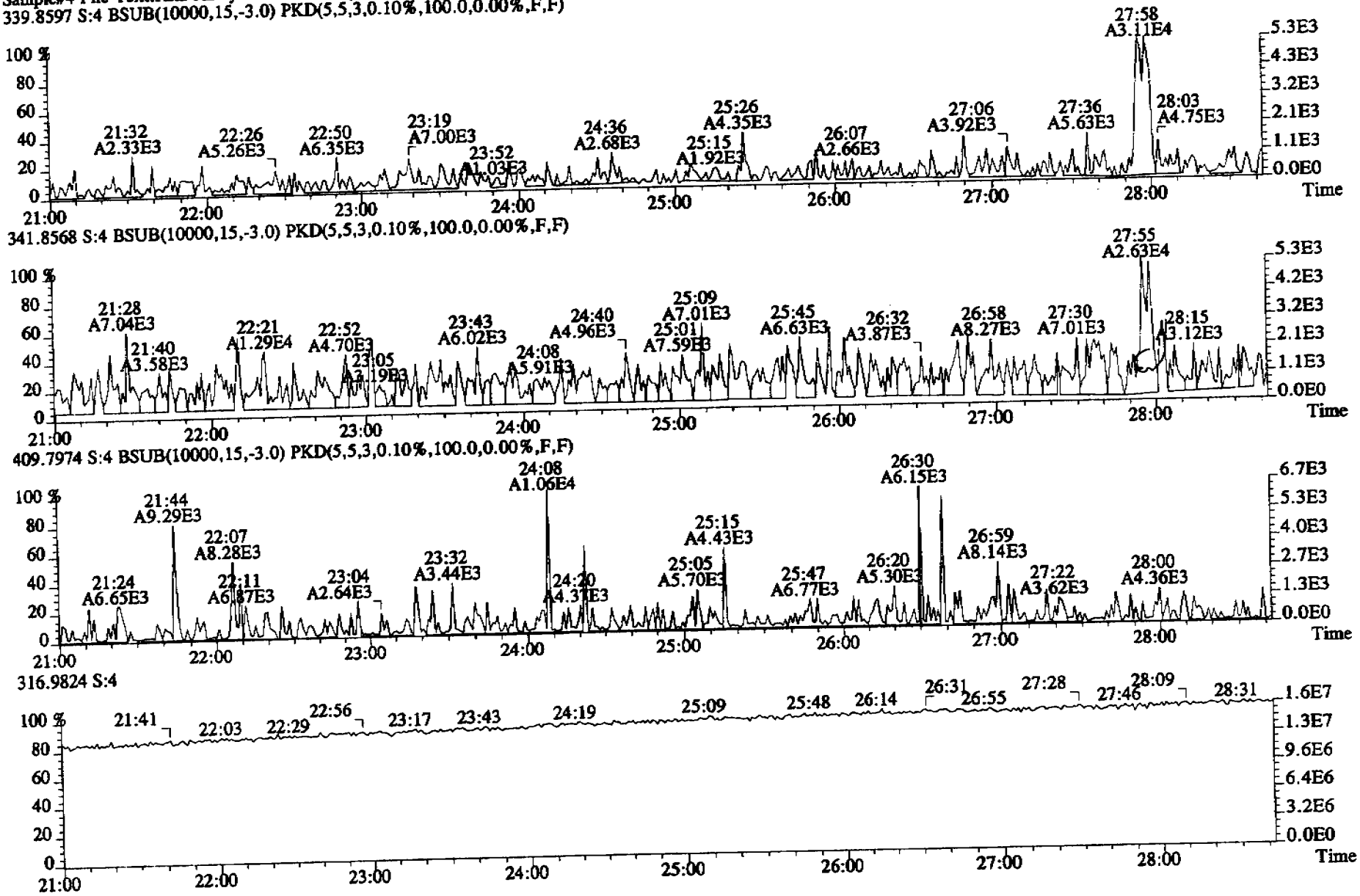
File:050507D2 #1-345 Acq: 8-MAY-2005 05:01:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:0_6769_MB001 Exp:OCDD_DB5
457.7377 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



459.7348 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

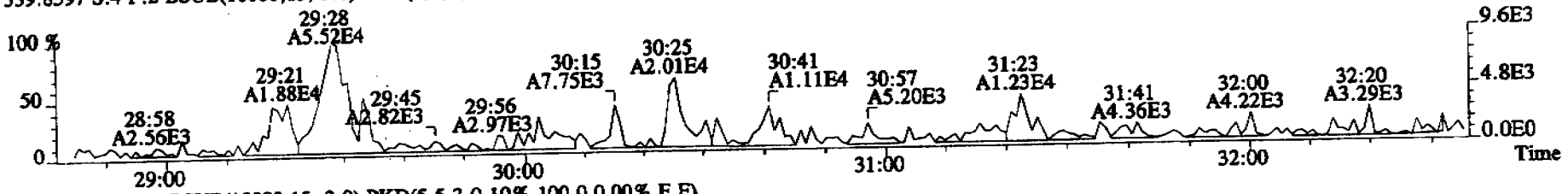



File:050507D2 #1-559 Acq: 8-MAY-2005 05:01:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:0_6769_MB001 Exp:OCDD_DB5
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
305.8987 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
315.9419 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
317.9389 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
375.8364 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
Time

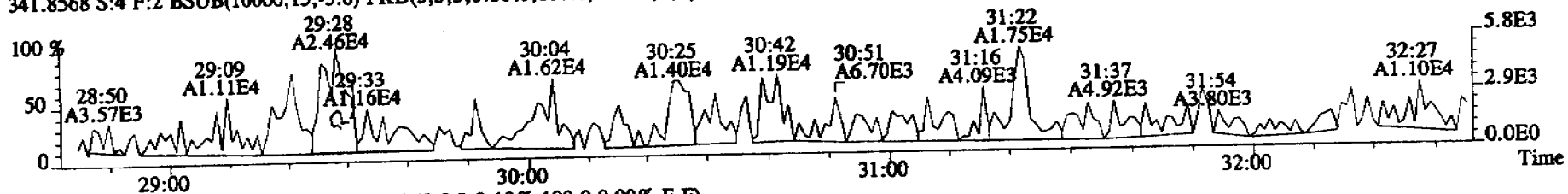

File:050507D2 #1-559 Acq: 8-MAY-2005 05:01:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:0_6769_MB001 Exp:OCDD_DB5
339.8597 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
341.8568 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
409.7974 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
316.9824 S:4
Time

File:050507D2 #1-272 Acq: 8-MAY-2005 05:01:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:0_6769_MB001 Exp:OCDD_DB5

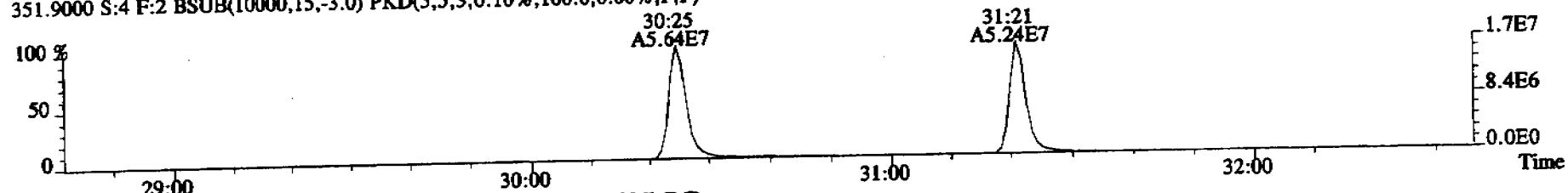
339.8597 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



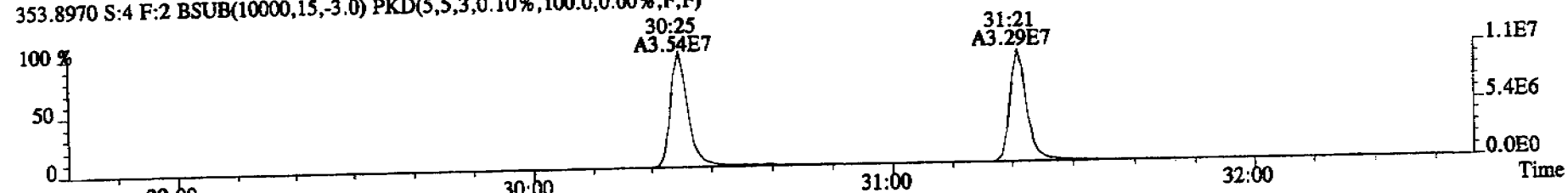
341.8568 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



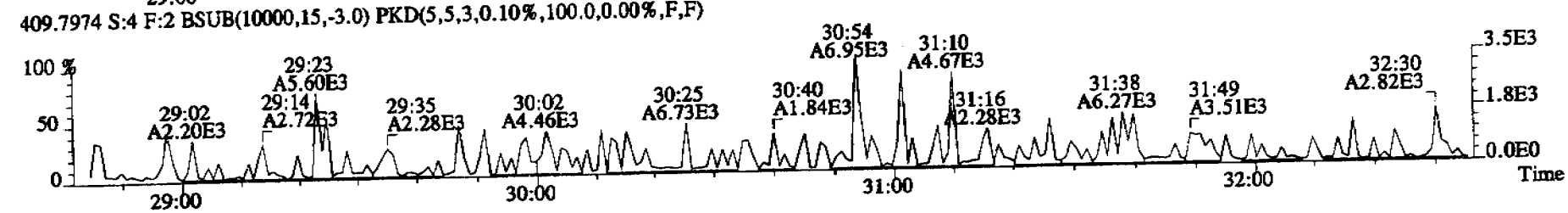
351.9000 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



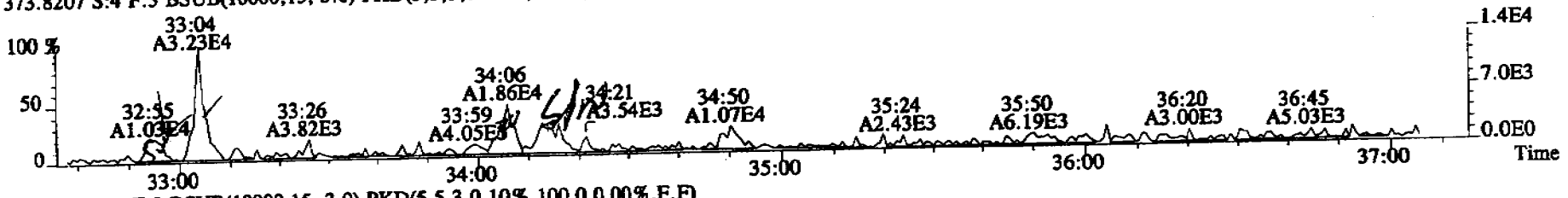
353.8970 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



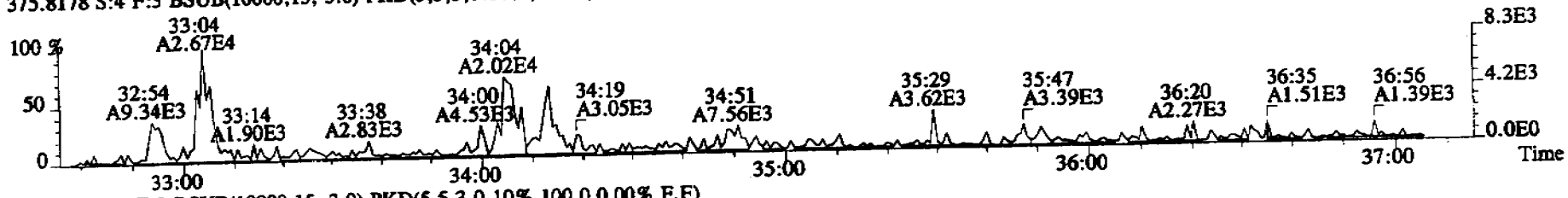
409.7974 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



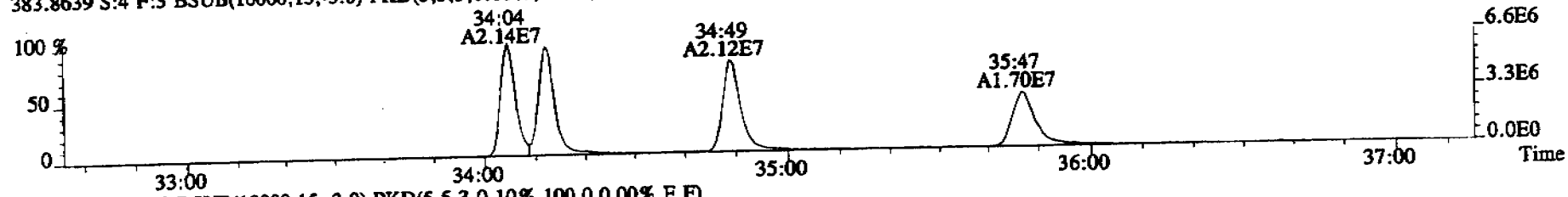
File:050507D2 #1-399 Acq: 8-MAY-2005 05:01:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:0_6769_MB001 Exp:OCDD_DB5
373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



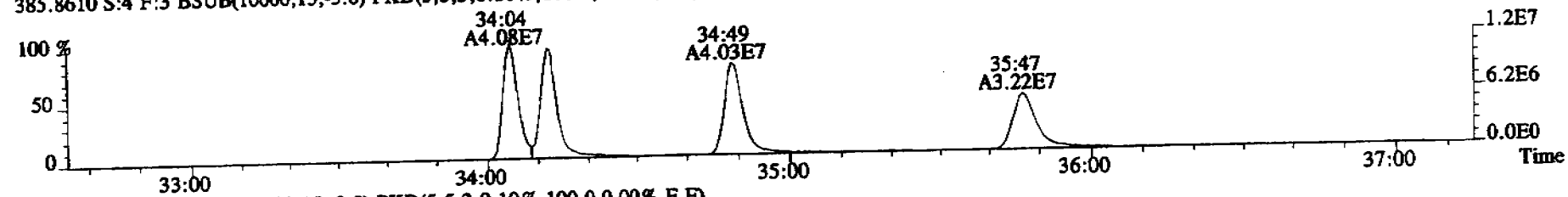
375.8178 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



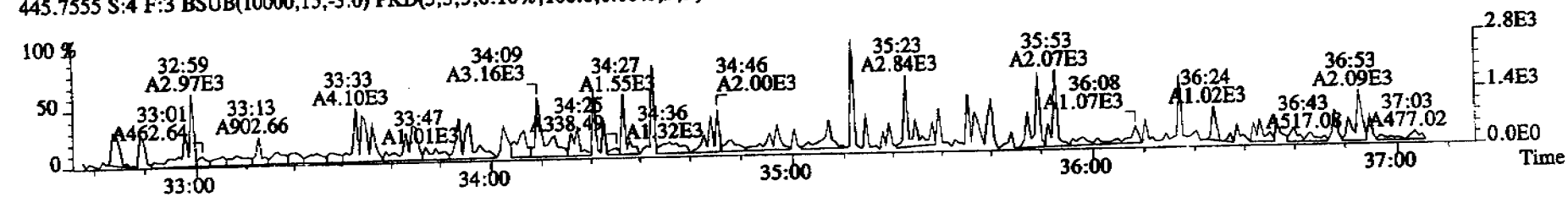
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

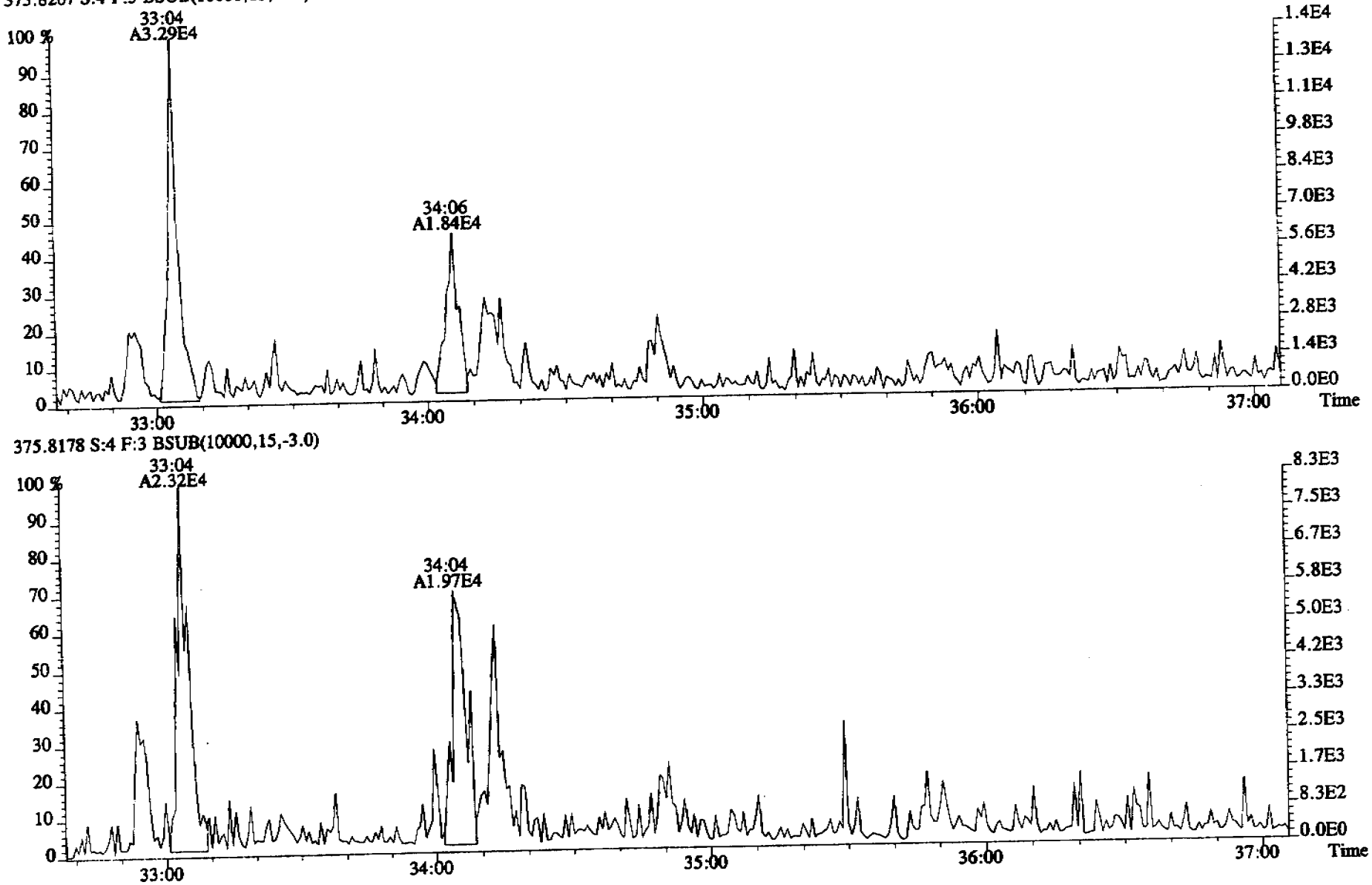


385.8610 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

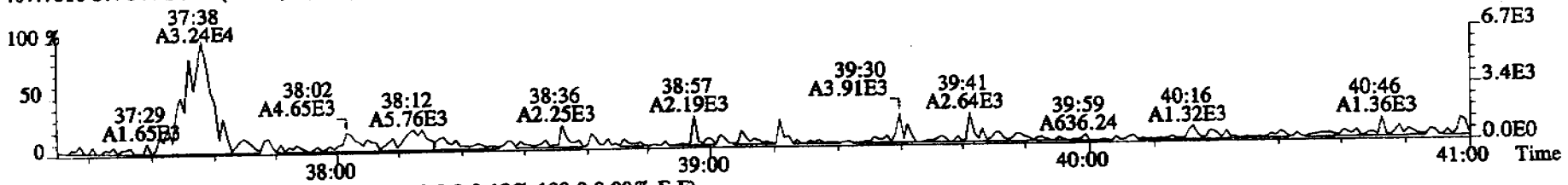


445.7555 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

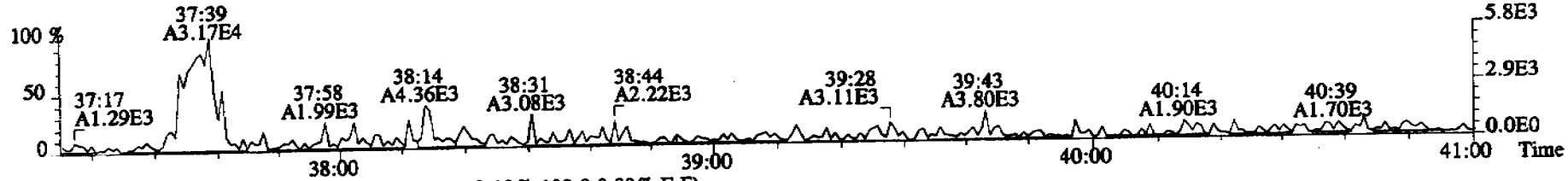



File:050507D2 #1-399 Acq: 8-MAY-2005 05:01:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:0_6769_MB001 Exp:OCDD_DB5
373.8207 S:4 F:3 BSUB(10000,15,-3.0)
33:04
A3.29E4
34:06
A1.84E4
100 %
90
80
70
60
50
40
30
20
10
0
1.4E4
1.3E4
1.1E4
9.8E3
8.4E3
7.0E3
5.6E3
4.2E3
2.8E3
1.4E3
0.0E0
33:00
34:00
35:00
36:00
37:00
Time
375.8178 S:4 F:3 BSUB(10000,15,-3.0)
33:04
A2.32E4
34:04
A1.97E4
100 %
90
80
70
60
50
40
30
20
10
0
8.3E3
7.5E3
6.7E3
5.8E3
5.0E3
4.2E3
3.3E3
2.5E3
1.7E3
8.3E2
0.0E0
33:00
34:00
35:00
36:00
37:00
Time

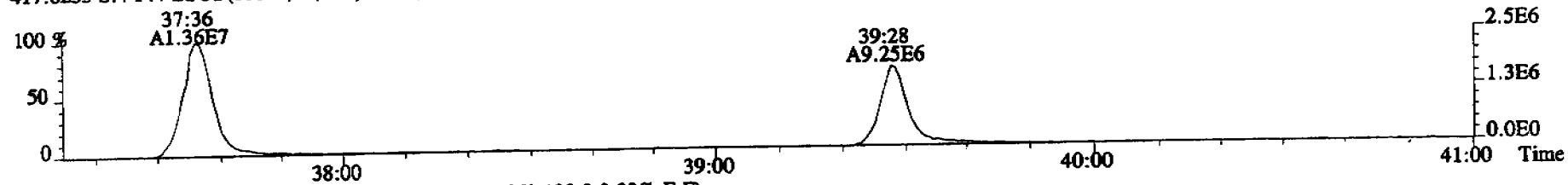
File:050507D2 #1-348 Acq: 8-MAY-2005 05:01:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:0_6769_MB001 Exp:OCDD_DB5
407.7818 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



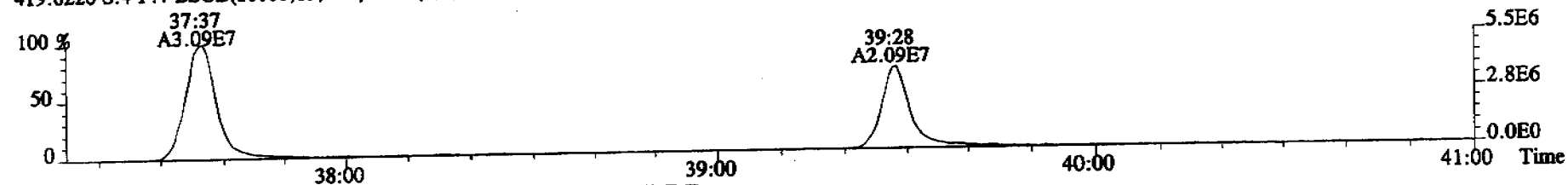
409.7788 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



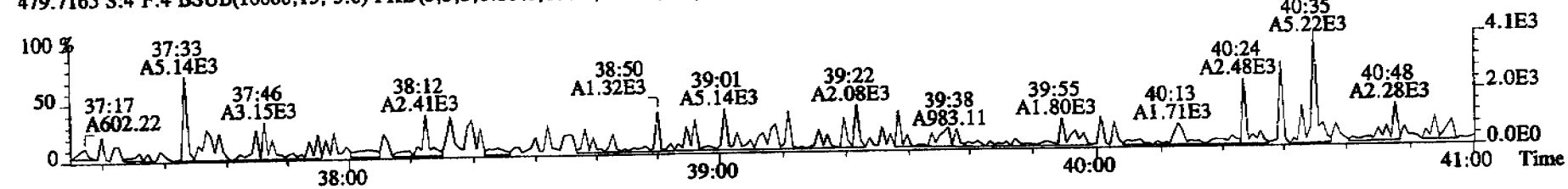
417.8253 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

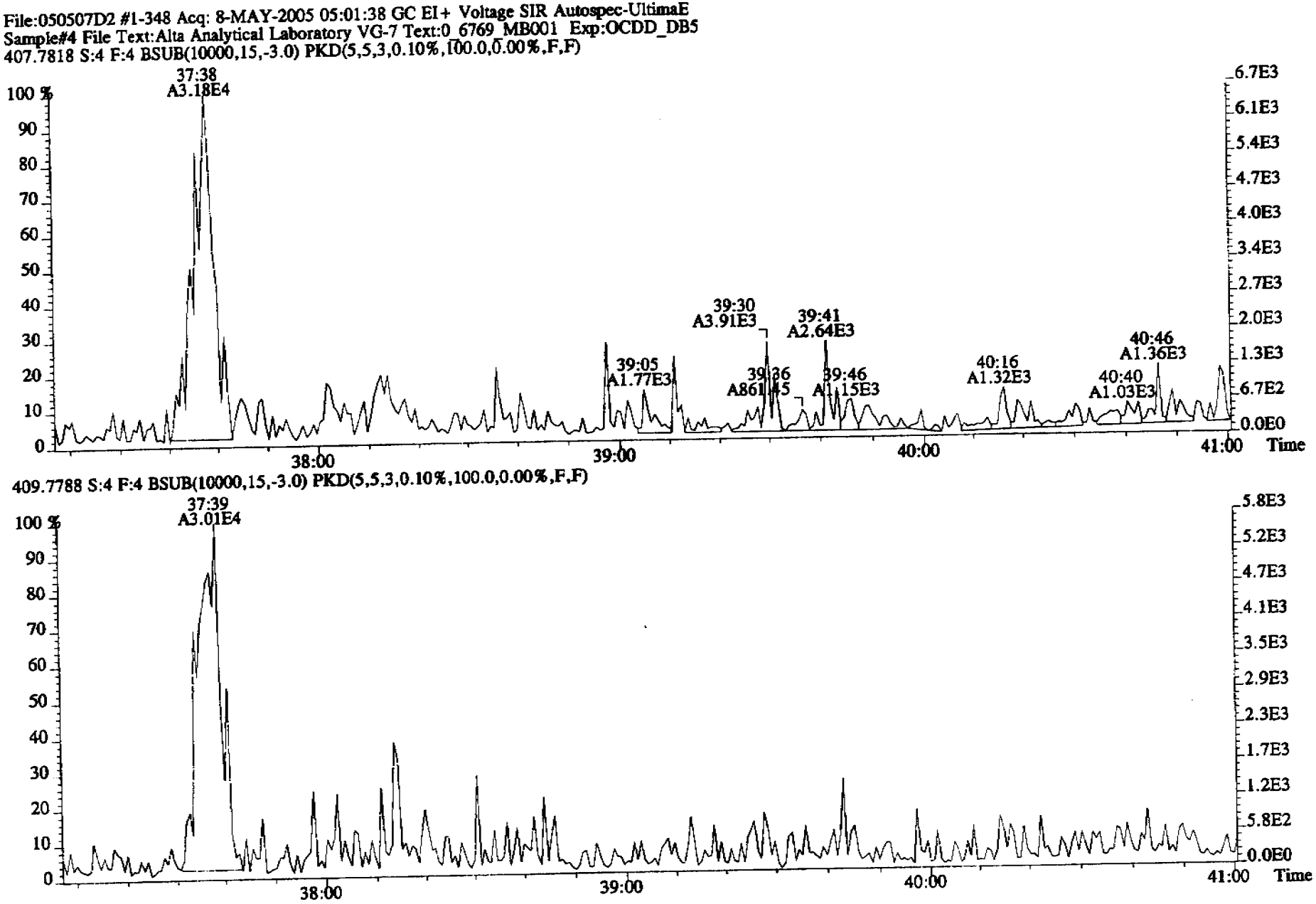


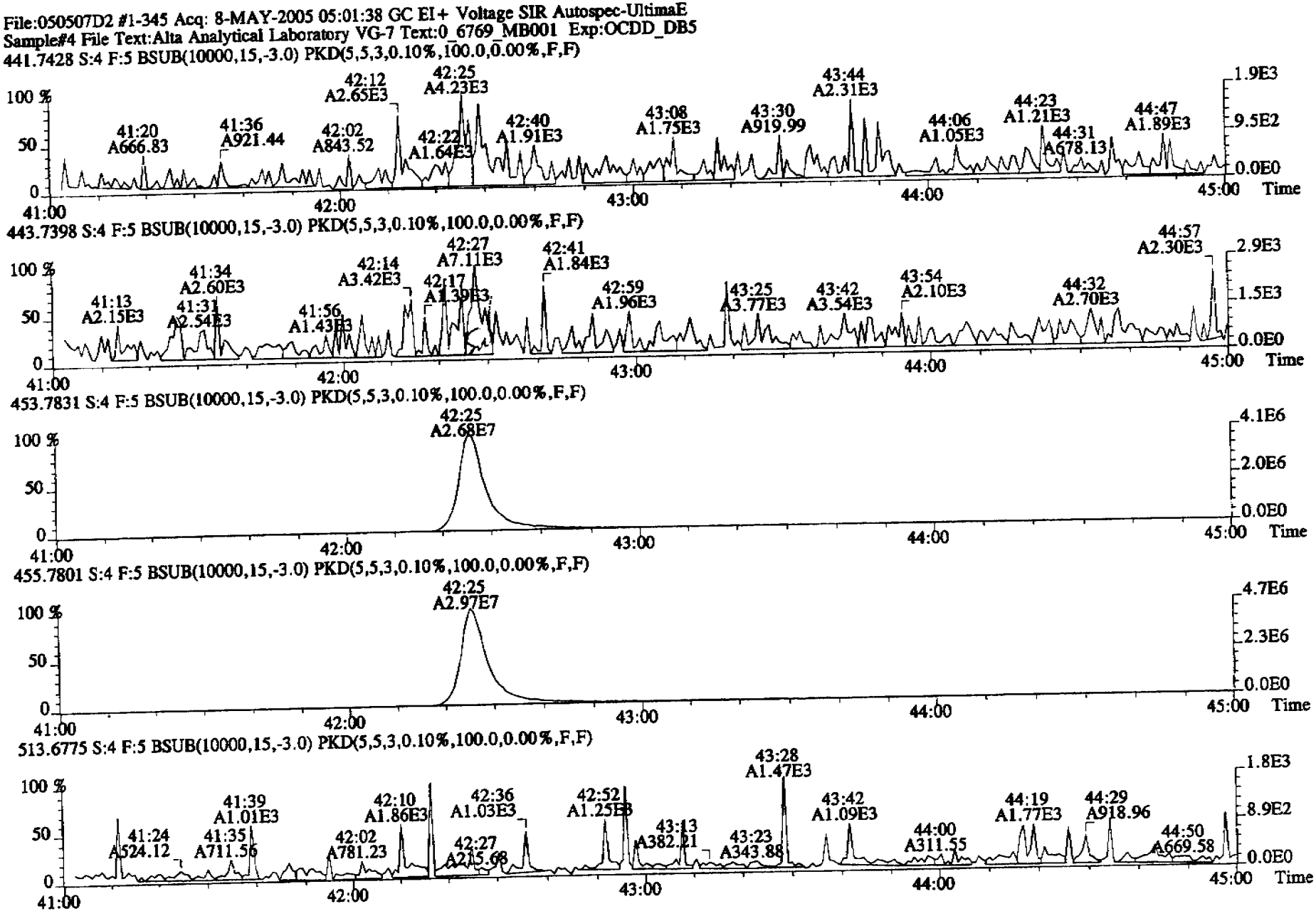
419.8220 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



479.7165 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)




File:050507D2 #1-348 Acq: 8-MAY-2005 05:01:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:0 6769_MB001 Exp:OCDD_DB5
407.7818 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
37:38
A3.18E4
39:30
A3.91E3
39:41
A2.64E3
39:05
A1.77E3
39:46
A1.15E3
40:16
A1.32E3
40:46
A1.36E3
40:40
A1.03E3
409.7788 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
37:39
A3.01E4
100 %
90
80
70
60
50
40
30
20
10
0
38:00
39:00
40:00
41:00
Time
6.7E3
6.1E3
5.4E3
4.7E3
4.0E3
3.4E3
2.7E3
2.0E3
1.3E3
6.7E2
0.0E0
5.8E3
5.2E3
4.7E3
4.1E3
3.5E3
2.9E3
2.3E3
1.7E3
1.2E3
5.8E2
0.0E0


File:050507D2 #1-345 Acq: 8-MAY-2005 05:01:38 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:0_6769_MB001 Exp:OCDD_DB5
441.7428 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
41:20 A666.83
41:36 A921.44
42:02 A843.52
42:12 A2.65E3
42:22 A1.64E3
42:25 A4.23E3
42:40 A1.91E3
43:08 A1.75E3
43:30 A919.99
43:44 A2.31E3
44:06 A1.05E3
44:23 A1.21E3
44:31 A678.13
44:47 A1.89E3
443.7398 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
41:13 A2.15E3
41:31 A2.54E3
41:34 A2.60E3
41:56 A1.43E3
42:14 A3.42E3
42:17 A1.39E3
42:27 A7.11E3
42:41 A1.84E3
42:59 A1.96E3
43:25 A3.77E3
43:42 A3.54E3
43:54 A2.10E3
44:32 A2.70E3
44:57 A2.30E3
453.7831 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
42:25 A2.68E7
455.7801 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
42:25 A2.97E7
513.6775 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
41:24 A524.12
41:35 A711.56
41:39 A1.01E3
42:02 A781.23
42:10 A1.86E3
42:27 A215.68
42:36 A1.03E3
42:52 A1.25E3
43:13 A382.21
43:23 A343.88
43:28 A1.47E3
43:42 A1.09E3
44:00 A311.55
44:19 A1.77E3
44:29 A918.96
44:50 A669.58
100 %
50
0
41:00
42:00
43:00
44:00
45:00
Time
1.9E3
9.5E2
0.0E0
2.9E3
1.5E3
4.1E6
2.0E6
4.7E6
2.3E6
1.8E3
8.9E2

FORM 8A

PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

Lab Name: Alta Analytical Laboratory Extraction Batch: 0_6769_OPR001

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): SOLID OPR Data Filename: 050507D2-2

Ext. Date: 5/6/05 Shift: Day Analysis Date: 8-MAY-05 Time: 03:23:27

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT.

NATIVE ANALYTES	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (1) (ng/mL)
2,3,7,8-TCDD	10	9.97	6.7 - 15.8 7.3 - 14.6 (2)
1,2,3,7,8-PeCDD	50	50.5	35.0 - 71.0
1,2,3,4,7,8-HxCDD	50	50.0	35.0 - 82.0
1,2,3,6,7,8-HxCDD	50	51.2	38.0 - 67.0
1,2,3,7,8,9-HxCDD	50	49.2	32.0 - 81.0
1,2,3,4,6,7,8-HpCDD	50	50.3	35.0 - 70.0
OCDD	100	100	78.0 - 144.0
2,3,7,8-TCDF	10	10.2	7.5 - 15.8 8.0 - 14.7 (2)
1,2,3,7,8-PeCDF	50	50.7	40.0 - 67.0
2,3,4,7,8-PeCDF	50	50.5	34.0 - 80.0
1,2,3,4,7,8-HxCDF	50	49.6	36.0 - 67.0
1,2,3,6,7,8-HxCDF	50	51.1	42.0 - 65.0
2,3,4,6,7,8-HxCDF	50	49.7	35.0 - 78.0
1,2,3,7,8,9-HxCDF	50	51.0	39.0 - 65.0
1,2,3,4,6,7,8-HpCDF	50	49.7	41.0 - 61.0
1,2,3,4,7,8,9-HpCDF	50	50.4	39.0 - 69.0
OCDF	100	99.8	63.0 - 170.0

(1) Contract-required concentration limits for OPR as specified in Table 6, Method 1613. 10/94

(2) Contract-required concentration limits for OPR as specified in Table 6a, Method 1613. 10/94

Analyst: [signature]

Date: 5-9-05

FORM 8B

PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

Lab Name: Alta Analytical Laboratory Extraction Batch: 0_6769_OPR001

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): SOLID OPR Data Filename: 050507D2-2

Ext. Date: 5/6/05 Shift: Day Analysis Date: 8-MAY-05 Time: 03:23:27

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT.

LABELED COMPOUNDS	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (1) (ng/mL)
13C-2,3,7,8-TCDD	100	100.0	20.0 - 175.0 25.0 - 141.0 (2)
13C-1,2,3,7,8-PeCDD	100	93.7	21.0 - 227.0
13C-1,2,3,4,7,8-HxCDD	100	93.3	21.0 - 193.0
13C-1,2,3,6,7,8-HxCDD	100	92.0	25.0 - 163.0
13C-1,2,3,4,6,7,8-HpCDD	100	76.3	26.0 - 166.0
13C-OCDD	200	128	26.0 - 397.0
13C-2,3,7,8-TCDF	100	94.7	22.0 - 152.0 26.0 - 126.0 (2)
13C-1,2,3,7,8-PeCDF	100	96.7	21.0 - 192.0
13C-2,3,4,7,8-PeCDF	100	93.5	13.0 - 328.0
13C-1,2,3,4,7,8-HxCDF	100	94.9	19.0 - 202.0
13C-1,2,3,6,7,8-HxCDF	100	93.8	21.0 - 159.0
13C-2,3,4,6,7,8-HxCDF	100	96.4	22.0 - 176.0
13C-1,2,3,7,8,9-HxCDF	100	85.7	17.0 - 205.0
13C-1,2,3,4,6,7,8-HpCDF	100	88.0	21.0 - 158.0
13C-1,2,3,4,7,8,9-HpCDF	100	68.0	20.0 - 186.0
13C-OCDF	200	118	26.0 - 397.0
CLEANUP STANDARD			
37Cl-2,3,7,8-TCDD	40	41.0	12.4 - 76.4

(1) Contract-required concentration limits for OPR as specified in Table 6, Method 1613. 10/94

(2) Contract-required concentration limits for OPR as specified in Table 6a, Method 1613. 10/94

Analyst: [signature]

Date: 5-9-05

Client ID: 0_6769_OPR001
Lab ID: 0_6769_OPR001

Filename: 050507D2 S:2 Acq: 8-MAY-05 03:23:27
GC Column ID: db-5 ICal: 1613VG7-4-23-05 wt/vol: 1.000

ConCal: ST050507D2-1
EndCAL: ST050507D2-2

Name	Resp	RA	RRF	RT	Conc	Method QC Limits	Alta Historical Limits Aqueous Limits	Solid Limits
2,3,7,8-TCDD	8.35e+06	0.79 y	1.06	26:56	9.97	7.0 - 13	7.73 - 12.4	7.53 - 12.5
1,2,3,7,8-PeCDD	2.92e+07	0.62 y	0.99	31:40	50.5	35 - 65	37.8 - 57.5	40.4 - 65.1
1,2,3,4,7,8-HxCDD	2.18e+07	1.25 y	1.11	34:59	50.0	35 - 65	38.3 - 58.0	41.2 - 63.2
1,2,3,6,7,8-HxCDD	2.53e+07	1.26 y	1.07	35:06	51.2	35 - 65	38.7 - 57.0	40.8 - 65.2
1,2,3,7,8,9-HxCDD	2.42e+07	1.22 y	1.15	35:25	49.2	35 - 65	37.0 - 57.5	41.7 - 65.4
1,2,3,4,6,7,8-HpCDD	1.67e+07	1.07 y	1.05	38:57	50.3	35 - 65	39.0 - 58.5	21.3 - 87.7
OCDD	2.49e+07	0.88 y	1.04	42:15	100	70 - 130	83.2 - 126	0 - 400
2,3,7,8-TCDF	1.10e+07	0.77 y	1.05	26:07	10.2	7.0 - 13	7.65 - 12.4	7.82 - 12.0
1,2,3,7,8-PeCDF	4.44e+07	1.59 y	0.95	30:26	50.7	35 - 65	41.4 - 64.9	39.6 - 65.6
2,3,4,7,8-PeCDF	4.68e+07	1.56 y	1.08	31:23	50.5	35 - 65	36.9 - 56.0	40.2 - 66.5
1,2,3,4,7,8-HxCDF	3.57e+07	1.25 y	1.19	34:06	49.6	35 - 65	33.4 - 59.4	39.4 - 63.9
1,2,3,6,7,8-HxCDF	4.13e+07	1.27 y	1.22	34:14	51.1	35 - 65	38.7 - 59.0	41.1 - 62.9
2,3,4,6,7,8-HxCDF	3.75e+07	1.27 y	1.20	34:51	49.7	35 - 65	39.3 - 58.0	40.9 - 63.3
1,2,3,7,8,9-HxCDF	2.78e+07	1.26 y	1.13	35:49	51.0	35 - 65	38.8 - 58.0	39.5 - 64.9
1,2,3,4,6,7,8-HpCDF	3.07e+07	1.04 y	1.38	37:38	49.7	35 - 65	40.2 - 63.1	31.9 - 74.7
1,2,3,4,7,8,9-HpCDF	1.86e+07	1.05 y	1.23	39:30	50.4	35 - 65	40.5 - 62.2	39.8 - 63.8
OCDF	2.85e+07	0.92 y	1.02	42:28	99.8	70 - 130	80.0 - 120	69.8 - 136

Name	Resp	RA	RRF	RT	Conc	% Rec	Method QC Limits	Aqueous Limits	Solid Limits
13C-2,3,7,8-TCDD	7.91e+07	0.76 y	1.12	26:55	100.0	100.0	40 - 135	48.8 - 105	53.0 - 115
13C-1,2,3,7,8-PeCDD	5.85e+07	0.63 y	0.89	31:38	93.7	93.7	40 - 135	49.8 - 109	61.4 - 117
13C-1,2,3,4,7,8-HxCDD	3.92e+07	1.26 y	0.83	34:58	93.3	93.3	40 - 135	51.9 - 102	63.1 - 116
13C-1,2,3,6,7,8-HxCDD	4.62e+07	1.27 y	1.00	35:05	92.0	92.0	40 - 135	50.4 - 99.1	54.6 - 121
13C-1,2,3,4,6,7,8-HpCDD	3.17e+07	1.07 y	0.82	38:56	76.3	76.3	40 - 135	51.2 - 106	67.6 - 117
13C-OCDD	4.80e+07	0.91 y	0.74	42:14	128	64.0	40 - 135	30.8 - 113	14.0 - 147
13C-2,3,7,8-TCDF	1.02e+08	0.80 y	1.02	26:06	94.7	94.7	40 - 135	50.3 - 103	56.0 - 112
13C-1,2,3,7,8-PeCDF	9.20e+07	1.58 y	0.90	30:25	96.7	96.7	40 - 135	49.3 - 105	58.6 - 116
13C-2,3,4,7,8-PeCDF	8.61e+07	1.61 y	0.87	31:22	93.5	93.5	40 - 135	53.3 - 109	62.9 - 118
13C-1,2,3,4,7,8-HxCDF	6.07e+07	0.53 y	1.27	34:04	94.9	94.9	40 - 135	44.5 - 110	55.9 - 118
13C-1,2,3,6,7,8-HxCDF	6.64e+07	0.54 y	1.40	34:13	93.8	93.8	40 - 135	45.8 - 111	58.6 - 118
13C-2,3,4,6,7,8-HxCDF	6.28e+07	0.53 y	1.29	34:50	96.4	96.4	40 - 135	50.8 - 110	63.7 - 115
13C-1,2,3,7,8,9-HxCDF	4.84e+07	0.52 y	1.12	35:47	85.7	85.7	40 - 135	48.6 - 108	63.3 - 112
13C-1,2,3,4,6,7,8-HpCDF	4.49e+07	0.45 y	1.01	37:37	88.0	88.0	40 - 135	45.9 - 104	55.0 - 117
13C-1,2,3,4,7,8,9-HpCDF	3.01e+07	0.44 y	0.88	39:28	68.0	68.0	40 - 135	41.1 - 114	53.2 - 122
13C-OCDF	5.60e+07	0.90 y	0.94	42:27	118	59.2	40 - 135	36.8 - 109	48.3 - 109
37Cl-2,3,7,8-TCDD	1.79e+07		0.62	26:56	41.0	102	40 - 135	51.1 - 117	49.6 - 106
13C-1,2,3,4-TCDD	7.04e+07	0.80 y	1.00	26:17	100				
13C-1,2,3,4-TCDF	1.05e+08	0.79 y	1.00	24:44	100				
13C-1,2,3,7,8,9-HxCDD	5.04e+07	1.24 y	1.00	35:24	100				

Analyst: [signature]

Date: 5-9-05

Client ID: 0_6769_OPR001 Filename: 050507D2 S:2 Acq: 8-MAY-05 03:23:27
Lab ID: 0_6769_OPR001 GC Column ID: db-5 ICal: 1613VG7-4-23-05 wt/vol: 1.000

ConCal: ST050507D2-1
EndCAL: ST050507D2-2

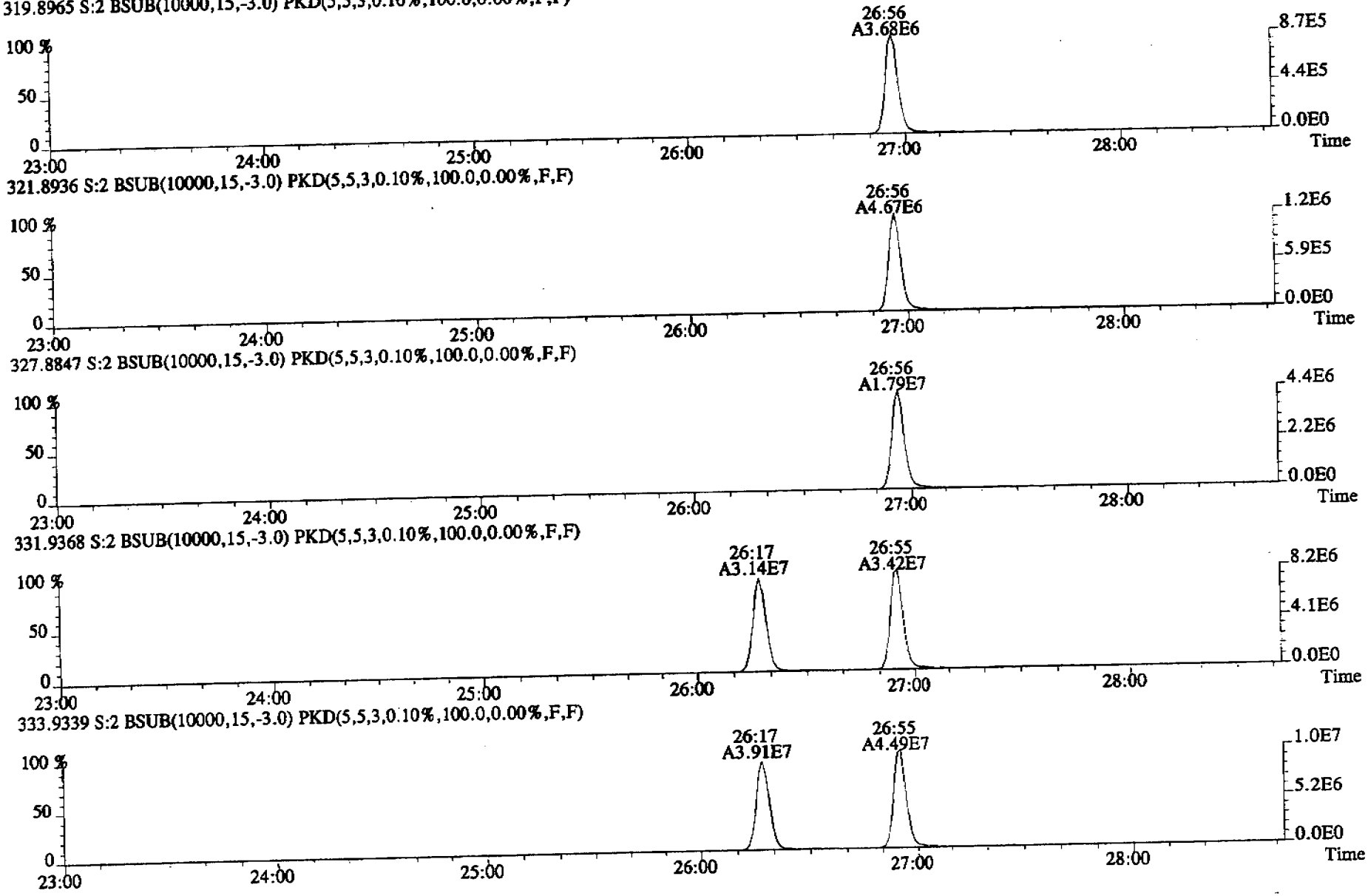
	Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Rec	Qual
	2,3,7,8-TCDD	8.35e+06	0.79 y	1.06	26:56	9.97		0.00	2.5	0.00		
	1,2,3,7,8-PeCDD	2.92e+07	0.62 y	0.99	31:40	50.5		0.00	2.5	0.00		
	1,2,3,4,7,8-HxCDD	2.18e+07	1.25 y	1.11	34:59	50.0		0.00	2.5	0.00		
	1,2,3,6,7,8-HxCDD	2.53e+07	1.26 y	1.07	35:06	51.2		0.00	2.5	0.00		
	1,2,3,7,8,9-HxCDD	2.42e+07	1.22 y	1.15	35:25	49.2		0.00	2.5	0.00		
	1,2,3,4,6,7,8-HpCDD	1.67e+07	1.07 y	1.05	38:57	50.3		0.00	2.5	0.00		
	OCDD	2.49e+07	0.88 y	1.04	42:15	100		0.00	2.5	0.00		
	2,3,7,8-TCDF	1.10e+07	0.77 y	1.05	26:07	10.2		0.00	2.5	0.00		
	1,2,3,7,8-PeCDF	4.44e+07	1.59 y	0.95	30:26	50.7		0.00	2.5	0.00		
	2,3,4,7,8-PeCDF	4.68e+07	1.56 y	1.08	31:23	50.5		0.00	2.5	0.00		
	1,2,3,4,7,8-HxCDF	3.57e+07	1.25 y	1.19	34:06	49.6		0.00	2.5	0.00		
	1,2,3,6,7,8-HxCDF	4.13e+07	1.27 y	1.22	34:14	51.1		0.00	2.5	0.00		
	2,3,4,6,7,8-HxCDF	3.75e+07	1.27 y	1.20	34:51	49.7		0.00	2.5	0.00		
	1,2,3,7,8,9-HxCDF	2.78e+07	1.26 y	1.13	35:49	51.0		0.00	2.5	0.00		
	1,2,3,4,6,7,8-HpCDF	3.07e+07	1.04 y	1.38	37:38	49.7		0.00	2.5	0.00		
	1,2,3,4,7,8,9-HpCDF	1.86e+07	1.05 y	1.23	39:30	50.4		0.00	2.5	0.00		
	OCDF	2.85e+07	0.92 y	1.02	42:28	99.8		0.00	2.5	0.00		
IS	13C-2,3,7,8-TCDD	7.91e+07	0.76 y	1.12	26:55	100.0					100.0	
IS	13C-1,2,3,7,8-PeCDD	5.85e+07	0.63 y	0.89	31:38	93.7					93.7	
IS	13C-1,2,3,4,7,8-HxCDD	3.92e+07	1.26 y	0.83	34:58	93.3					93.3	
IS	13C-1,2,3,6,7,8-HxCDD	4.62e+07	1.27 y	1.00	35:05	92.0					92.0	
IS	13C-1,2,3,4,6,7,8-HpCDD	3.17e+07	1.07 y	0.82	38:56	76.3					76.3	
IS	13C-OCDD	4.80e+07	0.91 y	0.74	42:14	128					64.0	
IS	13C-2,3,7,8-TCDF	1.02e+08	0.80 y	1.02	26:06	94.7					94.7	
IS	13C-1,2,3,7,8-PeCDF	9.20e+07	1.58 y	0.90	30:25	96.7					96.7	
IS	13C-2,3,4,7,8-PeCDF	8.61e+07	1.61 y	0.87	31:22	93.5					93.5	
IS	13C-1,2,3,4,7,8-HxCDF	6.07e+07	0.53 y	1.27	34:04	94.9					94.9	
IS	13C-1,2,3,6,7,8-HxCDF	6.64e+07	0.54 y	1.40	34:13	93.8					93.8	
IS	13C-2,3,4,6,7,8-HxCDF	6.28e+07	0.53 y	1.29	34:50	96.4					96.4	
IS	13C-1,2,3,7,8,9-HxCDF	4.84e+07	0.52 y	1.12	35:47	85.7					85.7	
IS	13C-1,2,3,4,6,7,8-HpCDF	4.49e+07	0.45 y	1.01	37:37	88.0					88.0	
IS	13C-1,2,3,4,7,8,9-HpCDF	3.01e+07	0.44 y	0.88	39:28	68.0					68.0	
IS	13C-OCDF	5.60e+07	0.90 y	0.94	42:27	118					59.2	
C/Up	37Cl-2,3,7,8-TCDD	1.79e+07		0.62	26:56	41.0					102	
RS/RT	13C-1,2,3,4-TCDD	7.04e+07	0.80 y	1.00	26:17	100						
RS	13C-1,2,3,4-TCDF	1.05e+08	0.79 y	1.00	24:44	100						
RS/RT	13C-1,2,3,7,8,9-HxCDD	5.04e+07	1.24 y	1.00	35:24	100						

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	10.0	10.2		0.00	0.00
Total Penta-Dioxins	50.9	51.2		0.00	0.00
Total Hexa-Dioxins	151	151		0.00	0.00
Total Hepta-Dioxins	51.5	53.6		0.00	0.00
Total Tetra-Furans	10.5	10.8		0.00	0.00
Total Penta-Furans	102	104		0.00	0.00
Total Hexa-Furans	202	203		0.00	0.00
Total Hepta-Furans	100	101		0.00	0.00

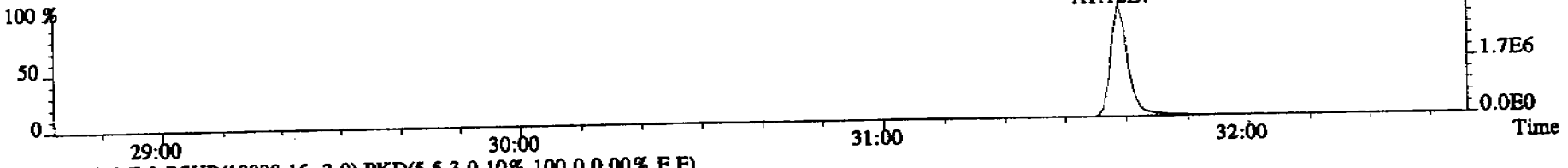
Intergrations by Analyst: [signature]

Date: 5-9-05

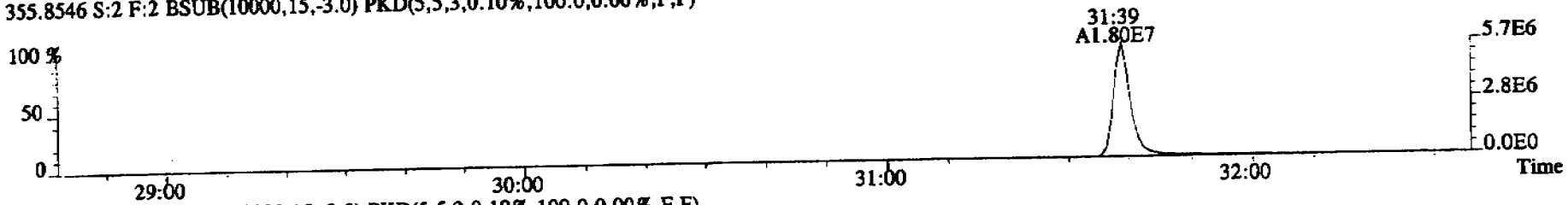
File:050507D2 #1-559 Acq: 8-MAY-2005 03:23:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory VG-7 Text:0_6769_OPR001 Exp:OCDD_DB5



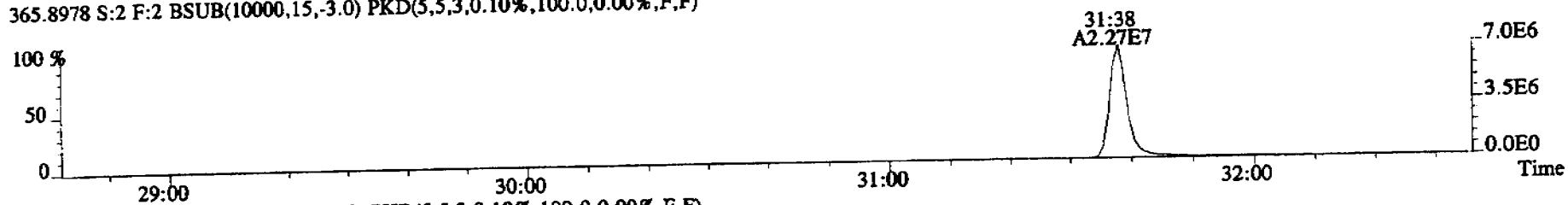
File:050507D2 #1-272 Acq: 8-MAY-2005 03:23:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory VG-7 Text:0_6769_OPR001 Exp:OCDD_DB5
353.8576 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



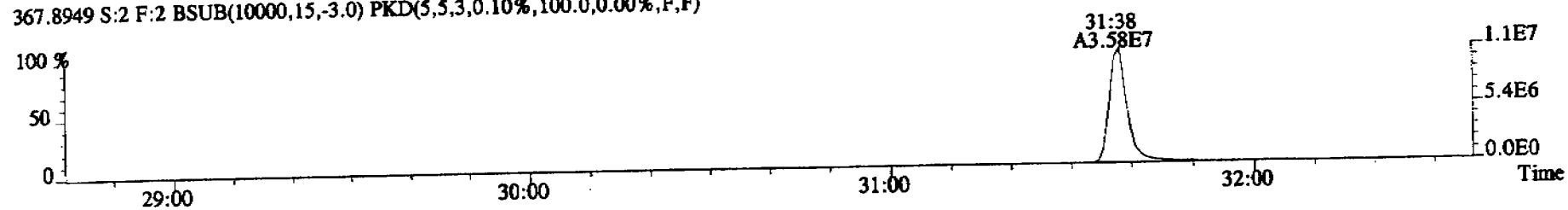
355.8546 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



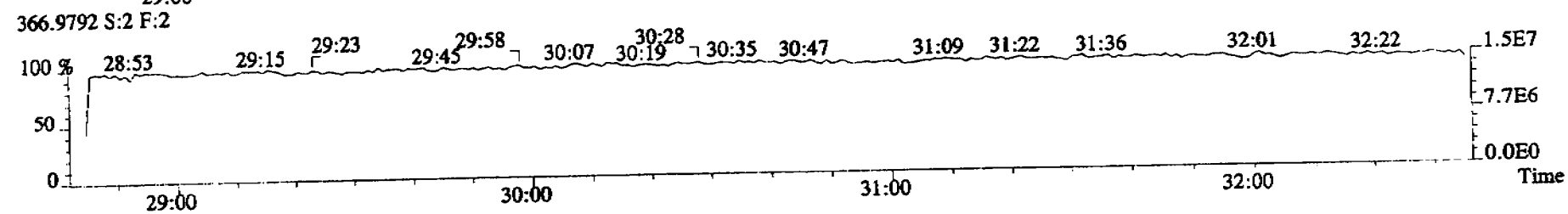
365.8978 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

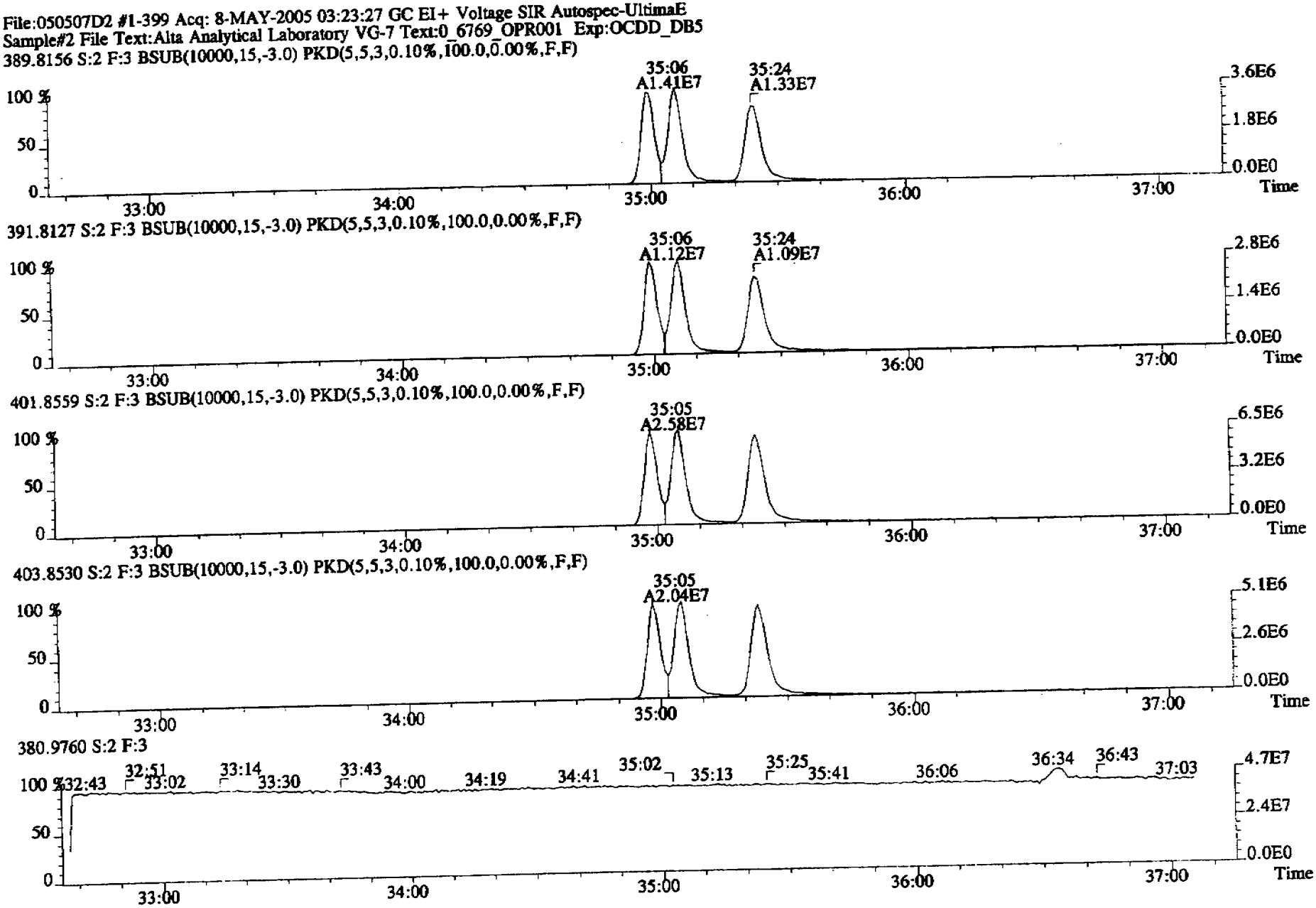


367.8949 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

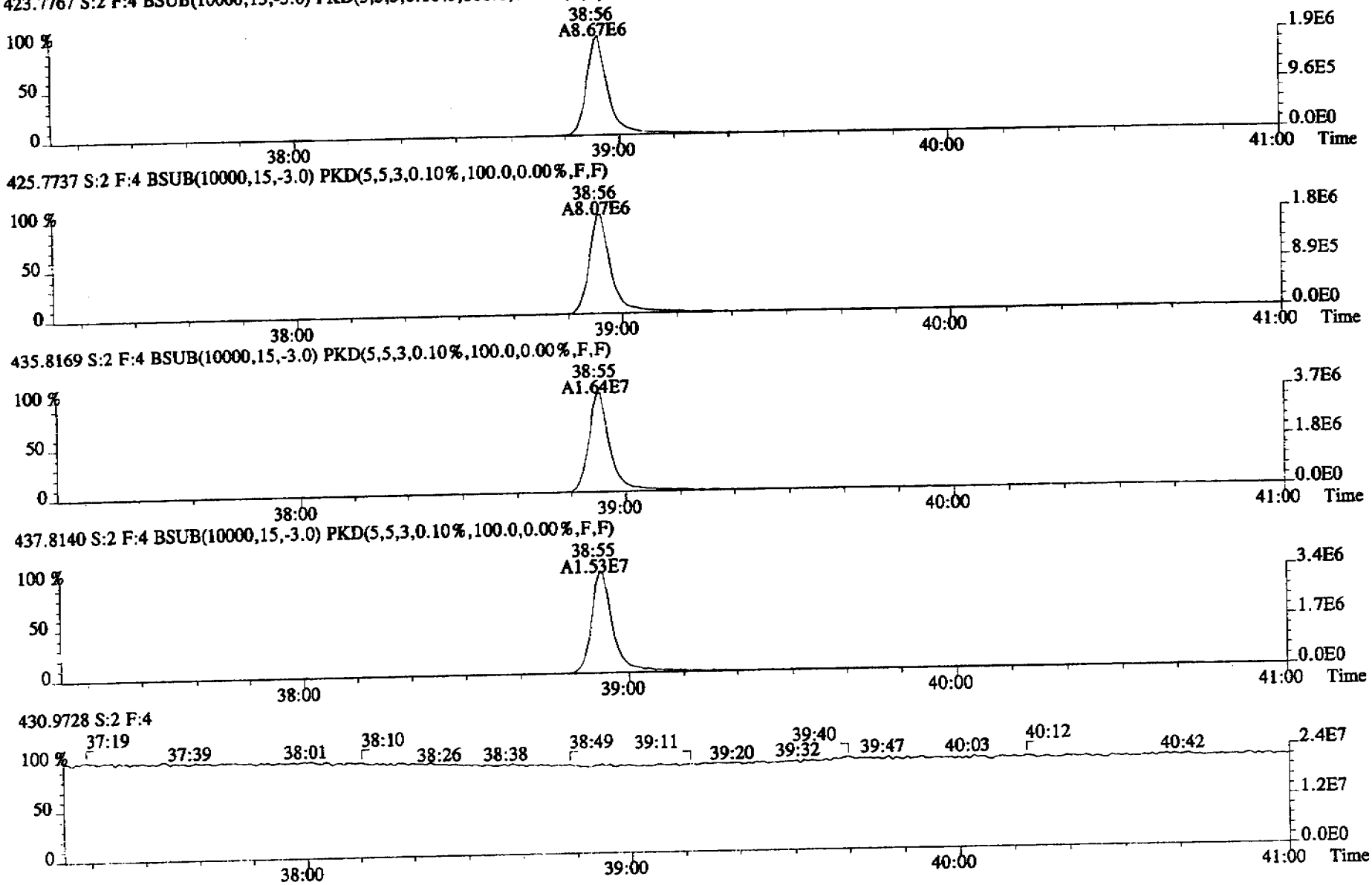


366.9792 S:2 F:2

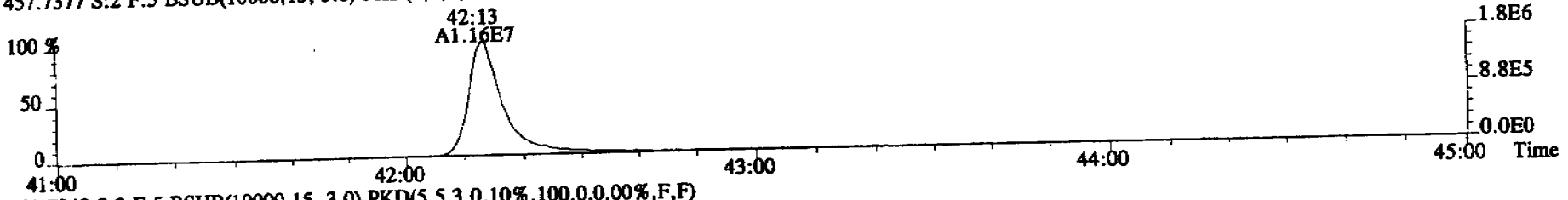



File:050507D2 #1-399 Acq: 8-MAY-2005 03:23:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory VG-7 Text:0_6769_OPR001 Exp:OCDD_DB5
389.8156 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
35:06 A1.41E7
35:24 A1.33E7
3.6E6
1.8E6
0.0E0
Time
391.8127 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
35:06 A1.12E7
35:24 A1.09E7
2.8E6
1.4E6
0.0E0
Time
401.8559 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
35:05 A2.58E7
6.5E6
3.2E6
0.0E0
Time
403.8530 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
35:05 A2.04E7
5.1E6
2.6E6
0.0E0
Time
380.9760 S:2 F:3
32:43 32:51 33:02 33:14 33:30 33:43 34:00 34:19 34:41 35:02 35:13 35:25 35:41 36:06 36:34 36:43 37:03
4.7E7
2.4E7
0.0E0
Time
100 %
50
0
33:00
34:00
35:00
36:00
37:00

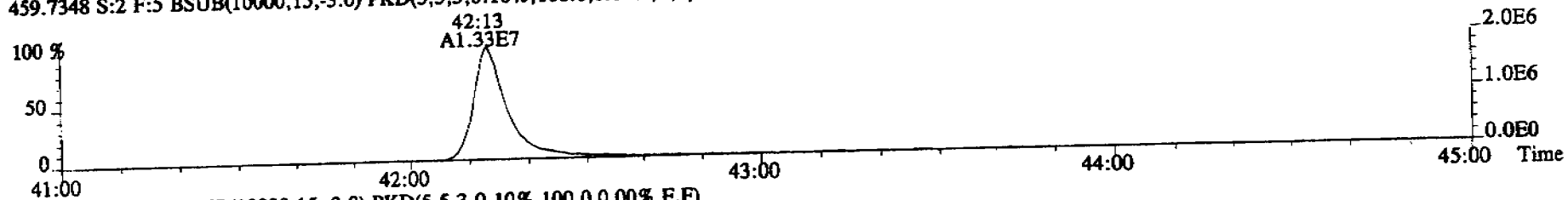
File:050507D2 #1-348 Acq: 8-MAY-2005 03:23:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory VG-7 Text:0_6769_OPR001 Exp:OCDD_DB5



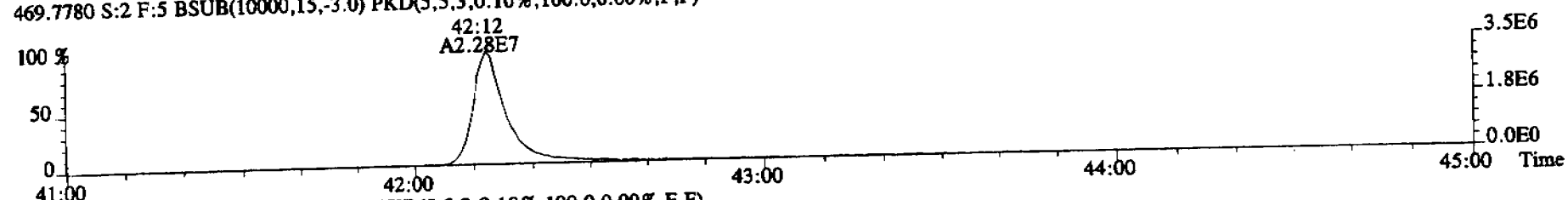
File:050507D2 #1-345 Acq: 8-MAY-2005 03:23:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory VG-7 Text:0_6769_OPR001 Exp:OCDD_DB5
457.7377 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



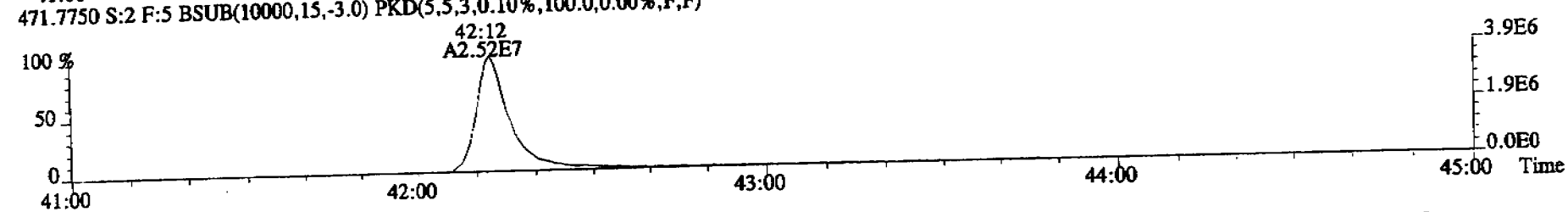
459.7348 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



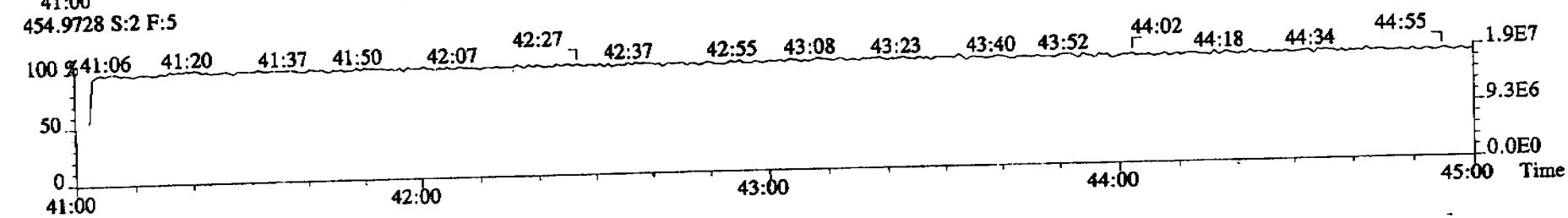
469.7780 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

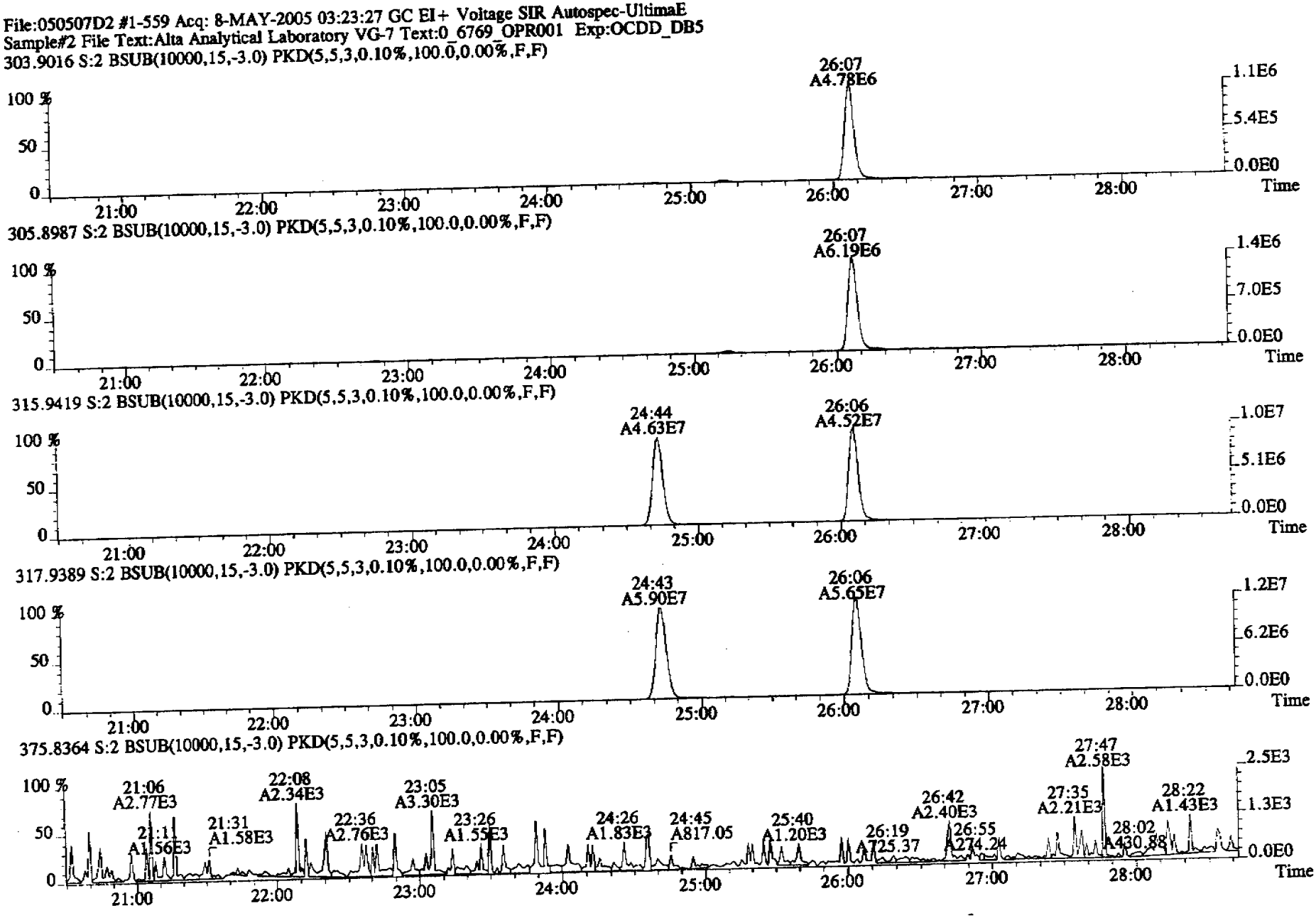


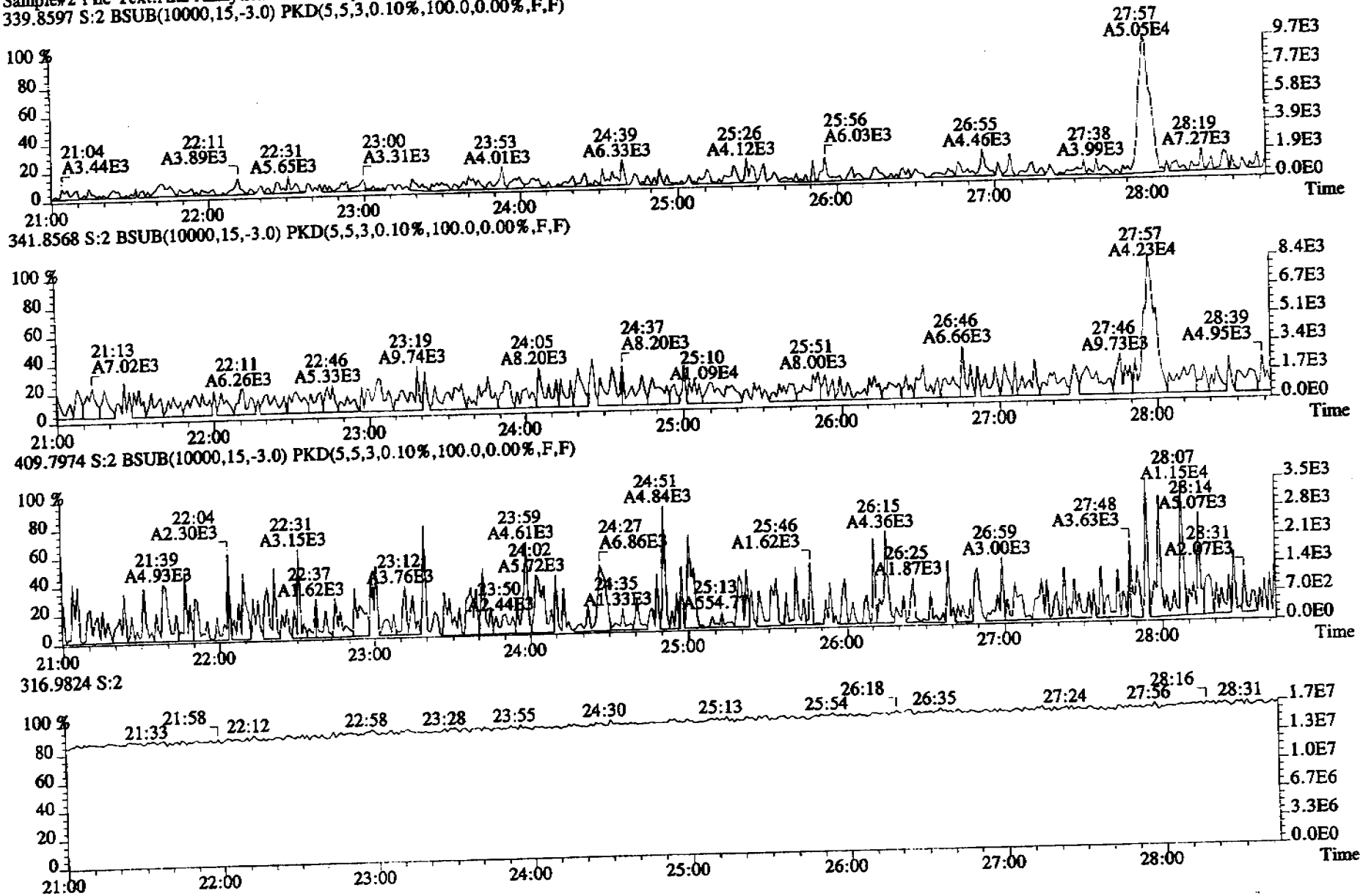
471.7750 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

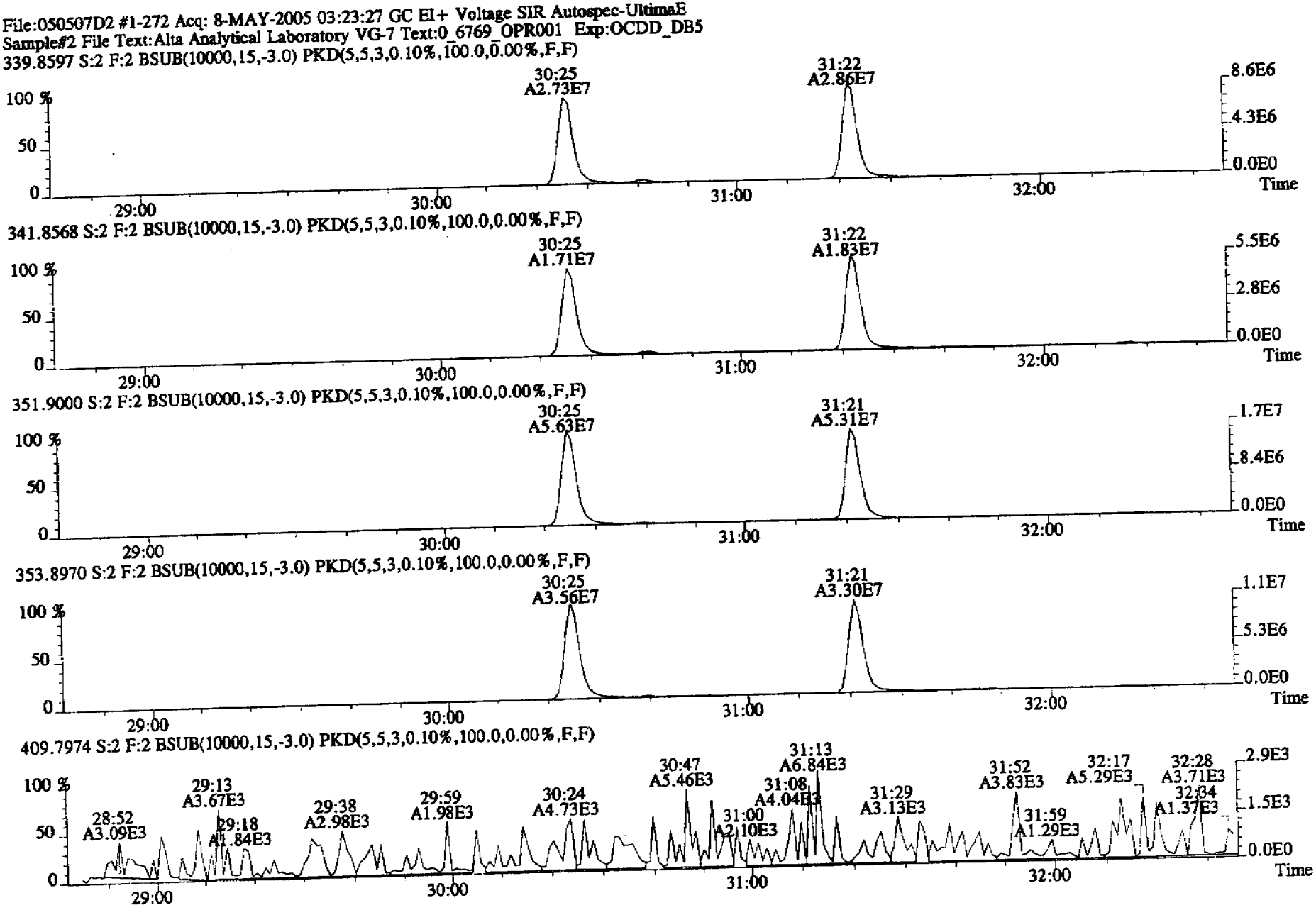


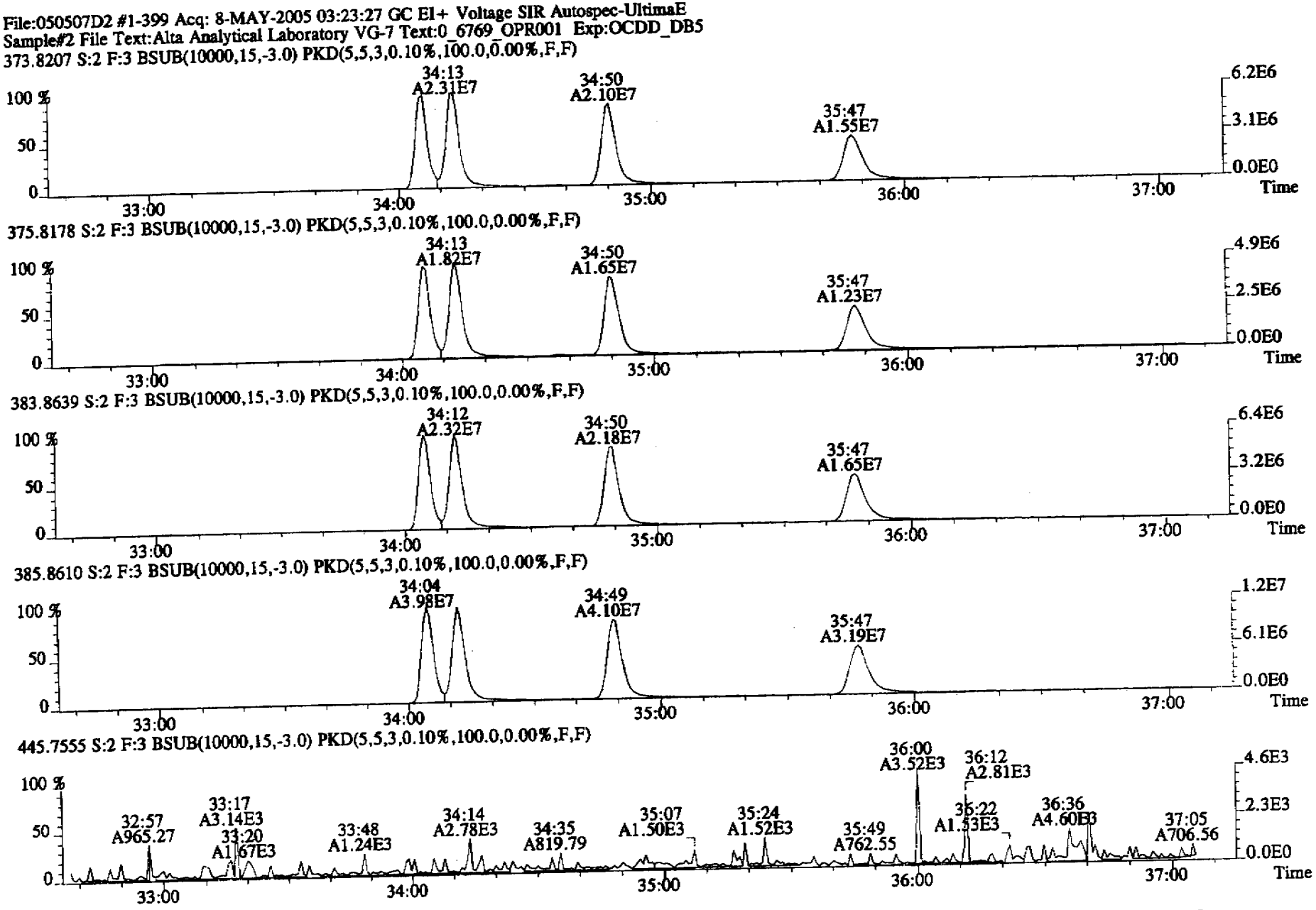
454.9728 S:2 F:5



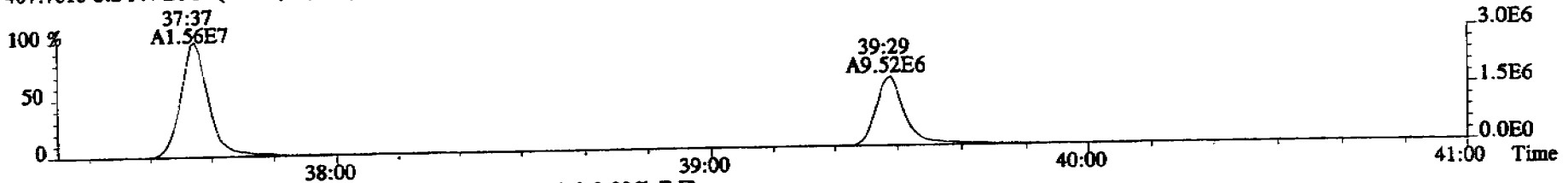

File:050507D2 #1-559 Acq: 8-MAY-2005 03:23:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory VG-7 Text:0_6769_OPR001 Exp:OCDD_DB5
303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:07
A4.78E6
305.8987 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:07
A6.19E6
315.9419 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
24:44
A4.63E7
26:06
A4.52E7
317.9389 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
24:43
A5.90E7
26:06
A5.65E7
375.8364 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:06
A2.77E3
21:11
A1.56E3
21:31
A1.58E3
22:08
A2.34E3
22:36
A2.76E3
23:05
A3.30E3
23:26
A1.55E3
24:26
A1.83E3
24:45
A817.05
25:40
A1.20E3
26:19
A725.37
26:42
A2.40E3
26:55
A274.24
27:35
A2.21E3
27:47
A2.58E3
28:02
A430.88
28:22
A1.43E3
Time


File:050507D2 #1-559 Acq: 8-MAY-2005 03:23:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory VG-7 Text:0 6769_OPR001 Exp:OCDD_DB5
339.8597 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
27:57 A5.05E4
21:04 A3.44E3
22:11 A3.89E3
22:31 A5.65E3
23:00 A3.31E3
23:53 A4.01E3
24:39 A6.33E3
25:26 A4.12E3
25:56 A6.03E3
26:55 A4.46E3
27:38 A3.99E3
28:19 A7.27E3
341.8568 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
27:57 A4.23E4
21:13 A7.02E3
22:11 A6.26E3
22:46 A5.33E3
23:19 A9.74E3
24:05 A8.20E3
24:37 A8.20E3
25:10 A1.09E4
25:51 A8.00E3
26:46 A6.66E3
27:46 A9.73E3
28:39 A4.95E3
409.7974 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
28:07 A1.15E4
24:51 A4.84E3
22:04 A2.30E3
22:31 A3.15E3
23:59 A4.61E3
24:27 A6.86E3
26:15 A4.36E3
25:46 A1.62E3
27:48 A3.63E3
28:14 A5.07E3
21:39 A4.93E3
22:37 A1.62E3
23:12 A3.76E3
24:02 A5.72E3
26:25 A1.87E3
26:59 A3.00E3
28:31 A2.07E3
316.9824 S:2
28:16
26:18
21:58
21:33
22:12
22:58
23:28
23:55
24:30
25:13
25:54
26:35
27:24
27:56
28:31
Time

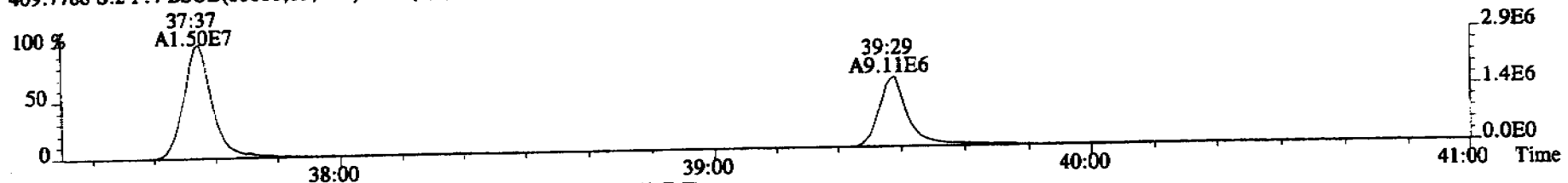

File:050507D2 #1-272 Acq: 8-MAY-2005 03:23:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory VG-7 Text:0_6769_OPR001 Exp:OCDD_DB5
339.8597 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
30:25 A2.73E7
31:22 A2.86E7
8.6E6
4.3E6
0.0E0
Time
341.8568 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
30:25 A1.71E7
31:22 A1.83E7
5.5E6
2.8E6
0.0E0
Time
351.9000 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
30:25 A5.63E7
31:21 A5.31E7
1.7E7
8.4E6
0.0E0
Time
353.8970 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
30:25 A3.56E7
31:21 A3.30E7
1.1E7
5.3E6
0.0E0
Time
409.7974 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
28:52 A3.09E3
29:13 A3.67E3
29:18 A1.84E3
29:38 A2.98E3
29:59 A1.98E3
30:24 A4.73E3
30:47 A5.46E3
31:00 A2.10E3
31:08 A4.04E3
31:13 A6.84E3
31:29 A3.13E3
31:52 A3.83E3
31:59 A1.29E3
32:17 A5.29E3
32:28 A3.71E3
32:34 A1.37E3
2.9E3
1.5E3
0.0E0
Time
100 %
50
0
29:00
30:00
31:00
32:00


File:050507D2 #1-399 Acq: 8-MAY-2005 03:23:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory VG-7 Text:0_6769_OPR001 Exp:OCDD_DB5
373.8207 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:13 A2.31E7
34:50 A2.10E7
35:47 A1.55E7
6.2E6
3.1E6
0.0E0
375.8178 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:13 A1.82E7
34:50 A1.65E7
35:47 A1.23E7
4.9E6
2.5E6
0.0E0
383.8639 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:12 A2.32E7
34:50 A2.18E7
35:47 A1.65E7
6.4E6
3.2E6
0.0E0
385.8610 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:04 A3.98E7
34:49 A4.10E7
35:47 A3.19E7
1.2E7
6.1E6
0.0E0
445.7555 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
32:57 A965.27
33:17 A3.14E3
33:20 A1.67E3
33:48 A1.24E3
34:14 A2.78E3
34:35 A819.79
35:07 A1.50E3
35:24 A1.52E3
35:49 A762.55
36:00 A3.52E3
36:12 A2.81E3
36:22 A1.53E3
36:36 A4.60E3
37:05 A706.56
4.6E3
2.3E3
0.0E0
100 %
50
0
33:00
34:00
35:00
36:00
37:00
Time

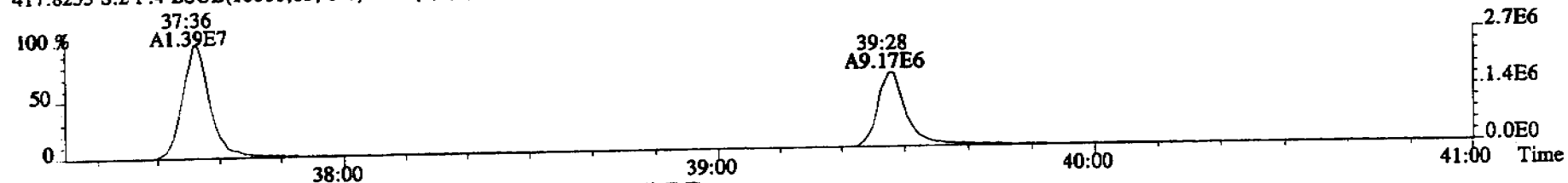
File:050507D2 #1-348 Acq: 8-MAY-2005 03:23:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory VG-7 Text:0_6769_OPR001 Exp:OCDD_DB5
407.7818 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



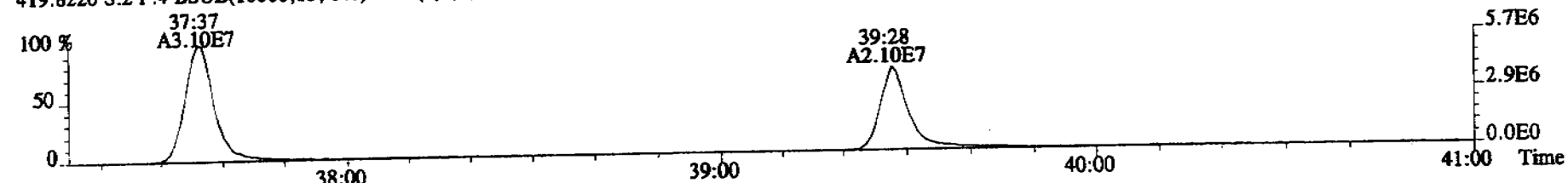
409.7788 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



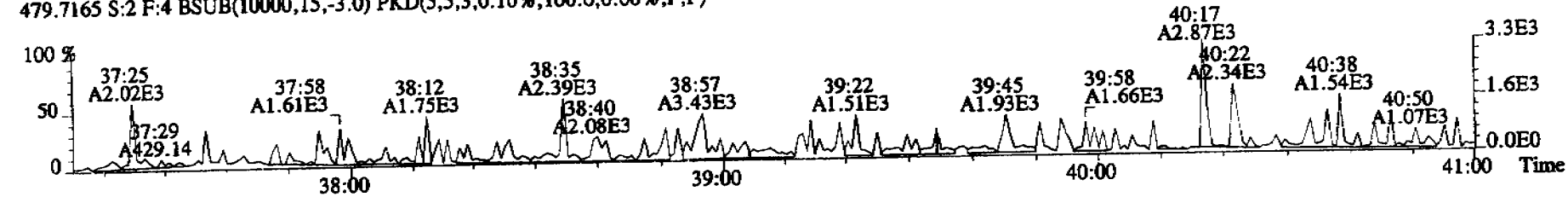
417.8253 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

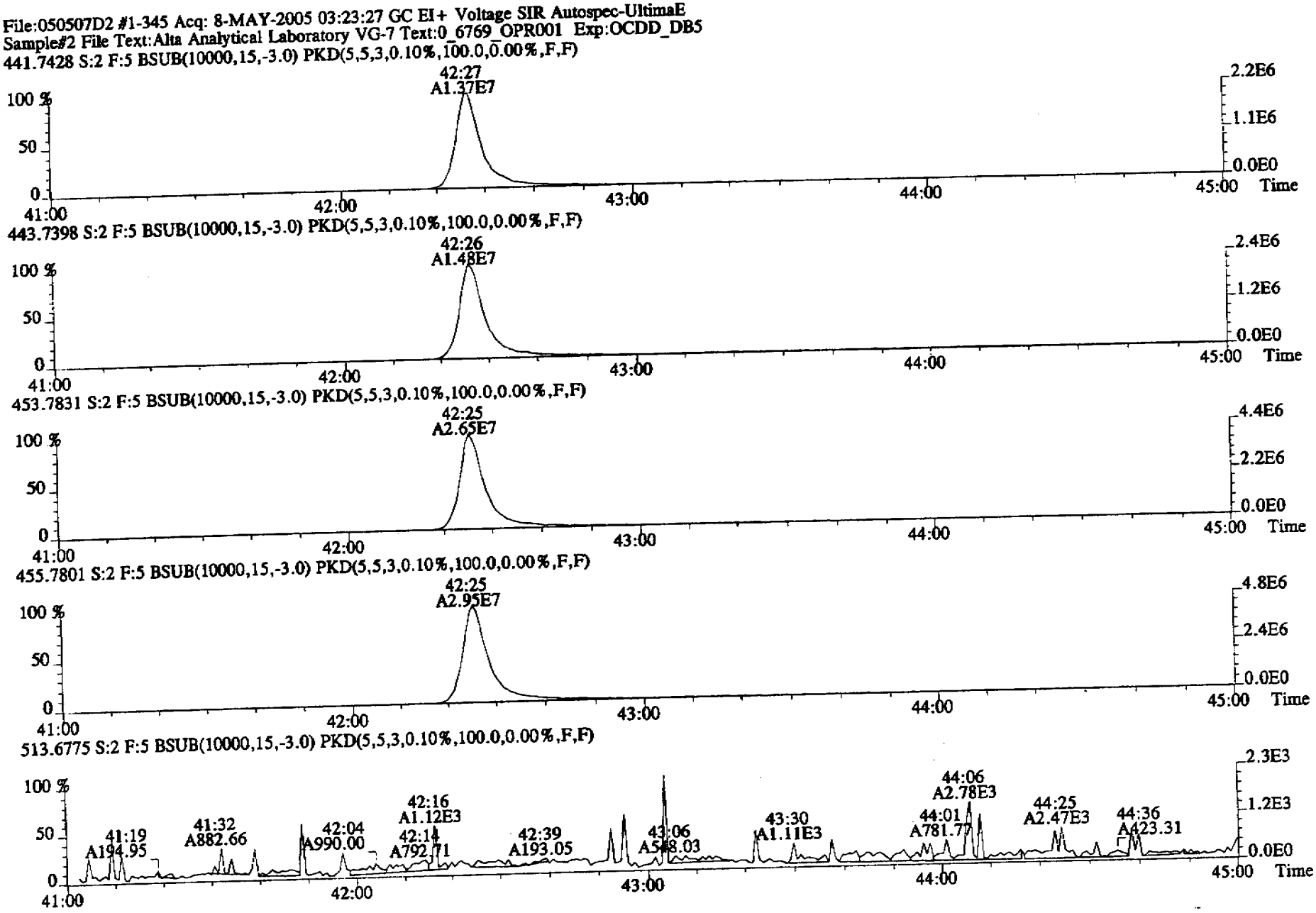


419.8220 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



479.7165 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)




File:050507D2 #1-345 Acq: 8-MAY-2005 03:23:27 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory VG-7 Text:0_6769_OPR001 Exp:OCDD_DB5
441.7428 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
42:27
A1.37E7
443.7398 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
42:26
A1.48E7
453.7831 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
42:25
A2.65E7
455.7801 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
42:25
A2.95E7
513.6775 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
41:19
A194.95
41:32
A882.66
42:04
A990.00
42:16
A1.12E3
42:14
A792.71
42:39
A193.05
43:06
A548.03
43:30
A1.11E3
44:06
A2.78E3
44:01
A781.77
44:25
A2.47E3
44:36
A423.31
100 %
50
0
41:00
42:00
43:00
44:00
45:00
Time
2.2E6
1.1E6
0.0E0
2.4E6
1.2E6
0.0E0
4.4E6
2.2E6
0.0E0
4.8E6
2.4E6
0.0E0
2.3E3
1.2E3
0.0E0

Client ID: RE73-05-58879 Filename: 050507D2 S:9 Acq:8-MAY-05 09:07:13
Lab ID: 26084_6769_001 GC Column ID: db-5 ICal: 1613VG7-4-23-05 wt/vol:10.020

ConCal: ST050507D2-1
EndCAL: ST050507D2-2

	Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL
	2,3,7,8-TCDD	1.36e+06	0.79 y	1.06	26:55	3.22			* 2.5	*
	1,2,3,7,8-PeCDD	2.47e+06	0.58 y	0.99	31:38	8.40			* 2.5	*
	1,2,3,4,7,8-HxCDD	1.81e+06	1.20 y	1.11	34:58	7.90			* 2.5	*
	1,2,3,6,7,8-HxCDD	7.06e+06	1.26 y	1.07	35:05	27.9			* 2.5	*
	1,2,3,7,8,9-HxCDD	5.33e+06	1.29 y	1.15	35:24	20.9			* 2.5	*
	1,2,3,4,6,7,8-HpCDD	9.97e+07	1.05 y	1.05	38:55	505			* 2.5	*
	OCDD	3.78e+08	0.88 y	1.04	42:12	2320			* 2.5	
	2,3,7,8-TCDF	9.31e+06	0.79 y	1.05	26:06	17.1	DK		* 2.5	*
	1,2,3,7,8-PeCDF	4.40e+06	1.58 y	0.95	30:25	10.0			* 2.5	*
	2,3,4,7,8-PeCDF	7.18e+06	1.57 y	1.08	31:22	15.4			* 2.5	*
	1,2,3,4,7,8-HxCDF	4.63e+06	1.22 y	1.19	34:04	12.3			* 2.5	*
	1,2,3,6,7,8-HxCDF	4.24e+06	1.28 y	1.22	34:12	10.2			* 2.5	*
	2,3,4,6,7,8-HxCDF	4.96e+06	1.28 y	1.20	34:50	13.0			* 2.5	*
	1,2,3,7,8,9-HxCDF	8.83e+05	1.18 y	1.13	35:48	3.07			* 2.5	*
	1,2,3,4,6,7,8-HpCDF	3.14e+07	1.06 y	1.38	37:35	90.8			* 2.5	*
	1,2,3,4,7,8,9-HpCDF	1.10e+06	1.08 y	1.23	39:27	4.97			* 2.5	*
	OCDF	1.31e+07	0.90 y	1.02	42:25	73.5			* 2.5	*
IS	13C-2,3,7,8-TCDD	7.99e+07	0.77 y	1.12	26:54	199				
IS	13C-1,2,3,7,8-PeCDD	5.93e+07	0.63 y	0.89	31:38	187				
IS	13C-1,2,3,4,7,8-HxCDD	4.11e+07	1.28 y	0.83	34:58	192				
IS	13C-1,2,3,6,7,8-HxCDD	4.72e+07	1.25 y	1.00	35:04	185				
IS	13C-1,2,3,4,6,7,8-HpCDD	3.76e+07	1.05 y	0.82	38:54	177				
IS	13C-OCDD	6.28e+07	0.90 y	0.74	42:11	329				
IS	13C-2,3,7,8-TCDF	1.03e+08	0.80 y	1.02	26:05	191				
IS	13C-1,2,3,7,8-PeCDF	9.21e+07	1.57 y	0.90	30:24	193				
IS	13C-2,3,4,7,8-PeCDF	8.66e+07	1.57 y	0.87	31:21	187				
IS	13C-1,2,3,4,7,8-HxCDF	6.34e+07	0.53 y	1.27	34:04	195				
IS	13C-1,2,3,6,7,8-HxCDF	6.81e+07	0.53 y	1.40	34:12	189				
IS	13C-2,3,4,6,7,8-HxCDF	6.36e+07	0.53 y	1.29	34:49	192				
IS	13C-1,2,3,7,8,9-HxCDF	5.10e+07	0.52 y	1.12	35:47	177				
IS	13C-1,2,3,4,6,7,8-HpCDF	5.01e+07	0.44 y	1.01	37:35	193				
IS	13C-1,2,3,4,7,8,9-HpCDF	3.61e+07	0.45 y	0.88	39:27	160				
IS	13C-OCDF	7.00e+07	0.91 y	0.94	42:25	290				
C/Up	37Cl-2,3,7,8-TCDD	1.83e+07		0.62	26:55	82.1				
RS/RT	13C-1,2,3,4-TCDD	7.15e+07	0.80 y	1.00	26:16	200				
RS	13C-1,2,3,4-TCDF	1.06e+08	0.78 y	1.00	24:42	200				
RS/RT	13C-1,2,3,7,8,9-HxCDD	5.13e+07	1.28 y	1.00	35:23	200				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	96.7	96.7		*	*
Total Penta-Dioxins	121	121		*	*
Total Hexa-Dioxins	299	299		*	*
Total Hepta-Dioxins	1040	1040		*	*
Total Tetra-Furans	326	326	D	*	*
Total Penta-Furans	177	177	D	*	*
Total Hexa-Furans	147	147		*	*
Total Hepta-Furans	174	174		*	*

Rec	Qual
99.5	
93.6	
96.3	
92.5	
88.8	
82.3	
95.6	
96.6	
93.7	
97.5	
94.5	
96.0	
88.7	
96.6	
79.9	
72.7	
103	

Intergrations by Analyst: [signature]

Date: 5/10/05

Totals class: TCDD EMPC Entry #: 19

Run: 15 File: 050507D2 S: 9 I: 1 F: 1
Acquired: 8-MAY-05 09:07:13 Processed: 9-MAY-05 08:14:18

Total Concentration: 96.748 Unnamed Concentration: 93.529

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
23:11	6.168e+06	7.998e+06	0.77	y	1.417e+07	33.442	
23:35	3.530e+06	4.541e+06	0.78	y	8.071e+06	19.054	
24:03	4.615e+05	6.070e+05	0.76	y	1.068e+06	2.5223	
24:53	8.922e+04	1.222e+05	0.73	y	2.114e+05	0.49918	
25:07	1.094e+06	1.402e+06	0.78	y	2.496e+06	5.8917	
25:19	1.387e+06	1.770e+06	0.78	y	3.157e+06	7.4525	
25:30	5.209e+05	6.835e+05	0.76	y	1.204e+06	2.8434	
25:45	2.850e+05	3.711e+05	0.77	y	6.562e+05	1.5491	
25:56	5.385e+05	6.899e+05	0.78	y	1.228e+06	2.9000	
26:17	8.048e+05	1.034e+06	0.78	y	1.839e+06	4.3419	
26:24	1.803e+05	2.244e+05	0.80	y	4.047e+05	0.95534	
26:39	1.065e+06	1.369e+06	0.78	y	2.434e+06	5.7455	
26:46	2.058e+05	2.876e+05	0.72	y	4.934e+05	1.1647	
26:55	6.003e+05	7.630e+05	0.79	y	1.363e+06	3.2186	2,3,7,8-TCDD
27:13	6.082e+05	7.937e+05	0.77	y	1.402e+06	3.3097	
27:21	1.673e+05	2.177e+05	0.77	y	3.851e+05	0.90906	
27:50	1.792e+05	2.225e+05	0.81	y	4.017e+05	0.94831	

Totals class: PeCDD EMPC Entry #: 21

Run: 15 File: 050507D2 S: 9 I: 1 F: 2
Acquired: 8-MAY-05 09:07:13 Processed: 9-MAY-05 08:14:18

Total Concentration: 121.23 Unnamed Concentration: 112.835

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
29:30	2.828e+06	4.632e+06	0.61	y	7.460e+06	25.392	
29:58	5.735e+05	9.202e+05	0.62	y	1.494e+06	5.0844	
30:26	3.013e+06	4.854e+06	0.62	y	7.867e+06	26.778	
30:36	1.316e+06	2.166e+06	0.61	y	3.482e+06	11.852	
30:42	1.837e+06	2.987e+06	0.61	y	4.824e+06	16.419	
30:54	1.508e+06	2.493e+06	0.60	y	4.001e+06	13.617	
31:13	6.180e+05	9.549e+05	0.65	y	1.573e+06	5.3538	
31:38	9.100e+05	1.557e+06	0.58	y	2.467e+06	8.3960	1,2,3,7,8-PeCDD
31:42	4.312e+05	7.337e+05	0.59	y	1.165e+06	3.9653	
32:00	4.957e+05	7.894e+05	0.63	y	1.285e+06	4.3740	

Totals class: HxCDD EMPC Entry #: 23

Run: 15 File: 050507D2 S: 9 I: 1 F: 3
Acquired: 8-MAY-05 09:07:13 Processed: 9-MAY-05 08:14:18

Total Concentration: 299.14 Unnamed Concentration: 242.475

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
33:25	9.372e+06	7.438e+06	1.26	y	1.681e+07	68.363	
34:00	3.788e+06	3.026e+06	1.25	y	6.814e+06	27.712	
34:15	1.699e+07	1.370e+07	1.24	y	3.069e+07	124.81	
34:23	1.405e+06	1.102e+06	1.27	y	2.507e+06	10.197	
34:58	9.887e+05	8.238e+05	1.20	y	1.813e+06	7.8972	1,2,3,4,7,8-HxCDD
35:05	3.933e+06	3.127e+06	1.26	y	7.060e+06	27.901	1,2,3,6,7,8-HxCDD
35:16	1.527e+06	1.274e+06	1.20	y	2.801e+06	11.392	
35:24	3.001e+06	2.328e+06	1.29	y	5.329e+06	20.870	1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC Entry #: 25

Run: 15 File: 050507D2 S: 9 I: 1 F: 4
Acquired: 8-MAY-05 09:07:13 Processed: 9-MAY-05 08:14:18

Total Concentration: 1040.9 Unnamed Concentration: 536.202

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
38:00	5.432e+07	5.162e+07	1.05	y	1.059e+08	536.20	
38:55	5.104e+07	4.868e+07	1.05	y	9.972e+07	504.74	1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC Entry #: 27

Run: 15 File: 050507D2 S: 9 I: 1 F: 1
Acquired: 8-MAY-05 09:07:13 Processed: 9-MAY-05 08:14:18

Total Concentration: 325.66 Unnamed Concentration: 308.539

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
20:56	1.814e+06	2.328e+06	0.78	y	4.142e+06	7.6170	
21:30	1.364e+06	1.760e+06	0.77	y	3.124e+06	5.7442	
22:09	1.310e+06	1.622e+06	0.81	y	2.932e+06	5.3916	
22:41	1.067e+07	1.377e+07	0.77	y	2.445e+07	44.953	
23:02	1.415e+06	1.806e+06	0.78	y	3.221e+06	5.9231	
23:11	4.231e+06	5.555e+06	0.76	y	9.786e+06	17.996	
23:36	2.079e+06	2.650e+06	0.78	y	4.729e+06	8.6971	
23:46	1.749e+06	2.234e+06	0.78	y	3.983e+06	7.3239	
23:57	2.645e+06	3.298e+06	0.80	y	5.943e+06	10.929	
24:21	2.417e+06	2.867e+06	0.84	y	5.284e+06	9.7176	
24:30	3.029e+06	4.058e+06	0.75	y	7.087e+06	13.032	
24:43	1.093e+07	1.408e+07	0.78	y	2.502e+07	46.001	
25:13	5.184e+06	6.693e+06	0.77	y	1.188e+07	21.841	
25:28	3.216e+06	4.075e+06	0.79	y	7.290e+06	13.406	
25:40	3.722e+06	4.753e+06	0.78	y	8.475e+06	15.584	
25:53	2.938e+06	3.769e+06	0.78	y	6.707e+06	12.334	
25:59	1.865e+06	2.420e+06	0.77	y	4.285e+06	7.8798	
26:06	4.114e+06	5.195e+06	0.79	y	9.310e+06	17.120	2,3,7,8-TCDF
26:26	1.074e+07	1.396e+07	0.77	y	2.470e+07	45.421	
26:41	5.103e+05	7.271e+05	0.70	y	1.237e+06	2.2754	
26:56	4.615e+05	6.203e+05	0.74	y	1.082e+06	1.9894	
27:30	1.838e+05	2.657e+05	0.69	y	4.495e+05	0.82661	
27:39	5.678e+05	7.497e+05	0.76	y	1.317e+06	2.4227	
27:59	2.816e+05	3.891e+05	0.72	y	6.707e+05	1.2334	

Totals class: 1st Func. PeCDF EMPC Entry #: 29

Run: 15 File: 050507D2 S: 9 I: 1 F: 1
Acquired: 8-MAY-05 09:07:13 Processed: 9-MAY-05 08:14:18

Total Concentration: 15.966 Unnamed Concentration: 15.966

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
27:56	4.421e+06	2.826e+06	1.56	y	7.247e+06	15.966	

Totals class: PeCDF EMPC Entry #: 31

Run: 15 File: 050507D2 S: 9 I: 1 F: 2
Acquired: 8-MAY-05 09:07:13 Processed: 9-MAY-05 08:14:18

Total Concentration: 160.99 Unnamed Concentration: 135.611

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
29:19	6.785e+06	4.334e+06	1.57	y	1.112e+07	24.497	
29:28	9.533e+06	6.008e+06	1.59	y	1.554e+07	34.241	
29:50	9.509e+05	6.196e+05	1.53	y	1.571e+06	3.4603	
29:57	1.939e+06	1.270e+06	1.53	y	3.209e+06	7.0702	
30:03	4.328e+06	2.784e+06	1.55	y	7.112e+06	15.670	
30:14	1.197e+06	7.629e+05	1.57	y	1.960e+06	4.3190	
30:25	2.695e+06	1.707e+06	1.58	y	4.402e+06	10.012	1,2,3,7,8-PeCDF
30:39	5.290e+06	3.329e+06	1.59	y	8.620e+06	18.992	
30:48	3.239e+05	2.242e+05	1.44	y	5.482e+05	1.2077	
31:08	4.570e+05	2.749e+05	1.66	y	7.320e+05	1.6127	
31:15	6.010e+06	3.791e+06	1.59	y	9.802e+06	21.596	
31:22	4.382e+06	2.798e+06	1.57	y	7.179e+06	15.366	2,3,4,7,8-PeCDF
31:37	4.891e+05	3.264e+05	1.50	y	8.155e+05	1.7967	
32:15	3.109e+05	2.106e+05	1.48	y	5.215e+05	1.1491	

Totals class: HxCDF EMPC Entry #: 33

Run: 15 File: 050507D2 S: 9 I: 1 F: 3
Acquired: 8-MAY-05 09:07:13 Processed: 9-MAY-05 08:14:18

Total Concentration: 146.56 Unnamed Concentration: 107.995

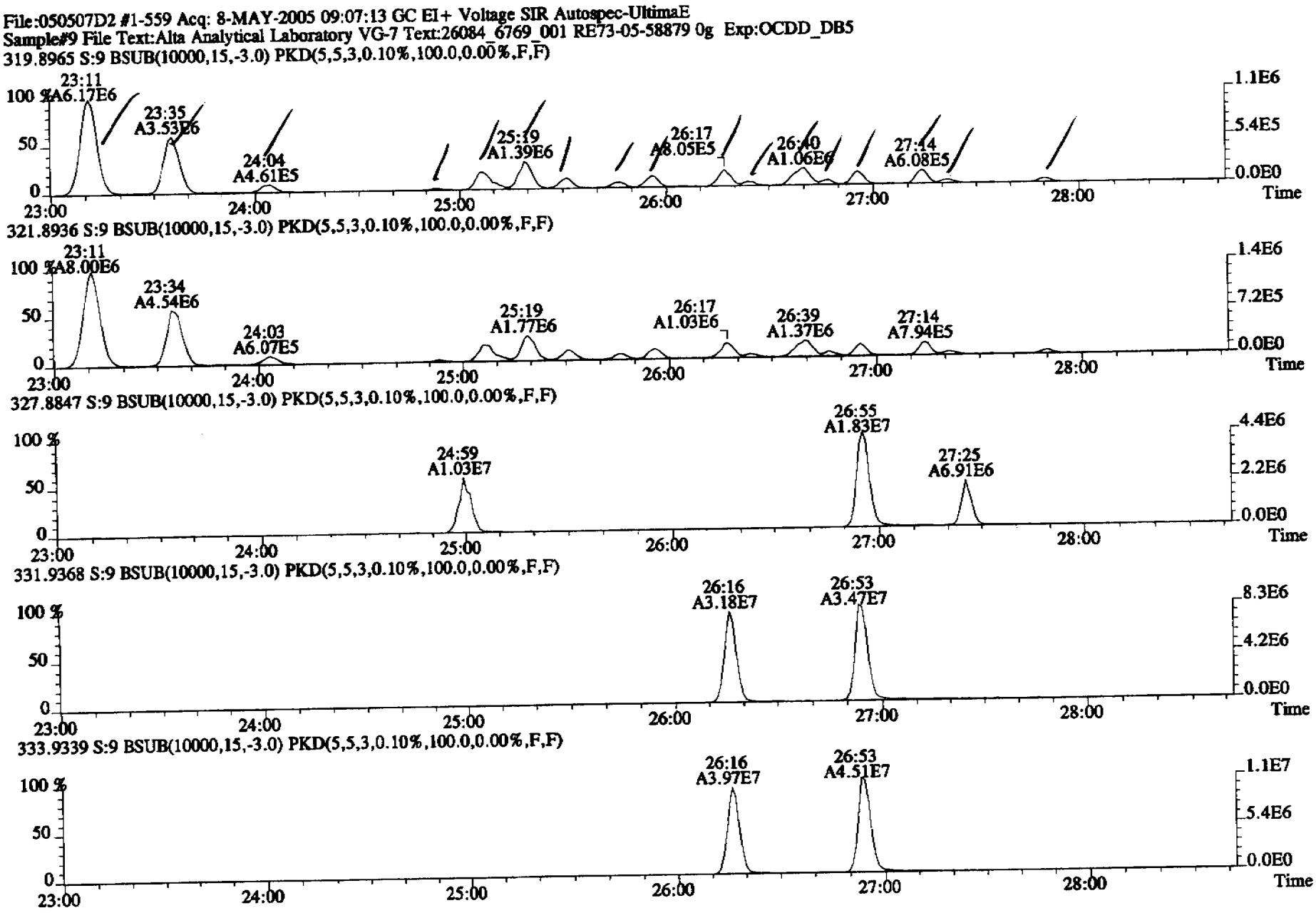
RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
32:53	2.582e+06	2.064e+06	1.25	y	4.646e+06	12.722	
33:03	8.418e+06	6.774e+06	1.24	y	1.519e+07	41.600	
33:15	4.942e+05	3.710e+05	1.33	y	8.653e+05	2.3693	
33:24	6.797e+05	5.217e+05	1.30	y	1.201e+06	3.2898	
33:36	5.223e+06	4.157e+06	1.26	y	9.380e+06	25.685	
33:58	3.324e+06	2.632e+06	1.26	y	5.956e+06	16.308	
34:04	2.549e+06	2.086e+06	1.22	y	4.634e+06	12.308	1,2,3,4,7,8-HxCDF
34:12	2.381e+06	1.864e+06	1.28	y	4.245e+06	10.226	1,2,3,6,7,8-HxCDF
34:21	3.143e+05	2.293e+05	1.37	y	5.436e+05	1.4885	
34:29	4.786e+05	3.944e+05	1.21	y	8.731e+05	2.3907	
34:36	4.445e+05	3.379e+05	1.32	y	7.824e+05	2.1425	
34:50	2.783e+06	2.177e+06	1.28	y	4.960e+06	12.956	2,3,4,6,7,8-HxCDF
35:48	4.775e+05	4.056e+05	1.18	y	8.831e+05	3.0710	1,2,3,7,8,9-HxCDF

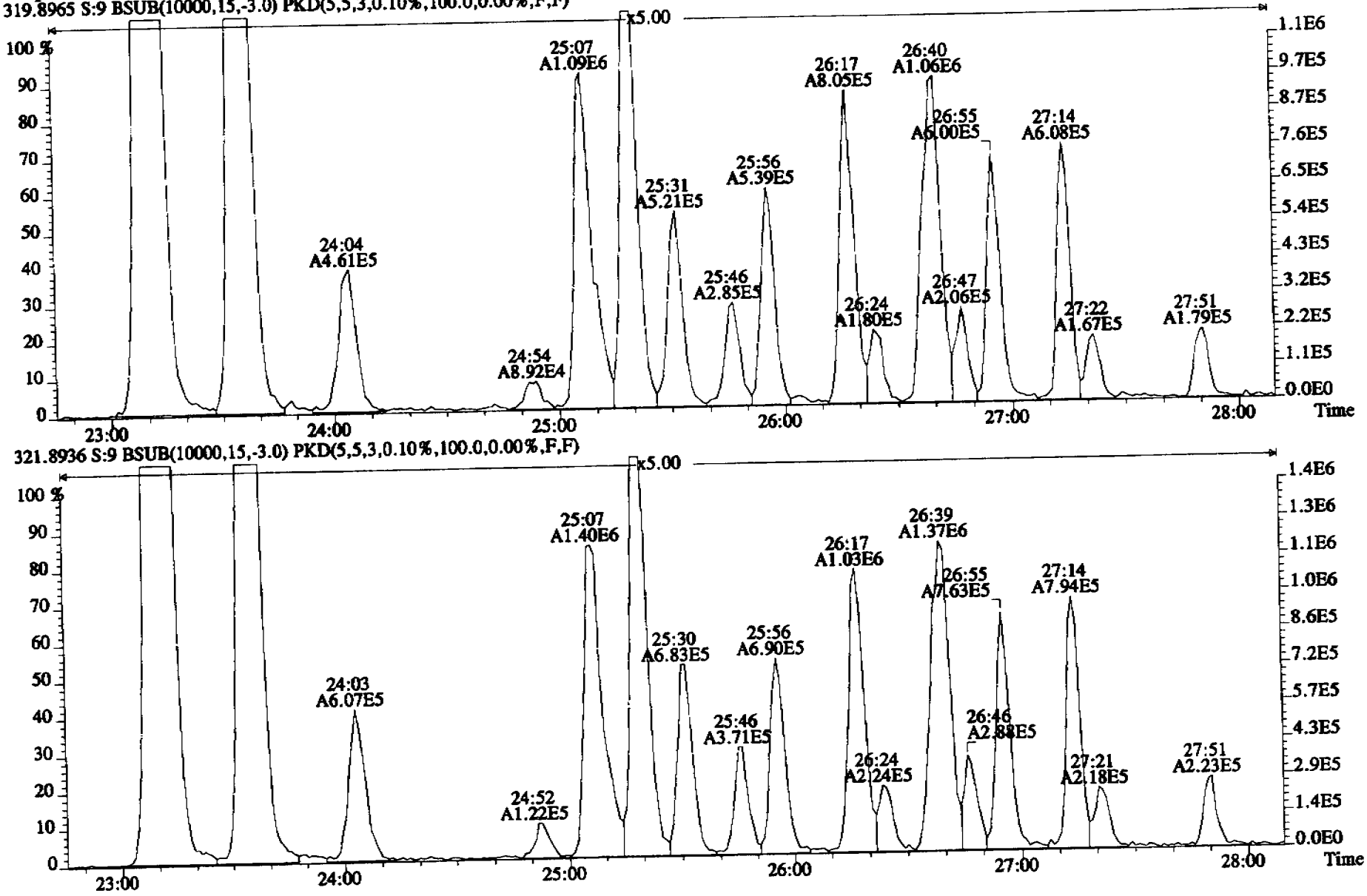
Totals class: HpCDF EMPC Entry #: 35

Run: 15 File: 050507D2 S: 9 I: 1 F: 4
Acquired: 8-MAY-05 09:07:13 Processed: 9-MAY-05 08:14:18

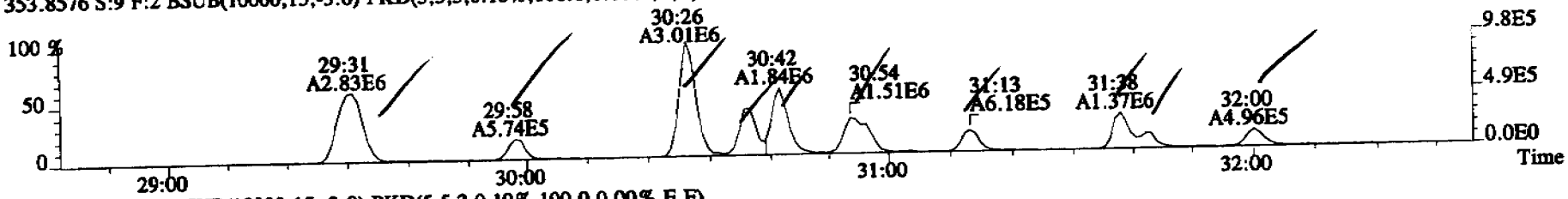
Total Concentration: 173.74 Unnamed Concentration: 77.985

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
37:35	1.612e+07	1.524e+07	1.06	y	3.136e+07	90.784	1,2,3,4,6,7,8-HpCDF
38:00	1.161e+06	1.086e+06	1.07	y	2.247e+06	7.9702	
38:13	1.028e+07	9.457e+06	1.09	y	1.974e+07	70.015	
39:27	5.722e+05	5.288e+05	1.08	y	1.101e+06	4.9694	1,2,3,4,7,8,9-HpCDF

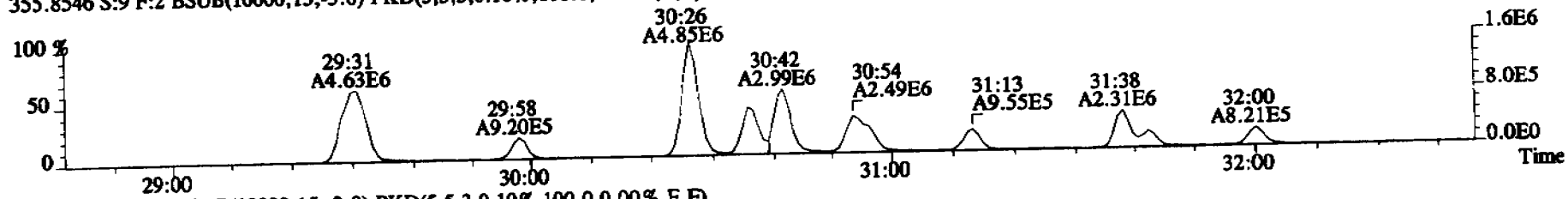

File:050507D2 #1-559 Acq: 8-MAY-2005 09:07:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:26084_6769_001 RE73-05-58879 0g Exp:OCDD_DB5
319.8965 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
23:11 A6.17E6
23:35 A3.53E6
24:04 A4.61E5
25:19 A1.39E6
26:17 A8.05E5
26:40 A1.06E6
27:14 A6.08E5
1.1E6
5.4E5
0.0E0
Time
321.8936 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
23:11 A8.00E6
23:34 A4.54E6
24:03 A6.07E5
25:19 A1.77E6
26:17 A1.03E6
26:39 A1.37E6
27:14 A7.94E5
1.4E6
7.2E5
0.0E0
Time
327.8847 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
24:59 A1.03E7
26:55 A1.83E7
27:25 A6.91E6
4.4E6
2.2E6
0.0E0
Time
331.9368 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:16 A3.18E7
26:53 A3.47E7
8.3E6
4.2E6
0.0E0
Time
333.9339 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:16 A3.97E7
26:53 A4.51E7
1.1E7
5.4E6
0.0E0
Time


File:050507D2 #1-559 Acq: 8-MAY-2005 09:07:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:26084_6769_001 RE73-05-58879 0g Exp:OCDD_DB5
319.8965 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
x5.00
24:04 A4.61E5
24:54 A8.92E4
25:07 A1.09E6
25:31 A5.21E5
25:46 A2.85E5
25:56 A5.39E5
26:17 A8.05E5
26:24 A1.80E5
26:40 A1.06E6
26:47 A2.06E5
26:55 A6.00E5
27:14 A6.08E5
27:22 A1.67E5
27:51 A1.79E5
Time
321.8936 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
x5.00
24:03 A6.07E5
24:52 A1.22E5
25:07 A1.40E6
25:30 A6.83E5
25:46 A3.71E5
25:56 A6.90E5
26:17 A1.03E6
26:24 A2.24E5
26:39 A1.37E6
26:46 A2.88E5
26:55 A7.63E5
27:14 A7.94E5
27:21 A2.18E5
27:51 A2.23E5
Time

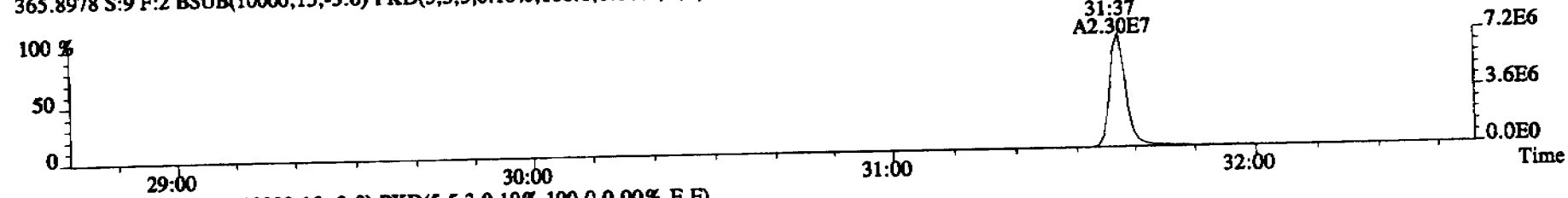
File:050507D2 #1-272 Acq: 8-MAY-2005 09:07:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:26084_6769_001 RE73-05-58879 0g Exp:OCDD_DB5
353.8576 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



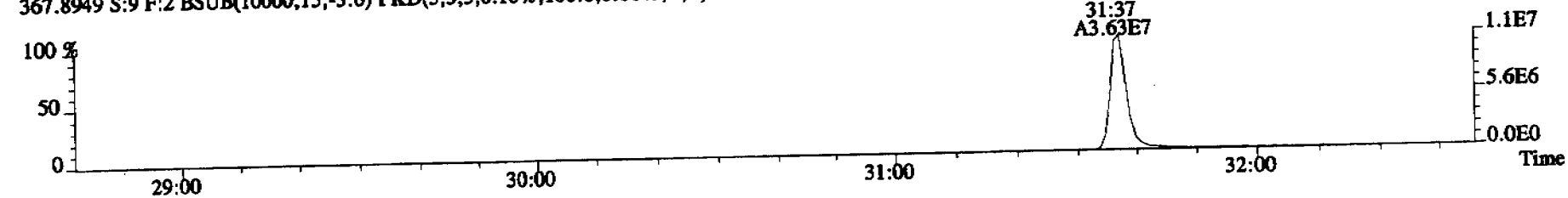
355.8546 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



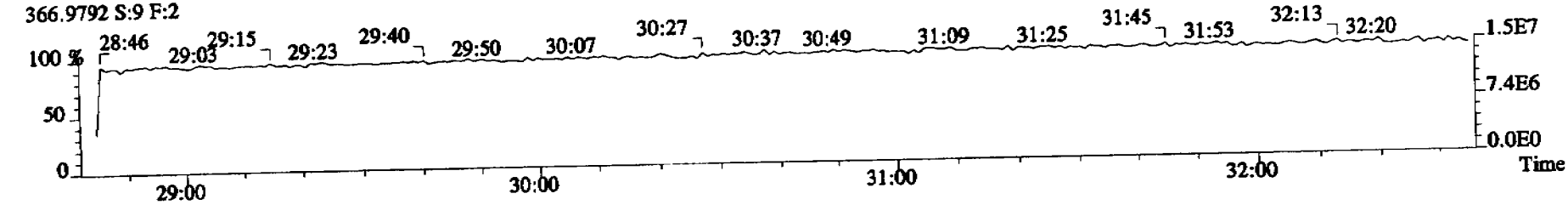
365.8978 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

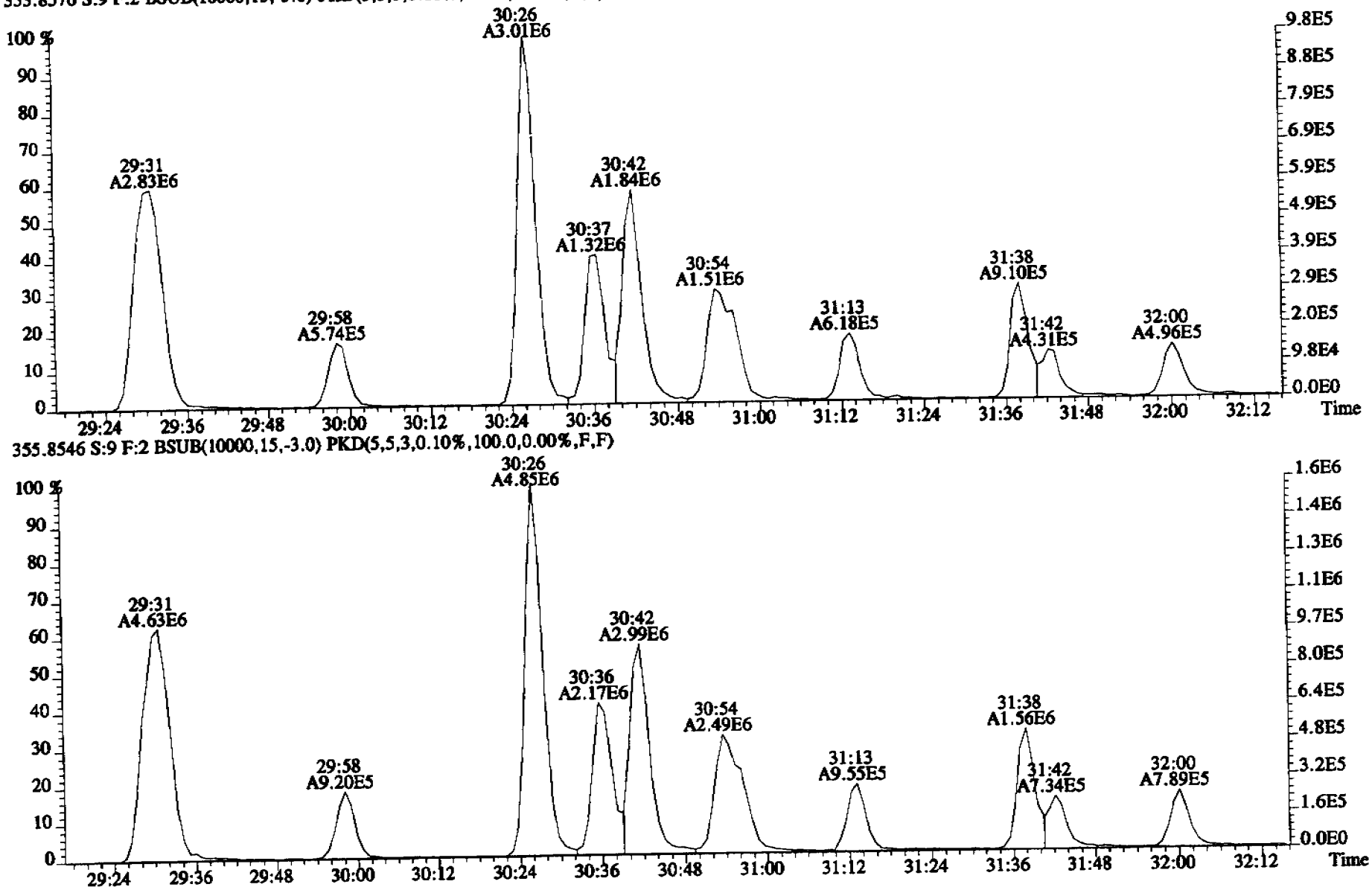


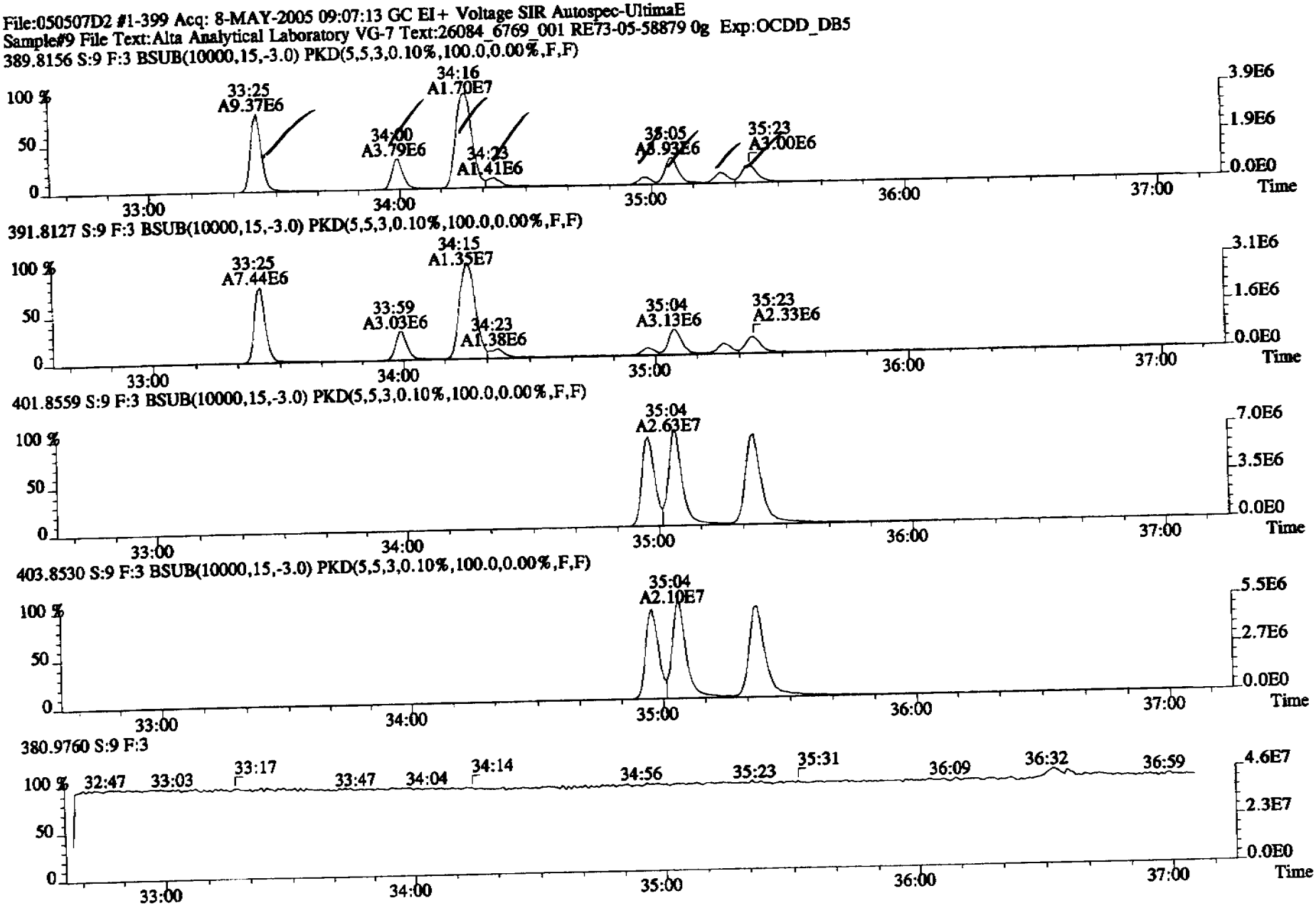
367.8949 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

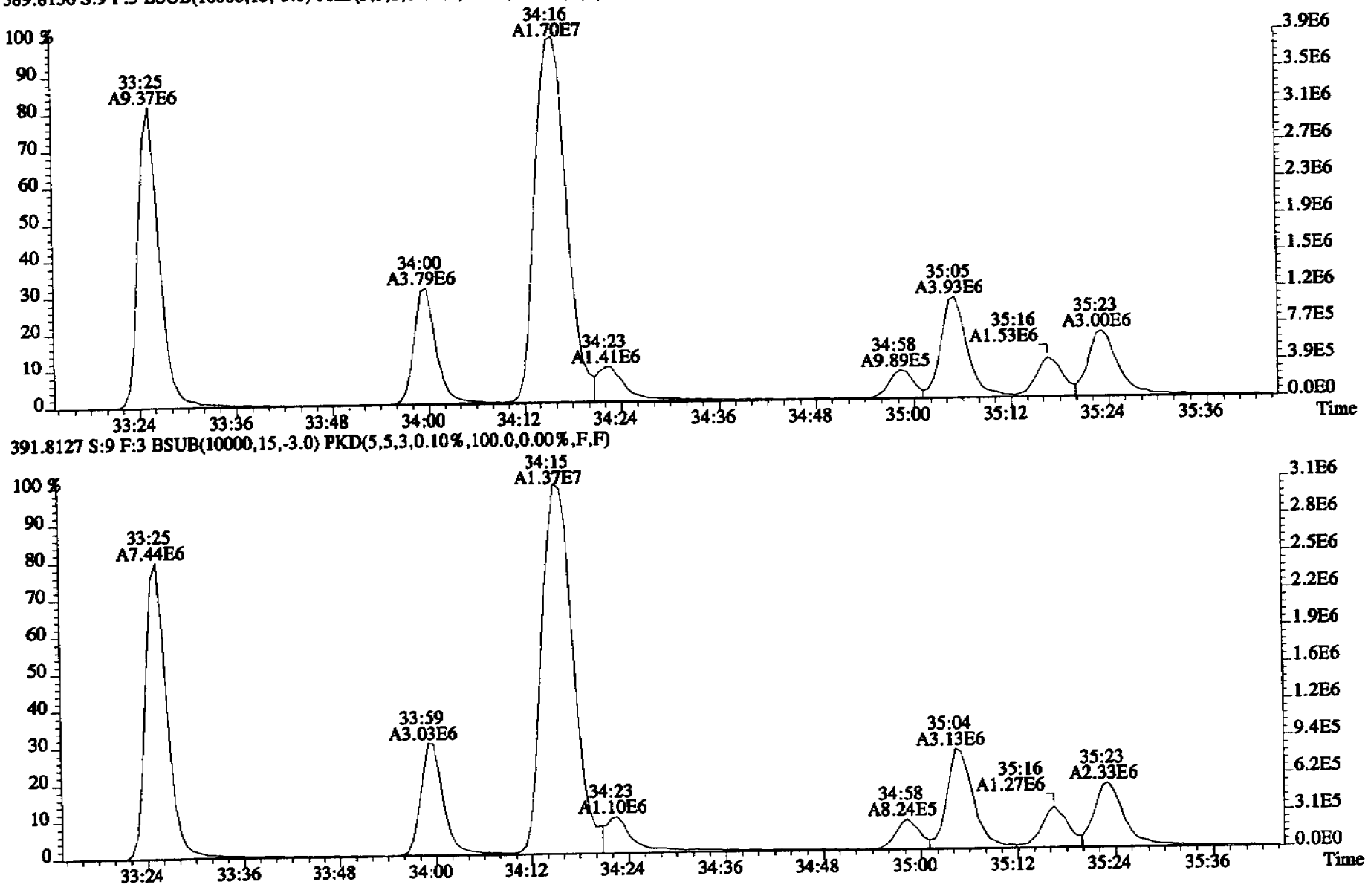


366.9792 S:9 F:2

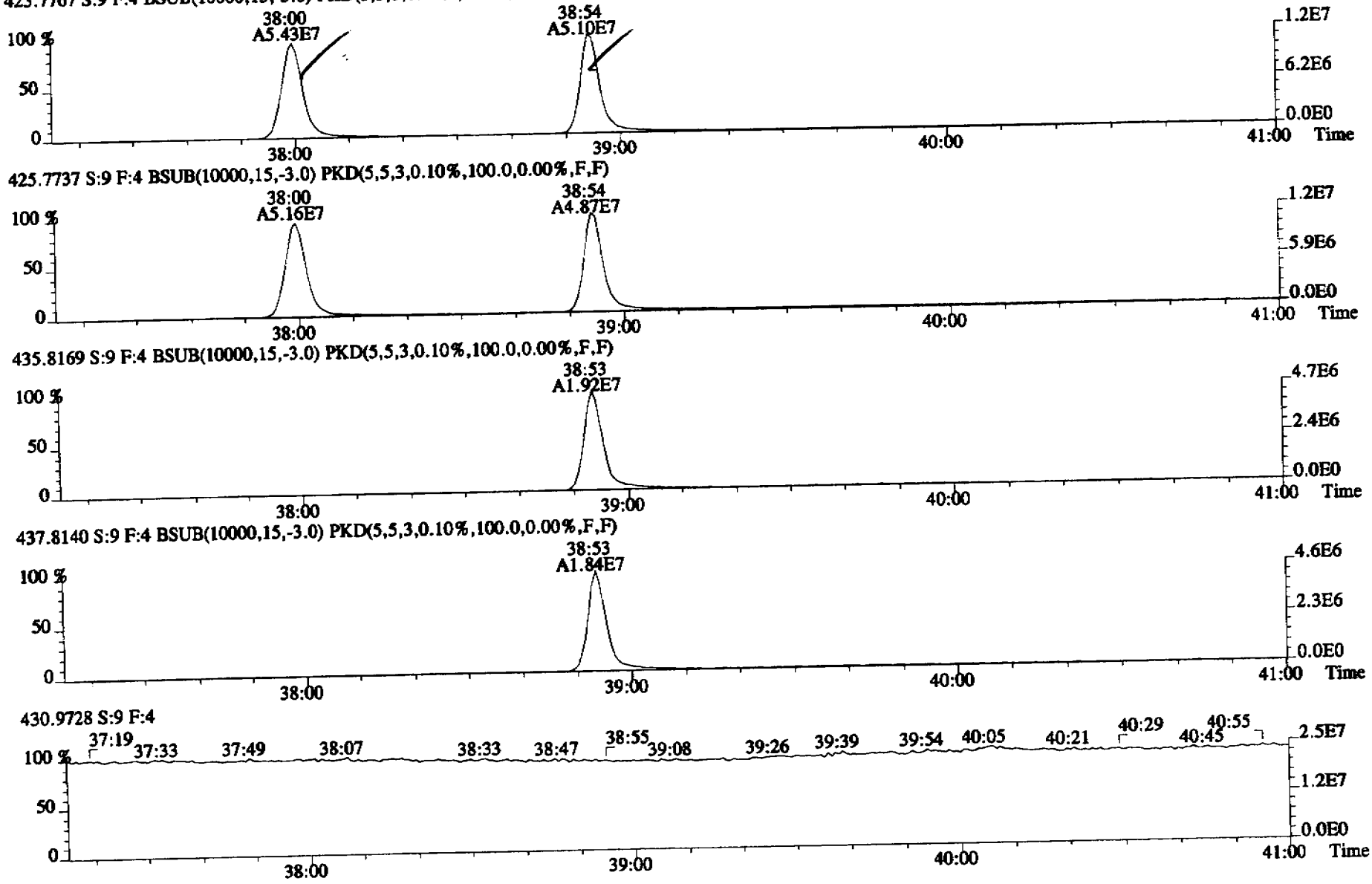



File:050507D2 #1-272 Acq: 8-MAY-2005 09:07:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:26084_6769_001 RE73-05-58879 0g Exp:OCDD_DB5
353.8576 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
30:26 A3.01E6
29:31 A2.83E6
29:58 A5.74E5
30:37 A1.32E6
30:42 A1.84E6
30:54 A1.51E6
31:13 A6.18E5
31:38 A9.10E5
31:42 A4.31E5
32:00 A4.96E5
Time
355.8546 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
30:26 A4.85E6
29:31 A4.63E6
29:58 A9.20E5
30:36 A2.17E6
30:42 A2.99E6
30:54 A2.49E6
31:13 A9.55E5
31:38 A1.56E6
31:42 A7.34E5
32:00 A7.89E5
Time

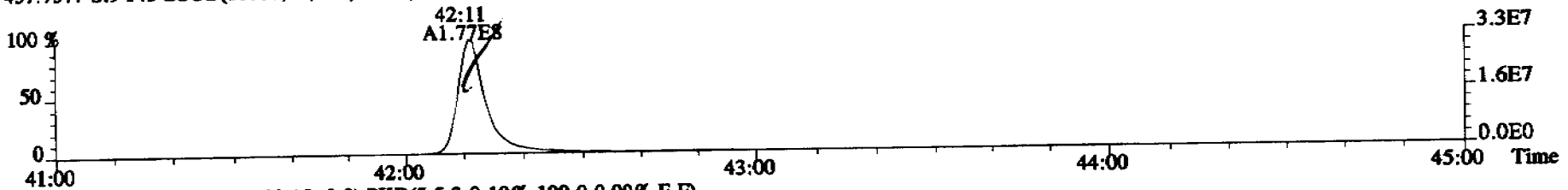

File:050507D2 #1-399 Acq: 8-MAY-2005 09:07:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:26084_6769_001 RE73-05-58879 0g Exp:OCDD_DB5
389.8156 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
33:25 A9.37E6
34:00 A3.79E6
34:16 A1.70E7
34:23 A1.41E6
35:05 A3.93E6
35:23 A3.00E6
391.8127 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
33:25 A7.44E6
33:59 A3.03E6
34:15 A1.35E7
34:23 A1.38E6
35:04 A3.13E6
35:23 A2.33E6
401.8559 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
35:04 A2.63E7
403.8530 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
35:04 A2.10E7
380.9760 S:9 F:3
32:47 33:03 33:17 33:47 34:04 34:14 34:56 35:23 35:31 36:09 36:32 36:59
100 %
50
0
33:00 34:00 35:00 36:00 37:00
3.9E6 1.9E6 0.0E0
3.1E6 1.6E6 0.0E0
7.0E6 3.5E6 0.0E0
5.5E6 2.7E6 0.0E0
4.6E7 2.3E7 0.0E0
Time


File:050507D2 #1-399 Acq: 8-MAY-2005 09:07:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:26084_6769_001 RE73-05-58879 0g Exp:OCDD_DB5
389.8156 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:16 A1.70E7
33:25 A9.37E6
34:00 A3.79E6
34:23 A1.41E6
34:58 A9.89E5
35:05 A3.93E6
35:16 A1.53E6
35:23 A3.00E6
391.8127 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:15 A1.37E7
33:25 A7.44E6
33:59 A3.03E6
34:23 A1.10E6
34:58 A8.24E5
35:04 A3.13E6
35:16 A1.27E6
35:23 A2.33E6
Time

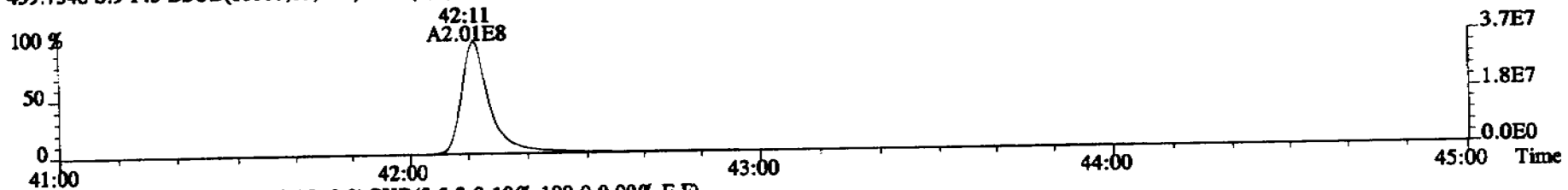
File:050507D2 #1-348 Acq: 8-MAY-2005 09:07:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:26084_6769_001 RE73-05-58879 0g Exp:OCDD_DB5



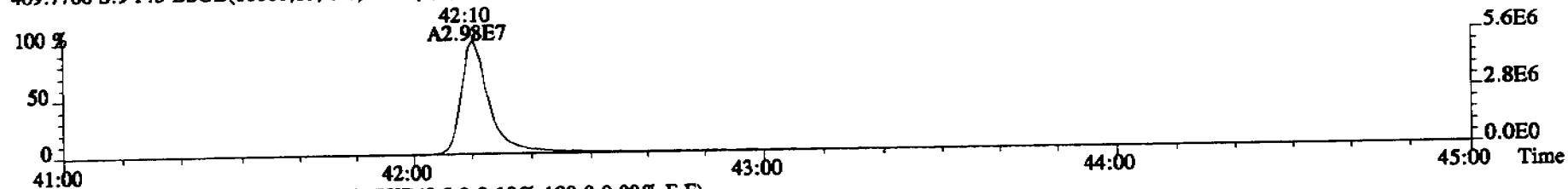
File:050507D2 #1-345 Acq: 8-MAY-2005 09:07:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:26084_6769_001 RE73-05-58879 0g Exp:OCDD_DB5
457.7377 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



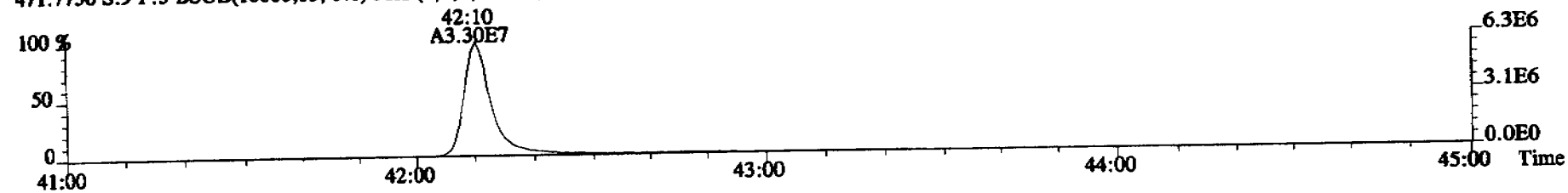
459.7348 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



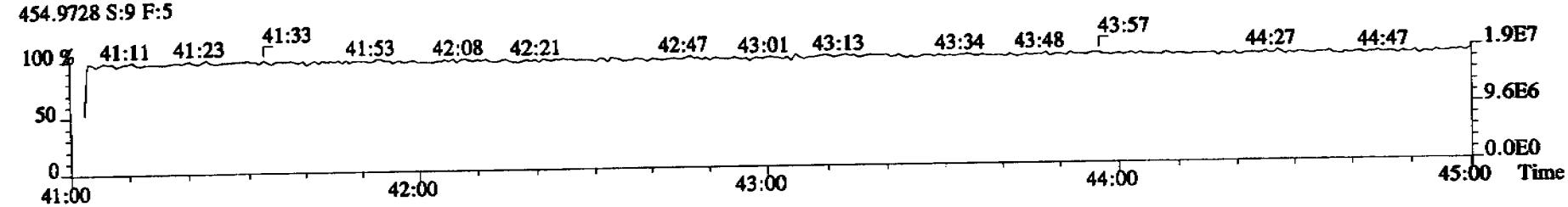
469.7780 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

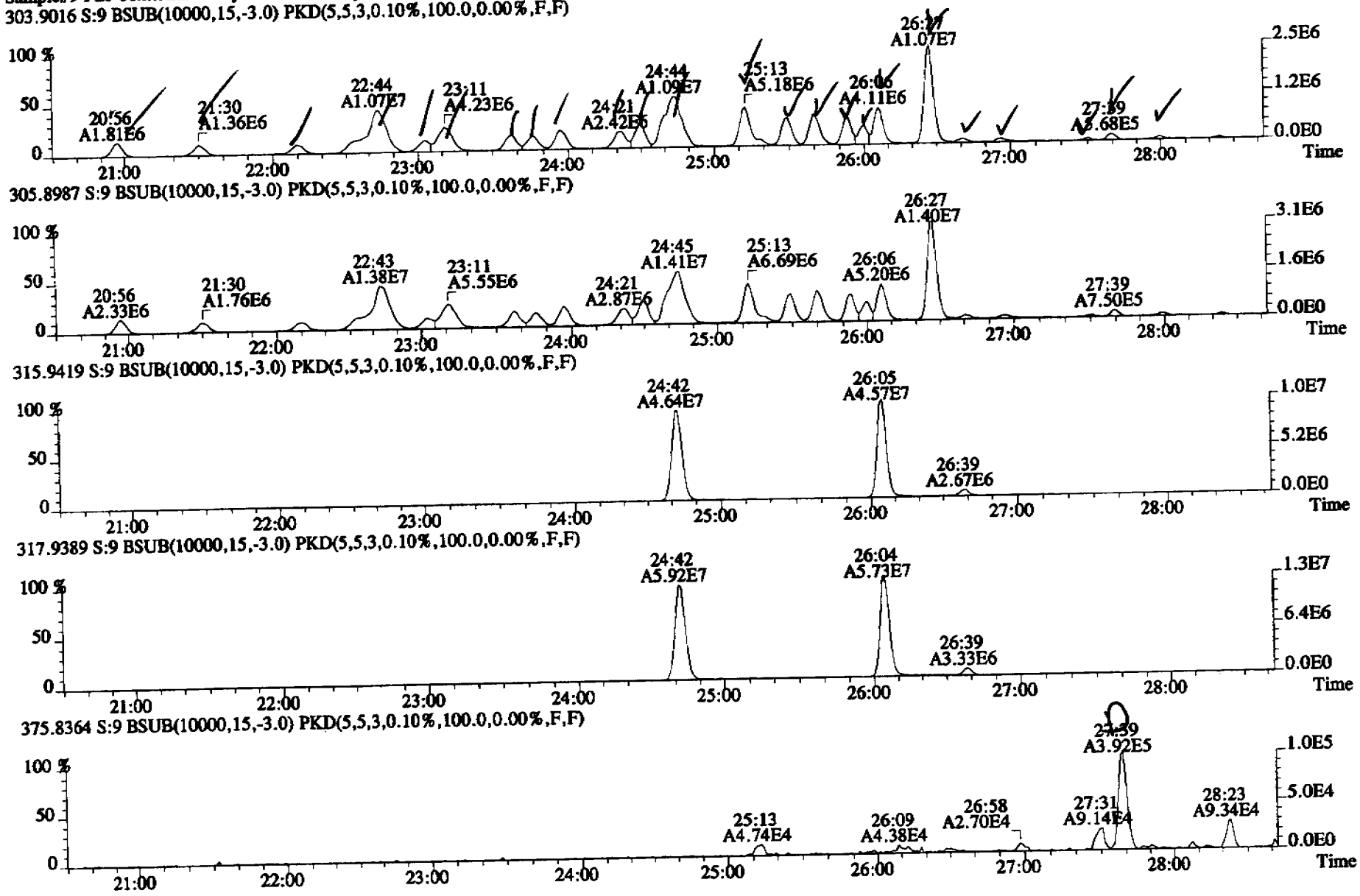


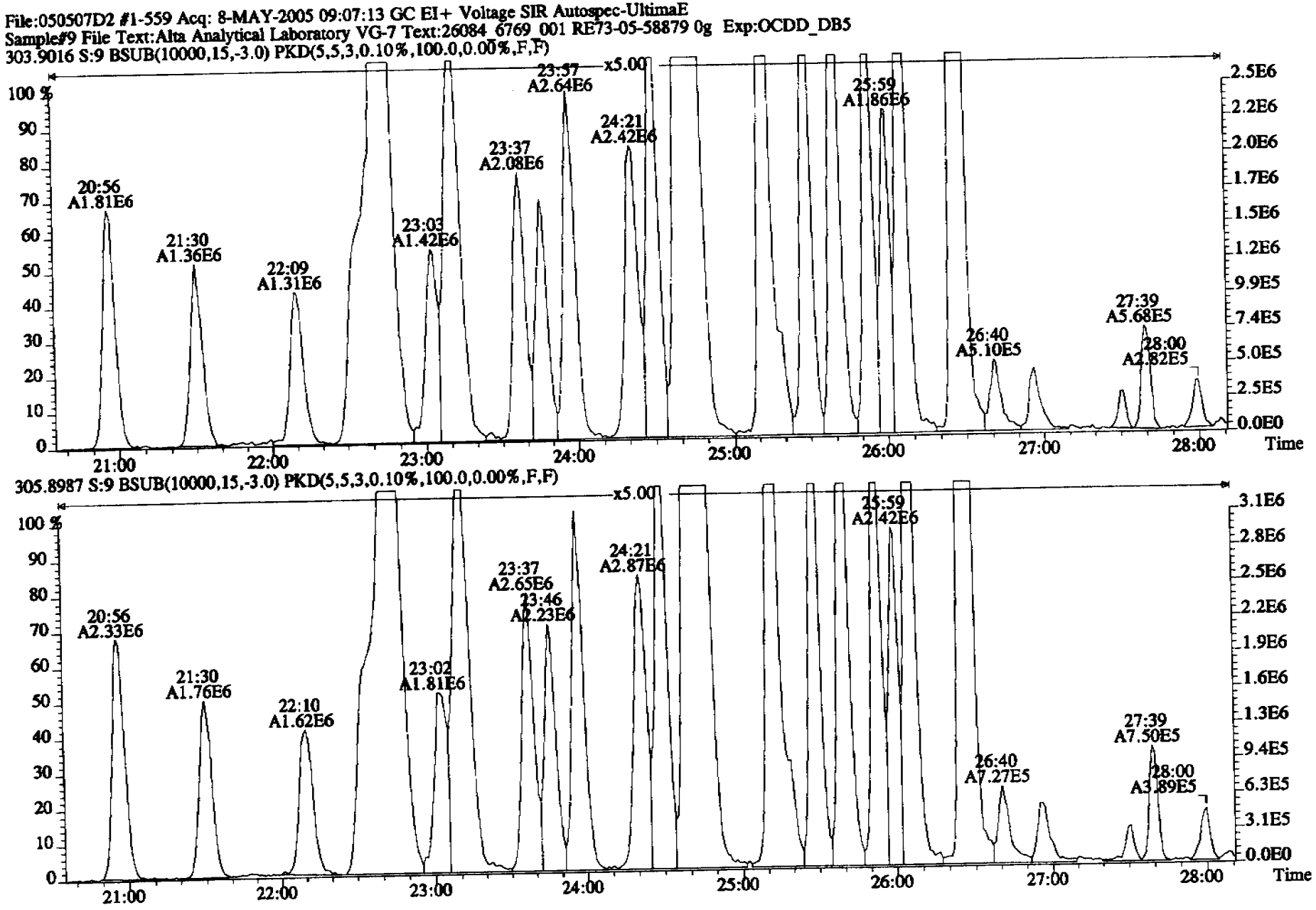
471.7750 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

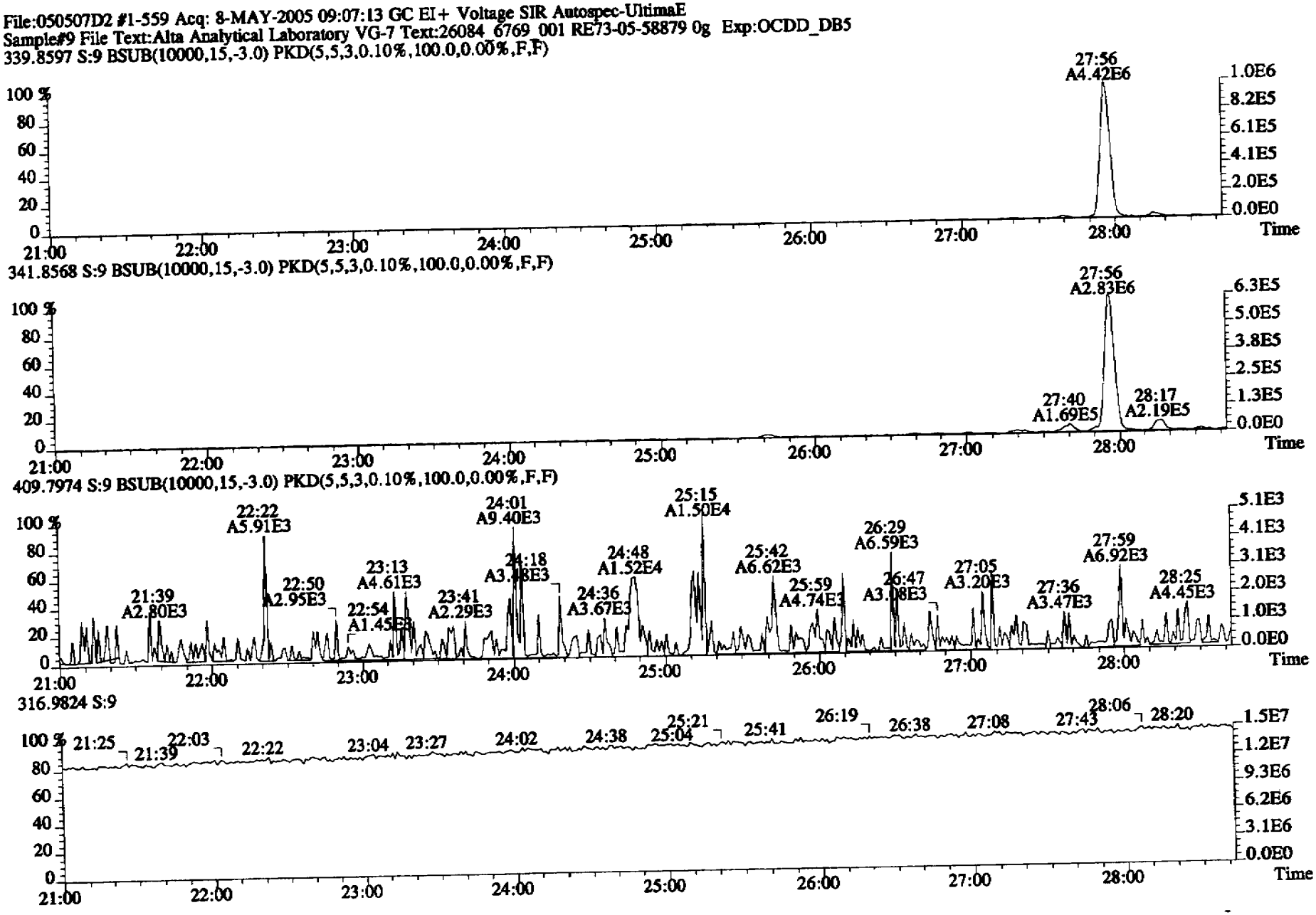


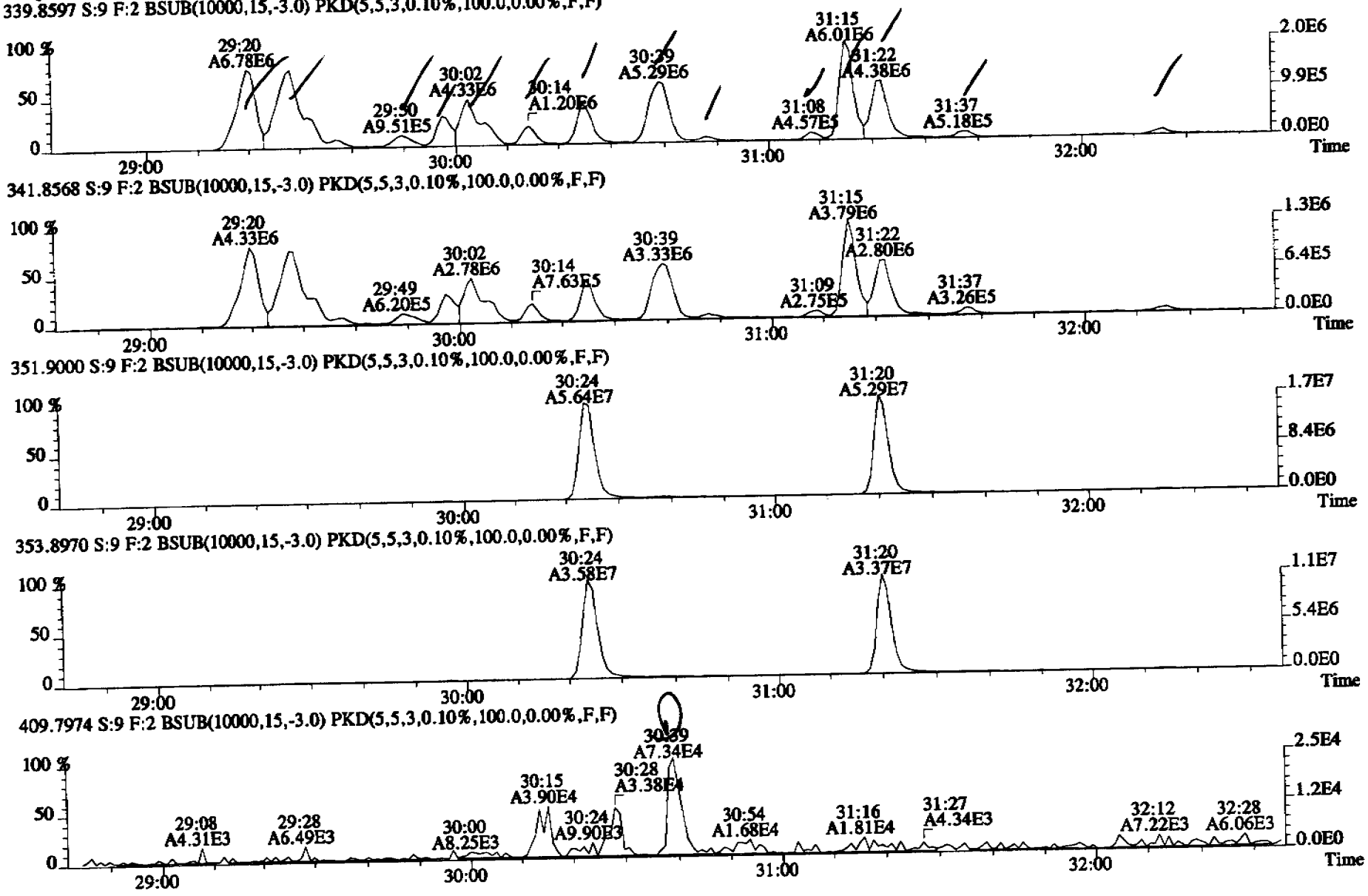
454.9728 S:9 F:5

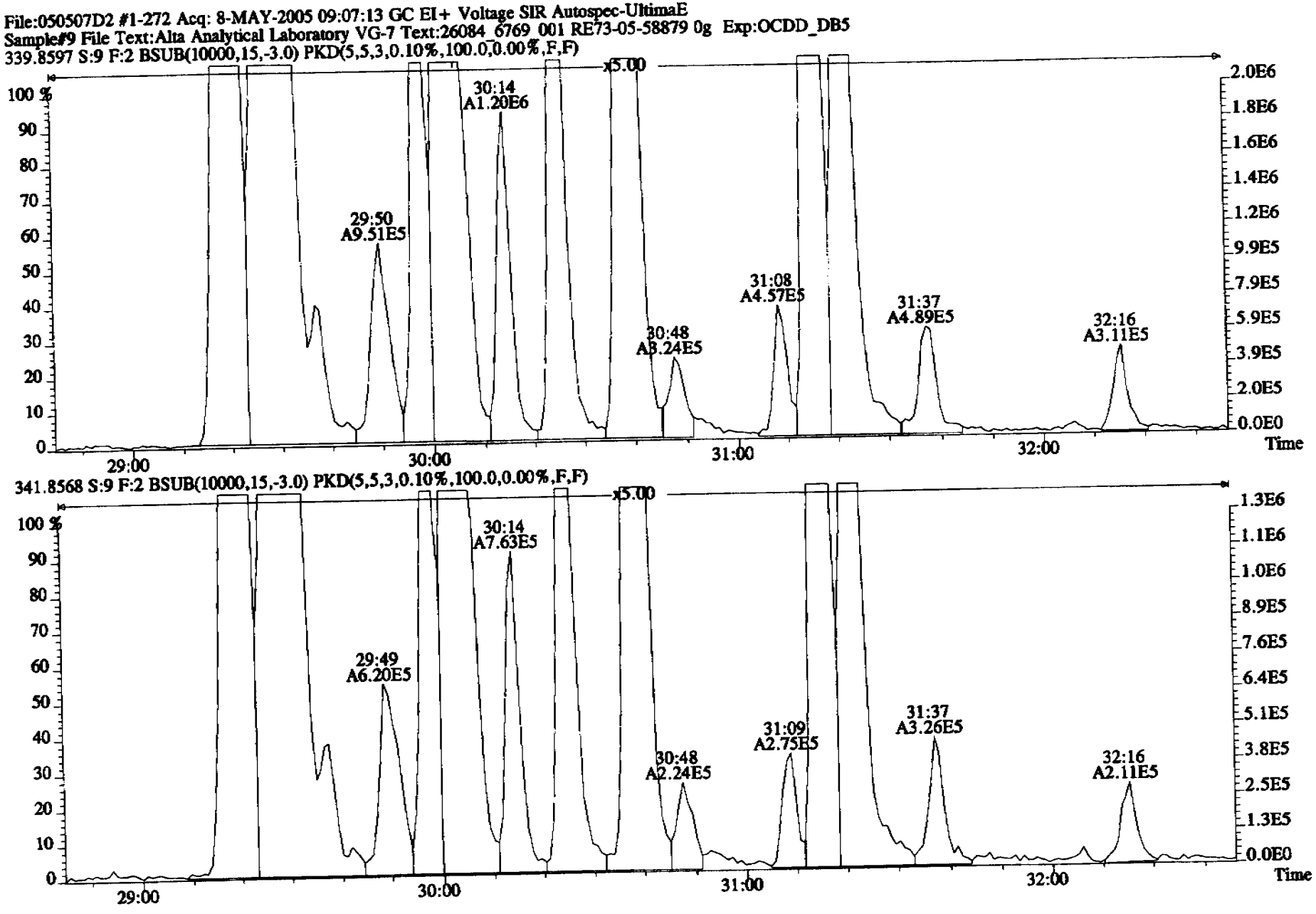



File:050507D2 #1-559 Acq: 8-MAY-2005 09:07:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:26084_6769_001 RE73-05-58879 0g Exp:OCDD_DB5
303.9016 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
20:56 A1.81E6
21:30 A1.36E6
22:44 A1.07E7
23:11 A4.23E6
24:21 A2.42E6
24:44 A1.09E7
25:13 A5.18E6
26:06 A4.11E6
26:27 A1.07E7
27:39 A3.68E5
305.8987 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
20:56 A2.33E6
21:30 A1.76E6
22:43 A1.38E7
23:11 A5.55E6
24:21 A2.87E6
24:45 A1.41E7
25:13 A6.69E6
26:06 A5.20E6
26:27 A1.40E7
27:39 A7.50E5
315.9419 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
24:42 A4.64E7
26:05 A4.57E7
26:39 A2.67E6
317.9389 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
24:42 A5.92E7
26:04 A5.73E7
26:39 A3.33E6
375.8364 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
25:13 A4.74E4
26:09 A4.38E4
26:58 A2.70E4
27:31 A9.14E4
27:39 A3.92E5
28:23 A9.34E4
100 %
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
28:00
Time
2.5E6
1.2E6
0.0E0
3.1E6
1.6E6
1.0E7
5.2E6
1.3E7
6.4E6
1.0E5
5.0E4

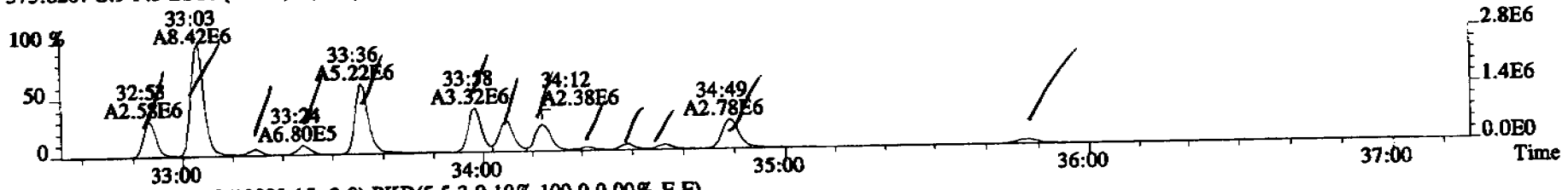

File:050507D2 #1-559 Acq: 8-MAY-2005 09:07:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:26084 6769_001 RE73-05-58879 0g Exp:OCDD_DB5
303.9016 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
x5.00
20:56 A1.81E6
21:30 A1.36E6
22:09 A1.31E6
23:03 A1.42E6
23:37 A2.08E6
23:57 A2.64E6
24:21 A2.42E6
25:59 A1.86E6
26:40 A5.10E5
27:39 A5.68E5
28:00 A2.82E5
Time
305.8987 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
x5.00
20:56 A2.33E6
21:30 A1.76E6
22:10 A1.62E6
23:02 A1.81E6
23:37 A2.65E6
23:46 A2.23E6
24:21 A2.87E6
25:59 A2.42E6
26:40 A7.27E5
27:39 A7.50E5
28:00 A3.89E5
Time


File:050507D2 #1-559 Acq: 8-MAY-2005 09:07:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:26084_6769_001 RE73-05-58879 0g Exp:OCDD_DB5
339.8597 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
27:56
A4.42E6
341.8568 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
27:56
A2.83E6
27:40
A1.69E5
28:17
A2.19E5
409.7974 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:39
A2.80E3
22:22
A5.91E3
22:50
A2.95E3
22:54
A1.45E3
23:13
A4.61E3
23:41
A2.29E3
24:01
A9.40E3
24:18
24:36
A3.67E3
24:48
A1.52E4
25:15
A1.50E4
25:42
A6.62E3
25:59
A4.74E3
26:29
A6.59E3
26:47
27:05
A3.20E3
27:36
A3.47E3
27:59
A6.92E3
28:25
A4.45E3
316.9824 S:9
21:25
21:39
22:03
22:22
23:04
23:27
24:02
24:38
25:04
25:21
25:41
26:19
26:38
27:08
27:43
28:06
28:20
Time

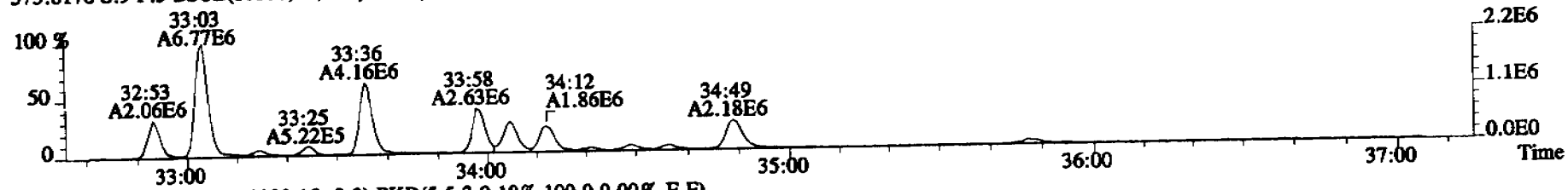

File:050507D2 #1-272 Acq: 8-MAY-2005 09:07:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:26084_6769_001 RE73-05-58879 0g Exp:OCDD_DB5
339.8597 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
29:20 A6.78E6
29:50 A9.51E5
30:02 A4.33E6
30:14 A1.20E6
30:29 A5.29E6
31:08 A4.57E5
31:15 A6.01E6
31:22 A4.38E6
31:37 A5.18E5
341.8568 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
29:20 A4.33E6
29:49 A6.20E5
30:02 A2.78E6
30:14 A7.63E5
30:39 A3.33E6
31:09 A2.75E5
31:15 A3.79E6
31:22 A2.80E6
31:37 A3.26E5
351.9000 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
30:24 A5.64E7
31:20 A5.29E7
353.8970 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
30:24 A3.58E7
31:20 A3.37E7
409.7974 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
29:08 A4.31E3
29:28 A6.49E3
30:00 A8.25E3
30:15 A3.90E4
30:24 A9.90E3
30:28 A3.38E4
30:39 A7.34E4
30:54 A1.68E4
31:16 A1.81E4
31:27 A4.34E3
32:12 A7.22E3
32:28 A6.06E3
100 %
50
0
29:00
30:00
31:00
32:00
Time
2.0E6
9.9E5
0.0E0
1.3E6
6.4E5
1.7E7
8.4E6
1.1E7
5.4E6
2.5E4
1.2E4


File:050507D2 #1-272 Acq: 8-MAY-2005 09:07:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:26084_6769_001 RE73-05-58879 0g Exp:OCDD_DB5
339.8597 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
x5.00
30:14
A1.20E6
29:50
A9.51E5
30:48
A3.24E5
31:08
A4.57E5
31:37
A4.89E5
32:16
A3.11E5
Time
341.8568 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
x5.00
30:14
A7.63E5
29:49
A6.20E5
30:48
A2.24E5
31:09
A2.75E5
31:37
A3.26E5
32:16
A2.11E5
Time

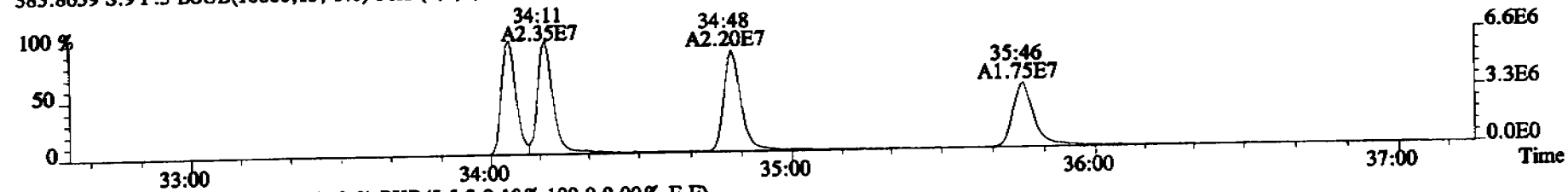
File:050507D2 #1-399 Acq: 8-MAY-2005 09:07:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:26084_6769_001 RE73-05-58879 0g Exp:OCDD_DB5
373.8207 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



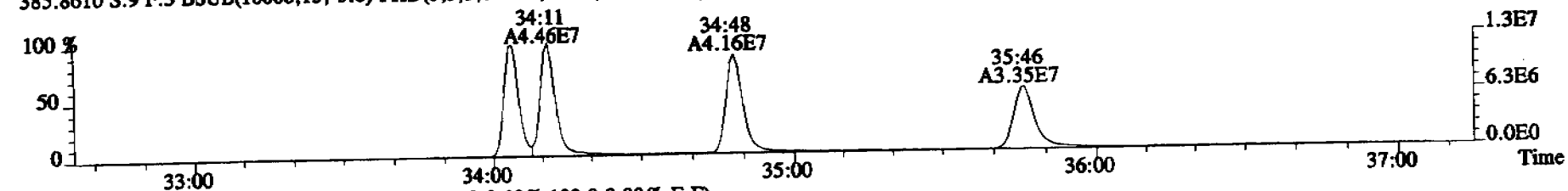
375.8178 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



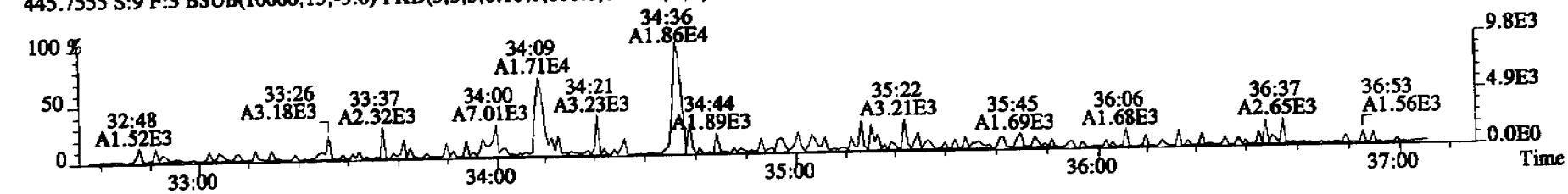
383.8639 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

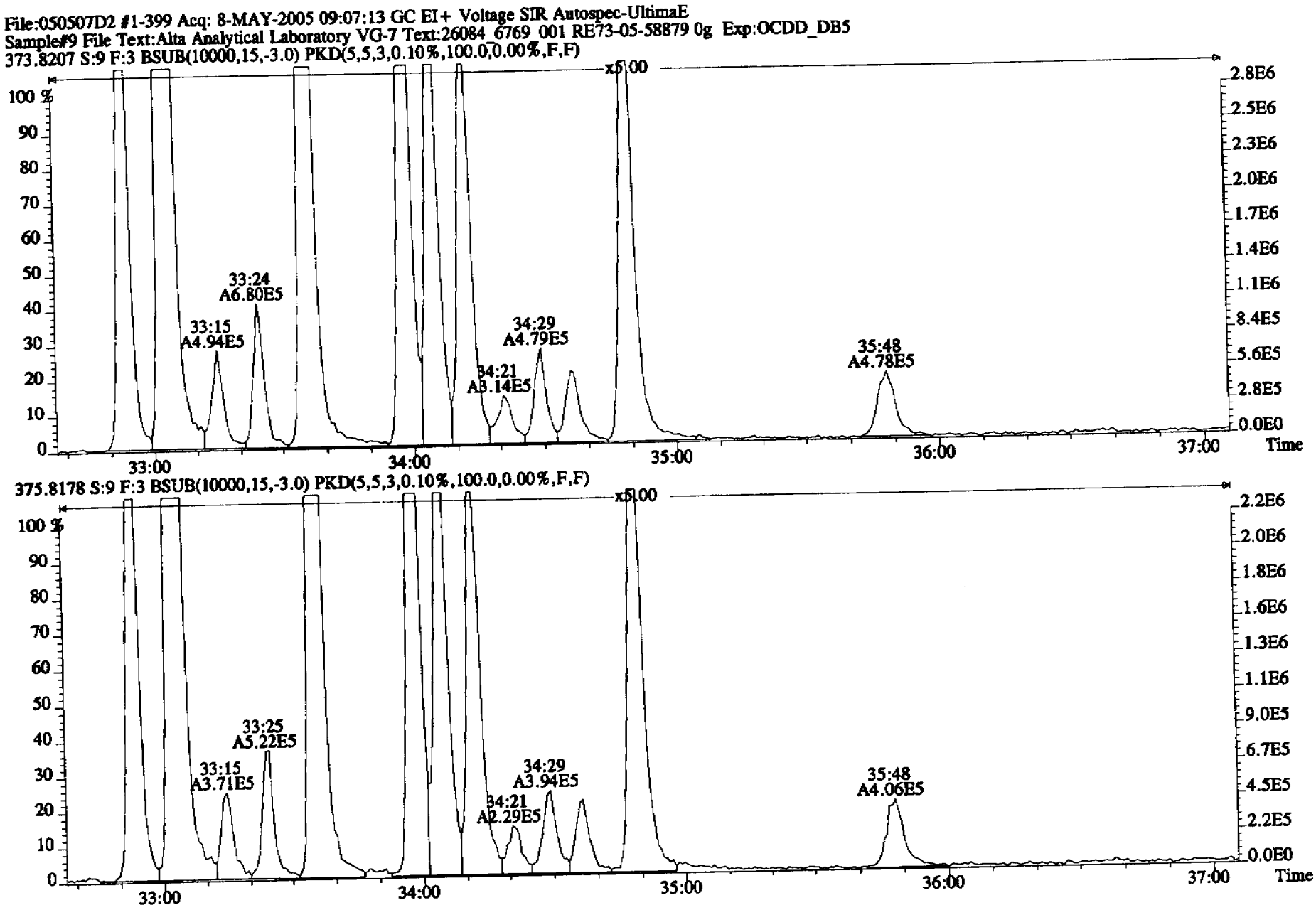


385.8610 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



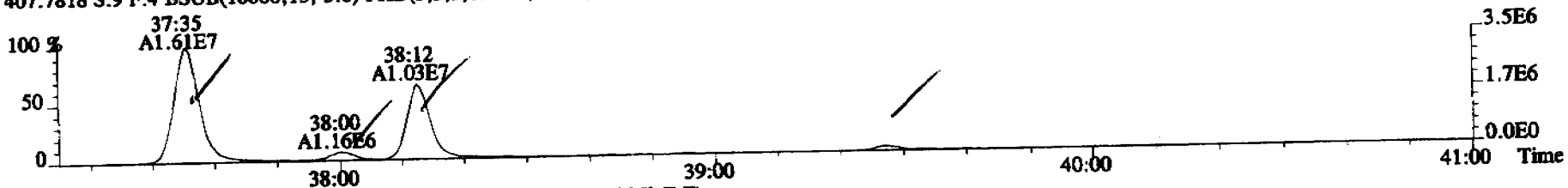
445.7555 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



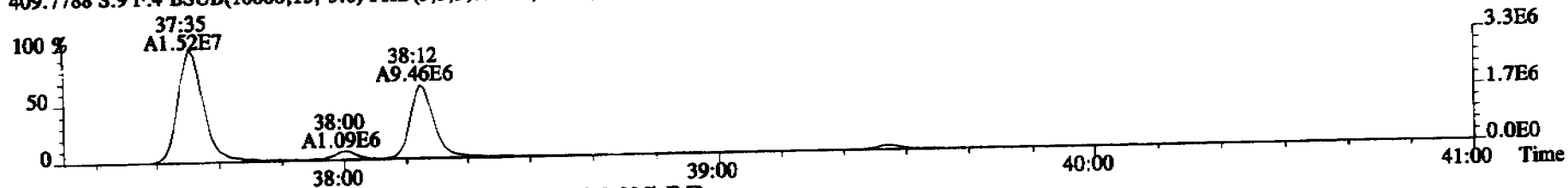

File:050507D2 #1-399 Acq: 8-MAY-2005 09:07:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:26084_6769_001 RE73-05-58879 0g Exp:OCDD_DB5
373.8207 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
x5.00
33:24
A6.80E5
33:15
A4.94E5
34:29
A4.79E5
34:21
A3.14E5
35:48
A4.78E5
Time
375.8178 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
x5.00
33:25
A5.22E5
33:15
A3.71E5
34:29
A3.94E5
34:21
A2.29E5
35:48
A4.06E5
Time

File:050507D2 #1-348 Acq: 8-MAY-2005 09:07:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:26084_6769_001 RE73-05-58879 0g Exp:OCDD_DB5

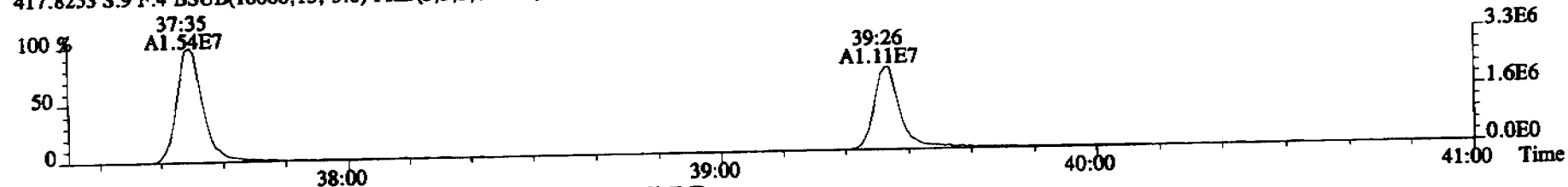
407.7818 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



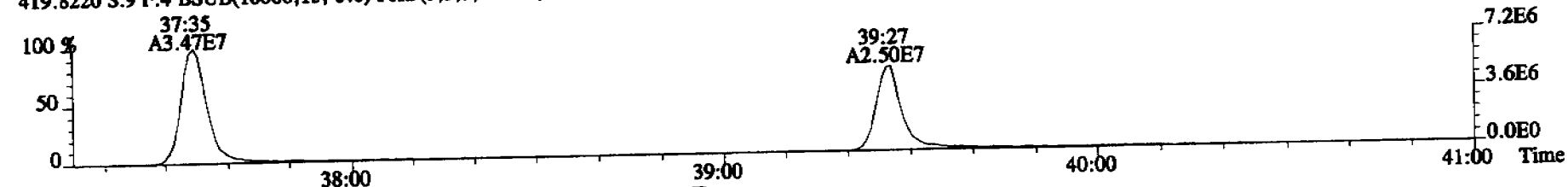
409.7788 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



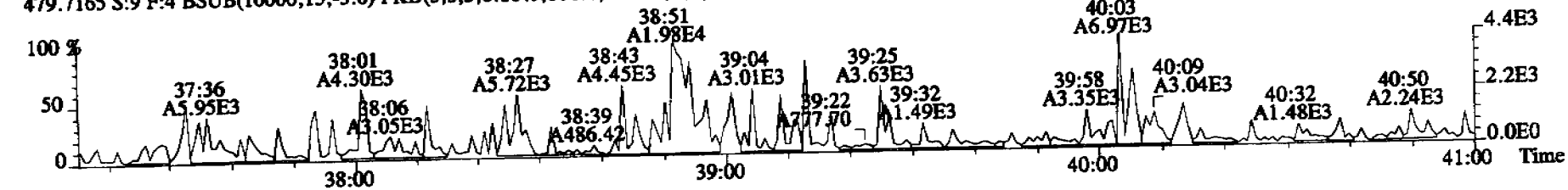
417.8253 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

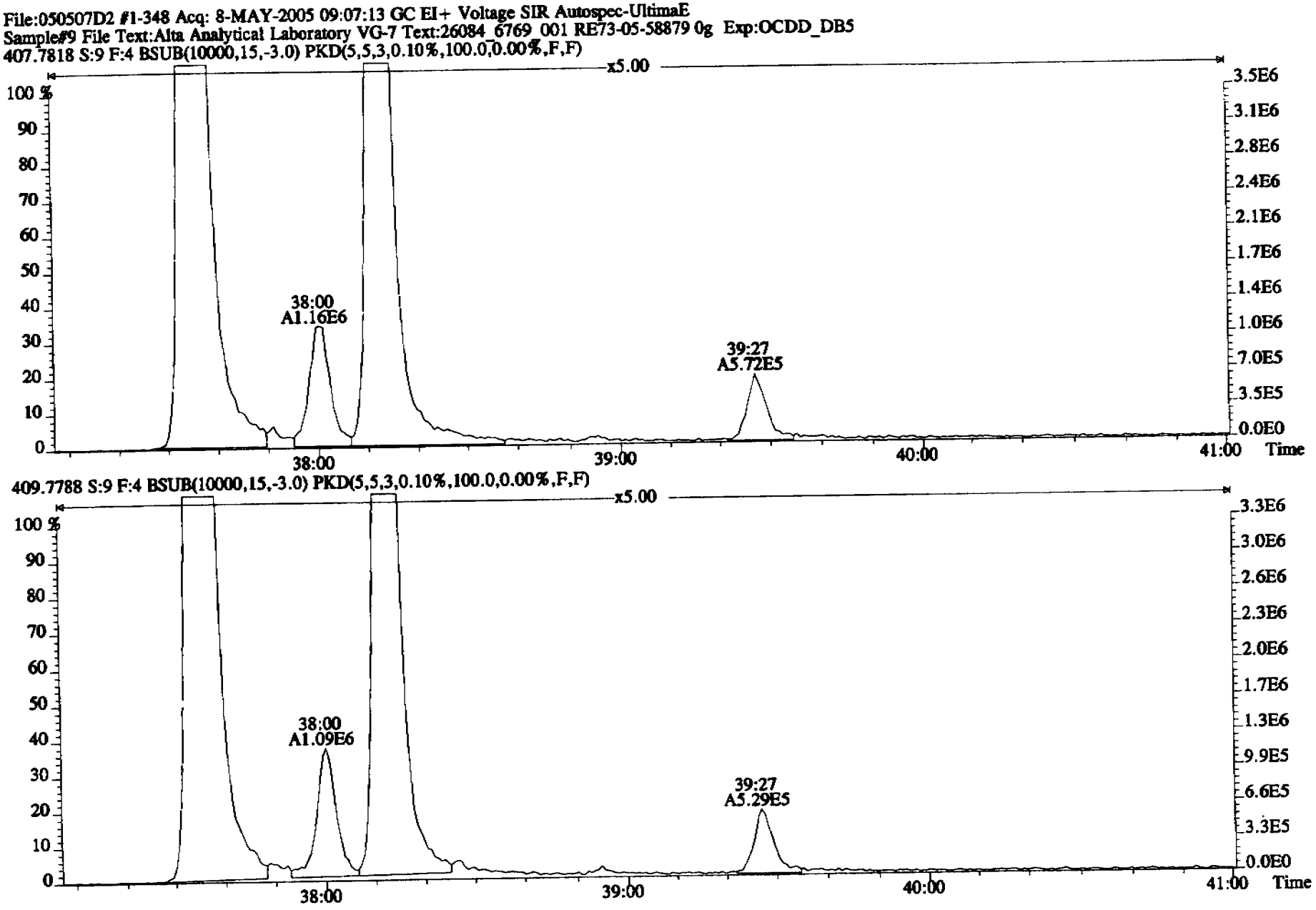


419.8220 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

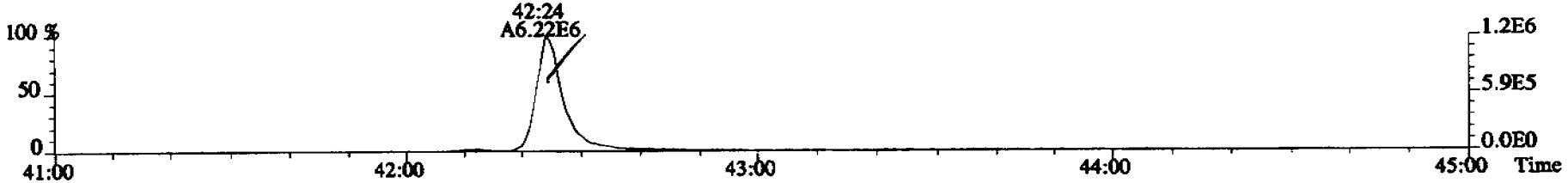


479.7165 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

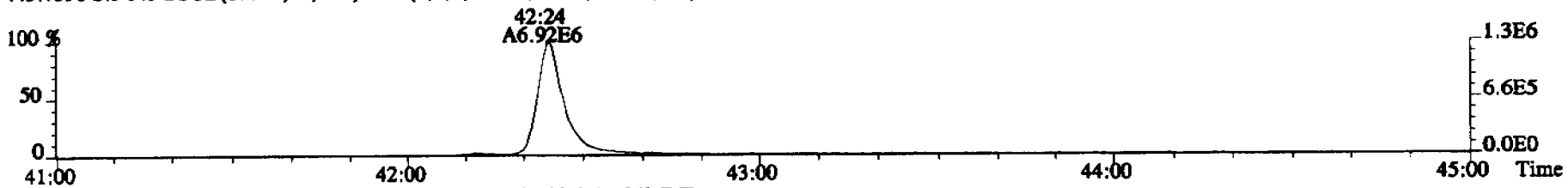



File:050507D2 #1-348 Acq: 8-MAY-2005 09:07:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:26084_6769_001 RE73-05-58879 0g Exp:OCDD_DB5
407.7818 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
x5.00
38:00
A1.16E6
39:27
A5.72E5
Time
409.7788 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
x5.00
38:00
A1.09E6
39:27
A5.29E5
Time

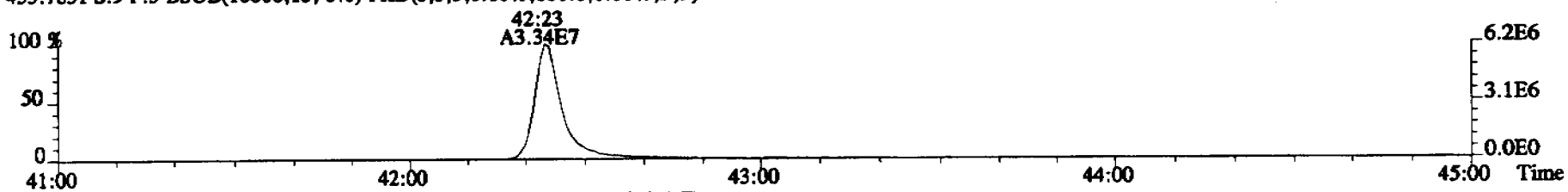
File:050507D2 #1-345 Acq: 8-MAY-2005 09:07:13 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:26084_6769_001 RE73-05-58879 0g Exp:OCDD_DB5
441.7428 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



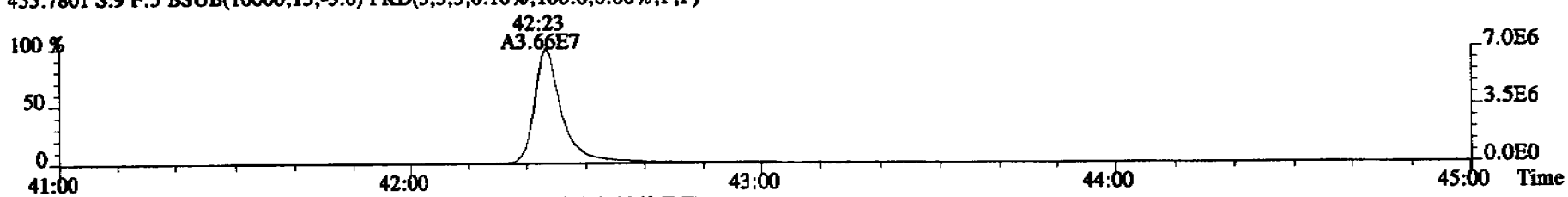
443.7398 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



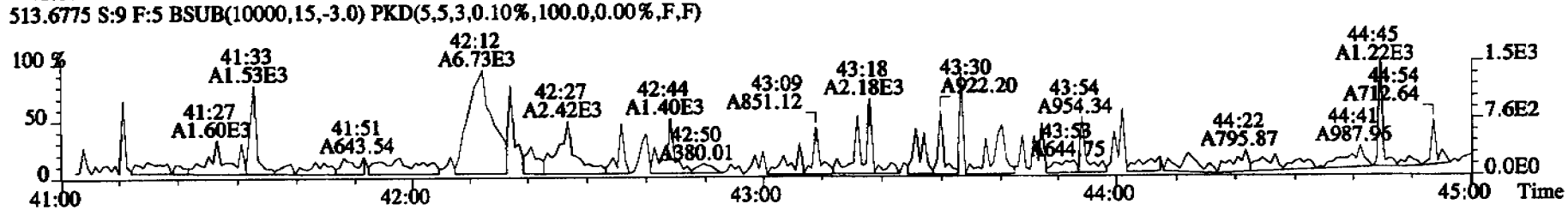
453.7831 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



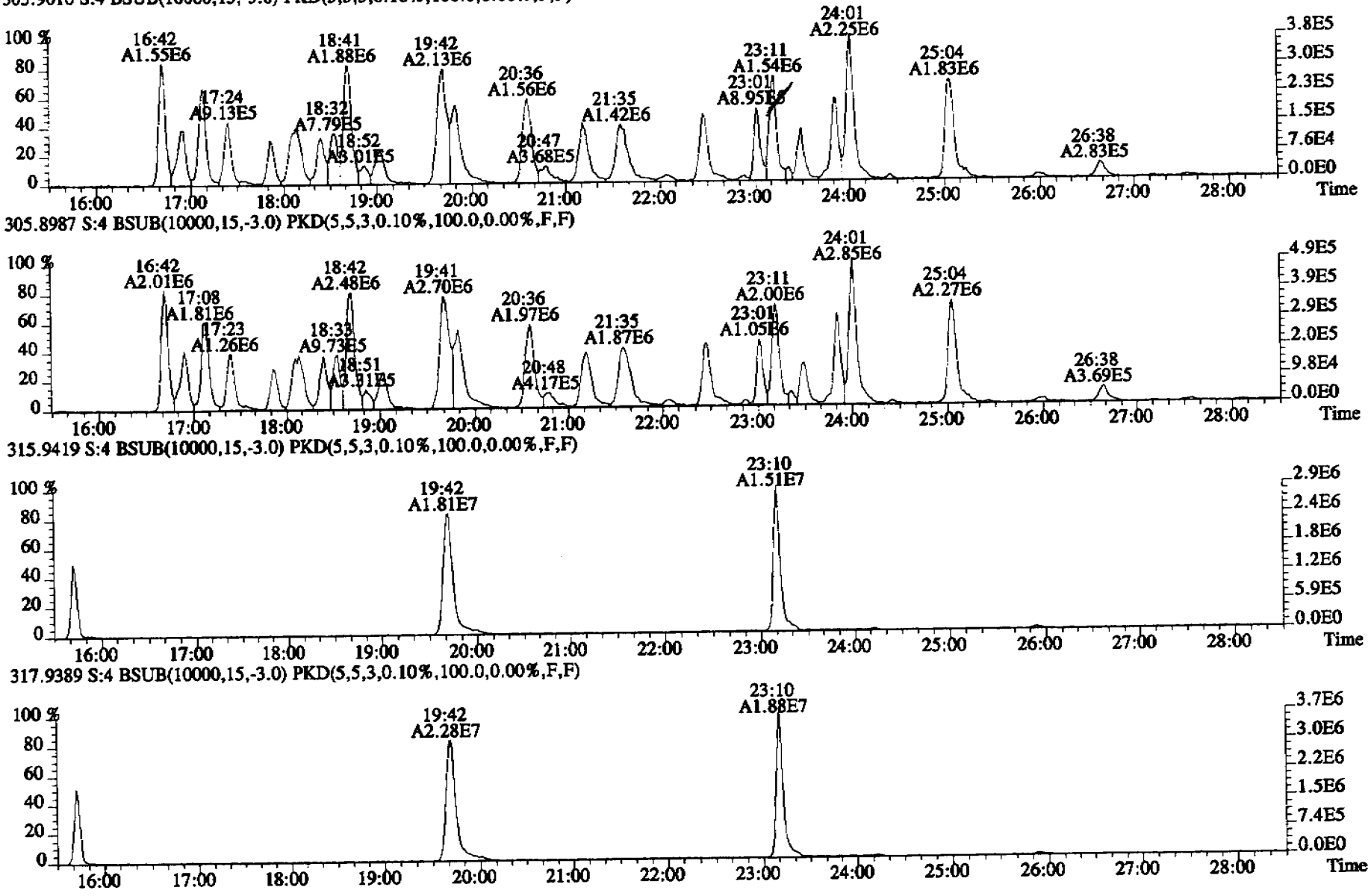
CONFIRMATION

Client ID: RE73-05-58879 Filename: 050509A2 S:4 Acq:10-MAY-05 01:02:50 ConCal: ST050509A2-1
Lab ID: 26084_6769_001 GC Column ID: DB-225 ICal: 1613TCDFVG6-4-29-05 wt/vol:10.020 EndCAL: ST050509A2-2

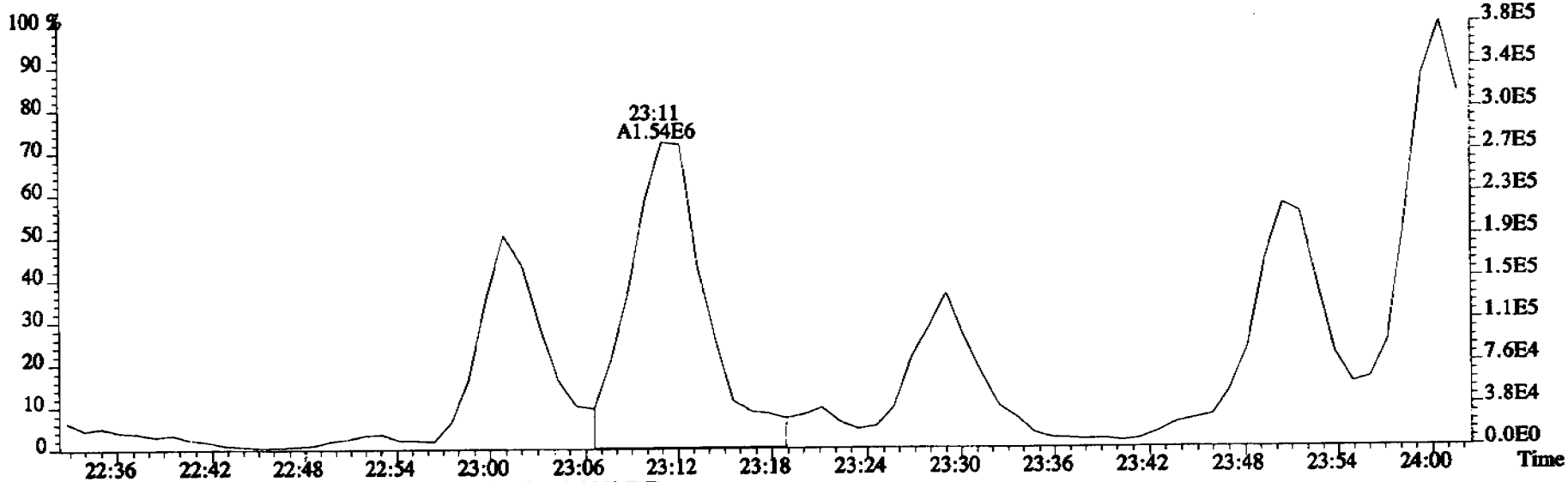
Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	4.09e+07	0.79 y	19:43	1.00	199.6	-
13C-2,3,7,8-TCDF	3.39e+07	0.80 y	23:11	1.04	159.3	79.8
2,3,7,8-TCDF	3.54e+06	0.77 y	23:12	1.07	19.43	

Analyst: DMS

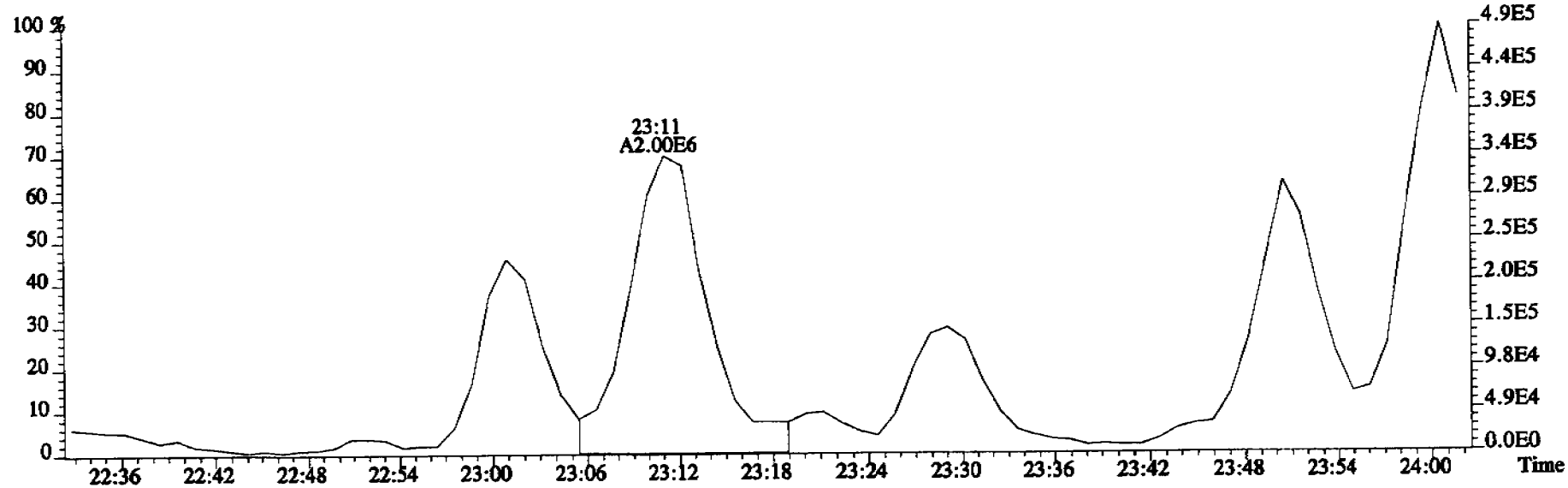
Date: 5/10/05


File:050509A2 #1-1173 Acq:10-MAY-2005 01:02:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory Text:26084_6769_001 RE73-05-58879 10.02g Exp:TCDF_DB225
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
16:42 A1.55E6
17:24 A9.13E5
18:32 A7.79E5
18:41 A1.88E6
18:52 A3.01E5
19:42 A2.13E6
20:36 A1.56E6
20:47 A3.68E5
21:35 A1.42E6
23:01 A8.95E5
23:11 A1.54E6
24:01 A2.25E6
25:04 A1.83E6
26:38 A2.83E5
305.8987 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
16:42 A2.01E6
17:08 A1.81E6
17:23 A1.26E6
18:33 A9.73E5
18:42 A2.48E6
18:51 A3.31E5
19:41 A2.70E6
20:36 A1.97E6
20:48 A4.17E5
21:35 A1.87E6
23:01 A1.05E6
23:11 A2.00E6
24:01 A2.85E6
25:04 A2.27E6
26:38 A3.69E5
315.9419 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
19:42 A1.81E7
23:10 A1.51E7
317.9389 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
19:42 A2.28E7
23:10 A1.88E7
Time

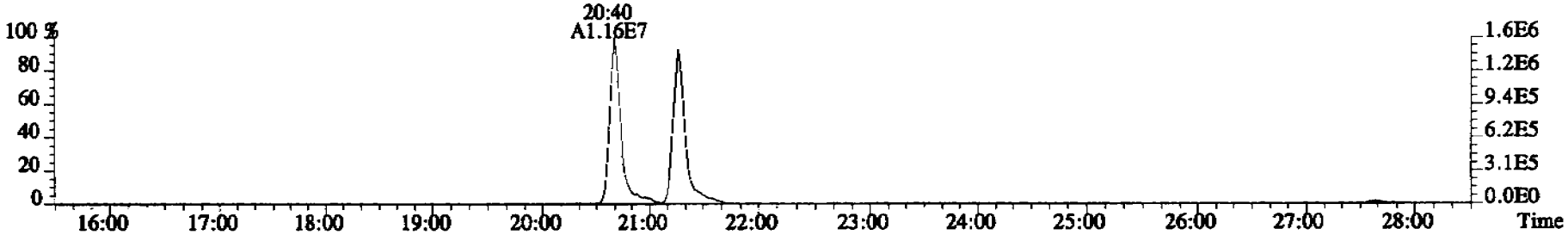
File:050509A2 #1-1173 Acq:10-MAY-2005 01:02:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory Text:26084_6769_001 RE73-05-58 Exp:TCDF_DB225
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



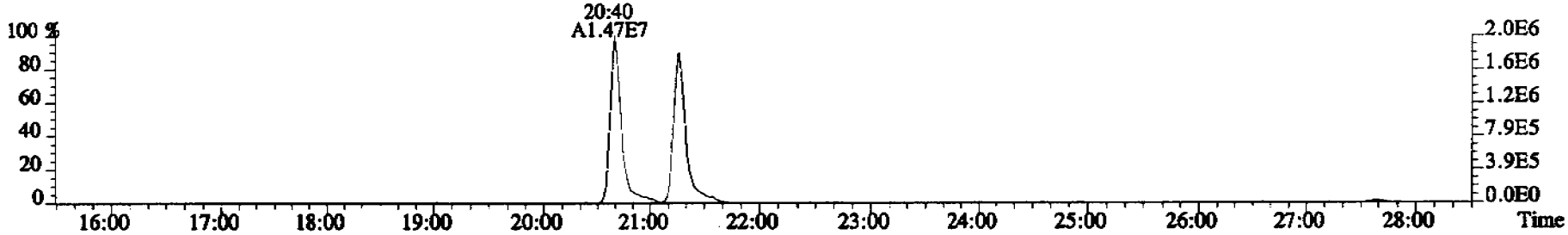
305.8987 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



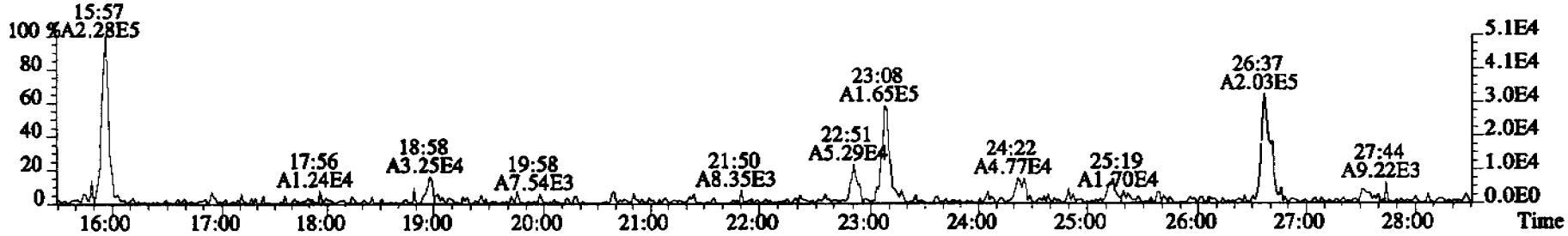
File:050509A2 #1-1173 Acq:10-MAY-2005 01:02:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory Text:26084_6769_001 RE73-05-58879 10.02g Exp:TCDF_DB225
331.9368 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



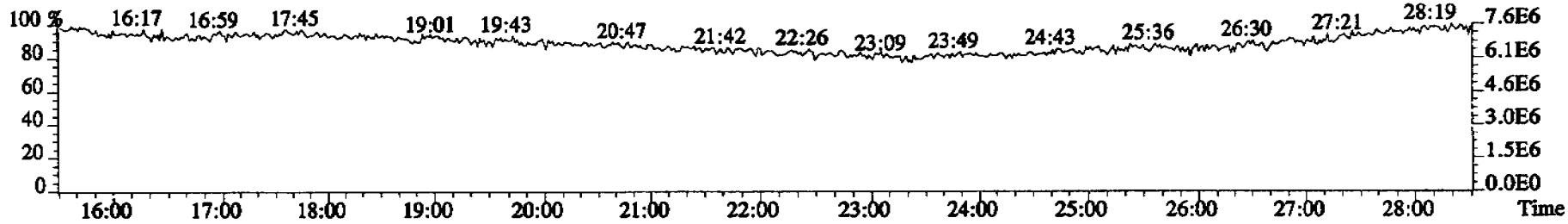
333.9339 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



375.8364 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



318.9792 S:4



ICAL

Initial Calibration RRF Summary (ICAL) Alta Analytical Laboratory
Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Inst. ID. VG-7

Data filename: 050423D1

			Samp# 1	Samp# 3	Samp# 4	Samp# 5	Samp# 6	Samp# 7
			10	0.25	0.50	2.0	40	200
Name	Mean RRF	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6
2,3,7,8-TCDD	1.06	5.82 %	1.03	1.16	1.02	1.05	1.10	0.98
1,2,3,7,8-PeCDD	0.99	8.04 %	0.92	1.14	0.94	0.97	1.00	0.97
1,2,3,4,7,8-HxCDD	1.11	9.07 %	1.03	1.31	1.03	1.11	1.10	1.10
1,2,3,6,7,8-HxCDD	1.07	9.72 %	0.99	1.27	1.02	1.02	1.09	1.04
1,2,3,7,8,9-HxCDD	1.15	9.12 %	1.06	1.36	1.15	1.11	1.12	1.11
1,2,3,4,6,7,8-HpCDD	1.05	8.74 %	0.97	1.22	0.99	1.00	1.06	1.06
OCDD	1.04	8.59 %	0.97	1.20	0.95	0.99	1.05	1.04
2,3,7,8-TCDF	1.05	6.85 %	1.04	1.19	1.03	1.03	1.07	0.98
1,2,3,7,8-PeCDF	0.95	8.78 %	0.93	1.12	0.90	0.93	0.95	0.89
2,3,4,7,8-PeCDF	1.08	8.28 %	1.03	1.26	1.02	1.06	1.07	1.02
1,2,3,4,7,8-HxCDF	1.19	8.86 %	1.13	1.39	1.11	1.18	1.18	1.13
1,2,3,6,7,8-HxCDF	1.22	8.33 %	1.15	1.41	1.15	1.17	1.24	1.17
2,3,4,6,7,8-HxCDF	1.20	9.45 %	1.12	1.42	1.14	1.18	1.22	1.14
1,2,3,7,8,9-HxCDF	1.13	7.96 %	1.07	1.30	1.06	1.08	1.14	1.10
1,2,3,4,6,7,8-HpCDF	1.38	9.14 %	1.29	1.62	1.28	1.35	1.38	1.33
1,2,3,4,7,8,9-HpCDF	1.23	7.80 %	1.18	1.39	1.12	1.22	1.28	1.17
OCDF	1.02	6.97 %	0.96	1.15	0.96	0.99	1.03	1.01
13C-2,3,7,8-TCDD	1.12	1.62 %	1.14	1.12	1.12	1.11	1.10	1.15
13C-1,2,3,7,8-PeCDD	0.89	2.30 %	0.87	0.88	0.87	0.90	0.88	0.92
13C-1,2,3,4,7,8-HxCDD	0.83	4.20 %	0.87	0.82	0.81	0.78	0.85	0.86
13C-1,2,3,6,7,8-HxCDD	1.00	2.32 %	1.01	0.97	0.98	1.00	1.03	0.98
13C-1,2,3,4,6,7,8-HpCDD	0.82	2.50 %	0.83	0.85	0.84	0.83	0.80	0.80
13C-OCDD	0.74	0.92 %	0.75	0.75	0.74	0.74	0.74	0.75
13C-2,3,7,8-TCDF	1.02	1.96 %	1.06	1.01	1.01	1.01	1.01	1.03
13C-1,2,3,7,8-PeCDF	0.90	2.77 %	0.91	0.89	0.90	0.91	0.87	0.95
13C-2,3,4,7,8-PeCDF	0.87	2.26 %	0.87	0.88	0.87	0.87	0.85	0.91
13C-1,2,3,4,7,8-HxCDF	1.27	3.03 %	1.23	1.21	1.27	1.28	1.29	1.31
13C-1,2,3,6,7,8-HxCDF	1.40	2.89 %	1.39	1.35	1.42	1.46	1.43	1.37
13C-2,3,4,6,7,8-HxCDF	1.29	2.35 %	1.28	1.26	1.30	1.28	1.35	1.30
13C-1,2,3,7,8,9-HxCDF	1.12	2.29 %	1.07	1.14	1.13	1.13	1.11	1.14
13C-1,2,3,4,6,7,8-HpCDF	1.01	1.51 %	0.98	1.02	1.03	1.01	1.01	1.02
13C-1,2,3,4,7,8,9-HpCDF	0.88	2.02 %	0.85	0.89	0.90	0.89	0.86	0.89
13C-OCDF	0.94	2.40 %	0.90	0.96	0.93	0.93	0.93	0.97
37Cl-2,3,7,8-TCDD	0.62	7.99 %	0.55	0.66	0.63	0.58	0.61	0.69
13C-1,2,3,4-TCDD	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-1,2,3,4-TCDF	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-1,2,3,7,8,9-HxCDD	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00

4/26/05

4/26/05

Initial Calibration RRF Summary (ICAL) Alta Analytical Laboratory

Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Inst. ID. VG-7

Data filename: 050423D1

			Samp# 1	Samp# 3	Samp# 4	Samp# 5	Samp# 6	Samp# 7
			10	0.25	0.50	2.0	40	200
Name	Mean RRF	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6
Total Tetra-Dioxins	1.06	5.82 %	1.03	1.16	1.02	1.05	1.10	0.98
TCDD EMPC	1.06	5.82 %	1.03	1.16	1.02	1.05	1.10	0.98
Total Penta-Dioxins	0.99	8.04 %	0.92	1.14	0.94	0.97	1.00	0.97
PeCDD EMPC	0.99	8.04 %	0.92	1.14	0.94	0.97	1.00	0.97
Total Hexa-Dioxins	1.11	9.14 %	1.03	1.31	1.07	1.08	1.10	1.08
HxCDD EMPC	1.11	9.14 %	1.03	1.31	1.07	1.08	1.10	1.08
Total Hepta-Dioxins	1.05	8.74 %	0.97	1.22	0.99	1.00	1.06	1.06
HpCDD EMPC	1.05	8.74 %	0.97	1.22	0.99	1.00	1.06	1.06
Total Tetra-Furans	1.05	6.85 %	1.04	1.19	1.03	1.03	1.07	0.98
TCDF EMPC	1.05	6.85 %	1.04	1.19	1.03	1.03	1.07	0.98
1st Func. Penta-Furans	1.01	8.54 %	0.98	1.19	0.96	0.99	1.01	0.95
1st Func. PeCDF EMPC	1.01	8.54 %	0.98	1.19	0.96	0.99	1.01	0.95
Total Penta-Furans	1.01	8.54 %	0.98	1.19	0.96	0.99	1.01	0.95
PeCDF EMPC	1.01	8.54 %	0.98	1.19	0.96	0.99	1.01	0.95
Total Hexa-Furans	1.19	8.60 %	1.12	1.38	1.12	1.16	1.20	1.14
HxCDF EMPC	1.19	8.60 %	1.12	1.38	1.12	1.16	1.20	1.14
Total Hepta-Furans	1.31	8.46 %	1.24	1.51	1.20	1.29	1.33	1.26
HpCDF EMPC	1.31	8.46 %	1.24	1.51	1.20	1.29	1.33	1.26

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.: CCAL ID: ST050423D1-1

Contract No.: SAS No.:

Initial Calibration Date: 4/23/04

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050423D1 S#1 Analysis Date: 23-APR-05 Time: 11:22:51

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	y	9.78	7.8 - 12.9 8.2 - 12.3 (4)
1,2,3,7,8-PeCDD	M+2/M+4	0.63	1.32-1.78	y	46.3	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	46.2	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	46.2	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05-1.43	y	46.1	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	y	46.4	43.0 - 58.0
OCDD	M+2/M+4	0.89	0.76-1.02	y	93.9	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	9.83	8.4 - 12.0 8.6 - 11.6 (4)
1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	49.0	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	48.0	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.27	1.05-1.43	y	47.5	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	47.2	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	46.5	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.27	1.05-1.43	y	47.6	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.03	0.88-1.20	y	47.1	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.02	0.88-1.20	y	48.1	43.0 - 58.0
OCDF	M+2/M+4	0.91	0.76-1.02	y	94.3	63.0 - 159.0

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) Contract-required concentration range as specified in Table 6a, Method 1613, for tetras only.

Analyst: _____

Date: 4/26/05

FORM 4B

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4/23/04

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050423D1 S#1 Analysis Date: 23-APR-05 Time: 11:22:51

LABELED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	y	101	82.0 - 121.0
						85.0 - 117.0 (5)
13C-1,2,3,7,8-PeCDD	M+2/M+4	0.63	1.32-1.78	y	98.2	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.30	1.05-1.43	y	104	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.22	1.05-1.43	y	102	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	101	72.0 - 138.0
13C-OCDD	M+2/M+4	0.90	0.76-1.02	y	202	96.0 - 415.0
13C-2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	y	104	71.0 - 140.0
						76.0 - 131.0 (5)
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	101	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	99.4	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	97.1	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	98.7	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	98.7	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	95.8	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37-0.51	y	97.3	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37-0.51	y	97.1	77.0 - 129.0
13C-OCDF	M+2/M+4	0.89	0.76-1.02	y	193	96.0 - 415.0
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					8.93	7.9 - 12.7
						8.3 - 12.1 (5)

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range, as specified in Table 6, Method 1613.

(4) No ion abundance ratio; report concentration found.

(5) Contract-required concentration range, as specified in Table 6a, Method 1613, for tetras only.

Analyst: _____

Date: 4/26/05

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: VG-7 Initial Calibration Date: 4/23/04

RT Window Data Filename: 050423D1 S#1 Analysis Date: 23-APR-05 Time: 11:22:51

DB-5 IS Data Filename: 050423D1 S#1 Analysis Date: 23-APR-05 Time: 11:22:51

DB_225 IS Data Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:23	1,3,6,8-TCDF (F)	21:09
1,2,8,9-TCDD (L)	27:58	1,2,8,9-TCDF (L)	28:07
1,2,4,7,9-PeCDD (F)	29:37	1,3,4,6,8-PeCDF (F)	28:02
1,2,3,8,9-PeCDD (L)	32:06	1,2,3,8,9-PeCDF (L)	32:21
1,2,4,6,7,9-HxCDD (F)	33:31	1,2,3,4,6,8-HxCDF (F)	32:59
1,2,3,7,8,9-HxCDD (L)	35:29	1,2,3,7,8,9-HxCDF (L)	35:52
1,2,3,4,6,7,9-HpCDD (F)	38:06	1,2,3,4,6,7,8-HpCDF (F)	37:42
1,2,3,4,6,7,8-HpCDD (L)	38:60	1,2,3,4,7,8,9-HpCDF (L)	39:33

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5).

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

COMPARED PEAKS (1)	% VALLEY HEIGHT BETWEEN
	<25%

(1) To meet contract requirements, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: [signature]

Date: 4/26/05

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4/23/04

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050423D1 S#1 Analysis Date: 23-APR-05 Time: 11:22:51

Compounds Using 13C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.000	0.999-1.002
LABELED COMPOUNDS			
13C-2,3,7,8-TCDF	13C-1,2,3,4-TCDD	0.993	0.923-1.103
13C-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.024	0.976-1.043
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.024	0.989-1.052
13C-1,2,3,7,8-PeCDF	13C-1,2,3,4-TCDD	1.155	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.190	1.011-1.526
13C-1,2,3,7,8-PeCDD	13C-1,2,3,4-TCDD	1.200	1.000-1.567

(1) Contract-required limits for
Relative Retention Times (RRT)
as specified in Table 2, Method 1613. 10/94

Analyst: _____

Date: 4/26/05

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4/23/04

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050423D1 S#1 Analysis Date: 23-APR-05 Time: 11:22:51

Compounds Using 13C-123789-HxCDD as Internal Standard

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.001	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.001	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.000	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.000	0.999-1.001
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.001	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.000	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.009	1.000-1.019
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.000	0.999-1.001
OCDD	13C-OCDD	1.000	0.999-1.001
OCDF	13C-OCDD	1.006	0.999-1.008
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDF	13C-1,2,3,7,8,9-HxCDD	0.963	0.944-0.970
13C-1,2,3,6,7,8-HxCDF	13C-1,2,3,7,8,9-HxCDD	0.966	0.949-0.975
13C-2,3,4,6,7,8-HxCDF	13C-1,2,3,7,8,9-HxCDD	0.984	0.959-1.021
13C-1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDD	1.011	0.977-1.047
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.988	0.977-1.000
13C-1,2,3,6,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.991	0.981-1.003
13C-1,2,3,4,6,7,8-HpCDF	13C-1,2,3,7,8,9-HxCDD	1.062	1.043-1.085
13C-1,2,3,4,6,7,8-HpCDD	13C-1,2,3,7,8,9-HxCDD	1.099	1.086-1.110
13C-1,2,3,4,7,8,9-HpCDF	13C-1,2,3,7,8,9-HxCDD	1.115	1.057-1.151
13C-OCDD	13C-1,2,3,7,8,9-HxCDD	1.192	1.032-1.311
13C-OCDF	13C-1,2,3,7,8,9-HxCDD	1.198	1.032-1.311

(1) Contract-required limits for
Relative Retention Times (RRT)
as specified in Table 2, Method 1613. 10/94

Analyst: _____

Date: 4/26/05

EPA METHOD 8290

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.: CCAL ID: ST050423D1-1

Contract No.: SAS No.:

Initial Calibration Date: 4/23/04

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050423D1 S#1 Analysis Date: 23-APR-05 Time: 11:22:51

	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	y	9.78	8.00 - 12.0
1,2,3,7,8-PeCDD	M+2/M+4	0.63	1.32-1.78	y	46.3	40.0 - 60.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	46.2	40.0 - 60.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	46.2	40.0 - 60.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05-1.43	y	46.1	40.0 - 60.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	y	46.4	40.0 - 60.0
OCDD	M+2/M+4	0.89	0.76-1.02	y	93.9	80.0 - 120
2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	9.83	8.00 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	49.0	40.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	48.0	40.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.27	1.05-1.43	y	47.5	40.0 - 60.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	47.2	40.0 - 60.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	46.5	40.0 - 60.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.27	1.05-1.43	y	47.6	40.0 - 60.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.03	0.88-1.20	y	47.1	40.0 - 60.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.02	0.88-1.20	y	48.1	40.0 - 60.0
OCDF	M+2/M+4	0.91	0.76-1.02	y	94.3	80.0 - 120

Analyst: [signature]

Date: 4/26/05

EPA METHOD 8290

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4/23/04

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050423D1 S#1 Analysis Date: 23-APR-05 Time: 11:22:51

LABELED COMPOUNDS	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	y	101	70.0 - 130
13C-1,2,3,7,8-PeCDD	M+2/M+4	0.63	1.32-1.78	y	98.2	70.0 - 130
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.30	1.05-1.43	y	104	70.0 - 130
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.22	1.05-1.43	y	102	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	101	70.0 - 130
13C-OCDD	M+2/M+4	0.90	0.76-1.02	y	202	140 - 260
13C-2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	y	104	70.0 - 130
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	101	70.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	99.4	70.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	97.1	70.0 - 130
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	98.7	70.0 - 130
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	98.7	70.0 - 130
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	95.8	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37-0.51	y	97.3	70.0 - 130
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37-0.51	y	97.1	70.0 - 130
13C-OCDF	M+2/M+4	0.89	0.76-1.02	y	193	140 - 260
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD					8.93	7.00 - 13.0

Analyst: [signature]

Date: 4/26/05

Client ID: 1613 CS3 050420H Filename: 050423D1 S:1 Acq:23-APR-05 11:22:51 ConCal: ST050423D1-1
Lab ID: ST050423D1-1 GC Column ID: DB-5 ICal: 1613vg7-4-23-05 wt/vol: 1.000 EndCAL: ST050423D1-8

	Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Rec	Qual
	2,3,7,8-TCDD	1.30e+07	0.78 y	1.06	27:04	9.78			* 2.5	*	101	
	1,2,3,7,8-PeCDD	4.42e+07	0.63 y	0.99	31:44	46.3			* 2.5	*		
	1,2,3,4,7,8-HxCDD	3.44e+07	1.25 y	1.11	35:04	46.2			* 2.5	*		
	1,2,3,6,7,8-HxCDD	3.87e+07	1.25 y	1.07	35:10	46.2			* 2.5	*		
	1,2,3,7,8,9-HxCDD	3.86e+07	1.27 y	1.15	35:29	46.1			* 2.5	*		
	1,2,3,4,6,7,8-HpCDD	3.11e+07	1.05 y	1.05	38:60	46.4			* 2.5	*		
	OCDD	5.66e+07	0.89 y	1.04	42:17	93.9			* 2.5			
	2,3,7,8-TCDF	1.62e+07	0.78 y	1.05	26:15	9.83			* 2.5	*		
	1,2,3,7,8-PeCDF	6.27e+07	1.57 y	0.95	30:31	49.0			* 2.5	*		
	2,3,4,7,8-PeCDF	6.64e+07	1.56 y	1.08	31:27	48.0			* 2.5	*		
	1,2,3,4,7,8-HxCDF	5.34e+07	1.27 y	1.19	34:11	47.5			* 2.5	*		
	1,2,3,6,7,8-HxCDF	6.15e+07	1.23 y	1.22	34:18	47.2			* 2.5	*		
	2,3,4,6,7,8-HxCDF	5.49e+07	1.23 y	1.20	34:54	46.5			* 2.5	*		
	1,2,3,7,8,9-HxCDF	4.44e+07	1.27 y	1.13	35:52	47.6			* 2.5	*		
	1,2,3,4,6,7,8-HpCDF	4.92e+07	1.03 y	1.38	37:42	47.1			* 2.5	*		
	1,2,3,4,7,8,9-HpCDF	3.89e+07	1.02 y	1.23	39:33	48.1			* 2.5	*		
	OCDF	6.71e+07	0.91 y	1.02	42:31	94.3			* 2.5	*		
IS	13C-2,3,7,8-TCDD	1.26e+08	0.78 y	1.12	27:03	101					101	
IS	13C-1,2,3,7,8-PeCDD	9.64e+07	0.63 y	0.89	31:43	98.2					98.2	
IS	13C-1,2,3,4,7,8-HxCDD	6.69e+07	1.30 y	0.83	35:03	104					104	
IS	13C-1,2,3,6,7,8-HxCDD	7.83e+07	1.22 y	1.00	35:10	102					102	
IS	13C-1,2,3,4,6,7,8-HpCDD	6.40e+07	1.06 y	0.82	38:59	101					101	
IS	13C-OCDD	1.16e+08	0.90 y	0.74	42:16	202					101	
IS	13C-2,3,7,8-TCDF	1.56e+08	0.77 y	1.02	26:14	104					104	
IS	13C-1,2,3,7,8-PeCDF	1.34e+08	1.57 y	0.90	30:30	101					101	
IS	13C-2,3,4,7,8-PeCDF	1.28e+08	1.58 y	0.87	31:27	99.4					99.4	
IS	13C-1,2,3,4,7,8-HxCDF	9.49e+07	0.52 y	1.27	34:09	97.1					97.1	
IS	13C-1,2,3,6,7,8-HxCDF	1.07e+08	0.52 y	1.40	34:17	98.7					98.7	
IS	13C-2,3,4,6,7,8-HxCDF	9.84e+07	0.52 y	1.29	34:54	98.7					98.7	
IS	13C-1,2,3,7,8,9-HxCDF	8.28e+07	0.51 y	1.12	35:51	95.8					95.8	
IS	13C-1,2,3,4,6,7,8-HpCDF	7.60e+07	0.45 y	1.01	37:41	97.3					97.3	
IS	13C-1,2,3,4,7,8,9-HpCDF	6.59e+07	0.44 y	0.88	39:32	97.1					97.1	
IS	13C-OCDF	1.40e+08	0.89 y	0.94	42:30	193					96.4	
C/Up	37Cl-2,3,7,8-TCDD	6.15e+06		0.62	27:04	8.93					22.3	
RS/RT	13C-1,2,3,4-TCDD	1.11e+08	0.80 y	1.00	26:25	100						
RS	13C-1,2,3,4-TCDF	1.48e+08	0.78 y	1.00	24:53	100						
RS/RT	13C-1,2,3,7,8,9-HxCDD	7.72e+07	1.25 y	1.00	35:28	100						

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	46.1	46.4		*	*
Total Penta-Dioxins	131	132		*	*
Total Hexa-Dioxins	190	190		*	*
Total Hepta-Dioxins	92.4	93.3		*	*
Total Tetra-Furans	28.1	28.5		*	*
Total Penta-Furans	187	187		*	*
Total Hexa-Furans	238	239		*	*
Total Hepta-Furans	95.5	95.9		*	*

Intergrations by Analyst: _____

Date: 4/26/05

Filename: 050423D1 S: 1 Acquired: 23-APR-05 11:22:51
Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Results:
Sample text: ST050423D1-1 1613 CS3 050420H

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk	2,3,7,8-TCDD	10.00	1.30e+07	0.78 y	27:04	-	1.03
2	Unk	1,2,3,7,8-PeCDD	50.00	4.42e+07	0.63 y	31:44	-	0.92
3	Unk	1,2,3,4,7,8-HxCDD	50.00	3.44e+07	1.25 y	35:04	-	1.03
4	Unk	1,2,3,6,7,8-HxCDD	50.00	3.87e+07	1.25 y	35:10	-	0.99
5	Unk	1,2,3,7,8,9-HxCDD	50.00	3.86e+07	1.27 y	35:29	-	1.06
6	Unk	1,2,3,4,6,7,8-HpCDD	50.00	3.11e+07	1.05 y	38:60	-	0.97
7	Unk	OCDD	100.00	5.66e+07	0.89 y	42:17	-	0.97
8	Unk	2,3,7,8-TCDF	10.00	1.62e+07	0.78 y	26:15	-	1.04
9	Unk	1,2,3,7,8-PeCDF	50.00	6.27e+07	1.57 y	30:31	-	0.93
10	Unk	2,3,4,7,8-PeCDF	50.00	6.64e+07	1.56 y	31:27	-	1.03
11	Unk	1,2,3,4,7,8-HxCDF	50.00	5.34e+07	1.27 y	34:11	-	1.13
12	Unk	1,2,3,6,7,8-HxCDF	50.00	6.15e+07	1.23 y	34:18	-	1.15
13	Unk	2,3,4,6,7,8-HxCDF	50.00	5.49e+07	1.23 y	34:54	-	1.12
14	Unk	1,2,3,7,8,9-HxCDF	50.00	4.44e+07	1.27 y	35:52	-	1.07
15	Unk	1,2,3,4,6,7,8-HpCDF	50.00	4.92e+07	1.03 y	37:42	-	1.29
16	Unk	1,2,3,4,7,8,9-HpCDF	50.00	3.89e+07	1.02 y	39:33	-	1.18
17	Unk	OCDF	100.00	6.71e+07	0.91 y	42:31	-	0.96
36	IS	13C-2,3,7,8-TCDD	100.00	1.25e+08	0.78 y	27:03	-	1.14
37	IS	13C-1,2,3,7,8-PeCDD	100.00	9.64e+07	0.63 y	31:43	-	0.87
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	6.69e+07	1.30 y	35:03	-	0.87
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	7.83e+07	1.22 y	35:10	-	1.01
40	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	6.40e+07	1.06 y	38:59	-	0.83
41	IS	13C-OCDD	200.00	1.16e+08	0.90 y	42:16	-	0.75
42	IS	13C-2,3,7,8-TCDF	100.00	1.56e+08	0.77 y	26:14	-	1.06
43	IS	13C-1,2,3,7,8-PeCDF	100.00	1.34e+08	1.57 y	30:30	-	0.91
44	IS	13C-2,3,4,7,8-PeCDF	100.00	1.28e+08	1.58 y	31:27	-	0.87
45	IS	13C-1,2,3,4,7,8-HxCDF	100.00	9.49e+07	0.52 y	34:09	-	1.23
46	IS	13C-1,2,3,6,7,8-HxCDF	100.00	1.07e+08	0.52 y	34:17	-	1.39
47	IS	13C-2,3,4,6,7,8-HxCDF	100.00	9.84e+07	0.52 y	34:54	-	1.28
48	IS	13C-1,2,3,7,8,9-HxCDF	100.00	8.28e+07	0.51 y	35:51	-	1.07
49	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	7.60e+07	0.45 y	37:41	-	0.98
50	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	6.59e+07	0.44 y	39:32	-	0.85
51	IS	13C-OCDF	200.00	1.40e+08	0.89 y	42:30	-	0.90
52	C/Up	37Cl-2,3,7,8-TCDD	10.00	6.15e+06		27:04	-	0.55
53	RS/RT	13C-1,2,3,4-TCDD	100.00	1.11e+08	0.80 y	26:25	-	1.00
54	RS	13C-1,2,3,4-TCDF	100.00	1.48e+08	0.78 y	24:53	-	1.00
55	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	7.72e+07	1.25 y	35:28	-	1.00

Filename: 050423D1 S: 1 Acquired: 23-APR-05 11:22:51
Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Results:
Sample text: ST050423D1-1 1613 CS3 050420H

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
18	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.03
19	Tot	TCDD EMPC	0.00	-	- n	-	-	1.03
20	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.92
21	Tot	PeCDD EMPC	0.00	-	- n	-	-	0.92
22	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	1.03
23	Tot	HxCDD EMPC	0.00	-	- n	-	-	1.03
24	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	0.97
25	Tot	HpCDD EMPC	0.00	-	- n	-	-	0.97
26	Tot	Total Tetra-Furans	0.00	-	- n	-	-	1.04
27	Tot	TCDF EMPC	0.00	-	- n	-	-	1.04
28	Tot	1st Func. Penta-Furans	0.00	-	- n	-	-	0.98
29	Tot	1st Func. PeCDF EMPC	0.00	-	- n	-	-	0.98
30	Tot	Total Penta-Furans	0.00	-	- n	-	-	0.98
31	Tot	PeCDF EMPC	0.00	-	- n	-	-	0.98
32	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.12
33	Tot	HxCDF EMPC	0.00	-	- n	-	-	1.12
34	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.24
35	Tot	HpCDF EMPC	0.00	-	- n	-	-	1.24

Filename: 050423D1 S: 3 Acquired: 23-APR-05 13:00:26
Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Results:
Sample text: ST050423D1-2 1613 CS0 050420E

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk	2,3,7,8-TCDD	0.25	4.23e+05	0.79 y	27:04	-	1.16
2	Unk	1,2,3,7,8-PeCDD	1.25	1.63e+06	0.61 y	31:44	-	1.14
3	Unk	1,2,3,4,7,8-HxCDD	1.25	1.33e+06	1.27 y	35:05	-	1.31
4	Unk	1,2,3,6,7,8-HxCDD	1.25	1.53e+06	1.26 y	35:11	-	1.27
5	Unk	1,2,3,7,8,9-HxCDD	1.25	1.51e+06	1.28 y	35:29	-	1.36
6	Unk	1,2,3,4,6,7,8-HpCDD	1.25	1.29e+06	0.99 y	39:00	-	1.22
7	Unk	OCDD	2.50	2.22e+06	0.83 y	42:18	-	1.20
8	Unk	2,3,7,8-TCDF	0.25	5.47e+05	0.77 y	26:15	-	1.19
9	Unk	1,2,3,7,8-PeCDF	1.25	2.26e+06	1.57 y	30:32	-	1.12
10	Unk	2,3,4,7,8-PeCDF	1.25	2.52e+06	1.52 y	31:28	-	1.26
11	Unk	1,2,3,4,7,8-HxCDF	1.25	2.09e+06	1.26 y	34:11	-	1.39
12	Unk	1,2,3,6,7,8-HxCDF	1.25	2.37e+06	1.27 y	34:18	-	1.41
13	Unk	2,3,4,6,7,8-HxCDF	1.25	2.21e+06	1.29 y	34:54	-	1.42
14	Unk	1,2,3,7,8,9-HxCDF	1.25	1.84e+06	1.22 y	35:53	-	1.30
15	Unk	1,2,3,4,6,7,8-HpCDF	1.25	2.05e+06	1.08 y	37:43	-	1.62
16	Unk	1,2,3,4,7,8,9-HpCDF	1.25	1.53e+06	1.08 y	39:33	-	1.39
17	Unk	OCDF	2.50	2.73e+06	0.86 y	42:31	-	1.15
36	IS	13C-2,3,7,8-TCDD	100.00	1.46e+08	0.79 y	27:03	-	1.12
37	IS	13C-1,2,3,7,8-PeCDD	100.00	1.14e+08	0.62 y	31:43	-	0.88
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	8.13e+07	1.27 y	35:04	-	0.82
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	9.61e+07	1.26 y	35:10	-	0.97
40	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	8.44e+07	1.06 y	38:60	-	0.85
41	IS	13C-OCDD	200.00	1.48e+08	0.89 y	42:17	-	0.75
42	IS	13C-2,3,7,8-TCDF	100.00	1.84e+08	0.78 y	26:14	-	1.01
43	IS	13C-1,2,3,7,8-PeCDF	100.00	1.62e+08	1.59 y	30:31	-	0.89
44	IS	13C-2,3,4,7,8-PeCDF	100.00	1.61e+08	1.58 y	31:27	-	0.88
45	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.20e+08	0.51 y	34:09	-	1.21
46	IS	13C-1,2,3,6,7,8-HxCDF	100.00	1.34e+08	0.54 y	34:17	-	1.35
47	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.24e+08	0.53 y	34:54	-	1.26
48	IS	13C-1,2,3,7,8,9-HxCDF	100.00	1.13e+08	0.52 y	35:52	-	1.14
49	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	1.01e+08	0.45 y	37:42	-	1.02
50	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	8.82e+07	0.45 y	39:33	-	0.89
51	IS	13C-OCDF	200.00	1.90e+08	0.89 y	42:30	-	0.96
52	C/Up	37Cl-2,3,7,8-TCDD	0.25	2.16e+05		27:04	-	0.66
53	RS/RT	13C-1,2,3,4-TCDD	100.00	1.31e+08	0.80 y	26:26	-	1.00
54	RS	13C-1,2,3,4-TCDF	100.00	1.83e+08	0.79 y	24:54	-	1.00
55	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	9.90e+07	1.27 y	35:28	-	1.00

Filename: 050423D1 S: 3 Acquired: 23-APR-05 13:00:26
Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Results:
Sample text: ST050423D1-2 1613 CS0 050420E

	Typ	Name	Amount	Resp	RA	RT	RF	RRP
18	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.16
19	Tot	TCDD EMPC	0.00	-	- n	-	-	1.16
20	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	1.14
21	Tot	PeCDD EMPC	0.00	-	- n	-	-	1.14
22	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	1.31
23	Tot	HxCDD EMPC	0.00	-	- n	-	-	1.31
24	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	1.22
25	Tot	HpCDD EMPC	0.00	-	- n	-	-	1.22
26	Tot	Total Tetra-Furans	0.00	-	- n	-	-	1.19
27	Tot	TCDF EMPC	0.00	-	- n	-	-	1.19
28	Tot	1st Punc. Penta-Furans	0.00	-	- n	-	-	1.19
29	Tot	1st Punc. PeCDF EMPC	0.00	-	- n	-	-	1.19
30	Tot	Total Penta-Furans	0.00	-	- n	-	-	1.19
31	Tot	PeCDF EMPC	0.00	-	- n	-	-	1.19
32	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.38
33	Tot	HxCDF EMPC	0.00	-	- n	-	-	1.38
34	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.51
35	Tot	HpCDF EMPC	0.00	-	- n	-	-	1.51

Filename: 050423D1 S: 4 Acquired: 23-APR-05 13:49:12
Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Results:
Sample text: ST050423D1-3 1613 CS1 050420F

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk	2,3,7,8-TCDD	0.50	7.03e+05	0.84 y	27:04	-	1.02
2	Unk	1,2,3,7,8-PeCDD	2.50	2.53e+06	0.62 y	31:44	-	0.94
3	Unk	1,2,3,4,7,8-HxCDD	2.50	1.84e+06	1.22 y	35:05	-	1.03
4	Unk	1,2,3,6,7,8-HxCDD	2.50	2.20e+06	1.24 y	35:11	-	1.02
5	Unk	1,2,3,7,8,9-HxCDD	2.50	2.27e+06	1.27 y	35:29	-	1.15
6	Unk	1,2,3,4,6,7,8-HpCDD	2.50	1.82e+06	1.00 y	39:00	-	0.99
7	Unk	OCDD	5.00	3.08e+06	0.97 y	42:18	-	0.95
8	Unk	2,3,7,8-TCDF	0.50	9.26e+05	0.80 y	26:15	-	1.03
9	Unk	1,2,3,7,8-PeCDF	2.50	3.61e+06	1.53 y	30:32	-	0.90
10	Unk	2,3,4,7,8-PeCDF	2.50	3.97e+06	1.56 y	31:28	-	1.02
11	Unk	1,2,3,4,7,8-HxCDF	2.50	3.11e+06	1.23 y	34:11	-	1.11
12	Unk	1,2,3,6,7,8-HxCDF	2.50	3.61e+06	1.24 y	34:18	-	1.15
13	Unk	2,3,4,6,7,8-HxCDF	2.50	3.24e+06	1.27 y	34:55	-	1.14
14	Unk	1,2,3,7,8,9-HxCDF	2.50	2.62e+06	1.26 y	35:53	-	1.06
15	Unk	1,2,3,4,6,7,8-HpCDF	2.50	2.88e+06	1.01 y	37:43	-	1.28
16	Unk	1,2,3,4,7,8,9-HpCDF	2.50	2.21e+06	0.99 y	39:33	-	1.12
17	Unk	OCDF	5.00	3.95e+06	0.92 y	42:31	-	0.96
36	IS	13C-2,3,7,8-TCDD	100.00	1.38e+08	0.77 y	27:03	-	1.12
37	IS	13C-1,2,3,7,8-PeCDD	100.00	1.08e+08	0.64 y	31:43	-	0.87
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	7.12e+07	1.26 y	35:04	-	0.81
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	8.65e+07	1.25 y	35:10	-	0.98
40	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	7.35e+07	1.05 y	38:60	-	0.84
41	IS	13C-OCDD	200.00	1.29e+08	0.90 y	42:17	-	0.74
42	IS	13C-2,3,7,8-TCDF	100.00	1.80e+08	0.79 y	26:14	-	1.01
43	IS	13C-1,2,3,7,8-PeCDF	100.00	1.60e+08	1.58 y	30:31	-	0.90
44	IS	13C-2,3,4,7,8-PeCDF	100.00	1.55e+08	1.57 y	31:27	-	0.87
45	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.12e+08	0.52 y	34:10	-	1.27
46	IS	13C-1,2,3,6,7,8-HxCDF	100.00	1.25e+08	0.52 y	34:17	-	1.42
47	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.14e+08	0.53 y	34:55	-	1.30
48	IS	13C-1,2,3,7,8,9-HxCDF	100.00	9.90e+07	0.52 y	35:52	-	1.13
49	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	9.04e+07	0.45 y	37:42	-	1.03
50	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	7.88e+07	0.46 y	39:33	-	0.90
51	IS	13C-OCDF	200.00	1.64e+08	0.89 y	42:31	-	0.93
52	C/Up	37Cl-2,3,7,8-TCDD	0.50	3.88e+05		27:05	-	0.63
53	RS/RT	13C-1,2,3,4-TCDD	100.00	1.23e+08	0.80 y	26:26	-	1.00
54	RS	13C-1,2,3,4-TCDF	100.00	1.79e+08	0.78 y	24:54	-	1.00
55	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	8.78e+07	1.28 y	35:29	-	1.00

Filename: 050423D1 S: 4 Acquired: 23-APR-05 13:49:12
Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Results:
Sample text: ST050423D1-3 1613 CS1 050420F

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
18	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.02
19	Tot	TCDD EMPC	0.00	-	- n	-	-	1.02
20	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.94
21	Tot	PeCDD EMPC	0.00	-	- n	-	-	0.94
22	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	1.07
23	Tot	HxCDD EMPC	0.00	-	- n	-	-	1.07
24	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	0.99
25	Tot	HpCDD EMPC	0.00	-	- n	-	-	0.99
26	Tot	Total Tetra-Furans	0.00	-	- n	-	-	1.03
27	Tot	TCDF EMPC	0.00	-	- n	-	-	1.03
28	Tot	1st Func. Penta-Furans	0.00	-	- n	-	-	0.96
29	Tot	1st Func. PeCDF EMPC	0.00	-	- n	-	-	0.96
30	Tot	Total Penta-Furans	0.00	-	- n	-	-	0.96
31	Tot	PeCDF EMPC	0.00	-	- n	-	-	0.96
32	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.12
33	Tot	HxCDF EMPC	0.00	-	- n	-	-	1.12
34	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.20
35	Tot	HpCDF EMPC	0.00	-	- n	-	-	1.20

Filename: 050423D1 S: 5 Acquired: 23-APR-05 14:37:59
Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Results:
Sample text: ST050423D1-4 1613 CS2 050420G

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk	2,3,7,8-TCDD	2.00	2.83e+06	0.79 y	27:04	-	1.05
2	Unk	1,2,3,7,8-PeCDD	10.00	1.05e+07	0.61 y	31:44	-	0.97
3	Unk	1,2,3,4,7,8-HxCDD	10.00	7.64e+06	1.26 y	35:05	-	1.11
4	Unk	1,2,3,6,7,8-HxCDD	10.00	8.92e+06	1.26 y	35:11	-	1.02
5	Unk	1,2,3,7,8,9-HxCDD	10.00	8.69e+06	1.27 y	35:29	-	1.11
6	Unk	1,2,3,4,6,7,8-HpCDD	10.00	7.28e+06	1.03 y	39:01	-	1.00
7	Unk	OCDD	20.00	1.30e+07	0.88 y	42:18	-	0.99
8	Unk	2,3,7,8-TCDF	2.00	3.66e+06	0.81 y	26:16	-	1.03
9	Unk	1,2,3,7,8-PeCDF	10.00	1.48e+07	1.54 y	30:32	-	0.93
10	Unk	2,3,4,7,8-PeCDF	10.00	1.63e+07	1.55 y	31:27	-	1.06
11	Unk	1,2,3,4,7,8-HxCDF	10.00	1.32e+07	1.28 y	34:11	-	1.18
12	Unk	1,2,3,6,7,8-HxCDF	10.00	1.51e+07	1.23 y	34:18	-	1.17
13	Unk	2,3,4,6,7,8-HxCDF	10.00	1.33e+07	1.28 y	34:55	-	1.18
14	Unk	1,2,3,7,8,9-HxCDF	10.00	1.08e+07	1.27 y	35:52	-	1.08
15	Unk	1,2,3,4,6,7,8-HpCDF	10.00	1.20e+07	1.05 y	37:43	-	1.35
16	Unk	1,2,3,4,7,8,9-HpCDF	10.00	9.49e+06	1.03 y	39:33	-	1.22
17	Unk	OCDF	20.00	1.63e+07	0.89 y	42:32	-	0.99
36	IS	13C-2,3,7,8-TCDD	100.00	1.34e+08	0.79 y	27:03	-	1.11
37	IS	13C-1,2,3,7,8-PeCDD	100.00	1.09e+08	0.63 y	31:43	-	0.90
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	6.86e+07	1.26 y	35:04	-	0.78
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	8.75e+07	1.26 y	35:10	-	1.00
40	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	7.29e+07	1.06 y	38:59	-	0.83
41	IS	13C-OCDD	200.00	1.31e+08	0.90 y	42:17	-	0.74
42	IS	13C-2,3,7,8-TCDF	100.00	1.78e+08	0.79 y	26:15	-	1.01
43	IS	13C-1,2,3,7,8-PeCDF	100.00	1.60e+08	1.59 y	30:31	-	0.91
44	IS	13C-2,3,4,7,8-PeCDF	100.00	1.54e+08	1.58 y	31:26	-	0.87
45	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.13e+08	0.52 y	34:10	-	1.28
46	IS	13C-1,2,3,6,7,8-HxCDF	100.00	1.29e+08	0.52 y	34:17	-	1.46
47	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.13e+08	0.53 y	34:54	-	1.28
48	IS	13C-1,2,3,7,8,9-HxCDF	100.00	9.94e+07	0.53 y	35:52	-	1.13
49	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	8.90e+07	0.45 y	37:42	-	1.01
50	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	7.80e+07	0.44 y	39:33	-	0.89
51	IS	13C-OCDF	200.00	1.64e+08	0.89 y	42:31	-	0.93
52	C/Up	37Cl-2,3,7,8-TCDD	2.00	1.40e+06		27:04	-	0.58
53	RS/RT	13C-1,2,3,4-TCDD	100.00	1.20e+08	0.79 y	26:26	-	1.00
54	RS	13C-1,2,3,4-TCDF	100.00	1.76e+08	0.79 y	24:54	-	1.00
55	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	8.80e+07	1.27 y	35:29	-	1.00

Filename: 050423D1 S: 5 Acquired: 23-APR-05 14:37:59
Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Results:
Sample text: ST050423D1-4 1613 CS2 050420G

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
18	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.05
19	Tot	TCDD EMPC	0.00	-	- n	-	-	1.05
20	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.97
21	Tot	PeCDD EMPC	0.00	-	- n	-	-	0.97
22	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	1.08
23	Tot	HxCDD EMPC	0.00	-	- n	-	-	1.08
24	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	1.00
25	Tot	HpCDD EMPC	0.00	-	- n	-	-	1.00
26	Tot	Total Tetra-Furans	0.00	-	- n	-	-	1.03
27	Tot	TCDF EMPC	0.00	-	- n	-	-	1.03
28	Tot	1st Func. Penta-Furans	0.00	-	- n	-	-	0.99
29	Tot	1st Func. PeCDF EMPC	0.00	-	- n	-	-	0.99
30	Tot	Total Penta-Furans	0.00	-	- n	-	-	0.99
31	Tot	PeCDF EMPC	0.00	-	- n	-	-	0.99
32	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.16
33	Tot	HxCDF EMPC	0.00	-	- n	-	-	1.16
34	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.29
35	Tot	HpCDF EMPC	0.00	-	- n	-	-	1.29

Filename: 050423D1 S: 6 Acquired: 23-APR-05 15:26:46
Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Results:
Sample text: ST050423D1-5 1613 CS4 050420I

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk	2,3,7,8-TCDD	40.00	5.74e+07	0.79 y	27:04	-	1.10
2	Unk	1,2,3,7,8-PeCDD	200.00	2.07e+08	0.62 y	31:44	-	1.00
3	Unk	1,2,3,4,7,8-HxCDD	200.00	1.51e+08	1.25 y	35:04	-	1.10
4	Unk	1,2,3,6,7,8-HxCDD	200.00	1.80e+08	1.26 y	35:11	-	1.09
5	Unk	1,2,3,7,8,9-HxCDD	200.00	1.70e+08	1.21 y	35:29	-	1.12
6	Unk	1,2,3,4,6,7,8-HpCDD	200.00	1.37e+08	1.02 y	38:60	-	1.06
7	Unk	OCDD	400.00	2.49e+08	0.91 y	42:17	-	1.05
8	Unk	2,3,7,8-TCDF	40.00	7.46e+07	0.79 y	26:15	-	1.07
9	Unk	1,2,3,7,8-PeCDF	200.00	2.88e+08	1.56 y	30:32	-	0.95
10	Unk	2,3,4,7,8-PeCDF	200.00	3.15e+08	1.57 y	31:27	-	1.07
11	Unk	1,2,3,4,7,8-HxCDF	200.00	2.46e+08	1.25 y	34:10	-	1.18
12	Unk	1,2,3,6,7,8-HxCDF	200.00	2.84e+08	1.26 y	34:17	-	1.24
13	Unk	2,3,4,6,7,8-HxCDF	200.00	2.63e+08	1.27 y	34:54	-	1.22
14	Unk	1,2,3,7,8,9-HxCDF	200.00	2.04e+08	1.26 y	35:52	-	1.14
15	Unk	1,2,3,4,6,7,8-HpCDF	200.00	2.23e+08	1.04 y	37:42	-	1.38
16	Unk	1,2,3,4,7,8,9-HpCDF	200.00	1.77e+08	1.03 y	39:33	-	1.28
17	Unk	OCDF	400.00	3.10e+08	0.91 y	42:31	-	1.03
36	IS	13C-2,3,7,8-TCDD	100.00	1.31e+08	0.78 y	27:03	-	1.10
37	IS	13C-1,2,3,7,8-PeCDD	100.00	1.04e+08	0.63 y	31:42	-	0.88
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	6.86e+07	1.27 y	35:03	-	0.85
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	8.27e+07	1.25 y	35:10	-	1.03
40	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	6.46e+07	1.06 y	38:59	-	0.80
41	IS	13C-OCDD	200.00	1.19e+08	0.92 y	42:17	-	0.74
42	IS	13C-2,3,7,8-TCDF	100.00	1.75e+08	0.78 y	26:14	-	1.01
43	IS	13C-1,2,3,7,8-PeCDF	100.00	1.52e+08	1.59 y	30:31	-	0.87
44	IS	13C-2,3,4,7,8-PeCDF	100.00	1.47e+08	1.59 y	31:26	-	0.85
45	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.04e+08	0.52 y	34:09	-	1.29
46	IS	13C-1,2,3,6,7,8-HxCDF	100.00	1.15e+08	0.52 y	34:17	-	1.43
47	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.08e+08	0.53 y	34:54	-	1.35
48	IS	13C-1,2,3,7,8,9-HxCDF	100.00	8.92e+07	0.53 y	35:52	-	1.11
49	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	8.08e+07	0.45 y	37:42	-	1.01
50	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	6.91e+07	0.45 y	39:32	-	0.86
51	IS	13C-OCDF	200.00	1.50e+08	0.90 y	42:31	-	0.93
52	C/Up	37Cl-2,3,7,8-TCDD	40.00	2.90e+07		27:04	-	0.61
53	RS/RT	13C-1,2,3,4-TCDD	100.00	1.18e+08	0.80 y	26:26	-	1.00
54	RS	13C-1,2,3,4-TCDF	100.00	1.74e+08	0.77 y	24:53	-	1.00
55	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	8.03e+07	1.28 y	35:28	-	1.00

Filename: 050423D1 S: 6 Acquired: 23-APR-05 15:26:46
Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Results:
Sample text: ST050423D1-5 1613 CS4 050420I

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
18	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.10
19	Tot	TCDD EMPC	0.00	-	- n	-	-	1.10
20	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	1.00
21	Tot	PeCDD EMPC	0.00	-	- n	-	-	1.00
22	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	1.10
23	Tot	HxCDD EMPC	0.00	-	- n	-	-	1.10
24	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	1.06
25	Tot	HpCDD EMPC	0.00	-	- n	-	-	1.06
26	Tot	Total Tetra-Furans	0.00	-	- n	-	-	1.07
27	Tot	TCDF EMPC	0.00	-	- n	-	-	1.07
28	Tot	1st Func. Penta-Furans	0.00	-	- n	-	-	1.01
29	Tot	1st Func. PeCDF EMPC	0.00	-	- n	-	-	1.01
30	Tot	Total Penta-Furans	0.00	-	- n	-	-	1.01
31	Tot	PeCDF EMPC	0.00	-	- n	-	-	1.01
32	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.20
33	Tot	HxCDF EMPC	0.00	-	- n	-	-	1.20
34	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.33
35	Tot	HpCDF EMPC	0.00	-	- n	-	-	1.33

Filename: 050423D1 S: 7 Acquired: 23-APR-05 16:15:33
Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Results:
Sample text: ST050423D1-6 1613 CS5 050420J

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk	2,3,7,8-TCDD	200.00	2.62e+08	0.78 y	27:04	-	0.98
2	Unk	1,2,3,7,8-PeCDD	1000.00	1.03e+09	0.62 y	31:43	-	0.97
3	Unk	1,2,3,4,7,8-HxCDD	1000.00	8.18e+08	1.25 y	35:03	-	1.10
4	Unk	1,2,3,6,7,8-HxCDD	1000.00	8.75e+08	1.26 y	35:10	-	1.04
5	Unk	1,2,3,7,8,9-HxCDD	1000.00	8.83e+08	1.25 y	35:27	-	1.11
6	Unk	1,2,3,4,6,7,8-HpCDD	1000.00	7.26e+08	1.03 y	38:58	-	1.06
7	Unk	OCDD	2000.00	1.35e+09	0.88 y	42:16	-	1.04
8	Unk	2,3,7,8-TCDF	200.00	3.37e+08	0.78 y	26:15	-	0.98
9	Unk	1,2,3,7,8-PeCDF	1000.00	1.41e+09	1.56 y	30:31	-	0.89
10	Unk	2,3,4,7,8-PeCDF	1000.00	1.56e+09	1.56 y	31:26	-	1.02
11	Unk	1,2,3,4,7,8-HxCDF	1000.00	1.28e+09	1.25 y	34:09	-	1.13
12	Unk	1,2,3,6,7,8-HxCDF	1000.00	1.39e+09	1.25 y	34:17	-	1.17
13	Unk	2,3,4,6,7,8-HxCDF	1000.00	1.28e+09	1.26 y	34:54	-	1.14
14	Unk	1,2,3,7,8,9-HxCDF	1000.00	1.08e+09	1.25 y	35:51	-	1.10
15	Unk	1,2,3,4,6,7,8-HpCDF	1000.00	1.16e+09	1.04 y	37:40	-	1.33
16	Unk	1,2,3,4,7,8,9-HpCDF	1000.00	8.99e+08	1.03 y	39:31	-	1.17
17	Unk	OCDF	2000.00	1.70e+09	0.93 y	42:30	-	1.01
36	IS	13C-2,3,7,8-TCDD	100.00	1.33e+08	0.79 y	27:02	-	1.15
37	IS	13C-1,2,3,7,8-PeCDD	100.00	1.06e+08	0.64 y	31:42	-	0.92
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	7.46e+07	1.28 y	35:03	-	0.86
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	8.45e+07	1.26 y	35:09	-	0.98
40	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	6.87e+07	1.04 y	38:58	-	0.80
41	IS	13C-OCDD	200.00	1.29e+08	0.92 y	42:15	-	0.75
42	IS	13C-2,3,7,8-TCDF	100.00	1.72e+08	0.79 y	26:14	-	1.03
43	IS	13C-1,2,3,7,8-PeCDF	100.00	1.59e+08	1.59 y	30:30	-	0.95
44	IS	13C-2,3,4,7,8-PeCDF	100.00	1.53e+08	1.57 y	31:25	-	0.91
45	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.13e+08	0.52 y	34:09	-	1.31
46	IS	13C-1,2,3,6,7,8-HxCDF	100.00	1.19e+08	0.53 y	34:16	-	1.37
47	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.12e+08	0.52 y	34:52	-	1.30
48	IS	13C-1,2,3,7,8,9-HxCDF	100.00	9.83e+07	0.53 y	35:50	-	1.14
49	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	8.76e+07	0.45 y	37:40	-	1.02
50	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	7.67e+07	0.45 y	39:31	-	0.89
51	IS	13C-OCDF	200.00	1.67e+08	0.90 y	42:29	-	0.97
52	C/Up	37Cl-2,3,7,8-TCDD	200.00	1.59e+08		27:03	-	0.69
53	RS/RT	13C-1,2,3,4-TCDD	100.00	1.15e+08	0.80 y	26:26	-	1.00
54	RS	13C-1,2,3,4-TCDF	100.00	1.68e+08	0.78 y	24:53	-	1.00
55	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	8.63e+07	1.27 y	35:27	-	1.00

Filename: 050423D1 S: 7 Acquired: 23-APR-05 16:15:33
Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Results:
Sample text: ST050423D1-6 1613 CS5 050420J

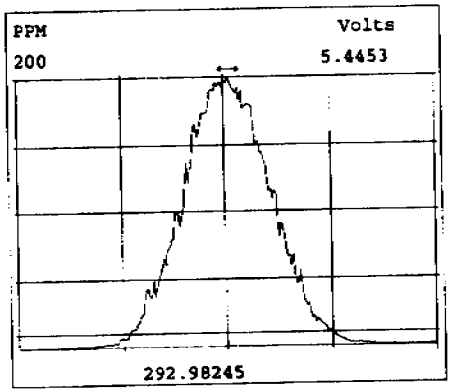
	Typ	Name	Amount	Resp	RA	RT	RF	RRF
18	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	0.98
19	Tot	TCDD EMPC	0.00	-	- n	-	-	0.98
20	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.97
21	Tot	PeCDD EMPC	0.00	-	- n	-	-	0.97
22	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	1.08
23	Tot	HxCDD EMPC	0.00	-	- n	-	-	1.08
24	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	1.06
25	Tot	HpCDD EMPC	0.00	-	- n	-	-	1.06
26	Tot	Total Tetra-Furans	0.00	-	- n	-	-	0.98
27	Tot	TCDF EMPC	0.00	-	- n	-	-	0.98
28	Tot	1st Func. Penta-Furans	0.00	-	- n	-	-	0.95
29	Tot	1st Func. PeCDF EMPC	0.00	-	- n	-	-	0.95
30	Tot	Total Penta-Furans	0.00	-	- n	-	-	0.95
31	Tot	PeCDF EMPC	0.00	-	- n	-	-	0.95
32	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.14
33	Tot	HxCDF EMPC	0.00	-	- n	-	-	1.14
34	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.26
35	Tot	HpCDF EMPC	0.00	-	- n	-	-	1.26

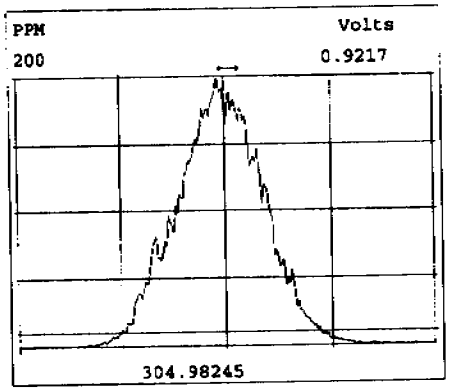
Alta Analytical Laboratory - Injection Log Run file: 050423d1 Instrument ID: VG-7 GC Column ID: DB-5

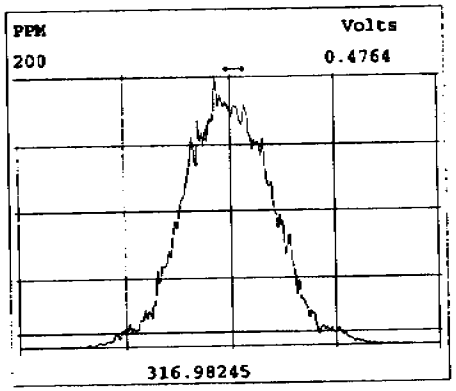
Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
050423D1	1	ST050423D1-1 1613 CS3 050420H	dms	23-APR-05	11:22:51	ST050423D1-1	ST050423D1-8
050423D1	2	SOLVENT BLANK	dms	23-APR-05	12:11:39	ST050423D1-1	ST050423D1-8
050423D1	3	ST050423D1-2 1613 CS0 050420E	dms	23-APR-05	13:00:26	ST050423D1-1	ST050423D1-8
050423D1	4	ST050423D1-3 1613 CS1 050420F	dms	23-APR-05	13:49:12	ST050423D1-1	ST050423D1-8
050423D1	5	ST050423D1-4 1613 CS2 050420G	dms	23-APR-05	14:37:59	ST050423D1-1	ST050423D1-8
050423D1	6	ST050423D1-5 1613 CS4 050420I	dms	23-APR-05	15:26:46	ST050423D1-1	ST050423D1-8
050423D1	7	ST050423D1-6 1613 CS5 050420J	dms	23-APR-05	16:15:33	ST050423D1-1	ST050423D1-8
050423D1	8	SOLVENT BLANK	dms	23-APR-05	17:04:20	ST050423D1-1	ST050423D1-8
050423D1	9	ST050423D1-7 1613 SSS L010608B	dms	23-APR-05	17:53:07	ST050423D1-1	ST050423D1-8

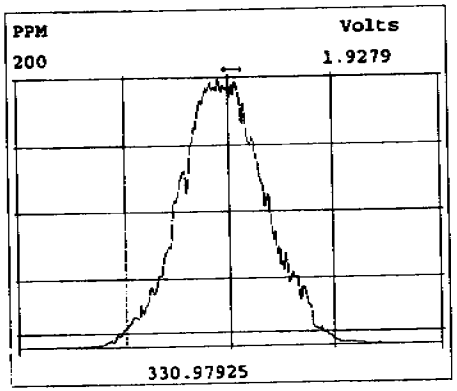
Peak Locate Examination:23-APR-2005:11:20 File:050423D1

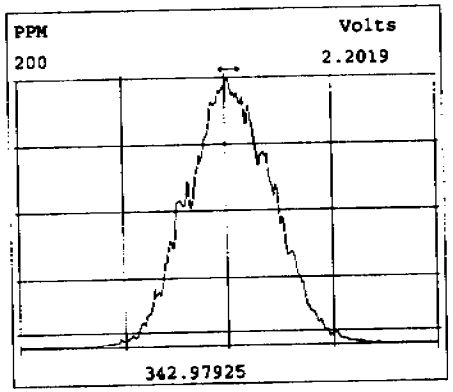
Experiment:OCDD_DB5 Function:1 Reference:PFK

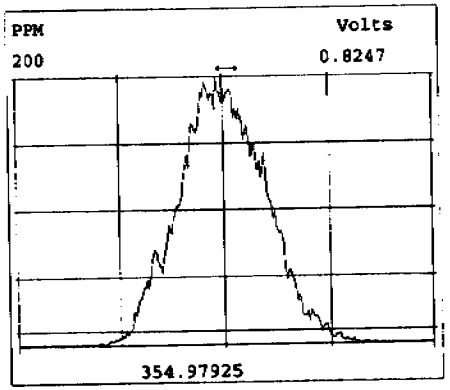


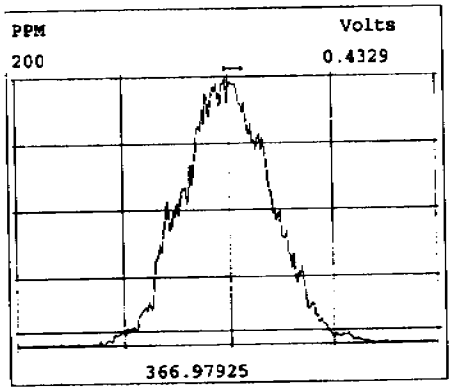


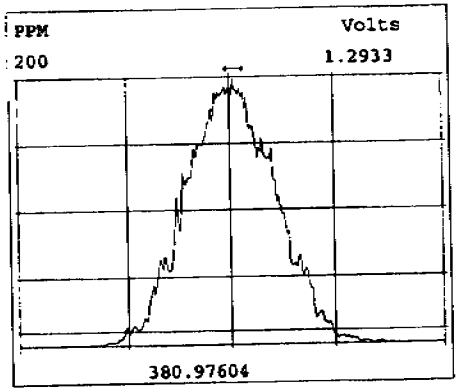


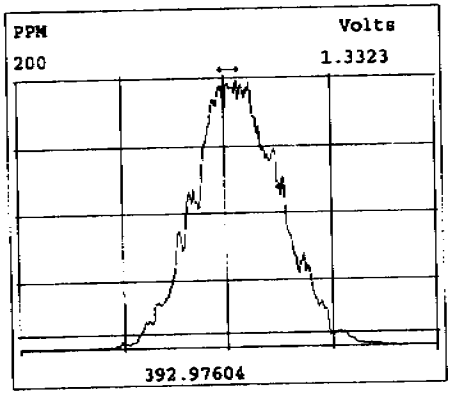


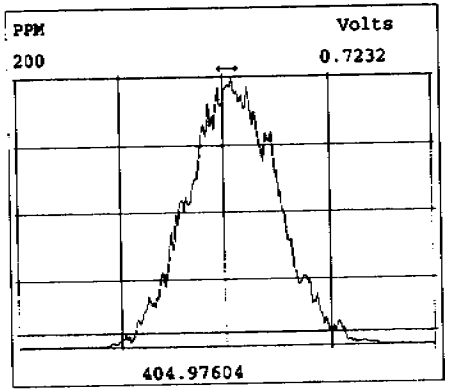


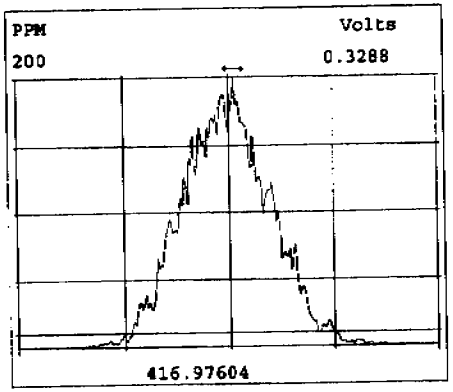






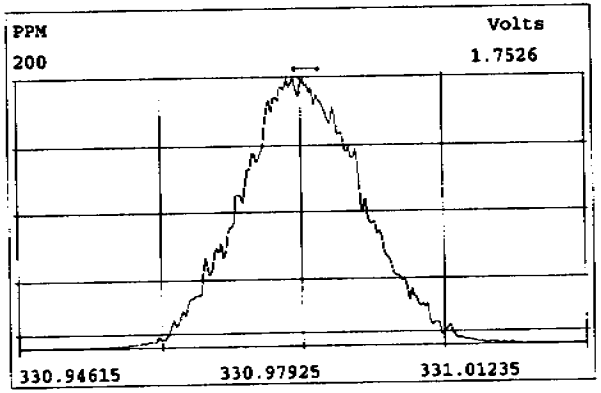


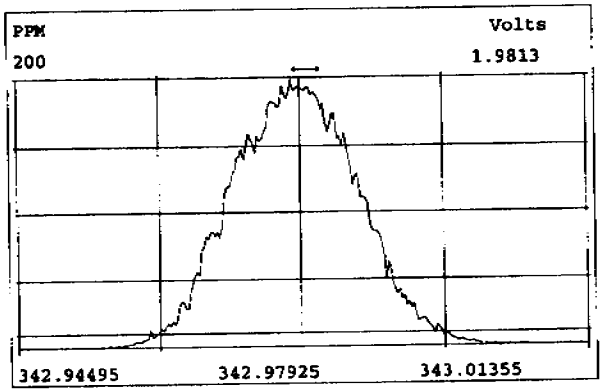


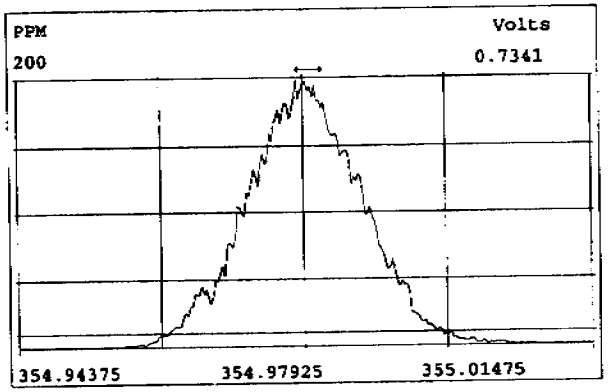


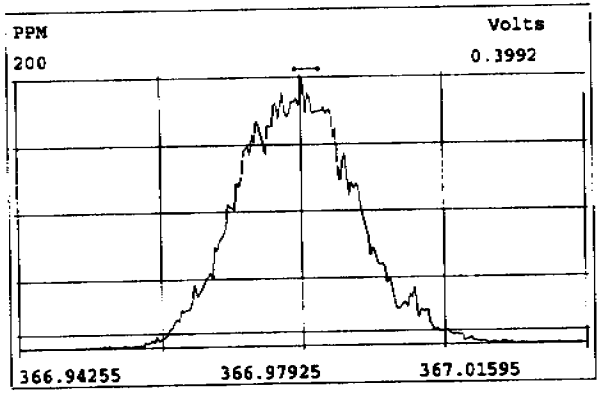
Peak Locate Examination:23-APR-2005:11:20 File:050423D1

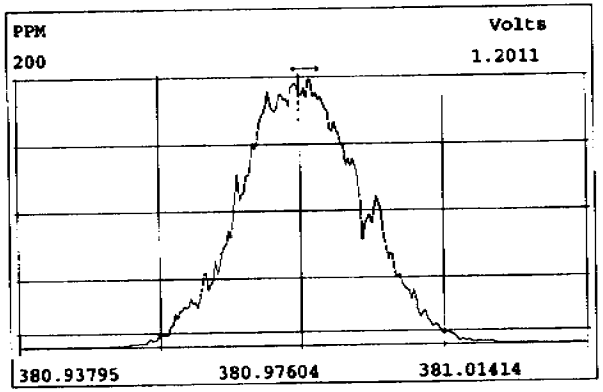
Experiment:OCDD_DB5 Function:2 Reference:PFK

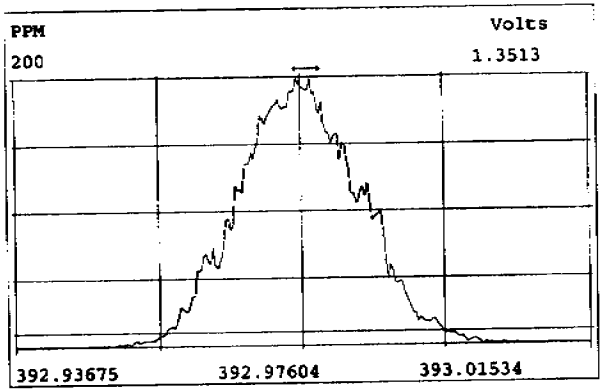


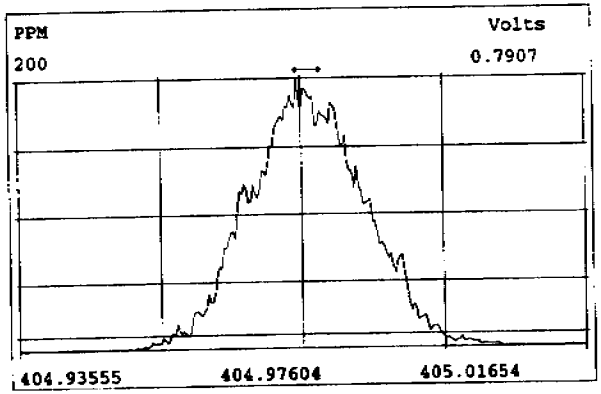


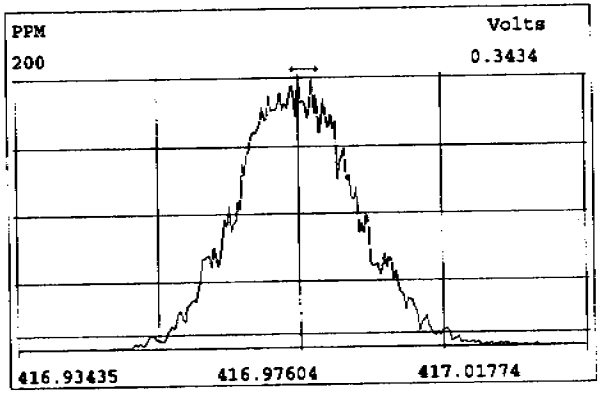






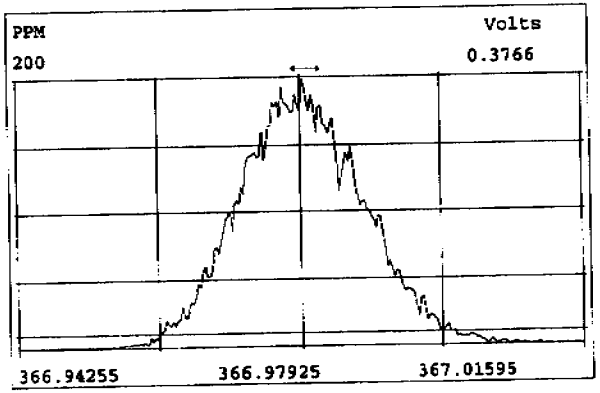


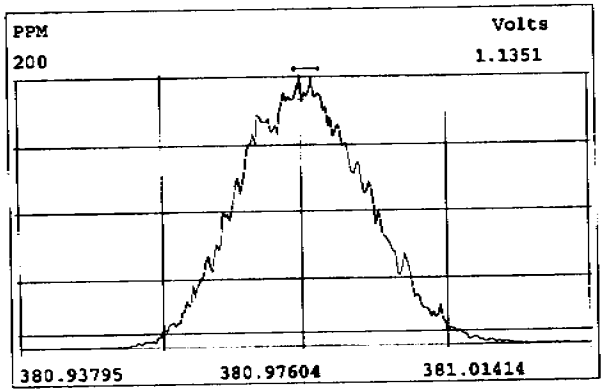


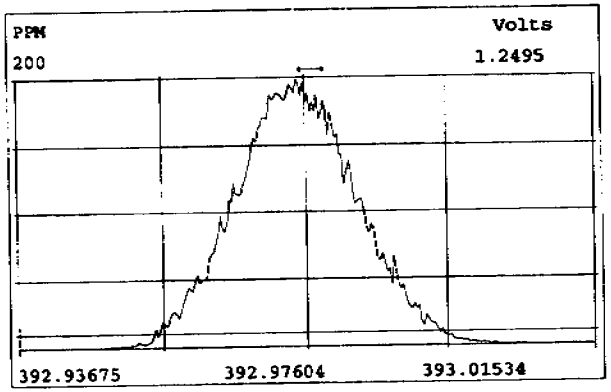


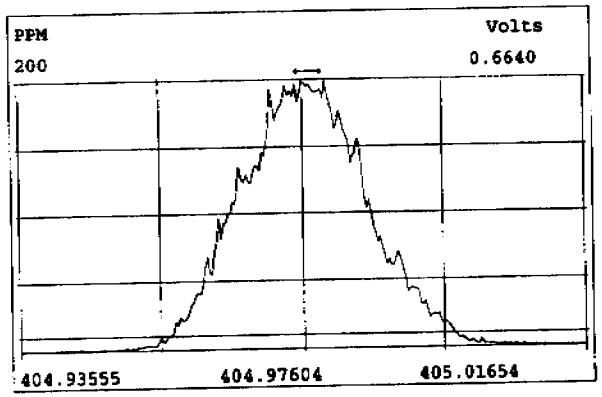
Peak Locate Examination:23-APR-2005:11:20 File:050423D1

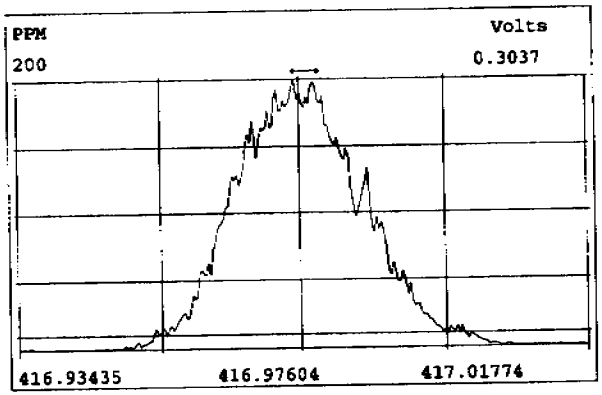
Experiment:OCDD_DB5 Function:3 Reference:PFK

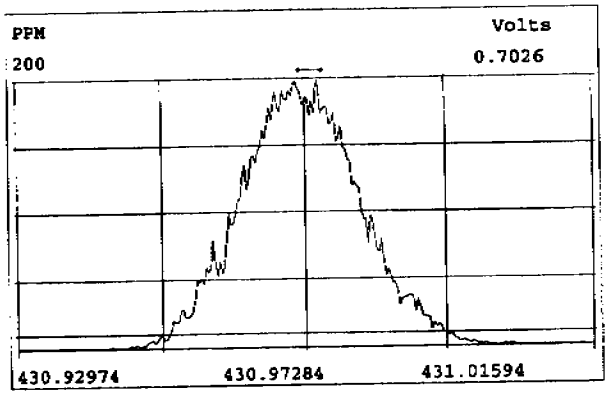


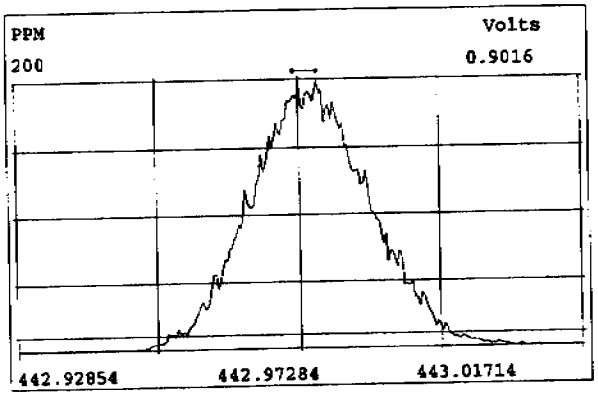


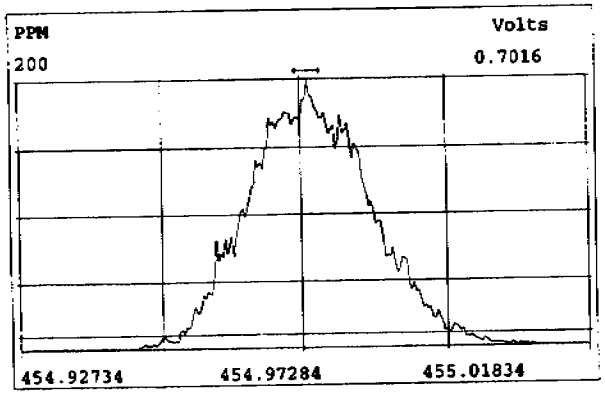






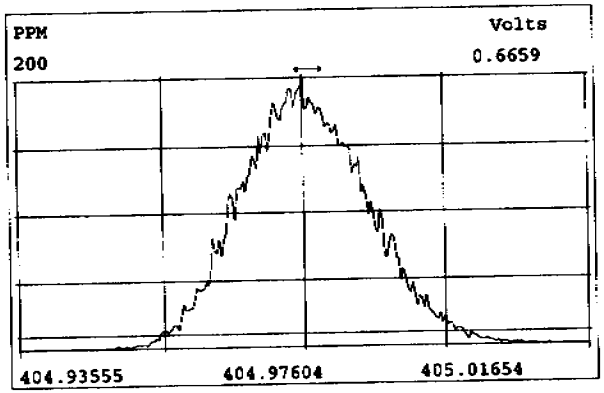


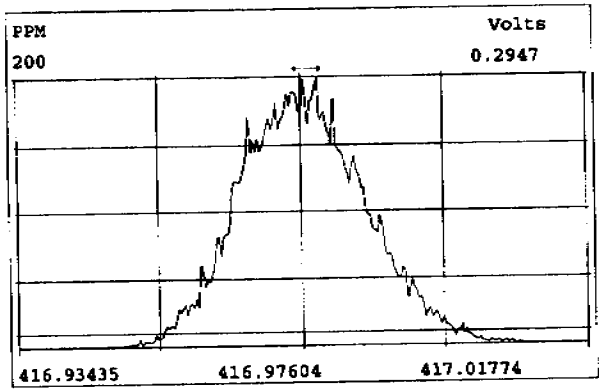


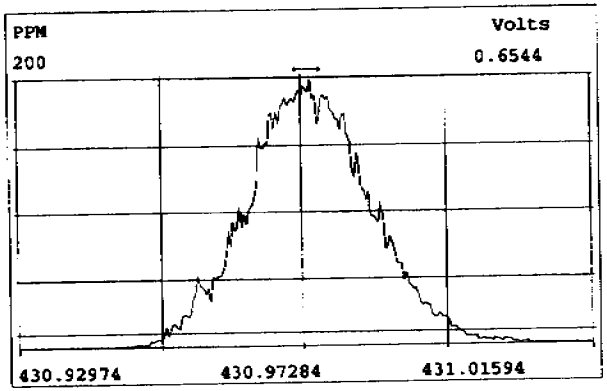


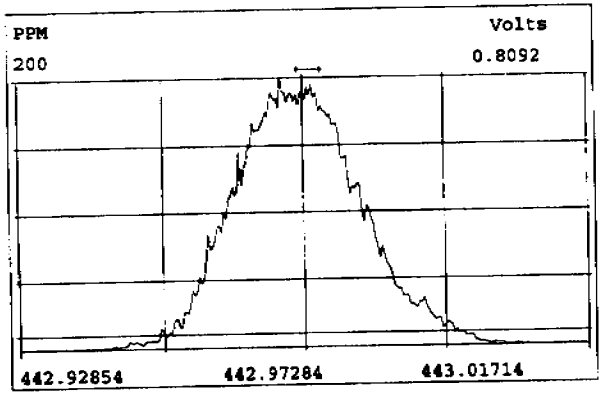
Peak Locate Examination:23-APR-2005:11:21 File:050423D1

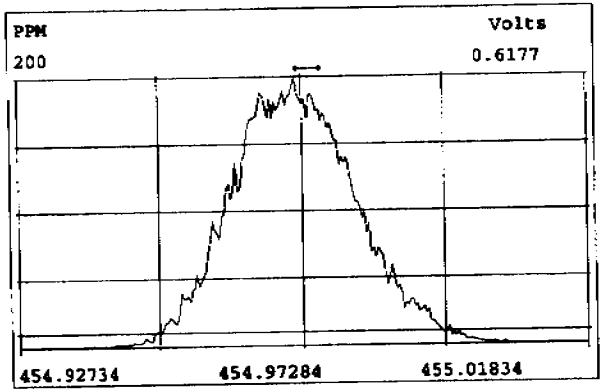
Experiment:OCDD_DB5 Function:4 Reference:PFK

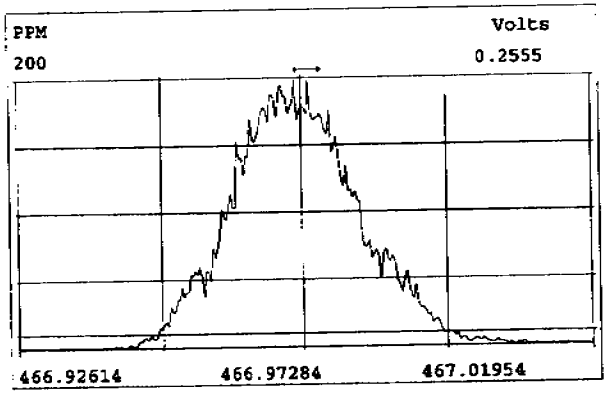


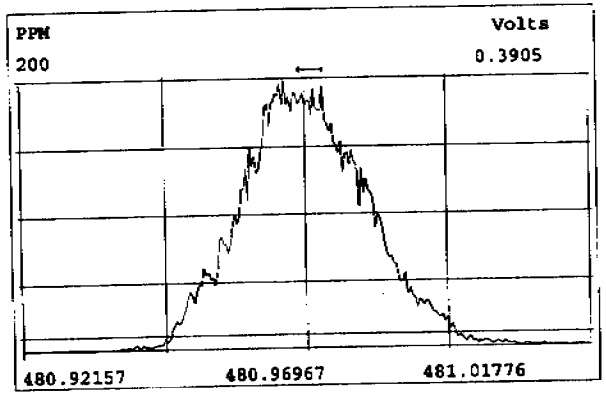






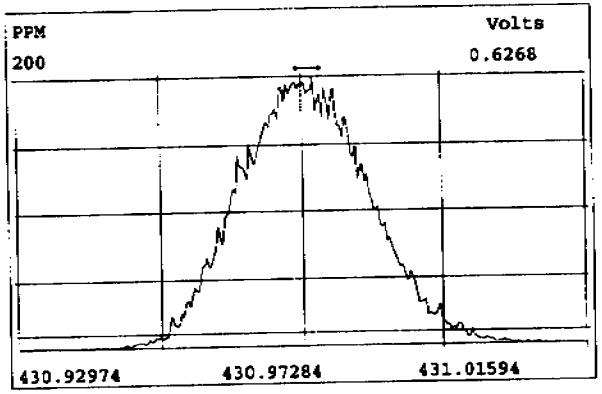


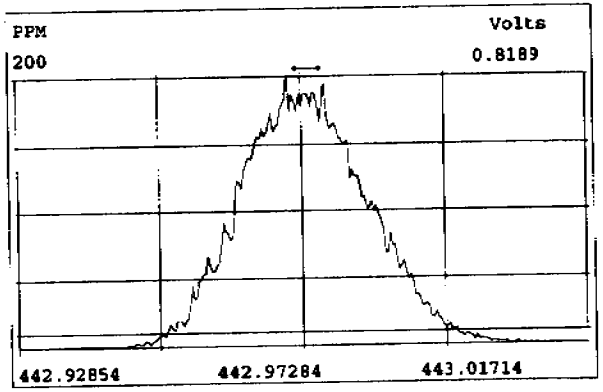


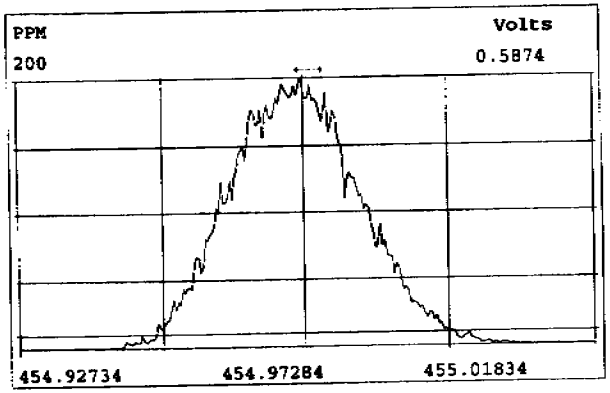


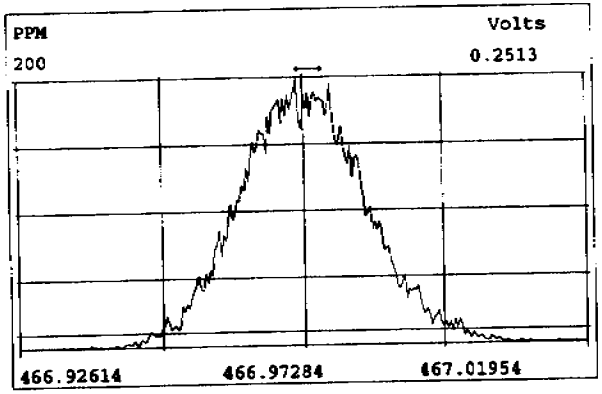
Peak Locate Examination:23-APR-2005:11:21 File:050423D1

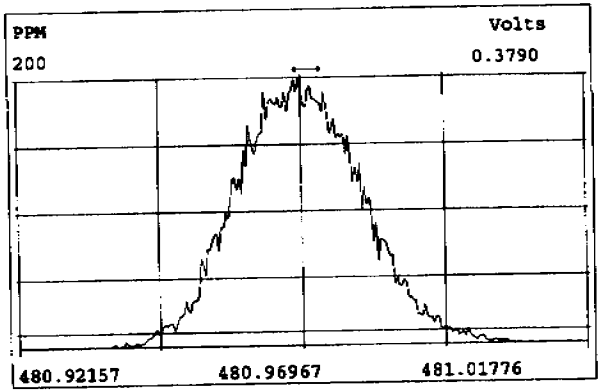
Experiment:OCDD_DB5 Function:5 Reference:PFK

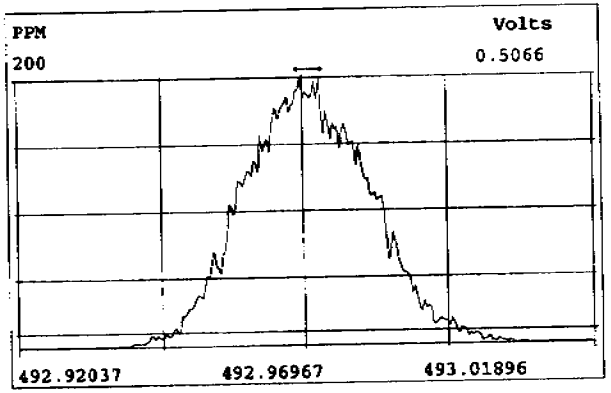


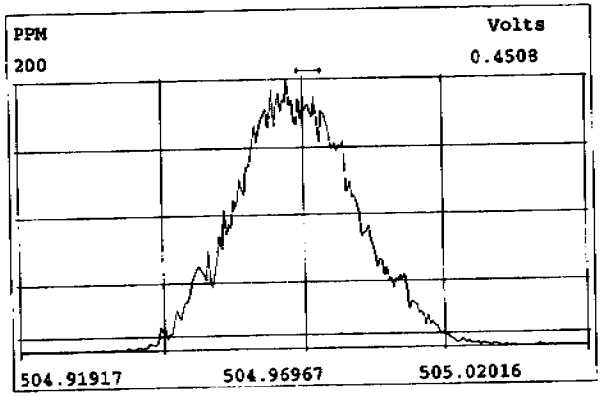


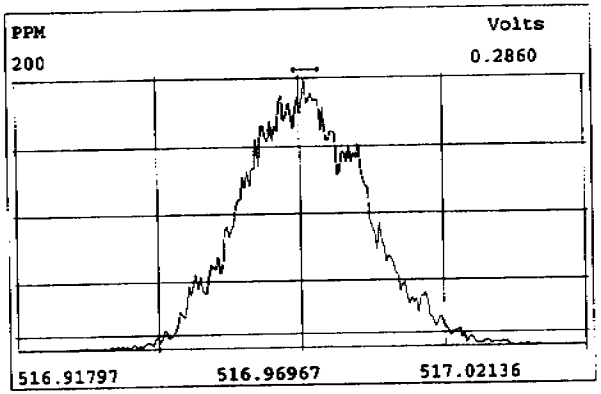




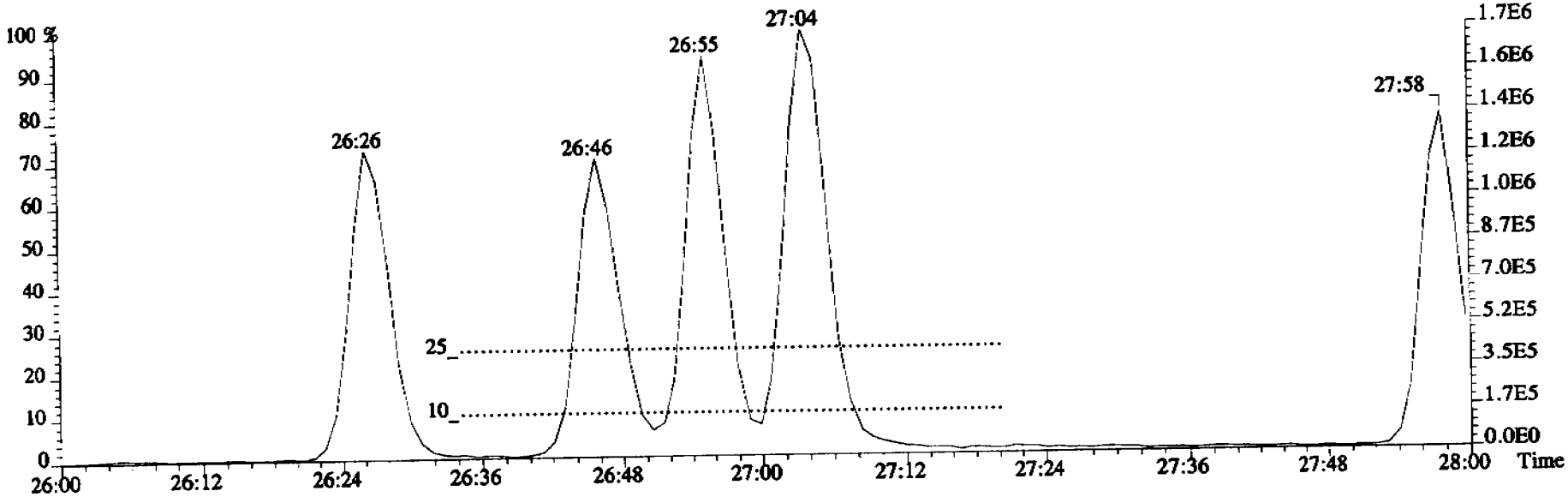




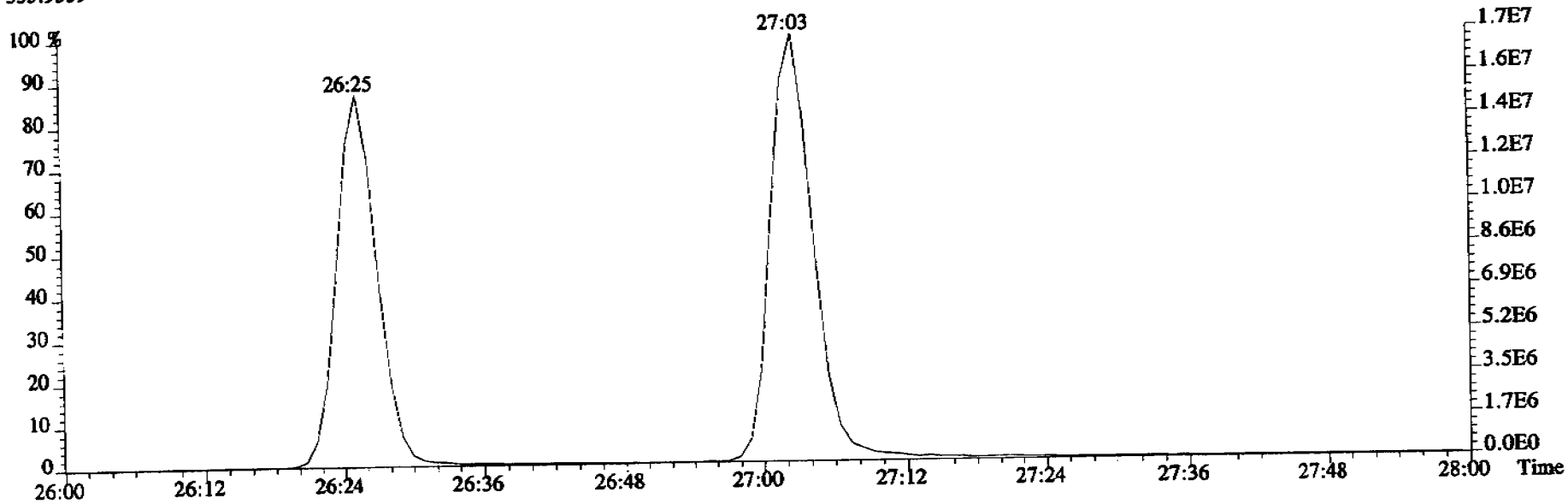


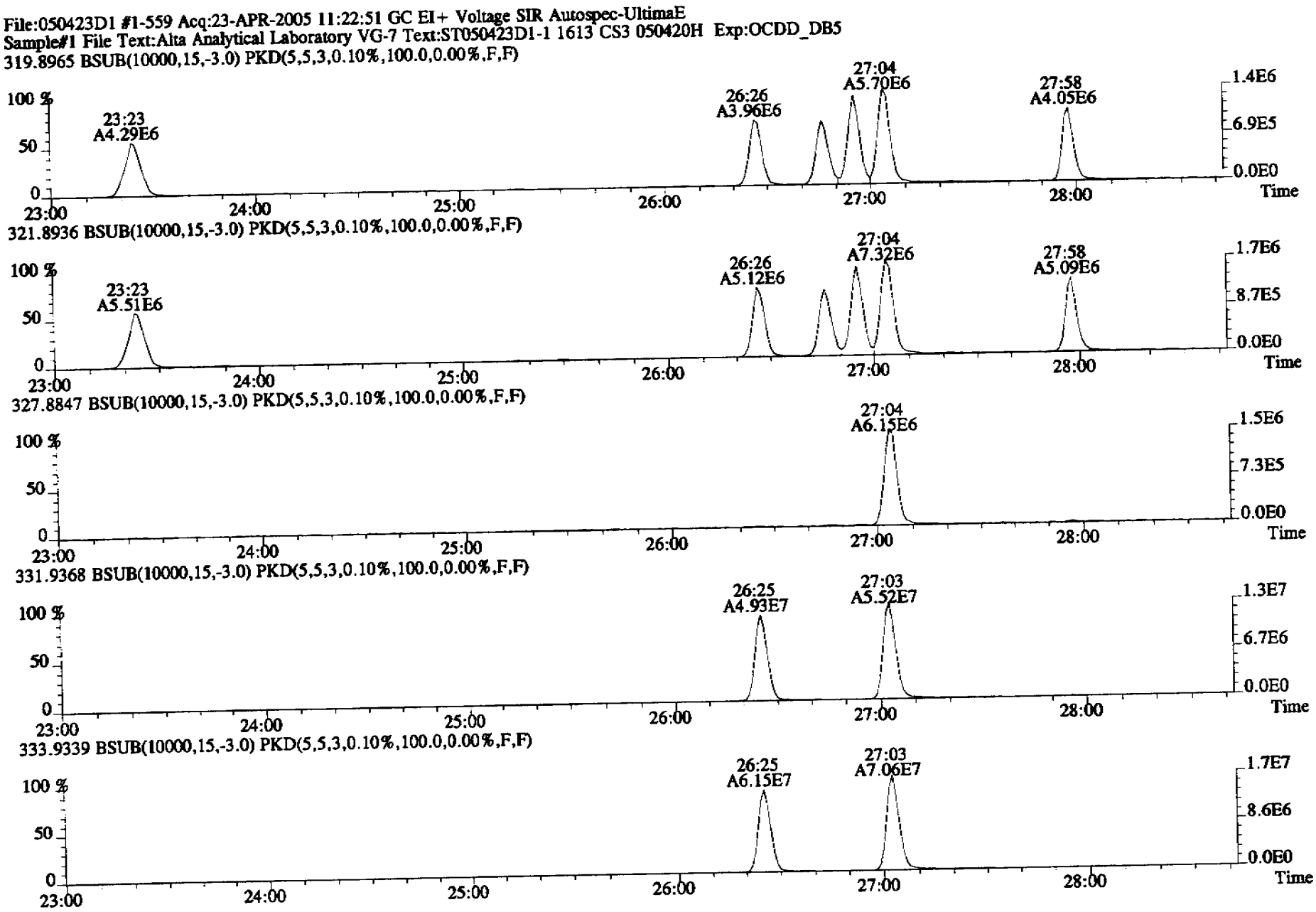


File:050423D1 #1-559 Acq:23-APR-2005 11:22:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-1 1613 CS3 050420H Exp:OCDD_DB5
321.8936



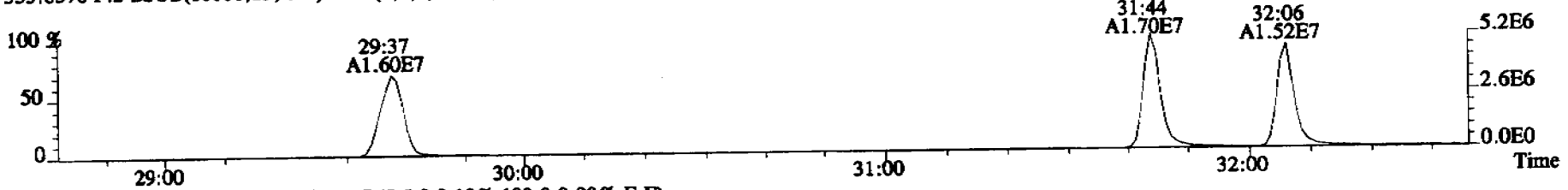
333.9339



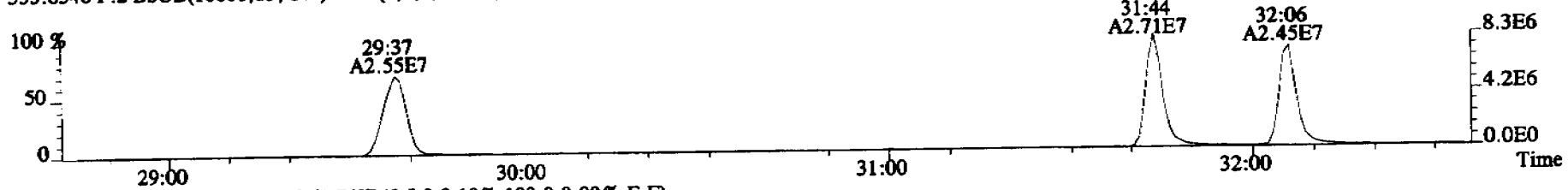

File:050423D1 #1-559 Acq:23-APR-2005 11:22:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-1 1613 CS3 050420H Exp:OCDD_DB5
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
23:23 A4.29E6
26:26 A3.96E6
27:04 A5.70E6
27:58 A4.05E6
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
23:23 A5.51E6
26:26 A5.12E6
27:04 A7.32E6
27:58 A5.09E6
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
27:04 A6.15E6
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:25 A4.93E7
27:03 A5.52E7
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:25 A6.15E7
27:03 A7.06E7
100 %
50
0
23:00
24:00
25:00
26:00
27:00
28:00
Time
1.4E6
6.9E5
0.0E0
1.7E6
8.7E5
1.5E6
7.3E5
1.3E7
6.7E6
1.7E7
8.6E6

File:050423D1 #1-273 Acq:23-APR-2005 11:22:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-1 1613 CS3 050420H Exp:OCDD_DB5

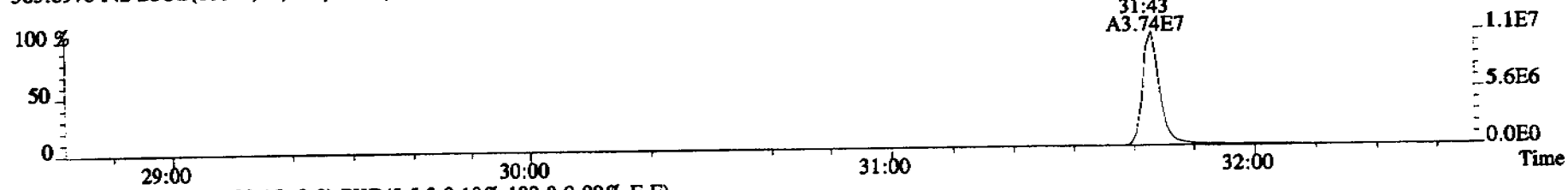
353.8576 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



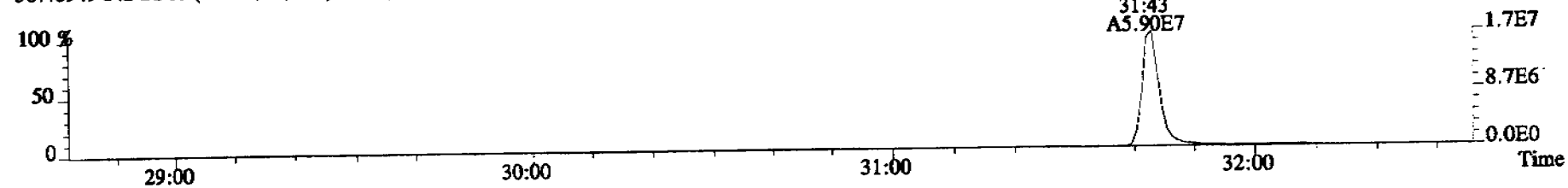
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



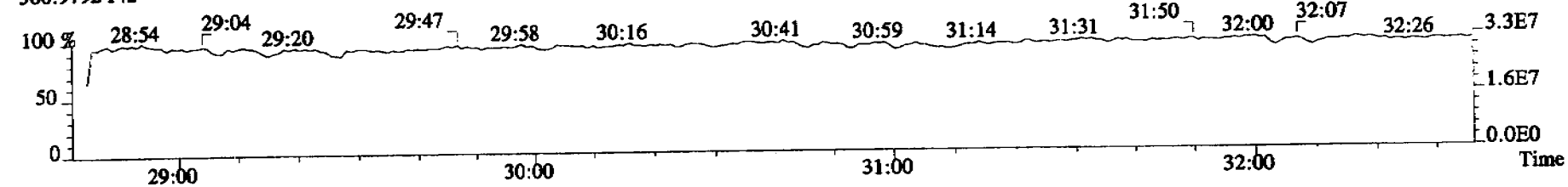
365.8978 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



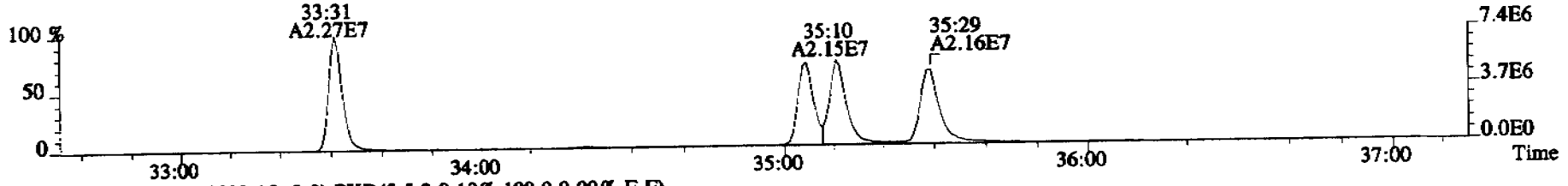
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



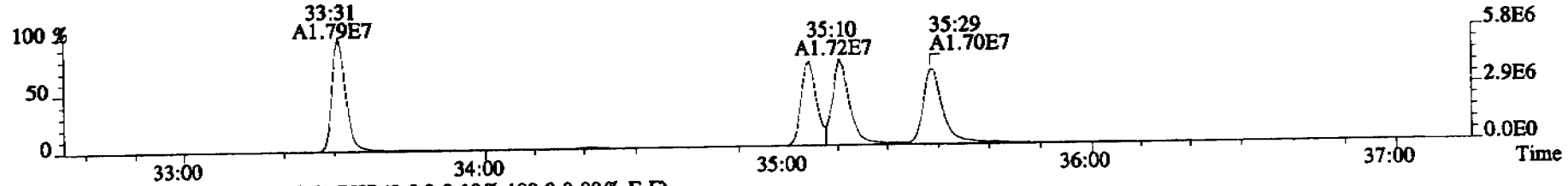
366.9792 F:2



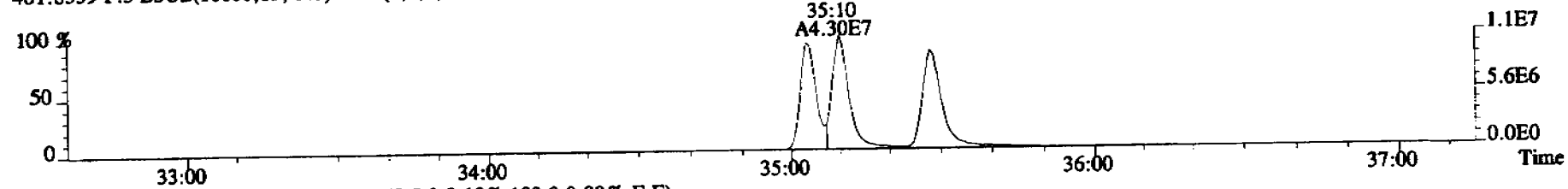
File:050423D1 #1-398 Acq:23-APR-2005 11:22:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-1 1613 CS3 050420H Exp:OCDD_DB5
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



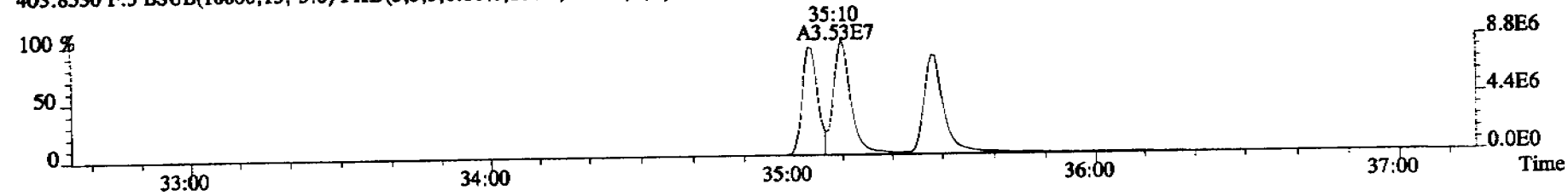
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



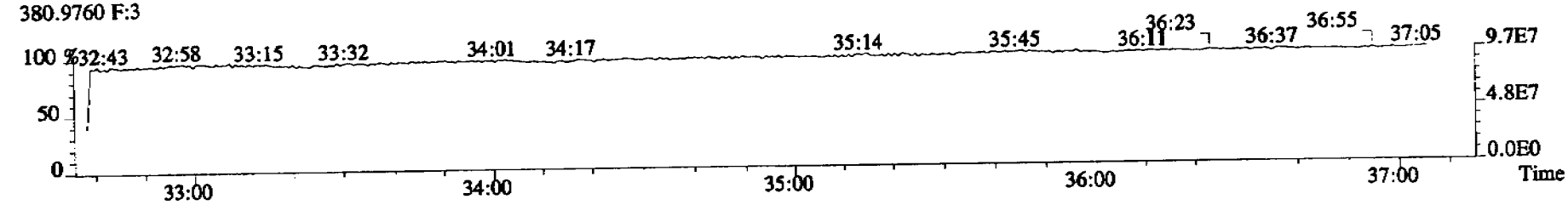
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



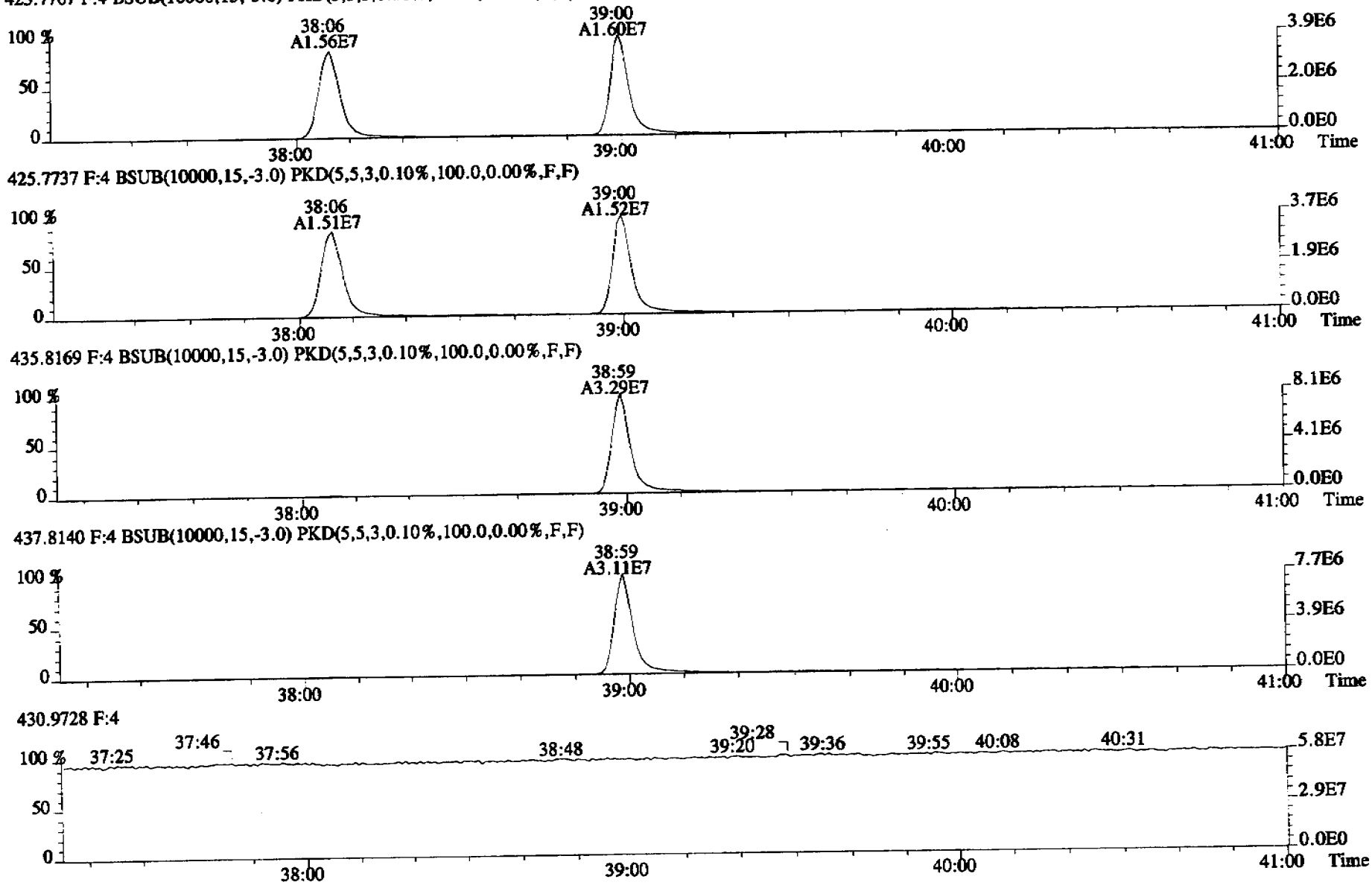
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



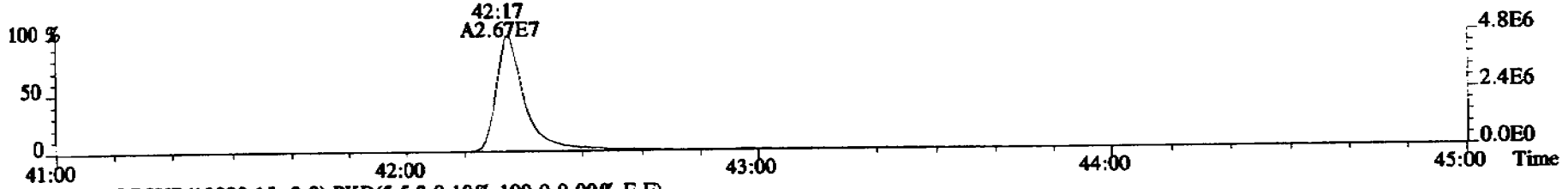
380.9760 F:3



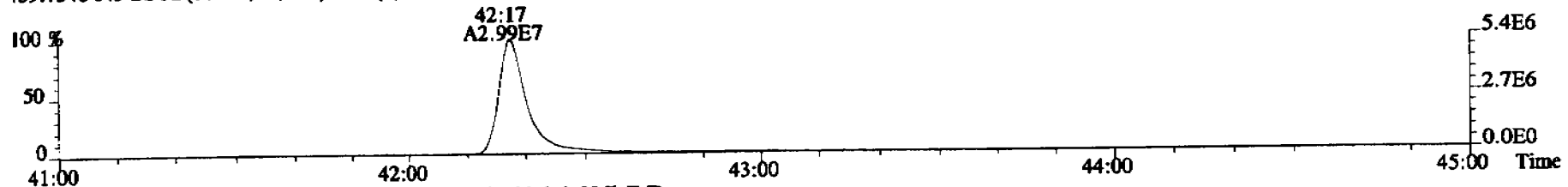
File:050423D1 #1-348 Acq:23-APR-2005 11:22:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-1 1613 CS3 050420H Exp:OCDD_DB5



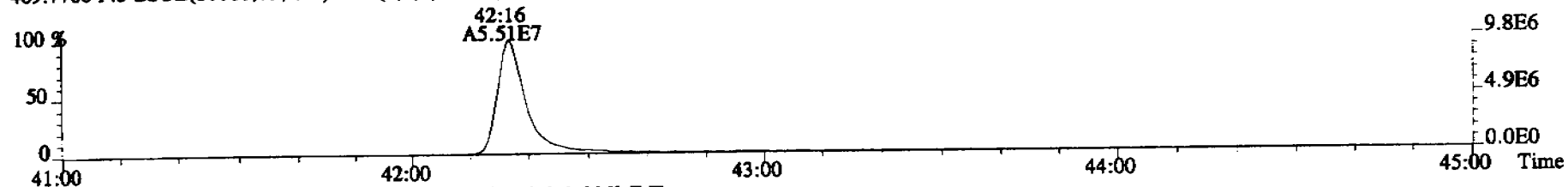
File:050423D1 #1-345 Acq:23-APR-2005 11:22:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-1 1613 CS3 050420H Exp:OCDD_DB5
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



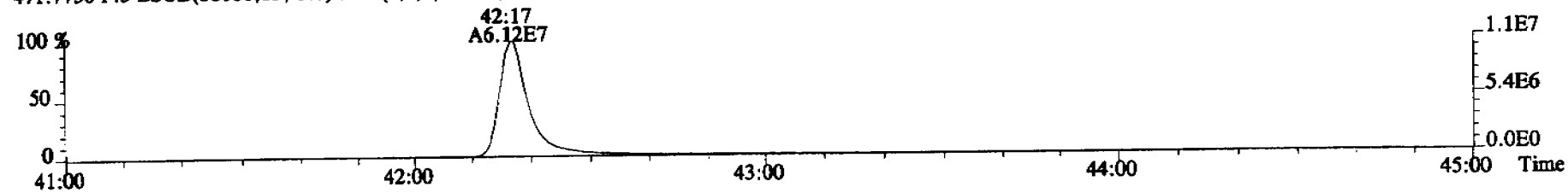
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



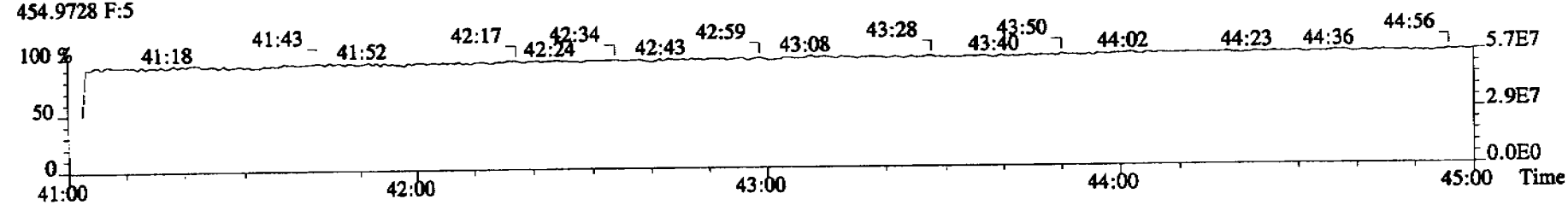
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

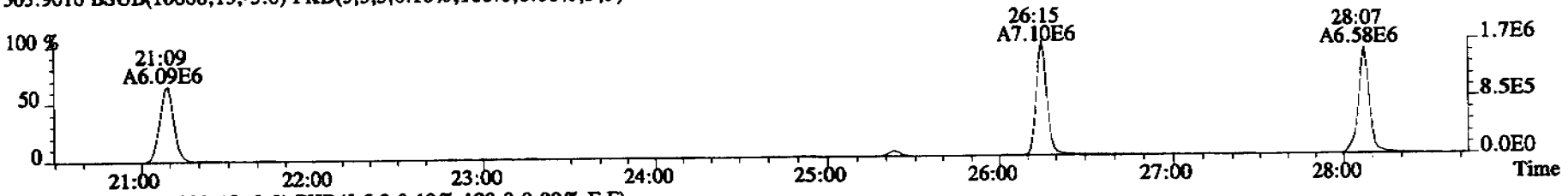


454.9728 F:5

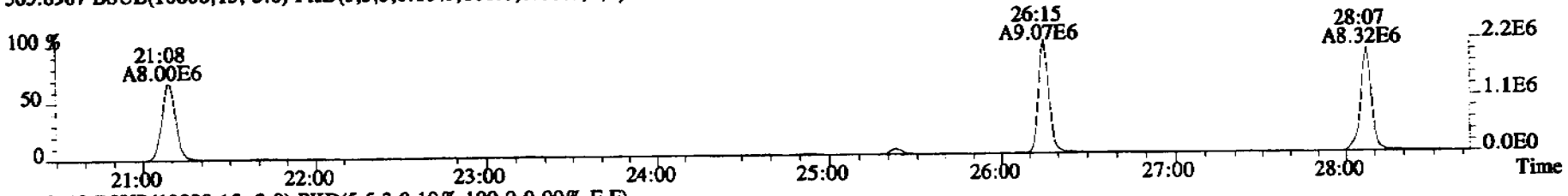


File:050423D1 #1-559 Acq:23-APR-2005 11:22:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-1 1613 CS3 050420H Exp:OCDD_DB5

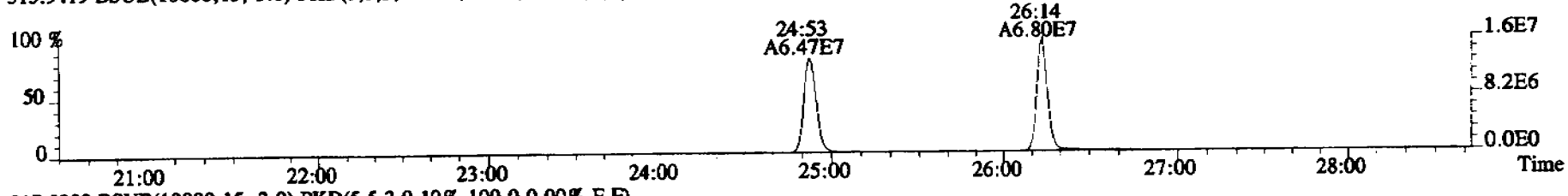
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



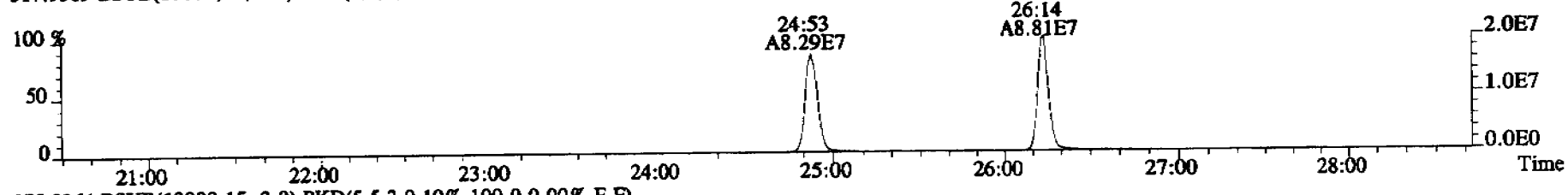
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



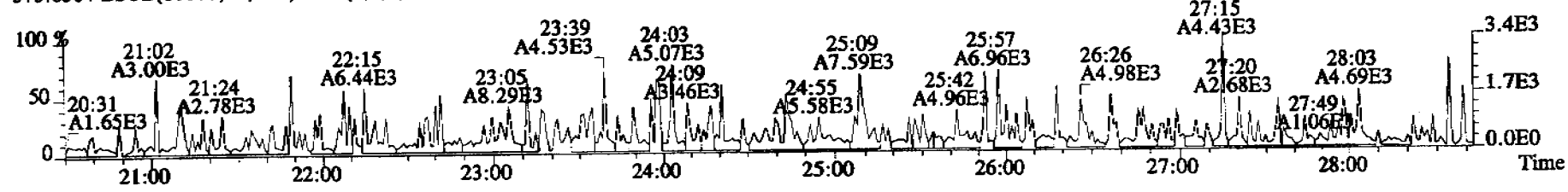
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

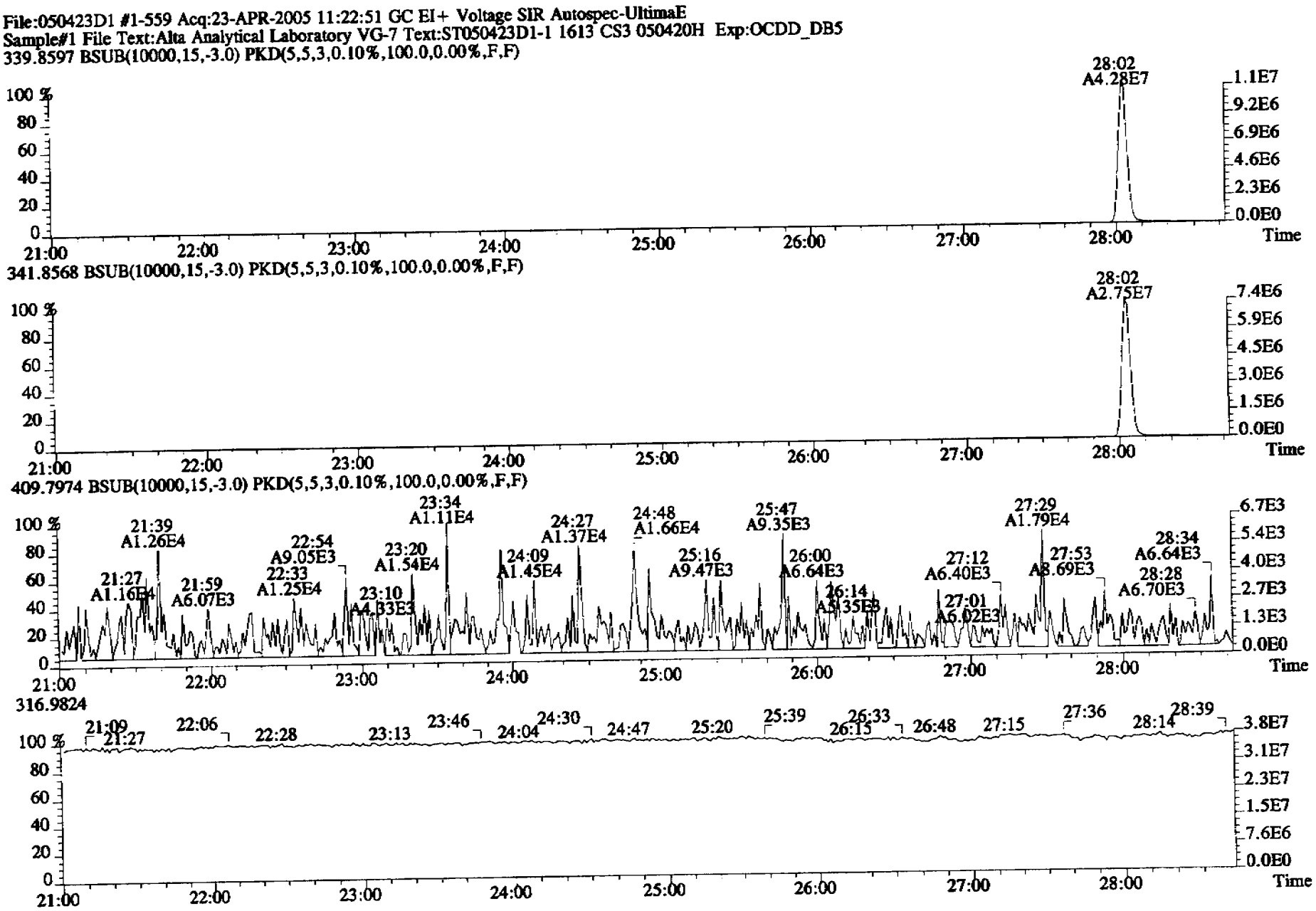


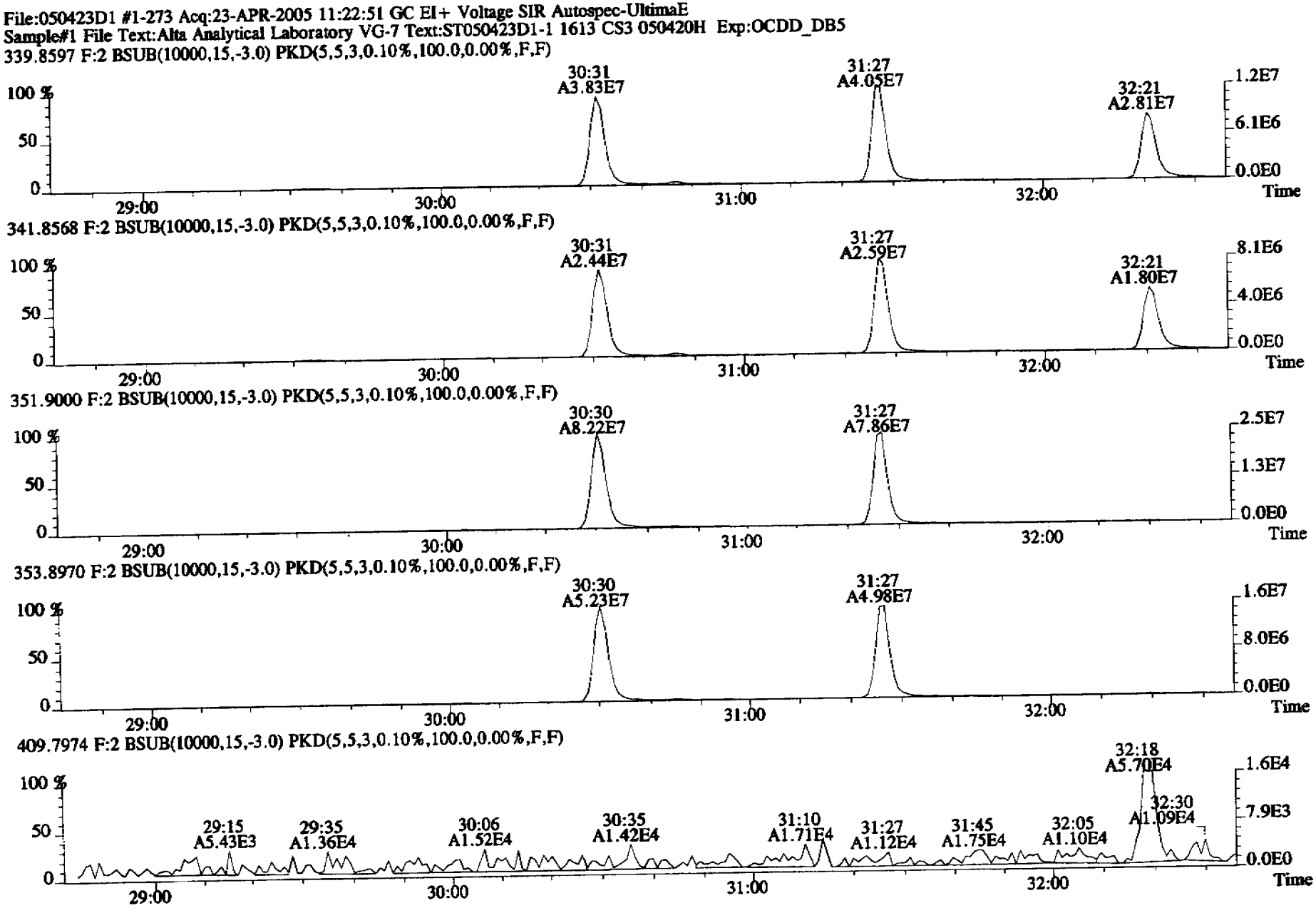
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

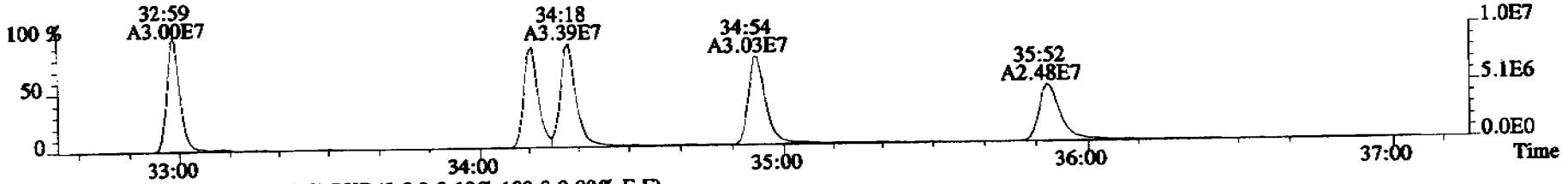



File:050423D1 #1-559 Acq:23-APR-2005 11:22:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-1 1613 CS3 050420H Exp:OCDD_DB5
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
28:02
A4.28E7
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
28:02
A2.75E7
409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:39
A1.26E4
21:27
A1.16E4
21:59
A6.07E3
22:54
A9.05E3
22:33
A1.25E4
23:34
A1.11E4
23:20
A1.54E4
23:10
A4.33E3
24:27
A1.37E4
24:09
A1.45E4
24:48
A1.66E4
25:16
A9.47E3
25:47
A9.35E3
26:00
A6.64E3
26:14
A5.35E3
27:12
A6.40E3
27:01
A6.02E3
27:29
A1.79E4
27:53
A8.69E3
28:34
A6.64E3
28:28
A6.70E3
316.9824
Time

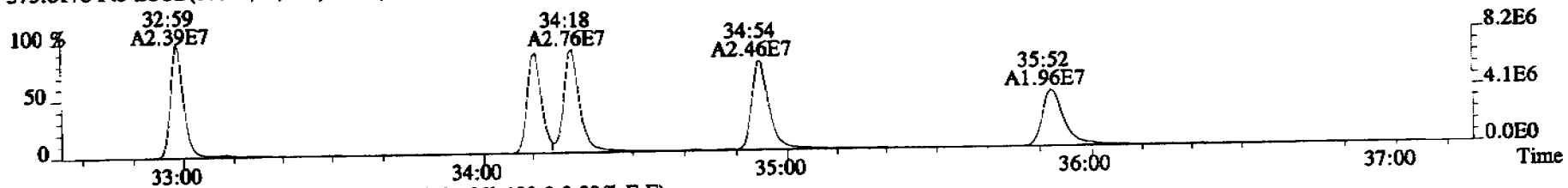

File:050423D1 #1-273 Acq:23-APR-2005 11:22:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-1 1613 CS3 050420H Exp:OCDD_DB5
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
30:31 A3.83E7
31:27 A4.05E7
32:21 A2.81E7
1.2E7
6.1E6
0.0E0
Time
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
30:31 A2.44E7
31:27 A2.59E7
32:21 A1.80E7
8.1E6
4.0E6
0.0E0
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
30:30 A8.22E7
31:27 A7.86E7
2.5E7
1.3E7
353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
30:30 A5.23E7
31:27 A4.98E7
1.6E7
8.0E6
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
32:18 A5.70E4
32:30 A1.09E4
29:15 A5.43E3
29:35 A1.36E4
30:06 A1.52E4
30:35 A1.42E4
31:10 A1.71E4
31:27 A1.12E4
31:45 A1.75E4
32:05 A1.10E4
1.6E4
7.9E3
100 %
50
0
29:00
30:00
31:00
32:00

File:050423D1 #1-398 Acq:23-APR-2005 11:22:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-1 1613 CS3 050420H Exp:OCDD_DB5

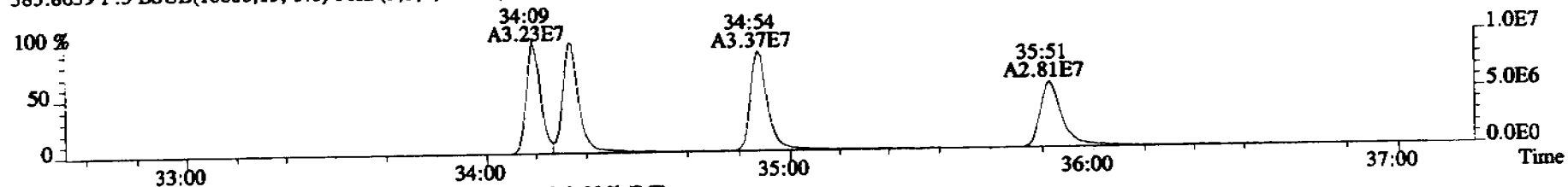
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



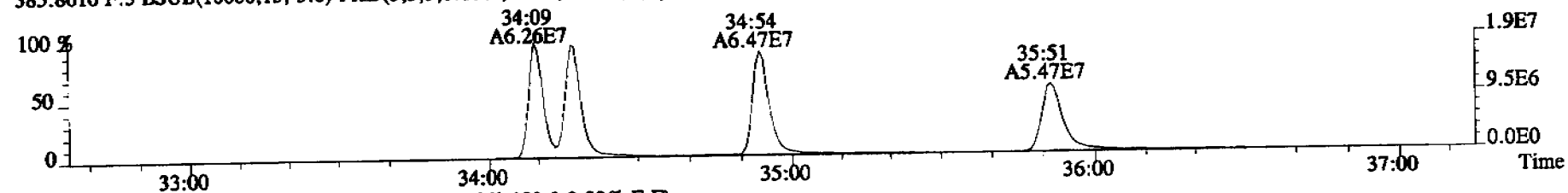
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



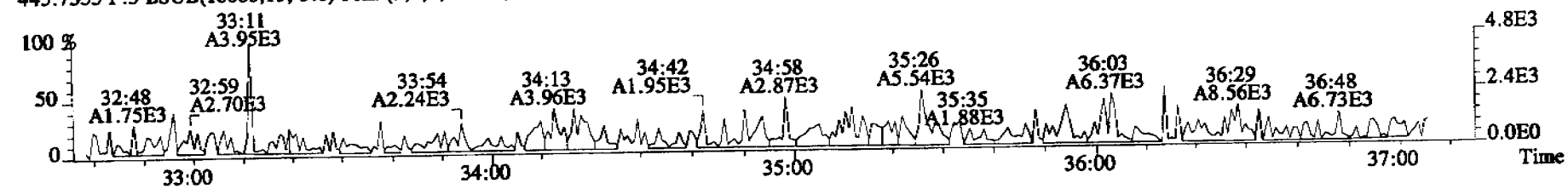
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



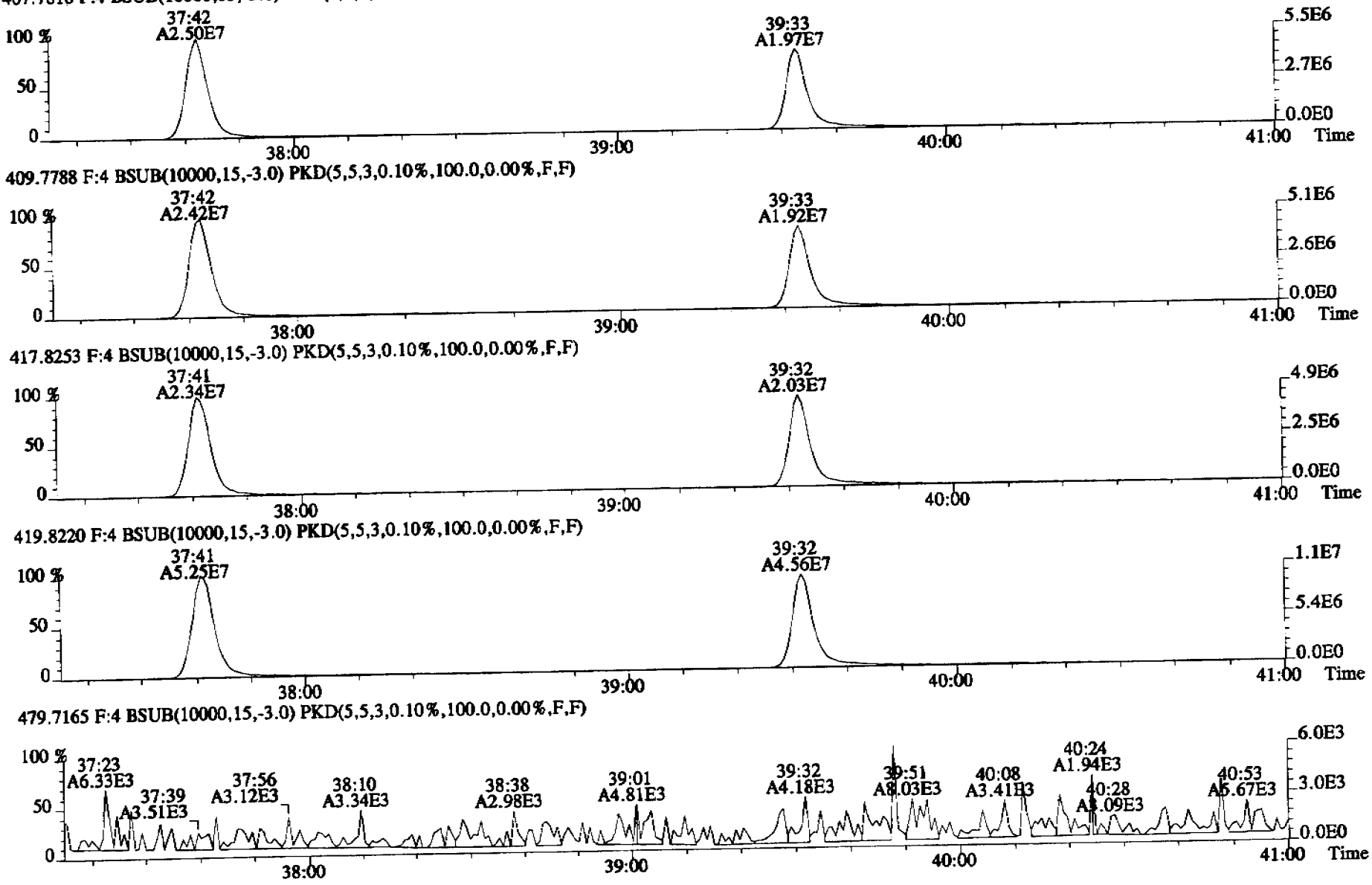
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

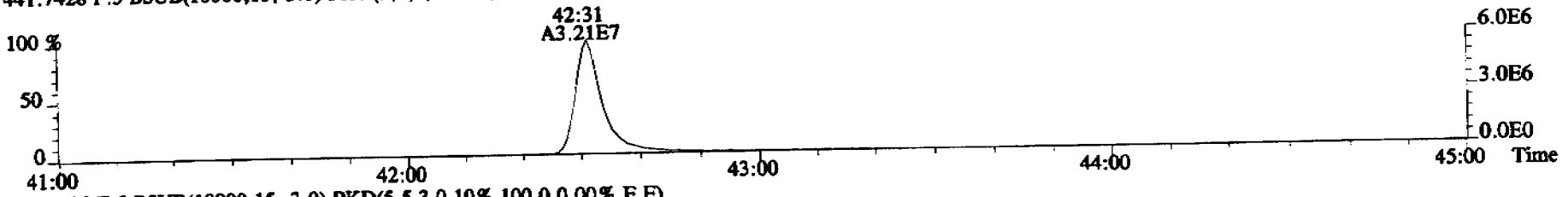


File:050423D1 #1-348 Acq:23-APR-2005 11:22:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-1 1613 CS3 050420H Exp:OCDD_DB5

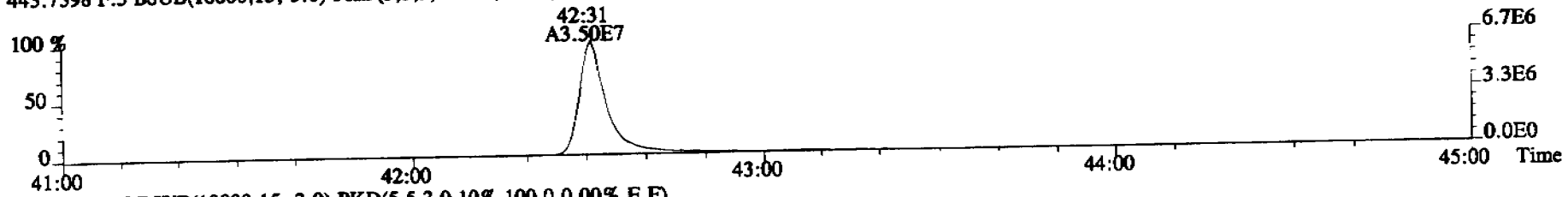


File:050423D1 #1-345 Acq:23-APR-2005 11:22:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-1 1613 CS3 050420H Exp:OCDD_DB5

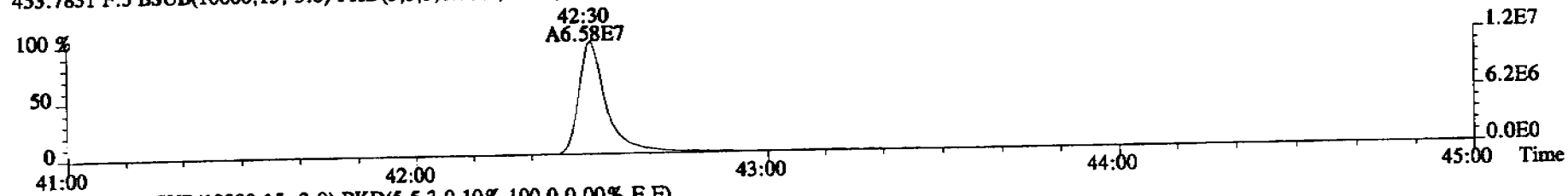
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



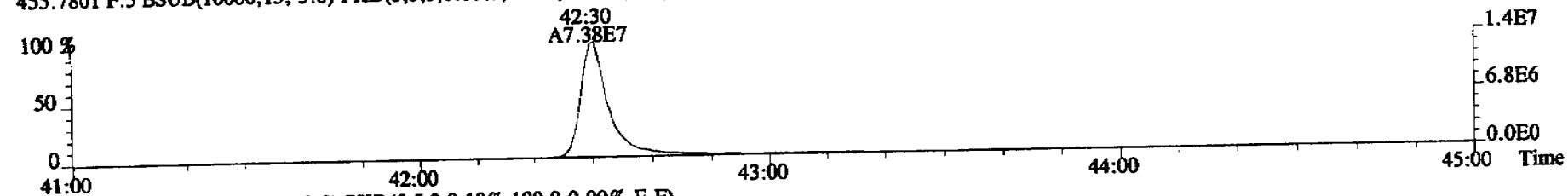
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



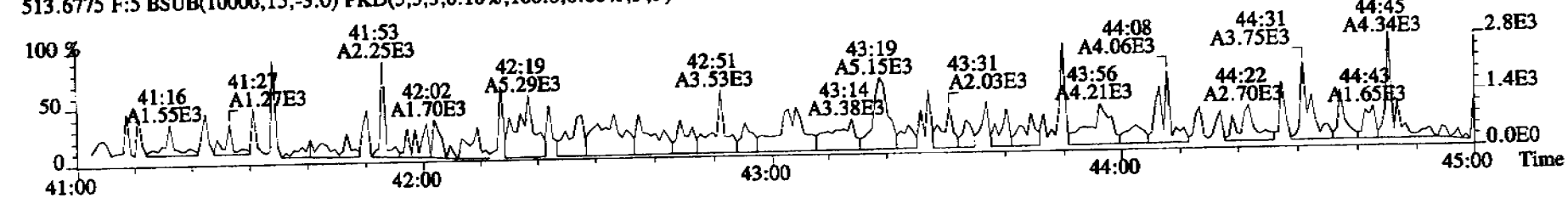
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



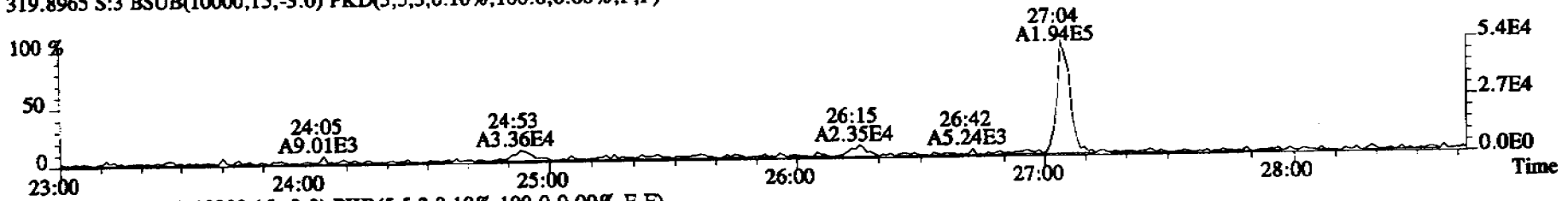
455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



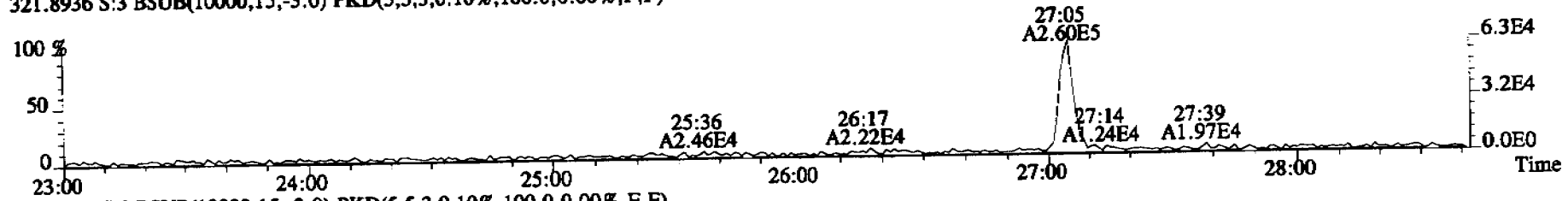
513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



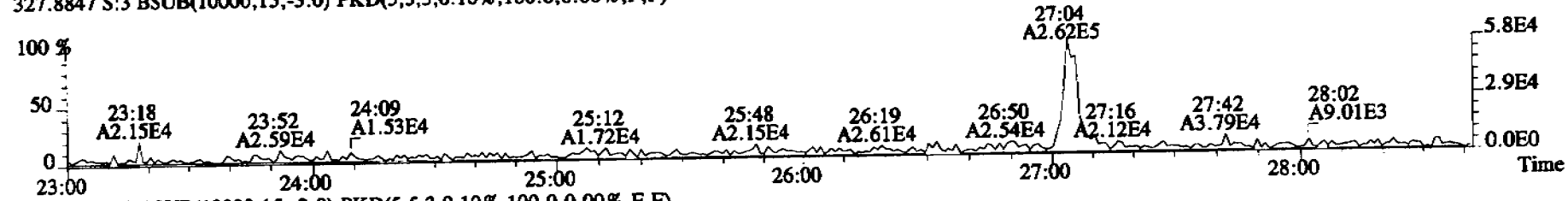
File:050423D1 #1-558 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5
319.8965 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



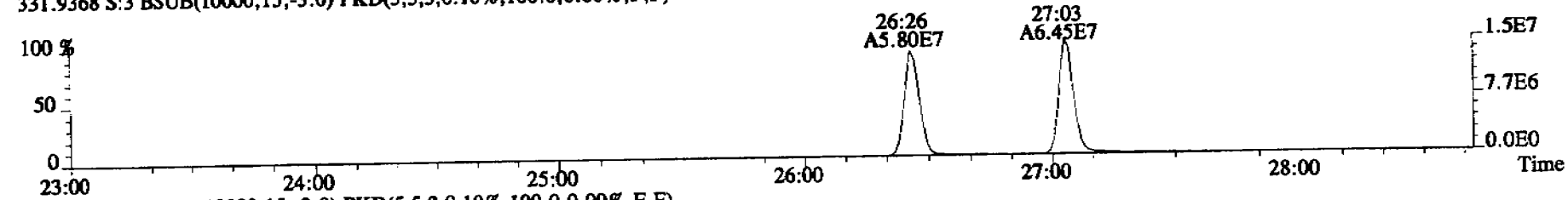
321.8936 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



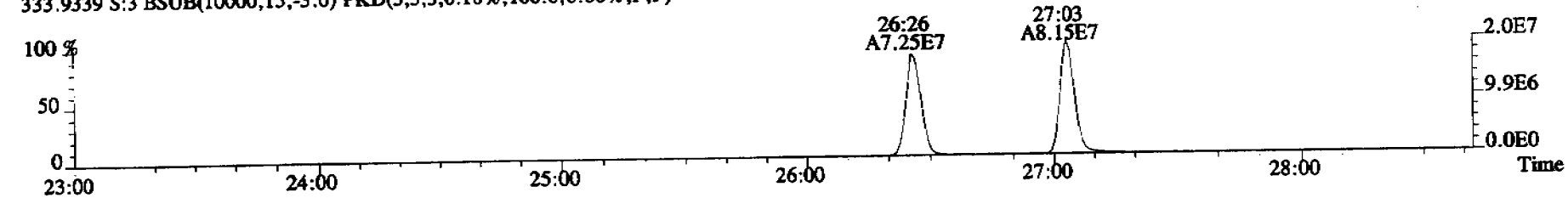
327.8847 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

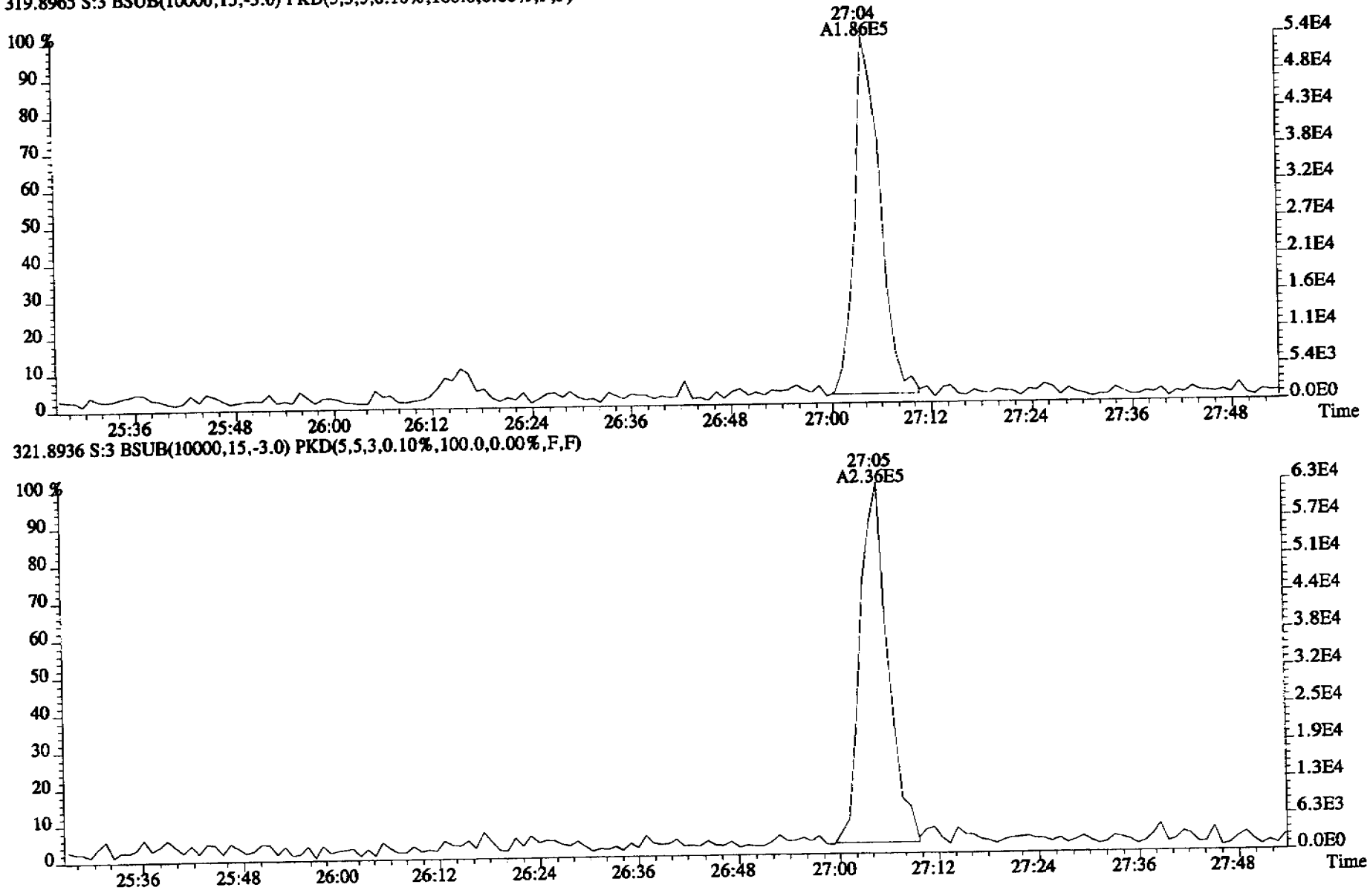


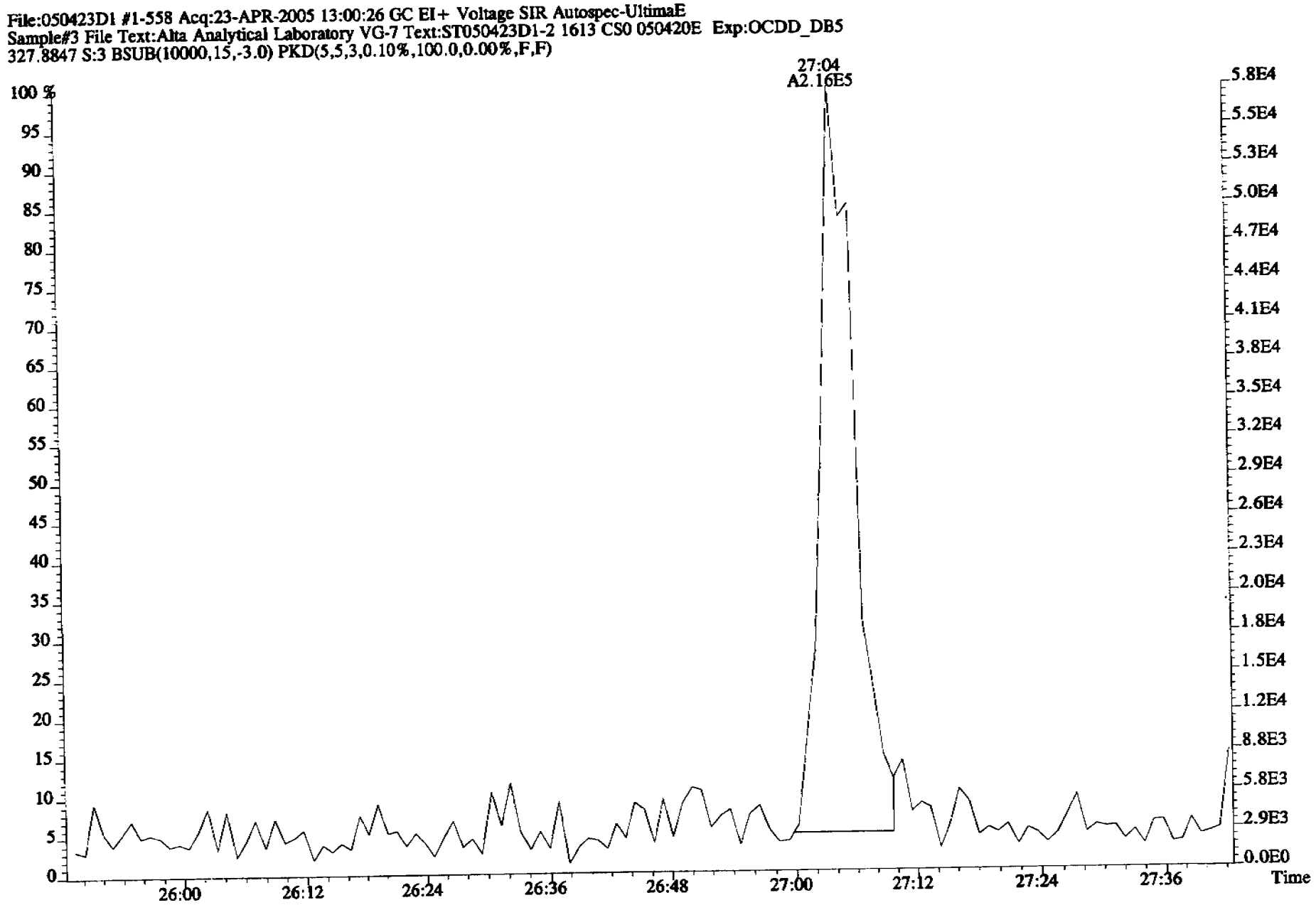
331.9368 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

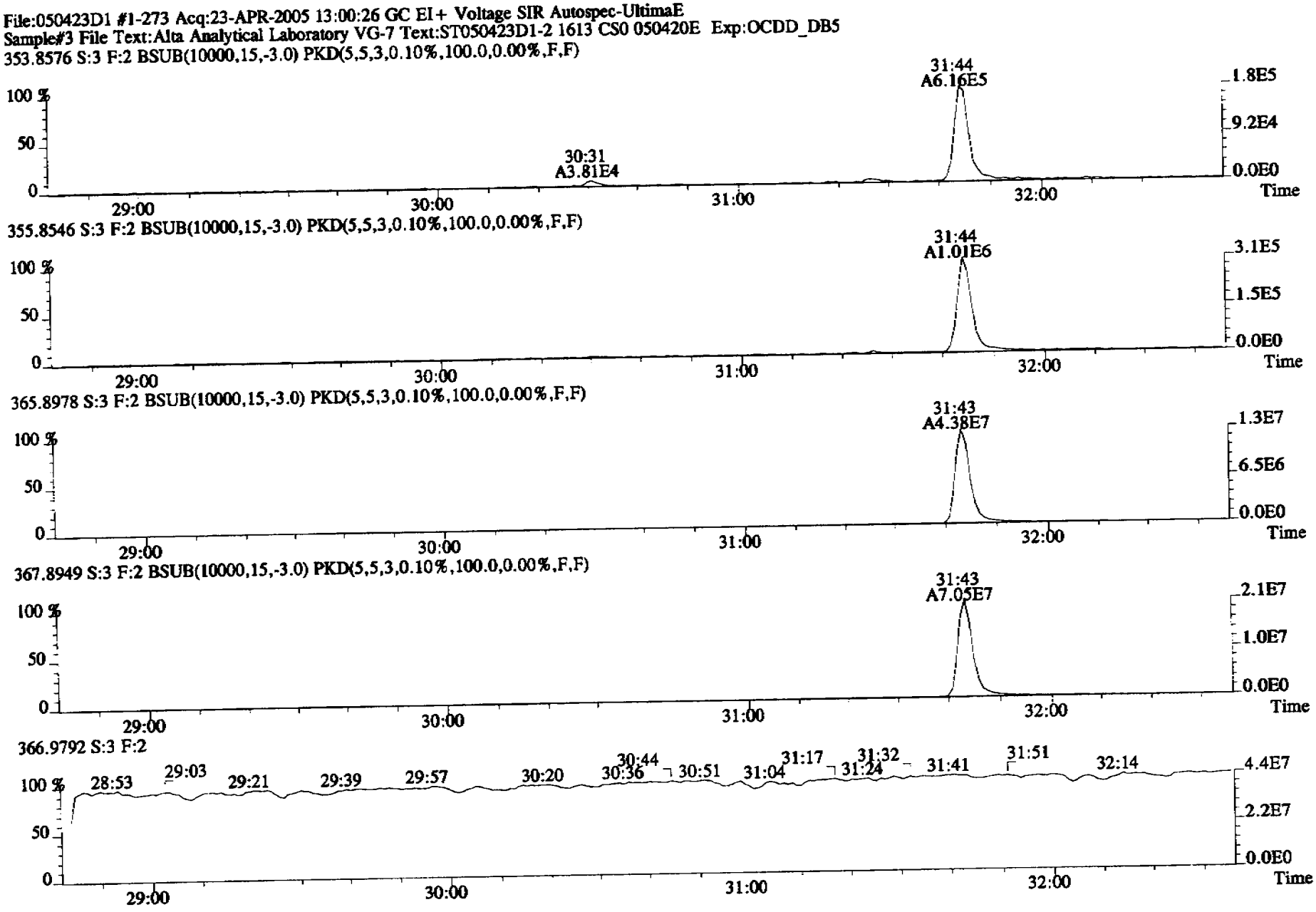


333.9339 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

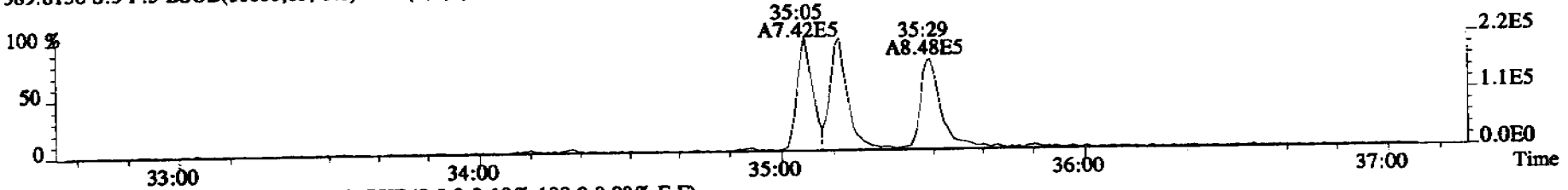



File:050423D1 #1-558 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5
319.8965 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
27:04
A1.86E5
100 %
90
80
70
60
50
40
30
20
10
0
5.4E4
4.8E4
4.3E4
3.8E4
3.2E4
2.7E4
2.1E4
1.6E4
1.1E4
5.4E3
0.0E0
25:36
25:48
26:00
26:12
26:24
26:36
26:48
27:00
27:12
27:24
27:36
27:48
Time
321.8936 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
27:05
A2.36E5
100 %
90
80
70
60
50
40
30
20
10
0
6.3E4
5.7E4
5.1E4
4.4E4
3.8E4
3.2E4
2.5E4
1.9E4
1.3E4
6.3E3
0.0E0
25:36
25:48
26:00
26:12
26:24
26:36
26:48
27:00
27:12
27:24
27:36
27:48
Time

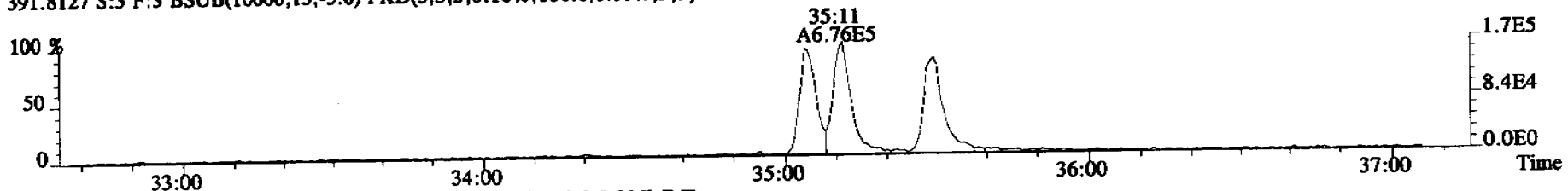

File:050423D1 #1-558 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5
327.8847 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
27:04
A2.16E5
100 %
95
90
85
80
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
5.8E4
5.5E4
5.3E4
5.0E4
4.7E4
4.4E4
4.1E4
3.8E4
3.5E4
3.2E4
2.9E4
2.6E4
2.3E4
2.0E4
1.8E4
1.5E4
1.2E4
8.8E3
5.8E3
2.9E3
0.0E0
26:00
26:12
26:24
26:36
26:48
27:00
27:12
27:24
27:36
Time


File:050423D1 #1-273 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5
353.8576 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
31:44
A6.16E5
30:31
A3.81E4
1.8E5
9.2E4
0.0E0
355.8546 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
31:44
A1.01E6
3.1E5
1.5E5
0.0E0
365.8978 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
31:43
A4.38E7
1.3E7
6.5E6
0.0E0
367.8949 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
31:43
A7.05E7
2.1E7
1.0E7
0.0E0
366.9792 S:3 F:2
28:53
29:03
29:21
29:39
29:57
30:20
30:36
30:44
30:51
31:04
31:17
31:24
31:32
31:41
31:51
32:14
4.4E7
2.2E7
0.0E0
100 %
50
0
29:00
30:00
31:00
32:00
Time

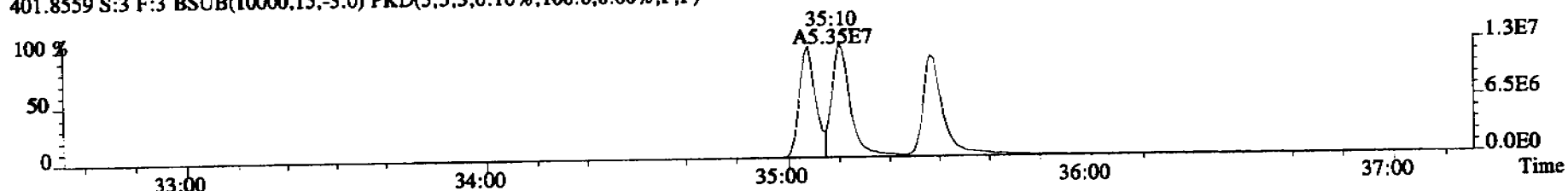
File:050423D1 #1-399 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5
389.8156 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



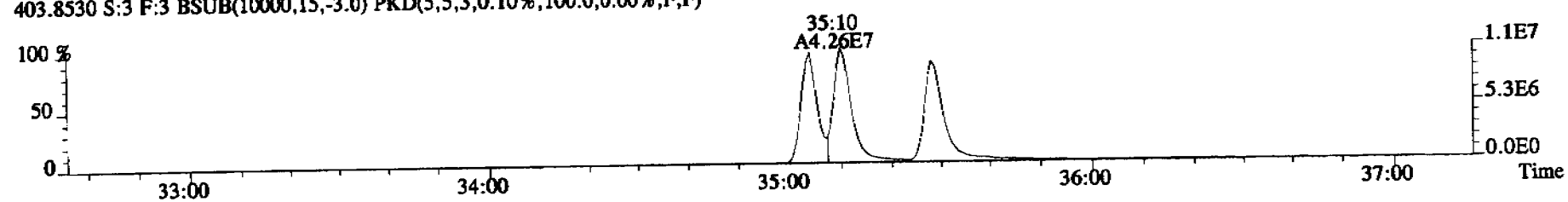
391.8127 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



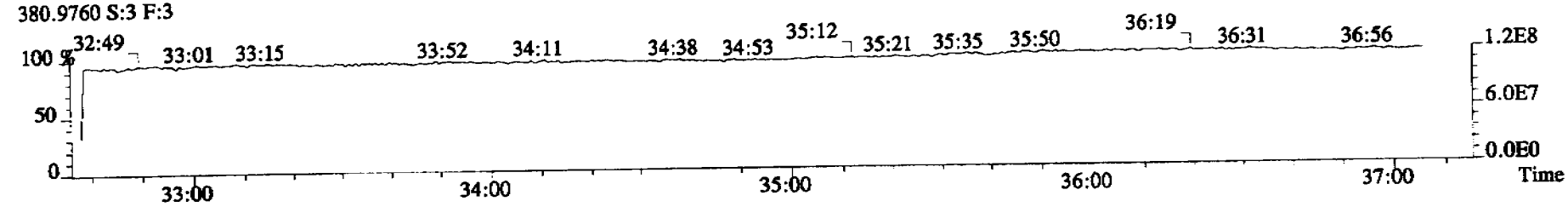
401.8559 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



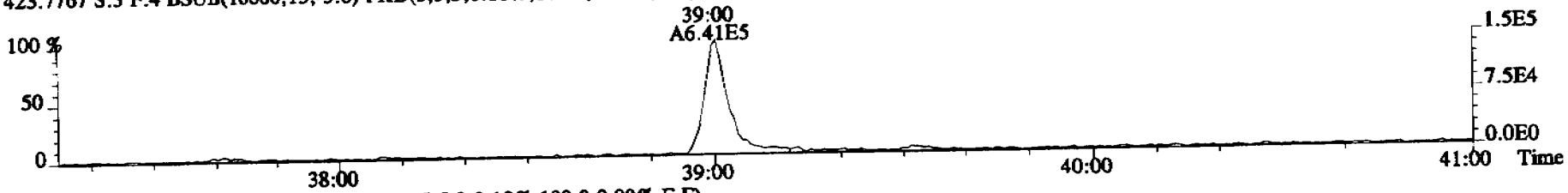
403.8530 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



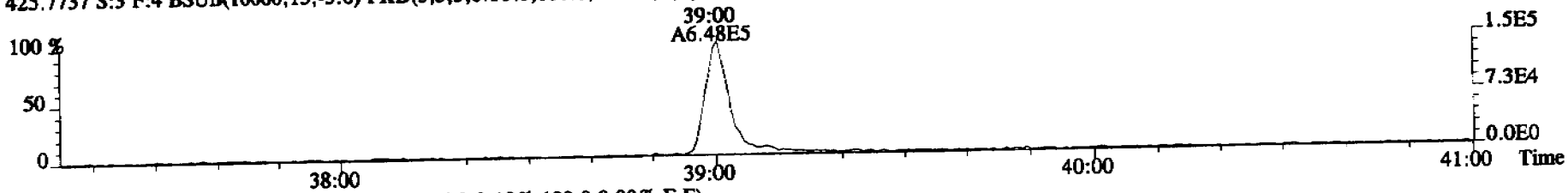
380.9760 S:3 F:3



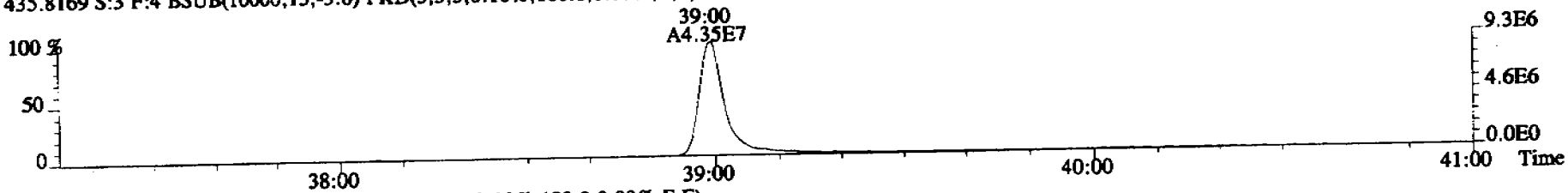
File:050423D1 #1-347 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5
423.7767 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



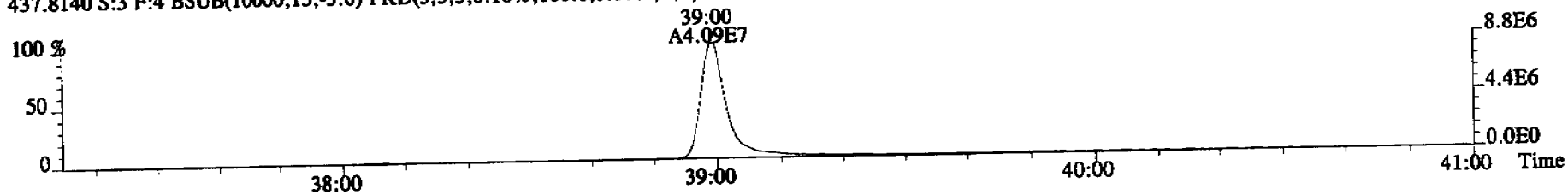
425.7737 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



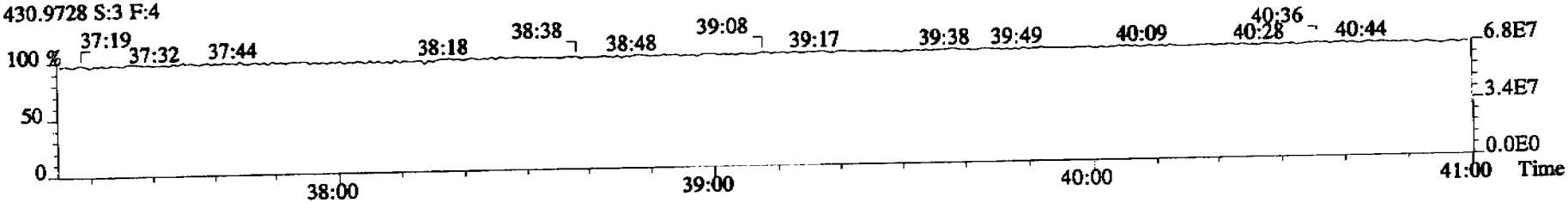
435.8169 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



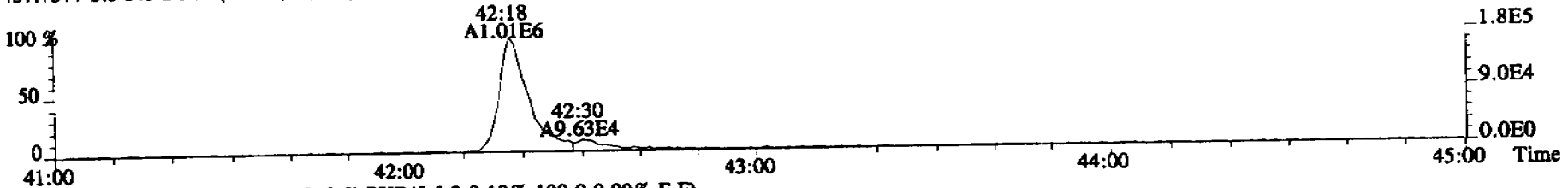
437.8140 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



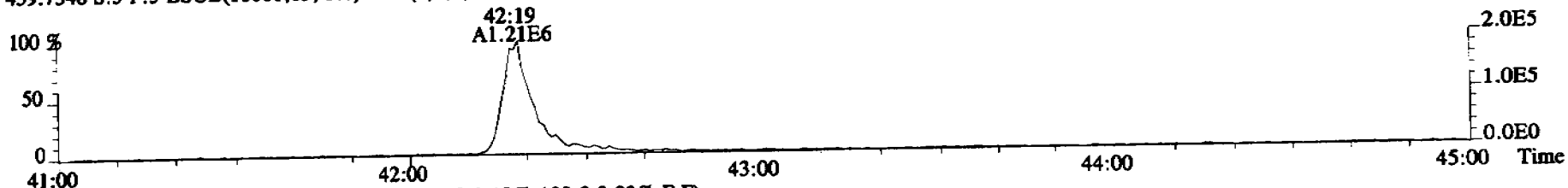
430.9728 S:3 F:4



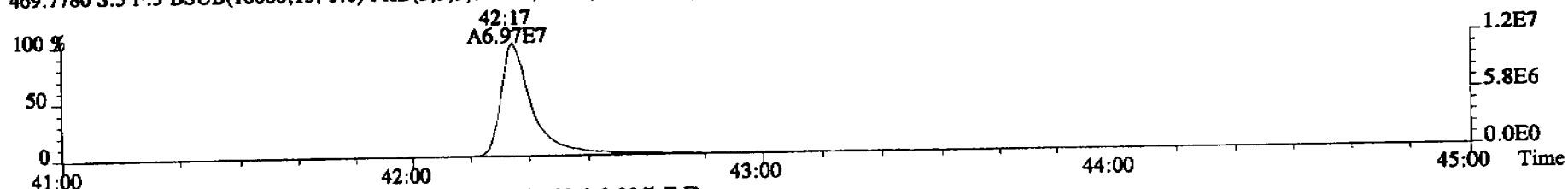
File:050423D1 #1-345 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5
457.7377 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



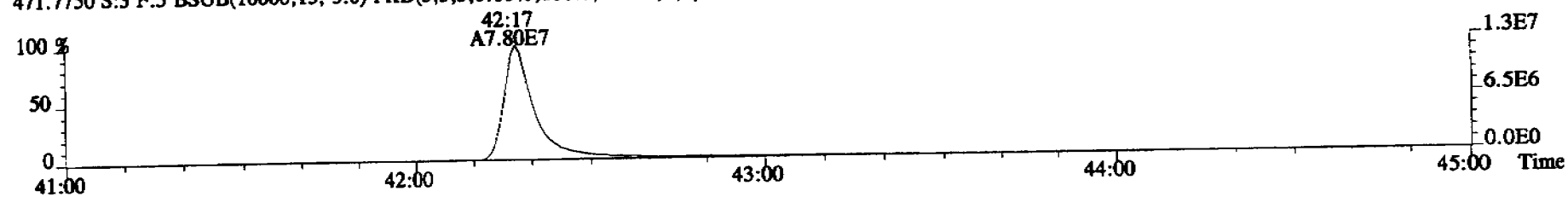
459.7348 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



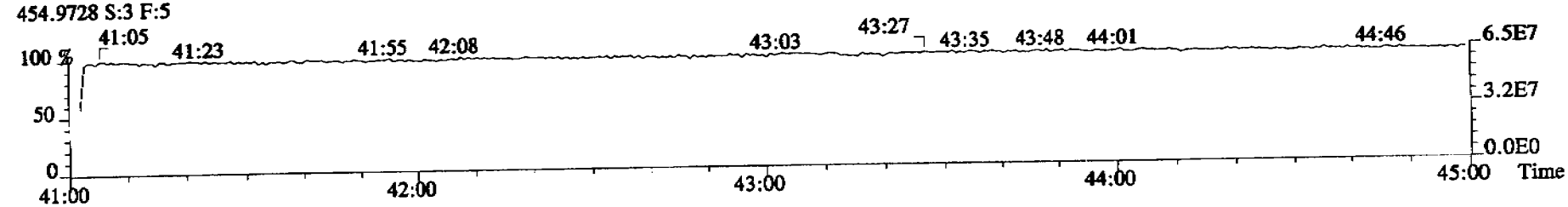
469.7780 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

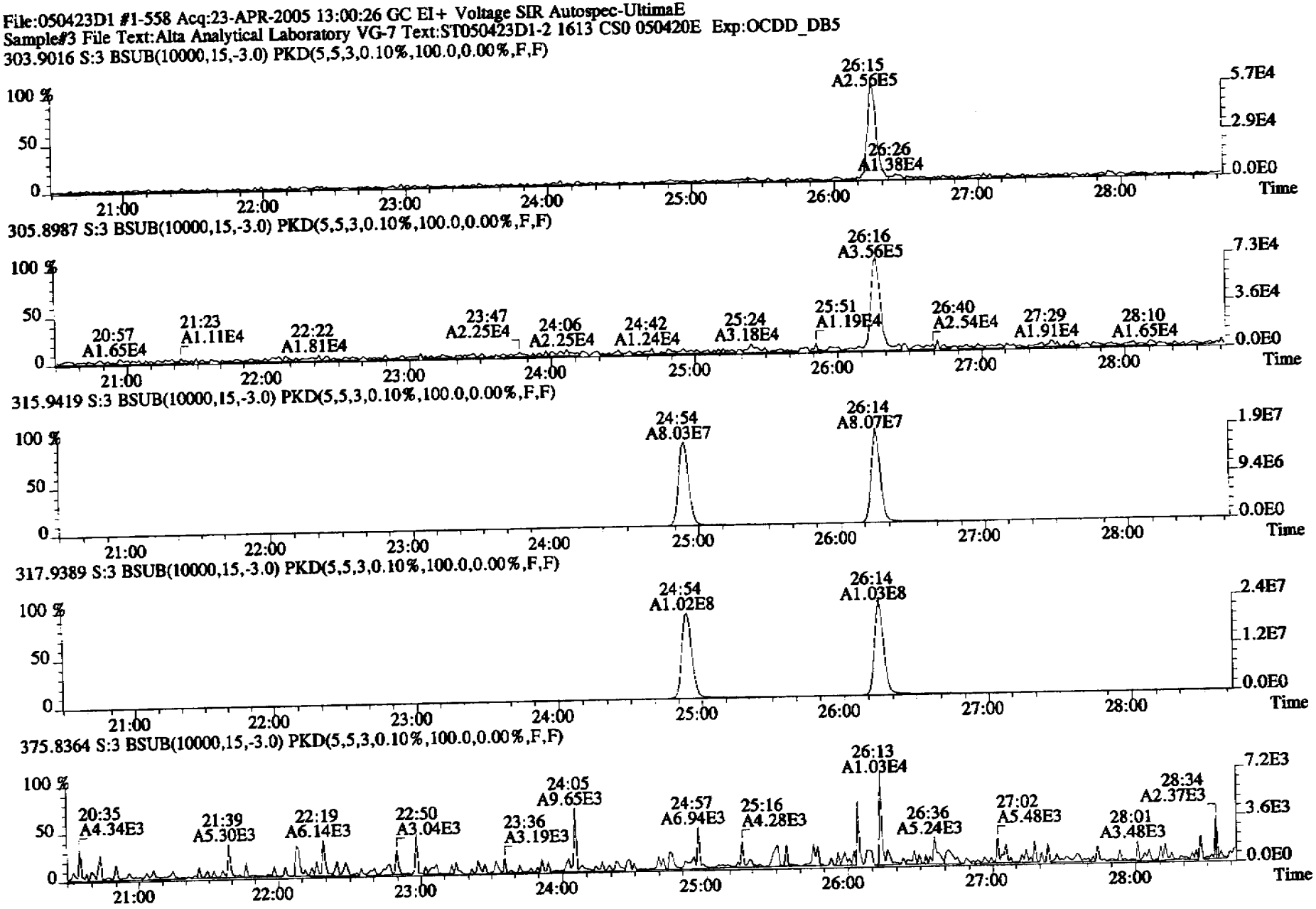


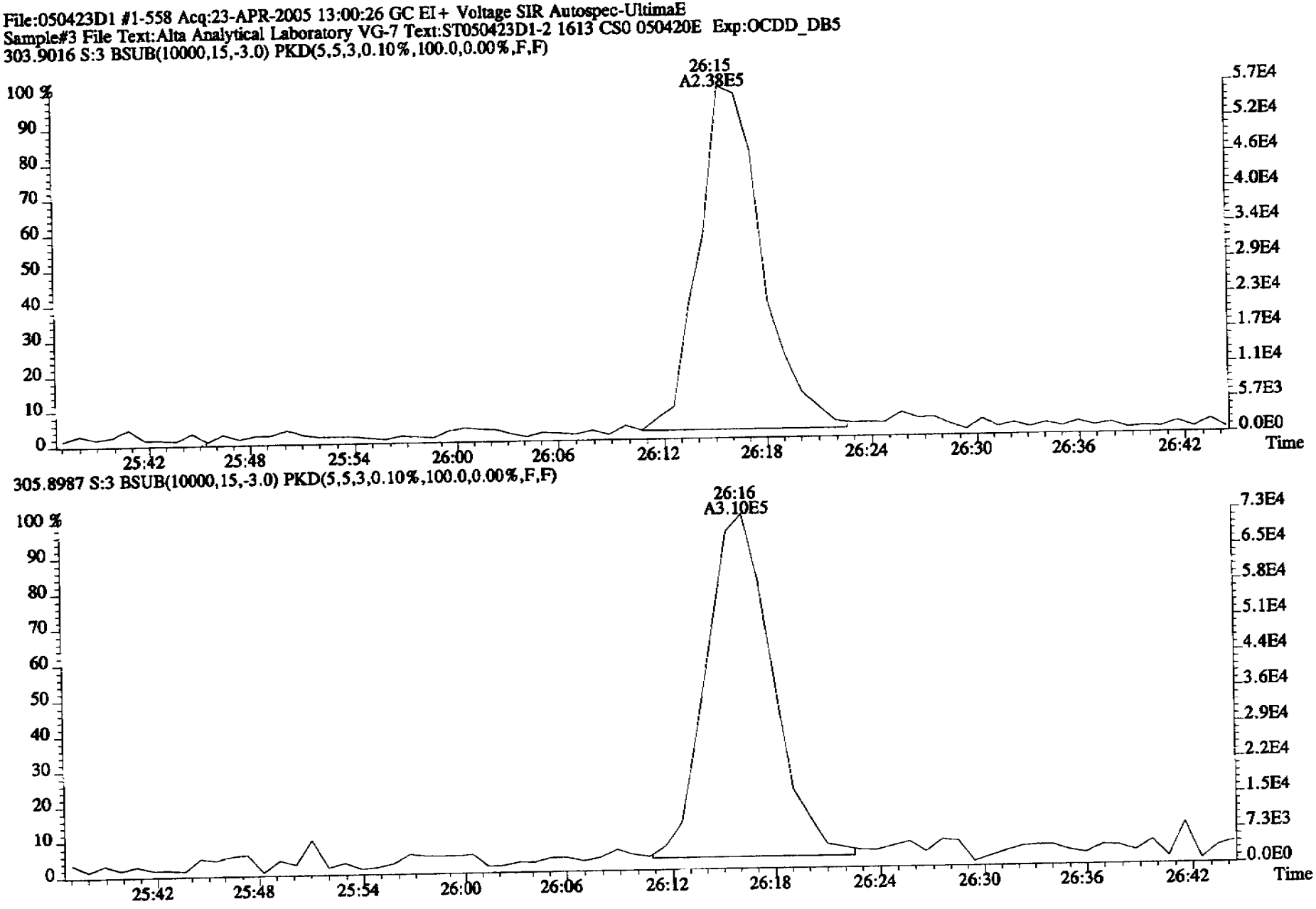
471.7750 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

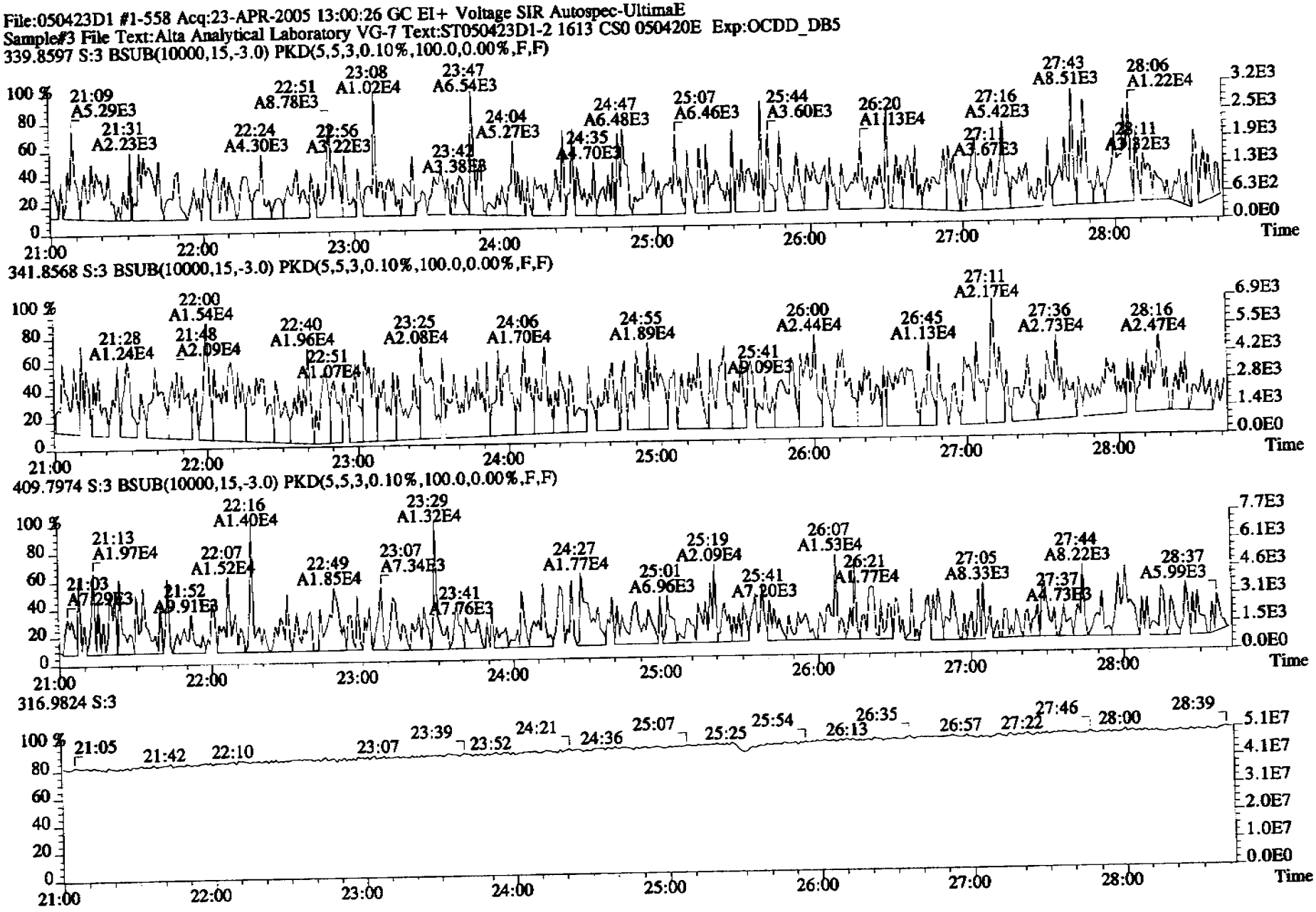


454.9728 S:3 F:5

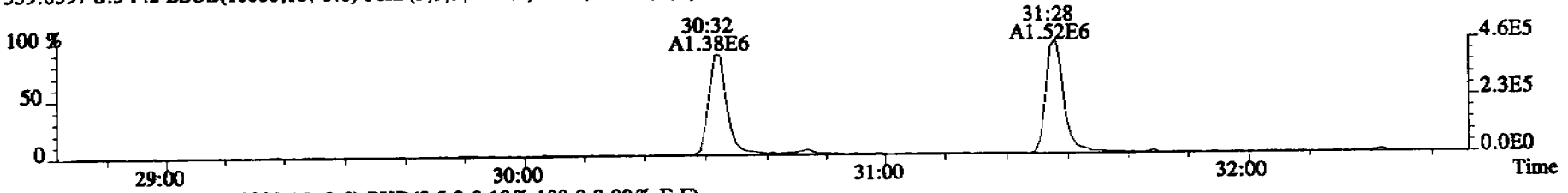



File:050423D1 #1-558 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:15 A2.56E5
26:26 A1.38E4
5.7E4
2.9E4
0.0E0
Time
305.8987 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:16 A3.56E5
20:57 A1.65E4
21:23 A1.11E4
22:22 A1.81E4
23:47 A2.25E4
24:06 A2.25E4
24:42 A1.24E4
25:24 A3.18E4
25:51 A1.19E4
26:40 A2.54E4
27:29 A1.91E4
28:10 A1.65E4
7.3E4
3.6E4
0.0E0
Time
315.9419 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
24:54 A8.03E7
26:14 A8.07E7
1.9E7
9.4E6
0.0E0
Time
317.9389 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
24:54 A1.02E8
26:14 A1.03E8
2.4E7
1.2E7
0.0E0
Time
375.8364 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:13 A1.03E4
20:35 A4.34E3
21:39 A5.30E3
22:19 A6.14E3
22:50 A3.04E3
23:36 A3.19E3
24:05 A9.65E3
24:57 A6.94E3
25:16 A4.28E3
26:36 A5.24E3
27:02 A5.48E3
28:01 A3.48E3
28:34 A2.37E3
7.2E3
3.6E3
0.0E0
Time

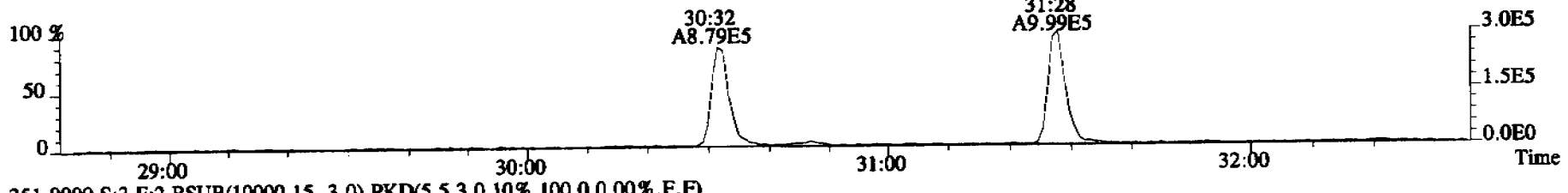

File:050423D1 #1-558 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:15
A2.38E5
100 %
90
80
70
60
50
40
30
20
10
0
5.7E4
5.2E4
4.6E4
4.0E4
3.4E4
2.9E4
2.3E4
1.7E4
1.1E4
5.7E3
0.0E0
25:42
25:48
25:54
26:00
26:06
26:12
26:18
26:24
26:30
26:36
26:42
Time
305.8987 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:16
A3.10E5
100 %
90
80
70
60
50
40
30
20
10
0
7.3E4
6.5E4
5.8E4
5.1E4
4.4E4
3.6E4
2.9E4
2.2E4
1.5E4
7.3E3
0.0E0
25:42
25:48
25:54
26:00
26:06
26:12
26:18
26:24
26:30
26:36
26:42
Time


File:050423D1 #1-558 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5
339.8597 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
341.8568 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
409.7974 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
316.9824 S:3
Time

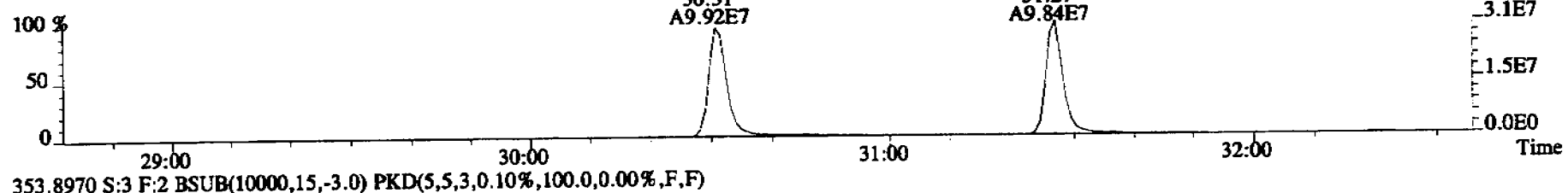
File:050423D1 #1-273 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5
339.8597 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



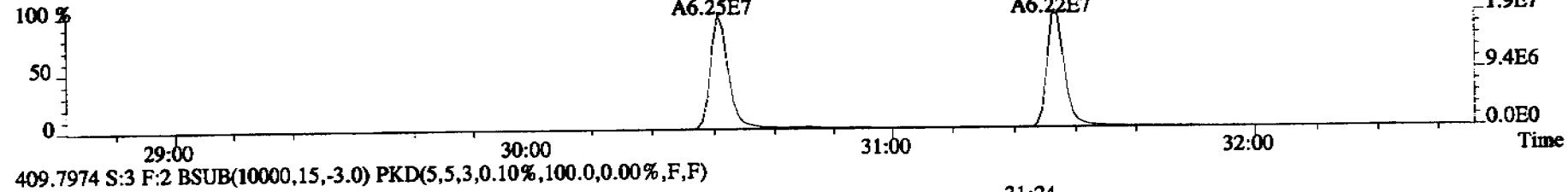
341.8568 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



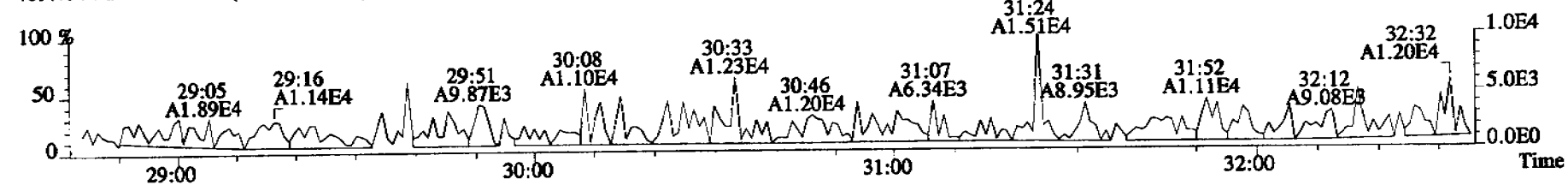
351.9000 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

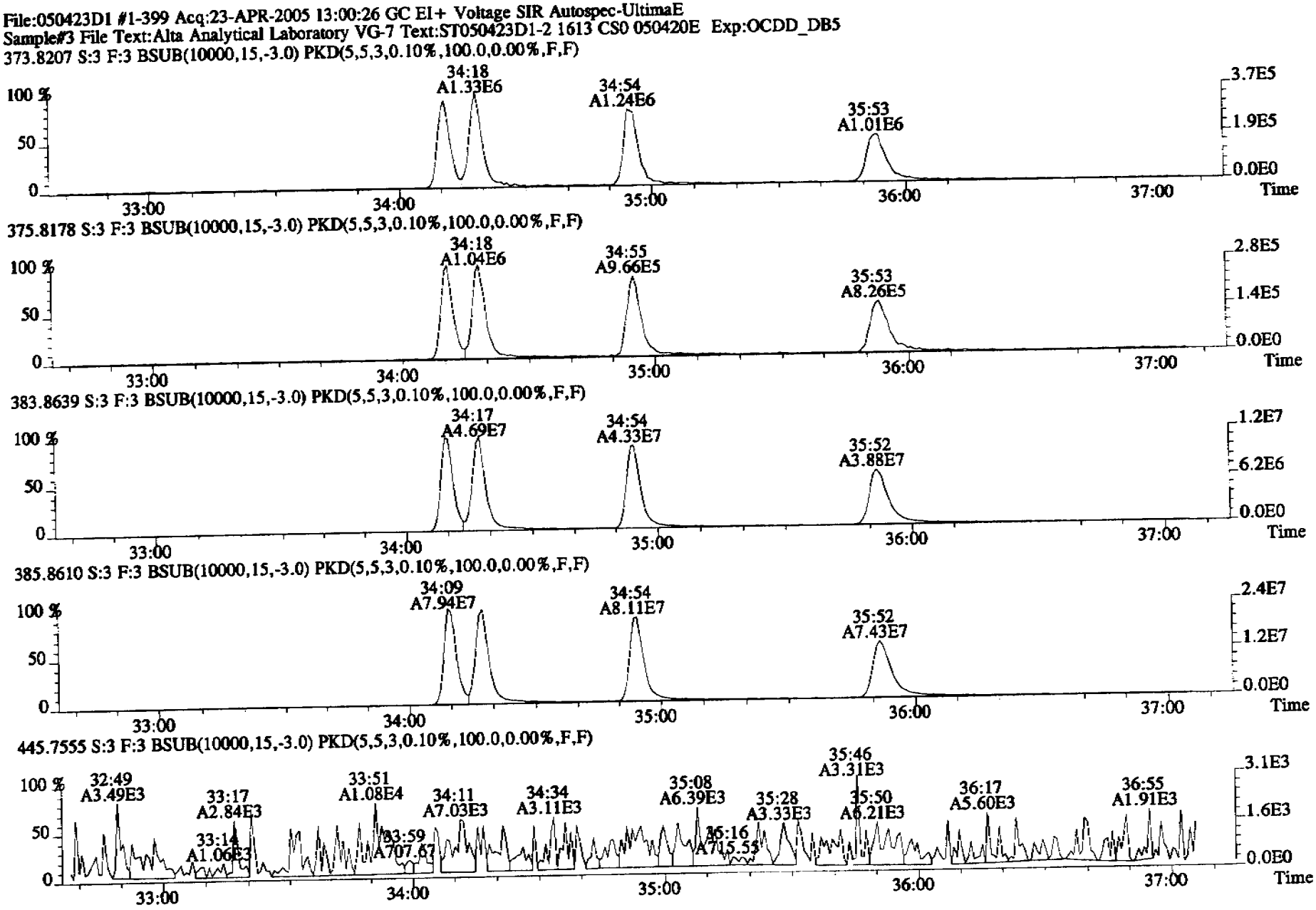


353.8970 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

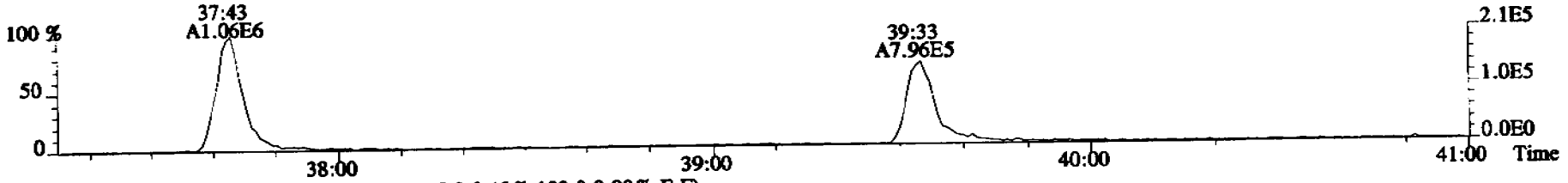


409.7974 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

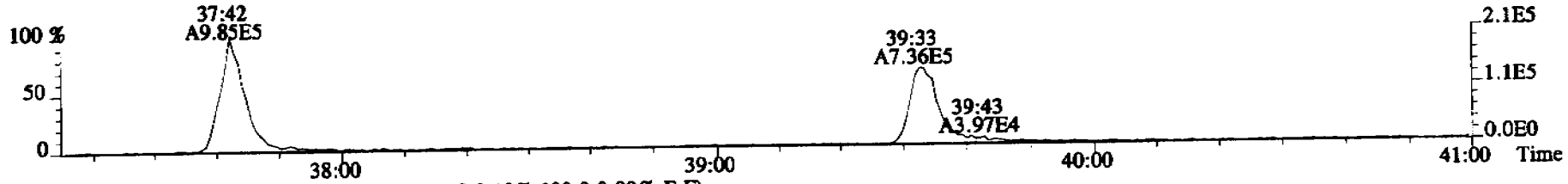



File:050423D1 #1-399 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5
373.8207 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:18 A1.33E6
34:54 A1.24E6
35:53 A1.01E6
375.8178 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:18 A1.04E6
34:55 A9.66E5
35:53 A8.26E5
383.8639 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:17 A4.69E7
34:54 A4.33E7
35:52 A3.88E7
385.8610 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:09 A7.94E7
34:54 A8.11E7
35:52 A7.43E7
445.7555 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
32:49 A3.49E3
33:17 A2.84E3
33:14 A1.06E3
33:51 A1.08E4
33:59 A707.67
34:11 A7.03E3
34:34 A3.11E3
35:08 A6.39E3
36:16 A715.55
35:28 A3.33E3
35:46 A3.31E3
35:50 A6.21E3
36:17 A5.60E3
36:55 A1.91E3
100 %
50
0
33:00
34:00
35:00
36:00
37:00
Time
3.7E5
1.9E5
0.0E0
2.8E5
1.4E5
1.2E7
6.2E6
2.4E7
1.2E7
3.1E3
1.6E3

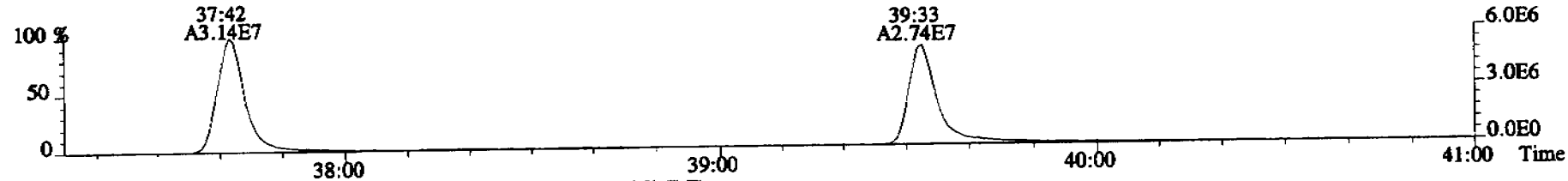
File:050423D1 #1-347 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5
407.7818 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



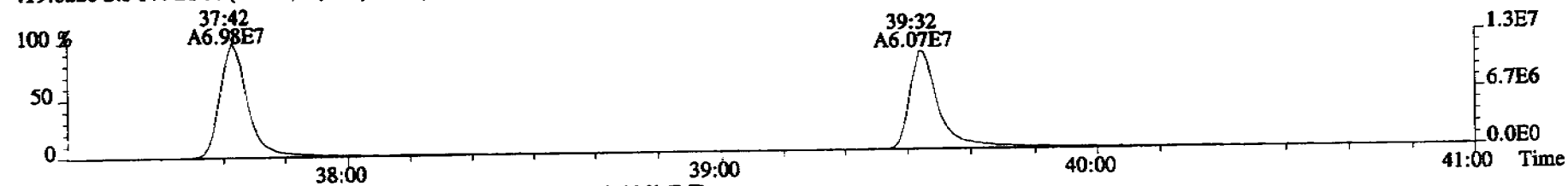
409.7788 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



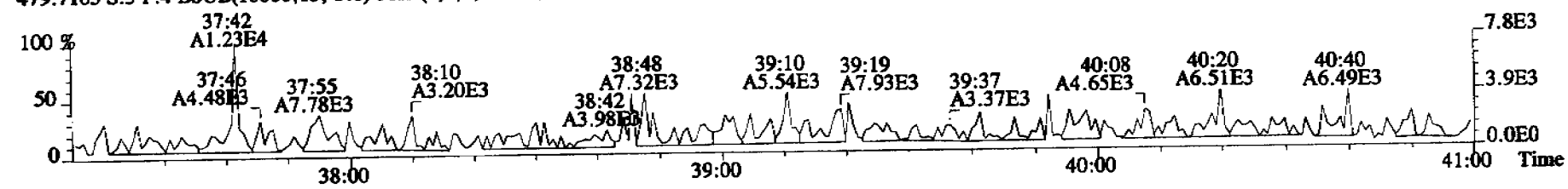
417.8253 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



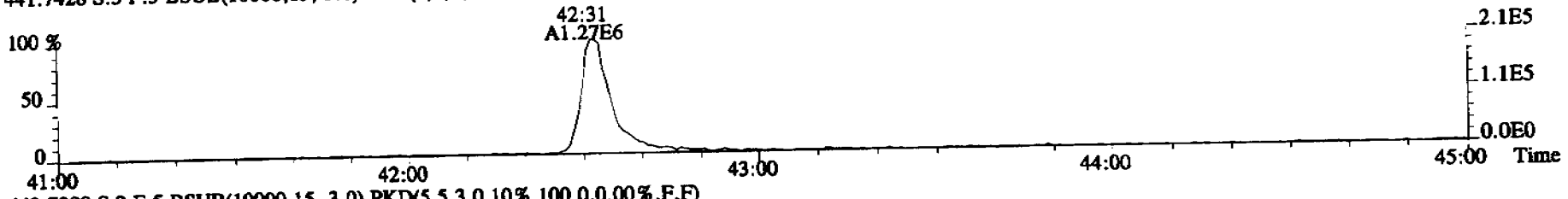
419.8220 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



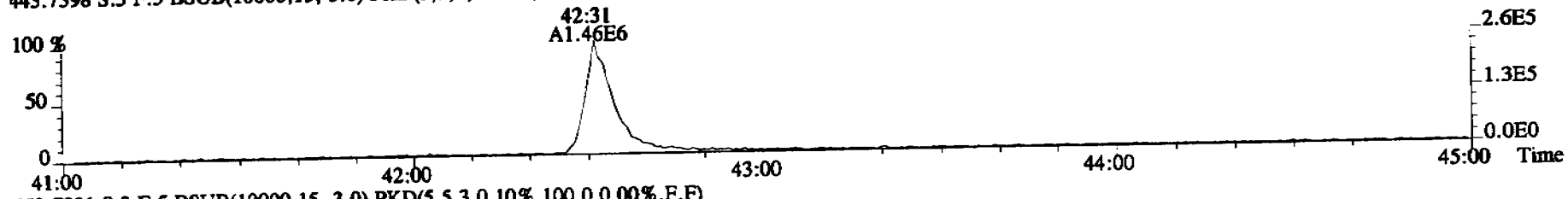
479.7165 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



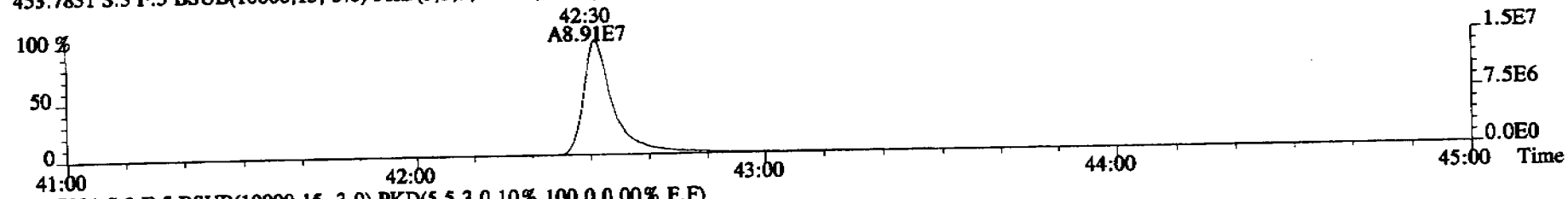
File:050423D1 #1-345 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5
441.7428 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



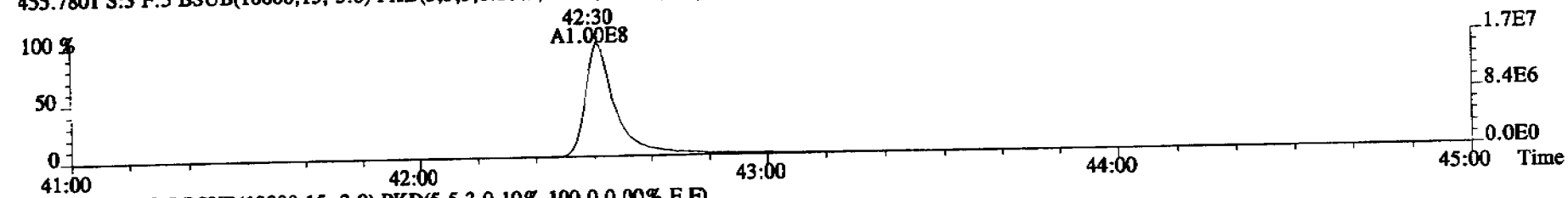
443.7398 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



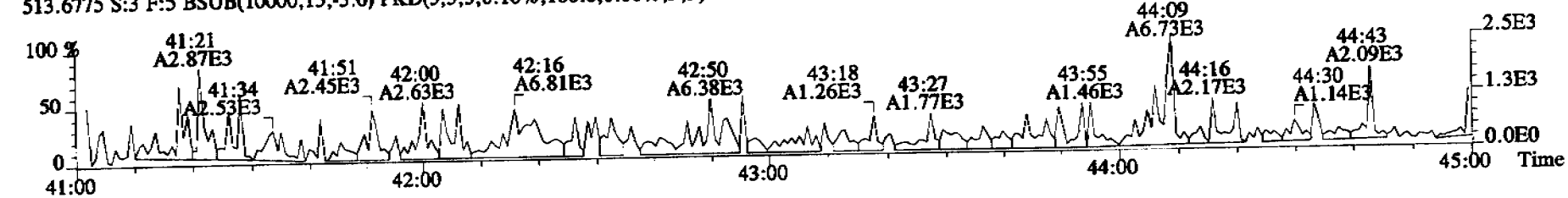
453.7831 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



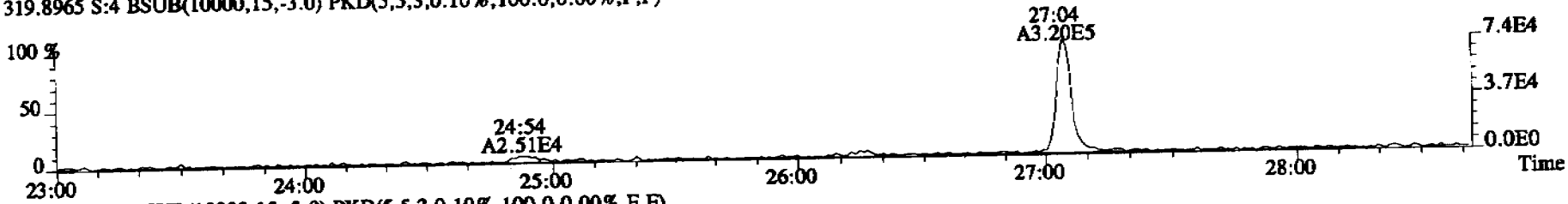
455.7801 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



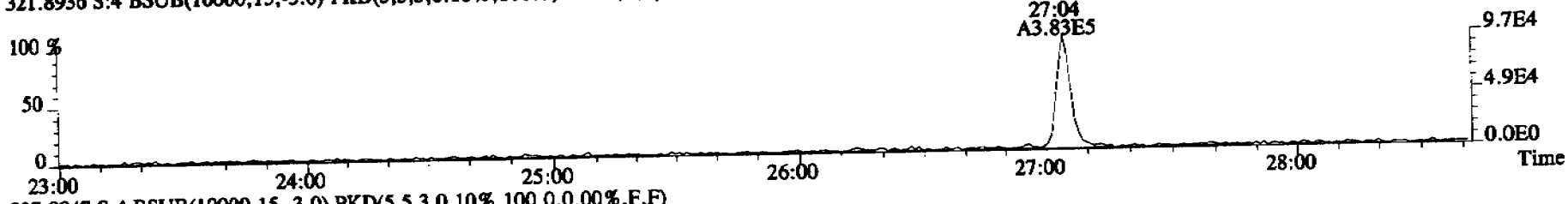
513.6775 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



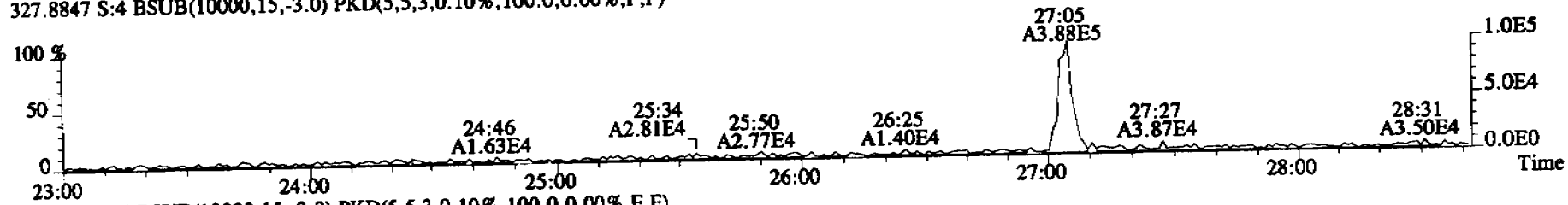
File:050423D1 #1-558 Acq:23-APR-2005 13:49:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-3 1613 CS1 050420F Exp:OCDD_DB5
319.8965 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



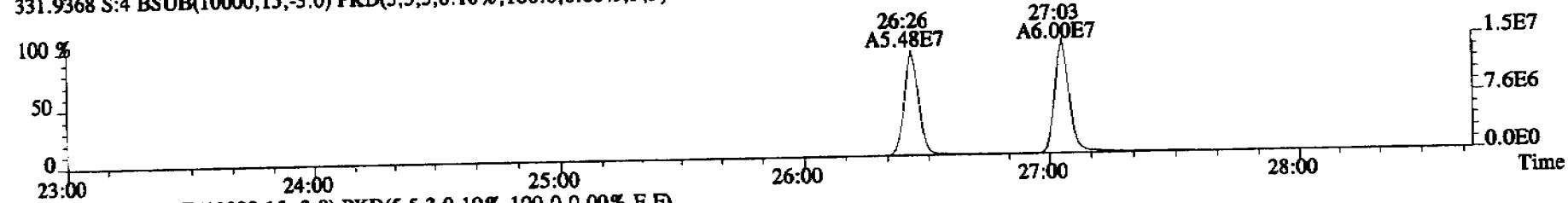
321.8936 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



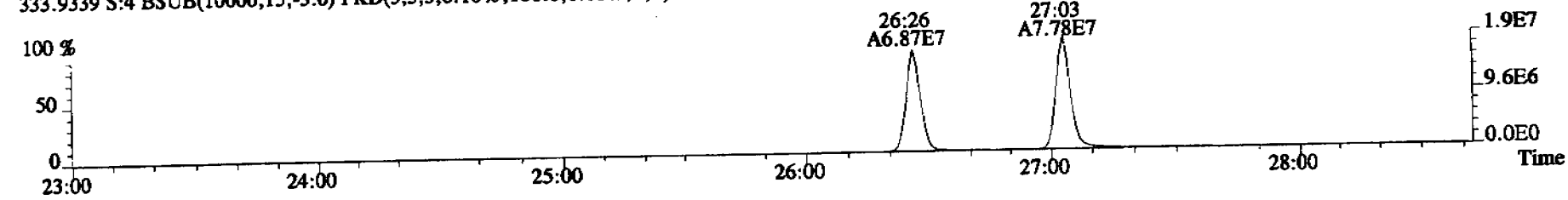
327.8847 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



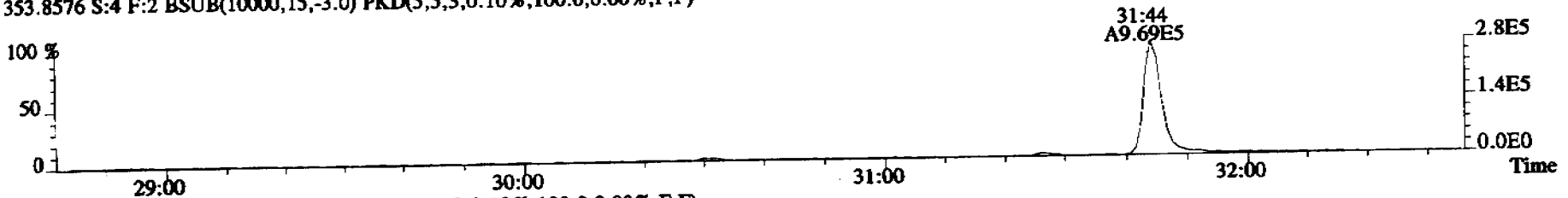
331.9368 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



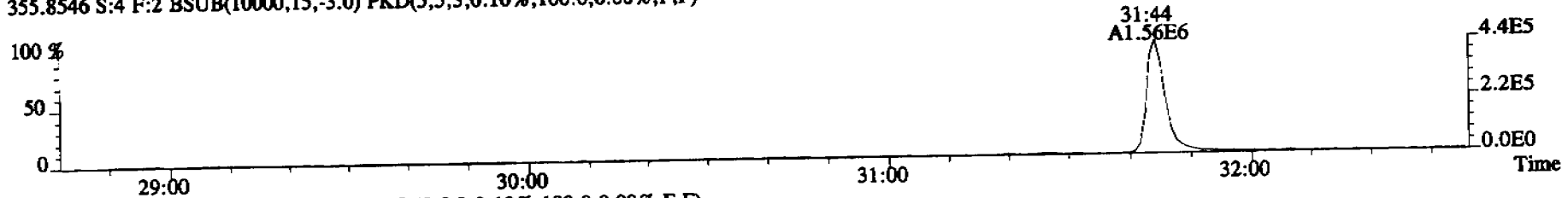
333.9339 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



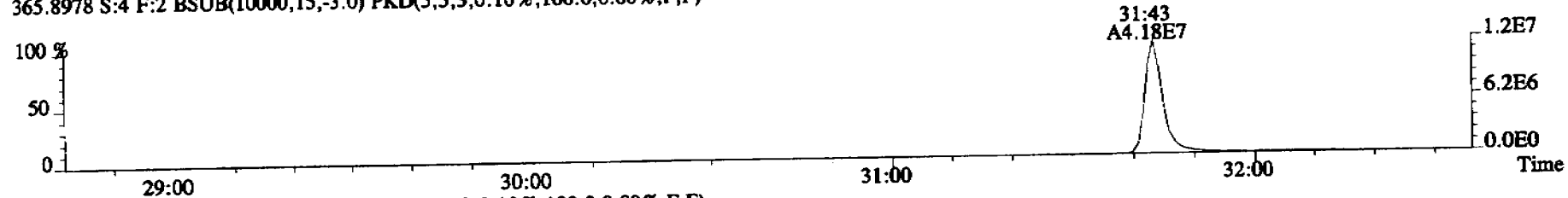
File:050423D1 #1-273 Acq:23-APR-2005 13:49:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-3 1613 CS1 050420F Exp:OCDD_DB5
353.8576 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



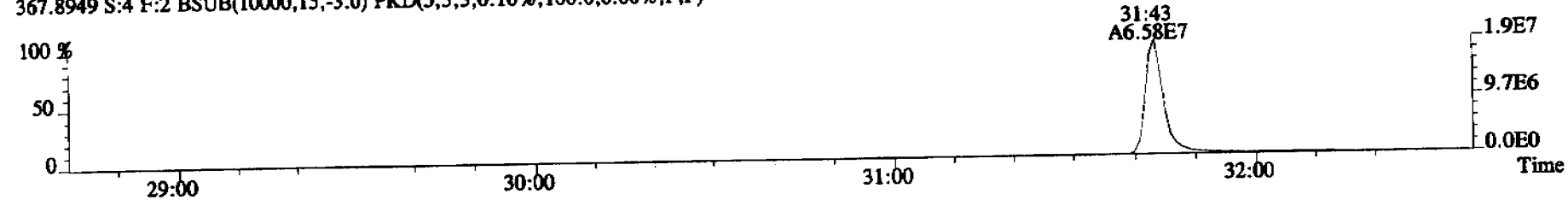
355.8546 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



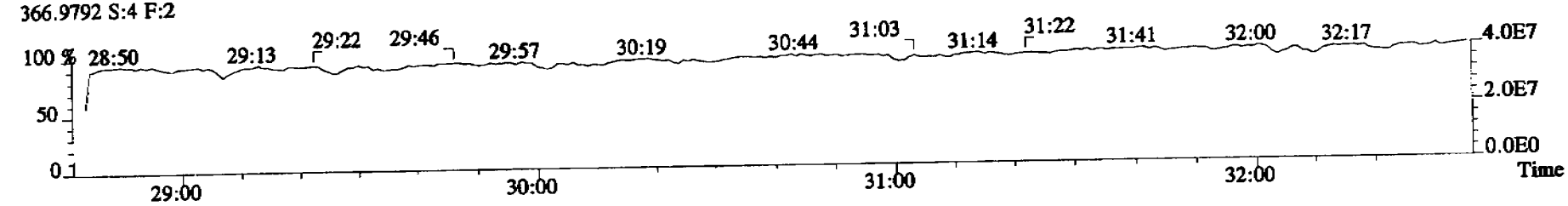
365.8978 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



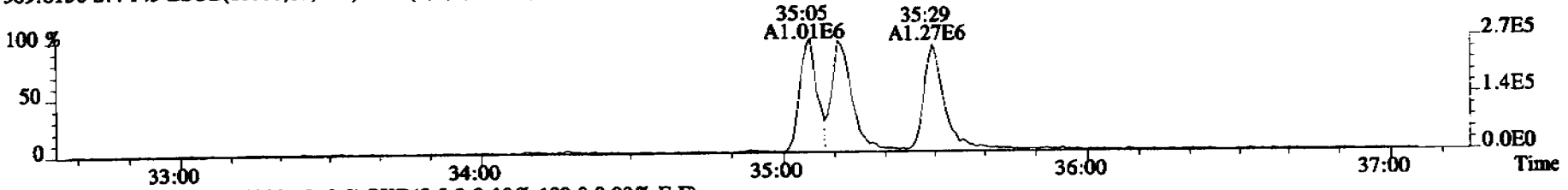
367.8949 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



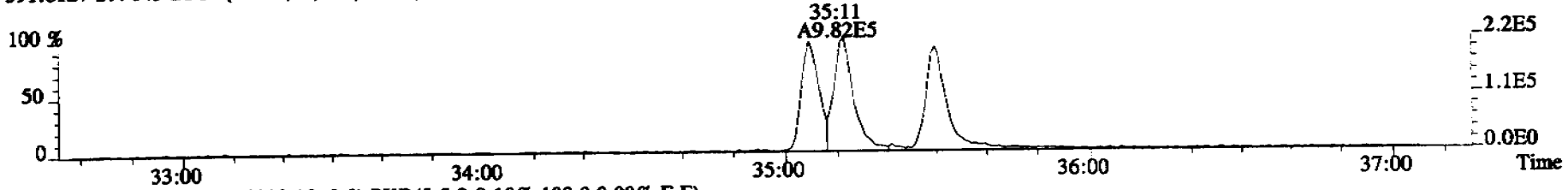
366.9792 S:4 F:2



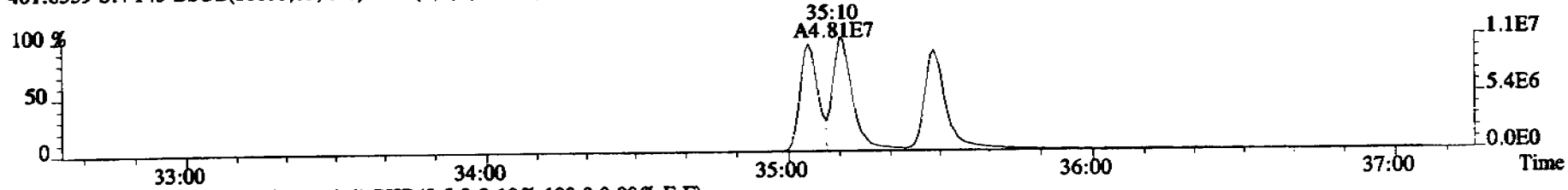
File:050423D1 #1-398 Acq:23-APR-2005 13:49:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-3 1613 CS1 050420F Exp:OCDD_DB5
389.8156 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



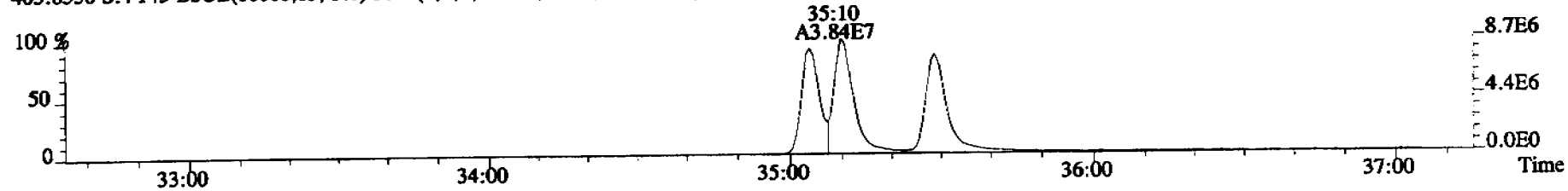
391.8127 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



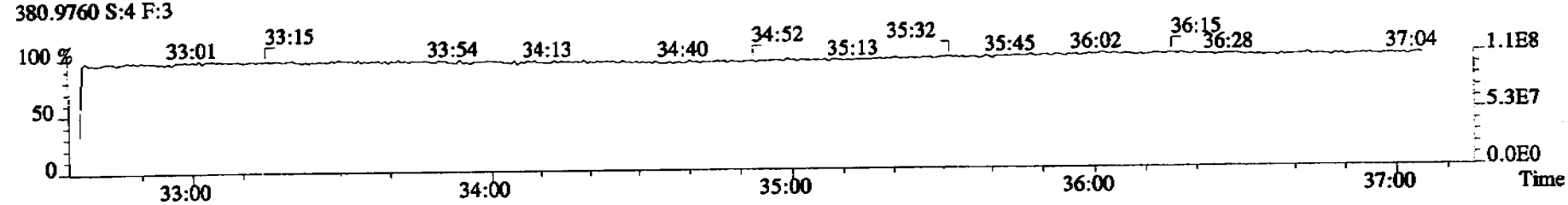
401.8559 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



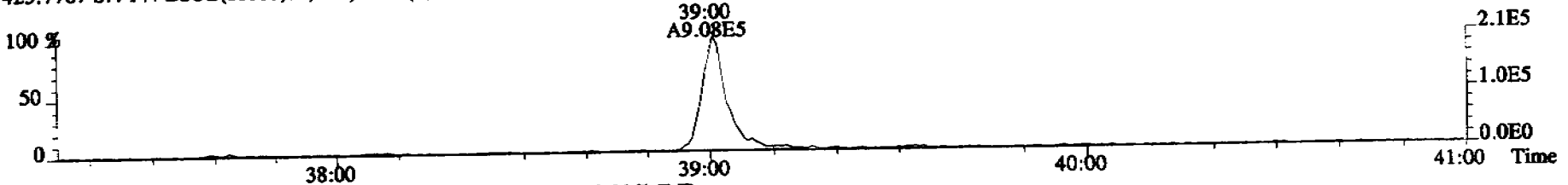
403.8530 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



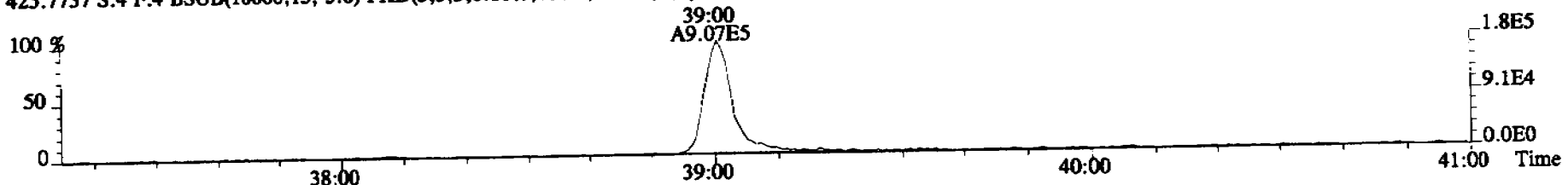
380.9760 S:4 F:3



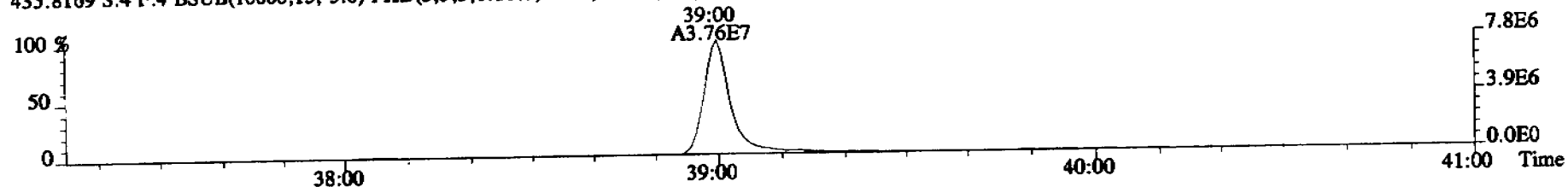
File:050423D1 #1-348 Acq:23-APR-2005 13:49:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-3 1613 CS1 050420F Exp:OCDD_DB5
423.7767 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



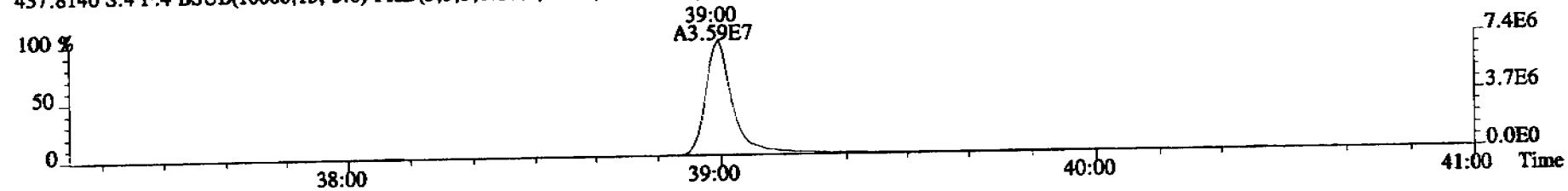
425.7737 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



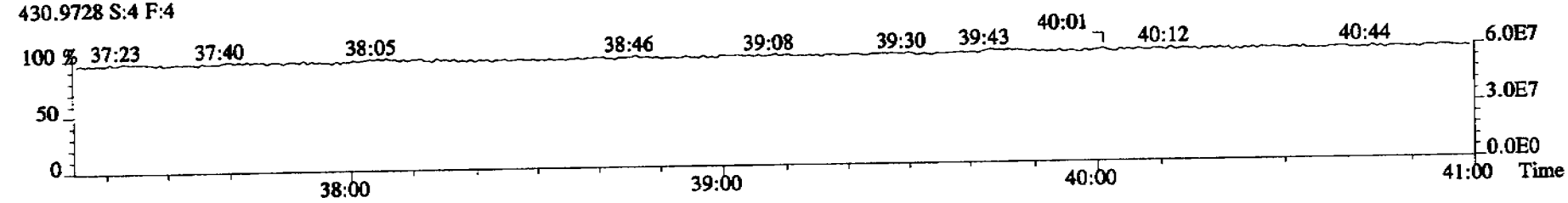
435.8169 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



437.8140 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

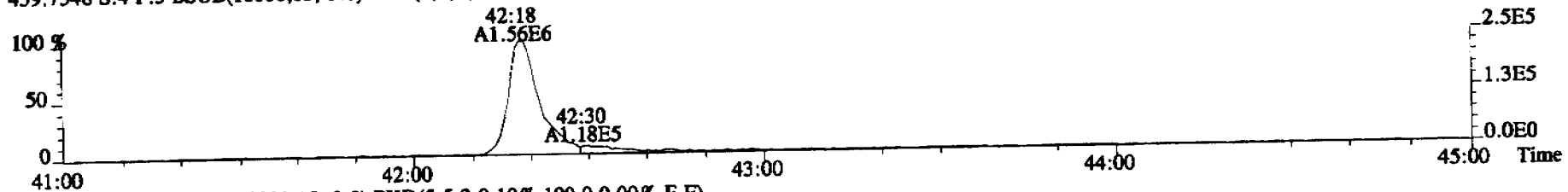


430.9728 S:4 F:4

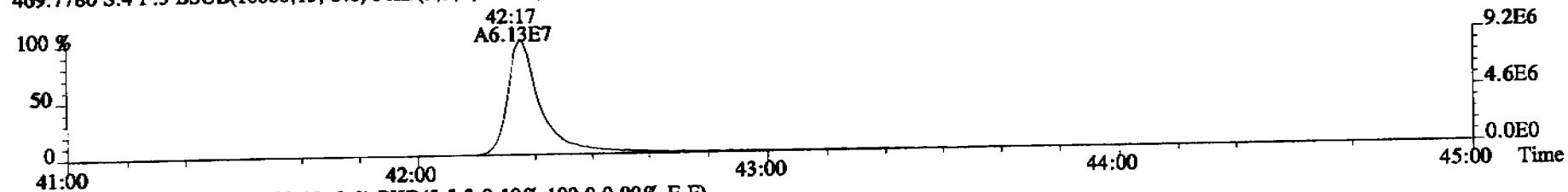


File:050423D1 #1-345 Acq:23-APR-2005 13:49:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-3 1613 CS1 050420F Exp:OCDD_DB5
457.7377 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

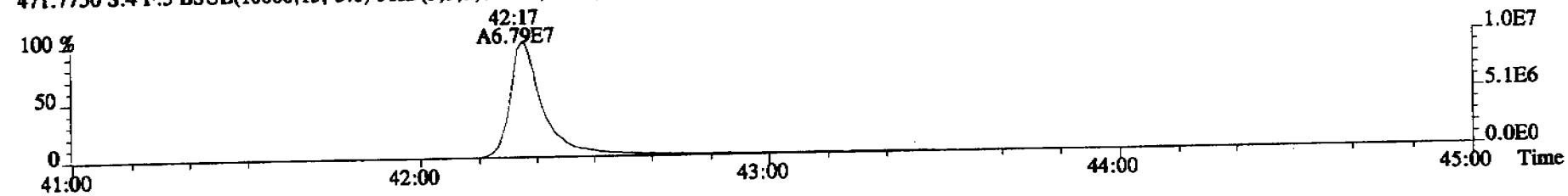
459.7348 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



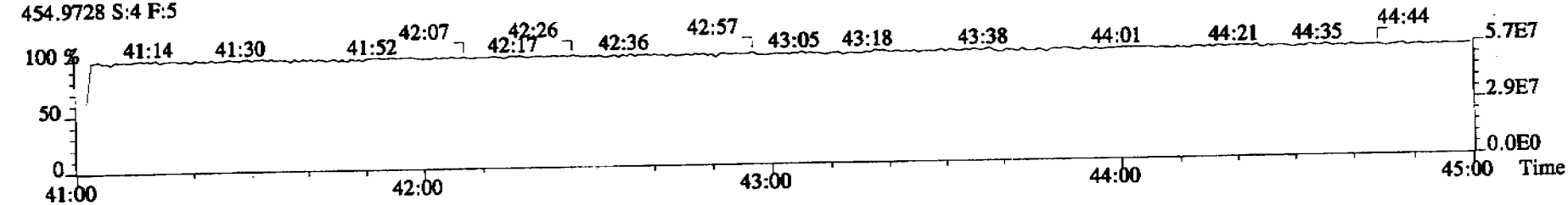
469.7780 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



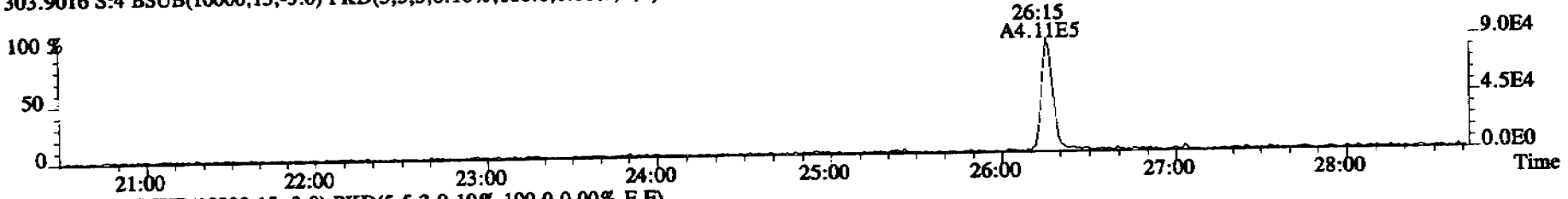
471.7750 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



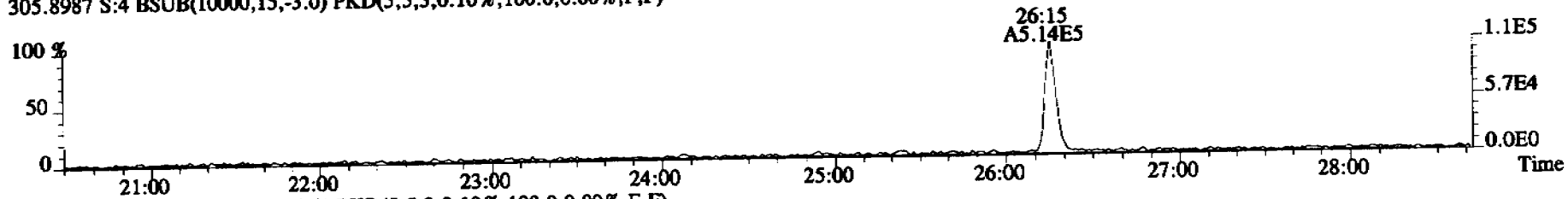
454.9728 S:4 F:5



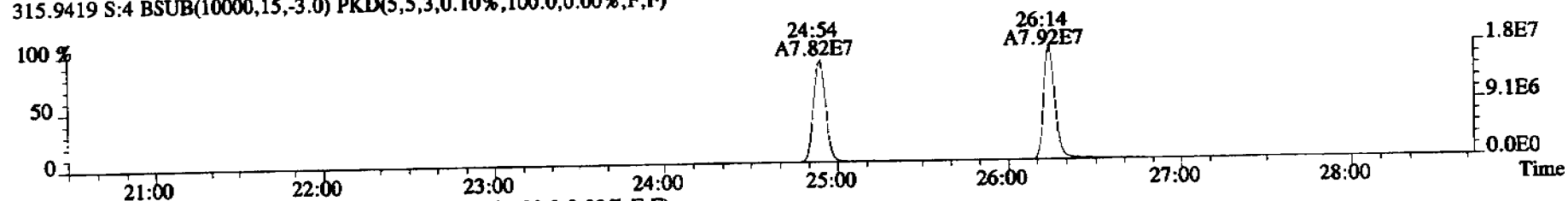
File:050423D1 #1-558 Acq:23-APR-2005 13:49:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-3 1613 CS1 050420F Exp:OCDD_DB5
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



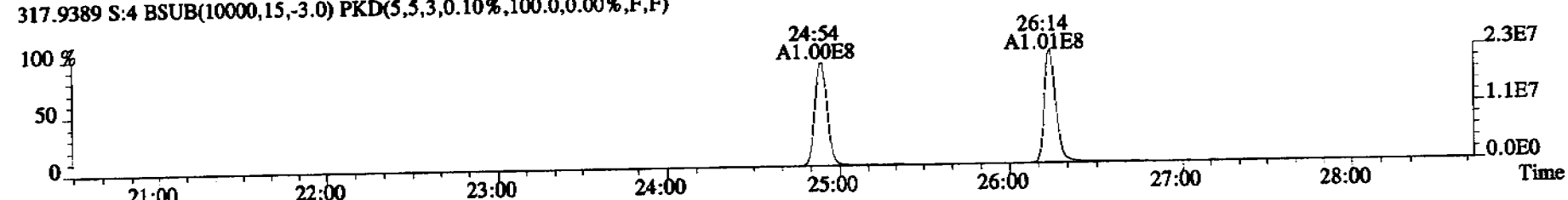
305.8987 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



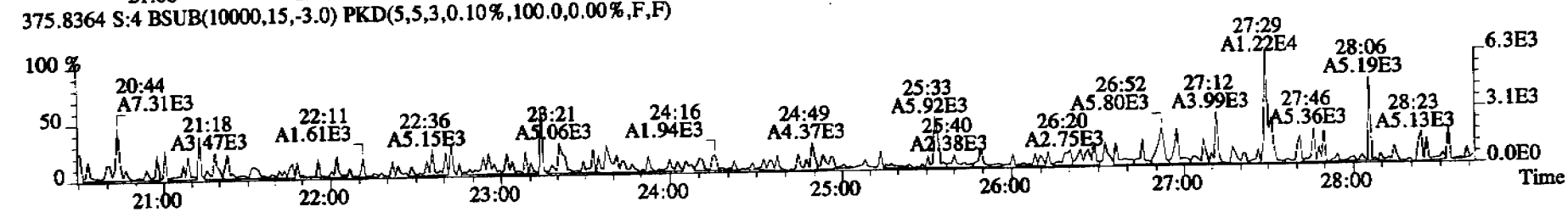
315.9419 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

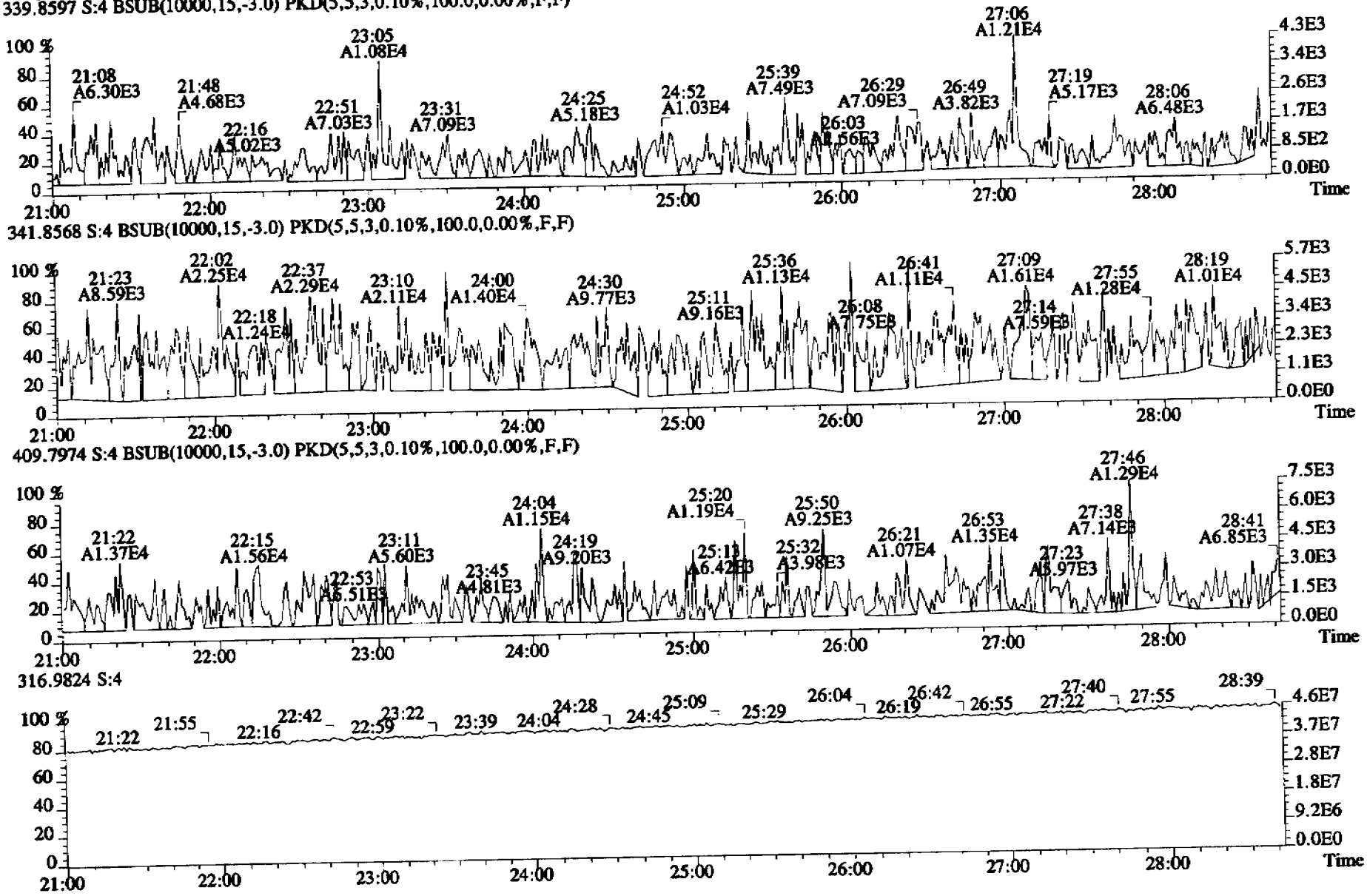


317.9389 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

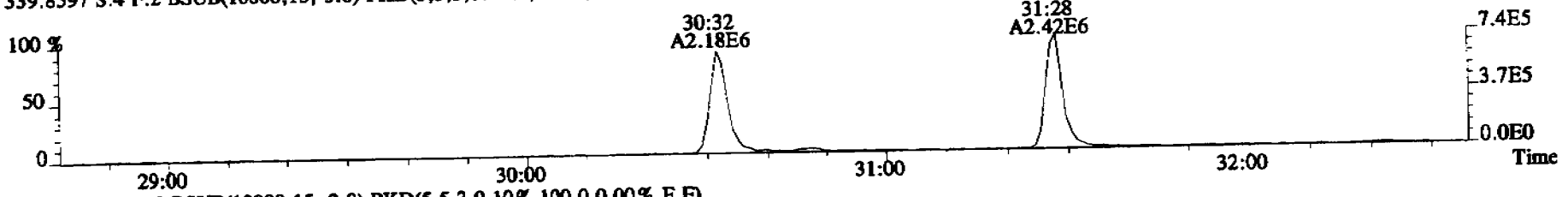


375.8364 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

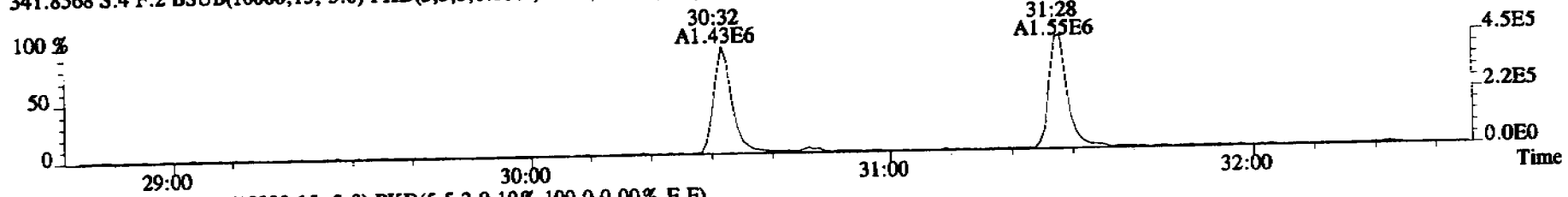



File:050423D1 #1-558 Acq:23-APR-2005 13:49:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-3 1613 CS1 050420F Exp:OCDD_DB5
339.8597 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
341.8568 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
409.7974 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
316.9824 S:4
Time

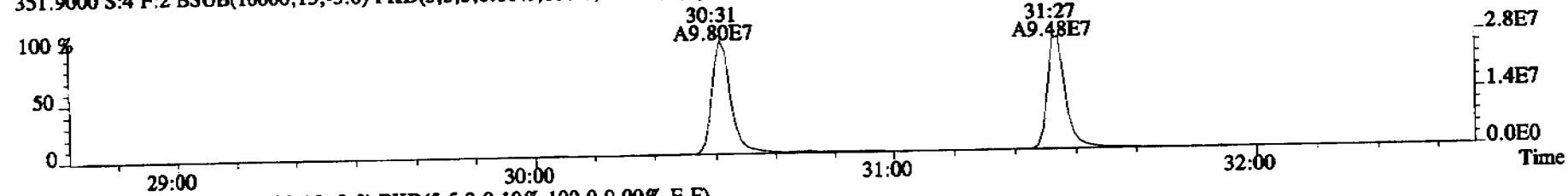
File:050423D1 #1-273 Acq:23-APR-2005 13:49:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-3 1613 CS1 050420F Exp:OCDD_DB5
339.8597 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



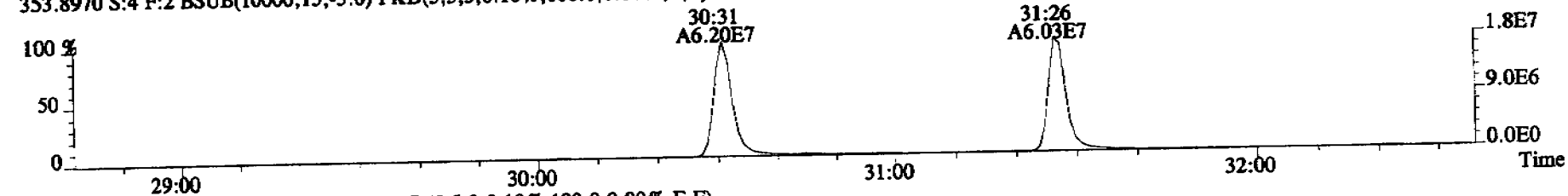
341.8568 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



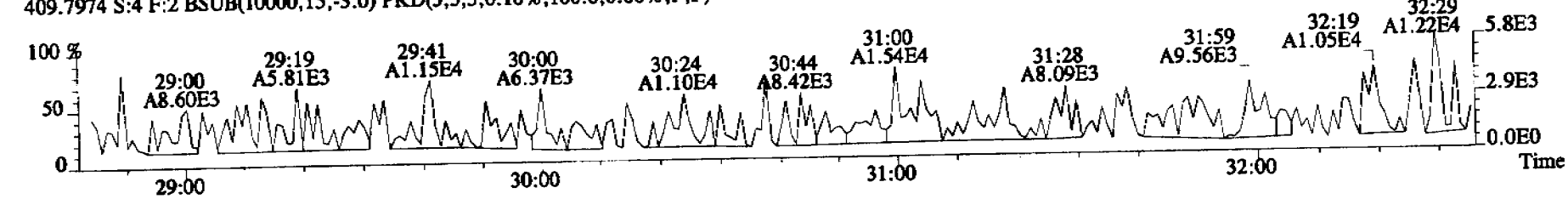
351.9000 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



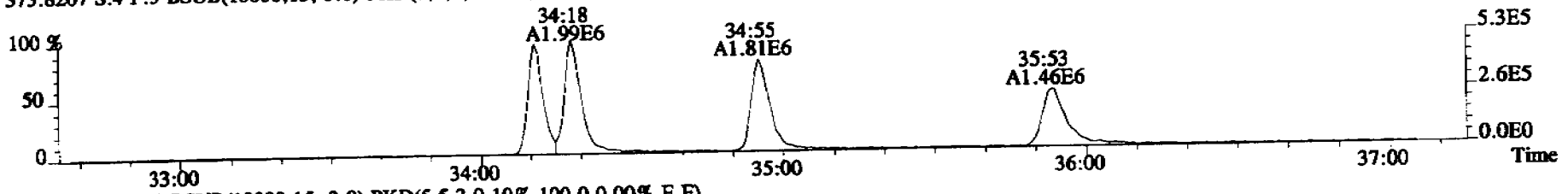
353.8970 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



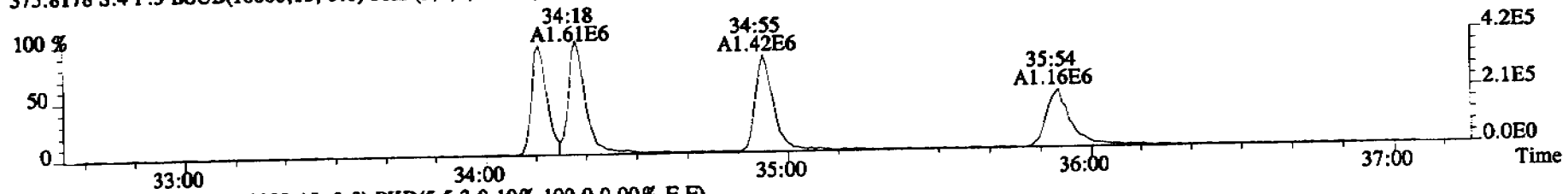
409.7974 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



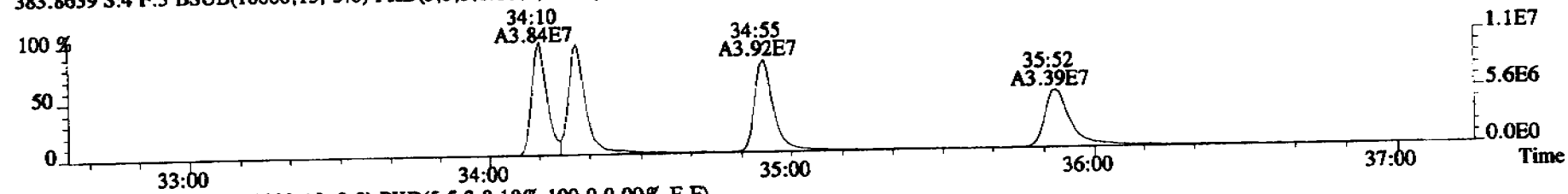
File:050423D1 #1-398 Acq:23-APR-2005 13:49:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-3 1613 CS1 050420F Exp:OCDD_DB5
373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



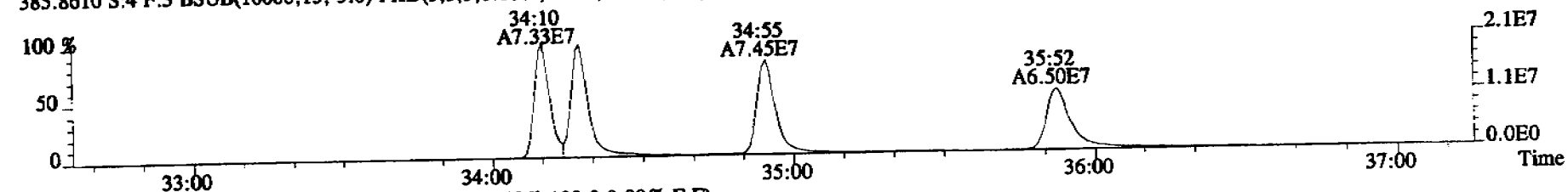
375.8178 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



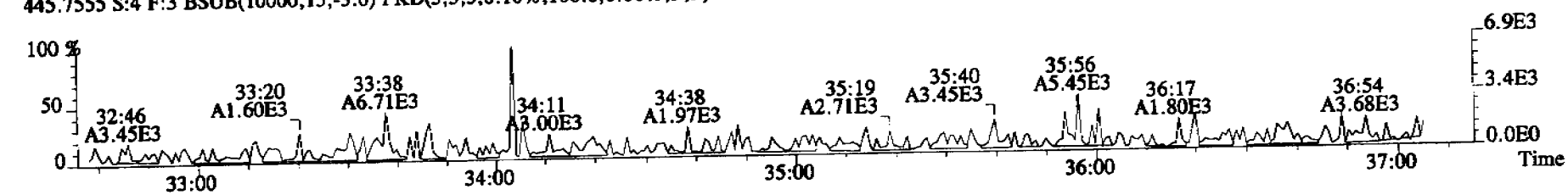
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



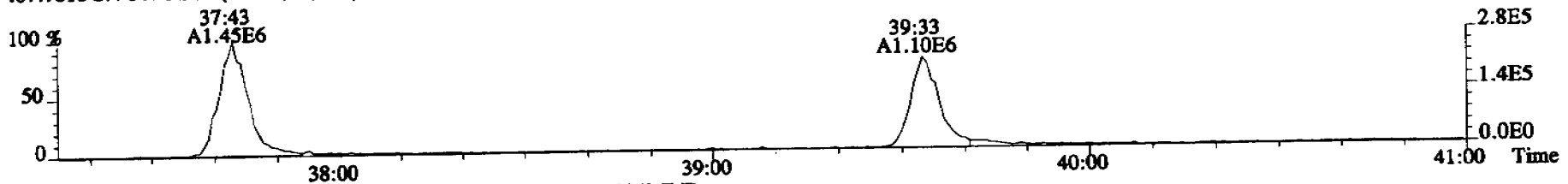
385.8610 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



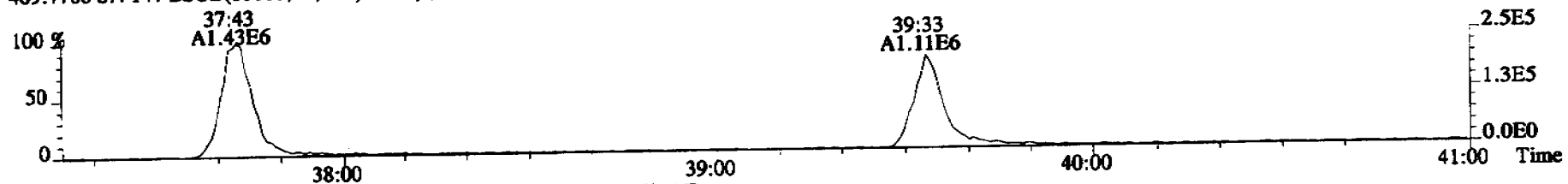
445.7555 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



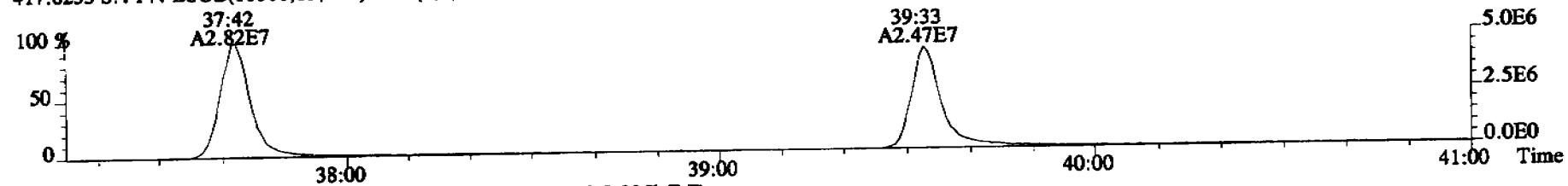
File:050423D1 #1-348 Acq:23-APR-2005 13:49:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-3 1613 CS1 050420F Exp:OCDD_DB5
407.7818 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



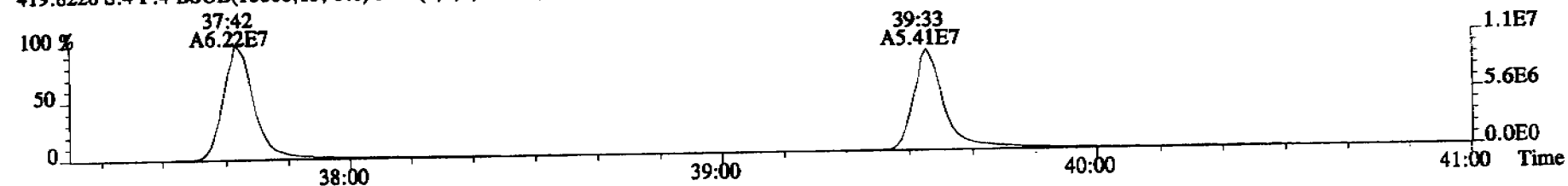
409.7788 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



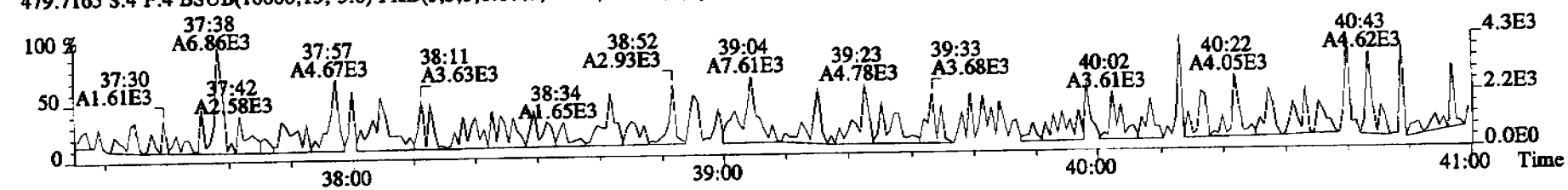
417.8253 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



419.8220 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

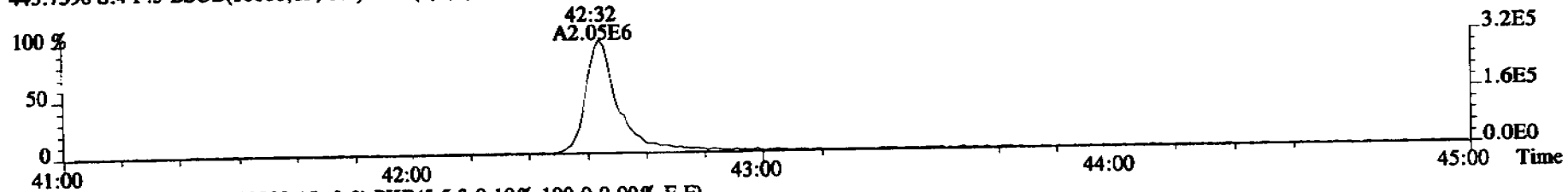


479.7165 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

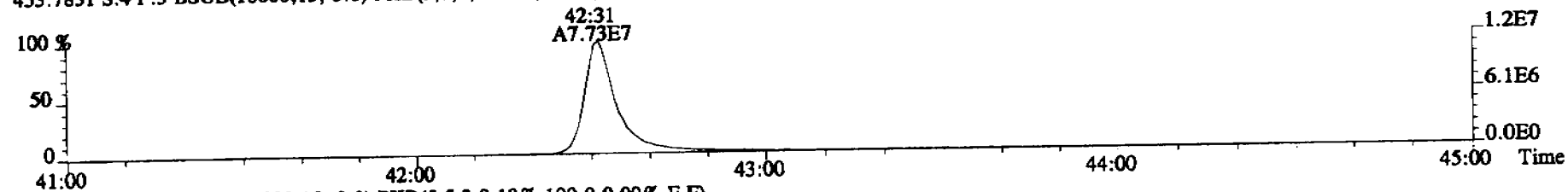


File:050423D1 #1-345 Acq:23-APR-2005 13:49:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-3 1613 CS1 050420F Exp:OCDD_DB5
441.7428 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

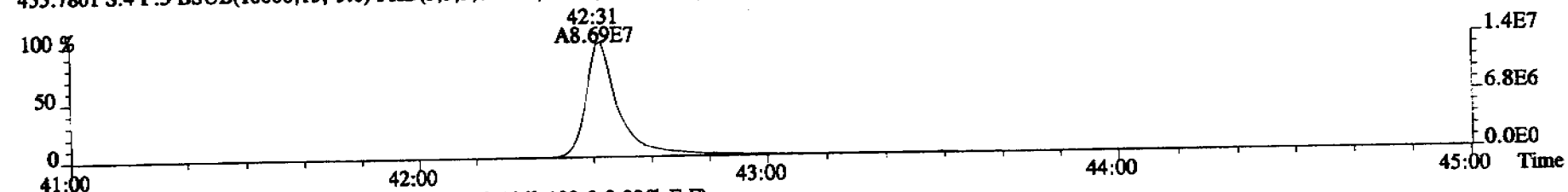
443.7398 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



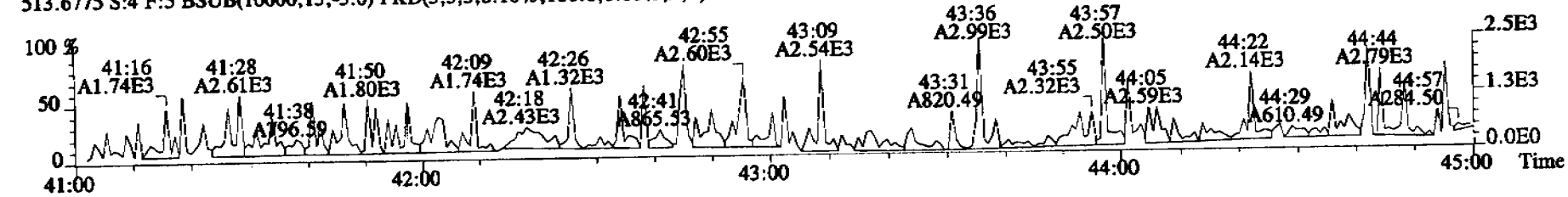
453.7831 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

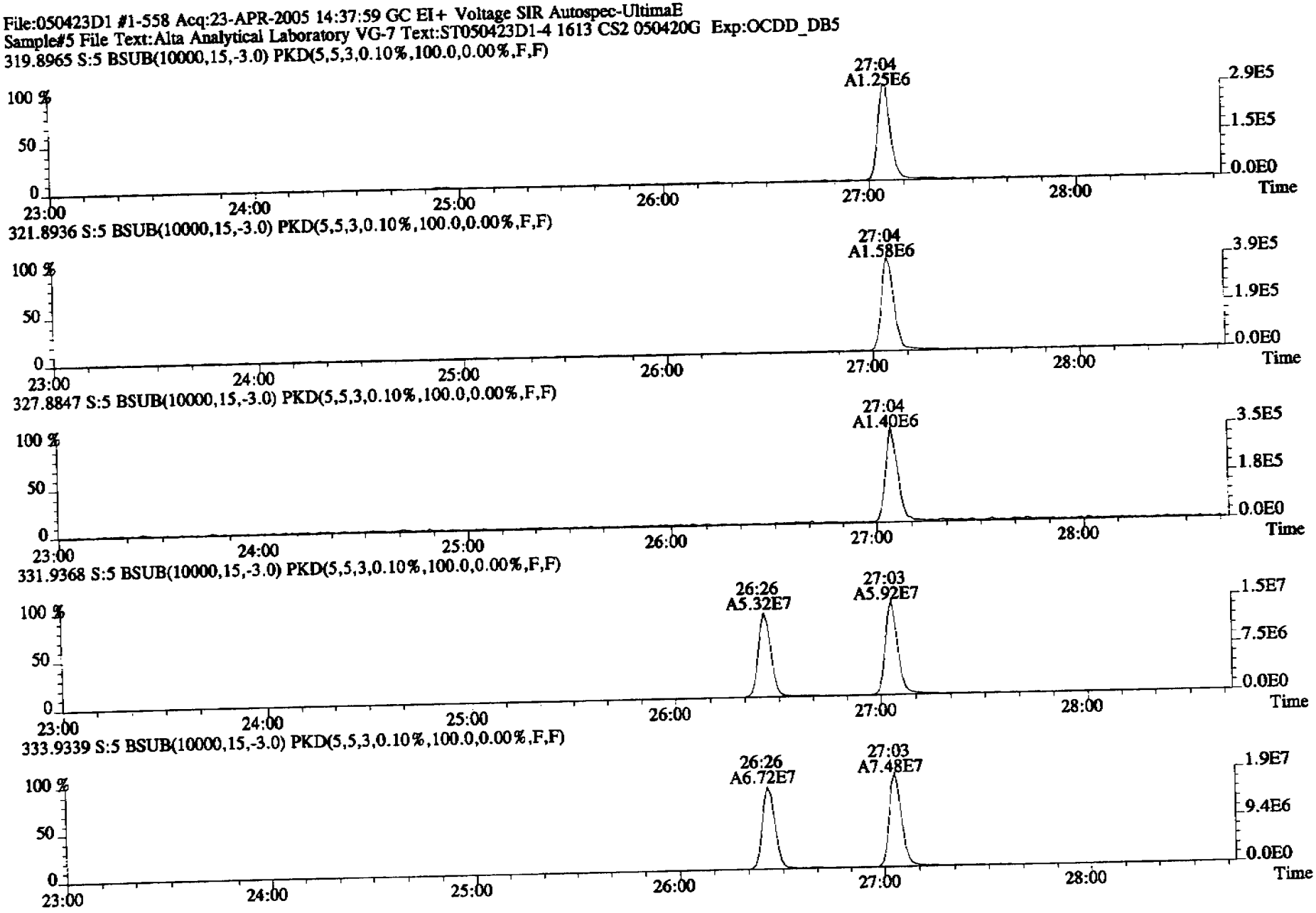


455.7801 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

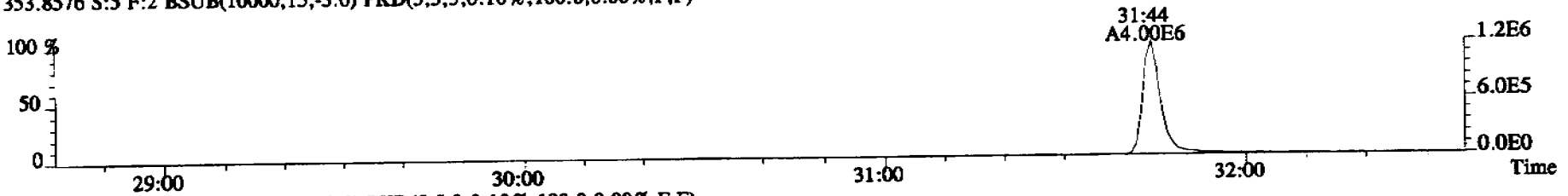


513.6775 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

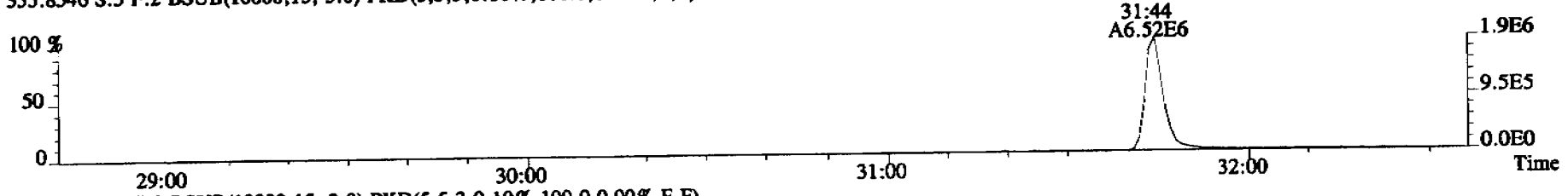



File:050423D1 #1-558 Acq:23-APR-2005 14:37:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-4 1613 CS2 050420G Exp:OCDD_DB5
319.8965 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
27:04
A1.25E6
2.9E5
1.5E5
0.0E0
Time
321.8936 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
27:04
A1.58E6
3.9E5
1.9E5
0.0E0
Time
327.8847 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
27:04
A1.40E6
3.5E5
1.8E5
0.0E0
Time
331.9368 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:26
A5.32E7
27:03
A5.92E7
1.5E7
7.5E6
0.0E0
Time
333.9339 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:26
A6.72E7
27:03
A7.48E7
1.9E7
9.4E6
0.0E0
Time
100 %
50
0
23:00
24:00
25:00
26:00
27:00
28:00

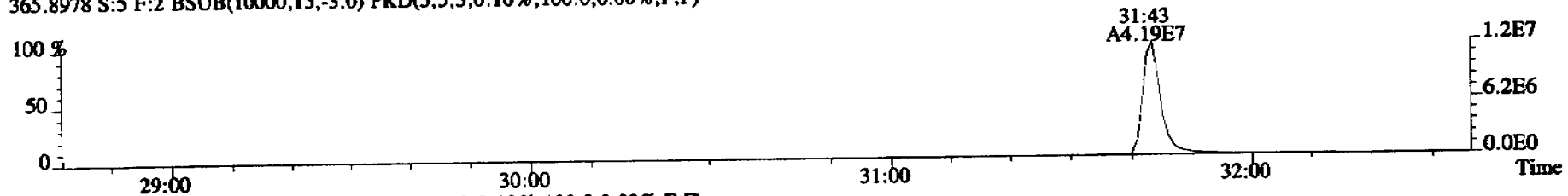
File:050423D1 #1-273 Acq:23-APR-2005 14:37:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-4 1613 CS2 050420G Exp:OCDD_DB5
353.8576 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



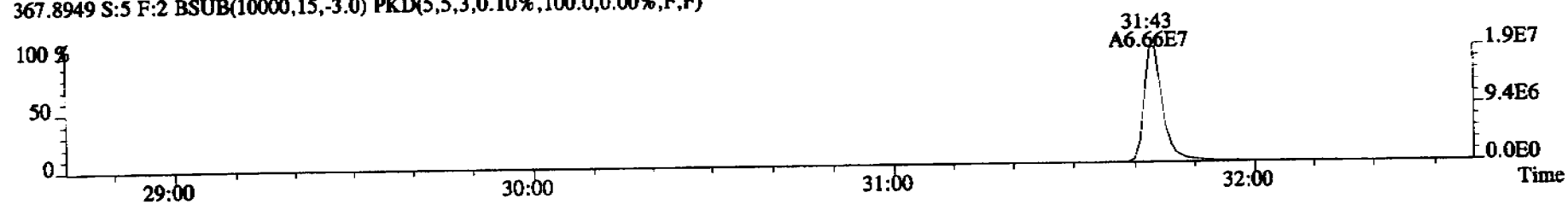
355.8546 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



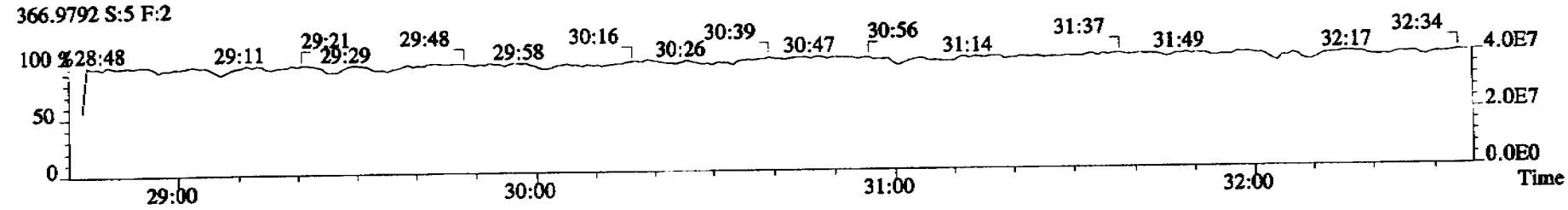
365.8978 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



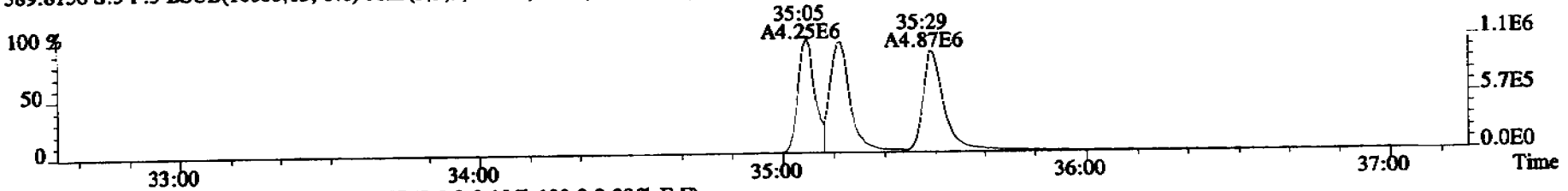
367.8949 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



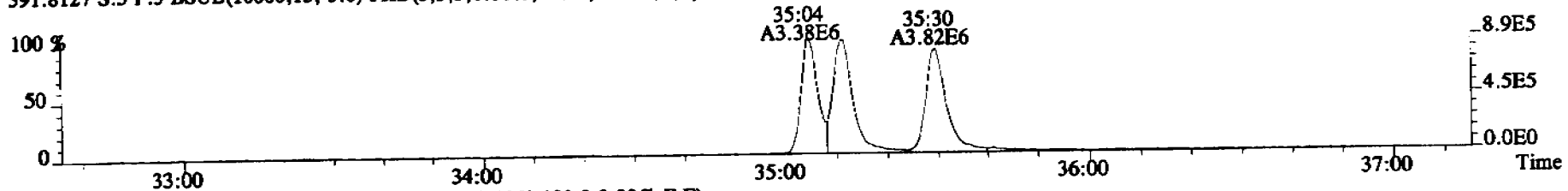
366.9792 S:5 F:2



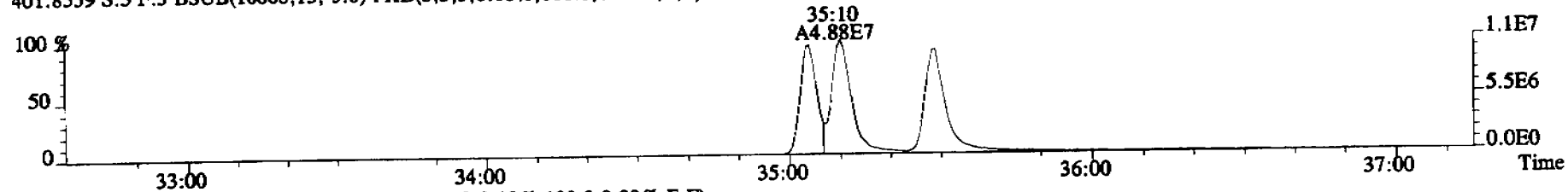
File:050423D1 #1-398 Acq:23-APR-2005 14:37:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-4 1613 CS2 050420G Exp:OCDD_DB5
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



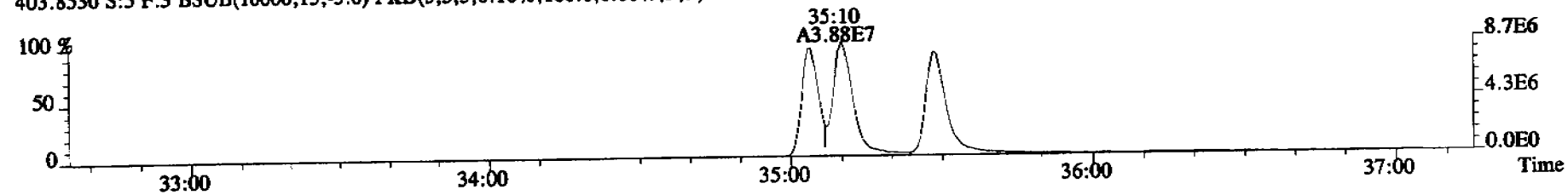
391.8127 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



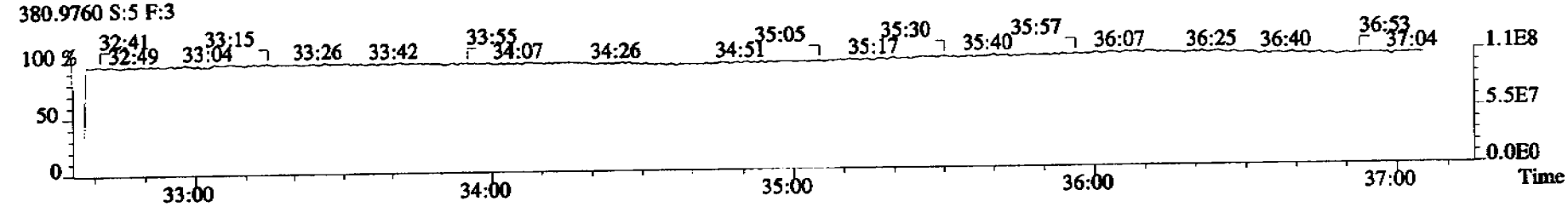
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



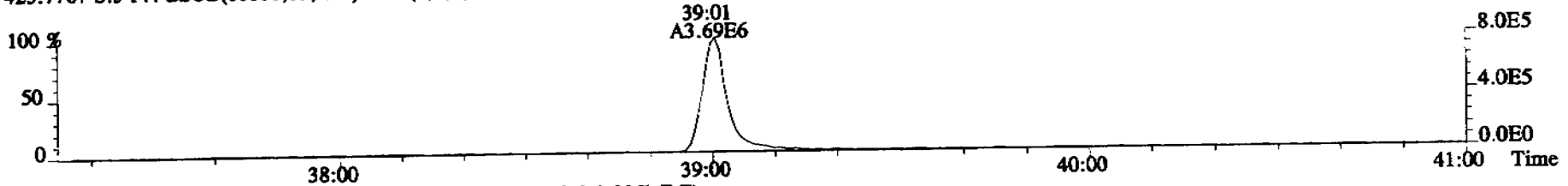
403.8530 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



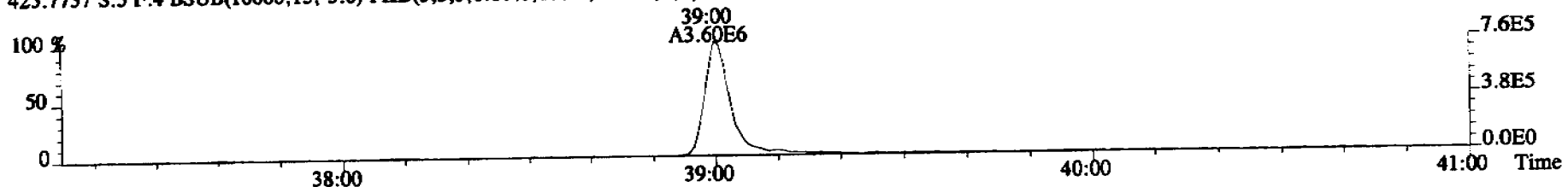
380.9760 S:5 F:3



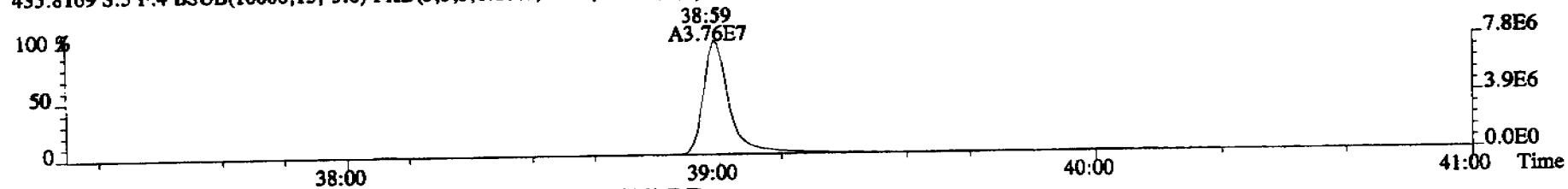
File:050423D1 #1-348 Acq:23-APR-2005 14:37:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-4 1613 CS2 050420G Exp:OCDD_DB5
423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



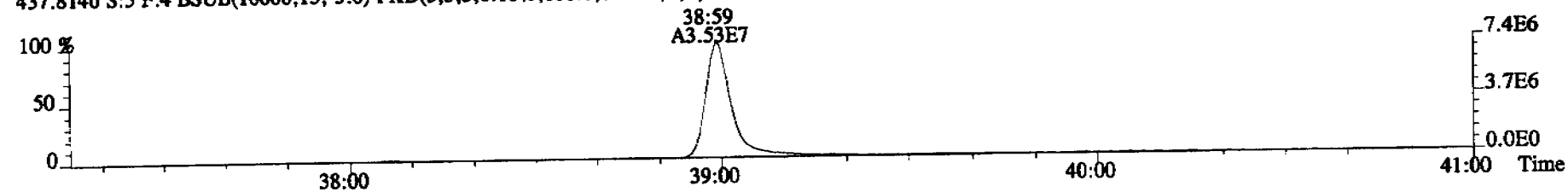
425.7737 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



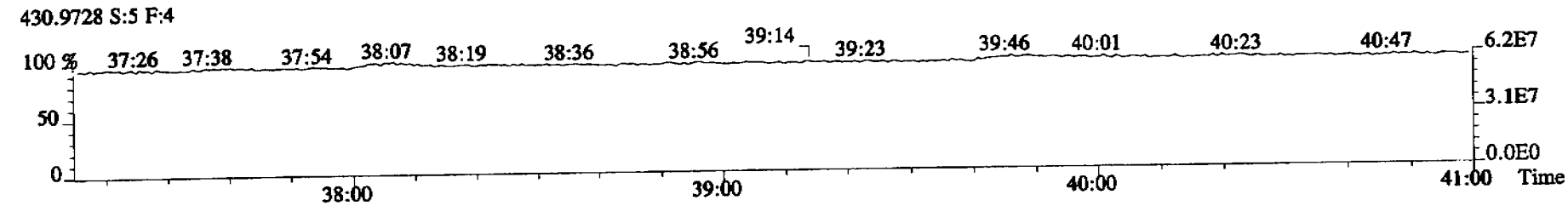
435.8169 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



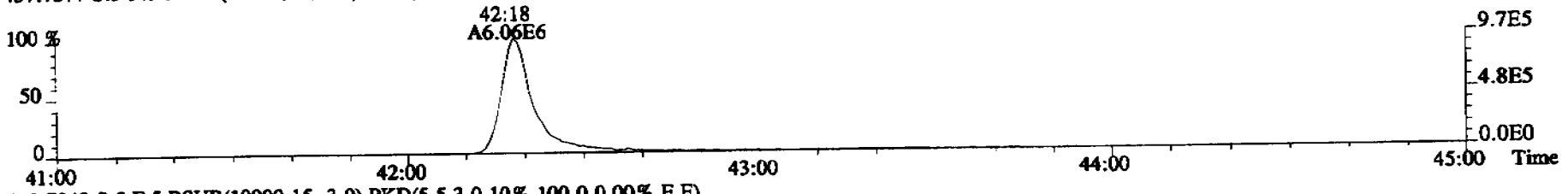
437.8140 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



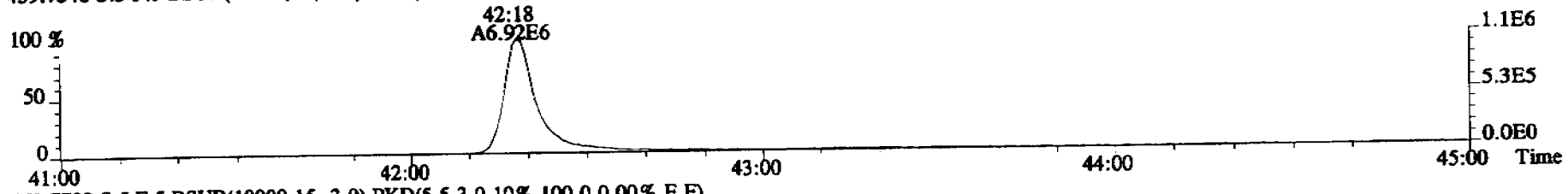
430.9728 S:5 F:4



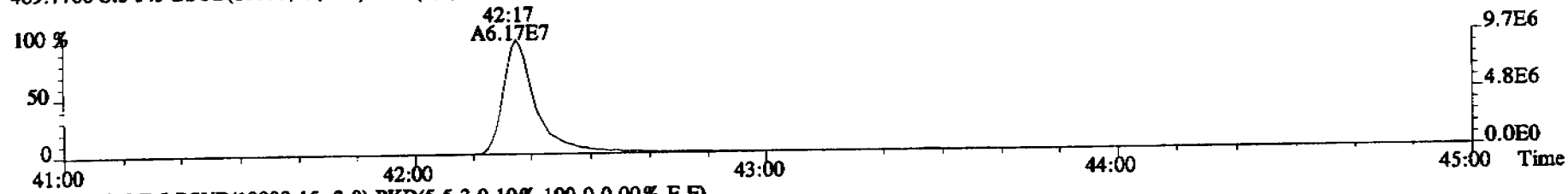
File:050423D1 #1-345 Acq:23-APR-2005 14:37:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-4 1613 CS2 050420G Exp:OCDD_DB5
457.7377 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



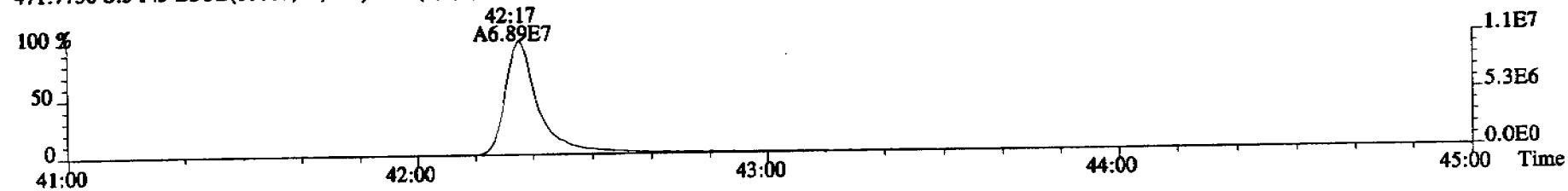
459.7348 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



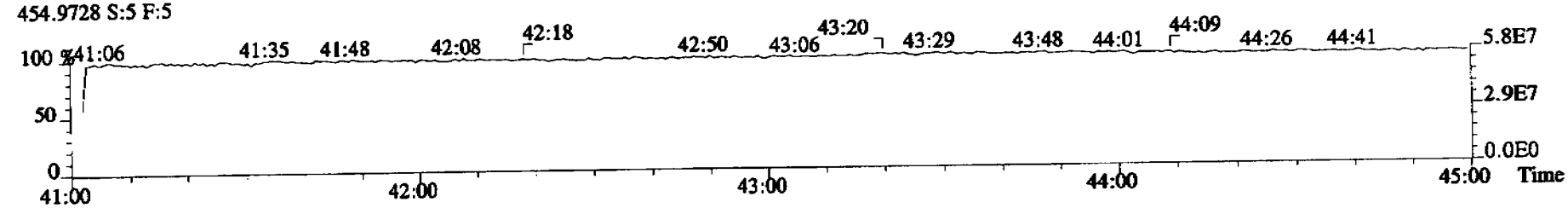
469.7780 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



471.7750 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

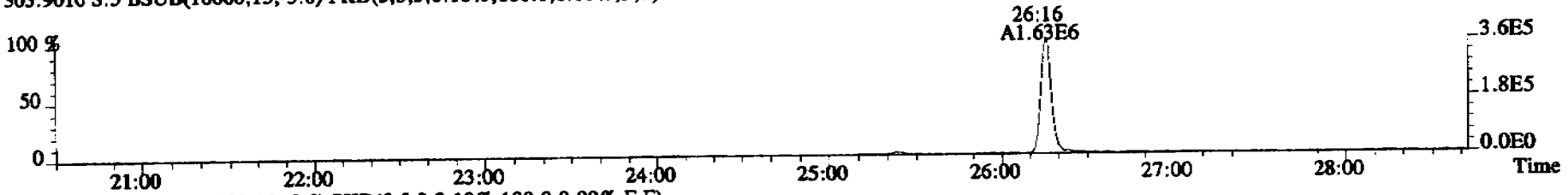


454.9728 S:5 F:5

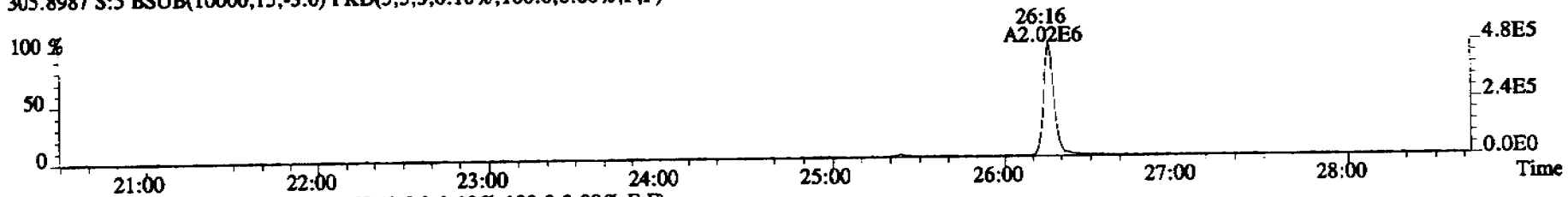


File:050423D1 #1-558 Acq:23-APR-2005 14:37:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-4 1613 CS2 050420G Exp:OCDD_DB5

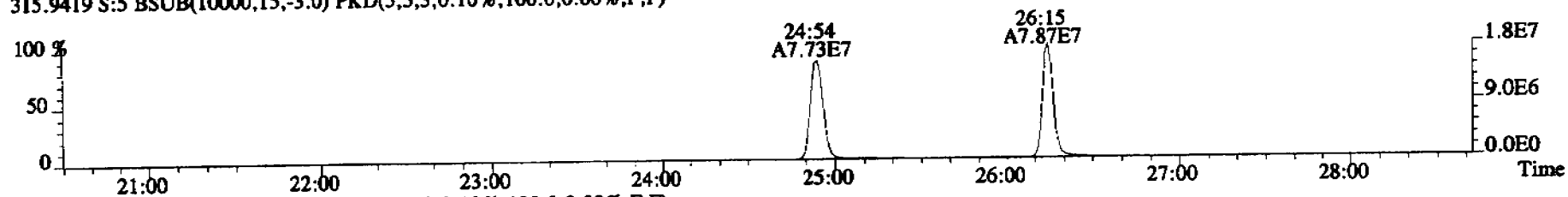
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



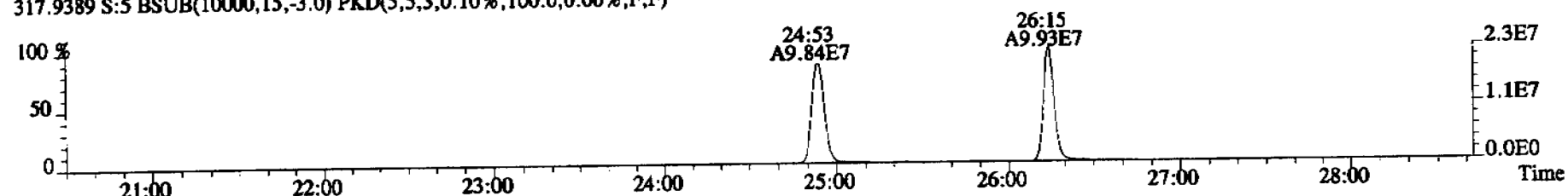
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



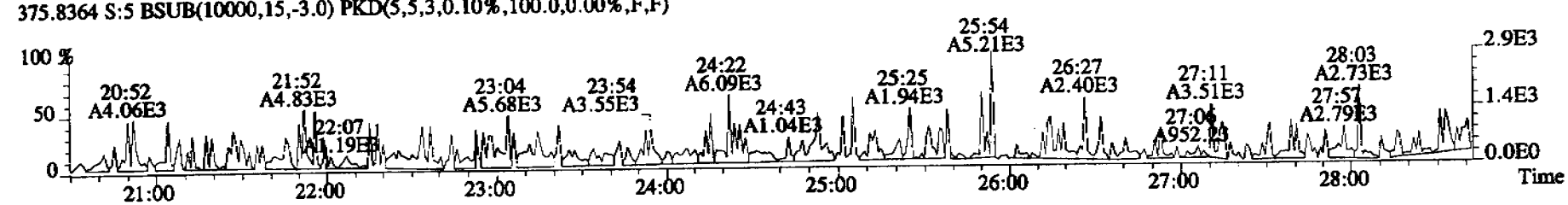
315.9419 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

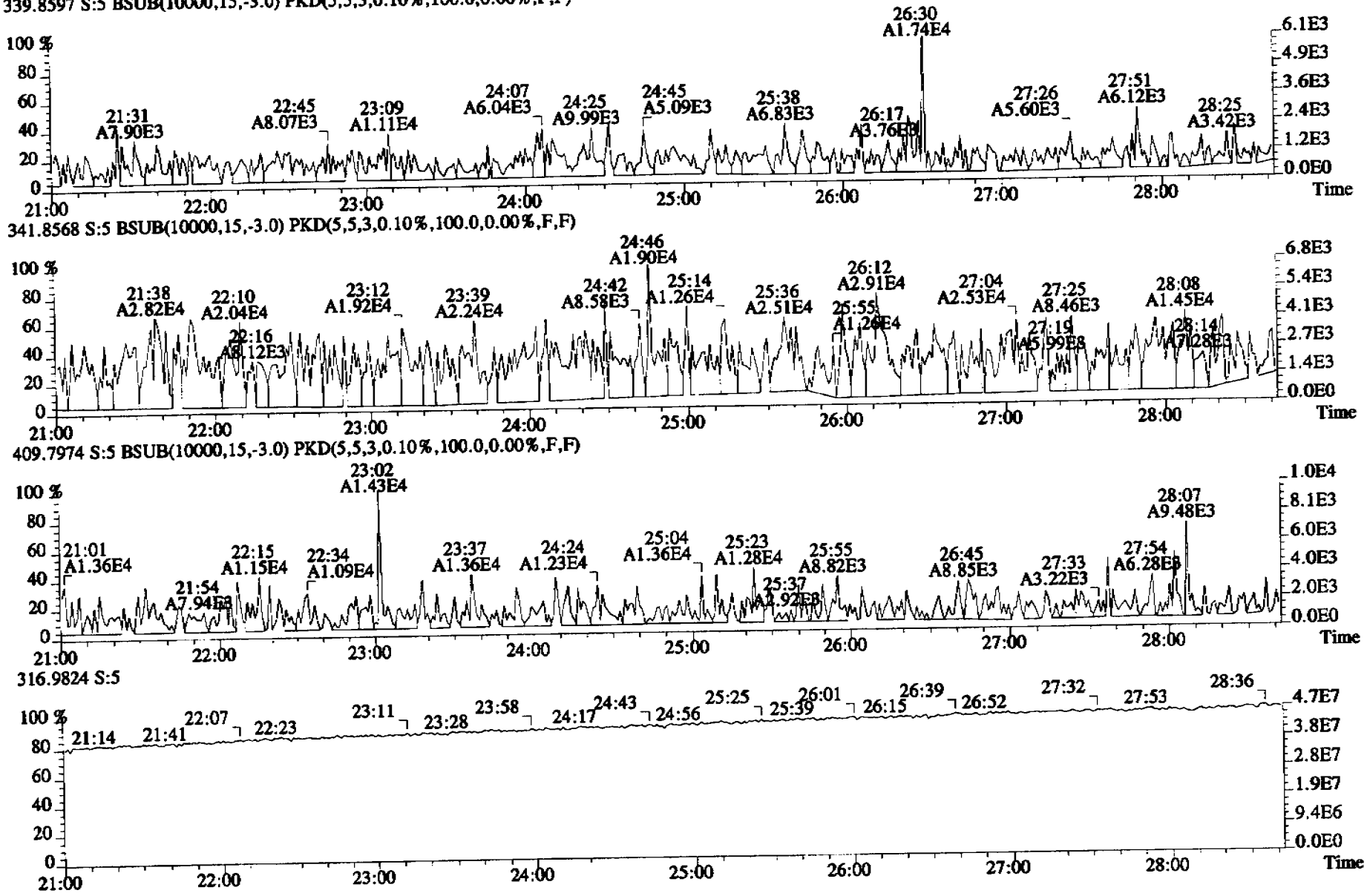


317.9389 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

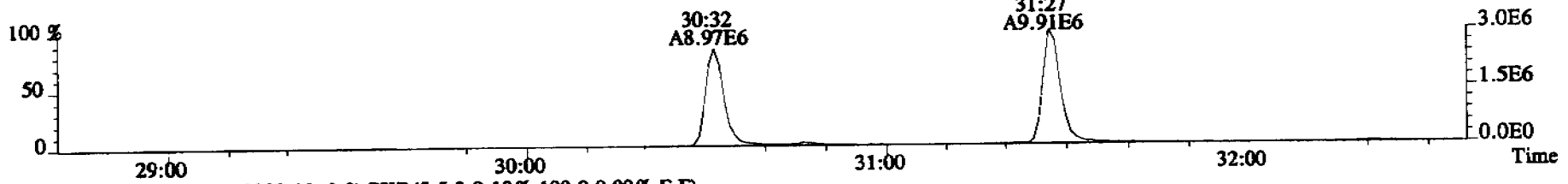


375.8364 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

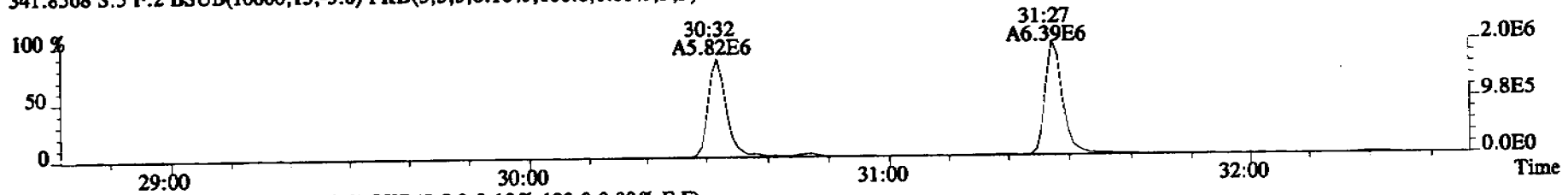



File:050423D1 #1-558 Acq:23-APR-2005 14:37:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-4 1613 CS2 050420G Exp:OCDD_DB5
339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
341.8568 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
409.7974 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
316.9824 S:5
Time

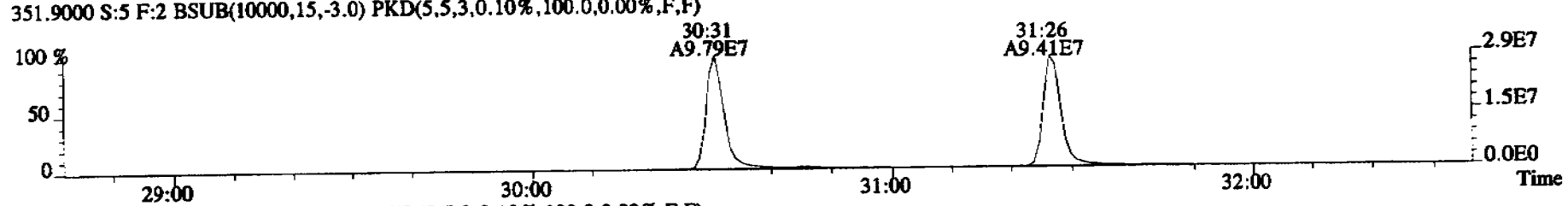
File:050423D1 #1-273 Acq:23-APR-2005 14:37:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-4 1613 CS2 050420G Exp:OCDD_DB5
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



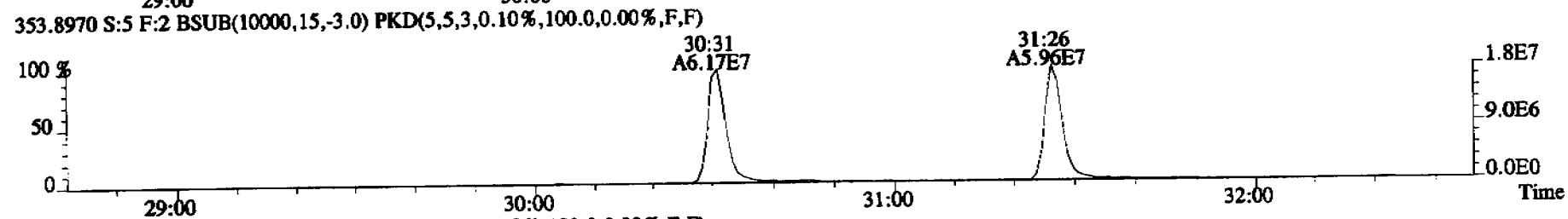
341.8568 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



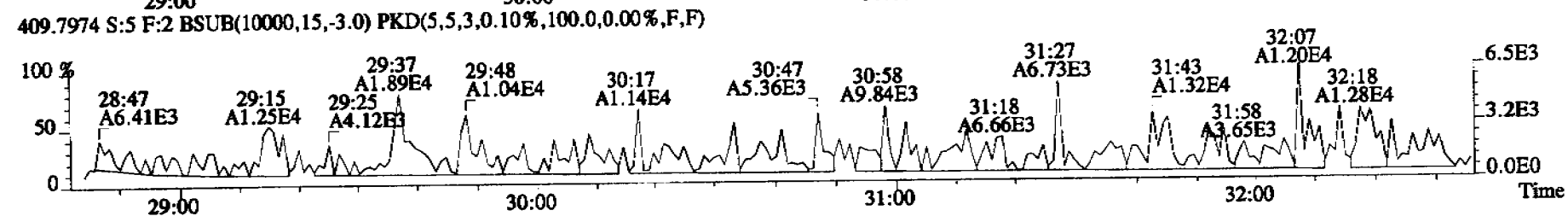
351.9000 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



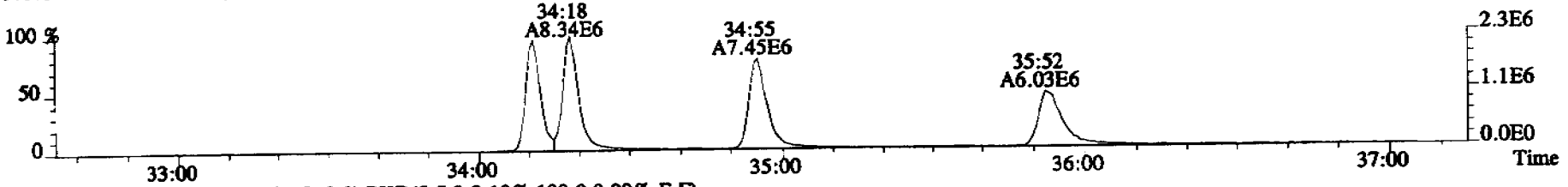
353.8970 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



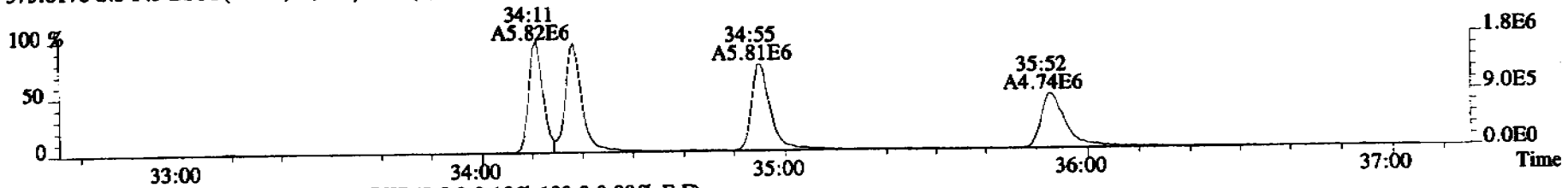
409.7974 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



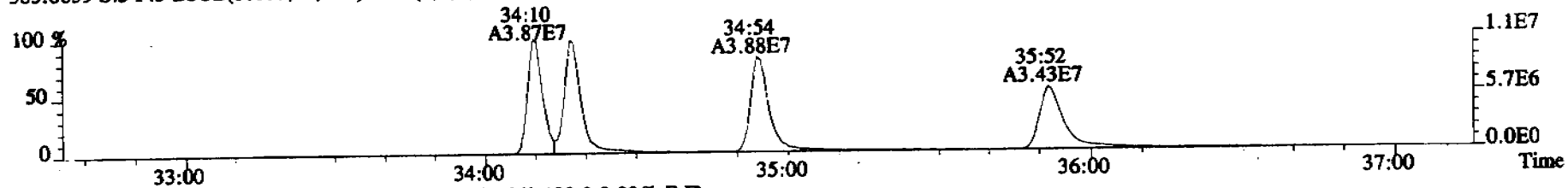
File:050423D1 #1-398 Acq:23-APR-2005 14:37:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-4 1613 CS2 050420G Exp:OCDD_DB5
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



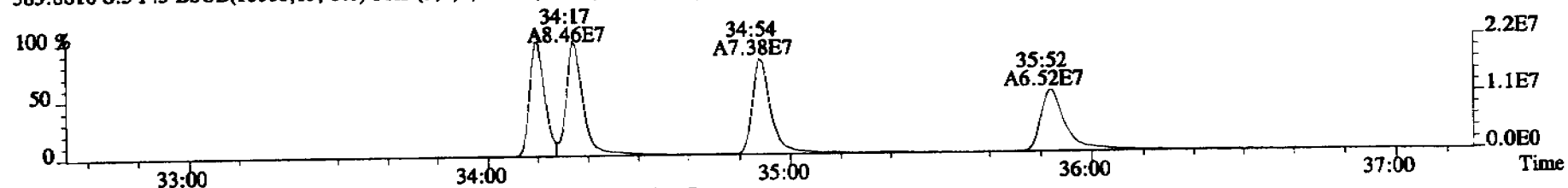
375.8178 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



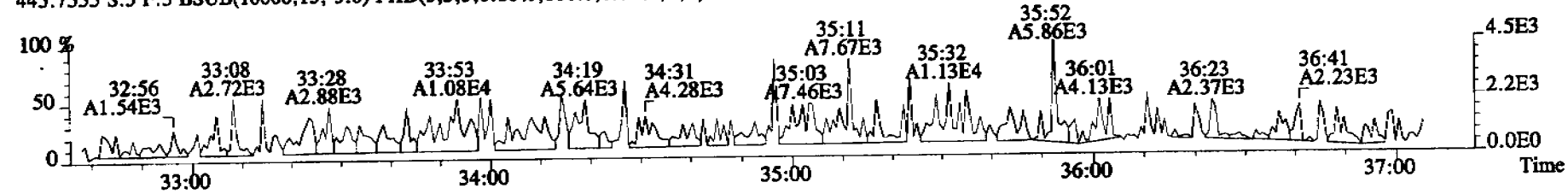
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



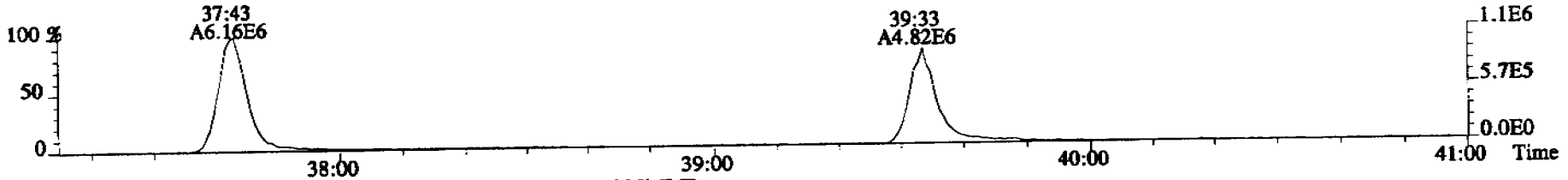
385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



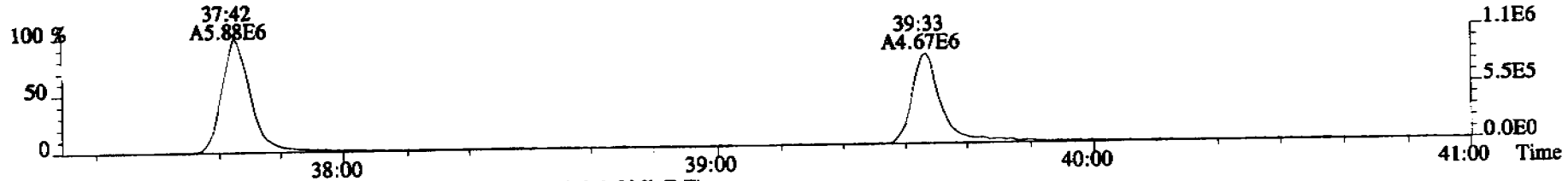
445.7555 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



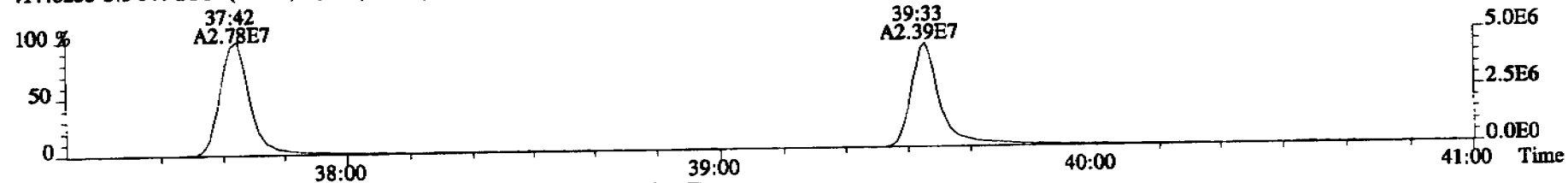
File:050423D1 #1-348 Acq:23-APR-2005 14:37:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-4 1613 CS2 050420G Exp:OCDD_DB5
407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



409.7788 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

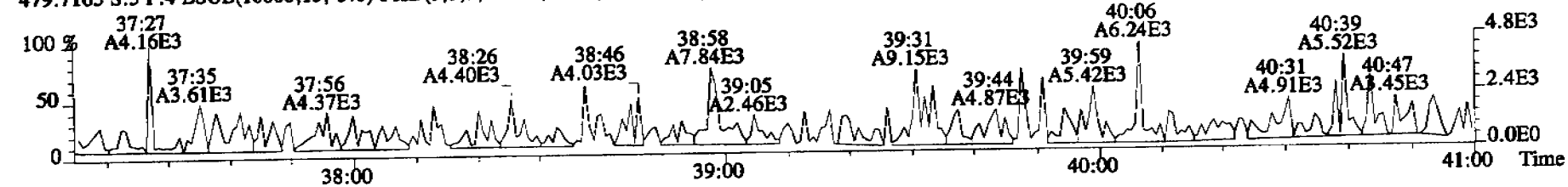


417.8253 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

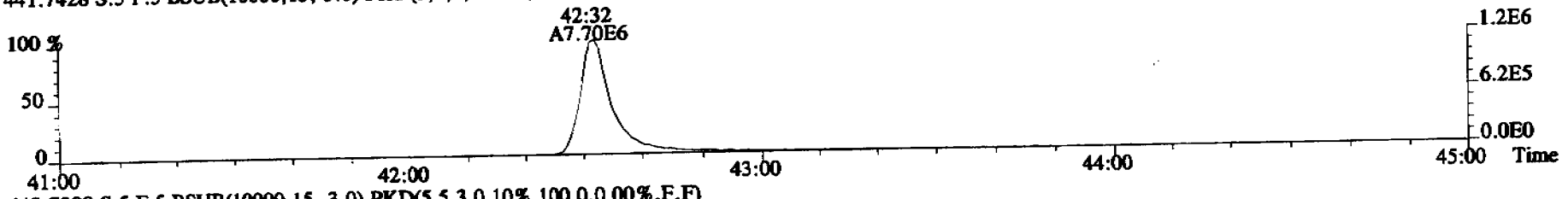


419.8220 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

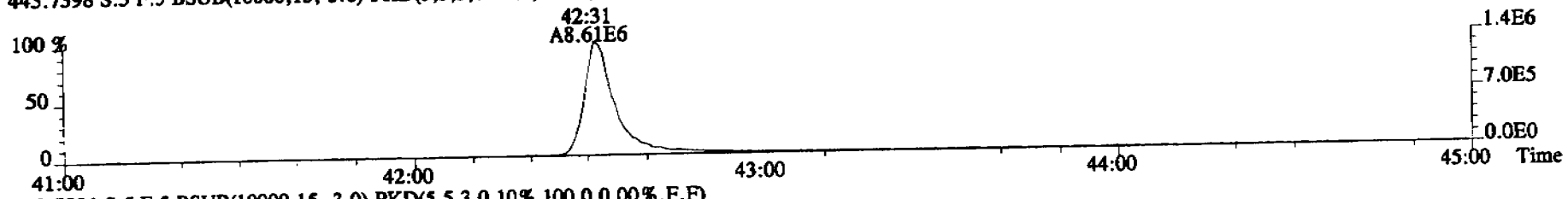
479.7165 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



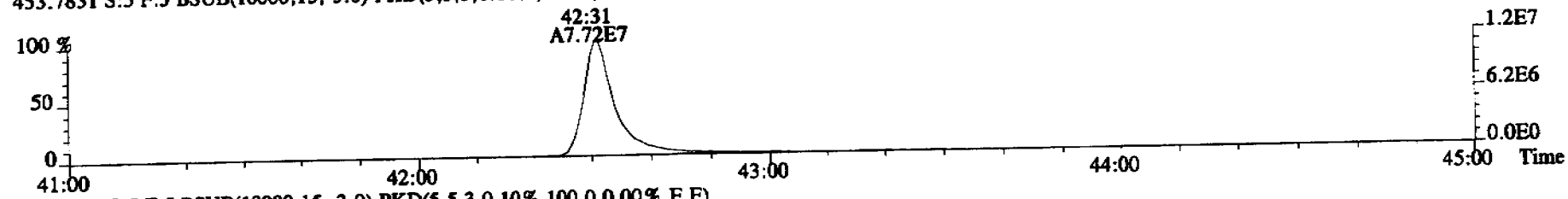
File:050423D1 #1-345 Acq:23-APR-2005 14:37:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-4 1613 CS2 050420G Exp:OCDD_DB5
441.7428 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



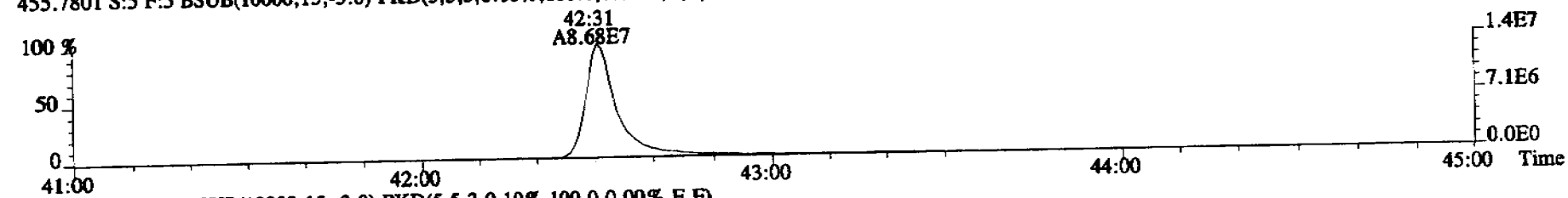
443.7398 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



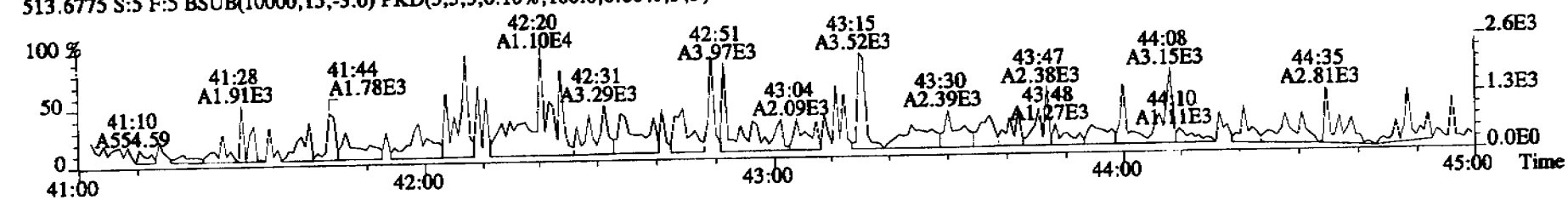
453.7831 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

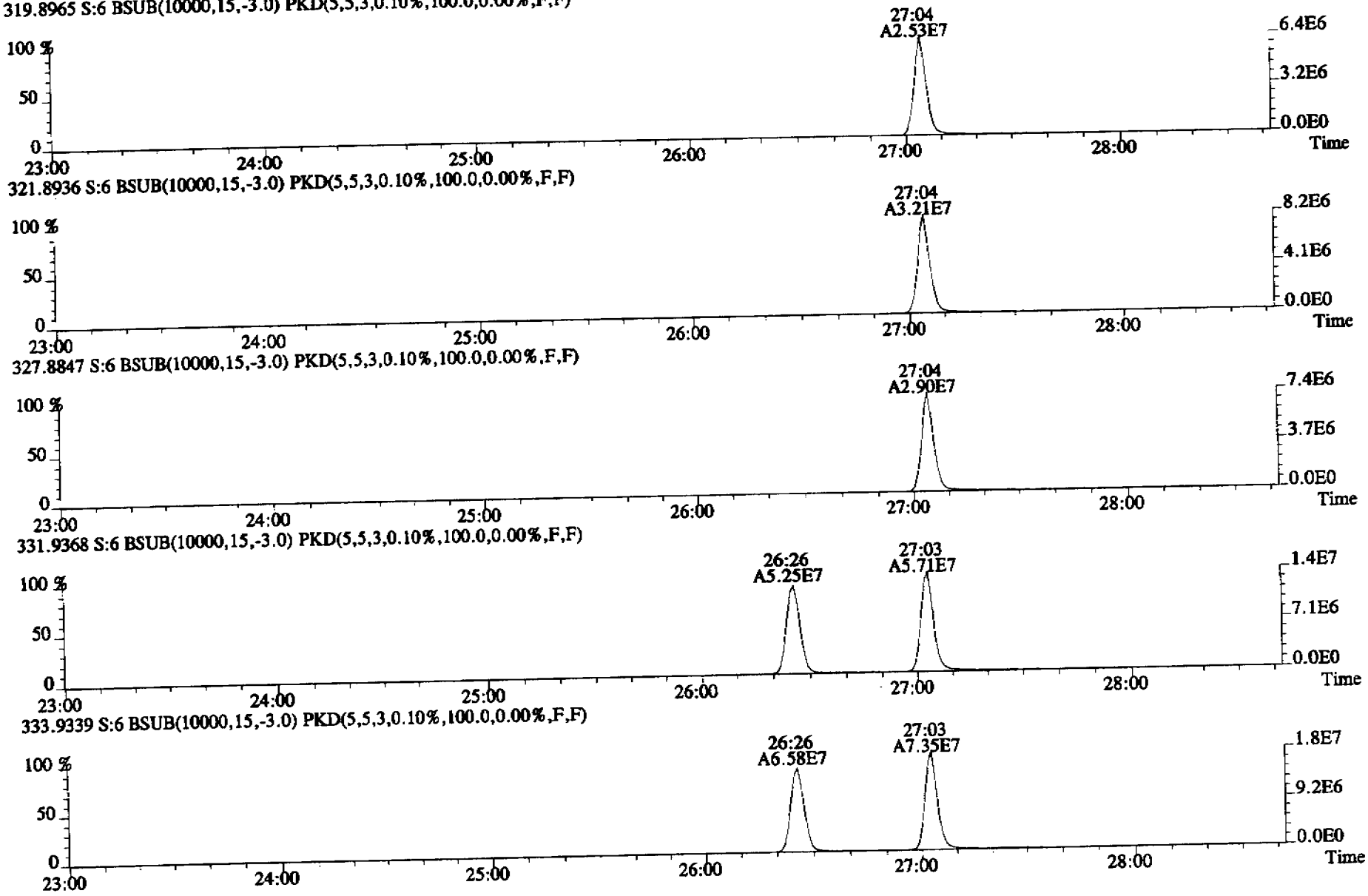


455.7801 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

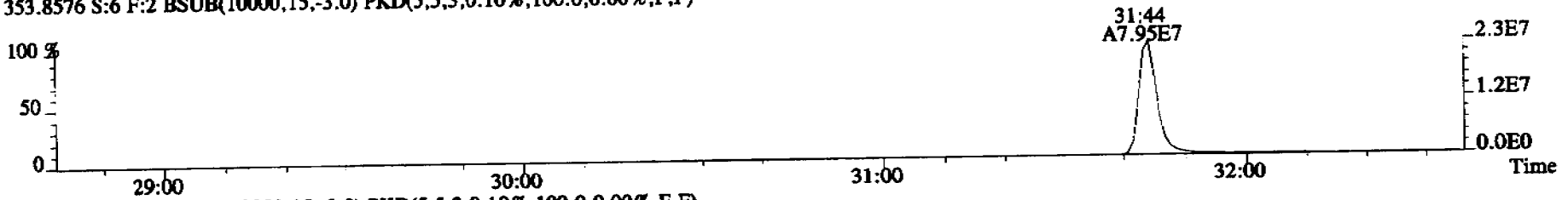


513.6775 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

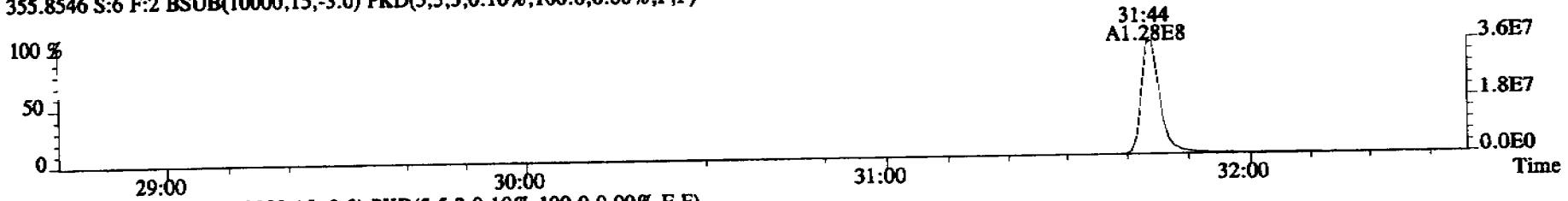



File:050423D1 #1-558 Acq:23-APR-2005 15:26:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-5 1613 CS4 050420I Exp:OCDD_DB5
319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
27:04
A2.53E7
6.4E6
3.2E6
0.0E0
Time
321.8936 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
27:04
A3.21E7
8.2E6
4.1E6
0.0E0
Time
327.8847 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
27:04
A2.90E7
7.4E6
3.7E6
0.0E0
Time
331.9368 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:26
A5.25E7
27:03
A5.71E7
1.4E7
7.1E6
0.0E0
Time
333.9339 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
26:26
A6.58E7
27:03
A7.35E7
1.8E7
9.2E6
0.0E0
Time
100 %
50
0
23:00
24:00
25:00
26:00
27:00
28:00

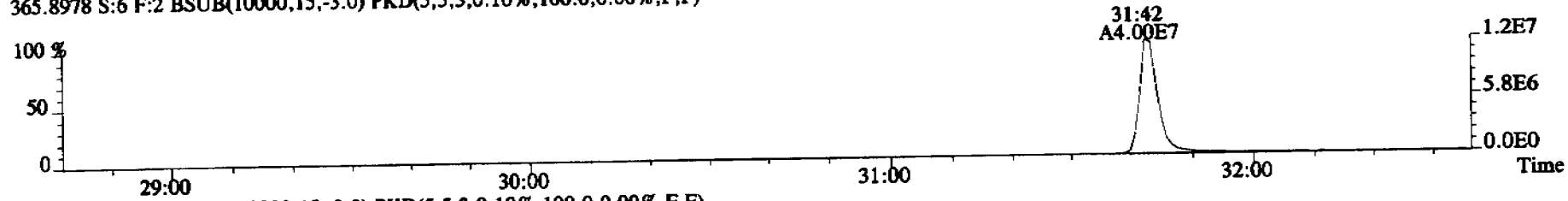
File:050423D1 #1-273 Acq:23-APR-2005 15:26:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-5 1613 CS4 050420I Exp:OCDD_DB5
353.8576 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



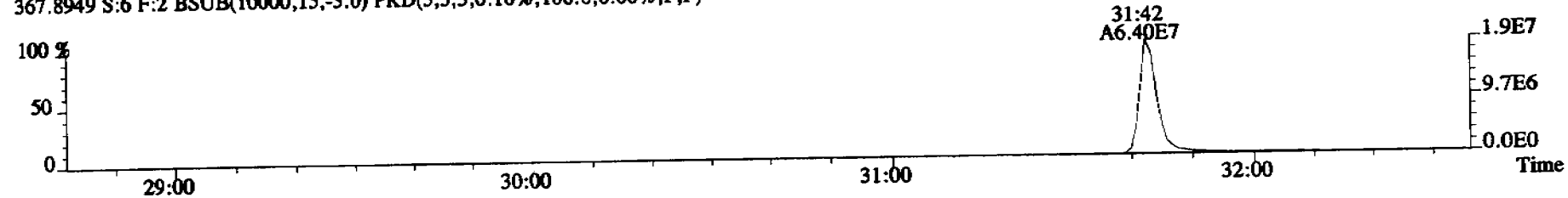
355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



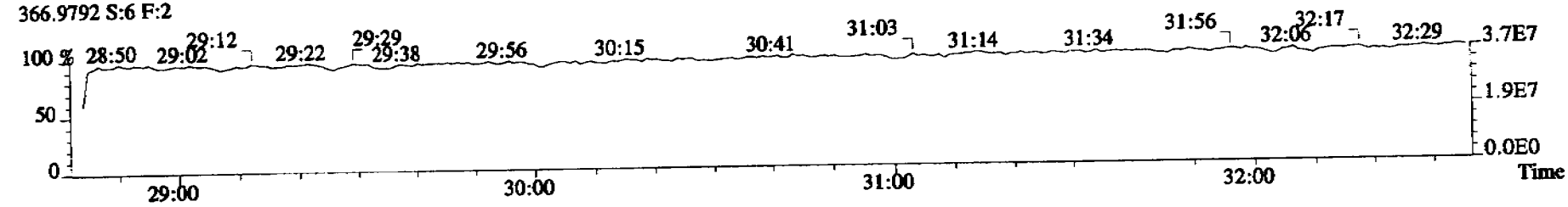
365.8978 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



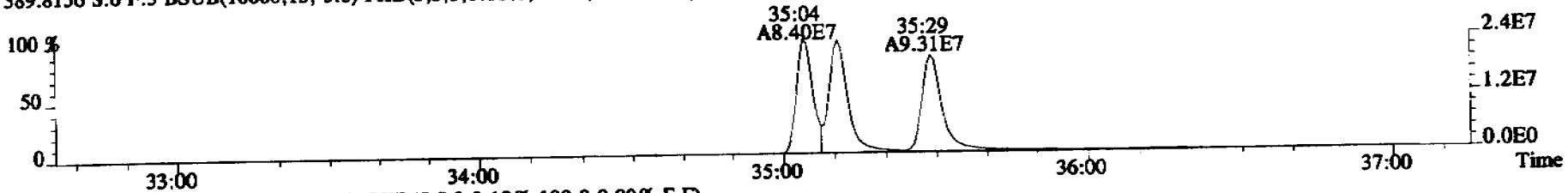
367.8949 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



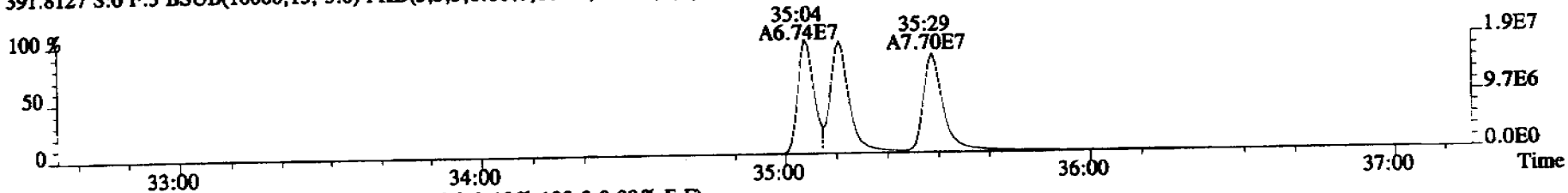
366.9792 S:6 F:2



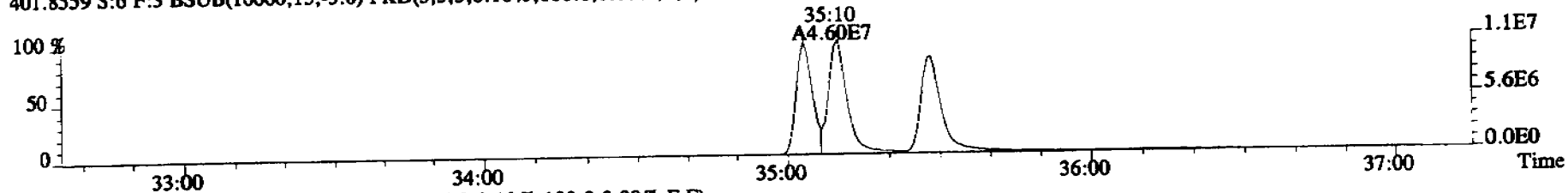
File:050423D1 #1-398 Acq:23-APR-2005 15:26:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-5 1613 CS4 050420I Exp:OCDD_DB5
389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



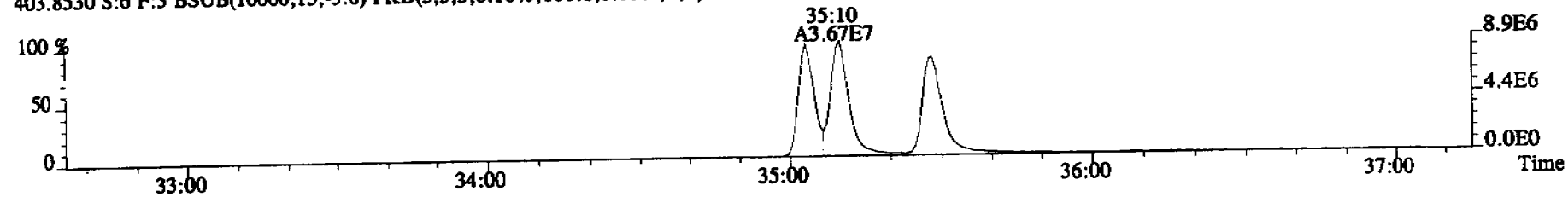
391.8127 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



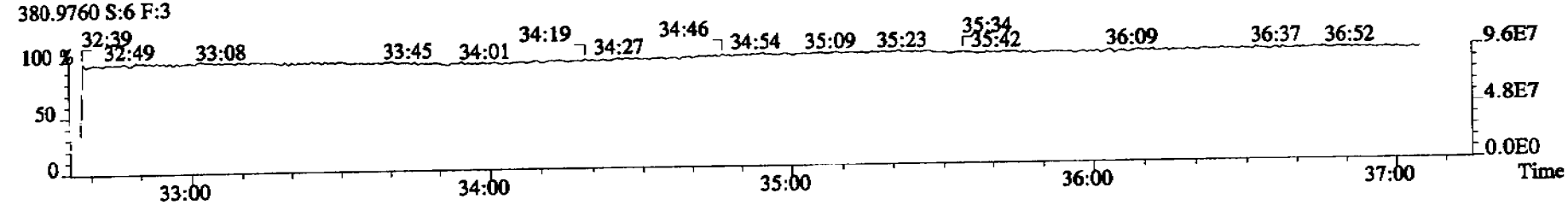
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



403.8530 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

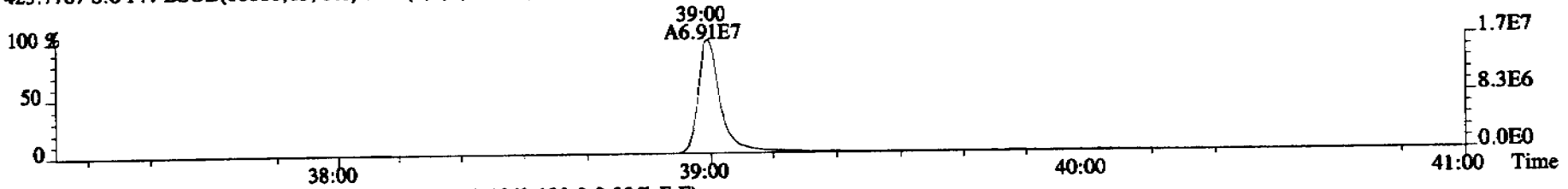


380.9760 S:6 F:3

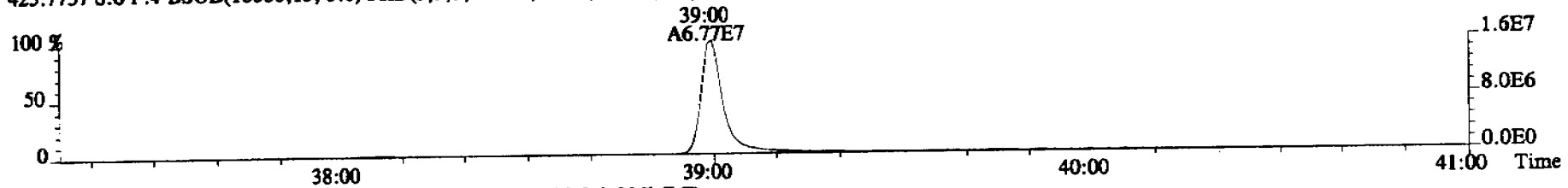


File:050423D1 #1-348 Acq:23-APR-2005 15:26:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-5 1613 CS4 050420I Exp:OCDD_DB5

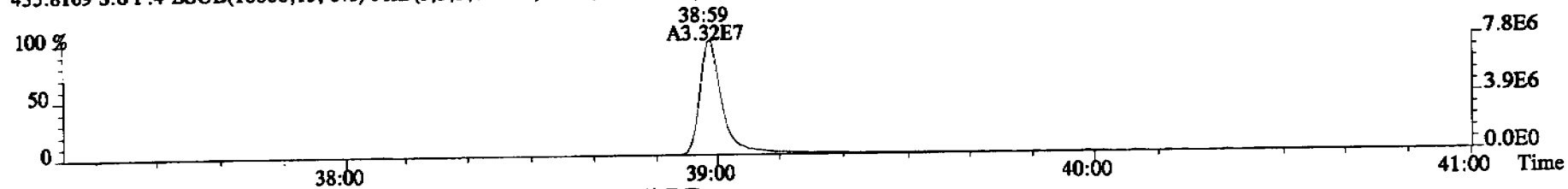
423.7767 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



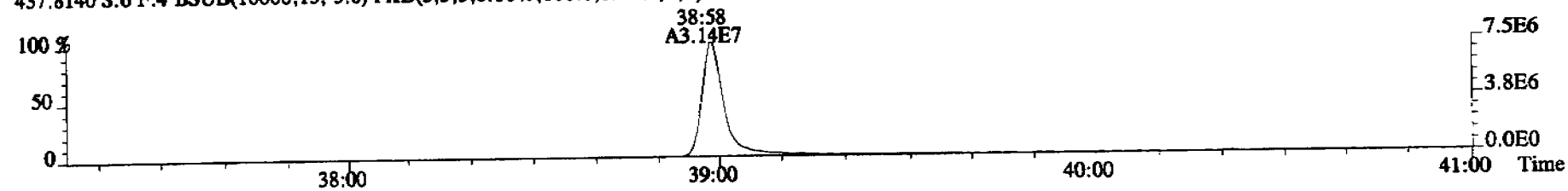
425.7737 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



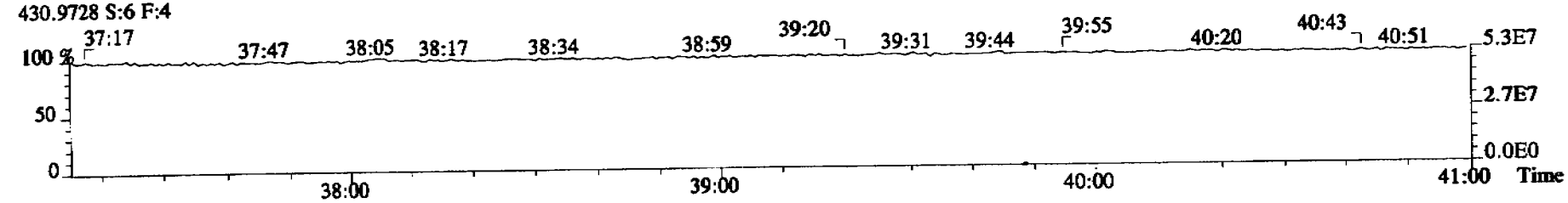
435.8169 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



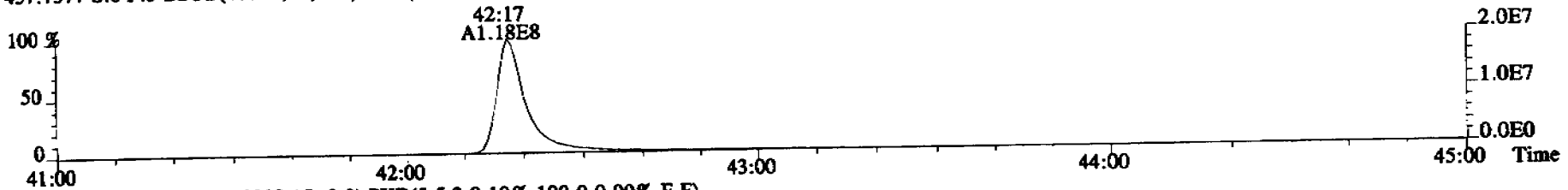
437.8140 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



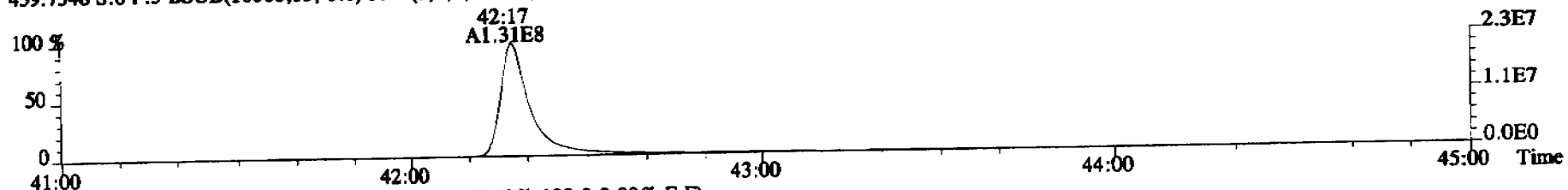
430.9728 S:6 F:4



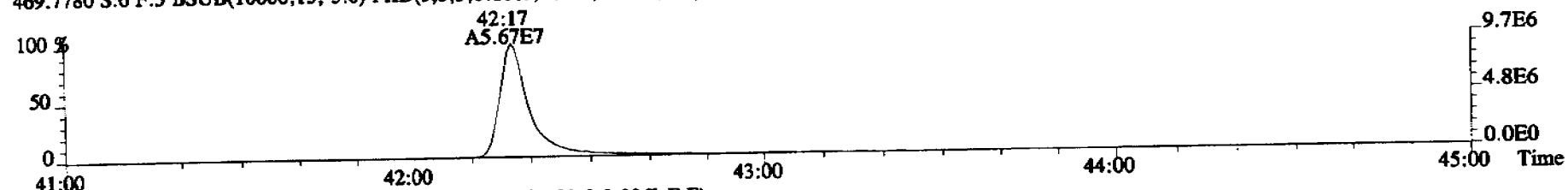
File:050423D1 #1-345 Acq:23-APR-2005 15:26:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-5 1613 CS4 050420I Exp:OCDD_DB5
457.7377 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



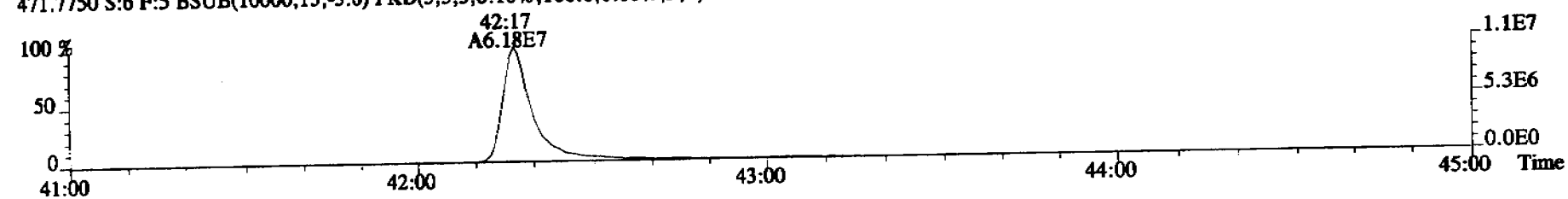
459.7348 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



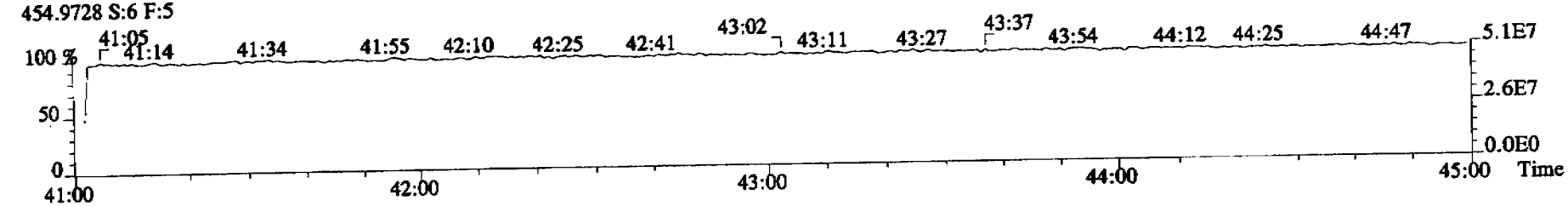
469.7780 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



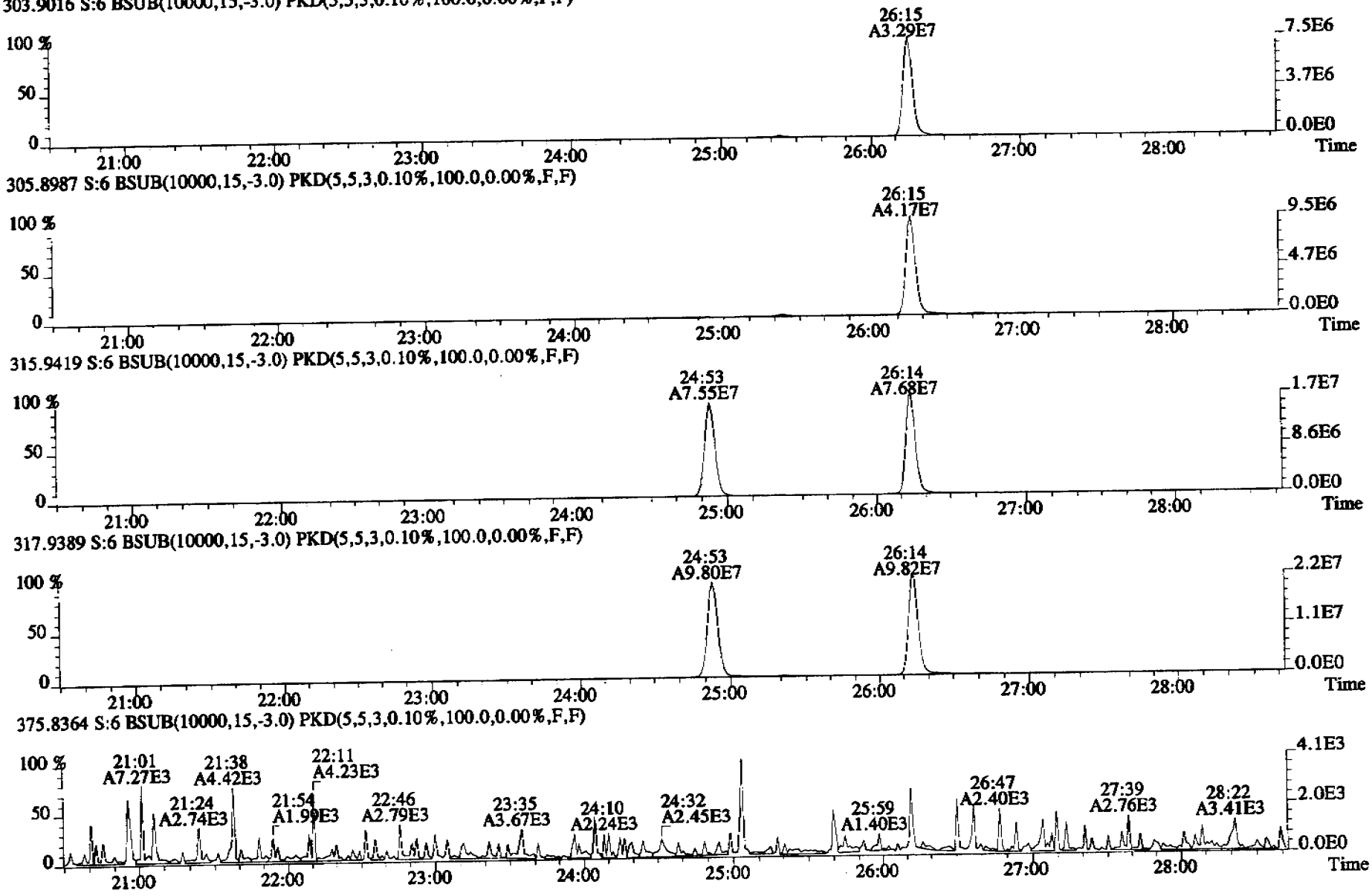
471.7750 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



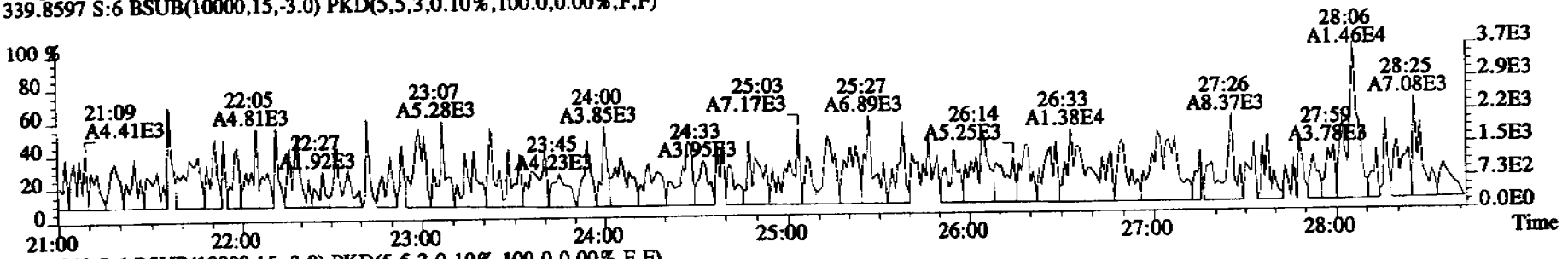
454.9728 S:6 F:5



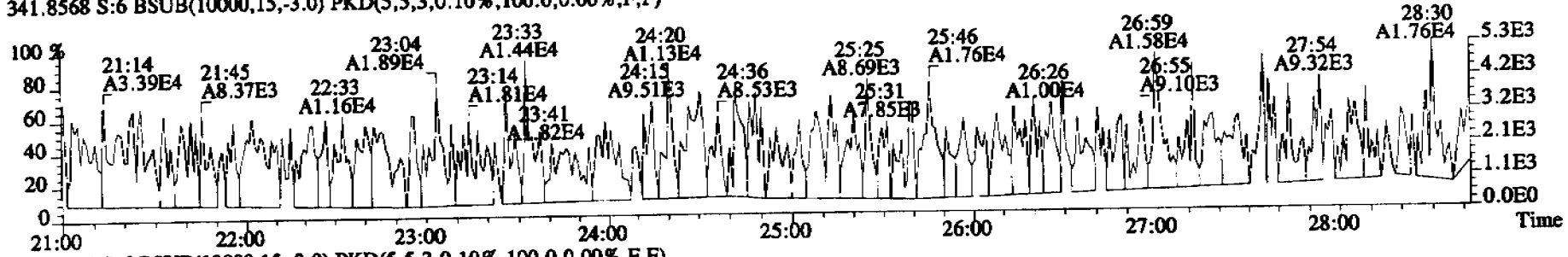
File:050423D1 #1-558 Acq:23-APR-2005 15:26:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-5 1613 CS4 050420I Exp:OCDD_DB5



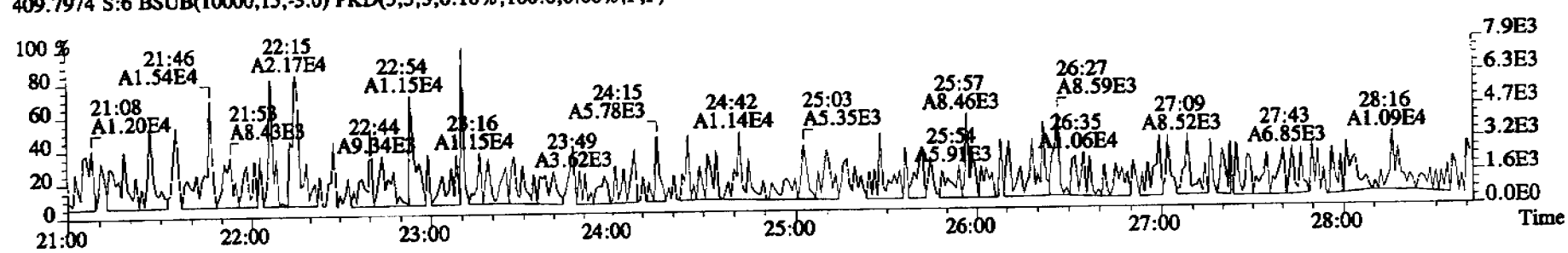
File:050423D1 #1-558 Acq:23-APR-2005 15:26:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-5 1613 CS4 050420I Exp:OCDD_DB5
339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



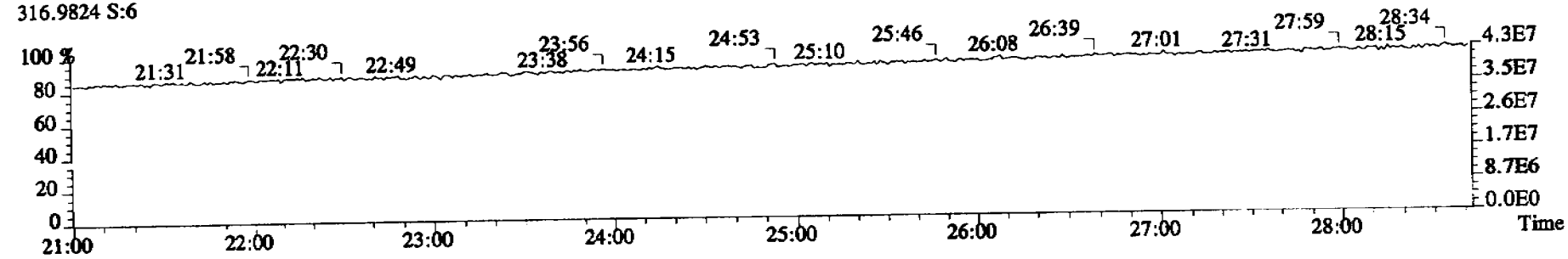
341.8568 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



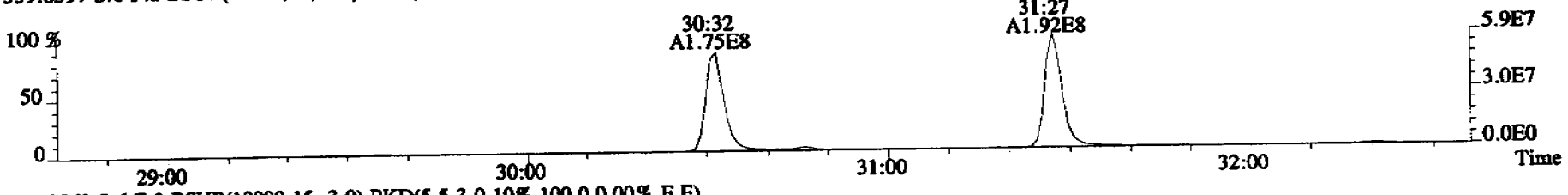
409.7974 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



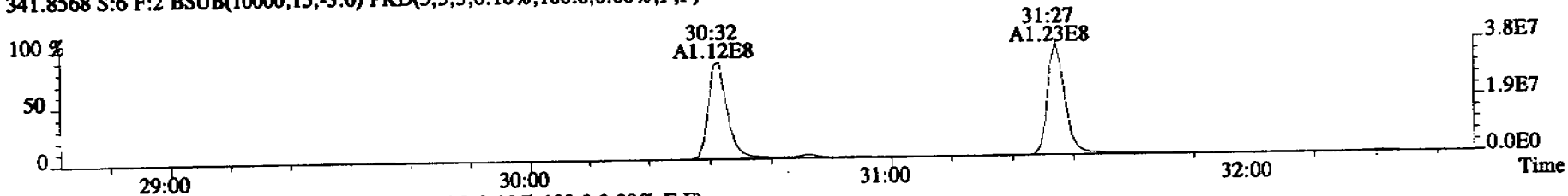
316.9824 S:6



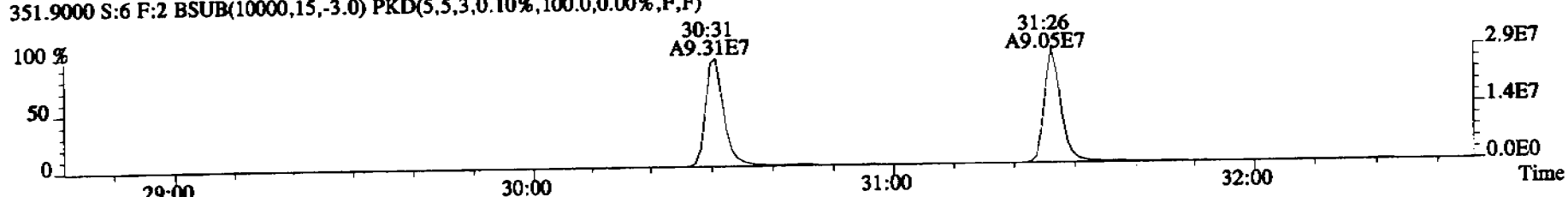
File:050423D1 #1-273 Acq:23-APR-2005 15:26:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-5 1613 CS4 050420I Exp:OCDD_DB5
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



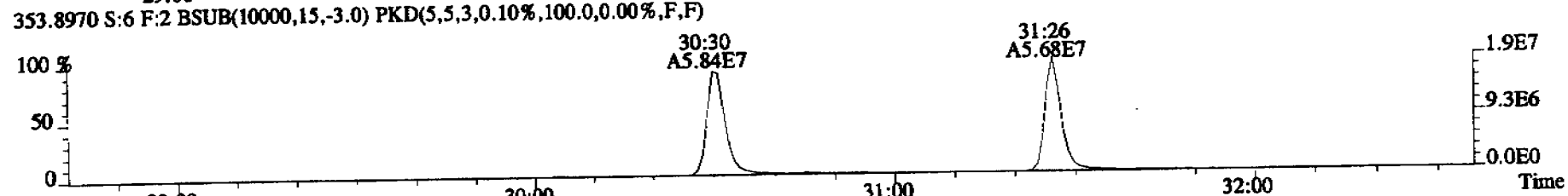
341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



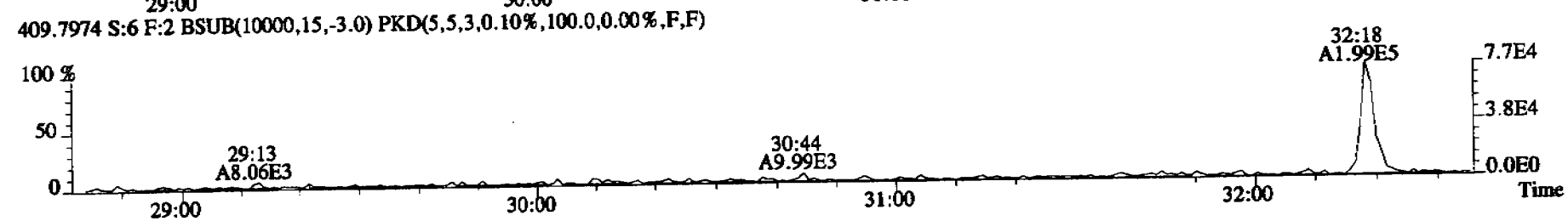
351.9000 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



353.8970 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

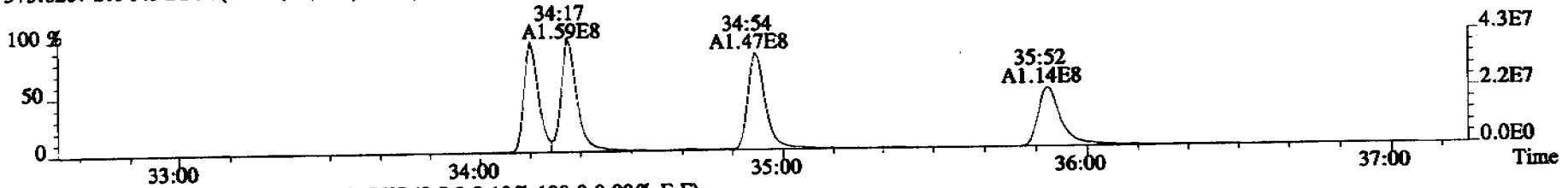


409.7974 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

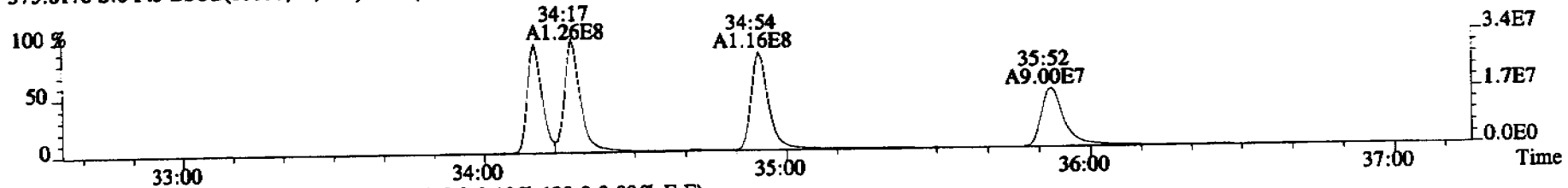


File:050423D1 #1-398 Acq:23-APR-2005 15:26:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-5 1613 CS4 0504201 Exp:OCDD_DB5

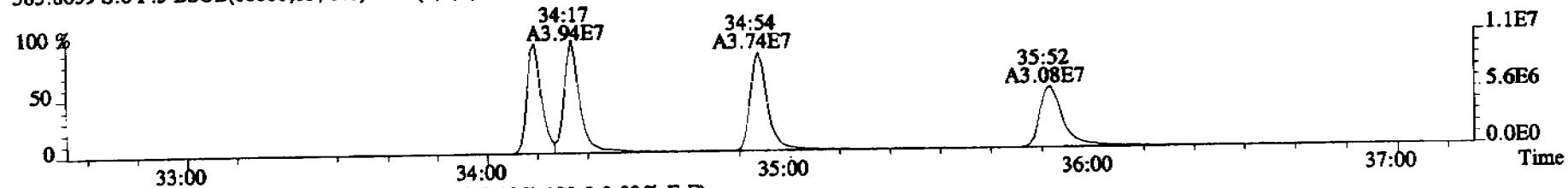
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



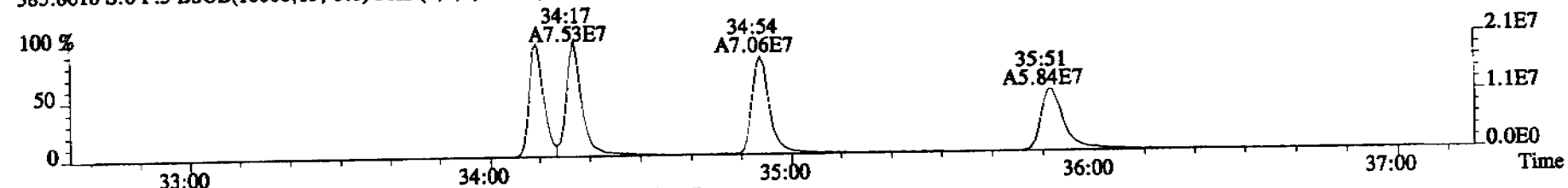
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



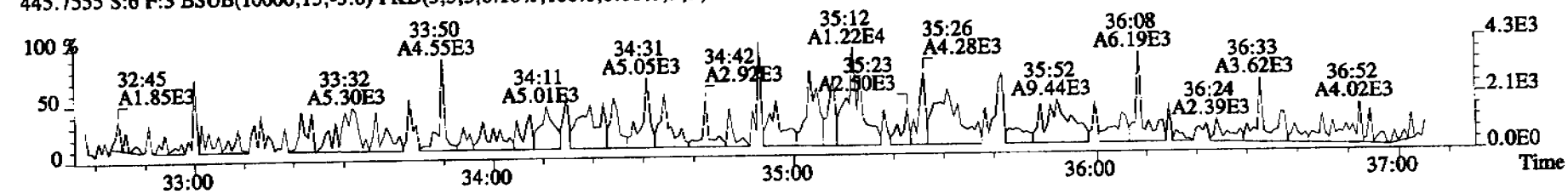
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



385.8610 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

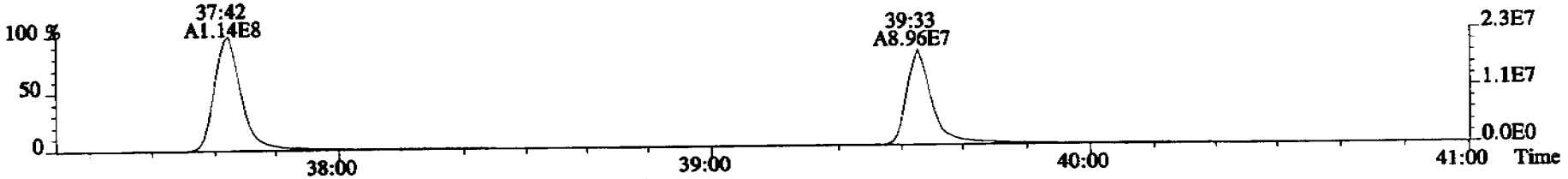


445.7555 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

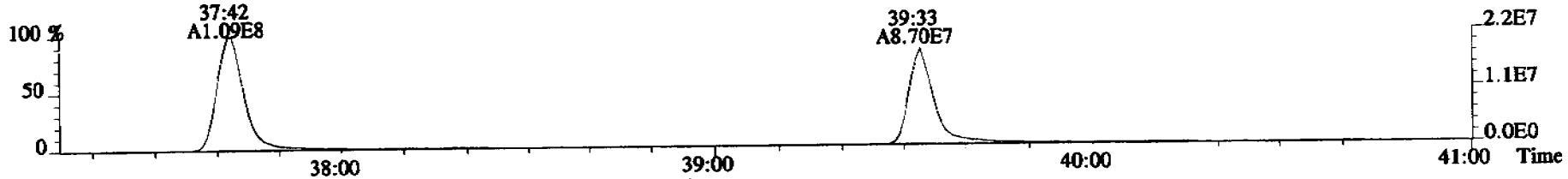


File:050423D1 #1-348 Acq:23-APR-2005 15:26:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-5 1613 CS4 050420I Exp:OCDD_DB5

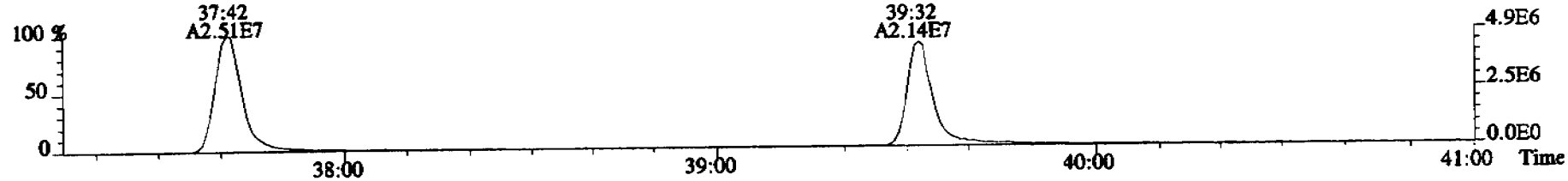
407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



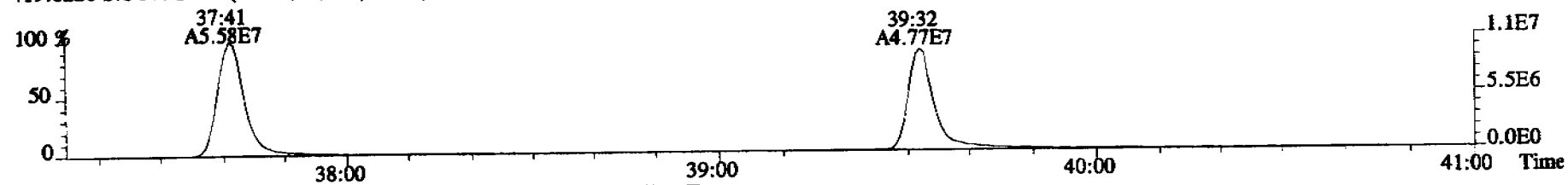
409.7788 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



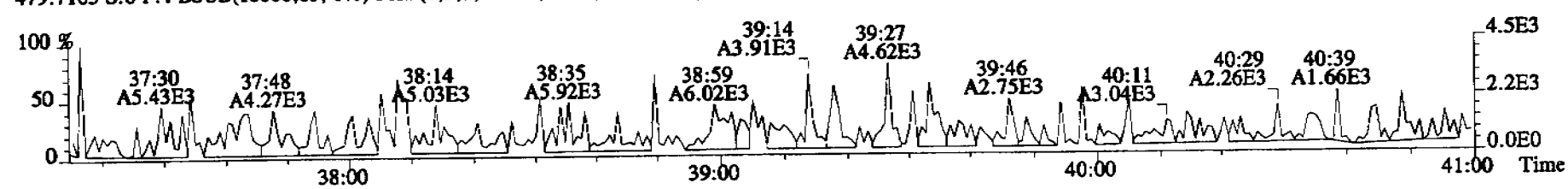
417.8253 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



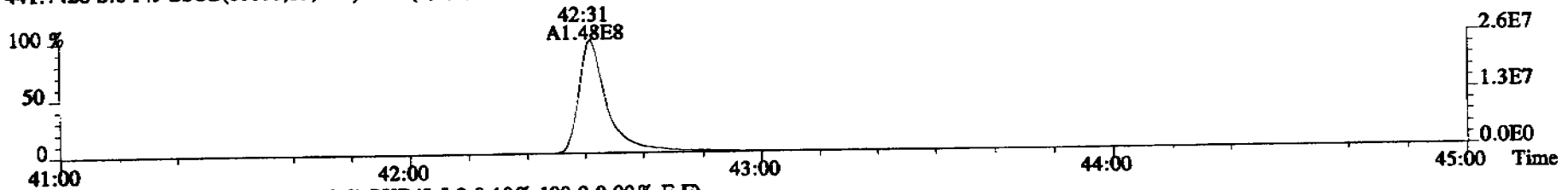
419.8220 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



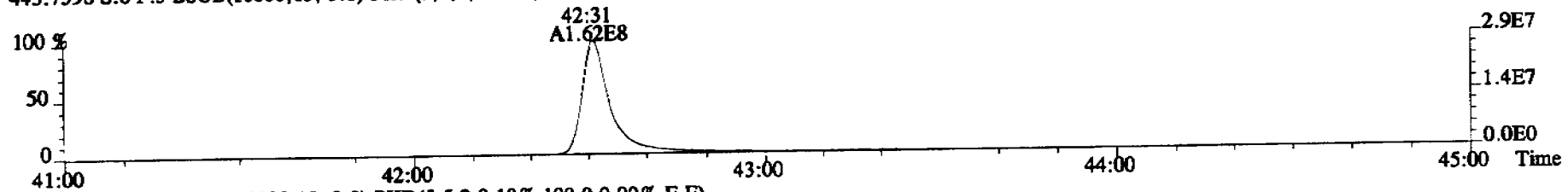
479.7165 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



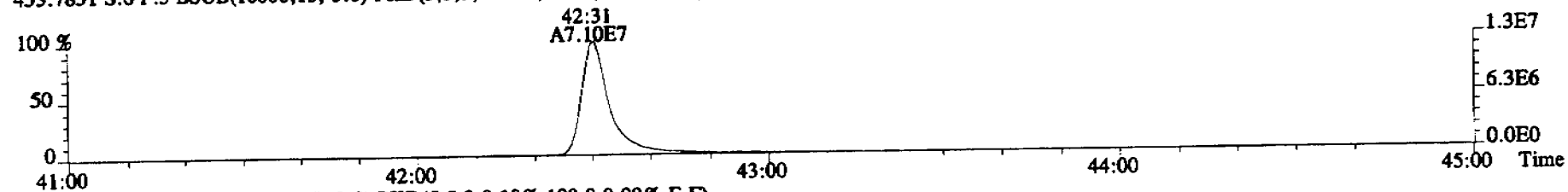
File:050423D1 #1-345 Acq:23-APR-2005 15:26:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-5 1613 CS4 0504201 Exp:OCDD_DB5
441.7428 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



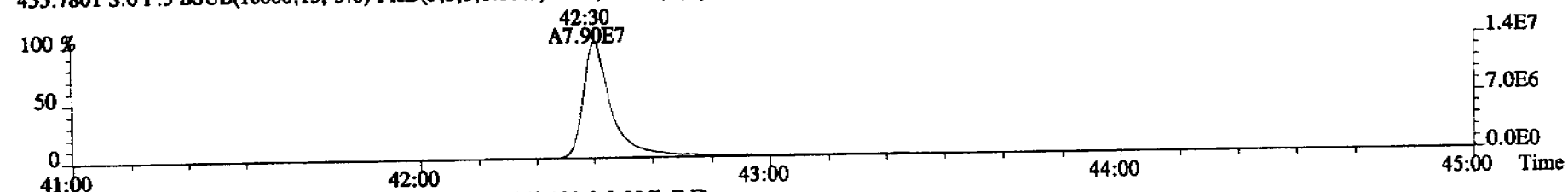
443.7398 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



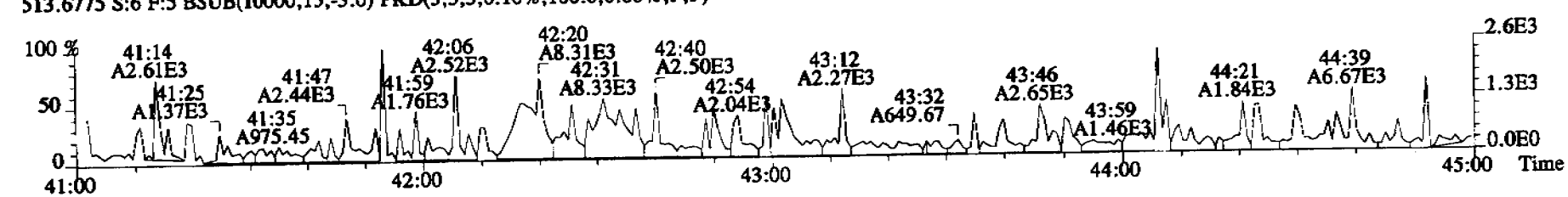
453.7831 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



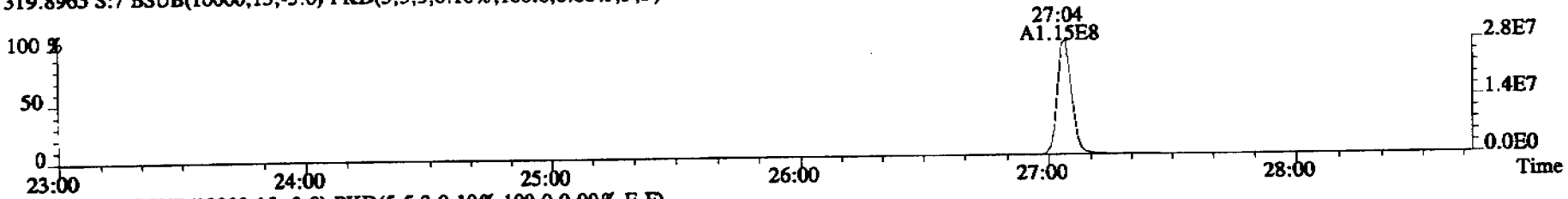
455.7801 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



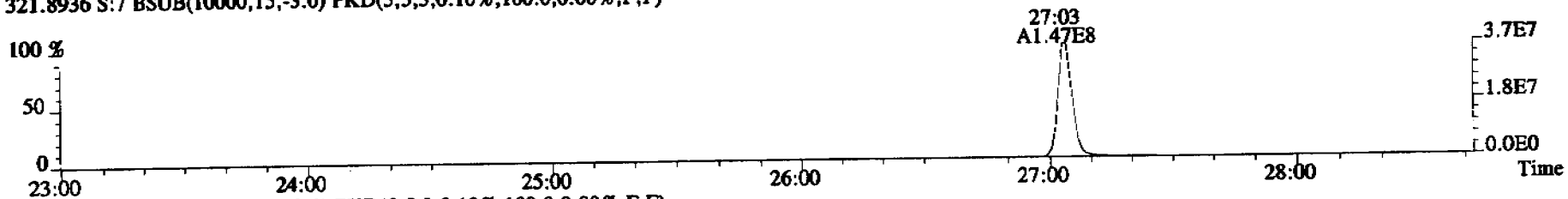
513.6775 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



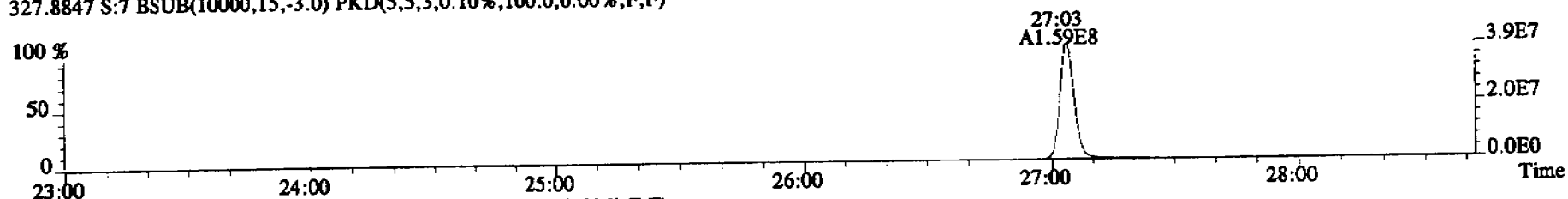
File:050423D1 #1-558 Acq:23-APR-2005 16:15:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-6 1613 CS5 050420J Exp:OCDD_DB5
319.8965 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



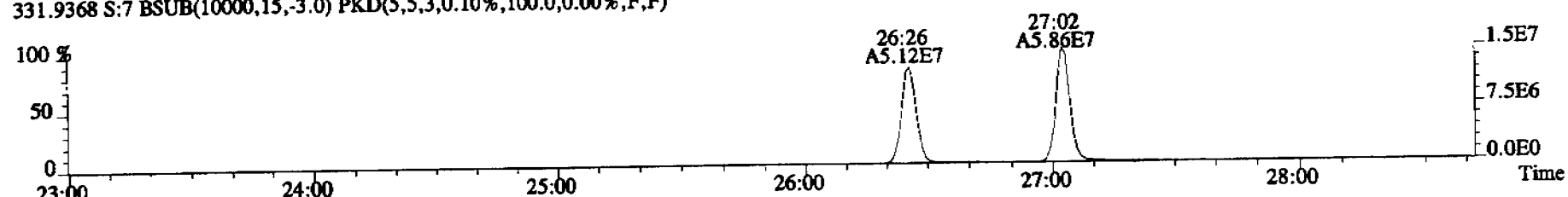
321.8936 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



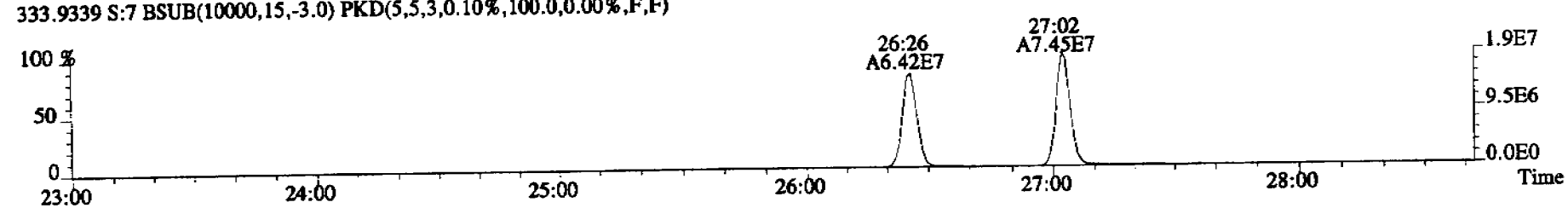
327.8847 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



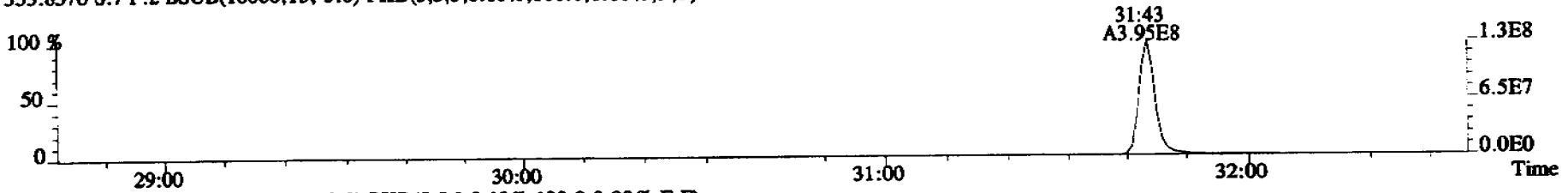
331.9368 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



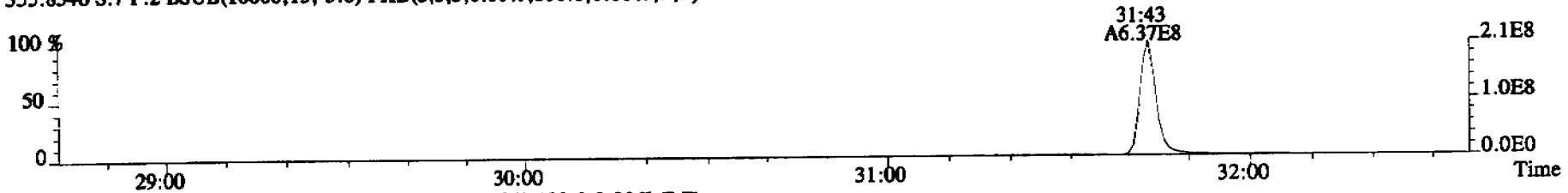
333.9339 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



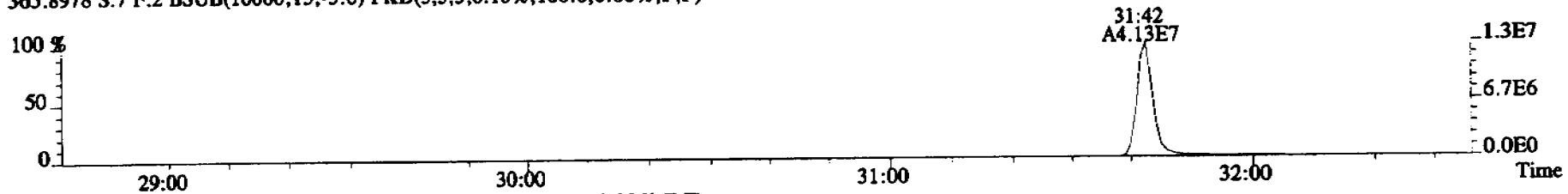
File:050423D1 #1-273 Acq:23-APR-2005 16:15:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-6 1613 CS5 050420J Exp:OCDD_DB5
353.8576 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



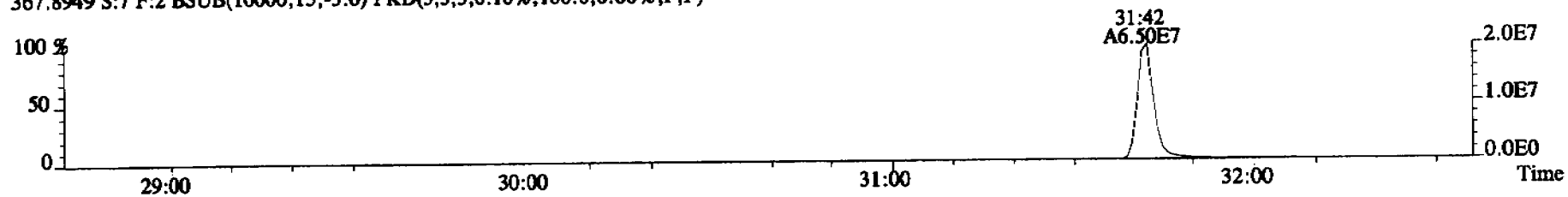
355.8546 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



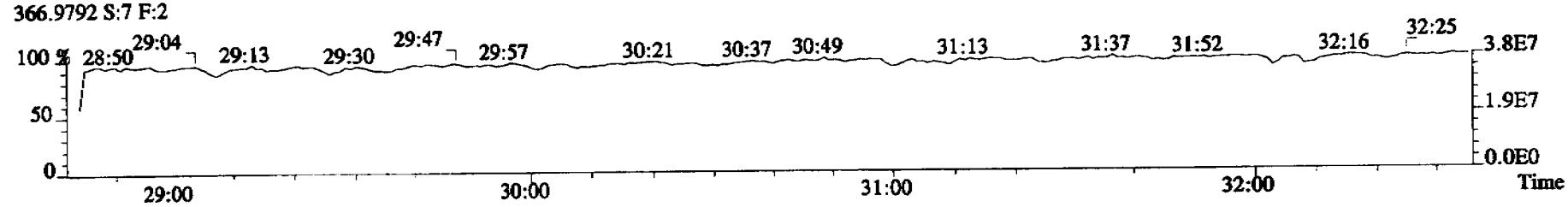
365.8978 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



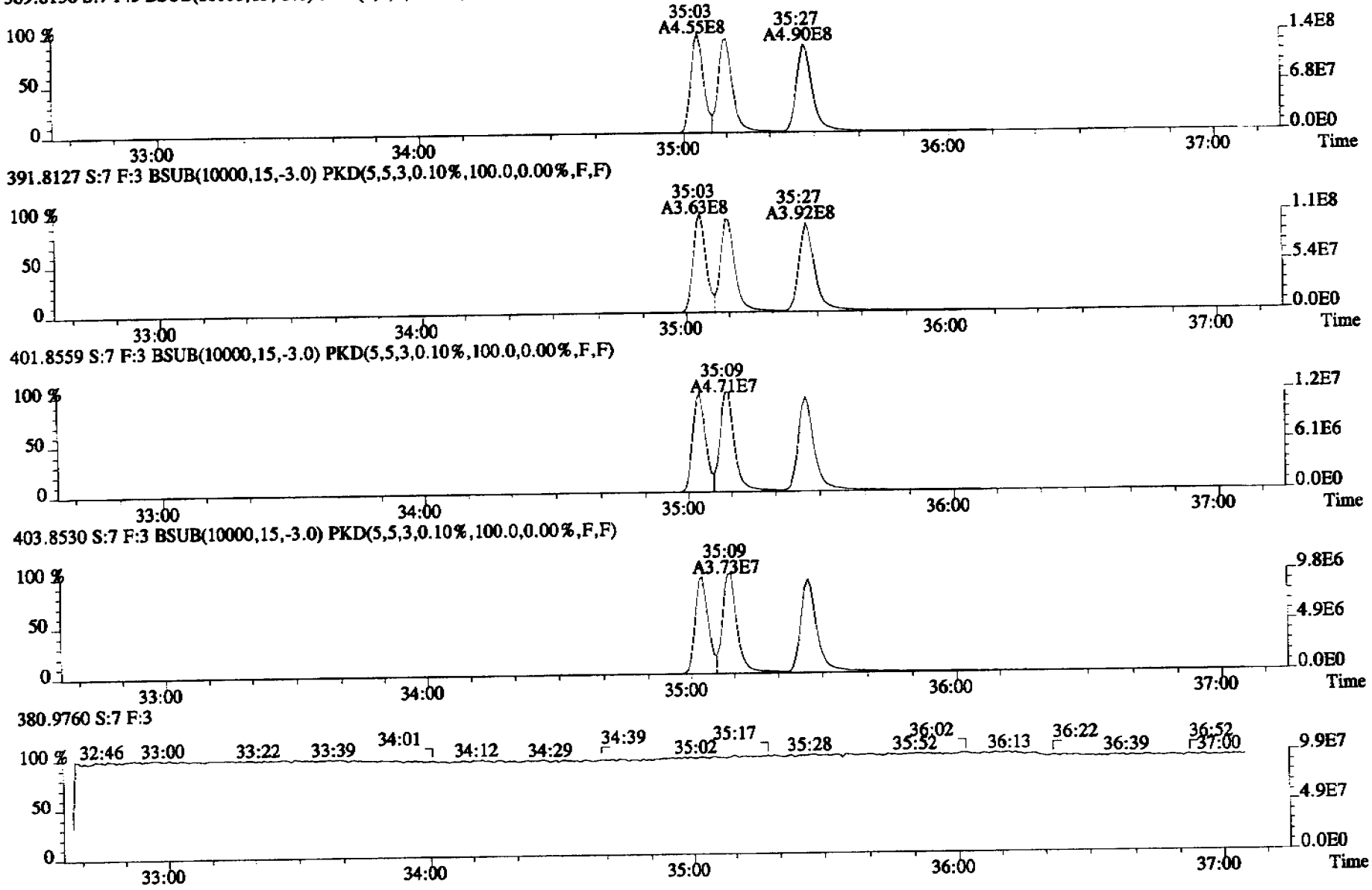
367.8949 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



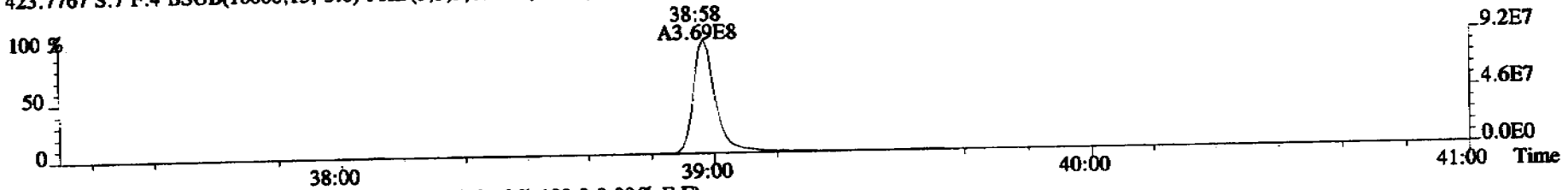
366.9792 S:7 F:2



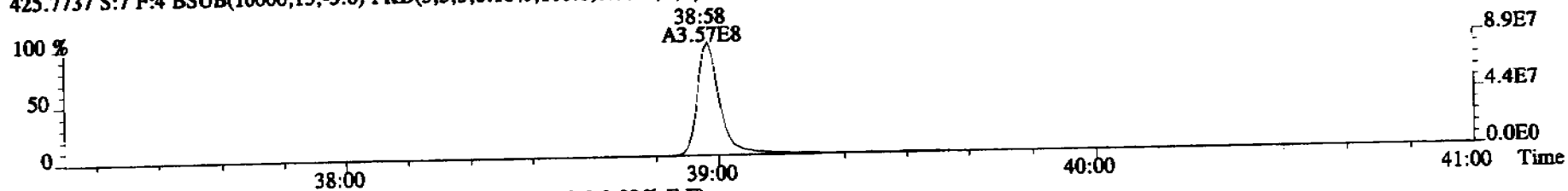
File:050423D1 #1-398 Acq:23-APR-2005 16:15:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-6 1613 CS5 050420J Exp:OCDD_DB5



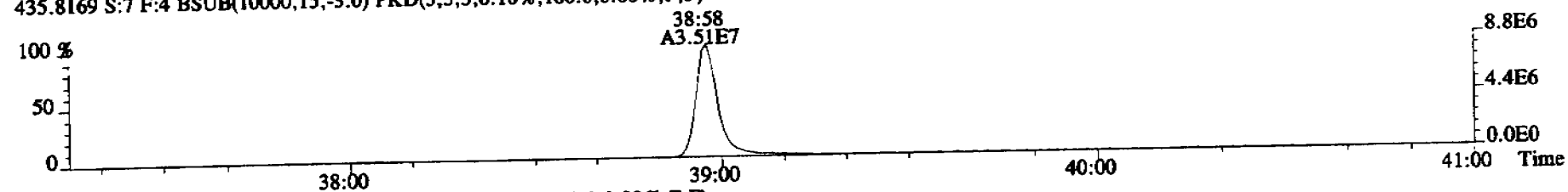
File:050423D1 #1-348 Acq:23-APR-2005 16:15:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-6 1613 CS5 050420J Exp:OCDD_DB5
423.7767 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



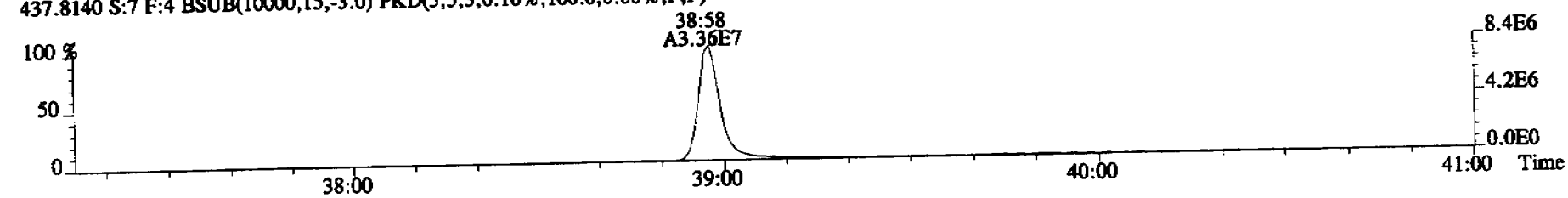
425.7737 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



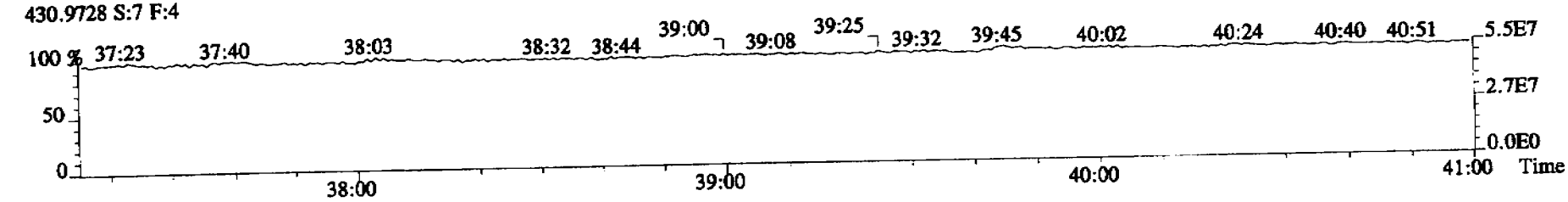
435.8169 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



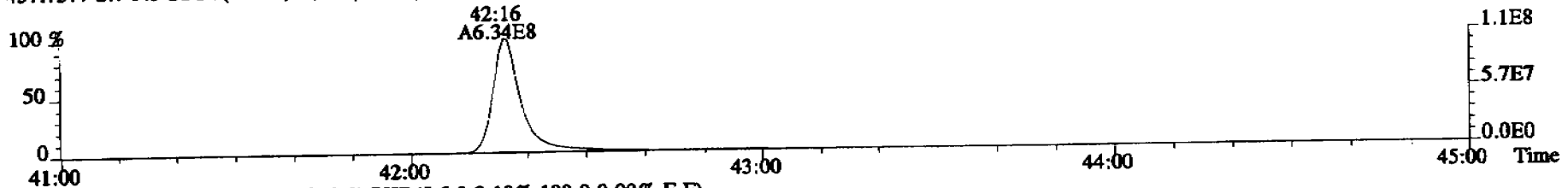
437.8140 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



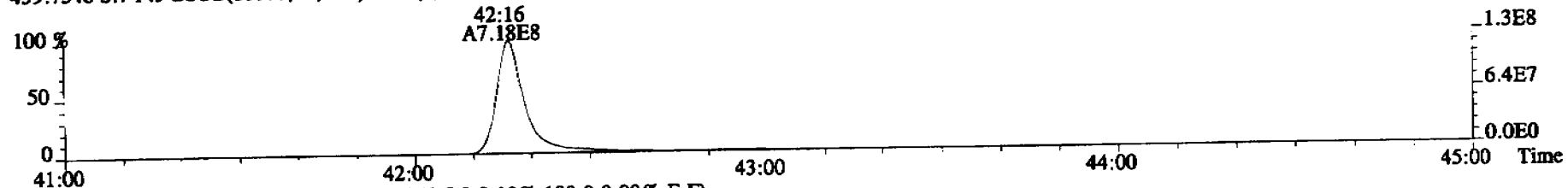
430.9728 S:7 F:4



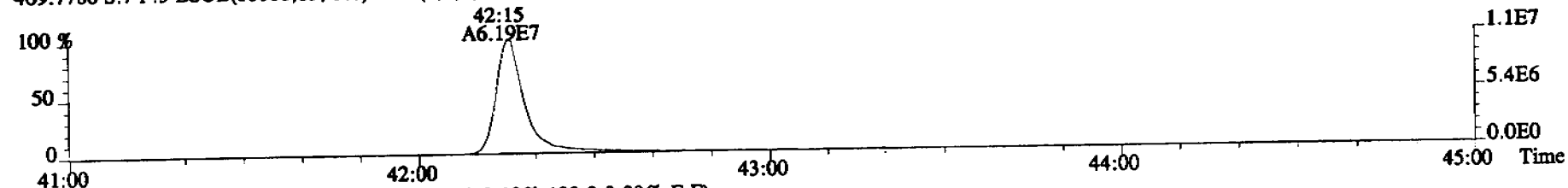
File:050423D1 #1-345 Acq:23-APR-2005 16:15:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-6 1613 CS5 050420J Exp:OCDD_DB5
457.7377 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



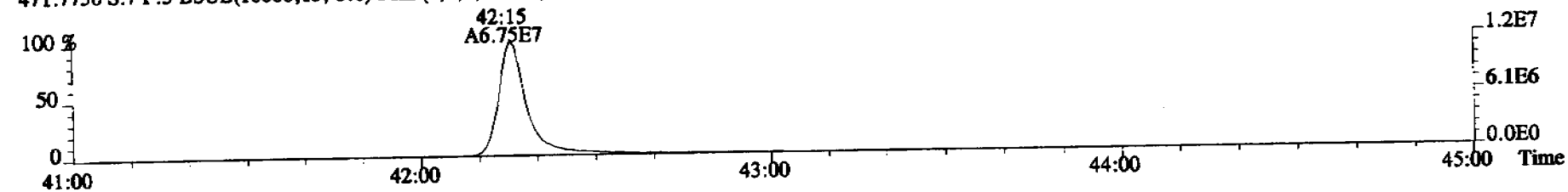
459.7348 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



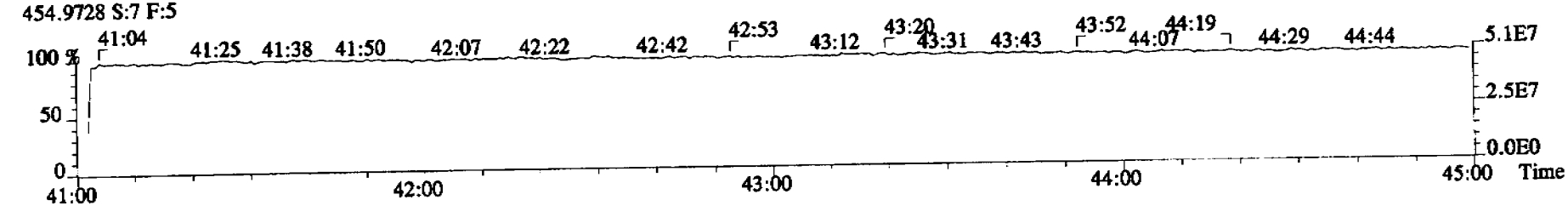
469.7780 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



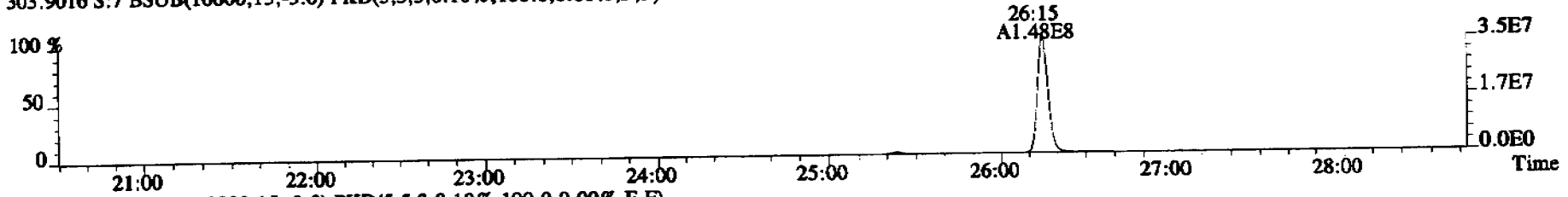
471.7750 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



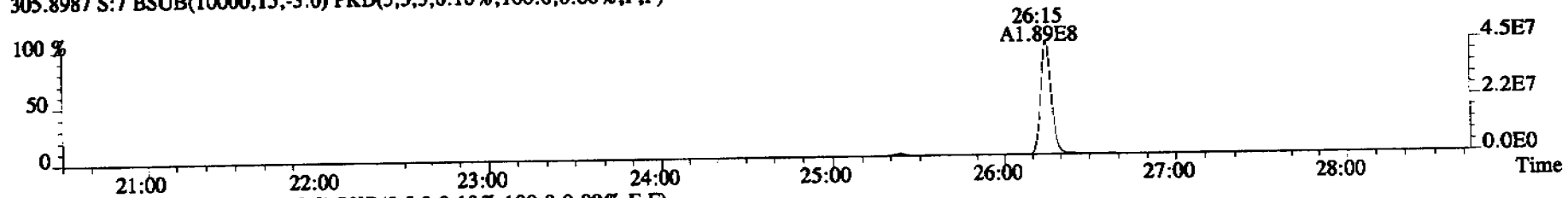
454.9728 S:7 F:5



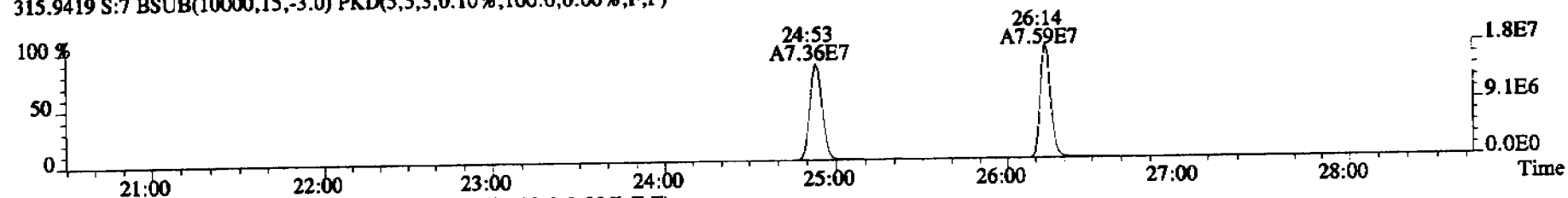
File:050423D1 #1-558 Acq:23-APR-2005 16:15:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-6 1613 CS5 050420J Exp:OCDD_DB5
303.9016 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



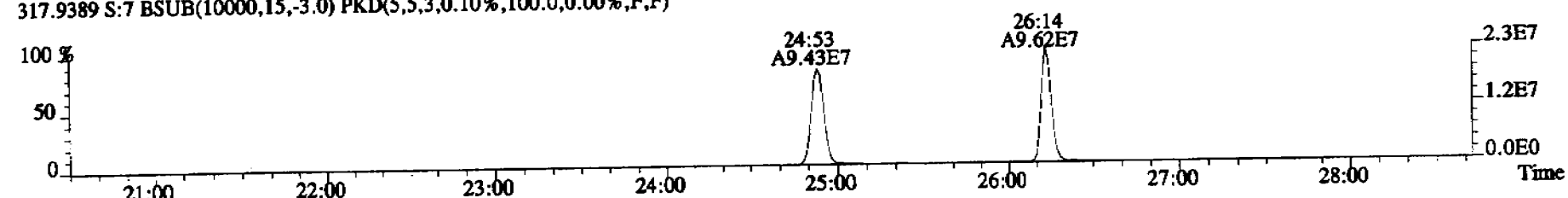
305.8987 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



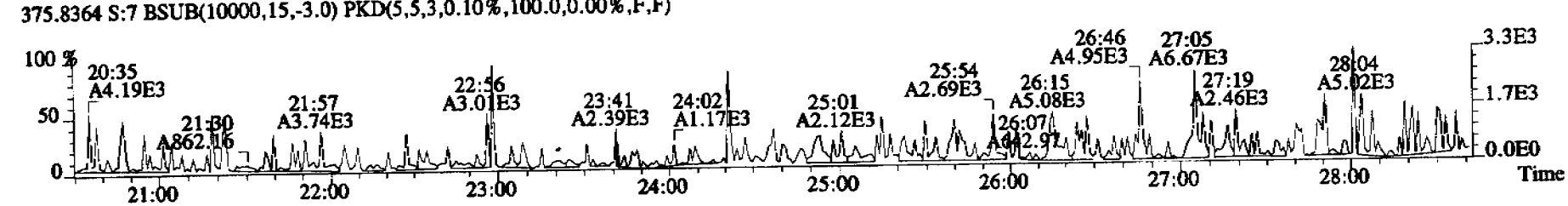
315.9419 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

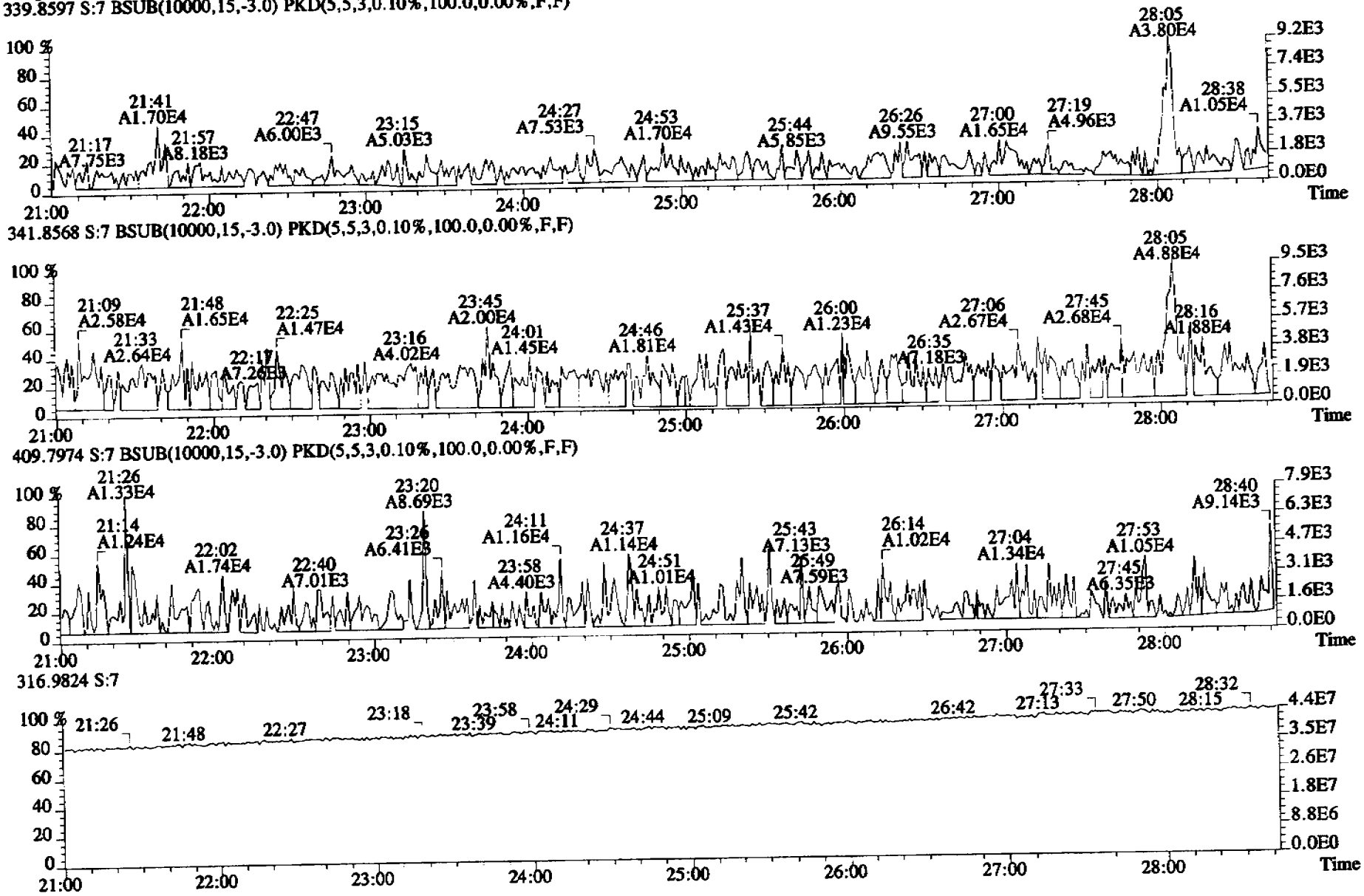


317.9389 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

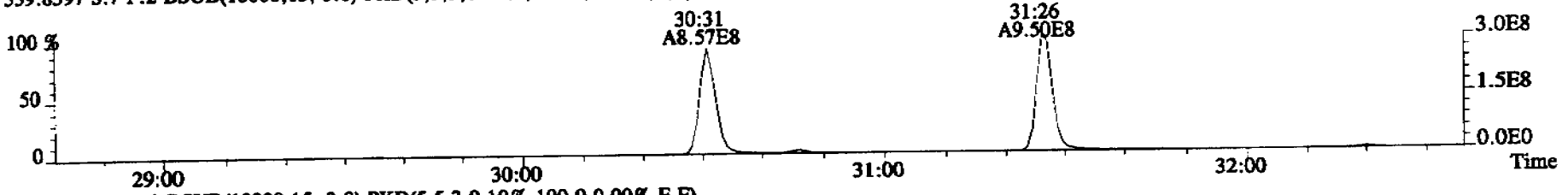


375.8364 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

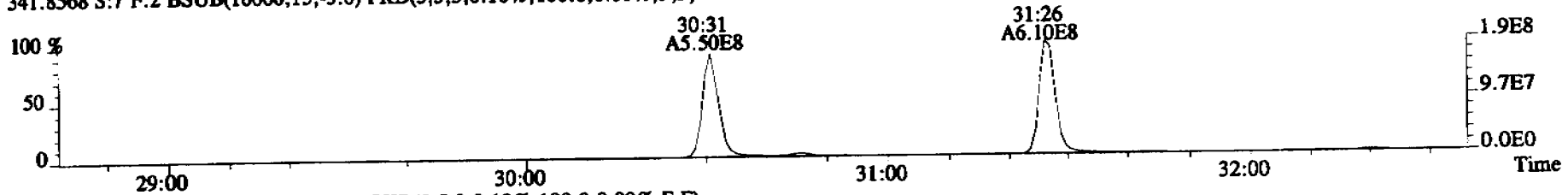



File:050423D1 #1-558 Acq:23-APR-2005 16:15:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-6 1613 CS5 050420J Exp:OCDD_DB5
339.8597 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
341.8568 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
409.7974 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
316.9824 S:7
Time

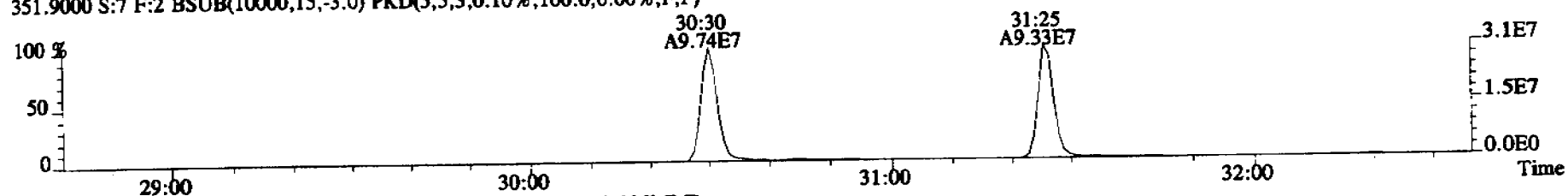
File:050423D1 #1-273 Acq:23-APR-2005 16:15:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-6 1613 CS5 050420J Exp:OCDD_DB5
339.8597 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



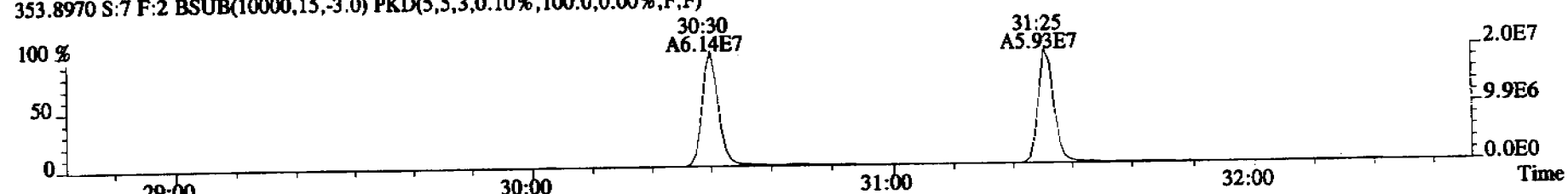
341.8568 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



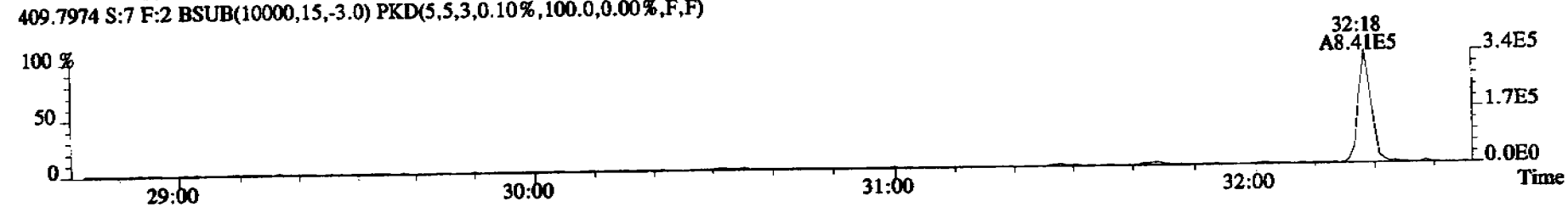
351.9000 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



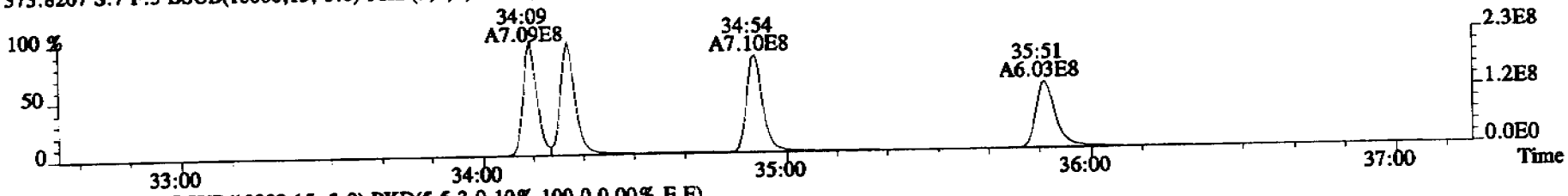
353.8970 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



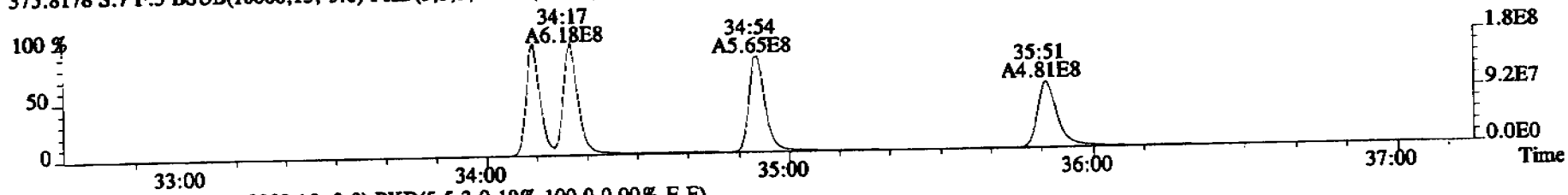
409.7974 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



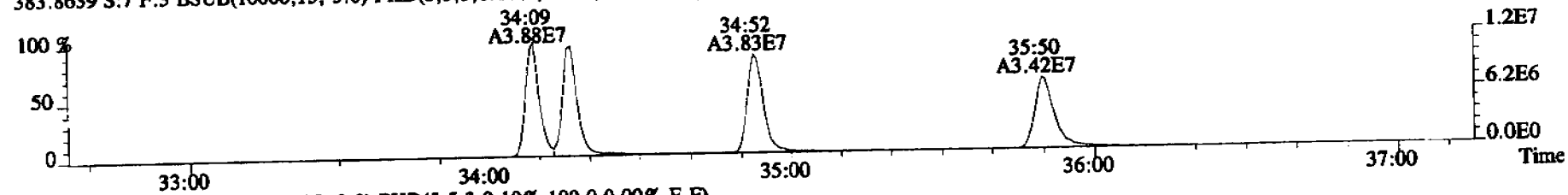
File:050423D1 #1-398 Acq:23-APR-2005 16:15:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-6 1613 CS5 050420J Exp:OCDD_DB5
373.8207 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



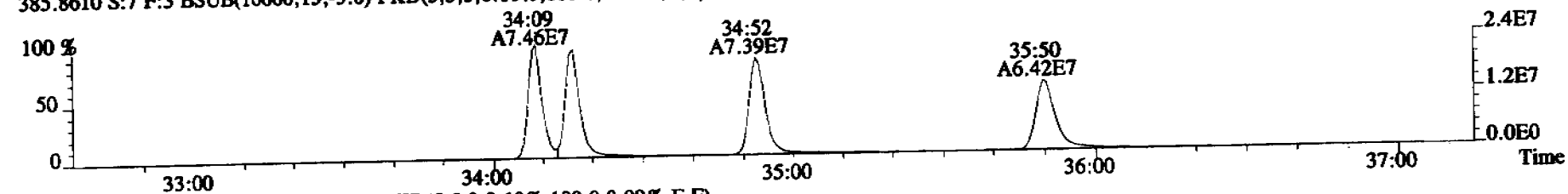
375.8178 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



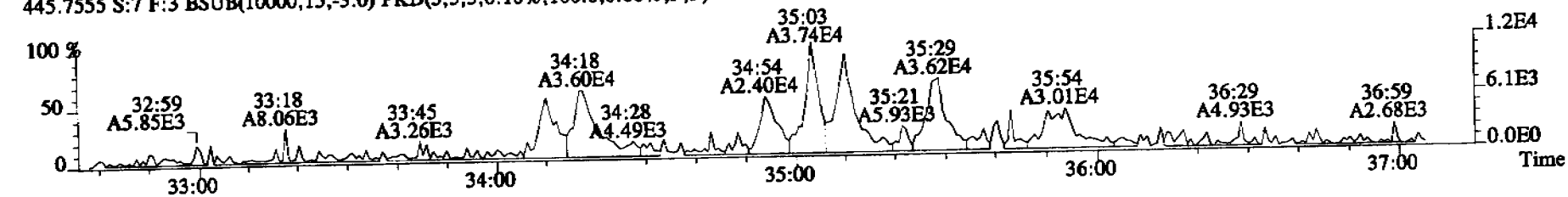
383.8639 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

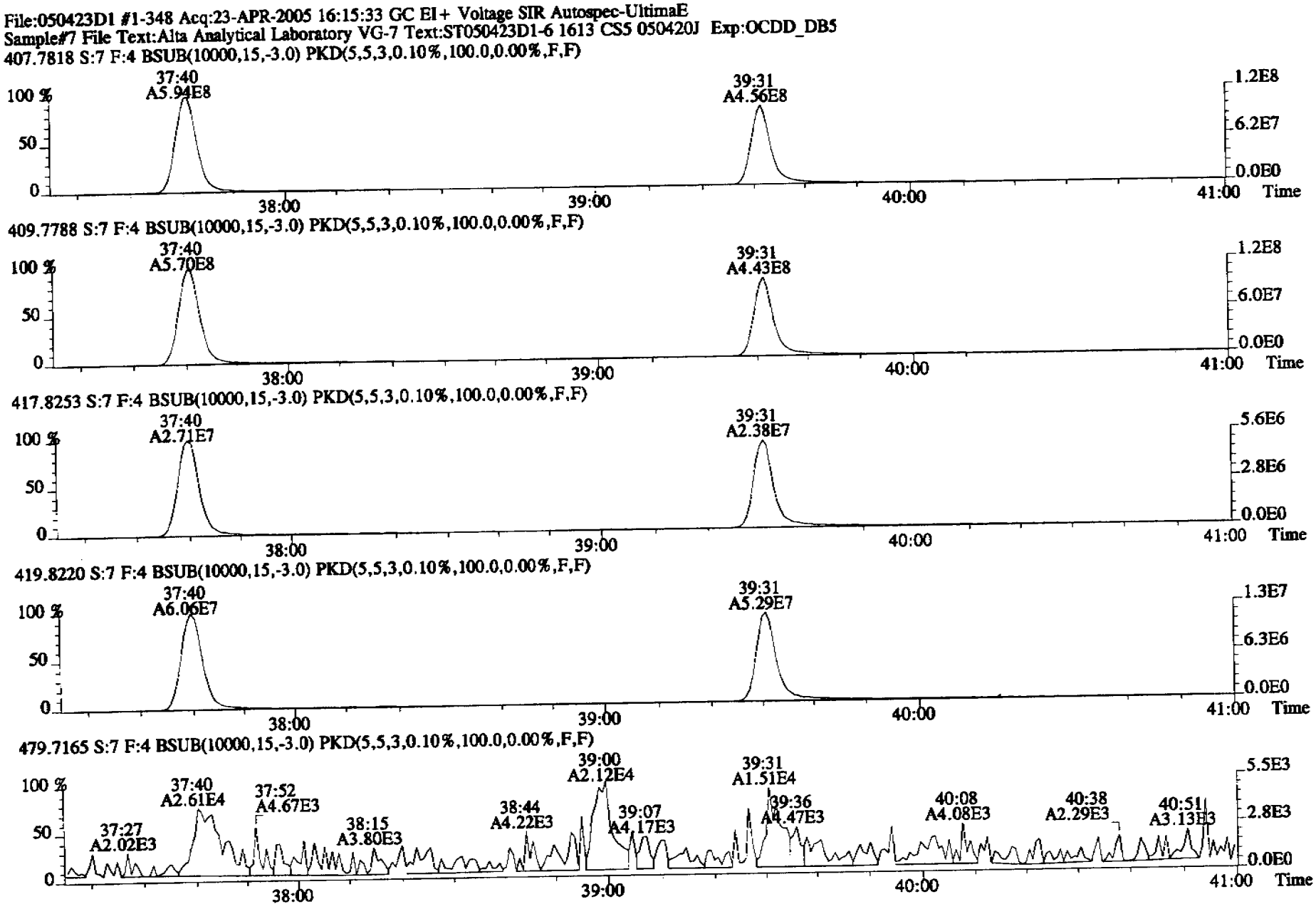


385.8610 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

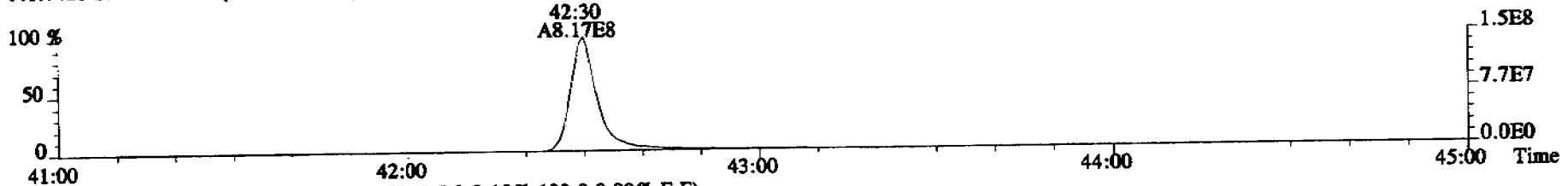


445.7555 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

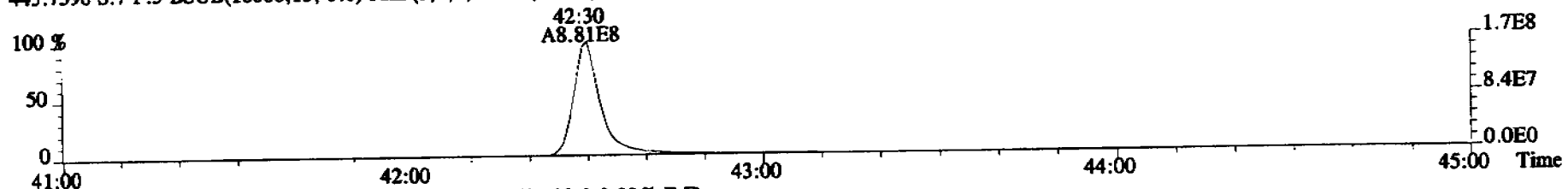



File:050423D1 #1-348 Acq:23-APR-2005 16:15:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-6 1613 CS5 050420J Exp:OCDD_DB5
407.7818 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
37:40 A5.94E8
39:31 A4.56E8
409.7788 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
37:40 A5.70E8
39:31 A4.43E8
417.8253 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
37:40 A2.71E7
39:31 A2.38E7
419.8220 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
37:40 A6.06E7
39:31 A5.29E7
479.7165 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
37:27 A2.02E3
37:40 A2.61E4
37:52 A4.67E3
38:15 A3.80E3
38:44 A4.22E3
39:00 A2.12E4
39:07 A4.17E3
39:31 A1.51E4
39:36 A4.47E3
40:08 A4.08E3
40:38 A2.29E3
40:51 A3.13E3
100 %
50
0
38:00
39:00
40:00
41:00
Time
1.2E8
6.2E7
0.0E0
1.2E8
6.0E7
0.0E0
5.6E6
2.8E6
0.0E0
1.3E7
6.3E6
0.0E0
5.5E3
2.8E3
0.0E0

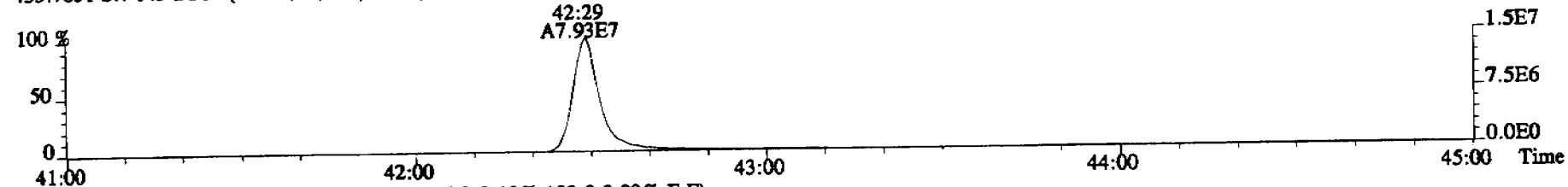
File:050423D1 #1-345 Acq:23-APR-2005 16:15:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-6 1613 CS5 050420J Exp:OCDD_DB5
441.7428 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



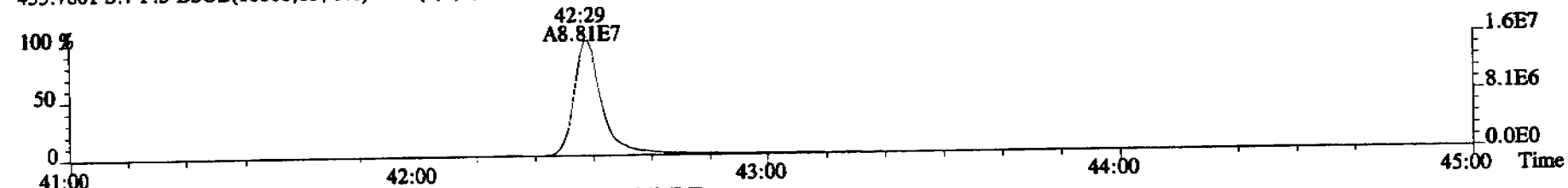
443.7398 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



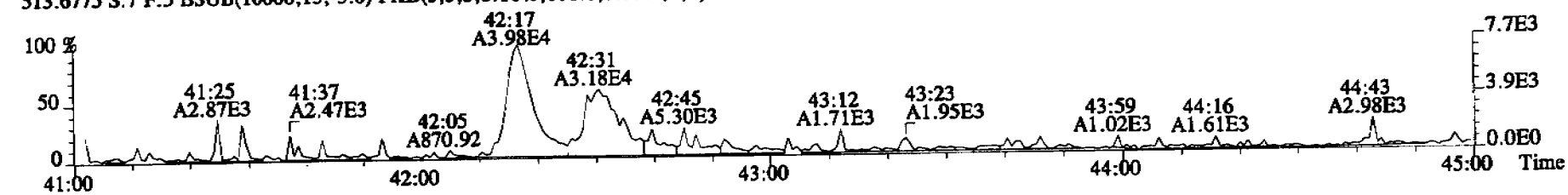
453.7831 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

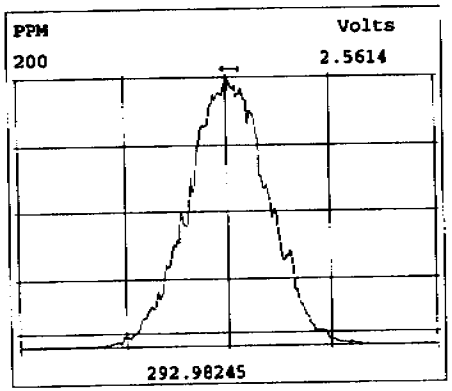


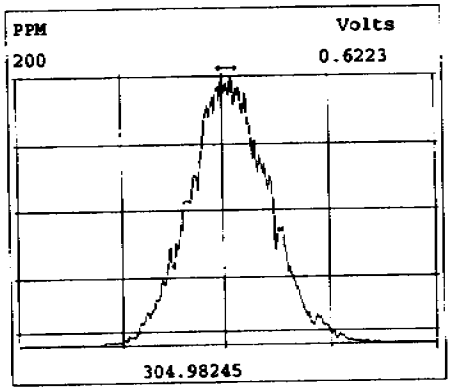
513.6775 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

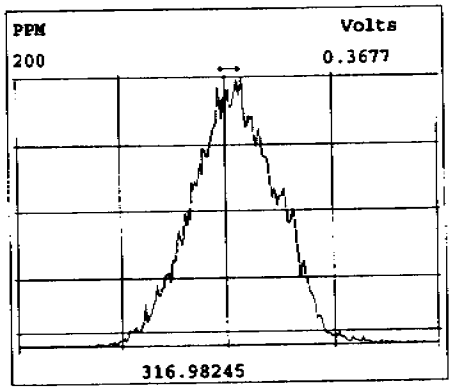


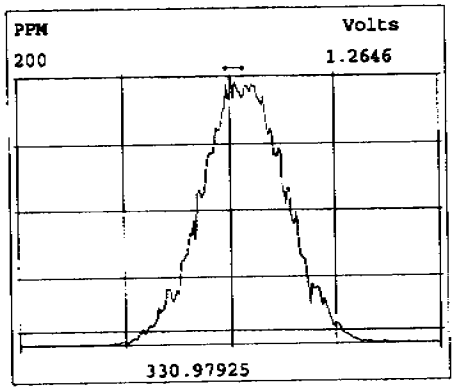
Peak Locate Examination:23-APR-2005:19:40 File:RES_CHECK

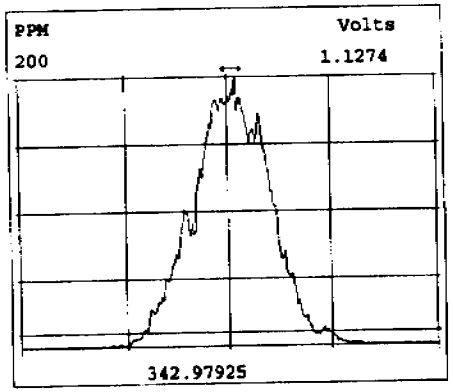
Experiment:OCDD_DB5 Function:1 Reference:PFK

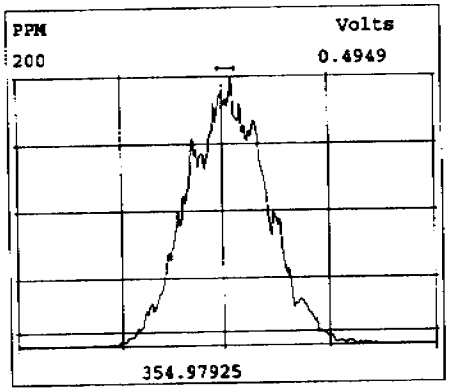


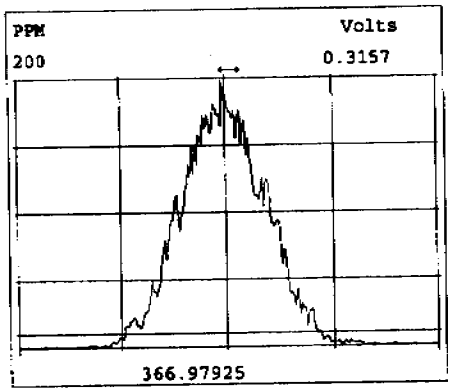


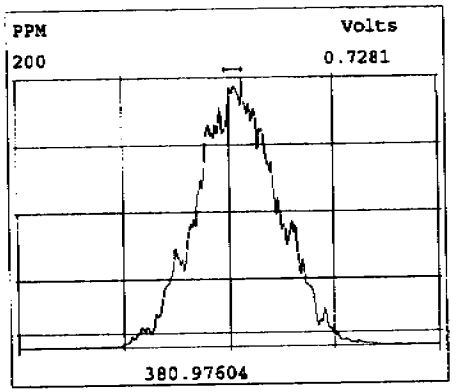


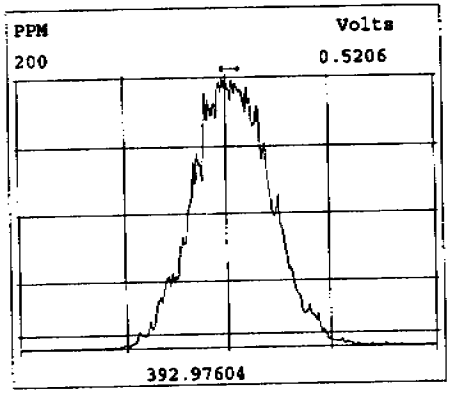


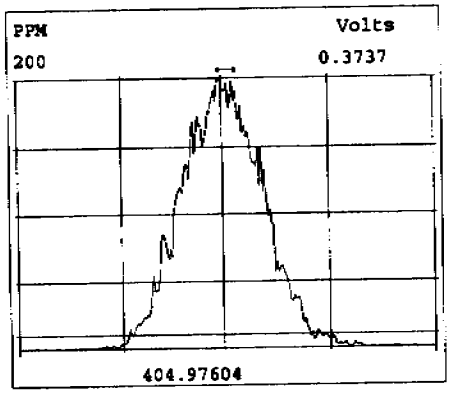


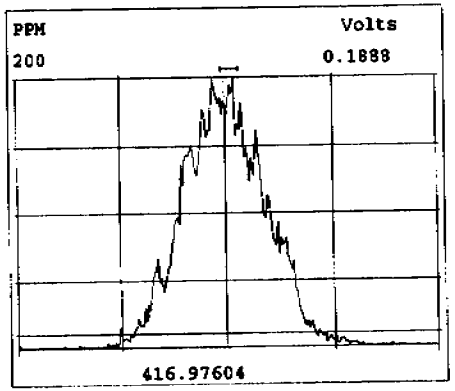






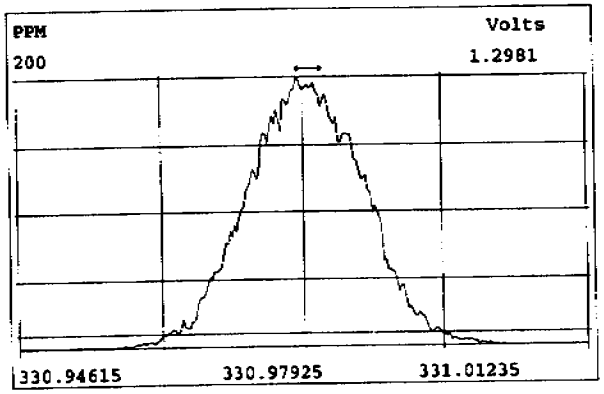


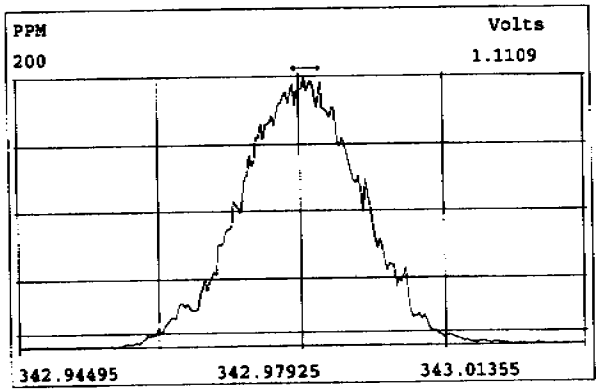


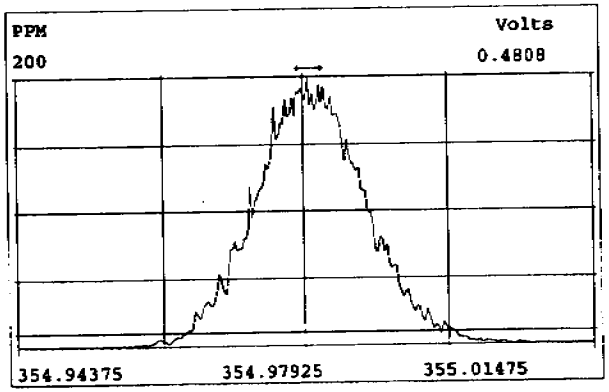


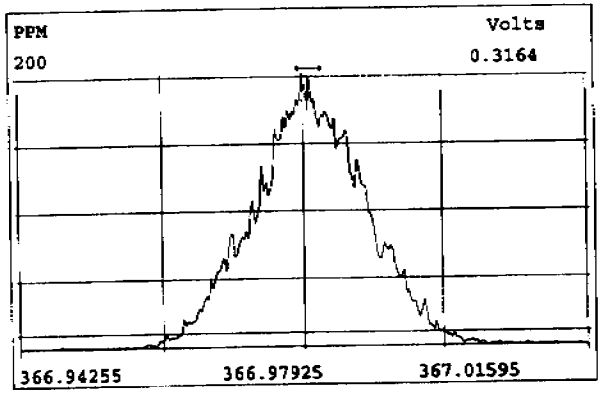
Peak Locate Examination:23-APR-2005:19:41 File:RES_CHECK

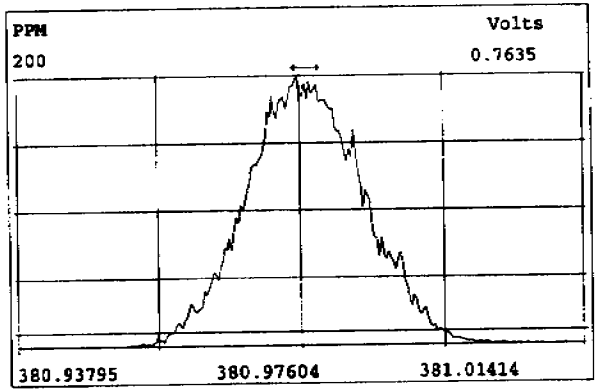
Experiment:OCDD_DB5 Function:2 Reference:PFK

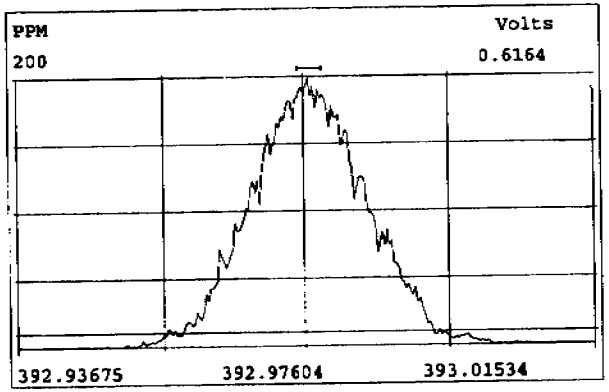


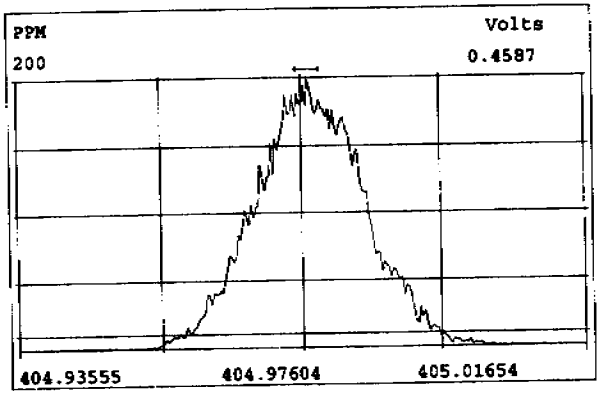


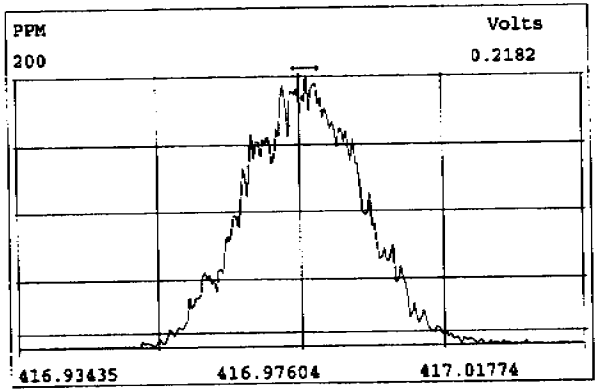






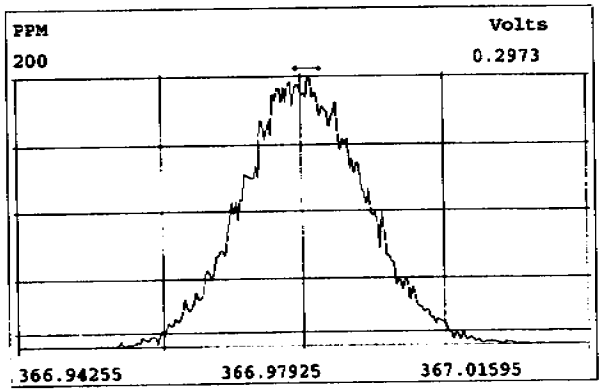


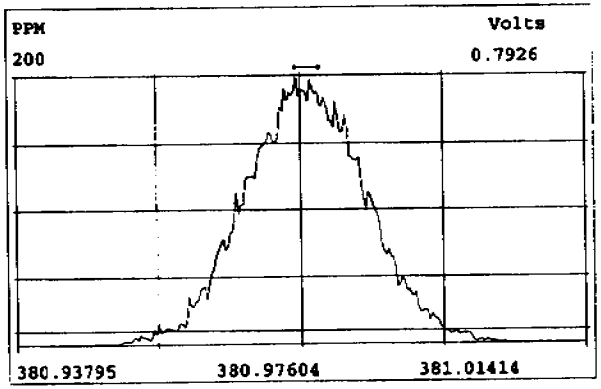


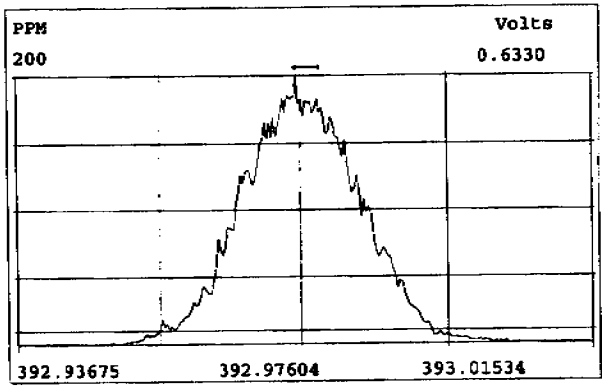


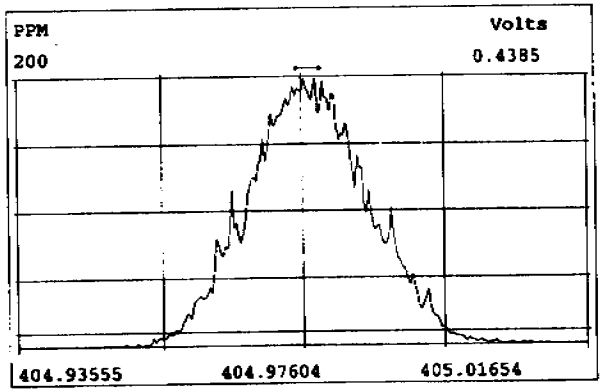
Peak Locate Examination:23-APR-2005:19:42 File:RES_CHECK

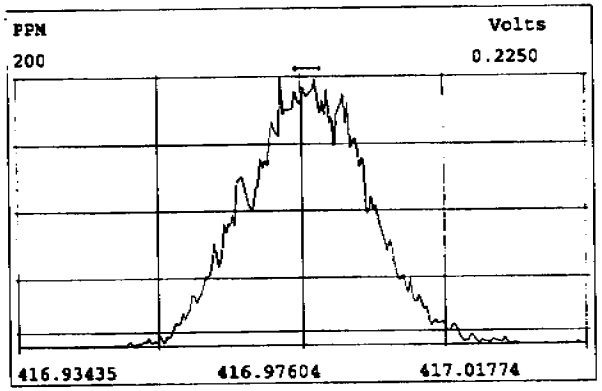
Experiment:OCDD_DB5 Function:3 Reference:PFK

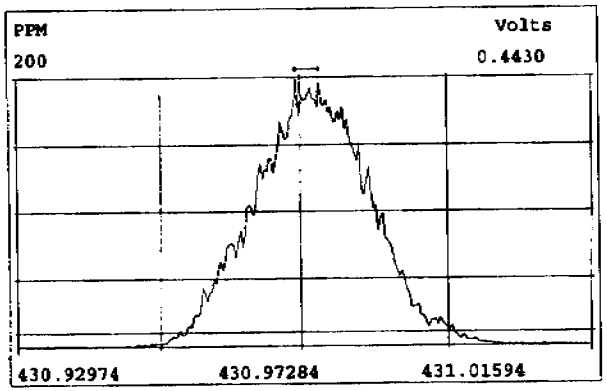


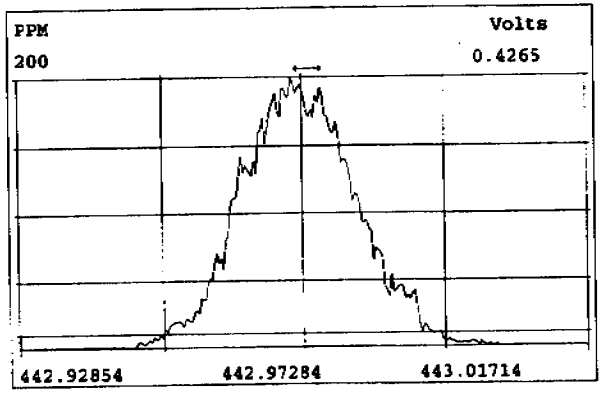


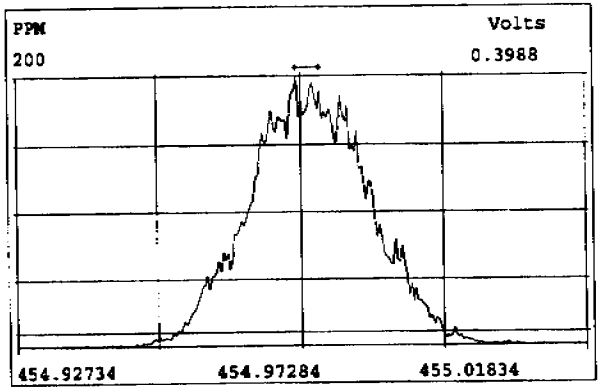






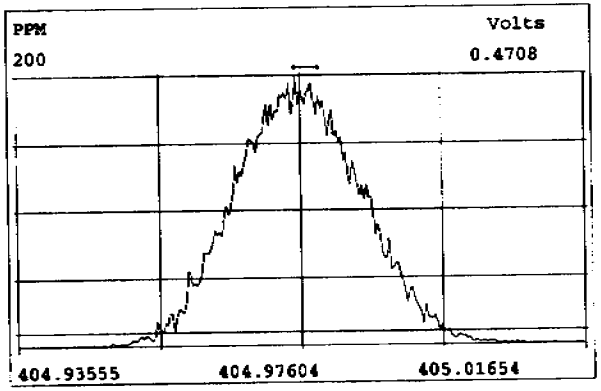


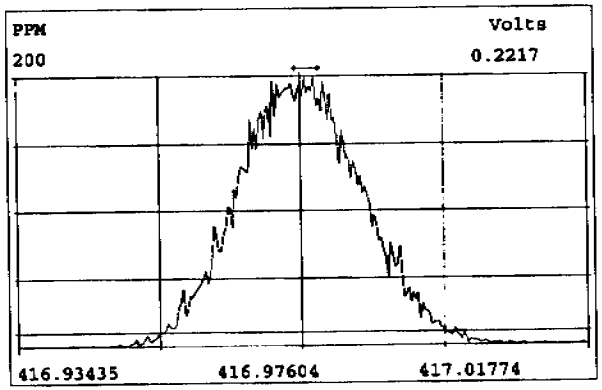


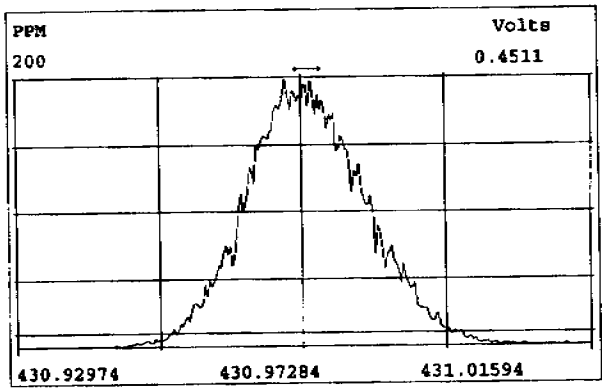


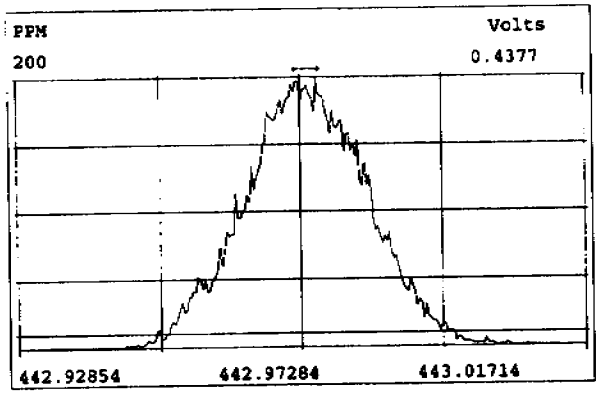
Peak Locate Examination:23-APR-2005:19:43 File:RES_CHECK

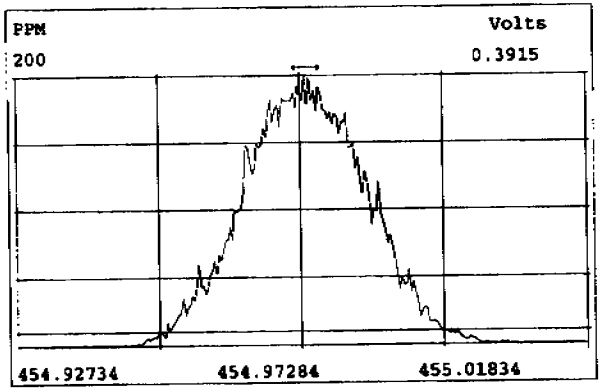
Experiment:OCDD_DB5 Function:4 Reference:PFK

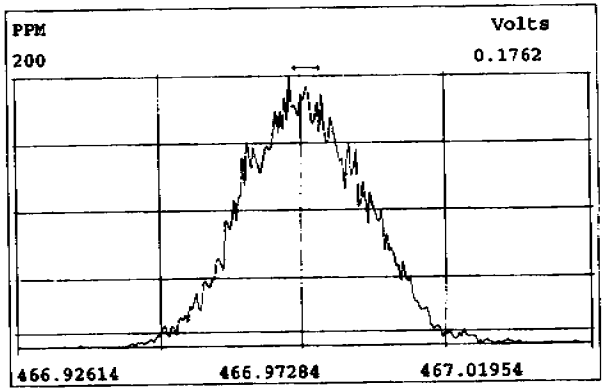


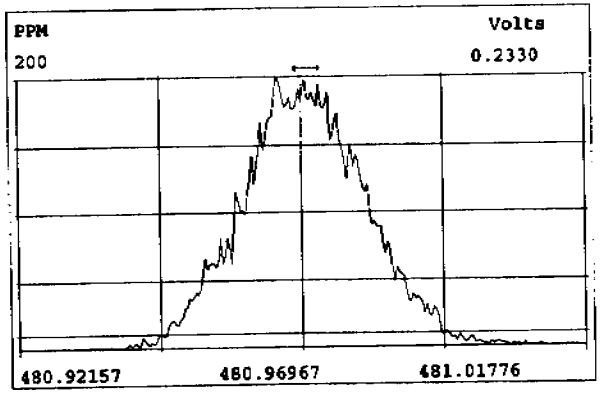






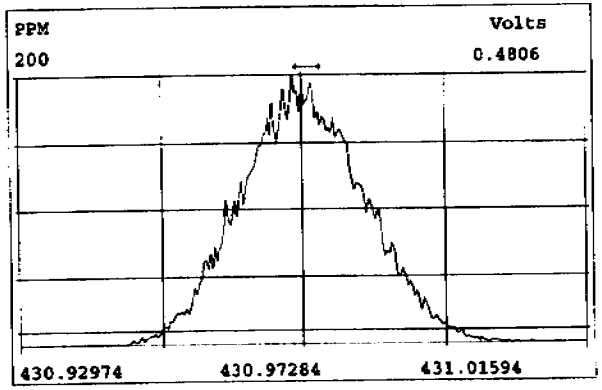


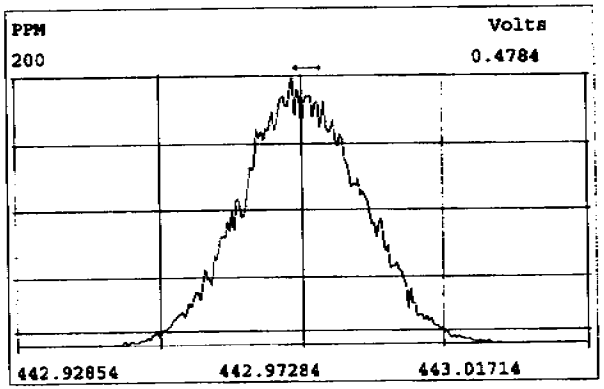


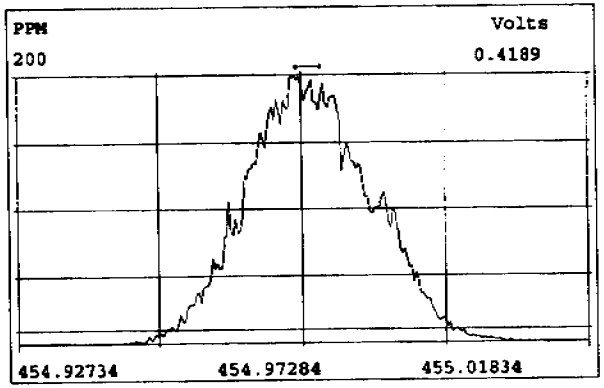


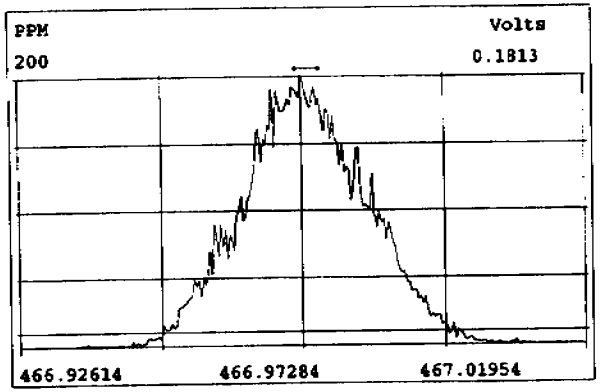
Peak Locate Examination:23-APR-2005:19:44 File:RES_CHECK

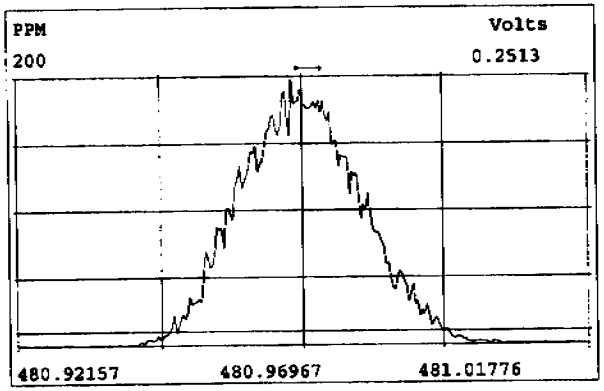
Experiment:OCDD_DB5 Function:5 Reference:PFK

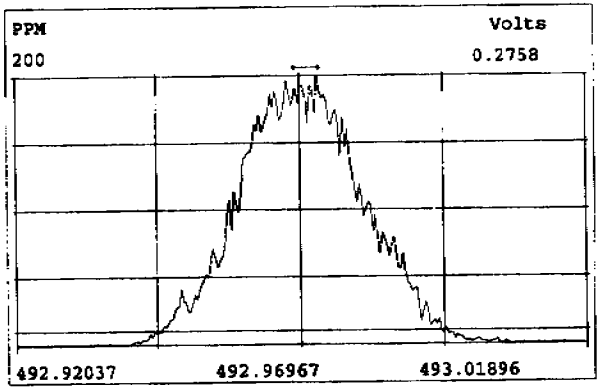


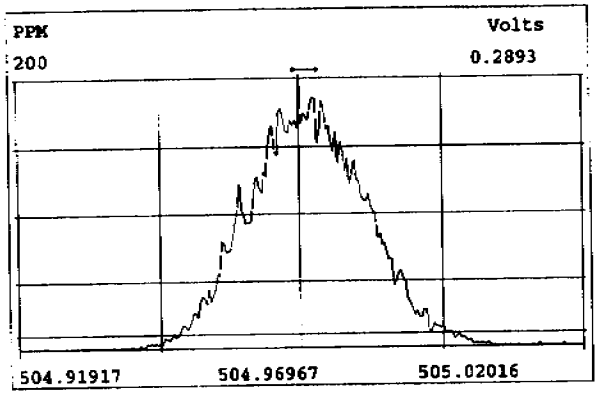


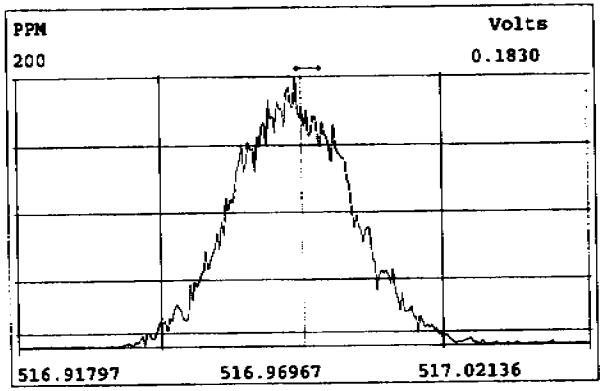












Client ID: 1613 SSS L010608B Filename: 050423D1 S:9 Acq:23-APR-05 17:53:07 ConCal: ST050423D1-1
Lab ID: ST050423D1-7 GC Column ID: DB-5 ICal: 1613vg7-4-23-05 wt/vol: 1.000 EndCAL: ST050423D1-8

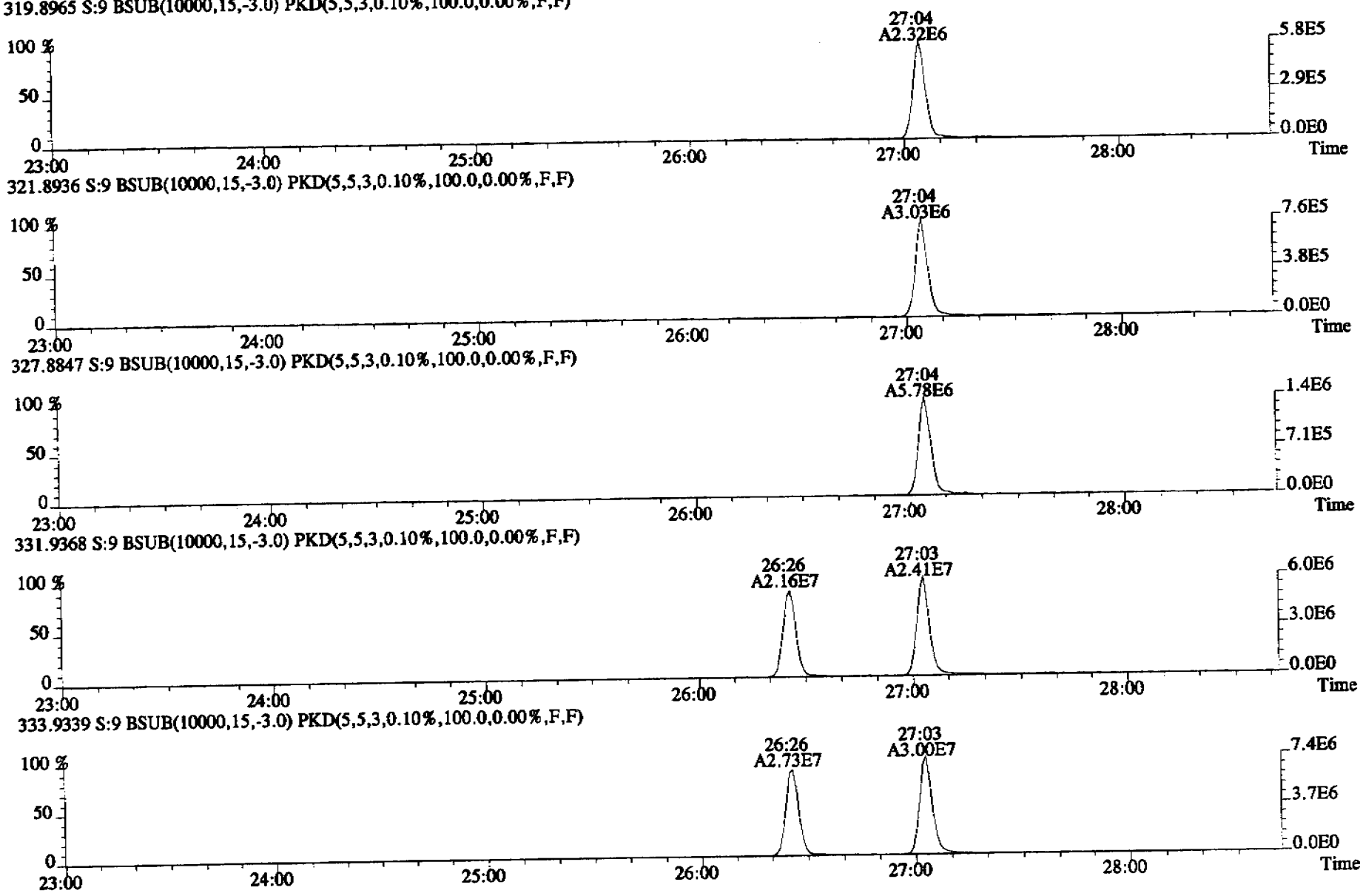
	Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Rec	Qual
	2,3,7,8-TCDD	5.35e+06	0.77 y	1.06	27:04	9.34		*	2.5	*	98.4	
	1,2,3,7,8-PeCDD	2.12e+07	0.61 y	0.99	31:44	50.7		*	2.5	*	97.3	
	1,2,3,4,7,8-HxCDD	1.65e+07	1.24 y	1.11	35:05	45.4		*	2.5	*	93.0	
	1,2,3,6,7,8-HxCDD	2.00e+07	1.25 y	1.07	35:11	42.4		*	2.5	*	105	
	1,2,3,7,8,9-HxCDD	2.01e+07	1.24 y	1.15	35:29	45.3		*	2.5	*	93.9	
	1,2,3,4,6,7,8-HpCDD	1.76e+07	1.03 y	1.05	39:00	51.2		*	2.5	*	89.8	
	OCDD	3.00e+07	0.88 y	1.04	42:18	103		*	2.5	*	* 116%	
	2,3,7,8-TCDF	8.04e+06	0.78 y	1.05	26:15	9.59		*	2.5	*	* 115%	
	1,2,3,7,8-PeCDF	3.27e+07	1.58 y	0.95	30:32	50.7		*	2.5	*	* 119%	
	2,3,4,7,8-PeCDF	3.41e+07	1.52 y	1.08	31:27	47.2		*	2.5	*	87.5	
	1,2,3,4,7,8-HxCDF	2.79e+07	1.27 y	1.19	34:11	50.2		*	2.5	*	99.2	
	1,2,3,6,7,8-HxCDF	3.44e+07	1.24 y	1.22	34:18	48.1		*	2.5	*	88.5	
	2,3,4,6,7,8-HxCDF	2.92e+07	1.24 y	1.20	34:55	50.3		*	2.5	*	93.2	
	1,2,3,7,8,9-HxCDF	2.52e+07	1.22 y	1.13	35:53	50.7		*	2.5	*	94.2	
	1,2,3,4,6,7,8-HpCDF	2.68e+07	1.05 y	1.38	37:43	48.5		*	2.5	*	96.4	
	1,2,3,4,7,8,9-HpCDF	2.22e+07	1.05 y	1.23	39:33	50.7		*	2.5	*	*	
	OCDF	3.67e+07	0.92 y	1.02	42:32	* 112		*	2.5	*		
IS	13C-2,3,7,8-TCDD	5.41e+07	0.80 y	1.12	27:03	98.4					47.6	
IS	13C-1,2,3,7,8-PeCDD	4.22e+07	0.64 y	0.89	31:43	97.3						
IS	13C-1,2,3,4,7,8-HxCDD	3.27e+07	1.34 y	0.83	35:04	93.0						
IS	13C-1,2,3,6,7,8-HxCDD	4.41e+07	1.21 y	1.00	35:10	105						
IS	13C-1,2,3,4,6,7,8-HpCDD	3.27e+07	1.06 y	0.82	38:59	93.9						
IS	13C-OCDD	5.64e+07	0.89 y	0.74	42:17	180						
IS	13C-2,3,7,8-TCDF	7.95e+07	0.77 y	1.02	26:14	*						
IS	13C-1,2,3,7,8-PeCDF	6.77e+07	1.58 y	0.90	30:31	*						
IS	13C-2,3,4,7,8-PeCDF	6.71e+07	1.59 y	0.87	31:26	*						
IS	13C-1,2,3,4,7,8-HxCDF	4.68e+07	0.53 y	1.27	34:09	87.5						
IS	13C-1,2,3,6,7,8-HxCDF	5.88e+07	0.53 y	1.40	34:17	99.2						
IS	13C-2,3,4,6,7,8-HxCDF	4.83e+07	0.53 y	1.29	34:54	88.5						
IS	13C-1,2,3,7,8,9-HxCDF	4.41e+07	0.54 y	1.12	35:52	93.2						
IS	13C-1,2,3,4,6,7,8-HpCDF	4.02e+07	0.45 y	1.01	37:42	94.2						
IS	13C-1,2,3,4,7,8,9-HpCDF	3.58e+07	0.45 y	0.88	39:33	96.4						
IS	13C-OCDF	*	* n	0.94	NotP¶	*						
C/Up	37Cl-2,3,7,8-TCDD	5.78e+06		0.62	27:04	19.0						
RS/RT	13C-1,2,3,4-TCDD	4.89e+07	0.79 y	1.00	26:26	100						
RS	13C-1,2,3,4-TCDF	*	* n	1.00	NotP¶	*						
RS/RT	13C-1,2,3,7,8,9-HxCDD	4.22e+07	1.25 y	1.00	35:29	100						

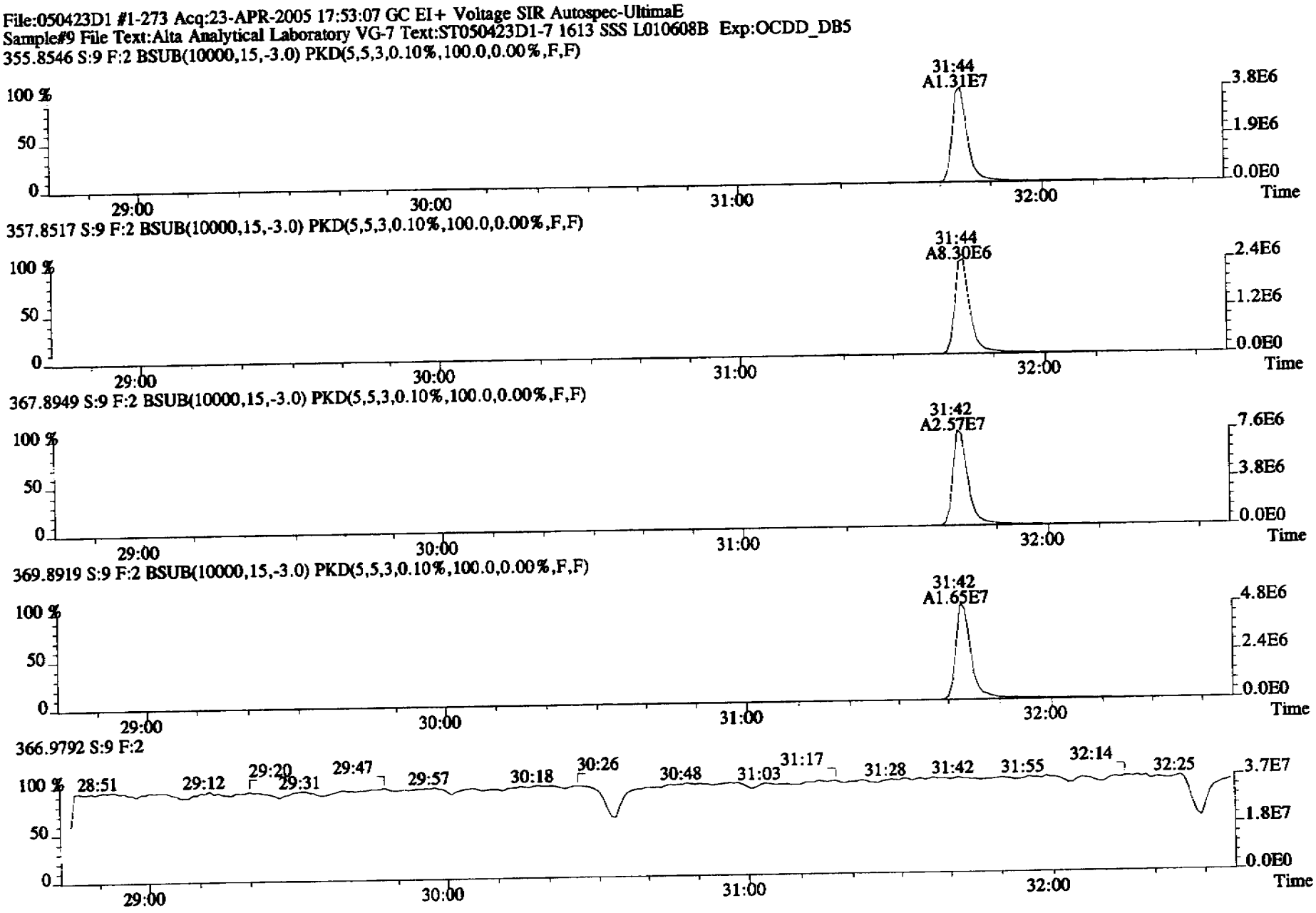
Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	9.56	10.2		*	*
Total Penta-Dioxins	51.2	51.4		*	*
Total Hexa-Dioxins	134	135		*	*
Total Hepta-Dioxins	51.6	53.3		*	*
Total Tetra-Furans	9.81	10.5		*	*
Total Penta-Furans	99.1	100		*	*
Total Hexa-Furans	201	201		*	*
Total Hepta-Furans	99.2	101		*	*

Intergrations by Analyst: _____

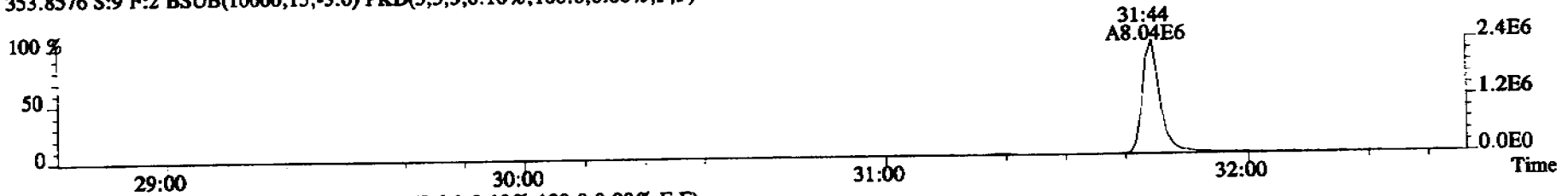
Date: 4/26/05

File:050423D1 #1-558 Acq:23-APR-2005 17:53:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-7 1613 SSS L010608B Exp:OCDD_DB5

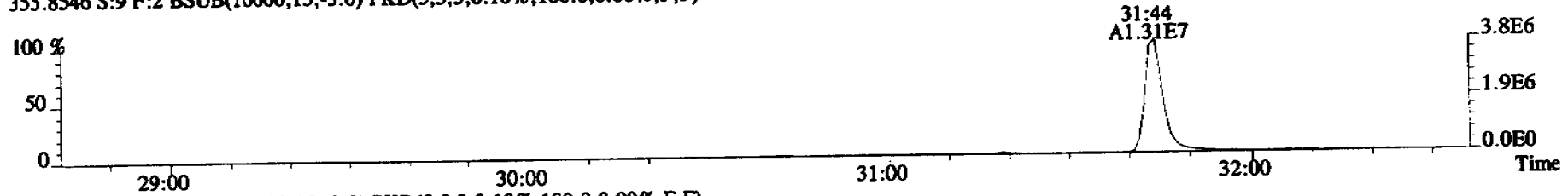



File:050423D1 #1-273 Acq:23-APR-2005 17:53:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-7 1613 SSS L010608B Exp:OCDD_DB5
355.8546 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
31:44
A1.31E7
3.8E6
1.9E6
0.0E0
100 %
50
0
29:00
30:00
31:00
32:00
Time
357.8517 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
31:44
A8.30E6
2.4E6
1.2E6
0.0E0
100 %
50
0
29:00
30:00
31:00
32:00
Time
367.8949 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
31:42
A2.57E7
7.6E6
3.8E6
0.0E0
100 %
50
0
29:00
30:00
31:00
32:00
Time
369.8919 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
31:42
A1.65E7
4.8E6
2.4E6
0.0E0
100 %
50
0
29:00
30:00
31:00
32:00
Time
366.9792 S:9 F:2
28:51
29:12
29:20
29:31
29:47
29:57
30:18
30:26
30:48
31:03
31:17
31:28
31:42
31:55
32:14
32:25
3.7E7
1.8E7
0.0E0
100 %
50
0
29:00
30:00
31:00
32:00
Time

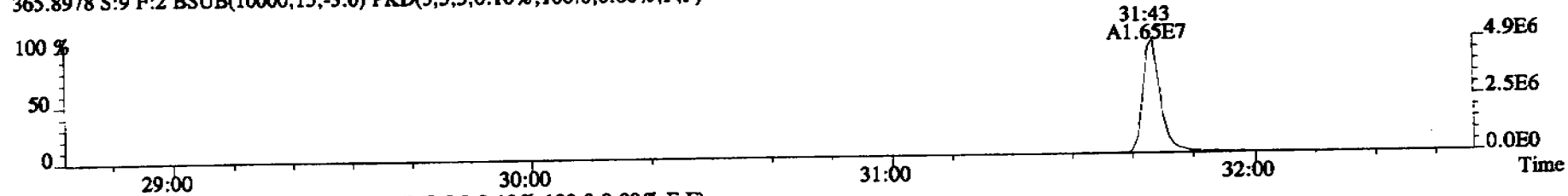
File:050423D1 #1-273 Acq:23-APR-2005 17:53:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-7 1613 SSS L010608B Exp:OCDD_DB5
353.8576 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



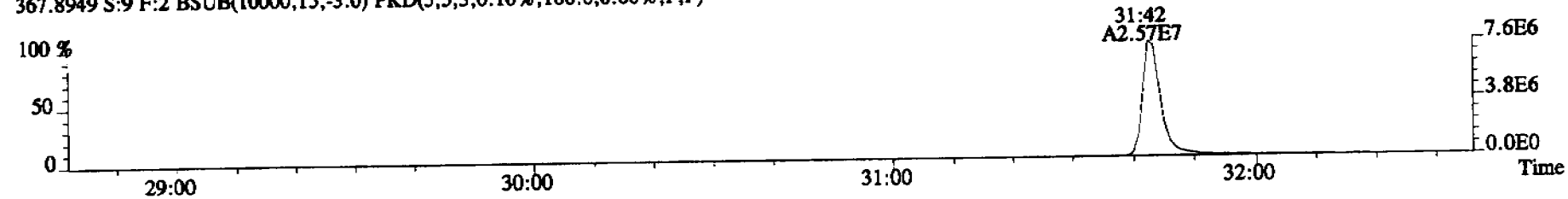
355.8546 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



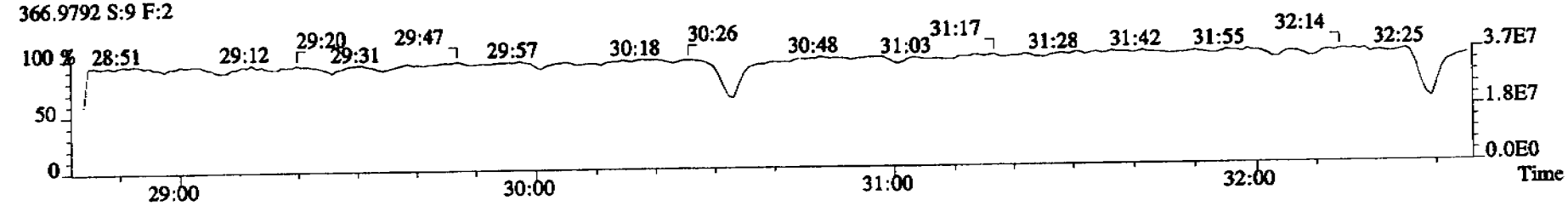
365.8978 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



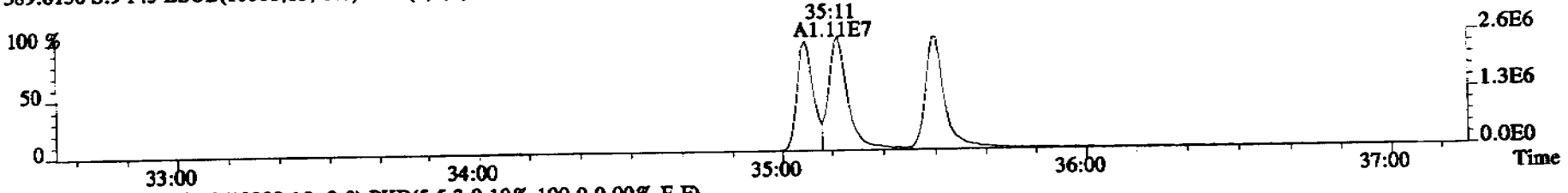
367.8949 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



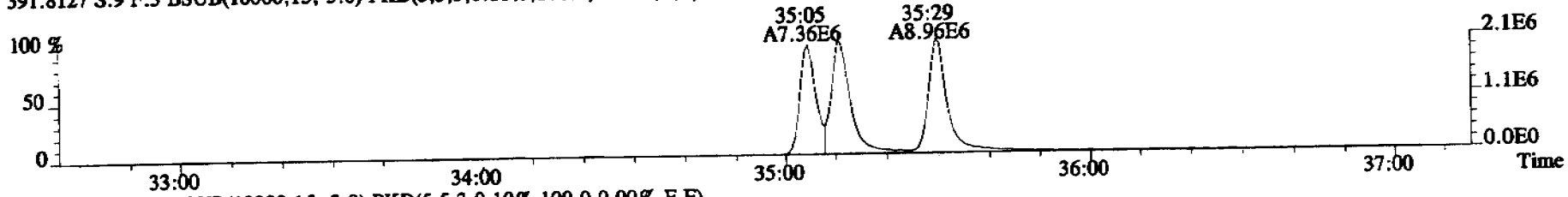
366.9792 S:9 F:2



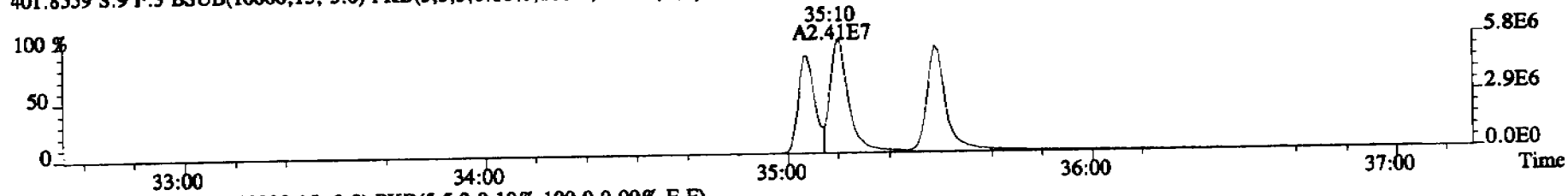
File:050423D1 #1-398 Acq:23-APR-2005 17:53:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-7 1613 SSS L010608B Exp:OCDD_DB5
389.8156 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



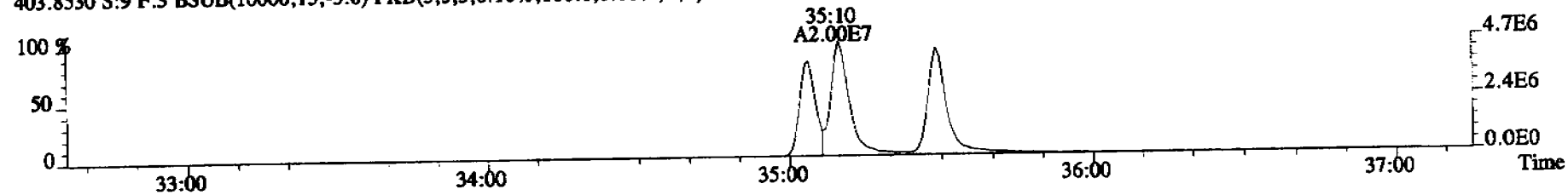
391.8127 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



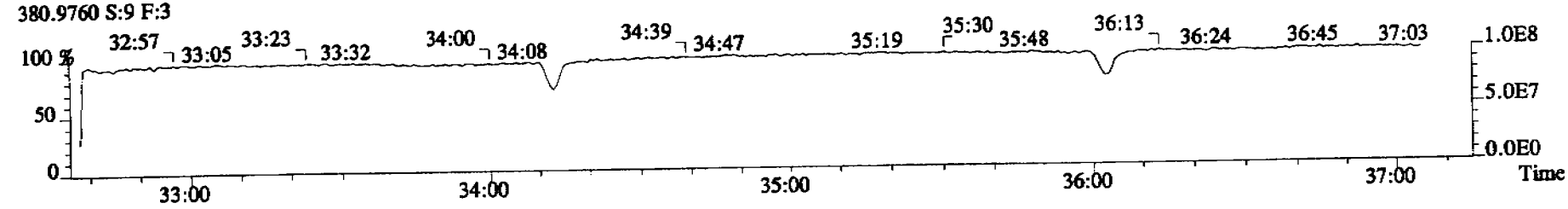
401.8559 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



403.8530 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

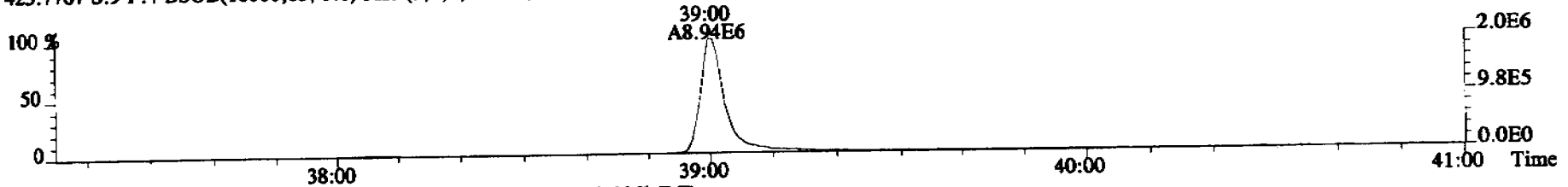


380.9760 S:9 F:3

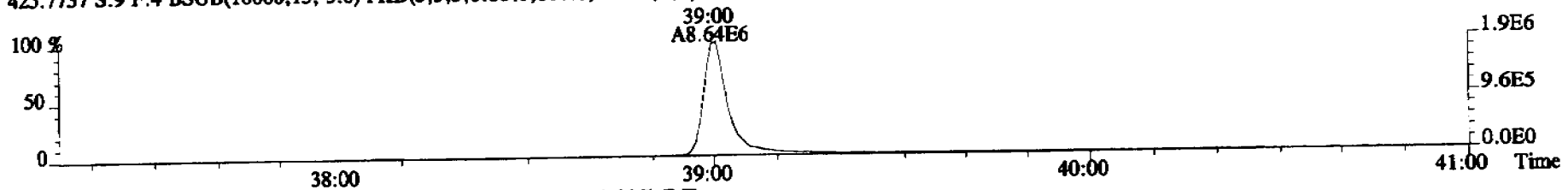


File:050423D1 #1-348 Acq:23-APR-2005 17:53:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-7 1613 SSS L010608B Exp:OCDD_DB5

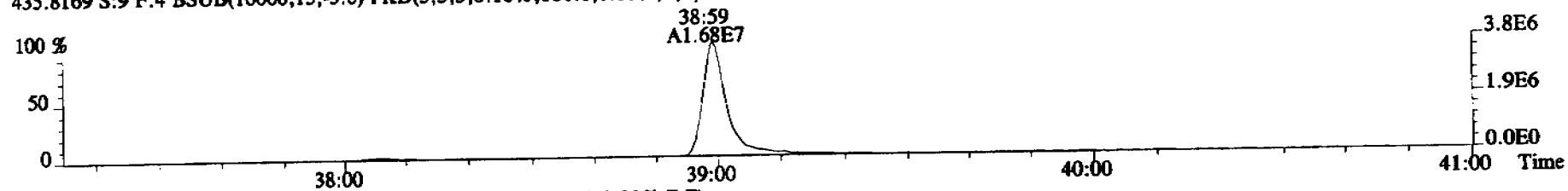
423.7767 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



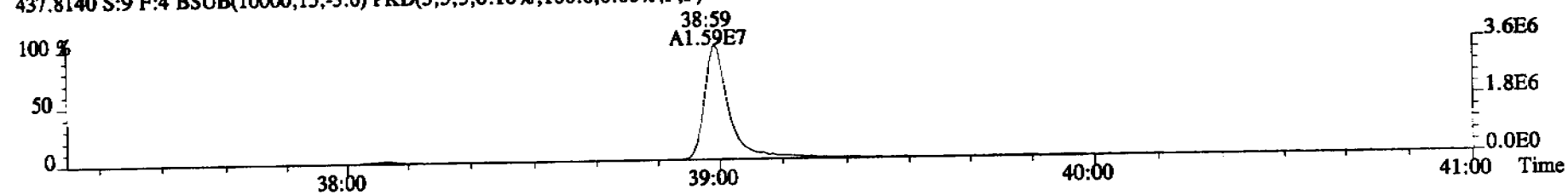
425.7737 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



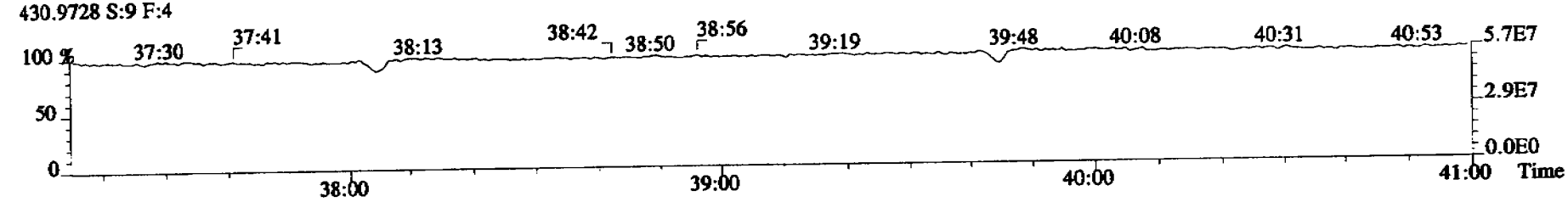
435.8169 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



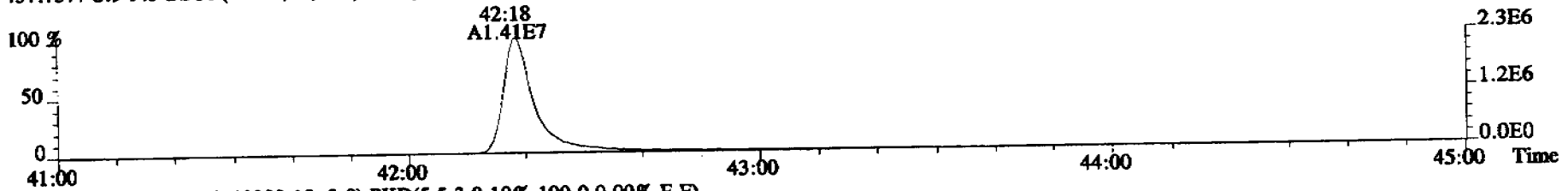
437.8140 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



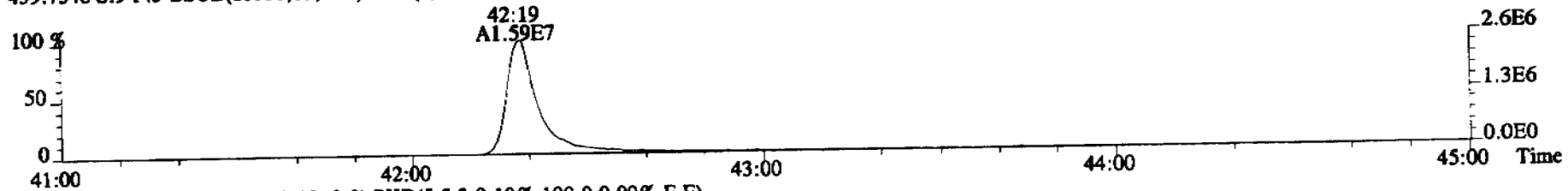
430.9728 S:9 F:4



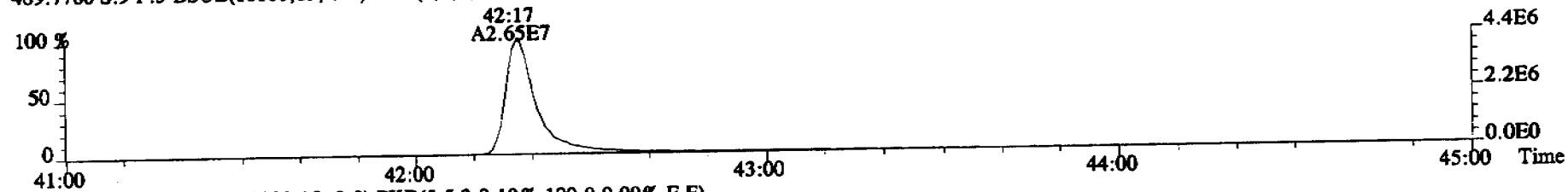
File:050423D1 #1-345 Acq:23-APR-2005 17:53:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-7 1613 SSS L010608B Exp:OCDD_DB5
457.7377 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



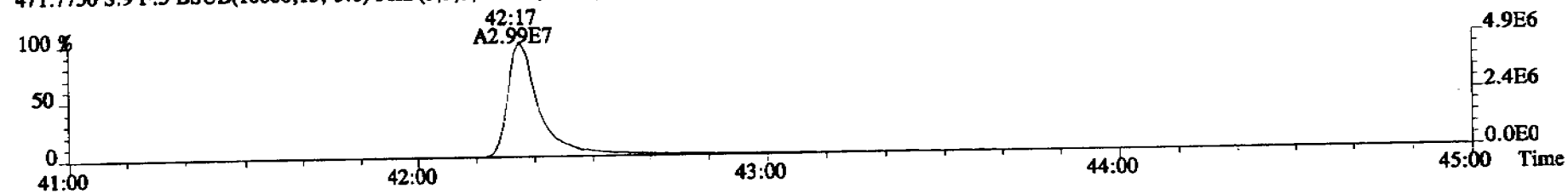
459.7348 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



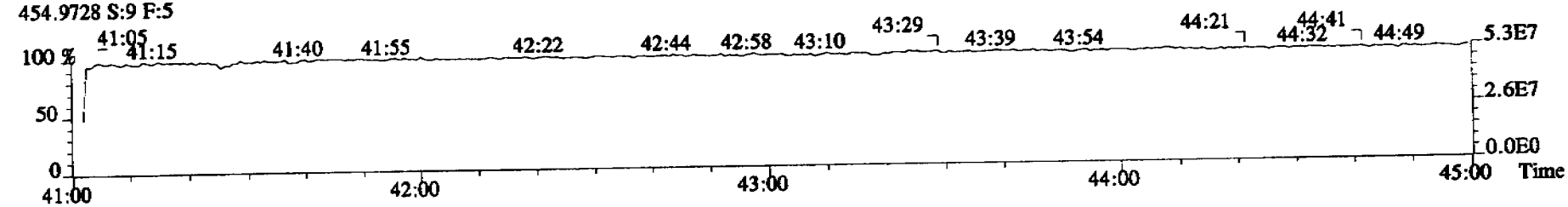
469.7780 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



471.7750 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

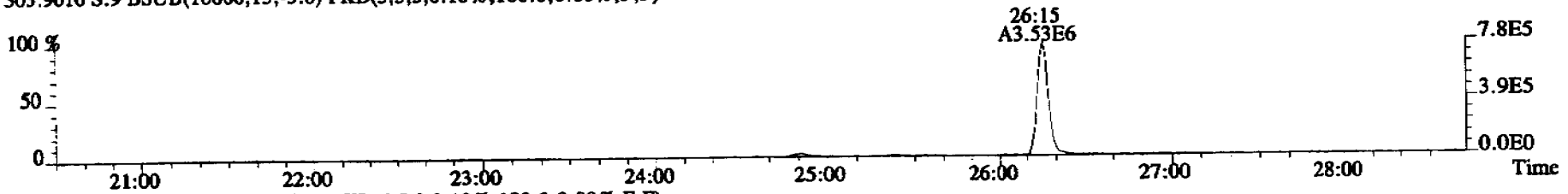


454.9728 S:9 F:5

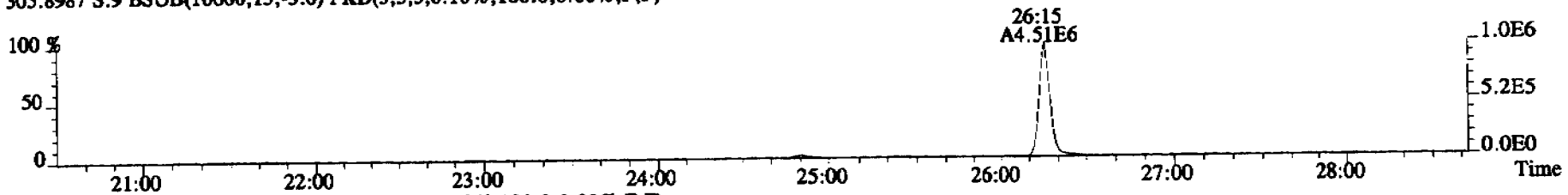


File:050423D1 #1-558 Acq:23-APR-2005 17:53:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-7 1613 SSS L010608B Exp:OCDD_DB5

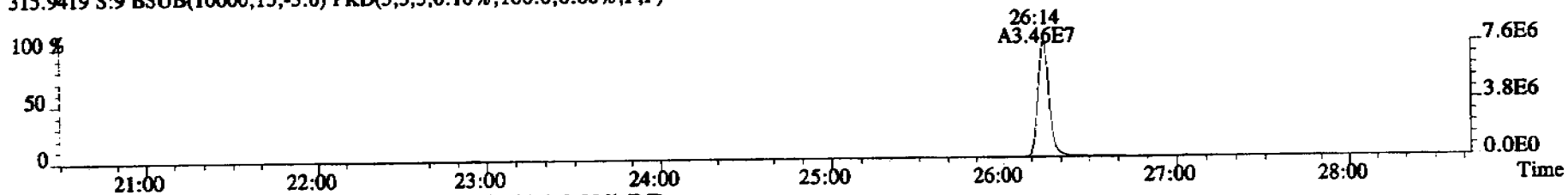
303.9016 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



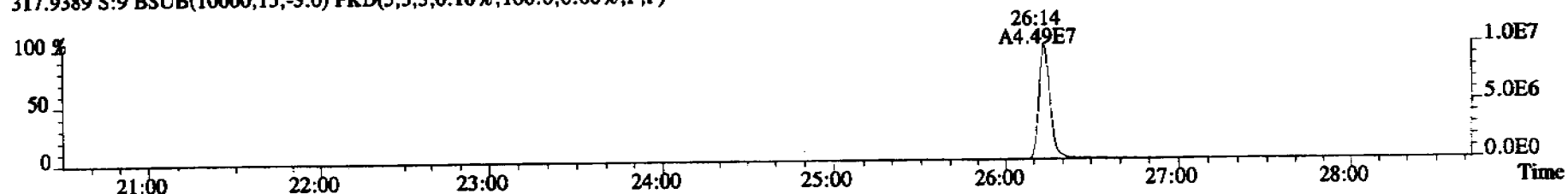
305.8987 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



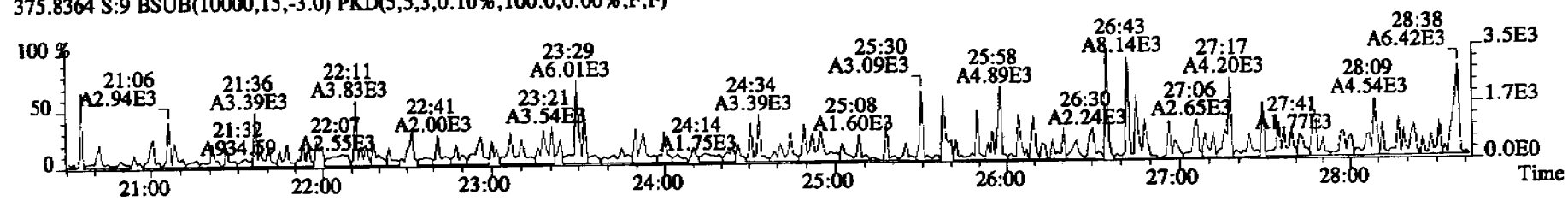
315.9419 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

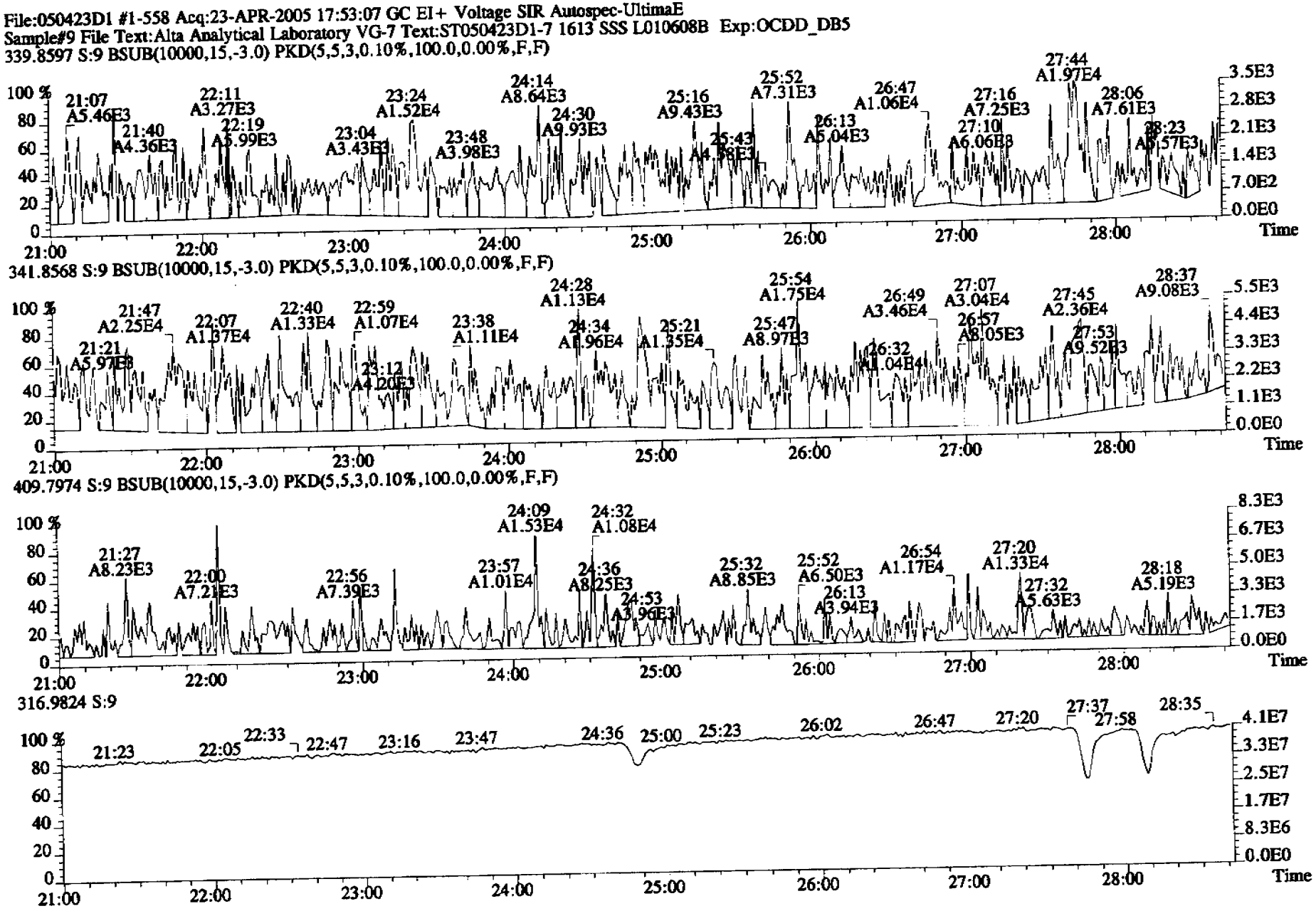


317.9389 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

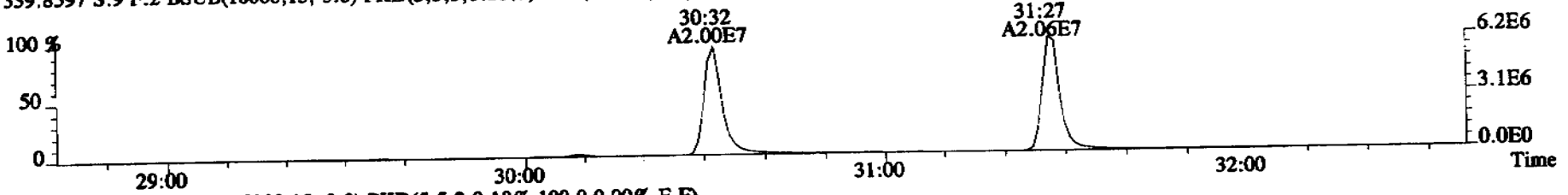


375.8364 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

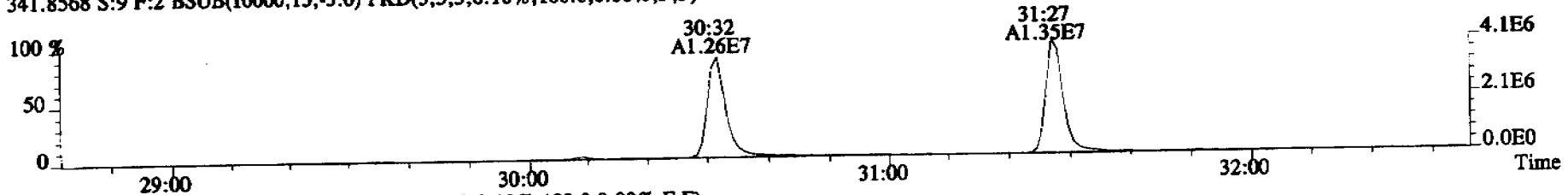



File:050423D1 #1-558 Acq:23-APR-2005 17:53:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-7 1613 SSS L010608B Exp:OCDD_DB5
339.8597 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
341.8568 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
409.7974 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
316.9824 S:9
Time

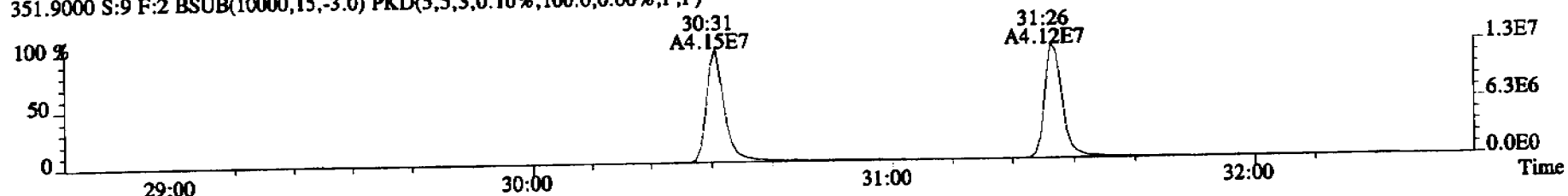
File:050423D1 #1-273 Acq:23-APR-2005 17:53:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-7 1613 SSS L010608B Exp:OCDD_DB5
339.8597 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



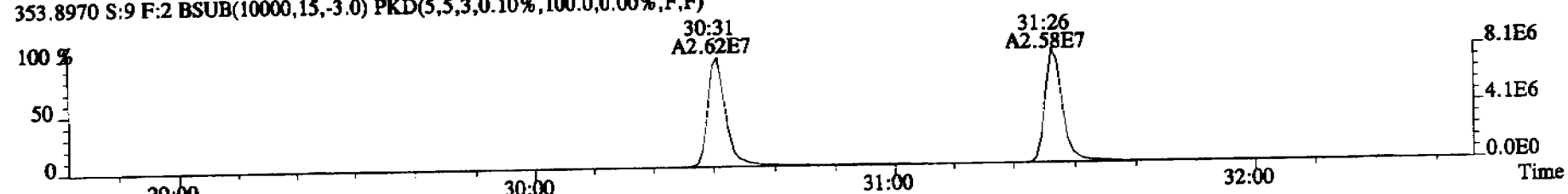
341.8568 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



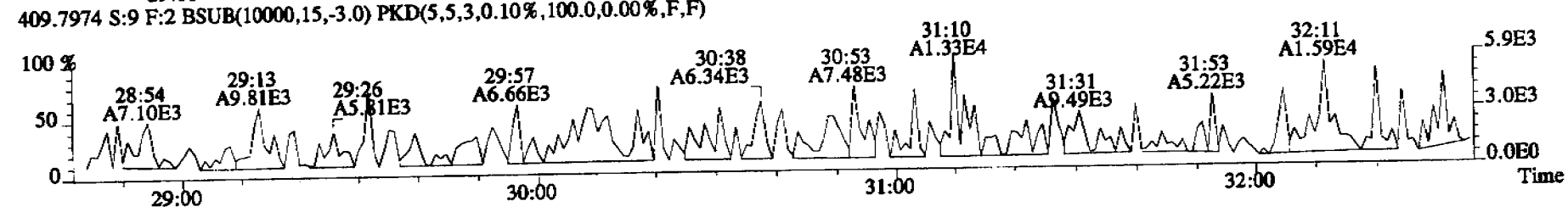
351.9000 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



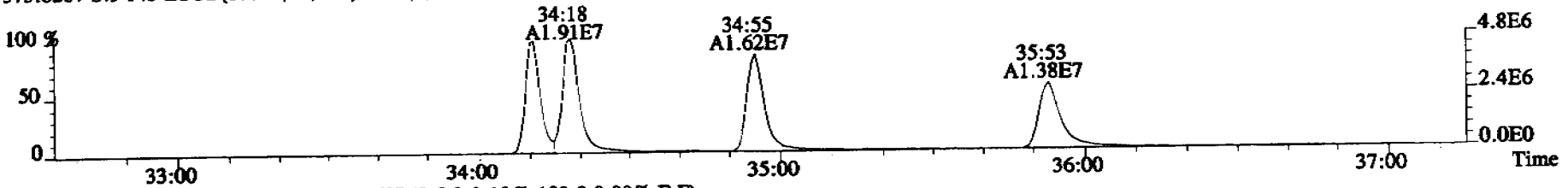
353.8970 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



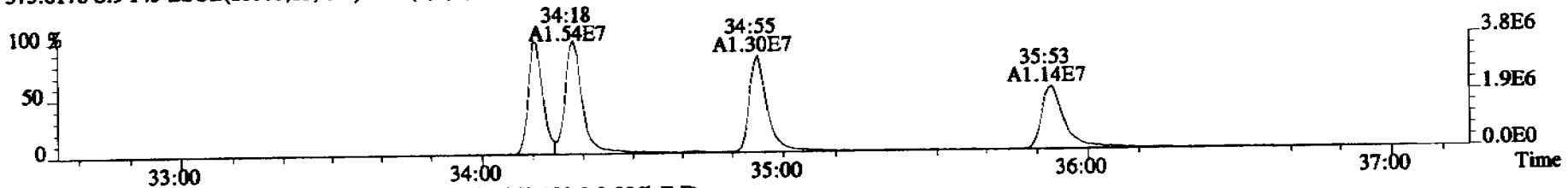
409.7974 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



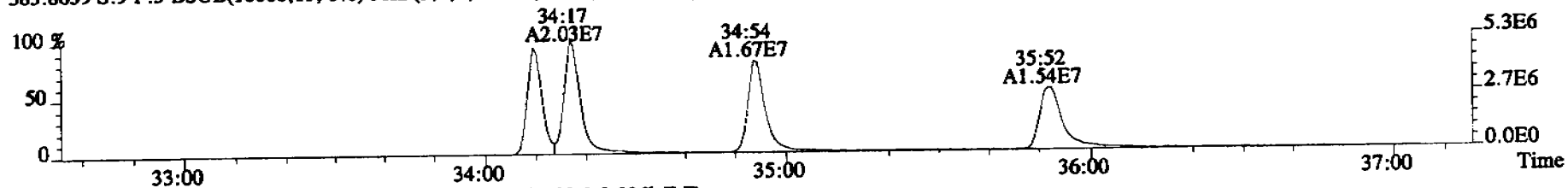
File:050423D1 #1-398 Acq:23-APR-2005 17:53:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-7 1613 SSS L010608B Exp:OCDD_DB5
373.8207 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



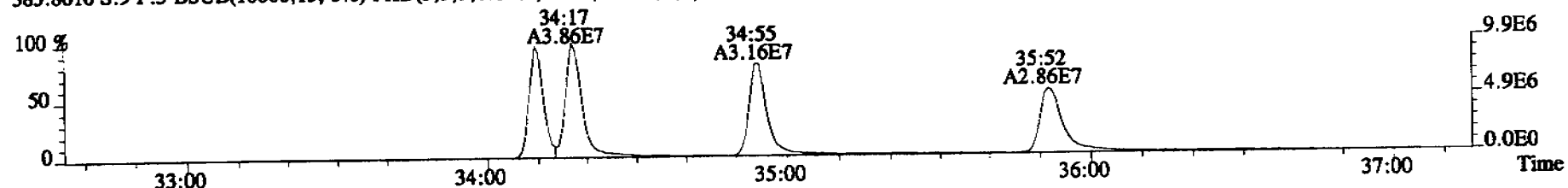
375.8178 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



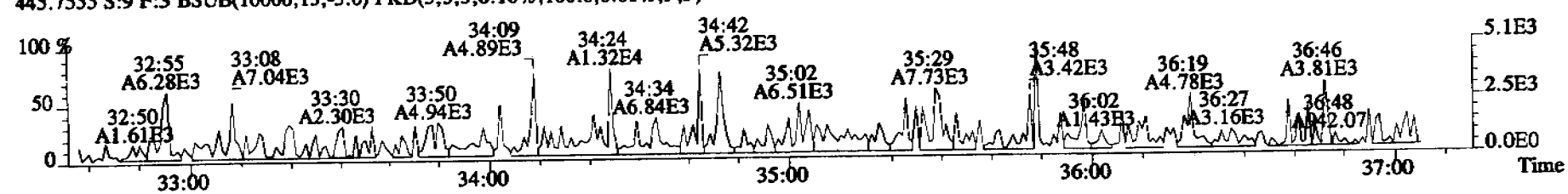
383.8639 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



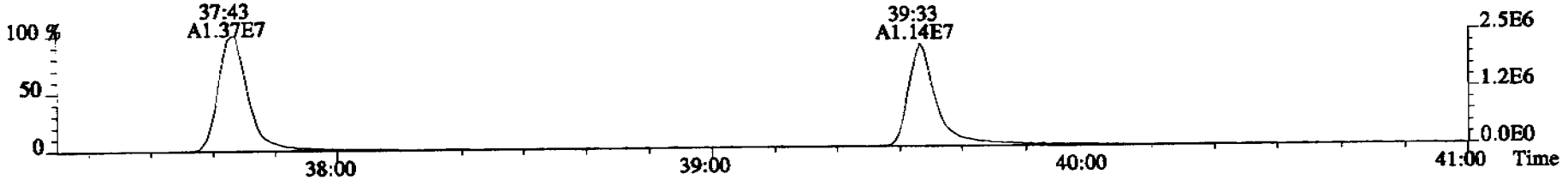
385.8610 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



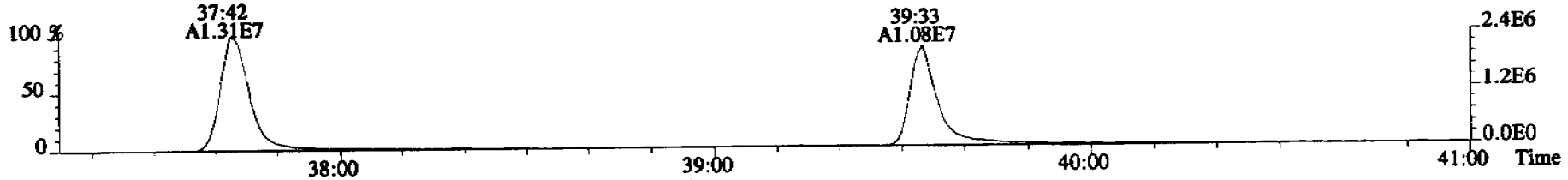
445.7555 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



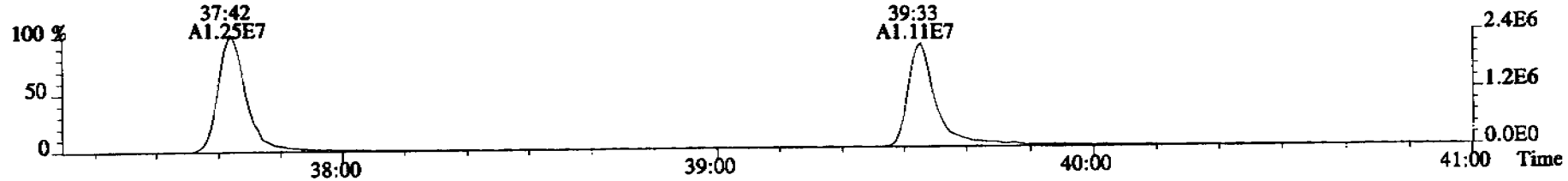
File:050423D1 #1-348 Acq:23-APR-2005 17:53:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-7 1613 SSS L010608B Exp:OCDD_DB5
407.7818 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



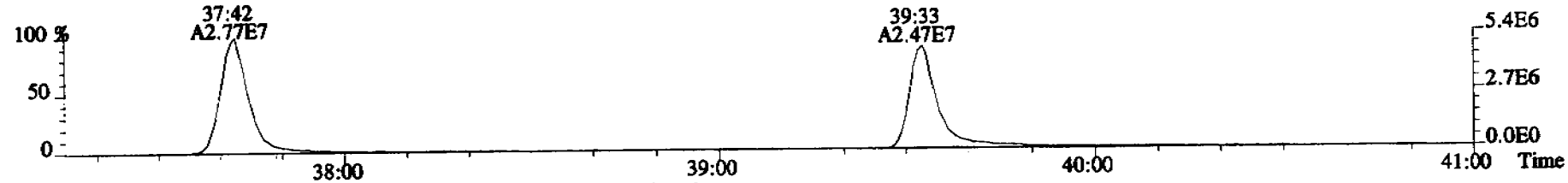
409.7788 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



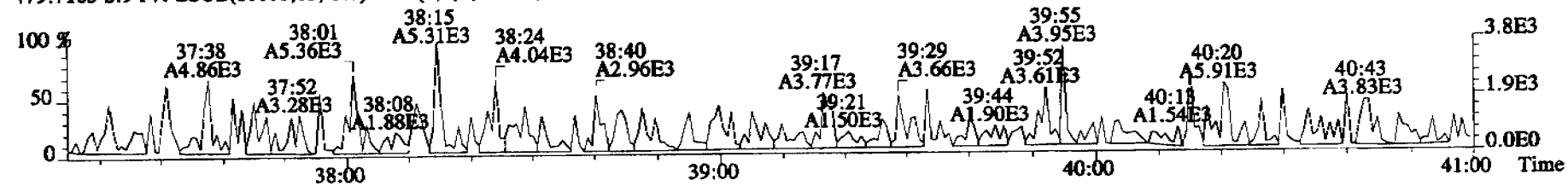
417.8253 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



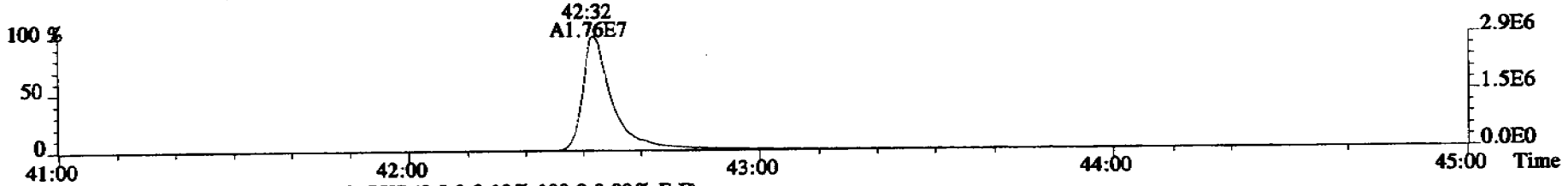
419.8220 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



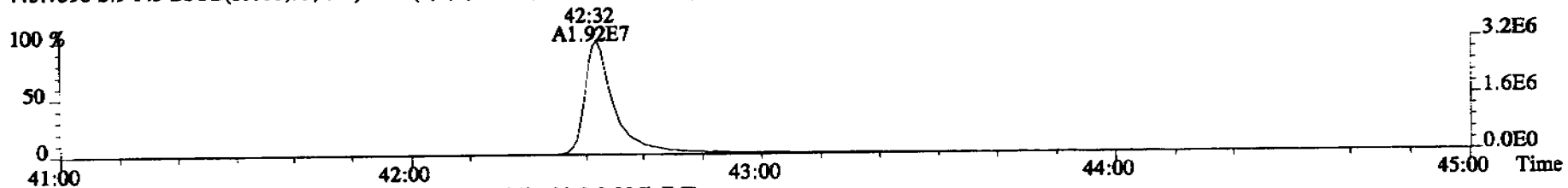
479.7165 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



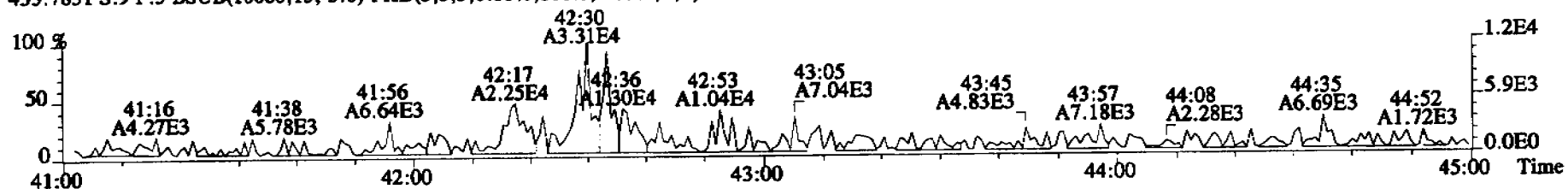
File:050423D1 #1-345 Acq:23-APR-2005 17:53:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-7 1613 SSS L010608B Exp:OCDD_DB5
441.7428 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



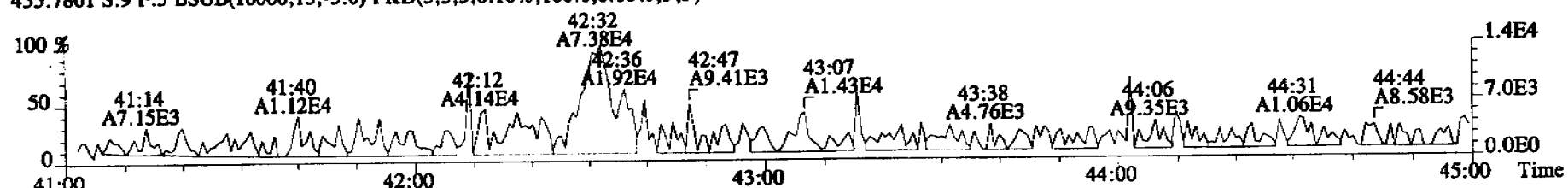
443.7398 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



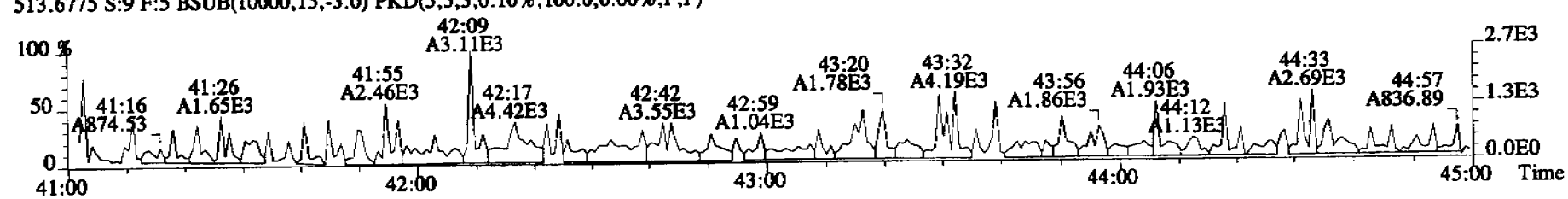
453.7831 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Initial Calibration RRF Summary Alta Analytical Laboratory
Run: Analyte: tcdf Cal: 1613tcdfvg6-4-29-05 Inst. ID: VG-6

Filename: 050429A1

Name	Mean RRF	%RSD	S2 RRF#1	S5 RRF#2	S6 RRF#3	S7 RRF#4	S8 RRF#5
13C-1,2,3,4-TCDF	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00
13C-2,3,7,8-TCDF	1.04	1.48 %	1.06	1.03	1.02	1.04	1.05
2,3,7,8-TCDF	1.07	3.75 %	1.08	1.11	1.07	1.09	1.00

DMS 4/30/05

OK W/A 5/11/05

Filename: 050429A1 S: 2 Acquired: 29-APR-05 11:36:00
Run: Analyte: tcdf Cal: 1613tcdfvg6-4-29-05 Results:
Sample text: ST050429A1-1 1613 CS3 050420H

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	RS	13C-1,2,3,4-TCDF	100.00	3.15e+07	0.78 y	20:20	-	1.00
2	IS	13C-2,3,7,8-TCDF	100.00	3.33e+07	0.80 y	23:36	-	1.06
3	Unk	2,3,7,8-TCDF	10.00	3.61e+06	0.76 y	23:36	-	1.08

Filename: 050429A1 S: 5 Acquired: 29-APR-05 13:38:50
Run: Analyte: tcdf Cal: 1613tcdfvg6-4-29-05 Results:
Sample text: ST050429A1-3 1613 CS1 050420F

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	RS	13C-1,2,3,4-TCDF	100.00	4.55e+07	0.79 y	20:12	-	1.00
2	IS	13C-2,3,7,8-TCDF	100.00	4.67e+07	0.79 y	23:32	-	1.03
3	Unk	2,3,7,8-TCDF	0.50	2.58e+05	0.70 y	23:33	-	1.11

Filename: 050429A1 S: 6 Acquired: 29-APR-05 14:19:46
Run: Analyte: tcdf Cal: 1613tcdfvg6-4-29-05 Results:
Sample text: ST050429A1-4 1613 CS2 050420G

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	RS	13C-1,2,3,4-TCDF	100.00	4.45e+07	0.78 y	20:11	-	1.00
2	IS	13C-2,3,7,8-TCDF	100.00	4.55e+07	0.80 y	23:32	-	1.02
3	Unk	2,3,7,8-TCDF	2.00	9.76e+05	0.81 y	23:33	-	1.07

Filename: 050429A1 S: 7 Acquired: 29-APR-05 15:00:41
Run: Analyte: tcdf Cal: 1613tcdfvg6-4-29-05 Results:
Sample text: ST050429A1-5 1613 CS4 050420I

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	RS	13C-1,2,3,4-TCDF	100.00	4.53e+07	0.79 y	20:12	-	1.00
2	IS	13C-2,3,7,8-TCDF	100.00	4.72e+07	0.80 y	23:32	-	1.04
3	Unk	2,3,7,8-TCDF	40.00	2.05e+07	0.78 y	23:34	-	1.09

Filename: 050429A1 S: 8 Acquired: 29-APR-05 15:41:37
Run: Analyte: tcdf Cal: 1613tcdfvg6-4-29-05 Results:
Sample text: ST050429A1-6 1613 CS5 050420J

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	RS	13C-1,2,3,4-TCDF	100.00	4.63e+07	0.77 y	20:11	-	1.00
2	IS	13C-2,3,7,8-TCDF	100.00	4.85e+07	0.78 y	23:32	-	1.05
3	Unk	2,3,7,8-TCDF	200.00	9.72e+07	0.78 y	23:33	-	1.00

FORM 4A/4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory

CCAL ID: ST050429A1-1

Initial Calibration Date: 4-29-05

Instrument ID: VG-6 GC Column ID: DB-225

VER Data Filename: 050429A1 S#2 Analysis Date: 29-APR-05 Time: 11:36:00

ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CONC. FOUND	CONC. RANGE (3) (ng/mL)
2,3,7,8-TCDF	M/M+2	0.75	0.65-0.89	10.2	8.6 - 11.6 8.0 - 12.0 (8290)
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65-0.89	101.8	76.0 - 131.0 70.0 - 130 (8290)

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6a, Method 1613, under VER.

10/94

Analyst: DMS

Date: 4/30/05

USEPA - ITD

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: VG-6 Initial Calibration Date:

DB-225 IS Data Filename: 050429A1 S#1 Analysis Date: 29-APR-05 Time: 10:55:04

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

ISOMERS	% VALLEY HEIGHT BETWEEN COMPARED PEAKS (1)
2347-TCDF	
2378-TCDF	<25%
2378-TCDF	
1239-TCDF	<25%

(1) To meet contract requirements, %Valley Height Between Compared Peaks shall not exceed 25% (section 14.4.2.2, Method 1613.

Analyst: DMS

Date: 4/30/05

Client ID: 1613 CS3 050420H Filename: 050429A1 S:2 Acq:29-APR-05 11:36:00 ConCal: NA
Lab ID: ST050429A1-1 GC Column ID: DB-225 ICal: 1613tcdfvg6-4-29-05 wt/vol: 1.000 EndCAL: NA

Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	3.15e+07	0.78 y	20:20	1.00	100.0	-
13C-2,3,7,8-TCDF	3.33e+07	0.80 y	23:36	1.04	101.8	101.8
2,3,7,8-TCDF	3.64e+06	0.75 y	23:37	1.07	10.21	

Analyst: DMS

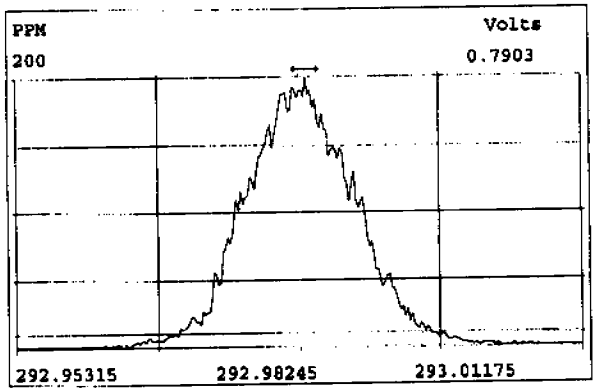
Date: 4/30/05

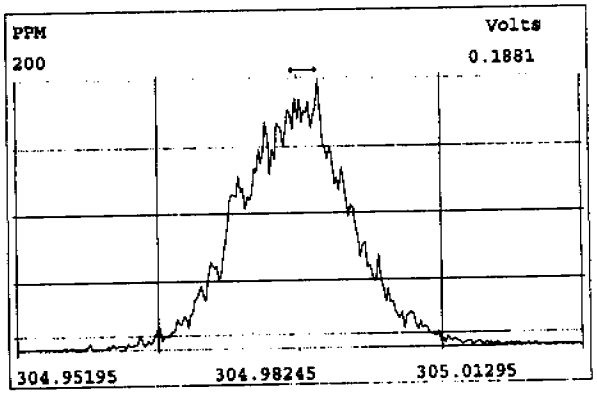
Alta Analytical Laboratory - Injection Log Run file: 050429A1 Instrument ID: VG-6 GC Column ID: DB-225

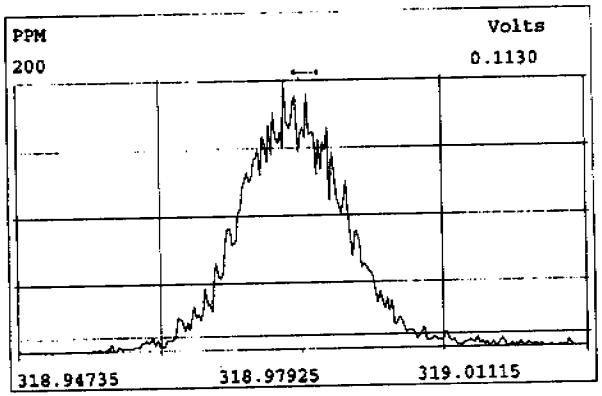
Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
050429A1	1	CP050429A1-1 DB-225 CPSM	DMS	29-APR-05	10:55:04	NA	NA
050429A1	2	ST050429A1-1 1613 CS3 050420H	DMS	29-APR-05	11:36:00	NA	NA
050429A1	3	SOLVENT BLANK	DMS	29-APR-05	12:16:57	NA	NA
050429A1	4	ST050429A1-2 1613 CS0 050420E	DMS	29-APR-05	12:57:53	NA	NA
050429A1	5	ST050429A1-3 1613 CS1 050420F	DMS	29-APR-05	13:38:50	NA	NA
050429A1	6	ST050429A1-4 1613 CS2 050420G	DMS	29-APR-05	14:19:46	NA	NA
050429A1	7	ST050429A1-5 1613 CS4 050420I	DMS	29-APR-05	15:00:41	NA	NA
050429A1	8	ST050429A1-6 1613 CS5 050420J	DMS	29-APR-05	15:41:37	NA	NA
050429A1	9	SOLVENT BLANK	DMS	29-APR-05	16:22:34	NA	NA
050429A1	10	ST050429A1-7 1613 SSS L010608B	DMS	29-APR-05	17:03:29	NA	NA

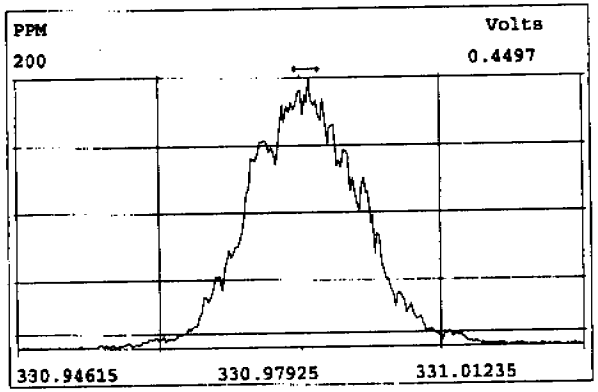
Peak Locate Examination:29-APR-2005:10:54 File:050429A1

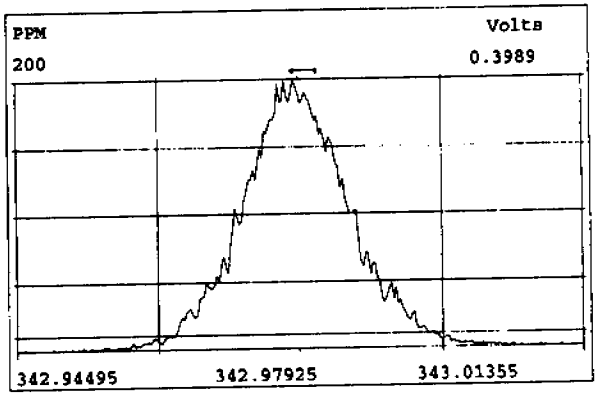
Experiment:TCDF_DB225 Function:1 Reference:PPK

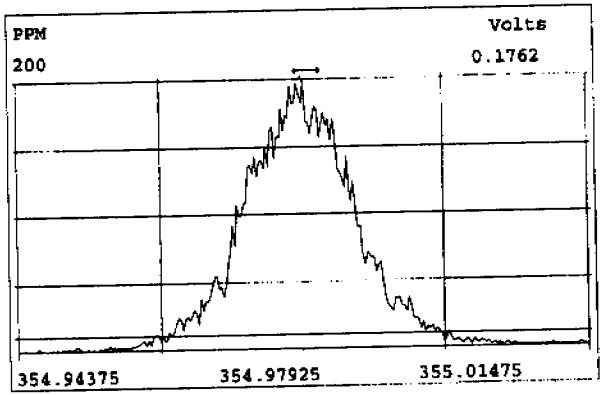


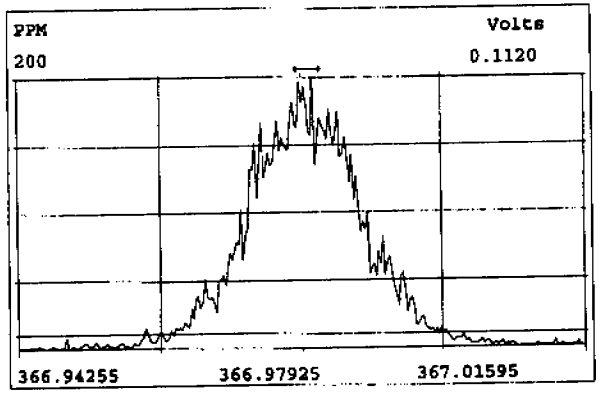


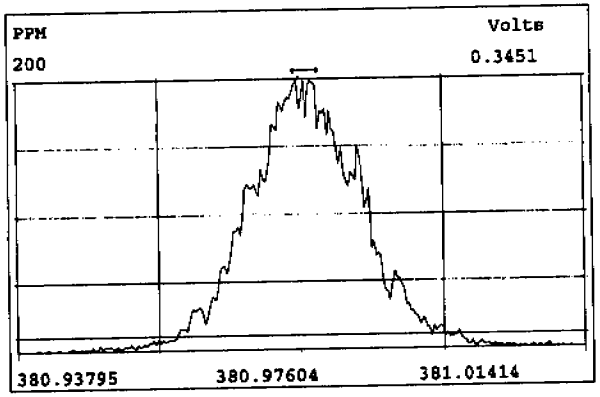




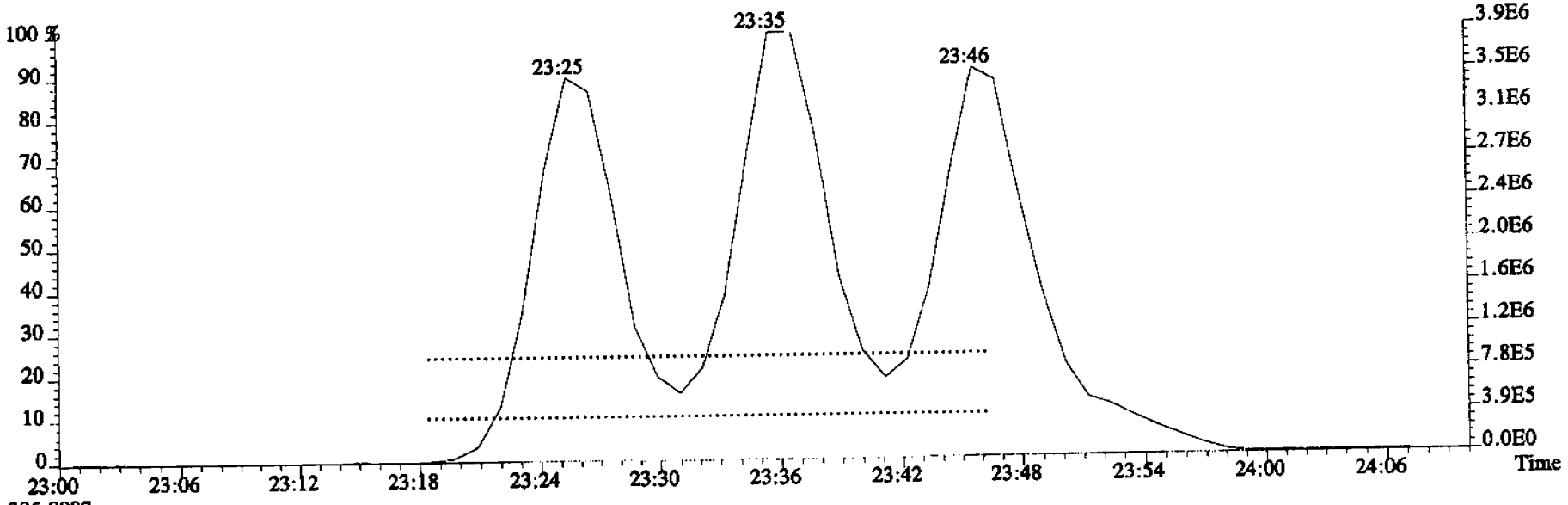




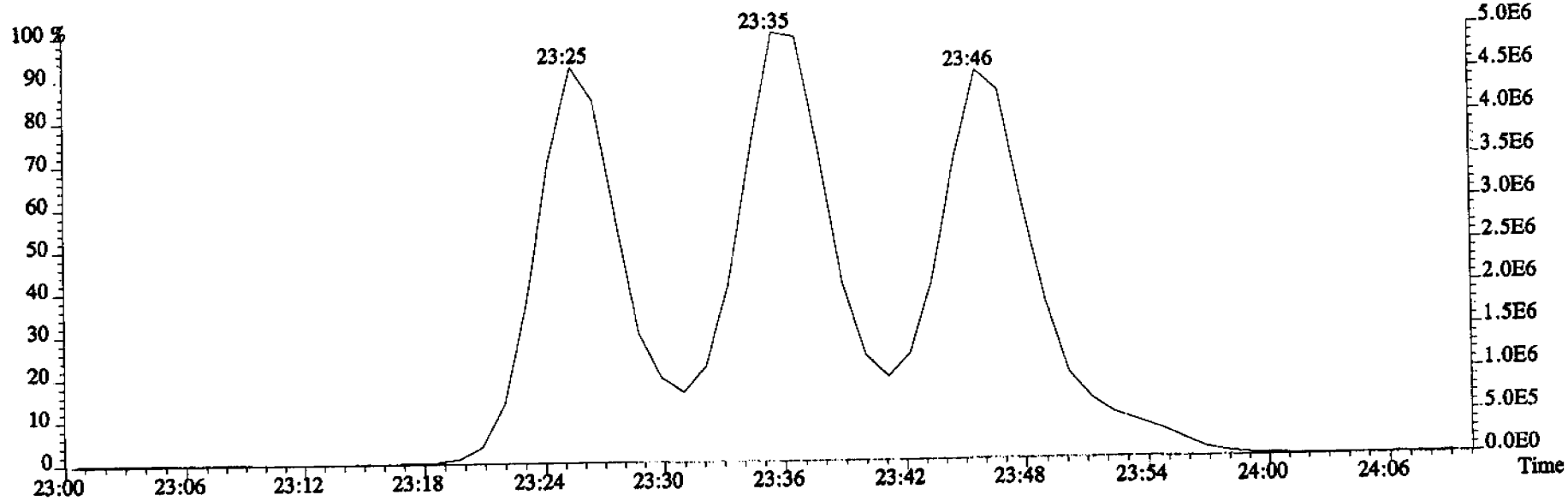




File:050429A1 #1-1174 Acq:29-APR-2005 10:55:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory Text:CP050429A1-1 DB-225 CPSM Exp:TCDF_DB225
303.9016



305.8987



File:050429A1 #1-1174 Acq:29-APR-2005 10:55:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory Text:CP050429A1-1 DB-225 CPSM Exp:TCDF_DB225
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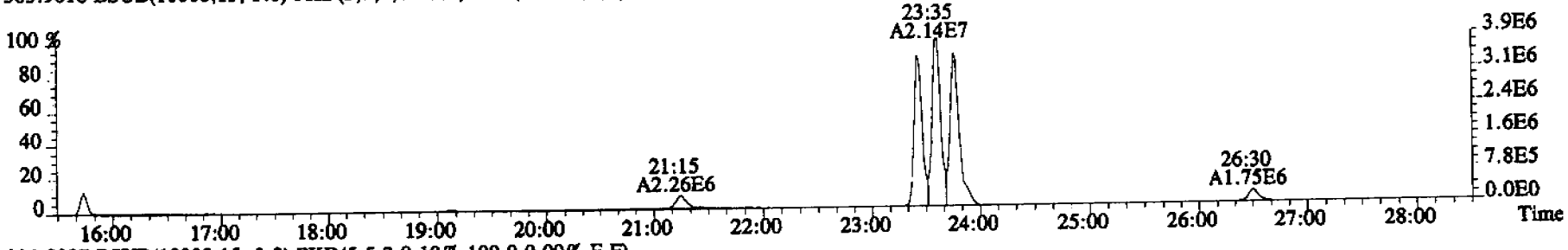

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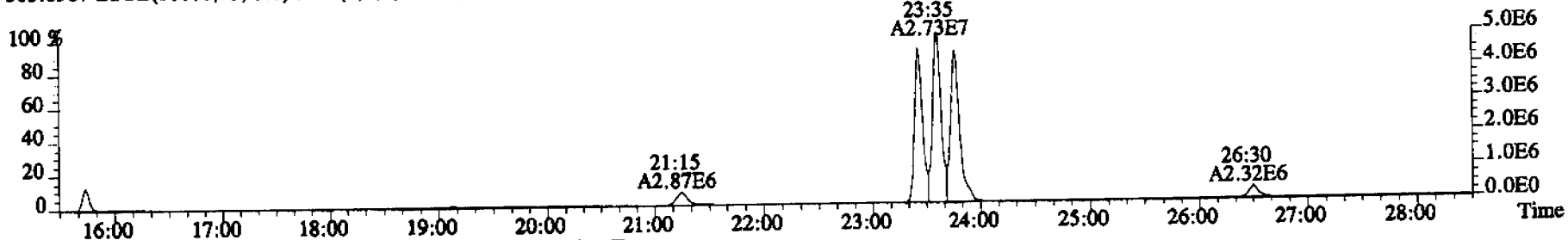
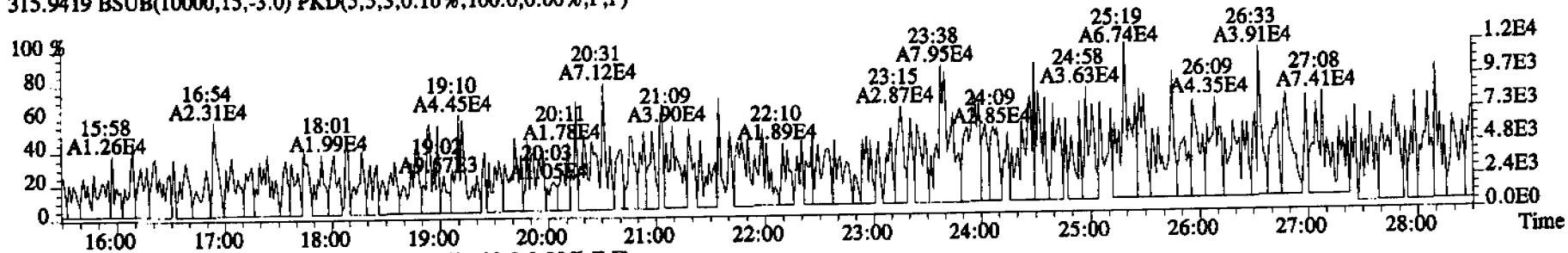
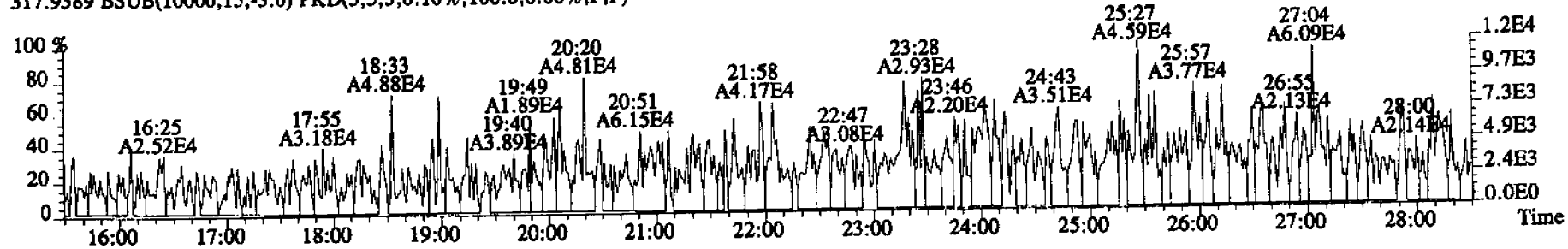


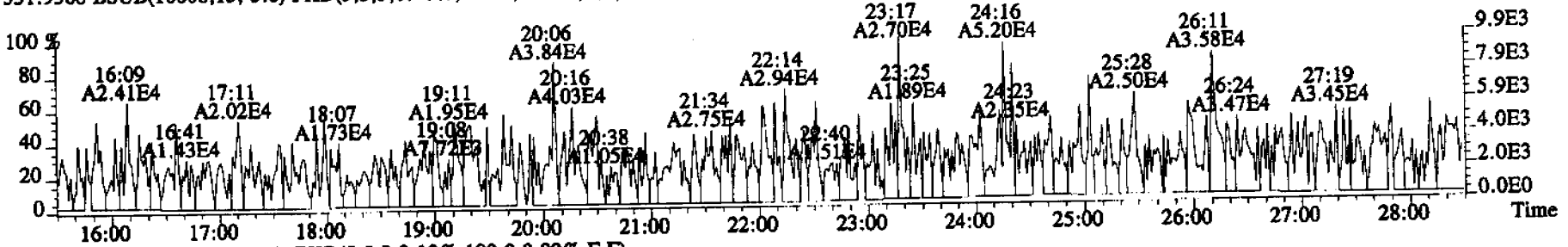
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



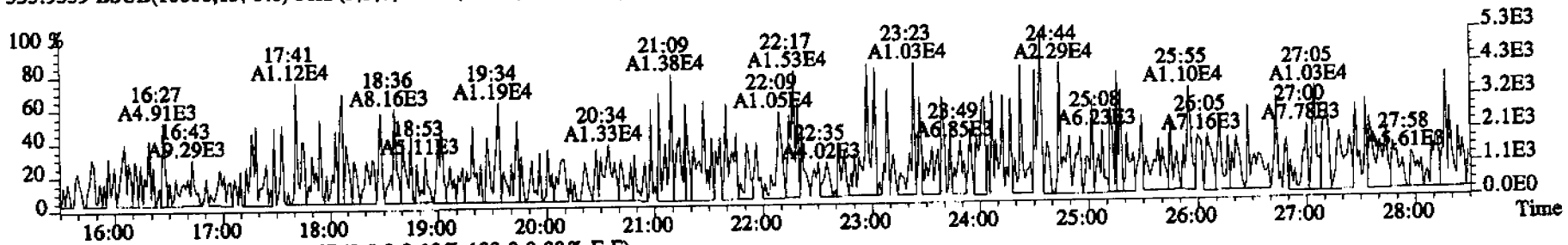
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



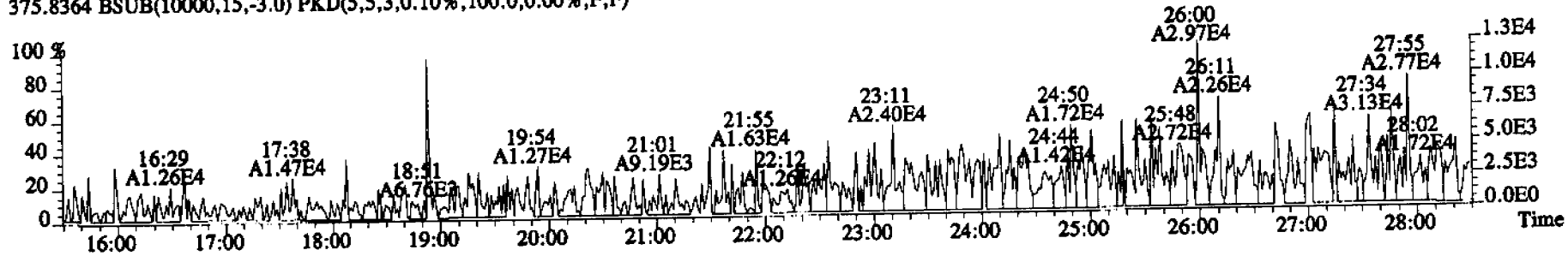
File:050429A1 #1-1174 Acq:29-APR-2005 10:55:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory Text:CP050429A1-1 DB-225 CPSM Exp:TCDF_DB225
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



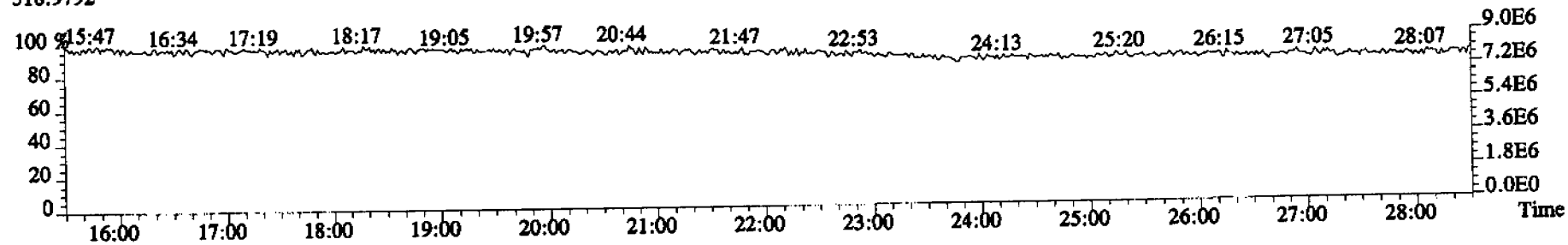
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



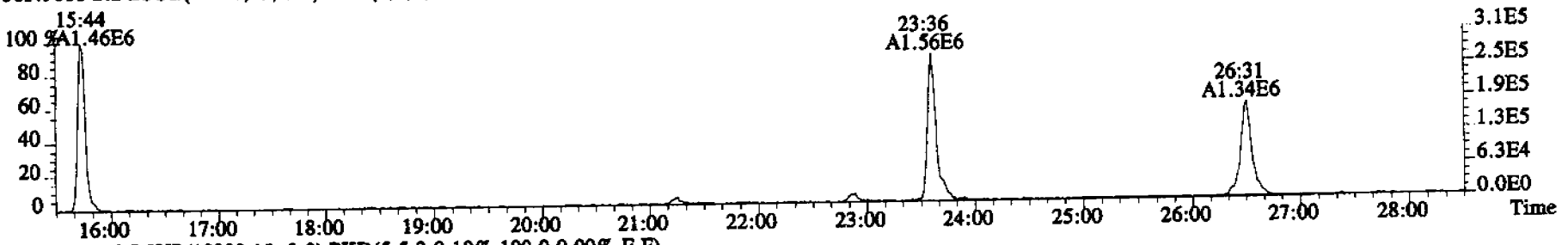
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



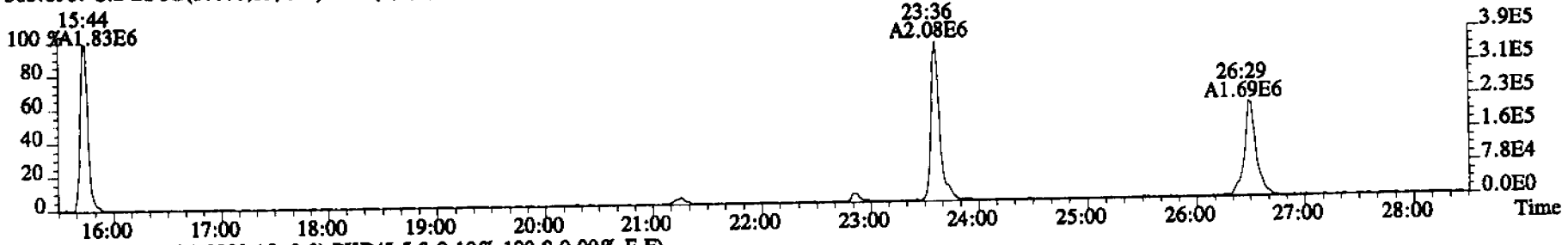
318.9792



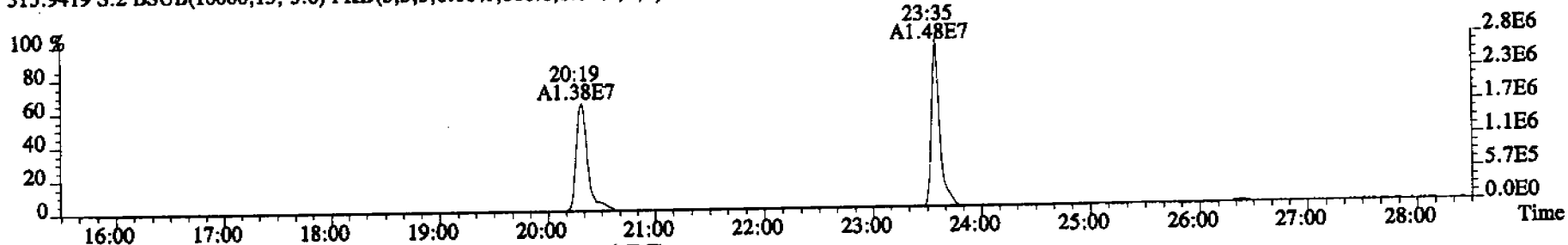
File:050429A1 #1-1173 Acq:29-APR-2005 11:36:00 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory Text:ST050429A1-1 1613 CS3 050420H Exp:TCDF_DB225
303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



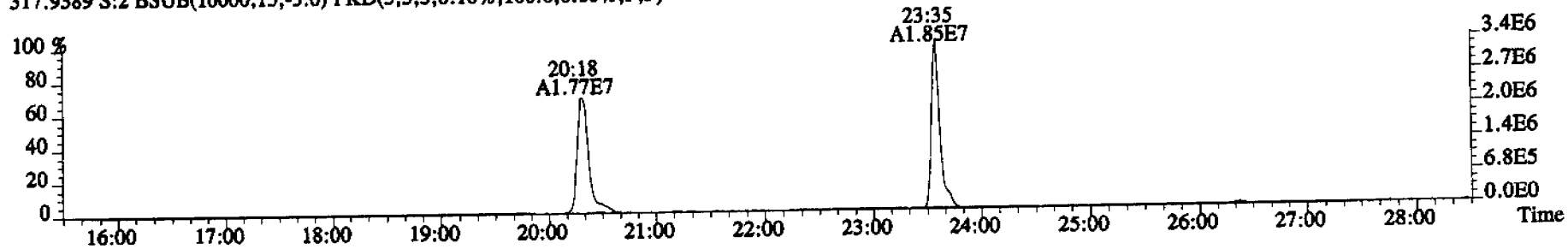
305.8987 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



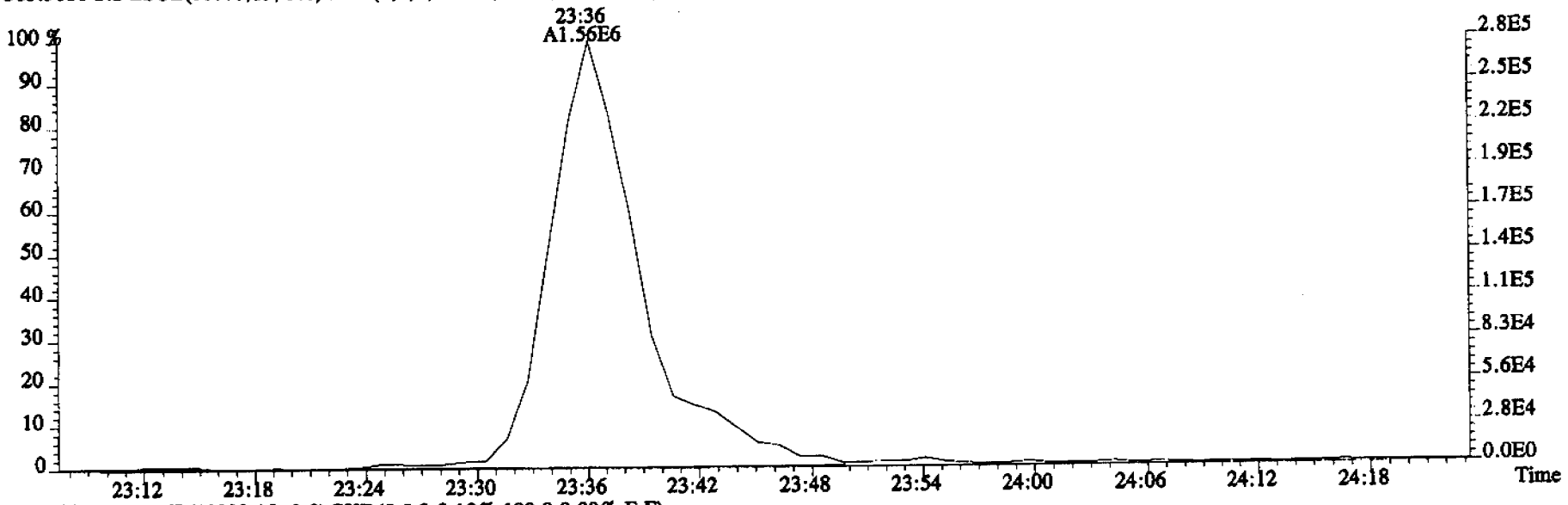
315.9419 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



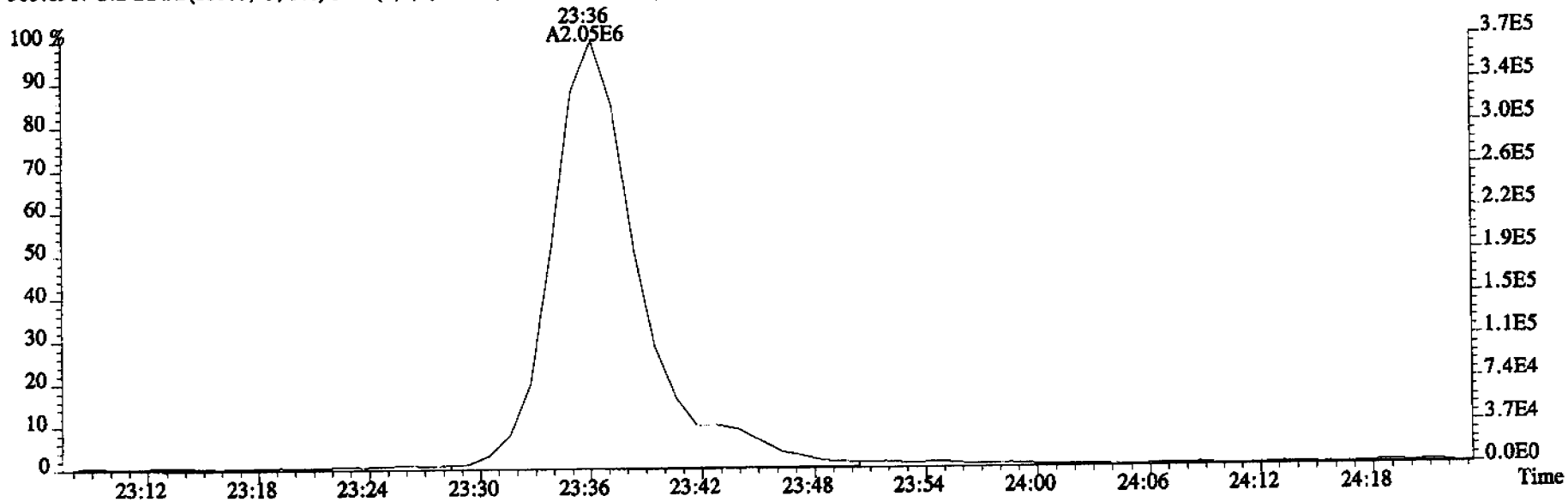
317.9389 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



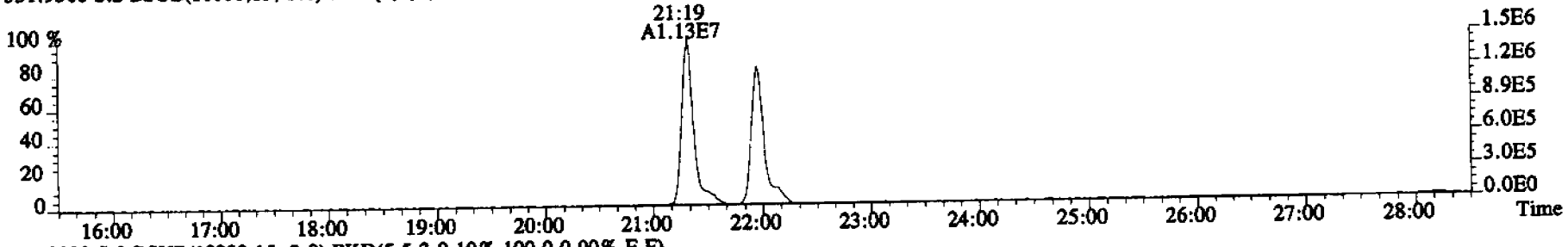
File:050429A1 #1-1173 Acq:29-APR-2005 11:36:00 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory Text:ST050429A1-1 1613 CS3 050 Exp:TCDF_DB225
303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



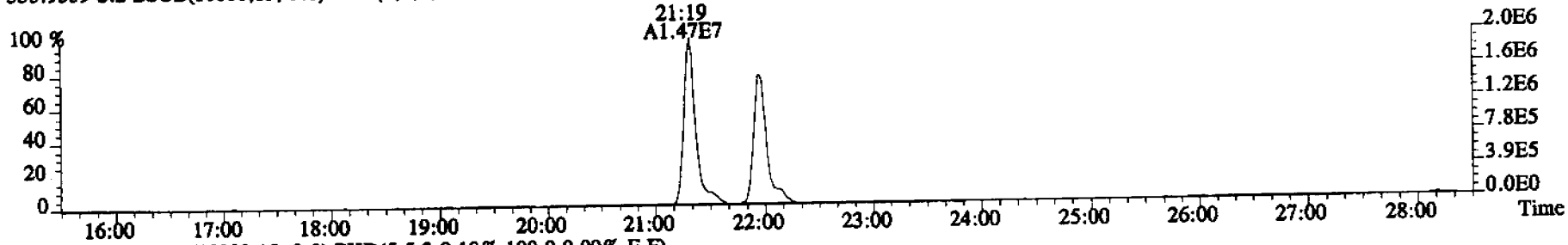
305.8987 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



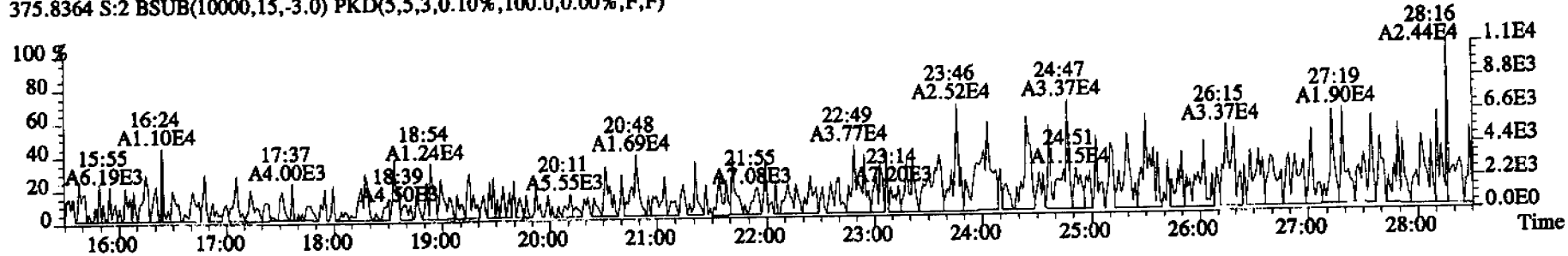
File:050429A1 #1-1173 Acq:29-APR-2005 11:36:00 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory Text:ST050429A1-1 1613 CS3 050420H Exp:TCDF_DB225
331.9368 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



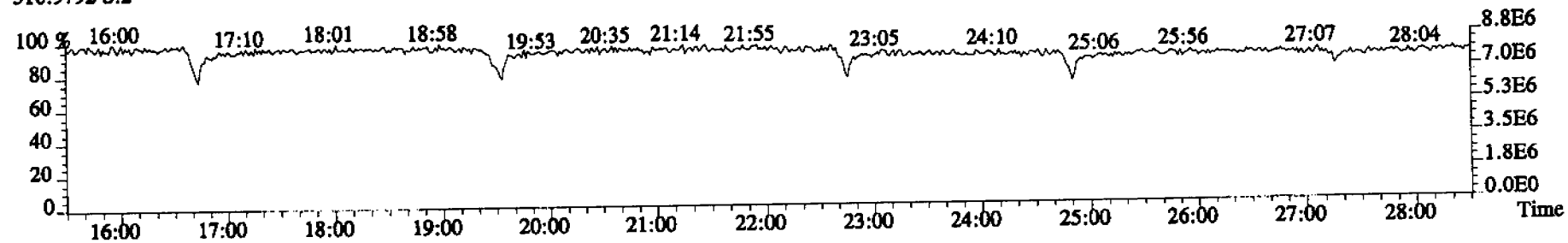
333.9339 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

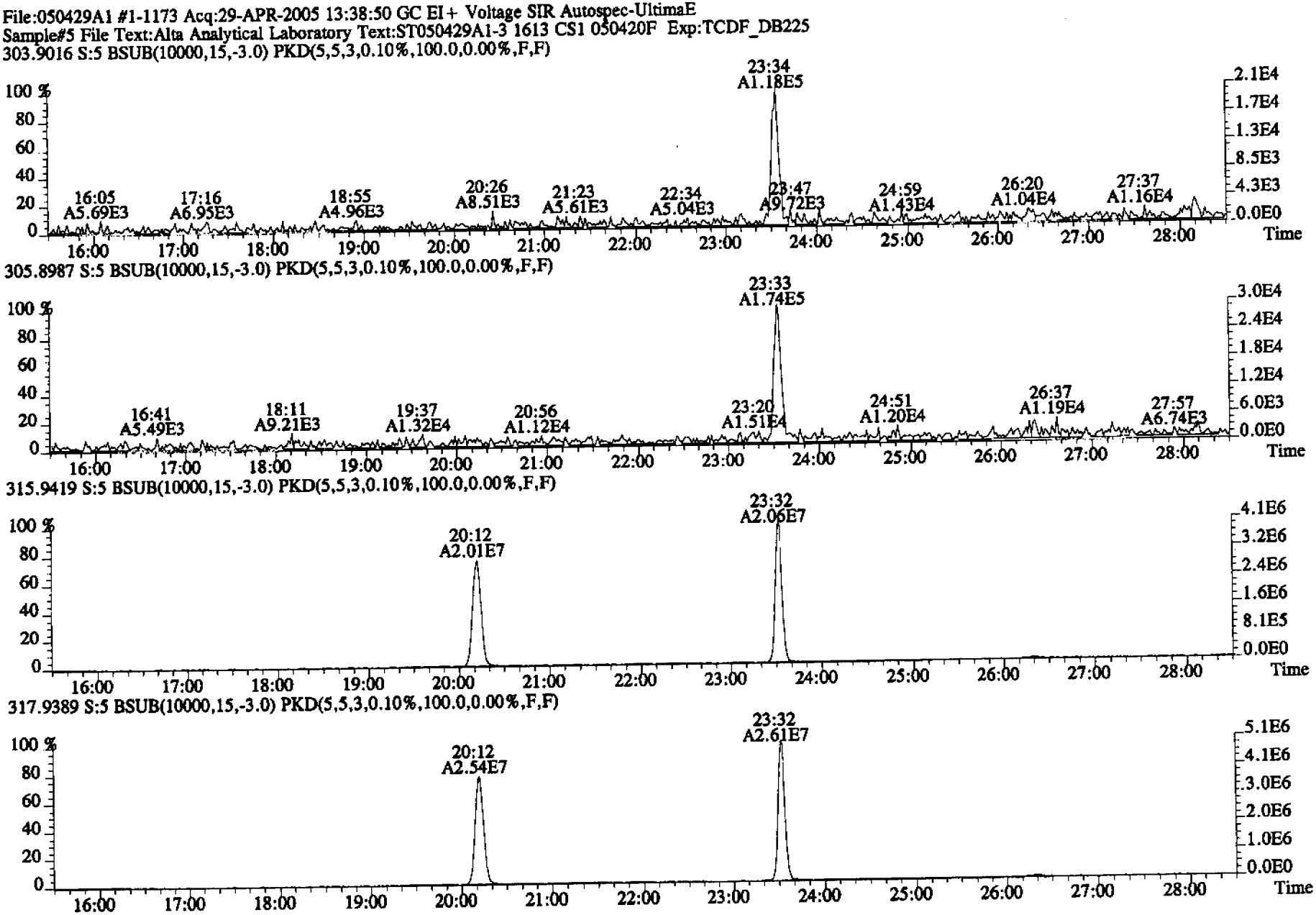


375.8364 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

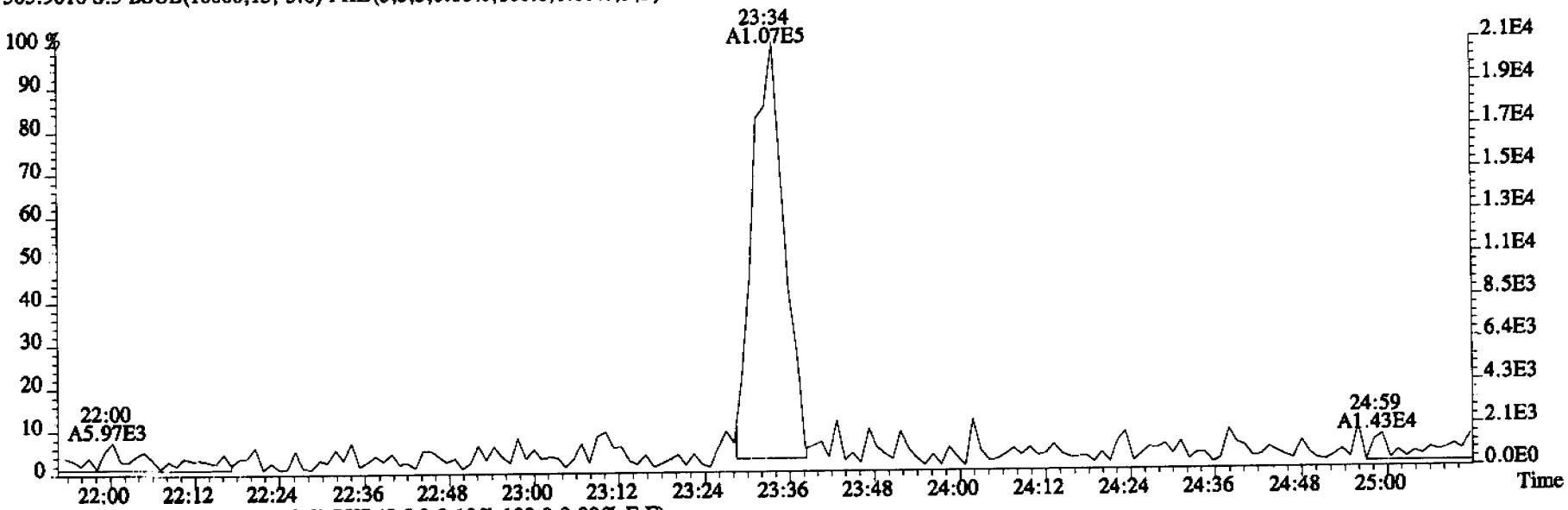


318.9792 S:2




File:050429A1 #1-1173 Acq:29-APR-2005 13:38:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory Text:ST050429A1-3 1613 CS1 050420F Exp:TCDF_DB225
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
23:34 A1.18E5
16:05 A5.69E3
17:16 A6.95E3
18:55 A4.96E3
20:26 A8.51E3
21:23 A5.61E3
22:34 A5.04E3
23:47 A9.72E3
24:59 A1.43E4
26:20 A1.04E4
27:37 A1.16E4
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
23:33 A1.74E5
16:41 A5.49E3
18:11 A9.21E3
19:37 A1.32E4
20:56 A1.12E4
23:20 A1.51E4
24:51 A1.20E4
26:37 A1.19E4
27:57 A6.74E3
315.9419 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
23:32 A2.06E7
20:12 A2.01E7
317.9389 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
23:32 A2.61E7
20:12 A2.54E7
Time

File:050429A1 #1-1173 Acq:29-APR-2005 13:38:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory Text:ST050429A1-3 1613 CS1 050 Exp:TCDF_DB225
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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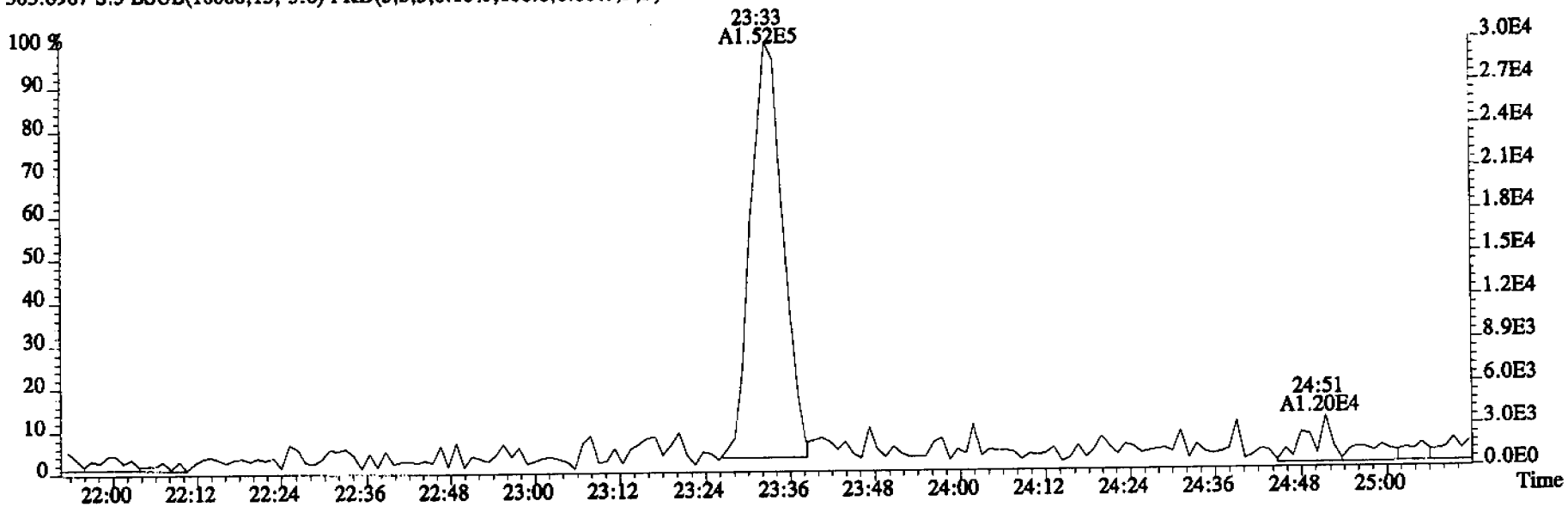
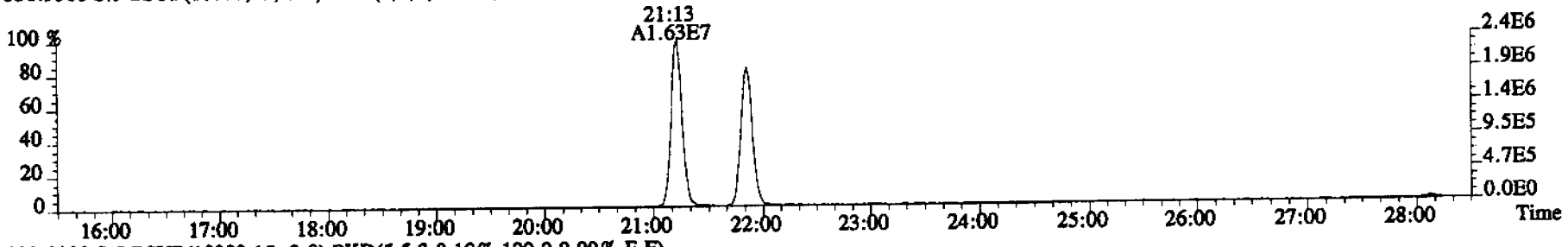
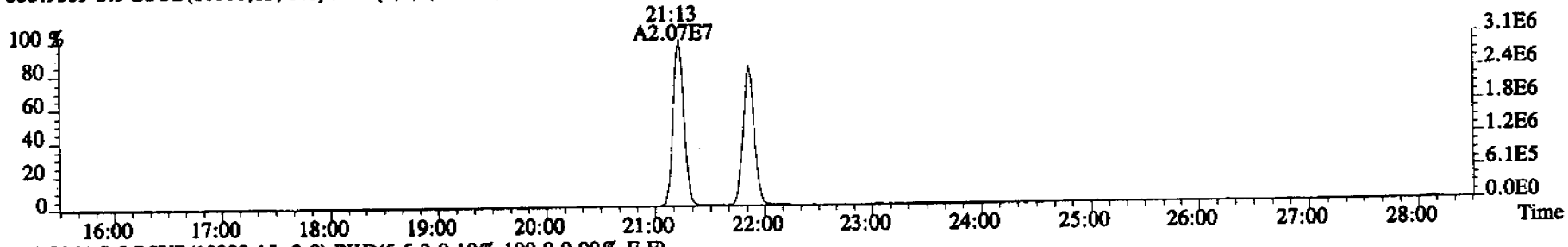


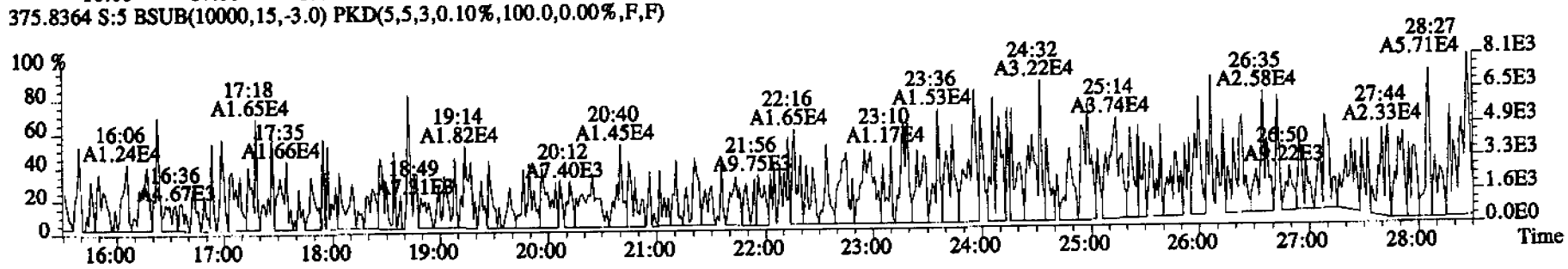
File:050429A1 #1-1173 Acq:29-APR-2005 13:38:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory Text:ST050429A1-3 1613 CS1 050420F Exp:TCDF_DB225
331.9368 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



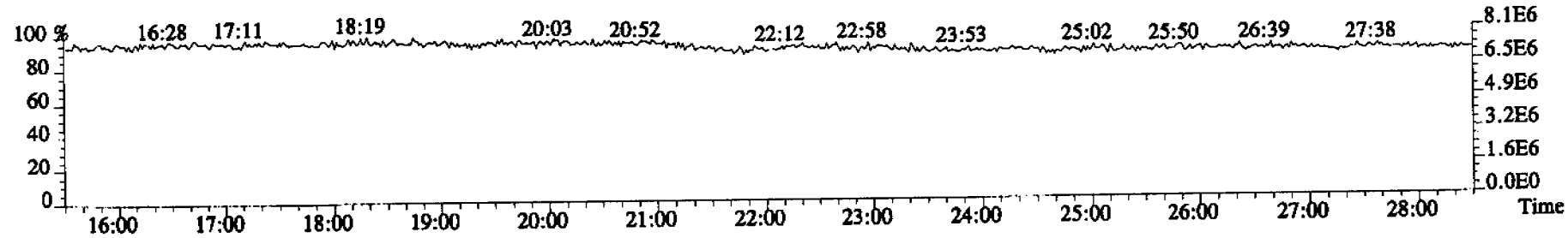
333.9339 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



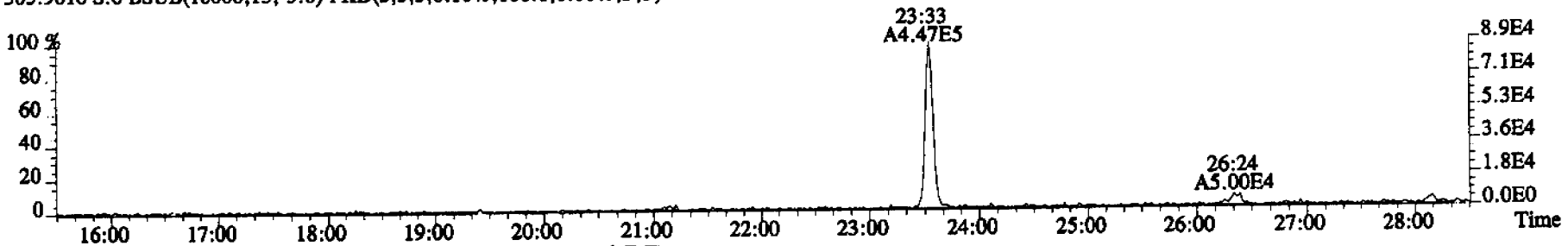
375.8364 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



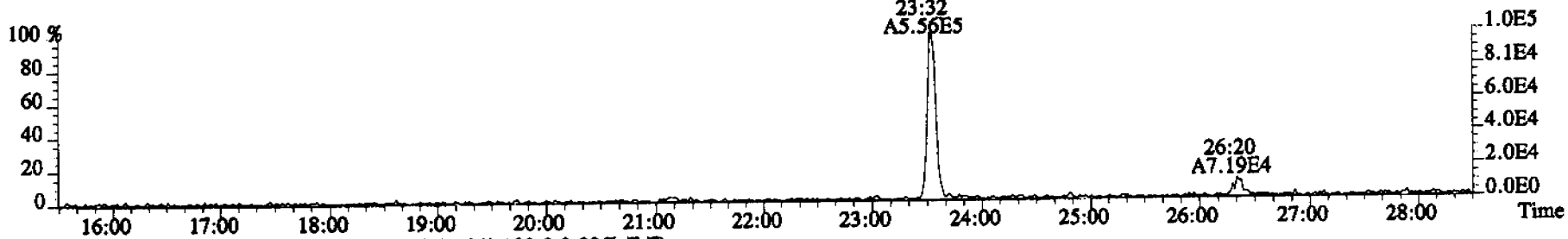
318.9792 S:5



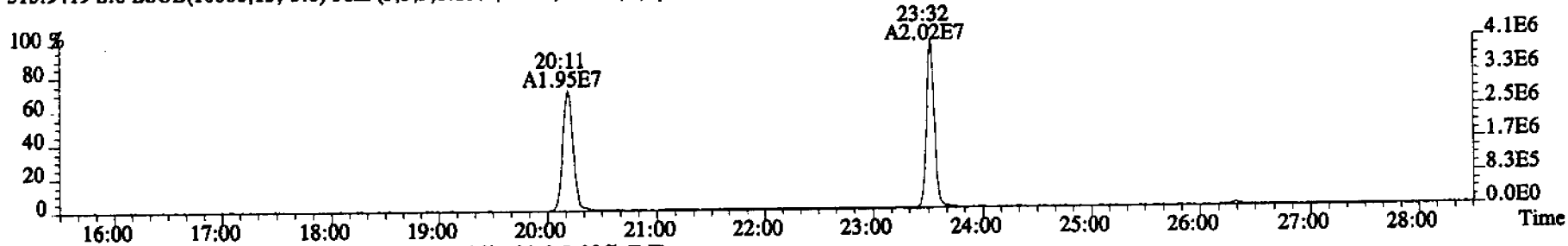
File:050429A1 #1-1173 Acq:29-APR-2005 14:19:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory Text:ST050429A1-4 1613 CS2 050420G Exp:TCDF_DB225
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



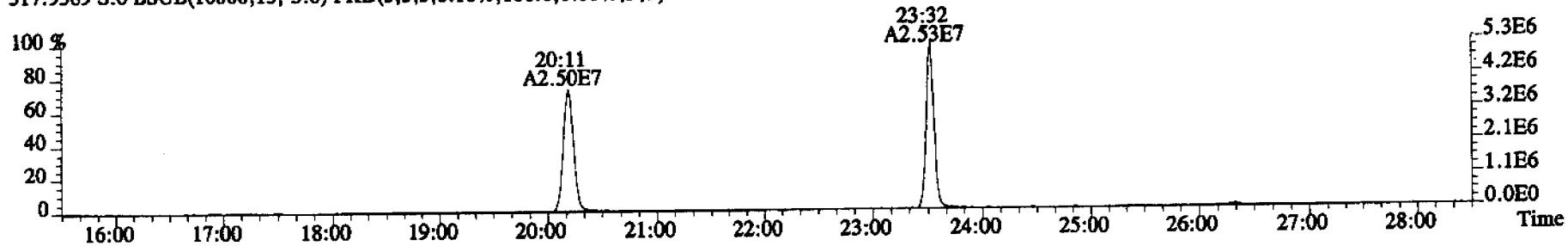
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



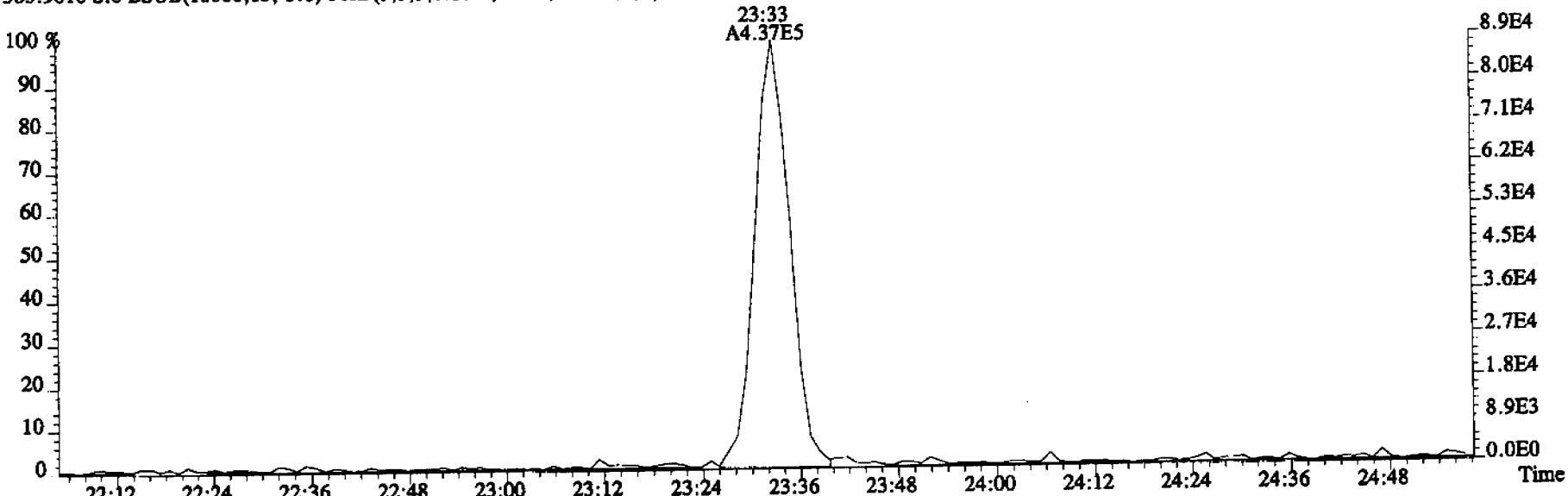
315.9419 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



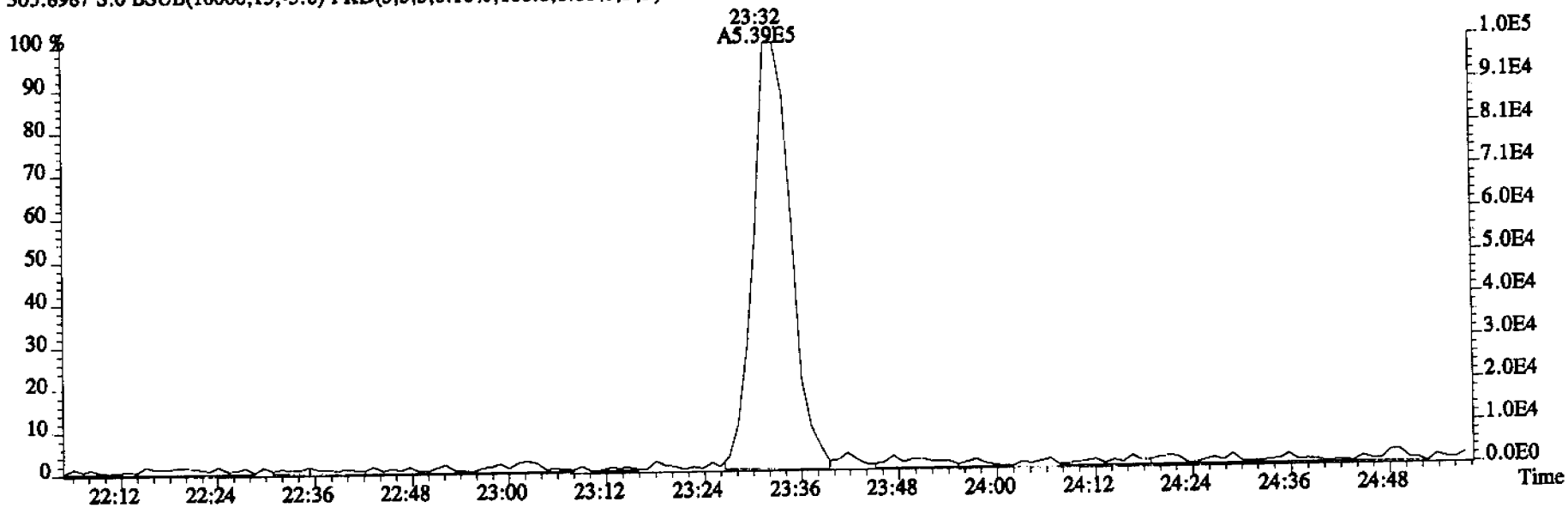
317.9389 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

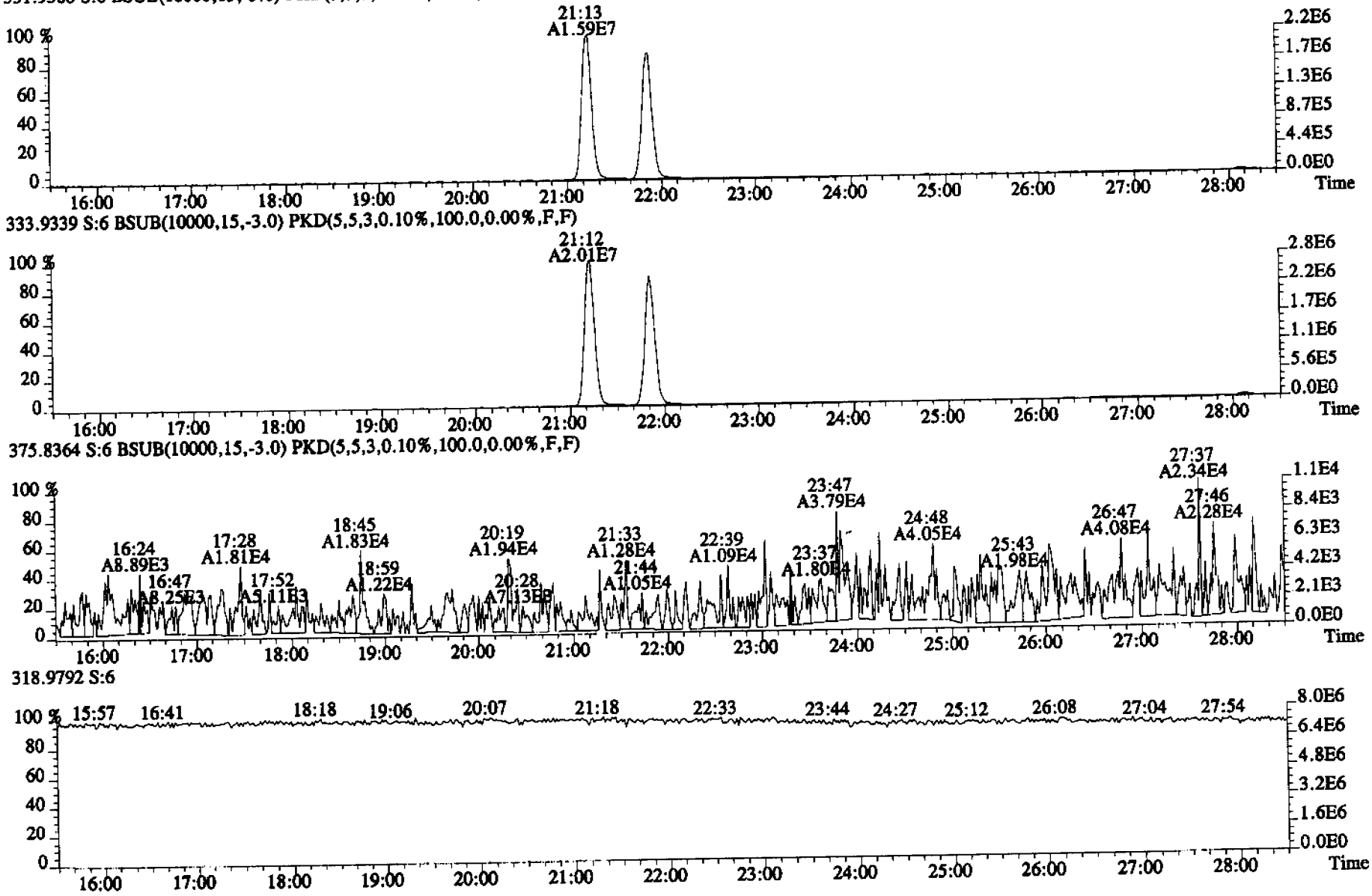


File:050429A1 #1-1173 Acq:29-APR-2005 14:19:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory Text:ST050429A1-4 1613 CS2 050 Exp:TCDF_DB225
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

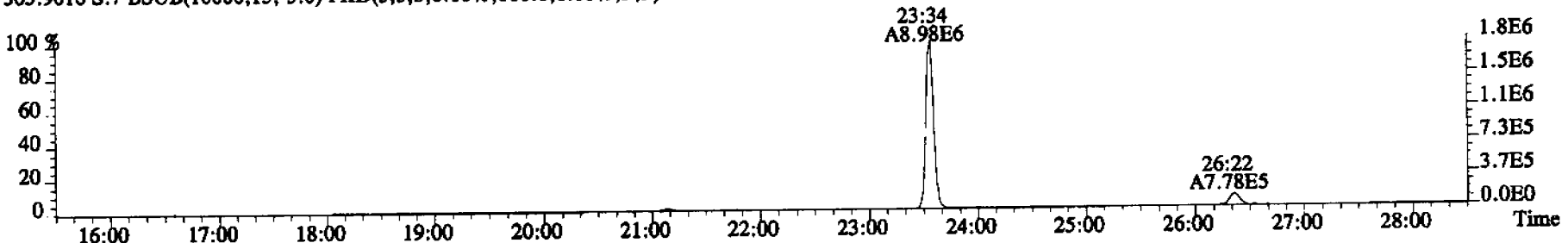


305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

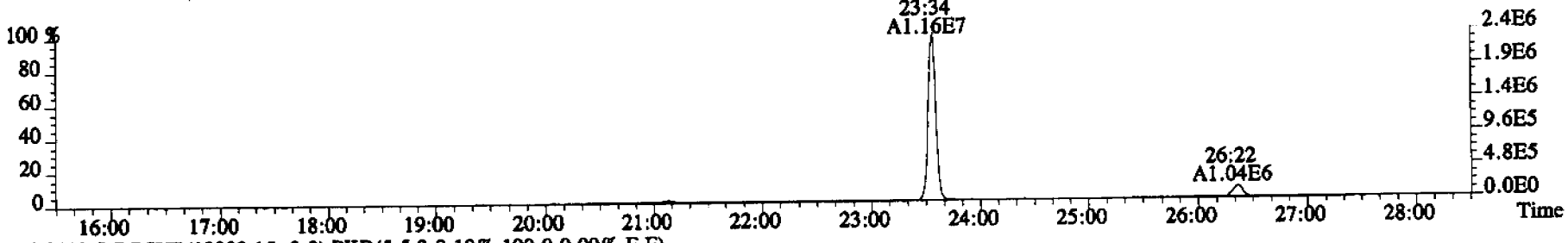



File:050429A1 #1-1173 Acq:29-APR-2005 14:19:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory Text:ST050429A1-4 1613 CS2 050420G Exp:TCDF_DB225
331.9368 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:13
A1.59E7
333.9339 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:12
A2.01E7
375.8364 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
16:24
A8.89E3
16:47
A8.25E3
17:28
A1.81E4
17:52
A5.11E3
18:45
A1.83E4
18:59
A1.22E4
20:19
A1.94E4
20:28
A7.13E3
21:33
A1.28E4
21:44
A1.05E4
22:39
A1.09E4
23:37
A1.80E4
23:47
A3.79E4
24:48
A4.05E4
25:43
A1.98E4
26:47
A4.08E4
27:37
A2.34E4
27:46
A2.28E4
318.9792 S:6
15:57
16:41
18:18
19:06
20:07
21:18
22:33
23:44
24:27
25:12
26:08
27:04
27:54
Time

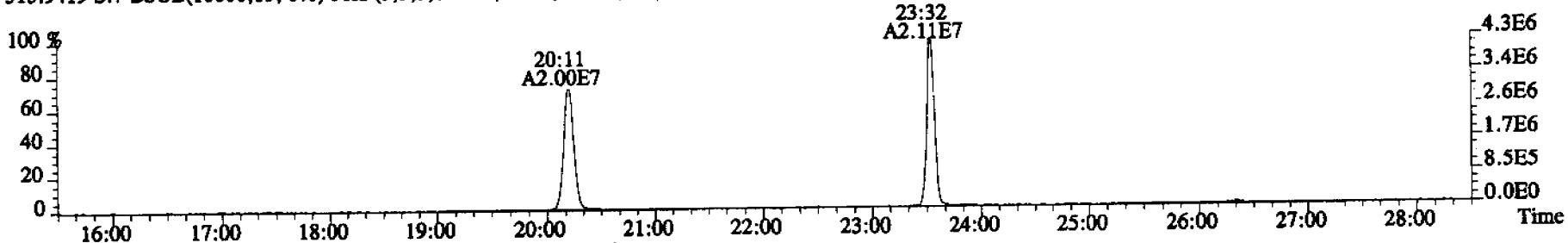
File:050429A1 #1-1173 Acq:29-APR-2005 15:00:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory Text:ST050429A1-5 1613 CS4 050420I Exp:TCDF_DB225
303.9016 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



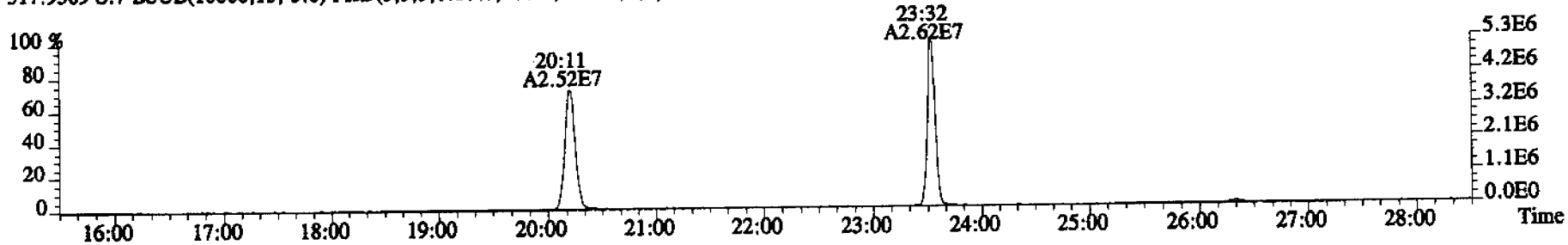
305.8987 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



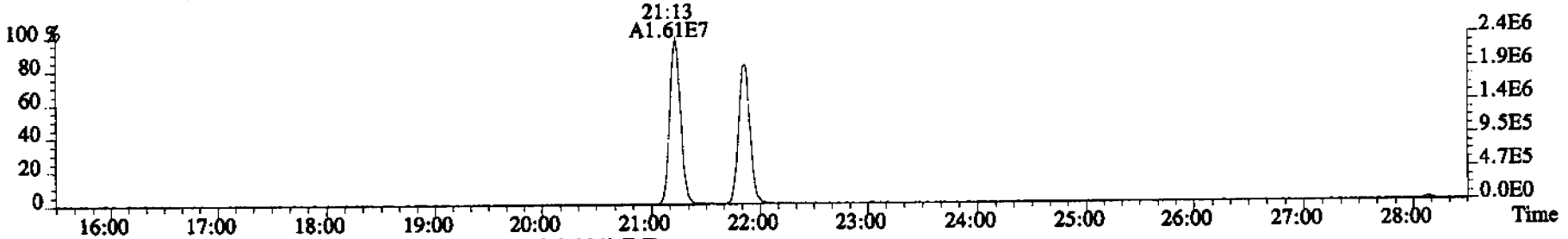
315.9419 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



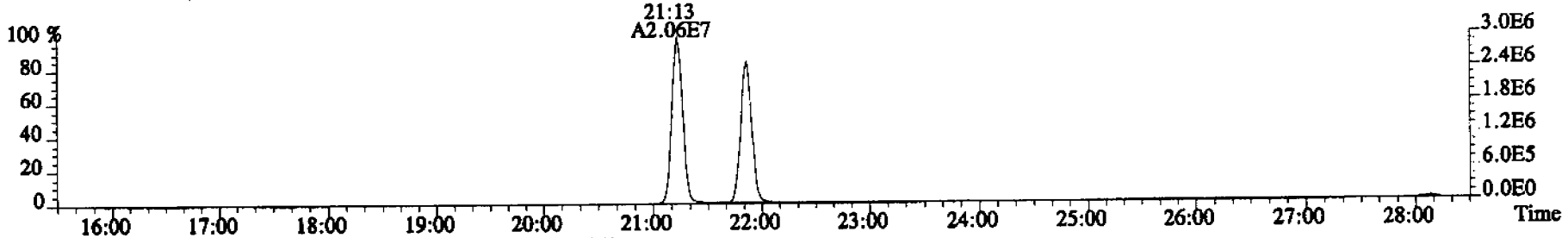
317.9389 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



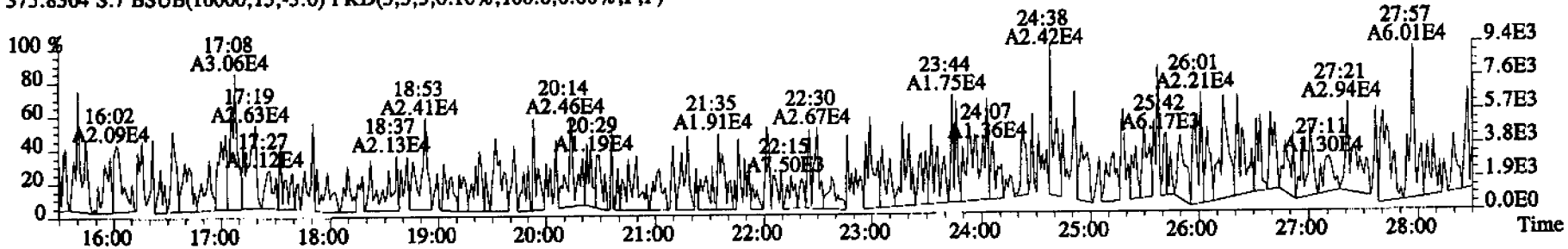
File:050429A1 #1-1173 Acq:29-APR-2005 15:00:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory Text:ST050429A1-5 1613 CS4 050420I Exp:TCDF_DB225
331.9368 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



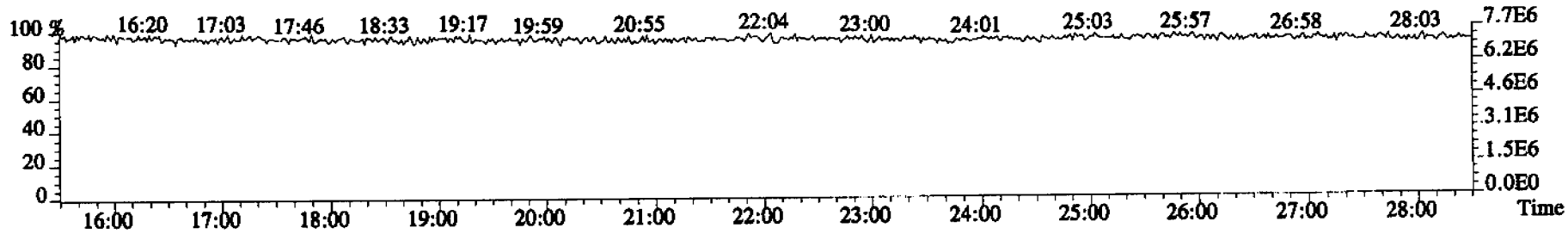
333.9339 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



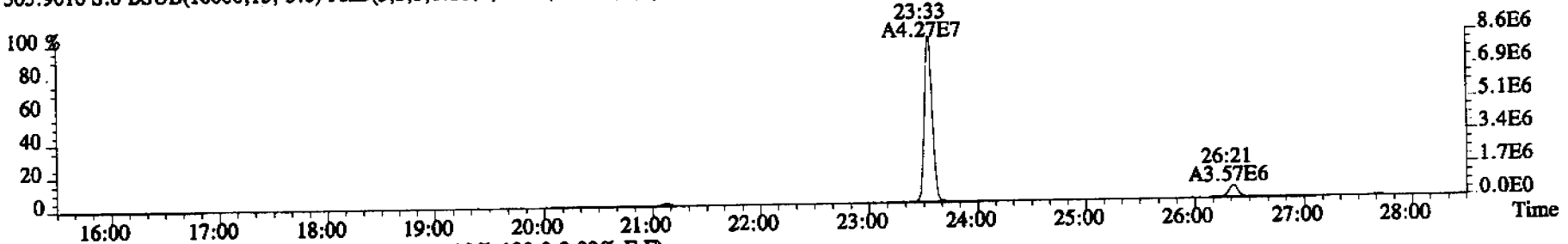
375.8364 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



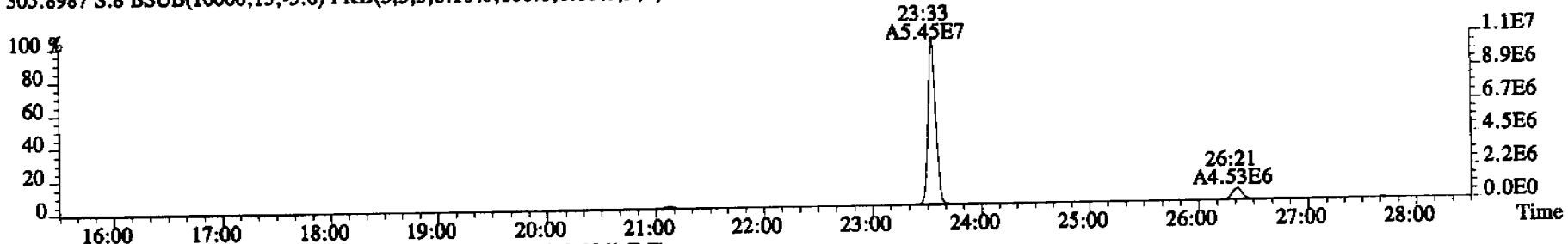
318.9792 S:7



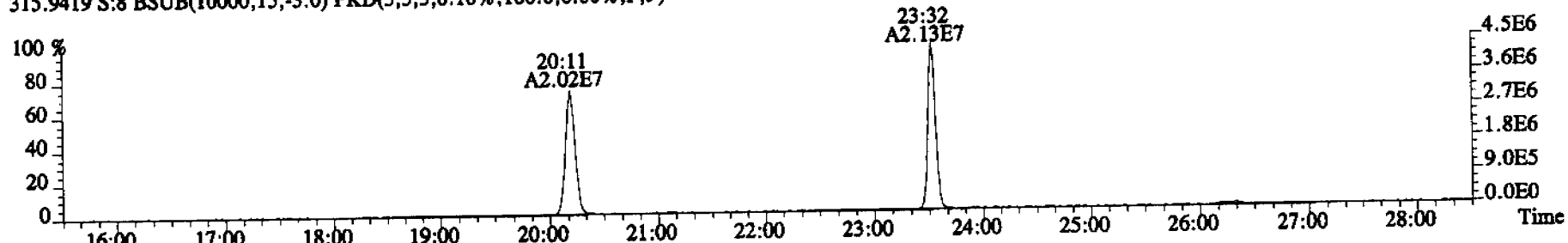
File:050429A1 #1-1173 Acq:29-APR-2005 15:41:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Alta Analytical Laboratory Text:ST050429A1-6 1613 CS5 050420J Exp:TCDF_DB225
303.9016 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



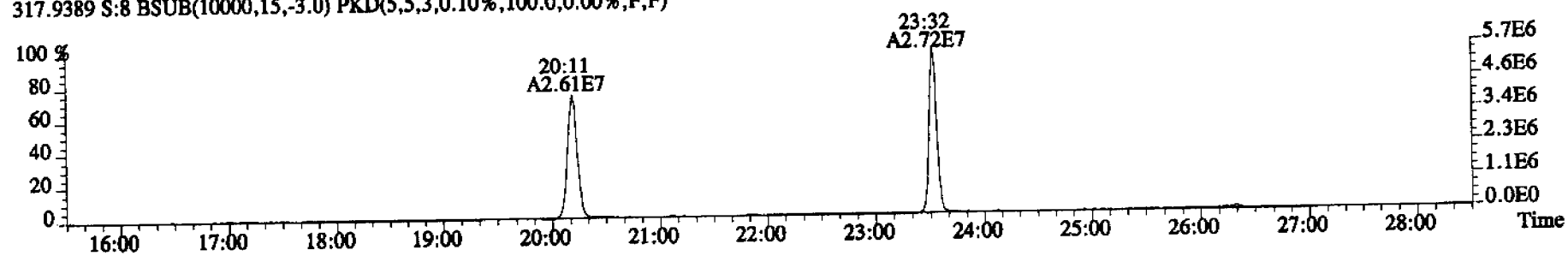
305.8987 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



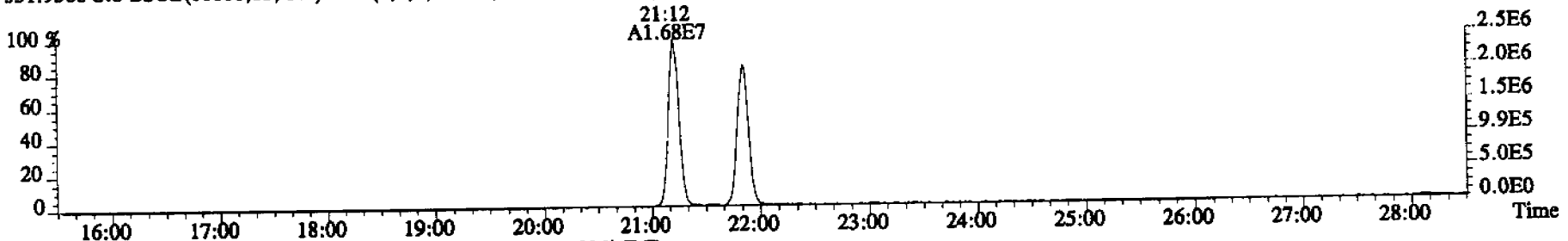
315.9419 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



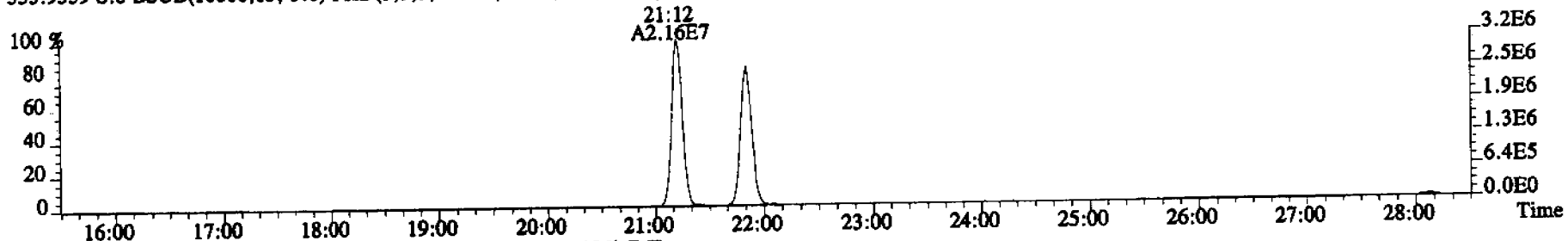
317.9389 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



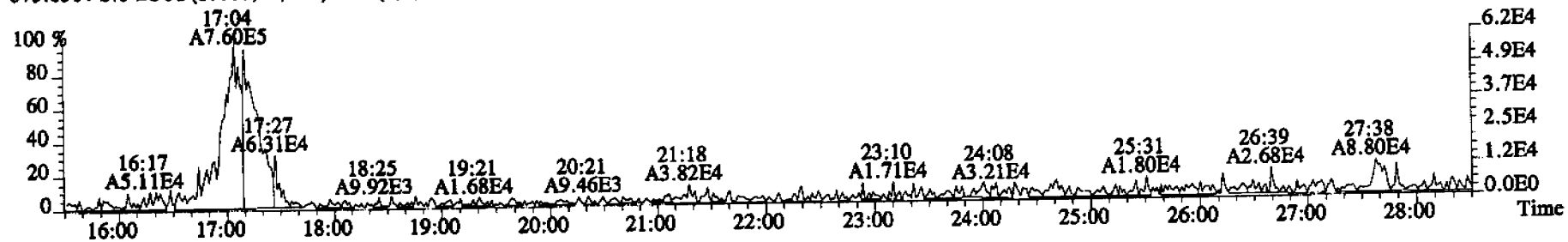
File:050429A1 #1-1173 Acq:29-APR-2005 15:41:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Alta Analytical Laboratory Text:ST050429A1-6 1613 CS5 050420J Exp:TCDF_DB225
331.9368 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



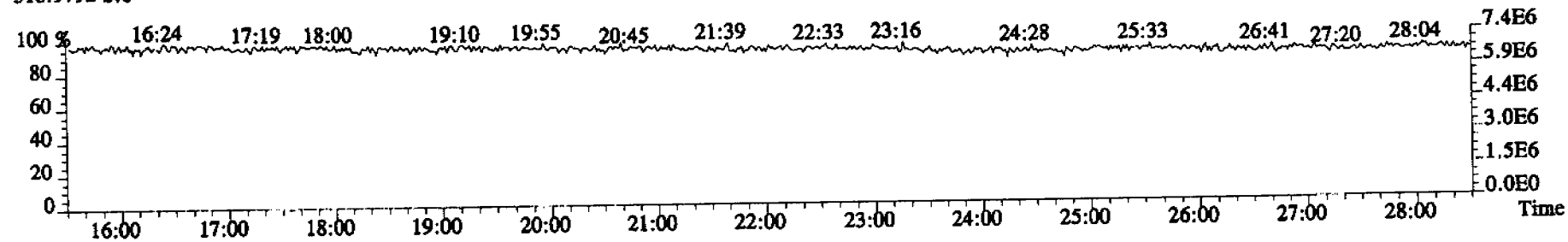
333.9339 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

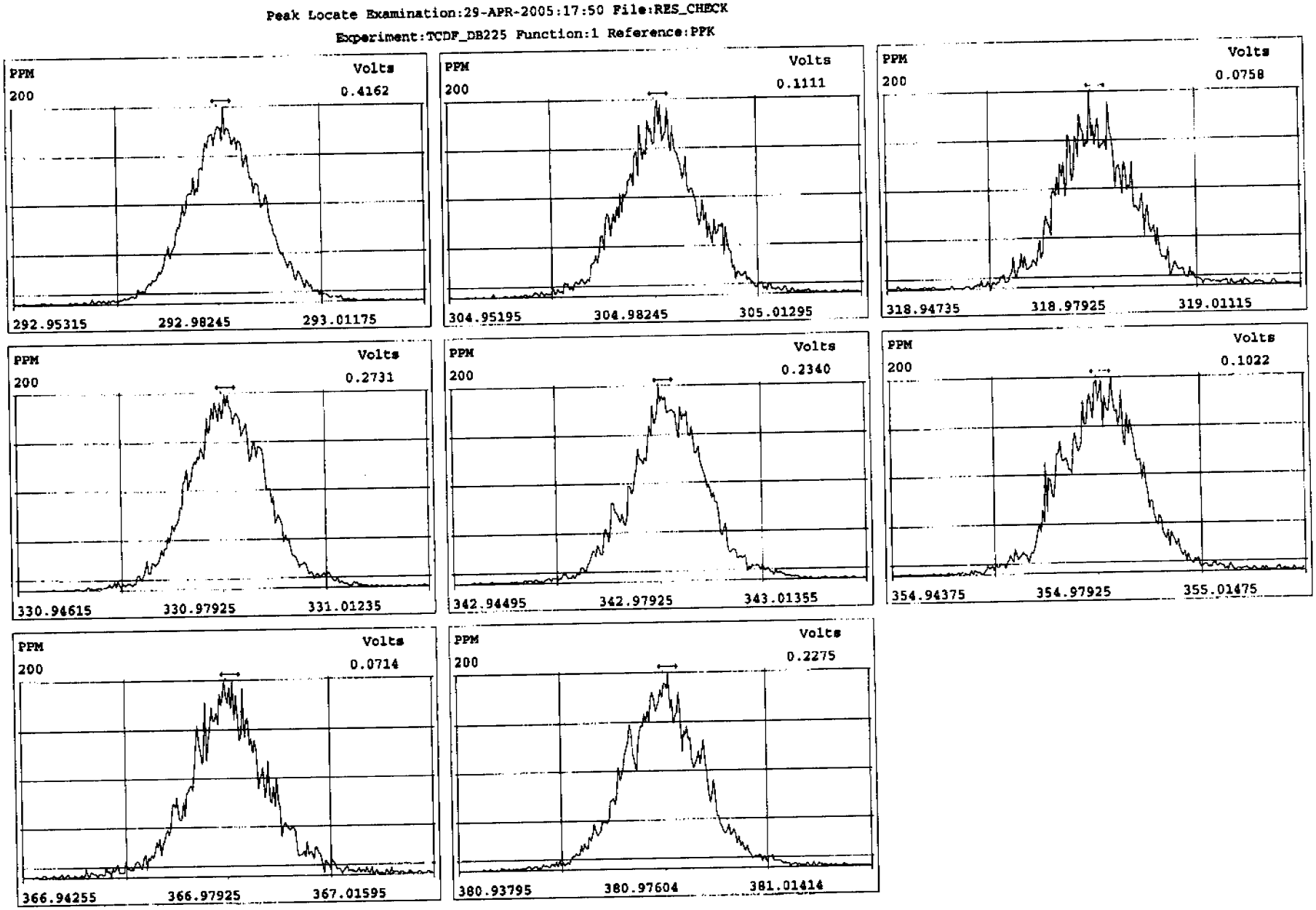


375.8364 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



318.9792 S:8




Peak Locate Examination:29-APR-2005:17:50 File:RES_CHECK
Experiment:TCDF_DB225 Function:1 Reference:PPK
PPM
Volts
200
0.4162
292.95315
292.98245
293.01175
PPM
Volts
200
0.1111
304.95195
304.98245
305.01295
PPM
Volts
200
0.0758
318.94735
318.97925
319.01115
PPM
Volts
200
0.2731
330.94615
330.97925
331.01235
PPM
Volts
200
0.2340
342.94495
342.97925
343.01355
PPM
Volts
200
0.1022
354.94375
354.97925
355.01475
PPM
Volts
200
0.0714
366.94255
366.97925
367.01595
PPM
Volts
200
0.2275
380.93795
380.97604
381.01414

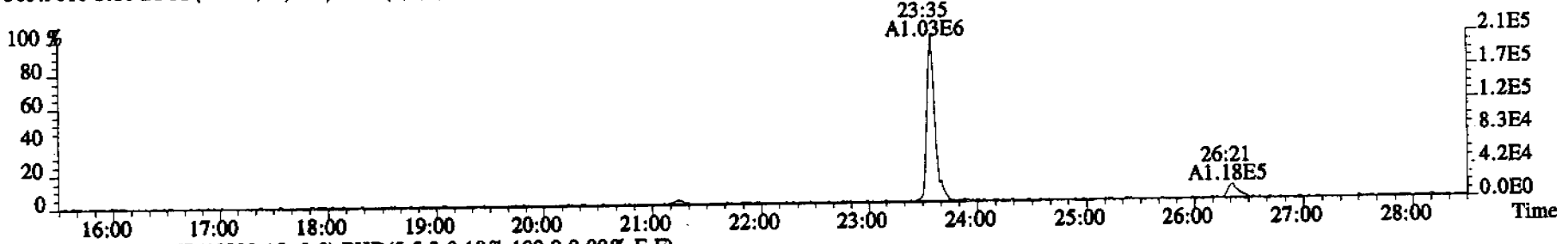
Client ID: 1613 SSS L010608B Filename: 050429A1 S:10 Acq:29-APR-05 17:03:29 ConCal: NA
Lab ID: ST050429A1-7 GC Column ID: DB-225 ICal: 1613tcdfvg6-4-29-05 wt/vol: 1.000 EndCAL: NA

Name	Resp	RA		RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	*	*	n	NotFnd	1.00	*	-
13C-2,3,7,8-TCDF	2.40e+07	0.78	y	23:34	1.04	*	*
2,3,7,8-TCDF	2.39e+06	0.76	y	23:36	1.07	9.313	

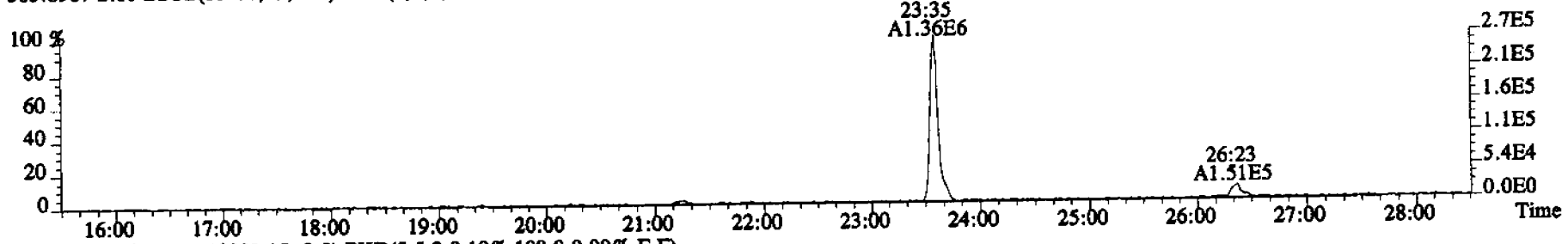
Analyst: DMS

Date: 4/30/05

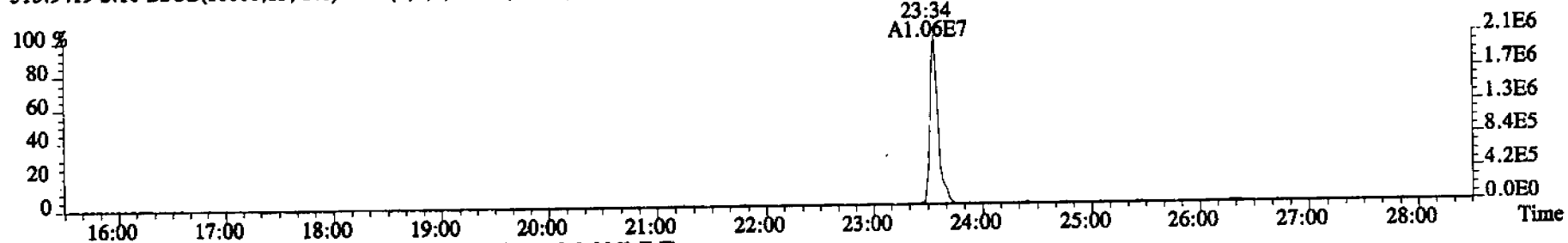
File:050429A1 #1-1173 Acq:29-APR-2005 17:03:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Alta Analytical Laboratory Text:ST050429A1-7 1613 SSS L010608B Exp:TCDF_DB225
303.9016 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



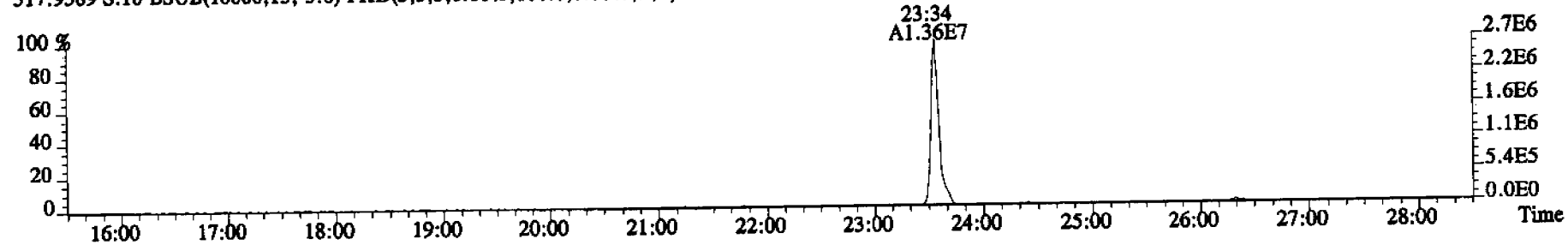
305.8987 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



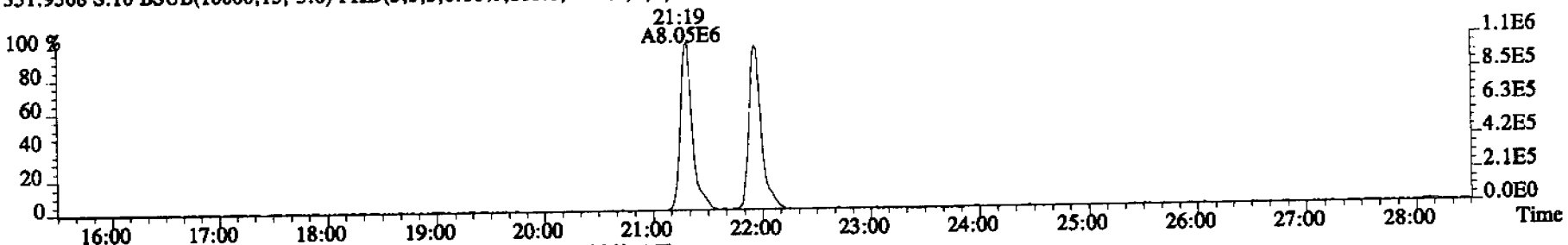
315.9419 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



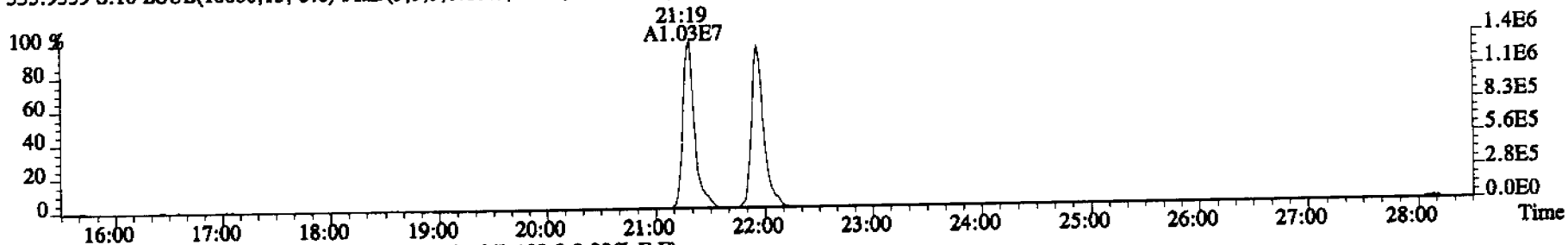
317.9389 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



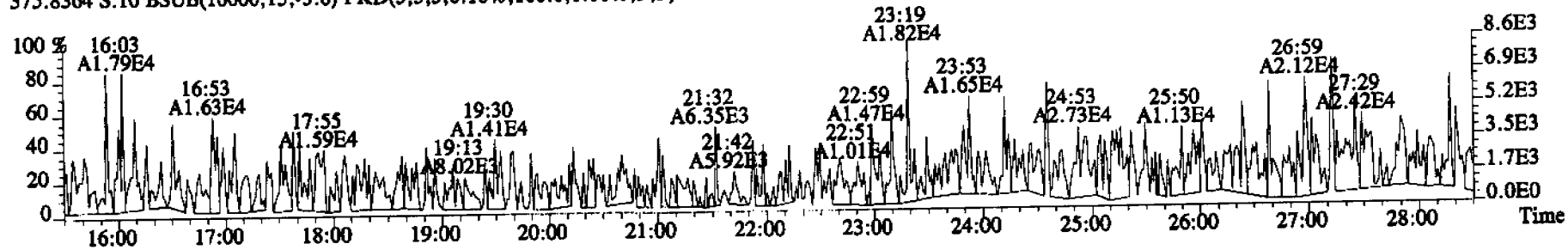
File:050429A1 #1-1173 Acq:29-APR-2005 17:03:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Alta Analytical Laboratory Text:ST050429A1-7 1613 SSS L010608B Exp:TCDF_DB225
331.9368 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



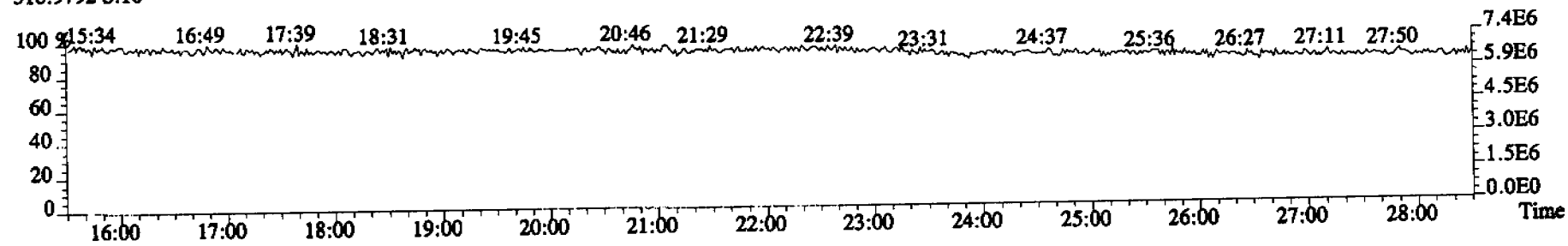
333.9339 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



375.8364 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



318.9792 S:10



Wednesday, April 20, 2005

REQUEST NUMBER: 3160S

ANALYSIS TYPE: RAD

Los Alamos
NATIONAL LABORATORY

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

SHIP DATE: 04/20/2005
REPORT DUE: 05/05/2005
TURN AROUND REQ'D: 15

RAD SCREENING: NOT REQ
COMMENTS:

These samples are on:

LANL Request Number: 3160S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
EPA:901.1	RE73-05-58824	2	S	04/18/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58824	2	S	04/18/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58824	2	S	04/18/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58824	2	S	04/18/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58825	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58825	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58825	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58825	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58826	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58826	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58826	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58826	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58827	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58827	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58827	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58827	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58828	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58828	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58828	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58828	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58830	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58830	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58830	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58830	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58831	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58831	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58831	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58831	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58832	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58832	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58832	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58832	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58833	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58833	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58833	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58833	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58834	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58834	2	S	04/19/2005	Analyze for Gross A/B/G also

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
HASL-300:ISOPU	RE73-05-58834	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58834	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58836	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58836	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58836	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58836	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58837	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58837	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58837	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58837	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58838	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58838	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58838	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58838	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58839	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58839	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58839	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58839	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58840	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58840	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58840	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58840	2	S	04/19/2005	Analyze for Gross A/B/G also

Final Page of REQUEST NUMBER 3160S

Wednesday, April 20, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3160SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3160S

ANALYSIS TYPE: RAD

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58824	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58825	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58826	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58827	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58828	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58830	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58831	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58832	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58833	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58834	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58836	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58837	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58838	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58839	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58840	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3160S

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[illegible]	4/20/05	1410				
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		

Received for DISPOSAL By:		Date	Time	Remarks:
PRINTED NAME	SIGNATURE			

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 219142 **Event ID:**4802

SAMPLE ID: RE73-05-58829
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	8260B	~~125 SEPTUM AMBER~~ ~~GLASS~~ 2x6" SS TUBE	Ice	Y		
1	8270C+8082	250 ML AMBER GLASS	Ice	Y		
3	8290	125 ML GLASS	Ice	Y		
4	8290	125 ML GLASS	Ice	Y		
5	PSDA+PROP-DBS	~~PROTECORE BAG~~ 2"x6" SS TUBE	Ice	Y		
6	RC+RS+ph+PF+I	500 ML POLY	Ice	Y		

RELINQUISHED BY (printed name): K Allwood (signature):	**Date/Time:** 4.19.05 1705	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): Eugene Jaramillo (signature):	**Date/Time:** 4-19-05 1705	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Los Alamos National Laboratory
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Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 219152 **Event ID:**4802

SAMPLE ID: RE73-05-58835 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	8260B	~~125 SEPTUM AMBER GLASS~~ 2"x6" SS TUBE	Ice	Y		
1	8270C+8082	250 ML AMBER GLASS	Ice	Y		
3	8290	125 ML GLASS	Ice	Y		
4	8290	125 ML GLASS	Ice	Y		
5	PSDA+PROP-DBS	~~PROTECORE BAG~~ 2"x6" SS TUBE	Ice	Y		
6	RC+RS+ph+PF+I	500 ML POLY	Ice	Y		

RELINQUISHED BY (printed name): K Rlwood (signature):	Date/Time: 4.19.05 17:05	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4-19-05 1705	RECEIVED BY (printed name): (signature):	Date/Time:

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Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 219162 Event ID:4802

SAMPLE ID: RE73-05-58841

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	8260B	~~125 SEPTUM AMBER GLASS~~ use 2"x6" SS TUBE	Ice	Y		
1	8270C+8082	250 ML AMBER GLASS	Ice	Y		
3	8290	125 ML GLASS	Ice	Y		
4	8290	125 ML GLASS	Ice	Y		
5	PSDA+PROP-DBS	~~PROTECORE BAC~~ use 2"x6" SS TUBE	Ice	Y		
6	RC+RS+ph+PF+I	500 ML POLY	Ice	Y		

RELINQUISHED BY (printed name): (signature):	Date/Time: 4-19-05 1655	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4-19-05 1656	RECEIVED BY (printed name): (signature):	Date/Time:

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Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218712 Event ID:4802

SAMPLE ID: RE73-05-58826
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature): K Rheaume	Date/Time: 4.19.05 17:10	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature): Jaylen Vay	Date/Time: 4/19/05 17:10.	RECEIVED BY (printed name): (signature):	Date/Time:

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FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218692 Event ID:4802

SAMPLE ID: RE73-05-58824
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): K R Leonard (signature):	Date/Time: 4.19.05 1710	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4-19-05 1710	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
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FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218722 Event ID:4802

SAMPLE ID: RE73-05-58827 ER TEAM LEADER: Terry Rust DESTINATION: SMO

SAMPLE ORDER MATRIX: Soil FIELD TEAM LEADER: John Tymkowych DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.11.08 1705	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/11/08 1705	RECEIVED BY (printed name): (signature):	Date/Time:

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FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218702 Event ID:4802

SAMPLE ID: RE73-05-58825

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 17:05	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 17:05	RECEIVED BY (printed name): (signature):	Date/Time:

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FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218672 Event ID:4802

SAMPLE ID: RE73-05-58877
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
1	8260B	125 SEPTUM AMBER GLASS	Ice	Y		

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.1.05 1705	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/1/05 1705	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
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FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218732 **Event ID:**4802

SAMPLE ID: RE73-05-58828
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): [illegible] **(signature):** [illegible]	**Date/Time:** 4.19.05 1705	**RELINQUISHED BY (printed name):** **(signature):**	**Date/Time:**
RECEIVED BY (printed name): [illegible] **(signature):** [illegible]	**Date/Time:** 4/19/05 1705	**RECEIVED BY (printed name):** **(signature):**	**Date/Time:**

Los Alamos National Laboratory
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Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218812 Event ID:4802

SAMPLE ID: RE73-05-58838

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y 1		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y 1		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 1655	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 16:55	RECEIVED BY (printed name): (signature):	Date/Time:

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FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218822 Event ID:4802

SAMPLE ID: RE73-05-58839

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 1655	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4-19-05 1655	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
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FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218742 Event ID:4802

SAMPLE ID: RE73-05-58830
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.18.05 1655	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4-19-05 1655	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
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Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218782 Event ID:4802

SAMPLE ID: RE73-05-58834

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): K2 Leonard (signature):	Date/Time: 4.19.05 16:55	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 1655	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218832 Event ID:4802

SAMPLE ID: RE73-05-58840 ER TEAM LEADER: Terry Rust DESTINATION: SMO

SAMPLE ORDER MATRIX: Soil FIELD TEAM LEADER: John Tymkowych DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4/19/05 1655	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 1655	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218762 Event ID:4802

SAMPLE ID: RE73-05-58832 ER TEAM LEADER: Terry Rust DESTINATION: SMO

SAMPLE ORDER MATRIX: Soil FIELD TEAM LEADER: John Tymkowych DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 1655	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 1655	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

EVENT NAME: TA-73 Ash Pile

FIELD CHAIN OF CUSTODY

COC ID: 218752 Event ID:4802

SAMPLE ID: RE73-05-58831 ER TEAM LEADER: Terry Rust DESTINATION: SMO

SAMPLE ORDER MATRIX: Soil FIELD TEAM LEADER: John Tymkowych DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 1655	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 1655	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

EVENT NAME: TA-73 Ash Pile

FIELD CHAIN OF CUSTODY

COC ID: 218772 Event ID:4802

SAMPLE ID: RE73-05-58833 ER TEAM LEADER: Terry Rust DESTINATION: SMO

SAMPLE ORDER MATRIX: Soil FIELD TEAM LEADER: John Tymkowych DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 1655	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 1655	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218802 **Event ID:**4802

SAMPLE ID: RE73-05-58837
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): KR Leonard (signature):	**Date/Time:** 4.19.05 1655	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4-19-05 1655	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218792 **Event ID:**4802

SAMPLE ID: RE73-05-58836 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	**Date/Time:** 4.19.05 1655	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4-19-05 1655	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Rad Screening Data Release Form

The Following samples were received at the Field Support Facility (FSF) without screening data (list sample number):

These samples will not be shipped until radiological screening data documentation arrives at the FSF. I understand that it is my responsibility to ensure this information arrives at the FSF in a timely manner. If holding times are missed because screening data does not arrive, I will pick up the samples.

The following samples do not require rad screening data for the reasons stated (list sample numbers):

RE73-05-58824,
" " -58825
" " -58826
-58827
-58828
-58829
-58830
-58831
-58832
-58833
-58834
-58835

RE73-05-58836
" " -58837
" " -58838
-58839
-58840
-58841
-58717

Reason: SCREENED IN THE FIELD BY RCT

Print Last Name Kenneth R. LEONARD Signature [signature] Date 4/19/05

Data Validation Cover Sheet

Section I. Data Record Package Identification

Request Number: 3160S Validation Date: 26-May-05 Lab Code: STL

Contract Laboratory Name: Severn Trent Laboratories - St. Louis

Validator: John A. Wilcox Organization: EES-9

Analytical Suite(s): (check all that apply)

- ☐ Volatile Organics
- ☐ Semivolatile Organics
- ☐ Organochlorine Pesticides/Polychlorinated Biphenyls
- ☐ High Explosives
- ☐ Inorganics
- ☒ Radiochemistry
- ☐ Other: _____ (describe)

Section II. Completeness Check

Yes	No	n/a	(check one)	Yes	No	n/a	(check one)
☒	☐	☐	1. Chain-of-custody form(s)	☒	☐	☐	6. Raw/BSS data
☒	☐	☐	2. Case narrative	☒	☐	☐	7. Quality control forms
☒	☐	☐	3. Sample result forms	☒	☐	☐	8. Quantitation reports
☐	☐	☒	4. Sample chromatograms	☐	☐	☒	9. TICs forms
☐	☐	☒	5. Standard chromatograms	☐	☐	☒	10. TICs mass spectra

Identify any samples in the assigned Request Number that are missing:

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed upon date of resolution and contract laboratory point of contact):

Alpha spec, Gas Flow, and Liquid Scintillation: All QC were within limits.

Gamma Spec: All QC were within limits.

Note: Unqualified data were flagged NQ in the electronic database.

(Attach additional comment sheets as necessary)

Validator's signature: John A Wilcox Date: 5/26/05

Attachment D: Gamma Spectroscopy Data-Validation Checklist

Yes	No	n/a	(check one)	Assign qualifier listed below if criteria = Yes: Detected analyte	Assign qualifier listed below if criteria = Yes: Undetected analyte
☐	☒	☐	1. MDC and/or TPU were not stated for each radionuclide in each batch for each sample.	a	a
☒	☐	☐	2. Sample result is <MDC.	U, R5	U, R5
☒	☐	☐	3. Sample result is <3 times the TPU calculation.	U, R11	N/A
☐	☒	☐	4. Sample results are tentative because of spectral interference.	R, R5b	R, R5b
☐	☒	☐	5. Preparation/method blank is not reported.	R, R4	R, R4
☐	☒	☐	6. Analyte detected in blank and sample result for analyte ≤5x the amount in blank	U, R4a	N/A
☐	☒	☐	7. Duplicate analysis information is not present.	J, R7	UJ, R7
☐	☒	☐	8. DER for detected analytes is ≥2 but ≤4.	J, R7b	N/A
☐	☒	☐	9. DER for detected analytes is >4.	R, R7c	N/A
☐	☒	☐	10. Laboratory Control Sample (LCS) information is not present.	R, R6	R, R6
☐	☒	☐	11. LCS % recovery is >120%.	J+, R6a	N/A
☐	☒	☐	12. LCS % recovery is <80 but ≥10%.	J-, R6c	UJ, R6d
☐	☒	☐	13. LCS % recovery is <10%.	R, R6b	R, R6b
☐	☒	☐	14. Sample was extracted outside of the appropriate hold time.	J-, R9	UJ, R9
☐	☒	☐	15. Sample was extracted >2 times the appropriate holding time.	R, R9a	R, R9a
☐	☒	☐	16. Other obvious data quality issues identified.	__, R19	__, R19

[a] If the laboratory cannot provide the missing MDC, an estimated MDC can be calculated using 3 times the TPU.

Attachment D: RAD Checklist

Yes	No	N/A	(check one)	Assign qualifier listed below if criteria = Yes	
				Detected analyte	Undetected analyte
☐	☒	☐	1. The MDC and/or TPU were not stated for each radionuclide in each batch for each sample.	(See note)[a]	(See note)[a]
☒	☐	☐	2. The sample result is less than the MDC.	U, R5	U, R5
☒	☐	☐	3. The sample result is less than three times the TPU calculation.	U, R11	N/A
☐	☒	☐	4. Required blank information is missing.	R, R4	R, R4
☐	☒	☐	5. The analyte detected is shown in the blank and sample result for analyte is less than or equal to the amount in blank.	U, R4a	N/A
☐	☒	☐	6. The duplicate analysis information is not present.	J, R7	UJ, R7
☐	☒	☐	7. The duplicate analysis was performed in lieu of a preparation duplicate.	J, R7a	N/A
☐	☒	☐	8. The DER for detected analytes is greater than but less than or equal to four.	J, R7b	N/A
☐	☒	☐	9. The DER for detected analytes is greater than four.	R, R7c	N/A
☐	☒	☐	10. The tracer/carrier information is not present.	R, R1	R, R1
☐	☒	☐	11. The tracer/carrier %R is greater than the UAL.	J+, R1d	N/A
☐	☒	☐	12. The tracer/carrier %R is less than 30 but greater than or equal to 10%.	J-, R1b	UJ, R1c
☐	☒	☐	13. The tracer/carrier %R is less than 10%.	R, R1a	R, R1a
☐	☒	☐	14. The LCS information is not present.	R, R6	R, R6
☐	☒	☐	15. The LCS %R is greater than 120%.	J+, R6a	N/A
☐	☒	☐	16. The LCS %R is less than 80 but greater than or equal to 10%.	J-, R6c	UJ, R6d
☐	☒	☐	17. The LCS %R is less than 10%.	R, R6b	R, R6b
☐	☒	☐	18. The matrix spike information is not present.	R, R3	R, R3
☐	☒	☐	19. The matrix spike %R is greater than 125%.	J+, R3c	N/A
☐	☒	☐	20. The matrix spike %R is less than 75% but greater than or equal to 10%.	J-, R3d	UJ, R3e
☐	☒	☐	21. The matrix spike %R is less than 10%.	R, R3a	R, R3b
☐	☒	☐	22. The sample was extracted after the appropriate holding time was exceeded.	J-, R9	UJ, R9
☐	☒	☐	23. The sample was extracted after a period double the appropriate holding time was exceeded.	R, R9a	R, R9a
☐	☒	☐	24. Other obvious data quality issues are identified.	__, R19	__, R19

[a] If the laboratory cannot provide the missing MDC, an estimated MDC can be calculated using an amount equal to three times the TPU.

CHAIN OF CUSTODY DOCUMENT NUMBER: 3160SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3160S

ANALYSIS TYPE: RAD

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

cer 624

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58824	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58825	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58826	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58827	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58828	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58830	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58831	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58832	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58833	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58834	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58836	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58837	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58838	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58839	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58840	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3160S Page 1

Relinquished By:		Date	Time	Received By:		Date	Time
A Padilla	A Padilla	4.20.05	1400	Sue Wilson	Sue Wilson	4.21.05	0900
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

PRINTED NAME SIGNATURE

STL ST. LOUIS
Wednesday, April 20, 2005

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3160S
ANALYSIS TYPE: RAD

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

SHIP DATE: 04/20/2005
REPORT DUE: 05/05/2005
TURN AROUND REQ'D: 15

RAD SCREENING: NOT REQ
COMMENTS:

These samples are on:

LANL Request Number: 3160S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
EPA:901.1	RE73-05-58824	2	S	04/18/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58824	2	S	04/18/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58824	2	S	04/18/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58824	2	S	04/18/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58825	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58825	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58825	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58825	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58826	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58826	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58826	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58826	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58827	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58827	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58827	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58827	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58828	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58828	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58828	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58828	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58830	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58830	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58830	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58830	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58831	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58831	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58831	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58831	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58832	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58832	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58832	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58832	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58833	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58833	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58833	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58833	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58834	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58834	2	S	04/19/2005	Analyze for Gross A/B/G also

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
HASL-300:ISOPU	RE73-05-58834	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58834	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58836	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58836	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58836	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58836	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58837	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58837	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58837	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58837	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58838	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58838	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58838	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58838	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58839	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58839	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58839	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58839	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58840	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58840	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58840	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58840	2	S	04/19/2005	Analyze for Gross A/B/G also

Final Page of REQUEST NUMBER 31603

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58824

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-001
Work Order: G8WNH
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				pCi/g		RP-730 MOD			
Americium 241	0.049	U U,R5	0.030	0.095	0.045	04/28/05	04/29/05	5118394	
Bismuth 211 (assumes	1.32		0.20	0.70	0.34	04/28/05	04/29/05	5118394	
Bismuth 214	0.277		0.070	0.24	0.12	04/28/05	04/29/05	5118394	
Cadmium 109	-0.27	U U,R5	0.36	1.0	0.51	04/28/05	04/29/05	5118394	
Cerium 139	-0.006	U	0.011	0.039	0.018	04/28/05	04/29/05	5118394	
Cesium 134	0.004	U	0.021	0.068	0.031	04/28/05	04/29/05	5118394	
Cesium 137	-0.039	U	0.024	0.077	0.035	04/28/05	04/29/05	5118394	
Cobalt 60	0.015	U	0.018	0.080	0.034	04/28/05	04/29/05	5118394	
Europium 152	0.023	U	0.078	0.34	0.14	04/28/05	04/29/05	5118394	
Lead 212	0.383		0.044	0.084	0.039	04/28/05	04/29/05	5118394	
Lead 214	0.462		0.052	0.13	0.059	04/28/05	04/29/05	5118394	
Mercury 203	0.022	U U,R5	0.013	0.051	0.024	04/28/05	04/29/05	5118394	
Potassium 40	8.51		0.96	0.93	0.40	04/28/05	04/29/05	5118394	
Radium (226)	4.74		0.57	0.90	0.38	04/28/05	04/29/05	5118394	
Radium 228	0.27	U U,R5	0.15	0.44	0.20	04/28/05	04/29/05	5118394	
Radium 223 (assumes e	-0.12	U	0.16	0.54	0.26	04/28/05	04/29/05	5118394	
Radium 224	2.90		0.92	1.6	0.78	04/28/05	04/29/05	5118394	
Ruthenium 106	-0.05	U U,R5	0.15	0.55	0.24	04/28/05	04/29/05	5118394	
Sodium 22	0.025	U	0.019	0.085	0.036	04/28/05	04/29/05	5118394	
Strontium 85	-0.043	U	0.024	0.076	0.036	04/28/05	04/29/05	5118394	
Thallium 208	0.123		0.032	0.070	0.032	04/28/05	04/29/05	5118394	
Thorium 227	0.11	U U,R5	0.11	0.34	0.16	04/28/05	04/29/05	5118394	
Thorium 231	0.56	U	0.19	0.60	0.29	04/28/05	04/29/05	5118394	
Thorium 234	3.87		0.40	0.89	0.43	04/28/05	04/29/05	5118394	
Tin 113	-0.015	U U,R5	0.019	0.066	0.030	04/28/05	04/29/05	5118394	
Uranium 235	0.313	U	0.038	0.33	0.16	04/28/05	04/29/05	5118394	
Yttrium 88	-0.007	U	0.020	0.080	0.032	04/28/05	04/29/05	5118394	
--- Other Detected Radionuclides ---									
Actinium 228	0.36	U,R11	0.12	0.31	0.14	04/28/05	04/29/05	5118394	
Iso PLUTONIUM (LONG CT) MAS & DOE MOD				pCi/g		3058/RP-725			
Plutonium 238	0.0	U U,R5	0.0	0.03	0.01	04/23/05	05/02/05	5113068	99
Plutonium 239/40	0.360		0.030	0.014	0.005	04/23/05	05/02/05	5113068	99
Iso AMERICIUM (LONG CT) MAS & DOE MOD				pCi/g		3006/RP-725			
Americium 241	0.035		0.011	0.029	0.013	04/23/05	05/03/05	5113067	89
Iso URANIUM (LONG CT) MAS & DOE MOD				pCi/g		3050/RP-725			
Uranium 234	8.41		0.41	0.05	0.02	05/11/05	05/12/05	5131544	100
Uranium 235	0.400		0.061	0.023	0.0	05/11/05	05/12/05	5131544	100
Uranium 238	7.64		0.38	0.03	0.009	05/11/05	05/12/05	5131544	100

LOT # F5D210345

jaw 5/26/05

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58825

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-002
Work Order: G8WNN
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				pCi/g		RP-730 MOD			
Americium 241	-0.007	U U,RS	0.021	0.077	0.037	04/28/05	04/29/05	5118394	
Bismuth 211 (assumes	0.78		0.14	0.53	0.25	04/28/05	04/29/05	5118394	
Bismuth 214	0.300		0.053	0.21	0.098	04/28/05	04/29/05	5118394	
Cadmium 109	-0.17	U U,RS	0.21	0.72	0.35	04/28/05	04/29/05	5118394	
Cerium 139	-0.0126	U	0.0095	0.032	0.015	04/28/05	04/29/05	5118394	
Cesium 134	0.005	U	0.017	0.059	0.027	04/28/05	04/29/05	5118394	
Cesium 137	0.067	U	0.024	0.10	0.047	04/28/05	04/29/05	5118394	
Cobalt 60	0.008	U	0.020	0.085	0.037	04/28/05	04/29/05	5118394	
Europium 152	-0.076	U	0.087	0.31	0.13	04/28/05	04/29/05	5118394	
Lead 212	0.245		0.034	0.078	0.036	04/28/05	04/29/05	5118394	
Lead 214	0.302		0.044	0.080	0.036	04/28/05	04/29/05	5118394	
Mercury 203	0.006	U U,RS	0.013	0.048	0.022	04/28/05	04/29/05	5118394	
Potassium 40	5.06		0.60	0.63	0.26	04/28/05	04/29/05	5118394	
Radium (226)	4.91		0.58	1.9	0.92	04/28/05	04/29/05	5118394	
Radium 228	0.124	U U,RS	0.071	0.29	0.13	04/28/05	04/29/05	5118394	
Radium 223 (assumes e	-0.13	U	0.13	0.45	0.21	04/28/05	04/29/05	5118394	
Radium 224	0.90	U	0.39	1.1	0.54	04/28/05	04/29/05	5118394	
Ruthenium 106	0.07	U	0.13	0.49	0.22	04/28/05	04/29/05	5118394	
Sodium 22	-0.004	U	0.016	0.064	0.026	04/28/05	04/29/05	5118394	
Strontium 85	0.039	U	0.016	0.059	0.027	04/28/05	04/29/05	5118394	
Thallium 208	0.053	U	0.022	0.087	0.041	04/28/05	04/29/05	5118394	
Thorium 227	0.022	U	0.097	0.30	0.14	04/28/05	04/29/05	5118394	
Thorium 231	0.40	U	0.13	0.49	0.24	04/28/05	04/29/05	5118394	
Thorium 234	2.39		0.29	0.70	0.33	04/28/05	04/29/05	5118394	
Tin 113	-0.004	U U,RS	0.015	0.053	0.024	04/28/05	04/29/05	5118394	
Uranium 235	0.328		0.037	0.26	0.12	04/28/05	04/29/05	5118394	
Yttrium 88	0.044	U U,RS	0.017	0.093	0.039	04/28/05	04/29/05	5118394	
Iso PLUTONIUM (LONG CT) MAS & DOE MOD				pCi/g		3050/RP-725			
Plutonium 238	0.0	U U,RS	0.0	0.03	0.01	04/23/05	05/02/05	5113068	57
Plutonium 239/40	2.34		0.14	0.02	0.006	04/23/05	05/02/05	5113068	57
Iso AMERICIUM (LONG CT) MAS & DOE MOD				pCi/g		3006/RP-725			
Americium 241	0.0151	U U,RS	0.0088	0.027	0.011	04/23/05	05/03/05	5113067	87
Iso URANIUM (LONG CT) MAS & DOE MOD				pCi/g		3050/RP-725			
Uranium 234	12.4		0.57	0.04	0.02	05/11/05	05/12/05	5131544	105
Uranium 235	0.458		0.065	0.047	0.015	05/11/05	05/12/05	5131544	105
Uranium 238	5.78		0.30	0.04	0.02	05/11/05	05/12/05	5131544	105

JAW 5/2/05

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58826

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-003
Work Order: G8WNO
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				pCi/g		RP-730 MOD			
Americium 241	0.011	U U,RS	0.035	0.12	0.057	04/28/05	04/29/05	5118394	
Bismuth 211 (assumes	**1.20**		**0.23**	**0.88**	**0.42**	**04/28/05**	**04/29/05**	**5118394**	
Bismuth 214	**0.548**		**0.098**	**0.38**	**0.18**	**04/28/05**	**04/29/05**	**5118394**	
Cadmium 109	0.13	U U,RS	0.36	1.3	0.63	04/28/05	04/29/05	5118394	
Cerium 139	-0.020	U	0.016	0.052	0.024	04/28/05	04/29/05	5118394	
Cesium 134	-0.036	U	0.024	0.072	0.032	04/28/05	04/29/05	5118394	
Cesium 137	0.023	U	0.030	0.11	0.052	04/28/05	04/29/05	5118394	
Cobalt 60	0.014	U	0.020	0.093	0.038	04/28/05	04/29/05	5118394	
Europium 152	-0.001	U	0.15	0.58	0.24	04/28/05	04/29/05	5118394	
Lead 212	**0.328**		**0.060**	**0.13**	**0.062**	**04/28/05**	**04/29/05**	**5118394**	
Lead 214	**0.412**		**0.069**	**0.17**	**0.079**	**04/28/05**	**04/29/05**	**5118394**	
Mercury 203	-0.021	U U,RS	0.019	0.064	0.029	04/28/05	04/29/05	5118394	
Potassium 40	**8.73**		**0.995**	**0.76**	**0.29**	**04/28/05**	**04/29/05**	**5118394**	
Radium (226)	**6.21**		**0.84**	**1.3**	**0.61**	**04/28/05**	**04/29/05**	**5118394**	
Radium 228	**0.44**		**0.11**	**0.29**	**0.12**	**04/28/05**	**04/29/05**	**5118394**	
Radium 223 (assumes e	-0.11	U U,RS	0.22	0.74	0.35	04/28/05	04/29/05	5118394	
Radium 224	**2.04**	U,RII	**0.75**	**1.8**	**0.85**	**04/28/05**	**04/29/05**	**5118394**	
Ruthenium 106	0.02	U U,RS	0.22	0.83	0.37	04/28/05	04/29/05	5118394	
Sodium 22	-0.041	U	0.026	0.082	0.032	04/28/05	04/29/05	5118394	
Strontium 85	-0.106	U	0.031	0.084	0.038	04/28/05	04/29/05	5118394	
Thallium 208	**0.141**		**0.040**	**0.089**	**0.040**	**04/28/05**	**04/29/05**	**5118394**	
Thorium 227	0.11	U U,RS	0.12	0.41	0.19	04/28/05	04/29/05	5118394	
Thorium 231	**0.92**		**0.22**	**0.83**	**0.40**	**04/28/05**	**04/29/05**	**5118394**	
Thorium 234	**4.33**		**0.47**	**1.0**	**0.50**	**04/28/05**	**04/29/05**	**5118394**	
Tin 113	-0.028	U U,RS	0.025	0.085	0.038	04/28/05	04/29/05	5118394	
Uranium 235	0.410	U	0.056	0.46	0.22	04/28/05	04/29/05	5118394	
Yttrium 88	0.008	U	0.021	0.099	0.038	04/28/05	04/29/05	5118394	
Iso PLUTONIUM (LONG CT) HAS & DOE MOD				pCi/g		3058/RP-725			
Plutonium 238	0.0	U U,RS	0.0	0.02	0.008	04/23/05	05/02/05	5113068	101
Plutonium 239/40	**0.475**		**0.036**	**0.017**	**0.006**	**04/23/05**	**05/02/05**	**5113068**	**101**
Iso AMERICIUM (LONG CT) HAS & DOE MOD				pCi/g		3006/RP-725			
Americium 241	**0.0236**		**0.0073**	**0.016**	**0.0063**	**04/23/05**	**05/03/05**	**5113067**	**92**
Iso URANIUM (LONG CT) HAS & DOE MOD				pCi/g		3050/RP-725			
Uranium 234	**8.22**		**0.41**	**0.04**	**0.02**	**05/11/05**	**05/12/05**	**5131544**	**99**
Uranium 235	**0.475**		**0.067**	**0.041**	**0.011**	**05/11/05**	**05/12/05**	**5131544**	**99**
Uranium 238	**7.01**		**0.36**	**0.02**	**0.0**	**05/11/05**	**05/12/05**	**5131544**	**99**

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58827

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-004
Work Order: G8WNR
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				pCi/g		RP-730 MOD			
Americium 241	0.003	U u,R5	0.042	0.13	0.065	04/28/05	04/29/05	5118394	
Bismuth 211 (assumes	2.06		0.27	0.92	0.45	04/28/05	04/29/05	5118394	
Bismuth 214	0.66		0.10	0.34	0.16	04/28/05	04/29/05	5118394	
Cadmium 109	1.36	U u,R5	0.41	1.5	0.71	04/28/05	04/29/05	5118394	
Cerium 139	-0.022	U	0.018	0.049	0.024	04/28/05	04/29/05	5118394	
Cesium 134	0.012	U	0.025	0.081	0.038	04/28/05	04/29/05	5118394	
Cesium 137	0.104	U	0.035	0.14	0.065	04/28/05	04/29/05	5118394	
Cobalt 60	0.011	U	0.028	0.11	0.049	04/28/05	04/29/05	5118394	
Europium 152	0.26	U	0.12	0.57	0.25	04/28/05	04/29/05	5118394	
Lead 212	0.771		0.075	0.11	0.053	04/28/05	04/29/05	5118394	
Lead 214	0.710		0.069	0.15	0.068	04/28/05	04/29/05	5118394	
Mercury 203	0.003	U u,R5	0.019	0.066	0.031	04/28/05	04/29/05	5118394	
Potassium 40	14.4		1.5	1.1	0.5	04/28/05	04/29/05	5118394	
Radium (226)	6.91		0.76	2.4	1.2	04/28/05	04/29/05	5118394	
Radium 228	0.86		0.15	0.38	0.18	04/28/05	04/29/05	5118394	
Radium 223 (assumes e	0.24	U u,R5	0.21	0.77	0.37	04/28/05	04/29/05	5118394	
Radium 224	5.4		1.7	2.3	1.1	04/28/05	04/29/05	5118394	
Ruthenium 106	-0.26	U u,R5	0.23	0.79	0.36	04/28/05	04/29/05	5118394	
Sodium 22	0.018	U	0.034	0.13	0.059	04/28/05	04/29/05	5118394	
Strontium 85	-0.055	U	0.027	0.085	0.040	04/28/05	04/29/05	5118394	
Thallium 208	0.269		0.048	0.087	0.040	04/28/05	04/29/05	5118394	
Thorium 227	0.43	U u,R5	0.15	0.51	0.24	04/28/05	04/29/05	5118394	
Thorium 231	0.69	U	0.25	0.78	0.38	04/28/05	04/29/05	5118394	
Thorium 234	5.49		0.47	1.2	0.57	04/28/05	04/29/05	5118394	
Tin 113	-0.005	U u,R5	0.025	0.089	0.042	04/28/05	04/29/05	5118394	
Uranium 235	0.452		0.048	0.37	0.18	04/28/05	04/29/05	5118394	
Yttrium 88	0.029	U u,R5	0.028	0.13	0.054	04/28/05	04/29/05	5118394	
--- Other Detected Radionuclides ---									
Actinium 228	0.53	u,R11	0.18	0.49	0.23	04/28/05	04/29/05	5118394	
Iso PLUTONIUM (LONG CT) HAS & DOE MOD				pCi/g		3058/RP-725			
Plutonium 238	0.0	U u,R5	0.0	0.02	0.009	04/23/05	05/02/05	5113068	95
Plutonium 239/40	0.544		0.039	0.006	0.0	04/23/05	05/02/05	5113068	95
Iso AMERICIUM (LONG CT) HAS & DOE MOD				pCi/g		3006/RP-725			
Americium 241	0.0070	U u,R5	0.0058	0.019	0.0079	04/23/05	05/04/05	5113067	96
Iso URANIUM (LONG CT) HAS & DOE MOD				pCi/g		3050/RP-725			
Uranium 234	9.97		0.48	0.03	0.009	05/11/05	05/12/05	5131544	98
Uranium 235	0.494		0.069	0.023	0.0	05/11/05	05/12/05	5131544	98
Uranium 238	6.97		0.35	0.04	0.01	05/11/05	05/12/05	5131544	98

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58828

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-005
Work Order: G8WNV
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Nits by DOE RP-730 MOD				pCi/g		RP-730 MOD			
Americium 241	0.003	U U,RS	0.034	0.11	0.055	04/28/05	04/29/05	5118394	
Bismuth 211 (assumes	**1.69**		**0.24**	**0.84**	**0.41**	**04/28/05**	**04/29/05**	**5118394**	
Bismuth 214	**0.66**		**0.10**	**0.33**	**0.16**	**04/28/05**	**04/29/05**	**5118394**	
Cadmium 109	0.64	U U,RS	0.32	1.1	0.55	04/28/05	04/29/05	5118394	
Cerium 139	-0.034	U	0.013	0.039	0.018	04/28/05	04/29/05	5118394	
Cesium 134	-0.009	U	0.022	0.071	0.032	04/28/05	04/29/05	5118394	
Cesium 137	0.012	U	0.025	0.10	0.047	04/28/05	04/29/05	5118394	
Cobalt 60	-0.018	U	0.028	0.11	0.046	04/28/05	04/29/05	5118394	
Europium 152	-0.006	U	0.12	0.48	0.20	04/28/05	04/29/05	5118394	
Lead 212	**0.382**		**0.055**	**0.12**	**0.058**	**04/28/05**	**04/29/05**	**5118394**	
Lead 214	**0.586**		**0.071**	**0.14**	**0.063**	**04/28/05**	**04/29/05**	**5118394**	
Mercury 203	-0.011	U U,RS	0.016	0.057	0.027	04/28/05	04/29/05	5118394	
Potassium 40	**11.6**		**1.1**	**0.8**	**0.3**	**04/28/05**	**04/29/05**	**5118394**	
Radium (226)	**6.65**		**0.84**	**2.2**	**1.1**	**04/28/05**	**04/29/05**	**5118394**	
Radium 228	**0.50**		**0.13**	**0.49**	**0.23**	**04/28/05**	**04/29/05**	**5118394**	
Radium 223 (assumes e	0.08	U U,RS	0.18	0.65	0.31	04/28/05	04/29/05	5118394	
Radium 224	**2.34**	U,R11	**0.80**	**1.6**	**0.77**	**04/28/05**	**04/29/05**	**5118394**	
Ruthenium 106	-0.27	U U,RS	0.19	0.62	0.27	04/28/05	04/29/05	5118394	
Sodium 22	0.011	U	0.024	0.098	0.042	04/28/05	04/29/05	5118394	
Strontium 85	-0.111	U	0.026	0.067	0.031	04/28/05	04/29/05	5118394	
Thallium 208	**0.175**		**0.034**	**0.062**	**0.027**	**04/28/05**	**04/29/05**	**5118394**	
Thorium 227	-0.12	U U,RS	0.13	0.35	0.16	04/28/05	04/29/05	5118394	
Thorium 231	0.40	U	0.21	0.67	0.32	04/28/05	04/29/05	5118394	
Thorium 234	**5.22**		**0.45**	**0.93**	**0.45**	**04/28/05**	**04/29/05**	**5118394**	
Tin 113	-0.004	U U,RS	0.021	0.076	0.035	04/28/05	04/29/05	5118394	
Uranium 235	**0.418**		**0.052**	**0.33**	**0.16**	**04/28/05**	**04/29/05**	**5118394**	
Yttrium 88	-0.009	U U,RS	0.020	0.081	0.031	04/28/05	04/29/05	5118394	
Iso PLUTONIUM (LONG CT) HAS & DOE MOD				pCi/g		3058/RP-725			
Plutonium 238	0.006	U U,RS	0.014	0.044	0.022	04/23/05	05/02/05	5113068	81
Plutonium 239/40	**1.68**		**0.087**	**0.023**	**0.009**	**04/23/05**	**05/02/05**	**5113068**	**81**
Iso AMERICIUM (LONG CT) HAS & DOE MOD				pCi/g		3006/RP-725			
Americium 241	**0.0370**		**0.0091**	**0.019**	**0.0078**	**04/23/05**	**05/03/05**	**5113067**	**90**
Iso URANIUM (LONG CT) HAS & DOE MOD				pCi/g		3050/RP-725			
Uranium 234	5.23		0.27	0.03	0.01	05/11/05	05/12/05	5131544	102
Uranium 235	0.267		0.048	0.052	0.019	05/11/05	05/12/05	5131544	102
Uranium 238	3.31		0.19	0.05	0.02	05/11/05	05/12/05	5131544	102

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58830

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-006
Work Order: G8WNW
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Nits by DOE RP-730 MOD				pCi/g		RP-730 MOD			
Americium 241	-0.007	U u,RS	0.028	0.095	0.045	04/28/05	04/29/05	5118394	
Bismuth 211 (assumes	**1.38**		**0.21**	**0.81**	**0.39**	**04/28/05**	**04/29/05**	**5118394**	
Bismuth 214	**0.586**		**0.088**	**0.14**	**0.060**	**04/28/05**	**04/29/05**	**5118394**	
Cadmium 109	0.85	U u,RS	0.33	1.2	0.59	04/28/05	04/29/05	5118394	
Cerium 139	0.003	U	0.012	0.044	0.021	04/28/05	04/29/05	5118394	
Cesium 134	-0.028	U	0.019	0.053	0.023	04/28/05	04/29/05	5118394	
Cesium 137	0.072	U	0.028	0.12	0.053	04/28/05	04/29/05	5118394	
Cobalt 60	-0.016	U	0.021	0.078	0.031	04/28/05	04/29/05	5118394	
Europium 152	0.24	U	0.13	0.59	0.26	04/28/05	04/29/05	5118394	
Lead 212	**0.412**		**0.056**	**0.12**	**0.057**	**04/28/05**	**04/29/05**	**5118394**	
Lead 214	**0.471**		**0.062**	**0.13**	**0.059**	**04/28/05**	**04/29/05**	**5118394**	
Mercury 203	0.0003	U u,RS	0.017	0.062	0.029	04/28/05	04/29/05	5118394	
Potassium 40	**9.1**		**1.0**	**0.6**	**0.2**	**04/28/05**	**04/29/05**	**5118394**	
Radium (226)	**3.36**		**0.64**	**1.1**	**0.52**	**04/28/05**	**04/29/05**	**5118394**	
Radium 228	**0.62**		**0.15**	**0.53**	**0.25**	**04/28/05**	**04/29/05**	**5118394**	
Radium 223 (assumes e	0.28	U u,RS	0.15	0.63	0.30	04/28/05	04/29/05	5118394	
Radium 224	0.78	U	0.48	1.4	0.69	04/28/05	04/29/05	5118394	
Ruthenium 106	-0.01	U	0.18	0.69	0.31	04/28/05	04/29/05	5118394	
Sodium 22	0.051	U	0.028	0.13	0.055	04/28/05	04/29/05	5118394	
Strontium 85	-0.079	U	0.026	0.073	0.033	04/28/05	04/29/05	5118394	
Thallium 208	**0.179**		**0.034**	**0.039**	**0.015**	**04/28/05**	**04/29/05**	**5118394**	
Thorium 227	0.02	U u,RS	0.11	0.36	0.17	04/28/05	04/29/05	5118394	
Thorium 231	0.67	U	0.18	0.69	0.33	04/28/05	04/29/05	5118394	
Thorium 234	**2.20**		**0.31**	**0.93**	**0.44**	**04/28/05**	**04/29/05**	**5118394**	
Tin 113	0.007	U u,RS	0.023	0.085	0.039	04/28/05	04/29/05	5118394	
Uranium 235	0.222	U	0.042	0.34	0.16	04/28/05	04/29/05	5118394	
Yttrium 88	0.016	U	0.016	0.086	0.033	04/28/05	04/29/05	5118394	
Iso PLUTONIUM (LOWG CT) MAS & DOE MOD				pCi/g		3050/RP-725			
Plutonium 238	0.0	U u,RS	0.0	0.02	0.01	04/23/05	05/02/05	5113068	101
Plutonium 239/40	**0.375**		**0.031**	**0.016**	**0.006**	**04/23/05**	**05/02/05**	**5113068**	**101**
Iso AMERICIUM (LOWG CT) MAS & DOE MOD				pCi/g		3006/RP-725			
Americium 241	**0.0228** u, R II		**0.0076**	**0.019**	**0.0081**	**04/23/05**	**05/03/05**	**5113067**	**94**
Iso URANIUM (LOWG CT) MAS & DOE MOD				pCi/g		3050/RP-725			
Uranium 234	**5.54**		**0.29**	**0.03**	**0.008**	**05/11/05**	**05/12/05**	**5131544**	**104**
Uranium 235	**0.264**		**0.049**	**0.022**	**0.0**	**05/11/05**	**05/12/05**	**5131544**	**104**
Uranium 238	**4.99**		**0.27**	**0.04**	**0.01**	**05/11/05**	**05/12/05**	**5131544**	**104**

JAW 5/26/05

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58831

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-007
Work Order: G8WN0
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				pCi/g		RP-730 MOD			
Americium 241	0.022	U u,RS	0.041	0.13	0.061	04/28/05	04/29/05	5118394	
Bismuth 211 (assumes	**1.22**		**0.19**	**0.73**	**0.35**	**04/28/05**	**04/29/05**	**5118394**	
Bismuth 214	**0.378**		**0.081**	**0.29**	**0.14**	**04/28/05**	**04/29/05**	**5118394**	
Cadmium 109	0.36	U u,RS	0.40	1.2	0.59	04/28/05	04/29/05	5118394	
Cerium 139	0.016	U	0.014	0.046	0.022	04/28/05	04/29/05	5118394	
Cesium 134	-0.003	U	0.022	0.070	0.032	04/28/05	04/29/05	5118394	
Cesium 137	0.0001	U	0.024	0.089	0.040	04/28/05	04/29/05	5118394	
Cobalt 60	0.019	U	0.020	0.091	0.038	04/28/05	04/29/05	5118394	
Europium 152	-0.07	U	0.12	0.45	0.19	04/28/05	04/29/05	5118394	
Lead 212	**0.366**		**0.051**	**0.11**	**0.054**	**04/28/05**	**04/29/05**	**5118394**	
Lead 214	**0.381**		**0.056**	**0.12**	**0.055**	**04/28/05**	**04/29/05**	**5118394**	
Mercury 203	0.0002	U u,RS	0.017	0.058	0.027	04/28/05	04/29/05	5118394	
Potassium 40	**7.13**		**0.74**	**0.83**	**0.34**	**04/28/05**	**04/29/05**	**5118394**	
Radium (226)	**8.12**		**0.84**	**2.6**	**1.3**	**04/28/05**	**04/29/05**	**5118394**	
Radium 228	0.254	U u,RS	0.094	0.40	0.19	04/28/05	04/29/05	5118394	
Radium 223 (assumes e	0.19	U	0.19	0.69	0.33	04/28/05	04/29/05	5118394	
Radium 224	**2.30**	u,R11	**0.79**	**1.6**	**0.79**	**04/28/05**	**04/29/05**	**5118394**	
Ruthenium 106	0.25	U u,RS	0.19	0.77	0.35	04/28/05	04/29/05	5118394	
Sodium 22	0.031	U	0.027	0.12	0.051	04/28/05	04/29/05	5118394	
Strontium 85	-0.077	U	0.027	0.082	0.038	04/28/05	04/29/05	5118394	
Thallium 208	**0.158**		**0.033**	**0.061**	**0.027**	**04/28/05**	**04/29/05**	**5118394**	
Thorium 227	0.19	U u,RS	0.13	0.42	0.20	04/28/05	04/29/05	5118394	
Thorium 231	0.28	U	0.21	0.73	0.36	04/28/05	04/29/05	5118394	
Thorium 234	**7.50**		**0.47**	**1.1**	**0.55**	**04/28/05**	**04/29/05**	**5118394**	
Tin 113	0.015	U u,RS	0.020	0.078	0.036	04/28/05	04/29/05	5118394	
Uranium 235	**0.525**		**0.052**	**0.37**	**0.17**	**04/28/05**	**04/29/05**	**5118394**	
Yttrium 88	-0.007	U u,RS	0.018	0.074	0.027	04/28/05	04/29/05	5118394	
Iso PLUTONIUM (LONG CT) HAS & DOE MOD				pCi/g		3058/RP-725			
Plutonium 238	0.0	U u,RS	0.0	0.02	0.01	04/23/05	05/02/05	5113068	92
Plutonium 239/40	**0.310**		**0.029**	**0.006**	**0.0**	**04/23/05**	**05/02/05**	**5113068**	**92**
Iso AMERICIUM (LONG CT) HAS & DOE MOD				pCi/g		3006/RP-725			
Americium 241	0.0133	U u,RS	0.0064	0.018	0.0073	04/23/05	05/03/05	5113067	89
Iso URANIUM (LONG CT) HAS & DOE MOD				pCi/g		3050/RP-725			
Uranium 234	**20.0**		**0.91**	**0.02**	**0.0**	**05/11/05**	**05/12/05**	**5131544**	**89**
Uranium 235	**1.06**		**0.11**	**0.04**	**0.01**	**05/11/05**	**05/12/05**	**5131544**	**89**
Uranium 238	**18.7**		**0.85**	**0.04**	**0.01**	**05/11/05**	**05/12/05**	**5131544**	**89**

JAW 5/26/05

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58832

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-008
Work Order: G8WN1
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Mits by DOE RP-730 MOD				pCi/g		RP-730 MOD			
Americium 241	-0.016	U U,R5	0.026	0.091	0.043	04/28/05	04/29/05	5118394	
Bismuth 211 (assumes	**1.29**		**0.20**	**0.73**	**0.35**	**04/28/05**	**04/29/05**	**5118394**	
Bismuth 214	**0.385**		**0.069**	**0.26**	**0.12**	**04/28/05**	**04/29/05**	**5118394**	
Cadmium 109	0.40	U U,R5	0.28	1.0	0.48	04/28/05	04/29/05	5118394	
Cerium 139	-0.014	U	0.011	0.038	0.018	04/28/05	04/29/05	5118394	
Cesium 134	0.016	U	0.016	0.058	0.026	04/28/05	04/29/05	5118394	
Cesium 137	0.046	U	0.027	0.071	0.032	04/28/05	04/29/05	5118394	
Cobalt 60	-0.057	U	0.025	0.079	0.032	04/28/05	04/29/05	5118394	
Europium 152	-0.004	U	0.099	0.40	0.16	04/28/05	04/29/05	5118394	
Lead 212	**0.301**		**0.056**	**0.11**	**0.053**	**04/28/05**	**04/29/05**	**5118394**	
Lead 214	**0.418**		**0.053**	**0.13**	**0.059**	**04/28/05**	**04/29/05**	**5118394**	
Mercury 203	-0.01	U U,R5	0.015	0.053	0.025	04/28/05	04/29/05	5118394	
Potassium 40	**7.94**		**0.94**	**0.67**	**0.26**	**04/28/05**	**04/29/05**	**5118394**	
Radium (226)	**2.81**		**0.68**	**0.94**	**0.44**	**04/28/05**	**04/29/05**	**5118394**	
Radium 228	0.267	U U,R5	0.089	0.38	0.18	04/28/05	04/29/05	5118394	
Radium 223 (assumes e	0.10	U	0.15	0.56	0.27	04/28/05	04/29/05	5118394	
Radium 224	**2.11**	U,R11	**0.73**	**1.5**	**0.72**	**04/28/05**	**04/29/05**	**5118394**	
Ruthenium 106	-0.13	U U,R5	0.17	0.58	0.26	04/28/05	04/29/05	5118394	
Sodium 22	-0.015	U	0.026	0.093	0.040	04/28/05	04/29/05	5118394	
Strontium 85	-0.052	U	0.025	0.078	0.037	04/28/05	04/29/05	5118394	
Thallium 208	**0.138**		**0.032**	**0.063**	**0.028**	**04/28/05**	**04/29/05**	**5118394**	
Thorium 227	-0.07	U U,R5	0.12	0.33	0.16	04/28/05	04/29/05	5118394	
Thorium 231	0.43	U	0.16	0.57	0.28	04/28/05	04/29/05	5118394	
Thorium 234	**1.79**		**0.28**	**0.86**	**0.41**	**04/28/05**	**04/29/05**	**5118394**	
Tin 113	-0.015	U U,R5	0.023	0.077	0.036	04/28/05	04/29/05	5118394	
Uranium 235	0.186	U	0.045	0.34	0.16	04/28/05	04/29/05	5118394	
Yttrium 88	-0.015	U	0.011	0.020	0.0	04/28/05	04/29/05	5118394	
Iso PLUTONIUM (LONG CT) HAS & DOE MOD				pCi/g		3058/RP-725			
Plutonium 238	0.0	U U,R5	0.0	0.02	0.01	04/23/05	05/02/05	5113068	96
Plutonium 239/40	**0.236**		**0.024**	**0.014**	**0.005**	**04/23/05**	**05/02/05**	**5113068**	**96**
Iso AMERICIUM (LONG CT) HAS & DOE MOD				pCi/g		3006/RP-725			
Americium 241	0.0104	U U,R5	0.0054	0.015	0.0060	04/23/05	05/03/05	5113067	99
Iso URANIUM (LONG CT) HAS & DOE MOD				pCi/g		3050/RP-725			
Uranium 234	**3.54**		**0.20**	**0.04**	**0.01**	**05/11/05**	**05/12/05**	**5131544**	**108**
Uranium 235	**0.193**		**0.041**	**0.039**	**0.010**	**05/11/05**	**05/12/05**	**5131544**	**108**
Uranium 238	**2.61**		**0.16**	**0.04**	**0.01**	**05/11/05**	**05/12/05**	**5131544**	**108**

JAW 5/26/05

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58833

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-009
Work Order: G8WN2
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Nits by DOE RP-730 MOD				pCi/g		RP-730 MOD			
Americium 241	0.028	U U,R5	0.030	0.11	0.051	04/28/05	04/29/05	5118394	
Bismuth 211 (assumes	**2.33**		**0.28**	**1.0**	**0.49**	**04/28/05**	**04/29/05**	**5118394**	
Bismuth 214	**0.96**		**0.14**	**0.43**	**0.21**	**04/28/05**	**04/29/05**	**5118394**	
Cadmium 109	1.10	U U,R5	0.40	1.3	0.65	04/28/05	04/29/05	5118394	
Cerium 139	-0.013	U	0.015	0.050	0.024	04/28/05	04/29/05	5118394	
Cesium 134	0.004	U	0.026	0.083	0.038	04/28/05	04/29/05	5118394	
Cesium 137	-0.011	U	0.025	0.092	0.041	04/28/05	04/29/05	5118394	
Cobalt 60	0.018	U	0.023	0.099	0.042	04/28/05	04/29/05	5118394	
Europium 152	0.18	U	0.13	0.57	0.25	04/28/05	04/29/05	5118394	
Lead 212	**0.520**		**0.061**	**0.11**	**0.050**	**04/28/05**	**04/29/05**	**5118394**	
Lead 214	**0.819**		**0.086**	**0.13**	**0.060**	**04/28/05**	**04/29/05**	**5118394**	
Mercury 203	0.008	U U,R5	0.018	0.066	0.031	04/28/05	04/29/05	5118394	
Potassium 40	**7.63**		**0.92**	**0.95**	**0.40**	**04/28/05**	**04/29/05**	**5118394**	
Radium (226)	**3.97**		**0.65**	**1.1**	**0.54**	**04/28/05**	**04/29/05**	**5118394**	
Radium 228	**0.57**		**0.13**	**0.53**	**0.28**	**04/28/05**	**04/29/05**	**5118394**	
Radium 223 (assumes (	-0.02	U U,R5	0.20	0.71	0.34	04/28/05	04/29/05	5118394	
Radium 224	**2.04**	U,R11	**0.72**	**1.7**	**0.82**	**04/28/05**	**04/29/05**	**5118394**	
Ruthenium 106	0.08	U U,R5	0.17	0.66	0.29	04/28/05	04/29/05	5118394	
Sodium 22	0.024	U	0.027	0.11	0.049	04/28/05	04/29/05	5118394	
Strontium 85	-0.148	U	0.031	0.071	0.032	04/28/05	04/29/05	5118394	
Thallium 208	**0.262**		**0.046**	**0.086**	**0.039**	**04/28/05**	**04/29/05**	**5118394**	
Thorium 227	0.05	U U,R5	0.13	0.40	0.19	04/28/05	04/29/05	5118394	
Thorium 231	0.54	U	0.20	0.73	0.35	04/28/05	04/29/05	5118394	
Thorium 234	**2.97**		**0.33**	**1.0**	**0.50**	**04/28/05**	**04/29/05**	**5118394**	
Tin 113	-0.008	U U,R5	0.024	0.088	0.040	04/28/05	04/29/05	5118394	
Uranium 235	0.262	U	0.043	0.43	0.21	04/28/05	04/29/05	5118394	
Yttrium 88	0.016	U	0.016	0.087	0.033	04/28/05	04/29/05	5118394	
Iso PLUTONIUM (LONG CT) MAS & DOE MOD				pCi/g		3058/RP-725			
Plutonium 238	0.0	U U,R5	0.0	0.03	0.01	04/23/05	05/02/05	5113068	80
Plutonium 239/40	**0.219**		**0.026**	**0.018**	**0.006**	**04/23/05**	**05/02/05**	**5113068**	**80**
Iso AMERICIUM (LONG CT) MAS & DOE MOD				pCi/g		3006/RP-725			
Americium 241	0.0124	U U,R5	0.0068	0.020	0.0085	04/23/05	05/03/05	5113067	86
Iso URANIUM (LONG CT) MAS & DOE MOD				pCi/g		3050/RP-725			
Uranium 234	**1.59**		**0.12**	**0.04**	**0.02**	**05/11/05**	**05/12/05**	**5131544**	**101**
Uranium 235	**0.057** U,RM		**0.023**	**0.041**	**0.011**	**05/11/05**	**05/12/05**	**5131544**	**101**
Uranium 238	**1.24**		**0.10**	**0.02**	**0.0**	**05/11/05**	**05/12/05**	**5131544**	**101**

JMW 5/26/05

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58834

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-010
Work Order: G8WN3
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Rits by DOE RP-730 MOD				**pCi/g**		**RP-730 MOD**			
Americium 241	-0.044	U U,RS	0.023	0.073	0.034	04/28/05	04/29/05	5118394	
Bismuth 211 (assumes	**0.76**		**0.16**	**0.59**	**0.28**	**04/28/05**	**04/29/05**	**5118394**	
Bismuth 214	**0.317**		**0.067**	**0.23**	**0.11**	**04/28/05**	**04/29/05**	**5118394**	
Cadmium 109	0.29	U U,RS	0.24	0.86	0.41	04/28/05	04/29/05	5118394	
Cerium 139	0.010	U	0.011	0.040	0.019	04/28/05	04/29/05	5118394	
Cesium 134	0.0007	U	0.020	0.063	0.028	04/28/05	04/29/05	5118394	
Cesium 137	0.018	U	0.023	0.090	0.041	04/28/05	04/29/05	5118394	
Cobalt 60	0.015	U	0.022	0.094	0.040	04/28/05	04/29/05	5118394	
Europium 152	0.164	U	0.088	0.44	0.18	04/28/05	04/29/05	5118394	
Lead 212	**0.167**		**0.053**	**0.12**	**0.057**	**04/28/05**	**04/29/05**	**5118394**	
Lead 214	**0.270**		**0.049**	**0.12**	**0.054**	**04/28/05**	**04/29/05**	**5118394**	
Mercury 203	-0.020	U U,RS	0.015	0.051	0.024	04/28/05	04/29/05	5118394	
Potassium 40	**5.01**		**0.70**	**0.72**	**0.29**	**04/28/05**	**04/29/05**	**5118394**	
Radium (226)	0.95	U U,RS	0.32	1.3	0.60	04/28/05	04/29/05	5118394	
Radium 228	0.222	U	0.088	0.37	0.17	04/28/05	04/29/05	5118394	
Radium 223 (assumes e	0.06	U	0.14	0.52	0.24	04/28/05	04/29/05	5118394	
Radium 224	**1.99**	U,R11	**0.71**	**1.5**	**0.73**	**04/28/05**	**04/29/05**	**5118394**	
Ruthenium 106	0.11	U U,RS	0.17	0.66	0.30	04/28/05	04/29/05	5118394	
Sodium 22	0.003	U	0.020	0.081	0.034	04/28/05	04/29/05	5118394	
Strontium 85	-0.031	U	0.022	0.073	0.034	04/28/05	04/29/05	5118394	
Thallium 208	**0.087**		**0.023**	**0.068**	**0.031**	**04/28/05**	**04/29/05**	**5118394**	
Thorium 227	-0.02	U U,RS	0.11	0.33	0.15	04/28/05	04/29/05	5118394	
Thorium 231	-0.15	U	0.13	0.42	0.20	04/28/05	04/29/05	5118394	
Thorium 234	0.76	U	0.28	1.1	0.52	04/28/05	04/29/05	5118394	
Tin 113	0.006	U	0.019	0.070	0.032	04/28/05	04/29/05	5118394	
Uranium 235	0.157	U	0.075	0.29	0.14	04/28/05	04/29/05	5118394	
Yttrium 88	0.022	U	0.022	0.10	0.042	04/28/05	04/29/05	5118394	
Iso PLUTONIUM (LONG CT) MAS & DOE MOD				**pCi/g**		**3058/RP-725**			
Plutonium 238	0.011	U U,RS	0.011	0.033	0.015	04/23/05	05/04/05	5113068	85
Plutonium 239/40	**0.186**		**0.022**	**0.007**	**0.0**	**04/23/05**	**05/04/05**	**5113068**	**85**
Iso AMERICIUM (LONG CT) MAS & DOE MOD				**pCi/g**		**3006/RP-725**			
Americium 241	0.012	U U,RS	0.012	0.039	0.018	04/23/05	05/03/05	5113067	76
Iso URANIUM (LONG CT) MAS & DOE MOD				**pCi/g**		**3050/RP-725**			
Uranium 234	**1.73**		**0.13**	**0.04**	**0.01**	**05/11/05**	**05/12/05**	**5131544**	**94**
Uranium 235	**0.092** U,R11		**0.031**	**0.025**	**0.0**	**05/11/05**	**05/12/05**	**5131544**	**94**
Uranium 238	**1.15**		**0.10**	**0.05**	**0.02**	**05/11/05**	**05/12/05**	**5131544**	**94**

JW 5/26/05

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58836

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-011
Work Order: G8WN4
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	ULC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Nits by DOE RP-730 MOD				pCi/g		RP-730 MOD			
Americium 241	-0.007	U U,R5	0.021	0.062	0.029	04/28/05	04/29/05	5118394	
Bismuth 211 (assumes	**0.72**		**0.15**	**0.50**	**0.24**	**04/28/05**	**04/29/05**	**5118394**	
Bismuth 214	0.163	U U,R5	0.040	0.17	0.078	04/28/05	04/29/05	5118394	
Cadmium 109	0.30	U	0.21	0.75	0.36	04/28/05	04/29/05	5118394	
Cerium 139	-0.0057	U	0.0096	0.033	0.016	04/28/05	04/29/05	5118394	
Cesium 134	0.012	U	0.013	0.048	0.021	04/28/05	04/29/05	5118394	
Cesium 137	**0.092**		**0.023**	**0.056**	**0.025**	**04/28/05**	**04/29/05**	**5118394**	
Cobalt 60	-0.017	U U,R5	0.016	0.056	0.022	04/28/05	04/29/05	5118394	
Europium 152	-0.020	U	0.084	0.33	0.14	04/28/05	04/29/05	5118394	
Lead 212	**0.162**		**0.034**	**0.094**	**0.045**	**04/28/05**	**04/29/05**	**5118394**	
Lead 214	**0.256**		**0.045**	**0.093**	**0.043**	**04/28/05**	**04/29/05**	**5118394**	
Mercury 203	-0.012	U U,R5	0.012	0.039	0.018	04/28/05	04/29/05	5118394	
Potassium 40	**2.83**		**0.41**	**0.42**	**0.15**	**04/28/05**	**04/29/05**	**5118394**	
Radium (226)	**1.90**		**0.37**	**0.81**	**0.38**	**04/28/05**	**04/29/05**	**5118394**	
Radium 228	0.118	U U,R5	0.065	0.28	0.12	04/28/05	04/29/05	5118394	
Radium 223 (assumes e	0.04	U	0.12	0.42	0.20	04/28/05	04/29/05	5118394	
Radium 224	**1.15**	U,R5,11	**0.46** JAW	**1.1**	**0.54**	**04/28/05**	**04/29/05**	**5118394**	
Ruthenium 106	0.02	U U,R5	0.12	0.47	0.21	04/28/05	04/29/05	5118394	
Sodium 22	0.01	U	0.015	0.067	0.028	04/28/05	04/29/05	5118394	
Strontium 85	-0.085	U	0.021	0.054	0.025	04/28/05	04/29/05	5118394	
Thallium 208	**0.065**	U,R11	**0.024**	**0.047**	**0.020**	**04/28/05**	**04/29/05**	**5118394**	
Thorium 227	0.081	U U,R5	0.079	0.26	0.12	04/28/05	04/29/05	5118394	
Thorium 231	-0.07	U	0.11	0.36	0.17	04/28/05	04/29/05	5118394	
Thorium 234	**1.06**		**0.22**	**0.67**	**0.32**	**04/28/05**	**04/29/05**	**5118394**	
Tin 113	-0.0002	U U,R5	0.017	0.060	0.028	04/28/05	04/29/05	5118394	
Uranium 235	0.126	U	0.024	0.25	0.12	04/28/05	04/29/05	5118394	
Yttrium 88	0.0061	U	0.0062	0.045	0.015	04/28/05	04/29/05	5118394	
Iso PLUTONIUM (LONG CT) HAS & DOE MOD				pCi/g		3058/RP-725			
Plutonium 238	0.0	U U,R5	0.0	0.03	0.01	04/23/05	05/04/05	5113068	98
Plutonium 239/40	**0.104**		**0.016**	**0.017**	**0.006**	**04/23/05**	**05/04/05**	**5113068**	**98**
Iso AMERICIUM (LONG CT) HAS & DOE MOD				pCi/g		3006/RP-725			
Americium 241	0.0100	U U,R5	0.0083	0.027	0.012	04/23/05	05/03/05	5113067	79
Iso URANIUM (LONG CT) HAS & DOE MOD				pCi/g		3050/RP-725			
Uranium 234	**2.24**		**0.16**	**0.03**	**0.009**	**05/11/05**	**05/12/05**	**5131544**	**96**
Uranium 235	**0.106**		**0.032**	**0.043**	**0.011**	**05/11/05**	**05/12/05**	**5131544**	**96**
Uranium 238	**1.93**		**0.14**	**0.05**	**0.02**	**05/11/05**	**05/12/05**	**5131544**	**96**

JAW
5/26/05

LOT # F5D210345

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58837

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-012
Work Order: G8WN5
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				pCi/g		RP-730 MOD			
Americium 241	0.025	U U,RS	0.015	0.057	0.027	04/28/05	04/29/05	5118394	
Bismuth 211 (assumes	**0.57**		**0.11**	**0.43**	**0.20**	**04/28/05**	**04/29/05**	**5118394**	
Bismuth 214	**0.192**		**0.083**	**0.19**	**0.090**	**04/28/05**	**04/29/05**	**5118394**	
Cadmium 109	-0.15	U U,RS	0.16	0.53	0.25	04/28/05	04/29/05	5118394	
Cerium 139	-0.0030	U	0.0077	0.027	0.013	04/28/05	04/29/05	5118394	
Cesium 134	-0.024	U	0.013	0.038	0.017	04/28/05	04/29/05	5118394	
Cesium 137	0.050	U	0.019	0.050	0.022	04/28/05	04/29/05	5118394	
Cobalt 60	-0.005	U	0.019	0.074	0.032	04/28/05	04/29/05	5118394	
Europium 152	0.002	U	0.071	0.29	0.12	04/28/05	04/29/05	5118394	
Lead 212	0.065	U	0.028	0.073	0.035	04/28/05	04/29/05	5118394	
Lead 214	**0.213**		**0.034**	**0.081**	**0.037**	**04/28/05**	**04/29/05**	**5118394**	
Mercury 203	-0.0041	U U,RS	0.0089	0.032	0.015	04/28/05	04/29/05	5118394	
Potassium 40	**4.50**		**0.52**	**0.55**	**0.23**	**04/28/05**	**04/29/05**	**5118394**	
Radium (226)	**1.37**		**0.32**	**0.58**	**0.27**	**04/28/05**	**04/29/05**	**5118394**	
Radium 228	0.104	U U,RS	0.061	0.25	0.11	04/28/05	04/29/05	5118394	
Radium 223 (assumes ε	0.046	U	0.099	0.36	0.17	04/28/05	04/29/05	5118394	
Radium 224	**1.13**	U,R11	**0.41**	**0.94**	**0.45**	**04/28/05**	**04/29/05**	**5118394**	
Ruthenium 106	0.17	U U,RS	0.13	0.51	0.23	04/28/05	04/29/05	5118394	
Sodium 22	0.012	U	0.016	0.066	0.028	04/28/05	04/29/05	5118394	
Strontium 85	-0.055	U	0.017	0.050	0.023	04/28/05	04/29/05	5118394	
Thallium 208	**0.066**		**0.018**	**0.052**	**0.023**	**04/28/05**	**04/29/05**	**5118394**	
Thorium 227	0.103	U U,RS	0.061	0.21	0.099	04/28/05	04/29/05	5118394	
Thorium 231	0.106	U	0.087	0.32	0.15	04/28/05	04/29/05	5118394	
Thorium 234	**1.00**		**0.17**	**0.52**	**0.24**	**04/28/05**	**04/29/05**	**5118394**	
Tin 113	-0.026	U U,RS	0.014	0.044	0.020	04/28/05	04/29/05	5118394	
Uranium 235	0.090	U	0.021	0.20	0.093	04/28/05	04/29/05	5118394	
Yttrium 88	-0.014	U	0.015	0.052	0.019	04/28/05	04/29/05	5118394	
Iso PLUTONIUM (LONG CT) HAS & DOE MOD				pCi/g		3058/RP-725			
Plutonium 238	0.0	U U,RS	0.0	0.02	0.01	04/23/05	05/02/05	5113068	85
Plutonium 239/40	**0.100**		**0.016**	**0.006**	**0.0**	**04/23/05**	**05/02/05**	**5113068**	**85**
Iso AMERICIUM (LONG CT) HAS & DOE MOD				pCi/g		3006/RP-725			
Americium 241	-0.0044	U U,RS	-0.0045	0.021	0.0086	04/23/05	05/03/05	5113067	85
Iso URANIUM (LONG CT) HAS & DOE MOD				pCi/g		3050/RP-725			
Uranium 234	**1.68**		**0.13**	**0.04**	**0.01**	**05/11/05**	**05/12/05**	**5131544**	**98**
Uranium 235	**0.089** U,R11		**0.030**	**0.024**	**0.0**	**05/11/05**	**05/12/05**	**5131544**	**98**
Uranium 238	**1.45**		**0.12**	**0.02**	**0.0**	**05/11/05**	**05/12/05**	**5131544**	**98**

JAW 5/24/05

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58838

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-013
Work Order: G8WN7
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Mits by DOE RP-730 MOD				pCi/g		RP-730 MOD			
Americium 241	0.002	U U,RS	0.056	0.17	0.084	04/28/05	04/29/05	5118394	
Bismuth 211 (assumes	2.38		0.29	1.1	0.52	04/28/05	04/29/05	5118394	
Bismuth 214	0.66		0.12	0.40	0.19	04/28/05	04/29/05	5118394	
Cadmium 109	-1.32	U U,RS	0.54	1.7	0.82	04/28/05	04/29/05	5118394	
Cerium 139	0.023	U	0.019	0.060	0.028	04/28/05	04/29/05	5118394	
Cesium 134	-0.041	U	0.030	0.081	0.036	04/28/05	04/29/05	5118394	
Cesium 137	0.051	U	0.030	0.12	0.056	04/28/05	04/29/05	5118394	
Cobalt 60	0.041	U	0.024	0.11	0.049	04/28/05	04/29/05	5118394	
Europium 152	0.173	U	0.093	0.49	0.20	04/28/05	04/29/05	5118394	
Lead 212	0.632		0.083	0.14	0.064	04/28/05	04/29/05	5118394	
Lead 214	0.864		0.092	0.12	0.056	04/28/05	04/29/05	5118394	
Mercury 203	-0.00007	U U,RS	0.020	0.070	0.032	04/28/05	04/29/05	5118394	
Potassium 40	11.1		1.3	1.1	0.5	04/28/05	04/29/05	5118394	
Radium (226)	25.2		2.1	4.7	2.3	04/28/05	04/29/05	5118394	
Radium 228	0.78		0.15	0.63	0.30	04/28/05	04/29/05	5118394	
Radium 223 (assumes e	0.31	U U,RS	0.24	0.87	0.42	04/28/05	04/29/05	5118394	
Radium 224	0.74	U	0.60	1.8	0.86	04/28/05	04/29/05	5118394	
Ruthenium 106	0.46	U	0.21	0.90	0.41	04/28/05	04/29/05	5118394	
Sodium 22	-0.043	U	0.028	0.090	0.037	04/28/05	04/29/05	5118394	
Strontium 85	-0.137	U	0.032	0.080	0.036	04/28/05	04/29/05	5118394	
Thallium 208	0.208		0.038	0.094	0.043	04/28/05	04/29/05	5118394	
Thorium 227	-0.29	U U,RS	0.18	0.47	0.22	04/28/05	04/29/05	5118394	
Thorium 231	2.02		0.47	0.93	0.45	04/28/05	04/29/05	5118394	
Thorium 234	21.1		1.6	1.8	0.7	04/28/05	04/29/05	5118394	
Tin 113	-0.034	U U,RS	0.028	0.096	0.044	04/28/05	04/29/05	5118394	
Uranium 235	1.63		0.13	0.46	0.22	04/28/05	04/29/05	5118394	
Yttrium 88	-0.047	U U,RS	0.025	0.065	0.021	04/28/05	04/29/05	5118394	
--- Other Detected Radionuclides ---									
Actinium 228	0.69	U,R11	0.26	0.49	0.23	04/28/05	04/29/05	5118394	
Protactinium 234M	47.2		8.8	16	7.1	04/28/05	04/29/05	5118394	
Iso PLUTONIUM (LONG CT) HAS & DOE MOD				pCi/g		3058/RP-725			
Plutonium 238	0.0	U U,RS	0.0	0.02	0.01	04/23/05	05/02/05	5113068	92
Plutonium 239/40	0.048		0.054	0.013	0.004	04/23/05	05/02/05	5113068	92
Iso AMERICIUM (LONG CT) HAS & DOE MOD				pCi/g		3006/RP-725			
Americium 241	0.0196	U U,RS	0.0082	0.022	0.0097	04/23/05	05/03/05	5113067	88
Iso URANIUM (LONG CT) HAS & DOE MOD				pCi/g		3050/RP-725			
Uranium 234	37.3		1.8	0.2	0.04	05/11/05	05/12/05	5131544	103
Uranium 235	2.02		0.30	0.11	0.0	05/11/05	05/12/05	5131544	103
Uranium 238	31.2		1.5	0.2	0.04	05/11/05	05/12/05	5131544	103

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58839

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-014
Work Order: G8WN9
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				pCi/g		RP-730 MOD			
Americium 241	-0.026	U U,RS	0.035	0.099	0.048	04/28/05	04/30/05	5118394	
Bismuth 211 (assumes	**0.93**		**0.19**	**0.68**	**0.33**	**04/28/05**	**04/30/05**	**5118394**	
Bismuth 214	**0.488**		**0.078**	**0.29**	**0.14**	**04/28/05**	**04/30/05**	**5118394**	
Cadmium 109	0.26	U U,RS	0.34	1.2	0.56	04/28/05	04/30/05	5118394	
Cerium 139	-0.012	U |	0.013	0.044	0.021	04/28/05	04/30/05	5118394	
Cesium 134	0.010	U |	0.019	0.067	0.030	04/28/05	04/30/05	5118394	
Cesium 137	0.007	U |	0.026	0.095	0.044	04/28/05	04/30/05	5118394	
Cobalt 60	0.001	U |	0.022	0.088	0.037	04/28/05	04/30/05	5118394	
Europium 152	-0.02	U |	0.10	0.40	0.16	04/28/05	04/30/05	5118394	
Lead 212	**0.343**		**0.047**	**0.12**	**0.057**	**04/28/05**	**04/30/05**	**5118394**	
Lead 214	**0.414**		**0.055**	**0.15**	**0.070**	**04/28/05**	**04/30/05**	**5118394**	
Mercury 203	0.0	U U,RS	0.0	0.05	0.03	04/28/05	04/30/05	5118394	
Potassium 40	**16.0**		**1.3**	**0.9**	**0.4**	**04/28/05**	**04/30/05**	**5118394**	
Radium (226)	**4.39**		**0.60**	**0.99**	**0.47**	**04/28/05**	**04/30/05**	**5118394**	
Radium 228	0.45	U U,RS	0.11	0.46	0.22	04/28/05	04/30/05	5118394	
Radium 223 (assumes e	0.05	U J	0.20	0.70	0.33	04/28/05	04/30/05	5118394	
Radium 224	**2.49**	U,R11	**0.84**	**1.6**	**0.80**	**04/28/05**	**04/30/05**	**5118394**	
Ruthenium 106	0.16	U U,RS	0.15	0.62	0.28	04/28/05	04/30/05	5118394	
Sodium 22	0.034	U |	0.024	0.10	0.046	04/28/05	04/30/05	5118394	
Strontium 85	-0.070	U |	0.024	0.069	0.032	04/28/05	04/30/05	5118394	
Thallium 208	**0.163**		**0.031**	**0.064**	**0.029**	**04/28/05**	**04/30/05**	**5118394**	
Thorium 227	0.18	U U,RS	0.12	0.38	0.18	04/28/05	04/30/05	5118394	
Thorium 231	0.006	U |	0.18	0.63	0.31	04/28/05	04/30/05	5118394	
Thorium 234	**2.49**		**0.30**	**1.0**	**0.50**	**04/28/05**	**04/30/05**	**5118394**	
Tin 113	0.033	U U,RS	0.019	0.077	0.036	04/28/05	04/30/05	5118394	
Uranium 235	0.290	U |	0.040	0.39	0.19	04/28/05	04/30/05	5118394	
Yttrium 88	0.008	U |	0.013	0.068	0.025	04/28/05	04/30/05	5118394	
Iso PLUTONIUM (LONG CT) MAS & DOE MOD				pCi/g		3050/RP-725			
Plutonium 238	0.0031	U U,RS	0.0052	0.019	0.0075	04/23/05	05/02/05	5113068	97
Plutonium 239/40	**0.455**		**0.034**	**0.011**	**0.003**	**04/23/05**	**05/02/05**	**5113068**	**97**
Iso AMERICIUM (LONG CT) MAS & DOE MOD				pCi/g		3006/RP-725			
Americium 241	0.0048	U U,RS	0.0098	0.038	0.014	05/06/05	05/11/05	5126224	76
Iso URANIUM (LONG CT) MAS & DOE MOD				pCi/g		3050/RP-725			
Uranium 234	**7.40**		**0.37**	**0.04**	**0.01**	**05/11/05**	**05/12/05**	**5131544**	**99**
Uranium 235	**0.340**		**0.057**	**0.050**	**0.016**	**05/11/05**	**05/12/05**	**5131544**	**99**
Uranium 238	**4.84**		**0.27**	**0.03**	**0.009**	**05/11/05**	**05/12/05**	**5131544**	**99**

jaw 5/26/05

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58840

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-015
Work Order: G8WPC
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Nits by DOE RP-730 MOD				pCi/g		RP-730 MOD			
Americium 241	0.008	U U,RS	0.027	0.089	0.042	04/28/05	04/30/05	5118394	
Bismuth 211 (assumes	1.28		0.17	0.69	0.33	04/28/05	04/30/05	5118394	
Bismuth 214	0.364		0.066	0.25	0.12	04/28/05	04/30/05	5118394	
Cadmium 109	0.44	U U,RS	0.25	0.92	0.44	04/28/05	04/30/05	5118394	
Cerium 139	-0.013	U	0.011	0.039	0.018	04/28/05	04/30/05	5118394	
Cesium 134	-0.020	U	0.019	0.055	0.024	04/28/05	04/30/05	5118394	
Cesium 137	0.051	U	0.029	0.12	0.056	04/28/05	04/30/05	5118394	
Cobalt 60	0.005	U	0.029	0.12	0.051	04/28/05	04/30/05	5118394	
Europium 152	0.145	U	0.089	0.44	0.18	04/28/05	04/30/05	5118394	
Lead 212	0.344		0.046	0.10	0.048	04/28/05	04/30/05	5118394	
Lead 214	0.403		0.054	0.11	0.051	04/28/05	04/30/05	5118394	
Mercury 203	-0.008	U U,RS	0.015	0.053	0.024	04/28/05	04/30/05	5118394	
Potassium 40	7.29		0.87	0.91	0.38	04/28/05	04/30/05	5118394	
Radium (226)	1.64		0.35	1.4	0.70	04/28/05	04/30/05	5118394	
Radium 228	0.32	U U,RS	0.10	0.44	0.20	04/28/05	04/30/05	5118394	
Radium 223 (assumes e	0.01	U	0.15	0.55	0.26	04/28/05	04/30/05	5118394	
Radium 224	1.09	U	0.51	1.4	0.66	04/28/05	04/30/05	5118394	
Ruthenium 106	0.33	U	0.17	0.71	0.32	04/28/05	04/30/05	5118394	
Sodium 22	0.006	U	0.025	0.10	0.043	04/28/05	04/30/05	5118394	
Strontium 85	-0.074	U	0.025	0.075	0.035	04/28/05	04/30/05	5118394	
Thallium 208	0.120		0.030	0.079	0.036	04/28/05	04/30/05	5118394	
Thorium 227	0.01	U U,RS	0.11	0.34	0.16	04/28/05	04/30/05	5118394	
Thorium 231	0.24	U	0.13	0.48	0.23	04/28/05	04/30/05	5118394	
Thorium 234	1.16		0.24	0.78	0.37	04/28/05	04/30/05	5118394	
Tin 113	-0.022	U U,RS	0.019	0.063	0.028	04/28/05	04/30/05	5118394	
Uranium 235	0.219	U	0.099	0.31	0.15	04/28/05	04/30/05	5118394	
Yttrium 88	-0.024	U	0.021	0.071	0.026	04/28/05	04/30/05	5118394	
Iso PLUTONIUM (LONG CT) HAS & DOE MOD				pCi/g		3058/RP-725			
Plutonium 238	0.0024	U U,RS	0.0053	0.020	0.0078	04/23/05	05/02/05	5113068	86
Plutonium 239/40	0.842		0.054	0.006	0.0	04/23/05	05/02/05	5113068	86
Iso AMERICIUM (LONG CT) HAS & DOE MOD				pCi/g		3006/RP-725			
Americium 241	0.018	U U,RS	0.012	0.037	0.014	05/06/05	05/11/05	5126224	76
Iso URANIUM (LONG CT) HAS & DOE MOD				pCi/g		3050/RP-725			
Uranium 234	3.03		0.18	0.06	0.03	05/11/05	05/12/05	5131544	103
Uranium 235	0.194		0.042	0.056	0.021	05/11/05	05/12/05	5131544	103
Uranium 238	2.42		0.16	0.05	0.02	05/11/05	05/12/05	5131544	103

JAW 5/26/05

DATA VALIDATION COVER SHEET (Example)

SECTION I.

REQUEST NUMBER: 31605 COST CODE: _____

VALIDATION DATE: _____

LAB NAME: STL LAB CODE: _____

VALIDATOR: _____ ORGANIZATION: _____

ANALYTICAL SUITE:

___ VOLATILES
___ SEMIVOLATILES
___ PESTICIDES/AROCLORS
___ HIGH EXPLOSIVES
___ INORGANICS
___ RADIOCHEMISTRY

OTHER (describe) _____

SECTION II. COMPLETENESS CHECKLIST

Item	Present? (Y/N/NA)	Item	Present? (Y/N/NA)
1. COC form(s)		2. Case Narrative	
3. Sample Results		4. Sample Chromatograms	
5. Standard Chromatograms		6. Quantitation Reports	
7. QC Forms			

Identify any samples in the assigned Request Number that are missing:

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

Comments: include information about requests to the laboratory and agreed upon date of resolution and lab contact: (Attach additional comment sheets as necessary)

_____

_____

_____

Signature/1st validation: _____ Date/1st validation: _____

Signature/2nd validation: _____ Date/2nd validation: _____

STL

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Tel: 314 298 8566 Fax: 314 298 8757
www.stl-inc.com

RECD MAY 27 2005

ANALYTICAL REPORT

REVISED

PROJECT NO. 31608

Los Alamos Non-Rad

Lot #: F5D210345

Joylene Valdez or Keith Greene

Los Alamos National Laboratory
SMO TA-00 Bldg 1237
DP: 03U; MS: 707
Los Alamos, NM 87545

SEVERN TRENT LABORATORIES, INC.

Elaine Wild for
Ed Kao
Project Manager

May 21, 2005

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TOTAL NUMBER OF PAGES IN PACKAGE	**922**

Revised
Case Narrative
LOT NUMBER: **F5D210345**
LANL Request Number: **3160S**

This report was revised to include gross alpha/beta results.

This report contains the analytical results for the 15 samples received under chain of custody number by STL St. Louis on April 21, 2005. These samples are associated with your Los Alamos Non-Rad project.

All applicable quality control procedures met method-specified acceptance criteria except as noted on the following page.

This report is incomplete without the case narrative. All chemical analysis results are based upon dry weight correction as required per the statement of work. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances

Sample Receiving

Samples were received at 4.0 °C. No problems were noted at the time of sample receipt.

Gamma Spec Method RP-730

QC Batch: 5118394
The Method Blank shows no contamination below the reporting limit.

The LCS is in control for spike compounds.

The Batch QC Duplicate was performed on F5D210345-001. The RPD/RER values are inside stated limits.

The gamma Radium-226 is reported from 186.10 keV. U-235 has an energy line at 185.72 keV (abn. 54%). The presence of U-235 may cause a high bias in the Ra-226 results.

Actinides by Method A-01-R

Americium
QC Batch: 5126224
The Method Blank shows no contamination below the reporting limit. Tracer recovery is within laboratory stated limits.

The LCS is in control for spike and tracer compounds.

The Batch QC Duplicate was performed on F5D210345-001. The Duplicate RER value is inside stated limits. Tracer recovery is in control.

QC Batch: 5113067

The Method Blank shows no contamination below the reporting limit. Tracer recovery is within laboratory stated limits.

The LCS is in control for spike and tracer compounds.

The Batch QC Duplicate was performed on F5D210345-001. The Duplicate RER value is inside stated limits. Tracer recovery is in control.

Plutonium

QC Batch: 5113068

The Method Blank shows no contamination below the reporting limit. Tracer recovery is within laboratory stated limits.

The LCS is in control for spike and tracer compounds.

The Batch QC Duplicate was performed on F5D210345-001. The Duplicate RER value is inside stated limits. Tracer recovery is in control.

Uranium

QC Batch: 5131544

The Method Blank shows contamination below the reporting limit. Tracer recovery is within laboratory stated limits.

The LCS is in control for spike and tracer compounds.

The Batch QC Duplicate was performed on F5D210345-001. The Duplicate RER value is inside stated limits. Tracer recovery is in control.

Affected Samples:
F5D210345 (8): RE73-05-58832

The Uranium 232 tracer recovery is outside control limits of 50-105%. The sample was re-extracted due to other reasons, but the initial analysis had an acceptable tracer recovery. This analysis was comparable to the initial result (+/-uncertainty). This anomaly had no aparent affect on the sample result. The results are reported with this narrative.

I certify that this data is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the signature on the front page, has authorized release of the data contained in this hardcopy.

METHOD / ANALYST SUMMARY

F5D210345

ANALYTICAL METHOD	ANALYST	ANALYST ID
DOE RP-730 MOD	Chris Hough	400214
NAS/DOE 3006/RP-725 MOD	Rhonda Ridenhower	060040
NAS/DOE 3050/RP-725 MOD	Rhonda Ridenhower	060040
NAS/DOE 3058/RP-725 MOD	Rhonda Ridenhower	060040
SW846 9310 MOD	Rhonda Ridenhower	060040

References:

DOE "DOE METHODS FOR EVALUATING ENVIRONMENTAL AND WASTE MANAGEMENT SAMPLES" OCTOBER 1994 US DEPARTMENT OF ENERGY

NAS/DOE NATIONAL ACADEMY OF SCIENCES. "DOE METHODS FOR EVALUATING ENVIRONMENTL AND WASTE MANGEMENT SAMPLE" OCTOBER 1994 US DEPARTMENT OF ENERGY.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

F5D210345

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
G8WNH	001	RE73-05-58824	04/19/05	
G8WNN	002	RE73-05-58825	04/19/05	
G8WNQ	003	RE73-05-58826	04/19/05	
G8WNR	004	RE73-05-58827	04/19/05	
G8WNV	005	RE73-05-58828	04/19/05	
G8WNW	006	RE73-05-58830	04/19/05	
G8WN0	007	RE73-05-58831	04/19/05	
G8WN1	008	RE73-05-58832	04/19/05	
G8WN2	009	RE73-05-58833	04/19/05	
G8WN3	010	RE73-05-58834	04/19/05	
G8WN4	011	RE73-05-58836	04/19/05	
G8WN5	012	RE73-05-58837	04/19/05	
G8WN7	013	RE73-05-58838	04/19/05	
G8WN9	014	RE73-05-58839	04/19/05	
G8WPC	015	RE73-05-58840	04/19/05	

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58824

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-001
Work Order: G8WNH
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				**pCi/g**		**RP-730 MOD**			
Americium 241	0.049	U	0.030	0.095	0.045	04/28/05	04/29/05	5118394	
Bismuth 211 (assumes	**1.32**		**0.20**	**0.70**	**0.34**	**04/28/05**	**04/29/05**	**5118394**	
Bismuth 214	**0.277**		**0.070**	**0.24**	**0.12**	**04/28/05**	**04/29/05**	**5118394**	
Cadmium 109	-0.27	U	0.36	1.0	0.51	04/28/05	04/29/05	5118394	
Cerium 139	-0.006	U	0.011	0.039	0.018	04/28/05	04/29/05	5118394	
Cesium 134	0.004	U	0.021	0.068	0.031	04/28/05	04/29/05	5118394	
Cesium 137	-0.039	U	0.024	0.077	0.035	04/28/05	04/29/05	5118394	
Cobalt 60	0.015	U	0.018	0.080	0.034	04/28/05	04/29/05	5118394	
Europium 152	0.023	U	0.078	0.34	0.14	04/28/05	04/29/05	5118394	
Lead 212	**0.383**		**0.044**	**0.084**	**0.039**	**04/28/05**	**04/29/05**	**5118394**	
Lead 214	**0.462**		**0.052**	**0.13**	**0.059**	**04/28/05**	**04/29/05**	**5118394**	
Mercury 203	0.022	U	0.013	0.051	0.024	04/28/05	04/29/05	5118394	
Potassium 40	**8.51**		**0.96**	**0.93**	**0.40**	**04/28/05**	**04/29/05**	**5118394**	
Radium (226)	**4.74**		**0.57**	**0.80**	**0.38**	**04/28/05**	**04/29/05**	**5118394**	
Radium 228	0.27	U	0.15	0.44	0.20	04/28/05	04/29/05	5118394	
Radium 223 (assumes ∈	-0.12	U	0.16	0.54	0.26	04/28/05	04/29/05	5118394	
Radium 224	**2.90**		**0.92**	**1.6**	**0.78**	**04/28/05**	**04/29/05**	**5118394**	
Ruthenium 106	-0.05	U	0.15	0.55	0.24	04/28/05	04/29/05	5118394	
Sodium 22	0.025	U	0.019	0.085	0.036	04/28/05	04/29/05	5118394	
Strontium 85	-0.043	U	0.024	0.076	0.036	04/28/05	04/29/05	5118394	
Thallium 208	**0.123**		**0.032**	**0.070**	**0.032**	**04/28/05**	**04/29/05**	**5118394**	
Thorium 227	0.11	U	0.11	0.34	0.16	04/28/05	04/29/05	5118394	
Thorium 231	0.56	U	0.19	0.60	0.29	04/28/05	04/29/05	5118394	
Thorium 234	**3.87**		**0.40**	**0.89**	**0.43**	**04/28/05**	**04/29/05**	**5118394**	
Tin 113	-0.015	U	0.019	0.066	0.030	04/28/05	04/29/05	5118394	
Uranium 235	0.313	U	0.038	0.33	0.16	04/28/05	04/29/05	5118394	
Yttrium 88	-0.007	U	0.020	0.080	0.032	04/28/05	04/29/05	5118394	
--- Other Detected Radionuclides ---									
Actinium 228	**0.36**		**0.12**	**0.31**	**0.14**	**04/28/05**	**04/29/05**	**5118394**	
Iso PLUTONIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3058/RP-725**			
Plutonium 238	0.0	U	0.0	0.03	0.01	04/23/05	05/02/05	5113068	99
Plutonium 239/40	**0.360**		**0.030**	**0.014**	**0.005**	**04/23/05**	**05/02/05**	**5113068**	**99**
Iso AMERICIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3006/RP-725**			
Americium 241	**0.035**		**0.011**	**0.029**	**0.013**	**04/23/05**	**05/03/05**	**5113067**	**89**
GROSS A/B BY GFPC SW846 9310 MOD				**pCi/g**		**9310 MOD**			
Gross Alpha	**7.51**		**0.76**	**1.3**	**0.60**	**05/19/05**	**05/19/05**	**5139111**	
Gross Beta	**13.7**		**0.94**	**1.7**	**0.82**	**05/19/05**	**05/19/05**	**5139111**	

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58824

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-001
Work Order: G8WNH
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Iso URANIUM (LONG CT) HASL & DOE MOD				pCi/g		3050/RP-725			
Uranium 234	8.41		0.41	0.05	0.02	05/11/05	05/12/05	5131544	100
Uranium 235	0.400		0.061	0.023	0.0	05/11/05	05/12/05	5131544	100
Uranium 238	7.64		0.38	0.03	0.009	05/11/05	05/12/05	5131544	100

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC
U. Result is less than the sample detection limit.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58824 DUP

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-001X
Work Order: G8WNH
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Iso AMERICIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3006/RP-725**			
Americium 241	**0.0342**		**0.0079**	**0.013**	**0.0045**	**04/23/05**	**05/03/05**	**5113067**	**91**
Iso PLUTONIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3058/RP-725**			
Plutonium 238	0.0	U	0.0	0.03	0.01	04/23/05	05/02/05	5113068	89
Plutonium 239/40	**0.456**		**0.036**	**0.012**	**0.004**	**04/23/05**	**05/02/05**	**5113068**	**89**
Gamma Cs-137 & Hits by DOE RP-730 MOD				**pCi/g**		**RP-730 MOD**			
Americium 241	0.049	U	0.034	0.12	0.056	04/28/05	04/29/05	5118394	
Bismuth 211 (assumes	**1.27**		**0.20**	**0.75**	**0.36**	**04/28/05**	**04/29/05**	**5118394**	
Bismuth 214	**0.356**		**0.079**	**0.27**	**0.13**	**04/28/05**	**04/29/05**	**5118394**	
Cadmium 109	0.07	U	0.45	1.2	0.57	04/28/05	04/29/05	5118394	
Cerium 139	-0.022	U	0.012	0.041	0.019	04/28/05	04/29/05	5118394	
Cesium 134	0.010	U	0.021	0.069	0.031	04/28/05	04/29/05	5118394	
Cesium 137	0.004	U	0.022	0.082	0.037	04/28/05	04/29/05	5118394	
Cobalt 60	-0.006	U	0.024	0.093	0.039	04/28/05	04/29/05	5118394	
Europium 152	0.02	U	0.11	0.47	0.20	04/28/05	04/29/05	5118394	
Lead 212	**0.277**		**0.060**	**0.13**	**0.065**	**04/28/05**	**04/29/05**	**5118394**	
Lead 214	**0.453**		**0.059**	**0.13**	**0.061**	**04/28/05**	**04/29/05**	**5118394**	
Mercury 203	-0.023	U	0.016	0.050	0.023	04/28/05	04/29/05	5118394	
Potassium 40	**7.52**		**0.85**	**0.82**	**0.33**	**04/28/05**	**04/29/05**	**5118394**	
Radium (226)	**4.68**		**0.59**	**0.99**	**0.47**	**04/28/05**	**04/29/05**	**5118394**	
Radium 228	0.35	U	0.10	0.45	0.21	04/28/05	04/29/05	5118394	
Radium 223 (assumes ε	-0.12	U	0.19	0.64	0.31	04/28/05	04/29/05	5118394	
Radium 224	**1.88**		**0.72**	**1.7**	**0.81**	**04/28/05**	**04/29/05**	**5118394**	
Ruthenium 106	-0.03	U	0.18	0.67	0.30	04/28/05	04/29/05	5118394	
Sodium 22	-0.014	U	0.024	0.091	0.038	04/28/05	04/29/05	5118394	
Strontium 85	-0.057	U	0.026	0.083	0.039	04/28/05	04/29/05	5118394	
Thallium 208	**0.177**		**0.036**	**0.063**	**0.028**	**04/28/05**	**04/29/05**	**5118394**	
Thorium 227	0.10	U	0.14	0.42	0.20	04/28/05	04/29/05	5118394	
Thorium 231	0.60	U	0.19	0.63	0.31	04/28/05	04/29/05	5118394	
Thorium 234	**4.09**		**0.41**	**1.1**	**0.53**	**04/28/05**	**04/29/05**	**5118394**	
Tin 113	0.012	U	0.021	0.078	0.036	04/28/05	04/29/05	5118394	
Uranium 235	0.309	U	0.039	0.39	0.19	04/28/05	04/29/05	5118394	
Yttrium 88	0.0009	U	0.022	0.095	0.037	04/28/05	04/29/05	5118394	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC
U Result is less than the sample detection limit.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58825

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-002
Work Order: G8WNN
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				**pCi/g**		**RP-730 MOD**			
Americium 241	-0.007	U	0.021	0.077	0.037	04/28/05	04/29/05	5118394	
Bismuth 211 (assumes	**0.78**		**0.14**	**0.53**	**0.25**	**04/28/05**	**04/29/05**	**5118394**	
Bismuth 214	**0.300**		**0.053**	**0.21**	**0.098**	**04/28/05**	**04/29/05**	**5118394**	
Cadmium 109	-0.17	U	0.21	0.72	0.35	04/28/05	04/29/05	5118394	
Cerium 139	-0.0126	U	0.0095	0.032	0.015	04/28/05	04/29/05	5118394	
Cesium 134	0.005	U	0.017	0.059	0.027	04/28/05	04/29/05	5118394	
Cesium 137	0.067	U	0.024	0.10	0.047	04/28/05	04/29/05	5118394	
Cobalt 60	0.008	U	0.020	0.085	0.037	04/28/05	04/29/05	5118394	
Europium 152	-0.076	U	0.087	0.31	0.13	04/28/05	04/29/05	5118394	
Lead 212	**0.245**		**0.034**	**0.078**	**0.036**	**04/28/05**	**04/29/05**	**5118394**	
Lead 214	**0.302**		**0.044**	**0.080**	**0.036**	**04/28/05**	**04/29/05**	**5118394**	
Mercury 203	0.006	U	0.013	0.048	0.022	04/28/05	04/29/05	5118394	
Potassium 40	**5.06**		**0.60**	**0.63**	**0.26**	**04/28/05**	**04/29/05**	**5118394**	
Radium (226)	**4.91**		**0.58**	**1.9**	**0.92**	**04/28/05**	**04/29/05**	**5118394**	
Radium 228	0.124	U	0.071	0.29	0.13	04/28/05	04/29/05	5118394	
Radium 223 (assumes ε	-0.13	U	0.13	0.45	0.21	04/28/05	04/29/05	5118394	
Radium 224	0.90	U	0.39	1.1	0.54	04/28/05	04/29/05	5118394	
Ruthenium 106	0.07	U	0.13	0.49	0.22	04/28/05	04/29/05	5118394	
Sodium 22	-0.004	U	0.016	0.064	0.026	04/28/05	04/29/05	5118394	
Strontium 85	0.039	U	0.016	0.059	0.027	04/28/05	04/29/05	5118394	
Thallium 208	0.053	U	0.022	0.087	0.041	04/28/05	04/29/05	5118394	
Thorium 227	0.022	U	0.097	0.30	0.14	04/28/05	04/29/05	5118394	
Thorium 231	0.40	U	0.13	0.49	0.24	04/28/05	04/29/05	5118394	
Thorium 234	**2.39**		**0.29**	**0.70**	**0.33**	**04/28/05**	**04/29/05**	**5118394**	
Tin 113	-0.004	U	0.015	0.053	0.024	04/28/05	04/29/05	5118394	
Uranium 235	**0.328**		**0.037**	**0.26**	**0.12**	**04/28/05**	**04/29/05**	**5118394**	
Yttrium 88	0.044	U	0.017	0.093	0.039	04/28/05	04/29/05	5118394	
Iso PLUTONIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3058/RP-725**			
Plutonium 238	0.0	U	0.0	0.03	0.01	04/23/05	05/02/05	5113068	57
Plutonium 239/40	**2.34**		**0.14**	**0.02**	**0.006**	**04/23/05**	**05/02/05**	**5113068**	**57**
Iso AMERICIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3006/RP-725**			
Americium 241	0.0151	U	0.0088	0.027	0.011	04/23/05	05/03/05	5113067	87
GROSS A/B BY GFPC SW846 9310 MOD				**pCi/g**		**9310 MOD**			
Gross Alpha	**4.27**		**0.59**	**1.4**	**0.66**	**05/19/05**	**05/19/05**	**5139111**	
Gross Beta	**6.15**		**0.61**	**1.5**	**0.75**	**05/19/05**	**05/19/05**	**5139111**	
Iso URANIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3050/RP-725**			
Uranium 234	**12.4**		**0.57**	**0.04**	**0.02**	**05/11/05**	**05/12/05**	**5131544**	**105**
Uranium 235	**0.458**		**0.065**	**0.047**	**0.015**	**05/11/05**	**05/12/05**	**5131544**	**105**
Uranium 238	**5.78**		**0.30**	**0.04**	**0.02**	**05/11/05**	**05/12/05**	**5131544**	**105**

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC
U Result is less than the sample detection limit.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58826

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-003
Work Order: G8WNO
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Mits by DOE RP-730 MOD				pCi/g		RP-730 MOD			
Americium 241	0.011	U	0.035	0.12	0.057	04/28/05	04/29/05	5118394	
Bismuth 211 (assumes	**1.20**		**0.23**	**0.88**	**0.42**	**04/28/05**	**04/29/05**	**5118394**	
Bismuth 214	**0.548**		**0.098**	**0.38**	**0.18**	**04/28/05**	**04/29/05**	**5118394**	
Cadmium 109	0.13	U	0.36	1.3	0.63	04/28/05	04/29/05	5118394	
Cerium 139	-0.020	U	0.016	0.052	0.024	04/28/05	04/29/05	5118394	
Cesium 134	-0.036	U	0.024	0.072	0.032	04/28/05	04/29/05	5118394	
Cesium 137	0.023	U	0.030	0.11	0.052	04/28/05	04/29/05	5118394	
Cobalt 60	0.014	U	0.020	0.093	0.038	04/28/05	04/29/05	5118394	
Europium 152	-0.001	U	0.15	0.58	0.24	04/28/05	04/29/05	5118394	
Lead 212	**0.328**		**0.060**	**0.13**	**0.062**	**04/28/05**	**04/29/05**	**5118394**	
Lead 214	**0.412**		**0.069**	**0.17**	**0.079**	**04/28/05**	**04/29/05**	**5118394**	
Mercury 203	-0.021	U	0.019	0.064	0.029	04/28/05	04/29/05	5118394	
Potassium 40	**8.73**		**0.995**	**0.76**	**0.29**	**04/28/05**	**04/29/05**	**5118394**	
Radium (226)	**6.21**		**0.84**	**1.3**	**0.61**	**04/28/05**	**04/29/05**	**5118394**	
Radium 228	**0.44**		**0.11**	**0.29**	**0.12**	**04/28/05**	**04/29/05**	**5118394**	
Radium 223 (assumes ε	-0.11	U	0.22	0.74	0.35	04/28/05	04/29/05	5118394	
Radium 224	**2.04**		**0.75**	**1.8**	**0.85**	**04/28/05**	**04/29/05**	**5118394**	
Ruthenium 106	0.02	U	0.22	0.83	0.37	04/28/05	04/29/05	5118394	
Sodium 22	-0.041	U	0.026	0.082	0.032	04/28/05	04/29/05	5118394	
Strontium 85	-0.106	U	0.031	0.084	0.038	04/28/05	04/29/05	5118394	
Thallium 208	**0.141**		**0.040**	**0.089**	**0.040**	**04/28/05**	**04/29/05**	**5118394**	
Thorium 227	0.11	U	0.12	0.41	0.19	04/28/05	04/29/05	5118394	
Thorium 231	**0.92**		**0.22**	**0.83**	**0.40**	**04/28/05**	**04/29/05**	**5118394**	
Thorium 234	**4.33**		**0.47**	**1.0**	**0.50**	**04/28/05**	**04/29/05**	**5118394**	
Tin 113	-0.028	U	0.025	0.085	0.038	04/28/05	04/29/05	5118394	
Uranium 235	0.410	U	0.056	0.46	0.22	04/28/05	04/29/05	5118394	
Yttrium 88	0.008	U	0.021	0.099	0.038	04/28/05	04/29/05	5118394	
Iso PLUTONIUM (LONG CT) HAS & DOE MOD				pCi/g		3058/RP-725			
Plutonium 238	0.0	U	0.0	0.02	0.008	04/23/05	05/02/05	5113068	101
Plutonium 239/40	**0.475**		**0.036**	**0.017**	**0.006**	**04/23/05**	**05/02/05**	**5113068**	**101**
Iso AMERICIUM (LONG CT) HAS & DOE MOD				pCi/g		3006/RP-725			
Americium 241	**0.0236**		**0.0073**	**0.016**	**0.0063**	**04/23/05**	**05/03/05**	**5113067**	**92**
GROSS A/B BY GFPC SW846 9310 MOD				pCi/g		9310 MOD			
Gross Alpha	**9.33**		**0.93**	**1.7**	**0.78**	**05/19/05**	**05/19/05**	**5139111**	
Gross Beta	**13.5**		**0.89**	**1.5**	**0.71**	**05/19/05**	**05/19/05**	**5139111**	
Iso URANIUM (LONG CT) HAS & DOE MOD				pCi/g		3050/RP-725			
Uranium 234	**8.22**		**0.41**	**0.04**	**0.02**	**05/11/05**	**05/12/05**	**5131544**	**99**
Uranium 235	**0.475**		**0.067**	**0.041**	**0.011**	**05/11/05**	**05/12/05**	**5131544**	**99**
Uranium 238	**7.01**		**0.36**	**0.02**	**0.0**	**05/11/05**	**05/12/05**	**5131544**	**99**

NOTE(S)

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MDC is determined by instrument performance only.

Bold results are greater than the MDC

U Result is less than the sample detection limit.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58827

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-004
Work Order: G8WNR
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				**pCi/g**		**RP-730 MOD**			
Americium 241	0.003	U	0.042	0.13	0.065	04/28/05	04/29/05	5118394	
Bismuth 211 (assumes	**2.06**		**0.27**	**0.92**	**0.45**	**04/28/05**	**04/29/05**	**5118394**	
Bismuth 214	**0.66**		**0.10**	**0.34**	**0.16**	**04/28/05**	**04/29/05**	**5118394**	
Cadmium 109	1.36	U	0.41	1.5	0.71	04/28/05	04/29/05	5118394	
Cerium 139	-0.022	U	0.018	0.049	0.024	04/28/05	04/29/05	5118394	
Cesium 134	0.012	U	0.025	0.081	0.038	04/28/05	04/29/05	5118394	
Cesium 137	0.104	U	0.035	0.14	0.065	04/28/05	04/29/05	5118394	
Cobalt 60	0.011	U	0.028	0.11	0.049	04/28/05	04/29/05	5118394	
Europium 152	0.26	U	0.12	0.57	0.25	04/28/05	04/29/05	5118394	
Lead 212	**0.771**		**0.075**	**0.11**	**0.053**	**04/28/05**	**04/29/05**	**5118394**	
Lead 214	**0.710**		**0.069**	**0.15**	**0.068**	**04/28/05**	**04/29/05**	**5118394**	
Mercury 203	0.003	U	0.019	0.066	0.031	04/28/05	04/29/05	5118394	
Potassium 40	**14.4**		**1.5**	**1.1**	**0.5**	**04/28/05**	**04/29/05**	**5118394**	
Radium (226)	**6.91**		**0.76**	**2.4**	**1.2**	**04/28/05**	**04/29/05**	**5118394**	
Radium 228	**0.86**		**0.15**	**0.38**	**0.18**	**04/28/05**	**04/29/05**	**5118394**	
Radium 223 (assumes ∢	0.24	U	0.21	0.77	0.37	04/28/05	04/29/05	5118394	
Radium 224	**5.4**		**1.7**	**2.3**	**1.1**	**04/28/05**	**04/29/05**	**5118394**	
Ruthenium 106	-0.26	U	0.23	0.79	0.36	04/28/05	04/29/05	5118394	
Sodium 22	0.018	U	0.034	0.13	0.059	04/28/05	04/29/05	5118394	
Strontium 85	-0.055	U	0.027	0.085	0.040	04/28/05	04/29/05	5118394	
Thallium 208	**0.269**		**0.048**	**0.087**	**0.040**	**04/28/05**	**04/29/05**	**5118394**	
Thorium 227	0.43	U	0.15	0.51	0.24	04/28/05	04/29/05	5118394	
Thorium 231	0.69	U	0.25	0.78	0.38	04/28/05	04/29/05	5118394	
Thorium 234	**5.49**		**0.47**	**1.2**	**0.57**	**04/28/05**	**04/29/05**	**5118394**	
Tin 113	-0.005	U	0.025	0.089	0.042	04/28/05	04/29/05	5118394	
Uranium 235	**0.452**		**0.048**	**0.37**	**0.18**	**04/28/05**	**04/29/05**	**5118394**	
Yttrium 88	0.029	U	0.028	0.13	0.054	04/28/05	04/29/05	5118394	
--- Other Detected Radionuclides ---									
Actinium 228	**0.53**		**0.18**	**0.49**	**0.23**	**04/28/05**	**04/29/05**	**5118394**	
Iso PLUTONIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3058/RP-725**			
Plutonium 238	0.0	U	0.0	0.02	0.009	04/23/05	05/02/05	5113068	95
Plutonium 239/40	**0.544**		**0.039**	**0.006**	**0.0**	**04/23/05**	**05/02/05**	**5113068**	**95**
Iso AMERICIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3006/RP-725**			
Americium 241	0.0070	U	0.0058	0.019	0.0079	04/23/05	05/04/05	5113067	96
GROSS A/B BY GFPC SW846 9310 MOD				**pCi/g**		**9310 MOD**			
Gross Alpha	**17.4**		**1.3**	**1.5**	**0.7**	**05/19/05**	**05/19/05**	**5139111**	
Gross Beta	**21.3**		**1.2**	**1.5**	**0.7**	**05/19/05**	**05/19/05**	**5139111**	

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58827

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-004
Work Order: G8WNR
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Iso URANIUM (LONG CT) HAS & DOE MOD				pCi/g		3050/RP-725			
Uranium 234	9.97		0.48	0.03	0.009	05/11/05	05/12/05	5131544	98
Uranium 235	0.494		0.069	0.023	0.0	05/11/05	05/12/05	5131544	98
Uranium 238	6.97		0.35	0.04	0.01	05/11/05	05/12/05	5131544	98

NOTE(S)

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MDC is determined by instrument performance only.
Bold results are greater than the MDC
U Result is less than the sample detection limit.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58828

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-005
Work Order: G8WNV
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				**pCi/g**		**RP-730 MOD**			
Americium 241	0.003	U	0.034	0.11	0.055	04/28/05	04/29/05	5118394	
Bismuth 211 (assumes	**1.69**		**0.24**	**0.84**	**0.41**	**04/28/05**	**04/29/05**	**5118394**	
Bismuth 214	**0.66**		**0.10**	**0.33**	**0.16**	**04/28/05**	**04/29/05**	**5118394**	
Cadmium 109	0.64	U	0.32	1.1	0.55	04/28/05	04/29/05	5118394	
Cerium 139	-0.034	U	0.013	0.039	0.018	04/28/05	04/29/05	5118394	
Cesium 134	-0.009	U	0.022	0.071	0.032	04/28/05	04/29/05	5118394	
Cesium 137	0.012	U	0.025	0.10	0.047	04/28/05	04/29/05	5118394	
Cobalt 60	-0.018	U	0.028	0.11	0.046	04/28/05	04/29/05	5118394	
Europium 152	-0.006	U	0.12	0.48	0.20	04/28/05	04/29/05	5118394	
Lead 212	**0.382**		**0.055**	**0.12**	**0.058**	**04/28/05**	**04/29/05**	**5118394**	
Lead 214	**0.586**		**0.071**	**0.14**	**0.063**	**04/28/05**	**04/29/05**	**5118394**	
Mercury 203	-0.011	U	0.016	0.057	0.027	04/28/05	04/29/05	5118394	
Potassium 40	**11.6**		**1.1**	**0.8**	**0.3**	**04/28/05**	**04/29/05**	**5118394**	
Radium (226)	**6.65**		**0.84**	**2.2**	**1.1**	**04/28/05**	**04/29/05**	**5118394**	
Radium 228	**0.50**		**0.13**	**0.49**	**0.23**	**04/28/05**	**04/29/05**	**5118394**	
Radium 223 (assumes ε	0.08	U	0.18	0.65	0.31	04/28/05	04/29/05	5118394	
Radium 224	**2.34**		**0.80**	**1.6**	**0.77**	**04/28/05**	**04/29/05**	**5118394**	
Ruthenium 106	-0.27	U	0.19	0.62	0.27	04/28/05	04/29/05	5118394	
Sodium 22	0.011	U	0.024	0.098	0.042	04/28/05	04/29/05	5118394	
Strontium 85	-0.111	U	0.026	0.067	0.031	04/28/05	04/29/05	5118394	
Thallium 208	**0.175**		**0.034**	**0.062**	**0.027**	**04/28/05**	**04/29/05**	**5118394**	
Thorium 227	-0.12	U	0.13	0.35	0.16	04/28/05	04/29/05	5118394	
Thorium 231	0.40	U	0.21	0.67	0.32	04/28/05	04/29/05	5118394	
Thorium 234	**5.22**		**0.45**	**0.93**	**0.45**	**04/28/05**	**04/29/05**	**5118394**	
Tin 113	-0.004	U	0.021	0.076	0.035	04/28/05	04/29/05	5118394	
Uranium 235	**0.418**		**0.052**	**0.33**	**0.16**	**04/28/05**	**04/29/05**	**5118394**	
Yttrium 88	-0.009	U	0.020	0.081	0.031	04/28/05	04/29/05	5118394	
Iso PLUTONIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3058/RP-725**			
Plutonium 238	0.006	U	0.014	0.044	0.022	04/23/05	05/02/05	5113068	81
Plutonium 239/40	**1.68**		**0.087**	**0.023**	**0.009**	**04/23/05**	**05/02/05**	**5113068**	**81**
Iso AMERICIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3006/RP-725**			
Americium 241	**0.0370**		**0.0091**	**0.019**	**0.0078**	**04/23/05**	**05/03/05**	**5113067**	**90**
GROSS A/B BY GFPC SW846 9310 MOD				**pCi/g**		**9310 MOD**			
Gross Alpha	**22.3**		**1.5**	**1.0**	**0.5**	**05/19/05**	**05/19/05**	**5139111**	
Gross Beta	**12.1**		**1.0**	**2.3**	**1.1**	**05/19/05**	**05/19/05**	**5139111**	
Iso URANIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3050/RP-725**			
Uranium 234	**5.23**		**0.27**	**0.03**	**0.01**	**05/11/05**	**05/12/05**	**5131544**	**102**
Uranium 235	**0.267**		**0.048**	**0.052**	**0.019**	**05/11/05**	**05/12/05**	**5131544**	**102**
Uranium 238	**3.31**		**0.19**	**0.05**	**0.02**	**05/11/05**	**05/12/05**	**5131544**	**102**

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC
U Result is less than the sample detection limit.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58830

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-006
Work Order: G8WNW
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				pCi/g		RP-730 MOD			
Americium 241	-0.007	U	0.028	0.095	0.045	04/28/05	04/29/05	5118394	
Bismuth 211 (assumes	**1.38**		**0.21**	**0.81**	**0.39**	**04/28/05**	**04/29/05**	**5118394**	
Bismuth 214	**0.586**		**0.088**	**0.14**	**0.060**	**04/28/05**	**04/29/05**	**5118394**	
Cadmium 109	0.85	U	0.33	1.2	0.59	04/28/05	04/29/05	5118394	
Cerium 139	0.003	U	0.012	0.044	0.021	04/28/05	04/29/05	5118394	
Cesium 134	-0.028	U	0.019	0.053	0.023	04/28/05	04/29/05	5118394	
Cesium 137	0.072	U	0.028	0.12	0.053	04/28/05	04/29/05	5118394	
Cobalt 60	-0.016	U	0.021	0.078	0.031	04/28/05	04/29/05	5118394	
Europium 152	0.24	U	0.13	0.59	0.26	04/28/05	04/29/05	5118394	
Lead 212	**0.412**		**0.056**	**0.12**	**0.057**	**04/28/05**	**04/29/05**	**5118394**	
Lead 214	**0.471**		**0.062**	**0.13**	**0.059**	**04/28/05**	**04/29/05**	**5118394**	
Mercury 203	0.0003	U	0.017	0.062	0.029	04/28/05	04/29/05	5118394	
Potassium 40	**9.1**		**1.0**	**0.6**	**0.2**	**04/28/05**	**04/29/05**	**5118394**	
Radium (226)	**3.36**		**0.64**	**1.1**	**0.52**	**04/28/05**	**04/29/05**	**5118394**	
Radium 228	**0.62**		**0.15**	**0.53**	**0.25**	**04/28/05**	**04/29/05**	**5118394**	
Radium 223 (assumes ε	0.28	U	0.15	0.63	0.30	04/28/05	04/29/05	5118394	
Radium 224	0.78	U	0.48	1.4	0.69	04/28/05	04/29/05	5118394	
Ruthenium 106	-0.01	U	0.18	0.69	0.31	04/28/05	04/29/05	5118394	
Sodium 22	0.051	U	0.028	0.13	0.055	04/28/05	04/29/05	5118394	
Strontium 85	-0.079	U	0.026	0.073	0.033	04/28/05	04/29/05	5118394	
Thallium 208	**0.179**		**0.034**	**0.039**	**0.015**	**04/28/05**	**04/29/05**	**5118394**	
Thorium 227	0.02	U	0.11	0.36	0.17	04/28/05	04/29/05	5118394	
Thorium 231	0.67	U	0.18	0.69	0.33	04/28/05	04/29/05	5118394	
Thorium 234	**2.20**		**0.31**	**0.93**	**0.44**	**04/28/05**	**04/29/05**	**5118394**	
Tin 113	0.007	U	0.023	0.085	0.039	04/28/05	04/29/05	5118394	
Uranium 235	0.222	U	0.042	0.34	0.16	04/28/05	04/29/05	5118394	
Yttrium 88	0.016	U	0.016	0.086	0.033	04/28/05	04/29/05	5118394	
Iso PLUTONIUM (LONG CT) HAS & DOE MOD				pCi/g		3058/RP-725			
Plutonium 238	0.0	U	0.0	0.02	0.01	04/23/05	05/02/05	5113068	101
Plutonium 239/40	**0.375**		**0.031**	**0.016**	**0.006**	**04/23/05**	**05/02/05**	**5113068**	**101**
Iso AMERICIUM (LONG CT) HAS & DOE MOD				pCi/g		3006/RP-725			
Americium 241	**0.0228**		**0.0076**	**0.019**	**0.0081**	**04/23/05**	**05/03/05**	**5113067**	**94**
GROSS A/B BY GFPC SW846 9310 MOD				pCi/g		9310 MOD			
Gross Alpha	**8.71**		**0.88**	**1.5**	**0.71**	**05/19/05**	**05/19/05**	**5139111**	
Gross Beta	**13.8**		**0.998**	**1.9**	**0.95**	**05/19/05**	**05/19/05**	**5139111**	
Iso URANIUM (LONG CT) HAS & DOE MOD				pCi/g		3050/RP-725			
Uranium 234	**5.54**		**0.29**	**0.03**	**0.008**	**05/11/05**	**05/12/05**	**5131544**	**104**
Uranium 235	**0.264**		**0.049**	**0.022**	**0.0**	**05/11/05**	**05/12/05**	**5131544**	**104**
Uranium 238	**4.99**		**0.27**	**0.04**	**0.01**	**05/11/05**	**05/12/05**	**5131544**	**104**

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

U Result is less than the sample detection limit.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58831

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-007
Work Order: G8WN0
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				**pCi/g**		**RP-730 MOD**			
Americium 241	0.022	U	0.041	0.13	0.061	04/28/05	04/29/05	5118394	
Bismuth 211 (assumes	**1.22**		**0.19**	**0.73**	**0.35**	**04/28/05**	**04/29/05**	**5118394**	
Bismuth 214	**0.378**		**0.081**	**0.29**	**0.14**	**04/28/05**	**04/29/05**	**5118394**	
Cadmium 109	0.36	U	0.40	1.2	0.59	04/28/05	04/29/05	5118394	
Cerium 139	0.016	U	0.014	0.046	0.022	04/28/05	04/29/05	5118394	
Cesium 134	-0.003	U	0.022	0.070	0.032	04/28/05	04/29/05	5118394	
Cesium 137	0.0001	U	0.024	0.089	0.040	04/28/05	04/29/05	5118394	
Cobalt 60	0.019	U	0.020	0.091	0.038	04/28/05	04/29/05	5118394	
Europium 152	-0.07	U	0.12	0.45	0.19	04/28/05	04/29/05	5118394	
Lead 212	**0.366**		**0.051**	**0.11**	**0.054**	**04/28/05**	**04/29/05**	**5118394**	
Lead 214	**0.381**		**0.056**	**0.12**	**0.055**	**04/28/05**	**04/29/05**	**5118394**	
Mercury 203	0.0002	U	0.017	0.058	0.027	04/28/05	04/29/05	5118394	
Potassium 40	**7.13**		**0.74**	**0.83**	**0.34**	**04/28/05**	**04/29/05**	**5118394**	
Radium (226)	**8.12**		**0.84**	**2.6**	**1.3**	**04/28/05**	**04/29/05**	**5118394**	
Radium 228	0.254	U	0.094	0.40	0.19	04/28/05	04/29/05	5118394	
Radium 223 (assumes e	0.19	U	0.19	0.69	0.33	04/28/05	04/29/05	5118394	
Radium 224	**2.30**		**0.79**	**1.6**	**0.79**	**04/28/05**	**04/29/05**	**5118394**	
Ruthenium 106	0.25	U	0.19	0.77	0.35	04/28/05	04/29/05	5118394	
Sodium 22	0.031	U	0.027	0.12	0.051	04/28/05	04/29/05	5118394	
Strontium 85	-0.077	U	0.027	0.082	0.038	04/28/05	04/29/05	5118394	
Thallium 208	**0.158**		**0.033**	**0.061**	**0.027**	**04/28/05**	**04/29/05**	**5118394**	
Thorium 227	0.19	U	0.13	0.42	0.20	04/28/05	04/29/05	5118394	
Thorium 231	0.28	U	0.21	0.73	0.36	04/28/05	04/29/05	5118394	
Thorium 234	**7.50**		**0.47**	**1.1**	**0.55**	**04/28/05**	**04/29/05**	**5118394**	
Tin 113	0.015	U	0.020	0.078	0.036	04/28/05	04/29/05	5118394	
Uranium 235	**0.525**		**0.052**	**0.37**	**0.17**	**04/28/05**	**04/29/05**	**5118394**	
Yttrium 88	-0.007	U	0.018	0.074	0.027	04/28/05	04/29/05	5118394	
Iso PLUTONIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3058/RP-725**			
Plutonium 238	0.0	U	0.0	0.02	0.01	04/23/05	05/02/05	5113068	92
Plutonium 239/40	**0.310**		**0.029**	**0.006**	**0.0**	**04/23/05**	**05/02/05**	**5113068**	**92**
Iso AMERICIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3006/RP-725**			
Americium 241	0.0133	U	0.0064	0.018	0.0073	04/23/05	05/03/05	5113067	89
GROSS A/B BY GFPC SW846 9310 MOD				**pCi/g**		**9310 MOD**			
Gross Alpha	**28.9**		**2.2**	**2.2**	**1.0**	**05/19/05**	**05/19/05**	**5139111**	
Gross Beta	**29.8**		**1.7**	**1.9**	**0.9**	**05/19/05**	**05/19/05**	**5139111**	
Iso URANIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3050/RP-725**			
Uranium 234	**20.0**		**0.91**	**0.02**	**0.0**	**05/11/05**	**05/12/05**	**5131544**	**89**
Uranium 235	**1.06**		**0.11**	**0.04**	**0.01**	**05/11/05**	**05/12/05**	**5131544**	**89**
Uranium 238	**18.7**		**0.85**	**0.04**	**0.01**	**05/11/05**	**05/12/05**	**5131544**	**89**

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

U Result is less than the sample detection limit.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58832

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-008
Work Order: G8WN1
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				**pCi/g**		**RP-730 MOD**			
Americium 241	-0.016	U	0.026	0.091	0.043	04/28/05	04/29/05	5118394	
Bismuth 211 (assumes	**1.29**		**0.20**	**0.73**	**0.35**	**04/28/05**	**04/29/05**	**5118394**	
Bismuth 214	**0.385**		**0.069**	**0.26**	**0.12**	**04/28/05**	**04/29/05**	**5118394**	
Cadmium 109	0.40	U	0.28	1.0	0.48	04/28/05	04/29/05	5118394	
Cerium 139	-0.014	U	0.011	0.038	0.018	04/28/05	04/29/05	5118394	
Cesium 134	0.016	U	0.016	0.058	0.026	04/28/05	04/29/05	5118394	
Cesium 137	0.046	U	0.027	0.071	0.032	04/28/05	04/29/05	5118394	
Cobalt 60	-0.057	U	0.025	0.079	0.032	04/28/05	04/29/05	5118394	
Europium 152	-0.004	U	0.099	0.40	0.16	04/28/05	04/29/05	5118394	
Lead 212	**0.301**		**0.056**	**0.11**	**0.053**	**04/28/05**	**04/29/05**	**5118394**	
Lead 214	**0.418**		**0.053**	**0.13**	**0.059**	**04/28/05**	**04/29/05**	**5118394**	
Mercury 203	-0.01	U	0.015	0.053	0.025	04/28/05	04/29/05	5118394	
Potassium 40	**7.94**		**0.94**	**0.67**	**0.26**	**04/28/05**	**04/29/05**	**5118394**	
Radium (226)	**2.81**		**0.68**	**0.94**	**0.44**	**04/28/05**	**04/29/05**	**5118394**	
Radium 228	0.267	U	0.089	0.38	0.18	04/28/05	04/29/05	5118394	
Radium 223 (assumes ∈	0.10	U	0.15	0.56	0.27	04/28/05	04/29/05	5118394	
Radium 224	**2.11**		**0.73**	**1.5**	**0.72**	**04/28/05**	**04/29/05**	**5118394**	
Ruthenium 106	-0.13	U	0.17	0.58	0.26	04/28/05	04/29/05	5118394	
Sodium 22	-0.015	U	0.026	0.093	0.040	04/28/05	04/29/05	5118394	
Strontium 85	-0.052	U	0.025	0.078	0.037	04/28/05	04/29/05	5118394	
Thallium 208	**0.138**		**0.032**	**0.063**	**0.028**	**04/28/05**	**04/29/05**	**5118394**	
Thorium 227	-0.07	U	0.12	0.33	0.16	04/28/05	04/29/05	5118394	
Thorium 231	0.43	U	0.16	0.57	0.28	04/28/05	04/29/05	5118394	
Thorium 234	**1.79**		**0.28**	**0.86**	**0.41**	**04/28/05**	**04/29/05**	**5118394**	
Tin 113	-0.015	U	0.023	0.077	0.036	04/28/05	04/29/05	5118394	
Uranium 235	0.186	U	0.045	0.34	0.16	04/28/05	04/29/05	5118394	
Yttrium 88	-0.015	U	0.011	0.020	0.0	04/28/05	04/29/05	5118394	
Iso PLUTONIUM (LONG CT) MAS & DOE MOD				**pCi/g**		**3058/RP-725**			
Plutonium 238	0.0	U	0.0	0.02	0.01	04/23/05	05/02/05	5113068	96
Plutonium 239/40	**0.236**		**0.024**	**0.014**	**0.005**	**04/23/05**	**05/02/05**	**5113068**	**96**
Iso AMERICIUM (LONG CT) MAS & DOE MOD				**pCi/g**		**3006/RP-725**			
Americium 241	0.0104	U	0.0054	0.015	0.0060	04/23/05	05/03/05	5113067	99
GROSS A/B BY GFPC SW846 9310 MOD				**pCi/g**		**9310 MOD**			
Gross Alpha	**5.75**		**0.73**	**1.6**	**0.76**	**05/19/05**	**05/19/05**	**5139111**	
Gross Beta	**10.4**		**0.79**	**1.6**	**0.80**	**05/19/05**	**05/19/05**	**5139111**	
Iso URANIUM (LONG CT) MAS & DOE MOD				**pCi/g**		**3050/RP-725**			
Uranium 234	**3.54**		**0.20**	**0.04**	**0.01**	**05/11/05**	**05/12/05**	**5131544**	**108**
Uranium 235	**0.193**		**0.041**	**0.039**	**0.010**	**05/11/05**	**05/12/05**	**5131544**	**108**
Uranium 238	**2.61**		**0.16**	**0.04**	**0.01**	**05/11/05**	**05/12/05**	**5131544**	**108**

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC
U Result is less than the sample detection limit.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58833

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-009
Work Order: G8WN2
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				**pCi/g**		**RP-730 MOD**			
Americium 241	0.028	U	0.030	0.11	0.051	04/28/05	04/29/05	5118394	
Bismuth 211 (assumes	**2.33**		**0.28**	**1.0**	**0.49**	**04/28/05**	**04/29/05**	**5118394**	
Bismuth 214	**0.96**		**0.14**	**0.43**	**0.21**	**04/28/05**	**04/29/05**	**5118394**	
Cadmium 109	1.10	U	0.40	1.3	0.65	04/28/05	04/29/05	5118394	
Cerium 139	-0.013	U	0.015	0.050	0.024	04/28/05	04/29/05	5118394	
Cesium 134	0.004	U	0.026	0.083	0.038	04/28/05	04/29/05	5118394	
Cesium 137	-0.011	U	0.025	0.092	0.041	04/28/05	04/29/05	5118394	
Cobalt 60	0.018	U	0.023	0.099	0.042	04/28/05	04/29/05	5118394	
Europium 152	0.18	U	0.13	0.57	0.25	04/28/05	04/29/05	5118394	
Lead 212	**0.520**		**0.061**	**0.11**	**0.050**	**04/28/05**	**04/29/05**	**5118394**	
Lead 214	**0.819**		**0.086**	**0.13**	**0.060**	**04/28/05**	**04/29/05**	**5118394**	
Mercury 203	0.008	U	0.018	0.066	0.031	04/28/05	04/29/05	5118394	
Potassium 40	**7.63**		**0.92**	**0.95**	**0.40**	**04/28/05**	**04/29/05**	**5118394**	
Radium (226)	**3.97**		**0.65**	**1.1**	**0.54**	**04/28/05**	**04/29/05**	**5118394**	
Radium 228	**0.57**		**0.13**	**0.53**	**0.25**	**04/28/05**	**04/29/05**	**5118394**	
Radium 223 (assumes ε	-0.02	U	0.20	0.71	0.34	04/28/05	04/29/05	5118394	
Radium 224	**2.04**		**0.72**	**1.7**	**0.82**	**04/28/05**	**04/29/05**	**5118394**	
Ruthenium 106	0.08	U	0.17	0.66	0.29	04/28/05	04/29/05	5118394	
Sodium 22	0.024	U	0.027	0.11	0.049	04/28/05	04/29/05	5118394	
Strontium 85	-0.148	U	0.031	0.071	0.032	04/28/05	04/29/05	5118394	
Thallium 208	**0.262**		**0.046**	**0.086**	**0.039**	**04/28/05**	**04/29/05**	**5118394**	
Thorium 227	0.05	U	0.13	0.40	0.19	04/28/05	04/29/05	5118394	
Thorium 231	0.54	U	0.20	0.73	0.35	04/28/05	04/29/05	5118394	
Thorium 234	**2.97**		**0.33**	**1.0**	**0.50**	**04/28/05**	**04/29/05**	**5118394**	
Tin 113	-0.008	U	0.024	0.088	0.040	04/28/05	04/29/05	5118394	
Uranium 235	0.262	U	0.043	0.43	0.21	04/28/05	04/29/05	5118394	
Yttrium 88	0.016	U	0.016	0.087	0.033	04/28/05	04/29/05	5118394	
Iso PLUTONIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3058/RP-725**			
Plutonium 238	0.0	U	0.0	0.03	0.01	04/23/05	05/02/05	5113068	80
Plutonium 239/40	**0.219**		**0.026**	**0.018**	**0.006**	**04/23/05**	**05/02/05**	**5113068**	**80**
Iso AMERICIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3006/RP-725**			
Americium 241	0.0124	U	0.0068	0.020	0.0085	04/23/05	05/03/05	5113067	86
GROSS A/B BY GFPC SW846 9310 MOD				**pCi/g**		**9310 MOD**			
Gross Alpha	**3.60**		**0.54**	**1.2**	**0.56**	**05/19/05**	**05/19/05**	**5139111**	
Gross Beta	**6.16**		**0.68**	**1.8**	**0.89**	**05/19/05**	**05/19/05**	**5139111**	
Iso URANIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3050/RP-725**			
Uranium 234	**1.59**		**0.12**	**0.04**	**0.02**	**05/11/05**	**05/12/05**	**5131544**	**101**
Uranium 235	**0.057**		**0.023**	**0.041**	**0.011**	**05/11/05**	**05/12/05**	**5131544**	**101**
Uranium 238	**1.24**		**0.10**	**0.02**	**0.0**	**05/11/05**	**05/12/05**	**5131544**	**101**

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC
U Result is less than the sample detection limit.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58834

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-010
Work Order: G8WN3
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				**pCi/g**		**RP-730 MOD**			
Americium 241	-0.044	U	0.023	0.073	0.034	04/28/05	04/29/05	5118394	
Bismuth 211 (assumes	**0.76**		**0.16**	**0.59**	**0.28**	**04/28/05**	**04/29/05**	**5118394**	
Bismuth 214	**0.317**		**0.067**	**0.23**	**0.11**	**04/28/05**	**04/29/05**	**5118394**	
Cadmium 109	0.29	U	0.24	0.86	0.41	04/28/05	04/29/05	5118394	
Cerium 139	0.010	U	0.011	0.040	0.019	04/28/05	04/29/05	5118394	
Cesium 134	0.0007	U	0.020	0.063	0.028	04/28/05	04/29/05	5118394	
Cesium 137	0.018	U	0.023	0.090	0.041	04/28/05	04/29/05	5118394	
Cobalt 60	0.015	U	0.022	0.094	0.040	04/28/05	04/29/05	5118394	
Europium 152	0.164	U	0.088	0.44	0.18	04/28/05	04/29/05	5118394	
Lead 212	**0.167**		**0.053**	**0.12**	**0.057**	**04/28/05**	**04/29/05**	**5118394**	
Lead 214	**0.270**		**0.049**	**0.12**	**0.054**	**04/28/05**	**04/29/05**	**5118394**	
Mercury 203	-0.020	U	0.015	0.051	0.024	04/28/05	04/29/05	5118394	
Potassium 40	**5.01**		**0.70**	**0.72**	**0.29**	**04/28/05**	**04/29/05**	**5118394**	
Radium (226)	0.95	U	0.32	1.3	0.60	04/28/05	04/29/05	5118394	
Radium 228	0.222	U	0.088	0.37	0.17	04/28/05	04/29/05	5118394	
Radium 223 (assumes ε	0.06	U	0.14	0.52	0.24	04/28/05	04/29/05	5118394	
Radium 224	**1.99**		**0.71**	**1.5**	**0.73**	**04/28/05**	**04/29/05**	**5118394**	
Ruthenium 106	0.11	U	0.17	0.66	0.30	04/28/05	04/29/05	5118394	
Sodium 22	0.003	U	0.020	0.081	0.034	04/28/05	04/29/05	5118394	
Strontium 85	-0.031	U	0.022	0.073	0.034	04/28/05	04/29/05	5118394	
Thallium 208	**0.087**		**0.023**	**0.068**	**0.031**	**04/28/05**	**04/29/05**	**5118394**	
Thorium 227	-0.02	U	0.11	0.33	0.15	04/28/05	04/29/05	5118394	
Thorium 231	-0.15	U	0.13	0.42	0.20	04/28/05	04/29/05	5118394	
Thorium 234	0.76	U	0.28	1.1	0.52	04/28/05	04/29/05	5118394	
Tin 113	0.006	U	0.019	0.070	0.032	04/28/05	04/29/05	5118394	
Uranium 235	0.157	U	0.075	0.29	0.14	04/28/05	04/29/05	5118394	
Yttrium 88	0.022	U	0.022	0.10	0.042	04/28/05	04/29/05	5118394	
Iso PLUTONIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3058/RP-725**			
Plutonium 238	0.011	U	0.011	0.033	0.015	04/23/05	05/04/05	5113068	85
Plutonium 239/40	**0.186**		**0.022**	**0.007**	**0.0**	**04/23/05**	**05/04/05**	**5113068**	**85**
Iso AMERICIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3006/RP-725**			
Americium 241	0.012	U	0.012	0.039	0.018	04/23/05	05/03/05	5113067	76
GROSS A/B BY GFPC SW846 9310 MOD				**pCi/g**		**9310 MOD**			
Gross Alpha	**2.21**		**0.55**	**1.6**	**0.74**	**05/19/05**	**05/19/05**	**5139111**	
Gross Beta	**4.71**		**0.66**	**1.9**	**0.94**	**05/19/05**	**05/19/05**	**5139111**	
Iso URANIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3050/RP-725**			
Uranium 234	**1.73**		**0.13**	**0.04**	**0.01**	**05/11/05**	**05/12/05**	**5131544**	**94**
Uranium 235	**0.092**		**0.031**	**0.025**	**0.0**	**05/11/05**	**05/12/05**	**5131544**	**94**
Uranium 238	**1.15**		**0.10**	**0.05**	**0.02**	**05/11/05**	**05/12/05**	**5131544**	**94**

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

U Result is less than the sample detection limit.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58836

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-011
Work Order: G8WN4
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				**pCi/g**		**RP-730 MOD**			
Americium 241	-0.007	U	0.021	0.062	0.029	04/28/05	04/29/05	5118394	
Bismuth 211 (assumes	**0.72**		**0.15**	**0.50**	**0.24**	**04/28/05**	**04/29/05**	**5118394**	
Bismuth 214	0.163	U	0.040	0.17	0.078	04/28/05	04/29/05	5118394	
Cadmium 109	0.30	U	0.21	0.75	0.36	04/28/05	04/29/05	5118394	
Cerium 139	-0.0057	U	0.0096	0.033	0.016	04/28/05	04/29/05	5118394	
Cesium 134	0.012	U	0.013	0.048	0.021	04/28/05	04/29/05	5118394	
Cesium 137	**0.092**		**0.023**	**0.056**	**0.025**	**04/28/05**	**04/29/05**	**5118394**	
Cobalt 60	-0.017	U	0.016	0.056	0.022	04/28/05	04/29/05	5118394	
Europium 152	-0.020	U	0.084	0.33	0.14	04/28/05	04/29/05	5118394	
Lead 212	**0.162**		**0.034**	**0.094**	**0.045**	**04/28/05**	**04/29/05**	**5118394**	
Lead 214	**0.256**		**0.045**	**0.093**	**0.043**	**04/28/05**	**04/29/05**	**5118394**	
Mercury 203	-0.012	U	0.012	0.039	0.018	04/28/05	04/29/05	5118394	
Potassium 40	**2.83**		**0.41**	**0.42**	**0.15**	**04/28/05**	**04/29/05**	**5118394**	
Radium (226)	**1.90**		**0.37**	**0.81**	**0.38**	**04/28/05**	**04/29/05**	**5118394**	
Radium 228	0.118	U	0.065	0.28	0.12	04/28/05	04/29/05	5118394	
Radium 223 (assumes ε	0.04	U	0.12	0.42	0.20	04/28/05	04/29/05	5118394	
Radium 224	**1.15**		**0.46**	**1.1**	**0.54**	**04/28/05**	**04/29/05**	**5118394**	
Ruthenium 106	0.02	U	0.12	0.47	0.21	04/28/05	04/29/05	5118394	
Sodium 22	0.01	U	0.015	0.067	0.028	04/28/05	04/29/05	5118394	
Strontium 85	-0.085	U	0.021	0.054	0.025	04/28/05	04/29/05	5118394	
Thallium 208	**0.065**		**0.024**	**0.047**	**0.020**	**04/28/05**	**04/29/05**	**5118394**	
Thorium 227	0.081	U	0.079	0.26	0.12	04/28/05	04/29/05	5118394	
Thorium 231	-0.07	U	0.11	0.36	0.17	04/28/05	04/29/05	5118394	
Thorium 234	**1.06**		**0.22**	**0.67**	**0.32**	**04/28/05**	**04/29/05**	**5118394**	
Tin 113	-0.0002	U	0.017	0.060	0.028	04/28/05	04/29/05	5118394	
Uranium 235	0.126	U	0.024	0.25	0.12	04/28/05	04/29/05	5118394	
Yttrium 88	0.0061	U	0.0062	0.045	0.015	04/28/05	04/29/05	5118394	
Iso PLUTONIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3058/RP-725**			
Plutonium 238	0.0	U	0.0	0.03	0.01	04/23/05	05/04/05	5113068	98
Plutonium 239/40	**0.104**		**0.016**	**0.017**	**0.006**	**04/23/05**	**05/04/05**	**5113068**	**98**
Iso AMERICIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3006/RP-725**			
Americium 241	0.0100	U	0.0083	0.027	0.012	04/23/05	05/03/05	5113067	79
GROSS A/B BY GFPC SW846 9310 MOD				**pCi/g**		**9310 MOD**			
Gross Alpha	**1.66**		**0.42**	**1.2**	**0.54**	**05/19/05**	**05/19/05**	**5139111**	
Gross Beta	**2.34**		**0.48**	**1.5**	**0.72**	**05/19/05**	**05/19/05**	**5139111**	
Iso URANIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3050/RP-725**			
Uranium 234	**2.24**		**0.16**	**0.03**	**0.009**	**05/11/05**	**05/12/05**	**5131544**	**96**
Uranium 235	**0.106**		**0.032**	**0.043**	**0.011**	**05/11/05**	**05/12/05**	**5131544**	**96**
Uranium 238	**1.93**		**0.14**	**0.05**	**0.02**	**05/11/05**	**05/12/05**	**5131544**	**96**

NOTE(S)

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MDC is determined by instrument performance only.
Bold results are greater than the MDC
U Result is less than the sample detection limit.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58837

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-012
Work Order: G8WN5
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				**pCi/g**		**RP-730 MOD**			
Americium 241	0.025	U	0.015	0.057	0.027	04/28/05	04/29/05	5118394	
Bismuth 211 (assumes	**0.57**		**0.11**	**0.43**	**0.20**	**04/28/05**	**04/29/05**	**5118394**	
Bismuth 214	**0.192**		**0.053**	**0.19**	**0.090**	**04/28/05**	**04/29/05**	**5118394**	
Cadmium 109	-0.15	U	0.16	0.53	0.25	04/28/05	04/29/05	5118394	
Cerium 139	-0.0030	U	0.0077	0.027	0.013	04/28/05	04/29/05	5118394	
Cesium 134	-0.024	U	0.013	0.038	0.017	04/28/05	04/29/05	5118394	
Cesium 137	0.050	U	0.019	0.050	0.022	04/28/05	04/29/05	5118394	
Cobalt 60	-0.005	U	0.019	0.074	0.032	04/28/05	04/29/05	5118394	
Europium 152	0.002	U	0.071	0.29	0.12	04/28/05	04/29/05	5118394	
Lead 212	0.065	U	0.028	0.073	0.035	04/28/05	04/29/05	5118394	
Lead 214	**0.213**		**0.034**	**0.081**	**0.037**	**04/28/05**	**04/29/05**	**5118394**	
Mercury 203	-0.0041	U	0.0089	0.032	0.015	04/28/05	04/29/05	5118394	
Potassium 40	**4.50**		**0.52**	**0.55**	**0.23**	**04/28/05**	**04/29/05**	**5118394**	
Radium (226)	**1.37**		**0.32**	**0.58**	**0.27**	**04/28/05**	**04/29/05**	**5118394**	
Radium 228	0.104	U	0.061	0.25	0.11	04/28/05	04/29/05	5118394	
Radium 223 (assumes ε	0.046	U	0.099	0.36	0.17	04/28/05	04/29/05	5118394	
Radium 224	**1.13**		**0.41**	**0.94**	**0.45**	**04/28/05**	**04/29/05**	**5118394**	
Ruthenium 106	0.17	U	0.13	0.51	0.23	04/28/05	04/29/05	5118394	
Sodium 22	0.012	U	0.016	0.066	0.028	04/28/05	04/29/05	5118394	
Strontium 85	-0.055	U	0.017	0.050	0.023	04/28/05	04/29/05	5118394	
Thallium 208	**0.066**		**0.018**	**0.052**	**0.023**	**04/28/05**	**04/29/05**	**5118394**	
Thorium 227	0.103	U	0.061	0.21	0.099	04/28/05	04/29/05	5118394	
Thorium 231	0.106	U	0.087	0.32	0.15	04/28/05	04/29/05	5118394	
Thorium 234	**1.00**		**0.17**	**0.52**	**0.24**	**04/28/05**	**04/29/05**	**5118394**	
Tin 113	-0.026	U	0.014	0.044	0.020	04/28/05	04/29/05	5118394	
Uranium 235	0.090	U	0.021	0.20	0.093	04/28/05	04/29/05	5118394	
Yttrium 88	-0.014	U	0.015	0.052	0.019	04/28/05	04/29/05	5118394	
Iso PLUTONIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3058/RP-725**			
Plutonium 238	0.0	U	0.0	0.02	0.01	04/23/05	05/02/05	5113068	85
Plutonium 239/40	**0.100**		**0.016**	**0.006**	**0.0**	**04/23/05**	**05/02/05**	**5113068**	**85**
Iso AMERICIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3006/RP-725**			
Americium 241	-0.0044	U	-0.0045	0.021	0.0086	04/23/05	05/03/05	5113067	85
GROSS A/B BY GFPC SW846 9310 MOD				**pCi/g**		**9310 MOD**			
Gross Alpha	1.37	U	0.49	1.5	0.69	05/19/05	05/19/05	5139111	
Gross Beta	**3.51**		**0.59**	**1.8**	**0.87**	**05/19/05**	**05/19/05**	**5139111**	
Iso URANIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3050/RP-725**			
Uranium 234	**1.68**		**0.13**	**0.04**	**0.01**	**05/11/05**	**05/12/05**	**5131544**	**98**
Uranium 235	**0.089**		**0.030**	**0.024**	**0.0**	**05/11/05**	**05/12/05**	**5131544**	**98**
Uranium 238	**1.45**		**0.12**	**0.02**	**0.0**	**05/11/05**	**05/12/05**	**5131544**	**98**

NOTE(S)

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MDC is determined by instrument performance only.
Bold results are greater than the MDC
U Result is less than the sample detection limit.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58838

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-013
Work Order: G8WN7
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				**pCi/g**		**RP-730 MOD**			
Americium 241	0.002	U	0.056	0.17	0.084	04/28/05	04/29/05	5118394	
Bismuth 211 (assumes	**2.38**		**0.29**	**1.1**	**0.52**	**04/28/05**	**04/29/05**	**5118394**	
Bismuth 214	**0.66**		**0.12**	**0.40**	**0.19**	**04/28/05**	**04/29/05**	**5118394**	
Cadmium 109	-1.32	U	0.54	1.7	0.82	04/28/05	04/29/05	5118394	
Cerium 139	0.023	U	0.019	0.060	0.028	04/28/05	04/29/05	5118394	
Cesium 134	-0.041	U	0.030	0.081	0.036	04/28/05	04/29/05	5118394	
Cesium 137	0.051	U	0.030	0.12	0.056	04/28/05	04/29/05	5118394	
Cobalt 60	0.041	U	0.024	0.11	0.049	04/28/05	04/29/05	5118394	
Europium 152	0.173	U	0.093	0.49	0.20	04/28/05	04/29/05	5118394	
Lead 212	**0.632**		**0.083**	**0.14**	**0.064**	**04/28/05**	**04/29/05**	**5118394**	
Lead 214	**0.864**		**0.092**	**0.12**	**0.056**	**04/28/05**	**04/29/05**	**5118394**	
Mercury 203	-0.00007	U	0.020	0.070	0.032	04/28/05	04/29/05	5118394	
Potassium 40	**11.1**		**1.3**	**1.1**	**0.5**	**04/28/05**	**04/29/05**	**5118394**	
Radium (226)	**25.2**		**2.1**	**4.7**	**2.3**	**04/28/05**	**04/29/05**	**5118394**	
Radium 228	**0.78**		**0.15**	**0.63**	**0.30**	**04/28/05**	**04/29/05**	**5118394**	
Radium 223 (assumes e	0.31	U	0.24	0.87	0.42	04/28/05	04/29/05	5118394	
Radium 224	0.74	U	0.60	1.8	0.86	04/28/05	04/29/05	5118394	
Ruthenium 106	0.46	U	0.21	0.90	0.41	04/28/05	04/29/05	5118394	
Sodium 22	-0.043	U	0.028	0.090	0.037	04/28/05	04/29/05	5118394	
Strontium 85	-0.137	U	0.032	0.080	0.036	04/28/05	04/29/05	5118394	
Thallium 208	**0.208**		**0.038**	**0.094**	**0.043**	**04/28/05**	**04/29/05**	**5118394**	
Thorium 227	-0.29	U	0.18	0.47	0.22	04/28/05	04/29/05	5118394	
Thorium 231	**2.02**		**0.47**	**0.93**	**0.45**	**04/28/05**	**04/29/05**	**5118394**	
Thorium 234	**21.1**		**1.6**	**1.5**	**0.7**	**04/28/05**	**04/29/05**	**5118394**	
Tin 113	-0.034	U	0.028	0.096	0.044	04/28/05	04/29/05	5118394	
Uranium 235	**1.63**		**0.13**	**0.46**	**0.22**	**04/28/05**	**04/29/05**	**5118394**	
Yttrium 88	-0.047	U	0.025	0.065	0.021	04/28/05	04/29/05	5118394	
--- Other Detected Radionuclides ---									
Actinium 228	**0.69**		**0.26**	**0.49**	**0.23**	**04/28/05**	**04/29/05**	**5118394**	
Protactinium 234M	**47.2**		**8.8**	**16**	**7.1**	**04/28/05**	**04/29/05**	**5118394**	
Iso PLUTONIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3058/RP-725**			
Plutonium 238	0.0	U	0.0	0.02	0.01	04/23/05	05/02/05	5113068	92
Plutonium 239/40	**0.848**		**0.054**	**0.013**	**0.004**	**04/23/05**	**05/02/05**	**5113068**	**92**
Iso AMERICIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3006/RP-725**			
Americium 241	0.0196	U	0.0082	0.022	0.0097	04/23/05	05/03/05	5113067	88
GROSS A/B BY GFPC SW846 9310 MOD				**pCi/g**		**9310 MOD**			
Gross Alpha	**43.4**		**2.8**	**2.1**	**1**	**05/19/05**	**05/19/05**	**5139111**	
Gross Beta	**47.6**		**2.6**	**1.8**	**0.9**	**05/19/05**	**05/19/05**	**5139111**	

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58838

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-013
Work Order: G8WN7
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Iso URANIUM (LONG CT) HAS & DOE MOD				pCi/g		3050/RP-725			
Uranium 234	37.3		1.8	0.2	0.04	05/11/05	05/12/05	5131544	103
Uranium 235	2.02		0.30	0.11	0.0	05/11/05	05/12/05	5131544	103
Uranium 238	31.2		1.5	0.2	0.04	05/11/05	05/12/05	5131544	103

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC
U Result is less than the sample detection limit.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58839

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-014
Work Order: G8WN9
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				**pCi/g**		**RP-730 MOD**			
Americium 241	-0.026	U	0.035	0.099	0.048	04/28/05	04/30/05	5118394	
Bismuth 211 (assumes	**0.93**		**0.19**	**0.68**	**0.33**	**04/28/05**	**04/30/05**	**5118394**	
Bismuth 214	**0.488**		**0.078**	**0.29**	**0.14**	**04/28/05**	**04/30/05**	**5118394**	
Cadmium 109	0.26	U	0.34	1.2	0.56	04/28/05	04/30/05	5118394	
Cerium 139	-0.012	U	0.013	0.044	0.021	04/28/05	04/30/05	5118394	
Cesium 134	0.010	U	0.019	0.067	0.030	04/28/05	04/30/05	5118394	
Cesium 137	0.007	U	0.026	0.095	0.044	04/28/05	04/30/05	5118394	
Cobalt 60	0.001	U	0.022	0.088	0.037	04/28/05	04/30/05	5118394	
Europium 152	-0.02	U	0.10	0.40	0.16	04/28/05	04/30/05	5118394	
Lead 212	**0.343**		**0.047**	**0.12**	**0.057**	**04/28/05**	**04/30/05**	**5118394**	
Lead 214	**0.414**		**0.055**	**0.15**	**0.070**	**04/28/05**	**04/30/05**	**5118394**	
Mercury 203	0.0	U	0.0	0.05	0.03	04/28/05	04/30/05	5118394	
Potassium 40	**16.0**		**1.3**	**0.9**	**0.4**	**04/28/05**	**04/30/05**	**5118394**	
Radium (226)	**4.39**		**0.60**	**0.99**	**0.47**	**04/28/05**	**04/30/05**	**5118394**	
Radium 228	0.45	U	0.11	0.46	0.22	04/28/05	04/30/05	5118394	
Radium 223 (assumes ε	0.05	U	0.20	0.70	0.33	04/28/05	04/30/05	5118394	
Radium 224	**2.49**		**0.84**	**1.6**	**0.80**	**04/28/05**	**04/30/05**	**5118394**	
Ruthenium 106	0.16	U	0.15	0.62	0.28	04/28/05	04/30/05	5118394	
Sodium 22	0.034	U	0.024	0.10	0.046	04/28/05	04/30/05	5118394	
Strontium 85	-0.070	U	0.024	0.069	0.032	04/28/05	04/30/05	5118394	
Thallium 208	**0.163**		**0.031**	**0.064**	**0.029**	**04/28/05**	**04/30/05**	**5118394**	
Thorium 227	0.18	U	0.12	0.38	0.18	04/28/05	04/30/05	5118394	
Thorium 231	0.006	U	0.18	0.63	0.31	04/28/05	04/30/05	5118394	
Thorium 234	**2.49**		**0.30**	**1.0**	**0.50**	**04/28/05**	**04/30/05**	**5118394**	
Tin 113	0.033	U	0.019	0.077	0.036	04/28/05	04/30/05	5118394	
Uranium 235	0.290	U	0.040	0.39	0.19	04/28/05	04/30/05	5118394	
Yttrium 88	0.008	U	0.013	0.068	0.025	04/28/05	04/30/05	5118394	
Iso PLUTONIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3058/RP-725**			
Plutonium 238	0.0031	U	0.0052	0.019	0.0075	04/23/05	05/02/05	5113068	97
Plutonium 239/40	**0.455**		**0.034**	**0.011**	**0.003**	**04/23/05**	**05/02/05**	**5113068**	**97**
GROSS A/B BY GFPC SW846 9310 MOD				**pCi/g**		**9310 MOD**			
Gross Alpha	**10.7**		**0.96**	**1.5**	**0.71**	**05/19/05**	**05/19/05**	**5139111**	
Gross Beta	**9.67**		**0.83**	**1.9**	**0.96**	**05/19/05**	**05/19/05**	**5139111**	
Iso AMERICIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3006/RP-725**			
Americium 241	0.0048	U	0.0098	0.038	0.014	05/06/05	05/11/05	5126224	76
Iso URANIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3050/RP-725**			
Uranium 234	**7.40**		**0.37**	**0.04**	**0.01**	**05/11/05**	**05/12/05**	**5131544**	**99**
Uranium 235	**0.340**		**0.057**	**0.050**	**0.016**	**05/11/05**	**05/12/05**	**5131544**	**99**
Uranium 238	**4.84**		**0.27**	**0.03**	**0.009**	**05/11/05**	**05/12/05**	**5131544**	**99**

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC
U Result is less than the sample detection limit.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58839 DUP

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-014X
Work Order: G8WN9
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Iso AMERICIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3006/RP-725**			
Americium 241	0.035	U	0.015	0.037	0.014	05/06/05	05/11/05	5126224	80
Iso URANIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3050/RP-725**			
Uranium 234	**8.01**		**0.41**	**0.02**	**0.0**	**05/11/05**	**05/12/05**	**5131544**	**99**
Uranium 235	**0.318**		**0.056**	**0.044**	**0.012**	**05/11/05**	**05/12/05**	**5131544**	**99**
Uranium 238	**5.21**		**0.29**	**0.04**	**0.01**	**05/11/05**	**05/12/05**	**5131544**	**99**

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC
U Result is less than the sample detection limit.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58840

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D210345-015
Work Order: G8WPC
Matrix: SOLID

Date Collected: 04/19/05 0000
Date Received: 04/21/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
Gamma Cs-137 & Hits by DOE RP-730 MOD				**pCi/g**		**RP-730 MOD**			
Americium 241	0.008	U	0.027	0.089	0.042	04/28/05	04/30/05	5118394	
Bismuth 211 (assumes	**1.28**		**0.17**	**0.69**	**0.33**	**04/28/05**	**04/30/05**	**5118394**	
Bismuth 214	**0.364**		**0.066**	**0.25**	**0.12**	**04/28/05**	**04/30/05**	**5118394**	
Cadmium 109	0.44	U	0.25	0.92	0.44	04/28/05	04/30/05	5118394	
Cerium 139	-0.013	U	0.011	0.039	0.018	04/28/05	04/30/05	5118394	
Cesium 134	-0.020	U	0.019	0.055	0.024	04/28/05	04/30/05	5118394	
Cesium 137	0.051	U	0.029	0.12	0.056	04/28/05	04/30/05	5118394	
Cobalt 60	0.005	U	0.029	0.12	0.051	04/28/05	04/30/05	5118394	
Europium 152	0.145	U	0.089	0.44	0.18	04/28/05	04/30/05	5118394	
Lead 212	**0.344**		**0.046**	**0.10**	**0.048**	**04/28/05**	**04/30/05**	**5118394**	
Lead 214	**0.403**		**0.054**	**0.11**	**0.051**	**04/28/05**	**04/30/05**	**5118394**	
Mercury 203	-0.008	U	0.015	0.053	0.024	04/28/05	04/30/05	5118394	
Potassium 40	**7.29**		**0.87**	**0.91**	**0.38**	**04/28/05**	**04/30/05**	**5118394**	
Radium (226)	**1.64**		**0.35**	**1.4**	**0.70**	**04/28/05**	**04/30/05**	**5118394**	
Radium 228	0.32	U	0.10	0.44	0.20	04/28/05	04/30/05	5118394	
Radium 223 (assumes (	0.01	U	0.15	0.55	0.26	04/28/05	04/30/05	5118394	
Radium 224	1.09	U	0.51	1.4	0.66	04/28/05	04/30/05	5118394	
Ruthenium 106	0.33	U	0.17	0.71	0.32	04/28/05	04/30/05	5118394	
Sodium 22	0.006	U	0.025	0.10	0.043	04/28/05	04/30/05	5118394	
Strontium 85	-0.074	U	0.025	0.075	0.035	04/28/05	04/30/05	5118394	
Thallium 208	**0.120**		**0.030**	**0.079**	**0.036**	**04/28/05**	**04/30/05**	**5118394**	
Thorium 227	0.01	U	0.11	0.34	0.16	04/28/05	04/30/05	5118394	
Thorium 231	0.24	U	0.13	0.48	0.23	04/28/05	04/30/05	5118394	
Thorium 234	**1.16**		**0.24**	**0.78**	**0.37**	**04/28/05**	**04/30/05**	**5118394**	
Tin 113	-0.022	U	0.019	0.063	0.028	04/28/05	04/30/05	5118394	
Uranium 235	0.219	U	0.099	0.31	0.15	04/28/05	04/30/05	5118394	
Yttrium 88	-0.024	U	0.021	0.071	0.026	04/28/05	04/30/05	5118394	
Iso PLUTONIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3058/RP-725**			
Plutonium 238	0.0024	U	0.0053	0.020	0.0078	04/23/05	05/02/05	5113068	86
Plutonium 239/40	**0.842**		**0.054**	**0.006**	**0.0**	**04/23/05**	**05/02/05**	**5113068**	**86**
GROSS A/B BY GFPC SW846 9310 MOD				**pCi/g**		**9310 MOD**			
Gross Alpha	**5.28**		**0.74**	**1.8**	**0.82**	**05/19/05**	**05/19/05**	**5139111**	
Gross Beta	**8.16**		**0.76**	**1.8**	**0.90**	**05/19/05**	**05/19/05**	**5139111**	
Iso AMERICIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3006/RP-725**			
Americium 241	0.018	U	0.012	0.037	0.014	05/06/05	05/11/05	5126224	76
Iso URANIUM (LONG CT) HAS & DOE MOD				**pCi/g**		**3050/RP-725**			
Uranium 234	**3.03**		**0.18**	**0.06**	**0.03**	**05/11/05**	**05/12/05**	**5131544**	**103**
Uranium 235	**0.194**		**0.042**	**0.056**	**0.021**	**05/11/05**	**05/12/05**	**5131544**	**103**
Uranium 238	**2.42**		**0.16**	**0.05**	**0.02**	**05/11/05**	**05/12/05**	**5131544**	**103**

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC
U Result is less than the sample detection limit.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58842

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D220356-001
Work Order: G8159
Matrix: SOLID

Date Collected: 04/20/05 0000
Date Received: 04/22/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY GFPC SW846 9310 MOD				pCi/g		9310 MOD			
Gross Alpha	19.8		1.6	1.7	0.8	05/19/05	05/19/05	5139111	
Gross Beta	20.0		1.2	1.7	0.8	05/19/05	05/19/05	5139111	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58842 DUP

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F5D220356-001X
Work Order: G8159
Matrix: SOLID

Date Collected: 04/20/05 0000
Date Received: 04/22/05 0900

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Batch #	Yld %
GROSS A/B BY GFPC SW846 9310 MOD				pCi/g		9310 MOD			
Gross Alpha	23.6		1.8	1.9	0.9	05/19/05	05/19/05	5139111	
Gross Beta	22.5		1.4	1.9	0.9	05/19/05	05/19/05	5139111	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

DUPLICATE EVALUATION REPORT

Severn Trent Laboratories - Radiochemistry

Client Lot ID: F5D210345
Matrix: SOLID

Date Sampled: 04/20/05
Date Received: 04/22/05

Parameter	SAMPLE Result		Total Uncert. (1σ +/-)	% Yld	DUPLICATE Result		Total Uncert. (1 σ +/-)	% Yld	QC Sample ID Precision	
GROSS A/B BY GFPC SW846 9310 MOD				**pCi/g**	**9310 MOD**				**F5D220356-001**	
Gross Alpha	**19.8**		**1.6**		**23.6**		**1.8**		0.6	RER
Gross Beta	**20.0**		**1.2**		**22.5**		**1.4**		0.5	RER
		Batch #:	5139111	(Sample)	5139111	(Duplicate)				
Iso AMERICIUM (LONG CT) HASL & DOE MOD				**pCi/g**	**3006/RP-725**				**F5D210345-014**	
Americium 241	0.0048	U	0.0098	76	0.035	U	0.015	80	1	RER
		Batch #:	5126224	(Sample)	5126224	(Duplicate)				
Iso URANIUM (LONG CT) HASL & DOE MOD				**pCi/g**	**3050/RP-725**				**F5D210345-014**	
Uranium 234	**7.40**		**0.37**	99	**8.01**		**0.41**	99	0.4	RER
Uranium 235	**0.340**		**0.057**	99	**0.318**		**0.056**	99	0.1	RER
Uranium 238	**4.84**		**0.27**	99	**5.21**		**0.29**	99	0.3	RER
		Batch #:	5131544	(Sample)	5131544	(Duplicate)				
Iso AMERICIUM (LONG CT) HASL & DOE MOD				**pCi/g**	**3006/RP-725**				**F5D210345-001**	
Americium 241	**0.035**		**0.011**	89	**0.0342**		**0.0079**	91	0.03	RER
		Batch #:	5113067	(Sample)	5113067	(Duplicate)				
Iso PLUTONIUM (LONG CT) HASL & DOE MOD				**pCi/g**	**3058/RP-725**				**F5D210345-001**	
Plutonium 238	0.0	U	0.0	99	0.0	U	0.0	89	0	RER
Plutonium 239/40	**0.360**		**0.030**	99	**0.456**		**0.036**	89	0.7	RER
		Batch #:	5113068	(Sample)	5113068	(Duplicate)				

DUPLICATE EVALUATION REPORT

Severn Trent Laboratories - Radiochemistry

Client Lot ID: F5D210345
Matrix: SOLID

Date Sampled: 04/19/05
Date Received: 04/21/05

Parameter	SAMPLE Result		Total Uncert. (1σ +/-)	% Yld	DUPLICATE Result		Total Uncert. (1 σ +/-)	% Yld	QC Sample ID Precision	
Gamma Cs-137 & Hits by DOE RP-730 MOD				**pCi/g**	**RP-730 MOD**				**F5D210345-001**	
Americium 241	0.049	U	0.030		0.049	U	0.034		0.00	RER
Bismuth 211 (assumes e	**1.32**		**0.20**		**1.27**		**0.20**		0.07	RER
Bismuth 214	**0.277**		**0.070**		**0.356**		**0.079**		0.3	RER
Cadmium 109	-0.27	U	0.36		0.07	U	0.45		0.2	RER
Cerium 139	-0.006	U	0.011		-0.022	U	0.012		0.4	RER
Cesium 134	0.004	U	0.021		0.010	U	0.021		0.08	RER
Cesium 137	-0.039	U	0.024		0.004	U	0.022		0.5	RER
Cobalt 60	0.015	U	0.018		-0.006	U	0.024		0.3	RER
Europium 152	0.023	U	0.078		0.02	U	0.11		0.00	RER
Lead 212	**0.383**		**0.044**		**0.277**		**0.060**		0.5	RER
Lead 214	**0.462**		**0.052**		**0.453**		**0.059**		0.04	RER
Mercury 203	0.022	U	0.013		-0.023	U	0.016		0.8	RER
Potassium 40	**8.51**		**0.96**		**7.52**		**0.85**		0.3	RER
Radium (226)	**4.74**		**0.57**		**4.68**		**0.59**		0.03	RER
Radium 223 (assumes eq	-0.12	U	0.16		-0.12	U	0.19		0.00	RER
Radium 224	**2.90**		**0.92**		**1.88**		**0.72**		0.3	RER
Radium 228	0.27	U	0.15		0.35	U	0.10		0.2	RER
Ruthenium 106	-0.05	U	0.15		-0.03	U	0.18		0.03	RER
Sodium 22	0.025	U	0.019		-0.014	U	0.024		0.5	RER
Strontium 85	-0.043	U	0.024		-0.057	U	0.026		0.1	RER
Thallium 208	**0.123**		**0.032**		**0.177**		**0.034**		0.4	RER
Thorium 227	0.11	U	0.11		0.10	U	0.14		0.02	RER
Thorium 231	0.56	U	0.19		0.60	U	0.19		0.06	RER
Thorium 234	**3.87**		**0.40**		**4.09**		**0.41**		0.1	RER
Tin 113	-0.015	U	0.019		0.012	U	0.021		0.3	RER
Uranium 235	0.313	U	0.038		0.309	U	0.039		0.03	RER
Yttrium 88	-0.007	U	0.020		0.0009	U	0.022		0.09	RER
	Batch #:		5118394	(Sample)	5118394		(Duplicate)			

NOTE(S)

Data are incomplete without the case narrative.
Calculations are performed before rounding to avoid round-off error in calculated results

U Result is less than the sample detection limit.

MATRIX SPIKE REPORT

Severn Trent Laboratories - Radiochemistry

Client Lot Id: F5D220356 Date Sampled: 04/20/05
Matrix: SOLID Date Received: 04/22/05

Parameter	Sample Result	Spike Amount	Spike Result	Total Uncert. (1σ +/-)	MDC	DLC	QC Sample ID Spike Yld.	%Rec	QC Control Limits
GROSS A/B BY GFPC SW846 9310 MOD			**pCi/g**	**9310 MOD**			**F5D220356-001**		
Gross Beta	20.0	212	183	9.4	2.3	1.1		77	(42 - 150)
Gross Alpha	19.8	93.7	121	6.6	2.1	1		108	(30 - 150)
	Batch #: 5139111			Analysis Date: 05/19/05					
Iso PLUTONIUM (LONG CT) HAS & DOE MOD			**pCi/g**	**3058/RP-725**			**F5D210345-001**		
Plutonium 238	0.0	0.745	0.773	0.052	0.026	0.011	88	104	(50 - 150)
Plutonium 239/40	0.360	0.721	1.30	0.073	0.016	0.006	88	130	(50 - 150)
	Batch #: 5113068			Analysis Date: 05/02/05					
Iso AMERICIUM (LONG CT) HAS & DOE MOD			**pCi/g**	**3006/RP-725**			**F5D210345-001**		
Americium 241	0.035	1.93	1.80	0.076	0.025	0.012	94	92	(50 - 150)
	Batch #: 5113067			Analysis Date: 05/03/05					

NOTE(S)

Data are incomplete without the case narrative.

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE REPORT

Severn Trent Laboratories - Radiochemistry

Client Lot ID: Date Sampled:
Matrix: Date Received:

Parameter	Spike Amount	SPIKE Result	Total Uncert. σ+/-)	Spike Yld	SAMPLE Result	Total Uncert. σ +/-)	QC Sample ID % Yld	%Rec	QC Control Limits
Spk2									

Precision:

Batch #: Analysis date:

NOTE(S)

Data are incomplete without the case narrative.

Calculations are performed before rounding to avoid round-off error in calculated results

METHOD BLANK REPORT

Severn Trent Laboratories - Radiochemistry

Client Lot ID: F5D210345
Matrix: SOLID

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Lab Sample ID Batch #	Yld %
Iso AMERICIUM (LOWG CT) HAS & DOE MOD			**pCi/g**		**3006/RP-725**			**F5D230000-067B**	
Americium 241	0.0008	U	0.0028	0.012	0.0043	04/23/05	05/03/05	5113067	92
Iso PLUTONIUM (LOWG CT) HAS & DOE MOD			**pCi/g**		**3058/RP-725**			**F5D230000-068B**	
Plutonium 238	0.0	U	0.0	0.01	0.005	04/23/05	05/02/05	5113068	94
Plutonium 239/40	0.0	U	0.0	0.01	0.004	04/23/05	05/02/05	5113068	94
Iso AMERICIUM (LOWG CT) HAS & DOE MOD			**pCi/g**		**3006/RP-725**			**F5E060000-224B**	
Americium 241	0.0067	U	0.0080	0.029	0.010	05/06/05	05/11/05	5126224	84
Gamma Cs-137 & Hits by DOE RP-730 MOD			**pCi/g**		**RP-730 MOD**			**F5D280000-394B**	
Americium 241	-0.013	U	0.022	0.076	0.034	04/28/05	04/30/05	5118394	
Bismuth 211 (assumes	0.20	U	0.11	0.49	0.22	04/28/05	04/30/05	5118394	
Bismuth 214	0.066	U	0.050	0.21	0.098	04/28/05	04/30/05	5118394	
Cadmium 109	0.27	U	0.20	0.80	0.37	04/28/05	04/30/05	5118394	
Cerium 139	-0.006	U	0.012	0.043	0.020	04/28/05	04/30/05	5118394	
Cesium 134	-0.029	U	0.018	0.060	0.025	04/28/05	04/30/05	5118394	
Cesium 137	0.029	U	0.019	0.086	0.037	04/28/05	04/30/05	5118394	
Cobalt 60	-0.008	U	0.020	0.080	0.030	04/28/05	04/30/05	5118394	
Europium 152	-0.042	U	0.086	0.35	0.13	04/28/05	04/30/05	5118394	
Lead 212	0.032	U	0.029	0.12	0.055	04/28/05	04/30/05	5118394	
Lead 214	0.068	U	0.038	0.16	0.075	04/28/05	04/30/05	5118394	
Mercury 203	0.002	U	0.016	0.060	0.027	04/28/05	04/30/05	5118394	
Potassium 40	0.07	U	0.27	1.2	0.53	04/28/05	04/30/05	5118394	
Radium (226)	0.23	U	0.30	1.2	0.57	04/28/05	04/30/05	5118394	
Radium 228	0.241	U	0.077	0.38	0.17	04/28/05	04/30/05	5118394	
Radium 223 (assumes e	-0.14	U	0.15	0.50	0.22	04/28/05	04/30/05	5118394	
Radium 224	-1.24	U	0.47	0.85	0.38	04/28/05	04/30/05	5118394	
Ruthenium 106	-0.10	U	0.19	0.70	0.30	04/28/05	04/30/05	5118394	
Sodium 22	0.021	U	0.019	0.094	0.038	04/28/05	04/30/05	5118394	
Strontium 85	-0.074	U	0.026	0.075	0.034	04/28/05	04/30/05	5118394	
Thallium 208	0.060	U	0.025	0.11	0.049	04/28/05	04/30/05	5118394	
Thorium 227	-0.30	U	0.11	0.33	0.15	04/28/05	04/30/05	5118394	
Thorium 231	0.40	U	0.13	0.53	0.25	04/28/05	04/30/05	5118394	
Thorium 234	0.36	U	0.26	1.0	0.49	04/28/05	04/30/05	5118394	
Tin 113	0.013	U	0.019	0.076	0.034	04/28/05	04/30/05	5118394	
Uranium 235	-0.016	U	0.076	0.28	0.13	04/28/05	04/30/05	5118394	
Yttrium 88	-0.020	U	0.020	0.071	0.023	04/28/05	04/30/05	5118394	
Iso URANIUM (LOWG CT) HAS & DOE MOD			**pCi/g**		**3050/RP-725**			**F5E110000-544B**	
Uranium 234	0.009	U	0.010	0.036	0.012	05/11/05	05/12/05	5131544	97
Uranium 235	0.0	U	0.0	0.05	0.02	05/11/05	05/12/05	5131544	97
Uranium 238	0.0	U	0.0	0.05	0.02	05/11/05	05/12/05	5131544	97

METHOD BLANK REPORT

Severn Trent Laboratories - Radiochemistry

Client Lot ID: F5D210345
Matrix: SOLID

Parameter	Result	Qual	Total Uncert. (1 σ+/-)	MDC	DLC	Prep Date	Analysis Date	Lab Sample ID Batch #	Yld %
GROSS A/B BY GFPC SW846 9310 MOD			pCi/g	9310 MOD				F5E190000-1118	
Gross Alpha	0.014	U	0.026	0.090	0.042	05/19/05	05/19/05	5139111	
Gross Beta	-0.056	U	0.053	0.18	0.088	05/19/05	05/19/05	5139111	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined using instrument performance only
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Laboratory Control Sample Report

Severn Trent Laboratories - Radiochemistry

Client Lot ID: F5D210345
Matrix: SOLID

Parameter	Spike Amount	Result	Total Uncert. (1 σ+/-)	MDC	% Yld	% Rec	Lab Sample ID / QC Control Limits
Iso AMERICIUM (LONG CT) HAS & DOE MOD		**pCi/g**		**3006/RP-725**			**F5D230000-067C**
Americium 241	1.93	1.73	0.072	0.004	101	90	(63 - 111)
	Batch #:	5113067		**Analysis Date:**	05/03/05		
Iso PLUTONIUM (LONG CT) HAS & DOE MOD		**pCi/g**		**3058/RP-725**			**F5D230000-068C**
Plutonium 238	8.02	7.21	0.47	0.06	93	90	(73 - 125)
Plutonium 239/40	41.0	39.9	1.7	0.06	93	97	(72 - 120)
	Batch #:	5113068		**Analysis Date:**	05/02/05		
Gamma Cs-137 & Hits by DOE RP-730 MOD		**pCi/g**		**RP-730 MOD**			**F5D280000-394C**
Americium 241	70.0	71.8	4.2	0.5		102	(80 - 120)
Cesium 137	29.5	31.2	1.6	0.3		106	(80 - 120)
Cobalt 60	42.4	43.7	1.5	0.4		103	(80 - 120)
	Batch #:	5118394		**Analysis Date:**	04/30/05		
Iso AMERICIUM (LONG CT) HAS & DOE MOD		**pCi/g**		**3006/RP-725**			**F5E060000-224C**
Americium 241	3.86	3.40	0.16	0.02	94	88	(63 - 111)
	Batch #:	5126224		**Analysis Date:**	05/11/05		
Iso URANIUM (LONG CT) HAS & DOE MOD		**pCi/g**		**3050/RP-725**			**F5E110000-544C**
Uranium 234	19.6	19.7	1.3	0.3	98	101	(67 - 117)
Uranium 238	19.6	19.0	1.3	0.3	98	97	(70 - 130)
	Batch #:	5131544		**Analysis Date:**	05/12/05		
GROSS A/B BY GFPC SW846 9310 MOD		**pCi/g**		**9310 MOD**			**F5E190000-111C**
Gross Beta	20.9	18.2	0.92	0.18		87	(73 - 115)
	Batch #:	5139111		**Analysis Date:**	05/19/05		
GROSS A/B BY GFPC SW846 9310 MOD		**pCi/g**		**9310 MOD**			**F5E190000-111C**
Gross Alpha	10.3	9.81	0.53	0.13		95	(52 - 150)
	Batch #:	5139111		**Analysis Date:**	05/19/05		

NOTE(S)

MDC is determined by instrument performance only
Calculations are performed before rounding to avoid round-off error in calculated results

SEVERN TRENT STL

Alpha Spectroscopy Americium

SEVERN TRENT STL

ALPHA SPECTROSCOPY

Data Reports
Results Reports
Channel by Channel Report

Calibration Data

Instrument Checks

Batch Summary Sheets
Run Logs
Yield Summary(ies)
Batch Yield Plot(s)

Raw Data
Prep Data Sheet(s)
QC Acceptance Sheet(s)
LCS Standard Sheet(s)
Tracer Standard Sheets

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 9:52:57AM 5/11/2005

Sample

Sample Name: F5D210345-014
SampleType: Sample
WRKNO: G8WN92AE
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 1.0005g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5126224
:
Description:

Client Name: Undefined
Client Contact:

Tracer

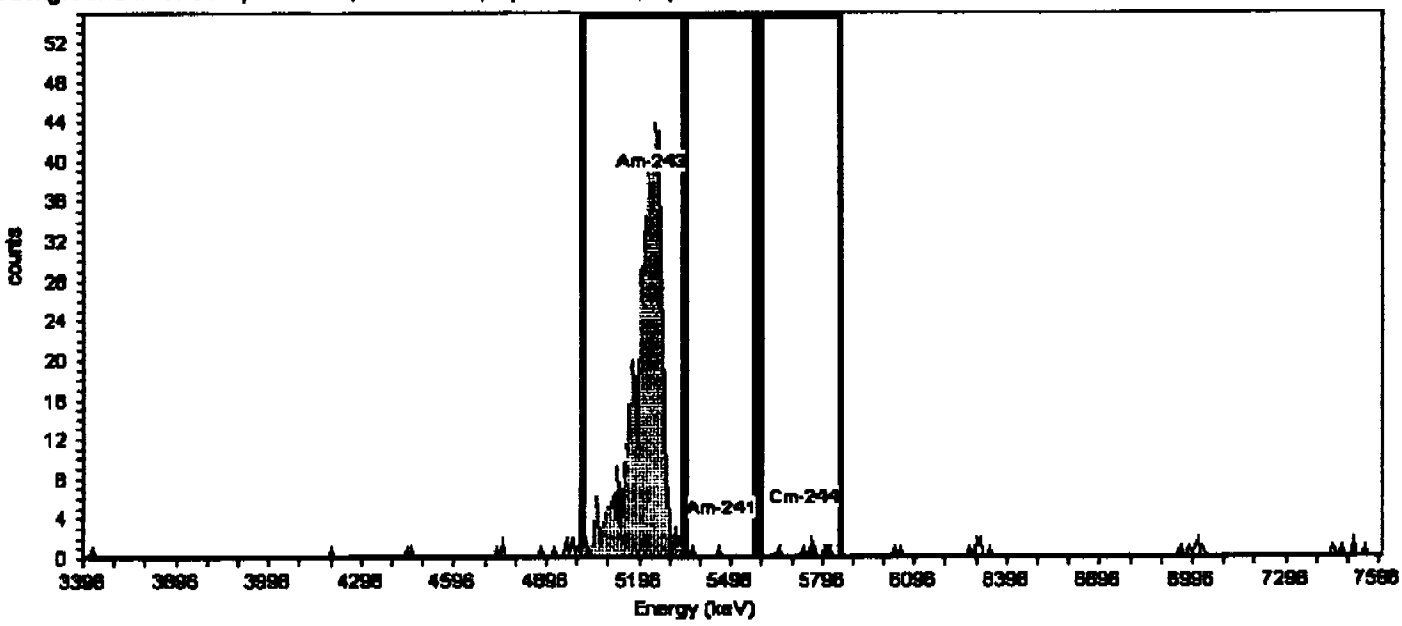
Tracer Name: Rad04-0040_Am243
Tracer Activity: 55.60 DPM/mL x (Vol.)0.10 mL = 5.56 DPM
Tracer Ref. Date: 6/17/1994 12:00:36PM

Tracer Nuclide: Am-243
Tracer Recovery: 75.66%

Acquisition

Detector: AV63
Serial Number:
Acquisition Start Date: 5/11/2005 1:11:13AM
Live Time: 510.00 min.
Real Time: 510.03 min.
Background Date: 4/25/2005 11:48:26AM
Background Info: Sample: AV63; Det: AV63; Spectrum #1; Apr-25-2005 11:48

Calibration Name: Apr2005_AV63
Calibration Date: 4/28/2005 12:22:08AM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.03% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = AmROI
Decay Correction: 5/11/2005 12:21:37AM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Americium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Am-243	5232.950	5015.156	5341.847	85.892	100.0	580.00	0.6375	579	1.894E+000	7.932E-002	7.262E-003	2.622E-002
Am-241	5465.263	5349.106	5574.180	.294	98.0	3.00	1.9125	1	4.790E-003	9.764E-003	1.282E-002	3.756E-002
Cm-244	5733.876	5595.940	5857.292	11.249	100.0	8.00	13.3875	-5	-2.325E-002	-1.999E-002	3.324E-002	7.817E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:53:07AM 5/11/2005

Analyst: 60040

Sample

Sample Name: F5D210345-014X
SampleType: Sample
WRKNO: G8WN91AF
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 1.0007g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5126224
:
Description:

Client Name: Undefined
Client Contact:

Tracer

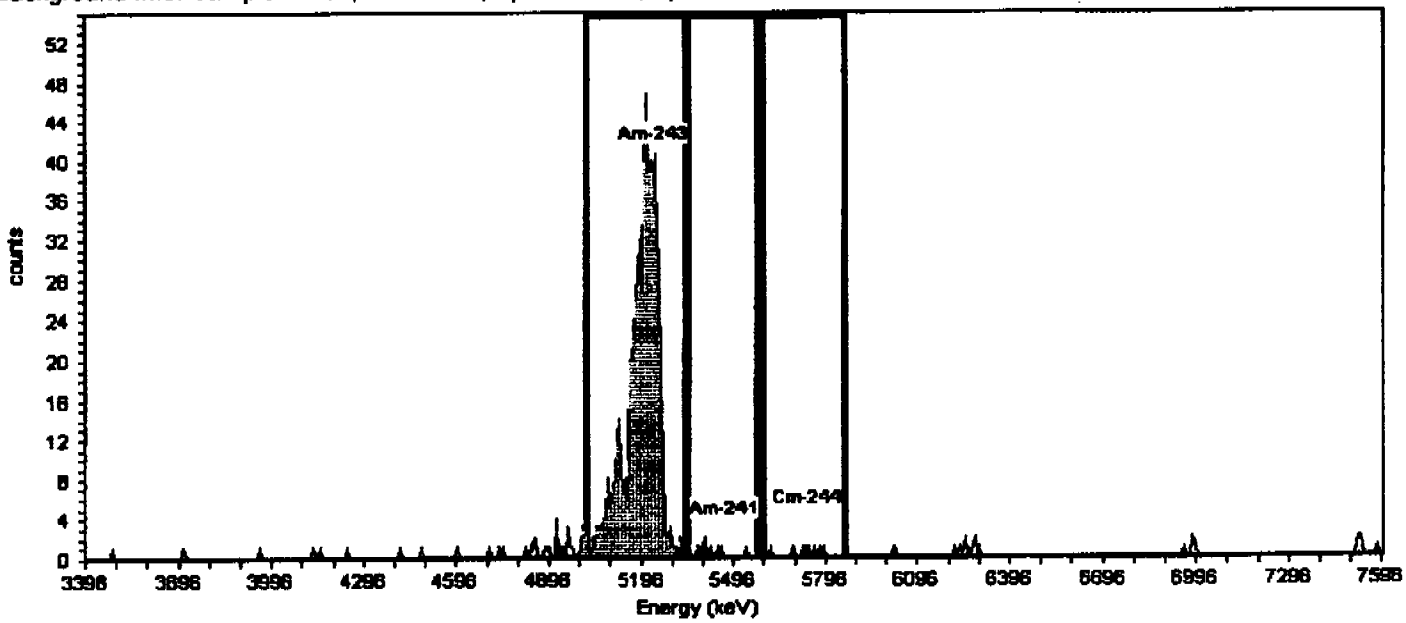
Tracer Name: Rad04-0040_Am243
Tracer Activity: 55.60 DPM/mL x (Vol.)0.10 mL = 5.56 DPM
Tracer Ref. Date: 6/17/1994 12:00:36PM

Tracer Nuclide: Am-243
Tracer Recovery: 79.98%

Acquisition

Detector: AV64
Serial Number:
Acquisition Start Date: 5/11/2005 1:11:16AM
Live Time: 510.00 min.
Real Time: 510.03 min.
Background Date: 4/25/2005 11:48:27AM
Background Info: Sample: AV64; Det: AV64; Spectrum #1; Apr-25-2005 11:48

Calibration Name: Apr2005_AV64
Calibration Date: 4/28/2005 12:22:17AM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.29% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = AmROI
Decay Correction: 5/11/2005 12:21:37AM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Americium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Am-243	5232.950	5015.156	5341.847	84.844	100.0	597.00	1.2750	596	2.002E+000	8.286E-002	9.986E-003	3.134E-002
Am-241	5465.283	5349.106	5574.160	194.157	98.0	10.00	1.9125	8	3.464E-002	1.485E-002	1.247E-002	3.652E-002
Cm-244	5733.876	5595.940	5857.292	.000	100.0	9.00	10.6375	-2	-7.712E-003	-1.870E-002	2.908E-002	6.952E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:53:15AM 5/11/2005

Analyst: 60040

Sample

Sample Name: F5D210345-015
SampleType: Sample
WRKNO: G8WPC2AE
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 1.0000g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5126224
:
Description:

Client Name: Undefined
Client Contact:

Tracer

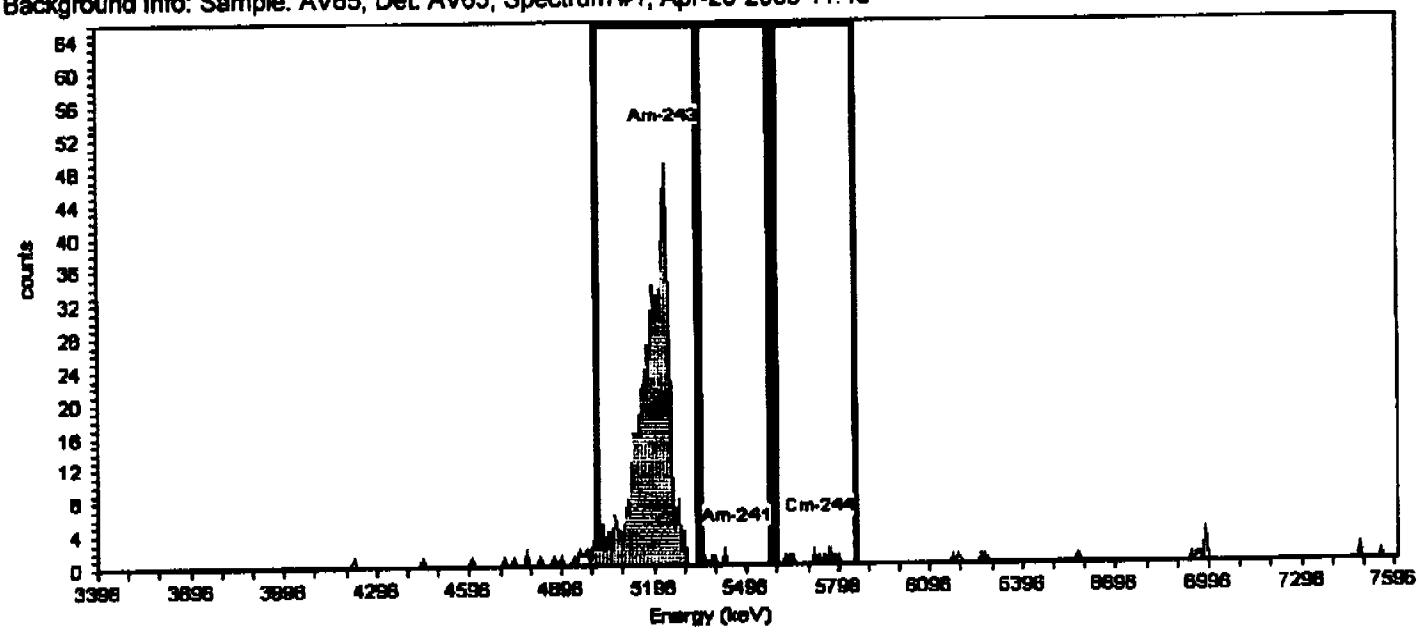
Tracer Name: Rad04-0040_Am243
Tracer Activity: 55.60 DPM/mL x (Vol.)0.10 mL = 5.56 DPM
Tracer Ref. Date: 6/17/1994 12:00:36PM

Tracer Nuclide: Am-243
Tracer Recovery: 76.14%

Acquisition

Detector: AV65
Serial Number:
Acquisition Start Date: 5/11/2005 1:11:18AM
Live Time: 510.00 min.
Real Time: 510.03 min.
Background Date: 4/25/2005 11:48:28AM
Background Info: Sample: AV65; Det: AV65; Spectrum #1; Apr-25-2005 11:48

Calibration Name: Apr2005_AV65
Calibration Date: 4/28/2005 12:22:27AM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.05% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = AmROI
Decay Correction: 5/11/2005 12:21:37AM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Americium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Am-243	5232.950	5015.156	5341.847	104.710	100.0	584.00	0.6375	583	1.907E+000	7.971E-002	7.216E-003	2.605E-002
Am-241	5465.263	5349.106	5574.160	.000	98.0	6.00	1.9125	4	1.789E-002	1.233E-002	1.274E-002	3.732E-002
Cm-244	5733.876	5595.940	5867.292	175.411	100.0	12.00	8.2875	4	1.592E-002	1.933E-002	2.599E-002	6.359E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:53:23AM 5/11/2005

Analyst: 60040

Sample

Sample Name: F5E060000-224B
SampleType: Blank
WRKNO: G909W1AA
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 1.0000g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5126224
:
Description:

Client Name: Undefined
Client Contact:

Tracer

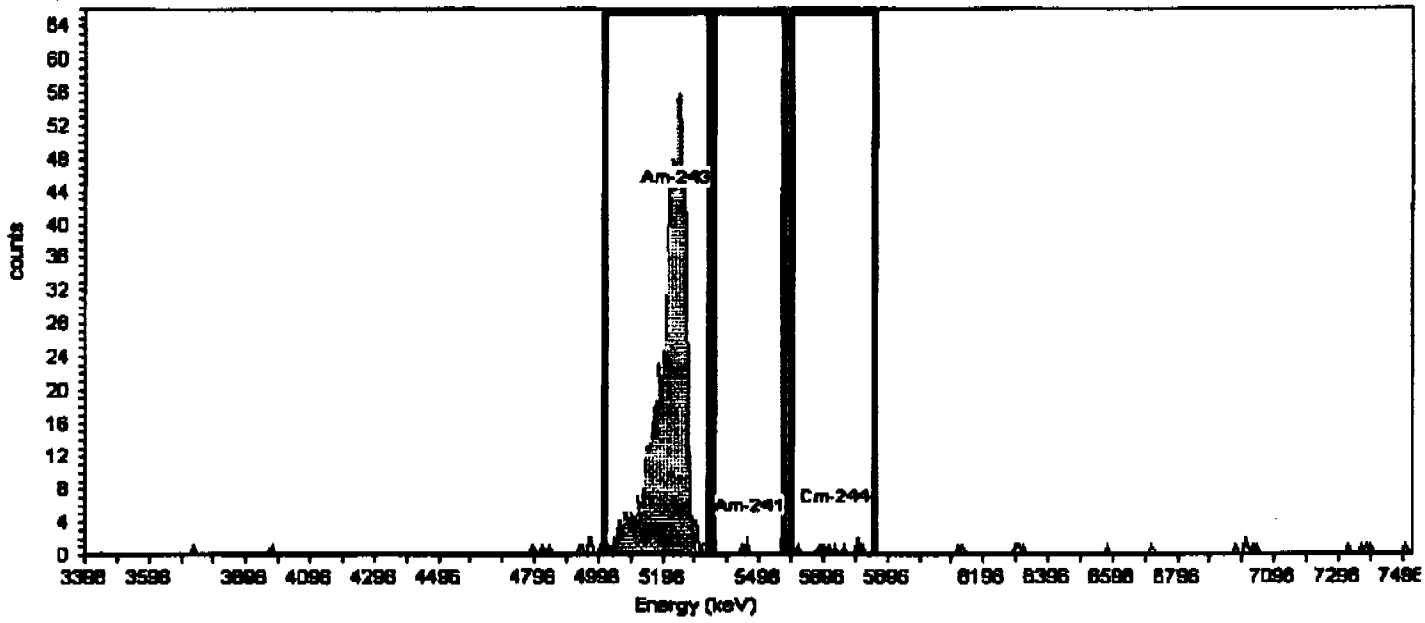
Tracer Name: Rad04-0040_Am243
Tracer Activity: 55.60 DPM/mL x (Vol.)0.10 mL = 5.56 DPM
Tracer Ref. Date: 6/17/1994 12:00:36PM

Tracer Nuclide: Am-243
Tracer Recovery: 84.16%

Acquisition

Detector: AV66
Serial Number:
Acquisition Start Date: 5/11/2005 1:11:19AM
Live Time: 510.01 min.
Real Time: 510.03 min.
Background Date: 4/25/2005 11:48:29AM
Background Info: Sample: AV66; Det: AV66; Spectrum #1; Apr-25-2005 11:48

Calibration Name: Apr2005_AV66
Calibration Date: 4/28/2005 12:22:36AM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.55% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = AmROI
Decay Correction: 5/11/2005 12:21:37AM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Americium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Am-243	5232.950	5015.156	5341.847	74.677	100.0	658.00	1.2750	657	2.106E+000	8.309E-002	9.065E-003	2.845E-002
Am-241	5465.263	5349.106	5574.160	20.682	98.0	3.00	1.2750	2	6.706E-003	8.042E-003	9.240E-003	2.900E-002
Cm-244	5733.676	5595.940	5857.292	12.096	100.0	10.00	7.6501	2	8.953E-003	1.601E-002	2.218E-002	5.467E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 9:53:47AM 5/11/2005

Sample

Sample Name: F5E060000-224C
SampleType: Control
WRKNO: G909W1AC
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 1.0000g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5126224
:
Description:

Client Name: Undefined
Client Contact:

Tracer

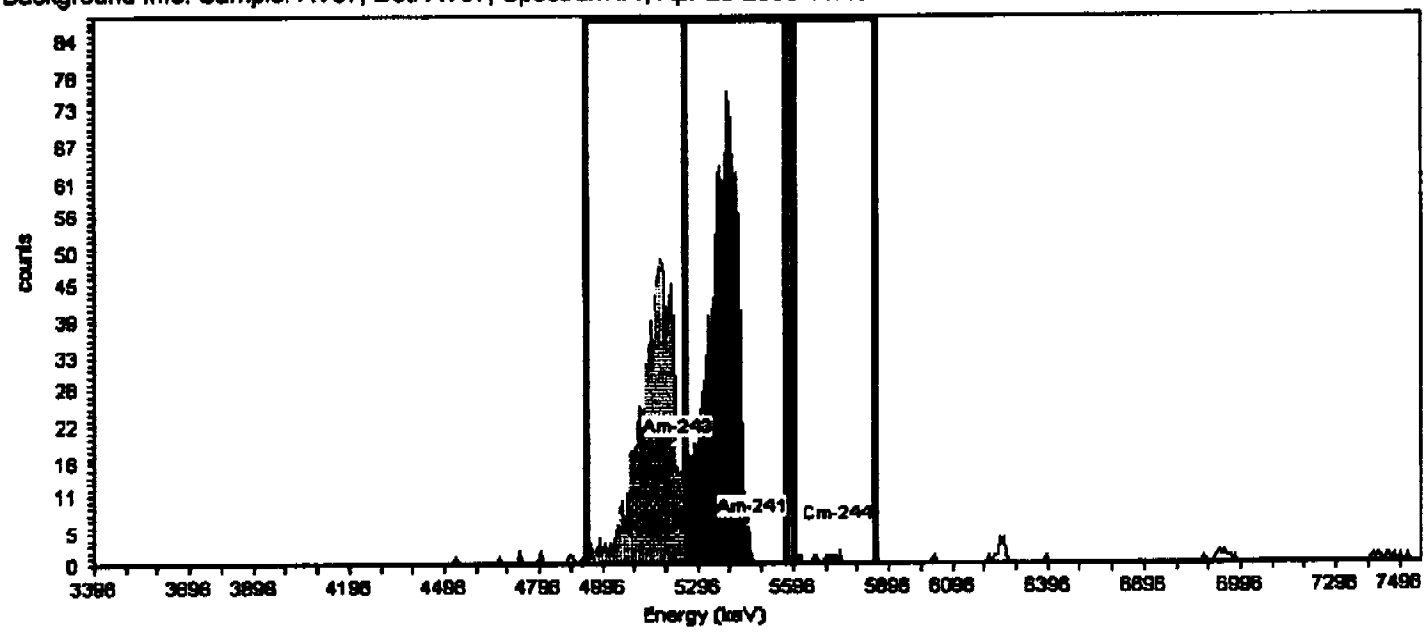
Tracer Name: Rad04-0040_Am243
Tracer Activity: 55.60 DPM/mL x (Vol.)0.10 mL = 5.56 DPM
Tracer Ref. Date: 6/17/1994 12:00:36PM

Tracer Nuclide: Am-243
Tracer Recovery: 94.07%

Acquisition

Detector: AV67
Serial Number:
Acquisition Start Date: 5/11/2005 1:11:23AM
Live Time: 510.00 min.
Real Time: 510.02 min.
Background Date: 4/26/2005 11:48:30AM
Background Info: Sample: AV67; Det: AV67; Spectrum #1; Apr-25-2005 11:48

Calibration Name: April2005_AV67
Calibration Date: 4/27/2005 9:54:01PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 29.35% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = AmROI
Decay Correction: 5/11/2005 12:21:37AM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Americium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Am-243	5232.950	4942.558	5254.729	87.558	100.0	782.00	0.0000	782	2.356E+000	8.504E-002	0.000E+000	8.667E-003
Am-241	5465.263	5254.729	5574.160	99.495	98.0	1,044.00	1.2750	1,043	3.404E+000	1.628E-001	7.760E-003	2.435E-002
Cm-244	5733.876	5595.940	5857.292	142.483	100.0	11.00	12.1125	-1	-3.559E-003	-1.538E-002	2.344E-002	5.554E-002

SEVERN TRENT STL

DAILY PULSERS

Daily Pulser Check - Severn Trent Lab

Pulser Date: 5/10/2005

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria	Gross Counts P/F	FWHM (keV) Result	FWHM (keV) Criteria	FWHM (keV) P/F	Pulser Center Result	Pulser Center Criteria	Pulser Center P/F	Energy (keV) Result	Energy (keV) Criteria	Energy (keV) P/F
AV1	05/10/2005 7:14	7342	7218.7 +/-5%	Pass	13.9	5-50	Pass	227.2	229.0 +/-5%	Pass	5038	5051.1 +/-25%	Pass
AV1	05/10/2005 7:14	7342	7218.7 +/-5%	Pass	13.9	5-50	Pass	227.2	229.0 +/-5%	Pass	5038	5051.1 +/-25%	Pass
AV2	05/10/2005 7:14	7334	7468.7 +/-5%	Pass	15.1	5-50	Pass	226.9	222.9 +/-5%	Pass	5036	5007.5 +/-25%	Pass
AV3	05/10/2005 7:14	7341	7484.9 +/-5%	Pass	13.3	5-50	Pass	228.9	225.9 +/-5%	Pass	5051	5028.8 +/-25%	Pass
AV3	05/10/2005 7:14	7341	7484.9 +/-5%	Pass	13.3	5-50	Pass	228.9	225.9 +/-5%	Pass	5051	5028.8 +/-25%	Pass
AV4	05/10/2005 6:38	7414	7413.7 +/-5%	Pass	13.8	5-50	Pass	224.9	224.9 +/-5%	Pass	5022	5021.6 +/-25%	Pass
AV5	05/10/2005 6:38	7426	7482.4 +/-5%	Pass	13.5	5-50	Pass	237.1	228.1 +/-5%	Pass	5110	5044.6 +/-25%	Pass
AV6	05/10/2005 6:38	7418	7476.7 +/-5%	Pass	13.5	5-50	Pass	227.0	224.0 +/-5%	Pass	5037	5015.3 +/-25%	Pass
AV7	05/10/2005 6:38	7396	7477.0 +/-5%	Pass	15.7	5-50	Pass	227.0	224.9 +/-5%	Pass	5037	5021.9 +/-25%	Pass
AV8	05/10/2005 6:38	7417	7327.4 +/-5%	Pass	13.5	5-50	Pass	228.0	228.0 +/-5%	Pass	5045	5044.6 +/-25%	Pass
AV9	05/10/2005 6:38	7694	7519.3 +/-5%	Pass	21.5	5-50	Pass	253.1	227.9 +/-5%	FAIL	5226	5043.3 +/-25%	Pass
AV10	05/10/2005 6:38	7692	7749.6 +/-5%	Pass	15.8	5-50	Pass	219.0	226.1 +/-5%	Pass	4979	5030.3 +/-25%	Pass
AV11	05/10/2005 6:38	7722	7666.2 +/-5%	Pass	13.3	5-50	Pass	222.0	225.0 +/-5%	Pass	5001	5022.1 +/-25%	Pass
AV12	05/10/2005 6:38	7727	7588.7 +/-5%	Pass	14.2	5-50	Pass	229.1	230.0 +/-5%	Pass	5052	5058.4 +/-25%	Pass
AV13	05/10/2005 6:38	7666	7584.6 +/-5%	Pass	16.7	5-50	Pass	227.0	228.0 +/-5%	Pass	5037	5044.1 +/-25%	Pass
AV15	05/10/2005 6:38	7658	7770.5 +/-5%	Pass	14.3	5-50	Pass	227.0	226.9 +/-5%	Pass	5037	5036.6 +/-25%	Pass
AV16	05/10/2005 6:38	7643	7456.0 +/-5%	Pass	13.5	5-50	Pass	225.1	226.9 +/-5%	Pass	5023	5036.2 +/-25%	Pass
AV17	05/10/2005 6:38	7739	7619.1 +/-5%	Pass	13.9	5-50	Pass	225.9	229.9 +/-5%	Pass	5029	5058.3 +/-25%	Pass
AV18	05/10/2005 6:38	7737	7714.5 +/-5%	Pass	13.8	5-50	Pass	228.0	226.9 +/-5%	Pass	5044	5036.4 +/-25%	Pass
AV19	05/10/2005 6:38	7307	7269.8 +/-5%	Pass	13.1	5-50	Pass	221.9	227.7 +/-5%	Pass	5000	5041.9 +/-25%	Pass
AV20	05/10/2005 6:38	7718	7503.6 +/-5%	Pass	13.7	5-50	Pass	227.1	226.0 +/-5%	Pass	5037	5029.9 +/-25%	Pass
AV21	05/10/2005 6:38	7736	7550.9 +/-5%	Pass	13.2	5-50	Pass	225.0	226.0 +/-5%	Pass	5022	5029.6 +/-25%	Pass
AV22	05/10/2005 6:38	7701	7691.4 +/-5%	Pass	15.5	5-50	Pass	224.1	225.0 +/-5%	Pass	5016	5022.4 +/-25%	Pass
AV23	05/10/2005 6:38	7728	7665.3 +/-5%	Pass	14.0	5-50	Pass	230.0	229.8 +/-5%	Pass	5059	5057.0 +/-25%	Pass
AV24	05/10/2005 6:38	7719	7354.0 +/-5%	Pass	14.2	5-50	Pass	230.0	226.9 +/-5%	Pass	5059	5036.4 +/-25%	Pass
AV25	05/10/2005 6:38	5130	5122.1 +/-5%	Pass	13.7	5-50	Pass	224.0	224.0 +/-5%	Pass	5015	5015.1 +/-25%	Pass
AV26	05/10/2005 6:38	5033	5069.9 +/-5%	Pass	18.3	5-50	Pass	224.0	226.9 +/-5%	Pass	5015	5036.5 +/-25%	Pass
AV27	05/10/2005 6:38	4982	4919.2 +/-5%	Pass	16.0	5-50	Pass	226.0	225.0 +/-5%	Pass	5030	5022.5 +/-25%	Pass
AV29	05/10/2005 6:38	4962	5005.4 +/-5%	Pass	31.4	5-50	Pass	225.1	223.8 +/-5%	Pass	5023	5014.0 +/-25%	Pass
AV29	05/10/2005 6:38	4962	5047.7 +/-5%	Pass	31.4	5-50	Pass	225.1	223.3 +/-5%	Pass	5023	5010.1 +/-25%	Pass
AV33	05/10/2005 6:38	5002	4977.0 +/-5%	Pass	11.5	5-50	Pass	209.1	218.0 +/-5%	Pass	4907	4971.5 +/-25%	Pass
AV34	05/10/2005 6:38	5178	5045.5 +/-5%	Pass	18.5	5-50	Pass	224.0	219.0 +/-5%	Pass	5015	4978.8 +/-25%	Pass

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria		Gross Counts P/F	FWHM (keV) Result	FWHM (keV) Criteria	FWHM (keV) P/F	Pulser Center Result	Pulser Center Criteria		Pulser Center P/F	Energy (keV) Result	Energy (keV) Criteria		Energy (keV) P/F
AV35	05/10/2005 6:38	5002	4932.6	+/-5%	Pass	12.0	5 - 50	Pass	275.0	275.0	+/-5%	Pass	5385	5385.6	+/-25%	Pass
AV37	05/10/2005 6:38	5020	5082.9	+/-5%	Pass	19.7	5 - 50	Pass	236.0	236.1	+/-5%	Pass	5102	5103.2	+/-25%	Pass
AV38	05/10/2005 6:38	5304	5419.4	+/-5%	Pass	16.4	5 - 50	Pass	219.1	217.9	+/-5%	Pass	4980	4448.6	+/-25%	Pass
AV39	05/10/2005 6:38	5263	5316.2	+/-5%	Pass	15.1	5 - 50	Pass	227.0	224.2	+/-5%	Pass	5037	5016.3	+/-25%	Pass
AV40	05/10/2005 6:38	4786	4755.8	+/-5%	Pass	12.3	5 - 50	Pass	226.0	226.0	+/-5%	Pass	5029	5029.5	+/-25%	Pass
AV41	05/10/2005 6:38	4992	4990.8	+/-5%	Pass	11.8	5 - 50	Pass	230.0	229.0	+/-5%	Pass	5059	5051.6	+/-25%	Pass
AV42	05/10/2005 6:38	4990	4977.0	+/-5%	Pass	12.2	5 - 50	Pass	236.9	228.1	+/-5%	Pass	5109	5044.9	+/-25%	Pass
AV43	05/10/2005 6:38	7675	7162.4	+/-5%	FAIL	13.0	5 - 50	Pass	223.0	224.1	+/-5%	Pass	5008	5015.9	+/-25%	Pass
AV45	05/10/2005 6:38	7634	7593.5	+/-5%	Pass	15.9	5 - 50	Pass	228.1	225.6	+/-5%	Pass	5045	5026.9	+/-25%	Pass
AV46	05/10/2005 6:38	7666	7722.7	+/-5%	Pass	13.9	5 - 50	Pass	224.0	225.8	+/-5%	Pass	5015	5028.0	+/-25%	Pass
AV47	05/10/2005 6:38	7663	7532.5	+/-5%	Pass	13.8	5 - 50	Pass	217.0	226.0	+/-5%	Pass	4964	5029.6	+/-25%	Pass
AV48	05/10/2005 6:38	7640	7717.5	+/-5%	Pass	15.3	5 - 50	Pass	220.9	224.0	+/-5%	Pass	4993	5015.2	+/-25%	Pass
AV49	05/10/2005 6:38	7658	7703.4	+/-5%	Pass	14.0	5 - 50	Pass	232.0	226.0	+/-5%	Pass	5073	5029.5	+/-25%	Pass
AV50	05/10/2005 6:38	7656	7660.9	+/-5%	Pass	13.6	5 - 50	Pass	225.0	227.0	+/-5%	Pass	5022	5037.2	+/-25%	Pass
AV51	05/10/2005 6:38	7353	7070.5	+/-5%	Pass	13.1	5 - 50	Pass	221.0	223.0	+/-5%	Pass	4993	5007.6	+/-25%	Pass
AV52	05/10/2005 6:39	7350	7156.4	+/-5%	Pass	13.0	5 - 50	Pass	225.0	225.0	+/-5%	Pass	5022	5022.4	+/-25%	Pass
AV53	05/10/2005 6:39	7167	7144.1	+/-5%	Pass	12.9	5 - 50	Pass	223.0	223.0	+/-5%	Pass	5008	5007.8	+/-25%	Pass
AV54	05/10/2005 6:39	7346	7313.1	+/-5%	Pass	13.6	5 - 50	Pass	229.0	226.0	+/-5%	Pass	5052	5029.5	+/-25%	Pass
AV55	05/10/2005 6:39	7176	7132.9	+/-5%	Pass	12.8	5 - 50	Pass	227.0	226.0	+/-5%	Pass	5037	5029.7	+/-25%	Pass
AV56	05/10/2005 6:39	7340	7163.7	+/-5%	Pass	13.7	5 - 50	Pass	221.1	222.0	+/-5%	Pass	4994	5000.7	+/-25%	Pass
AV57	05/10/2005 6:39	7336	7309.5	+/-5%	Pass	14.5	5 - 50	Pass	222.0	222.0	+/-5%	Pass	5000	5000.6	+/-25%	Pass
AV58	05/10/2005 6:39	7336	7249.2	+/-5%	Pass	13.1	5 - 50	Pass	224.0	223.0	+/-5%	Pass	5015	5008.0	+/-25%	Pass
AV59	05/10/2005 6:39	7057	7141.4	+/-5%	Pass	12.2	5 - 50	Pass	284.9	284.0	+/-5%	Pass	5458	5450.6	+/-25%	Pass
AV60	05/10/2005 6:39	7276	7019.7	+/-5%	Pass	14.1	5 - 50	Pass	222.9	223.0	+/-5%	Pass	5007	5007.5	+/-25%	Pass
AV61	05/10/2005 6:39	7276	7078.3	+/-5%	Pass	13.9	5 - 50	Pass	223.9	225.0	+/-5%	Pass	5014	5022.2	+/-25%	Pass
AV62	05/10/2005 7:14	7226	7083.5	+/-5%	Pass	14.6	5 - 50	Pass	221.9	222.0	+/-5%	Pass	5000	5000.7	+/-25%	Pass
AV63	05/10/2005 7:14	7043	7120.8	+/-5%	Pass	12.6	5 - 50	Pass	223.0	223.0	+/-5%	Pass	5008	5007.9	+/-25%	Pass
AV64	05/10/2005 7:14	7226	7153.7	+/-5%	Pass	13.1	5 - 50	Pass	223.0	224.0	+/-5%	Pass	5008	5015.3	+/-25%	Pass
AV64	05/10/2005 7:14	7226	7153.7	+/-5%	Pass	13.1	5 - 50	Pass	223.0	224.0	+/-5%	Pass	5008	5015.3	+/-25%	Pass
AV65	05/10/2005 7:14	7222	7233.4	+/-5%	Pass	13.6	5 - 50	Pass	222.9	224.0	+/-5%	Pass	5007	5015.3	+/-25%	Pass
AV65	05/10/2005 7:14	7222	7233.4	+/-5%	Pass	13.6	5 - 50	Pass	222.9	224.0	+/-5%	Pass	5007	5015.3	+/-25%	Pass
AV66	05/10/2005 7:14	7095	7165.5	+/-5%	Pass	12.1	5 - 50	Pass	221.0	222.0	+/-5%	Pass	4993	5000.5	+/-25%	Pass
AV66	05/10/2005 7:14	7095	7165.5	+/-5%	Pass	12.1	5 - 50	Pass	221.0	222.0	+/-5%	Pass	4993	5000.5	+/-25%	Pass
AV67	05/10/2005 7:14	7397	7128.1	+/-5%	Pass	16.8	5 - 50	Pass	221.0	224.1	+/-5%	Pass	4993	5015.6	+/-25%	Pass
AV67	05/10/2005 7:14	7397	7128.1	+/-5%	Pass	16.8	5 - 50	Pass	221.0	224.1	+/-5%	Pass	4993	5015.6	+/-25%	Pass
AV68	05/10/2005 7:14	7156	7259.5	+/-5%	Pass	12.8	5 - 50	Pass	221.0	222.0	+/-5%	Pass	4993	5000.8	+/-25%	Pass

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria	Gross Counts P/F	FWHM (keV) Result	FWHM (keV) Criteria	FWHM (keV) P/F	Pulser Center Result	Pulser Center Criteria	Pulser Center P/F	Energy (keV) Result	Energy (keV) Criteria	Energy (keV) P/F
AV69	05/10/2005 7:14	7112	7305.4 +/- 5%	Pass	12.7	5 - 50	Pass	221.0	222.0 +/- 5%	Pass	4993	5000.6 +/- 25%	Pass
AV69	05/10/2005 7:14	7112	7305.4 +/- 5%	Pass	12.7	5 - 50	Pass	221.0	222.0 +/- 5%	Pass	4993	5000.6 +/- 25%	Pass
AV70	05/10/2005 7:14	7118	7406.5 +/- 5%	Pass	12.9	5 - 50	Pass	221.0	222.6 +/- 5%	Pass	4994	5004.7 +/- 25%	Pass
AV71	05/10/2005 7:14	7443	7187.3 +/- 5%	Pass	13.6	5 - 50	Pass	222.1	225.0 +/- 5%	Pass	5001	5022.7 +/- 25%	Pass
AV71	05/10/2005 7:14	7443	7187.3 +/- 5%	Pass	13.6	5 - 50	Pass	222.1	225.0 +/- 5%	Pass	5001	5022.7 +/- 25%	Pass
AV72	05/10/2005 7:14	7442	7090.0 +/- 5%	Pass	13.0	5 - 50	Pass	219.0	223.9 +/- 5%	Pass	4979	5014.6 +/- 25%	Pass
AV73	05/10/2005 7:14	7167	7251.3 +/- 5%	Pass	12.7	5 - 50	Pass	224.0	225.0 +/- 5%	Pass	5015	5022.4 +/- 25%	Pass
AV73	05/10/2005 7:14	7167	7251.3 +/- 5%	Pass	12.7	5 - 50	Pass	224.0	225.0 +/- 5%	Pass	5015	5022.4 +/- 25%	Pass
AV74	05/10/2005 7:14	7435	7227.1 +/- 5%	Pass	13.8	5 - 50	Pass	220.1	224.0 +/- 5%	Pass	4987	5015.0 +/- 25%	Pass

SEVERN TRENT STL

Alpha Calibration Insert
5/10/05

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:44:27AM 5/10/2005

Analyst: 60040
Detector: AV5

Calibration

Name: April_2005a
Description:

Calibration Date: 5/9/2005 6:20:57PM

Source Info

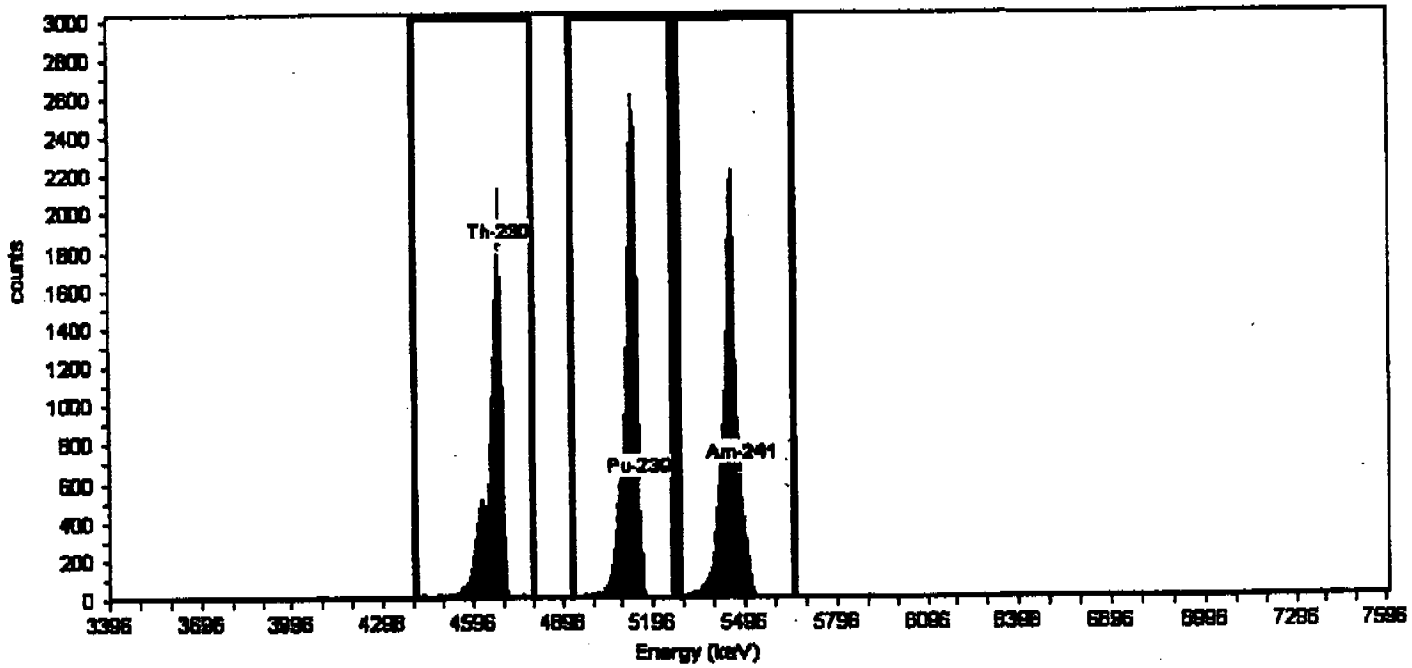
Certificate ID: 63507-334
Prepared by: Analytics
Description: AV5

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV5 , SN: 41-158X7
Acquisition Start Date: 5/9/2005 3:50:26PM
Live Time: 140.00 min.
Real Time: 140.04 min.
Efficiency: 27.25% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,687.00	90.62
Pu-239	243	5.16	212	258	14,940.00	106.71
Am-241	289	5.49	261	313	14,747.00	105.34

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:56:48PM 5/9/2005

Analyst: 60040
Detector: AV27

Calibration

Name: April2005_AV27a
Description:

Calibration Date: 5/9/2005 6:56:44PM

Source Info

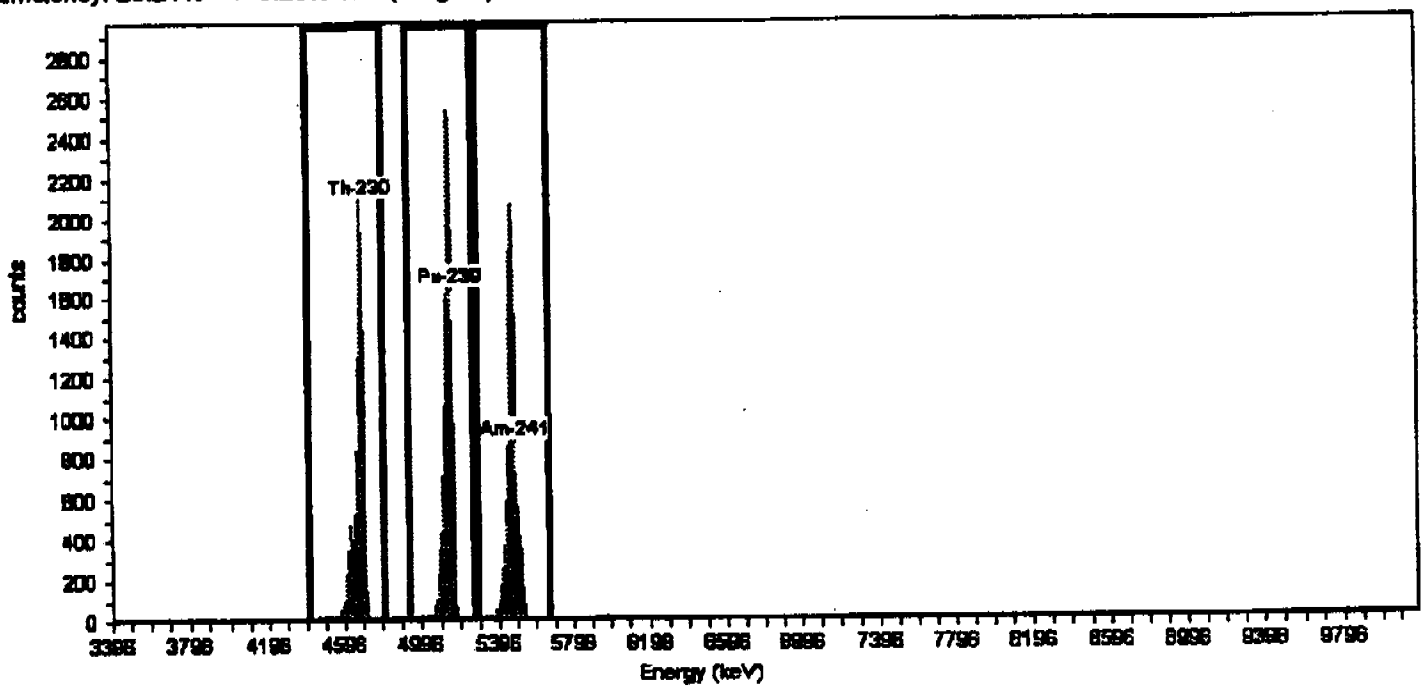
Certificate ID: 63508A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV27 , SN: ALDR19
Acquisition Start Date: 5/9/2005 4:10:28PM
Live Time: 140.00 min.
Real Time: 140.04 min.
Efficiency: 25.21% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 2

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	11,560.00	82.57
Pu-239	243	5.16	212	258	13,327.00	95.19
Am-241	289	5.49	261	313	12,376.00	88.40

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:57:06PM 5/9/2005

Analyst: 60040
Detector: AV28

Calibration

Name: April2005a_AV28
Description:

Calibration Date: 5/9/2005 6:57:02PM

Source Info

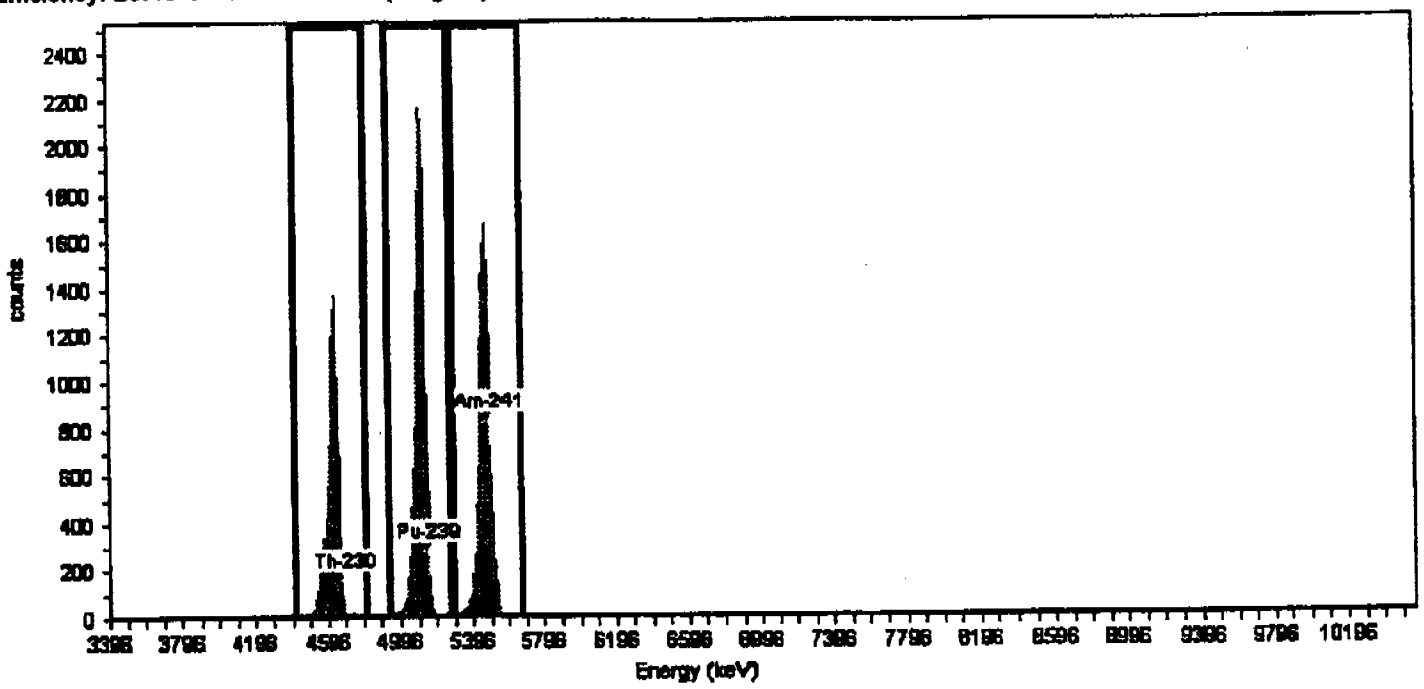
Certificate ID: 63507-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV28 , SN: ALDR20
Acquisition Start Date: 5/9/2005 4:36:27PM
Live Time: 140.00 min.
Real Time: 140.05 min.
Efficiency: 26.40% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 2

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	11,113.00	79.38
Pu-239	243	5.16	212	258	16,766.00	119.76
Am-241	269	5.49	261	313	14,615.00	104.39

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:56:57PM 5/9/2005

Analyst: 60040
Detector: AV30

Calibration

Name: April2005_AV30a
Description:

Calibration Date: 5/9/2005 6:56:53PM

Source Info

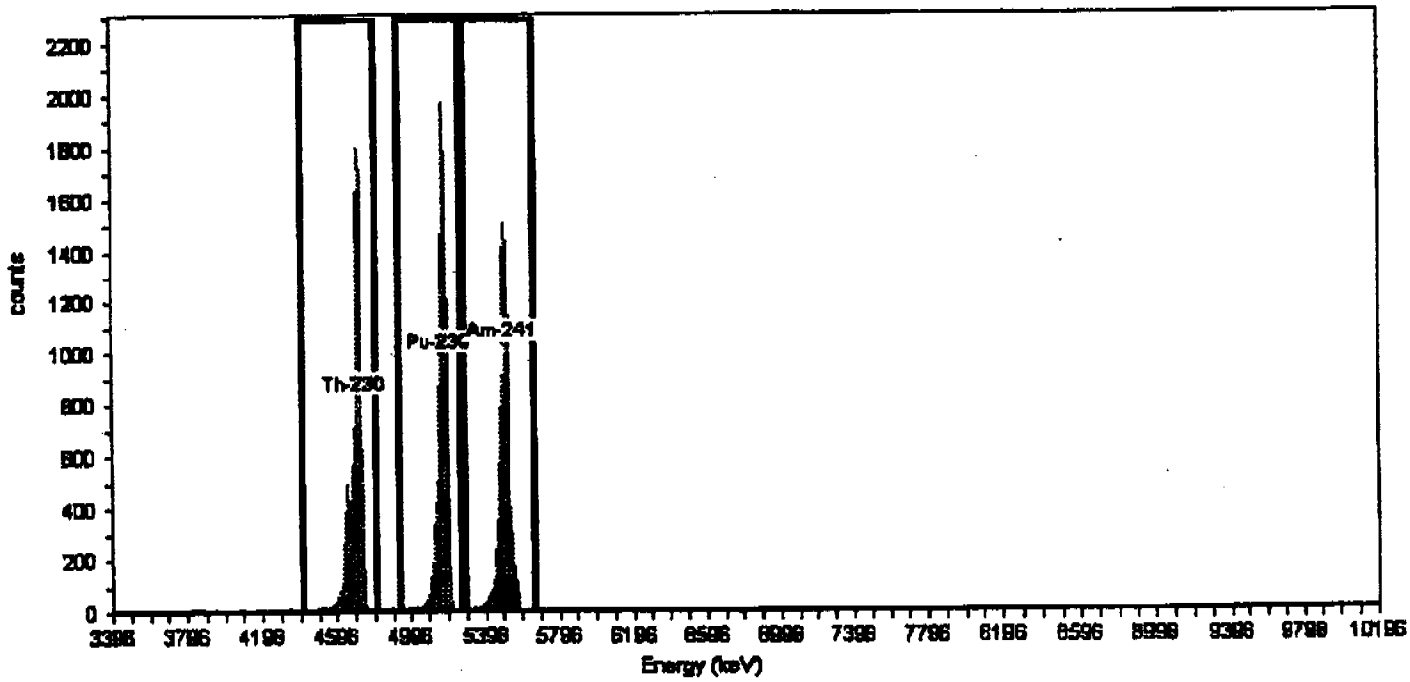
Certificate ID: 63506-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:07PM

Acquisition

Detector: AV30 , SN:
Acquisition Start Date: 5/9/2005 4:22:38PM
Live Time: 140.00 min.
Real Time: 140.05 min.
Efficiency: 18.64% +/- 0.22% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 2

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	11,361.00	81.15
Pu-239	243	5.16	212	258	10,911.00	77.94
Am-241	289	5.49	261	313	10,151.00	72.51

SEVERN TRENT STL

Run Log

Alphavision
5/10/05

Logbook No.: 2671

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5/9	9119016	F5D250133-008	34	180	TH	JLL	gw
2			-009	35				
3			-010	37				
4			-011	38				
5			-012	39				
6			-013	40				
7			-014	41				
8			F5B290000-016B	70				
9			-016C	71				
10	5/9	5125266	F5D270308-001	34	180	TH	PL	gw
11			-002	25				
12			-003	37				
13			-004	38				
14			-005	39				
15			F5E050000-266B	40				
16			-266C	41				
17			-266L	42				
18	5/9	5126225	F5E060000-225B	35	180	TH	CH	
19			-225C	37				
20			F5E060125-001	25				
21			-001X	33				
22			-003	34				
23		5126226	F5E060000-226B	41	180	U	CH	gw
24			-226C	42				
25			F5E060125-001	38				
26			-001X	39				
27			-003	40				
28	5/10/5	Daily	BKG + Source	1-74	1 min	Co	gw	—
29	5-10-5	5129044	F5E070124-001	1	180 min	Pu	~	

Reviewed By: RD

Date: 5/11/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2671

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5-10-5	5129064	FSE070129-001X	2	180min	Pu	~	RR
2			FSE090000-094B	10				
3			-094C	45				
4		5129596	FSE030266-002	3	500min	Th	~	RR
5			-002X	9				
6			FSE040000-596B	47				
7			-596C	48				
8		5129600	FSE030266-002	6	500min	Th	~	RR - stopped
9			-002X	1				
10			FSE040000-600B	54				
11			-600C	55				
12		5125489	FSD280189-001	8	240min	Th	~	RR
13			-001X	9				
14			-002	11				
15			FSE050000-489B	57				
16			-489C	58				
17		5125491	FSD280189-001	12	180min	Th	~	RR
18			-001X	13				
19			-002	15				
20			FSE050000-491B	59				
21			-491C	62				
22		5125266	FSD270308-001RC	25	180	Th	RR	RR
23		5126533	FSD210345-001	1	480	U	CH	
24			-002	2				
25			-003	3				
26			-004	4				
27			-005	6				
28			-006	7				
29			-007	8				

Reviewed By: RR

Date: 5/11/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2671

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5/10/05	5126533	F5D210345-006 009	9	400	U	CH	RR
2			-009 -010	10				
3			-010 -011	11				
4			-011 -012	12				
5			-012 -013	13				
6			-013 -014	15				
7			-014 -014X	16				
8			-014X cnt 5/10/05	17				
9			-015	18				
10			F5E060000-533B	19				
11			1 -533C	20				
12	5/10/05	5125131	F5E040103-001	45	180	Am	CH	RR
13			-001X	46				
14			F5E040104-001	47				
15			F5E040105-001	48				
16			F5E050000-131B	49				
17			1 -131C	50				
18	5/10/05	5125133	F5E040103-001	51	180	Pu	CH	
19			1 -001X	52				
20			F5E040104-001	53				
21			F5E040105-001	54				
22			F5E050000-133B	55				
23			1 133C	56				
24	5/10/05	5125136	F5E040103-001	57	180	U	CH	
25			1 -001X	58				
26			F5E040104-001	59				
27			F5E040105-001	60				
28			F5E050000-136B	61				
29			1 -136C	62				

Reviewed By: RR Date: 5/11/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2671

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5/10/05	5126224	F5D210345-014	63	~~600~~ 51000	Am	CH	PIC
2			-014X	64				
3			-015	65				
4			F5E060000-224B	66				
5			-224C	67				
6	5/11/5	Daily	Pulsers	1-74	1 min	QA	gew	—
7	5/11	5126533	F5D210345-006	15	400	UW	gew/PR	
8			-008	16				
9		5130592	F5E030266-002	1	240	UU	PR	
10			-002X	2				
11			F5E100020-592B	3				
12			-592C	4				
13		5126328	F5D050130-021	6	180	UU		
14			-021X	7				
15			-022	8				
16			-023	9				
17			-024	11				
18			F5E060000-328B	12				
19			-328C	13				
20		5126347	F5D200213-002	25		TH	gew	
21			-002X	26				
22			F5E060000-347B	27				
23			-347C	33				
24								
25								
26								
27								
28								
29								

Reviewed By:______________________ Date:__________

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

LANL LL 600mm 5/12

SEVERN TRENT **STL**

Radiochemistry Prep Report

Alpha Spectroscopy

Batch # 5126224

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

General Prep Information

Method	Tracer ID	Aliquot	Isotope	Reference Date	Activity	Units	Analyst
Iso AMERICIUM (LONG CT) NAS & DOE MOD							
	Rad04-0040	0.1	Am-243	6/7/1994	5.56E+01	dpm/mL	400586

Weights

Lot ID	Work Order #	Geometry	Aliquot	Dilution	Adj Aliquot	
F5D210345-014	G8WN92AE	Planchette, 44mm	1.0005	1	1.0005 g	63
[redacted]						
F5D210345-014X	G8WN91AF	Planchette, 44mm	1.0007	1	1.0007 g	64
[redacted]						
F5D210345-015	G8WPC2AE	Planchette, 44mm	1	1	1 g	65
[redacted]						
F5E060000-224B	G909W1AA	Planchette, 44mm	1	1	1 g	66
[redacted]						
F5E060000-224C	G909W1AC	Planchette, 44mm	1	1	1 g	67
[redacted]						

Spike Information

Lot ID	Work Order #	Standard ID	Aliquot	Isotope	Reference Date	Activity	Units
F5E060000-224C	G909W1AC	Rad04-0006	0.1	Am-241	4/18/1996	3.86E+00	pCi/g

Standard Operating Procedures

	SOP Number	Rev	Title
☐	STL-RC-0002	3	Planchet Preparation For Radiochemistry And Radiological Screening Analysis
☑	STL-RC-0003	5	Drying And Grinding Of Soil And Solid Samples
☑	STL-RC-0004	7	Preparation Of Soil, Sludge, And Filter Paper Samples For Radiochemical Analysis
☐	STL-RC-0090	4	Preparation Of Samples For Sequential Determination Of Isotopic Americium, Curium, Neptunium, Plutonium, Thorium, And Uranium In Aqueous Samples
☑	STL-RC-0100	7	Actinide Coprecipitation
☑	STL-RC-0240	3	Isotopic Americium, Curium, Plutonium, Thorium, and Uranium in Water, Soil, Sludge and Filters by Eichrome Separation Resin
☐	STL-RC-0241	1	Isotopic Americium, Plutonium, Curium, and Uranium in Water, Soil, Sludge and Filters by Eichrome Uteva and Tru Resins
☑	STL-RD-0201	2	Daily Operations Of An Alpha Spectroscopy System
☑	STL-RD-0203	1	Calibration And Maintenance Of A Alpha Spectroscopy System

(Check all that apply)

KH	05-10-05	MPM	JTW	5-9-05
Coprecipitated By	Precip Date	Spiked By	Spike Verified By	Spike Date
[signature]	5-10-05	RE	5-11-05	
Analyst's Signature	Date	Reviewed By	Date	

Monday, May 09, 2005 12:42:01 PM Page 1 of 1 RadCapture version 3.50, updated 5/24/2004

STL St. Louis

Isotopic Actinide DLC calculation when decay and ingrowth calculations are not required.

Sample ID	Isotope	Total Bkgd Cts	L/g Sample Volume	decimal det. eff.	minutes ct. length	decimal yield	decimal abundance	DLC
F5D210345-014	Am241	1.9125	1.0005	0.2703	510	0.7566	0.98	0.0142
F5D210345-014X	Am241	1.9125	1.0007	0.2629	510	0.7998	0.98	0.0138
F5D210345-015	Am241	1.9125	1	0.2705	510	0.7614	0.98	0.0141
F5E060000-224B	Am241	1.275	1	0.2755	510	0.8416	0.98	0.0102
F5E060000-224C	Am241	1.275	1	0.2935	510	0.9407	0.98	0.0086

Calculated by: RR Date: 5/11/05

Reviewed by: [signature] Date: 5/11/05

St. Louis Laboratory
13715 Rider Trail North
Earth City, MO 63045-1205

Alpha Spectroscopy Quality Assurance Worksheet

Batch: 5126224

F5E060000-224C Recovery Summary			
Isotope	Certified Activity	Observed Activity	% Recovery
Am-241	3.86E+00	3.40E+00	88%

F5D210345-014 Duplicate Summary			
Isotope	Sample Activity	Duplicate Activity	RER
Am-241	<MDA	<MDA	N/A

Comments: _____

Calculated By: RR DATE: 5/11/2005

Reviewed By: [signature] DATE: 5/11/05

SEVERN TRENT STL

Gas Proportional Counting Gross Alpha and Beta

SEVERN TRENT STL

GAS FLOW PROPORTIONAL COUNTING

Data and Results Reports

Instrument Checks
Daily Instrument Check
Monthly Background

Batch Summary Sheets
Run Logs

Raw Data
Prep Data Sheet(s)
Instrument Printouts
QC Acceptance Sheet(s)
Certificate/Standard Sheets

SEVERN TRENT **STL**

Analysis Report for Gross Alpha/Beta

Batch: 5139111 **Operator:** 60040

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Sample ID / WRKNO	Aliquot Mass	Instr ID / CountTime	Cnt Dur / Dilution	Sigma		Sample Counts	BkgCPM	SampCPM	Eff	Activity	UncTot	UncCnt	MDA	DLC
F5D210345-001	1.021E-001 g	RedA1	800.00	1.00	*Alpha*	231	5.300E-002	2.888E-001	0.1385	7.512E+000pCi/g	7.581E-001	6.585E-001	1.314E+000	8.033E-001
G8WNH1AT	0.0461 g	5/19/05 17:46	1.00		*Beta*	1983	1.058E+000	2.479E+000	0.4562	1.374E+001pCi/g	9.409E-001	6.430E-001	1.668E+000	8.181E-001
F5D210345-002	1.180E-001 g	RedA2	800.00	1.00	*Alpha*	210	9.700E-002	2.625E-001	0.1478	4.274E+000pCi/g	5.877E-001	5.475E-001	1.410E+000	6.616E-001
G8WNN1AF	0.0417 g	5/19/05 17:46	1.00		*Beta*	1463	1.119E+000	1.828E+000	0.4407	6.148E+000pCi/g	6.090E-001	5.258E-001	1.536E+000	7.536E-001
F5D210345-003	1.213E-001 g	RedA3	800.00	1.00	*Alpha*	257	6.700E-002	3.212E-001	0.1012	9.328E+000pCi/g	9.330E-001	8.081E-001	1.685E+000	7.909E-001
G8WNQ1AF	0.0646 g	5/19/05 17:46	1.00		*Beta*	2105	1.036E+000	2.631E+000	0.4372	1.355E+001pCi/g	8.896E-001	5.750E-001	1.450E+000	7.110E-001
F5D210345-004	1.216E-001 g	RedA4	800.00	1.00	*Alpha*	392	4.600E-002	4.900E-001	0.0945	1.740E+001pCi/g	1.336E+000	1.014E+000	1.515E+000	6.913E-001
G8WNR1AF	0.0705 g	5/19/05 17:46	1.00		*Beta*	2795	1.016E+000	3.494E+000	0.4310	2.129E+001pCi/g	1.245E+000	6.453E-001	1.453E+000	7.125E-001
F5D210345-005	9.270E-002 g	RedB1	800.00	1.00	*Alpha*	546	2.600E-002	6.825E-001	0.1430	2.230E+001pCi/g	1.505E+000	1.011E+000	1.016E+000	4.506E-001
G8WNV1AF	0.0446 g	5/19/05 17:47	1.00		*Beta*	2177	1.615E+000	2.721E+000	0.4439	1.211E+001pCi/g	1.008E+000	8.060E-001	2.324E+000	1.144E+000
F5D210345-006	9.240E-002 g	RedB2	800.00	1.00	*Alpha*	236	5.600E-002	2.950E-001	0.1337	8.711E+000pCi/g	8.790E-001	7.635E-001	1.542E+000	7.095E-001
G8WNW1AF	0.0488 g	5/19/05 17:47	1.00		*Beta*	1935	1.139E+000	2.419E+000	0.4515	1.382E+001pCi/g	9.976E-001	7.200E-001	1.931E+000	9.477E-001
F5D210345-007	9.540E-002 g	RedB3	800.00	1.00	*Alpha*	410	4.100E-002	5.125E-001	0.0771	2.887E+001pCi/g	2.162E+000	1.610E+000	2.245E+000	1.020E+000
G8WN01AF	0.0843 g	5/19/05 17:47	1.00		*Beta*	3071	1.114E+000	3.839E+000	0.4315	2.961E+001pCi/g	1.721E+000	8.609E-001	1.936E+000	9.498E-001
F5D210345-008	1.059E-001 g	RedB4	800.00	1.00	*Alpha*	195	7.400E-002	2.437E-001	0.1256	5.747E+000pCi/g	7.334E-001	6.747E-001	1.629E+000	7.575E-001
G8WN11AF	0.0537 g	5/19/05 17:47	1.00		*Beta*	1763	1.092E+000	2.204E+000	0.4548	1.040E+001pCi/g	7.942E-001	8.003E-001	1.639E+000	8.039E-001
F5D210345-009	1.007E-001 g	RedC3	800.00	1.00	*Alpha*	127	4.600E-002	1.588E-001	0.1400	3.602E+000pCi/g	5.419E-001	5.111E-001	1.235E+000	5.635E-001
G8WN21AF	0.0481 g	5/19/05 17:48	1.00		*Beta*	1439	1.181E+000	1.799E+000	0.4483	6.164E+000pCi/g	6.825E-001	6.089E-001	1.816E+000	8.919E-001
F5D210345-010	9.570E-002 g	RedC4	800.00	1.00	*Alpha*	122	8.200E-002	1.525E-001	0.1505	2.206E+000pCi/g	5.467E-001	5.355E-001	1.578E+000	7.367E-001
G8WN31AF	0.0410 g	5/19/05 17:48	1.00		*Beta*	1353	1.232E+000	1.691E+000	0.4589	4.710E+000pCi/g	6.832E-001	6.200E-001	1.906E+000	9.364E-001
F5D210345-011	1.174E-001 g	RedD1	800.00	1.00	*Alpha*	91	5.500E-002	1.138E-001	0.1358	1.660E+000pCi/g	4.186E-001	4.103E-001	1.185E+000	5.450E-001
G8WN41AF	0.0491 g	5/19/05 17:47	1.00		*Beta*	1097	1.081E+000	1.359E+000	0.4560	2.337E+000pCi/g	4.791E-001	4.647E-001	1.467E+000	7.196E-001
F5D210345-012	1.021E-001 g	RedD2	800.00	1.00	*Alpha*	67	4.800E-002	8.375E-002	0.1155	1.365E+000pCi/g	4.947E-001	4.900E-001	1.505E+000	6.881E-001
G8WN51AF	0.0608 g	5/19/05 17:47	1.00		*Beta*	1160	1.100E+000	1.450E+000	0.4399	3.810E+000pCi/g	5.928E-001	5.663E-001	1.763E+000	8.652E-001
F5D210345-013	1.007E-001 g	RedD3	800.00	1.00	*Alpha*	731	5.400E-002	9.137E-001	0.0885	4.344E+001pCi/g	2.794E+000	1.757E+000	2.101E+000	9.657E-001
G8WN71AF	0.0752 g	5/19/05 17:47	1.00		*Beta*	4581	1.085E+000	5.726E+000	0.4365	4.756E+001pCi/g	2.559E+000	9.456E-001	1.790E+000	8.780E-001
F5D210345-014	9.590E-002 g	RedD4	800.00	1.00	*Alpha*	303	6.500E-002	3.787E-001	0.1379	1.069E+001pCi/g	9.640E-001	8.023E-001	1.543E+000	7.144E-001
G8WN91AJ	0.0448 g	5/19/05 17:47	1.00		*Beta*	1788	1.272E+000	2.210E+000	0.4558	9.668E+000pCi/g	8.342E-001	6.799E-001	1.946E+000	9.560E-001
F5D210345-015	9.250E-002 g	BlueA1	800.00	1.00	*Alpha*	181	7.800E-002	2.263E-001	0.1368	5.277E+000pCi/g	7.427E-001	6.942E-001	1.755E+000	8.177E-001
G8WPC1AF	0.0456 g	5/19/05 17:47	1.00		*Beta*	1470	1.067E+000	1.837E+000	0.4596	8.184E+000pCi/g	7.578E-001	6.384E-001	1.835E+000	9.002E-001

Sample ID / WRKNO	Aliquot Mass	Instr ID / CountTime	Cnt Dur / Dilution	Sigma		Sample Counts	BkgCPM	SampCPM	Eff	Activity	UncTot	UncCnt	MDA	DLC
F5D220356-001	1.061E-001 g	BlueA2	800.00	1.00	*Alpha*	351	3.700E-002	4.387E-001	0.0861	1.981E+001pCi/g	1.558E+000	1.202E+000	1.726E+000	7.800E-001
G81591AH	0.0794 g	5/19/05 17:47	1.00		*Beta*	2487	1.059E+000	3.109E+000	0.4357	1.997E+001pCi/g	1.221E+000	7.032E-001	1.681E+000	8.247E-001
F5D220356-001Sa	1.096E-001 g	BlueA4	800.00	1.00	*Alpha*	2082	6.200E-002	2.603E+000	0.0862	1.209E+002pCi/g	6.640E+000	2.746E+000	2.109E+000	9.746E-001
G81591AL	0.0749 g	5/19/05 17:47	1.00		*Beta*	3116	9.570E-001	3.895E+000	0.4481	2.702E+001pCi/g	1.529E+000	7.163E-001	1.510E+000	7.400E-001
F5D220356-001Sb	9.820E-002 g	BlueB1	541.11	1.00	*Alpha*	322	5.400E-002	5.951E-001	0.0730	3.388E+001pCi/g	2.760E+000	2.175E+000	3.232E+000	1.460E+000
G81591AJ	0.0646 g	5/19/05 17:47	1.00		*Beta*	10000	1.105E+000	1.848E+001	0.4354	1.831E+002pCi/g	9.370E+000	2.004E+000	2.267E+000	1.108E+000
F5D220356-001X	9.560E-002 g	BlueB2	800.00	1.00	*Alpha*	405	4.300E-002	5.062E-001	0.0926	2.359E+001pCi/g	1.781E+000	1.334E+000	1.909E+000	8.685E-001
G81591AK	0.0706 g	5/19/05 17:48	1.00		*Beta*	2611	1.151E+000	3.264E+000	0.4436	2.247E+001pCi/g	1.373E+000	7.900E-001	1.912E+000	9.384E-001
F5D220356-002	1.104E-001 g	BlueB4	800.00	1.00	*Alpha*	267	4.100E-002	3.337E-001	0.1070	1.116E+001pCi/g	9.964E-001	8.254E-001	1.399E+000	6.351E-001
G816E1AF	0.0586 g	5/19/05 17:48	1.00		*Beta*	1978	9.690E-001	2.473E+000	0.4424	1.387E+001pCi/g	9.200E-001	6.049E-001	1.524E+000	7.467E-001
F5D220356-003	1.215E-001 g	BlueC2	800.00	1.00	*Alpha*	108	6.200E-002	1.350E-001	0.0916	2.954E+000pCi/g	6.519E-001	6.349E-001	1.793E+000	8.266E-001
G816L1AF	0.0741 g	5/19/05 17:48	1.00		*Beta*	1030	9.890E-001	1.288E+000	0.4466	2.478E+000pCi/g	4.599E-001	4.429E-001	1.385E+000	6.791E-001
F5D220356-004	1.049E-001 g	BlueC3	800.00	1.00	*Alpha*	133	7.000E-002	1.663E-001	0.1336	3.093E+000pCi/g	5.736E-001	5.523E-001	1.507E+000	6.994E-001
G816P1AM	0.0434 g	5/19/05 17:48	1.00		*Beta*	1978	1.446E+000	2.473E+000	0.4506	9.783E+000pCi/g	8.271E-001	6.670E-001	1.916E+000	9.426E-001
F5D220356-005	9.730E-002 g	BlueC4	800.00	1.00	*Alpha*	108	6.400E-002	1.350E-001	0.1398	2.351E+000pCi/g	5.354E-001	5.223E-001	1.490E+000	6.891E-001
G816T1AF	0.0448 g	5/19/05 17:48	1.00		*Beta*	1208	1.028E+000	1.510E+000	0.4563	4.890E+000pCi/g	8.215E-001	5.714E-001	1.725E+000	8.460E-001
F5E190000-111B	1.000E+000 g	YellowA1	800.00	1.00	*Alpha*	70	8.000E-002	8.750E-002	0.2494	1.384E-002pCi/g	2.614E-002	2.613E-002	9.009E-002	4.201E-002
HATWN1AA	0.0003 g	5/19/05 17:49	1.00		*Beta*	930	1.220E+000	1.183E+000	0.4630	-5.594E-002pCi/g	5.317E-002	5.310E-002	1.800E-001	8.839E-002
F5E190000-111Ca	1.000E+000 g	YellowA2	800.00	1.00	*Alpha*	2913	7.000E-002	3.641E+000	0.1639	9.814E+000pCi/g	5.252E-001	1.872E-001	1.268E-001	5.980E-002
HATWN1AD	0.0323 g	5/19/05 17:49	1.00		*Beta*	1732	1.170E+000	2.165E+000	0.4456	1.006E+000pCi/g	8.239E-002	6.527E-002	1.832E-001	8.993E-002
F5E190000-111Cb	1.000E+000 g	YellowA3	800.00	1.00	*Alpha*	261	6.000E-002	3.262E-001	0.1616	7.420E-001pCi/g	7.160E-002	6.124E-002	1.217E-001	5.615E-002
HATWN1AC	0.0325 g	5/19/05 17:49	1.00		*Beta*	15816	1.200E+000	1.977E+001	0.4592	1.822E+001pCi/g	9.246E-001	1.588E-001	1.800E-001	8.838E-002

Laboratory Control Sample Information

SampID	WRKNO	Analyte	Activity	StdAdded	Recovery
F5E190000-111Ca	HATWN1AD	Gross Alpha	9.814E+000pCi/g	1.029E+001pCi/g	95.39%
F5E190000-111Cb	HATWN1AC	Gross Beta	1.822E+001pCi/g	2.086E+001pCi/g	87.31%

Sample Duplicate Information

Sample ID	Dup Sample ID		Sample Activity	Dup Activity	RPD	RER
F5D220356-001	F5D220356-001X	*Alpha:*	1.981E+001	2.359E+001	17.44%	1.133E+000
		Beta:	1.997E+001	2.247E+001	11.76%	9.620E-001

Sample ID / WRKNO	Aliquot Mass	Instr ID / CountTime	Cnt Dur / Dilution	Sigma	Sample Counts	BkgCPM	SampCPM	Eff	Activity	UncTot	UncCnt	MDA	DLC

Matrix Spike Information

SampID	SampMSID	Sample Activity	MS Activity	StdAdded	MSRecovery
F5D220358-001	F5D220358-001Sa	1.981E+001pCi/g	1.209E+002pCi/g	9.370E+001	107.89%
F5D220358-001	F5D220358-001Sb	1.997E+001pCi/g	1.831E+002pCi/g	2.125E+002	76.76%

SEVERN TRENT STL

Instrument Checks

LOT# F5D220345

STL ST. LOUIS

STL Gas Proportional Counter Daily Quality Control Checks

Thursday, May 19, 2005

Instrument: ***Protean***

Detector ID	Check Type	Alpha CPM	Alpha Mean	Alpha Std. Dev.	Alpha Deviation	Alpha Flag	Beta CPM	Beta Mean	Beta Std. Dev.	Beta Deviation	Beta Flag
0	Efficiency	12555.50	12559.35	68.88	-3.85	Pass	40853.66	41184.40	151.97	-330.74	WARNING
	Background	0.067	0.063	0.055	0.003	Pass	0.433	0.643	0.189	-0.210	Pass
1	Efficiency	11137.00	11226.75	102.68	-89.75	Pass	42647.13	42754.43	146.49	-107.30	Pass
	Background	0.067	0.022	0.029	0.045	Pass	0.900	0.493	0.192	0.407	Pass
10	Efficiency	11622.50	11749.83	74.07	-127.33	Pass	28615.22	28619.05	135.18	-3.83	Pass
	Background	0.133	0.027	0.034	0.107	FAIL	0.567	0.390	0.183	0.177	Pass
11	Efficiency	11751.00	11782.92	88.72	-31.92	Pass	36833.76	36990.70	166.73	-156.94	Pass
	Background	0.167	0.045	0.031	0.122	FAIL	0.733	0.470	0.142	0.263	Pass
12	Efficiency	12058.00	12262.05	64.21	-204.05	FAIL	32401.98	32548.70	121.53	-146.72	Pass
	Background	0.067	0.033	0.029	0.033	Pass	0.400	0.432	0.112	-0.032	Pass
13	Efficiency	11714.00	12082.75	59.85	-368.75	FAIL	28451.14	28999.40	97.30	-548.26	FAIL
	Background	0.133	0.040	0.035	0.093	Pass	0.400	0.378	0.143	0.022	Pass
14	Efficiency										
	Background	0.400	0.033	0.037	0.367	FAIL	0.667	0.345	0.097	0.322	FAIL
15	Efficiency										
	Background	0.200	0.030	0.042	0.170	FAIL	0.767	0.445	0.120	0.322	Pass
2	Efficiency	11929.50	11981.23	68.71	-51.73	Pass	29249.43	29179.72	137.91	69.71	Pass
	Background	0.100	0.030	0.047	0.070	Pass	0.400	0.553	0.126	-0.153	Pass
3	Efficiency	11942.00	11948.73	85.58	-6.73	Pass	38253.93	38443.78	165.07	-189.85	Pass
	Background	0.067	0.017	0.020	0.050	Pass	0.333	0.513	0.184	-0.180	Pass
4	Efficiency	12244.00	12441.33	69.85	-197.33	WARNING	31024.00	33032.35	125.88	-2008.35	FAIL
	Background	0.033	0.042	0.030	-0.008	Pass	0.467	0.418	0.159	0.048	Pass
5	Efficiency	12094.00	12208.20	69.90	-114.20	Pass	29170.22	29318.10	90.79	-147.88	Pass
	Background	0.033	0.028	0.029	0.005	Pass	0.200	0.478	0.181	-0.278	Pass
6	Efficiency										
	Background	0.033	0.038	0.029	-0.005	Pass	0.300	0.435	0.134	-0.135	Pass
7	Efficiency	12678.00	12712.42	66.23	-34.42	Pass	34703.26	35123.97	172.19	-420.72	WARNING
	Background	0.167	0.043	0.042	0.123	Pass	0.400	0.565	0.146	-0.165	Pass
8	Efficiency	12407.00	12519.67	93.66	-112.67	Pass	40921.43	41196.50	117.84	-275.07	WARNING
	Background	0.033	0.038	0.029	-0.005	Pass	0.333	0.443	0.164	-0.110	Pass
9	Efficiency	11136.00	11159.50	63.97	-23.50	Pass	42144.59	42504.65	209.38	-360.06	Pass
	Background	0.033	0.033	0.031	0.000	Pass	0.400	0.345	0.108	0.055	Pass

5/19/2005 9:12:47 AM

IQC version 2.2, updated 3/16/2004

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5/19/05

STL

Gas Proportional Counter Daily Quality Control Checks

Thursday, May 19, 2005

Instrument: *BLUE*

Detector ID	Check Type	Alpha CPM	Alpha Mean	Alpha Std. Dev.	Alpha Deviation	Alpha Flag	Beta CPM	Beta Mean	Beta Std. Dev.	Beta Deviation	Beta Flag
A1	Efficiency	13682.50	13817.48	92.26	-134.98	Pass	46256.82	46464.18	220.26	-207.36	Pass
	Background	0.133	0.080	0.060	0.053	Pass	0.900	1.112	0.210	-0.212	Pass
A2	Efficiency	12175.00	12297.53	90.44	-122.52	Pass	46989.55	46874.55	204.49	115.00	Pass
	Background	0.033	0.053	0.055	-0.020	Pass	0.967	1.025	0.224	-0.058	Pass
A3	Efficiency	8196.50	12874.63	89.97	-4678.13	FAIL	21859.01	31733.17	173.49	-9874.17	FAIL
	Background	0.133	0.040	0.041	0.093	Pass	1.300	13.282	11.420	-11.982	Pass
A4	Efficiency	13049.00	12974.10	89.70	74.90	Pass	42033.80	42018.38	147.34	15.43	Pass
	Background	0.033	0.082	0.057	-0.048	Pass	1.033	0.990	0.250	0.043	Pass
B1	Efficiency	13067.50	13115.48	67.45	-47.98	Pass	35286.78	35343.20	131.28	-56.42	Pass
	Background	0.067	0.073	0.059	-0.007	Pass	1.067	1.057	0.185	0.010	Pass
B2	Efficiency	12985.50	13134.85	84.21	-149.35	Pass	31584.37	31623.00	108.52	-38.63	Pass
	Background	0.167	0.083	0.060	0.083	Pass	1.100	1.118	0.175	-0.018	Pass
B3	Efficiency	7132.50	12929.85	95.67	-5797.35	FAIL	25385.49	39254.85	337.77	-13869.36	FAIL
	Background	0.233	0.058	0.044	0.175	FAIL	38.400	8.063	12.526	30.337	Pass
B4	Efficiency	13635.00	13513.28	116.46	121.73	Pass	38213.62	37659.47	269.72	554.14	WARNING
	Background	0.067	0.067	0.055	0.000	Pass	1.067	0.893	0.132	0.173	Pass
C1	Efficiency						7987.01	48531.29	191.74	-40544.28	FAIL
	Background	0.000	0.117	0.055	-0.117	Pass	0.167	1.183	0.352	-1.017	Pass
C2	Efficiency	12248.00	12289.40	86.44	-41.40	Pass	47573.89	47696.78	168.01	-122.88	Pass
	Background	0.100	0.078	0.050	0.022	Pass	0.833	1.020	0.168	-0.187	Pass
C3	Efficiency	12407.50	12564.40	101.69	-156.90	Pass	31609.36	31302.33	174.07	307.03	Pass
	Background	0.033	0.117	0.064	-0.083	Pass	1.600	1.567	0.221	0.033	Pass
C4	Efficiency	12971.00	12969.85	102.01	1.15	Pass	42273.46	42241.28	173.11	32.18	Pass
	Background	0.067	0.077	0.048	-0.010	Pass	1.367	0.952	0.140	0.415	Pass

LOT# F5D220345

STL ST. LOUIS

STL Gas Proportional Counter Daily Quality Control Checks

Thursday, May 19, 2006

Instrument: ***Red***

Detector ID	Check Type	Alpha CPM	Alpha Mean	Alpha Std. Dev.	Alpha Deviation	Alpha Flag	Beta CPM	Beta Mean	Beta Std. Dev.	Beta Deviation	Beta Flag
A1	Efficiency	13961.00	13698.98	630.17	262.02	Pass	46934.99	45903.78	1841.17	1031.22	Pass
	Background	0.100	0.052	0.035	0.048	Pass	1.200	1.073	0.251	0.127	Pass
A2	Efficiency	12188.50	12064.65	505.85	123.85	Pass	46272.00	45258.00	1880.66	1014.00	Pass
	Background	0.167	0.075	0.042	0.092	Pass	1.233	1.132	0.202	0.102	Pass
A3	Efficiency	13012.50	12762.15	497.04	250.35	Pass	31896.67	31389.55	989.25	507.12	Pass
	Background	0.067	0.090	0.060	-0.023	Pass	1.367	1.063	0.201	0.303	Pass
A4	Efficiency	13043.00	12782.88	436.45	260.13	Pass	41963.86	41685.82	826.32	278.03	Pass
	Background	0.033	0.028	0.027	0.005	Pass	1.233	1.038	0.161	0.195	Pass
B1	Efficiency	13297.50	13396.90	219.47	-99.40	Pass	32787.24	35204.15	1085.35	-2416.91	WARNING
	Background	0.100	0.045	0.045	0.055	Pass	1.867	1.187	0.156	0.680	FAIL
B2	Efficiency	13348.50	13479.88	88.68	-131.38	Pass	31720.05	31941.70	133.11	-221.65	Pass
	Background	0.000	0.048	0.041	-0.048	Pass	1.200	1.132	0.181	0.068	Pass
B3	Efficiency	12876.00	13070.20	87.82	-194.20	WARNING	39529.09	39537.75	146.59	-8.66	Pass
	Background	0.033	0.052	0.040	-0.018	Pass	1.567	1.143	0.211	0.423	Pass
B4	Efficiency	14271.00	14333.85	71.77	-62.85	Pass	38981.05	39240.13	139.73	-259.07	Pass
	Background	0.067	0.067	0.046	0.000	Pass	1.300	1.117	0.150	0.183	Pass
C1	Efficiency	13267.00	13905.73	92.11	-638.73	FAIL	44395.76	46157.45	200.99	-1761.69	FAIL
	Background	0.033	0.070	0.043	-0.037	Pass	1.200	1.173	0.190	0.027	Pass
C2	Efficiency	12318.00	12279.17	107.34	38.83	Pass	46175.86	46752.82	161.77	-576.96	FAIL
	Background	0.033	0.065	0.041	-0.032	Pass	1.400	1.232	0.179	0.168	Pass
C3	Efficiency	12828.00	12936.25	81.82	-108.25	Pass	31410.11	31665.83	120.61	-255.71	WARNING
	Background	0.067	0.038	0.027	0.028	Pass	1.033	1.183	0.239	-0.150	Pass
C4	Efficiency	13059.50	13278.28	95.76	-218.77	WARNING	42318.04	42485.05	196.23	-167.01	Pass
	Background	0.133	0.090	0.034	0.043	Pass	1.233	1.248	0.156	-0.015	Pass
D1	Efficiency	13669.50	13793.98	92.56	-124.48	Pass	36542.59	36465.80	167.13	76.79	Pass
	Background	0.033	0.052	0.044	-0.018	Pass	1.300	1.150	0.197	0.150	Pass
D2	Efficiency	13201.00	13401.85	90.37	-200.85	WARNING	31371.12	31534.90	129.15	-163.78	Pass
	Background	0.100	0.062	0.056	0.038	Pass	1.067	1.058	0.216	0.008	Pass
D3	Efficiency	13185.00	13170.65	93.09	14.35	Pass	39903.18	39840.40	138.20	62.78	Pass
	Background	0.033	0.052	0.044	-0.018	Pass	1.067	1.088	0.163	-0.022	Pass
D4	Efficiency	13962.00	14070.85	91.88	-108.85	Pass	38918.96	38889.10	220.93	29.86	Pass
	Background	0.033	0.063	0.049	-0.030	Pass	1.367	1.085	0.173	0.282	Pass

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IQC version 2.2, updated 3/16/2004

C1 pass

C1

C2

5/17/06

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STL Gas Proportional Counter Daily Quality Control Checks

Thursday, May 19, 2005

Instrument: *Yellow*

Detector ID	Check Type	Alpha CPM	Alpha Mean	Alpha Std. Dev.	Alpha Deviation	Alpha Flag	Beta CPM	Beta Mean	Beta Std. Dev.	Beta Deviation	Beta Flag
A1	Efficiency	13595.00	13809.35	123.54	-214.35	Pass	45648.46	45279.15	397.53	369.31	Pass
	Background	0.100	0.060	0.043	0.040	Pass	0.900	1.010	0.146	-0.110	Pass
A2	Efficiency	12017.50	12010.33	96.30	7.17	Pass	45810.48	45555.15	501.53	255.33	Pass
	Background	0.000	0.057	0.043	-0.057	Pass	1.067	1.032	0.140	0.035	Pass
A3	Efficiency	13064.00	12997.25	116.67	66.75	Pass	32054.79	32243.75	1655.20	-188.96	Pass
	Background	0.067	0.050	0.056	0.017	Pass	0.867	1.153	0.380	-0.287	Pass
A4	Efficiency	12798.50	12924.90	86.33	-126.40	Pass	41825.69	41324.97	917.62	500.71	Pass
	Background	0.033	0.022	0.036	0.012	Pass	1.167	1.042	0.161	0.125	Pass
B1	Efficiency	13480.50	13467.66	78.10	12.84	Pass	35732.51	36207.43	2300.03	-474.92	Pass
	Background	0.100	0.042	0.036	0.058	Pass	1.167	1.073	0.198	0.093	Pass
B2	Efficiency	12490.00	12363.80	63.06	126.20	WARNING	30261.19	30007.10	149.45	254.09	Pass
	Background	0.133	0.048	0.057	0.085	Pass	1.233	1.068	0.181	0.165	Pass
B3	Efficiency	12040.50	12150.69	69.41	-110.19	Pass	37506.55	37455.75	130.69	50.80	Pass
	Background	0.100	0.055	0.041	0.045	Pass	1.500	1.168	0.270	0.332	Pass
B4	Efficiency	12743.00	12792.91	77.50	-49.91	Pass	35835.38	35971.13	129.55	-135.75	Pass
	Background	0.133	0.080	0.041	0.053	Pass	1.333	1.018	0.148	0.315	Pass
C1	Efficiency										
	Background										
C2	Efficiency										
	Background										
C3	Efficiency										
	Background										
C4	Efficiency										
	Background										
D1	Efficiency	11212.00	11345.20	145.73	-133.20	Pass	30834.71	30586.05	152.88	248.66	Pass
	Background	0.067	0.065	0.048	0.002	Pass	0.500	0.863	0.211	-0.363	Pass
D2	Efficiency	10195.00	10283.86	92.90	-88.86	Pass	25484.27	25594.86	174.10	-110.59	Pass
	Background	0.067	0.045	0.046	0.022	Pass	0.900	0.963	0.165	-0.063	Pass
D3	Efficiency	10262.00	10251.48	66.21	10.52	Pass	31950.88	31865.03	209.38	85.86	Pass
	Background	0.067	0.027	0.034	0.040	Pass	1.167	0.783	0.161	0.383	Pass
D4	Efficiency	11724.50	11562.35	101.38	162.15	Pass	32850.51	32469.02	317.88	381.49	Pass
	Background	0.133	0.035	0.031	0.098	FAIL	0.667	0.885	0.208	-0.218	Pass

PASS

CW 5/19/05

5/19/2005 8:08:42 AM

IQC version 2.2, updated 3/16/2004

STL

Monthly Background

SEVERN TRENT STL

Long Backgrounds – Red
April 2005

Detector ID	Sample ID	Alpha	Beta	Guard	Count Count Time	Event	Voltage	TOD
A1	A1-01	53	1058	539991	1000	0	1410	38474.19
A2	A2-01	97	1119	539991	1000	0	1410	38474.19
A3	A3-01	67	1036	539990	1000	0	1410	38474.19
A4	A4-01	46	1016	539989	1000	0	1410	38474.19
B1	B1-01	26	1615	1139825	1000	0	1410	38474.19
B2	B2-01	56	1139	1139800	1000	0	1410	38474.19
B3	B3-01	41	1114	1139783	1000	0	1410	38474.19
B4	B4-01	74	1092	1139773	1000	0	1410	38474.19
C1	C1-01	88	1159	541346	1000	0	1410	38474.19
C2	C2-01	119	1236	541345	1000	0	1410	38474.19
C3	C3-01	46	1181	541345	1000	0	1410	38474.19
C4	C4-01	82	1232	541348	1000	0	1410	38474.19
D1	D1-01	55	1081	535081	1000	0	1410	38474.19
D2	D2-01	48	1100	535083	1000	0	1410	38474.19
D3	D3-01	54	1085	535082	1000	0	1410	38474.19
D4	D4-01	65	1272	535082	1000	0	1410	38474.19

SEVERN TRENT STL

Long Backgrounds – Blue
April 2005

Detector ID	Sample ID	Alpha	Beta	Guard	Count Count Time	Event	Voltage	TOD
A1	A1-01	78	1067	546890	1000	0	1470	38469.08
A2	A2-01	37	1059	546888	1000	0	1470	38469.08
A3	A3-01	67	1240	546888	1000	0	1470	38469.08
A4	A4-01	62	957	546882	1000	0	1470	38469.08
B1	B1-01	54	1105	545902	1000	0	1470	38469.09
B2	B2-01	43	1151	545899	1000	0	1470	38469.09
B3	B3-01	101	1537	545894	1000	0	1470	38469.09
B4	B4-01	41	969	545895	1000	0	1470	38469.09
C1	C1-01	0	52	604716	1000	0	1500	38469.09
C2	C2-01	62	989	604709	1000	0	1500	38469.09
C3	C3-01	70	1446	604707	1000	0	1500	38469.09
C4	C4-01	64	1028	604703	1000	0	1500	38469.09

SEVERN TRENT STL

Backgrounds
Yellow -April 2005

Group A	LID.	Time	Counts α	Counts β	BKG α	BKG β
1	BKG	1000	76	1218	0.08	1.22
2	BKG	1000	68	1174	0.07	1.17
3	BKG	1000	56	1204	0.06	1.20
4	BKG	1000	56	1117	0.06	1.12
Group B						
1	BKG	1000	60	1226	0.06	1.23
2	BKG	1000	65	1212	0.07	1.21
3	BKG	1000	64	1242	0.06	1.24
4	BKG	1000	43	1473	0.04	1.47
Group C						
1	BKG	1000	0	0	0.00	0.00
2	BKG	1000	0	0	0.00	0.00
3	BKG	1000	0	0	0.00	0.00
4	BKG	1000	0	0	0.00	0.00
Group D						
1	BKG	1000	49	929	0.05	0.93
2	BKG	1000	58	1120	0.06	1.12
3	BKG	1000	71	906	0.07	0.91
4	BKG	1000	62	982	0.06	0.98

SEVERN TRENT STL

Run Log

Logbook No.: 2649

STL
St. Louis Laboratory

Gas Proportional Counter Runlog
(Yellow)

Date	Time	Batch #	Filename	Sample #	Det.	Count Time	Analysis	Initials
5/18/05	23:52	5130396	051805D	FSE 100000-396C	A4	200	NP	CH
		5137109		FSE 130151-002	B1			
				1 -002x	2			
				FSE 170000-109B	3			
				1 -109C	4			
		5132153		FSE 110160-002	D1			
				1 -002C	2			
				FSE 120000-153B	3			
				1 153C	4			
5/19/5	—		DA-7615	Daily ✓	—	30m	QA	JW
	—		DGC 1273		—	2m		
	—		DGC 1274		—	2m		
	10:54	5116339	051905A	FSD250133-015	A1	200m	LOT28	
				-016	2			
				-017	3			
				-018	4			
				-019	B1			
				-020	2			
				-021	3			
				-022	4			
				-023	D1			
				-024	2			
				-025	3			
				-026	4			
	17:49	5139111	051905BD	FSE 190000-149111B	A1	800m	ABT	
				-111C2	A2			
				-111C3	A3			

Reviewed By: _____ Date: 5-19-5

SOP References: STL-RD-0403, current revision
Form: SL-RAD-0053, Revised 12/19/03
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2672

STL
St. Louis Laboratory

Gas Proportional Counter Runlog

Date	Batch #	Sample #	Detector	Count Time	Analysis	Initials
5-19-5	5139111	F5D220345-011	Red D1	800min	A, BC	
		-012	D2			
		-013	D3			
		-014	D4			
		-015	Blu A1			
		F5D220356-001	A2			
		-001Sα	A4			
		-001Sβ	B1			
		-001X	B2			
		-002	B4			
		-003	C2			
		-004	C3			
		-005	C4			
5/20/5	Daily	Bkg + Source	Red/Blu	30+2min	αβ	
5-20-5	5140338	F5D250133-001	Red A2	200min	Ra-228	
		-002	A3			
		-003	A4			
		-004	B1			
		-005	B2			
		-006	B3			
		-007	B4			
		-008	C2			
		-009	C4			
		-010	D1			
		-011	D2			
		-012	D3			
		-013	D4			

Reviewed By: ________ Date: 5-20-5

SOP References: STL-RD-0403, current revision
Form: SL-RAD-0025, Revised 5/29/03
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2672

STL
St. Louis Laboratory

Gas Proportional Counter Runlog

Date	Batch #	Sample #	Detector	Count Time	Analysis	Initials
5/9-5	5116337	F5D450183-015	Red B4	200 min	Ra-226	✓
		-016	C2			
		-017	C4			
		-018	B1			
		-019	B2			
		-020	B3			
		-021	Blue B4			
		-022	C2			
		-023	C3			
		-024	C4			
		-025	Red A1			
		-026	A2			
		-027	A3			
		-028	A4			
		F5D260000-337B	B1			
		-337C	B2			
		-337L	B3			
5/9-5	5139111	F5D2203450-01	Red A1	800 min	ABL	✓
		-002	A2			
		-003	A3			
		-004	A4			
		-005	B1			
		-006	B2			
		-007	B3			
		-008	B4			
		-009	C3			
		-010	C4			

Reviewed By: _____ Date: 5/9-5

SOP References: STL-RD-0403, current revision
Form: SL-RAD-0025, Revised 5/29/03
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

SEVERN TRENT **STL**

Prep Report for Gross Alpha/Beta

Batch: 5139111 **Prep Analyst:** 401929

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

SampID	WRKNO	Aliquot	Gross	Tare	Mass	Dilution
F5D210345-001	G8WNH1AT	1.021E-001 g	8.6634 g	8.6173 g	0.0461 g	1.00
	RA1					
F5D210345-002	G8WNN1AF	1.180E-001 g	8.6527 g	8.6110 g	0.0417 g	1.00
	A2					
F5D210345-003	G8WNQ1AF	1.213E-001 g	8.7383 g	8.6737 g	0.0646 g	1.00
	A3					
F5D210345-004	G8WNR1AF	1.216E-001 g	8.7113 g	8.6408 g	0.0705 g	1.00
	A4					
F5D210345-005	G8WNV1AF	9.270E-002 g	8.6836 g	8.6390 g	0.0446 g	1.00
	B1					
F5D210345-006	G8WNW1AF	9.240E-002 g	8.7055 g	8.6567 g	0.0488 g	1.00
	B2					
F5D210345-007	G8WN01AF	9.540E-002 g	8.7066 g	8.6223 g	0.0843 g	1.00
	B3					
F5D210345-008	G8WN11AF	1.059E-001 g	8.6953 g	8.6416 g	0.0537 g	1.00
	B4					
F5D210345-009	G8WN21AF	1.007E-001 g	8.6939 g	8.6458 g	0.0481 g	1.00
	C3					
F5D210345-010	G8WN31AF	9.570E-002 g	8.6560 g	8.6150 g	0.0410 g	1.00
	C4					
F5D210345-011	G8WN41AF	1.174E-001 g	8.7380 g	8.6889 g	0.0491 g	1.00
	D1					
F5D210345-012	G8WN51AF	1.021E-001 g	8.6830 g	8.6224 g	0.0606 g	1.00
	D2					
F5D210345-013	G8WN71AF	1.007E-001 g	8.7107 g	8.6355 g	0.0752 g	1.00
	D3					
F5D210345-014	G8WN91AJ	9.590E-002 g	8.6762 g	8.6314 g	0.0448 g	1.00
	D4					
F5D210345-015	G8WPC1AF	9.250E-002 g	8.6820 g	8.6364 g	0.0456 g	1.00
	B11					
F5D220356-001	G81591AH	1.061E-001 g	8.7264 g	8.6470 g	0.0794 g	1.00
	A2					
F5D220356-001Sa	G81591AL	1.098E-001 g	8.7110 g	8.6361 g	0.0749 g	1.00
	A4					

Reprint for correction

RadCapture, version 4.0.32, released 2/18/2005

5/20/05

SampID	WRKNO	Aliquot	Gross	Tare	Mass	Dilution
F5D220356-001Sb	G81591AJ	9.820E-002 g	8.7452 g	8.6606 g	0.0846 g	1.00
		Blue B1				
F5D220356-001X	G81591AK	9.550E-002 g	8.7056 g	8.6350 g	0.0706 g	1.00
		B2				
F5D220356-002	G816E1AF	1.104E-001 g	8.7154 g	8.6568 g	0.0586 g	1.00
		B4				
F5D220356-003	G816L1AF	1.215E-001 g	8.7258 g	8.6517 g	0.0741 g	1.00
		C2				
F5D220356-004	G816P1AM	1.049E-001 g	8.7129 g	8.6685 g	0.0434 g	1.00
		C3				
F5D220356-005	G816T1AF	9.730E-002 g	8.6935 g	8.6487 g	0.0448 g	1.00
		C4				
F5E190000-111B	HATWN1AA	1.000E+000 g	8.7051 g	8.7048 g	0.0003 g	1.00
		4+1 (1749)				
F5E190000-111Ca	HATWN1AD	1.000E+000 g	8.7021 g	8.6698 g	0.0323 g	1.00
		+2				
F5E190000-111Cb	HATWN1AC	1.000E+000 g	8.6637 g	8.6312 g	0.0325 g	1.00
		+3				

Spike Information

Sample ID	Standard ID	Analyte	Std Conc		Aliquot		Ref Date	StdAdded	
F5D220356-001Sb	Rad05-0019	Gross Beta	4.632E+001	Dpm/m	1.00	mL	8/7/2001 12:00:00AM	2.125E+002	pCi/g
F5D220356-001Sa	rad05-0033	Gross Alpha	2.284E+001	dpm/mL	1.00	mL	12/19/2002 12:00:00A	9.370E+001	pCi/g
F5E190000-111Cb	Rad05-0019	Gross Beta	4.632E+001	Dpm/m	1.00	mL	8/7/2001 12:00:00AM	2.086E+001	pCi/g
F5E190000-111Ca	rad05-0033	Gross Alpha	2.284E+001	dpm/mL	1.00	mL	12/19/2002 12:00:00A	1.029E+001	pCi/g

JAO — Spiked By

BC — Spike Verified By

5-18-05 — Spike Date

Standard Operating Procedures

SOPNumber	Title	Revision
☐ STL-RC-0002	Planchet Preparation For Radiochemistry And Radiological Screening Analysis	3.00
☐ STL-RC-0003	Drying And Grinding Of Soil And Solid Samples	5.00
☐ STL-RC-0004	Preparation Of Soil, Sludge, And Filter Paper Samples For Radiochemical Analysis	7.00
☐ STL-RC-0041	Radium 228 In Water	2.00

RR — Reviewed By

5-20-05 — Review Date

JAO — Analyst/Relenquished By

5-19-05 — Release Date

LR — Received By

5-19-05 — Receipt Date

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Red
Data file name: 5139111

Reviewed By: DR

Batch ID: ABL 05/19/05 IV

Date: ~~5-19-05~~ 5-20-05
RE 5/20/05

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	CalType	Net CPM Alpha	Net CPM Beta
F5D210345-001	Red	A1	5/19/2005 17:46	800	231	1983	1000	53	1058	1	0.24	1.42
F5D210345-002	Red	A2	5/19/2005 17:46	800	210	1463	1000	97	1119	1	0.17	0.71
F5D210345-003	Red	A3	5/19/2005 17:46	800	257	2105	1000	67	1036	1	0.25	1.60
F5D210345-004	Red	A4	5/19/2005 17:46	800	392	2795	1000	46	1016	1	0.44	2.48
F5D210345-005	Red	B1	5/19/2005 17:47	800	546	2177	1000	26	1615	1	0.66	1.11
F5D210345-006	Red	B2	5/19/2005 17:47	800	236	1935	1000	56	1139	1	0.24	1.28
F5D210345-007	Red	B3	5/19/2005 17:47	800	410	3071	1000	41	1114	1	0.47	2.72
F5D210345-008	Red	B4	5/19/2005 17:47	800	195	1763	1000	74	1092	1	0.17	1.11
F5D210345-009	Red	C3	5/19/2005 17:46	800	127	1439	1000	46	1181	1	0.11	0.62
F5D210345-010	Red	C4	5/19/2005 17:46	800	122	1353	1000	82	1232	1	0.07	0.46
F5D210345-011	Red	D1	5/19/2005 17:47	800	91	1087	1000	55	1081	1	0.06	0.28
F5D210345-012	Red	D2	5/19/2005 17:47	800	67	1160	1000	48	1100	1	0.04	0.35
F5D210345-013	Red	D3	5/19/2005 17:47	800	731	4581	1000	54	1085	1	0.86	4.64
F5D210345-014	Red	D4	5/19/2005 17:47	800	303	1768	1000	65	1272	1	0.31	0.94

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: 5139111

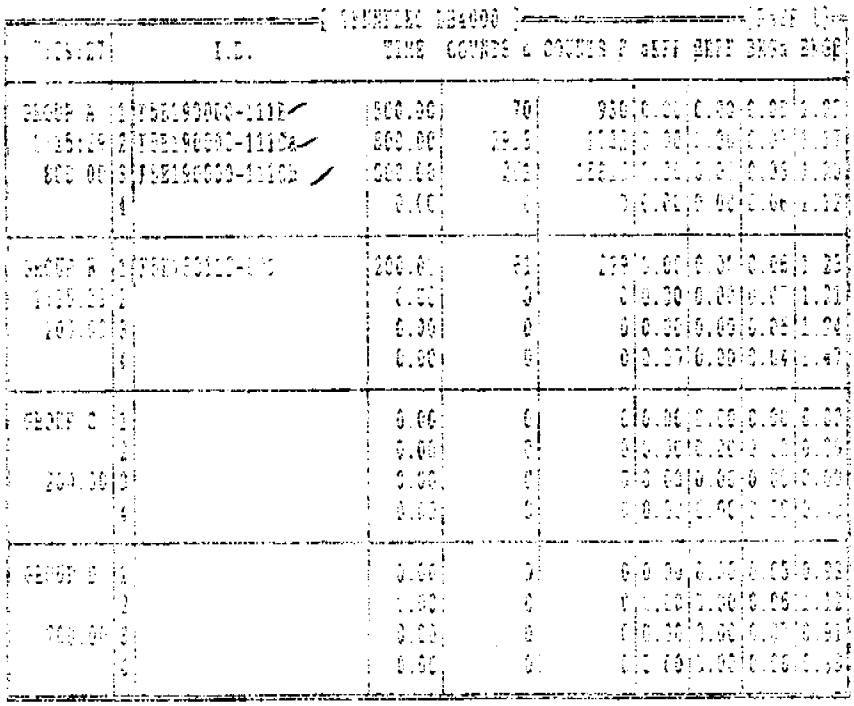
Reviewed By: PR

Batch ID: ABL 05/19/05 IV

Date: 5-20-05

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta		Net CPM Alpha	Net CPM Beta
F5D210345-015	Blue	A1	5/19/2005 17:47	800	181	1470	1000	78	1067	1	0.15	0.77
F5D220356-001	Blue	A2	5/19/2005 17:47	800	351	2487	1000	37	1059	1	0.40	2.05
F5D220356-001Sa	Blue	A4	5/19/2005 17:47	800	2082	3116	1000	62	957	1	2.54	2.94
F5D220356-001Sb	Blue	B1	5/19/2005 17:47	541	322	10000	1000	54	1105	1	0.54	17.38
F5D220356-001X	Blue	B2	5/19/2005 17:48	800	405	2611	1000	43	1151	1	0.46	2.11
F5D220356-002	Blue	B4	5/19/2005 17:48	800	267	1978	1000	41	969	1	0.29	1.50
F5D220356-003	Blue	C2	5/19/2005 17:48	800	108	1030	1000	62	989	1	0.07	0.30
F5D220356-004	Blue	C3	5/19/2005 17:48	800	133	1978	1000	70	1446	1	0.10	1.03
F5D220356-005	Blue	C4	5/19/2005 17:48	800	108	1208	1000	64	1028	1	0.07	0.48

STL ST. LOUIS



YELLOW

Filename 051905D

Date 5/19/05

Analyst CH

Nuclide RnBA, ABT

Batch 5137148

5137111

SEVERN TRENT STL

Gamma Spectroscopy

SEVERN TRENT STL

GAMMA SPECTROSCOPY

Data and Results Reports

Calibration Data

Instrument Checks
Daily Instrument Check
Background

Batch Summary Sheets
Run Logs

Raw Data
Prep Data Sheet(s)
QC Acceptance Sheet(s)
Certificate/Standard Sheets

VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:31:12
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WNH1AA_GE7_SOLID100ML_57908.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-001
Sample ID : G8WNH1AA

Sample Quantity : 1.66200E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 29-APR-2005 12:06:22
Acquisition date : 29-APR-2005 12:06:22
Decay time : 0 00:00:00.00

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.48
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE7

Counting geometry: SOLID_100ML

Energy cal. time : 25-FEB-2005 09:11:05
Effic. cal. time : 19-JAN-2005 01:25:36

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE7__57457.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WNH1AA

Acquisition date : 29-APR-2005 12:06:22

---- Energy, FWHM, and Efficiency Curves ----

```
*************************************************************************
*                                                                       *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)       *
*                            A = 7.85538E-02                            *
*                            B = 2.50061E-01                            *
*                            C = -1.56700E-08                           *
*                                                                       *
*                                                                       *
*                       FWHM(keV) = A + (B * SQRT(Energy))              *
*                            A = 5.33118E-01                            *
*                            B = 4.95085E-02                            *
*                                                                       *
*                                                                       *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                       *
*     a1=9.41250E+02   a2=-4.39222E+00 a3=9.59385E-01                   *
*     a4=7.48354E-02   a5=-4.49953E-02 a6=-1.06506E-02   a7=0.00000E+00 *
*                                                                       *
*************************************************************************
```

Post-NID Peak Search Report
Sample ID : G8WNH1AA

Acquisition date : 29-APR-2005 12:06:22

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.33*	188	234	0.69	252.95	241	23	19.6		TH-234
5	74.74*	76	135	0.97	298.59	294	21	18.1	9.69E-01	
5	77.03*	116	153	0.98	307.72	294	21	13.5		
0	87.44	27	103	0.46	349.35	344	10	65.3		
0	92.61*	346	144	0.96	370.05	365	15	8.7		TH-234
0	185.94*	201	49	1.10	743.31	736	14	9.8		U-235
										RA-226
4	238.69*	169	42	1.10	954.27	949	24	8.9	9.71E-01	PB-212
4	241.67	49	40	1.11	966.18	949	24	18.0		PB-214
0	295.28	57	42	1.31	1180.59	1171	18	26.1		PB-214
0	338.63	34	15	0.53	1353.98	1348	13	26.6		AC-228
0	352.13	122	28	1.31	1407.97	1400	15	12.1		PB-214
0	583.32	46	20	0.94	2332.76	2326	21	25.0		TL-208
0	609.37	54	26	0.64	2436.93	2431	20	24.2		
0	911.40	22	26	0.60	3645.22	3634	22	52.9		
0	1461.27	166	10	2.23	5845.51	5828	30	9.1		K-40

Summary of Nuclide Activity
Sample ID : G8WNH1AA

Acquisition date : 29-APR-2005 12:06:22

Total number of lines in spectrum	15	
Number of unidentified lines	3	
Number of lines tentatively identified by NID	12	80.00%

Nuclide Type : natural

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	8.508E+00	8.508E+00	0.958E+00	11.26	
	Total Activity :		8.508E+00	8.508E+00			

Nuclide Type : Th Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
TL-208	1.91Y	1.00	1.228E-01	1.228E-01	0.323E-01	26.33	
PB-212	1.91Y	1.00	3.833E-01	3.834E-01	0.444E-01	11.58	
AC-228	5.75Y	1.00	3.631E-01	3.631E-01	1.204E-01	33.16	
	Total Activity :		8.693E-01	8.693E-01			

Nuclide Type : U Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
PB-214	1600.00Y	1.00	4.619E-01	4.619E-01	0.524E-01	11.35	
RA-226	1600.00Y	1.00	4.739E+00	4.739E+00	0.568E+00	11.98	
TH-234	4.47E+09Y	1.00	3.867E+00	3.867E+00	0.405E+00	10.47	
	Total Activity :		9.068E+00	9.068E+00			

Nuclide Type : Ac Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
U-235	7.04E+08Y	1.00	3.130E-01	3.130E-01	0.377E-01	12.05	
	Total Activity :		3.130E-01	3.130E-01			

Grand Total Activity :	1.876E+01	1.876E+01

Flags: "K" = Keyline not found
"E" = Manually edited
"M" = Manually accepted
"A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G8WNH1AA

Acquisition date : 29-APR-2005 12:06:22

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	8.508E+00	9.577E-01	9.255E-01	4.105E-02	9.192
TL-208	1.228E-01	3.234E-02	7.047E-02	4.695E-03	1.743
PB-212	3.834E-01	4.438E-02	8.358E-02	4.615E-03	4.587
PB-214	4.619E-01	5.240E-02	1.270E-01	6.486E-03	3.636
RA-226	4.739E+00	5.676E-01	8.025E-01	3.758E-02	5.906
AC-228	3.631E-01	1.204E-01	3.131E-01	6.001E-02	1.160
TH-234	3.867E+00	4.049E-01	8.889E-01	8.312E-02	4.350
U-235	3.130E-01	3.771E-02	3.276E-01	3.052E-02	0.955

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	1.042E-01		1.243E-01	4.832E-01	2.575E-02	0.216
NA-22	2.488E-02		1.879E-02	8.459E-02	3.575E-03	0.294
CR-51	-5.889E-02		1.150E-01	4.076E-01	2.080E-02	-0.144
MN-54	5.616E-03		1.971E-02	7.537E-02	3.909E-03	0.075
CO-57	6.417E-04		9.350E-03	3.234E-02	1.957E-03	0.020
FE-59	-7.896E-03		4.176E-02	1.551E-01	7.917E-03	-0.051
CO-60	1.506E-02		1.823E-02	7.994E-02	3.398E-03	0.188
ZN-65	-1.546E-01		5.977E-02	1.750E-01	7.566E-03	-0.883
SE-75	1.981E-02		1.732E-02	6.491E-02	3.239E-03	0.305
SR-85	-4.322E-02		2.358E-02	7.606E-02	4.014E-03	-0.568
Y-88	-6.510E-03		1.996E-02	8.006E-02	3.350E-03	-0.081
NB-95	5.495E-02		2.485E-02	9.856E-02	5.568E-03	0.558
ZR-95	-3.855E-02		3.402E-02	1.142E-01	6.905E-03	-0.338
MO-99	-1.796E-01		1.285E-01	4.194E-01	3.572E-02	-0.428
TC-99M	-2.162E-02		1.014E-02	3.251E-02	1.780E-03	-0.665
RU-103	1.027E-02		1.483E-02	5.724E-02	3.311E-03	0.179
RH-105	1.291E-01		1.939E-01	7.159E-01	3.538E-02	0.180
RH-106	3.025E-02		1.193E-01	5.061E-01	2.664E-02	0.060
RU-106	-4.975E-02		1.486E-01	5.462E-01	4.248E-02	-0.091
CD-109	-2.676E-01		3.636E-01	1.041E+00	6.133E-02	-0.257
SN-113	-1.459E-02		1.914E-02	6.607E-02	3.002E-03	-0.221
SB-124	-3.250E-03		1.956E-02	6.850E-02	3.958E-03	-0.047
SB-125	7.541E-02		4.828E-02	1.863E-01	8.879E-03	0.405
I-131	1.453E-02		1.413E-02	5.420E-02	2.628E-03	0.268
I-132	4.004E-03		2.246E-02	8.318E-02	5.016E-03	0.048
TE-132	6.364E-03		1.035E-02	3.832E-02	1.869E-03	0.166
BA-133	2.970E-02		2.304E-02	7.756E-02	5.331E-03	0.383
I-133	-1.705E-02		1.623E-02	5.530E-02	2.972E-03	-0.308
CS-134	3.704E-03		2.146E-02	6.774E-02	3.925E-03	0.055
CS-137	-3.880E-02		2.364E-02	7.691E-02	4.652E-03	-0.504
CE-139	-5.608E-03		1.127E-02	3.879E-02	1.773E-03	-0.145
BA-140	-2.978E-02		5.280E-02	1.870E-01	3.160E-02	-0.159
LA-140	-3.738E-02		2.335E-02	7.426E-02	3.208E-03	-0.503
CE-141	2.502E-02		1.879E-02	6.906E-02	3.708E-03	0.362
CE-144	-5.076E-02		7.183E-02	2.487E-01	1.675E-02	-0.204

Combined Activity-MDA Report (continued)
Sample ID : G8WNH1AA Acquisition date : 29-APR-2005 12:06:22

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
ND-147	1.698E-01		9.966E-02	4.074E-01	2.193E-02	0.417
EU-152	2.308E-02		7.757E-02	3.350E-01	1.651E-02	0.069
EU-154	7.577E-03		1.725E-01	6.496E-01	4.236E-02	0.012
EU-155	-2.752E-02		4.076E-02	1.373E-01	7.554E-03	-0.201
HG-203	2.176E-02		1.341E-02	5.134E-02	2.608E-03	0.424
BI-211	1.325E+00		1.962E-01	6.975E-01	3.313E-02	1.900
PB-211	9.285E-02		6.119E-01	2.363E+00	1.231E-01	0.039
BI-212	5.055E-01		3.131E-01	1.242E+00	7.251E-02	0.407
BI-214	2.773E-01	+	7.043E-02	2.418E-01	1.463E-02	1.147
RN-219	1.551E-01		1.104E-01	4.155E-01	2.076E-02	0.373
RA-223	-1.227E-01		1.579E-01	5.390E-01	2.899E-02	-0.228
RA-224	2.904E+00		9.247E-01	1.604E+00	4.592E-01	1.811
TH-227	1.096E-01		1.056E-01	3.418E-01	1.676E-02	0.321
RA-228	2.743E-01	+	1.463E-01	4.357E-01	2.013E-02	0.629
PA-231	-4.230E-01		5.202E-01	1.755E+00	1.156E-01	-0.241
TH-231	5.593E-01		1.858E-01	6.019E-01	4.084E-02	0.929
TH-232	3.666E-01		4.428E-01	1.768E+00	8.796E-02	0.207
PA-233	-3.479E-03		2.952E-02	1.038E-01	5.228E-03	-0.034
PA-234M	1.466E+01		4.548E+00	1.935E+01	8.800E-01	0.758
NP-237	-3.730E-03		3.166E-02	1.113E-01	5.486E-03	-0.034
NP-239	-1.850E-02		5.308E-02	1.823E-01	9.744E-03	-0.102
AM-241	4.918E-02		2.970E-02	9.468E-02	5.002E-03	0.519
ANN RAD	2.468E-02		2.503E-02	1.072E-01	5.639E-03	0.230

Nuclide Line Activity Report
Sample ID : G8WNH1AA

Acquisition date : 29-APR-2005 12:06:22

Nuclide Type: natural

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
K-40	1460.83	10.67*	8.262E-01	8.506E+00	8.506E+00	11.26	OK

Final Mean for 1 Valid Peaks = 8.508E+00+/- 9.577E-01 (11.26%)

Nuclide Type: Th Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
TL-208	583.02	86.00*	1.982E+00	1.228E-01	1.228E-01	26.33	OK

Final Mean for 1 Valid Peaks = 1.228E-01+/- 3.234E-02 (26.33%)

PB-212	238.58	43.60*	4.557E+00	3.832E-01	3.832E-01	11.58	OK
	300.03	3.34	3.752E+00	----- Line Not Found		-----	Absent

Final Mean for 1 Valid Peaks = 3.834E-01+/- 4.438E-02 (11.58%)

AC-228	338.42	12.40*	3.363E+00	3.629E-01	3.629E-01	33.16	OK

Final Mean for 1 Valid Peaks = 3.631E-01+/- 1.204E-01 (33.16%)

Nuclide Type: U Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
PB-214	241.92	7.46	4.506E+00	6.522E-01	6.522E-01	19.47	OK
	295.09	19.20	3.807E+00	3.544E-01	3.544E-01	27.13	OK
	351.87	37.10*	3.243E+00	4.592E-01	4.592E-01	14.07	OK

Final Mean for 3 Valid Peaks = 4.619E-01+/- 5.240E-02 (11.35%)

RA-226	186.21	3.50*	5.469E+00	4.744E+00	4.744E+00	11.98	OK

Final Mean for 1 Valid Peaks = 4.739E+00+/- 5.676E-01 (11.98%)

TH-234	63.29	3.80*	6.669E+00	3.347E+00	3.347E+00	22.33	OK
	92.59	5.41	7.178E+00	4.030E+00	4.030E+00	11.29	OK

Final Mean for 2 Valid Peaks = 3.867E+00+/- 4.049E-01 (10.47%)

Nuclide Type: Ac Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
U-235	143.79	10.50*	6.350E+00	----- Line Not Found		-----	Absent
	185.74	53.00	5.478E+00	3.127E-01	3.127E-01	12.05	OK

Final Mean for 1 Valid Peaks = 3.130E-01+/- 3.771E-02 (12.05%)

Nuclide Line Activity Report (continued)
Sample ID : G8WNH1AA

Acquisition date : 29-APR-2005 12:06:22

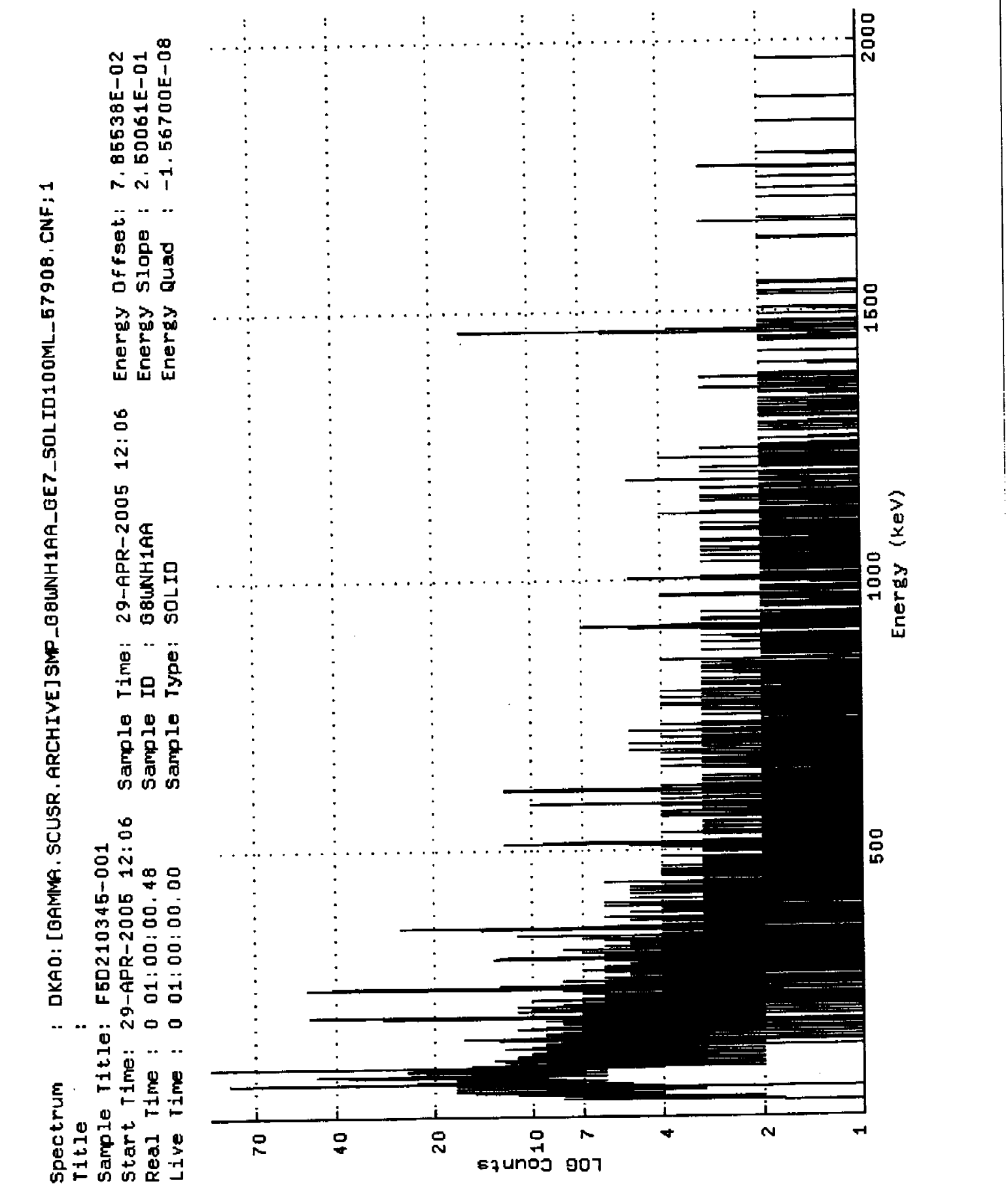
Flag: "*" = Keyline

Rejected Report
Sample ID : G8WNH1AA

Acquisition date : 29-APR-2005 12:06:22

Nuclide	Half-life	Half-Life Ratio	Energy	%Abund	Activity (pCi/G)	1-Sigma %Error	Rejected by
RU-103	39.25D	0.00	497.05*	88.70	--- Not Found ---		Abun.
			610.30	5.64	2.271E+00	25.54	
		% Abundances	Found =	5.98			
BI-214	1600.00Y	0.00	609.31*	46.10	2.773E-01	25.40	Abun.
			768.35	4.88	--- Not Found ---		
			1120.27	15.00	--- Not Found ---		
		% Abundances	Found =	69.87			
RA-228	5.75Y	0.00	911.16*	29.00	2.743E-01	53.35	Abun.
			968.97	17.40	--- Not Found ---		
		% Abundances	Found =	62.50			

Flag: "*" = Keyline


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WNH1AA_GE7_SOLID100ML_67908.CNF;1
Title :
Sample Title: F5D210345-001
Start Time: 29-APR-2005 12:06 Sample Time: 29-APR-2005 12:06 Energy Offset: 7.85538E-02
Real Time : 0 01:00:00.48 Sample ID : G8WNH1AA Energy Slope : 2.60061E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : -1.56700E-08
Log Counts
70
40
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:31:33
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WNH1AR_GE4_SOLID100ML_57911.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-001X
Sample ID : G8WNH1AR

Sample Quantity : 1.66200E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 29-APR-2005 13:16:50
Acquisition date : 29-APR-2005 13:16:50
Decay time : 0 00:00:00.00

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.59
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE4

Counting geometry: SOLID_100ML

Energy cal. time : 16-MAR-2005 08:34:49
Effic. cal. time : 18-JAN-2005 00:15:12

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE4__57454.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WNH1AR

Acquisition date : 29-APR-2005 13:16:50

---- Energy, FWHM, and Efficiency Curves ----

```
**********************************************************************************
*                                                                                *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)                *
*                          A = 1.10653E-01                                       *
*                          B = 2.49919E-01                                       *
*                          C = 1.94892E-08                                       *
*                                                                                *
*                                                                                *
*                    FWHM(keV) = A + (B * SQRT(Energy))                          *
*                          A = 8.02351E-01                                       *
*                          B = 2.65421E-02                                       *
*                                                                                *
*                                                                                *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)  *
*                                                                                *
*     a1=9.41250E+02   a2=-4.55854E+00 a3=9.62044E-01                            *
*     a4=7.38134E-02   a5=-4.50301E-02 a6=-9.56656E-03   a7=0.00000E+00          *
*                                                                                *
**********************************************************************************
```

Post-NID Peak Search Report
Sample ID : G8WNH1AR

Acquisition date : 29-APR-2005 13:16:50

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.37*	195	112	1.10	253.10	248	13	12.3		TH-234
5	74.75	90	141	1.32	298.66	292	24	15.7	1.09E+00	
5	77.22	118	132	1.32	308.53	292	24	12.6		
0	87.23	54	78	0.76	348.60	344	10	30.1		
0	92.75*	320	203	1.12	370.67	363	25	11.8		TH-234
0	185.78*	170	54	1.06	742.86	738	16	11.6		U-235 RA-226
0	238.75*	104	97	0.88	954.78	945	16	21.0		PB-212
0	295.29	55	34	0.60	1181.00	1174	18	24.9		PB-214
0	352.06	108	30	1.26	1408.09	1398	18	14.0		PB-214
0	583.30*	57	11	1.19	2333.11	2326	18	18.0		TL-208
0	609.60*	58	21	1.21	2438.28	2429	21	21.5		
0	1461.18	124	9	0.64	5843.50	5836	19	10.2		K-40

Summary of Nuclide Activity
Sample ID : G8WNH1AR

Acquisition date : 29-APR-2005 13:16:50

Total number of lines in spectrum	12	
Number of unidentified lines	3	
Number of lines tentatively identified by NID	9	75.00%

Nuclide Type : natural

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	7.523E+00	7.523E+00	0.848E+00	11.27	
Total Activity :			7.523E+00	7.523E+00			

Nuclide Type : Th Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
TL-208	1.91Y	1.00	1.773E-01	1.774E-01	0.338E-01	19.06	
PB-212	1.91Y	1.00	2.767E-01	2.767E-01	0.600E-01	21.70	
Total Activity :			4.540E-01	4.540E-01			

Nuclide Type : U Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
PB-214	1600.00Y	1.00	4.533E-01	4.533E-01	0.585E-01	12.91	
RA-226	1600.00Y	1.00	4.678E+00	4.678E+00	0.587E+00	12.55	
TH-234	4.47E+09Y	1.00	4.087E+00	4.087E+00	0.407E+00	9.96	
Total Activity :			9.218E+00	9.218E+00			

Nuclide Type : Ac Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
U-235	7.04E+08Y	1.00	3.089E-01	3.089E-01	0.390E-01	12.62	
Total Activity :			3.089E-01	3.089E-01			

Grand Total Activity : 1.750E+01 1.750E+01

Flags: "K" = Keyline not found
"E" = Manually edited
"M" = Manually accepted
"A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G8WNH1AR

Acquisition date : 29-APR-2005 13:16:50

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	7.523E+00	8.476E-01	8.216E-01	3.842E-02	9.157
TL-208	1.774E-01	3.381E-02	6.257E-02	3.817E-03	2.835
PB-212	2.767E-01	6.005E-02	1.348E-01	7.367E-03	2.053
PB-214	4.533E-01	5.852E-02	1.321E-01	6.600E-03	3.431
RA-226	4.678E+00	5.873E-01	9.912E-01	4.586E-02	4.719
TH-234	4.087E+00	4.070E-01	1.103E+00	1.056E-01	3.706
U-235	3.089E-01	3.900E-02	3.880E-01	3.588E-02	0.796

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-1.515E-01		1.330E-01	4.467E-01	2.234E-02	-0.339
NA-22	-1.434E-02		2.433E-02	9.083E-02	4.122E-03	-0.158
CR-51	-1.905E-01		1.301E-01	4.351E-01	2.180E-02	-0.438
MN-54	-2.571E-02		1.941E-02	6.392E-02	3.430E-03	-0.402
CO-57	-2.065E-03		9.779E-03	3.478E-02	2.037E-03	-0.059
FE-59	5.322E-02		3.989E-02	1.727E-01	9.537E-03	0.308
CO-60	-6.270E-03		2.388E-02	9.275E-02	4.208E-03	-0.068
ZN-65	2.980E-02		5.609E-02	2.193E-01	1.048E-02	0.136
SE-75	7.556E-03		1.973E-02	7.105E-02	3.495E-03	0.106
SR-85	-5.652E-02		2.646E-02	8.256E-02	3.988E-03	-0.685
Y-88	9.429E-04		2.199E-02	9.473E-02	4.031E-03	0.010
NB-95	-2.296E-02		2.095E-02	7.104E-02	3.765E-03	-0.323
ZR-95	-2.316E-02		3.708E-02	1.316E-01	7.446E-03	-0.176
MO-99	-2.140E-01		1.449E-01	4.715E-01	3.850E-02	-0.454
TC-99M	-1.736E-02		1.287E-02	4.340E-02	2.319E-03	-0.400
RU-103	1.242E-02		1.573E-02	6.144E-02	3.336E-03	0.202
RH-105	3.916E-01		1.970E-01	8.051E-01	3.906E-02	0.486
RH-106	-1.197E-01		1.317E-01	5.313E-01	2.562E-02	-0.225
RU-106	-2.788E-02		1.795E-01	6.654E-01	4.779E-02	-0.042
CD-109	6.860E-02		4.470E-01	1.169E+00	6.804E-02	0.059
SN-113	1.184E-02		2.057E-02	7.783E-02	3.424E-03	0.152
SB-124	9.842E-03		1.703E-02	6.666E-02	3.356E-03	0.148
SB-125	-4.266E-02		5.097E-02	1.755E-01	7.974E-03	-0.243
I-131	1.233E-03		1.469E-02	5.444E-02	2.574E-03	0.023
I-132	1.597E-02		2.101E-02	8.320E-02	4.231E-03	0.192
TE-132	7.084E-03		1.192E-02	4.357E-02	2.099E-03	0.163
BA-133	2.633E-03		2.273E-02	7.211E-02	4.898E-03	0.037
I-133	-9.544E-03		1.804E-02	6.344E-02	3.095E-03	-0.150
CS-134	1.013E-02		2.051E-02	6.862E-02	3.462E-03	0.148
CS-137	3.801E-03		2.166E-02	8.209E-02	4.167E-03	0.046
CE-139	-2.200E-02		1.248E-02	4.076E-02	1.839E-03	-0.540
BA-140	7.761E-02		6.047E-02	2.433E-01	4.071E-02	0.319
LA-140	-1.548E-02		2.560E-02	9.587E-02	4.328E-03	-0.161
CE-141	-1.597E-02		2.247E-02	7.719E-02	4.055E-03	-0.207
CE-144	-3.105E-02		8.068E-02	2.835E-01	1.873E-02	-0.109
ND-147	9.675E-02		1.090E-01	4.286E-01	2.093E-02	0.226

Combined Activity-MDA Report (continued)
Sample ID : G8WNH1AR Acquisition date : 29-APR-2005 13:16:50

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-152	2.079E-02		1.143E-01	4.682E-01	2.416E-02	0.044
EU-154	-2.158E-01		1.764E-01	6.069E-01	4.195E-02	-0.356
EU-155	-3.013E-02		4.758E-02	1.591E-01	8.551E-03	-0.189
HG-203	-2.337E-02		1.557E-02	5.015E-02	2.509E-03	-0.466
BI-211	1.273E+00		1.966E-01	7.513E-01	3.480E-02	1.695
PB-211	-6.224E-02		6.248E-01	2.377E+00	1.275E-01	-0.026
BI-212	3.141E-01		3.304E-01	1.295E+00	6.775E-02	0.243
BI-214	3.563E-01	+	7.905E-02	2.699E-01	1.435E-02	1.320
RN-219	2.373E-01		1.251E-01	4.795E-01	2.361E-02	0.495
RA-223	-1.191E-01		1.866E-01	6.433E-01	3.404E-02	-0.185
RA-224	1.883E+00		7.207E-01	1.676E+00	4.797E-01	1.123
TH-227	1.023E-01		1.358E-01	4.231E-01	2.049E-02	0.242
AC-228	3.411E-01		1.418E-01	5.037E-01	9.639E-02	0.677
RA-228	3.528E-01		1.027E-01	4.465E-01	2.389E-02	0.790
PA-231	-5.030E-01		4.682E-01	1.614E+00	1.053E-01	-0.312
TH-231	6.018E-01		1.913E-01	6.301E-01	4.272E-02	0.955
TH-232	1.990E-02		5.067E-01	1.898E+00	1.020E-01	0.010
PA-233	-2.515E-02		3.049E-02	1.065E-01	5.266E-03	-0.236
PA-234M	5.860E+00		3.858E+00	1.623E+01	8.400E-01	0.361
NP-237	-2.697E-02		3.269E-02	1.142E-01	5.521E-03	-0.236
NP-239	-3.066E-03		7.578E-02	2.390E-01	1.251E-02	-0.013
AM-241	4.865E-02		3.419E-02	1.155E-01	6.643E-03	0.421
ANN RAD	-1.693E-02		2.696E-02	1.099E-01	5.299E-03	-0.154

Nuclide Line Activity Report
Sample ID : G8WNH1AR

Acquisition date : 29-APR-2005 13:16:50

Nuclide Type: natural

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
K-40	1460.83	10.67*	6.987E-01	7.522E+00	7.522E+00	11.27	OK

Final Mean for 1 Valid Peaks = 7.523E+00+/- 8.476E-01 (11.27%)

Nuclide Type: Th Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
TL-208	583.02	86.00*	1.680E+00	1.773E-01	1.773E-01	19.06	OK

Final Mean for 1 Valid Peaks = 1.774E-01+/- 3.381E-02 (19.06%)

PB-212	238.58	43.60*	3.880E+00	2.765E-01	2.765E-01	21.70	OK
	300.03	3.34	3.188E+00	----- Line Not Found		-----	Absent

Final Mean for 1 Valid Peaks = 2.767E-01+/- 6.005E-02 (21.70%)

Nuclide Type: U Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
PB-214	241.92	7.46	3.836E+00	----- Line Not Found		-----	Absent
	295.09	19.20	3.236E+00	4.020E-01	4.020E-01	25.47	OK
	351.87	37.10*	2.753E+00	4.776E-01	4.776E-01	14.89	OK

Final Mean for 2 Valid Peaks = 4.533E-01+/- 5.852E-02 (12.91%)

RA-226	186.21	3.50*	4.673E+00	4.685E+00	4.685E+00	12.56	OK

Final Mean for 1 Valid Peaks = 4.678E+00+/- 5.873E-01 (12.55%)

TH-234	63.29	3.80*	5.976E+00	3.879E+00	3.879E+00	15.61	OK
	92.59	5.41	6.273E+00	4.258E+00	4.258E+00	12.85	OK

Final Mean for 2 Valid Peaks = 4.087E+00+/- 4.070E-01 (9.96%)

Nuclide Type: Ac Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
U-235	143.79	10.50*	5.457E+00	----- Line Not Found		-----	Absent
	185.74	53.00	4.681E+00	3.089E-01	3.089E-01	12.62	OK

Final Mean for 1 Valid Peaks = 3.089E-01+/- 3.900E-02 (12.62%)

Nuclide Line Activity Report (continued)
Sample ID : G8WNH1AR

Acquisition date : 29-APR-2005 13:16:50

Flag: "*" = Keyline

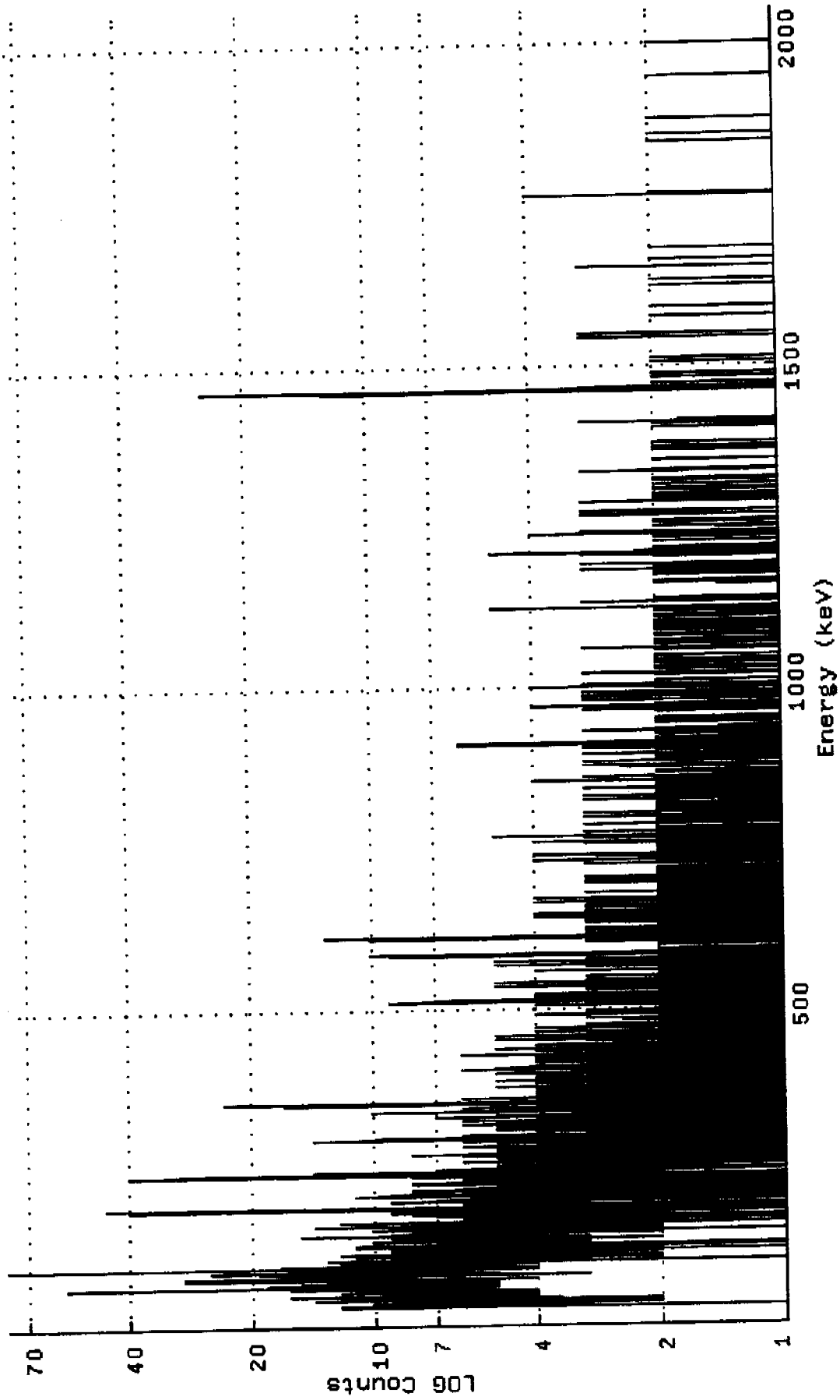
Rejected Report
Sample ID : G8WNH1AR

Acquisition date : 29-APR-2005 13:16:50

Nuclide	Half-life	Half-Life Ratio	Energy	%Abund	Activity (pCi/G)	1-Sigma %Error	Rejected by
RU-103	39.25D	0.00	497.05*	88.70	--- Not Found ---		Abun.
			610.30	5.64	2.918E+00	22.35	
		% Abundances	Found =	5.98			
BI-214	1600.00Y	0.00	609.31*	46.10	3.563E-01	22.19	Abun.
			768.35	4.88	--- Not Found ---		
			1120.27	15.00	--- Not Found ---		
		% Abundances	Found =	69.87			

Flag: "*" = Keyline

Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8UNH1AR_GE4_SOLID100ML_57911.CNF;1
Title :
Sample Title: F5D210345-001X
Start Time: 29-APR-2005 13:16 Sample Time: 29-APR-2005 13:16 Energy Offset: 1.10653E-01
Real Time : 0 01:00:00.59 Sample ID : G8UNH1AR Energy Slope : 2.49919E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : 1.94892E-08



VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:32:00
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WNN1AA_GE5_SOLID100ML_57909.CN

SEVERN TRENT LABORATORIES --- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-002
Sample ID : G8WNN1AA

Sample Quantity : 1.91000E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 29-APR-2005 12:18:17
Acquisition date : 29-APR-2005 12:18:17
Decay time : 0 00:00:00.00

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.96
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE5

Counting geometry: SOLID_100ML

Energy cal. time : 9-MAR-2005 09:18:16.
Effic. cal. time : 18-JAN-2005 09:43:11

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE5__57455.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WNN1AA

Acquisition date : 29-APR-2005 12:18:17

---- Energy, FWHM, and Efficiency Curves ----

```
*****************************************************************************
*                                                                           *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)           *
*                          A = -7.14002E-03                                 *
*                          B = 2.49998E-01                                  *
*                          C = -1.90945E-09                                 *
*                                                                           *
*                                                                           *
*                    FWHM(keV) = A + (B * SQRT(Energy))                     *
*                          A = 5.02556E-01                                  *
*                          B = 3.66242E-02                                  *
*                                                                           *
*                                                                           *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)  x = ln(a1/energy)*
*                                                                           *
*     a1=9.41250E+02   a2=-4.46457E+00 a3=9.42586E-01                       *
*     a4=5.97186E-02   a5=-3.91387E-02 a6=-9.36517E-03   a7=0.00000E+00     *
*                                                                           *
*****************************************************************************
```

Post-NID Peak Search Report
Sample ID : G8WNN1AA

Acquisition date : 29-APR-2005 12:18:17

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.17*	141	68	0.97	252.72	249	10	13.3		TH-234
4	74.75	63	65	0.64	299.01	295	19	16.6	5.28E-01	
4	77.07*	68	76	0.65	308.32	295	19	16.8		
0	92.56*	225	153	0.91	370.27	365	19	13.5		TH-234
0	143.89	56	59	0.58	575.60	567	16	29.7		U-235
0	185.83*	215	61	1.00	743.36	738	12	9.5		U-235
10	238.62*	112	39	0.83	954.53	948	26	11.4	1.18E+00	PB-212
10	242.04	24	37	0.84	968.22	948	26	30.3		PB-214
0	295.37	60	32	0.52	1181.54	1173	16	22.2		PB-214
0	352.06*	76	30	1.12	1408.30	1401	19	19.3		PB-214
0	511.04*	31	22	0.78	2044.25	2031	27	49.6		ANN RAD
0	609.61	62	9	1.30	2438.52	2432	15	15.8		
0	1461.44	106	0	0.72	5846.08	5834	20	9.7		K-40

Summary of Nuclide Activity
Sample ID : G8WNN1AA

Acquisition date : 29-APR-2005 12:18:17

Total number of lines in spectrum	13	
Number of unidentified lines	2	
Number of lines tentatively identified by NID	11	84.62%

Nuclide Type : natural

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	5.062E+00	5.062E+00	0.601E+00	11.88	
	Total Activity :		5.062E+00	5.062E+00			

Nuclide Type : Th Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
PB-212	1.91Y	1.00	2.450E-01	2.450E-01	0.335E-01	13.69	
	Total Activity :		2.450E-01	2.450E-01			

Nuclide Type : U Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
PB-214	1600.00Y	1.00	3.019E-01	3.019E-01	0.437E-01	14.48	
TH-234	4.47E+09Y	1.00	2.388E+00	2.388E+00	0.286E+00	11.98	
	Total Activity :		2.690E+00	2.690E+00			

Nuclide Type : Ac Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
U-235	7.04E+08Y	1.00	3.275E-01	3.275E-01	0.371E-01	11.34	
	Total Activity :		3.275E-01	3.275E-01			

Nuclide Type : Natural

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
ANN RAD	4.47E+09Y	1.00	5.862E-02	5.862E-02	2.941E-02	50.17	
	Total Activity :		5.862E-02	5.862E-02			

Grand Total Activity :	8.383E+00	8.383E+00

Flags: "K" = Keyline not found
"E" = Manually edited
"M" = Manually accepted
"A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G8WNN1AA

Acquisition date : 29-APR-2005 12:18:17

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	5.062E+00	6.013E-01	6.347E-01	2.961E-02	7.976
PB-212	2.450E-01	3.352E-02	7.751E-02	4.415E-03	3.160
PB-214	3.019E-01	4.374E-02	8.041E-02	4.108E-03	3.755
TH-234	2.388E+00	2.860E-01	6.980E-01	6.725E-02	3.421
U-235	3.275E-01	3.714E-02	2.552E-01	2.448E-02	1.283
ANN RAD	5.862E-02	2.941E-02	4.146E-02	2.255E-03	1.414

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	7.329E-02		1.216E-01	4.642E-01	2.512E-02	0.158
NA-22	-4.116E-03		1.618E-02	6.367E-02	2.860E-03	-0.065
CR-51	9.746E-02		1.040E-01	3.941E-01	2.038E-02	0.247
MN-54	-2.248E-02		1.644E-02	5.376E-02	3.535E-03	-0.418
CO-57	-8.159E-03		8.231E-03	2.708E-02	1.810E-03	-0.301
FE-59	5.210E-02		3.743E-02	1.558E-01	8.899E-03	0.334
CO-60	7.733E-03		1.956E-02	8.460E-02	3.844E-03	0.091
ZN-65	-3.914E-02		4.535E-02	1.569E-01	7.717E-03	-0.250
SE-75	-6.093E-03		1.472E-02	5.268E-02	2.714E-03	-0.116
SR-85	3.919E-02		1.574E-02	5.911E-02	3.231E-03	0.663
Y-88	4.354E-02		1.670E-02	9.334E-02	3.909E-03	0.466
NB-95	3.146E-03		1.727E-02	6.506E-02	4.395E-03	0.048
ZR-95	-7.322E-03		2.432E-02	9.097E-02	6.426E-03	-0.080
MO-99	-8.524E-02		1.169E-01	4.146E-01	3.826E-02	-0.206
TC-99M	1.067E-02		9.091E-03	3.037E-02	1.813E-03	0.351
RU-103	-5.837E-03		1.358E-02	4.891E-02	2.890E-03	-0.119
RH-105	-2.186E-01		1.701E-01	5.713E-01	2.878E-02	-0.383
RH-106	2.850E-01	+	1.430E-01	4.589E-01	2.499E-02	0.621
RU-106	6.523E-02		1.263E-01	4.922E-01	4.043E-02	0.133
CD-109	-1.687E-01		2.149E-01	7.244E-01	4.219E-02	-0.233
SN-113	-3.834E-03		1.463E-02	5.260E-02	2.342E-03	-0.073
SB-124	1.516E-02		1.575E-02	6.074E-02	3.808E-03	0.250
SB-125	3.462E-02		3.593E-02	1.423E-01	6.744E-03	0.243
I-131	3.108E-03		1.322E-02	4.840E-02	2.335E-03	0.064
I-132	-1.546E-02		1.546E-02	5.399E-02	3.667E-03	-0.286
TE-132	-6.554E-03		9.557E-03	3.254E-02	1.654E-03	-0.201
BA-133	-1.577E-02		2.172E-02	6.220E-02	4.273E-03	-0.253
I-133	-1.038E-02		1.447E-02	5.076E-02	2.847E-03	-0.204
CS-134	4.721E-03		1.713E-02	5.885E-02	3.704E-03	0.080
CS-137	6.681E-02		2.362E-02	1.006E-01	6.834E-03	0.664
CE-139	-1.260E-02		9.532E-03	3.187E-02	1.532E-03	-0.395
BA-140	5.595E-02		5.245E-02	2.041E-01	3.466E-02	0.274
LA-140	-1.661E-02		1.895E-02	6.919E-02	3.103E-03	-0.240
CE-141	-6.713E-03		1.807E-02	5.452E-02	3.170E-03	-0.123
CE-144	-4.239E-02		6.332E-02	2.216E-01	1.598E-02	-0.191
ND-147	-4.442E-02		8.955E-02	3.207E-01	1.803E-02	-0.139
EU-152	-7.600E-02		8.734E-02	3.121E-01	1.610E-02	-0.243

Combined Activity-MDA Report (continued)
Sample ID : G8WNN1AA Acquisition date : 29-APR-2005 12:18:17

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-154	4.670E-02		1.245E-01	5.051E-01	3.918E-02	0.092
EU-155	3.328E-02		3.341E-02	1.209E-01	6.992E-03	0.275
HG-203	6.235E-03		1.298E-02	4.801E-02	2.505E-03	0.130
TL-208	5.261E-02		2.203E-02	8.666E-02	6.084E-03	0.607
BI-211	7.755E-01		1.401E-01	5.270E-01	2.505E-02	1.471
PB-211	4.151E-01		5.436E-01	2.195E+00	1.446E-01	0.189
BI-212	6.266E-01		2.313E-01	1.014E+00	6.898E-02	0.618
BI-214	3.002E-01	+	5.339E-02	2.068E-01	1.354E-02	1.452
RN-219	1.521E-01		9.018E-02	3.548E-01	1.827E-02	0.429
RA-223	-1.261E-01		1.304E-01	4.465E-01	2.553E-02	-0.282
RA-224	8.994E-01		3.913E-01	1.131E+00	3.241E-01	0.795
RA-226	4.913E+00	+	5.793E-01	1.872E+00	9.203E-02	2.624
TH-227	2.173E-02		9.723E-02	2.966E-01	1.513E-02	0.073
AC-228	2.277E-01		9.824E-02	3.562E-01	6.830E-02	0.639
RA-228	1.238E-01		7.052E-02	2.929E-01	1.830E-02	0.423
PA-231	-5.505E-01		4.614E-01	1.554E+00	1.036E-01	-0.354
TH-231	4.039E-01		1.319E-01	4.869E-01	3.308E-02	0.830
TH-232	5.090E-01		3.762E-01	1.569E+00	1.017E-01	0.324
PA-233	-1.078E-02		2.389E-02	8.487E-02	4.344E-03	-0.127
PA-234M	5.124E+00		3.030E+00	1.284E+01	7.420E-01	0.399
NP-237	-1.156E-02		2.561E-02	9.100E-02	4.561E-03	-0.127
NP-239	4.421E-03		4.732E-02	1.655E-01	9.107E-03	0.027
AM-241	-6.757E-03		2.146E-02	7.701E-02	4.516E-03	-0.088

Nuclide Line Activity Report
Sample ID : G8WNN1AA

Acquisition date : 29-APR-2005 12:18:17

Nuclide Type: natural

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
K-40	1460.83	10.67*	7.717E-01	5.060E+00	5.060E+00	11.88	OK

Final Mean for 1 Valid Peaks = 5.062E+00+/- 6.013E-01 (11.88%)

Nuclide Type: Th Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
PB-212	238.58	43.60*	4.106E+00	2.449E-01	2.449E-01	13.69	OK
	300.03	3.34	3.393E+00	-----	Line Not Found	-----	Absent

Final Mean for 1 Valid Peaks = 2.450E-01+/- 3.352E-02 (13.69%)

Nuclide Type: U Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
PB-214	241.92	7.46	4.061E+00	3.072E-01	3.072E-01	31.15	OK
	295.09	19.20	3.443E+00	3.568E-01	3.568E-01	23.41	OK
	351.87	37.10*	2.944E+00	2.750E-01	2.750E-01	20.58	OK

Final Mean for 3 Valid Peaks = 3.019E-01+/- 4.374E-02 (14.48%)

TH-234	63.29	3.80*	6.379E+00	2.289E+00	2.289E+00	17.20	OK
	92.59	5.41	6.611E+00	2.476E+00	2.476E+00	15.33	OK

Final Mean for 2 Valid Peaks = 2.388E+00+/- 2.860E-01 (11.98%)

Nuclide Type: Ac Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
U-235	143.79	10.50*	5.732E+00	3.646E-01	3.646E-01	31.65	OK
	185.74	53.00	4.930E+00	3.239E-01	3.239E-01	11.86	OK

Final Mean for 2 Valid Peaks = 3.275E-01+/- 3.714E-02 (11.34%)

Nuclide Type: Natural

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
ANN RAD	511.00	100.00*	2.072E+00	5.861E-02	5.861E-02	50.17	OK

Final Mean for 1 Valid Peaks = 5.862E-02+/- 2.941E-02 (50.17%)

Nuclide Line Activity Report (continued)
Sample ID : G8WNN1AA

Acquisition date : 29-APR-2005 12:18:17

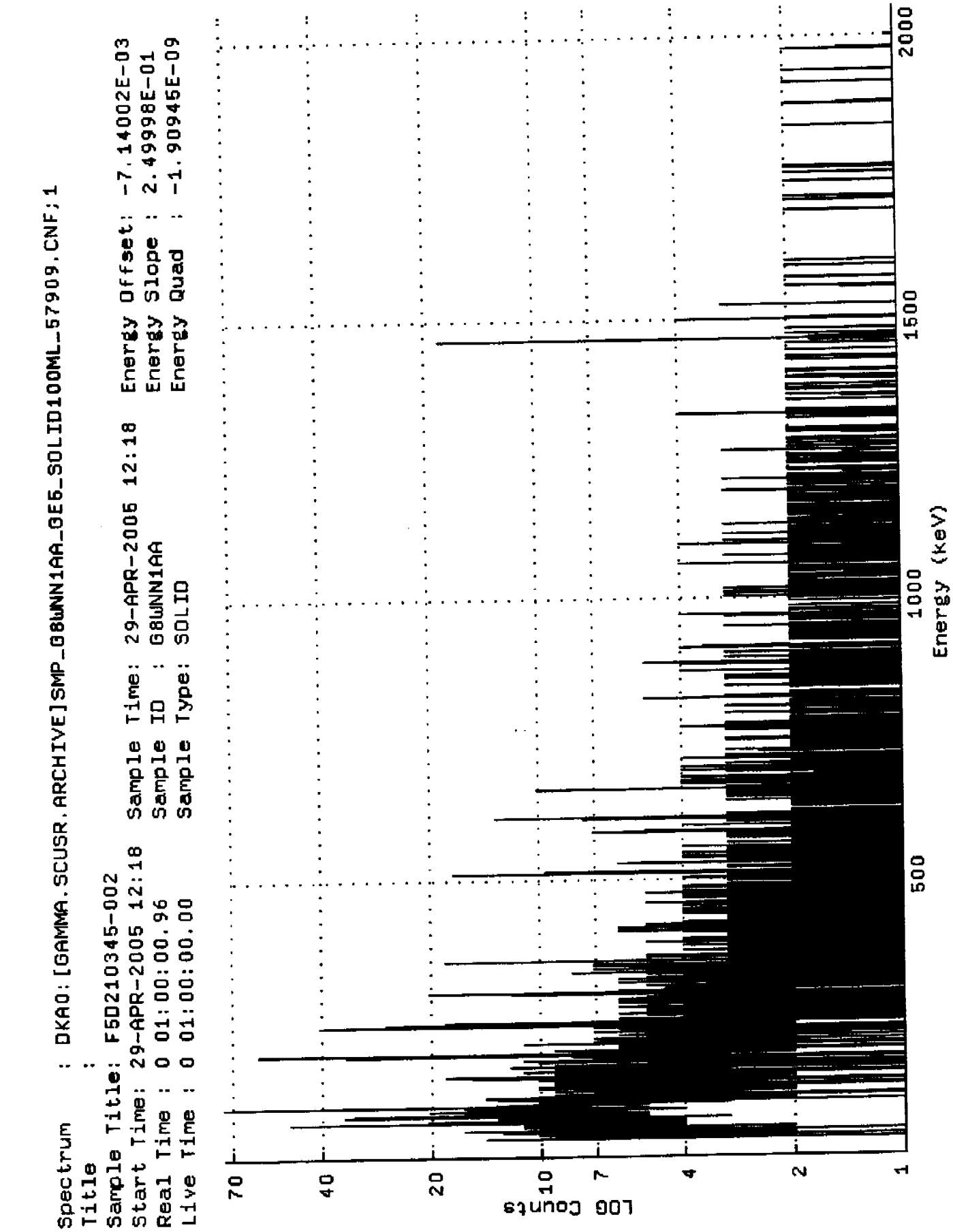
Flag: "*" = Keyline

Rejected Report
Sample ID : G8WNN1AA

Acquisition date : 29-APR-2005 12:18:17

Nuclide	Half-life	Half-Life Ratio	Energy	%Abund	Activity (pCi/G)	1-Sigma %Error	Rejected by
RU-103	39.25D	0.00	497.05*	88.70	--- Not Found ---		Abun.
			610.30	5.64	2.459E+00	17.99	
		% Abundances Found =		5.98			
RH-106	368.20D	0.00	511.80*	20.60	2.850E-01	50.17	Abun.
			621.84	9.80	--- Not Found ---		
		% Abundances Found =		67.76			
BI-214	1600.00Y	0.00	609.31*	46.10	3.002E-01	17.78	Abun.
			768.35	4.88	--- Not Found ---		
			1120.27	15.00	--- Not Found ---		
		% Abundances Found =		69.87			
RA-226	1600.00Y	0.00	186.21*	3.50	4.913E+00	11.79	Interf Abun
		% Abundances Found =		100.00	(Abn. Limit = 75.00%)		

Flag: "*" = Keyline


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WNN1AA_GE5_SOLID100ML_57909.CNF;1
Title :
Sample Title: F5D210345-002
Start Time: 29-APR-2005 12:18 Sample Time: 29-APR-2006 12:18 Energy Offset: -7.14002E-03
Real Time : 0 01:00:00.96 Sample ID : G8WNN1AA Energy Slope : 2.49998E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : -1.90945E-09
Log Counts
70
40
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:32:27
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WNQ1AA_GE6_SOLID100ML_57910.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-003
Sample ID : G8WNQ1AA

Sample Quantity : 1.53800E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 29-APR-2005 12:19:00
Acquisition date : 29-APR-2005 12:19:00
Decay time : 0 00:00:00.00

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.55
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE6

Counting geometry: SOLID_100ML

Energy cal. time : 3-MAR-2004 08:43:53.
Effic. cal. time : 18-JAN-2005 22:11:47

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE6__57456.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WNQ1AA

Acquisition date : 29-APR-2005 12:19:00

---- Energy, FWHM, and Efficiency Curves ----

```
**********************************************************************************
*                                                                                *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)                *
*                            A = 1.54285E-01                                     *
*                            B = 2.49832E-01                                     *
*                            C = 1.86799E-08                                     *
*                                                                                *
*                                                                                *
*                       FWHM(keV) = A + (B * SQRT(Energy))                       *
*                            A = 4.67797E-01                                     *
*                            B = 3.35494E-02                                     *
*                                                                                *
*                                                                                *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)  *
*                                                                                *
*     a1=9.41250E+02   a2=-4.68519E+00 a3=8.82578E-01                            *
*     a4=8.83148E-02   a5=-2.58765E-02 a6=-1.60802E-02   a7=0.00000E+00          *
*                                                                                *
**********************************************************************************
```

Post-NID Peak Search Report
Sample ID : G8WNQ1AA

Acquisition date : 29-APR-2005 12:19:00

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.39*	151	90	0.67	253.10	249	10	13.7		TH-234
5	75.00*	90	129	0.67	299.59	295	21	16.5	1.46E+00	
5	77.21	93	102	0.68	308.42	295	21	13.7		
0	92.69*	265	131	0.91	370.40	364	17	10.8		TH-234
0	185.76*	174	67	1.00	742.87	736	14	11.7		U-235
										RA-226
0	238.61*	95	45	0.83	954.40	949	12	16.8		PB-212
0	295.18*	50	27	0.66	1180.78	1175	14	24.2		PB-214
0	338.42	22	33	0.45	1353.84	1349	10	48.5		AC-228
0	351.92*	67	32	0.97	1407.85	1401	14	20.0		PB-214
0	583.23	36	16	0.42	2333.46	2326	14	26.8		TL-208
0	609.24*	71	15	1.16	2437.55	2433	11	15.8		
0	911.09	27	6	0.81	3645.21	3637	18	26.5		RA-228
0	968.62	12	8	0.59	3875.34	3871	10	51.0		RA-228
0	1460.59*	122	0	0.38	5843.13	5834	19	9.2		K-40

Summary of Nuclide Activity
Sample ID : G8WNQ1AA

Acquisition date : 29-APR-2005 12:19:00

Total number of lines in spectrum 14
Number of unidentified lines 2
Number of lines tentatively identified by NID 12 85.71%

Nuclide Type : natural

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	8.728E+00	8.728E+00	0.995E+00	11.40	
Total Activity :			8.728E+00	8.728E+00			

Nuclide Type : Th Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
TL-208	1.91Y	1.00	1.409E-01	1.409E-01	0.398E-01	28.25	
PB-212	1.91Y	1.00	3.276E-01	3.276E-01	0.602E-01	18.36	
AC-228	5.75Y	1.00	3.574E-01	3.574E-01	1.874E-01	52.45	
Total Activity :			8.258E-01	8.258E-01			

Nuclide Type : U Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
PB-214	1600.00Y	1.00	4.120E-01	4.120E-01	0.690E-01	16.74	
RA-226	1600.00Y	1.00	6.208E+00	6.208E+00	0.841E+00	13.55	
TH-234	4.47E+09Y	1.00	4.334E+00	4.334E+00	0.473E+00	10.92	
Total Activity :			1.095E+01	1.095E+01			

Nuclide Type : Ac-228

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
RA-228	5.75Y	1.00	4.391E-01	4.391E-01	1.081E-01	24.61	
Total Activity :			4.391E-01	4.391E-01			

Nuclide Type : Ac Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
U-235	7.04E+08Y	1.00	4.099E-01	4.099E-01	0.558E-01	13.61	
Total Activity :			4.099E-01	4.099E-01			

Grand Total Activity : 2.136E+01 2.136E+01

Flags: "K" = Keyline not found
"E" = Manually edited
"M" = Manually accepted
"A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G8WNQ1AA

Acquisition date : 29-APR-2005 12:19:00

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	8.728E+00	9.950E-01	7.582E-01	3.356E-02	11.513
TL-208	1.409E-01	3.980E-02	8.937E-02	6.508E-03	1.576
PB-212	3.276E-01	6.016E-02	1.311E-01	7.204E-03	2.498
PB-214	4.120E-01	6.898E-02	1.701E-01	9.128E-03	2.423
RA-226	6.208E+00	8.410E-01	1.300E+00	5.911E-02	4.774
AC-228	3.574E-01	1.874E-01	4.885E-01	9.392E-02	0.732
RA-228	4.391E-01	1.081E-01	2.935E-01	1.559E-02	1.496
TH-234	4.334E+00	4.732E-01	1.049E+00	9.970E-02	4.132
U-235	4.099E-01	5.580E-02	4.578E-01	4.193E-02	0.896

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-2.662E-01		1.733E-01	5.594E-01	3.274E-02	-0.476
NA-22	-4.113E-02		2.579E-02	8.227E-02	3.563E-03	-0.500
CR-51	1.131E-01		1.491E-01	5.600E-01	2.954E-02	0.202
MN-54	-6.870E-03		2.183E-02	8.293E-02	4.927E-03	-0.083
CO-57	1.792E-03		1.190E-02	4.248E-02	2.410E-03	0.042
FE-59	7.813E-03		3.642E-02	1.510E-01	8.241E-03	0.052
CO-60	1.387E-02		2.024E-02	9.309E-02	3.956E-03	0.149
ZN-65	-1.435E-01		6.987E-02	2.188E-01	1.029E-02	-0.656
SE-75	2.551E-02		1.996E-02	7.819E-02	3.923E-03	0.326
SR-85	-1.063E-01		3.082E-02	8.370E-02	4.925E-03	-1.270
Y-88	8.450E-03		2.088E-02	9.880E-02	4.140E-03	0.086
NB-95	-5.456E-03		2.915E-02	1.052E-01	6.784E-03	-0.052
ZR-95	6.391E-02		4.506E-02	1.853E-01	1.262E-02	0.345
MO-99	-6.555E-02		1.687E-01	6.172E-01	5.610E-02	-0.106
TC-99M	1.903E-02		1.378E-02	5.090E-02	2.639E-03	0.374
RU-103	-4.532E-02		2.110E-02	6.297E-02	3.972E-03	-0.720
RH-105	-3.509E-01		2.962E-01	9.775E-01	4.965E-02	-0.359
RH-106	8.015E-01		1.618E-01	6.441E-01	3.778E-02	1.244
RU-106	2.440E-02		2.203E-01	8.345E-01	6.995E-02	0.029
CD-109	1.333E-01		3.643E-01	1.298E+00	7.605E-02	0.103
SN-113	-2.808E-02		2.500E-02	8.547E-02	4.238E-03	-0.329
SB-124	-1.801E-02		2.353E-02	8.297E-02	5.415E-03	-0.217
SB-125	-1.199E-02		4.941E-02	1.825E-01	9.556E-03	-0.066
I-131	-1.597E-02		1.600E-02	5.595E-02	2.888E-03	-0.286
I-132	-7.649E-03		2.409E-02	8.896E-02	6.120E-03	-0.086
TE-132	3.969E-02		1.449E-02	5.847E-02	2.820E-03	0.679
BA-133	2.891E-02		2.639E-02	9.740E-02	6.895E-03	0.297
I-133	-4.076E-03		2.109E-02	7.682E-02	4.612E-03	-0.053
CS-134	-3.646E-02		2.370E-02	7.218E-02	4.725E-03	-0.505
CS-137	2.265E-02		2.961E-02	1.149E-01	7.927E-03	0.197
CE-139	-1.994E-02		1.594E-02	5.186E-02	2.280E-03	-0.384
BA-140	6.215E-02		7.170E-02	2.816E-01	4.818E-02	0.221
LA-140	-1.835E-02		2.931E-02	1.106E-01	4.768E-03	-0.166
CE-141	-4.057E-02		2.652E-02	8.565E-02	4.372E-03	-0.474

Combined Activity-MDA Report (continued)
Sample ID : G8WNQ1AA Acquisition date : 29-APR-2005 12:19:00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
CE-144	-3.947E-03		9.278E-02	3.275E-01	2.117E-02	-0.012
ND-147	1.057E-02		1.338E-01	4.986E-01	2.999E-02	0.021
EU-152	-1.258E-03		1.473E-01	5.765E-01	2.837E-02	-0.002
EU-154	-1.258E-01		1.634E-01	5.995E-01	4.244E-02	-0.210
EU-155	6.312E-03		4.764E-02	1.710E-01	9.061E-03	0.037
HG-203	-2.076E-02		1.899E-02	6.358E-02	3.269E-03	-0.326
BI-211	1.195E+00		2.345E-01	8.769E-01	4.408E-02	1.363
PB-211	5.863E-01		8.312E-01	3.400E+00	2.028E-01	0.172
BI-212	7.426E-01		3.875E-01	1.610E+00	1.072E-01	0.461
BI-214	5.480E-01	+	9.826E-02	3.813E-01	2.587E-02	1.437
RN-219	3.120E-01		1.575E-01	6.098E-01	3.073E-02	0.512
RA-223	-1.127E-01		2.171E-01	7.382E-01	3.813E-02	-0.153
RA-224	2.039E+00		7.501E-01	1.772E+00	5.073E-01	1.151
TH-227	1.127E-01		1.204E-01	4.058E-01	1.975E-02	0.278
PA-231	-8.795E-01		6.288E-01	2.041E+00	1.364E-01	-0.431
TH-231	9.152E-01		2.231E-01	8.291E-01	5.628E-02	1.104
TH-232	-2.716E-01		5.129E-01	1.906E+00	1.088E-01	-0.143
PA-233	-2.083E-02		4.434E-02	1.528E-01	7.925E-03	-0.136
PA-234M	1.504E+01		5.685E+00	2.411E+01	1.233E+00	0.624
NP-237	-2.233E-02		4.755E-02	1.639E-01	8.326E-03	-0.136
NP-239	1.245E-01		7.202E-02	2.710E-01	1.409E-02	0.460
AM-241	1.080E-02		3.465E-02	1.208E-01	6.791E-03	0.089
ANN RAD	-2.937E-02		3.283E-02	1.374E-01	8.050E-03	-0.214

Nuclide Line Activity Report
Sample ID : G8WNQ1AA

Acquisition date : 29-APR-2005 12:19:00

Nuclide Type: natural

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
K-40	1460.83	10.67*	6.381E-01	8.730E+00	8.730E+00	11.40	OK

Final Mean for 1 Valid Peaks = 8.728E+00+/- 9.950E-01 (11.40%)

Nuclide Type: Th Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
TL-208	583.02	86.00*	1.432E+00	1.408E-01	1.408E-01	28.25	OK

Final Mean for 1 Valid Peaks = 1.409E-01+/- 3.980E-02 (28.25%)

PB-212	238.58	43.60*	3.234E+00	3.275E-01	3.276E-01	18.36	OK
	300.03	3.34	2.660E+00	----- Line Not Found		-----	Absent

Final Mean for 1 Valid Peaks = 3.276E-01+/- 6.016E-02 (18.36%)

AC-228	338.42	12.40*	2.387E+00	3.574E-01	3.574E-01	52.45	OK

Final Mean for 1 Valid Peaks = 3.574E-01+/- 1.874E-01 (52.45%)

Nuclide Type: U Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
PB-214	241.92	7.46	3.198E+00	----- Line Not Found		-----	Absent
	295.09	19.20	2.699E+00	4.718E-01	4.717E-01	25.34	OK
	351.87	37.10*	2.303E+00	3.844E-01	3.844E-01	21.29	OK

Final Mean for 2 Valid Peaks = 4.120E-01+/- 6.898E-02 (16.74%)

RA-226	186.21	3.50*	3.900E+00	6.218E+00	6.218E+00	13.55	OK

Final Mean for 1 Valid Peaks = 6.208E+00+/- 8.410E-01 (13.55%)

TH-234	63.29	3.80*	4.870E+00	3.986E+00	3.986E+00	17.39	OK
	92.59	5.41	5.227E+00	4.569E+00	4.569E+00	12.91	OK

Final Mean for 2 Valid Peaks = 4.334E+00+/- 4.732E-01 (10.92%)

Nuclide Type: Ac-228

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
RA-228	911.16	29.00*	9.500E-01	4.784E-01	4.784E-01	27.48	OK
	968.97	17.40	8.998E-01	3.596E-01	3.596E-01	51.50	OK

Final Mean for 2 Valid Peaks = 4.391E-01+/- 1.081E-01 (24.61%)

Nuclide Line Activity Report (continued)
Sample ID : G8WNQ1AA Acquisition date : 29-APR-2005 12:19:00

Nuclide Type: Ac Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
U-235	143.79	10.50*	4.563E+00	----- Line Not Found		-----	Absent
	185.74	53.00	3.907E+00	4.099E-01	4.099E-01	13.61	OK

Final Mean for 1 Valid Peaks = 4.099E-01+/- 5.580E-02 (13.61%)

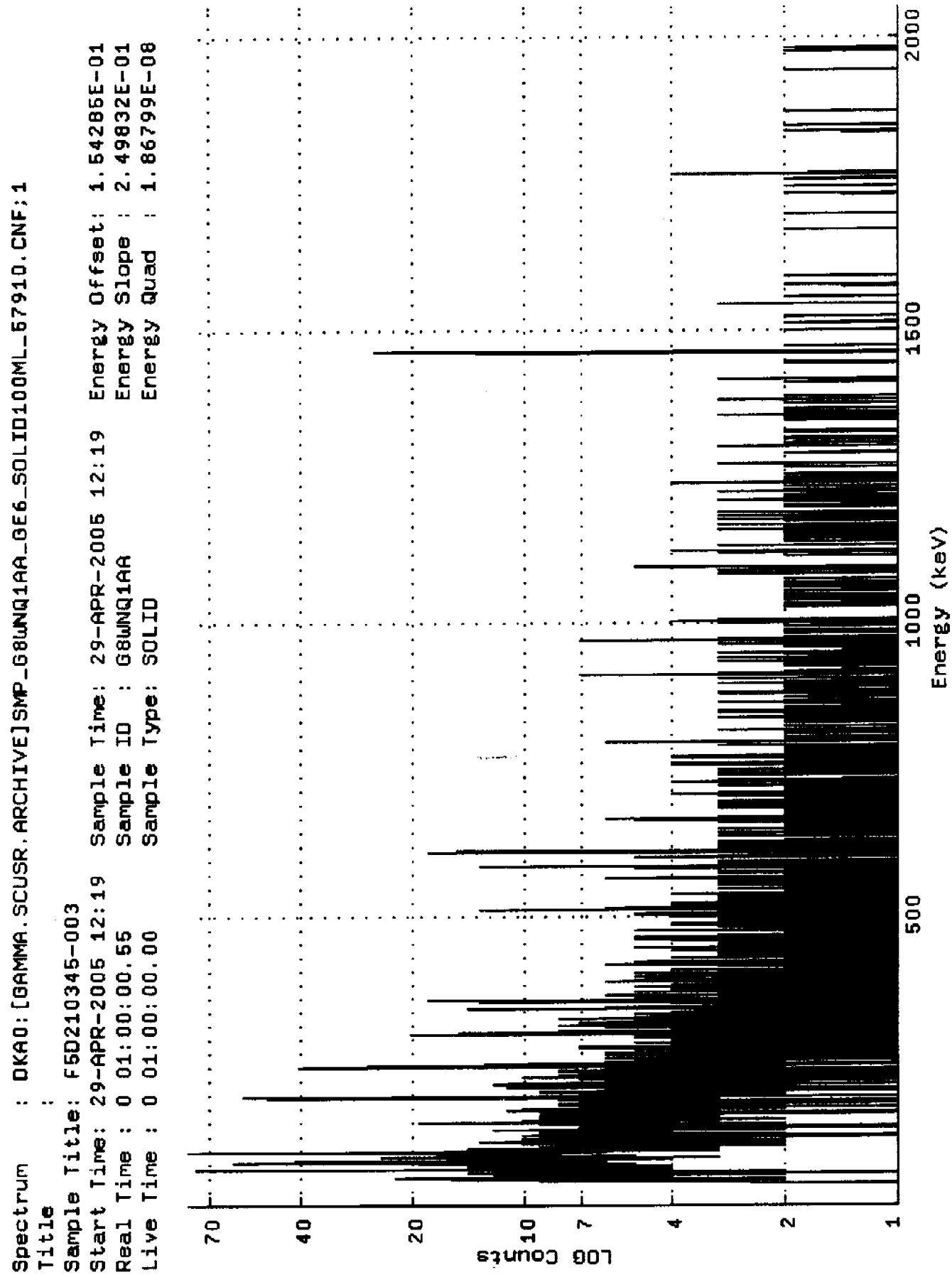
Flag: "*" = Keyline

Rejected Report
Sample ID : G8WNQ1AA

Acquisition date : 29-APR-2005 12:19:00

Nuclide	Half-life	Half-Life Ratio	Energy	%Abund	Activity (pCi/G)	1-Sigma %Error	Rejected by
BI-214	1600.00Y	0.00	609.31*	46.10	5.480E-01	17.93	Abun.
			768.35	4.88	--- Not Found ---		
			1120.27	15.00	--- Not Found ---		
		% Abundances Found =		69.87			

Flag: "*" = Keyline


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WNQ1AA_GE6_SOLID100ML_67910.CNF;1
Title :
Sample Title: F5D210345-003
Start Time: 29-APR-2005 12:19 Sample Time: 29-APR-2005 12:19 Energy Offset: 1.54285E-01
Real Time : 0 01:00:00.55 Sample ID : G8WNQ1AA Energy Slope : 2.49832E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : 1.86799E-08
Log Counts
70
40
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:32:48
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WNR1AA_GE7_SOLID100ML_57912.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-004
Sample ID : G8WNR1AA

Sample Quantity : 1.44300E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 29-APR-2005 13:17:36
Acquisition date : 29-APR-2005 13:17:36
Decay time : 0 00:00:00.00
Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.60
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE7
Counting geometry: SOLID_100ML

Energy cal. time : 25-FEB-2005 09:11:05
Effic. cal. time : 19-JAN-2005 01:25:36
Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000
End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE7__57457.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WNR1AA Acquisition date : 29-APR-2005 13:17:36

---- Energy, FWHM, and Efficiency Curves ----

```
*************************************************************************
*                                                                       *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)       *
*                          A = 7.85538E-02                              *
*                          B = 2.50061E-01                              *
*                          C = -1.56700E-08                             *
*                                                                       *
*                                                                       *
*                    FWHM(keV) = A + (B * SQRT(Energy))                 *
*                          A = 5.33118E-01                              *
*                          B = 4.95085E-02                              *
*                                                                       *
*                                                                       *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                       *
*     a1=9.41250E+02   a2=-4.39222E+00 a3=9.59385E-01                   *
*     a4=7.48354E-02   a5=-4.49953E-02 a6=-1.06506E-02   a7=0.00000E+00 *
*                                                                       *
*************************************************************************
```

Post-NID Peak Search Report
Sample ID : G8WNR1AA

Acquisition date : 29-APR-2005 13:17:36

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.20*	265	142	0.98	252.45	247	12	10.2		TH-234
6	74.75*	218	177	1.02	298.63	283	31	8.7	1.50E+00	
6	77.12*	223	180	1.03	308.10	283	31	8.7		
32	87.23	69	206	1.20	348.54	342	45	21.3	1.45E+00	
32	89.95	44	201	1.21	359.39	342	45	29.8		
32	92.74*	411	162	1.21	370.56	342	45	6.1		TH-234
0	143.79	54	71	0.85	574.73	568	11	29.9		U-235
0	163.20	20	59	0.57	652.33	647	11	69.0		
0	185.83*	254	62	1.02	742.85	736	14	8.7		U-235
0	209.37	21	41	0.50	837.00	833	10	54.2		
5	238.70*	292	72	1.23	954.33	946	29	6.6	1.37E+00	PB-212
5	242.07	60	57	1.23	967.81	946	29	16.9		PB-214
15	295.45	87	42	0.98	1181.28	1173	31	12.9	1.70E+00	PB-214
15	299.85	21	27	0.98	1198.88	1173	31	30.7		PB-212
0	338.39	43	28	0.61	1353.05	1347	14	27.8		AC-228
0	352.07	171	47	1.19	1407.76	1398	20	11.3		PB-214
0	583.36	88	26	1.29	2332.90	2325	18	15.7		TL-208
0	609.55	111	25	1.14	2437.66	2427	21	13.4		
0	911.49	80	13	0.37	3645.61	3633	27	15.3		RA-228
0	968.97	18	18	0.43	3875.57	3867	16	52.5		RA-228
0	1461.32	244	17	2.19	5845.69	5827	32	7.7		K-40

Summary of Nuclide Activity
Sample ID : G8WNR1AA

Acquisition date : 29-APR-2005 13:17:36

Total number of lines in spectrum	21	
Number of unidentified lines	5	
Number of lines tentatively identified by NID	16	76.19%

Nuclide Type : natural

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	1.441E+01	1.441E+01	0.147E+01	10.22	
Total Activity :			1.441E+01	1.441E+01			

Nuclide Type : Th Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
TL-208	1.91Y	1.00	2.686E-01	2.686E-01	0.478E-01	17.78	
PB-212	1.91Y	1.00	7.710E-01	7.710E-01	0.746E-01	9.68	
AC-228	5.75Y	1.00	5.305E-01	5.305E-01	1.810E-01	34.13	
Total Activity :			1.570E+00	1.570E+00			

Nuclide Type : U Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
PB-214	1600.00Y	1.00	7.100E-01	7.100E-01	0.689E-01	9.70	
TH-234	4.47E+09Y	1.00	5.491E+00	5.491E+00	0.470E+00	8.55	
Total Activity :			6.201E+00	6.201E+00			

Nuclide Type : Ac-228

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
RA-228	5.75Y	1.00	8.646E-01	8.646E-01	1.481E-01	17.13	
Total Activity :			8.646E-01	8.646E-01			

Nuclide Type : Ac Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
U-235	7.04E+08Y	1.00	4.517E-01	4.517E-01	0.484E-01	10.71	
Total Activity :			4.517E-01	4.517E-01			

Grand Total Activity :	2.350E+01	2.350E+01

Flags: "K" = Keyline not found
"E" = Manually edited
"M" = Manually accepted
"A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G8WNR1AA

Acquisition date : 29-APR-2005 13:17:36

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	1.441E+01	1.473E+00	1.096E+00	4.860E-02	13.153
TL-208	2.686E-01	4.777E-02	8.741E-02	5.824E-03	3.073
PB-212	7.710E-01	7.463E-02	1.104E-01	6.097E-03	6.983
PB-214	7.100E-01	6.886E-02	1.463E-01	7.470E-03	4.853
AC-228	5.305E-01	1.810E-01	4.855E-01	9.304E-02	1.093
RA-228	8.646E-01	1.481E-01	3.842E-01	1.775E-02	2.250
TH-234	5.491E+00	4.697E-01	1.185E+00	1.108E-01	4.634
U-235	4.517E-01	4.837E-02	3.686E-01	3.434E-02	1.225

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	1.714E-01		1.654E-01	6.358E-01	3.388E-02	0.270
NA-22	1.810E-02		3.376E-02	1.312E-01	5.544E-03	0.138
CR-51	-1.877E-01		1.430E-01	4.827E-01	2.464E-02	-0.389
MN-54	-1.129E-02		2.636E-02	9.451E-02	4.902E-03	-0.119
CO-57	1.036E-02		1.197E-02	4.225E-02	2.557E-03	0.245
FE-59	-5.688E-02		4.864E-02	1.649E-01	8.419E-03	-0.345
CO-60	1.144E-02		2.850E-02	1.131E-01	4.805E-03	0.101
ZN-65	-1.420E-01		6.823E-02	2.111E-01	9.129E-03	-0.673
SE-75	-1.623E-02		2.028E-02	6.932E-02	3.459E-03	-0.234
SR-85	-5.478E-02		2.679E-02	8.529E-02	4.502E-03	-0.642
Y-88	2.900E-02		2.850E-02	1.264E-01	5.290E-03	0.229
NB-95	2.084E-02		2.922E-02	1.084E-01	6.127E-03	0.192
ZR-95	4.962E-02		4.429E-02	1.721E-01	1.040E-02	0.288
MO-99	-2.637E-01		1.748E-01	5.644E-01	4.806E-02	-0.467
TC-99M	-2.433E-02		1.624E-02	4.485E-02	2.455E-03	-0.543
RU-103	2.343E-02		1.728E-02	6.892E-02	3.986E-03	0.340
RH-105	2.055E-01		2.631E-01	9.583E-01	4.736E-02	0.214
RH-106	-4.934E-02		1.349E-01	5.667E-01	2.983E-02	-0.087
RU-106	-2.584E-01		2.311E-01	7.868E-01	6.118E-02	-0.328
CD-109	1.364E+00		4.083E-01	1.457E+00	8.585E-02	0.936
SN-113	-5.051E-03		2.527E-02	8.938E-02	4.061E-03	-0.057
SB-124	-8.840E-03		2.386E-02	7.690E-02	4.443E-03	-0.115
SB-125	6.282E-02		5.314E-02	2.031E-01	9.678E-03	0.309
I-131	3.203E-03		1.828E-02	6.642E-02	3.221E-03	0.048
I-132	-4.609E-02		2.986E-02	9.788E-02	5.902E-03	-0.471
TE-132	-4.498E-03		1.448E-02	5.083E-02	2.479E-03	-0.088
BA-133	-3.472E-02		3.073E-02	8.500E-02	5.843E-03	-0.408
I-133	-1.121E-02		2.190E-02	7.700E-02	4.138E-03	-0.146
CS-134	1.249E-02		2.519E-02	8.145E-02	4.720E-03	0.153
CS-137	1.035E-01		3.489E-02	1.376E-01	8.323E-03	0.752
CE-139	-2.195E-02		1.784E-02	4.930E-02	2.254E-03	-0.445
BA-140	-4.859E-02		7.790E-02	2.700E-01	4.561E-02	-0.180
LA-140	3.542E-02		3.120E-02	1.340E-01	5.791E-03	0.264
CE-141	6.759E-02		2.737E-02	9.049E-02	4.859E-03	0.747
CE-144	-1.143E-02		9.555E-02	3.364E-01	2.266E-02	-0.034

Combined Activity-MDA Report (continued)
Sample ID : G8WNR1AA Acquisition date : 29-APR-2005 13:17:36

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
ND-147	2.525E-01		1.393E-01	5.520E-01	2.971E-02	0.458
EU-152	2.622E-01		1.235E-01	5.734E-01	2.826E-02	0.457
EU-154	1.719E-03		2.304E-01	8.504E-01	5.545E-02	0.002
EU-155	6.875E-02		5.081E-02	1.822E-01	1.003E-02	0.377
HG-203	2.975E-03		1.871E-02	6.621E-02	3.363E-03	0.045
BI-211	2.056E+00		2.683E-01	9.181E-01	4.361E-02	2.239
PB-211	-1.253E+00		9.354E-01	3.131E+00	1.631E-01	-0.400
BI-212	1.005E+00		3.997E-01	1.611E+00	9.408E-02	0.623
BI-214	6.623E-01	+	1.030E-01	3.395E-01	2.054E-02	1.951
RN-219	3.734E-01		1.524E-01	5.771E-01	2.883E-02	0.647
RA-223	2.377E-01		2.118E-01	7.652E-01	4.115E-02	0.311
RA-224	5.412E+00		1.661E+00	2.273E+00	6.507E-01	2.381
RA-226	6.910E+00	+	7.630E-01	2.379E+00	1.114E-01	2.905
TH-227	4.343E-01		1.487E-01	5.051E-01	2.477E-02	0.860
PA-231	-5.366E-01		7.203E-01	2.022E+00	1.332E-01	-0.265
TH-231	6.881E-01		2.481E-01	7.847E-01	5.324E-02	0.877
TH-232	1.246E+00		5.970E-01	2.474E+00	1.231E-01	0.504
PA-233	-7.882E-03		3.758E-02	1.306E-01	6.576E-03	-0.060
PA-234M	1.417E+01		5.018E+00	2.127E+01	9.674E-01	0.666
NP-237	-8.451E-03		4.030E-02	1.400E-01	6.900E-03	-0.060
NP-239	1.035E-01		7.678E-02	2.632E-01	1.407E-02	0.393
AM-241	3.288E-03		4.216E-02	1.337E-01	7.065E-03	0.025
ANN RAD	-2.094E-02		2.808E-02	1.162E-01	6.110E-03	-0.180

Nuclide Line Activity Report
Sample ID : G8WNR1AA

Acquisition date : 29-APR-2005 13:17:36

Nuclide Type: natural

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
K-40	1460.83	10.67*	8.262E-01	1.441E+01	1.441E+01	10.22	OK

Final Mean for 1 Valid Peaks = 1.441E+01+/- 1.473E+00 (10.22%)

Nuclide Type: Th Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
TL-208	583.02	86.00*	1.982E+00	2.685E-01	2.685E-01	17.78	OK

Final Mean for 1 Valid Peaks = 2.686E-01+/- 4.777E-02 (17.78%)

PB-212	238.58	43.60*	4.557E+00	7.650E-01	7.650E-01	9.94	OK
	300.03	3.34	3.752E+00	8.685E-01	8.685E-01	31.68	OK

Final Mean for 2 Valid Peaks = 7.710E-01+/- 7.463E-02 (9.68%)

AC-228	338.42	12.40*	3.363E+00	5.305E-01	5.305E-01	34.13	OK

Final Mean for 1 Valid Peaks = 5.305E-01+/- 1.810E-01 (34.13%)

Nuclide Type: U Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
PB-214	241.92	7.46	4.506E+00	9.337E-01	9.337E-01	18.42	OK
	295.09	19.20	3.807E+00	6.196E-01	6.196E-01	14.88	OK
	351.87	37.10*	3.243E+00	7.409E-01	7.409E-01	13.36	OK

Final Mean for 3 Valid Peaks = 7.100E-01+/- 6.886E-02 (9.70%)

TH-234	63.29	3.80*	6.669E+00	5.441E+00	5.441E+00	14.70	OK
	92.59	5.41	7.178E+00	5.506E+00	5.506E+00	9.45	OK

Final Mean for 2 Valid Peaks = 5.491E+00+/- 4.697E-01 (8.55%)

Nuclide Type: Ac-228

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
RA-228	911.16	29.00*	1.277E+00	1.126E+00	1.126E+00	16.73	OK
	968.97	17.40	1.203E+00	4.362E-01	4.362E-01	52.98	OK

Final Mean for 2 Valid Peaks = 8.646E-01+/- 1.481E-01 (17.13%)

Nuclide Line Activity Report (continued)
Sample ID : G8WNR1AA Acquisition date : 29-APR-2005 13:17:36

Nuclide Type: Ac Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
U-235	143.79	10.50*	6.350E+00	4.179E-01	4.179E-01	31.70	OK
	185.74	53.00	5.478E+00	4.556E-01	4.556E-01	11.12	OK

Final Mean for 2 Valid Peaks = 4.517E-01+/- 4.837E-02 (10.71%)

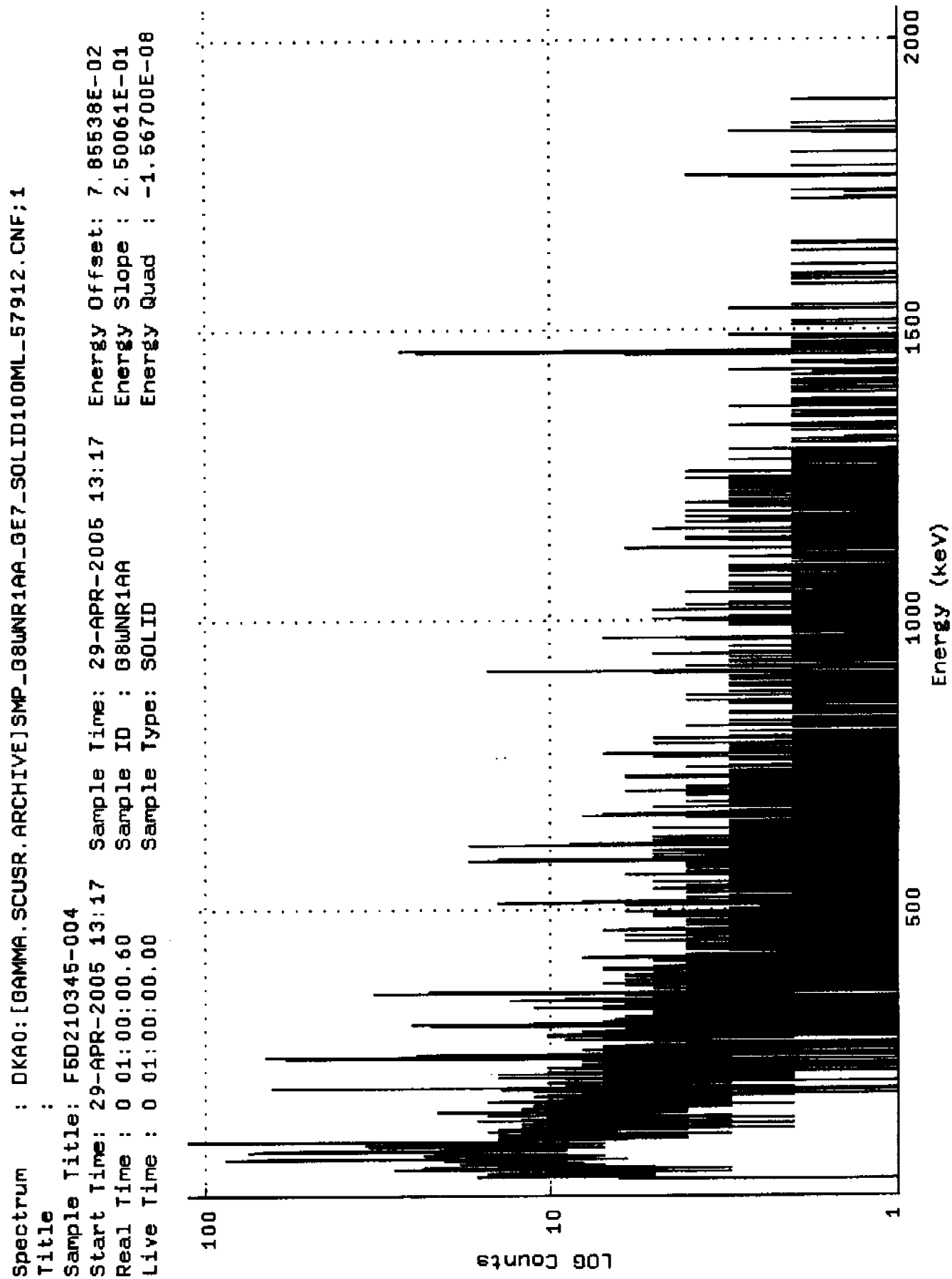
Flag: "*" = Keyline

Rejected Report
Sample ID : G8WNR1AA

Acquisition date : 29-APR-2005 13:17:36

Nuclide	Half-life	Half-Life Ratio	Energy	%Abund	Activity (pCi/G)	1-Sigma %Error	Rejected by
RU-103	39.25D	0.00	497.05*	88.70	--- Not Found ---		Abun.
			610.30	5.64	5.424E+00	15.79	
		% Abundances Found =		5.98			
BA-140	12.79D	0.00	162.64	6.70	2.605E-01	70.90	Abun.
			304.84	4.50	--- Not Found ---		
			423.70	3.20	--- Not Found ---		
			537.32*	25.00	--- Not Found ---		
		% Abundances Found =		17.01			
BI-214	1600.00Y	0.00	609.31*	46.10	6.623E-01	15.55	Abun.
			768.35	4.88	--- Not Found ---		
			1120.27	15.00	--- Not Found ---		
		% Abundances Found =		69.87			
RA-226	1600.00Y	0.00	186.21*	3.50	6.910E+00	11.04	Interf Abun
		% Abundances Found =		100.00	(Abn. Limit = 75.00%)		
PA-231	3.28E+04Y	0.00	283.67	1.59	--- Not Found ---		Abun.
			300.08	2.30	1.261E+00	31.84	
			302.67*	2.30	--- Not Found ---		
			330.07	1.32	--- Not Found ---		
		% Abundances Found =		30.63			
PA-233	2.20E+06Y	0.00	300.12	6.60	4.396E-01	32.12	Abun.
			311.98*	38.60	--- Not Found ---		
			340.50	4.50	--- Not Found ---		
		% Abundances Found =		13.28			

Flag: "*" = Keyline


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WNR1AA_GE7_SOLID100ML_57912.CNF;1
Title :
Sample Title: F5D210345-004
Start Time: 29-APR-2005 13:17 Sample Time: 29-APR-2005 13:17 Energy Offset: 7.85538E-02
Real Time : 0 01:00:00.60 Sample ID : G8WNR1AA Energy Slope : 2.50061E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : -1.56700E-08
Log Counts
100
10
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:33:10
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WNV1AA_GE5_SOLID100ML_57913.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-005
Sample ID : G8WNV1AA

Sample Quantity : 1.58700E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 29-APR-2005 13:21:17
Acquisition date : 29-APR-2005 13:21:17
Decay time : 0 00:00:00.00
Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:01.07
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE5
Counting geometry: SOLID_100ML

Energy cal. time : 9-MAR-2005 09:18:16.
Effic. cal. time : 18-JAN-2005 09:43:11
Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000
End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE5__57455.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WNV1AA Acquisition date : 29-APR-2005 13:21:17

---- Energy, FWHM, and Efficiency Curves ----

```
*************************************************************************
*                                                                       *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)       *
*                          A = -7.14002E-03                             *
*                          B = 2.49998E-01                              *
*                          C = -1.90945E-09                             *
*                                                                       *
*                                                                       *
*                    FWHM(keV) = A + (B * SQRT(Energy))                 *
*                          A = 5.02556E-01                              *
*                          B = 3.66242E-02                              *
*                                                                       *
*                                                                       *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                       *
*     a1=9.41250E+02   a2=-4.46457E+00 a3=9.42586E-01                   *
*     a4=5.97186E-02   a5=-3.91387E-02 a6=-9.36517E-03   a7=0.00000E+00 *
*                                                                       *
*************************************************************************
```

Post-NID Peak Search Report
Sample ID : G8WNV1AA

Acquisition date : 29-APR-2005 13:21:17

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.21*	275	181	0.67	252.89	247	19	11.9		TH-234
5	74.86	86	139	0.73	299.46	294	20	15.6	9.31E-01	
5	77.16*	146	129	0.73	308.66	294	20	10.9		
8	87.26	41	143	0.99	349.07	343	34	28.6	7.12E-01	
8	89.85	37	145	0.99	359.43	343	34	29.9		
8	92.66*	392	125	1.00	370.67	343	34	6.1		TH-234
0	143.96	39	61	0.42	575.86	568	12	38.8		U-235
0	185.85*	242	85	1.05	743.42	731	22	10.6		U-235
0	238.75*	144	58	0.84	955.06	950	10	12.3		PB-212
0	295.50	88	34	0.72	1182.04	1173	15	16.4		PB-214
0	338.30	27	44	0.99	1353.24	1341	19	53.1		AC-228
0	352.07*	130	42	1.16	1408.33	1399	16	13.1		PB-214
0	583.42	58	12	0.58	2333.78	2328	15	17.3		TL-208
0	609.55	112	23	1.40	2438.30	2431	20	12.9		
0	911.26	37	10	1.06	3645.20	3635	17	23.8		
0	1461.45	202	0	1.52	5846.15	5834	23	7.0		K-40

Summary of Nuclide Activity
Sample ID : G8WNV1AA Acquisition date : 29-APR-2005 13:21:17

Total number of lines in spectrum	16	
Number of unidentified lines	4	
Number of lines tentatively identified by NID	12	75.00%

Nuclide Type : natural

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	1.161E+01	1.161E+01	0.114E+01	9.81	
Total Activity :			1.161E+01	1.161E+01			

Nuclide Type : Th Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
TL-208	1.91Y	1.00	1.747E-01	1.747E-01	0.338E-01	19.32	
PB-212	1.91Y	1.00	3.816E-01	3.816E-01	0.551E-01	14.43	
AC-228	5.75Y	1.00	3.411E-01	3.411E-01	1.934E-01	56.69	
Total Activity :			8.974E-01	8.974E-01			

Nuclide Type : U Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
PB-214	1600.00Y	1.00	5.865E-01	5.865E-01	0.706E-01	12.04	
TH-234	4.47E+09Y	1.00	5.224E+00	5.224E+00	0.454E+00	8.68	
Total Activity :			5.810E+00	5.810E+00			

Nuclide Type : Ac Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
U-235	7.04E+08Y	1.00	4.177E-01	4.177E-01	0.517E-01	12.39	
Total Activity :			4.177E-01	4.177E-01			

Grand Total Activity :	1.874E+01	1.874E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G8WNV1AA

Acquisition date : 29-APR-2005 13:21:17

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	1.161E+01	1.139E+00	7.935E-01	3.703E-02	14.631
TL-208	1.747E-01	3.375E-02	6.209E-02	4.360E-03	2.814
PB-212	3.816E-01	5.505E-02	1.207E-01	6.877E-03	3.161
PB-214	5.865E-01	7.061E-02	1.350E-01	6.896E-03	4.345
AC-228	3.411E-01	1.934E-01	4.123E-01	7.905E-02	0.827
TH-234	5.224E+00	4.536E-01	9.341E-01	8.999E-02	5.592
U-235	4.177E-01	5.175E-02	3.327E-01	3.192E-02	1.255

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-4.897E-03		1.612E-01	5.876E-01	3.180E-02	-0.008
NA-22	1.076E-02		2.411E-02	9.803E-02	4.404E-03	0.110
CR-51	-1.040E-01		1.243E-01	4.281E-01	2.214E-02	-0.243
MN-54	2.964E-03		2.097E-02	7.903E-02	5.197E-03	0.038
CO-57	-1.950E-02		1.171E-02	3.701E-02	2.475E-03	-0.527
FE-59	2.194E-02		4.594E-02	1.792E-01	1.023E-02	0.122
CO-60	-1.812E-02		2.803E-02	1.064E-01	4.834E-03	-0.170
ZN-65	-1.022E-01		6.336E-02	2.029E-01	9.985E-03	-0.504
SE-75	-4.952E-02		1.738E-02	5.189E-02	2.673E-03	-0.954
SR-85	-1.112E-01		2.582E-02	6.702E-02	3.663E-03	-1.659
Y-88	-8.563E-03		2.023E-02	8.053E-02	3.373E-03	-0.106
NB-95	-3.661E-02		2.416E-02	7.865E-02	5.313E-03	-0.465
ZR-95	6.113E-03		3.199E-02	1.235E-01	8.722E-03	0.050
MO-99	1.069E-01		1.502E-01	5.912E-01	5.456E-02	0.181
TC-99M	-1.490E-02		1.398E-02	4.028E-02	2.404E-03	-0.370
RU-103	1.875E-04		1.688E-02	6.249E-02	3.692E-03	0.003
RH-105	2.063E-04		2.077E-01	7.575E-01	3.816E-02	0.000
RH-106	-9.420E-02		1.302E-01	5.362E-01	2.920E-02	-0.176
RU-106	-2.698E-01		1.911E-01	6.158E-01	5.059E-02	-0.438
CD-109	6.372E-01		3.176E-01	1.142E+00	6.653E-02	0.558
SN-113	-3.903E-03		2.138E-02	7.593E-02	3.380E-03	-0.051
SB-124	-1.061E-03		1.920E-02	6.949E-02	4.357E-03	-0.015
SB-125	1.769E-02		4.317E-02	1.658E-01	7.859E-03	0.107
I-131	-1.257E-02		1.514E-02	5.191E-02	2.504E-03	-0.242
I-132	8.169E-04		1.970E-02	7.490E-02	5.086E-03	0.011
TE-132	1.799E-02		1.221E-02	4.587E-02	2.331E-03	0.392
BA-133	-1.241E-02		2.799E-02	8.529E-02	5.859E-03	-0.146
I-133	-3.324E-02		1.811E-02	5.713E-02	3.204E-03	-0.582
CS-134	-8.534E-03		2.248E-02	7.075E-02	4.453E-03	-0.121
CS-137	1.235E-02		2.532E-02	1.024E-01	6.955E-03	0.121
CE-139	-3.411E-02		1.275E-02	3.926E-02	1.888E-03	-0.869
BA-140	2.167E-05		5.818E-02	2.166E-01	3.677E-02	0.000
LA-140	1.381E-02		2.568E-02	1.094E-01	4.904E-03	0.126
CE-141	1.037E-02		2.382E-02	7.477E-02	4.348E-03	0.139
CE-144	-5.367E-02		8.467E-02	2.955E-01	2.131E-02	-0.182
ND-147	1.552E-01		1.108E-01	4.477E-01	2.517E-02	0.347

Combined Activity-MDA Report (continued)
Sample ID : G8WNV1AA Acquisition date : 29-APR-2005 13:21:17

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-152	-6.118E-03		1.231E-01	4.775E-01	2.463E-02	-0.013
EU-154	-3.224E-02		2.052E-01	7.647E-01	5.931E-02	-0.042
EU-155	1.179E-01		4.642E-02	1.722E-01	9.957E-03	0.685
HG-203	-1.062E-02		1.635E-02	5.711E-02	2.980E-03	-0.186
BI-211	1.688E+00		2.391E-01	8.394E-01	3.990E-02	2.011
PB-211	6.885E-01		7.002E-01	2.834E+00	1.867E-01	0.243
BI-212	5.012E-01		3.573E-01	1.406E+00	9.560E-02	0.357
BI-214	6.604E-01	+	1.014E-01	3.301E-01	2.162E-02	2.000
RN-219	1.350E-01		1.289E-01	4.842E-01	2.493E-02	0.279
RA-223	7.619E-02		1.813E-01	6.537E-01	3.738E-02	0.117
RA-224	2.341E+00		7.969E-01	1.590E+00	4.558E-01	1.472
RA-226	6.648E+00	+	8.434E-01	2.235E+00	1.099E-01	2.975
TH-227	-1.195E-01		1.266E-01	3.518E-01	1.794E-02	-0.340
RA-228	5.020E-01	+	1.260E-01	4.891E-01	3.056E-02	1.026
PA-231	-1.241E+00		5.498E-01	1.708E+00	1.138E-01	-0.727
TH-231	3.994E-01		2.110E-01	6.683E-01	4.541E-02	0.598
TH-232	4.986E-01		4.937E-01	1.979E+00	1.282E-01	0.252
PA-233	2.671E-02		3.213E-02	1.209E-01	6.187E-03	0.221
PA-234M	4.531E+00		4.387E+00	1.730E+01	9.996E-01	0.262
NP-237	2.864E-02		3.445E-02	1.296E-01	6.497E-03	0.221
NP-239	1.862E-01		6.488E-02	2.421E-01	1.332E-02	0.769
AM-241	3.468E-03		3.372E-02	1.142E-01	6.699E-03	0.030
ANN RAD	1.512E-02		2.648E-02	1.135E-01	6.175E-03	0.133

Nuclide Line Activity Report
Sample ID : G8WNV1AA

Acquisition date : 29-APR-2005 13:21:17

Nuclide Type: natural

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
K-40	1460.83	10.67*	7.717E-01	1.161E+01	1.161E+01	9.81	OK

Final Mean for 1 Valid Peaks = 1.161E+01+/- 1.139E+00 (9.81%)

Nuclide Type: Th Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
TL-208	583.02	86.00*	1.824E+00	1.746E-01	1.746E-01	19.32	OK

Final Mean for 1 Valid Peaks = 1.747E-01+/- 3.375E-02 (19.32%)

PB-212	238.58	43.60*	4.106E+00	3.814E-01	3.814E-01	14.43	OK
	300.03	3.34	3.393E+00	----- Line Not Found		-----	Absent

Final Mean for 1 Valid Peaks = 3.816E-01+/- 5.505E-02 (14.43%)

AC-228	338.42	12.40*	3.050E+00	3.412E-01	3.412E-01	56.69	OK

Final Mean for 1 Valid Peaks = 3.411E-01+/- 1.934E-01 (56.69%)

Nuclide Type: U Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
PB-214	241.92	7.46	4.061E+00	----- Line Not Found		-----	Absent
	295.09	19.20	3.443E+00	6.274E-01	6.274E-01	18.02	OK
	351.87	37.10*	2.944E+00	5.639E-01	5.639E-01	14.97	OK

Final Mean for 2 Valid Peaks = 5.865E-01+/- 7.061E-02 (12.04%)

TH-234	63.29	3.80*	6.379E+00	5.375E+00	5.375E+00	16.13	OK
	92.59	5.41	6.611E+00	5.184E+00	5.184E+00	9.44	OK

Final Mean for 2 Valid Peaks = 5.224E+00+/- 4.536E-01 (8.68%)

Nuclide Type: Ac Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
U-235	143.79	10.50*	5.732E+00	3.029E-01	3.029E-01	40.24	OK
	185.74	53.00	4.930E+00	4.382E-01	4.382E-01	12.75	OK

Final Mean for 2 Valid Peaks = 4.177E-01+/- 5.175E-02 (12.39%)

Nuclide Line Activity Report (continued)
Sample ID : G8WNV1AA Acquisition date : 29-APR-2005 13:21:17

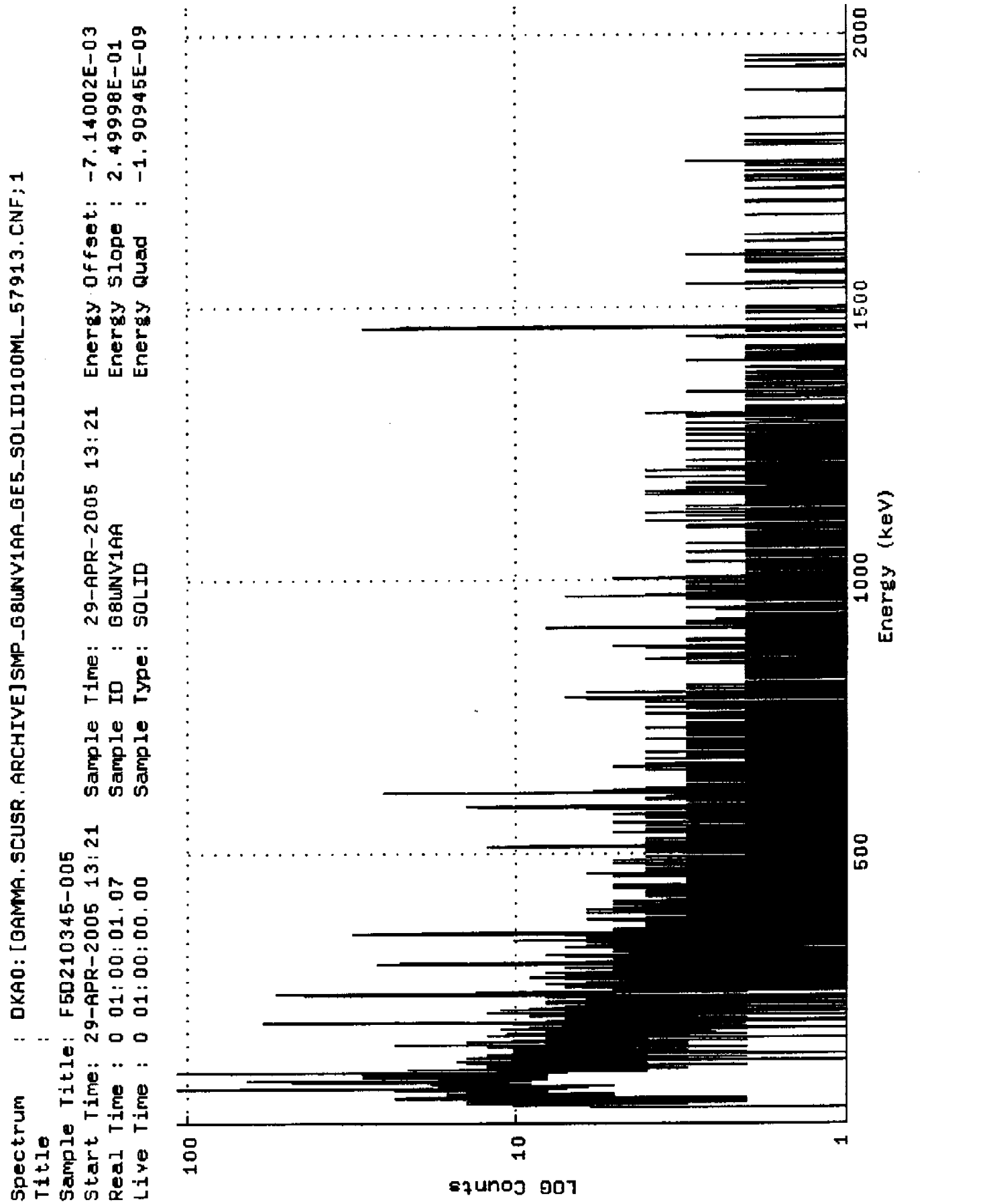
Flag: "*" = Keyline

Rejected Report
Sample ID : G8WNV1AA

Acquisition date : 29-APR-2005 13:21:17

Nuclide	Half-life	Half-Life Ratio	Energy	%Abund	Activity (pCi/G)	1-Sigma %Error	Rejected by
RU-103	39.25D	0.00	497.05*	88.70	--- Not Found ---		Abun.
			610.30	5.64	5.408E+00	15.59	
		% Abundances Found =		5.98			
BI-214	1600.00Y	0.00	609.31*	46.10	6.604E-01	15.35	Abun.
			768.35	4.88	--- Not Found ---		
			1120.27	15.00	--- Not Found ---		
		% Abundances Found =		69.87			
RA-226	1600.00Y	0.00	186.21*	3.50	6.648E+00	12.69	Interf Abun
		% Abundances Found =		100.00	(Abn. Limit = 75.00%)		
RA-228	5.75Y	0.00	911.16*	29.00	5.020E-01	25.10	Abun.
			968.97	17.40	--- Not Found ---		
		% Abundances Found =		62.50			

Flag: "*" = Keyline


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WNV1AA_GE5_SOLID100ML_57913.CNF;1
Title : :
Sample Title: F5D210345-005
Start Time: 29-APR-2005 13:21 Sample Time: 29-APR-2005 13:21 Energy Offset: -7.14002E-03
Real Time : 0 01:00:01.07 Sample ID : G8WNV1AA Energy Slope : 2.49998E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : -1.90945E-09
100
10
1
Log Counts
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:33:32
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WNW1AA_GE6_SOLID100ML_57914.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-006
Sample ID : G8WNW1AA

Sample Quantity : 1.77200E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 29-APR-2005 13:22:04
Acquisition date : 29-APR-2005 13:22:04
Decay time : 0 00:00:00.00

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.54
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE6

Counting geometry: SOLID_100ML

Energy cal. time : 3-MAR-2004 08:43:53.
Effic. cal. time : 18-JAN-2005 22:11:47

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE6__57456.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WNW1AA Acquisition date : 29-APR-2005 13:22:04

---- Energy, FWHM, and Efficiency Curves ----

```
*****************************************************************************
*                                                                           *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)           *
*                          A = 1.54285E-01                                  *
*                          B = 2.49832E-01                                  *
*                          C = 1.86799E-08                                  *
*                                                                           *
*                                                                           *
*                    FWHM(keV) = A + (B * SQRT(Energy))                     *
*                          A = 4.67797E-01                                  *
*                          B = 3.35494E-02                                  *
*                                                                           *
*                                                                           *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                           *
*     a1=9.41250E+02   a2=-4.68519E+00 a3=8.82578E-01                       *
*     a4=8.83148E-02   a5=-2.58765E-02 a6=-1.60802E-02   a7=0.00000E+00     *
*                                                                           *
*****************************************************************************
```

Post-NID Peak Search Report
Sample ID : G8WNW1AA

Acquisition date : 29-APR-2005 13:22:04

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.38*	109	81	0.76	253.06	249	11	17.7		TH-234
4	74.91*	68	119	0.85	299.20	294	20	20.2	1.16E+00	
4	77.24	129	96	0.85	308.56	294	20	11.1		
0	92.71*	137	105	0.88	370.48	365	13	16.6		TH-234
0	154.23	16	27	0.38	616.68	612	8	54.9		
0	185.72*	109	67	0.84	742.74	735	16	17.8		U-235
										RA-226
0	238.61*	137	29	0.94	954.39	949	11	11.3		PB-212
0	295.20*	61	30	0.57	1180.87	1176	11	20.2		PB-214
0	338.33	16	38	0.48	1353.48	1344	14	76.2		AC-228
0	351.85*	92	22	1.00	1407.57	1402	12	13.9		PB-214
0	583.05	52	6	1.16	2332.76	2326	16	16.7		TL-208
0	609.09*	83	13	1.16	2436.94	2431	16	14.3		BI-214
0	911.02	40	8	0.77	3644.91	3638	20	22.5		
0	1119.69	25	7	1.50	4479.65	4474	16	29.1		BI-214
0	1460.63*	146	3	1.57	5843.26	5829	24	8.8		K-40

Summary of Nuclide Activity
Sample ID : G8WNW1AA Acquisition date : 29-APR-2005 13:22:04

Total number of lines in spectrum 15
Number of unidentified lines 2
Number of lines tentatively identified by NID 13 86.67%

Nuclide Type : natural

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	9.103E+00	9.103E+00	1.007E+00	11.07	
		Total Activity :	9.103E+00	9.103E+00			

Nuclide Type : Th Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
TL-208	1.91Y	1.00	1.792E-01	1.792E-01	0.339E-01	18.92	
PB-212	1.91Y	1.00	4.124E-01	4.125E-01	0.557E-01	13.50	
AC-228	5.75Y	1.00	2.250E-01	2.250E-01	1.771E-01	78.70	
		Total Activity :	8.167E-01	8.167E-01			

Nuclide Type : U Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
BI-214	1600.00Y	1.00	5.855E-01	5.855E-01	0.879E-01	15.02	
PB-214	1600.00Y	1.00	4.708E-01	4.708E-01	0.618E-01	13.13	
RA-226	1600.00Y	1.00	3.362E+00	3.362E+00	0.639E+00	19.02	
TH-234	4.47E+09Y	1.00	2.204E+00	2.204E+00	0.311E+00	14.11	
		Total Activity :	6.622E+00	6.622E+00			

Nuclide Type : Ac Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
U-235	7.04E+08Y	1.00	2.220E-01	2.220E-01	0.423E-01	19.07	
		Total Activity :	2.220E-01	2.220E-01			

Grand Total Activity : 1.676E+01 1.676E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G8WNW1AA

Acquisition date : 29-APR-2005 13:22:04

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	9.103E+00	1.007E+00	5.511E-01	2.440E-02	16.516
TL-208	1.792E-01	3.391E-02	3.883E-02	2.828E-03	4.615
PB-212	4.125E-01	5.567E-02	1.200E-01	6.593E-03	3.437
BI-214	5.855E-01	8.792E-02	1.369E-01	9.285E-03	4.278
PB-214	4.708E-01	6.184E-02	1.296E-01	6.957E-03	3.632
RA-226	3.362E+00	6.395E-01	1.105E+00	5.021E-02	3.043
AC-228	2.250E-01	1.771E-01	3.890E-01	7.478E-02	0.579
TH-234	2.204E+00	3.110E-01	9.336E-01	8.874E-02	2.361
U-235	2.220E-01	4.233E-02	3.383E-01	3.099E-02	0.656

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	6.983E-02		1.379E-01	5.328E-01	3.118E-02	0.131
NA-22	5.070E-02		2.843E-02	1.251E-01	5.416E-03	0.405
CR-51	-6.078E-02		1.313E-01	4.567E-01	2.409E-02	-0.133
MN-54	7.009E-03		1.867E-02	7.558E-02	4.490E-03	0.093
CO-57	-1.992E-03		1.065E-02	3.736E-02	2.120E-03	-0.053
FE-59	-4.485E-02		4.503E-02	1.540E-01	8.405E-03	-0.291
CO-60	-1.610E-02		2.115E-02	7.752E-02	3.294E-03	-0.208
ZN-65	2.164E-02		4.807E-02	1.745E-01	8.208E-03	0.124
SE-75	-2.627E-03		1.884E-02	6.763E-02	3.394E-03	-0.039
SR-85	-7.866E-02		2.573E-02	7.251E-02	4.266E-03	-1.085
Y-88	1.562E-02		1.614E-02	8.575E-02	3.594E-03	0.182
NB-95	3.441E-02		2.200E-02	9.084E-02	5.859E-03	0.379
ZR-95	-1.657E-02		2.840E-02	1.038E-01	7.072E-03	-0.160
MO-99	1.595E-01		1.316E-01	5.599E-01	5.089E-02	0.285
TC-99M	2.033E-02		1.119E-02	4.231E-02	2.193E-03	0.481
RU-103	8.730E-03		1.592E-02	6.211E-02	3.917E-03	0.141
RH-105	7.190E-02		2.553E-01	9.236E-01	4.691E-02	0.078
RH-106	4.861E-01		1.355E-01	5.314E-01	3.118E-02	0.915
RU-106	-1.156E-02		1.830E-01	6.884E-01	5.771E-02	-0.017
CD-109	8.464E-01		3.312E-01	1.228E+00	7.198E-02	0.689
SN-113	6.995E-03		2.258E-02	8.479E-02	4.204E-03	0.082
SB-124	9.605E-03		1.592E-02	6.406E-02	4.181E-03	0.150
SB-125	-5.182E-02		4.827E-02	1.648E-01	8.629E-03	-0.314
I-131	1.406E-02		1.638E-02	6.389E-02	3.297E-03	0.220
I-132	-8.181E-03		2.220E-02	8.112E-02	5.581E-03	-0.101
TE-132	-2.210E-02		1.269E-02	4.126E-02	1.990E-03	-0.536
BA-133	-8.607E-04		2.010E-02	7.111E-02	5.034E-03	-0.012
I-133	-4.135E-03		1.995E-02	7.193E-02	4.318E-03	-0.057
CS-134	-2.767E-02		1.881E-02	5.349E-02	3.502E-03	-0.517
CS-137	7.227E-02		2.791E-02	1.158E-01	7.991E-03	0.624
CE-139	2.570E-03		1.245E-02	4.398E-02	1.933E-03	0.058
BA-140	-1.922E-02		6.770E-02	2.428E-01	4.155E-02	-0.079
LA-140	6.273E-03		2.436E-02	1.036E-01	4.465E-03	0.061
CE-141	-3.158E-03		2.004E-02	6.983E-02	3.564E-03	-0.045

Combined Activity-MDA Report (continued)
Sample ID : G8WNW1AA Acquisition date : 29-APR-2005 13:22:04

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
CE-144	1.775E-02		8.565E-02	3.043E-01	1.967E-02	0.058
ND-147	1.335E-01		1.233E-01	4.878E-01	2.934E-02	0.274
EU-152	2.446E-01		1.269E-01	5.859E-01	2.884E-02	0.417
EU-154	3.847E-02		1.904E-01	7.431E-01	5.261E-02	0.052
EU-155	1.200E-01		4.365E-02	1.693E-01	8.971E-03	0.709
HG-203	2.838E-04		1.725E-02	6.160E-02	3.167E-03	0.005
BI-211	1.379E+00		2.140E-01	8.087E-01	4.065E-02	1.705
PB-211	-7.686E-01		7.860E-01	2.761E+00	1.648E-01	-0.278
BI-212	0.000E+00		0.000E+00	1.180E+00	7.858E-02	0.000
RN-219	1.415E-01		1.250E-01	4.743E-01	2.391E-02	0.298
RA-223	2.796E-01	+	1.548E-01	6.277E-01	3.242E-02	0.445
RA-224	7.767E-01		4.840E-01	1.443E+00	4.132E-01	0.538
TH-227	2.134E-02		1.142E-01	3.604E-01	1.754E-02	0.059
RA-228	6.151E-01	+	1.458E-01	5.265E-01	2.798E-02	1.168
PA-231	-9.586E-01		5.913E-01	1.884E+00	1.259E-01	-0.509
TH-231	6.741E-01		1.843E-01	6.891E-01	4.678E-02	0.978
TH-232	1.322E+00		5.186E-01	2.321E+00	1.326E-01	0.569
PA-233	-6.403E-02		3.442E-02	1.073E-01	5.562E-03	-0.597
PA-234M	1.085E+01		3.482E+00	1.656E+01	8.472E-01	0.655
NP-237	-6.865E-02		3.690E-02	1.150E-01	5.844E-03	-0.597
NP-239	-9.622E-02		6.383E-02	2.116E-01	1.100E-02	-0.455
AM-241	-7.081E-03		2.786E-02	9.526E-02	5.355E-03	-0.074
ANN RAD	-5.984E-02		2.800E-02	1.125E-01	6.590E-03	-0.532

Nuclide Line Activity Report
Sample ID : G8WNW1AA

Acquisition date : 29-APR-2005 13:22:04

Nuclide Type: natural

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
K-40	1460.83	10.67*	6.381E-01	9.104E+00	9.104E+00	11.07	OK

Final Mean for 1 Valid Peaks = 9.103E+00+/- 1.007E+00 (11.07%)

Nuclide Type: Th Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
TL-208	583.02	86.00*	1.432E+00	1.792E-01	1.792E-01	18.92	OK

Final Mean for 1 Valid Peaks = 1.792E-01+/- 3.391E-02 (18.92%)

PB-212	238.58	43.60*	3.234E+00	4.124E-01	4.124E-01	13.50	OK
	300.03	3.34	2.660E+00	----- Line Not Found		-----	Absent

Final Mean for 1 Valid Peaks = 4.125E-01+/- 5.567E-02 (13.50%)

AC-228	338.42	12.40*	2.387E+00	2.251E-01	2.251E-01	78.70	OK

Final Mean for 1 Valid Peaks = 2.250E-01+/- 1.771E-01 (78.70%)

Nuclide Type: U Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
BI-214	609.31	46.10*	1.374E+00	5.524E-01	5.524E-01	16.62	OK
	768.35	4.88	1.108E+00	----- Line Not Found		-----	Absent
	1120.27	15.00	7.938E-01	8.773E-01	8.773E-01	29.96	OK

Final Mean for 2 Valid Peaks = 5.855E-01+/- 8.792E-02 (15.02%)

PB-214	241.92	7.46	3.198E+00	----- Line Not Found		-----	Absent
	295.09	19.20	2.699E+00	4.993E-01	4.993E-01	21.54	OK
	351.87	37.10*	2.303E+00	4.586E-01	4.586E-01	15.70	OK

Final Mean for 2 Valid Peaks = 4.708E-01+/- 6.184E-02 (13.13%)

RA-226	186.21	3.50*	3.900E+00	3.368E+00	3.368E+00	19.02	OK

Final Mean for 1 Valid Peaks = 3.362E+00+/- 6.395E-01 (19.02%)

TH-234	63.29	3.80*	4.870E+00	2.495E+00	2.495E+00	20.67	OK
	92.59	5.41	5.227E+00	2.056E+00	2.056E+00	18.09	OK

Final Mean for 2 Valid Peaks = 2.204E+00+/- 3.110E-01 (14.11%)

Nuclide Line Activity Report (continued)
Sample ID : G8WNW1AA Acquisition date : 29-APR-2005 13:22:04

Nuclide Type: Ac Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
U-235	143.79	10.50*	4.563E+00	----- Line Not Found		-----	Absent
	185.74	53.00	3.907E+00	2.220E-01	2.220E-01	19.07	OK

Final Mean for 1 Valid Peaks = 2.220E-01+/- 4.233E-02 (19.07%)

Flag: "*" = Keyline

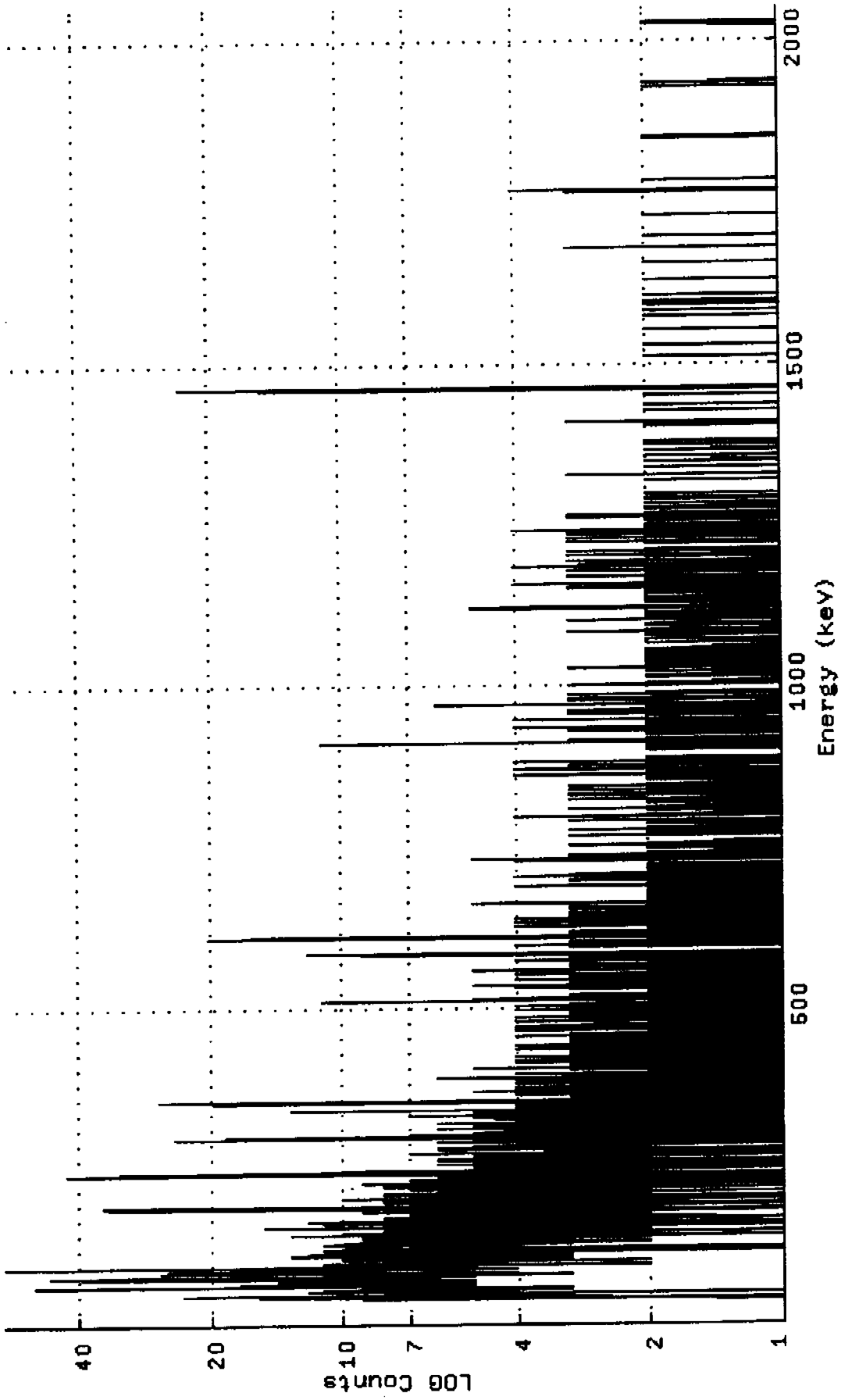
Rejected Report
Sample ID : G8WNW1AA

Acquisition date : 29-APR-2005 13:22:04

Nuclide	Half-life	Half-Life Ratio	Energy	%Abund	Activity (pCi/G)	1-Sigma %Error	Rejected by
RA-223	21.77Y	0.00	154.18*	5.59	2.796E-01	55.35	Abun.
			269.39	13.60	--- Not Found ---		
		% Abundances	Found =	29.13			
RA-228	5.75Y	0.00	911.16*	29.00	6.151E-01	23.70	Abun.
			968.97	17.40	--- Not Found ---		
		% Abundances	Found =	62.50			

Flag: "*" = Keyline

Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WNW1AA_GE6_SOLID100ML_57914.CNF;1
Title :
Sample Title: F5D210345-006
Start Time: 29-APR-2005 13:22 Sample Time: 29-APR-2005 13:22 Energy Offset: 1.54285E-01
Real Time : 0 01:00:00.54 Sample ID : G8WNW1AA Energy Slope : 2.49832E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : 1.86799E-08



VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:33:56
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN01AA_GE4_SOLID100ML_57915.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-007
Sample ID : G8WN01AA

Sample Quantity : 1.63900E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 29-APR-2005 14:25:06
Acquisition date : 29-APR-2005 14:25:06
Decay time : 0 00:00:00.00

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.65
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE4

Counting geometry: SOLID_100ML

Energy cal. time : 16-MAR-2005 08:34:49
Effic. cal. time : 18-JAN-2005 00:15:12

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE4__57454.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WN01AA

Acquisition date : 29-APR-2005 14:25:06

---- Energy, FWHM, and Efficiency Curves ----

```
*************************************************************************
*                                                                       *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)       *
*                          A = 1.10653E-01                              *
*                          B = 2.49919E-01                              *
*                          C = 1.94892E-08                              *
*                                                                       *
*                                                                       *
*                    FWHM(keV) = A + (B * SQRT(Energy))                 *
*                          A = 8.02351E-01                              *
*                          B = 2.65421E-02                              *
*                                                                       *
*                                                                       *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                       *
*     a1=9.41250E+02   a2=-4.55854E+00 a3=9.62044E-01                   *
*     a4=7.38134E-02   a5=-4.50301E-02 a6=-9.56656E-03   a7=0.00000E+00 *
*                                                                       *
*************************************************************************
```

Post-NID Peak Search Report
Sample ID : G8WN01AA

Acquisition date : 29-APR-2005 14:25:06

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.32*	322	157	0.75	252.91	246	15	9.3		TH-234
8	74.82	123	178	1.38	298.93	289	31	12.7	7.01E-01	
8	77.20	140	166	1.38	308.47	289	31	11.6		
19	90.03	32	173	1.18	359.78	353	25	38.5	1.42E+00	
19	92.72*	585	145	1.18	370.54	353	25	4.7		TH-234
0	143.86	57	75	0.93	575.18	571	12	29.8		U-235
0	163.64	37	49	0.55	654.28	649	11	35.6		
0	185.78*	290	92	1.16	742.86	736	20	9.1		U-235
0	205.22	28	39	0.78	820.65	815	11	42.6		
0	238.64*	135	48	1.10	954.34	948	13	12.8		PB-212
0	295.51	52	41	1.08	1181.88	1170	18	28.6		PB-214
0	351.99	85	30	0.92	1407.81	1400	15	16.3		PB-214
0	583.52*	50	11	1.48	2333.99	2323	17	19.6		TL-208
0	609.35*	61	25	0.78	2437.27	2430	17	20.8		
0	1461.21	116	0	1.38	5843.63	5834	22	9.3		K-40

Summary of Nuclide Activity
Sample ID : G8WN01AA

Acquisition date : 29-APR-2005 14:25:06

Total number of lines in spectrum	15	
Number of unidentified lines	5	
Number of lines tentatively identified by NID	10	66.67%

Nuclide Type : natural

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	7.129E+00	7.129E+00	0.745E+00	10.44	
	Total Activity :		7.129E+00	7.129E+00			

Nuclide Type : Th Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
TL-208	1.91Y	1.00	1.583E-01	1.583E-01	0.326E-01	20.57	
PB-212	1.91Y	1.00	3.655E-01	3.655E-01	0.511E-01	13.98	
	Total Activity :		5.238E-01	5.238E-01			

Nuclide Type : U Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
PB-214	1600.00Y	1.00	3.808E-01	3.808E-01	0.561E-01	14.74	
TH-234	4.47E+09Y	1.00	7.496E+00	7.496E+00	0.470E+00	6.26	
	Total Activity :		7.876E+00	7.876E+00			

Nuclide Type : Ac Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
U-235	7.04E+08Y	1.00	5.248E-01	5.248E-01	0.517E-01	9.86	
	Total Activity :		5.248E-01	5.248E-01			

Grand Total Activity :	1.605E+01	1.605E+01

Flags: "K" = Keyline not found
"E" = Manually edited
"M" = Manually accepted
"A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G8WN01AA

Acquisition date : 29-APR-2005 14:25:06

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	7.129E+00	7.445E-01	8.332E-01	3.896E-02	8.556
TL-208	1.583E-01	3.256E-02	6.071E-02	3.703E-03	2.607
PB-212	3.655E-01	5.112E-02	1.132E-01	6.187E-03	3.229
PB-214	3.808E-01	5.611E-02	1.211E-01	6.050E-03	3.144
TH-234	7.496E+00	4.695E-01	1.131E+00	1.083E-01	6.625
U-235	5.248E-01	5.175E-02	3.654E-01	3.378E-02	1.436

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-5.731E-02		1.520E-01	5.393E-01	2.698E-02	-0.106
NA-22	3.141E-02		2.741E-02	1.168E-01	5.299E-03	0.269
CR-51	-1.618E-01		1.353E-01	4.602E-01	2.306E-02	-0.352
MN-54	1.311E-02		1.939E-02	7.784E-02	4.177E-03	0.168
CO-57	-1.807E-02		1.108E-02	3.688E-02	2.160E-03	-0.490
FE-59	-8.759E-04		4.031E-02	1.561E-01	8.623E-03	-0.006
CO-60	1.894E-02		1.982E-02	9.070E-02	4.115E-03	0.209
ZN-65	-2.245E-02		5.585E-02	2.034E-01	9.720E-03	-0.110
SE-75	-1.257E-02		2.140E-02	7.294E-02	3.588E-03	-0.172
SR-85	-7.680E-02		2.748E-02	8.229E-02	3.974E-03	-0.933
Y-88	-7.286E-03		1.758E-02	7.426E-02	3.160E-03	-0.098
NB-95	4.289E-02		2.527E-02	1.016E-01	5.384E-03	0.422
ZR-95	8.330E-02		3.423E-02	1.524E-01	8.623E-03	0.547
MO-99	2.802E-02		1.578E-01	5.979E-01	4.883E-02	0.047
TC-99M	8.477E-03		1.435E-02	4.662E-02	2.490E-03	0.182
RU-103	3.561E-02		1.784E-02	7.307E-02	3.968E-03	0.487
RH-105	-4.107E-01		2.162E-01	7.028E-01	3.410E-02	-0.584
RH-106	-6.757E-03		1.285E-01	5.399E-01	2.604E-02	-0.013
RU-106	2.492E-01		1.913E-01	7.699E-01	5.529E-02	0.324
CD-109	3.641E-01		4.003E-01	1.207E+00	7.027E-02	0.302
SN-113	1.455E-02		2.026E-02	7.757E-02	3.412E-03	0.188
SB-124	-1.507E-02		1.962E-02	6.908E-02	3.478E-03	-0.218
SB-125	-1.233E-02		4.901E-02	1.762E-01	8.006E-03	-0.070
I-131	-1.686E-02		1.648E-02	5.646E-02	2.669E-03	-0.299
I-132	2.711E-03		2.256E-02	8.488E-02	4.317E-03	0.032
TE-132	-1.268E-02		1.431E-02	4.816E-02	2.320E-03	-0.263
BA-133	3.010E-02		1.969E-02	7.229E-02	4.909E-03	0.416
I-133	-2.602E-02		1.700E-02	5.448E-02	2.658E-03	-0.478
CS-134	-2.683E-03		2.179E-02	7.000E-02	3.532E-03	-0.038
CS-137	1.400E-04		2.394E-02	8.875E-02	4.505E-03	0.002
CE-139	1.584E-02		1.406E-02	4.566E-02	2.060E-03	0.347
BA-140	1.985E-02		6.842E-02	2.596E-01	4.344E-02	0.076
LA-140	-8.531E-04		2.799E-02	1.114E-01	5.027E-03	-0.008
CE-141	4.436E-02		2.827E-02	9.099E-02	4.780E-03	0.488
CE-144	-8.273E-02		8.792E-02	3.007E-01	1.987E-02	-0.275
ND-147	-2.305E-01		1.170E-01	3.580E-01	1.748E-02	-0.644
EU-152	-6.880E-02		1.198E-01	4.488E-01	2.316E-02	-0.153

Combined Activity-MDA Report (continued)
Sample ID : G8WN01AA Acquisition date : 29-APR-2005 14:25:06

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-154	-8.251E-02		1.653E-01	6.166E-01	4.262E-02	-0.134
EU-155	-2.724E-02		4.746E-02	1.592E-01	8.555E-03	-0.171
HG-203	2.185E-04		1.661E-02	5.848E-02	2.926E-03	0.004
BI-211	1.218E+00		1.890E-01	7.320E-01	3.391E-02	1.664
PB-211	1.985E-01		6.617E-01	2.595E+00	1.392E-01	0.076
BI-212	3.809E-01		3.909E-01	1.498E+00	7.839E-02	0.254
BI-214	3.783E-01	+	8.134E-02	2.914E-01	1.550E-02	1.298
RN-219	3.426E-02		1.307E-01	4.649E-01	2.289E-02	0.074
RA-223	1.938E-01		1.888E-01	6.919E-01	3.661E-02	0.280
RA-224	2.296E+00		7.886E-01	1.641E+00	4.698E-01	1.399
RA-226	8.124E+00	+	8.352E-01	2.567E+00	1.188E-01	3.165
TH-227	1.905E-01		1.266E-01	4.158E-01	2.013E-02	0.458
AC-228	3.797E-01		1.547E-01	5.418E-01	1.037E-01	0.701
RA-228	2.542E-01		9.351E-02	4.050E-01	2.167E-02	0.628
PA-231	-1.284E-01		5.200E-01	1.877E+00	1.224E-01	-0.068
TH-231	2.768E-01		2.102E-01	7.345E-01	4.980E-02	0.377
TH-232	1.048E+00		6.024E-01	2.457E+00	1.320E-01	0.427
PA-233	-1.928E-02		3.259E-02	1.151E-01	5.692E-03	-0.167
PA-234M	1.579E+01		4.575E+00	2.040E+01	1.056E+00	0.774
NP-237	-2.068E-02		3.495E-02	1.234E-01	5.967E-03	-0.167
NP-239	8.526E-02		6.861E-02	2.450E-01	1.283E-02	0.348
AM-241	2.222E-02		4.147E-02	1.255E-01	7.217E-03	0.177
ANN RAD	-2.892E-02		2.730E-02	1.098E-01	5.293E-03	-0.263

Nuclide Line Activity Report
Sample ID : G8WN01AA

Acquisition date : 29-APR-2005 14:25:06

Nuclide Type: natural

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
K-40	1460.83	10.67*	6.987E-01	7.127E+00	7.127E+00	10.44	OK

Final Mean for 1 Valid Peaks = 7.129E+00+/- 7.445E-01 (10.44%)

Nuclide Type: Th Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
TL-208	583.02	86.00*	1.680E+00	1.581E-01	1.581E-01	20.57	OK

Final Mean for 1 Valid Peaks = 1.583E-01+/- 3.256E-02 (20.57%)

PB-212	238.58	43.60*	3.880E+00	3.654E-01	3.654E-01	13.98	OK
	300.03	3.34	3.188E+00	----- Line Not Found		-----	Absent

Final Mean for 1 Valid Peaks = 3.655E-01+/- 5.112E-02 (13.98%)

Nuclide Type: U Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
PB-214	241.92	7.46	3.836E+00	----- Line Not Found		-----	Absent
	295.09	19.20	3.236E+00	3.804E-01	3.804E-01	29.06	OK
	351.87	37.10*	2.753E+00	3.806E-01	3.806E-01	17.08	OK

Final Mean for 2 Valid Peaks = 3.808E-01+/- 5.611E-02 (14.74%)

TH-234	63.29	3.80*	5.976E+00	6.491E+00	6.491E+00	13.39	OK
	92.59	5.41	6.273E+00	7.898E+00	7.898E+00	7.02	OK

Final Mean for 2 Valid Peaks = 7.496E+00+/- 4.695E-01 (6.26%)

Nuclide Type: Ac Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
U-235	143.79	10.50*	5.457E+00	4.537E-01	4.537E-01	31.24	OK
	185.74	53.00	4.681E+00	5.356E-01	5.356E-01	10.36	OK

Final Mean for 2 Valid Peaks = 5.248E-01+/- 5.175E-02 (9.86%)

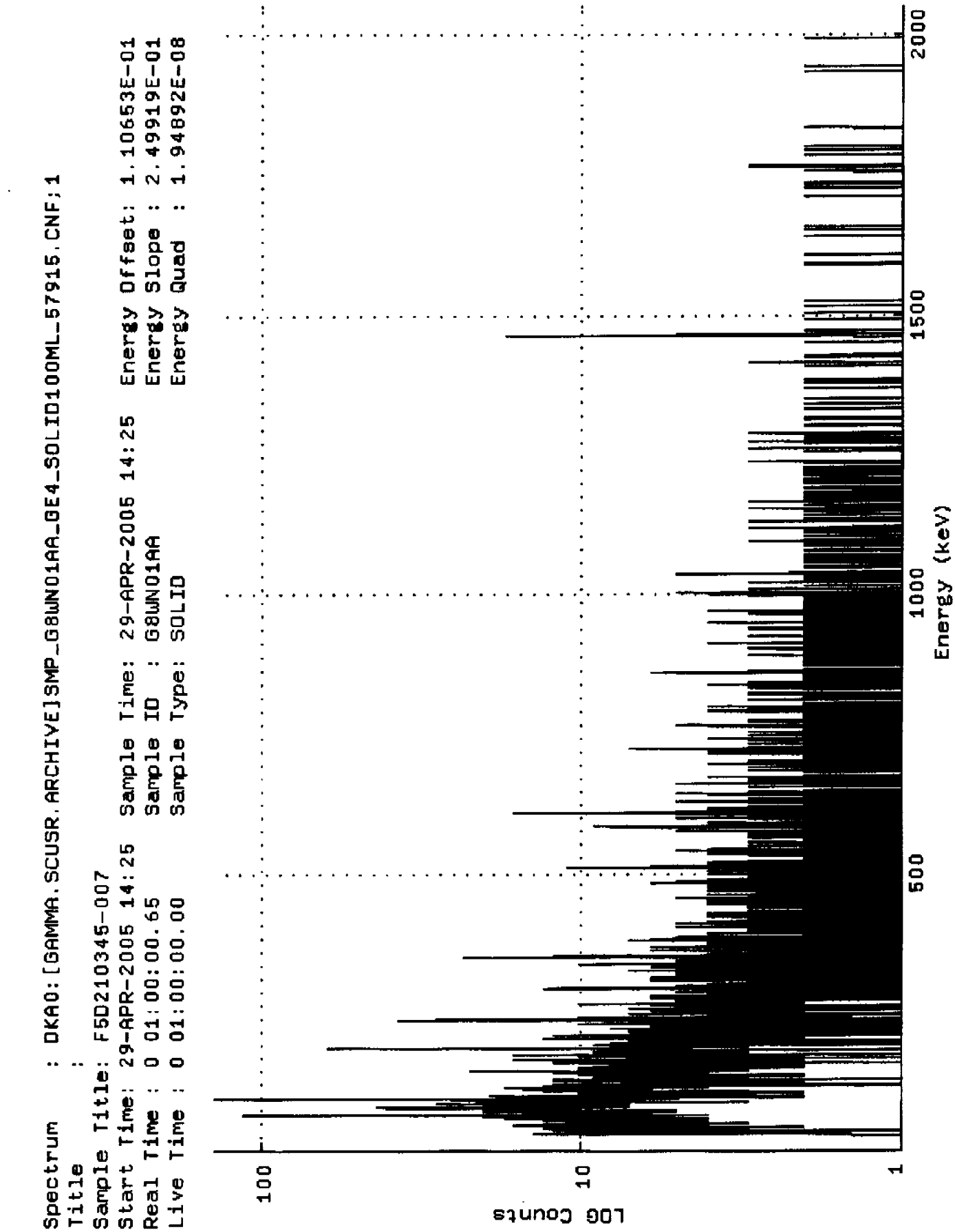
Flag: "*" = Keyline

Rejected Report

Sample ID : G8WN01AA
Acquisition date : 29-APR-2005 14:25:06

Nuclide	Half-life	Half-Life Ratio	Energy	%Abund	Activity (pCi/G)	1-Sigma %Error	Rejected by
BI-214	1600.00Y	0.00	609.31*	46.10	3.783E-01	21.50	Abun.
			768.35	4.88	--- Not Found ---		
			1120.27	15.00	--- Not Found ---		
		% Abundances	Found =	69.87			
RA-226	1600.00Y	0.00	186.21*	3.50	8.124E+00	10.28	Interf Abun
		% Abundances	Found =	100.00	(Abn. Limit =	75.00%)	

Flag: "*" = Keyline


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN01AA_GE4_SOLID100ML_57915.CNF;1
Title :
Sample Title: F5D210345-007
Start Time: 29-APR-2005 14:25 Sample Time: 29-APR-2005 14:25 Energy Offset: 1.10653E-01
Real Time : 0 01:00:00.65 Sample ID : G8WN01AA Energy Slope : 2.49919E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : 1.94892E-08
100
10
1
Log Counts
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:34:27
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN11AA_GE5_SOLID100ML_57916.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-008
Sample ID : G8WN11AA

Sample Quantity : 1.60800E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 29-APR-2005 14:25:49
Acquisition date : 29-APR-2005 14:25:49
Decay time : 0 00:00:00.00

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.94
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE5

Counting geometry: SOLID_100ML

Energy cal. time : 9-MAR-2005 09:18:16.
Effic. cal. time : 18-JAN-2005 09:43:11

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE5__57455.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WN11AA

Acquisition date : 29-APR-2005 14:25:49

---- Energy, FWHM, and Efficiency Curves ----

```
*************************************************************************
*                                                                       *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)       *
*                            A = -7.14002E-03                           *
*                            B = 2.49998E-01                            *
*                            C = -1.90945E-09                           *
*                                                                       *
*                                                                       *
*                       FWHM(keV) = A + (B * SQRT(Energy))              *
*                            A = 5.02556E-01                            *
*                            B = 3.66242E-02                            *
*                                                                       *
*                                                                       *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                       *
*     a1=9.41250E+02   a2=-4.46457E+00 a3=9.42586E-01                   *
*     a4=5.97186E-02   a5=-3.91387E-02 a6=-9.36517E-03   a7=0.00000E+00 *
*                                                                       *
*************************************************************************
```

Post-NID Peak Search Report
Sample ID : G8WN11AA

Acquisition date : 29-APR-2005 14:25:49

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.26*	77	117	0.90	253.07	249	17	30.8		TH-234
5	74.82	101	97	0.85	299.31	294	22	12.9	1.16E+00	
5	77.09*	124	87	0.85	308.39	294	22	11.4		
0	92.64*	147	95	1.14	370.59	365	15	15.7		TH-234
0	185.68*	104	86	1.02	742.75	727	26	23.2		U-235
										RA-226
0	238.67*	115	75	1.00	954.71	950	12	16.8		PB-212
0	295.50	65	18	1.15	1182.06	1177	10	16.4		PB-214
0	352.03*	92	28	1.44	1408.16	1402	13	15.0		PB-214
0	583.38	46	14	0.62	2333.59	2325	16	21.5		TL-208
0	609.70	66	14	1.38	2438.91	2430	15	16.0		
0	662.05*	14	12	0.31	2648.31	2644	11	57.3		CS-137
0	969.57	21	4	0.30	3878.45	3872	13	28.4		
0	1461.48	140	8	1.66	5846.24	5834	24	9.6		K-40

Summary of Nuclide Activity
Sample ID : G8WN11AA Acquisition date : 29-APR-2005 14:25:49

Total number of lines in spectrum 13
Number of unidentified lines 2
Number of lines tentatively identified by NID 11 84.62%

Nuclide Type : natural

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	7.939E+00	7.939E+00	0.936E+00	11.80	
Total Activity :			7.939E+00	7.939E+00			

Nuclide Type : fission

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
CS-137	30.20Y	1.00	4.596E-02	4.596E-02	2.661E-02	57.89	
Total Activity :			4.596E-02	4.596E-02			

Nuclide Type : Th Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
TL-208	1.91Y	1.00	1.378E-01	1.378E-01	0.319E-01	23.14	
PB-212	1.91Y	1.00	3.007E-01	3.008E-01	0.556E-01	18.47	
Total Activity :			4.385E-01	4.385E-01			

Nuclide Type : U Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
PB-214	1600.00Y	1.00	4.182E-01	4.182E-01	0.534E-01	12.76	
RA-226	1600.00Y	1.00	2.810E+00	2.810E+00	0.680E+00	24.19	
TH-234	4.47E+09Y	1.00	1.789E+00	1.789E+00	0.280E+00	15.63	
Total Activity :			5.018E+00	5.018E+00			

Nuclide Type : Ac Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
U-235	7.04E+08Y	1.00	1.856E-01	1.856E-01	0.450E-01	24.23	
Total Activity :			1.856E-01	1.856E-01			

Grand Total Activity : 1.363E+01 1.363E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G8WN11AA

Acquisition date : 29-APR-2005 14:25:49

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	7.939E+00	9.364E-01	6.676E-01	3.115E-02	11.892
CS-137	4.596E-02	2.661E-02	7.124E-02	4.837E-03	0.645
TL-208	1.378E-01	3.189E-02	6.272E-02	4.404E-03	2.197
PB-212	3.008E-01	5.555E-02	1.104E-01	6.289E-03	2.724
PB-214	4.182E-01	5.336E-02	1.268E-01	6.480E-03	3.296
RA-226	2.810E+00	6.799E-01	9.383E-01	4.613E-02	2.995
TH-234	1.789E+00	2.796E-01	8.580E-01	8.267E-02	2.085
U-235	1.856E-01	4.497E-02	3.365E-01	3.227E-02	0.552

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-7.604E-02		1.263E-01	4.519E-01	2.445E-02	-0.168
NA-22	-1.521E-02		2.557E-02	9.342E-02	4.196E-03	-0.163
CR-51	2.207E-01		1.235E-01	4.851E-01	2.508E-02	0.455
MN-54	1.393E-02		2.101E-02	8.204E-02	5.395E-03	0.170
CO-57	1.436E-03		8.834E-03	3.107E-02	2.077E-03	0.046
FE-59	-6.187E-03		3.916E-02	1.480E-01	8.453E-03	-0.042
CO-60	-5.697E-02		2.496E-02	7.866E-02	3.574E-03	-0.724
ZN-65	-9.602E-02		5.331E-02	1.661E-01	8.172E-03	-0.578
SE-75	-2.237E-02		1.592E-02	5.364E-02	2.763E-03	-0.417
SR-85	-5.182E-02		2.481E-02	7.841E-02	4.285E-03	-0.661
Y-88	-1.531E-02		1.087E-02	1.997E-02	8.364E-04	-0.767
NB-95	1.473E-02		2.245E-02	8.610E-02	5.816E-03	0.171
ZR-95	-5.424E-02		3.422E-02	1.103E-01	7.790E-03	-0.492
MO-99	-2.540E-02		1.314E-01	4.924E-01	4.544E-02	-0.052
TC-99M	-1.203E-02		1.020E-02	3.470E-02	2.071E-03	-0.347
RU-103	1.450E-02		1.631E-02	6.383E-02	3.772E-03	0.227
RH-105	-9.296E-02		2.268E-01	8.020E-01	4.040E-02	-0.116
RH-106	-8.407E-02		1.260E-01	5.235E-01	2.851E-02	-0.161
RU-106	-1.289E-01		1.695E-01	5.848E-01	4.804E-02	-0.220
CD-109	3.954E-01		2.776E-01	9.990E-01	5.818E-02	0.396
SN-113	-1.534E-02		2.257E-02	7.728E-02	3.441E-03	-0.199
SB-124	2.781E-02		1.541E-02	6.461E-02	4.051E-03	0.430
SB-125	4.582E-02		4.566E-02	1.794E-01	8.500E-03	0.255
I-131	-3.164E-02		1.576E-02	4.895E-02	2.361E-03	-0.647
I-132	-1.784E-02		2.039E-02	6.923E-02	4.701E-03	-0.258
TE-132	1.771E-03		1.097E-02	3.928E-02	1.996E-03	0.045
BA-133	3.690E-02		2.148E-02	7.848E-02	5.391E-03	0.470
I-133	-1.416E-02		1.748E-02	6.079E-02	3.409E-03	-0.233
CS-134	1.627E-02		1.569E-02	5.803E-02	3.653E-03	0.280
CE-139	-1.413E-02		1.125E-02	3.777E-02	1.816E-03	-0.374
BA-140	4.097E-02		6.685E-02	2.529E-01	4.293E-02	0.162
LA-140	1.174E-02		2.113E-02	9.417E-02	4.223E-03	0.125
CE-141	-1.209E-02		1.811E-02	6.307E-02	3.667E-03	-0.192
CE-144	-6.557E-02		7.026E-02	2.433E-01	1.754E-02	-0.270
ND-147	-8.575E-04		1.132E-01	4.179E-01	2.349E-02	-0.002

Combined Activity-MDA Report (continued)
Sample ID : G8WN11AA Acquisition date : 29-APR-2005 14:25:49

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-152	-4.025E-03		9.921E-02	3.989E-01	2.057E-02	-0.010
EU-154	-3.827E-02		1.811E-01	6.805E-01	5.277E-02	-0.056
EU-155	5.557E-02		3.212E-02	1.227E-01	7.093E-03	0.453
HG-203	-9.668E-03		1.517E-02	5.320E-02	2.776E-03	-0.182
BI-211	1.289E+00		2.013E-01	7.314E-01	3.477E-02	1.763
PB-211	-1.798E-01		7.104E-01	2.605E+00	1.716E-01	-0.069
BI-212	3.177E-01		2.965E-01	1.182E+00	8.037E-02	0.269
BI-214	3.846E-01	+	6.911E-02	2.610E-01	1.709E-02	1.474
RN-219	6.470E-02		1.093E-01	4.101E-01	2.111E-02	0.158
RA-223	1.000E-01		1.530E-01	5.643E-01	3.227E-02	0.177
RA-224	2.106E+00		7.261E-01	1.501E+00	4.304E-01	1.403
TH-227	-6.763E-02		1.160E-01	3.327E-01	1.697E-02	-0.203
AC-228	1.540E-01		1.244E-01	4.545E-01	8.714E-02	0.339
RA-228	2.670E-01		8.897E-02	3.839E-01	2.399E-02	0.696
PA-231	2.867E-01		5.133E-01	1.912E+00	1.274E-01	0.150
TH-231	4.311E-01		1.561E-01	5.748E-01	3.906E-02	0.750
TH-232	1.375E-01		3.753E-01	1.505E+00	9.747E-02	0.091
PA-233	8.623E-03		2.882E-02	1.068E-01	5.468E-03	0.081
PA-234M	3.334E+00		3.686E+00	1.484E+01	8.573E-01	0.225
NP-237	9.246E-03		3.090E-02	1.145E-01	5.741E-03	0.081
NP-239	6.721E-02		5.295E-02	1.944E-01	1.070E-02	0.346
AM-241	-1.632E-02		2.565E-02	9.084E-02	5.327E-03	-0.180
ANN RAD	-2.833E-03		2.534E-02	1.079E-01	5.868E-03	-0.026

Nuclide Line Activity Report
Sample ID : G8WN11AA

Acquisition date : 29-APR-2005 14:25:49

Nuclide Type: natural

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
K-40	1460.83	10.67*	7.717E-01	7.936E+00	7.936E+00	11.80	OK

Final Mean for 1 Valid Peaks = 7.939E+00+/- 9.364E-01 (11.80%)

Nuclide Type: fission

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
CS-137	661.65	85.12*	1.613E+00	4.593E-02	4.593E-02	57.89	OK

Final Mean for 1 Valid Peaks = 4.596E-02+/- 2.661E-02 (57.89%)

Nuclide Type: Th Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
TL-208	583.02	86.00*	1.824E+00	1.377E-01	1.377E-01	23.14	OK

Final Mean for 1 Valid Peaks = 1.378E-01+/- 3.189E-02 (23.14%)

PB-212	238.58	43.60*	4.106E+00	3.007E-01	3.007E-01	18.47	OK
	300.03	3.34	3.393E+00	----- Line Not Found		-----	Absent

Final Mean for 1 Valid Peaks = 3.008E-01+/- 5.555E-02 (18.47%)

Nuclide Type: U Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
PB-214	241.92	7.46	4.061E+00	----- Line Not Found		-----	Absent
	295.09	19.20	3.443E+00	4.574E-01	4.574E-01	18.04	OK
	351.87	37.10*	2.944E+00	3.933E-01	3.933E-01	16.65	OK

Final Mean for 2 Valid Peaks = 4.182E-01+/- 5.336E-02 (12.76%)

RA-226	186.21	3.50*	4.922E+00	2.816E+00	2.816E+00	24.19	OK

Final Mean for 1 Valid Peaks = 2.810E+00+/- 6.799E-01 (24.19%)

TH-234	63.29	3.80*	6.379E+00	1.484E+00	1.484E+00	32.69	OK
	92.59	5.41	6.611E+00	1.923E+00	1.923E+00	17.27	OK

Final Mean for 2 Valid Peaks = 1.789E+00+/- 2.796E-01 (15.63%)

Nuclide Line Activity Report (continued)
Sample ID : G8WN11AA Acquisition date : 29-APR-2005 14:25:49

Nuclide Type: Ac Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
U-235	143.79	10.50*	5.732E+00	----- Line Not Found		-----	Absent
	185.74	53.00	4.930E+00	1.856E-01	1.856E-01	24.23	OK

Final Mean for 1 Valid Peaks = 1.856E-01+/- 4.497E-02 (24.23%)

Flag: "*" = Keyline

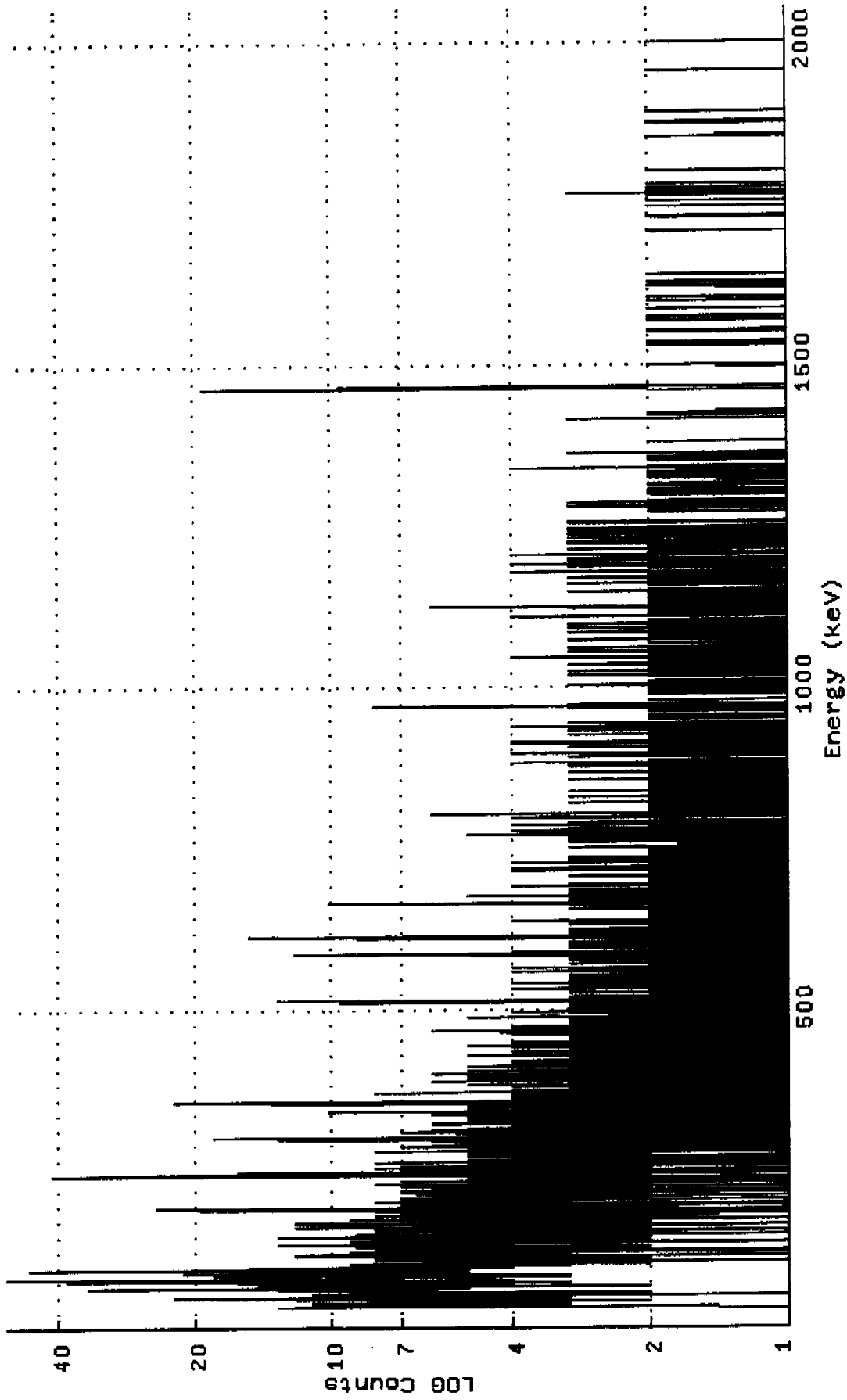
Rejected Report
Sample ID : G8WN11AA

Acquisition date : 29-APR-2005 14:25:49

Nuclide	Half-life	Half-Life Ratio	Energy	%Abund	Activity (pCi/G)	1-Sigma %Error	Rejected by
RU-103	39.25D	0.00	497.05*	88.70	--- Not Found ---		Abun.
			610.30	5.64	3.150E+00	18.17	
		% Abundances Found =		5.98			
BI-214	1600.00Y	0.00	609.31*	46.10	3.846E-01	17.97	Abun.
			768.35	4.88	--- Not Found ---		
			1120.27	15.00	--- Not Found ---		
		% Abundances Found =		69.87			
RA-228	5.75Y	0.00	911.16*	29.00	--- Not Found ---		Abun.
			968.97	17.40	4.951E-01	29.42	
		% Abundances Found =		37.50			

Flag: "*" = Keyline

Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN11AA_GE6_SOLID100ML_57916.CNF;1
Title :
Sample Title: F5D210345-008
Start Time: 29-APR-2005 14:25 Sample Time: 29-APR-2005 14:25 Energy Offset: -7.14002E-03
Real Time : 0 01:00:00.94 Sample ID : G8WN11AA Energy Slope : 2.49998E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : -1.90946E-09



VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:34:52
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN21AA_GE6_SOLID100ML_57917.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-009
Sample ID : G8WN21AA

Sample Quantity : 1.74600E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 29-APR-2005 14:26:38
Acquisition date : 29-APR-2005 14:26:38
Decay time : 0 00:00:00.00
Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.62
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE6
Counting geometry: SOLID_100ML

Energy cal. time : 3-MAR-2004 08:43:53.
Effic. cal. time : 18-JAN-2005 22:11:47
Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000
End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE6__57456.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WN21AA Acquisition date : 29-APR-2005 14:26:38

---- Energy, FWHM, and Efficiency Curves ----

```
**************************************************************************
*                                                                        *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)        *
*                            A = 1.54285E-01                             *
*                            B = 2.49832E-01                             *
*                            C = 1.86799E-08                             *
*                                                                        *
*                                                                        *
*                      FWHM(keV) = A + (B * SQRT(Energy))                *
*                            A = 4.67797E-01                             *
*                            B = 3.35494E-02                             *
*                                                                        *
*                                                                        *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                        *
*     a1=9.41250E+02   a2=-4.68519E+00 a3=8.82578E-01                    *
*     a4=8.83148E-02   a5=-2.58765E-02 a6=-1.60802E-02   a7=0.00000E+00  *
*                                                                        *
**************************************************************************
```

Post-NID Peak Search Report
Sample ID : G8WN21AA

Acquisition date : 29-APR-2005 14:26:38

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.34*	114	124	0.55	252.89	248	13	20.4		TH-234
4	74.92*	103	132	0.69	299.26	294	22	14.9	1.24E+00	
4	77.29	137	123	0.70	308.73	294	22	11.0		
6	90.10	24	88	0.99	360.03	358	22	40.6	1.15E+00	
6	92.67*	202	140	1.00	370.30	358	22	9.6		TH-234
0	185.88*	126	70	0.96	743.35	737	12	14.9		U-235
										RA-226
0	209.26	34	44	0.65	836.93	832	12	37.9		
4	238.63*	170	51	0.90	954.47	949	26	9.0	1.08E+00	PB-212
4	241.78	49	43	0.90	967.08	949	26	17.9		PB-214
0	295.11*	107	50	1.08	1180.53	1170	17	16.2		PB-214
0	351.89*	151	46	1.02	1407.76	1400	21	12.6		PB-214
0	582.94	75	15	1.14	2332.31	2325	15	15.0		TL-208
0	609.18*	142	33	1.00	2437.29	2426	19	12.2		
0	910.86	37	7	0.35	3644.29	3638	14	21.3		
0	1460.46*	121	4	1.14	5842.61	5831	22	10.0		K-40
0	1764.17	15	5	0.48	7057.08	7050	15	40.5		

Summary of Nuclide Activity
Sample ID : G8WN21AA

Acquisition date : 29-APR-2005 14:26:38

Total number of lines in spectrum 16
Number of unidentified lines 5
Number of lines tentatively identified by NID 11 68.75%

Nuclide Type : natural

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	7.626E+00	7.626E+00	0.916E+00	12.01	
Total Activity :			7.626E+00	7.626E+00			

Nuclide Type : Th Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
TL-208	1.91Y	1.00	2.623E-01	2.623E-01	0.457E-01	17.40	
PB-212	1.91Y	1.00	5.195E-01	5.195E-01	0.606E-01	11.67	
Total Activity :			7.818E-01	7.819E-01			

Nuclide Type : U Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
PB-214	1600.00Y	1.00	8.192E-01	8.192E-01	0.865E-01	10.56	
RA-226	1600.00Y	1.00	3.973E+00	3.973E+00	0.651E+00	16.39	
TH-234	4.47E+09Y	1.00	2.969E+00	2.969E+00	0.326E+00	10.98	
Total Activity :			7.762E+00	7.762E+00			

Nuclide Type : Ac Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
U-235	7.04E+08Y	1.00	2.624E-01	2.624E-01	0.431E-01	16.44	
Total Activity :			2.624E-01	2.624E-01			

Grand Total Activity : 1.643E+01 1.643E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G8WN21AA

Acquisition date : 29-APR-2005 14:26:38

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	7.626E+00	9.161E-01	9.480E-01	4.196E-02	8.045
TL-208	2.623E-01	4.565E-02	8.567E-02	6.239E-03	3.062
PB-212	5.195E-01	6.060E-02	1.076E-01	5.908E-03	4.830
PB-214	8.192E-01	8.649E-02	1.316E-01	7.061E-03	6.226
RA-226	3.973E+00	6.513E-01	1.145E+00	5.206E-02	3.469
TH-234	2.969E+00	3.260E-01	1.045E+00	9.937E-02	2.840
U-235	2.624E-01	4.315E-02	4.299E-01	3.937E-02	0.610

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	3.063E-01		1.641E-01	6.653E-01	3.893E-02	0.460
NA-22	2.415E-02		2.705E-02	1.136E-01	4.919E-03	0.213
CR-51	9.698E-02		1.362E-01	5.077E-01	2.678E-02	0.191
MN-54	-5.830E-03		2.089E-02	7.882E-02	4.683E-03	-0.074
CO-57	5.479E-03		1.087E-02	3.928E-02	2.228E-03	0.140
FE-59	2.511E-02		4.223E-02	1.717E-01	9.371E-03	0.146
CO-60	1.827E-02		2.274E-02	9.924E-02	4.217E-03	0.184
ZN-65	-2.085E-01		6.564E-02	1.771E-01	8.330E-03	-1.177
SE-75	3.930E-02		2.287E-02	8.761E-02	4.396E-03	0.449
SR-85	-1.475E-01		3.058E-02	7.119E-02	4.188E-03	-2.071
Y-88	1.586E-02		1.638E-02	8.703E-02	3.647E-03	0.182
NB-95	-2.073E-03		2.394E-02	8.768E-02	5.655E-03	-0.024
ZR-95	3.430E-02		3.889E-02	1.553E-01	1.057E-02	0.221
MO-99	1.440E-01		1.733E-01	6.822E-01	6.200E-02	0.211
TC-99M	2.923E-02		1.271E-02	4.796E-02	2.486E-03	0.609
RU-103	7.125E-03		2.132E-02	7.884E-02	4.972E-03	0.090
RH-105	-4.653E-01		2.362E-01	7.287E-01	3.701E-02	-0.639
RH-106	7.845E-01		1.577E-01	6.142E-01	3.603E-02	1.277
RU-106	8.396E-02		1.656E-01	6.608E-01	5.539E-02	0.127
CD-109	1.098E+00		4.031E-01	1.336E+00	7.828E-02	0.822
SN-113	-7.861E-03		2.437E-02	8.761E-02	4.344E-03	-0.090
SB-124	-1.607E-02		2.263E-02	7.682E-02	5.014E-03	-0.209
SB-125	-2.548E-03		5.984E-02	2.170E-01	1.136E-02	-0.012
I-131	-7.244E-03		1.844E-02	6.630E-02	3.422E-03	-0.109
I-132	-4.373E-02		2.322E-02	7.231E-02	4.975E-03	-0.605
TE-132	-2.062E-03		1.489E-02	5.286E-02	2.549E-03	-0.039
BA-133	-1.662E-02		2.621E-02	7.835E-02	5.546E-03	-0.212
I-133	-1.735E-02		2.090E-02	7.139E-02	4.285E-03	-0.243
CS-134	3.672E-03		2.605E-02	8.306E-02	5.438E-03	0.044
CS-137	-1.095E-02		2.549E-02	9.167E-02	6.326E-03	-0.119
CE-139	-1.292E-02		1.522E-02	5.050E-02	2.220E-03	-0.256
BA-140	-1.358E-01		7.512E-02	2.198E-01	3.760E-02	-0.618
LA-140	6.897E-04		2.816E-02	1.137E-01	4.899E-03	0.006
CE-141	-4.615E-02		2.407E-02	7.602E-02	3.880E-03	-0.607
CE-144	-1.315E-02		9.401E-02	3.272E-01	2.115E-02	-0.040
ND-147	7.937E-02		1.239E-01	4.775E-01	2.872E-02	0.166

Combined Activity-MDA Report (continued)
Sample ID : G8WN21AA Acquisition date : 29-APR-2005 14:26:38

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-152	1.839E-01		1.286E-01	5.729E-01	2.820E-02	0.321
EU-154	-1.484E-01		1.895E-01	6.783E-01	4.803E-02	-0.219
EU-155	5.675E-02		5.022E-02	1.838E-01	9.738E-03	0.309
HG-203	7.879E-03		1.816E-02	6.598E-02	3.393E-03	0.119
BI-211	2.331E+00		2.809E-01	9.980E-01	5.017E-02	2.336
PB-211	-6.248E-01		8.365E-01	2.995E+00	1.787E-01	-0.209
BI-212	7.585E-01		3.419E-01	1.440E+00	9.591E-02	0.527
BI-214	9.636E-01	+	1.428E-01	4.346E-01	2.948E-02	2.217
RN-219	5.509E-02		1.561E-01	5.595E-01	2.820E-02	0.098
RA-223	-2.035E-02		2.047E-01	7.073E-01	3.653E-02	-0.029
RA-224	2.038E+00		7.231E-01	1.713E+00	4.902E-01	1.190
TH-227	5.060E-02		1.252E-01	3.980E-01	1.937E-02	0.127
AC-228	3.386E-01		1.469E-01	5.315E-01	1.022E-01	0.637
RA-228	5.743E-01	+	1.294E-01	5.344E-01	2.839E-02	1.075
PA-231	-2.945E-02		6.140E-01	2.179E+00	1.456E-01	-0.014
TH-231	5.412E-01		1.973E-01	7.284E-01	4.945E-02	0.743
TH-232	1.488E+00		5.761E-01	2.524E+00	1.442E-01	0.589
PA-233	-5.426E-02		3.492E-02	1.118E-01	5.796E-03	-0.485
PA-234M	1.197E+01		4.517E+00	1.963E+01	1.004E+00	0.609
NP-237	-5.818E-02		3.743E-02	1.198E-01	6.089E-03	-0.485
NP-239	1.003E-01		6.521E-02	2.433E-01	1.265E-02	0.412
AM-241	2.834E-02		2.991E-02	1.070E-01	6.015E-03	0.265
ANN RAD	4.251E-02		3.153E-02	1.358E-01	7.961E-03	0.313

Nuclide Line Activity Report
Sample ID : G8WN21AA

Acquisition date : 29-APR-2005 14:26:38

Nuclide Type: natural

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
K-40	1460.83	10.67*	6.381E-01	7.628E+00	7.628E+00	12.01	OK

Final Mean for 1 Valid Peaks = 7.626E+00+/- 9.161E-01 (12.01%)

Nuclide Type: Th Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
TL-208	583.02	86.00*	1.432E+00	2.624E-01	2.624E-01	17.40	OK

Final Mean for 1 Valid Peaks = 2.623E-01+/- 4.565E-02 (17.40%)

PB-212	238.58	43.60*	3.234E+00	5.194E-01	5.194E-01	11.67	OK
	300.03	3.34	2.660E+00	----- Line Not Found		-----	Absent

Final Mean for 1 Valid Peaks = 5.195E-01+/- 6.060E-02 (11.67%)

Nuclide Type: U Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
PB-214	241.92	7.46	3.198E+00	8.763E-01	8.763E-01	19.37	OK
	295.09	19.20	2.699E+00	8.904E-01	8.904E-01	17.78	OK
	351.87	37.10*	2.303E+00	7.624E-01	7.624E-01	14.57	OK

Final Mean for 3 Valid Peaks = 8.192E-01+/- 8.649E-02 (10.56%)

RA-226	186.21	3.50*	3.900E+00	3.978E+00	3.978E+00	16.39	OK

Final Mean for 1 Valid Peaks = 3.973E+00+/- 6.513E-01 (16.39%)

TH-234	63.29	3.80*	4.870E+00	2.653E+00	2.653E+00	23.08	OK
	92.59	5.41	5.227E+00	3.067E+00	3.067E+00	11.93	OK

Final Mean for 2 Valid Peaks = 2.969E+00+/- 3.260E-01 (10.98%)

Nuclide Type: Ac Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
U-235	143.79	10.50*	4.563E+00	----- Line Not Found		-----	Absent
	185.74	53.00	3.907E+00	2.623E-01	2.623E-01	16.44	OK

Final Mean for 1 Valid Peaks = 2.624E-01+/- 4.315E-02 (16.44%)

Nuclide Line Activity Report (continued)
Sample ID : G8WN21AA Acquisition date : 29-APR-2005 14:26:38

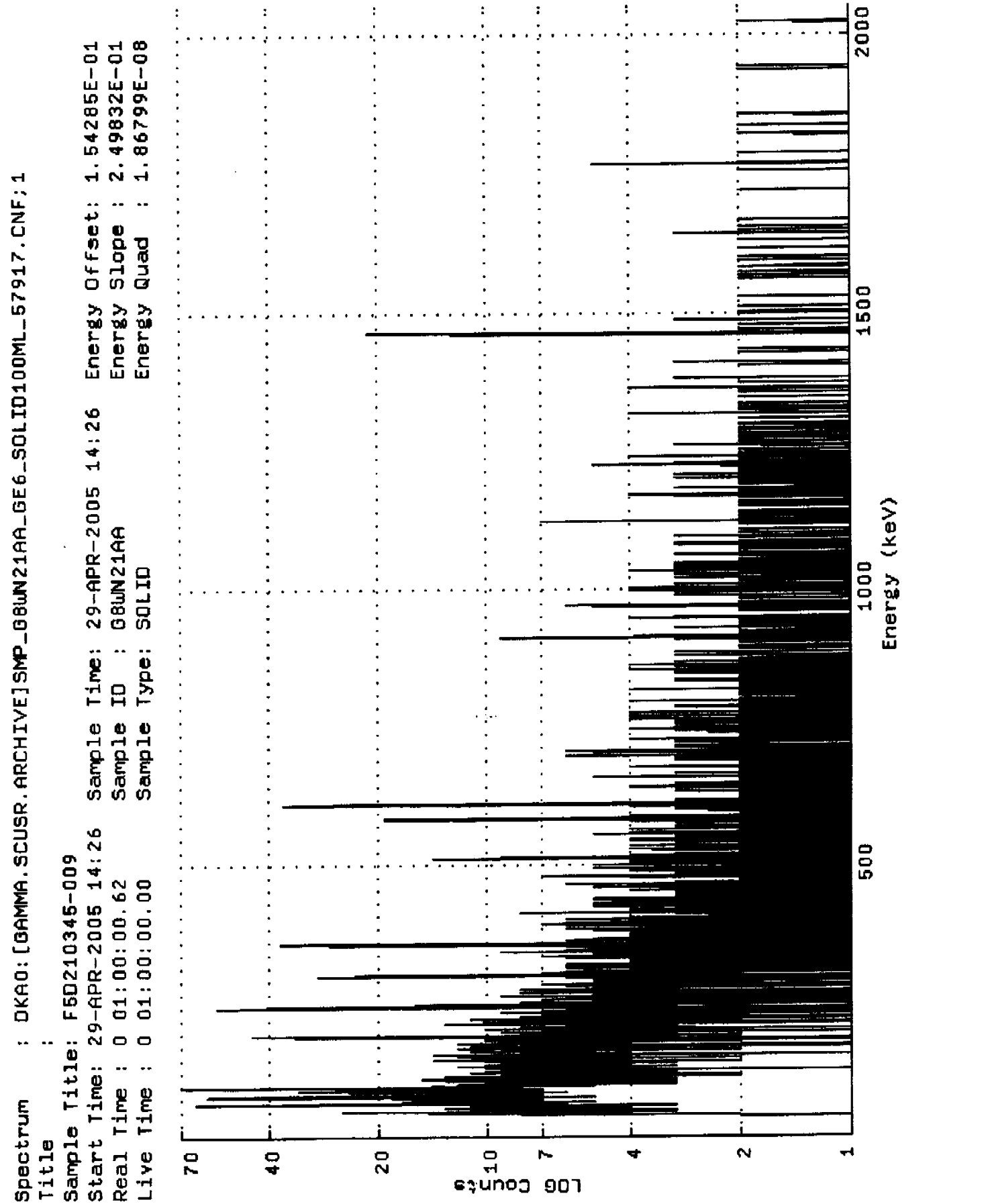
Flag: "*" = Keyline

Rejected Report
Sample ID : G8WN21AA

Acquisition date : 29-APR-2005 14:26:38

Nuclide	Half-life	Half-Life Ratio	Energy	%Abund	Activity (pCi/G)	1-Sigma %Error	Rejected by
BI-214	1600.00Y	0.00	609.31*	46.10	9.636E-01	14.82	Abun.
			768.35	4.88	--- Not Found ---		
			1120.27	15.00	--- Not Found ---		
		% Abundances	Found =	69.87			
RA-228	5.75Y	0.00	911.16*	29.00	5.743E-01	22.54	Abun.
			968.97	17.40	--- Not Found ---		
		% Abundances	Found =	62.50			

Flag: "*" = Keyline


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN21AA_GE6_SOLID100ML_57917.CNF;1
Title :
Sample Title: F5D210345-009
Start Time: 29-APR-2005 14:26 Sample Time: 29-APR-2005 14:26 Energy Offset: 1.54285E-01
Real Time : 0 01:00:00.62 Sample ID : G8WN21AA Energy Slope : 2.49832E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : 1.86799E-08
Log Counts
70
40
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 9-MAY-2005 23:51:45
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN31AARC_GE7_SOLID100ML_57922.

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-010
Sample ID : G8WN31AA-RC

Sample Quantity : 1.54000E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 29-APR-2005 15:37:27
Acquisition date : 29-APR-2005 15:37:27
Decay time : 0 00:00:00.00

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.37
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE7

Counting geometry: SOLID_100ML

Energy cal. time : 25-FEB-2005 09:11:05
Effic. cal. time : 19-JAN-2005 01:25:36

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE7__57457.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WN31AA-RC

Acquisition date : 29-APR-2005 15:37:27

---- Energy, FWHM, and Efficiency Curves ----

```
*************************************************************************
*                                                                       *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)       *
*                            A = 7.85538E-02                            *
*                            B = 2.50061E-01                            *
*                            C = -1.56700E-08                           *
*                                                                       *
*                                                                       *
*                       FWHM(keV) = A + (B * SQRT(Energy))              *
*                            A = 5.33118E-01                            *
*                            B = 4.95085E-02                            *
*                                                                       *
*                                                                       *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                       *
*     a1=9.41250E+02   a2=-4.39222E+00 a3=9.59385E-01                   *
*     a4=7.48354E-02   a5=-4.49953E-02 a6=-1.06506E-02   a7=0.00000E+00 *
*                                                                       *
*************************************************************************
```

Post-NID Peak Search Report
Sample ID : G8WN31AA-RC

Acquisition date : 29-APR-2005 15:37:27

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
6	74.89*	34	76	1.01	299.18	292	23	28.5	6.36E-01	
6	77.17*	80	72	1.02	308.28	292	23	15.5		
0	92.50*	72	68	0.95	369.62	365	14	26.4		
0	238.70*	68	89	0.84	954.31	944	18	30.5		PB-212
0	295.35	44	26	0.73	1180.89	1176	15	26.3		PB-214
0	352.02	63	32	0.93	1407.56	1397	19	22.2		PB-214
0	583.38	30	9	0.58	2332.97	2326	13	25.1		TL-208
0	609.74	57	14	0.80	2438.43	2428	23	19.5		
0	1461.04	91	5	2.04	5844.56	5827	33	12.4		K-40

Summary of Nuclide Activity
Sample ID : G8WN31AA-RC

Acquisition date : 29-APR-2005 15:37:27

Total number of lines in spectrum	9	
Number of unidentified lines	2	
Number of lines tentatively identified by NID	7	77.78%

Nuclide Type : natural

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	5.010E+00	5.010E+00	0.705E+00	14.06	
	Total Activity :		5.010E+00	5.010E+00			

Nuclide Type : Th Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
TL-208	1.91Y	1.00	8.683E-02	8.683E-02	2.300E-02	26.49	
PB-212	1.91Y	1.00	1.674E-01	1.674E-01	0.525E-01	31.37	
	Total Activity :		2.542E-01	2.542E-01			

Nuclide Type : U Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
PB-214	1600.00Y	1.00	2.704E-01	2.704E-01	0.489E-01	18.10	
	Total Activity :		2.704E-01	2.704E-01			

Grand Total Activity :	5.534E+00	5.534E+00

Flags: "K" = Keyline not found
"E" = Manually edited
"M" = Manually accepted
"A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G8WN31AA-RC

Acquisition date : 29-APR-2005 15:37:27

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	5.010E+00	7.045E-01	7.157E-01	3.175E-02	7.000
TL-208	8.683E-02	2.300E-02	6.829E-02	4.550E-03	1.271
PB-212	1.674E-01	5.251E-02	1.179E-01	6.512E-03	1.419
PB-214	2.704E-01	4.894E-02	1.168E-01	5.964E-03	2.315

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-4.399E-02		1.161E-01	4.249E-01	2.264E-02	-0.104
NA-22	3.345E-03		1.981E-02	8.093E-02	3.420E-03	0.041
CR-51	-2.286E-02		1.189E-01	4.301E-01	2.195E-02	-0.053
MN-54	2.341E-02		2.108E-02	8.496E-02	4.406E-03	0.276
CO-57	-3.781E-03		7.758E-03	2.654E-02	1.606E-03	-0.142
FE-59	-3.590E-04		4.127E-02	1.573E-01	8.032E-03	-0.002
CO-60	1.468E-02		2.229E-02	9.358E-02	3.978E-03	0.157
ZN-65	5.259E-03		4.549E-02	1.756E-01	7.595E-03	0.030
SE-75	2.572E-03		1.505E-02	5.525E-02	2.757E-03	0.047
SR-85	-3.104E-02		2.205E-02	7.289E-02	3.847E-03	-0.426
Y-88	2.239E-02		2.172E-02	1.021E-01	4.272E-03	0.219
NB-95	2.786E-02		1.775E-02	7.422E-02	4.193E-03	0.375
ZR-95	3.657E-03		3.422E-02	1.284E-01	7.764E-03	0.028
MO-99	-6.789E-02		1.205E-01	4.356E-01	3.709E-02	-0.156
TC-99M	-9.885E-03		9.388E-03	3.197E-02	1.751E-03	-0.309
RU-103	-1.164E-02		1.603E-02	5.638E-02	3.261E-03	-0.207
RH-105	-6.811E-02		1.932E-01	6.787E-01	3.354E-02	-0.100
RH-106	-1.771E-01		1.169E-01	4.879E-01	2.568E-02	-0.363
RU-106	1.079E-01		1.696E-01	6.606E-01	5.138E-02	0.163
CD-109	2.858E-01		2.368E-01	8.605E-01	5.071E-02	0.332
SN-113	5.987E-03		1.866E-02	6.950E-02	3.158E-03	0.086
SB-124	2.261E-02		1.693E-02	6.512E-02	3.762E-03	0.347
SB-125	1.702E-02		4.149E-02	1.560E-01	7.434E-03	0.109
I-131	-1.161E-02		1.419E-02	4.929E-02	2.390E-03	-0.235
I-132	1.422E-02		2.022E-02	7.914E-02	4.772E-03	0.180
TE-132	4.485E-04		1.033E-02	3.754E-02	1.831E-03	0.012
BA-133	-1.878E-02		2.405E-02	6.893E-02	4.739E-03	-0.273
I-133	-5.386E-03		1.727E-02	6.239E-02	3.352E-03	-0.086
CS-134	6.833E-04		1.991E-02	6.310E-02	3.657E-03	0.011
CS-137	1.781E-02		2.331E-02	8.963E-02	5.421E-03	0.199
CE-139	1.049E-02		1.078E-02	3.973E-02	1.816E-03	0.264
BA-140	-6.226E-02		5.533E-02	1.843E-01	3.114E-02	-0.338
LA-140	-7.170E-04		1.882E-02	7.944E-02	3.432E-03	-0.009
CE-141	-4.665E-03		1.685E-02	5.943E-02	3.191E-03	-0.079
CE-144	5.094E-02		6.050E-02	2.279E-01	1.535E-02	0.224
ND-147	6.511E-02		1.080E-01	4.156E-01	2.237E-02	0.157
EU-152	1.642E-01		8.846E-02	4.376E-01	2.156E-02	0.375
EU-154	1.534E-01		1.771E-01	7.111E-01	4.637E-02	0.216
EU-155	1.735E-02		3.277E-02	1.185E-01	6.524E-03	0.146

Combined Activity-MDA Report (continued)
Sample ID : G8WN31AA-RC Acquisition date : 29-APR-2005 15:37:27

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
HG-203	-2.037E-02		1.539E-02	5.077E-02	2.578E-03	-0.401
BI-211	7.577E-01		1.609E-01	5.903E-01	2.804E-02	1.284
PB-211	1.717E-01		7.723E-01	2.934E+00	1.529E-01	0.059
BI-212	-5.525E-02		2.986E-01	1.087E+00	6.347E-02	-0.051
BI-214	3.168E-01	+	6.671E-02	2.329E-01	1.409E-02	1.360
RN-219	1.109E-01		9.807E-02	3.749E-01	1.873E-02	0.296
RA-223	5.705E-02		1.421E-01	5.166E-01	2.778E-02	0.110
RA-224	1.994E+00		7.070E-01	1.507E+00	4.314E-01	1.324
RA-226	9.509E-01		3.159E-01	1.257E+00	5.889E-02	0.756
TH-227	-1.834E-02		1.078E-01	3.254E-01	1.596E-02	-0.056
AC-228	1.689E-01		1.136E-01	4.199E-01	8.047E-02	0.402
RA-228	2.215E-01		8.801E-02	3.710E-01	1.714E-02	0.597
PA-231	-5.603E-01		4.689E-01	1.550E+00	1.021E-01	-0.361
TH-231	-1.468E-01		1.253E-01	4.189E-01	2.842E-02	-0.351
TH-232	-1.568E-01		4.723E-01	1.736E+00	8.637E-02	-0.090
PA-233	-5.912E-02		2.988E-02	9.259E-02	4.662E-03	-0.638
PA-234M	-1.555E+00		3.316E+00	1.252E+01	5.693E-01	-0.124
TH-234	7.603E-01		2.773E-01	1.077E+00	1.007E-01	0.706
U-235	1.569E-01		7.539E-02	2.875E-01	2.678E-02	0.546
NP-237	-6.338E-02		3.203E-02	9.927E-02	4.891E-03	-0.638
NP-239	6.304E-02		4.513E-02	1.693E-01	9.053E-03	0.372
AM-241	-4.353E-02		2.334E-02	7.257E-02	3.834E-03	-0.600
ANN RAD	-1.359E-02		2.380E-02	1.028E-01	5.405E-03	-0.132

Nuclide Line Activity Report
Sample ID : G8WN31AA-RC

Acquisition date : 29-APR-2005 15:37:27

Nuclide Type: natural

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
K-40	1460.83	10.67*	8.262E-01	5.009E+00	5.009E+00	14.06	OK

Final Mean for 1 Valid Peaks = 5.010E+00+/- 7.045E-01 (14.06%)

Nuclide Type: Th Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
TL-208	583.02	86.00*	1.982E+00	8.678E-02	8.678E-02	26.49	OK

Final Mean for 1 Valid Peaks = 8.683E-02+/- 2.300E-02 (26.49%)

PB-212	238.58	43.60*	4.557E+00	1.673E-01	1.673E-01	31.37	OK
	300.03	3.34	3.752E+00	----- Line Not Found		-----	Absent

Final Mean for 1 Valid Peaks = 1.674E-01+/- 5.251E-02 (31.37%)

Nuclide Type: U Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
PB-214	241.92	7.46	4.506E+00	----- Line Not Found		-----	Absent
	295.09	19.20	3.807E+00	2.967E-01	2.967E-01	27.28	OK
	351.87	37.10*	3.243E+00	2.562E-01	2.562E-01	23.29	OK

Final Mean for 2 Valid Peaks = 2.704E-01+/- 4.894E-02 (18.10%)

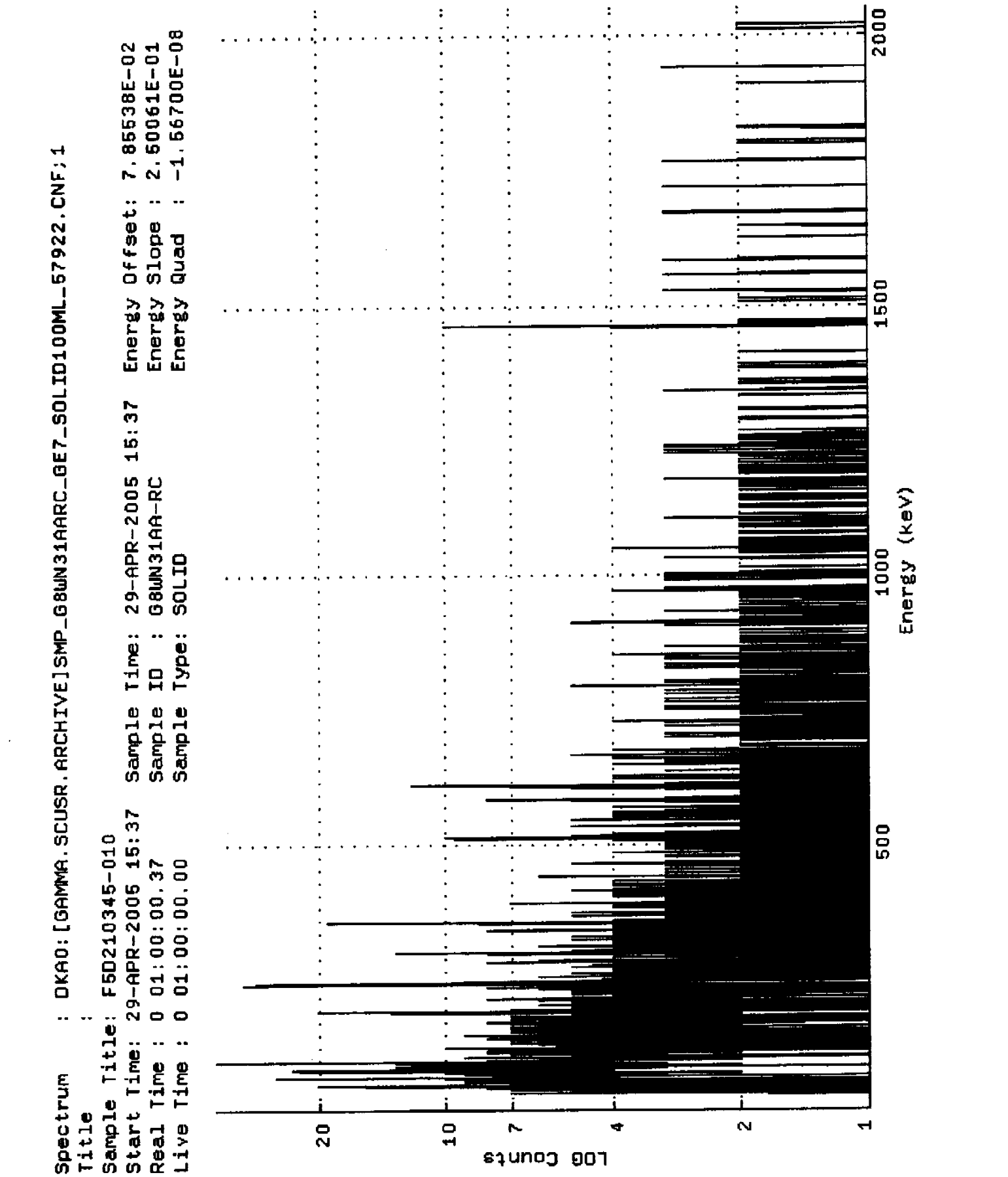
Flag: "*" = Keyline

Rejected Report
Sample ID : G8WN31AA-RC

Acquisition date : 29-APR-2005 15:37:27

Nuclide	Half-life	Half-Life Ratio	Energy	%Abund	Activity (pCi/G)	1-Sigma %Error	Rejected by
RU-103	39.25D	0.00	497.05*	88.70	--- Not Found ---		Abun.
			610.30	5.64	2.595E+00	21.23	
		% Abundances Found =		5.98			
BI-214	1600.00Y	0.00	609.31*	46.10	3.168E-01	21.05	Abun.
			768.35	4.88	--- Not Found ---		
			1120.27	15.00	--- Not Found ---		
		% Abundances Found =		69.87			
TH-234	4.47E+09Y	0.00	63.29*	3.80	--- Not Found ---		Abun.
			92.59	5.41	8.982E-01	27.37	
		% Abundances Found =		58.74			

Flag: "*" = Keyline


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN31AARC_GE7_SOLID100ML_57922.CNF;1
Title :
Sample Title: F5D210345-010
Start Time: 29-APR-2005 15:37 Sample Time: 29-APR-2005 15:37 Energy Offset: 7.85538E-02
Real Time : 0 01:00:00.37 Sample ID : G8WN31AA-RC Energy Slope : 2.50061E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : -1.56700E-08
Log Counts
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:35:43
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN41AA_GE4_SOLID100ML_57919.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-011
Sample ID : G8WN41AA

Sample Quantity : 2.13600E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 29-APR-2005 15:34:50
Acquisition date : 29-APR-2005 15:34:50
Decay time : 0 00:00:00.00

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.50
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE4

Counting geometry: SOLID_100ML

Energy cal. time : 16-MAR-2005 08:34:49
Effic. cal. time : 18-JAN-2005 00:15:12

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE4__57454.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WN41AA Acquisition date : 29-APR-2005 15:34:50

---- Energy, FWHM, and Efficiency Curves ----

```
*************************************************************************
*                                                                       *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)       *
*                          A = 1.10653E-01                              *
*                          B = 2.49919E-01                              *
*                          C = 1.94892E-08                              *
*                                                                       *
*                                                                       *
*                    FWHM(keV) = A + (B * SQRT(Energy))                 *
*                          A = 8.02351E-01                              *
*                          B = 2.65421E-02                              *
*                                                                       *
*                                                                       *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                       *
*     a1=9.41250E+02   a2=-4.55854E+00 a3=9.62044E-01                   *
*     a4=7.38134E-02   a5=-4.50301E-02 a6=-9.56656E-03   a7=0.00000E+00 *
*                                                                       *
*************************************************************************
```

Post-NID Peak Search Report
Sample ID : G8WN41AA

Acquisition date : 29-APR-2005 15:34:50

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.25*	64	87	0.77	252.63	241	18	32.4		TH-234
0	77.43	28	71	1.04	309.38	304	10	53.5		
0	92.73*	106	103	1.02	370.60	365	23	24.0		TH-234
0	137.84	16	24	0.48	551.09	548	8	56.7		
0	185.97*	89	52	0.98	743.66	739	12	18.1		U-235 RA-226
0	238.72*	78	41	0.45	954.67	946	15	19.6		PB-212
0	295.42	57	40	0.84	1181.53	1172	22	27.6		PB-214
0	351.84	69	31	0.64	1407.20	1399	17	20.0		PB-214
0	582.95*	27	16	1.28	2331.68	2326	16	35.7		TL-208
0	609.65*	34	8	0.91	2438.50	2430	14	23.5		
0	661.85	33	9	0.62	2647.26	2641	13	24.0		CS-137
0	911.33	11	7	0.45	3645.02	3640	12	54.6		
0	1461.36	60	0	1.17	5844.26	5834	22	12.9		K-40

Summary of Nuclide Activity
Sample ID : G8WN41AA

Acquisition date : 29-APR-2005 15:34:50

Total number of lines in spectrum 13
Number of unidentified lines 2
Number of lines tentatively identified by NID 11 84.62%

Nuclide Type : natural

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.830E+00	2.830E+00	0.413E+00	14.61	
Total Activity :			2.830E+00	2.830E+00			

Nuclide Type : fission

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
CS-137	30.20Y	1.00	9.212E-02	9.212E-02	2.303E-02	25.01	
Total Activity :			9.212E-02	9.212E-02			

Nuclide Type : Th Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
TL-208	1.91Y	1.00	6.493E-02	6.493E-02	2.372E-02	36.54	
PB-212	1.91Y	1.00	1.617E-01	1.617E-01	0.339E-01	20.97	
Total Activity :			2.266E-01	2.266E-01			

Nuclide Type : U Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
PB-214	1600.00Y	1.00	2.559E-01	2.559E-01	0.448E-01	17.50	
RA-226	1600.00Y	1.00	1.903E+00	1.903E+00	0.369E+00	19.39	
TH-234	4.47E+09Y	1.00	1.061E+00	1.061E+00	0.217E+00	20.47	
Total Activity :			3.220E+00	3.220E+00			

Nuclide Type : Ac Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
U-235	7.04E+08Y	1.00	1.257E-01	1.257E-01	0.244E-01	19.43	
Total Activity :			1.257E-01	1.257E-01			

Grand Total Activity :	6.494E+00	6.494E+00

Flags: "K" = Keyline not found
"E" = Manually edited
"M" = Manually accepted
"A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G8WN41AA

Acquisition date : 29-APR-2005 15:34:50

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	2.830E+00	4.135E-01	4.230E-01	1.978E-02	6.690
CS-137	9.212E-02	2.303E-02	5.581E-02	2.833E-03	1.651
TL-208	6.493E-02	2.372E-02	4.658E-02	2.842E-03	1.394
PB-212	1.617E-01	3.391E-02	9.400E-02	5.139E-03	1.720
PB-214	2.559E-01	4.477E-02	9.292E-02	4.642E-03	2.754
RA-226	1.903E+00	3.689E-01	8.053E-01	3.726E-02	2.363
TH-234	1.061E+00	2.172E-01	6.712E-01	6.426E-02	1.581
U-235	1.257E-01	2.442E-02	2.491E-01	2.303E-02	0.505

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-3.522E-02		9.869E-02	3.559E-01	1.780E-02	-0.099
NA-22	9.922E-03		1.517E-02	6.689E-02	3.035E-03	0.148
CR-51	-8.745E-03		8.870E-02	3.250E-01	1.629E-02	-0.027
MN-54	2.903E-02		1.435E-02	6.363E-02	3.415E-03	0.456
CO-57	1.318E-02		7.710E-03	2.924E-02	1.712E-03	0.451
FE-59	2.024E-02		2.680E-02	1.146E-01	6.330E-03	0.177
CO-60	-1.731E-02		1.575E-02	5.567E-02	2.526E-03	-0.311
ZN-65	-4.797E-02		3.519E-02	1.165E-01	5.567E-03	-0.412
SE-75	4.283E-03		1.467E-02	5.282E-02	2.599E-03	0.081
SR-85	-8.519E-02		2.073E-02	5.402E-02	2.609E-03	-1.577
Y-88	6.141E-03		6.154E-03	4.515E-02	1.922E-03	0.136
NB-95	2.067E-02		1.415E-02	5.974E-02	3.167E-03	0.346
ZR-95	1.052E-02		2.864E-02	1.101E-01	6.229E-03	0.096
MO-99	-3.422E-03		9.386E-02	3.623E-01	2.959E-02	-0.009
TC-99M	6.582E-03		9.539E-03	3.077E-02	1.644E-03	0.214
RU-103	-6.341E-03		1.198E-02	4.250E-02	2.307E-03	-0.149
RH-105	2.626E-01		1.685E-01	6.635E-01	3.219E-02	0.396
RH-106	9.778E-02		9.736E-02	4.234E-01	2.042E-02	0.231
RU-106	1.966E-02		1.202E-01	4.651E-01	3.340E-02	0.042
CD-109	3.037E-01		2.085E-01	7.498E-01	4.366E-02	0.405
SN-113	-2.371E-04		1.653E-02	6.023E-02	2.649E-03	-0.004
SB-124	-2.163E-02		1.370E-02	4.504E-02	2.268E-03	-0.480
SB-125	-1.577E-02		3.563E-02	1.270E-01	5.769E-03	-0.124
I-131	-1.198E-02		1.121E-02	3.838E-02	1.814E-03	-0.312
I-132	9.659E-03		1.516E-02	5.968E-02	3.036E-03	0.162
TE-132	-1.032E-03		9.474E-03	3.341E-02	1.609E-03	-0.031
BA-133	2.254E-03		1.706E-02	5.445E-02	3.698E-03	0.041
I-133	1.171E-02		1.285E-02	5.085E-02	2.481E-03	0.230
CS-134	1.208E-02		1.303E-02	4.805E-02	2.425E-03	0.251
CE-139	-5.652E-03		9.591E-03	3.317E-02	1.497E-03	-0.170
BA-140	-2.874E-02		4.468E-02	1.608E-01	2.691E-02	-0.179
LA-140	-1.736E-02		1.009E-02	1.539E-02	6.947E-04	-1.128
CE-141	3.238E-03		1.487E-02	5.344E-02	2.807E-03	0.061
CE-144	2.625E-02		5.944E-02	2.134E-01	1.410E-02	0.123
ND-147	-8.714E-05		8.867E-02	3.254E-01	1.589E-02	0.000

Combined Activity-MDA Report (continued)
Sample ID : G8WN41AA Acquisition date : 29-APR-2005 15:34:50

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-152	-2.043E-02		8.398E-02	3.316E-01	1.711E-02	-0.062
EU-154	3.973E-02		1.097E-01	4.535E-01	3.134E-02	0.088
EU-155	4.314E-02		3.024E-02	1.112E-01	5.975E-03	0.388
HG-203	-1.170E-02		1.181E-02	3.933E-02	1.968E-03	-0.297
BI-211	7.184E-01	+	1.517E-01	5.050E-01	2.339E-02	1.423
PB-211	-5.943E-01		5.027E-01	1.685E+00	9.039E-02	-0.353
BI-212	2.986E-01		2.230E-01	9.163E-01	4.795E-02	0.326
BI-214	1.627E-01	+	3.998E-02	1.668E-01	8.870E-03	0.976
RN-219	1.249E-01		9.168E-02	3.461E-01	1.704E-02	0.361
RA-223	4.282E-02		1.157E-01	4.224E-01	2.235E-02	0.101
RA-224	1.150E+00		4.602E-01	1.132E+00	3.241E-01	1.016
TH-227	8.052E-02		7.915E-02	2.601E-01	1.260E-02	0.310
AC-228	1.962E-01		9.233E-02	3.396E-01	6.499E-02	0.578
RA-228	1.183E-01	+	6.521E-02	2.762E-01	1.478E-02	0.428
PA-231	-6.189E-01		4.031E-01	1.339E+00	8.731E-02	-0.462
TH-231	-7.073E-02		1.080E-01	3.639E-01	2.467E-02	-0.194
TH-232	6.747E-01		4.010E-01	1.676E+00	9.008E-02	0.402
PA-233	3.509E-02		2.414E-02	9.448E-02	4.671E-03	0.371
PA-234M	3.425E+00		2.336E+00	1.036E+01	5.363E-01	0.331
NP-237	3.763E-02		2.588E-02	1.013E-01	4.897E-03	0.371
NP-239	4.425E-02		4.239E-02	1.446E-01	7.569E-03	0.306
AM-241	-6.839E-03		2.081E-02	6.177E-02	3.552E-03	-0.111
ANN RAD	2.726E-02		2.003E-02	8.786E-02	4.235E-03	0.310

Nuclide Line Activity Report
Sample ID : G8WN41AA

Acquisition date : 29-APR-2005 15:34:50

Nuclide Type: natural

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
K-40	1460.83	10.67*	6.987E-01	2.829E+00	2.829E+00	14.61	OK

Final Mean for 1 Valid Peaks = 2.830E+00+/- 4.135E-01 (14.61%)

Nuclide Type: fission

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
CS-137	661.65	85.12*	1.481E+00	9.209E-02	9.209E-02	25.01	OK

Final Mean for 1 Valid Peaks = 9.212E-02+/- 2.303E-02 (25.01%)

Nuclide Type: Th Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
TL-208	583.02	86.00*	1.680E+00	6.494E-02	6.494E-02	36.54	OK

Final Mean for 1 Valid Peaks = 6.493E-02+/- 2.372E-02 (36.54%)

PB-212	238.58	43.60*	3.880E+00	1.616E-01	1.616E-01	20.97	OK
	300.03	3.34	3.188E+00	----- Line Not Found		-----	Absent

Final Mean for 1 Valid Peaks = 1.617E-01+/- 3.391E-02 (20.97%)

Nuclide Type: U Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
PB-214	241.92	7.46	3.836E+00	----- Line Not Found		-----	Absent
	295.09	19.20	3.236E+00	3.210E-01	3.210E-01	28.51	OK
	351.87	37.10*	2.753E+00	2.367E-01	2.367E-01	21.20	OK

Final Mean for 2 Valid Peaks = 2.559E-01+/- 4.477E-02 (17.50%)

RA-226	186.21	3.50*	4.673E+00	1.905E+00	1.905E+00	19.39	OK

Final Mean for 1 Valid Peaks = 1.903E+00+/- 3.689E-01 (19.39%)

TH-234	63.29	3.80*	5.976E+00	9.955E-01	9.955E-01	34.14	OK
	92.59	5.41	6.273E+00	1.103E+00	1.103E+00	25.00	OK

Final Mean for 2 Valid Peaks = 1.061E+00+/- 2.172E-01 (20.47%)

Nuclide Line Activity Report (continued)
Sample ID : G8WN41AA Acquisition date : 29-APR-2005 15:34:50

Nuclide Type: Ac Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
U-235	143.79	10.50*	5.457E+00	----- Line Not Found		-----	Absent
	185.74	53.00	4.681E+00	1.256E-01	1.256E-01	19.43	OK

Final Mean for 1 Valid Peaks = 1.257E-01+/- 2.442E-02 (19.43%)

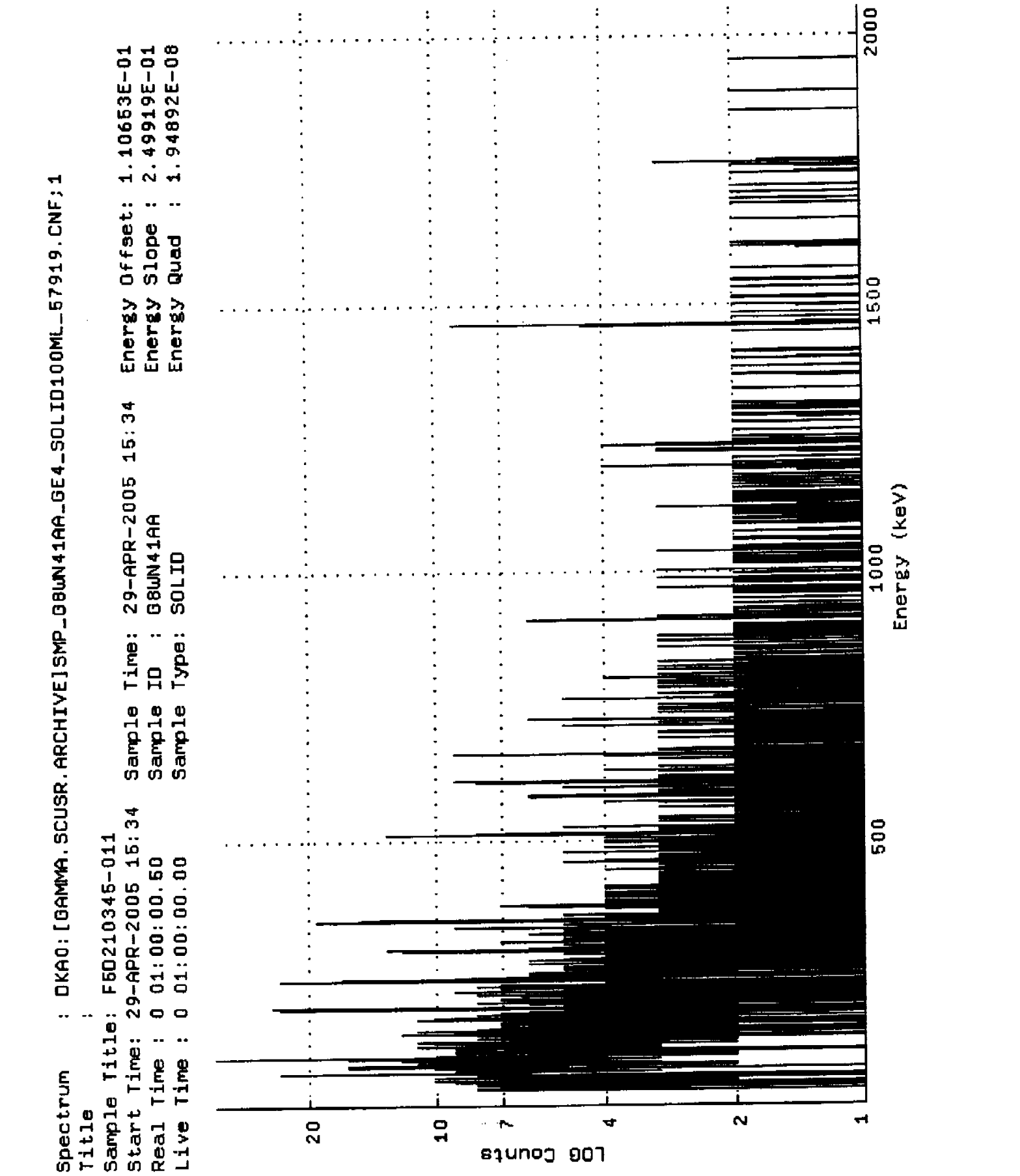
Flag: "*" = Keyline

Rejected Report
Sample ID : G8WN41AA

Acquisition date : 29-APR-2005 15:34:50

Nuclide	Half-life	Half-Life Ratio	Energy	%Abund	Activity (pCi/G)	1-Sigma %Error	Rejected by
RU-103	39.25D	0.00	497.05*	88.70	--- Not Found ---		Abun.
			610.30	5.64	1.333E+00	24.72	
		% Abundances	Found =	5.98			
BI-211	21.77Y	0.00	351.10*	12.20	7.184E-01	21.12	Abun.
			404.80	4.10	--- Not Found ---		
			426.90	1.90	--- Not Found ---		
			831.80	3.30	--- Not Found ---		
		% Abundances	Found =	56.74			
BI-214	1600.00Y	0.00	609.31*	46.10	1.627E-01	24.57	Abun.
			768.35	4.88	--- Not Found ---		
			1120.27	15.00	--- Not Found ---		
		% Abundances	Found =	69.87			
RA-228	5.75Y	0.00	911.16*	29.00	1.183E-01	55.11	Abun.
			968.97	17.40	--- Not Found ---		
		% Abundances	Found =	62.50			

Flag: "*" = Keyline


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN41AA_GE4_SOLID100ML_57919.CNF;1
Title :
Sample Title: F5D210345-011
Start Time: 29-APR-2005 15:34 Sample Time: 29-APR-2005 15:34 Energy Offset: 1.10653E-01
Real Time : 0 01:00:00.50 Sample ID : G8WN41AA Energy Slope : 2.49919E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : 1.94892E-08
Log Counts
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:36:05
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN51AA_GE5_SOLID100ML_57920.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-012
Sample ID : G8WN51AA

Sample Quantity : 2.27000E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 29-APR-2005 15:35:28
Acquisition date : 29-APR-2005 15:35:28
Decay time : 0 00:00:00.00

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.84
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE5

Counting geometry: SOLID_100ML

Energy cal. time : 9-MAR-2005 09:18:16.
Effic. cal. time : 18-JAN-2005 09:43:11

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE5__57455.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WN51AA

Acquisition date : 29-APR-2005 15:35:28

---- Energy, FWHM, and Efficiency Curves ----

```
**********************************************************************************
*                                                                                *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)                *
*                          A = -7.14002E-03                                      *
*                          B = 2.49998E-01                                       *
*                          C = -1.90945E-09                                      *
*                                                                                *
*                                                                                *
*                    FWHM(keV) = A + (B * SQRT(Energy))                          *
*                          A = 5.02556E-01                                       *
*                          B = 3.66242E-02                                       *
*                                                                                *
*                                                                                *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)  *
*                                                                                *
*     a1=9.41250E+02   a2=-4.46457E+00 a3=9.42586E-01                            *
*     a4=5.97186E-02   a5=-3.91387E-02 a6=-9.36517E-03   a7=0.00000E+00          *
*                                                                                *
**********************************************************************************
```

Post-NID Peak Search Report
Sample ID : G8WN51AA

Acquisition date : 29-APR-2005 15:35:28

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.09*	59	61	0.78	252.38	246	14	29.6		TH-234
4	74.87	55	60	0.72	299.50	293	22	18.0	8.80E-01	
4	77.11*	63	50	0.73	308.46	293	22	16.6		
0	92.62*	124	71	1.06	370.53	364	21	17.8		TH-234
0	185.84*	71	45	0.88	743.41	737	15	22.1		U-235 RA-226
0	238.68*	35	55	0.68	954.77	950	12	42.0		PB-212
0	295.38	41	37	0.61	1181.55	1174	14	31.6		PB-214
0	352.04*	71	16	0.80	1408.22	1398	17	16.7		PB-214
0	583.45	31	11	0.97	2333.88	2327	13	26.1		TL-208
0	609.62	47	28	0.56	2438.57	2434	16	26.4		
0	661.75*	21	8	0.97	2647.10	2641	13	36.7		CS-137
0	1461.41	112	0	0.71	5845.97	5834	25	9.4		K-40

Summary of Nuclide Activity
Sample ID : G8WN51AA

Acquisition date : 29-APR-2005 15:35:28

Total number of lines in spectrum	12	
Number of unidentified lines	2	
Number of lines tentatively identified by NID	10	83.33%

Nuclide Type : natural

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	4.500E+00	4.500E+00	0.525E+00	11.66	
Total Activity :			4.500E+00	4.500E+00			

Nuclide Type : fission

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
CS-137	30.20Y	1.00	5.041E-02	5.041E-02	1.897E-02	37.62	
Total Activity :			5.041E-02	5.041E-02			

Nuclide Type : Th Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
TL-208	1.91Y	1.00	6.559E-02	6.559E-02	1.805E-02	27.51	
PB-212	1.91Y	1.00	6.535E-02	6.535E-02	2.791E-02	42.71	
Total Activity :			1.309E-01	1.309E-01			

Nuclide Type : U Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
PB-214	1600.00Y	1.00	2.126E-01	2.126E-01	0.343E-01	16.12	
RA-226	1600.00Y	1.00	1.367E+00	1.367E+00	0.316E+00	23.14	
TH-234	4.47E+09Y	1.00	1.002E+00	1.002E+00	0.169E+00	16.90	
Total Activity :			2.581E+00	2.581E+00			

Nuclide Type : Ac Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
U-235	7.04E+08Y	1.00	9.025E-02	9.025E-02	2.092E-02	23.18	
Total Activity :			9.025E-02	9.025E-02			

Grand Total Activity :	7.353E+00	7.353E+00

Flags: "K" = Keyline not found
"E" = Manually edited
"M" = Manually accepted
"A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G8WN51AA

Acquisition date : 29-APR-2005 15:35:28

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	4.500E+00	5.249E-01	5.548E-01	2.589E-02	8.112
CS-137	5.041E-02	1.897E-02	5.046E-02	3.427E-03	0.999
TL-208	6.559E-02	1.805E-02	5.152E-02	3.618E-03	1.273
PB-212	6.535E-02	2.791E-02	7.320E-02	4.169E-03	0.893
PB-214	2.126E-01	3.427E-02	8.103E-02	4.139E-03	2.623
RA-226	1.367E+00	3.162E-01	5.807E-01	2.855E-02	2.354
TH-234	1.002E+00	1.693E-01	5.165E-01	4.977E-02	1.940
U-235	9.025E-02	2.092E-02	1.971E-01	1.891E-02	0.458

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	5.729E-02		1.058E-01	4.009E-01	2.169E-02	0.143
NA-22	1.174E-02		1.561E-02	6.617E-02	2.972E-03	0.177
CR-51	-1.249E-01		8.902E-02	2.949E-01	1.525E-02	-0.424
MN-54	1.078E-02		1.449E-02	5.715E-02	3.758E-03	0.189
CO-57	-7.108E-03		6.652E-03	2.180E-02	1.458E-03	-0.326
FE-59	-4.952E-02		2.711E-02	8.286E-02	4.732E-03	-0.598
CO-60	-4.734E-03		1.876E-02	7.437E-02	3.379E-03	-0.064
ZN-65	5.142E-02		3.167E-02	1.374E-01	6.759E-03	0.374
SE-75	7.021E-03		1.200E-02	4.529E-02	2.333E-03	0.155
SR-85	-5.473E-02		1.715E-02	4.959E-02	2.710E-03	-1.104
Y-88	-1.418E-02		1.468E-02	5.241E-02	2.195E-03	-0.271
NB-95	-8.446E-03		1.361E-02	4.847E-02	3.274E-03	-0.174
ZR-95	2.150E-02		2.552E-02	1.009E-01	7.128E-03	0.213
MO-99	-1.981E-01		9.184E-02	2.679E-01	2.472E-02	-0.740
TC-99M	7.834E-03		6.883E-03	2.592E-02	1.547E-03	0.302
RU-103	-3.749E-03		1.041E-02	3.801E-02	2.246E-03	-0.099
RH-105	7.559E-02		1.362E-01	5.157E-01	2.598E-02	0.147
RH-106	-2.515E-02		8.520E-02	3.641E-01	1.983E-02	-0.069
RU-106	1.677E-01		1.277E-01	5.060E-01	4.157E-02	0.331
CD-109	-1.477E-01		1.579E-01	5.306E-01	3.090E-02	-0.278
SN-113	-2.581E-02		1.407E-02	4.400E-02	1.959E-03	-0.587
SB-124	-4.051E-03		1.160E-02	4.165E-02	2.612E-03	-0.097
SB-125	4.927E-02		2.578E-02	1.106E-01	5.241E-03	0.446
I-131	-2.819E-03		1.057E-02	3.770E-02	1.819E-03	-0.075
I-132	-2.154E-02		1.201E-02	3.717E-02	2.524E-03	-0.579
TE-132	2.143E-03		8.543E-03	3.047E-02	1.549E-03	0.070
BA-133	2.124E-03		1.550E-02	5.048E-02	3.468E-03	0.042
I-133	5.485E-03		1.142E-02	4.412E-02	2.474E-03	0.124
CS-134	-2.435E-02		1.315E-02	3.846E-02	2.421E-03	-0.633
CE-139	-3.008E-03		7.699E-03	2.707E-02	1.302E-03	-0.111
BA-140	-1.557E-02		3.828E-02	1.386E-01	2.353E-02	-0.112
LA-140	4.933E-03		8.361E-03	4.501E-02	2.018E-03	0.110
CE-141	-3.307E-02		1.221E-02	3.744E-02	2.177E-03	-0.884
CE-144	-1.017E-02		4.918E-02	1.767E-01	1.274E-02	-0.058
ND-147	1.659E-02		6.929E-02	2.653E-01	1.491E-02	0.063

Combined Activity-MDA Report (continued)
Sample ID : G8WN51AA Acquisition date : 29-APR-2005 15:35:28

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-152	2.298E-03		7.101E-02	2.874E-01	1.482E-02	0.008
EU-154	1.029E-02		9.635E-02	3.876E-01	3.006E-02	0.027
EU-155	9.542E-03		2.210E-02	8.016E-02	4.634E-03	0.119
HG-203	-4.066E-03		8.904E-03	3.193E-02	1.666E-03	-0.127
BI-211	5.661E-01		1.141E-01	4.265E-01	2.027E-02	1.327
PB-211	3.421E-01		4.938E-01	1.956E+00	1.288E-01	0.175
BI-212	3.355E-02		1.989E-01	7.554E-01	5.137E-02	0.044
BI-214	1.921E-01	+	5.310E-02	1.875E-01	1.228E-02	1.025
RN-219	1.160E-01		7.705E-02	3.004E-01	1.546E-02	0.386
RA-223	4.630E-02		9.874E-02	3.648E-01	2.086E-02	0.127
RA-224	1.133E+00		4.101E-01	9.418E-01	2.700E-01	1.202
TH-227	1.032E-01		6.064E-02	2.142E-01	1.093E-02	0.482
AC-228	4.750E-03		7.285E-02	2.636E-01	5.054E-02	0.018
RA-228	1.035E-01		6.074E-02	2.505E-01	1.565E-02	0.413
PA-231	-1.203E-01		3.172E-01	1.137E+00	7.580E-02	-0.106
TH-231	1.064E-01		8.738E-02	3.205E-01	2.178E-02	0.332
TH-232	2.857E-01		3.270E-01	1.312E+00	8.502E-02	0.218
PA-233	8.455E-03		2.057E-02	7.663E-02	3.922E-03	0.110
PA-234M	5.175E+00		2.375E+00	1.051E+01	6.076E-01	0.492
NP-237	9.065E-03		2.205E-02	8.217E-02	4.118E-03	0.110
NP-239	3.752E-02		3.171E-02	1.185E-01	6.522E-03	0.317
AM-241	2.458E-02		1.523E-02	5.666E-02	3.323E-03	0.434
ANN RAD	-1.769E-02		1.772E-02	7.377E-02	4.012E-03	-0.240

Nuclide Line Activity Report
Sample ID : G8WN51AA

Acquisition date : 29-APR-2005 15:35:28

Nuclide Type: natural

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
K-40	1460.83	10.67*	7.717E-01	4.499E+00	4.499E+00	11.66	OK

Final Mean for 1 Valid Peaks = 4.500E+00+/- 5.249E-01 (11.66%)

Nuclide Type: fission

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
CS-137	661.65	85.12*	1.613E+00	5.041E-02	5.041E-02	37.62	OK

Final Mean for 1 Valid Peaks = 5.041E-02+/- 1.897E-02 (37.62%)

Nuclide Type: Th Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
TL-208	583.02	86.00*	1.824E+00	6.555E-02	6.555E-02	27.51	OK

Final Mean for 1 Valid Peaks = 6.559E-02+/- 1.805E-02 (27.51%)

PB-212	238.58	43.60*	4.106E+00	6.533E-02	6.533E-02	42.71	OK
	300.03	3.34	3.393E+00	----- Line Not Found		-----	Absent

Final Mean for 1 Valid Peaks = 6.535E-02+/- 2.791E-02 (42.71%)

Nuclide Type: U Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
PB-214	241.92	7.46	4.061E+00	----- Line Not Found		-----	Absent
	295.09	19.20	3.443E+00	2.035E-01	2.035E-01	32.46	OK
	351.87	37.10*	2.944E+00	2.154E-01	2.154E-01	18.15	OK

Final Mean for 2 Valid Peaks = 2.126E-01+/- 3.427E-02 (16.12%)

RA-226	186.21	3.50*	4.922E+00	1.368E+00	1.368E+00	23.14	OK

Final Mean for 1 Valid Peaks = 1.367E+00+/- 3.162E-01 (23.14%)

TH-234	63.29	3.80*	6.379E+00	8.007E-01	8.007E-01	31.53	OK
	92.59	5.41	6.611E+00	1.147E+00	1.147E+00	19.17	OK

Final Mean for 2 Valid Peaks = 1.002E+00+/- 1.693E-01 (16.90%)

Nuclide Line Activity Report (continued)
Sample ID : G8WN51AA Acquisition date : 29-APR-2005 15:35:28

Nuclide Type: Ac Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
U-235	143.79	10.50*	5.732E+00	----- Line Not Found		-----	Absent
	185.74	53.00	4.930E+00	9.022E-02	9.022E-02	23.18	OK

Final Mean for 1 Valid Peaks = 9.025E-02+/- 2.092E-02 (23.18%)

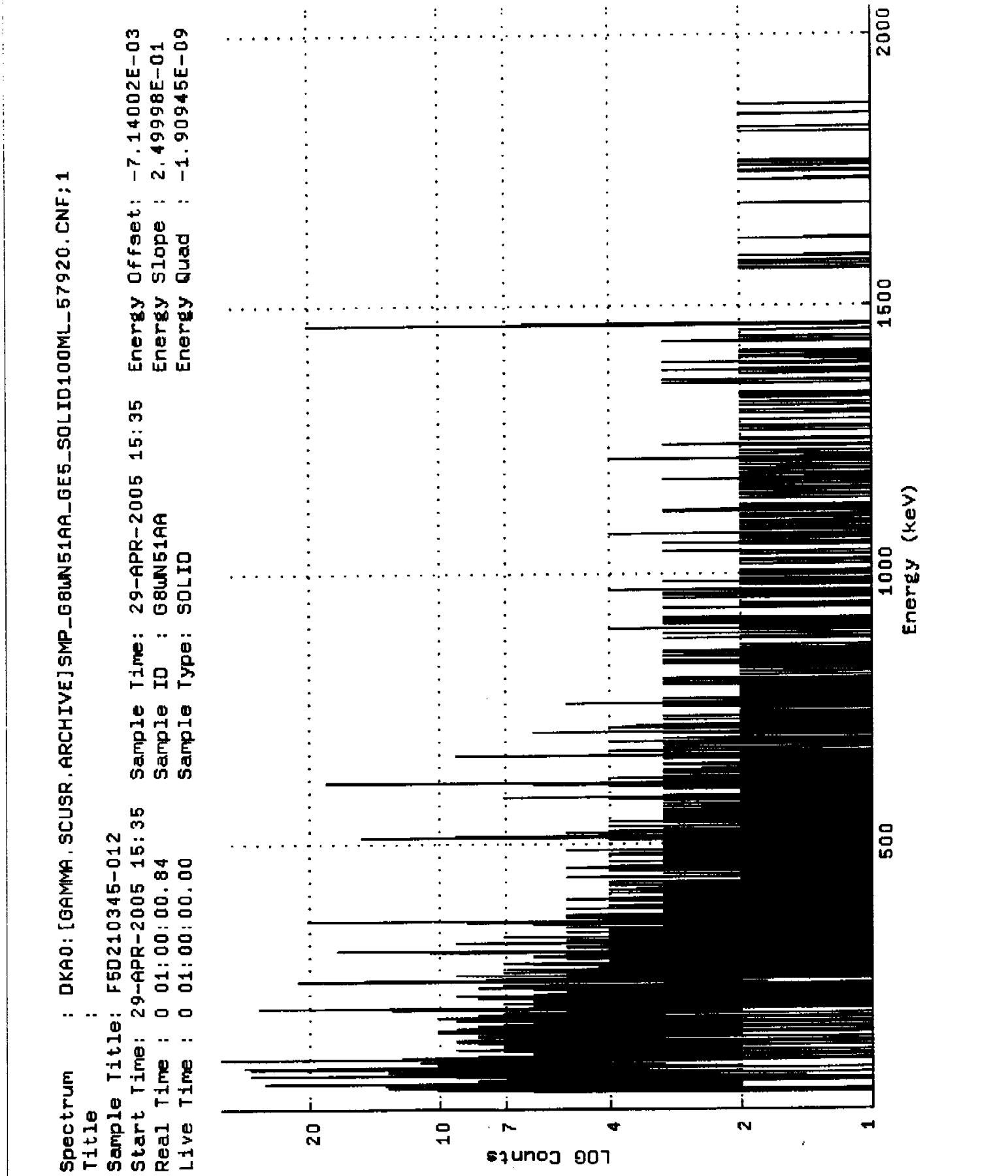
Flag: "*" = Keyline

Rejected Report
Sample ID : G8WN51AA

Acquisition date : 29-APR-2005 15:35:28

Nuclide	Half-life	Half-Life Ratio	Energy	%Abund	Activity (pCi/G)	1-Sigma %Error	Rejected by
RU-103	39.25D	0.00	497.05*	88.70	--- Not Found ---		Abun.
			610.30	5.64	1.574E+00	27.77	
		% Abundances Found =		5.98			
BI-214	1600.00Y	0.00	609.31*	46.10	1.921E-01	27.64	Abun.
			768.35	4.88	--- Not Found ---		
			1120.27	15.00	--- Not Found ---		
		% Abundances Found =		69.87			

Flag: "*" = Keyline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Title :
Sample Title: F5D210345-012
Start Time: 29-APR-2005 15:35 Sample Time: 29-APR-2005 15:35 Energy Offset: -7.14002E-03
Real Time : 0 01:00:00.84 Sample ID : G8WN51AA Energy Slope : 2.49998E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : -1.90945E-09
Log Counts
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:36:26
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN71AA_GE6_SOLID100ML_57921.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-013
Sample ID : G8WN71AA

Sample Quantity : 1.58600E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 29-APR-2005 15:36:44
Acquisition date : 29-APR-2005 15:36:44
Decay time : 0 00:00:00.00
Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.78
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE6
Counting geometry: SOLID_100ML

Energy cal. time : 3-MAR-2004 08:43:53.
Effic. cal. time : 18-JAN-2005 22:11:47
Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000
End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE6__57456.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WN71AA

Acquisition date : 29-APR-2005 15:36:44

---- Energy, FWHM, and Efficiency Curves ----

```
**********************************************************************************
*                                                                                *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)                *
*                            A = 1.54285E-01                                     *
*                            B = 2.49832E-01                                     *
*                            C = 1.86799E-08                                     *
*                                                                                *
*                                                                                *
*                       FWHM(keV) = A + (B * SQRT(Energy))                       *
*                            A = 4.67797E-01                                     *
*                            B = 3.35494E-02                                     *
*                                                                                *
*                                                                                *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)  *
*                                                                                *
*     a1=9.41250E+02   a2=-4.68519E+00 a3=8.82578E-01                            *
*     a4=8.83148E-02   a5=-2.58765E-02 a6=-1.60802E-02   a7=0.00000E+00          *
*                                                                                *
**********************************************************************************
```

Post-NID Peak Search Report
Sample ID : G8WN71AA

Acquisition date : 29-APR-2005 15:36:44

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.37*	751	227	0.76	253.02	245	13	5.2		TH-234
4	74.99*	128	236	0.72	299.52	294	21	14.3	1.43E+00	
4	77.18	163	207	0.73	308.31	294	21	10.7		
0	84.40*	147	259	0.98	337.20	330	13	21.5		TH-231
0	92.69*	1314	349	1.00	370.37	364	20	4.1		TH-234
0	98.55	117	140	0.62	393.83	389	14	20.7		
0	112.83	70	121	0.86	451.00	447	9	27.8		
0	143.85*	148	105	0.66	575.14	568	14	15.2		U-235
0	163.36	85	73	1.01	653.24	649	11	20.3		
0	185.70*	728	118	0.83	742.66	732	18	4.9		U-235
0	238.57*	188	56	0.85	954.25	944	16	10.9		PB-212
0	295.21*	114	36	1.20	1180.90	1171	18	14.2		PB-214
0	338.00	43	42	0.62	1352.17	1346	15	32.0		AC-228
0	351.77*	145	20	0.90	1407.27	1399	15	10.4		PB-214
0	583.03	54	7	0.87	2332.65	2327	13	16.1		TL-208
0	609.17*	88	21	1.36	2437.25	2428	18	15.3		
0	911.00	46	5	0.33	3644.86	3640	16	17.4		
0	1000.82	57	9	1.40	4004.15	3994	19	17.2		PA-234M
0	1460.47*	159	11	1.34	5842.65	5832	21	9.2		K-40

Summary of Nuclide Activity
Sample ID : G8WN71AA

Acquisition date : 29-APR-2005 15:36:44

Total number of lines in spectrum	19	
Number of unidentified lines	4	
Number of lines tentatively identified by NID	15	78.95%

Nuclide Type : natural

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	1.107E+01	1.107E+01	0.125E+01	11.33	
	Total Activity :		1.107E+01	1.107E+01			

Nuclide Type : Th Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
TL-208	1.91Y	1.00	2.085E-01	2.085E-01	0.383E-01	18.37	
PB-212	1.91Y	1.00	6.317E-01	6.318E-01	0.833E-01	13.18	
AC-228	5.75Y	1.00	6.887E-01	6.887E-01	2.591E-01	37.62	
	Total Activity :		1.529E+00	1.529E+00			

Nuclide Type : U Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
PB-214	1600.00Y	1.00	8.643E-01	8.643E-01	0.915E-01	10.59	
PA-234M	4.47E+09Y	1.00	4.722E+01	4.722E+01	0.879E+01	18.61	
TH-234	4.47E+09Y	1.00	2.109E+01	2.109E+01	0.158E+01	7.52	
	Total Activity :		6.917E+01	6.917E+01			

Nuclide Type : Ac Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
TH-231	7.13E+08Y	1.00	2.019E+00	2.019E+00	0.466E+00	23.09	
U-235	7.04E+08Y	1.00	1.632E+00	1.632E+00	0.132E+00	8.08	
	Total Activity :		3.651E+00	3.651E+00			

Grand Total Activity :	8.541E+01	8.541E+01

Flags: "K" = Keyline not found
"E" = Manually edited
"M" = Manually accepted
"A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G8WN71AA

Acquisition date : 29-APR-2005 15:36:44

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	1.107E+01	1.254E+00	1.145E+00	5.067E-02	9.667
TL-208	2.085E-01	3.831E-02	9.431E-02	6.868E-03	2.211
PB-212	6.318E-01	8.328E-02	1.359E-01	7.463E-03	4.650
PB-214	8.643E-01	9.151E-02	1.246E-01	6.688E-03	6.935
AC-228	6.887E-01	2.591E-01	4.913E-01	9.446E-02	1.402
TH-231	2.019E+00	4.663E-01	9.283E-01	6.301E-02	2.175
PA-234M	4.722E+01	8.789E+00	1.614E+01	8.255E-01	2.926
TH-234	2.109E+01	1.585E+00	1.515E+00	1.440E-01	13.918
U-235	1.632E+00	1.318E-01	4.622E-01	4.233E-02	3.531

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-7.696E-02		1.807E-01	6.413E-01	3.753E-02	-0.120
NA-22	-4.335E-02		2.794E-02	9.030E-02	3.911E-03	-0.480
CR-51	-3.285E-02		1.516E-01	5.348E-01	2.821E-02	-0.061
MN-54	1.611E-02		2.354E-02	9.545E-02	5.671E-03	0.169
CO-57	-7.065E-05		1.635E-02	5.671E-02	3.217E-03	-0.001
FE-59	3.469E-02		5.200E-02	2.081E-01	1.136E-02	0.167
CO-60	4.101E-02		2.412E-02	1.147E-01	4.876E-03	0.357
ZN-65	-1.260E-01		7.238E-02	2.356E-01	1.108E-02	-0.535
SE-75	-1.688E-02		2.751E-02	9.448E-02	4.741E-03	-0.179
SR-85	-1.374E-01		3.209E-02	7.978E-02	4.694E-03	-1.722
Y-88	-4.667E-02		2.456E-02	6.549E-02	2.745E-03	-0.713
NB-95	6.682E-02		3.485E-02	1.367E-01	8.817E-03	0.489
ZR-95	1.716E-02		3.921E-02	1.540E-01	1.049E-02	0.111
MO-99	-2.327E-01		2.097E-01	7.022E-01	6.382E-02	-0.331
TC-99M	-3.352E-03		1.826E-02	5.411E-02	2.805E-03	-0.062
RU-103	-2.225E-03		2.075E-02	7.559E-02	4.768E-03	-0.029
RH-105	-2.675E-01		2.911E-01	9.783E-01	4.969E-02	-0.273
RH-106	8.048E-01		1.758E-01	6.799E-01	3.989E-02	1.184
RU-106	4.565E-01		2.138E-01	9.047E-01	7.584E-02	0.505
CD-109	-1.321E+00		5.403E-01	1.686E+00	9.877E-02	-0.783
SN-113	-3.388E-02		2.829E-02	9.581E-02	4.751E-03	-0.354
SB-124	-5.267E-03		2.602E-02	9.450E-02	6.167E-03	-0.056
SB-125	9.789E-02		6.411E-02	2.526E-01	1.323E-02	0.387
I-131	-8.104E-03		1.998E-02	7.186E-02	3.708E-03	-0.113
I-132	-1.804E-02		2.560E-02	9.056E-02	6.230E-03	-0.199
TE-132	1.399E-02		1.584E-02	5.889E-02	2.840E-03	0.238
BA-133	5.049E-02		2.397E-02	9.607E-02	6.801E-03	0.526
I-133	5.681E-03		2.367E-02	8.752E-02	5.254E-03	0.065
CS-134	-4.111E-02		3.011E-02	8.110E-02	5.309E-03	-0.507
CS-137	5.127E-02		3.050E-02	1.226E-01	8.461E-03	0.418
CE-139	2.283E-02		1.873E-02	5.977E-02	2.627E-03	0.382
BA-140	4.300E-02		8.097E-02	3.048E-01	5.215E-02	0.141
LA-140	-1.790E-02		2.590E-02	9.790E-02	4.219E-03	-0.183
CE-141	6.746E-02		3.424E-02	1.110E-01	5.663E-03	0.608

Combined Activity-MDA Report (continued)
Sample ID : G8WN71AA Acquisition date : 29-APR-2005 15:36:44

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
CE-144	-6.170E-02		1.234E-01	4.193E-01	2.711E-02	-0.147
ND-147	-2.164E-02		1.471E-01	5.311E-01	3.194E-02	-0.041
EU-152	1.727E-01		9.335E-02	4.904E-01	2.414E-02	0.352
EU-154	-4.871E-01		2.484E-01	7.758E-01	5.492E-02	-0.628
EU-155	1.455E-01		6.971E-02	2.547E-01	1.350E-02	0.571
HG-203	-7.455E-05		1.950E-02	6.950E-02	3.574E-03	-0.001
BI-211	2.384E+00		2.946E-01	1.062E+00	5.337E-02	2.245
PB-211	3.316E-01		9.283E-01	3.619E+00	2.160E-01	0.092
BI-212	5.475E-01		4.005E-01	1.598E+00	1.064E-01	0.343
BI-214	6.613E-01	+	1.154E-01	3.962E-01	2.688E-02	1.669
RN-219	2.192E-01		1.768E-01	6.536E-01	3.294E-02	0.335
RA-223	3.130E-01		2.421E-01	8.744E-01	4.516E-02	0.358
RA-224	7.443E-01		5.965E-01	1.794E+00	5.135E-01	0.415
RA-226	2.525E+01	+	2.101E+00	4.668E+00	2.122E-01	5.409
TH-227	-2.937E-01		1.756E-01	4.745E-01	2.309E-02	-0.619
RA-228	7.836E-01	+	1.478E-01	6.323E-01	3.360E-02	1.239
PA-231	-1.838E-01		8.015E-01	2.781E+00	1.859E-01	-0.066
TH-232	-2.305E-01		6.935E-01	2.535E+00	1.448E-01	-0.091
PA-233	-2.641E-02		4.149E-02	1.418E-01	7.354E-03	-0.186
NP-237	-2.832E-02		4.449E-02	1.521E-01	7.726E-03	-0.186
NP-239	4.891E-01		1.092E-01	4.029E-01	2.094E-02	1.214
AM-241	1.522E-03		5.574E-02	1.732E-01	9.736E-03	0.009
ANN RAD	1.691E-02		3.591E-02	1.497E-01	8.774E-03	0.113

Nuclide Line Activity Report
Sample ID : G8WN71AA

Acquisition date : 29-APR-2005 15:36:44

Nuclide Type: natural

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
K-40	1460.83	10.67*	6.381E-01	1.107E+01	1.107E+01	11.33	OK

Final Mean for 1 Valid Peaks = 1.107E+01+/- 1.254E+00 (11.33%)

Nuclide Type: Th Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
TL-208	583.02	86.00*	1.432E+00	2.085E-01	2.085E-01	18.37	OK

Final Mean for 1 Valid Peaks = 2.085E-01+/- 3.831E-02 (18.37%)

PB-212	238.58	43.60*	3.234E+00	6.318E-01	6.318E-01	13.18	OK
	300.03	3.34	2.660E+00	----- Line Not Found		-----	Absent

Final Mean for 1 Valid Peaks = 6.318E-01+/- 8.328E-02 (13.18%)

AC-228	338.42	12.40*	2.387E+00	6.895E-01	6.895E-01	37.62	OK

Final Mean for 1 Valid Peaks = 6.887E-01+/- 2.591E-01 (37.62%)

Nuclide Type: U Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
PB-214	241.92	7.46	3.198E+00	----- Line Not Found		-----	Absent
	295.09	19.20	2.699E+00	1.043E+00	1.043E+00	16.05	OK
	351.87	37.10*	2.303E+00	8.025E-01	8.025E-01	12.69	OK

Final Mean for 2 Valid Peaks = 8.643E-01+/- 9.151E-02 (10.59%)

PA-234M	766.41	0.21	1.111E+00	----- Line Not Found		-----	Absent
	1001.30	0.65*	8.744E-01	4.724E+01	4.724E+01	18.61	OK

Final Mean for 1 Valid Peaks = 4.722E+01+/- 8.789E+00 (18.61%)

TH-234	63.29	3.80*	4.870E+00	1.920E+01	1.920E+01	11.93	OK
	92.59	5.41	5.227E+00	2.199E+01	2.199E+01	8.23	OK

Final Mean for 2 Valid Peaks = 2.109E+01+/- 1.585E+00 (7.52%)

Nuclide Line Activity Report (continued)
Sample ID : G8WN71AA

Acquisition date : 29-APR-2005 15:36:44

Nuclide Type: Ac Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
TH-231	84.20	6.60*	5.234E+00	2.019E+00	2.019E+00	23.09	OK
	Final Mean for 1 Valid Peaks = 2.019E+00+/- 4.663E-01 (23.09%)						
U-235	143.79	10.50*	4.563E+00	1.462E+00	1.462E+00	18.45	OK
	185.74	53.00	3.907E+00	1.664E+00	1.664E+00	8.42	OK
	Final Mean for 2 Valid Peaks = 1.632E+00+/- 1.318E-01 (8.08%)						

Flag: "*" = Keyline

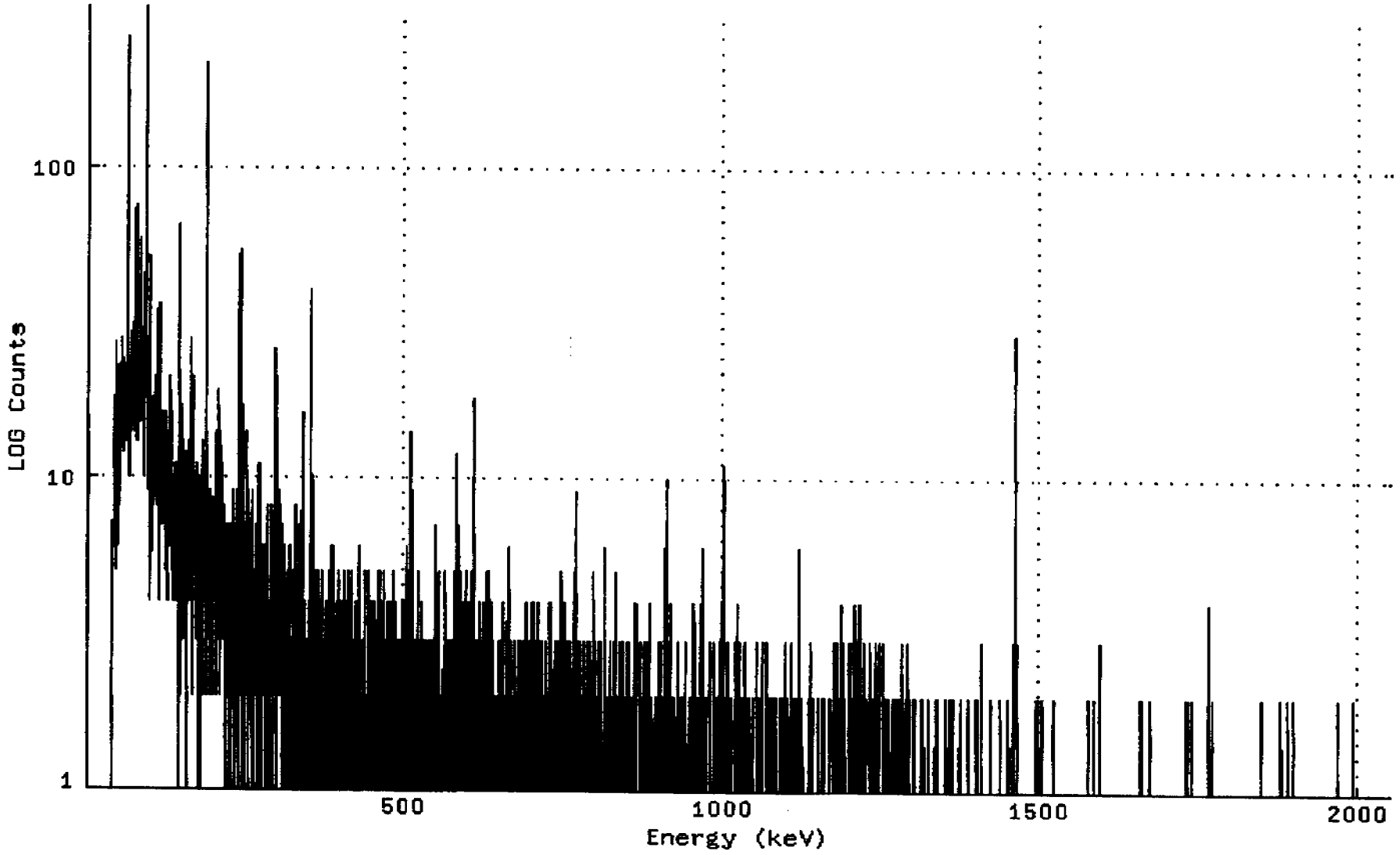
Rejected Report

Sample ID : G8WN71AA
Acquisition date : 29-APR-2005 15:36:44

Nuclide	Half-life	Half-Life Ratio	Energy	%Abund	Activity (pCi/G)	1-Sigma %Error	Rejected by
BI-214	1600.00Y	0.00	609.31*	46.10	6.613E-01	17.44	Abun.
			768.35	4.88	--- Not Found ---		
			1120.27	15.00	--- Not Found ---		
		% Abundances	Found =	69.87			
RA-226	1600.00Y	0.00	186.21*	3.50	2.525E+01	8.32	Interf Abun
		% Abundances	Found =	100.00	(Abn. Limit =	75.00%)	
RA-228	5.75Y	0.00	911.16*	29.00	7.836E-01	18.86	Abun.
			968.97	17.40	--- Not Found ---		
		% Abundances	Found =	62.50			
NP-237	2.14E+06Y	0.00	98.44	17.60	6.066E-01	21.92	Abun.
			311.98*	36.00	--- Not Found ---		
		% Abundances	Found =	32.84			

Flag: "*" = Keyline

Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN71AA_GE6_SOLID100ML_57921.CNF;1
Title :
Sample Title: F5D210345-013
Start Time: 29-APR-2005 15:36 Sample Time: 29-APR-2005 15:36 Energy Offset: 1.54285E-01
Real Time : 0 01:00:00.78 Sample ID : G8WN71AA Energy Slope : 2.49832E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : 1.86799E-08



VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:36:48
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN91AA_GE4_SOLID100ML_57927.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-014
Sample ID : G8WN91AA

Sample Quantity : 1.78200E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date	: 30-APR-2005 09:30:36	Elapsed live time:	0 01:00:00.00
Acquisition date	: 30-APR-2005 09:30:36	Elapsed real time:	0 01:00:00.68
Decay time	: 0 00:00:00.00	% dead time :	0.0%

---- Detector Parameters ----

Detector name	: GE4	Counting geometry:	SOLID_100ML
Energy cal. time	: 16-MAR-2005 08:34:49	Energy cal. type :	Poly
Effic. cal. time	: 18-JAN-2005 00:15:12	FWHM cal. type :	Sqrt

---- Processing Parameters ----

Start channel	: 150	End channel :	8100
Sensitivity	: 3.00000	Gaussian Sens. :	15.00000
Critical level?	: Yes	Propagate Errors?:	Yes
Empirical Eff?	: No	Library-based eff:	Yes
Energy tolerance	: 1.25000	Half life ratio :	8.00000
Abundance limit	: 70.00000	WTM error limit :	3.00000
MDA Width (FWHM)	: 3.00000	MDA Confid Level :	5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE4__57454.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WN91AA Acquisition date : 30-APR-2005 09:30:36

---- Energy, FWHM, and Efficiency Curves ----

```
*********************************************************************************
*                                                                               *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)               *
*                            A = 1.10653E-01                                    *
*                            B = 2.49919E-01                                    *
*                            C = 1.94892E-08                                    *
*                                                                               *
*                                                                               *
*                      FWHM(keV) = A + (B * SQRT(Energy))                       *
*                            A = 8.02351E-01                                    *
*                            B = 2.65421E-02                                    *
*                                                                               *
*                                                                               *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                               *
*     a1=9.41250E+02   a2=-4.55854E+00 a3=9.62044E-01                           *
*     a4=7.38134E-02   a5=-4.50301E-02 a6=-9.56656E-03   a7=0.00000E+00         *
*                                                                               *
*********************************************************************************
```

Post-NID Peak Search Report

Sample ID : G8WN91AA
Acquisition date : 30-APR-2005 09:30:36

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.43*	110	150	0.60	253.37	246	14	23.0		TH-234
4	75.06	88	166	0.83	299.87	293	20	16.0	8.46E-01	
4	77.24	96	137	0.83	308.61	293	20	14.9		
0	92.75*	221	151	0.70	370.66	364	15	12.6		TH-234
0	185.86*	170	74	1.25	743.19	736	18	12.9		U-235
										RA-226
0	238.76*	138	50	1.13	954.85	950	11	12.5		PB-212
0	295.14	80	39	0.47	1180.41	1173	18	19.6		PB-214
0	352.06	90	35	1.14	1408.10	1401	16	16.5		PB-214
0	583.46*	56	13	0.37	2333.74	2328	13	18.0		TL-208
0	609.54*	86	19	1.39	2438.05	2430	18	15.1		
0	1461.27	282	11	2.01	5843.87	5833	22	6.4		K-40

Summary of Nuclide Activity
Sample ID : G8WN91AA Acquisition date : 30-APR-2005 09:30:36

Total number of lines in spectrum 11
Number of unidentified lines 2
Number of lines tentatively identified by NID 9 81.82%

Nuclide Type : natural

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	1.596E+01	1.596E+01	0.127E+01	7.96	
	Total Activity :		1.596E+01	1.596E+01			

Nuclide Type : Th Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
TL-208	1.91Y	1.00	1.634E-01	1.634E-01	0.310E-01	18.97	
PB-212	1.91Y	1.00	3.433E-01	3.433E-01	0.467E-01	13.61	
	Total Activity :		5.067E-01	5.067E-01			

Nuclide Type : U Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
PB-214	1600.00Y	1.00	4.143E-01	4.143E-01	0.552E-01	13.33	
RA-226	1600.00Y	1.00	4.386E+00	4.386E+00	0.600E+00	13.68	
TH-234	4.47E+09Y	1.00	2.493E+00	2.493E+00	0.301E+00	12.07	
	Total Activity :		7.293E+00	7.293E+00			

Nuclide Type : Ac Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
U-235	7.04E+08Y	1.00	2.897E-01	2.897E-01	0.398E-01	13.74	
	Total Activity :		2.897E-01	2.897E-01			

Grand Total Activity : 2.405E+01 2.405E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G8WN91AA

Acquisition date : 30-APR-2005 09:30:36

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	1.596E+01	1.271E+00	8.612E-01	4.028E-02	18.533
TL-208	1.634E-01	3.100E-02	6.431E-02	3.923E-03	2.541
PB-212	3.433E-01	4.672E-02	1.188E-01	6.491E-03	2.891
PB-214	4.143E-01	5.524E-02	1.495E-01	7.468E-03	2.772
RA-226	4.386E+00	5.999E-01	9.890E-01	4.576E-02	4.435
TH-234	2.493E+00	3.009E-01	1.025E+00	9.816E-02	2.432
U-235	2.897E-01	3.980E-02	3.852E-01	3.561E-02	0.752

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	5.427E-03		1.380E-01	5.043E-01	2.522E-02	0.011
NA-22	3.375E-02		2.357E-02	1.040E-01	4.720E-03	0.324
CR-51	-6.500E-02		1.245E-01	4.400E-01	2.205E-02	-0.148
MN-54	-2.769E-02		1.850E-02	5.964E-02	3.201E-03	-0.464
CO-57	-5.894E-03		1.118E-02	3.887E-02	2.276E-03	-0.152
FE-59	7.352E-02		4.320E-02	1.850E-01	1.022E-02	0.397
CO-60	1.492E-03		2.187E-02	8.814E-02	3.999E-03	0.017
ZN-65	-1.327E-01		5.834E-02	1.757E-01	8.394E-03	-0.755
SE-75	2.121E-02		1.939E-02	7.173E-02	3.529E-03	0.296
SR-85	-7.015E-02		2.352E-02	6.905E-02	3.335E-03	-1.016
Y-88	7.581E-03		1.263E-02	6.830E-02	2.907E-03	0.111
NB-95	-1.477E-03		2.266E-02	8.261E-02	4.379E-03	-0.018
ZR-95	3.616E-02		3.090E-02	1.280E-01	7.245E-03	0.282
MO-99	-2.524E-01		1.613E-01	5.212E-01	4.257E-02	-0.484
TC-99M	-4.240E-02		1.283E-02	3.953E-02	2.112E-03	-1.072
RU-103	1.922E-03		1.593E-02	5.880E-02	3.193E-03	0.033
RH-105	7.846E-02		2.171E-01	8.045E-01	3.903E-02	0.098
RH-106	-5.028E-02		1.172E-01	4.884E-01	2.355E-02	-0.103
RU-106	1.617E-01		1.524E-01	6.212E-01	4.461E-02	0.260
CD-109	2.601E-01		3.413E-01	1.155E+00	6.727E-02	0.225
SN-113	3.316E-02		1.932E-02	7.745E-02	3.407E-03	0.428
SB-124	1.062E-02		1.642E-02	6.422E-02	3.233E-03	0.165
SB-125	2.620E-02		4.930E-02	1.840E-01	8.361E-03	0.142
I-131	1.236E-02		1.499E-02	5.729E-02	2.708E-03	0.216
I-132	-3.252E-03		2.237E-02	8.194E-02	4.167E-03	-0.040
TE-132	-6.826E-03		1.269E-02	4.350E-02	2.096E-03	-0.157
BA-133	-1.042E-02		2.765E-02	8.224E-02	5.585E-03	-0.127
I-133	2.409E-02		1.529E-02	6.326E-02	3.086E-03	0.381
CS-134	1.030E-02		1.944E-02	6.651E-02	3.356E-03	0.155
CS-137	7.414E-03		2.575E-02	9.547E-02	4.846E-03	0.078
CE-139	-1.216E-02		1.307E-02	4.437E-02	2.002E-03	-0.274
BA-140	1.706E-01		6.425E-02	2.561E-01	4.286E-02	0.666
LA-140	6.377E-03		2.063E-02	8.941E-02	4.036E-03	0.071
CE-141	1.480E-02		2.162E-02	7.778E-02	4.086E-03	0.190
CE-144	-3.841E-02		8.577E-02	2.988E-01	1.974E-02	-0.129
ND-147	6.926E-02		1.030E-01	3.981E-01	1.944E-02	0.174

Combined Activity-MDA Report (continued)
Sample ID : G8WN91AA Acquisition date : 30-APR-2005 09:30:36

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-152	-2.363E-02		1.008E-01	3.982E-01	2.055E-02	-0.059
EU-154	2.326E-02		1.739E-01	6.735E-01	4.655E-02	0.035
EU-155	-7.753E-03		4.565E-02	1.553E-01	8.345E-03	-0.050
HG-203	0.000E+00		0.000E+00	5.431E-02	2.718E-03	0.000
BI-211	9.344E-01		1.873E-01	6.843E-01	3.170E-02	1.365
PB-211	-7.269E-01		6.283E-01	2.114E+00	1.134E-01	-0.344
BI-212	7.930E-01		3.653E-01	1.476E+00	7.726E-02	0.537
BI-214	4.881E-01	+	7.797E-02	2.876E-01	1.530E-02	1.697
RN-219	1.364E-01		1.307E-01	4.770E-01	2.348E-02	0.286
RA-223	4.997E-02		1.971E-01	6.974E-01	3.691E-02	0.072
RA-224	2.488E+00		8.381E-01	1.648E+00	4.715E-01	1.510
TH-227	1.824E-01		1.168E-01	3.845E-01	1.862E-02	0.474
AC-228	4.806E-01		1.519E-01	5.027E-01	9.621E-02	0.956
RA-228	4.534E-01		1.054E-01	4.613E-01	2.468E-02	0.983
PA-231	-9.328E-01		5.615E-01	1.856E+00	1.211E-01	-0.502
TH-231	6.464E-03		1.847E-01	6.284E-01	4.260E-02	0.010
TH-232	1.733E+00		5.890E-01	2.513E+00	1.350E-01	0.690
PA-233	8.843E-02		3.031E-02	1.248E-01	6.168E-03	0.709
PA-234M	1.582E+01		4.118E+00	1.877E+01	9.713E-01	0.843
NP-237	9.482E-02		3.248E-02	1.338E-01	6.466E-03	0.709
NP-239	-5.766E-02		6.493E-02	2.149E-01	1.125E-02	-0.268
AM-241	-2.632E-02		3.473E-02	9.935E-02	5.714E-03	-0.265
ANN RAD	-8.398E-03		2.483E-02	1.027E-01	4.947E-03	-0.082

Nuclide Line Activity Report
Sample ID : G8WN91AA

Acquisition date : 30-APR-2005 09:30:36

Nuclide Type: natural

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
K-40	1460.83	10.67*	6.987E-01	1.596E+01	1.596E+01	7.96	OK

Final Mean for 1 Valid Peaks = 1.596E+01+/- 1.271E+00 (7.96%)

Nuclide Type: Th Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
TL-208	583.02	86.00*	1.680E+00	1.633E-01	1.633E-01	18.97	OK

Final Mean for 1 Valid Peaks = 1.634E-01+/- 3.100E-02 (18.97%)

PB-212	238.58	43.60*	3.880E+00	3.431E-01	3.431E-01	13.61	OK
	300.03	3.34	3.188E+00	----- Line Not Found		-----	Absent

Final Mean for 1 Valid Peaks = 3.433E-01+/- 4.672E-02 (13.61%)

Nuclide Type: U Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
PB-214	241.92	7.46	3.836E+00	----- Line Not Found		-----	Absent
	295.09	19.20	3.236E+00	5.392E-01	5.392E-01	20.28	OK
	351.87	37.10*	2.753E+00	3.713E-01	3.713E-01	17.23	OK

Final Mean for 2 Valid Peaks = 4.143E-01+/- 5.524E-02 (13.33%)

RA-226	186.21	3.50*	4.673E+00	4.392E+00	4.392E+00	13.68	OK

Final Mean for 1 Valid Peaks = 4.386E+00+/- 5.999E-01 (13.68%)

TH-234	63.29	3.80*	5.976E+00	2.032E+00	2.032E+00	24.93	OK
	92.59	5.41	6.273E+00	2.746E+00	2.746E+00	13.63	OK

Final Mean for 2 Valid Peaks = 2.493E+00+/- 3.009E-01 (12.07%)

Nuclide Type: Ac Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
U-235	143.79	10.50*	5.457E+00	----- Line Not Found		-----	Absent
	185.74	53.00	4.681E+00	2.895E-01	2.895E-01	13.74	OK

Final Mean for 1 Valid Peaks = 2.897E-01+/- 3.980E-02 (13.74%)

Nuclide Line Activity Report (continued)
Sample ID : G8WN91AA Acquisition date : 30-APR-2005 09:30:36

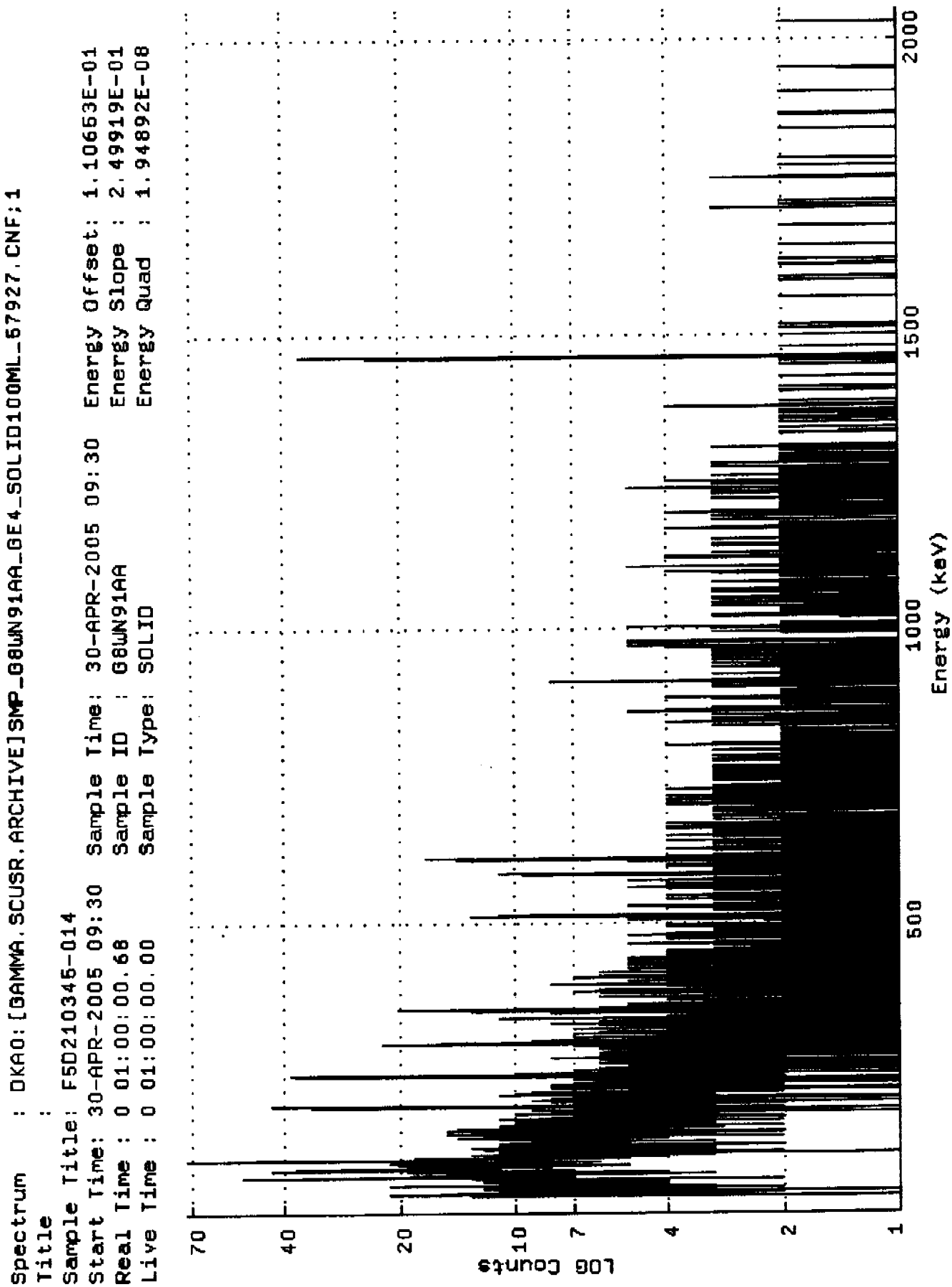
Flag: "*" = Keyline

Rejected Report

Sample ID : G8WN91AA
Acquisition date : 30-APR-2005 09:30:36

Nuclide	Half-life	Half-Life Ratio	Energy	%Abund	Activity (pCi/G)	1-Sigma %Error	Rejected by
RU-103	39.25D	0.00	497.05*	88.70	--- Not Found ---		Abun.
			610.30	5.64	3.997E+00	16.20	
		% Abundances	Found =	5.98			
BI-214	1600.00Y	0.00	609.31*	46.10	4.881E-01	15.98	Abun.
			768.35	4.88	--- Not Found ---		
			1120.27	15.00	--- Not Found ---		
		% Abundances	Found =	69.87			

Flag: "*" = Keyline


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN91AA_GE4_SOLID100ML_57927.CNF;1
Title :
Sample Title: F5D210345-014
Start Time: 30-APR-2005 09:30 Sample Time: 30-APR-2005 09:30 Energy Offset: 1.10663E-01
Real Time : 0 01:00:00.68 Sample ID : G8WN91AA Energy Slope : 2.49919E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : 1.94892E-08
Log Counts
70
40
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:37:12
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WPC1AA_GE5_SOLID100ML_57928.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-015
Sample ID : G8WPC1AA

Sample Quantity : 1.55300E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 30-APR-2005 09:31:42
Acquisition date : 30-APR-2005 09:31:42
Decay time : 0 00:00:00.00
Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.88
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE5
Counting geometry: SOLID_100ML

Energy cal. time : 9-MAR-2005 09:18:16.
Effic. cal. time : 18-JAN-2005 09:43:11
Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000
End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE5__57455.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WPC1AA Acquisition date : 30-APR-2005 09:31:42

---- Energy, FWHM, and Efficiency Curves ----

```
*************************************************************************
*                                                                       *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)       *
*                          A = -7.14002E-03                             *
*                          B = 2.49998E-01                              *
*                          C = -1.90945E-09                             *
*                                                                       *
*                                                                       *
*                    FWHM(keV) = A + (B * SQRT(Energy))                 *
*                          A = 5.02556E-01                              *
*                          B = 3.66242E-02                              *
*                                                                       *
*                                                                       *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                       *
*     a1=9.41250E+02   a2=-4.46457E+00 a3=9.42586E-01                   *
*     a4=5.97186E-02   a5=-3.91387E-02 a6=-9.36517E-03   a7=0.00000E+00 *
*                                                                       *
*************************************************************************
```

Post-NID Peak Search Report
Sample ID : G8WPC1AA

Acquisition date : 30-APR-2005 09:31:42

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.35*	52	85	0.74	253.43	245	14	36.8		TH-234
5	74.79	85	67	0.83	299.20	295	20	13.7	6.72E-01	
5	77.04*	116	67	0.84	308.19	295	20	11.4		
0	92.75*	92	103	0.54	371.02	364	15	24.4		TH-234
0	143.71	27	37	0.47	574.87	568	13	44.1		
0	238.80*	127	34	0.85	955.26	951	11	12.2		PB-212
0	295.39	74	15	1.07	1181.62	1175	14	15.2		PB-214
0	352.05*	71	40	1.08	1408.25	1400	17	21.5		PB-214
0	583.34	39	12	0.95	2333.45	2326	16	23.8		TL-208
0	609.96	61	11	0.78	2439.94	2430	17	16.8		
0	1461.34	124	15	1.89	5845.72	5837	21	11.0		K-40

Summary of Nuclide Activity
Sample ID : G8WPC1AA Acquisition date : 30-APR-2005 09:31:42

Total number of lines in spectrum 11
Number of unidentified lines 2
Number of lines tentatively identified by NID 9 81.82%

Nuclide Type : natural

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	7.286E+00	7.286E+00	0.871E+00	11.96	
Total Activity :			7.286E+00	7.286E+00			

Nuclide Type : Th Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
TL-208	1.91Y	1.00	1.196E-01	1.196E-01	0.296E-01	24.79	
PB-212	1.91Y	1.00	3.438E-01	3.438E-01	0.463E-01	13.46	
Total Activity :			4.634E-01	4.634E-01			

Nuclide Type : U Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
PB-214	1600.00Y	1.00	4.032E-01	4.032E-01	0.545E-01	13.51	
TH-234	4.47E+09Y	1.00	1.164E+00	1.164E+00	0.243E+00	20.91	
Total Activity :			1.567E+00	1.567E+00			

Grand Total Activity : 9.317E+00 9.317E+00

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G8WPC1AA

Acquisition date : 30-APR-2005 09:31:42

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	7.286E+00	8.712E-01	9.118E-01	4.254E-02	7.991
TL-208	1.196E-01	2.964E-02	7.860E-02	5.519E-03	1.521
PB-212	3.438E-01	4.627E-02	1.009E-01	5.746E-03	3.408
PB-214	4.032E-01	5.446E-02	1.116E-01	5.702E-03	3.612
TH-234	1.164E+00	2.435E-01	7.780E-01	7.496E-02	1.496

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	2.024E-01		1.373E-01	5.569E-01	3.013E-02	0.364
NA-22	5.508E-03		2.523E-02	1.002E-01	4.500E-03	0.055
CR-51	-1.663E-01		1.307E-01	4.379E-01	2.264E-02	-0.380
MN-54	3.279E-02		2.335E-02	9.430E-02	6.202E-03	0.348
CO-57	2.350E-02		9.439E-03	3.624E-02	2.423E-03	0.648
FE-59	5.905E-02		4.542E-02	1.888E-01	1.078E-02	0.313
CO-60	5.068E-03		2.865E-02	1.164E-01	5.291E-03	0.044
ZN-65	-1.924E-01		6.142E-02	1.626E-01	7.999E-03	-1.183
SE-75	-2.094E-02		1.708E-02	5.837E-02	3.007E-03	-0.359
SR-85	-7.383E-02		2.498E-02	7.482E-02	4.090E-03	-0.987
Y-88	-2.433E-02		2.079E-02	7.099E-02	2.973E-03	-0.343
NB-95	-7.849E-03		2.199E-02	7.936E-02	5.361E-03	-0.099
ZR-95	1.010E-02		3.648E-02	1.395E-01	9.851E-03	0.072
MO-99	2.324E-01		1.324E-01	5.712E-01	5.271E-02	0.407
TC-99M	6.274E-03		1.139E-02	3.670E-02	2.191E-03	0.171
RU-103	-1.743E-02		1.593E-02	5.452E-02	3.221E-03	-0.320
RH-105	3.240E-02		1.823E-01	6.829E-01	3.440E-02	0.047
RH-106	-1.052E-01		1.316E-01	5.431E-01	2.957E-02	-0.194
RU-106	3.277E-01		1.682E-01	7.057E-01	5.797E-02	0.464
CD-109	4.369E-01		2.499E-01	9.226E-01	5.373E-02	0.474
SN-113	-2.220E-02		1.897E-02	6.319E-02	2.813E-03	-0.351
SB-124	8.751E-03		1.765E-02	6.717E-02	4.211E-03	0.130
SB-125	6.279E-02		4.384E-02	1.785E-01	8.457E-03	0.352
I-131	3.147E-04		1.453E-02	5.316E-02	2.564E-03	0.006
I-132	-7.981E-03		2.110E-02	7.734E-02	5.252E-03	-0.103
TE-132	2.526E-02		1.084E-02	4.323E-02	2.197E-03	0.584
BA-133	-1.539E-02		2.388E-02	6.927E-02	4.758E-03	-0.222
I-133	-7.071E-03		1.685E-02	6.085E-02	3.413E-03	-0.116
CS-134	-2.010E-02		1.935E-02	5.488E-02	3.455E-03	-0.366
CS-137	5.114E-02		2.857E-02	1.190E-01	8.080E-03	0.430
CE-139	-1.295E-02		1.138E-02	3.854E-02	1.853E-03	-0.336
BA-140	-2.586E-03		5.404E-02	2.028E-01	3.443E-02	-0.013
LA-140	-3.002E-02		2.179E-02	7.280E-02	3.264E-03	-0.412
CE-141	-1.767E-02		1.934E-02	5.637E-02	3.278E-03	-0.313
CE-144	-1.241E-02		6.647E-02	2.404E-01	1.733E-02	-0.052
ND-147	5.694E-02		1.042E-01	4.060E-01	2.282E-02	0.140
EU-152	1.451E-01		8.870E-02	4.397E-01	2.268E-02	0.330
EU-154	1.898E-02		1.558E-01	6.170E-01	4.785E-02	0.031

Combined Activity-MDA Report (continued)
Sample ID : G8WPC1AA Acquisition date : 30-APR-2005 09:31:42

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-155	-2.948E-03		3.712E-02	1.297E-01	7.500E-03	-0.023
HG-203	-8.412E-03		1.487E-02	5.254E-02	2.741E-03	-0.160
BI-211	1.281E+00		1.676E-01	6.902E-01	3.281E-02	1.856
PB-211	2.088E-01		7.946E-01	3.006E+00	1.980E-01	0.069
BI-212	5.254E-01		2.999E-01	1.248E+00	8.484E-02	0.421
BI-214	3.640E-01	+	6.572E-02	2.549E-01	1.670E-02	1.428
RN-219	9.226E-02		1.132E-01	4.293E-01	2.210E-02	0.215
RA-223	9.635E-03		1.535E-01	5.541E-01	3.168E-02	0.017
RA-224	1.094E+00		5.115E-01	1.390E+00	3.985E-01	0.787
RA-226	1.637E+00		3.547E-01	1.450E+00	7.127E-02	1.129
TH-227	1.155E-02		1.116E-01	3.396E-01	1.732E-02	0.034
AC-228	4.684E-01		1.449E-01	4.865E-01	9.327E-02	0.963
RA-228	3.213E-01		1.026E-01	4.371E-01	2.731E-02	0.735
PA-231	-7.411E-01		5.144E-01	1.709E+00	1.139E-01	-0.434
TH-231	2.377E-01		1.268E-01	4.757E-01	3.232E-02	0.500
TH-232	6.205E-02		4.613E-01	1.760E+00	1.140E-01	0.035
PA-233	4.383E-03		2.856E-02	1.055E-01	5.400E-03	0.042
PA-234M	1.009E+01		4.073E+00	1.768E+01	1.022E+00	0.571
U-235	2.186E-01	+	9.872E-02	3.147E-01	3.019E-02	0.694
NP-237	4.700E-03		3.062E-02	1.131E-01	5.670E-03	0.042
NP-239	2.371E-02		4.839E-02	1.748E-01	9.621E-03	0.136
AM-241	8.330E-03		2.707E-02	8.901E-02	5.220E-03	0.094
ANN RAD	4.389E-03		2.716E-02	1.151E-01	6.259E-03	0.038

Nuclide Line Activity Report
Sample ID : G8WPC1AA

Acquisition date : 30-APR-2005 09:31:42

Nuclide Type: natural

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
K-40	1460.83	10.67*	7.717E-01	7.284E+00	7.284E+00	11.96	OK

Final Mean for 1 Valid Peaks = 7.286E+00+/- 8.712E-01 (11.96%)

Nuclide Type: Th Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
TL-208	583.02	86.00*	1.824E+00	1.195E-01	1.195E-01	24.79	OK

Final Mean for 1 Valid Peaks = 1.196E-01+/- 2.964E-02 (24.79%)

PB-212	238.58	43.60*	4.106E+00	3.436E-01	3.436E-01	13.46	OK
	300.03	3.34	3.393E+00	----- Line Not Found		-----	Absent

Final Mean for 1 Valid Peaks = 3.438E-01+/- 4.627E-02 (13.46%)

Nuclide Type: U Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
PB-214	241.92	7.46	4.061E+00	----- Line Not Found		-----	Absent
	295.09	19.20	3.443E+00	5.380E-01	5.380E-01	16.15	OK
	351.87	37.10*	2.944E+00	3.158E-01	3.158E-01	22.11	OK

Final Mean for 2 Valid Peaks = 4.032E-01+/- 5.446E-02 (13.51%)

TH-234	63.29	3.80*	6.379E+00	1.037E+00	1.037E+00	38.02	OK
	92.59	5.41	6.611E+00	1.243E+00	1.243E+00	24.91	OK

Final Mean for 2 Valid Peaks = 1.164E+00+/- 2.435E-01 (20.91%)

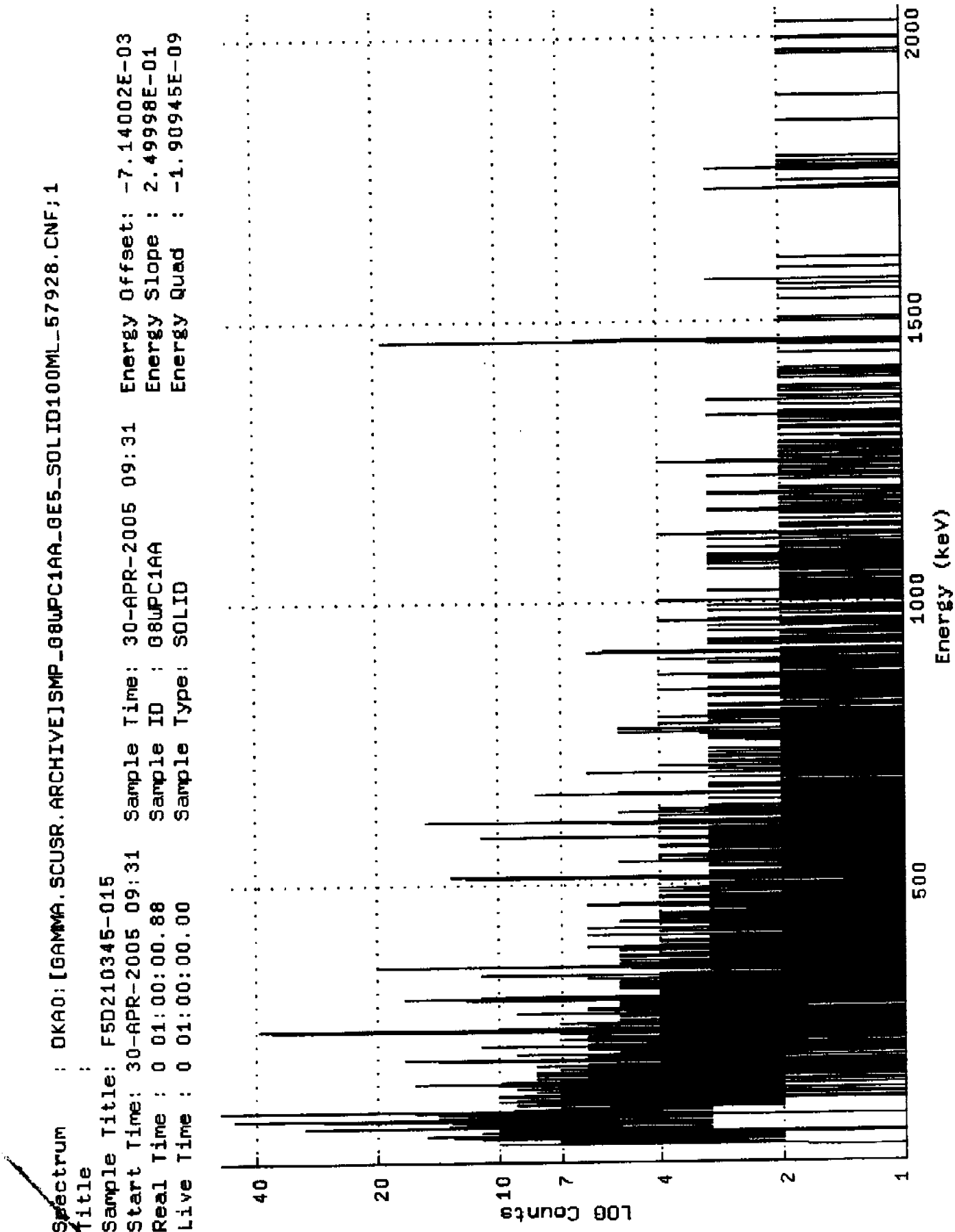
Flag: "*" = Keyline

Rejected Report

Sample ID : G8WPC1AA
Acquisition date : 30-APR-2005 09:31:42

Nuclide	Half-life	Half-Life Ratio	Energy	%Abund	Activity (pCi/G)	1-Sigma %Error	Rejected by
RU-103	39.25D	0.00	497.05*	88.70	--- Not Found ---		Abun.
			610.30	5.64	2.981E+00	18.26	
		% Abundances Found =		5.98			
BI-214	1600.00Y	0.00	609.31*	46.10	3.640E-01	18.05	Abun.
			768.35	4.88	--- Not Found ---		
			1120.27	15.00	--- Not Found ---		
		% Abundances Found =		69.87			
U-235	7.04E+08Y	0.00	143.79*	10.50	2.186E-01	45.17	Abun.
			185.74	53.00	--- Not Found ---		
		% Abundances Found =		16.54			

Flag: "*" = Keyline


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8UPC1AA_GE5_SOLID100ML_57928.CNF;1
Title :
Sample Title: F5D210345-015
Start Time: 30-APR-2005 09:31
Real Time : 0 01:00:00.88
Live Time : 0 01:00:00.00
Sample Time: 30-APR-2005 09:31
Sample ID : G8UPC1AA
Sample Type: SOLID
Energy Offset: -7.14002E-03
Energy Slope : 2.49998E-01
Energy Quad : -1.90945E-09
Log Counts
40
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:46:47
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G9EAH1AA_GE6_SOLID100ML_57929.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D280000-394B
Sample ID : G9EAH1AA

Sample Quantity : 1.47200E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date	: 30-APR-2005 09:32:22	Elapsed live time:	0 01:00:00.00
Acquisition date	: 30-APR-2005 09:32:22	Elapsed real time:	0 01:00:00.30
Decay time	: 0 00:00:00.00	% dead time :	0.0%

---- Detector Parameters ----

Detector name	: GE6	Counting geometry:	SOLID_100ML
Energy cal. time	: 3-MAR-2004 08:43:53.	Energy cal. type :	Poly
Effic. cal. time	: 18-JAN-2005 22:11:47	FWHM cal. type :	Sqrt

---- Processing Parameters ----

Start channel	: 150	End channel :	8100
Sensitivity	: 3.00000	Gaussian Sens. :	15.00000
Critical level?	: Yes	Propagate Errors?:	Yes
Empirical Eff?	: No	Library-based eff:	Yes
Energy tolerance	: 1.25000	Half life ratio :	8.00000
Abundance limit	: 70.00000	WTM error limit :	3.00000
MDA Width (FWHM)	: 3.00000	MDA Confid Level :	5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE6__57456.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G9EAH1AA Acquisition date : 30-APR-2005 09:32:22

---- Energy, FWHM, and Efficiency Curves ----

```
**********************************************************************************
*                                                                                *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)                *
*                            A = 1.54285E-01                                     *
*                            B = 2.49832E-01                                     *
*                            C = 1.86799E-08                                     *
*                                                                                *
*                                                                                *
*                   FWHM(keV) = A + (B * SQRT(Energy))                           *
*                            A = 4.67797E-01                                     *
*                            B = 3.35494E-02                                     *
*                                                                                *
*                                                                                *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)  *
*                                                                                *
*     a1=9.41250E+02   a2=-4.68519E+00 a3=8.82578E-01                            *
*     a4=8.83148E-02   a5=-2.58765E-02 a6=-1.60802E-02   a7=0.00000E+00          *
*                                                                                *
**********************************************************************************
```

Post-NID Peak Search Report
***** No peaks found *****

Summary of Nuclide Activity
Sample ID : G9EAH1AA

Acquisition date : 30-APR-2005 09:32:22

**** There are no nuclides meeting summary criteria ****

Flags: "K" = Keyline not found
"E" = Manually edited
"M" = Manually accepted
"A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G9EAH1AA

Acquisition date : 30-APR-2005 09:32:22

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-1.891E-01		1.631E-01	5.491E-01	3.213E-02	-0.344
NA-22	2.149E-02		1.897E-02	9.382E-02	4.063E-03	0.229
K-40	7.008E-02		2.722E-01	1.247E+00	5.522E-02	0.056
CR-51	-4.897E-02		1.017E-01	3.668E-01	1.935E-02	-0.133
MN-54	-1.884E-02		1.180E-02	3.651E-02	2.169E-03	-0.516
CO-57	-5.278E-03		9.122E-03	3.203E-02	1.817E-03	-0.165
FE-59	-1.241E-02		2.010E-02	8.230E-02	4.493E-03	-0.151
CO-60	-7.904E-03		1.983E-02	7.986E-02	3.394E-03	-0.099
ZN-65	-7.096E-03		4.777E-02	1.900E-01	8.938E-03	-0.037
SE-75	2.312E-02		1.483E-02	6.317E-02	3.170E-03	0.366
SR-85	-7.429E-02		2.612E-02	7.463E-02	4.391E-03	-0.995
Y-88	-2.034E-02		1.979E-02	7.056E-02	2.957E-03	-0.288
NB-95	3.279E-03		1.696E-02	6.903E-02	4.452E-03	0.048
ZR-95	-1.233E-04		2.719E-02	1.109E-01	7.551E-03	-0.001
MO-99	5.117E-02		9.756E-02	4.415E-01	4.012E-02	0.116
TC-99M	1.561E-03		1.004E-02	3.657E-02	1.896E-03	0.043
RU-103	1.804E-02		1.381E-02	6.122E-02	3.861E-03	0.295
RH-105	2.021E-03		2.000E-01	7.473E-01	3.796E-02	0.003
RH-106	2.667E-01		1.499E-01	5.699E-01	3.343E-02	0.468
RU-106	-1.045E-01		1.910E-01	6.997E-01	5.866E-02	-0.149
CD-109	2.741E-01		2.029E-01	7.994E-01	4.684E-02	0.343
SN-113	1.320E-02		1.869E-02	7.620E-02	3.778E-03	0.173
SB-124	1.230E-02		1.700E-02	7.063E-02	4.610E-03	0.174
SB-125	1.247E-02		3.980E-02	1.600E-01	8.379E-03	0.078
I-131	8.647E-03		1.521E-02	6.074E-02	3.135E-03	0.142
I-132	8.992E-03		1.886E-02	7.833E-02	5.389E-03	0.115
TE-132	1.684E-03		1.162E-02	4.351E-02	2.099E-03	0.039
BA-133	-9.804E-03		1.863E-02	6.901E-02	4.885E-03	-0.142
I-133	2.454E-02		1.859E-02	7.828E-02	4.699E-03	0.313
CS-134	-2.862E-02		1.821E-02	5.970E-02	3.908E-03	-0.479
CS-137	2.949E-02		1.909E-02	8.621E-02	5.949E-03	0.342
CE-139	-6.130E-03		1.243E-02	4.283E-02	1.883E-03	-0.143
BA-140	-6.139E-03		6.141E-02	2.319E-01	3.968E-02	-0.026
LA-140	-2.649E-02		1.992E-02	6.607E-02	2.848E-03	-0.401
CE-141	1.475E-03		1.374E-02	5.136E-02	2.621E-03	0.029
CE-144	6.657E-02		6.331E-02	2.491E-01	1.610E-02	0.267
ND-147	-1.553E-01		1.197E-01	3.927E-01	2.362E-02	-0.395
EU-152	-4.162E-02		8.572E-02	3.479E-01	1.712E-02	-0.120
EU-154	-1.217E-01		1.931E-01	7.126E-01	5.045E-02	-0.171
EU-155	4.316E-02		3.183E-02	1.281E-01	6.785E-03	0.337
HG-203	2.274E-03		1.631E-02	6.007E-02	3.089E-03	0.038
TL-208	6.019E-02		2.495E-02	1.076E-01	7.837E-03	0.559
BI-211	2.029E-01		1.132E-01	4.894E-01	2.460E-02	0.415
PB-211	1.992E-01		4.593E-01	2.121E+00	1.266E-01	0.094
BI-212	1.138E-01		2.985E-01	1.193E+00	7.945E-02	0.095
PB-212	3.225E-02		2.864E-02	1.188E-01	6.525E-03	0.272
BI-214	6.616E-02		4.963E-02	2.147E-01	1.457E-02	0.308
PB-214	6.776E-02		3.825E-02	1.641E-01	8.809E-03	0.413

Combined Activity-MDA Report (continued)
Sample ID : G9EAH1AA Acquisition date : 30-APR-2005 09:32:22

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
RN-219	4.211E-02		1.085E-01	4.142E-01	2.088E-02	0.102
RA-223	-1.385E-01		1.474E-01	4.980E-01	2.572E-02	-0.278
RA-224	-1.235E+00		4.743E-01	8.480E-01	2.427E-01	-1.457
RA-226	2.320E-01		2.998E-01	1.232E+00	5.599E-02	0.188
TH-227	-3.015E-01		1.112E-01	3.331E-01	1.621E-02	-0.905
AC-228	5.317E-02		1.081E-01	4.199E-01	8.072E-02	0.127
RA-228	2.411E-01		7.729E-02	3.834E-01	2.037E-02	0.629
PA-231	-3.799E-01		5.514E-01	1.913E+00	1.279E-01	-0.199
TH-231	4.000E-01		1.282E-01	5.272E-01	3.579E-02	0.759
TH-232	1.862E-02		3.684E-01	1.550E+00	8.855E-02	0.012
PA-233	8.847E-03		2.825E-02	1.081E-01	5.606E-03	0.082
PA-234M	-1.338E+00		2.665E+00	1.035E+01	5.297E-01	-0.129
TH-234	3.568E-01		2.552E-01	1.044E+00	9.926E-02	0.342
U-235	-1.578E-02		7.594E-02	2.847E-01	2.608E-02	-0.055
NP-237	9.486E-03		3.028E-02	1.159E-01	5.889E-03	0.082
NP-239	3.835E-02		4.049E-02	1.615E-01	8.396E-03	0.237
AM-241	-1.265E-02		2.203E-02	7.586E-02	4.264E-03	-0.167
ANN RAD	-9.827E-02		3.346E-02	1.309E-01	7.672E-03	-0.751

Nuclide Line Activity Report
Sample ID : G9EAH1AA

Acquisition date : 30-APR-2005 09:32:22

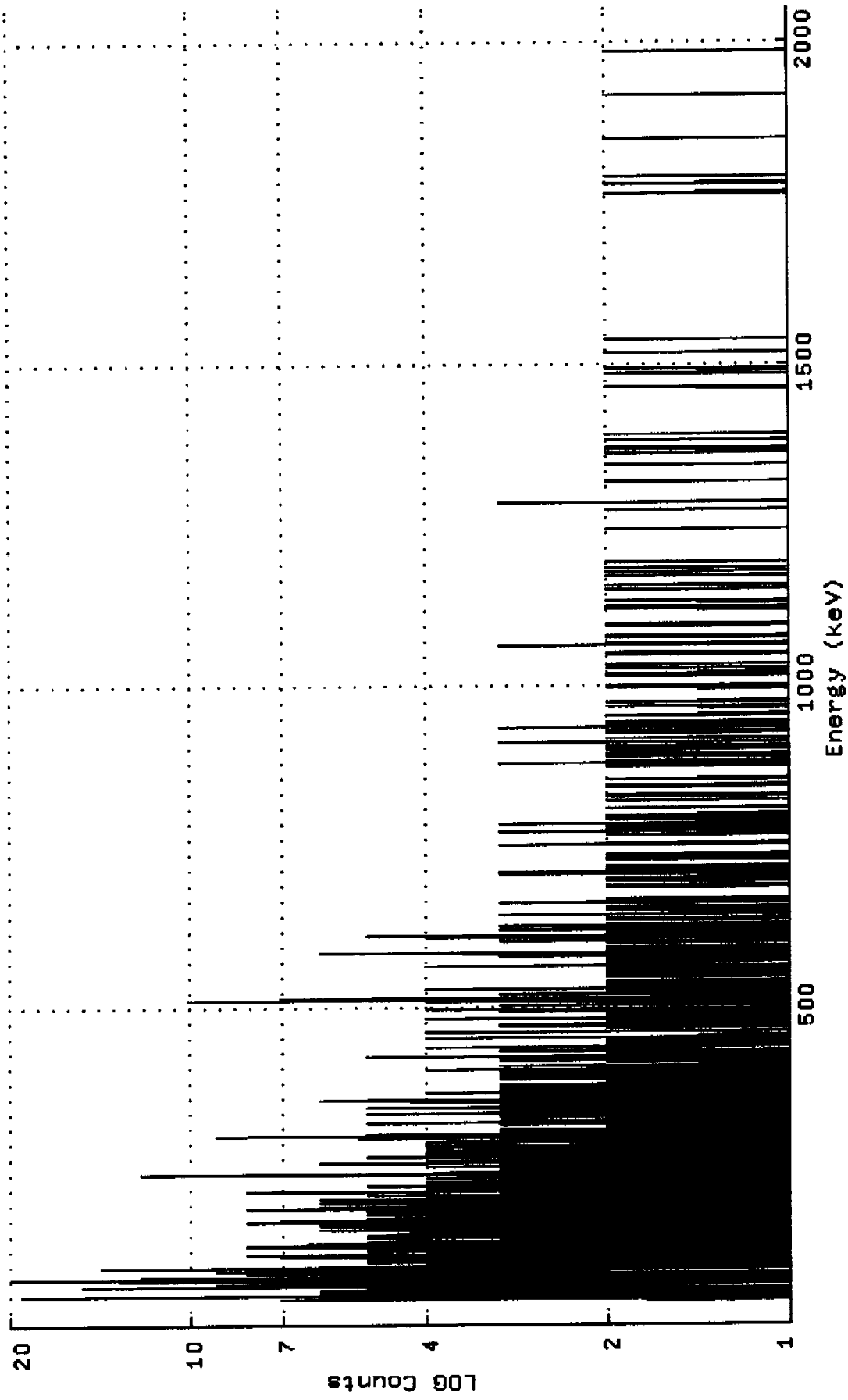
Flag: "*" = Keyline

Rejected Report
Sample ID : G9EAH1AA

Acquisition date : 30-APR-2005 09:32:22

Flag: "*" = Keyline

Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G9EAH1AA_GE6_SOLID100ML_57929.CNF;1
Title :
Sample Title: F5D280000-394B
Start Time: 30-APR-2005 09:32 Sample Time: 30-APR-2005 09:32 Energy Offset: 1.54285E-01
Real Time : 0 01:00:00.30 Sample ID : G9EAH1AA Energy Slope : 2.49832E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : 1.86799E-08



VMS Gamma Spectroscopy Report generated 6-MAY-2005 22:47:09
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G9EAH1AC_GE4_SOLID100ML_57930.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D280000-394C
Sample ID : G9EAH1AC

Sample Quantity : 1.59200E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 1-JAN-2000 00:00:00.
Acquisition date : 30-APR-2005 11:33:40
Decay time : 1946 11:33:40.74

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:07.25
% dead time : 0.2%

---- Detector Parameters ----

Detector name : GE4

Counting geometry: SOLID_100ML

Energy cal. time : 16-MAR-2005 08:34:49
Effic. cal. time : 18-JAN-2005 00:15:12

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE4__57454.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G9EAH1AC Acquisition date : 30-APR-2005 11:33:40

---- Energy, FWHM, and Efficiency Curves ----

```
**************************************************************************
*                                                                        *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)        *
*                            A = 1.10653E-01                             *
*                            B = 2.49919E-01                             *
*                            C = 1.94892E-08                             *
*                                                                        *
*                                                                        *
*                       FWHM(keV) = A + (B * SQRT(Energy))               *
*                            A = 8.02351E-01                             *
*                            B = 2.65421E-02                             *
*                                                                        *
*                                                                        *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                        *
*     a1=9.41250E+02   a2=-4.55854E+00 a3=9.62044E-01                    *
*     a4=7.38134E-02   a5=-4.50301E-02 a6=-9.56656E-03   a7=0.00000E+00  *
*                                                                        *
**************************************************************************
```

Post-NID Peak Search Report
Sample ID : G9EAH1AC

Acquisition date : 30-APR-2005 11:33:40

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	46.61*	32736	9235	1.00	186.07	170	23	0.9		
0	59.61	31392	6221	1.05	238.09	221	26	0.8		AM-241
0	77.15	116	1039	1.15	308.26	303	12	49.0		
0	88.10	2769	1505	1.00	352.07	342	24	3.7		CD-109
0	122.08	144	612	0.35	488.01	483	14	32.6		CO-57
0	238.71*	194	504	1.11	954.63	948	15	22.9		PB-212
0	351.96	124	545	0.57	1407.69	1399	24	43.4		
0	609.23*	54	140	0.33	2436.82	2432	13	41.3		
0	661.81	7391	224	1.45	2647.12	2632	27	1.3		CS-137
0	1173.57	3972	157	1.77	4693.63	4674	35	1.8		CO-60
0	1332.89	3426	49	1.82	5330.63	5314	32	1.8		CO-60
0	1461.20	59	10	0.49	5843.59	5835	19	17.2		K-40

Summary of Nuclide Activity
Sample ID : G9EAH1AC

Acquisition date : 30-APR-2005 11:33:40

Total number of lines in spectrum	12	
Number of unidentified lines	2	
Number of lines tentatively identified by NID	10	83.33%

Nuclide Type : natural

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	3.740E+00	3.740E+00	0.665E+00	17.79	
	Total Activity :		3.740E+00	3.740E+00			

Nuclide Type : fission

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
CO-57	271.00D	145.	1.352E-01	1.964E+01	0.651E+01	33.13	
CS-137	30.20Y	1.13	2.765E+01	3.125E+01	0.163E+01	5.23	
	Total Activity :		2.779E+01	5.089E+01			

Nuclide Type : activation

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
CO-60	5.27Y	2.02	2.167E+01	4.368E+01	0.150E+01	3.44	
CD-109	464.00D	18.3	5.576E+01	1.021E+03	0.071E+03	6.91	
	Total Activity :		7.743E+01	1.065E+03			

Nuclide Type : Th Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
PB-212	1.91Y	6.92	5.422E-01	3.751E+00	0.882E+00	23.51	
	Total Activity :		5.422E-01	3.751E+00			

Nuclide Type : Np Series

Nuclide	Hlife	Decay	Wtd Mean Uncorrected pCi/G	Wtd Mean Decay Corr pCi/G	Decay Corr 1-Sigma Error	1-Sigma %Error	Flags
AM-241	432.70Y	1.01	7.116E+01	7.177E+01	0.417E+01	5.81	
	Total Activity :		7.116E+01	7.177E+01			

Grand Total Activity :	1.807E+02	1.195E+03

Flags: "K" = Keyline not found
"E" = Manually edited
"M" = Manually accepted
"A" = Nuclide specific abn. limit

Combined Activity-MDA Report
Sample ID : G9EAH1AC

Acquisition date : 30-APR-2005 11:33:40

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	3.740E+00	6.654E-01	1.227E+00	5.737E-02	3.049
CO-57	1.964E+01	6.507E+00	1.582E+01	9.424E-01	1.242
CO-60	4.368E+01	1.501E+00	3.919E-01	1.778E-02	111.452
CD-109	1.021E+03	7.060E+01	5.175E+01	3.031E+00	19.734
CS-137	3.125E+01	1.634E+00	2.825E-01	1.434E-02	110.628
PB-212	3.751E+00	8.819E-01	2.090E+00	1.143E-01	1.794
AM-241	7.177E+01	4.168E+00	5.393E-01	3.101E-02	133.080

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	1.466E+04		5.775E+04	Half-Life too short		
NA-22	-1.560E-01		1.780E-01	6.227E-01	2.826E-02	-0.251
CR-51	-7.414E+13		6.123E+14	Half-Life too short		
MN-54	1.294E+01		6.290E+00	2.216E+01	1.193E+00	0.584
FE-59	3.475E+06		2.760E+06	Half-Life too short		
ZN-65	-3.624E+01		5.007E+01	1.679E+02	8.055E+00	-0.216
SE-75	1.989E-03		5.147E-03	Half-Life too short		
SR-85	-1.180E+02		6.742E+01	Half-Life too short		
Y-88	7.963E-03		9.198E-03	Half-Life too short		
NB-95	-2.314E+09		3.781E+09	Half-Life too short		
ZR-95	1.252E+01		1.848E+02	Half-Life too short		
MO-99	-1.000E+35		2.173E+35	Half-Life too short		
TC-99M	-1.000E+35		1.789E+36	Half-Life too short		
RU-103	-2.179E+07		5.362E+07	Half-Life too short		
RH-105	1.000E+35		3.896E+34	Half-Life too short		
RH-106	7.443E+00		1.166E+01	4.135E+01	1.994E+00	0.180
RU-106	8.645E+00		2.365E+01	8.211E+01	5.978E+00	0.105
SN-113	7.719E-03		9.802E-03	Half-Life too short		
SB-124	-1.808E+02		3.162E+02	Half-Life too short		
SB-125	1.174E+00		7.771E-01	2.678E+00	1.322E-01	0.439
I-131	1.000E+35		1.932E+35	Half-Life too short		
I-132	1.000E+35		9.237E+35	Half-Life too short		
TE-132	-1.000E+35		2.708E+36	Half-Life too short		
BA-133	2.071E-03		1.272E-01	3.688E-01	2.508E-02	0.006
I-133	-1.000E+35		9.521E+34	Half-Life too short		
CS-134	7.749E-01		3.786E-01	1.265E+00	6.407E-02	0.613
CE-139	5.111E-04		6.610E-04	Half-Life too short		
BA-140	-1.000E+35		1.481E+36	Half-Life too short		
LA-140	-1.000E+35		1.507E+35	Half-Life too short		
CE-141	-2.535E+10		6.014E+10	Half-Life too short		
CE-144	-2.237E+01		2.884E+01	9.714E+01	6.425E+00	-0.230
ND-147	-1.000E+35		1.141E+35	Half-Life too short		
EU-152	-1.524E-01		2.246E-01	8.063E-01	4.173E-02	-0.189
EU-154	2.980E-01		1.148E+00	3.991E+00	2.765E-01	0.075
EU-155	-1.194E+00		2.962E-01	8.968E-01	4.819E-02	-1.331
HG-203	-8.636E+04		1.978E+05	Half-Life too short		

Combined Activity-MDA Report (continued)
Sample ID : G9EAH1AC Acquisition date : 30-APR-2005 11:33:40

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
TL-208	1.804E-01		4.671E-01	1.630E+00	9.947E-02	0.111
BI-211	1.774E+00		5.595E-01	1.726E+00	7.995E-02	1.028
PB-211	-1.709E+00		3.471E+00	1.160E+01	6.222E-01	-0.147
BI-212	-6.958E-01		6.812E+00	2.325E+01	1.217E+00	-0.030
BI-214	3.465E-01	+	1.444E-01	4.780E-01	2.542E-02	0.725
PB-214	5.736E-01	+	2.509E-01	4.865E-01	2.431E-02	1.179
RN-219	8.266E-01		4.658E-01	1.595E+00	7.956E-02	0.518
RA-223	3.147E-01		6.002E-01	2.055E+00	1.087E-01	0.153
RA-224	3.006E+01		1.170E+01	2.451E+01	7.015E+00	1.226
RA-226	7.738E-01		9.736E-01	3.328E+00	1.540E-01	0.233
TH-227	3.126E-01		4.719E-01	1.363E+00	6.688E-02	0.229
AC-228	5.471E-01		7.200E-01	2.460E+00	4.709E-01	0.222
RA-228	6.536E-01		6.622E-01	2.317E+00	1.240E-01	0.282
PA-231	-4.215E+00		1.811E+00	5.894E+00	3.844E-01	-0.715
TH-231	-1.815E-03		5.698E-01	1.616E+00	1.095E-01	-0.001
TH-232	1.465E+00		1.908E+00	6.567E+00	3.529E-01	0.223
PA-233	7.733E-02		1.063E-01	3.687E-01	1.823E-02	0.210
PA-234M	1.856E+01		1.456E+01	5.144E+01	2.663E+00	0.361
TH-234	-7.078E-02		1.119E+00	3.212E+00	3.075E-01	-0.022
U-235	2.947E-01		2.603E-01	8.966E-01	8.290E-02	0.329
NP-237	8.291E-02		1.140E-01	3.954E-01	1.911E-02	0.210
NP-239	-1.569E-01		1.907E-01	6.224E-01	3.258E-02	-0.252
ANN RAD	4.371E-02		6.216E-02	2.204E-01	1.062E-02	0.198

Nuclide Line Activity Report
Sample ID : G9EAH1AC

Acquisition date : 30-APR-2005 11:33:40

Nuclide Type: natural

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
K-40	1460.83	10.67*	6.987E-01	3.739E+00	3.739E+00	17.79	OK

Final Mean for 1 Valid Peaks = 3.740E+00+/- 6.654E-01 (17.79%)

Nuclide Type: fission

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
CO-57	122.06	85.51*	5.867E+00	1.352E-01	1.964E+01	33.13	OK
	136.48	10.60	5.598E+00	----- Line Not Found		-----	Absent

Final Mean for 1 Valid Peaks = 1.964E+01+/- 6.507E+00 (33.13%)

CS-137	661.65	85.12*	1.481E+00	2.765E+01	3.124E+01	5.23	OK

Final Mean for 1 Valid Peaks = 3.125E+01+/- 1.634E+00 (5.23%)

Nuclide Type: activation

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
CO-60	1173.24	99.90	8.511E-01	2.203E+01	4.440E+01	4.84	OK
	1332.50	99.98*	7.580E-01	2.132E+01	4.297E+01	4.88	OK

Final Mean for 2 Valid Peaks = 4.368E+01+/- 1.501E+00 (3.44%)

CD-109	88.03	3.72*	6.297E+00	5.576E+01	1.021E+03	6.91	OK

Final Mean for 1 Valid Peaks = 1.021E+03+/- 7.060E+01 (6.91%)

Nuclide Type: Th Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
PB-212	238.58	43.60*	3.880E+00	5.420E-01	3.749E+00	23.51	OK
	300.03	3.34	3.188E+00	----- Line Not Found		-----	Absent

Final Mean for 1 Valid Peaks = 3.751E+00+/- 8.819E-01 (23.51%)

Nuclide Type: Np Series

Nuclide	Energy	%Abn	%Eff	Uncorrected pCi/G	Decay Corr pCi/G	1-Sigma %Error	Status
AM-241	59.54	35.70*	5.824E+00	7.120E+01	7.181E+01	5.81	OK

Final Mean for 1 Valid Peaks = 7.177E+01+/- 4.168E+00 (5.81%)

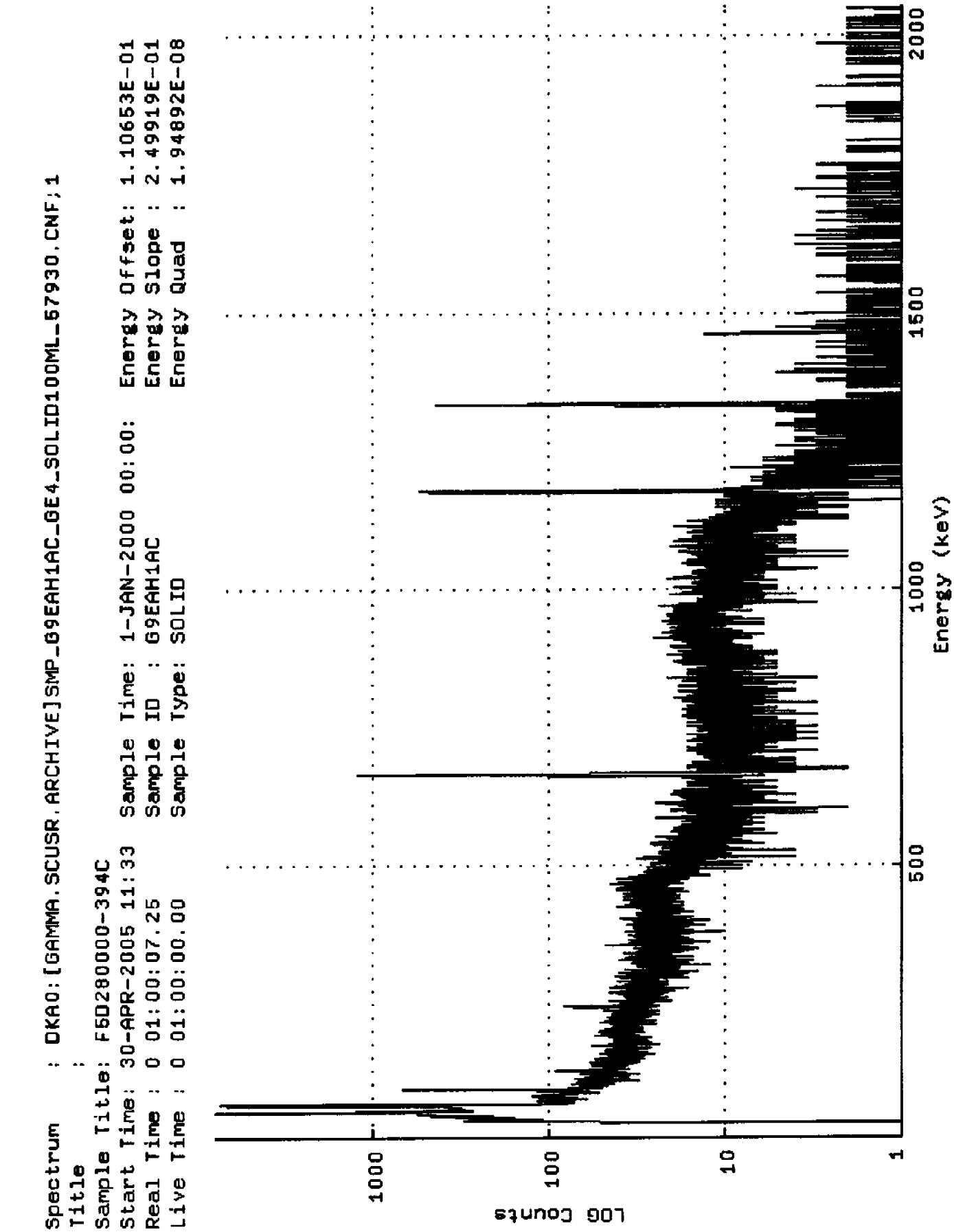
Nuclide Line Activity Report (continued) Page : 8
Sample ID : G9EAH1AC Acquisition date : 30-APR-2005 11:33:40

Flag: "*" = Keyline

Rejected Report
Sample ID : G9EAH1AC Acquisition date : 30-APR-2005 11:33:40

Nuclide	Half-life	Half-Life Ratio	Energy	%Abund	Activity (pCi/G)	1-Sigma %Error	Rejected by
EU-152	13.60Y	0.39	121.78	28.40	5.336E-01	33.20	Abun.
			344.27	26.50	--- Not Found ---		
			778.89	12.74	--- Not Found ---		
			964.01	14.40	--- Not Found ---		
			1085.78	10.00	--- Not Found ---		
			1112.02	13.30	--- Not Found ---		
			1407.95*	20.70	--- Not Found ---		
		% Abundances Found =		22.53			
BI-214	1600.00Y	0.00	609.31*	46.10	3.465E-01	41.69	Abun.
			768.35	4.88	--- Not Found ---		
			1120.27	15.00	--- Not Found ---		
		% Abundances Found =		69.87			
PB-214	1600.00Y	0.00	241.92	7.46	--- Not Found ---		Abun.
			295.09	19.20	--- Not Found ---		
			351.87*	37.10	5.736E-01	43.73	
		% Abundances Found =		58.19			

Flag: "*" = Keyline


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G9EAH1AC_GE4_SOLID100ML_57930.CNF;1
Title :
Sample Title: F5D280000-394C
Start Time: 30-APR-2005 11:33 Sample Time: 1-JAN-2000 00:00: Energy Offset: 1.10653E-01
Real Time : 0 01:00:07.25 Sample ID : G9EAH1AC Energy Slope : 2.49919E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : 1.94892E-08
Log Counts
1000
100
10
1
500
1000
1500
2000
Energy (keV)

STL

MLcC

VMS Gamma Spectroscopy Report generated 10-MAY-2005 19:01:45
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WNH1AA_GE7_SOLID100ML_57908.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-001
Sample ID : G8WNH1AA

Sample Quantity : 1.66200E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 29-APR-2005 12:06:22
Acquisition date : 29-APR-2005 12:06:22
Decay time : 0 00:00:00.00
Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.48
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE7
Counting geometry: SOLID_100ML

Energy cal. time : 25-FEB-2005 09:11:05
Effic. cal. time : 19-JAN-2005 01:25:36
Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000
End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE7__57457.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WNH1AA Acquisition date : 29-APR-2005 12:06:22

---- Energy, FWHM, and Efficiency Curves ----

```
**************************************************************************************
*                                                                                    *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)                    *
*                            A = 7.85538E-02                                         *
*                            B = 2.50061E-01                                         *
*                            C = -1.56700E-08                                        *
*                                                                                    *
*                                                                                    *
*                       FWHM(keV) = A + (B * SQRT(Energy))                           *
*                            A = 5.33118E-01                                         *
*                            B = 4.95085E-02                                         *
*                                                                                    *
*                                                                                    *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                                    *
*     a1=9.41250E+02   a2=-4.39222E+00 a3=9.59385E-01                                *
*     a4=7.48354E-02   a5=-4.49953E-02 a6=-1.06506E-02   a7=0.00000E+00              *
*                                                                                    *
**************************************************************************************
```

Combined Activity-MDA Report
Sample ID : G8WNH1AA Acquisition date : 29-APR-2005 12:06:22

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	8.508E+00	9.577E-01	4.001E-01	1.775E-02	21.265
TL-208	1.228E-01	3.234E-02	3.218E-02	2.144E-03	3.817
PB-212	3.834E-01	4.438E-02	3.936E-02	2.173E-03	9.739
PB-214	4.619E-01	5.240E-02	5.941E-02	3.034E-03	7.774
RA-226	4.739E+00	5.676E-01	3.755E-01	1.758E-02	12.620
AC-228	3.631E-01	1.204E-01	1.443E-01	2.766E-02	2.516
TH-234	3.867E+00	4.049E-01	4.274E-01	3.997E-02	9.048
U-235	3.130E-01	3.771E-02	1.572E-01	1.465E-02	1.990

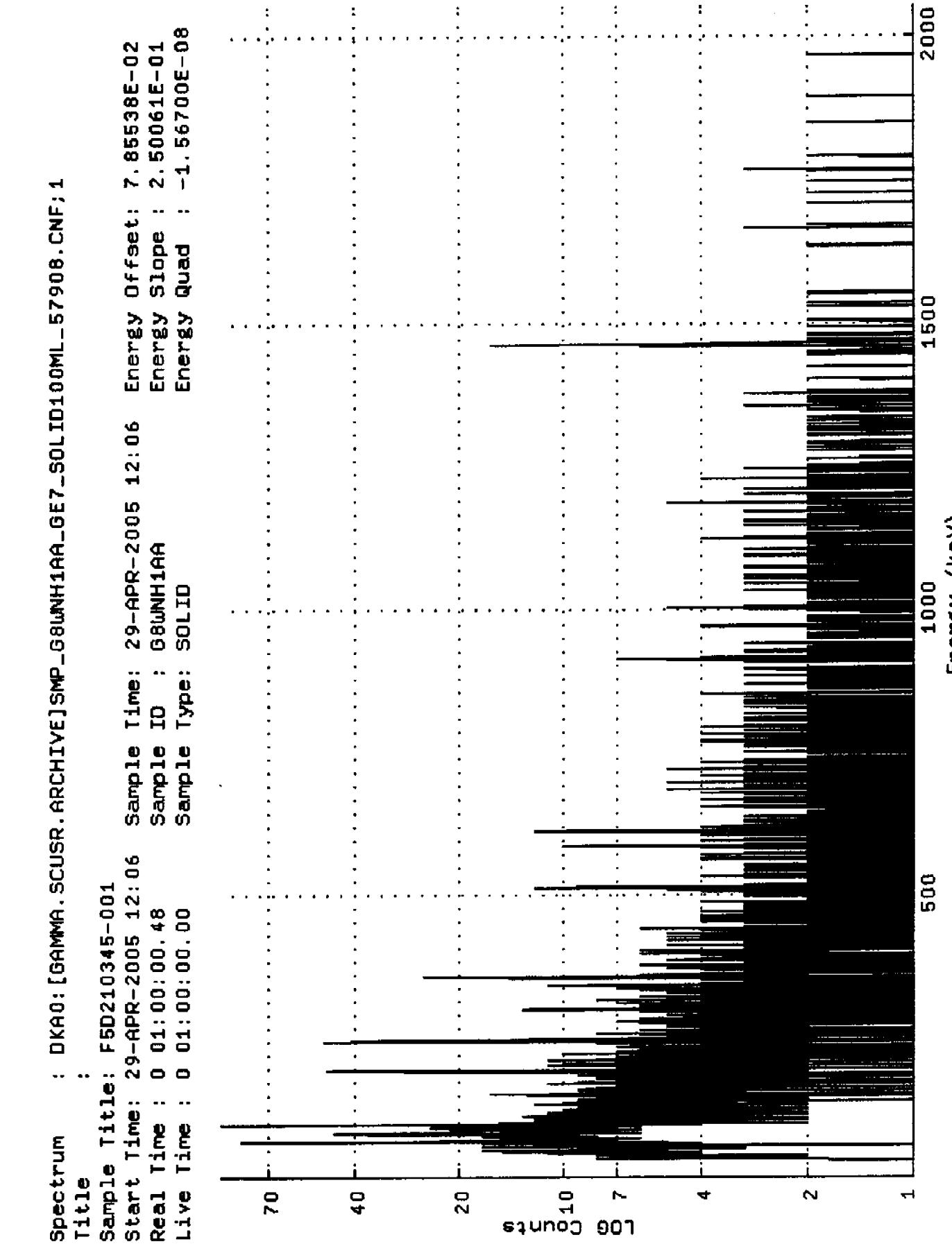
---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	1.042E-01		1.243E-01	2.210E-01	1.177E-02	0.471
NA-22	2.488E-02		1.879E-02	3.634E-02	1.536E-03	0.685
CR-51	-5.889E-02		1.150E-01	1.893E-01	9.665E-03	-0.311
MN-54	5.616E-03		1.971E-02	3.385E-02	1.756E-03	0.166
CO-57	6.417E-04		9.350E-03	1.537E-02	9.301E-04	0.042
FE-59	-7.896E-03		4.176E-02	6.854E-02	3.500E-03	-0.115
CO-60	1.506E-02		1.823E-02	3.371E-02	1.433E-03	0.447
ZN-65	-1.546E-01		5.977E-02	7.733E-02	3.344E-03	-1.999
SE-75	1.981E-02		1.732E-02	3.052E-02	1.523E-03	0.649
SR-85	-4.322E-02		2.358E-02	3.588E-02	1.894E-03	-1.205
Y-88	-6.510E-03		1.996E-02	3.153E-02	1.319E-03	-0.206
NB-95	5.495E-02		2.485E-02	4.599E-02	2.598E-03	1.195
ZR-95	-3.855E-02		3.402E-02	5.062E-02	3.060E-03	-0.762
MO-99	-1.796E-01		1.285E-01	1.821E-01	1.550E-02	-0.987
TC-99M	-2.162E-02		1.014E-02	1.538E-02	8.420E-04	-1.406
RU-103	1.027E-02		1.483E-02	2.608E-02	1.509E-03	0.394
RH-105	1.291E-01		1.939E-01	3.326E-01	1.644E-02	0.388
RH-106	3.025E-02		1.193E-01	2.439E-01	1.284E-02	0.124
RU-106	-4.975E-02		1.486E-01	2.436E-01	1.895E-02	-0.204
CD-109	-2.676E-01		3.636E-01	5.058E-01	2.981E-02	-0.529
SN-113	-1.459E-02		1.914E-02	3.032E-02	1.378E-03	-0.481
SB-124	-3.250E-03		1.956E-02	3.151E-02	1.821E-03	-0.103
SB-125	7.541E-02		4.828E-02	8.686E-02	4.139E-03	0.868
I-131	1.453E-02		1.413E-02	2.511E-02	1.218E-03	0.579
I-132	4.004E-03		2.246E-02	3.810E-02	2.297E-03	0.105
TE-132	6.364E-03		1.035E-02	1.799E-02	8.773E-04	0.354
BA-133	2.970E-02		2.304E-02	3.620E-02	2.488E-03	0.820
I-133	-1.705E-02		1.623E-02	2.480E-02	1.333E-03	-0.687
CS-134	3.704E-03		2.146E-02	3.111E-02	1.803E-03	0.119
CS-137	-3.880E-02		2.364E-02	3.492E-02	2.112E-03	-1.111
CE-139	-5.608E-03		1.127E-02	1.841E-02	8.414E-04	-0.305
BA-140	-2.978E-02		5.280E-02	8.352E-02	1.411E-02	-0.357
LA-140	-3.738E-02		2.335E-02	2.925E-02	1.264E-03	-1.278
CE-141	2.502E-02		1.879E-02	3.307E-02	1.776E-03	0.757
CE-144	-5.076E-02		7.183E-02	1.179E-01	7.942E-03	-0.431

Combined Activity-MDA Report (continued)
Sample ID : G8WNH1AA Acquisition date : 29-APR-2005 12:06:22

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
ND-147	1.698E-01		9.966E-02	1.860E-01	1.001E-02	0.913
EU-152	2.308E-02		7.757E-02	1.352E-01	6.660E-03	0.171
EU-154	7.577E-03		1.725E-01	2.896E-01	1.889E-02	0.026
EU-155	-2.752E-02		4.076E-02	6.554E-02	3.607E-03	-0.420
HG-203	2.176E-02		1.341E-02	2.409E-02	1.223E-03	0.904
BI-211	1.325E+00		1.962E-01	3.389E-01	1.610E-02	3.910
PB-211	9.285E-02		6.119E-01	1.042E+00	5.430E-02	0.089
BI-212	5.055E-01		3.131E-01	5.727E-01	3.344E-02	0.883
BI-214	2.773E-01	+	7.043E-02	1.158E-01	7.009E-03	2.394
RN-219	1.551E-01		1.104E-01	1.959E-01	9.787E-03	0.792
RA-223	-1.227E-01		1.579E-01	2.559E-01	1.376E-02	-0.479
RA-224	2.904E+00		9.247E-01	7.801E-01	2.234E-01	3.723
TH-227	1.096E-01		1.056E-01	1.617E-01	7.929E-03	0.678
RA-228	2.743E-01	+	1.463E-01	2.047E-01	9.459E-03	1.340
PA-231	-4.230E-01		5.202E-01	8.199E-01	5.401E-02	-0.516
TH-231	5.593E-01		1.858E-01	2.929E-01	1.987E-02	1.910
TH-232	3.666E-01		4.428E-01	7.920E-01	3.940E-02	0.463
PA-233	-3.479E-03		2.952E-02	4.835E-02	2.434E-03	-0.072
PA-234M	1.466E+01		4.548E+00	9.018E+00	4.101E-01	1.626
NP-237	-3.730E-03		3.166E-02	5.184E-02	2.554E-03	-0.072
NP-239	-1.850E-02		5.308E-02	8.685E-02	4.643E-03	-0.213
AM-241	4.918E-02		2.970E-02	4.544E-02	2.401E-03	1.082
ANN RAD	2.468E-02		2.503E-02	5.176E-02	2.722E-03	0.477


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WNH1AA_GE7_SOLID100ML_57908.CNF;1
Title :
Sample Title: F5D210345-001
Start Time: 29-APR-2005 12:06 Sample Time: 29-APR-2005 12:06 Energy Offset: 7.85538E-02
Real Time : 0 01:00:00.48 Sample ID : G8WNH1AA Energy Slope : 2.50061E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : -1.56700E-08
Log Counts
70
40
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 10-MAY-2005 19:02:29
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WNH1AR_GE4_SOLID100ML_57911.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-001X
Sample ID : G8WNH1AR

Sample Quantity : 1.66200E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date	: 29-APR-2005 13:16:50	Elapsed live time	: 0 01:00:00.00
Acquisition date	: 29-APR-2005 13:16:50	Elapsed real time	: 0 01:00:00.59
Decay time	: 0 00:00:00.00	% dead time	: 0.0%

---- Detector Parameters ----

Detector name	: GE4	Counting geometry	: SOLID_100ML
Energy cal. time	: 16-MAR-2005 08:34:49	Energy cal. type	: Poly
Effic. cal. time	: 18-JAN-2005 00:15:12	FWHM cal. type	: Sqrt

---- Processing Parameters ----

Start channel	: 150	End channel	: 8100
Sensitivity	: 3.00000	Gaussian Sens.	: 15.00000
Critical level?	: Yes	Propagate Errors?	: Yes
Empirical Eff?	: No	Library-based eff	: Yes
Energy tolerance	: 1.25000	Half life ratio	: 8.00000
Abundance limit	: 70.00000	WTM error limit	: 3.00000
MDA Width (FWHM)	: 3.00000	MDA Confid Level	: 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE4__57454.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WNH1AR Acquisition date : 29-APR-2005 13:16:50

---- Energy, FWHM, and Efficiency Curves ----

```
**************************************************************************
*                                                                        *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)        *
*                            A = 1.10653E-01                             *
*                            B = 2.49919E-01                             *
*                            C = 1.94892E-08                             *
*                                                                        *
*                                                                        *
*                      FWHM(keV) = A + (B * SQRT(Energy))                *
*                            A = 8.02351E-01                             *
*                            B = 2.65421E-02                             *
*                                                                        *
*                                                                        *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                        *
*     a1=9.41250E+02   a2=-4.55854E+00 a3=9.62044E-01                    *
*     a4=7.38134E-02   a5=-4.50301E-02 a6=-9.56656E-03   a7=0.00000E+00  *
*                                                                        *
**************************************************************************
```

Combined Activity-MDA Report
Sample ID : G8WNH1AR

Acquisition date : 29-APR-2005 13:16:50

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	7.523E+00	8.476E-01	3.344E-01	1.564E-02	22.497
TL-208	1.774E-01	3.381E-02	2.751E-02	1.678E-03	6.447
PB-212	2.767E-01	6.005E-02	6.484E-02	3.544E-03	4.267
PB-214	4.533E-01	5.852E-02	6.108E-02	3.052E-03	7.422
RA-226	4.678E+00	5.873E-01	4.659E-01	2.156E-02	10.040
TH-234	4.087E+00	4.070E-01	5.333E-01	5.106E-02	7.665
U-235	3.089E-01	3.900E-02	1.864E-01	1.724E-02	1.657

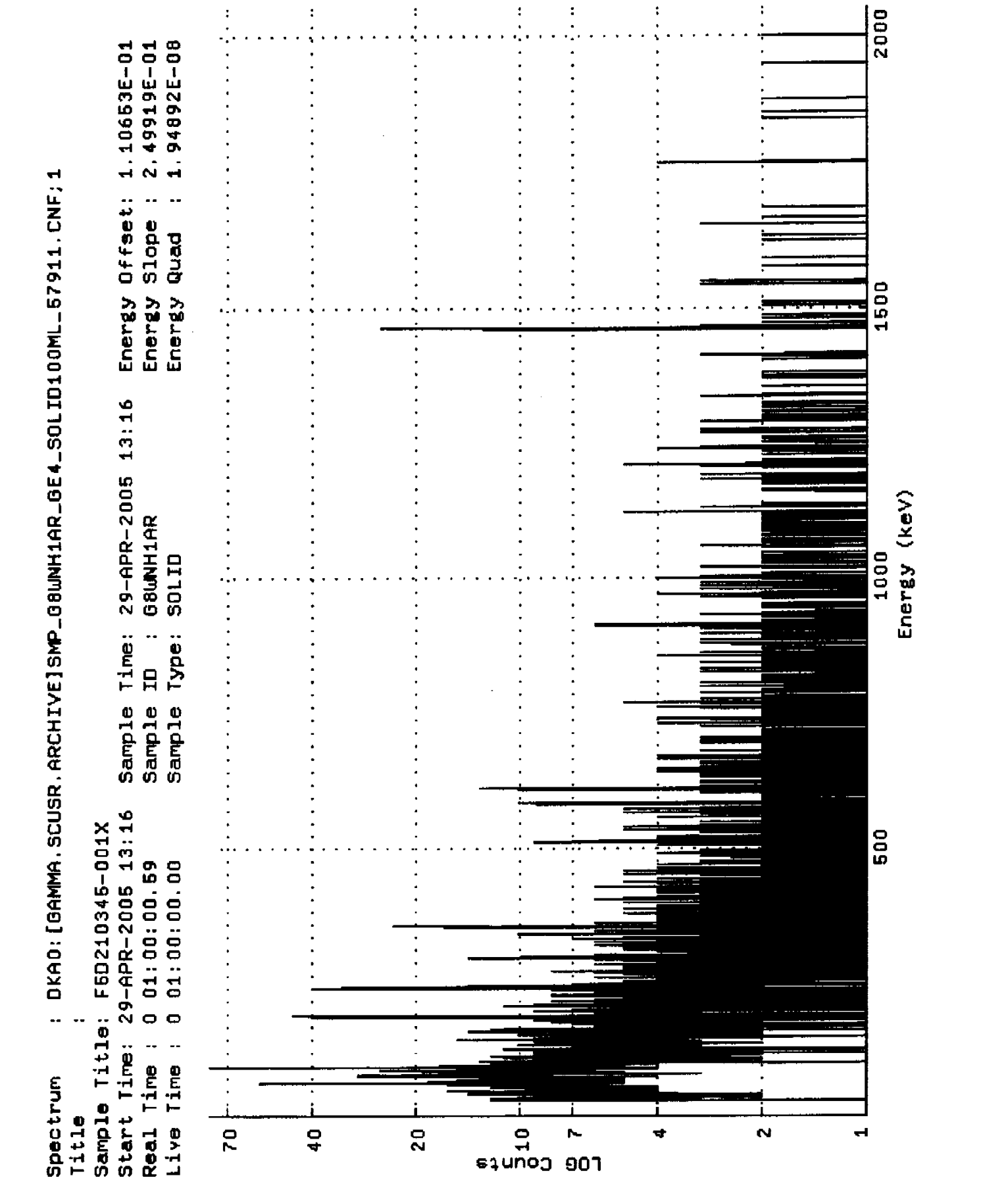
---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-1.515E-01		1.330E-01	1.980E-01	9.903E-03	-0.765
NA-22	-1.434E-02		2.433E-02	3.830E-02	1.738E-03	-0.374
CR-51	-1.905E-01		1.301E-01	2.002E-01	1.003E-02	-0.952
MN-54	-2.571E-02		1.941E-02	2.722E-02	1.461E-03	-0.944
CO-57	-2.065E-03		9.779E-03	1.645E-02	9.630E-04	-0.126
FE-59	5.322E-02		3.989E-02	7.563E-02	4.177E-03	0.704
CO-60	-6.270E-03		2.388E-02	3.896E-02	1.768E-03	-0.161
ZN-65	2.980E-02		5.609E-02	9.778E-02	4.671E-03	0.305
SE-75	7.556E-03		1.973E-02	3.320E-02	1.633E-03	0.228
SR-85	-5.652E-02		2.646E-02	3.869E-02	1.868E-03	-1.461
Y-88	9.429E-04		2.199E-02	3.731E-02	1.588E-03	0.025
NB-95	-2.296E-02		2.095E-02	3.126E-02	1.657E-03	-0.735
ZR-95	-2.316E-02		3.708E-02	5.810E-02	3.288E-03	-0.399
MO-99	-2.140E-01		1.449E-01	2.029E-01	1.657E-02	-1.055
TC-99M	-1.736E-02		1.287E-02	2.073E-02	1.107E-03	-0.837
RU-103	1.242E-02		1.573E-02	2.768E-02	1.503E-03	0.449
RH-105	3.916E-01		1.970E-01	3.725E-01	1.807E-02	1.051
RH-106	-1.197E-01		1.317E-01	2.543E-01	1.227E-02	-0.471
RU-106	-2.788E-02		1.795E-01	2.981E-01	2.141E-02	-0.094
CD-109	6.860E-02		4.470E-01	5.676E-01	3.305E-02	0.121
SN-113	1.184E-02		2.057E-02	3.572E-02	1.571E-03	0.332
SB-124	9.842E-03		1.703E-02	2.999E-02	1.510E-03	0.328
SB-125	-4.266E-02		5.097E-02	7.993E-02	3.632E-03	-0.534
I-131	1.233E-03		1.469E-02	2.480E-02	1.172E-03	0.050
I-132	1.597E-02		2.101E-02	3.735E-02	1.900E-03	0.427
TE-132	7.084E-03		1.192E-02	2.040E-02	9.826E-04	0.347
BA-133	2.633E-03		2.273E-02	3.286E-02	2.232E-03	0.080
I-133	-9.544E-03		1.804E-02	2.835E-02	1.383E-03	-0.337
CS-134	1.013E-02		2.051E-02	3.096E-02	1.562E-03	0.327
CS-137	3.801E-03		2.166E-02	3.681E-02	1.868E-03	0.103
CE-139	-2.200E-02		1.248E-02	1.919E-02	8.659E-04	-1.147
BA-140	7.761E-02		6.047E-02	1.100E-01	1.841E-02	0.705
LA-140	-1.548E-02		2.560E-02	3.868E-02	1.746E-03	-0.400
CE-141	-1.597E-02		2.247E-02	3.687E-02	1.937E-03	-0.433
CE-144	-3.105E-02		8.068E-02	1.342E-01	8.868E-03	-0.231
ND-147	9.675E-02		1.090E-01	1.929E-01	9.419E-03	0.502

Combined Activity-MDA Report (continued)
Sample ID : G8WNH1AR Acquisition date : 29-APR-2005 13:16:50

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-152	2.079E-02		1.143E-01	1.965E-01	1.014E-02	0.106
EU-154	-2.158E-01		1.764E-01	2.606E-01	1.801E-02	-0.828
EU-155	-3.013E-02		4.758E-02	7.602E-02	4.084E-03	-0.396
HG-203	-2.337E-02		1.557E-02	2.313E-02	1.157E-03	-1.010
BI-211	1.273E+00		1.966E-01	3.635E-01	1.684E-02	3.503
PB-211	-6.224E-02		6.248E-01	1.021E+00	5.477E-02	-0.061
BI-212	3.141E-01		3.304E-01	5.889E-01	3.082E-02	0.533
BI-214	3.563E-01	+	7.905E-02	1.288E-01	6.852E-03	2.766
RN-219	2.373E-01		1.251E-01	2.258E-01	1.111E-02	1.051
RA-223	-1.191E-01		1.866E-01	3.059E-01	1.619E-02	-0.389
RA-224	1.883E+00		7.207E-01	8.106E-01	2.320E-01	2.322
TH-227	1.023E-01		1.358E-01	2.009E-01	9.728E-03	0.509
AC-228	3.411E-01		1.418E-01	2.385E-01	4.565E-02	1.430
RA-228	3.528E-01		1.027E-01	2.072E-01	1.109E-02	1.703
PA-231	-5.030E-01		4.682E-01	7.352E-01	4.795E-02	-0.684
TH-231	6.018E-01		1.913E-01	3.054E-01	2.070E-02	1.971
TH-232	1.990E-02		5.067E-01	8.388E-01	4.507E-02	0.024
PA-233	-2.515E-02		3.049E-02	4.892E-02	2.419E-03	-0.514
PA-234M	5.860E+00		3.858E+00	7.283E+00	3.770E-01	0.805
NP-237	-2.697E-02		3.269E-02	5.246E-02	2.536E-03	-0.514
NP-239	-3.066E-03		7.578E-02	1.149E-01	6.012E-03	-0.027
AM-241	4.865E-02		3.419E-02	5.573E-02	3.205E-03	0.873
ANN RAD	-1.693E-02		2.696E-02	5.265E-02	2.538E-03	-0.322


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WNH1AR_GE4_SOLID100ML_57911.CNF;1
Title :
Sample Title: F5D210345-001X
Start Time: 29-APR-2005 13:16 Sample Time: 29-APR-2005 13:16 Energy Offset: 1.10653E-01
Real Time : 0 01:00:00.59 Sample ID : G8WNH1AR Energy Slope : 2.49919E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : 1.94892E-08
Log Counts
70
40
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 10-MAY-2005 19:03:05
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WNN1AA_GE5_SOLID100ML_57909.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-002
Sample ID : G8WNN1AA

Sample Quantity : 1.91000E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date	: 29-APR-2005 12:18:17	Elapsed live time:	0 01:00:00.00
Acquisition date	: 29-APR-2005 12:18:17	Elapsed real time:	0 01:00:00.96
Decay time	: 0 00:00:00.00	% dead time :	0.0%

---- Detector Parameters ----

Detector name	: GE5	Counting geometry:	SOLID_100ML
Energy cal. time	: 9-MAR-2005 09:18:16.	Energy cal. type :	Poly
Effic. cal. time	: 18-JAN-2005 09:43:11	FWHM cal. type :	Sqrt

---- Processing Parameters ----

Start channel	: 150	End channel :	8100
Sensitivity	: 3.00000	Gaussian Sens. :	15.00000
Critical level?	: Yes	Propagate Errors?:	Yes
Empirical Eff?	: No	Library-based eff:	Yes
Energy tolerance	: 1.25000	Half life ratio :	8.00000
Abundance limit	: 70.00000	WTM error limit :	3.00000
MDA Width (FWHM)	: 3.00000	MDA Confid Level :	5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE5__57455.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WNN1AA Acquisition date : 29-APR-2005 12:18:17

---- Energy, FWHM, and Efficiency Curves ----

```
*********************************************************************************
*                                                                               *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)               *
*                            A = -7.14002E-03                                   *
*                            B = 2.49998E-01                                    *
*                            C = -1.90945E-09                                   *
*                                                                               *
*                                                                               *
*                     FWHM(keV) = A + (B * SQRT(Energy))                        *
*                            A = 5.02556E-01                                    *
*                            B = 3.66242E-02                                    *
*                                                                               *
*                                                                               *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                               *
*     a1=9.41250E+02   a2=-4.46457E+00 a3=9.42586E-01                           *
*     a4=5.97186E-02   a5=-3.91387E-02 a6=-9.36517E-03   a7=0.00000E+00         *
*                                                                               *
*********************************************************************************
```

Combined Activity-MDA Report
Sample ID : G8WNN1AA

Acquisition date : 29-APR-2005 12:18:17

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	5.062E+00	6.013E-01	2.570E-01	1.199E-02	19.694
PB-212	2.450E-01	3.352E-02	3.639E-02	2.072E-03	6.733
PB-214	3.019E-01	4.374E-02	3.593E-02	1.836E-03	8.403
TH-234	2.388E+00	2.860E-01	3.325E-01	3.204E-02	7.181
U-235	3.275E-01	3.714E-02	1.208E-01	1.158E-02	2.712
ANN RAD	5.862E-02	2.941E-02	1.847E-02	1.004E-03	3.174

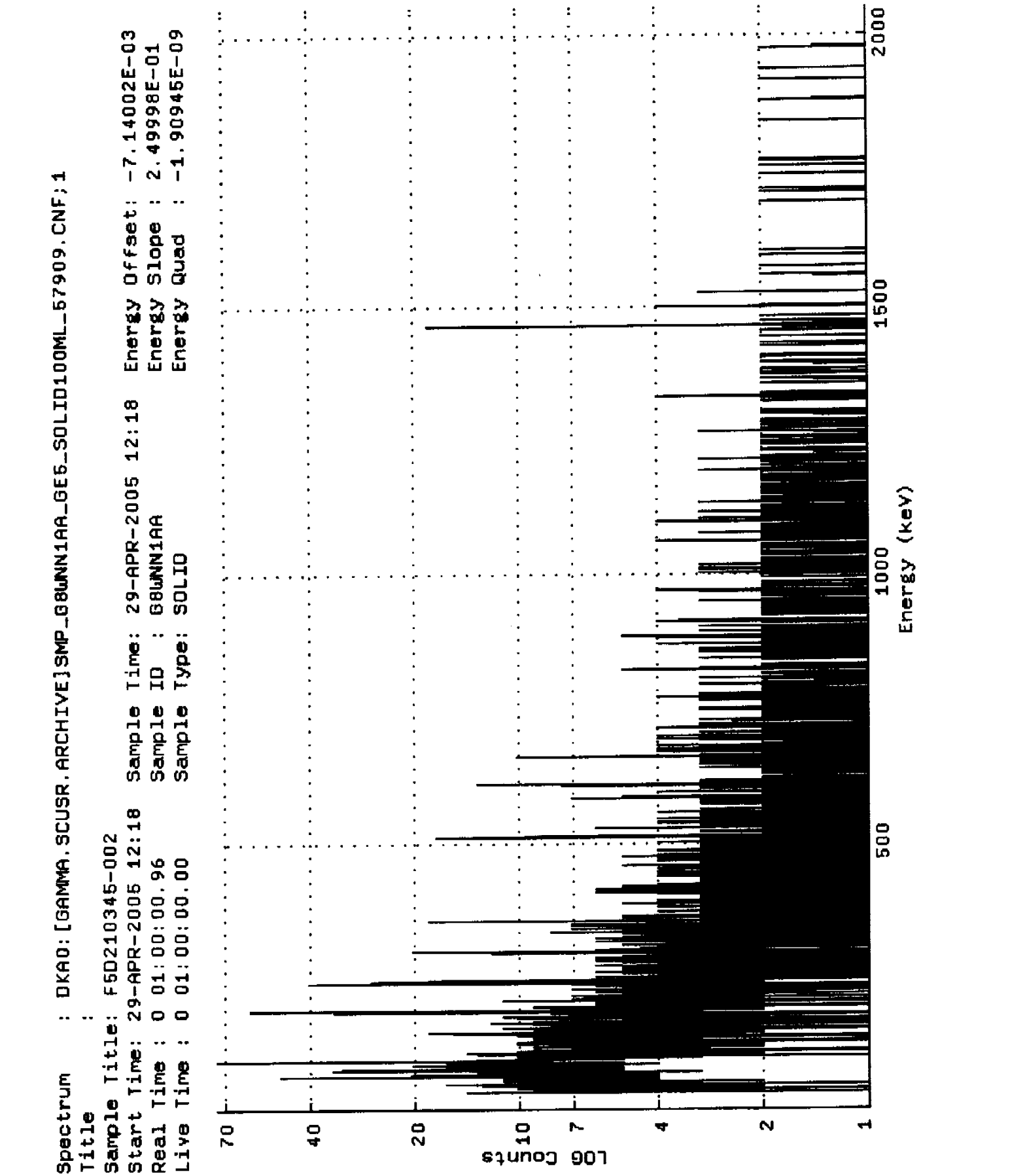
---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	7.329E-02		1.216E-01	2.125E-01	1.150E-02	0.345
NA-22	-4.116E-03		1.618E-02	2.616E-02	1.175E-03	-0.157
CR-51	9.746E-02		1.040E-01	1.832E-01	9.474E-03	0.532
MN-54	-2.248E-02		1.644E-02	2.314E-02	1.522E-03	-0.972
CO-57	-8.159E-03		8.231E-03	1.274E-02	8.518E-04	-0.640
FE-59	5.210E-02		3.743E-02	6.960E-02	3.975E-03	0.749
CO-60	7.733E-03		1.956E-02	3.655E-02	1.661E-03	0.212
ZN-65	-3.914E-02		4.535E-02	6.891E-02	3.390E-03	-0.568
SE-75	-6.093E-03		1.472E-02	2.439E-02	1.256E-03	-0.250
SR-85	3.919E-02		1.574E-02	2.741E-02	1.498E-03	1.430
Y-88	4.354E-02		1.670E-02	3.890E-02	1.629E-03	1.119
NB-95	3.146E-03		1.727E-02	2.921E-02	1.973E-03	0.108
ZR-95	-7.322E-03		2.432E-02	3.925E-02	2.773E-03	-0.187
MO-99	-8.524E-02		1.169E-01	1.815E-01	1.675E-02	-0.470
TC-99M	1.067E-02		9.091E-03	1.433E-02	8.554E-04	0.745
RU-103	-5.837E-03		1.358E-02	2.200E-02	1.300E-03	-0.265
RH-105	-2.186E-01		1.701E-01	2.603E-01	1.311E-02	-0.840
RH-106	2.850E-01	+	1.430E-01	2.206E-01	1.201E-02	1.292
RU-106	6.523E-02		1.263E-01	2.181E-01	1.791E-02	0.299
CD-109	-1.687E-01		2.149E-01	3.464E-01	2.017E-02	-0.487
SN-113	-3.834E-03		1.463E-02	2.362E-02	1.051E-03	-0.162
SB-124	1.516E-02		1.575E-02	2.775E-02	1.740E-03	0.546
SB-125	3.462E-02		3.593E-02	6.484E-02	3.073E-03	0.534
I-131	3.108E-03		1.322E-02	2.227E-02	1.074E-03	0.140
I-132	-1.546E-02		1.546E-02	2.350E-02	1.596E-03	-0.658
TE-132	-6.554E-03		9.557E-03	1.510E-02	7.674E-04	-0.434
BA-133	-1.577E-02		2.172E-02	2.853E-02	1.960E-03	-0.553
I-133	-1.038E-02		1.447E-02	2.267E-02	1.271E-03	-0.458
CS-134	4.721E-03		1.713E-02	2.677E-02	1.685E-03	0.176
CS-137	6.681E-02		2.362E-02	4.723E-02	3.207E-03	1.415
CE-139	-1.260E-02		9.532E-03	1.493E-02	7.179E-04	-0.844
BA-140	5.595E-02		5.245E-02	9.282E-02	1.576E-02	0.603
LA-140	-1.661E-02		1.895E-02	2.725E-02	1.222E-03	-0.609
CE-141	-6.713E-03		1.807E-02	2.576E-02	1.498E-03	-0.261
CE-144	-4.239E-02		6.332E-02	1.045E-01	7.532E-03	-0.406
ND-147	-4.442E-02		8.955E-02	1.430E-01	8.038E-03	-0.311
EU-152	-7.600E-02		8.734E-02	1.259E-01	6.495E-03	-0.603

Combined Activity-MDA Report (continued)
Sample ID : G8WNN1AA Acquisition date : 29-APR-2005 12:18:17

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-154	4.670E-02		1.245E-01	2.188E-01	1.697E-02	0.213
EU-155	3.328E-02		3.341E-02	5.744E-02	3.321E-03	0.579
HG-203	6.235E-03		1.298E-02	2.247E-02	1.172E-03	0.277
TL-208	5.261E-02		2.203E-02	4.061E-02	2.851E-03	1.295
BI-211	7.755E-01		1.401E-01	2.529E-01	1.202E-02	3.066
PB-211	4.151E-01		5.436E-01	9.668E-01	6.368E-02	0.429
BI-212	6.266E-01		2.313E-01	4.605E-01	3.132E-02	1.361
BI-214	3.002E-01	+	5.339E-02	9.840E-02	6.446E-03	3.051
RN-219	1.521E-01		9.018E-02	1.656E-01	8.526E-03	0.918
RA-223	-1.261E-01		1.304E-01	2.095E-01	1.198E-02	-0.602
RA-224	8.994E-01		3.913E-01	5.408E-01	1.550E-01	1.663
RA-226	4.913E+00	+	5.793E-01	9.203E-01	4.524E-02	5.339
TH-227	2.173E-02		9.723E-02	1.391E-01	7.096E-03	0.156
AC-228	2.277E-01		9.824E-02	1.668E-01	3.198E-02	1.365
RA-228	1.238E-01		7.052E-02	1.332E-01	8.324E-03	0.929
PA-231	-5.505E-01		4.614E-01	7.202E-01	4.800E-02	-0.764
TH-231	4.039E-01		1.319E-01	2.352E-01	1.598E-02	1.717
TH-232	5.090E-01		3.762E-01	6.977E-01	4.520E-02	0.730
PA-233	-1.078E-02		2.389E-02	3.888E-02	1.990E-03	-0.277
PA-234M	5.124E+00		3.030E+00	5.763E+00	3.330E-01	0.889
NP-237	-1.156E-02		2.561E-02	4.169E-02	2.089E-03	-0.277
NP-239	4.421E-03		4.732E-02	7.860E-02	4.327E-03	0.056
AM-241	-6.757E-03		2.146E-02	3.672E-02	2.153E-03	-0.184


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WNN1AA_GE6_SOLID100ML_57909.CNF;1
Title :
Sample Title: F5D210345-002
Start Time: 29-APR-2005 12:18 Sample Time: 29-APR-2005 12:18 Energy Offset: -7.14002E-03
Real Time : 0 01:00:00.96 Sample ID : G8WNN1AA Energy Slope : 2.49998E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : -1.90945E-09
Log Counts
70
40
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 10-MAY-2005 19:03:35
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WNQ1AA_GE6_SOLID100ML_57910.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-003
Sample ID : G8WNQ1AA

Sample Quantity : 1.53800E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date	: 29-APR-2005 12:19:00	Elapsed live time:	0 01:00:00.00
Acquisition date	: 29-APR-2005 12:19:00	Elapsed real time:	0 01:00:00.55
Decay time	: 0 00:00:00.00	% dead time :	0.0%

---- Detector Parameters ----

Detector name	: GE6	Counting geometry:	SOLID_100ML
Energy cal. time	: 3-MAR-2004 08:43:53.	Energy cal. type :	Poly
Effic. cal. time	: 18-JAN-2005 22:11:47	FWHM cal. type :	Sqrt

---- Processing Parameters ----

Start channel	: 150	End channel :	8100
Sensitivity	: 3.00000	Gaussian Sens. :	15.00000
Critical level?	: Yes	Propagate Errors?:	Yes
Empirical Eff?	: No	Library-based eff:	Yes
Energy tolerance	: 1.25000	Half life ratio :	8.00000
Abundance limit	: 70.00000	WTM error limit :	3.00000
MDA Width (FWHM)	: 3.00000	MDA Confid Level :	5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE6__57456.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WNQ1AA

Acquisition date : 29-APR-2005 12:19:00

---- Energy, FWHM, and Efficiency Curves ----

```
**************************************************************************
*                                                                        *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)        *
*                          A = 1.54285E-01                               *
*                          B = 2.49832E-01                               *
*                          C = 1.86799E-08                               *
*                                                                        *
*                                                                        *
*                    FWHM(keV) = A + (B * SQRT(Energy))                  *
*                          A = 4.67797E-01                               *
*                          B = 3.35494E-02                               *
*                                                                        *
*                                                                        *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                        *
*     a1=9.41250E+02   a2=-4.68519E+00 a3=8.82578E-01                    *
*     a4=8.83148E-02   a5=-2.58765E-02 a6=-1.60802E-02   a7=0.00000E+00  *
*                                                                        *
**************************************************************************
```

Combined Activity-MDA Report
Sample ID : G8WNQ1AA

Acquisition date : 29-APR-2005 12:19:00

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	8.728E+00	9.950E-01	2.869E-01	1.270E-02	30.424
TL-208	1.409E-01	3.980E-02	3.999E-02	2.912E-03	3.523
PB-212	3.276E-01	6.016E-02	6.191E-02	3.401E-03	5.292
PB-214	4.120E-01	6.898E-02	7.860E-02	4.219E-03	5.242
RA-226	6.208E+00	8.410E-01	6.119E-01	2.781E-02	10.145
AC-228	3.574E-01	1.874E-01	2.257E-01	4.339E-02	1.584
RA-228	4.391E-01	1.081E-01	1.249E-01	6.634E-03	3.517
TH-234	4.334E+00	4.732E-01	4.969E-01	4.724E-02	8.721
U-235	4.099E-01	5.580E-02	2.187E-01	2.003E-02	1.874

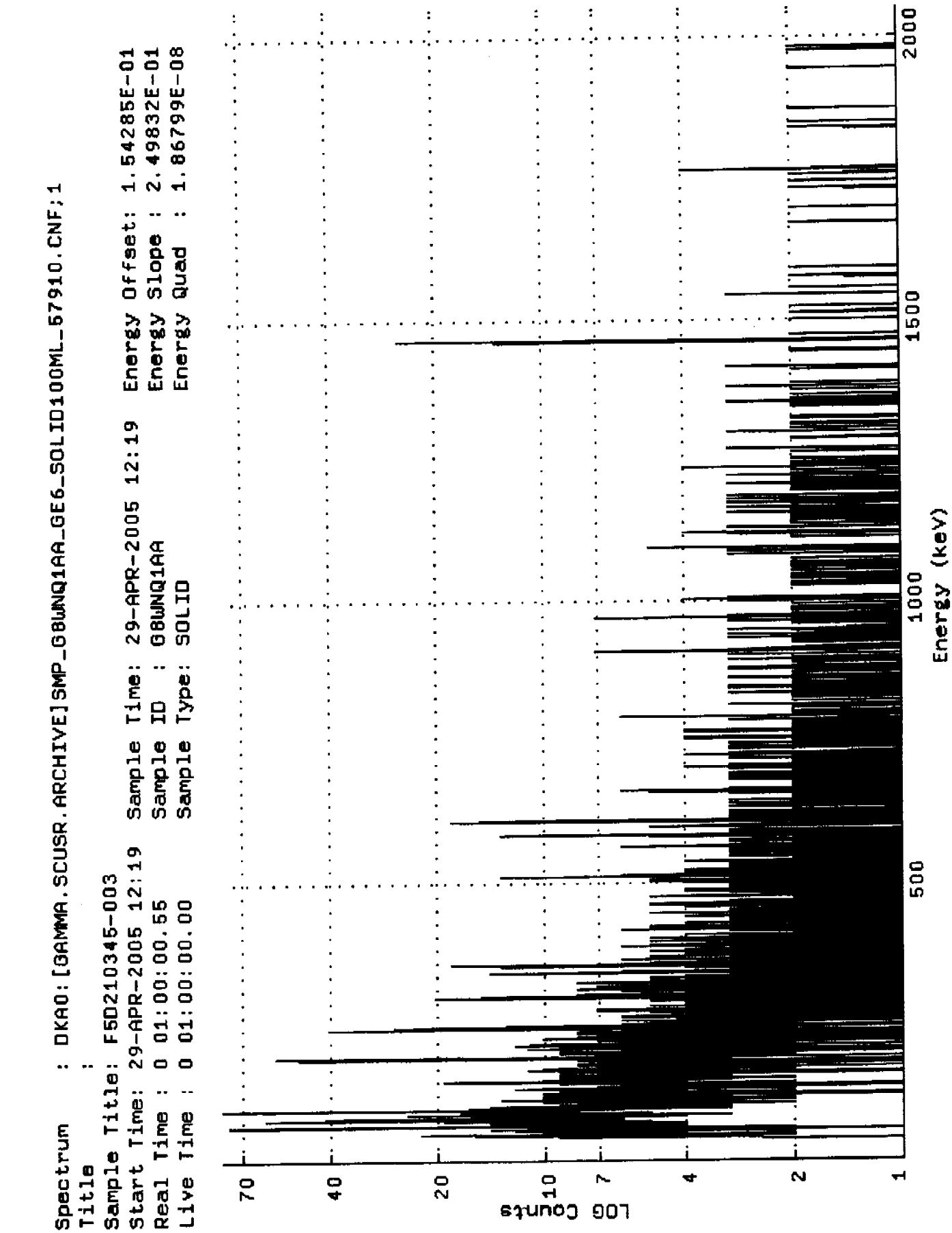
---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-2.662E-01		1.733E-01	2.472E-01	1.446E-02	-1.077
NA-22	-4.113E-02		2.579E-02	3.240E-02	1.403E-03	-1.269
CR-51	1.131E-01		1.491E-01	2.575E-01	1.358E-02	0.439
MN-54	-6.870E-03		2.183E-02	3.563E-02	2.117E-03	-0.193
CO-57	1.792E-03		1.190E-02	2.000E-02	1.134E-03	0.090
FE-59	7.813E-03		3.642E-02	6.203E-02	3.386E-03	0.126
CO-60	1.387E-02		2.024E-02	3.756E-02	1.596E-03	0.369
ZN-65	-1.435E-01		6.987E-02	9.465E-02	4.452E-03	-1.516
SE-75	2.551E-02		1.996E-02	3.596E-02	1.805E-03	0.709
SR-85	-1.063E-01		3.082E-02	3.836E-02	2.257E-03	-2.771
Y-88	8.450E-03		2.088E-02	3.760E-02	1.576E-03	0.225
NB-95	-5.456E-03		2.915E-02	4.742E-02	3.059E-03	-0.115
ZR-95	6.391E-02		4.506E-02	8.322E-02	5.667E-03	0.768
MO-99	-6.555E-02		1.687E-01	2.679E-01	2.435E-02	-0.245
TC-99M	1.903E-02		1.378E-02	2.415E-02	1.252E-03	0.788
RU-103	-4.532E-02		2.110E-02	2.747E-02	1.733E-03	-1.650
RH-105	-3.509E-01		2.962E-01	4.493E-01	2.282E-02	-0.781
RH-106	8.015E-01		1.618E-01	3.073E-01	1.803E-02	2.608
RU-106	2.440E-02		2.203E-01	3.734E-01	3.130E-02	0.065
CD-109	1.333E-01		3.643E-01	6.253E-01	3.664E-02	0.213
SN-113	-2.808E-02		2.500E-02	3.849E-02	1.909E-03	-0.730
SB-124	-1.801E-02		2.353E-02	3.724E-02	2.430E-03	-0.484
SB-125	-1.199E-02		4.941E-02	8.086E-02	4.234E-03	-0.148
I-131	-1.597E-02		1.600E-02	2.473E-02	1.276E-03	-0.646
I-132	-7.649E-03		2.409E-02	3.901E-02	2.684E-03	-0.196
TE-132	3.969E-02		1.449E-02	2.745E-02	1.324E-03	1.446
BA-133	2.891E-02		2.639E-02	4.461E-02	3.158E-03	0.648
I-133	-4.076E-03		2.109E-02	3.408E-02	2.046E-03	-0.120
CS-134	-3.646E-02		2.370E-02	3.173E-02	2.077E-03	-1.149
CS-137	2.265E-02		2.961E-02	5.220E-02	3.602E-03	0.434
CE-139	-1.994E-02		1.594E-02	2.438E-02	1.072E-03	-0.818
BA-140	6.215E-02		7.170E-02	1.258E-01	2.152E-02	0.494
LA-140	-1.835E-02		2.931E-02	4.443E-02	1.915E-03	-0.413
CE-141	-4.057E-02		2.652E-02	4.048E-02	2.066E-03	-1.002

Combined Activity-MDA Report (continued)
Sample ID : G8WNQ1AA Acquisition date : 29-APR-2005 12:19:00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
CE-144	-3.947E-03		9.278E-02	1.537E-01	9.937E-03	-0.026
ND-147	1.057E-02		1.338E-01	2.217E-01	1.333E-02	0.048
EU-152	-1.258E-03		1.473E-01	2.438E-01	1.200E-02	-0.005
EU-154	-1.258E-01		1.634E-01	2.456E-01	1.739E-02	-0.512
EU-155	6.312E-03		4.764E-02	8.061E-02	4.271E-03	0.078
HG-203	-2.076E-02		1.899E-02	2.926E-02	1.504E-03	-0.710
BI-211	1.195E+00		2.345E-01	4.219E-01	2.121E-02	2.832
PB-211	5.863E-01		8.312E-01	1.496E+00	8.925E-02	0.392
BI-212	7.426E-01		3.875E-01	7.317E-01	4.873E-02	1.015
BI-214	5.480E-01	+	9.826E-02	1.832E-01	1.243E-02	2.991
RN-219	3.120E-01		1.575E-01	2.867E-01	1.445E-02	1.088
RA-223	-1.127E-01		2.171E-01	3.479E-01	1.797E-02	-0.324
RA-224	2.039E+00		7.501E-01	8.473E-01	2.425E-01	2.407
TH-227	1.127E-01		1.204E-01	1.879E-01	9.145E-03	0.599
PA-231	-8.795E-01		6.288E-01	9.269E-01	6.196E-02	-0.949
TH-231	9.152E-01		2.231E-01	4.021E-01	2.729E-02	2.276
TH-232	-2.716E-01		5.129E-01	8.131E-01	4.644E-02	-0.334
PA-233	-2.083E-02		4.434E-02	7.092E-02	3.678E-03	-0.294
PA-234M	1.504E+01		5.685E+00	1.107E+01	5.665E-01	1.358
NP-237	-2.233E-02		4.755E-02	7.604E-02	3.864E-03	-0.294
NP-239	1.245E-01		7.202E-02	1.291E-01	6.712E-03	0.964
AM-241	1.080E-02		3.465E-02	5.744E-02	3.228E-03	0.188
ANN RAD	-2.937E-02		3.283E-02	6.570E-02	3.850E-03	-0.447


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WNQ1AA_GE6_SOLID100ML_57910.CNF;1
Title :
Sample Title: F5D210345-003
Start Time: 29-APR-2005 12:19 Sample Time: 29-APR-2005 12:19 Energy Offset: 1.54285E-01
Real Time : 0 01:00:00.55 Sample ID : G8WNQ1AA Energy Slope : 2.49832E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : 1.86799E-08
Log Counts
70
40
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 10-MAY-2005 19:04:08
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WNR1AA_GE7_SOLID100ML_57912.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-004
Sample ID : G8WNR1AA

Sample Quantity : 1.44300E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 29-APR-2005 13:17:36
Acquisition date : 29-APR-2005 13:17:36
Decay time : 0 00:00:00.00

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.60
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE7

Counting geometry: SOLID_100ML

Energy cal. time : 25-FEB-2005 09:11:05
Effic. cal. time : 19-JAN-2005 01:25:36

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE7__57457.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WNR1AA

Acquisition date : 29-APR-2005 13:17:36

---- Energy, FWHM, and Efficiency Curves ----

```
**********************************************************************************
*                                                                                *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)                *
*                            A = 7.85538E-02                                     *
*                            B = 2.50061E-01                                     *
*                            C = -1.56700E-08                                    *
*                                                                                *
*                                                                                *
*                       FWHM(keV) = A + (B * SQRT(Energy))                       *
*                              A = 5.33118E-01                                   *
*                              B = 4.95085E-02                                   *
*                                                                                *
*                                                                                *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)  *
*                                                                                *
*     a1=9.41250E+02   a2=-4.39222E+00 a3=9.59385E-01                            *
*     a4=7.48354E-02   a5=-4.49953E-02 a6=-1.06506E-02   a7=0.00000E+00          *
*                                                                                *
**********************************************************************************
```

Combined Activity-MDA Report
Sample ID : G8WNR1AA

Acquisition date : 29-APR-2005 13:17:36

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	1.441E+01	1.473E+00	4.759E-01	2.111E-02	30.282
TL-208	2.686E-01	4.777E-02	4.024E-02	2.681E-03	6.676
PB-212	7.710E-01	7.463E-02	5.253E-02	2.901E-03	14.677
PB-214	7.100E-01	6.886E-02	6.843E-02	3.494E-03	10.376
AC-228	5.305E-01	1.810E-01	2.296E-01	4.401E-02	2.310
RA-228	8.646E-01	1.481E-01	1.760E-01	8.131E-03	4.913
TH-234	5.491E+00	4.697E-01	5.741E-01	5.369E-02	9.564
U-235	4.517E-01	4.837E-02	1.766E-01	1.646E-02	2.557

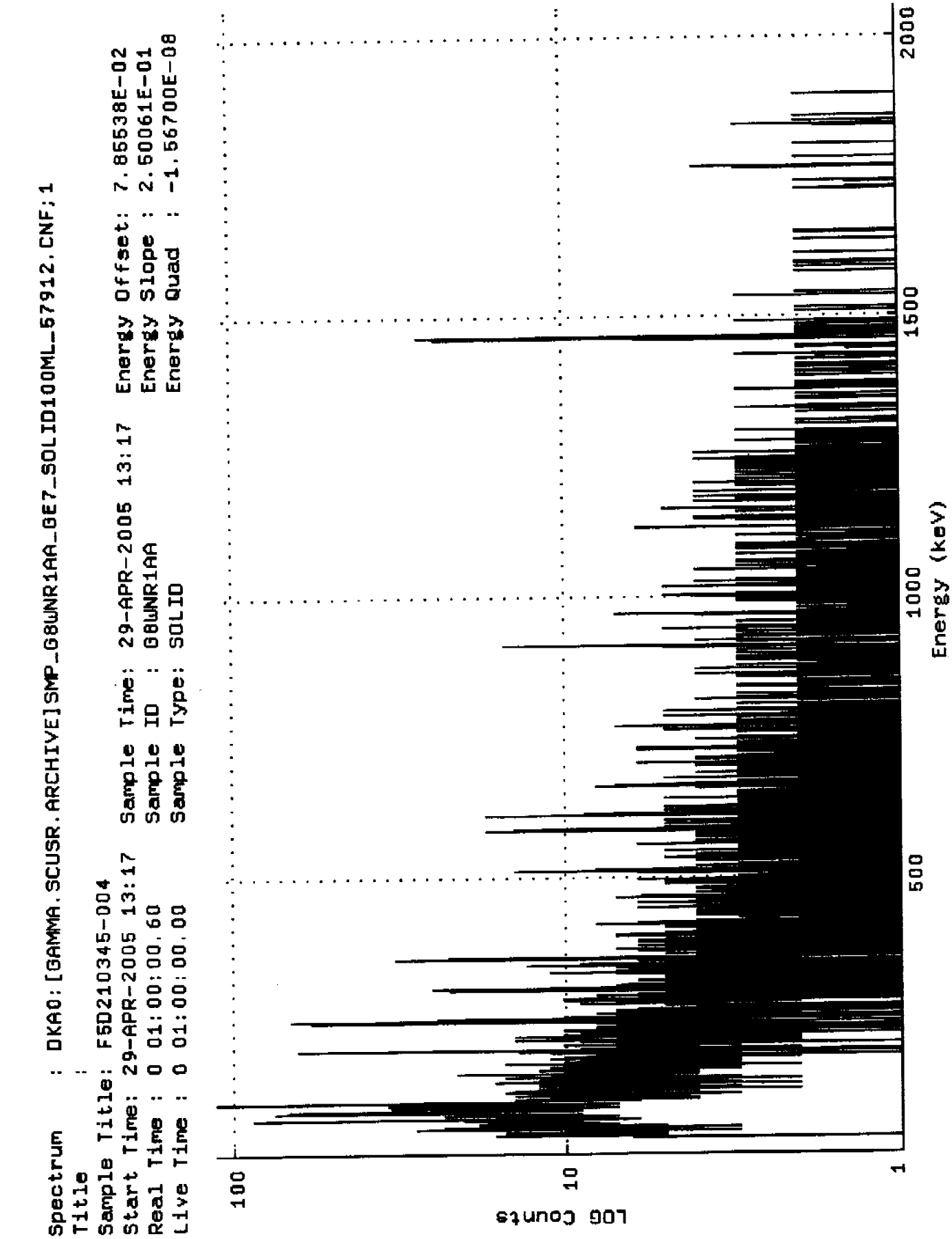
---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	1.714E-01		1.654E-01	2.948E-01	1.571E-02	0.582
NA-22	1.810E-02		3.376E-02	5.901E-02	2.494E-03	0.307
CR-51	-1.877E-01		1.430E-01	2.248E-01	1.148E-02	-0.835
MN-54	-1.129E-02		2.636E-02	4.290E-02	2.225E-03	-0.263
CO-57	1.036E-02		1.197E-02	2.025E-02	1.225E-03	0.512
FE-59	-5.688E-02		4.864E-02	7.197E-02	3.675E-03	-0.790
CO-60	1.144E-02		2.850E-02	4.949E-02	2.104E-03	0.231
ZN-65	-1.420E-01		6.823E-02	9.394E-02	4.062E-03	-1.511
SE-75	-1.623E-02		2.028E-02	3.238E-02	1.616E-03	-0.501
SR-85	-5.478E-02		2.679E-02	4.015E-02	2.119E-03	-1.364
Y-88	2.900E-02		2.850E-02	5.372E-02	2.248E-03	0.540
NB-95	2.084E-02		2.922E-02	5.039E-02	2.847E-03	0.413
ZR-95	4.962E-02		4.429E-02	7.891E-02	4.771E-03	0.629
MO-99	-2.637E-01		1.748E-01	2.510E-01	2.138E-02	-1.050
TC-99M	-2.433E-02		1.624E-02	2.147E-02	1.176E-03	-1.133
RU-103	2.343E-02		1.728E-02	3.156E-02	1.825E-03	0.742
RH-105	2.055E-01		2.631E-01	4.511E-01	2.229E-02	0.456
RH-106	-4.934E-02		1.349E-01	2.727E-01	1.436E-02	-0.181
RU-106	-2.584E-01		2.311E-01	3.607E-01	2.805E-02	-0.716
CD-109	1.364E+00		4.083E-01	7.137E-01	4.206E-02	1.911
SN-113	-5.051E-03		2.527E-02	4.168E-02	1.893E-03	-0.121
SB-124	-8.840E-03		2.386E-02	3.528E-02	2.039E-03	-0.251
SB-125	6.282E-02		5.314E-02	9.418E-02	4.488E-03	0.667
I-131	3.203E-03		1.828E-02	3.096E-02	1.501E-03	0.103
I-132	-4.609E-02		2.986E-02	4.494E-02	2.710E-03	-1.026
TE-132	-4.498E-03		1.448E-02	2.412E-02	1.176E-03	-0.186
BA-133	-3.472E-02		3.073E-02	3.950E-02	2.715E-03	-0.879
I-133	-1.121E-02		2.190E-02	3.533E-02	1.899E-03	-0.317
CS-134	1.249E-02		2.519E-02	3.757E-02	2.177E-03	0.332
CS-137	1.035E-01		3.489E-02	6.515E-02	3.940E-03	1.588
CE-139	-2.195E-02		1.784E-02	2.355E-02	1.076E-03	-0.932
BA-140	-4.859E-02		7.790E-02	1.239E-01	2.094E-02	-0.392
LA-140	3.542E-02		3.120E-02	5.835E-02	2.521E-03	0.607
CE-141	6.759E-02		2.737E-02	4.366E-02	2.345E-03	1.548
CE-144	-1.143E-02		9.555E-02	1.612E-01	1.086E-02	-0.071

Combined Activity-MDA Report (continued)
Sample ID : G8WNR1AA Acquisition date : 29-APR-2005 13:17:36

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
ND-147	2.525E-01		1.393E-01	2.562E-01	1.379E-02	0.986
EU-152	2.622E-01		1.235E-01	2.510E-01	1.237E-02	1.045
EU-154	1.719E-03		2.304E-01	3.855E-01	2.514E-02	0.004
EU-155	6.875E-02		5.081E-02	8.771E-02	4.827E-03	0.784
HG-203	2.975E-03		1.871E-02	3.134E-02	1.592E-03	0.095
BI-211	2.056E+00		2.683E-01	4.487E-01	2.131E-02	4.582
PB-211	-1.253E+00		9.354E-01	1.408E+00	7.339E-02	-0.890
BI-212	1.005E+00		3.997E-01	7.516E-01	4.388E-02	1.337
BI-214	6.623E-01	+	1.030E-01	1.644E-01	9.947E-03	4.029
RN-219	3.734E-01		1.524E-01	2.757E-01	1.377E-02	1.354
RA-223	2.377E-01		2.118E-01	3.681E-01	1.979E-02	0.646
RA-224	5.412E+00		1.661E+00	1.115E+00	3.192E-01	4.855
RA-226	6.910E+00	+	7.630E-01	1.172E+00	5.488E-02	5.896
TH-227	4.343E-01		1.487E-01	2.429E-01	1.191E-02	1.788
PA-231	-5.366E-01		7.203E-01	9.443E-01	6.221E-02	-0.568
TH-231	6.881E-01		2.481E-01	3.838E-01	2.604E-02	1.793
TH-232	1.246E+00		5.970E-01	1.135E+00	5.647E-02	1.098
PA-233	-7.882E-03		3.758E-02	6.128E-02	3.085E-03	-0.129
PA-234M	1.417E+01		5.018E+00	9.871E+00	4.489E-01	1.435
NP-237	-8.451E-03		4.030E-02	6.570E-02	3.237E-03	-0.129
NP-239	1.035E-01		7.678E-02	1.271E-01	6.798E-03	0.814
AM-241	3.288E-03		4.216E-02	6.488E-02	3.428E-03	0.051
ANN RAD	-2.094E-02		2.808E-02	5.589E-02	2.939E-03	-0.375


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8UNR1AA_GE7_SOLID100ML_57912.CNF;1
Title :
Sample Title: F5D210345-004
Start Time: 29-APR-2005 13:17 Sample Time: 29-APR-2005 13:17 Energy Offset: 7.85538E-02
Real Time : 0 01:00:00.60 Sample ID : G8UNR1AA Energy Slope : 2.50061E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : -1.56700E-08
100
10
1
Log Counts
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 10-MAY-2005 19:04:42
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WNV1AA_GE5_SOLID100ML_57913.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-005
Sample ID : G8WNV1AA

Sample Quantity : 1.58700E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 29-APR-2005 13:21:17
Acquisition date : 29-APR-2005 13:21:17
Decay time : 0 00:00:00.00

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:01.07
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE5

Counting geometry: SOLID_100ML

Energy cal. time : 9-MAR-2005 09:18:16.
Effic. cal. time : 18-JAN-2005 09:43:11

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE5__57455.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WNV1AA Acquisition date : 29-APR-2005 13:21:17

---- Energy, FWHM, and Efficiency Curves ----

```
**************************************************************************
*                                                                        *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)        *
*                          A = -7.14002E-03                              *
*                          B = 2.49998E-01                               *
*                          C = -1.90945E-09                              *
*                                                                        *
*                                                                        *
*                    FWHM(keV) = A + (B * SQRT(Energy))                  *
*                          A = 5.02556E-01                               *
*                          B = 3.66242E-02                               *
*                                                                        *
*                                                                        *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                        *
*     a1=9.41250E+02   a2=-4.46457E+00 a3=9.42586E-01                    *
*     a4=5.97186E-02   a5=-3.91387E-02 a6=-9.36517E-03   a7=0.00000E+00  *
*                                                                        *
**************************************************************************
```

Combined Activity-MDA Report
Sample ID : G8WNV1AA

Acquisition date : 29-APR-2005 13:21:17

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	1.161E+01	1.139E+00	3.244E-01	1.514E-02	35.785
TL-208	1.747E-01	3.375E-02	2.742E-02	1.925E-03	6.372
PB-212	3.816E-01	5.505E-02	5.775E-02	3.289E-03	6.608
PB-214	5.865E-01	7.061E-02	6.267E-02	3.201E-03	9.359
AC-228	3.411E-01	1.934E-01	1.924E-01	3.689E-02	1.773
TH-234	5.224E+00	4.536E-01	4.480E-01	4.316E-02	11.660
U-235	4.177E-01	5.175E-02	1.584E-01	1.519E-02	2.638

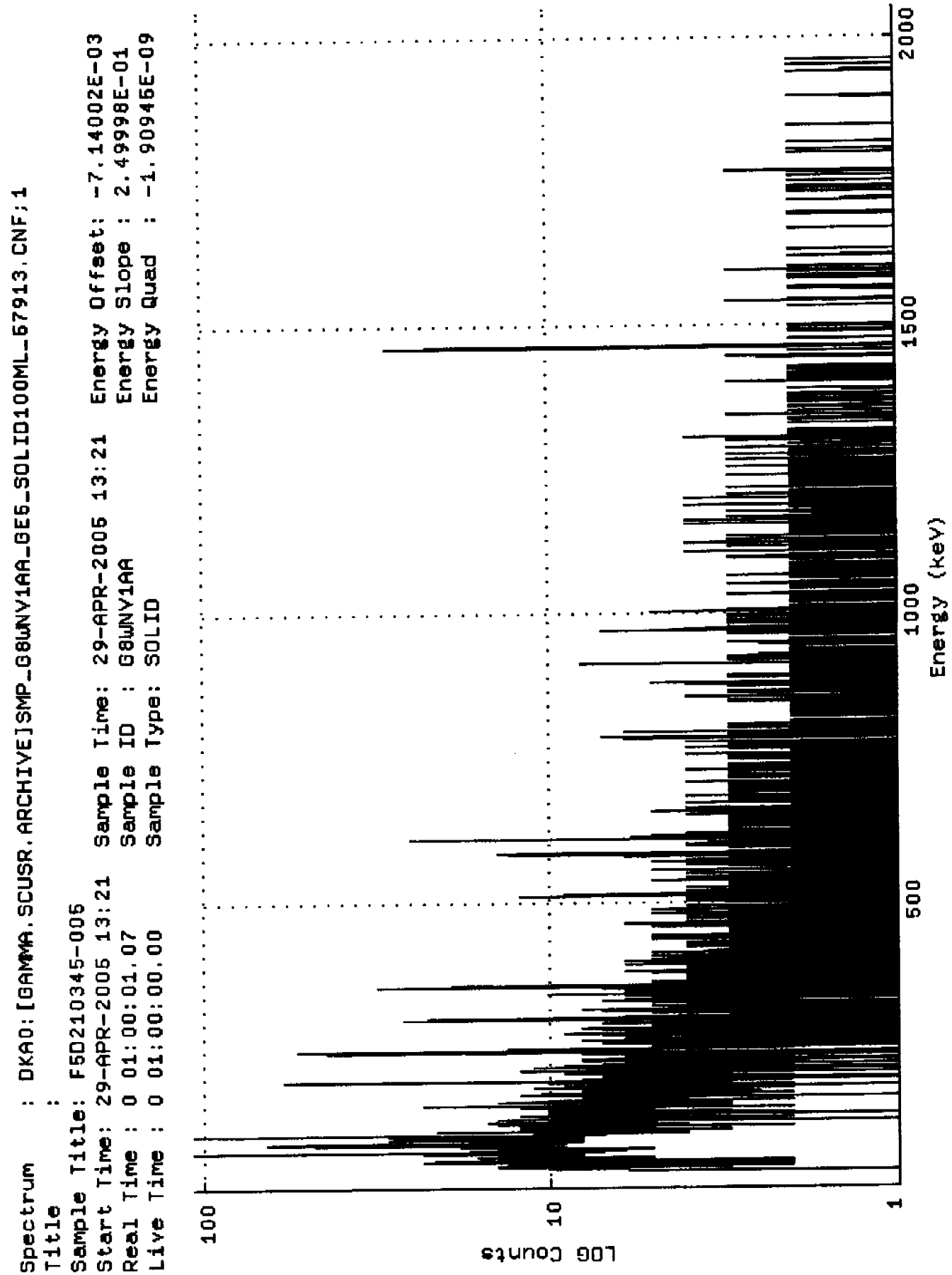
---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-4.897E-03		1.612E-01	2.705E-01	1.464E-02	-0.018
NA-22	1.076E-02		2.411E-02	4.236E-02	1.903E-03	0.254
CR-51	-1.040E-01		1.243E-01	1.970E-01	1.019E-02	-0.528
MN-54	2.964E-03		2.097E-02	3.514E-02	2.311E-03	0.084
CO-57	-1.950E-02		1.171E-02	1.758E-02	1.175E-03	-1.109
FE-59	2.194E-02		4.594E-02	7.952E-02	4.541E-03	0.276
CO-60	-1.812E-02		2.803E-02	4.631E-02	2.104E-03	-0.391
ZN-65	-1.022E-01		6.336E-02	9.013E-02	4.434E-03	-1.134
SE-75	-4.952E-02		1.738E-02	2.350E-02	1.211E-03	-2.107
SR-85	-1.112E-01		2.582E-02	3.089E-02	1.689E-03	-3.600
Y-88	-8.563E-03		2.023E-02	3.065E-02	1.284E-03	-0.279
NB-95	-3.661E-02		2.416E-02	3.533E-02	2.387E-03	-1.036
ZR-95	6.113E-03		3.199E-02	5.435E-02	3.839E-03	0.112
MO-99	1.069E-01		1.502E-01	2.653E-01	2.448E-02	0.403
TC-99M	-1.490E-02		1.398E-02	1.914E-02	1.143E-03	-0.778
RU-103	1.875E-04		1.688E-02	2.832E-02	1.673E-03	0.007
RH-105	2.063E-04		2.077E-01	3.489E-01	1.757E-02	0.001
RH-106	-9.420E-02		1.302E-01	2.573E-01	1.401E-02	-0.366
RU-106	-2.698E-01		1.911E-01	2.743E-01	2.254E-02	-0.983
CD-109	6.372E-01		3.176E-01	5.544E-01	3.229E-02	1.149
SN-113	-3.903E-03		2.138E-02	3.484E-02	1.551E-03	-0.112
SB-124	-1.061E-03		1.920E-02	3.156E-02	1.979E-03	-0.034
SB-125	1.769E-02		4.317E-02	7.527E-02	3.567E-03	0.235
I-131	-1.257E-02		1.514E-02	2.358E-02	1.137E-03	-0.533
I-132	8.169E-04		1.970E-02	3.333E-02	2.263E-03	0.025
TE-132	1.799E-02		1.221E-02	2.158E-02	1.097E-03	0.834
BA-133	-1.241E-02		2.799E-02	3.964E-02	2.723E-03	-0.313
I-133	-3.324E-02		1.811E-02	2.527E-02	1.417E-03	-1.315
CS-134	-8.534E-03		2.248E-02	3.218E-02	2.026E-03	-0.265
CS-137	1.235E-02		2.532E-02	4.734E-02	3.214E-03	0.261
CE-139	-3.411E-02		1.275E-02	1.843E-02	8.862E-04	-1.851
BA-140	2.167E-05		5.818E-02	9.691E-02	1.645E-02	0.000
LA-140	1.381E-02		2.568E-02	4.606E-02	2.065E-03	0.300
CE-141	1.037E-02		2.382E-02	3.565E-02	2.073E-03	0.291
CE-144	-5.367E-02		8.467E-02	1.404E-01	1.012E-02	-0.382
ND-147	1.552E-01		1.108E-01	2.034E-01	1.144E-02	0.763

Combined Activity-MDA Report (continued)
Sample ID : G8WNV1AA Acquisition date : 29-APR-2005 13:21:17

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-152	-6.118E-03		1.231E-01	2.034E-01	1.049E-02	-0.030
EU-154	-3.224E-02		2.052E-01	3.430E-01	2.660E-02	-0.094
EU-155	1.179E-01		4.642E-02	8.268E-02	4.780E-03	1.426
HG-203	-1.062E-02		1.635E-02	2.670E-02	1.393E-03	-0.398
BI-211	1.688E+00		2.391E-01	4.086E-01	1.943E-02	4.130
PB-211	6.885E-01		7.002E-01	1.261E+00	8.307E-02	0.546
BI-212	5.012E-01		3.573E-01	6.483E-01	4.409E-02	0.773
BI-214	6.604E-01	+	1.014E-01	1.598E-01	1.046E-02	4.134
RN-219	1.350E-01		1.289E-01	2.284E-01	1.176E-02	0.591
RA-223	7.619E-02		1.813E-01	3.113E-01	1.780E-02	0.245
RA-224	2.341E+00		7.969E-01	7.675E-01	2.200E-01	3.050
RA-226	6.648E+00	+	8.434E-01	1.098E+00	5.399E-02	6.053
TH-227	-1.195E-01		1.266E-01	1.648E-01	8.407E-03	-0.725
RA-228	5.020E-01	+	1.260E-01	2.297E-01	1.436E-02	2.185
PA-231	-1.241E+00		5.498E-01	7.842E-01	5.226E-02	-1.583
TH-231	3.994E-01		2.110E-01	3.249E-01	2.208E-02	1.229
TH-232	4.986E-01		4.937E-01	8.857E-01	5.738E-02	0.563
PA-233	2.671E-02		3.213E-02	5.632E-02	2.883E-03	0.474
PA-234M	4.531E+00		4.387E+00	7.873E+00	4.550E-01	0.575
NP-237	2.864E-02		3.445E-02	6.039E-02	3.027E-03	0.474
NP-239	1.862E-01		6.488E-02	1.164E-01	6.409E-03	1.599
AM-241	3.468E-03		3.372E-02	5.515E-02	3.234E-03	0.063
ANN RAD	1.512E-02		2.648E-02	5.458E-02	2.968E-03	0.277


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WNV1AA_GE5_SOLID100ML_67913.CNF;1
Title :
Sample Title: F5D210345-005
Start Time: 29-APR-2005 13:21 Sample Time: 29-APR-2005 13:21 Energy Offset: -7.14002E-03
Real Time : 0 01:00:01.07 Sample ID : G8WNV1AA Energy Slope : 2.49998E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : -1.90945E-09
100
10
1
Log Counts
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 10-MAY-2005 19:05:15
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WNW1AA_GE6_SOLID100ML_57914.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-006
Sample ID : G8WNW1AA

Sample Quantity : 1.77200E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 29-APR-2005 13:22:04
Acquisition date : 29-APR-2005 13:22:04
Decay time : 0 00:00:00.00

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.54
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE6

Counting geometry: SOLID_100ML

Energy cal. time : 3-MAR-2004 08:43:53.
Effic. cal. time : 18-JAN-2005 22:11:47

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE6__57456.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WNW1AA

Acquisition date : 29-APR-2005 13:22:04

---- Energy, FWHM, and Efficiency Curves ----

```
**********************************************************************************
*                                                                                *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)                *
*                            A = 1.54285E-01                                     *
*                            B = 2.49832E-01                                     *
*                            C = 1.86799E-08                                     *
*                                                                                *
*                                                                                *
*                     FWHM(keV) = A + (B * SQRT(Energy))                         *
*                            A = 4.67797E-01                                     *
*                            B = 3.35494E-02                                     *
*                                                                                *
*                                                                                *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                                *
*     a1=9.41250E+02   a2=-4.68519E+00 a3=8.82578E-01                           *
*     a4=8.83148E-02   a5=-2.58765E-02 a6=-1.60802E-02   a7=0.00000E+00         *
*                                                                                *
**********************************************************************************
```

Combined Activity-MDA Report
Sample ID : G8WNW1AA

Acquisition date : 29-APR-2005 13:22:04

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	9.103E+00	1.007E+00	1.947E-01	8.617E-03	46.761
TL-208	1.792E-01	3.391E-02	1.501E-02	1.093E-03	11.937
PB-212	4.125E-01	5.567E-02	5.688E-02	3.125E-03	7.251
BI-214	5.855E-01	8.792E-02	6.039E-02	4.097E-03	9.695
PB-214	4.708E-01	6.184E-02	5.908E-02	3.171E-03	7.969
RA-226	3.362E+00	6.395E-01	5.189E-01	2.359E-02	6.479
AC-228	2.250E-01	1.771E-01	1.781E-01	3.423E-02	1.264
TH-234	2.204E+00	3.110E-01	4.431E-01	4.212E-02	4.974
U-235	2.220E-01	4.233E-02	1.598E-01	1.464E-02	1.389

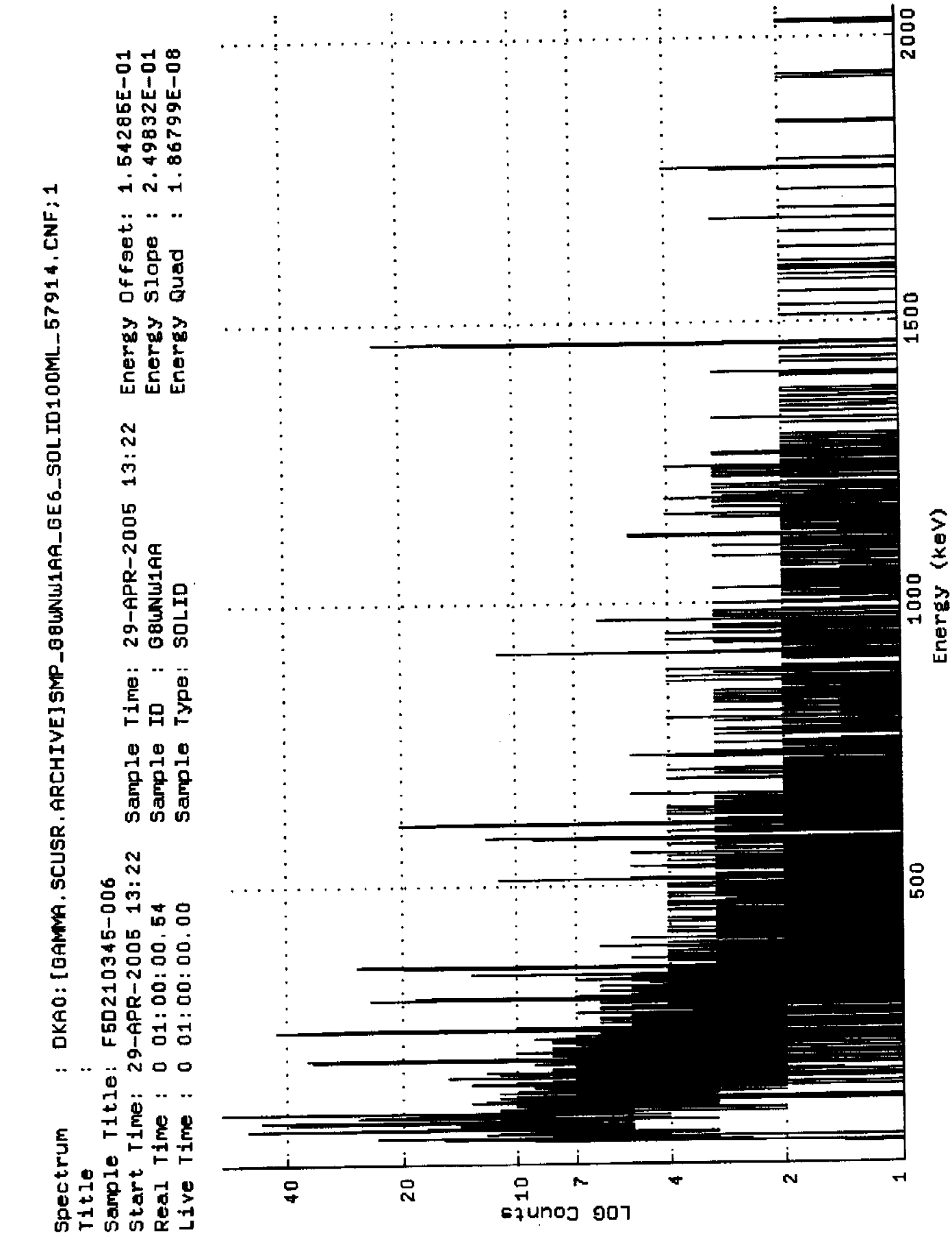
---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	6.983E-02		1.379E-01	2.386E-01	1.396E-02	0.293
NA-22	5.070E-02		2.843E-02	5.541E-02	2.399E-03	0.915
CR-51	-6.078E-02		1.313E-01	2.086E-01	1.100E-02	-0.291
MN-54	7.009E-03		1.867E-02	3.275E-02	1.946E-03	0.214
CO-57	-1.992E-03		1.065E-02	1.760E-02	9.987E-04	-0.113
FE-59	-4.485E-02		4.503E-02	6.550E-02	3.575E-03	-0.685
CO-60	-1.610E-02		2.115E-02	3.094E-02	1.315E-03	-0.520
ZN-65	2.164E-02		4.807E-02	7.431E-02	3.495E-03	0.291
SE-75	-2.627E-03		1.884E-02	3.110E-02	1.561E-03	-0.084
SR-85	-7.866E-02		2.573E-02	3.322E-02	1.955E-03	-2.368
Y-88	1.562E-02		1.614E-02	3.264E-02	1.368E-03	0.479
NB-95	3.441E-02		2.200E-02	4.093E-02	2.640E-03	0.841
ZR-95	-1.657E-02		2.840E-02	4.328E-02	2.947E-03	-0.383
MO-99	1.595E-01		1.316E-01	2.448E-01	2.225E-02	0.652
TC-99M	2.033E-02		1.119E-02	2.001E-02	1.037E-03	1.016
RU-103	8.730E-03		1.592E-02	2.763E-02	1.743E-03	0.316
RH-105	7.190E-02		2.553E-01	4.281E-01	2.174E-02	0.168
RH-106	4.861E-01		1.355E-01	2.527E-01	1.482E-02	1.924
RU-106	-1.156E-02		1.830E-01	3.059E-01	2.564E-02	-0.038
CD-109	8.464E-01		3.312E-01	5.946E-01	3.484E-02	1.423
SN-113	6.995E-03		2.258E-02	3.880E-02	1.924E-03	0.180
SB-124	9.605E-03		1.592E-02	2.828E-02	1.846E-03	0.340
SB-125	-5.182E-02		4.827E-02	7.344E-02	3.845E-03	-0.706
I-131	1.406E-02		1.638E-02	2.926E-02	1.510E-03	0.481
I-132	-8.181E-03		2.220E-02	3.585E-02	2.466E-03	-0.228
TE-132	-2.210E-02		1.269E-02	1.900E-02	9.166E-04	-1.163
BA-133	-8.607E-04		2.010E-02	3.189E-02	2.258E-03	-0.027
I-133	-4.135E-03		1.995E-02	3.225E-02	1.936E-03	-0.128
CS-134	-2.767E-02		1.881E-02	2.288E-02	1.498E-03	-1.209
CS-137	7.227E-02		2.791E-02	5.349E-02	3.691E-03	1.351
CE-139	2.570E-03		1.245E-02	2.063E-02	9.071E-04	0.125
BA-140	-1.922E-02		6.770E-02	1.084E-01	1.854E-02	-0.177
LA-140	6.273E-03		2.436E-02	4.240E-02	1.828E-03	0.148
CE-141	-3.158E-03		2.004E-02	3.284E-02	1.676E-03	-0.096

Combined Activity-MDA Report (continued)
Sample ID : G8WNW1AA Acquisition date : 29-APR-2005 13:22:04

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
CE-144	1.775E-02		8.565E-02	1.436E-01	9.284E-03	0.124
ND-147	1.335E-01		1.233E-01	2.204E-01	1.326E-02	0.606
EU-152	2.446E-01		1.269E-01	2.550E-01	1.255E-02	0.959
EU-154	3.847E-02		1.904E-01	3.265E-01	2.311E-02	0.118
EU-155	1.200E-01		4.365E-02	8.059E-02	4.270E-03	1.489
HG-203	2.838E-04		1.725E-02	2.866E-02	1.473E-03	0.010
BI-211	1.379E+00		2.140E-01	3.904E-01	1.963E-02	3.532
PB-211	-7.686E-01		7.860E-01	1.202E+00	7.172E-02	-0.639
BI-212	0.000E+00		0.000E+00	5.247E-01	3.494E-02	0.000
RN-219	1.415E-01		1.250E-01	2.209E-01	1.113E-02	0.641
RA-223	2.796E-01	+	1.548E-01	2.954E-01	1.526E-02	0.947
RA-224	7.767E-01		4.840E-01	6.873E-01	1.967E-01	1.130
TH-227	2.134E-02		1.142E-01	1.673E-01	8.141E-03	0.128
RA-228	6.151E-01	+	1.458E-01	2.465E-01	1.310E-02	2.495
PA-231	-9.586E-01		5.913E-01	8.619E-01	5.761E-02	-1.112
TH-231	6.741E-01		1.843E-01	3.334E-01	2.264E-02	2.022
TH-232	1.322E+00		5.186E-01	1.045E+00	5.969E-02	1.265
PA-233	-6.403E-02		3.442E-02	4.866E-02	2.523E-03	-1.316
PA-234M	1.085E+01		3.482E+00	7.395E+00	3.783E-01	1.467
NP-237	-6.865E-02		3.690E-02	5.217E-02	2.651E-03	-1.316
NP-239	-9.622E-02		6.383E-02	1.001E-01	5.203E-03	-0.961
AM-241	-7.081E-03		2.786E-02	4.497E-02	2.528E-03	-0.157
ANN RAD	-5.984E-02		2.800E-02	5.358E-02	3.140E-03	-1.117


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WNW1AA_GE6_SOLID100ML_57914.CNF;1
Title :
Sample Title: F5D210345-006
Start Time: 29-APR-2005 13:22
Real Time : 0 01:00:00.54
Live Time : 0 01:00:00.00
Sample Time: 29-APR-2005 13:22
Sample ID : G8WNW1AA
Sample Type: SOLID
Energy Offset: 1.54285E-01
Energy Slope : 2.49832E-01
Energy Quad : 1.86799E-08
Log Counts
40
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 10-MAY-2005 19:05:47
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN01AA_GE4_SOLID100ML_57915.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-007
Sample ID : G8WN01AA

Sample Quantity : 1.63900E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 29-APR-2005 14:25:06
Acquisition date : 29-APR-2005 14:25:06
Decay time : 0 00:00:00.00

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.65
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE4

Counting geometry: SOLID_100ML

Energy cal. time : 16-MAR-2005 08:34:49
Effic. cal. time : 18-JAN-2005 00:15:12

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE4__57454.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WN01AA

Acquisition date : 29-APR-2005 14:25:06

---- Energy, FWHM, and Efficiency Curves ----

```
*************************************************************************
*                                                                       *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)       *
*                          A = 1.10653E-01                              *
*                          B = 2.49919E-01                              *
*                          C = 1.94892E-08                              *
*                                                                       *
*                                                                       *
*                    FWHM(keV) = A + (B * SQRT(Energy))                 *
*                          A = 8.02351E-01                              *
*                          B = 2.65421E-02                              *
*                                                                       *
*                                                                       *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                       *
*     a1=9.41250E+02   a2=-4.55854E+00 a3=9.62044E-01                   *
*     a4=7.38134E-02   a5=-4.50301E-02 a6=-9.56656E-03   a7=0.00000E+00 *
*                                                                       *
*************************************************************************
```

Combined Activity-MDA Report
Sample ID : G8WN01AA

Acquisition date : 29-APR-2005 14:25:06

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	7.129E+00	7.445E-01	3.391E-01	1.586E-02	21.021
TL-208	1.583E-01	3.256E-02	2.651E-02	1.617E-03	5.971
PB-212	3.655E-01	5.112E-02	5.382E-02	2.942E-03	6.792
PB-214	3.808E-01	5.611E-02	5.540E-02	2.768E-03	6.873
TH-234	7.496E+00	4.695E-01	5.474E-01	5.241E-02	13.693
U-235	5.248E-01	5.175E-02	1.747E-01	1.616E-02	3.003

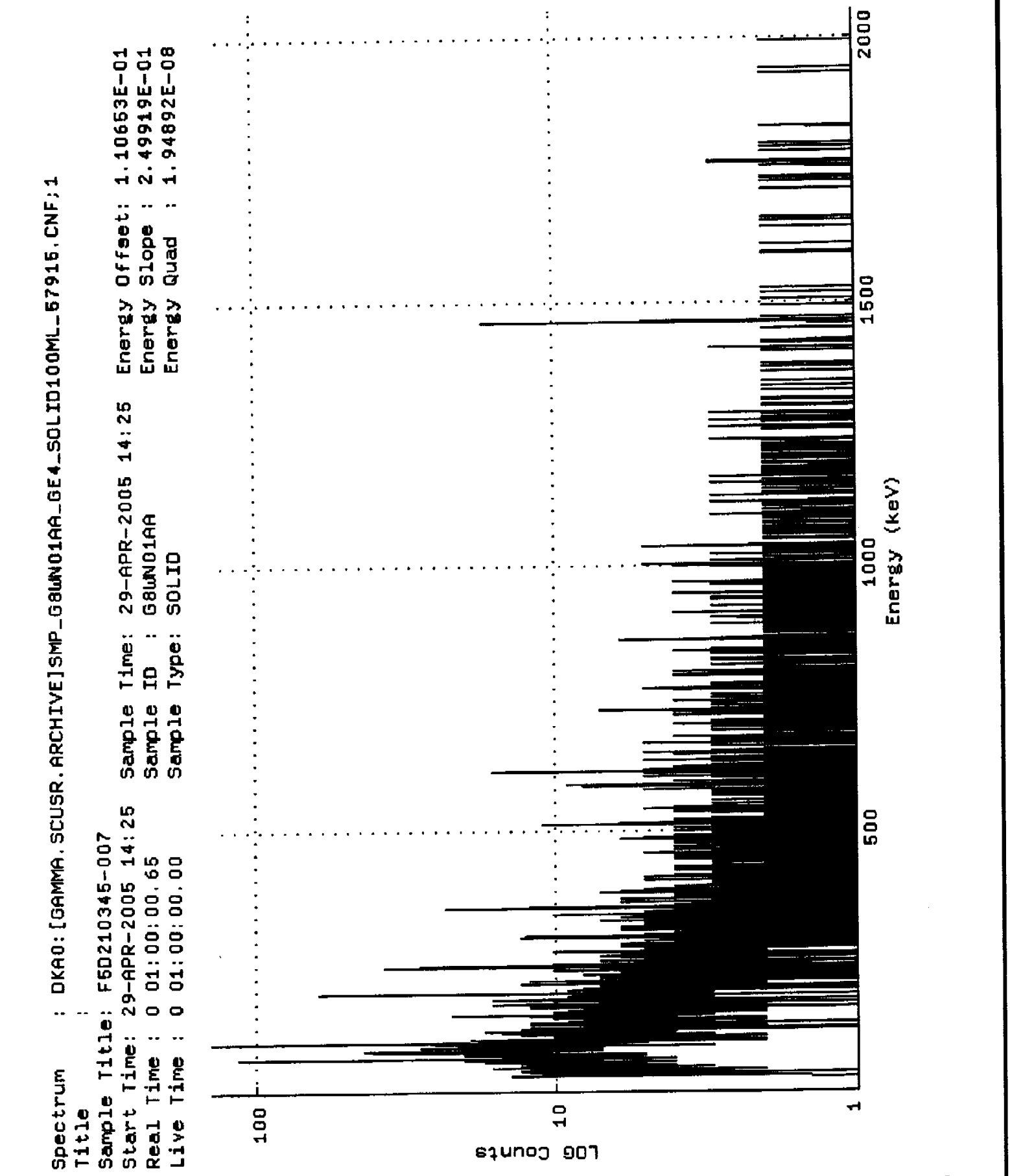
---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-5.731E-02		1.520E-01	2.447E-01	1.224E-02	-0.234
NA-22	3.141E-02		2.741E-02	5.138E-02	2.331E-03	0.611
CR-51	-1.618E-01		1.353E-01	2.126E-01	1.065E-02	-0.761
MN-54	1.311E-02		1.939E-02	3.422E-02	1.837E-03	0.383
CO-57	-1.807E-02		1.108E-02	1.749E-02	1.024E-03	-1.033
FE-59	-8.759E-04		4.031E-02	6.704E-02	3.703E-03	-0.013
CO-60	1.894E-02		1.982E-02	3.780E-02	1.715E-03	0.501
ZN-65	-2.245E-02		5.585E-02	8.951E-02	4.277E-03	-0.251
SE-75	-1.257E-02		2.140E-02	3.412E-02	1.679E-03	-0.368
SR-85	-7.680E-02		2.748E-02	3.850E-02	1.860E-03	-1.994
Y-88	-7.286E-03		1.758E-02	2.675E-02	1.139E-03	-0.272
NB-95	4.289E-02		2.527E-02	4.672E-02	2.476E-03	0.918
ZR-95	8.330E-02		3.423E-02	6.855E-02	3.879E-03	1.215
MO-99	2.802E-02		1.578E-01	2.667E-01	2.178E-02	0.105
TC-99M	8.477E-03		1.435E-02	2.234E-02	1.194E-03	0.379
RU-103	3.561E-02		1.784E-02	3.354E-02	1.821E-03	1.062
RH-105	-4.107E-01		2.162E-01	3.199E-01	1.552E-02	-1.284
RH-106	-6.757E-03		1.285E-01	2.585E-01	1.246E-02	-0.026
RU-106	2.492E-01		1.913E-01	3.506E-01	2.518E-02	0.711
CD-109	3.641E-01		4.003E-01	5.866E-01	3.416E-02	0.621
SN-113	1.455E-02		2.026E-02	3.553E-02	1.563E-03	0.409
SB-124	-1.507E-02		1.962E-02	3.116E-02	1.569E-03	-0.483
SB-125	-1.233E-02		4.901E-02	8.016E-02	3.643E-03	-0.154
I-131	-1.686E-02		1.648E-02	2.578E-02	1.219E-03	-0.654
I-132	2.711E-03		2.256E-02	3.814E-02	1.940E-03	0.071
TE-132	-1.268E-02		1.431E-02	2.271E-02	1.094E-03	-0.558
BA-133	3.010E-02		1.969E-02	3.290E-02	2.234E-03	0.915
I-133	-2.602E-02		1.700E-02	2.374E-02	1.158E-03	-1.096
CS-134	-2.683E-03		2.179E-02	3.161E-02	1.595E-03	-0.085
CS-137	1.400E-04		2.394E-02	4.012E-02	2.037E-03	0.003
CE-139	1.584E-02		1.406E-02	2.165E-02	9.771E-04	0.731
BA-140	1.985E-02		6.842E-02	1.181E-01	1.977E-02	0.168
LA-140	-8.531E-04		2.799E-02	4.641E-02	2.095E-03	-0.018
CE-141	4.436E-02		2.827E-02	4.385E-02	2.304E-03	1.012
CE-144	-8.273E-02		8.792E-02	1.428E-01	9.436E-03	-0.579
ND-147	-2.305E-01		1.170E-01	1.567E-01	7.650E-03	-1.471
EU-152	-6.880E-02		1.198E-01	1.860E-01	9.598E-03	-0.370

Combined Activity-MDA Report (continued)
Sample ID : G8WN01AA Acquisition date : 29-APR-2005 14:25:06

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-154	-8.251E-02		1.653E-01	2.649E-01	1.831E-02	-0.311
EU-155	-2.724E-02		4.746E-02	7.599E-02	4.083E-03	-0.358
HG-203	2.185E-04		1.661E-02	2.733E-02	1.368E-03	0.008
BI-211	1.218E+00		1.890E-01	3.534E-01	1.637E-02	3.447
PB-211	1.985E-01		6.617E-01	1.129E+00	6.056E-02	0.176
BI-212	3.809E-01		3.909E-01	6.912E-01	3.617E-02	0.551
BI-214	3.783E-01	+	8.134E-02	1.396E-01	7.426E-03	2.709
RN-219	3.426E-02		1.307E-01	2.181E-01	1.074E-02	0.157
RA-223	1.938E-01		1.888E-01	3.303E-01	1.748E-02	0.587
RA-224	2.296E+00		7.886E-01	7.925E-01	2.268E-01	2.897
RA-226	8.124E+00	+	8.352E-01	1.266E+00	5.860E-02	6.415
TH-227	1.905E-01		1.266E-01	1.970E-01	9.540E-03	0.967
AC-228	3.797E-01		1.547E-01	2.576E-01	4.930E-02	1.474
RA-228	2.542E-01		9.351E-02	1.858E-01	9.943E-03	1.368
PA-231	-1.284E-01		5.200E-01	8.678E-01	5.660E-02	-0.148
TH-231	2.768E-01		2.102E-01	3.583E-01	2.429E-02	0.773
TH-232	1.048E+00		6.024E-01	1.121E+00	6.025E-02	0.935
PA-233	-1.928E-02		3.259E-02	5.322E-02	2.631E-03	-0.362
PA-234M	1.579E+01		4.575E+00	9.392E+00	4.861E-01	1.681
NP-237	-2.068E-02		3.495E-02	5.707E-02	2.759E-03	-0.362
NP-239	8.526E-02		6.861E-02	1.178E-01	6.166E-03	0.724
AM-241	2.222E-02		4.147E-02	6.077E-02	3.495E-03	0.366
ANN RAD	-2.892E-02		2.730E-02	5.254E-02	2.532E-03	-0.551


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN01AA_GE4_SOLID100ML_57915.CNF;1
Title :
Sample Title: F5D210345-007
Start Time: 29-APR-2005 14:25 Sample Time: 29-APR-2005 14:25 Energy Offset: 1.10653E-01
Real Time : 0 01:00:00.65 Sample ID : G8WN01AA Energy Slope : 2.49919E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : 1.94892E-08
Log Counts
100
10
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 10-MAY-2005 19:06:21
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN11AA_GE5_SOLID100ML_57916.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-008
Sample ID : G8WN11AA

Sample Quantity : 1.60800E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 29-APR-2005 14:25:49
Acquisition date : 29-APR-2005 14:25:49
Decay time : 0 00:00:00.00

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.94
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE5

Counting geometry: SOLID_100ML

Energy cal. time : 9-MAR-2005 09:18:16.
Effic. cal. time : 18-JAN-2005 09:43:11

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE5__57455.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WN11AA

Acquisition date : 29-APR-2005 14:25:49

---- Energy, FWHM, and Efficiency Curves ----

```
*****************************************************************************
*                                                                           *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)           *
*                          A = -7.14002E-03                                 *
*                          B = 2.49998E-01                                  *
*                          C = -1.90945E-09                                 *
*                                                                           *
*                                                                           *
*                    FWHM(keV) = A + (B * SQRT(Energy))                     *
*                          A = 5.02556E-01                                  *
*                          B = 3.66242E-02                                  *
*                                                                           *
*                                                                           *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                           *
*     a1=9.41250E+02   a2=-4.46457E+00 a3=9.42586E-01                       *
*     a4=5.97186E-02   a5=-3.91387E-02 a6=-9.36517E-03   a7=0.00000E+00     *
*                                                                           *
*****************************************************************************
```

---- Identified Nuclides ----

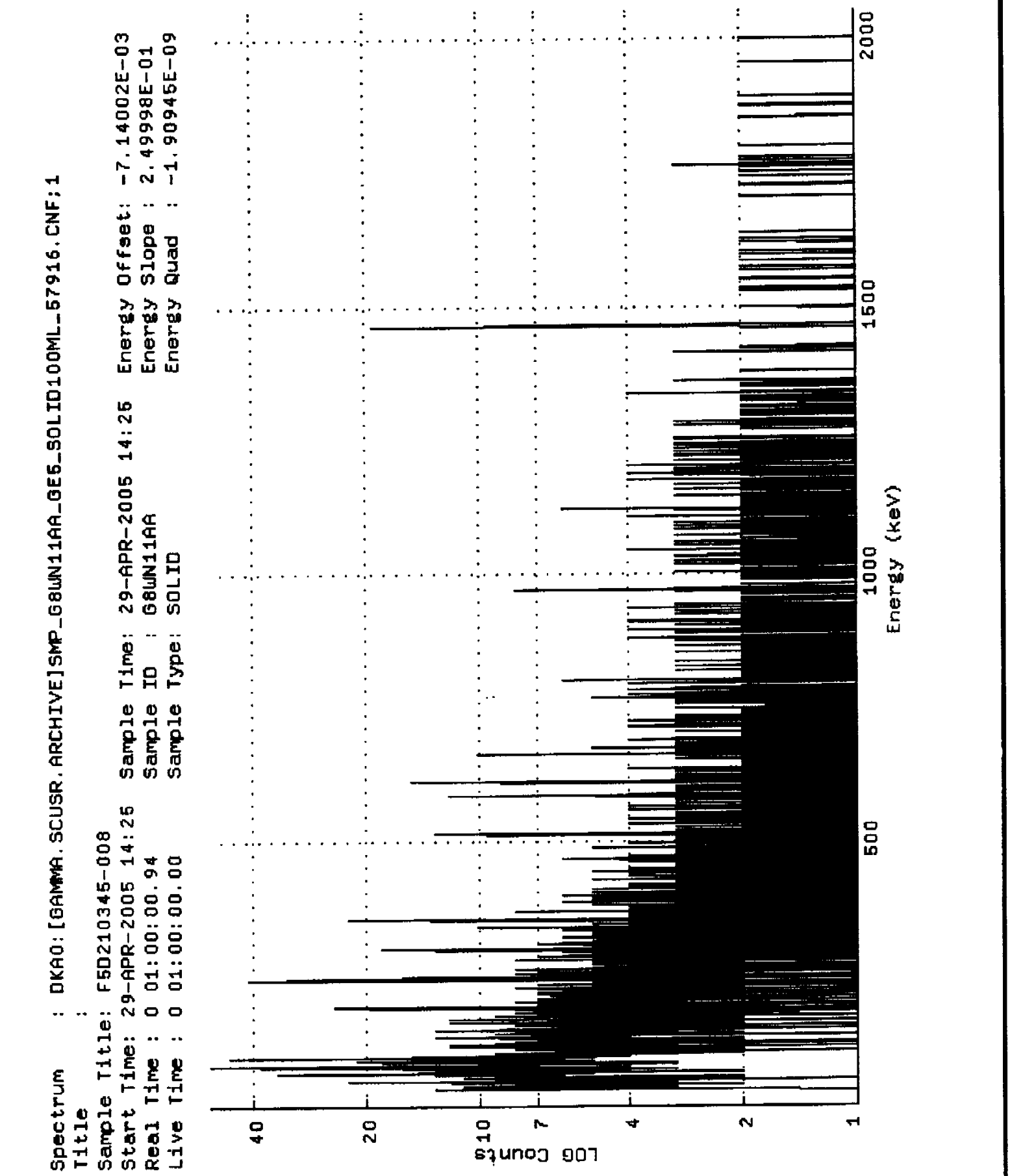
Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	7.939E+00	9.364E-01	2.614E-01	1.220E-02	30.364
CS-137	4.596E-02	2.661E-02	3.154E-02	2.142E-03	1.457
TL-208	1.378E-01	3.189E-02	2.779E-02	1.951E-03	4.958
PB-212	3.008E-01	5.555E-02	5.255E-02	2.993E-03	5.724
PB-214	4.182E-01	5.336E-02	5.861E-02	2.994E-03	7.135
RA-226	2.810E+00	6.799E-01	4.397E-01	2.162E-02	6.391
TH-234	1.789E+00	2.796E-01	4.097E-01	3.947E-02	4.367
U-235	1.856E-01	4.497E-02	1.604E-01	1.538E-02	1.157

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-7.604E-02		1.263E-01	2.019E-01	1.092E-02	-0.377
NA-22	-1.521E-02		2.557E-02	4.011E-02	1.802E-03	-0.379
CR-51	2.207E-01		1.235E-01	2.262E-01	1.170E-02	0.975
MN-54	1.393E-02		2.101E-02	3.673E-02	2.415E-03	0.379
CO-57	1.436E-03		8.834E-03	1.457E-02	9.745E-04	0.099
FE-59	-6.187E-03		3.916E-02	6.383E-02	3.646E-03	-0.097
CO-60	-5.697E-02		2.496E-02	3.232E-02	1.468E-03	-1.763
ZN-65	-9.602E-02		5.331E-02	7.157E-02	3.521E-03	-1.342
SE-75	-2.237E-02		1.592E-02	2.443E-02	1.258E-03	-0.916
SR-85	-5.182E-02		2.481E-02	3.672E-02	2.007E-03	-1.411
Y-88	-1.531E-02		1.087E-02	MDA could not be calculated		
NB-95	1.473E-02		2.245E-02	3.918E-02	2.647E-03	0.376
ZR-95	-5.424E-02		3.422E-02	4.775E-02	3.373E-03	-1.136
MO-99	-2.540E-02		1.314E-01	2.156E-01	1.989E-02	-0.118
TC-99M	-1.203E-02		1.020E-02	1.632E-02	9.745E-04	-0.737
RU-103	1.450E-02		1.631E-02	2.905E-02	1.716E-03	0.499
RH-105	-9.296E-02		2.268E-01	3.720E-01	1.874E-02	-0.250
RH-106	-8.407E-02		1.260E-01	2.511E-01	1.367E-02	-0.335
RU-106	-1.289E-01		1.695E-01	2.591E-01	2.128E-02	-0.498
CD-109	3.954E-01		2.776E-01	4.818E-01	2.806E-02	0.821
SN-113	-1.534E-02		2.257E-02	3.558E-02	1.584E-03	-0.431
SB-124	2.781E-02		1.541E-02	2.913E-02	1.826E-03	0.955
SB-125	4.582E-02		4.566E-02	8.227E-02	3.899E-03	0.557
I-131	-3.164E-02		1.576E-02	2.211E-02	1.066E-03	-1.432
I-132	-1.784E-02		2.039E-02	3.051E-02	2.072E-03	-0.585
TE-132	1.771E-03		1.097E-02	1.825E-02	9.277E-04	0.097
BA-133	3.690E-02		2.148E-02	3.622E-02	2.488E-03	1.019
I-133	-1.416E-02		1.748E-02	2.718E-02	1.524E-03	-0.521
CS-134	1.627E-02		1.569E-02	2.577E-02	1.622E-03	0.632
CE-139	-1.413E-02		1.125E-02	1.769E-02	8.507E-04	-0.799
BA-140	4.097E-02		6.685E-02	1.155E-01	1.962E-02	0.355
LA-140	1.174E-02		2.113E-02	3.846E-02	1.725E-03	0.305
CE-141	-1.209E-02		1.811E-02	2.973E-02	1.729E-03	-0.407
CE-144	-6.557E-02		7.026E-02	1.139E-01	8.214E-03	-0.576
ND-147	-8.575E-04		1.132E-01	1.886E-01	1.060E-02	-0.005

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-152	-4.025E-03		9.921E-02	1.639E-01	8.451E-03	-0.025
EU-154	-3.827E-02		1.811E-01	3.008E-01	2.333E-02	-0.127
EU-155	5.557E-02		3.212E-02	5.757E-02	3.328E-03	0.965
HG-203	-9.668E-03		1.517E-02	2.475E-02	1.291E-03	-0.391
BI-211	1.289E+00		2.013E-01	3.540E-01	1.683E-02	3.642
PB-211	-1.798E-01		7.104E-01	1.147E+00	7.557E-02	-0.157
BI-212	3.177E-01		2.965E-01	5.353E-01	3.640E-02	0.593
BI-214	3.846E-01	+	6.911E-02	1.247E-01	8.169E-03	3.084
RN-219	6.470E-02		1.093E-01	1.910E-01	9.830E-03	0.339
RA-223	1.000E-01		1.530E-01	2.661E-01	1.521E-02	0.376
RA-224	2.106E+00		7.261E-01	7.229E-01	2.072E-01	2.913
TH-227	-6.763E-02		1.160E-01	1.553E-01	7.921E-03	-0.436
AC-228	1.540E-01		1.244E-01	2.141E-01	4.104E-02	0.719
RA-228	2.670E-01		8.897E-02	1.765E-01	1.103E-02	1.513
PA-231	2.867E-01		5.133E-01	8.892E-01	5.926E-02	0.322
TH-231	4.311E-01		1.561E-01	2.776E-01	1.886E-02	1.553
TH-232	1.375E-01		3.753E-01	6.461E-01	4.185E-02	0.213
PA-233	8.623E-03		2.882E-02	4.924E-02	2.520E-03	0.175
PA-234M	3.334E+00		3.686E+00	6.633E+00	3.833E-01	0.503
NP-237	9.246E-03		3.090E-02	5.279E-02	2.646E-03	0.175
NP-239	6.721E-02		5.295E-02	9.230E-02	5.080E-03	0.728
AM-241	-1.632E-02		2.565E-02	4.330E-02	2.539E-03	-0.377
ANN RAD	-2.833E-03		2.534E-02	5.175E-02	2.814E-03	-0.055


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN11AA_GE5_SOLID100ML_57916.CNF;1
Title :
Sample Title: F5D210345-008
Start Time: 29-APR-2005 14:25 Sample Time: 29-APR-2005 14:26 Energy Offset: -7.14002E-03
Real Time : 0 01:00:00.94 Sample ID : G8WN11AA Energy Slope : 2.49998E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : -1.90945E-09
Log Counts
40
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 10-MAY-2005 19:06:52
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN21AA_GE6_SOLID100ML_57917.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-009
Sample ID : G8WN21AA

Sample Quantity : 1.74600E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 29-APR-2005 14:26:38
Acquisition date : 29-APR-2005 14:26:38
Decay time : 0 00:00:00.00

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.62
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE6

Counting geometry: SOLID_100ML

Energy cal. time : 3-MAR-2004 08:43:53.
Effic. cal. time : 18-JAN-2005 22:11:47

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE6__57456.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WN21AA

Acquisition date : 29-APR-2005 14:26:38

---- Energy, FWHM, and Efficiency Curves ----

```
*************************************************************************
*                                                                       *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)       *
*                          A = 1.54285E-01                              *
*                          B = 2.49832E-01                              *
*                          C = 1.86799E-08                              *
*                                                                       *
*                                                                       *
*                    FWHM(keV) = A + (B * SQRT(Energy))                 *
*                          A = 4.67797E-01                              *
*                          B = 3.35494E-02                              *
*                                                                       *
*                                                                       *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                       *
*     a1=9.41250E+02   a2=-4.68519E+00 a3=8.82578E-01                   *
*     a4=8.83148E-02   a5=-2.58765E-02 a6=-1.60802E-02   a7=0.00000E+00 *
*                                                                       *
*************************************************************************
```

Combined Activity-MDA Report
Sample ID : G8WN21AA

Acquisition date : 29-APR-2005 14:26:38

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	7.626E+00	9.161E-01	3.951E-01	1.749E-02	19.302
TL-208	2.623E-01	4.565E-02	3.875E-02	2.822E-03	6.769
PB-212	5.195E-01	6.060E-02	5.049E-02	2.773E-03	10.291
PB-214	8.192E-01	8.649E-02	5.996E-02	3.218E-03	13.661
RA-226	3.973E+00	6.513E-01	5.390E-01	2.450E-02	7.372
TH-234	2.969E+00	3.260E-01	4.995E-01	4.748E-02	5.944
U-235	2.624E-01	4.315E-02	2.062E-01	1.889E-02	1.273

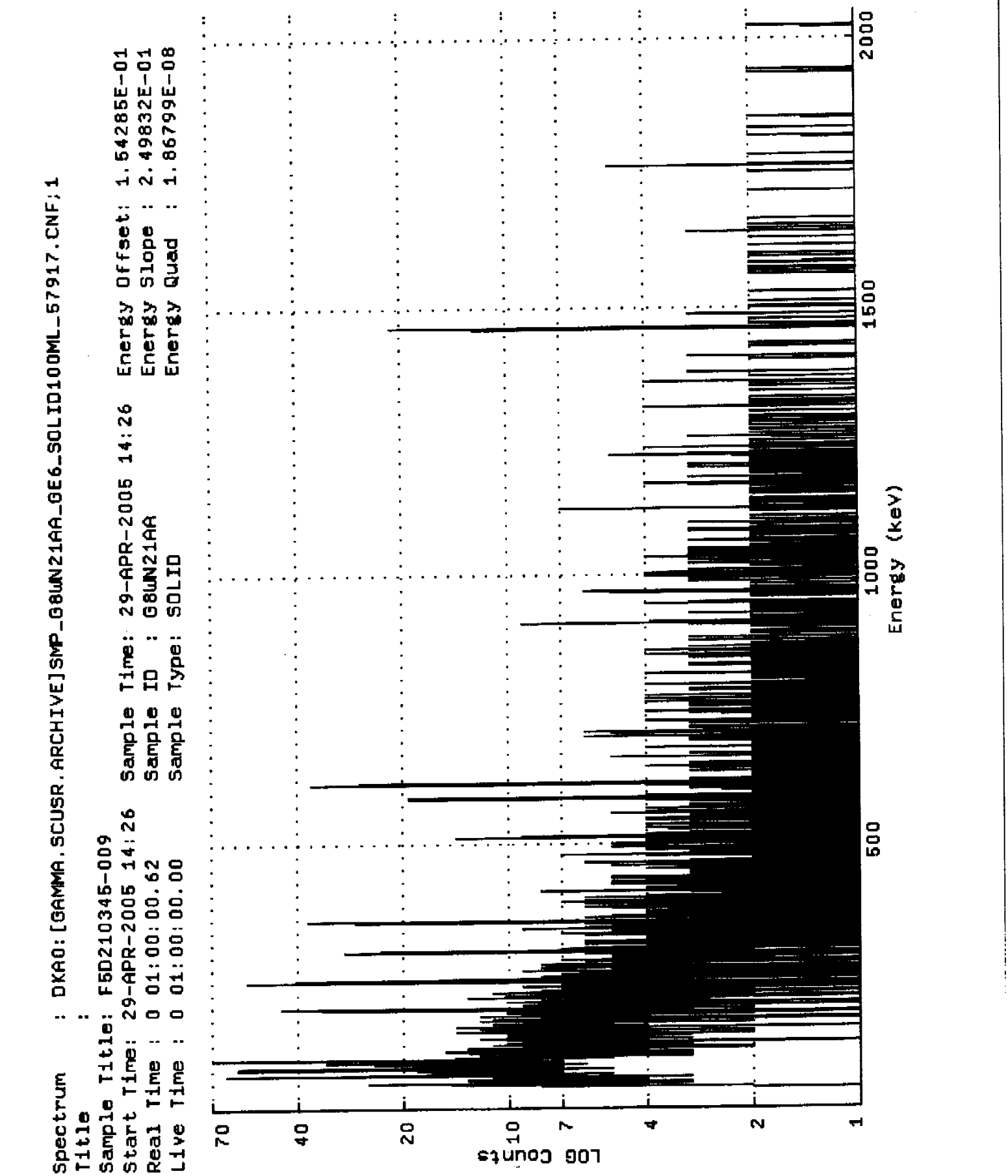
---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	3.063E-01		1.641E-01	3.054E-01	1.787E-02	1.003
NA-22	2.415E-02		2.705E-02	4.944E-02	2.141E-03	0.488
CR-51	9.698E-02		1.362E-01	2.341E-01	1.235E-02	0.414
MN-54	-5.830E-03		2.089E-02	3.432E-02	2.039E-03	-0.170
CO-57	5.479E-03		1.087E-02	1.856E-02	1.053E-03	0.295
FE-59	2.511E-02		4.223E-02	7.430E-02	4.056E-03	0.338
CO-60	1.827E-02		2.274E-02	4.185E-02	1.778E-03	0.437
ZN-65	-2.085E-01		6.564E-02	7.542E-02	3.547E-03	-2.765
SE-75	3.930E-02		2.287E-02	4.120E-02	2.068E-03	0.954
SR-85	-1.475E-01		3.058E-02	3.250E-02	1.912E-03	-4.537
Y-88	1.586E-02		1.638E-02	3.312E-02	1.388E-03	0.479
NB-95	-2.073E-03		2.394E-02	3.924E-02	2.531E-03	-0.053
ZR-95	3.430E-02		3.889E-02	6.927E-02	4.717E-03	0.495
MO-99	1.440E-01		1.733E-01	3.064E-01	2.784E-02	0.470
TC-99M	2.923E-02		1.271E-02	2.286E-02	1.185E-03	1.279
RU-103	7.125E-03		2.132E-02	3.608E-02	2.275E-03	0.198
RH-105	-4.653E-01		2.362E-01	3.285E-01	1.668E-02	-1.417
RH-106	7.845E-01		1.577E-01	2.945E-01	1.728E-02	2.664
RU-106	8.396E-02		1.656E-01	2.912E-01	2.441E-02	0.288
CD-109	1.098E+00		4.031E-01	6.488E-01	3.802E-02	1.693
SN-113	-7.861E-03		2.437E-02	4.017E-02	1.992E-03	-0.196
SB-124	-1.607E-02		2.263E-02	3.470E-02	2.265E-03	-0.463
SB-125	-2.548E-03		5.984E-02	9.983E-02	5.227E-03	-0.026
I-131	-7.244E-03		1.844E-02	3.044E-02	1.571E-03	-0.238
I-132	-4.373E-02		2.322E-02	3.129E-02	2.153E-03	-1.397
TE-132	-2.062E-03		1.489E-02	2.487E-02	1.199E-03	-0.083
BA-133	-1.662E-02		2.621E-02	3.551E-02	2.514E-03	-0.468
I-133	-1.735E-02		2.090E-02	3.191E-02	1.916E-03	-0.544
CS-134	3.672E-03		2.605E-02	3.785E-02	2.478E-03	0.097
CS-137	-1.095E-02		2.549E-02	4.115E-02	2.839E-03	-0.266
CE-139	-1.292E-02		1.522E-02	2.392E-02	1.052E-03	-0.540
BA-140	-1.358E-01		7.512E-02	9.643E-02	1.650E-02	-1.408
LA-140	6.897E-04		2.816E-02	4.738E-02	2.042E-03	0.015
CE-141	-4.615E-02		2.407E-02	3.595E-02	1.835E-03	-1.284
CE-144	-1.315E-02		9.401E-02	1.551E-01	1.003E-02	-0.085
ND-147	7.937E-02		1.239E-01	2.147E-01	1.291E-02	0.370

Combined Activity-MDA Report (continued)
Sample ID : G8WN21AA Acquisition date : 29-APR-2005 14:26:38

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-152	1.839E-01		1.286E-01	2.478E-01	1.220E-02	0.742
EU-154	-1.484E-01		1.895E-01	2.928E-01	2.073E-02	-0.507
EU-155	5.675E-02		5.022E-02	8.787E-02	4.655E-03	0.646
HG-203	7.879E-03		1.816E-02	3.084E-02	1.586E-03	0.255
BI-211	2.331E+00		2.809E-01	4.863E-01	2.445E-02	4.794
PB-211	-6.248E-01		8.365E-01	1.318E+00	7.862E-02	-0.474
BI-212	7.585E-01		3.419E-01	6.558E-01	4.368E-02	1.157
BI-214	9.636E-01	+	1.428E-01	2.116E-01	1.436E-02	4.554
RN-219	5.509E-02		1.561E-01	2.639E-01	1.330E-02	0.209
RA-223	-2.035E-02		2.047E-01	3.355E-01	1.733E-02	-0.061
RA-224	2.038E+00		7.231E-01	8.234E-01	2.357E-01	2.475
TH-227	5.060E-02		1.252E-01	1.861E-01	9.058E-03	0.272
AC-228	3.386E-01		1.469E-01	2.502E-01	4.811E-02	1.353
RA-228	5.743E-01	+	1.294E-01	2.502E-01	1.329E-02	2.295
PA-231	-2.945E-02		6.140E-01	1.010E+00	6.752E-02	-0.029
TH-231	5.412E-01		1.973E-01	3.532E-01	2.398E-02	1.532
TH-232	1.488E+00		5.761E-01	1.146E+00	6.547E-02	1.298
PA-233	-5.426E-02		3.492E-02	5.086E-02	2.637E-03	-1.067
PA-234M	1.197E+01		4.517E+00	8.942E+00	4.574E-01	1.338
NP-237	-5.818E-02		3.743E-02	5.453E-02	2.771E-03	-1.067
NP-239	1.003E-01		6.521E-02	1.161E-01	6.033E-03	0.864
AM-241	2.834E-02		2.991E-02	5.089E-02	2.860E-03	0.557
ANN RAD	4.251E-02		3.153E-02	6.541E-02	3.833E-03	0.650


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN21AA_GE6_SOLID100ML_57917.CNF;1
Title :
Sample Title: F5D210345-009
Start Time: 29-APR-2005 14:26 Sample Time: 29-APR-2005 14:26 Energy Offset: 1.54285E-01
Real Time : 0 01:00:00.62 Sample ID : G8WN21AA Energy Slope : 2.49832E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : 1.86799E-08
LOG Counts
70
40
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 10-MAY-2005 19:07:40
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN31AARC_GE7_SOLID100ML_57922.

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-010
Sample ID : G8WN31AA-RC

Sample Quantity : 1.54000E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 29-APR-2005 15:37:27
Acquisition date : 29-APR-2005 15:37:27
Decay time : 0 00:00:00.00

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.37
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE7

Counting geometry: SOLID_100ML

Energy cal. time : 25-FEB-2005 09:11:05
Effic. cal. time : 19-JAN-2005 01:25:36

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE7__57457.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WN31AA-RC Acquisition date : 29-APR-2005 15:37:27

---- Energy, FWHM, and Efficiency Curves ----

```
*********************************************************************************
*                                                                               *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)               *
*                          A = 7.85538E-02                                      *
*                          B = 2.50061E-01                                      *
*                          C = -1.56700E-08                                     *
*                                                                               *
*                                                                               *
*                    FWHM(keV) = A + (B * SQRT(Energy))                         *
*                          A = 5.33118E-01                                      *
*                          B = 4.95085E-02                                      *
*                                                                               *
*                                                                               *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                               *
*     a1=9.41250E+02   a2=-4.39222E+00 a3=9.59385E-01                           *
*     a4=7.48354E-02   a5=-4.49953E-02 a6=-1.06506E-02   a7=0.00000E+00         *
*                                                                               *
*********************************************************************************
```

Combined Activity-MDA Report
Sample ID : G8WN31AA-RC

Acquisition date : 29-APR-2005 15:37:27

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	5.010E+00	7.045E-01	2.879E-01	1.277E-02	17.404
TL-208	8.683E-02	2.300E-02	3.079E-02	2.051E-03	2.820
PB-212	1.674E-01	5.251E-02	5.658E-02	3.124E-03	2.958
PB-214	2.704E-01	4.894E-02	5.381E-02	2.748E-03	5.026

---- Non-Identified Nuclides ----

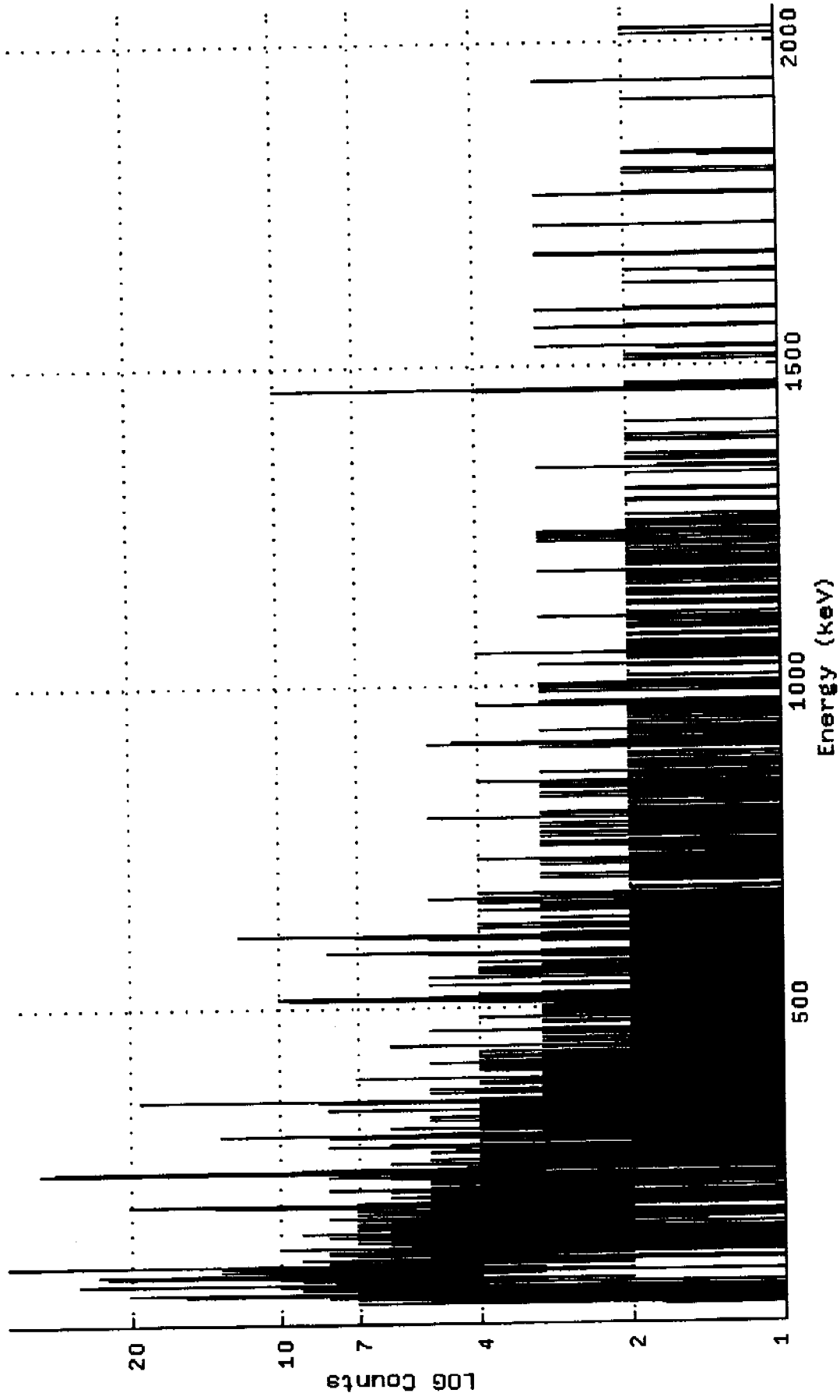
Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-4.399E-02		1.161E-01	1.894E-01	1.009E-02	-0.232
NA-22	3.345E-03		1.981E-02	3.395E-02	1.435E-03	0.099
CR-51	-2.286E-02		1.189E-01	1.994E-01	1.018E-02	-0.115
MN-54	2.341E-02		2.108E-02	3.837E-02	1.990E-03	0.610
CO-57	-3.781E-03		7.758E-03	1.234E-02	7.466E-04	-0.306
FE-59	-3.590E-04		4.127E-02	6.886E-02	3.516E-03	-0.005
CO-60	1.468E-02		2.229E-02	4.010E-02	1.704E-03	0.366
ZN-65	5.259E-03		4.549E-02	7.675E-02	3.319E-03	0.069
SE-75	2.572E-03		1.505E-02	2.541E-02	1.268E-03	0.101
SR-85	-3.104E-02		2.205E-02	3.405E-02	1.797E-03	-0.912
Y-88	2.239E-02		2.172E-02	4.201E-02	1.758E-03	0.533
NB-95	2.786E-02		1.775E-02	3.329E-02	1.881E-03	0.837
ZR-95	3.657E-03		3.422E-02	5.725E-02	3.461E-03	0.064
MO-99	-6.789E-02		1.205E-01	1.878E-01	1.599E-02	-0.362
TC-99M	-9.885E-03		9.388E-03	1.501E-02	8.220E-04	-0.658
RU-103	-1.164E-02		1.603E-02	2.541E-02	1.469E-03	-0.458
RH-105	-6.811E-02		1.932E-01	3.112E-01	1.538E-02	-0.219
RH-106	-1.771E-01		1.169E-01	2.336E-01	1.230E-02	-0.758
RU-106	1.079E-01		1.696E-01	2.991E-01	2.326E-02	0.361
CD-109	2.858E-01		2.368E-01	4.123E-01	2.430E-02	0.693
SN-113	5.987E-03		1.866E-02	3.181E-02	1.445E-03	0.188
SB-124	2.261E-02		1.693E-02	2.953E-02	1.706E-03	0.766
SB-125	1.702E-02		4.149E-02	7.082E-02	3.375E-03	0.240
I-131	-1.161E-02		1.419E-02	2.242E-02	1.087E-03	-0.518
I-132	1.422E-02		2.022E-02	3.572E-02	2.154E-03	0.398
TE-132	4.485E-04		1.033E-02	1.747E-02	8.522E-04	0.026
BA-133	-1.878E-02		2.405E-02	3.156E-02	2.170E-03	-0.595
I-133	-5.386E-03		1.727E-02	2.814E-02	1.512E-03	-0.191
CS-134	6.833E-04		1.991E-02	2.849E-02	1.651E-03	0.024
CS-137	1.781E-02		2.331E-02	4.106E-02	2.484E-03	0.434
CE-139	1.049E-02		1.078E-02	1.878E-02	8.585E-04	0.558
BA-140	-6.226E-02		5.533E-02	8.122E-02	1.372E-02	-0.767
LA-140	-7.170E-04		1.882E-02	3.121E-02	1.348E-03	-0.023
CE-141	-4.665E-03		1.685E-02	2.802E-02	1.505E-03	-0.167
CE-144	5.094E-02		6.050E-02	1.067E-01	7.185E-03	0.478
ND-147	6.511E-02		1.080E-01	1.884E-01	1.014E-02	0.346
EU-152	1.642E-01		8.846E-02	1.845E-01	9.092E-03	0.890
EU-154	1.534E-01		1.771E-01	3.177E-01	2.072E-02	0.483
EU-155	1.735E-02		3.277E-02	5.569E-02	3.065E-03	0.311

LOT# F5D220345

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
HG-203	-2.037E-02		1.539E-02	2.364E-02	1.201E-03	-0.862
BI-211	7.577E-01		1.609E-01	2.832E-01	1.345E-02	2.676
PB-211	1.717E-01		7.723E-01	1.320E+00	6.876E-02	0.130
BI-212	-5.525E-02		2.986E-01	4.894E-01	2.857E-02	-0.113
BI-214	3.168E-01	+	6.671E-02	1.107E-01	6.701E-03	2.861
RN-219	1.109E-01		9.807E-02	1.741E-01	8.696E-03	0.637
RA-223	5.705E-02		1.421E-01	2.430E-01	1.307E-02	0.235
RA-224	1.994E+00		7.070E-01	7.280E-01	2.084E-01	2.740
RA-226	9.509E-01		3.159E-01	6.042E-01	2.830E-02	1.574
TH-227	-1.834E-02		1.078E-01	1.524E-01	7.473E-03	-0.120
AC-228	1.689E-01		1.136E-01	1.974E-01	3.783E-02	0.856
RA-228	2.215E-01		8.801E-02	1.705E-01	7.877E-03	1.299
PA-231	-5.603E-01		4.689E-01	7.097E-01	4.675E-02	-0.789
TH-231	-1.468E-01		1.253E-01	1.988E-01	1.349E-02	-0.739
TH-232	-1.568E-01		4.723E-01	7.673E-01	3.817E-02	-0.204
PA-233	-5.912E-02		2.988E-02	4.228E-02	2.129E-03	-1.398
PA-234M	-1.555E+00		3.316E+00	5.480E+00	2.492E-01	-0.284
TH-234	7.603E-01		2.773E-01	5.208E-01	4.870E-02	1.460
U-235	1.569E-01		7.539E-02	1.361E-01	1.268E-02	1.153
NP-237	-6.338E-02		3.203E-02	4.533E-02	2.233E-03	-1.398
NP-239	6.304E-02		4.513E-02	7.982E-02	4.267E-03	0.790
AM-241	-4.353E-02		2.334E-02	3.399E-02	1.796E-03	-1.281
ANN RAD	-1.359E-02		2.380E-02	4.928E-02	2.592E-03	-0.276

Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN31AARC_GE7_SOLID100ML_67922.CNF;1
Title :
Sample Title: F5D210345-010
Start Time: 29-APR-2005 15:37 Sample Time: 29-APR-2005 15:37 Energy Offset: 7.85538E-02
Real Time : 0 01:00:00.37 Sample ID : G8WN31AA-RC Energy Slope : 2.50061E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : -1.56700E-08



VMS Gamma Spectroscopy Report generated 10-MAY-2005 19:08:14
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN41AA_GE4_SOLID100ML_57919.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-011
Sample ID : G8WN41AA

Sample Quantity : 2.13600E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 29-APR-2005 15:34:50
Acquisition date : 29-APR-2005 15:34:50
Decay time : 0 00:00:00.00

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.50
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE4

Counting geometry: SOLID_100ML

Energy cal. time : 16-MAR-2005 08:34:49
Effic. cal. time : 18-JAN-2005 00:15:12

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE4__57454.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WN41AA

Acquisition date : 29-APR-2005 15:34:50

---- Energy, FWHM, and Efficiency Curves ----

```
**********************************************************************************
*                                                                                *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)                *
*                            A = 1.10653E-01                                     *
*                            B = 2.49919E-01                                     *
*                            C = 1.94892E-08                                     *
*                                                                                *
*                                                                                *
*                       FWHM(keV) = A + (B * SQRT(Energy))                       *
*                            A = 8.02351E-01                                     *
*                            B = 2.65421E-02                                     *
*                                                                                *
*                                                                                *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)  *
*                                                                                *
*     a1=9.41250E+02   a2=-4.55854E+00 a3=9.62044E-01                            *
*     a4=7.38134E-02   a5=-4.50301E-02 a6=-9.56656E-03   a7=0.00000E+00          *
*                                                                                *
**********************************************************************************
```

Combined Activity-MDA Report
Sample ID : G8WN41AA

Acquisition date : 29-APR-2005 15:34:50

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	2.830E+00	4.135E-01	1.502E-01	7.026E-03	18.835
CS-137	9.212E-02	2.303E-02	2.454E-02	1.246E-03	3.754
TL-208	6.493E-02	2.372E-02	2.034E-02	1.241E-03	3.192
PB-212	1.617E-01	3.391E-02	4.493E-02	2.456E-03	3.598
PB-214	2.559E-01	4.477E-02	4.251E-02	2.124E-03	6.020
RA-226	1.903E+00	3.689E-01	3.799E-01	1.758E-02	5.010
TH-234	1.061E+00	2.172E-01	3.200E-01	3.063E-02	3.316
U-235	1.257E-01	2.442E-02	1.182E-01	1.093E-02	1.063

---- Non-Identified Nuclides ----

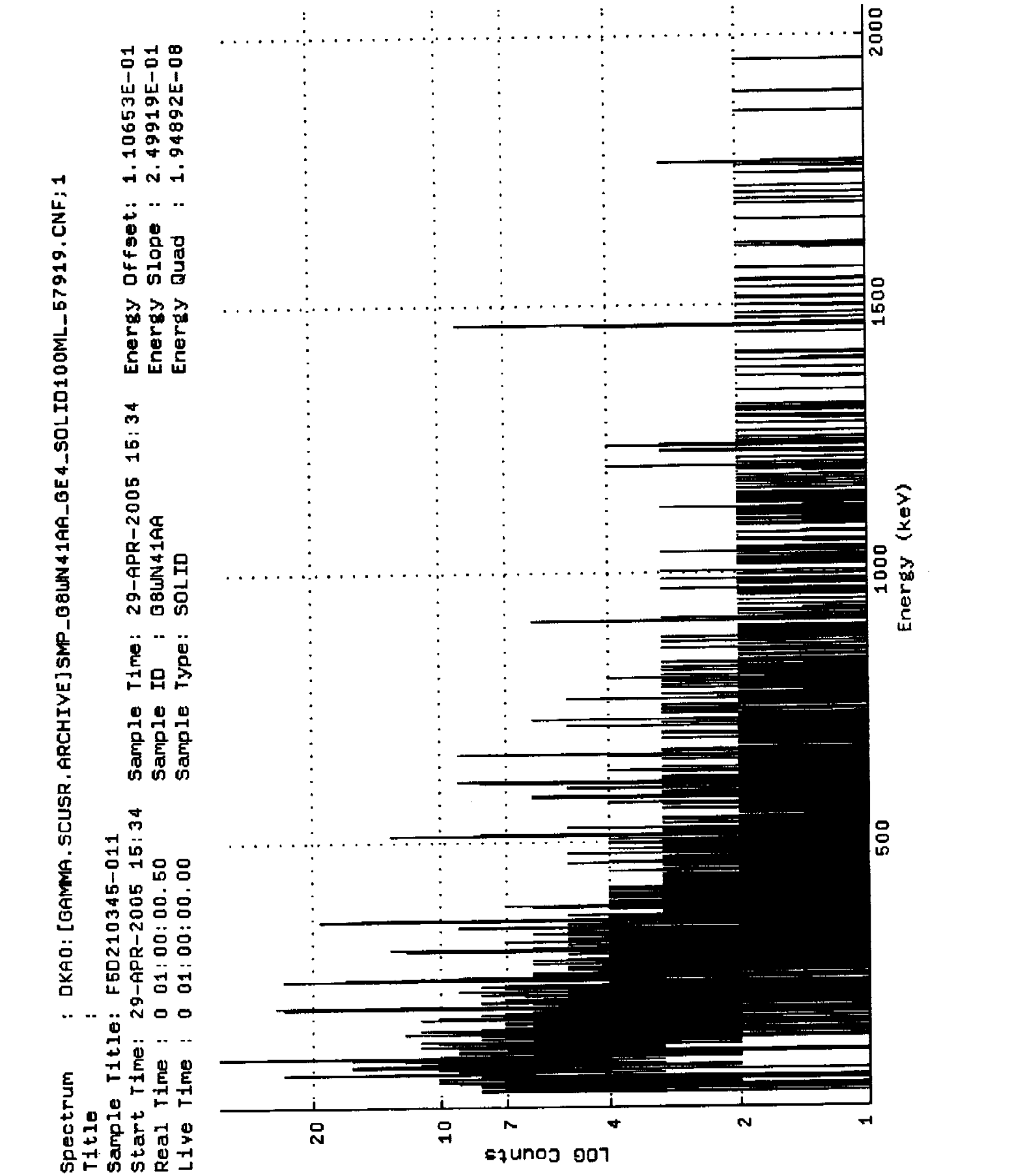
Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-3.522E-02		9.869E-02	1.583E-01	7.917E-03	-0.223
NA-22	9.922E-03		1.517E-02	2.788E-02	1.265E-03	0.356
CR-51	-8.745E-03		8.870E-02	1.489E-01	7.459E-03	-0.059
MN-54	2.903E-02		1.435E-02	2.824E-02	1.516E-03	1.028
CO-57	1.318E-02		7.710E-03	1.390E-02	8.141E-04	0.948
FE-59	2.024E-02		2.680E-02	4.880E-02	2.695E-03	0.415
CO-60	-1.731E-02		1.575E-02	2.193E-02	9.948E-04	-0.789
ZN-65	-4.797E-02		3.519E-02	4.857E-02	2.320E-03	-0.988
SE-75	4.283E-03		1.467E-02	2.458E-02	1.209E-03	0.174
SR-85	-8.519E-02		2.073E-02	2.491E-02	1.203E-03	-3.420
Y-88	6.141E-03		6.154E-03	1.452E-02	6.178E-04	0.423
NB-95	2.067E-02		1.415E-02	2.659E-02	1.410E-03	0.777
ZR-95	1.052E-02		2.864E-02	4.912E-02	2.780E-03	0.214
MO-99	-3.422E-03		9.386E-02	1.556E-01	1.271E-02	-0.022
TC-99M	6.582E-03		9.539E-03	1.460E-02	7.801E-04	0.451
RU-103	-6.341E-03		1.198E-02	1.884E-02	1.023E-03	-0.337
RH-105	2.626E-01		1.685E-01	3.086E-01	1.497E-02	0.851
RH-106	9.778E-02		9.736E-02	2.030E-01	9.788E-03	0.482
RU-106	1.966E-02		1.202E-01	2.051E-01	1.473E-02	0.096
CD-109	3.037E-01		2.085E-01	3.606E-01	2.099E-02	0.842
SN-113	-2.371E-04		1.653E-02	2.762E-02	1.215E-03	-0.009
SB-124	-2.163E-02		1.370E-02	1.986E-02	9.998E-04	-1.089
SB-125	-1.577E-02		3.563E-02	5.732E-02	2.605E-03	-0.275
I-131	-1.198E-02		1.121E-02	1.727E-02	8.165E-04	-0.694
I-132	9.659E-03		1.516E-02	2.650E-02	1.348E-03	0.365
TE-132	-1.032E-03		9.474E-03	1.562E-02	7.525E-04	-0.066
BA-133	2.254E-03		1.706E-02	2.472E-02	1.679E-03	0.091
I-133	1.171E-02		1.285E-02	2.281E-02	1.113E-03	0.513
CS-134	1.208E-02		1.303E-02	2.137E-02	1.078E-03	0.565
CE-139	-5.652E-03		9.591E-03	1.567E-02	7.070E-04	-0.361
BA-140	-2.874E-02		4.468E-02	7.113E-02	1.190E-02	-0.404
LA-140	-1.736E-02		1.009E-02	MDA could not be calculated		
CE-141	3.238E-03		1.487E-02	2.533E-02	1.330E-03	0.128
CE-144	2.625E-02		5.944E-02	1.008E-01	6.657E-03	0.260
ND-147	-8.714E-05		8.867E-02	1.460E-01	7.128E-03	-0.001

LOT# F5D220345

Combined Activity-MDA Report (continued)
Sample ID : G8WN41AA Acquisition date : 29-APR-2005 15:34:50

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-152	-2.043E-02		8.398E-02	1.362E-01	7.029E-03	-0.150
EU-154	3.973E-02		1.097E-01	1.933E-01	1.336E-02	0.206
EU-155	4.314E-02		3.024E-02	5.274E-02	2.833E-03	0.818
HG-203	-1.170E-02		1.181E-02	1.816E-02	9.085E-04	-0.644
BI-211	7.184E-01	+	1.517E-01	2.424E-01	1.123E-02	2.964
PB-211	-5.943E-01		5.027E-01	7.105E-01	3.812E-02	-0.836
BI-212	2.986E-01		2.230E-01	4.120E-01	2.156E-02	0.725
BI-214	1.627E-01	+	3.998E-02	7.827E-02	4.162E-03	2.079
RN-219	1.249E-01		9.168E-02	1.619E-01	7.972E-03	0.771
RA-223	4.282E-02		1.157E-01	1.983E-01	1.049E-02	0.216
RA-224	1.150E+00		4.602E-01	5.435E-01	1.555E-01	2.116
TH-227	8.052E-02		7.915E-02	1.212E-01	5.870E-03	0.664
AC-228	1.962E-01		9.233E-02	1.590E-01	3.043E-02	1.234
RA-228	1.183E-01	+	6.521E-02	1.250E-01	6.688E-03	0.947
PA-231	-6.189E-01		4.031E-01	6.141E-01	4.005E-02	-1.008
TH-231	-7.073E-02		1.080E-01	1.734E-01	1.175E-02	-0.408
TH-232	6.747E-01		4.010E-01	7.542E-01	4.052E-02	0.895
PA-233	3.509E-02		2.414E-02	4.397E-02	2.174E-03	0.798
PA-234M	3.425E+00		2.336E+00	4.515E+00	2.337E-01	0.759
NP-237	3.763E-02		2.588E-02	4.714E-02	2.279E-03	0.798
NP-239	4.425E-02		4.239E-02	6.832E-02	3.576E-03	0.648
AM-241	-6.839E-03		2.081E-02	2.908E-02	1.672E-03	-0.235
ANN RAD	2.726E-02		2.003E-02	4.214E-02	2.031E-03	0.647


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN41AA_GE4_SOLID100ML_57919.CNF;1
Title :
Sample Title: F5D210345-011
Start Time: 29-APR-2005 15:34 Sample Time: 29-APR-2005 15:34 Energy Offset: 1.10653E-01
Real Time : 0 01:00:00.50 Sample ID : G8WN41AA Energy Slope : 2.49919E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : 1.94892E-08
LOG Counts
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 10-MAY-2005 19:08:47
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN51AA_GE5_SOLID100ML_57920.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-012
Sample ID : G8WN51AA

Sample Quantity : 2.27000E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 29-APR-2005 15:35:28
Acquisition date : 29-APR-2005 15:35:28
Decay time : 0 00:00:00.00

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.84
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE5

Counting geometry: SOLID_100ML

Energy cal. time : 9-MAR-2005 09:18:16.
Effic. cal. time : 18-JAN-2005 09:43:11

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE5__57455.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WN51AA

Acquisition date : 29-APR-2005 15:35:28

---- Energy, FWHM, and Efficiency Curves ----

```
**************************************************************************
*                                                                        *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)        *
*                            A = -7.14002E-03                            *
*                            B = 2.49998E-01                             *
*                            C = -1.90945E-09                            *
*                                                                        *
*                                                                        *
*                       FWHM(keV) = A + (B * SQRT(Energy))               *
*                            A = 5.02556E-01                             *
*                            B = 3.66242E-02                             *
*                                                                        *
*                                                                        *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                        *
*     a1=9.41250E+02   a2=-4.46457E+00 a3=9.42586E-01                    *
*     a4=5.97186E-02   a5=-3.91387E-02 a6=-9.36517E-03   a7=0.00000E+00  *
*                                                                        *
**************************************************************************
```

Combined Activity-MDA Report
Sample ID : G8WN51AA

Acquisition date : 29-APR-2005 15:35:28

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	4.500E+00	5.249E-01	2.268E-01	1.058E-02	19.840
CS-137	5.041E-02	1.897E-02	2.234E-02	1.517E-03	2.256
TL-208	6.559E-02	1.805E-02	2.329E-02	1.636E-03	2.816
PB-212	6.535E-02	2.791E-02	3.467E-02	1.975E-03	1.885
PB-214	2.126E-01	3.427E-02	3.703E-02	1.892E-03	5.740
RA-226	1.367E+00	3.162E-01	2.688E-01	1.321E-02	5.084
TH-234	1.002E+00	1.693E-01	2.438E-01	2.349E-02	4.109
U-235	9.025E-02	2.092E-02	9.266E-02	8.887E-03	0.974

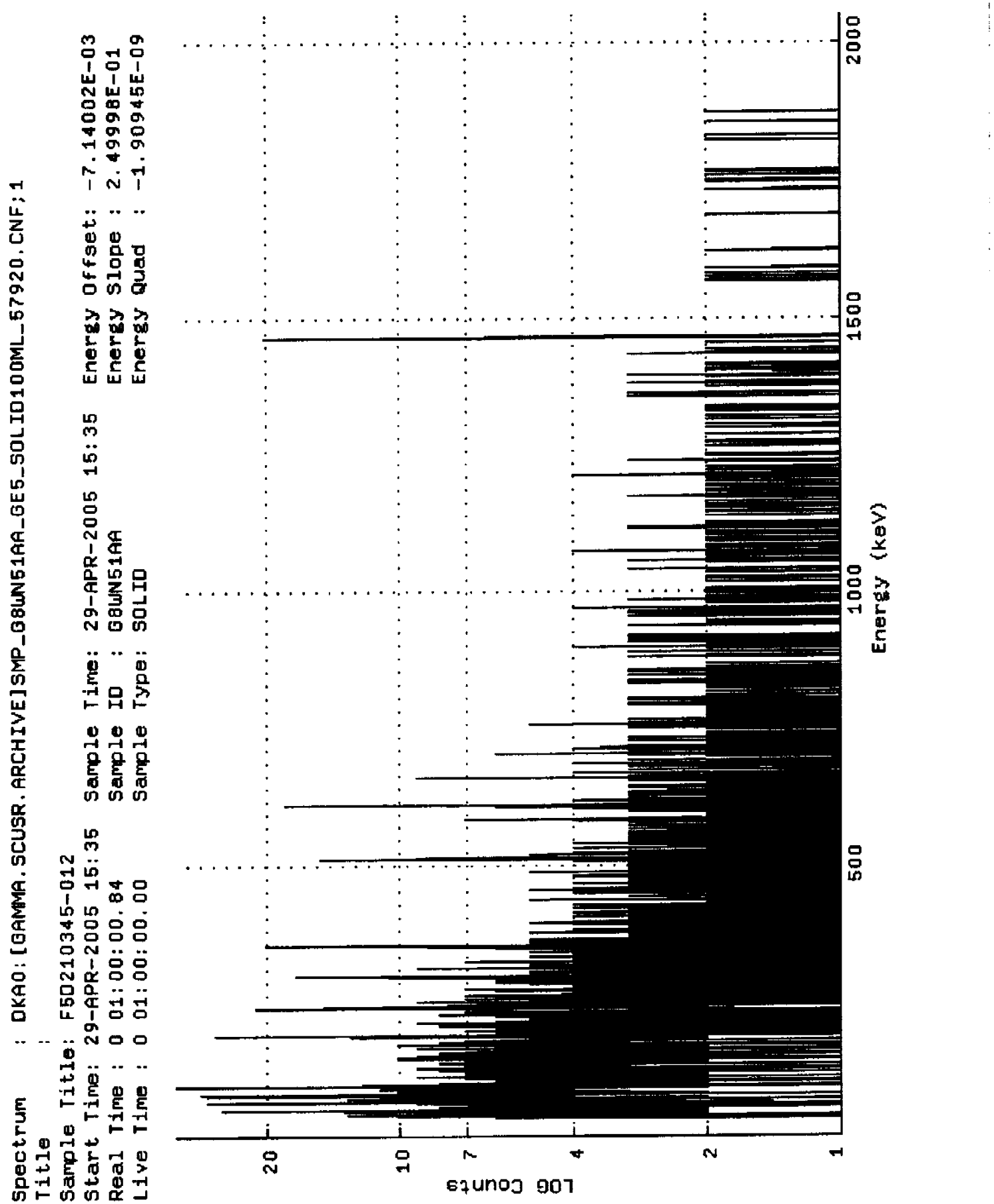
---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	5.729E-02		1.058E-01	1.840E-01	9.959E-03	0.311
NA-22	1.174E-02		1.561E-02	2.842E-02	1.276E-03	0.413
CR-51	-1.249E-01		8.902E-02	1.355E-01	7.005E-03	-0.922
MN-54	1.078E-02		1.449E-02	2.553E-02	1.679E-03	0.422
CO-57	-7.108E-03		6.652E-03	1.022E-02	6.834E-04	-0.695
FE-59	-4.952E-02		2.711E-02	3.404E-02	1.944E-03	-1.455
CO-60	-4.734E-03		1.876E-02	3.237E-02	1.471E-03	-0.146
ZN-65	5.142E-02		3.167E-02	6.072E-02	2.988E-03	0.847
SE-75	7.021E-03		1.200E-02	2.101E-02	1.082E-03	0.334
SR-85	-5.473E-02		1.715E-02	2.298E-02	1.256E-03	-2.381
Y-88	-1.418E-02		1.468E-02	1.945E-02	8.145E-04	-0.729
NB-95	-8.446E-03		1.361E-02	2.139E-02	1.445E-03	-0.395
ZR-95	2.150E-02		2.552E-02	4.541E-02	3.208E-03	0.473
MO-99	-1.981E-01		9.184E-02	1.116E-01	1.030E-02	-1.776
TC-99M	7.834E-03		6.883E-03	1.225E-02	7.310E-04	0.640
RU-103	-3.749E-03		1.041E-02	1.691E-02	9.993E-04	-0.222
RH-105	7.559E-02		1.362E-01	2.369E-01	1.193E-02	0.319
RH-106	-2.515E-02		8.520E-02	1.744E-01	9.500E-03	-0.144
RU-106	1.677E-01		1.277E-01	2.302E-01	1.891E-02	0.728
CD-109	-1.477E-01		1.579E-01	2.513E-01	1.464E-02	-0.588
SN-113	-2.581E-02		1.407E-02	1.974E-02	8.790E-04	-1.307
SB-124	-4.051E-03		1.160E-02	1.855E-02	1.163E-03	-0.218
SB-125	4.927E-02		2.578E-02	4.990E-02	2.365E-03	0.987
I-131	-2.819E-03		1.057E-02	1.720E-02	8.297E-04	-0.164
I-132	-2.154E-02		1.201E-02	1.558E-02	1.058E-03	-1.383
TE-132	2.143E-03		8.543E-03	1.427E-02	7.255E-04	0.150
BA-133	2.124E-03		1.550E-02	2.306E-02	1.584E-03	0.092
I-133	5.485E-03		1.142E-02	1.979E-02	1.110E-03	0.277
CS-134	-2.435E-02		1.315E-02	1.691E-02	1.064E-03	-1.440
CE-139	-3.008E-03		7.699E-03	1.270E-02	6.105E-04	-0.237
BA-140	-1.557E-02		3.828E-02	6.125E-02	1.040E-02	-0.254
LA-140	4.933E-03		8.361E-03	1.622E-02	7.271E-04	0.304
CE-141	-3.307E-02		1.221E-02	1.738E-02	1.011E-03	-1.903
CE-144	-1.017E-02		4.918E-02	8.294E-02	5.980E-03	-0.123
ND-147	1.659E-02		6.929E-02	1.180E-01	6.632E-03	0.141

Combined Activity-MDA Report (continued)
Sample ID : G8WN51AA Acquisition date : 29-APR-2005 15:35:28

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-152	2.298E-03		7.101E-02	1.185E-01	6.113E-03	0.019
EU-154	1.029E-02		9.635E-02	1.650E-01	1.280E-02	0.062
EU-155	9.542E-03		2.210E-02	3.735E-02	2.159E-03	0.255
HG-203	-4.066E-03		8.904E-03	1.460E-02	7.617E-04	-0.279
BI-211	5.661E-01		1.141E-01	2.042E-01	9.706E-03	2.773
PB-211	3.421E-01		4.938E-01	8.688E-01	5.722E-02	0.394
BI-212	3.355E-02		1.989E-01	3.376E-01	2.296E-02	0.099
BI-214	1.921E-01	+	5.310E-02	8.965E-02	5.872E-03	2.143
RN-219	1.160E-01		7.705E-02	1.403E-01	7.222E-03	0.827
RA-223	4.630E-02		9.874E-02	1.707E-01	9.763E-03	0.271
RA-224	1.133E+00		4.101E-01	4.502E-01	1.290E-01	2.516
TH-227	1.032E-01		6.064E-02	9.910E-02	5.055E-03	1.042
AC-228	4.750E-03		7.285E-02	1.220E-01	2.339E-02	0.039
RA-228	1.035E-01		6.074E-02	1.141E-01	7.132E-03	0.907
PA-231	-1.203E-01		3.172E-01	5.195E-01	3.462E-02	-0.232
TH-231	1.064E-01		8.738E-02	1.526E-01	1.037E-02	0.697
TH-232	2.857E-01		3.270E-01	5.830E-01	3.777E-02	0.490
PA-233	8.455E-03		2.057E-02	3.537E-02	1.810E-03	0.239
PA-234M	5.175E+00		2.375E+00	4.702E+00	2.717E-01	1.101
NP-237	9.065E-03		2.205E-02	3.792E-02	1.901E-03	0.239
NP-239	3.752E-02		3.171E-02	5.560E-02	3.060E-03	0.675
AM-241	2.458E-02		1.523E-02	2.676E-02	1.570E-03	0.918
ANN RAD	-1.769E-02		1.772E-02	3.531E-02	1.920E-03	-0.501


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN51AA_GE5_SOLID100ML_67920.CNF;1
Title :
Sample Title: F5D210345-012
Start Time: 29-APR-2005 15:35 Sample Time: 29-APR-2005 15:35 Energy Offset: -7.14002E-03
Real Time : 0 01:00:00.84 Sample ID : G8WN51AA Energy Slope : 2.49998E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : -1.90945E-09
Log Counts
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 10-MAY-2005 19:09:20
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN71AA_GE6_SOLID100ML_57921.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-013
Sample ID : G8WN71AA

Sample Quantity : 1.58600E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 29-APR-2005 15:36:44
Acquisition date : 29-APR-2005 15:36:44
Decay time : 0 00:00:00.00

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.78
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE6

Counting geometry: SOLID_100ML

Energy cal. time : 3-MAR-2004 08:43:53.
Effic. cal. time : 18-JAN-2005 22:11:47

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE6__57456.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WN71AA Acquisition date : 29-APR-2005 15:36:44

---- Energy, FWHM, and Efficiency Curves ----

```
*************************************************************************
*                                                                       *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)       *
*                          A = 1.54285E-01                              *
*                          B = 2.49832E-01                              *
*                          C = 1.86799E-08                              *
*                                                                       *
*                                                                       *
*                    FWHM(keV) = A + (B * SQRT(Energy))                 *
*                          A = 4.67797E-01                              *
*                          B = 3.35494E-02                              *
*                                                                       *
*                                                                       *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                       *
*     a1=9.41250E+02   a2=-4.68519E+00 a3=8.82578E-01                   *
*     a4=8.83148E-02   a5=-2.58765E-02 a6=-1.60802E-02   a7=0.00000E+00 *
*                                                                       *
*************************************************************************
```

Combined Activity-MDA Report
Sample ID : G8WN71AA

Acquisition date : 29-APR-2005 15:36:44

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	1.107E+01	1.254E+00	4.863E-01	2.153E-02	22.753
TL-208	2.085E-01	3.831E-02	4.266E-02	3.107E-03	4.887
PB-212	6.318E-01	8.328E-02	6.445E-02	3.541E-03	9.802
PB-214	8.643E-01	9.151E-02	5.574E-02	2.991E-03	15.505
AC-228	6.887E-01	2.591E-01	2.278E-01	4.379E-02	3.024
TH-231	2.019E+00	4.663E-01	4.530E-01	3.075E-02	4.457
PA-234M	4.722E+01	8.789E+00	7.059E+00	3.611E-01	6.689
TH-234	2.109E+01	1.585E+00	7.350E-01	6.987E-02	28.688
U-235	1.632E+00	1.318E-01	2.214E-01	2.028E-02	7.372

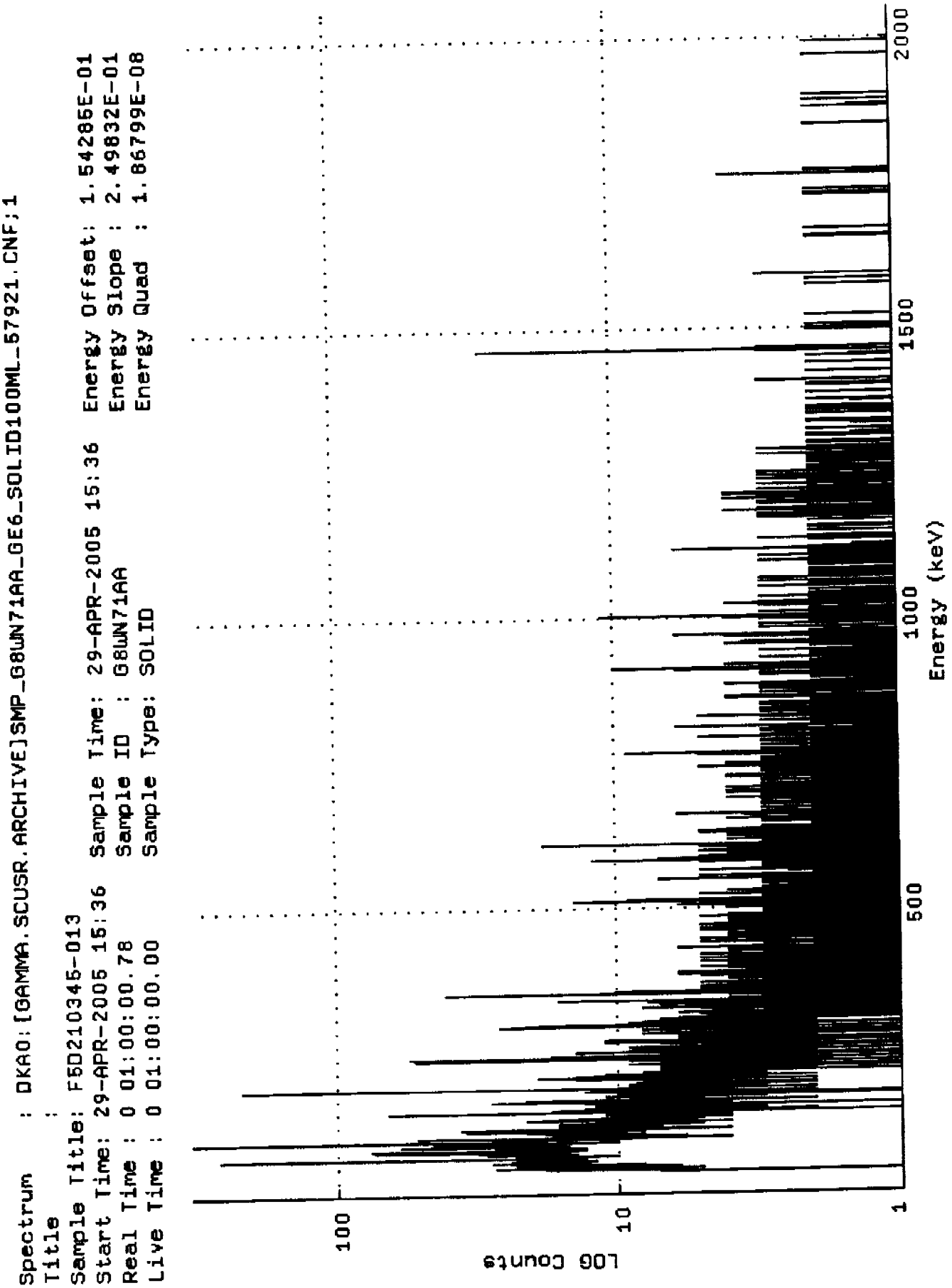
---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-7.696E-02		1.807E-01	2.899E-01	1.696E-02	-0.265
NA-22	-4.335E-02		2.794E-02	3.677E-02	1.592E-03	-1.179
CR-51	-3.285E-02		1.516E-01	2.455E-01	1.295E-02	-0.134
MN-54	1.611E-02		2.354E-02	4.219E-02	2.506E-03	0.382
CO-57	-7.065E-05		1.635E-02	2.728E-02	1.548E-03	-0.003
FE-59	3.469E-02		5.200E-02	9.149E-02	4.994E-03	0.379
CO-60	4.101E-02		2.412E-02	4.886E-02	2.076E-03	0.839
ZN-65	-1.260E-01		7.238E-02	1.037E-01	4.876E-03	-1.216
SE-75	-1.688E-02		2.751E-02	4.436E-02	2.226E-03	-0.381
SR-85	-1.374E-01		3.209E-02	3.650E-02	2.147E-03	-3.764
Y-88	-4.667E-02		2.456E-02	2.105E-02	8.823E-04	-2.217
NB-95	6.682E-02		3.485E-02	6.363E-02	4.104E-03	1.050
ZR-95	1.716E-02		3.921E-02	6.765E-02	4.607E-03	0.254
MO-99	-2.327E-01		2.097E-01	3.124E-01	2.840E-02	-0.745
TC-99M	-3.352E-03		1.826E-02	2.583E-02	1.339E-03	-0.130
RU-103	-2.225E-03		2.075E-02	3.402E-02	2.146E-03	-0.065
RH-105	-2.675E-01		2.911E-01	4.511E-01	2.291E-02	-0.593
RH-106	8.048E-01		1.758E-01	3.261E-01	1.913E-02	2.467
RU-106	4.565E-01		2.138E-01	4.107E-01	3.442E-02	1.112
CD-109	-1.321E+00		5.403E-01	8.235E-01	4.825E-02	-1.604
SN-113	-3.388E-02		2.829E-02	4.390E-02	2.177E-03	-0.772
SB-124	-5.267E-03		2.602E-02	4.325E-02	2.823E-03	-0.122
SB-125	9.789E-02		6.411E-02	1.169E-01	6.119E-03	0.838
I-131	-8.104E-03		1.998E-02	3.293E-02	1.699E-03	-0.246
I-132	-1.804E-02		2.560E-02	4.001E-02	2.753E-03	-0.451
TE-132	1.399E-02		1.584E-02	2.773E-02	1.338E-03	0.504
BA-133	5.049E-02		2.397E-02	4.408E-02	3.120E-03	1.145
I-133	5.681E-03		2.367E-02	3.967E-02	2.381E-03	0.143
CS-134	-4.111E-02		3.011E-02	3.641E-02	2.384E-03	-1.129
CS-137	5.127E-02		3.050E-02	5.632E-02	3.886E-03	0.910
CE-139	2.283E-02		1.873E-02	2.846E-02	1.251E-03	0.802
BA-140	4.300E-02		8.097E-02	1.381E-01	2.363E-02	0.311
LA-140	-1.790E-02		2.590E-02	3.831E-02	1.651E-03	-0.467
CE-141	6.746E-02		3.424E-02	5.344E-02	2.728E-03	1.262

Combined Activity-MDA Report (continued)
Sample ID : G8WN71AA Acquisition date : 29-APR-2005 15:36:44

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
CE-144	-6.170E-02		1.234E-01	2.008E-01	1.298E-02	-0.307
ND-147	-2.164E-02		1.471E-01	2.391E-01	1.438E-02	-0.090
EU-152	1.727E-01		9.335E-02	2.015E-01	9.917E-03	0.857
EU-154	-4.871E-01		2.484E-01	3.371E-01	2.386E-02	-1.445
EU-155	1.455E-01		6.971E-02	1.234E-01	6.536E-03	1.180
HG-203	-7.455E-05		1.950E-02	3.236E-02	1.664E-03	-0.002
BI-211	2.384E+00		2.946E-01	5.167E-01	2.597E-02	4.615
PB-211	3.316E-01		9.283E-01	1.614E+00	9.633E-02	0.205
BI-212	5.475E-01		4.005E-01	7.283E-01	4.851E-02	0.752
BI-214	6.613E-01	+	1.154E-01	1.912E-01	1.297E-02	3.459
RN-219	2.192E-01		1.768E-01	3.097E-01	1.561E-02	0.708
RA-223	3.130E-01		2.421E-01	4.180E-01	2.159E-02	0.749
RA-224	7.443E-01		5.965E-01	8.600E-01	2.462E-01	0.865
RA-226	2.525E+01	+	2.101E+00	2.325E+00	1.057E-01	10.859
TH-227	-2.937E-01		1.756E-01	2.234E-01	1.087E-02	-1.315
RA-228	7.836E-01	+	1.478E-01	2.978E-01	1.582E-02	2.631
PA-231	-1.838E-01		8.015E-01	1.307E+00	8.733E-02	-0.141
TH-232	-2.305E-01		6.935E-01	1.138E+00	6.499E-02	-0.203
PA-233	-2.641E-02		4.149E-02	6.553E-02	3.398E-03	-0.403
NP-237	-2.832E-02		4.449E-02	7.026E-02	3.570E-03	-0.403
NP-239	4.891E-01		1.092E-01	1.964E-01	1.021E-02	2.490
AM-241	1.522E-03		5.574E-02	8.419E-02	4.732E-03	0.018
ANN RAD	1.691E-02		3.591E-02	7.210E-02	4.225E-03	0.235


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8UN71AA_GE6_SOLID100ML_57921.CNF;1
Title :
Sample Title: F5D210345-013
Start Time: 29-APR-2005 15:36
Real Time : 0 01:00:00.78
Live Time : 0 01:00:00.00
Sample Time: 29-APR-2005 15:36
Sample ID : G8UN71AA
Sample Type: SOLID
Energy Offset: 1.54285E-01
Energy Slope : 2.49832E-01
Energy Quad : 1.86799E-08
LOG Counts
100
10
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 10-MAY-2005 19:09:50
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN91AA_GE4_SOLID100ML_57927.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-014
Sample ID : G8WN91AA

Sample Quantity : 1.78200E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 30-APR-2005 09:30:36
Acquisition date : 30-APR-2005 09:30:36
Decay time : 0 00:00:00.00

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.68
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE4

Counting geometry: SOLID_100ML

Energy cal. time : 16-MAR-2005 08:34:49
Effic. cal. time : 18-JAN-2005 00:15:12

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE4__57454.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WN91AA Acquisition date : 30-APR-2005 09:30:36

---- Energy, FWHM, and Efficiency Curves ----

```
**********************************************************************************
*                                                                                *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)                *
*                            A = 1.10653E-01                                     *
*                            B = 2.49919E-01                                     *
*                            C = 1.94892E-08                                     *
*                                                                                *
*                                                                                *
*                     FWHM(keV) = A + (B * SQRT(Energy))                         *
*                            A = 8.02351E-01                                     *
*                            B = 2.65421E-02                                     *
*                                                                                *
*                                                                                *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                                *
*     a1=9.41250E+02   a2=-4.55854E+00 a3=9.62044E-01                           *
*     a4=7.38134E-02   a5=-4.50301E-02 a6=-9.56656E-03   a7=0.00000E+00         *
*                                                                                *
**********************************************************************************
```

Combined Activity-MDA Report
Sample ID : G8WN91AA

Acquisition date : 30-APR-2005 09:30:36

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	1.596E+01	1.271E+00	3.602E-01	1.684E-02	44.317
TL-208	1.634E-01	3.100E-02	2.869E-02	1.750E-03	5.697
PB-212	3.433E-01	4.672E-02	5.695E-02	3.113E-03	6.029
PB-214	4.143E-01	5.524E-02	7.032E-02	3.513E-03	5.892
RA-226	4.386E+00	5.999E-01	4.674E-01	2.163E-02	9.385
TH-234	2.493E+00	3.009E-01	4.957E-01	4.746E-02	5.030
U-235	2.897E-01	3.980E-02	1.857E-01	1.717E-02	1.560

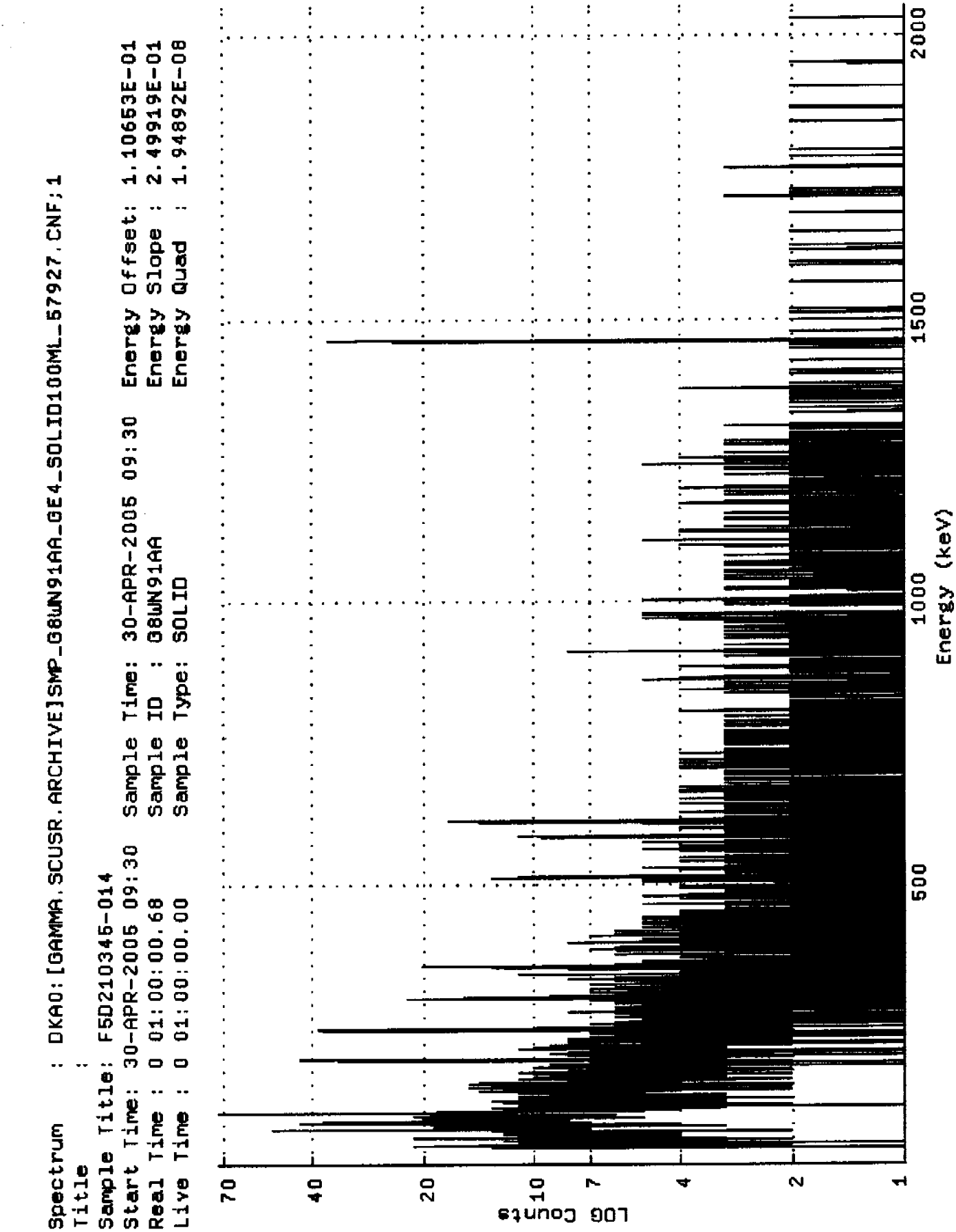
---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	5.427E-03		1.380E-01	2.292E-01	1.147E-02	0.024
NA-22	3.375E-02		2.357E-02	4.554E-02	2.066E-03	0.741
CR-51	-6.500E-02		1.245E-01	2.041E-01	1.023E-02	-0.318
MN-54	-2.769E-02		1.850E-02	2.540E-02	1.363E-03	-1.090
CO-57	-5.894E-03		1.118E-02	1.861E-02	1.090E-03	-0.317
FE-59	7.352E-02		4.320E-02	8.273E-02	4.569E-03	0.889
CO-60	1.492E-03		2.187E-02	3.717E-02	1.686E-03	0.040
ZN-65	-1.327E-01		5.834E-02	7.653E-02	3.656E-03	-1.734
SE-75	2.121E-02		1.939E-02	3.374E-02	1.660E-03	0.628
SR-85	-7.015E-02		2.352E-02	3.204E-02	1.547E-03	-2.189
Y-88	7.581E-03		1.263E-02	2.461E-02	1.047E-03	0.308
NB-95	-1.477E-03		2.266E-02	3.746E-02	1.986E-03	-0.039
ZR-95	3.616E-02		3.090E-02	5.689E-02	3.219E-03	0.636
MO-99	-2.524E-01		1.613E-01	2.307E-01	1.884E-02	-1.094
TC-99M	-4.240E-02		1.283E-02	1.885E-02	1.007E-03	-2.249
RU-103	1.922E-03		1.593E-02	2.658E-02	1.443E-03	0.072
RH-105	7.846E-02		2.171E-01	3.746E-01	1.817E-02	0.209
RH-106	-5.028E-02		1.172E-01	2.336E-01	1.126E-02	-0.215
RU-106	1.617E-01		1.524E-01	2.783E-01	1.999E-02	0.581
CD-109	2.601E-01		3.413E-01	5.626E-01	3.276E-02	0.462
SN-113	3.316E-02		1.932E-02	3.579E-02	1.574E-03	0.927
SB-124	1.062E-02		1.642E-02	2.901E-02	1.460E-03	0.366
SB-125	2.620E-02		4.930E-02	8.488E-02	3.857E-03	0.309
I-131	1.236E-02		1.499E-02	2.644E-02	1.250E-03	0.467
I-132	-3.252E-03		2.237E-02	3.705E-02	1.884E-03	-0.088
TE-132	-6.826E-03		1.269E-02	2.048E-02	9.866E-04	-0.333
BA-133	-1.042E-02		2.765E-02	3.826E-02	2.598E-03	-0.272
I-133	2.409E-02		1.529E-02	2.852E-02	1.391E-03	0.845
CS-134	1.030E-02		1.944E-02	3.015E-02	1.521E-03	0.342
CS-137	7.414E-03		2.575E-02	4.394E-02	2.230E-03	0.169
CE-139	-1.216E-02		1.307E-02	2.112E-02	9.531E-04	-0.576
BA-140	1.706E-01		6.425E-02	1.175E-01	1.966E-02	1.452
LA-140	6.377E-03		2.063E-02	3.607E-02	1.629E-03	0.177
CE-141	1.480E-02		2.162E-02	3.733E-02	1.961E-03	0.397
CE-144	-3.841E-02		8.577E-02	1.427E-01	9.424E-03	-0.269
ND-147	6.926E-02		1.030E-01	1.791E-01	8.746E-03	0.387

Combined Activity-MDA Report (continued)
Sample ID : G8WN91AA Acquisition date : 30-APR-2005 09:30:36

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-152	-2.363E-02		1.008E-01	1.637E-01	8.447E-03	-0.144
EU-154	2.326E-02		1.739E-01	2.977E-01	2.058E-02	0.078
EU-155	-7.753E-03		4.565E-02	7.440E-02	3.997E-03	-0.104
HG-203	0.000E+00		0.000E+00	2.540E-02	1.271E-03	0.000
BI-211	9.344E-01		1.873E-01	3.307E-01	1.532E-02	2.826
PB-211	-7.269E-01		6.283E-01	8.998E-01	4.828E-02	-0.808
BI-212	7.930E-01		3.653E-01	6.859E-01	3.589E-02	1.156
BI-214	4.881E-01	+	7.797E-02	1.384E-01	7.360E-03	3.526
RN-219	1.364E-01		1.307E-01	2.257E-01	1.111E-02	0.604
RA-223	4.997E-02		1.971E-01	3.348E-01	1.772E-02	0.149
RA-224	2.488E+00		8.381E-01	7.990E-01	2.287E-01	3.114
TH-227	1.824E-01		1.168E-01	1.823E-01	8.826E-03	1.001
AC-228	4.806E-01		1.519E-01	2.392E-01	4.578E-02	2.009
RA-228	4.534E-01		1.054E-01	2.160E-01	1.156E-02	2.099
PA-231	-9.328E-01		5.615E-01	8.641E-01	5.636E-02	-1.080
TH-231	6.464E-03		1.847E-01	3.055E-01	2.071E-02	0.021
TH-232	1.733E+00		5.890E-01	1.160E+00	6.232E-02	1.495
PA-233	8.843E-02		3.031E-02	5.855E-02	2.895E-03	1.510
PA-234M	1.582E+01		4.118E+00	8.638E+00	4.471E-01	1.831
NP-237	9.482E-02		3.248E-02	6.278E-02	3.035E-03	1.510
NP-239	-5.766E-02		6.493E-02	1.030E-01	5.394E-03	-0.560
AM-241	-2.632E-02		3.473E-02	4.772E-02	2.744E-03	-0.552
ANN RAD	-8.398E-03		2.483E-02	4.916E-02	2.369E-03	-0.171


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WN91AA_GE4_SOLID100ML_57927.CNF;1
Title :
Sample Title: F5D210345-014
Start Time: 30-APR-2005 09:30 Sample Time: 30-APR-2005 09:30 Energy Offset: 1.10653E-01
Real Time : 0 01:00:00.68 Sample ID : G8WN91AA Energy Slope : 2.49919E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : 1.94892E-08
Log Counts
70
40
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 10-MAY-2005 19:10:21
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WPC1AA_GE5_SOLID100ML_57928.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D210345-015
Sample ID : G8WPC1AA

Sample Quantity : 1.55300E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 30-APR-2005 09:31:42
Acquisition date : 30-APR-2005 09:31:42
Decay time : 0 00:00:00.00
Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.88
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE5
Counting geometry: SOLID_100ML

Energy cal. time : 9-MAR-2005 09:18:16.
Effic. cal. time : 18-JAN-2005 09:43:11
Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000
End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE5__57455.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G8WPC1AA Acquisition date : 30-APR-2005 09:31:42

---- Energy, FWHM, and Efficiency Curves ----

```
*************************************************************************
*                                                                       *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)       *
*                            A = -7.14002E-03                           *
*                            B = 2.49998E-01                            *
*                            C = -1.90945E-09                           *
*                                                                       *
*                                                                       *
*                      FWHM(keV) = A + (B * SQRT(Energy))               *
*                            A = 5.02556E-01                            *
*                            B = 3.66242E-02                            *
*                                                                       *
*                                                                       *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                       *
*     a1=9.41250E+02   a2=-4.46457E+00 a3=9.42586E-01                   *
*     a4=5.97186E-02   a5=-3.91387E-02 a6=-9.36517E-03   a7=0.00000E+00 *
*                                                                       *
*************************************************************************
```

Combined Activity-MDA Report
Sample ID : G8WPC1AA

Acquisition date : 30-APR-2005 09:31:42

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	7.286E+00	8.712E-01	3.828E-01	1.786E-02	19.032
TL-208	1.196E-01	2.964E-02	3.572E-02	2.508E-03	3.348
PB-212	3.438E-01	4.627E-02	4.758E-02	2.710E-03	7.227
PB-214	4.032E-01	5.446E-02	5.066E-02	2.588E-03	7.959
TH-234	1.164E+00	2.435E-01	3.681E-01	3.546E-02	3.163

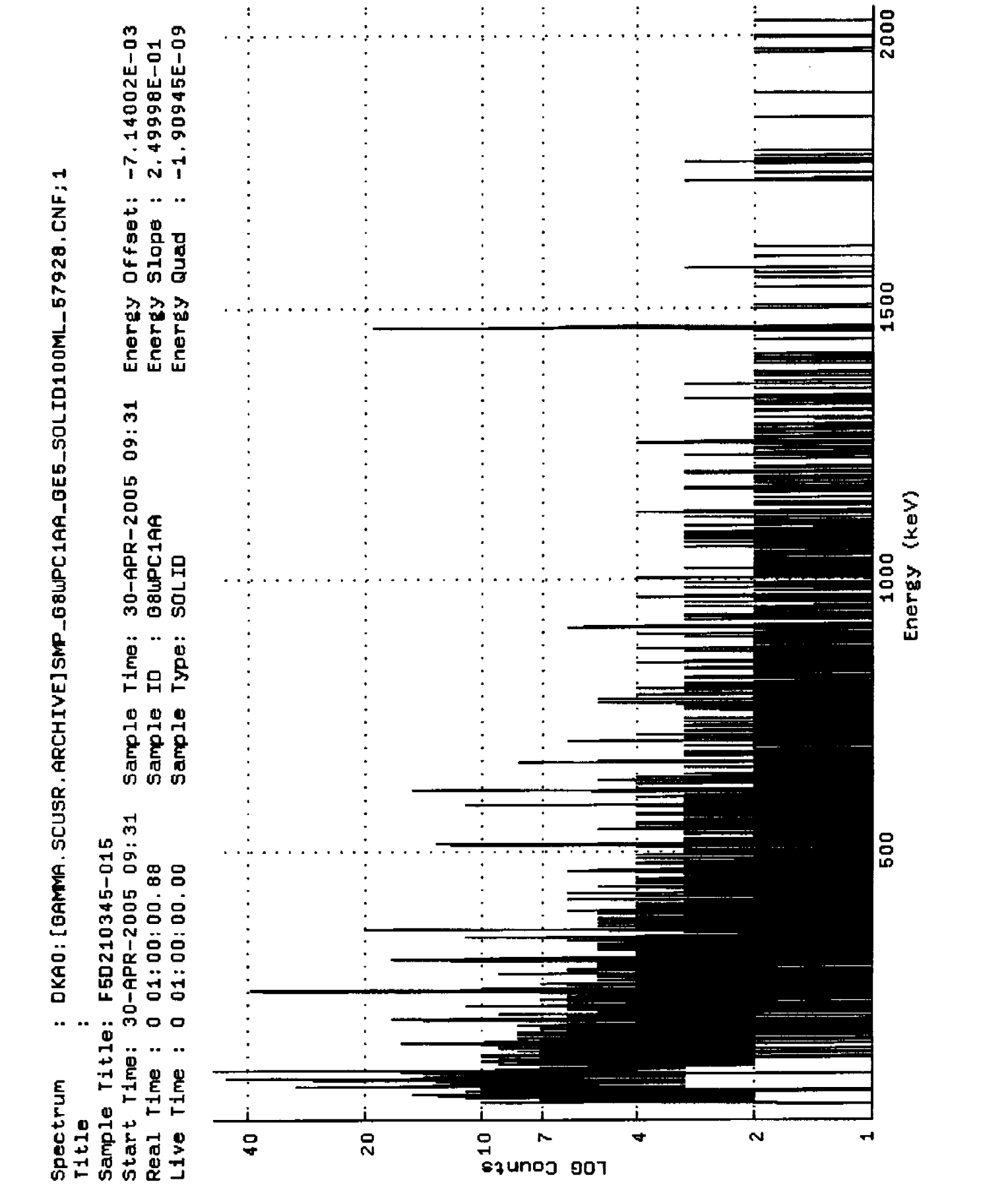
---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	2.024E-01		1.373E-01	2.542E-01	1.376E-02	0.796
NA-22	5.508E-03		2.523E-02	4.329E-02	1.945E-03	0.127
CR-51	-1.663E-01		1.307E-01	2.015E-01	1.042E-02	-0.825
MN-54	3.279E-02		2.335E-02	4.279E-02	2.814E-03	0.766
CO-57	2.350E-02		9.439E-03	1.716E-02	1.147E-03	1.369
FE-59	5.905E-02		4.542E-02	8.418E-02	4.808E-03	0.701
CO-60	5.068E-03		2.865E-02	5.125E-02	2.329E-03	0.099
ZN-65	-1.924E-01		6.142E-02	6.933E-02	3.411E-03	-2.775
SE-75	-2.094E-02		1.708E-02	2.673E-02	1.377E-03	-0.783
SR-85	-7.383E-02		2.498E-02	3.479E-02	1.901E-03	-2.122
Y-88	-2.433E-02		2.079E-02	2.558E-02	1.071E-03	-0.951
NB-95	-7.849E-03		2.199E-02	3.559E-02	2.404E-03	-0.221
ZR-95	1.010E-02		3.648E-02	6.229E-02	4.400E-03	0.162
MO-99	2.324E-01		1.324E-01	2.543E-01	2.347E-02	0.914
TC-99M	6.274E-03		1.139E-02	1.729E-02	1.032E-03	0.363
RU-103	-1.743E-02		1.593E-02	2.419E-02	1.429E-03	-0.720
RH-105	3.240E-02		1.823E-01	3.102E-01	1.562E-02	0.104
RH-106	-1.052E-01		1.316E-01	2.605E-01	1.419E-02	-0.404
RU-106	3.277E-01		1.682E-01	3.192E-01	2.622E-02	1.027
CD-109	4.369E-01		2.499E-01	4.421E-01	2.575E-02	0.988
SN-113	-2.220E-02		1.897E-02	2.828E-02	1.259E-03	-0.785
SB-124	8.751E-03		1.765E-02	3.030E-02	1.900E-03	0.289
SB-125	6.279E-02		4.384E-02	8.150E-02	3.862E-03	0.770
I-131	3.147E-04		1.453E-02	2.415E-02	1.165E-03	0.013
I-132	-7.981E-03		2.110E-02	3.446E-02	2.340E-03	-0.232
TE-132	2.526E-02		1.084E-02	2.020E-02	1.027E-03	1.250
BA-133	-1.539E-02		2.388E-02	3.141E-02	2.158E-03	-0.490
I-133	-7.071E-03		1.685E-02	2.708E-02	1.519E-03	-0.261
CS-134	-2.010E-02		1.935E-02	2.403E-02	1.513E-03	-0.836
CS-137	5.114E-02		2.857E-02	5.565E-02	3.779E-03	0.919
CE-139	-1.295E-02		1.138E-02	1.803E-02	8.671E-04	-0.718
BA-140	-2.586E-03		5.404E-02	8.961E-02	1.521E-02	-0.029
LA-140	-3.002E-02		2.179E-02	2.727E-02	1.223E-03	-1.101
CE-141	-1.767E-02		1.934E-02	2.625E-02	1.526E-03	-0.673
CE-144	-1.241E-02		6.647E-02	1.121E-01	8.084E-03	-0.111
ND-147	5.694E-02		1.042E-01	1.817E-01	1.022E-02	0.313
EU-152	1.451E-01		8.870E-02	1.833E-01	9.451E-03	0.792
EU-154	1.898E-02		1.558E-01	2.669E-01	2.070E-02	0.071

Combined Activity-MDA Report (continued)
Sample ID : G8WPC1AA Acquisition date : 30-APR-2005 09:31:42

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
EU-155	-2.948E-03		3.712E-02	6.098E-02	3.525E-03	-0.048
HG-203	-8.412E-03		1.487E-02	2.433E-02	1.269E-03	-0.346
BI-211	1.281E+00		1.676E-01	3.324E-01	1.580E-02	3.853
PB-211	2.088E-01		7.946E-01	1.345E+00	8.859E-02	0.155
BI-212	5.254E-01		2.999E-01	5.664E-01	3.852E-02	0.928
BI-214	3.640E-01	+	6.572E-02	1.214E-01	7.949E-03	3.000
RN-219	9.226E-02		1.132E-01	2.001E-01	1.030E-02	0.461
RA-223	9.635E-03		1.535E-01	2.602E-01	1.488E-02	0.037
RA-224	1.094E+00		5.115E-01	6.649E-01	1.906E-01	1.646
RA-226	1.637E+00		3.547E-01	6.984E-01	3.433E-02	2.344
TH-227	1.155E-02		1.116E-01	1.583E-01	8.075E-03	0.073
AC-228	4.684E-01		1.449E-01	2.297E-01	4.405E-02	2.039
RA-228	3.213E-01		1.026E-01	2.029E-01	1.268E-02	1.584
PA-231	-7.411E-01		5.144E-01	7.832E-01	5.220E-02	-0.946
TH-231	2.377E-01		1.268E-01	2.267E-01	1.540E-02	1.049
TH-232	6.205E-02		4.613E-01	7.717E-01	4.999E-02	0.080
PA-233	4.383E-03		2.856E-02	4.839E-02	2.477E-03	0.091
PA-234M	1.009E+01		4.073E+00	8.046E+00	4.649E-01	1.254
U-235	2.186E-01	+	9.872E-02	1.490E-01	1.429E-02	1.467
NP-237	4.700E-03		3.062E-02	5.188E-02	2.601E-03	0.091
NP-239	2.371E-02		4.839E-02	8.208E-02	4.518E-03	0.289
AM-241	8.330E-03		2.707E-02	4.227E-02	2.479E-03	0.197
ANN RAD	4.389E-03		2.716E-02	5.530E-02	3.007E-03	0.079


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G8WPC1AA_GE5_SOLID100ML_57928.CNF;1
Title :
Sample Title: F5D210345-015
Start Time: 30-APR-2005 09:31 Sample Time: 30-APR-2005 09:31 Energy Offset: -7.14002E-03
Real Time : 0 01:00:00.88 Sample ID : G8WPC1AA Energy Slope : 2.49998E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : -1.90945E-09
Log Counts
40
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 10-MAY-2005 19:10:53
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G9EAH1AA_GE6_SOLID100ML_57929.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D280000-394B
Sample ID : G9EAH1AA

Sample Quantity : 1.47200E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 30-APR-2005 09:32:22
Acquisition date : 30-APR-2005 09:32:22
Decay time : 0 00:00:00.00

Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:00.30
% dead time : 0.0%

---- Detector Parameters ----

Detector name : GE6

Counting geometry: SOLID_100ML

Energy cal. time : 3-MAR-2004 08:43:53.
Effic. cal. time : 18-JAN-2005 22:11:47

Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000

End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE6__57456.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G9EAH1AA

Acquisition date : 30-APR-2005 09:32:22

---- Energy, FWHM, and Efficiency Curves ----

```
**********************************************************************************
*                                                                                *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)                *
*                            A = 1.54285E-01                                     *
*                            B = 2.49832E-01                                     *
*                            C = 1.86799E-08                                     *
*                                                                                *
*                                                                                *
*                       FWHM(keV) = A + (B * SQRT(Energy))                       *
*                            A = 4.67797E-01                                     *
*                            B = 3.35494E-02                                     *
*                                                                                *
*                                                                                *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)  *
*                                                                                *
*     a1=9.41250E+02   a2=-4.68519E+00 a3=8.82578E-01                            *
*     a4=8.83148E-02   a5=-2.58765E-02 a6=-1.60802E-02   a7=0.00000E+00          *
*                                                                                *
**********************************************************************************
```

Combined Activity-MDA Report
Sample ID : G9EAH1AA

Acquisition date : 30-APR-2005 09:32:22

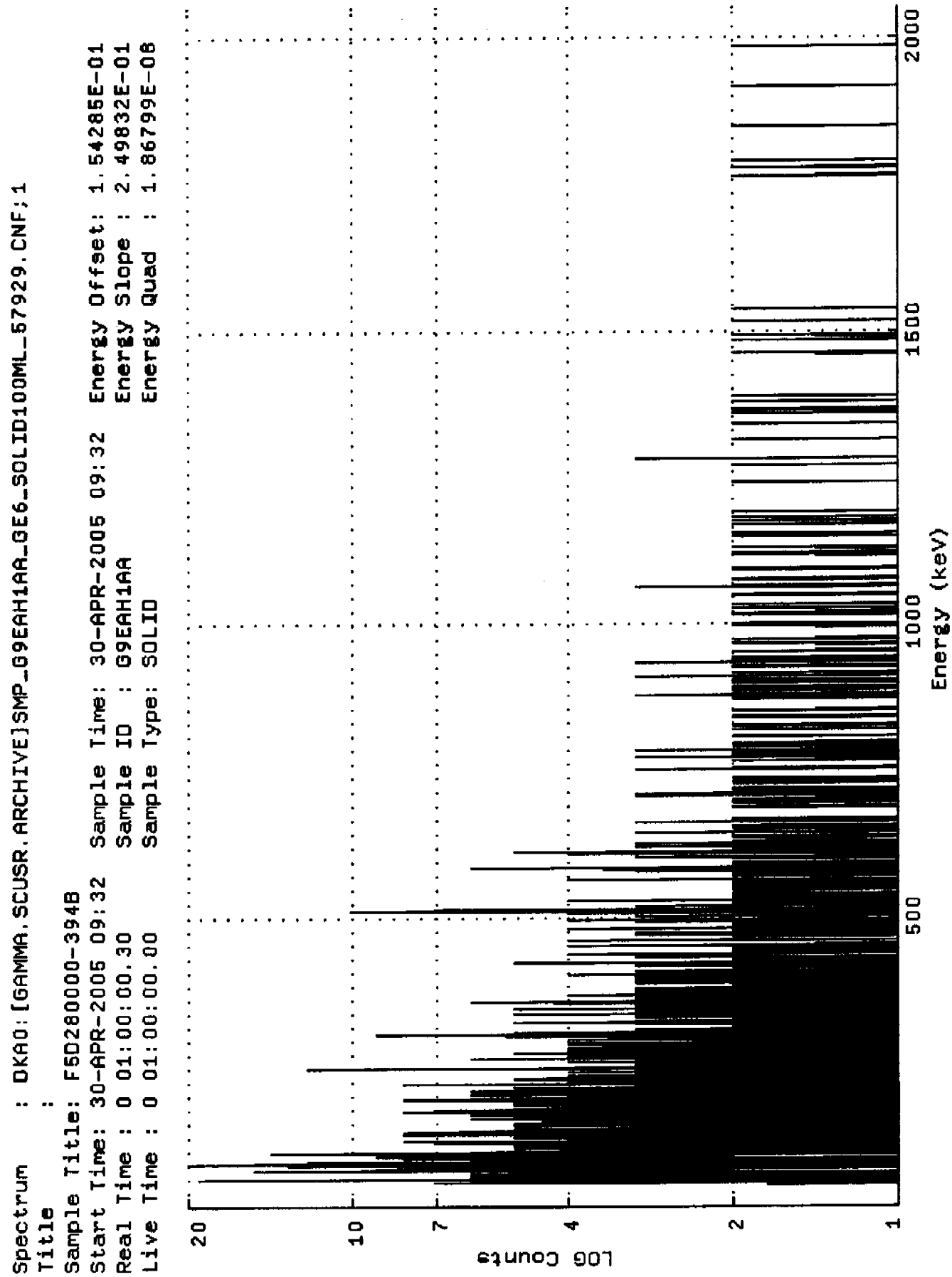
---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	-1.891E-01		1.631E-01	2.402E-01	1.406E-02	-0.787
NA-22	2.149E-02		1.897E-02	3.785E-02	1.639E-03	0.568
K-40	7.008E-02		2.722E-01	5.312E-01	2.352E-02	0.132
CR-51	-4.897E-02		1.017E-01	1.581E-01	8.338E-03	-0.310
MN-54	-1.884E-02		1.180E-02	1.174E-02	6.973E-04	-1.605
CO-57	-5.278E-03		9.122E-03	1.461E-02	8.289E-04	-0.361
FE-59	-1.241E-02		2.010E-02	2.646E-02	1.444E-03	-0.469
CO-60	-7.904E-03		1.983E-02	3.040E-02	1.292E-03	-0.260
ZN-65	-7.096E-03		4.777E-02	7.927E-02	3.728E-03	-0.090
SE-75	2.312E-02		1.483E-02	2.816E-02	1.413E-03	0.821
SR-85	-7.429E-02		2.612E-02	3.356E-02	1.975E-03	-2.213
Y-88	-2.034E-02		1.979E-02	2.268E-02	9.507E-04	-0.897
NB-95	3.279E-03		1.696E-02	2.877E-02	1.855E-03	0.114
ZR-95	-1.233E-04		2.719E-02	4.492E-02	3.059E-03	-0.003
MO-99	5.117E-02		9.756E-02	1.765E-01	1.604E-02	0.290
TC-99M	1.561E-03		1.004E-02	1.679E-02	8.702E-04	0.093
RU-103	1.804E-02		1.381E-02	2.638E-02	1.663E-03	0.684
RH-105	2.021E-03		2.000E-01	3.301E-01	1.676E-02	0.006
RH-106	2.667E-01		1.499E-01	2.687E-01	1.576E-02	0.992
RU-106	-1.045E-01		1.910E-01	3.027E-01	2.537E-02	-0.345
CD-109	2.741E-01		2.029E-01	3.704E-01	2.171E-02	0.740
SN-113	1.320E-02		1.869E-02	3.356E-02	1.664E-03	0.393
SB-124	1.230E-02		1.700E-02	3.075E-02	2.007E-03	0.400
SB-125	1.247E-02		3.980E-02	6.889E-02	3.607E-03	0.181
I-131	8.647E-03		1.521E-02	2.700E-02	1.393E-03	0.320
I-132	8.992E-03		1.886E-02	3.333E-02	2.293E-03	0.270
TE-132	1.684E-03		1.162E-02	1.975E-02	9.525E-04	0.085
BA-133	-9.804E-03		1.863E-02	2.995E-02	2.120E-03	-0.327
I-133	2.454E-02		1.859E-02	3.460E-02	2.077E-03	0.709
CS-134	-2.862E-02		1.821E-02	2.516E-02	1.647E-03	-1.138
CS-137	2.949E-02		1.909E-02	3.735E-02	2.577E-03	0.789
CE-139	-6.130E-03		1.243E-02	1.970E-02	8.660E-04	-0.311
BA-140	-6.139E-03		6.141E-02	9.975E-02	1.707E-02	-0.062
LA-140	-2.649E-02		1.992E-02	2.124E-02	9.154E-04	-1.247
CE-141	1.475E-03		1.374E-02	2.291E-02	1.170E-03	0.064
CE-144	6.657E-02		6.331E-02	1.133E-01	7.322E-03	0.588
ND-147	-1.553E-01		1.197E-01	1.664E-01	1.001E-02	-0.933
EU-152	-4.162E-02		8.572E-02	1.253E-01	6.169E-03	-0.332
EU-154	-1.217E-01		1.931E-01	3.005E-01	2.127E-02	-0.405
EU-155	4.316E-02		3.183E-02	5.850E-02	3.100E-03	0.738
HG-203	2.274E-03		1.631E-02	2.733E-02	1.406E-03	0.083
TL-208	6.019E-02		2.495E-02	4.902E-02	3.570E-03	1.228
BI-211	2.029E-01		1.132E-01	2.239E-01	1.125E-02	0.906
PB-211	1.992E-01		4.593E-01	8.354E-01	4.985E-02	0.238
BI-212	1.138E-01		2.985E-01	5.160E-01	3.436E-02	0.221
PB-212	3.225E-02		2.864E-02	5.541E-02	3.044E-03	0.582
BI-214	6.616E-02		4.963E-02	9.809E-02	6.654E-03	0.674
PB-214	6.776E-02		3.825E-02	7.523E-02	4.038E-03	0.901

Combined Activity-MDA Report (continued)
Sample ID : G9EAH1AA Acquisition date : 30-APR-2005 09:32:22

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
RN-219	4.211E-02		1.085E-01	1.862E-01	9.385E-03	0.226
RA-223	-1.385E-01		1.474E-01	2.246E-01	1.160E-02	-0.617
RA-224	-1.235E+00		4.743E-01	3.751E-01	1.074E-01	-3.294
RA-226	2.320E-01		2.998E-01	5.748E-01	2.613E-02	0.404
TH-227	-3.015E-01		1.112E-01	1.501E-01	7.306E-03	-2.008
AC-228	5.317E-02		1.081E-01	1.898E-01	3.648E-02	0.280
RA-228	2.411E-01		7.729E-02	1.695E-01	9.005E-03	1.423
PA-231	-3.799E-01		5.514E-01	8.571E-01	5.729E-02	-0.443
TH-231	4.000E-01		1.282E-01	2.477E-01	1.682E-02	1.615
TH-232	1.862E-02		3.684E-01	6.254E-01	3.572E-02	0.030
PA-233	8.847E-03		2.825E-02	4.789E-02	2.483E-03	0.185
PA-234M	-1.338E+00		2.665E+00	4.031E+00	2.062E-01	-0.332
TH-234	3.568E-01		2.552E-01	4.929E-01	4.686E-02	0.724
U-235	-1.578E-02		7.594E-02	1.301E-01	1.192E-02	-0.121
NP-237	9.486E-03		3.028E-02	5.134E-02	2.609E-03	0.185
NP-239	3.835E-02		4.049E-02	7.310E-02	3.799E-03	0.525
AM-241	-1.265E-02		2.203E-02	3.440E-02	1.934E-03	-0.368
ANN RAD	-9.827E-02		3.346E-02	6.223E-02	3.647E-03	-1.579


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G9EAH1AA_GE6_SOLID100ML_57929.CNF;1
Title :
Sample Title: F5D280000-394B
Start Time: 30-APR-2005 09:32 Sample Time: 30-APR-2005 09:32 Energy Offset: 1.54285E-01
Real Time : 0 01:00:00.30 Sample ID : G9EAH1AA Energy Slope : 2.49832E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : 1.86799E-08
Log Counts
20
10
7
4
2
1
500
1000
1500
2000
Energy (keV)

VMS Gamma Spectroscopy Report generated 10-MAY-2005 19:11:24
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G9EAH1AC_GE4_SOLID100ML_57930.CN

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number : 5118394
Project Number : F5D280000-394C
Sample ID : G9EAH1AC

Sample Quantity : 1.59200E+02 G
Sample Type : SOLID
Sample Analyst : gamma

---- Sample Decay/Count Information ----

Sample Date : 1-JAN-2000 00:00:00.
Acquisition date : 30-APR-2005 11:33:40
Decay time : 1946 11:33:40.74
Elapsed live time: 0 01:00:00.00
Elapsed real time: 0 01:00:07.25
% dead time : 0.2%

---- Detector Parameters ----

Detector name : GE4
Counting geometry: SOLID_100ML

Energy cal. time : 16-MAR-2005 08:34:49
Effic. cal. time : 18-JAN-2005 00:15:12
Energy cal. type : Poly
FWHM cal. type : Sqrt

---- Processing Parameters ----

Start channel : 150
Sensitivity : 3.00000
Critical level? : Yes
Empirical Eff? : No
Energy tolerance : 1.25000
Abundance limit : 70.00000
MDA Width (FWHM) : 3.00000
End channel : 8100
Gaussian Sens. : 15.00000
Propagate Errors?: Yes
Library-based eff: Yes
Half life ratio : 8.00000
WTM error limit : 3.00000
MDA Confid Level : 5.00000 %

Bkgd File : DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE4__57454.CNF;1

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]DOE_AL_MOD.NLB;1

Sample ID : G9EAH1AC Acquisition date : 30-APR-2005 11:33:40

---- Energy, FWHM, and Efficiency Curves ----

```
*****************************************************************************
*                                                                           *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)           *
*                            A = 1.10653E-01                                *
*                            B = 2.49919E-01                                *
*                            C = 1.94892E-08                                *
*                                                                           *
*                                                                           *
*                       FWHM(keV) = A + (B * SQRT(Energy))                  *
*                            A = 8.02351E-01                                *
*                            B = 2.65421E-02                                *
*                                                                           *
*                                                                           *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                           *
*     a1=9.41250E+02   a2=-4.55854E+00 a3=9.62044E-01                       *
*     a4=7.38134E-02   a5=-4.50301E-02 a6=-9.56656E-03   a7=0.00000E+00     *
*                                                                           *
*****************************************************************************
```

Combined Activity-MDA Report
Sample ID : G9EAH1AC

Acquisition date : 30-APR-2005 11:33:40

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	3.740E+00	6.654E-01	5.367E-01	2.510E-02	6.968
CO-57	1.964E+01	6.507E+00	7.852E+00	4.679E-01	2.501
CO-60	4.368E+01	1.501E+00	1.820E-01	8.258E-03	240.002
CD-109	1.021E+03	7.060E+01	2.580E+01	1.511E+00	39.582
CS-137	3.125E+01	1.634E+00	1.378E-01	6.994E-03	226.798
PB-212	3.751E+00	8.819E-01	1.036E+00	5.665E-02	3.620
AM-241	7.177E+01	4.168E+00	2.710E-01	1.558E-02	264.828

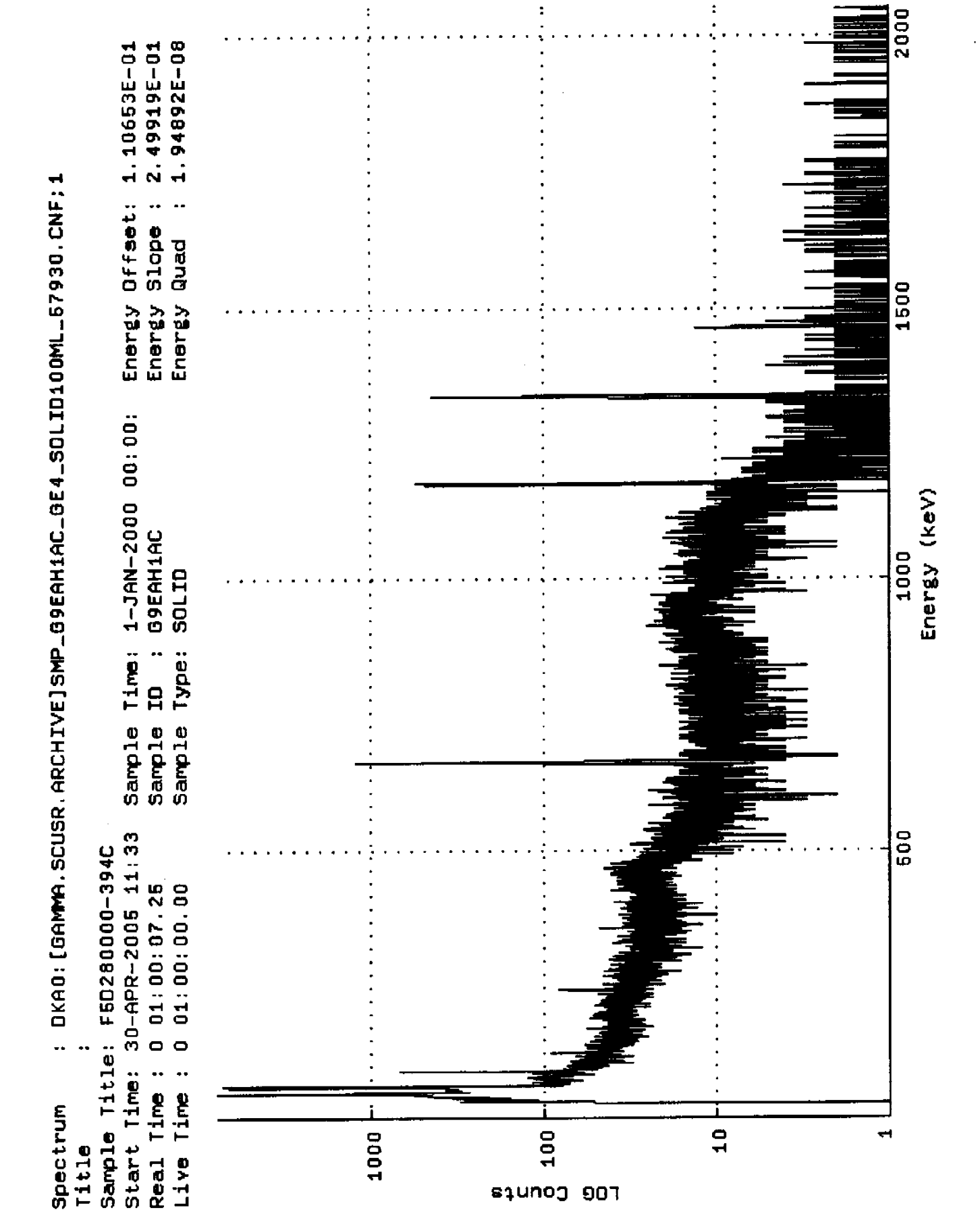
---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
BE-7	1.466E+04		5.775E+04	Half-Life too short		
NA-22	-1.560E-01		1.780E-01	2.825E-01	1.282E-02	-0.552
CR-51	-7.414E+13		6.123E+14	Half-Life too short		
MN-54	1.294E+01		6.290E+00	1.085E+01	5.842E-01	1.193
FE-59	3.475E+06		2.760E+06	Half-Life too short		
ZN-65	-3.624E+01		5.007E+01	8.175E+01	3.923E+00	-0.443
SE-75	1.989E-03		5.147E-03	Half-Life too short		
SR-85	-1.180E+02		6.742E+01	Half-Life too short		
Y-88	7.963E-03		9.198E-03	Half-Life too short		
NB-95	-2.314E+09		3.781E+09	Half-Life too short		
ZR-95	1.252E+01		1.848E+02	Half-Life too short		
MO-99	-1.000E+35		2.173E+35	Half-Life too short		
TC-99M	-1.000E+35		1.789E+36	Half-Life too short		
RU-103	-2.179E+07		5.362E+07	Half-Life too short		
RH-105	1.000E+35		3.896E+34	Half-Life too short		
RH-106	7.443E+00		1.166E+01	2.038E+01	9.828E-01	0.365
RU-106	8.645E+00		2.365E+01	4.010E+01	2.920E+00	0.216
SN-113	7.719E-03		9.802E-03	Half-Life too short		
SB-124	-1.808E+02		3.162E+02	Half-Life too short		
SB-125	1.174E+00		7.771E-01	1.324E+00	6.537E-02	0.887
I-131	1.000E+35		1.932E+35	Half-Life too short		
I-132	1.000E+35		9.237E+35	Half-Life too short		
TE-132	-1.000E+35		2.708E+36	Half-Life too short		
BA-133	2.071E-03		1.272E-01	1.819E-01	1.237E-02	0.011
I-133	-1.000E+35		9.521E+34	Half-Life too short		
CS-134	7.749E-01		3.786E-01	6.185E-01	3.133E-02	1.253
CE-139	5.111E-04		6.610E-04	Half-Life too short		
BA-140	-1.000E+35		1.481E+36	Half-Life too short		
LA-140	-1.000E+35		1.507E+35	Half-Life too short		
CE-141	-2.535E+10		6.014E+10	Half-Life too short		
CE-144	-2.237E+01		2.884E+01	4.820E+01	3.188E+00	-0.464
ND-147	-1.000E+35		1.141E+35	Half-Life too short		
EU-152	-1.524E-01		2.246E-01	3.530E-01	1.827E-02	-0.432
EU-154	2.980E-01		1.148E+00	1.953E+00	1.353E-01	0.153
EU-155	-1.194E+00		2.962E-01	4.452E-01	2.392E-02	-2.682
HG-203	-8.636E+04		1.978E+05	Half-Life too short		

Combined Activity-MDA Report (continued)
Sample ID : G9EAH1AC Acquisition date : 30-APR-2005 11:33:40

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
TL-208	1.804E-01		4.671E-01	7.979E-01	4.868E-02	0.226
BI-211	1.774E+00		5.595E-01	8.547E-01	3.959E-02	2.076
PB-211	-1.709E+00		3.471E+00	5.663E+00	3.038E-01	-0.302
BI-212	-6.958E-01		6.812E+00	1.132E+01	5.923E-01	-0.061
BI-214	3.465E-01	+	1.444E-01	2.342E-01	1.246E-02	1.479
PB-214	5.736E-01	+	2.509E-01	2.409E-01	1.204E-02	2.381
RN-219	8.266E-01		4.658E-01	7.885E-01	3.933E-02	1.048
RA-223	3.147E-01		6.002E-01	1.018E+00	5.389E-02	0.309
RA-224	3.006E+01		1.170E+01	1.216E+01	3.481E+00	2.472
RA-226	7.738E-01		9.736E-01	1.652E+00	7.644E-02	0.468
TH-227	3.126E-01		4.719E-01	6.752E-01	3.314E-02	0.463
AC-228	5.471E-01		7.200E-01	1.216E+00	2.327E-01	0.450
RA-228	6.536E-01		6.622E-01	1.138E+00	6.092E-02	0.574
PA-231	-4.215E+00		1.811E+00	2.907E+00	1.896E-01	-1.450
TH-231	-1.815E-03		5.698E-01	8.057E-01	5.463E-02	-0.002
TH-232	1.465E+00		1.908E+00	3.207E+00	1.723E-01	0.457
PA-233	7.733E-02		1.063E-01	1.820E-01	8.998E-03	0.425
PA-234M	1.856E+01		1.456E+01	2.514E+01	1.301E+00	0.738
TH-234	-7.078E-02		1.119E+00	1.604E+00	1.536E-01	-0.044
U-235	2.947E-01		2.603E-01	4.445E-01	4.110E-02	0.663
NP-237	8.291E-02		1.140E-01	1.951E-01	9.433E-03	0.425
NP-239	-1.569E-01		1.907E-01	3.094E-01	1.620E-02	-0.507
ANN RAD	4.371E-02		6.216E-02	1.087E-01	5.237E-03	0.402


Spectrum : DKA0:[GAMMA.SCUSR.ARCHIVE]SMP_G9EAH1AC_GE4_SOLID100ML_67930.CNF;1
Title :
Sample Title: F5D280000-394C
Start Time: 30-APR-2005 11:33 Sample Time: 1-JAN-2000 00:00: Energy Offset: 1.10653E-01
Real Time : 0 01:00:07.25 Sample ID : G9EAH1AC Energy Slope : 2.49919E-01
Live Time : 0 01:00:00.00 Sample Type: SOLID Energy Quad : 1.94892E-08
LOG Counts
1000
100
10
1
600
1000
1500
2000
Energy (keV)

Instrument Checks

STL ST. LOUIS

QA filename : DKA0:[GAMMA.SCUSR.QA]QCB_GE7.QAF;1

Sample ID : Bkgrnd Check
Sample date : 29-APR-2005 05:51:13
Elapsed live time: 0 00:20:00.00
Sample quantity : 1.00 EACH
Acquisition date : 29-APR-2005 05:51:13
Elapsed real time: 0 00:20:00.08

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*Background Rate GE7 [1.25481+/-0.09021]	1.2292E+00	-0.28	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: Dan Approval Date: 4 / 29 / 5

QA filename : DKA0:[GAMMA.SCUSR.QA]QCB_GE6.QAF;1

Sample ID : Bkgrnd Check
Sample quantity : 1.00 EACH
Sample date : 29-APR-2005 05:51:20
Acquisition date : 29-APR-2005 05:51:20
Elapsed live time: 0 00:20:00.00
Elapsed real time: 0 00:20:00.11

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*Background Rate GE6 [1.34312+/-0.03885]	1.3533E+00	0.26	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: RJM Approval Date: 4 / 29 / 5

STL ST. LOUIS

QA filename : DKA0:[GAMMA.SCUSR.QA]QCB_GE5.QAF;1

Sample ID : Bkgrnd Check Sample quantity : 1.00 EACH
Sample date : 29-APR-2005 05:51:27 Acquisition date : 29-APR-2005 05:51:27
Elapsed live time: 0 00:20:00.00 Elapsed real time: 0 00:20:00.22

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*Background Rate GE5 [1.40558+/-0.04394]	1.3708E+00	-0.79	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: RAM Approval Date: 4 / 29 / 5

STL ST. LOUIS

QA filename : DKA0:[GAMMA.SCUSR.QA]QCB_GE4.QAF;1

Sample ID : Bkgrnd Check
Sample date : 29-APR-2005 05:51:34
Elapsed live time: 0 00:20:00.00
Sample quantity : 1.00 EACH
Acquisition date : 29-APR-2005 05:51:34
Elapsed real time: 0 00:20:00.11

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*Background Rate GE4 [1.25639+/-0.04128]	1.3067E+00	1.22	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: RAH Approval Date: 4/29/RAH/05

QA filename : DKA0:[GAMMA.SCUSR.QA]QCC_GE4_PETRI060.QAF;1

Sample ID : Calib Check
Sample date : 1-OCT-1997 12:00:00
Elapsed live time: 0 00:10:00.00
Sample quantity : 1.00 EACH
Acquisition date : 29-APR-2005 06:15:51
Elapsed real time: 0 00:10:00.97

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*GE4 Peak Energy 59.5 keV [59.4765+/-0.1698]	5.9665E+01	1.11	
*GE4 Peak Energy 661.6 keV [661.6335+/-0.2657]	6.6181E+02	0.66	
*GE4 Peak Energy 1332 keV [1332.5524+/-0.3974]	1.3329E+03	0.80	
*GE4 Peak FWHM 59.5 keV [0.83564+/-0.08195]	9.7561E-01	1.71	
*GE4 Peak FWHM 661.6 keV [1.3473+/-0.1464]	1.4940E+00	1.00	
*GE4 Peak FWHM 1332 keV [1.7542+/-0.2242]	1.9191E+00	0.74	
*GE4 Am-241 Activity, 59.5 keV [0.0051038+/-2.5856E-04]	5.3159E-03	0.82	
*GE4 Cs-137 Activity, 661.6 keV [0.0019680+/-1.1838E-04]	1.9490E-03	-0.16	
*GE4 Co-60 Activity, 1332 keV [0.0031154+/-2.7340E-04]	3.1711E-03	0.20	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*GE4 Peak Centroid 59.5 keV	2.3200E+02	2.4400E+02	2.3829E+02	
*GE4 Peak Centroid 661 keV	2.6380E+03	2.6500E+03	2.6471E+03	
*GE4 Peak Centroid 1332 keV	5.3220E+03	5.3340E+03	5.3306E+03	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 4 / 29 / 5

QA filename : DKA0:[GAMMA.SCUSR.QA]QCC_GE5_PETRI060.QAF;1

Sample ID : Calib Check
Sample date : 1-OCT-1997 12:00:00
Elapsed live time: 0 00:10:00.00
Sample quantity : 1.00 EACH
Acquisition date : 29-APR-2005 06:16:10
Elapsed real time: 0 00:10:01.09

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*GE5 Peak Energy 59.5 keV [59.51143+/-0.03576]	5.9507E+01	-0.11	
*GE5 Peak Energy 661.6 keV [661.6370+/-0.2149]	6.6194E+02	1.39	
*GE5 Peak Energy 1332 keV [1332.4376+/-0.3451]	1.3331E+03	1.78	
*GE5 Peak FWHM 59.5 keV [0.79683+/-0.01892]	8.1456E-01	0.94	
*GE5 Peak FWHM 661 KEV [1.34206+/-0.08835]	1.4029E+00	0.69	
*GE5 Peak FWHM 1332 keV [1.7736+/-0.2140]	1.6105E+00	-0.76	
*GE5 Am-241 Activity, 59.5 keV [0.00537092+/-9.5029E-05]	5.2885E-03	-0.87	
*GE5 Cs-137 Activity, 661.6 keV [0.00198257+/-7.2602E-05]	1.8287E-03	-2.12	Investigate
*GE5 Co-60 Activity, 1332 keV [0.0031156+/-1.4953E-04]	3.2834E-03	1.12	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*GE5 Peak Centroid 59.5 keV	2.3500E+02	2.4100E+02	2.3806E+02	
*GE5 Peak Centroid 661 keV	2.6406E+03	2.6526E+03	2.6478E+03	
*GE5 Peak Centroid 1332 keV	5.3239E+03	5.3359E+03	5.3325E+03	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 4/29/5

STL ST. LOUIS

QA filename : DKA0:[GAMMA.SCUSR.QA]QCC_GE6_PETRI060.QAF;1

Sample ID : Calib Check
Sample date : 1-OCT-1997 12:00:00
Elapsed live time: 0 00:10:00.00
Sample quantity : 1.00 EACH
Acquisition date : 29-APR-2005 06:16:25
Elapsed real time: 0 00:10:00.69

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*GE-6 Peak Energy 59.5 keV [59.57895+/-0.06881]	5.9668E+01	1.30	
*GE-6 Peak Energy 661.6 keV [661.6124+/-0.1401]	6.6152E+02	-0.66	
*Ge-6 Peak Energy 1332 keV [1332.4098+/-0.2469]	1.3322E+03	-0.78	
*GE-6 Peak FWHM 59.5 keV [0.74419+/-0.01982]	7.7447E-01	1.53	
*GE-6 Peak FWHM 661.6 keV [1.24488+/-0.09401]	1.2262E+00	-0.20	
*GE-6 Peak FWHM 1332 keV [1.6124+/-0.2106]	1.5708E+00	-0.20	
GE-6 Am-241 Activity, 59.5 keV [0.0044729+/-1.0326E-04]	4.2869E-03	-1.80	
GE-6 Cs-137 Activity, 661.6 keV [0.00178314+/-7.5930E-05]	1.6785E-03	-1.38	
GE-6 Co-60 Activity, 1332 keV [0.0037600+/-2.1368E-04]	3.4065E-03	-1.65	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*GE-6 Peak Centroid 59.5	2.3200E+02	2.4400E+02	2.3821E+02	
*GE-6 Peak Centroid 661 keV	2.6380E+03	2.6500E+03	2.6467E+03	
*GE-6 Peak Centroid 1332 keV	5.3220E+03	5.3340E+03	5.3297E+03	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 4 / 21 / 5

QA filename : DKA0:[GAMMA.SCUSR.QA]QCC_GE7_PETRI060.QAF;1

Sample ID : Calib Check
Sample date : 1-OCT-1997 12:00:00
Elapsed live time: 0 00:10:00.00
Sample quantity : 1.00 EACH
Acquisition date : 29-APR-2005 06:16:42
Elapsed real time: 0 00:10:00.74

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*GE7 Peak Energy 59.5 keV [59.48854+/-0.07971]	5.9556E+01	0.85	
*GE7 Peak Energy 661.6 keV [661.4800+/-0.2331]	6.6176E+02	1.19	
*GE7 Peak Energy 1332 keV [1332.2655+/-0.4909]	1.3325E+03	0.54	
*GE7 Peak FWHM 59.5 keV [0.96014+/-0.02820]	9.6670E-01	0.23	
*GE7 Peak FWHM 661.6 keV [1.6034+/-0.1178]	1.6053E+00	0.02	
*GE7 Peak FWHM 1332 keV [2.1455+/-0.2865]	2.0928E+00	-0.18	
*GE7 Am-241 Activity, 59.5 keV [0.0062991+/-1.1998E-04]	6.1954E-03	-0.86	
*GE7 Cs-137 Activity, 661.6 keV [0.00261233+/-8.7429E-05]	2.6710E-03	0.67	
*GE7 Co-60 Activity, 1332 keV [0.0040824+/-1.9734E-04]	3.9477E-03	-0.68	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*GE7 Peak Centroid 59.5 keV	2.3200E+02	2.4400E+02	2.3786E+02	
*GE7 Peak Centroid 661 keV	2.6380E+03	2.6500E+03	2.6465E+03	
*GE7 Peak Centroid 1332 keV	5.3220E+03	5.3340E+03	5.3303E+03	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 4 / 27 / 5

STL

Monthly Background

April 17, 2005

VMS Gamma Spectroscopy Report generated 18-APR-2005 09:26:03
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE4__57454.CNF;1

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number :
Project Number : MONTHLY BKG
Sample ID : LNGBKG_4-17-05

Sample Quantity : 1.00000E+00 EA
Sample Type : Empty
Sample Analyst : 400214

---- Sample Decay/Count Information ----

Sample Date	: 17-APR-2005 21:26:02	Elapsed live time	: 0 12:00:00.00
Acquisition date	: 17-APR-2005 21:26:02	Elapsed real time	: 0 12:00:04.27
Decay time	: 0 00:00:00.00	% dead time	: 0.0%

---- Detector Parameters ----

Detector name : GE4
Counting geometry:

Energy cal. time	: 16-MAR-2005 08:34:49	Energy cal. type	: Poly
Effic. cal. time	: 6-APR-2004 13:53:47.	FWHM cal. type	: Sqrt

---- Processing Parameters ----

Start channel	: 150	End channel	: 8192
Sensitivity	: 3.00000	Gaussian Sens.	: 15.00000
Critical level?	: Yes	Propagate Errors?	: Yes
Empirical Eff?	: No	Library-based eff	: Yes
Energy tolerance	: 1.50000	Half life ratio	: 8.00000
Abundance limit	: 50.00000	WTM error limit	: 3.00000
MDA Width (FWHM)	: 3.00000	MDA Confid Level	: 5.00000 %

Bkgd File :

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]MAIN.NLB;

Sample ID : LNGBKG_4-17-05 Acquisition date : 17-APR-2005 21:26:02

---- Energy, FWHM, and Efficiency Curves ----

```
**********************************************************************************
*                                                                                *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)                *
*                          A = 1.10653E-01                                       *
*                          B = 2.49919E-01                                       *
*                          C = 1.94892E-08                                       *
*                                                                                *
*                                                                                *
*                    FWHM(keV) = A + (B * SQRT(Energy))                          *
*                          A = 8.02351E-01                                       *
*                          B = 2.65421E-02                                       *
*                                                                                *
*                                                                                *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                                *
*     a1=9.47750E+02   a2=-4.92113E+00 a3=9.16377E-01                           *
*     a4=5.88282E-02   a5=-2.51537E-02 a6=-1.56778E-02   a7=0.00000E+00         *
*                                                                                *
**********************************************************************************
```

Post-NID Peak Search Report
Sample ID : LNGBKG_4-17-05

Acquisition date : 17-APR-2005 21:26:02

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
6	46.59	264	366	1.08	185.98	180	14	18.7	1.11E+00	PB-210
5	63.38	215	367	0.95	253.17	246	13	21.7	6.97E-01	TH-234
5	92.64	332	420	1.22	370.23	365	13	16.6	8.56E-01	TH-234
19	139.95	52	254	0.84	559.50	555	11	65.2	6.50E-01	TC-99M
5	185.76	142	287	1.10	742.79	733	14	30.0	7.29E-01	U-235
										RA-226
7	238.68	108	258	0.89	954.53	948	13	34.2	5.61E-01	PB-212
5	511.13	766	264	2.64	2044.40	2025	38	8.3	9.54E-01	TL-208
										ANN RAD
5	583.64	52	87	1.06	2334.47	2328	13	45.0	9.92E-01	TL-208
5	609.43	42	85	0.82	2437.61	2430	13	50.4	1.41E+00	
32	969.27	22	35	0.98	3876.72	3871	12	59.8	8.84E-01	

Unidentified Energy Lines
Sample ID : LNGBKG_4-17-05

Acquisition date : 17-APR-2005 21:26:02

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
5	609.43	42	85	0.82	2437.61	2430	13	9.81E-04	50.4	1.10E+00	T
32	969.27	22	35	0.98	3876.72	3871	12	5.01E-04	59.8	7.14E-01	T

Flags: "T" = Tentatively associated

QA filename : DKA0:[GAMMA.SCUSR.QA]LBC_GE4.QAF;1

Sample ID : LNGBKG_4-17-05 Sample quantity : 1.00 EA
Sample date : 17-APR-2005 21:26:02 Acquisition date : 17-APR-2005 21:26:02
Elapsed live time: 0 12:00:00.00 Elapsed real time: 0 12:00:04.27

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*Background Rate [1.11477+/-0.01667]	1.1942E+00	4.76	Action

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: CH Approval Date: 4 / 18 / 05

Energy lines were compared to previous Backgrounds on GE 4. The "Value" and previous energy lines were comparable. the background will be subtracted during sample analysis.

CH

VMS Gamma Spectroscopy Report generated 18-APR-2005 09:30:24
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE5__57455.CNF;1

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number :
Project Number : MONTHLY BKG
Sample ID : LNGBKG_4-17-05

Sample Quantity : 1.00000E+00 EA
Sample Type : Empty
Sample Analyst : 400214

---- Sample Decay/Count Information ----

Sample Date	: 17-APR-2005 21:30:17	Elapsed live time:	0 12:00:00.00
Acquisition date	: 17-APR-2005 21:30:17	Elapsed real time:	0 12:00:07.87
Decay time	: 0 00:00:00.00	% dead time :	0.0%

---- Detector Parameters ----

Detector name : GE5 Counting geometry:

Energy cal. time	: 9-MAR-2005 09:18:16.	Energy cal. type :	Poly
Effic. cal. time	: 15-DEC-2004 23:41:28	FWHM cal. type :	Sqrt

---- Processing Parameters ----

Start channel	: 150	End channel :	8192
Sensitivity	: 3.00000	Gaussian Sens. :	15.00000
Critical level?	: Yes	Propagate Errors?:	Yes
Empirical Eff?	: No	Library-based eff:	Yes
Energy tolerance	: 1.50000	Half life ratio :	8.00000
Abundance limit	: 50.00000	WTM error limit :	3.00000
MDA Width (FWHM)	: 3.00000	MDA Confid Level :	5.00000 %

Bkgd File :

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]MAIN.NLB;

Sample ID : LNGBKG_4-17-05 Acquisition date : 17-APR-2005 21:30:17

---- Energy, FWHM, and Efficiency Curves ----

```
*************************************************************************
*                                                                       *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)       *
*                            A = -7.14002E-03                           *
*                            B = 2.49998E-01                            *
*                            C = -1.90945E-09                           *
*                                                                       *
*                                                                       *
*                       FWHM(keV) = A + (B * SQRT(Energy))              *
*                            A = 5.02556E-01                            *
*                            B = 3.66242E-02                            *
*                                                                       *
*                                                                       *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                       *
*     a1=9.41250E+02   a2=-4.61703E+00 a3=8.62748E-01                   *
*     a4=8.21586E-02   a5=3.49412E-03  a6=-3.05292E-02   a7=0.00000E+00 *
*                                                                       *
*************************************************************************
```

Post-NID Peak Search Report
Sample ID : LNGBKG_4-17-05

Acquisition date : 17-APR-2005 21:30:17

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
5	46.51	444	286	0.75	186.07	178	15	12.1	8.12E-01	PB-210
15	59.27	127	394	1.55	237.12	229	16	36.4	1.43E+00	AM-241
4	63.20	309	304	0.81	252.83	245	14	15.6	1.32E+00	TH-234
32	77.08	69	327	0.79	308.37	304	11	47.6	1.55E+00	PB-214
										PB-212
4	92.62	501	341	1.06	370.53	364	21	11.6	1.17E+00	TH-234
6	185.80	173	215	0.77	743.23	732	23	21.8	9.30E-01	U-235
										RA-226
4	238.65	136	210	0.97	954.63	950	10	27.9	1.06E+00	PB-212
6	352.13	79	215	1.26	1408.58	1401	20	41.0	9.18E-01	PB-214
5	511.16	860	295	2.69	2044.72	2029	31	7.9	5.74E-01	ANN RAD
5	661.95	131	112	1.07	2647.92	2637	19	23.1	8.46E-01	CS-137
7	779.16	32	38	1.30	3116.79	3111	11	55.4	1.04E+00	
8	803.23	45	67	1.19	3213.05	3203	17	46.0	7.24E-01	
9	1173.53	56	54	1.38	4694.35	4687	16	37.8	1.03E+00	CO-60
15	1333.00	38	30	0.96	5332.28	5326	15	41.9	1.21E+00	CO-60

Unidentified Energy Lines
Sample ID : LNGBKG_4-17-05

Acquisition date : 17-APR-2005 21:30:17

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
7	779.16	32	38	1.30	3116.79	3111	11	7.48E-04	55.4	1.17E+00	T
8	803.23	45	67	1.19	3213.05	3203	17	1.03E-03	46.0	1.14E+00	

Flags: "T" = Tentatively associated

QA filename : DKA0:[GAMMA.SCUSR.QA]LBC_GE5.QAF;1

Sample ID : LNGBKG_4-17-05 Sample quantity : 1.00 EA
Sample date : 17-APR-2005 21:30:17 Acquisition date : 17-APR-2005 21:30:17
Elapsed live time: 0 12:00:00.00 Elapsed real time: 0 12:00:07.87

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*Background Rate [1.22039+/-0.01247]	1.2126E+00	-0.63	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: LRR Approval Date: 4 / 18 / 05

VMS Gamma Spectroscopy Report generated 18-APR-2005 09:30:59
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE6__57456.CNF;1

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number :
Project Number : MONTHLY BKG
Sample ID : LNGBKG_4-17-05

Sample Quantity : 1.00000E+00 EA
Sample Type : Empty
Sample Analyst : 400214

---- Sample Decay/Count Information ----

Sample Date	: 17-APR-2005 21:30:59	Elapsed live time:	0 12:00:00.00
Acquisition date	: 17-APR-2005 21:30:59	Elapsed real time:	0 12:00:03.81
Decay time	: 0 00:00:00.00	% dead time :	0.0%

---- Detector Parameters ----

Detector name : GE6 Counting geometry:

Energy cal. time	: 3-MAR-2004 08:43:53.	Energy cal. type	: Poly
Effic. cal. time	: 8-JUL-2004 17:41:15.	FWHM cal. type	: Sqrt

---- Processing Parameters ----

Start channel	: 150	End channel	: 8192
Sensitivity	: 3.00000	Gaussian Sens.	: 15.00000
Critical level?	: Yes	Propagate Errors?	: Yes
Empirical Eff?	: No	Library-based eff	: Yes
Energy tolerance	: 1.50000	Half life ratio	: 8.00000
Abundance limit	: 50.00000	WTM error limit	: 3.00000
MDA Width (FWHM)	: 3.00000	MDA Confid Level	: 5.00000 %

Bkgd File :

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]MAIN.NLB;

---- Energy, FWHM, and Efficiency Curves ----

```
**************************************************************************
*                                                                        *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)        *
*                          A = 1.54285E-01                               *
*                          B = 2.49832E-01                               *
*                          C = 1.86799E-08                               *
*                                                                        *
*                                                                        *
*                     FWHM(keV) = A + (B * SQRT(Energy))                 *
*                          A = 4.67797E-01                               *
*                          B = 3.35494E-02                               *
*                                                                        *
*                                                                        *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                        *
*     a1=9.47750E+02   a2=-4.64127E+00 a3=9.31555E-01                    *
*     a4=8.26639E-02   a5=-4.44934E-02 a6=-8.73174E-03   a7=0.00000E+00  *
*                                                                        *
**************************************************************************
```

Post-NID Peak Search Report
Sample ID : LNGBKG_4-17-05

Acquisition date : 17-APR-2005 21:30:59

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
6	40.86	325	234	1.03	162.93	158	13	13.8	2.20E+00	
4	46.57	410	269	0.80	185.78	182	9	12.9	9.47E-01	PB-210
4	63.34	280	317	0.74	252.90	246	14	16.8	4.26E-01	TH-234
5	72.88	183	375	0.71	291.10	285	21	22.0	2.11E+00	
5	74.97	385	401	0.72	299.47	285	21	14.2		PB-214
										PB-212
5	84.78	350	464	1.16	338.73	331	14	16.1	1.09E+00	
5	92.73	452	360	1.02	370.53	363	21	12.5	6.94E-01	TH-234
8	143.66	88	259	1.02	574.39	570	14	41.5	9.95E-01	U-235
4	185.70	189	286	0.95	742.65	737	12	22.3	6.75E-01	U-235
										RA-226
5	238.53	184	232	1.03	954.09	949	11	22.4	1.21E+00	PB-212
14	295.32	57	155	0.87	1181.37	1177	12	49.9	8.25E-01	PB-214
19	351.91	69	178	0.97	1407.83	1395	18	44.2	1.14E+00	PB-214
5	510.99	851	265	2.68	2044.41	2024	38	7.8	6.90E-01	ANN RAD
6	609.49	103	135	1.69	2438.52	2431	18	29.9	8.53E-01	
4	1460.75	51	29	1.83	5843.77	5837	18	35.0	7.88E-01	K-40

Unidentified Energy Lines
Sample ID : LNGBKG_4-17-05

Acquisition date : 17-APR-2005 21:30:59

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
6	40.86	325	234	1.03	162.93	158	13	7.53E-03	13.8	4.37E+00	
5	72.88	183	375	0.71	291.10	285	21	4.24E-03	22.0	5.86E+00	T
5	84.78	350	464	1.16	338.73	331	14	8.10E-03	16.1	5.88E+00	T
6	609.49	103	135	1.69	2438.52	2431	18	2.39E-03	29.9	1.47E+00	T

Flags: "T" = Tentatively associated

QA filename : DKA0:[GAMMA.SCUSR.QA]LBC_GE6.QAF;1

Sample ID : LNGBKG_4-17-05 Sample quantity : 1.00 EA
Sample date : 17-APR-2005 21:30:59 Acquisition date : 17-APR-2005 21:30:59
Elapsed live time: 0 12:00:00.00 Elapsed real time: 0 12:00:03.81

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*Background Rate [1.5258+/-0.2127]	1.1626E+00	-1.71	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: PL Approval Date: 4 / 18 / 05

VMS Gamma Spectroscopy Report generated 18-APR-2005 09:31:33
Configuration: DKA0:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG_41705_GE7__57457.CNF;1

SEVERN TRENT LABORATORIES -- St. Louis Laboratory

---- Sample Information ----

Batch Number :
Project Number : MONTHLY BKG
Sample ID : LNGBKG_4-17-05

Sample Quantity : 1.00000E+00 EA
Sample Type : Empty
Sample Analyst : 400214

---- Sample Decay/Count Information ----

Sample Date	: 17-APR-2005 21:31:33	Elapsed live time:	0 12:00:00.00
Acquisition date	: 17-APR-2005 21:31:33	Elapsed real time:	0 12:00:03.12
Decay time	: 0 00:00:00.00	% dead time :	0.0%

---- Detector Parameters ----

Detector name : GE7 Counting geometry:

Energy cal. time	: 25-FEB-2005 09:11:05	Energy cal. type	: Poly
Effic. cal. time	: 8-JUL-2004 20:41:38.	FWHM cal. type	: Sqrt

---- Processing Parameters ----

Start channel	: 150	End channel	: 8192
Sensitivity	: 3.00000	Gaussian Sens.	: 15.00000
Critical level?	: Yes	Propagate Errors?	: Yes
Empirical Eff?	: No	Library-based eff	: Yes
Energy tolerance	: 1.50000	Half life ratio	: 8.00000
Abundance limit	: 50.00000	WTM error limit	: 3.00000
MDA Width (FWHM)	: 3.00000	MDA Confid Level	: 5.00000 %

Bkgd File :

Nuclide Library : DKA0:[GAMMA.SCUSR.LIB]MAIN.NLB;

Sample ID : LNGBKG_4-17-05 Acquisition date : 17-APR-2005 21:31:33

---- Energy, FWHM, and Efficiency Curves ----

```
*************************************************************************
*                                                                       *
*              Energy(keV) = A + (B * Channel) + (C * Channel**2)       *
*                            A = 7.85538E-02                            *
*                            B = 2.50061E-01                            *
*                            C = -1.56700E-08                           *
*                                                                       *
*                                                                       *
*                      FWHM(keV) = A + (B * SQRT(Energy))               *
*                            A = 5.33118E-01                            *
*                            B = 4.95085E-02                            *
*                                                                       *
*                                                                       *
*EFF = EXP(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5) x = ln(a1/energy)*
*                                                                       *
*     a1=9.47750E+02   a2=-4.36268E+00 a3=9.88960E-01                   *
*     a4=5.56421E-02   a5=-4.27284E-02 a6=-7.82275E-03   a7=0.00000E+00 *
*                                                                       *
*************************************************************************
```

Post-NID Peak Search Report
Sample ID : LNGBKG_4-17-05

Acquisition date : 17-APR-2005 21:31:33

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
4	46.40	474	364	0.90	185.24	176	18	12.1	6.20E-01	PB-210
4	63.16	399	329	0.82	252.25	247	11	13.3	1.29E+00	TH-234
5	74.82	70	327	0.86	298.89	294	20	48.4	6.13E-01	PB-212
5	76.95	98	302	0.86	307.43	294	20	37.3		PB-212
4	92.52	576	392	1.14	369.70	363	16	10.7	8.91E-01	TH-234
4	185.76	264	308	1.13	742.58	734	16	17.5	7.93E-01	U-235
										RA-226
5	238.62	110	259	0.86	954.00	948	12	32.5	4.88E-01	PB-212
32	360.07	29	109	1.00	1439.74	1435	11	39.7	2.59E+00	
5	511.10	958	263	3.12	2043.87	2025	38	7.3	9.21E-01	ANN RAD
21	637.77	24	58	0.82	2550.55	2545	12	71.7	2.50E-01	
21	1001.38	22	44	1.00	4005.24	3998	15	69.9	6.39E-01	

Unidentified Energy Lines
Sample ID : LNGBKG_4-17-05

Acquisition date : 17-APR-2005 21:31:33

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
32	360.07	29	109	1.00	1439.74	1435	11	6.68E-04	39.7	3.34E+00	
21	637.77	24	58	0.82	2550.55	2545	12	5.54E-04	71.7	1.90E+00	T
21	1001.38	22	44	1.00	4005.24	3998	15	5.15E-04	69.9	1.21E+00	T

Flags: "T" = Tentatively associated

QA filename : DKA0:[GAMMA.SCUSR.QA]LBC_GE7.QAF;1

Sample ID : LNGBKG_4-17-05 Sample quantity : 1.00 EA
Sample date : 17-APR-2005 21:31:33 Acquisition date : 17-APR-2005 21:31:33
Elapsed live time: 0 12:00:00.00 Elapsed real time: 0 12:00:03.12

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*Background Rate [1.15490+/-0.06361]	1.0968E+00	-0.91	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: PR Approval Date: 4 / 18 / 05

Run Log

Logbook No.: 2615

STL
St. Louis

Gamma Counting Runlog

Date	Batch #	Sample #	Detector	Count Time	Geometry	Initials
4/28/05	5117397	G8499R1AC	6	1 hr	Solid 100 ml	CH
4-29-5	Daily BKG + Source ✓		4,5,6,7	20 min 10 min	QA	RAN
4/29/5	5117325	G84041AC	5	1hr	Solid 100ml	JW
	5118317	G86E71AC	4			
		G9DX71AA	6			
		G9DX71AC	7			
		B8QE71A0	5			RAN ✓
	5119099	G9A8E1AC	4	30 min	TUNA	
		G9F631AA	6			
		G9F631AC	7			
		G9A8E1AE	6			
4-29-5	5119129	G86691AC	4	1hr	100ml Sol	RAN
		G867E1AC	7			
		G867F1AC	5			
		G867G1AC	6			
		G86691AF	7			
		G867H1AC	4			
		G867J1AC	5			
		G9GA31AA	6			
		G9GA31AC	4			✓
	5116594	G8WNH1AA	7	1hr	100mL Solid	~
		G8WNN1AA	4			JW
		G8WNQ1AA	5			
		G8WNH1AR	4			
		G8WNR1AA	7			
		G8WNV1AA	5			
		G8WNO1AA	6			

Reviewed By: RAN Date: 4-29-5

SOP Reference: STL-RD-0101, Current Revision
Form No.: SL-RAD-0026, Revised 1/2/03
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2615

STL
St. Louis

Gamma Counting Runlog

Date	Batch #	Sample #	Detector	Count Time	Geometry	Initials
4-28-5	5118394	G8WN01AA	4	60'	100 ml Sol	RAN
		G8WN11AA	5			
		G8WN21AA	6			
		G8WN31AA	7			
		G8WN41AA	4			"
		G8WN51AA	5			
		G9WN71AA	6			
		G8WN81AA-RE	7			
	5119100	G8VQWVAA	4	2 hr	0.5L Marn	"
		G9F681AA	5			
		G9F681AC	7			
4-30-5	Daily Blks + Sources ✓		4,5,6,7	20 min 10'		RAN
	5118394	G84N91AA	4	1 hr	100 ml S	
		G8WPC1AA	5			
		G9EAH1AA	6			
	5119100	G8VQW1AC	7	2 hr	1/2L m	
	5118394	G9FAH1AC	4	1 hr	100 ml S	RAN
	5119432	G8B0G1AA	5		100 ml DI	
		G9JCK1AA	6			
		G9JCK1AC	7			
		G8B0G1AC	4			
	5118335	G81GW1AE	6	1 hr	1L m	
		G81G81AE	7			
		G9D2J1AA	4			
		G9D2J1AC	6			
		G81GW1AP	7			
5-1-5	Daily Blks + Sources ✓		4,5,6,7			

Reviewed By: Ran Date: 5-1-5

SOP Reference: STL-RD-0101, Current Revision
Form No.: SL-RAD-0026, Revised 1/2/03
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

STL

Prep Report for:
Gamma Spectroscopy

Batch: 5118394 **Prep Analyst:** 402441

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

SampID	WRKNO	Aliquot	Dilution	Adjusted Aliquot	GeometryDesc
F5D210345-001	G8WNH1AA	1.6620E+002 g	1.00	1.6620E+002 g	Solid 100mL
F5D210345-001X	G8WNH1AR	1.6620E+002 g	1.00	1.6620E+002 g	Solid 100mL
F5D210345-002	G8WNN1AA	1.9100E+002 g	1.00	1.9100E+002 g	Solid 100mL
F5D210345-003	G8WNQ1AA	1.5380E+002 g	1.00	1.5380E+002 g	Solid 100mL
F5D210345-004	G8WNR1AA	1.4430E+002 g	1.00	1.4430E+002 g	Solid 100mL
F5D210345-005	G8WNV1AA	1.5870E+002 g	1.00	1.5870E+002 g	Solid 100mL
F5D210345-006	G8WNW1AA	1.7720E+002 g	1.00	1.7720E+002 g	Solid 100mL
F5D210345-007	G8WNX1AA	1.6390E+002 g	1.00	1.6390E+002 g	Solid 100mL
F5D210345-008	G8WN11AA	1.6080E+002 g	1.00	1.6080E+002 g	Solid 100mL
F5D210345-009	G8WN21AA	1.7460E+002 g	1.00	1.7460E+002 g	Solid 100mL
F5D210345-010	G8WN31AA	1.5400E+002 g	1.00	1.5400E+002 g	Solid 100mL
F5D210345-011	G8WN41AA	2.1360E+002 g	1.00	2.1360E+002 g	Solid 100mL
F5D210345-012	G8WN51AA	2.2700E+002 g	1.00	2.2700E+002 g	Solid 100mL
F5D210345-013	G8WN71AA	1.5860E+002 g	1.00	1.5860E+002 g	Solid 100mL
F5D210345-014	G8WN91AA	1.7820E+002 g	1.00	1.7820E+002 g	Solid 100mL
F5D210345-015	G8WPC1AA	1.5530E+002 g	1.00	1.5530E+002 g	Solid 100mL
F5D280000-3048	G9EAH1AA	1.4719E+002 g	1.00	1.4719E+002 g	Solid 100mL

SampleID	WRKNQ	Aliquot	Dilution	Adjusted Aliquot	GeometryDesc
F5D220000-394C	G9EAH1AC	1.5919E+002 g	1.00	1.5919E+002 g	Solid 100mL

Spike Information

Sample ID	Standard ID	Analyte	Std Conc	Aliquot	Ref Date	StdAdded
—						

Spiked By | Spike Verified By | Spike Date

Standard Operating Procedures

SOPNumber	Title	Revision
☐ STL-RC-0025	Preparation Of Samples For Gamma Spectroscopy	3.00
☑ STL-RD-0101	Daily Operations Of A Germanium Spectroscopy System	3.00
☑ STL-RD-0103	Maintenance Of The Germanium Spectroscopy System	0.00

CH — Reviewed By
5/9/05 — Review Date

3M — Analyst/Relenquished By
4/28/05 — Release Date
Received By
4-28-05 — Receipt Date

St. Louis Laboratory
13715 Rider Trail North
Earth City, MO 63045-1205

Gamma Spectroscopy Quality Assurance Worksheet

Batch: 5118394

F5D280000-394 C Recovery Summary			
Isotope	Certified Activity	Observed Activity	% Recovery
Am-241	70	7.18E+01	103%
Cs-137	29.5	3.13E+01	106%
Co-60	42.4	4.37E+01	103%

F5D210345-001 Duplicate Summary						
Isotope	Sample Activity	Sample Uncertainty	Duplicate Activity	Duplicate Uncertainty	RPD	RER
K-40	8.51E+00	9.58E-01	7.52E+00	8.48E-01	12%	0.55
Tl-208	1.23E-01	3.23E-02	1.77E-01	3.38E-01	36%	0.15
Pb-212	3.83E-01	4.44E-02	2.77E-01	6.01E-02	32%	1.02
Pb-214	4.62E-01	5.24E-02	4.53E-01	5.85E-02	2%	0.08
Ra-226	4.74E+00	5.68E-01	4.68E+00	5.87E-01	1%	0.05
Ac-228	3.63E-01	1.20E-01	<MDA	NA	N/A	N/A
Th-234	3.87E+00	4.05E-01	4.09E+00	4.07E-01	6%	0.27

Comments: 5/12

Calculated By: CH DATE: 5/10/2005

Reviewed By: [signature] DATE: 5/11/05

SEVERN TRENT STL

Alpha Spectroscopy Plutonium

SEVERN TRENT STL

ALPHA SPECTROSCOPY

Data Reports
Results Reports
Channel by Channel Report

Calibration Data

Instrument Checks

Batch Summary Sheets
Run Logs
Yield Summary(ies)
Batch Yield Plot(s)

Raw Data
Prep Data Sheet(s)
QC Acceptance Sheet(s)
LCS Standard Sheet(s)
Tracer Standard Sheets

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:53:45PM 5/3/2005

Analyst: 60040

Sample

Sample Name: F5D210345-001
SampleType: Sample
WRKNO: G8WNH1AD
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.0000g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5113068
;
Description:

Client Name: Undefined
Client Contact:

Tracer

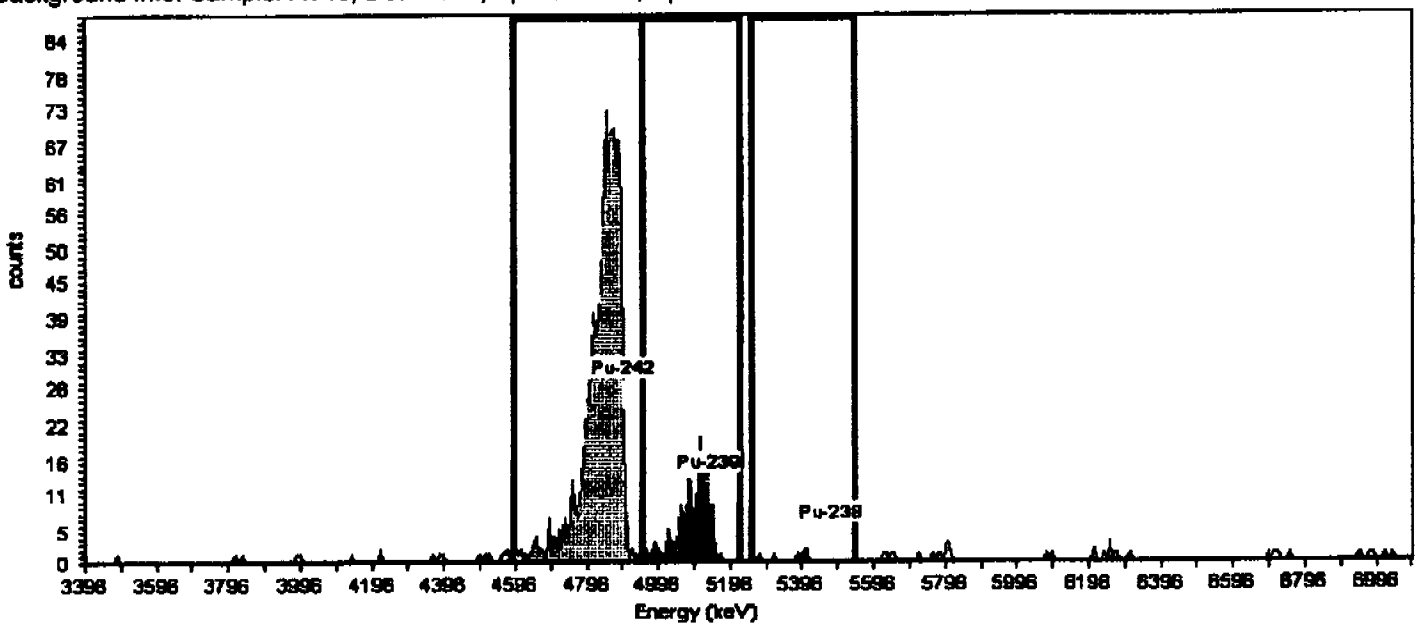
Tracer Name: Rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:48PM

Tracer Nuclide: Pu-242
Tracer Recovery: 98.67%

Acquisition

Detector: AV13
Serial Number: 41-172Q1
Acquisition Start Date: 5/2/2005 5:20:10PM
Live Time: 400.00 min.
Real Time: 400.01 min.
Background Date: 4/26/2005 10:37:55AM
Background Info: Sample: AV13; Det: AV13; Spectrum #1; Apr-26-2005 10:37

Calibration Name: April2005_AV13
Calibration Date: 4/29/2005 1:22:01PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.79% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PuROI
Decay Correction: 5/2/2005 2:53:08PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4896.999	4586.828	4949.818	77.949	99.0	885.00	0.5000	885	1.878E+000	6.385E-002	3.065E-003	1.195E-002
Pu-239	5138.573	4949.818	5225.690	68.311	99.9	170.00	1.0000	169	3.604E-001	3.051E-002	4.296E-003	1.436E-002
Pu-238	5479.783	5254.729	5545.121	41.198	100.0	7.00	7.0000	0	0.000E+000	0.000E+000	1.135E-002	2.847E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:53:54PM 5/3/2005

Analyst: 60040

Sample

Sample Name: F5D210345-001S
SampleType: Sample
WRKNO: G8WNH1AL
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.0001g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5113068
:
Description:

Client Name: Undefined
Client Contact:

Tracer

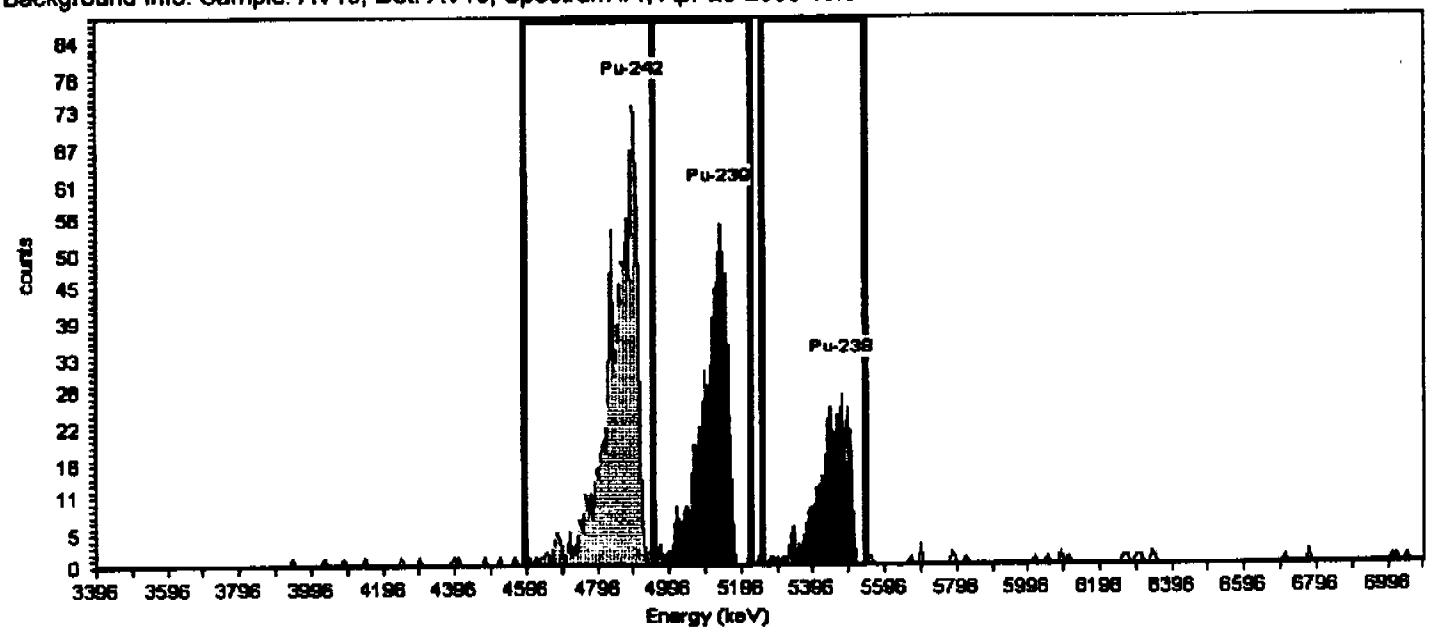
Tracer Name: Rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:48PM

Tracer Nuclide: Pu-242
Tracer Recovery: 87.66%

Acquisition

Detector: AV15
Serial Number: 41-172C5
Acquisition Start Date: 5/2/2005 5:20:12PM
Live Time: 400.00 min.
Real Time: 400.01 min.
Background Date: 4/26/2005 10:37:57AM
Background Info: Sample: AV15; Det: AV15; Spectrum #1; Apr-26-2005 10:37

Calibration Name: April2005_AV15
Calibration Date: 4/29/2005 1:23:09PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.85% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PuROI
Decay Correction: 5/2/2005 2:53:08PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4898.999	4586.828	4949.818	88.723	99.0	789.00	1.5000	788	1.668E+000	6.024E-002	5.963E-003	1.847E-002
Pu-239	5138.573	4949.818	5225.690	71.259	99.9	544.00	1.0000	543	1.300E+000	7.335E-002	4.825E-003	1.613E-002
Pu-238	5479.783	5254.729	5545.121	98.098	100.0	327.00	4.0000	323	7.727E-001	5.187E-002	9.640E-003	2.575E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:54:05PM 5/3/2005

Analyst: 60040

Sample

Sample Name: F5D210345-001X
SampleType: Sample
WRKNO: G8WNH1AP
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.0001g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5113068
:
Description:

Client Name: Undefined
Client Contact:

Tracer

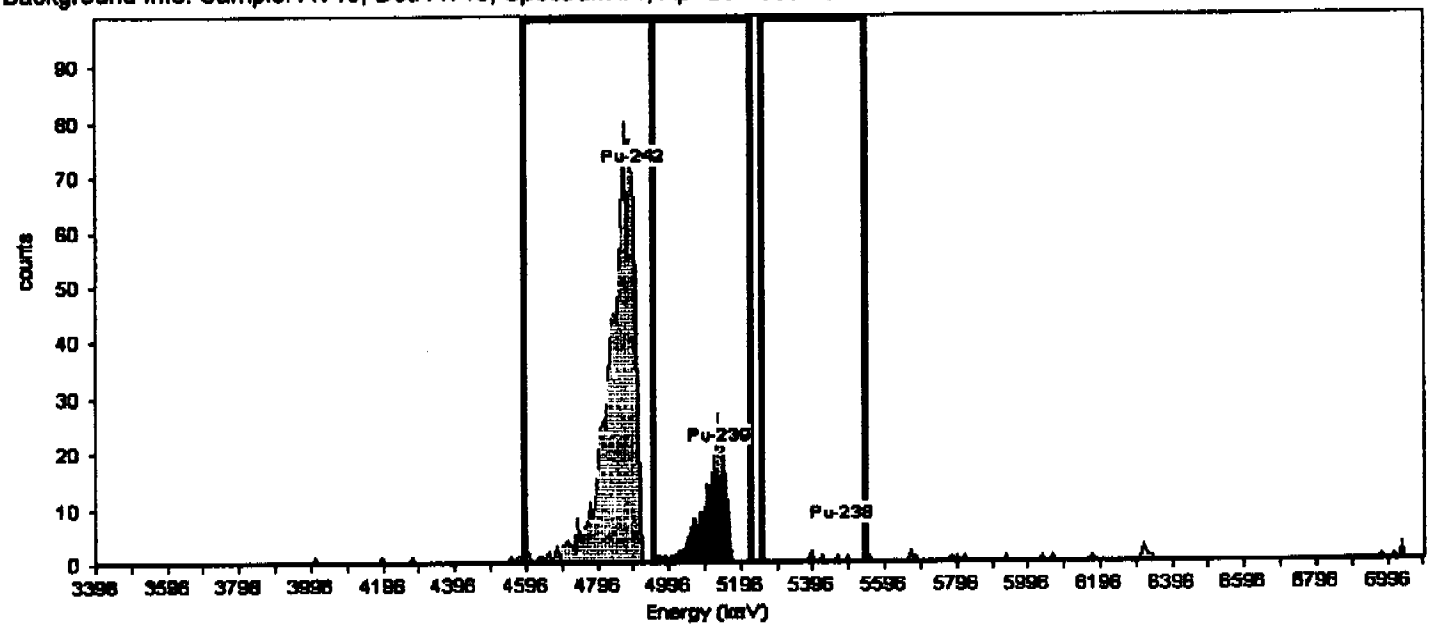
Tracer Name: Rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:48PM

Tracer Nuclide: Pu-242
Tracer Recovery: 89.41%

Acquisition

Detector: AV16
Serial Number: 41-172Q7
Acquisition Start Date: 5/2/2005 5:20:13PM
Live Time: 400.00 min.
Real Time: 400.01 min.
Background Date: 4/26/2005 10:37:58AM
Background Info: Sample: AV16; Det: AV16; Spectrum #1; Apr-26-2005 10:37

Calibration Name: April2005_AV16
Calibration Date: 4/29/2005 1:23:15PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 28.68% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PuROI
Decay Correction: 5/2/2005 2:53:08PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4898.999	4586.828	4949.818	78.744	99.0	859.00	1.0000	858	1.702E+000	5.876E-002	4.469E-003	1.494E-002
Pu-239	5138.573	4949.818	5225.690	59.598	99.9	208.00	0.5000	208	4.561E-001	3.550E-002	3.131E-003	1.221E-002
Pu-238	5479.783	5254.729	5545.121	48.671	100.0	5.00	5.5000	-1	0.000E+000	0.000E+000	1.038E-002	2.669E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:54:15PM 5/3/2005

Analyst: 60040

Sample

Sample Name: F5D210345-002
SampleType: Sample
WRKNO: G8WNN1AD
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.0035g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5113068
:
Description:

Client Name: Undefined
Client Contact:

Tracer

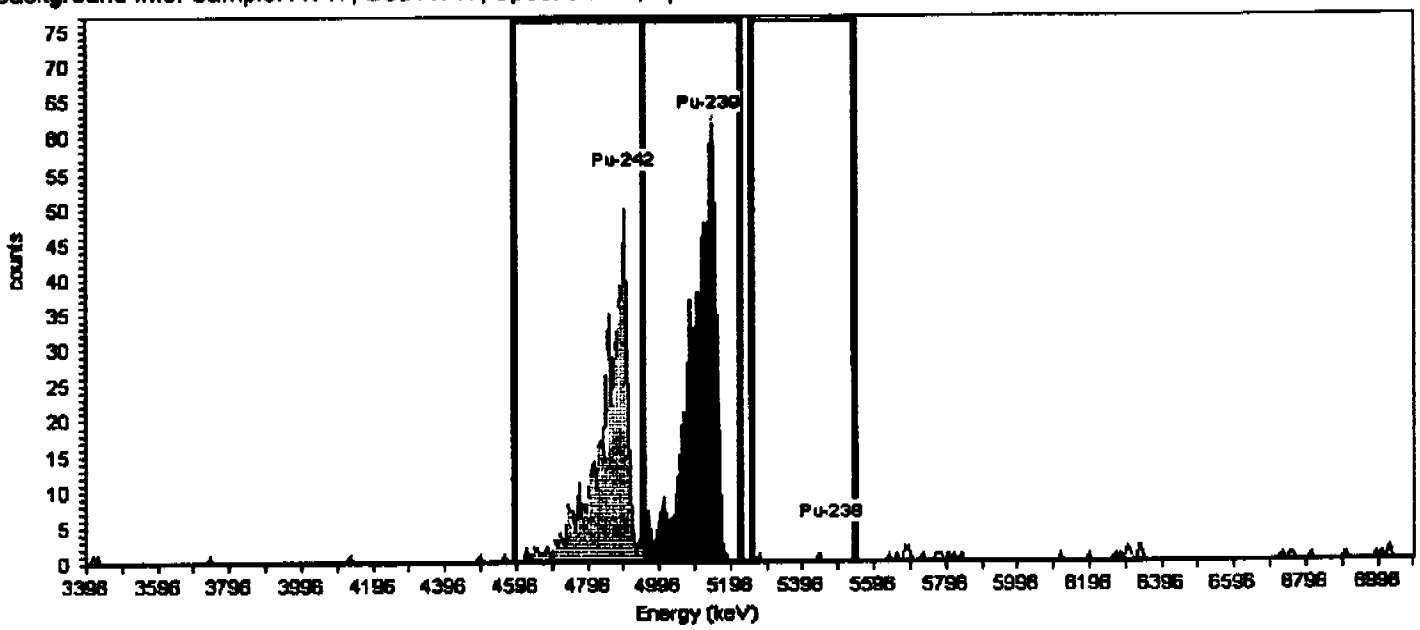
Tracer Name: Rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:48PM

Tracer Nuclide: Pu-242
Tracer Recovery: 56.51%

Acquisition

Detector: AV17
Serial Number: 41-172Q4
Acquisition Start Date: 5/2/2005 5:20:15PM
Live Time: 400.00 min.
Real Time: 400.01 min.
Background Date: 4/26/2005 10:38:00AM
Background Info: Sample: AV17; Det: AV17; Spectrum #1; Apr-26-2005 10:38

Calibration Name: April2005_AV17
Calibration Date: 4/29/2005 3:51:41PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.57% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PuROI
Decay Correction: 5/2/2005 2:53:08PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4898.999	4586.828	4949.818	84.628	99.0	504.00	1.5000	503	1.074E+000	4.833E-002	9.329E-003	2.889E-002
Pu-239	5138.573	4949.818	5225.690	83.015	99.9	624.00	0.5000	624	2.336E+000	1.413E-001	5.338E-003	2.081E-002
Pu-238	5479.783	5254.729	5545.121	27.744	100.0	2.00	2.5000	-1	0.000E+000	0.000E+000	1.192E-002	3.397E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:54:24PM 5/3/2005

Analyst: 60040

Sample

Sample Name: F5D210345-003
SampleType: Sample
WRKNO: G8WNQ1AD
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.0003g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5113068
:
Description:

Client Name: Undefined
Client Contact:

Tracer

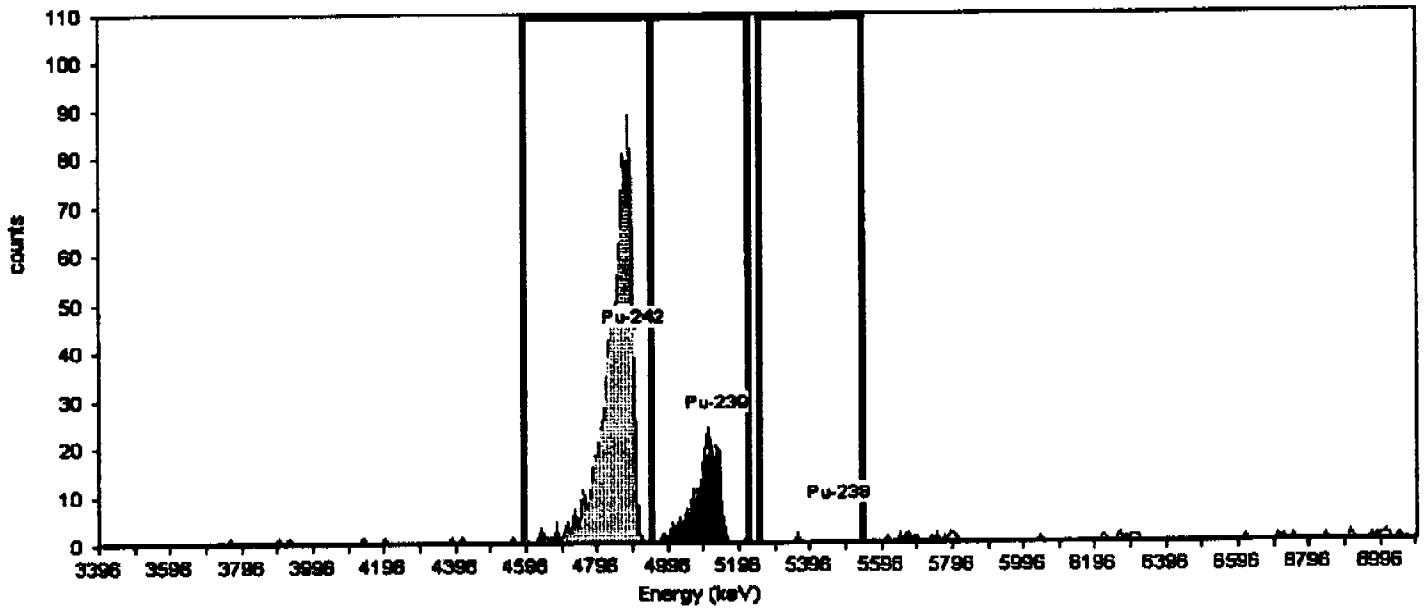
Tracer Name: Rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:48PM

Tracer Nuclide: Pu-242
Tracer Recovery: 100.87%

Acquisition

Detector: AV18
Serial Number: 41-172C6
Acquisition Start Date: 5/2/2005 5:20:17PM
Live Time: 400.00 min.
Real Time: 400.01 min.
Background Date: 4/26/2005 10:38:01AM
Background Info: Sample: AV18; Det: AV18; Spectrum #1; Apr-26-2005 10:38

Calibration Name: April2005_AV18
Calibration Date: 4/29/2005 3:51:49PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 25.83% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PuROI
Decay Correction: 5/2/2005 2:53:08PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4898.999	4586.828	4949.818	68.973	99.0	872.00	0.0000	872	1.920E+000	6.583E-002	0.000E+000	5.905E-003
Pu-239	5138.573	4949.818	5225.690	63.039	99.9	221.00	1.5000	220	4.747E-001	3.622E-002	5.336E-003	1.652E-002
Pu-238	5479.783	5254.729	5545.121	43.286	100.0	2.00	2.5000	-1	0.000E+000	0.000E+000	6.882E-003	1.961E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:54:32PM 5/3/2005

Analyst: 60040

Sample

Sample Name: F5D210345-004
SampleType: Sample
WRKNO: G8WNR1AD
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.0029g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5113068
:
Description:

Client Name: Undefined
Client Contact:

Tracer

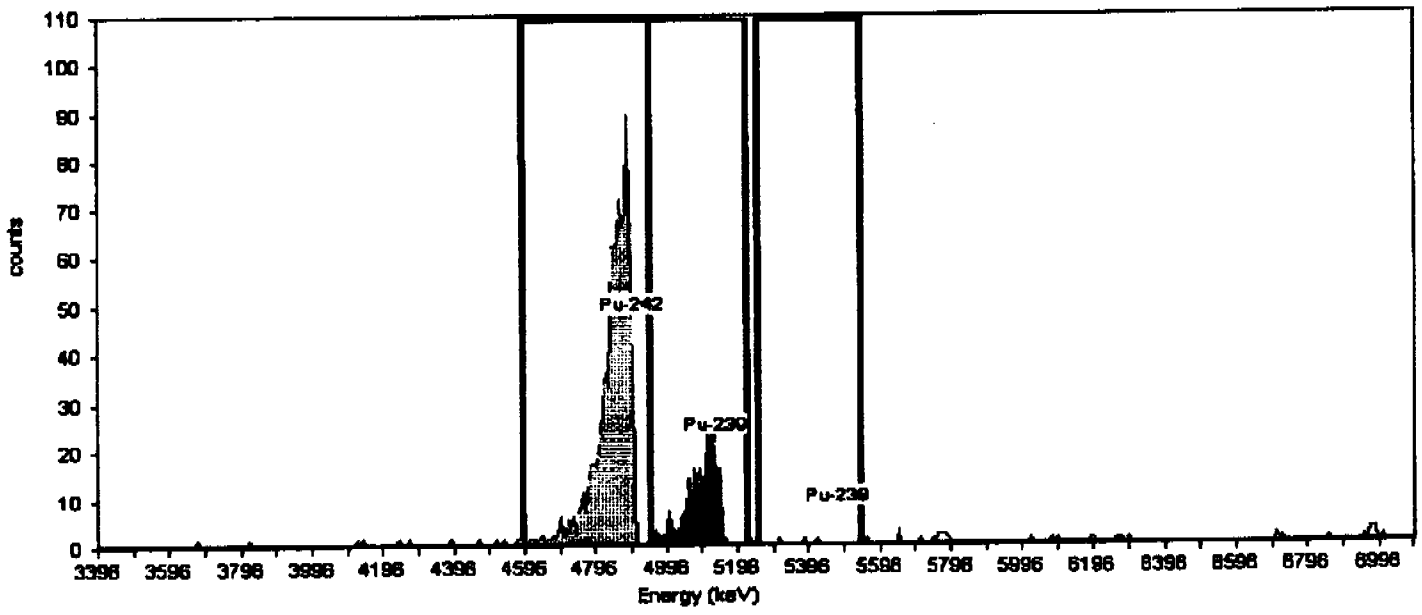
Tracer Name: Rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:48PM

Tracer Nuclide: Pu-242
Tracer Recovery: 94.62%

Acquisition

Detector: AV19
Serial Number: 41-172Q6
Acquisition Start Date: 5/2/2005 5:20:18PM
Live Time: 400.00 min.
Real Time: 400.01 min.
Background Date: 4/26/2005 10:38:03AM
Background Info: Sample: AV19; Det: AV19; Spectrum #1; Apr-26-2005 10:38

Calibration Name: April2005_AV19
Calibration Date: 4/29/2005 3:51:57PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.76% +/- 0.30% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PuROI
Decay Correction: 5/2/2005 2:53:08PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4898.999	4586.828	4949.818	71.282	99.0	885.00	6.0000	879	1.798E+000	6.181E-002	1.067E-002	2.719E-002
Pu-239	5138.573	4949.818	5225.690	86.639	99.9	254.00	0.0000	254	5.442E-001	3.910E-002	0.000E+000	5.798E-003
Pu-238	5479.783	5254.729	5545.121	125.956	100.0	3.00	3.5000	-1	0.000E+000	0.000E+000	8.067E-003	2.193E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:54:41PM 5/3/2005

Analyst: 60040

Sample

Sample Name: F5D210345-005
SampleType: Sample
WRKNO: G8WNV1AD
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.0047g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5113068
:
Description:

Client Name: Undefined
Client Contact:

Tracer

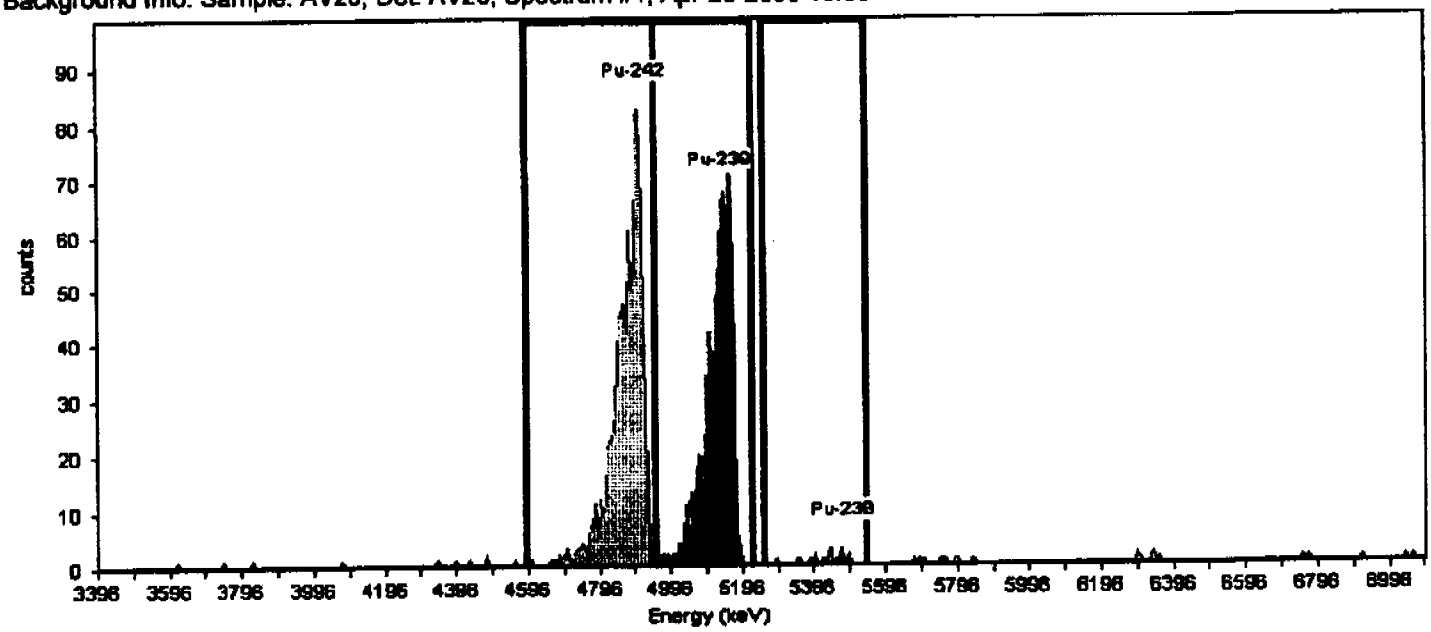
Tracer Name: Rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:48PM

Tracer Nuclide: Pu-242
Tracer Recovery: 80.88%

Acquisition

Detector: AV20
Serial Number: 41-172R2
Acquisition Start Date: 5/2/2005 5:20:19PM
Live Time: 400.00 min.
Real Time: 400.01 min.
Background Date: 4/26/2005 10:38:06AM
Background Info: Sample: AV20; Det: AV20; Spectrum #1; Apr-26-2005 10:38

Calibration Name: April2005_AV20
Calibration Date: 4/29/2005 3:52:07PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 29.89% +/- 0.31% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PuROI
Decay Correction: 5/2/2005 2:53:08PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4898.999	4586.828	4949.818	41.455	99.0	811.00	2.0000	809	1.536E+000	5.471E-002	6.687E-003	1.973E-002
Pu-239	5138.573	4949.818	5225.690	65.738	99.9	726.00	3.0000	723	1.682E+000	8.722E-002	8.116E-003	2.253E-002
Pu-238	5479.763	5254.729	5545.121	83.732	100.0	19.00	16.5000	3	5.809E-003	1.385E-002	1.901E-002	4.432E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:54:48PM 5/3/2005

Analyst: 60040

Sample

Sample Name: F5D210345-006
SampleType: Sample
WRKNO: G8WNW1AD
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.0012g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5113068
:
Description:

Client Name: Undefined
Client Contact:

Tracer

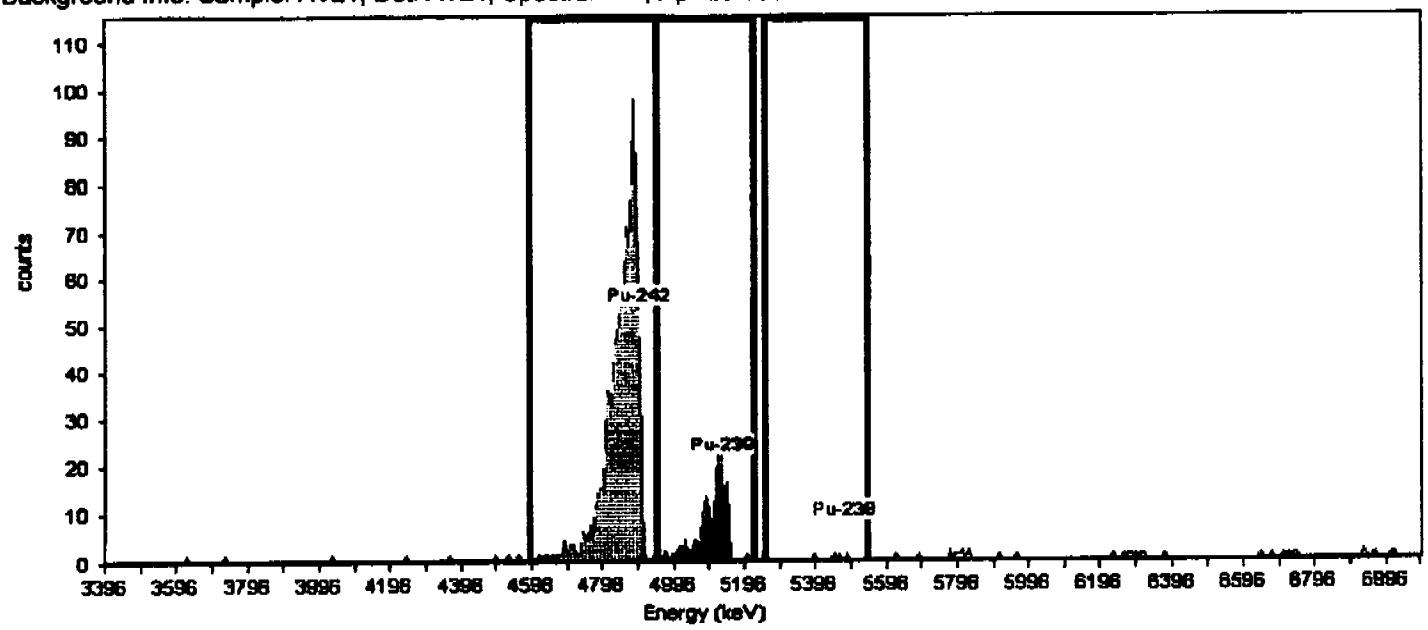
Tracer Name: Rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:48PM

Tracer Nuclide: Pu-242
Tracer Recovery: 100.53%

Acquisition

Detector: AV21
Serial Number: 41-172C7
Acquisition Start Date: 5/2/2005 5:20:21PM
Live Time: 400.00 min.
Real Time: 400.01 min.
Background Date: 4/26/2005 10:38:07AM
Background Info: Sample: AV21; Det: AV21; Spectrum #1; Apr-26-2005 10:38

Calibration Name: April2005_AV21
Calibration Date: 4/29/2005 6:14:46PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.49% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PuROI
Decay Correction: 5/2/2005 2:53:08PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4898.999	4586.828	4949.818	74.324	99.0	892.00	1.0000	891	1.912E+000	6.483E-002	4.301E-003	1.438E-002
Pu-239	5138.573	4949.818	5225.690	57.145	99.9	179.00	1.5000	178	3.755E-001	3.120E-002	5.220E-003	1.616E-002
Pu-238	5479.783	5254.729	5545.121	48.286	100.0	4.00	5.0000	-1	0.000E+000	0.000E+000	9.521E-003	2.476E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:54:57PM 5/3/2005

Analyst: 60040

Sample

Sample Name: F5D210345-007
SampleType: Sample
WRKNO: G8WN01AD
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.0015g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5113068
:
Description:

Client Name: Undefined
Client Contact:

Tracer

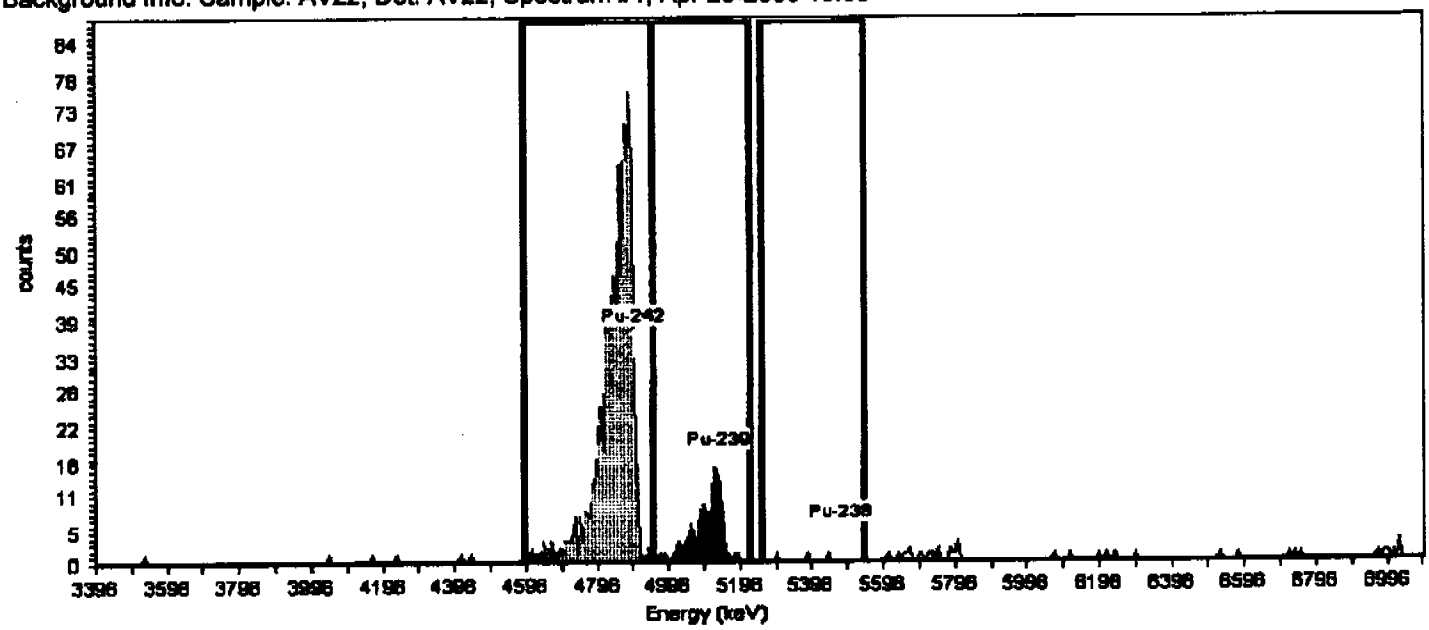
Tracer Name: Rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:48PM

Tracer Nuclide: Pu-242
Tracer Recovery: 92.50%

Acquisition

Detector: AV22
Serial Number: 41-172Q5
Acquisition Start Date: 5/2/2005 5:20:22PM
Live Time: 400.00 min.
Real Time: 400.01 min.
Background Date: 4/26/2005 10:38:09AM
Background Info: Sample: AV22; Det: AV22; Spectrum #1; Apr-26-2005 10:38

Calibration Name: April2005a_AV22
Calibration Date: 4/29/2005 6:39:12PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 25.69% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PuROI
Decay Correction: 5/2/2005 2:53:08PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4898.999	4586.628	4949.818	78.962	99.0	796.00	1.0000	795	1.759E+000	6.317E-002	4.819E-003	1.611E-002
Pu-239	5138.573	4949.818	5225.690	63.740	99.9	131.00	0.0000	131	3.105E-001	2.948E-002	0.000E+000	6.415E-003
Pu-238	5479.783	5254.729	5545.121	59.970	100.0	3.00	3.5000	-1	0.000E+000	0.000E+000	8.926E-003	2.426E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:55:04PM 5/3/2005

Analyst: 60040

Sample

Sample Name: F5D210345-008
SampleType: Sample
WRKNO: G8WN11AD
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.0010g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5113068
:
Description:

Client Name: Undefined
Client Contact:

Tracer

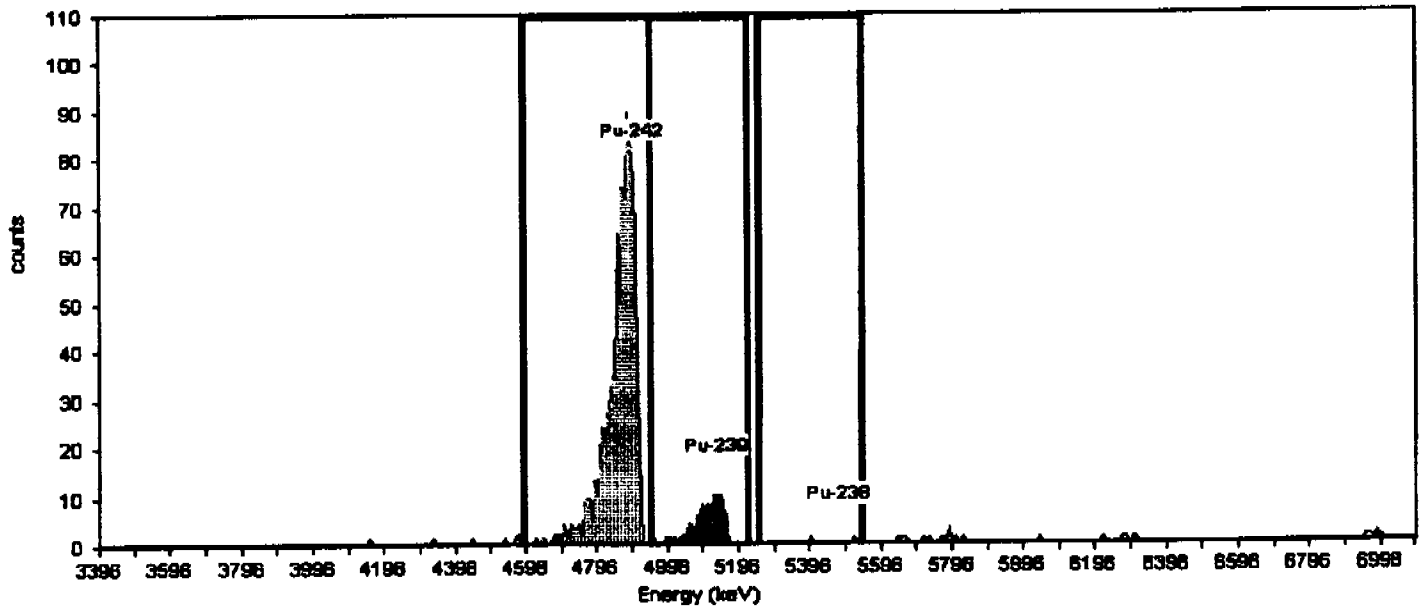
Tracer Name: Rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:48PM

Tracer Nuclide: Pu-242
Tracer Recovery: 96.50%

Acquisition

Detector: AV23
Serial Number: 41-172R4
Acquisition Start Date: 5/2/2005 5:20:24PM
Live Time: 400.00 min.
Real Time: 400.01 min.
Background Date: 4/26/2005 10:38:11AM
Background Info: Sample: AV23; Det: AV23; Spectrum #1; Apr-26-2005 10:38

Calibration Name: April2005_AV23
Calibration Date: 4/29/2005 6:38:55PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.21% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PuROI
Decay Correction: 5/2/2005 2:53:08PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4898.999	4686.828	4949.818	70.387	99.0	880.00	1.5000	879	1.836E+000	6.282E-002	5.343E-003	1.655E-002
Pu-239	5138.573	4949.818	5225.690	83.621	99.9	111.00	1.0000	110	2.360E-001	2.414E-002	4.323E-003	1.445E-002
Pu-238	5479.783	5254.729	5545.121	9.924	100.0	2.00	4.5000	-3	0.000E+000	0.000E+000	9.161E-003	2.412E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:55:12PM 5/3/2005

Analyst: 60040

Sample

Sample Name: F5D210345-009
SampleType: Sample
WRKNO: G8WN21AD
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.0007g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5113068
:
Description:

Client Name: Undefined
Client Contact:

Tracer

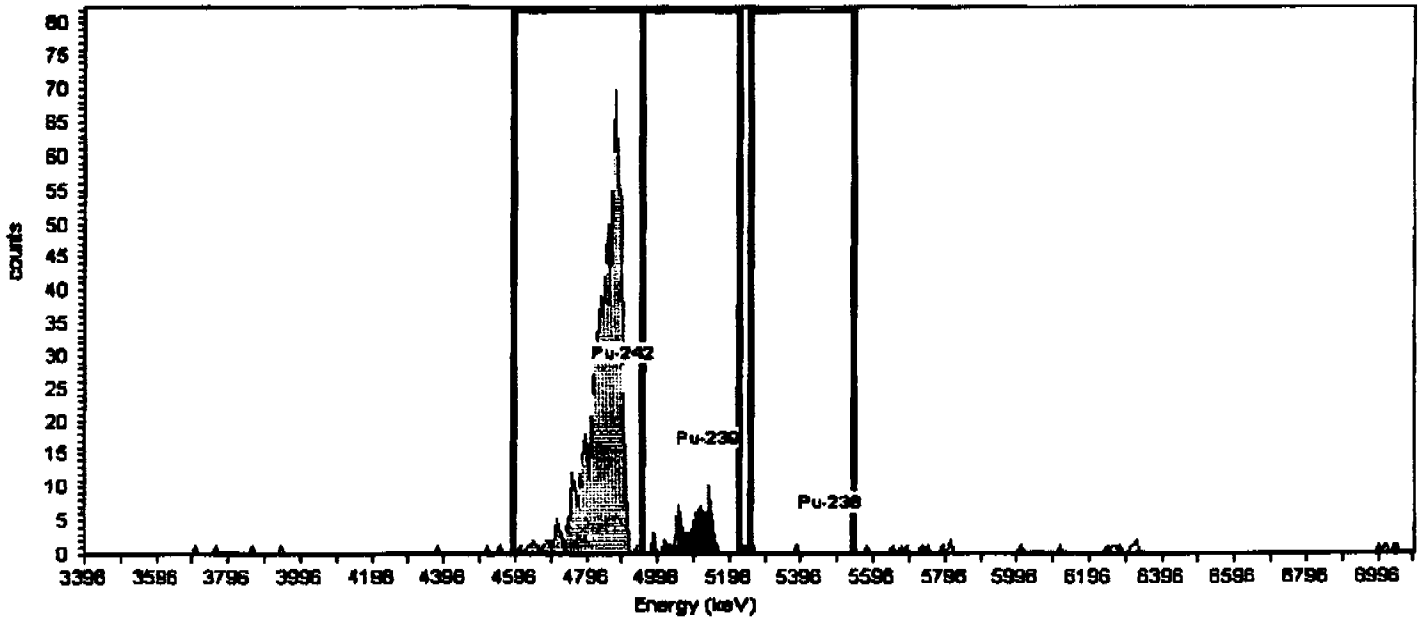
Tracer Name: Rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:48PM

Tracer Nuclide: Pu-242
Tracer Recovery: 80.13%

Acquisition

Detector: AV24
Serial Number: 41-172R5
Acquisition Start Date: 5/2/2005 5:20:25PM
Live Time: 400.01 min.
Real Time: 400.03 min.
Background Date: 4/26/2005 10:38:13AM
Background Info: Sample: AV24; Det: AV24; Spectrum #1; Apr-26-2005 10:38

Calibration Name: April2005_AV24
Calibration Date: 4/29/2005 6:39:02PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 25.98% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PuROI
Decay Correction: 5/2/2005 2:53:08PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4898.999	4586.828	4949.818	77.512	99.0	698.00	1.5001	696	1.524E+000	5.842E-002	6.740E-003	2.087E-002
Pu-239	5138.573	4949.818	5225.690	98.789	99.9	82.00	1.0000	81	2.193E-001	2.608E-002	5.454E-003	1.823E-002
Pu-238	5479.783	5254.729	5545.121	17.503	100.0	2.00	3.0001	-1	0.000E+000	0.000E+000	9.437E-003	2.619E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:01:17AM 5/5/2005

Analyst: 60040

Sample

Sample Name: F5D210345-010
SampleType: Sample
WRKNO: G8WN31AD
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #2 Analysis #1
Sample Weight : 2.0039g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5113068
:
Description:

Client Name: Undefined
Client Contact:

Tracer

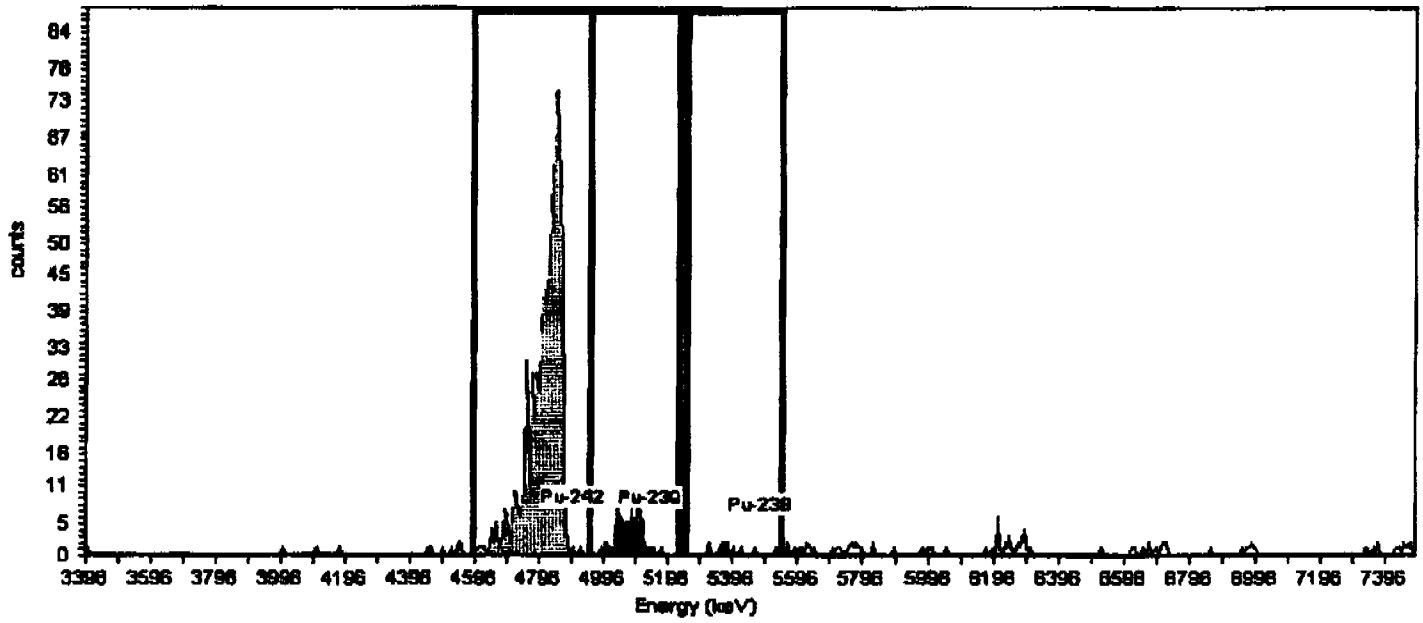
Tracer Name: Rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:48PM

Tracer Nuclide: Pu-242
Tracer Recovery: 85.08%

Acquisition

Detector: AV1
Serial Number: 41-158W6
Acquisition Start Date: 5/4/2005 8:49:49AM
Live Time: 400.00 min.
Real Time: 400.09 min.
Background Date: 4/26/2005 10:37:36AM
Background Info: Sample: AV1; Det: AV1; Spectrum #1; Apr-26-2005 10:37

Calibration Name: April2005_AV1
Calibration Date: 4/28/2005 7:27:38PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 27.40% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PuROI
Decay Correction: 5/2/2005 2:53:08PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4898.999	4586.828	4949.818	72.893	99.0	782.00	2.0000	780	1.616E+000	5.854E-002	6.938E-003	2.047E-002
Pu-239	5138.573	4949.818	5225.690	93.202	99.9	77.00	0.0000	77	1.858E-001	2.237E-002	0.000E+000	6.530E-003
Pu-238	5479.783	5254.729	5545.121	15.102	100.0	12.00	7.5000	5	1.085E-002	1.065E-002	1.330E-002	3.313E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
9:01:25AM 5/5/2005

Analyst: 60040

Sample

Sample Name: F5D210345-011
SampleType: Sample
WRKNO: G8WN41AD
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.0007g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5113068
:
Description:

Client Name: Undefined
Client Contact:

Tracer

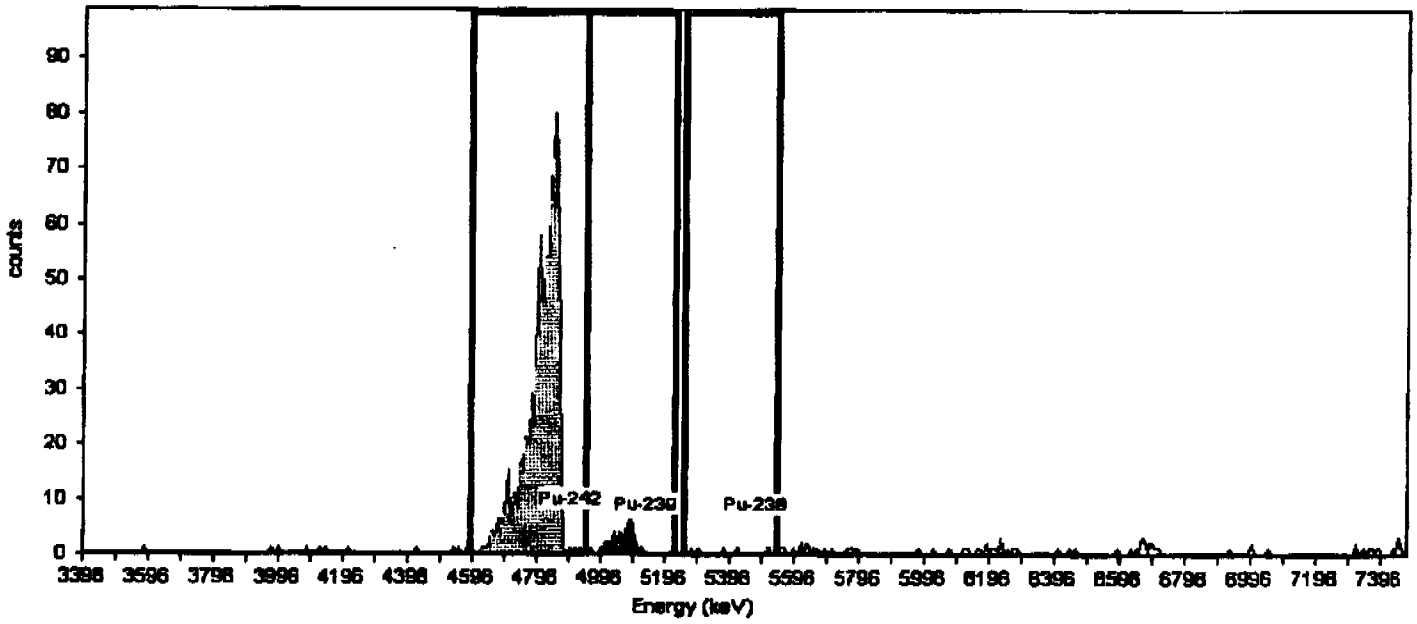
Tracer Name: Rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:48PM

Tracer Nuclide: Pu-242
Tracer Recovery: 97.68%

Acquisition

Detector: AV2
Serial Number: 41-158W7
Acquisition Start Date: 5/4/2005 8:49:49AM
Live Time: 400.00 min.
Real Time: 400.09 min.
Background Date: 4/26/2005 10:37:38AM
Background Info: Sample: AV2; Det: AV2; Spectrum #1; Apr-26-2005 10:37

Calibration Name: April2005_AV2
Calibration Date: 4/28/2005 7:27:46PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 26.31% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PuROI
Decay Correction: 5/2/2005 2:53:08PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4896.999	4586.828	4949.818	79.060	99.0	862.00	2.0000	860	1.858E+000	6.427E-002	6.303E-003	1.859E-002
Pu-239	5138.573	4949.818	5225.690	79.907	99.9	49.00	1.5000	48	1.041E-001	1.600E-002	5.409E-003	1.675E-002
Pu-238	5479.783	5254.729	5545.121	9.542	100.0	5.00	6.0000	-1	0.000E+000	0.000E+000	1.081E-002	2.754E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:56:30PM 5/3/2005

Analyst: 60040

Sample

Sample Name: F5D210345-012
SampleType: Sample
WRKNO: G8WN51AD
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.0038g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5113068
:
Description:

Client Name: Undefined
Client Contact:

Tracer

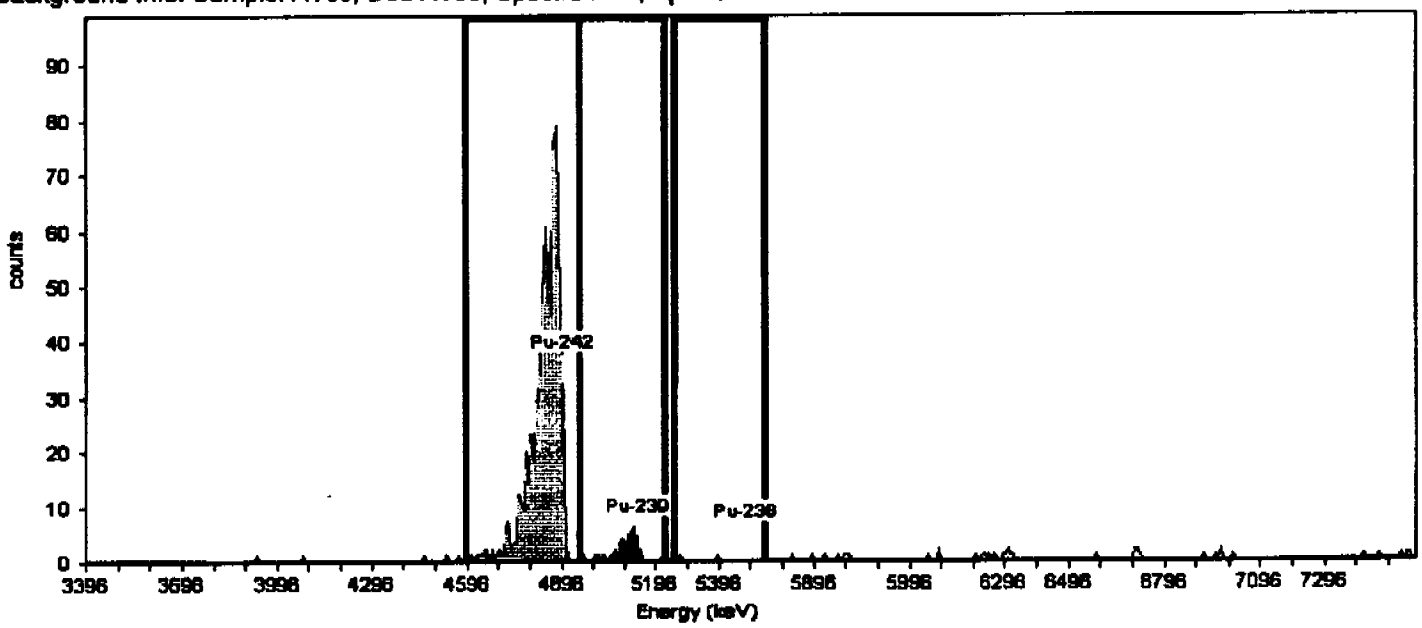
Tracer Name: Rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:48PM

Tracer Nuclide: Pu-242
Tracer Recovery: 85.37%

Acquisition

Detector: AV53
Serial Number:
Acquisition Start Date: 5/2/2005 5:19:42PM
Live Time: 400.00 min.
Real Time: 400.01 min.
Background Date: 4/25/2005 11:48:51AM
Background Info: Sample: AV53; Det: AV53; Spectrum #1; Apr-25-2005 11:48

Calibration Name: April2005_AV53
Calibration Date: 4/29/2005 4:36:47AM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.62% +/- 0.30% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PuROI
Decay Correction: 5/2/2005 2:53:08PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4898.999	4586.628	4949.818	78.520	99.0	789.00	0.0000	789	1.622E+000	5.842E-002	0.000E+000	6.515E-003
Pu-239	5138.573	4949.818	5225.690	57.004	99.9	42.00	0.0000	42	1.002E-001	1.606E-002	0.000E+000	6.456E-003
Pu-238	5479.783	5254.729	5545.121	.000	100.0	3.00	3.0000	0	0.000E+000	0.000E+000	8.317E-003	2.308E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:56:41PM 5/3/2005

Analyst: 60040

Sample

Sample Name: F5D210345-013
SampleType: Sample
WRKNO: G8WN71AD
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.0028g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5113068
:
Description:

Client Name: Undefined
Client Contact:

Tracer

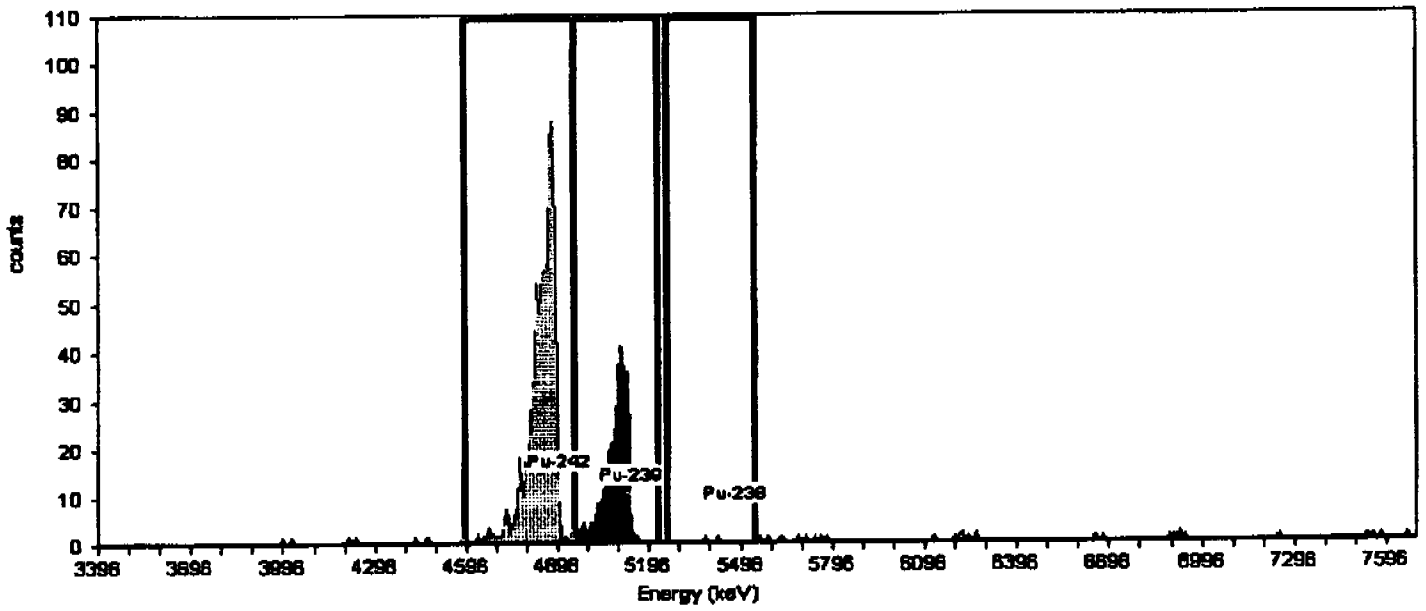
Tracer Name: Rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:48PM

Tracer Nuclide: Pu-242
Tracer Recovery: 91.81%

Acquisition

Detector: AV56
Serial Number:
Acquisition Start Date: 5/2/2005 5:19:37PM
Live Time: 400.00 min.
Real Time: 400.01 min.
Background Date: 4/25/2005 11:48:57AM
Background Info: Sample: AV56; Det: AV56; Spectrum #1; Apr-25-2005 11:48

Calibration Name: April2005_AV56
Calibration Date: 4/28/2005 11:52:35AM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.48% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PuROI
Decay Correction: 5/2/2005 2:53:08PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4898.999	4586.828	4949.818	76.998	99.0	814.00	0.5000	814	1.745E+000	6.189E-002	3.328E-003	1.298E-002
Pu-239	5138.573	4949.818	5225.690	63.257	99.9	367.00	0.5000	367	8.485E-001	5.381E-002	3.298E-003	1.286E-002
Pu-238	5479.783	5254.729	5545.121	85.750	100.0	2.00	3.5000	-2	0.000E+000	0.000E+000	8.717E-003	2.369E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:56:49PM 5/3/2005

Analyst: 60040

Sample

Sample Name: F5D210345-014
SampleType: Sample
WRKNO: G8WN91AD
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.0003g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5113068
:
Description:

Client Name: Undefined
Client Contact:

Tracer

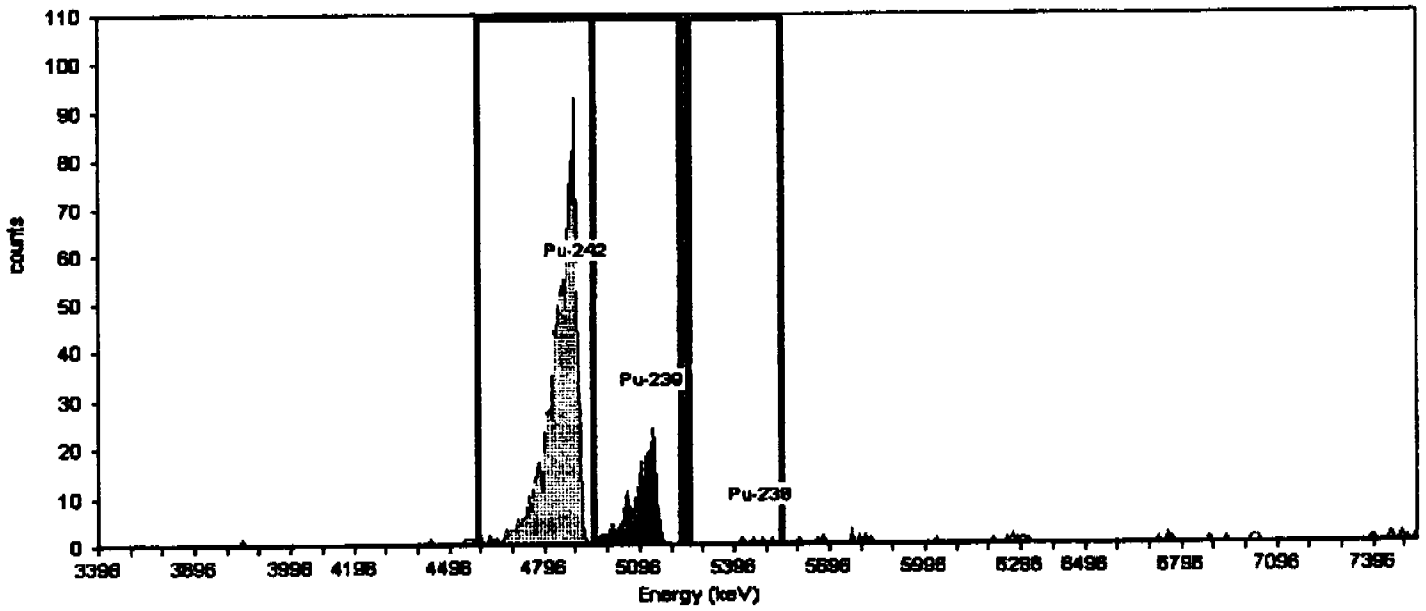
Tracer Name: Rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:48PM

Tracer Nuclide: Pu-242
Tracer Recovery: 97.05%

Acquisition

Detector: AV60
Serial Number:
Acquisition Start Date: 5/2/2005 5:19:42PM
Live Time: 400.00 min.
Real Time: 400.02 min.
Background Date: 4/25/2005 11:48:23AM
Background Info: Sample: AV60; Det: AV60; Spectrum #1; Apr-25-2005 11:48

Calibration Name: Apr2005_AV60
Calibration Date: 4/28/2005 7:13:37AM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 28.41% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PuROI
Decay Correction: 5/2/2005 2:53:08PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4898.999	4586.828	4949.818	84.260	99.0	923.00	0.5000	923	1.847E+000	6.156E-002	2.939E-003	1.146E-002
Pu-239	5138.573	4949.818	5225.690	64.037	99.9	223.00	0.5000	223	4.548E-001	3.419E-002	2.912E-003	1.136E-002
Pu-238	5479.783	5254.729	5545.121	9.863	100.0	4.00	2.5000	2	3.063E-003	5.207E-003	6.505E-003	1.854E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040

3:56:56PM 5/3/2005

Sample

Sample Name: F5D210345-015
SampleType: Sample
WRKNO: G8WPC1AD
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.0065g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5113068
:
Description:

Client Name: Undefined
Client Contact:

Tracer

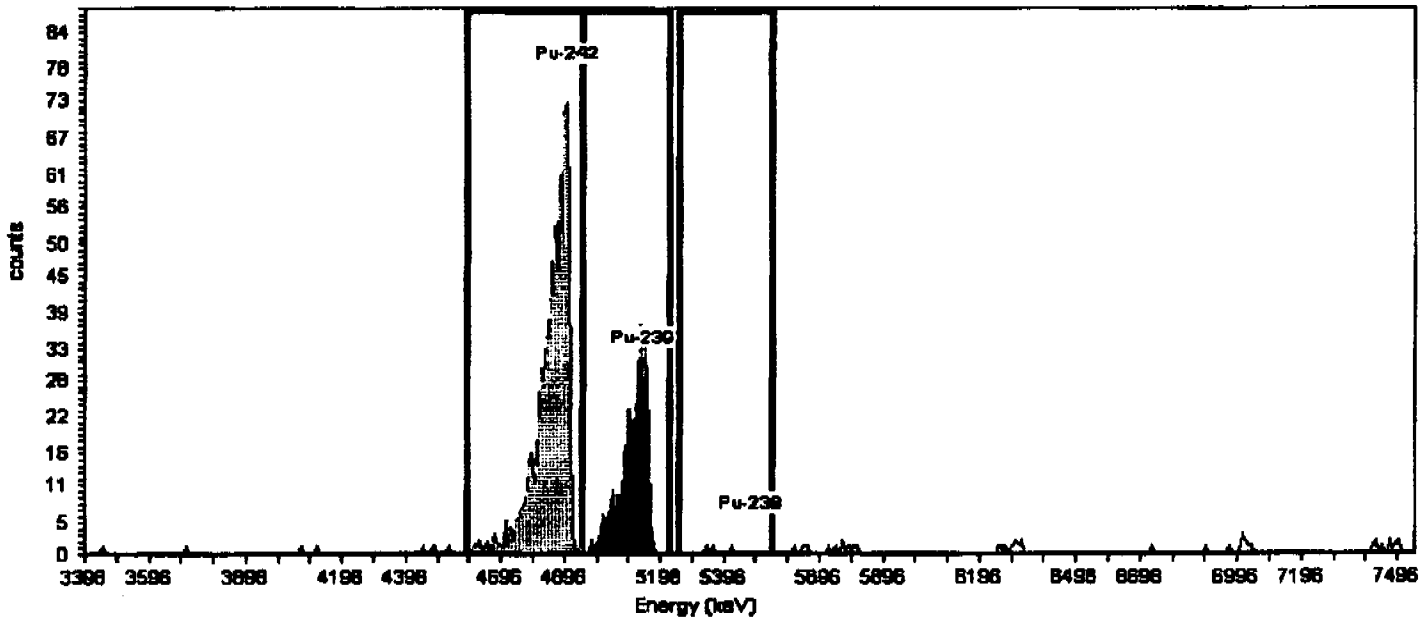
Tracer Name: Rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:48PM

Tracer Nuclide: Pu-242
Tracer Recovery: 86.27%

Acquisition

Detector: AV61
Serial Number:
Acquisition Start Date: 5/2/2005 5:19:44PM
Live Time: 400.00 min.
Real Time: 400.02 min.
Background Date: 4/25/2005 11:48:24AM
Background Info: Sample: AV61; Det: AV61; Spectrum #1; Apr-25-2005 11:48

Calibration Name: Apr2005_AV61
Calibration Date: 4/28/2005 7:13:47AM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.52% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PuROI
Decay Correction: 5/2/2005 2:53:08PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4898.999	4586.828	4949.818	87.334	99.0	796.00	1.5000	795	1.636E+000	5.882E-002	5.892E-003	1.824E-002
Pu-239	5138.573	4949.818	5225.690	70.618	99.9	356.00	0.0000	356	8.423E-001	5.418E-002	0.000E+000	6.403E-003
Pu-238	5479.783	5254.729	5545.121	39.757	100.0	3.00	2.0000	1	2.364E-003	5.286E-003	6.735E-003	1.987E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:57:05PM 5/3/2005

Analyst: 60040

Sample

Sample Name: F5D230000-068B
SampleType: Blank
WRKNO: G83F91AA
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 2.0000g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5113068
:
Description:

Client Name: Undefined
Client Contact:

Tracer

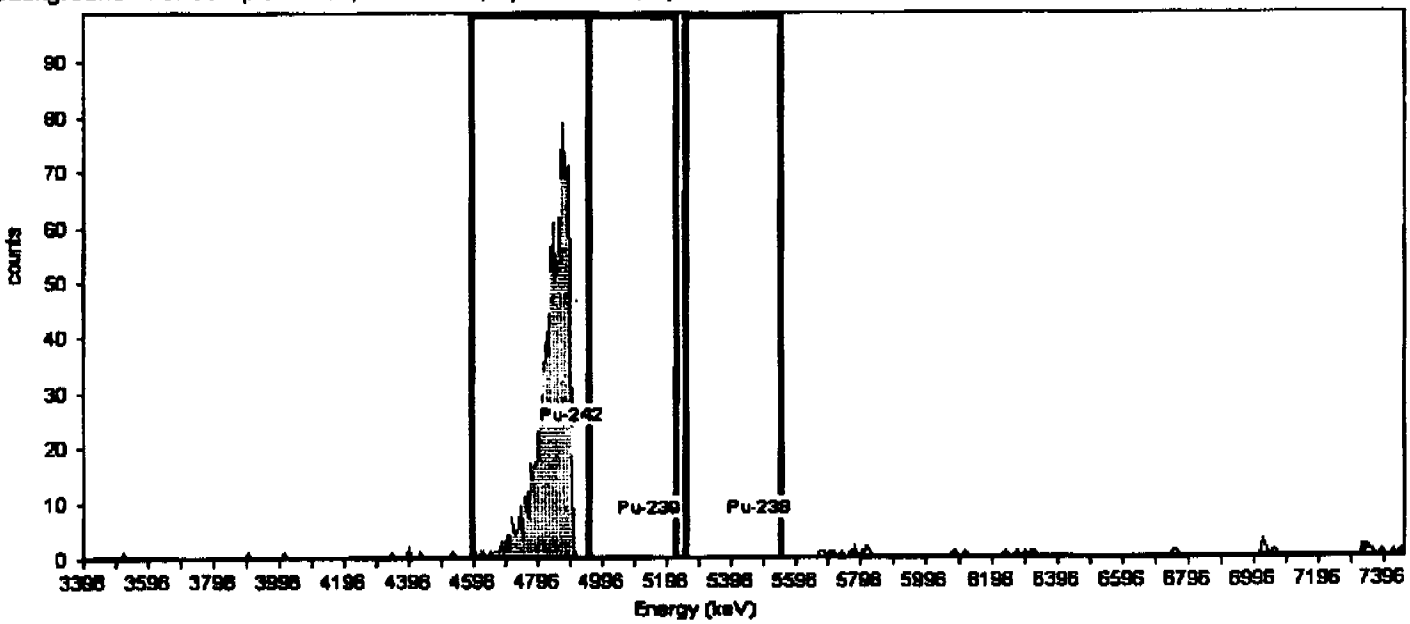
Tracer Name: Rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:48PM

Tracer Nuclide: Pu-242
Tracer Recovery: 94.42%

Acquisition

Detector: AV57
Serial Number:
Acquisition Start Date: 5/2/2005 2:54:52PM
Live Time: 400.00 min.
Real Time: 400.00 min.
Background Date: 4/25/2005 11:48:59AM
Background Info: Sample: AV57; Det: AV57; Spectrum #1; Apr-25-2005 11:48

Calibration Name: April2005_AV57
Calibration Date: 4/28/2005 11:52:44AM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.38% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PuROI
Decay Correction: 5/2/2005 2:53:08PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4898.999	4586.828	4949.818	80.901	99.0	865.00	0.0000	865	1.797E+000	6.189E-002	0.000E+000	5.954E-003
Pu-239	5138.573	4949.818	5225.690	.000	99.9	0.00	0.5000	-1	0.000E+000	0.000E+000	3.106E-003	1.211E-002
Pu-238	5479.783	5254.729	5545.121	.000	100.0	0.00	1.0000	-1	0.000E+000	0.000E+000	4.388E-003	1.467E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 3:57:47PM 5/3/2005

Sample

Sample Name: F5D230000-068C
SampleType: Control
WRKNO: G83F91AC
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 0.2030g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5113068
:
Description:

Client Name: Undefined
Client Contact:

Tracer

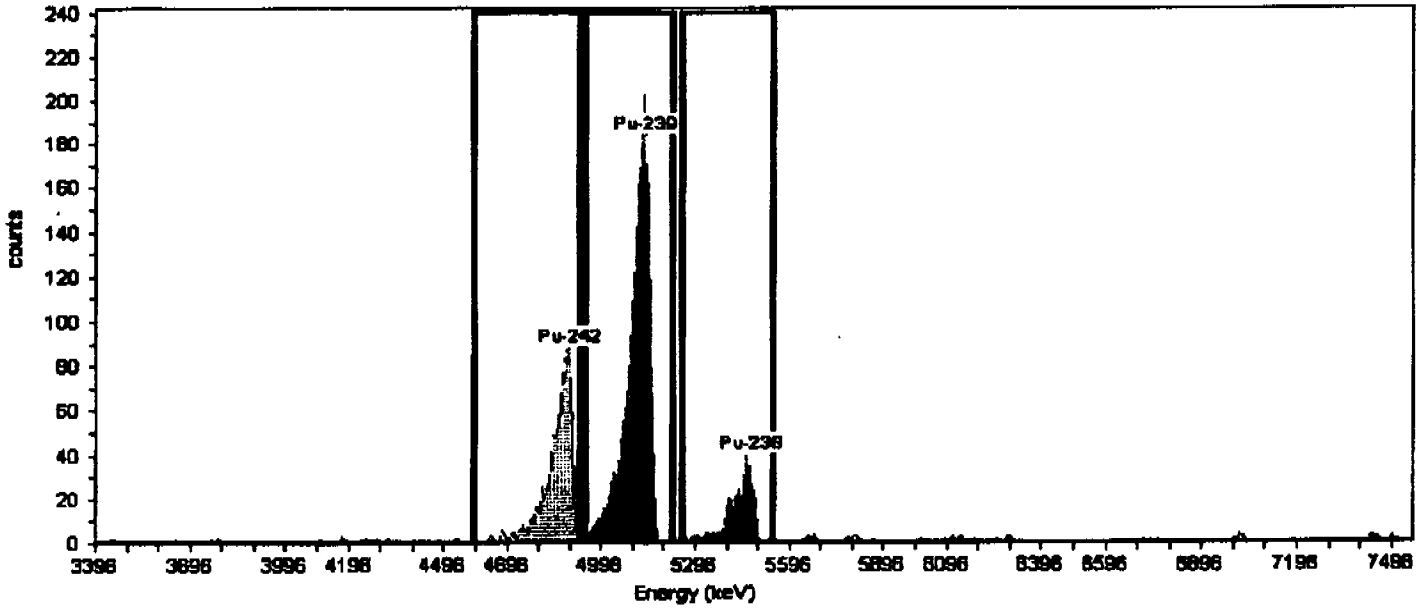
Tracer Name: Rad04-0062_Pu242
Tracer Activity: 84.50 DPM/mL x (Vol.)0.10 mL = 8.45 DPM
Tracer Ref. Date: 8/1/1999 12:00:48PM

Tracer Nuclide: Pu-242
Tracer Recovery: 92.82%

Acquisition

Detector: AV58
Serial Number:
Acquisition Start Date: 5/2/2005 2:54:53PM
Live Time: 400.00 min.
Real Time: 400.00 min.
Background Date: 4/25/2005 11:49:00AM
Background Info: Sample: AV58; Det: AV58; Spectrum #1; Apr-25-2005 11:49

Calibration Name: April2005_AV58
Calibration Date: 4/28/2005 11:52:51AM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.61% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = PuROI
Decay Correction: 5/2/2005 2:53:09PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Plutonium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
Pu-242	4898.999	4586.828	4928.039	18.588	99.0	859.00	1.5000	858	1.740E+001	6.018E-001	5.395E-002	1.671E-001
Pu-239	5138.573	4942.558	5225.690	63.180	99.9	1,841.00	0.0000	1,841	3.989E+001	1.676E+000	0.000E+000	5.864E-002
Pu-238	5479.783	5254.729	5545.121	77.134	100.0	333.00	0.0000	333	7.209E+000	4.690E-001	0.000E+000	5.858E-002

SEVERN TRENT STL

DAILY PULSERS

LOT# F5D220345

STL ST. LOUIS

Daily Pulser Check - Severn Trent Lab

Pulser Date: 5/2/2005

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria	P/F	FWHM (keV) Result	FWHM (keV) Criteria	P/F	Pulser Center Result	Pulser Center Criteria	P/F	Energy (keV) Result	Energy (keV) Criteria	P/F
AV1	05/02/2005 7:36	7364	7218.7 +/-5%	Pass	14.2	5-50	Pass	227.1	229.0 +/-5%	Pass	5037	5051.1 +/-25%	Pass
AV2	05/02/2005 7:36	7364	7468.7 +/-5%	Pass	14.0	5-50	Pass	227.0	222.9 +/-5%	Pass	5037	5007.5 +/-25%	Pass
AV3	05/02/2005 7:36	7365	7484.9 +/-5%	Pass	13.7	5-50	Pass	229.1	225.9 +/-5%	Pass	5052	5028.8 +/-25%	Pass
AV4	05/02/2005 7:36	7362	7413.7 +/-5%	Pass	13.8	5-50	Pass	226.1	224.9 +/-5%	Pass	5030	5021.6 +/-25%	Pass
AV4	05/02/2005 7:36	7362	7413.7 +/-5%	Pass	13.8	5-50	Pass	226.1	224.9 +/-5%	Pass	5030	5021.6 +/-25%	Pass
AV6	05/02/2005 7:36	7355	7476.7 +/-5%	Pass	14.3	5-50	Pass	226.9	224.0 +/-5%	Pass	5036	5015.3 +/-25%	Pass
AV7	05/02/2005 6:46	7313	7477.0 +/-5%	Pass	15.7	5-50	Pass	228.2	224.9 +/-5%	Pass	5046	5021.9 +/-25%	Pass
AV8	05/02/2005 6:46	7364	7327.4 +/-5%	Pass	13.3	5-50	Pass	228.0	228.0 +/-5%	Pass	5044	5044.6 +/-25%	Pass
AV9	05/02/2005 6:46	7669	7519.3 +/-5%	Pass	16.1	5-50	Pass	221.0	227.9 +/-5%	Pass	4994	5043.3 +/-25%	Pass
AV10	05/02/2005 6:46	7717	7749.6 +/-5%	Pass	15.4	5-50	Pass	219.0	226.1 +/-5%	Pass	4979	5030.3 +/-25%	Pass
AV11	05/02/2005 6:46	7719	7666.2 +/-5%	Pass	14.0	5-50	Pass	222.9	225.0 +/-5%	Pass	5007	5022.1 +/-25%	Pass
AV12	05/02/2005 6:46	7706	7588.7 +/-5%	Pass	14.8	5-50	Pass	229.1	230.0 +/-5%	Pass	5052	5058.4 +/-25%	Pass
AV13	05/02/2005 6:46	7678	7584.6 +/-5%	Pass	17.0	5-50	Pass	227.0	228.0 +/-5%	Pass	5037	5044.1 +/-25%	Pass
AV15	05/02/2005 7:35	7615	7770.5 +/-5%	Pass	14.1	5-50	Pass	227.0	226.9 +/-5%	Pass	5037	5036.6 +/-25%	Pass
AV16	05/02/2005 7:36	7436	7456.0 +/-5%	Pass	12.5	5-50	Pass	225.0	226.9 +/-5%	Pass	5022	5036.2 +/-25%	Pass
AV17	05/02/2005 7:36	7617	7619.1 +/-5%	Pass	14.2	5-50	Pass	225.9	229.9 +/-5%	Pass	5029	5058.3 +/-25%	Pass
AV18	05/02/2005 7:36	7618	7714.5 +/-5%	Pass	13.8	5-50	Pass	228.0	226.9 +/-5%	Pass	5044	5036.4 +/-25%	Pass
AV19	05/02/2005 6:46	7533	7269.8 +/-5%	Pass	12.6	5-50	Pass	222.0	227.7 +/-5%	Pass	5000	5041.9 +/-25%	Pass
AV20	05/02/2005 6:46	7732	7503.6 +/-5%	Pass	13.2	5-50	Pass	227.0	226.0 +/-5%	Pass	5037	5029.9 +/-25%	Pass
AV21	05/02/2005 6:46	7716	7550.9 +/-5%	Pass	13.3	5-50	Pass	225.0	226.0 +/-5%	Pass	5022	5029.6 +/-25%	Pass
AV22	05/02/2005 6:46	7708	7691.4 +/-5%	Pass	14.7	5-50	Pass	224.1	225.0 +/-5%	Pass	5016	5022.4 +/-25%	Pass
AV23	05/02/2005 6:47	7710	7665.3 +/-5%	Pass	14.5	5-50	Pass	229.9	229.8 +/-5%	Pass	5058	5057.0 +/-25%	Pass
AV24	05/02/2005 6:47	7717	7354.0 +/-5%	Pass	14.7	5-50	Pass	228.9	226.9 +/-5%	Pass	5051	5036.4 +/-25%	Pass
AV25	05/02/2005 6:47	5157	5122.1 +/-5%	Pass	14.8	5-50	Pass	225.1	224.0 +/-5%	Pass	5023	5015.1 +/-25%	Pass
AV26	05/02/2005 6:47	5079	5069.9 +/-5%	Pass	19.8	5-50	Pass	224.0	226.9 +/-5%	Pass	5015	5036.5 +/-25%	Pass
AV27	05/02/2005 6:47	5051	4919.2 +/-5%	Pass	14.9	5-50	Pass	223.2	225.0 +/-5%	Pass	5009	5022.5 +/-25%	Pass
AV29	05/02/2005 6:47	5023	5005.4 +/-5%	Pass	26.7	5-50	Pass	225.0	223.8 +/-5%	Pass	5022	5014.0 +/-25%	Pass
AV29	05/02/2005 6:47	5023	5047.7 +/-5%	Pass	26.7	5-50	Pass	225.0	223.3 +/-5%	Pass	5022	5010.1 +/-25%	Pass
AV33	05/02/2005 6:46	5057	4977.0 +/-5%	Pass	11.3	5-50	Pass	209.0	218.0 +/-5%	Pass	4906	4971.5 +/-25%	Pass
AV34	05/02/2005 6:46	5181	5045.5 +/-5%	Pass	17.8	5-50	Pass	224.0	219.0 +/-5%	Pass	5015	4978.8 +/-25%	Pass
AV35	05/02/2005 6:46	4869	4932.6 +/-5%	Pass	12.8	5-50	Pass	274.9	275.0 +/-5%	Pass	5385	5385.6 +/-25%	Pass
AV37	05/02/2005 6:46	4994	5082.9 +/-5%	Pass	20.4	5-50	Pass	236.1	236.1 +/-5%	Pass	5103	5103.2 +/-25%	Pass

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria		Gross Counts P/F	FWHM (keV) Result	FWHM (keV) Criteria	FWHM (keV) P/F	Pulser Center Result	Pulser Center Criteria		Pulser Center P/F	Energy (keV) Result	Energy (keV) Criteria		Energy (keV) P/F
AV38	05/02/2005 6:46	5328	5419.4	+/-5%	Pass	17.2	5-50	Pass	219.0	217.9	+/-5%	Pass	4979	4448.6	+/-25%	Pass
AV39	05/02/2005 6:46	5267	5316.2	+/-5%	Pass	14.9	5-50	Pass	227.8	224.2	+/-5%	Pass	5043	5016.3	+/-25%	Pass
AV40	05/02/2005 6:46	4892	4755.8	+/-5%	Pass	13.1	5-50	Pass	227.0	226.0	+/-5%	Pass	5037	5029.5	+/-25%	Pass
AV41	05/02/2005 6:46	4953	4990.8	+/-5%	Pass	11.9	5-50	Pass	228.9	229.0	+/-5%	Pass	5051	5051.6	+/-25%	Pass
AV42	05/02/2005 6:46	4797	4977.0	+/-5%	Pass	12.8	5-50	Pass	236.9	228.1	+/-5%	Pass	5109	5044.9	+/-25%	Pass
AV43	05/02/2005 6:46	7663	7162.4	+/-5%	FAIL	13.1	5-50	Pass	222.0	224.1	+/-5%	Pass	5000	5015.9	+/-25%	Pass
AV43	05/02/2005 7:54	7530	7162.4	+/-5%	FAIL	12.9	5-50	Pass	222.0	224.1	+/-5%	Pass	5001	5015.9	+/-25%	Pass
AV45	05/02/2005 6:47	7621	7593.5	+/-5%	Pass	15.5	5-50	Pass	226.9	225.6	+/-5%	Pass	5036	5026.9	+/-25%	Pass
AV46	05/02/2005 6:47	7654	7722.7	+/-5%	Pass	14.2	5-50	Pass	224.1	225.8	+/-5%	Pass	5016	5028.0	+/-25%	Pass
AV47	05/02/2005 6:47	7653	7532.5	+/-5%	Pass	13.5	5-50	Pass	218.0	226.0	+/-5%	Pass	4972	5029.6	+/-25%	Pass
AV48	05/02/2005 6:47	7634	7717.5	+/-5%	Pass	14.7	5-50	Pass	214.9	224.0	+/-5%	Pass	4949	5015.2	+/-25%	Pass
AV49	05/02/2005 6:47	7646	7703.4	+/-5%	Pass	13.8	5-50	Pass	232.0	226.0	+/-5%	Pass	5073	5029.5	+/-25%	Pass
AV50	05/02/2005 6:47	7645	7660.9	+/-5%	Pass	13.8	5-50	Pass	225.0	227.0	+/-5%	Pass	5023	5037.2	+/-25%	Pass
AV51	05/02/2005 6:47	7350	7070.5	+/-5%	Pass	12.9	5-50	Pass	220.0	223.0	+/-5%	Pass	4986	5007.6	+/-25%	Pass
AV52	05/02/2005 6:47	7026	7156.4	+/-5%	Pass	12.8	5-50	Pass	225.1	225.0	+/-5%	Pass	5023	5022.4	+/-25%	Pass
AV53	05/02/2005 6:47	7143	7144.1	+/-5%	Pass	12.7	5-50	Pass	223.0	223.0	+/-5%	Pass	5008	5007.8	+/-25%	Pass
AV54	05/02/2005 6:47	7341	7313.1	+/-5%	Pass	13.7	5-50	Pass	227.9	226.0	+/-5%	Pass	5044	5029.5	+/-25%	Pass
AV55	05/02/2005 6:47	7341	7132.9	+/-5%	Pass	13.2	5-50	Pass	227.0	226.0	+/-5%	Pass	5037	5029.7	+/-25%	Pass
AV56	05/02/2005 6:47	6910	7163.7	+/-5%	Pass	13.1	5-50	Pass	221.1	222.0	+/-5%	Pass	4994	5000.7	+/-25%	Pass
AV57	05/02/2005 6:47	7333	7309.5	+/-5%	Pass	14.2	5-50	Pass	222.0	222.0	+/-5%	Pass	5000	5000.6	+/-25%	Pass
AV58	05/02/2005 6:47	7333	7249.2	+/-5%	Pass	13.4	5-50	Pass	225.0	223.0	+/-5%	Pass	5022	5008.0	+/-25%	Pass
AV59	05/02/2005 6:47	7125	7141.4	+/-5%	Pass	12.3	5-50	Pass	285.0	284.0	+/-5%	Pass	5458	5450.6	+/-25%	Pass
AV60	05/02/2005 6:47	6962	7019.7	+/-5%	Pass	12.8	5-50	Pass	222.9	223.0	+/-5%	Pass	5008	5007.5	+/-25%	Pass
AV61	05/02/2005 6:47	7275	7078.3	+/-5%	Pass	13.1	5-50	Pass	224.0	225.0	+/-5%	Pass	5015	5022.2	+/-25%	Pass
AV62	05/02/2005 6:47	7271	7083.5	+/-5%	Pass	13.9	5-50	Pass	222.0	222.0	+/-5%	Pass	5000	5000.7	+/-25%	Pass
AV63	05/02/2005 6:47	6884	7120.8	+/-5%	Pass	13.0	5-50	Pass	221.9	223.0	+/-5%	Pass	5000	5007.9	+/-25%	Pass
AV64	05/02/2005 6:47	7267	7153.7	+/-5%	Pass	13.1	5-50	Pass	223.0	224.0	+/-5%	Pass	5008	5015.3	+/-25%	Pass
AV65	05/02/2005 6:47	7265	7233.4	+/-5%	Pass	13.4	5-50	Pass	223.0	224.0	+/-5%	Pass	5008	5015.3	+/-25%	Pass
AV66	05/02/2005 6:47	7149	7165.5	+/-5%	Pass	12.0	5-50	Pass	221.0	222.0	+/-5%	Pass	4993	5000.5	+/-25%	Pass
AV67	05/02/2005 6:47	7390	7128.1	+/-5%	Pass	16.4	5-50	Pass	221.0	224.1	+/-5%	Pass	4994	5015.6	+/-25%	Pass
AV68	05/02/2005 6:47	7442	7259.5	+/-5%	Pass	12.9	5-50	Pass	221.0	222.0	+/-5%	Pass	4993	5000.8	+/-25%	Pass
AV69	05/02/2005 6:47	7231	7305.4	+/-5%	Pass	12.6	5-50	Pass	221.0	222.0	+/-5%	Pass	4994	5000.6	+/-25%	Pass
AV70	05/02/2005 6:47	7437	7406.5	+/-5%	Pass	12.9	5-50	Pass	221.0	222.6	+/-5%	Pass	4993	5004.7	+/-25%	Pass
AV71	05/02/2005 6:47	7434	7187.3	+/-5%	Pass	13.2	5-50	Pass	222.1	225.0	+/-5%	Pass	5001	5022.7	+/-25%	Pass
AV72	05/02/2005 6:47	7068	7090.0	+/-5%	Pass	12.8	5-50	Pass	219.1	223.9	+/-5%	Pass	4979	5014.6	+/-25%	Pass
AV73	05/02/2005 7:36	6880	7251.3	+/-5%	FAIL	13.1	5-50	Pass	224.1	225.0	+/-5%	Pass	5016	5022.4	+/-25%	Pass

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria		Gross Counts P/F	FWHM (keV) Result	FWHM (keV) Criteria	FWHM (keV) P/F	Pulser Center Result	Pulser Center Criteria		Pulser Center P/F	Energy (keV) Result	Energy (keV) Criteria		Energy (keV) P/F
AV73	05/02/2005 7:54	7317	7251.3	+/-5%	Pass	13.4	5 - 50	Pass	224.1	225.0	+/-5%	Pass	5016	5022.4	+/-25%	Pass
AV74	05/02/2005 7:36	7334	7227.1	+/-5%	Pass	13.0	5 - 50	Pass	220.0	224.0	+/-5%	Pass	4986	5015.0	+/-25%	Pass

SEVERN TRENT STL

Run Log

Alphavision
5/4/05

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	05-03-05	5117290	FSD250130 - 014	38	180	U	KY	RR
2			- 015	39				
3			- 016	40				
4			- 017	41				
5			- 018	42				
6			- 019	49				
7			- 020	50				
8	05-04-05	5117497	FSD250136 - 003	1	180	Th		RR
9			- 003x	2				
10			- 010	4				
11			- 015	7				
12			- 021	51				
13			FSD270000 - 497 B	47				
14			1 1 C	48				
15		5120055	FSD290305 - 001	10	240	Th	KY	RR
16			- 001x	54				
17			- 002	55				
18			- 003	57				
19			FSD290307 - 001	58				
20			1 - 002	59				
21			FSD 306000 - 055 B	62				
22			1 1 C	65				
23		5119189	FSD270262 - 001	52	180	Th		RR
24			1 - 001x	53				
25			FSD280184 - 001	56				
26			1 - 002	60				
27			FSD290000 - 189 B	61				
28			1 1 C	63				
29								

line skipped RR 5/4/05

Reviewed By: RR Date: 5-4-05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	05-04-05	5118471	FSD190195-001	64	180	Th	KY	
2	"	"	" -004	68	"	"	"	"
3	"	"	" -005	69	"	"	"	"
4	"	"	" -005S	73	"	"	"	"
5	"	"	" -005X	74	"	"	"	"
6	"	"	FSD280000-471B	66	"	"	"	"
7	"	"	" " C	67	"	"	"	"
8	5/4/5	Daily	Pulsers	1-74	1 min	QA	JW	—
9	5/4/05	5120121	FSD290249-002	27	180	Th	KY	
10	"	"	" -002X	25	"	"	"	"
11	"	"	FSD300000-127B	6	"	"	"	"
12	"	"	" -127C	7	"	"	"	"
13	"	5119532	FSD200213-002	25	"	"	"	"
14	"	"	" -002X	26	"	"	"	"
15	"	"	FSD290000-533B	3	"	"	"	"
16	"	"	" -533C	4	"	"	"	"
17	"	5120068	FSD210345-010 RC	1	"	"	"	"
18	"	"	" -011 RC	2	"	"	"	"
19	"	5118473	FSD190195-001	9	"	Lu	JW	"
20	"	"	" -004	11	"	"	"	"
21	"	"	" -005	12	"	"	"	"
22	"	"	" -005X	13	"	"	"	"
23	"	"	" -007	15	"	"	"	"
24	"	"	" -008	16	"	"	"	"
25	"	"	FSD200168-002	17	"	"	"	"
26	"	"	" -003	18	"	"	"	"
27	"	"	" -004	19	"	"	"	"
28	"	"	FSD210324-002	20	"	"	"	"
29	"	"	" -003	21	"	"	"	"

Reviewed By: JW Date: 5/4/5

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
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Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5/4/05	5118473	FSD220168-001	22	180	Ra	GW	
2			-003	23				
3			-004	24				
4			-004S	46				
5			FSD280000-473B	47				
6			473C	48				
7		918471	FSD190195-007	33		TH		
8			-008	34				
9			FSD200168-007	35				
10			-003	37				
11			-004	38				
12			FSD210324-002	39				
13			-003	40				
14			FSD220148-001	41				
15			-003	42				
16			-004	8				
17			FSD280000-471B		GW	5/4/05		
18			-471C					
19	5/4/05	5117283	FSD250130-021	49	180	Am	GW	
20			-021X	50				
21			-022	51				
22			-023	52				
23			-024	53				
24			FSD270000-283B	54				
25			-283C	55				
26		5117287	FSD250130-021	56		Pu		
27			-021X	60				
28			-022	61				
29			-023	63				

Reviewed By: GW Date: 5/4/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
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Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5/4/05	5117287	FSD250130-024	64	180	Pu	gw	
2			FSD270000-287D	65				
3			-287C	66				
4		5113067	FSD210345-004 RC	68	600	Am		
5			-014 RC	69				
6			-015 RC	73				
7	5/4/05	5117290	FSD270000-290C RC	74	180	Pu		
8	5/4/05	5117071	FSD220279-002X RC	72	600	Th	RC.	
9	5/4/05	5120122	FSD300000-122B RC	6	180min	Th	—	
10	5/4/05	5120164	FSD290183-001	25	180min	Pu	~	
11			-001X	26				
12			FSD300000-164B	27				
13			-164C	29				
14	5/4/05	5120010	FSD290183-001	33	180min	Am	—	
15			-001X	34				
16			FSE080000-010B	35				
17			-010C	37				
18	5/4/05	5120092	FSD290215-001	3	180min	Pu	~	
19			-001X	4				
20			-002	7				
21			-003	8				
22			-004	9				
23			-005	11				
24			-006	12				
25			-007	13				
26			-008	15				
27			-009	16				
28			-010	17				
29			-011	18				

Reviewed By:_____ Date:_____

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Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5-4-5	5120092	FSD290215-012	19	180	U		
2			-013	20				
3			-014	21				
4			-015	22				
5			-016	23				
6			-017	24				
7			-018	46				
8			FSD290000-09LB	10				
9			-092C	47				
10	5-4-05	5120092	FSD290215-019	49	180	UU	RR	
11	1	1	1 -020	50	1	1		
12		5120093	FSD290215-001	45	~~240~~ 180	Th		
13			-001X	48				
14			-002	51				
15			-003	52				
16			-004	53				
17			-005	54				
18			-006	55				
19			-007	56				
20			-008	57				
21			-009	58				
22			-010	59				
23			-011	60				
24			-012	61				
25			-013	62				
26			-014	63				
27			-015	64				
28			-016	65				
29			-017	66				

Reviewed By:_____ Date:_____

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
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Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5-4-5	5120091	FSD290215-021	11	180min	U4	✓	
2			-021X	12				
3			-022	13				
4			-023	15				
5			-024	16				
6			-025	49				
7			-026	50				
8			-027	51				
9			-028	52				
10			-029	53				
11			-030	56				
12			-031	60				
13			-032	61				
14			-033	63				
15			-034	64				
16			FSD300000-091B	23				
17			-091C	24				
18		5120166	FSD290133-001	25	180min	U4	✓	
19			-001X	26				
20			FSD300000-166B	10				
21			-166C	46				
22		5117292	FSD290130-021	27	180min	U4	✓	
23			-021X	29				
24			-022	33				
25			-023	34				
26			-024	35				
27			FSD270000-292B	67				
28			-292C	70				
29		5120165	FSD290133-001	37	180min	U4	✓	

Reviewed By:_____ Date:_____

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5-4-5	5120165	F5D290133-001X	38	180min	Th	~	
2			F5D300000-165B	71				
3			-165C	74				
4		5128966	F5D270160-001	17	240min	Th	~	
5			-002	18				
6			-006	19				
7			-006X	20				
8			F5E080000-166B	21				
9			-166C	22				
10		5112298	F5D250130024	29	180min	Th	~	
11			-027X	90				
12			-022	41				
13			-023	42				
14			-024	1				
15			F5D220000-289B	2				
16			-289C	3				
17		5120093	F5D290215-018	4	180min	Th	~	
18			-019	6				
19			-020	7				
20			F5D300000-093B	8				
21			-093C	9				
22	5/4/05	5120091	F5D290215-035	01	180	U	CH	
23			-036	X2				
24			-037	3				
25			-038	4				
26			-039	7				
27			-040	6				
28	5/5/05	Daily	Pulsers	1-74	1min	QA	JW	—
29								

Reviewed By:_____ Date:_____

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QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

STL

DAILY PULSERS

Daily Pulser Check - Severn Trent Lab

Pulser Date: 5/4/2005

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria	P/F	FWHM (keV) Result	FWHM (keV) Criteria	P/F	Pulser Center Result	Pulser Center Criteria	P/F	Energy (keV) Result	Energy (keV) Criteria	P/F
AV1	05/04/2005 7:00	7331	7218.7 +/-5%	Pass	13.9	5 - 50	Pass	227.0	229.0 +/-5%	Pass	5037	5051.1 +/-25%	Pass
AV1	05/04/2005 7:00	7331	7218.7 +/-5%	Pass	13.9	5 - 50	Pass	227.0	229.0 +/-5%	Pass	5037	5051.1 +/-25%	Pass
AV2	05/04/2005 7:00	7331	7468.7 +/-5%	Pass	14.1	5 - 50	Pass	227.0	222.9 +/-5%	Pass	5037	5007.5 +/-25%	Pass
AV2	05/04/2005 7:00	7331	7468.7 +/-5%	Pass	14.1	5 - 50	Pass	227.0	222.9 +/-5%	Pass	5037	5007.5 +/-25%	Pass
AV3	05/04/2005 7:00	7112	7484.9 +/-5%	Pass	12.8	5 - 50	Pass	229.0	225.9 +/-5%	Pass	5051	5028.8 +/-25%	Pass
AV4	05/04/2005 6:48	7329	7413.7 +/-5%	Pass	13.6	5 - 50	Pass	226.1	224.9 +/-5%	Pass	5030	5021.6 +/-25%	Pass
AV6	05/04/2005 6:48	7323	7476.7 +/-5%	Pass	13.5	5 - 50	Pass	228.0	224.0 +/-5%	Pass	5044	5015.3 +/-25%	Pass
AV7	05/04/2005 6:48	7275	7477.0 +/-5%	Pass	15.9	5 - 50	Pass	226.8	224.9 +/-5%	Pass	5036	5021.9 +/-25%	Pass
AV8	05/04/2005 6:48	7316	7327.4 +/-5%	Pass	13.3	5 - 50	Pass	228.0	228.0 +/-5%	Pass	5044	5044.6 +/-25%	Pass
AV9	05/04/2005 6:48	7710	7519.3 +/-5%	Pass	20.3	5 - 50	Pass	219.9	227.9 +/-5%	Pass	4985	5043.3 +/-25%	Pass
AV10	05/04/2005 6:48	7725	7749.6 +/-5%	Pass	13.2	5 - 50	Pass	219.0	226.1 +/-5%	Pass	4979	5030.3 +/-25%	Pass
AV11	05/04/2005 6:48	7723	7666.2 +/-5%	Pass	13.6	5 - 50	Pass	221.9	225.0 +/-5%	Pass	5000	5022.1 +/-25%	Pass
AV12	05/04/2005 6:48	7704	7588.7 +/-5%	Pass	14.9	5 - 50	Pass	227.9	230.0 +/-5%	Pass	5044	5058.4 +/-25%	Pass
AV13	05/04/2005 6:48	7721	7584.6 +/-5%	Pass	17.8	5 - 50	Pass	227.0	228.0 +/-5%	Pass	5037	5044.1 +/-25%	Pass
AV15	05/04/2005 6:48	7690	7770.5 +/-5%	Pass	14.0	5 - 50	Pass	227.0	226.9 +/-5%	Pass	5037	5036.6 +/-25%	Pass
AV16	05/04/2005 6:48	7468	7456.0 +/-5%	Pass	12.9	5 - 50	Pass	225.0	226.9 +/-5%	Pass	5023	5036.2 +/-25%	Pass
AV17	05/04/2005 6:48	7723	7619.1 +/-5%	Pass	13.8	5 - 50	Pass	227.1	229.9 +/-5%	Pass	5038	5058.3 +/-25%	Pass
AV18	05/04/2005 6:48	7731	7714.5 +/-5%	Pass	13.8	5 - 50	Pass	228.0	226.9 +/-5%	Pass	5044	5036.4 +/-25%	Pass
AV19	05/04/2005 6:48	7269	7269.8 +/-5%	Pass	13.1	5 - 50	Pass	222.1	227.7 +/-5%	Pass	5001	5041.9 +/-25%	Pass
AV20	05/04/2005 6:48	7722	7503.6 +/-5%	Pass	13.3	5 - 50	Pass	227.0	226.0 +/-5%	Pass	5037	5029.9 +/-25%	Pass
AV21	05/04/2005 6:48	7724	7550.9 +/-5%	Pass	13.3	5 - 50	Pass	225.0	226.0 +/-5%	Pass	5022	5029.6 +/-25%	Pass
AV22	05/04/2005 6:48	7699	7691.4 +/-5%	Pass	15.6	5 - 50	Pass	224.1	225.0 +/-5%	Pass	5016	5022.4 +/-25%	Pass
AV23	05/04/2005 6:48	7717	7665.3 +/-5%	Pass	14.5	5 - 50	Pass	229.9	229.8 +/-5%	Pass	5058	5057.0 +/-25%	Pass
AV24	05/04/2005 6:48	7717	7354.0 +/-5%	Pass	13.7	5 - 50	Pass	228.9	226.9 +/-5%	Pass	5051	5036.4 +/-25%	Pass
AV25	05/04/2005 6:48	5140	5122.1 +/-5%	Pass	14.6	5 - 50	Pass	225.1	224.0 +/-5%	Pass	5023	5015.1 +/-25%	Pass
AV26	05/04/2005 6:48	5088	5069.9 +/-5%	Pass	24.7	5 - 50	Pass	223.0	226.9 +/-5%	Pass	5008	5036.5 +/-25%	Pass
AV27	05/04/2005 6:48	5041	4919.2 +/-5%	Pass	14.8	5 - 50	Pass	221.9	225.0 +/-5%	Pass	5000	5022.5 +/-25%	Pass
AV29	05/04/2005 6:48	4992	5005.4 +/-5%	Pass	21.2	5 - 50	Pass	224.9	223.8 +/-5%	Pass	5022	5014.0 +/-25%	Pass
AV29	05/04/2005 6:48	4992	5047.7 +/-5%	Pass	21.2	5 - 50	Pass	224.9	223.3 +/-5%	Pass	5022	5010.1 +/-25%	Pass
AV33	05/04/2005 6:48	4989	4977.0 +/-5%	Pass	11.6	5 - 50	Pass	209.0	218.0 +/-5%	Pass	4906	4971.5 +/-25%	Pass
AV34	05/04/2005 6:48	5189	5045.5 +/-5%	Pass	17.9	5 - 50	Pass	224.0	219.0 +/-5%	Pass	5015	4978.8 +/-25%	Pass
AV35	05/04/2005 6:48	4943	4932.6 +/-5%	Pass	12.2	5 - 50	Pass	274.9	275.0 +/-5%	Pass	5385	5385.6 +/-25%	Pass

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria	P/F	FWHM (keV) Result	FWHM (keV) Criteria	P/F	Pulser Center Result	Pulser Center Criteria	P/F	Energy (keV) Result	Energy (keV) Criteria	P/F
AV37	05/04/2005 6:48	4991	5082.9 +/- 5%	Pass	19.8	5 - 50	Pass	236.0	236.1 +/- 5%	Pass	5102	5103.2 +/- 25%	Pass
AV38	05/04/2005 6:48	5298	5419.4 +/- 5%	Pass	16.8	5 - 50	Pass	219.0	217.9 +/- 5%	Pass	4979	4448.6 +/- 25%	Pass
AV39	05/04/2005 6:48	5253	5316.2 +/- 5%	Pass	15.0	5 - 50	Pass	228.1	224.2 +/- 5%	Pass	5045	5016.3 +/- 25%	Pass
AV40	05/04/2005 6:48	4705	4755.8 +/- 5%	Pass	12.6	5 - 50	Pass	227.1	226.0 +/- 5%	Pass	5037	5029.5 +/- 25%	Pass
AV41	05/04/2005 6:48	5064	4990.8 +/- 5%	Pass	11.5	5 - 50	Pass	230.0	229.0 +/- 5%	Pass	5059	5051.6 +/- 25%	Pass
AV42	05/04/2005 6:48	4809	4977.0 +/- 5%	Pass	13.0	5 - 50	Pass	238.2	228.1 +/- 5%	Pass	5118	5044.9 +/- 25%	Pass
AV43	05/04/2005 6:48	7663	7162.4 +/- 5%	FAIL	13.0	5 - 50	Pass	222.0	224.1 +/- 5%	Pass	5001	5015.9 +/- 25%	Pass
AV45	05/04/2005 6:48	7641	7593.5 +/- 5%	Pass	15.6	5 - 50	Pass	226.9	225.6 +/- 5%	Pass	5037	5026.9 +/- 25%	Pass
AV46	05/04/2005 6:48	7652	7722.7 +/- 5%	Pass	13.9	5 - 50	Pass	224.0	225.8 +/- 5%	Pass	5015	5028.0 +/- 25%	Pass
AV47	05/04/2005 6:49	7652	7532.5 +/- 5%	Pass	13.8	5 - 50	Pass	214.0	226.0 +/- 5%	FAIL	4942	5029.6 +/- 25%	Pass
AV48	05/04/2005 6:49	7636	7717.5 +/- 5%	Pass	15.3	5 - 50	Pass	218.0	224.0 +/- 5%	Pass	4972	5015.2 +/- 25%	Pass
AV49	05/04/2005 6:49	7648	7703.4 +/- 5%	Pass	13.7	5 - 50	Pass	232.0	226.0 +/- 5%	Pass	5073	5029.5 +/- 25%	Pass
AV50	05/04/2005 6:49	7642	7660.9 +/- 5%	Pass	13.8	5 - 50	Pass	225.1	227.0 +/- 5%	Pass	5023	5037.2 +/- 25%	Pass
AV51	05/04/2005 6:49	7346	7070.5 +/- 5%	Pass	13.2	5 - 50	Pass	221.1	223.0 +/- 5%	Pass	4994	5007.6 +/- 25%	Pass
AV52	05/04/2005 6:49	6939	7156.4 +/- 5%	Pass	13.1	5 - 50	Pass	225.1	225.0 +/- 5%	Pass	5023	5022.4 +/- 25%	Pass
AV53	05/04/2005 6:49	7138	7144.1 +/- 5%	Pass	12.7	5 - 50	Pass	223.0	223.0 +/- 5%	Pass	5008	5007.8 +/- 25%	Pass
AV54	05/04/2005 6:49	7337	7313.1 +/- 5%	Pass	13.9	5 - 50	Pass	229.1	226.0 +/- 5%	Pass	5052	5029.5 +/- 25%	Pass
AV55	05/04/2005 6:49	7338	7132.9 +/- 5%	Pass	13.3	5 - 50	Pass	227.0	226.0 +/- 5%	Pass	5037	5029.7 +/- 25%	Pass
AV56	05/04/2005 6:49	7336	7163.7 +/- 5%	Pass	13.2	5 - 50	Pass	221.1	222.0 +/- 5%	Pass	4994	5000.7 +/- 25%	Pass
AV57	05/04/2005 6:49	7331	7309.5 +/- 5%	Pass	13.9	5 - 50	Pass	222.0	222.0 +/- 5%	Pass	5001	5000.6 +/- 25%	Pass
AV58	05/04/2005 6:49	6998	7249.2 +/- 5%	Pass	13.0	5 - 50	Pass	224.1	223.0 +/- 5%	Pass	5016	5008.0 +/- 25%	Pass
AV59	05/04/2005 7:00	7135	7141.4 +/- 5%	Pass	12.2	5 - 50	Pass	285.0	284.0 +/- 5%	Pass	5458	5450.6 +/- 25%	Pass
AV59	05/04/2005 7:00	7135	7141.4 +/- 5%	Pass	12.2	5 - 50	Pass	285.0	284.0 +/- 5%	Pass	5458	5450.6 +/- 25%	Pass
AV60	05/04/2005 7:00	7026	7019.7 +/- 5%	Pass	13.0	5 - 50	Pass	222.9	223.0 +/- 5%	Pass	5007	5007.5 +/- 25%	Pass
AV61	05/04/2005 7:00	7274	7078.3 +/- 5%	Pass	13.0	5 - 50	Pass	224.0	225.0 +/- 5%	Pass	5015	5022.2 +/- 25%	Pass
AV61	05/04/2005 7:00	7274	7078.3 +/- 5%	Pass	13.0	5 - 50	Pass	224.0	225.0 +/- 5%	Pass	5015	5022.2 +/- 25%	Pass
AV62	05/04/2005 7:00	7271	7083.5 +/- 5%	Pass	14.0	5 - 50	Pass	222.0	222.0 +/- 5%	Pass	5001	5000.7 +/- 25%	Pass
AV63	05/04/2005 7:00	6993	7120.8 +/- 5%	Pass	12.6	5 - 50	Pass	221.9	223.0 +/- 5%	Pass	5000	5007.9 +/- 25%	Pass
AV64	05/04/2005 7:00	7266	7153.7 +/- 5%	Pass	13.2	5 - 50	Pass	223.0	224.0 +/- 5%	Pass	5008	5015.3 +/- 25%	Pass
AV65	05/04/2005 7:00	7262	7233.4 +/- 5%	Pass	13.6	5 - 50	Pass	223.0	224.0 +/- 5%	Pass	5008	5015.3 +/- 25%	Pass
AV65	05/04/2005 7:00	7262	7233.4 +/- 5%	Pass	13.6	5 - 50	Pass	223.0	224.0 +/- 5%	Pass	5008	5015.3 +/- 25%	Pass
AV66	05/04/2005 7:00	7146	7165.5 +/- 5%	Pass	12.0	5 - 50	Pass	221.0	222.0 +/- 5%	Pass	4993	5000.5 +/- 25%	Pass
AV67	05/04/2005 7:00	7395	7128.1 +/- 5%	Pass	16.4	5 - 50	Pass	221.1	224.1 +/- 5%	Pass	4994	5015.6 +/- 25%	Pass
AV68	05/04/2005 7:00	7322	7259.5 +/- 5%	Pass	12.8	5 - 50	Pass	221.0	222.0 +/- 5%	Pass	4993	5000.8 +/- 25%	Pass
AV69	05/04/2005 7:00	7242	7305.4 +/- 5%	Pass	12.3	5 - 50	Pass	221.0	222.0 +/- 5%	Pass	4994	5000.6 +/- 25%	Pass
AV69	05/04/2005 7:00	7242	7305.4 +/- 5%	Pass	12.3	5 - 50	Pass	221.0	222.0 +/- 5%	Pass	4994	5000.6 +/- 25%	Pass

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria	P/F	FWHM (keV) Result	FWHM (keV) Criteria	P/F	Pulser Center Result	Pulser Center Criteria	P/F	Energy (keV) Result	Energy (keV) Criteria	P/F
AV70	05/04/2005 7:00	7258	7406.5 +/-5%	Pass	12.8	5-50	Pass	221.0	222.6 +/-5%	Pass	4993	5004.7 +/-25%	Pass
AV71	05/04/2005 7:00	7433	7187.3 +/-5%	Pass	13.4	5-50	Pass	219.9	225.0 +/-5%	Pass	4986	5022.7 +/-25%	Pass
AV71	05/04/2005 7:00	7433	7187.3 +/-5%	Pass	13.4	5-50	Pass	219.9	225.0 +/-5%	Pass	4986	5022.7 +/-25%	Pass
AV72	05/04/2005 7:00	7195	7090.0 +/-5%	Pass	12.5	5-50	Pass	219.0	223.9 +/-5%	Pass	4979	5014.6 +/-25%	Pass
AV73	05/04/2005 7:00	7137	7251.3 +/-5%	Pass	12.7	5-50	Pass	224.1	225.0 +/-5%	Pass	5016	5022.4 +/-25%	Pass
AV74	05/04/2005 7:00	7426	7227.1 +/-5%	Pass	13.2	5-50	Pass	220.0	224.0 +/-5%	Pass	4986	5015.0 +/-25%	Pass

SEVERN TRENT STL

Run Log

Alphavision
5/2/05

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	4/30/5	5117193	F5D250160-12	16	400'	Pu	RR	RR
2			13	17				
3			F5D270000-193B	18				
4			193C	19				
5		5117192	F5D250160-01	20		Th		RR
6			01X	21				
7			02	22				
8			03	23				
9			04	24				
10			05	46				
11			06	49				
12			07	50				
13			08	51				
14			09	52				
15			10	53				
16			11	56				
17			12	60				
18			13	61				
19			F5D270000-192B	64				
20			192C	65				
21	5-1-5	Daily	Pulser ✓	1-79	1min	QA	RR	—
22		5117192	F5D250160-01	1	400'	Th		RR
23			01X	2				
24			02	4				
25			06	7				
26	5-2-5	Daily	Pulsers	1-74	1min	QA	JW	—
27	5-2-05	5120105	F5D300000-105B	1	180	Th	RR	RR
28			105C	2				
29			F5D300120-001	3				

Reviewed By: RR Date: 5-2-05

RR 5/2/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5/2/	5120105	FSD300120-001X	1	180	Th	RK	RK
2		5117112	FSD280284-001	37				RK
3			-001X	38				
4			-002	39				
5			-003	40				
6			-004	41				
7			FSD270000-112B	42				
8			-112C	10				
9		5120106	FSD300000-106B	6		U,Pu		RK
10			-106C	7				
11			FSD300120-001	8				
12			-001X	9				
13		5117113	FSD280284-001	25				
14			-001X	26				
15			-002	27				
16			-003	28 29				
17			-004	32 33				
18			FSD270000-113B	34 34				
19			-113C	35				
20		5118158	FSD140191-008X RC	11	186	Th	RK	RK
21		1	FSD250000-458B	12			1	1
22		5118229	FSD270110-001	13			gw	RK
23			-001X	15				
24			-002	16				
25			-003	17				
26			-004	18				
27			-005	19				
28			-006	20				
29			-007	21				

Reviewed By: gw Date: 5-2-5

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
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Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5-28	5118429	F5D280000-229B	22	180	TH	gw	RR
2	↓	↓	↓ -229C	29	↓	↓	↓	↓
3		5118231	F5D270110-001	24		U4		RR
4		↓	↓ -001X	46	↓	↓	↓	↓
5			-002	49				
6			-003	50				
7			-004	51				
8			-005	52				
9			-006	53				
10			↓ -007	56				
11			F5D280000-231B	60				
12	↓	↓	↓ -231C	61	↓	↓	↓	↓
13	5-2	5117632	F5D140271-006 RE	1	180	U4	RR	RR
14	5-25	5113068	F5D280000-068B	57	240 min	Pu	~	↓
15	↓	↓	↓ -068C	58	↓	↓	↓	
16		5117072	F5D220279-001	12	240min	Pu	~	RR
17		↓	↓ -001	63	↓	↓	↓	↓
18			-002	64				
19			-002X	73				
20			F5D270000-072B	54				
21			↓ -072C	55	↓	↓	↓	↓
22		5117073	F5D220279-001	7	240min	U4	~	RR
23		↓	↓ -001S	8	↓	↓	↓	↓
24			-002	9				
25			-002X	11				
26			F5D270000-073B	49				
27			↓ -073C	48	↓	↓	↓	↓
28		5117071	F5D220279-001	2	600min	Am	~	
29		↓	↓ -001S	3	↓	↓	↓	

Reviewed By: RR Date: 5/3/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
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Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5-2-5	5112071	FSD220279-002	4	600min	Am	~	
2			-002X	6				
3			FSD270000-071B	10				
4			-071C	45				
5	5-2-05	5115433	FSD220356-001 RC	1	400	U	RR	RR
6	5-2-05	5113068	FSD210345-001	13		Pu	RR	
7			-001S	15				
8			-001X	16				
9			-002	17				
10			-003	18				
11			-004	19				
12			-005	20				
13			-006	21				
14			-007	22				
15			-008	23				
16			-009	24				
17			-010	49				
18			-011	50				
19			-012	53				
20			-013	56				
21			-014	60				
22			-015	61				
23		5117492	FSD250136-003	25	180	Th		RR
24			-003X	26				
25			-010	27				
26			-015	29				
27			-021	33				
28			FSD270000-492B	54				
29			-492C	62				

Reviewed By: RR Date: 5/2/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2654

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5/2/05	5117495	F5D250136-003	34	180	Pu	PR	PR
2			-003X	35				
3			-010	37				
4			-015	38				
5			-021	39				
6			F5D270000-495B	65				
7			" -495C	66				
8		5117498	F5D250136-003	40		Pu		PR
9			-003X	41				
10			-010	42				
11			F5D270000-498B	67				
12			" -498C	68				
13		5117498	F5D252136-015	25	180	U	CH	
14		"	" -021	26	"	"	"	
15	5/3/5	Daily	Pulses	1-74	1 min	QA	QA	—
16	5/3/05	5119118	F5D270289-001	25	180	TH	PR	
17			-001X	26				
18			-002	27				
19			-003	29				
20			-004	33				
21			-005	34				
22			-006	35				
23			-007	37				
24			-008	38				
25			-009	39				
26			-010	40				
27			-011	41				
28			-012	42				
29			-013	1				

Reviewed By: RR Date: 5/3/05

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

LL HOP 5/12
Rack 490 mm

STL

Radiochemistry Prep Report

Alpha Spectroscopy

Batch # 5113068

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Prepped Routine Level 1 Sigma

General Prep Information

Method	Tracer ID	Aliquot	Isotope	Reference Date	Activity	Units	Analyst
Iso PLUTONIUM (LONG CT) NAS & DOE MOD							
	Rad04-0062	0.1	Pu-242	8/1/1999	8.45E+01	dpm/mL	402580

Weights

Lot ID	Work Order #	Geometry	Aliquot	Dilution	Adj Aliquot	
F5D210345-001	G8WNH1AD	Planchette, 44mm	2	1	2 g	13
F5D210345-001S	G8WNH1AL	Planchette, 44mm	2.0001	1	2.0001 g	15
F5D210345-001X	G8WNH1AP	Planchette, 44mm	2.0001	1	2.0001 g	16
F5D210345-002	G8WNN1AD	Planchette, 44mm	2.0035	1	2.0035 g	17
F5D210345-003	G8WNQ1AD	Planchette, 44mm	2.0003	1	2.0003 g	18
F5D210345-004	G8WNR1AD	Planchette, 44mm	2.0029	1	2.0029 g	19
F5D210345-005	G8WNV1AD	Planchette, 44mm	2.0047	1	2.0047 g	20
F5D210345-006	G8WNW1AD	Planchette, 44mm	2.0012	1	2.0012 g	21
F5D210345-007	G8WN01AD	Planchette, 44mm	2.0015	1	2.0015 g	22
F5D210345-008	G8WN11AD	Planchette, 44mm	2.001	1	2.001 g	23
F5D210345-009	G8WN21AD	Planchette, 44mm	2.0007	1	2.0007 g	24
F5D210345-010	G8WN31AD	Planchette, 44mm	2.0039	1	2.0039 g	49
F5D210345-011	G8WN41AD	Planchette, 44mm	2.0007	1	2.0007 g	50
F5D210345-012	G8WN51AD	Planchette, 44mm	2.0038	1	2.0038 g	53
F5D210345-013	G8WN71AD	Planchette, 44mm	2.0028	1	2.0028 g	56
F5D210345-014	G8WN91AD	Planchette, 44mm	2.0003	1	2.0003 g	60
F5D210345-015	G8WPC1AD	Planchette, 44mm	2.0065	1	2.0065 g	61
F5D230000-0688	G83F91AA	Planchette, 44mm	2	1	2 g	57

RC= 1
RC= 2

Coprecipitated By	Precip Date	Spiked By	Spike Verified By	Spike Date
5-2-05		KH for MPM	MPM	4-23-05
Analyst's Signature	Date		Reviewed By	Date
reprint 5/2/05				5-6-05

SEVERN TRENT **STL**

Radiochemistry Prep Report

Alpha Spectroscopy

Batch # 5113068

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

F5D230000-068C	G83F91AC	Planchette, 44mm	0.203	1	0.203 g

[redacted]

Spike Information

Lot ID	Work Order #	Standard ID	Aliquot	Isotope	Reference Date	Activity	Units
F5D210345-001S	G8WNH1AL	RAD03-0069	0.1	Pu-239/40	9/11/2003	7.21E-01	pCi/g
F5D210345-001S	G8WNH1AL	RAD03-0069	0.1	Pu-238	9/11/2003	7.45E-01	pCi/g
F5D230000-068C	G83F91AC	PEM-1 Iso-Pu	0.203	Pu-239/40	4/12/2002	4.10E+01	pCi/g
F5D230000-068C	G83F91AC	PEM-1 Iso-Pu	0.203	Pu-238	4/12/2002	8.02E+00	pCi/g

Standard Operating Procedures

	SOP Number	Rev	Title
☐	STL-RC-0002	3	Planchet Preparation For Radiochemistry And Radiological Screening Analysis
☐	STL-RC-0003	5	Drying And Grinding Of Soil And Solid Samples
☐	STL-RC-0004	7	Preparation Of Soil, Sludge, And Filter Paper Samples For Radiochemical Analysis
☐	STL-RC-0090	4	Preparation Of Samples For Sequential Determination Of Isotopic Americium, Curium, Neptunium, Plutonium, Thorium, And Uranium In Aqueous Samples
☐	STL-RC-0100	7	Actinide Coprecipitation
☐	STL-RC-0240	3	Isotopic Americium, Curium, Plutonium, Thorium, and Uranium In Water, Soil, Sludge and Filters by Eichrome Separation Resin
☐	STL-RC-0241	1	Isotopic Americium, Plutonium, Curium, and Uranium in Water, Soil, Sludge and Filters by Eichrome Uteva and Tru Resins
☑	STL-RD-0201	2	Daily Operations Of An Alpha Spectroscopy System
☑	STL-RD-0203	1	Calibration And Maintenance Of A Alpha Spectroscopy System

(Check all that apply)

Coprecipitated By	Precip Date	Spiked By	Spike Verified By	Spike Date
5-2-05				4-23-05
Analyst's Signature	Date		Reviewed By	Date
5-2-05				5-6-05

reprint 5/6/05

St. Louis Laboratory
13715 Rider Trail North
Earth City, MO 63045-1205

Alpha Spectroscopy Quality Assurance Worksheet

Batch: 5113068

F5D230000-068C Recovery Summary			
Isotope	Certified Activity	Observed Activity	% Recovery
Pu-238	8.02E+00	7.21E+00	90%
Pu-239	4.10E+01	3.99E+01	97%

F5D210345-001 Duplicate Summary			
Isotope	Sample Activity	Duplicate Activity	RER
Pu-238	<MDA	<MDA	N/A
Pu-239	3.60E-01	4.56E-01	1.4

F5D210345-001 Spike Summary				
Isotope	Spike Activity	Sample Activity	Spike Added	% Recovery
Pu-238	7.73E-01	0.00E+00	7.45E-01	104%
Pu-239	1.30E+00	3.60E-01	7.21E-01	130%

Comments:

Calculated By: DE DATE: 5/6/2005

Reviewed By: [signature] DATE: 5/9/05

STL St. Louis

Isotopic Actinide DLC calculation when decay and ingrowth calculations are not required.

Sample ID	Isotope	Total Bkgd Cts	L/g Sample Volume	decimal det. eff.	minutes ct. length	decimal yield	decimal abundance	DLC
F5D210345-001	Pu238	7	2	0.2679	400	0.9867	0.999	0.0131
F5D210345-001	Pu239/240	1	2	0.2679	400	0.9867	0.999	0.0050
F5D210345-001S	Pu238	4	2.0001	0.2685	400	0.8766	0.999	0.0111
F5D210345-001S	Pu239/240	1	2.0001	0.2685	400	0.8766	0.999	0.0056
F5D210345-001X	Pu238	5.5	2.0001	0.2868	400	0.8941	0.999	0.0120
F5D210345-001X	Pu239/240	0.5	2.0001	0.2868	400	0.8941	0.999	0.0036
F5D210345-002	Pu238	2.5	2.0035	0.2657	400	0.5651	0.999	0.0138
F5D210345-002	Pu239/240	0.5	2.0035	0.2657	400	0.5651	0.999	0.0062
F5D210345-003	Pu238	2.5	2.0003	0.2583	400	1.0087	0.999	0.0080
F5D210345-003	Pu239/240	1.5	2.0003	0.2583	400	1.0087	0.999	0.0062
F5D210345-004	Pu238	3.5	2.0029	0.2776	400	0.9462	0.999	0.0093
F5D210345-004	Pu239/240	0	2.0029	0.2776	400	0.9462	0.999	0.0000
F5D210345-005	Pu238	16.5	2.0047	0.2969	400	0.8088	0.999	0.0220
F5D210345-005	Pu239/240	3	2.0047	0.2969	400	0.8088	0.999	0.0094
F5D210345-006	Pu238	5	2.0012	0.2649	400	1.0053	0.999	0.0110
F5D210345-006	Pu239/240	1.5	2.0012	0.2649	400	1.0053	0.999	0.0060
F5D210345-007	Pu238	3.5	2.0015	0.2569	400	0.925	0.999	0.0103
F5D210345-007	Pu239/240	0	2.0015	0.2569	400	0.925	0.999	0.0000
F5D210345-008	Pu238	4.5	2.001	0.2721	400	0.965	0.999	0.0106
F5D210345-008	Pu239/240	1	2.001	0.2721	400	0.965	0.999	0.0050
F5D210345-009	Pu238	3	2.0007	0.2598	400	0.8013	0.999	0.0109
F5D210345-009	Pu239/240	1	2.0007	0.2598	400	0.8013	0.999	0.0063
F5D210345-010	Pu238	7.5	2.0039	0.274	400	0.8508	0.999	0.0154
F5D210345-010	Pu239/240	0	2.0039	0.274	400	0.8508	0.999	0.0000
F5D210345-011	Pu238	6	2.0007	0.2631	400	0.9768	0.999	0.0125
F5D210345-011	Pu239/240	1.5	2.0007	0.2631	400	0.9768	0.999	0.0062
F5D210345-012	Pu238	3	2.0038	0.2762	400	0.8537	0.999	0.0096
F5D210345-012	Pu239/240	0	2.0038	0.2762	400	0.8537	0.999	0.0000
F5D210345-013	Pu238	3.5	2.0028	0.2648	400	0.9181	0.999	0.0101
F5D210345-013	Pu239/240	0.5	2.0028	0.2648	400	0.9181	0.999	0.0038
F5D210345-014	Pu238	2.5	2.0003	0.2841	400	0.9705	0.999	0.0075
F5D210345-014	Pu239/240	0.5	2.0003	0.2841	400	0.9705	0.999	0.0034

STL St. Louis

F5D210345-015	Pu238	2	2.0065	0.2752	400	0.8627	0.999	0.0078
F5D210345-015	Pu239/240	0	2.0065	0.2752	400	0.8627	0.999	0.0000
F5D230000-068B	Pu238	1	2	0.2738	400	0.9442	0.999	0.0051
F5D230000-068B	Pu239/240	0.5	2	0.2738	400	0.9442	0.999	0.0036
F5D230000-068C	Pu238	0	0.203	0.2761	400	0.9282	0.999	0.0000
F5D230000-068C	Pu239/240	0	0.203	0.2761	400	0.9282	0.999	0.0000

Calculated by: RR Date: 5/6/05

Reviewed by: [signature] Date: 5/9/05

Alpha Spectroscopy Uranium

ALPHA SPECTROSCOPY

Data Reports
Results Reports
Channel by Channel Report

Calibration Data

Instrument Checks

Batch Summary Sheets
Run Logs
Yield Summary(ies)
Batch Yield Plot(s)

Raw Data
Prep Data Sheet(s)
QC Acceptance Sheet(s)
LCS Standard Sheet(s)
Tracer Standard Sheets

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 11:11:09AM 5/12/2005

Sample

Sample Name: F5D210345-001
SampleType: Sample
WRKNO: G8WNH3AC
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 1.0015g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5131544
:
Description:

Client Name: Undefined
Client Contact:

Tracer

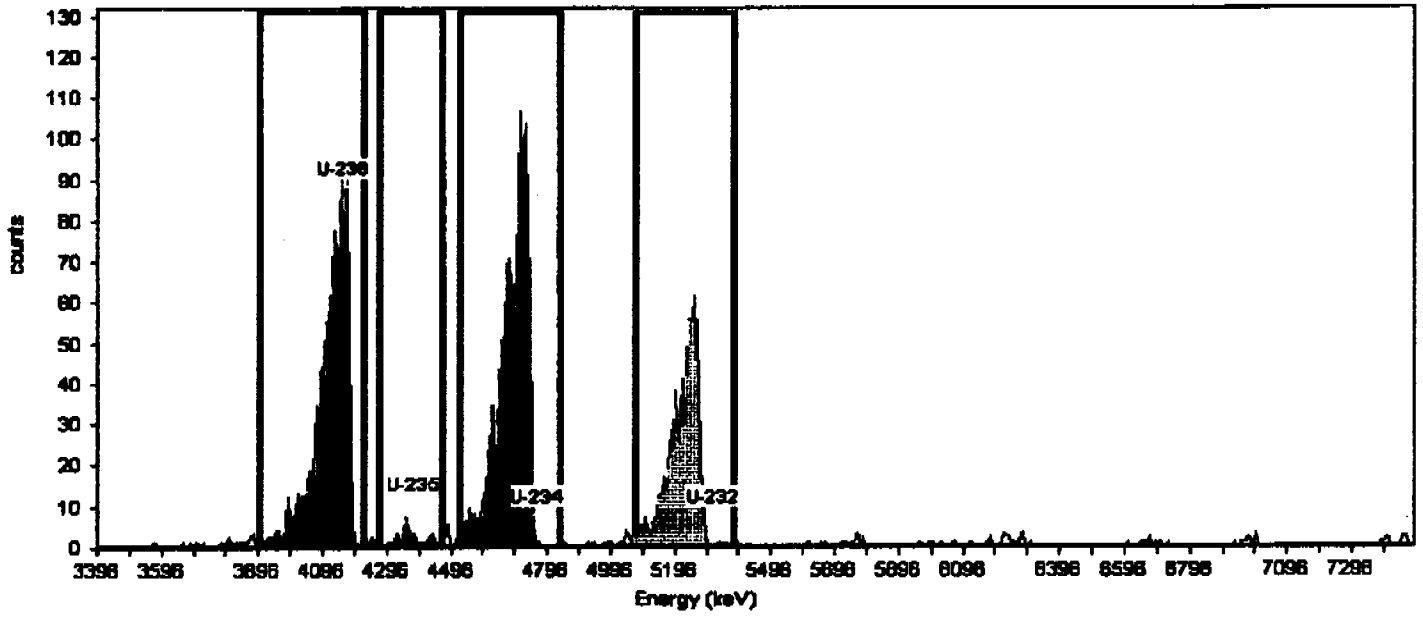
Tracer Name: U232_RAD04-0051
Tracer Activity: 110.00 DPM/mL x (Vol.)0.10 mL = 11.00 DPM
Tracer Ref. Date: 9/16/1997 12:00:08PM

Tracer Nuclide: U-232
Tracer Recovery: 100.31%

Acquisition

Detector: AV1
Serial Number: 41-158W6
Acquisition Start Date: 5/12/2005 4:56:27AM
Live Time: 240.00 min.
Real Time: 240.03 min.
Background Date: 4/26/2005 10:37:36AM
Background Info: Sample: AV1; Det: AV1; Spectrum #1; Apr-26-2005 10:37

Calibration Name: April2005_AV1
Calibration Date: 4/28/2005 7:27:38PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.40% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 5/11/2005 11:08:35PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
U-232	5312.808	5073.234	5378.146	84.295	100.1	677.00	2.4000	675	4.963E+000	1.933E-001	2.131E-002	6.247E-002
U-238	4158.500	3897.147	4223.838	85.179	100.0	1,121.00	0.3000	1,121	7.642E+000	3.770E-001	7.005E-003	3.246E-002
U-235	4376.294	4267.397	4463.412	21.938	80.2	47.00	0.0000	47	3.996E-001	6.096E-002	0.000E+000	2.301E-002
U-234	4761.063	4521.490	4833.661	89.099	99.8	1,232.00	1.5000	1,231	8.408E+000	4.080E-001	1.570E-002	4.988E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
11:12:50AM 5/12/2005

Analyst: 60040

Sample

Sample Name: F5D210345-002
SampleType: Sample
WRKNO: G8WNN3AC
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 1.0003g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5131544
:
Description:

Client Name: Undefined
Client Contact:

Tracer

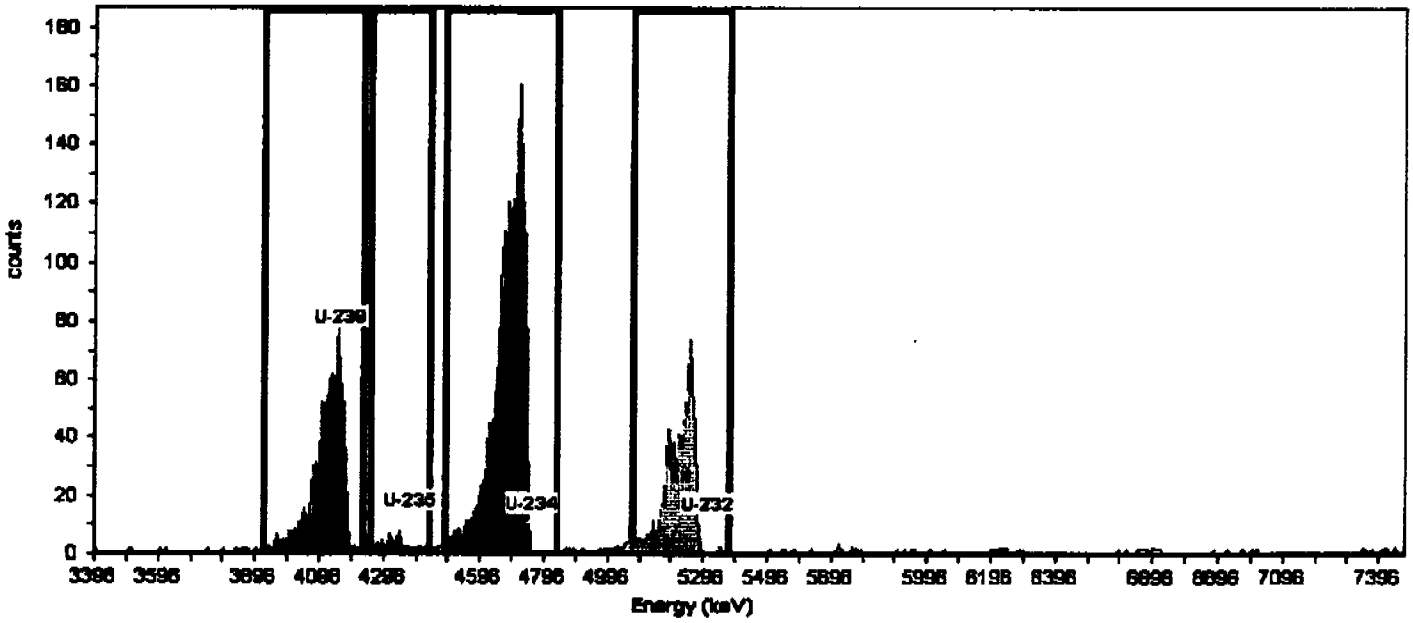
Tracer Name: U232_RAD04-0051
Tracer Activity: 110.00 DPM/mL x (Vol.)0.10 mL = 11.00 DPM
Tracer Ref. Date: 9/16/1997 12:00:08PM

Tracer Nuclide: U-232
Tracer Recovery: 105.64%

Acquisition

Detector: AV2
Serial Number: 41-158W7
Acquisition Start Date: 5/12/2005 4:56:29AM
Live Time: 240.00 min.
Real Time: 240.03 min.
Background Date: 4/26/2005 10:37:38AM
Background Info: Sample: AV2; Det: AV2; Spectrum #1; Apr-26-2005 10:37

Calibration Name: April2005_AV2
Calibration Date: 4/28/2005 7:27:46PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 26.31% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 5/11/2005 11:08:35PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
U-238	4158.500	3918.927	4231.098	80.900	100.0	857.00	0.9000	856	5.780E+000	3.003E-001	1.201E-002	4.229E-002
U-235	4376.294	4252.877	4434.372	21.598	80.2	55.00	0.6000	54	4.579E-001	6.527E-002	1.223E-002	4.724E-002
U-234	4761.063	4485.191	4833.661	88.856	99.8	1,840.00	0.9000	1,839	1.244E+001	5.665E-001	1.204E-002	4.238E-002
U-232	5312.808	5073.234	5378.146	87.824	100.1	684.00	1.8000	682	5.233E+000	2.028E-001	1.827E-002	5.619E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
11:13:00AM 5/12/2005

Analyst: 60040

Sample

Sample Name: F5D210345-003
SampleType: Sample
WRKNO: G8WNQ3AC
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 1.0043g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5131544
:
Description:

Client Name: Undefined
Client Contact:

Tracer

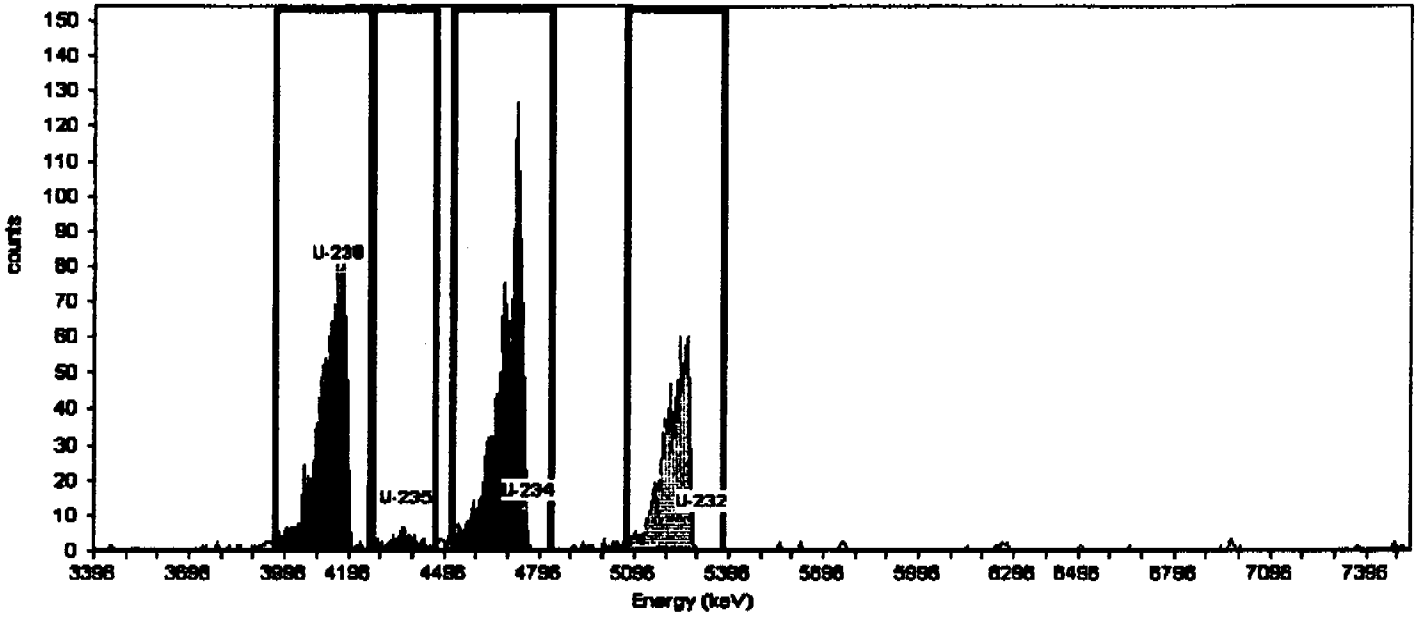
Tracer Name: U232_RAD04-0051
Tracer Activity: 110.00 DPM/mL x (Vol.)0.10 mL = 11.00 DPM
Tracer Ref. Date: 9/16/1997 12:00:08PM

Tracer Nuclide: U-232
Tracer Recovery: 98.72%

Acquisition

Detector: AV3
Serial Number: 41-158X5
Acquisition Start Date: 5/12/2005 4:56:30AM
Live Time: 240.00 min.
Real Time: 240.03 min.
Background Date: 4/26/2005 10:37:40AM
Background Info: Sample: AV3; Det: AV3; Spectrum #1; Apr-26-2005 10:37

Calibration Name: April2005_AV3
Calibration Date: 4/28/2005 7:27:53PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.19% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 5/11/2005 11:08:35PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
U-238	4158.500	3962.485	4260.137	87.065	100.0	1,007.00	0.0000	1,007	7.012E+000	3.558E-001	0.000E+000	1.884E-002
U-235	4376.294	4267.397	4463.412	27.639	80.2	55.00	0.3000	55	4.749E-001	6.727E-002	8.919E-003	4.133E-002
U-234	4761.063	4521.490	4833.661	83.616	99.8	1,179.00	0.9000	1,178	8.220E+000	4.053E-001	1.241E-002	4.371E-002
U-232	5312.808	5073.234	5378.146	91.764	100.1	660.00	1.2000	659	4.871E+000	1.919E-001	1.539E-002	5.104E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
11:13:45AM 5/12/2005

Analyst: 60040

Sample

Sample Name: F5D210345-004
SampleType: Sample
WRKNO: G8WNR3AC
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 1.0156g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5131544
:
Description:

Client Name: Undefined
Client Contact:

Tracer

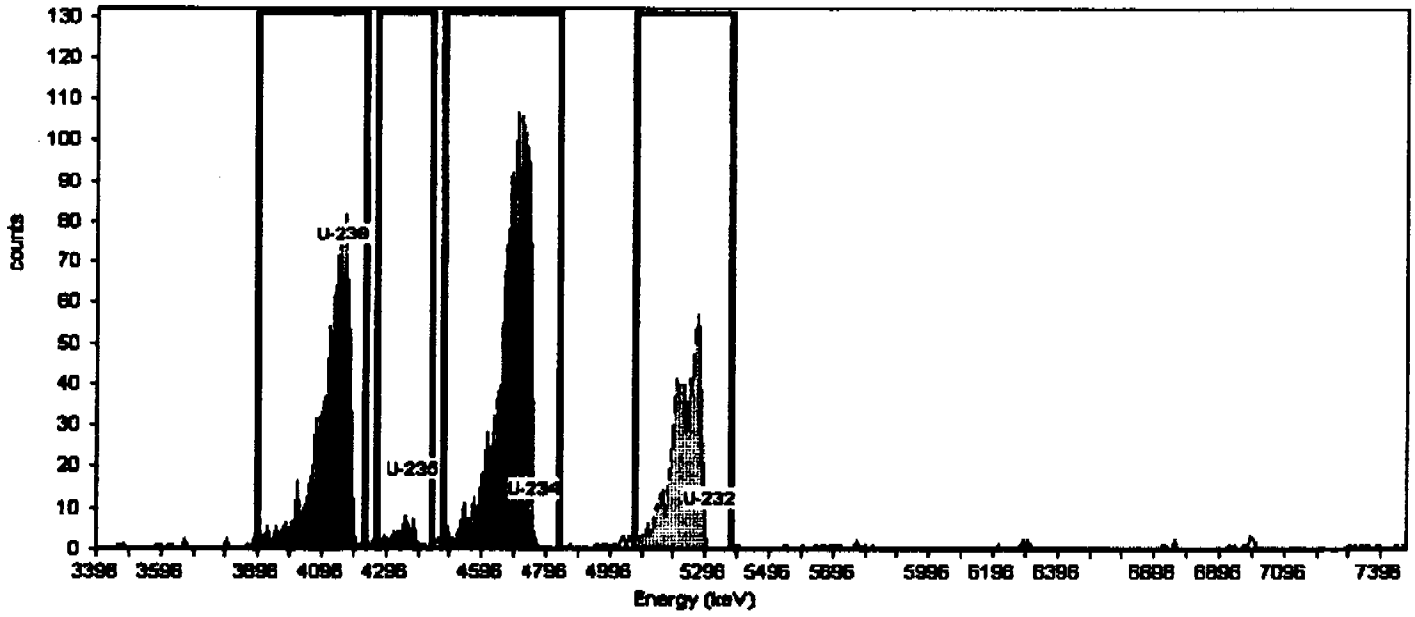
Tracer Name: U232_RAD04-0051
Tracer Activity: 110.00 DPM/mL x (Vol.)0.10 mL = 11.00 DPM
Tracer Ref. Date: 9/16/1997 12:00:08PM

Tracer Nuclide: U-232
Tracer Recovery: 98.13%

Acquisition

Detector: AV4
Serial Number: 41-172B5
Acquisition Start Date: 5/12/2005 4:56:02AM
Live Time: 240.00 min.
Real Time: 240.03 min.
Background Date: 4/26/2005 10:37:42AM
Background Info: Sample: AV4; Det: AV4; Spectrum #1; Apr-26-2005 10:37

Calibration Name: April2005_AV4
Calibration Date: 4/28/2005 7:28:00PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.07% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 5/11/2005 11:08:35PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
U-238	4158.500	3889.887	4231.098	78.979	100.0	1,003.00	0.6000	1,002	6.973E+000	3.547E-001	1.011E-002	3.903E-002
U-235	4376.294	4267.397	4434.372	65.502	80.2	57.00	0.0000	57	4.944E-001	6.893E-002	0.000E+000	2.347E-002
U-234	4761.063	4470.671	4833.661	90.346	99.8	1,431.00	0.3000	1,431	9.972E+000	4.770E-001	7.160E-003	3.318E-002
U-232	5312.808	5073.234	5378.146	98.909	100.1	653.00	0.9000	652	4.788E+000	1.893E-001	1.331E-002	4.687E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
3:02:45PM 5/12/2005

Analyst: 60040

Sample

Sample Name: F5D210345-005
SampleType: Sample
WRKNO: G8WNV3AC
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #3 Analysis #1
Sample Weight : 1.0006g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5131544
:
Description:

Client Name: Undefined
Client Contact:

Tracer

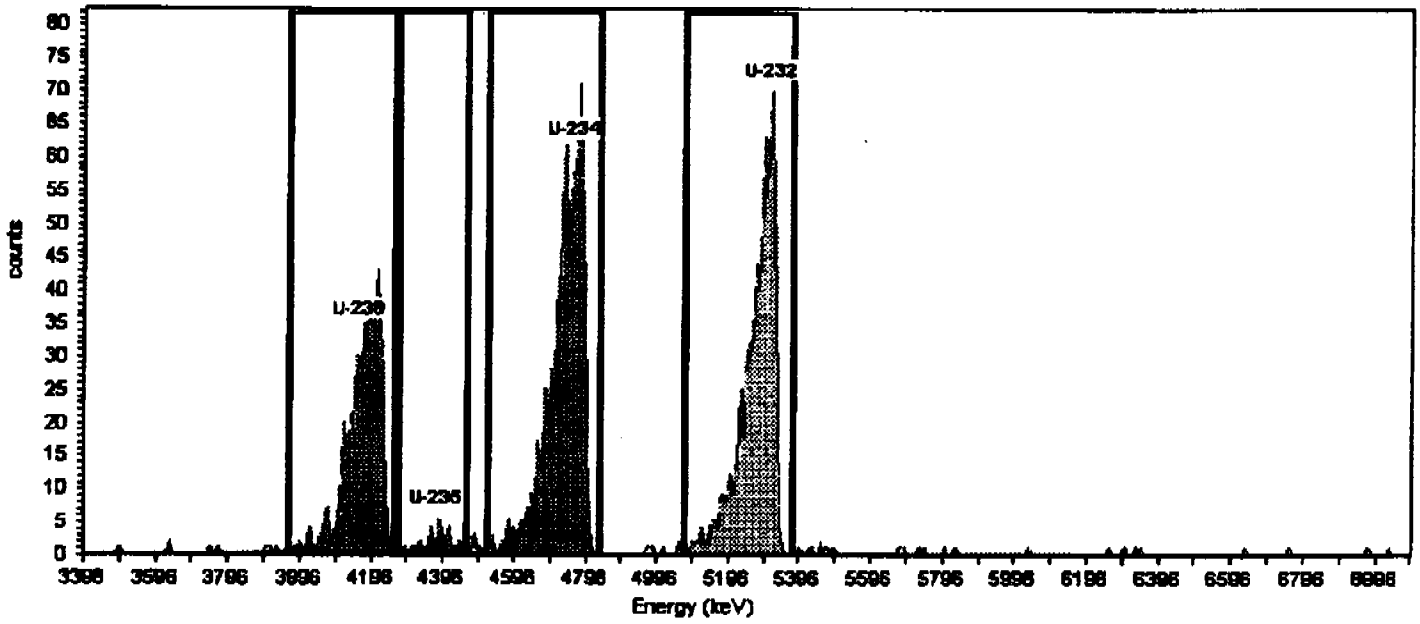
Tracer Name: U232_RAD04-0051
Tracer Activity: 110.00 DPM/mL x (Vol.)0.10 mL = 11.00 DPM
Tracer Ref. Date: 9/16/1997 12:00:08PM

Tracer Nuclide: U-232
Tracer Recovery: 102.01%

Acquisition

Detector: AV20
Serial Number: 41-172R2
Acquisition Start Date: 5/12/2005 11:02:50AM
Live Time: 240.00 min.
Real Time: 240.02 min.
Background Date: 4/26/2005 10:38:06AM
Background Info: Sample: AV20; Det: AV20; Spectrum #1; Apr-26-2005 10:38

Calibration Name: April2005_AV20
Calibration Date: 4/29/2005 3:52:07PM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 29.89% +/- 0.31% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 5/11/2005 11:08:35PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
U-238	4158.500	3982.486	4280.137	76.457	100.0	540.00	1.8000	538	3.311E+000	1.894E-001	1.548E-002	4.761E-002
U-235	4376.294	4267.397	4463.412	64.114	80.2	36.00	1.2000	35	2.669E-001	4.784E-002	1.576E-002	5.228E-002
U-234	4761.063	4521.490	4833.661	95.655	99.8	849.00	0.6000	848	5.230E+000	2.658E-001	8.955E-003	3.459E-002
U-232	5312.808	5073.234	5378.146	73.622	100.1	752.00	3.6000	748	5.051E+000	1.874E-001	2.355E-002	6.500E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
11:13:58AM 5/12/2005

Analyst: 60040

Sample

Sample Name: F5D210345-006
SampleType: Sample
WRKNO: G8WNW3AC
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 1.0012g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5131544
:
Description:

Client Name: Undefined
Client Contact:

Tracer

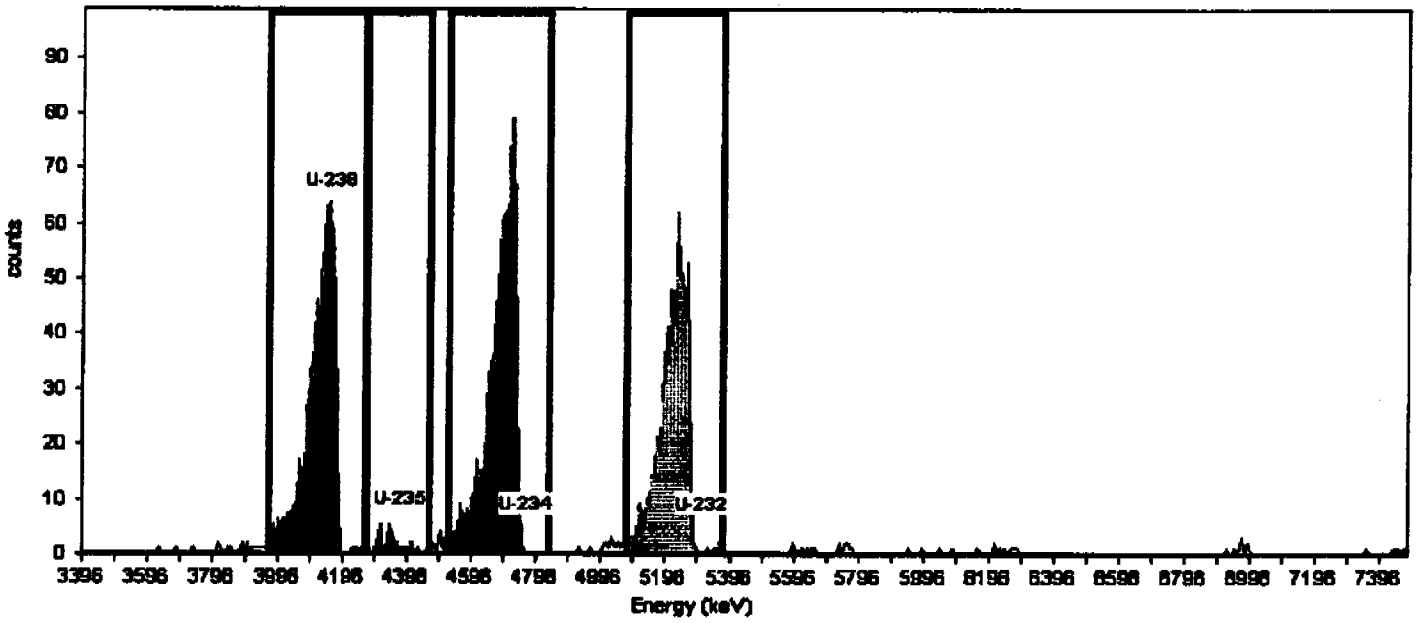
Tracer Name: U232_RAD04-0051
Tracer Activity: 110.00 DPM/mL x (Vol.)0.10 mL = 11.00 DPM
Tracer Ref. Date: 9/16/1997 12:00:08PM

Tracer Nuclide: U-232
Tracer Recovery: 103.99%

Acquisition

Detector: AV7
Serial Number: 41-158X6
Acquisition Start Date: 5/12/2005 4:56:06AM
Live Time: 240.00 min.
Real Time: 240.03 min.
Background Date: 4/26/2005 10:37:45AM
Background Info: Sample: AV7; Det: AV7; Spectrum #1; Apr-26-2005 10:37

Calibration Name: April2005_AV7
Calibration Date: 4/28/2005 11:43:07PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.23% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 5/11/2005 11:08:35PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
U-238	4158.500	3962.485	4260.137	77.324	100.0	755.00	0.9000	754	4.992E+000	2.667E-001	1.178E-002	4.147E-002
U-235	4376.294	4267.397	4463.412	56.089	80.2	32.00	0.0000	32	2.641E-001	4.853E-002	0.000E+000	2.234E-002
U-234	4761.063	4521.490	4833.661	80.295	99.8	835.00	0.3000	835	5.537E+000	2.890E-001	6.814E-003	3.158E-002
U-232	5312.808	5073.234	5378.146	84.906	100.1	702.00	6.9000	695	5.147E+000	1.991E-001	3.508E-002	8.943E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
11:14:37AM 5/12/2005

Analyst: 60040

Sample

Sample Name: F5D210345-007
SampleType: Sample
WRKNO: G8WN03AC
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 1.0035g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5131544
:
Description:

Client Name: Undefined
Client Contact:

Tracer

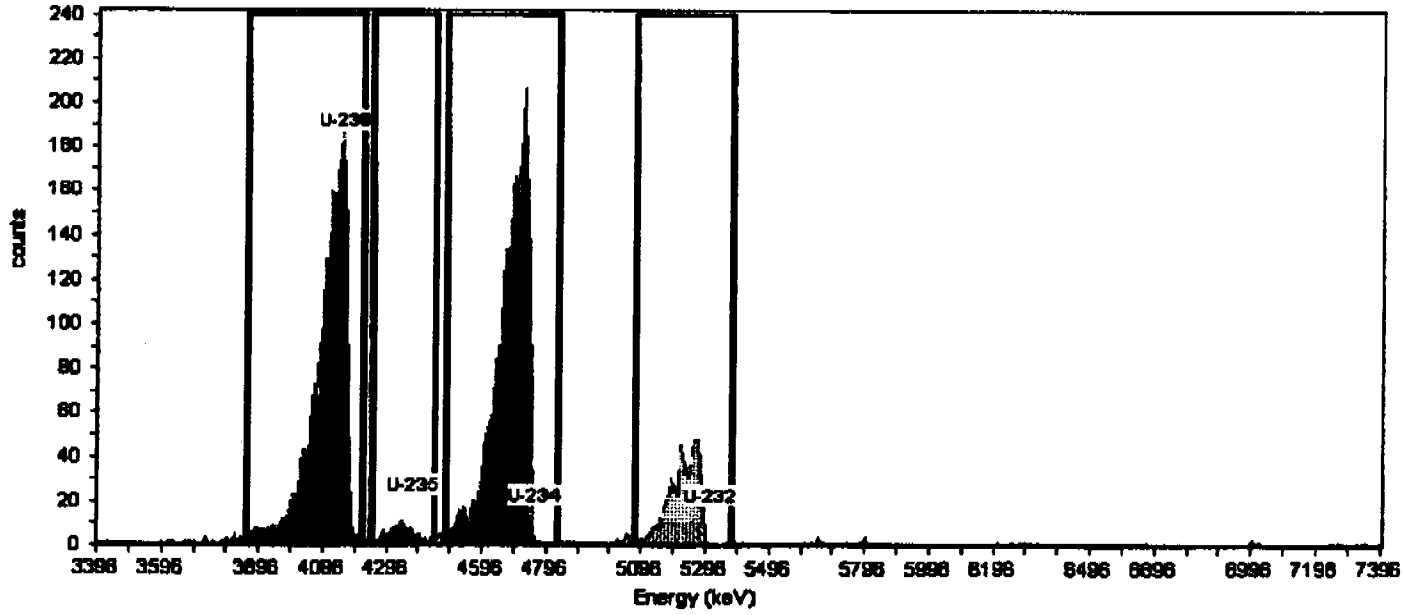
Tracer Name: U232_RAD04-0051
Tracer Activity: 110.00 DPM/mL x (Vol.)0.10 mL = 11.00 DPM
Tracer Ref. Date: 9/16/1997 12:00:08PM

Tracer Nuclide: U-232
Tracer Recovery: 88.63%

Acquisition

Detector: AV8
Serial Number: 41-158X1
Acquisition Start Date: 5/12/2005 4:56:02AM
Live Time: 240.00 min.
Real Time: 240.03 min.
Background Date: 4/26/2005 10:37:46AM
Background Info: Sample: AV8; Det: AV8; Spectrum #1; Apr-26-2005 10:37

Calibration Name: April2005_AV8
Calibration Date: 4/28/2005 11:42:56PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 28.42% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 5/11/2005 11:08:35PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
U-238	4158.500	3853.588	4216.578	86.392	100.0	2,523.00	0.3000	2,523	1.873E+001	8.537E-001	7.628E-003	3.535E-002
U-235	4376.294	4245.618	4441.632	73.906	80.2	115.00	0.3000	115	1.062E+000	1.085E-001	9.511E-003	4.407E-002
U-234	4761.063	4477.931	4833.681	94.160	99.8	2,688.00	0.0000	2,688	2.000E+001	9.061E-001	0.000E+000	2.013E-002
U-232	5312.808	5073.234	5378.146	108.368	100.1	621.00	2.7000	618	4.377E+000	1.781E-001	2.461E-002	7.084E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040

3:02:49PM 5/12/2005

Sample

Sample Name: F5D210345-008
SampleType: Sample
WRKNO: G8WN13AC
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #3 Analysis #1
Sample Weight : 1.0001g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5131544
:
Description:

Client Name: Undefined
Client Contact:

Tracer

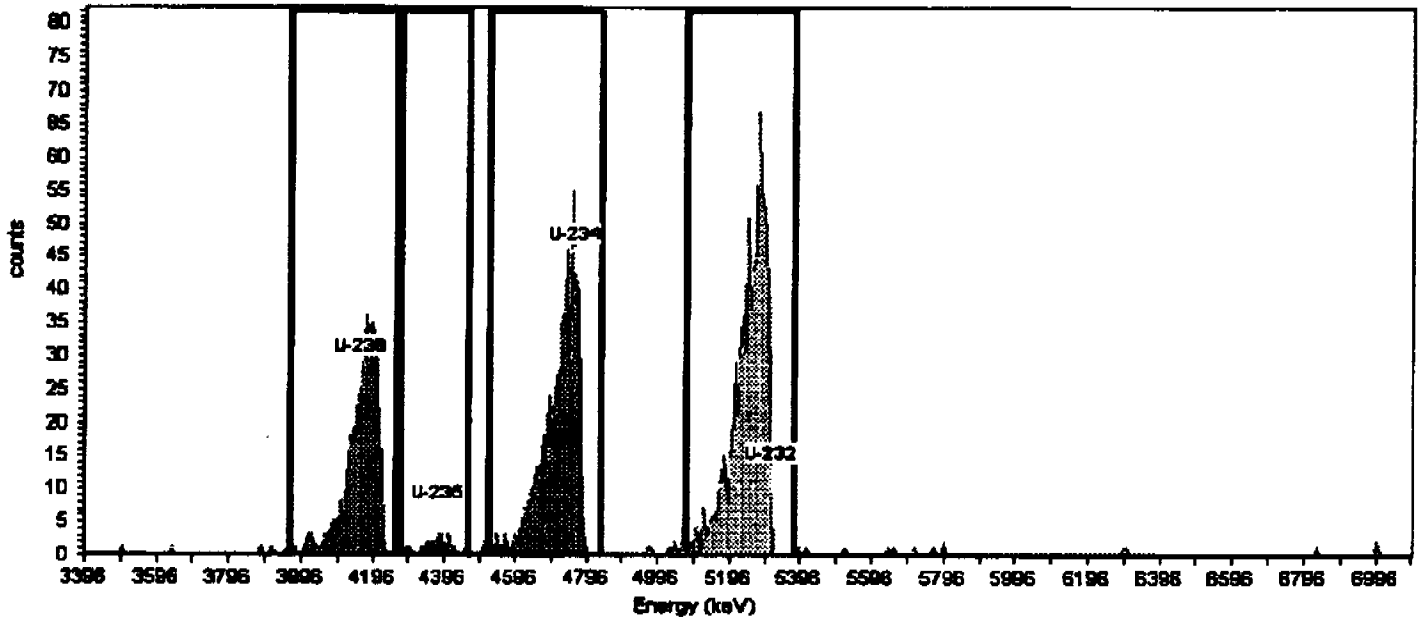
Tracer Name: U232_RAD04-0051
Tracer Activity: 110.00 DPM/mL x (Vol.)0.10 mL = 11.00 DPM
Tracer Ref. Date: 9/16/1997 12:00:08PM

Tracer Nuclide: U-232
Tracer Recovery: 108.26%

Acquisition

Detector: AV21
Serial Number: 41-172C7
Acquisition Start Date: 5/12/2005 11:02:51AM
Live Time: 240.00 min.
Real Time: 240.02 min.
Background Date: 4/26/2005 10:38:07AM
Background Info: Sample: AV21; Det: AV21; Spectrum #1; Apr-26-2005 10:38

Calibration Name: April2005_AV21
Calibration Date: 4/29/2005 6:14:46PM
Energy Cal Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 26.49% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 5/11/2005 11:08:35PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
U-238	4158.500	3962.485	4260.137	73.289	100.0	400.00	0.9000	399	2.612E+000	1.650E-001	1.165E-002	4.100E-002
U-235	4376.294	4267.397	4463.412	76.770	80.2	24.00	0.3000	24	1.934E-001	4.091E-002	8.383E-003	3.885E-002
U-234	4761.063	4521.490	4833.661	71.308	99.8	541.00	0.9000	540	3.542E+000	2.045E-001	1.167E-002	4.108E-002
U-232	5312.808	5073.234	5378.146	85.388	100.1	705.00	1.2000	704	5.364E+000	2.043E-001	1.446E-002	4.798E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
11:14:48AM 5/12/2005

Analyst: 60040

Sample

Sample Name: F5D210345-009
SampleType: Sample
WRKNO: G8WN23AC
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 1.0093g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5131544
:
Description:

Client Name: Undefined
Client Contact:

Tracer

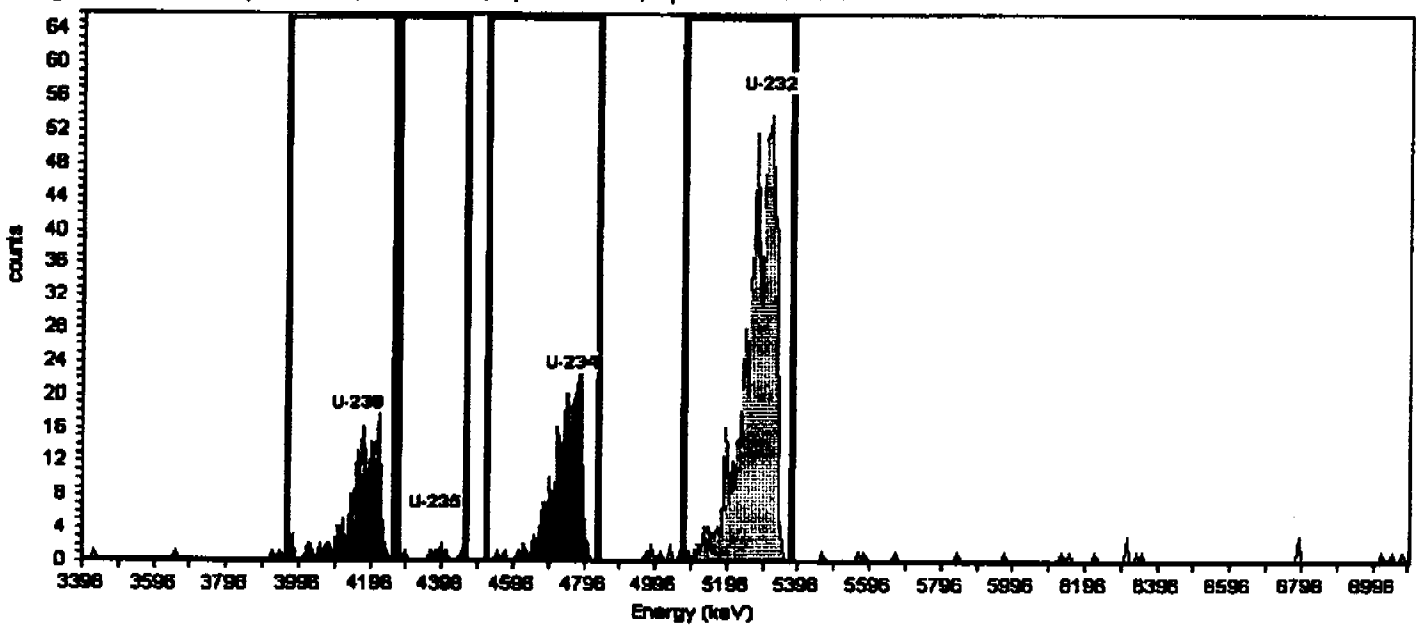
Tracer Name: U232_RAD04-0051
Tracer Activity: 110.00 DPM/mL x (Vol.)0.10 mL = 11.00 DPM
Tracer Ref. Date: 9/16/1997 12:00:08PM

Tracer Nuclide: U-232
Tracer Recovery: 100.90%

Acquisition

Detector: AV11
Serial Number: 41-172Q3
Acquisition Start Date: 5/12/2005 4:56:06AM
Live Time: 240.00 min.
Real Time: 240.02 min.
Background Date: 4/26/2005 10:37:50AM
Background Info: Sample: AV11; Det: AV11; Spectrum #1; Apr-26-2005 10:37

Calibration Name: April2005_AV11
Calibration Date: 4/29/2005 10:59:17AM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.81% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 5/11/2005 11:08:35PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
U-238	4158.500	3962.485	4260.137	86.510	100.0	180.00	0.0000	180	1.238E+000	1.047E-001	0.000E+000	1.860E-002
U-235	4376.294	4267.397	4463.412	73.596	80.2	7.00	0.3000	7	5.744E-002	2.327E-002	8.807E-003	4.081E-002
U-234	4761.063	4521.490	4833.661	81.604	99.8	232.00	0.9000	231	1.592E+000	1.227E-001	1.226E-002	4.316E-002
U-232	5312.808	5073.234	5378.146	91.953	100.1	666.00	2.1000	664	4.954E+000	1.947E-001	2.010E-002	6.021E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
11:14:57AM 5/12/2005

Analyst: 60040

Sample

Sample Name: F5D210345-010
SampleType: Sample
WRKNO: G8WN33AC
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 1.0178g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5131544
:
Description:

Client Name: Undefined
Client Contact:

Tracer

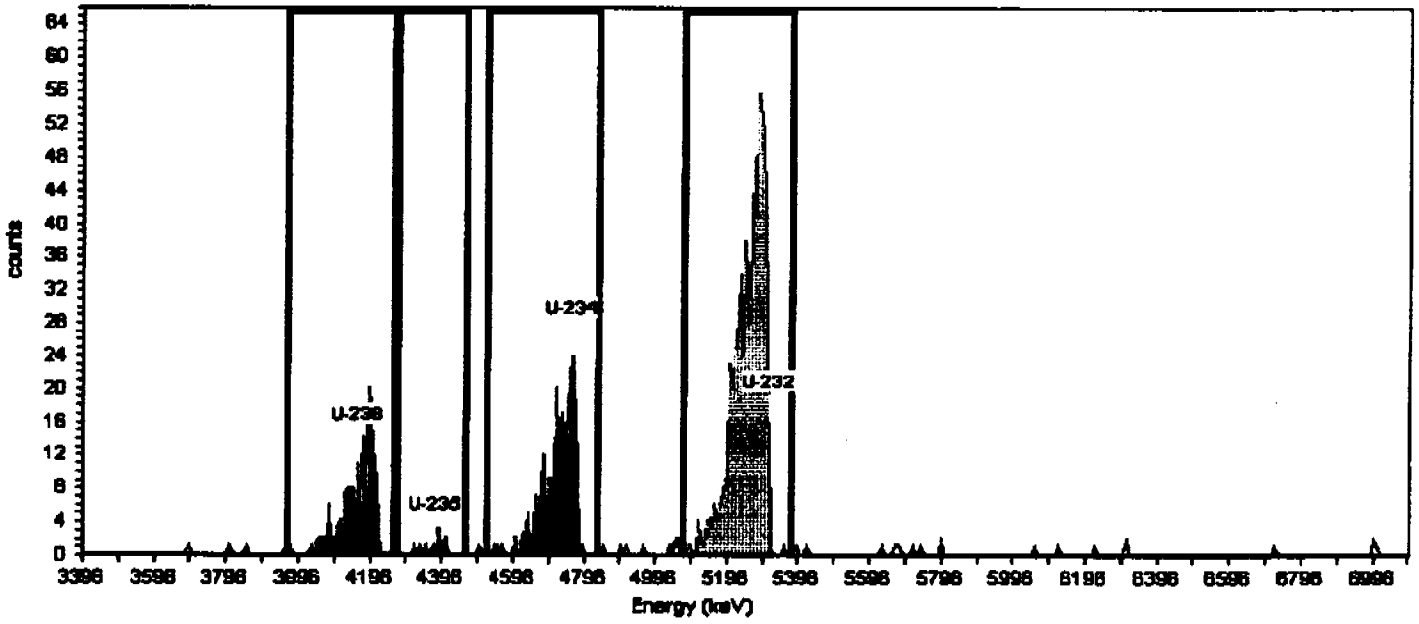
Tracer Name: U232_RAD04-0051
Tracer Activity: 110.00 DPM/mL x (Vol.)0.10 mL = 11.00 DPM
Tracer Ref. Date: 9/16/1997 12:00:08PM

Tracer Nuclide: U-232
Tracer Recovery: 94.37%

Acquisition

Detector: AV12
Serial Number: 41-172Q2
Acquisition Start Date: 5/12/2005 4:56:09AM
Live Time: 240.00 min.
Real Time: 240.02 min.
Background Date: 4/26/2005 10:37:53AM
Background Info: Sample: AV12; Det: AV12; Spectrum #1; Apr-26-2005 10:37

Calibration Name: April2005_AV12
Calibration Date: 4/29/2005 10:59:41AM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 26.42% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 5/11/2005 11:08:35PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
U-238	4158.500	3962.485	4260.137	52.128	100.0	156.00	0.9000	155	1.147E+000	1.040E-001	1.316E-002	4.634E-002
U-235	4376.294	4267.397	4463.412	39.419	80.2	10.00	0.0000	10	9.223E-002	3.082E-002	0.000E+000	2.496E-002
U-234	4761.063	4521.490	4833.661	78.582	99.8	234.00	0.6000	233	1.730E+000	1.340E-001	1.077E-002	4.159E-002
U-232	5312.808	5073.234	5378.146	90.857	100.1	614.00	2.1000	612	4.594E+000	1.879E-001	2.162E-002	6.478E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 11:15:06AM 5/12/2005

Sample

Sample Name: F5D210345-011
SampleType: Sample
WRKNO: G8WN43AC
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 1.0072g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5131544
:
Description:

Client Name: Undefined
Client Contact:

Tracer

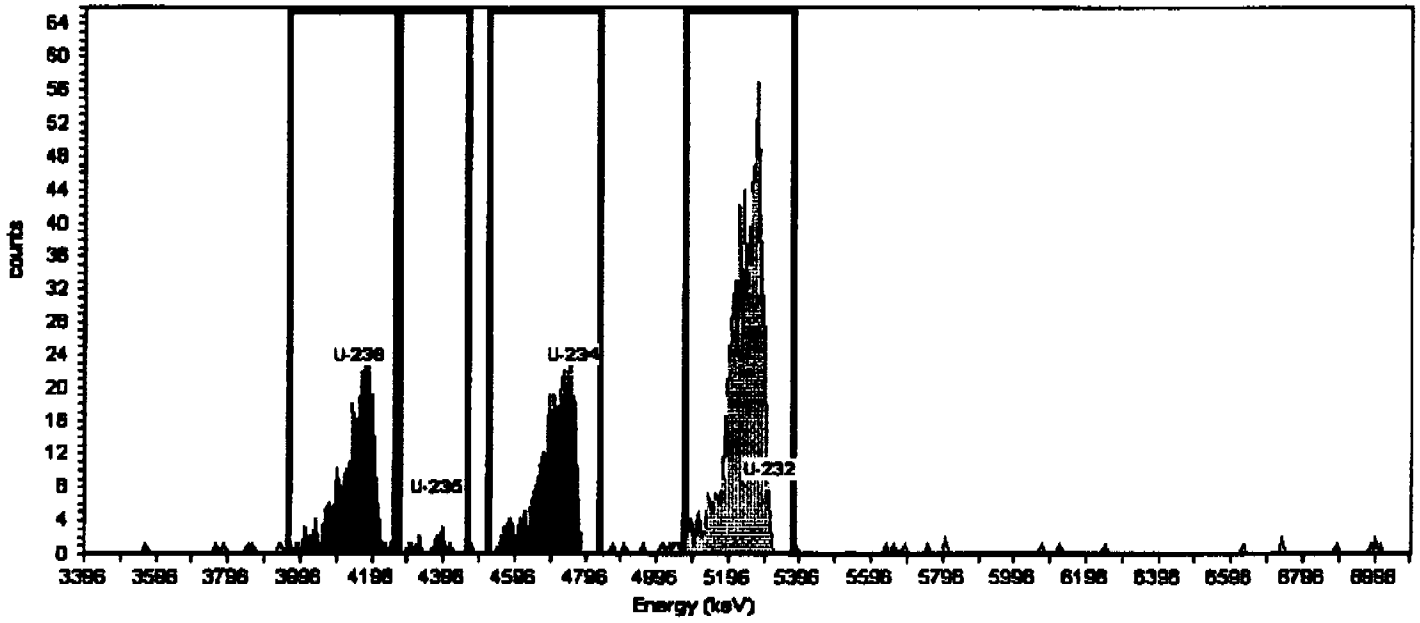
Tracer Name: U232_RAD04-0051
Tracer Activity: 110.00 DPM/mL x (Vol.)0.10 mL = 11.00 DPM
Tracer Ref. Date: 9/16/1997 12:00:08PM

Tracer Nuclide: U-232
Tracer Recovery: 95.79%

Acquisition

Detector: AV13
Serial Number: 41-172Q1
Acquisition Start Date: 5/12/2005 4:56:10AM
Live Time: 240.00 min.
Real Time: 240.02 min.
Background Date: 4/26/2005 10:37:55AM
Background Info: Sample: AV13; Det: AV13; Spectrum #1; Apr-26-2005 10:37

Calibration Name: April2005_AV13
Calibration Date: 4/29/2005 1:22:01PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 26.79% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 5/11/2005 11:08:35PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
U-238	4158.500	3962.485	4260.137	71.291	100.0	267.00	0.9000	266	1.932E+000	1.424E-001	1.292E-002	4.549E-002
U-235	4376.294	4267.397	4463.412	27.631	80.2	12.00	0.3000	12	1.059E-001	3.204E-002	9.302E-003	4.310E-002
U-234	4761.063	4521.490	4833.661	99.357	99.8	308.00	0.3000	308	2.239E+000	1.668E-001	7.475E-003	3.464E-002
U-232	5312.808	5073.234	5378.146	98.870	100.1	632.00	2.1000	630	4.713E+000	1.898E-001	2.123E-002	6.359E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040

11:15:15AM 5/12/2005

Sample

Sample Name: F5D210345-012
SampleType: Sample
WRKNO: G8WN53AC
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 1.0058g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5131544
:
Description:

Client Name: Undefined
Client Contact:

Tracer

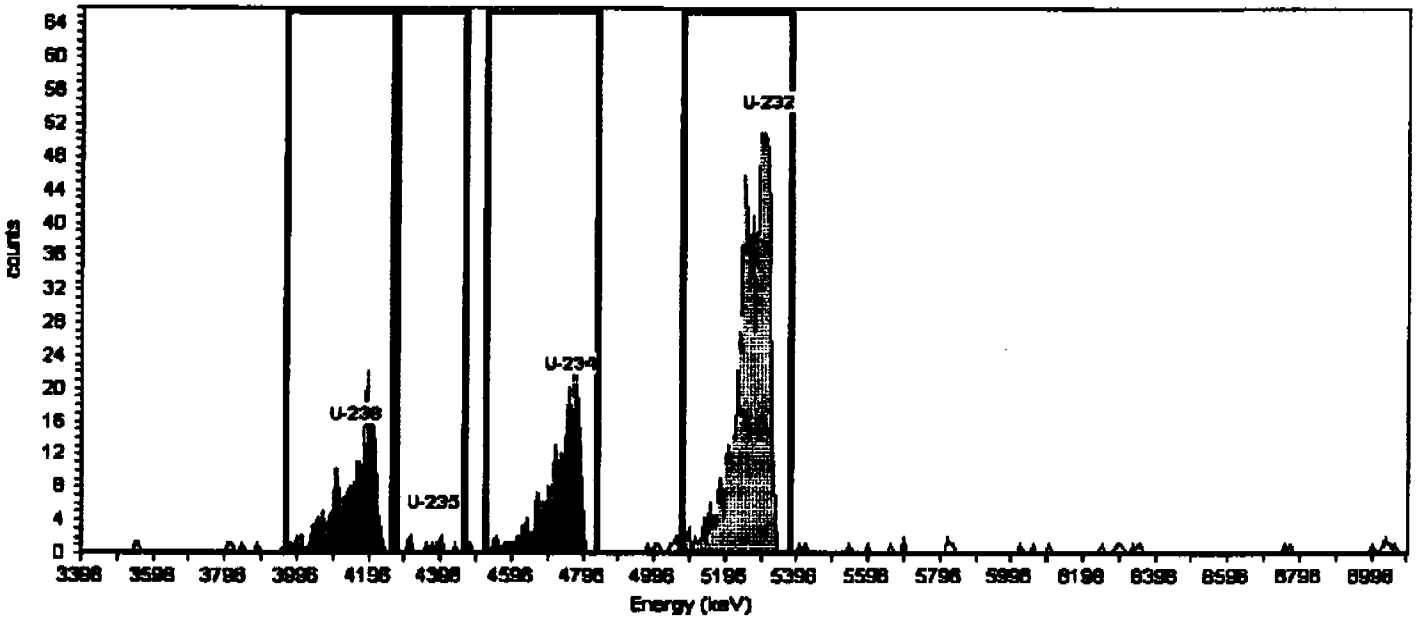
Tracer Name: U232_RAD04-0051
Tracer Activity: 110.00 DPM/mL x (Vol.)0.10 mL = 11.00 DPM
Tracer Ref. Date: 9/16/1997 12:00:08PM

Tracer Nuclide: U-232
Tracer Recovery: 97.55%

Acquisition

Detector: AV15
Serial Number: 41-172C5
Acquisition Start Date: 5/12/2005 4:56:13AM
Live Time: 240.00 min.
Real Time: 240.02 min.
Background Date: 4/26/2005 10:37:57AM
Background Info: Sample: AV15; Det: AV15; Spectrum #1; Apr-26-2005 10:37

Calibration Name: April2005_AV15
Calibration Date: 4/29/2005 1:23:09PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 26.85% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 5/11/2005 11:08:35PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
U-238	4158.500	3962.485	4260.137	75.932	100.0	204.00	0.0000	204	1.454E+000	1.176E-001	0.000E+000	1.928E-002
U-235	4376.294	4267.397	4463.412	102.643	80.2	10.00	0.0000	10	8.885E-002	2.968E-002	0.000E+000	2.404E-002
U-234	4761.063	4521.490	4833.661	68.052	99.8	236.00	0.6000	235	1.681E+000	1.290E-001	1.037E-002	4.007E-002
U-232	5312.808	5073.234	5378.146	93.720	100.1	644.00	1.2000	643	4.806E+000	1.917E-001	1.575E-002	5.223E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
11:15:27AM 5/12/2005

Analyst: 60040

Sample

Sample Name: F5D210345-013
SampleType: Sample
WRKNO: G8WN73AC
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 0.2002g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5131544
:
Description:

Client Name: Undefined
Client Contact:

Tracer

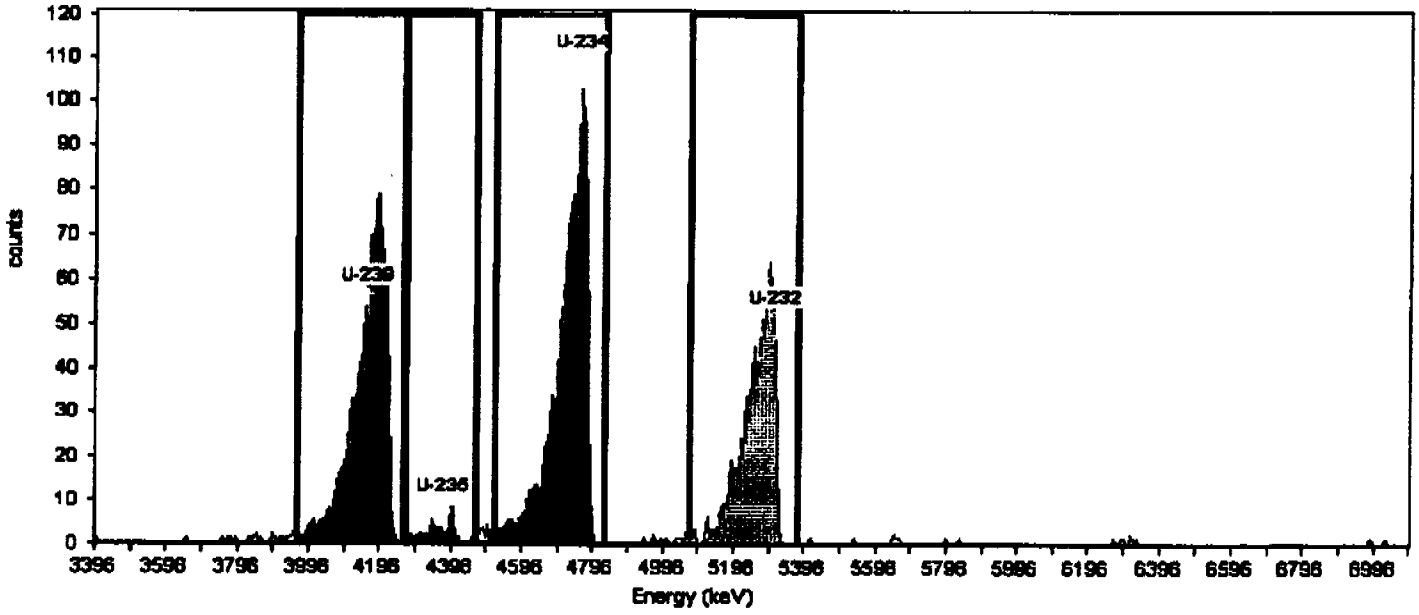
Tracer Name: U232_RAD04-0051
Tracer Activity: 110.00 DPM/mL x (Vol.)0.10 mL = 11.00 DPM
Tracer Ref. Date: 9/16/1997 12:00:08PM

Tracer Nuclide: U-232
Tracer Recovery: 102.69%

Acquisition

Detector: AV16
Serial Number: 41-172Q7
Acquisition Start Date: 5/12/2005 4:56:15AM
Live Time: 240.00 min.
Real Time: 240.02 min.
Background Date: 4/26/2005 10:37:58AM
Background Info: Sample: AV16; Det: AV16; Spectrum #1; Apr-26-2005 10:37

Calibration Name: April2005_AV16
Calibration Date: 4/29/2005 1:23:15PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²
Efficiency: 28.68% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 5/11/2005 11:08:35PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
U-234	4761.063	4521.490	4833.661	80.206	99.8	1,170.00	0.3000	1,170	3.731E+001	1.787E+000	3.277E-002	1.519E-001
U-232	5312.808	5073.234	5378.146	83.266	100.1	724.00	1.2000	723	2.542E+001	9.553E-001	7.036E-002	2.334E-001
U-238	4158.500	3962.485	4260.137	79.694	100.0	982.00	0.3000	982	3.125E+001	1.549E+000	3.271E-002	1.516E-001
U-235	4376.294	4267.397	4463.412	67.949	80.2	51.00	0.0000	51	2.025E+000	2.964E-001	0.000E+000	1.074E-001

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
11:15:37AM 5/12/2005

Analyst: 60040

Sample

Sample Name: F5D210345-014
SampleType: Sample
WRKNO: G8WN93AC
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 1.0011g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5131544
:
Description:

Client Name: Undefined
Client Contact:

Tracer

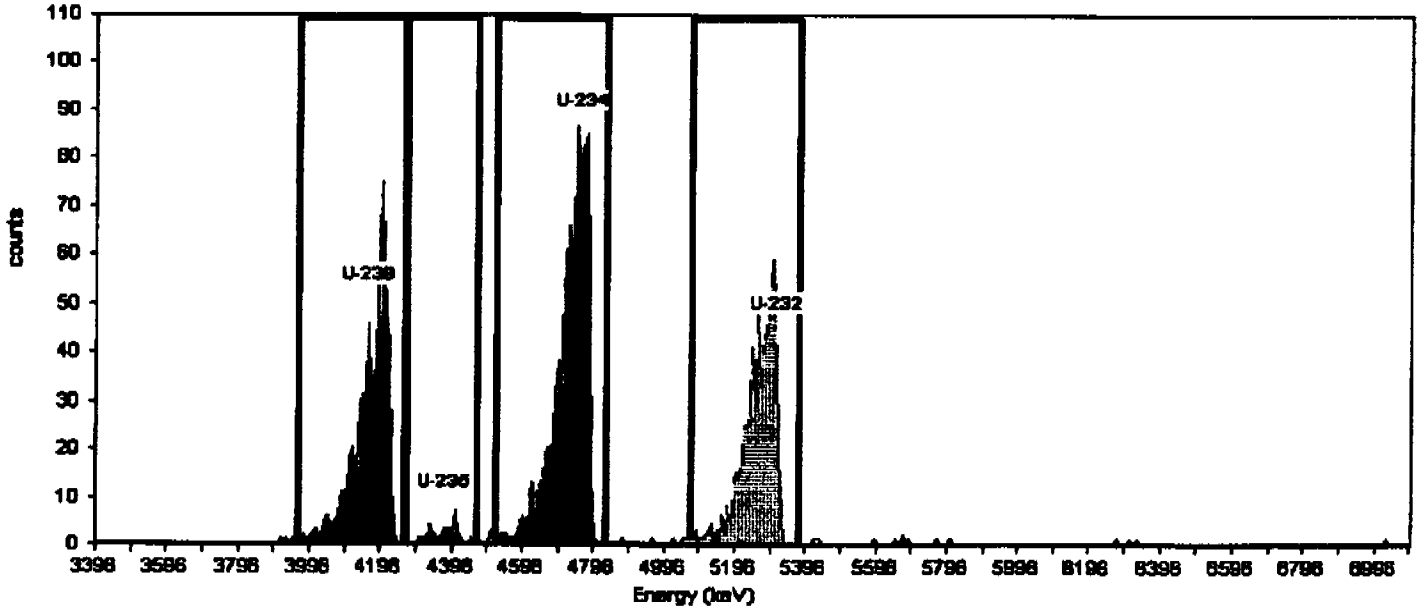
Tracer Name: U232_RAD04-0051
Tracer Activity: 110.00 DPM/mL x (Vol.)0.10 mL = 11.00 DPM
Tracer Ref. Date: 9/16/1997 12:00:08PM

Tracer Nuclide: U-232
Tracer Recovery: 99.46%

Acquisition

Detector: AV17
Serial Number: 41-172Q4
Acquisition Start Date: 5/12/2005 4:56:17AM
Live Time: 240.00 min.
Real Time: 240.03 min.
Background Date: 4/26/2005 10:38:00AM
Background Info: Sample: AV17; Det: AV17; Spectrum #1; Apr-26-2005 10:38

Calibration Name: April2005_AV17
Calibration Date: 4/29/2005 3:51:41PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.57% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 5/11/2005 11:08:35PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
U-238	4158.500	3962.485	4260.137	88.803	100.0	683.00	0.3000	683	4.843E+000	2.678E-001	7.288E-003	3.377E-002
U-235	4376.294	4267.397	4463.412	84.259	80.2	39.00	0.6000	38	3.397E-001	5.729E-002	1.285E-002	4.964E-002
U-234	4761.063	4521.490	4833.661	82.319	99.8	1,042.00	0.6000	1,041	7.403E+000	3.741E-001	1.033E-002	3.989E-002
U-232	5312.808	5073.234	5378.146	90.591	100.1	649.00	0.3000	649	4.923E+000	1.949E-001	7.839E-003	3.632E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040

11:15:44AM 5/12/2005

Sample

Sample Name: F5D210345-014X
SampleType: Sample
WRKNO: G8WN91AH
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 1.0008g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5131544
:
Description:

Client Name: Undefined
Client Contact:

Tracer

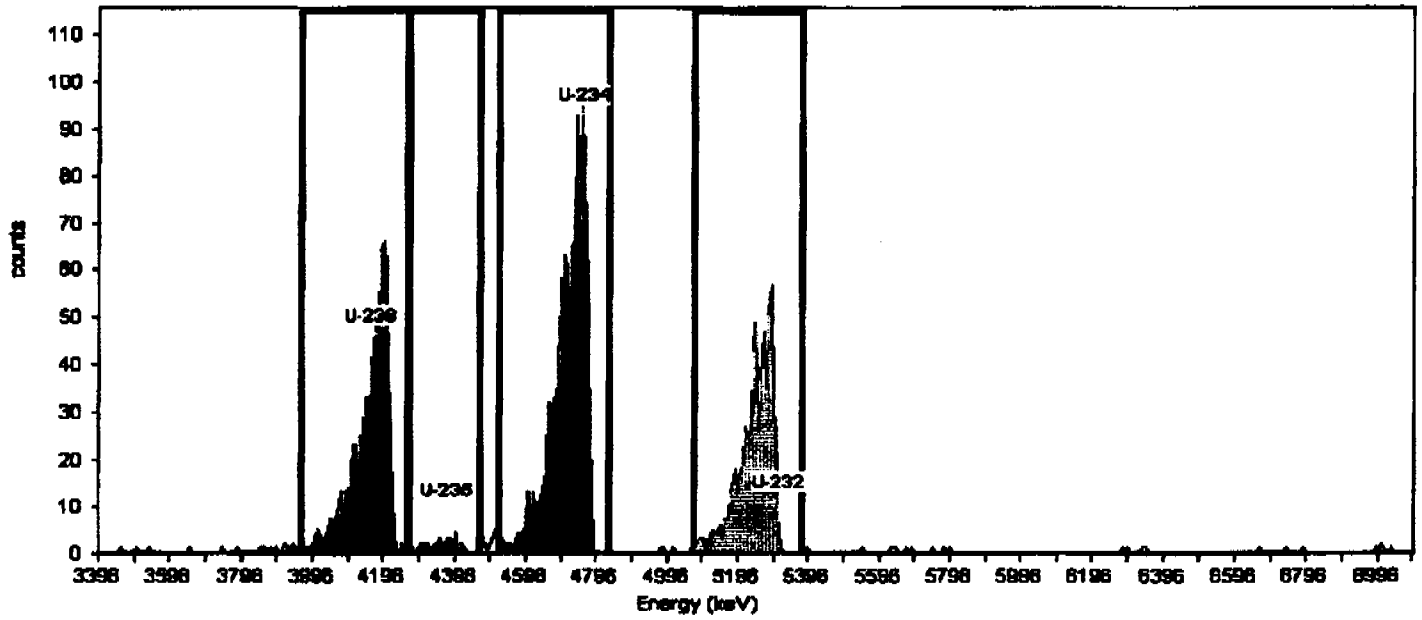
Tracer Name: U232_RAD04-0051
Tracer Activity: 110.00 DPM/mL x (Vol.)0.10 mL = 11.00 DPM
Tracer Ref. Date: 9/16/1997 12:00:08PM

Tracer Nuclide: U-232
Tracer Recovery: 98.90%

Acquisition

Detector: AV18
Serial Number: 41-172C6
Acquisition Start Date: 5/12/2005 4:56:19AM
Live Time: 240.00 min.
Real Time: 240.03 min.
Background Date: 4/26/2005 10:38:01AM
Background Info: Sample: AV18; Det: AV18; Spectrum #1; Apr-26-2005 10:38

Calibration Name: April2005_AV18
Calibration Date: 4/29/2005 3:51:49PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 25.83% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 5/11/2005 11:08:35PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
U-238	4158.500	3962.485	4260.137	66.782	100.0	711.00	0.6000	710	5.215E+000	2.887E-001	1.066E-002	4.119E-002
U-235	4376.294	4267.397	4463.412	111.220	80.2	35.00	0.3000	35	3.176E-001	5.589E-002	9.402E-003	4.357E-002
U-234	4761.063	4521.490	4833.661	90.160	99.8	1,089.00	0.0000	1,089	8.010E+000	4.064E-001	0.000E+000	1.990E-002
U-232	5312.808	5073.234	5378.146	91.155	100.1	628.00	0.9000	627	4.896E+000	1.975E-001	1.405E-002	4.946E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 11:15:53AM 5/12/2005

Sample

Sample Name: F5D210345-015
SampleType: Sample
WRKNO: G8WPC3AC
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 1.0060g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5131544
:
Description:

Client Name: Undefined
Client Contact:

Tracer

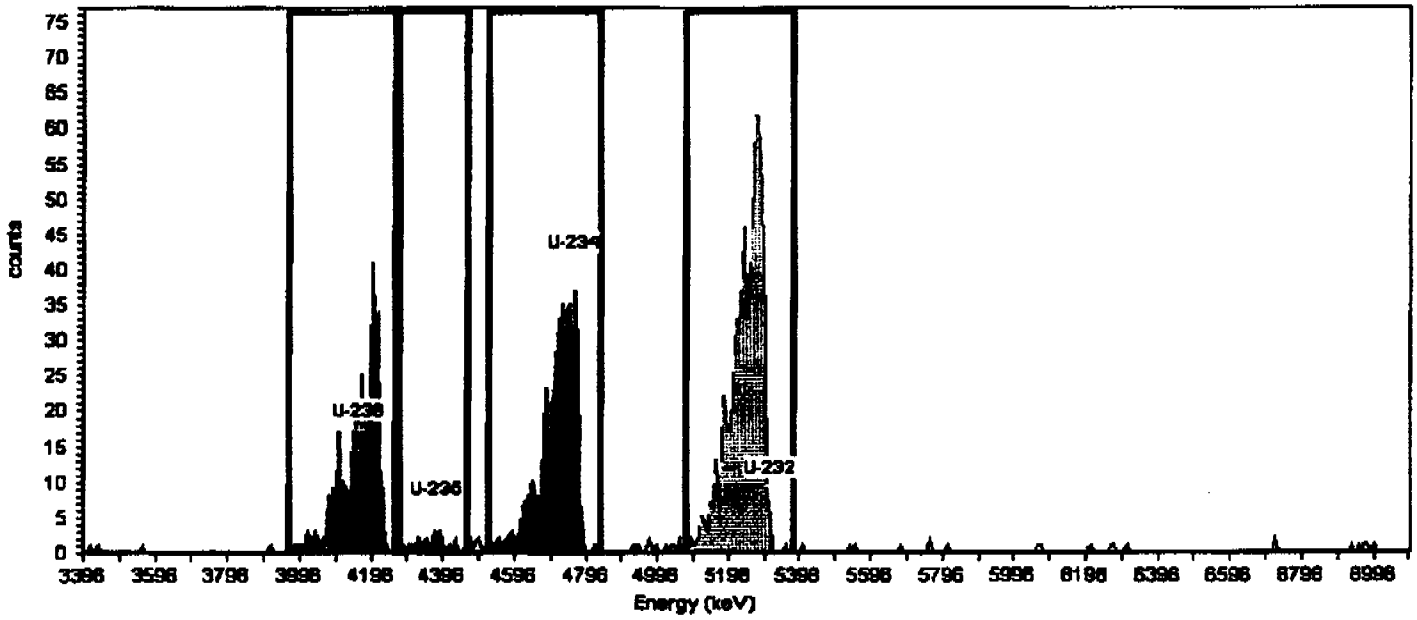
Tracer Name: U232_RAD04-0051
Tracer Activity: 110.00 DPM/mL x (Vol.)0.10 mL = 11.00 DPM
Tracer Ref. Date: 9/16/1997 12:00:08PM

Tracer Nuclide: U-232
Tracer Recovery: 102.84%

Acquisition

Detector: AV19
Serial Number: 41-172Q6
Acquisition Start Date: 5/12/2005 4:56:20AM
Live Time: 240.00 min.
Real Time: 240.03 min.
Background Date: 4/26/2005 10:38:03AM
Background Info: Sample: AV19; Det: AV19; Spectrum #1; Apr-26-2005 10:38

Calibration Name: April2005_AV19
Calibration Date: 4/29/2005 3:51:57PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.76% +/- 0.30% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 5/11/2005 11:08:35PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
U-238	4158.500	3962.485	4260.137	81.983	100.0	373.00	1.8000	371	2.426E+000	1.574E-001	1.644E-002	5.057E-002
U-236	4376.294	4267.397	4463.412	49.445	80.2	25.00	1.2000	24	1.939E-001	4.237E-002	1.674E-002	5.553E-002
U-234	4761.063	4521.490	4833.661	86.949	99.8	466.00	3.6000	462	3.028E+000	1.838E-001	2.330E-002	6.432E-002
U-232	5312.808	5073.234	5378.146	87.295	100.1	702.00	1.2000	701	5.066E+000	1.936E-001	1.444E-002	4.790E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040

11:16:00AM 5/12/2005

Sample

Sample Name: F5E110000-544B
SampleType: Blank
WRKNO: HACWP1AA
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 1.0000g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5131544
:
Description:

Client Name: Undefined
Client Contact:

Tracer

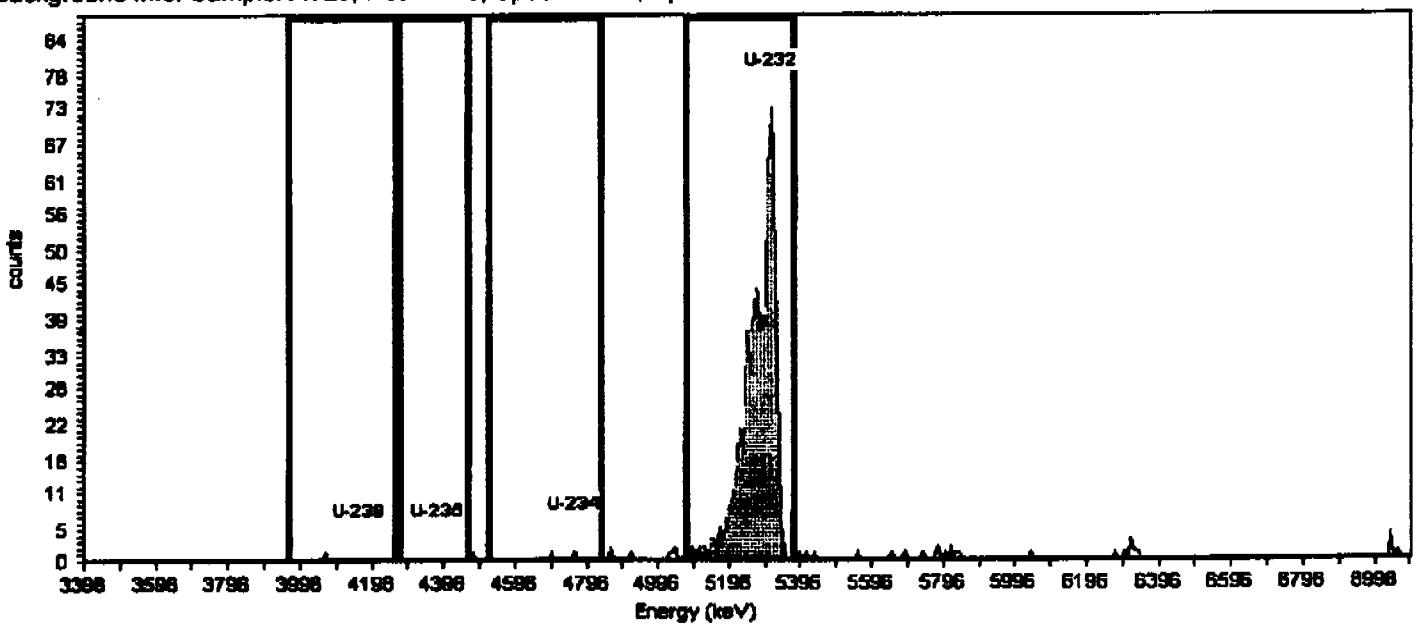
Tracer Name: U232_RAD04-0051
Tracer Activity: 110.00 DPM/mL x (Vol.)0.10 mL = 11.00 DPM
Tracer Ref. Date: 9/16/1997 12:00:08PM

Tracer Nuclide: U-232
Tracer Recovery: 97.10%

Acquisition

Detector: AV20
Serial Number: 41-172R2
Acquisition Start Date: 5/12/2005 4:56:22AM
Live Time: 240.00 min.
Real Time: 240.03 min.
Background Date: 4/26/2005 10:38:06AM
Background Info: Sample: AV20; Det: AV20; Spectrum #1; Apr-26-2005 10:38

Calibration Name: April2005_AV20
Calibration Date: 4/29/2005 3:52:07PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 29.89% +/- 0.31% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 5/11/2005 11:08:35PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
U-238	4158.500	3962.485	4260.137	43.286	100.0	1.00	1.8000	-1	0.000E+000	0.000E+000	1.627E-002	5.004E-002
U-235	4376.294	4267.397	4463.412	.000	80.2	0.00	1.2000	-1	0.000E+000	0.000E+000	1.657E-002	5.495E-002
U-234	4761.063	4521.490	4833.661	43.340	99.8	2.00	0.6000	1	9.071E-003	1.045E-002	9.414E-003	3.636E-002
U-232	5312.808	5073.234	5378.146	91.276	100.1	716.00	3.6000	712	4.811E+000	1.829E-001	2.475E-002	6.832E-002

STL

Alpha-Spectroscopy Analysis Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
11:16:08AM 5/12/2005

Analyst: 60040

Sample

Sample Name: F5E110000-544C
SampleType: Control
WRKNO: HACWP1AC
Sample Collection Date: 4/19/2005 12:00:00AM
Comment:

Spectrum #1 Analysis #1
Sample Weight : 0.1309g
Aliquot: N/A Aliquot Fraction: N/A
Lab Preparation:

Batch

Batch Name: 5131544
:
Description:

Client Name: Undefined
Client Contact:

Tracer

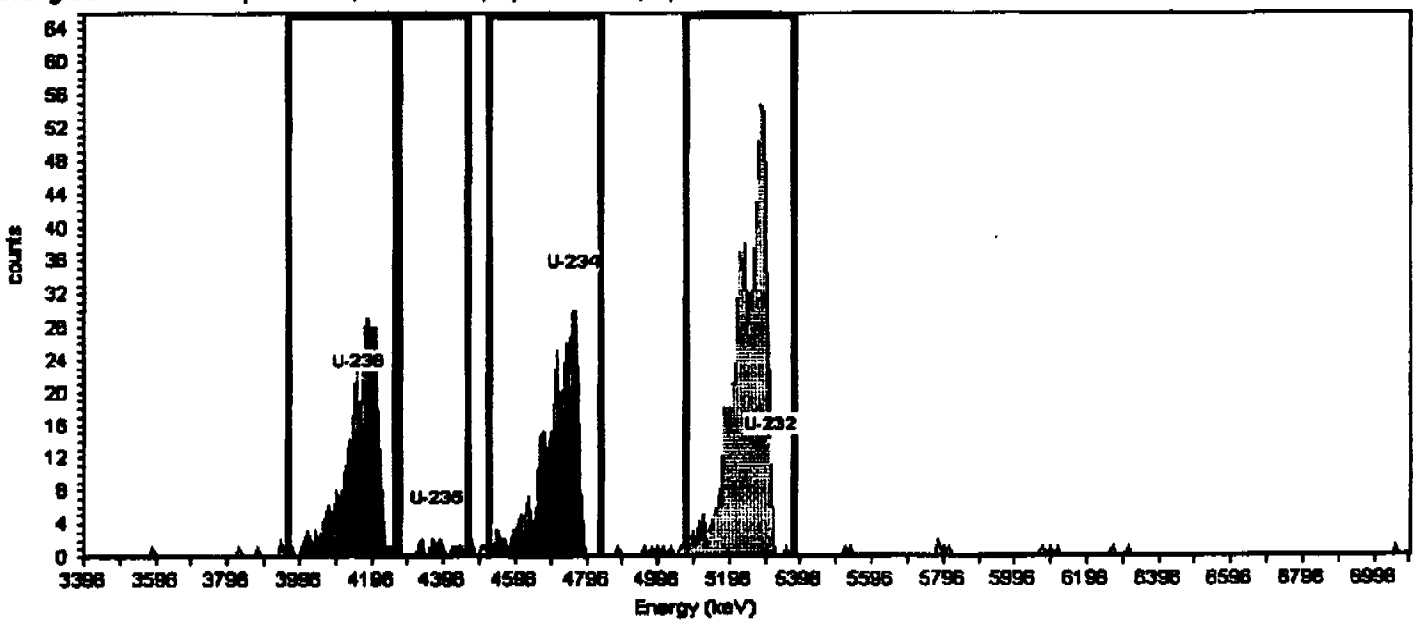
Tracer Name: U232_RAD04-0051
Tracer Activity: 110.00 DPM/mL x (Vol.)0.10 mL = 11.00 DPM
Tracer Ref. Date: 9/16/1997 12:00:08PM

Tracer Nuclide: U-232
Tracer Recovery: 98.26%

Acquisition

Detector: AV21
Serial Number: 41-172C7
Acquisition Start Date: 5/12/2005 4:56:24AM
Live Time: 240.00 min.
Real Time: 240.03 min.
Background Date: 4/26/2005 10:38:07AM
Background Info: Sample: AV21; Det: AV21; Spectrum #1; Apr-26-2005 10:38

Calibration Name: April2005_AV21
Calibration Date: 4/29/2005 6:14:46PM
Energy Cal: Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.49% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: ROI Analysis, Set Name = UROI
Decay Correction: 5/11/2005 11:08:35PM
MDA Constants: Kα = 1.65 , Kβ = 1.65

Nuclide Library: Uranium
MDA Source: Background

Nuclide Summary (ROI)

Nuclide	Peak Energy keV	ROI Start keV	ROI End keV	FWHM keV	B.R. %	Gross Counts	Bkgd Counts	Net Counts	Activity pCi/g	1.00Sigma TPU pCi/g	Critical Level pCi/g	MDA pCi/g
U-238	4158.500	3962.485	4260.137	80.067	100.0	346.00	0.9000	345	1.901E+001	1.260E+000	9.803E-002	3.451E-001
U-235	4376.294	4267.397	4463.412	70.590	80.2	13.00	0.3000	13	8.724E-001	2.530E-001	7.057E-002	3.270E-001
U-234	4761.063	4521.490	4833.661	96.602	99.8	358.00	0.9000	357	1.971E+001	1.313E+000	9.822E-002	3.458E-001
U-232	5312.808	5073.234	5378.146	98.864	100.1	640.00	1.2000	639	3.720E+001	1.486E+000	1.217E-001	4.038E-001

SEVERN TRENT STL

DAILY PULSERS

LOT# F5D220345

STL ST. LOUIS

Daily Pulser Check - Severn Trent Lab

Pulser Date: 5/11/2005

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria		Gross Counts P/F	FWHM (keV) Result	FWHM (keV) Criteria	FWHM (keV) P/F	Pulser Center Result	Pulser Center Criteria		Pulser Center P/F	Energy (keV) Result	Energy (keV) Criteria		Energy (keV) P/F
AV1	05/11/2005 7:02	7527	7218.7	+/-5%	Pass	13.8	5-50	Pass	226.0	229.0	+/-5%	Pass	5030	5051.1	+/-25%	Pass
AV2	05/11/2005 7:02	7531	7468.7	+/-5%	Pass	14.8	5-50	Pass	226.9	222.9	+/-5%	Pass	5036	5007.5	+/-25%	Pass
AV3	05/11/2005 7:02	7524	7484.9	+/-5%	Pass	13.1	5-50	Pass	228.9	225.9	+/-5%	Pass	5051	5028.8	+/-25%	Pass
AV4	05/11/2005 7:02	7528	7413.7	+/-5%	Pass	13.6	5-50	Pass	224.9	224.9	+/-5%	Pass	5022	5021.6	+/-25%	Pass
AV5	05/11/2005 7:02	7519	7482.4	+/-5%	Pass	13.4	5-50	Pass	238.0	228.1	+/-5%	Pass	5117	5044.6	+/-25%	Pass
AV6	05/11/2005 7:03	7512	7476.7	+/-5%	Pass	13.6	5-50	Pass	227.0	224.0	+/-5%	Pass	5037	5015.3	+/-25%	Pass
AV7	05/11/2005 7:03	7500	7477.0	+/-5%	Pass	15.7	5-50	Pass	227.0	224.9	+/-5%	Pass	5037	5021.9	+/-25%	Pass
AV8	05/11/2005 7:03	7196	7327.4	+/-5%	Pass	12.9	5-50	Pass	228.0	228.0	+/-5%	Pass	5044	5044.6	+/-25%	Pass
AV9	05/11/2005 7:03	7751	7519.3	+/-5%	Pass	22.5	5-50	Pass	225.9	227.9	+/-5%	Pass	5029	5043.3	+/-25%	Pass
AV10	05/11/2005 7:03	7738	7749.6	+/-5%	Pass	14.0	5-50	Pass	219.0	226.1	+/-5%	Pass	4979	5030.3	+/-25%	Pass
AV11	05/11/2005 7:03	7699	7666.2	+/-5%	Pass	15.4	5-50	Pass	222.0	225.0	+/-5%	Pass	5001	5022.1	+/-25%	Pass
AV12	05/11/2005 7:03	7724	7588.7	+/-5%	Pass	14.2	5-50	Pass	227.8	230.0	+/-5%	Pass	5043	5058.4	+/-25%	Pass
AV13	05/11/2005 7:03	7699	7584.6	+/-5%	Pass	19.7	5-50	Pass	227.1	228.0	+/-5%	Pass	5037	5044.1	+/-25%	Pass
AV15	05/11/2005 7:03	7712	7770.5	+/-5%	Pass	14.2	5-50	Pass	227.0	226.9	+/-5%	Pass	5037	5036.6	+/-25%	Pass
AV16	05/11/2005 7:03	7711	7456.0	+/-5%	Pass	13.5	5-50	Pass	225.1	226.9	+/-5%	Pass	5023	5036.2	+/-25%	Pass
AV17	05/11/2005 7:03	7736	7619.1	+/-5%	Pass	13.8	5-50	Pass	225.9	229.9	+/-5%	Pass	5029	5058.3	+/-25%	Pass
AV18	05/11/2005 7:03	7737	7714.5	+/-5%	Pass	13.9	5-50	Pass	228.0	226.9	+/-5%	Pass	5044	5036.4	+/-25%	Pass
AV19	05/11/2005 7:03	7291	7269.8	+/-5%	Pass	12.9	5-50	Pass	221.9	227.7	+/-5%	Pass	5000	5041.9	+/-25%	Pass
AV20	05/11/2005 7:03	7662	7503.6	+/-5%	Pass	13.9	5-50	Pass	226.9	226.0	+/-5%	Pass	5037	5029.9	+/-25%	Pass
AV21	05/11/2005 7:03	7657	7550.9	+/-5%	Pass	13.3	5-50	Pass	225.0	226.0	+/-5%	Pass	5022	5029.6	+/-25%	Pass
AV22	05/11/2005 7:03	7640	7691.4	+/-5%	Pass	14.8	5-50	Pass	224.1	225.0	+/-5%	Pass	5016	5022.4	+/-25%	Pass
AV23	05/11/2005 7:03	7652	7665.3	+/-5%	Pass	14.3	5-50	Pass	230.0	229.8	+/-5%	Pass	5059	5057.0	+/-25%	Pass
AV24	05/11/2005 7:03	7640	7354.0	+/-5%	Pass	14.6	5-50	Pass	230.0	226.9	+/-5%	Pass	5059	5036.4	+/-25%	Pass
AV25	05/11/2005 7:03	5229	5122.1	+/-5%	Pass	14.0	5-50	Pass	224.0	224.0	+/-5%	Pass	5015	5015.1	+/-25%	Pass
AV26	05/11/2005 7:03	5141	5069.9	+/-5%	Pass	23.1	5-50	Pass	224.1	226.9	+/-5%	Pass	5016	5036.5	+/-25%	Pass
AV27	05/11/2005 7:03	5101	4919.2	+/-5%	Pass	16.0	5-50	Pass	226.1	225.0	+/-5%	Pass	5030	5022.5	+/-25%	Pass
AV28	05/11/2005 7:03	5067	4922.4	+/-5%	Pass	28.0	5-50	Pass	235.3	223.4	+/-5%	FAIL	5097	5010.5	+/-25%	Pass
AV29	05/11/2005 7:03	5078	5005.4	+/-5%	Pass	32.4	5-50	Pass	225.1	223.8	+/-5%	Pass	5023	5014.0	+/-25%	Pass
AV29	05/11/2005 7:03	5078	5047.7	+/-5%	Pass	32.4	5-50	Pass	225.1	223.3	+/-5%	Pass	5023	5010.1	+/-25%	Pass
AV30	05/11/2005 8:55	5047	5041.6	+/-5%	Pass	17.4	5-50	Pass	139.9	228.1	+/-5%	FAIL	4404	5044.7	+/-25%	Pass
AV30	05/11/2005 8:55	5047	5084.6	+/-5%	Pass	17.4	5-50	Pass	139.9	227.6	+/-5%	FAIL	4404	5041.5	+/-25%	Pass
AV33	05/11/2005 7:03	5023	4977.0	+/-5%	Pass	11.0	5-50	Pass	209.0	218.0	+/-5%	Pass	4906	4971.5	+/-25%	Pass

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Detector	Date/Time	Gross Counts Result	Gross Counts Criteria		Gross Counts P/F	FWHM (keV) Result	FWHM (keV) Criteria	FWHM (keV) P/F	Pulser Center Result	Pulser Center Criteria		Pulser Center P/F	Energy (keV) Result	Energy (keV) Criteria		Energy (keV) P/F
AV34	05/11/2005 7:03	5173	5045.5	+/-5%	Pass	17.4	5-50	Pass	224.1	219.0	+/-5%	Pass	5016	4978.8	+/-25%	Pass
AV35	05/11/2005 7:03	4961	4932.6	+/-5%	Pass	12.0	5-50	Pass	275.0	275.0	+/-5%	Pass	5385	5385.6	+/-25%	Pass
AV37	05/11/2005 7:03	5066	5082.9	+/-5%	Pass	21.1	5-50	Pass	236.2	236.1	+/-5%	Pass	5104	5103.2	+/-25%	Pass
AV38	05/11/2005 7:03	5327	5419.4	+/-5%	Pass	16.6	5-50	Pass	219.1	217.9	+/-5%	Pass	4980	4448.6	+/-25%	Pass
AV39	05/11/2005 7:03	5314	5316.2	+/-5%	Pass	15.4	5-50	Pass	228.0	224.2	+/-5%	Pass	5044	5016.3	+/-25%	Pass
AV40	05/11/2005 7:03	4846	4755.8	+/-5%	Pass	12.6	5-50	Pass	226.0	226.0	+/-5%	Pass	5030	5029.5	+/-25%	Pass
AV41	05/11/2005 8:20	5036	4990.8	+/-5%	Pass	12.4	5-50	Pass	230.0	229.0	+/-5%	Pass	5059	5051.6	+/-25%	Pass
AV42	05/11/2005 7:48	5034	4977.0	+/-5%	Pass	12.1	5-50	Pass	237.0	228.1	+/-5%	Pass	5109	5044.9	+/-25%	Pass
AV42	05/11/2005 7:48	5034	4977.0	+/-5%	Pass	12.1	5-50	Pass	237.0	228.1	+/-5%	Pass	5109	5044.9	+/-25%	Pass
AV43	05/11/2005 7:48	7671	7162.4	+/-5%	FAIL	13.1	5-50	Pass	223.0	224.1	+/-5%	Pass	5008	5015.9	+/-25%	Pass
AV43	05/11/2005 7:48	7671	7162.4	+/-5%	FAIL	13.1	5-50	Pass	223.0	224.1	+/-5%	Pass	5008	5015.9	+/-25%	Pass
AV45	05/11/2005 7:48	7607	7593.5	+/-5%	Pass	15.9	5-50	Pass	226.8	225.6	+/-5%	Pass	5036	5026.9	+/-25%	Pass
AV45	05/11/2005 7:48	7607	7593.5	+/-5%	Pass	15.9	5-50	Pass	226.8	225.6	+/-5%	Pass	5036	5026.9	+/-25%	Pass
AV46	05/11/2005 7:48	7660	7722.7	+/-5%	Pass	13.7	5-50	Pass	224.0	225.8	+/-5%	Pass	5015	5028.0	+/-25%	Pass
AV46	05/11/2005 7:48	7660	7722.7	+/-5%	Pass	13.7	5-50	Pass	224.0	225.8	+/-5%	Pass	5015	5028.0	+/-25%	Pass
AV47	05/11/2005 7:48	7658	7532.5	+/-5%	Pass	13.8	5-50	Pass	220.0	226.0	+/-5%	Pass	4986	5029.6	+/-25%	Pass
AV47	05/11/2005 7:48	7658	7532.5	+/-5%	Pass	13.8	5-50	Pass	220.0	226.0	+/-5%	Pass	4986	5029.6	+/-25%	Pass
AV48	05/11/2005 7:48	7637	7717.5	+/-5%	Pass	15.8	5-50	Pass	222.1	224.0	+/-5%	Pass	5001	5015.2	+/-25%	Pass
AV48	05/11/2005 7:48	7637	7717.5	+/-5%	Pass	15.8	5-50	Pass	222.1	224.0	+/-5%	Pass	5001	5015.2	+/-25%	Pass
AV49	05/11/2005 7:48	7653	7703.4	+/-5%	Pass	13.8	5-50	Pass	232.0	226.0	+/-5%	Pass	5073	5029.5	+/-25%	Pass
AV49	05/11/2005 7:48	7653	7703.4	+/-5%	Pass	13.8	5-50	Pass	232.0	226.0	+/-5%	Pass	5073	5029.5	+/-25%	Pass
AV50	05/11/2005 7:48	7652	7660.9	+/-5%	Pass	13.6	5-50	Pass	225.0	227.0	+/-5%	Pass	5022	5037.2	+/-25%	Pass
AV51	05/11/2005 7:48	7348	7070.5	+/-5%	Pass	13.1	5-50	Pass	221.0	223.0	+/-5%	Pass	4993	5007.6	+/-25%	Pass
AV52	05/11/2005 7:48	7346	7156.4	+/-5%	Pass	13.0	5-50	Pass	225.0	225.0	+/-5%	Pass	5023	5022.4	+/-25%	Pass
AV52	05/11/2005 7:48	7346	7156.4	+/-5%	Pass	13.0	5-50	Pass	225.0	225.0	+/-5%	Pass	5023	5022.4	+/-25%	Pass
AV53	05/11/2005 7:48	7343	7144.1	+/-5%	Pass	12.9	5-50	Pass	223.0	223.0	+/-5%	Pass	5008	5007.8	+/-25%	Pass
AV53	05/11/2005 7:48	7343	7144.1	+/-5%	Pass	12.9	5-50	Pass	223.0	223.0	+/-5%	Pass	5008	5007.8	+/-25%	Pass
AV54	05/11/2005 7:48	7339	7313.1	+/-5%	Pass	13.6	5-50	Pass	229.1	226.0	+/-5%	Pass	5052	5029.5	+/-25%	Pass
AV55	05/11/2005 7:48	7338	7132.9	+/-5%	Pass	13.1	5-50	Pass	227.0	226.0	+/-5%	Pass	5037	5029.7	+/-25%	Pass
AV55	05/11/2005 7:48	7338	7132.9	+/-5%	Pass	13.1	5-50	Pass	227.0	226.0	+/-5%	Pass	5037	5029.7	+/-25%	Pass
AV56	05/11/2005 7:48	7334	7163.7	+/-5%	Pass	13.5	5-50	Pass	221.1	222.0	+/-5%	Pass	4994	5000.7	+/-25%	Pass
AV57	05/11/2005 7:48	7331	7309.5	+/-5%	Pass	14.2	5-50	Pass	222.0	222.0	+/-5%	Pass	5000	5000.6	+/-25%	Pass
AV57	05/11/2005 7:48	7331	7309.5	+/-5%	Pass	14.2	5-50	Pass	222.0	222.0	+/-5%	Pass	5000	5000.6	+/-25%	Pass
AV58	05/11/2005 7:48	7332	7249.2	+/-5%	Pass	13.0	5-50	Pass	224.0	223.0	+/-5%	Pass	5015	5008.0	+/-25%	Pass
AV59	05/11/2005 7:48	6875	7141.4	+/-5%	Pass	12.4	5-50	Pass	286.1	284.0	+/-5%	Pass	5466	5450.6	+/-25%	Pass
AV60	05/11/2005 7:48	7145	7019.7	+/-5%	Pass	14.0	5-50	Pass	222.9	223.0	+/-5%	Pass	5007	5007.5	+/-25%	Pass

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria	P/F	FWHM (keV) Result	FWHM (keV) Criteria	P/F	Pulser Center Result	Pulser Center Criteria	P/F	Energy (keV) Result	Energy (keV) Criteria	P/F
AV61	05/11/2005 7:48	6736	7078.3 +/-5%	Pass	13.2	5-50	Pass	223.9	225.0 +/-5%	Pass	5014	5022.2 +/-25%	Pass
AV62	05/11/2005 7:48	7132	7083.5 +/-5%	Pass	14.7	5-50	Pass	221.9	222.0 +/-5%	Pass	5000	5000.7 +/-25%	Pass
AV63	05/11/2005 9:48	6896	7120.8 +/-5%	Pass	12.7	5-50	Pass	223.0	223.0 +/-5%	Pass	5008	5007.9 +/-25%	Pass
AV64	05/11/2005 9:48	7206	7153.7 +/-5%	Pass	13.1	5-50	Pass	223.0	224.0 +/-5%	Pass	5008	5015.3 +/-25%	Pass
AV65	05/11/2005 9:48	7198	7233.4 +/-5%	Pass	13.3	5-50	Pass	222.9	224.0 +/-5%	Pass	5007	5015.3 +/-25%	Pass
AV66	05/11/2005 9:48	7085	7165.5 +/-5%	Pass	11.9	5-50	Pass	221.0	222.0 +/-5%	Pass	4994	5000.5 +/-25%	Pass
AV67	05/11/2005 9:48	7258	7128.1 +/-5%	Pass	16.6	5-50	Pass	221.0	224.1 +/-5%	Pass	4994	5015.6 +/-25%	Pass
AV68	05/11/2005 7:02	7418	7259.5 +/-5%	Pass	13.3	5-50	Pass	221.0	222.0 +/-5%	Pass	4993	5000.8 +/-25%	Pass
AV69	05/11/2005 7:02	7093	7305.4 +/-5%	Pass	12.8	5-50	Pass	220.9	222.0 +/-5%	Pass	4993	5000.6 +/-25%	Pass
AV70	05/11/2005 7:02	7414	7406.5 +/-5%	Pass	13.5	5-50	Pass	219.9	222.6 +/-5%	Pass	4986	5004.7 +/-25%	Pass
AV71	05/11/2005 7:02	7237	7187.3 +/-5%	Pass	12.9	5-50	Pass	221.0	225.0 +/-5%	Pass	4993	5022.7 +/-25%	Pass
AV72	05/11/2005 7:02	7409	7090.0 +/-5%	Pass	13.1	5-50	Pass	219.0	223.9 +/-5%	Pass	4979	5014.6 +/-25%	Pass
AV73	05/11/2005 7:03	7407	7251.3 +/-5%	Pass	13.4	5-50	Pass	224.1	225.0 +/-5%	Pass	5016	5022.4 +/-25%	Pass
AV74	05/11/2005 7:02	7399	7227.1 +/-5%	Pass	13.1	5-50	Pass	220.0	224.0 +/-5%	Pass	4986	5015.0 +/-25%	Pass

LOT# F5D220345

STL ST. LOUIS

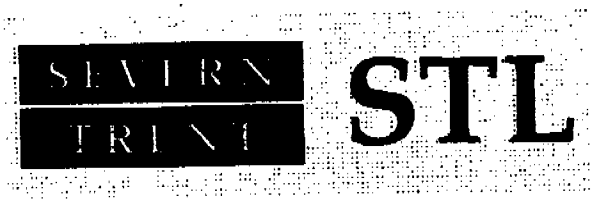
Daily Pulser Check - Severn Trent Lab

Pulser Date: 5/12/2005

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria		Gross Counts P/F	FWHM (keV) Result	FWHM (keV) Criteria	FWHM (keV) P/F	Pulser Center Result	Pulser Center Criteria		Pulser Center P/F	Energy (keV) Result	Energy (keV) Criteria		Energy (keV) P/F
AV1	05/12/2005 9:30	7381	7218.7	+/-5%	Pass	13.8	5 - 50	Pass	226.0	229.0	+/-5%	Pass	5029	5051.1	+/-25%	Pass
AV2	05/12/2005 9:30	7378	7468.7	+/-5%	Pass	14.2	5 - 50	Pass	227.0	222.9	+/-5%	Pass	5037	5007.5	+/-25%	Pass
AV3	05/12/2005 9:30	7037	7484.9	+/-5%	FAIL	13.0	5 - 50	Pass	228.9	225.9	+/-5%	Pass	5051	5028.8	+/-25%	Pass
AV3 OK	05/12/2005 9:41	6963	7484.9	+/-5%	FAIL	13.0	5 - 50	Pass	228.9	225.9	+/-5%	Pass	5051	5028.8	+/-25%	Pass
AV4	05/12/2005 9:30	7369	7413.7	+/-5%	Pass	13.6	5 - 50	Pass	224.9	224.9	+/-5%	Pass	5022	5021.6	+/-25%	Pass
AV5	05/12/2005 9:30	7367	7482.4	+/-5%	Pass	13.1	5 - 50	Pass	238.0	228.1	+/-5%	Pass	5117	5044.6	+/-25%	Pass
AV6	05/12/2005 9:30	7362	7476.7	+/-5%	Pass	13.9	5 - 50	Pass	227.0	224.0	+/-5%	Pass	5037	5015.3	+/-25%	Pass
AV7	05/12/2005 9:30	7340	7477.0	+/-5%	Pass	16.3	5 - 50	Pass	226.9	224.9	+/-5%	Pass	5036	5021.9	+/-25%	Pass
AV8	05/12/2005 9:30	7357	7327.4	+/-5%	Pass	13.7	5 - 50	Pass	228.1	228.0	+/-5%	Pass	5045	5044.6	+/-25%	Pass
AV9	05/12/2005 9:30	7676	7519.3	+/-5%	Pass	23.0	5 - 50	Pass	225.8	227.9	+/-5%	Pass	5029	5043.3	+/-25%	Pass
AV10	05/12/2005 9:30	7671	7749.6	+/-5%	Pass	14.7	5 - 50	Pass	219.0	226.1	+/-5%	Pass	4979	5030.3	+/-25%	Pass
AV11	05/12/2005 9:30	7659	7666.2	+/-5%	Pass	15.6	5 - 50	Pass	222.0	225.0	+/-5%	Pass	5000	5022.1	+/-25%	Pass
AV12 OK	05/12/2005 9:30	6948	7588.7	+/-5%	FAIL	13.4	5 - 50	Pass	227.8	230.0	+/-5%	Pass	5043	5058.4	+/-25%	Pass
AV12	05/12/2005 9:41	7594	7588.7	+/-5%	Pass	14.0	5 - 50	Pass	227.8	230.0	+/-5%	Pass	5043	5058.4	+/-25%	Pass
AV13	05/12/2005 9:30	7668	7584.6	+/-5%	Pass	22.4	5 - 50	Pass	227.1	228.0	+/-5%	Pass	5037	5044.1	+/-25%	Pass
AV15	05/12/2005 9:30	7658	7770.5	+/-5%	Pass	14.3	5 - 50	Pass	227.0	226.9	+/-5%	Pass	5037	5036.6	+/-25%	Pass
AV16	05/12/2005 9:30	7255	7456.0	+/-5%	Pass	13.0	5 - 50	Pass	225.1	226.9	+/-5%	Pass	5023	5036.2	+/-25%	Pass
AV17	05/12/2005 9:30	7642	7619.1	+/-5%	Pass	14.1	5 - 50	Pass	225.9	229.9	+/-5%	Pass	5029	5058.3	+/-25%	Pass
AV18	05/12/2005 9:30	7640	7714.5	+/-5%	Pass	13.9	5 - 50	Pass	228.0	226.9	+/-5%	Pass	5044	5036.4	+/-25%	Pass
AV19 OK	05/12/2005 9:41	7432	7269.8	+/-5%	Pass	12.9	5 - 50	Pass	222.0	227.7	+/-5%	Pass	5000	5041.9	+/-25%	Pass
AV19	05/12/2005 9:30	7640	7269.8	+/-5%	FAIL	13.3	5 - 50	Pass	221.9	227.7	+/-5%	Pass	5000	5041.9	+/-25%	Pass
AV20	05/12/2005 9:30	7636	7503.6	+/-5%	Pass	13.8	5 - 50	Pass	226.9	226.0	+/-5%	Pass	5036	5029.9	+/-25%	Pass
AV21	05/12/2005 9:30	7630	7550.9	+/-5%	Pass	13.6	5 - 50	Pass	224.9	226.0	+/-5%	Pass	5022	5029.6	+/-25%	Pass
AV22	05/12/2005 6:35	7605	7691.4	+/-5%	Pass	14.9	5 - 50	Pass	224.0	225.0	+/-5%	Pass	5016	5022.4	+/-25%	Pass
AV23	05/12/2005 6:35	7617	7665.3	+/-5%	Pass	14.5	5 - 50	Pass	230.0	229.8	+/-5%	Pass	5059	5057.0	+/-25%	Pass
AV24	05/12/2005 6:35	7621	7354.0	+/-5%	Pass	14.8	5 - 50	Pass	230.0	226.9	+/-5%	Pass	5059	5036.4	+/-25%	Pass
AV25	05/12/2005 6:35	5208	5122.1	+/-5%	Pass	13.9	5 - 50	Pass	224.0	224.0	+/-5%	Pass	5015	5015.1	+/-25%	Pass
AV26	05/12/2005 6:35	5151	5069.9	+/-5%	Pass	38.7	5 - 50	Pass	224.0	226.9	+/-5%	Pass	5015	5036.5	+/-25%	Pass
AV27	05/12/2005 6:35	5076	4919.2	+/-5%	Pass	16.2	5 - 50	Pass	226.1	225.0	+/-5%	Pass	5030	5022.5	+/-25%	Pass
AV28 OK	05/12/2005 6:35	5171	4922.4	+/-5%	FAIL	31.3	5 - 50	Pass	235.8	223.4	+/-5%	FAIL	5101	5010.5	+/-25%	Pass
AV29	05/12/2005 6:35	5074	5005.4	+/-5%	Pass	34.0	5 - 50	Pass	225.2	223.8	+/-5%	Pass	5024	5014.0	+/-25%	Pass
AV29	05/12/2005 6:35	5074	5047.7	+/-5%	Pass	34.0	5 - 50	Pass	225.2	223.3	+/-5%	Pass	5024	5010.1	+/-25%	Pass

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria		Gross Counts P/F	FWHM (keV) Result	FWHM (keV) Criteria	FWHM (keV) P/F	Pulser Center Result	Pulser Center Criteria		Pulser Center P/F	Energy (keV) Result	Energy (keV) Criteria		Energy (keV) P/F
AV30	05/12/2005 6:35	5053	5041.6	+/-5%	Pass	17.4	5-50	Pass	201.1	228.1	+/-5%	FAIL	4849	5044.7	+/-25%	Pass
AV30	05/12/2005 6:35	5053	5084.6	+/-5%	Pass	17.4	5-50	Pass	201.1	227.6	+/-5%	FAIL	4849	5041.5	+/-25%	Pass
AV33	05/12/2005 6:35	5039	4977.0	+/-5%	Pass	11.2	5-50	Pass	209.0	218.0	+/-5%	Pass	4907	4971.5	+/-25%	Pass
AV34	05/12/2005 6:35	5235	5045.5	+/-5%	Pass	18.4	5-50	Pass	224.1	219.0	+/-5%	Pass	5016	4978.8	+/-25%	Pass
AV35	05/12/2005 6:35	5052	4932.6	+/-5%	Pass	12.2	5-50	Pass	275.0	275.0	+/-5%	Pass	5385	5385.6	+/-25%	Pass
AV37	05/12/2005 6:35	5049	5082.9	+/-5%	Pass	20.2	5-50	Pass	234.8	236.1	+/-5%	Pass	5093	5103.2	+/-25%	Pass
AV38	05/12/2005 6:35	5309	5419.4	+/-5%	Pass	16.5	5-50	Pass	219.1	217.9	+/-5%	Pass	4980	4448.6	+/-25%	Pass
AV39	05/12/2005 6:35	5295	5316.2	+/-5%	Pass	15.1	5-50	Pass	228.0	224.2	+/-5%	Pass	5044	5016.3	+/-25%	Pass
AV40	05/12/2005 6:35	4809	4755.8	+/-5%	Pass	12.8	5-50	Pass	226.0	226.0	+/-5%	Pass	5030	5029.5	+/-25%	Pass
AV41	05/12/2005 6:35	4993	4990.8	+/-5%	Pass	12.4	5-50	Pass	230.0	229.0	+/-5%	Pass	5059	5051.6	+/-25%	Pass
AV42	05/12/2005 6:35	4884	4977.0	+/-5%	Pass	12.5	5-50	Pass	236.9	228.1	+/-5%	Pass	5109	5044.9	+/-25%	Pass
AV43	05/12/2005 6:35	7674	7162.4	+/-5%	FAIL	13.4	5-50	Pass	223.1	224.1	+/-5%	Pass	5008	5015.9	+/-25%	Pass
AV45	05/12/2005 6:35	7625	7593.5	+/-5%	Pass	15.6	5-50	Pass	228.1	225.6	+/-5%	Pass	5045	5026.9	+/-25%	Pass
AV46	05/12/2005 6:36	7664	7722.7	+/-5%	Pass	14.1	5-50	Pass	224.0	225.8	+/-5%	Pass	5015	5028.0	+/-25%	Pass
AV47	05/12/2005 6:36	7659	7532.5	+/-5%	Pass	14.3	5-50	Pass	217.9	226.0	+/-5%	Pass	4971	5029.6	+/-25%	Pass
AV48	05/12/2005 6:36	7648	7717.5	+/-5%	Pass	14.7	5-50	Pass	222.2	224.0	+/-5%	Pass	5002	5015.2	+/-25%	Pass
AV49	05/12/2005 6:36	7655	7703.4	+/-5%	Pass	14.1	5-50	Pass	232.0	226.0	+/-5%	Pass	5073	5029.5	+/-25%	Pass
AV50	05/12/2005 6:36	7655	7660.9	+/-5%	Pass	13.8	5-50	Pass	225.0	227.0	+/-5%	Pass	5022	5037.2	+/-25%	Pass
AV51	05/12/2005 6:36	7350	7070.5	+/-5%	Pass	14.0	5-50	Pass	220.9	223.0	+/-5%	Pass	4993	5007.6	+/-25%	Pass
AV52	05/12/2005 6:36	7350	7156.4	+/-5%	Pass	13.4	5-50	Pass	225.0	225.0	+/-5%	Pass	5022	5022.4	+/-25%	Pass
AV53	05/12/2005 6:36	7347	7144.1	+/-5%	Pass	13.1	5-50	Pass	223.0	223.0	+/-5%	Pass	5008	5007.8	+/-25%	Pass
AV54	05/12/2005 6:36	7346	7313.1	+/-5%	Pass	13.1	5-50	Pass	229.0	226.0	+/-5%	Pass	5051	5029.5	+/-25%	Pass
AV55	05/12/2005 6:36	7150	7132.9	+/-5%	Pass	12.6	5-50	Pass	227.0	226.0	+/-5%	Pass	5037	5029.7	+/-25%	Pass
AV56	05/12/2005 6:36	7341	7163.7	+/-5%	Pass	13.1	5-50	Pass	219.9	222.0	+/-5%	Pass	4986	5000.7	+/-25%	Pass
AV57	05/12/2005 6:36	7331	7309.5	+/-5%	Pass	14.5	5-50	Pass	221.9	222.0	+/-5%	Pass	5000	5000.6	+/-25%	Pass
AV58	05/12/2005 6:36	7334	7249.2	+/-5%	Pass	13.3	5-50	Pass	224.0	223.0	+/-5%	Pass	5015	5008.0	+/-25%	Pass
AV59	05/12/2005 6:36	7036	7141.4	+/-5%	Pass	12.2	5-50	Pass	285.0	284.0	+/-5%	Pass	5458	5450.6	+/-25%	Pass
AV60	05/12/2005 6:36	7277	7019.7	+/-5%	Pass	14.6	5-50	Pass	224.1	223.0	+/-5%	Pass	5016	5007.5	+/-25%	Pass
AV61	05/12/2005 6:36	7276	7078.3	+/-5%	Pass	13.7	5-50	Pass	223.9	225.0	+/-5%	Pass	5014	5022.2	+/-25%	Pass
AV61	05/12/2005 7:21	7331	7078.3	+/-5%	Pass	13.9	5-50	Pass	223.9	225.0	+/-5%	Pass	5014	5022.2	+/-25%	Pass
AV62	05/12/2005 7:21	7294	7083.5	+/-5%	Pass	14.9	5-50	Pass	221.9	222.0	+/-5%	Pass	5000	5000.7	+/-25%	Pass
AV63	05/12/2005 7:21	6939	7120.8	+/-5%	Pass	12.6	5-50	Pass	223.0	223.0	+/-5%	Pass	5008	5007.9	+/-25%	Pass
AV64	05/12/2005 7:21	7260	7153.7	+/-5%	Pass	13.1	5-50	Pass	223.0	224.0	+/-5%	Pass	5008	5015.3	+/-25%	Pass
AV65	05/12/2005 7:21	7247	7233.4	+/-5%	Pass	14.0	5-50	Pass	222.9	224.0	+/-5%	Pass	5007	5015.3	+/-25%	Pass
AV66	05/12/2005 7:21	7131	7165.5	+/-5%	Pass	11.9	5-50	Pass	221.0	222.0	+/-5%	Pass	4993	5000.5	+/-25%	Pass
AV67	05/12/2005 7:21	7690	7128.1	+/-5%	FAIL	16.6	5-50	Pass	220.9	224.1	+/-5%	Pass	4993	5015.6	+/-25%	Pass

Detector	Date/Time	Gross Counts Result	Gross Counts Criteria	Gross Counts P/F	FWHM (keV) Result	FWHM (keV) Criteria	FWHM (keV) P/F	Pulser Center Result	Pulser Center Criteria	Pulser Center P/F	Energy (keV) Result	Energy (keV) Criteria	Energy (keV) P/F
AV67	05/12/2005 7:37	7278	7128.1 +/-5%	Pass	16.7	5-50	Pass	221.0	224.1 +/-5%	Pass	4993	5015.6 +/-25%	Pass
AV68	05/12/2005 7:21	7430	7259.5 +/-5%	Pass	12.8	5-50	Pass	221.0	222.0 +/-5%	Pass	4993	5000.8 +/-25%	Pass
AV69	05/12/2005 7:21	7281	7305.4 +/-5%	Pass	12.9	5-50	Pass	220.9	222.0 +/-5%	Pass	4993	5000.6 +/-25%	Pass
AV70	05/12/2005 7:21	7680	7406.5 +/-5%	Pass	13.4	5-50	Pass	219.9	222.6 +/-5%	Pass	4985	5004.7 +/-25%	Pass
AV71	05/12/2005 7:22	7619	7187.3 +/-5%	FAIL	13.4	5-50	Pass	220.9	225.0 +/-5%	Pass	4993	5022.7 +/-25%	Pass
AV71	05/12/2005 7:37	6994	7187.3 +/-5%	Pass	12.9	5-50	Pass	220.9	225.0 +/-5%	Pass	4993	5022.7 +/-25%	Pass
AV72	05/12/2005 7:22	7198	7090.0 +/-5%	Pass	12.8	5-50	Pass	219.1	223.9 +/-5%	Pass	4979	5014.6 +/-25%	Pass
AV73	05/12/2005 7:22	7328	7251.3 +/-5%	Pass	12.7	5-50	Pass	224.0	225.0 +/-5%	Pass	5015	5022.4 +/-25%	Pass
AV74	05/12/2005 7:22	7438	7227.1 +/-5%	Pass	13.9	5-50	Pass	221.1	224.0 +/-5%	Pass	4994	5015.0 +/-25%	Pass



Alpha Calibration Insert
5/10/05

STL

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
8:44:27AM 5/10/2005

Analyst: 60040
Detector: AV5

Calibration

Name: April_2005a
Description:

Calibration Date: 5/9/2005 6:20:57PM

Source Info

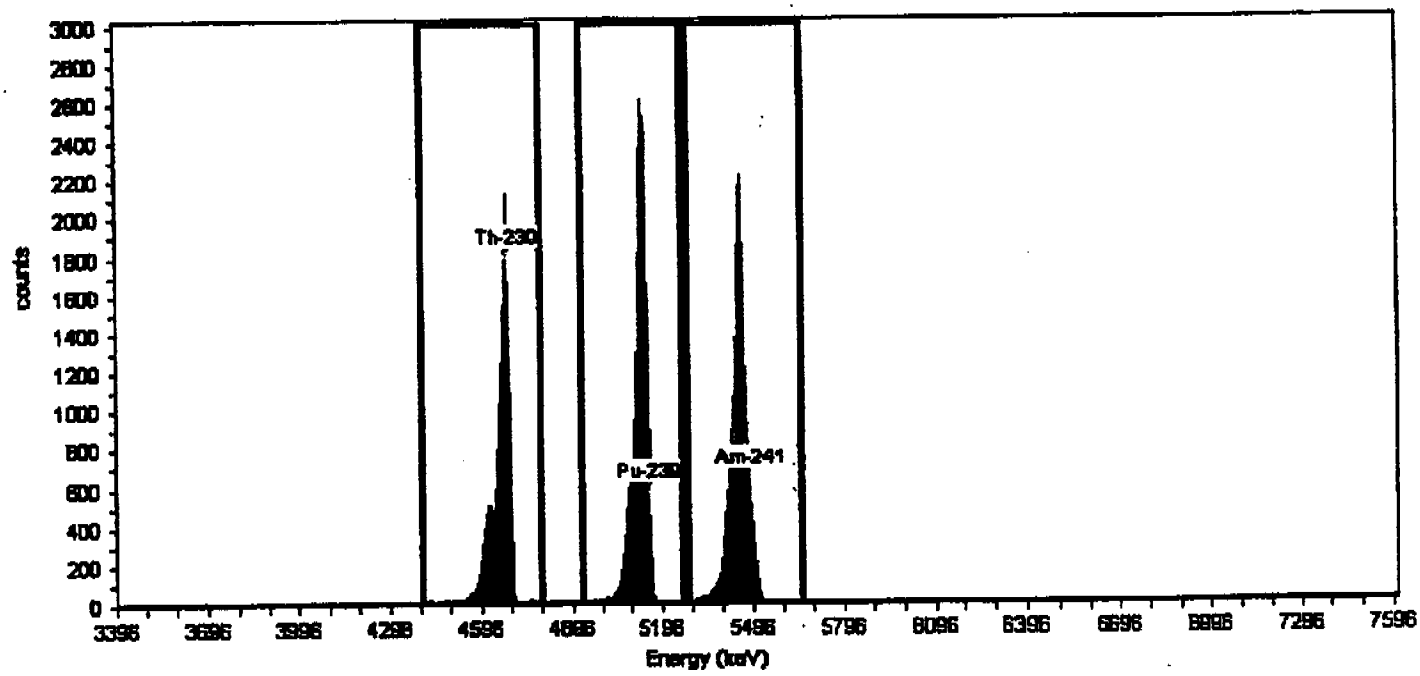
Certificate ID: 63507-334
Prepared by: Analytics
Description: AV5

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV5 , SN: 41-158X7
Acquisition Start Date: 5/9/2005 3:50:26PM
Live Time: 140.00 min.
Real Time: 140.04 min.
Efficiency: 27.25% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 1

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	12,687.00	90.62
Pu-239	243	5.16	212	258	14,940.00	106.71
Am-241	289	5.49	261	313	14,747.00	105.34

STL [redacted]

STL Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:56:48PM 5/9/2005

Analyst: 60040
Detector: AV27

Calibration

Name: April2005_AV27a
Description:

Calibration Date: 5/9/2005 6:56:44PM

Source Info

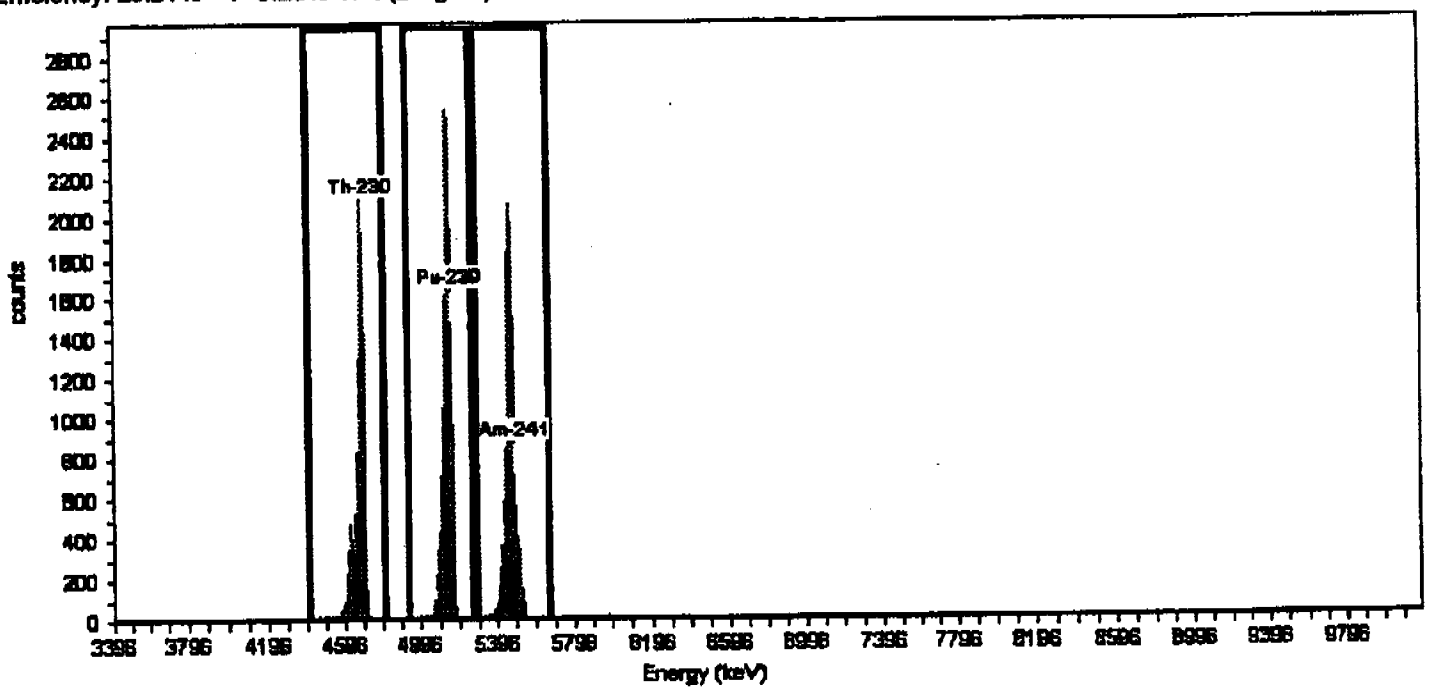
Certificate ID: 63508A-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV27 , SN: ALDR19
Acquisition Start Date: 5/9/2005 4:10:28PM
Live Time: 140.00 min.
Real Time: 140.04 min.
Efficiency: 25.21% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 2

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	11,580.00	82.57
Pu-239	243	5.16	212	258	13,327.00	95.19
Am-241	289	5.49	261	313	12,376.00	88.40

STL

STL Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:57:06PM 5/9/2005

Analyst: 60040
Detector: AV28

Calibration

Name: April2005a_AV28
Description:

Calibration Date: 5/9/2005 6:57:02PM

Source Info

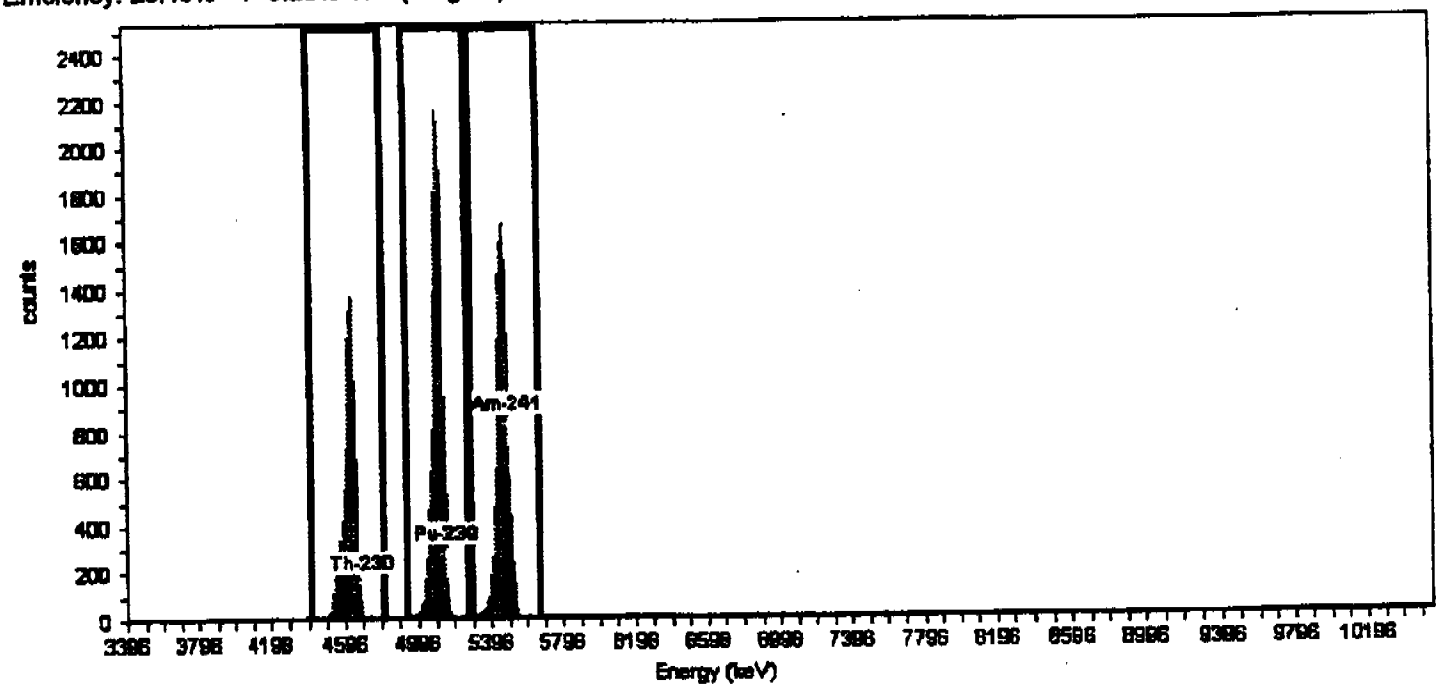
Certificate ID: 63507-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:00PM

Acquisition

Detector: AV28 , SN: ALDR20
Acquisition Start Date: 5/9/2005 4:36:27PM
Live Time: 140.00 min.
Real Time: 140.05 min.
Efficiency: 26.40% +/- 0.28% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 2

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	11,113.00	79.38
Pu-239	243	5.16	212	258	16,766.00	119.76
Am-241	289	5.49	261	313	14,615.00	104.39

LOT# F5D220345

STL [redacted]

STL

Alpha-Spectroscopy Calibration Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
6:56:57PM 5/9/2005

Analyst: 60040
Detector: AV30

Calibration

Name: April2005_AV30a
Description:

Calibration Date: 5/9/2005 6:56:53PM

Source Info

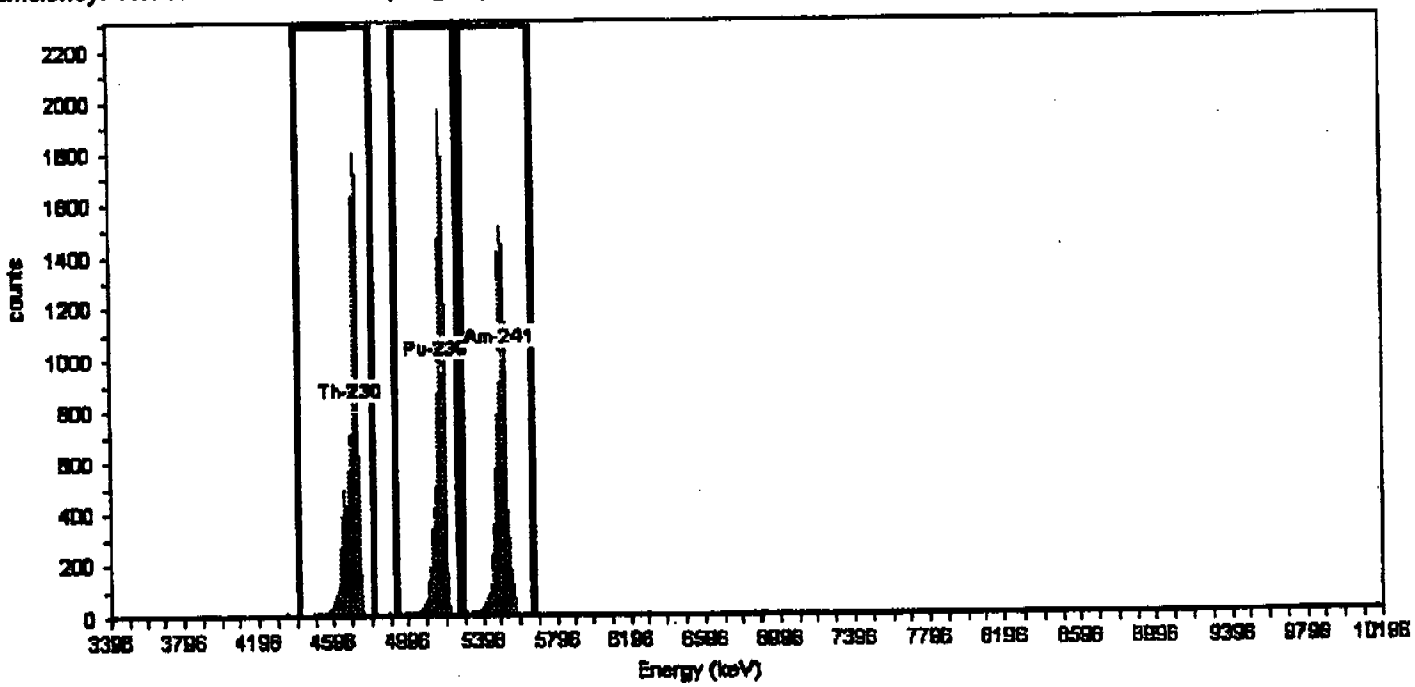
Certificate ID: 63506-334
Prepared by: Analytics
Description:

Certification Date: 5/30/2002 12:00:07PM

Acquisition

Detector: AV30 , SN:
Acquisition Start Date: 5/9/2005 4:22:38PM
Live Time: 140.00 min.
Real Time: 140.05 min.
Efficiency: 18.64% +/- 0.22% TPU(2 sigma)

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2



General Analysis

Method: Manual (ROI)
Algorithm: Linear

Initial Calibration: No
Shelf: 2

Nuclide Activity Summary

Nuclide	Peak Channel	Peak Energy MeV	ROI Start Channel	ROI End Channel	Gross Counts	Net Count Rate (cpm)
Th-230	179	4.69	139	194	11,361.00	81.15
Pu-239	243	5.16	212	258	10,911.00	77.94
Am-241	289	5.49	261	313	10,151.00	72.51

SEVERN TRENT STL

Run Log

Alphavision
5/11/05

Logbook No.: 2671

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5/10/05	5126224	FSD210345-014	63	~~5100~~ 60000	Am	CH	PR
2			-014X	64				
3			-015	65				
4			FSE060000-224B	66				
5			-224C	67				
6	5/11/5	Daily	Pulses	1-74	1 min	QA	gw	—
7	5/11	5124533	FSD210345-006	15	400	LLL	gw/RR	
8			-008	16				
9		5130592	FSED30206-002	1	240	LLL	PR	
10			-002X	2				
11			FSE060020-390B	3				
12			-592C	4				
13		5124338	FS 060130-021	6	180	LLL		PR
14			-021X	7				
15			-022	8				
16			-023	9				
17			-024	11				
18			FSE060000-328B	12				
19			-328C	13				
20		5126347	FSD200213-002	25		TH	gw	
21			-002X	26				
22			FSE060000-347B	27				
23			-347C	33				
24	5/11	5124340	FSD260288-014	10	400	U	CH	
25			-015	45				
26			-016	47				
27			-017	48				
28	5/11	5124339	FSD260288-001	54	400	PU		
29			-001X	55				

Reviewed By:_____ Date:_____

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2671

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5/11/05	5124339	FS0260288-002	57	400	Pu	CH	
2			-003	58				
3			-004	59				
4			-005	62				
5			-006	65				
6			-007	66				
7			-008	67				
8			-009	70				
9			-010	71				
10			-011	72				
11	5/11/05	5131544	FS0210345-001	1	240 480	U	CH/KH	
12			-002	2				
13			-003	3				
14			-004	4				
15			-005	6				
16			-006	7				
17			-007	8				
18			-008	9				
19			-009	11				
20			-010	12				
21			-011	13				
22			-012	15				
23			-013	16				
24			-014	17				
25			-014[illegible]	18				
26			-015	19				
27			FSE110000-544B	20				
28			-544C	21				
29	5/12/5	Daily	8 Pulses	1-74	1 min	QA	QA	—

Reviewed By: QA Date: 5/12/5

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2671

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5/12/5	5124339	FSD260288-012	45	200	Pu	JW	
2			-013	47				
3			-014	48				
4			-015	54				
5			-016	55				
6			-017	57				
7			FSTE040000-339B	58				
8			-339C	59				
9		5130106	FSD290133-001	25	180m	Pu		DSL
10			-001X	26				
11			FSD100000-106B	27				
12			-106C	23				
13		5131103	FSDZ70183-001	41				
14			-002	49				
15			-003	50				
16			FSD280187-001	51				
17			-002	52				
18			-003	53				
19			FSDZ902169-001	56				
20			-002	60				
21			-003	61				
22			-004	63				
23			-005	64				
24			-006	68				
25			FSD300157-001	69				
26			-002	73				
27			-003	74				
28			-1003X	22				
29			-1004	23				

Reviewed By: JW Date: 5/12/5

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2671

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5/12/5	5131103	FSD300157-005	24	180	Ua	gw	RR
2	"	"	FSE100000-1038	70	"	"	"	"
3			-103C	71				
4	5/12/05	5131574	FSD210345-005 RE	20	240	UU	RR	RR
5	"	"	" -008	21	"	"	"	"
6		5129533	FSE060286001	1	180	UU	RR	
7			-001X	8				
8			-002	4				
9			-003	6				
10			-004	7				
11			-005	8				
12			-006	9				
13			-007	11				
14			-008	12				
15			FSE090000-533B	10				
16			" -533C	13				
17		5129531	FSE060286-001	39		TW		
18			-001X	40				
19			-002	41				
20			-003	42				
21			-004	15				
22			-005	34				
23			-006	35				
24			-007	37				
25			-008	38				
26			FSE090000-533B	16				
27			" -531C	17				
28		5130104	FSD290133-001	26		UU	gw	
29		"	" -001X	25		"	"	

Reviewed By: gw Date: 5/12/5

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2671

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5/12/5	5130104	FSE100000-106B	33	180m	LLL	QW	
2		1	1 -106C	27		J		
3		5129528	FSE060207-001	68		TH		
4			-001X	69				
5			-002	73				
6			-003	74				
7			FSE090000-528B	70				
8			1 -528C	71				
9		5129529	FSE060207-001	5		LLL		
10			-001X	18				
11			-002	19				
12			-003	22				
13			-004	23				
14			-005	24				
15			-006	46				
16			-007	49				
17			-008	50				
18			FSE060278-001	51				
19			-002	52				
20			-003	53				
21			-004	56				
22			-005	60				
23			-006	61				
24			-007	63				
25			-008	64				
26			FSE090000-529B	65				
27			1 -529C	66				
28		5129531	FSE060278-001K	20	180min	TH	~	
29		5129528	FSE060207-004	1	180min	TH	~	

Reviewed By:_____ Date:_____

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2671

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials	
1	5-12-5	5129528	FSE060207-005	2	180 min	Th	✓		
2			-006	4					
3			-007	6					
4			-008	7					
5			FJE060278-001	8					
6			-002	9					
7			-003	11					
8			-004	12					
9			-005	13					
10			-006	15					
11			-007	16					
12			-008	17					
13	5-12-5	5127902	FSD250133-015	5	180 min	Pu	✓		elbow pump on
14			-016	18					
15			-017	19					
16			-018	21					
17			-018X	22					
18			-019	23					
19			-020	24					
20			-021	46					
21			-022	49					
22			-023	50					
23			-024	51					
24			-025	52					
25			-026	53					
26			-027	56					
27			-028	60					
28			FSE050011-002B	10					
29			-002C	45					

Reviewed By:_____ Date:_____

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2671

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5-12-5	5125404	F5E050000-004C	47	(8 days)	Pu	✓	
2	5-12-5	5125406	F5D250133-015	61		U		
3			-016	63				
4			-017	64				
5			-018	68				
6			-018X	69				
7			-019	73				
8			-020	74				
9			-021	25				
10			-022	26				
11			-023	27				
12			-024	29				
13			-025	35				
14			-026	34				
15			027	35				
16			-028	37				
17			F5E050000-006B	48				
18			-006C	54				
19	5/12/05	5125401	F5D250133-015	2	240	Am	CH	
20			-016	4				
21			-017	6				
22			-018	7				
23			-018X	8				
24			-019	9				
25			-020	10				
26			-021	11				
27			-022	12				
28			-023	13				
29			-024	15				

Reviewed By: CH Date: 5-12-5

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2671

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5/12/05	5125401	F5D250133-025	16	240	Am	CH	
2	"	"	-026	17	"	"	"	
3	"	"	-027	18	"	"	"	
4	"	"	-028	19	"	"	"	
5	"	"	F5E050000-401B	20	"	"	"	
6	"	"	" -401C	21	"	"	"	
7	5/12/05	5126312	F5E050200-001	22	240	U	CH	
8	"	"	" -001X	23	"	"	"	
9	"	"	F5E060000-316B	24	"	"	"	
10	"	"	" -316C	45	"	"	"	
11	5/12/05	5126315	F5E050200-001	46	240	Pu	CH	
12	"	"	" -001X	47	"	"	"	
13	"	"	F5E060000-315B	48	"	"	"	
14	"	"	" -315C	49	"	"	"	
15	5/12/05	5126317	F5E050200-001	50	240	Am	CH	
16	"	"	" -001X	51	"	"	"	
17	"	"	F5E060000-317B	52	"	"	"	
18	"	"	" -317C	53	"	"	"	
19	5/12/05	5125405	F5D250133-015	25	180	Th	CH	
20	"	"	-016	26	"	"	"	
21	"	"	-017	27	"	"	"	
22	"	"	-018	29	"	"	"	
23	"	"	-018X	33	"	"	"	
24	"	"	-019	34	"	"	"	
25	"	"	-020	35	"	"	"	
26	"	"	-021	37	"	"	"	
27	"	"	-022	38	"	"	"	
28	"	"	-023	39	"	"	"	
29	"	"	-024	40	"	"	"	

Reviewed By: CH Date: 5-13-5

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Logbook No.: 2671

STL
St. Louis

Alpha Spectrometry Runlog

	Date	Batch #	Sample #	Detector	Count Time	Analyte	Setup Initials	Process Initials
1	5/12/05	5125405	F5D250133-025	41	240	Th	CH	
2	"	"	" -026	42	"	"	"	
3	"	"	F5E050000-405B	54	"	"	"	
4	"	"	" -405C	55	"	"	"	
5	5-13-5	Daily Pulser ✓		1-74	1 min	Qa	RA	
6	"	5125405	F5D250133-027	25	240	TH	gh	
7	"	"	" -028	26	"	"	"	
8	"	5125406	F5D250133-024	33	180	U	"	
9	"	"	" -025	27	"	"	"	
10	"	"	" -026	35	"	"	"	
11	"	"	" -028	34	"	"	"	
12	"	51263116	F5E060000-316C	15	240	"	"	
13	"	5125402	F5D250133-015	1	180	Pu	"	
14	"	"	" -016	2	"	"	"	
15	"	"	" -017	3	"	"	"	
16	"	"	" -018	4	"	"	"	
17	"	"	" -021	5	"	"	"	
18	"	"	" -022	6	"	"	"	
19	"	"	" -023	7	"	"	"	
20	"	"	" -024	8	"	"	"	
21	"	"	" -025	9	"	"	"	
22	"	"	" -026	11	"	"	"	
23	"	"	" -027	12	"	"	"	
24	"	"	" -028	13	"	"	"	
25								
26								
27								
28								
29								

Reviewed By:_____ Date:_____

SOP References: STL-RD-0210, current revision. Form: SL-RAD-0030, Revised 5/17/04
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

STL

Radiochemistry Prep Report

Alpha Spectroscopy

Batch # 5131544

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

General Prep Information

Method	Tracer ID	Aliquot	Isotope	Reference Date	Activity	Units	Analyst
Iso URANIUM (LONG CT) NAS & DOE MOD							
	Rad04-0051	0.1	U-232	9/16/1997	1.10E+02	dpm/mL	400923

Weights

Lot ID	Work Order #	Geometry	Aliquot	Dilution	Adj Aliquot	
F5D210345-001	G8WNH3AC	Planchette, 44mm	2.0029	2	1.00145 g	1
F5D210345-002	G8WNN3AC	Planchette, 44mm	2.0005	2	1.00025 g	2
F5D210345-003	G8WNQ3AC	Planchette, 44mm	2.0085	2	1.00425 g	3
F5D210345-004	G8WNR3AC	Planchette, 44mm	2.0312	2	1.0156 g	4
F5D210345-005	G8WNV3AC	Planchette, 44mm	2.0012	2	1.0006 g	6
[redacted] RC=20						
F5D210345-006	G8WNW3AC	Planchette, 44mm	2.0023	2	1.00115 g	7
F5D210345-007	G8WN03AC	Planchette, 44mm	2.0069	2	1.00345 g	8
F5D210345-008	G8WN13AC	Planchette, 44mm	2.0002	2	1.0001 g	9
[redacted] RC: 21						
F5D210345-009	G8WN23AC	Planchette, 44mm	2.0185	2	1.00925 g	11
F5D210345-010	G8WN33AC	Planchette, 44mm	2.0356	2	1.0178 g	12
F5D210345-011	G8WN43AC	Planchette, 44mm	2.0143	2	1.00715 g	13
F5D210345-012	G8WN53AC	Planchette, 44mm	2.0115	2	1.00575 g	15
F5D210345-013	G8WN73AC	Planchette, 44mm	2.0019	(10) ~~10~~ ~~20~~	RE 5/12/05 ~~0.20019 g~~ ~~0.100095~~	0.20019 16
F5D210345-014	G8WN93AC	Planchette, 44mm	2.0021	2	1.00105 g	17
F5D210345-014X	G8WN91AH	Planchette, 44mm	2.0016	2	1.0008 g	18
F5D210345-015	G8WPC3AC	Planchette, 44mm	2.0119	2	1.00595 g	19
F5E110000-544B	HACWP1AA	Planchette, 44mm	1	1	1 g	20
F5E110000-544C	HACWP1AC	Planchette, 44mm	0.1309	1	0.1309 g	21

KH — Coprecipitated By
05-12-05 — Precip Date
KH — Spiked By
SS — Spike Verified By
5-12-05 — Spike Date
KH — Analyst's Signature
05-12-05 — Date
Reviewed By
5-12-05 — Date

STL

Radiochemistry Prep Report

Alpha Spectroscopy

Batch # 5131544

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Spike Information

Lot ID	Work Order #	Standard ID	Aliquot	Isotope	Reference Date	Activity	Units
F5E110000-544C	HACWP1AC	TRM-3 Iso-U	0.1309	U-238	5/29/2003	1.96E+01	pCi/g
F5E110000-544C	HACWP1AC	TRM-3 Iso-U	0.1309	U-234	5/29/2003	1.96E+01	pCi/g

Standard Operating Procedures

	SOP Number	Rev	Title
☐	STL-RC-0002	3	Planchet Preparation For Radiochemistry And Radiological Screening Analysis
☑	STL-RC-0003	5	Drying And Grinding Of Soil And Solid Samples
☑	STL-RC-0004	7	Preparation Of Soil, Sludge, And Filter Paper Samples For Radiochemical Analysis
☐	STL-RC-0090	4	Preparation Of Samples For Sequential Determination Of Isotopic Americium, Curium, Neptunium, Plutonium, Thorium, And Uranium In Aqueous Samples
☑	STL-RC-0100	7	Actinide Coprecipitation
☑	STL-RC-0238	3	Isotopic Uranium By Eichrom UTEVA Resin for Water, Soil, Sludge and Filters
☐	STL-RC-0240	3	Isotopic Americium, Curium, Plutonium, Thorium, and Uranium in Water, Soil, Sludge and Filters by Eichrome Separation Resin
☐	STL-RC-0241	1	Isotopic Americium, Plutonium, Curium, and Uranium in Water, Soil, Sludge and Filters by Eichrome Uteva and Tru Resins
☐	STL-RC-0242	3	Isotopic Thorium, Plutonium and Uranium In Water, Soil, Sludge and Filters by Eichrome Separation Resin
☑	STL-RD-0201	2	Daily Operations Of An Alpha Spectroscopy System
☑	STL-RD-0203	1	Calibration And Maintenance Of A Alpha Spectroscopy System

(Check all that apply)

KH	05-12-05		SSS	5-12-05	
Coprecipitated By	Precip Date	Spiked By	Spike Verified By	Spike Date	
KH	05-12-05	PR		5-12-05	
Analyst's Signature	Date	Reviewed By		Date	

St. Louis Laboratory
13715 Rider Trail North
Earth City, MO 63045-1205

Alpha Spectroscopy Quality Assurance Worksheet

Batch: 5131544

F5E110000-544C Recovery Summary			
Isotope	Certified Activity	Observed Activity	% Recovery
U-234	1.96E+01	1.97E+01	101%
U-238	1.96E+01	1.90E+01	97%

F5D210345-014 Duplicate Summary			
Isotope	Sample Activity	Duplicate Activity	RER
U-234	7.40E+00	8.01E+00	0.78
U-235	3.40E-01	3.18E-01	0.20
U-238	4.84E+00	5.22E+00	0.67

Comments:

Calculated By: RL DATE: 5/12/2005

Reviewed By: [signature] DATE: 5/13/05

STL St. Louis

Isotopic Actinide DLC calculation when decay and ingrowth calculations are not required.

Sample ID	Isotope	Total Bkgd Cts	L/g Sample Volume	decimal det. eff.	minutes ct. length	decimal yield	decimal abundance	DLC
F5D210345-001	U234	1.5	1.0015	0.274	240	1.0031	0.998	0.0195
F5D210345-001	U235	0	1.0015	0.274	240	1.0031	0.809	0.0000
F5D210345-001	U238	0.3	1.0015	0.274	240	1.0031	1	0.0057
F5D210345-002	U234	0.9	1.0003	0.2631	240	1.05	0.998	0.0150
F5D210345-002	U235	0.6	1.0003	0.2631	240	1.05	0.809	0.0151
F5D210345-002	U238	0.9	1.0003	0.2631	240	1.05	1	0.0150
F5D210345-003	U234	0.9	1.0043	0.2719	240	0.9872	0.998	0.0154
F5D210345-003	U235	0.3	1.0043	0.2719	240	0.9872	0.809	0.0110
F5D210345-003	U238	0	1.0043	0.2719	240	0.9872	1	0.0000
F5D210345-004	U234	0.3	1.0156	0.2707	240	0.9813	0.998	0.0059
F5D210345-004	U235	0	1.0156	0.2707	240	0.9813	0.809	0.0000
F5D210345-004	U238	0.6	1.0156	0.2707	240	0.9813	1	0.0125
F5D210345-005	U234	0.6	1.0006	0.2989	240	1.0201	0.998	0.0111
F5D210345-005	U235	1.2	1.0006	0.2989	240	1.0201	0.809	0.0194
F5D210345-005	U238	1.8	1.0006	0.2989	240	1.0201	1	0.0192
F5D210345-006	U234	0.3	1.0012	0.2723	240	1.0399	0.998	0.0055
F5D210345-006	U235	0	1.0012	0.2723	240	1.0399	0.809	0.0000
F5D210345-006	U238	0.9	1.0012	0.2723	240	1.0399	1	0.0146
F5D210345-007	U234	0	1.0035	0.2842	240	0.8863	0.998	0.0000
F5D210345-007	U235	0.3	1.0035	0.2842	240	0.8863	0.809	0.0117
F5D210345-007	U238	0.3	1.0035	0.2842	240	0.8863	1	0.0095
F5D210345-008	U234	0.9	1.0001	0.2649	240	1.0626	0.998	0.0146
F5D210345-008	U235	0.3	1.0001	0.2649	240	1.0626	0.809	0.0103
F5D210345-008	U238	0.9	1.0001	0.2649	240	1.0626	1	0.0144
F5D210345-009	U234	0.9	1.0093	0.2661	240	1.009	0.998	0.0152
F5D210345-009	U235	0.3	1.0093	0.2661	240	1.009	0.809	0.0106
F5D210345-009	U238	0	1.0093	0.2661	240	1.009	1	0.0000
F5D210345-010	U234	0.6	1.0178	0.2642	240	0.9437	0.998	0.0134
F5D210345-010	U235	0	1.0178	0.2642	240	0.9437	0.809	0.0000
F5D210345-010	U238	0.9	1.0178	0.2642	240	0.9437	1	0.0163
F5D210345-011	U234	0.3	1.0072	0.2679	240	0.9579	0.998	0.0093
F5D210345-011	U235	0.3	1.0072	0.2679	240	0.9579	0.809	0.0114
F5D210345-011	U238	0.9	1.0072	0.2679	240	0.9579	1	0.0160
F5D210345-012	U234	0.6	1.0058	0.2685	240	0.9755	0.998	0.0129
F5D210345-012	U235	0	1.0058	0.2685	240	0.9755	0.809	0.0000
F5D210345-012	U238	0	1.0058	0.2685	240	0.9755	1	0.0000
F5D210345-013	U234	0.3	0.2002	0.2868	240	1.0269	0.998	0.0406
F5D210345-013	U235	0	0.2002	0.2868	240	1.0269	0.809	0.0000
F5D210345-013	U238	0.3	0.2002	0.2868	240	1.0269	1	0.0406
F5D210345-014	U234	0.6	1.0011	0.2657	240	0.9946	0.998	0.0128
F5D210345-014	U235	0.6	1.0011	0.2657	240	0.9946	0.809	0.0158
F5D210345-014	U238	0.3	1.0011	0.2657	240	0.9946	1	0.0080
F5D210345-014X	U234	0	1.0008	0.2583	240	0.989	0.998	0.0000
F5D210345-014X	U235	0.3	1.0008	0.2583	240	0.989	0.809	0.0116
F5D210345-014X	U238	0.6	1.0008	0.2583	240	0.989	1	0.0132
F5D210345-015	U234	3.6	1.006	0.2776	240	1.0284	0.998	0.0289
F5D210345-015	U235	1.2	1.006	0.2776	240	1.0284	0.809	0.0206
F5D210345-015	U238	1.8	1.006	0.2776	240	1.0284	1	0.0204
F5E110000-544B	U234	0.6	1	0.2989	240	0.971	0.998	0.0117
F5E110000-544B	U235	1.2	1	0.2989	240	0.971	0.809	0.0804
F5E110000-544B	U238	1.8	1	0.2989	240	0.971	1	0.0202
F5E110000-544C	U234	0.9	0.1309	0.2649	240	0.9826	0.998	0.1218
F5E110000-544C	U238	0.9	0.1309	0.2649	240	0.9826	1	0.1216

Calculated by: DR Date: 5/12/05

Reviewed by: DJ Date: 5/13/05

Monthly Backgrounds
April 2005
Alphavision

STL ST. LOUIS

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:36AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV1
Comment:

Spectrum #1 Analysis #1

Batch

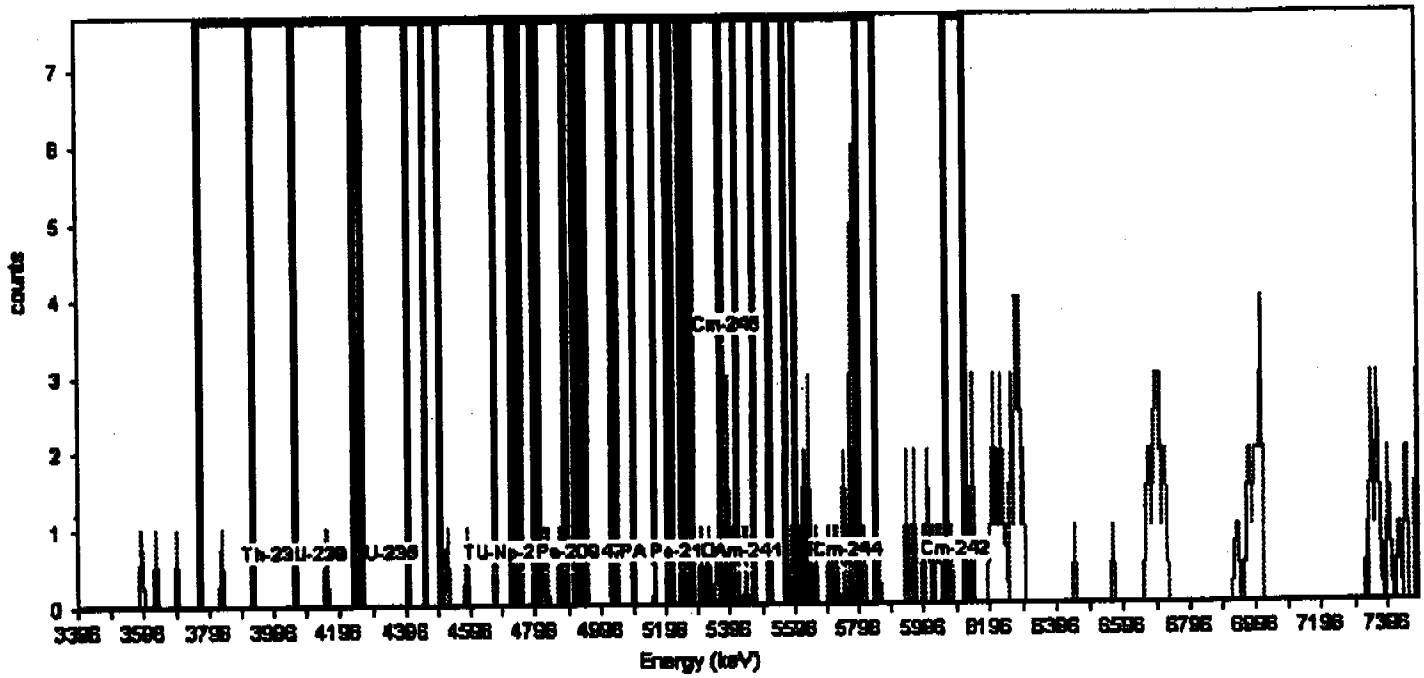
Batch Name: April_2005
Description:

Acquisition

Detector: AV1 , SN: 41-158W6
Acquisition Start Date: 4/26/2005 10:37:36AM
Live Time: 800.00 min.
Real Time: 800.11 min.
Calibration Name: March2005_AV1
Calibration Date: 3/16/2005 7:59:48PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.33% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROU[illegible] Library: Background ROI Library
Total Background Counts: 156.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	3.00	3.750E-003	2.500E-003
U-234	4.70	4.50	4.80	3.00	3.750E-003	2.500E-003
Pu-242	4.86	4.67	4.93	4.00	5.000E-003	2.795E-003
Th-229	4.84	4.72	5.10	4.00	5.000E-003	2.795E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.26	1.00	1.250E-003	1.768E-003
U-232	5.29	5.04	5.37	6.00	7.500E-003	3.307E-003
Th-228	5.41	5.16	5.47	14.00	1.750E-002	4.841E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	15.00	1.875E-002	5.000E-003
Am-241	5.45	5.27	5.57	14.00	1.750E-002	4.841E-003
Cm-245	5.39	5.36	5.41	9.00	1.125E-002	3.953E-003
Pu-236	5.74	5.52	5.80	25.00	3.125E-002	6.374E-003
Cm-244	5.76	5.60	5.85	25.00	3.125E-002	6.374E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:40AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV2
Comment:

Spectrum #1 Analysis #1

Batch

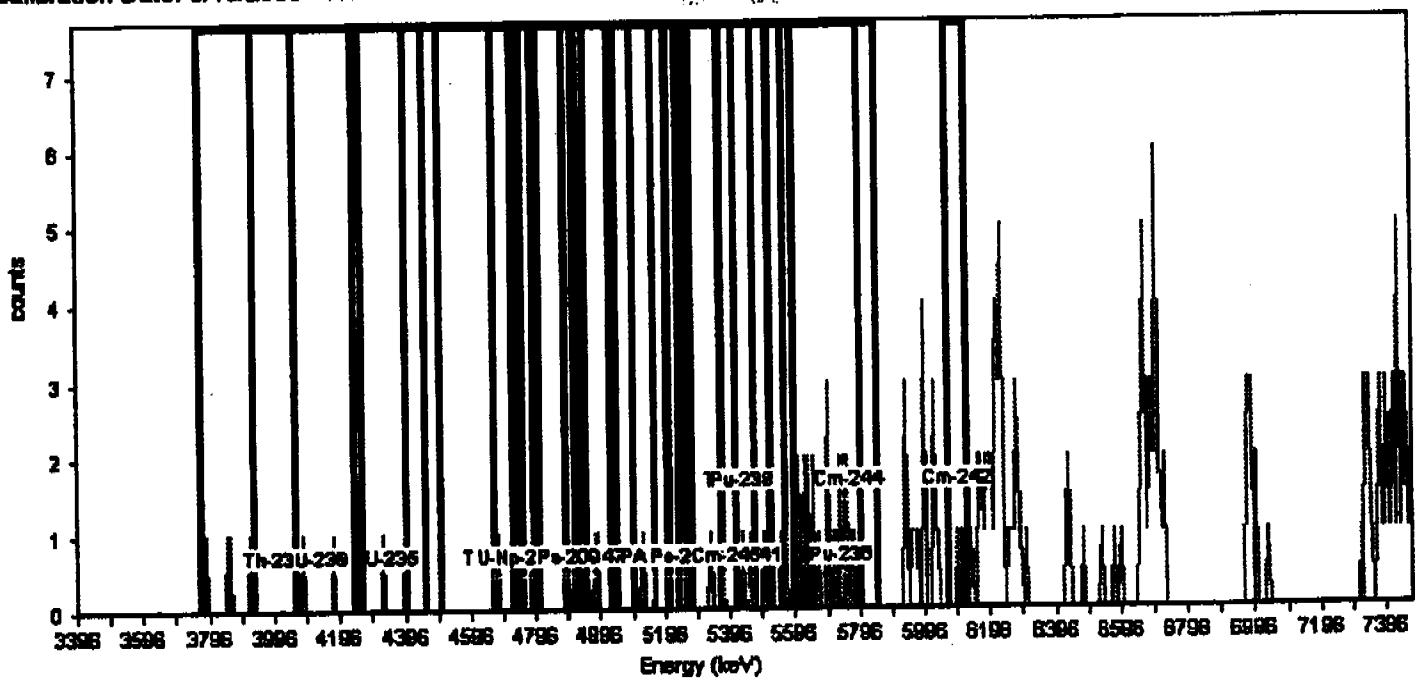
Batch Name: April_2005
Description:

Acquisition

Detector: AV2 , SN: 41-158W7
Acquisition Start Date: 4/26/2005 10:37:38AM
Live Time: 800.00 min.
Real Time: 800.11 min.
Calibration Name: March2005_AV2
Calibration Date: 3/16/2005 7:59:52PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.39% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 197.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	4.00	5.000E-003	2.795E-003
U-238	4.14	3.93	4.24	2.00	2.500E-003	2.165E-003
U-235	4.35	4.26	4.46	2.00	2.500E-003	2.165E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	3.00	3.750E-003	2.500E-003
Pu-242	4.88	4.67	4.93	4.00	5.000E-003	2.795E-003
Th-229	4.84	4.72	5.10	5.00	6.250E-003	3.062E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	4.00	5.000E-003	2.795E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	3.00	3.750E-003	2.500E-003
Am-243	5.20	5.03	5.26	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	5.00	6.250E-003	3.062E-003
Th-228	5.41	5.16	5.47	10.00	1.250E-002	4.148E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	11.00	1.375E-002	4.330E-003
Am-241	5.45	5.27	5.57	14.00	1.750E-002	4.841E-003
Cm-245	5.39	5.36	5.41	5.00	6.250E-003	3.062E-003
Pu-236	5.74	5.52	5.80	26.00	3.250E-002	6.495E-003
Cm-244	5.76	5.60	5.85	23.00	2.875E-002	6.124E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:43AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV3
Comment:

Spectrum #1 Analysis #1

Batch

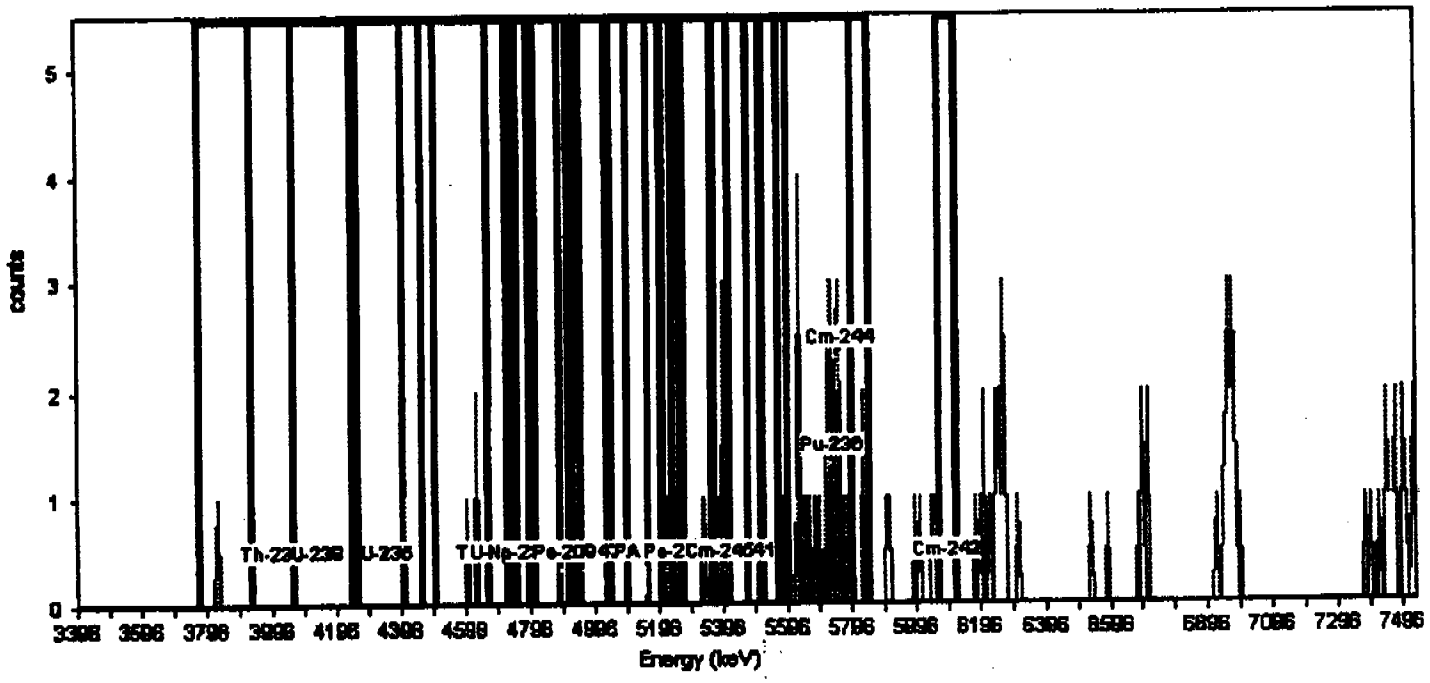
Batch Name: April_2005
Description:

Acquisition

Detector: AV3 , SN: 41-158X5
Acquisition Start Date: 4/26/2005 10:37:40AM
Live Time: 800.00 min.
Real Time: 800.11 min.
Calibration Name: March2005_AV3
Calibration Date: 3/16/2005 7:59:56PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²

Efficiency: 27.35% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Library: Background ROI Library
Total Background Counts: 107.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	4.00	5.000E-003	2.795E-003
U-234	4.70	4.50	4.80	3.00	3.750E-003	2.500E-003
Pu-242	4.86	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	3.00	3.750E-003	2.500E-003
Th-228	5.41	5.16	5.47	8.00	1.000E-002	3.750E-003
Po-210	5.25	5.20	5.28	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	8.00	1.000E-002	3.750E-003
Am-241	5.45	5.27	5.57	8.00	1.000E-002	3.750E-003
Cm-245	5.39	5.36	5.41	6.00	7.500E-003	3.307E-003
Pu-236	5.74	5.52	5.80	29.00	3.625E-002	6.847E-003
Cm-244	5.76	5.60	5.85	30.00	3.750E-002	6.960E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:46AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV4
Comment:

Spectrum #1 Analysis #1

Batch

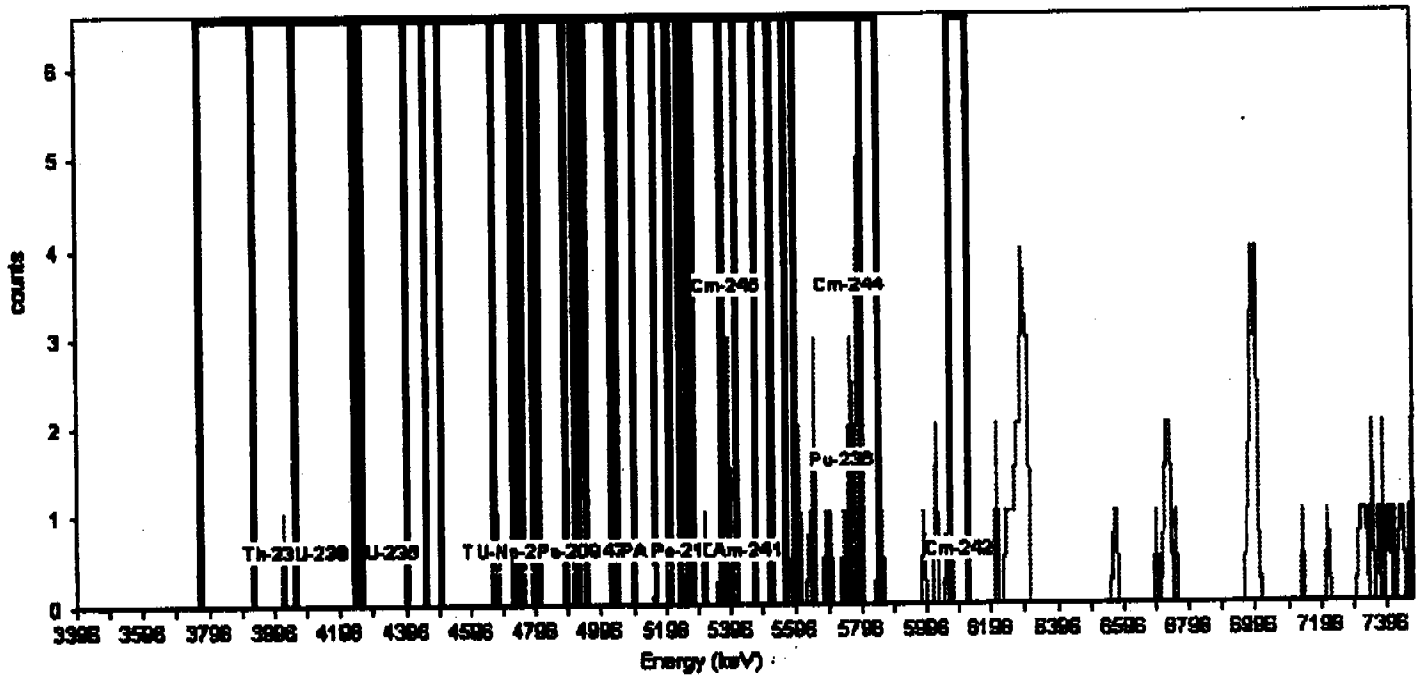
Batch Name: April_2005
Description:

Acquisition

Detector: AV4 , SN: 41-172B5
Acquisition Start Date: 4/26/2005 10:37:42AM
Live Time: 800.00 min.
Real Time: 800.11 min.
Calibration Name: March2005_AV4
Calibration Date: 3/16/2005 7:59:59PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.17% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 117.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.08	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	2.00	2.500E-003	2.165E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	8.00	1.000E-002	3.750E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	8.00	1.000E-002	3.750E-003
Am-241	5.45	5.27	5.57	8.00	1.000E-002	3.750E-003
Cm-245	5.39	5.36	5.41	7.00	8.750E-003	3.536E-003
Pu-236	5.74	5.52	5.80	31.00	3.875E-002	7.071E-003
Cm-244	5.76	5.60	5.85	31.00	3.875E-002	7.071E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
2:53:46AM 4/27/2005

Analyst: 60040

Sample

Spectrum #1 Analysis #1

Sample Name: AV5
Comment:

Batch

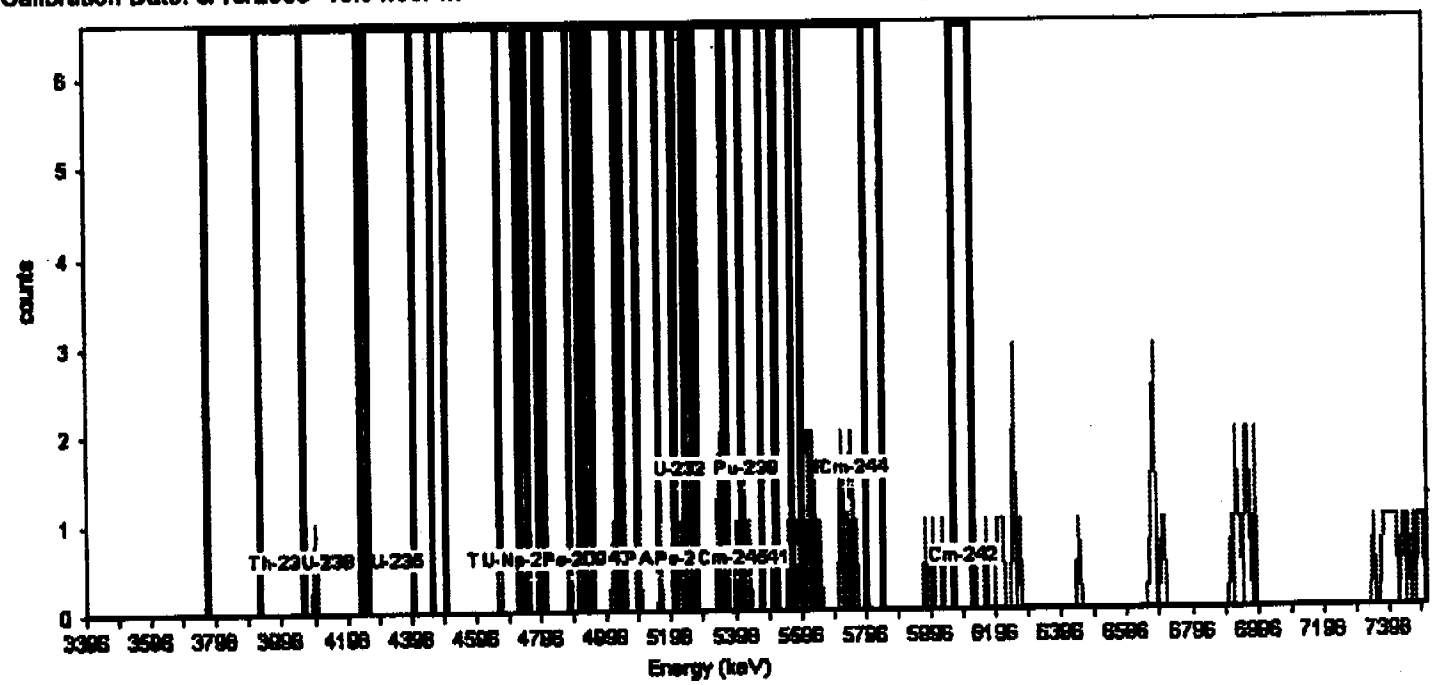
Batch Name: April_2005
Description:

Acquisition

Detector: AV5 , SN: 41-158X7
Acquisition Start Date: 4/26/2005 1:33:24PM
Live Time: 800.00 min.
Real Time: 800.04 min.
Calibration Name: March2005_AV5
Calibration Date: 3/16/2005 10:54:03PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 29.32% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 91.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	4.00	5.000E-003	2.795E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.86	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	5.00	6.250E-003	3.062E-003
Am-243	5.20	5.03	5.28	7.00	8.750E-003	3.536E-003
U-232	5.23	5.04	5.37	17.00	2.125E-002	5.303E-003
Th-228	5.41	5.16	5.47	17.00	2.125E-002	5.303E-003
Po-210	5.25	5.20	5.26	3.00	3.750E-003	2.500E-003
Pu-238	5.44	5.24	5.52	16.00	2.000E-002	5.154E-003
Am-241	5.45	5.27	5.57	15.00	1.875E-002	5.000E-003
Cm-245	5.39	5.36	5.41	8.00	1.000E-002	3.750E-003
Pu-236	5.74	5.52	5.80	19.00	2.375E-002	5.590E-003
Cm-244	5.76	5.80	5.85	17.00	2.125E-002	5.303E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:50AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV6
Comment:

Spectrum #1 Analysis #1

Batch

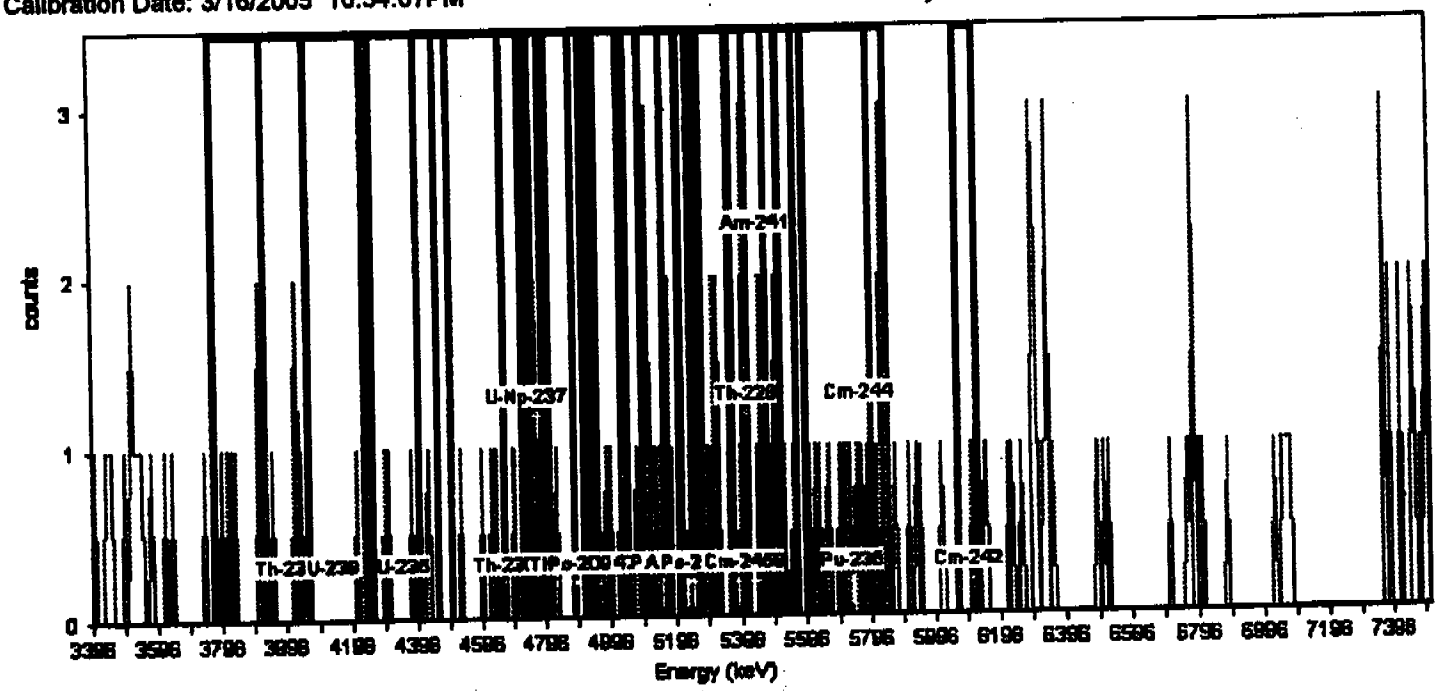
Batch Name: April_2005
Description:

Acquisition

Detector: AV6 , SN:
Acquisition Start Date: 4/26/2005 10:37:43AM
Live Time: 800.00 min.
Real Time: 800.11 min.
Calibration Name: March2005_AV6
Calibration Date: 3/16/2005 10:54:07PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.74% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND_ROI Library: Background ROI Library
Total Background Counts: 182.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	14.00	1.750E-002	4.841E-003
U-238	4.14	3.93	4.24	9.00	1.126E-002	3.963E-003
U-235	4.35	4.26	4.46	4.00	5.000E-003	2.795E-003
Th-230	4.67	4.40	4.73	8.00	1.000E-002	3.750E-003
U-234	4.70	4.50	4.80	11.00	1.375E-002	4.330E-003
Pu-242	4.86	4.67	4.93	9.00	1.125E-002	3.953E-003
Th-229	4.84	4.72	5.10	20.00	2.500E-002	5.728E-003
Np-237	4.77	4.75	4.79	3.00	3.750E-003	2.500E-003
Cm-247	4.96	4.88	5.04	12.00	1.500E-002	4.507E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	19.00	2.375E-002	5.590E-003
Am-243	5.20	5.03	5.28	16.00	2.000E-002	5.154E-003
U-232	5.23	5.04	5.37	23.00	2.875E-002	6.124E-003
Th-228	5.41	5.16	5.47	23.00	2.875E-002	6.124E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	21.00	2.625E-002	5.883E-003
Am-241	5.45	5.27	5.57	24.00	3.000E-002	6.250E-003
Cm-245	5.39	5.36	5.41	7.00	8.750E-003	3.536E-003
Pu-236	5.74	5.52	5.80	22.00	2.750E-002	5.985E-003
Cm-244	5.76	5.60	5.86	29.00	3.625E-002	6.847E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:53AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV7
Comment:

Spectrum #1 Analysis #1

Batch

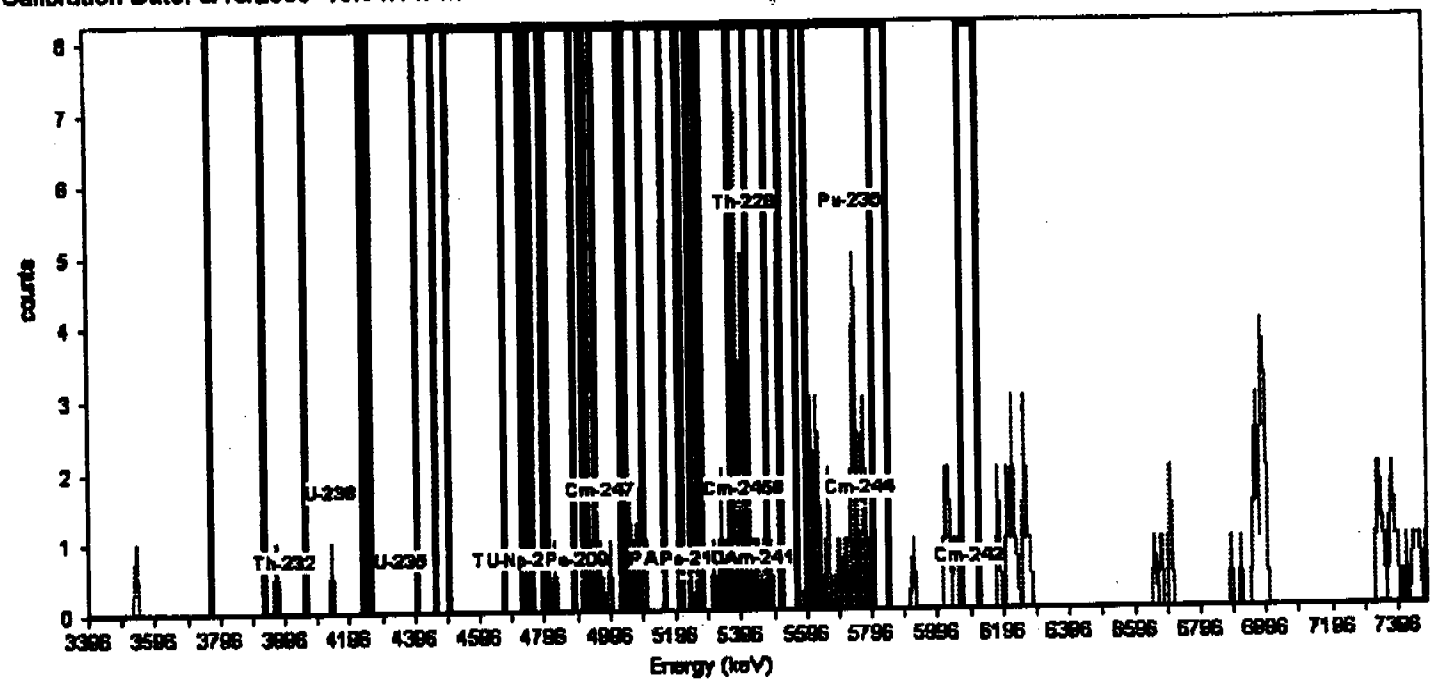
Batch Name: April_2005
Description:

Acquisition

Detector: AV7 , SN: 41-158X6
Acquisition Start Date: 4/26/2005 10:37:45AM
Live Time: 800.00 min.
Real Time: 800.11 min.
Calibration Name: March2005_AV7
Calibration Date: 3/16/2005 10:54:14PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.46% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Library: Background ROI Library
Total Background Counts: 154.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	3.00	3.750E-003	2.500E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.86	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	13.00	1.625E-002	4.677E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	3.00	3.750E-003	2.500E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	13.00	1.625E-002	4.677E-003
Am-243	5.20	5.03	5.28	14.00	1.750E-002	4.841E-003
U-232	5.23	5.04	5.37	20.00	2.500E-002	5.728E-003
Th-228	5.41	5.16	5.47	34.00	4.250E-002	7.395E-003
Po-210	5.25	5.20	5.28	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	35.00	4.375E-002	7.500E-003
Am-241	5.45	5.27	5.57	34.00	4.250E-002	7.395E-003
Cm-245	5.39	5.36	5.41	21.00	2.625E-002	5.863E-003
Pu-236	5.74	5.52	5.80	35.00	4.375E-002	7.500E-003
Cm-244	5.78	5.60	5.85	35.00	4.375E-002	7.500E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

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Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:56AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV8
Spectrum #1 Analysis #1
Comment:

Batch

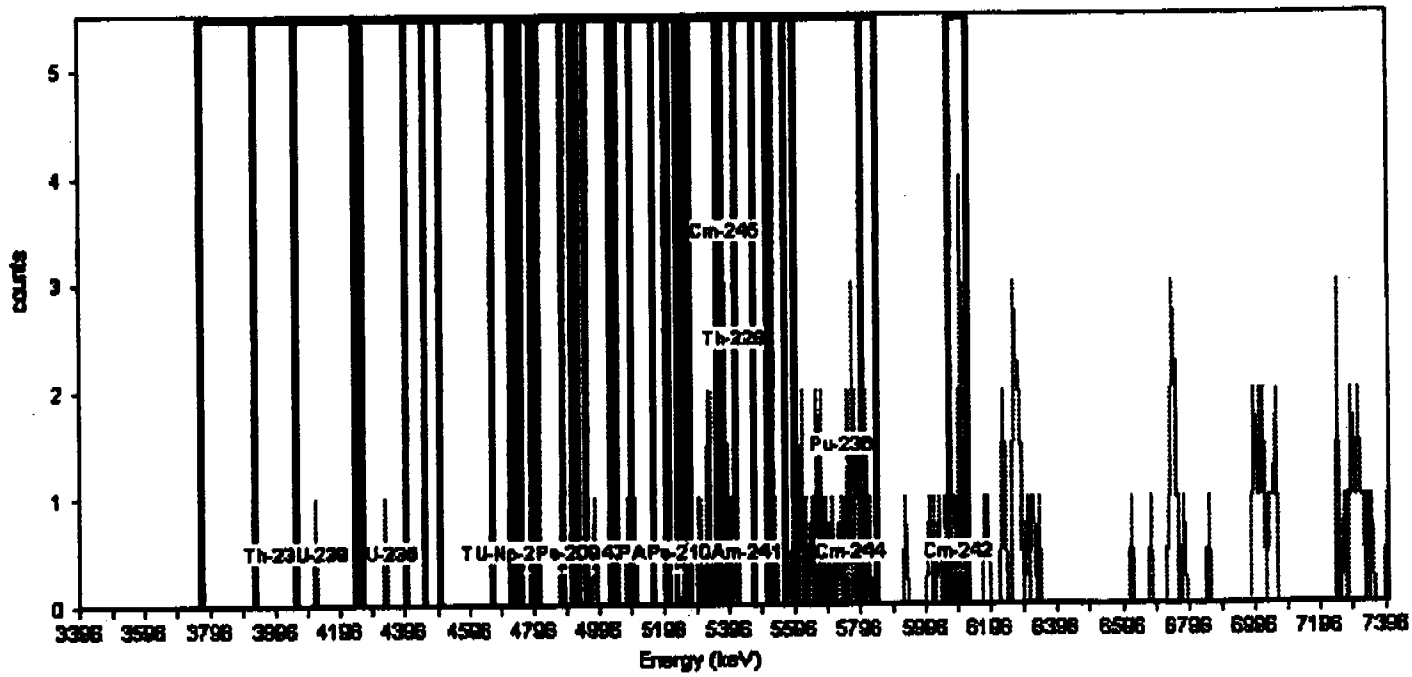
Batch Name: April_2005
Description:

Acquisition

Detector: AV8 , SN: 41-158X1
Acquisition Start Date: 4/26/2005 10:37:46AM
Live Time: 800.00 min.
Real Time: 800.11 min.
Calibration Name: March2005_AV8
Calibration Date: 3/16/2005 10:54:19PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 28.25% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 119.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.83	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	3.00	3.750E-003	2.500E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	3.00	3.750E-003	2.500E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	9.00	1.125E-002	3.953E-003
Th-228	5.41	5.16	5.47	15.00	1.875E-002	5.000E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	15.00	1.875E-002	5.000E-003
Am-241	5.45	5.27	5.57	16.00	2.000E-002	5.154E-003
Cm-245	5.39	5.36	5.41	9.00	1.125E-002	3.953E-003
Pu-236	5.74	5.52	5.80	26.00	3.250E-002	6.495E-003
Cm-244	5.76	5.60	5.85	27.00	3.375E-002	6.614E-003
Cm-242	6.10	6.07	6.13	8.00	1.000E-002	3.750E-003

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Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
2:58:06AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV9
Comment:

Spectrum #1 Analysis #1

Batch

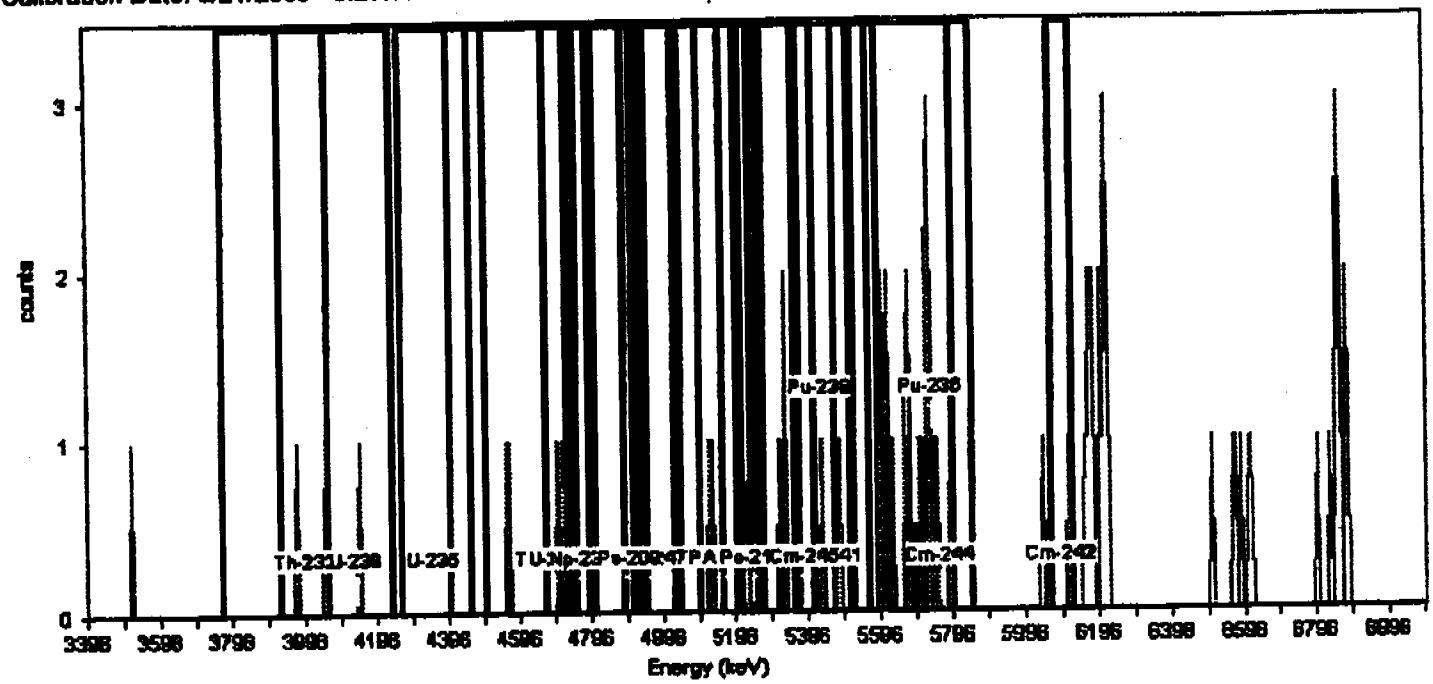
Batch Name: April_2005
Description:

Acquisition

Detector: AV9 , SN: 41-172R1
Acquisition Start Date: 4/26/2005 10:37:48AM
Live Time: 800.00 min.
Real Time: 979.61 min.
Calibration Name: March2005_AV9#2
Calibration Date: 3/21/2005 8:25:56PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²

Efficiency: 26.56% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 72.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	3.00	3.750E-003	2.500E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	4.00	5.000E-003	2.795E-003
U-234	4.70	4.50	4.80	4.00	5.000E-003	2.795E-003
Pu-242	4.86	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	3.00	3.750E-003	2.500E-003
U-232	5.23	5.04	5.37	6.00	7.500E-003	3.307E-003
Th-228	5.41	5.16	5.47	5.00	6.250E-003	3.062E-003
Po-210	5.25	5.20	5.28	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	5.00	6.250E-003	3.062E-003
Am-241	5.45	5.27	5.57	5.00	6.250E-003	3.062E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	23.00	2.875E-002	6.124E-003
Cm-244	5.76	5.60	5.85	23.00	2.875E-002	6.124E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:21:18PM 4/28/2005

Analyst: 60040

Sample

Spectrum #1 Analysis #1

Sample Name: AV10
Comment:

Batch

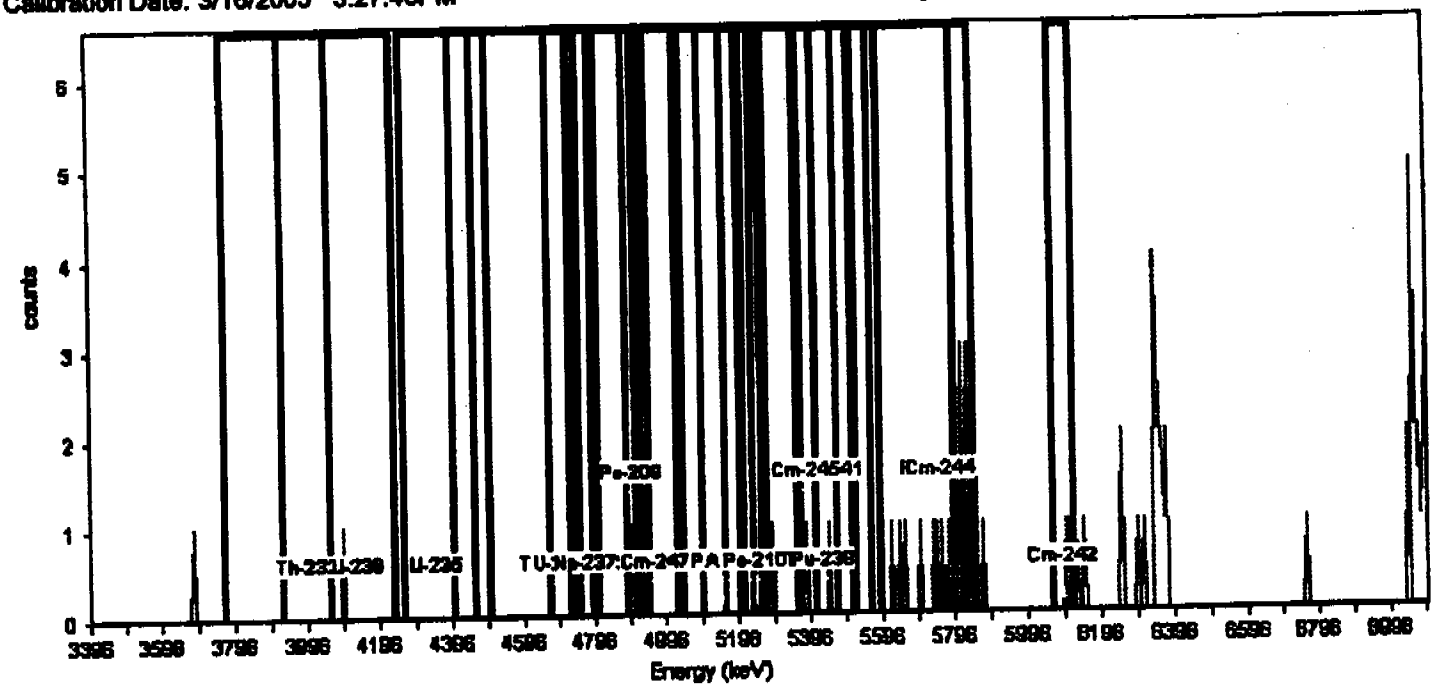
Batch Name: Aprila_2005
Description:

Acquisition

Detector: AV10 , SN: 41-172R3
Acquisition Start Date: 4/28/2005 9:01:10AM
Live Time: 800.00 min.
Real Time: 800.00 min.
Calibration Name: March2005_AV10
Calibration Date: 3/16/2005 5:27:48PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.75% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 72.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.60	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	3.00	3.750E-003	2.500E-003
Am-241	5.46	5.27	5.57	3.00	3.750E-003	2.500E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	11.00	1.375E-002	4.330E-003
Cm-244	5.78	5.60	5.86	25.00	3.125E-002	6.374E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
2:58:14AM 4/27/2005

Analyst: 60040

Sample

Spectrum #1 Analysis #1

Sample Name: AV11
Comment:

Batch

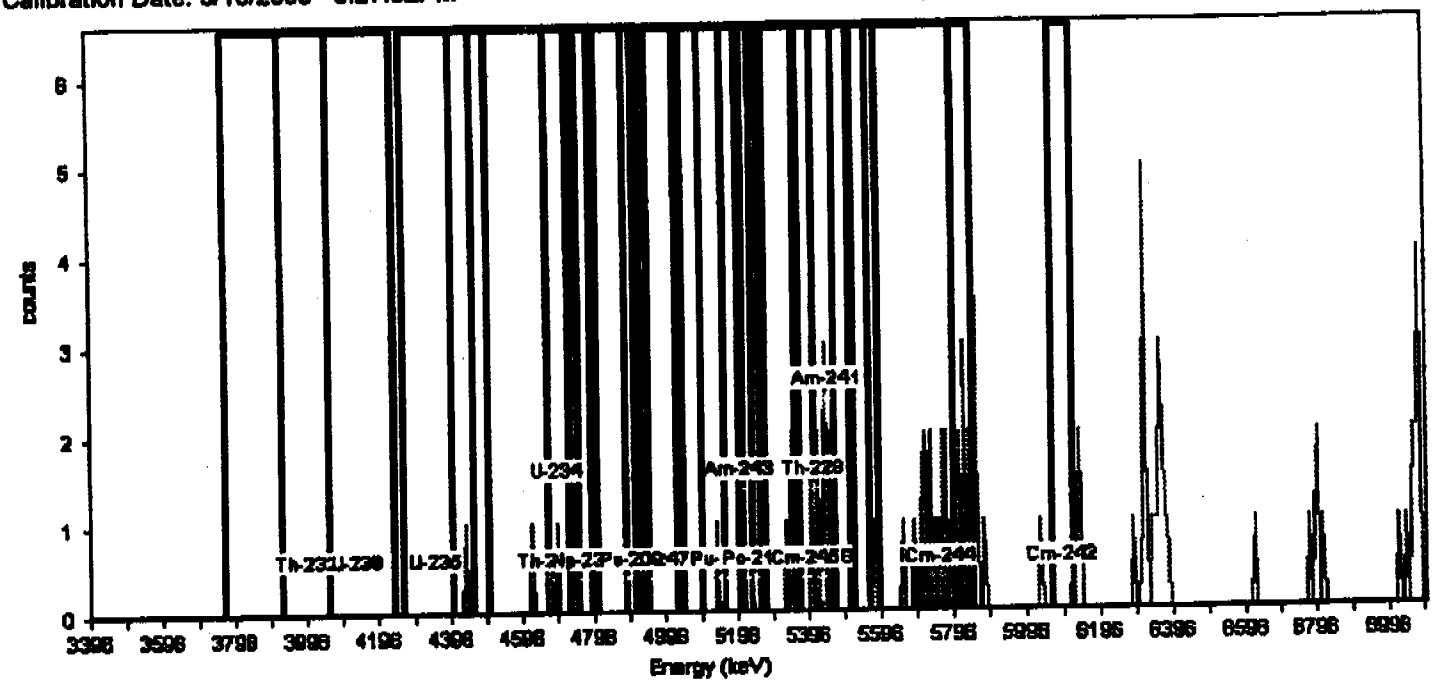
Batch Name: April_2005
Description:

Acquisition

Detector: AV11 , SN: 41-172Q3
Acquisition Start Date: 4/26/2005 10:37:50AM
Live Time: 800.00 min.
Real Time: 979.61 min.
Calibration Name: March2005_AV11
Calibration Date: 3/16/2005 5:27:52PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.13% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 100.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.08	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.28	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	4.00	5.000E-003	2.795E-003
U-234	4.70	4.50	4.80	3.00	3.750E-003	2.500E-003
Pu-242	4.88	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	7.00	8.750E-003	3.536E-003
Th-228	5.41	5.16	5.47	19.00	2.375E-002	5.580E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	18.00	2.250E-002	5.449E-003
Am-241	5.45	5.27	5.57	18.00	2.250E-002	5.449E-003
Cm-245	5.39	5.36	5.41	5.00	6.250E-003	3.062E-003
Pu-236	5.74	5.52	5.80	16.00	2.000E-002	5.154E-003
Cm-244	5.76	5.60	5.85	26.00	3.250E-002	6.495E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
2:58:17AM 4/27/2005

Analyst: 60040

Sample

Spectrum #1 Analysis #1

Sample Name: AV12
Comment:

Batch

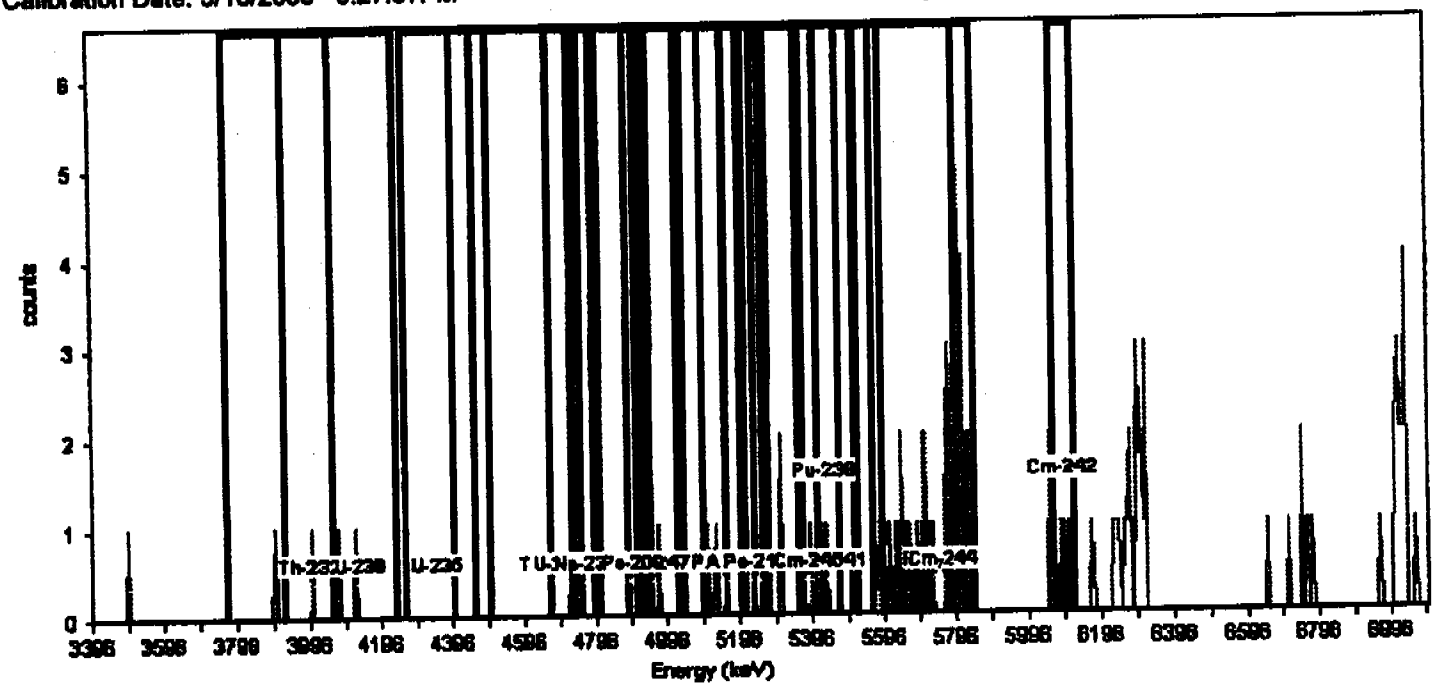
Batch Name: April_2005
Description:

Acquisition

Detector: AV12 , SN: 41-172Q2
Acquisition Start Date: 4/26/2005 10:37:53AM
Live Time: 800.00 min.
Real Time: 979.61 min.
Calibration Name: March2005_AV12
Calibration Date: 3/16/2005 5:27:57PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.80% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 101.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.08	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	3.00	3.750E-003	2.500E-003
U-235	4.35	4.26	4.48	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	2.00	2.500E-003	2.165E-003
Pu-242	4.86	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	3.00	3.750E-003	2.500E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	4.00	5.000E-003	2.795E-003
Am-243	5.20	5.03	5.28	5.00	6.250E-003	3.062E-003
U-232	5.23	5.04	5.37	7.00	8.750E-003	3.536E-003
Th-228	5.41	5.16	5.47	8.00	1.000E-002	3.750E-003
Po-210	5.25	5.20	5.28	2.00	2.500E-003	2.165E-003
Pu-238	5.44	5.24	5.52	8.00	1.000E-002	3.750E-003
Am-241	5.45	5.27	5.57	7.00	8.750E-003	3.536E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	25.00	3.125E-002	6.374E-003
Cm-244	5.76	5.60	5.85	37.00	4.625E-002	7.708E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
2:58:20AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV13
Comment:

Spectrum #1 Analysis #1

Batch

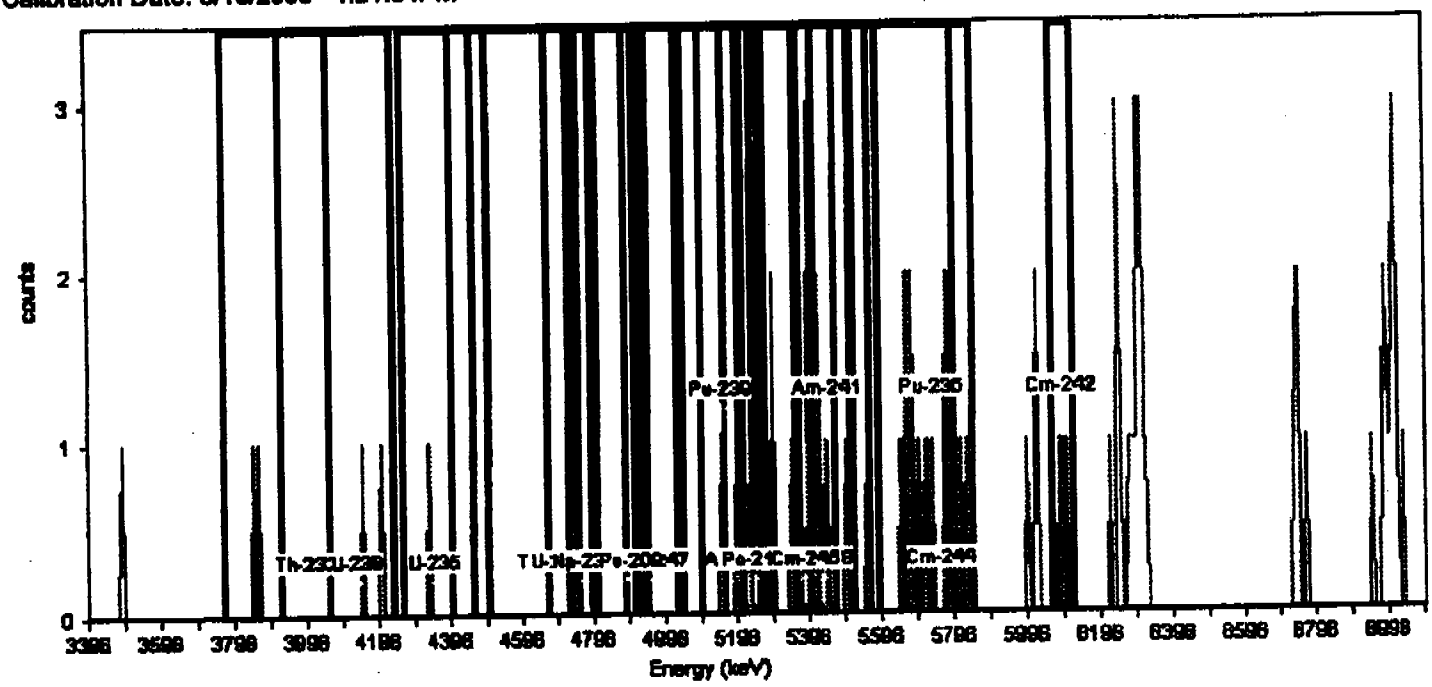
Batch Name: April_2005
Description:

Acquisition

Detector: AV13 , SN: 41-172Q1
Acquisition Start Date: 4/26/2005 10:37:55AM
Live Time: 600.00 min.
Real Time: 979.61 min.
Calibration Name: March2005_AV13
Calibration Date: 3/16/2005 1:21:34PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.86% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 94.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	3.00	3.750E-003	2.500E-003
U-238	4.14	3.93	4.24	3.00	3.750E-003	2.500E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	3.00	3.750E-003	2.500E-003
U-232	5.23	5.04	5.37	7.00	8.750E-003	3.536E-003
Th-228	5.41	5.16	5.47	15.00	1.875E-002	5.000E-003
Po-210	5.25	5.20	5.28	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	14.00	1.750E-002	4.841E-003
Am-241	5.45	5.27	5.57	15.00	1.875E-002	5.000E-003
Cm-245	5.39	5.36	5.41	5.00	6.250E-003	3.062E-003
Pu-236	5.74	5.52	5.80	20.00	2.500E-002	5.728E-003
Cm-244	5.76	5.60	5.85	25.00	3.125E-002	6.374E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
5:21:32AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV14
Comment:

Spectrum #1 Analysis #1

Batch

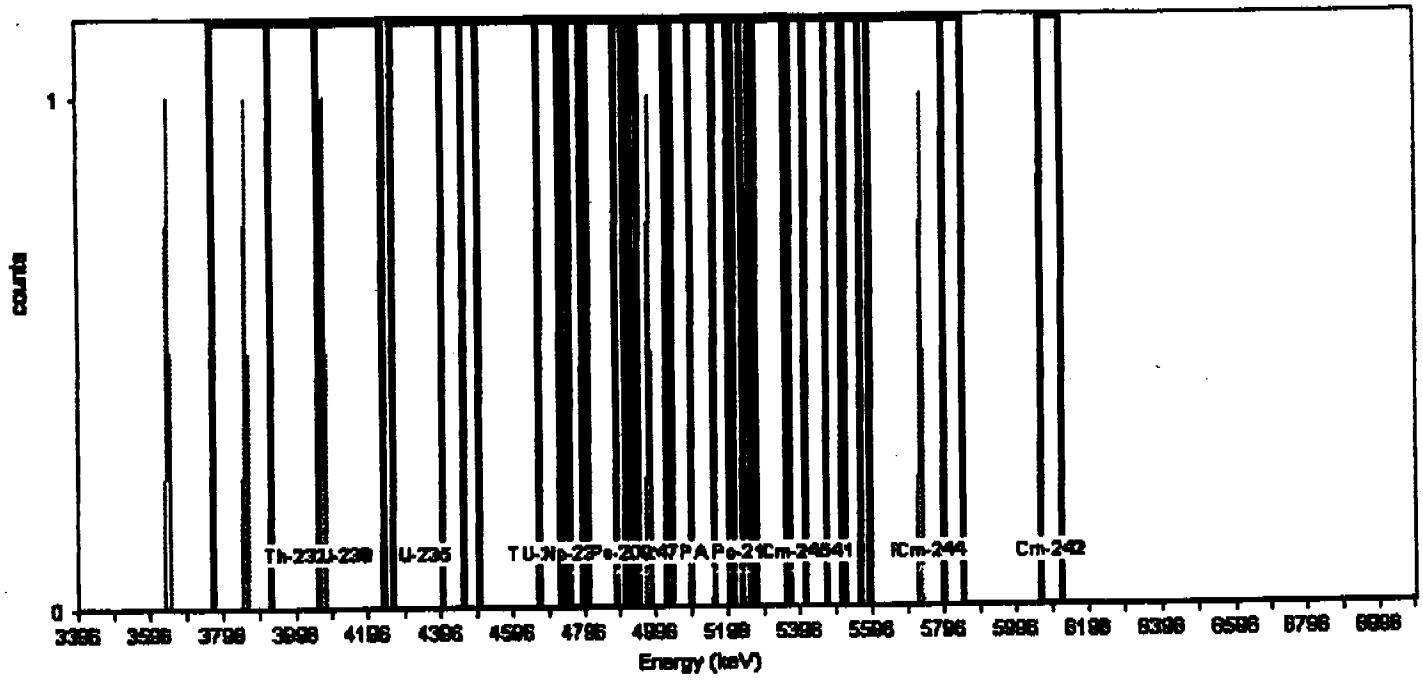
Batch Name: April_2005
Description:

Acquisition

Detector: AV14 , SN: 41-172C4
Acquisition Start Date: 4/26/2005 1:33:40PM
Live Time: 600.00 min.
Real Time: 947.91 min.
Calibration Name: March2005_AV14
Calibration Date: 3/16/2005 1:21:48PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 0.05% +/- 0.01% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Library: Background ROI Library
Total Background Counts: 6.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.86	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.768E-003
Th-228	5.41	5.16	5.47	0.00	0.000E+000	1.768E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	0.00	0.000E+000	1.768E-003
Am-241	5.45	5.27	5.57	0.00	0.000E+000	1.768E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	1.00	1.250E-003	1.768E-003
Cm-244	5.76	5.60	5.85	1.00	1.250E-003	1.768E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
2:58:24AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV15
Comment:

Spectrum #1 Analysis #1

Batch

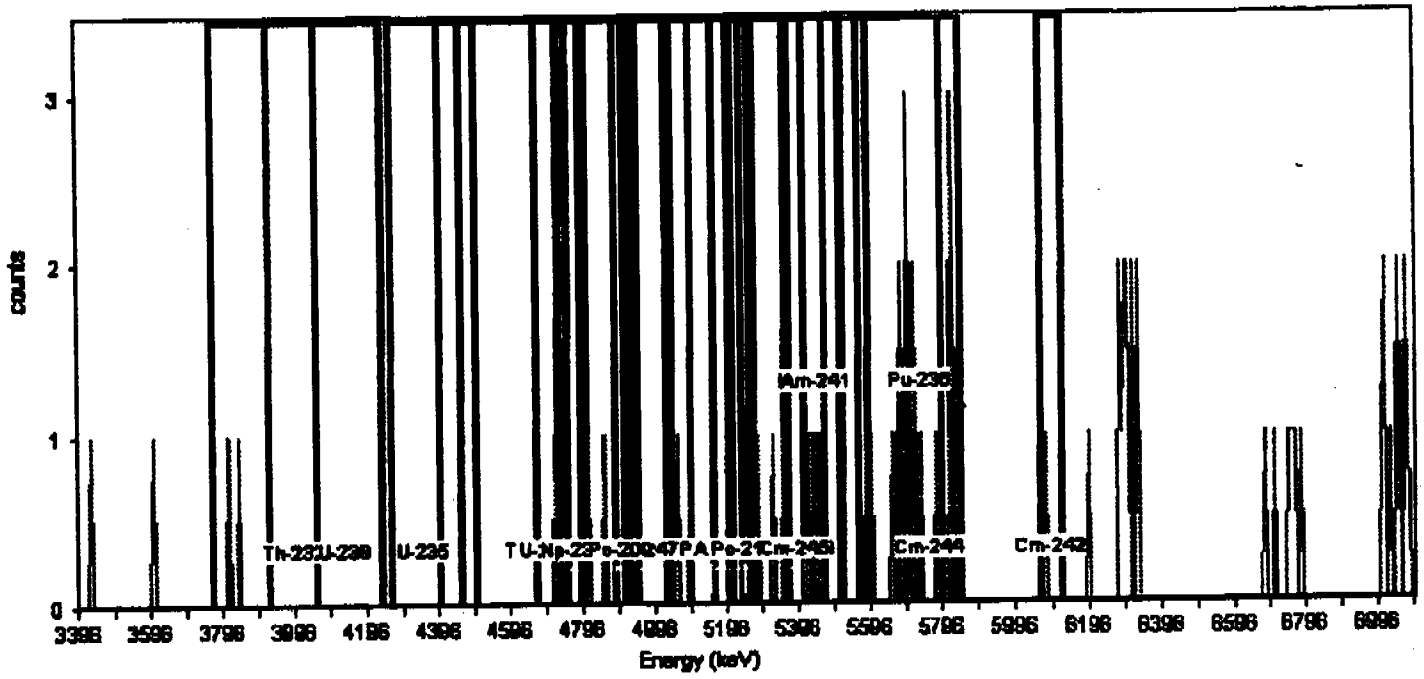
Batch Name: April_2005
Description:

Acquisition

Detector: AV15 , SN: 41-172C5
Acquisition Start Date: 4/26/2005 10:37:57AM
Live Time: 800.00 min.
Real Time: 979.61 min.
Calibration Name: March2005_AV15
Calibration Date: 3/16/2005 1:21:55PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.84% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 72.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.36	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.86	4.67	4.93	3.00	3.750E-003	2.600E-003
Th-229	4.84	4.72	5.10	4.00	5.000E-003	2.795E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.86	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.26	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	5.00	6.250E-003	3.062E-003
Th-228	5.41	5.16	5.47	8.00	1.000E-002	3.750E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	8.00	1.000E-002	3.750E-003
Am-241	5.45	5.27	5.57	8.00	1.000E-002	3.750E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	19.00	2.375E-002	5.590E-003
Cm-244	5.76	5.60	5.85	24.00	3.000E-002	6.250E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
2:58:27AM 4/27/2005

Analyst: 60040

Sample

Spectrum #1 Analysis #1

Sample Name: AV16
Comment:

Batch

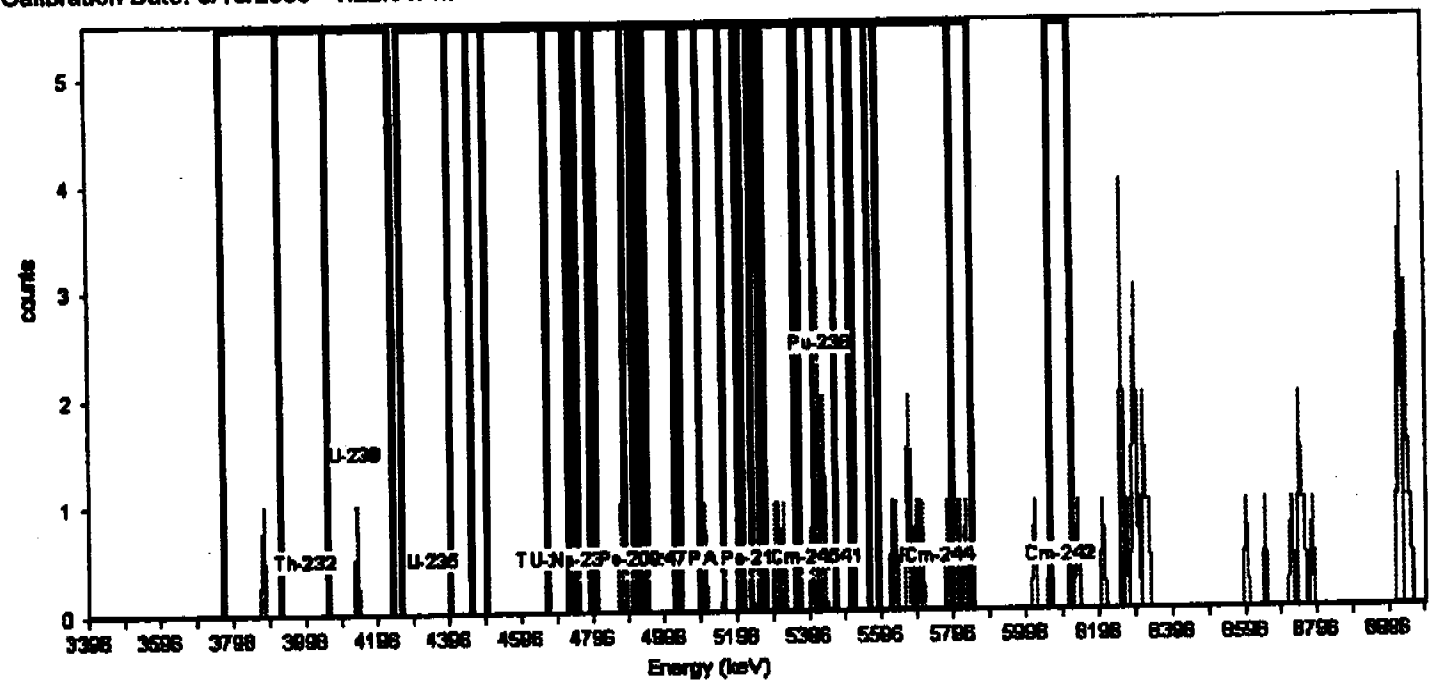
Batch Name: April_2005
Description:

Acquisition

Detector: AV16 , SN: 41-172Q7
Acquisition Start Date: 4/26/2005 10:37:58AM
Live Time: 800.00 min.
Real Time: 979.61 min.
Calibration Name: March2005_AV16
Calibration Date: 3/16/2005 1:22:01PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 28.82% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Library: Background ROI Library
Total Background Counts: 66.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.86	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	4.00	5.000E-003	2.795E-003
Th-228	5.41	5.16	5.47	11.00	1.375E-002	4.330E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	11.00	1.375E-002	4.330E-003
Am-241	5.45	5.27	5.57	11.00	1.375E-002	4.330E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	9.00	1.125E-002	3.953E-003
Cm-244	5.76	5.60	5.85	13.00	1.625E-002	4.677E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:09AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV17
Comment:

Spectrum #1 Analysis #1

Batch

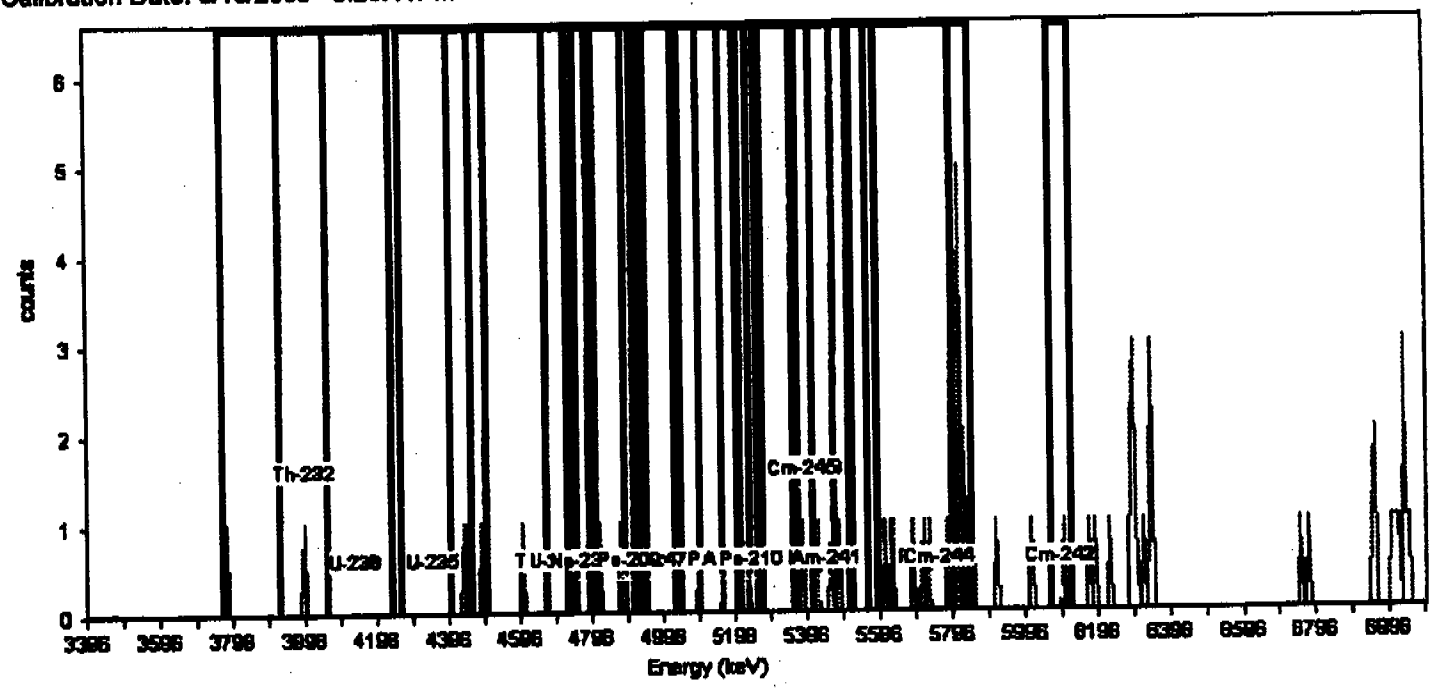
Batch Name: April_2005
Description:

Acquisition

Detector: AV17 , SN: 41-172Q4
Acquisition Start Date: 4/26/2005 10:38:00AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: Mar2005_AV17
Calibration Date: 3/16/2005 5:28:41PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.69% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 68.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	2.00	2.500E-003	2.165E-003
Th-230	4.67	4.40	4.73	5.00	6.250E-003	3.062E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.86	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	3.00	3.750E-003	2.500E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	4.00	5.000E-003	2.795E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	5.00	6.250E-003	3.062E-003
Am-241	5.45	5.27	5.57	5.00	6.250E-003	3.062E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	9.00	1.125E-002	3.953E-003
Cm-244	5.76	5.80	5.85	21.00	2.625E-002	5.863E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:12AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV18
Comment:

Spectrum #1 Analysis #1

Batch

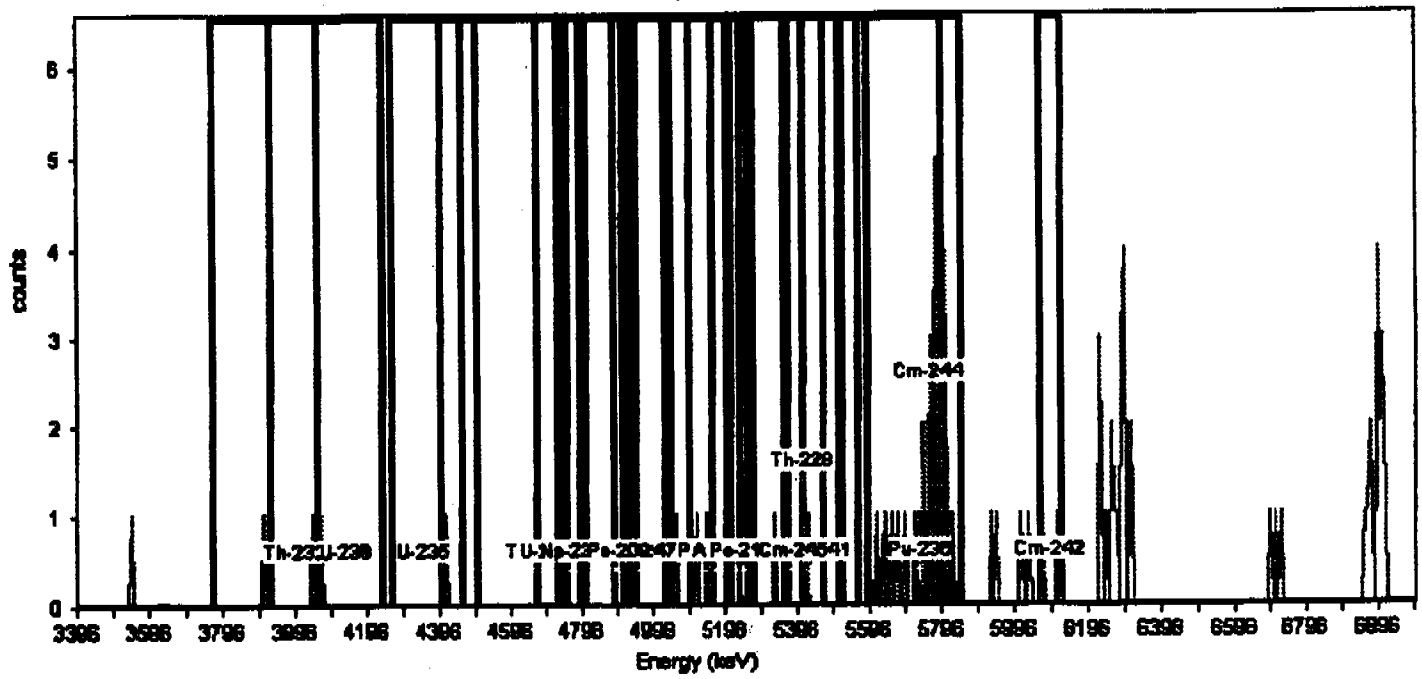
Batch Name: April_2005
Description:

Acquisition

Detector: AV18 , SN: 41-172C6
Acquisition Start Date: 4/26/2005 10:38:01AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: Mar2005_AV18
Calibration Date: 3/16/2005 5:28:55PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 25.79% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 87.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	2.00	2.500E-003	2.165E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.86	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	3.00	3.750E-003	2.500E-003
Am-243	5.20	5.03	5.26	3.00	3.750E-003	2.500E-003
U-232	5.23	5.04	5.37	4.00	5.000E-003	2.795E-003
Th-228	5.41	5.16	5.47	4.00	5.000E-003	2.795E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	5.00	6.250E-003	3.062E-003
Am-241	5.45	5.27	5.57	5.00	6.250E-003	3.062E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	26.00	3.250E-002	6.495E-003
Cm-244	5.78	5.60	5.85	32.00	4.000E-002	7.181E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL ST. LOUIS

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:16AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV19
Comment:

Spectrum #1 Analysis #1

Batch

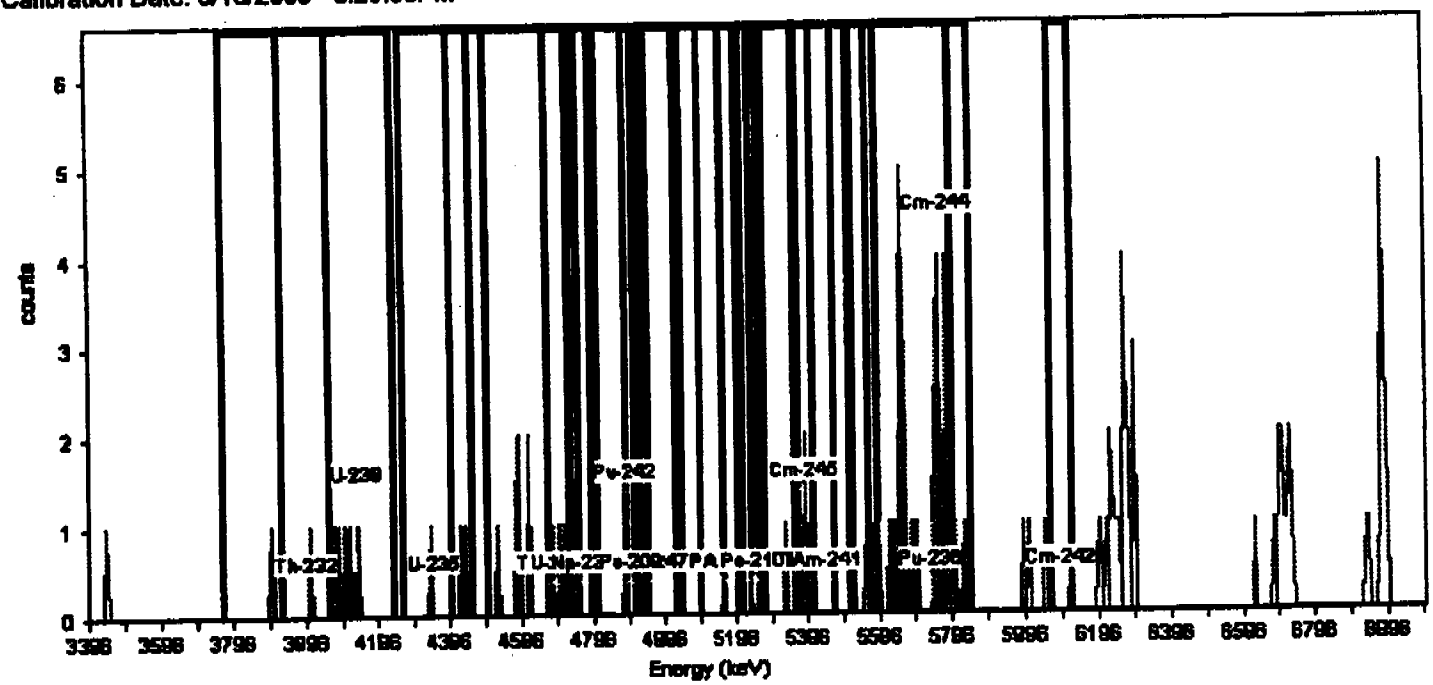
Batch Name: April_2005
Description:

Acquisition

Detector: AV19 , SN: 41-172Q6
Acquisition Start Date: 4/26/2005 10:38:03AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: Mar2005_AV19
Calibration Date: 3/16/2005 5:29:03PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 28.94% +/- 0.30% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND_ROI Library: Background ROI Library
Total Background Counts: 117.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	6.00	7.500E-003	3.307E-003
U-235	4.35	4.26	4.46	4.00	5.000E-003	2.795E-003
Th-230	4.67	4.40	4.73	13.00	1.625E-002	4.677E-003
U-234	4.70	4.50	4.80	12.00	1.500E-002	4.507E-003
Pu-242	4.88	4.67	4.93	7.00	8.750E-003	3.536E-003
Th-229	4.84	4.72	5.10	5.00	6.250E-003	3.062E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.86	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	3.00	3.750E-003	2.500E-003
Th-228	5.41	5.16	5.47	7.00	8.750E-003	3.536E-003
Po-210	5.25	5.20	5.28	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	7.00	8.750E-003	3.536E-003
Am-241	5.45	5.27	5.57	7.00	8.750E-003	3.536E-003
Cm-245	5.39	5.36	5.41	5.00	6.250E-003	3.062E-003
Pu-236	5.74	5.52	5.80	35.00	4.375E-002	7.500E-003
Cm-244	5.76	5.80	5.85	35.00	4.375E-002	7.500E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:19AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV20
Comment:

Spectrum #1 Analysis #1

Batch

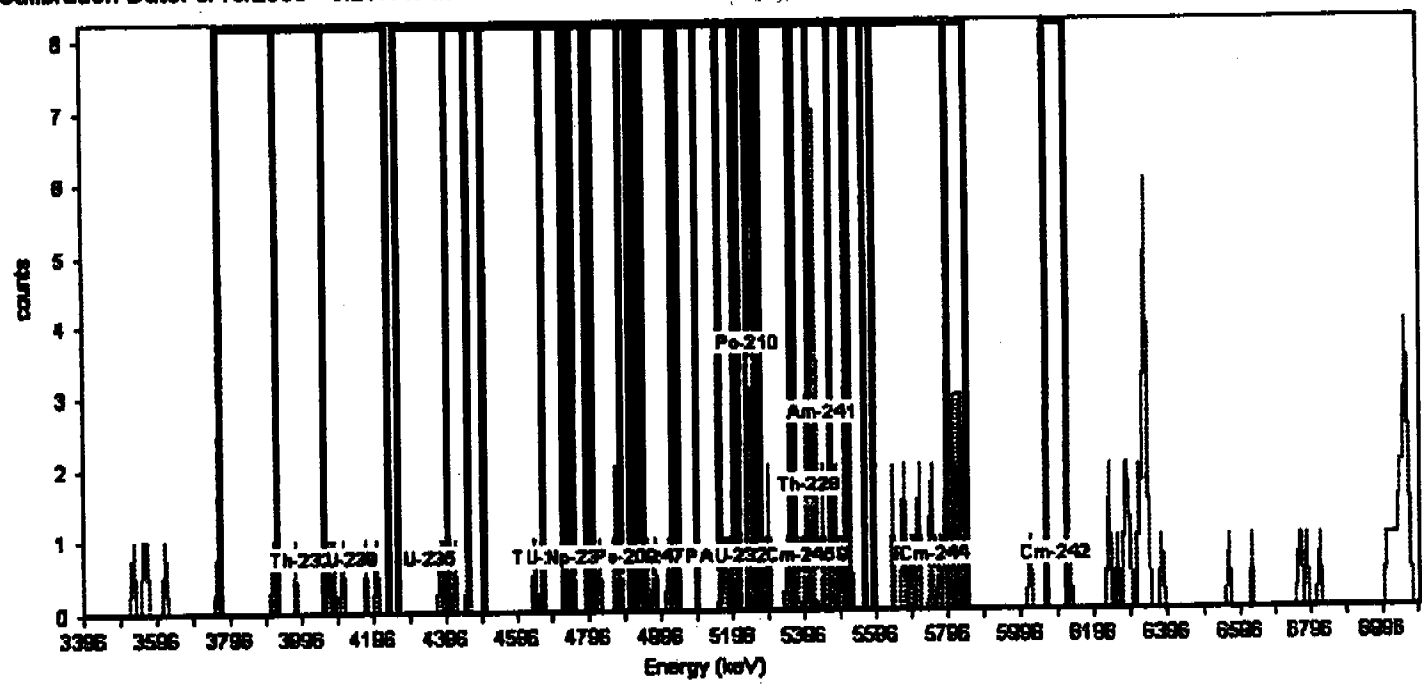
Batch Name: April_2005
Description:

Acquisition

Detector: AV20 , SN: 41-172R2
Acquisition Start Date: 4/26/2005 10:38:06AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: Mar2005_AV20
Calibration Date: 3/16/2005 5:29:11PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.11% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Library: Background ROI Library
Total Background Counts: 140.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	6.00	7.500E-003	3.307E-003
U-235	4.35	4.26	4.46	4.00	5.000E-003	2.795E-003
Th-230	4.67	4.40	4.73	3.00	3.750E-003	2.500E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	3.00	3.750E-003	2.500E-003
Th-229	4.84	4.72	5.10	7.00	8.750E-003	3.536E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	4.00	5.000E-003	2.795E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	6.00	7.500E-003	3.307E-003
Am-243	5.20	5.03	5.28	7.00	8.750E-003	3.536E-003
U-232	5.23	5.04	5.37	11.00	1.375E-002	4.330E-003
Th-228	5.41	5.16	5.47	33.00	4.125E-002	7.289E-003
Po-210	5.25	5.20	5.26	3.00	3.750E-003	2.500E-003
Pu-238	5.44	5.24	5.52	35.00	4.375E-002	7.500E-003
Am-241	5.45	5.27	5.57	33.00	4.125E-002	7.289E-003
Cm-245	5.39	5.36	5.41	8.00	1.000E-002	3.750E-003
Pu-236	5.74	5.52	5.80	16.00	2.000E-002	5.154E-003
Cm-244	5.76	5.80	5.85	29.00	3.625E-002	6.847E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:23AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV21
Comment:

Spectrum #1 Analysis #1

Batch

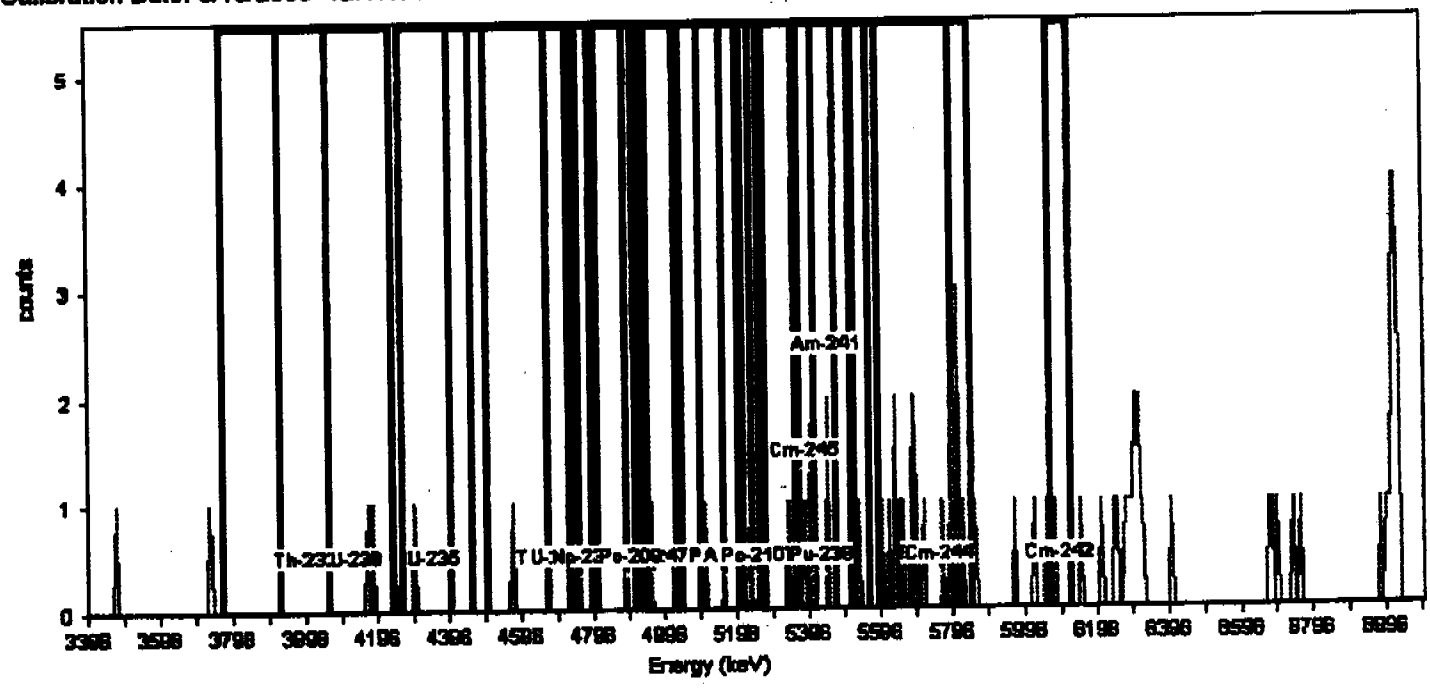
Batch Name: April_2005
Description:

Acquisition

Detector: AV21 , SN: 41-172C7
Acquisition Start Date: 4/26/2005 10:38:07AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV21
Calibration Date: 3/16/2005 12:47:04AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²

Efficiency: 27.06% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND_ROI Library: Background ROI Library
Total Background Counts: 85.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	3.00	3.750E-003	2.500E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	3.00	3.750E-003	2.500E-003
Pu-242	4.88	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	4.00	5.000E-003	2.795E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	3.00	3.750E-003	2.500E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	4.00	5.000E-003	2.795E-003
Th-228	5.41	5.16	5.47	10.00	1.250E-002	4.146E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	9.00	1.125E-002	3.953E-003
Am-241	5.45	5.27	5.57	11.00	1.375E-002	4.330E-003
Cm-245	5.39	5.36	5.41	5.00	6.250E-003	3.062E-003
Pu-236	5.74	5.52	5.80	17.00	2.125E-002	5.303E-003
Cm-244	5.76	5.60	5.85	22.00	2.750E-002	5.985E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:26AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV22
Comment:

Spectrum #1 Analysis #1

Batch

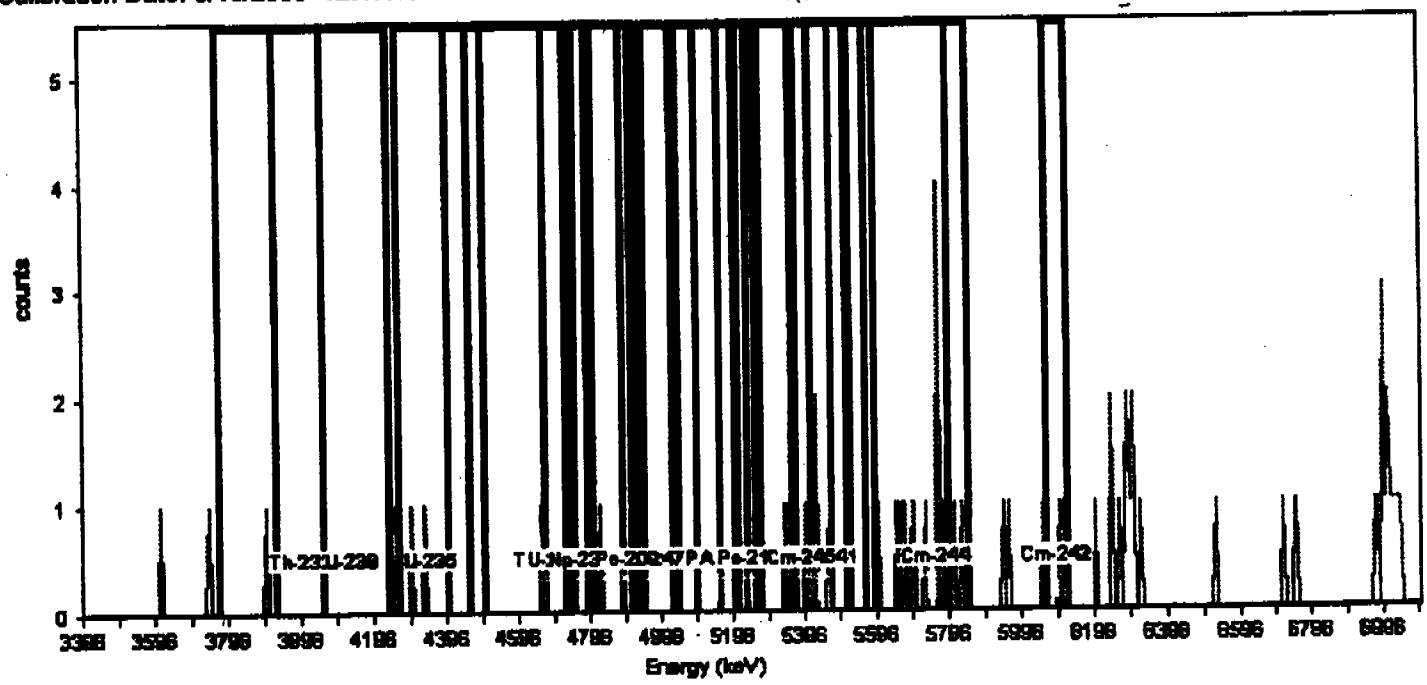
Batch Name: April_2005
Description:

Acquisition

Detector: AV22 , SN: 41-172Q5
Acquisition Start Date: 4/26/2005 10:38:09AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV22
Calibration Date: 3/16/2005 12:47:13AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 25.61% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 64.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	2.00	2.500E-003	2.165E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.86	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	7.00	8.750E-003	3.536E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	7.00	8.750E-003	3.536E-003
Am-241	5.45	5.27	5.57	7.00	8.750E-003	3.536E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	14.00	1.750E-002	4.841E-003
Cm-244	5.76	5.60	5.85	16.00	2.000E-002	5.154E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:29AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV23
Comment:

Spectrum #1 Analysis #1

Batch

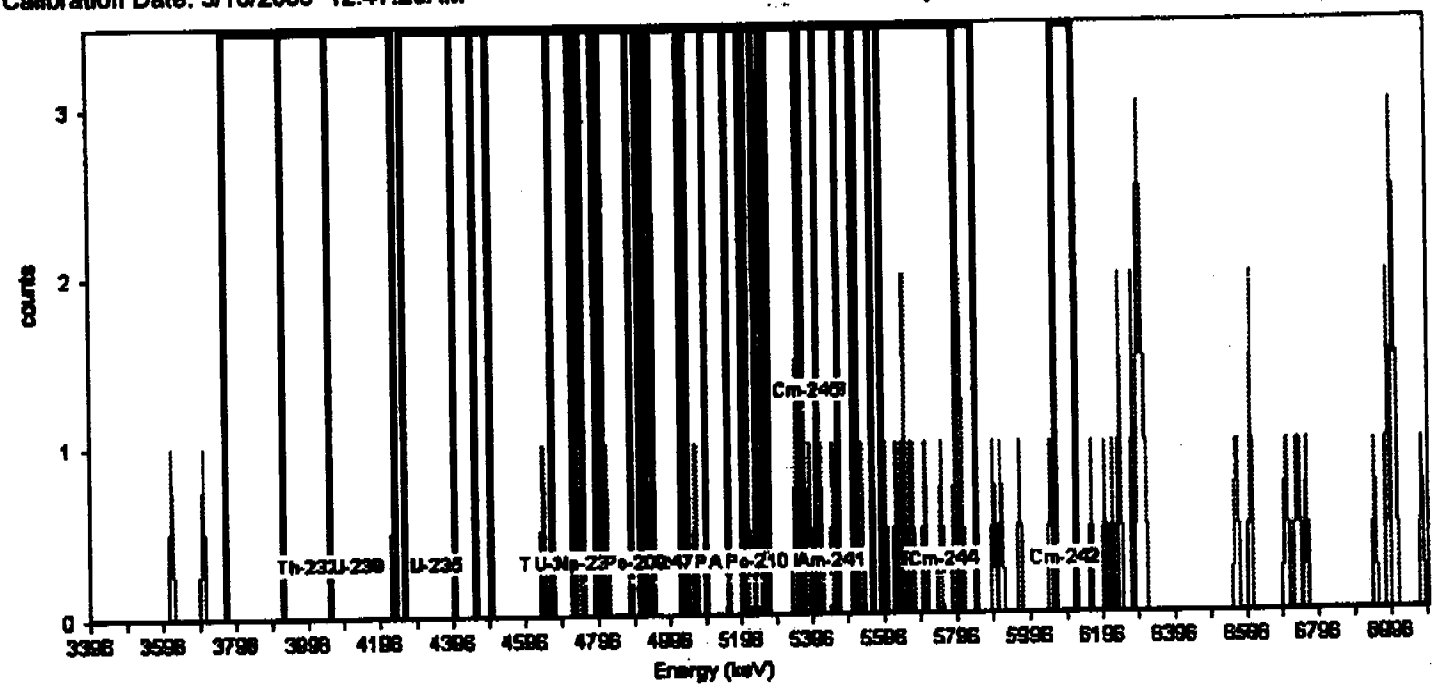
Batch Name: April_2005
Description:

Acquisition

Detector: AV23 , SN: 41-172R4
Acquisition Start Date: 4/26/2005 10:38:11AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV23
Calibration Date: 3/16/2005 12:47:20AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.07% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 66.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.08	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	2.00	2.500E-003	2.165E-003
Pu-242	4.88	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	3.00	3.750E-003	2.500E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	5.00	6.250E-003	3.062E-003
Th-228	5.41	5.16	5.47	9.00	1.125E-002	3.953E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	8.00	1.000E-002	3.750E-003
Am-241	5.45	5.27	5.57	9.00	1.125E-002	3.953E-003
Cm-245	5.39	5.36	5.41	3.00	3.750E-003	2.500E-003
Pu-236	5.74	5.52	5.80	11.00	1.375E-002	4.330E-003
Cm-244	5.76	5.60	5.85	13.00	1.625E-002	4.677E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
12:35:33AM 4/27/2005

Analyst: 60040

Sample

Spectrum #1 Analysis #1

Sample Name: AV24
Comment:

Batch

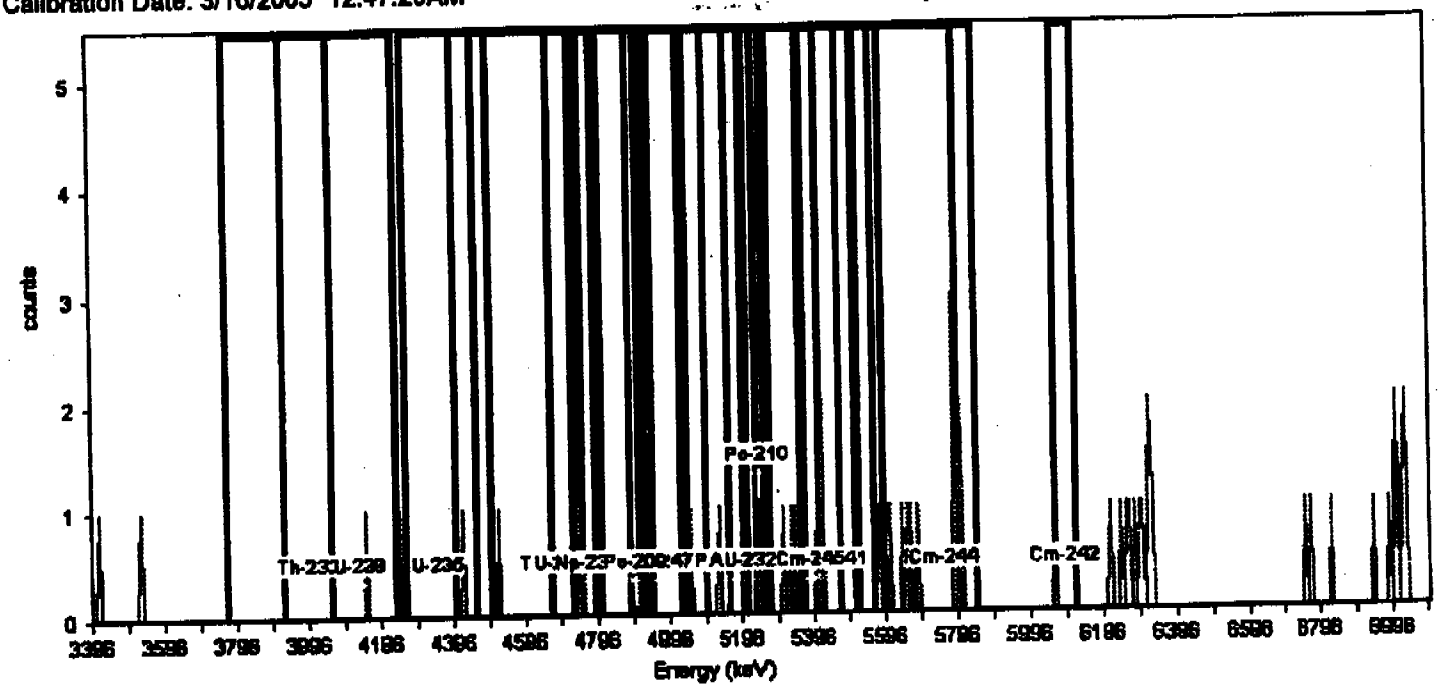
Batch Name: April_2005
Description:

Acquisition

Detector: AV24 , SN: 41-172R5
Acquisition Start Date: 4/26/2005 10:38:13AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV24
Calibration Date: 3/16/2005 12:47:29AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.59% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 57.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	3.00	3.750E-003	2.500E-003
Pu-242	4.88	4.67	4.93	3.00	3.750E-003	2.500E-003
Th-229	4.84	4.72	5.10	4.00	5.000E-003	2.795E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	3.00	3.750E-003	2.500E-003
U-232	5.23	5.04	5.37	6.00	7.500E-003	3.307E-003
Th-228	5.41	5.16	5.47	7.00	8.750E-003	3.536E-003
Po-210	5.25	5.20	5.28	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	7.00	8.750E-003	3.536E-003
Am-241	5.45	5.27	5.57	6.00	7.500E-003	3.307E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	12.00	1.500E-002	4.507E-003
Cm-244	5.76	5.60	5.85	14.00	1.750E-002	4.841E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:16:38AM 4/26/2005

Analyst: 60040

Sample

Spectrum #1 Analysis #1

Sample Name: AV25
Comment:

Batch

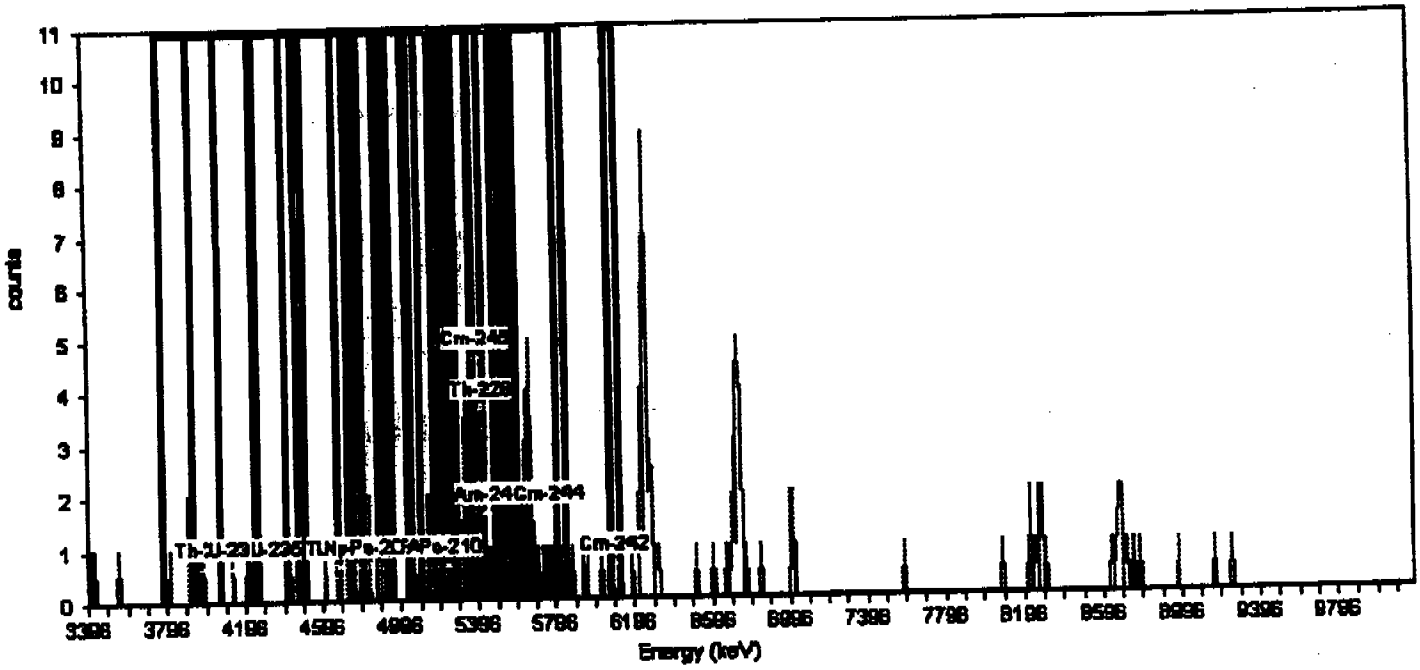
Batch Name: April_2005
Description:

Acquisition

Detector: AV25 , SN: ALDR17
Acquisition Start Date: 4/25/2005 11:49:22AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV25
Calibration Date: 3/18/2005 4:19:57PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 24.95% +/- 0.25% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 228.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	6.00	7.500E-003	3.307E-003
U-238	4.14	3.93	4.24	6.00	7.500E-003	3.307E-003
U-235	4.35	4.26	4.46	2.00	2.500E-003	2.165E-003
Th-230	4.67	4.40	4.73	6.00	7.500E-003	3.307E-003
U-234	4.70	4.50	4.80	7.00	8.750E-003	3.536E-003
Pu-242	4.88	4.67	4.93	10.00	1.250E-002	4.146E-003
Th-229	4.84	4.72	5.10	11.00	1.375E-002	4.330E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	3.00	3.750E-003	2.500E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	6.00	7.500E-003	3.307E-003
Am-243	5.20	5.03	5.28	6.00	7.500E-003	3.307E-003
U-232	5.23	5.04	5.37	20.00	2.500E-002	5.728E-003
Th-228	5.41	5.16	5.47	40.00	5.000E-002	8.004E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	39.00	4.875E-002	7.906E-003
Am-241	5.45	5.27	5.57	40.00	5.000E-002	8.004E-003
Cm-245	5.39	5.36	5.41	23.00	2.875E-002	6.124E-003
Pu-236	5.74	5.52	5.80	36.00	4.500E-002	7.603E-003
Cm-244	5.76	5.60	5.85	38.00	4.750E-002	7.806E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:16:44AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV26
Comment:

Spectrum #1 Analysis #1

Batch

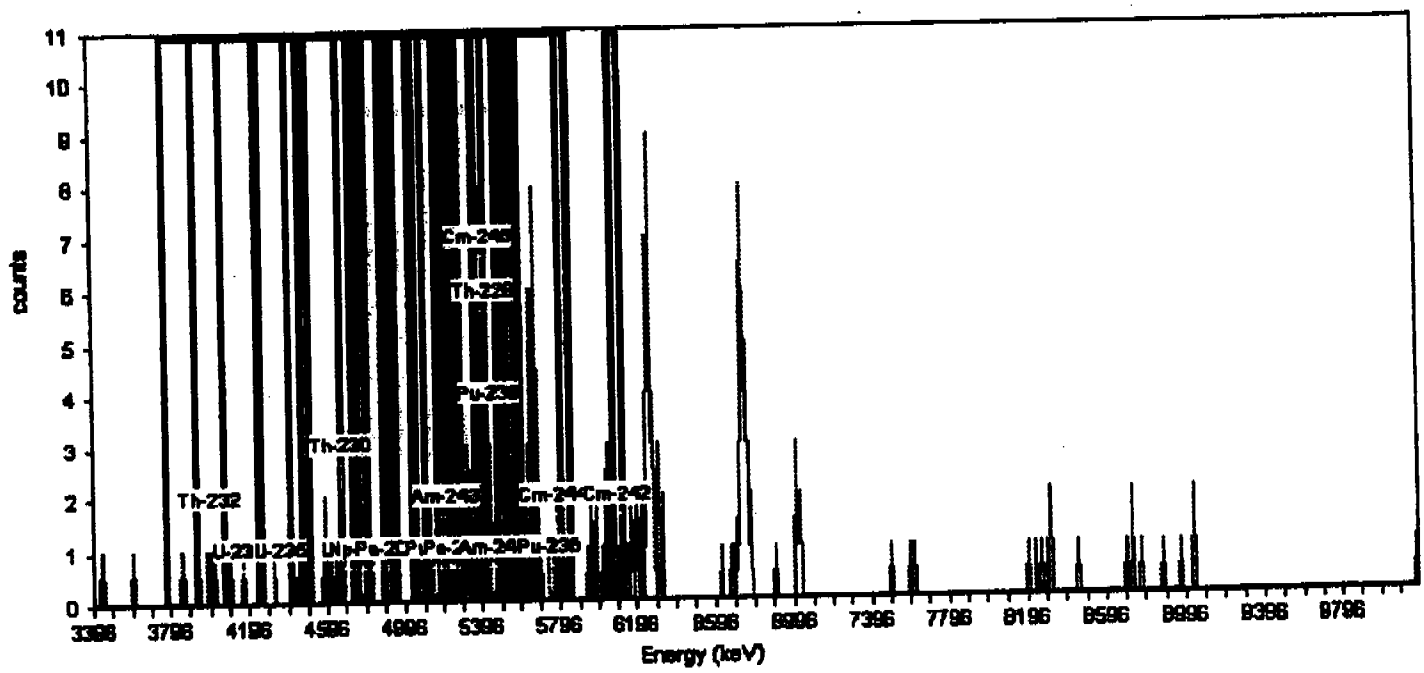
Batch Name: April_2005
Description:

Acquisition

Detector: AV26 , SN: ALDR18
Acquisition Start Date: 4/25/2005 11:49:23AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV26
Calibration Date: 3/18/2005 4:20:03PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 23.91% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROU[illegible] Library: Background ROI Library
Total Background Counts: 288.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
U-234	4.70	4.50	4.80	12.00	1.500E-002	4.507E-003
Pu-242	4.86	4.67	4.93	8.00	1.000E-002	3.750E-003
Th-229	4.84	4.72	5.10	7.00	8.750E-003	3.536E-003
Np-237	4.77	4.75	4.79	2.00	2.500E-003	2.165E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	5.00	6.250E-003	3.062E-003
Am-243	5.20	5.03	5.28	7.00	8.750E-003	3.536E-003
U-232	5.23	5.04	5.37	29.00	3.625E-002	6.847E-003
Th-228	5.41	5.16	5.47	55.00	6.875E-002	9.354E-003
Po-210	5.25	5.20	5.28	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	55.00	6.875E-002	9.354E-003
Am-241	5.45	5.27	5.57	55.00	6.875E-002	9.354E-003
Cm-245	5.39	5.36	5.41	31.00	3.875E-002	7.071E-003
Pu-236	5.74	5.52	5.60	55.00	6.875E-002	9.354E-003
Cm-244	5.76	5.60	5.86	55.00	6.875E-002	9.354E-003
Cm-242	6.10	6.07	6.13	7.00	8.750E-003	3.536E-003
Th-232	3.99	3.77	4.06	6.00	7.500E-003	3.307E-003
U-238	4.14	3.93	4.24	6.00	7.500E-003	3.307E-003
U-235	4.35	4.26	4.46	3.00	3.750E-003	2.500E-003
Th-230	4.67	4.40	4.73	12.00	1.500E-002	4.507E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:16:49AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV27
Spectrum #1 Analysis #1
Comment:

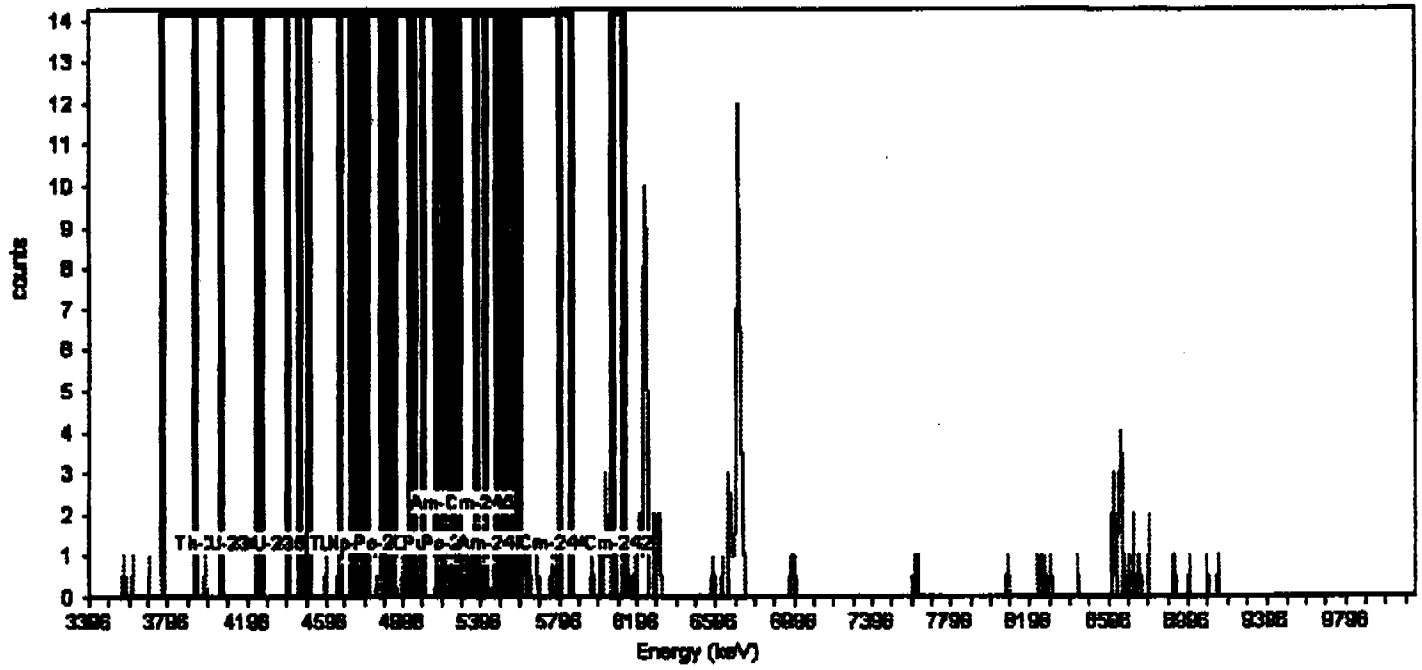
Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV27 , SN: ALDR19
Acquisition Start Date: 4/25/2005 11:48:20AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV27
Calibration Date: 3/18/2005 4:20:09PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 24.34% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 172.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	3.00	3.750E-003	2.500E-003
U-234	4.70	4.50	4.80	3.00	3.750E-003	2.500E-003
Pu-242	4.86	4.67	4.93	3.00	3.750E-003	2.500E-003
Th-229	4.84	4.72	5.10	7.00	8.750E-003	3.536E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	6.00	7.500E-003	3.307E-003
Am-243	5.20	5.03	5.28	4.00	5.000E-003	2.795E-003
U-232	5.23	5.04	5.37	7.00	8.750E-003	3.536E-003
Th-228	5.41	5.16	5.47	6.00	7.500E-003	3.307E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	5.00	6.250E-003	3.062E-003
Am-241	5.45	5.27	5.57	6.00	7.500E-003	3.307E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	9.00	1.125E-002	3.953E-003
Cm-244	5.76	5.60	5.85	7.00	8.750E-003	3.536E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:16:55AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV28
Comment:

Spectrum #1 Analysis #1

Batch

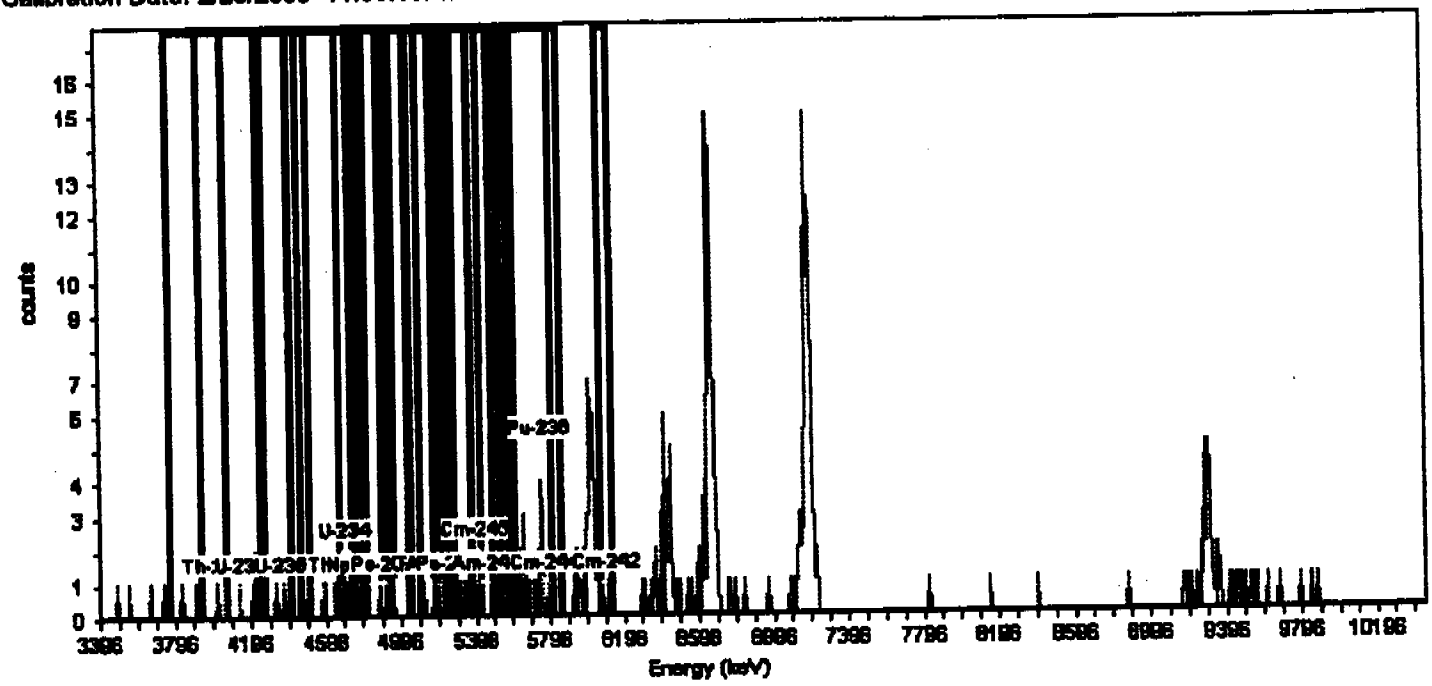
Batch Name: April_2005
Description:

Acquisition

Detector: AV28 , SN: ALDR20
Acquisition Start Date: 4/25/2005 11:48:20AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: Feb2005_AV28
Calibration Date: 2/28/2005 11:00:16PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 0.68% +/- 0.04% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 381.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	5.00	6.250E-003	3.062E-003
U-238	4.14	3.93	4.24	8.00	1.000E-002	3.750E-003
U-235	4.35	4.26	4.46	2.00	2.500E-003	2.165E-003
Th-230	4.67	4.40	4.73	9.00	1.125E-002	3.953E-003
U-234	4.70	4.50	4.80	9.00	1.125E-002	3.953E-003
Pu-242	4.88	4.67	4.93	6.00	7.500E-003	3.307E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	3.00	3.750E-003	2.500E-003
Am-243	5.20	5.03	5.28	3.00	3.750E-003	2.500E-003
U-232	5.23	5.04	5.37	6.00	7.500E-003	3.307E-003
Th-228	5.41	5.16	5.47	6.00	7.500E-003	3.307E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	6.00	7.500E-003	3.307E-003
Am-241	5.45	5.27	5.57	7.00	8.750E-003	3.536E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	29.00	3.625E-002	6.847E-003
Cm-244	5.78	5.80	5.85	27.00	3.375E-002	6.614E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:17:00AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV29
Spectrum #1 Analysis #1
Comment:

Batch

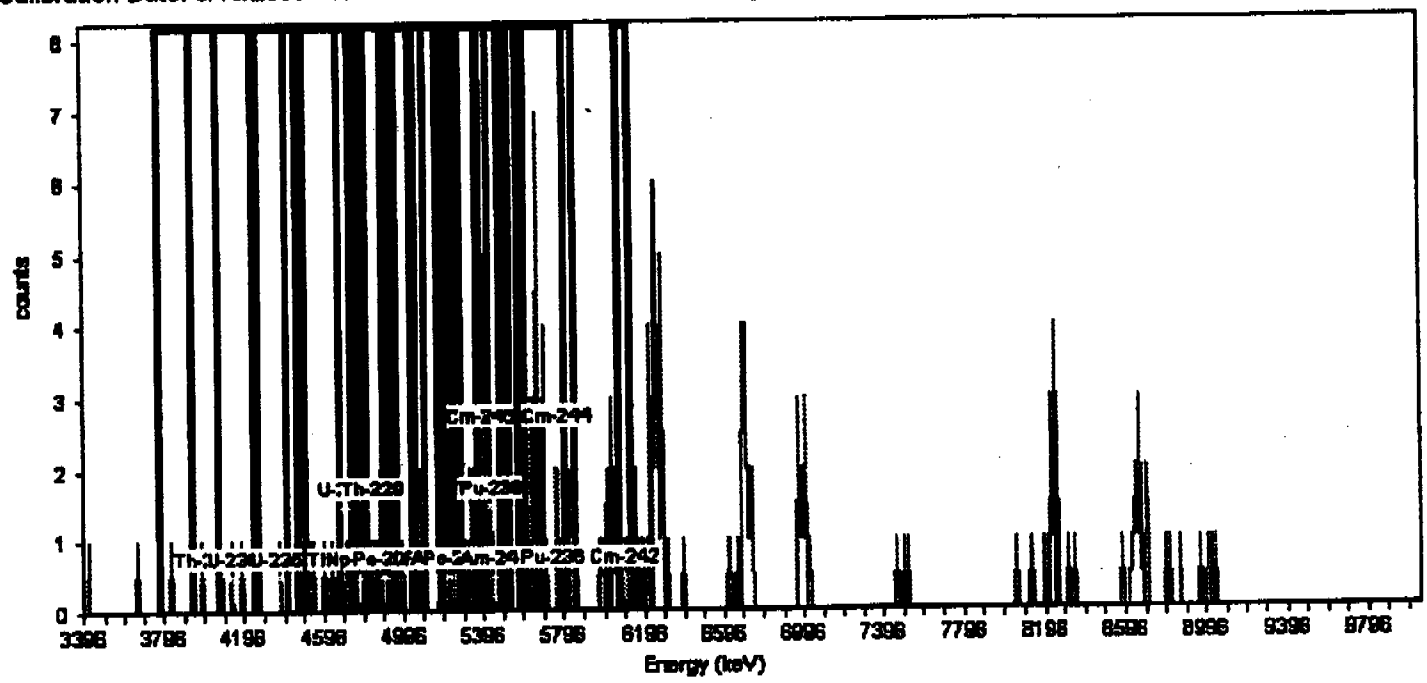
Batch Name: April_2005
Description:

Acquisition

Detector: AV29 , SN: ALDR21
Acquisition Start Date: 4/25/2005 11:48:21AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: MARCH2005_AV29
Calibration Date: 3/19/2005 6:47:49AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 25.44% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 255.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	4.00	5.000E-003	2.795E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	7.00	8.750E-003	3.536E-003
U-234	4.70	4.50	4.80	7.00	8.750E-003	3.536E-003
Pu-242	4.86	4.67	4.93	8.00	1.000E-002	3.750E-003
Th-229	4.84	4.72	5.10	17.00	2.125E-002	5.303E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	15.00	1.875E-002	5.000E-003
Am-243	5.20	5.03	5.28	15.00	1.875E-002	5.000E-003
U-232	5.23	5.04	5.37	27.00	3.375E-002	6.614E-003
Th-228	5.41	5.16	5.47	41.00	5.125E-002	8.101E-003
Po-210	5.25	5.20	5.26	2.00	2.500E-003	2.165E-003
Pu-238	5.44	5.24	5.52	41.00	5.125E-002	8.101E-003
Am-241	5.45	5.27	5.57	40.00	5.000E-002	8.004E-003
Cm-245	5.39	5.36	5.41	19.00	2.375E-002	5.590E-003
Pu-236	5.74	5.52	5.80	38.00	4.750E-002	7.806E-003
Cm-244	5.76	5.60	5.85	44.00	5.500E-002	8.385E-003
Cm-242	6.10	6.07	6.13	4.00	5.000E-003	2.795E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:17:06AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV30
Spectrum #1 Analysis #1
Comment:

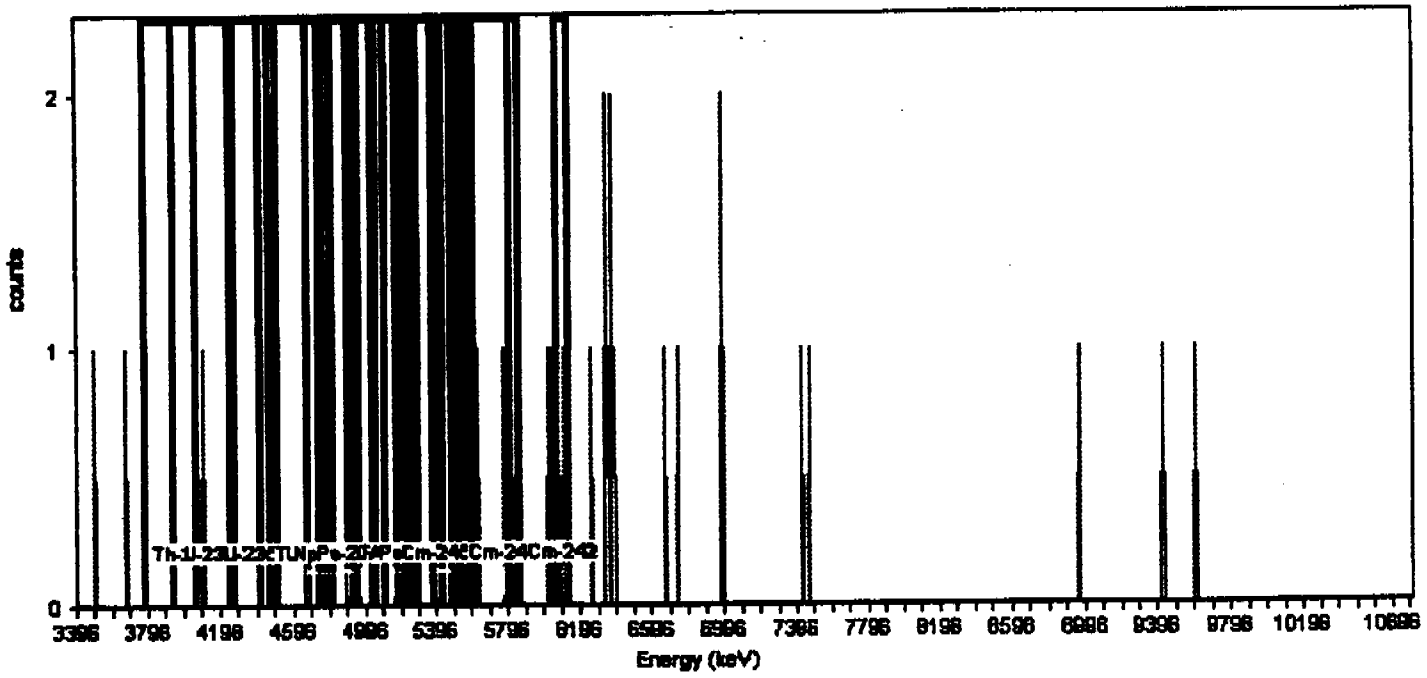
Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV30 , SN:
Acquisition Start Date: 4/25/2005 11:48:22AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: Test
Calibration Date: 12/27/2004 4:30:29PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 24.04% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Library: Background ROI Library
Total Background Counts: 34.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.08	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.86	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	1.00	1.250E-003	1.768E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	1.00	1.250E-003	1.768E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.62	5.80	3.00	3.750E-003	2.500E-003
Cm-244	5.76	5.60	5.85	3.00	3.750E-003	2.500E-003
Cm-242	6.10	6.07	6.13	5.00	6.250E-003	3.062E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:17:12AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV33
Comment:

Spectrum #1 Analysis #1

Batch

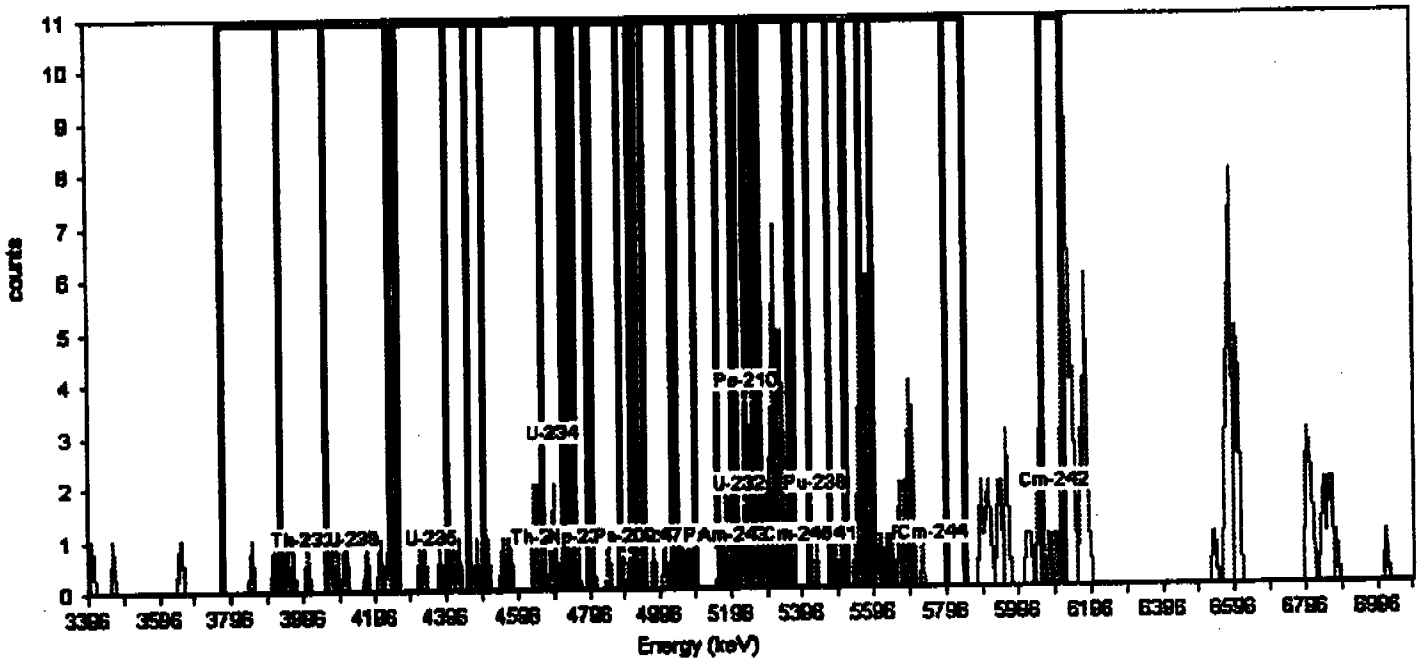
Batch Name: April_2005
Description:

Acquisition

Detector: AV33 , SN: ALDR25
Acquisition Start Date: 4/25/2005 11:48:23AM
Live Time: 800.00 min.
Real Time: 800.00 min.
Calibration Name: March2005_AV33
Calibration Date: 3/21/2005 2:52:41PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 23.43% +/- 0.25% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Nuclide Library: Background ROI Library
Total Background Counts: 270.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	7.00	8.750E-003	3.536E-003
U-238	4.14	3.93	4.24	12.00	1.500E-002	4.507E-003
U-235	4.35	4.26	4.46	6.00	7.500E-003	3.307E-003
Th-230	4.67	4.40	4.73	17.00	2.125E-002	5.303E-003
U-234	4.70	4.50	4.80	18.00	2.250E-002	5.449E-003
Pu-242	4.86	4.67	4.93	13.00	1.625E-002	4.677E-003
Th-229	4.84	4.72	5.10	18.00	2.250E-002	5.449E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	8.00	1.000E-002	3.750E-003
Po-209	4.90	4.88	4.91	3.00	3.750E-003	2.500E-003
Pu-239	5.15	4.95	5.21	9.00	1.125E-002	3.953E-003
Am-243	5.20	5.03	5.28	19.00	2.375E-002	5.590E-003
U-232	5.23	5.04	5.37	49.00	6.125E-002	8.839E-003
Th-228	5.41	5.16	5.47	46.00	5.750E-002	8.570E-003
Po-210	5.25	5.20	5.26	8.00	1.000E-002	3.750E-003
Pu-238	5.44	5.24	5.52	46.00	5.750E-002	8.570E-003
Am-241	5.46	5.27	5.57	54.00	6.750E-002	9.270E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	47.00	5.875E-002	8.660E-003
Cm-244	5.76	5.60	5.85	18.00	2.250E-002	5.449E-003
Cm-242	6.10	6.07	6.13	14.00	1.750E-002	4.841E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:17:17AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV34
Comment:

Spectrum #1 Analysis #1

Batch

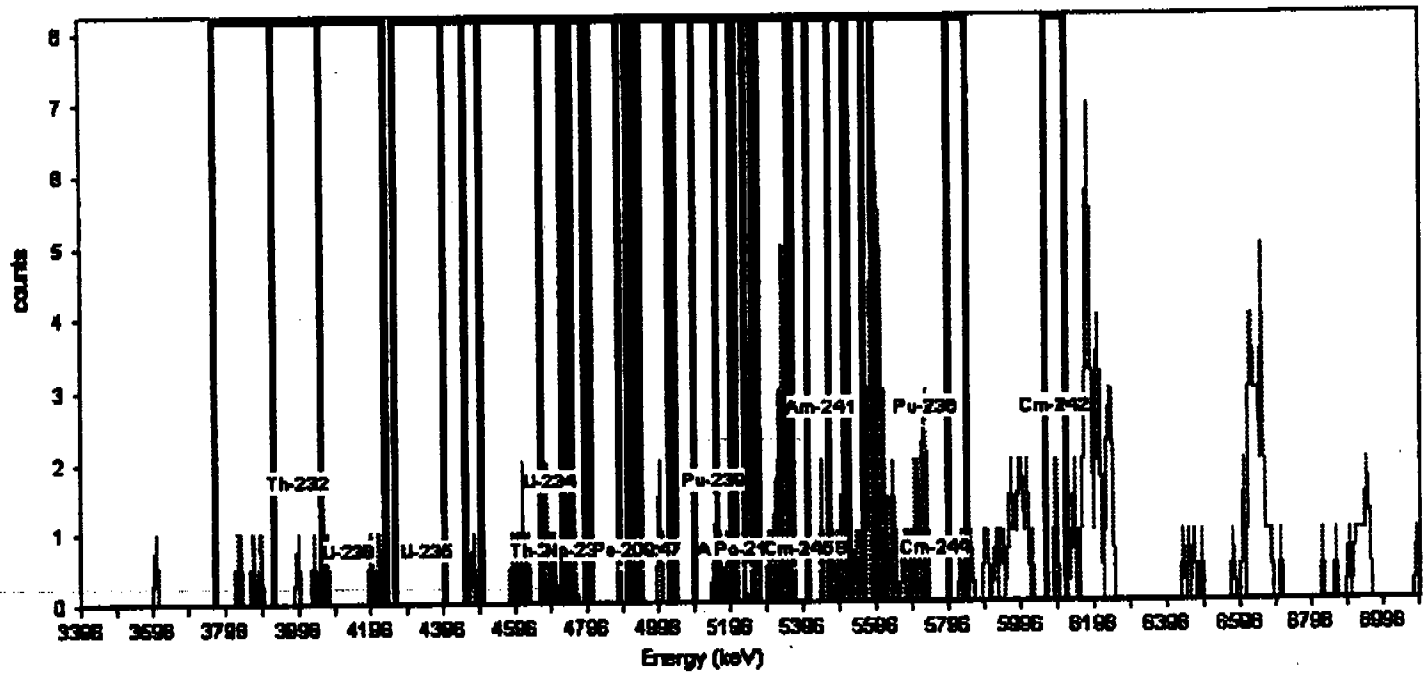
Batch Name: April_2005
Description:

Acquisition

Detector: AV34 , SN: ALDR26
Acquisition Start Date: 4/25/2005 11:48:24AM
Live Time: 800.00 min.
Real Time: 800.00 min.
Calibration Name: March2005_AV34
Calibration Date: 3/18/2005 7:00:45PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 23.85% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 208.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	6.00	7.500E-003	3.307E-003
U-238	4.14	3.93	4.24	5.00	6.250E-003	3.062E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	12.00	1.500E-002	4.507E-003
U-234	4.70	4.50	4.80	13.00	1.625E-002	4.677E-003
Pu-242	4.88	4.67	4.93	7.00	8.750E-003	3.536E-003
Th-229	4.84	4.72	5.10	5.00	6.250E-003	3.062E-003
Np-237	4.77	4.75	4.79	2.00	2.500E-003	2.165E-003
Cm-247	4.96	4.86	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	5.00	6.250E-003	3.062E-003
Am-243	5.20	5.03	5.28	7.00	8.750E-003	3.536E-003
U-232	5.23	5.04	5.37	24.00	3.000E-002	6.250E-003
Th-228	5.41	5.16	5.47	25.00	3.125E-002	6.374E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	29.00	3.625E-002	6.847E-003
Am-241	5.45	5.27	5.57	32.00	4.000E-002	7.181E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	48.00	6.000E-002	8.750E-003
Cm-244	5.76	5.80	5.86	37.00	4.625E-002	7.706E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:17:23AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV35
Comment:

Spectrum #1 Analysis #1

Batch

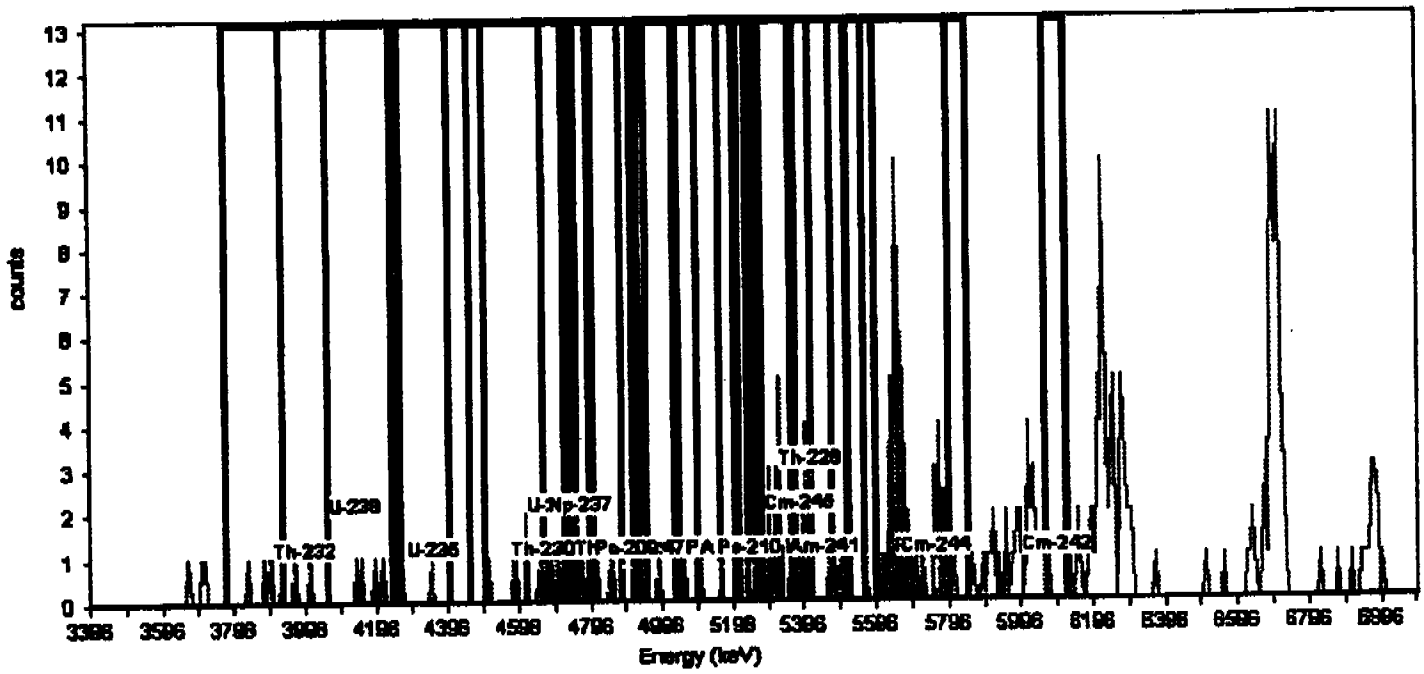
Batch Name: April_2005
Description:

Acquisition

Detector: AV35 , SN: ALDR27
Acquisition Start Date: 4/25/2005 11:48:25AM
Live Time: 800.00 min.
Real Time: 800.00 min.
Calibration Name: March2005_AV35
Calibration Date: 3/16/2005 7:00:50PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.52% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Library: Background ROI Library
Total Background Counts: 293.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.08	7.00	8.750E-003	3.536E-003
U-238	4.14	3.93	4.24	7.00	8.750E-003	3.536E-003
U-235	4.35	4.26	4.46	2.00	2.500E-003	2.165E-003
Th-230	4.67	4.40	4.73	11.00	1.375E-002	4.330E-003
U-234	4.70	4.50	4.80	14.00	1.750E-002	4.841E-003
Pu-242	4.88	4.67	4.93	11.00	1.375E-002	4.330E-003
Th-229	4.84	4.72	5.10	10.00	1.250E-002	4.146E-003
Np-237	4.77	4.75	4.79	3.00	3.750E-003	2.500E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	5.00	6.250E-003	3.062E-003
Am-243	5.20	5.03	5.26	4.00	5.000E-003	2.795E-003
U-232	5.23	5.04	5.37	17.00	2.125E-002	5.303E-003
Th-228	5.41	5.16	5.47	29.00	3.625E-002	6.847E-003
Po-210	5.25	5.20	5.26	2.00	2.500E-003	2.165E-003
Pu-238	5.44	5.24	5.52	30.00	3.750E-002	6.960E-003
Am-241	5.45	5.27	5.57	30.00	3.750E-002	6.960E-003
Cm-245	5.39	5.36	5.41	13.00	1.625E-002	4.677E-003
Pu-236	5.74	5.52	5.80	54.00	6.750E-002	9.270E-003
Cm-244	5.76	5.80	5.86	54.00	6.750E-002	9.270E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:17:28AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV37
Comment:

Spectrum #1 Analysis #1

Batch

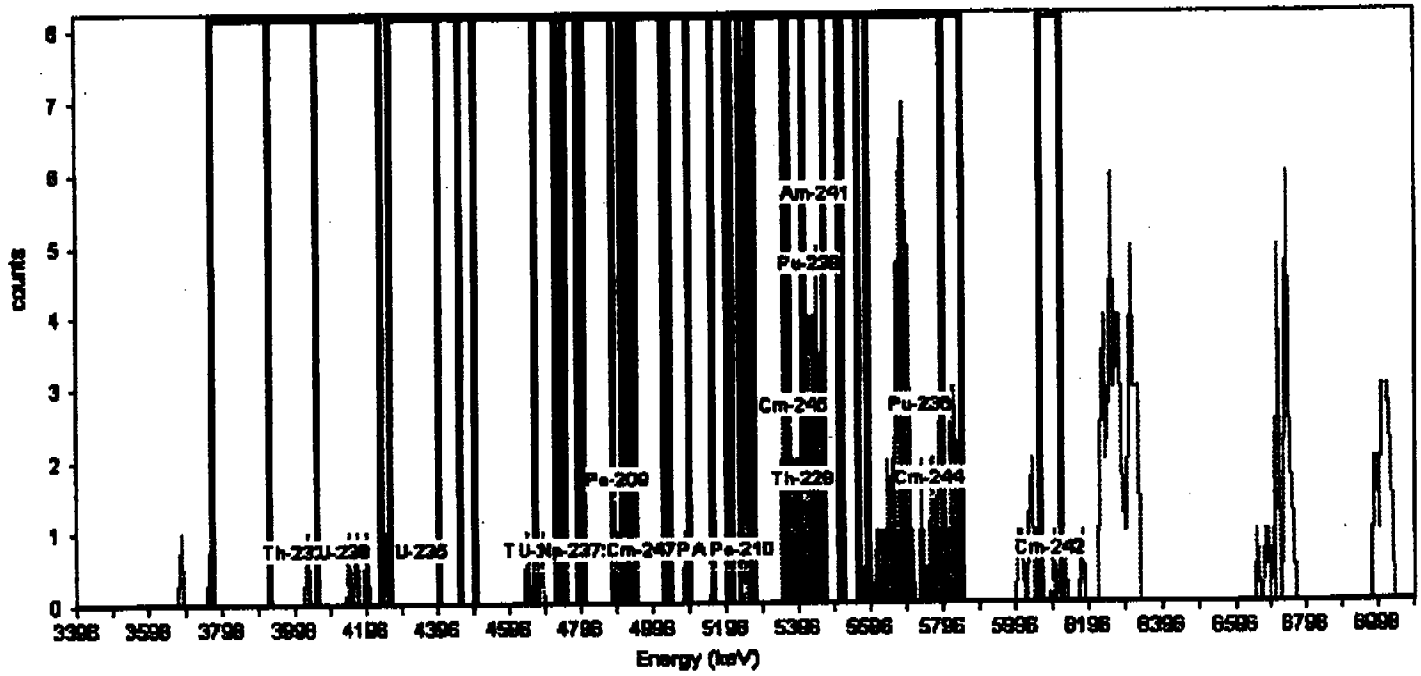
Batch Name: April_2005
Description:

Acquisition

Detector: AV37 , SN:
Acquisition Start Date: 4/25/2005 11:48:26AM
Live Time: 800.00 min.
Real Time: 800.00 min.
Calibration Name: March2005_AV37
Calibration Date: 3/21/2005 5:29:23PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 22.97% +/- 0.24% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 202.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	4.00	5.000E-003	2.795E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.60	4.80	2.00	2.500E-003	2.165E-003
Pu-242	4.88	4.67	4.93	4.00	5.000E-003	2.795E-003
Th-229	4.84	4.72	5.10	4.00	5.000E-003	2.795E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	3.00	3.750E-003	2.500E-003
Po-209	4.90	4.88	4.91	3.00	3.750E-003	2.500E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	8.00	1.000E-002	3.750E-003
Th-228	5.41	5.16	5.47	34.00	4.250E-002	7.395E-003
Po-210	5.25	5.20	5.28	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	34.00	4.250E-002	7.395E-003
Am-241	5.45	5.27	5.57	33.00	4.125E-002	7.289E-003
Cm-245	5.39	5.36	5.41	11.00	1.375E-002	4.330E-003
Pu-236	5.74	5.52	5.80	50.00	6.250E-002	8.927E-003
Cm-244	5.76	5.60	5.85	59.00	7.375E-002	9.682E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:17:34AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV38
Spectrum #1 Analysis #1
Comment:

Batch

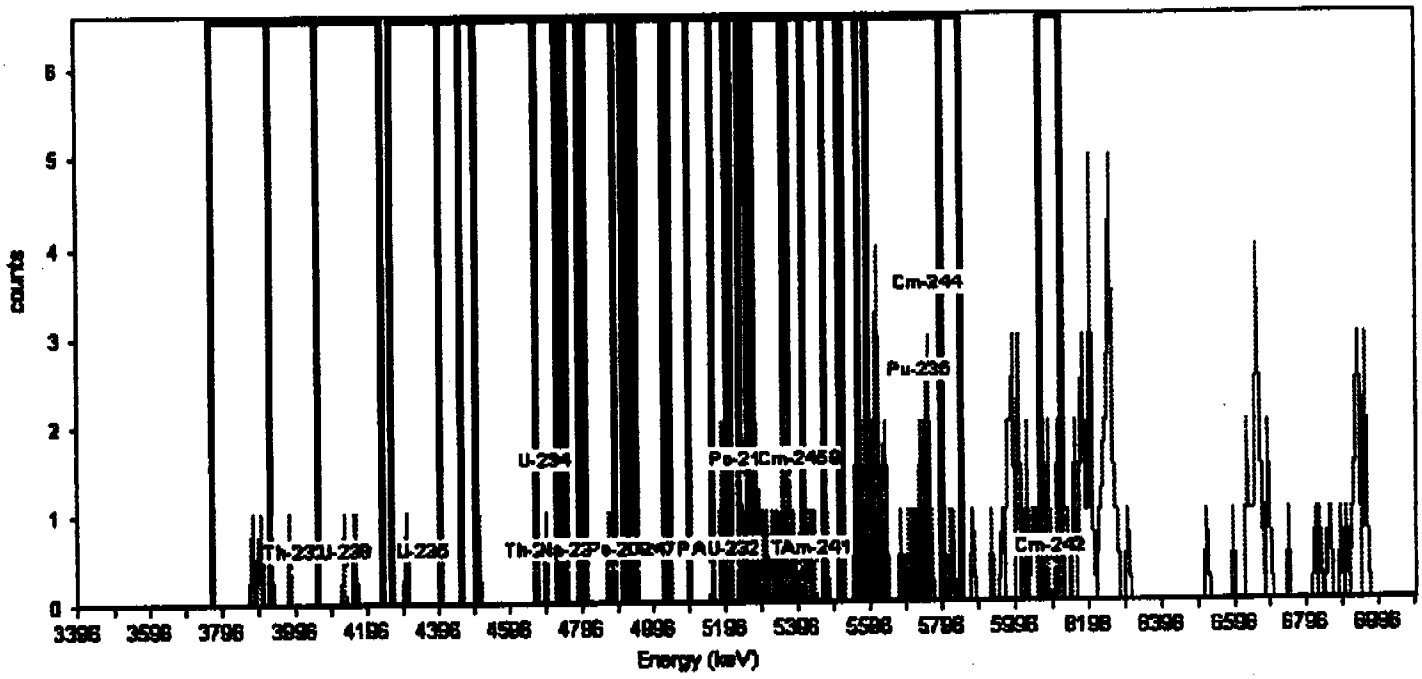
Batch Name: April_2005
Description:

Acquisition

Detector: AV38 , SN: ALDR30
Acquisition Start Date: 4/25/2005 11:48:27AM
Live Time: 800.00 min.
Real Time: 800.00 min.
Calibration Name: March2005_AV38
Calibration Date: 3/19/2005 6:48:01AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 24.37% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Library: Background ROI Library
Total Background Counts: 170.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.08	4.00	5.000E-003	2.795E-003
U-238	4.14	3.93	4.24	4.00	5.000E-003	2.795E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	2.00	2.500E-003	2.165E-003
Pu-242	4.88	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	4.00	5.000E-003	2.795E-003
Am-243	5.20	5.03	5.28	7.00	8.750E-003	3.536E-003
U-232	5.23	5.04	5.37	21.00	2.625E-002	5.863E-003
Th-228	5.41	5.16	5.47	26.00	3.250E-002	6.495E-003
Po-210	5.25	5.20	5.26	2.00	2.500E-003	2.165E-003
Pu-238	5.44	5.24	5.52	24.00	3.000E-002	6.250E-003
Am-241	5.45	5.27	5.57	27.00	3.375E-002	6.614E-003
Cm-245	5.39	5.36	5.41	8.00	1.000E-002	3.750E-003
Pu-236	5.74	5.52	5.80	39.00	4.875E-002	7.906E-003
Cm-244	5.76	5.60	5.85	33.00	4.125E-002	7.289E-003
Cm-242	6.10	6.07	6.13	7.00	8.750E-003	3.536E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:17:39AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV39
Comment:

Spectrum #1 Analysis #1

Batch

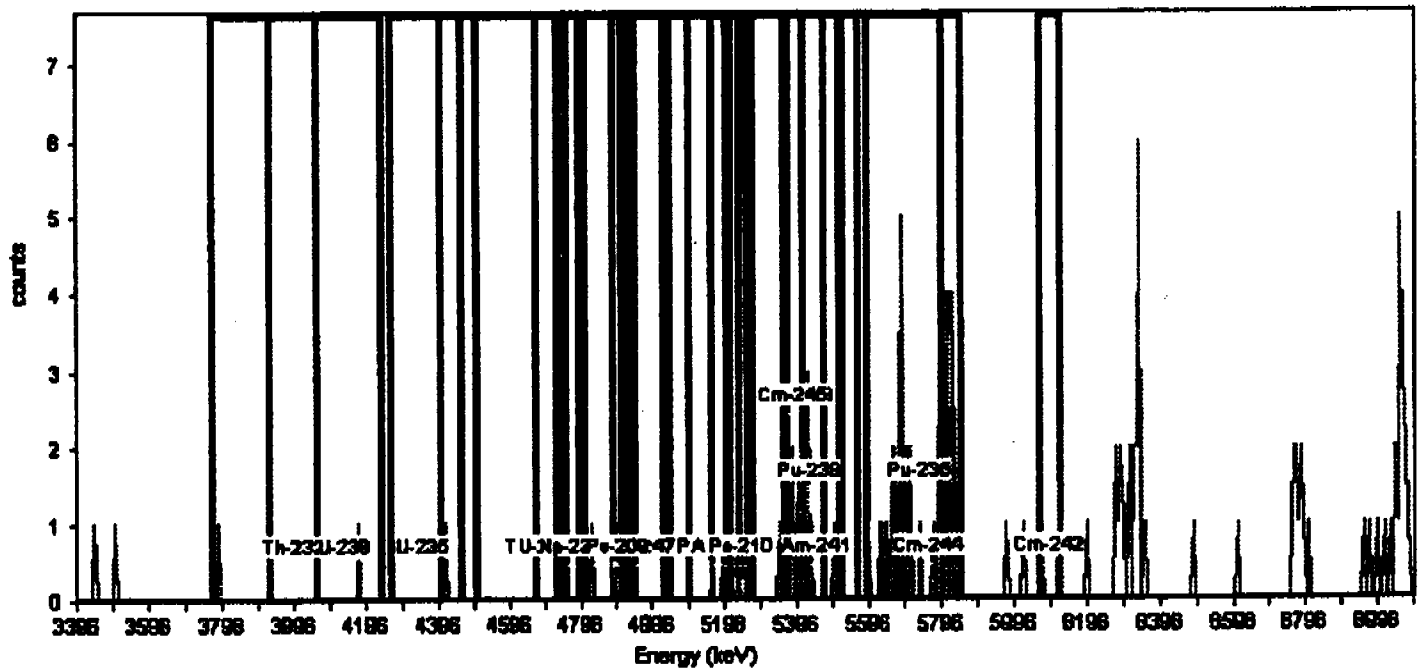
Batch Name: April_2005
Description:

Acquisition

Detector: AV39 , SN: ALDR31
Acquisition Start Date: 4/25/2005 11:48:28AM
Live Time: 800.00 min.
Real Time: 800.00 min.
Calibration Name: March2005_AV39
Calibration Date: 3/19/2005 6:48:11AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 25.89% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 115.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.86	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.26	3.00	3.750E-003	2.500E-003
U-232	5.23	5.04	5.37	5.00	6.250E-003	3.062E-003
Th-228	5.41	5.16	5.47	17.00	2.125E-002	5.303E-003
Po-210	5.25	5.20	5.26	2.00	2.500E-003	2.165E-003
Pu-238	5.44	5.24	5.52	16.00	2.000E-002	5.154E-003
Am-241	5.45	5.27	5.57	15.00	1.875E-002	5.000E-003
Cm-245	5.39	5.36	5.41	7.00	8.750E-003	3.536E-003
Pu-236	5.74	5.52	5.80	23.00	2.875E-002	6.124E-003
Cm-244	5.76	5.60	5.85	35.00	4.375E-002	7.500E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 1:17:45AM 4/26/2005

Sample

Sample Name: AV40 Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

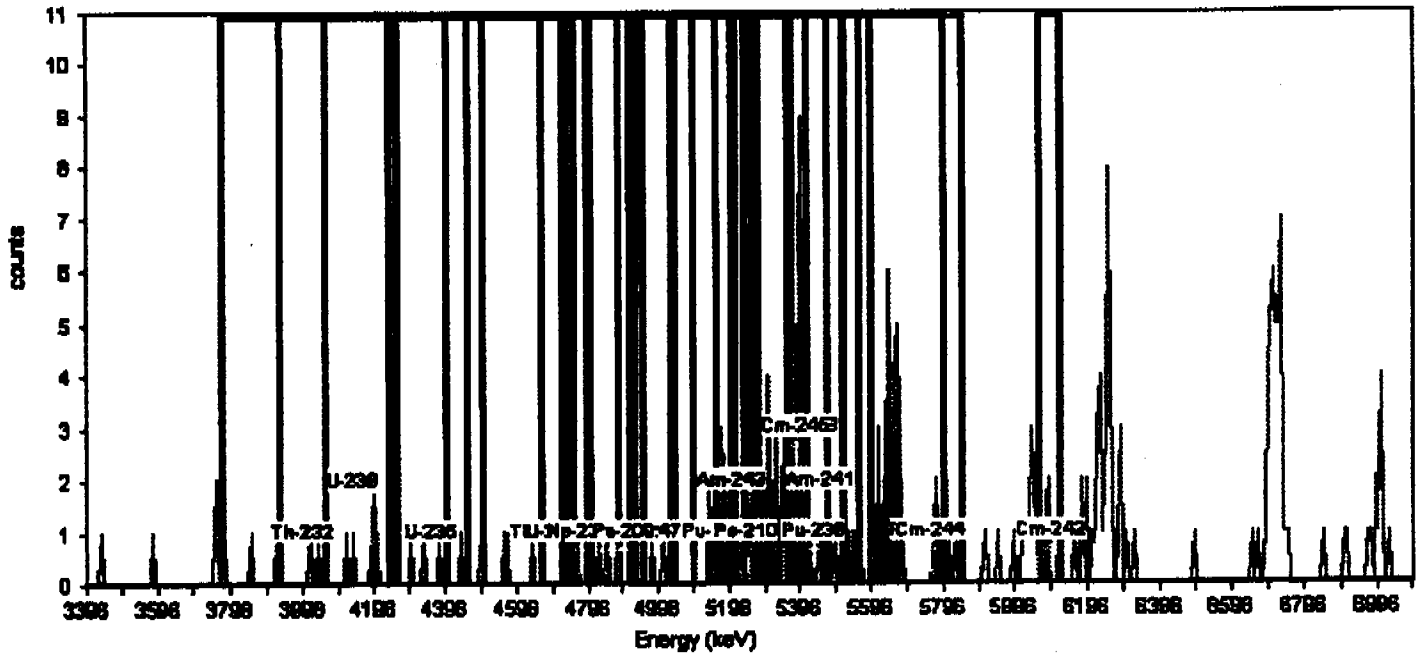
Description:

Acquisition

Detector: AV40 , SN: ALDR32
Acquisition Start Date: 4/25/2005 11:48:29AM
Live Time: 800.00 min.
Real Time: 800.00 min.
Calibration Name: March2005_AV40
Calibration Date: 3/18/2005 4:20:21PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 25.23% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library

Total Background Counts: 255.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	7.00	8.750E-003	3.536E-003
U-238	4.14	3.93	4.24	9.00	1.125E-002	3.953E-003
U-235	4.35	4.26	4.46	4.00	5.000E-003	2.795E-003
Th-230	4.67	4.40	4.73	7.00	8.750E-003	3.536E-003
U-234	4.70	4.50	4.80	7.00	8.750E-003	3.536E-003
Pu-242	4.88	4.67	4.93	7.00	8.750E-003	3.536E-003
Th-229	4.84	4.72	5.10	11.00	1.375E-002	4.390E-003
Np-237	4.77	4.75	4.79	2.00	2.500E-003	2.165E-003
Cm-247	4.96	4.86	5.04	3.00	3.750E-003	2.500E-003
Po-209	4.90	4.86	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	14.00	1.750E-002	4.841E-003
Am-243	5.20	5.03	5.28	19.00	2.375E-002	5.590E-003
U-232	5.23	5.04	5.37	38.00	4.750E-002	7.806E-003
Th-228	5.41	5.16	5.47	67.00	8.375E-002	1.031E-002
Po-210	5.25	5.20	5.26	6.00	7.500E-003	3.307E-003
Pu-238	5.44	5.24	5.52	61.00	7.625E-002	9.843E-003
Am-241	5.45	5.27	5.57	61.00	7.625E-002	9.843E-003
Cm-245	5.39	5.36	5.41	34.00	4.250E-002	7.395E-003
Pu-236	5.74	5.52	5.80	37.00	4.625E-002	7.706E-003
Cm-244	5.78	5.60	5.85	37.00	4.625E-002	7.706E-003
Cm-242	6.10	6.07	6.13	5.00	6.250E-003	3.062E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:17:50AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV41
Comment:

Spectrum #1 Analysis #1

Batch

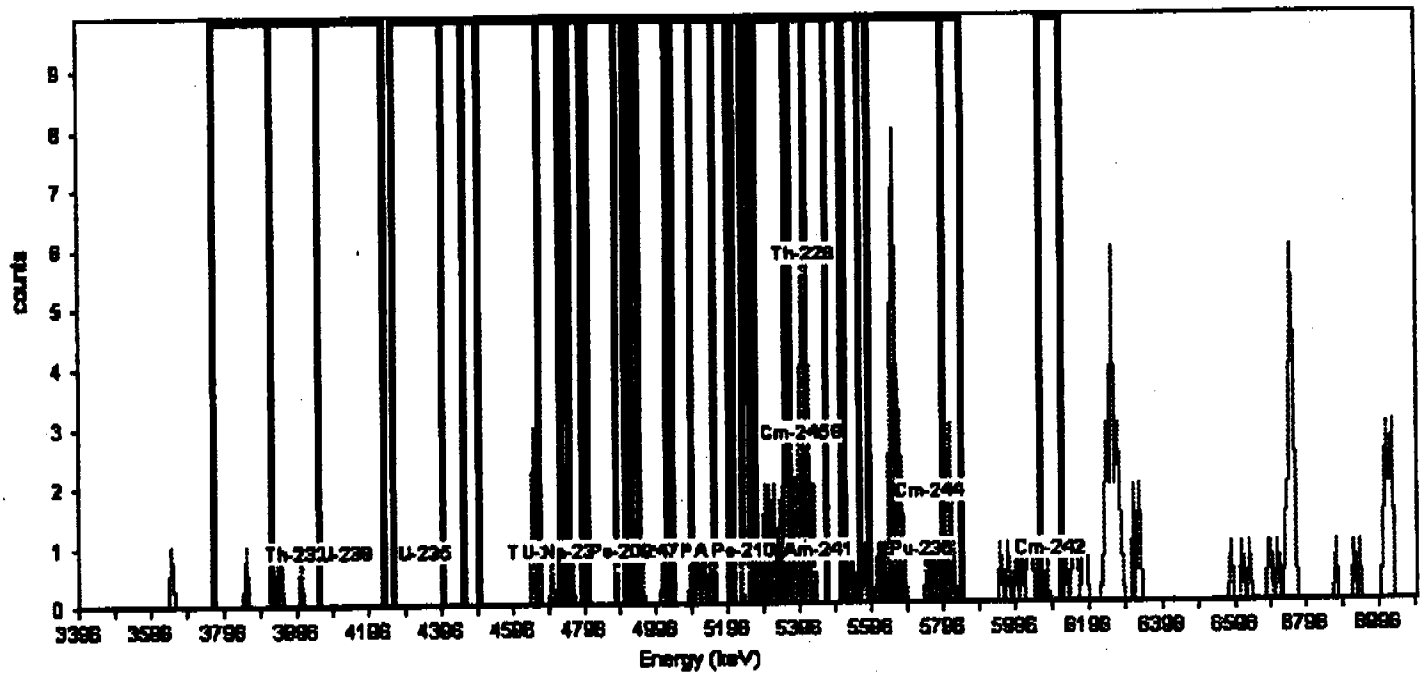
Batch Name: April_2005
Description:

Acquisition

Detector: AV41 , SN: ALDR33
Acquisition Start Date: 4/25/2005 11:48:30AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV41
Calibration Date: 3/21/2005 12:30:51PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 23.34% +/- 0.24% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 175.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	4.00	5.000E-003	2.795E-003
U-238	4.14	3.93	4.24	3.00	3.750E-003	2.500E-003
U-235	4.36	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	5.00	6.250E-003	3.062E-003
U-234	4.70	4.50	4.80	6.00	7.500E-003	3.307E-003
Pu-242	4.86	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	4.00	5.000E-003	2.795E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	6.00	7.500E-003	3.307E-003
Am-243	5.20	5.03	5.28	5.00	6.250E-003	3.062E-003
U-232	5.23	5.04	5.37	22.00	2.750E-002	5.995E-003
Th-228	5.41	5.16	5.47	45.00	5.625E-002	8.478E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	45.00	5.625E-002	8.478E-003
Am-241	5.45	5.27	5.57	45.00	5.625E-002	8.478E-003
Cm-245	5.39	5.36	5.41	24.00	3.000E-002	6.250E-003
Pu-236	5.74	5.52	5.80	32.00	4.000E-002	7.181E-003
Cm-244	5.76	5.60	5.85	38.00	4.750E-002	7.806E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:17:56AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV42
Comment:

Spectrum #1 Analysis #1

Batch

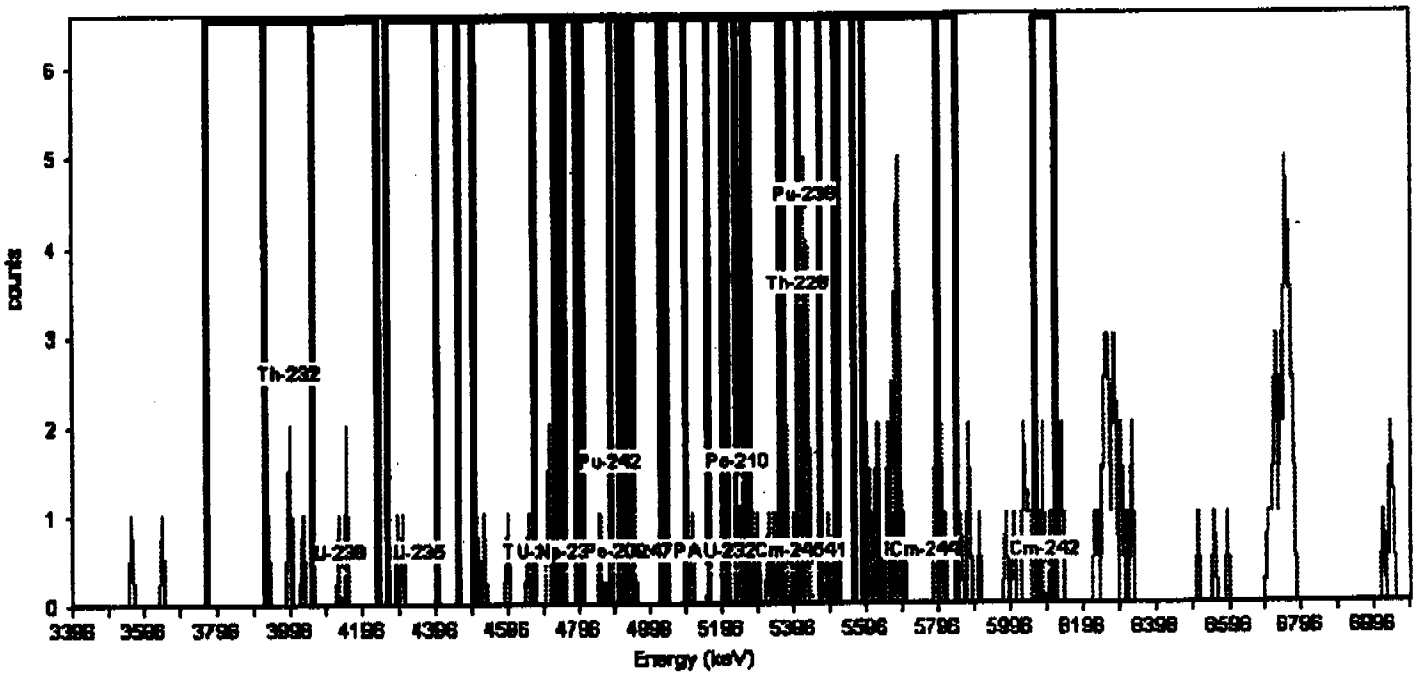
Batch Name: April_2005
Description:

Acquisition

Detector: AV42 , SN: ALDR34
Acquisition Start Date: 4/25/2005 11:48:32AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV42
Calibration Date: 3/21/2005 12:31:05PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 24.13% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Library: Background ROI Library
Total Background Counts: 155.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	4.00	5.000E-003	2.795E-003
U-238	4.14	3.93	4.24	7.00	8.750E-003	3.536E-003
U-235	4.35	4.26	4.46	2.00	2.500E-003	2.165E-003
Th-230	4.67	4.40	4.73	6.00	7.500E-003	3.307E-003
U-234	4.70	4.50	4.80	7.00	8.750E-003	3.536E-003
Pu-242	4.88	4.67	4.93	6.00	7.500E-003	3.307E-003
Th-229	4.84	4.72	5.10	5.00	6.250E-003	3.062E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.86	4.68	5.04	3.00	3.750E-003	2.500E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	9.00	1.125E-002	3.953E-003
Th-228	5.41	5.16	5.47	28.00	3.500E-002	6.731E-003
Po-210	5.25	5.20	5.28	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	29.00	3.625E-002	6.847E-003
Am-241	5.46	5.27	5.57	28.00	3.500E-002	6.731E-003
Cm-245	5.39	5.36	5.41	7.00	8.750E-003	3.536E-003
Pu-236	5.74	5.52	5.80	25.00	3.125E-002	6.374E-003
Cm-244	5.76	5.60	5.85	28.00	3.500E-002	6.731E-003
Cm-242	6.10	6.07	6.13	6.00	7.500E-003	3.307E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:01AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV43
Comment:

Spectrum #1 Analysis #1

Batch

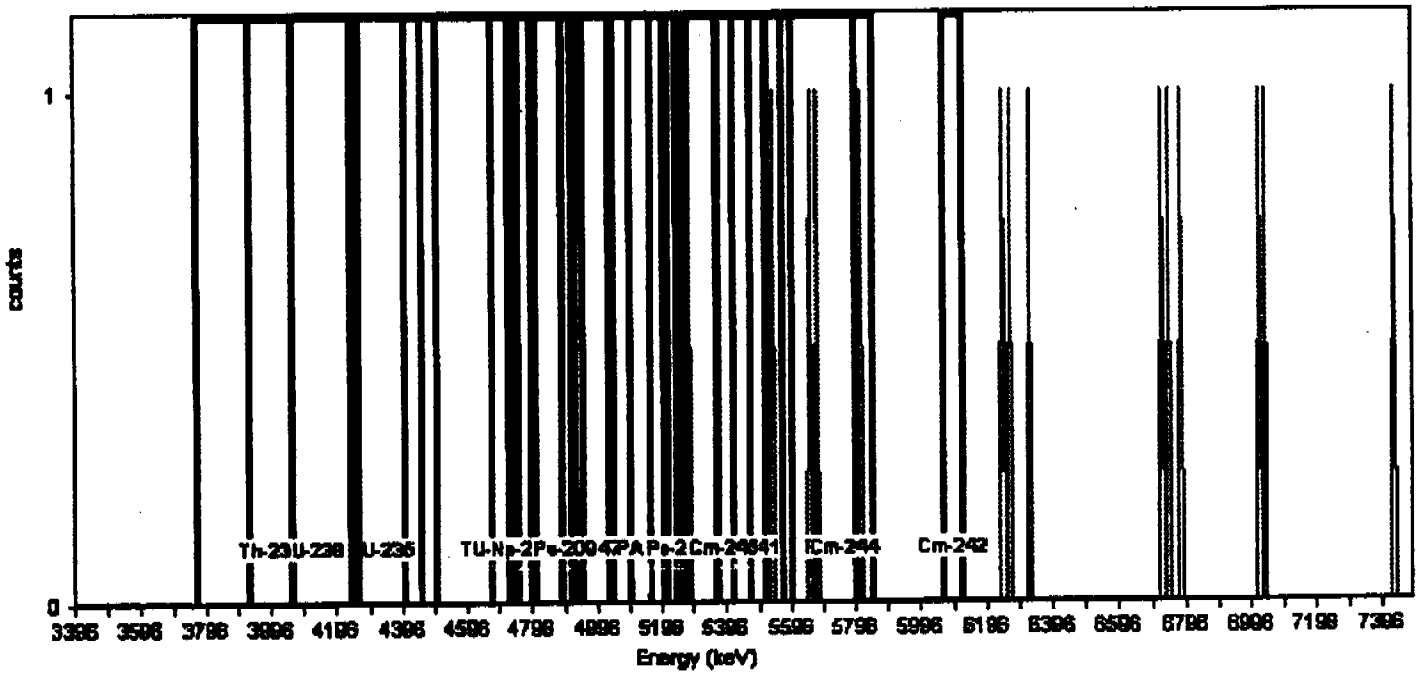
Batch Name: April_2005
Description:

Acquisition

Detector: AV43 , SN: AV43
Acquisition Start Date: 4/25/2005 11:48:33AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV43
Calibration Date: 3/17/2005 12:19:51PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.51% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 14.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	1.00	1.250E-003	1.768E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	1.00	1.250E-003	1.768E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	3.00	3.750E-003	2.500E-003
Cm-244	5.76	5.60	5.85	3.00	3.750E-003	2.500E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:07AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV44
Spectrum #1 Analysis #1
Comment:

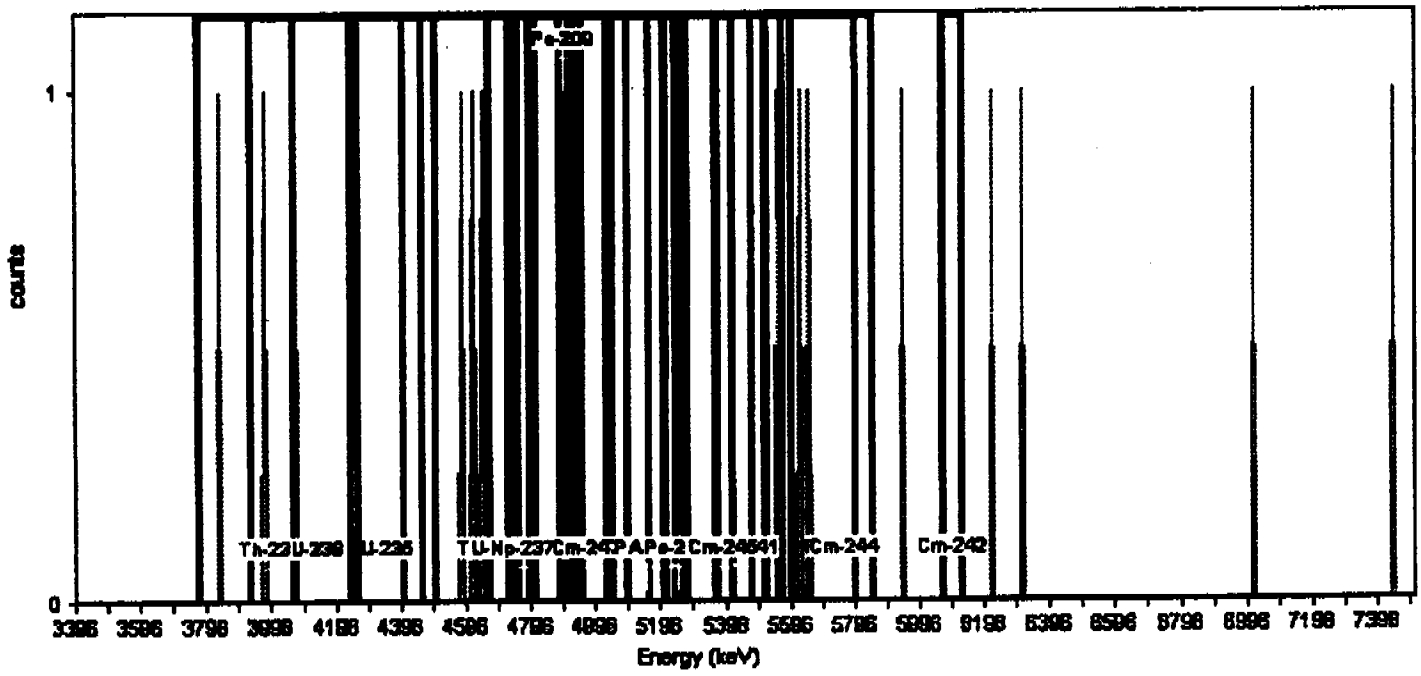
Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV44 , SN: AV44
Acquisition Start Date: 4/25/2005 11:48:35AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV44
Calibration Date: 3/17/2005 12:19:57PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 28.18% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Library: Background ROI Library
Total Background Counts: 15.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	2.00	2.500E-003	2.165E-003
U-238	4.14	3.93	4.24	2.00	2.500E-003	2.165E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	3.00	3.750E-003	2.500E-003
U-234	4.70	4.50	4.80	3.00	3.750E-003	2.500E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.98	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.768E-003
Th-228	5.41	5.16	5.47	0.00	0.000E+000	1.768E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	0.00	0.000E+000	1.768E-003
Am-241	5.45	5.27	5.57	1.00	1.250E-003	1.768E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	3.00	3.750E-003	2.500E-003
Cm-244	5.76	5.60	5.85	2.00	2.500E-003	2.165E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:54:44AM 4/27/2005

Analyst: 60040

Sample

Sample Name: AV45
Comment:

Spectrum #1 Analysis #1

Batch

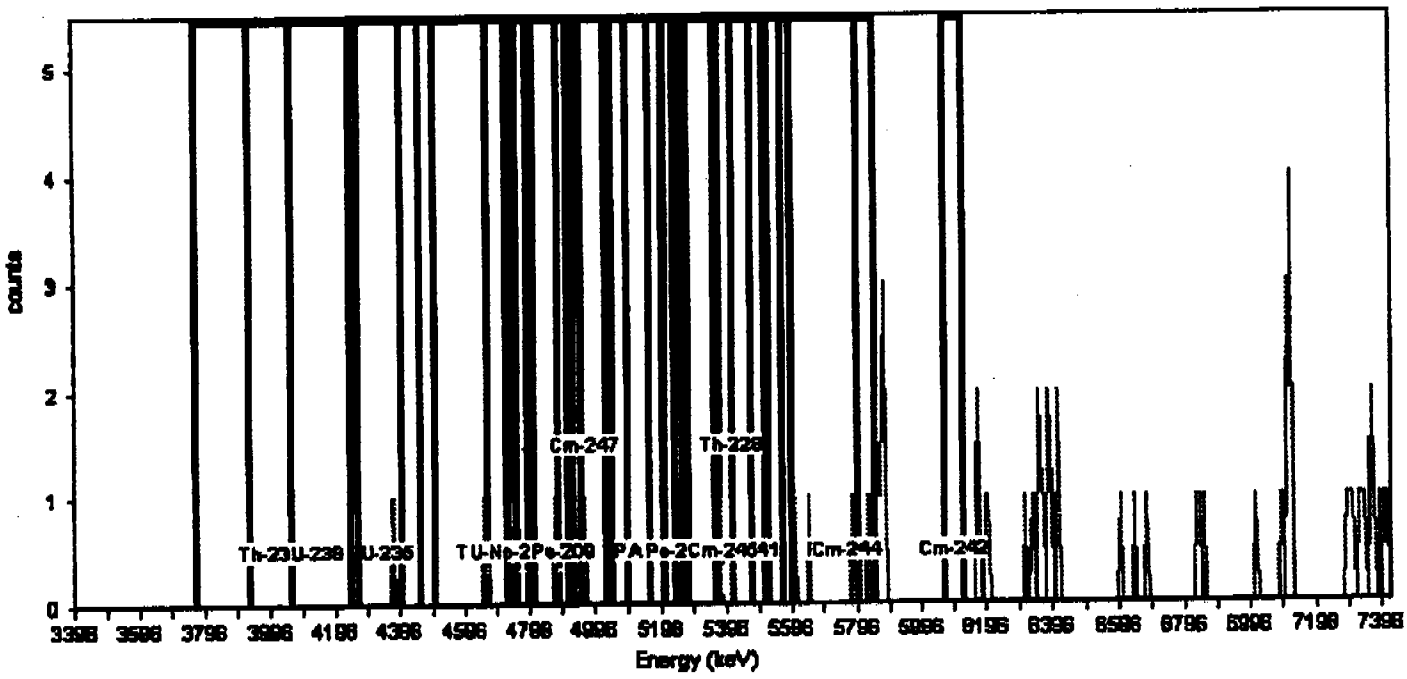
Batch Name: April_2005
Description:

Acquisition

Detector: AV45 , SN: AV45
Acquisition Start Date: 4/26/2005 12:34:24PM
Live Time: 800.00 min.
Real Time: 800.00 min.
Calibration Name: March2005_AV45
Calibration Date: 3/17/2005 12:20:04PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.96% +/- 0.30% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 70.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.16	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.768E-003
Th-228	5.41	5.16	5.47	2.00	2.500E-003	2.165E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	4.00	5.000E-003	2.795E-003
Cm-244	5.76	5.60	5.85	7.00	8.750E-003	3.536E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:13AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV46
Comment:

Spectrum #1 Analysis #1

Batch

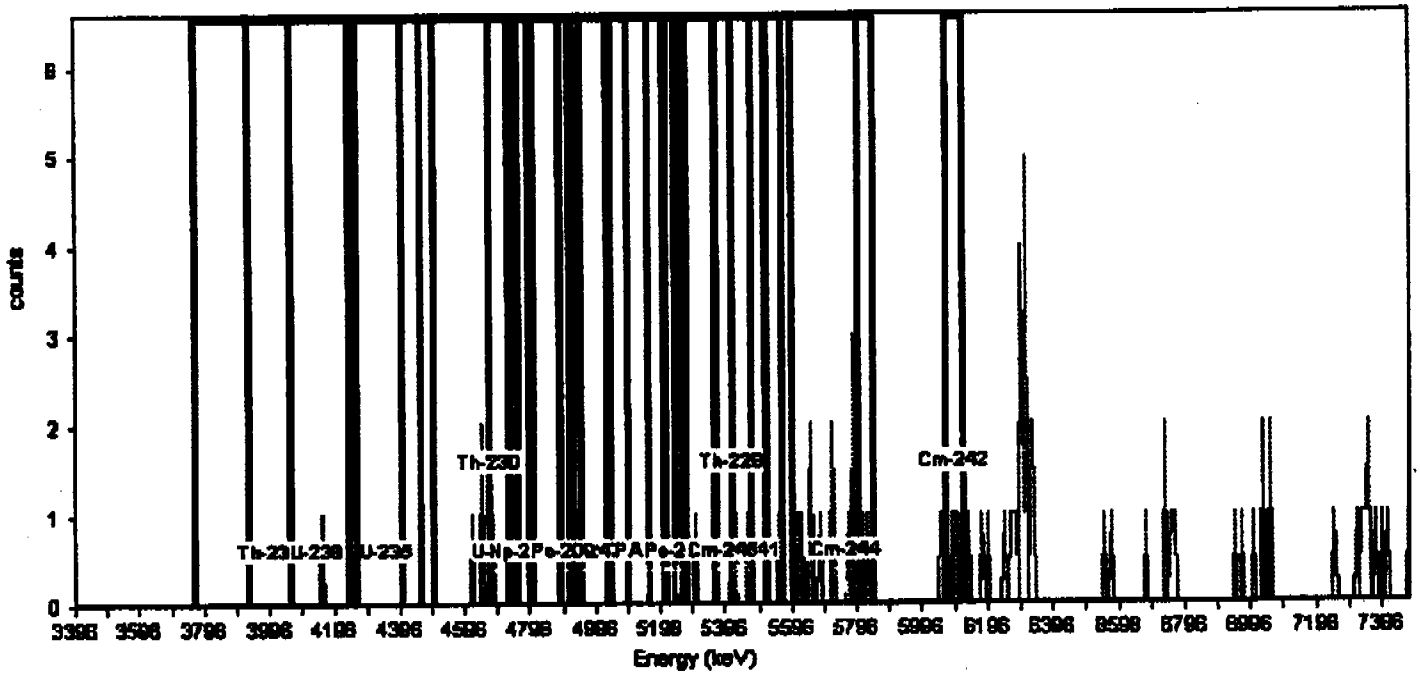
Batch Name: April_2005
Description:

Acquisition

Detector: AV46 , SN: AV46
Acquisition Start Date: 4/25/2005 11:48:40AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV46
Calibration Date: 3/17/2005 12:20:10PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 29.31% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Library: Background ROI Library
Total Background Counts: 82.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	5.00	6.250E-003	3.062E-003
U-234	4.70	4.50	4.80	5.00	6.250E-003	3.062E-003
Pu-242	4.86	4.67	4.93	3.00	3.750E-003	2.500E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	5.00	6.250E-003	3.062E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	5.00	6.250E-003	3.062E-003
Am-241	5.45	5.27	5.57	6.00	7.500E-003	3.307E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	15.00	1.875E-002	5.000E-003
Cm-244	5.78	5.60	5.85	17.00	2.125E-002	5.303E-003
Cm-242	6.10	6.07	6.13	4.00	5.000E-003	2.795E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:18AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV47
Comment:

Spectrum #1 Analysis #1

Batch

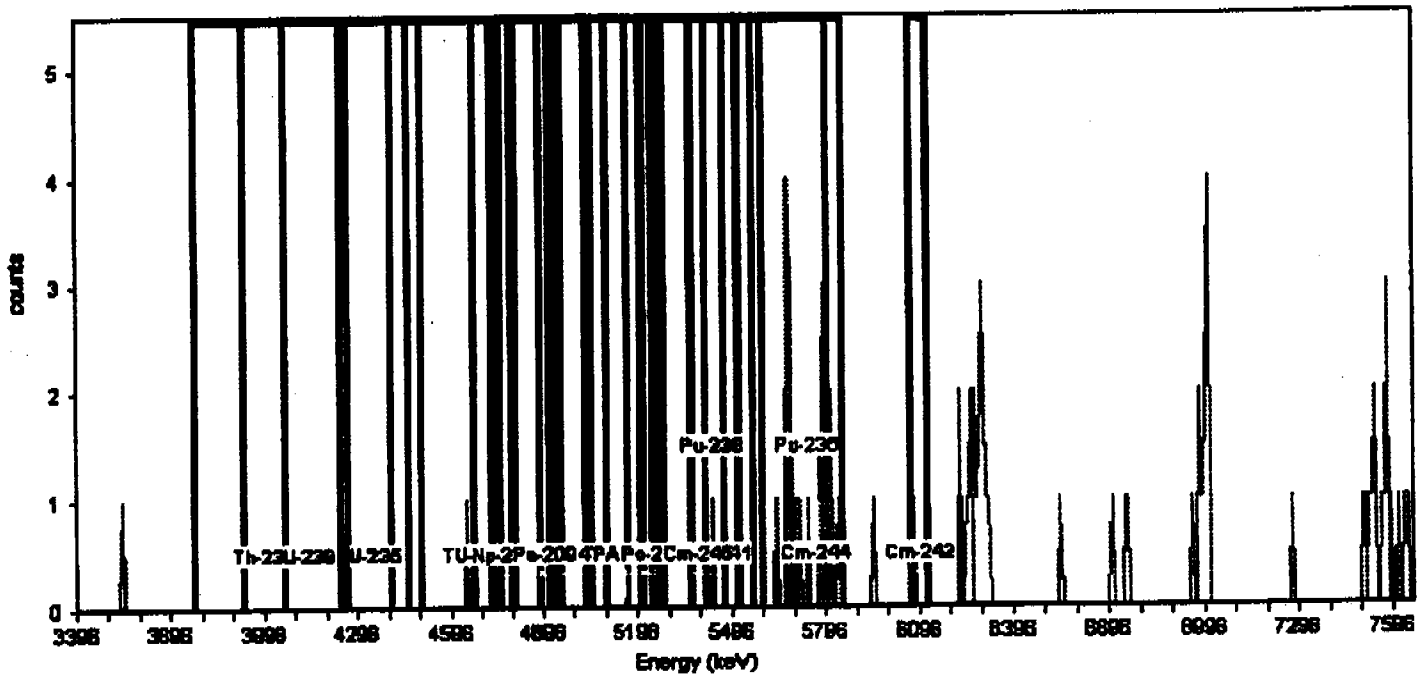
Batch Name: April_2005
Description:

Acquisition

Detector: AV47 , SN: AV47
Acquisition Start Date: 4/25/2005 11:48:42AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV47
Calibration Date: 3/17/2005 4:29:23PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.70% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 82.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.86	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.96	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	2.00	2.500E-003	2.165E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	19.00	2.375E-002	5.590E-003
Cm-244	5.76	5.60	5.85	24.00	3.000E-002	6.250E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:24AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV48
Spectrum #1 Analysis #1
Comment:

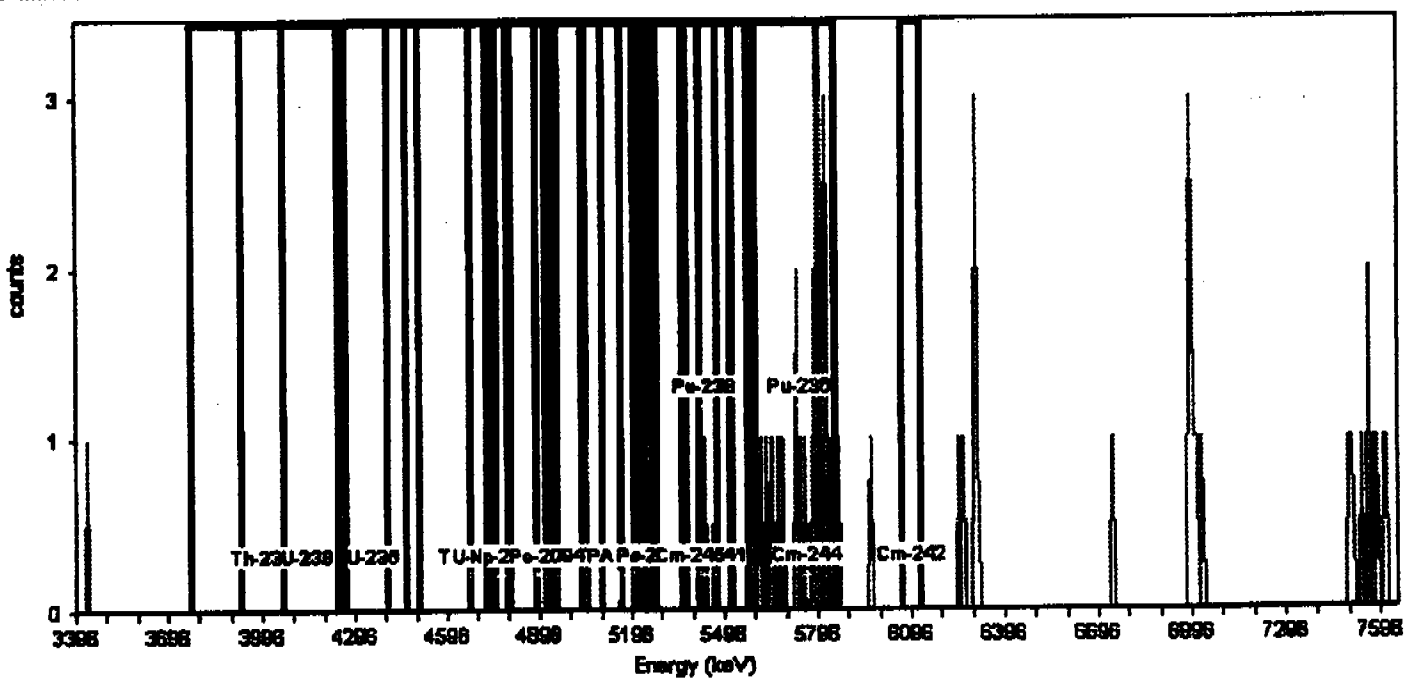
Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV48 , SN: AV48
Acquisition Start Date: 4/25/2005 11:48:43AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV48
Calibration Date: 3/17/2005 4:29:35PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 26.24% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROU[illegible] Library: Background ROI Library
Total Background Counts: 62.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.28	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.98	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	3.00	3.750E-003	2.500E-003
Am-241	5.45	5.27	5.57	3.00	3.750E-003	2.500E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.62	5.80	18.00	2.250E-002	5.449E-003
Cm-244	5.76	5.60	5.86	24.00	3.000E-002	6.250E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:29AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV49
Comment:

Spectrum #1 Analysis #1

Batch

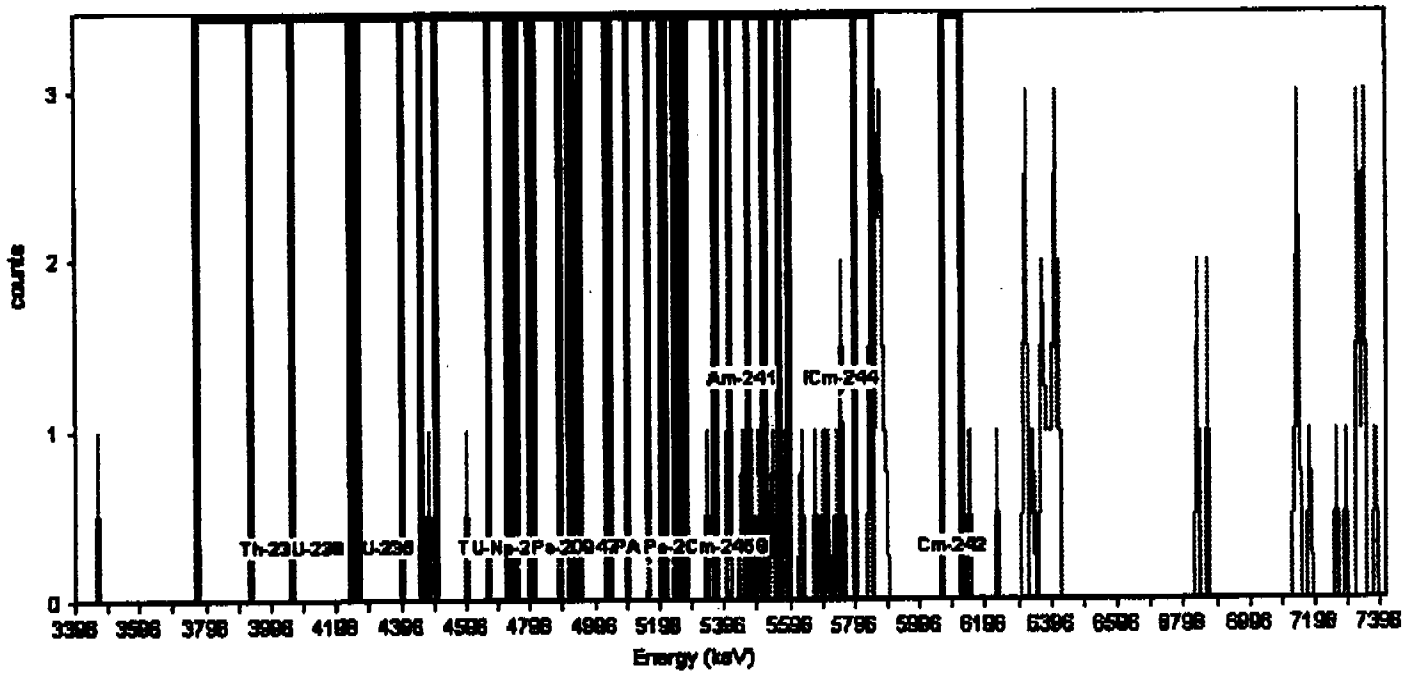
Batch Name: April_2005
Description:

Acquisition

Detector: AV49 , SN: AV49
Acquisition Start Date: 4/25/2005 11:48:45AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV49
Calibration Date: 3/17/2005 4:29:42PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.84% +/- 0.30% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Library: Background ROI Library
Total Background Counts: 81.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.36	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	2.00	2.500E-003	2.165E-003
Pu-242	4.86	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	6.00	7.500E-003	3.307E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	7.00	8.750E-003	3.536E-003
Am-241	5.45	5.27	5.57	8.00	1.000E-002	3.750E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	13.00	1.625E-002	4.677E-003
Cm-244	5.76	5.60	5.85	13.00	1.625E-002	4.677E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:35AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV50
Comment:

Spectrum #1 Analysis #1

Batch

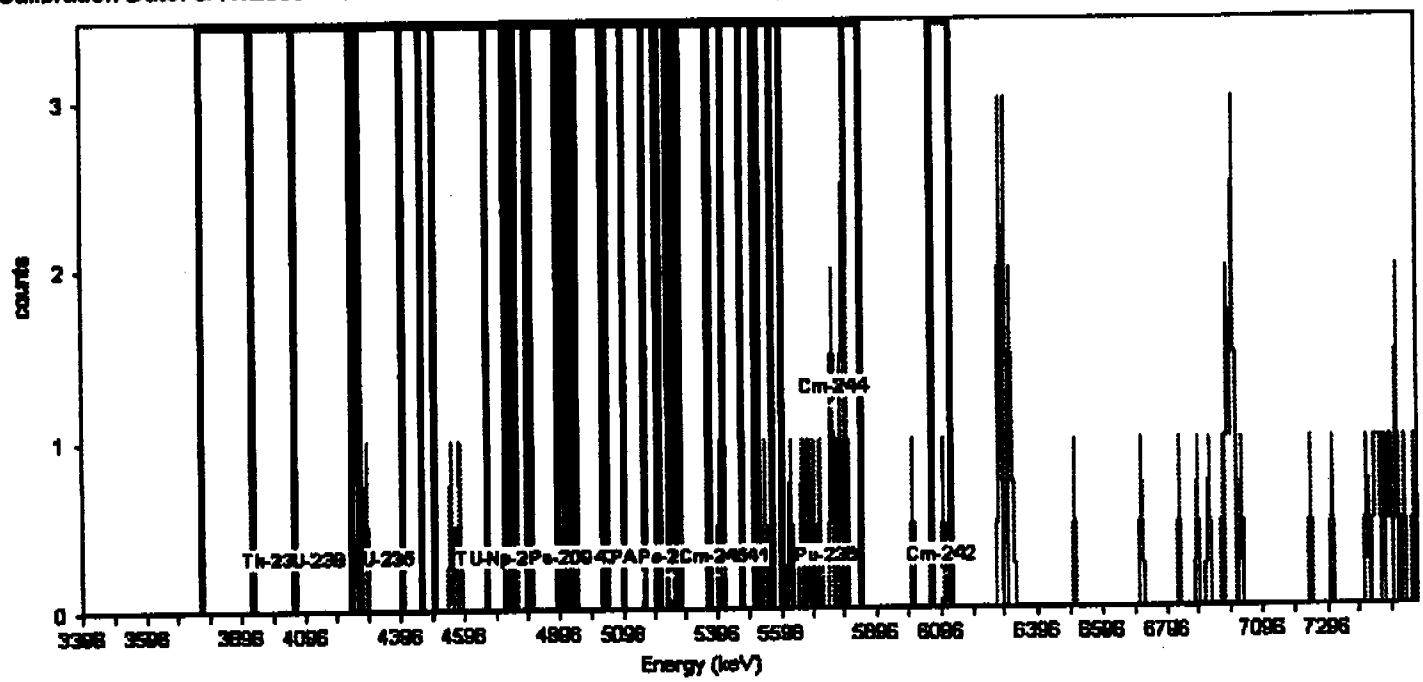
Batch Name: April_2005
Description:

Acquisition

Detector: AV50 , SN: AV50
Acquisition Start Date: 4/25/2005 11:48:47AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV50
Calibration Date: 3/17/2005 4:29:48PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.29% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 65.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	3.00	3.750E-003	2.500E-003
U-234	4.70	4.60	4.80	4.00	5.000E-003	2.795E-003
Pu-242	4.88	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.26	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.768E-003
Th-228	5.41	5.16	5.47	1.00	1.250E-003	1.768E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	1.00	1.250E-003	1.768E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	16.00	2.000E-002	5.154E-003
Cm-244	5.76	5.60	5.85	17.00	2.125E-002	5.303E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:40AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV51
Comment:

Spectrum #1 Analysis #1

Batch

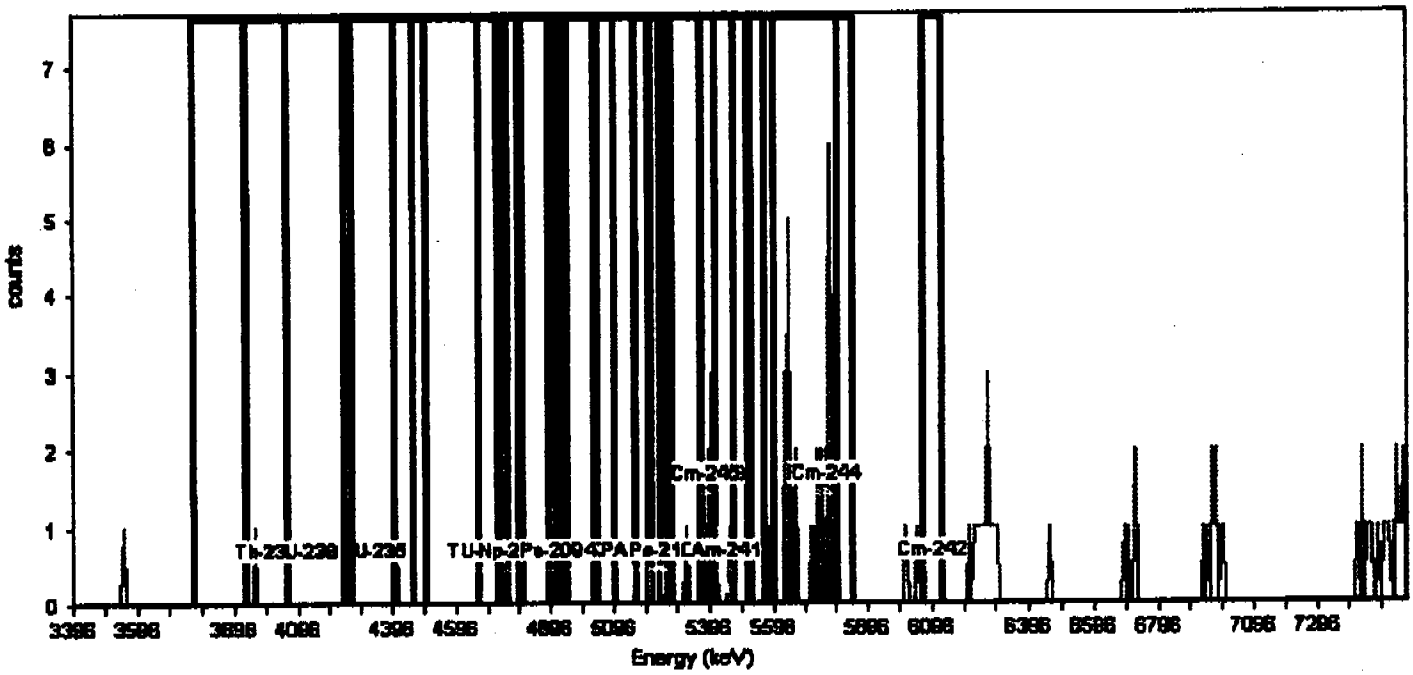
Batch Name: April_2005
Description:

Acquisition

Detector: AV51 , SN:
Acquisition Start Date: 4/25/2005 11:48:48AM
Live Time: 600.00 min.
Real Time: 600.01 min.
Calibration Name: March2005_AV51
Calibration Date: 3/18/2005 12:58:33PM

Energy Calibration Equation:
Gain = 7.2596 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.39% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 98.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Pu-236	5.74	5.52	5.80	34.00	4.250E-002	7.395E-003
Cm-244	5.76	5.60	5.85	33.00	4.125E-002	7.269E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-236	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.86	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	3.00	3.750E-003	2.500E-003
Th-228	5.41	5.18	5.47	12.00	1.500E-002	4.507E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	11.00	1.375E-002	4.330E-003
Am-241	5.45	5.27	5.57	11.00	1.375E-002	4.330E-003
Cm-245	5.39	5.36	5.41	9.00	1.125E-002	3.953E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:46AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV52
Comment:

Spectrum #1 Analysis #1

Batch

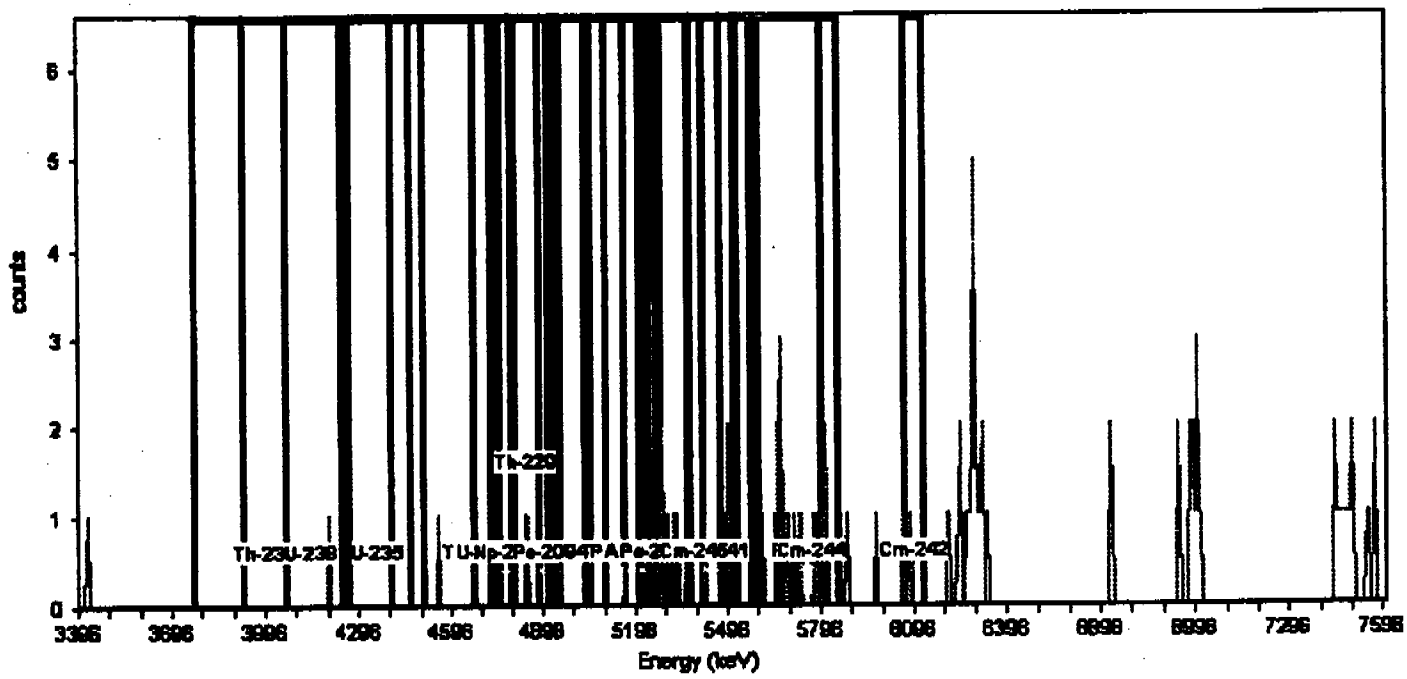
Batch Name: April_2005
Description:

Acquisition

Detector: AV52 , SN:
Acquisition Start Date: 4/25/2005 11:48:50AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV52
Calibration Date: 3/16/2005 12:56:40PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.60% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROU[illegible] Library: Background ROI Library
Total Background Counts: 91.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.36	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.60	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.86	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.96	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	7.00	8.750E-003	3.536E-003
Th-228	5.41	5.16	5.47	8.00	1.000E-002	3.750E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	10.00	1.250E-002	4.146E-003
Am-241	5.45	5.27	5.57	10.00	1.250E-002	4.146E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	17.00	2.125E-002	5.303E-003
Cm-244	5.76	5.60	5.85	20.00	2.500E-002	5.728E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:18:51AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV53
Comment:

Spectrum #1 Analysis #1

Batch

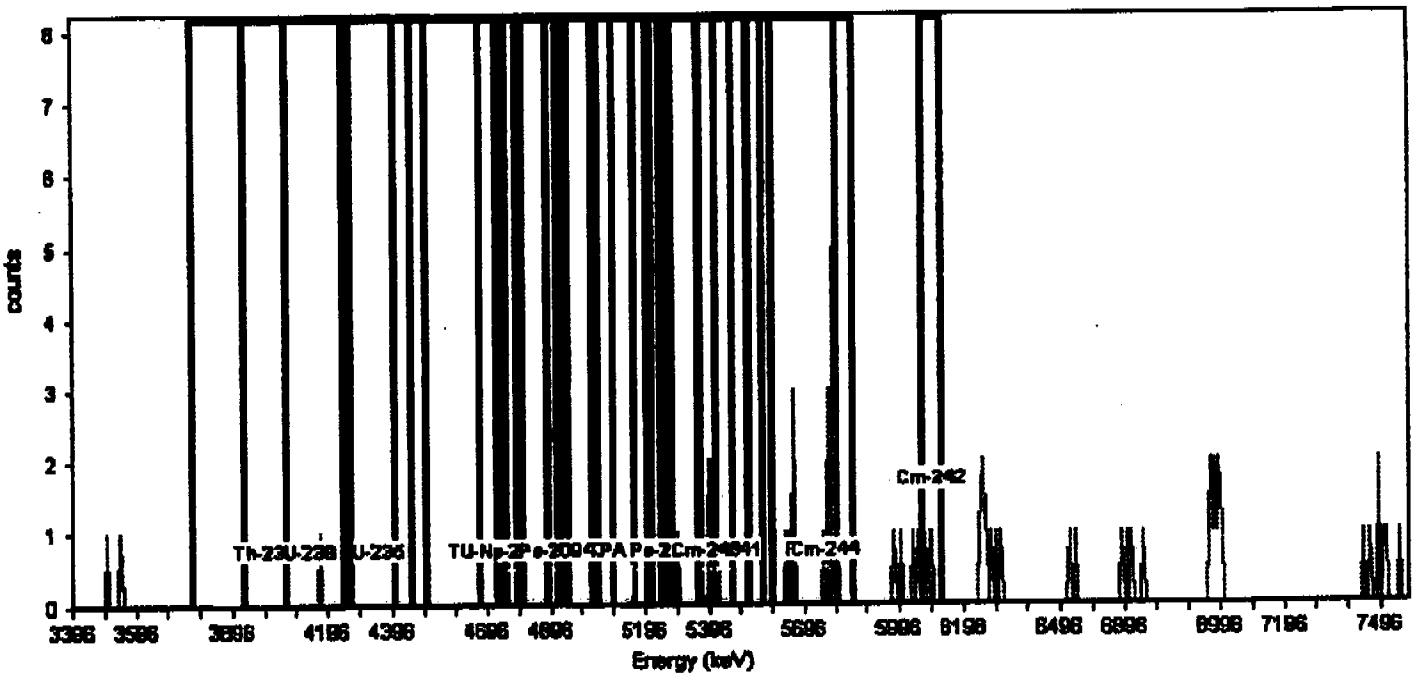
Batch Name: April_2005
Description:

Acquisition

Detector: AV53 , SN:
Acquisition Start Date: 4/25/2005 11:48:51AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV53
Calibration Date: 3/18/2005 12:58:46PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.69% +/- 0.30% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 68.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.28	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	6.00	7.500E-003	3.307E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	6.00	7.500E-003	3.307E-003
Am-241	5.46	5.27	5.57	6.00	7.500E-003	3.307E-003
Cm-245	5.39	5.36	5.41	4.00	5.000E-003	2.795E-003
Pu-236	5.74	5.52	5.80	21.00	2.625E-002	5.863E-003
Cm-244	5.76	5.60	5.85	22.00	2.750E-002	5.995E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 1:18:57AM 4/26/2005

Sample

Sample Name: AV54 Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

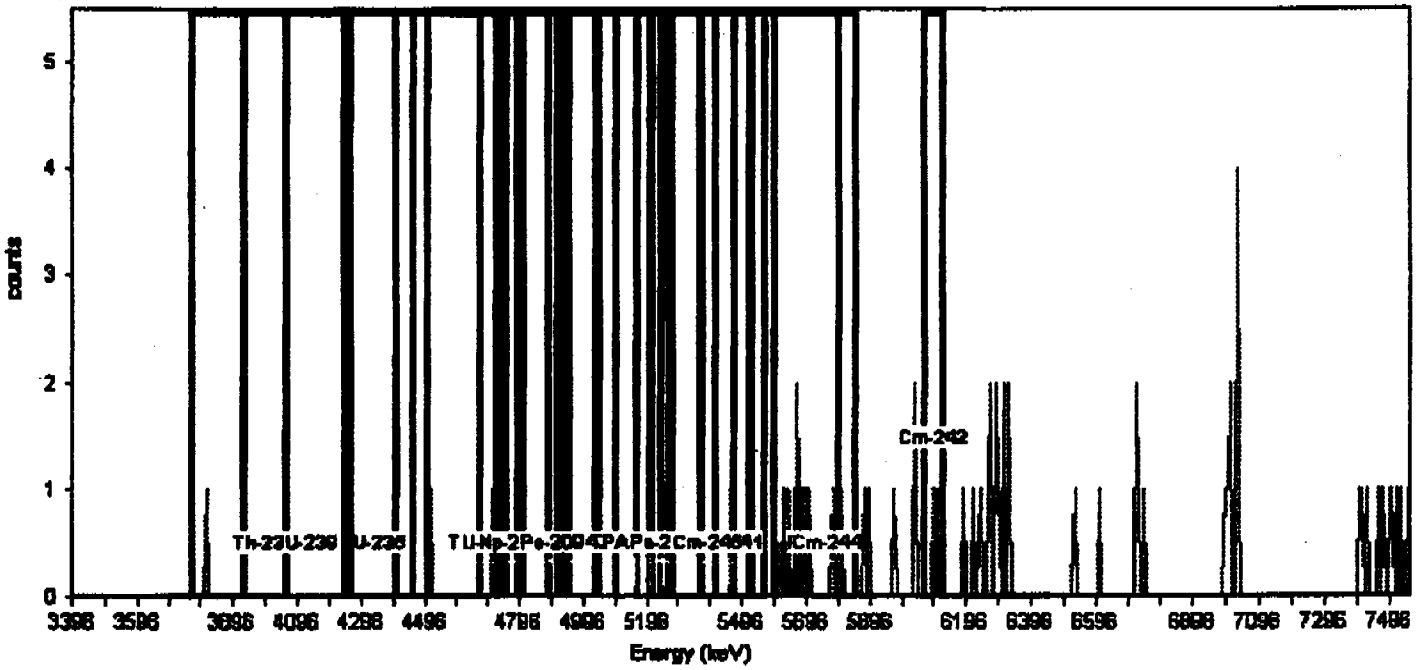
Description:

Acquisition

Detector: AV54 , SN:
Acquisition Start Date: 4/25/2005 11:48:54AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV54
Calibration Date: 3/18/2005 12:58:53PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.27% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Library: Background ROI Library

Total Background Counts: 64.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	2.00	2.500E-003	2.165E-003
Pu-242	4.86	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	2.00	2.500E-003	2.165E-003
Po-210	5.26	5.20	5.28	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.46	5.27	5.57	1.00	1.250E-003	1.768E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	14.00	1.750E-002	4.841E-003
Cm-244	5.76	5.60	5.86	15.00	1.875E-002	5.000E-003
Cm-242	6.10	6.07	6.13	3.00	3.750E-003	2.500E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:19:02AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV55
Comment:

Spectrum #1 Analysis #1

Batch

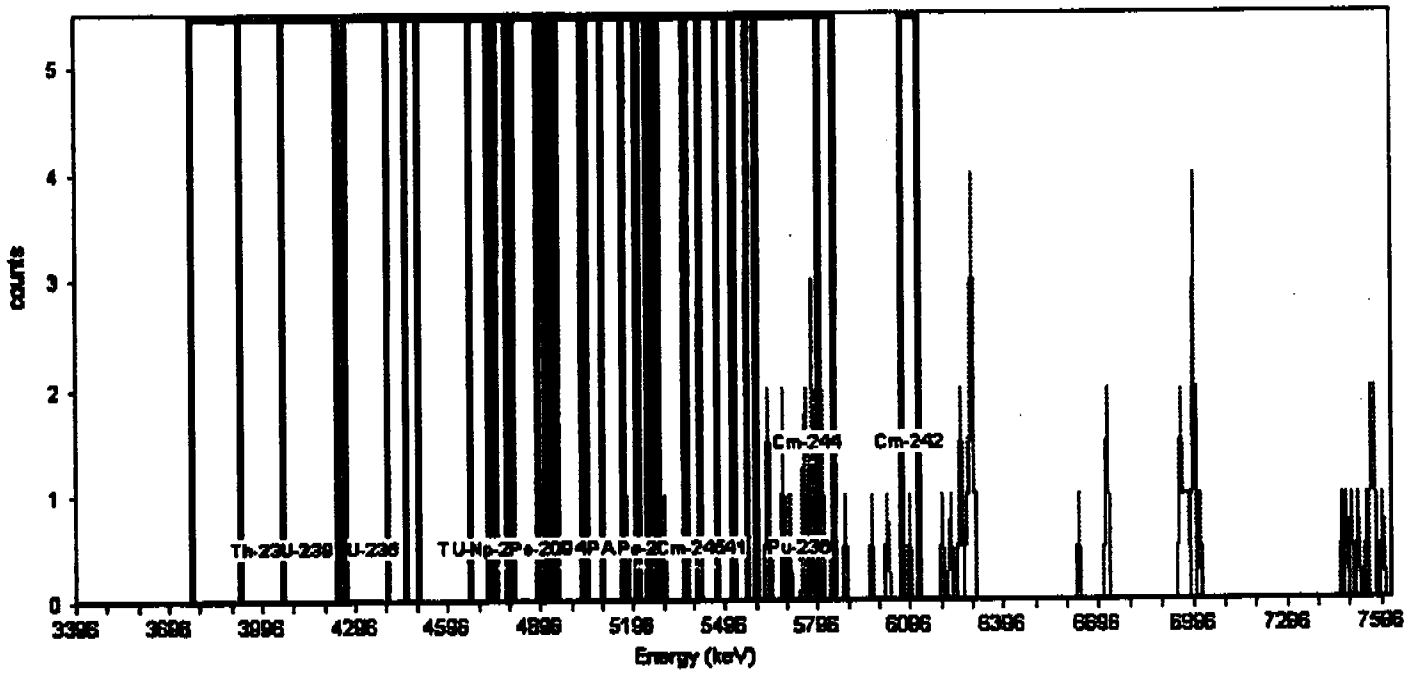
Batch Name: April_2005
Description:

Acquisition

Detector: AV55 , SN:
Acquisition Start Date: 4/25/2005 11:48:56AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: Mar2005_AV55
Calibration Date: 3/18/2005 9:23:08AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 26.76% +/- 0.26% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 67.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.36	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.86	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.26	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.46	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	16.00	2.000E-002	5.154E-003
Cm-244	5.76	5.60	5.85	20.00	2.500E-002	5.728E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:19:08AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV56
Comment:

Spectrum #1 Analysis #1

Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV56 , SN:
Acquisition Start Date: 4/25/2005 11:48:57AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: Mar2005_AV56
Calibration Date: 3/18/2005 9:23:19AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 25.92% +/- 0.28% TPU(2 sigma)

General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 49.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Pu-236	5.74	5.62	5.80	11.00	1.375E-002	4.330E-003
Cm-244	5.76	5.60	5.85	11.00	1.375E-002	4.330E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	3.00	3.750E-003	2.500E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.26	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	3.00	3.750E-003	2.500E-003
Th-228	5.41	5.16	5.47	8.00	1.000E-002	3.750E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	7.00	8.750E-003	3.536E-003
Am-241	5.46	5.27	5.57	7.00	8.750E-003	3.536E-003
Cm-245	5.39	5.36	5.41	5.00	6.250E-003	3.062E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:19:13AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV57
Comment:

Spectrum #1 Analysis #1

Batch

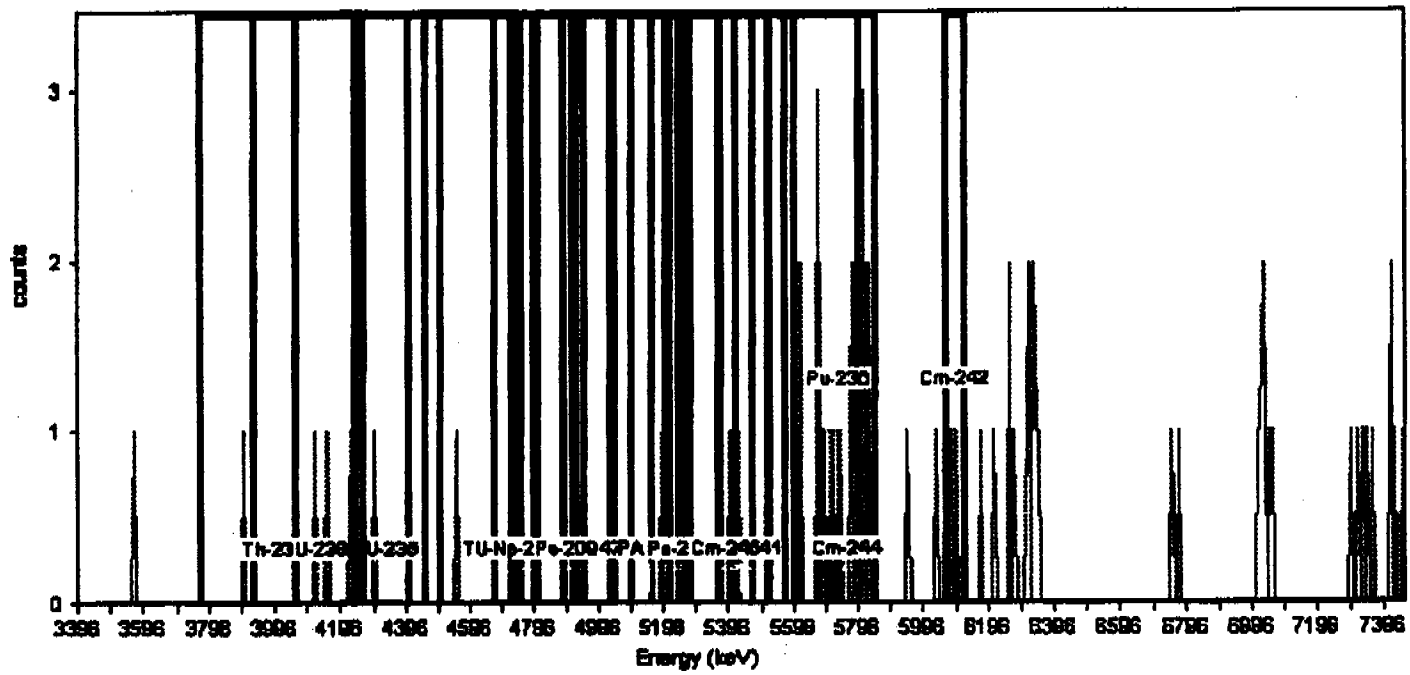
Batch Name: April_2005
Description:

Acquisition

Detector: AV57 , SN:
Acquisition Start Date: 4/25/2005 11:48:59AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: Mar2005_AV57
Calibration Date: 3/18/2005 9:23:31AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.01% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND_ROI, Library: Background ROI Library
Total Background Counts: 67.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	3.00	3.750E-003	2.500E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	16.00	2.000E-002	5.154E-003
Cm-244	5.76	5.60	5.85	23.00	2.875E-002	6.124E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040 1:19:19AM 4/26/2005

Sample

Sample Name: AV58 Spectrum #1 Analysis #1
Comment:

Batch

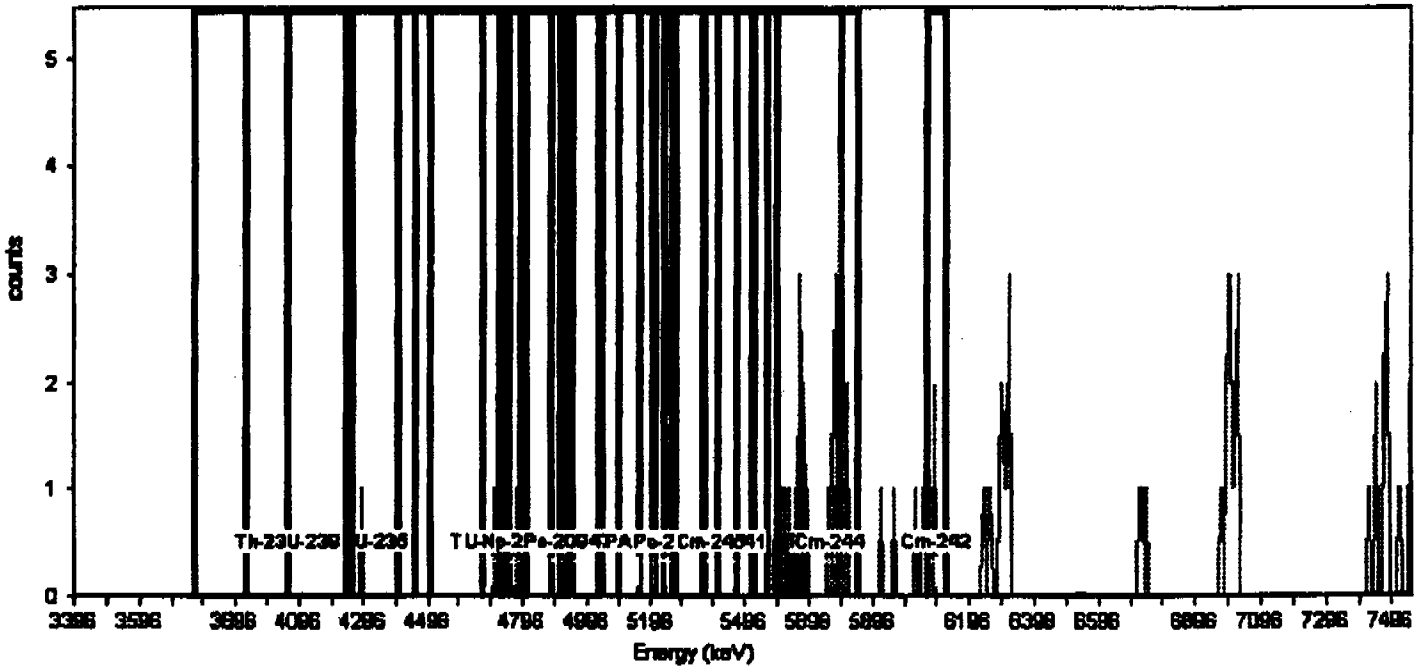
Batch Name: April_2005
Description:

Acquisition

Detector: AV58 , SN:
Acquisition Start Date: 4/25/2005 11:49:00AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: Mar2005_AV58
Calibration Date: 3/18/2005 9:23:40AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.78% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 76.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	2.00	2.500E-003	2.165E-003
Pu-242	4.88	4.67	4.93	3.00	3.750E-003	2.500E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.768E-003
Th-228	5.41	5.16	5.47	0.00	0.000E+000	1.768E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	0.00	0.000E+000	1.768E-003
Am-241	5.45	5.27	5.57	0.00	0.000E+000	1.768E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	23.00	2.875E-002	6.124E-003
Cm-244	5.76	5.60	5.85	26.00	3.250E-002	6.495E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:19:24AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV59
Comment:

Spectrum #1 Analysis #1

Batch

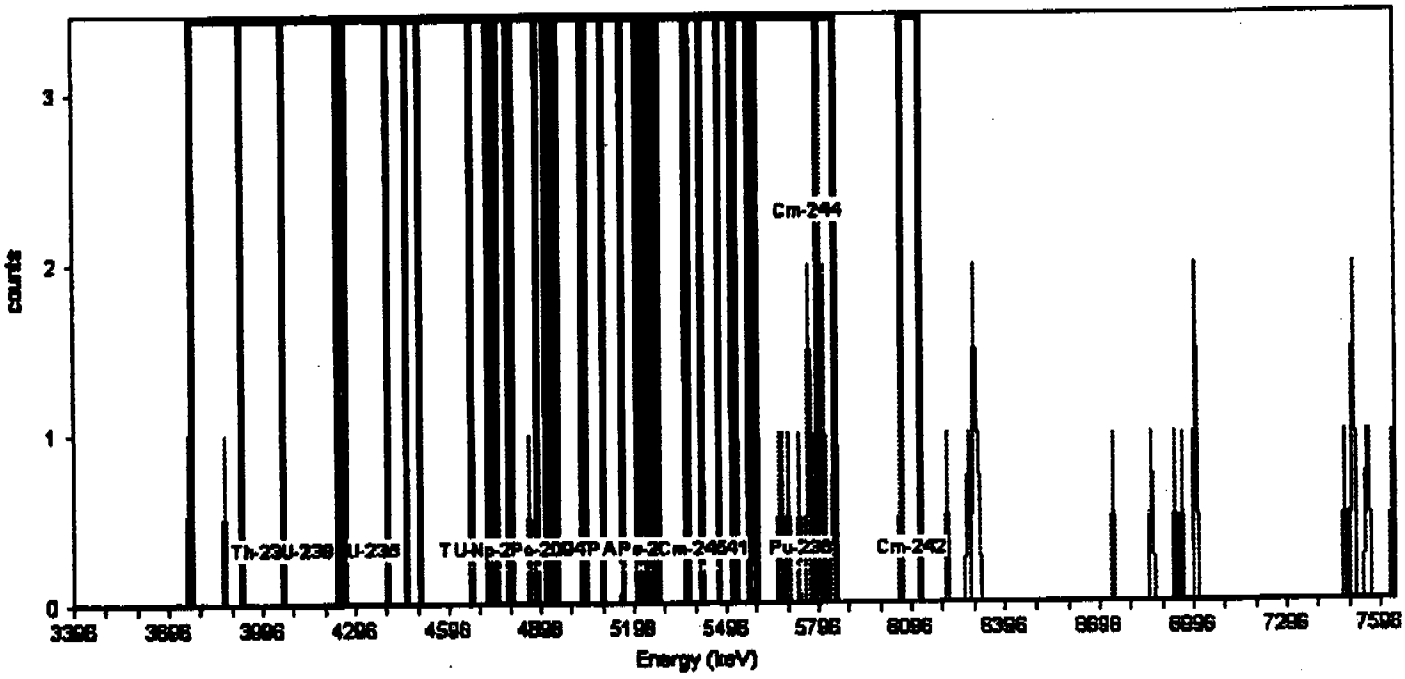
Batch Name: April_2005
Description:

Acquisition

Detector: AV59 , SN:
Acquisition Start Date: 4/25/2005 11:48:22AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV59
Calibration Date: 3/18/2005 1:41:17AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.09% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROU[illegible] Library: Background ROI Library
Total Background Counts: 40.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.768E-003
Th-228	5.41	5.16	5.47	0.00	0.000E+000	1.768E-003
Po-210	5.26	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	0.00	0.000E+000	1.768E-003
Am-241	5.45	5.27	5.57	0.00	0.000E+000	1.768E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	11.00	1.375E-002	4.330E-003
Cm-244	5.76	5.80	5.85	14.00	1.750E-002	4.841E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:19:30AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV60
Comment:

Spectrum #1 Analysis #1

Batch

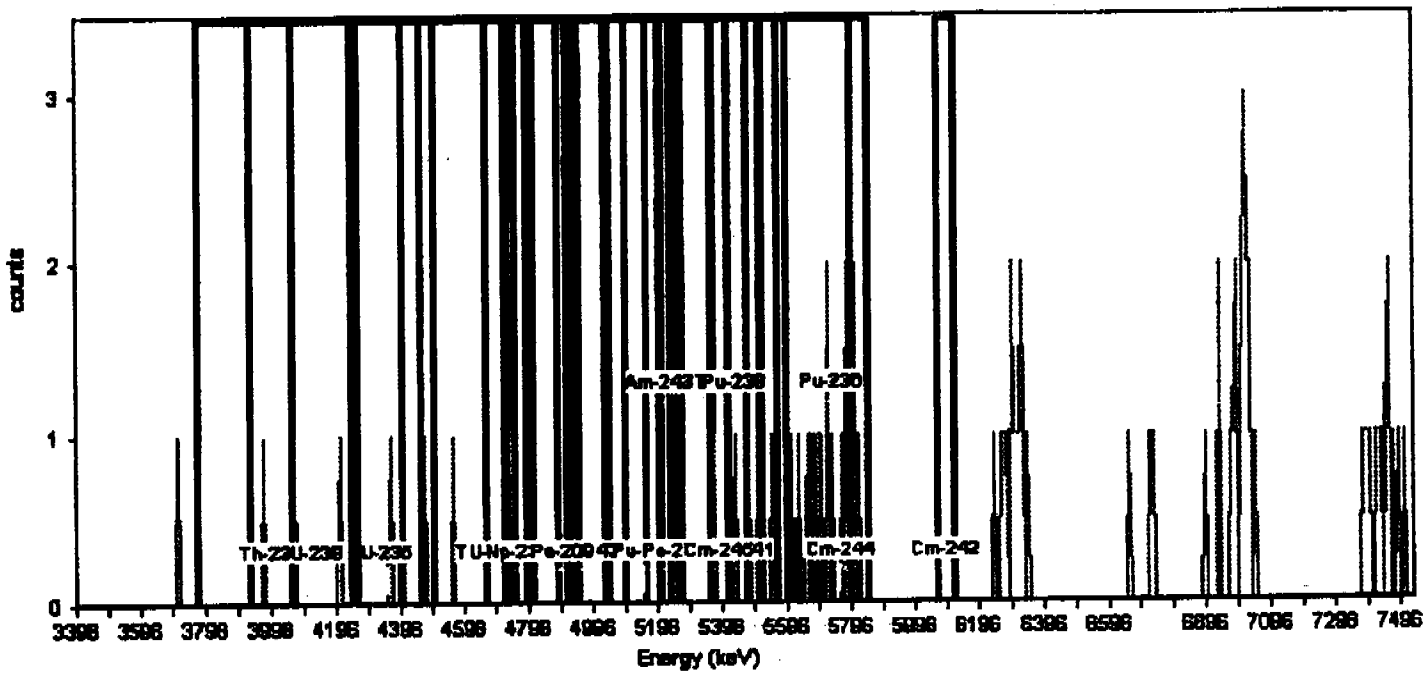
Batch Name: April_2005
Description:

Acquisition

Detector: AV60 , SN:
Acquisition Start Date: 4/25/2005 11:48:23AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV60
Calibration Date: 3/18/2005 1:41:25AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 28.01% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND_ROI Library: Background ROI Library
Total Background Counts: 83.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	3.00	3.750E-003	2.500E-003
U-235	4.35	4.26	4.46	2.00	2.500E-003	2.165E-003
Th-230	4.67	4.40	4.73	3.00	3.750E-003	2.500E-003
U-234	4.70	4.50	4.80	2.00	2.500E-003	2.165E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	4.00	5.000E-003	2.795E-003
Po-210	5.25	5.20	5.28	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	5.00	6.250E-003	3.062E-003
Am-241	5.45	5.27	5.57	6.00	7.500E-003	3.307E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	15.00	1.875E-002	5.000E-003
Cm-244	5.76	5.60	5.86	19.00	2.375E-002	5.590E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:19:36AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV61
Comment:

Spectrum #1 Analysis #1

Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV61 , SN:
Acquisition Start Date: 4/25/2005 11:48:24AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: March2005_AV61
Calibration Date: 3/18/2005 1:41:36AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.35% +/- 0.29% TPU(2 sigma)

General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 78.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.28	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	3.00	3.750E-003	2.500E-003
Th-229	4.84	4.72	5.10	3.00	3.750E-003	2.500E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	3.00	3.750E-003	2.500E-003
Po-209	4.90	4.88	4.91	3.00	3.750E-003	2.500E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.26	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	5.00	6.250E-003	3.062E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	5.00	6.250E-003	3.062E-003
Am-241	5.45	5.27	5.57	4.00	5.000E-003	2.795E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	24.00	3.000E-002	6.250E-003
Cm-244	5.76	5.60	5.85	28.00	3.500E-002	6.731E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:15:30AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV62
Comment:

Spectrum #1 Analysis #1

Batch

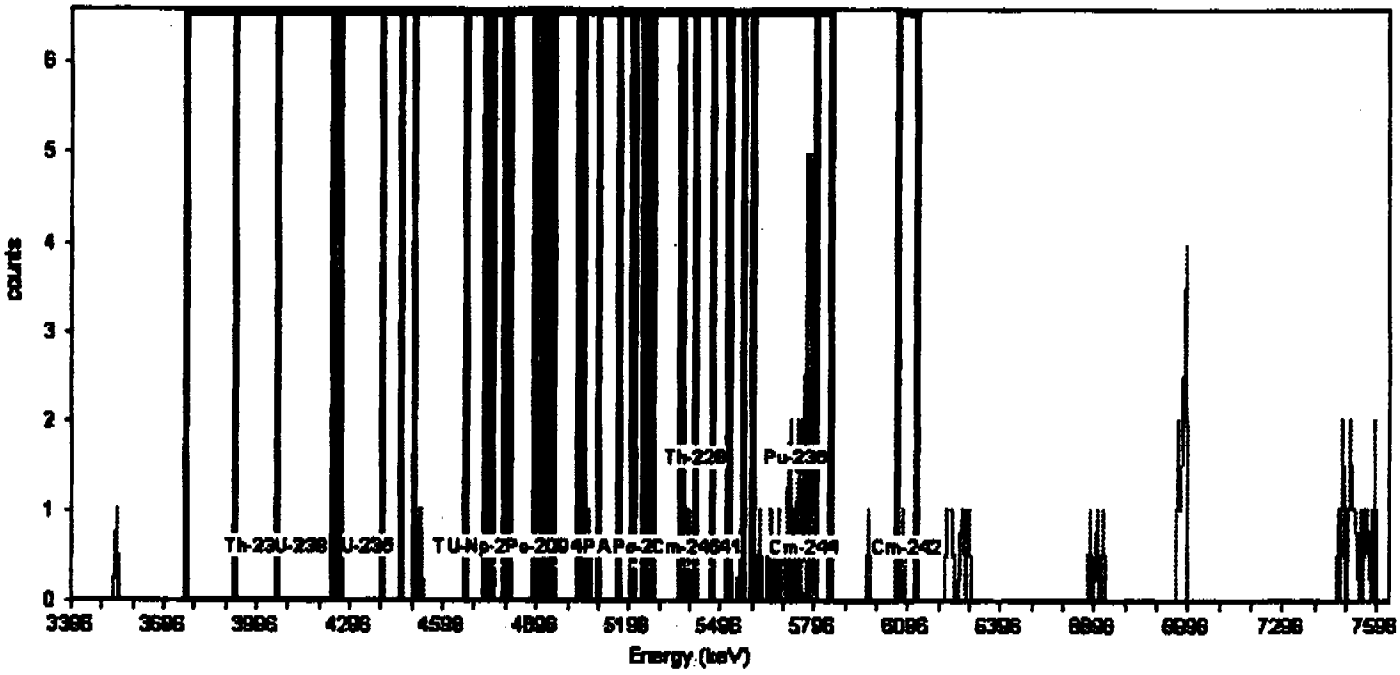
Batch Name: April_2005
Description:

Acquisition

Detector: AV62 , SN:
Acquisition Start Date: 4/25/2005 11:48:25AM
Live Time: 600.00 min.
Real Time: 600.02 min.
Calibration Name: March2005_AV62
Calibration Date: 3/18/2005 1:41:44AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.65% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Library: Background ROI Library
Total Background Counts: 68.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	2.00	2.500E-003	2.165E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.45	5.27	5.57	3.00	3.750E-003	2.500E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	26.00	3.250E-002	6.495E-003
Cm-244	5.76	5.60	5.85	25.00	3.125E-002	6.374E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Analyst: 60040

1:15:36AM 4/26/2005

Sample

Sample Name: AV63

Spectrum #1 Analysis #1

Comment:

Batch

Batch Name: April_2005

Description:

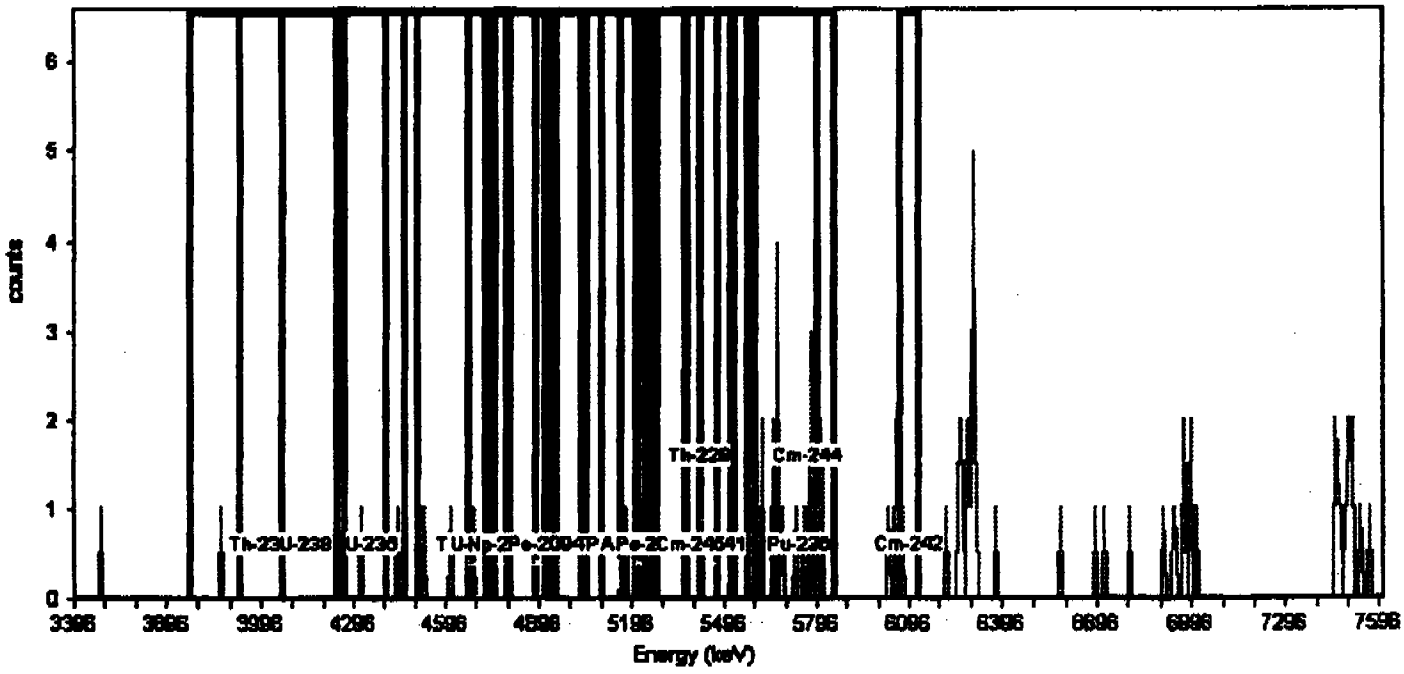
Acquisition

Detector: AV63 , SN:
Acquisition Start Date: 4/25/2005 11:48:26AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: Mar2005_AV63
Calibration Date: 3/17/2005 10:32:03PM

Energy Calibration Equation:

Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.17% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library

Total Background Counts: 79.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	2.00	2.500E-003	2.165E-003
Th-230	4.67	4.40	4.73	4.00	5.000E-003	2.795E-003
U-234	4.70	4.50	4.80	3.00	3.750E-003	2.500E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	4.00	5.000E-003	2.795E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	3.00	3.750E-003	2.500E-003
Am-241	5.45	5.27	5.57	3.00	3.750E-003	2.500E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	18.00	2.250E-002	5.449E-003
Cm-244	5.78	5.60	5.85	21.00	2.625E-002	5.863E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:15:42AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV64
Comment:

Spectrum #1 Analysis #1

Batch

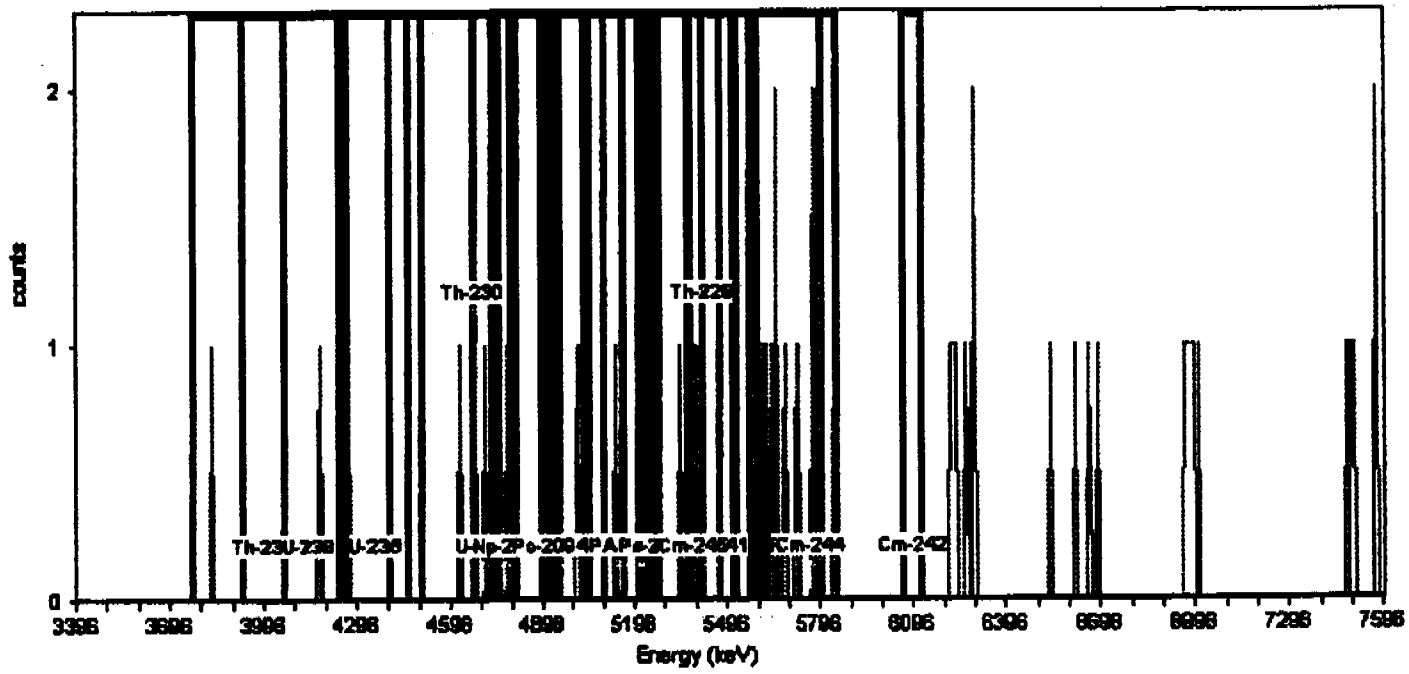
Batch Name: April_2005
Description:

Acquisition

Detector: AV64 , SN:
Acquisition Start Date: 4/25/2005 11:48:27AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: Mar2005_AV64
Calibration Date: 3/17/2005 10:32:07PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch²

Efficiency: 26.00% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Library: Background ROI Library
Total Background Counts: 54.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
U-234	4.70	4.50	4.80	6.00	7.500E-003	3.307E-003
Pu-242	4.88	4.67	4.93	5.00	6.250E-003	3.062E-003
Th-229	4.84	4.72	5.10	3.00	3.750E-003	2.500E-003
Np-237	4.77	4.75	4.79	2.00	2.500E-003	2.165E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.16	4.96	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.26	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	3.00	3.750E-003	2.500E-003
Am-241	5.45	5.27	5.57	3.00	3.750E-003	2.500E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	17.00	2.125E-002	5.303E-003
Cm-244	5.76	5.80	5.85	17.00	2.125E-002	5.303E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	4.00	5.000E-003	2.795E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:15:47AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV65
Comment:

Spectrum #1 Analysis #1

Batch

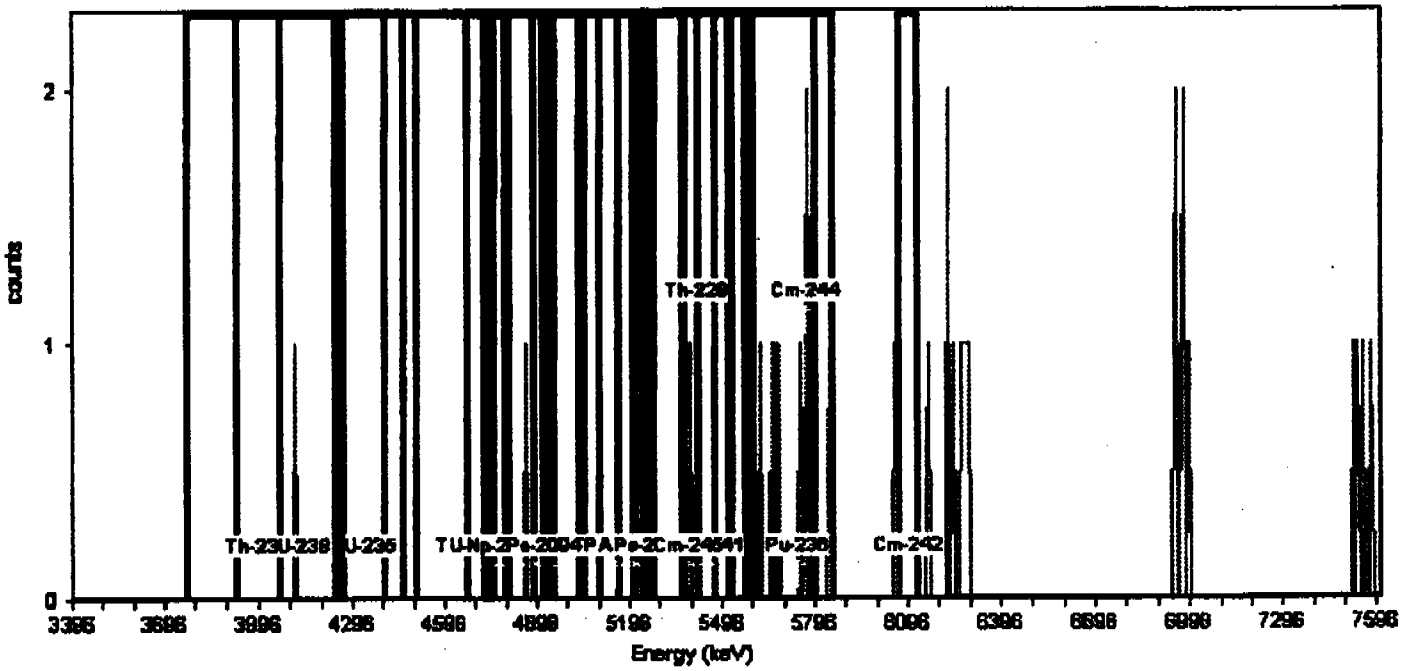
Batch Name: April_2005
Description:

Acquisition

Detector: AV65 , SN:
Acquisition Start Date: 4/25/2005 11:48:28AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: Mar2005_AV65
Calibration Date: 3/17/2005 10:32:12PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.10% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROU[illegible] Library: Background ROI Library
Total Background Counts: 40.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	3.00	3.750E-003	2.500E-003
Am-241	5.45	5.27	5.57	3.00	3.750E-003	2.500E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	13.00	1.625E-002	4.677E-003
Cm-244	5.76	5.60	5.85	13.00	1.625E-002	4.677E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:16:16AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV66
Comment:

Spectrum #1 Analysis #1

Batch

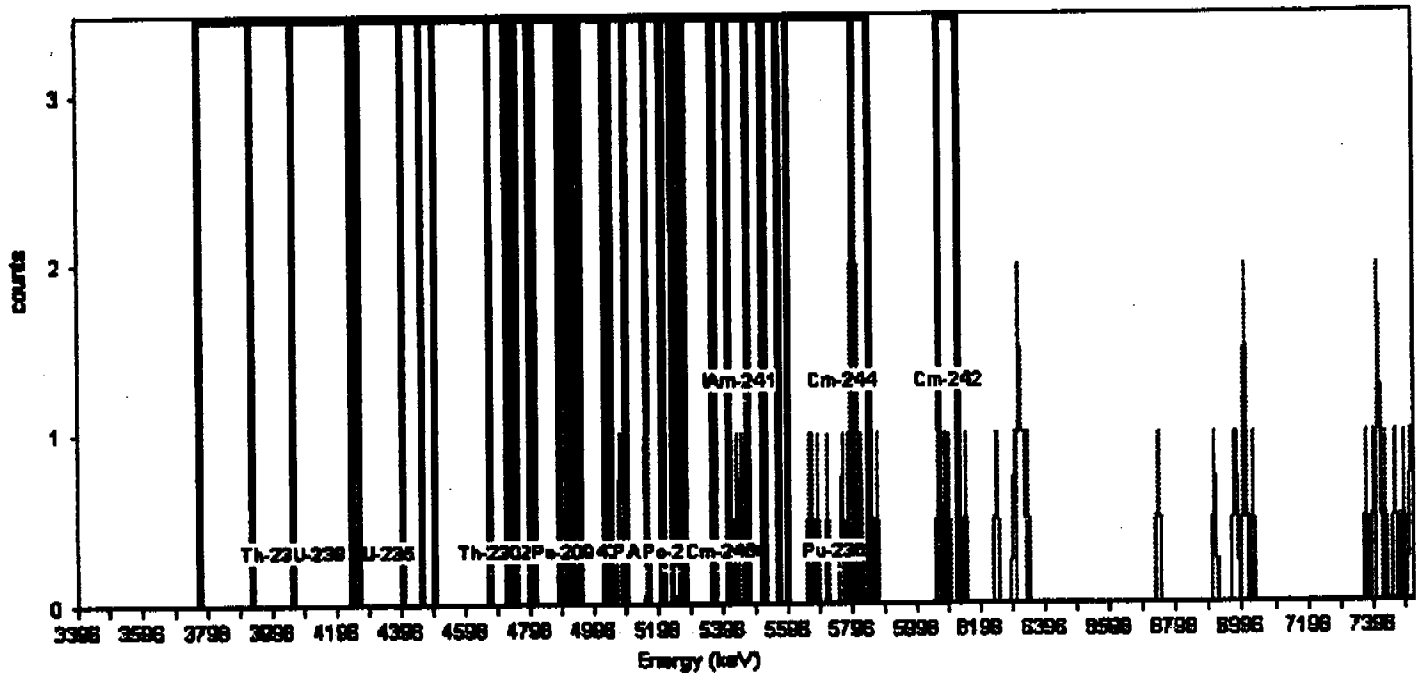
Batch Name: April_2005
Description:

Acquisition

Detector: AV66 , SN:
Acquisition Start Date: 4/25/2005 11:48:29AM
Live Time: 800.00 min.
Real Time: 800.02 min.
Calibration Name: Mar2005_AV66
Calibration Date: 3/17/2005 10:32:16PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.56% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 51.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	7.00	8.750E-003	3.536E-003
Cm-244	5.76	5.60	5.85	12.00	1.500E-002	4.507E-003
Cm-242	6.10	6.07	6.13	2.00	2.500E-003	2.165E-003
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:15:53AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV67
Comment:

Spectrum #1 Analysis #1

Batch

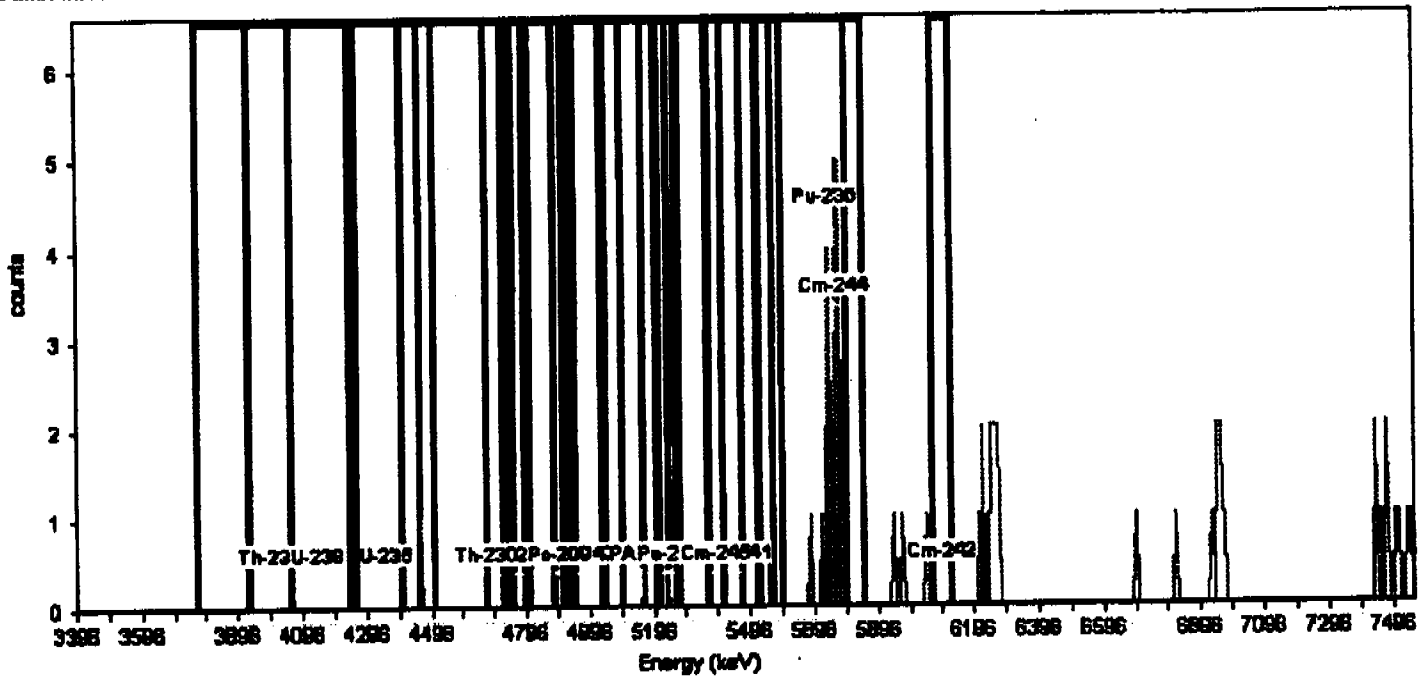
Batch Name: April_2005
Description:

Acquisition

Detector: AV67 , SN:
Acquisition Start Date: 4/25/2005 11:48:30AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV67
Calibration Date: 3/17/2005 8:01:05PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.87% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 56.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
U-234	4.70	4.50	4.80	0.00	0.000E+000	1.768E-003
Pu-242	4.88	4.67	4.93	0.00	0.000E+000	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.86	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.26	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	1.00	1.250E-003	1.768E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	1.00	1.250E-003	1.768E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	20.00	2.500E-002	5.726E-003
Cm-244	5.76	5.60	5.85	19.00	2.375E-002	5.590E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:15:58AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV68
Comment:

Spectrum #1 Analysis #1

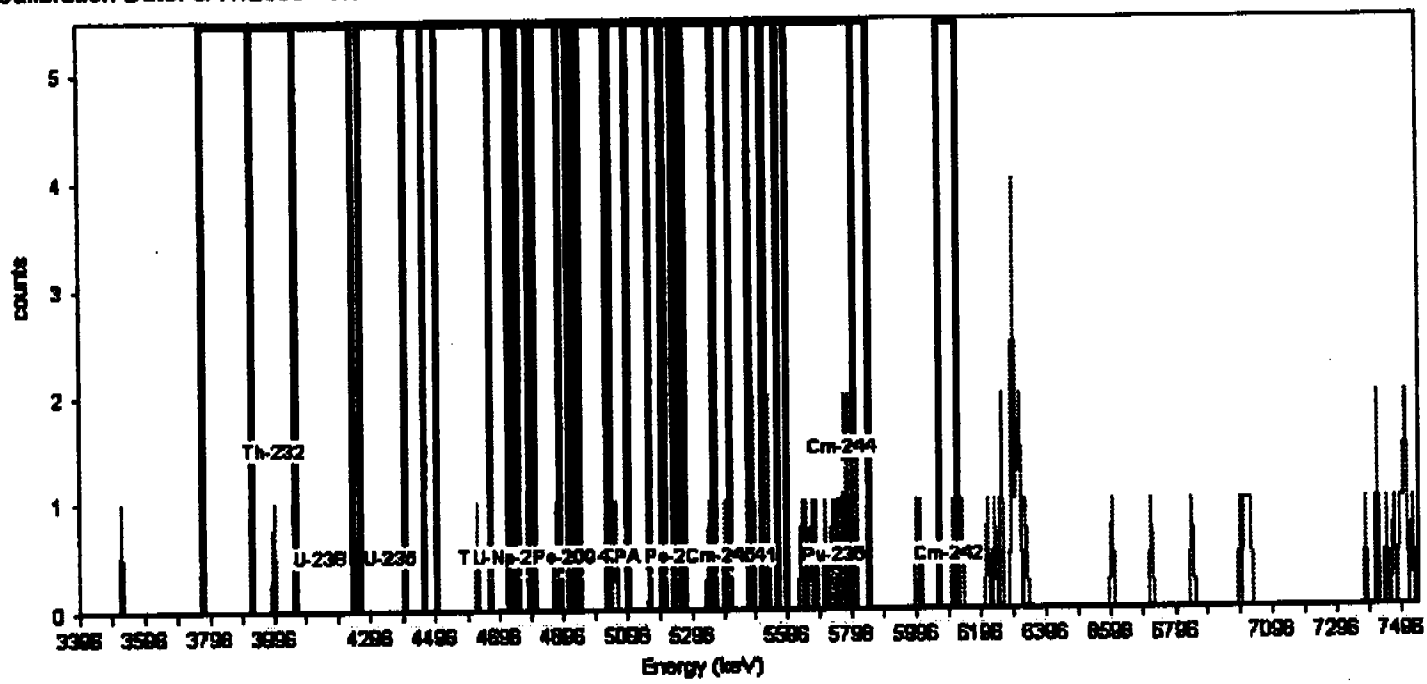
Batch

Batch Name: April_2005
Description:

Acquisition

Detector: AV68 , SN:
Acquisition Start Date: 4/25/2005 11:48:31AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV68
Calibration Date: 3/17/2005 8:01:31PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2
Efficiency: 27.17% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI, Library: Background ROI Library
Total Background Counts: 71.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	2.00	2.500E-003	2.165E-003
Th-229	4.84	4.72	5.10	3.00	3.750E-003	2.500E-003
Np-237	4.77	4.76	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	1.00	1.250E-003	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	2.00	2.500E-003	2.165E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	5.00	6.250E-003	3.062E-003
Am-241	5.45	5.27	5.57	7.00	8.750E-003	3.536E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	20.00	2.500E-002	5.728E-003
Cm-244	5.76	5.60	5.86	21.00	2.625E-002	5.863E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:16:04AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV69
Comment:

Spectrum #1 Analysis #1

Batch

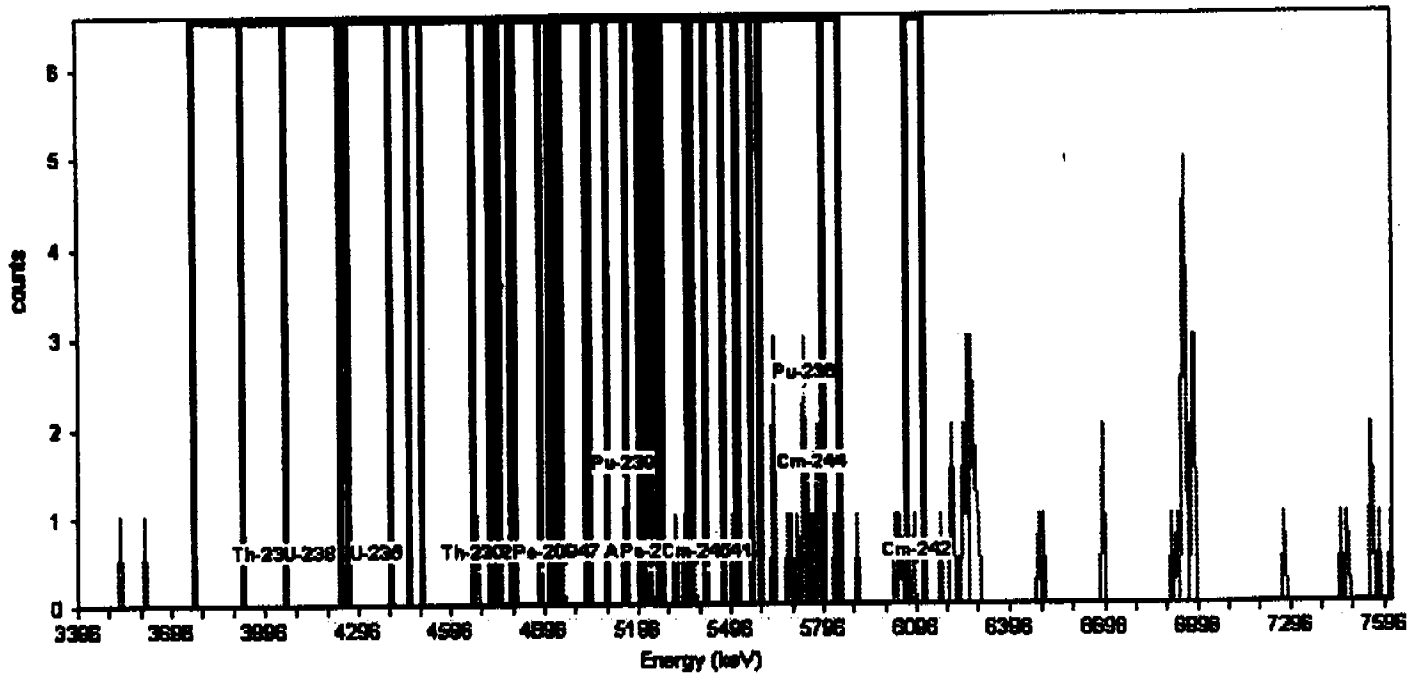
Batch Name: April_2005
Description:

Acquisition

Detector: AV69 , SN:
Acquisition Start Date: 4/25/2005 11:48:32AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March05_AV69
Calibration Date: 3/17/2005 8:01:49PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 28.07% +/- 0.30% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 84.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.26	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	3.00	3.750E-003	2.500E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	4.00	5.000E-003	2.795E-003
Am-241	5.46	5.27	5.57	4.00	5.000E-003	2.795E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	22.00	2.750E-002	5.995E-003
Cm-244	5.76	5.60	5.86	23.00	2.875E-002	6.124E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	1.00	1.250E-003	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:16:09AM 4/26/2005

Analyst: 60040

Sample

Sample Name: AV70
Comment:

Spectrum #1 Analysis #1

Batch

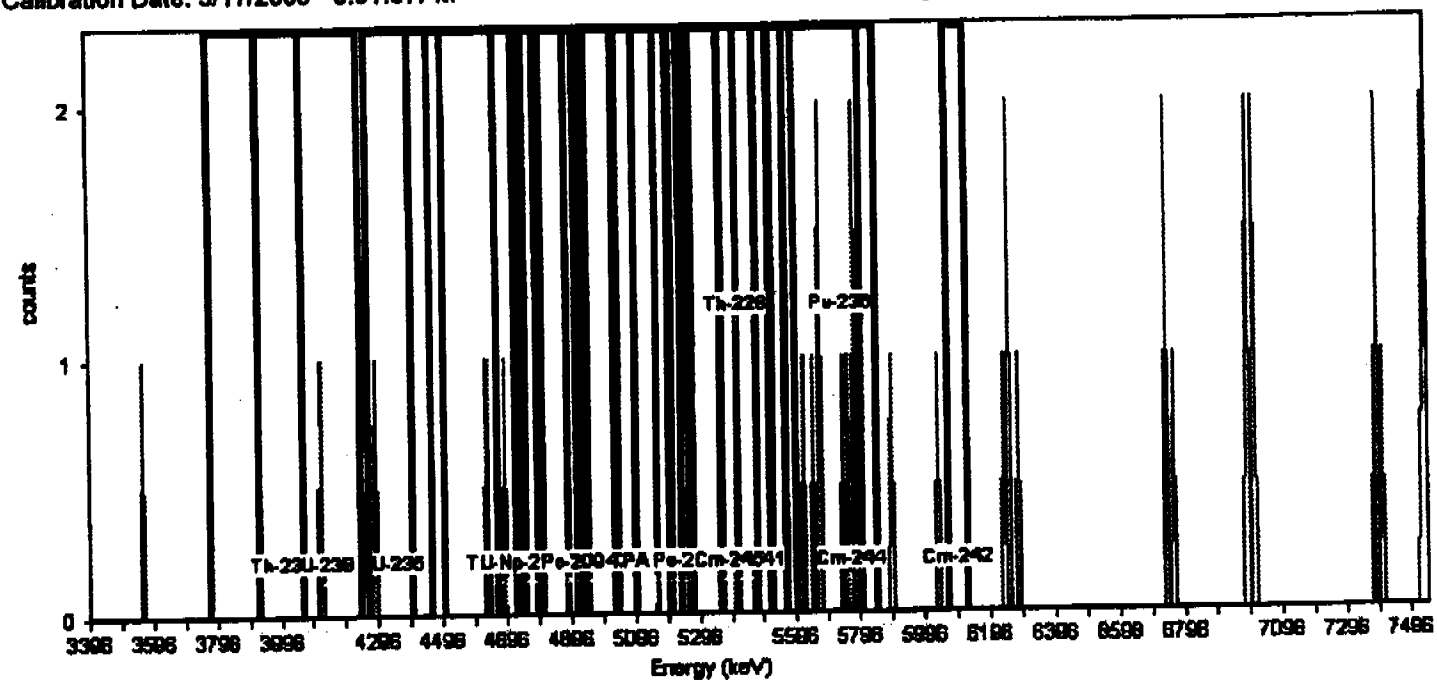
Batch Name: April_2005
Description:

Acquisition

Detector: AV70 , SN:
Acquisition Start Date: 4/25/2005 11:48:33AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV70
Calibration Date: 3/17/2005 8:01:57PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.03% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 37.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	2.00	2.500E-003	2.165E-003
U-234	4.70	4.50	4.80	2.00	2.500E-003	2.165E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	0.00	0.000E+000	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.28	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.768E-003
Th-228	5.41	5.16	5.47	2.00	2.500E-003	2.165E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	9.00	1.125E-002	3.953E-003
Cm-244	5.76	5.80	5.85	9.00	1.125E-002	3.953E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
10:38:45PM 4/28/2005

Analyst: 60040

Sample

Spectrum #1 Analysis #1

Sample Name: AV71
Comment:

Batch

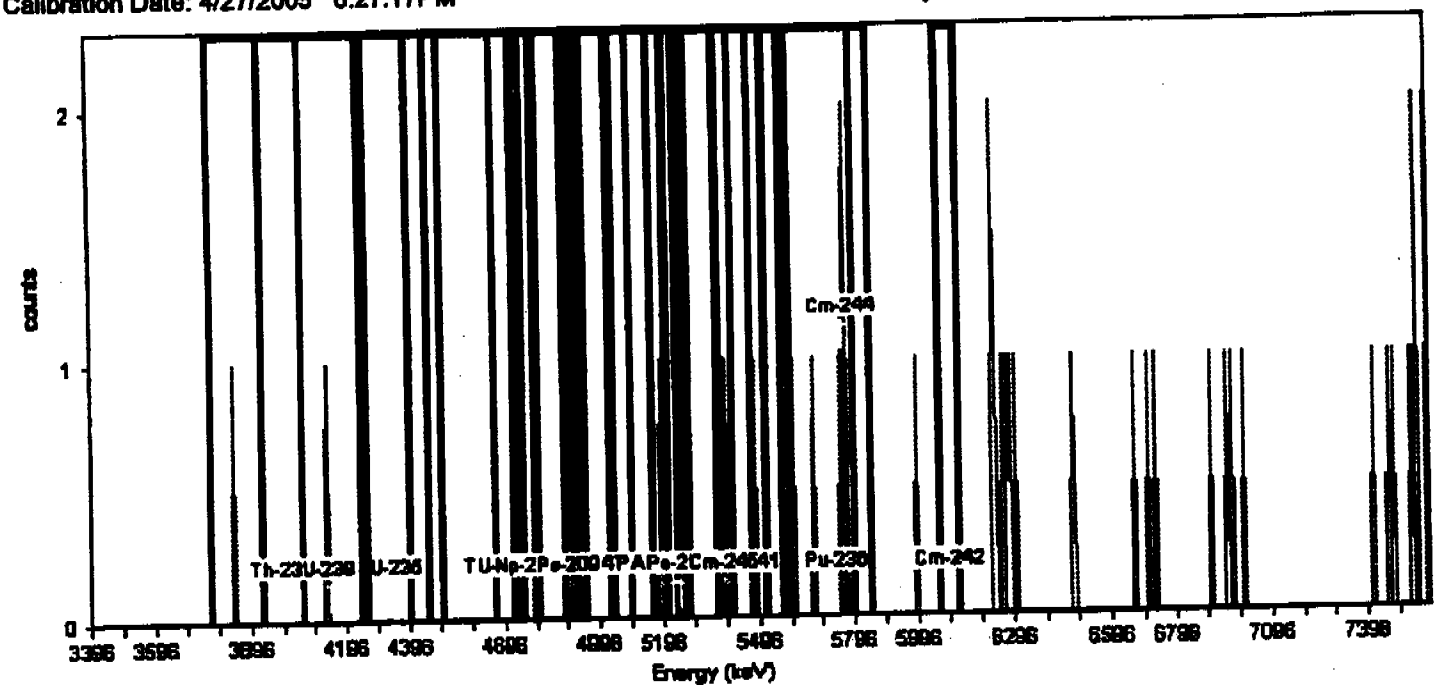
Batch Name: Aprilb_2005
Description:

Acquisition

Detector: AV71 , SN:
Acquisition Start Date: 4/28/2005 9:18:33AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: April2005_AV71a
Calibration Date: 4/27/2005 6:27:17PM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.10% +/- 0.27% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, ROI Library: Background ROI Library
Total Background Counts: 36.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	1.00	1.250E-003	1.768E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	1.00	1.250E-003	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.26	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	1.00	1.250E-003	1.768E-003
Th-228	5.41	5.16	5.47	2.00	2.500E-003	2.165E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	1.00	1.250E-003	1.768E-003
Pu-236	5.74	5.52	5.80	6.00	7.500E-003	3.307E-003
Cm-244	5.76	5.60	5.85	6.00	7.500E-003	3.307E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:16:21AM 4/26/2005

Analyst: 60040

Sample

Spectrum #1 Analysis #1

Sample Name: AV72
Comment:

Batch

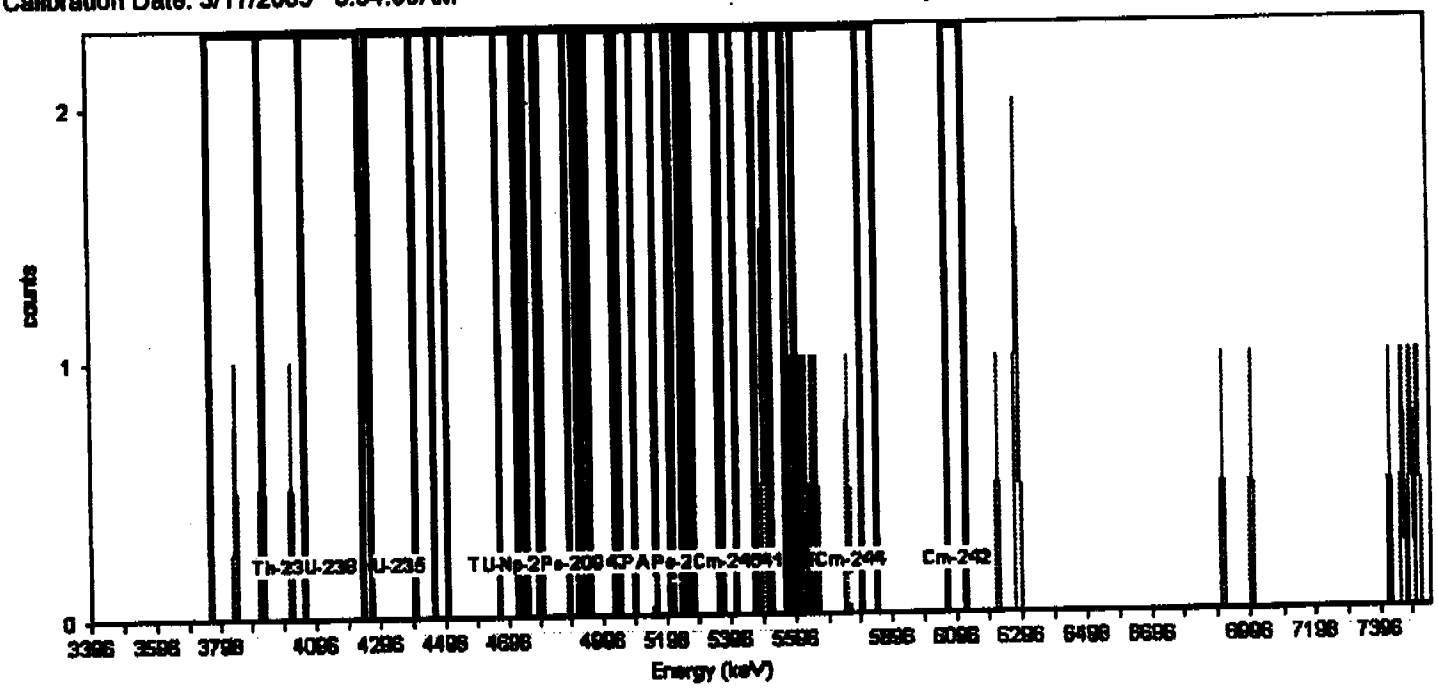
Batch Name: April_2005
Description:

Acquisition

Detector: AV72 , SN:
Acquisition Start Date: 4/25/2005 11:48:36AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV72
Calibration Date: 3/17/2005 8:34:09AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.14% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND, Library: Background ROI Library
Total Background Counts: 25.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.08	3.00	3.750E-003	2.500E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	0.00	0.000E+000	1.768E-003
U-234	4.70	4.50	4.80	1.00	1.250E-003	1.768E-003
Pu-242	4.88	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	1.00	1.250E-003	1.768E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	0.00	0.000E+000	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	0.00	0.000E+000	1.768E-003
Am-243	5.20	5.03	5.26	0.00	0.000E+000	1.768E-003
U-232	5.23	5.04	5.37	0.00	0.000E+000	1.768E-003
Th-228	5.41	5.16	5.47	0.00	0.000E+000	1.768E-003
Po-210	5.25	5.20	5.26	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	2.00	2.500E-003	2.165E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	7.00	8.750E-003	3.536E-003
Cm-244	5.76	5.60	5.85	6.00	7.500E-003	3.307E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL

Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:16:27AM 4/26/2005

Analyst: 60040

Sample

Spectrum #1 Analysis #1

Sample Name: AV73
Comment:

Batch

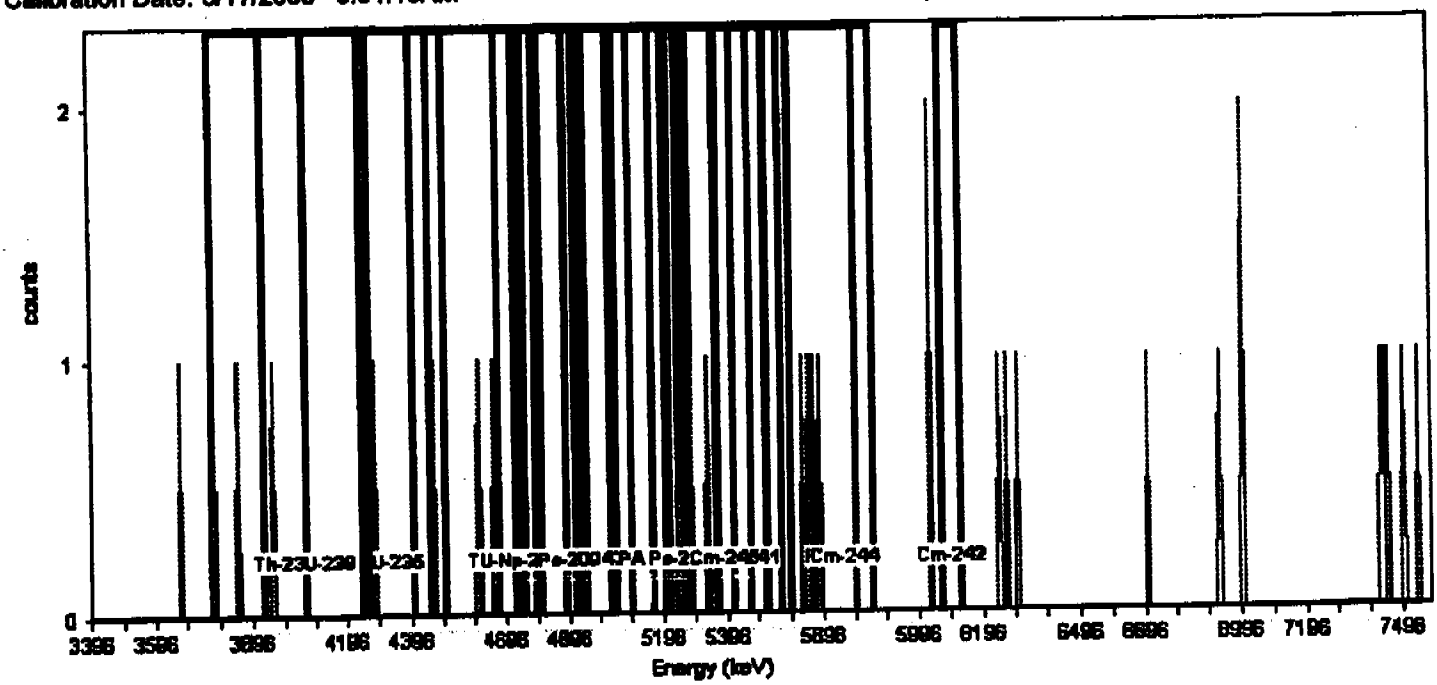
Batch Name: April_2005
Description:

Acquisition

Detector: AV73 , SN:
Acquisition Start Date: 4/25/2005 11:48:38AM
Live Time: 800.00 min.
Real Time: 800.01 min.
Calibration Name: March2005_AV73
Calibration Date: 3/17/2005 8:34:15AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.38% +/- 0.29% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROU[illegible] Library: Background ROI Library
Total Background Counts: 35.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	4.00	5.000E-003	2.795E-003
U-238	4.14	3.93	4.24	1.00	1.250E-003	1.768E-003
U-235	4.35	4.26	4.46	1.00	1.250E-003	1.768E-003
Th-230	4.67	4.40	4.73	4.00	5.000E-003	2.795E-003
U-234	4.70	4.50	4.80	4.00	5.000E-003	2.795E-003
Pu-242	4.86	4.67	4.93	1.00	1.250E-003	1.768E-003
Th-229	4.84	4.72	5.10	2.00	2.500E-003	2.165E-003
Np-237	4.77	4.75	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.86	5.04	1.00	1.250E-003	1.768E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.95	5.21	1.00	1.250E-003	1.768E-003
Am-243	5.20	5.03	5.28	1.00	1.250E-003	1.768E-003
U-232	5.23	5.04	5.37	3.00	3.750E-003	2.500E-003
Th-228	5.41	5.16	5.47	3.00	3.750E-003	2.500E-003
Po-210	5.25	5.20	5.26	1.00	1.250E-003	1.768E-003
Pu-238	5.44	5.24	5.52	3.00	3.750E-003	2.500E-003
Am-241	5.45	5.27	5.57	2.00	2.500E-003	2.165E-003
Cm-245	5.39	5.36	5.41	0.00	0.000E+000	1.768E-003
Pu-236	5.74	5.52	5.80	6.00	7.500E-003	3.307E-003
Cm-244	5.78	5.60	5.85	6.00	7.500E-003	3.307E-003
Cm-242	6.10	6.07	6.13	0.00	0.000E+000	1.768E-003

STL Alpha-Spectroscopy Background Report

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045
1:16:32AM 4/26/2005

Analyst: 60040

Sample

Spectrum #1 Analysis #1

Sample Name: AV74
Comment:

Batch

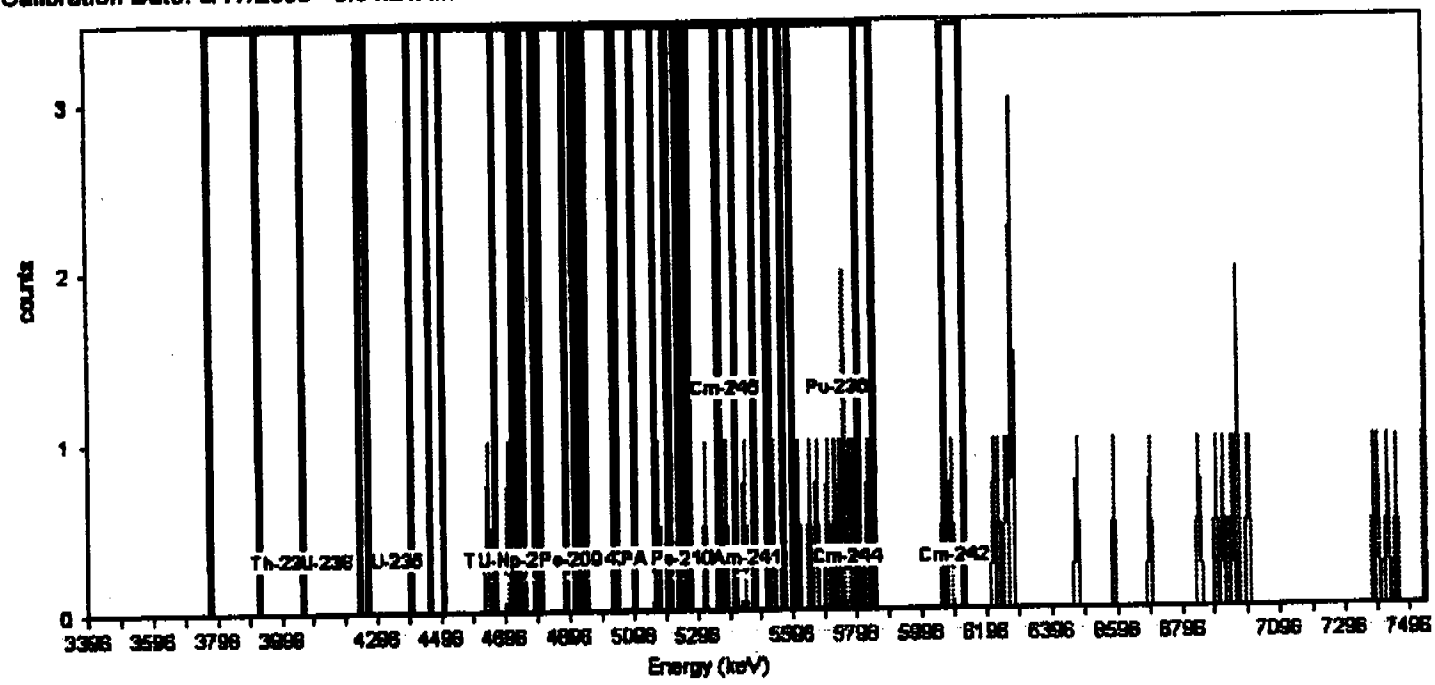
Batch Name: April_2005
Description:

Acquisition

Detector: AV74 , SN:
Acquisition Start Date: 4/25/2005 11:48:41AM
Live Time: 600.00 min.
Real Time: 600.01 min.
Calibration Name: March2005_AV74
Calibration Date: 3/17/2005 8:34:21AM

Energy Calibration Equation:
Gain = 7.2598 keV / Ch
Offset = 3,388.96 keV
Quadratic = 0.0000 keV / Ch^2

Efficiency: 27.79% +/- 0.28% TPU(2 sigma)



General Analysis

Analysis Method: Absolute ROI Analysis, Set Name = 2004_BACKGROUND ROI Library: Background ROI Library
Total Background Counts: 49.00

Nuclide Summary (ROI)

RegionName	Peak Energy (MeV)	Start Energy (MeV)	End Energy (MeV)	GrossCounts	Count Rate (CPM)	CR Uncertainty (CPM)
Th-232	3.99	3.77	4.06	0.00	0.000E+000	1.768E-003
U-238	4.14	3.93	4.24	0.00	0.000E+000	1.768E-003
U-235	4.35	4.26	4.46	0.00	0.000E+000	1.768E-003
Th-230	4.67	4.40	4.73	3.00	3.750E-003	2.500E-003
U-234	4.70	4.50	4.80	4.00	5.000E-003	2.795E-003
Pu-242	4.88	4.67	4.93	3.00	3.750E-003	2.500E-003
Th-229	4.84	4.72	5.10	4.00	5.000E-003	2.795E-003
Np-237	4.77	4.76	4.79	0.00	0.000E+000	1.768E-003
Cm-247	4.96	4.88	5.04	2.00	2.500E-003	2.165E-003
Po-209	4.90	4.88	4.91	0.00	0.000E+000	1.768E-003
Pu-239	5.15	4.96	5.21	2.00	2.500E-003	2.165E-003
Am-243	5.20	5.03	5.28	2.00	2.500E-003	2.165E-003
U-232	5.23	5.04	5.37	4.00	5.000E-003	2.795E-003
Th-228	5.41	5.16	5.47	5.00	6.250E-003	3.062E-003
Po-210	5.25	5.20	5.28	0.00	0.000E+000	1.768E-003
Pu-238	5.44	5.24	5.52	4.00	5.000E-003	2.795E-003
Am-241	5.45	5.27	5.57	5.00	6.250E-003	3.062E-003
Cm-245	5.39	5.36	5.41	2.00	2.500E-003	2.165E-003
Pu-236	5.74	5.52	5.80	11.00	1.375E-002	4.330E-003
Cm-244	5.76	5.60	5.85	11.00	1.375E-002	4.330E-003
Cm-242	6.10	6.07	6.13	1.00	1.250E-003	1.768E-003

SEVERN TRENT STL

Calibration for LB4000

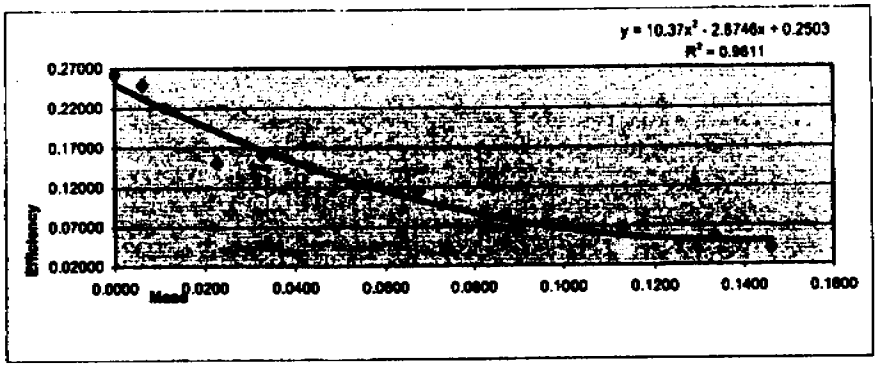
Yellow

Alpha Th-230

Detector Efficiency Curves

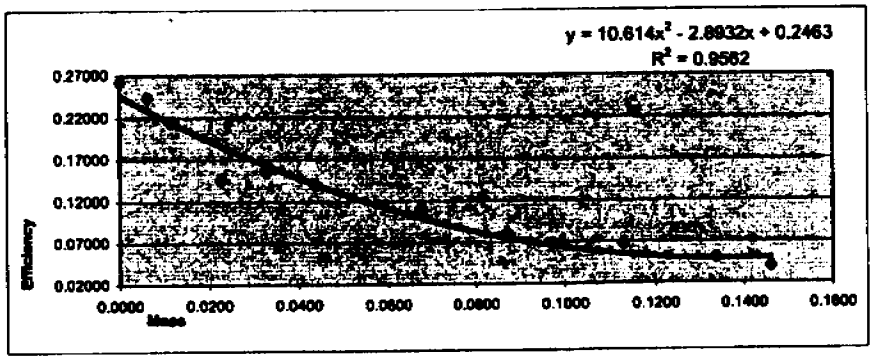
Alpha Attenuation Yellow A1
11/17/2003

Detector ID	Sample ID	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
A1	0.0000	53848	60	897.467	0.20427
A1	0.0063	65502	60	1091.700	0.24848
A1	0.0115	57862	60	964.367	0.21950
A1	0.0228	39792	60	663.200	0.15095
A1	0.0328	42424	60	707.067	0.16094
A1	0.0437	37967	60	633.117	0.14410
A1	0.0675	30071	60	501.183	0.11407
A1	0.0870	21679	60	364.650	0.08300
A1	0.1129	17711	60	295.183	0.06719
A1	0.1335	14552	60	242.533	0.05520
A1	0.1480	10632	60	177.200	0.04033



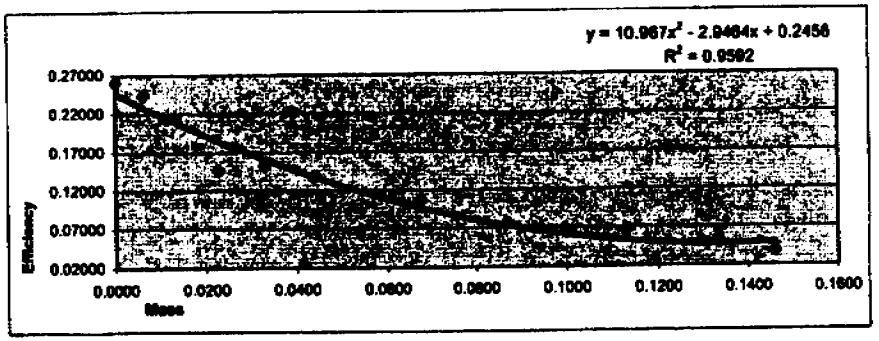
Alpha Attenuation Yellow A2
11/17/2003

Detector ID	Sample ID	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
A2	0.0000	52800	60	880.000	0.20030
A2	0.0063	64170	60	1069.500	0.24343
A2	0.0115	56346	60	939.133	0.21376
A2	0.0228	38349	60	639.150	0.14548
A2	0.0328	40906	60	681.767	0.15518
A2	0.0437	36782	60	613.033	0.13953
A2	0.0675	29339	60	488.983	0.11130
A2	0.0870	20859	60	347.650	0.07913
A2	0.1129	17740	60	295.667	0.06730
A2	0.1335	13237	60	220.617	0.05021
A2	0.1480	10362	60	172.700	0.03931



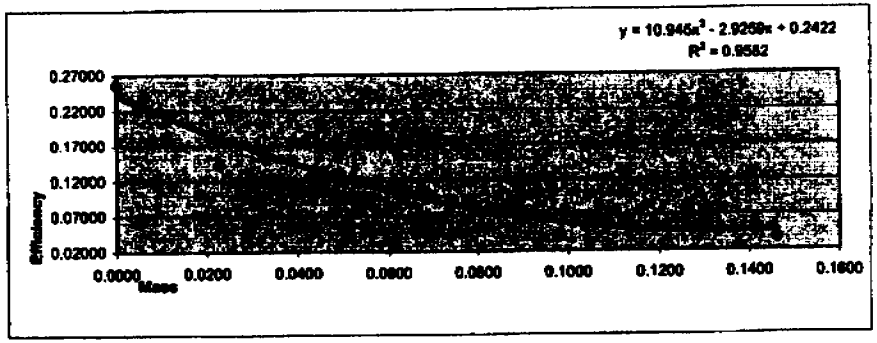
Alpha Attenuation Yellow A3
11/17/2003

Detector ID	Sample ID	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
A3	0.0000	52442	60	874.033	0.19894
A3	0.0063	64243	60	1070.717	0.24371
A3	0.0115	56060	60	934.333	0.21266
A3	0.0228	38506	60	641.800	0.14606
A3	0.0328	40131	60	668.850	0.15224
A3	0.0437	36251	60	604.183	0.13752
A3	0.0675	26379	60	472.983	0.10766
A3	0.0870	20174	60	336.233	0.07653
A3	0.1129	17238	60	287.300	0.06539
A3	0.1335	13250	60	220.833	0.05026
A3	0.1480	9908	60	165.133	0.03759



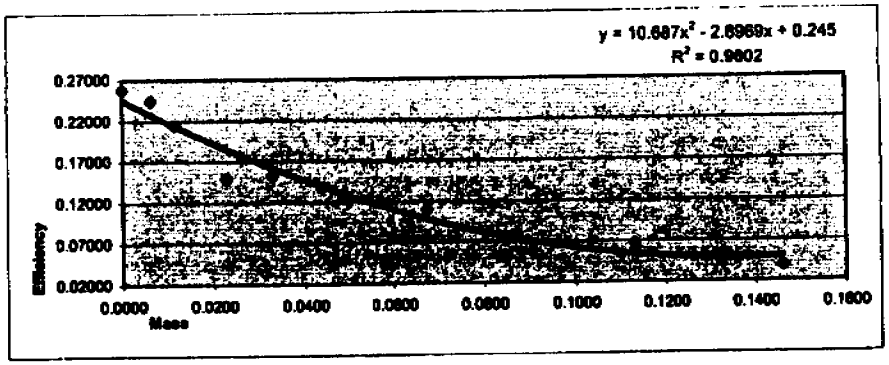
Alpha Attenuation Yellow A4
11/17/2003

Detector ID	Sample ID	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
A4	0.0000	51887	60	864.783	0.19683
A4	0.0063	63086	60	1051.433	0.23932
A4	0.0115	55707	60	928.450	0.21132
A4	0.0228	37429	60	623.817	0.14199
A4	0.0328	39963	60	665.883	0.15156
A4	0.0437	35043	60	584.050	0.13294
A4	0.0675	27660	60	461.333	0.10500
A4	0.0870	19768	60	329.467	0.07499
A4	0.1129	16907	60	281.783	0.06414
A4	0.1335	12868	60	214.467	0.04881
A4	0.1480	9645	60	160.750	0.03659



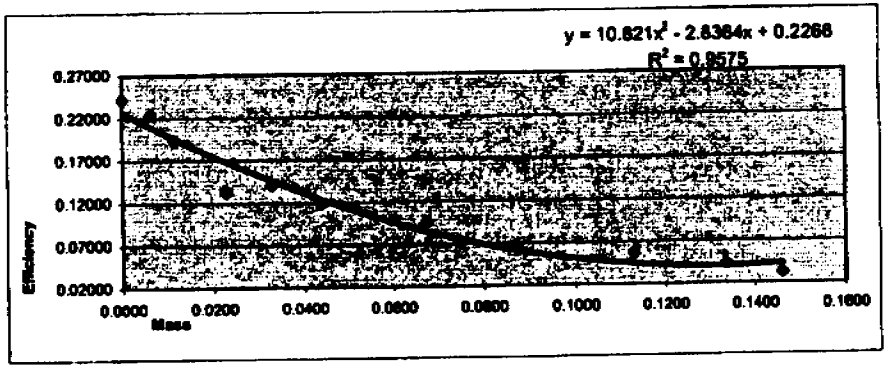
Alpha Attenuation Yellow B1
11/17/2003

Detector ID	Sample ID	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
B1	0.0000	53185	60	886.417	0.20176
B1	0.0063	64282	60	1071.367	0.24385
B1	0.0115	56400	60	940.000	0.21395
B1	0.0228	38957	60	649.283	0.14778
B1	0.0328	40038	60	667.300	0.15188
B1	0.0437	36156	60	602.600	0.13716
B1	0.0675	28860	60	481.000	0.10948
B1	0.0870	20418	60	340.300	0.07746
B1	0.1129	17616	60	293.600	0.06683
B1	0.1335	13617	60	226.950	0.05166
B1	0.1460	9938	60	165.633	0.03770



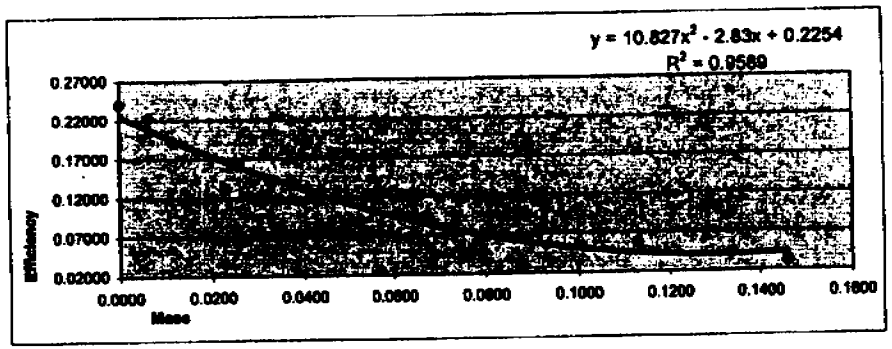
Alpha Attenuation Yellow B2
11/17/2003

Detector ID	Sample ID	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
B2	0.0000	48896	60	814.933	0.18549
B2	0.0063	59105	60	985.083	0.22421
B2	0.0115	50809	60	846.817	0.19274
B2	0.0228	34704	60	578.400	0.13165
B2	0.0328	36927	60	615.450	0.14008
B2	0.0437	31164	60	519.400	0.11822
B2	0.0675	25236	60	420.633	0.09574
B2	0.0870	17599	60	293.317	0.06676
B2	0.1129	14911	60	248.517	0.05656
B2	0.1335	11243	60	187.383	0.04265
B2	0.1460	8369	60	139.483	0.03175



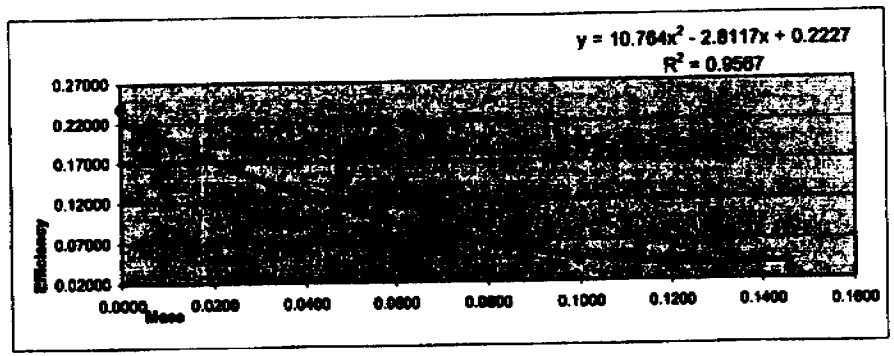
Alpha Attenuation Yellow B3
11/17/2003

Detector ID	Sample ID	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
B3	0.0000	48315	60	805.250	0.18328
B3	0.0063	58600	60	976.667	0.22230
B3	0.0115	50667	60	844.450	0.19221
B3	0.0228	34416	60	573.600	0.13056
B3	0.0328	36520	60	608.667	0.13854
B3	0.0437	32046	60	534.100	0.12157
B3	0.0675	23929	60	398.817	0.09077
B3	0.0870	17447	60	290.783	0.06619
B3	0.1129	15167	60	252.783	0.05754
B3	0.1335	11093	60	184.883	0.04208
B3	0.1460	8314	60	138.567	0.03154



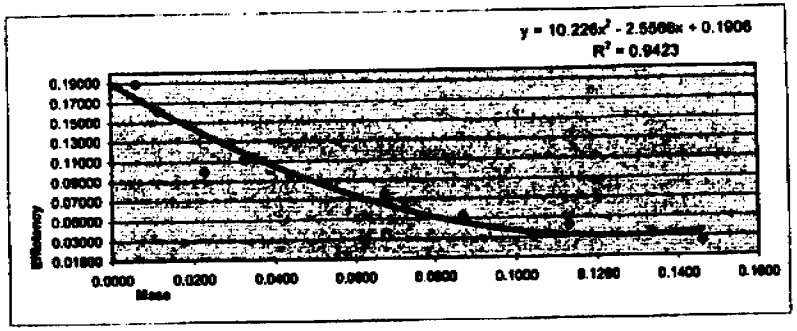
Alpha Attenuation Yellow B4
11/17/2003

Detector ID	Sample ID	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
B4	0.0000	48011	60	800.1833	0.18213
B4	0.0063	57763	60	962.7167	0.21912
B4	0.0115	49739	60	828.9833	0.18868
B4	0.0228	33676	60	561.3000	0.12776
B4	0.0328	35979	60	599.6500	0.13649
B4	0.0437	31580	60	526.3333	0.11980
B4	0.0675	24606	60	410.1000	0.09334
B4	0.0870	15948	60	265.8000	0.06050
B4	0.1129	14633	60	243.8833	0.05551
B4	0.1335	10903	60	181.7167	0.04136
B4	0.1460	8004	60	133.4000	0.03036



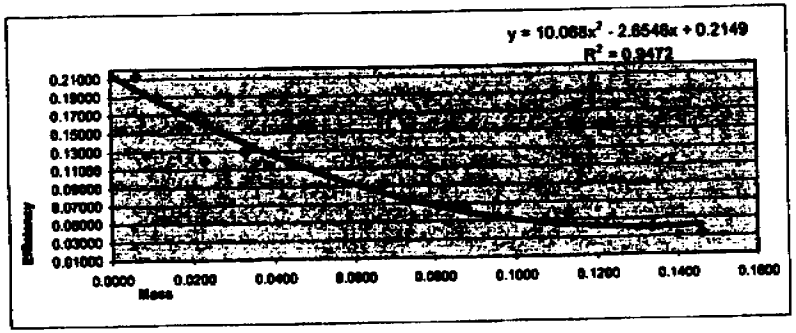
Alpha Attenuation Yellow C1
11/17/2003

Detector ID	Sample ID	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
C1	0.0000	39335	60	655.5833	0.14922
C1	0.0063	49617	60	830.2833	0.18896
C1	0.0115	42634	60	710.5667	0.16173
C1	0.0228	26306	60	438.4333	0.09979
C1	0.0328	29365	60	489.4167	0.11140
C1	0.0437	25211	60	420.1833	0.09564
C1	0.0675	19839	60	330.6500	0.07526
C1	0.0870	13783	60	229.3833	0.05221
C1	0.1129	11156	60	185.9333	0.04232
C1	0.1335	8676	60	144.6000	0.03291
C1	0.1460	6566	60	109.4667	0.02492



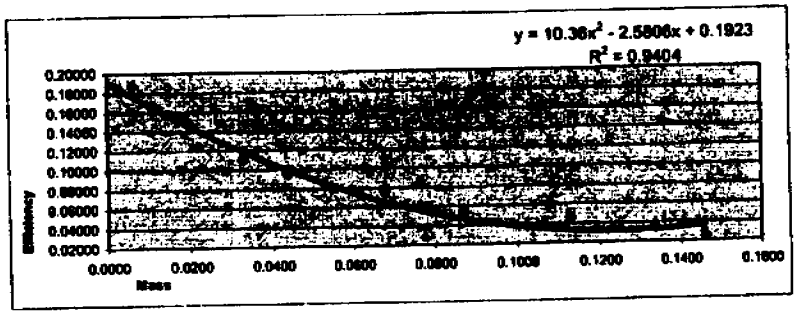
Alpha Attenuation Yellow C2
11/17/2003

Detector ID	Sample ID	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
C2	0.0000	43806	60	730.1000	0.16618
C2	0.0063	56060	60	934.3333	0.21278
C2	0.0115	50086	60	834.7667	0.19000
C2	0.0228	31516	60	525.2667	0.11956
C2	0.0328	34076	60	567.9333	0.12927
C2	0.0437	30923	60	515.3833	0.11731
C2	0.0675	24421	60	407.0167	0.09264
C2	0.0870	17391	60	289.8500	0.06597
C2	0.1129	14680	60	244.6667	0.05569
C2	0.1335	10430	60	173.8333	0.03957
C2	0.1460	8486	60	141.4333	0.03219



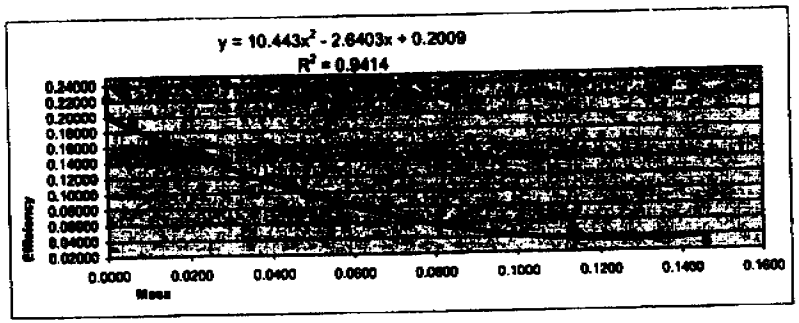
Alpha Attenuation Yellow C3
11/17/2003

Detector ID	Sample ID	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
C3	0.0000	39303	60	655.0500	0.14910
C3	0.0063	49420	60	823.6667	0.18747
C3	0.0115	43002	60	716.7000	0.16313
C3	0.0228	26916	60	448.6000	0.10211
C3	0.0328	29110	60	485.1667	0.11043
C3	0.0437	25152	60	419.2000	0.09541
C3	0.0675	20212	60	336.8667	0.07667
C3	0.0870	13905	60	231.7500	0.05275
C3	0.1129	11958	60	199.3000	0.04536
C3	0.1335	9003	60	150.0500	0.03415
C3	0.1460	6425	60	107.0833	0.02437



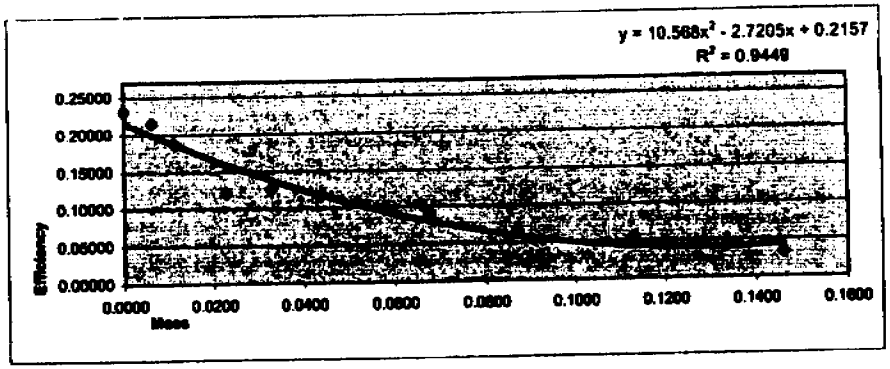
Alpha Attenuation Yellow C4
11/17/2003

Detector ID	Sample Wt	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
C4	0.0000	11797	12	983.0833	0.22376
C4	0.0063	16706	22	850.2727	0.19353
C4	0.0115	16102	22	731.9091	0.16659
C4	0.0228	10465	22	475.6818	0.10827
C4	0.0328	11394	22	517.9091	0.11788
C4	0.0437	28120	60	468.6667	0.10667
C4	0.0675	21380	60	356.3333	0.08111
C4	0.0870	14634	60	243.9000	0.05551
C4	0.1129	12605	60	210.0833	0.04782
C4	0.1335	9317	60	155.2833	0.03534
C4	0.1460	7202	60	120.0333	0.02732



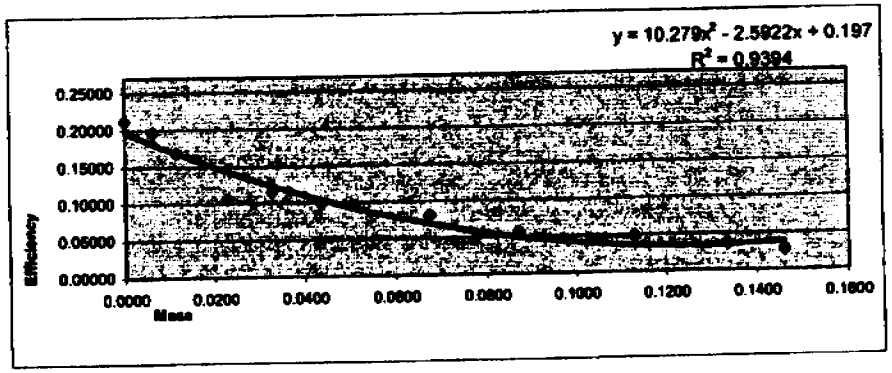
Alpha Attenuation Yellow D1
11/17/2003

Detector ID	Sample ID	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
D1	0.0000	12184	12	1015.3333	0.23110
D1	0.0063	20770	22	944.0909	0.21488
D1	0.0115	16002	22	818.2727	0.18625
D1	0.0228	11656	22	529.9091	0.12061
D1	0.0328	12165	22	552.9545	0.12586
D1	0.0437	30359	60	505.9833	0.11517
D1	0.0675	24373	60	406.2167	0.09246
D1	0.0870	17268	60	287.8000	0.06551
D1	0.1129	14646	60	244.1000	0.05556
D1	0.1335	11119	60	185.3167	0.04218
D1	0.1460	8456	60	140.9333	0.03208



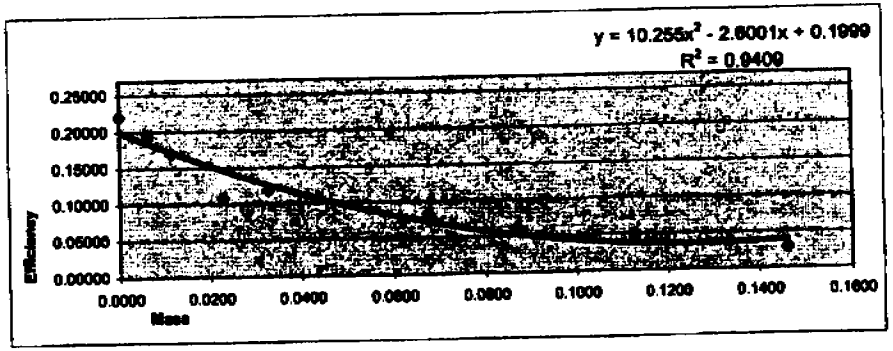
Alpha Attenuation Yellow D2
11/17/2003

Detector ID	Sample Wt	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
D2	0.0000	11184	12	930.3333	0.21175
D2	0.0063	19022	22	864.6364	0.19680
D2	0.0115	16331	22	742.3182	0.16896
D2	0.0228	10139	22	460.8636	0.10490
D2	0.0328	11064	22	503.8182	0.11467
D2	0.0437	26039	60	433.9833	0.09878
D2	0.0675	21306	60	355.1333	0.08083
D2	0.0870	14651	60	244.1833	0.05558
D2	0.1129	12666	60	211.1000	0.04805
D2	0.1335	9317	60	155.2833	0.03534
D2	0.1460	6868	60	114.4667	0.02605



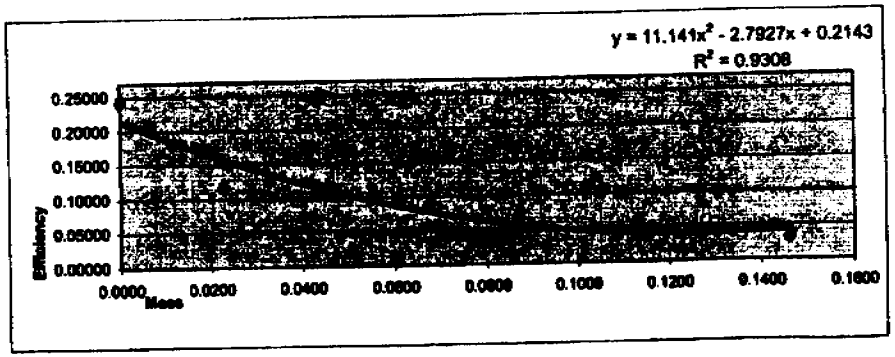
Alpha Attenuation Yellow D3
11/17/2003

Detector ID	Sample Wt	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
D3	0.0000	11600	12	966.6667	0.22002
D3	0.0063	18769	22	853.1364	0.19418
D3	0.0115	16383	22	744.8818	0.16950
D3	0.0228	10364	22	471.0909	0.10723
D3	0.0328	11412	22	518.7273	0.11807
D3	0.0437	27743	60	462.3833	0.10524
D3	0.0675	21412	60	356.8667	0.08123
D3	0.0870	15276	60	254.6000	0.05795
D3	0.1129	12924	60	215.4000	0.04903
D3	0.1335	9868	60	161.4667	0.03675
D3	0.1460	7298	60	121.6333	0.02768

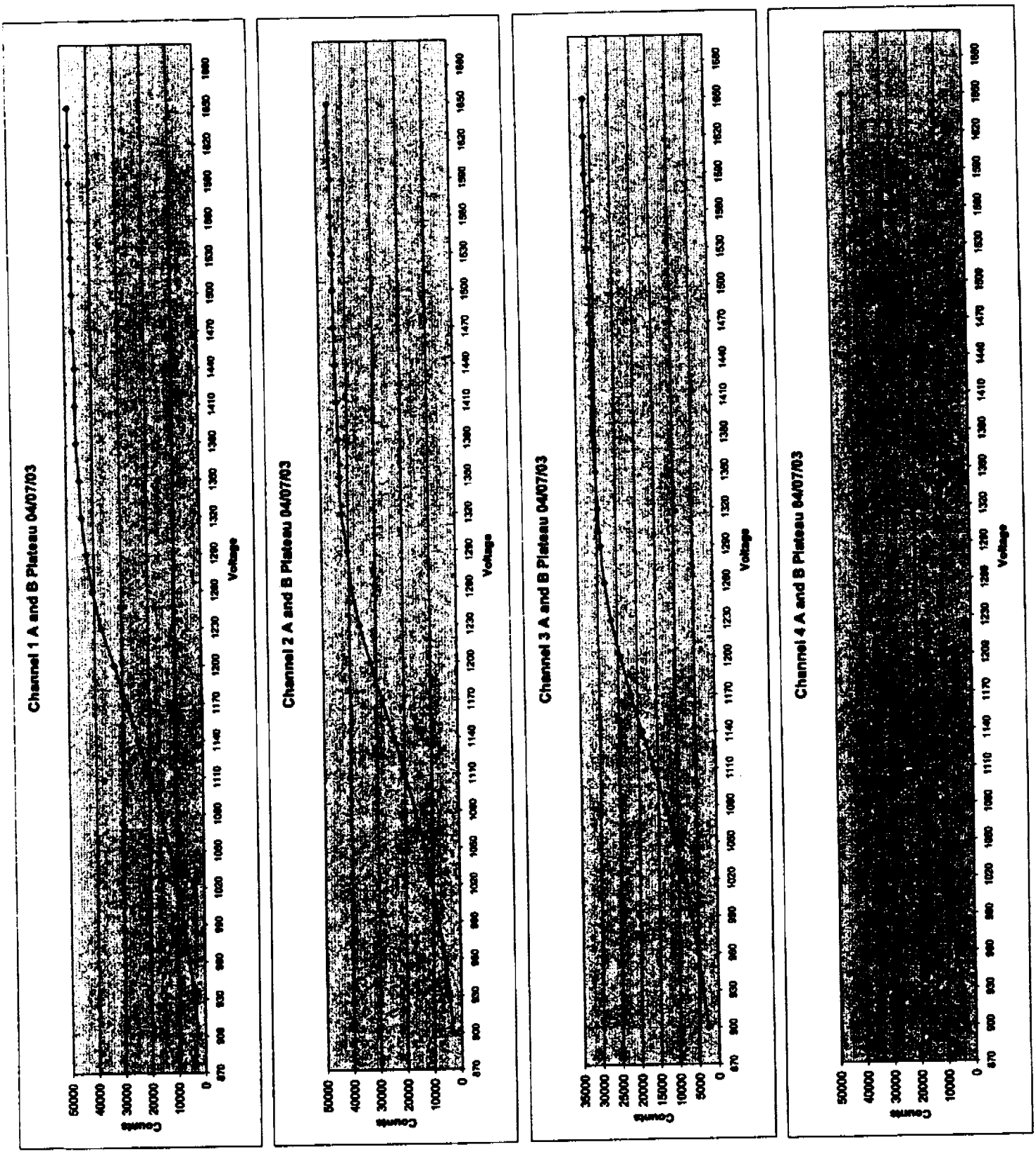


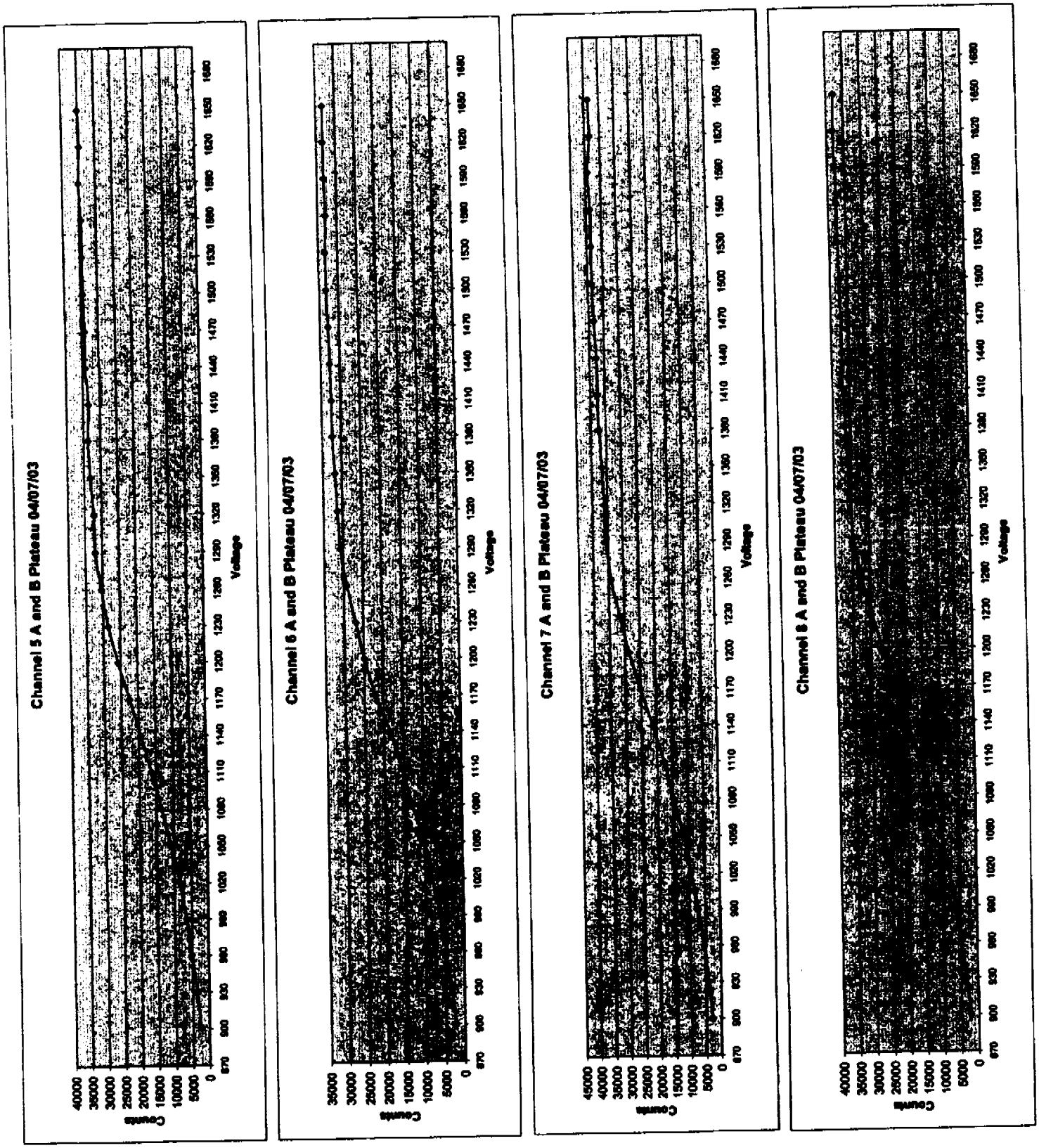
Alpha Attenuation Yellow D4
11/17/2003

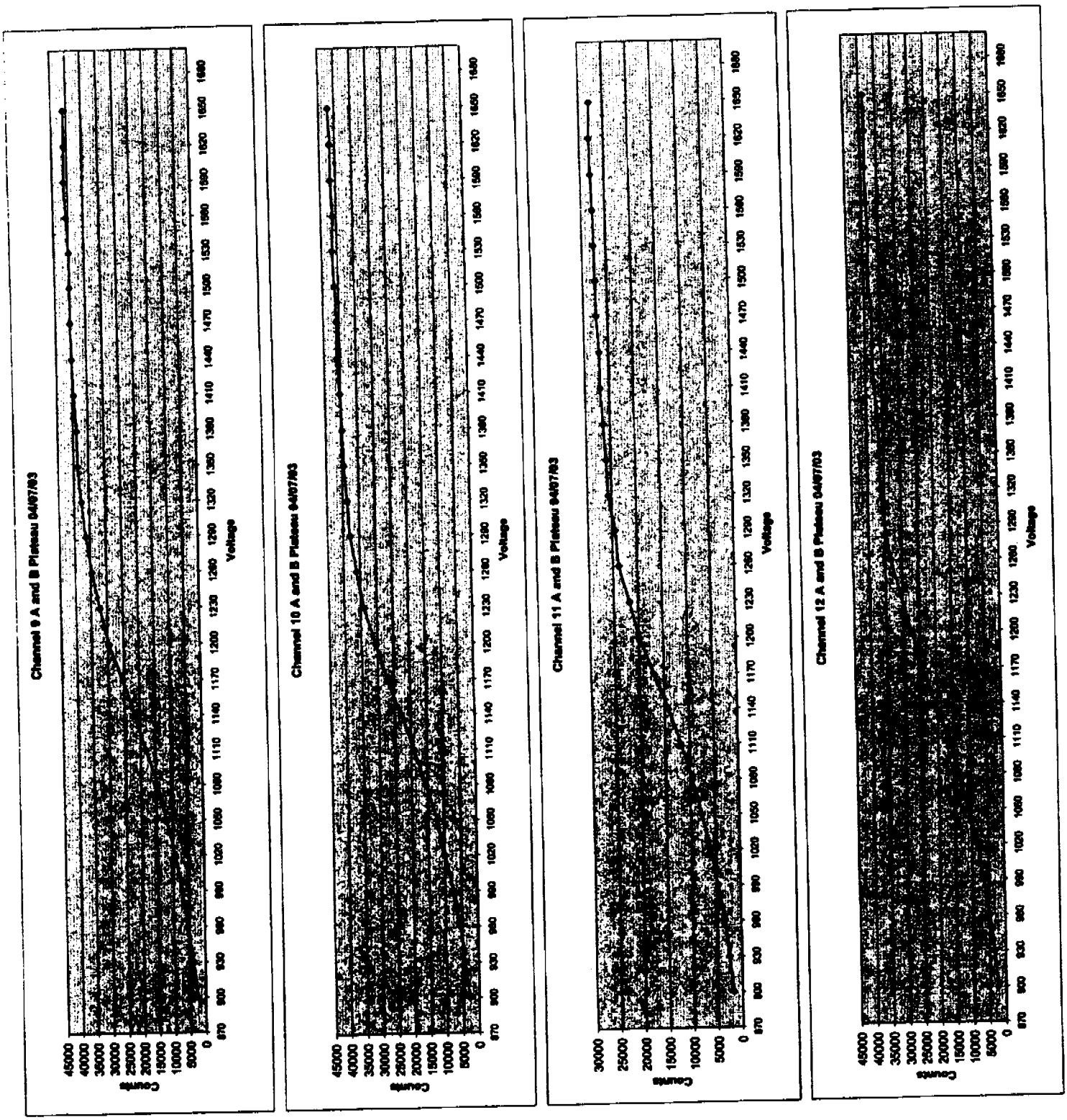
Detector ID	Sample Wt	Alpha	Count Time	DPM 4393.48 CPM	Th230 Eff
D4	0.0000	12742	12	1061.8333	0.24168
D4	0.0063	19919	22	905.4091	0.20608
D4	0.0115	17310	22	786.8182	0.17909
D4	0.0228	11153	22	506.9545	0.11539
D4	0.0328	12023	22	546.5000	0.12439
D4	0.0437	28859	60	480.9833	0.10948
D4	0.0675	23306	60	388.4333	0.08841
D4	0.0870	17309	60	288.4833	0.06566
D4	0.1129	14840	60	247.3333	0.05630
D4	0.1335	10598	60	176.6000	0.04020
D4	0.1460	8079	60	134.6500	0.03065

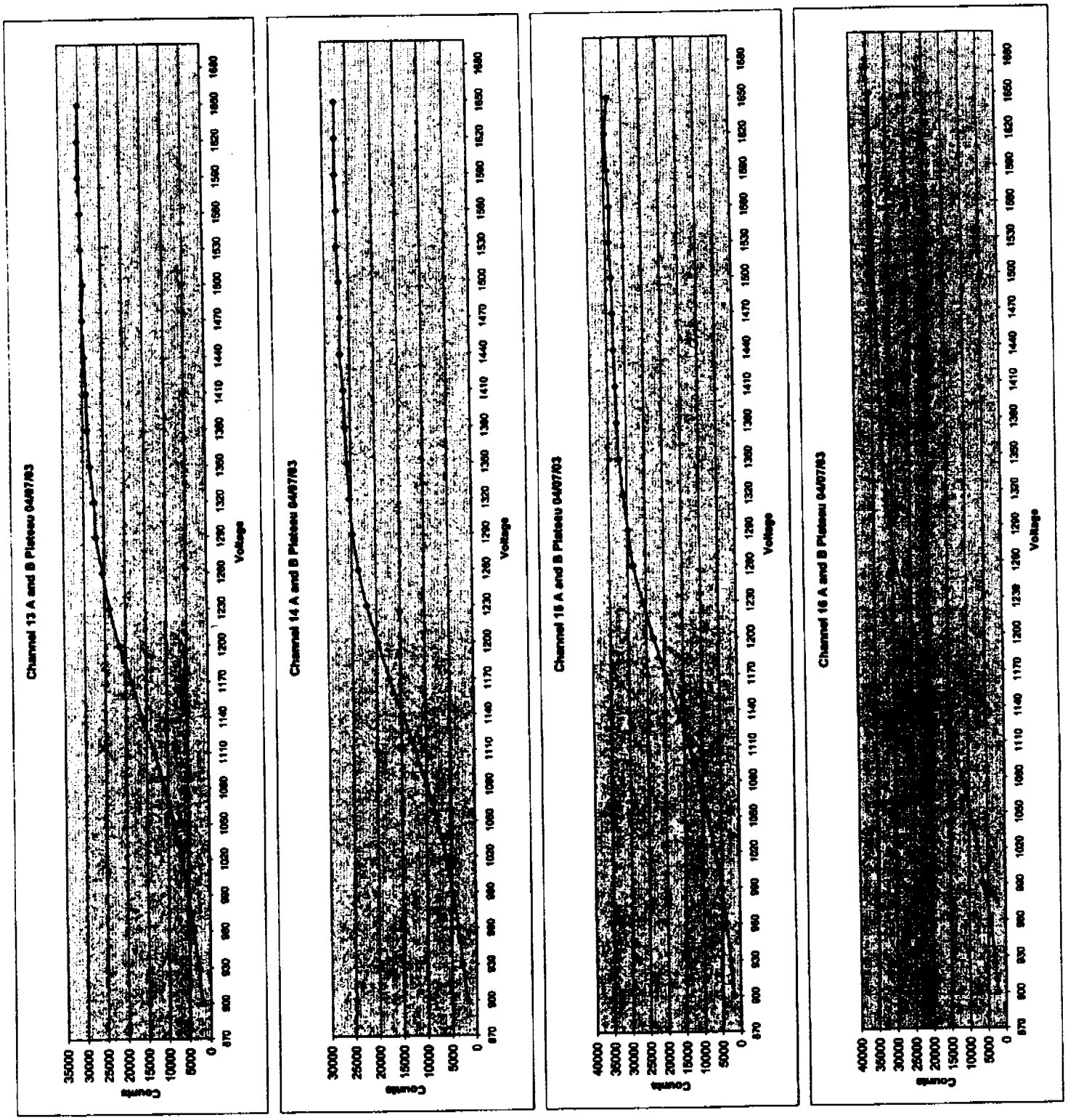


Voltage Plateaus


Channel 1 A and B Plateau 04/07/03
Channel 2 A and B Plateau 04/07/03
Channel 3 A and B Plateau 04/07/03
Channel 4 A and B Plateau 04/07/03
Counts
Voltage


Channel 5 A and B Plateau 04/07/03
Channel 6 A and B Plateau 04/07/03
Channel 7 A and B Plateau 04/07/03
Channel 8 A and B Plateau 04/07/03
Counts
Voltage


Channel 9 A and B Plateau 04/07/03
Channel 10 A and B Plateau 04/07/03
Channel 11 A and B Plateau 04/07/03
Channel 12 A and B Plateau 04/07/03
Counts
Voltage


Channel 13 A and B Plateau 04/07/03
Channel 14 A and B Plateau 04/07/03
Channel 15 A and B Plateau 04/07/03
Channel 16 A and B Plateau 04/07/03
Counts
Voltage

PLATEAU GENERATION

GROSS COUNTS

CHANNEL	GROUP A	GROUP B	GROUP C	GROUP D
1	14	0	0	0
2	0	0	0	0
3	16	0	0	0
4	14	0	0	0
GUARD	6782	6862	7112	6883

START VOLTAGE	900.0	PRESET TIME	1.00
STOP VOLTAGE	1650.0	ELAPSED TIME	13.25
STEP VOLTAGE	30.0	GATING	YES
PRESENT VOLTAGE		MODE	Normal

ALT E: Begin a plateau count
ALT D: Abort a plateau early
ALT P: Print or Plot a stored or saved Plateau

Yellow GPC Plateaus 4/7/2003

Counting time: 1.00

Voltage	4/7/2003 Channel 1	4/7/2003 Channel 2	4/7/2003 Channel 3	4/7/2003 Channel 4	4/7/2003 Channel 5	4/7/2003 Channel 6	4/7/2003 Channel 7	4/7/2003 Channel 8	4/7/2003 Channel 9	4/7/2003 Channel 10	4/7/2003 Channel 11	4/7/2003 Channel 12	4/7/2003 Channel 13	4/7/2003 Channel 14	4/7/2003 Channel 15	4/7/2003 Channel 16
900	2740	3076	2687	3370	2514	2267	2851	2228	2704	2967	1750	2387	2037	1862	1786	2176
930	4111	4295	3897	4883	3673	3443	4056	3415	3874	4221	2533	3491	2834	2757	2695	3174
960	5786	6064	5055	6848	5053	4829	5455	4757	5463	5568	3425	4799	3948	3610	3756	4268
990	7463	7967	6749	8900	6451	5975	7231	6359	7182	7449	4624	6530	5148	4830	5035	5862
1020	9944	10362	8578	11303	8302	8045	9337	8158	9253	9944	5956	8336	6802	6075	6643	7492
1050	12653	12987	10729	14427	10798	10077	11680	10440	11943	12328	7780	10945	8505	7629	8648	9486
1080	15940	16390	13211	18097	13271	12996	14720	13203	14800	15554	9536	13579	10728	9884	11018	11848
1110	19628	19880	15883	21704	16300	15475	17692	16338	18263	19069	11790	16804	13103	12254	13458	14771
1140	23909	23968	18880	26119	19255	18402	21258	19834	21630	22815	14200	20533	16025	14668	16580	17835
1170	28369	27959	21728	29904	22443	22068	25035	23554	25332	26882	16895	24170	18528	17283	19828	20873
1200	32766	32359	24236	33972	25730	24949	28606	26603	29513	30389	19771	27461	21456	19641	22902	24065
1230	37266	36063	26525	36843	28441	27029	31410	29870	32163	33793	21720	30556	23790	21894	25842	26714
1260	40333	38863	28036	39471	30297	29143	34045	32558	34491	36000	23716	33265	25362	23516	28368	29234
1290	42713	40448	28986	40931	31905	30688	35671	34458	36303	37767	24371	34898	26899	24683	29786	30469
1320	44319	42370	29626	41529	32258	31370	35975	35291	37538	38581	25634	36050	27273	25277	30930	31416
1350	44952	42876	30060	42081	33043	31787	36571	35834	38647	39286	25917	36145	28227	25669	31962	32285
1380	46105	43181	30686	42332	33578	32384	37222	36357	38790	39648	26377	36587	28779	26099	32448	32658
1410	46302	43623	30585	43221	33240	32440	37541	36777	39446	40080	26820	37499	28964	26319	32738	32904
1440	46135	44024	30659	43271	34095	32717	37675	36990	39923	40788	26845	37581	29330	26893	33120	33351
1470	46773	44390	30971	43244	34046	32864	38121	37140	40147	40652	27327	37795	29706	26771	33300	33764
1500	46812	44474	30914	43650	34277	33226	38620	37168	40195	41078	27371	38592	29482	26939	33503	34023
1530	46932	44435	31279	43778	34414	33201	38588	37491	40023	41473	27541	38081	29941	27325	33908	34216
1560	46952	44738	31386	43451	34388	32943	38574	37565	40680	41123	27632	38504	29863	27224	33630	34321
1590	47095	44717	31637	43947	35050	33208	39114	37740	41110	41668	27846	38661	30303	27485	34157	34471
1620	47408	45434	31619	44148	34697	33253	38273	38058	40865	41536	28005	38510	30372	27404	34495	34501
1650	47255	45248	31567	44111	34975	33255	38610	37835	40936	41979	27760	38749	30123	27388	33776	34266

Discriminator Settings

TENNELEC LB4000 PAGE 3

#1 Channel GROUP > A B C D

Discriminator Settings	Beta LL	0	0	0	0
	Beta UL	1150	1200	1225	1575
	Alpha LL	1151	1201	1226	1576
	Alpha UL	4095	4095	4095	4095
	Threshold	25	25	25	25
Automatic Sequence	Print Enable	YES	YES	YES	YES
	Save Enable	NO	NO	NO	NO
	Print	QUANTERA	QUANTERA	QUANTERA	QUANTERA
	Save	leebkg.dat	leebkg.dat	leebkg.dat	leebkg.dat
	Repeat	0	0	0	0
Detector Bias	Alpha	802.5			
	Beta	1440.0			

Count Mode Simultaneous

(ALT T to select Count Mode, CTL PgUp and CTL PgDn for other channels)
(ALT X to configure the Print & Save commands and the Autoexecute Batch Name)

TENNELEC LB4000 PAGE 3

#2 Channel GROUP >

		A	B	C	D
Discriminator Settings	Beta LL	0	0	0	0
	Beta UL	1107	1200	1450	1575
	Alpha LL	1108	1201	1451	1576
	Alpha UL	4095	4095	4095	4095
	Threshold	25	25	25	25
Automatic Sequence	Print Enable	YES	YES	YES	YES
	Save Enable	NO	NO	NO	NO
	Print	QUANTERA	QUANTERA	QUANTERA	QUANTERA
	Save	leebkg.dat	leebkg.dat	leebkg.dat	leebkg.dat
	Repeat	0	0	0	0
Detector Bias	Alpha	802.5			
	Beta	1440.0			

Count Mode Simultaneous

(ALT T to select Count Mode, CTL PgUp and CTL PgDn for other channels)
(ALT X to configure the Print & Save commands and the Autoexecute Batch Name)

TENNELEC LB4000 PAGE 3

#3 Channel	GROUP >	A	B	C	D
Discriminator Settings	Beta LL	0	0	0	0
	Beta UL	1350	1350	1275	1425
	Alpha LL	1356	1351	1276	1426
	Alpha UL	4095	4095	4095	4095
	Threshold	25	25	25	25
Automatic Sequence	Print Enable	YES	YES	YES	YES
	Save Enable	NO	NO	NO	NO
	Print	QUANTERA	QUANTERA	QUANTERA	QUANTERA
	Save	leebkg.dat	leebkg.dat	leebkg.dat	leebkg.dat
	Repeat	0	0	0	0
Detector Bias	Alpha	802.5			
	Beta	1440.0			

Count Mode Simultaneous

(ALT T to select Count Mode, CTL PgUp and CTL PgDn for other channels)
(ALT X to configure the Print & Save commands and the Autoexecute Batch Name)

TENNELEC LB4000 PAGE 3

#4 Channel	GROUP >	A	B	C	D
Discriminator Settings	Beta LL	0	0	0	0
	Beta UL	1250	835	1450	1435
	Alpha LL	1251	836	1451	1436
	Alpha UL	4095	4095	4095	4095
	Threshold	25	25	25	25
Automatic Sequence	Print Enable	YES	YES	YES	YES
	Save Enable	NO	NO	NO	NO
	Print	QUANTERA	QUANTERA	QUANTERA	QUANTERA
	Save	leebkg.dat	leebkg.dat	leebkg.dat	leebkg.dat
	Repeat	0	0	0	0
Detector Bias	Alpha	802.5			
	Beta	1440.0			

Count Mode Simultaneous

(ALT T to select Count Mode, CTL PgUp and CTL PgDn for other channels)
(ALT X to configure the Print & Save commands and the Autoexecute Batch Name)

STL

Beta into Alpha Crosstalk

[TENNELEC LB4000] [PAGE 1]

10:28:30		I.D.	TIME	COUNTS α	COUNTS β	αEFF	βEFF	BKGα	BKGβ
GROUP A	1	e	0.38	18	18191	0.00	0.00	0.00	0.00
9:24:00	2	ROIA2	0.38	18	18298	0.00	0.00	0.00	0.00
1500.00	3	ROIA3	0.38	12	12695	0.00	0.00	0.00	0.00
	4	ROIA4	0.38	14	16250	0.00	0.00	0.00	0.00
GROUP B	1	ROIB1	0.38	13	14245	0.00	0.00	0.00	0.00
9:24:00	2	ROIB2	0.38	11	11896	0.00	0.00	0.00	0.00
1500.00	3	ROIB3	0.38	13	14912	0.00	0.00	0.00	0.00
	4	ROIB4	0.38	13	14236	0.00	0.00	0.00	0.00
GROUP C	1	ROIC1	0.44	14	16662	0.00	0.00	0.00	0.00
10:08:49	2	ROIC2	0.44	18	18247	0.00	0.00	0.00	0.00
1500.00	3	ROIC3	0.44	10	11321	0.00	0.00	0.00	0.00
	4	ROIC4	0.44	13	15911	0.00	0.00	0.00	0.00
GROUP D	1	ROID1	0.44	14	14451	0.00	0.00	0.00	0.00
10:08:49	2	ROID2	0.44	10	11868	0.00	0.00	0.00	0.00
1500.00	3	ROID3	0.44	13	14698	0.00	0.00	0.00	0.00
	4	ROID4	0.44	13	14874	0.00	0.00	0.00	0.00

SEVERN TRENT **STL**

BACKGROUNDS

Yellow – November 2003

BG1103.TXT
11/20/03

12:27:58		I.D.	TIME	COUNTS	COUNTS				
GROUP A	1	LONG BKG 11/20/03	1000.0	29	1024	0.00	0.00	0.03	1.02
18:35:04	2	LONG BKG	1000.0	37	1049	0.00	0.00	0.04	1.05
1.00	3	LONG BKG	1000.0	51	1122	0.00	0.00	0.05	1.12
	4	LONG BKG	1000.0	61	1111	0.00	0.00	0.06	1.11
GROUP B	1	LONG BKG	1000.0	51	1176	0.00	0.00	0.05	1.18
18:35:04	2	LONG BKG	1000.0	60	1012	0.00	0.00	0.06	1.01
1.00	3	LONG BKG	1000.0	44	1141	0.00	0.00	0.04	1.14
	4	LONG BKG	1000.0	48	1085	0.00	0.00	0.05	1.00
GROUP C	1	LONG BKG	1000.0	44	976	0.00	0.00	0.04	0.98
18:35:04	2	LONG BKG	1000.0	34	965	0.00	0.00	0.03	0.97
1.00	3	LONG BKG	1000.0	46	893	0.00	0.00	0.05	0.89
	4	LONG BKG	1000.0	36	1065	0.00	0.00	0.04	1.00
GROUP D	1	LONG BKG	1000.0	36	859	0.00	0.00	0.04	0.86
18:35:04	2	LONG BKG	1000.0	72	975	0.00	0.00	0.07	0.98
1.00	3	LONG BKG	1000.0	35	723	0.00	0.00	0.04	0.72
	4	LONG BKG	1000.0	51	912	0.00	0.00	0.05	0.91

Long Backgrounds 04/07/2003

[TENNELEC LB4000] [PAGE 1]

18:09:44		I.D.	TIME	COUNTS α	COUNTS β	αEFF	βEFF	BKGα	BKGβ
GROUP A	1	BA1	1000.0	89	1219	0.00	0.00	0.00	0.00
22:41:27	2	BA2	1000.0	39	1081	0.00	0.00	0.00	0.00
1000.00	3	BA3	1000.0	35	1187	0.00	0.00	0.00	0.00
	4	BA4	1000.0	61	1123	0.00	0.00	0.00	0.00
GROUP B	1	BB1	1000.0	52	1159	0.00	0.00	0.00	0.00
22:41:27	2	BB2	1000.0	44	1160	0.00	0.00	0.00	0.00
1000.00	3	BB3	1000.0	54	1294	0.00	0.00	0.00	0.00
	4	BB4	1000.0	43	1038	0.00	0.00	0.00	0.00
GROUP C	1	BC1	1000.0	30	933	0.00	0.00	0.00	0.00
22:41:27	2	BC2	1000.0	34	924	0.00	0.00	0.00	0.00
1000.00	3	BC3	1000.0	44	1090	0.00	0.00	0.00	0.00
	4	BC4	1000.0	31	1056	0.00	0.00	0.00	0.00
GROUP D	1	BD1	1000.0	45	912	0.00	0.00	0.00	0.00
22:41:27	2	BD2	1000.0	44	1136	0.00	0.00	0.00	0.00
1000.00	3	BD3	1000.0	54	917	0.00	0.00	0.00	0.00
	4	BD4	1000.0	61	980	0.00	0.00	0.00	0.00

Group C channel 2 COUNT TERMINATED

Calibration Standards and Certificates

Alpha Th-230

Alpha Calibration Standards
11/14/2003 reprep 11/17/03
Alpha standard, 02-047, 2196.7 dpm/mL Th-230, 4393.4 dpm/ standard

Std #	mLs, 02-047	mLs salt solution	gross mass (g)	tare mass (g)	net mass (g)
1	2	0	8.4532	8.4525	0.0007
2	2	0.25	8.4245	8.4182	0.0063
3	2	0.5	8.4418	8.4303	0.0115
4	2	1	8.4154	8.3926	0.0228
5	2	1.5	8.4875	8.4547	0.0328
6	2	2	8.4561	8.4124	0.0437
7	2	3	8.4552	8.3877	0.0675
8	2	4	8.5208	8.4338	0.0870
9	2	5	8.5345	8.4216	0.1129
10	2	6	8.5468	8.4133	0.1335
11	2	7	8.5682	8.4222	0.1460
1-reprep	2	0	*	*	0

* See Calibration Narrative.

ANALYTICS

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CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

65090-334

Th-230 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated by liquid scintillation counting.

Radionuclide purity and calibration were checked by germanium gamma-ray spectrometry and liquid scintillation counting. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

ISOTOPE:	Th-230
ACTIVITY (dps):	7.654 E3
HALF-LIFE:	7.538 E4 Years
CALIBRATION DATE:	December 19, 2002 12:00 EST
TOTAL UNCERTAINTY*:	3.5%
SYSTEMATIC:	2.6%
RANDOM:	0.9%

*99% Confidence Level

Impurities: γ-impurities <0.1%, α-impurities <0.05%

5.17738 grams 0.5M HNO_3 solution.

P O NUMBER 1614557-000 OP, Item 3

SOURCE PREPARED BY: M. Taskaeva
M. Taskaeva, Radiochemist

Q A APPROVED: 12-19-02

Logbook: 2060

Radiochemistry
Standards Preparation Logbook

Date Prep'd	Expir. Date	Standard ID Number	Isotope	Parent ID Number	Parent Activity	Parent Ref. Date	Aliquot	Dilution Volume	Change in Time	T½	Final Activity	Solvent/ Lot #	Prep'd Initials	Cal. Ver. Initials	Comments
9-11-03	9-11-08	03-069 02-024 Pu 9-22-03	Pu 238	02-026	132.98	2-23-01	0.5 ml	↓	1367 days	320224 / 87.75	3340 dpm/ml	[illegible]	MFM		re-certification of 02-031 which blend 606.2 C
↓	↓	↓	Pu 239	02-025	128.06	2-23-01	1.5 ml	150 ml		2.41 E04 y	[illegible] dpm/ml / 62.025 dpm/ml	[illegible]	MFM		62.025 dpm/ml
9-11-03	9-11-08	03-070 ~~03-0470~~ MFM 9-22-03	Am 243	98-011	1161 dpm/g	2-28-98	15 g ~~16 g~~	200 ml		7.37 E+3 y	87.075 ~~9.238~~ dpm/ml		MFM		
10-6-03	10-6-08	03-071	Th 230	65090-334	7,654 dps	12-19-02	5.1498 g	100 mL	N/A	7.538 E4	4,567.9 dpm/mL	0.5 M HNO3	BH	BBF	
10-6-03	10-6-08	03-072	Th 230	03-071	4,567.9 dpm/mL	12-19-02	1 mL	200 mL	N/A	7.538 E4	22.84 dpm/mL	0.5 M HNO3	BH	BBF	
10-11-03	10-11-0	03-073	clean (U-233)	047-105	60944 dpm/ml	4-16-97	10 ml	1000 L		70 y	163.85 dpm/L	DI H2O 2M H2SO4 KOH pH 11.5	MFM BBF		Rad 03-0678 in Rad Capture
10/31/03	10/31/08	03-074	I-129	681-78-4	1.059 uCi	1-1-2000	1 mL	100 mL	N/A	1.57 E+07	10.54 nCi/mL	0.1 M NaOH	BH	BBF	
10/31/03	10/31/04	03-075	I-129	03-074	10.54 nCi/mL	1-1-2000	1 mL	100 mL	N/A	1.57 E7	105.4 pCi/mL	0.1 M NaOH	BH	BBF	
10/31/03	10/31/04	03-076	Ra 228	01012	1,015 dpm/mL	9/16/01	2 mL	100 mL	NA	5.75 y	20.30 dpm/mL	0.5 M HNO3	BH	BBF	
10/31/03	10/31/04	03-081	Pu-242	92-242-5-1	129.636 dpm/g	12/10/89	5.0723	500 mL	NA	3.73 X 10^5 y	78.9017	.5 M HNO3	MFM	MO	
11/3/03	11/2/04	SR19	SM SR carrier	[illegible]	NA	NA	120.77 g	1 Liter	NA	N/A		ditto	[illegible]	BBF	Reported in Rad capture
11-5-03	11-5-04	RAD03-032	Th-229	02-006	2134.75 dpm/ml	1-28-02	17.5 mL	500 mL	N/A	7.3 e+3	74.716 dpm/mL	.5 M HNO3	MFM	JMW	

Additional Comments:

Narrative for LB4000 Yellow Alpha Calibration

The first count of calibration standards was on November 14, 2003. Detector efficiencies were calculated. It was discovered the efficiency of standard number one was below the expected value. This standard was re-prepared and counted separately on November 17, 2003. Efficiency calculations using the new standard number one yielded acceptable results.

During the re-preparation process of standard number one the gross and tare weights of the planchette were lost due to laboratory technician error. Note standard number one is the zero mass standard. The prep technician recalled that the net mass was actually zero before the weights were lost.

STL

Beta Calibration for LB4000

Yellow

Sr90

STL

Calibration Standards and Certificates

Beta

Sr90

Beta Standards 1/22/04

Strontium 90 standard 01093
10,435 pCi/mL
Reference date: 9/19/01
0.1 ml ADDED TO EACH STANDARD

STD #	TARE	GROSS	MASS	SALT mL
1	8.4539	8.454	0.0001	0
2	8.512	8.5145	0.0025	0.1
3	8.5133	8.5179	0.0046	0.2
4	8.4823	8.4906	0.0083	0.375
5	8.4135	8.4279	0.0144	0.625
6	8.4015	8.426	0.0245	1.1
7	8.5081	8.5359	0.0278	1.25
8	8.4565	8.4992	0.0427	1.9
9	8.4036	8.459	0.0554	2.5
10	8.4005	8.4844	0.0839	3.75
11	8.4275	8.5471	0.1196	5.5
12	8.394	8.5664	0.1724	8
13	8.4041	8.592	0.1879	10
14	8.4168	8.6704	0.2536	12

Decay Correction

Strontium 90						
Initial Activity:	23166	dpm				
Reference Date:	8/7/2001					
Current Date:	3/3/2004		(or date at which you wish to determine activity)			
Elapsed Time:	939.000	days				
Half Life:	10409.625	days				
Exponential Term:	0.939389271					
Corrected Activity:	21761.89185	dpm	9802.653987	pCi	362.6982	Bq
Activity (Sr/Y-90)	43523.7837	dpm	19605.30797	pCi	725.3964	Bq

Logbook: 2060

Radiochemistry
Standards Preparation Logbook

Date Prep'd	Expir. Date	Standard ID Number	Isotope	Parent ID Number	Parent Activity	Parent Ref.	Aliquot	Dilution Volume	Change in Time	T ½	Final Activity	Solvent/ Lot #	Prep'd Initials	Cal. Ver. Initials	Comments
9/18/01	12/19/01	01-087	UNAT CAL STD	01085	10 µg/mL	9/18/01	1.5 mL	100 mL	N/A	N/A	150 ng/mL	.8 M HNO_3	BMW	MC	Nanogram/mL
		01-088					1.0 mL				100 ng/mL			MC	
		01-089					0.5 mL				50 ng/mL			MC	
		01-090		01086	100 ng/mL		10 mL	100 mL			10 ng/mL			MC	
		01-091		01-089	50 ng/mL		10 mL	100.0 mL			5 ng/mL			MC	
		01-092		01-088	100 ng/mL		1.0 mL	100.0 mL			1 ng/mL			MC	
9/19/01	9/19/02	01-093	SR-90	ampule C2201-334	36,897 dps	8/7/01	4.7531 g	100.0 mL	N/A	28.7 yr	~~104.5~~ 10435 pCi/mL ~~231.66~~ 23,106 dpm/mL	.8 M HNO_3	BMW	MC	
9/19/01	9/19/02	01-094	SR90	01093	10435.9 pCi/g	9/19/01	1.0 mL	100.0 mL	N/A	28.79 yr	104.5 pCi/mL 231.66 dpm/mL	.8 M HNO_3	BMW	MC	
9/26/01	9/26/02	Ba-28	STD. Barium Carrier	Ac28-RPCM $BaCl_2$	N/A	3/23/98	28.46 g	1000.0 mL	N/A	N/A	27.2 mg/mL	Reagent H2O	BMW	MC	See Ant capture weight sheet.
10/4/01	~~10/4/02~~ 10/4/04 EMA 3-14-03	01-095	U-232	97-105	10,994 dpm/mL	9-6-97	1 mL	500 mL	—	70 yr	21.99 dpm	1M HNO_3	CMA	MC	1
10/12/01	10/12/02	01-096	Ra226	98-006	1316 dpm/mL	4/2/98	1.0 mL	100.0 mL	—	1600 yr	13.16 dpm/mL	1M HNO_3	AM	MC	
12/18/01	~~10/18/02~~ ~~10/18/01~~ EMA 3-14-03	01-097	SR90 (ABT)	01032	1,765.4 dpm/mL	3/26/96	2.0 mL	100.0 mL	N/A	28.5 yr	(35.31) ~~23.99~~ dpm/mL	~~1M~~ HNO_3	BMW	AW	Decay Correct= 1699.65 dpm/mL

Additional Comments:

decay corrected 34.83 MC 10-29-01

[redacted]UIS

ANALYTICS

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CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

62204-334

Sr-90 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated by liquid scintillation counting.

Radionuclide purity and calibration were checked by germanium gamma-ray spectrometry and liquid scintillation counting. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

ISOTOPE:	Sr-90
ACTIVITY (dps):	3.897 E4
HALF-LIFE:	28.79 years
CALIBRATION DATE:	August 7, 2001 12:00 EST
TOTAL UNCERTAINTY*:	4.0%
SYSTEMATIC:	3.5%
RANDOM:	0.5%

*99% Confidence Level

Impurities: γ-impurities <0.1%

4.99897 grams 0.1M HCl solution with 30 µg/g Sr carrier.

P O NUMBER 1097166, Item 1

SOURCE PREPARED BY: M. D. Currie

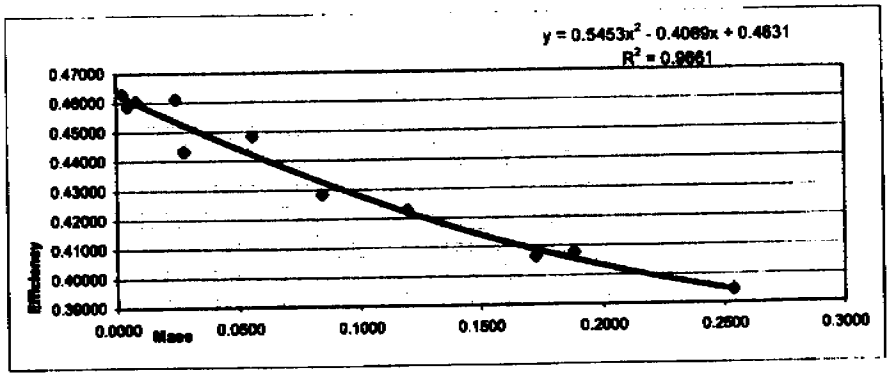
M. D. Currie, Radiochemist

Q A APPROVED: 8-8-01

Detector Efficiency Curves

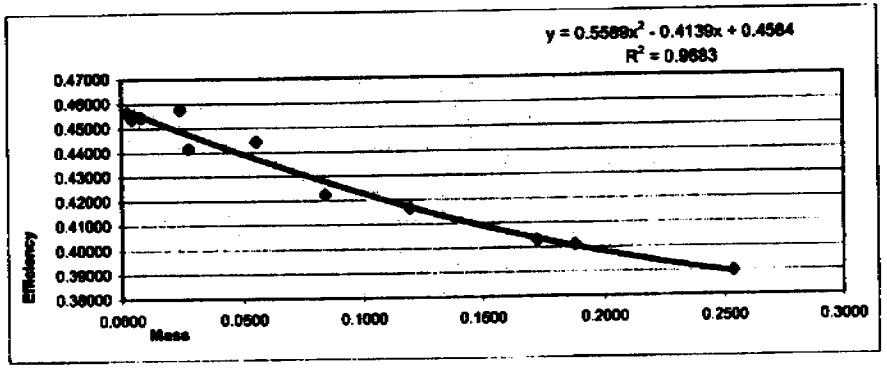
Beta Attenuation Yellow A1
1/22/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4364.3 CPM	Sr90 Eff
A1	0.0025	30297	15.00	2019.800	0.46280
A1	0.0046	30020	15.00	2001.333	0.45857
A1	0.0083	30141	15.00	2009.400	0.46042
A1	0.0245	30174	15.00	2011.600	0.46092
A1	0.0278	29011	15.00	1934.067	0.44316
A1	0.0554	29349	15.00	1956.600	0.44832
A1	0.0839	28041	15.00	1869.400	0.42834
A1	0.1196	27671	15.00	1844.733	0.42269
A1	0.1724	26806	15.00	1773.733	0.40642
A1	0.1879	26693	15.00	1779.533	0.40775
A1	0.2536	25814	15.00	1720.933	0.39432



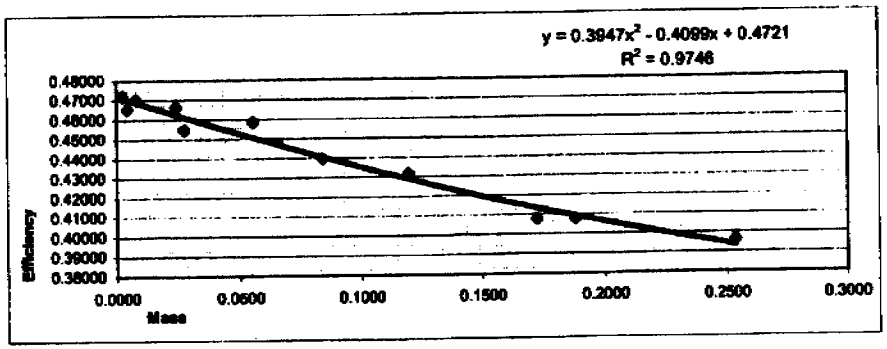
Beta Attenuation Yellow A2
1/22/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4364.3 CPM	Sr90 Eff
A2	0.0025	29870	15.00	1991.333	0.45628
A2	0.0046	29707	15.00	1960.467	0.45379
A2	0.0083	29736	15.00	1982.400	0.45423
A2	0.0245	29948	15.00	1996.533	0.45747
A2	0.0278	28900	15.00	1926.667	0.44146
A2	0.0554	29080	15.00	1938.667	0.44421
A2	0.0839	27642	15.00	1842.800	0.42224
A2	0.1196	27256	15.00	1817.200	0.41638
A2	0.1724	26383	15.00	1758.867	0.40301
A2	0.1879	26249	15.00	1749.933	0.40097
A2	0.2536	25509	15.00	1700.600	0.38968



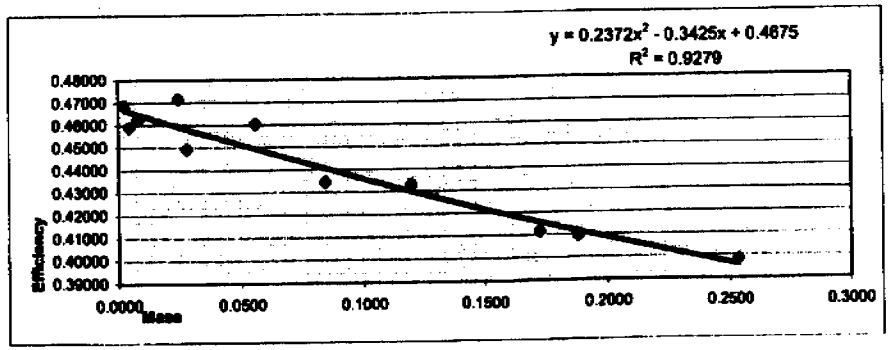
Beta Attenuation Yellow A3
1/22/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4364.3 CPM	Sr90 Eff
A3	0.0025	30900	15.00	2060.000	0.47201
A3	0.0046	30454	15.00	2030.267	0.46520
A3	0.0083	30773	15.00	2051.533	0.47007
A3	0.0245	30523	15.00	2034.867	0.46625
A3	0.0278	29762	15.00	1984.133	0.45463
A3	0.0554	30017	15.00	2001.133	0.45852
A3	0.0839	28779	15.00	1918.600	0.43981
A3	0.1196	28257	15.00	1883.800	0.43184
A3	0.1724	26872	15.00	1778.133	0.40743
A3	0.1879	26872	15.00	1778.133	0.40743
A3	0.2536	25937	15.00	1729.133	0.39620



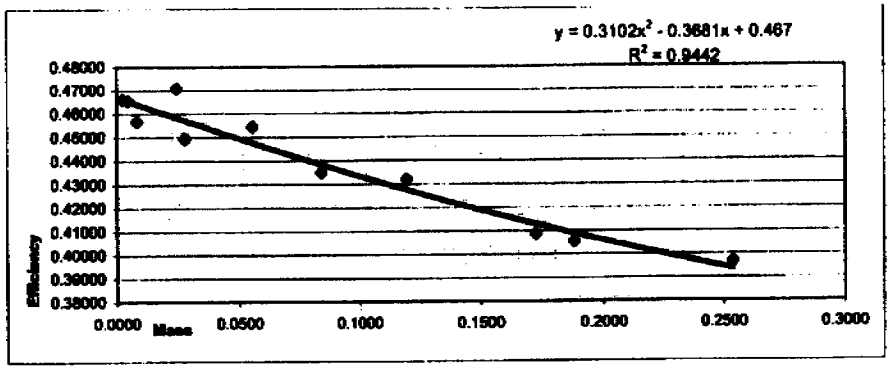
Beta Attenuation Yellow A4
1/22/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4364.3 CPM	Sr90 Eff
A4	0.0025	30669	15.00	2044.600	0.46848
A4	0.0046	30046	15.00	2003.067	0.45897
A4	0.0083	30271	15.00	2018.067	0.46240
A4	0.0245	30861	15.00	2057.400	0.47142
A4	0.0278	29399	15.00	1959.933	0.44906
A4	0.0554	30131	15.00	2008.733	0.46026
A4	0.0839	28428	15.00	1895.200	0.43425
A4	0.1196	28343	15.00	1889.533	0.43295
A4	0.1724	26934	15.00	1795.600	0.41143
A4	0.1879	26806	15.00	1787.067	0.40947
A4	0.2536	26077	15.00	1738.467	0.39834



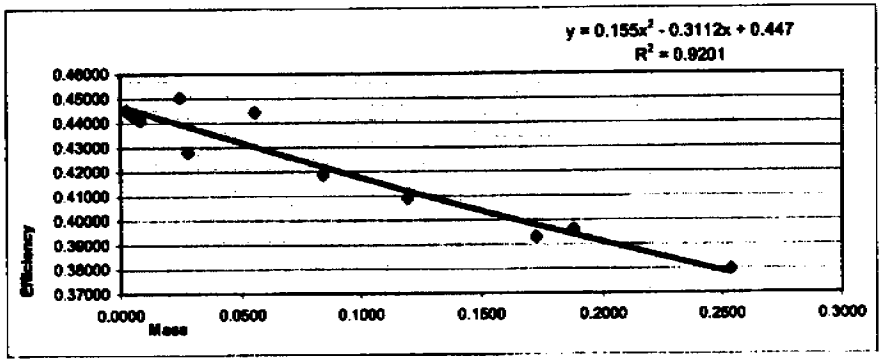
Beta Attenuation Yellow B1
1/22/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4364.3 CPM	Sr90 Eff
B1	0.0025	30502	15.00	2033.467	0.46593
B1	0.0046	30469	15.00	2031.267	0.46543
B1	0.0083	29883	15.00	1992.200	0.45648
B1	0.0245	30810	15.00	2054.000	0.47064
B1	0.0278	29408	15.00	1960.533	0.44922
B1	0.0554	29740	15.00	1982.667	0.45429
B1	0.0839	28486	15.00	1897.733	0.43483
B1	0.1196	28283	15.00	1885.533	0.43204
B1	0.1724	26742	15.00	1782.800	0.40850
B1	0.1879	26534	15.00	1768.933	0.40532
B1	0.2536	25980	15.00	1730.667	0.39655



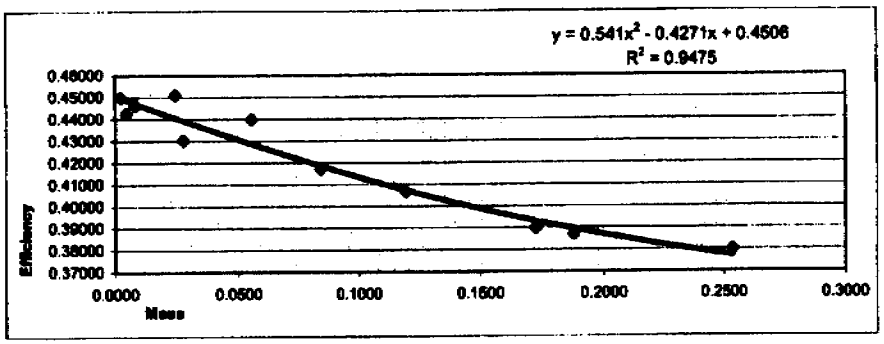
Beta Attenuation Yellow B2
1/22/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4364.3 CPM	Sr90 Eff
B2	0.0025	29142	15.00	1942.800	0.44516
B2	0.0046	29021	15.00	1934.733	0.44331
B2	0.0083	28870	15.00	1924.667	0.44100
B2	0.0245	29474	15.00	1964.933	0.45023
B2	0.0278	28009	15.00	1867.267	0.42785
B2	0.0554	29080	15.00	1938.667	0.44421
B2	0.0839	27403	15.00	1826.867	0.41859
B2	0.1196	26776	15.00	1785.067	0.40902
B2	0.1724	25725	15.00	1715.000	0.39296
B2	0.1879	25927	15.00	1728.467	0.39605
B2	0.2536	24845	15.00	1656.333	0.37952



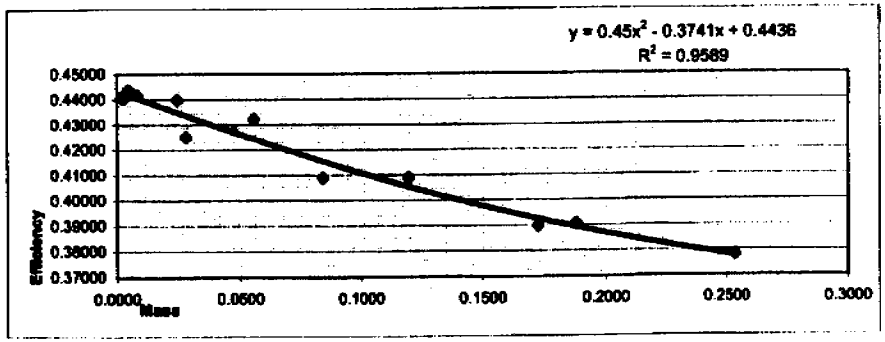
Beta Attenuation Yellow B3
1/22/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4364.3 CPM	Sr90 Eff
B3	0.0025	29438	15.00	1962.533	0.44968
B3	0.0046	28982	15.00	1930.800	0.44241
B3	0.0083	29207	15.00	1947.133	0.44615
B3	0.0245	29512	15.00	1967.467	0.45081
B3	0.0278	28157	15.00	1877.133	0.43011
B3	0.0554	28788	15.00	1919.200	0.43975
B3	0.0839	27286	15.00	1819.067	0.41681
B3	0.1196	26615	15.00	1774.333	0.40656
B3	0.1724	25503	15.00	1700.200	0.38957
B3	0.1879	25325	15.00	1688.333	0.38685
B3	0.2536	24869	15.00	1657.933	0.37989



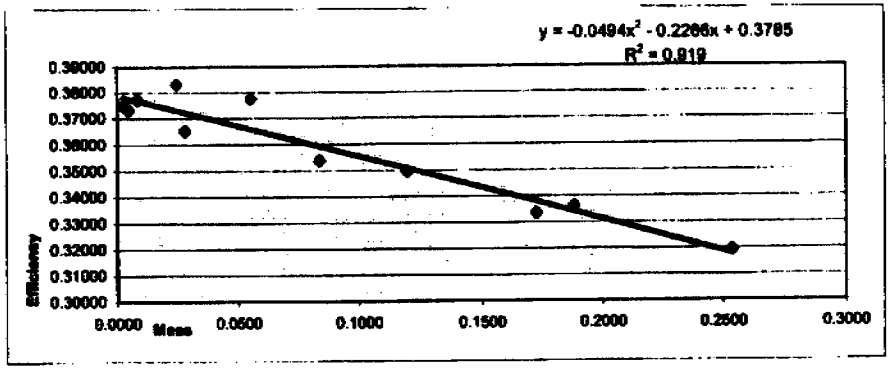
Beta Attenuation Yellow B4
1/22/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4364.3 CPM	Sr90 Eff
B4	0.0025	28810	15.00	1920.667	0.44009
B4	0.0046	29040	15.00	1936.000	0.44360
B4	0.0083	28903	15.00	1926.867	0.44151
B4	0.0245	28782	15.00	1918.800	0.43986
B4	0.0278	27818	15.00	1854.533	0.42493
B4	0.0554	28282	15.00	1885.467	0.43202
B4	0.0839	26755	15.00	1783.667	0.40869
B4	0.1196	26761	15.00	1784.067	0.40879
B4	0.1724	25502	15.00	1700.133	0.38955
B4	0.1879	25559	15.00	1703.933	0.39043
B4	0.2536	24737	15.00	1649.133	0.37787



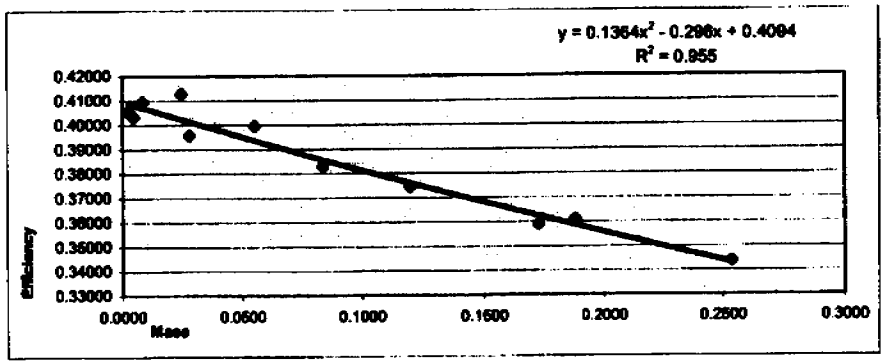
Beta Attenuation Yellow C1
3/3/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4352.38 CPM	Sr90 Eff
C1	0.0025	48945	30.00	1631.500	0.37485
C1	0.0046	48717	30.00	1623.900	0.37311
C1	0.0083	49232	30.00	1641.067	0.37705
C1	0.0245	50015	30.00	1667.167	0.38305
C1	0.0278	47671	30.00	1589.033	0.36510
C1	0.0554	49279	30.00	1642.633	0.37741
C1	0.0839	46184	30.00	1539.467	0.35371
C1	0.1198	45641	30.00	1521.367	0.34955
C1	0.1724	43527	30.00	1450.900	0.33336
C1	0.1879	43893	30.00	1463.100	0.33616
C1	0.2536	41671	30.00	1389.033	0.31914



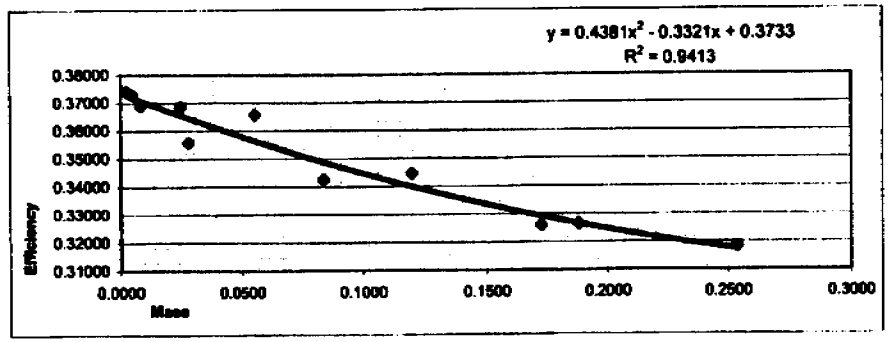
Beta Attenuation Yellow C2
3/3/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4352.38 CPM	Sr90 Eff
C2	0.0025	52929	30.00	1764.300	0.40536
C2	0.0046	52635	30.00	1754.500	0.40311
C2	0.0083	53443	30.00	1781.433	0.40930
C2	0.0245	53884	30.00	1796.133	0.41268
C2	0.0278	51670	30.00	1722.333	0.39572
C2	0.0554	52153	30.00	1738.433	0.39942
C2	0.0839	49978	30.00	1665.933	0.38276
C2	0.1198	48883	30.00	1629.433	0.37438
C2	0.1724	46847	30.00	1561.567	0.35878
C2	0.1879	47144	30.00	1571.467	0.36106
C2	0.2536	44893	30.00	1496.433	0.34382



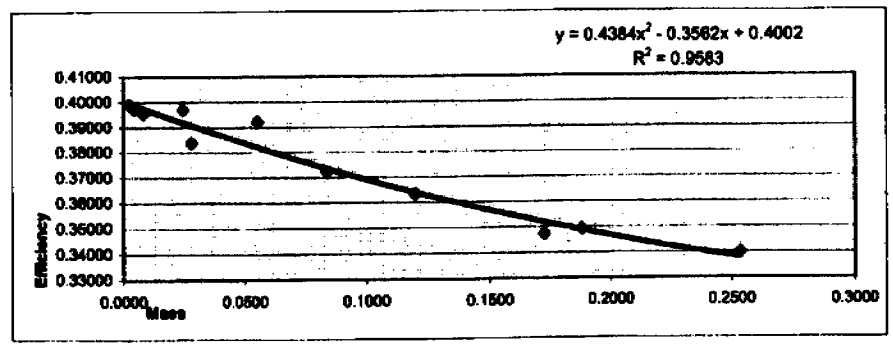
Beta Attenuation Yellow C3
3/3/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4352.38 CPM	Sr90 Eff
C3	0.0025	48832	30.00	1627.733	0.37399
C3	0.0046	48690	30.00	1623.000	0.37290
C3	0.0083	48153	30.00	1605.100	0.36879
C3	0.0245	48096	30.00	1603.267	0.36837
C3	0.0278	46426	30.00	1547.533	0.35556
C3	0.0554	47738	30.00	1591.267	0.36561
C3	0.0839	44707	30.00	1490.233	0.34240
C3	0.1198	44983	30.00	1499.433	0.34451
C3	0.1724	42535	30.00	1417.833	0.32576
C3	0.1879	42606	30.00	1420.267	0.32632
C3	0.2536	41543	30.00	1384.767	0.31816



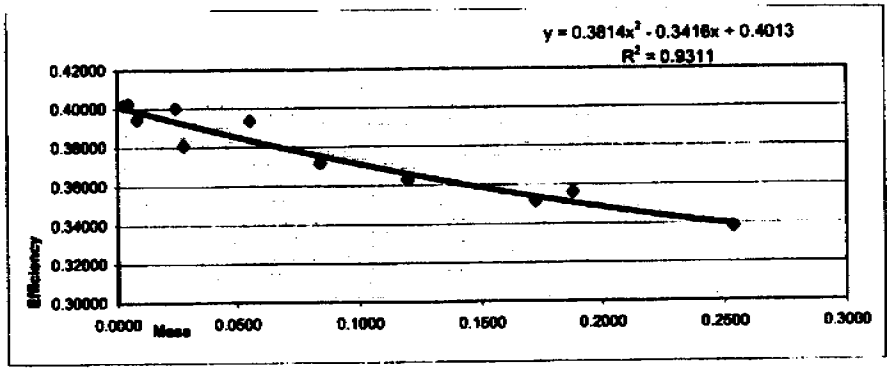
Beta Attenuation Yellow C4
3/3/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4352.38 CPM	Sr90 Eff
C4	0.0025	52103	30.00	1736.767	0.39904
C4	0.0046	51846	30.00	1726.200	0.39707
C4	0.0083	51607	30.00	1720.233	0.39524
C4	0.0245	51811	30.00	1727.033	0.39680
C4	0.0278	50082	30.00	1669.400	0.38356
C4	0.0554	51190	30.00	1706.333	0.39205
C4	0.0839	48570	30.00	1619.000	0.37198
C4	0.1198	47425	30.00	1580.833	0.36321
C4	0.1724	45330	30.00	1511.000	0.34717
C4	0.1879	45578	30.00	1519.267	0.34907
C4	0.2536	44374	30.00	1479.133	0.33984



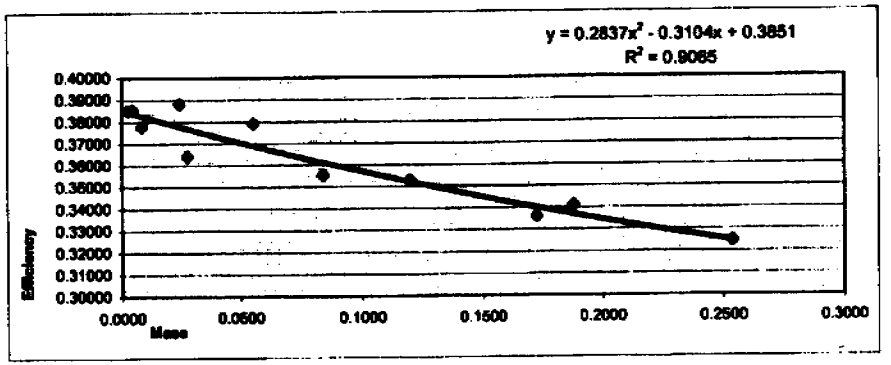
Beta Attenuation Yellow D1
3/3/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4352.38 CPM	Sr90 Eff
D1	0.0025	52443	30.00	1748.100	0.40164
D1	0.0046	52540	30.00	1751.333	0.40239
D1	0.0083	51491	30.00	1716.367	0.39435
D1	0.0245	52220	30.00	1740.667	0.39993
D1	0.0276	49698	30.00	1656.600	0.38062
D1	0.0554	51353	30.00	1711.767	0.39329
D1	0.0839	48509	30.00	1616.967	0.37151
D1	0.1196	47356	30.00	1578.533	0.36268
D1	0.1724	45883	30.00	1529.433	0.35140
D1	0.1879	46461	30.00	1549.367	0.35598
D1	0.2536	44127	30.00	1470.900	0.33795



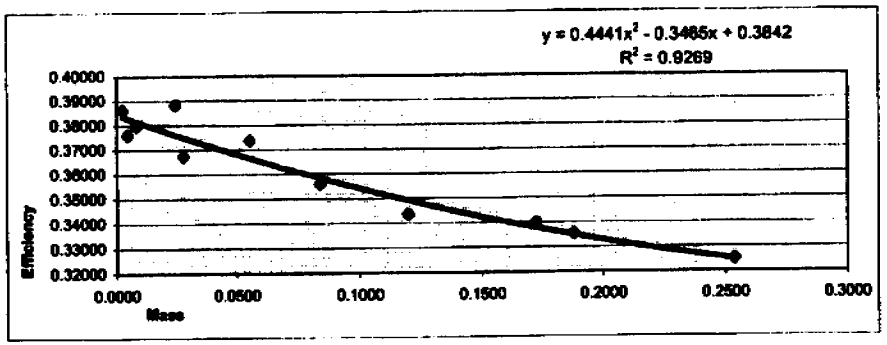
Beta Attenuation Yellow D2
3/3/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4352.38 CPM	Sr90 Eff
D2	0.0025	50292	30.00	1676.400	0.38517
D2	0.0046	50339	30.00	1677.967	0.38553
D2	0.0083	49317	30.00	1643.900	0.37770
D2	0.0245	50853	30.00	1695.433	0.38793
D2	0.0276	47552	30.00	1585.067	0.36418
D2	0.0554	49491	30.00	1649.700	0.37903
D2	0.0839	46369	30.00	1545.633	0.35512
D2	0.1196	46046	30.00	1534.867	0.35265
D2	0.1724	43848	30.00	1461.600	0.33582
D2	0.1879	44519	30.00	1483.967	0.34096
D2	0.2536	42363	30.00	1412.100	0.32444



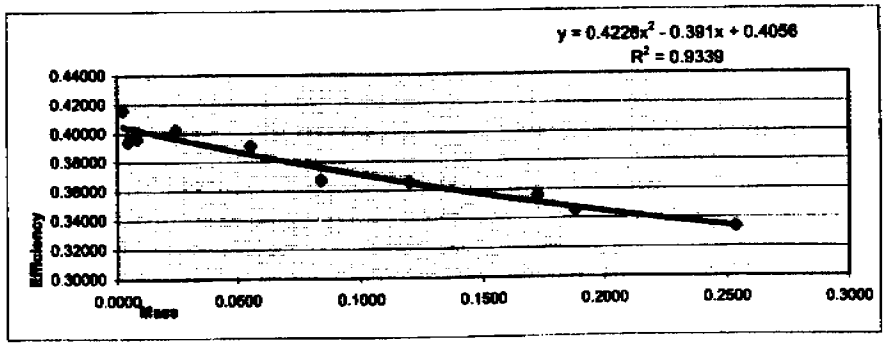
Beta Attenuation Yellow D3
3/3/2004

Detector ID	Sample ID	Beta	Count Time	DPM 4352.38 CPM	Sr90 Eff
D3	0.0025	50403	30.00	1680.100	0.38602
D3	0.0046	49072	30.00	1635.733	0.37583
D3	0.0083	49548	30.00	1651.600	0.37947
D3	0.0245	50857	30.00	1695.567	0.38796
D3	0.0276	47946	30.00	1598.200	0.36720
D3	0.0554	48782	30.00	1626.067	0.37360
D3	0.0839	46459	30.00	1548.633	0.35581
D3	0.1196	44843	30.00	1494.767	0.34344
D3	0.1724	44391	30.00	1479.700	0.33998
D3	0.1879	43765	30.00	1458.833	0.33518
D3	0.2536	42406	30.00	1413.533	0.32477



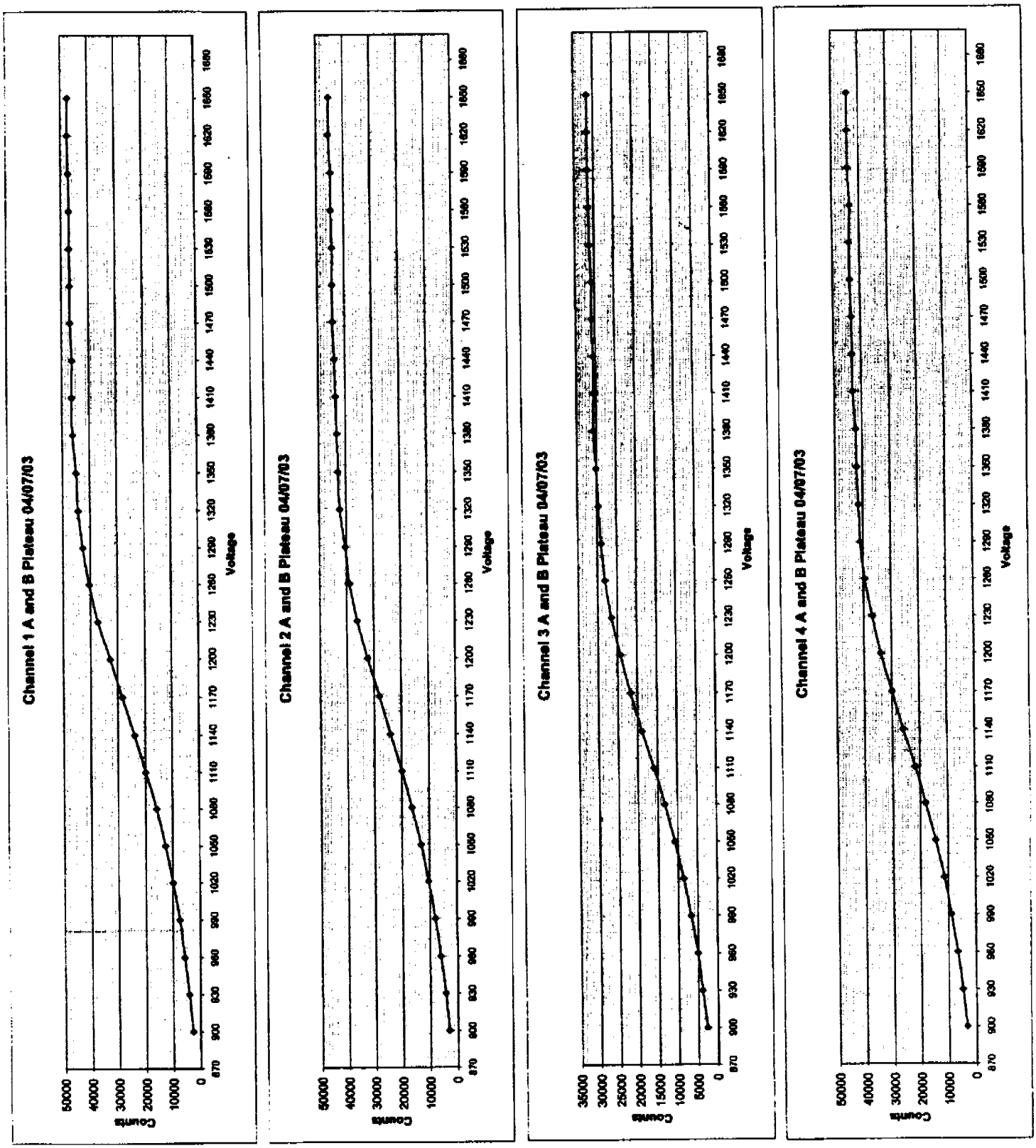
Beta Attenuation Yellow D4
3/3/2004

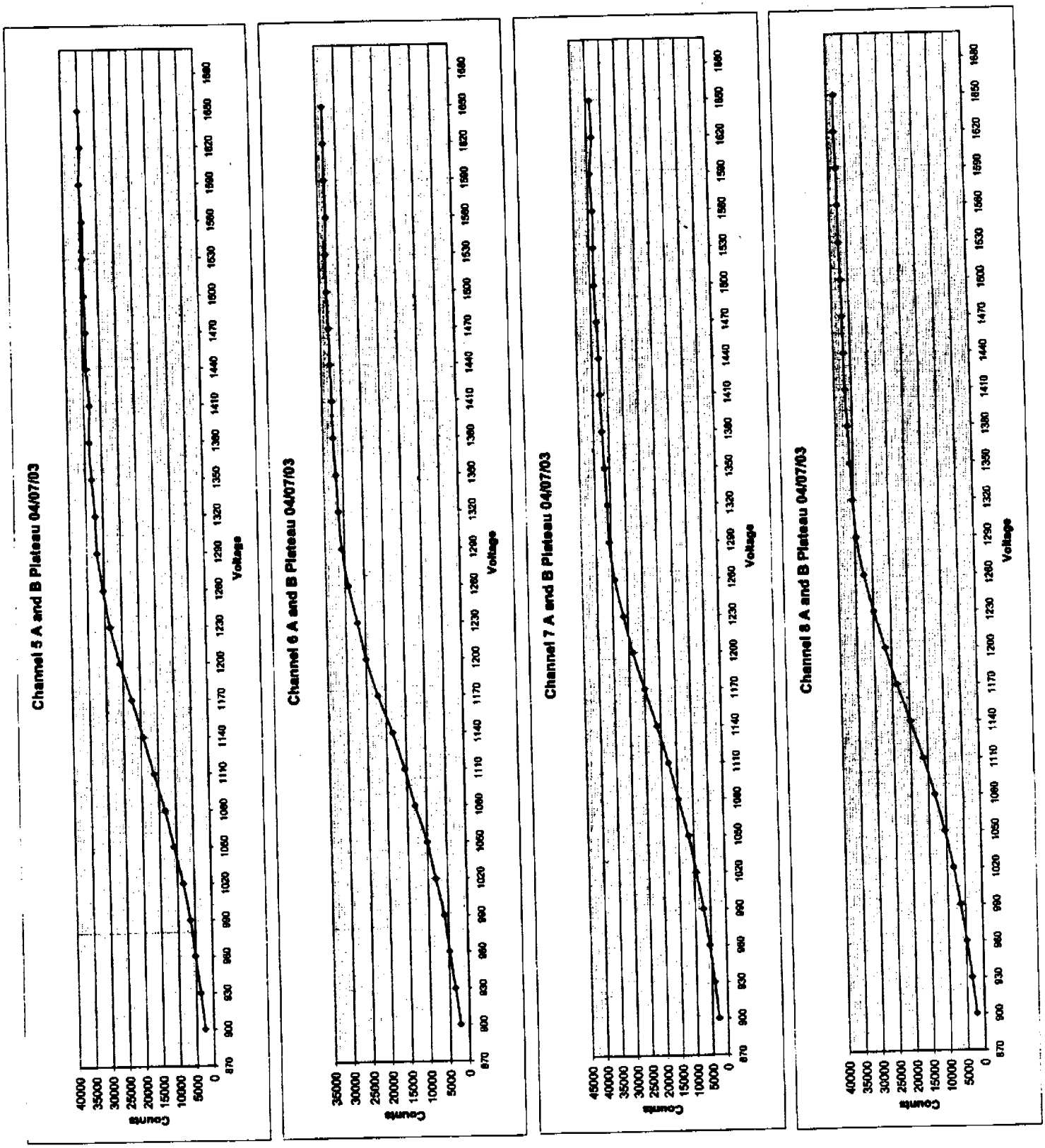
Detector ID	Sample ID	Beta	Count Time	DPM 4352.38 CPM	Sr90 Eff
D4	0.0025	54258	30.00	1808.600	0.41554
D4	0.0046	51421	30.00	1714.033	0.39382
D4	0.0083	51701	30.00	1723.367	0.39596
D4	0.0245	52498	30.00	1749.933	0.40206
D4	0.0554	51072	30.00	1702.400	0.39114
D4	0.0839	47894	30.00	1596.467	0.36680
D4	0.1196	47715	30.00	1590.500	0.36543
D4	0.1724	46410	30.00	1547.000	0.35544
D4	0.1879	45012	30.00	1500.400	0.34473
D4	0.2536	43506	30.00	1450.200	0.33320

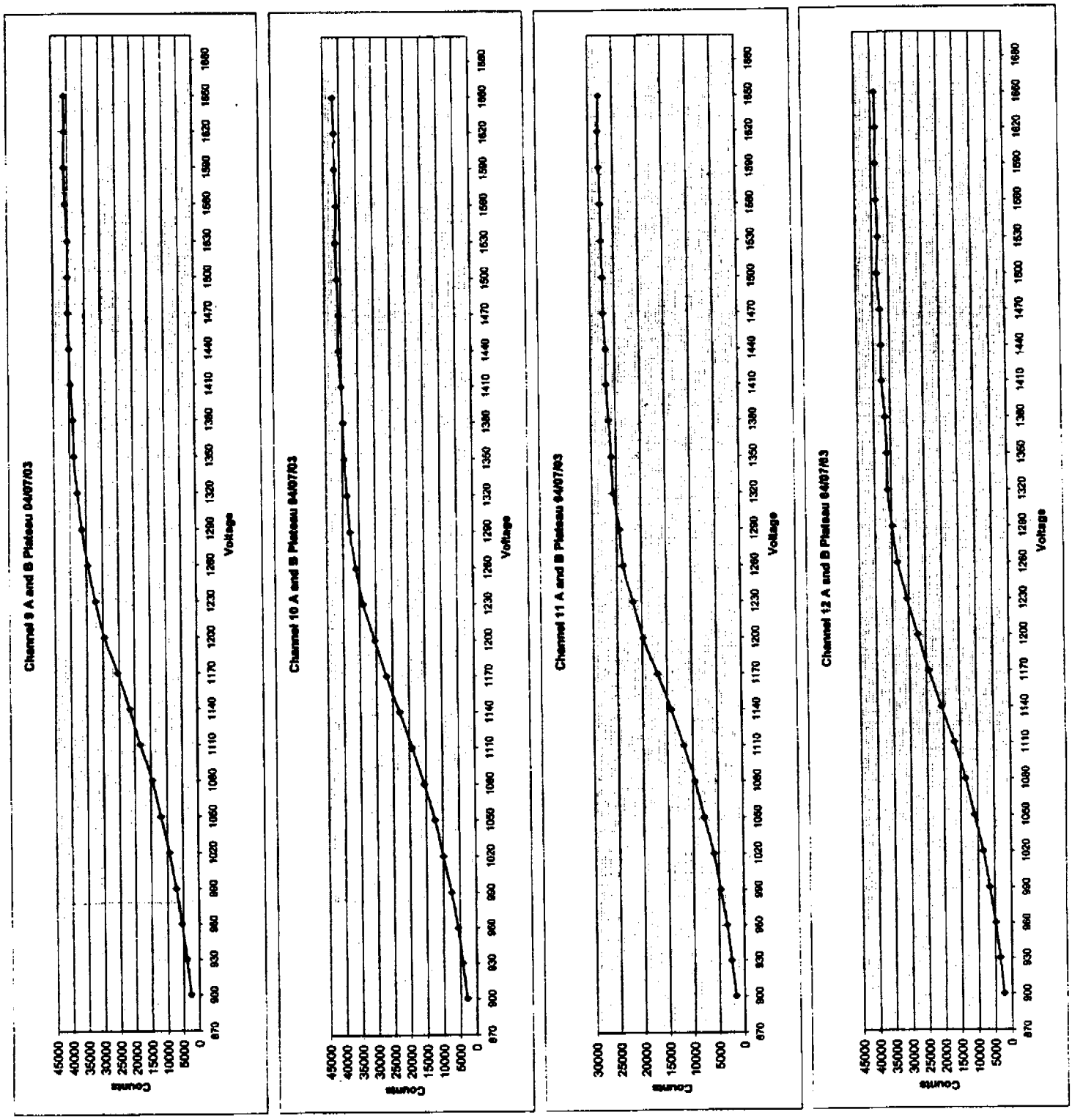


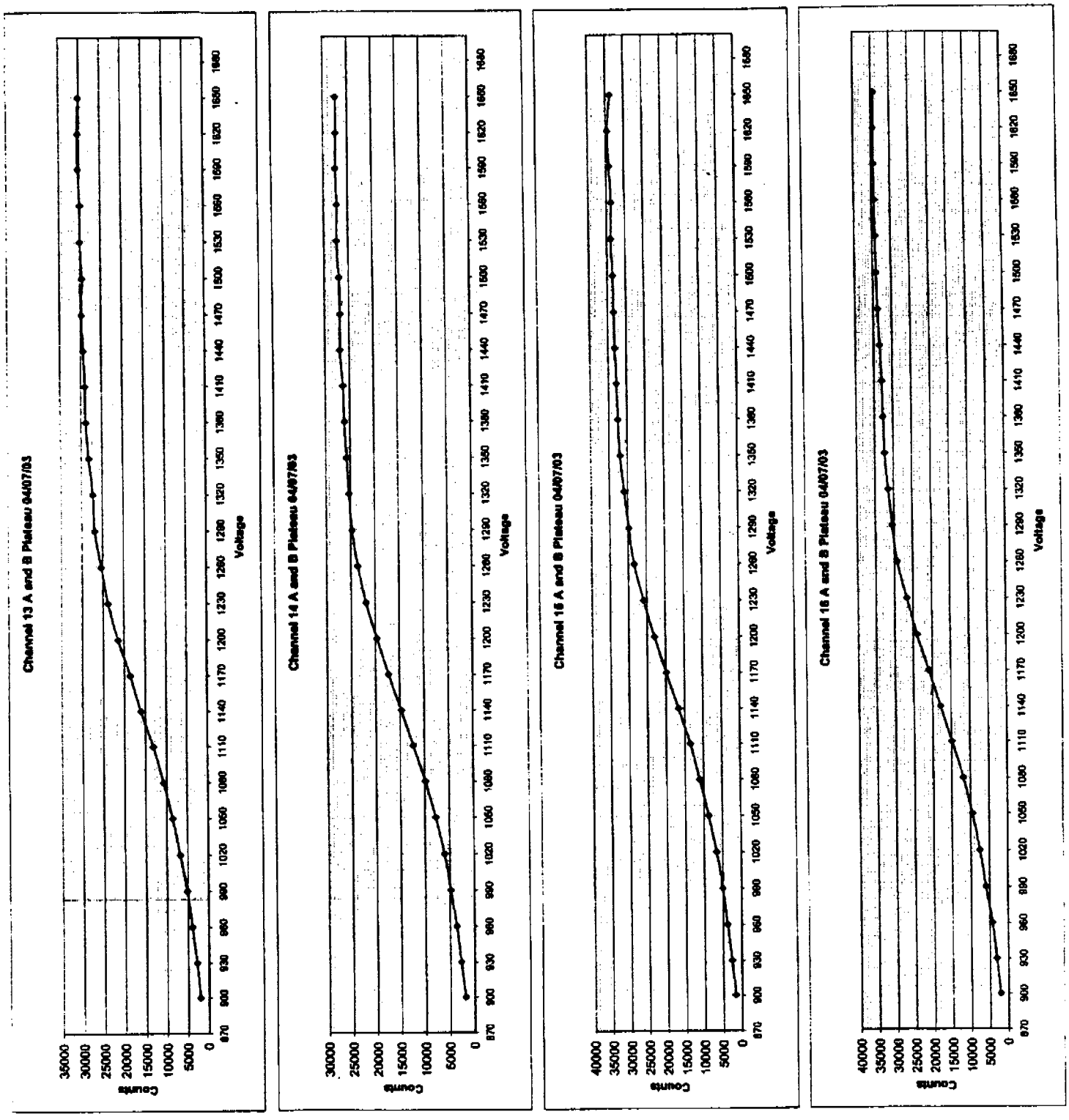
STL

Voltage Plateaus


Channel 1 A and B Plateau 04/07/03
Counts
Voltage
Channel 2 A and B Plateau 04/07/03
Counts
Voltage
Channel 3 A and B Plateau 04/07/03
Counts
Voltage
Channel 4 A and B Plateau 04/07/03
Counts
Voltage


Channel 5 A and B Plateau 04/07/03
Channel 6 A and B Plateau 04/07/03
Channel 7 A and B Plateau 04/07/03
Channel 8 A and B Plateau 04/07/03
Counts
Voltage


Channel 9 A and B Plateau 04/07/03
Channel 10 A and B Plateau 04/07/03
Channel 11 A and B Plateau 04/07/03
Channel 12 A and B Plateau 04/07/03
Counts
Voltage


Channel 13 A and B Plateau 04/07/03
Counts
Voltage
Channel 14 A and B Plateau 04/07/03
Counts
Voltage
Channel 15 A and B Plateau 04/07/03
Counts
Voltage
Channel 16 A and B Plateau 04/07/03
Counts
Voltage

PLATEAU GENERATION

GROSS COUNTS

CHANNEL	GROUP A	GROUP B	GROUP C	GROUP D
1	14	0	0	0
2	0	0	0	0
3	16	0	0	0
4	14	0	0	0
GUARD	6782	6862	7112	6883

START VOLTAGE	900.0	PRESET TIME	1.00
STOP VOLTAGE	1650.0	ELAPSED TIME	13.25
STEP VOLTAGE	30.0	GATING	YES
PRESENT VOLTAGE		MODE	Normal

ALT E: Begin a plateau count
ALT D: Abort a plateau early
ALT P: Print or Plot a stored or saved Plateau

Yellow GPC Plateaus 4/7/2003

Counting time: 1.00

Voltage	4/7/2003 Channel 1	4/7/2003 Channel 2	4/7/2003 Channel 3	4/7/2003 Channel 4	4/7/2003 Channel 5	4/7/2003 Channel 6	4/7/2003 Channel 7	4/7/2003 Channel 8	4/7/2003 Channel 9	4/7/2003 Channel 10	4/7/2003 Channel 11	4/7/2003 Channel 12	4/7/2003 Channel 13	4/7/2003 Channel 14	4/7/2003 Channel 15	4/7/2003 Channel 16
900	2740	3076	2687	3370	2514	2267	2851	2228	2704	2967	1750	2367	2037	1862	1786	2176
930	4111	4295	3897	4883	3673	3443	4056	3415	3874	4221	2533	3491	2834	2757	2695	3174
960	5786	6064	5055	6646	5053	4829	5455	4757	5463	5568	3425	4799	3948	3610	3756	4268
990	7463	7987	6749	8900	6451	5975	7231	6359	7182	7449	4624	6530	5148	4830	5035	5982
1020	9944	10362	8578	11303	8302	8045	9337	8158	9253	9944	5956	8336	6802	6075	6643	7492
1050	12653	12987	10729	14427	10798	10077	11680	10440	11943	12328	7780	10945	8505	7829	8646	9486
1080	15940	16390	13211	18097	13271	12996	14720	13203	14600	15554	9536	13579	10728	9884	11016	11848
1110	19828	19880	15883	21704	16300	15475	17692	16338	18263	19069	11790	16804	13103	12254	13456	14771
1140	23909	23988	18880	26119	19255	18402	21258	19834	21630	22815	14200	20533	16025	14668	16580	17835
1170	28369	27959	21728	29904	22443	22066	25035	23554	25332	26882	16895	24170	18528	17283	19828	20873
1200	32768	32359	24236	33972	25730	24949	28606	26803	29513	30389	19771	27461	21458	19641	22902	24065
1230	37266	36063	26525	36843	28441	27029	31410	29870	32163	33793	21720	30556	23790	21894	25842	26714
1260	40333	38863	28038	39471	30297	29143	34045	32558	34491	36000	23716	33265	25362	23516	28368	29234
1290	42713	40448	28986	40931	31905	30688	35871	34458	36303	37767	24371	34696	26699	24683	29786	30469
1320	44319	42370	29626	41529	32258	31370	35975	35291	37538	38581	25634	36050	27273	25277	30930	31416
1350	44952	42876	30060	42081	33043	31787	36571	35834	38647	39286	25917	36145	28227	25669	31962	32285
1380	46105	43181	30686	42332	33578	32384	37222	36357	38790	39648	26377	36587	28779	26099	32448	32658
1410	46302	43623	30585	43221	33240	32440	37541	36777	39446	40060	26820	37499	28964	26319	32738	32904
1440	46135	44024	30659	43271	34095	32717	37675	36990	39923	40788	26845	37561	29330	26893	33120	33351
1470	46773	44390	30971	43244	34046	32864	38121	37140	40147	40652	27327	37795	29706	26771	33300	33764
1500	46812	44474	30914	43650	34277	33228	38620	37168	40195	41078	27371	38592	29482	26939	33503	34023
1530	46932	44435	31279	43778	34414	33201	38588	37491	40023	41473	27541	38081	29941	27325	33908	34216
1560	46952	44738	31366	43451	34388	32943	38574	37565	40680	41123	27632	38504	29863	27224	33630	34321
1590	47095	44717	31637	43947	35050	33208	39114	37740	41110	41668	27846	38661	30303	27485	34157	34471
1620	47408	45434	31619	44148	34597	33253	38273	38058	40865	41536	28005	38510	30372	27404	34495	34501
1650	47255	45248	31567	44111	34975	33255	38610	37835	40936	41979	27760	38749	30123	27388	33776	34266

SEVERN TRENT STL

Discriminator Settings

#1 Channel	GROUP >	A	B	C	D
Discriminator Settings	Beta LL	0	0	0	0
	Beta UL	1150	1200	1225	1575
	Alpha LL	1151	1201	1226	1576
	Alpha UL	4095	4095	4095	4095
	Threshold	25	25	25	25
Automatic Sequence	Print Enable	YES	YES	YES	YES
	Save Enable	NO	NO	NO	NO
	Print	QUANTERA	QUANTERA	QUANTERA	QUANTERA
	Save	leebkg.dat	leebkg.dat	leebkg.dat	leebkg.dat
	Repeat	0	0	0	0
Detector Bias	Alpha	802.5			
	Beta	1440.0			

Count Mode Simultaneous

(ALT T to select Count Mode, CTL PgUp and CTL PgDn for other channels)

(ALT X to configure the Print & Save commands and the Autoexecute Batch Name)

#2 Channel	GROUP >	A	B	C	D
Discriminator Settings	Beta LL	0	0	0	0
	Beta UL	1107	1200	1450	1575
	Alpha LL	1108	1201	1451	1576
	Alpha UL	4095	4095	4095	4095
	Threshold	25	25	25	25
Automatic Sequence	Print Enable	YES	YES	YES	YES
	Save Enable	NO	NO	NO	NO
	Print	QUANTERA	QUANTERA	QUANTERA	QUANTERA
	Save	leebkg.dat	leebkg.dat	leebkg.dat	leebkg.dat
	Repeat	0	0	0	0
Detector Bias	Alpha	802.5			
	Beta	1440.0			

Count Mode Simultaneous

(ALT T to select Count Mode, CTL PgUp and CTL PgDn for other channels)

(ALT X to configure the Print & Save commands and the Autoexecute Batch Name)

#3 Channel	GROUP >	A	B	C	D
Discriminator Settings	Beta LL	0	0	0	0
	Beta UL	1350	1350	1275	1425
	Alpha LL	1356	1351	1276	1426
	Alpha UL	4095	4095	4095	4095
	Threshold	25	25	25	25
Automatic Sequence	Print Enable	YES	YES	YES	YES
	Save Enable	NO	NO	NO	NO
	Print	QUANTERA	QUANTERA	QUANTERA	QUANTERA
	Save	leebkg.dat	leebkg.dat	leebkg.dat	leebkg.dat
	Repeat	0	0	0	0
Detector Bias	Alpha	802.5			
	Beta	1440.0			

Count Mode Simultaneous

(ALT T to select Count Mode, CTL PgUp and CTL PgDn for other channels)
(ALT X to configure the Print & Save commands and the Autoexecute Batch Name)

#4 Channel	GROUP >	A	B	C	D
Discriminator Settings	Beta LL	0	0	0	0
	Beta UL	1250	835	1450	1435
	Alpha LL	1251	836	1451	1436
	Alpha UL	4095	4095	4095	4095
	Threshold	25	25	25	25
Automatic Sequence	Print Enable	YES	YES	YES	YES
	Save Enable	NO	NO	NO	NO
	Print	QUANTERA	QUANTERA	QUANTERA	QUANTERA
	Save	leebkg.dat	leebkg.dat	leebkg.dat	leebkg.dat
	Repeat	0	0	0	0
Detector Bias	Alpha	802.5			
	Beta	1440.0			

Count Mode Simultaneous

(ALT T to select Count Mode, CTL PgUp and CTL PgDn for other channels)
(ALT X to configure the Print & Save commands and the Autoexecute Batch Name)

SEVERN TRENT STL

Beta into Alpha Crosstalk

[TENNELEC LB4000] [PAGE 1]

10:28:30		I.D.	TIME	COUNTS α	COUNTS β	αEFF	βEFF	BKGα	BKGβ
GROUP A	1	e	0.38	18	18191	0.00	0.00	0.00	0.00
9:24:00	2	ROIA2	0.38	18	18298	0.00	0.00	0.00	0.00
1500.00	3	ROIA3	0.38	12	12695	0.00	0.00	0.00	0.00
	4	ROIA4	0.38	14	16250	0.00	0.00	0.00	0.00
GROUP B	1	ROIB1	0.38	13	14245	0.00	0.00	0.00	0.00
9:24:00	2	ROIB2	0.38	11	11896	0.00	0.00	0.00	0.00
1500.00	3	ROIB3	0.38	13	14912	0.00	0.00	0.00	0.00
	4	ROIB4	0.38	13	14236	0.00	0.00	0.00	0.00
GROUP C	1	ROIC1	0.44	14	16662	0.00	0.00	0.00	0.00
10:08:49	2	ROIC2	0.44	18	18247	0.00	0.00	0.00	0.00
1500.00	3	ROIC3	0.44	10	11321	0.00	0.00	0.00	0.00
	4	ROIC4	0.44	13	15911	0.00	0.00	0.00	0.00
GROUP D	1	ROID1	0.44	14	14451	0.00	0.00	0.00	0.00
10:08:49	2	ROID2	0.44	10	11868	0.00	0.00	0.00	0.00
1500.00	3	ROID3	0.44	13	14698	0.00	0.00	0.00	0.00
	4	ROID4	0.44	13	14874	0.00	0.00	0.00	0.00

SEVERN TRENT STL

BACKGROUNDS

Yellow – November 2003

[TENNELEC LB4000] [PAGE 1]

LBG-1103.TXT
11/20/03

12:27:58		I.D.	TIME	COUNTS α	COUNTS β	αEFF	βEFF	BKGα	BKGβ
GROUP A	1	LONG BKG 11/20/03	1000.0	29	1024	0.00	0.00	0.03	1.02
18:35:04	2	LONG BKG	1000.0	37	1049	0.00	0.00	0.04	1.05
1.00	3	LONG BKG	1000.0	51	1122	0.00	0.00	0.05	1.12
	4	LONG BKG	1000.0	61	1111	0.00	0.00	0.06	1.11
GROUP B	1	LONG BKG	1000.0	51	1176	0.00	0.00	0.05	1.18
18:35:04	2	LONG BKG	1000.0	60	1012	0.00	0.00	0.06	1.01
1.00	3	LONG BKG	1000.0	44	1141	0.00	0.00	0.04	1.14
	4	LONG BKG	1000.0	48	1005	0.00	0.00	0.05	1.00
GROUP C	1	LONG BKG	1000.0	44	976	0.00	0.00	0.04	0.98
18:35:04	2	LONG BKG	1000.0	34	965	0.00	0.00	0.03	0.97
1.00	3	LONG BKG	1000.0	46	893	0.00	0.00	0.05	0.89
	4	LONG BKG	1000.0	38	1005	0.00	0.00	0.04	1.00
GROUP D	1	LONG BKG	1000.0	36	859	0.00	0.00	0.04	0.86
18:35:04	2	LONG BKG	1000.0	72	975	0.00	0.00	0.07	0.98
1.00	3	LONG BKG	1000.0	35	723	0.00	0.00	0.04	0.72
	4	LONG BKG	1000.0	51	912	0.00	0.00	0.05	0.91

Long Backgrounds 04/07/2003

[TENNELEC LB4000] [PAGE 1]

18:09:44		I.D.	TIME	COUNTS α	COUNTS β	αEFF	βEFF	BKGα	BKGβ
GROUP A	1	BA1	1000.0	89	1219	0.00	0.00	0.00	0.00
22:41:27	2	BA2	1000.0	39	1081	0.00	0.00	0.00	0.00
1000.00	3	BA3	1000.0	35	1187	0.00	0.00	0.00	0.00
	4	BA4	1000.0	61	1123	0.00	0.00	0.00	0.00
GROUP B	1	BB1	1000.0	52	1159	0.00	0.00	0.00	0.00
22:41:27	2	BB2	1000.0	44	1160	0.00	0.00	0.00	0.00
1000.00	3	BB3	1000.0	54	1294	0.00	0.00	0.00	0.00
	4	BB4	1000.0	43	1038	0.00	0.00	0.00	0.00
GROUP C	1	BC1	1000.0	30	933	0.00	0.00	0.00	0.00
22:41:27	2	BC2	1000.0	34	924	0.00	0.00	0.00	0.00
1000.00	3	BC3	1000.0	44	1090	0.00	0.00	0.00	0.00
	4	BC4	1000.0	31	1056	0.00	0.00	0.00	0.00
GROUP D	1	BD1	1000.0	45	912	0.00	0.00	0.00	0.00
22:41:27	2	BD2	1000.0	44	1136	0.00	0.00	0.00	0.00
1000.00	3	BD3	1000.0	54	917	0.00	0.00	0.00	0.00
	4	BD4	1000.0	61	980	0.00	0.00	0.00	0.00

Group C channel 2 COUNT TERMINATED

SEVERN TRENT **STL**

Yellow – January 2004

BACKGROUNDS

[TENNELEC LB4000] [PAGE 1]

9:36:30		I.D.	TIME	COUNTS α	COUNTS β	αEFF	βEFF	BKGα	BKGβ
GROUP A	1	LBKG	1000.0	47	1081	0.00	0.00	0.05	1.08
12:51:06	2	LBKG	1000.0	51	1008	0.00	0.00	0.05	1.01
1000.00	3	LBKG	1000.0	46	1278	0.00	0.00	0.05	1.28
	4	LBKG	1000.0	66	1107	0.00	0.00	0.07	1.11
GROUP B	1	LBKG	1000.0	58	1164	0.00	0.00	0.06	1.16
12:51:06	2	LBKG	1000.0	56	1123	0.00	0.00	0.06	1.12
1000.00	3	LBKG	1000.0	51	1251	0.00	0.00	0.05	1.25
	4	LBKG	1000.0	40	1004	0.00	0.00	0.04	1.00
GROUP C	1	LBKG	1000.0	50	941	0.00	0.00	0.05	0.94
12:51:06	2	LBKG	1000.0	30	890	0.00	0.00	0.03	0.89
1000.00	3	LBKG	1000.0	44	945	0.00	0.00	0.04	0.94
	4	LBKG	1000.0	29	999	0.00	0.00	0.03	1.00
GROUP D	1	LBKG	1000.0	32	1102	0.00	0.00	0.03	1.10
12:51:06	2	LBKG	1000.0	55	1094	0.00	0.00	0.06	1.06
1000.00	3	LBKG	1000.0	57	820	0.00	0.00	0.06	0.82
	4	LBKG	1000.0	58	883	0.00	0.00	0.06	0.88

STL

Backgrounds

Yellow – February 2004

[TENNELEC LB4000] [PAGE 1]

8:25:23		I.D.	TIME	COUNTS α	COUNTS β	αEFF	βEFF	BKGα	BKGβ
GROUP A	1	BKG	1000.0	57	999	0.00	0.00	0.06	1.00
11:01:47	2	BKG	1000.0	64	1041	0.00	0.00	0.06	1.04
1000.00	3	BKG	1000.0	55	1157	0.00	0.00	0.06	1.16
	4	BKG	1000.0	48	1043	0.00	0.00	0.05	1.04
GROUP B	1	BKG	1000.0	55	1113	0.00	0.00	0.06	1.11
11:01:47	2	BKG	1000.0	64	1036	0.00	0.00	0.06	1.04
1000.00	3	BKG	1000.0	43	1194	0.00	0.00	0.04	1.19
	4	BKG	1000.0	43	991	0.00	0.00	0.04	0.99
GROUP C	1	BKG	1000.0	38	911	0.00	0.00	0.04	0.91
11:01:47	2	BKG	1000.0	35	889	0.00	0.00	0.04	0.89
1000.00	3	BKG	1000.0	43	909	0.00	0.00	0.04	0.91
	4	BKG	1000.0	65	1003	0.00	0.00	0.07	1.00
GROUP D	1	BKG	1000.0	38	835	0.00	0.00	0.04	0.84
11:01:47	2	BKG	1000.0	49	965	0.00	0.00	0.05	0.97
1000.00	3	BKG	1000.0	46	732	0.00	0.00	0.05	0.73
	4	BKG	1000.0	49	883	0.00	0.00	0.05	0.88

Group C channel 2 COUNT TERMINATED

SEVERN TRENT STL

Calibration for LB4100

Red

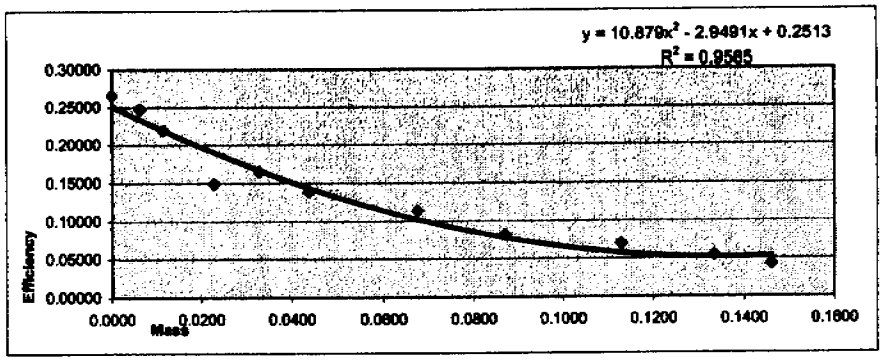
Alpha Th-230

SEVERN TRENT STL

Detector Efficiency Curves

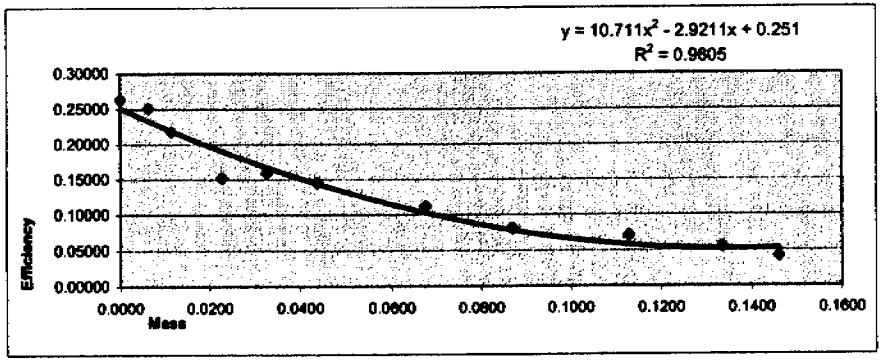
Alpha Attenuation Red A1 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
A1	0.0000	10.59	12361	1167.233	0.26568
A1	0.0063	11.37	12361	1087.159	0.24745
A1	0.0115	12.84	12358	962.461	0.21907
A1	0.0228	18.90	12353	653.596	0.14877
A1	0.0328	17.10	12367	723.216	0.16461
A1	0.0437	20.25	12355	610.123	0.13887
A1	0.0675	24.82	12352	497.663	0.11328
A1	0.0870	34.82	12347	354.595	0.08071
A1	0.1129	40.85	12348	302.277	0.06880
A1	0.1335	52.41	12348	235.604	0.05363
A1	0.1460	60.00	10918	181.967	0.04142



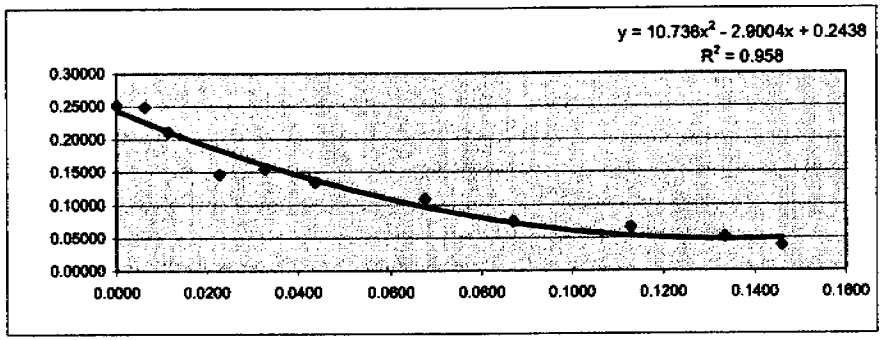
Alpha Attenuation Red A2 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
A2	0.0000	10.89	12362	1156.408	0.26321
A2	0.0063	11.22	12364	1101.961	0.25082
A2	0.0115	12.95	12356	954.131	0.21717
A2	0.0228	18.51	12353	667.369	0.15190
A2	0.0328	17.60	12357	702.102	0.15981
A2	0.0437	19.43	12363	636.284	0.14483
A2	0.0675	25.13	12358	491.763	0.11193
A2	0.0870	34.92	12347	353.580	0.08048
A2	0.1129	39.67	12350	311.318	0.07086
A2	0.1335	51.51	12349	239.740	0.05457
A2	0.1460	60.00	10849	180.817	0.04116



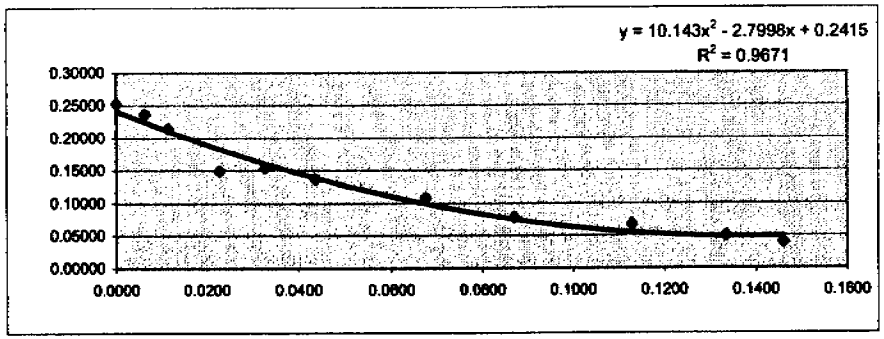
Alpha Attenuation Red A3 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
A3	0.0000	11.20	12366	1104.107	0.25131
A3	0.0063	11.33	12358	1090.733	0.24827
A3	0.0115	13.31	12355	928.249	0.21128
A3	0.0228	19.29	12355	640.487	0.14578
A3	0.0328	18.23	12359	677.948	0.15431
A3	0.0437	21.00	12362	588.667	0.13399
A3	0.0675	25.82	12353	478.428	0.10890
A3	0.0870	37.79	12350	326.806	0.07439
A3	0.1129	42.76	12347	288.751	0.06572
A3	0.1335	55.28	12347	223.354	0.05084
A3	0.1460	60.00	9892	164.867	0.03753



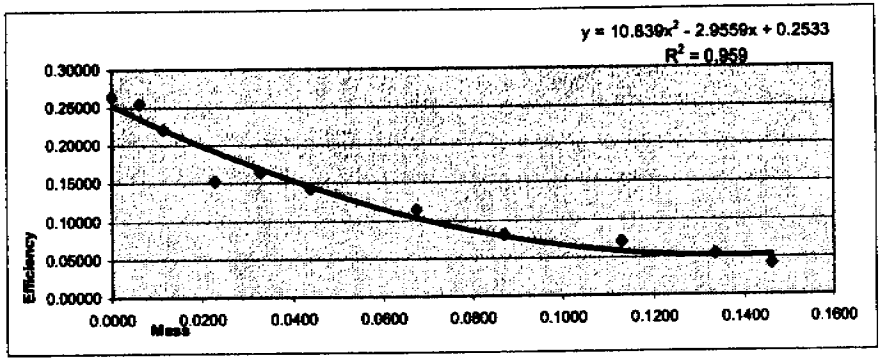
Alpha Attenuation Red A4 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
A4	0.0000	11.15	12357	1108.251	0.25225
A4	0.0063	11.89	12357	1039.277	0.23655
A4	0.0115	13.10	12360	943.511	0.21476
A4	0.0228	18.90	12347	653.280	0.14870
A4	0.0328	18.26	12353	676.506	0.15398
A4	0.0437	20.55	12352	601.071	0.13681
A4	0.0675	26.07	12351	473.763	0.10784
A4	0.0870	36.17	12347	341.360	0.07770
A4	0.1129	41.90	12346	294.654	0.06707
A4	0.1335	56.79	12346	217.397	0.04948
A4	0.1460	60.00	10286	171.433	0.03902



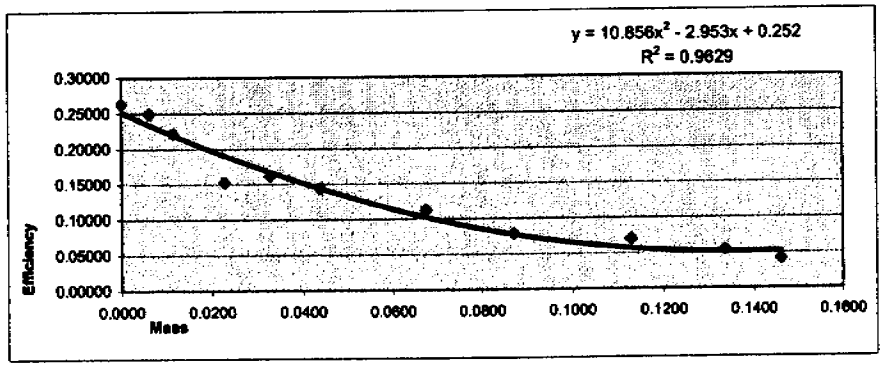
Alpha Attenuation Red B1 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
B1	0.0000	10.66	12370	1160.413	0.26413
B1	0.0063	11.07	12368	1117.254	0.25430
B1	0.0115	12.76	12355	968.260	0.22039
B1	0.0228	18.52	12355	667.117	0.15185
B1	0.0328	17.22	12347	717.015	0.16320
B1	0.0437	19.74	12355	625.887	0.14246
B1	0.0675	24.58	12351	502.482	0.11437
B1	0.0870	34.88	12347	353.985	0.08057
B1	0.1129	39.74	12346	310.669	0.07071
B1	0.1335	51.80	12349	238.398	0.05426
B1	0.1460	60.00	10868	181.133	0.04123



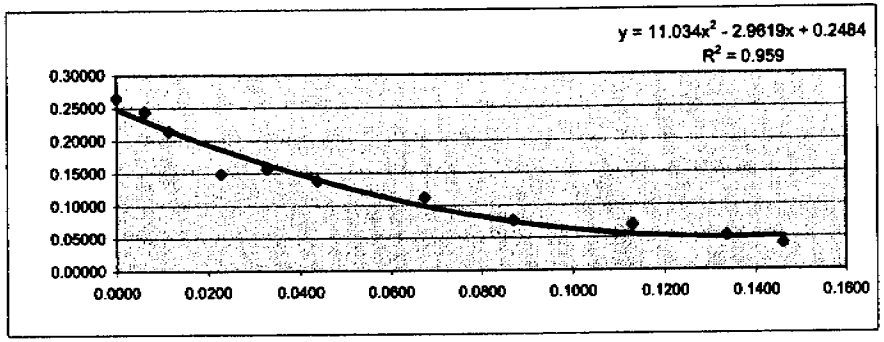
Alpha Attenuation Red B2 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
B2	0.0000	10.70	12368	1155.888	0.26310
B2	0.0063	11.28	12353	1095.124	0.24927
B2	0.0115	12.70	12357	972.992	0.22147
B2	0.0228	18.48	12351	668.344	0.15212
B2	0.0328	17.41	12348	709.248	0.16143
B2	0.0437	19.65	12348	628.397	0.14303
B2	0.0675	25.00	12349	493.960	0.11243
B2	0.0870	35.76	12346	345.246	0.07858
B2	0.1129	40.26	12350	306.756	0.06982
B2	0.1335	52.15	12347	236.759	0.05389
B2	0.1460	60.00	10797	179.950	0.04096



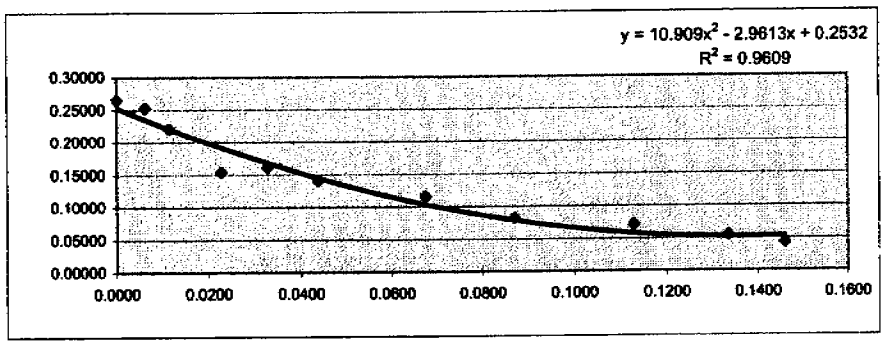
Alpha Attenuation Red B3 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
B3	0.0000	10.63	12359	1162.653	0.26464
B3	0.0063	11.53	12350	1071.119	0.24380
B3	0.0115	13.11	12353	942.258	0.21447
B3	0.0228	18.93	12348	652.192	0.14845
B3	0.0328	17.97	12349	687.201	0.15642
B3	0.0437	20.44	12355	604.452	0.13758
B3	0.0675	25.14	12352	491.329	0.11183
B3	0.0870	36.97	12348	334.001	0.07602
B3	0.1129	41.10	12350	300.487	0.06840
B3	0.1335	54.62	12345	226.016	0.05144
B3	0.1460	60.00	10398	173.300	0.03945



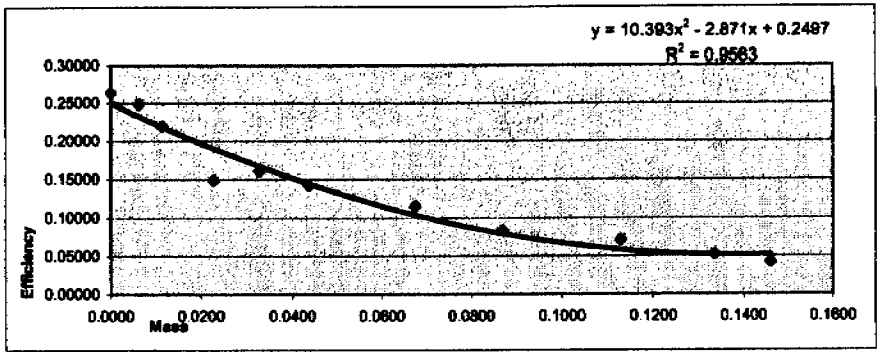
Alpha Attenuation Red B4 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
B4	0.0000	10.63	12366	1163.311	0.26479
B4	0.0063	11.13	12363	1110.782	0.25283
B4	0.0115	12.74	12350	969.388	0.22065
B4	0.0228	18.30	12351	674.918	0.15362
B4	0.0328	17.46	12359	707.847	0.16112
B4	0.0437	19.97	12353	618.578	0.14080
B4	0.0675	24.40	12350	506.148	0.11521
B4	0.0870	34.65	12349	356.392	0.08112
B4	0.1129	39.58	12346	311.925	0.07100
B4	0.1335	52.07	12347	237.123	0.05397
B4	0.1460	60.00	11071	184.517	0.04200



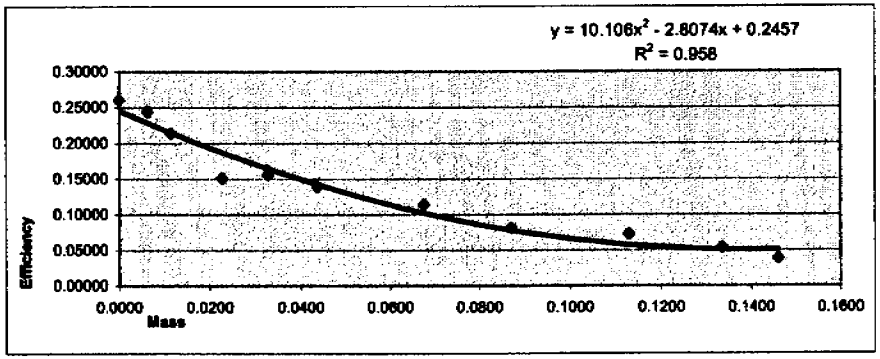
Alpha Attenuation Red C1 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
C1	0.0000	10.68	12356	1156.929	0.26333
C1	0.0063	11.33	12354	1090.380	0.24819
C1	0.0115	12.84	12359	962.539	0.21909
C1	0.0228	18.96	12350	651.371	0.14826
C1	0.0328	17.47	12356	707.270	0.16098
C1	0.0437	19.77	12345	624.431	0.14213
C1	0.0675	24.49	12352	504.369	0.11480
C1	0.0870	33.89	12347	364.326	0.08293
C1	0.1129	39.76	12347	310.538	0.07068
C1	0.1335	54.09	12345	228.231	0.05195
C1	0.1460	60.00	11011	183.517	0.04177



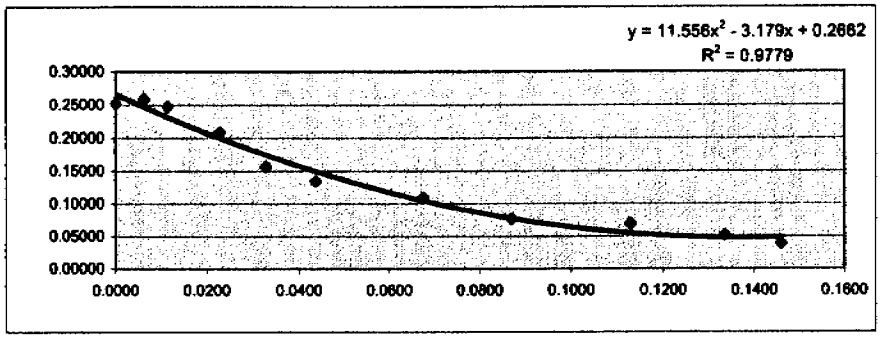
Alpha Attenuation Red C2 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
C2	0.0000	10.80	12357	1144.167	0.26043
C2	0.0063	11.53	12359	1071.699	0.24398
C2	0.0115	13.15	12355	939.544	0.21385
C2	0.0228	18.66	12352	661.951	0.15067
C2	0.0328	18.07	12347	683.287	0.15553
C2	0.0437	20.26	12348	609.477	0.13873
C2	0.0675	24.58	12350	502.441	0.11436
C2	0.0870	34.77	12347	355.105	0.08083
C2	0.1129	38.77	12347	318.468	0.07249
C2	0.1335	52.55	12346	234.938	0.05348
C2	0.1460	60.00	10088	168.133	0.03827



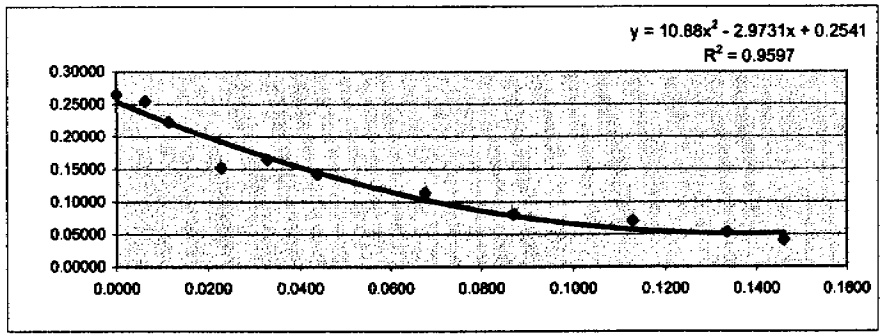
Alpha Attenuation Red C3 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
C3	0.0000	11.16	12358	1107.348	0.25205
C3	0.0063	10.88	12358	1135.846	0.25853
C3	0.0115	11.38	12359	1086.028	0.24720
C3	0.0228	13.47	12353	917.075	0.20874
C3	0.0328	17.98	12351	686.930	0.15635
C3	0.0437	21.01	12348	587.720	0.13377
C3	0.0675	25.97	12349	475.510	0.10823
C3	0.0870	36.70	12345	336.376	0.07656
C3	0.1129	41.05	12348	300.804	0.06847
C3	0.1335	54.55	12347	226.343	0.05152
C3	0.1460	60.00	10097	168.283	0.03830



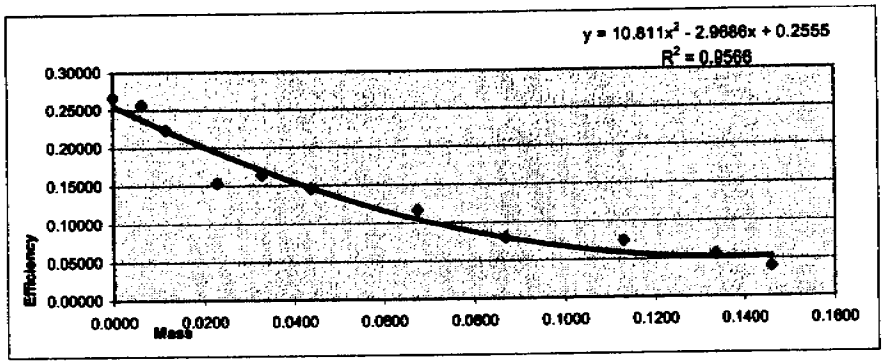
Alpha Attenuation Red C4 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
C4	0.0000	10.64	12365	1162.124	0.26452
C4	0.0063	11.06	12362	1117.722	0.25441
C4	0.0115	12.65	12348	976.126	0.22218
C4	0.0228	18.51	12349	667.153	0.15185
C4	0.0328	17.10	12350	722.222	0.16439
C4	0.0437	19.81	12354	623.624	0.14195
C4	0.0675	24.77	12352	498.668	0.11350
C4	0.0870	34.98	12352	353.116	0.08037
C4	0.1129	39.81	12346	310.123	0.07059
C4	0.1335	52.96	12345	233.100	0.05306
C4	0.1460	60.00	10662	177.700	0.04045



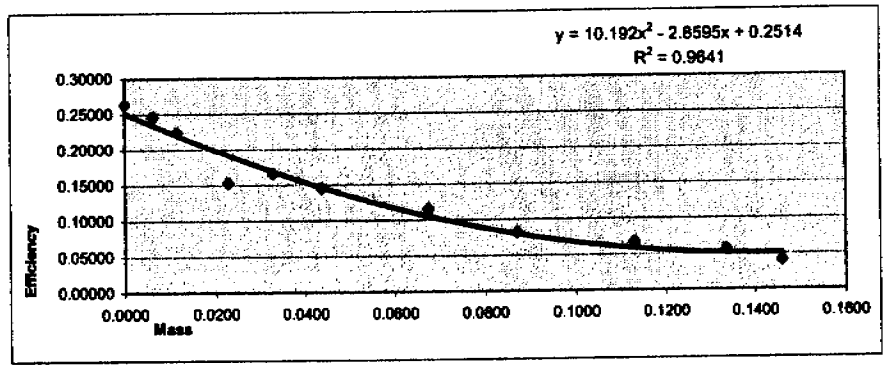
Alpha Attenuation Red D1 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
D1	0.0000	10.55	12349	1170.521	0.26643
D1	0.0063	10.97	12354	1126.162	0.25633
D1	0.0115	12.57	12350	982.498	0.22363
D1	0.0228	18.39	12348	671.452	0.15283
D1	0.0328	17.24	12360	716.937	0.16319
D1	0.0437	19.34	12355	638.831	0.14541
D1	0.0675	24.16	12351	511.217	0.11636
D1	0.0870	35.73	12349	345.620	0.07867
D1	0.1129	38.22	12348	323.077	0.07354
D1	0.1335	50.74	12345	243.299	0.05538
D1	0.1460	60.00	10373	172.883	0.03935



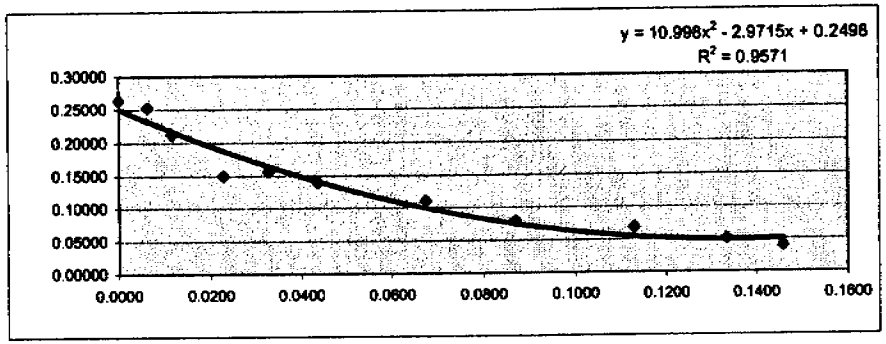
Alpha Attenuation Red D2 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
D2	0.0000	10.70	12376	1156.636	0.26327
D2	0.0063	11.45	12373	1080.611	0.24596
D2	0.0115	12.57	12350	982.498	0.22363
D2	0.0228	18.43	12348	669.995	0.15250
D2	0.0328	16.95	12353	728.791	0.16588
D2	0.0437	19.42	12350	635.942	0.14475
D2	0.0675	24.31	12351	508.063	0.11564
D2	0.0870	34.29	12348	360.105	0.08196
D2	0.1129	41.64	12346	296.494	0.06749
D2	0.1335	50.53	12347	244.350	0.05562
D2	0.1460	60.00	10639	177.317	0.04036



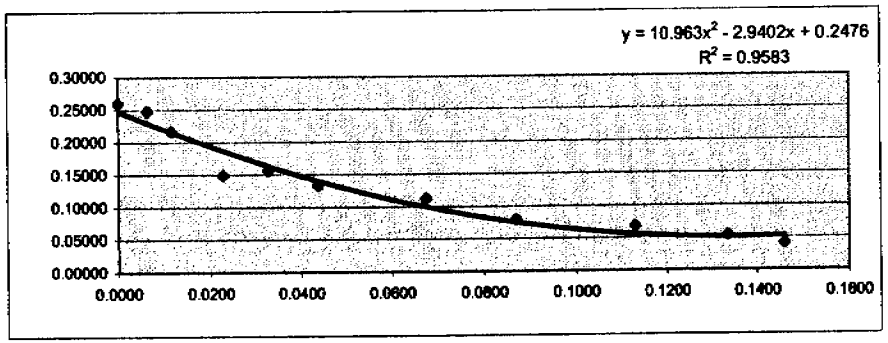
Alpha Attenuation Red D3 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
D3	0.0000	10.68	12360	1157.303	0.26342
D3	0.0063	11.16	12357	1107.258	0.25203
D3	0.0115	13.24	12350	932.779	0.21231
D3	0.0228	18.81	12349	656.512	0.14943
D3	0.0328	18.04	12348	684.479	0.15580
D3	0.0437	20.16	12350	612.599	0.13944
D3	0.0675	25.38	12349	486.584	0.11075
D3	0.0870	35.66	12347	346.242	0.07881
D3	0.1129	41.24	12349	299.442	0.06816
D3	0.1335	56.34	12347	219.152	0.04988
D3	0.1460	60.00	10309	171.817	0.03911



Alpha Attenuation Red D4 4/7/2004

Detector ID	Sample Wt	Count Time	Alpha	DPM 4393.4 CPM	Th230 Eff
D4	0.0000	10.85	12355	1138.710	0.25919
D4	0.0063	11.37	12360	1087.071	0.24743
D4	0.0115	12.98	12350	951.464	0.21657
D4	0.0228	18.92	12354	652.960	0.14862
D4	0.0328	18.02	12352	685.461	0.15602
D4	0.0437	21.08	12359	586.290	0.13345
D4	0.0675	24.96	12350	494.792	0.11262
D4	0.0870	35.45	12346	348.265	0.07927
D4	0.1129	41.61	12348	296.708	0.06753
D4	0.1335	53.05	12345	232.705	0.05297
D4	0.1460	60.00	10576	176.267	0.04012

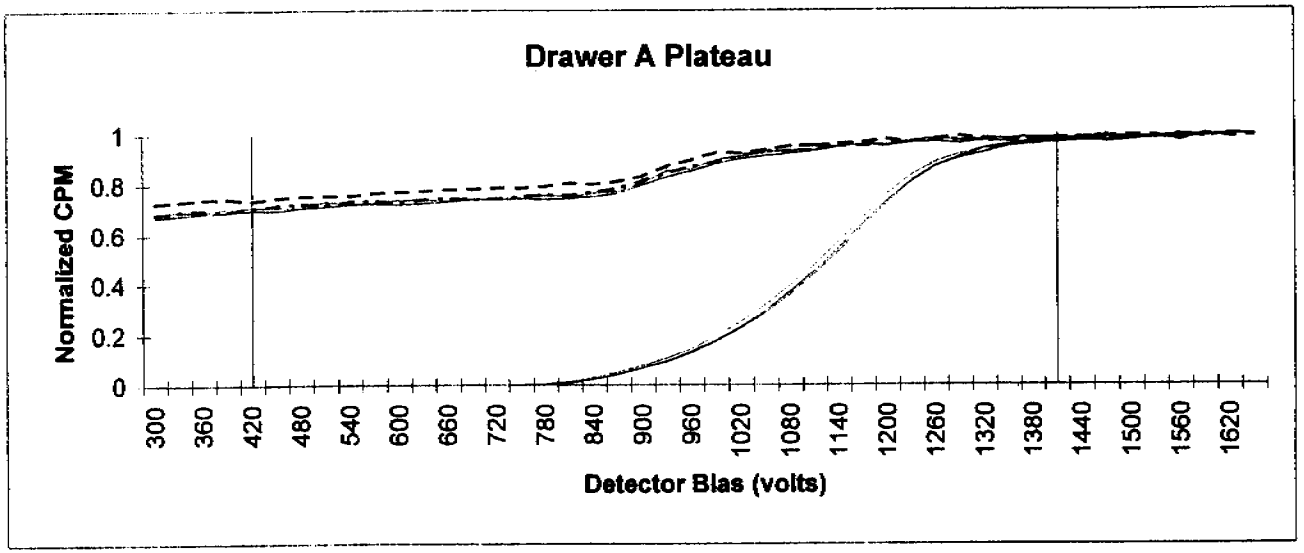


SEVERN TRENT STL

Voltage Plateaus

Unit Type: LB4100/W
Date Performed: 3/25/04 11:59
FileName: PLAT000
Batch ID: RED PLATEAUS 03/25/04 IV

Unit Id: Red
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

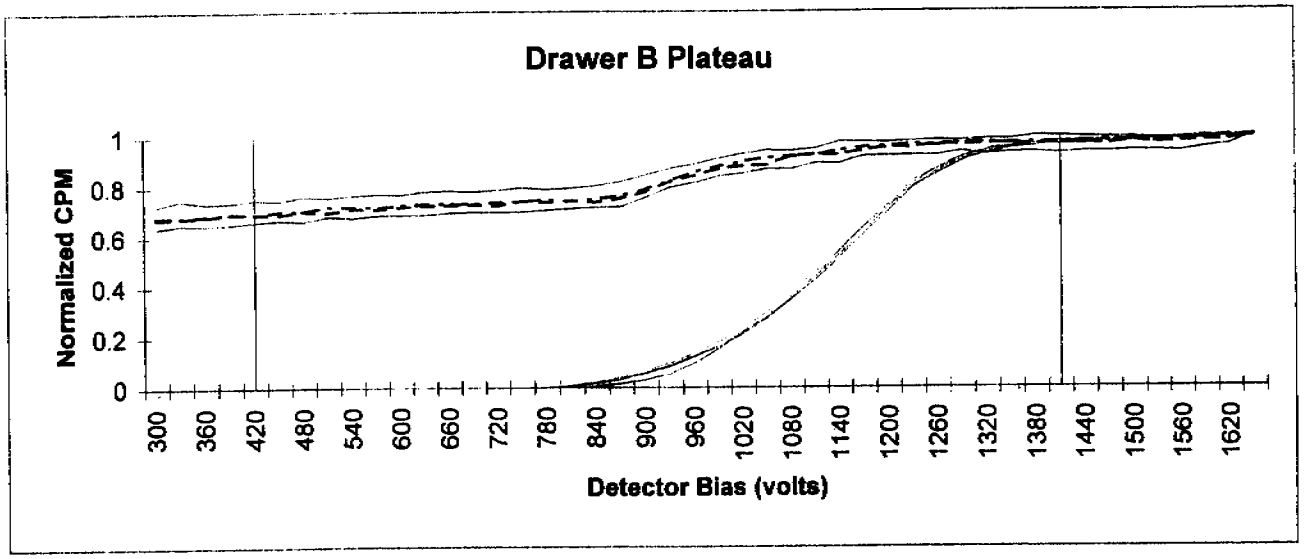
Optimum alpha only operating voltage: 420

	A1	A2	A3	A4
Beta slope at beta voltage	2.02%	2.37%	2.37%	1.15%
Alpha slope at beta voltage	0.88%	1.01%	0.57%	0.87%
Alpha slope at alpha voltage	1.70%	1.39%	2.26%	3.25%

Printed 3/26/2004 12:59 PM

Unit Type: LB4100/W
Date Performed: 3/25/04 11:59
FileName: PLAT000
Batch ID: RED PLATEAUS 03/25/04 IV

Unit Id: Red
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

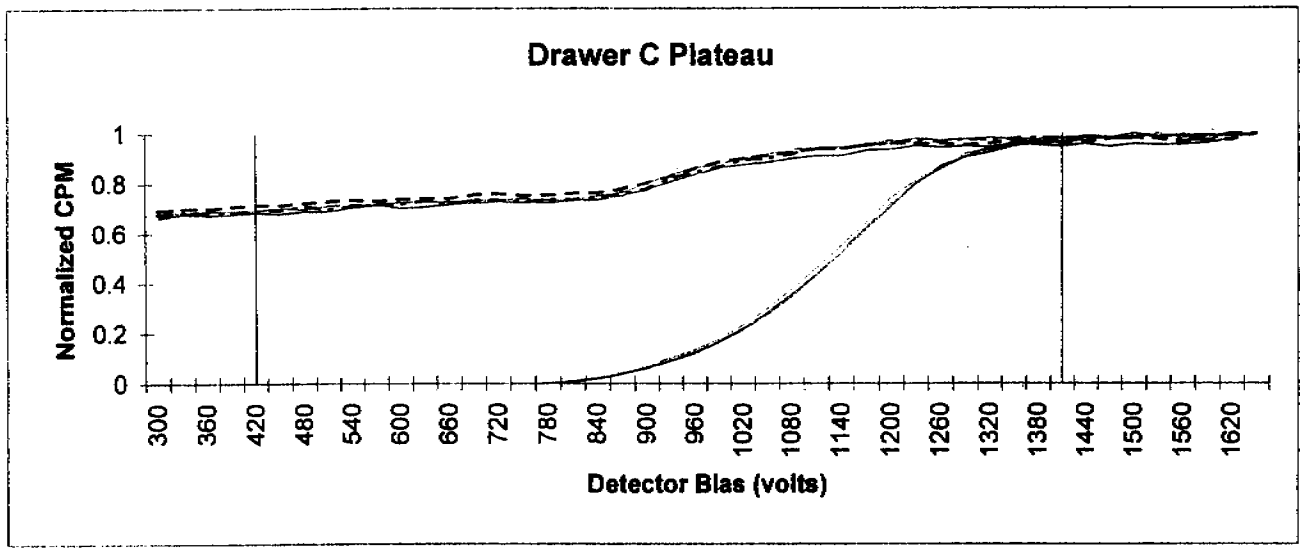
Optimum alpha only operating voltage: 420

	B1	B2	B3	B4
Beta slope at beta voltage	2.01%	2.51%	3.24%	1.41%
Alpha slope at beta voltage	0.31%	-0.08%	0.14%	0.96%
Alpha slope at alpha voltage	2.73%	2.06%	2.42%	2.08%

Printed 3/26/2004 12:59 PM

Unit Type: LB4100/W
Date Performed: 3/25/04 11:59
FileName: PLAT000
Batch ID: RED PLATEAUS 03/25/04 IV

Unit Id: Red
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

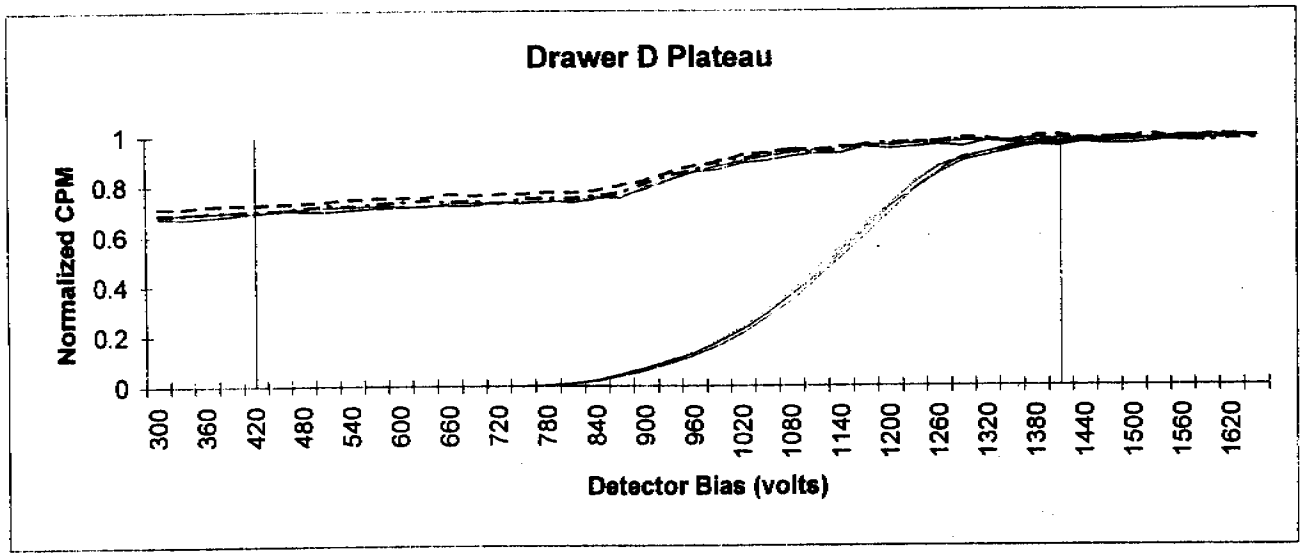
Optimum alpha only operating voltage: 420

	C1	C2	C3	C4
Beta slope at beta voltage	1.87%	3.12%	2.82%	2.97%
Alpha slope at beta voltage	0.82%	0.39%	-0.79%	0.31%
Alpha slope at alpha voltage	1.36%	2.31%	1.73%	2.98%

Printed 3/26/2004 1:00 PM

Unit Type: LB4100/W
Date Performed: 3/25/04 11:59
FileName: PLAT000
Batch ID: RED PLATEAUS 03/25/04 IV

Unit Id: Red
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

Optimum alpha only operating voltage: 420

	D1	D2	D3	D4
Beta slope at beta voltage	2.60%	2.22%	2.90%	2.29%
Alpha slope at beta voltage	0.31%	0.50%	-0.50%	1.10%
Alpha slope at alpha voltage	1.96%	0.99%	3.11%	2.04%

Printed 3/26/2004 1:00 PM

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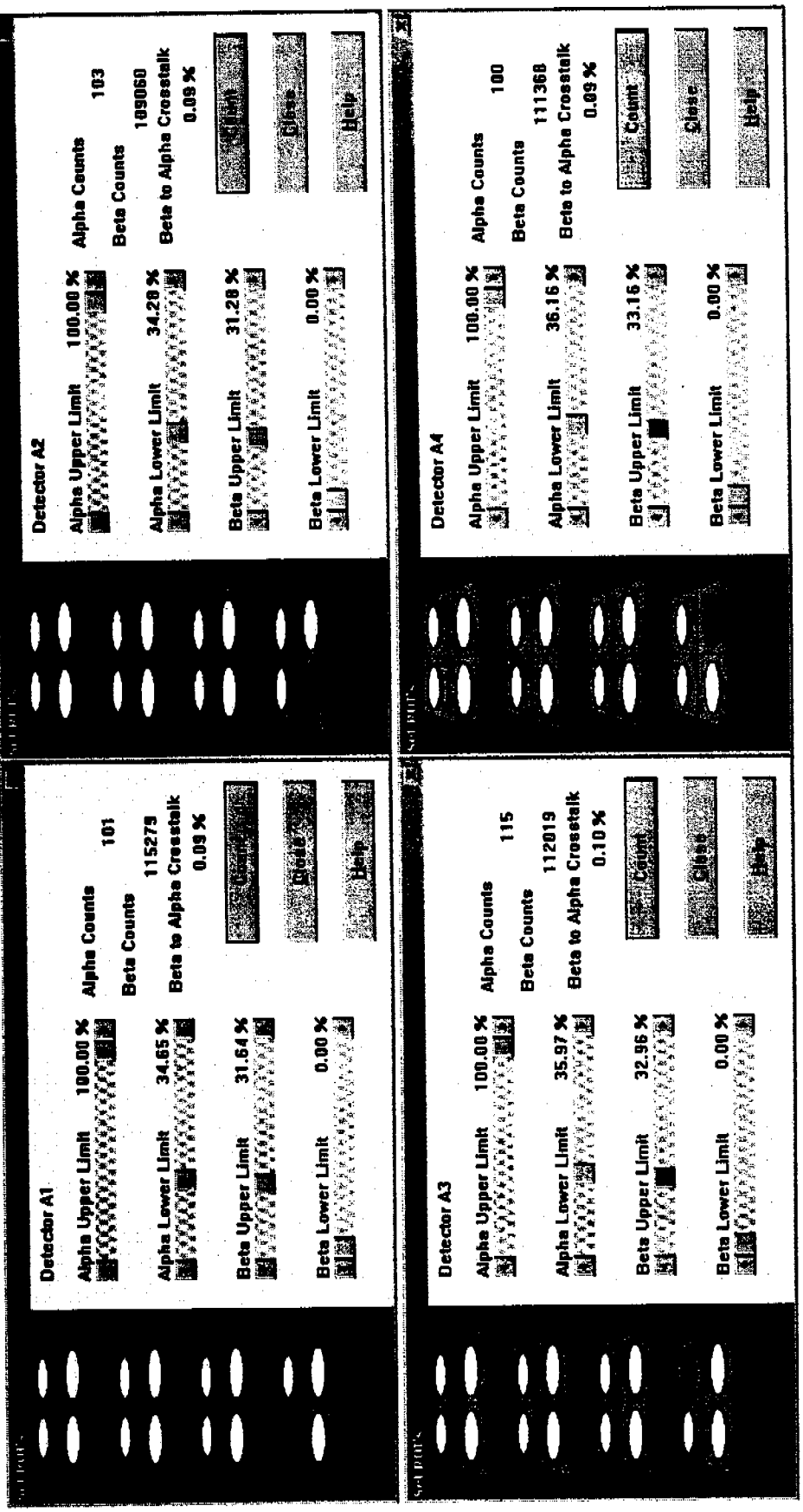
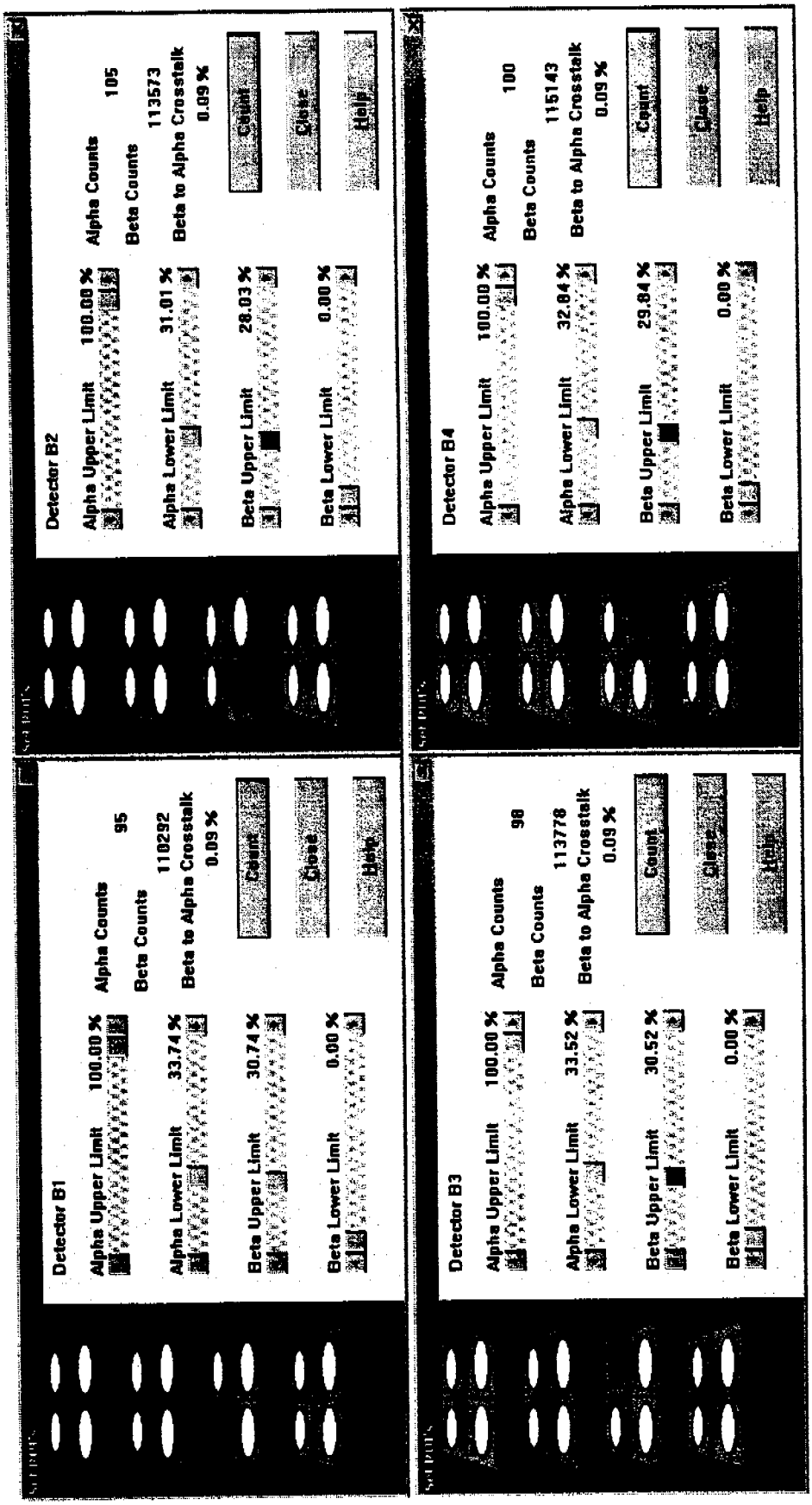
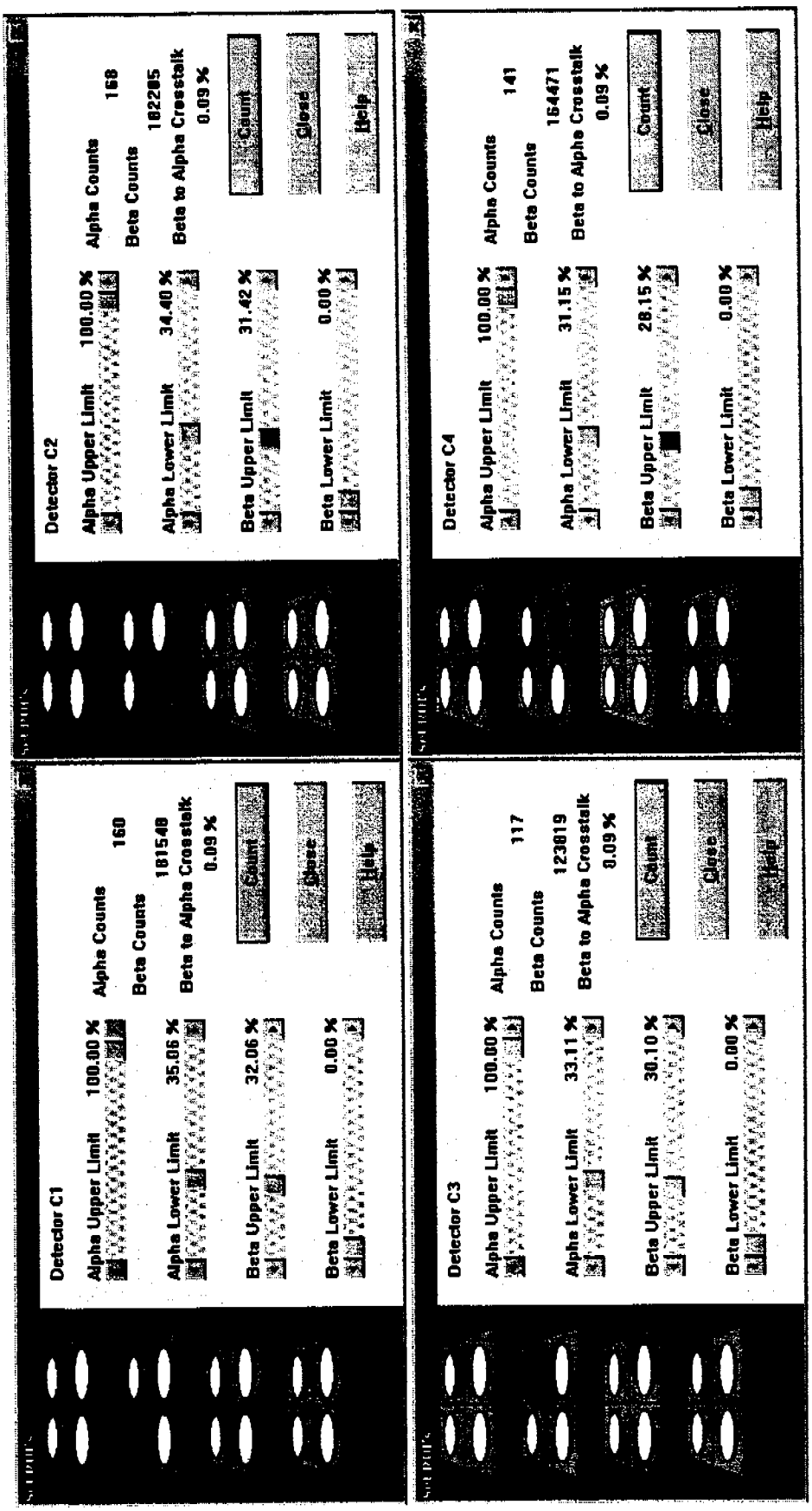
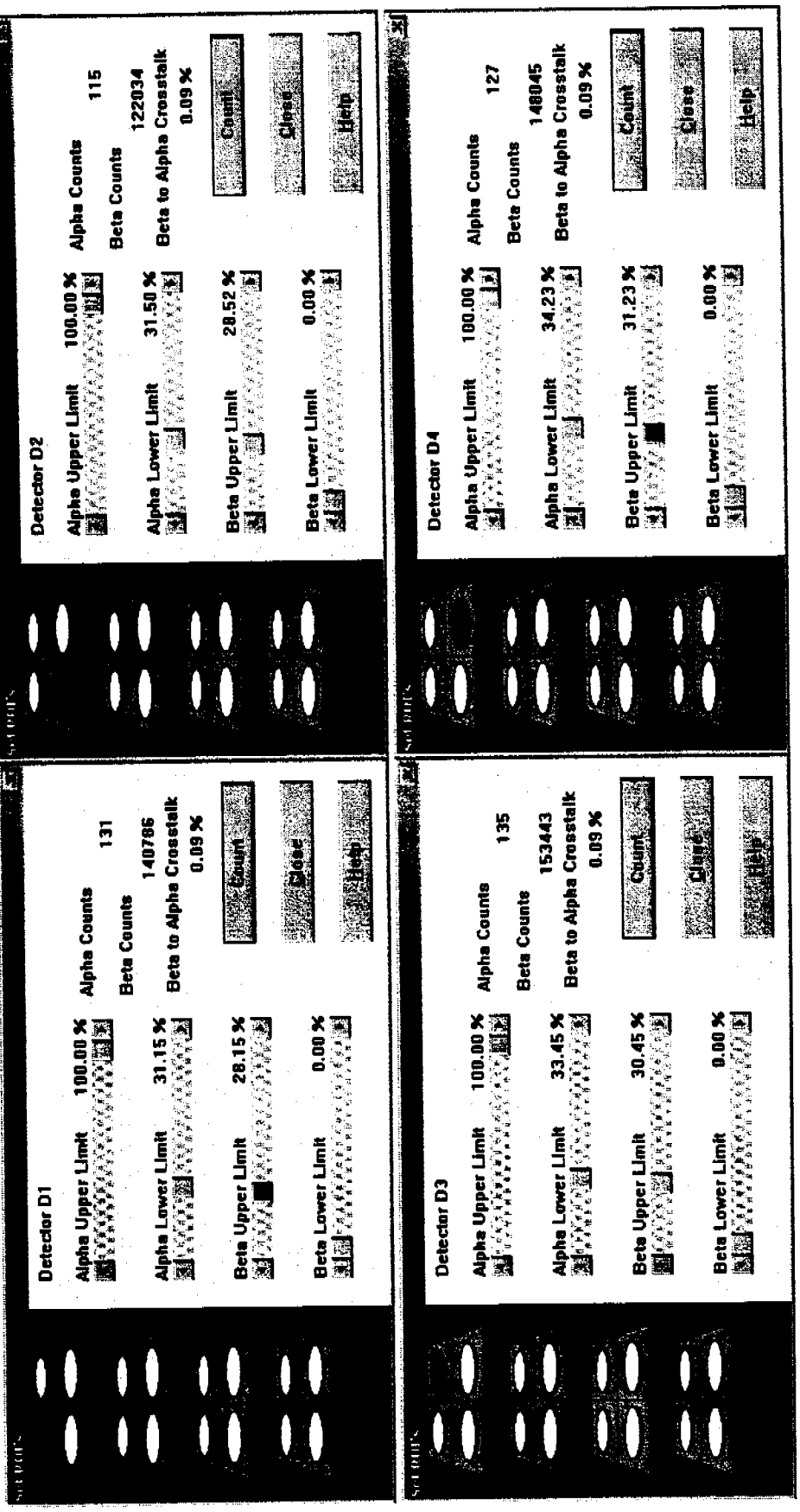
Discriminator Settings


Detector A1
Alpha Upper Limit 100.00 %
Alpha Counts 101
Beta Counts 115273
Alpha Lower Limit 34.65 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 31.64 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector A2
Alpha Upper Limit 100.00 %
Alpha Counts 103
Beta Counts 109060
Alpha Lower Limit 34.28 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 31.28 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector A3
Alpha Upper Limit 100.00 %
Alpha Counts 115
Beta Counts 112019
Alpha Lower Limit 35.97 %
Beta to Alpha Crosstalk 0.10 %
Beta Upper Limit 32.96 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector A4
Alpha Upper Limit 100.00 %
Alpha Counts 100
Beta Counts 111368
Alpha Lower Limit 36.16 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 33.16 %
Count
Close
Beta Lower Limit 0.00 %
Help


Detector B1
Alpha Upper Limit 100.00 %
Alpha Lower Limit 33.74 %
Beta Upper Limit 30.74 %
Beta Lower Limit 0.00 %
Alpha Counts 95
Beta Counts 110292
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector B2
Alpha Upper Limit 100.00 %
Alpha Lower Limit 31.01 %
Beta Upper Limit 28.03 %
Beta Lower Limit 0.00 %
Alpha Counts 105
Beta Counts 113573
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector B3
Alpha Upper Limit 100.00 %
Alpha Lower Limit 33.52 %
Beta Upper Limit 30.52 %
Beta Lower Limit 0.00 %
Alpha Counts 98
Beta Counts 113778
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector B4
Alpha Upper Limit 100.00 %
Alpha Lower Limit 32.84 %
Beta Upper Limit 29.84 %
Beta Lower Limit 0.00 %
Alpha Counts 100
Beta Counts 115143
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help


Detector C1
Alpha Upper Limit 100.00 %
Alpha Lower Limit 35.06 %
Beta Upper Limit 32.06 %
Beta Lower Limit 0.00 %
Alpha Counts 160
Beta Counts 181548
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector C2
Alpha Upper Limit 100.00 %
Alpha Lower Limit 34.40 %
Beta Upper Limit 31.42 %
Beta Lower Limit 0.00 %
Alpha Counts 168
Beta Counts 182285
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector C3
Alpha Upper Limit 100.00 %
Alpha Lower Limit 33.11 %
Beta Upper Limit 30.10 %
Beta Lower Limit 0.00 %
Alpha Counts 117
Beta Counts 123819
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector C4
Alpha Upper Limit 100.00 %
Alpha Lower Limit 31.15 %
Beta Upper Limit 28.15 %
Beta Lower Limit 0.00 %
Alpha Counts 141
Beta Counts 154471
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help


Detector D1
Alpha Upper Limit 100.00 %
Alpha Lower Limit 31.15 %
Beta Upper Limit 28.15 %
Beta Lower Limit 0.00 %
Alpha Counts 131
Beta Counts 140786
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector D2
Alpha Upper Limit 100.00 %
Alpha Lower Limit 31.50 %
Beta Upper Limit 28.52 %
Beta Lower Limit 0.00 %
Alpha Counts 115
Beta Counts 122034
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector D3
Alpha Upper Limit 100.00 %
Alpha Lower Limit 33.45 %
Beta Upper Limit 30.45 %
Beta Lower Limit 0.00 %
Alpha Counts 135
Beta Counts 153443
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector D4
Alpha Upper Limit 100.00 %
Alpha Lower Limit 34.23 %
Beta Upper Limit 31.23 %
Beta Lower Limit 0.00 %
Alpha Counts 127
Beta Counts 148045
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help

SEVERN TRENT STL

Calibration Standards and Certificates

Red

Alpha Th-230

Alpha Calibration Standards
11/14/2003 reprep 11/17/03
Alpha standard, 02-047, 2196.7 dpm/mL Th-230, 4393.4 dpm/ standard

Std #	mLs, 02-047	mLs salt solution	gross mass (g)	tare mass (g)	net mass (g)	projected mass
1	2	0	8.4532	8.4525	0.0007	0
2	2	0.25	8.4245	8.4182	0.0063	5.75
3	2	0.5	8.4418	8.4303	0.0115	11
4	2	1	8.4154	8.3926	0.0228	23
5	2	1.5	8.4875	8.4547	0.0328	34
6	2	2	8.4561	8.4124	0.0437	46
7	2	3	8.4552	8.3877	0.0675	69
8	2	4	8.5208	8.4338	0.0870	92
9	2	5	8.5345	8.4216	0.1129	115
10	2	6	8.5468	8.4133	0.1335	138
11	2	7	8.5682	8.4222	0.1460	161

1-reprep	2	0	*	*	0

* See Calibration Narrative.

ANALYTICS

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318 · U.S.A.

Phone (404) 352-8677
Fax (404) 352-2837

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

65090-334

Th-230 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated by liquid scintillation counting.

Radionuclide purity and calibration were checked by germanium gamma-ray spectrometry and liquid scintillation counting. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

ISOTOPE:	Th-230
ACTIVITY (dps):	7.654 E3
HALF-LIFE:	7.538 E4 Years
CALIBRATION DATE:	December 19, 2002 12:00 EST
TOTAL UNCERTAINTY*:	3.5%
SYSTEMATIC:	2.6%
RANDOM:	0.9%

*99% Confidence Level

Impurities: γ-impurities <0.1%, α-impurities <0.05%

5.17738 grams 0.5M HNO_3 solution.

P O NUMBER 1614557-000 OP, Item 3

SOURCE PREPARED BY: M. Taskaeva, Radiochemist

Q A APPROVED: 12-19-02

SEVERN TRENT SERVICES

Logbook: 2060

Radiochemistry
Standards Preparation Logbook

Date Prep'd	Expir. Date	Standard ID Number	Isotope	Parent ID Number	Parent Activity	Parent Ref. Date	Aliquot	Dilution Volume	Change in Time	T ½	Final Activity	Solvent/ Lot #	Prep'd Initials	Cal. Ver. Initials	Comments
9-11-03	9-11-08	03-069	Pu-238	02-026	132.98	2-23-01	0.5mL	1	1356 hrs	32022 y	66.20 dpm/mL	9-15-03	MFM		re-certification of 03-031 & 03-b/and 66.22 dpm/mL
1	1	—	Pu-239	02-025	128.05	2-23-01	1mL	150mL	11 hrs 05 min	24110 y	62.025 dpm/mL	9/62.025 dpm/mL	MFM		62.025 dpm/mL
9-11-03	9-11-08	03-070	Am-243	98-011	1161 dpm/g	2-28-98	15.0 g	200mL		7370 y	87.075 dpm/mL		MFM		
10-6-03	10-6-08	03-071	Th-230	05090-334	7,654 dps	10-19-02	5.1498 g	100mL	N/A	7.538E4	4,567.9 dpm/mL	0.5M HNO3	BH	BBF	
10-6-03	10-6-08	03-072	Th-230	03-071	4,567.9 dpm/mL	12-19-02	1mL	200mL	N/A	7.538E4	22.84 dpm/mL	0.5M HNO3	BH	BBF	
10-11-03	10-11-0	03-073	clean U-233	047-105	0.994 dpm/mL	9-16-97	10mL	1000L		70 yr	103.85 dpm/L	P-1 H2O 2M H2SO4 2M KOH pH 1.5	MFM BBF		Rec'd 03-0078 in Rad Capture
10/31/03	10/31/08	03-074	I-129	681-78-4	1.059 mCi	1-1-2000	1mL	100mL	N/A	1.57E7	10.54 nCi/mL	0.1M NaOH	BH	BBF	
10/31/03	10/31/04	03-075	I-129	03-074	10.54 nCi/mL	1-1-2000	1mL	100mL	N/A	1.57E7	105.4 pCi/mL	0.1M NaOH	BH	BBF	
10/31/03	10/31/04	03-076	Ra-228	01012	1,018 dpm/mL	2/16/01	1mL	100mL	NA	5.75 y	20.36 dpm/mL	0.5M HNO3	BH	BBF	
10/31/03	10/31/04	03-081	Pu-242	92-242-5-1	129.63 Bq/g	12/1/89	5.0723 g	500mL	N/A	3.73E5 y	78.9027	.5M HNO3	MFM	MO	
11/3/03	11/3/04	SR19	Std SR carrier	$Ce(NO_3)_2$	N/A	N/A	120.77 g	1 Liter	N/A	N/A		dH2O		BBF	Reported in Rad capture
11-5-03	11-5-04	RAD03-0032	Th-229	02-006	2134.75 dpm/mL	1-28-02	17.5mL	500mL	n/a	7.3E3	74.716 dpm/mL	.5M HNO_3	MFM	JMW	

Additional Comments:

SEVERN TRENT STL

Calibration for LB4100

Red

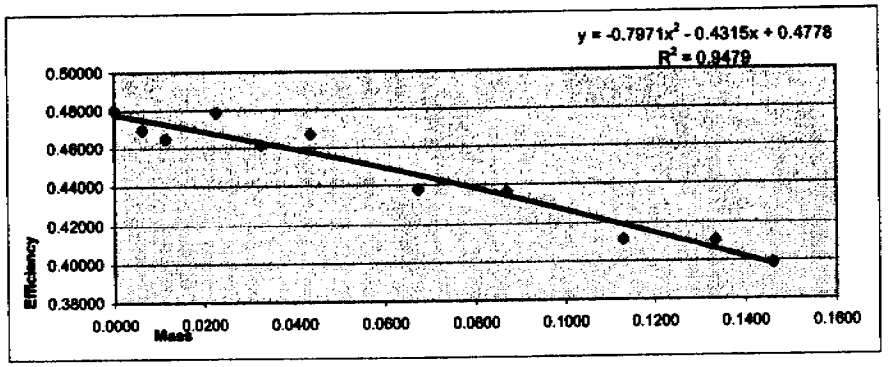
Beta Sr-90

SEVERN TRENT STL

Detector Efficiency Curves

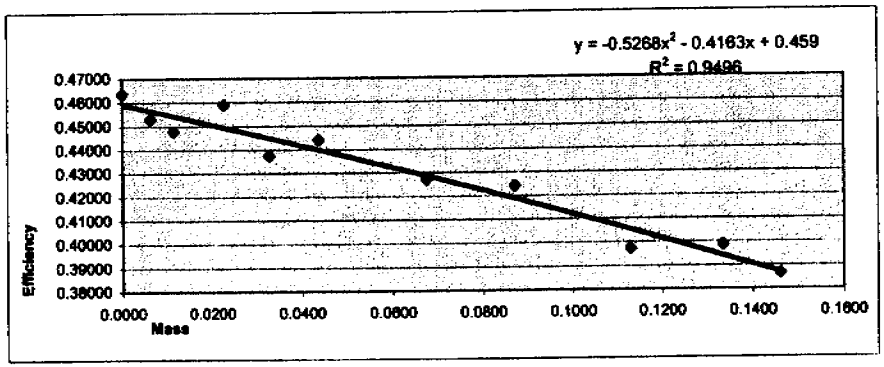
Beta Attenuation Red A1 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
A1	0.0000	9.81	20446	2084.200	0.48001
A1	0.0063	10.02	20436	2039.521	0.46972
A1	0.0115	10.13	20441	2017.868	0.46473
A1	0.0228	9.83	20422	2077.518	0.47847
A1	0.0328	10.20	20428	2002.745	0.46125
A1	0.0437	10.07	20423	2028.103	0.46709
A1	0.0675	10.75	20431	1900.558	0.43771
A1	0.0870	10.79	20426	1893.049	0.43599
A1	0.1129	11.44	20418	1784.790	0.41105
A1	0.1335	11.46	20430	1782.723	0.41058
A1	0.1460	11.80	20421	1730.593	0.39857



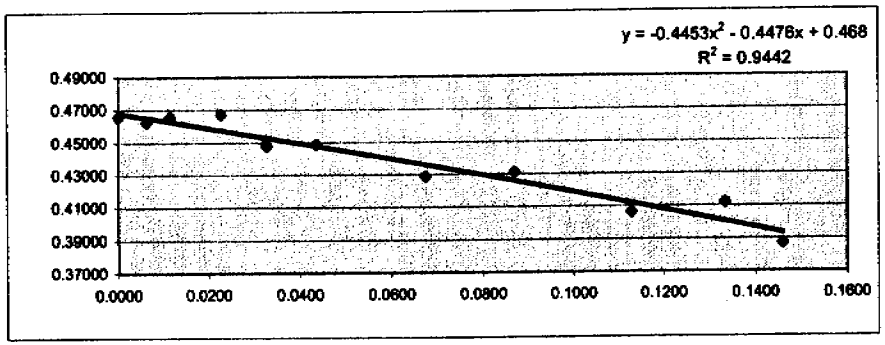
Beta Attenuation Red A2 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
A2	0.0000	10.17	20465	2012.291	0.46345
A2	0.0063	10.39	20430	1966.314	0.45286
A2	0.0115	10.51	20428	1943.673	0.44764
A2	0.0228	10.26	20439	1992.105	0.45880
A2	0.0328	10.76	20434	1899.071	0.43737
A2	0.0437	10.60	20434	1927.736	0.44397
A2	0.0675	11.02	20426	1853.539	0.42689
A2	0.0870	11.09	20418	1841.118	0.42403
A2	0.1129	11.84	20421	1724.747	0.39722
A2	0.1335	11.80	20426	1731.017	0.39867
A2	0.1460	12.17	20414	1677.403	0.38632



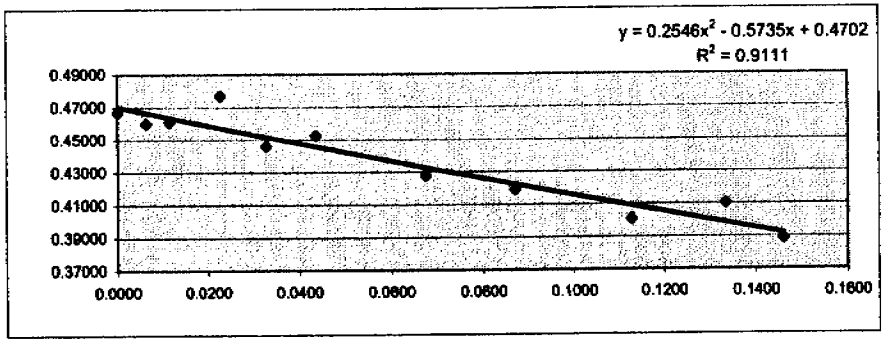
Beta Attenuation Red A3 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
A3	0.0000	10.12	20457	2021.443	0.46556
A3	0.0063	10.18	20443	2008.153	0.46249
A3	0.0115	10.11	20438	2021.563	0.46558
A3	0.0228	10.07	20426	2028.401	0.46716
A3	0.0328	10.51	20428	1943.673	0.44764
A3	0.0437	10.50	20444	1947.048	0.44842
A3	0.0675	10.98	20431	1860.747	0.42855
A3	0.0870	10.92	20445	1872.253	0.43120
A3	0.1129	11.58	20420	1763.385	0.40612
A3	0.1335	11.43	20432	1787.577	0.41169
A3	0.1460	12.16	20417	1679.030	0.38669



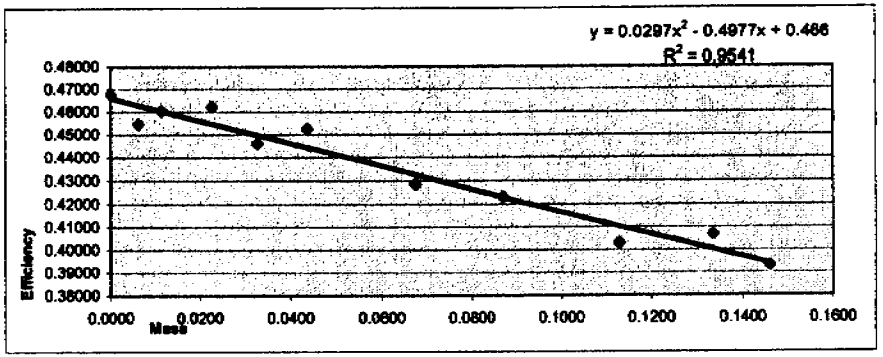
Beta Attenuation Red A4 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
A4	0.0000	10.08	20434	2027.183	0.46688
A4	0.0063	10.23	20435	1997.556	0.46005
A4	0.0115	10.20	20418	2001.765	0.46102
A4	0.0228	9.88	20455	2070.344	0.47682
A4	0.0328	10.55	20431	1936.588	0.44601
A4	0.0437	10.40	20437	1965.096	0.45258
A4	0.0675	11.00	20428	1857.091	0.42770
A4	0.0870	11.24	20436	1818.149	0.41874
A4	0.1129	11.74	20420	1739.353	0.40059
A4	0.1335	11.48	20436	1780.139	0.40998
A4	0.1460	12.11	20425	1686.623	0.38844



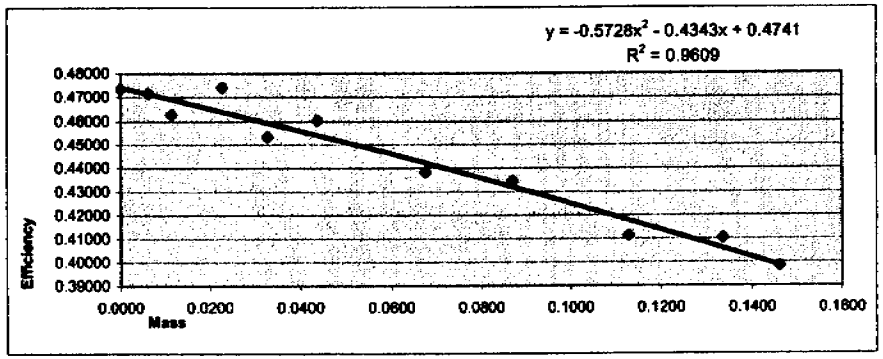
Beta Attenuation Red B1 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
B1	0.0000	10.06	20429	2030.716	0.46769
B1	0.0063	10.36	20446	1973.552	0.45453
B1	0.0115	10.22	20430	1999.022	0.46039
B1	0.0228	10.18	20431	2006.974	0.46222
B1	0.0328	10.55	20431	1936.588	0.44601
B1	0.0437	10.41	20447	1964.169	0.45237
B1	0.0675	10.98	20423	1860.018	0.42838
B1	0.0870	11.12	20432	1837.410	0.42317
B1	0.1129	11.68	20427	1748.887	0.40278
B1	0.1335	11.57	20424	1765.255	0.40655
B1	0.1460	11.97	20423	1706.182	0.39295



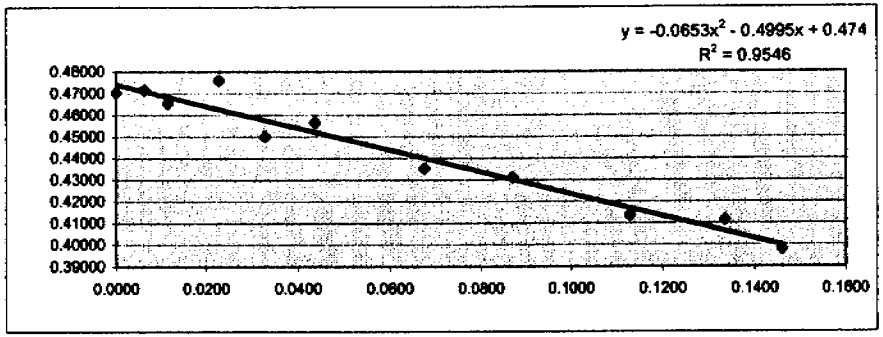
Beta Attenuation Red B2 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
B2	0.0000	9.93	20414	2055.791	0.47347
B2	0.0063	9.97	20417	2047.844	0.47164
B2	0.0115	10.18	20453	2009.136	0.46272
B2	0.0228	9.94	20458	2058.149	0.47401
B2	0.0328	10.38	20431	1968.304	0.45332
B2	0.0437	10.22	20423	1998.337	0.46023
B2	0.0675	10.73	20413	1902.423	0.43814
B2	0.0870	10.82	20415	1886.784	0.43454
B2	0.1129	11.43	20413	1785.914	0.41131
B2	0.1335	11.47	20432	1781.343	0.41026
B2	0.1460	11.81	20417	1728.789	0.39816



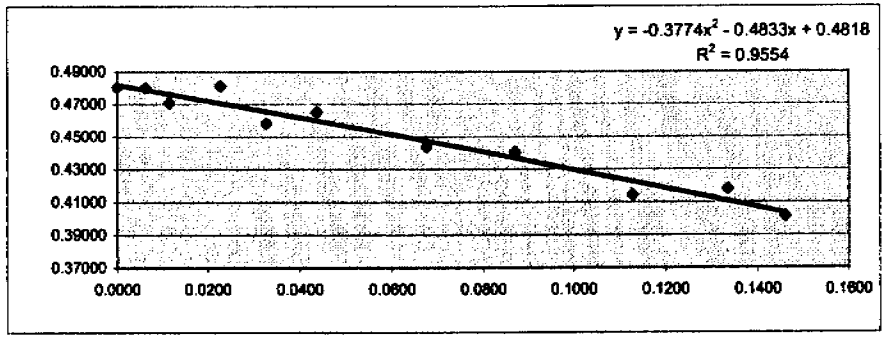
Beta Attenuation Red B3 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
B3	0.0000	10.00	20414	2041.400	0.47015
B3	0.0063	9.97	20412	2047.342	0.47152
B3	0.0115	10.11	20427	2020.475	0.46533
B3	0.0228	9.91	20471	2065.691	0.47575
B3	0.0328	10.45	20414	1953.493	0.44991
B3	0.0437	10.31	20438	1982.347	0.45655
B3	0.0675	10.81	20426	1889.547	0.43518
B3	0.0870	10.91	20413	1871.036	0.43092
B3	0.1129	11.38	20424	1794.728	0.41334
B3	0.1335	11.44	20424	1785.315	0.41117
B3	0.1460	11.82	20419	1727.496	0.39786



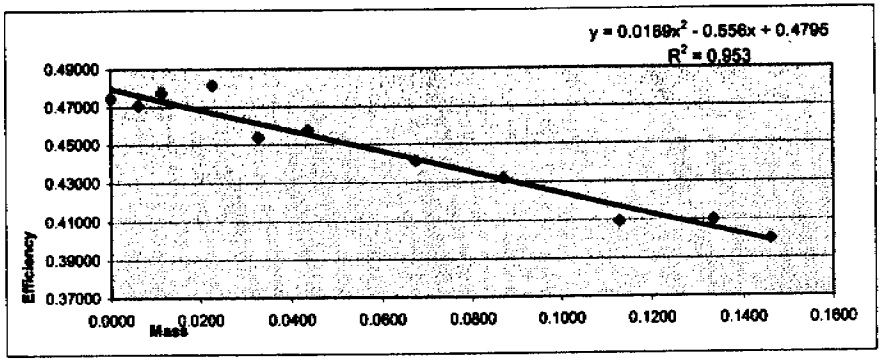
Beta Attenuation Red B4 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
B4	0.0000	9.81	20452	2084.811	0.48015
B4	0.0063	9.82	20466	2084.114	0.47999
B4	0.0115	9.99	20424	2044.444	0.47085
B4	0.0228	9.78	20430	2088.957	0.48110
B4	0.0328	10.27	20438	1990.068	0.45833
B4	0.0437	10.12	20437	2019.466	0.46510
B4	0.0675	10.60	20417	1926.132	0.44360
B4	0.0870	10.68	20430	1912.921	0.44056
B4	0.1129	11.35	20418	1798.943	0.41431
B4	0.1335	11.26	20424	1813.854	0.41775
B4	0.1460	11.72	20411	1741.553	0.40109



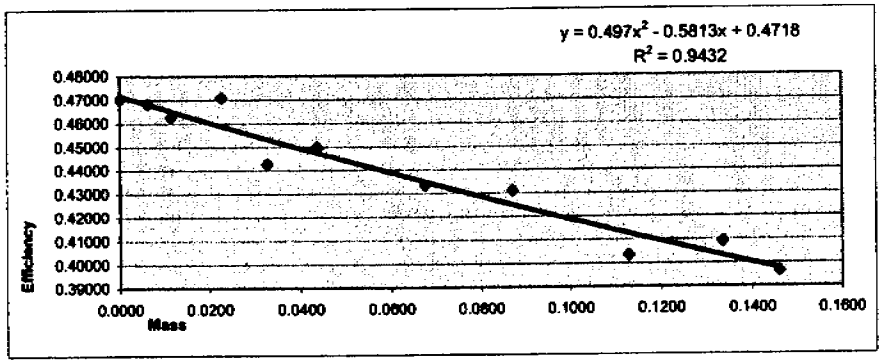
Beta Attenuation Red C1 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
C1	0.0000	9.93	20458	2060.222	0.47449
C1	0.0063	10.00	20444	2044.400	0.47084
C1	0.0115	9.86	20428	2071.805	0.47715
C1	0.0228	9.78	20433	2089.264	0.48118
C1	0.0328	10.38	20450	1970.135	0.45374
C1	0.0437	10.29	20440	1986.395	0.45748
C1	0.0675	10.68	20449	1914.700	0.44097
C1	0.0870	10.90	20439	1875.138	0.43186
C1	0.1129	11.50	20429	1776.435	0.40913
C1	0.1335	11.48	20431	1779.704	0.40988
C1	0.1460	11.77	20418	1734.749	0.39953



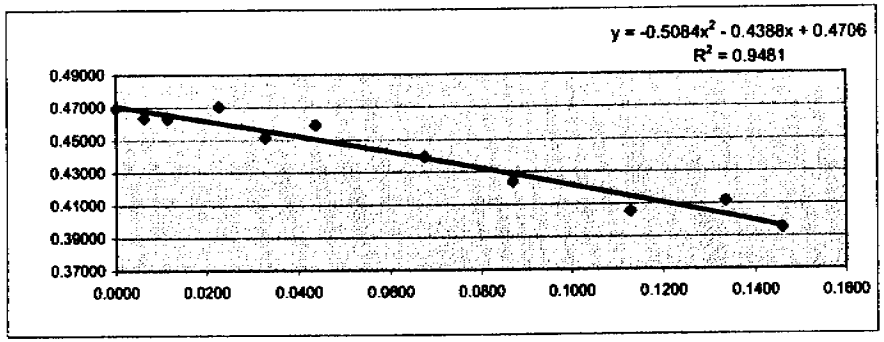
Beta Attenuation Red C2 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
C2	0.0000	10.02	20459	2041.816	0.47025
C2	0.0063	10.05	20430	2032.836	0.46818
C2	0.0115	10.17	20432	2009.046	0.46270
C2	0.0228	9.99	20427	2044.745	0.47092
C2	0.0328	10.63	20426	1921.543	0.44255
C2	0.0437	10.46	20432	1953.346	0.44987
C2	0.0675	10.85	20415	1881.567	0.43334
C2	0.0870	10.92	20429	1870.788	0.43086
C2	0.1129	11.66	20418	1751.115	0.40330
C2	0.1335	11.50	20417	1775.391	0.40889
C2	0.1460	11.87	20427	1720.893	0.39634



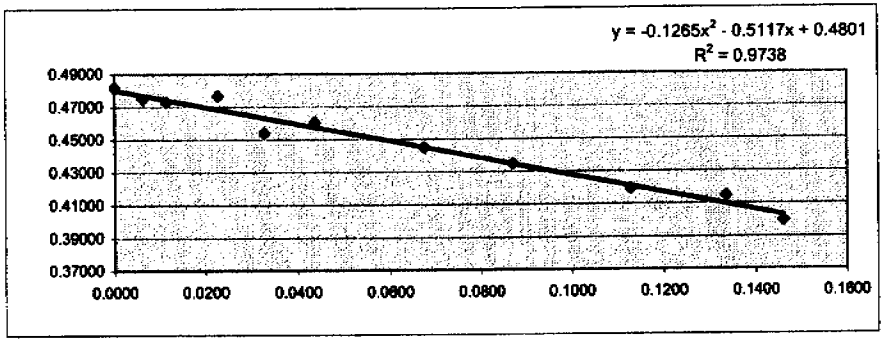
Beta Attenuation Red C3 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
C3	0.0000	10.04	20459	2037.749	0.46931
C3	0.0063	10.15	20418	2011.626	0.46329
C3	0.0115	10.17	20444	2010.226	0.46297
C3	0.0228	10.01	20438	2041.758	0.47023
C3	0.0328	10.42	20418	1959.501	0.45129
C3	0.0437	10.25	20420	1992.195	0.45882
C3	0.0675	10.72	20448	1907.463	0.43931
C3	0.0870	11.09	20413	1840.667	0.42392
C3	0.1129	11.61	20430	1759.690	0.40527
C3	0.1335	11.44	20434	1786.189	0.41137
C3	0.1460	11.91	20426	1715.029	0.39499



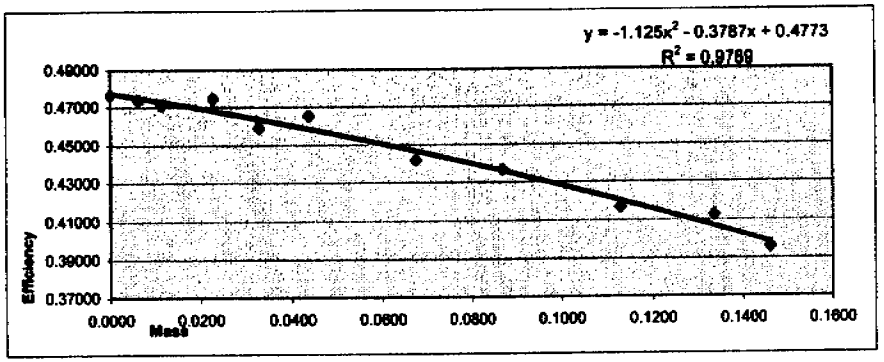
Beta Attenuation Red C4 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
C4	0.0000	9.77	20431	2091.198	0.48162
C4	0.0063	9.91	20426	2061.150	0.47470
C4	0.0115	9.95	20430	2053.268	0.47288
C4	0.0228	9.88	20443	2069.130	0.47654
C4	0.0328	10.36	20418	1970.849	0.45390
C4	0.0437	10.22	20432	1999.217	0.46044
C4	0.0675	10.57	20417	1931.599	0.44486
C4	0.0870	10.82	20424	1887.616	0.43473
C4	0.1129	11.22	20421	1820.053	0.41917
C4	0.1335	11.35	20430	1800.000	0.41456
C4	0.1460	11.77	20414	1734.410	0.39945



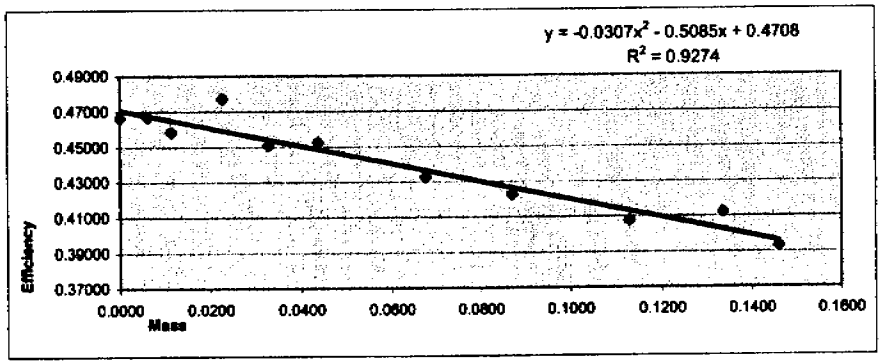
Beta Attenuation Red D1 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
D1	0.0000	9.88	20434	2068.219	0.47633
D1	0.0063	9.93	20425	2056.898	0.47372
D1	0.0115	10.00	20448	2044.800	0.47094
D1	0.0228	9.93	20453	2059.718	0.47437
D1	0.0328	10.25	20424	1992.585	0.45891
D1	0.0437	10.11	20427	2020.475	0.46533
D1	0.0675	10.65	20422	1917.559	0.44163
D1	0.0870	10.78	20424	1894.620	0.43635
D1	0.1129	11.29	20426	1809.212	0.41668
D1	0.1335	11.40	20421	1791.316	0.41256
D1	0.1460	11.89	20419	1717.325	0.39551



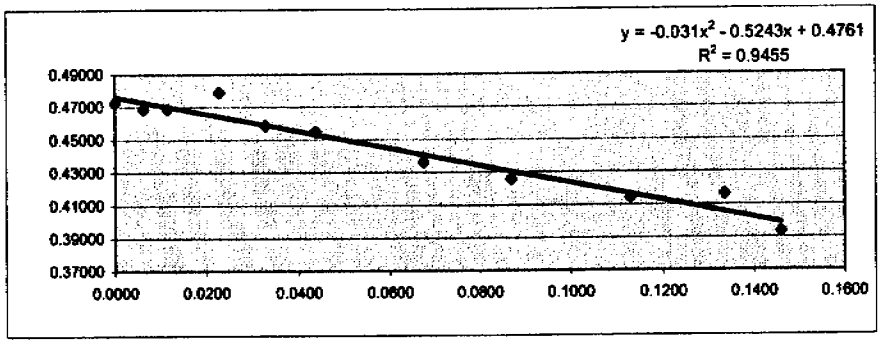
Beta Attenuation Red D2 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
D2	0.0000	10.08	20415	2025.298	0.46644
D2	0.0063	10.07	20413	2027.110	0.46686
D2	0.0115	10.26	20419	1990.156	0.45835
D2	0.0228	9.87	20445	2071.429	0.47707
D2	0.0328	10.43	20413	1957.143	0.45075
D2	0.0437	10.40	20432	1964.615	0.45247
D2	0.0675	10.87	20419	1878.473	0.43263
D2	0.0870	11.13	20416	1834.322	0.42246
D2	0.1129	11.54	20421	1769.584	0.40755
D2	0.1335	11.42	20426	1788.616	0.41193
D2	0.1460	11.97	20417	1705.681	0.39283



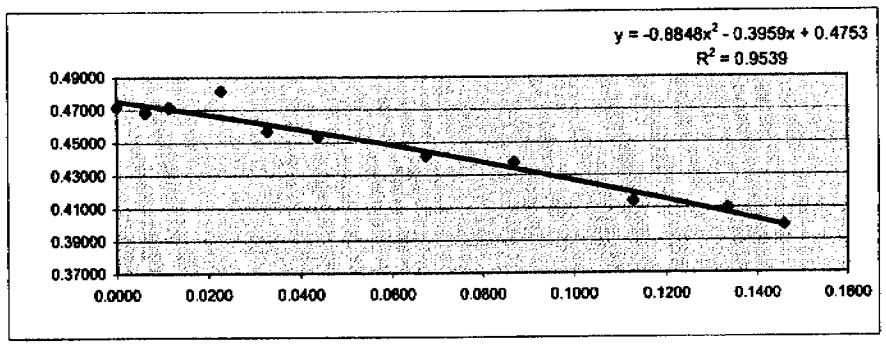
Beta Attenuation Red D3 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
D3	0.0000	9.95	20413	2051.558	0.47249
D3	0.0063	10.04	20429	2034.761	0.46862
D3	0.0115	10.04	20423	2034.163	0.46849
D3	0.0228	9.82	20411	2078.513	0.47870
D3	0.0328	10.26	20416	1989.864	0.45828
D3	0.0437	10.36	20450	1973.938	0.45461
D3	0.0675	10.80	20431	1891.759	0.43569
D3	0.0870	11.06	20431	1847.288	0.42545
D3	0.1129	11.35	20420	1799.119	0.41435
D3	0.1335	11.30	20424	1807.434	0.41627
D3	0.1460	11.95	20411	1708.033	0.39337



Beta Attenuation Red D4 4/9/2004

Detector ID	Sample Wt	Count Time	Beta	DPM 4342 CPM	Th230 Eff
D4	0.0000	9.97	20422	2048.345	0.47175
D4	0.0063	10.04	20418	2033.665	0.46837
D4	0.0115	9.97	20415	2047.643	0.47159
D4	0.0228	9.77	20425	2090.583	0.48148
D4	0.0328	10.29	20425	1984.937	0.45715
D4	0.0437	10.38	20429	1968.112	0.45327
D4	0.0675	10.66	20435	1916.979	0.44150
D4	0.0870	10.75	20432	1900.651	0.43774
D4	0.1129	11.36	20414	1797.007	0.41387
D4	0.1335	11.49	20430	1778.068	0.40950
D4	0.1460	11.79	20421	1732.061	0.39891



SEVERN TRENT STL

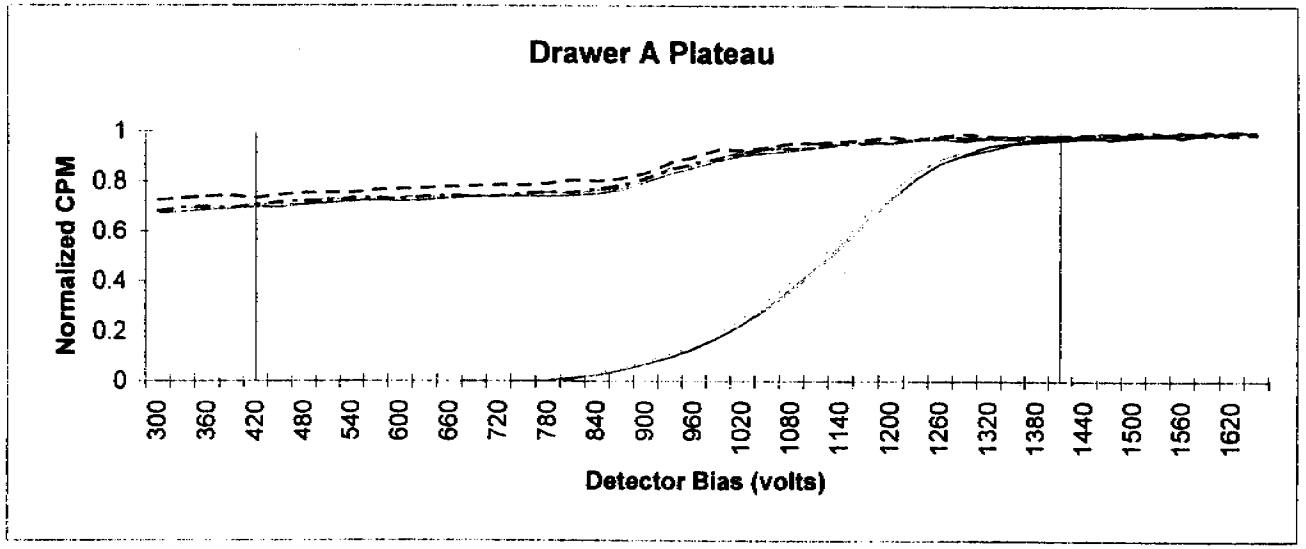
Voltage Plateaus

LOT# F5D220345

STL ST. LOUIS

Unit Type: LB4100/W
Date Performed: 3/25/04 11:59
FileName: PLAT000
Batch ID: RED PLATEAUS 03/25/04 IV

Unit Id: Red
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

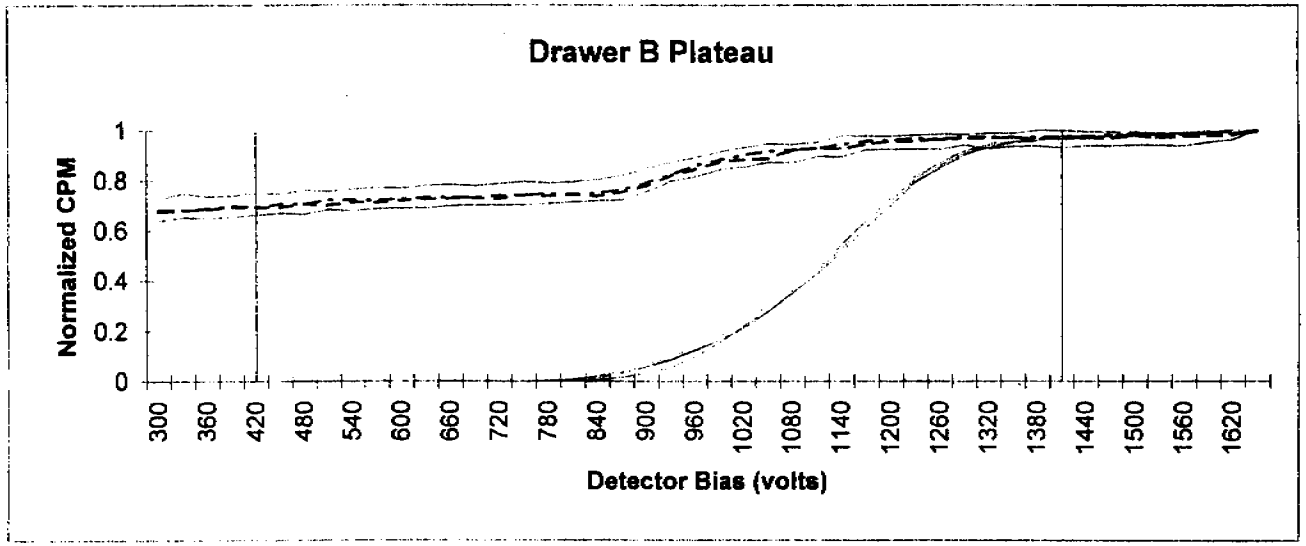
Optimum alpha only operating voltage: 420

	A1	A2	A3	A4
Beta slope at beta voltage	2.02%	2.37%	2.37%	1.15%
Alpha slope at beta voltage	0.88%	1.01%	0.57%	0.87%
Alpha slope at alpha voltage	1.70%	1.39%	2.26%	3.25%

Printed 3/26/2004 12:59 PM

Unit Type: LB4100/W
Date Performed: 3/25/04 11:59
FileName: PLAT000
Batch ID: RED PLATEAUS 03/25/04 IV

Unit Id: Red
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

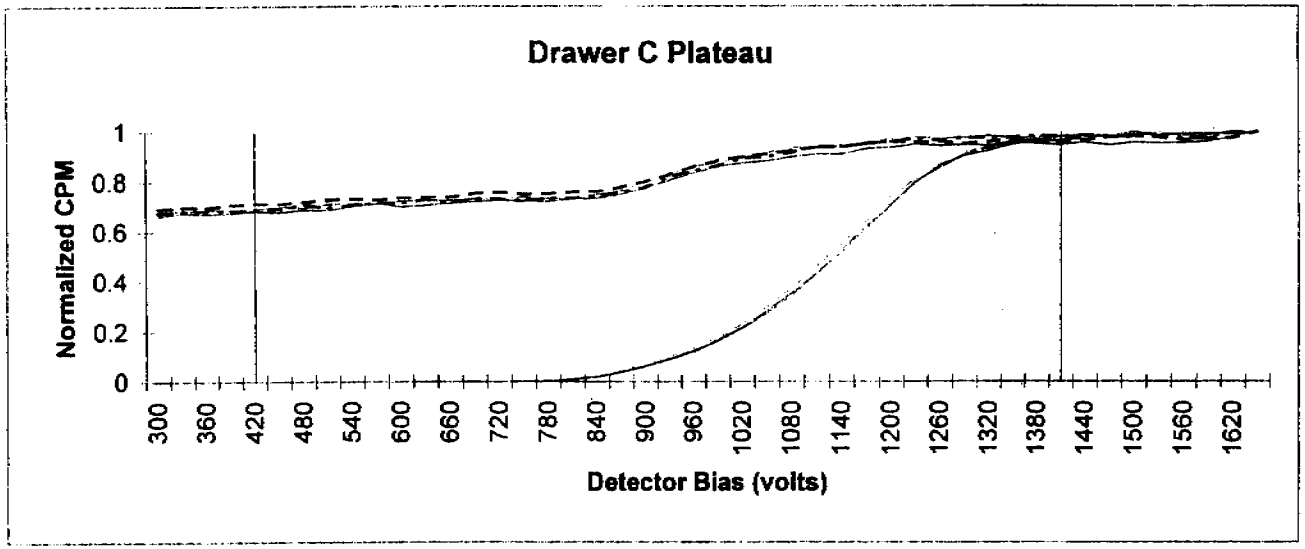
Optimum alpha only operating voltage: 420

	B1	B2	B3	B4
Beta slope at beta voltage	2.01%	2.51%	3.24%	1.41%
Alpha slope at beta voltage	0.31%	-0.08%	0.14%	0.96%
Alpha slope at alpha voltage	2.73%	2.06%	2.42%	2.08%

Printed 3/26/2004 12:59 PM

Unit Type: LB4100/W
Date Performed: 3/25/04 11:59
FileName: PLAT000
Batch ID: RED PLATEAUS 03/25/04 IV

Unit Id: Red
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

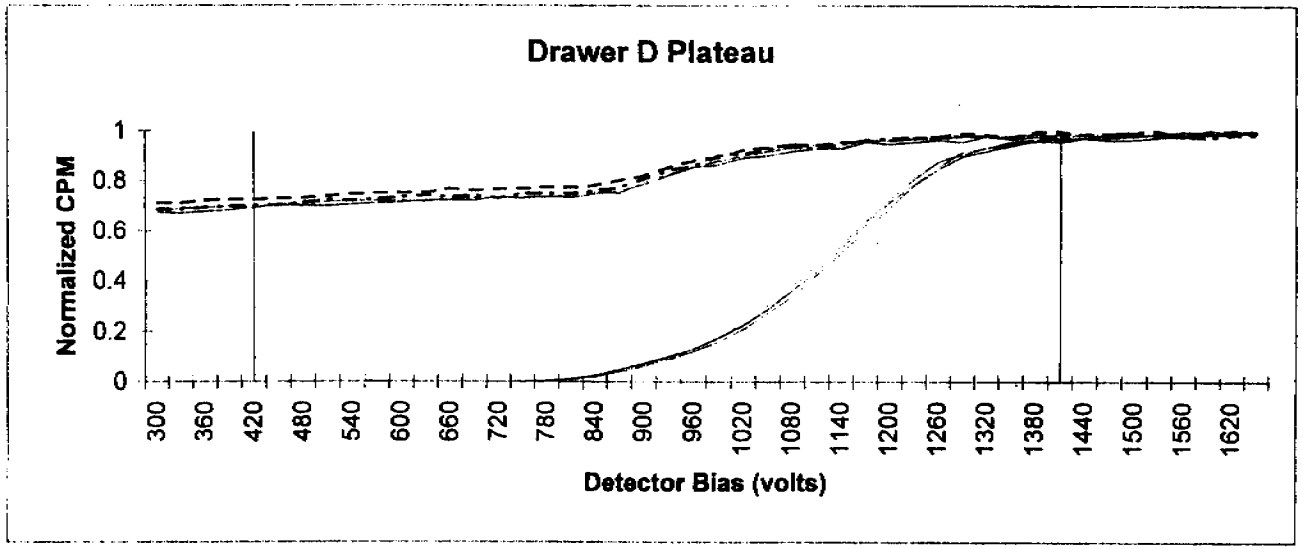
Optimum alpha only operating voltage: 420

	C1	C2	C3	C4
Beta slope at beta voltage	1.87%	3.12%	2.82%	2.97%
Alpha slope at beta voltage	0.82%	0.39%	-0.79%	0.31%
Alpha slope at alpha voltage	1.36%	2.31%	1.73%	2.98%

Printed 3/26/2004 1:00 PM

Unit Type: LB4100/W
Date Performed: 3/25/04 11:59
FileName: PLAT000
Batch ID: RED PLATEAUS 03/25/04 IV

Unit Id: Red
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

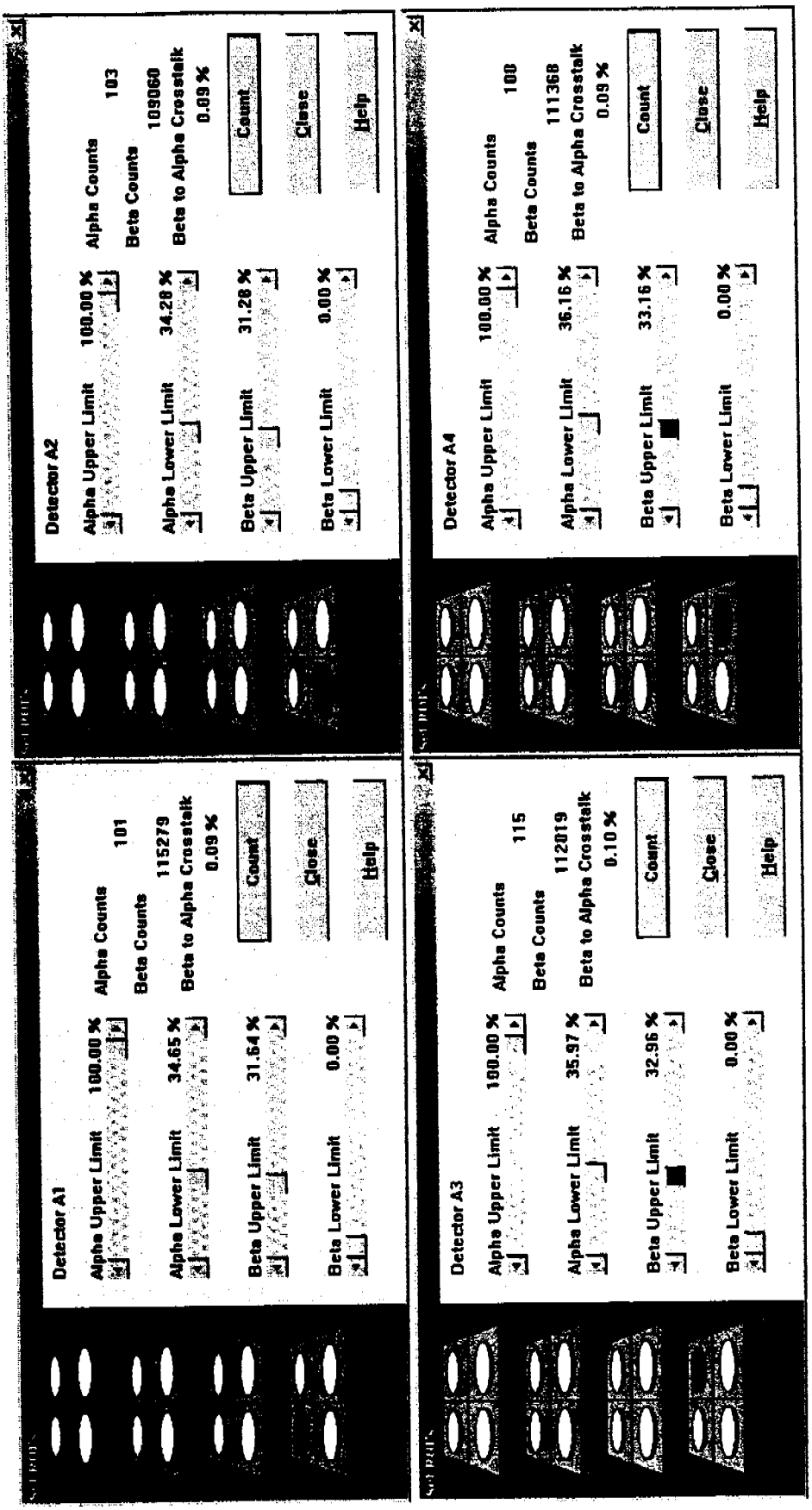
Optimum alpha only operating voltage: 420

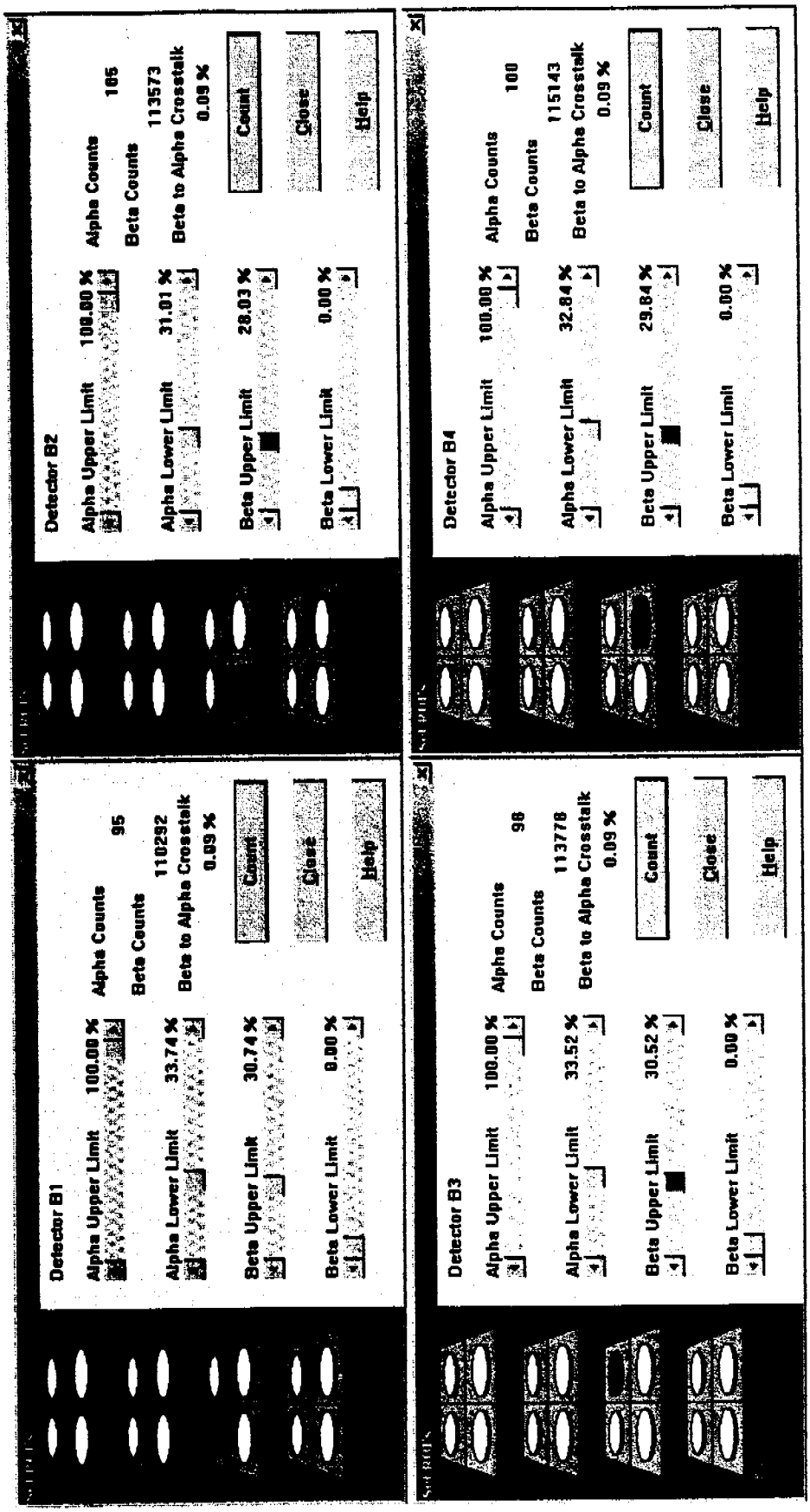
	D1	D2	D3	D4
Beta slope at beta voltage	2.60%	2.22%	2.90%	2.29%
Alpha slope at beta voltage	0.31%	0.50%	-0.50%	1.10%
Alpha slope at alpha voltage	1.96%	0.99%	3.11%	2.04%

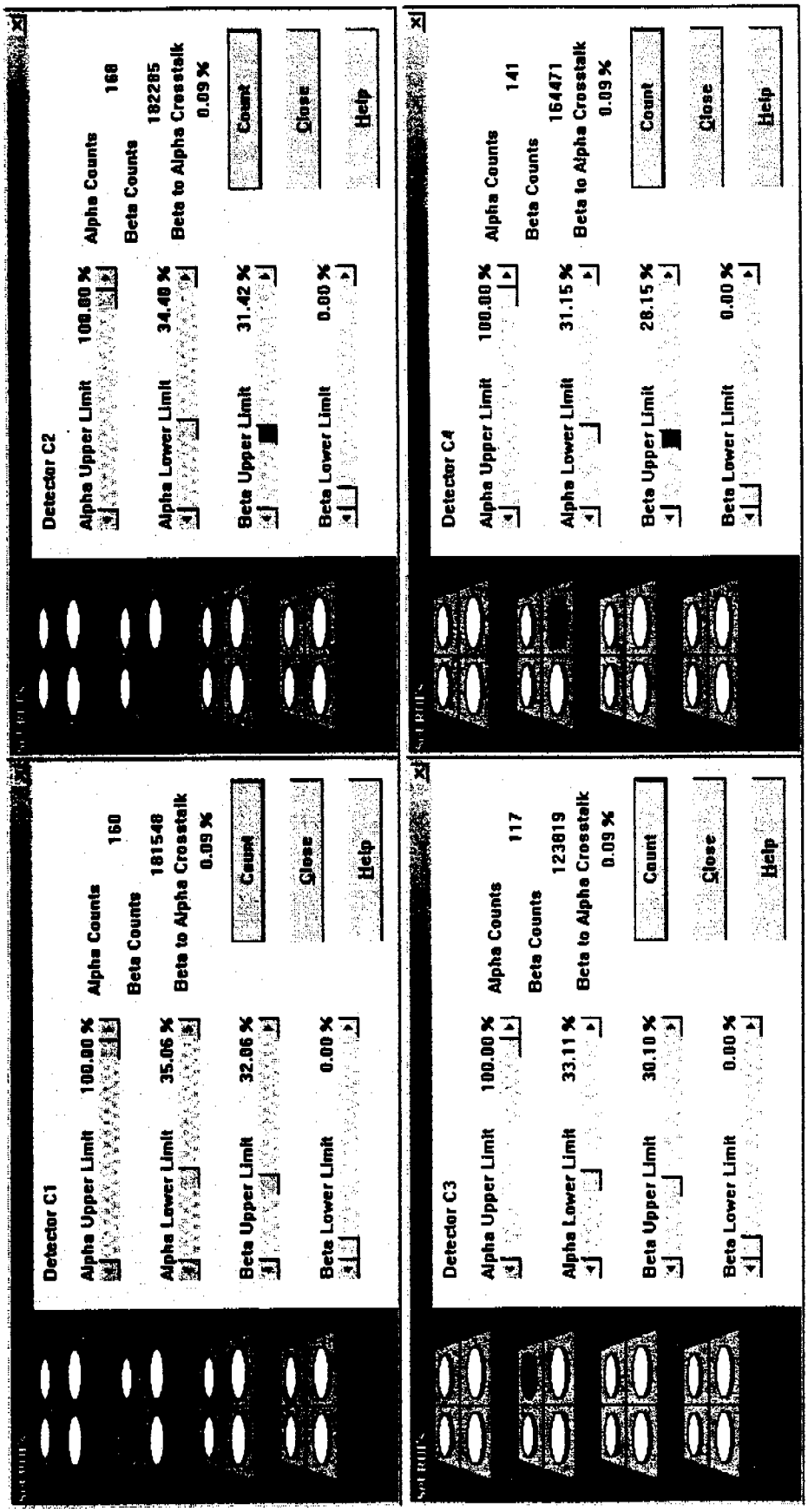
Printed 3/26/2004 1:00 PM

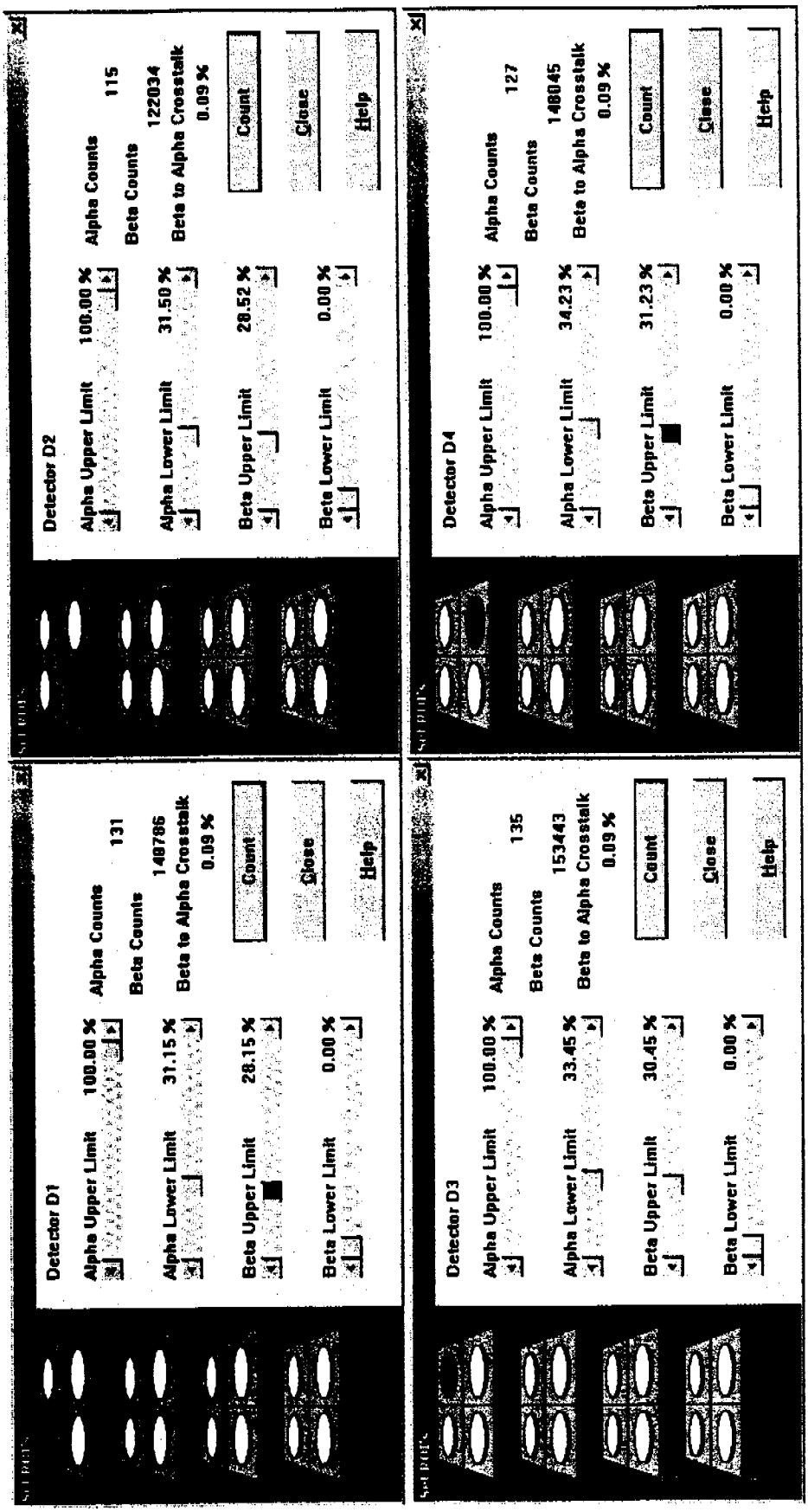
SEVERN TRENT STL

Discriminator Settings


Detector A1
Alpha Upper Limit 100.00 %
Alpha Counts 101
Beta Counts 115279
Alpha Lower Limit 34.65 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 31.64 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector A2
Alpha Upper Limit 100.00 %
Alpha Counts 103
Beta Counts 109060
Alpha Lower Limit 34.28 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 31.28 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector A3
Alpha Upper Limit 100.00 %
Alpha Counts 115
Beta Counts 112019
Alpha Lower Limit 35.97 %
Beta to Alpha Crosstalk 0.10 %
Beta Upper Limit 32.96 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector A4
Alpha Upper Limit 100.00 %
Alpha Counts 108
Beta Counts 111368
Alpha Lower Limit 36.16 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 33.16 %
Count
Close
Beta Lower Limit 0.00 %
Help


Detector B1
Alpha Upper Limit 100.00 %
Alpha Counts 95
Beta Counts 110292
Alpha Lower Limit 33.74 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 30.74 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector B2
Alpha Upper Limit 100.00 %
Alpha Counts 105
Beta Counts 113573
Alpha Lower Limit 31.01 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 28.03 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector B3
Alpha Upper Limit 100.00 %
Alpha Counts 98
Beta Counts 113778
Alpha Lower Limit 33.52 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 30.52 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector B4
Alpha Upper Limit 100.00 %
Alpha Counts 100
Beta Counts 115143
Alpha Lower Limit 32.84 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 29.84 %
Count
Close
Beta Lower Limit 0.00 %
Help


Detector C1
Alpha Upper Limit 100.00 %
Alpha Counts 160
Beta Counts 181548
Alpha Lower Limit 35.06 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 32.06 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector C2
Alpha Upper Limit 100.00 %
Alpha Counts 168
Beta Counts 182285
Alpha Lower Limit 34.48 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 31.42 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector C3
Alpha Upper Limit 100.00 %
Alpha Counts 117
Beta Counts 123819
Alpha Lower Limit 33.11 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 30.10 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector C4
Alpha Upper Limit 100.00 %
Alpha Counts 141
Beta Counts 164471
Alpha Lower Limit 31.15 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 28.15 %
Count
Close
Beta Lower Limit 0.00 %
Help


Detector D1
Alpha Upper Limit 100.00 %
Alpha Counts 131
Alpha Lower Limit 31.15 %
Beta Counts 148766
Beta Upper Limit 28.15 %
Beta to Alpha Crosstalk 0.09 %
Beta Lower Limit 0.00 %
Count
Close
Help
Detector D2
Alpha Upper Limit 100.00 %
Alpha Counts 115
Alpha Lower Limit 31.50 %
Beta Counts 122034
Beta Upper Limit 28.52 %
Beta to Alpha Crosstalk 0.09 %
Beta Lower Limit 0.00 %
Count
Close
Help
Detector D3
Alpha Upper Limit 100.00 %
Alpha Counts 135
Alpha Lower Limit 33.45 %
Beta Counts 153443
Beta Upper Limit 30.45 %
Beta to Alpha Crosstalk 0.09 %
Beta Lower Limit 0.00 %
Count
Close
Help
Detector D4
Alpha Upper Limit 100.00 %
Alpha Counts 127
Alpha Lower Limit 34.23 %
Beta Counts 140045
Beta Upper Limit 31.23 %
Beta to Alpha Crosstalk 0.09 %
Beta Lower Limit 0.00 %
Count
Close
Help

SEVERN TRENT STL

Calibration Standards and Certificates

Red

Alpha Th-230

Beta Standards 1/22/04

Strontium 90 standard 01093
10,435 pCi/mL
Reference date: 9/19/01
0.1 ml ADDED TO EACH STANDARD

STD #	TARE	GROSS	MASS	SALT mL
1	8.4539	8.454	0.0001	0
2	8.512	8.5145	0.0025	0.1
3	8.5133	8.5179	0.0046	0.2
4	8.4823	8.4906	0.0083	0.375
5	8.4135	8.4279	0.0144	0.625
6	8.4015	8.426	0.0245	1.1
7	8.5081	8.5359	0.0278	1.25
8	8.4565	8.4992	0.0427	1.9
9	8.4036	8.459	0.0554	2.5
10	8.4005	8.4844	0.0839	3.75
11	8.4275	8.5471	0.1196	5.5
12	8.394	8.5664	0.1724	8
13	8.4041	8.592	0.1879	10
14	8.4168	8.6704	0.2536	12

ANALYTICS

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318 · U.S.A.

Phone (404) 352-8677
Fax (404) 352-2837

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

62204-334

Sr-90 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated by liquid scintillation counting.

Radionuclide purity and calibration were checked by germanium gamma-ray spectrometry and liquid scintillation counting. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

ISOTOPE:	Sr-90
ACTIVITY (dps):	3.897 E4
HALF-LIFE:	28.79 years
CALIBRATION DATE:	August 7, 2001 12:00 EST
TOTAL UNCERTAINTY*:	4.0%
SYSTEMATIC:	3.5%
RANDOM:	0.5%

*99% Confidence Level

Impurities: γ-impurities <0.1%

4.99897 grams 0.1M HCl solution with 30 µg/g Sr carrier.

P O NUMBER 1097166, Item 1

SOURCE PREPARED BY: M. D. Currie

M. D. Currie, Radiochemist

Q A APPROVED: W.M. Mt 8-8-01

LOT# F5D220345

SEVERN TRENT SERVICES

Logbook: 2060

Radiochemistry
Standards Preparation Logbook

Date Prep'd	Expir. Date	Standard ID Number	Isotope	Parent ID Number	Parent Activity	Parent Ref. Date	Aliquot	Dilution Volume	Change in Time	T ½	Final Activity	Solvent/ Lot #	Prep'd Initials	Cal. Ver. Initials	Comments
9/18/01	12/18/01	01-087	UNAT CAL STD	01085	10 µg/mL	9/18/01	1.5 mL	100 mL	N/A	N/A	150 ng/mL	.8 M HNO_3	BMW	JTK	nanograms/mL
		01-088					1.0 mL				100 ng/mL			JTK	
		01-089					0.5 mL				50 ng/mL			JTK	
		01-090		01086	100 ng/mL		10 mL	100 mL			10 ng/mL			JTK	
		01-091		01-089	50 ng/mL		10 mL	100.0 mL			5 ng/mL			JTK	
		01-092		01-088	100 ng/mL		1.0 mL	100.0 mL			1 ng/mL			JTK	
9/19/01	9/19/02	01-093	SR-90	ampule C2204-334	38,887 dps	8/7/01	4.7531 g	100.0 mL	N/A	28.79 K	~~10435 pCi/mL~~ ~~104.3 pCi/mL~~ 231.66 dpm/mL	.8 M HNO_3	BMW	JTK	
9/19/01	9/19/02	01-094	SR90	01093	10435.8 pCi/mL	9/19/01	1.0 mL	100.0 mL	N/A	28.79 K	104.3 pCi/mL 231.66 dpm/mL	.8 M HNO_3	BMW	JTK	
9/20/01	9/20/02	Ba-28	STD. Barium Carrier	Merck-KPCM $BaCl_2$	N/A	3/23/98	28.46 g	1000.0 mL	N/A	N/A	27.2 mg/mL	Reagent H2O	BMW	JTK	See Anal. expire weight sheet.
10/4/01	~~10/4/02~~ 10/4/02 ema 3-16-03	01-095	U-232	97-105	10,994 dpm/mL	9-6-97	1 mL	500 mL	—	70 yr	21.99 dpm	1M HNO_3	CMA	JTK	
10/12/01	10/12/02	01-096	Ra226	98-006	1316 dpm/mL	4/13/98	1.0 mL	100.0 mL	—	1600 yr	13.16 dpm/mL	1M HNO_3	AM	JTK	
10/18/01	~~10/18/02~~ 10/18/02 ema 3-16-03	01-097	(ABT) SR90 Y90	01032	1765.4 dpm/mL	3/26/96	2.0 mL	100.0 mL	N/A	28.5 yr	(35.31) total ~~23.99~~ dpm/mL	1M HNO_3	BMW	AW	Decay Correct = 1699.65 dpm/mL

Additional Comments:

decay corrected 34.83 JTK 10-29-01

728 of 922

STL ST. LOUIS

SEVERN TRENT STL

Calibration for LB4100

Red

Alpha Th-230 BaSO4 for Ra-226

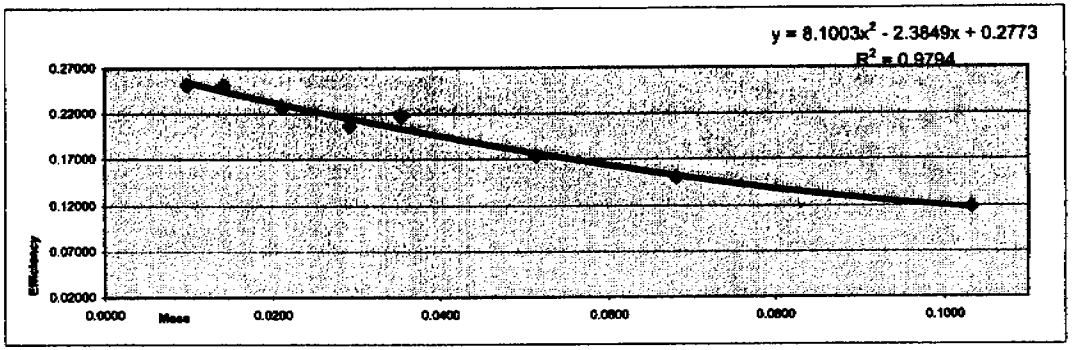
SEVERN TRENT STL

Detector Efficiency Curves

Alpha Attenuation Red A1 — Th-230 BaSO4 for Ra-226

4/15/2004

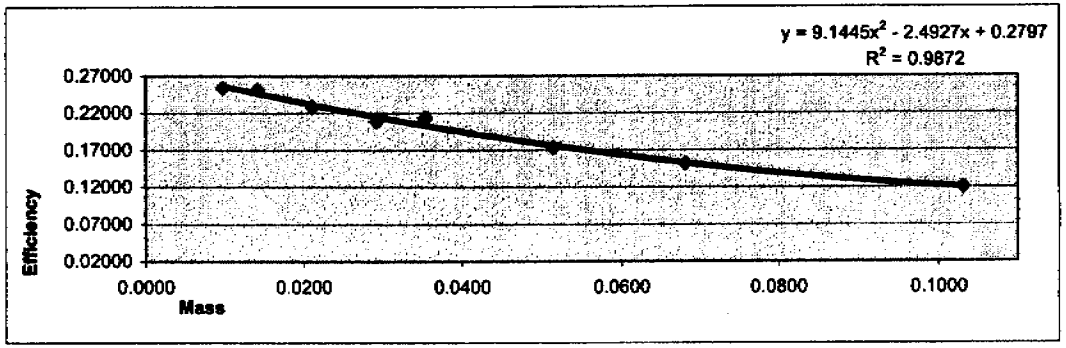
Detector ID	Sample Wt	Alpha	Count Time	DPM 4567.9 CPM	Th230 Eff
A1	0.0097	20435	17.77	1149.972	0.25175
A1	0.0141	20412	17.76	1149.324	0.25161
A1	0.0211	20415	19.74	1034.195	0.22640
A1	0.0292	20411	21.71	940.166	0.20582
A1	0.0354	20408	20.65	988.281	0.21635
A1	0.0514	20420	25.77	792.394	0.17347
A1	0.0681	20419	29.69	687.740	0.15056
A1	0.1031	20412	37.83	539.572	0.11812



Alpha Attenuation Red A2 — Th-230 BaSO4 for Ra-226

4/15/2004

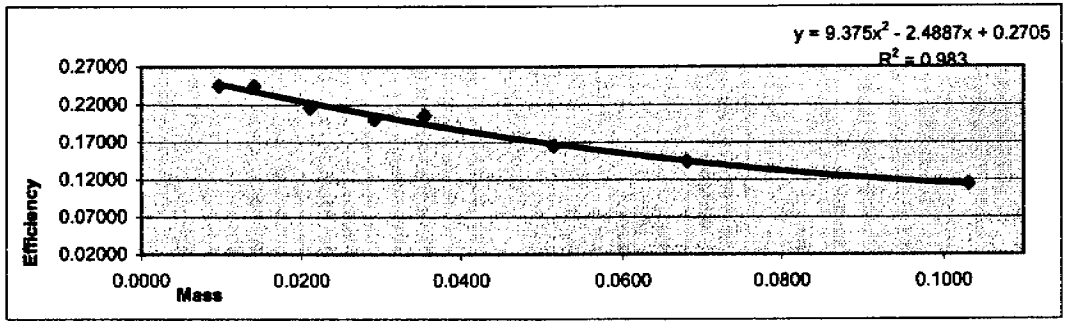
Detector ID	Sample Wt	Alpha	Count Time	DPM 4567.9 CPM	Th230 Eff
A2	0.0097	20420	17.63	1158.253	0.25356
A2	0.0141	20421	17.77	1149.184	0.25158
A2	0.0211	20410	19.59	1041.858	0.22808
A2	0.0292	20419	21.47	951.048	0.20820
A2	0.0354	20415	20.95	974.463	0.21333
A2	0.0514	20417	25.89	788.606	0.17264
A2	0.0681	20412	29.47	692.637	0.15163
A2	0.1031	20411	37.15	549.421	0.12028



Alpha Attenuation Red A3 — Th-230 BaSO4 for Ra-226

4/15/2004

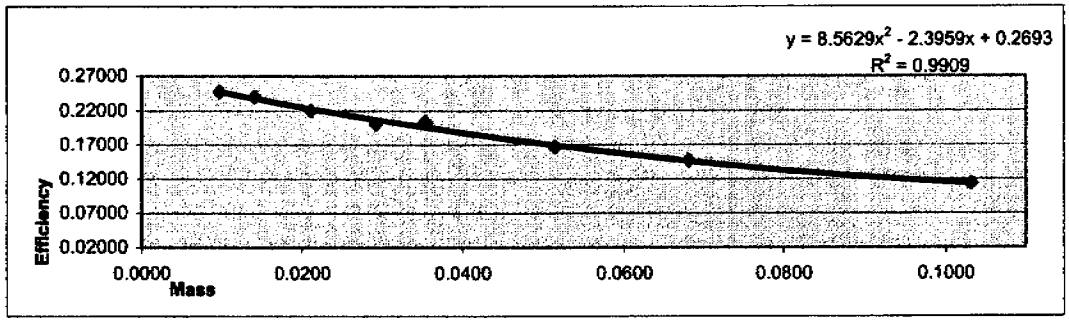
Detector ID	Sample Wt	Alpha	Count Time	DPM 4567.9 CPM	Th230 Eff
A3	0.0097	20417	18.25	1118.740	0.24491
A3	0.0141	20417	18.30	1115.683	0.24424
A3	0.0211	20421	20.76	983.671	0.21534
A3	0.0292	20416	22.34	913.876	0.20006
A3	0.0354	20410	21.77	937.529	0.20524
A3	0.0514	20419	27.12	752.913	0.16483
A3	0.0681	20411	31.11	656.091	0.14363
A3	0.1031	20412	39.22	520.449	0.11394



Alpha Attenuation Red A4 — Th-230 BaSO4 for Ra-226

4/15/2004

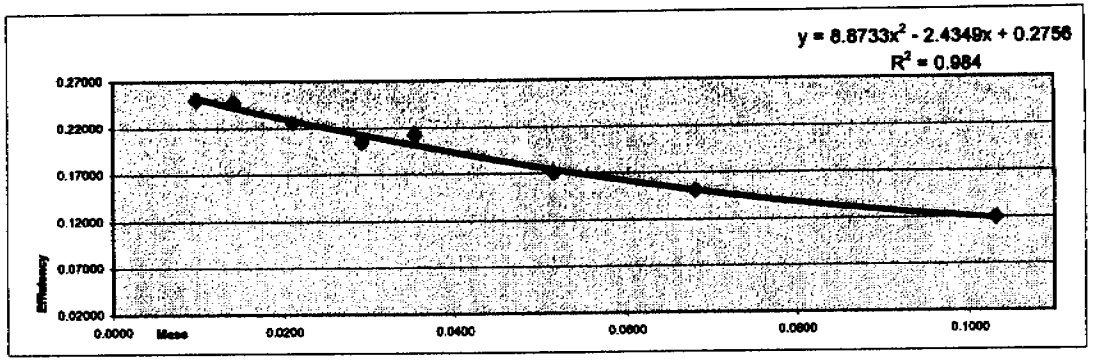
Detector ID	Sample Wt	Alpha	Count Time	DPM 4567.9 CPM	Th230 Eff
A4	0.0097	20441	18.11	1128.713	0.24710
A4	0.0141	20417	18.62	1096.509	0.24005
A4	0.0211	20428	20.34	1004.326	0.21987
A4	0.0292	20420	22.38	912.422	0.19975
A4	0.0354	20423	21.97	929.586	0.20350
A4	0.0514	20417	26.85	760.410	0.16647
A4	0.0681	20412	30.40	671.447	0.14699
A4	0.1031	20414	39.51	516.679	0.11311



Alpha Attenuation Red B1
4/15/2004

Th-230 BaSO4 for Ra-226

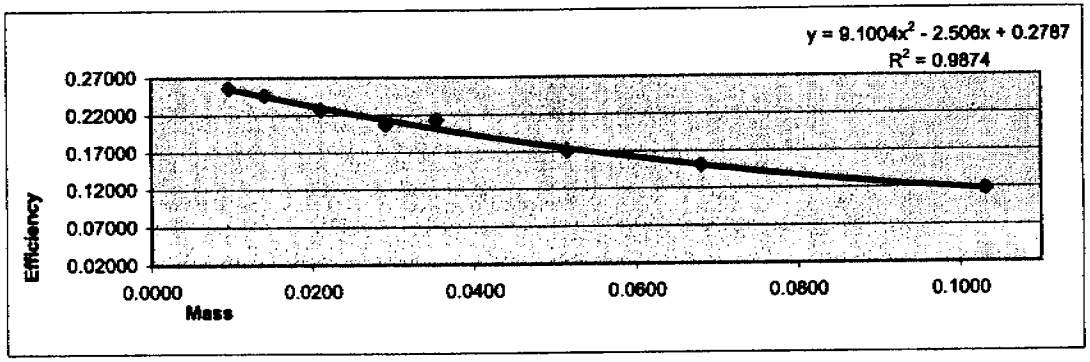
Detector ID	Sample Wt	Alpha	Count Time	DPM 4567.9 CPM	Th230 Eff
B1	0.0097	20429	17.84	1145.123	0.25069
B1	0.0141	20419	18.05	1131.247	0.24765
B1	0.0211	20414	19.80	1031.010	0.22571
B1	0.0292	20417	21.96	929.736	0.20354
B1	0.0354	20414	21.08	968.406	0.21200
B1	0.0514	20414	26.19	779.458	0.17064
B1	0.0681	20414	29.66	688.267	0.15067
B1	0.1031	20416	37.53	543.991	0.11909



Alpha Attenuation Red B2
4/15/2004

Th-230 BaSO4 for Ra-226

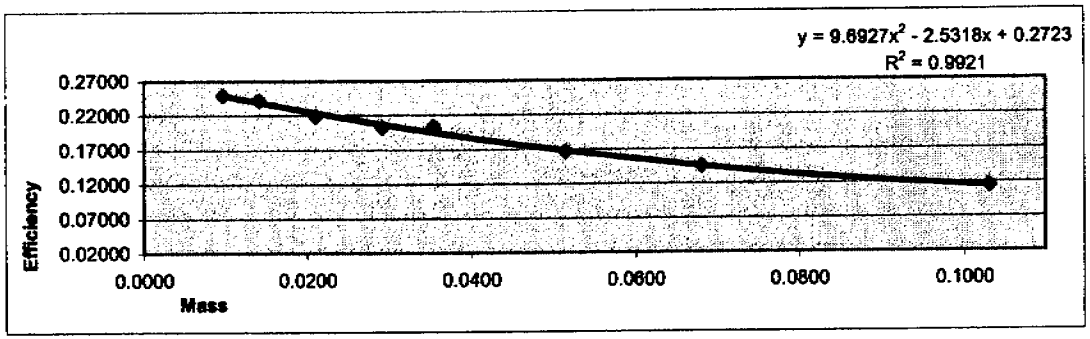
Detector ID	Sample Wt	Alpha	Count Time	DPM 4567.9 CPM	Th230 Eff
B2	0.0097	20419	17.50	1166.800	0.25543
B2	0.0141	20418	18.13	1126.200	0.24655
B2	0.0211	20413	19.71	1035.667	0.22673
B2	0.0292	20415	21.60	945.139	0.20691
B2	0.0354	20409	20.97	973.247	0.21306
B2	0.0514	20416	26.32	775.684	0.16981
B2	0.0681	20413	29.75	686.151	0.15021
B2	0.1031	20413	38.10	535.774	0.11729



Alpha Attenuation Red B3
4/15/2004

Th-230 BaSO4 for Ra-226

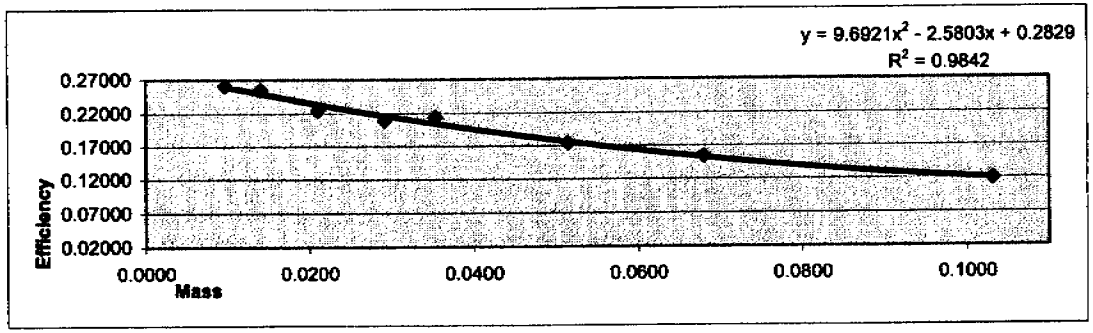
Detector ID	Sample Wt	Alpha	Count Time	DPM 4567.9 CPM	Th230 Eff
B3	0.0097	20422	17.97	1136.450	0.24879
B3	0.0141	20415	18.50	1103.514	0.24158
B3	0.0211	20416	20.49	996.388	0.21813
B3	0.0292	20422	22.12	923.237	0.20211
B3	0.0354	20414	22.03	926.645	0.20286
B3	0.0514	20410	26.90	758.736	0.16610
B3	0.0681	20424	30.94	660.116	0.14451
B3	0.1031	20413	39.08	522.339	0.11435



Alpha Attenuation Red B4
4/15/2004

Th-230 BaSO4 for Ra-226

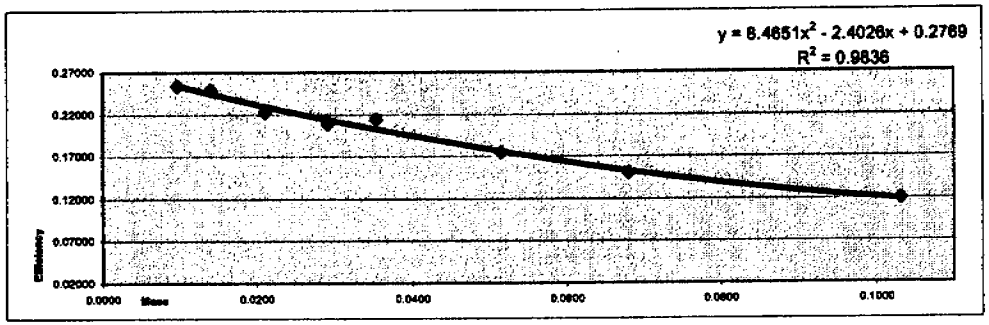
Detector ID	Sample Wt	Alpha	Count Time	DPM 4567.9 CPM	Th230 Eff
B4	0.0097	20410	17.19	1187.3182	0.25993
B4	0.0141	20424	17.61	1159.7956	0.25390
B4	0.0211	20425	19.95	1023.8095	0.22413
B4	0.0292	20414	21.41	953.4797	0.20873
B4	0.0354	20427	20.92	976.4340	0.21376
B4	0.0514	20417	25.73	793.5095	0.17371
B4	0.0681	20422	29.11	701.5459	0.15358
B4	0.1031	20412	37.44	545.1923	0.11935



Alpha Attenuation Red C1 — Th-230 BaSO4 for Ra-226

4/15/2004

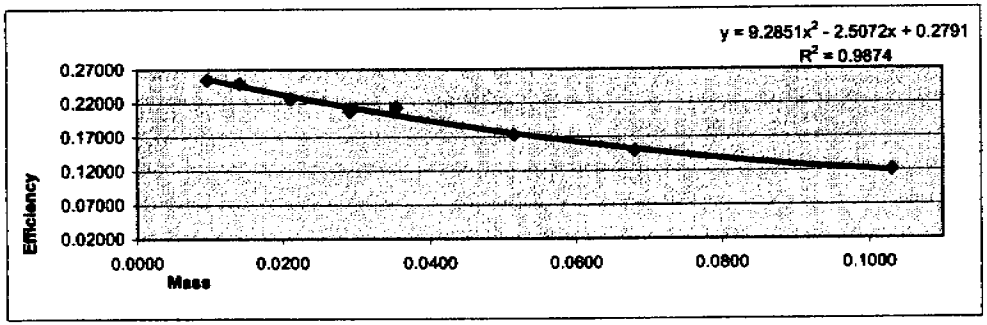
Detector ID	Sample Wt	Alpha	Count Time	4567.9 DPM CPM	Th230 Eff
C1	0.0097	20426	17.62	1159.2509	0.25378
C1	0.0141	20439	17.96	1138.0290	0.24914
C1	0.0211	20430	20.08	1017.4303	0.22273
C1	0.0292	20416	21.44	952.2388	0.20846
C1	0.0354	20422	20.84	979.9424	0.21453
C1	0.0514	20416	25.67	795.3253	0.17411
C1	0.0681	20413	29.74	686.3820	0.15026
C1	0.1031	20409	37.30	547.1582	0.11978



Alpha Attenuation Red C2 — Th-230 BaSO4 for Ra-226

4/15/2004

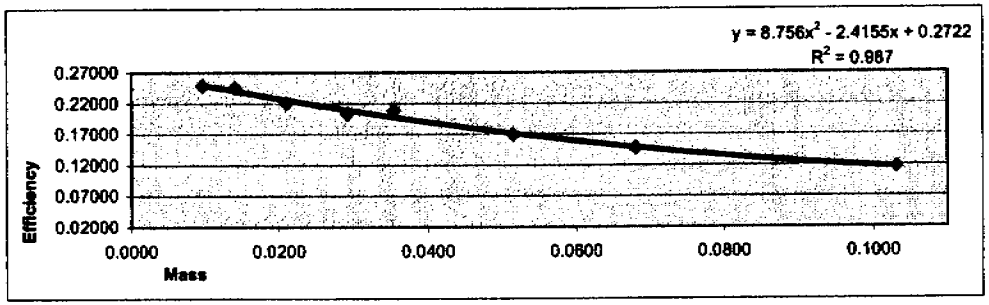
Detector ID	Sample Wt	Alpha	Count Time	4567.9 DPM CPM	Th230 Eff
C2	0.0097	20411	17.56	1162.3576	0.25446
C2	0.0141	20420	17.98	1135.7063	0.24863
C2	0.0211	20418	19.72	1035.3955	0.22667
C2	0.0292	20423	21.53	948.5834	0.20766
C2	0.0354	20419	20.95	974.6539	0.21337
C2	0.0514	20412	25.88	788.7172	0.17267
C2	0.0681	20411	29.93	681.9579	0.14929
C2	0.1031	20409	37.24	548.0397	0.11998



Alpha Attenuation Red C3 — Th-230 BaSO4 for Ra-226

4/15/2004

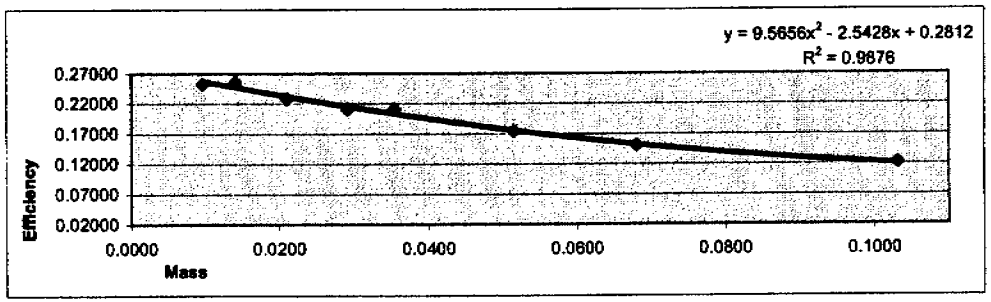
Detector ID	Sample Wt	Alpha	Count Time	4567.9 DPM CPM	Th230 Eff
C3	0.0097	20415	18.02	1132.9079	0.24802
C3	0.0141	20423	18.29	1116.6211	0.24445
C3	0.0211	20413	20.28	1006.5582	0.22035
C3	0.0292	20416	21.97	929.2672	0.20343
C3	0.0354	20416	21.46	951.3514	0.20827
C3	0.0514	20415	26.50	770.3774	0.16865
C3	0.0681	20413	30.35	672.5865	0.14724
C3	0.1031	20413	38.31	532.8374	0.11665



Alpha Attenuation Yellow C4 — Th-230 BaSO4 for Ra-226

4/15/2004

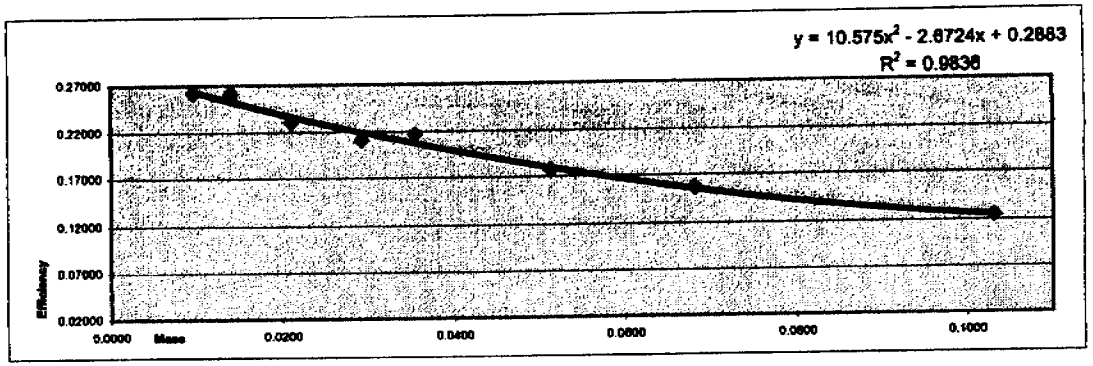
Detector ID	Sample Wt	Alpha	Count Time	4567.9 DPM CPM	Th230 Eff
C4	0.0097	20435	17.73	1152.5663	0.25232
C4	0.0141	20422	17.48	1168.3066	0.25576
C4	0.0211	20426	19.63	1040.5502	0.22780
C4	0.0292	20413	21.25	960.6118	0.21030
C4	0.0354	20411	21.20	962.7830	0.21077
C4	0.0514	20419	25.62	796.9945	0.17448
C4	0.0681	20413	29.64	688.6977	0.15077
C4	0.1031	20413	36.86	553.7982	0.12124



Alpha Attenuation Red D1
4/15/2004

Th-230 BaSO4 for Ra-226

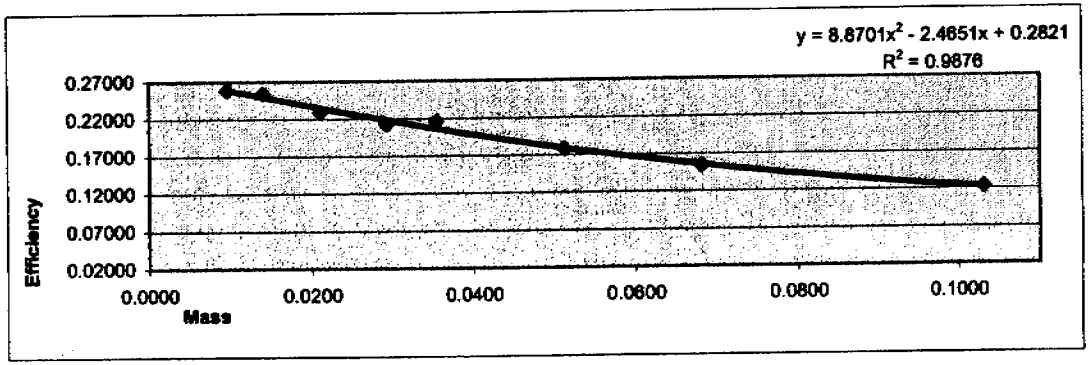
Detector ID	Sample Wt	Alpha	Count Time	DPM 4567.9 CPM	Th230 Eff
D1	0.0097	20419	17.10	1194.0936	0.26141
D1	0.0141	20439	17.17	1190.3902	0.26060
D1	0.0211	20425	19.37	1054.4657	0.23084
D1	0.0292	20412	21.22	961.9227	0.21058
D1	0.0354	20420	20.64	989.3411	0.21659
D1	0.0514	20413	25.29	807.1570	0.17670
D1	0.0681	20418	28.55	715.1664	0.15656
D1	0.1031	20414	35.81	570.0642	0.12480



Alpha Attenuation Red D2
4/15/2004

Th-230 BaSO4 for Ra-226

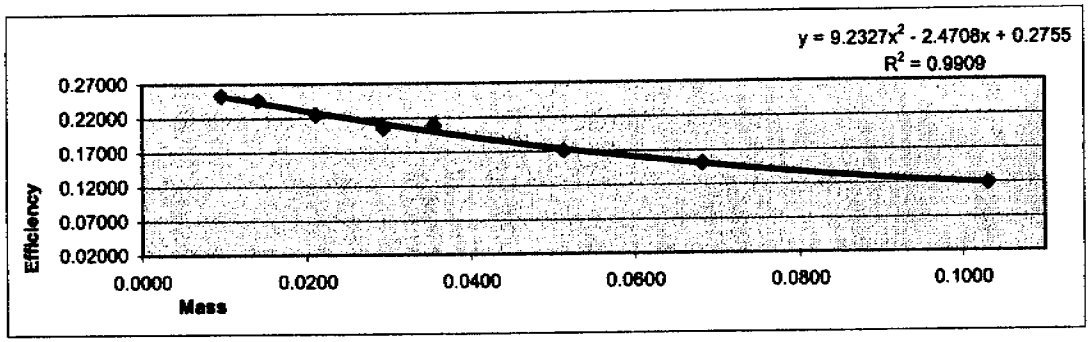
Detector ID	Sample Wt	Alpha	Count Time	DPM 4567.9 CPM	Th230 Eff
D2	0.0097	20453	17.36	1178.1682	0.25792
D2	0.0141	20422	17.60	1160.3409	0.25402
D2	0.0211	20432	19.60	1042.4490	0.22821
D2	0.0292	20413	21.08	968.3586	0.21199
D2	0.0354	20412	20.68	987.0406	0.21608
D2	0.0514	20408	25.15	811.4513	0.17764
D2	0.0681	20412	29.06	702.4088	0.15377
D2	0.1031	20413	36.43	560.3349	0.12267



Alpha Attenuation Red D3
4/15/2004

Th-230 BaSO4 for Ra-226

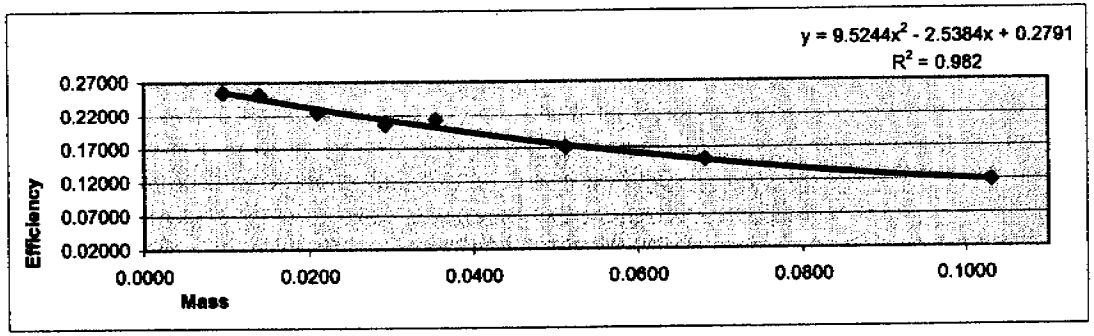
Detector ID	Sample Wt	Alpha	Count Time	DPM 4567.9 CPM	Th230 Eff
D3	0.0097	20412	17.72	1151.9187	0.25218
D3	0.0141	20432	18.21	1122.0209	0.24563
D3	0.0211	20421	19.93	1024.6362	0.22431
D3	0.0292	20417	21.82	935.7012	0.20484
D3	0.0354	20421	21.48	950.6983	0.20813
D3	0.0514	20413	26.22	778.5278	0.17043
D3	0.0681	20411	29.64	688.6302	0.15075
D3	0.1031	20415	37.62	542.6635	0.11880



Alpha Attenuation Red D4
4/15/2004

Th-230 BaSO4 for Ra-226

Detector ID	Sample Wt	Alpha	Count Time	DPM 4567.9 CPM	Th230 Eff
D4	0.0097	20439	17.60	1161.3068	0.25423
D4	0.0141	20415	17.78	1148.2002	0.25136
D4	0.0211	20428	19.98	1022.4224	0.22383
D4	0.0292	20409	21.78	937.0523	0.20514
D4	0.0354	20419	20.99	972.7966	0.21296
D4	0.0514	20411	26.26	777.2658	0.17016
D4	0.0681	20410	29.50	691.8644	0.15146
D4	0.1031	20409	37.70	541.3528	0.11851

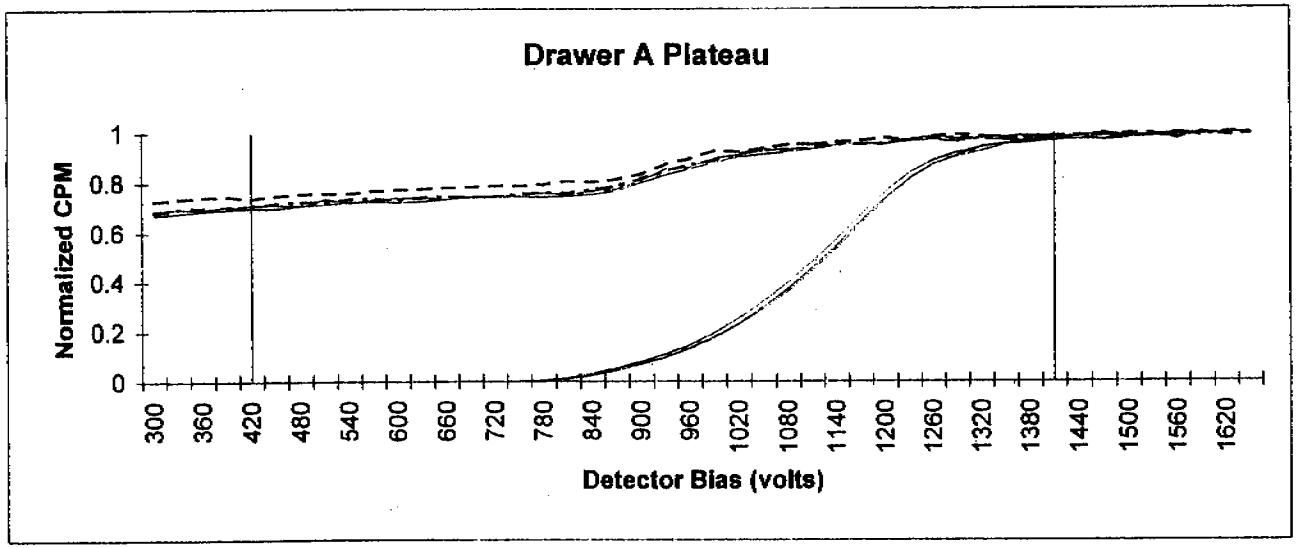


SEVERN TRENT STL

Voltage Platueas

Unit Type: LB4100/W
Date Performed: 3/25/04 11:59
FileName: PLAT000
Batch ID: RED PLATEAUS 03/25/04 IV

Unit Id: Red
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

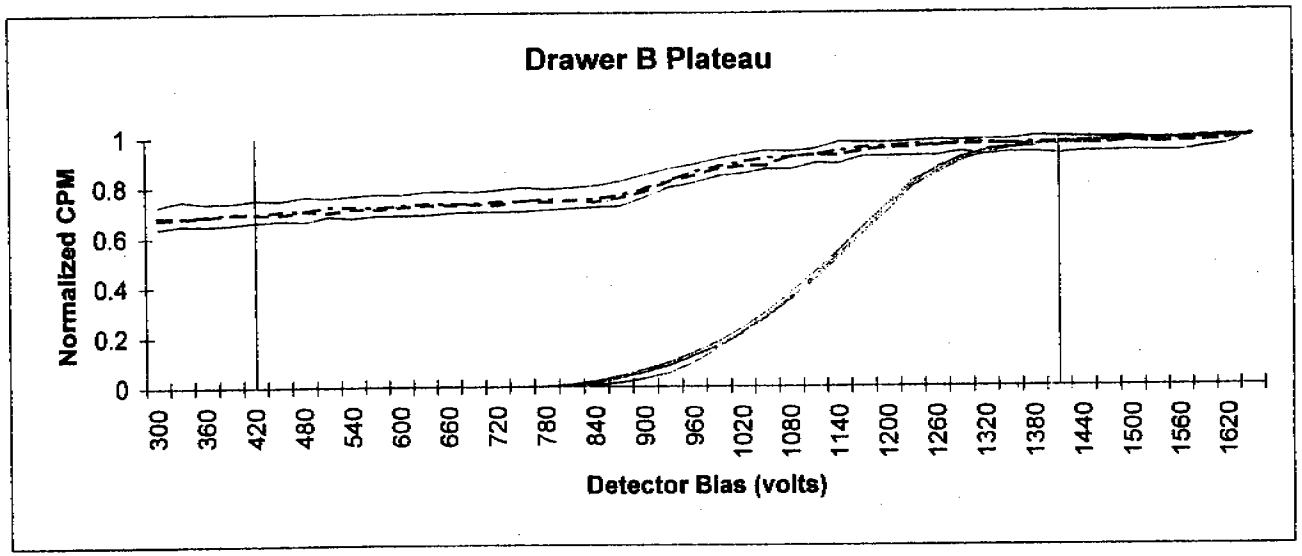
Optimum alpha only operating voltage: 420

	A1	A2	A3	A4
Beta slope at beta voltage	2.02%	2.37%	2.37%	1.15%
Alpha slope at beta voltage	0.88%	1.01%	0.57%	0.87%
Alpha slope at alpha voltage	1.70%	1.39%	2.26%	3.25%

Printed 3/26/2004 12:59 PM

Unit Type: LB4100/W
Date Performed: 3/25/04 11:59
FileName: PLAT000
Batch ID: RED PLATEAUS 03/25/04 IV

Unit Id: Red
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

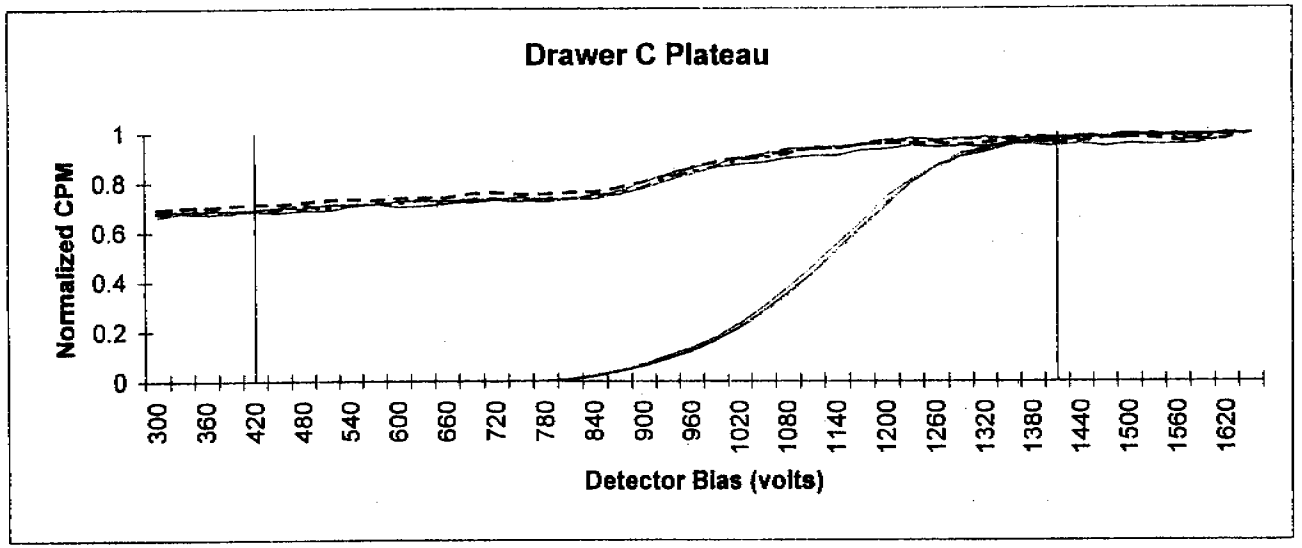
Optimum alpha only operating voltage: 420

	B1	B2	B3	B4
Beta slope at beta voltage	2.01%	2.51%	3.24%	1.41%
Alpha slope at beta voltage	0.31%	-0.08%	0.14%	0.96%
Alpha slope at alpha voltage	2.73%	2.06%	2.42%	2.08%

Printed 3/26/2004 12:59 PM

Unit Type: LB4100/W
Date Performed: 3/25/04 11:59
FileName: PLAT000
Batch ID: RED PLATEAUS 03/25/04 IV

Unit Id: Red
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

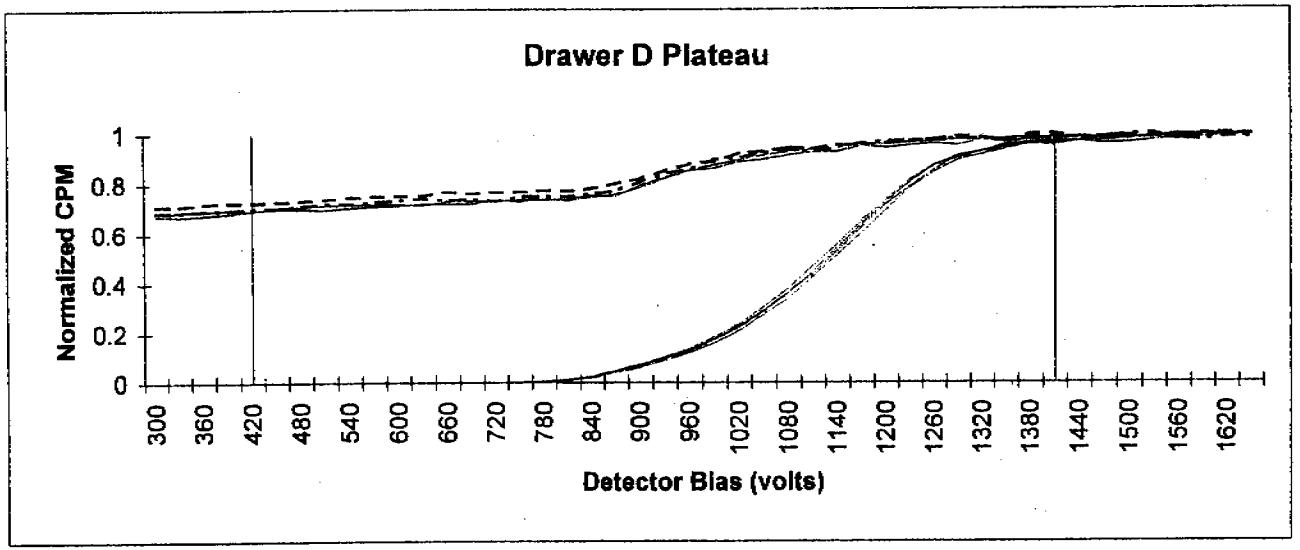
Optimum alpha only operating voltage: 420

	C1	C2	C3	C4
Beta slope at beta voltage	1.87%	3.12%	2.82%	2.97%
Alpha slope at beta voltage	0.82%	0.39%	-0.79%	0.31%
Alpha slope at alpha voltage	1.36%	2.31%	1.73%	2.98%

Printed 3/26/2004 1:00 PM

Unit Type: LB4100/W
Date Performed: 3/25/04 11:59
FileName: PLAT000
Batch ID: RED PLATEAUS 03/25/04 IV

Unit Id: Red
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

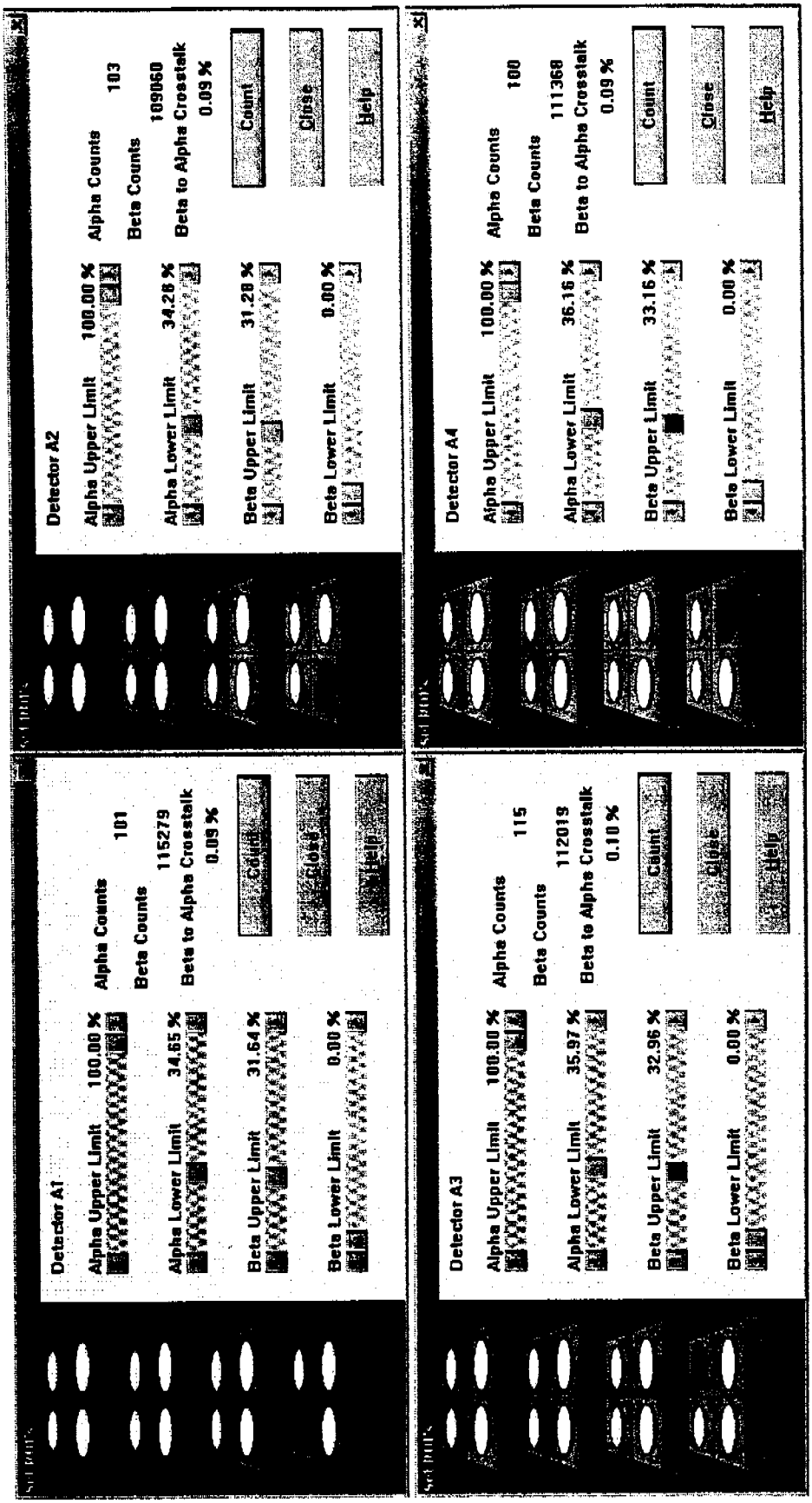
Optimum alpha only operating voltage: 420

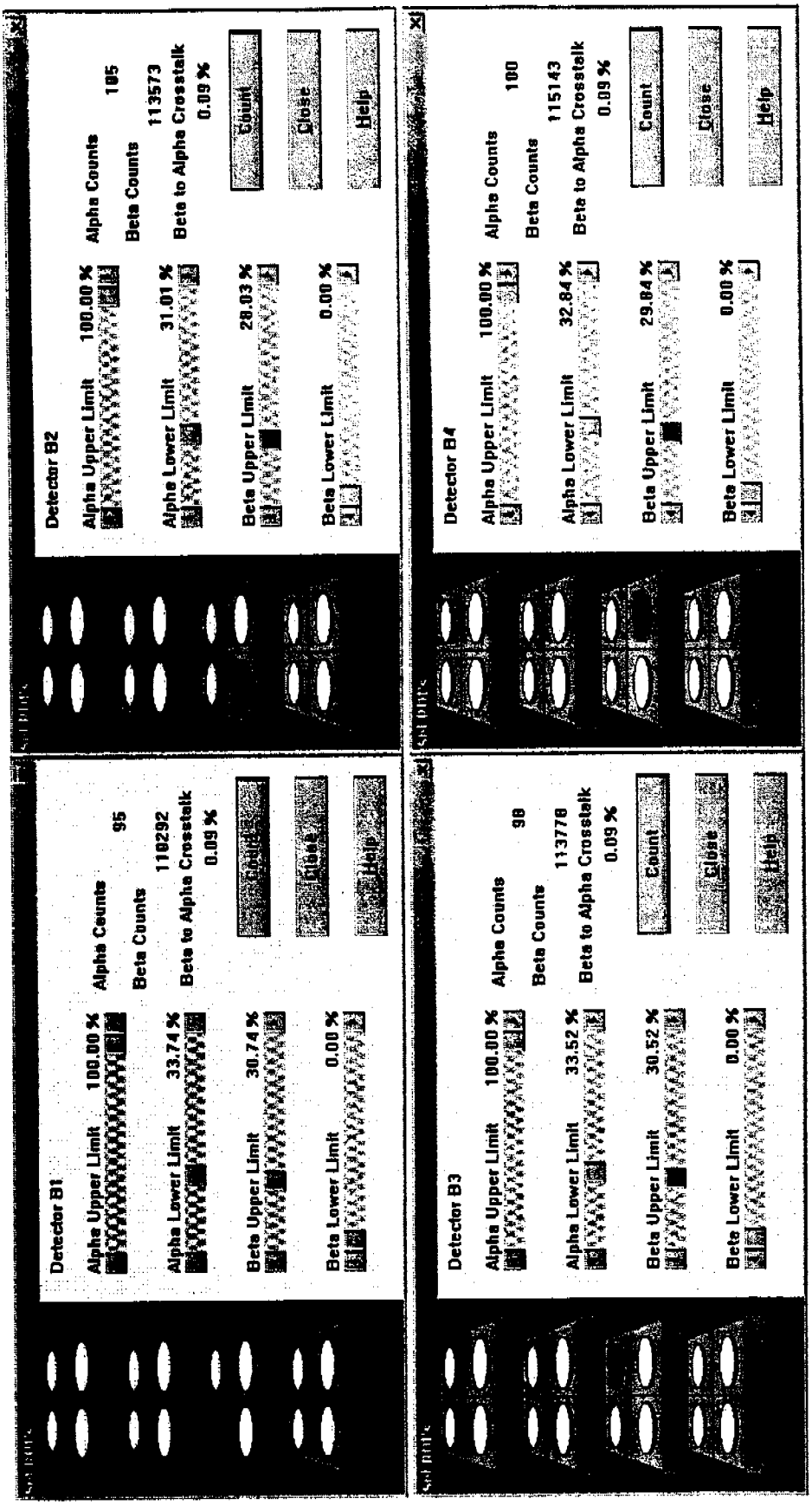
	D1	D2	D3	D4
Beta slope at beta voltage	2.60%	2.22%	2.90%	2.29%
Alpha slope at beta voltage	0.31%	0.50%	-0.50%	1.10%
Alpha slope at alpha voltage	1.96%	0.99%	3.11%	2.04%

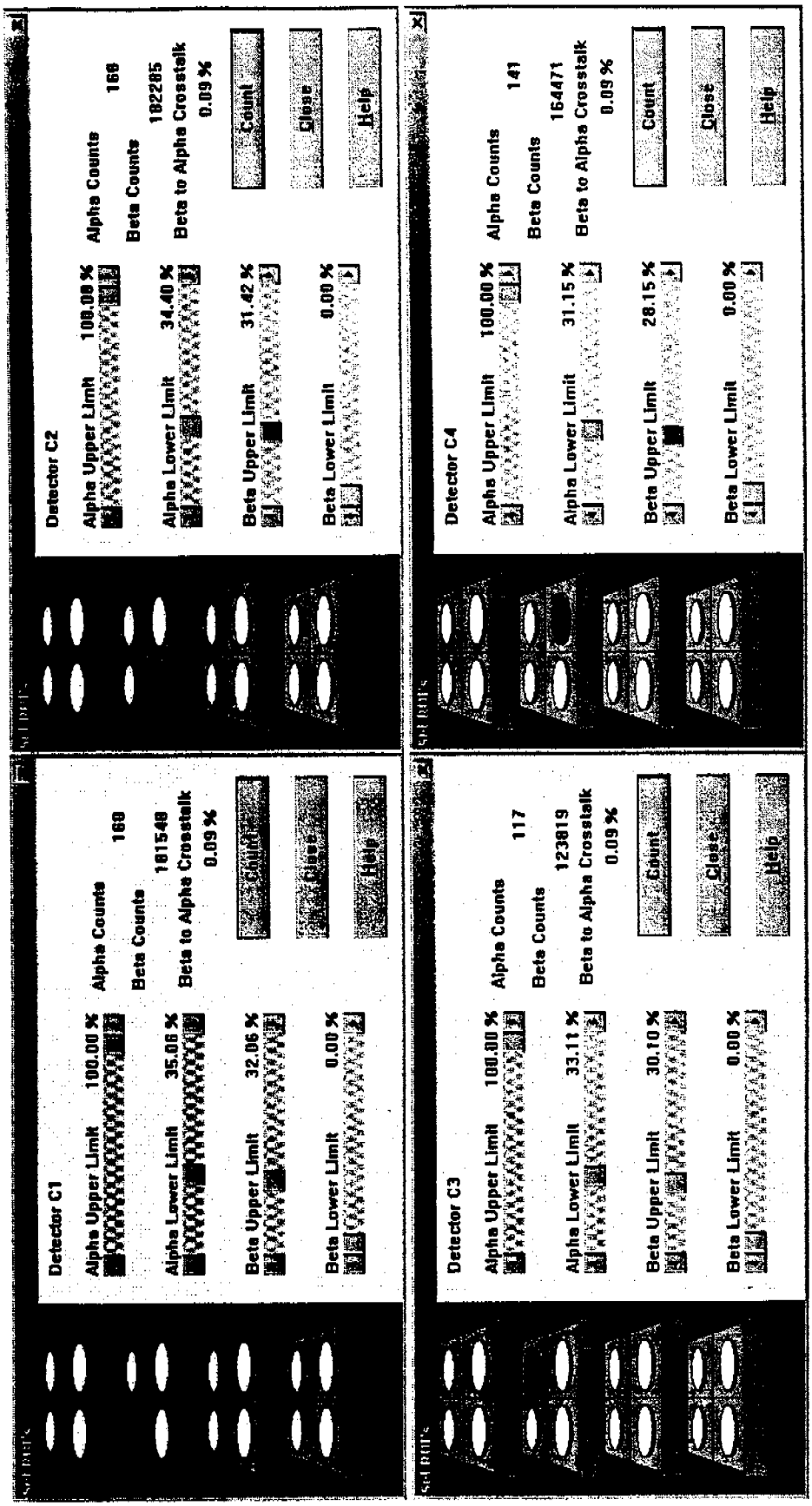
Printed 3/26/2004 1:00 PM

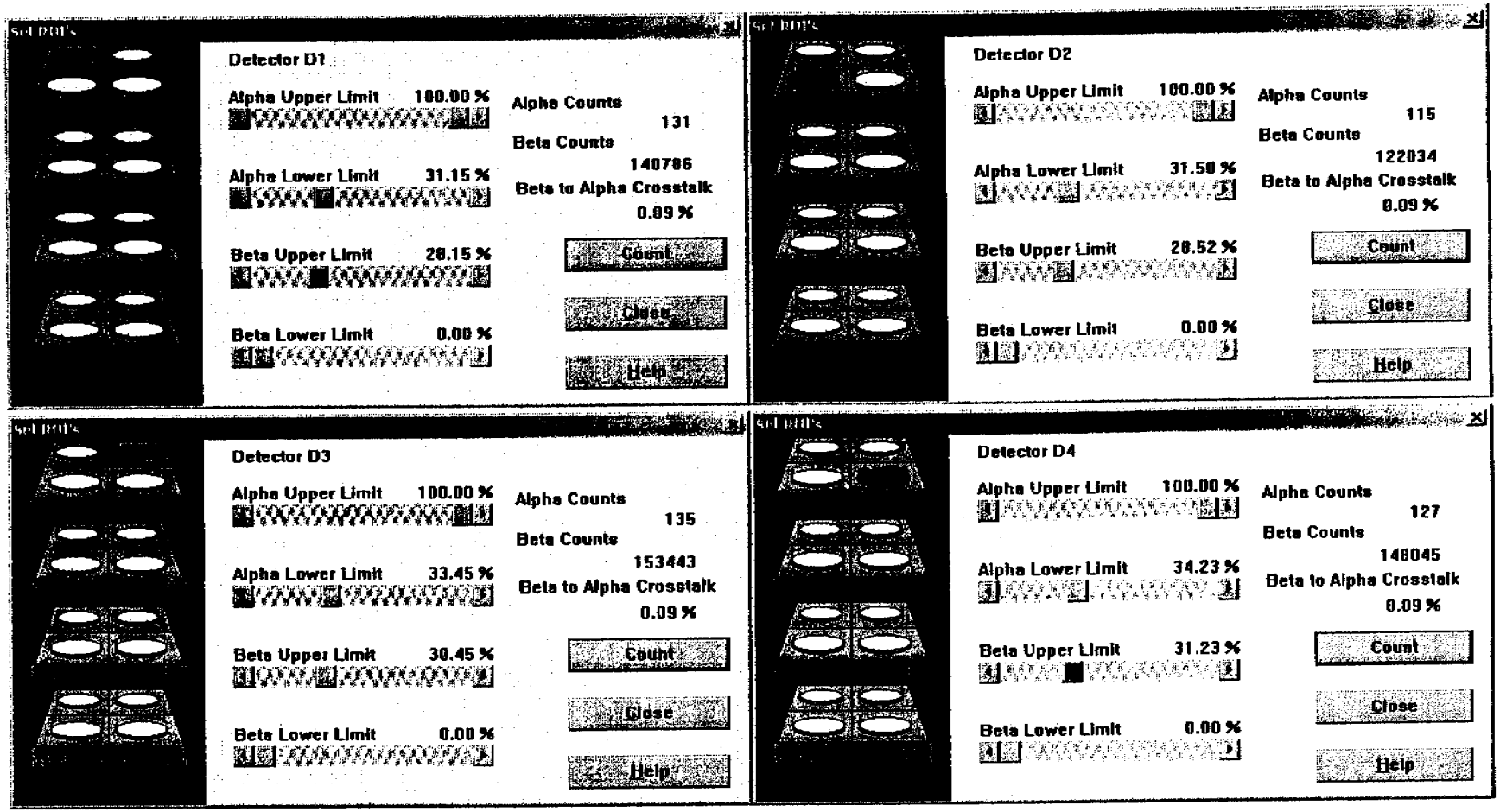
SEVERN TRENT STL

Discriminator Settings


Detector A1
Alpha Upper Limit 100.00 %
Alpha Counts 101
Beta Counts 115279
Alpha Lower Limit 34.65 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 31.64 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector A2
Alpha Upper Limit 100.00 %
Alpha Counts 103
Beta Counts 109060
Alpha Lower Limit 34.26 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 31.28 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector A3
Alpha Upper Limit 100.00 %
Alpha Counts 115
Beta Counts 112019
Alpha Lower Limit 35.97 %
Beta to Alpha Crosstalk 0.10 %
Beta Upper Limit 32.96 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector A4
Alpha Upper Limit 100.00 %
Alpha Counts 100
Beta Counts 111368
Alpha Lower Limit 36.16 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 33.16 %
Count
Close
Beta Lower Limit 0.00 %
Help


Detector B1
Alpha Upper Limit 100.00 %
Alpha Counts 95
Beta Counts 118292
Alpha Lower Limit 33.74 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 30.74 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector B2
Alpha Upper Limit 100.00 %
Alpha Counts 105
Beta Counts 113573
Alpha Lower Limit 31.01 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 28.03 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector B3
Alpha Upper Limit 100.00 %
Alpha Counts 98
Beta Counts 113778
Alpha Lower Limit 33.52 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 30.52 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector B4
Alpha Upper Limit 100.00 %
Alpha Counts 100
Beta Counts 115143
Alpha Lower Limit 32.84 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 29.84 %
Count
Close
Beta Lower Limit 0.00 %
Help


Detector C1
Alpha Upper Limit 100.00 %
Alpha Counts 168
Beta Counts 181548
Alpha Lower Limit 35.06 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 32.06 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector C2
Alpha Upper Limit 100.00 %
Alpha Counts 168
Beta Counts 182285
Alpha Lower Limit 34.40 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 31.42 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector C3
Alpha Upper Limit 100.00 %
Alpha Counts 117
Beta Counts 123819
Alpha Lower Limit 33.11 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 30.10 %
Count
Close
Beta Lower Limit 0.00 %
Help
Detector C4
Alpha Upper Limit 100.00 %
Alpha Counts 141
Beta Counts 164471
Alpha Lower Limit 31.15 %
Beta to Alpha Crosstalk 0.09 %
Beta Upper Limit 28.15 %
Count
Close
Beta Lower Limit 0.00 %
Help


Detector D1
Alpha Upper Limit 100.00 %
Alpha Lower Limit 31.15 %
Beta Upper Limit 28.15 %
Beta Lower Limit 0.00 %
Alpha Counts 131
Beta Counts 140786
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector D2
Alpha Upper Limit 100.00 %
Alpha Lower Limit 31.50 %
Beta Upper Limit 28.52 %
Beta Lower Limit 0.00 %
Alpha Counts 115
Beta Counts 122034
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector D3
Alpha Upper Limit 100.00 %
Alpha Lower Limit 33.45 %
Beta Upper Limit 30.45 %
Beta Lower Limit 0.00 %
Alpha Counts 135
Beta Counts 153443
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help
Detector D4
Alpha Upper Limit 100.00 %
Alpha Lower Limit 34.23 %
Beta Upper Limit 31.23 %
Beta Lower Limit 0.00 %
Alpha Counts 127
Beta Counts 148045
Beta to Alpha Crosstalk 0.09 %
Count
Close
Help

SEVERN TRENT STL

Calibration Standards and Certificates

Alpha Th-230 BaSO4 for Ra-226 Analysis

Alpha Calibration Standards for Ra-226

Standard used: 1mL of Th-230 03-071 4567.9 dpm/mL 12/24/03

Std #	mL Ba Carrier	Gross wt	Tare Wt	Mass BaSO4
1	0.25	8.4779	8.4682	0.0097
2	0.4	8.3925	8.3784	0.0141
3	0.6	8.4768	8.4557	0.0211
4	0.8	8.4605	8.4313	0.0292
5	1	8.4726	8.4372	0.0354
6	1.5	8.4687	8.4173	0.0514
7	2	8.5100	8.4419	0.0681
8	3	8.5684	8.4653	0.1031

ANALYTICS

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318 · U.S.A.

Phone (404) 352-8677
Fax (404) 352-2837

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

65090-334

Th-230 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated by liquid scintillation counting.

Radionuclide purity and calibration were checked by germanium gamma-ray spectrometry and liquid scintillation counting. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

ISOTOPE:	Th-230
ACTIVITY (dps):	7.654 E3
HALF-LIFE:	7.538 E4 Years
CALIBRATION DATE:	December 19, 2002 12:00 EST
TOTAL UNCERTAINTY*:	3.5%
SYSTEMATIC:	2.6%
RANDOM:	0.9%

*99% Confidence Level

Impurities: γ-impurities <0.1%, α-impurities <0.05%

5.17738 grams 0.5M HNO_3 solution.

P O NUMBER 1614557-000 OP, Item 3

SOURCE PREPARED BY: M. D. Taskaeva for
M. Taskaeva, Radiochemist

Q A APPROVED: 12-19-02

LOT# F5D220345

SML ST. LOUIS

SEVERN TRENT SERVICES

Logbook: 2060

Radiochemistry
Standards Preparation Logbook

Date Prep'd	Expir. Date	Standard ID Number	Isotope	Parent ID Number	Parent Activity	Parent Ref. Date	Aliquot	Dilution Volume	Change in Time	T ½	Final Activity	Solvent/ Lot #	Prep'd Initials	Cal. Ver. Initials	Comments
9-11-03	9-11-08	03-070	Am-243	98-011	1161 dpm/g	2-28-98	150 mg	200mL		7377 yr	87.075 dpm/mL		MFM		
10-6-03	10-6-08	03-071	Th230	65090-334	7,654 dps	10-19-02	5.1498g	100mL	N/A	7.538E4	4,567.9 dpm/mL	0.5M HNO_3	BH	BBF	
10-6-03	10-6-08	03-072	Th230	03-071	4,567.9 dpm/mL	12-19-02	1mL	200mL	N/A	7.538e4	22.84 dpm/mL	0.5M HNO_3	BH	BBF	
10-11-03	10-11-8	03-073	Clean U-233	047-105	10944 dpm/mL	9-16-97	10mL	1000L		70 yr	103.85 dpm/L	PI H_2O 2M H_2SO_4 KOH pH 1.5	MFM BBF		Rad 03-0078 in Rad Capture
10/31/03	10/31/08	03-074	I-129	681-78-4	1.059 uCi	1-1-2000	1mL	100mL	N/A	1.57e+07	10.54 nCi/mL	0.1M NaOH	BH	BBF	
10/31/03	10/31/04	03-075	I-129	03-074	10.54 nCi/mL	1-12000	1mL	100mL	N/A	1.57E7	105.4 pCi/mL	0.1M NaOH	BH	BBF	
10/31/03	10/31/04	03-076	Ra 228	01012	1,018 dpm/mL	2/16/01	2mL	100mL	NA	5.75y	20.36 dpm/mL	0.5M HNO_3	BH	BBF	
10/31/03	10/31/04	03-081	Pu-242	92-242-5-1	129.63 Bq/g	12/10/89	50.723	500mL	NA	3.73E5 yr	78.9027	.5M HNO_3	MFM	MO	
11/3/03	11/3/04	SR19	SM SR counter	$Pu(NO_3)_4$	N/A	N/A	120.77g	1 Liter	N/A	N/A		dil H_2O		BBF	Reported in Rad capture
11-5-03	11-5-04	RAD03-0022	Th-229	02-006	2134.75 dpm/mL	1-28-02	17.5mL	500mL	n/a	7.3e+3	74.716 dpm/mL	.5M HNO_3	MFM	JMW	

Additional Comments:

SEVERN TRENT SERVICES

CALIBRATION FOR LB4100 BLUE

SEVERN TRENT SERVICES

The following calibration of the LB4100 'Blue' gas flow proportional counter was begin on April 1, 2002 and completed on May 8, 2002. The following procedures were used to perform the calibration:

STL-13019 Rev. 2: Calibration of the Low Background Gas Flow Proportional Counting System

SL 13012 Rev. 2: Evaluation of Sample Transmission Factor

This instrument calibration was implemented on May 10, 2002.

Analyst: _____ Date: 5-13-02

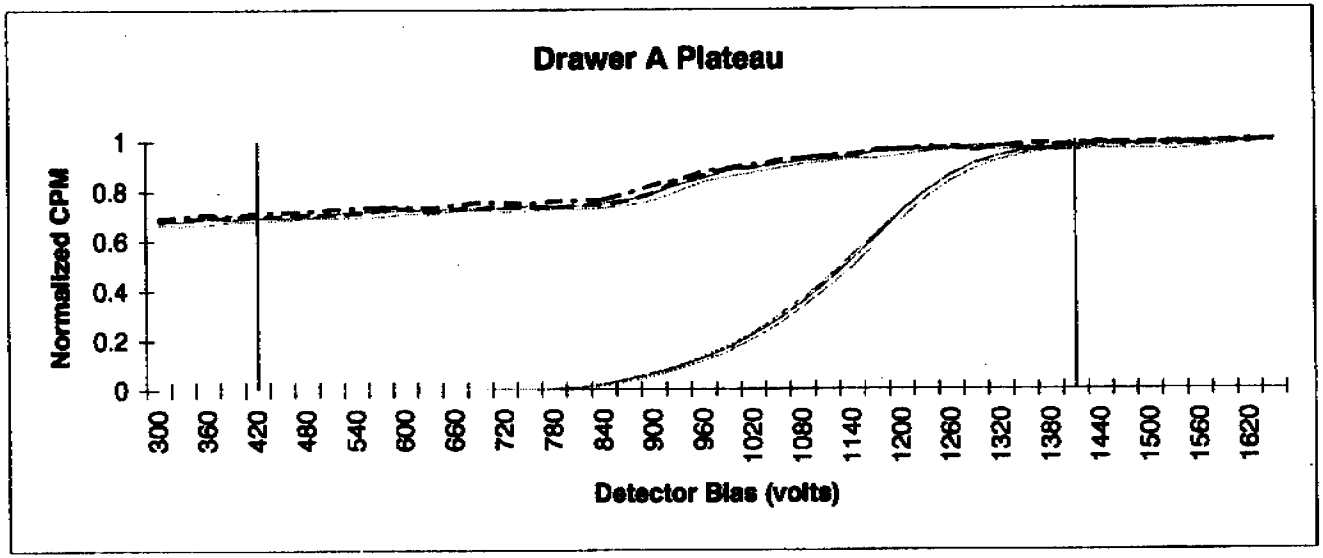
Rad Group Leader: _____ Date: 5-14-02

SEVERN TRENT SERVICES

VOLTAGE PLATEAUS

Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit Id: Blue
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

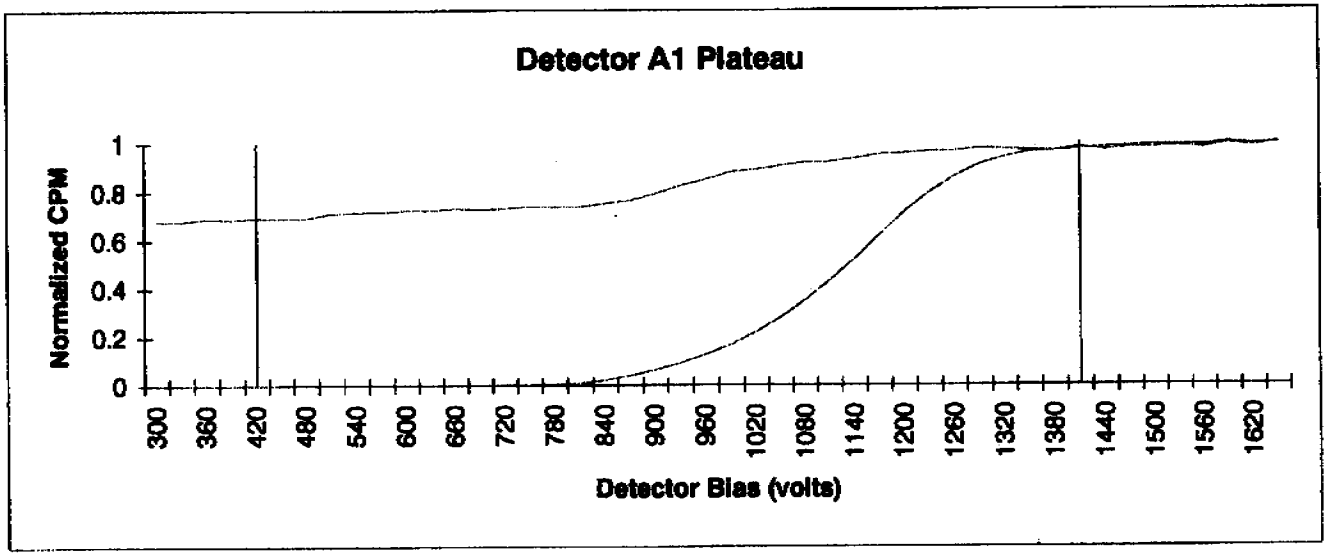
Optimum alpha only operating voltage: 420

	A1	A2	A3	A4
Beta slope at beta voltage	2.01%	2.90%	3.42%	2.81%
Alpha slope at beta voltage	0.73%	0.54%	-0.09%	1.16%
Alpha slope at alpha voltage	0.46%	1.38%	2.93%	1.83%

Printed 4/2/2002 12:47 PM

Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit Id: Blue
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

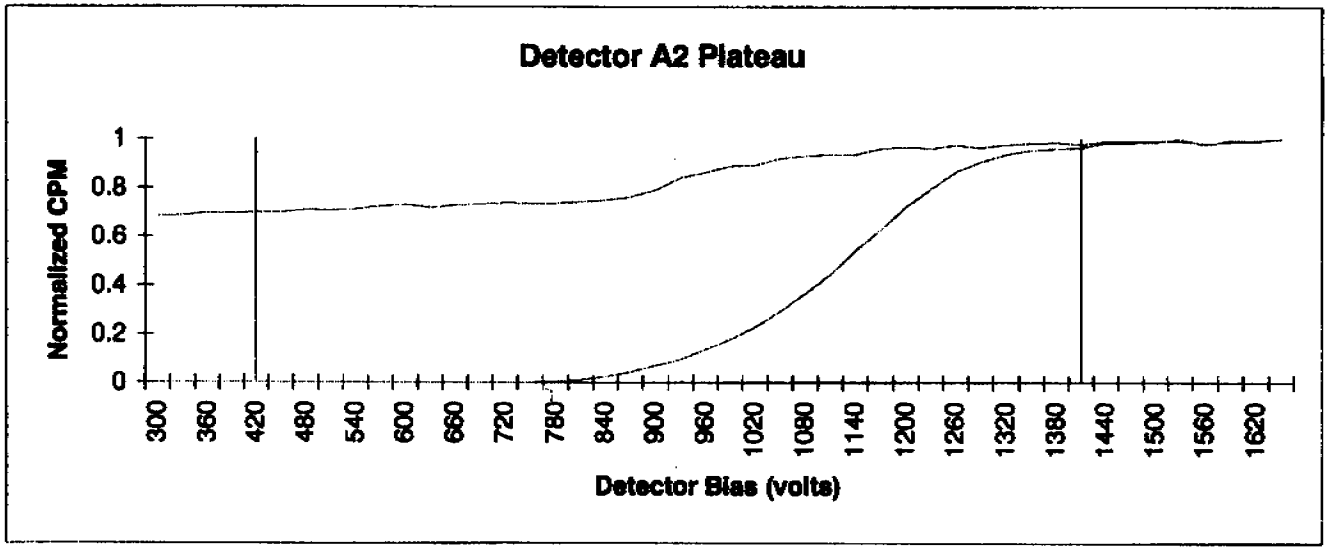
Optimum alpha only operating voltage: 420

	A1
Beta slope at beta voltage	2.01%
Alpha slope at beta voltage	0.73%
Alpha slope at alpha voltage	0.46%

Printed 4/2/2002 12:40 PM

Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit Id: Blue
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

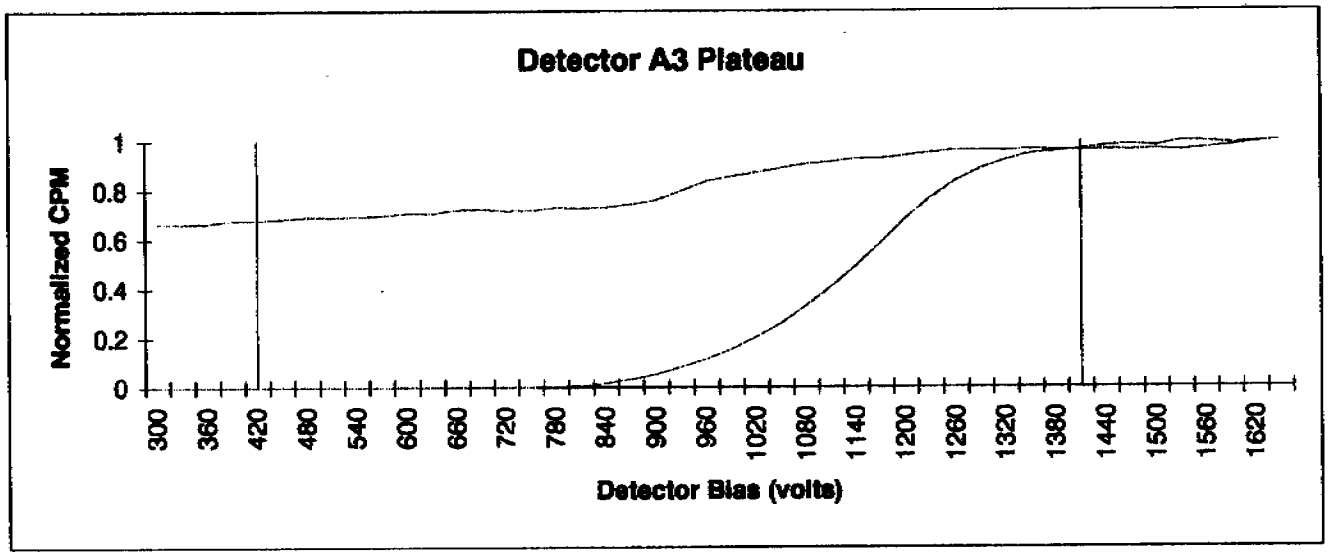
Optimum alpha only operating voltage: 420

	A2
Beta slope at beta voltage	2.90%
Alpha slope at beta voltage	0.54%
Alpha slope at alpha voltage	1.38%

Printed 4/2/2002 12:40 PM

Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit Id: Blue
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

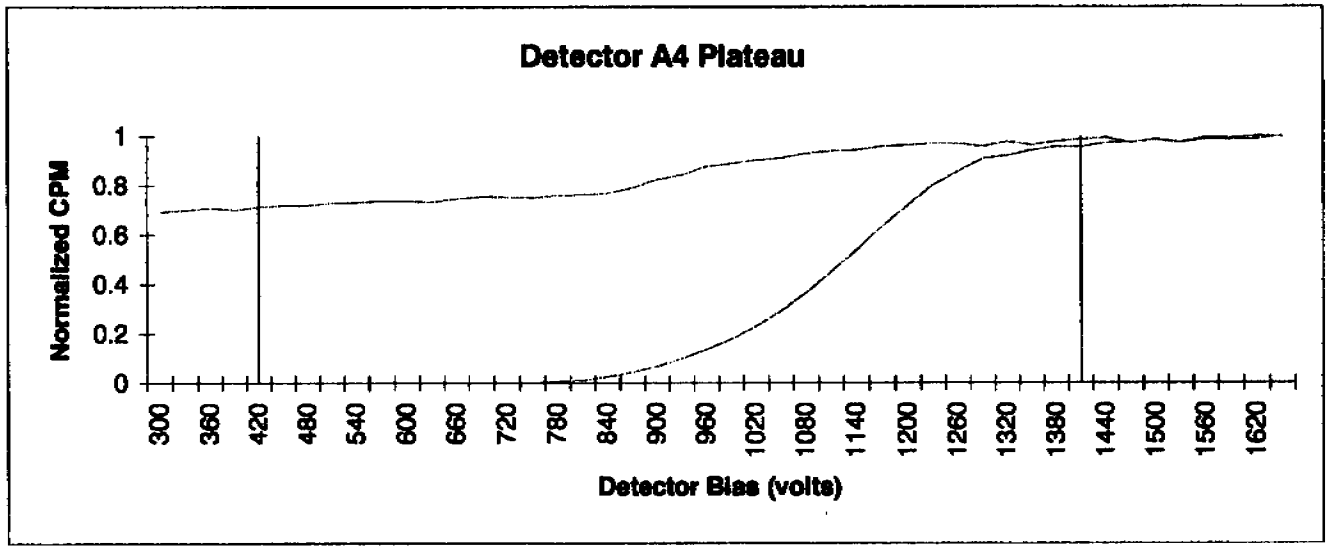
Optimum alpha only operating voltage: 420

	A3
Beta slope at beta voltage	3.42%
Alpha slope at beta voltage	-0.09%
Alpha slope at alpha voltage	2.93%

Printed 4/2/2002 12:40 PM

Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit Id: Blue
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

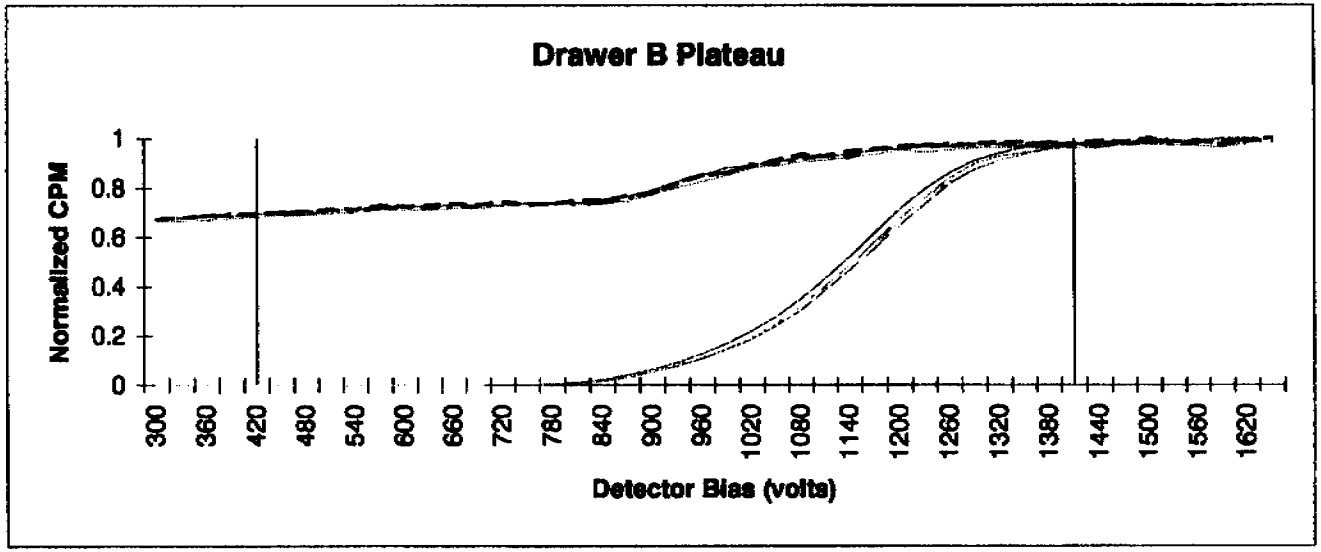
Optimum alpha only operating voltage: 420

	A4
Beta slope at beta voltage	2.81%
Alpha slope at beta voltage	1.16%
Alpha slope at alpha voltage	1.83%

Printed 4/2/2002 12:40 PM

Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit Id: Blue
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

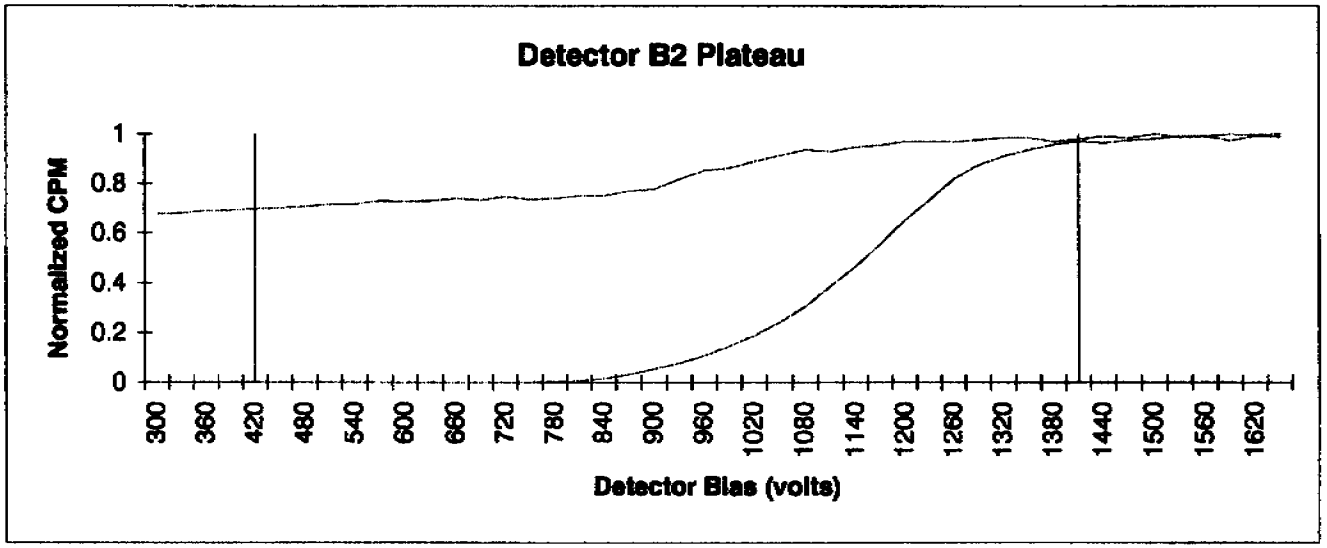
Optimum alpha only operating voltage: 420

	B1	B2	B3	B4
Beta slope at beta voltage	---	3.00%	3.39%	3.40%
Alpha slope at beta voltage	---	0.66%	0.92%	0.34%
Alpha slope at alpha voltage	---	2.28%	2.47%	1.26%

Printed 4/2/2002 12:41 PM

Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit Id: Blue
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

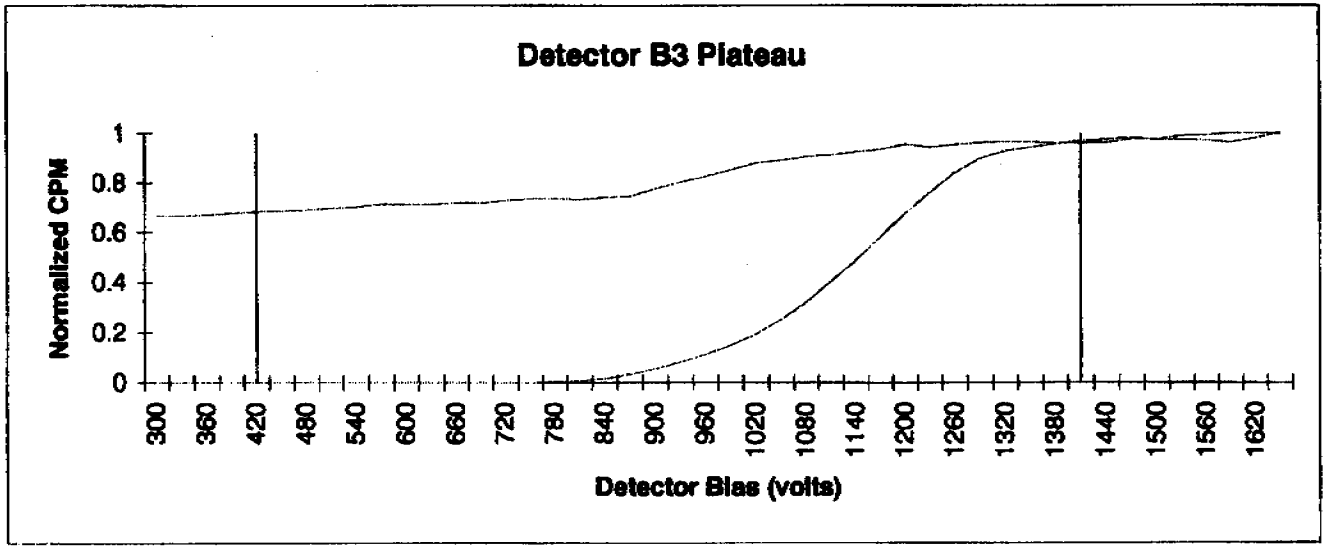
Optimum alpha only operating voltage: 420

	B2
Beta slope at beta voltage	2.90%
Alpha slope at beta voltage	0.54%
Alpha slope at alpha voltage	1.38%

Printed 4/2/2002 12:40 PM

Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit Id: Blue
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

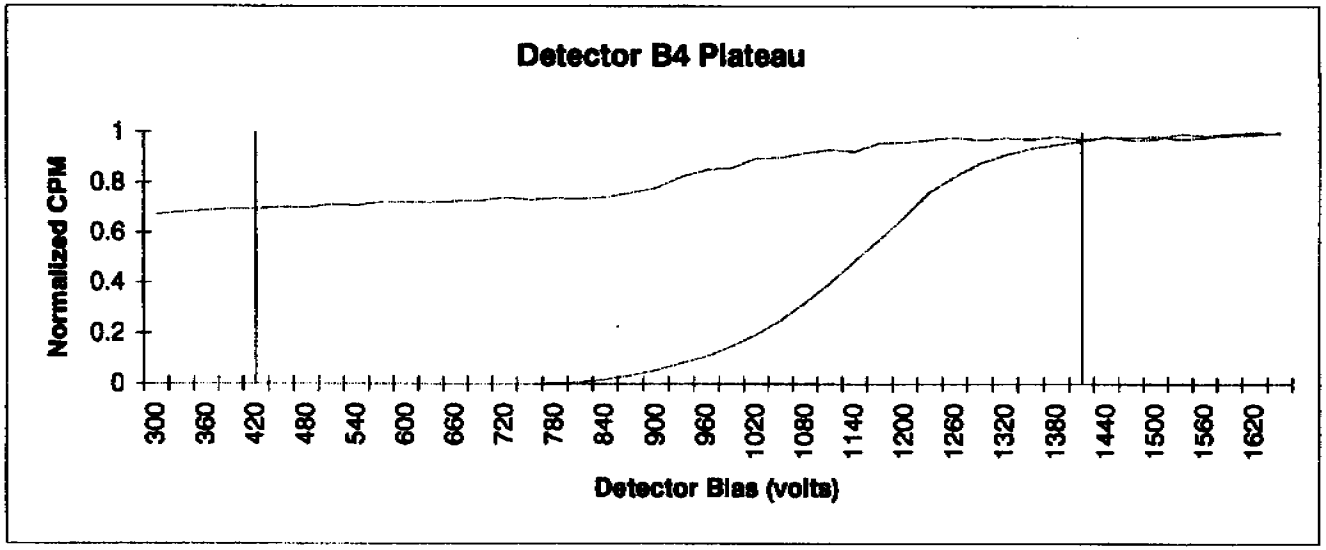
Optimum alpha only operating voltage: 420

	B3
Beta slope at beta voltage	3.42%
Alpha slope at beta voltage	-0.09%
Alpha slope at alpha voltage	2.93%

Printed 4/2/2002 12:40 PM

Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit Id: Blue
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1410

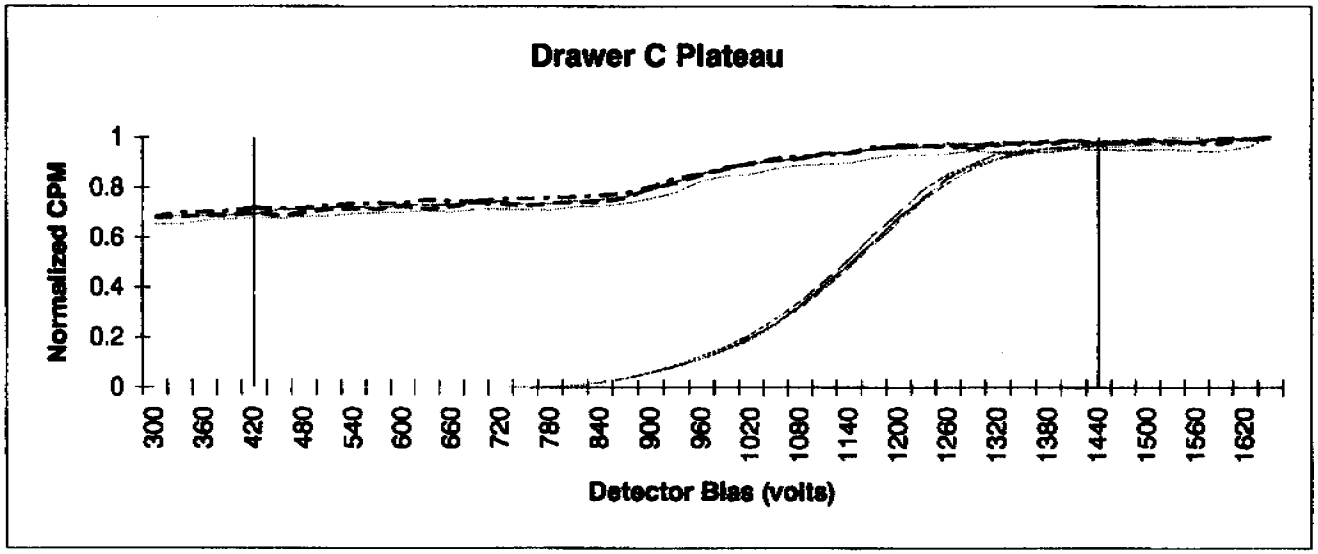
Optimum alpha only operating voltage: 420

	B4
Beta slope at beta voltage	2.81%
Alpha slope at beta voltage	1.16%
Alpha slope at alpha voltage	1.83%

Printed 4/2/2002 12:40 PM

Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit Id: Blue
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1440

Optimum alpha only operating voltage: 420

	C1	C2	C3	C4
Beta slope at beta voltage	2.43%	2.69%	2.11%	2.63%
Alpha slope at beta voltage	0.28%	0.21%	0.54%	-0.27%
Alpha slope at alpha voltage	3.43%	0.91%	1.95%	1.81%

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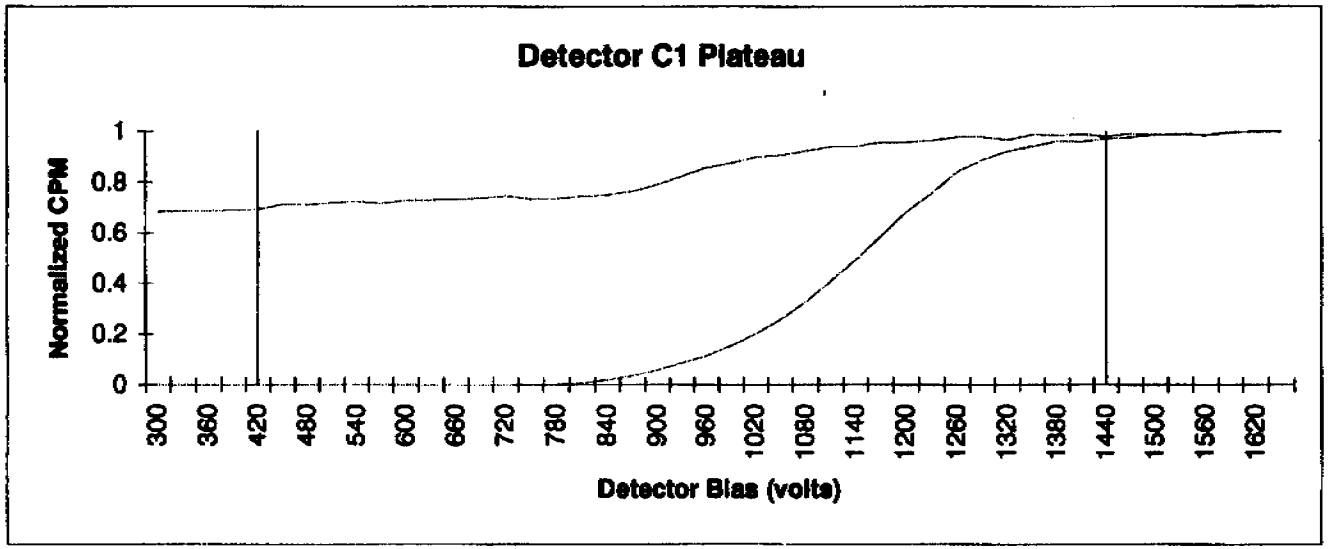
Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit Id: Blue
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1440

Optimum alpha only operating voltage: 420

	C1
Beta slope at beta voltage	2.01%
Alpha slope at beta voltage	0.73%
Alpha slope at alpha voltage	0.46%

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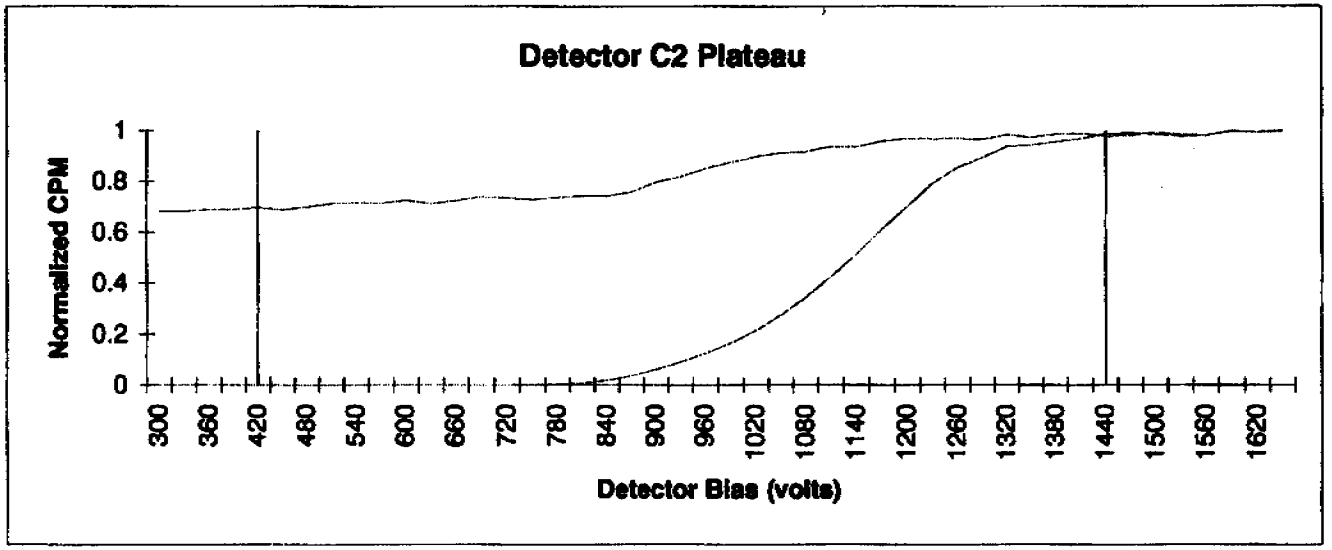
Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit id: Blue
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1440

Optimum alpha only operating voltage: 420

	C2
Beta slope at beta voltage	2.90%
Alpha slope at beta voltage	0.54%
Alpha slope at alpha voltage	1.38%

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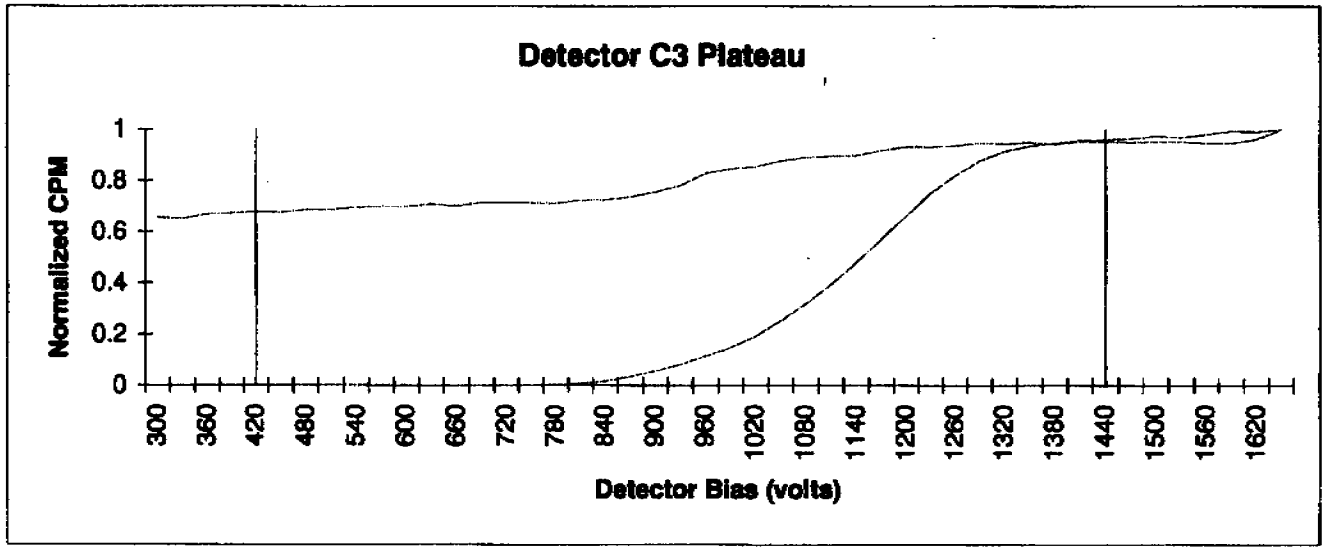
LOT# F5D220345

STL ST. LOUIS

Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit Id: Blue
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1440

Optimum alpha only operating voltage: 420

	C3
Beta slope at beta voltage	3.42%
Alpha slope at beta voltage	-0.09%
Alpha slope at alpha voltage	2.93%

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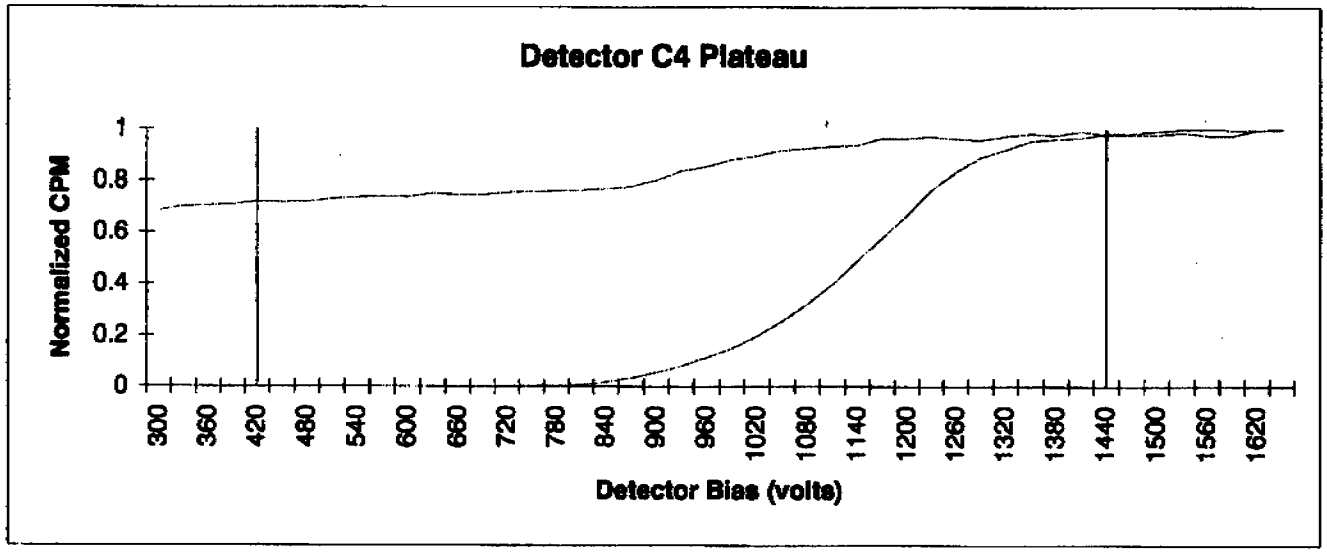
Unit Type: LB4100/W
Date Performed: 4/1/02 14:44
FileName: PLAT000
Batch ID: APRIL 2002 VOLTAGE SETTINGS

Unit Id: Blue
Application Revision: 2
Application Version: Standard



Optimum alpha beta simultaneous operating voltage: 1440

Optimum alpha only operating voltage: 420

	C4
Beta slope at beta voltage	2.81%
Alpha slope at beta voltage	1.16%
Alpha slope at alpha voltage	1.83%

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
A1	ALPHA	26090	2	300	0.680443	#VALUE!	0
A1	ALPHA	26084	2	330	0.680286	#VALUE!	0
A1	ALPHA	26537	2	360	0.692101	0.018795	0
A1	ALPHA	26380	2	390	0.688006	0.014992	0
A1	ALPHA	26685	2	420	0.695961	0.00458	1
A1	ALPHA	26605	2	450	0.693874	0.02201	0
A1	ALPHA	26607	2	480	0.693927	0.02932	0
A1	ALPHA	27301	2	510	0.712026	0.034432	0
A1	ALPHA	27522	2	540	0.71779	0.032904	0
A1	ALPHA	27548	2	570	0.718468	0.01522	0
A1	ALPHA	27834	2	600	0.725927	0.015772	0
A1	ALPHA	27775	2	630	0.724389	0.012609	0
A1	ALPHA	28065	2	660	0.731952	0.008064	0
A1	ALPHA	27959	2	690	0.729188	0.015432	0
A1	ALPHA	28080	2	720	0.732343	0.011809	0
A1	ALPHA	28417	2	750	0.741132	0.013375	0
A1	ALPHA	28335	2	780	0.738994	0.018495	0
A1	ALPHA	28398	2	810	0.740637	0.027842	0
A1	ALPHA	28878	2	840	0.753156	0.057417	0
A1	ALPHA	29343	2	870	0.765283	0.090189	0
A1	ALPHA	30062	1.98	900	0.791955	0.108223	0
A1	ALPHA	30251	1.91	930	0.826141	0.118535	0
A1	ALPHA	30226	1.85	960	0.852229	0.100196	0
A1	ALPHA	30252	1.79	990	0.881553	0.07693	0
A1	ALPHA	30091	1.76	1020	0.891808	0.061481	0
A1	ALPHA	30254	1.74	1050	0.906945	0.041498	0
A1	ALPHA	30039	1.7	1080	0.921688	0.038604	0
A1	ALPHA	30080	1.7	1110	0.922946	0.038207	0
A1	ALPHA	30174	1.68	1140	0.936852	0.035423	0
A1	ALPHA	30132	1.65	1170	0.952558	0.03751	0
A1	ALPHA	30264	1.65	1200	0.956731	0.025815	0
A1	ALPHA	30196	1.63	1230	0.966294	0.02056	0
A1	ALPHA	30218	1.63	1260	0.966998	0.015561	0
A1	ALPHA	30348	1.62	1290	0.977153	0.004764	0
A1	ALPHA	30247	1.62	1320	0.973901	-0.00209	0
A1	ALPHA	30119	1.62	1350	0.96978	8.16E-05	0
A1	ALPHA	30238	1.63	1380	0.967638	0.000906	0
A1	ALPHA	30261	1.61	1410	0.980404	0.007339	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
A1	ALPHA	30309	1.63	1440	0.96991	0.007549	0
A1	ALPHA	30041	1.6	1470	0.979359	0.006096	0
A1	ALPHA	30224	1.61	1500	0.979205	0.00681	0
A1	ALPHA	30205	1.6	1530	0.984706	0.01069	0
A1	ALPHA	30163	1.61	1560	0.977229	0.008029	0
A1	ALPHA	30364	1.59	1590	0.996115	0.013054	0
A1	ALPHA	30225	1.6	1620	0.985358	#VALUE!	0
A1	ALPHA	30099	1.57	1650	1	#VALUE!	0
A1	BETA	0	0.11	300	0	#VALUE!	0
A1	BETA	0	0.11	330	0	#VALUE!	0
A1	BETA	1	0.11	360	0.000184	1.31E-15	0
A1	BETA	0	0.11	390	0	-1.66667	0
A1	BETA	0	0.12	420	0	-3.33333	0
A1	BETA	0	0.11	450	0	#VALUE!	0
A1	BETA	0	0.11	480	0	3.333333	0
A1	BETA	0	0.11	510	0	1.666667	0
A1	BETA	1	0.11	540	0.000184	2.222222	0
A1	BETA	0	0.11	570	0	1.666667	0
A1	BETA	2	0.11	600	0.000368	0.555556	0
A1	BETA	2	0.11	630	0.000368	0.277778	0
A1	BETA	1	0.11	660	0.000184	0.5	0
A1	BETA	1	0.11	690	0.000184	1.234568	0
A1	BETA	4	0.11	720	0.000737	2.145754	0
A1	BETA	6	0.12	750	0.001013	2.367456	0
A1	BETA	314	2	780	0.003182	2.339819	0
A1	BETA	884	2	810	0.008957	2.155034	0
A1	BETA	2157	2	840	0.021856	1.85076	0
A1	BETA	3995	2	870	0.04048	1.527654	0
A1	BETA	6384	2	900	0.064687	1.269561	0
A1	BETA	9084	2	930	0.092045	1.082383	0
A1	BETA	12674	2	960	0.128422	0.963603	0
A1	BETA	16712	2	990	0.169338	0.878999	0
A1	BETA	21854	2	1020	0.22144	0.809945	0
A1	BETA	27708	2	1050	0.280757	0.754715	0
A1	BETA	30119	1.73	1080	0.352817	0.694452	0
A1	BETA	30182	1.41	1110	0.433795	0.637354	0
A1	BETA	30150	1.17	1140	0.522224	0.574841	0
A1	BETA	30505	1	1170	0.618196	0.495746	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
A1	BETA	30406	0.86	1200	0.7165	0.405957	0
A1	BETA	30625	0.78	1230	0.795677	0.311924	0
A1	BETA	30606	0.72	1260	0.861449	0.221868	0
A1	BETA	30566	0.68	1290	0.91093	0.153454	0
A1	BETA	30152	0.65	1320	0.940066	0.094314	0
A1	BETA	30386	0.64	1350	0.962164	0.053593	0
A1	BETA	30544	0.64	1380	0.967167	0.032446	0
A1	BETA	30754	0.64	1410	0.973816	0.020083	1
A1	BETA	30503	0.63	1440	0.9812	0.020057	0
A1	BETA	30605	0.63	1470	0.984481	0.01498	0
A1	BETA	30328	0.62	1500	0.991305	0.007027	0
A1	BETA	30804	0.63	1530	0.990882	0.009464	0
A1	BETA	30727	0.63	1560	0.988405	0.003167	0
A1	BETA	30594	0.62	1590	1	0.00506	0
A1	BETA	30822	0.63	1620	0.991461	#VALUE!	0
A1	BETA	30499	0.62	1650	0.996895	#VALUE!	0
A2	ALPHA	23238	2	300	0.682858	#VALUE!	0
A2	ALPHA	23379	2	330	0.687001	#VALUE!	0
A2	ALPHA	23718	2	360	0.696963	0.019385	0
A2	ALPHA	23679	2	390	0.695817	0.012997	0
A2	ALPHA	23773	2	420	0.698579	0.013795	1
A2	ALPHA	23813	2	450	0.699754	0.016084	0
A2	ALPHA	24144	2	480	0.709481	0.016757	0
A2	ALPHA	24070	2	510	0.707307	0.024615	0
A2	ALPHA	24248	2	540	0.712537	0.027465	0
A2	ALPHA	24654	2	570	0.724468	0.018172	0
A2	ALPHA	24857	2	600	0.730433	0.012033	0
A2	ALPHA	24432	2	630	0.717944	0.006119	0
A2	ALPHA	24803	2	660	0.728846	0.013134	0
A2	ALPHA	24908	2	690	0.731931	0.020342	0
A2	ALPHA	25108	2	720	0.737809	0.008113	0
A2	ALPHA	25038	2	750	0.735752	0.008085	0
A2	ALPHA	25042	2	780	0.735869	0.012298	0
A2	ALPHA	25245	2	810	0.741834	0.029392	0
A2	ALPHA	25469	2	840	0.748417	0.057729	0
A2	ALPHA	25942	2	870	0.762316	0.103944	0
A2	ALPHA	26921	2	900	0.791084	0.128259	0
A2	ALPHA	28642	2	930	0.841657	0.130719	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
A2	ALPHA	29365	2	960	0.862902	0.098025	0
A2	ALPHA	30103	1.99	990	0.889034	0.071448	0
A2	ALPHA	30092	1.98	1020	0.893197	0.061816	0
A2	ALPHA	30088	1.92	1050	0.920987	0.048363	0
A2	ALPHA	30076	1.9	1080	0.930311	0.037721	0
A2	ALPHA	30126	1.89	1110	0.936788	0.031352	0
A2	ALPHA	30151	1.89	1140	0.937565	0.034491	0
A2	ALPHA	30101	1.84	1170	0.961445	0.027534	0
A2	ALPHA	30109	1.83	1200	0.966956	0.025526	0
A2	ALPHA	30101	1.84	1230	0.961445	0.004532	0
A2	ALPHA	30173	1.82	1260	0.974336	0.008051	0
A2	ALPHA	30191	1.84	1290	0.96432	0.016422	0
A2	ALPHA	30096	1.81	1320	0.977219	0.014663	0
A2	ALPHA	30136	1.8	1350	0.983954	0.013159	0
A2	ALPHA	30199	1.8	1380	0.986011	0.007737	0
A2	ALPHA	30158	1.81	1410	0.979232	0.005446	0
A2	ALPHA	30183	1.79	1440	0.990994	0.006806	0
A2	ALPHA	30138	1.79	1470	0.989516	0.009067	0
A2	ALPHA	30013	1.78	1500	0.990948	-0.00482	0
A2	ALPHA	30235	1.79	1530	0.992701	-0.00373	0
A2	ALPHA	30084	1.8	1560	0.982256	-0.00074	0
A2	ALPHA	30270	1.8	1590	0.988329	0.0082	0
A2	ALPHA	30046	1.78	1620	0.992038	#VALUE!	0
A2	ALPHA	30117	1.77	1650	1	#VALUE!	0
A2	BETA	1	0.11	300	0.000176	#VALUE!	0
A2	BETA	1	0.11	330	0.000176	#VALUE!	0
A2	BETA	1	0.11	360	0.000176	-0.49645	0
A2	BETA	0	0.11	390	0	-1.19048	0
A2	BETA	1	0.12	420	0.000162	-1.73913	0
A2	BETA	0	0.11	450	0	-1.66667	0
A2	BETA	0	0.11	480	0	-3.33333	0
A2	BETA	0	0.11	510	0	#VALUE!	0
A2	BETA	0	0.11	540	0	#VALUE!	0
A2	BETA	0	0.11	570	0	3.333333	0
A2	BETA	0	0.11	600	0	2.777778	0
A2	BETA	1	0.11	630	0.000176	2	0
A2	BETA	2	0.11	660	0.000353	1.190476	0
A2	BETA	2	0.11	690	0.000353	0.598291	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
A2	BETA	2	0.11	720	0.000353	2.131271	0
A2	BETA	3	0.12	750	0.000485	2.580958	0
A2	BETA	364	2	780	0.003531	2.441206	0
A2	BETA	1105	2	810	0.010719	2.165227	0
A2	BETA	2421	2	840	0.023484	1.8311	0
A2	BETA	4511	2	870	0.043757	1.484742	0
A2	BETA	7269	2	900	0.07051	1.253817	0
A2	BETA	9915	2	930	0.096177	1.060785	0
A2	BETA	14090	2	960	0.136675	0.93336	0
A2	BETA	18318	2	990	0.177687	0.872088	0
A2	BETA	23547	2	1020	0.228409	0.800088	0
A2	BETA	30212	1.99	1050	0.294533	0.741048	0
A2	BETA	30302	1.6	1080	0.367416	0.690867	0
A2	BETA	30239	1.32	1110	0.444427	0.614004	0
A2	BETA	30204	1.08	1140	0.54256	0.550837	0
A2	BETA	30332	0.94	1170	0.626008	0.470011	0
A2	BETA	30578	0.82	1200	0.72344	0.383108	0
A2	BETA	30758	0.75	1230	0.795617	0.299822	0
A2	BETA	30808	0.69	1260	0.866207	0.213042	0
A2	BETA	30391	0.65	1290	0.907066	0.145936	0
A2	BETA	30947	0.64	1320	0.938092	0.085668	0
A2	BETA	30521	0.62	1350	0.955024	0.04916	0
A2	BETA	30717	0.62	1380	0.961157	0.036432	0
A2	BETA	30350	0.61	1410	0.965241	0.028988	1
A2	BETA	30479	0.6	1440	0.9855	0.025024	0
A2	BETA	30465	0.6	1470	0.985047	0.023137	0
A2	BETA	30554	0.6	1500	0.987925	-0.00015	0
A2	BETA	30357	0.59	1530	0.998192	0.002409	0
A2	BETA	30269	0.6	1560	0.97871	0.000724	0
A2	BETA	30718	0.6	1590	0.993227	0.005505	0
A2	BETA	30664	0.6	1620	0.991481	#VALUE!	0
A2	BETA	30412	0.59	1650	1	#VALUE!	0
A3	ALPHA	24336	2	300	0.665293	#VALUE!	0
A3	ALPHA	24319	2	330	0.664828	#VALUE!	0
A3	ALPHA	24400	2	360	0.667042	0.022946	0
A3	ALPHA	24854	2	390	0.679454	0.027542	0
A3	ALPHA	24914	2	420	0.681094	0.029273	1
A3	ALPHA	25083	2	450	0.685714	0.019086	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
A3	ALPHA	25380	2	480	0.693833	0.016794	0
A3	ALPHA	25340	2	510	0.69274	0.013473	0
A3	ALPHA	25421	2	540	0.694954	0.01834	0
A3	ALPHA	25575	2	570	0.699164	0.021736	0
A3	ALPHA	25965	2	600	0.709826	0.030611	0
A3	ALPHA	25904	2	630	0.708158	0.02977	0
A3	ALPHA	26444	2	660	0.722921	0.016422	0
A3	ALPHA	26500	2	690	0.724452	0.009897	0
A3	ALPHA	26313	2	720	0.719339	0.005767	0
A3	ALPHA	26360	2	750	0.720624	0.009855	0
A3	ALPHA	26743	2	780	0.731095	0.016565	0
A3	ALPHA	26677	2	810	0.72929	0.022072	0
A3	ALPHA	26815	2	840	0.733063	0.034279	0
A3	ALPHA	27210	2	870	0.743861	0.074445	0
A3	ALPHA	27868	2	900	0.76185	0.113702	0
A3	ALPHA	29228	2	930	0.799029	0.125318	0
A3	ALPHA	30182	1.97	960	0.837674	0.112389	0
A3	ALPHA	30226	1.93	990	0.856282	0.084476	0
A3	ALPHA	30156	1.89	1020	0.872379	0.086479	0
A3	ALPHA	30260	1.86	1050	0.889507	0.057739	0
A3	ALPHA	30228	1.82	1080	0.908095	0.050276	0
A3	ALPHA	30135	1.8	1110	0.915361	0.035687	0
A3	ALPHA	30196	1.78	1140	0.927519	0.028282	0
A3	ALPHA	30074	1.77	1170	0.928991	0.031583	0
A3	ALPHA	30274	1.76	1200	0.940482	0.032983	0
A3	ALPHA	30331	1.74	1230	0.953084	0.031305	0
A3	ALPHA	30266	1.72	1260	0.9621	0.017016	0
A3	ALPHA	30287	1.72	1290	0.962767	0.008046	0
A3	ALPHA	30201	1.72	1320	0.960033	0.000731	0
A3	ALPHA	30203	1.71	1350	0.965712	-0.00049	0
A3	ALPHA	30077	1.71	1380	0.961683	0.001422	0
A3	ALPHA	30063	1.71	1410	0.961235	-0.00088	0
A3	ALPHA	30336	1.72	1440	0.964325	0.002557	0
A3	ALPHA	30122	1.71	1470	0.963122	-0.00121	0
A3	ALPHA	30163	1.71	1500	0.964433	0.001898	0
A3	ALPHA	30182	1.72	1530	0.959429	0.011904	0
A3	ALPHA	30126	1.7	1560	0.968916	0.025108	0
A3	ALPHA	30234	1.69	1590	0.978143	0.035363	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
A3	ALPHA	30109	1.66	1620	0.991703	#VALUE!	0
A3	ALPHA	30178	1.65	1650	1	#VALUE!	0
A3	BETA	1	0.11	300	0.000262	#VALUE!	0
A3	BETA	0	0.11	330	0	#VALUE!	0
A3	BETA	0	0.11	360	0	0.52381	0
A3	BETA	1	0.12	390	0.00024	0.869565	0
A3	BETA	1	0.11	420	0.000262	-0.7971	0
A3	BETA	0	0.11	450	0	-2.46377	0
A3	BETA	0	0.11	480	0	-7.4E-16	0
A3	BETA	0	0.12	510	0	1.666667	0
A3	BETA	1	0.11	540	0.000262	-9.2E-17	0
A3	BETA	0	0.12	570	0	0.833333	0
A3	BETA	0	0.11	600	0	0.555556	0
A3	BETA	1	0.11	630	0.000262	1.619048	0
A3	BETA	1	0.11	660	0.000262	1.327684	0
A3	BETA	1	0.12	690	0.00024	0.28169	0
A3	BETA	2	0.11	720	0.000523	1.358543	0
A3	BETA	1	0.11	750	0.000262	2.387761	0
A3	BETA	5	0.11	780	0.001308	2.571187	0
A3	BETA	372	2	810	0.00535	2.376098	0
A3	BETA	1131	2	840	0.016267	2.013797	0
A3	BETA	2254	2	870	0.032419	1.687252	0
A3	BETA	3725	2	900	0.053577	1.377782	0
A3	BETA	5796	2	930	0.083364	1.160572	0
A3	BETA	8002	2	960	0.115093	1.018259	0
A3	BETA	10741	2	990	0.154488	0.901772	0
A3	BETA	14235	2	1020	0.204742	0.843013	0
A3	BETA	18053	2	1050	0.259657	0.779792	0
A3	BETA	23092	2	1080	0.332133	0.712147	0
A3	BETA	28432	2	1110	0.408938	0.651215	0
A3	BETA	30161	1.76	1140	0.492962	0.58795	0
A3	BETA	30120	1.48	1170	0.585428	0.518454	0
A3	BETA	30038	1.26	1200	0.685773	0.433513	0
A3	BETA	30261	1.13	1230	0.770344	0.335462	0
A3	BETA	30343	1.04	1260	0.839277	0.239345	0
A3	BETA	30251	0.98	1290	0.887961	0.166422	0
A3	BETA	30440	0.95	1320	0.921724	0.107456	0
A3	BETA	30291	0.92	1350	0.947122	0.06709	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
A3	BETA	30257	0.91	1380	0.956455	0.046938	0
A3	BETA	30184	0.9	1410	0.964749	0.034208	1
A3	BETA	30323	0.89	1440	0.980081	0.022385	0
A3	BETA	30130	0.88	1470	0.98491	0.02314	0
A3	BETA	30291	0.89	1500	0.979047	0.015518	0
A3	BETA	30224	0.87	1530	0.999339	0.007361	0
A3	BETA	30465	0.88	1560	0.995861	0.005413	0
A3	BETA	30207	0.88	1590	0.987427	-0.0005	0
A3	BETA	30379	0.88	1620	0.993049	#VALUE!	0
A3	BETA	30244	0.87	1650	1	#VALUE!	0
A4	ALPHA	24380	2	300	0.692591	#VALUE!	0
A4	ALPHA	24646	2	330	0.700147	#VALUE!	0
A4	ALPHA	24969	2	360	0.709323	0.02169	0
A4	ALPHA	24724	2	390	0.702363	0.020113	0
A4	ALPHA	25147	2	420	0.71438	0.018298	1
A4	ALPHA	25310	2	450	0.71901	0.028831	0
A4	ALPHA	25365	2	480	0.720573	0.021979	0
A4	ALPHA	25707	2	510	0.730288	0.023729	0
A4	ALPHA	25788	2	540	0.732589	0.019585	0
A4	ALPHA	26011	2	570	0.738924	0.006083	0
A4	ALPHA	25970	2	600	0.73776	0.010201	0
A4	ALPHA	25852	2	630	0.734407	0.019342	0
A4	ALPHA	26265	2	660	0.74614	0.024859	0
A4	ALPHA	26622	2	690	0.756282	0.018761	0
A4	ALPHA	26564	2	720	0.754634	0.009976	0
A4	ALPHA	26444	2	750	0.751225	0.008044	0
A4	ALPHA	26751	2	780	0.759946	0.017282	0
A4	ALPHA	26850	2	810	0.762759	0.038886	0
A4	ALPHA	27054	2	840	0.768554	0.067431	0
A4	ALPHA	27867	2	870	0.79165	0.09033	0
A4	ALPHA	29025	2	900	0.824546	0.109732	0
A4	ALPHA	29671	2	930	0.842898	0.098472	0
A4	ALPHA	30137	1.95	960	0.876089	0.079438	0
A4	ALPHA	30224	1.93	990	0.889749	0.06216	0
A4	ALPHA	30249	1.9	1020	0.904545	0.046941	0
A4	ALPHA	30185	1.88	1050	0.912234	0.045908	0
A4	ALPHA	30132	1.84	1080	0.930429	0.038266	0
A4	ALPHA	30106	1.82	1110	0.939841	0.038079	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
A4	ALPHA	30070	1.81	1140	0.943904	0.030627	0
A4	ALPHA	30214	1.79	1170	0.959021	0.028994	0
A4	ALPHA	30043	1.77	1200	0.964368	0.022819	0
A4	ALPHA	30084	1.76	1230	0.971171	0.002311	0
A4	ALPHA	30071	1.76	1260	0.970752	0.005088	0
A4	ALPHA	30050	1.78	1290	0.959174	-0.00273	0
A4	ALPHA	30116	1.75	1320	0.97776	0.006977	0
A4	ALPHA	30192	1.78	1350	0.963706	0.019223	0
A4	ALPHA	30143	1.75	1380	0.978636	0.017891	0
A4	ALPHA	30047	1.73	1410	0.986797	0.011631	0
A4	ALPHA	30221	1.73	1440	0.992512	0.000819	0
A4	ALPHA	30167	1.76	1470	0.973851	-0.01001	0
A4	ALPHA	30206	1.74	1500	0.986318	0.000923	0
A4	ALPHA	30207	1.76	1530	0.975142	0.014294	0
A4	ALPHA	30068	1.72	1560	0.993228	0.014731	0
A4	ALPHA	30190	1.73	1590	0.991494	0.016706	0
A4	ALPHA	30097	1.71	1620	1	#VALUE!	0
A4	ALPHA	30170	1.72	1650	0.996597	#VALUE!	0
A4	BETA	0	0.11	300	0	#VALUE!	0
A4	BETA	0	0.11	330	0	#VALUE!	0
A4	BETA	2	0.11	360	0.0004	1.111111	0
A4	BETA	0	0.12	390	0	-0.55556	0
A4	BETA	1	0.11	420	0.0002	-0.83333	0
A4	BETA	0	0.11	450	0	-1.1E-15	0
A4	BETA	1	0.11	480	0.0002	1.29E-15	0
A4	BETA	0	0.11	510	0	9.04E-17	0
A4	BETA	1	0.11	540	0.0002	4.02E-15	0
A4	BETA	0	0.12	570	0	1.111111	0
A4	BETA	1	0.11	600	0.0002	-0.55556	0
A4	BETA	1	0.11	630	0.0002	1.15942	0
A4	BETA	0	0.11	660	0	0.287356	0
A4	BETA	2	0.12	690	0.000366	1.698113	0
A4	BETA	1	0.11	720	0.0002	2.637575	0
A4	BETA	5	0.11	750	0.000999	2.529193	0
A4	BETA	402	2	780	0.004418	2.391522	0
A4	BETA	1055	2	810	0.011595	2.077129	0
A4	BETA	2335	2	840	0.025663	1.739755	0
A4	BETA	4097	2	870	0.045028	1.453522	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
A4	BETA	6272	2	900	0.068932	1.225959	0
A4	BETA	9019	2	930	0.099123	1.050162	0
A4	BETA	12438	2	960	0.136699	0.941522	0
A4	BETA	16119	2	990	0.177155	0.858138	0
A4	BETA	21054	2	1020	0.231393	0.797294	0
A4	BETA	26671	2	1050	0.293126	0.750218	0
A4	BETA	30223	1.81	1080	0.367033	0.683832	0
A4	BETA	30193	1.47	1110	0.451476	0.625098	0
A4	BETA	30113	1.23	1140	0.538139	0.547554	0
A4	BETA	30394	1.05	1170	0.636274	0.468243	0
A4	BETA	30149	0.92	1200	0.720329	0.3774	0
A4	BETA	30676	0.84	1230	0.802722	0.289986	0
A4	BETA	30425	0.78	1260	0.857396	0.200265	0
A4	BETA	30198	0.73	1290	0.909287	0.12847	0
A4	BETA	30134	0.72	1320	0.919962	0.084854	0
A4	BETA	30435	0.71	1350	0.942238	0.047321	0
A4	BETA	30498	0.7	1380	0.957677	0.041826	0
A4	BETA	30475	0.7	1410	0.956954	0.028051	1
A4	BETA	30518	0.69	1440	0.972193	0.024917	0
A4	BETA	30619	0.69	1470	0.975411	0.016229	0
A4	BETA	30462	0.68	1500	0.98468	0.009238	0
A4	BETA	30587	0.69	1530	0.974391	0.007319	0
A4	BETA	30511	0.68	1560	0.986264	0.006083	0
A4	BETA	30484	0.68	1590	0.985391	0.017939	0
A4	BETA	30120	0.67	1620	0.988157	#VALUE!	0
A4	BETA	30481	0.67	1650	1	#VALUE!	0
B2	ALPHA	24882	2	300	0.675492	#VALUE!	0
B2	ALPHA	25053	2	330	0.680134	#VALUE!	0
B2	ALPHA	25381	2	360	0.689039	0.028007	0
B2	ALPHA	25455	2	390	0.691048	0.025585	0
B2	ALPHA	25744	2	420	0.698894	0.022842	1
B2	ALPHA	25850	2	450	0.701771	0.026244	0
B2	ALPHA	26064	2	480	0.707581	0.021663	0
B2	ALPHA	26314	2	510	0.714368	0.029931	0
B2	ALPHA	26359	2	540	0.715589	0.025663	0
B2	ALPHA	26883	2	570	0.729815	0.01964	0
B2	ALPHA	26799	2	600	0.727535	0.020901	0
B2	ALPHA	26879	2	630	0.729706	0.007483	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
B2	ALPHA	27202	2	660	0.738475	0.018041	0
B2	ALPHA	26984	2	690	0.732557	0.008148	0
B2	ALPHA	27479	2	720	0.745995	0.001152	0
B2	ALPHA	27072	2	750	0.734946	0.013075	0
B2	ALPHA	27205	2	780	0.738557	0.011793	0
B2	ALPHA	27656	2	810	0.7508	0.036187	0
B2	ALPHA	27672	2	840	0.751235	0.041986	0
B2	ALPHA	28336	2	870	0.769261	0.068702	0
B2	ALPHA	28622	2	900	0.777025	0.104891	0
B2	ALPHA	30116	2	930	0.817584	0.106629	0
B2	ALPHA	30125	1.92	960	0.851904	0.10691	0
B2	ALPHA	30174	1.9	990	0.862272	0.087603	0
B2	ALPHA	30138	1.84	1020	0.889327	0.081627	0
B2	ALPHA	30260	1.8	1050	0.91277	0.06573	0
B2	ALPHA	30330	1.76	1080	0.935674	0.047666	0
B2	ALPHA	30265	1.77	1110	0.928394	0.034182	0
B2	ALPHA	30364	1.74	1140	0.94749	0.033037	0
B2	ALPHA	30248	1.72	1170	0.954846	0.036944	0
B2	ALPHA	30173	1.69	1200	0.969386	0.019135	0
B2	ALPHA	30202	1.69	1230	0.970318	0.014541	0
B2	ALPHA	30110	1.69	1260	0.967362	0.012784	0
B2	ALPHA	30229	1.68	1290	0.976966	0.015931	0
B2	ALPHA	30288	1.67	1320	0.984734	0.003602	0
B2	ALPHA	30114	1.66	1350	0.984975	-0.00381	0
B2	ALPHA	30328	1.7	1380	0.968634	0.001692	0
B2	ALPHA	30305	1.68	1410	0.979422	0.006635	0
B2	ALPHA	30450	1.67	1440	0.990001	0.022811	0
B2	ALPHA	30086	1.66	1470	0.98406	0.008158	0
B2	ALPHA	30205	1.64	1500	1	0.000679	0
B2	ALPHA	30161	1.66	1530	0.986513	-0.01107	0
B2	ALPHA	30261	1.66	1560	0.989783	-0.01097	0
B2	ALPHA	30279	1.69	1590	0.972792	0.001272	0
B2	ALPHA	30286	1.66	1620	0.990601	#VALUE!	0
B2	ALPHA	30206	1.66	1650	0.987985	#VALUE!	0
B2	BETA	0	0.12	300	0	#VALUE!	0
B2	BETA	0	0.11	330	0	#VALUE!	0
B2	BETA	0	0.11	360	0	#VALUE!	0
B2	BETA	0	0.11	390	0	#VALUE!	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
B2	BETA	0	0.11	420	0	3.333333	0
B2	BETA	0	0.12	450	0	1.666667	0
B2	BETA	1	0.11	480	0.000262	1.666667	0
B2	BETA	0	0.11	510	0	-1.8E-15	0
B2	BETA	1	0.11	540	0.000262	-0.18018	0
B2	BETA	0	0.11	570	0	-0.13889	0
B2	BETA	1	0.13	600	0.000221	-1.3E-15	0
B2	BETA	0	0.11	630	0	0.138889	0
B2	BETA	1	0.11	660	0.000262	-1.52778	0
B2	BETA	0	0.11	690	0	-1.66667	0
B2	BETA	0	0.11	720	0	2.434457	0
B2	BETA	0	0.12	750	0	2.918445	0
B2	BETA	7	0.12	780	0.001679	2.674916	0
B2	BETA	352	2	810	0.005066	2.388894	0
B2	BETA	1013	2	840	0.014579	2.04305	0
B2	BETA	2166	2	870	0.031173	1.689913	0
B2	BETA	3734	2	900	0.05374	1.356522	0
B2	BETA	5425	2	930	0.078077	1.134687	0
B2	BETA	7427	2	960	0.10689	0.9819	0
B2	BETA	10162	2	990	0.146252	0.897402	0
B2	BETA	13105	2	1020	0.188608	0.829089	0
B2	BETA	16845	2	1050	0.242434	0.785323	0
B2	BETA	21177	2	1080	0.304781	0.735469	0
B2	BETA	26904	2	1110	0.387204	0.671424	0
B2	BETA	30181	1.86	1140	0.467061	0.607486	0
B2	BETA	30298	1.57	1170	0.555478	0.524786	0
B2	BETA	30349	1.34	1200	0.651917	0.455102	0
B2	BETA	30390	1.19	1230	0.735084	0.3682	0
B2	BETA	30120	1.06	1260	0.817903	0.273892	0
B2	BETA	30058	0.99	1290	0.873932	0.192372	0
B2	BETA	30359	0.96	1320	0.910268	0.125588	0
B2	BETA	30550	0.94	1350	0.935484	0.086109	0
B2	BETA	30570	0.92	1380	0.956446	0.049575	0
B2	BETA	30357	0.9	1410	0.970888	0.029965	1
B2	BETA	30445	0.91	1440	0.963003	0.01791	0
B2	BETA	30497	0.9	1470	0.975366	0.019951	0
B2	BETA	30309	0.89	1500	0.980245	0.02498	0
B2	BETA	30312	0.88	1530	0.991482	0.019247	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
B2	BETA	30318	0.88	1560	0.991678	0.011475	0
B2	BETA	30516	0.88	1590	0.998155	0.006474	0
B2	BETA	30388	0.88	1620	0.993968	#VALUE!	0
B2	BETA	30225	0.87	1650	1	#VALUE!	0
B3	ALPHA	24032	2	300	0.667644	#VALUE!	0
B3	ALPHA	23985	2	330	0.666338	#VALUE!	0
B3	ALPHA	24165	2	360	0.671339	0.021578	0
B3	ALPHA	24398	2	390	0.677812	0.02654	0
B3	ALPHA	24610	2	420	0.683702	0.024658	1
B3	ALPHA	24733	2	450	0.687119	0.023618	0
B3	ALPHA	24906	2	480	0.691925	0.024139	0
B3	ALPHA	25127	2	510	0.698065	0.031558	0
B3	ALPHA	25316	2	540	0.703315	0.027253	0
B3	ALPHA	25719	2	570	0.714511	0.018279	0
B3	ALPHA	25646	2	600	0.712483	0.015021	0
B3	ALPHA	25661	2	630	0.7129	0.007439	0
B3	ALPHA	25923	2	660	0.720179	0.017438	0
B3	ALPHA	25868	2	690	0.718651	0.025249	0
B3	ALPHA	26219	2	720	0.728402	0.022253	0
B3	ALPHA	26499	2	750	0.736181	0.015511	0
B3	ALPHA	26482	2	780	0.735708	0.008335	0
B3	ALPHA	26348	2	810	0.731986	0.010805	0
B3	ALPHA	26625	2	840	0.739681	0.041821	0
B3	ALPHA	26858	2	870	0.746154	0.077441	0
B3	ALPHA	27911	2	900	0.775408	0.097316	0
B3	ALPHA	28879	2	930	0.802301	0.108218	0
B3	ALPHA	29701	2	960	0.825137	0.104145	0
B3	ALPHA	30178	1.97	990	0.851156	0.090594	0
B3	ALPHA	30097	1.9	1020	0.880146	0.076482	0
B3	ALPHA	30123	1.88	1050	0.890277	0.055063	0
B3	ALPHA	30147	1.85	1080	0.905435	0.040411	0
B3	ALPHA	30196	1.84	1110	0.911836	0.038308	0
B3	ALPHA	30102	1.81	1140	0.924063	0.042417	0
B3	ALPHA	30239	1.8	1170	0.933426	0.032312	0
B3	ALPHA	30204	1.76	1200	0.953535	0.023533	0
B3	ALPHA	30188	1.78	1230	0.942322	0.018813	0
B3	ALPHA	30182	1.76	1260	0.952841	0.01317	0
B3	ALPHA	30253	1.75	1290	0.96054	0.018116	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
B3	ALPHA	30166	1.74	1320	0.963282	0.004514	0
B3	ALPHA	30160	1.74	1350	0.96309	-0.00226	0
B3	ALPHA	30175	1.75	1380	0.958063	-0.00319	0
B3	ALPHA	30060	1.74	1410	0.959897	0.009188	0
B3	ALPHA	30072	1.74	1440	0.96028	0.016218	0
B3	ALPHA	30190	1.72	1470	0.975258	0.013628	0
B3	ALPHA	30147	1.72	1500	0.973869	0.005277	0
B3	ALPHA	30117	1.72	1530	0.9729	-0.01042	0
B3	ALPHA	30175	1.73	1560	0.969139	-0.00015	0
B3	ALPHA	30140	1.74	1590	0.962452	0.021823	0
B3	ALPHA	30126	1.71	1620	0.978882	#VALUE!	0
B3	ALPHA	30236	1.68	1650	1	#VALUE!	0
B3	BETA	0	0.12	300	0	#VALUE!	0
B3	BETA	2	0.11	330	0.000427	#VALUE!	0
B3	BETA	1	0.11	360	0.000214	-0.41667	0
B3	BETA	1	0.11	390	0.000214	-2.08333	0
B3	BETA	0	0.11	420	0	-0.66667	0
B3	BETA	0	0.12	450	0	-0.94203	0
B3	BETA	1	0.12	480	0.000196	2.285714	0
B3	BETA	0	0.11	510	0	0.619048	0
B3	BETA	2	0.11	540	0.000427	0.070922	0
B3	BETA	0	0.11	570	0	0.416667	0
B3	BETA	1	0.11	600	0.000214	-0.33333	0
B3	BETA	1	0.11	630	0.000214	1.333333	0
B3	BETA	1	0.11	660	0.000214	0.714286	0
B3	BETA	2	0.11	690	0.000427	-0.27778	0
B3	BETA	2	0.11	720	0.000427	1.441441	0
B3	BETA	0	0.12	750	0	2.425455	0
B3	BETA	8	0.12	780	0.001567	2.586419	0
B3	BETA	506	2	810	0.005946	2.383016	0
B3	BETA	1373	2	840	0.016133	2.006597	0
B3	BETA	2872	2	870	0.033747	1.649665	0
B3	BETA	4750	2	900	0.055815	1.337407	0
B3	BETA	6968	2	930	0.081877	1.102458	0
B3	BETA	9569	2	960	0.112441	0.968576	0
B3	BETA	12630	2	990	0.148409	0.895012	0
B3	BETA	16597	2	1020	0.195023	0.844221	0
B3	BETA	21520	2	1050	0.252871	0.801759	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
B3	BETA	27319	2	1080	0.321012	0.738341	0
B3	BETA	30351	1.77	1110	0.402982	0.671041	0
B3	BETA	30288	1.46	1140	0.487533	0.600025	0
B3	BETA	30433	1.23	1170	0.581468	0.518032	0
B3	BETA	30502	1.06	1200	0.676252	0.440542	0
B3	BETA	30103	0.93	1230	0.760699	0.353913	0
B3	BETA	30387	0.85	1260	0.840147	0.260355	0
B3	BETA	30583	0.8	1290	0.898414	0.171022	0
B3	BETA	30797	0.78	1320	0.927898	0.100103	0
B3	BETA	30429	0.76	1350	0.940937	0.060081	0
B3	BETA	30507	0.75	1380	0.955926	0.042479	0
B3	BETA	30511	0.74	1410	0.968971	0.033898	1
B3	BETA	30275	0.73	1440	0.974647	0.016007	0
B3	BETA	30460	0.73	1470	0.980603	0.013043	0
B3	BETA	30651	0.74	1500	0.973418	0.013807	0
B3	BETA	30291	0.72	1530	0.988706	0.017857	0
B3	BETA	30359	0.72	1560	0.990926	0.021115	0
B3	BETA	30584	0.72	1590	0.99827	0.009009	0
B3	BETA	30637	0.72	1620	1	#VALUE!	0
B3	BETA	30564	0.72	1650	0.997617	#VALUE!	0
B4	ALPHA	25578	2	300	0.673618	#VALUE!	0
B4	ALPHA	25882	2	330	0.681624	#VALUE!	0
B4	ALPHA	26170	2	360	0.689209	0.028407	0
B4	ALPHA	26444	2	390	0.696425	0.022538	0
B4	ALPHA	26409	2	420	0.695503	0.012628	1
B4	ALPHA	26652	2	450	0.701903	0.017277	0
B4	ALPHA	26567	2	480	0.699664	0.016808	0
B4	ALPHA	27055	2	510	0.712516	0.022739	0
B4	ALPHA	26881	2	540	0.707934	0.025296	0
B4	ALPHA	27413	2	570	0.721944	0.014031	0
B4	ALPHA	27415	2	600	0.721997	0.015251	0
B4	ALPHA	27361	2	630	0.720575	0.006734	0
B4	ALPHA	27532	2	660	0.725078	0.020101	0
B4	ALPHA	27632	2	690	0.727712	0.016978	0
B4	ALPHA	28112	2	720	0.740353	0.013494	0
B4	ALPHA	27776	2	750	0.731504	0.005176	0
B4	ALPHA	28023	2	780	0.738009	0.002322	0
B4	ALPHA	27893	2	810	0.734586	0.02668	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
B4	ALPHA	28151	2	840	0.74138	0.047133	0
B4	ALPHA	28838	2	870	0.759473	0.094424	0
B4	ALPHA	29565	2	900	0.778619	0.119818	0
B4	ALPHA	30219	1.93	930	0.824708	0.110287	0
B4	ALPHA	30049	1.86	960	0.850931	0.106229	0
B4	ALPHA	30137	1.85	990	0.858036	0.074587	0
B4	ALPHA	30282	1.78	1020	0.89607	0.065885	0
B4	ALPHA	30381	1.78	1050	0.898999	0.061837	0
B4	ALPHA	30321	1.74	1080	0.917849	0.03206	0
B4	ALPHA	30214	1.71	1110	0.930656	0.044209	0
B4	ALPHA	30179	1.72	1140	0.924174	0.039171	0
B4	ALPHA	30168	1.66	1170	0.957228	0.040822	0
B4	ALPHA	30245	1.66	1200	0.959672	0.043006	0
B4	ALPHA	30233	1.64	1230	0.97099	0.015863	0
B4	ALPHA	30114	1.62	1260	0.979108	0.012242	0
B4	ALPHA	30403	1.65	1290	0.970532	0.001269	0
B4	ALPHA	30072	1.62	1320	0.977742	0.004483	0
B4	ALPHA	30312	1.64	1350	0.973527	0.002886	0
B4	ALPHA	30270	1.62	1380	0.98418	0.000762	0
B4	ALPHA	30250	1.64	1410	0.971536	0.003368	0
B4	ALPHA	30323	1.63	1440	0.979855	0.00243	0
B4	ALPHA	30347	1.63	1470	0.98063	0.001571	0
B4	ALPHA	30240	1.62	1500	0.983205	-0.00357	0
B4	ALPHA	30085	1.63	1530	0.972164	0.003309	0
B4	ALPHA	30106	1.62	1560	0.978848	0.010496	0
B4	ALPHA	30190	1.61	1590	0.987676	0.022903	0
B4	ALPHA	30101	1.6	1620	0.990919	#VALUE!	0
B4	ALPHA	30187	1.59	1650	1	#VALUE!	0
B4	BETA	0	0.11	300	0	#VALUE!	0
B4	BETA	1	0.11	330	0.00022	#VALUE!	0
B4	BETA	1	0.11	360	0.00022	0.833333	0
B4	BETA	1	0.11	390	0.00022	-0.83333	0
B4	BETA	1	0.11	420	0.00022	-1.66667	0
B4	BETA	0	0.11	450	0	-2.5	0
B4	BETA	0	0.12	480	0	0.980392	0
B4	BETA	0	0.11	510	0	1.666667	0
B4	BETA	2	0.12	540	0.000404	1.73913	0
B4	BETA	0	0.11	570	0	0.747126	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
B4	BETA	2	0.11	600	0.00044	-0.19048	0
B4	BETA	1	0.11	630	0.00022	-0.41667	0
B4	BETA	1	0.11	660	0.00022	-1	0
B4	BETA	0	0.11	690	0	5.83E-15	0
B4	BETA	1	0.11	720	0.00022	2.361111	0
B4	BETA	1	0.11	750	0.00022	2.758479	0
B4	BETA	9	0.11	780	0.001982	2.563918	0
B4	BETA	538	2	810	0.006515	2.300802	0
B4	BETA	1412	2	840	0.017099	1.939257	0
B4	BETA	2794	2	870	0.033836	1.628006	0
B4	BETA	4521	2	900	0.05475	1.306956	0
B4	BETA	6858	2	930	0.083051	1.108472	0
B4	BETA	9032	2	960	0.109378	0.980212	0
B4	BETA	12368	2	990	0.149778	0.894583	0
B4	BETA	16156	2	1020	0.195651	0.854834	0
B4	BETA	20797	2	1050	0.251854	0.789301	0
B4	BETA	26605	2	1080	0.322189	0.734295	0
B4	BETA	30283	1.84	1110	0.39862	0.660974	0
B4	BETA	30355	1.51	1140	0.48689	0.587047	0
B4	BETA	30252	1.28	1170	0.572429	0.523808	0
B4	BETA	30252	1.1	1200	0.6661	0.435088	0
B4	BETA	30228	0.96	1230	0.762634	0.344889	0
B4	BETA	30283	0.89	1260	0.824113	0.248951	0
B4	BETA	30396	0.84	1290	0.876426	0.168108	0
B4	BETA	30465	0.81	1320	0.910949	0.117344	0
B4	BETA	30550	0.79	1350	0.936617	0.078011	0
B4	BETA	30280	0.77	1380	0.952452	0.060984	0
B4	BETA	30258	0.76	1410	0.964283	0.033962	1
B4	BETA	30470	0.75	1440	0.983986	0.016363	0
B4	BETA	30432	0.76	1470	0.969828	0.017024	0
B4	BETA	30144	0.75	1500	0.973459	0.009258	0
B4	BETA	30385	0.74	1530	0.994501	0.020152	0
B4	BETA	30510	0.75	1560	0.985278	0.017595	0
B4	BETA	30769	0.75	1590	0.993642	0.004171	0
B4	BETA	30553	0.74	1620	1	#VALUE!	0
B4	BETA	30350	0.74	1650	0.993356	#VALUE!	0
C1	ALPHA	25995	2	300	0.682646	#VALUE!	0
C1	ALPHA	26120	2	330	0.685929	#VALUE!	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
C1	ALPHA	26134	2	360	0.686297	0.011663	0
C1	ALPHA	26272	2	390	0.689921	0.028341	0
C1	ALPHA	26377	2	420	0.692678	0.034278	1
C1	ALPHA	27121	2	450	0.712216	0.037042	0
C1	ALPHA	27077	2	480	0.71106	0.033108	0
C1	ALPHA	27414	2	510	0.71991	0.01038	0
C1	ALPHA	27577	2	540	0.724191	0.015846	0
C1	ALPHA	27296	2	570	0.716811	0.011955	0
C1	ALPHA	27788	2	600	0.729732	0.013864	0
C1	ALPHA	27803	2	630	0.730126	0.019817	0
C1	ALPHA	27899	2	660	0.732647	0.017684	0
C1	ALPHA	28066	2	690	0.737032	0.008851	0
C1	ALPHA	28399	2	720	0.745777	0.001342	0
C1	ALPHA	27925	2	750	0.733329	0.002853	0
C1	ALPHA	28026	2	780	0.735982	0.009389	0
C1	ALPHA	28373	2	810	0.745094	0.034421	0
C1	ALPHA	28573	2	840	0.750346	0.056966	0
C1	ALPHA	29118	2	870	0.764658	0.085587	0
C1	ALPHA	30118	2	900	0.790919	0.114378	0
C1	ALPHA	30134	1.92	930	0.824312	0.116809	0
C1	ALPHA	30199	1.85	960	0.857347	0.103929	0
C1	ALPHA	30174	1.81	990	0.875569	0.077297	0
C1	ALPHA	30252	1.77	1020	0.89767	0.060045	0
C1	ALPHA	30163	1.75	1050	0.905258	0.055451	0
C1	ALPHA	30221	1.72	1080	0.922819	0.043312	0
C1	ALPHA	30199	1.69	1110	0.938516	0.04289	0
C1	ALPHA	30275	1.69	1140	0.940878	0.029958	0
C1	ALPHA	30223	1.66	1170	0.956237	0.022749	0
C1	ALPHA	30226	1.66	1200	0.956332	0.027482	0
C1	ALPHA	30261	1.65	1230	0.963242	0.021134	0
C1	ALPHA	30132	1.62	1260	0.976897	0.011323	0
C1	ALPHA	30122	1.62	1290	0.976573	0.011196	0
C1	ALPHA	30167	1.64	1320	0.966105	0.006985	0
C1	ALPHA	30194	1.61	1350	0.984987	0.013251	0
C1	ALPHA	30131	1.61	1380	0.982932	0.010157	0
C1	ALPHA	30087	1.6	1410	0.987631	0.002501	0
C1	ALPHA	30219	1.62	1440	0.979718	0.002842	0
C1	ALPHA	30168	1.6	1470	0.99029	0.002678	0

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Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
C1	ALPHA	30219	1.61	1500	0.985803	0.00227	0
C1	ALPHA	30115	1.6	1530	0.98855	0.003972	0
C1	ALPHA	30162	1.61	1560	0.983944	0.010848	0
C1	ALPHA	30186	1.59	1590	0.997113	0.012279	0
C1	ALPHA	30202	1.59	1620	0.997642	#VALUE!	0
C1	ALPHA	30083	1.58	1650	1	#VALUE!	0
C1	BETA	56	2	300	0.000558	#VALUE!	0
C1	BETA	1	0.11	330	0.000181	#VALUE!	0
C1	BETA	1	0.11	360	0.000181	-1.41447	0
C1	BETA	0	0.11	390	0	0.666667	0
C1	BETA	1	0.11	420	0.000181	0.666667	0
C1	BETA	2	0.11	450	0.000363	-1.2E-15	0
C1	BETA	1	0.11	480	0.000181	-0.66667	0
C1	BETA	0	0.11	510	0	-1.66667	0
C1	BETA	1	0.11	540	0.000181	-1.66667	0
C1	BETA	0	0.11	570	0	-1.66667	0
C1	BETA	0	0.11	600	0	-1.6E-15	0
C1	BETA	0	0.11	630	0	2.5	0
C1	BETA	1	0.11	660	0.000181	0.833333	0
C1	BETA	1	0.11	690	0.000181	2.291667	0
C1	BETA	0	0.11	720	0	2.12963	0
C1	BETA	6	0.11	750	0.001088	2.595682	0
C1	BETA	10	0.11	780	0.001813	2.52511	0
C1	BETA	759	2	810	0.007567	2.209256	0
C1	BETA	1940	2	840	0.019342	1.918688	0
C1	BETA	3593	2	870	0.035822	1.574943	0
C1	BETA	5870	2	900	0.058523	1.276722	0
C1	BETA	8607	2	930	0.085811	1.087618	0
C1	BETA	11503	2	960	0.114684	0.96282	0
C1	BETA	15475	2	990	0.154285	0.880311	0
C1	BETA	20263	2	1020	0.202021	0.837272	0
C1	BETA	25786	2	1050	0.257085	0.786138	0
C1	BETA	30170	1.83	1080	0.328735	0.723559	0
C1	BETA	30208	1.47	1110	0.409757	0.659167	0
C1	BETA	30137	1.22	1140	0.492563	0.588217	0
C1	BETA	30227	1.03	1170	0.585167	0.502734	0
C1	BETA	30434	0.89	1200	0.681853	0.431383	0
C1	BETA	30346	0.8	1230	0.756368	0.339651	0

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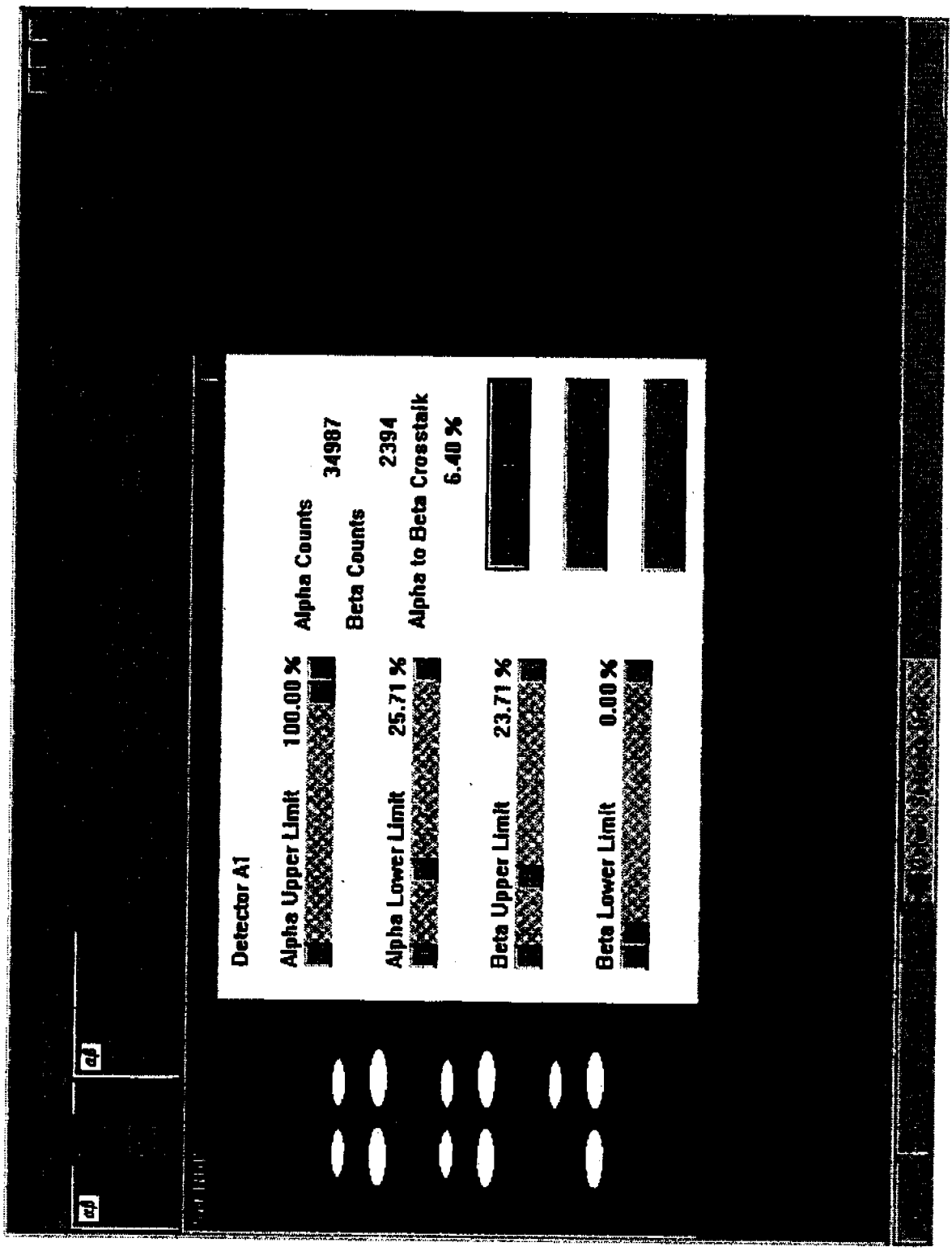
Detector ID	Sample ID	Gross Counts	Count Time	Voltage	Normalized CPM	Slope	Voltage Flag
C1	BETA	30384	0.72	1260	0.841462	0.247307	0
C1	BETA	30274	0.68	1290	0.887734	0.171202	0
C1	BETA	30431	0.66	1320	0.919378	0.105906	0
C1	BETA	30190	0.64	1350	0.9406	0.065421	0
C1	BETA	30317	0.63	1380	0.95955	0.042837	0
C1	BETA	30307	0.63	1410	0.959234	0.027975	0
C1	BETA	30195	0.62	1440	0.971103	0.024343	1
C1	BETA	30321	0.62	1470	0.975155	0.023439	0
C1	BETA	30690	0.62	1500	0.987023	0.011657	0
C1	BETA	30645	0.62	1530	0.985576	0.010452	0
C1	BETA	30566	0.62	1560	0.983035	0.011104	0
C1	BETA	30863	0.62	1590	0.992587	0.014363	0
C1	BETA	30592	0.61	1620	1	#VALUE!	0
C1	BETA	30545	0.61	1650	0.998464	#VALUE!	0
C2	ALPHA	23542	2	300	0.680812	#VALUE!	0
C2	ALPHA	23600	2	330	0.682489	#VALUE!	0
C2	ALPHA	23839	2	360	0.689401	0.019562	0
C2	ALPHA	23830	2	390	0.68914	0.00976	0
C2	ALPHA	24125	2	420	0.697672	0.009128	1
C2	ALPHA	23806	2	450	0.688446	0.022809	0
C2	ALPHA	24179	2	480	0.699233	0.028344	0
C2	ALPHA	24628	2	510	0.712218	0.03244	0
C2	ALPHA	24747	2	540	0.715659	0.025752	0
C2	ALPHA	24710	2	570	0.714589	0.005437	0
C2	ALPHA	25091	2	600	0.725607	0.007832	0
C2	ALPHA	24658	2	630	0.713085	0.022728	0
C2	ALPHA	25065	2	660	0.724855	0.021273	0
C2	ALPHA	25576	2	690	0.739633	0.018401	0
C2	ALPHA	25435	2	720	0.735555	0.005314	0
C2	ALPHA	25168	2	750	0.727834	0.002749	0
C2	ALPHA	25471	2	780	0.736597	0.01265	0
C2	ALPHA	25663	2	810	0.742149	0.029955	0
C2	ALPHA	25671	2	840	0.74238	0.060959	0
C2	ALPHA	26220	2	870	0.758257	0.090169	0
C2	ALPHA	27581	2	900	0.797616	0.117053	0
C2	ALPHA	28318	2	930	0.818929	0.117209	0
C2	ALPHA	29441	2	960	0.851405	0.100754	0
C2	ALPHA	30126	1.99	990	0.875593	0.088832	0

Printed 4/2/2002 12:41 PM

DETECTOR CROSSTALK / DISCRIMINATOR SETTINGS


Detector A1
Alpha Upper Limit 100.00 %
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Beta Upper Limit 23.71 %
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Alpha Counts 34987
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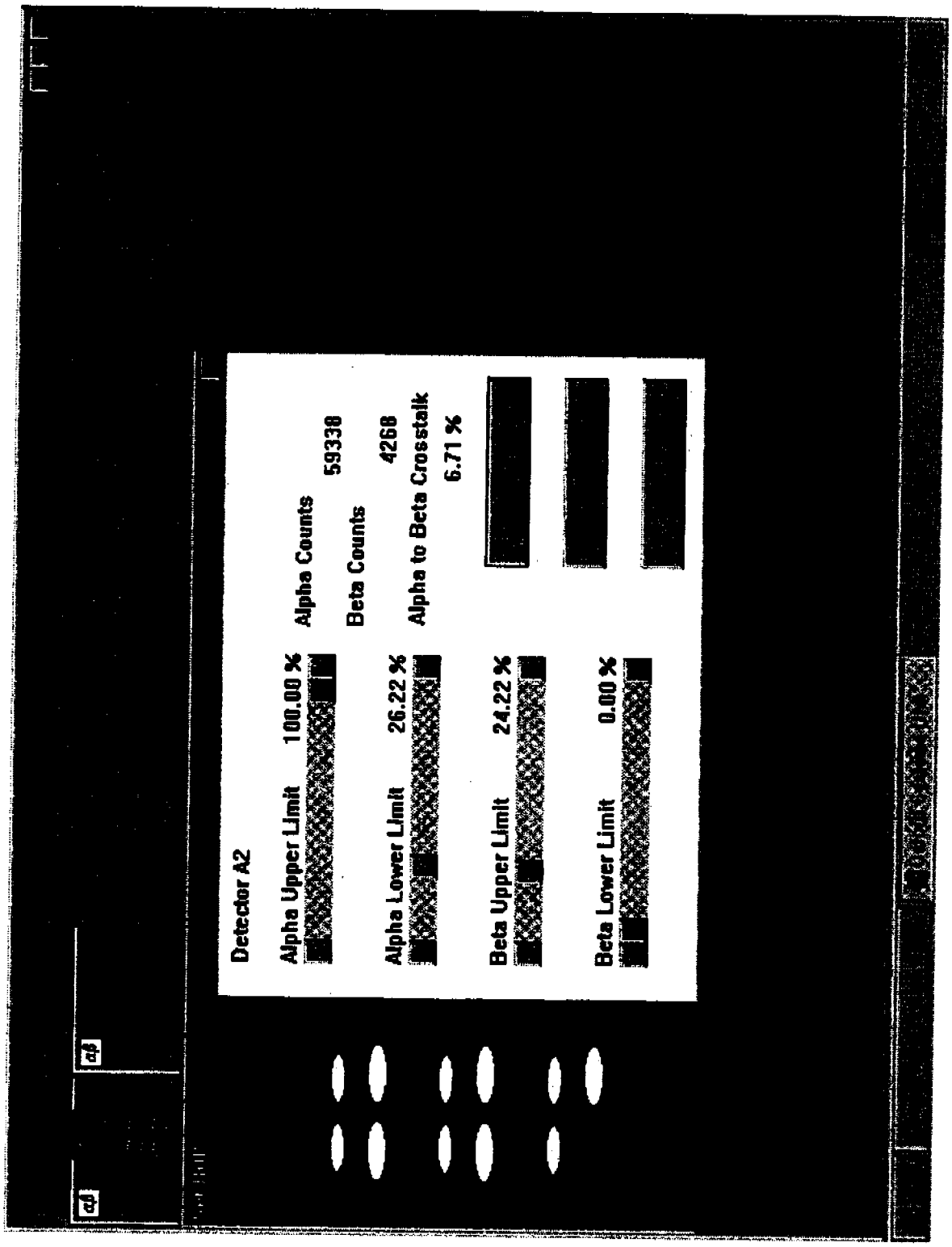
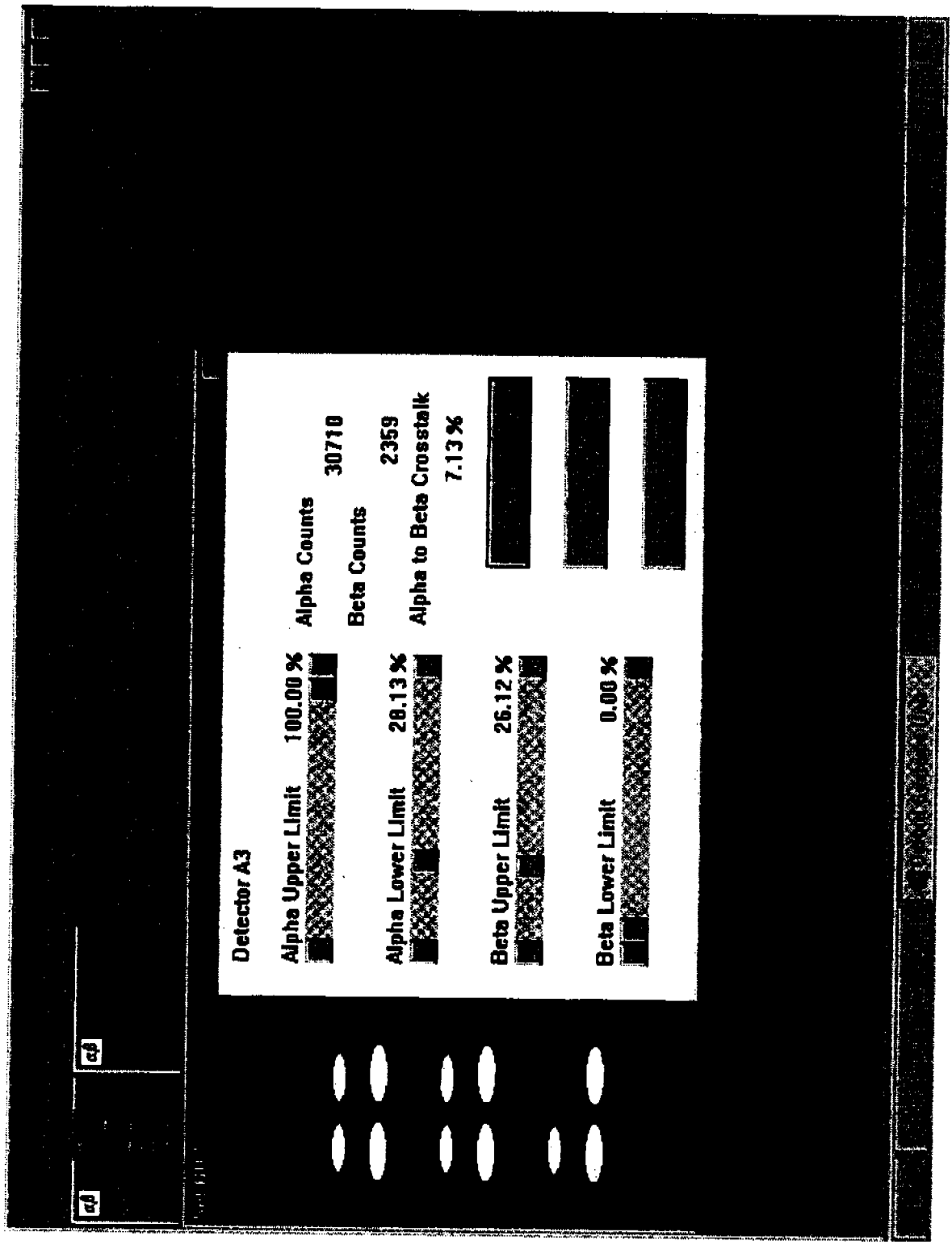
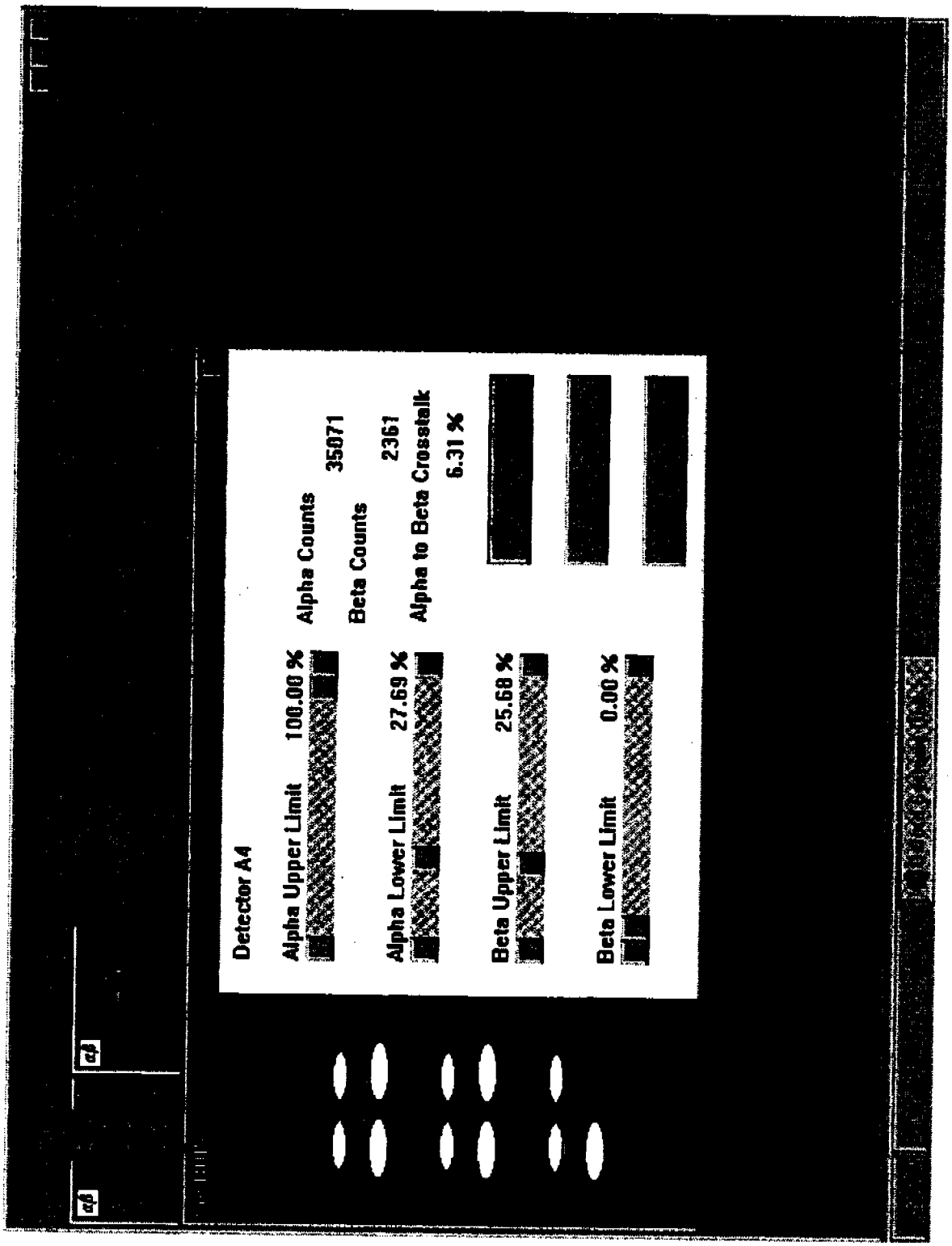
Alpha to Beta Crosstalk 6.40 %


Detector A2
Alpha Upper Limit 100.00 %
Alpha Lower Limit 26.22 %
Beta Upper Limit 24.22 %
Beta Lower Limit 0.00 %
Alpha Counts 59338
Beta Counts 4268
Alpha to Beta Crosstalk 6.71 %


Detector A3
Alpha Upper Limit 100.00 %
Alpha Lower Limit 28.13 %
Beta Upper Limit 26.12 %
Beta Lower Limit 0.00 %
Alpha Counts 30710
Beta Counts 2359
Alpha to Beta Crosstalk 7.13 %


Detector A4
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Alpha Lower Limit 27.69 %
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Beta Lower Limit 0.00 %
Alpha Counts 35071
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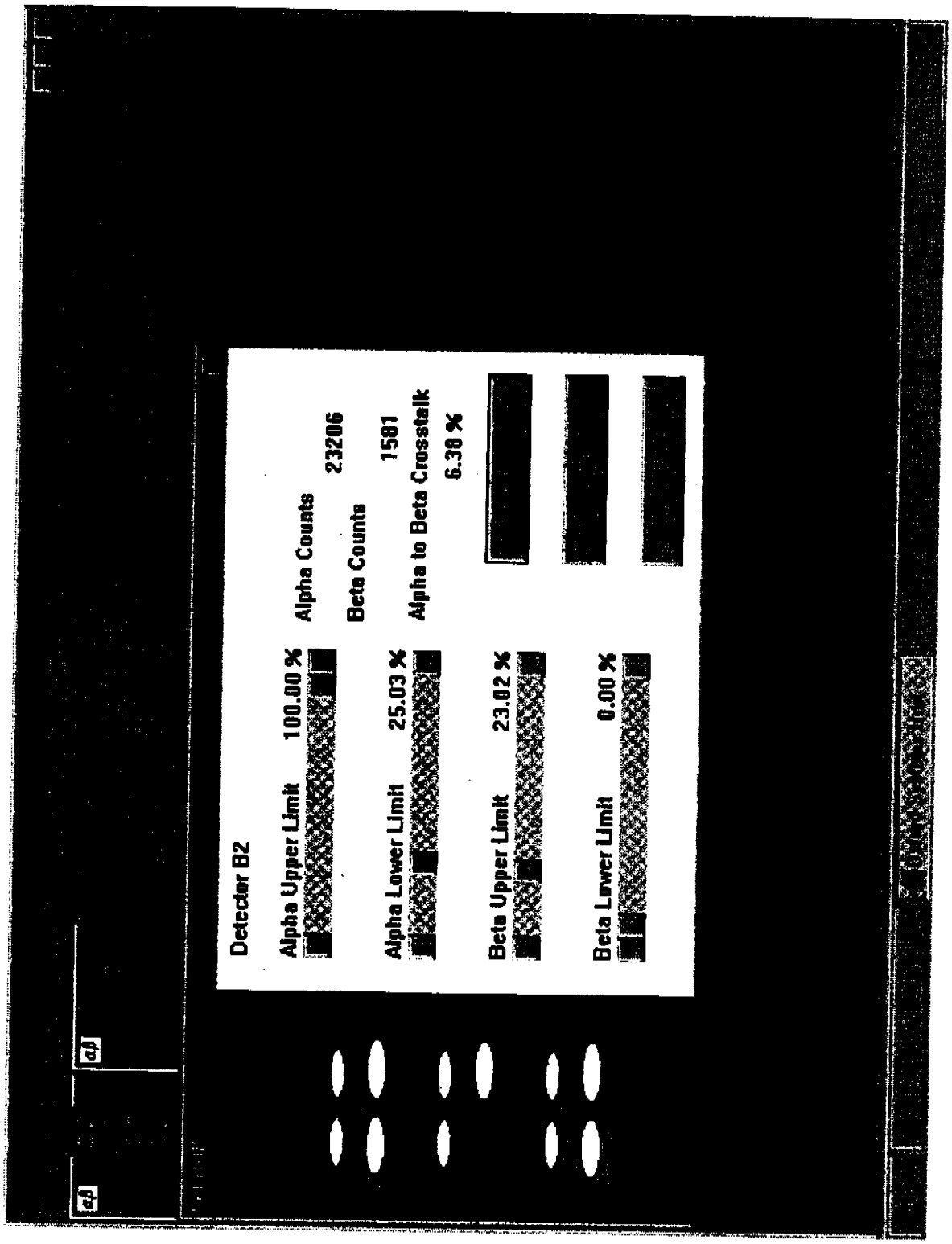
Alpha to Beta Crosstalk 6.31 %


Detector B2
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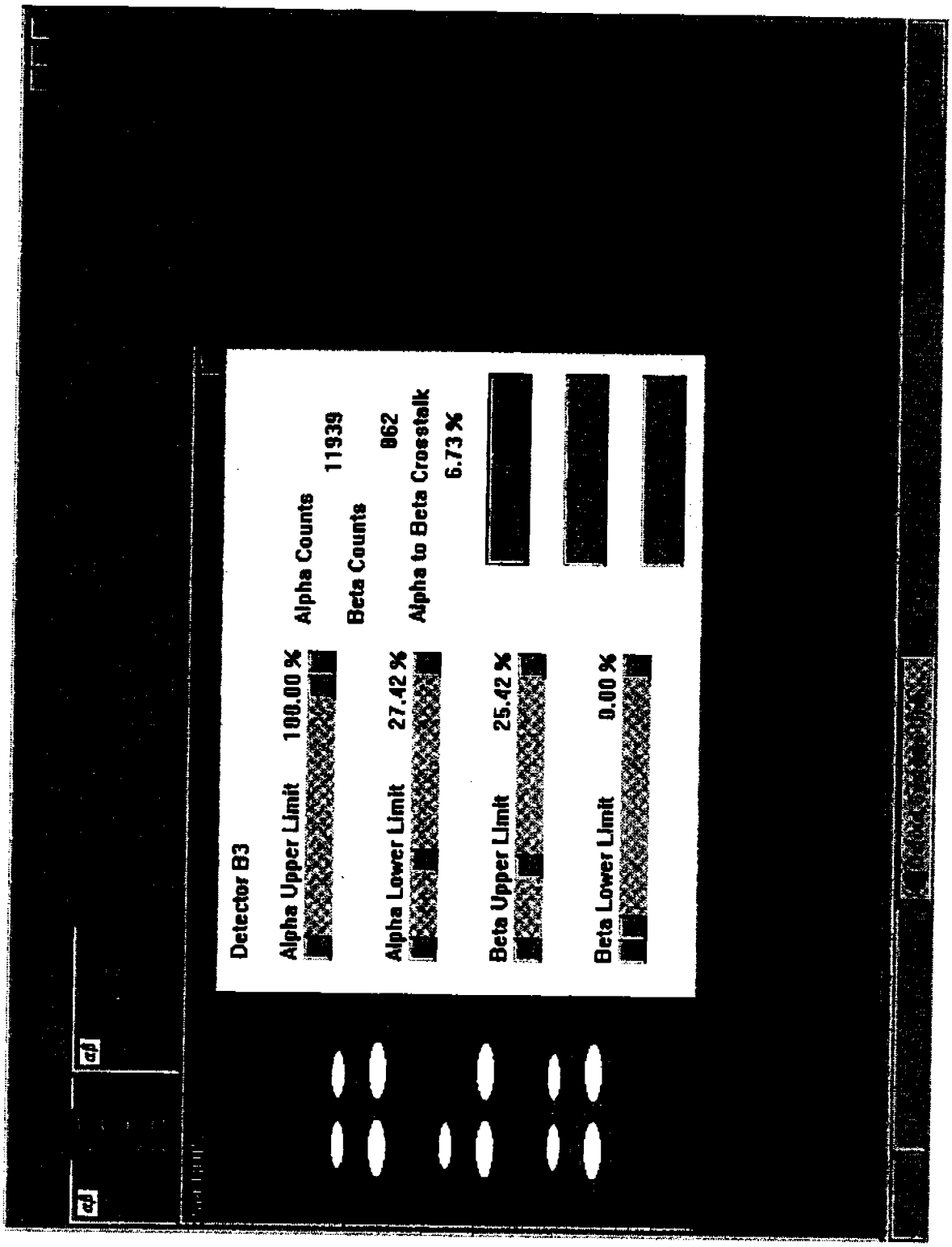
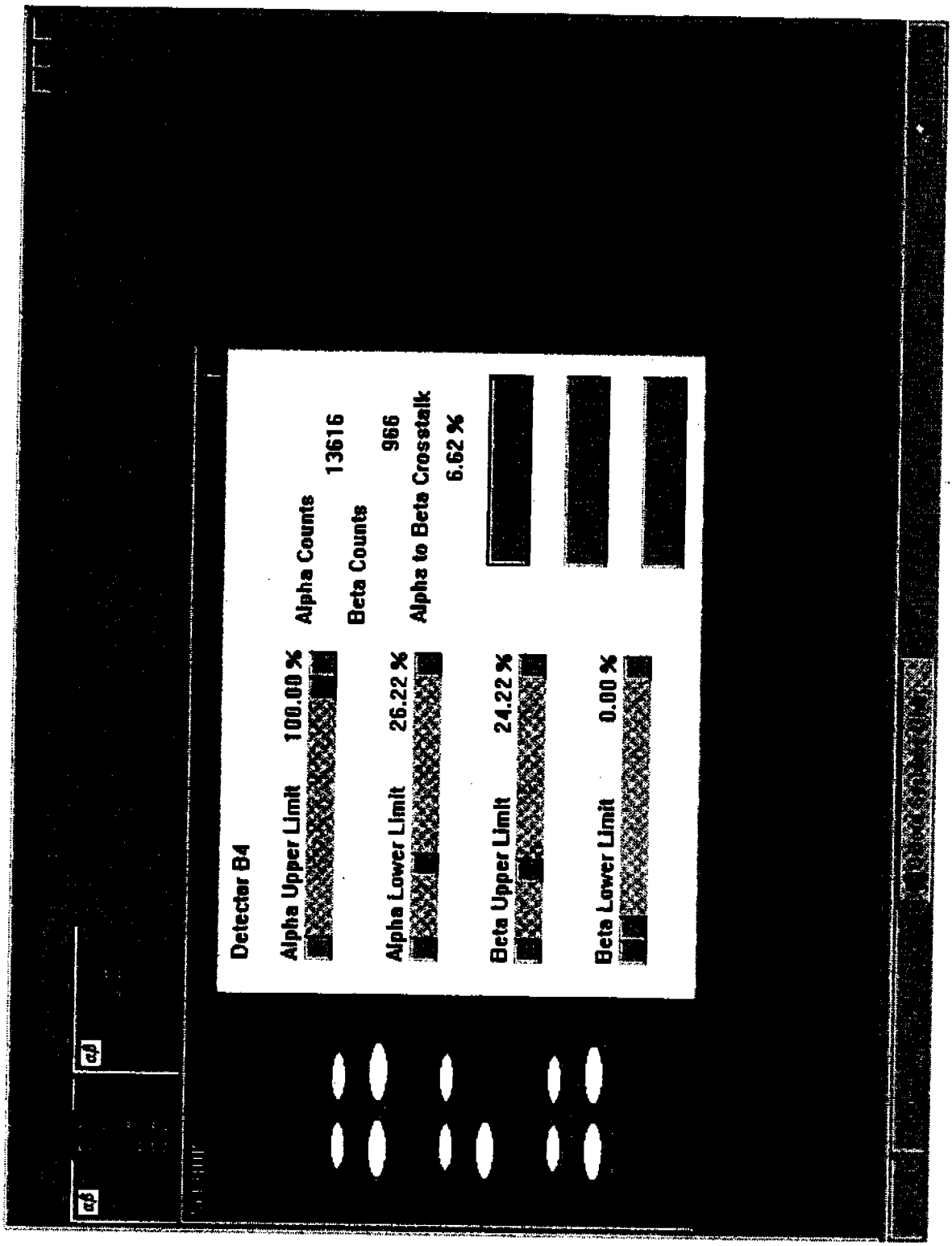
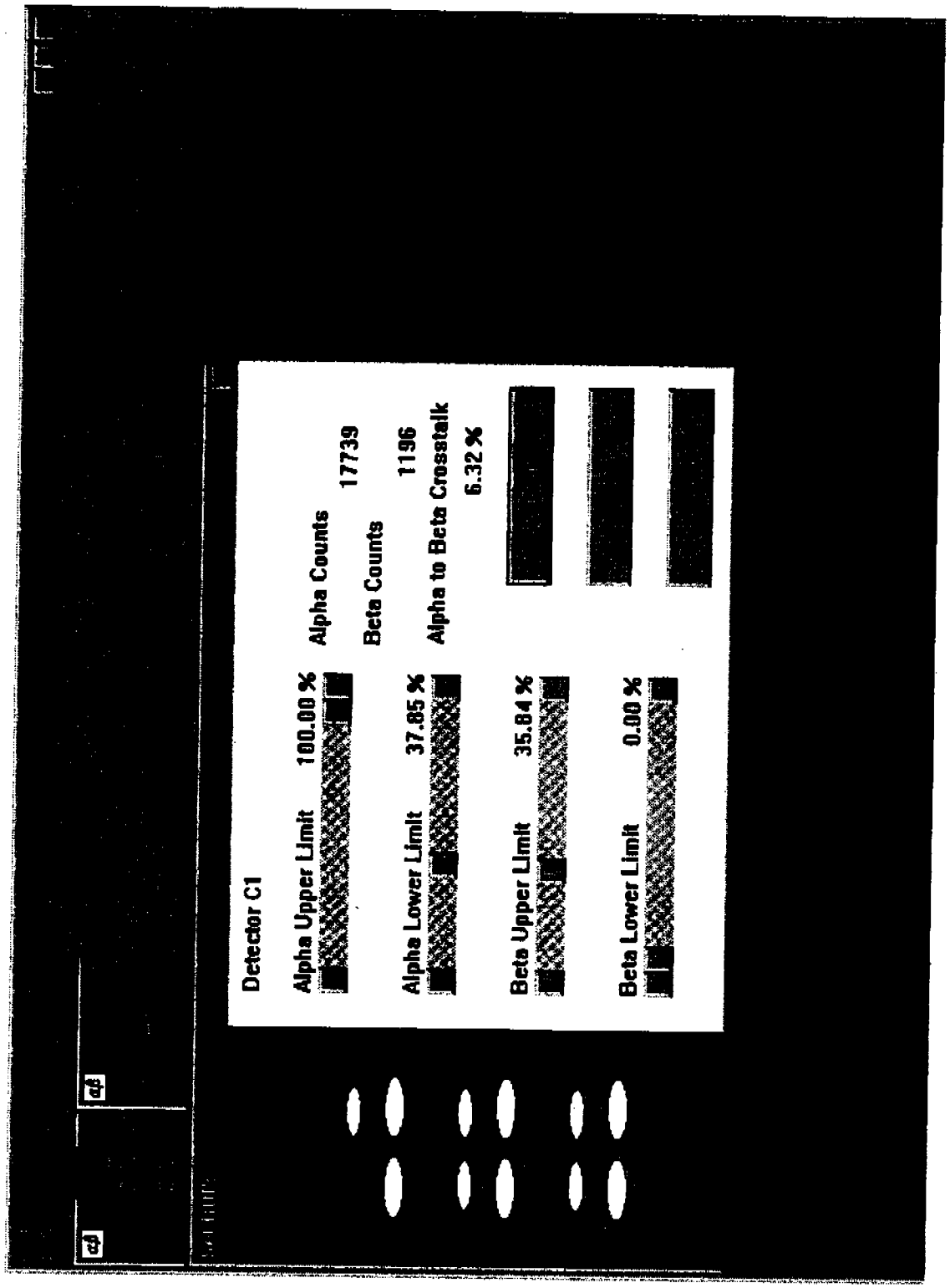
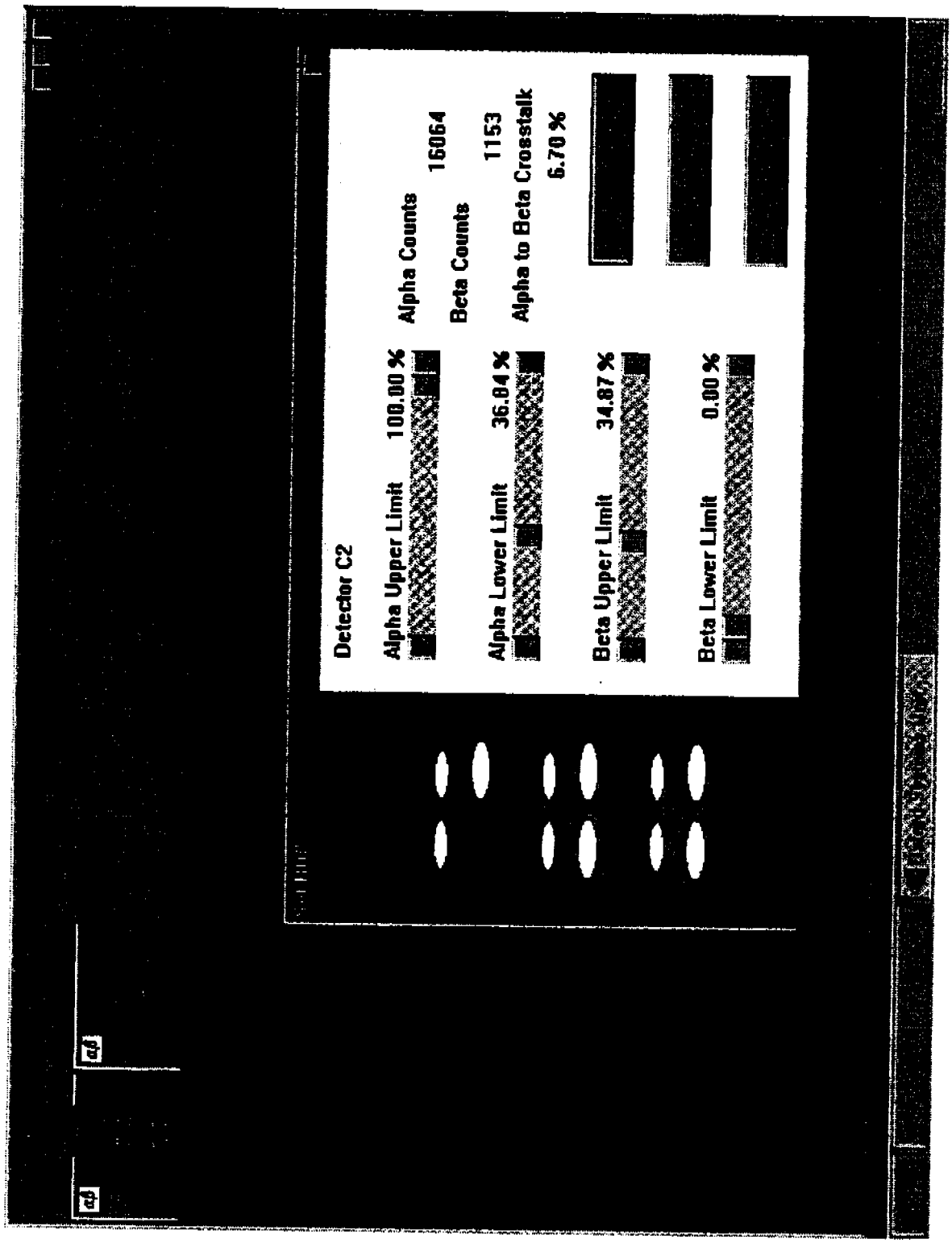
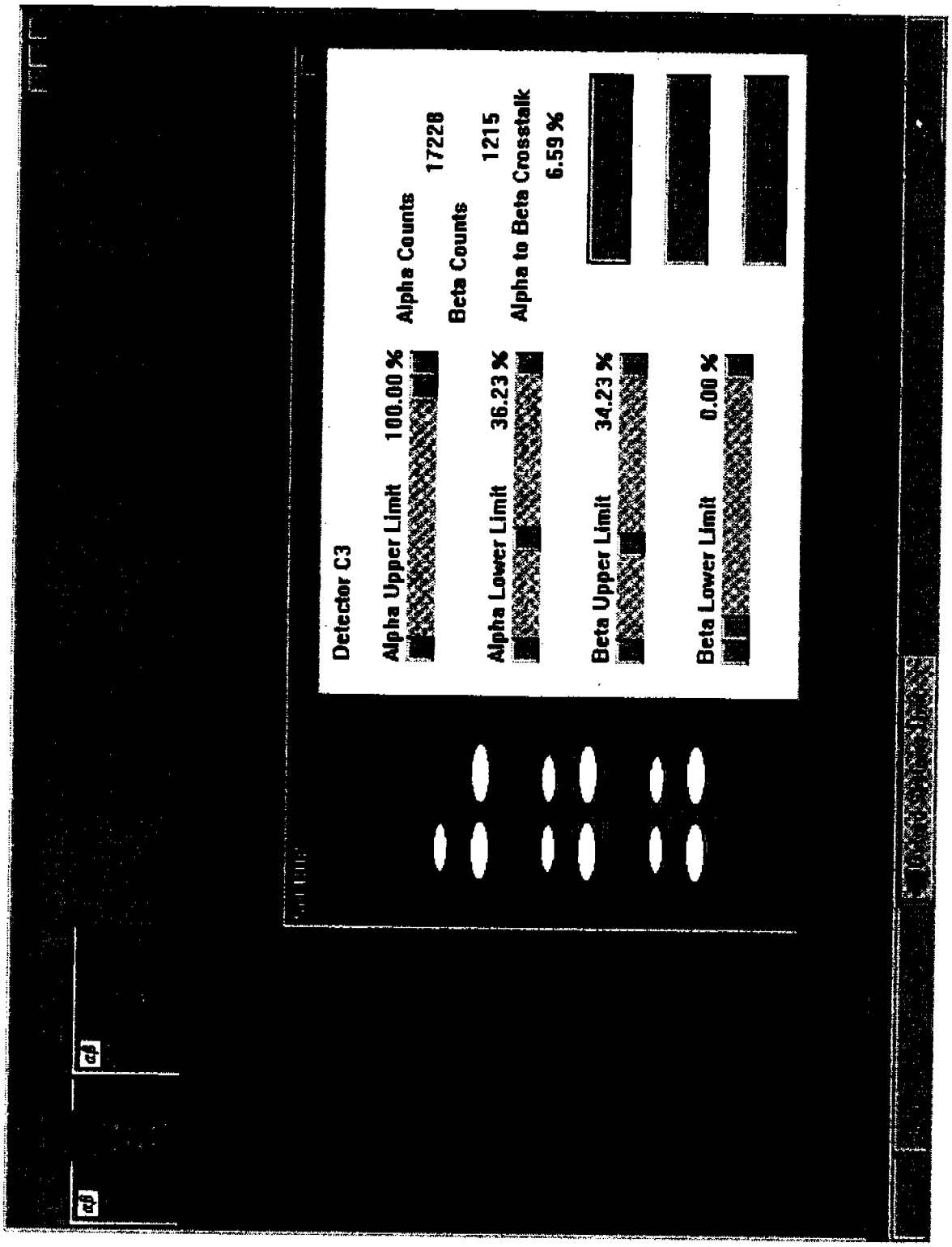
Alpha Lower Limit 25.03 %
Beta Upper Limit 23.02 %
Beta Lower Limit 0.00 %
Alpha Counts 23206
Beta Counts 1581
Alpha to Beta Crosstalk 6.38 %


Detector B3
Alpha Upper Limit 100.00 %
Alpha Lower Limit 27.42 %
Beta Upper Limit 25.42 %
Beta Lower Limit 0.00 %
Alpha Counts 11939
Beta Counts 862
Alpha to Beta Crosstalk 6.73 %


Detector B4
Alpha Upper Limit 100.00 %
Alpha Lower Limit 26.22 %
Beta Upper Limit 24.22 %
Beta Lower Limit 0.00 %
Alpha Counts 13616
Beta Counts 966
Alpha to Beta Crosstalk 6.62 %


Detector C1
Alpha Upper Limit 100.00 %
Alpha Lower Limit 37.85 %
Beta Upper Limit 35.84 %
Beta Lower Limit 0.00 %
Alpha Counts 17739
Beta Counts 1196
Alpha to Beta Crosstalk 6.32 %


Detector C2
Alpha Upper Limit
100.00 %
Alpha Counts
16064
Beta Counts
1153
Alpha Lower Limit
36.84 %
Alpha to Beta Crosstalk
6.70 %
Beta Upper Limit
34.87 %
Beta Lower Limit
0.00 %


Detector C3
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Beta Lower Limit 0.00 %
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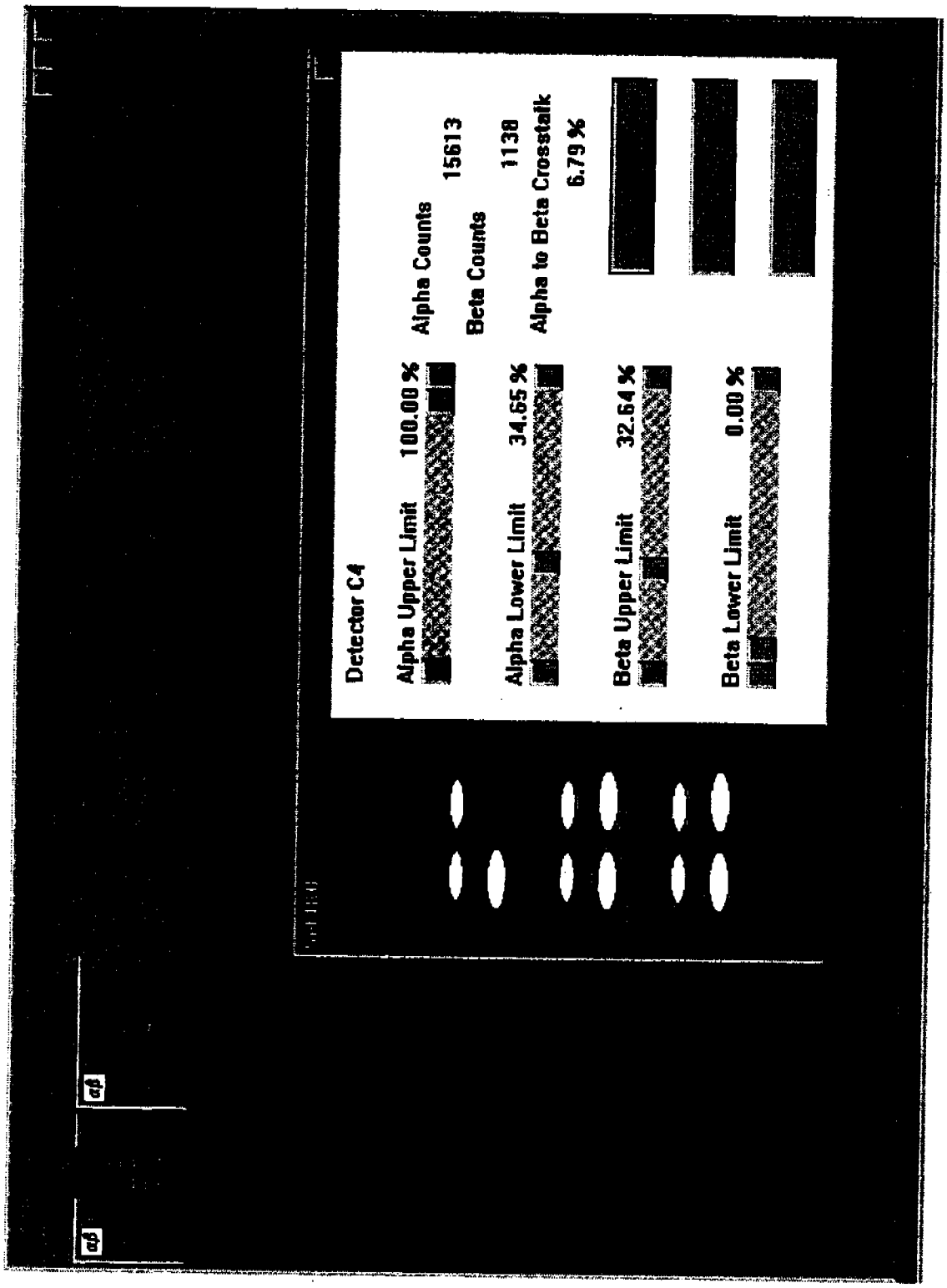
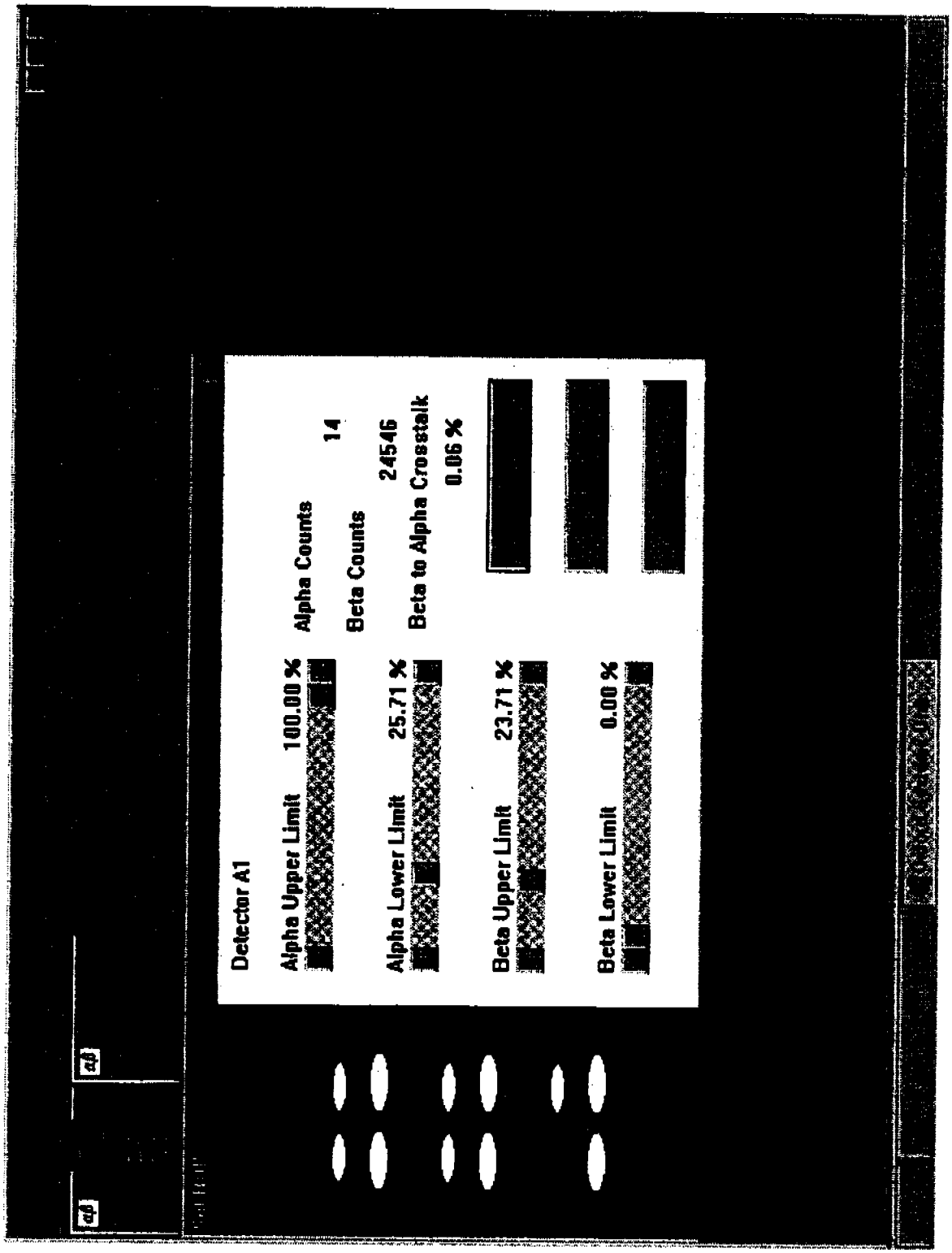
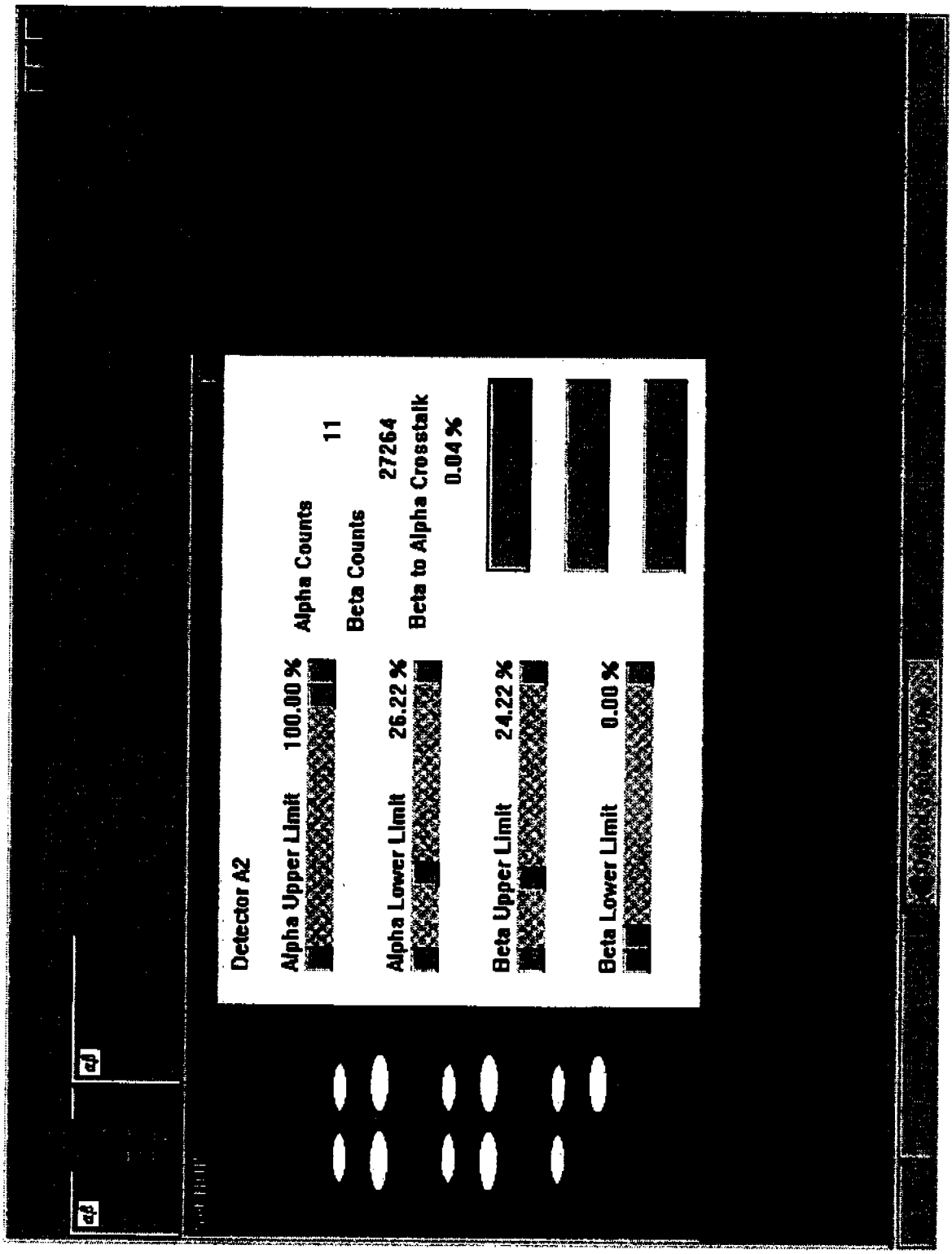
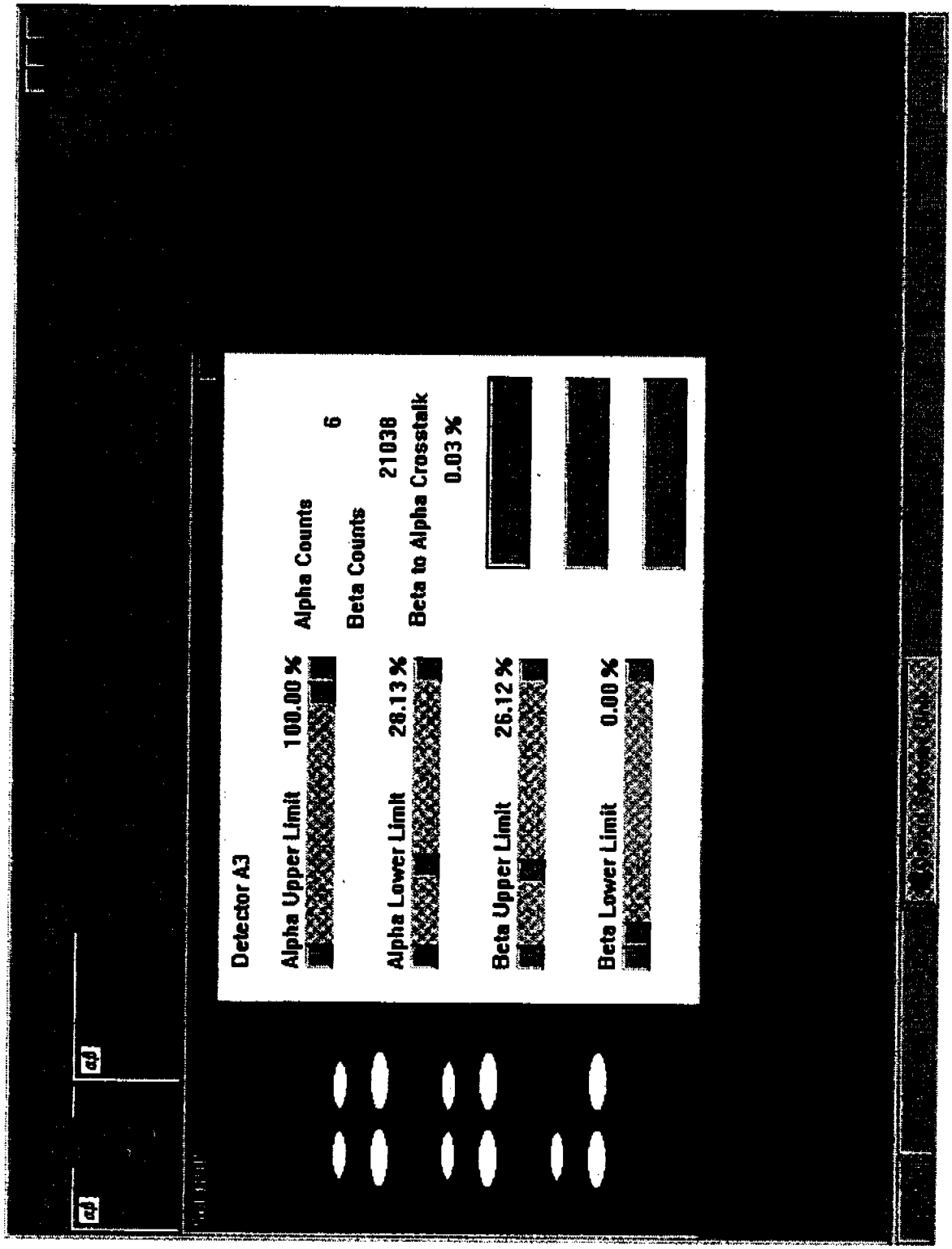
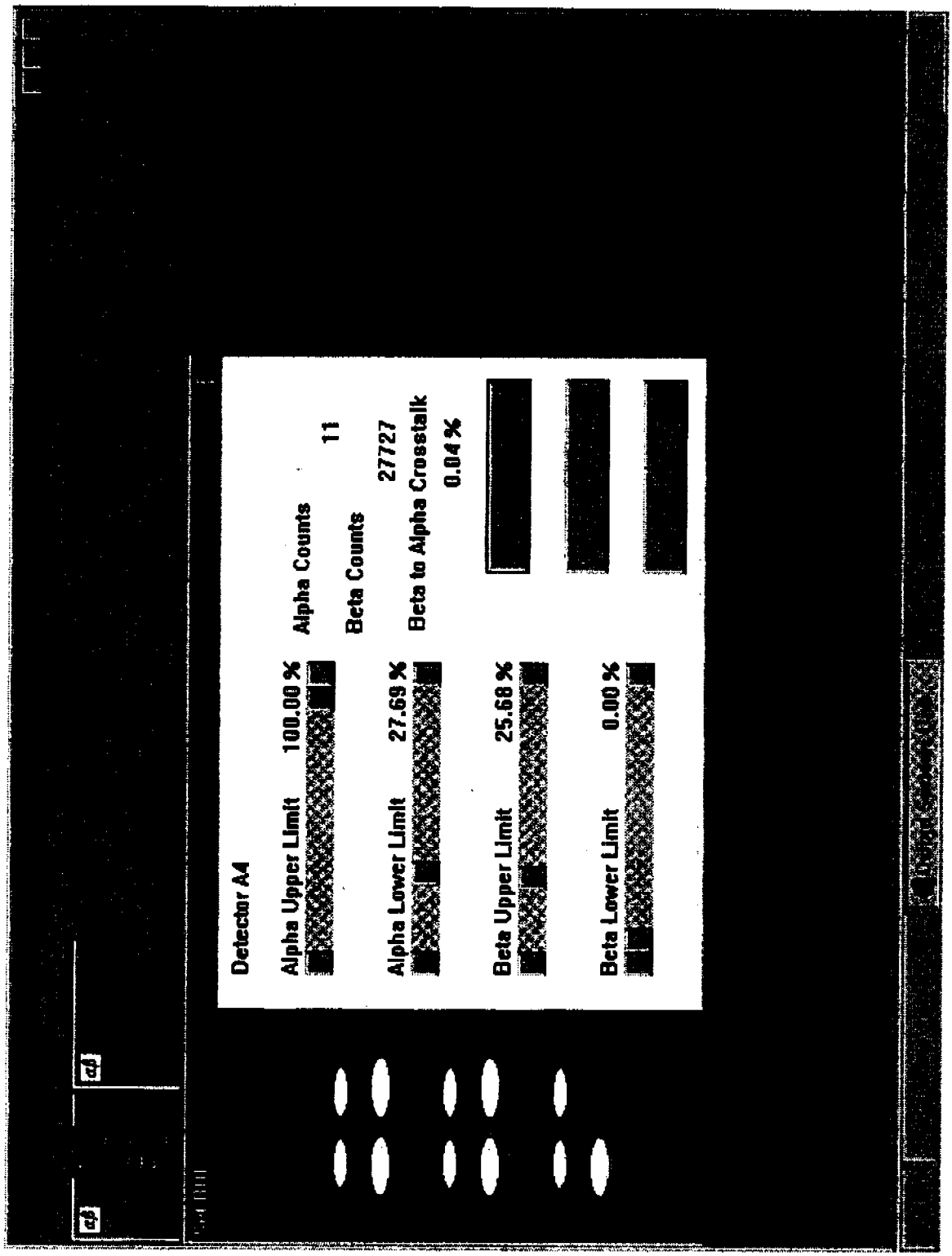
Alpha to Beta Crosstalk 6.59 %


Detector C4
Alpha Upper Limit 100.00 %
Alpha Lower Limit 34.65 %
Beta Upper Limit 32.64 %
Beta Lower Limit 0.00 %
Alpha Counts 15613
Beta Counts 1138
Alpha to Beta Crosstalk 6.79 %


Detector A1
Alpha Upper Limit 100.00 %
Alpha Lower Limit 25.71 %
Beta Upper Limit 23.71 %
Beta Lower Limit 0.00 %
Alpha Counts 14
Beta Counts 2454
Beta to Alpha Crosstalk 0.06 %


Detector A2
Alpha Upper Limit 100.00 %
Alpha Lower Limit 26.22 %
Beta Upper Limit 24.22 %
Beta Lower Limit 0.00 %
Alpha Counts 11
Beta Counts 27264
Beta to Alpha Crosstalk 0.04 %


Detector A3
Alpha Upper Limit 100.00 %
Alpha Counts 6
Beta Counts 21038
Alpha Lower Limit 28.13 %
Beta to Alpha Crosstalk 0.03 %
Beta Upper Limit 26.12 %
Beta Lower Limit 0.00 %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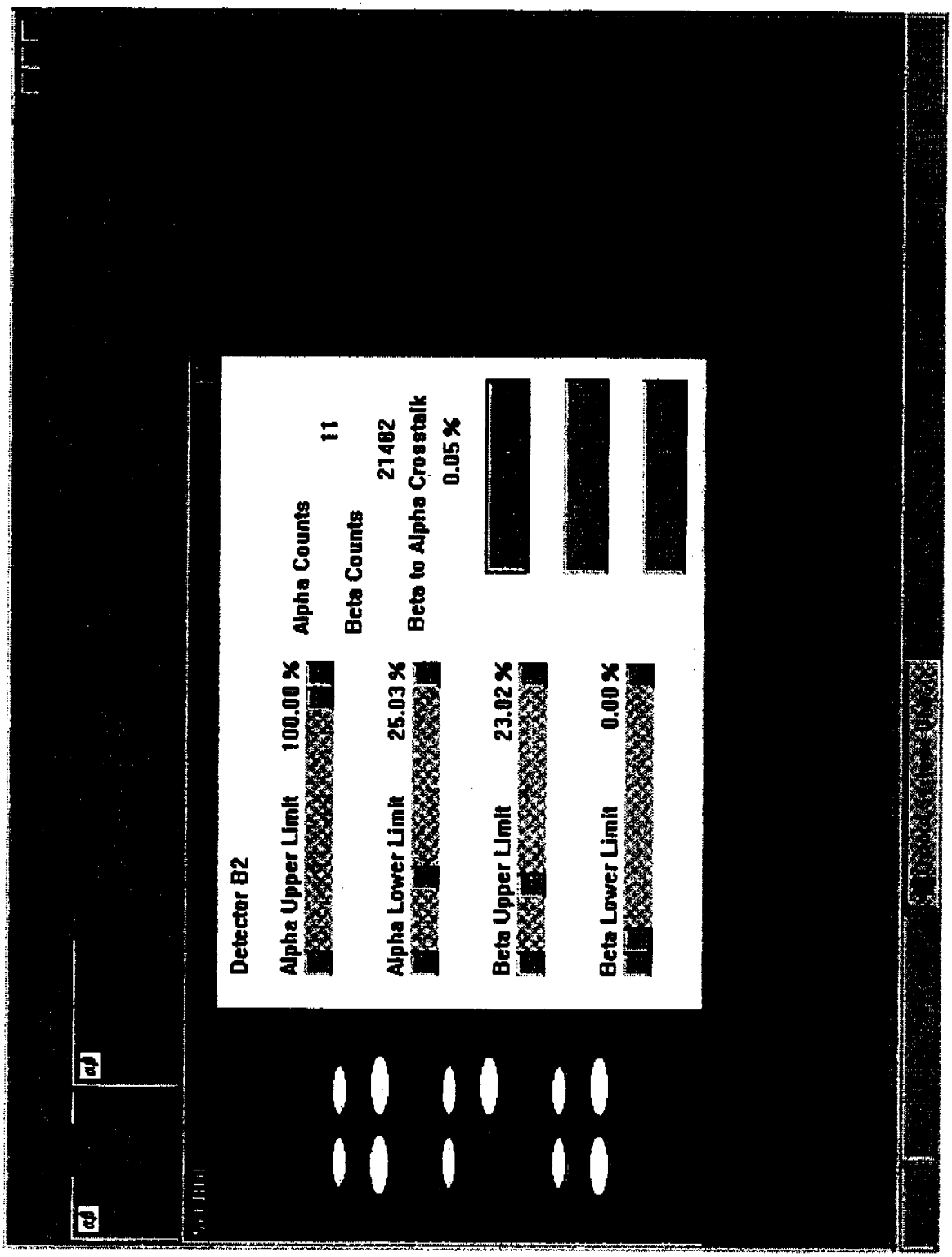
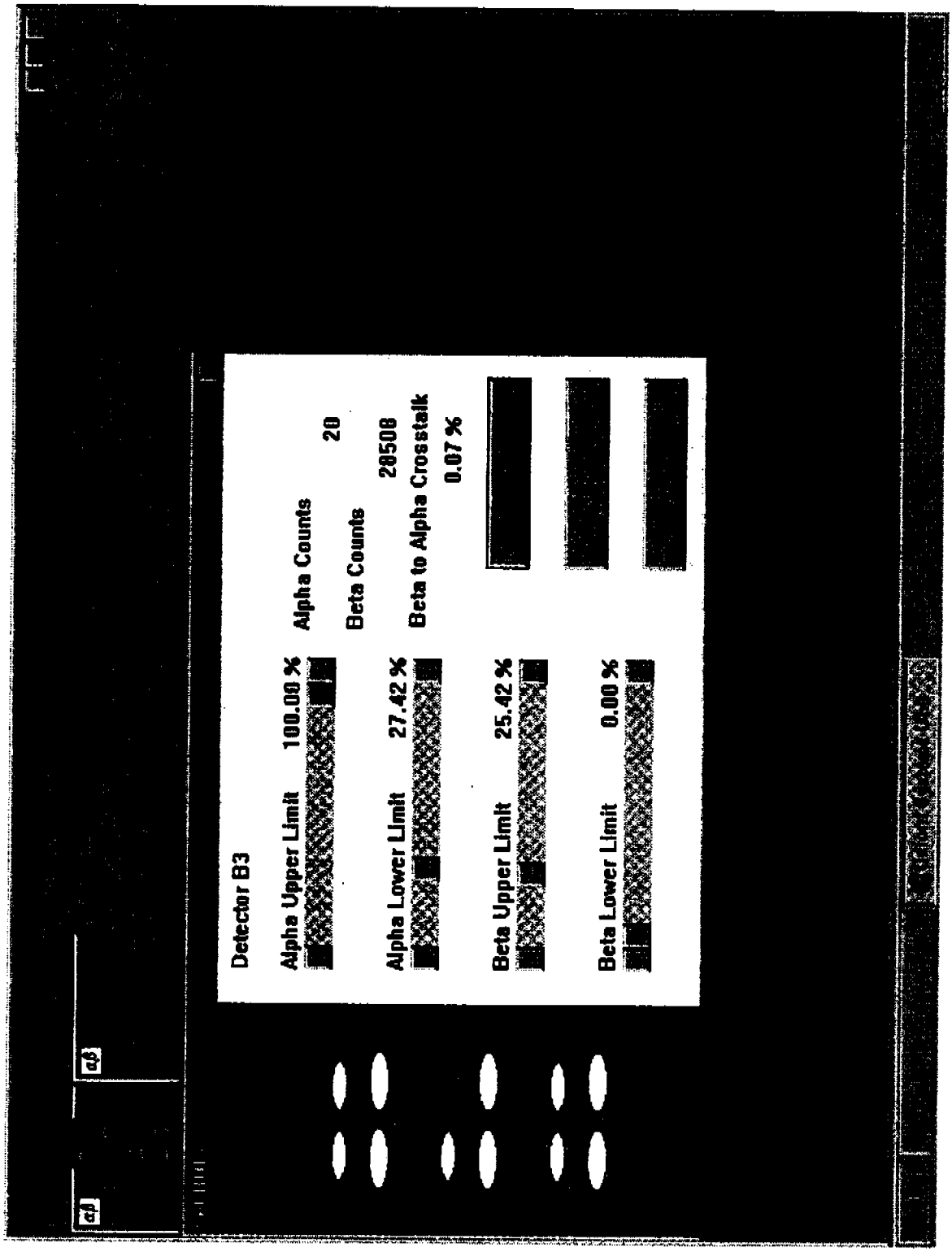
Alpha Counts 11
Beta Counts 27727
Beta to Alpha Crosstalk 0.04 %


Detector B2
Alpha Upper Limit 100.00 %
Alpha Lower Limit 25.03 %
Beta Upper Limit 23.02 %
Beta Lower Limit 0.00 %
Alpha Counts 11
Beta Counts 21482
Beta to Alpha Crosstalk 0.05 %


Detector B3
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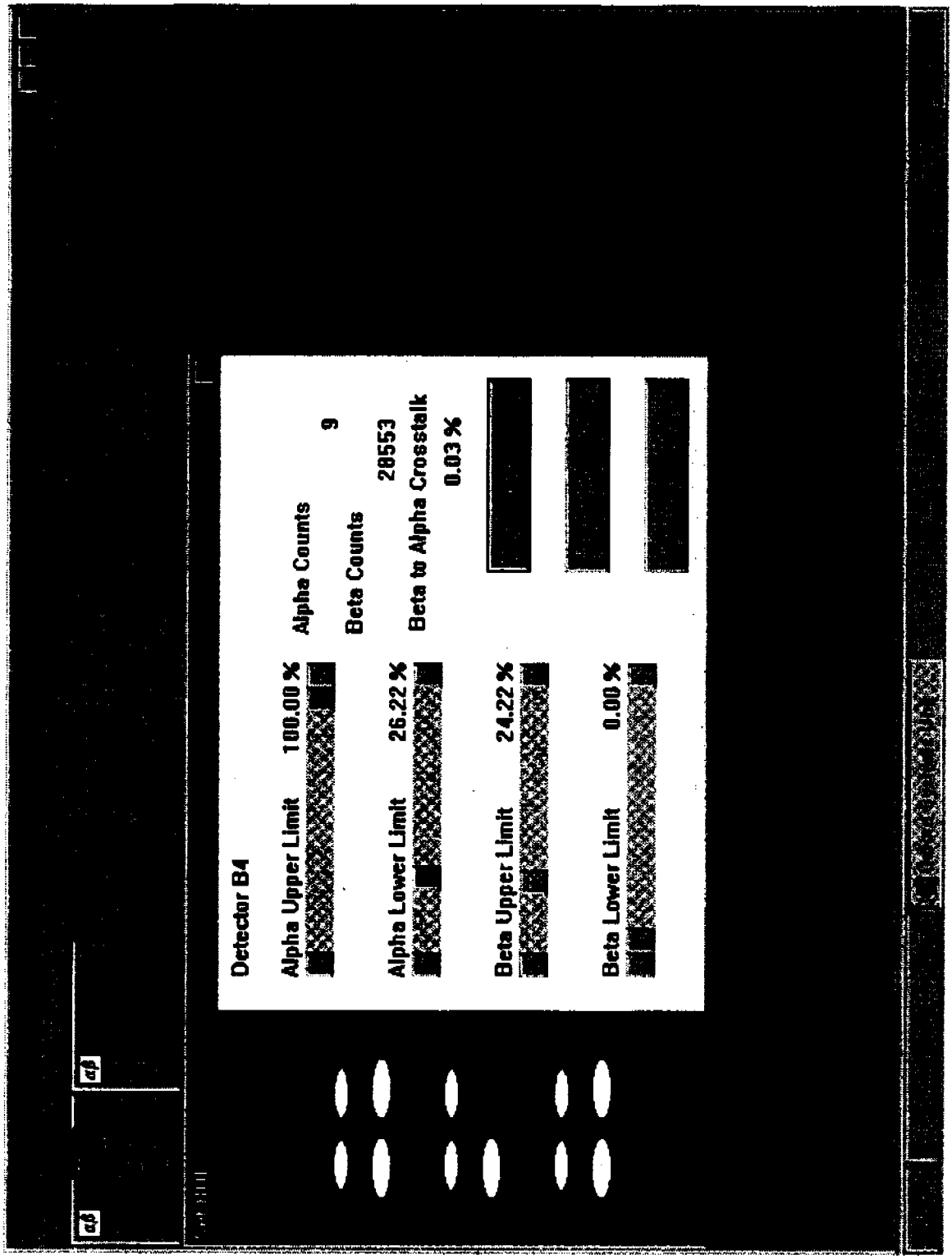
Beta Lower Limit 0.00 %
Alpha Counts 20
Beta Counts 28508
Beta to Alpha Crosstalk 0.07 %


Detector B4
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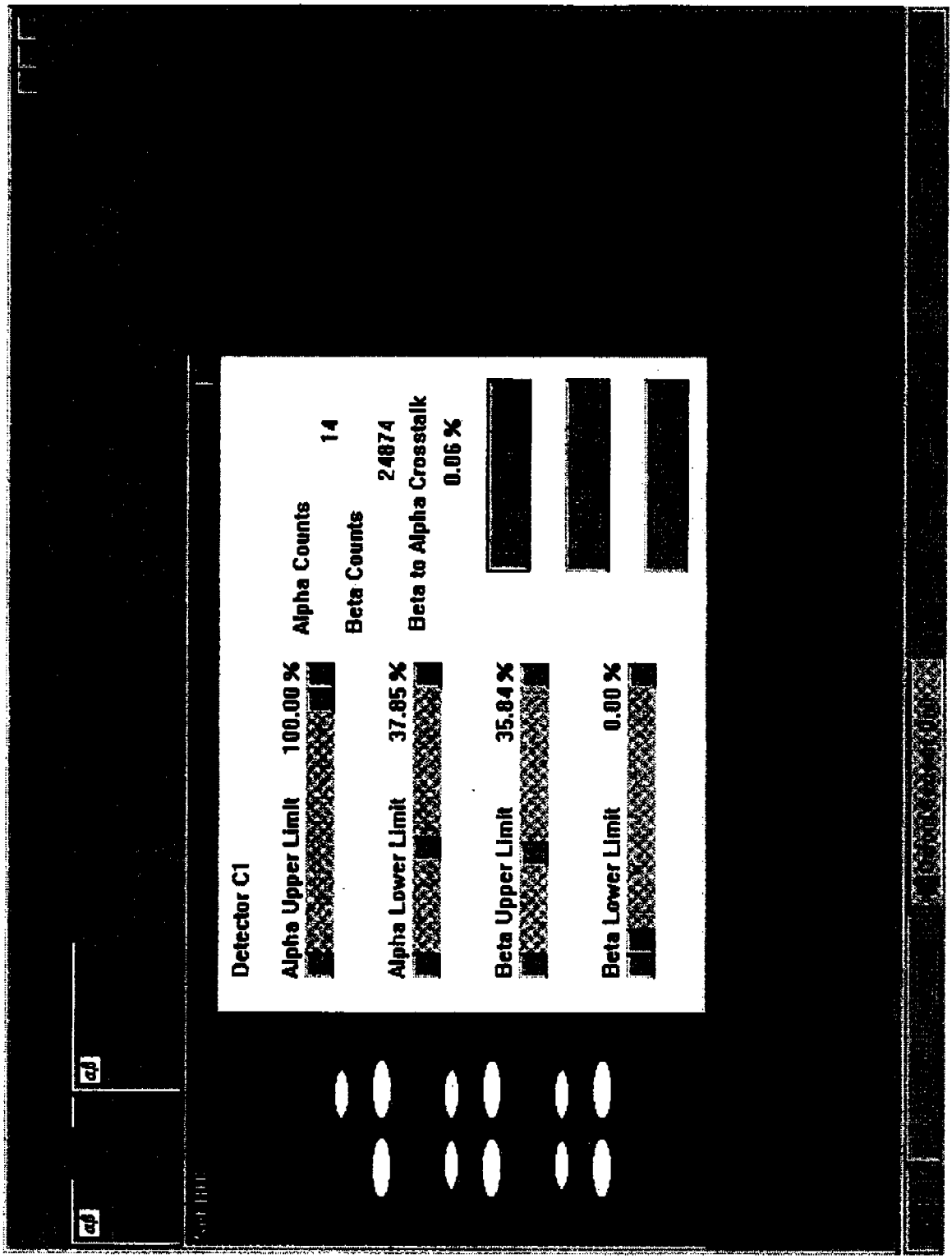
Alpha Lower Limit 26.22 %
Beta Upper Limit 24.22 %
Beta Lower Limit 0.00 %
Alpha Counts 9
Beta Counts 28553
Beta to Alpha Crosstalk 0.03 %


Detector C1
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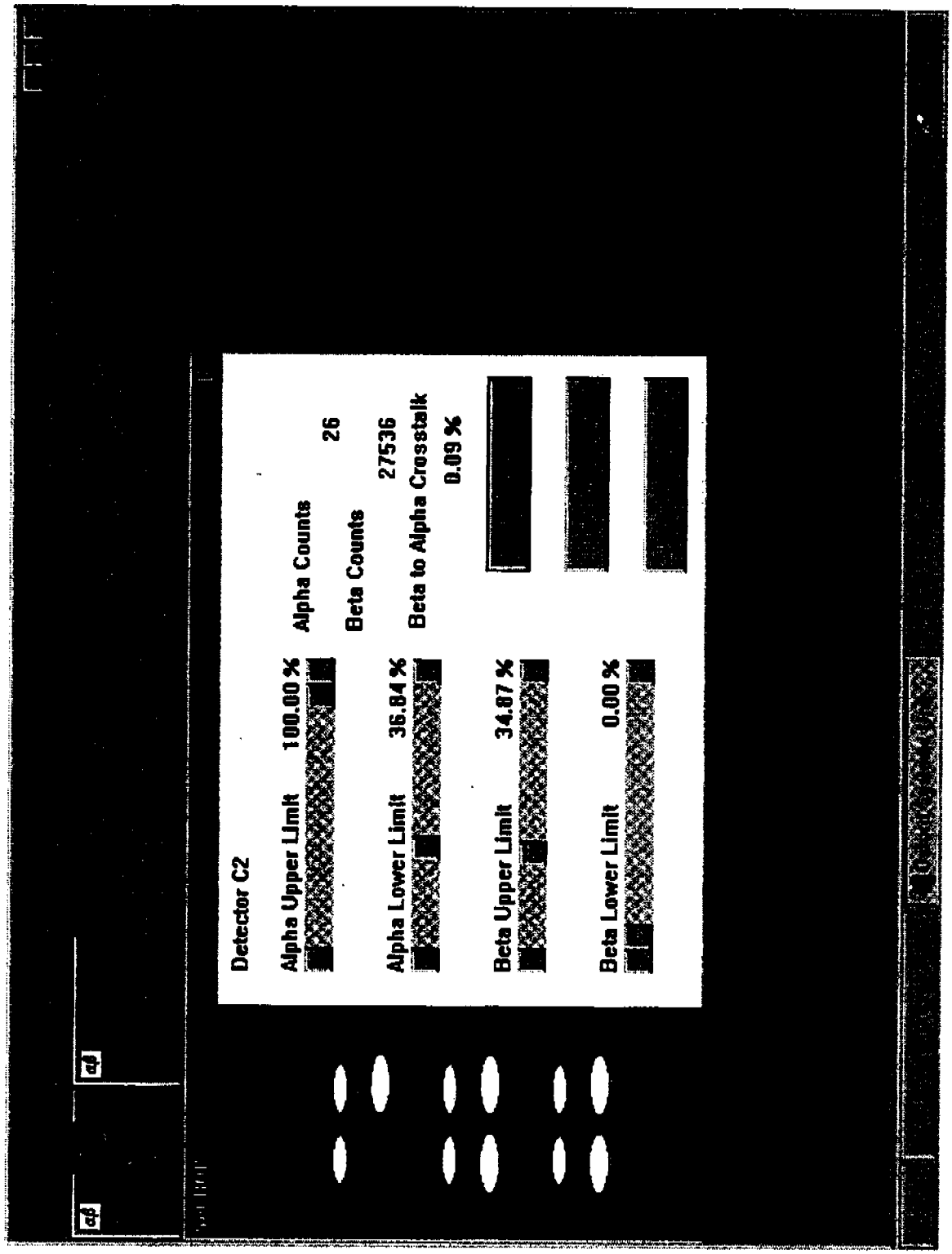
Alpha Lower Limit 37.85 %
Beta Upper Limit 35.84 %
Beta Lower Limit 0.00 %
Alpha Counts 14
Beta Counts 24874
Beta to Alpha Crosstalk 0.06 %


Detector C2
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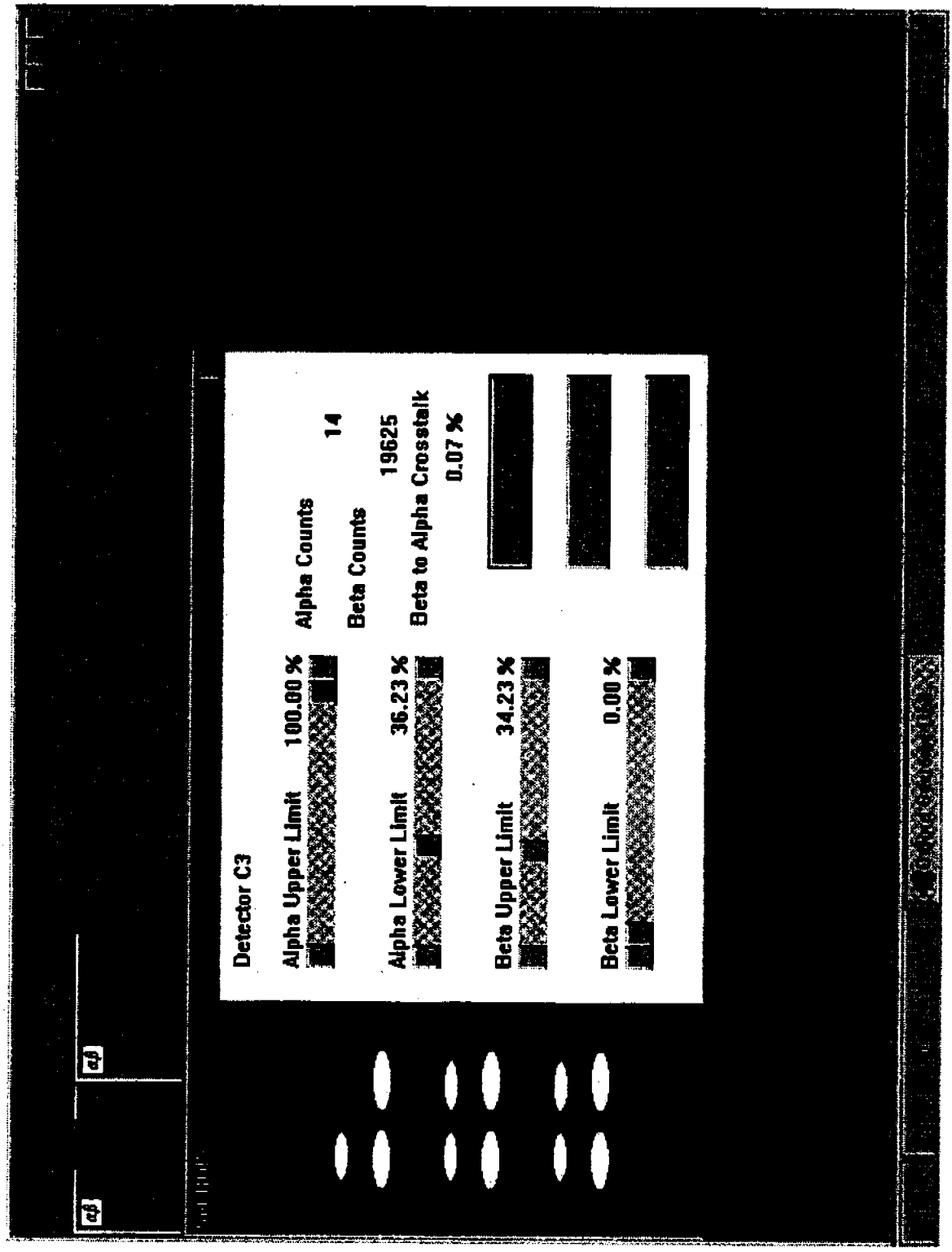
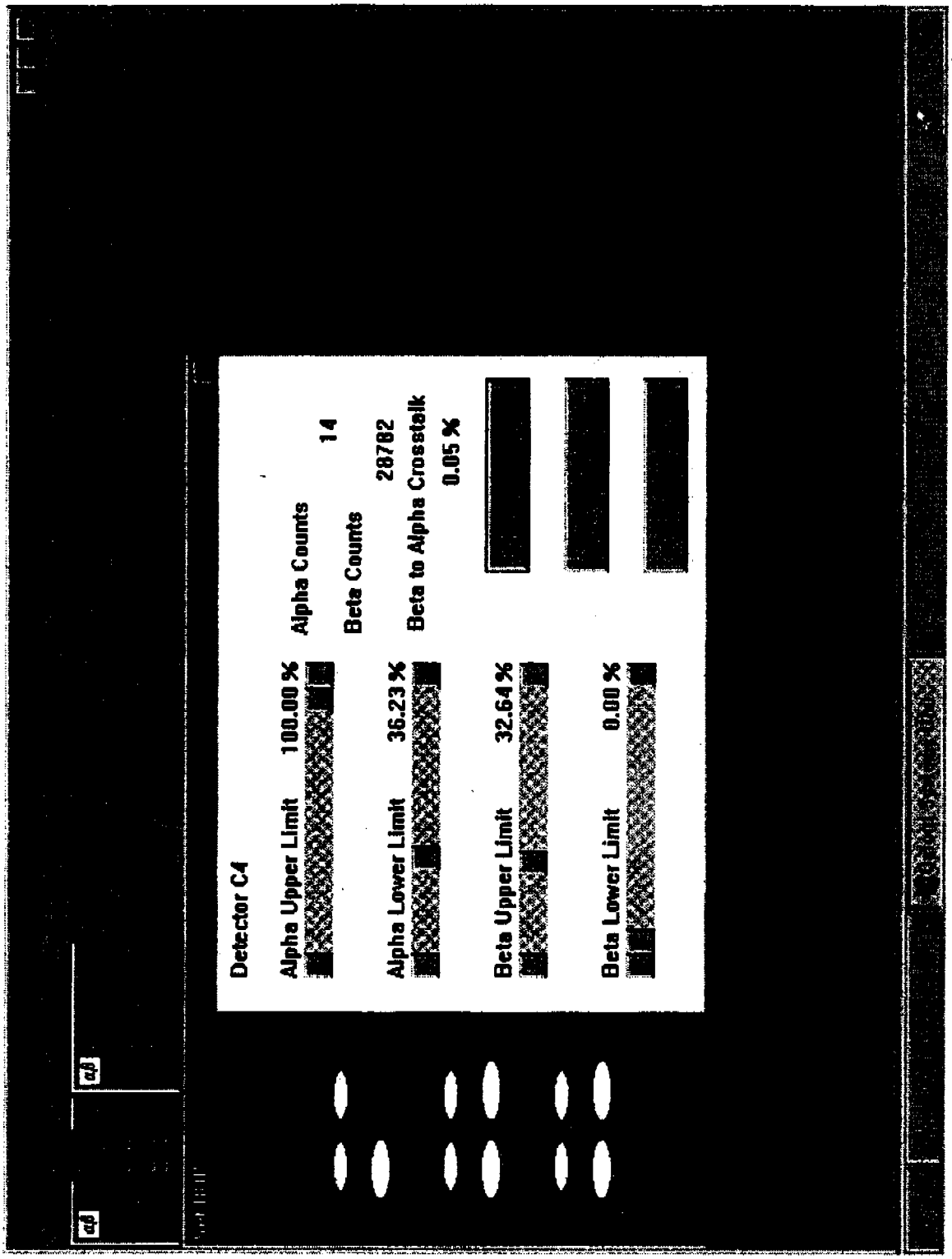
Alpha Lower Limit 36.84 %
Beta Upper Limit 34.87 %
Beta Lower Limit 0.00 %
Alpha Counts 26
Beta Counts 27536
Beta to Alpha Crosstalk 0.09 %


Detector C3
Alpha Upper Limit 100.00 %
Alpha Lower Limit 36.23 %
Beta Upper Limit 34.23 %
Beta Lower Limit 0.00 %
Alpha Counts 14
Beta Counts 19625
Beta to Alpha Crosstalk 0.07 %


Detector C4
Alpha Upper Limit 100.00 %
Alpha Lower Limit 36.23 %
Beta Upper Limit 32.64 %
Beta Lower Limit 0.00 %
Alpha Counts 14
Beta Counts 28782
Beta to Alpha Crosstalk 0.05 %

SEVERN TRENT SERVICES

Source Certificates For Plateau and Discriminator/Crosstalk Settings

11 October 1994 Men/wo
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CERTIFICATE

No. 6088-17

for a Sealed Radioactive Source

Source Type: Beta Wide Area Reference Source

Product Code	SIR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 936
Nuclide	Strontium-90

Measurement Data

Activity	1.10 kBq
Overall Uncertainty*	± 10 %
Beta Surface Emission Rate	1.39E03 s^{-1} ± 10 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

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LOT# F5D22034 5

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CERTIFICATE

No. 6088-18

for a Sealed Radioactive Source

Source Type: Beta Wide Area Reference Source

Product Code	SIR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 937
Nuclide	Strontium-90

Measurement Data

Activity	1.13 kBq
Overall Uncertainty*	± 10 %
Beta Surface Emission Rate	1.43E03 s^{-1} ± 10 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

Amersham Buchler

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CERTIFICATE

No. 6088-19

for a Sealed Radioactive Source

Source Type: Beta Wide Area Reference Source

Product Code	SIR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 938
Nuclide	Strontium-90

Measurement Data

Activity	754 Bq
Overall Uncertainty*	± 10 %
Beta Surface Emission Rate	954 s^{-1} ± 10 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

Amersham Buchler

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CERTIFICATE

No. 6088-20

for a Sealed Radioactive Source

Source Type: Beta Wide Area Reference Source

Product Code	SIR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 939
Nuclide	Strontium-90

Measurement Data

Activity	990 Bq
Overall Uncertainty*	± 10 %
Beta Surface Emission Rate	1.25E03 s^{-1} ± 10 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

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Page 1 of 2 pages, Issue 8/94

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CERTIFICATE

No. 6088-21

for a Sealed Radioactive Source

Source Type: Beta Wide Area Reference Source

Product Code	SIR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 940
Nuclide	Strontium-90

Measurement Data

Activity	852 Bq
Overall Uncertainty*	± 10 %
Beta Surface Emission Rate	1.08E03 s^{-1} ± 10 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

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11 October 1994 Men/wo
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CERTIFICATE

No. 6088-22

for a Sealed Radioactive Source

Source Type: Beta Wide Area Reference Source

Product Code	SIR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 941
Nuclide	Strontium-90

Measurement Data

Activity	770 Bq
Overall Uncertainty*	± 10 %
Beta Surface Emission Rate	974 s^{-1} ± 10 % in 2π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

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CERTIFICATE

No. 6088-23

for a Sealed Radioactive Source

Source Type: Beta Wide Area Reference Source

Product Code	SIR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 942
Nuclide	Strontium-90

Measurement Data

Activity	942 Bq
Overall Uncertainty*	± 10 %
Beta Surface Emission Rate	1.19E03 s^{-1} ± 10 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

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LOT# F5D[illegible]

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CERTIFICATE

No. 6088-24

for a Sealed Radioactive Source

Source Type: Beta Wide Area Reference Source

Product Code	SIR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 943
Nuclide	Strontium-90

Measurement Data

Activity	919 Bq
Overall Uncertainty*	± 10 %
Beta Surface Emission Rate	1.16E03 s^{-1} ± 10 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

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CERTIFICATE

No. 6088-25

for a Sealed Radioactive Source

Source Type: Alpha Wide Area Reference Source

Product Code	AMR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 944
Nuclide	Americium-241

Measurement Data

Activity	840 Bq
Overall Uncertainty*	± 10 %
Alpha Surface Emission Rate	400 s^{-1} ± 5 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

Amersham Buchler

i. A. Mann

(Production Manager)

11 October 1994 Men/wo
Page 1 of 2 pages, Issue 8/94

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Fax-Zentrale 930-237

Amersham
The Health Science Group

CERTIFICATE

No. 6088-26

for a Sealed Radioactive Source

Source Type: Alpha Wide Area Reference Source

Product Code	AMR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 945
Nuclide	Americium-241

Measurement Data

Activity	734 Bq
Overall Uncertainty*	± 10 %
Alpha Surface Emission Rate	350 s^{-1} ± 5 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

Amersham Buchler

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11 October 1994 Men/wo
Page 1 of 2 pages, Issue 8/94

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CERTIFICATE

No. 6088-27

for a Sealed Radioactive Source

Source Type: Alpha Wide Area Reference Source

Product Code	AMR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 946
Nuclide	Americium-241

Measurement Data

Activity	769 Bq
Overall Uncertainty*	± 10 %
Alpha Surface Emission Rate	366 s^{-1} ± 5 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

Amersham Buchler

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11 October 1994 Men/wo
Page 1 of 2 pages, Issue 8/94

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The Health Science Group

CERTIFICATE

No. 6088-28

for a Sealed Radioactive Source

Source Type: Alpha Wide Area Reference Source

Product Code	AMR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 947
Nuclide	Americium-241

Measurement Data

Activity	771 Bq
Overall Uncertainty*	± 10 %
Alpha Surface Emission Rate	367 s^{-1} ± 5 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

Amersham Buchler

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11 October 1994 Men/wo
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The Health Science Group

CERTIFICATE

No. 6088-30

for a Sealed Radioactive Source

Source Type: Alpha Wide Area Reference Source

Product Code	AMR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 949
Nuclide	Americium-241

Measurement Data

Activity	794 Bq
Overall Uncertainty*	± 10 %
Alpha Surface Emission Rate	378 s^{-1} ± 5 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

Amersham Buchler

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11 October 1994 Men/wo
Page 1 of 2 pages, Issue 8/94

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CERTIFICATE

No. 6088-29

for a Sealed Radioactive Source

Source Type: Alpha Wide Area Reference Source

Product Code	AMR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 948
Nuclide	Americium-241

Measurement Data

Activity	791 Bq
Overall Uncertainty*	± 10 %
Alpha Surface Emission Rate	377 s^{-1} ± 5 % in 2π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

Amersham Buchler

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11 October 1994 Men/wo
Page 1 of 2 pages, Issue 8/94

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Amersham
The Health Science Group

CERTIFICATE

No. 6088-31

for a Sealed Radioactive Source

Source Type: Alpha Wide Area Reference Source

Product Code	AMR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 950
Nuclide	Americium-241

Measurement Data

Activity	775 Bq
Overall Uncertainty*	± 10 %
Alpha Surface Emission Rate	369 s^{-1} ± 5 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

Amersham Buchler

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11 October 1994 Men/wo

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Amersham
The Health Science Group

CERTIFICATE

No. 6088-32

for a Sealed Radioactive Source

Source Type: Alpha Wide Area Reference Source

Product Code	AMR0821
Drawing	VZ-1430
Dimensions of Active Surface	Ø 49 mm
Overall Dimensions	Ø 50 mm x 3 mm
Source No.	EA 951
Nuclide	Americium-241

Measurement Data

Activity	823 Bq
Overall Uncertainty*	± 10 %
Alpha Surface Emission Rate	392 s^{-1} ± 5 % in 2 π steradian
Reference Date	22 September 1994
Traceability*	Defined on page 2

Leakage and Contamination Test(s)

Test Method(s)*	I
Test(s) passed on	10 October 1994

Additional Information

ISO Classification*	C.34645
Recommended Working Life*	10 years
Remark	---

* see page 2 for explanation

Amersham Buchler

i. A.

(Production Manager)

STL ST. LOUIS

TMA
Thermo Analytical Inc.

TMA/Eberline Albuquerque Laboratory
7021 Pan American Hwy. NE
Albuquerque, NM 87109
(505) 345-3461 • FAX # (505) 761-5416

CERTIFICATE OF CALIBRATION

Electroplated Alpha Standard

S.O.# S-02900
P.O.# 130552

Description of Standard:

Model No. DNS-10 Serial No. 1928-94 Isotope Plutonium-239

Electroplated on polished Stainless Steel disc, 0.79 mm thick.

Total diameter of 2.23 cm and an active diameter of 1.91 cm.

The radioactive material is permanently fixed to the disc by heat treatment without any covering over the active surface.

Measurement Method:

The 2 pi alpha emission rate was measured using an internal gas flow proportional chamber. Absolute counting of alpha particles emitted in the hemisphere above the active surface was verified by counting above, below and at the operative voltage. The calibration is traceable to NIST by reference to an NIST calibrated alpha source S/N 2393/91.

Measurement Result:

The observed alpha particles emitted from the surface of the disc per minute (cpm) on the calibration date was

1,880 ± 56

The total disintegration rate (dpm) assuming 1.5% backscatter of alpha particles from the surface of the disc, was

3,770 ± 113 (0.00170 μCi)

The uncertainty of the measurement is 3 % which is the sum of random counting error at the 99% confidence level, and the estimated upper limit of systematic error in this measurement.

Calibrated by: Arlene Gutierrez Reviewed by: [signature]

Calibration technician: [signature] Q.A. Representative: [signature]

Calibration date: 9/27/94 Reviewed date: 10-18-94

LOT# F5D220345

STL ST. LOUIS

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TMA/Eberline Albuquerque Laboratory
7021 Pan American Hwy. NE
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(505) 345-3461 • FAX # (505) 761-5416

CERTIFICATE OF CALIBRATION

Electroplated Alpha Standard

S.O.# S-02900
P.O.# 130552

Description of Standard:

Model No. DNS-10 Serial No. 1929-94 Isotope Plutonium-239

Electroplated on polished Stainless Steel disc, 0.79 mm thick.

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The radioactive material is permanently fixed to the disc by heat treatment without any covering over the active surface.

Measurement Method:

The 2 pi alpha emission rate was measured using an internal gas flow proportional chamber. Absolute counting of alpha particles emitted in the hemisphere above the active surface was verified by counting above, below and at the operative voltage. The calibration is traceable to NIST by reference to an NIST calibrated alpha source S/N 2393/91.

Measurement Result:

The observed alpha particles emitted from the surface of the disc per minute (cpm) on the calibration date was

2,130 ± 64

The total disintegration rate (dpm) assuming 1.5% backscatter of alpha particles from the surface of the disc, was

4,250 ± 128 (0.00192 μCi)

The uncertainty of the measurement is 3 % which is the sum of random counting error at the 99% confidence level, and the estimated upper limit of systematic error in this measurement.

Calibrated by: Arlene Gutierrez Reviewed by: [signature]

Calibration technician: [signature] Representative: [signature]

Calibration date: 9/30/94 Reviewed date: 10-18-94

LOT# F5D220345

STL ST. LOUIS

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TMA/Eberline Albuquerque Laboratory
7021 Pan American Hwy. NE
Albuquerque, NM 87109
(505) 345-3461 • FAX # (505) 761-5416

CERTIFICATE OF CALIBRATION

Electroplated Alpha Standard

S.O.# S-02900
P.O.# 130552

Description of Standard:

Model No. DNS-10 Serial No. 1922-94 Isotope Plutonium-239

Electroplated on polished Stainless Steel disc, 0.79 mm thick.

Total diameter of 2.23 cm and an active diameter of 1.91 cm.

The radioactive material is permanently fixed to the disc by heat treatment without any covering over the active surface.

Measurement Method:

The 2 pi alpha emission rate was measured using an internal gas flow proportional chamber. Absolute counting of alpha particles emitted in the hemisphere above the active surface was verified by counting above, below and at the operative voltage. The calibration is traceable to NIST by reference to an NIST calibrated alpha source S/N 2393/91.

Measurement Result:

The observed alpha particles emitted from the surface of the disc per minute (cpm) on the calibration date was

2,140 ± 107

The total disintegration rate (dpm) assuming 1.5% backscatter of alpha particles from the surface of the disc, was

4,270 ± 214 (0.00193 μCi)

The uncertainty of the measurement is 5 % which is the sum of random counting error at the 99% confidence level, and the estimated upper limit of systematic error in this measurement.

Calibrated by: Arlene Gutierrez Reviewed by: Art Reese

Calibration technician: Arlene Gutierrez QA Representative: Kathy Burnham

Calibration date: 9/27/94 Reviewed date: 10-18-94

LOT# F5D220345

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CERTIFICATE OF CALIBRATION

Electroplated Alpha Standard

S.O.# S-02900
P.O.# 130552

Description of Standard:

Model No. DNS-10 Serial No. 1923-94 Isotope Plutonium-239

Electroplated on polished Stainless Steel disc, 0.79 mm thick.

Total diameter of 2.23 cm and an active diameter of 1.91 cm.

The radioactive material is permanently fixed to the disc by heat treatment without any covering over the active surface.

Measurement Method:

The 2 pi alpha emission rate was measured using an internal gas flow proportional chamber. Absolute counting of alpha particles emitted in the hemisphere above the active surface was verified by counting above, below and at the operative voltage. The calibration is traceable to NIST by reference to an NIST calibrated alpha source S/N 2393/91.

Measurement Result:

The observed alpha particles emitted from the surface of the disc per minute (cpm) on the calibration date was

3,630 ± 109

The total disintegration rate (dpm) assuming 1.5% backscatter of alpha particles from the surface of the disc, was

7,250 ± 218 (0.00327 μCi)

The uncertainty of the measurement is 3 % which is the sum of random counting error at the 99% confidence level, and the estimated upper limit of systematic error in this measurement.

Calibrated by: Arlene Gutierrez Reviewed by: Art Renard

Calibration technician: Arlene A. Gutierrez Q.A. Representative: Kathy Brumbaugh

Calibration date: 9/27/94 Reviewed date: 10-18-94

SEVERN TRENT SERVICES

DETECTOR BACKGROUNDS
At Time of Calibration

LB4100-W(Blue) Detector Background Data

Background	Date/Time	Official	Alpha Bkg.	error	Beta Bkg.	error
A1	4/3/2002 6:16	TRUE	0.03800	0.00616	1.15500	0.03399
A2	4/3/2002 6:16	TRUE	0.02600	0.00510	1.05300	0.03245
A3	4/3/2002 6:16	TRUE	0.03800	0.00616	1.09000	0.03302
A4	4/3/2002 6:16	TRUE	0.04800	0.00693	1.18600	0.03444
B1	2/16/2002 10:54	TRUE	0.07900	0.00889	0.10900	0.01044
B2	4/3/2002 6:16	TRUE	0.03300	0.00574	1.10800	0.03329
B3	4/3/2002 6:16	TRUE	0.04800	0.00693	1.10000	0.03317
B4	4/3/2002 6:16	TRUE	0.05700	0.00755	1.00100	0.03164
C1	4/3/2002 6:16	TRUE	0.08200	0.00906	0.96400	0.03105
C2	4/3/2002 6:16	TRUE	0.04900	0.00700	1.32000	0.03633
C3	4/3/2002 6:16	TRUE	0.04000	0.00632	1.05600	0.03250
C4	4/3/2002 6:16	TRUE	0.06200	0.00787	1.09400	0.03308
D1	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
D2	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
D3	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
D4	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!

B1 out of service

Background Count Time = 1000 min.

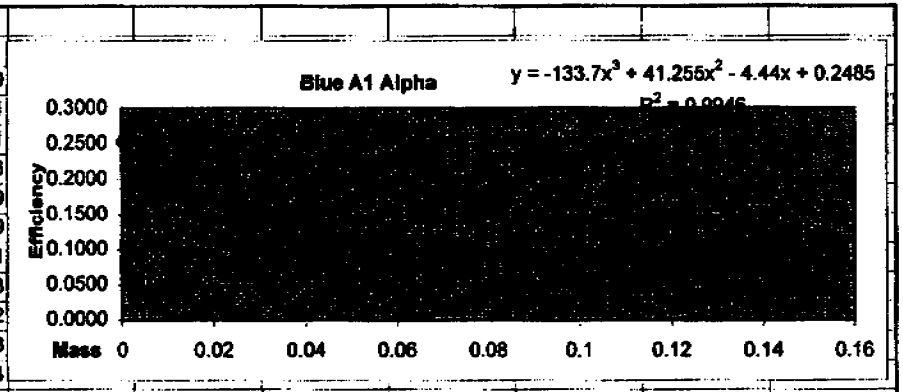
Detector ID	Sample ID	Alpha	Beta	Guard	Count Count Time	Event	Voltage	TOD
A1	A1-01	38	1155	512596	1000	0	1410	37349.26
A2	A2-01	26	1053	512596	1000	0	1410	37349.26
A3	A3-01	38	1090	512596	1000	0	1410	37349.26
A4	A4-01	48	1186	512595	1000	0	1410	37349.26
B2	B2-01	33	1108	523051	1000	0	1410	37349.26
B3	B3-01	48	1100	523051	1000	0	1410	37349.26
B4	B4-01	57	1001	523048	1000	0	1410	37349.26
C1	C1-01	82	964	571841	1000	0	1440	37349.26
C2	C2-01	49	1320	571839	1000	0	1440	37349.26
C3	C3-01	40	1056	571840	1000	0	1440	37349.26
C4	C4-01	62	1094	571840	1000	0	1440	37349.26

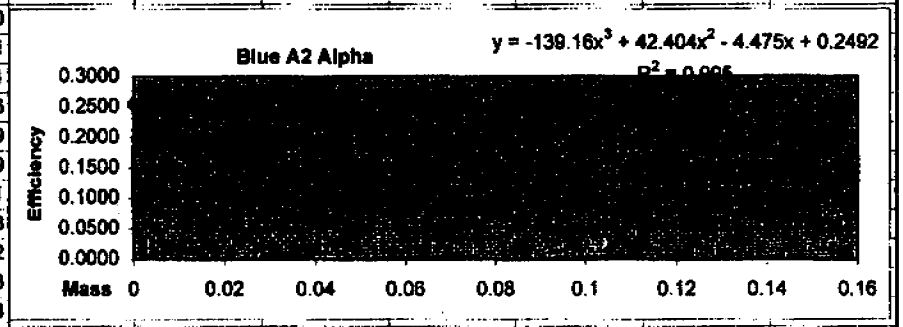
SEVERN TRENT SERVICES

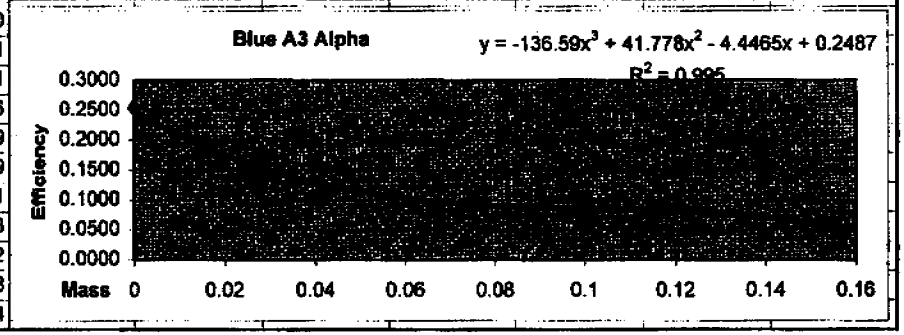
Efficiency/Attenuation CALIBRATION

regress_data _blue_Alpha

Det ID	Sample ID	Alpha	Beta	Count Time	CPM	Std. 01-050 Activity	Efficiency CPM/Act	Mass
A1	0	10016	3056	8.88	1127.9	4452	0.2534	0
A1	0.0021	10004	2928	9.62	1039.9	4452	0.2336	0.0021
A1	0.0041	10010	2976	9.4	1064.9	4452	0.2392	0.0041
A1	0.0096	10007	3020	10.96	913.0	4452	0.2051	0.0096
A1	0.0149	10004	3046	12.09	827.5	4452	0.1859	0.0149
A1	0.0239	10007	3121	13.83	723.6	4452	0.1625	0.0239
A1	0.0411	10007	3211	18.08	553.5	4452	0.1243	0.0411
A1	0.0488	10007	3313	18.64	536.9	4452	0.1206	0.0488
A1	0.0762	10005	3553	23.83	419.8	4452	0.0943	0.0762
A1	0.0988	10003	3609	28.52	350.7	4452	0.0788	0.0988
A1	0.1514	10003	3815	38.36	260.8	4452	0.0586	0.1514
A2	0	10009	3084	8.8	1137.4	4452	0.2555	0
A2	0.0021	10009	2959	9.65	1037.2	4452	0.2330	0.0021
A2	0.0041	10006	2960	9.49	1054.4	4452	0.2368	0.0041
A2	0.0096	10006	2986	10.8	926.5	4452	0.2081	0.0096
A2	0.0149	10013	3019	11.97	836.5	4452	0.1879	0.0149
A2	0.0239	10008	3249	13.86	722.1	4452	0.1622	0.0239
A2	0.0411	10005	3321	18.1	552.8	4452	0.1242	0.0411
A2	0.0488	10002	3268	18.5	540.6	4452	0.1214	0.0488
A2	0.0762	10002	3400	23.05	433.9	4452	0.0975	0.0762
A2	0.0988	10002	3593	27.51	363.6	4452	0.0817	0.0988
A2	0.1514	10000	3660	36.6	273.2	4452	0.0614	0.1514
A3	0	10015	2979	8.83	1134.2	4452	0.2548	0
A3	0.0021	10021	2890	9.69	1034.2	4452	0.2323	0.0021
A3	0.0041	10015	2938	9.45	1059.8	4452	0.2380	0.0041
A3	0.0096	10000	2888	10.81	925.1	4452	0.2078	0.0096
A3	0.0149	10007	2988	12.15	823.6	4452	0.1850	0.0149
A3	0.0239	10003	3204	13.77	726.4	4452	0.1632	0.0239
A3	0.0411	10003	3225	17.79	562.3	4452	0.1263	0.0411
A3	0.0488	10003	3309	18.74	533.8	4452	0.1199	0.0488
A3	0.0762	10003	3388	23.54	424.9	4452	0.0954	0.0762
A3	0.0988	9999	3510	27.67	361.4	4452	0.0812	0.0988
A3	0.1514	9999	3803	37.6	265.9	4452	0.0597	0.1514

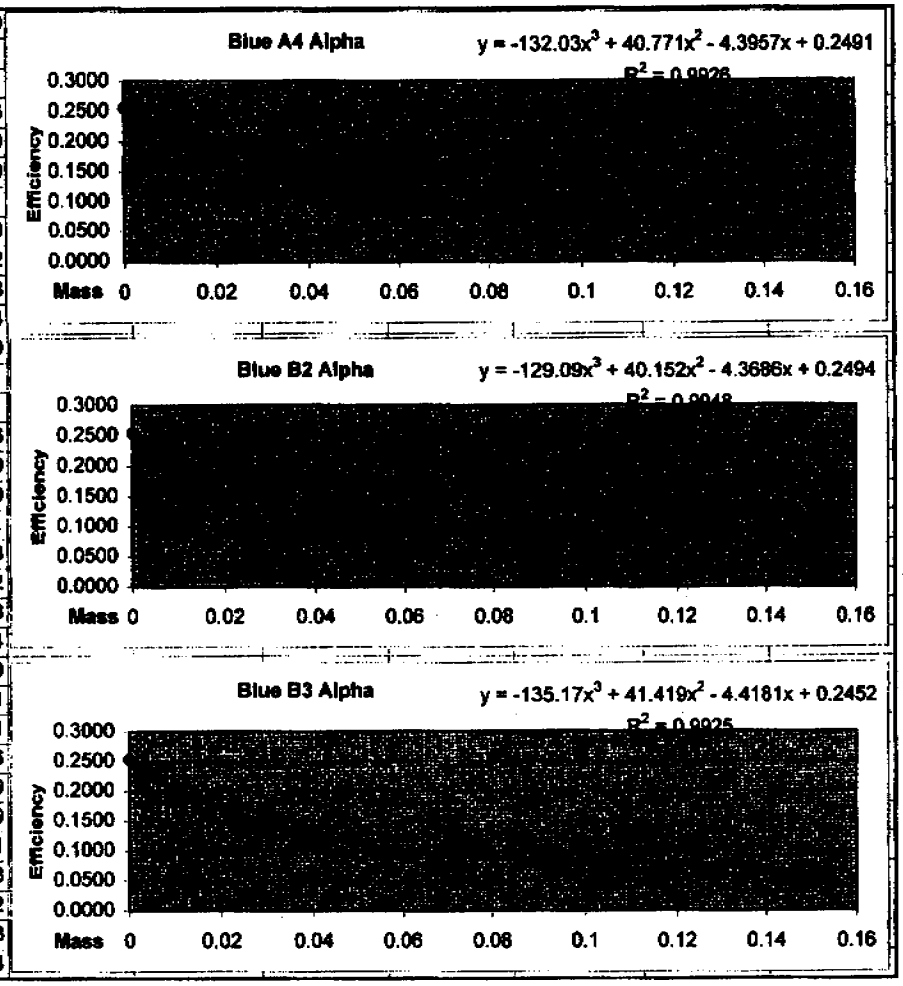






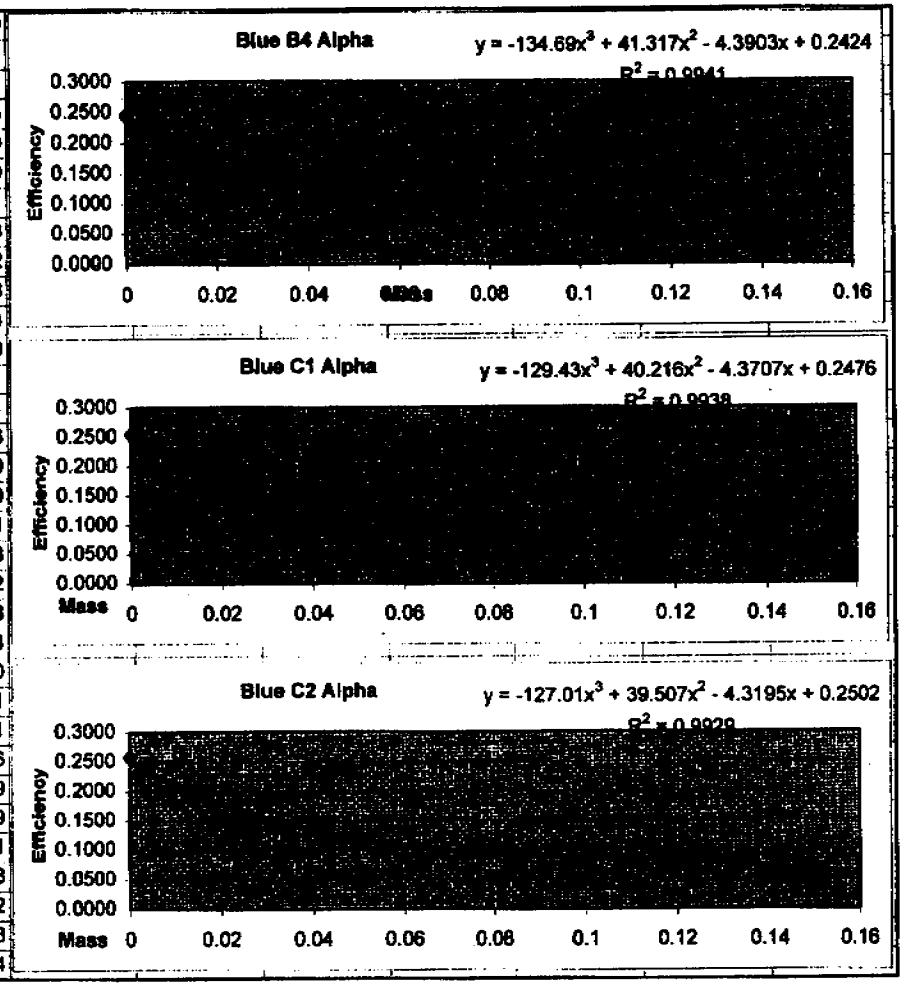
regress_data _blue_Alpha

A4	0	10009	2978	8.75	1143.9	4452	0.2569	0
A4	0.0021	10001	2901	9.79	1021.6	4452	0.2295	0.0021
A4	0.0041	10015	2754	9.38	1067.7	4452	0.2398	0.0041
A4	0.0096	10009	2757	10.8	926.8	4452	0.2082	0.0096
A4	0.0149	10005	2913	12.01	833.1	4452	0.1871	0.0149
A4	0.0239	10003	2951	13.61	735.0	4452	0.1651	0.0239
A4	0.0411	10005	3053	17.96	557.1	4452	0.1251	0.0411
A4	0.0488	9999	3072	18.32	545.8	4452	0.1226	0.0488
A4	0.0762	10002	3202	23.57	424.4	4452	0.0953	0.0762
A4	0.0988	9999	3364	27.52	363.3	4452	0.0816	0.0988
A4	0.1514	9999	3564	37.1	269.5	4452	0.0605	0.1514
B2	0	10005	4157	8.83	1133.1	4452	0.2545	0
B2	0.0021	10001	4353	9.71	1030.0	4452	0.2313	0.0021
B2	0.0041	10017	2926	9.4	1065.6	4452	0.2394	0.0041
B2	0.0096	10001	2983	10.77	928.6	4452	0.2086	0.0096
B2	0.0149	10003	3059	11.64	859.4	4452	0.1930	0.0149
B2	0.0239	10003	3105	13.72	729.1	4452	0.1638	0.0239
B2	0.0411	10002	3248	18.04	554.4	4452	0.1245	0.0411
B2	0.0488	10000	6474	18.37	544.4	4452	0.1223	0.0488
B2	0.0762	10002	9192	23.45	426.5	4452	0.0958	0.0762
B2	0.0988	10000	9394	27.46	364.2	4452	0.0818	0.0988
B2	0.1514	9999	6622	36.91	270.9	4452	0.0608	0.1514
B3	0	10007	3123	8.87	1128.2	4452	0.2534	0
B3	0.0021	10014	2962	9.9	1011.5	4452	0.2272	0.0021
B3	0.0041	10013	2942	9.72	1030.1	4452	0.2314	0.0041
B3	0.0096	10005	2829	10.83	923.8	4452	0.2075	0.0096
B3	0.0149	10004	2873	12.18	821.3	4452	0.1845	0.0149
B3	0.0239	10010	3180	14.35	697.6	4452	0.1567	0.0239
B3	0.0411	10004	3238	18.81	531.8	4452	0.1195	0.0411
B3	0.0488	10004	3105	18.39	544.0	4452	0.1222	0.0488
B3	0.0762	10002	3403	24.34	410.9	4452	0.0923	0.0762
B3	0.0988	10001	3592	28.85	346.7	4452	0.0779	0.0988
B3	0.1514	10000	3840	39.21	255.0	4452	0.0573	0.1514



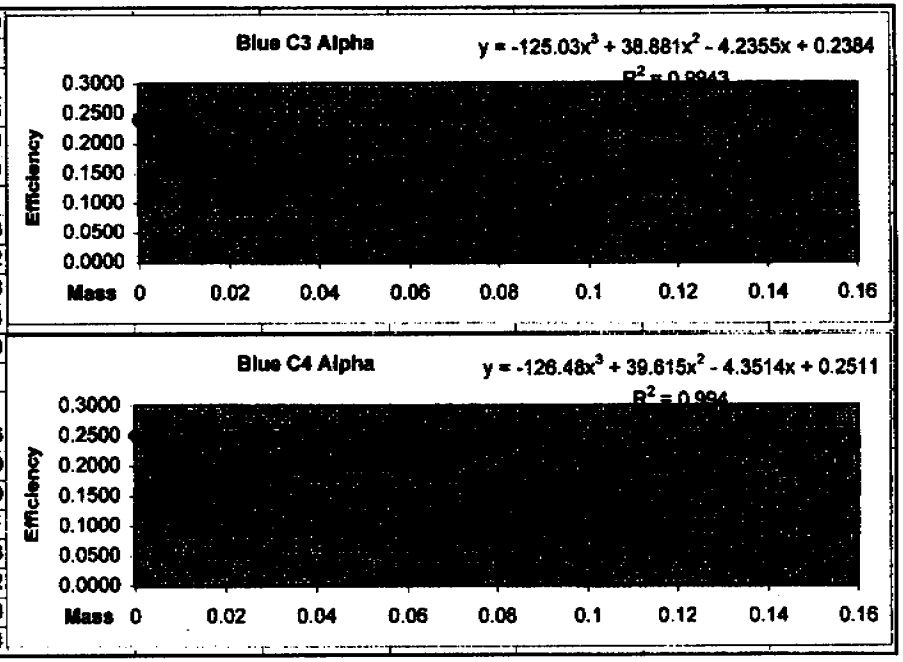
regress_data _blue_Alpha

B4	0	10007	3115	9.19	1088.9	4452	0.2446	0
B4	0.0021	10016	3100	9.92	1009.7	4452	0.2268	0.0021
B4	0.0041	10010	3039	9.57	1046.0	4452	0.2349	0.0041
B4	0.0096	10003	2974	11.03	906.9	4452	0.2037	0.0096
B4	0.0149	10007	3015	12.4	807.0	4452	0.1813	0.0149
B4	0.0239	10002	3288	14.82	684.1	4452	0.1537	0.0239
B4	0.0411	10003	3328	18.53	539.8	4452	0.1213	0.0411
B4	0.0488	10000	3231	19.09	523.8	4452	0.1177	0.0488
B4	0.0762	10001	3736	24.84	402.6	4452	0.0904	0.0762
B4	0.0988	10002	3679	28.68	348.7	4452	0.0783	0.0988
B4	0.1514	10005	3995	38.8	257.9	4452	0.0579	0.1514
C1	0	10012	3052	8.84	1132.6	4452	0.2544	0
C1	0.0021	10006	3176	9.82	1018.9	4452	0.2289	0.0021
C1	0.0041	10002	2970	9.43	1060.7	4452	0.2382	0.0041
C1	0.0096	10004	3141	10.8	926.3	4452	0.2081	0.0096
C1	0.0149	10005	3055	12.13	824.8	4452	0.1853	0.0149
C1	0.0239	10002	3195	13.75	727.4	4452	0.1634	0.0239
C1	0.0411	10004	3197	17.93	557.9	4452	0.1253	0.0411
C1	0.0488	10005	3451	18.72	534.5	4452	0.1200	0.0488
C1	0.0762	10000	3468	23.97	417.2	4452	0.0937	0.0762
C1	0.0988	10002	3800	28.15	355.3	4452	0.0798	0.0988
C1	0.1514	9999	4101	37.98	263.3	4452	0.0591	0.1514
C2	0	10007	3110	8.73	1146.3	4452	0.2575	0
C2	0.0021	10000	2989	9.71	1029.9	4452	0.2313	0.0021
C2	0.0041	10005	3057	9.35	1070.1	4452	0.2404	0.0041
C2	0.0096	10005	2922	10.63	941.2	4452	0.2114	0.0096
C2	0.0149	10002	2939	11.8	847.6	4452	0.1904	0.0149
C2	0.0239	10003	3205	13.68	731.2	4452	0.1642	0.0239
C2	0.0411	10006	3179	17.56	569.8	4452	0.1280	0.0411
C2	0.0488	10005	3183	18.05	554.3	4452	0.1245	0.0488
C2	0.0762	10003	3299	22.59	442.8	4452	0.0995	0.0762
C2	0.0988	10000	3814	27.71	360.9	4452	0.0811	0.0988
C2	0.1514	9999	3792	36.35	275.1	4452	0.0618	0.1514



regress_data _blue_Alpha

C3	0	10009	3149	9.39	1065.9	4452	0.2394	0
C3	0.0021	10007	3122	10.17	984.0	4452	0.2210	0.0021
C3	0.0041	10010	2995	9.7	1032.0	4452	0.2318	0.0041
C3	0.0096	10007	2955	11.07	904.0	4452	0.2030	0.0096
C3	0.0149	10002	3035	12.41	806.0	4452	0.1810	0.0149
C3	0.0239	9999	3447	14.64	683.0	4452	0.1534	0.0239
C3	0.0411	10002	3363	18.94	528.1	4452	0.1186	0.0411
C3	0.0488	10001	3399	19.51	512.6	4452	0.1151	0.0488
C3	0.0762	10000	3777	25.63	390.2	4452	0.0876	0.0762
C3	0.0988	10002	3624	29.32	341.1	4452	0.0766	0.0988
C3	0.1514	9999	4145	41	243.9	4452	0.0548	0.1514
C4	0	10010	3030	8.96	1117.2	4452	0.2509	0
C4	0.0021	10016	2771	9.49	1055.4	4452	0.2371	0.0021
C4	0.0041	10001	2799	9.19	1088.2	4452	0.2444	0.0041
C4	0.0096	10009	2682	10.5	953.2	4452	0.2141	0.0096
C4	0.0149	10001	2794	11.88	841.8	4452	0.1891	0.0149
C4	0.0239	10008	3062	13.78	726.3	4452	0.1631	0.0239
C4	0.0411	10002	3075	17.62	567.7	4452	0.1275	0.0411
C4	0.0488	10007	3051	17.93	558.1	4452	0.1254	0.0488
C4	0.0762	10004	3279	23.1	433.1	4452	0.0973	0.0762
C4	0.0988	10001	3435	27.58	362.6	4452	0.0815	0.0988
C4	0.1514	10000	3531	36.21	276.2	4452	0.0620	0.1514



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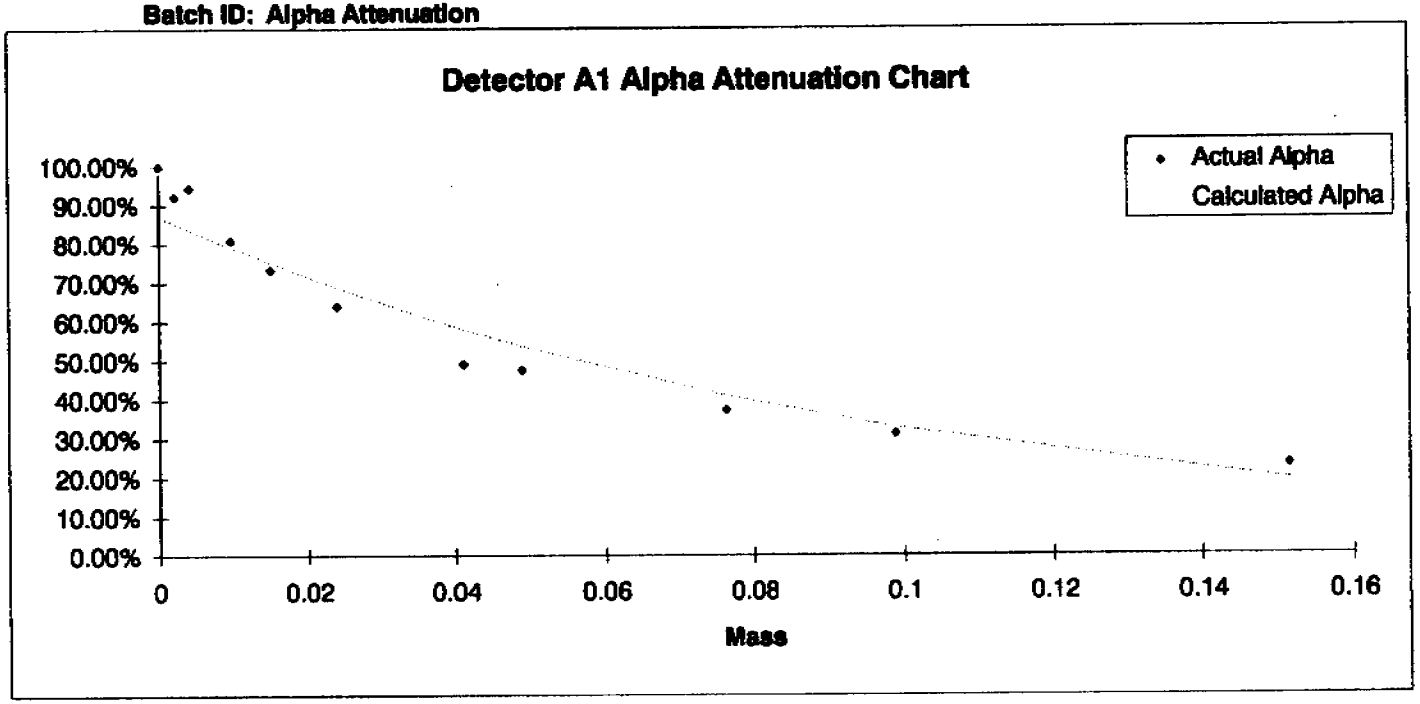
Date Performed: 4/8/02 14:08
FileName: ATTEN000
Batch ID: Alpha Attenuation

Unit Id: Blue
Application Revision: 2
Application Version: Standard



$\alpha r^2 =$ 0.946392

Archive File

Printed 4/9/2002 1:08 PM

Unit Type: LB4100/W
Date Performed: 4/8/02 14:08
FileName: ATTEN000
Batch ID: Alpha Attenuation

Unit Id: Blue
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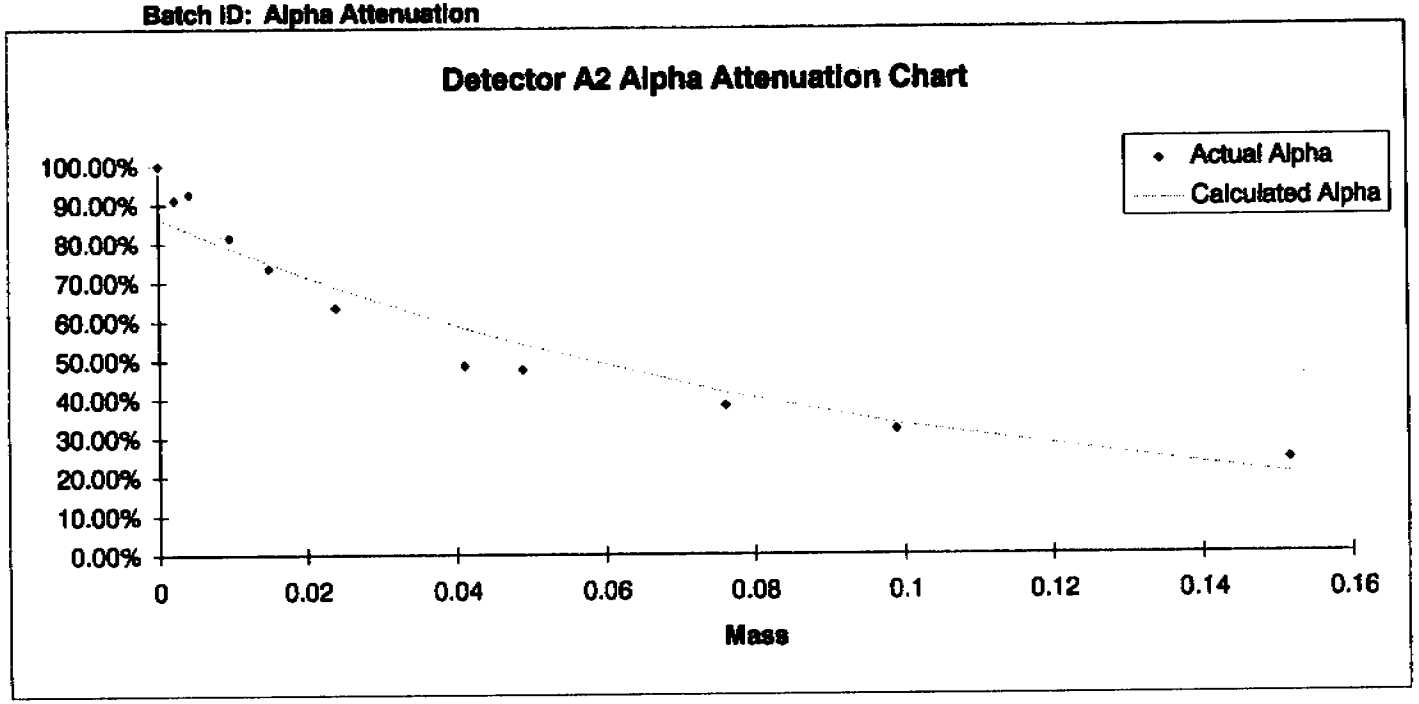
Application Version: Standard



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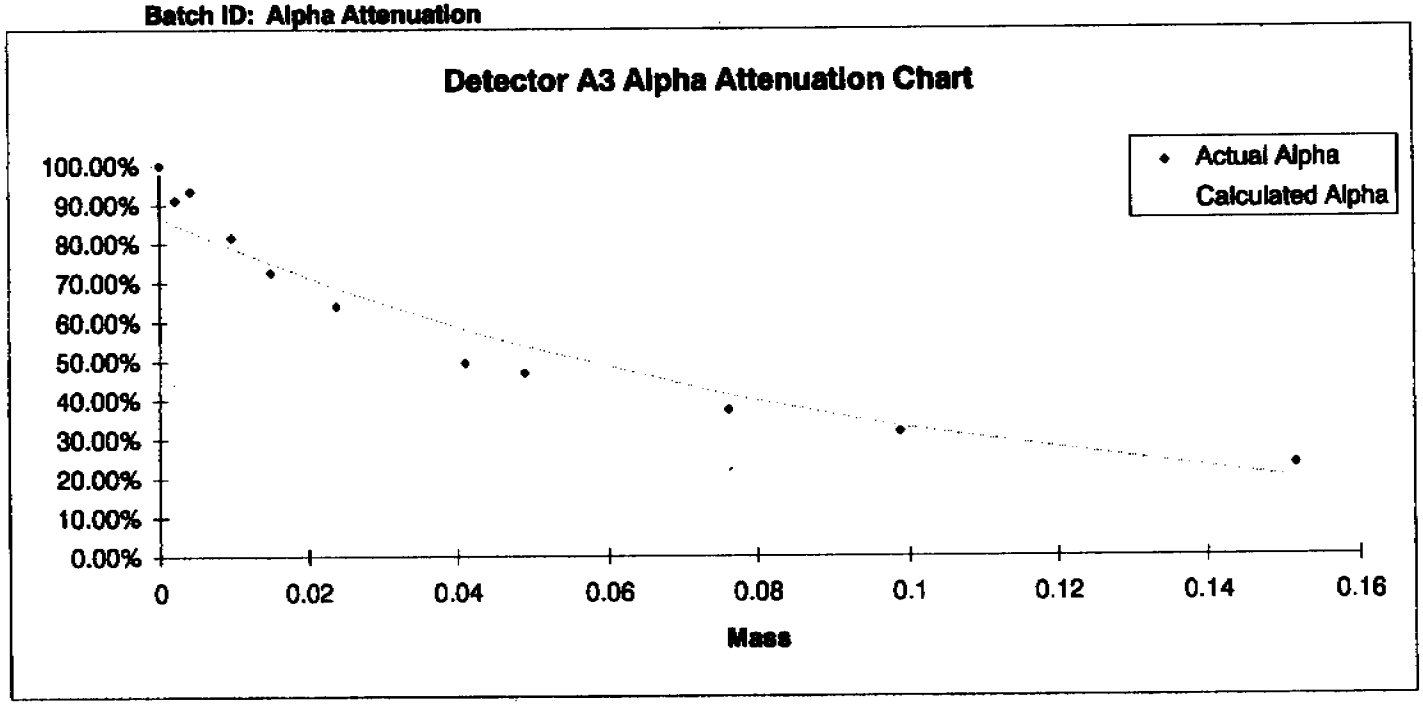

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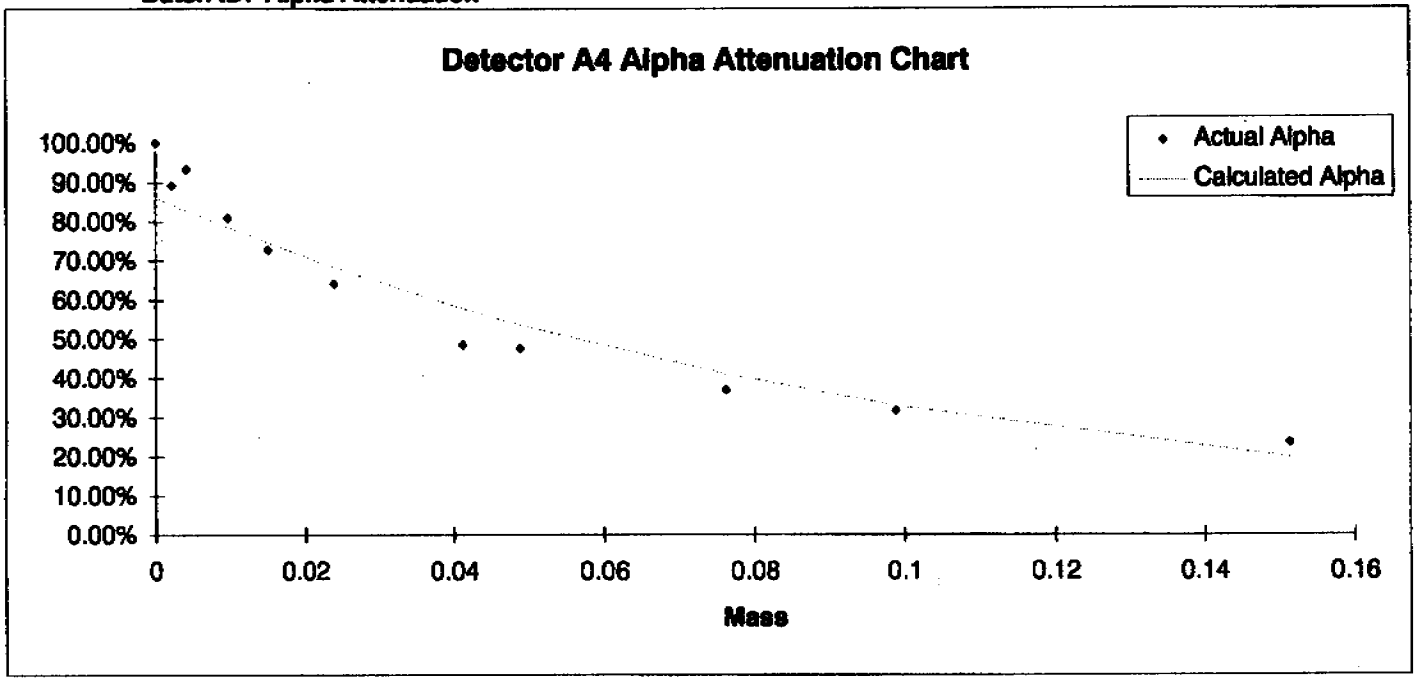

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Archive File

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Unit Id: Blue
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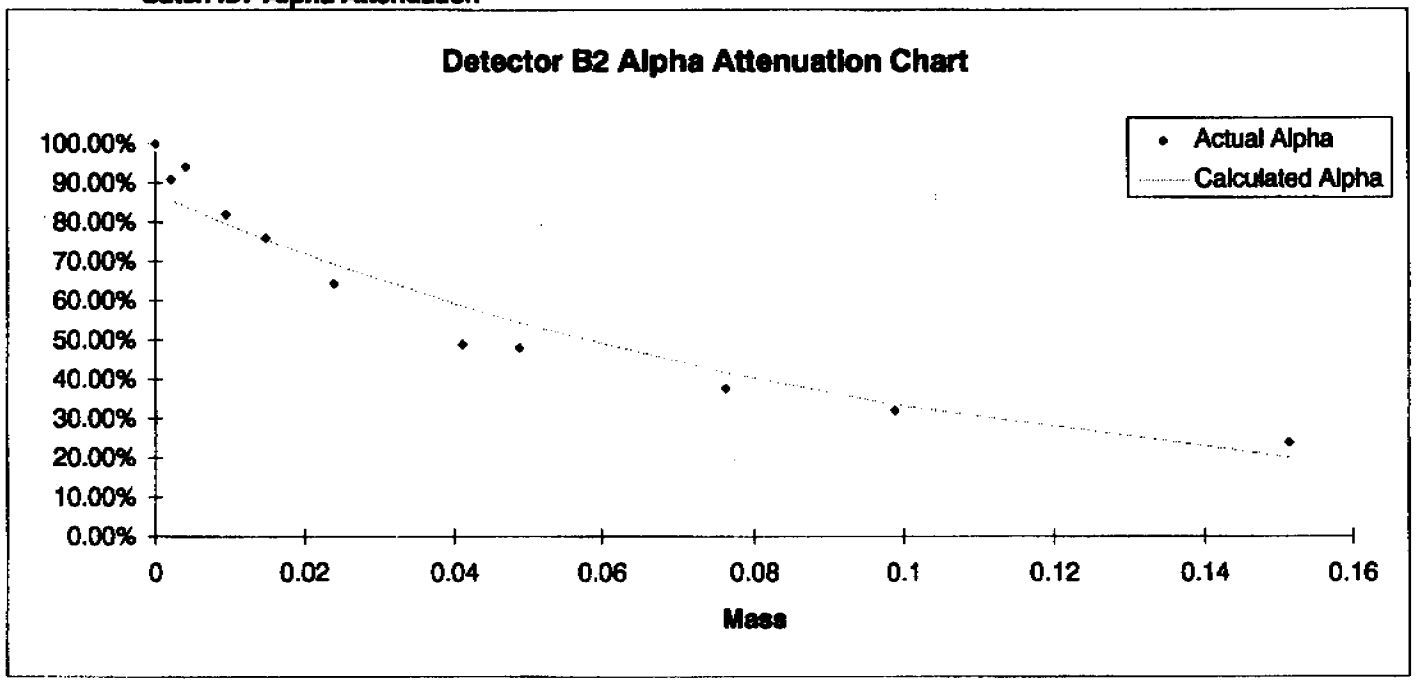

$\alpha r^2 =$ 0.943312

Archive File

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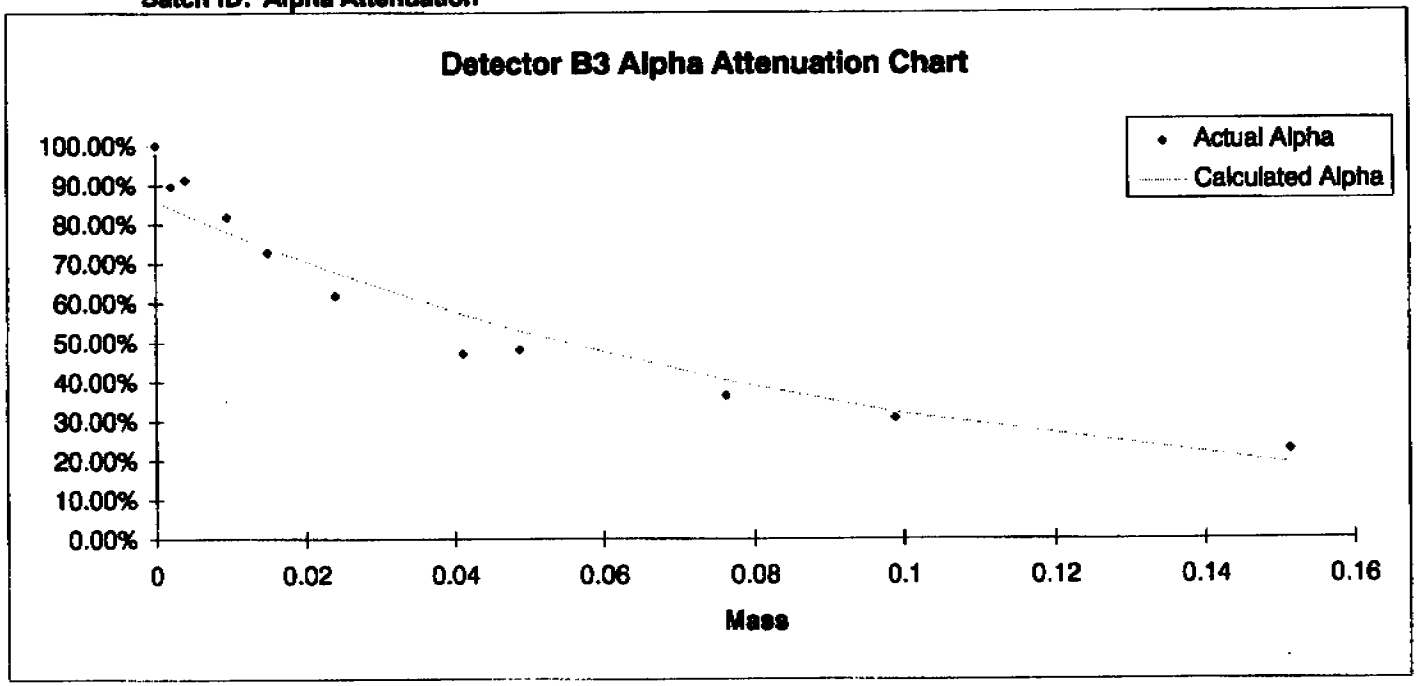
Application Version: Standard



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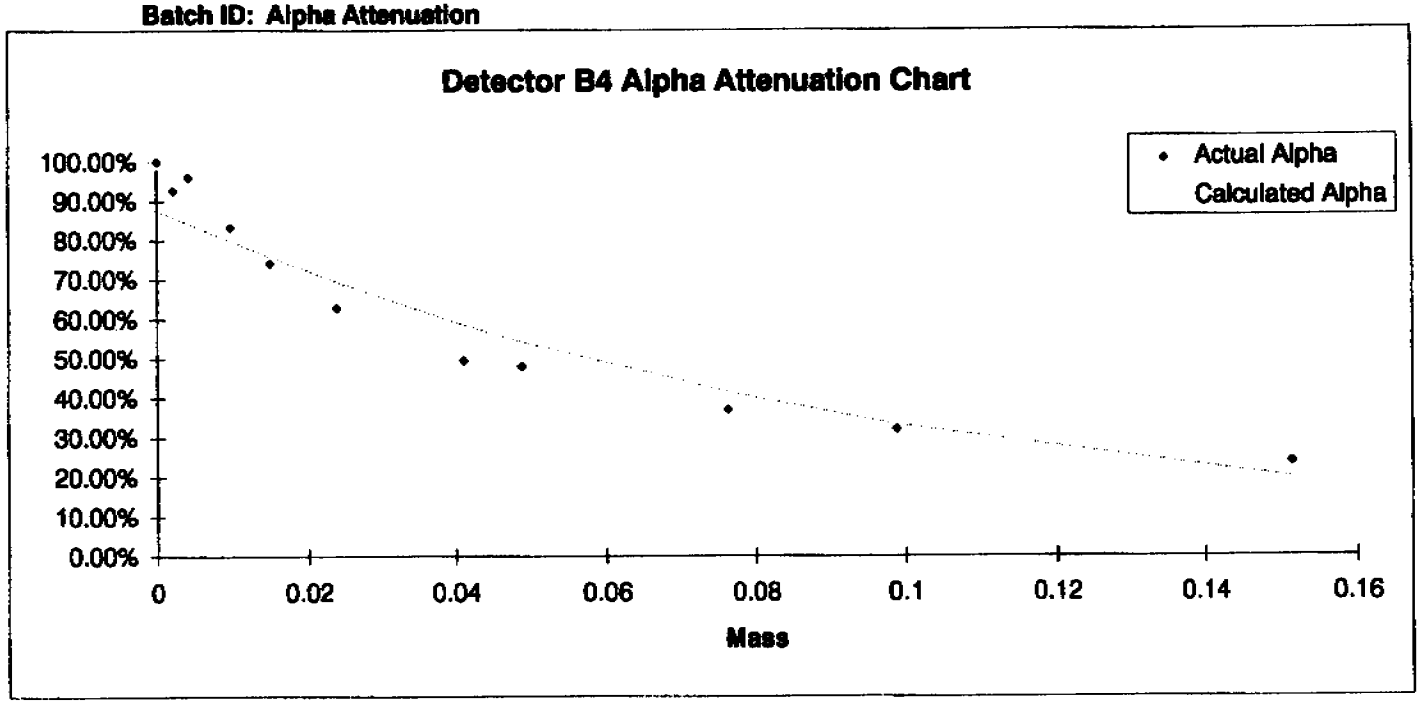

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FileName: ATTEN000
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Unit Id: Blue
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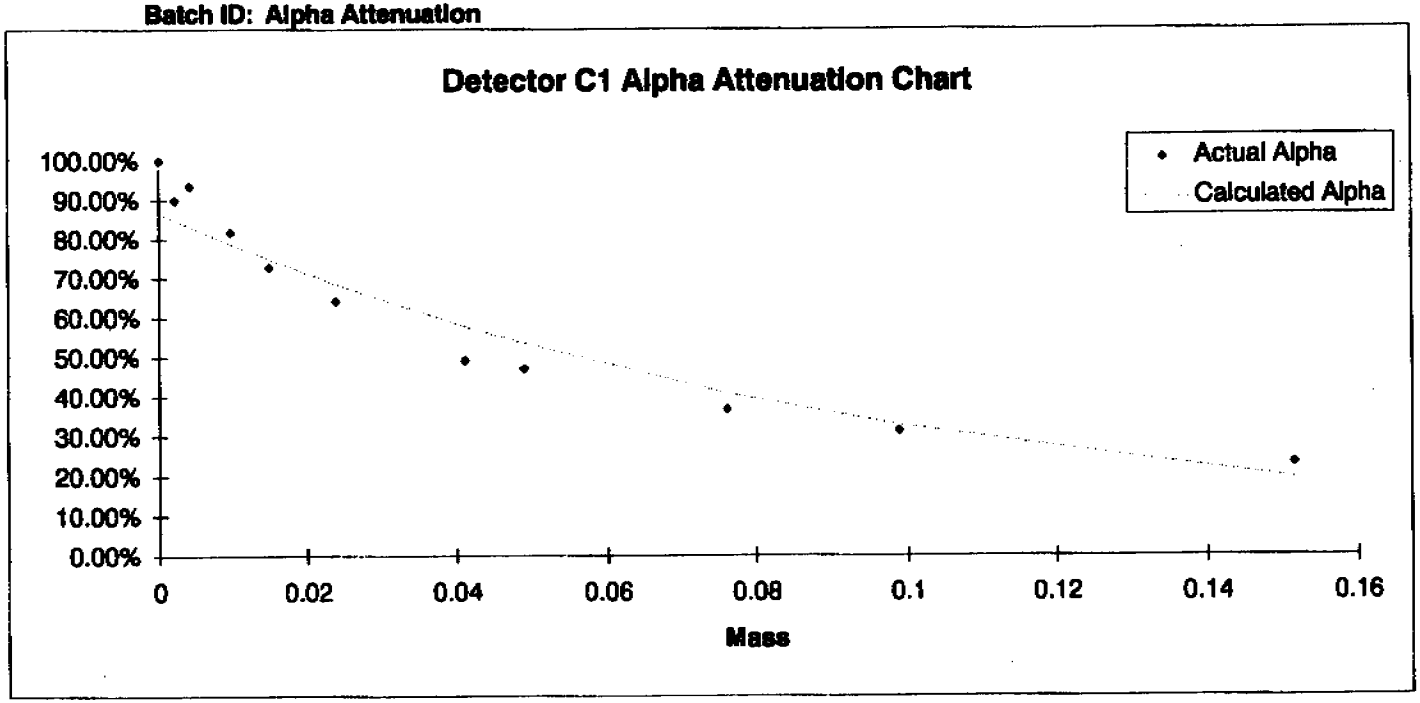
Application Version: Standard



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Unit Id: Blue
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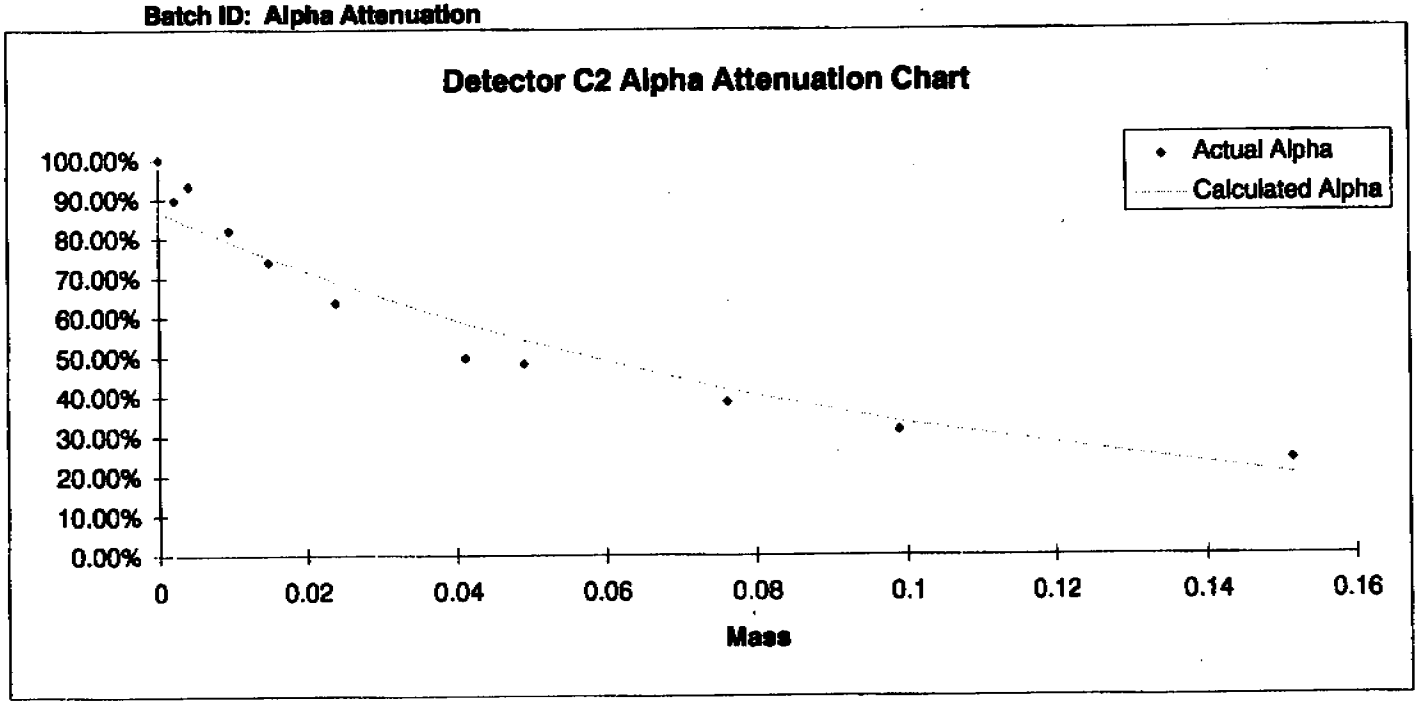

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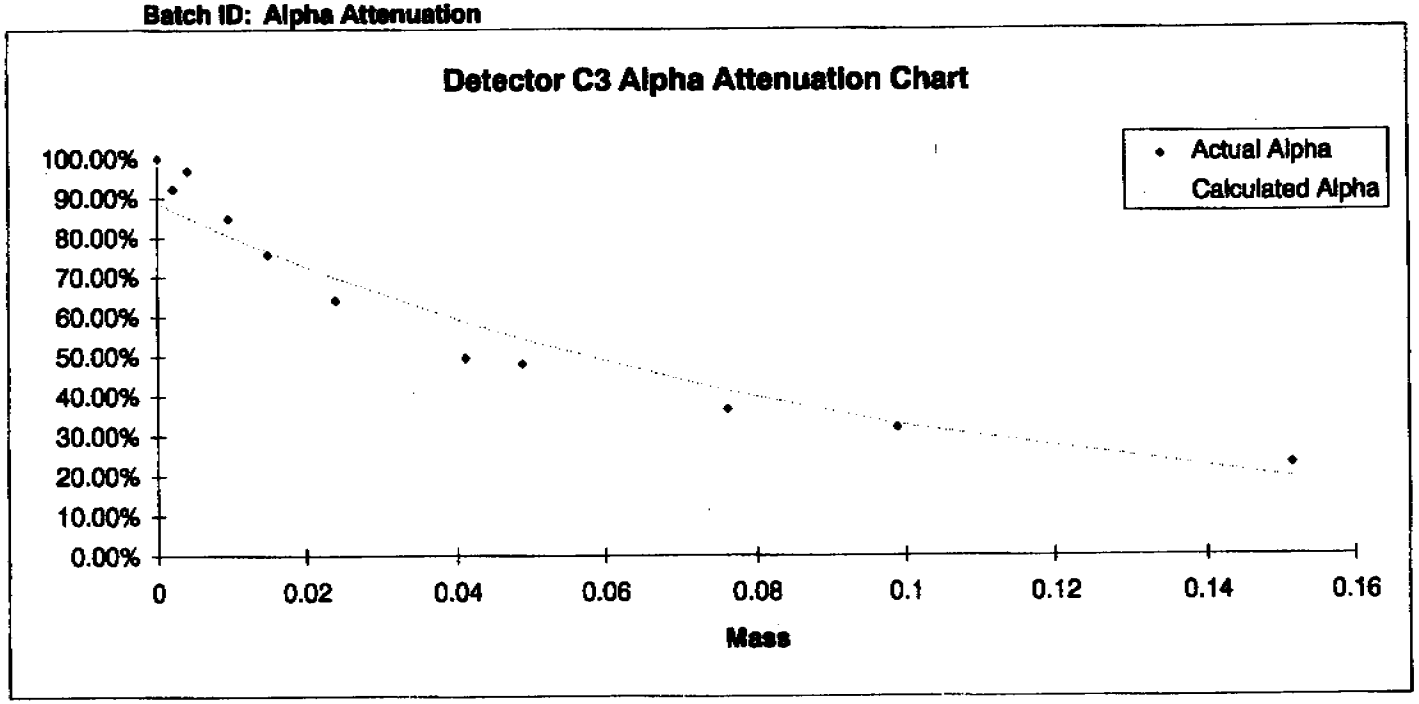

$\alpha r^2 =$ 0.947465

Archive File

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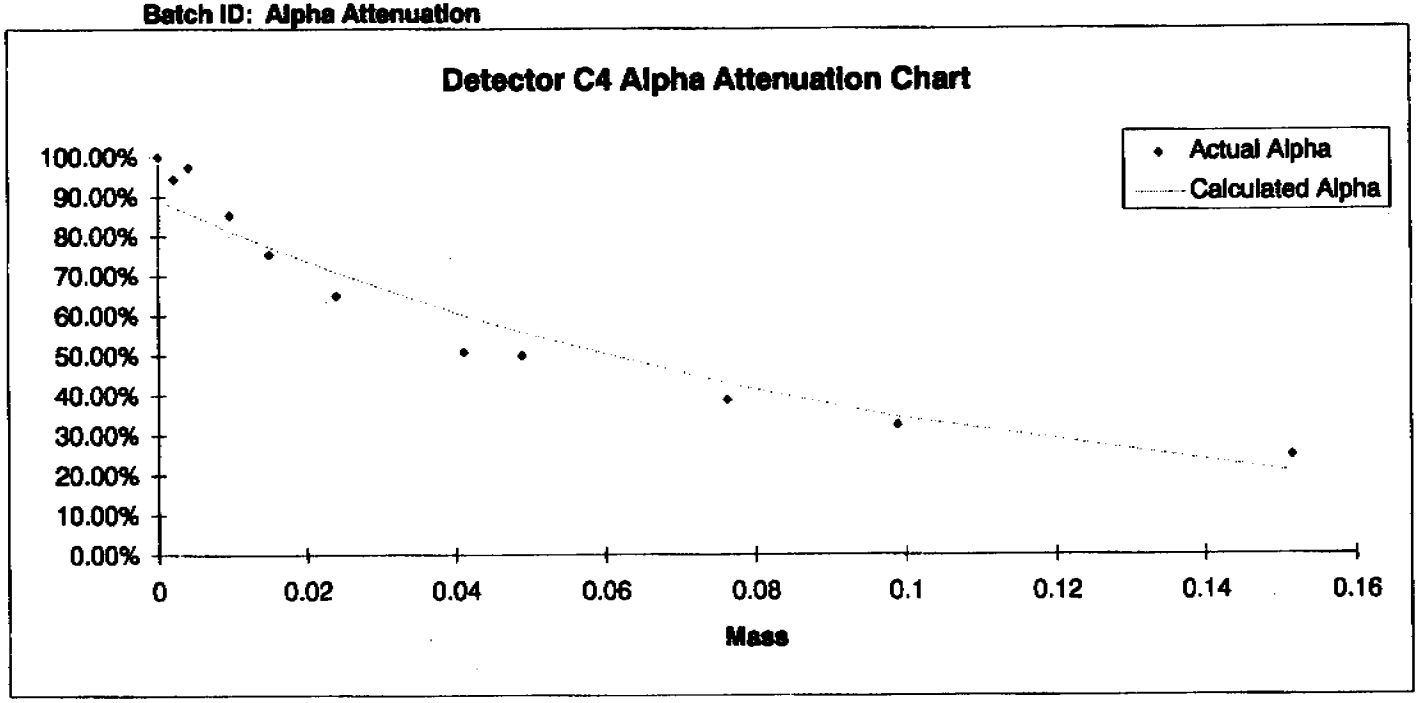
FileName: ATTEN000
Batch ID: Alpha Attenuation

Unit Id: Blue
Application Revision: 2
Application Version: Standard



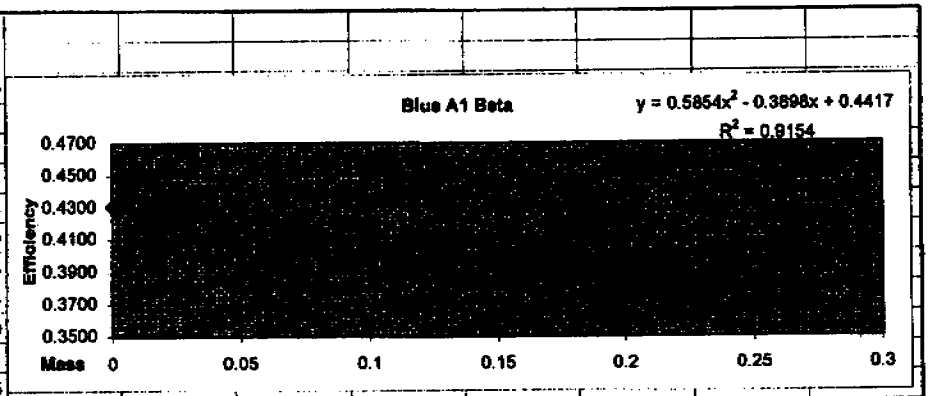
$\alpha r^2 =$ 0.943579

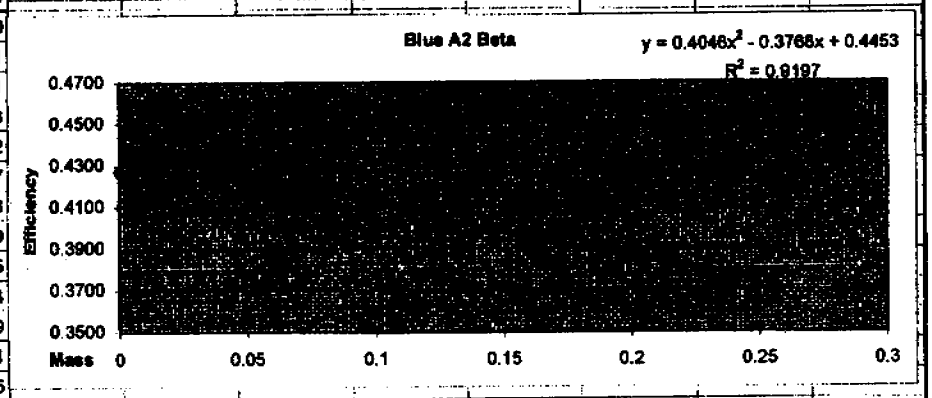
Archive File

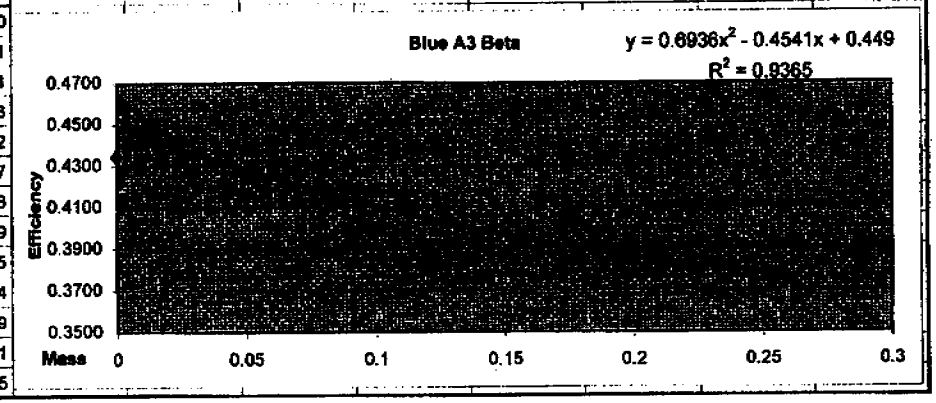
Printed 4/9/2002 1:08 PM

regress_data_blue_BETA

Det ID	Sample ID	Counts Beta	Count Time	CPM	STD 01051 Activity	Efficiency	Mass
A1	0	10011	2.85	3512.6	8151.5	0.4309	0
A1	0.0108	10013	2.75	3641.1	8151.5	0.4467	0.0108
A1	0.0152	10067	2.78	3621.2	8151.5	0.4442	0.0152
A1	0.0247	10034	2.86	3508.4	8151.5	0.4304	0.0247
A1	0.0416	10011	2.9	3452.1	8151.5	0.4235	0.0416
A1	0.0509	10001	2.92	3425.0	8151.5	0.4202	0.0509
A1	0.0755	10039	3	3346.3	8151.5	0.4105	0.0755
A1	0.0954	10017	2.93	3418.8	8151.5	0.4194	0.0954
A1	0.1569	10027	3.14	3193.3	8151.5	0.3917	0.1569
A1	0.2051	10047	3.2	3139.7	8151.5	0.3852	0.2051
A1	0.255	10016	3.22	3110.6	8151.5	0.3816	0.255
A2	0	10026	2.88	3480.9	8151.5	0.4270	0
A2	0.0021	10063	2.71	3713.3	8151.5	0.4555	0.0021
A2	0.0041	10066	2.73	3687.2	8151.5	0.4523	0.0041
A2	0.0108	10035	2.78	3609.7	8151.5	0.4428	0.0108
A2	0.0152	10029	2.79	3594.6	8151.5	0.4410	0.0152
A2	0.0247	10075	2.87	3510.5	8151.5	0.4307	0.0247
A2	0.0416	10016	2.86	3502.1	8151.5	0.4296	0.0416
A2	0.0509	10022	2.85	3516.5	8151.5	0.4314	0.0509
A2	0.0755	10032	2.95	3400.7	8151.5	0.4172	0.0755
A2	0.0954	10015	2.97	3372.1	8151.5	0.4137	0.0954
A2	0.1569	10001	3.11	3215.8	8151.5	0.3945	0.1569
A2	0.2051	10019	3.18	3150.6	8151.5	0.3865	0.2051
A2	0.255	10002	3.27	3058.7	8151.5	0.3752	0.255
A3	0	10056	2.84	3540.8	8151.5	0.4344	0
A3	0.0021	10057	2.68	3752.6	8151.5	0.4604	0.0021
A3	0.0041	10037	2.74	3663.1	8151.5	0.4494	0.0041
A3	0.0108	10060	2.76	3644.9	8151.5	0.4471	0.0108
A3	0.0152	10054	2.78	3616.5	8151.5	0.4437	0.0152
A3	0.0247	10033	2.78	3609.0	8151.5	0.4427	0.0247
A3	0.0416	10031	2.91	3447.1	8151.5	0.4229	0.0416
A3	0.0509	10042	2.89	3474.7	8151.5	0.4263	0.0509
A3	0.0755	10029	2.95	3399.7	8151.5	0.4171	0.0755
A3	0.0954	10041	2.99	3358.2	8151.5	0.4120	0.0954
A3	0.1569	10024	3.1	3233.5	8151.5	0.3967	0.1569
A3	0.2051	10010	3.16	3167.7	8151.5	0.3886	0.2051
A3	0.255	10014	3.27	3062.4	8151.5	0.3757	0.255

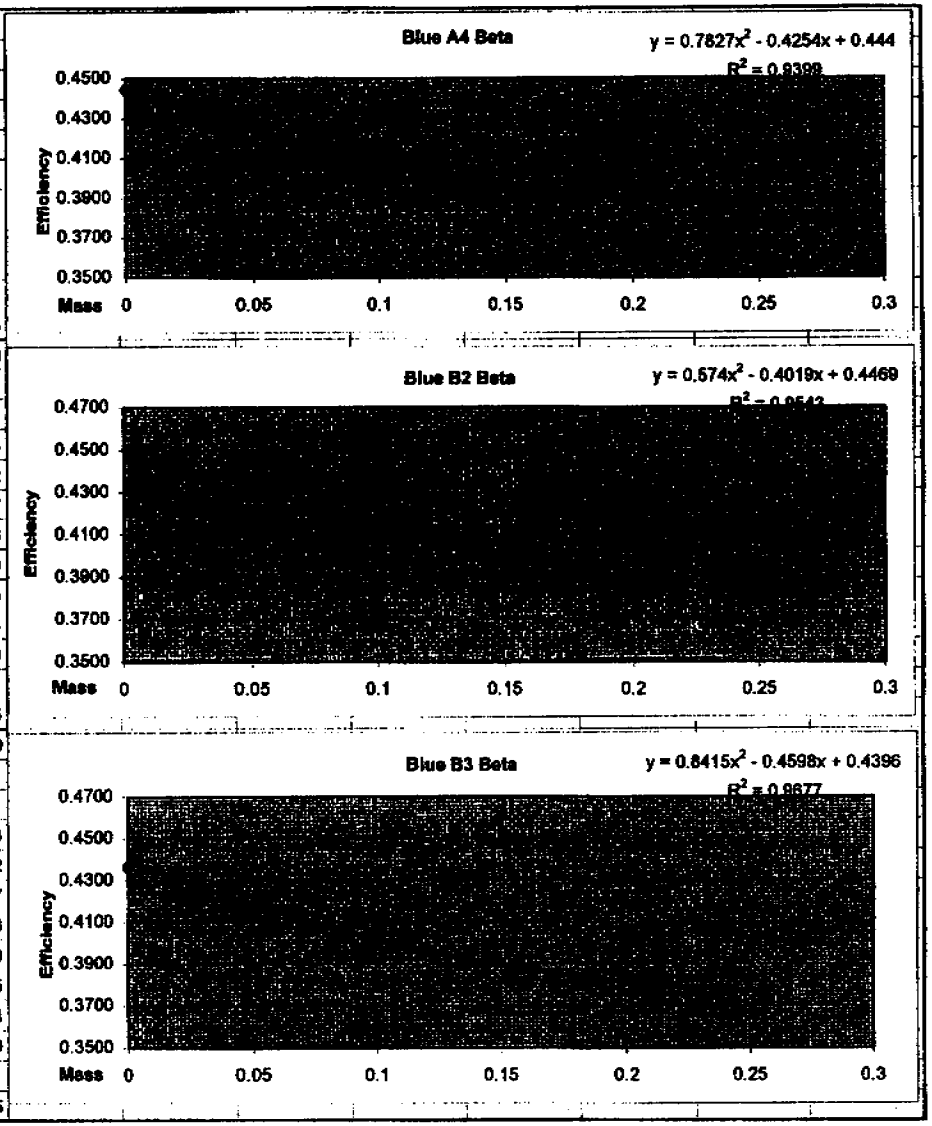






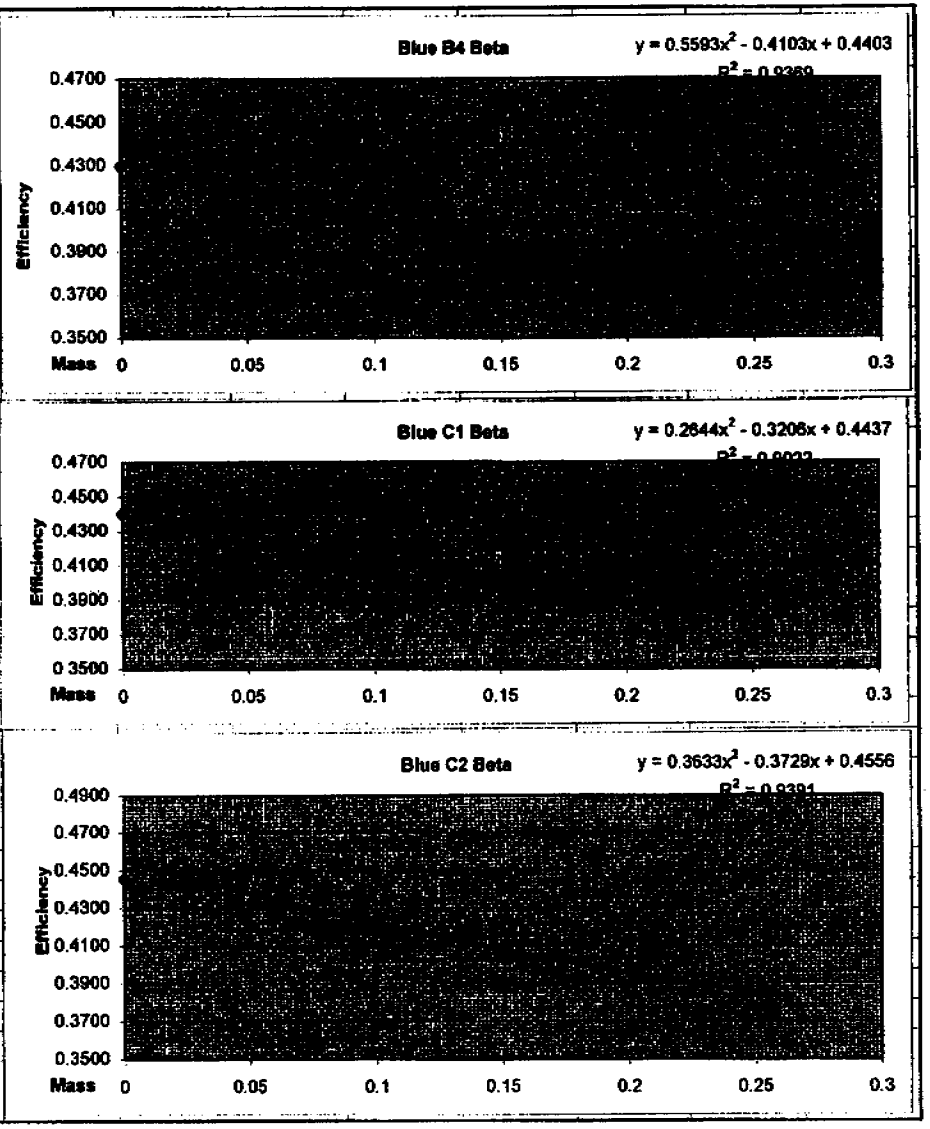
regress_data_blue_BETA

A4	0	10031	2.77	3821.3	8151.5	0.4442	0
A4	0.0041	10018	2.77	3816.6	8151.5	0.4437	0.0041
A4	0.0152	10022	2.83	3541.3	8151.5	0.4344	0.0152
A4	0.0247	10041	2.8	3586.1	8151.5	0.4389	0.0247
A4	0.0416	10022	2.93	3420.5	8151.5	0.4196	0.0416
A4	0.0509	10019	2.87	3490.9	8151.5	0.4283	0.0509
A4	0.0755	10028	2.95	3399.3	8151.5	0.4170	0.0755
A4	0.0954	10020	3	3340.0	8151.5	0.4097	0.0954
A4	0.1589	10030	3.15	3184.1	8151.5	0.3906	0.1589
A4	0.2051	10031	3.08	3256.8	8151.5	0.3995	0.2051
A4	0.255	10004	3.21	3116.5	8151.5	0.3823	0.255
B2	0	10017	2.84	3527.1	8151.5	0.4327	0
B2	0.0021	10059	2.75	3657.8	8151.5	0.4487	0.0021
B2	0.0041	10060	2.74	3671.5	8151.5	0.4504	0.0041
B2	0.0108	10032	2.82	3557.4	8151.5	0.4364	0.0108
B2	0.0152	10025	2.8	3580.4	8151.5	0.4392	0.0152
B2	0.0247	10016	2.8	3577.1	8151.5	0.4388	0.0247
B2	0.0416	10031	2.86	3507.3	8151.5	0.4303	0.0416
B2	0.0509	10030	2.87	3494.8	8151.5	0.4287	0.0509
B2	0.0755	10011	2.96	3382.1	8151.5	0.4149	0.0755
B2	0.0954	10050	2.96	3395.3	8151.5	0.4165	0.0954
B2	0.1589	10025	3.13	3202.9	8151.5	0.3929	0.1589
B2	0.2051	10020	3.08	3253.2	8151.5	0.3991	0.2051
B2	0.255	10014	3.26	3071.8	8151.5	0.3768	0.255
B3	0	10029	2.82	3566.4	8151.5	0.4363	0
B3	0.0021	10057	2.8	3591.8	8151.5	0.4406	0.0021
B3	0.0041	10029	2.75	3646.9	8151.5	0.4474	0.0041
B3	0.0108	10032	2.83	3544.9	8151.5	0.4349	0.0108
B3	0.0152	10050	2.87	3501.7	8151.5	0.4296	0.0152
B3	0.0247	10004	2.89	3461.6	8151.5	0.4247	0.0247
B3	0.0416	10008	2.94	3404.1	8151.5	0.4176	0.0416
B3	0.0509	10003	2.93	3414.0	8151.5	0.4188	0.0509
B3	0.0755	10035	2.96	3367.4	8151.5	0.4131	0.0755
B3	0.0954	10023	3.08	3254.2	8151.5	0.3992	0.0954
B3	0.1589	10023	3.14	3192.0	8151.5	0.3916	0.1589
B3	0.2051	10013	3.21	3119.3	8151.5	0.3827	0.2051
B3	0.255	10023	3.28	3055.8	8151.5	0.3749	0.255



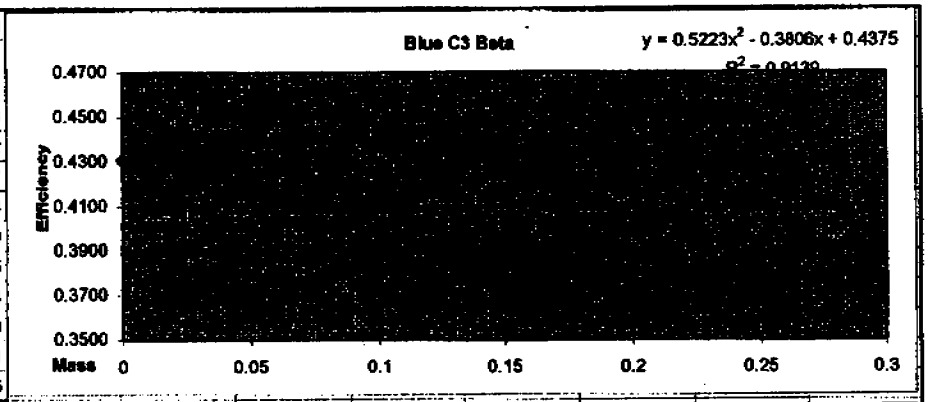
regress_data_blue_BETA

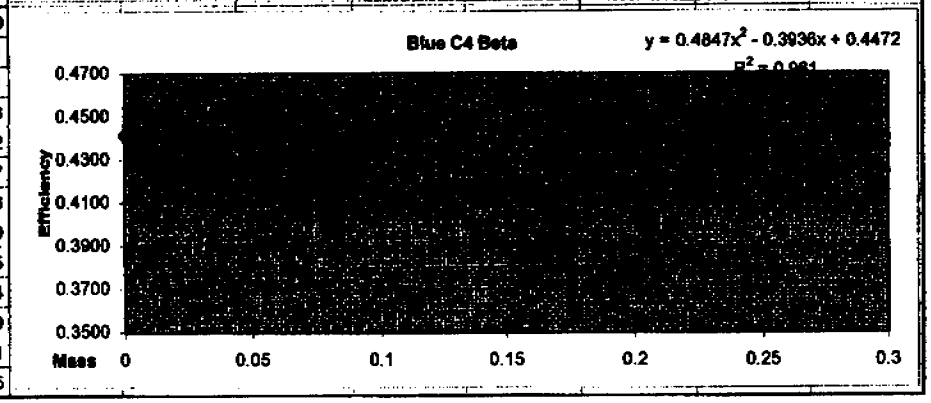
B4	0	10055	2.87	3503.5	8151.5	0.4298	0
B4	0.0021	10026	2.75	3645.8	8151.5	0.4473	0.0021
B4	0.0041	10058	2.8	3592.1	8151.5	0.4407	0.0041
B4	0.0108	10040	2.77	3624.5	8151.5	0.4446	0.0108
B4	0.0152	10026	2.88	3481.3	8151.5	0.4271	0.0152
B4	0.0247	10034	2.85	3520.7	8151.5	0.4319	0.0247
B4	0.0416	10035	2.95	3401.7	8151.5	0.4173	0.0416
B4	0.0509	10003	2.89	3461.2	8151.5	0.4246	0.0509
B4	0.0755	10023	3	3341.0	8151.5	0.4099	0.0755
B4	0.0954	10037	2.96	3368.1	8151.5	0.4132	0.0954
B4	0.1569	10032	3.2	3135.0	8151.5	0.3846	0.1569
B4	0.2051	10025	3.22	3113.4	8151.5	0.3819	0.2051
B4	0.255	10004	3.3	3031.5	8151.5	0.3719	0.255
C1	0	10009	2.79	3587.5	8151.5	0.4401	0
C1	0.0108	10053	2.75	3655.6	8151.5	0.4485	0.0108
C1	0.0152	10041	2.84	3535.6	8151.5	0.4337	0.0152
C1	0.0247	10015	2.81	3564.1	8151.5	0.4372	0.0247
C1	0.0416	10017	2.93	3418.8	8151.5	0.4194	0.0416
C1	0.0509	10010	2.8	3575.0	8151.5	0.4386	0.0509
C1	0.0755	10025	2.93	3421.5	8151.5	0.4197	0.0755
C1	0.0954	10025	2.91	3445.0	8151.5	0.4226	0.0954
C1	0.1569	10010	3.15	3177.8	8151.5	0.3898	0.1569
C1	0.2051	10040	3.13	3207.7	8151.5	0.3935	0.2051
C1	0.255	10011	3.24	3089.8	8151.5	0.3790	0.255
C2	0	10060	2.77	3631.8	8151.5	0.4455	0
C2	0.0021	10026	2.63	3812.2	8151.5	0.4677	0.0021
C2	0.0041	10033	2.7	3715.9	8151.5	0.4559	0.0041
C2	0.0108	10014	2.71	3695.2	8151.5	0.4533	0.0108
C2	0.0152	10032	2.74	3661.3	8151.5	0.4492	0.0152
C2	0.0247	10017	2.77	3616.2	8151.5	0.4436	0.0247
C2	0.0416	10040	2.79	3598.6	8151.5	0.4415	0.0416
C2	0.0509	10031	2.84	3532.0	8151.5	0.4333	0.0509
C2	0.0755	10034	2.88	3484.0	8151.5	0.4274	0.0755
C2	0.0954	10047	2.9	3464.5	8151.5	0.4250	0.0954
C2	0.1569	10032	3.06	3278.4	8151.5	0.4022	0.1569
C2	0.2051	10030	3.04	3299.3	8151.5	0.4048	0.2051
C2	0.255	10010	3.24	3089.5	8151.5	0.3790	0.255



regress_data_blue_BETA

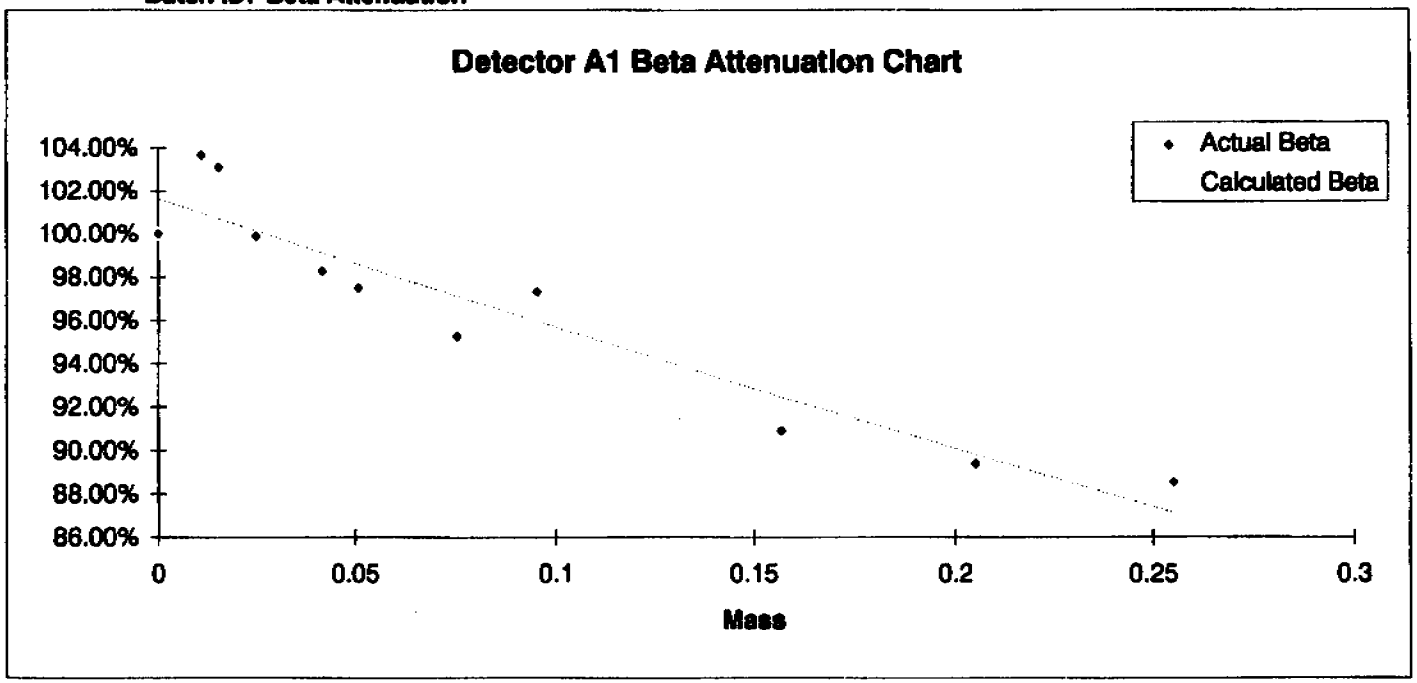
C3	0	10048	2.86	3513.3	8151.5	0.4310	0
C3	0.0021	10038	2.74	3663.5	8151.5	0.4494	0.0021
C3	0.0041	10035	2.77	3622.7	8151.5	0.4444	0.0041
C3	0.0108	10024	2.9	3456.8	8151.5	0.4240	0.0108
C3	0.0152	10014	2.85	3513.7	8151.5	0.4310	0.0152
C3	0.0247	10016	2.86	3502.1	8151.5	0.4296	0.0247
C3	0.0416	10022	2.99	3351.8	8151.5	0.4112	0.0416
C3	0.0509	10040	2.94	3415.0	8151.5	0.4189	0.0509
C3	0.0755	10022	2.95	3397.3	8151.5	0.4168	0.0755
C3	0.0954	10016	3.03	3305.6	8151.5	0.4055	0.0954
C3	0.1569	9999	3.13	3194.6	8151.5	0.3919	0.1569
C3	0.2051	10034	3.2	3135.6	8151.5	0.3847	0.2051
C3	0.255	10033	3.31	3031.1	8151.5	0.3718	0.255
C4	0	10003	2.78	3598.2	8151.5	0.4414	0
C4	0.0021	10047	2.71	3707.4	8151.5	0.4548	0.0021
C4	0.0041	10038	2.75	3650.2	8151.5	0.4478	0.0041
C4	0.0108	10028	2.77	3620.2	8151.5	0.4441	0.0108
C4	0.0152	10012	2.79	3588.5	8151.5	0.4402	0.0152
C4	0.0247	10011	2.85	3512.6	8151.5	0.4309	0.0247
C4	0.0416	10013	2.85	3513.3	8151.5	0.4310	0.0416
C4	0.0509	10021	2.85	3516.1	8151.5	0.4313	0.0509
C4	0.0755	10037	2.95	3402.4	8151.5	0.4174	0.0755
C4	0.0954	10015	2.95	3394.9	8151.5	0.4165	0.0954
C4	0.1569	10021	3.13	3201.6	8151.5	0.3928	0.1569
C4	0.2051	10032	3.12	3215.4	8151.5	0.3945	0.2051
C4	0.255	10025	3.28	3056.4	8151.5	0.3749	0.255





Unit Type: LB4100/W
Date Performed: 4/9/02 11:15
FileName: ATTEN001
Batch ID: Beta Attenuation

Unit Id: Blue
Application Revision: 2
Application Version: Standard



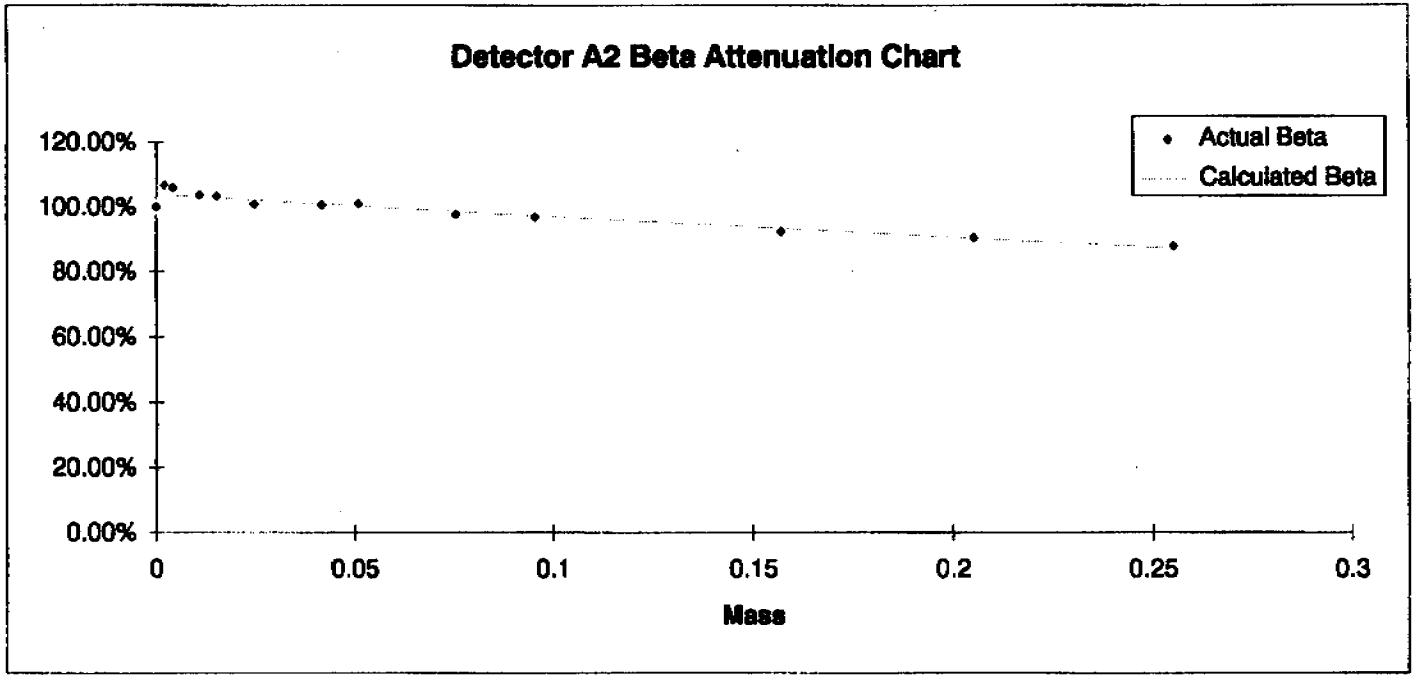
$\beta\ r^2 =$ 0.903898

Archive File

Printed 4/10/2002 9:15 AM

Unit Type: LB4100/W
Date Performed: 4/9/02 11:15
FileName: ATTEN001
Batch ID: Beta Attenuation

Unit id: Blue
Application Revision: 2
Application Version: Standard



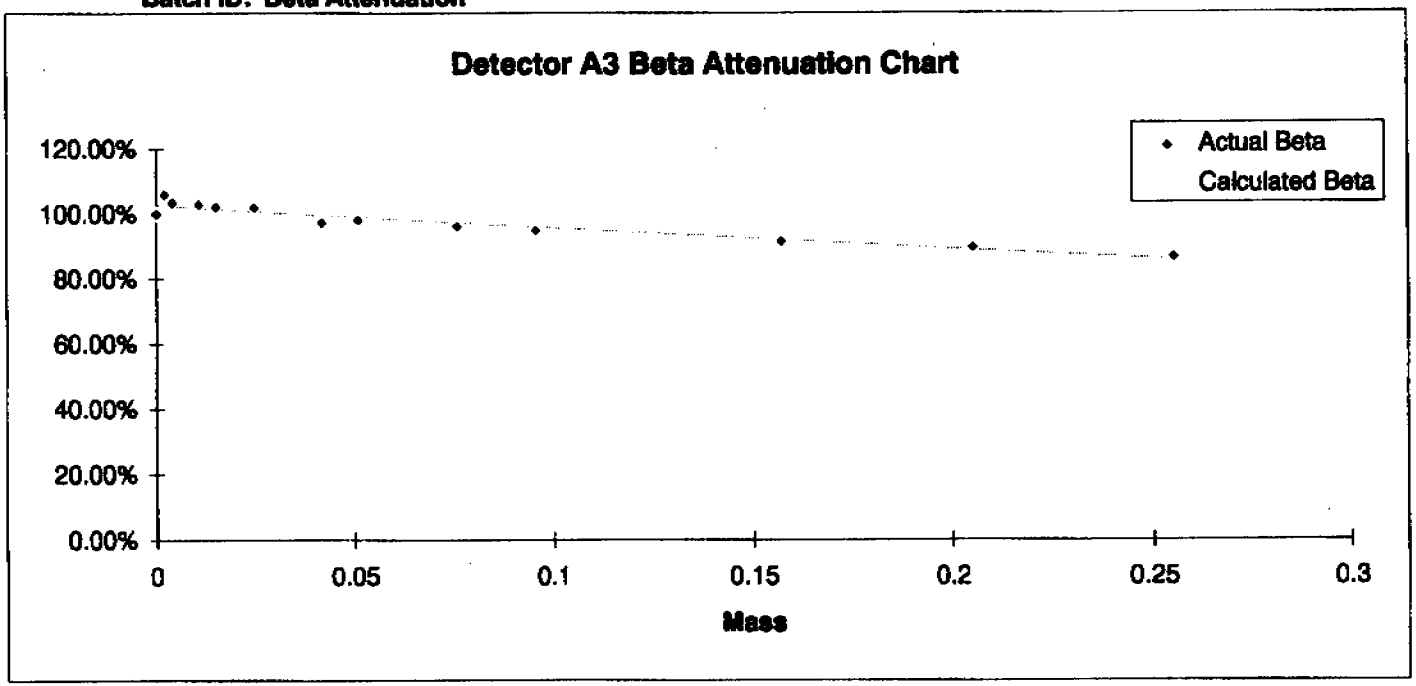
$\beta\ r^2 =$ 0.923569

Archive File

Printed 4/10/2002 9:15 AM

Unit Type: LB4100/W
Date Performed: 4/9/02 11:15
FileName: ATTEN001
Batch ID: Beta Attenuation

Unit Id: Blue
Application Revision: 2
Application Version: Standard



$\beta\ r^2 =$ 0.92731

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Printed 4/10/2002 9:15 AM

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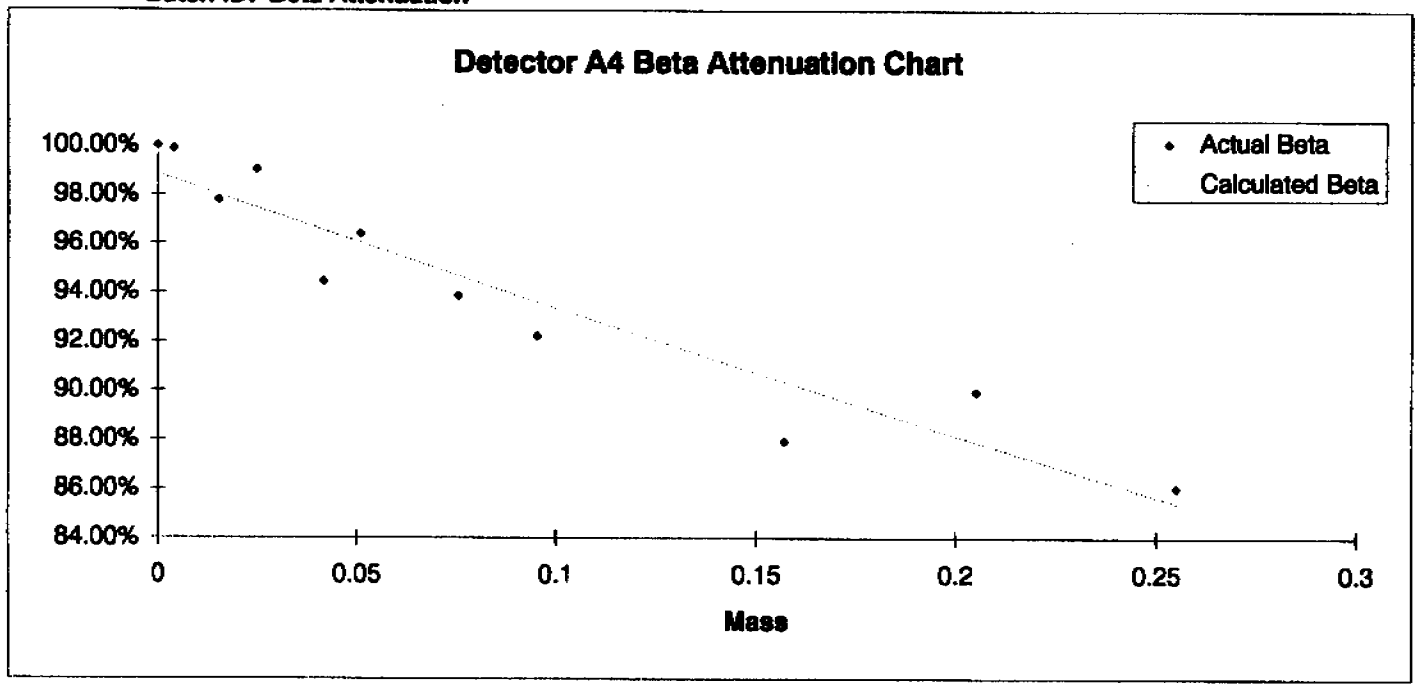
Date Performed: 4/9/02 11:15
FileName: ATTEN001
Batch ID: Beta Attenuation

Unit Id: Blue
Application Revision: 2
Application Version: Standard



$\beta\ r^2 =$ 0.901752

Archive File

Printed 4/10/2002 9:15 AM

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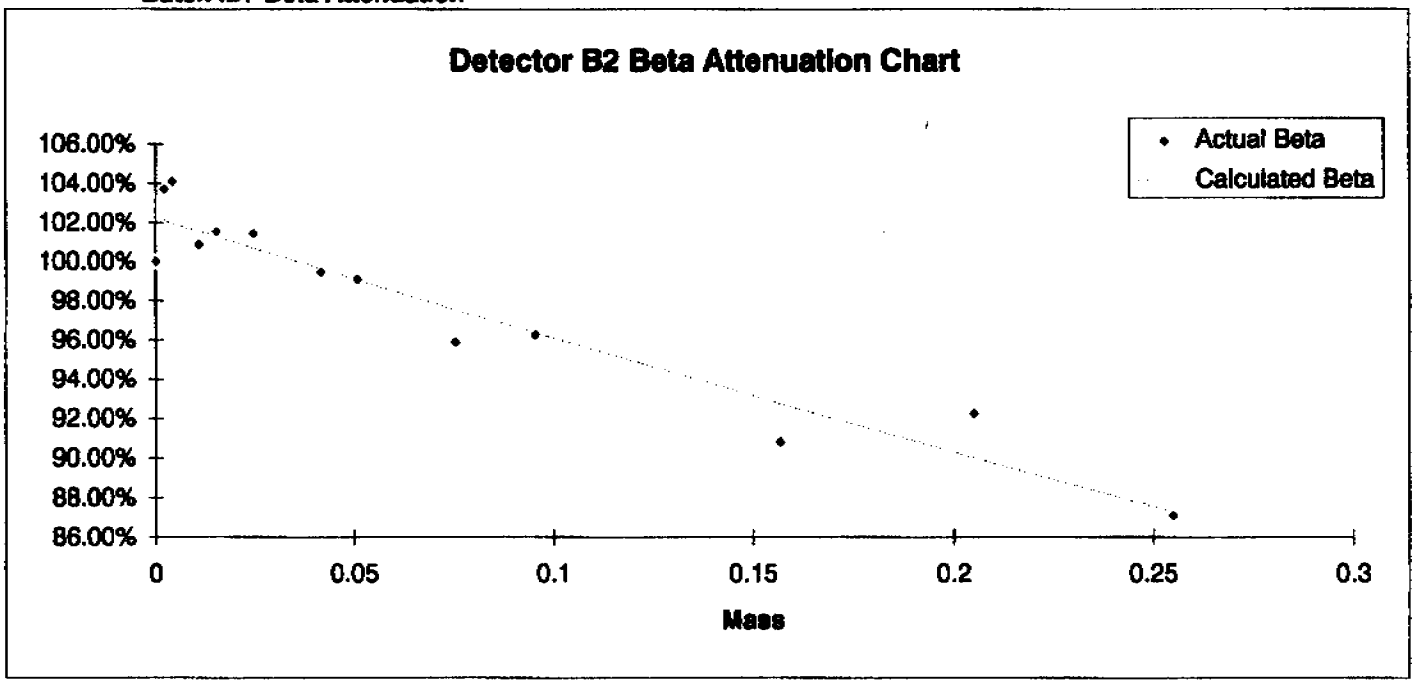
Date Performed: 4/9/02 11:15
FileName: ATTEN001
Batch ID: Beta Attenuation

Unit Id: Blue
Application Revision: 2
Application Version: Standard



$\beta\ r^2 =$ 0.925409

Archive File

Printed 4/10/2002 9:15 AM

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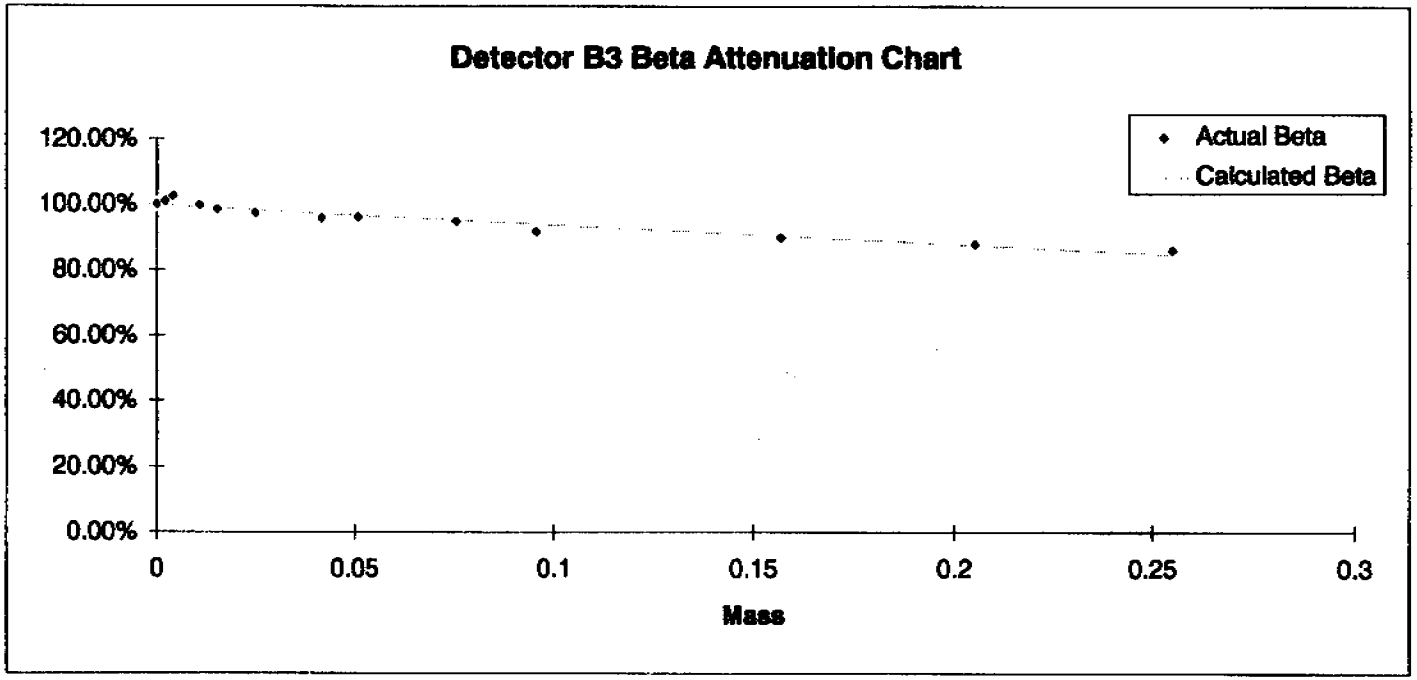
Date Performed: 4/9/02 11:15
FileName: ATTEN001
Batch ID: Beta Attenuation

Unit Id: Blue
Application Revision: 2
Application Version: Standard



$\beta\ r^2 =$ 0.937168

Archive File

Printed 4/10/2002 9:15 AM

Unit Type: LB4100/W
Date Performed: 4/9/02 11:15
FileName: ATTEN001
Batch ID: Beta Attenuation

Unit Id: Blue
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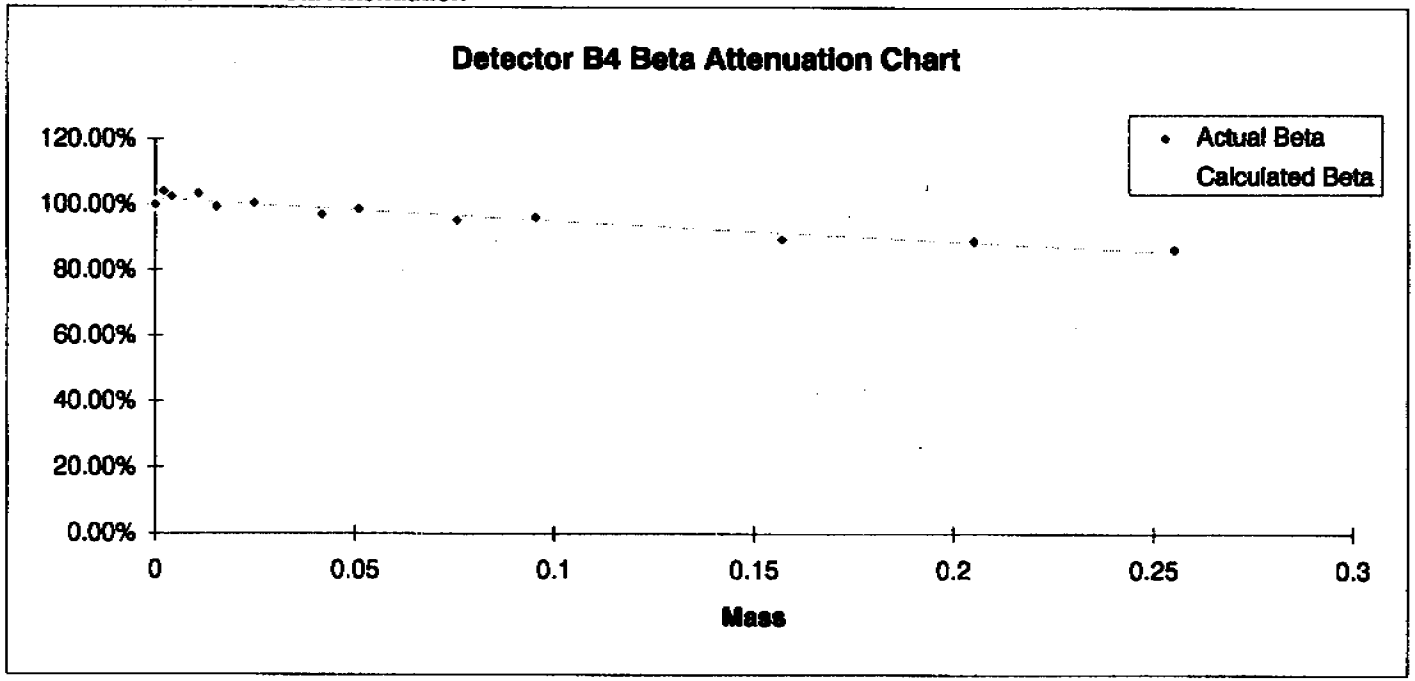

$\beta\ r^2 =$ 0.930399

Archive File

Printed 4/10/2002 9:15 AM

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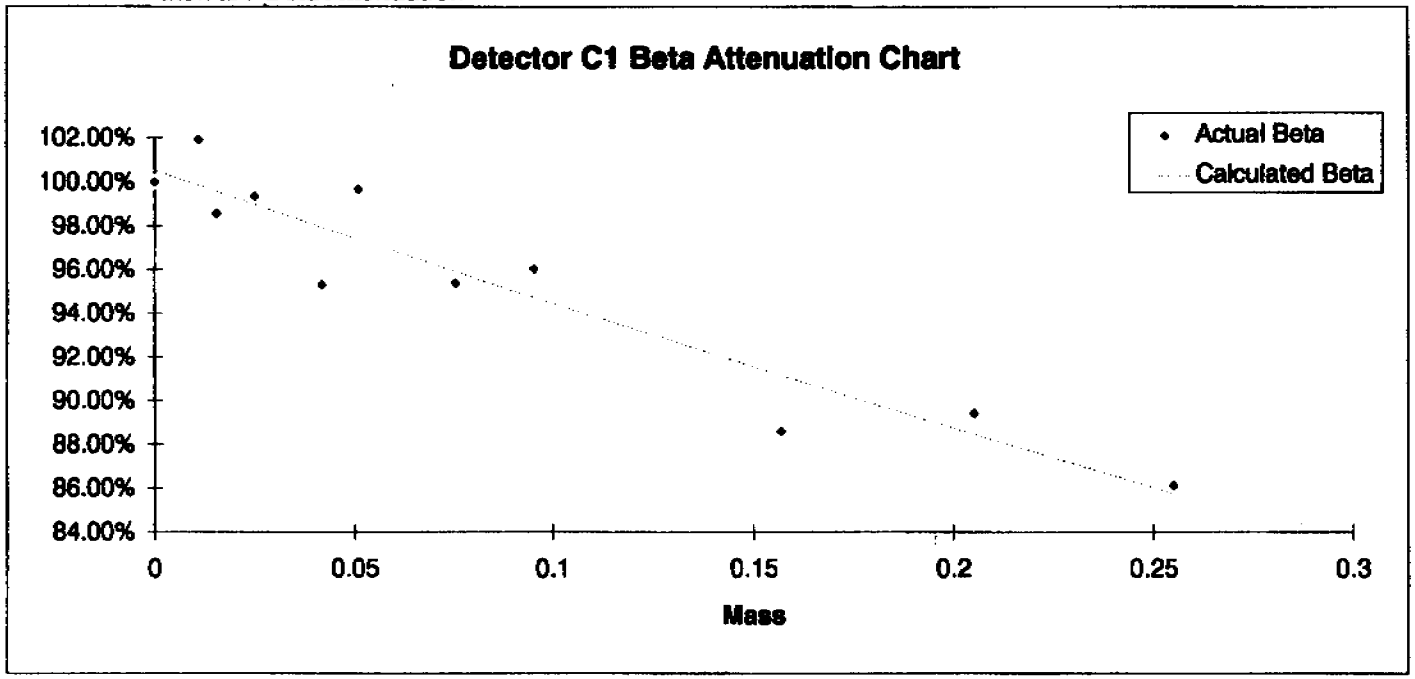
Date Performed: 4/9/02 11:15
FileName: ATTEN001
Batch ID: Beta Attenuation

Unit Id: Blue
Application Revision: 2
Application Version: Standard



$\beta\ r^2 =$ 0.903696

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Printed 4/10/2002 9:15 AM

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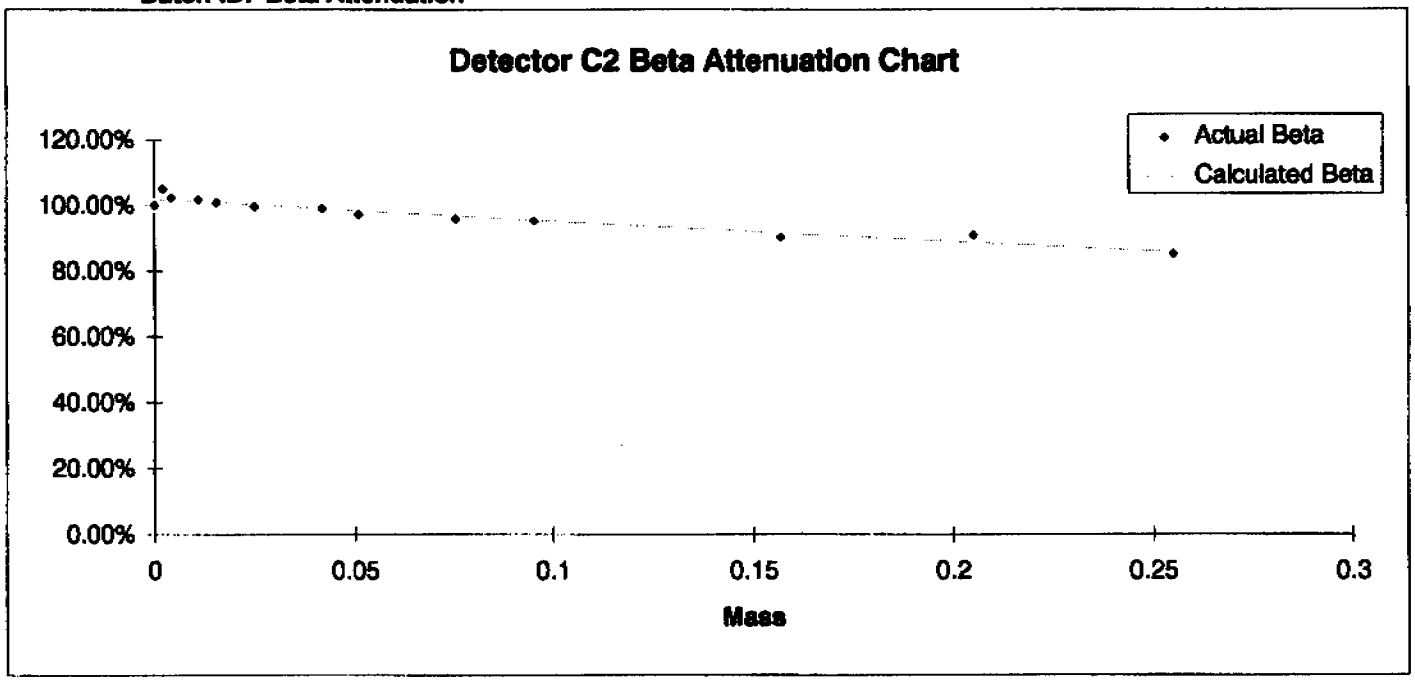
Date Performed: 4/9/02 11:15
FileName: ATTEN001
Batch ID: Beta Attenuation

Unit Id: Blue
Application Revision: 2
Application Version: Standard



$\beta\ r^2 =$ 0.939638

Archive File

Printed 4/10/2002 9:15 AM

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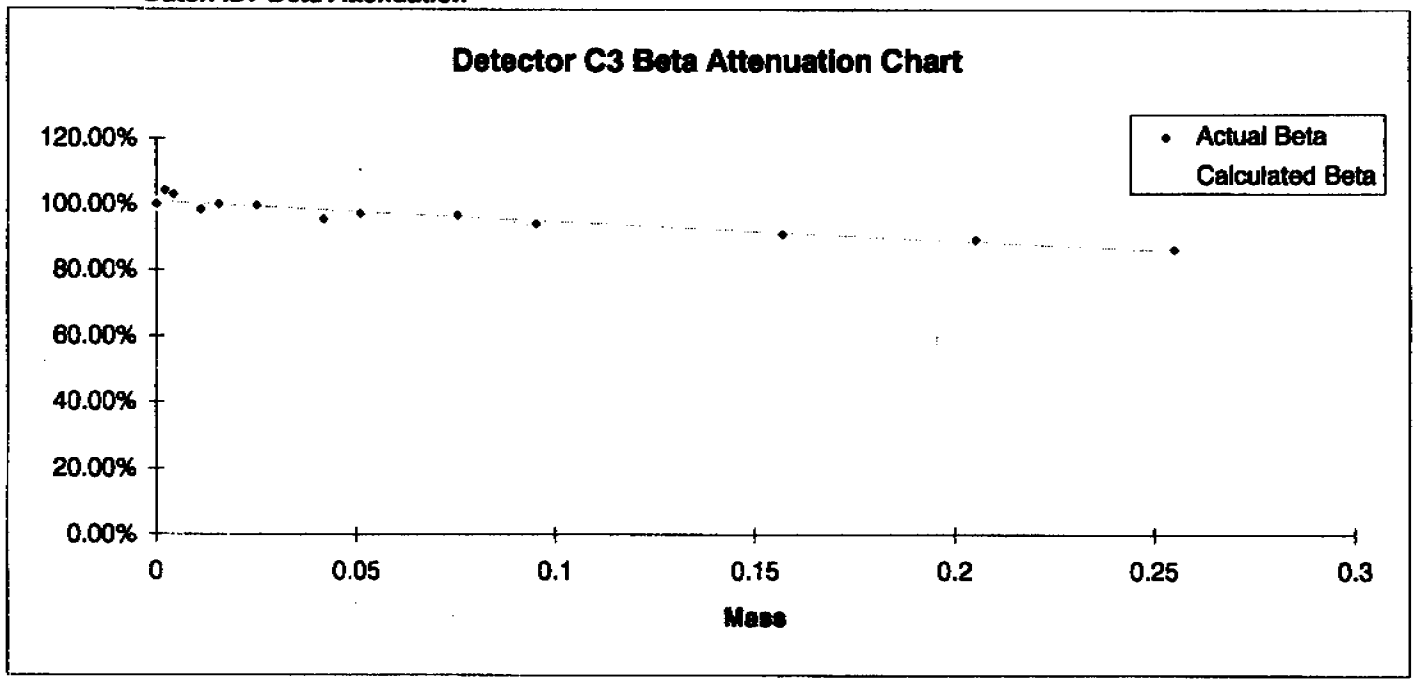
Date Performed: 4/9/02 11:15
FileName: ATTEN001
Batch ID: Beta Attenuation

Unit Id: Blue
Application Revision: 2
Application Version: Standard



$\beta\ r^2 =$ 0.911309

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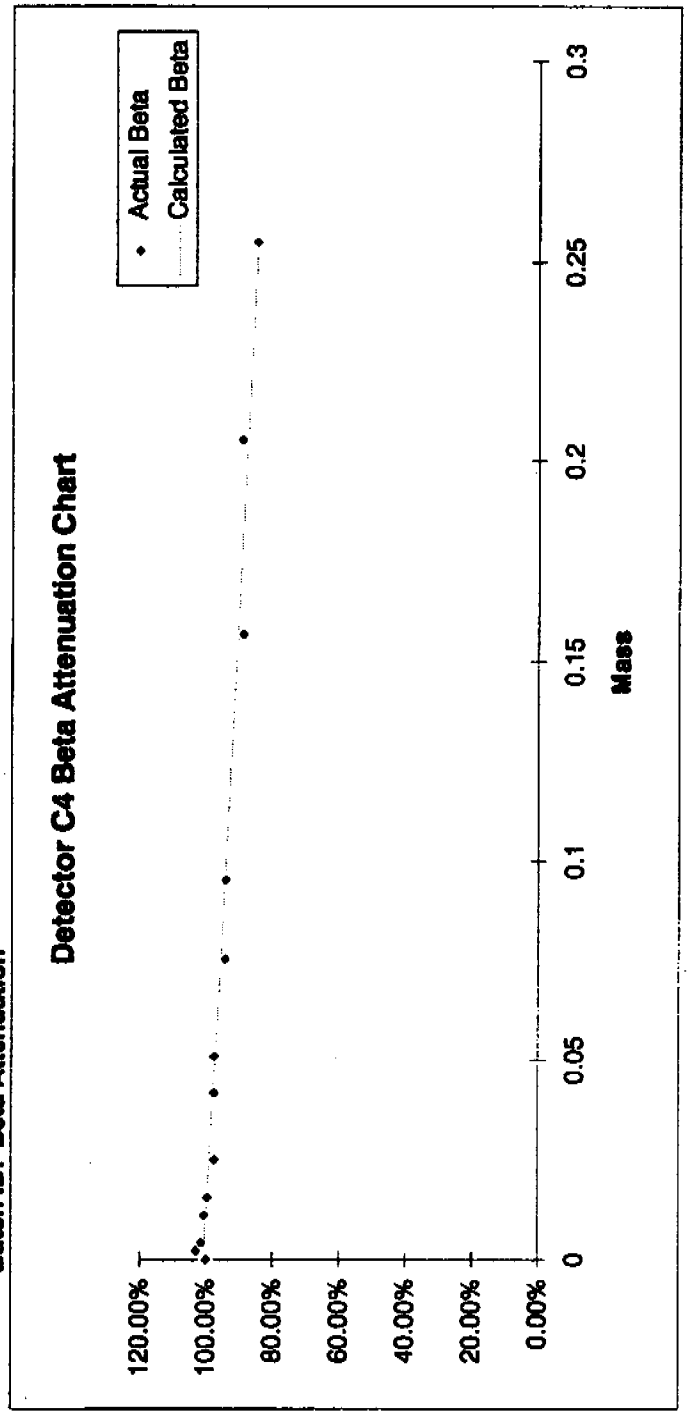
Date Performed: 4/9/02 11:15
FileName: ATTEN001
Batch ID: Beta Attenuation

Unit Id: Blue
Application Revision: 2
Application Version: Standard



$\beta\ r^2 =$ 0.954946

Archive File

Printed 4/10/2002 9:15 AM

Detector ID	Sample ID	Alpha	Beta	Guard	Count Time	Event	Voltage	TOD
A1	0	10016	3056	5030	8.88	0	1410	37354.5894
A2	0	10009	3084	9382	8.8	0	1410	37354.6224
A3	0	10015	2979	9570	8.83	0	1410	37354.6659
A4	0	10009	2978	29888	8.75	0	1410	37354.6978
B2	0	10005	4157	4679	8.83	0	1410	37354.7458
B3	0	10007	3123	4809	8.87	0	1410	37354.7756
B4	0	10007	3115	4835	9.19	0	1410	37354.8096
C1	0	10012	3052	5114	8.84	0	1440	37354.8533
C2	0	10007	3110	5117	8.73	0	1440	37354.9018
C3	0	10009	3149	5517	9.39	0	1440	37354.9563
C4	0	10010	3030	5365	8.96	0	1440	37354.9957
A1	0.0021	10004	2928	5044	9.62	0	1410	37354.9961
A2	0.0021	10009	2959	5437	9.65	0	1410	37354.5899
A3	0.0021	10021	2890	10408	9.69	0	1410	37354.623
A4	0.0021	10001	2901	10667	9.79	0	1410	37354.6666
B2	0.0021	10001	4353	5184	9.71	0	1410	37354.6984
B3	0.0021	10014	2962	5310	9.9	0	1410	37354.7466
B4	0.0021	10016	3100	5411	9.92	0	1410	37354.7764
C1	0.0021	10006	3176	5740	9.82	0	1440	37354.8101
C2	0.0021	10000	2989	5616	9.71	0	1440	37354.854
C3	0.0021	10007	3122	5944	10.17	0	1440	37354.9028
C4	0.0021	10016	2771	5565	9.49	0	1440	37354.9564
A1	0.0041	10010	2976	4879	9.4	0	1410	37354.9563
A2	0.0041	10006	2960	4970	9.49	0	1410	37354.9961
A3	0.0041	10015	2938	5329	9.45	0	1410	37354.5898
A4	0.0041	10015	2754	10079	9.38	0	1410	37354.6228
B2	0.0041	10017	2926	5083	9.4	0	1410	37354.6663
B3	0.0041	10013	2942	5189	9.72	0	1410	37354.6984
B4	0.0041	10010	3039	5099	9.57	0	1410	37354.7463
C1	0.0041	10002	2970	5604	9.43	0	1440	37354.776
C2	0.0041	10005	3057	5454	9.35	0	1440	37354.8097
C3	0.0041	10010	2995	5606	9.7	0	1440	37354.854
C4	0.0041	10001	2799	5371	9.19	0	1440	37354.9021
A1	0.0096	10007	3020	12381	10.96	0	1410	37354.9034
A2	0.0096	10006	2986	5607	10.8	0	1410	37354.9573

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Detector ID	Sample ID	Alpha	Beta	Guard	Count Time	Event	Voltage	TOD
A3	0.0096	10000	2888	5651	10.81	0	1410	37354.997
A4	0.0096	10009	2757	6070	10.8	0	1410	37354.5907
B2	0.0096	10001	2983	5812	10.77	0	1410	37354.6238
B3	0.0096	10005	2829	5844	10.83	0	1410	37354.6673
B4	0.0096	10003	2974	5860	11.03	0	1410	37354.6993
C1	0.0096	10004	3141	6285	10.8	0	1440	37354.7472
C2	0.0096	10005	2922	6320	10.63	0	1440	37354.7768
C3	0.0096	10007	2955	6470	11.07	0	1440	37354.8109
C4	0.0096	10009	2682	6029	10.5	0	1440	37354.8545
A1	0.0149	10004	3046	53515	12.09	0	1410	37354.8558
A2	0.0149	10013	3019	13687	11.97	0	1410	37354.9041
A3	0.0149	10007	2988	6313	12.15	0	1410	37354.9582
A4	0.0149	10005	2913	6262	12.01	0	1410	37354.9978
B2	0.0149	10003	3059	6253	11.64	0	1410	37354.5913
B3	0.0149	10004	2873	6585	12.18	0	1410	37354.6248
B4	0.0149	10007	3015	6698	12.4	0	1410	37354.6684
C1	0.0149	10005	3055	6989	12.13	0	1440	37354.7001
C2	0.0149	10002	2939	6887	11.8	0	1440	37354.7479
C3	0.0149	10002	3035	7361	12.41	0	1440	37354.7781
C4	0.0149	10001	2794	6948	11.88	0	1440	37354.8115
A1	0.0239	10007	3121	7194	13.83	0	1410	37354.8129
A2	0.0239	10008	3249	61102	13.86	0	1410	37354.8571
A3	0.0239	10003	3204	16049	13.77	0	1410	37354.9053
A4	0.0239	10003	2951	7028	13.61	0	1410	37354.9593
B2	0.0239	10003	3105	7331	13.72	0	1410	37354.999
B3	0.0239	10010	3180	7737	14.35	0	1410	37354.5932
B4	0.0239	10002	3288	7867	14.62	0	1410	37354.6265
C1	0.0239	10002	3195	8114	13.75	0	1440	37354.6693
C2	0.0239	10003	3205	7877	13.68	0	1440	37354.7012
C3	0.0239	9999	3447	8540	14.64	0	1440	37354.7498
C4	0.0239	10008	3062	8170	13.78	0	1440	37354.779
A1	0.0411	10007	3211	68952	18.08	0	1410	37354.7823
A2	0.0411	10005	3321	9481	18.1	0	1410	37354.8158
A3	0.0411	10003	3225	77075	17.79	0	1410	37354.8599
A4	0.0411	10005	3053	21566	17.96	0	1410	37354.9083
B2	0.0411	10002	3248	9555	18.04	0	1410	37354.9623
B3	0.0411	10004	3238	9999	18.81	0	1410	37355.0026

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Detector ID	Sample ID	Alpha	Beta	Guard	Count Time	Event	Voltage	TOD
B4	0.0411	10003	3328	9946	18.53	0	1410	37354.5961
C1	0.0411	10004	3197	10481	17.93	0	1440	37354.6288
C2	0.0411	10006	3179	10273	17.56	0	1440	37354.6719
C3	0.0411	10002	3363	10945	18.94	0	1440	37354.7048
C4	0.0411	10002	3075	10306	17.62	0	1440	37354.7519
A1	0.0488	10007	3313	9819	18.64	0	1410	37354.7526
A2	0.0488	10002	3268	70428	18.5	0	1410	37354.7826
A3	0.0488	10003	3309	9822	18.74	0	1410	37354.8163
A4	0.0488	9999	3072	79120	18.32	0	1410	37354.8603
B2	0.0488	10000	6474	9767	18.37	0	1410	37354.9085
B3	0.0488	10004	3105	9732	18.39	0	1410	37354.9626
B4	0.0488	10000	3231	10121	19.09	0	1410	37355.0028
C1	0.0488	10005	3451	10851	18.72	0	1440	37354.5963
C2	0.0488	10005	3183	10552	18.05	0	1440	37354.6288
C3	0.0488	10001	3399	11381	19.51	0	1440	37354.6733
C4	0.0488	10007	3051	10328	17.93	0	1440	37354.7041
A1	0.0762	10005	3553	63231	23.83	0	1410	37354.7085
A2	0.0762	10002	3400	12109	23.05	0	1410	37354.7557
A3	0.0762	10003	3388	78975	23.54	0	1410	37354.7861
A4	0.0762	10002	3202	12335	23.57	0	1410	37354.8196
B2	0.0762	10002	9192	12270	23.45	0	1410	37354.8635
B3	0.0762	10002	3403	12896	24.34	0	1410	37354.9127
B4	0.0762	10001	3736	13205	24.84	0	1410	37354.9671
C1	0.0762	10000	3468	14045	23.97	0	1440	37355.0062
C2	0.0762	10003	3299	13131	22.59	0	1440	37354.599
C3	0.0762	10000	3777	14928	25.63	0	1440	37354.6341
C4	0.0762	10004	3279	13464	23.1	0	1440	37354.6758
A1	0.0988	10003	3609	32235	28.52	0	1410	37354.6797
A2	0.0988	10002	3593	73110	27.51	0	1410	37354.7111
A3	0.0988	9999	3510	14502	27.67	0	1410	37354.7589
A4	0.0988	9999	3364	89787	27.52	0	1410	37354.7889
B2	0.0988	10000	9394	14610	27.46	0	1410	37354.8224
B3	0.0988	10001	3592	15066	28.85	0	1410	37354.8673
B4	0.0988	10002	3679	15206	28.68	0	1410	37354.9157
C1	0.0988	10002	3800	16407	28.15	0	1440	37354.9694
C2	0.0988	10000	3814	16246	27.71	0	1440	37355.0088
C3	0.0988	10002	3624	17167	29.32	0	1440	37354.6036
C4	0.0988	10001	3435	16029	27.58	0	1440	37354.6355

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Detector ID	Sample ID	Alpha	Beta	Guard	Count Time	Event	Voltage	TOD
A1	0.1514	10003	3815	36336	38.36	0	1410	37354.6431
A2	0.1514	10000	3660	40932	36.6	0	1410	37354.6853
A3	0.1514	9999	3803	98387	37.6	0	1410	37354.7182
A4	0.1514	9999	3564	19337	37.1	0	1410	37354.7655
B2	0.1514	9999	6622	19770	36.91	0	1410	37354.7952
B3	0.1514	10000	3840	20823	39.21	0	1410	37354.8305
B4	0.1514	10005	3995	20419	38.8	0	1410	37354.8742
C1	0.1514	9999	4101	22082	37.98	0	1440	37354.9221
C2	0.1514	9999	3792	21090	36.35	0	1440	37354.9751
C3	0.1514	9999	4145	23900	41	0	1440	37355.018
C4	0.1514	10000	3531	21282	36.21	0	1440	37354.6084

Detector ID	Sample ID	Alpha	Beta	Guard	Count Time	Event	Voltage	TOD
A1	0	7	10011	2328	2.85	0	1410	37355.4694
A1	0.0108	6	10013	1412	2.75	0	1410	37355.7369
A1	0.0152	8	10067	1464	2.78	0	1410	37355.7263
A1	0.0247	11	10034	1444	2.86	0	1410	37355.7113
A1	0.0416	7	10011	1410	2.9	0	1410	37355.6835
A1	0.0509	6	10001	1762	2.92	0	1410	37355.6184
A1	0.0755	7	10039	1483	3	0	1410	37355.5732
A1	0.0954	2	10017	1517	2.93	0	1410	37355.5444
A1	0.1569	8	10027	1637	3.14	0	1410	37355.5344
A1	0.2051	8	10047	1910	3.2	0	1410	37355.4945
A1	0.255	12	10016	4385	3.22	0	1410	37355.4843
A2	0	6	10025	3869	2.88	0	1410	37355.4841
A2	0.0021	7	10063	2205	2.71	0	1410	37355.4693
A2	0.0041	9	10066	1412	2.73	0	1410	37355.7657
A2	0.0108	8	10035	1365	2.78	0	1410	37355.7471
A2	0.0152	7	10029	1434	2.79	0	1410	37355.737
A2	0.0247	8	10075	1518	2.87	0	1410	37355.7263
A2	0.0416	8	10016	1447	2.86	0	1410	37355.7113
A2	0.0509	4	10022	1384	2.85	0	1410	37355.6835
A2	0.0755	14	10032	1778	2.95	0	1410	37355.6185
A2	0.0954	7	10015	1469	2.97	0	1410	37355.5732
A2	0.1569	7	10001	1605	3.11	0	1410	37355.5445
A2	0.2051	11	10019	1663	3.18	0	1410	37355.5344
A2	0.255	3	10002	1939	3.27	0	1410	37355.4945
A3	0	9	10056	1711	2.84	0	1410	37355.4942
A3	0.0021	8	10057	3486	2.68	0	1410	37355.4839
A3	0.0041	6	10037	2239	2.74	0	1410	37355.4693
A3	0.0108	4	10060	1427	2.76	0	1410	37355.7657
A3	0.0152	9	10054	1366	2.78	0	1410	37355.7471
A3	0.0247	15	10033	1426	2.78	0	1410	37355.737
A3	0.0416	5	10031	1534	2.91	0	1410	37355.7264
A3	0.0509	5	10042	1470	2.89	0	1410	37355.7113
A3	0.0755	5	10029	1439	2.95	0	1410	37355.6836
A3	0.0954	8	10041	1802	2.99	0	1410	37355.6185
A3	0.1569	4	10024	1540	3.1	0	1410	37355.5733

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Detector ID	Sample ID	Alpha	Beta	Guard	Count Time	Event	Voltage	TOD
A3	0.2051	8	10010	1634	3.16	0	1410	37355.5446
A3	0.255	0	10014	1701	3.27	0	1410	37355.5345
A4	0	11	10031	1459	2.77	0	1410	37355.5341
A4	0.0041	8	10018	3665	2.77	0	1410	37355.484
A4	0.0152	9	10022	1468	2.83	0	1410	37355.7657
A4	0.0247	7	10041	1381	2.8	0	1410	37355.7471
A4	0.0416	10	10022	1493	2.93	0	1410	37355.7371
A4	0.0509	6	10019	1517	2.87	0	1410	37355.7264
A4	0.0755	6	10028	1504	2.95	0	1410	37355.7113
A4	0.0954	4	10020	1465	3	0	1410	37355.6836
A4	0.1569	6	10030	1894	3.15	0	1410	37355.6186
A4	0.2051	5	10031	1528	3.08	0	1410	37355.5733
A4	0.255	5	10004	1661	3.21	0	1410	37355.5446
B2	0	2	10017	1521	2.84	0	1410	37355.5444
B2	0.0021	8	10059	1471	2.75	0	1410	37355.5341
B2	0.0041	7	10060	1448	2.74	0	1410	37355.4942
B2	0.0108	8	10032	1432	2.82	0	1410	37355.484
B2	0.0152	10	10025	1408	2.8	0	1410	37355.4694
B2	0.0247	7	10016	1460	2.8	0	1410	37355.7657
B2	0.0416	7	10031	1427	2.86	0	1410	37355.7472
B2	0.0509	5	10030	1520	2.87	0	1410	37355.737
B2	0.0755	9	10011	1572	2.96	0	1410	37355.7264
B2	0.0954	8	10050	1499	2.96	0	1410	37355.7113
B2	0.1569	10	10025	1622	3.13	0	1410	37355.6837
B2	0.2051	7	10020	1576	3.08	0	1410	37355.6186
B2	0.255	3	10014	1662	3.26	0	1410	37355.5734
B3	0	13	10029	1429	2.82	0	1410	37355.5731
B3	0.0021	5	10057	1507	2.8	0	1410	37355.5444
B3	0.0041	4	10029	1470	2.75	0	1410	37355.5341
B3	0.0108	7	10032	1488	2.83	0	1410	37355.4942
B3	0.0152	7	10050	1459	2.87	0	1410	37355.4841
B3	0.0247	8	10004	1442	2.89	0	1410	37355.4694
B3	0.0416	8	10008	1525	2.94	0	1410	37355.7658
B3	0.0509	9	10003	1469	2.93	0	1410	37355.7472
B3	0.0755	9	10035	1576	2.98	0	1410	37355.7371
B3	0.0954	6	10023	1632	3.08	0	1410	37355.7265
B3	0.1569	2	10023	1582	3.14	0	1410	37355.7115

Detector ID	Sample ID	Alpha	Beta	Guard	Count Time	Event	Voltage	TOD
B3	0.2051	7	10013	1662	3.21	0	1410	37355.6838
B3	0.255	8	10023	1693	3.28	0	1410	37355.6187
B4	0	5	10055	1471	2.87	0	1410	37355.6184
B4	0.0021	7	10026	1405	2.75	0	1410	37355.5731
B4	0.0041	4	10058	1508	2.8	0	1410	37355.5444
B4	0.0108	3	10040	1484	2.77	0	1410	37355.5341
B4	0.0152	6	10026	1516	2.88	0	1410	37355.4943
B4	0.0247	8	10034	1448	2.85	0	1410	37355.4841
B4	0.0416	7	10035	1465	2.95	0	1410	37355.4695
B4	0.0509	11	10003	1501	2.89	0	1410	37355.7658
B4	0.0755	6	10023	1504	3	0	1410	37355.7473
B4	0.0954	4	10037	1573	2.98	0	1410	37355.7371
B4	0.1569	5	10032	1689	3.2	0	1410	37355.7266
B4	0.2051	5	10025	1625	3.22	0	1410	37355.7115
B4	0.255	3	10004	1705	3.3	0	1410	37355.6838
C1	0	10	10009	1587	2.79	0	1440	37355.6835
C1	0.0108	7	10053	1610	2.75	0	1440	37355.5443
C1	0.0152	6	10041	1641	2.84	0	1440	37355.5342
C1	0.0247	4	10015	1623	2.81	0	1440	37355.4942
C1	0.0416	6	10017	1634	2.93	0	1440	37355.4841
C1	0.0509	9	10010	1580	2.8	0	1440	37355.4694
C1	0.0755	3	10025	1666	2.93	0	1440	37355.7658
C1	0.0954	3	10025	1580	2.91	0	1440	37355.7472
C1	0.1569	6	10010	1852	3.15	0	1440	37355.7372
C1	0.2051	8	10040	1830	3.13	0	1440	37355.7265
C1	0.255	7	10011	1862	3.24	0	1440	37355.7115
C2	0	4	10060	1601	2.77	0	1440	37355.7112
C2	0.0021	3	10026	1494	2.63	0	1440	37355.6834
C2	0.0041	9	10033	1569	2.7	0	1440	37355.6183
C2	0.0108	12	10014	1517	2.71	0	1440	37355.573
C2	0.0152	16	10032	1602	2.74	0	1440	37355.5443
C2	0.0247	16	10017	1607	2.77	0	1440	37355.5341
C2	0.0416	7	10040	1600	2.79	0	1440	37355.4942
C2	0.0509	11	10031	1588	2.84	0	1440	37355.484
C2	0.0755	4	10034	1617	2.88	0	1440	37355.4694
C2	0.0954	16	10047	1647	2.9	0	1440	37355.7658
C2	0.1569	8	10032	1666	3.06	0	1440	37355.7473
C2	0.2051	3	10030	1791	3.04	0	1440	37355.7372

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Detector ID	Sample ID	Alpha	Beta	Guard	Count Time	Event	Voltage	TOD
C2	0.255	11	10010	1882	3.24	0	1440	37355.7266
C3	0	6	10048	1663	2.86	0	1440	37355.7263
C3	0.0021	5	10038	1578	2.74	0	1440	37355.7112
C3	0.0041	8	10035	1573	2.77	0	1440	37355.6834
C3	0.0108	7	10024	1669	2.9	0	1440	37355.6184
C3	0.0152	7	10014	1604	2.85	0	1440	37355.5731
C3	0.0247	2	10016	1664	2.86	0	1440	37355.5444
C3	0.0416	10	10022	1723	2.99	0	1440	37355.5343
C3	0.0509	3	10040	1679	2.94	0	1440	37355.4943
C3	0.0755	4	10022	1652	2.95	0	1440	37355.4841
C3	0.0954	7	10016	1698	3.03	0	1440	37355.4695
C3	0.1569	3	9999	1797	3.13	0	1440	37355.7659
C3	0.2051	5	10034	1745	3.2	0	1440	37355.7474
C3	0.255	7	10033	1942	3.31	0	1440	37355.7373
C4	0	10	10003	1637	2.78	0	1440	37355.737
C4	0.0021	5	10047	1592	2.71	0	1440	37355.7262
C4	0.0041	11	10038	1585	2.75	0	1440	37355.7112
C4	0.0108	5	10028	1574	2.77	0	1440	37355.6835
C4	0.0152	3	10012	1611	2.79	0	1440	37355.6184
C4	0.0247	7	10011	1605	2.85	0	1440	37355.5731
C4	0.0416	4	10013	1654	2.85	0	1440	37355.5444
C4	0.0509	6	10021	1654	2.85	0	1440	37355.5342
C4	0.0755	5	10037	1685	2.95	0	1440	37355.4943
C4	0.0954	5	10015	1651	2.95	0	1440	37355.4841
C4	0.1569	5	10021	1752	3.13	0	1440	37355.4696
C4	0.2051	7	10032	1788	3.12	0	1440	37355.7659
C4	0.255	3	10025	1782	3.28	0	1440	37355.7475

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SEVERN TRENT SERVICES

Efficiency/Attenuation Calibration Standards

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Radiochemistry Prep Report

General Prep Information

Analysis	Batch	Method Description	Analyst
ABT	56	GROSS A/B BY DOE RP-710 MOD	

Weights

Lot ID	Aliquot	Gross	Tare	Mass	Gross	Tare	Mass
Alpha-001C		8.2087	8.2087	0.0000			
Alpha-002		8.2473	8.2452	0.0021			
Alpha-003		8.2389	8.2348	0.0041			
Alpha-004		8.1666	8.1570	0.0096			
Alpha-005		8.2600	8.2451	0.0149			
Alpha-006		8.2475	8.2236	0.0239			
Alpha-007		8.2855	8.2444	0.0411			
Alpha-008		8.2883	8.2395	0.0488			
Alpha-009		8.2877	8.2115	0.0762			
Alpha-010		8.3087	8.2099	0.0988			
Alpha-011		8.3921	8.2407	0.1514			
Beta-001C					8.2399	8.2399	0.0000
Beta-002					8.2086	8.2065	0.0021
Beta-003					8.2472	8.2431	0.0041
Beta-004					8.2471	8.2363	0.0108
Beta-005					8.2329	8.2177	0.0152
Beta-006					8.2501	8.2254	0.0247
Beta-007					8.2217	8.1801	0.0416
Beta-008					8.2674	8.2165	0.0509
Beta-009					8.3346	8.2591	0.0755
Beta-010					8.3068	8.2114	0.0954
Beta-011					8.3855	8.2286	0.1569
Beta-012					8.4741	8.2690	0.2051
Beta-013					8.4716	8.2166	0.2550

Spike Information

Isotope	Lot ID	No	QCCode	Std. No.	Volume	Ref. Date	Activity	Units
Th-230	Alpha	1	C	01050	1.0000	07/18/2001	4452	dpm/mL
Sr-90/Y-90	Beta	1	C	01051	1.0000	07/18/2001	8299.8	dpm/mL

Analyst's Signature Date 9-27-01 Reviewed By Date 9-27-01

Atlanta, Georgia 30378 - U.S.A.

Phone (404) 352-8677
Fax (404) 352-2837

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

56869-334

Sr-90 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared using an aliquot measured gravimetrically from a master radionuclide solution standard. The master radionuclide solution standard was calibrated by the Department Des Applications Et De La Metrologie Des Rayonnements Ionisants (DAMRI), Paris, France, as Number 25931.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

Radionuclide purity and calibration were checked by germanium gamma-ray spectrometry and liquid scintillation counting. The nuclear decay rate and assay date for this source are given below.

ISOTOPE:	Sr-90
ACTIVITY (dps):	7.513 E+05
CALIBRATION DATE:	December 3, 1998 12:00 EST
HALF-LIFE:	28.74 years
PERCENT UNCERTAINTY:	5.0

5.10743 grams of solution 30 ppm Sr carrier in 0.1M HCl.

P O NUMBER 612904-000 CP, Item 2

PREPARED BY: M. D. Carrie

M. D. Carrie, Radicchemist

Q A APPROVED: 12-7-98

Sr^{90}

.9
99-078

prep 10-14-99
I.D. # 56869-334

20.305 µCi in 5.10743 g

5.10743 g / 50 ml in H_2O = 884.6 µCi / ml

ANALYTICS
1380 Seaboard Ind. Blvd. · Atlanta, GA 30318 · U.S.A. (404) 352-8677
Type 4 Sr^{-90}
STD # 56869-334 Date 12/3/98 12:00 EST
Amount 20.305 µCi Exp. QA
P.O. # 612904-000 OP, Item 2
5.10743 grams solution in HCl
CAUTION: RADIOACTIVE MATERIAL

Quanterra Environmental Services

Standard Preparation Log - Radiochemistry

St. Louis, Missouri

Notebook: 800 Page 31

Date Prepared	Expiration Date	Standard ID Number	Isotope	Parent ID Number	Parent Activity	Parent Ref. Date	Aliquot	Dilution Volume	Change in Time	T 1/2	Final Activity	Solvent/Lot #	Prep'd Initials	Cal. Ver Initials	Comments
07/09/99	07/09/04	91-141-5-5-1	Pu 242	91-141-5-5	[illegible] 7,777.8	12-18-89	6.8122g	50ml	NA	NA	904.123	1M HNO3 6623 [illegible]	BLG		
07/09/99	07/09/04	99-049	Pu242	91-142-55-1	904.123	12-18-89	2.5ml	100ml	NA	NA	22.60	1M HNO3 6623 [illegible]	BLG		
09/20/99	[illegible]	990666	Th229	[illegible]	[illegible]	06/01/96	5.1733g	100ml	NA	NA	103.59	1M HNO3 6623 [illegible]	BLG		
09/20/99	09/20/00	99-067	Th229	99066	103.59 [illegible]	06/01/96	15ml	100ml	NA	NA	15.53	1M HNO3	BLG		
9-23-99	3/23/00	99-068	Natural Uranium	M50122-98	1000.2 µg/ml	12/1/98	1.00ml	1000ml	NA	NA	1.0002 µg/ml	0.8M HNO3	JTK		
|	|	99069	|	99068	1.0002 µg/ml	12/1/98	20ml	100ml	|	|	200ng/ml	|	|		
|	|	99070	|	|	|	|	15ml	|	|	|	150ng/ml	|	|		
|	|	99071	|	|	|	|	10ml	|	|	|	100ng/ml	|	|		
|	|	99072	|	|	|	|	5ml	|	|	|	50ng/ml	|	|		
|	|	99073	|	|	|	|	1ml	|	|	|	10ng/ml	|	|		
|	|	99074	|	99071	100ng/ml	|	5ml	|	|	|	5ng/ml	|	|		
↓	↓	99075	↓	99073	10ng/ml	↓	10ml	↓	↓	↓	1ng/ml	↓	↓		
9/28/99	9-1-2001	99076	Natural Uranium	METOUNG -99	1000.2µg/ml	9-1-99	1.0ml	1L	NA	NA	1.0µg/ml	0.8M HNO3	JTK/BD		
9/28/99	9-1-2001	99077	Natural Uranium	99076	1µg/ml	9-28-99	20ml	100ml	N/A	N/A	200ng/ml	↓	JTK/BD		
10-14-99		99-078	Sr 90	51869-139	28.345 [illegible]	12-3-98	5.0116g	50 [illegible]		28.75 yr	111,461 [illegible]	1M HCl 6623 [illegible]	BT		
10-14-99		99-079	Th 230	184138	21.32 nCi/g	3-1-99	4.4413	50ml	N/A	7.54×10⁴ yr	4132.4 [illegible]		BT		
10-14-99		99-080	Sr90	99-078	111,461 [illegible]	12-3-98	0.5ml	100ml	311 days	28.75 yr	4413 [illegible]	↓	BT		
			"	"									BT		Entry corrected BT

SEVERN TRENT SERVICES

Logbook: 2060

Radiochemistry
Standards Preparation Logbook

Date Prep'd	Expir. Date	Standard ID Number	Isotope	Parent ID Number	Parent Activity	Parent Ref. Date	Aliquot	Dilution Volume	Change in Time	T ½	Final Activity	Solvent/ Lot #	Prep'd Initials	Cal. Ver. Initials	Comments
5/24/01	7/24/01	01-043	Uncat Gel Std.	01-041	100 pCi/mL	5/24/01	10 mL	100 mL	N/A	N/A	10 pCi/mL	0.5M HNO3	RSD		
↓	↓	01-044	↓	01-042	50 pCi/mL	↓	10 mL	↓	↓	↓	5 pCi/mL	↓	↓		
↓	↓	01-045	↓	01-041	100 pCi/mL	↓	1 mL	↓	↓	↓	1 pCi/mL	↓	↓		
6.6.01	6.6.02	01046	Th 229	00-015	102.2 dpm/mL	7/96	15 mL 30 mL	100 mL 200 mL	N/A	N/A	15.33 dpm/mL	1m HNO_3	SDS	ST 6.6.01 calc.	
6.12.01	6.12.02	01-047	Th 229	00-015	102.2 dpm/mL	7/96	8.55 ml	100 ml	N/A	N/A	8.74 dpm/mL	1m HNO_3	SDS	BT 6.12.01 calc.	
6/14/01	6/14/02	Y-30	STD YTTRIUM CARRIER	Yttrium oxalate trihydrate	N/A	N/A	8.2g	200mL	N/A	N/A	Concentration 18.1 mg/mL	DI H_2O	REW		Reported in Radiochem
NA 6/7/01	9/14/01	01-048	Uncat (Sr)	00063	1 mg/mL	9/14/99	20 mL	100 mL	N/A	N/A	200 mg	0.5M HNO_3	HA	BT 7-5-01 calc.	LCS
7/6/01	7/6/02	01-049	RA-226	01-012	1,048 dpm/mL	2/16/01	2.0 ml	100.0 mL	N/A	N/A	20.36 dpm/mL	0.8 M HNO_3	BMW		
6/10/01	6/10/02	Y-30	Std. Yttrium Carrier	Yttrium Oxalate Trihydrate	N/A	N/A	8.2g	200 mL	N/A	N/A	25.2 mg/mL	DI H_2O	REW		Returned unused Y30. Diluted untracer.
7/17/01	7/17/02	01-050	Th-230	Vial # C1781-314	3,751 dpm/vial	6/21/01	5.1633 g	50.0 mL	N/A	75,380 yrs	4,452 dpm/mL	0.3M HNO_3	BMW		- Calc. conc. STD's.
7/18/01	7/18/02	01-051	SR90	99-078	82/1990.4 dpm/mL	12/31/96	0.5 mL	100 mL	956 days	28.5 years	4149.9 dpm/mL	0.5M HNO_3	BMW	7.19.01 calc.	Jerry corrected Bq
7.18.01	7.18.02	01052	Th 229	5340 508	1.633x10^5 dpm/mL	7.18.96	.5mL	100 mL	N/A	N/A	816.5	N/A	SDS		

Additional Comments:

Decay Correction

Strontium 90							
Initial Activity:	884861.1	dpm	Parent				
Reference Date:	12/3/98						
Current Date:	4/15/02		(or date at which you wish to determine activity)				
Elapsed Time:	1229.000	days					
Half Life:	10409.625	days					
Exponential Term:	0.9214234						
Corrected Activity:	815147.47	dpm	367183.5	pCi	13585.79	Bq	
Activity (Sr/Y-90)	1630294.9	dpm	734367.1	pCi	27171.58	Bq	

0.5 ml → 1000 ml

$$\frac{(815147.47)(0.5\text{ml})}{1000\text{ml}} = 4075.73\ \text{dpm}$$

8151.5 dpm/ml 5 ml/vial

ST 4-24-02

CERTIFICATE OF CALIBRATION

CAL3000 STANDARDIZED SOLUTION

Radionuclide:	Th-230[1]	**Activity:**	3.944 kBq (106.6 nCi)
Serial Number:	A8438	**Mass of Solution:**	4.9998 grams
Concentration:	788.8 Bq/g (21.32 nCi/g)	**Chemical Form:**	$Th(NO_3)_4$ in 0.1 M HNO_3
Half Life[2]:	$(7.54 \pm 0.03) \times 10^4$ years	**Reference Date:**	1200 PST March 1, 1998

PRINCIPAL EMISSIONS[2]

Type	Energy (keV)	Intensity (%)
alpha	4621.1	22.4
alpha	4687.8	76.3

SOURCE DESCRIPTION

Standardized solution in a flame-seal ampoule.

METHOD OF CALIBRATION

Gravimetric aliquots of a master solution were calibrated by liquid scintillation counting. The efficiency for Th-230 was established through ongoing intercomparisons with the National Institute of Standards and Technology. A gravimetric aliquot of this master solution was dispensed into a flame-seal ampoule. This standard is indirectly (implicitly) traceable to the National Institute of Standards and Technology.

North American Scientific, Inc. actively participates in the Radioactivity Measurements Assurance Program conducted by the National Institute of Standards and Technology in cooperation with the Nuclear Energy Institute.

TOTAL UNCERTAINTY (99% Confidence Level)

Systematic uncertainty	2.15%
Weighing uncertainty	0.07%
Total uncertainty (quadratic sum)	± 2.15%

Jay Fan, Ph.D.
Calibration Laboratory Manager

March 23, 1998
Date

REFERENCES

The solution contained 0.29% Ra-226 as of 28 September 1996.
Table of Radioactive Isotopes, 7th edition, 1986.

• LEAK TEST CERTIFICATION ON REVERSE •

North American Scientific, Inc. 7435 Greenbush Ave., North Hollywood, CA 91605 (818) 503-9201 Fax (818) 503-0764

Th 230

11

9907

pkg date : 10-14-99

I.D. # A8435

North American Scientific

STANDARDIZED SOLUTION

CAUTION RADIOACTIVE MATERIAL

4.9415 g

788.8 Bq/g

$\left(\frac{4.8413\ g}{50\ ml}\right)$ $\frac{47328\ dpm}{g}$: 4582.58 dpm/ml

SEVERN TRENT SERVICES

Efficiency/Attenuation Calibration Verification

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Radiochemistry Prep Report

General Prep Information

Analysis	Batch	Method Description	Analyst
ABT	M02_004	GROSS A/B BY GFPC SW846 9310 MOD	

Weights

			ABT/Alpha Spiked			Beta Spiked		
Lot ID	WorkNo	Aliquot	Gross	Tare	Mass	Gross	Tare	Mass
Alpha_LOW-001		1.000 g	8.2087	8.2087	0.0000			
Alpha_MED-005		1.000 g	8.2600	8.2451	0.0149			
AlphaHIGH-009		1.000 g	8.2877	8.2115	0.0762			
Beta_HIGH-009		1.000 g				8.3346	8.2591	0.0755
Beta_LOW-001		1.000 g				8.2399	8.2399	0.0000
Beta_MED-005		1.000 g				8.2329	8.2177	0.0152

Spike Information

Isotope	Lot ID	No	QCCode	Std. No.	Volume	Ref. Date	Activity	Units

See Calibration standards prep sheet — Analyst's Signature — Date — Reviewed By — 5-14-02 — Date

LOT# F5D220345

STL ST. LOUIS

Gross Alpha/Beta Analysis Report for Batch # M02_004

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Data Summary

Identification		Measurement		Run Data				Count Data				Results				
Lot Number	Work Order	Aliquot	Mass(g)	Run Date/Time	Instr	Dur		Samp CPM	Blg CPM	Efficiency	TF	Activity	Units	Error	MDA	DLC
Alpha_LOW-001C		1.0000 sam	0.0000	04/26/02 9:32	Blue A1	8.95	Alpha	1.12E+03	0.038	1.0000	0.2485	2.03E+03	pCi/sam	2.07E+02	1.10E+00	2.75E-01
							Beta						pCi/sam			
Alpha_LOW-001C		1.0000 sam	0.0000	04/26/02 11:54	Blue A2	8.88	Alpha	1.13E+03	0.026	1.0000	0.2492	2.04E+03	pCi/sam	2.08E+02	1.01E+00	2.28E-01
							Beta						pCi/sam			
Alpha_LOW-001C		1.0000 sam	0.0000	04/26/02 10:56	Blue A3	8.87	Alpha	1.13E+03	0.038	1.0000	0.2487	2.04E+03	pCi/sam	2.08E+02	1.10E+00	2.76E-01
							Beta						pCi/sam			
Alpha_LOW-001C		1.0000 sam	0.0000	04/30/02 7:43	Blue A4	8.85	Alpha	1.13E+03	0.048	1.0000	0.2491	2.04E+03	pCi/sam	2.08E+02	1.17E+00	3.10E-01
							Beta						pCi/sam			
Alpha_LOW-001C		1.0000 sam	0.0000	04/26/02 13:54	Blue B2	8.83	Alpha	1.13E+03	0.223	1.0000	0.2494	2.05E+03	pCi/sam	2.09E+02	1.89E+00	6.68E-01
							Beta						pCi/sam			
Alpha_LOW-001C		1.0000 sam	0.0000	04/29/02 11:03	Blue B3	9.13	Alpha	1.10E+03	0.048	1.0000	0.2452	2.01E+03	pCi/sam	2.05E+02	1.16E+00	3.10E-01
							Beta						pCi/sam			
Alpha_LOW-001C		1.0000 sam	0.0000	04/29/02 10:02	Blue B4	8.96	Alpha	1.12E+03	0.057	1.0000	0.2424	2.08E+03	pCi/sam	2.12E+02	1.25E+00	3.45E-01
							Beta						pCi/sam			
Alpha_LOW-001C		1.0000 sam	0.0000	04/30/02 14:02	Blue C1	8.87	Alpha	1.13E+03	0.082	1.0000	0.2476	2.05E+03	pCi/sam	2.09E+02	1.37E+00	4.07E-01
							Beta						pCi/sam			
Alpha_LOW-001C		1.0000 sam	0.0000	05/08/02 13:36	Blue C2	8.8	Alpha	1.14E+03	0.074	1.0000	0.2502	2.05E+03	pCi/sam	2.09E+02	1.32E+00	3.84E-01
							Beta						pCi/sam			
Alpha_LOW-001C		1.0000 sam	0.0000	04/30/02 14:22	Blue C3	9.1	Alpha	1.10E+03	0.040	1.0000	0.2384	2.08E+03	pCi/sam	2.12E+02	1.15E+00	2.91E-01
							Beta						pCi/sam			
Alpha_LOW-001C		1.0000 sam	0.0000	04/30/02 14:40	Blue C4	8.87	Alpha	1.13E+03	0.062	1.0000	0.2511	2.02E+03	pCi/sam	2.06E+02	1.25E+00	3.49E-01
							Beta						pCi/sam			
Alpha_MED-005C		1.0000 sam	0.0149	04/26/02 10:56	Blue A1	12.01	Alpha	8.33E+02	0.038	1.0000	0.1911	1.96E+03	pCi/sam	2.00E+02	1.15E+00	3.09E-01
							Beta						pCi/sam			
Alpha_MED-005C		1.0000 sam	0.0149	04/26/02 9:32	Blue A2	12.02	Alpha	8.32E+02	0.026	1.0000	0.1915	1.96E+03	pCi/sam	2.00E+02	1.04E+00	2.55E-01
							Beta						pCi/sam			
Alpha_MED-005C		1.0000 sam	0.0149	04/26/02 11:54	Blue A3	12.08	Alpha	8.28E+02	0.038	1.0000	0.1913	1.95E+03	pCi/sam	1.99E+02	1.14E+00	3.07E-01
							Beta						pCi/sam			
Alpha_MED-005C		1.0000 sam	0.0149	05/08/02 13:36	Blue A4	12.13	Alpha	8.26E+02	0.071	1.0000	0.1922	1.93E+03	pCi/sam	1.97E+02	1.36E+00	4.17E-01
							Beta						pCi/sam			

NOTE: Uncertainty results for this report were calculated using a 2 sigma confidence level.

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LOT# F5D220345

STL ST. LOUIS

[redacted]

Gross Alpha/Beta Analysis Report for Batch # M02_004

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Alpha_MED-005C	1.0000 sam	0.0149	04/29/02 10:02	Blue B2	11.98	*Alpha*	8.36E+02	0.223	1.0000	0.1928	**1.95E+03** pCi/sam	1.99E+02	2.01E+00	7.42E-01
						Beta					pCi/sam			
Alpha_MED-005C	1.0000 sam	0.0149	04/26/02 13:54	Blue B3	12.44	*Alpha*	8.04E+02	0.048	1.0000	0.1881	**1.93E+03** pCi/sam	1.96E+02	1.21E+00	3.46E-01
						Beta					pCi/sam			
Alpha_MED-005C	1.0000 sam	0.0149	04/29/02 11:04	Blue B4	12.61	*Alpha*	7.93E+02	0.057	1.0000	0.1857	**1.92E+03** pCi/sam	1.96E+02	1.28E+00	3.79E-01
						Beta					pCi/sam			
Alpha_MED-005C	1.0000 sam	0.0149	04/30/02 7:43	Blue C1	12.13	*Alpha*	8.25E+02	0.082	1.0000	0.1910	**1.95E+03** pCi/sam	1.98E+02	1.43E+00	4.51E-01
						Beta					pCi/sam			
Alpha_MED-005C	1.0000 sam	0.0149	04/30/02 14:02	Blue C2	11.9	*Alpha*	8.41E+02	0.049	1.0000	0.1942	**1.95E+03** pCi/sam	1.99E+02	1.22E+00	3.46E-01
						Beta					pCi/sam			
Alpha_MED-005C	1.0000 sam	0.0149	04/30/02 15:17	Blue C3	12.86	*Alpha*	7.91E+02	0.040	1.0000	0.1835	**1.94E+03** pCi/sam	1.98E+02	1.17E+00	3.21E-01
						Beta					pCi/sam			
Alpha_MED-005C	1.0000 sam	0.0149	04/30/02 14:22	Blue C4	11.78	*Alpha*	8.49E+02	0.062	1.0000	0.1946	**1.97E+03** pCi/sam	2.00E+02	1.31E+00	3.91E-01
						Beta					pCi/sam			
AlphaHIGH-009C	1.0000 sam	0.0762	04/26/02 11:54	Blue A1	24.03	*Alpha*	4.16E+02	0.038	1.0000	0.0906	**2.07E+03** pCi/sam	2.11E+02	1.48E+00	4.60E-01
						Beta					pCi/sam			
AlphaHIGH-009C	1.0000 sam	0.0762	04/26/02 10:56	Blue A2	23.09	*Alpha*	4.33E+02	0.026	1.0000	0.0929	**2.10E+03** pCi/sam	2.14E+02	1.33E+00	3.79E-01
						Beta					pCi/sam			
AlphaHIGH-009C	1.0000 sam	0.0762	04/26/02 9:32	Blue A3	24.02	*Alpha*	4.16E+02	0.038	1.0000	0.0920	**2.04E+03** pCi/sam	2.08E+02	1.46E+00	4.53E-01
						Beta					pCi/sam			
AlphaHIGH-009C	1.0000 sam	0.0762	05/06/02 11:17	Blue A4	23.56	*Alpha*	4.25E+02	0.071	1.0000	0.0925	**2.07E+03** pCi/sam	2.11E+02	1.80E+00	6.22E-01
						Beta					pCi/sam			
AlphaHIGH-009C	1.0000 sam	0.0762	04/29/02 11:04	Blue B2	24.04	*Alpha*	4.16E+02	0.223	1.0000	0.0925	**2.02E+03** pCi/sam	2.06E+02	2.73E+00	1.09E+00
						Beta					pCi/sam			
AlphaHIGH-009C	1.0000 sam	0.0762	04/29/02 10:02	Blue B3	24.85	*Alpha*	4.02E+02	0.048	1.0000	0.0892	**2.03E+03** pCi/sam	2.07E+02	1.58E+00	5.16E-01
						Beta					pCi/sam			
AlphaHIGH-009C	1.0000 sam	0.0762	04/26/02 13:54	Blue B4	24.33	*Alpha*	4.11E+02	0.057	1.0000	0.0882	**2.10E+03** pCi/sam	2.14E+02	1.72E+00	5.75E-01
						Beta					pCi/sam			
AlphaHIGH-009C	1.0000 sam	0.0762	05/06/02 10:38	Blue C1	23.41	*Alpha*	4.27E+02	0.082	1.0000	0.0908	**2.12E+03** pCi/sam	2.16E+02	1.94E+00	6.83E-01
						Beta					pCi/sam			
AlphaHIGH-009C	1.0000 sam	0.0762	04/30/02 7:43	Blue C2	23.44	*Alpha*	4.27E+02	0.049	1.0000	0.0943	**2.04E+03** pCi/sam	2.08E+02	1.57E+00	5.08E-01
						Beta					pCi/sam			

NOTE: Uncertainty results for this report were calculated using a 2 sigma confidence level.

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STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Gross Alpha/Beta Analysis Report for Batch # M02_004

AlphaHIGH-009C	1.0000 sam	0.0762	04/30/02 14:40	Blue C3	25.01	*Alpha*	4.00E+02	0.040	1.0000	0.0861	2.09E+03 pCi/sam	2.13E+02	1.54E+00	4.87E-01
						Beta					pCi/sam			
AlphaHIGH-009C	1.0000 sam	0.0762	04/30/02 15:17	Blue C4	22.94	*Alpha*	4.36E+02	0.062	1.0000	0.0936	2.10E+03 pCi/sam	2.14E+02	1.73E+00	5.82E-01
						Beta					pCi/sam			
Beta_LOW-001C	1.0000 sam	0.0000	04/26/02 13:53	Blue A1	2.83	*Alpha*					pCi/sam			
						Beta	3.54E+03	1.155	1.0000	0.4417	3.61E+03 pCi/sam	3.68E+02	4.01E+00	1.52E+00
Beta_LOW-001C	1.0000 sam	0.0000	04/29/02 11:00	Blue A2	2.77	*Alpha*					pCi/sam			
						Beta	3.63E+03	1.053	1.0000	0.4453	3.67E+03 pCi/sam	3.74E+02	3.89E+00	1.45E+00
Beta_LOW-001C	1.0000 sam	0.0000	04/29/02 9:55	Blue A3	2.79	*Alpha*					pCi/sam			
						Beta	3.60E+03	1.090	1.0000	0.4490	3.61E+03 pCi/sam	3.68E+02	3.89E+00	1.46E+00
Beta_LOW-001C	1.0000 sam	0.0000	04/30/02 14:04	Blue A4	2.79	*Alpha*					pCi/sam			
						Beta	3.60E+03	1.186	1.0000	0.4440	3.65E+03 pCi/sam	3.72E+02	4.06E+00	1.54E+00
Beta_LOW-001C	1.0000 sam	0.0000	04/26/02 10:59	Blue B2	2.84	*Alpha*					pCi/sam			
						Beta	3.53E+03	1.177	1.0000	0.4469	3.56E+03 pCi/sam	3.63E+02	3.98E+00	1.51E+00
Beta_LOW-001C	1.0000 sam	0.0000	04/26/02 11:56	Blue B3	2.83	*Alpha*					pCi/sam			
						Beta	3.54E+03	1.100	1.0000	0.4396	3.63E+03 pCi/sam	3.70E+02	3.95E+00	1.49E+00
Beta_LOW-001C	1.0000 sam	0.0000	04/26/02 9:38	Blue B4	2.85	*Alpha*					pCi/sam			
						Beta	3.52E+03	1.001	1.0000	0.4403	3.60E+03 pCi/sam	3.67E+02	3.79E+00	1.41E+00
Beta_LOW-001C	1.0000 sam	0.0000	04/30/02 14:21	Blue C1	2.79	*Alpha*					pCi/sam			
						Beta	3.60E+03	0.964	1.0000	0.4437	3.65E+03 pCi/sam	3.72E+02	3.76E+00	1.39E+00
Beta_LOW-001C	1.0000 sam	0.0000	04/30/02 14:41	Blue C2	2.72	*Alpha*					pCi/sam			
						Beta	3.68E+03	1.320	1.0000	0.4556	3.64E+03 pCi/sam	3.71E+02	4.19E+00	1.60E+00
Beta_LOW-001C	1.0000 sam	0.0000	04/30/02 7:44	Blue C3	2.81	*Alpha*					pCi/sam			
						Beta	3.58E+03	1.056	1.0000	0.4375	3.68E+03 pCi/sam	3.75E+02	3.93E+00	1.47E+00
Beta_LOW-001C	1.0000 sam	0.0000	05/06/02 10:38	Blue C4	2.79	*Alpha*					pCi/sam			
						Beta	3.59E+03	1.022	1.0000	0.4472	3.62E+03 pCi/sam	3.69E+02	3.81E+00	1.42E+00
Beta_MED-005C	1.0000 sam	0.0152	04/29/02 9:55	Blue A1	2.82	*Alpha*					pCi/sam			
						Beta	3.55E+03	1.155	1.0000	0.4359	3.67E+03 pCi/sam	3.74E+02	4.07E+00	1.54E+00
Beta_MED-005C	1.0000 sam	0.0152	04/26/02 13:53	Blue A2	2.8	*Alpha*					pCi/sam			
						Beta	3.58E+03	1.053	1.0000	0.4397	3.67E+03 pCi/sam	3.74E+02	3.91E+00	1.46E+00
Beta_MED-005C	1.0000 sam	0.0152	04/29/02 11:00	Blue A3	2.79	*Alpha*					pCi/sam			
						Beta	3.60E+03	1.090	1.0000	0.4423	3.66E+03 pCi/sam	3.73E+02	3.95E+00	1.48E+00

NOTE: Uncertainty results for this report were calculated using a 2 sigma confidence level.

[redacted]

Gross Alpha/Beta Analysis Report for Batch # M02_004

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Beta_MED-005C	1.0000 sam	0.0152	04/30/02 14:41	Blue A4	2.86	Alpha					pCi/sam			
						Beta	3.51E+03	1.186	1.0000	0.4377	3.61E+03 pCi/sam	3.68E+02	4.06E+00	1.54E+00
Beta_MED-005C	1.0000 sam	0.0152	04/26/02 9:38	Blue B2	2.84	Alpha					pCi/sam			
						Beta	3.53E+03	1.177	1.0000	0.4409	3.61E+03 pCi/sam	3.68E+02	4.03E+00	1.53E+00
Beta_MED-005C	1.0000 sam	0.0152	04/26/02 10:59	Blue B3	2.83	Alpha					pCi/sam			
						Beta	3.55E+03	1.100	1.0000	0.4328	3.69E+03 pCi/sam	3.76E+02	4.01E+00	1.51E+00
Beta_MED-005C	1.0000 sam	0.0152	04/26/02 11:56	Blue B4	2.88	Alpha					pCi/sam			
						Beta	3.48E+03	1.001	1.0000	0.4342	3.61E+03 pCi/sam	3.69E+02	3.82E+00	1.42E+00
Beta_MED-005C	1.0000 sam	0.0152	05/06/02 11:17	Blue C1	2.71	Alpha					pCi/sam			
						Beta	3.70E+03	0.964	1.0000	0.4389	3.79E+03 pCi/sam	3.87E+02	3.87E+00	1.42E+00
Beta_MED-005C	1.0000 sam	0.0152	04/30/02 14:21	Blue C2	2.76	Alpha					pCi/sam			
						Beta	3.63E+03	1.320	1.0000	0.4500	3.63E+03 pCi/sam	3.71E+02	4.20E+00	1.61E+00
Beta_MED-005C	1.0000 sam	0.0152	04/30/02 14:04	Blue C3	2.85	Alpha					pCi/sam			
						Beta	3.52E+03	1.056	1.0000	0.4318	3.67E+03 pCi/sam	3.75E+02	3.94E+00	1.48E+00
Beta_MED-005C	1.0000 sam	0.0152	04/30/02 7:44	Blue C4	2.83	Alpha					pCi/sam			
						Beta	3.55E+03	1.094	1.0000	0.4413	3.62E+03 pCi/sam	3.69E+02	3.93E+00	1.48E+00
Beta_HIGH-009C	1.0000 sam	0.0755	04/29/02 11:00	Blue A1	2.91	Alpha					pCi/sam			
						Beta	3.44E+03	1.155	1.0000	0.4156	3.73E+03 pCi/sam	3.80E+02	4.18E+00	1.59E+00
Beta_HIGH-009C	1.0000 sam	0.0755	04/29/02 9:55	Blue A2	2.96	Alpha					pCi/sam			
						Beta	3.40E+03	1.053	1.0000	0.4192	3.65E+03 pCi/sam	3.73E+02	3.96E+00	1.49E+00
Beta_HIGH-009C	1.0000 sam	0.0755	04/26/02 13:53	Blue A3	2.94	Alpha					pCi/sam			
						Beta	3.41E+03	1.090	1.0000	0.4187	3.67E+03 pCi/sam	3.74E+02	4.04E+00	1.52E+00
Beta_HIGH-009C	1.0000 sam	0.0755	04/30/02 14:21	Blue A4	2.94	Alpha					pCi/sam			
						Beta	3.41E+03	1.186	1.0000	0.4163	3.69E+03 pCi/sam	3.76E+02	4.19E+00	1.60E+00
Beta_HIGH-009C	1.0000 sam	0.0755	04/26/02 11:56	Blue B2	3.04	Alpha					pCi/sam			
						Beta	3.30E+03	1.177	1.0000	0.4198	3.54E+03 pCi/sam	3.61E+02	4.06E+00	1.55E+00
Beta_HIGH-009C	1.0000 sam	0.0755	04/26/02 9:38	Blue B3	2.94	Alpha					pCi/sam			
						Beta	3.41E+03	1.100	1.0000	0.4097	3.74E+03 pCi/sam	3.82E+02	4.14E+00	1.56E+00
Beta_HIGH-009C	1.0000 sam	0.0755	04/26/02 10:59	Blue B4	3.01	Alpha					pCi/sam			
						Beta	3.34E+03	1.001	1.0000	0.4125	3.64E+03 pCi/sam	3.72E+02	3.91E+00	1.46E+00
Beta_HIGH-009C	1.0000 sam	0.0755	04/30/02 14:41	Blue C1	2.96	Alpha					pCi/sam			
						Beta	3.38E+03	0.964	1.0000	0.4210	3.62E+03 pCi/sam	3.69E+02	3.82E+00	1.42E+00

NOTE: Uncertainty results for this report were calculated using a 2 sigma confidence level.

LOT# F5D220345

STL ST. LOUIS

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Gross Alpha/Beta Analysis Report for Batch # M02_004

Beta_HIGH-009C	1.0000 sam	0.0755	05/06/02 11:17	Blue C2	2.9	Alpha					pCi/sam				
						Beta	3.45E+03	1.240	1.0000	0.4295	3.62E+03 pCi/sam	3.69E+02	4.17E+00	1.60E+00	
Beta_HIGH-009C	1.0000 sam	0.0755	05/06/02 10:38	Blue C3	2.99	Alpha					pCi/sam				
						Beta	3.35E+03	1.173	1.0000	0.4117	3.66E+03 pCi/sam	3.74E+02	4.18E+00	1.59E+00	
Beta_HIGH-009C	1.0000 sam	0.0755	04/30/02 14:04	Blue C4	2.92	Alpha					pCi/sam				
						Beta	3.43E+03	1.094	1.0000	0.4202	3.68E+03 pCi/sam	3.75E+02	4.05E+00	1.53E+00	

LCS Summary

		Alpha			*Beta*		
LOTNo	WRKNO	Activity	Std Added	Recovery	Activity	Std Added	Recovery
Alpha_LOW-001		2.05E+03 pCi/sa	2.01E+03 pCi/sa	102.06%	pCi/sa	pCi/sa	
Alpha_LOW-001		2.08E+03 pCi/sa	2.01E+03 pCi/sa	103.60%	pCi/sa	pCi/sa	
Alpha_LOW-001		2.01E+03 pCi/sa	2.01E+03 pCi/sa	100.37%	pCi/sa	pCi/sa	
Alpha_LOW-001		2.03E+03 pCi/sa	2.01E+03 pCi/sa	101.05%	pCi/sa	pCi/sa	
Alpha_LOW-001		2.02E+03 pCi/sa	2.01E+03 pCi/sa	100.90%	pCi/sa	pCi/sa	
Alpha_LOW-001		2.04E+03 pCi/sa	2.01E+03 pCi/sa	101.58%	pCi/sa	pCi/sa	
Alpha_LOW-001		2.08E+03 pCi/sa	2.01E+03 pCi/sa	103.54%	pCi/sa	pCi/sa	
Alpha_LOW-001		2.04E+03 pCi/sa	2.01E+03 pCi/sa	101.93%	pCi/sa	pCi/sa	
Alpha_LOW-001		2.05E+03 pCi/sa	2.01E+03 pCi/sa	102.05%	pCi/sa	pCi/sa	
Alpha_LOW-001		2.04E+03 pCi/sa	2.01E+03 pCi/sa	101.86%	pCi/sa	pCi/sa	
Alpha_LOW-001		2.05E+03 pCi/sa	2.01E+03 pCi/sa	102.27%	pCi/sa	pCi/sa	
Alpha_MED-005		1.94E+03 pCi/sa	2.01E+03 pCi/sa	96.77%	pCi/sa	pCi/sa	
Alpha_MED-005		1.93E+03 pCi/sa	2.01E+03 pCi/sa	96.46%	pCi/sa	pCi/sa	
Alpha_MED-005		1.96E+03 pCi/sa	2.01E+03 pCi/sa	97.94%	pCi/sa	pCi/sa	
Alpha_MED-005		1.93E+03 pCi/sa	2.01E+03 pCi/sa	96.04%	pCi/sa	pCi/sa	
Alpha_MED-005		1.95E+03 pCi/sa	2.01E+03 pCi/sa	97.04%	pCi/sa	pCi/sa	
Alpha_MED-005		1.96E+03 pCi/sa	2.01E+03 pCi/sa	97.61%	pCi/sa	pCi/sa	
Alpha_MED-005		1.95E+03 pCi/sa	2.01E+03 pCi/sa	97.22%	pCi/sa	pCi/sa	
Alpha_MED-005		1.95E+03 pCi/sa	2.01E+03 pCi/sa	97.35%	pCi/sa	pCi/sa	
Alpha_MED-005		1.92E+03 pCi/sa	2.01E+03 pCi/sa	95.94%	pCi/sa	pCi/sa	
Alpha_MED-005		1.95E+03 pCi/sa	2.01E+03 pCi/sa	97.24%	pCi/sa	pCi/sa	
Alpha_MED-005		1.97E+03 pCi/sa	2.01E+03 pCi/sa	98.00%	pCi/sa	pCi/sa	

NOTE: Uncertainty results for this report were calculated using a 2 sigma confidence level.

887 of 922

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Gross Alpha/Beta Analysis Report for Batch # M02_004

AlphaHIGH-009	2.09E+03 pCi/sa	2.01E+03 pCi/sa	104.31%	pCi/sa	pCi/sa	
AlphaHIGH-009	2.10E+03 pCi/sa	2.01E+03 pCi/sa	104.61%	pCi/sa	pCi/sa	
AlphaHIGH-009	2.12E+03 pCi/sa	2.01E+03 pCi/sa	105.68%	pCi/sa	pCi/sa	
AlphaHIGH-009	2.04E+03 pCi/sa	2.01E+03 pCi/sa	101.61%	pCi/sa	pCi/sa	
AlphaHIGH-009	2.07E+03 pCi/sa	2.01E+03 pCi/sa	103.11%	pCi/sa	pCi/sa	
AlphaHIGH-009	2.04E+03 pCi/sa	2.01E+03 pCi/sa	101.70%	pCi/sa	pCi/sa	
AlphaHIGH-009	2.10E+03 pCi/sa	2.01E+03 pCi/sa	104.74%	pCi/sa	pCi/sa	
AlphaHIGH-009	2.03E+03 pCi/sa	2.01E+03 pCi/sa	101.31%	pCi/sa	pCi/sa	
AlphaHIGH-009	2.07E+03 pCi/sa	2.01E+03 pCi/sa	103.21%	pCi/sa	pCi/sa	
AlphaHIGH-009	2.02E+03 pCi/sa	2.01E+03 pCi/sa	100.96%	pCi/sa	pCi/sa	
AlphaHIGH-009	2.10E+03 pCi/sa	2.01E+03 pCi/sa	104.79%	pCi/sa	pCi/sa	
Beta_LOW-001	pCi/sa	pCi/sa		3.67E+03 pCi/sa	3.67E+03 pCi/sa	99.93%
Beta_LOW-001	pCi/sa	pCi/sa		3.65E+03 pCi/sa	3.67E+03 pCi/sa	99.48%
Beta_LOW-001	pCi/sa	pCi/sa		3.64E+03 pCi/sa	3.67E+03 pCi/sa	99.19%
Beta_LOW-001	pCi/sa	pCi/sa		3.56E+03 pCi/sa	3.67E+03 pCi/sa	96.94%
Beta_LOW-001	pCi/sa	pCi/sa		3.60E+03 pCi/sa	3.67E+03 pCi/sa	97.94%
Beta_LOW-001	pCi/sa	pCi/sa		3.62E+03 pCi/sa	3.67E+03 pCi/sa	98.55%
Beta_LOW-001	pCi/sa	pCi/sa		3.65E+03 pCi/sa	3.67E+03 pCi/sa	99.48%
Beta_LOW-001	pCi/sa	pCi/sa		3.68E+03 pCi/sa	3.67E+03 pCi/sa	100.24%
Beta_LOW-001	pCi/sa	pCi/sa		3.63E+03 pCi/sa	3.67E+03 pCi/sa	98.80%
Beta_LOW-001	pCi/sa	pCi/sa		3.61E+03 pCi/sa	3.67E+03 pCi/sa	98.32%
Beta_LOW-001	pCi/sa	pCi/sa		3.61E+03 pCi/sa	3.67E+03 pCi/sa	98.27%
Beta_MED-005	pCi/sa	pCi/sa		3.67E+03 pCi/sa	3.67E+03 pCi/sa	100.03%
Beta_MED-005	pCi/sa	pCi/sa		3.79E+03 pCi/sa	3.67E+03 pCi/sa	103.34%
Beta_MED-005	pCi/sa	pCi/sa		3.61E+03 pCi/sa	3.67E+03 pCi/sa	98.29%
Beta_MED-005	pCi/sa	pCi/sa		3.67E+03 pCi/sa	3.67E+03 pCi/sa	99.91%
Beta_MED-005	pCi/sa	pCi/sa		3.66E+03 pCi/sa	3.67E+03 pCi/sa	99.71%
Beta_MED-005	pCi/sa	pCi/sa		3.61E+03 pCi/sa	3.67E+03 pCi/sa	98.27%
Beta_MED-005	pCi/sa	pCi/sa		3.61E+03 pCi/sa	3.67E+03 pCi/sa	98.42%
Beta_MED-005	pCi/sa	pCi/sa		3.69E+03 pCi/sa	3.67E+03 pCi/sa	100.55%
Beta_MED-005	pCi/sa	pCi/sa		3.63E+03 pCi/sa	3.67E+03 pCi/sa	98.98%

NOTE: Uncertainty results for this report were calculated using a 2 sigma confidence level.

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Gross Alpha/Beta Analysis Report for Batch # M02_004

Beta__MED-005	pCi/sa	pCi/sa	3.62E+03 pCi/sa	3.67E+03 pCi/sa	98.58%
Beta__MED-005	pCi/sa	pCi/sa	3.67E+03 pCi/sa	3.67E+03 pCi/sa	99.95%
Beta_HIGH-009	pCi/sa	pCi/sa	3.74E+03 pCi/sa	3.67E+03 pCi/sa	101.97%
Beta_HIGH-009	pCi/sa	pCi/sa	3.68E+03 pCi/sa	3.67E+03 pCi/sa	100.24%
Beta_HIGH-009	pCi/sa	pCi/sa	3.73E+03 pCi/sa	3.67E+03 pCi/sa	101.48%
Beta_HIGH-009	pCi/sa	pCi/sa	3.64E+03 pCi/sa	3.67E+03 pCi/sa	99.24%
Beta_HIGH-009	pCi/sa	pCi/sa	3.54E+03 pCi/sa	3.67E+03 pCi/sa	96.28%
Beta_HIGH-009	pCi/sa	pCi/sa	3.62E+03 pCi/sa	3.67E+03 pCi/sa	98.47%
Beta_HIGH-009	pCi/sa	pCi/sa	3.67E+03 pCi/sa	3.67E+03 pCi/sa	99.82%
Beta_HIGH-009	pCi/sa	pCi/sa	3.66E+03 pCi/sa	3.67E+03 pCi/sa	99.76%
Beta_HIGH-009	pCi/sa	pCi/sa	3.65E+03 pCi/sa	3.67E+03 pCi/sa	99.49%
Beta_HIGH-009	pCi/sa	pCi/sa	3.69E+03 pCi/sa	3.67E+03 pCi/sa	100.55%
Beta_HIGH-009	pCi/sa	pCi/sa	3.62E+03 pCi/sa	3.67E+03 pCi/sa	98.52%

NOTE: Uncertainty results for this report were calculated using a 2 sigma confidence level.

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: M02_004Z

Batch ID: A/B

Reviewed By: JRC

Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample		Bkgd Time	Background		Net CPM	
					Alpha	Beta		Alpha	Beta	Alpha	Beta
001CA	Blue	C2	5/8/2002 13:36	9	10005	3014	1000	74	1240	1136.86	341.26
ALPHA_MED-005CA	Blue	A4	5/8/2002 13:36	12	10014	2841	1000	71	1157	825.49	233.06

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: M02_004X

Batch ID: A/B CALIB

Reviewed By: JK

Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
ALPHA_HIGH-009	Blue	A4	5/6/2002 11:17	24	10002	3308	1000	71	1157	424.46	139.25
BETA_HIGH-009	Blue	C2	5/6/2002 11:17	3	5	10007	1000	74	1240	1.65	3449.45
BETA_MED-005	Blue	C1	5/6/2002 11:17	3	13	10022	1000	82	964	4.72	3697.19

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: M02_004W

Batch ID: A/B CALIB

Reviewed By: JK

Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
ALPHA_HIGH-009	Blue	C1	5/6/2002 10:38	23	10003	4690	1000	82	964	427.21	199.38
ALPHA_LOW-001	Blue	C2	5/6/2002 10:38	12	10006	3082	1000	74	1240	831.68	254.95
ALPHA_MED-005	Blue	A4	5/6/2002 10:37	3	16	10029	1000	71	1157	5.64	3580.63
BETA_HIGH-009	Blue	C3	5/6/2002 10:38	3	9	10015	1000	59	1173	2.95	3348.33
BETA_LOW-001	Blue	C4	5/6/2002 10:38	3	7	10026	1000	64	1022	2.44	3592.53

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: ALPHA1

Reviewed By: JK

Batch ID: ~~ALPHA1~~ M02-0049

Date: 5/1-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta
ALPHA_LOW-001	Blue	A1	4/26/2002 9:32	9	10006	3105	1000	38	1155
ALPHA_MED-005	Blue	A2	4/26/2002 9:32	12	10002	2972	1000	26	1053
ALPHA_HIGH-009	Blue	A3	4/26/2002 9:32	24	10000	3466	1000	38	1090

Net CPM	
Alpha	Beta
1117.95	345.77
832.09	246.20
416.28	143.21

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: ALPHA2

Reviewed By: JK

Batch ID: ~~ALPHA2~~ M02-004B

Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
ALPHA_LOW-001	Blue	A3	4/26/2002 10:56	9	10004	3040	1000	38	1090	1127.81	341.64
ALPHA_MED-005	Blue	A1	4/26/2002 10:56	12	10006	2996	1000	38	1155	833.10	248.30
ALPHA_HIGH-009	Blue	A2	4/26/2002 10:56	23	10002	3431	1000	26	1053	433.15	147.54

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: ALPHA3
Batch ID: ~~ALPHA3~~ M02_004C

Reviewed By: MC
Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
ALPHA_LOW-001	Blue	A2	4/26/2002 11:54	9	10008	3028	1000	26	1053	1127.00	339.94
ALPHA_MED-005	Blue	A3	4/26/2002 11:54	12	10001	3004	1000	38	1090	827.86	247.59
ALPHA_HIGH-009	Blue	A1	4/26/2002 11:54	24	10000	3431	1000	38	1155	416.11	141.62

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: ALPHA4

Reviewed By: JK

Batch ID: ~~ALPHA4~~ m02-004 D

Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
ALPHA_LOW-001	Blue	B2	4/26/2002 13:54	9	10007	2993	1000	223	1177	1133.07	337.78
ALPHA_MED-005	Blue	B3	4/26/2002 13:54	12	10007	2979	1000	48	1100	804.37	238.37
ALPHA_HIGH-009	Blue	B4	4/26/2002 13:54	24	10004	3489	1000	57	1001	411.12	142.40

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: ALPHA5

Reviewed By: MC

Batch ID: ~~ALPHA5~~ M02-004R

Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta
ALPHA_LOW-001	Blue	B4	4/29/2002 10:02	9	10012	3188	1000	57	1001
ALPHA_MED-005	Blue	B2	4/29/2002 10:02	12	10013	2896	1000	223	1177
ALPHA_HIGH-009	Blue	B3	4/29/2002 10:02	25	10002	3477	1000	48	1100

Net CPM	
Alpha	Beta
1117.35	354.80
835.59	240.56
402.45	138.82

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: ALPHA6

Batch ID: ~~ALPHA6~~ m02_004F

Reviewed By: MC

Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
ALPHA_LOW-001	Blue	B3	4/29/2002 11:03	9	10004	3094	1000	48	1100	1095.68	337.78
ALPHA_MED-005	Blue	B4	4/29/2002 11:04	13	10003	3074	1000	57	1001	793.20	242.77
ALPHA_HIGH-009	Blue	B2	4/29/2002 11:04	24	10004	3372	1000	223	1177	415.92	139.09

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: ALPHA7

Reviewed By: JJC

Batch ID: ~~ALPHA7~~ mo2.004 G

Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
ALPHA_LOW-001	Blue	A4	4/30/2002 7:43	9	10004	2927	1001	48	1186	1130.35	329.55
ALPHA_MED-005	Blue	C1	4/30/2002 7:43	12	10009	3053	1002	82	964	825.06	250.73
ALPHA_HIGH-009	Blue	C2	4/30/2002 7:43	23	10004	3382	1003	49	1320	426.74	142.96

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: ALPHA8

Batch ID: ~~ALPHA8~~ M02-0041

Reviewed By: JJC

Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
ALPHA_LOW-001	Blue	C1	4/30/2002 14:02	9	10000	3174	1000	82	964	1127.31	356.87
ALPHA_MED-005	Blue	C2	4/30/2002 14:02	12	10005	2975	1000	49	1320	840.71	248.68

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: ALPHA10

Reviewed By: [signature]

Batch ID: ~~ALPHA10~~ M02-004 I

Date: 5/14/02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
ALPHA_LOW-001	Blue	C3	4/30/2002 14:22	9	10006	3118	1000	40	1056	1099.52	341.58
ALPHA_MED-005	Blue	C4	4/30/2002 14:22	12	10004	2804	1000	62	1094	849.17	236.94

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: ALPHA11

Reviewed By: JK

Batch ID: ~~ALPHA11~~ M02_0045

Date: 5/4/02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta
ALPHA_HIGH-009	Blue	C3	4/30/2002 14:40	25	10000	3507	1000	40	1056
ALPHA_LOW-001	Blue	C4	4/30/2002 14:40	9	10006	2897	1000	62	1094

Net CPM	
Alpha	Beta
399.80	139.17
1128.01	325.51

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: ALPHA12

Reviewed By: JAC

Batch ID: ~~alpha12~~ M02-004 K

Date: 5/14/02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
ALPHA_HIGH-009	Blue	C4	4/30/2002 15:17	23	10000	3250	1000	62	1094	435.86	140.58
ALPHA_MED-005	Blue	C3	4/30/2002 15:17	13	10009	3047	1000	40	1056	790.56	239.62

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: BETA1

Batch ID: ~~BETA1~~ M02_004L

Reviewed By: JK

Date: 5/14/02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
BETA_LOW-001	Blue	B4	4/26/2002 9:38	3	4	10021	1000	57	1001	1.35	3515.14
BETA_MED-005	Blue	B2	4/26/2002 9:38	3	5	10034	1000	223	1177	1.54	3531.92
BETA_HIGH-009	Blue	B3	4/26/2002 9:38	3	13	10015	1000	48	1100	4.37	3405.36

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: BETA2

Reviewed By: JJC

Batch ID: ~~BETA2~~ M02-004M

Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
BETA_LOW-001	Blue	B2	4/26/2002 10:59	3	5	10033	1000	223	1177	1.54	3531.57
BETA_MED-005	Blue	B3	4/26/2002 10:59	3	8	10042	1000	48	1100	2.78	3547.31
BETA_HIGH-009	Blue	B4	4/26/2002 10:59	3	10	10047	1000	57	1001	3.27	3336.87

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: BETA3
Batch ID: ~~BETA3~~ 0702-004 N

Reviewed By: MK
Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
BETA_LOE-001	Blue	B3	4/26/2002 11:56	3	8	10022	1000	48	1100	2.78	3540.24
BETA_MED-005	Blue	B4	4/26/2002 11:56	3	8	10035	1000	57	1001	2.72	3483.37
BETA_HIGH-009	Blue	B2	4/26/2002 11:56	3	9	10020	1000	223	1177	2.74	3294.88

LOT# F5D220345

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: BETA4

Reviewed By: JK

Batch ID: ~~BETA4~~ M02_004D

Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
BETA_LOW-001	Blue	A1	4/26/2002 13:53	3	4	10022	1000	38	1155	1.38	3540.19
BETA_MED-005	Blue	A2	4/26/2002 13:53	3	9	10033	1000	26	1053	3.19	3582.16
BETA_HIGH-009	Blue	A3	4/26/2002 13:53	3	2	10019	1000	38	1090	0.64	3406.73

LOT# F5D220345

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: BETA5

Reviewed By: [signature]

Batch ID: beta5 M02_004 P

Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
BETA_LOW-001	Blue	A3	4/29/2002 9:55	3	6	10038	1000	38	1090	2.11	3596.76
BETA_MED-005	Blue	A1	4/29/2002 9:55	3	10	10015	1000	38	1155	3.51	3550.26
BETA_HIGH-009	Blue	A2	4/29/2002 9:55	3	13	10065	1000	26	1053	4.37	3399.28

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: BETA6

Reviewed By: JJK

Batch ID: ~~BETA6~~ M02-0042

Date: 5/14/02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
BETA_LOW-001	Blue	A2	4/29/2002 11:00	3	8	10051	1000	26	1053	2.86	3627.47
BETA_MED-005	Blue	A3	4/29/2002 11:00	3	9	10032	1000	38	1090	3.19	3594.61
BETA_HIGH-009	Blue	A1	4/29/2002 11:00	3	11	10008	1000	38	1155	3.74	3438.02

LOT# F5D220345

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: BETA7

Batch ID: ~~BETA7~~ M02-004 R

Reviewed By: JK

Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
BETA_LOW-001	Blue	C3	4/30/2002 7:44	3	6	10048	1000	40	1056	2.10	3574.74
BETA_MED-005	Blue	C4	4/30/2002 7:44	3	6	10039	1000	62	1094	2.06	3546.26

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: BETA8
Batch ID: ~~BETA8~~ M02-0045

Reviewed By: JJK
Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample		Bkgd Time	Background		Net CPM	
					Alpha	Beta		Alpha	Beta	Alpha	Beta
BETA_LOW-001	Blue	A4	4/30/2002 14:04	3	9	10049	1000	48	1186	3.18	3600.61
BETA_MED-005	Blue	C3	4/30/2002 14:04	3	6	10038	1000	40	1056	2.07	3521.05
BETA_HIGH-009	Blue	C4	4/30/2002 14:04	3	7	10030	1000	62	1094	2.34	3433.84

[redacted]

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: BETA11
Batch ID: ~~BETA11~~ ~~A100~~ M02-004 U

Reviewed By: [signature]
Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample Alpha	Sample Beta	Bkgd Time	Background Alpha	Background Beta	Net CPM Alpha	Net CPM Beta
BETA_HIGH-009	Blue	C1	4/30/2002 14:41	3	14	10006	1000	82	964	4.65	3379.44
BETA_LOW-001	Blue	C2	4/30/2002 14:41	3	14	10023	1000	49	1320	5.10	3683.61
BETA_MED-005	Blue	A4	4/30/2002 14:41	3	21	10033	1000	48	1186	7.29	3506.86

LB4100/W General Counting Application

Unit Type: LB4100/W
Counting Unit ID: Blue
Data file name: BETA10

Batch ID: BETA10

Reviewed By: MC

Date: 5-14-02

Sample ID		Det. ID	Count Date/Time	Count Duration	Sample		Bkgd Time	Background		Net CPM	
					Alpha	Beta		Alpha	Beta	Alpha	Beta
BETA_HIGH-009	Blue	A4	4/30/2002 14:21	3	16	10036	1000	48	1186	5.39	3412.42
BETA_LOW-001	Blue	C1	4/30/2002 14:21	3	11	10041	1000	82	964	3.86	3597.96
BETA_MED-005	Blue	C2	4/30/2002 14:21	3	12	10025	1000	49	1320	4.30	3630.93

F5D210345

CLIENT ANALYSIS SUMMARY

Storage Loc: RAD
Date Received: 2005-04-21
Analytical Due Date: 2005-05-12
Report Due Date: 2005-05-16
Report Type: D Expanded Deliverable
EDD Code: 99

Project Manager: EK
Project: 3160S
PO#: 126310021
Client: 108581 LOS ALAMOS NATIONAL LABORATORY

Quote #: 44975 SDG: F5D210345
Los Alamos Non-Rad
Report to: Joylene Valdez or Keith
#SMPS in LOT: 0

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"
Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********
Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level
Do spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

	SAMPLE #		CLIENT SAMPLE ID			Site ID	Client Matrix		DATE/TIME SAMPLED		WORKORDER	A
	1		RE73-05-58824						2005-04-19 / 0		G8WNH	SOLID
	SAMPLE COMMENTS:											
	XX	15	NAS/DOE	3058/RP-725 MOD	Iso PLUTONIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
	XX	16	NAS/DOE	3050/RP-725 MOD	Iso URANIUM (LONG CT) NAS & DOE MOD	IK	Sequential Actinides (Pu/Am/Th) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
	XX	17	NAS/DOE	3006/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
	XX	Z8	DOE	RP-730 MOD	Gamma Co-137 & Hits by DOE RP-730 MOD	G6	Dry, Grind, and Fill Geometry	9Q	CLIENT: LANL	PROT: A	WRK LOC	06
S	XX	15	NAS/DOE	3058/RP-725 MOD	Iso PLUTONIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
S	XX	16	NAS/DOE	3050/RP-725 MOD	Iso URANIUM (LONG CT) NAS & DOE MOD	IK	Sequential Actinides (Pu/Am/Th) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
S	XX	17	NAS/DOE	3006/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
X	XX	15	NAS/DOE	3058/RP-725 MOD	Iso PLUTONIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
X	XX	16	NAS/DOE	3050/RP-725 MOD	Iso URANIUM (LONG CT) NAS & DOE MOD	IK	Sequential Actinides (Pu/Am/Th) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
X	XX	17	NAS/DOE	3006/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
X	XX	Z8	DOE	RP-730 MOD	Gamma Co-137 & Hits by DOE RP-730 MOD	G6	Dry, Grind, and Fill Geometry	9Q	CLIENT: LANL	PROT: A	WRK LOC	06

	SAMPLE #		CLIENT SAMPLE ID			Site ID	Client Matrix		DATE/TIME SAMPLED		WORKORDER	A
	2		RE73-05-58825						2005-04-19 / 0		G8WNN	SOLID
	SAMPLE COMMENTS:											
	XX	15	NAS/DOE	3058/RP-725 MOD	Iso PLUTONIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
	XX	16	NAS/DOE	3050/RP-725 MOD	Iso URANIUM (LONG CT) NAS & DOE MOD	IK	Sequential Actinides (Pu/Am/Th) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
	XX	17	NAS/DOE	3006/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
	XX	Z8	DOE	RP-730 MOD	Gamma Co-137 & Hits by DOE RP-730 MOD	G6	Dry, Grind, and Fill Geometry	9Q	CLIENT: LANL	PROT: A	WRK LOC	06

	SAMPLE #		CLIENT SAMPLE ID			Site ID	Client Matrix		DATE/TIME SAMPLED		WORKORDER	A
	3		RE73-05-58826						2005-04-19 / 0		G8WNQ	SOLID
	SAMPLE COMMENTS:											
	XX	15	NAS/DOE	3058/RP-725 MOD	Iso PLUTONIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
	XX	16	NAS/DOE	3050/RP-725 MOD	Iso URANIUM (LONG CT) NAS & DOE MOD	IK	Sequential Actinides (Pu/Am/Th) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
	XX	17	NAS/DOE	3006/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
	XX	Z8	DOE	RP-730 MOD	Gamma Co-137 & Hits by DOE RP-730 MOD	G6	Dry, Grind, and Fill Geometry	9Q	CLIENT: LANL	PROT: A	WRK LOC	06

	SAMPLE #		CLIENT SAMPLE ID			Site ID	Client Matrix		DATE/TIME SAMPLED		WORKORDER	A
	4		RE73-05-58827						2005-04-19 / 0		G8WNR	SOLID
	SAMPLE COMMENTS:											
	XX	15	NAS/DOE	3058/RP-725 MOD	Iso PLUTONIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
	XX	16	NAS/DOE	3050/RP-725 MOD	Iso URANIUM (LONG CT) NAS & DOE MOD	IK	Sequential Actinides (Pu/Am/Th) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
	XX	17	NAS/DOE	3006/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
	XX	Z8	DOE	RP-730 MOD	Gamma Co-137 & Hits by DOE RP-730 MOD	G6	Dry, Grind, and Fill Geometry	9Q	CLIENT: LANL	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A

F5D210345 CLIENT ANALYSIS SUMMARY

Storage Loc: RAD
Date Received: 2005-04-21
Analytical Due Date: 2005-05-12
Report Due Date: 2005-05-16
Report Type: D Expanded Deliverable
EDD Code: 99

Project Manager: EK Quote #: 44975 SDG: F5D210345
Project: 3160S Los Alamos Non-Rad
PO#: 126310021 Report to: Joylene Valdez or Keith
Client: 108581 LOS ALAMOS NATIONAL LABORATORY #SMPS in LOT: 0

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"
Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********
Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level
Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

5 RE73-05-58828 2005-04-19 / 0 G8WNV SOLID

SAMPLE COMMENTS:

XX	15	NAS/D OE	3058/RP-725 MOD	Iso PLUTONIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
XX	16	NAS/D OE	3050/RP-725 MOD	Iso URANIUM (LONG CT) NAS & DOE MOD	IK	Sequential Actinides (Pu/Am/Th) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
XX	17	NAS/D OE	3008/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
XX	Z8	DOE	RP-730 MOD	Gamma Cs-137 & Hits by DOE RP-730 MOD	G6	Dry, Grind, and Fill Geometry	9Q	CLIENT: LANL	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
6	RE73-05-58830			2005-04-19 / 0	G8WNW	SOLID

SAMPLE COMMENTS:

XX	15	NAS/D OE	3058/RP-725 MOD	Iso PLUTONIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
XX	16	NAS/D OE	3050/RP-725 MOD	Iso URANIUM (LONG CT) NAS & DOE MOD	IK	Sequential Actinides (Pu/Am/Th) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
XX	17	NAS/D OE	3008/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
XX	Z8	DOE	RP-730 MOD	Gamma Cs-137 & Hits by DOE RP-730 MOD	G6	Dry, Grind, and Fill Geometry	9Q	CLIENT: LANL	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
7	RE73-05-58831			2005-04-19 / 0	G8WN0	SOLID

SAMPLE COMMENTS:

XX	15	NAS/D OE	3058/RP-725 MOD	Iso PLUTONIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
XX	16	NAS/D OE	3050/RP-725 MOD	Iso URANIUM (LONG CT) NAS & DOE MOD	IK	Sequential Actinides (Pu/Am/Th) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
XX	17	NAS/D OE	3008/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
XX	Z8	DOE	RP-730 MOD	Gamma Cs-137 & Hits by DOE RP-730 MOD	G6	Dry, Grind, and Fill Geometry	9Q	CLIENT: LANL	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
8	RE73-05-58832			2005-04-19 / 0	G8WN1	SOLID

SAMPLE COMMENTS:

XX	15	NAS/D OE	3058/RP-725 MOD	Iso PLUTONIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
XX	16	NAS/D OE	3050/RP-725 MOD	Iso URANIUM (LONG CT) NAS & DOE MOD	IK	Sequential Actinides (Pu/Am/Th) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
XX	17	NAS/D OE	3008/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
XX	Z8	DOE	RP-730 MOD	Gamma Cs-137 & Hits by DOE RP-730 MOD	G6	Dry, Grind, and Fill Geometry	9Q	CLIENT: LANL	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
9	RE73-05-58833			2005-04-19 / 0	G8WN2	SOLID

SAMPLE COMMENTS:

XX	15	NAS/D OE	3058/RP-725 MOD	Iso PLUTONIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
XX	16	NAS/D OE	3050/RP-725 MOD	Iso URANIUM (LONG CT) NAS & DOE MOD	IK	Sequential Actinides (Pu/Am/Th) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
XX	17	NAS/D OE	3008/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
XX	Z8	DOE	RP-730 MOD	Gamma Cs-137 & Hits by DOE RP-730 MOD	G6	Dry, Grind, and Fill Geometry	9Q	CLIENT: LANL	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
10	RE73-05-58834			2005-04-19 / 0	G8WN3	SOLID

SAMPLE COMMENTS:

F5D210345 CLIENT ANALYSIS SUMMARY

Storage Loc: RAD
Date Received: 2005-04-21
Analytical Due Date: 2005-05-12
Report Due Date: 2005-05-16

Project Manager: EK Quote #: 44975 SDG: F5D210345
Project: 3160S Los Alamos Non-Rad
PO#: 126310021 Report to: Joylene Valdez or Keith
Client: 108581 LOS ALAMOS NATIONAL LABORATORY #SMPS in LOT: 0
Report Type: D Expanded Deliverable
EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"
Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********
Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level
Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

XX	15	NAS/D OE	3058/RP-725 MOD	Iso PLUTONIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06	
XX	16	NAS/D OE	3060/RP-725 MOD	Iso URANIUM (LONG CT) NAS & DOE MOD	IK	Sequential Actinides (Pu/Am/Th) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06	
XX	17	NAS/D OE	3006/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06	
XX	Z8	DOE	RP-730 MOD	Gamma Cs-137 & Hits by DOE RP-730 MOD	G6	Dry, Grind, and Fill Geometry	9Q	CLIENT: LANL	PROT: A	WRK LOC	06	

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
11	RE73-05-58836			2005-04-19 / 0	G8WN4	SOLID

SAMPLE COMMENTS:

XX	15	NAS/D OE	3058/RP-725 MOD	Iso PLUTONIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06	
XX	16	NAS/D OE	3060/RP-725 MOD	Iso URANIUM (LONG CT) NAS & DOE MOD	IK	Sequential Actinides (Pu/Am/Th) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06	
XX	17	NAS/D OE	3006/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06	
XX	Z8	DOE	RP-730 MOD	Gamma Cs-137 & Hits by DOE RP-730 MOD	G6	Dry, Grind, and Fill Geometry	9Q	CLIENT: LANL	PROT: A	WRK LOC	06	

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
12	RE73-05-58837			2005-04-19 / 0	G8WN5	SOLID

SAMPLE COMMENTS:

XX	15	NAS/D OE	3058/RP-725 MOD	Iso PLUTONIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06	
XX	16	NAS/D OE	3060/RP-725 MOD	Iso URANIUM (LONG CT) NAS & DOE MOD	IK	Sequential Actinides (Pu/Am/Th) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06	
XX	17	NAS/D OE	3006/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06	
XX	Z8	DOE	RP-730 MOD	Gamma Cs-137 & Hits by DOE RP-730 MOD	G6	Dry, Grind, and Fill Geometry	9Q	CLIENT: LANL	PROT: A	WRK LOC	06	

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
13	RE73-05-58838			2005-04-19 / 0	G8WN7	SOLID

SAMPLE COMMENTS:

XX	15	NAS/D OE	3058/RP-725 MOD	Iso PLUTONIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06	
XX	16	NAS/D OE	3060/RP-725 MOD	Iso URANIUM (LONG CT) NAS & DOE MOD	IK	Sequential Actinides (Pu/Am/Th) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06	
XX	17	NAS/D OE	3006/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06	
XX	Z8	DOE	RP-730 MOD	Gamma Cs-137 & Hits by DOE RP-730 MOD	G6	Dry, Grind, and Fill Geometry	9Q	CLIENT: LANL	PROT: A	WRK LOC	06	

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
14	RE73-05-58839			2005-04-19 / 0	G8WN9	SOLID

SAMPLE COMMENTS:

XX	15	NAS/D OE	3058/RP-725 MOD	Iso PLUTONIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06	
XX	16	NAS/D OE	3060/RP-725 MOD	Iso URANIUM (LONG CT) NAS & DOE MOD	IK	Sequential Actinides (Pu/Am/Th) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06	
XX	17	NAS/D OE	3006/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06	
XX	Z8	DOE	RP-730 MOD	Gamma Cs-137 & Hits by DOE RP-730 MOD	G6	Dry, Grind, and Fill Geometry	9Q	CLIENT: LANL	PROT: A	WRK LOC	06	

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
15	RE73-05-58840			2005-04-19 / 0	G8WPC	SOLID

SAMPLE COMMENTS:

XX	15	NAS/D OE	3058/RP-725 MOD	Iso PLUTONIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06	

F5D210345

CLIENT ANALYSIS SUMMARY

Storage Loc: RAD

Project Manager: EK | Quote #: 44975 | SDG: F5D210345

Date Received: 2005-04-21

Project: 3160S | Los Alamos Non-Rad

Analytical Due Date: 2005-05-12

PO#: 126310021 | Report to: Joylene Valdez or Keith

Report Due Date: 2005-05-16

Client: 108581 LOS ALAMOS NATIONAL LABORATORY

Report Type: D Expanded Deliverable

#SMPS in LOT: 0 | EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

XX	16	NAS/DOE	3050/RP-725 MOD	Iso URANIUM (LONG CT) NAS & DOE MOD	IK	Sequential Actinides (Pu/Am/Th) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
XX	17	NAS/DOE	3008/RP-725 MOD	Iso AMERICIUM (LONG CT) NAS & DOE MOD	IJ	Sequential Actinides (Pu/U/Am) by IEx and/or ExC	01	STANDARD TEST SET	PROT: Z	WRK LOC	06
XX	Z8	DOE	RP-730 MOD	Gamma Cs-137 & Hits by DOE RP-730 MOD	G6	Dry, Grind, and Fill Geometry	9Q	CLIENT: LANL	PROT: A	WRK LOC	06

F5D210345

CLIENT COMMENTS SUMMARY

Storage Loc: RAD
Date Received: 2005-04-21
Analytical Due Date: 2005-05-12
Report Due Date: 2005-05-16
Report Type: D Expanded Deliverable
EDD Code: 99

Project Manager: EK
Quote #: 44975 SDG: F5D210345
Project: 3160S Los Alamos Non-Rad
PO#: 126310021 Report to: Joylene Valdez or Keith
Client: 108581 LOS ALAMOS NATIONAL LABORATORY
#SMPS in LOT: 0

Sample Receiving: LOS ALAMOS CLIENT REQUIREMEN
Enter COC NUMBER on sample sample header in the COC Fi
SDG = "Lot Number"
Project Name = "Request number"

********** METALS AND WETCHEMISTRY **********
Can batch multiple Lots together and report Client specific
Batch QC: Matrix Spike and Sample Duplicate
Met Prep: GFAA Spike Level and Standard Spike Level
Sb spike at 100 ppb
Pb - Spike Solids at 100 ppb, spike Waters at 20
- Perform analytical spike when matrix spike is swamped with indigenous analyte.
********** GC/MS ORGANICS **********
Can batch multiple Lots together and report Client specific
Batch QC MS and MSD
Clouseau observations for:
- Dilutions and elevated detection limits
- Unknown aldol condensate in TIC report
USE GPC for sample extracts as required.
Put client ID on all raw data
Client requires qualifiers
********** GC/HPLC **********
Can batch multiple Lots together and report Client specific
Batch QC
USE GPC for sample extracts as required.
Client requires Qualifiers for both GC and HPLC
- No averaging of CCV compounds
- Include Form Xs in data packages
********** Radiochemistry **********
Rad Chem with no tracers require MS (spk <= 100 pCi/L or g) and sample duplicate ..... Gamma does not require MS.
Radium 226 requires MS and Sample Duplicate
Radiological: "Do not include control chart, standard certif certificates, or calibration data as part of data package"
- Tracers need to be added at a level to yield at least 400
- Report 1 sigma uncertainty
Gross Alpha/Beta requires a total digestion.

CHAIN OF CUSTODY DOCUMENT NUMBER: 3160SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3160S

ANALYSIS TYPE: RAD

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

cer 624

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58824	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58825	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58826	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58827	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58828	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58830	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58831	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58832	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58833	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58834	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58836	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58837	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58838	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58839	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S
RE73-05-58840	2	1 L POLY	AM241+GS+ISOPU+ISOU	NONE	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3160S Page 1

Relinquished By:		Date	Time	Received By:		Date	Time
A Padilla	A Padilla	4.20.05	1400	Sue Wilson	Sue Wilson	4.21.05	0900
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
Received for DISPOSAL By:		**Date**	**Time**	**Remarks:**			
PRINTED NAME	SIGNATURE						

STL ST. LOUIS
Wednesday, April 20, 2005

REQUEST NUMBER: 3160S

ANALYSIS TYPE: RAD

Los Alamos
NATIONAL LABORATORY

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

SHIP DATE: 04/20/2005
REPORT DUE: 05/05/2005
TURN AROUND REQ'D: 15

RAD SCREENING: NOT REQ
COMMENTS:

These samples are on:

LANL Request Number: 3160S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
EPA:901.1	RE73-05-58824	2	S	04/18/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58824	2	S	04/18/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58824	2	S	04/18/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58824	2	S	04/18/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58825	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58825	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58825	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58825	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58826	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58826	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58826	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58826	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58827	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58827	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58827	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58827	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58828	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58828	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58828	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58828	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58830	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58830	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58830	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58830	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58831	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58831	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58831	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58831	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58832	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58832	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58832	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58832	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58833	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58833	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58833	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58833	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58834	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58834	2	S	04/19/2005	Analyze for Gross A/B/G also

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
HASL-300:ISOPU	RE73-05-58834	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58834	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58836	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58836	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58836	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58836	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58837	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58837	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58837	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58837	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58838	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58838	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58838	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58838	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58839	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58839	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58839	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58839	2	S	04/19/2005	Analyze for Gross A/B/G also
EPA:901.1	RE73-05-58840	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:AM-241	RE73-05-58840	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOPU	RE73-05-58840	2	S	04/19/2005	Analyze for Gross A/B/G also
HASL-300:ISOU	RE73-05-58840	2	S	04/19/2005	Analyze for Gross A/B/G also

Final Page of REQUEST NUMBER 3160S Page 2

SEVERN TRENT **STL**

Lot No: F5D210345

Condition Upon Receipt Form
St. Louis Laboratory

Client: LANL Date: 4.21.05 Time: 0900

Quote No: 44475 Initiated by: SW

Shipper/No: FedX 695477892744 2733 COC/RFA Numbers: 31605C, 31595C, 31585C

Condition/Variance (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	(Y) N	Sample received in undamaged condition?	7.	(Y) N	Sample received with Chain of Custody?
2.	(Y) N	Sample received within 4-C ± 2-C° ?	8.	Y (N)	Chain of Custody matches sample IDs on containers?
		Record 4°	9.	(Y) N N/A	Custody seal received intact on cooler.?
3.	Y N (N/A)	Sample received with proper pH [1]?	10.	(Y) N N/A	Custody seal tamper evident on cooler.?
4.	Y N	If N/A - Was pH taken by original STL lab?	11.	(Y) N N/A	Custody seal on bottles received intact?
5.	(Y) N	Sample received in proper containers?	12.	(Y) N N/A	Custody seal tamper evident on bottles?
6.	(Y) N	Sample volume sufficient for analysis?	13.	Y N	Was CUR (equivalent) rec' d from original STL lab?

* Temperature Variance Does Not Affect the Following Analyses: Red cooler is ambient.

[1]For DOE-AL (Pantex, LANL, Sandia) sites, verify pH all containers received, except for VOA, TOX, and soils.

Notes: ~~Did not receive any samples for COC 31595~~ SW 4.21.05

and on 31585C, missing RE 73-05-58877

Corrective Action:

☐ Client's Name: _____ Informed by: _____ By: _____

☐ Sample(s) processed "as is". _____

☐ Sample(s) on hold until: _____ If released, notify: _____

Project Management Review: _____ Date: _____

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED
IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIALS AND THE DATE NEXT TO THAT ITEM

Wednesday, April 20, 2005

REQUEST NUMBER: 3159S

Los Alamos
NATIONAL LABORATORY

ANALYSIS TYPE: INORGANIC

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

These samples are on:

SHIP DATE: 04/20/2005
REPORT DUE: 05/05/2005
TURN AROUND REQ'D: 15

LANL Request Number: 3159S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

RAD SCREENING: NOT REQ
COMMENTS: NOTE: For 58829, 58835 and 58841 do full waste classification testing

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:6010B	RE73-05-58824	1	S	04/18/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58824	1	S	04/18/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58824	1	S	04/18/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58824	1	S	04/18/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58825	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58825	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58825	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58825	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58826	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58826	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58826	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58826	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58827	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58827	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58827	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58827	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58828	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58828	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58828	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58828	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:1020A	RE73-05-58829	6	S	04/19/2005	
SW-846:7.3	RE73-05-58829	6	S	04/19/2005	
SW-846:9045C	RE73-05-58829	6	S	04/19/2005	
SW-846:9095	RE73-05-58829	6	S	04/19/2005	
SW-846:6010B	RE73-05-58830	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TGLP	RE73-05-58830	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58830	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58830	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58831	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58831	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58831	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58831	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58832	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58832	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58832	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58832	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58833	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58833	1	S	04/19/2005	Analyze for TCLP Zinc also

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:7470A_TCLP	RE73-05-58833	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58833	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58834	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58834	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58834	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58834	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:1020A	RE73-05-58835	6	S	04/19/2005	
SW-846:7.3	RE73-05-58835	6	S	04/19/2005	
SW-846:9045C	RE73-05-58835	6	S	04/19/2005	
SW-846:9095	RE73-05-58835	6	S	04/19/2005	
SW-846:6010B	RE73-05-58836	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58836	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58836	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58836	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58837	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58837	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58837	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58837	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58838	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58838	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58838	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58838	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58839	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58839	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58839	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58839	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58840	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58840	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58840	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58840	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:1020A	RE73-05-58841	6	S	04/19/2005	
SW-846:7.3	RE73-05-58841	6	S	04/19/2005	
SW-846:9045C	RE73-05-58841	6	S	04/19/2005	
SW-846:9095	RE73-05-58841	6	S	04/19/2005	

Final Page of REQUEST NUMBER 3159S

Wednesday, April 20, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3159SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3159S

ANALYSIS TYPE: INORGANIC

ATTN: Mark Loeb
Severn Trent Laboraties, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58824	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58825	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58826	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58827	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58828	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58829	6	500 ML POLY	RC+RS+ph+PF+I	ICE	S
RE73-05-58830	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58831	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58832	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58833	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58834	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58835	6	500 ML POLY	RC+RS+ph+PF+I	ICE	S
RE73-05-58836	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58837	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58838	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58839	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58840	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58841	6	500 ML POLY	RC+RS+ph+PF+I	ICE	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3159S

Relinquished By:	Date	Time	Received By:	Date	Time
PRINTED NAME SIGNATURE	4/20/05	1100	PRINTED NAME SIGNATURE		
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		

Received for DISPOSAL By:	Date	Time	Remarks:
PRINTED NAME SIGNATURE			

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 219142 Event ID:4802

SAMPLE ID: RE73-05-58829
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	8260B	~~125 SEPTUM AMBER GLASS~~ 2"x6" SS TUBE	Ice	Y		
1	8270C+8082	250 ML AMBER GLASS	Ice	Y		
3	8290	125 ML GLASS	Ice	Y		
4	8290	125 ML GLASS	Ice	Y		
5	PSDA+PROP-DBS	~~PROTECORE BAG~~ 2"x6" SS TUBE	Ice	Y		
6	RC+RS+ph+PF+I	500 ML POLY	Ice	Y		

RELINQUISHED BY (printed name): Kilwood (signature):	Date/Time: 4.19.05 1705	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): Eugene Jory (signature):	Date/Time: 4-19-05 1705	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 219152 Event ID:4802

SAMPLE ID: RE73-05-58835 ER TEAM LEADER: Terry Rust DESTINATION: SMO

SAMPLE ORDER MATRIX: Soil FIELD TEAM LEADER: John Tymkowych DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	8260B	~~125 SEPTUM AMBER GLASS~~ 2"x6" SS TUBE	Ice	Y		
1	8270C+8082	250 ML AMBER GLASS	Ice	Y		
3	8290	125 ML GLASS	Ice	Y		
4	8290	125 ML GLASS	Ice	Y		
5	PSDA+PROP-DBS	~~PROTEGORE BAG~~ 2"x6" SS TUBE	Ice	Y		
6	RC+RS+ph+PF+I	500 ML POLY	Ice	Y		

RELINQUISHED BY (printed name): K Rivord (signature):	Date/Time: 4.19.05 17:05	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4-19-05 1705	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 219162 **Event ID:**4802

SAMPLE ID: RE73-05-58841 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	8260B	~~125 SEPTUM AMBER GLASS~~ RE 2"x6" SS TUBE	Ice	Y		
1	8270C+8082	250 ML AMBER GLASS	Ice	Y		
3	8290	125 ML GLASS	Ice	Y		
4	8290	125 ML GLASS	Ice	Y		
5	PSDA+PROP-DBS	~~PROTECORE BAG~~ RE 2"x6" SS TUBE	Ice	Y		
6	RC+RS+ph+PF+I	500 ML POLY	Ice	Y		

RELINQUISHED BY (printed name): KR Leonard (signature):	**Date/Time:** 4-19-05 1655	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4-19-05 1656	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218712 Event ID:4802

SAMPLE ID: RE73-05-58826 ER TEAM LEADER: Terry Rust DESTINATION: SMO

SAMPLE ORDER MATRIX: Soil FIELD TEAM LEADER: John Tymkowych DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): K Rheoms (signature):	Date/Time: 4.19.05 17:10	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 17:10.	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218692 Event ID:4802

SAMPLE ID: RE73-05-58824
ER TEAM LEADER: Terry Rust
DESTINATION: SMO
SAMPLE ORDER MATRIX: Soil
FIELD TEAM LEADER: John Tymkowych
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): K R Leonard (signature):	Date/Time: 4.19.05 1710	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4-19-05 17:10	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218722 Event ID:4802

SAMPLE ID: RE73-05-58827

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): K Reeves (signature):	Date/Time: 4.19.05 1705	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 1705	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

EVENT NAME: TA-73 Ash Pile

FIELD CHAIN OF CUSTODY

COC ID: 218702 Event ID:4802

SAMPLE ID: RE73-05-58825
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature): K Reeves	Date/Time: 4.19.05 17:05	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 17:05	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218672 Event ID:4802

SAMPLE ID: RE73-05-58877

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
1	8260B	125 SEPTUM AMBER GLASS	Ice	Y		

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 1705	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 1705	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218732 Event ID:4802

SAMPLE ID: RE73-05-58828

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 1705	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 1705	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218812 **Event ID:**4802

SAMPLE ID: RE73-05-58838 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): [illegible] **(signature):** [illegible]	**Date/Time:** 4.19.05 1655	**RELINQUISHED BY (printed name):** **(signature):**	**Date/Time:**
RECEIVED BY (printed name): **(signature):** [illegible]	**Date/Time:** 4/19/05 16:55	**RECEIVED BY (printed name):** **(signature):**	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218822 Event ID:4802

SAMPLE ID: RE73-05-58839

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 1655	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4-19-05 1655	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218742 **Event ID:**4802

SAMPLE ID: RE73-05-58830
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	**Date/Time:** 4.19.05 1655	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4-19-05 1655	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218782 Event ID:4802

SAMPLE ID: RE73-05-58834
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 16:55	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 1655	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218832 **Event ID:**4802

SAMPLE ID: RE73-05-58840 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4/19.05 1655	**RELINQUISHED BY** (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 1655	**RECEIVED BY** (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218762 Event ID:4802

SAMPLE ID: RE73-05-58832
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 1655	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 1655	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218752 **Event ID:**4802

SAMPLE ID: RE73-05-58831
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	**Date/Time:** 4.19.05 1655	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4/19/05 1655	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218772 **Event ID:**4802

SAMPLE ID: RE73-05-58833
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y 1		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y 1		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): K Leonard **(signature):**	**Date/Time:** 4.19.05 1655	**RELINQUISHED BY (printed name):** **(signature):**	**Date/Time:**
RECEIVED BY (printed name): **(signature):**	**Date/Time:** 4/19/05 1655	**RECEIVED BY (printed name):** **(signature):**	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218802 **Event ID:**4802

SAMPLE ID: RE73-05-58837
SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): KR Lewis (signature):	**Date/Time:** 4.19.05 1655	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4/19/05 1655	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218792 **Event ID:**4802

SAMPLE ID: RE73-05-58836
SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): K Leonard (signature):	**Date/Time:** 4.19.05 1655	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4-19-05 1655	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Rad Screening Data Release Form

The Following samples were received at the Field Support Facility (FSF) without screening data (list sample number):

These samples will not be shipped until radiological screening data documentation arrives at the FSF. I understand that it is my responsibility to ensure this information arrives at the FSF in a timely manner. If holding times are missed because screening data does not arrive, I will pick up the samples.

The following samples do not require rad screening data for the reasons stated (list sample numbers):

RE73-05-58824,
" " -58825
" " -58826
-58827
-58828
-58829
-58830
-58831
-58832
-58833
-58834
-58835

RE73-05-58836
" " -58837
" " -58838
-58839
-58840
-58841
-58877

Reason: SCREENED IN THE FIELD BY RCT

Print Last Name Kenneth R. LEONARD Signature [signature] Date 4/19/05

Data-Validation Cover Sheet

☐ Rejected Data

Section I

Request Number: 3159S Validation Date: 21-Jun-05 Lab Code: STL- St Louis

Contract Laboratory Name: _____

Validator: Clifford Deiner Organization: ENV-ECR

Analytical Suite (check all that apply):
☐ Volatile Organics
☐ Semivolatile Organics
☐ Organochlorine Pesticides/Polychlorinated Biphenyls
☐ High Explosives
☒ Inorganics
☐ Radiochemistry

Other (describe): pH, flashpoint, paint filter test, percent moisture, reactive cyanide, reactvie cyanide

Section II—Completeness Check

Yes	No	n/a	(check one)	Yes	No	n/a	(check one)
☒	☐	☐	1. Chain-of-custody form(s)	☒	☐	☐	6. Raw/BSS data
☒	☐	☐	2. Case narrative	☒	☐	☐	7. Quality control forms
☒	☐	☐	3. Sample result forms	☒	☐	☐	8. Quantitation reports
☐	☐	☒	4. Sample chromatograms	☐	☐	☒	9. TICs forms
☐	☐	☒	5. Standard chromatograms	☐	☐	☒	10. TICs mass spectra

Identify any samples in the assigned Request Number that are missing:

_____ _____ _____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____ _____ _____

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

Total Metals:

Blank contamination was present for numerous analytes in soil. The 5x rule was applied and some sample results for Se were qualified U,I4a. The matrix spike recoveries for Mg(137%), Na(140%), and Hg(33%) did not meet acceptance limits. Hg sample results were qualified J-,I3e; while Mg and Na results were qualifed J+,I3d. The serial dilution RPDs for Ca, Mg, and As for RE73-05-58824 did not meet acceptance limits and sample results were qualified J,I18b. All other QCs met acceptance limits. Some analytes were B-flagged and sample results were qualified J,I1.

TCLP_Metals:

Blank contamination was present for Ba and Zn in soil. The 5x rule was applied and one Ba sample result was qualified U,I4a. The matrix spike recovery for Pb(71%) was less than acceptance limits and sample results were qualified J-,I3e.

pH, flashpoint, paint filter test, percent moisture, reactive cyanide, reactvie cyanide:

The matrix spike recoveries for reactive cyanide and reactive sulfide were not used in the qualification of samples. All other QCs met acceptance limits.

CD

Validator's signature: Cliff Dering Date: 6-21-05	
(Attach additional comment sheets as necessary.)	
SOP-15.02, R1	**Los Alamos National Laboratory** **RRES-Remediation Services Project**

Inorganic Data-Validation Checklist

Yes	No	(check one)	Assign qualifier listed below if criteria = Yes: Detected analyte	Assign qualifier listed below if criteria = Yes: Undetected analyte
☐	☒	1. The preparation Blank (PB), ICB, or CCB was not analyzed with the samples.	R, I4	R, I4
☒	☐	2. The analyte detected in PB and the sample result for the analyte ≤5x the amount in PB.	U, I4a	N/A
☐	☒	3. The initial or continuing calibration verification (ICV or CCV) was not analyzed with the samples.	R, I16	R, I16
☐	☒	4. The ICV or CCV recovery is >UAL.	R, I16a	N/A
☐	☒	5. The ICV or CCV recovery is >UWL and ≤UAL.	J+, I16b	N/A
☐	☒	6. The ICV or CCV recovery is <LWL but ≥LAL.	J-, I16c	UJ, I16c
☐	☒	7. The ICV or CCV recovery is <LAL.	R, I16d	R, I16d
☐	☒	8. For ICPMS and CN analyses: The correlation coefficient is <0.995?	R, I16e	R,I16e
☐	☒	9. The interference check sample (ICS) was not analyzed with the samples.	R, I7	R, I7
☐	☒	10. The ICS recovery is >120%.	J+, I7a	N/A
☐	☒	11. The ICS recovery is ≥50% and <80%.	J-, I7b	UJ, I7b
☐	☒	12. The ICS recovery is <50%.	R, I7c	R, I7d
☐	☒	13. The MS was not analyzed with the sample without explanation.	R, I3	R, I3
☐	☒	14. Insufficient sample volume for MS analyses was provided.	J, I3a	UJ, I3a
☐	☒	15. An MS analyses was performed on a non-LANL sample.	J, I3b	UJ, I3b
☐	☒	16. The MS recovery was > 150%*.	J+, I3c	UJ, I3c
☒	☐	17. The MS recovery was >125% and ≤150%.	J+, I3d	N/A
☒	☐	18. The MS recovery was ≥30% and <75%.	J-, I3e	UJ, I3e
☐	☒	19. The MS recovery was <30%.	R, I3f	R, I3f
☐	☒	20. A duplicate sample was not analyzed without explanation.	J, I10	UJ, I10
☐	☒	21. Insufficient sample volume for duplicate sample analysis was provided.	J, I10a	UJ, I10a
☐	☒	22. A duplicate sample was performed on a non-LANL sample.	J, I10b	UJ, I10b
☐	☒	23. Both the sample and the duplicate are ≥5x RL, and the RPD is >20 for water samples or >35 for soil samples	J, I10c	UJ, I10c
☐	☒	24. Either the sample or Dup is ≥5x the RL and the sample and Dup results are not within ±1x the RL for water or ±2x the RL for soil.	J, I10d	UJ, I10d
☐	☒	25. The LCS was not analyzed with the samples.	R, I6	R, I6
☐	☒	26. The LCS recovery was >the UWL.	J+, I6a	N/A
☐	☒	27. The LCS recovery was ≥LAL and <LWL.	J-, I6b	UJ, I6b
☐	☒	28. The LCS recovery was <the LAL.	R, I6c	R, I6c
☐	☒	29. The serial dilution sample was not analyzed with the samples.	J, I18	UJ, I18
☐	☒	30. The serial dilution sample was performed on a non-LANL sample.	J, I18a	UJ, I18a
☒	☐	31. The RPD between the sample and the serial dilution sample is >10, and the undiluted sample result is >50x the RL(>100x for ICPMS).	J, I18b	UJ, I18b
☐	☒	32. The sample was analyzed past the appropriate hold time.	J-, I9	UJ, I9
☐	☒	33. The sample was analyzed past double the hold time.	J-, I9a	R, I9a
☒	☐	34. B-flagged sample results are present.	J, I1	N/A
☐	☒	35. Other obvious data quality issues are identified.	__, I19	__, I19

CD

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WQL **Client ID:** RE73-05-58825

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/28/05 **Prep Batch:** 5117679

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 24.74

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0096	0.044	1.2	NE	1	CVAA	4/28/05	17:34

J-I3e

Comments: Lot #: F5D210354 Sample #: 2

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58824

TOTAL Metals

Lot-Sample #...: F5D210354-001 **Matrix.....: SOLID**
Date Sampled...: 04/18/05 **Date Received..: 04/21/05**
% Moisture.....: 24

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	**17.5 M***	**0.52**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WP71AC**
		Dilution Factor: 10		Analysis Time..: 00:37		
Arsenic J, I 186	**42.0 E**	**0.52**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WP71AD**
		Dilution Factor: 10		Analysis Time..: 00:37		
Barium	**1170 M**	**5.2**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WP71AE**
		Dilution Factor: 10		Analysis Time..: 00:37		
Beryllium	**0.27**	**0.26**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WP71AF**
		Dilution Factor: 10		Analysis Time..: 00:37		
Cadmium	**16.9 M**	**0.65**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WP71AG**
		Dilution Factor: 10		Analysis Time..: 00:37		
Cobalt	**16.2**	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WP71AH**
		Dilution Factor: 10		Analysis Time..: 00:37		
Chromium	**102 M**	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WP71AJ**
		Dilution Factor: 10		Analysis Time..: 00:37		
Copper	**1620 M***	**2.6**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WP71AK**
		Dilution Factor: 20		Analysis Time..: 17:48		
Manganese	**1520 M**	**2.6**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WP71AL**
		Dilution Factor: 10		Analysis Time..: 00:37		
Nickel	**203 M**	**0.52**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WP71AM**
		Dilution Factor: 10		Analysis Time..: 00:37		
Lead	**3330 M***	**1.6**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WP71AN**
		Dilution Factor: 20		Analysis Time..: 17:48		
Antimony	**33.4 M**	**0.52**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WP71AP**
		Dilution Factor: 10		Analysis Time..: 00:37		
Selenium U, I 4a	**1.1**	**0.52**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WP71AQ**
		Dilution Factor: 10		Analysis Time..: 00:37		

(Continued on next page)

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58824

TOTAL Metals

Lot-Sample #...: F5D210354-001 **Matrix.....: SOLID**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	0.54	0.26	mg/kg	SW846 6020	04/27-04/28/05	G8WP71AR
		Dilution Factor: 10		Analysis Time..: 00:37		
Vanadium	16.1	2.6	mg/kg	SW846 6020	04/27-04/28/05	G8WP71AT
		Dilution Factor: 10		Analysis Time..: 00:37		
Prep Batch #...: 5115193						
Calcium J,I186	44100 N*E	327	mg/kg	SW846 6010B	04/27/05	G8WP71AU
		Dilution Factor: 1		Analysis Time..: 15:23		
Iron	82200 N	65.4	mg/kg	SW846 6010B	04/27-04/28/05	G8WP71AV
		Dilution Factor: 5		Analysis Time..: 08:19		
Potassium	4950 N	392	mg/kg	SW846 6010B	04/27/05	G8WP71AW
		Dilution Factor: 1		Analysis Time..: 15:23		
Magnesium JrI23d; J.I186	3680 NE	327	mg/kg	SW846 6010B	04/27/05	G8WP71AX
		Dilution Factor: 1		Analysis Time..: 15:23		
Sodium JrI23d	5410 N	327	mg/kg	SW846 6010B	04/27/05	G8WP71A0
		Dilution Factor: 1		Analysis Time..: 15:23		
Zinc	8220 N*	13.1	mg/kg	SW846 6010B	04/27-04/28/05	G8WP71A1
		Dilution Factor: 5		Analysis Time..: 08:19		
Aluminum	18800 N*	13.1	mg/kg	SW846 6010B	04/27/05	G8WP71A2
		Dilution Factor: 1		Analysis Time..: 15:23		
Prep Batch #...: 5117679						
Mercury J-I23e	0.62 NE	0.044	mg/kg	SW846 7471A	04/28/05	G8WP71A3
		Dilution Factor: 1		Analysis Time..: 17:22		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58825

TOTAL Metals

Lot-Sample #...: F5D210354-002 Matrix.....: SOLID
Date Sampled...: 04/19/05 Date Received..: 04/21/05
% Moisture.....: 25

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	190 E*	0.53	mg/kg	SW846 6020	04/27-04/28/05	G8WQL1AN
		Dilution Factor: 10		Analysis Time..: 01:15		
Arsenic	29.6 E	0.53	mg/kg	SW846 6020	04/27-04/28/05	G8WQL1AP
		Dilution Factor: 10		Analysis Time..: 01:15		
Barium	5030 E	5.3	mg/kg	SW846 6020	04/27-04/28/05	G8WQL1AQ
		Dilution Factor: 10		Analysis Time..: 01:15		
Beryllium	0.21 B	0.27	mg/kg	SW846 6020	04/27-04/28/05	G8WQL1AR
J.I		Dilution Factor: 10		Analysis Time..: 01:15		
Cadmium	12.4 E	0.66	mg/kg	SW846 6020	04/27-04/28/05	G8WQL1AT
		Dilution Factor: 10		Analysis Time..: 01:15		
Cobalt	17.9	1.3	mg/kg	SW846 6020	04/27-04/28/05	G8WQL1AU
		Dilution Factor: 10		Analysis Time..: 01:15		
Chromium	74.0 E	1.3	mg/kg	SW846 6020	04/27-04/28/05	G8WQL1AV
		Dilution Factor: 10		Analysis Time..: 01:15		
Copper	993 E*	2.7	mg/kg	SW846 6020	04/27-04/28/05	G8WQL1AW
		Dilution Factor: 20		Analysis Time..: 18:04		
Manganese	1270 E	2.7	mg/kg	SW846 6020	04/27-04/28/05	G8WQL1AX
		Dilution Factor: 10		Analysis Time..: 01:15		
Nickel	96.3 E	0.53	mg/kg	SW846 6020	04/27-04/28/05	G8WQL1A0
		Dilution Factor: 10		Analysis Time..: 01:15		
Lead	6650 E*	1.6	mg/kg	SW846 6020	04/27-04/28/05	G8WQL1A1
		Dilution Factor: 20		Analysis Time..: 18:04		
Antimony	52.1 E	0.53	mg/kg	SW846 6020	04/27-04/28/05	G8WQL1A2
		Dilution Factor: 10		Analysis Time..: 01:15		
Selenium	1.6	0.53	mg/kg	SW846 6020	04/27-04/28/05	G8WQL1A3
		Dilution Factor: 10		Analysis Time..: 01:15		

(Continued on next page)

CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: EE73-05-58825

TOTAL Metals

Lot-Sample #...: F5D210354-002 **Matrix.....: SOLID**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.27	mg/kg	SW846 6020	04/27-04/28/05	G8WQL1A4
		Dilution Factor: 10		Analysis Time..: 01:15		
Vanadium	12.8	2.7	mg/kg	SW846 6020	04/27-04/28/05	G8WQL1A5
		Dilution Factor: 10		Analysis Time..: 01:15		
Prep Batch #...: 5115193						
Calcium	25200 E*E	332	mg/kg	SW846 6010B	04/27/05	G8WQL1A6
		Dilution Factor: 1		Analysis Time..: 15:41		
Iron	144000 E	66.4	mg/kg	SW846 6010B	04/27-04/28/05	G8WQL1A7
		Dilution Factor: 5		Analysis Time..: 08:37		
Potassium	2370 E	399	mg/kg	SW846 6010B	04/27/05	G8WQL1A8
		Dilution Factor: 1		Analysis Time..: 15:41		
Magnesium	2640 EE	332	mg/kg	SW846 6010B	04/27/05	G8WQL1A9
Jn23d		Dilution Factor: 1		Analysis Time..: 15:41		
Sodium	1900 E	332	mg/kg	SW846 6010B	04/27/05	G8WQL1AA
Jn23d		Dilution Factor: 1		Analysis Time..: 15:41		
Zinc	3020 E*	13.3	mg/kg	SW846 6010B	04/27-04/28/05	G8WQL1AC
		Dilution Factor: 5		Analysis Time..: 08:37		
Aluminum	12400 E*	13.3	mg/kg	SW846 6010B	04/27/05	G8WQL1AD
		Dilution Factor: 1		Analysis Time..: 15:41		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

B Estimated result. Result is less than RL.

10

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: EE73-05-58826

TOTAL Metals

Lot-Sample #...: F5D210354-003 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 25

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	54.9 M*	0.53	mg/kg	SW846 6020	04/27-04/28/05	G8WQN1AN
		Dilution Factor: 10		Analysis Time..: 01:20		
Arsenic	22.7 E	0.53	mg/kg	SW846 6020	04/27-04/28/05	G8WQN1AP
		Dilution Factor: 10		Analysis Time..: 01:20		
Barium	1490 M	5.3	mg/kg	SW846 6020	04/27-04/28/05	G8WQN1AQ
		Dilution Factor: 10		Analysis Time..: 01:20		
Beryllium	0.34	0.27	mg/kg	SW846 6020	04/27-04/28/05	G8WQN1AR
		Dilution Factor: 10		Analysis Time..: 01:20		
Cadmium	19.7 M	0.66	mg/kg	SW846 6020	04/27-04/28/05	G8WQN1AT
		Dilution Factor: 10		Analysis Time..: 01:20		
Cobalt	13.8	1.3	mg/kg	SW846 6020	04/27-04/28/05	G8WQN1AU
		Dilution Factor: 10		Analysis Time..: 01:20		
Chromium	77.0 M	1.3	mg/kg	SW846 6020	04/27-04/28/05	G8WQN1AV
		Dilution Factor: 10		Analysis Time..: 01:20		
Copper	1670 M*	2.7	mg/kg	SW846 6020	04/27-04/28/05	G8WQN1AW
		Dilution Factor: 20		Analysis Time..: 18:07		
Manganese	1230 M	2.7	mg/kg	SW846 6020	04/27-04/28/05	G8WQN1AX
		Dilution Factor: 10		Analysis Time..: 01:20		
Nickel	79.7 M	0.53	mg/kg	SW846 6020	04/27-04/28/05	G8WQN1A0
		Dilution Factor: 10		Analysis Time..: 01:20		
Lead	6700 M*	1.6	mg/kg	SW846 6020	04/27-04/28/05	G8WQN1A1
		Dilution Factor: 20		Analysis Time..: 18:07		
Antimony	48.4 M	0.53	mg/kg	SW846 6020	04/27-04/28/05	G8WQN1A2
		Dilution Factor: 10		Analysis Time..: 01:20		
Selenium	1.1	0.53	mg/kg	SW846 6020	04/27-04/28/05	G8WQN1A3
U.I4a		Dilution Factor: 10		Analysis Time..: 01:20		

(Continued on next page)

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58826

TOTAL Metals

Lot-Sample #...: F5D210354-003 **Matrix.....: SOLID**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.27	mg/kg	SW846 6020	04/27-04/28/05	G8WQN1A4
		Dilution Factor: 10		Analysis Time..: 01:20		
Vanadium	15.3	2.7	mg/kg	SW846 6020	04/27-04/28/05	G8WQN1A5
		Dilution Factor: 10		Analysis Time..: 01:20		
Prep Batch #...: 5115193						
Calcium	27300 N*E	332	mg/kg	SW846 6010B	04/27/05	G8WQN1A6
		Dilution Factor: 1		Analysis Time..: 15:45		
Iron	78400 E	66.4	mg/kg	SW846 6010B	04/27-04/28/05	G8WQN1A7
		Dilution Factor: 5		Analysis Time..: 08:41		
Potassium	3820 E	398	mg/kg	SW846 6010B	04/27/05	G8WQN1A8
		Dilution Factor: 1		Analysis Time..: 15:45		
Magnesium J+ Z3d	2840 NE	332	mg/kg	SW846 6010B	04/27/05	G8WQN1A9
		Dilution Factor: 1		Analysis Time..: 15:45		
Sodium J+ Z3d	3690 E	332	mg/kg	SW846 6010B	04/27/05	G8WQN1AA
		Dilution Factor: 1		Analysis Time..: 15:45		
Zinc	4360 N*	2.7	mg/kg	SW846 6010B	04/27/05	G8WQN1AC
		Dilution Factor: 1		Analysis Time..: 15:45		
Aluminum	15200 N*	13.3	mg/kg	SW846 6010B	04/27/05	G8WQN1AD
		Dilution Factor: 1		Analysis Time..: 15:45		
Prep Batch #...: 5117679						
Mercury J- I3e	0.70 NE	0.044	mg/kg	SW846 7471A	04/28/05	G8WQN1AE
		Dilution Factor: 1		Analysis Time..: 17:44		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RF73-05-58827

TOTAL Metals

Lot-Sample #...: F5D210354-004 Matrix.....: SOLID
Date Sampled...: 04/19/05 Date Received..: 04/21/05
% Moisture.....: 17

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	118 E*	0.48	mg/kg	SW846 6020	04/27-04/28/05	G8WQR1AN
		Dilution Factor: 10		Analysis Time..: 01:25		
Arsenic	33.6 E	0.48	mg/kg	SW846 6020	04/27-04/28/05	G8WQR1AP
		Dilution Factor: 10		Analysis Time..: 01:25		
Barium	4150 E	4.8	mg/kg	SW846 6020	04/27-04/28/05	G8WQR1AQ
		Dilution Factor: 10		Analysis Time..: 01:25		
Beryllium	0.37	0.24	mg/kg	SW846 6020	04/27-04/28/05	G8WQR1AR
		Dilution Factor: 10		Analysis Time..: 01:25		
Cadmium	9.0 E	0.6	mg/kg	SW846 6020	04/27-04/28/05	G8WQR1AT
		Dilution Factor: 10		Analysis Time..: 01:25		
Cobalt	11.3	1.2	mg/kg	SW846 6020	04/27-04/28/05	G8WQR1AU
		Dilution Factor: 10		Analysis Time..: 01:25		
Chromium	61.3 E	1.2	mg/kg	SW846 6020	04/27-04/28/05	G8WQR1AV
		Dilution Factor: 10		Analysis Time..: 01:25		
Copper	1270 E*	1.2	mg/kg	SW846 6020	04/27-04/28/05	G8WQR1AW
		Dilution Factor: 10		Analysis Time..: 18:19		
Manganese	895 E	2.4	mg/kg	SW846 6020	04/27-04/28/05	G8WQR1AX
		Dilution Factor: 10		Analysis Time..: 01:25		
Nickel	43.7 E	0.48	mg/kg	SW846 6020	04/27-04/28/05	G8WQR1A0
		Dilution Factor: 10		Analysis Time..: 01:25		
Lead	2400	0.72	mg/kg	SW846 6020	04/27-04/28/05	G8WQR1A1
		Dilution Factor: 2		Analysis Time..: 01:25		
Antimony	32.8 E	0.48	mg/kg	SW846 6020	04/27-04/28/05	G8WQR1A2
		Dilution Factor: 10		Analysis Time..: 01:25		
Selenium	0.89	0.48	mg/kg	SW846 6020	04/27-04/28/05	G8WQR1A3
		Dilution Factor: 10		Analysis Time..: 01:25		

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ND

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58827

TOTAL Metals

Lot-Sample #...: F5D210354-004 **Matrix.....: SOLID**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.24	mg/kg	SW846 6020	04/27-04/28/05	G8WQR1A4
		Dilution Factor: 10		Analysis Time..: 01:25		
Vanadium	14.1	2.4	mg/kg	SW846 6020	04/27-04/28/05	G8WQR1A5
		Dilution Factor: 10		Analysis Time..: 01:25		
Prep Batch #...: 5115193						
Calcium	22800 E*E	301	mg/kg	SW846 6010B	04/27/05	G8WQR1A6
		Dilution Factor: 1		Analysis Time..: 15:49		
Iron	41800 E	12	mg/kg	SW846 6010B	04/27/05	G8WQR1A7
		Dilution Factor: 1		Analysis Time..: 15:49		
Potassium	2490 E	361	mg/kg	SW846 6010B	04/27/05	G8WQR1A8
		Dilution Factor: 1		Analysis Time..: 15:49		
Magnesium	2680 EE	301	mg/kg	SW846 6010B	04/27/05	G8WQR1A9
J+, I-3d		Dilution Factor: 1		Analysis Time..: 15:49		
Sodium	1990 E	301	mg/kg	SW846 6010B	04/27/05	G8WQR1AA
J+ I-3d		Dilution Factor: 1		Analysis Time..: 15:49		
Zinc	4450 E*	2.4	mg/kg	SW846 6010B	04/27/05	G8WQR1AC
		Dilution Factor: 1		Analysis Time..: 15:49		
Aluminum	13400 E*	12	mg/kg	SW846 6010B	04/27/05	G8WQR1AD
		Dilution Factor: 1		Analysis Time..: 15:49		
Prep Batch #...: 5117679						
Mercury	0.90 EE	0.04	mg/kg	SW846 7471A	04/28/05	G8WQR1AE
J-, I-3e		Dilution Factor: 1		Analysis Time..: 17:46		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58828

TOTAL Metals

Lot-Sample #...: F5D210354-005 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 18

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	**37.2 M***	**0.49** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:30	**04/27-04/28/05**	**G8WQT1AN**
Arsenic	**39.3 M**	**0.49** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:30	**04/27-04/28/05**	**G8WQT1AP**
Barium	**1550 M**	**4.9** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:30	**04/27-04/28/05**	**G8WQT1AQ**
Beryllium	**2.4**	**0.24** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:30	**04/27-04/28/05**	**G8WQT1AR**
Cadmium	**48.3 M**	**0.61** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:30	**04/27-04/28/05**	**G8WQT1AT**
Cobalt	**18.3**	**1.2** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:30	**04/27-04/28/05**	**G8WQT1AU**
Chromium	**85.9 M**	**1.2** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:30	**04/27-04/28/05**	**G8WQT1AV**
Copper	**219000 M***	**24.3** Dilution Factor: 200	**mg/kg**	**SW846 6020** Analysis Time..: 19:40	**04/27-04/28/05**	**G8WQT1AW**
Manganese	**21800 M**	**2.4** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:30	**04/27-04/28/05**	**G8WQT1AX**
Nickel	**146 M**	**0.49** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:30	**04/27-04/28/05**	**G8WQT1A0**
Lead	**2460**	**0.73** Dilution Factor: 2	**mg/kg**	**SW846 6020** Analysis Time..: 01:30	**04/27-04/28/05**	**G8WQT1A1**
Antimony	**27.8 M**	**0.49** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:30	**04/27-04/28/05**	**G8WQT1A2**
Selenium U, E4a	**0.92**	**0.49** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:30	**04/27-04/28/05**	**G8WQT1A3**

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: EE73-05-58828

TOTAL Metals

Lot-Sample #...: F5D210354-005 **Matrix.....: SOLID**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.24	mg/kg	SW846 6020	04/27-04/28/05	G8WQT1A4
		Dilution Factor: 10		Analysis Time..: 01:30		
Vanadium	24.7	2.4	mg/kg	SW846 6020	04/27-04/28/05	G8WQT1A5
		Dilution Factor: 10		Analysis Time..: 01:30		
Prep Batch #...: 5115193						
Calcium	27700 E*E	304	mg/kg	SW846 6010B	04/27/05	G8WQT1A6
		Dilution Factor: 1		Analysis Time..: 15:54		
Iron	40900 E	12.2	mg/kg	SW846 6010B	04/27/05	G8WQT1A7
		Dilution Factor: 1		Analysis Time..: 15:54		
Potassium	2680 E	364	mg/kg	SW846 6010B	04/27/05	G8WQT1A8
		Dilution Factor: 1		Analysis Time..: 15:54		
Magnesium J+ I3d	2880 EE	304	mg/kg	SW846 6010B	04/27/05	G8WQT1A9
		Dilution Factor: 1		Analysis Time..: 15:54		
Sodium J+ I3d	2450 E	304	mg/kg	SW846 6010B	04/27/05	G8WQT1AA
		Dilution Factor: 1		Analysis Time..: 15:54		
Zinc	11300 E*	12.2	mg/kg	SW846 6010B	04/27-04/28/05	G8WQT1AC
		Dilution Factor: 5		Analysis Time..: 08:45		
Aluminum	12200 E*	12.2	mg/kg	SW846 6010B	04/27/05	G8WQT1AD
		Dilution Factor: 1		Analysis Time..: 15:54		
Prep Batch #...: 5117679						
Mercury J- I3e	0.92 EE	0.041	mg/kg	SW846 7471A	04/28/05	G8WQT1AE
		Dilution Factor: 1		Analysis Time..: 17:49		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

(D)

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58830

TOTAL Metals

Lot-Sample #...: F5D210354-007 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 21

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	54.0 E*	0.51	mg/kg	SW846 6020	04/27-04/28/05	G8WR61AN
		Dilution Factor: 10		Analysis Time..: 01:35		
Arsenic	26.1 E	0.51	mg/kg	SW846 6020	04/27-04/28/05	G8WR61AP
		Dilution Factor: 10		Analysis Time..: 01:35		
Barium	1980 E	5.1	mg/kg	SW846 6020	04/27-04/28/05	G8WR61AQ
		Dilution Factor: 10		Analysis Time..: 01:35		
Beryllium	0.39	0.25	mg/kg	SW846 6020	04/27-04/28/05	G8WR61AR
		Dilution Factor: 10		Analysis Time..: 01:35		
Cadmium	18.2 E	0.63	mg/kg	SW846 6020	04/27-04/28/05	G8WR61AT
		Dilution Factor: 10		Analysis Time..: 01:35		
Cobalt	40.3	1.3	mg/kg	SW846 6020	04/27-04/28/05	G8WR61AU
		Dilution Factor: 10		Analysis Time..: 01:35		
Chromium	154 E	1.3	mg/kg	SW846 6020	04/27-04/28/05	G8WR61AV
		Dilution Factor: 10		Analysis Time..: 01:35		
Copper	1330 E*	2.5	mg/kg	SW846 6020	04/27-04/28/05	G8WR61AW
		Dilution Factor: 20		Analysis Time..: 18:25		
Manganese	2190 E	2.5	mg/kg	SW846 6020	04/27-04/28/05	G8WR61AX
		Dilution Factor: 10		Analysis Time..: 01:35		
Nickel	633 E	0.51	mg/kg	SW846 6020	04/27-04/28/05	G8WR61A0
		Dilution Factor: 10		Analysis Time..: 01:35		
Lead	6110 E*	1.5	mg/kg	SW846 6020	04/27-04/28/05	G8WR61A1
		Dilution Factor: 20		Analysis Time..: 18:25		
Antimony	73.1 E	0.51	mg/kg	SW846 6020	04/27-04/28/05	G8WR61A2
		Dilution Factor: 10		Analysis Time..: 01:35		
Selenium	0.81	0.51	mg/kg	SW846 6020	04/27-04/28/05	G8WR61A3
U.Z4a		Dilution Factor: 10		Analysis Time..: 01:35		

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: EM73-05-58830

TOTAL Metals

Lot-Sample #...: F5D210354-007 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.25	mg/kg	SW846 6020	04/27-04/28/05	G8WR61A4
		Dilution Factor: 10		Analysis Time..: 01:35		
Vanadium	20.9	2.5	mg/kg	SW846 6020	04/27-04/28/05	G8WR61A5
		Dilution Factor: 10		Analysis Time..: 01:35		
Prep Batch #...: 5115193						
Calcium	30700 N*E	316	mg/kg	SW846 6010B	04/27/05	G8WR61A6
		Dilution Factor: 1		Analysis Time..: 16:07		
Iron	57100 E	12.6	mg/kg	SW846 6010B	04/27/05	G8WR61A7
		Dilution Factor: 1		Analysis Time..: 16:07		
Potassium	2220 E	379	mg/kg	SW846 6010B	04/27/05	G8WR61A8
		Dilution Factor: 1		Analysis Time..: 16:07		
Magnesium J+ I3d	57600 NE	316	mg/kg	SW846 6010B	04/27/05	G8WR61A9
		Dilution Factor: 1		Analysis Time..: 16:07		
Sodium J+ I3d	1510 E	316	mg/kg	SW846 6010B	04/27/05	G8WR61AA
		Dilution Factor: 1		Analysis Time..: 16:07		
Zinc	4880 N*	2.5	mg/kg	SW846 6010B	04/27/05	G8WR61AC
		Dilution Factor: 1		Analysis Time..: 16:07		
Aluminum	12100 N*	12.6	mg/kg	SW846 6010B	04/27/05	G8WR61AD
		Dilution Factor: 1		Analysis Time..: 16:07		
Prep Batch #...: 5117679						
Mercury J-I3e	1.6 NE	0.042	mg/kg	SW846 7471A	04/28/05	G8WR61AE
		Dilution Factor: 1		Analysis Time..: 17:50		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58831

TOTAL Metals

Lot-Sample #...: F5D210354-008 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 24

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	**49.5 N***	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTA1AN**
		Dilution Factor: 10		Analysis Time..: 01:40		
Arsenic	**19.0 E**	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTA1AP**
		Dilution Factor: 10		Analysis Time..: 01:40		
Barium	**1880 N**	**5.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTA1AQ**
		Dilution Factor: 10		Analysis Time..: 01:40		
Beryllium	**0.28**	**0.27**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTA1AR**
		Dilution Factor: 10		Analysis Time..: 01:40		
Cadmium	**78.5 N**	**0.66**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTA1AT**
		Dilution Factor: 10		Analysis Time..: 01:40		
Cobalt	**15.1**	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTA1AU**
		Dilution Factor: 10		Analysis Time..: 01:40		
Chromium	**88.5 N**	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTA1AV**
		Dilution Factor: 10		Analysis Time..: 01:40		
Copper	**4130 N***	**3.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTA1AW**
		Dilution Factor: 25		Analysis Time..: 18:28		
Manganese	**1330 N**	**2.7**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTA1AX**
		Dilution Factor: 10		Analysis Time..: 01:40		
Nickel	**125 N**	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTA1A0**
		Dilution Factor: 10		Analysis Time..: 01:40		
Lead	**3950**	**0.79**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTA1A1**
		Dilution Factor: 2		Analysis Time..: 01:40		
Antimony	**27.8 N**	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTA1A2**
		Dilution Factor: 10		Analysis Time..: 01:40		
Selenium	**1.7**	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTA1A3**
		Dilution Factor: 10		Analysis Time..: 01:40		

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58831

TOTAL Metals

Lot-Sample #...: F5D210354-008 **Matrix.....: SOLID**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.27	mg/kg	SW846 6020	04/27-04/28/05	G8WTA1A4
		Dilution Factor: 10		Analysis Time..: 01:40		
Vanadium	17.2	2.7	mg/kg	SW846 6020	04/27-04/28/05	G8WTA1A5
		Dilution Factor: 10		Analysis Time..: 01:40		
Prep Batch #...: 5115193						
Calcium	31400 E*E	331	mg/kg	SW846 6010B	04/27/05	G8WTA1A6
		Dilution Factor: 1		Analysis Time..: 16:11		
Iron	50000 E	13.2	mg/kg	SW846 6010B	04/27/05	G8WTA1A7
		Dilution Factor: 1		Analysis Time..: 16:11		
Potassium	3860 E	397	mg/kg	SW846 6010B	04/27/05	G8WTA1A8
		Dilution Factor: 1		Analysis Time..: 16:11		
Magnesium	3070 EE	331	mg/kg	SW846 6010B	04/27/05	G8WTA1A9
J+I3d		Dilution Factor: 1		Analysis Time..: 16:11		
Sodium	4050 E	331	mg/kg	SW846 6010B	04/27/05	G8WTA1AA
J+I3d		Dilution Factor: 1		Analysis Time..: 16:11		
Zinc	43000 E*	26.5	mg/kg	SW846 6010B	04/27-04/28/05	G8WTA1AC
		Dilution Factor: 10		Analysis Time..: 08:50		
Aluminum	17700 E*	13.2	mg/kg	SW846 6010B	04/27/05	G8WTA1AD
		Dilution Factor: 1		Analysis Time..: 16:11		
Prep Batch #...: 5117679						
Mercury	1.4 NE	0.044	mg/kg	SW846 7471A	04/28/05	G8WTA1AE
J-I3e		Dilution Factor: 1		Analysis Time..: 17:53		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58832

TOTAL Metals

Lot-Sample #...: F5D210354-009 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 25

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Barium	**1580 N**	**5.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTE1AQ**
		Dilution Factor: 10		Analysis Time..: 01:45		
Beryllium	**0.28**	**0.27**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTE1AR**
		Dilution Factor: 10		Analysis Time..: 01:45		
Cadmium	**14.9 N**	**0.67**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTE1AT**
		Dilution Factor: 10		Analysis Time..: 01:45		
Cobalt	**13.2**	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTE1AU**
		Dilution Factor: 10		Analysis Time..: 01:45		
Chromium	**66.8 N**	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTE1AV**
		Dilution Factor: 10		Analysis Time..: 01:45		
Copper	**1930 N***	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTE1AW**
		Dilution Factor: 10		Analysis Time..: 18:31		
Manganese	**1380 N**	**2.7**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTE1AX**
		Dilution Factor: 10		Analysis Time..: 01:45		
Nickel	**131 N**	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTE1A0**
		Dilution Factor: 10		Analysis Time..: 01:45		
Lead	**2390 N***	**0.8**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTE1A1**
		Dilution Factor: 10		Analysis Time..: 01:45		
Antimony	**29.1 N**	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTE1A2**
		Dilution Factor: 10		Analysis Time..: 01:45		
Selenium	**0.68**	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTE1A3**
u.t4a		Dilution Factor: 10		Analysis Time..: 01:45		
Thallium	**ND**	**0.27**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTE1A4**
		Dilution Factor: 10		Analysis Time..: 01:45		
Vanadium	**17.1**	**2.7**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTE1A5**
		Dilution Factor: 10		Analysis Time..: 01:45		

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58832

TOTAL Metals

Lot-Sample #...: F5D210354-009 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	35.6 N*	0.53	mg/kg	SW846 6020	04/27-04/28/05	G8WTK1AN
		Dilution Factor: 10		Analysis Time..: 01:45		
Arsenic	20.5 E	0.53	mg/kg	SW846 6020	04/27-04/28/05	G8WTK1AP
		Dilution Factor: 10		Analysis Time..: 01:45		
Prep Batch #...: 5115193						
Calcium	34800 N*E	332	mg/kg	SW846 6010B	04/27/05	G8WTK1A6
		Dilution Factor: 1		Analysis Time..: 16:16		
Iron	58300 N	13.3	mg/kg	SW846 6010B	04/27/05	G8WTK1A7
		Dilution Factor: 1		Analysis Time..: 16:16		
Potassium	4370 N	399	mg/kg	SW846 6010B	04/27/05	G8WTK1A8
		Dilution Factor: 1		Analysis Time..: 16:16		
Magnesium J+.23d	3390 NE	332	mg/kg	SW846 6010B	04/27/05	G8WTK1A9
		Dilution Factor: 1		Analysis Time..: 16:16		
Sodium J+.23d	3960 N	332	mg/kg	SW846 6010B	04/27/05	G8WTK1AA
		Dilution Factor: 1		Analysis Time..: 16:16		
Zinc	3940 N*	2.7	mg/kg	SW846 6010B	04/27/05	G8WTK1AC
		Dilution Factor: 1		Analysis Time..: 16:16		
Aluminum	18200 N*	13.3	mg/kg	SW846 6010B	04/27/05	G8WTK1AD
		Dilution Factor: 1		Analysis Time..: 16:16		
Prep Batch #...: 5117679						
Mercury J-.23e	1.7 NE	0.044	mg/kg	SW846 7471A	04/28/05	G8WTK1AE
		Dilution Factor: 1		Analysis Time..: 17:55		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

E Matrix interference.

W

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58833

TOTAL Metals

Lot-Sample #...: F5D210354-010 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 17

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	**119 M***	**0.48**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTG1AN**
		Dilution Factor: 10		Analysis Time..: 01:51		
Arsenic	**26.8 E**	**0.48**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTG1AP**
		Dilution Factor: 10		Analysis Time..: 01:51		
Barium	**2660 M**	**4.8**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTG1AQ**
		Dilution Factor: 10		Analysis Time..: 01:51		
Beryllium	**1.2**	**0.24**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTG1AR**
		Dilution Factor: 10		Analysis Time..: 01:51		
Cadmium	**7.7 M**	**0.6**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTG1AT**
		Dilution Factor: 10		Analysis Time..: 01:51		
Cobalt	**17.3**	**1.2**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTG1AU**
		Dilution Factor: 10		Analysis Time..: 01:51		
Chromium	**107 M**	**1.2**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTG1AV**
		Dilution Factor: 10		Analysis Time..: 01:51		
Copper	**1190 M***	**1.2**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTG1AW**
		Dilution Factor: 10		Analysis Time..: 18:35		
Manganese	**1750 M**	**2.4**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTG1AX**
		Dilution Factor: 10		Analysis Time..: 01:51		
Nickel	**115 M**	**0.48**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTG1A0**
		Dilution Factor: 10		Analysis Time..: 01:51		
Lead	**2500 M***	**0.72**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTG1A1**
		Dilution Factor: 10		Analysis Time..: 01:51		
Antimony	**29.8 M**	**0.48**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTG1A2**
		Dilution Factor: 10		Analysis Time..: 01:51		
Selenium	**0.57**	**0.48**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTG1A3**
4.I4a		Dilution Factor: 10		Analysis Time..: 01:51		

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: EE73-05-58833

TOTAL Metals

Lot-Sample #...: F5D210354-010 **Matrix.....: SOLID**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.24	mg/kg	SW846 6020	04/27-04/28/05	G8WTG1A4
		Dilution Factor: 10		Analysis Time..: 01:51		
Vanadium	12.9	2.4	mg/kg	SW846 6020	04/27-04/28/05	G8WTG1A5
		Dilution Factor: 10		Analysis Time..: 01:51		
Prep Batch #...: 5115193						
Calcium	27200 N*E	300	mg/kg	SW846 6010B	04/27/05	G8WTG1A6
		Dilution Factor: 1		Analysis Time..: 16:20		
Iron	148000 N	59.9	mg/kg	SW846 6010B	04/27-04/28/05	G8WTG1A7
		Dilution Factor: 5		Analysis Time..: 08:54		
Potassium	3200 N	360	mg/kg	SW846 6010B	04/27/05	G8WTG1A8
		Dilution Factor: 1		Analysis Time..: 16:20		
Magnesium J-I3d	2830 NE	300	mg/kg	SW846 6010B	04/27/05	G8WTG1A9
		Dilution Factor: 1		Analysis Time..: 16:20		
Sodium J-I3d	4750 N	300	mg/kg	SW846 6010B	04/27/05	G8WTG1AA
		Dilution Factor: 1		Analysis Time..: 16:20		
Zinc	3760 N*	2.4	mg/kg	SW846 6010B	04/27/05	G8WTG1AC
		Dilution Factor: 1		Analysis Time..: 16:20		
Aluminum	15800 N*	12	mg/kg	SW846 6010B	04/27/05	G8WTG1AD
		Dilution Factor: 1		Analysis Time..: 16:20		
Prep Batch #...: 5117679						
Mercury J-I3e	2.1 NE	0.08	mg/kg	SW846 7471A	04/28/05	G8WTG1AE
		Dilution Factor: 2		Analysis Time..: 18:50		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58834

TOTAL Metals

Lot-Sample #...: F5D210354-011 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 25

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	**56.9 M***	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTR1AN**
		Dilution Factor: 10		**Analysis Time..: 01:56**		
Arsenic	**26.3 E**	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTR1AP**
		Dilution Factor: 10		**Analysis Time..: 01:56**		
Barium	**1000 M**	**5.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTR1AQ**
		Dilution Factor: 10		**Analysis Time..: 01:56**		
Beryllium	**0.74**	**0.27**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTR1AR**
		Dilution Factor: 10		**Analysis Time..: 01:56**		
Cadmium	**15.4 M**	**0.66**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTR1AT**
		Dilution Factor: 10		**Analysis Time..: 01:56**		
Cobalt	**17.7**	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTR1AU**
		Dilution Factor: 10		**Analysis Time..: 01:56**		
Chromium	**81.8 M**	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTR1AV**
		Dilution Factor: 10		**Analysis Time..: 01:56**		
Copper	**31500 M***	**3.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTR1AW**
		Dilution Factor: 25		**Analysis Time..: 18:38**		
Manganese	**2540 M**	**2.7**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTR1AX**
		Dilution Factor: 10		**Analysis Time..: 01:56**		
Nickel	**295 M**	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTR1A0**
		Dilution Factor: 10		**Analysis Time..: 01:56**		
Lead	**8770 M***	**2**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTR1A1**
		Dilution Factor: 25		**Analysis Time..: 18:38**		
Antimony	**123 M**	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTR1A2**
		Dilution Factor: 10		**Analysis Time..: 01:56**		
Selenium	**2.0**	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTR1A3**
		Dilution Factor: 10		**Analysis Time..: 01:56**		

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: HE73-05-58834

TOTAL Metals

Lot-Sample #...: F5D210354-011 **Matrix.....: SOLID**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.27	mg/kg	SW846 6020	04/27-04/28/05	G8WTR1A4
		Dilution Factor: 10		Analysis Time..: 01:56		
Vanadium	12.6	2.7	mg/kg	SW846 6020	04/27-04/28/05	G8WTR1A5
		Dilution Factor: 10		Analysis Time..: 01:56		
Prep Batch #...: 5115193						
Calcium	32900 N*E	332	mg/kg	SW846 6010B	04/27/05	G8WTR1A6
		Dilution Factor: 1		Analysis Time..: 16:24		
Iron	125000 N	66.4	mg/kg	SW846 6010B	04/27-04/28/05	G8WTR1A7
		Dilution Factor: 5		Analysis Time..: 08:58		
Potassium	2560 N	399	mg/kg	SW846 6010B	04/27/05	G8WTR1A8
		Dilution Factor: 1		Analysis Time..: 16:24		
Magnesium	2940 NE	332	mg/kg	SW846 6010B	04/27/05	G8WTR1A9
Jh 23d		Dilution Factor: 1		Analysis Time..: 16:24		
Sodium	3300 N	332	mg/kg	SW846 6010B	04/27/05	G8WTR1AA
Jh 23d		Dilution Factor: 1		Analysis Time..: 16:24		
Zinc	9830 N*	13.3	mg/kg	SW846 6010B	04/27-04/28/05	G8WTR1AC
		Dilution Factor: 5		Analysis Time..: 08:58		
Aluminum	13300 N*	13.3	mg/kg	SW846 6010B	04/27/05	G8WTR1AD
		Dilution Factor: 1		Analysis Time..: 16:24		
Prep Batch #...: 5117679						
Mercury	1.6 NE	0.044	mg/kg	SW846 7471A	04/28/05	G8WTR1AE
J-, 23c		Dilution Factor: 1		Analysis Time..: 17:59		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58836

TOTAL Metals

Lot-Sample #...: F5D210354-013 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	21.2 N*	0.45	mg/kg	SW846 6020	04/27-04/28/05	G8WTV1AN
		Dilution Factor: 10		Analysis Time..: 02:13		
Arsenic	66.4 E	0.45	mg/kg	SW846 6020	04/27-04/28/05	G8WTV1AP
		Dilution Factor: 10		Analysis Time..: 02:13		
Barium	643 N	4.5	mg/kg	SW846 6020	04/27-04/28/05	G8WTV1AQ
		Dilution Factor: 10		Analysis Time..: 02:13		
Beryllium JI1	0.11 B	0.22	mg/kg	SW846 6020	04/27-04/28/05	G8WTV1AR
		Dilution Factor: 10		Analysis Time..: 02:13		
Cadmium	4.1 N	0.56	mg/kg	SW846 6020	04/27-04/28/05	G8WTV1AT
		Dilution Factor: 10		Analysis Time..: 02:13		
Cobalt	41.9	1.1	mg/kg	SW846 6020	04/27-04/28/05	G8WTV1AU
		Dilution Factor: 10		Analysis Time..: 02:13		
Chromium	104 N	1.1	mg/kg	SW846 6020	04/27-04/28/05	G8WTV1AV
		Dilution Factor: 10		Analysis Time..: 02:13		
Copper	815 N*	1.1	mg/kg	SW846 6020	04/27-04/28/05	G8WTV1AW
		Dilution Factor: 10		Analysis Time..: 18:41		
Manganese	2050 N	2.2	mg/kg	SW846 6020	04/27-04/28/05	G8WTV1AX
		Dilution Factor: 10		Analysis Time..: 02:13		
Nickel	220 N	0.45	mg/kg	SW846 6020	04/27-04/28/05	G8WTV1A0
		Dilution Factor: 10		Analysis Time..: 02:13		
Lead	2840 N*	0.67	mg/kg	SW846 6020	04/27-04/28/05	G8WTV1A1
		Dilution Factor: 10		Analysis Time..: 02:13		
Antimony	36.2 N	0.45	mg/kg	SW846 6020	04/27-04/28/05	G8WTV1A2
		Dilution Factor: 10		Analysis Time..: 02:13		
Selenium U.I4a	0.45	0.45	mg/kg	SW846 6020	04/27-04/28/05	G8WTV1A3
		Dilution Factor: 10		Analysis Time..: 02:13		

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58836

TOTAL Metals

Lot-Sample #...: F5D210354-013 **Matrix.....: SOLID**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.22	mg/kg	SW846 6020	04/27-04/28/05	G8WTV1A4
		Dilution Factor: 10		Analysis Time..: 02:13		
Vanadium	3.8	2.2	mg/kg	SW846 6020	04/27-04/28/05	G8WTV1A5
		Dilution Factor: 10		Analysis Time..: 02:13		
Prep Batch #...: 5115193						
Calcium	8420 N*E	6990	mg/kg	SW846 6010B	04/27-04/28/05	G8WTV1A6
		Dilution Factor: 25		Analysis Time..: 09:11		
Iron	425000 E	280	mg/kg	SW846 6010B	04/27-04/28/05	G8WTV1A7
		Dilution Factor: 25		Analysis Time..: 09:11		
Potassium	ND N	8390	mg/kg	SW846 6010B	04/27-04/28/05	G8WTV1A8
		Dilution Factor: 25		Analysis Time..: 09:11		
Magnesium	1070 NE	6990	mg/kg	SW846 6010B	04/27-04/28/05	G8WTV1A9
J+.I3d; J.I1		Dilution Factor: 25		Analysis Time..: 09:11		
Sodium	822 NE	6990	mg/kg	SW846 6010B	04/27-04/28/05	G8WTV1AA
J+.I3d; J.I1		Dilution Factor: 25		Analysis Time..: 09:11		
Zinc	939 N*	55.9	mg/kg	SW846 6010B	04/27-04/28/05	G8WTV1AC
		Dilution Factor: 25		Analysis Time..: 09:11		
Aluminum	4540 N*	280	mg/kg	SW846 6010B	04/27-04/28/05	G8WTV1AD
		Dilution Factor: 25		Analysis Time..: 09:11		
Prep Batch #...: 5117679						
Mercury	0.71 NE	0.037	mg/kg	SW846 7471A	04/28/05	G8WTV1AE
J-.I3e		Dilution Factor: 1		Analysis Time..: 18:02		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

B Estimated result. Result is less than RL.

CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58837

TOTAL Metals

Lot-Sample #...: F5D210354-014 Matrix.....: SOLID
Date Sampled...: 04/19/05 Date Received..: 04/21/05
% Moisture.....: 15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	15.4 E*	0.47	mg/kg	SW846 6020	04/27-04/28/05	G8WTW1AN
		Dilution Factor: 10		Analysis Time..: 02:18		
Arsenic	133 E	0.47	mg/kg	SW846 6020	04/27-04/28/05	G8WTW1AP
		Dilution Factor: 10		Analysis Time..: 02:18		
Barium	575 E	4.7	mg/kg	SW846 6020	04/27-04/28/05	G8WTW1AQ
		Dilution Factor: 10		Analysis Time..: 02:18		
Beryllium J,I-1	0.089 B	0.23	mg/kg	SW846 6020	04/27-04/28/05	G8WTW1AR
		Dilution Factor: 10		Analysis Time..: 02:18		
Cadmium	2.8 E	0.59	mg/kg	SW846 6020	04/27-04/28/05	G8WTW1AT
		Dilution Factor: 10		Analysis Time..: 02:18		
Cobalt	49.7	1.2	mg/kg	SW846 6020	04/27-04/28/05	G8WTW1AU
		Dilution Factor: 10		Analysis Time..: 02:18		
Chromium	94.4 E	1.2	mg/kg	SW846 6020	04/27-04/28/05	G8WTW1AV
		Dilution Factor: 10		Analysis Time..: 02:18		
Copper	490 E*	1.2	mg/kg	SW846 6020	04/27-04/28/05	G8WTW1AW
		Dilution Factor: 10		Analysis Time..: 18:44		
Manganese	2330 E	2.3	mg/kg	SW846 6020	04/27-04/28/05	G8WTW1AX
		Dilution Factor: 10		Analysis Time..: 02:18		
Nickel	219 E	0.47	mg/kg	SW846 6020	04/27-04/28/05	G8WTW1A0
		Dilution Factor: 10		Analysis Time..: 02:18		
Lead	4310 E*	0.7	mg/kg	SW846 6020	04/27-04/28/05	G8WTW1A1
		Dilution Factor: 10		Analysis Time..: 02:18		
Antimony	24.7 E	0.47	mg/kg	SW846 6020	04/27-04/28/05	G8WTW1A2
		Dilution Factor: 10		Analysis Time..: 02:18		
Selenium U,I-4a	0.64	0.47	mg/kg	SW846 6020	04/27-04/28/05	G8WTW1A3
		Dilution Factor: 10		Analysis Time..: 02:18		

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58837

TOTAL Metals

Lot-Sample #...: F5D210354-014 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.23	mg/kg	SW846 6020	04/27-04/28/05	G8WTW1A4
		Dilution Factor: 10		Analysis Time..: 02:18		
Vanadium	4.1	2.3	mg/kg	SW846 6020	04/27-04/28/05	G8WTW1A5
		Dilution Factor: 10		Analysis Time..: 02:18		
Prep Batch #...: 5115193						
Calcium	6640 EN*,E	7330	mg/kg	SW846 6010B	04/27-04/28/05	G8WTW1A6
		Dilution Factor: 25		Analysis Time..: 09:16		
Iron	486000 E	293	mg/kg	SW846 6010B	04/27-04/28/05	G8WTW1A7
		Dilution Factor: 25		Analysis Time..: 09:16		
Potassium	723 E	352	mg/kg	SW846 6010B	04/27/05	G8WTW1A8
		Dilution Factor: 1		Analysis Time..: 16:33		
Magnesium	911 EEE	7330	mg/kg	SW846 6010B	04/27-04/28/05	G8WTW1A9
J+ L3d; J. L1		Dilution Factor: 25		Analysis Time..: 09:16		
Sodium	363 EN	7330	mg/kg	SW846 6010B	04/27-04/28/05	G8WTW1AA
J+ L3d ; J. L1		Dilution Factor: 25		Analysis Time..: 09:16		
Zinc	823 E*	58.6	mg/kg	SW846 6010B	04/27-04/28/05	G8WTW1AC
		Dilution Factor: 25		Analysis Time..: 09:16		
Aluminum	3870 E*	293	mg/kg	SW846 6010B	04/27-04/28/05	G8WTW1AD
		Dilution Factor: 25		Analysis Time..: 09:16		
Prep Batch #...: 5117679						
Mercury	0.28 EE	0.039	mg/kg	SW846 7471A	04/28/05	G8WTW1AE
J- L3e		Dilution Factor: 1		Analysis Time..: 18:04		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

B Estimated result. Result is less than RL.

U

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58838

TOTAL Metals

Lot-Sample #...: F5D210354-015 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 25

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	**95.7 E***	**0.54**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTX1AN**
		Dilution Factor: 10		**Analysis Time..: 02:23**		
Arsenic	**19.5 E**	**0.54**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTX1AP**
		Dilution Factor: 10		**Analysis Time..: 02:23**		
Barium	**2600 E**	**5.4**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTX1AQ**
		Dilution Factor: 10		**Analysis Time..: 02:23**		
Beryllium	**0.33**	**0.27**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTX1AR**
		Dilution Factor: 10		**Analysis Time..: 02:23**		
Cadmium	**67.5 E**	**0.67**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTX1AT**
		Dilution Factor: 10		**Analysis Time..: 02:23**		
Cobalt	**10.1**	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTX1AU**
		Dilution Factor: 10		**Analysis Time..: 02:23**		
Chromium	**54.1 E**	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTX1AV**
		Dilution Factor: 10		**Analysis Time..: 02:23**		
Copper	**3260 E***	**6.7**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTX1AW**
		Dilution Factor: 50		**Analysis Time..: 18:47**		
Manganese	**859 E**	**2.7**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTX1AX**
		Dilution Factor: 10		**Analysis Time..: 02:23**		
Nickel	**77.0 E**	**0.54**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTX1A0**
		Dilution Factor: 10		**Analysis Time..: 02:23**		
Lead	**13700 E***	**4**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTX1A1**
		Dilution Factor: 50		**Analysis Time..: 18:47**		
Antimony	**116 E**	**0.54**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTX1A2**
		Dilution Factor: 10		**Analysis Time..: 02:23**		
Selenium	**1.2**	**0.54**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTX1A3**
U, I 4a		**Dilution Factor: 10**		**Analysis Time..: 02:23**		

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58838

TOTAL Metals

Lot-Sample #...: F5D210354-015 **Matrix.....: SOLID**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.27	mg/kg	SW846 6020	04/27-04/28/05	G8WTX1A4
		Dilution Factor: 10		Analysis Time..: 02:23		
Vanadium	14.5	2.7	mg/kg	SW846 6020	04/27-04/28/05	G8WTX1A5
		Dilution Factor: 10		Analysis Time..: 02:23		
Prep Batch #...: 5115193						
Calcium	22600 N*E	335	mg/kg	SW846 6010B	04/27/05	G8WTX1A6
		Dilution Factor: 1		Analysis Time..: 16:37		
Iron	53100 N	13.4	mg/kg	SW846 6010B	04/27/05	G8WTX1A7
		Dilution Factor: 1		Analysis Time..: 16:37		
Potassium	2560 N	402	mg/kg	SW846 6010B	04/27/05	G8WTX1A8
		Dilution Factor: 1		Analysis Time..: 16:37		
Magnesium J+.I3d	2070 NE	335	mg/kg	SW846 6010B	04/27/05	G8WTX1A9
		Dilution Factor: 1		Analysis Time..: 16:37		
Sodium J+.I3d	1940 N	335	mg/kg	SW846 6010B	04/27/05	G8WTX1AA
		Dilution Factor: 1		Analysis Time..: 16:37		
Zinc	4630 N*	2.7	mg/kg	SW846 6010B	04/27/05	G8WTX1AC
		Dilution Factor: 1		Analysis Time..: 16:37		
Aluminum	11100 N*	13.4	mg/kg	SW846 6010B	04/27/05	G8WTX1AD
		Dilution Factor: 1		Analysis Time..: 16:37		
Prep Batch #...: 5117679						
Mercury J-.I3e	0.56 NE	0.045	mg/kg	SW846 7471A	04/28/05	G8WTX1AE
		Dilution Factor: 1		Analysis Time..: 18:10		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

A

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: ER73-05-58839

TOTAL Metals

Lot-Sample #...: F5D210354-016 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 25

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	125 E*	0.53	mg/kg	SW846 6020	04/27-04/28/05	G8WT01AN
		Dilution Factor: 10		Analysis Time..: 02:29		
Arsenic	76.0 E	0.53	mg/kg	SW846 6020	04/27-04/28/05	G8WT01AP
		Dilution Factor: 10		Analysis Time..: 02:29		
Barium	2870 E	5.3	mg/kg	SW846 6020	04/27-04/28/05	G8WT01AQ
		Dilution Factor: 10		Analysis Time..: 02:29		
Beryllium	0.33	0.27	mg/kg	SW846 6020	04/27-04/28/05	G8WT01AR
		Dilution Factor: 10		Analysis Time..: 02:29		
Cadmium	16.4 E	0.67	mg/kg	SW846 6020	04/27-04/28/05	G8WT01AT
		Dilution Factor: 10		Analysis Time..: 02:29		
Cobalt	14.8	1.3	mg/kg	SW846 6020	04/27-04/28/05	G8WT01AU
		Dilution Factor: 10		Analysis Time..: 02:29		
Chromium	68.7 E	1.3	mg/kg	SW846 6020	04/27-04/28/05	G8WT01AV
		Dilution Factor: 10		Analysis Time..: 02:29		
Copper	3820 E*	13.3	mg/kg	SW846 6020	04/27-04/28/05	G8WT01AW
		Dilution Factor: 100		Analysis Time..: 18:59		
Manganese	2810 E	2.7	mg/kg	SW846 6020	04/27-04/28/05	G8WT01AX
		Dilution Factor: 10		Analysis Time..: 02:29		
Nickel	98.6 E	0.53	mg/kg	SW846 6020	04/27-04/28/05	G8WT01A0
		Dilution Factor: 10		Analysis Time..: 02:29		
Lead	33000 E*	8	mg/kg	SW846 6020	04/27-04/28/05	G8WT01A1
		Dilution Factor: 100		Analysis Time..: 18:59		
Antimony	543 E	0.53	mg/kg	SW846 6020	04/27-04/28/05	G8WT01A2
		Dilution Factor: 10		Analysis Time..: 02:29		
Selenium	1.7	0.53	mg/kg	SW846 6020	04/27-04/28/05	G8WT01A3
		Dilution Factor: 10		Analysis Time..: 02:29		

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58839

TOTAL Metals

Lot-Sample #...: F5D210354-016 **Matrix.....: SOLID**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.27	mg/kg	SW846 6020	04/27-04/28/05	G8WT01A4
		Dilution Factor: 10		Analysis Time..: 02:29		
Vanadium	15.1	2.7	mg/kg	SW846 6020	04/27-04/28/05	G8WT01A5
		Dilution Factor: 10		Analysis Time..: 02:29		
Prep Batch #...: 5115193						
Calcium	63900 N*E	333	mg/kg	SW846 6010B	04/27/05	G8WT01A6
		Dilution Factor: 1		Analysis Time..: 16:42		
Iron	93700 N	66.6	mg/kg	SW846 6010B	04/27-04/28/05	G8WT01A7
		Dilution Factor: 5		Analysis Time..: 09:20		
Potassium	2940 N	400	mg/kg	SW846 6010B	04/27/05	G8WT01A8
		Dilution Factor: 1		Analysis Time..: 16:42		
Magnesium J+. I3d	3210 NE	333	mg/kg	SW846 6010B	04/27/05	G8WT01A9
		Dilution Factor: 1		Analysis Time..: 16:42		
Sodium J+, I3d	3030 N	333	mg/kg	SW846 6010B	04/27/05	G8WT01AA
		Dilution Factor: 1		Analysis Time..: 16:42		
Zinc	4370 N*	2.7	mg/kg	SW846 6010B	04/27/05	G8WT01AC
		Dilution Factor: 1		Analysis Time..: 16:42		
Aluminum	13900 N*	13.3	mg/kg	SW846 6010B	04/27/05	G8WT01AD
		Dilution Factor: 1		Analysis Time..: 16:42		
Prep Batch #...: 5117679						
Mercury J-. I3e	1.2 NE	0.044	mg/kg	SW846 7471A	04/28/05	G8WT01AE
		Dilution Factor: 1		Analysis Time..: 18:12		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

(9)

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58840

TOTAL Metals

Lot-Sample #...: F5D210354-017 Matrix.....: SOLID
Date Sampled...: 04/19/05 Date Received..: 04/21/05
% Moisture.....: 15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	187 M*	0.47	mg/kg	SW846 6020	04/27-04/28/05	G8WT11AN
		Dilution Factor: 10		Analysis Time..: 02:34		
Arsenic	22.1 E	0.47	mg/kg	SW846 6020	04/27-04/28/05	G8WT11AP
		Dilution Factor: 10		Analysis Time..: 02:34		
Barium	3490 M	4.7	mg/kg	SW846 6020	04/27-04/28/05	G8WT11AQ
		Dilution Factor: 10		Analysis Time..: 02:34		
Beryllium J,F1	0.20 B	0.23	mg/kg	SW846 6020	04/27-04/28/05	G8WT11AR
		Dilution Factor: 10		Analysis Time..: 02:34		
Cadmium	16.5 M	0.59	mg/kg	SW846 6020	04/27-04/28/05	G8WT11AT
		Dilution Factor: 10		Analysis Time..: 02:34		
Cobalt	14.4	1.2	mg/kg	SW846 6020	04/27-04/28/05	G8WT11AU
		Dilution Factor: 10		Analysis Time..: 02:34		
Chromium	85.0 M	1.2	mg/kg	SW846 6020	04/27-04/28/05	G8WT11AV
		Dilution Factor: 10		Analysis Time..: 02:34		
Copper	1040 M*	1.2	mg/kg	SW846 6020	04/27-04/28/05	G8WT11AW
		Dilution Factor: 10		Analysis Time..: 19:02		
Manganese	1050 M	2.3	mg/kg	SW846 6020	04/27-04/28/05	G8WT11AX
		Dilution Factor: 10		Analysis Time..: 02:34		
Nickel	215 M	0.47	mg/kg	SW846 6020	04/27-04/28/05	G8WT11A0
		Dilution Factor: 10		Analysis Time..: 02:34		
Lead	1950 M*	0.7	mg/kg	SW846 6020	04/27-04/28/05	G8WT11A1
		Dilution Factor: 10		Analysis Time..: 02:34		
Antimony	19.9 M	0.47	mg/kg	SW846 6020	04/27-04/28/05	G8WT11A2
		Dilution Factor: 10		Analysis Time..: 02:34		
Selenium U,F4a	0.94	0.47	mg/kg	SW846 6020	04/27-04/28/05	G8WT11A3
		Dilution Factor: 10		Analysis Time..: 02:34		

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58840

TOTAL Metals

Lot-Sample #...: F5D210354-017 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.23	mg/kg	SW846 6020	04/27-04/28/05	G8WT11A4
		Dilution Factor: 10		Analysis Time..: 02:34		
Vanadium	14.1	2.3	mg/kg	SW846 6020	04/27-04/28/05	G8WT11A5
		Dilution Factor: 10		Analysis Time..: 02:34		
Prep Batch #...: 5115193						
Calcium	31000 N*E	293	mg/kg	SW846 6010B	04/27/05	G8WT11A6
		Dilution Factor: 1		Analysis Time..: 16:46		
Iron	99900 N	58.6	mg/kg	SW846 6010B	04/27-04/28/05	G8WT11A7
		Dilution Factor: 5		Analysis Time..: 09:24		
Potassium	4480 N	352	mg/kg	SW846 6010B	04/27/05	G8WT11A8
		Dilution Factor: 1		Analysis Time..: 16:46		
Magnesium J+.I3d	3760 NE	293	mg/kg	SW846 6010B	04/27/05	G8WT11A9
		Dilution Factor: 1		Analysis Time..: 16:46		
Sodium J+.I3d	5330 N	293	mg/kg	SW846 6010B	04/27/05	G8WT11AA
		Dilution Factor: 1		Analysis Time..: 16:46		
Zinc	5500 N*	2.3	mg/kg	SW846 6010B	04/27/05	G8WT11AC
		Dilution Factor: 1		Analysis Time..: 16:46		
Aluminum	20600 N*	11.7	mg/kg	SW846 6010B	04/27/05	G8WT11AD
		Dilution Factor: 1		Analysis Time..: 16:46		
Prep Batch #...: 5117679						
Mercury J-.I3e	0.60 NE	0.039	mg/kg	SW846 7471A	04/28/05	G8WT11AE
		Dilution Factor: 1		Analysis Time..: 18:14		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

B Estimated result. Result is less than RL.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58824

TCLP Metals

Lot-Sample #...: F5D210354-001 **Matrix.....: SOLID**
Date Sampled...: 04/18/05 **Date Received..: 04/21/05**
Leach Date.....: 04/28/05 **Leach Batch #..: P511814**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10	ug/L	SW846 7470A	04/29-05/02/05	G8WP71CC
		Dilution Factor: 1		Analysis Time..: 10:34		
Prep Batch #...: 5119272						
Arsenic	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WP71A4
		Dilution Factor: 1		Analysis Time..: 19:49		
Barium	884	500	ug/L	SW846 6010B	04/29-05/05/05	G8WP71A5
		Dilution Factor: 1		Analysis Time..: 19:49		
Cadmium	180	25	ug/L	SW846 6010B	04/29-05/05/05	G8WP71A6
		Dilution Factor: 1		Analysis Time..: 19:49		
Chromium	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WP71A7
		Dilution Factor: 1		Analysis Time..: 19:49		
Lead J-, I3e	3140 N	250	ug/L	SW846 6010B	04/29-05/05/05	G8WP71A8
		Dilution Factor: 1		Analysis Time..: 19:49		
Silver	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WP71A9
		Dilution Factor: 1		Analysis Time..: 19:49		
Selenium	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WP71CA
		Dilution Factor: 1		Analysis Time..: 19:49		
Zinc	37400 N	100	ug/L	SW846 6010B	04/29-05/05/05	G8WP71EJ
		Dilution Factor: 1		Analysis Time..: 19:49		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: EM73-05-58825

TCLP Metals

Lot-Sample #...: F5D210354-002 Matrix.....: SOLID
Date Sampled...: 04/19/05 Date Received..: 04/21/05
Leach Date.....: 04/28/05 Leach Batch #..: P511814

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10	ug/L	SW846 7470A	04/29-05/02/05	G8WQL1CC
		Dilution Factor: 1		Analysis Time..: 10:46		
Prep Batch #...: 5119272						
Arsenic	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WQL1AF
		Dilution Factor: 1		Analysis Time..: 20:06		
Barium	1650	500	ug/L	SW846 6010B	04/29-05/05/05	G8WQL1AG
		Dilution Factor: 1		Analysis Time..: 20:06		
Cadmium	91.2	25	ug/L	SW846 6010B	04/29-05/05/05	G8WQL1AH
		Dilution Factor: 1		Analysis Time..: 20:06		
Chromium	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WQL1AJ
		Dilution Factor: 1		Analysis Time..: 20:06		
Lead J-1.23e	786 N	250	ug/L	SW846 6010B	04/29-05/05/05	G8WQL1AK
		Dilution Factor: 1		Analysis Time..: 20:06		
Silver	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WQL1AL
		Dilution Factor: 1		Analysis Time..: 20:06		
Selenium	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WQL1CA
		Dilution Factor: 1		Analysis Time..: 20:06		
Zinc	19400 N	100	ug/L	SW846 6010B	04/29-05/05/05	G8WQL1CE
		Dilution Factor: 1		Analysis Time..: 20:06		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58826

TCLP Metals

Lot-Sample #...: F5D210354-003 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
Leach Date.....: 04/28/05 **Leach Batch #..: P511814**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10 Dilution Factor: 1	ug/L	SW846 7470A Analysis Time..: 10:48	04/29-05/02/05	G8WQN1CC
Prep Batch #...: 5119272						
Arsenic	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:10	04/29-05/05/05	G8WQN1AF
Barium	1440	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:10	04/29-05/05/05	G8WQN1AG
Cadmium	105	25 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:10	04/29-05/05/05	G8WQN1AH
Chromium	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:10	04/29-05/05/05	G8WQN1AJ
Lead J-123e	2390 N	250 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:10	04/29-05/05/05	G8WQN1AK
Silver	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:10	04/29-05/05/05	G8WQN1AL
Selenium	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:10	04/29-05/05/05	G8WQN1CA
Zinc	39100 N	100 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:10	04/29-05/05/05	G8WQN1CK

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58827

TCLP Metals

Lot-Sample #...: F5D210354-004 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
Leach Date.....: 04/28/05 **Leach Batch #..: P511814**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10	ug/L	SW846 7470A	04/29-05/02/05	G8WQR1CC
		Dilution Factor: 1		Analysis Time..: 10:50		
Prep Batch #...: 5119272						
Arsenic	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WQR1AF
		Dilution Factor: 1		Analysis Time..: 20:15		
Barium	2400	500	ug/L	SW846 6010B	04/29-05/05/05	G8WQR1AG
		Dilution Factor: 1		Analysis Time..: 20:15		
Cadmium	40.6	25	ug/L	SW846 6010B	04/29-05/05/05	G8WQR1AH
		Dilution Factor: 1		Analysis Time..: 20:15		
Chromium	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WQR1AJ
		Dilution Factor: 1		Analysis Time..: 20:15		
Lead J-I3e	6290 N	250	ug/L	SW846 6010B	04/29-05/05/05	G8WQR1AK
		Dilution Factor: 1		Analysis Time..: 20:15		
Silver	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WQR1AL
		Dilution Factor: 1		Analysis Time..: 20:15		
Selenium	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WQR1CA
		Dilution Factor: 1		Analysis Time..: 20:15		
Zinc	19200 N	100	ug/L	SW846 6010B	04/29-05/05/05	G8WQR1CR
		Dilution Factor: 1		Analysis Time..: 20:15		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: EE73-05-58828

TCLP Metals

Matrix.....: SOLID

Lot-Sample #...: F5D210354-005
Date Sampled...: 04/19/05
Leach Date.....: 04/28/05

Date Received..: 04/21/05
Leach Batch #..: P511814

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10 Dilution Factor: 1	ug/L	SW846 7470A Analysis Time..: 10:52	04/29-05/02/05	G8WQT1CC
Prep Batch #...: 5119272						
Arsenic	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:19	04/29-05/05/05	G8WQT1AF
Barium	1430	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:19	04/29-05/05/05	G8WQT1AG
Cadmium	133	25 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:19	04/29-05/05/05	G8WQT1AH
Chromium	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:19	04/29-05/05/05	G8WQT1AJ
Lead J-.23e	2560 N	250 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:19	04/29-05/05/05	G8WQT1AK
Silver	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:19	04/29-05/05/05	G8WQT1AL
Selenium	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:19	04/29-05/05/05	G8WQT1CA
Zinc	40500 N	100 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:19	04/29-05/05/05	G8WQT1CE

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58830

TCLP Metals

Lot-Sample #...: F5D210354-007 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
Leach Date.....: 04/28/05 **Leach Batch #..: P511814**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10	ug/L	SW846 7470A	04/29-05/02/05	G8WR61CC
		Dilution Factor: 1		Analysis Time..: 10:54		
Prep Batch #...: 5119272						
Arsenic	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WR61AF
		Dilution Factor: 1		Analysis Time..: 20:32		
Barium	3840	500	ug/L	SW846 6010B	04/29-05/05/05	G8WR61AG
		Dilution Factor: 1		Analysis Time..: 20:32		
Cadmium	1730	25	ug/L	SW846 6010B	04/29-05/05/05	G8WR61AH
		Dilution Factor: 1		Analysis Time..: 20:32		
Chromium	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WR61AJ
		Dilution Factor: 1		Analysis Time..: 20:32		
Lead J-Fe	3330 N	250	ug/L	SW846 6010B	04/29-05/05/05	G8WR61AK
		Dilution Factor: 1		Analysis Time..: 20:32		
Silver	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WR61AL
		Dilution Factor: 1		Analysis Time..: 20:32		
Selenium	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WR61CA
		Dilution Factor: 1		Analysis Time..: 20:32		
Zinc	35100 N	100	ug/L	SW846 6010B	04/29-05/05/05	G8WR61CE
		Dilution Factor: 1		Analysis Time..: 20:32		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58831

TCLP Metals

Lot-Sample #...: F5D210354-008 **Matrix.....:** SOLID
Date Sampled...: 04/19/05 **Date Received..:** 04/21/05
Leach Date.....: 04/28/05 **Leach Batch #..:** P511814

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10	ug/L	SW846 7470A	04/29-05/02/05	G8WTA1CC
		Dilution Factor: 1		Analysis Time..: 10:57		
Prep Batch #...: 5119272						
Arsenic	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WTA1AF
		Dilution Factor: 1		Analysis Time..: 20:37		
Barium	**1180**	**500**	**ug/L**	**SW846 6010B**	**04/29-05/05/05**	**G8WTA1AG**
		Dilution Factor: 1		Analysis Time..: 20:37		
Cadmium	**134**	**25**	**ug/L**	**SW846 6010B**	**04/29-05/05/05**	**G8WTA1AH**
		Dilution Factor: 1		Analysis Time..: 20:37		
Chromium	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WTA1AJ
		Dilution Factor: 1		Analysis Time..: 20:37		
Lead J-Z3e	**4370 N**	**250**	**ug/L**	**SW846 6010B**	**04/29-05/05/05**	**G8WTA1AK**
		Dilution Factor: 1		Analysis Time..: 20:37		
Silver	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WTA1AL
		Dilution Factor: 1		Analysis Time..: 20:37		
Selenium	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WTA1CA
		Dilution Factor: 1		Analysis Time..: 20:37		
Zinc	**42400 N**	**100**	**ug/L**	**SW846 6010B**	**04/29-05/05/05**	**G8WTA1CE**
		Dilution Factor: 1		Analysis Time..: 20:37		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: KE73-05-58832

TCLP Metals

Lot-Sample #...: F5D210354-009 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
Leach Date.....: 04/28/05 **Leach Batch #..: P511814**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10	ug/L	SW846 7470A	04/29-05/02/05	G8WTE1CC
		Dilution Factor: 1		Analysis Time..: 10:59		
Prep Batch #...: 5119272						
Arsenic	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WTE1AF
		Dilution Factor: 1		Analysis Time..: 20:41		
Barium	1320	500	ug/L	SW846 6010B	04/29-05/05/05	G8WTE1AG
		Dilution Factor: 1		Analysis Time..: 20:41		
Cadmium	40.3	25	ug/L	SW846 6010B	04/29-05/05/05	G8WTE1AH
		Dilution Factor: 1		Analysis Time..: 20:41		
Chromium	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WTE1AJ
		Dilution Factor: 1		Analysis Time..: 20:41		
Lead J-I3e	1080 N	250	ug/L	SW846 6010B	04/29-05/05/05	G8WTE1AK
		Dilution Factor: 1		Analysis Time..: 20:41		
Silver	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WTE1AL
		Dilution Factor: 1		Analysis Time..: 20:41		
Selenium	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WTE1CA
		Dilution Factor: 1		Analysis Time..: 20:41		
Zinc	30300 N	100	ug/L	SW846 6010B	04/29-05/05/05	G8WTE1CE
		Dilution Factor: 1		Analysis Time..: 20:41		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58833

TCLP Metals

Lot-Sample #...: F5D210354-010 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
Leach Date.....: 04/28/05 **Leach Batch #..: P511814**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10	ug/L	SW846 7470A	04/29-05/02/05	G8WTG1CC
		Dilution Factor: 1		Analysis Time..: 11:05		
Prep Batch #...: 5119272						
Arsenic	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WTG1AF
		Dilution Factor: 1		Analysis Time..: 20:46		
Barium	939	500	ug/L	SW846 6010B	04/29-05/05/05	G8WTG1AG
		Dilution Factor: 1		Analysis Time..: 20:46		
Cadmium J, I 1	20.5 B	25	ug/L	SW846 6010B	04/29-05/05/05	G8WTG1AH
		Dilution Factor: 1		Analysis Time..: 20:46		
Chromium	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WTG1AJ
		Dilution Factor: 1		Analysis Time..: 20:46		
Lead J, I 3e	633 N	250	ug/L	SW846 6010B	04/29-05/05/05	G8WTG1AK
		Dilution Factor: 1		Analysis Time..: 20:46		
Silver	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WTG1AL
		Dilution Factor: 1		Analysis Time..: 20:46		
Selenium	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WTG1CA
		Dilution Factor: 1		Analysis Time..: 20:46		
Zinc	24900 N	100	ug/L	SW846 6010B	04/29-05/05/05	G8WTG1CE
		Dilution Factor: 1		Analysis Time..: 20:46		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

B Estimated result. Result is less than RL.

N Spiked analyte recovery is outside stated control limits.

(D)

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58834

TCLP Metals

Lot-Sample #...: F5D210354-011 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
Leach Date.....: 04/28/05 **Leach Batch #..: P511814**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10	ug/L	SW846 7470A	04/29-05/02/05	G8WTR1CC
		Dilution Factor: 1		Analysis Time..: 11:08		
Prep Batch #...: 5119272						
Arsenic	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WTR1AF
		Dilution Factor: 1		Analysis Time..: 20:50		
Barium	**1060**	**500**	**ug/L**	**SW846 6010B**	**04/29-05/05/05**	**G8WTR1AG**
		Dilution Factor: 1		Analysis Time..: 20:50		
Cadmium	**31.6**	**25**	**ug/L**	**SW846 6010B**	**04/29-05/05/05**	**G8WTR1AH**
		Dilution Factor: 1		Analysis Time..: 20:50		
Chromium	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WTR1AJ
		Dilution Factor: 1		Analysis Time..: 20:50		
Lead J, I3e	**630 N**	**250**	**ug/L**	**SW846 6010B**	**04/29-05/05/05**	**G8WTR1AK**
		Dilution Factor: 1		Analysis Time..: 20:50		
Silver	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WTR1AL
		Dilution Factor: 1		Analysis Time..: 20:50		
Selenium	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WTR1CA
		Dilution Factor: 1		Analysis Time..: 20:50		
Zinc	**57200 N**	**500**	**ug/L**	**SW846 6010B**	**04/29-05/06/05**	**G8WTR1CE**
		Dilution Factor: 5		Analysis Time..: 07:34		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: EE73-05-58836

TCLP Metals

Lot-Sample #...: F5D210354-013 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
Leach Date.....: 04/28/05 **Leach Batch #..: P511814**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10 Dilution Factor: 1	ug/L	SW846 7470A Analysis Time..: 11:10	04/29-05/02/05	G8WTV1CC
Prep Batch #...: 5119272						
Arsenic	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:54	04/29-05/05/05	G8WTV1AF
Barium	1760	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:54	04/29-05/05/05	G8WTV1AG
Cadmium J.E1	11.7 B	25 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:54	04/29-05/05/05	G8WTV1AH
Chromium	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:54	04/29-05/05/05	G8WTV1AJ
Lead J.E3e	792 N	250 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:54	04/29-05/05/05	G8WTV1AK
Silver	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:54	04/29-05/05/05	G8WTV1AL
Selenium	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:54	04/29-05/05/05	G8WTV1CA
Zinc	5100 N	100 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:54	04/29-05/05/05	G8WTV1CK

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

B Estimated result. Result is less than RL.

N Spiked analyte recovery is outside stated control limits.

CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58837

TCLP Metals

Lot-Sample #...: F5D210354-014 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
Leach Date.....: 04/28/05 **Leach Batch #..: P511814**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10	ug/L	SW846 7470A	04/29-05/02/05	G8WTW1CC
		Dilution Factor: 1		Analysis Time..: 11:12		
Prep Batch #...: 5119272						
Arsenic	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WTW1AF
		Dilution Factor: 1		Analysis Time..: 20:59		
Barium	1620	500	ug/L	SW846 6010B	04/29-05/05/05	G8WTW1AG
		Dilution Factor: 1		Analysis Time..: 20:59		
Cadmium J.I1	11.2 B	25	ug/L	SW846 6010B	04/29-05/05/05	G8WTW1AH
		Dilution Factor: 1		Analysis Time..: 20:59		
Chromium	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WTW1AJ
		Dilution Factor: 1		Analysis Time..: 20:59		
Lead J-I3e	316 N	250	ug/L	SW846 6010B	04/29-05/05/05	G8WTW1AK
		Dilution Factor: 1		Analysis Time..: 20:59		
Silver	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WTW1AL
		Dilution Factor: 1		Analysis Time..: 20:59		
Selenium	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WTW1CA
		Dilution Factor: 1		Analysis Time..: 20:59		
Zinc	8500 N	100	ug/L	SW846 6010B	04/29-05/05/05	G8WTW1CE
		Dilution Factor: 1		Analysis Time..: 20:59		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

B Estimated result. Result is less than RL.

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: EE73-05-58838

TCLP Metals

Lot-Sample #...: F5D210354-015 **Matrix.....:** SOLID
Date Sampled...: 04/19/05 **Date Received..:** 04/21/05
Leach Date.....: 04/28/05 **Leach Batch #..:** P511814

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10	ug/L	SW846 7470A	04/29-05/02/05	G8WTX1CC
		Dilution Factor: 1		Analysis Time..: 11:14		
Prep Batch #...: 5119272						
Arsenic	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WTX1AF
		Dilution Factor: 1		Analysis Time..: 21:03		
Barium	1790	500	ug/L	SW846 6010B	04/29-05/05/05	G8WTX1AG
		Dilution Factor: 1		Analysis Time..: 21:03		
Cadmium	160	25	ug/L	SW846 6010B	04/29-05/05/05	G8WTX1AH
		Dilution Factor: 1		Analysis Time..: 21:03		
Chromium	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WTX1AJ
		Dilution Factor: 1		Analysis Time..: 21:03		
Lead J-E3e	2470 N	250	ug/L	SW846 6010B	04/29-05/05/05	G8WTX1AK
		Dilution Factor: 1		Analysis Time..: 21:03		
Silver	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WTX1AL
		Dilution Factor: 1		Analysis Time..: 21:03		
Selenium	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WTX1CA
		Dilution Factor: 1		Analysis Time..: 21:03		
Zinc	36700 N	100	ug/L	SW846 6010B	04/29-05/05/05	G8WTX1CE
		Dilution Factor: 1		Analysis Time..: 21:03		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58839

TCLP Metals

Lot-Sample #...: F5D210354-016 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
Leach Date.....: 04/28/05 **Leach Batch #..: P511814**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10	ug/L	SW846 7470A	04/29-05/02/05	G8WT01CC
		Dilution Factor: 1		Analysis Time..: 11:16		
Prep Batch #...: 5119272						
Arsenic	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WT01AF
		Dilution Factor: 1		Analysis Time..: 21:07		
Barium	1590	500	ug/L	SW846 6010B	04/29-05/05/05	G8WT01AG
		Dilution Factor: 1		Analysis Time..: 21:07		
Cadmium	95.0	25	ug/L	SW846 6010B	04/29-05/05/05	G8WT01AH
		Dilution Factor: 1		Analysis Time..: 21:07		
Chromium	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WT01AJ
		Dilution Factor: 1		Analysis Time..: 21:07		
Lead J, I3e	1470 N	250	ug/L	SW846 6010B	04/29-05/05/05	G8WT01AK
		Dilution Factor: 1		Analysis Time..: 21:07		
Silver	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WT01AL
		Dilution Factor: 1		Analysis Time..: 21:07		
Selenium	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WT01CA
		Dilution Factor: 1		Analysis Time..: 21:07		
Zinc	33700 N	100	ug/L	SW846 6010B	04/29-05/05/05	G8WT01CE
		Dilution Factor: 1		Analysis Time..: 21:07		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58840

TCLP Metals

Lot-Sample #...: F5D210354-017 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
Leach Date.....: 04/28/05 **Leach Batch #..: P511814**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10	ug/L	SW846 7470A	04/29-05/02/05	G8WT11CC
		Dilution Factor: 1		Analysis Time..: 11:18		
Prep Batch #...: 5119272						
Arsenic	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WT11AF
		Dilution Factor: 1		Analysis Time..: 21:12		
Barium U. I4a	786	500	ug/L	SW846 6010B	04/29-05/05/05	G8WT11AG
		Dilution Factor: 1		Analysis Time..: 21:12		
Cadmium	73.9	25	ug/L	SW846 6010B	04/29-05/05/05	G8WT11AH
		Dilution Factor: 1		Analysis Time..: 21:12		
Chromium	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WT11AJ
		Dilution Factor: 1		Analysis Time..: 21:12		
Lead J- I3e	1440 N	250	ug/L	SW846 6010B	04/29-05/05/05	G8WT11AK
		Dilution Factor: 1		Analysis Time..: 21:12		
Silver	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WT11AL
		Dilution Factor: 1		Analysis Time..: 21:12		
Selenium	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WT11CA
		Dilution Factor: 1		Analysis Time..: 21:12		
Zinc	67500 N	500	ug/L	SW846 6010B	04/29-05/06/05	G8WT11CE
		Dilution Factor: 5		Analysis Time..: 07:38		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: EE73-05-58829

General Chemistry

Lot-Sample #...: F5D210354-006 **Work Order #...: G8WQV** **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 23

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	8.0		No Units	SW846 9045A	04/25/05	5115278
		Dilution Factor: 1		Analysis Time..: 00:00		
Flashpoint	>60.0		deg C	SW846 1010	04/25/05	5115320
		Dilution Factor: 1		Analysis Time..: 00:00		
Paint Filter Test	PAS,S		No Units	SW846 9095	04/25/05	5115319
		Dilution Factor: 1		Analysis Time..: 00:00		
Percent Moisture	23.5	0.10	%	MCAWW 160.3 MOD	04/22-04/25/05	5112218
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Cyanide	0.052 B	0.065	mg/kg	SW846 7.3.3	05/04-05/06/05	5126308
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Sulfide	ND	5.8	mg/kg	SW846 7.3.4	05/04-05/06/05	5126399
		Dilution Factor: 1		Analysis Time..: 00:00		

NOTE(S):

RL Reporting Limit

S The result was determined using the Method of Standard Additions (MSA).

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58835

General Chemistry

Lot-Sample #...: F5D210354-012 **Work Order #...:** G8WTT **Matrix.....:** SOLID
Date Sampled...: 04/19/05 **Date Received..:** 04/21/05
% Moisture.....: 24

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	8.0		No Units	SW846 9045A	04/25/05	5115278
		Dilution Factor: 1		Analysis Time..: 00:00		
Flashpoint	>60.0		deg C	SW846 1010	04/25/05	5115320
		Dilution Factor: 1		Analysis Time..: 00:00		
Paint Filter Test	PAS,S		No Units	SW846 9095	04/25/05	5115319
		Dilution Factor: 1		Analysis Time..: 00:00		
Percent Moisture	23.8	0.10	%	MCAWW 160.3 MOD	04/22-04/25/05	5112218
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Cyanide	0.092	0.066	mg/kg	SW846 7.3.3	05/04-05/06/05	5126308
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Sulfide	ND	5.8	mg/kg	SW846 7.3.4	05/04-05/06/05	5126399
		Dilution Factor: 1		Analysis Time..: 00:00		

NOTE(S):

RL Reporting Limit

S The result was determined using the Method of Standard Additions (MSA).

Results and reporting limits have been adjusted for dry weight.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58841

General Chemistry

Lot-Sample #...: F5D210354-018 Work Order #...: G8WT3 Matrix.....: SOLID
Date Sampled...: 04/19/05 Date Received..: 04/21/05
% Moisture.....: 20

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	8.1		No Units	SW846 9045A	04/25/05	5115278
		Dilution Factor: 1		Analysis Time..: 00:00		
Flashpoint	>60.0		deg C	SW846 1010	04/25/05	5115320
		Dilution Factor: 1		Analysis Time..: 00:00		
Paint Filter Test	PASS		No Units	SW846 9095	04/25/05	5115319
		Dilution Factor: 1		Analysis Time..: 00:00		
Percent Moisture	19.6	0.10	%	MCAWW 160.3 MOD	04/22-04/25/05	5112218
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Cyanide	0.062	0.062	mg/kg	SW846 7.3.3	05/04-05/06/05	5126308
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Sulfide	ND	5.5	mg/kg	SW846 7.3.4	05/04-05/06/05	5126399
		Dilution Factor: 1		Analysis Time..: 00:00		

NOTE(S):

RL Reporting Limit

S The result was determined using the Method of Standard Additions (MSA).

Results and reporting limits have been adjusted for dry weight.

CP

STL ST LOUIS

Wednesday, April 20, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3159SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3159S

ANALYSIS TYPE: INORGANIC

Cert 6121

ATTN: Mark Loeb
Severn Trent Laboratles, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58824	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58825	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58826	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58827	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58828	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58829	6	500 ML POLY	RC+RS+ph+PF+I	ICE	S
RE73-05-58830	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58831	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58832	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58833	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58834	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58835	6	500 ML POLY	RC+RS+ph+PF+I	ICE	S
RE73-05-58836	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58837	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58838	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58839	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58840	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58841	6	500 ML POLY	RC+RS+ph+PF+I	ICE	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3159S Page 1

Relinquished By:		Date	Time	Received By:		Date	Time
Hadilla Alfaro		4/20/05	1400	Sue Wilson	Sue Wilson	4.21.05	0900
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

PRINTED NAME SIGNATURE

Wednesday, April 20, 2005

REQUEST NUMBER: 3159S

Los Alamos
NATIONAL LABORATORY

ANALYSIS TYPE: INORGANIC

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

These samples are on:

SHIP DATE: 04/20/2005
REPORT DUE: 05/05/2005
TURN AROUND REQ'D: 15

LANL Request Number: 3159S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

RAD SCREENING: NOT REQ
COMMENTS: NOTE: For 58829, 58835 and 58841 do full waste classification testing

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:6010B	RE73-05-58824	1	S	04/18/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58824	1	S	04/18/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58824	1	S	04/18/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58824	1	S	04/18/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58825	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58825	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58825	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58825	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58826	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58826	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58826	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58826	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58827	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58827	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58827	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58827	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58828	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58828	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58828	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58828	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:1020A	RE73-05-58829	6	S	04/19/2005	
SW-846:7.3	RE73-05-58829	6	S	04/19/2005	
SW-846:9045C	RE73-05-58829	6	S	04/19/2005	
SW-846:9095	RE73-05-58829	6	S	04/19/2005	
SW-846:6010B	RE73-05-58830	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58830	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58830	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58830	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58831	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58831	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58831	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58831	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58832	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58832	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58832	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58832	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58833	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58833	1	S	04/19/2005	Analyze for TCLP Zinc also

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:7470A_TCLP	RE73-05-58833	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58833	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58834	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58834	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58834	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58834	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:1020A	RE73-05-58835	6	S	04/19/2005	
SW-846:7.3	RE73-05-58835	6	S	04/19/2005	
SW-846:9045C	RE73-05-58835	6	S	04/19/2005	
SW-846:9095	RE73-05-58835	6	S	04/19/2005	
SW-846:6010B	RE73-05-58836	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58836	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58836	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58836	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58837	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58837	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58837	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58837	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58838	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58838	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58838	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58838	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58839	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58839	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58839	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58839	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58840	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58840	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58840	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58840	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:1020A	RE73-05-58841	6	S	04/19/2005	
SW-846:7.3	RE73-05-58841	6	S	04/19/2005	
SW-846:9045C	RE73-05-58841	6	S	04/19/2005	
SW-846:9095	RE73-05-58841	6	S	04/19/2005	

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DATA VALIDATION COVER SHEET (Example)

SECTION I.

REQUEST NUMBER: 31595 COST CODE: _____

VALIDATION DATE: _____

LAB NAME: STL. LAB CODE: _____

VALIDATOR: _____ ORGANIZATION: _____

ANALYTICAL SUITE: ___ VOLATILES ___ HIGH EXPLOSIVES

___ SEMIVOLATILES ___ INORGANICS

___ PESTICIDES/AROCLORS ___ RADIOCHEMISTRY

OTHER (describe) _____

SECTION II. COMPLETENESS CHECKLIST

Item	Present? (Y/N/NA)	Item	Present? (Y/N/NA)
1. COC form(s)		2. Case Narrative	
3. Sample Results		4. Sample Chromatograms	
5. Standard Chromatograms		6. Quantitation Reports	
7. QC Forms			

Identify any samples in the assigned Request Number that are missing:

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

Comments: include information about requests to the laboratory and agreed upon date of resolution and lab contact: (Attach additional comment sheets as necessary)

_____

_____

_____

Signature/1st validation: _____ Date/1st validation: _____

Signature/2nd validation: _____ Date/2nd validation: _____

SEVERN TRENT STL

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Tel: 314 298 8566 Fax: 314 298 8757
www.stl-inc.com

REC'D MAY 2 7 2005

ANALYTICAL REPORT

PROJECT NO. 31598

Los Alamos Mon-Rad

Lot #: F5D210354

Joylene Valdez or Keith Greene

Los Alamos National Laboratory
SMO TA-00 Bldg 1237
DP: 03U; MS: 707
Los Alamos, NM 87545

SEVERN TRENT LABORATORIES, INC.

Elaine Wild for

Ed Eno
Project Manager

May 10, 2005

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ANALYTICAL REPORT 1
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METALS 375
METALS 680
WET CHEMISTRY 903
CLIENT ANALYSIS SUMMARY 941
CLIENT CHAIN OF CUSTODY 960

TOTAL # OF PAGES IN PACKAGE 963

Case Narrative
LOT NUMBER: F5D210354
LANL Request Number:

This report contains the analytical results for the 18 samples received under chain of custody number by STL St. Louis on April 21, 2005. These samples are associated with your Los Alamos Non-Rad project.

All applicable quality control procedures met method-specified acceptance criteria except as noted on the following page.

This report is incomplete without the case narrative. All chemical analysis results are based upon dry weight correction as required per the statement of work. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances

Sample Receiving

Samples were received at .0 °C. No problems were noted at the time of sample receipt.

Metals Method 6020A

QC Batch: 5115187

The Method Blank shows contamination below the reporting limit for Arsenic, Manganese, Selenium, and Vanadium.

The LCS is in control for spike compounds.

The Batch QC Matrix Spike and Matrix Spike Duplicate was performed on F5D210354-001. The MS (MSD) recovery for silver, barium, cadmium, chromium, nickel, copper, manganese, and lead is outside the established QC limits. The said analyte concentration in the original sample is greater than 4 times the amount spiked, making % recovery information ineffective. The MS (MSD) recovery for antimony is outside the established QC limits. The RPD is within method acceptance criteria indicating a possible matrix interference.

The MS/MSD Copper, Lead, and Silver RPD is greater than 30% potentially indicating matrix interference or lack of sample homogeneity.

The percent difference between the original sample concentration and the calculated serial dilution result for Arsenic is greater than 10% indicating a potential matrix interference. All associated samples are flagged accordingly.

The sample was analyzed at a dilution due to the presence of matrix interferences and high concentrations of target and non-target analytes. The reporting limit has been adjusted for the dilution.

Metals Method 6010B

QC Batch: 5115193

The Method Blank shows contamination below the reporting limit for Calcium, Iron, Magnesium, and Aluminum.

The LCS is in control for spike compounds.

The Batch QC Matrix Spike and Matrix Spike Duplicate was performed on F5D210354-001. The MS (MSD) recovery for Zinc, Aluminum, Calcium and Iron is outside the established QC limits. The said analyte concentration in the original sample is greater than 4 times the amount spiked, making % recovery information ineffective. The MS (MSD) recovery for Sodium, Potassium, and Magnesium is outside the established QC limits. The RPD is within method acceptance criteria indicating a possible matrix interference.

The Aluminum, Calcium, and Zinc RPD is greater than 30% potentially indicating matrix interference or lack of sample homogeneity.

The percent difference between the original sample concentration and the calculated serial dilution result for Calcium and Magnesium is greater than 10% indicating a potential matrix interference. All associated samples are flagged accordingly.

Mercury Method 7471A

QC Batch: 5117679

The Method Blank shows no contamination below the reporting limit.

The LCS is in control for spike compounds.

The Batch QC Matrix Spike and Matrix Spike Duplicate was performed on F5D210354-001. The MS (MSD) recovery for mercury is outside the established QC limits. The RPD is within method acceptance criteria indicating a possible matrix interference.

TCLP Metals Method 6010B

QC Batch: 5119272

The Method Blank shows no contamination below the reporting limit.

The LCS is in control for spike compounds.

The Batch QC Matrix Spike and Matrix Spike Duplicate was performed on F5D210354-001. The MS (MSD) recovery for Zinc is outside the established QC limits. The said analyte concentration in the original sample is greater than 4 times the amount spiked, making % recovery information ineffective. Method performance is demonstrated by acceptable LCS recovery.

The MS (MSD) recovery for Lead is outside the established QC limits. The RPD is within method acceptance criteria indicating a possible matrix interference. Method performance is demonstrated by acceptable LCS recovery. No further action is required.

TCLP Mercury Method 7470A

QC Batch: 5119194

The Method Blank shows no contamination below the reporting limit.

The LCS is in control for spike compounds.

The Batch QC Matrix Spike and Matrix Spike Duplicate was performed on F5D210354-001. The Matrix Spike and Matrix Spike Duplicate recovery and RPD value are inside stated limits.

Reactive Cyanide Method 7.3.3

QC Batch: 5126308

The Method Blank shows no contamination below the reporting limit.

The LCS is in control for spike compounds.

The Batch QC Matrix Spike and Duplicate was performed on F5D210354-006. The Matrix Spike recovery is outside stated limits. Reactive Cyanide is a semi-qualitative analysis. The RPD value is outside stated limits.

Reactive Sulfide Method 7.3.4

QC Batch: 5126399

The Method Blank shows no contamination below the reporting limit.

The LCS is in control for spike compounds.

The Batch QC Matrix Spike and Duplicate was performed on F5D210354-006. The Matrix Spike recovery is outside stated limits. Reactive Sulfide is a semi-qualitative analysis. The RPD value is inside stated limits.

pH Method 9045C

QC Batch: 5115278

The LCS is in control.

The Batch QC Duplicate was performed on F5D210354-006. The RPD value is inside stated limits.

Flashpoint Method 1010

QC Batch: 5126399

The LCS is in control.

The Batch QC Duplicate was performed on F5D210354-006. The RPD value is inside stated limits.

I certify that this data is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the signature on the front page, has authorized release of the data contained in this hardcopy.

METHODS SUMMARY

F5D210354

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
pH Non-Aqueous	SW846 9045A	
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 1311/3010
ICP-MS (6020)	SW846 6020	
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A	SW846 1311/7470
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Paint Filter Test	SW846 9095	SW846 9095
Pensky-Martens Method for Determining Ignitability	SW846 1010	SW846 1010
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
Reactive Cyanide	SW846 7.3.3	SW846 7.3.3
Reactive Sulfide	SW846 7.3.4	SW846 7.3.4

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

F5D210354

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
G8WP7	001	RE73-05-58824	04/18/05	
G8WQL	002	RE73-05-58825	04/19/05	
G8WQN	003	RE73-05-58826	04/19/05	
G8WQR	004	RE73-05-58827	04/19/05	
G8WQT	005	RE73-05-58828	04/19/05	
G8WQV	006	RE73-05-58829	04/19/05	
G8WR6	007	RE73-05-58830	04/19/05	
G8WTA	008	RE73-05-58831	04/19/05	
G8WTE	009	RE73-05-58832	04/19/05	
G8WTG	010	RE73-05-58833	04/19/05	
G8WTR	011	RE73-05-58834	04/19/05	
G8WTT	012	RE73-05-58835	04/19/05	
G8WTV	013	RE73-05-58836	04/19/05	
G8WTW	014	RE73-05-58837	04/19/05	
G8WTX	015	RE73-05-58838	04/19/05	
G8WT0	016	RE73-05-58839	04/19/05	
G8WT1	017	RE73-05-58840	04/19/05	
G8WT3	018	RE73-05-58841	04/19/05	

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

QC DATA ASSOCIATION SUMMARY

F5D210354

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SOLID	SW846 6020		5115187	5115138
	SOLID	SW846 7470A	P511814	5119194	5119133
	SOLID	SW846 7471A		5117679	5117375
	SOLID	SW846 6010B		5115193	5115166
	SOLID	SW846 6010B	P511814	5119272	5119173
	SOLID	MCAWW 160.3 MOD		5112218	5112219
002	SOLID	SW846 6020		5115187	5115138
	SOLID	SW846 7470A	P511814	5119194	5119133
	SOLID	SW846 6010B		5115193	5115166
	SOLID	SW846 6010B	P511814	5119272	5119173
	SOLID	MCAWW 160.3 MOD		5112218	5112219
003	SOLID	SW846 6020		5115187	5115138
	SOLID	SW846 7470A	P511814	5119194	5119133
	SOLID	SW846 7471A		5117679	5117375
	SOLID	SW846 6010B		5115193	5115166
	SOLID	SW846 6010B	P511814	5119272	5119173
	SOLID	MCAWW 160.3 MOD		5112218	5112219
004	SOLID	SW846 6020		5115187	5115138
	SOLID	SW846 7470A	P511814	5119194	5119133
	SOLID	SW846 7471A		5117679	5117375
	SOLID	SW846 6010B		5115193	5115166
	SOLID	SW846 6010B	P511814	5119272	5119173
	SOLID	MCAWW 160.3 MOD		5112218	5112219
005	SOLID	SW846 6020		5115187	5115138
	SOLID	SW846 7470A	P511814	5119194	5119133
	SOLID	SW846 7471A		5117679	5117375
	SOLID	SW846 6010B		5115193	5115166
	SOLID	SW846 6010B	P511814	5119272	5119173
	SOLID	MCAWW 160.3 MOD		5112218	5112219
006	SOLID	SW846 1010		5115320	5115261
	SOLID	SW846 9045A		5115278	5115242
	SOLID	SW846 9095		5115319	5115260
	SOLID	SW846 7.3.3		5126308	5126201
	SOLID	SW846 7.3.4		5126399	5126257
	SOLID	MCAWW 160.3 MOD		5112218	5112219

(Continued on next page)

QC DATA ASSOCIATION SUMMARY

F5D210354

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
007	SOLID	SW846 6020		5115187	5115138
	SOLID	SW846 7470A	P511814	5119194	5119133
	SOLID	SW846 7471A		5117679	5117375
	SOLID	SW846 6010B		5115193	5115166
	SOLID	SW846 6010B	P511814	5119272	5119173
	SOLID	MCAWW 160.3 MOD		5112218	5112219
008	SOLID	SW846 6020		5115187	5115138
	SOLID	SW846 7470A	P511814	5119194	5119133
	SOLID	SW846 7471A		5117679	5117375
	SOLID	SW846 6010B		5115193	5115166
	SOLID	SW846 6010B	P511814	5119272	5119173
	SOLID	MCAWW 160.3 MOD		5112218	5112219
009	SOLID	SW846 6020		5115187	5115138
	SOLID	SW846 7470A	P511814	5119194	5119133
	SOLID	SW846 7471A		5117679	5117375
	SOLID	SW846 6010B		5115193	5115166
	SOLID	SW846 6010B	P511814	5119272	5119173
	SOLID	MCAWW 160.3 MOD		5112218	5112219
010	SOLID	SW846 6020		5115187	5115138
	SOLID	SW846 7470A	P511814	5119194	5119133
	SOLID	SW846 7471A		5117679	5117375
	SOLID	SW846 6010B		5115193	5115166
	SOLID	SW846 6010B	P511814	5119272	5119173
	SOLID	MCAWW 160.3 MOD		5112218	5112219
011	SOLID	SW846 6020		5115187	5115138
	SOLID	SW846 7470A	P511814	5119194	5119133
	SOLID	SW846 7471A		5117679	5117375
	SOLID	SW846 6010B		5115193	5115166
	SOLID	SW846 6010B	P511814	5119272	5119173
	SOLID	MCAWW 160.3 MOD		5112218	5112219
012	SOLID	SW846 1010		5115320	5115262
	SOLID	SW846 9045A		5115278	5115242
	SOLID	SW846 9095		5115319	5115260
	SOLID	SW846 7.3.3		5126308	5126201
	SOLID	SW846 7.3.4		5126399	5126256
	SOLID	MCAWW 160.3 MOD		5112218	5112219

(Continued on next page)

QC DATA ASSOCIATION SUMMARY

F5D210354

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
013	SOLID	SW846 6020		5115187	5115138
	SOLID	SW846 7470A	P511814	5119194	5119133
	SOLID	SW846 7471A		5117679	5117375
	SOLID	SW846 6010B		5115193	5115166
	SOLID	SW846 6010B	P511814	5119272	5119173
	SOLID	MCAWW 160.3 MOD		5112218	5112219
014	SOLID	SW846 6020		5115187	5115138
	SOLID	SW846 7470A	P511814	5119194	5119133
	SOLID	SW846 7471A		5117679	5117375
	SOLID	SW846 6010B		5115193	5115166
	SOLID	SW846 6010B	P511814	5119272	5119173
	SOLID	MCAWW 160.3 MOD		5112218	5112219
015	SOLID	SW846 6020		5115187	5115138
	SOLID	SW846 7470A	P511814	5119194	5119133
	SOLID	SW846 7471A		5117679	5117375
	SOLID	SW846 6010B		5115193	5115166
	SOLID	SW846 6010B	P511814	5119272	5119173
	SOLID	MCAWW 160.3 MOD		5112218	5112219
016	SOLID	SW846 6020		5115187	5115138
	SOLID	SW846 7470A	P511814	5119194	5119133
	SOLID	SW846 7471A		5117679	5117375
	SOLID	SW846 6010B		5115193	5115166
	SOLID	SW846 6010B	P511814	5119272	5119173
	SOLID	MCAWW 160.3 MOD		5112218	5112219
017	SOLID	SW846 6020		5115187	5115138
	SOLID	SW846 7470A	P511814	5119194	5119133
	SOLID	SW846 7471A		5117679	5117375
	SOLID	SW846 6010B		5115193	5115166
	SOLID	SW846 6010B	P511814	5119272	5119173
	SOLID	MCAWW 160.3 MOD		5112218	5112219
018	SOLID	SW846 1010		5115320	5115262
	SOLID	SW846 9045A		5115278	5115242
	SOLID	SW846 9095		5115319	5115260
	SOLID	SW846 7.3.3		5126308	5126201
	SOLID	SW846 7.3.4		5126399	5126256
	SOLID	MCAWW 160.3 MOD		5112218	5112219

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: KE73-05-58824

TOTAL Metals

Lot-Sample #...: F5D210354-001 **Matrix.....: SOLID**
Date Sampled...: 04/18/05 **Date Received..: 04/21/05**
% Moisture.....: 24

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	**17.5 M***	**0.52**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WP71AC**
		Dilution Factor: 10		Analysis Time..: 00:37		
Arsenic	**42.0 E**	**0.52**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WP71AD**
		Dilution Factor: 10		Analysis Time..: 00:37		
Barium	**1170 M**	**5.2**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WP71AE**
		Dilution Factor: 10		Analysis Time..: 00:37		
Beryllium	**0.27**	**0.26**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WP71AF**
		Dilution Factor: 10		Analysis Time..: 00:37		
Cadmium	**16.9 M**	**0.65**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WP71AG**
		Dilution Factor: 10		Analysis Time..: 00:37		
Cobalt	**16.2**	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WP71AH**
		Dilution Factor: 10		Analysis Time..: 00:37		
Chromium	**102 M**	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WP71AJ**
		Dilution Factor: 10		Analysis Time..: 00:37		
Copper	**1620 M***	**2.6**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WP71AK**
		Dilution Factor: 20		Analysis Time..: 17:48		
Manganese	**1520 M**	**2.6**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WP71AL**
		Dilution Factor: 10		Analysis Time..: 00:37		
Nickel	**203 M**	**0.52**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WP71AM**
		Dilution Factor: 10		Analysis Time..: 00:37		
Lead	**3330 M***	**1.6**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WP71AN**
		Dilution Factor: 20		Analysis Time..: 17:48		
Antimony	**33.4 M**	**0.52**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WP71AP**
		Dilution Factor: 10		Analysis Time..: 00:37		
Selenium	**1.1**	**0.52**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WP71AQ**
		Dilution Factor: 10		Analysis Time..: 00:37		

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RR73-05-58824

TOTAL Metals

Lot-Sample #...: F5D210354-001 **Matrix.....: SOLID**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	0.54	0.26	mg/kg	SW846 6020	04/27-04/28/05	G8WP71AR
		Dilution Factor: 10		Analysis Time..: 00:37		
Vanadium	16.1	2.6	mg/kg	SW846 6020	04/27-04/28/05	G8WP71AT
		Dilution Factor: 10		Analysis Time..: 00:37		
Prep Batch #...: 5115193						
Calcium	44100 N*E	327	mg/kg	SW846 6010B	04/27/05	G8WP71AU
		Dilution Factor: 1		Analysis Time..: 15:23		
Iron	82200 N	65.4	mg/kg	SW846 6010B	04/27-04/28/05	G8WP71AV
		Dilution Factor: 5		Analysis Time..: 08:19		
Potassium	4950 N	392	mg/kg	SW846 6010B	04/27/05	G8WP71AW
		Dilution Factor: 1		Analysis Time..: 15:23		
Magnesium	3680 NE	327	mg/kg	SW846 6010B	04/27/05	G8WP71AX
		Dilution Factor: 1		Analysis Time..: 15:23		
Sodium	5410 N	327	mg/kg	SW846 6010B	04/27/05	G8WP71A0
		Dilution Factor: 1		Analysis Time..: 15:23		
Zinc	8220 N*	13.1	mg/kg	SW846 6010B	04/27-04/28/05	G8WP71A1
		Dilution Factor: 5		Analysis Time..: 08:19		
Aluminum	18800 N*	13.1	mg/kg	SW846 6010B	04/27/05	G8WP71A2
		Dilution Factor: 1		Analysis Time..: 15:23		
Prep Batch #...: 5117679						
Mercury	0.62 NE	0.044	mg/kg	SW846 7471A	04/28/05	G8WP71A3
		Dilution Factor: 1		Analysis Time..: 17:22		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58824

TCLP Metals

Lot-Sample #...: F5D210354-001 **Matrix.....: SOLID**
Date Sampled...: 04/18/05 **Date Received..: 04/21/05**
Leach Date.....: 04/28/05 **Leach Batch #..: P511814**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10	ug/L	SW846 7470A	04/29-05/02/05	G8WP71CC
		Dilution Factor: 1		Analysis Time..: 10:34		
Prep Batch #...: 5119272						
Arsenic	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WP71A4
		Dilution Factor: 1		Analysis Time..: 19:49		
Barium	884	500	ug/L	SW846 6010B	04/29-05/05/05	G8WP71A5
		Dilution Factor: 1		Analysis Time..: 19:49		
Cadmium	180	25	ug/L	SW846 6010B	04/29-05/05/05	G8WP71A6
		Dilution Factor: 1		Analysis Time..: 19:49		
Chromium	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WP71A7
		Dilution Factor: 1		Analysis Time..: 19:49		
Lead	3140 N	250	ug/L	SW846 6010B	04/29-05/05/05	G8WP71A8
		Dilution Factor: 1		Analysis Time..: 19:49		
Silver	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WP71A9
		Dilution Factor: 1		Analysis Time..: 19:49		
Selenium	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WP71CA
		Dilution Factor: 1		Analysis Time..: 19:49		
Zinc	37400 N	100	ug/L	SW846 6010B	04/29-05/05/05	G8WP71EJ
		Dilution Factor: 1		Analysis Time..: 19:49		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58824

General Chemistry

Lot-Sample #...: F5D210354-001 **Work Order #...: G8WP7** **Matrix.....: SOLID**
Date Sampled...: 04/18/05 **Date Received..: 04/21/05**
% Moisture.....: 24

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	23.5	0.10	%	MCAWW 160.3 MOD	04/22-04/25/05	5112218
	Dilution Factor: 1			Analysis Time..: 00:00		

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58825

TOTAL Metals

Lot-Sample #...: F5D210354-002 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 25

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	**190 M***	**0.53** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:15	**04/27-04/28/05**	**G8WQL1AN**
Arsenic	**29.6 E**	**0.53** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:15	**04/27-04/28/05**	**G8WQL1AP**
Barium	**5030 M**	**5.3** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:15	**04/27-04/28/05**	**G8WQL1AQ**
Beryllium	**0.21 B**	**0.27** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:15	**04/27-04/28/05**	**G8WQL1AR**
Cadmium	**12.4 M**	**0.66** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:15	**04/27-04/28/05**	**G8WQL1AT**
Cobalt	**17.9**	**1.3** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:15	**04/27-04/28/05**	**G8WQL1AU**
Chromium	**74.0 M**	**1.3** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:15	**04/27-04/28/05**	**G8WQL1AV**
Copper	**993 M***	**2.7** Dilution Factor: 20	**mg/kg**	**SW846 6020** Analysis Time..: 18:04	**04/27-04/28/05**	**G8WQL1AW**
Manganese	**1270 M**	**2.7** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:15	**04/27-04/28/05**	**G8WQL1AX**
Nickel	**96.3 M**	**0.53** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:15	**04/27-04/28/05**	**G8WQL1A0**
Lead	**6650 M***	**1.6** Dilution Factor: 20	**mg/kg**	**SW846 6020** Analysis Time..: 18:04	**04/27-04/28/05**	**G8WQL1A1**
Antimony	**52.1 M**	**0.53** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:15	**04/27-04/28/05**	**G8WQL1A2**
Selenium	**1.6**	**0.53** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:15	**04/27-04/28/05**	**G8WQL1A3**

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58825

TOTAL Metals

Lot-Sample #...: F5D210354-002 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.27	mg/kg	SW846 6020	04/27-04/28/05	G8WQL1A4
		Dilution Factor: 10		Analysis Time..: 01:15		
Vanadium	12.8	2.7	mg/kg	SW846 6020	04/27-04/28/05	G8WQL1A5
		Dilution Factor: 10		Analysis Time..: 01:15		
Prep Batch #...: 5115193						
Calcium	25200 N*E	332	mg/kg	SW846 6010B	04/27/05	G8WQL1A6
		Dilution Factor: 1		Analysis Time..: 15:41		
Iron	144000 N	66.4	mg/kg	SW846 6010B	04/27-04/28/05	G8WQL1A7
		Dilution Factor: 5		Analysis Time..: 08:37		
Potassium	2370 N	399	mg/kg	SW846 6010B	04/27/05	G8WQL1A8
		Dilution Factor: 1		Analysis Time..: 15:41		
Magnesium	2640 NE	332	mg/kg	SW846 6010B	04/27/05	G8WQL1A9
		Dilution Factor: 1		Analysis Time..: 15:41		
Sodium	1900 N	332	mg/kg	SW846 6010B	04/27/05	G8WQL1AA
		Dilution Factor: 1		Analysis Time..: 15:41		
Zinc	3020 N*	13.3	mg/kg	SW846 6010B	04/27-04/28/05	G8WQL1AC
		Dilution Factor: 5		Analysis Time..: 08:37		
Aluminum	12400 N*	13.3	mg/kg	SW846 6010B	04/27/05	G8WQL1AD
		Dilution Factor: 1		Analysis Time..: 15:41		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

B Estimated result. Result is less than RL.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RK73-05-58825

TCLP Metals

Lot-Sample #...: F5D210354-002 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
Leach Date.....: 04/28/05 **Leach Batch #..: P511814**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10 Dilution Factor: 1	ug/L	SW846 7470A Analysis Time..: 10:46	04/29-05/02/05	G8WQL1CC
Prep Batch #...: 5119272						
Arsenic	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:06	04/29-05/05/05	G8WQL1AF
Barium	1650	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:06	04/29-05/05/05	G8WQL1AG
Cadmium	91.2	25 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:06	04/29-05/05/05	G8WQL1AH
Chromium	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:06	04/29-05/05/05	G8WQL1AJ
Lead	786 N	250 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:06	04/29-05/05/05	G8WQL1AK
Silver	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:06	04/29-05/05/05	G8WQL1AL
Selenium	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:06	04/29-05/05/05	G8WQL1CA
Zinc	19400 N	100 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:06	04/29-05/05/05	G8WQL1CE

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58825

General Chemistry

Lot-Sample #...: F5D210354-002 **Work Order #...: G8WQL** **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 25

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	24.7	0.10	%	MCAWW 160.3 MOD	04/22-04/25/05	5112218

Dilution Factor: 1 Analysis Time..: 00:00

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58826

TOTAL Metals

Lot-Sample #...: F5D210354-003 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 25

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	**54.9 E***	**0.53** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:20	**04/27-04/28/05**	**G8WQN1AN**
Arsenic	**22.7 E**	**0.53** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:20	**04/27-04/28/05**	**G8WQN1AP**
Barium	**1490 E**	**5.3** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:20	**04/27-04/28/05**	**G8WQN1AQ**
Beryllium	**0.34**	**0.27** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:20	**04/27-04/28/05**	**G8WQN1AR**
Cadmium	**19.7 E**	**0.66** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:20	**04/27-04/28/05**	**G8WQN1AT**
Cobalt	**13.8**	**1.3** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:20	**04/27-04/28/05**	**G8WQN1AU**
Chromium	**77.0 E**	**1.3** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:20	**04/27-04/28/05**	**G8WQN1AV**
Copper	**1670 E***	**2.7** Dilution Factor: 20	**mg/kg**	**SW846 6020** Analysis Time..: 18:07	**04/27-04/28/05**	**G8WQN1AN**
Manganese	**1230 E**	**2.7** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:20	**04/27-04/28/05**	**G8WQN1AX**
Nickel	**79.7 E**	**0.53** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:20	**04/27-04/28/05**	**G8WQN1A0**
Lead	**6700 E***	**1.6** Dilution Factor: 20	**mg/kg**	**SW846 6020** Analysis Time..: 18:07	**04/27-04/28/05**	**G8WQN1A1**
Antimony	**48.4 E**	**0.53** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:20	**04/27-04/28/05**	**G8WQN1A2**
Selenium	**1.1**	**0.53** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:20	**04/27-04/28/05**	**G8WQN1A3**

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58826

TOTAL Metals

Lot-Sample #...: F5D210354-003 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.27	mg/kg	SW846 6020	04/27-04/28/05	G8WQN1A4
		Dilution Factor: 10		Analysis Time..: 01:20		
Vanadium	15.3	2.7	mg/kg	SW846 6020	04/27-04/28/05	G8WQN1A5
		Dilution Factor: 10		Analysis Time..: 01:20		
Prep Batch #...: 5115193						
Calcium	27300 N*E	332	mg/kg	SW846 6010B	04/27/05	G8WQN1A6
		Dilution Factor: 1		Analysis Time..: 15:45		
Iron	78400 N	66.4	mg/kg	SW846 6010B	04/27-04/28/05	G8WQN1A7
		Dilution Factor: 5		Analysis Time..: 08:41		
Potassium	3820 N	398	mg/kg	SW846 6010B	04/27/05	G8WQN1A8
		Dilution Factor: 1		Analysis Time..: 15:45		
Magnesium	2840 NE	332	mg/kg	SW846 6010B	04/27/05	G8WQN1A9
		Dilution Factor: 1		Analysis Time..: 15:45		
Sodium	3690 N	332	mg/kg	SW846 6010B	04/27/05	G8WQN1AA
		Dilution Factor: 1		Analysis Time..: 15:45		
Zinc	4360 N*	2.7	mg/kg	SW846 6010B	04/27/05	G8WQN1AC
		Dilution Factor: 1		Analysis Time..: 15:45		
Aluminum	15200 N*	13.3	mg/kg	SW846 6010B	04/27/05	G8WQN1AD
		Dilution Factor: 1		Analysis Time..: 15:45		
Prep Batch #...: 5117679						
Mercury	0.70 NE	0.044	mg/kg	SW846 7471A	04/28/05	G8WQN1AE
		Dilution Factor: 1		Analysis Time..: 17:44		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58826

TCLP Metals

Lot-Sample #...: F5D210354-003 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
Leach Date.....: 04/28/05 **Leach Batch #..: P511814**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10 Dilution Factor: 1	ug/L	SW846 7470A Analysis Time..: 10:48	04/29-05/02/05	G8WQN1CC
Prep Batch #...: 5119272						
Arsenic	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:10	04/29-05/05/05	G8WQN1AF
Barium	1440	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:10	04/29-05/05/05	G8WQN1AG
Cadmium	105	25 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:10	04/29-05/05/05	G8WQN1AH
Chromium	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:10	04/29-05/05/05	G8WQN1AJ
Lead	2390 N	250 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:10	04/29-05/05/05	G8WQN1AK
Silver	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:10	04/29-05/05/05	G8WQN1AL
Selenium	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:10	04/29-05/05/05	G8WQN1CA
Zinc	39100 N	100 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:10	04/29-05/05/05	G8WQN1CB

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58826

General Chemistry

Lot-Sample #...: F5D210354-003 **Work Order #...: G8WQN** **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 25

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	24.7	0.10	%	MCAWW 160.3 MOD	04/22-04/25/05	5112218

Dilution Factor: 1 Analysis Time..: 00:00

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RF73-05-58827

TOTAL Metals

Lot-Sample #...: F5D210354-004 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 17

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	**118 E***	**0.48** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:25	**04/27-04/28/05**	**G8WQR1AN**
Arsenic	**33.6 E**	**0.48** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:25	**04/27-04/28/05**	**G8WQR1AP**
Barium	**4150 E**	**4.8** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:25	**04/27-04/28/05**	**G8WQR1AQ**
Beryllium	**0.37**	**0.24** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:25	**04/27-04/28/05**	**G8WQR1AR**
Cadmium	**9.0 E**	**0.6** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:25	**04/27-04/28/05**	**G8WQR1AT**
Cobalt	**11.3**	**1.2** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:25	**04/27-04/28/05**	**G8WQR1AU**
Chromium	**61.3 E**	**1.2** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:25	**04/27-04/28/05**	**G8WQR1AV**
Copper	**1270 E***	**1.2** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 18:19	**04/27-04/28/05**	**G8WQR1AW**
Manganese	**895 E**	**2.4** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:25	**04/27-04/28/05**	**G8WQR1AX**
Nickel	**43.7 E**	**0.48** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:25	**04/27-04/28/05**	**G8WQR1A0**
Lead	**2400**	**0.72** Dilution Factor: 2	**mg/kg**	**SW846 6020** Analysis Time..: 01:25	**04/27-04/28/05**	**G8WQR1A1**
Antimony	**32.8 E**	**0.48** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:25	**04/27-04/28/05**	**G8WQR1A2**
Selenium	**0.89**	**0.48** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:25	**04/27-04/28/05**	**G8WQR1A3**

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58827

TOTAL Metals

Lot-Sample #...: F5D210354-004 **Matrix.....: SOLID**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.24	mg/kg	SW846 6020	04/27-04/28/05	G8WQR1A4
		Dilution Factor: 10		Analysis Time..: 01:25		
Vanadium	14.1	2.4	mg/kg	SW846 6020	04/27-04/28/05	G8WQR1A5
		Dilution Factor: 10		Analysis Time..: 01:25		
Prep Batch #...: 5115193						
Calcium	22800 E*E	301	mg/kg	SW846 6010B	04/27/05	G8WQR1A6
		Dilution Factor: 1		Analysis Time..: 15:49		
Iron	41800 E	12	mg/kg	SW846 6010B	04/27/05	G8WQR1A7
		Dilution Factor: 1		Analysis Time..: 15:49		
Potassium	2490 E	361	mg/kg	SW846 6010B	04/27/05	G8WQR1A8
		Dilution Factor: 1		Analysis Time..: 15:49		
Magnesium	2680 NE	301	mg/kg	SW846 6010B	04/27/05	G8WQR1A9
		Dilution Factor: 1		Analysis Time..: 15:49		
Sodium	1990 E	301	mg/kg	SW846 6010B	04/27/05	G8WQR1AA
		Dilution Factor: 1		Analysis Time..: 15:49		
Zinc	4450 E*	2.4	mg/kg	SW846 6010B	04/27/05	G8WQR1AC
		Dilution Factor: 1		Analysis Time..: 15:49		
Aluminum	13400 E*	12	mg/kg	SW846 6010B	04/27/05	G8WQR1AD
		Dilution Factor: 1		Analysis Time..: 15:49		
Prep Batch #...: 5117679						
Mercury	0.90 NE	0.04	mg/kg	SW846 7471A	04/28/05	G8WQR1AE
		Dilution Factor: 1		Analysis Time..: 17:46		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RR73-05-58827

TCLP Metals

Lot-Sample #...: F5D210354-004 **Matrix.....:** SOLID
Date Sampled...: 04/19/05 **Date Received..:** 04/21/05
Leach Date.....: 04/28/05 **Leach Batch #..:** P511814

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10	ug/L	SW846 7470A	04/29-05/02/05	G8WQR1CC
		Dilution Factor: 1		Analysis Time..: 10:50		
Prep Batch #...: 5119272						
Arsenic	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WQR1AF
		Dilution Factor: 1		Analysis Time..: 20:15		
Barium	2400	500	ug/L	SW846 6010B	04/29-05/05/05	G8WQR1AG
		Dilution Factor: 1		Analysis Time..: 20:15		
Cadmium	40.6	25	ug/L	SW846 6010B	04/29-05/05/05	G8WQR1AH
		Dilution Factor: 1		Analysis Time..: 20:15		
Chromium	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WQR1AJ
		Dilution Factor: 1		Analysis Time..: 20:15		
Lead	6290 N	250	ug/L	SW846 6010B	04/29-05/05/05	G8WQR1AK
		Dilution Factor: 1		Analysis Time..: 20:15		
Silver	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WQR1AL
		Dilution Factor: 1		Analysis Time..: 20:15		
Selenium	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WQR1CA
		Dilution Factor: 1		Analysis Time..: 20:15		
Zinc	19200 N	100	ug/L	SW846 6010B	04/29-05/05/05	G8WQR1CE
		Dilution Factor: 1		Analysis Time..: 20:15		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RK73-05-58827

General Chemistry

Lot-Sample #...: F5D210354-004 **Work Order #...: G8WQR** **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 17

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	16.9	0.10	%	MCAWW 160.3 MOD	04/22-04/25/05	5112218

Dilution Factor: 1 Analysis Time..: 00:00

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58828

TOTAL Metals

Lot-Sample #...: F5D210354-005 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 18

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	37.2 E*	0.49 Dilution Factor: 10	mg/kg	SW846 6020 Analysis Time..: 01:30	04/27-04/28/05	G8WQT1AN
Arsenic	39.3 E	0.49 Dilution Factor: 10	mg/kg	SW846 6020 Analysis Time..: 01:30	04/27-04/28/05	G8WQT1AP
Barium	1550 E	4.9 Dilution Factor: 10	mg/kg	SW846 6020 Analysis Time..: 01:30	04/27-04/28/05	G8WQT1AQ
Beryllium	2.4	0.24 Dilution Factor: 10	mg/kg	SW846 6020 Analysis Time..: 01:30	04/27-04/28/05	G8WQT1AR
Cadmium	48.3 E	0.61 Dilution Factor: 10	mg/kg	SW846 6020 Analysis Time..: 01:30	04/27-04/28/05	G8WQT1AT
Cobalt	18.3	1.2 Dilution Factor: 10	mg/kg	SW846 6020 Analysis Time..: 01:30	04/27-04/28/05	G8WQT1AU
Chromium	85.9 E	1.2 Dilution Factor: 10	mg/kg	SW846 6020 Analysis Time..: 01:30	04/27-04/28/05	G8WQT1AV
Copper	219000 E*	24.3 Dilution Factor: 200	mg/kg	SW846 6020 Analysis Time..: 19:40	04/27-04/28/05	G8WQT1AW
Manganese	21800 E	2.4 Dilution Factor: 10	mg/kg	SW846 6020 Analysis Time..: 01:30	04/27-04/28/05	G8WQT1AX
Nickel	146 E	0.49 Dilution Factor: 10	mg/kg	SW846 6020 Analysis Time..: 01:30	04/27-04/28/05	G8WQT1A0
Lead	2460	0.73 Dilution Factor: 2	mg/kg	SW846 6020 Analysis Time..: 01:30	04/27-04/28/05	G8WQT1A1
Antimony	27.8 E	0.49 Dilution Factor: 10	mg/kg	SW846 6020 Analysis Time..: 01:30	04/27-04/28/05	G8WQT1A2
Selenium	0.92	0.49 Dilution Factor: 10	mg/kg	SW846 6020 Analysis Time..: 01:30	04/27-04/28/05	G8WQT1A3

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58828

TOTAL Metals

Lot-Sample #...: F5D210354-005 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.24	mg/kg	SW846 6020	04/27-04/28/05	G8WQT1A4
		Dilution Factor: 10		Analysis Time..: 01:30		
Vanadium	24.7	2.4	mg/kg	SW846 6020	04/27-04/28/05	G8WQT1A5
		Dilution Factor: 10		Analysis Time..: 01:30		
Prep Batch #...: 5115193						
Calcium	27700 E*E	304	mg/kg	SW846 6010B	04/27/05	G8WQT1A6
		Dilution Factor: 1		Analysis Time..: 15:54		
Iron	40900 E	12.2	mg/kg	SW846 6010B	04/27/05	G8WQT1A7
		Dilution Factor: 1		Analysis Time..: 15:54		
Potassium	2680 E	364	mg/kg	SW846 6010B	04/27/05	G8WQT1A8
		Dilution Factor: 1		Analysis Time..: 15:54		
Magnesium	2880 EE	304	mg/kg	SW846 6010B	04/27/05	G8WQT1A9
		Dilution Factor: 1		Analysis Time..: 15:54		
Sodium	2450 E	304	mg/kg	SW846 6010B	04/27/05	G8WQT1AA
		Dilution Factor: 1		Analysis Time..: 15:54		
Zinc	11300 E*	12.2	mg/kg	SW846 6010B	04/27-04/28/05	G8WQT1AC
		Dilution Factor: 5		Analysis Time..: 08:45		
Aluminum	12200 E*	12.2	mg/kg	SW846 6010B	04/27/05	G8WQT1AD
		Dilution Factor: 1		Analysis Time..: 15:54		
Prep Batch #...: 5117679						
Mercury	0.92 EE	0.041	mg/kg	SW846 7471A	04/28/05	G8WQT1AE
		Dilution Factor: 1		Analysis Time..: 17:49		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RM73-05-58828

TCLP Metals

Lot-Sample #...: F5D210354-005 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
Leach Date.....: 04/28/05 **Leach Batch #..: P511814**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10 Dilution Factor: 1	ug/L	SW846 7470A Analysis Time..: 10:52	04/29-05/02/05	G8WQT1CC
Prep Batch #...: 5119272						
Arsenic	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:19	04/29-05/05/05	G8WQT1AF
Barium	**1430**	**500** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 20:19	**04/29-05/05/05**	**G8WQT1AG**
Cadmium	**133**	**25** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 20:19	**04/29-05/05/05**	**G8WQT1AH**
Chromium	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:19	04/29-05/05/05	G8WQT1AJ
Lead	**2560 N**	**250** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 20:19	**04/29-05/05/05**	**G8WQT1AK**
Silver	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:19	04/29-05/05/05	G8WQT1AL
Selenium	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:19	04/29-05/05/05	G8WQT1CA
Zinc	**40500 N**	**100** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 20:19	**04/29-05/05/05**	**G8WQT1CE**

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58828

General Chemistry

Lot-Sample #...: F5D210354-005 **Work Order #...: G8WQT** **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 18

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	17.7	0.10	%	MCAWW 160.3 MOD	04/22-04/25/05	5112218

Dilution Factor: 1 Analysis Time..: 00:00

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58829

General Chemistry

Lot-Sample #...: F5D210354-006 **Work Order #...:** G8WQV **Matrix.....:** SOLID
Date Sampled...: 04/19/05 **Date Received..:** 04/21/05
% Moisture.....: 23

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	8.0		No Units	SW846 9045A	04/25/05	5115278
		Dilution Factor: 1		Analysis Time..: 00:00		
Flashpoint	>60.0		deg C	SW846 1010	04/25/05	5115320
		Dilution Factor: 1		Analysis Time..: 00:00		
Paint Filter Test	PAS,S		No Units	SW846 9095	04/25/05	5115319
		Dilution Factor: 1		Analysis Time..: 00:00		
Percent Moisture	23.5	0.10	%	MCAWW 160.3 MOD	04/22-04/25/05	5112218
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Cyanide	0.052 B	0.065	mg/kg	SW846 7.3.3	05/04-05/06/05	5126308
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Sulfide	ND	5.8	mg/kg	SW846 7.3.4	05/04-05/06/05	5126399
		Dilution Factor: 1		Analysis Time..: 00:00		

NOTE(S):

RL Reporting Limit

S The result was determined using the Method of Standard Additions (MSA).

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RR73-05-58830

TOTAL Metals

Lot-Sample #...: F5D210354-007 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 21

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	**54.0 M***	**0.51** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:35	**04/27-04/28/05**	**G8WR61AN**
Arsenic	**26.1 M**	**0.51** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:35	**04/27-04/28/05**	**G8WR61AP**
Barium	**1980 M**	**5.1** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:35	**04/27-04/28/05**	**G8WR61AQ**
Beryllium	**0.39**	**0.25** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:35	**04/27-04/28/05**	**G8WR61AR**
Cadmium	**18.2 M**	**0.63** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:35	**04/27-04/28/05**	**G8WR61AT**
Cobalt	**40.3**	**1.3** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:35	**04/27-04/28/05**	**G8WR61AU**
Chromium	**154 M**	**1.3** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:35	**04/27-04/28/05**	**G8WR61AV**
Copper	**1330 M***	**2.5** Dilution Factor: 20	**mg/kg**	**SW846 6020** Analysis Time..: 18:25	**04/27-04/28/05**	**G8WR61AW**
Manganese	**2190 M**	**2.5** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:35	**04/27-04/28/05**	**G8WR61AX**
Nickel	**633 M**	**0.51** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:35	**04/27-04/28/05**	**G8WR61A0**
Lead	**6110 M***	**1.5** Dilution Factor: 20	**mg/kg**	**SW846 6020** Analysis Time..: 18:25	**04/27-04/28/05**	**G8WR61A1**
Antimony	**73.1 M**	**0.51** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:35	**04/27-04/28/05**	**G8WR61A2**
Selenium	**0.81**	**0.51** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:35	**04/27-04/28/05**	**G8WR61A3**

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: ER73-05-58830

TOTAL Metals

Lot-Sample #...: F5D210354-007 **Matrix.....: SOLID**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.25	mg/kg	SW846 6020	04/27-04/28/05	G8WR61A4
		Dilution Factor: 10		Analysis Time..: 01:35		
Vanadium	20.9	2.5	mg/kg	SW846 6020	04/27-04/28/05	G8WR61A5
		Dilution Factor: 10		Analysis Time..: 01:35		
Prep Batch #...: 5115193						
Calcium	30700 N*E	316	mg/kg	SW846 6010B	04/27/05	G8WR61A6
		Dilution Factor: 1		Analysis Time..: 16:07		
Iron	57100 N	12.6	mg/kg	SW846 6010B	04/27/05	G8WR61A7
		Dilution Factor: 1		Analysis Time..: 16:07		
Potassium	2220 N	379	mg/kg	SW846 6010B	04/27/05	G8WR61A8
		Dilution Factor: 1		Analysis Time..: 16:07		
Magnesium	57600 NE	316	mg/kg	SW846 6010B	04/27/05	G8WR61A9
		Dilution Factor: 1		Analysis Time..: 16:07		
Sodium	1510 N	316	mg/kg	SW846 6010B	04/27/05	G8WR61AA
		Dilution Factor: 1		Analysis Time..: 16:07		
Zinc	4880 N*	2.5	mg/kg	SW846 6010B	04/27/05	G8WR61AC
		Dilution Factor: 1		Analysis Time..: 16:07		
Aluminum	12100 N*	12.6	mg/kg	SW846 6010B	04/27/05	G8WR61AD
		Dilution Factor: 1		Analysis Time..: 16:07		
Prep Batch #...: 5117679						
Mercury	1.6 NE	0.042	mg/kg	SW846 7471A	04/28/05	G8WR61AE
		Dilution Factor: 1		Analysis Time..: 17:50		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58830

TCLP Metals

Lot-Sample #...: F5D210354-007 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
Leach Date.....: 04/28/05 **Leach Batch #..: P511814**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10 Dilution Factor: 1	ug/L	SW846 7470A Analysis Time..: 10:54	04/29-05/02/05	G8WR61CC
Prep Batch #...: 5119272						
Arsenic	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:32	04/29-05/05/05	G8WR61AF
Barium	**3840**	**500** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 20:32	**04/29-05/05/05**	**G8WR61AG**
Cadmium	**1730**	**25** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 20:32	**04/29-05/05/05**	**G8WR61AH**
Chromium	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:32	04/29-05/05/05	G8WR61AJ
Lead	**3330 N**	**250** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 20:32	**04/29-05/05/05**	**G8WR61AK**
Silver	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:32	04/29-05/05/05	G8WR61AL
Selenium	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:32	04/29-05/05/05	G8WR61CA
Zinc	**35100 N**	**100** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 20:32	**04/29-05/05/05**	**G8WR61CE**

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: KE73-05-58830

General Chemistry

Lot-Sample #...: F5D210354-007 Work Order #...: G8WR6 Matrix.....: SOLID
Date Sampled...: 04/19/05 Date Received..: 04/21/05
% Moisture.....: 21

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	20.9	0.10	%	MCAWW 160.3 MOD	04/22-04/25/05	5112218
		Dilution Factor: 1		Analysis Time..: 00:00		

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: KF73-05-58831

TOTAL Metals

Lot-Sample #...: F5D210354-008 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 24

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	**49.5 N***	**0.53** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:40	**04/27-04/28/05**	**G8WTA1AN**
Arsenic	**19.0 E**	**0.53** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:40	**04/27-04/28/05**	**G8WTA1AP**
Barium	**1880 N**	**5.3** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:40	**04/27-04/28/05**	**G8WTA1AQ**
Beryllium	**0.28**	**0.27** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:40	**04/27-04/28/05**	**G8WTA1AR**
Cadmium	**78.5 N**	**0.66** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:40	**04/27-04/28/05**	**G8WTA1AT**
Cobalt	**15.1**	**1.3** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:40	**04/27-04/28/05**	**G8WTA1AU**
Chromium	**88.5 N**	**1.3** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:40	**04/27-04/28/05**	**G8WTA1AV**
Copper	**4130 N***	**3.3** Dilution Factor: 25	**mg/kg**	**SW846 6020** Analysis Time..: 18:28	**04/27-04/28/05**	**G8WTA1AW**
Manganese	**1330 N**	**2.7** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:40	**04/27-04/28/05**	**G8WTA1AX**
Nickel	**125 N**	**0.53** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:40	**04/27-04/28/05**	**G8WTA1A0**
Lead	**3950**	**0.79** Dilution Factor: 2	**mg/kg**	**SW846 6020** Analysis Time..: 01:40	**04/27-04/28/05**	**G8WTA1A1**
Antimony	**27.8 N**	**0.53** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:40	**04/27-04/28/05**	**G8WTA1A2**
Selenium	**1.7**	**0.53** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:40	**04/27-04/28/05**	**G8WTA1A3**

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58831

TOTAL Metals

Lot-Sample #...: F5D210354-008 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.27	mg/kg	SW846 6020	04/27-04/28/05	G8WTA1A4
		Dilution Factor: 10		Analysis Time..: 01:40		
Vanadium	17.2	2.7	mg/kg	SW846 6020	04/27-04/28/05	G8WTA1A5
		Dilution Factor: 10		Analysis Time..: 01:40		
Prep Batch #...: 5115193						
Calcium	31400 N*E	331	mg/kg	SW846 6010B	04/27/05	G8WTA1A6
		Dilution Factor: 1		Analysis Time..: 16:11		
Iron	50000 N	13.2	mg/kg	SW846 6010B	04/27/05	G8WTA1A7
		Dilution Factor: 1		Analysis Time..: 16:11		
Potassium	3860 N	397	mg/kg	SW846 6010B	04/27/05	G8WTA1A8
		Dilution Factor: 1		Analysis Time..: 16:11		
Magnesium	3070 NE	331	mg/kg	SW846 6010B	04/27/05	G8WTA1A9
		Dilution Factor: 1		Analysis Time..: 16:11		
Sodium	4050 N	331	mg/kg	SW846 6010B	04/27/05	G8WTA1AA
		Dilution Factor: 1		Analysis Time..: 16:11		
Zinc	43000 N*	26.5	mg/kg	SW846 6010B	04/27-04/28/05	G8WTA1AC
		Dilution Factor: 10		Analysis Time..: 08:50		
Aluminum	17700 N*	13.2	mg/kg	SW846 6010B	04/27/05	G8WTA1AD
		Dilution Factor: 1		Analysis Time..: 16:11		
Prep Batch #...: 5117679						
Mercury	1.4 NE	0.044	mg/kg	SW846 7471A	04/28/05	G8WTA1AE
		Dilution Factor: 1		Analysis Time..: 17:53		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58831

TCLP Metals

Lot-Sample #...: F5D210354-008 **Matrix.....:** SOLID
Date Sampled...: 04/19/05 **Date Received..:** 04/21/05
Leach Date.....: 04/28/05 **Leach Batch #..:** P511814

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10	ug/L	SW846 7470A	04/29-05/02/05	G8WTA1CC
		Dilution Factor: 1		Analysis Time..: 10:57		
Prep Batch #...: 5119272						
Arsenic	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WTA1AF
		Dilution Factor: 1		Analysis Time..: 20:37		
Barium	1180	500	ug/L	SW846 6010B	04/29-05/05/05	G8WTA1AG
		Dilution Factor: 1		Analysis Time..: 20:37		
Cadmium	134	25	ug/L	SW846 6010B	04/29-05/05/05	G8WTA1AH
		Dilution Factor: 1		Analysis Time..: 20:37		
Chromium	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WTA1AJ
		Dilution Factor: 1		Analysis Time..: 20:37		
Lead	4370 N	250	ug/L	SW846 6010B	04/29-05/05/05	G8WTA1AK
		Dilution Factor: 1		Analysis Time..: 20:37		
Silver	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WTA1AL
		Dilution Factor: 1		Analysis Time..: 20:37		
Selenium	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WTA1CA
		Dilution Factor: 1		Analysis Time..: 20:37		
Zinc	42400 N	100	ug/L	SW846 6010B	04/29-05/05/05	G8WTA1CE
		Dilution Factor: 1		Analysis Time..: 20:37		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RF73-05-58831

General Chemistry

Lot-Sample #...: F5D210354-008 **Work Order #...: G8WTA** **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 24

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	24.5	0.10	%	MCAWW 160.3 MOD	04/22-04/25/05	5112218

Dilution Factor: 1 Analysis Time..: 00:00

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58832

TOTAL Metals

Lot-Sample #...: F5D210354-009 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 25

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Barium	**1580 H**	**5.3** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:45	**04/27-04/28/05**	**G8WTE1AQ**
Beryllium	**0.28**	**0.27** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:45	**04/27-04/28/05**	**G8WTE1AR**
Cadmium	**14.9 H**	**0.67** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:45	**04/27-04/28/05**	**G8WTE1AT**
Cobalt	**13.2**	**1.3** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:45	**04/27-04/28/05**	**G8WTE1AU**
Chromium	**66.8 H**	**1.3** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:45	**04/27-04/28/05**	**G8WTE1AV**
Copper	**1930 H***	**1.3** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 18:31	**04/27-04/28/05**	**G8WTE1AW**
Manganese	**1380 H**	**2.7** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:45	**04/27-04/28/05**	**G8WTE1AX**
Nickel	**131 H**	**0.53** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:45	**04/27-04/28/05**	**G8WTE1A0**
Lead	**2390 H***	**0.8** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:45	**04/27-04/28/05**	**G8WTE1A1**
Antimony	**29.1 H**	**0.53** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:45	**04/27-04/28/05**	**G8WTE1A2**
Selenium	**0.68**	**0.53** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:45	**04/27-04/28/05**	**G8WTE1A3**
Thallium	ND	0.27 Dilution Factor: 10	mg/kg	SW846 6020 Analysis Time..: 01:45	04/27-04/28/05	G8WTE1A4
Vanadium	**17.1**	**2.7** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:45	**04/27-04/28/05**	**G8WTE1A5**

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58832

TOTAL Metals

Lot-Sample #...: F5D210354-009 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	35.6 N*	0.53	mg/kg	SW846 6020	04/27-04/28/05	G8WTK1AN
		Dilution Factor: 10		Analysis Time..: 01:45		
Arsenic	20.5 E	0.53	mg/kg	SW846 6020	04/27-04/28/05	G8WTK1AP
		Dilution Factor: 10		Analysis Time..: 01:45		
Prep Batch #...: 5115193						
Calcium	34800 N*E	332	mg/kg	SW846 6010B	04/27/05	G8WTK1A6
		Dilution Factor: 1		Analysis Time..: 16:16		
Iron	58300 N	13.3	mg/kg	SW846 6010B	04/27/05	G8WTK1A7
		Dilution Factor: 1		Analysis Time..: 16:16		
Potassium	4370 N	399	mg/kg	SW846 6010B	04/27/05	G8WTK1A8
		Dilution Factor: 1		Analysis Time..: 16:16		
Magnesium	3390 NE	332	mg/kg	SW846 6010B	04/27/05	G8WTK1A9
		Dilution Factor: 1		Analysis Time..: 16:16		
Sodium	3960 N	332	mg/kg	SW846 6010B	04/27/05	G8WTK1AA
		Dilution Factor: 1		Analysis Time..: 16:16		
Zinc	3940 N*	2.7	mg/kg	SW846 6010B	04/27/05	G8WTK1AC
		Dilution Factor: 1		Analysis Time..: 16:16		
Aluminum	18200 N*	13.3	mg/kg	SW846 6010B	04/27/05	G8WTK1AD
		Dilution Factor: 1		Analysis Time..: 16:16		
Prep Batch #...: 5117679						
Mercury	1.7 NE	0.044	mg/kg	SW846 7471A	04/28/05	G8WTK1AE
		Dilution Factor: 1		Analysis Time..: 17:55		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

E Matrix interference.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58832

TCLP Metals

Lot-Sample #...: F5D210354-009 Matrix.....: SOLID
Date Sampled...: 04/19/05 Date Received..: 04/21/05
Leach Date.....: 04/28/05 Leach Batch #..: P511814

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10 Dilution Factor: 1	ug/L	SW846 7470A Analysis Time..: 10:59	04/29-05/02/05	G8WTE1CC
Prep Batch #...: 5119272						
Arsenic	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:41	04/29-05/05/05	G8WTE1AF
Barium	1320	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:41	04/29-05/05/05	G8WTE1AG
Cadmium	40.3	25 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:41	04/29-05/05/05	G8WTE1AH
Chromium	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:41	04/29-05/05/05	G8WTE1AJ
Lead	1080 N	250 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:41	04/29-05/05/05	G8WTE1AK
Silver	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:41	04/29-05/05/05	G8WTE1AL
Selenium	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:41	04/29-05/05/05	G8WTE1CA
Zinc	30300 N	100 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:41	04/29-05/05/05	G8WTE1CE

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58832

General Chemistry

Lot-Sample #...: F5D210354-009 **Work Order #...: G8WTE** **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 25

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	24.8	0.10	%	MCAWW 160.3 MOD	04/22-04/25/05	5112218

Dilution Factor: 1 Analysis Time..: 00:00

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58833

TOTAL Metals

Lot-Sample #...: F5D210354-010 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 17

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	**119 M***	**0.48** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:51	**04/27-04/28/05**	**G8WTG1AN**
Arsenic	**26.8 E**	**0.48** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:51	**04/27-04/28/05**	**G8WTG1AP**
Barium	**2660 M**	**4.8** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:51	**04/27-04/28/05**	**G8WTG1AQ**
Beryllium	**1.2**	**0.24** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:51	**04/27-04/28/05**	**G8WTG1AR**
Cadmium	**7.7 M**	**0.6** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:51	**04/27-04/28/05**	**G8WTG1AT**
Cobalt	**17.3**	**1.2** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:51	**04/27-04/28/05**	**G8WTG1AU**
Chromium	**107 M**	**1.2** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:51	**04/27-04/28/05**	**G8WTG1AV**
Copper	**1190 M***	**1.2** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 18:35	**04/27-04/28/05**	**G8WTG1AW**
Manganese	**1750 M**	**2.4** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:51	**04/27-04/28/05**	**G8WTG1AX**
Nickel	**115 M**	**0.48** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:51	**04/27-04/28/05**	**G8WTG1A0**
Lead	**2500 M***	**0.72** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:51	**04/27-04/28/05**	**G8WTG1A1**
Antimony	**29.8 M**	**0.48** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:51	**04/27-04/28/05**	**G8WTG1A2**
Selenium	**0.57**	**0.48** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 01:51	**04/27-04/28/05**	**G8WTG1A3**

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: EE73-05-58833

TOTAL Metals

Lot-Sample #...: F5D210354-010 **Matrix.....: SOLID**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.24	mg/kg	SW846 6020	04/27-04/28/05	G8WTG1A4
		Dilution Factor: 10		Analysis Time..: 01:51		
Vanadium	12.9	2.4	mg/kg	SW846 6020	04/27-04/28/05	G8WTG1A5
		Dilution Factor: 10		Analysis Time..: 01:51		
Prep Batch #...: 5115193						
Calcium	27200 N*E	300	mg/kg	SW846 6010B	04/27/05	G8WTG1A6
		Dilution Factor: 1		Analysis Time..: 16:20		
Iron	148000 N	59.9	mg/kg	SW846 6010B	04/27-04/28/05	G8WTG1A7
		Dilution Factor: 5		Analysis Time..: 08:54		
Potassium	3200 N	360	mg/kg	SW846 6010B	04/27/05	G8WTG1A8
		Dilution Factor: 1		Analysis Time..: 16:20		
Magnesium	2830 NE	300	mg/kg	SW846 6010B	04/27/05	G8WTG1A9
		Dilution Factor: 1		Analysis Time..: 16:20		
Sodium	4750 N	300	mg/kg	SW846 6010B	04/27/05	G8WTG1AA
		Dilution Factor: 1		Analysis Time..: 16:20		
Zinc	3760 N*	2.4	mg/kg	SW846 6010B	04/27/05	G8WTG1AC
		Dilution Factor: 1		Analysis Time..: 16:20		
Aluminum	15800 N*	12	mg/kg	SW846 6010B	04/27/05	G8WTG1AD
		Dilution Factor: 1		Analysis Time..: 16:20		
Prep Batch #...: 5117679						
Mercury	2.1 NE	0.08	mg/kg	SW846 7471A	04/28/05	G8WTG1AE
		Dilution Factor: 2		Analysis Time..: 18:50		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RR73-05-58833

TCLP Metals

Lot-Sample #...: F5D210354-010 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
Leach Date.....: 04/28/05 **Leach Batch #..: P511814**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10	ug/L	SW846 7470A	04/29-05/02/05	G8WTG1CC
		Dilution Factor: 1		Analysis Time..: 11:05		
Prep Batch #...: 5119272						
Arsenic	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WTG1AF
		Dilution Factor: 1		Analysis Time..: 20:46		
Barium	939	500	ug/L	SW846 6010B	04/29-05/05/05	G8WTG1AG
		Dilution Factor: 1		Analysis Time..: 20:46		
Cadmium	20.5 B	25	ug/L	SW846 6010B	04/29-05/05/05	G8WTG1AH
		Dilution Factor: 1		Analysis Time..: 20:46		
Chromium	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WTG1AJ
		Dilution Factor: 1		Analysis Time..: 20:46		
Lead	633 N	250	ug/L	SW846 6010B	04/29-05/05/05	G8WTG1AK
		Dilution Factor: 1		Analysis Time..: 20:46		
Silver	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WTG1AL
		Dilution Factor: 1		Analysis Time..: 20:46		
Selenium	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WTG1CA
		Dilution Factor: 1		Analysis Time..: 20:46		
Zinc	24900 N	100	ug/L	SW846 6010B	04/29-05/05/05	G8WTG1CE
		Dilution Factor: 1		Analysis Time..: 20:46		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

B Estimated result. Result is less than RL.

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58833

General Chemistry

Lot-Sample #...: F5D210354-010 **Work Order #...: G8WTG** **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 17

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	16.5	0.10	%	NCANW 160.3 MOD	04/22-04/25/05	5112218

Dilution Factor: 1 Analysis Time..: 00:00

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58834

TOTAL Metals

Lot-Sample #...: F5D210354-011 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 25

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	**56.9 E***	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTR1AN**
		Dilution Factor: 10		Analysis Time..: 01:56		
Arsenic	**26.3 E**	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTR1AP**
		Dilution Factor: 10		Analysis Time..: 01:56		
Barium	**1000 E**	**5.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTR1AQ**
		Dilution Factor: 10		Analysis Time..: 01:56		
Beryllium	**0.74**	**0.27**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTR1AR**
		Dilution Factor: 10		Analysis Time..: 01:56		
Cadmium	**15.4 E**	**0.66**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTR1AT**
		Dilution Factor: 10		Analysis Time..: 01:56		
Cobalt	**17.7**	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTR1AU**
		Dilution Factor: 10		Analysis Time..: 01:56		
Chromium	**81.8 E**	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTR1AV**
		Dilution Factor: 10		Analysis Time..: 01:56		
Copper	**31500 E***	**3.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTR1AW**
		Dilution Factor: 25		Analysis Time..: 18:38		
Manganese	**2540 E**	**2.7**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTR1AX**
		Dilution Factor: 10		Analysis Time..: 01:56		
Nickel	**295 E**	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTR1A0**
		Dilution Factor: 10		Analysis Time..: 01:56		
Lead	**8770 E***	**2**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTR1A1**
		Dilution Factor: 25		Analysis Time..: 18:38		
Antimony	**123 E**	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTR1A2**
		Dilution Factor: 10		Analysis Time..: 01:56		
Selenium	**2.0**	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTR1A3**
		Dilution Factor: 10		Analysis Time..: 01:56		

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: KH73-05-58834

TOTAL Metals

Lot-Sample #...: F5D210354-011 **Matrix.....: SOLID**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.27	mg/kg	SW846 6020	04/27-04/28/05	G8WTR1A4
		Dilution Factor: 10		Analysis Time..: 01:56		
Vanadium	12.6	2.7	mg/kg	SW846 6020	04/27-04/28/05	G8WTR1A5
		Dilution Factor: 10		Analysis Time..: 01:56		
Prep Batch #...: 5115193						
Calcium	32900 E*E	332	mg/kg	SW846 6010B	04/27/05	G8WTR1A6
		Dilution Factor: 1		Analysis Time..: 16:24		
Iron	125000 E	66.4	mg/kg	SW846 6010B	04/27-04/28/05	G8WTR1A7
		Dilution Factor: 5		Analysis Time..: 08:58		
Potassium	2560 E	399	mg/kg	SW846 6010B	04/27/05	G8WTR1A8
		Dilution Factor: 1		Analysis Time..: 16:24		
Magnesium	2940 NE	332	mg/kg	SW846 6010B	04/27/05	G8WTR1A9
		Dilution Factor: 1		Analysis Time..: 16:24		
Sodium	3300 E	332	mg/kg	SW846 6010B	04/27/05	G8WTR1AA
		Dilution Factor: 1		Analysis Time..: 16:24		
Zinc	9830 N*	13.3	mg/kg	SW846 6010B	04/27-04/28/05	G8WTR1AC
		Dilution Factor: 5		Analysis Time..: 08:58		
Aluminum	13300 N*	13.3	mg/kg	SW846 6010B	04/27/05	G8WTR1AD
		Dilution Factor: 1		Analysis Time..: 16:24		
Prep Batch #...: 5117679						
Mercury	1.6 NE	0.044	mg/kg	SW846 7471A	04/28/05	G8WTR1AE
		Dilution Factor: 1		Analysis Time..: 17:59		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RR73-05-58834

TCLP Metals

Lot-Sample #...: F5D210354-011 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
Leach Date.....: 04/28/05 **Leach Batch #..: P511814**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10	ug/L	SW846 7470A	04/29-05/02/05	G8WTR1CC
		Dilution Factor: 1		Analysis Time..: 11:08		
Prep Batch #...: 5119272						
Arsenic	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WTR1AF
		Dilution Factor: 1		Analysis Time..: 20:50		
Barium	**1060**	**500**	**ug/L**	**SW846 6010B**	**04/29-05/05/05**	**G8WTR1AG**
		Dilution Factor: 1		Analysis Time..: 20:50		
Cadmium	**31.6**	**25**	**ug/L**	**SW846 6010B**	**04/29-05/05/05**	**G8WTR1AH**
		Dilution Factor: 1		Analysis Time..: 20:50		
Chromium	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WTR1AJ
		Dilution Factor: 1		Analysis Time..: 20:50		
Lead	**630 N**	**250**	**ug/L**	**SW846 6010B**	**04/29-05/05/05**	**G8WTR1AK**
		Dilution Factor: 1		Analysis Time..: 20:50		
Silver	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WTR1AL
		Dilution Factor: 1		Analysis Time..: 20:50		
Selenium	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WTR1CA
		Dilution Factor: 1		Analysis Time..: 20:50		
Zinc	**57200 N**	**500**	**ug/L**	**SW846 6010B**	**04/29-05/06/05**	**G8WTR1CE**
		Dilution Factor: 5		Analysis Time..: 07:34		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RF73-05-58834

General Chemistry

Lot-Sample #...: F5D210354-011 **Work Order #...:** G8WTR **Matrix.....:** SOLID
Date Sampled...: 04/19/05 **Date Received..:** 04/21/05
% Moisture.....: 25

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	24.7	0.10	%	MCAWW 160.3 MOD	04/22-04/25/05	5112218

Dilution Factor: 1 Analysis Time..: 00:00

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: KE73-05-58835

General Chemistry

Lot-Sample #...: F5D210354-012 **Work Order #...:** G8WTT **Matrix.....:** SOLID
Date Sampled...: 04/19/05 **Date Received..:** 04/21/05
% Moisture.....: 24

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	8.0		No Units	SW846 9045A	04/25/05	5115278
		Dilution Factor: 1		Analysis Time..: 00:00		
Flashpoint	>60.0		deg C	SW846 1010	04/25/05	5115320
		Dilution Factor: 1		Analysis Time..: 00:00		
Paint Filter Test	PAS,S		No Units	SW846 9095	04/25/05	5115319
		Dilution Factor: 1		Analysis Time..: 00:00		
Percent Moisture	23.8	0.10	%	MCAWW 160.3 MOD	04/22-04/25/05	5112218
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Cyanide	0.092	0.066	mg/kg	SW846 7.3.3	05/04-05/06/05	5126308
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Sulfide	ND	5.8	mg/kg	SW846 7.3.4	05/04-05/06/05	5126399
		Dilution Factor: 1		Analysis Time..: 00:00		

NOTE(S):

RL Reporting Limit

S The result was determined using the Method of Standard Additions (MSA).

Results and reporting limits have been adjusted for dry weight.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58836

TOTAL Metals

Lot-Sample #...: F5D210354-013 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	**21.2 N***	**0.45**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTV1AN**
		Dilution Factor: 10		Analysis Time..: 02:13		
Arsenic	**66.4 E**	**0.45**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTV1AP**
		Dilution Factor: 10		Analysis Time..: 02:13		
Barium	**643 N**	**4.5**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTV1AQ**
		Dilution Factor: 10		Analysis Time..: 02:13		
Beryllium	**0.11 B**	**0.22**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTV1AR**
		Dilution Factor: 10		Analysis Time..: 02:13		
Cadmium	**4.1 N**	**0.56**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTV1AT**
		Dilution Factor: 10		Analysis Time..: 02:13		
Cobalt	**41.9**	**1.1**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTV1AU**
		Dilution Factor: 10		Analysis Time..: 02:13		
Chromium	**104 N**	**1.1**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTV1AV**
		Dilution Factor: 10		Analysis Time..: 02:13		
Copper	**815 N***	**1.1**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTV1AW**
		Dilution Factor: 10		Analysis Time..: 18:41		
Manganese	**2050 N**	**2.2**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTV1AX**
		Dilution Factor: 10		Analysis Time..: 02:13		
Nickel	**220 N**	**0.45**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTV1A0**
		Dilution Factor: 10		Analysis Time..: 02:13		
Lead	**2840 N***	**0.67**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTV1A1**
		Dilution Factor: 10		Analysis Time..: 02:13		
Antimony	**36.2 N**	**0.45**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTV1A2**
		Dilution Factor: 10		Analysis Time..: 02:13		
Selenium	**0.45**	**0.45**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WTV1A3**
		Dilution Factor: 10		Analysis Time..: 02:13		

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RF73-05-58836

TOTAL Metals

Lot-Sample #...: F5D210354-013 **Matrix.....: SOLID**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.22	mg/kg	SW846 6020	04/27-04/28/05	G8WTV1A4
		Dilution Factor: 10		Analysis Time..: 02:13		
Vanadium	3.8	2.2	mg/kg	SW846 6020	04/27-04/28/05	G8WTV1A5
		Dilution Factor: 10		Analysis Time..: 02:13		
Prep Batch #...: 5115193						
Calcium	8420 N*E	6990	mg/kg	SW846 6010B	04/27-04/28/05	G8WTV1A6
		Dilution Factor: 25		Analysis Time..: 09:11		
Iron	425000 N	280	mg/kg	SW846 6010B	04/27-04/28/05	G8WTV1A7
		Dilution Factor: 25		Analysis Time..: 09:11		
Potassium	ND N	8390	mg/kg	SW846 6010B	04/27-04/28/05	G8WTV1A8
		Dilution Factor: 25		Analysis Time..: 09:11		
Magnesium	1070 NE	6990	mg/kg	SW846 6010B	04/27-04/28/05	G8WTV1A9
		Dilution Factor: 25		Analysis Time..: 09:11		
Sodium	822 NE	6990	mg/kg	SW846 6010B	04/27-04/28/05	G8WTV1AA
		Dilution Factor: 25		Analysis Time..: 09:11		
Zinc	939 N*	55.9	mg/kg	SW846 6010B	04/27-04/28/05	G8WTV1AC
		Dilution Factor: 25		Analysis Time..: 09:11		
Aluminum	4540 N*	280	mg/kg	SW846 6010B	04/27-04/28/05	G8WTV1AD
		Dilution Factor: 25		Analysis Time..: 09:11		
Prep Batch #...: 5117679						
Mercury	0.71 NE	0.037	mg/kg	SW846 7471A	04/28/05	G8WTV1AE
		Dilution Factor: 1		Analysis Time..: 18:02		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

B Estimated result. Result is less than RL.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58836

TCLP Metals

Lot-Sample #...: F5D210354-013 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
Leach Date.....: 04/28/05 **Leach Batch #..: P511814**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10	ug/L	SW846 7470A	04/29-05/02/05	G8WTV1CC
		Dilution Factor: 1		Analysis Time..: 11:10		
Prep Batch #...: 5119272						
Arsenic	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WTV1AF
		Dilution Factor: 1		Analysis Time..: 20:54		
Barium	**1760**	**500**	**ug/L**	**SW846 6010B**	**04/29-05/05/05**	**G8WTV1AG**
		Dilution Factor: 1		Analysis Time..: 20:54		
Cadmium	**11.7 B**	**25**	**ug/L**	**SW846 6010B**	**04/29-05/05/05**	**G8WTV1AH**
		Dilution Factor: 1		Analysis Time..: 20:54		
Chromium	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WTV1AJ
		Dilution Factor: 1		Analysis Time..: 20:54		
Lead	**792 N**	**250**	**ug/L**	**SW846 6010B**	**04/29-05/05/05**	**G8WTV1AK**
		Dilution Factor: 1		Analysis Time..: 20:54		
Silver	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G8WTV1AL
		Dilution Factor: 1		Analysis Time..: 20:54		
Selenium	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G8WTV1CA
		Dilution Factor: 1		Analysis Time..: 20:54		
Zinc	**5100 N**	**100**	**ug/L**	**SW846 6010B**	**04/29-05/05/05**	**G8WTV1CK**
		Dilution Factor: 1		Analysis Time..: 20:54		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

B Estimated result. Result is less than RL.

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RR73-05-58836

General Chemistry

Lot-Sample #...: F5D210354-013 **Work Order #...: G8WTV** **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	10.6	0.10	%	MCAWW 160.3 MOD	04/22-04/25/05	5112218
		Dilution Factor: 1		Analysis Time..: 00:00		

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58837

TOTAL Metals

Lot-Sample #...: F5D210354-014 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	**15.4 N***	**0.47** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:18	**04/27-04/28/05**	**G8WTW1AN**
Arsenic	**133 E**	**0.47** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:18	**04/27-04/28/05**	**G8WTW1AP**
Barium	**575 N**	**4.7** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:18	**04/27-04/28/05**	**G8WTW1AQ**
Beryllium	**0.089 B**	**0.23** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:18	**04/27-04/28/05**	**G8WTW1AR**
Cadmium	**2.8 N**	**0.59** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:18	**04/27-04/28/05**	**G8WTW1AT**
Cobalt	**49.7**	**1.2** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:18	**04/27-04/28/05**	**G8WTW1AU**
Chromium	**94.4 N**	**1.2** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:18	**04/27-04/28/05**	**G8WTW1AV**
Copper	**490 N***	**1.2** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 18:44	**04/27-04/28/05**	**G8WTW1AW**
Manganese	**2330 N**	**2.3** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:18	**04/27-04/28/05**	**G8WTW1AX**
Nickel	**219 N**	**0.47** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:18	**04/27-04/28/05**	**G8WTW1A0**
Lead	**4310 N***	**0.7** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:18	**04/27-04/28/05**	**G8WTW1A1**
Antimony	**24.7 N**	**0.47** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:18	**04/27-04/28/05**	**G8WTW1A2**
Selenium	**0.64**	**0.47** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:18	**04/27-04/28/05**	**G8WTW1A3**

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58837

TOTAL Metals

Lot-Sample #...: F5D210354-014 **Matrix.....: SOLID**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.23	mg/kg	SW846 6020	04/27-04/28/05	G8WTW1A4
		Dilution Factor: 10		Analysis Time..: 02:18		
Vanadium	4.1	2.3	mg/kg	SW846 6020	04/27-04/28/05	G8WTW1A5
		Dilution Factor: 10		Analysis Time..: 02:18		
Prep Batch #...: 5115193						
Calcium	6640 BN*,E	7330	mg/kg	SW846 6010B	04/27-04/28/05	G8WTW1A6
		Dilution Factor: 25		Analysis Time..: 09:16		
Iron	486000 N	293	mg/kg	SW846 6010B	04/27-04/28/05	G8WTW1A7
		Dilution Factor: 25		Analysis Time..: 09:16		
Potassium	723 N	352	mg/kg	SW846 6010B	04/27/05	G8WTW1A8
		Dilution Factor: 1		Analysis Time..: 16:33		
Magnesium	911 BNE	7330	mg/kg	SW846 6010B	04/27-04/28/05	G8WTW1A9
		Dilution Factor: 25		Analysis Time..: 09:16		
Sodium	363 BN	7330	mg/kg	SW846 6010B	04/27-04/28/05	G8WTW1AA
		Dilution Factor: 25		Analysis Time..: 09:16		
Zinc	823 N*	58.6	mg/kg	SW846 6010B	04/27-04/28/05	G8WTW1AC
		Dilution Factor: 25		Analysis Time..: 09:16		
Aluminum	3870 N*	293	mg/kg	SW846 6010B	04/27-04/28/05	G8WTW1AD
		Dilution Factor: 25		Analysis Time..: 09:16		
Prep Batch #...: 5117679						
Mercury	0.28 BE	0.039	mg/kg	SW846 7471A	04/28/05	G8WTW1AE
		Dilution Factor: 1		Analysis Time..: 18:04		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

B Estimated result. Result is less than RL.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: EM73-05-58837

TCLP Metals

Lot-Sample #...: F5D210354-014 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
Leach Date.....: 04/28/05 **Leach Batch #..: P511814**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10 Dilution Factor: 1	ug/L	SW846 7470A Analysis Time..: 11:12	04/29-05/02/05	G8WTW1CC
Prep Batch #...: 5119272						
Arsenic	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:59	04/29-05/05/05	G8WTW1AF
Barium	**1620**	**500** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 20:59	**04/29-05/05/05**	**G8WTW1AG**
Cadmium	**11.2 B**	**25** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 20:59	**04/29-05/05/05**	**G8WTW1AH**
Chromium	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:59	04/29-05/05/05	G8WTW1AJ
Lead	**316 N**	**250** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 20:59	**04/29-05/05/05**	**G8WTW1AK**
Silver	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:59	04/29-05/05/05	G8WTW1AL
Selenium	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 20:59	04/29-05/05/05	G8WTW1CA
Zinc	**8500 N**	**100** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 20:59	**04/29-05/05/05**	**G8WTW1CE**

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

B Estimated result. Result is less than RL.

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58837

General Chemistry

Lot-Sample #...: F5D210354-014 **Work Order #...: G8WTW** **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 15

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	14.7	0.10	%	NCANW 160.3 MOD	04/22-04/25/05	5112218

Dilution Factor: 1 Analysis Time..: 00:00

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58838

TOTAL Metals

Lot-Sample #...: F5D210354-015 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 25

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	**95.7 M***	**0.54** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:23	**04/27-04/28/05**	**G8WTX1AN**
Arsenic	**19.5 E**	**0.54** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:23	**04/27-04/28/05**	**G8WTX1AP**
Barium	**2600 M**	**5.4** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:23	**04/27-04/28/05**	**G8WTX1AQ**
Beryllium	**0.33**	**0.27** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:23	**04/27-04/28/05**	**G8WTX1AR**
Cadmium	**67.5 M**	**0.67** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:23	**04/27-04/28/05**	**G8WTX1AT**
Cobalt	**10.1**	**1.3** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:23	**04/27-04/28/05**	**G8WTX1AU**
Chromium	**54.1 M**	**1.3** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:23	**04/27-04/28/05**	**G8WTX1AV**
Copper	**3260 M***	**6.7** Dilution Factor: 50	**mg/kg**	**SW846 6020** Analysis Time..: 18:47	**04/27-04/28/05**	**G8WTX1AW**
Manganese	**859 M**	**2.7** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:23	**04/27-04/28/05**	**G8WTX1AX**
Nickel	**77.0 M**	**0.54** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:23	**04/27-04/28/05**	**G8WTX1A0**
Lead	**13700 M***	**4** Dilution Factor: 50	**mg/kg**	**SW846 6020** Analysis Time..: 18:47	**04/27-04/28/05**	**G8WTX1A1**
Antimony	**116 M**	**0.54** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:23	**04/27-04/28/05**	**G8WTX1A2**
Selenium	**1.2**	**0.54** Dilution Factor: 10	**mg/kg**	**SW846 6020** Analysis Time..: 02:23	**04/27-04/28/05**	**G8WTX1A3**

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: KE73-05-58838

TOTAL Metals

Lot-Sample #...: F5D210354-015 **Matrix.....: SOLID**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.27	mg/kg	SW846 6020	04/27-04/28/05	G8WTX1A4
		Dilution Factor: 10		Analysis Time..: 02:23		
Vanadium	14.5	2.7	mg/kg	SW846 6020	04/27-04/28/05	G8WTX1A5
		Dilution Factor: 10		Analysis Time..: 02:23		
Prep Batch #...: 5115193						
Calcium	22600 N*E	335	mg/kg	SW846 6010B	04/27/05	G8WTX1A6
		Dilution Factor: 1		Analysis Time..: 16:37		
Iron	53100 N	13.4	mg/kg	SW846 6010B	04/27/05	G8WTX1A7
		Dilution Factor: 1		Analysis Time..: 16:37		
Potassium	2560 N	402	mg/kg	SW846 6010B	04/27/05	G8WTX1A8
		Dilution Factor: 1		Analysis Time..: 16:37		
Magnesium	2070 NE	335	mg/kg	SW846 6010B	04/27/05	G8WTX1A9
		Dilution Factor: 1		Analysis Time..: 16:37		
Sodium	1940 N	335	mg/kg	SW846 6010B	04/27/05	G8WTX1AA
		Dilution Factor: 1		Analysis Time..: 16:37		
Zinc	4630 N*	2.7	mg/kg	SW846 6010B	04/27/05	G8WTX1AC
		Dilution Factor: 1		Analysis Time..: 16:37		
Aluminum	11100 N*	13.4	mg/kg	SW846 6010B	04/27/05	G8WTX1AD
		Dilution Factor: 1		Analysis Time..: 16:37		
Prep Batch #...: 5117679						
Mercury	0.56 NE	0.045	mg/kg	SW846 7471A	04/28/05	G8WTX1AE
		Dilution Factor: 1		Analysis Time..: 18:10		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: EM73-05-58838

TCLP Metals

Lot-Sample #...: F5D210354-015 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
Leach Date.....: 04/28/05 **Leach Batch #..: P511814**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10 Dilution Factor: 1	ug/L	SW846 7470A Analysis Time..: 11:14	04/29-05/02/05	G8WTX1CC
Prep Batch #...: 5119272						
Arsenic	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 21:03	04/29-05/05/05	G8WTX1AF
Barium	**1790**	**500** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 21:03	**04/29-05/05/05**	**G8WTX1AG**
Cadmium	**160**	**25** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 21:03	**04/29-05/05/05**	**G8WTX1AH**
Chromium	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 21:03	04/29-05/05/05	G8WTX1AJ
Lead	**2470 N**	**250** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 21:03	**04/29-05/05/05**	**G8WTX1AK**
Silver	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 21:03	04/29-05/05/05	G8WTX1AL
Selenium	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 21:03	04/29-05/05/05	G8WTX1CA
Zinc	**36700 N**	**100** Dilution Factor: 1	**ug/L**	**SW846 6010B** Analysis Time..: 21:03	**04/29-05/05/05**	**G8WTX1CE**

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58838

General Chemistry

Lot-Sample #...: F5D210354-015 **Work Order #...: G8WTX** **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 25

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	25.3	0.10	%	MCAWW 160.3 MOD	04/22-04/25/05	5112218

Dilution Factor: 1 Analysis Time..: 00:00

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: EE73-05-58839

TOTAL Metals

Lot-Sample #...: F5D210354-016 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 25

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	**125 M***	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WT01AW**
		Dilution Factor: 10		Analysis Time..: 02:29		
Arsenic	**76.0 E**	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WT01AP**
		Dilution Factor: 10		Analysis Time..: 02:29		
Barium	**2870 E**	**5.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WT01AQ**
		Dilution Factor: 10		Analysis Time..: 02:29		
Beryllium	**0.33**	**0.27**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WT01AR**
		Dilution Factor: 10		Analysis Time..: 02:29		
Cadmium	**16.4 E**	**0.67**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WT01AT**
		Dilution Factor: 10		Analysis Time..: 02:29		
Cobalt	**14.8**	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WT01AU**
		Dilution Factor: 10		Analysis Time..: 02:29		
Chromium	**68.7 E**	**1.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WT01AV**
		Dilution Factor: 10		Analysis Time..: 02:29		
Copper	**3820 E***	**13.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WT01AW**
		Dilution Factor: 100		Analysis Time..: 18:59		
Manganese	**2810 E**	**2.7**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WT01AX**
		Dilution Factor: 10		Analysis Time..: 02:29		
Nickel	**98.6 E**	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WT01A0**
		Dilution Factor: 10		Analysis Time..: 02:29		
Lead	**33000 E***	**8**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WT01A1**
		Dilution Factor: 100		Analysis Time..: 18:59		
Antimony	**543 E**	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WT01A2**
		Dilution Factor: 10		Analysis Time..: 02:29		
Selenium	**1.7**	**0.53**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WT01A3**
		Dilution Factor: 10		Analysis Time..: 02:29		

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: KM73-05-58839

TOTAL Metals

Lot-Sample #...: F5D210354-016 **Matrix.....: SOLID**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.27	mg/kg	SW846 6020	04/27-04/28/05	G8WT01A4
		Dilution Factor: 10		Analysis Time..: 02:29		
Vanadium	15.1	2.7	mg/kg	SW846 6020	04/27-04/28/05	G8WT01A5
		Dilution Factor: 10		Analysis Time..: 02:29		
Prep Batch #...: 5115193						
Calcium	63900 N*E	333	mg/kg	SW846 6010B	04/27/05	G8WT01A6
		Dilution Factor: 1		Analysis Time..: 16:42		
Iron	93700 N	66.6	mg/kg	SW846 6010B	04/27-04/28/05	G8WT01A7
		Dilution Factor: 5		Analysis Time..: 09:20		
Potassium	2940 N	400	mg/kg	SW846 6010B	04/27/05	G8WT01A8
		Dilution Factor: 1		Analysis Time..: 16:42		
Magnesium	3210 NE	333	mg/kg	SW846 6010B	04/27/05	G8WT01A9
		Dilution Factor: 1		Analysis Time..: 16:42		
Sodium	3030 N	333	mg/kg	SW846 6010B	04/27/05	G8WT01AA
		Dilution Factor: 1		Analysis Time..: 16:42		
Zinc	4370 N*	2.7	mg/kg	SW846 6010B	04/27/05	G8WT01AC
		Dilution Factor: 1		Analysis Time..: 16:42		
Aluminum	13900 N*	13.3	mg/kg	SW846 6010B	04/27/05	G8WT01AD
		Dilution Factor: 1		Analysis Time..: 16:42		
Prep Batch #...: 5117679						
Mercury	1.2 NE	0.044	mg/kg	SW846 7471A	04/28/05	G8WT01AE
		Dilution Factor: 1		Analysis Time..: 18:12		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58839

TCLP Metals

Lot-Sample #...: F5D210354-016 **Matrix.....:** SOLID
Date Sampled...: 04/19/05 **Date Received..:** 04/21/05
Leach Date.....: 04/28/05 **Leach Batch #..:** P511814

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10 Dilution Factor: 1	ug/L	SW846 7470A Analysis Time..: 11:16	04/29-05/02/05	G8WT01CC
Prep Batch #...: 5119272						
Arsenic	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 21:07	04/29-05/05/05	G8WT01AF
Barium	1590	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 21:07	04/29-05/05/05	G8WT01AG
Cadmium	95.0	25 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 21:07	04/29-05/05/05	G8WT01AH
Chromium	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 21:07	04/29-05/05/05	G8WT01AJ
Lead	1470 N	250 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 21:07	04/29-05/05/05	G8WT01AK
Silver	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 21:07	04/29-05/05/05	G8WT01AL
Selenium	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 21:07	04/29-05/05/05	G8WT01CA
Zinc	33700 N	100 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 21:07	04/29-05/05/05	G8WT01CE

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58839

General Chemistry

Lot-Sample #...: F5D210354-016 **Work Order #...:** G8WT0 **Matrix.....:** SOLID
Date Sampled...: 04/19/05 **Date Received..:** 04/21/05
% Moisture.....: 25

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	25.0	0.10	%	MCAWW 160.3 MOD	04/22-04/25/05	5112218

Dilution Factor: 1 Analysis Time..: 00:00

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58840

TOTAL Metals

Lot-Sample #...: F5D210354-017 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5115187						
Silver	**187 M***	**0.47**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WT11AN**
		Dilution Factor: 10		Analysis Time..: 02:34		
Arsenic	**22.1 E**	**0.47**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WT11AP**
		Dilution Factor: 10		Analysis Time..: 02:34		
Barium	**3490 M**	**4.7**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WT11AQ**
		Dilution Factor: 10		Analysis Time..: 02:34		
Beryllium	**0.20 B**	**0.23**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WT11AR**
		Dilution Factor: 10		Analysis Time..: 02:34		
Cadmium	**16.5 M**	**0.59**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WT11AT**
		Dilution Factor: 10		Analysis Time..: 02:34		
Cobalt	**14.4**	**1.2**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WT11AU**
		Dilution Factor: 10		Analysis Time..: 02:34		
Chromium	**85.0 M**	**1.2**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WT11AV**
		Dilution Factor: 10		Analysis Time..: 02:34		
Copper	**1040 M***	**1.2**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WT11AW**
		Dilution Factor: 10		Analysis Time..: 19:02		
Manganese	**1050 M**	**2.3**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WT11AX**
		Dilution Factor: 10		Analysis Time..: 02:34		
Nickel	**215 M**	**0.47**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WT11A0**
		Dilution Factor: 10		Analysis Time..: 02:34		
Lead	**1950 M***	**0.7**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WT11A1**
		Dilution Factor: 10		Analysis Time..: 02:34		
Antimony	**19.9 M**	**0.47**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WT11A2**
		Dilution Factor: 10		Analysis Time..: 02:34		
Selenium	**0.94**	**0.47**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G8WT11A3**
		Dilution Factor: 10		Analysis Time..: 02:34		

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: EM73-05-58840

TOTAL Metals

Lot-Sample #...: F5D210354-017 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.23	mg/kg	SW846 6020	04/27-04/28/05	G8WT11A4
		Dilution Factor: 10		Analysis Time..: 02:34		
Vanadium	14.1	2.3	mg/kg	SW846 6020	04/27-04/28/05	G8WT11A5
		Dilution Factor: 10		Analysis Time..: 02:34		
Prep Batch #...: 5115193						
Calcium	31000 N*E	293	mg/kg	SW846 6010B	04/27/05	G8WT11A6
		Dilution Factor: 1		Analysis Time..: 16:46		
Iron	99900 N	58.6	mg/kg	SW846 6010B	04/27-04/28/05	G8WT11A7
		Dilution Factor: 5		Analysis Time..: 09:24		
Potassium	4480 N	352	mg/kg	SW846 6010B	04/27/05	G8WT11A8
		Dilution Factor: 1		Analysis Time..: 16:46		
Magnesium	3760 NE	293	mg/kg	SW846 6010B	04/27/05	G8WT11A9
		Dilution Factor: 1		Analysis Time..: 16:46		
Sodium	5330 N	293	mg/kg	SW846 6010B	04/27/05	G8WT11AA
		Dilution Factor: 1		Analysis Time..: 16:46		
Zinc	5500 N*	2.3	mg/kg	SW846 6010B	04/27/05	G8WT11AC
		Dilution Factor: 1		Analysis Time..: 16:46		
Aluminum	20600 N*	11.7	mg/kg	SW846 6010B	04/27/05	G8WT11AD
		Dilution Factor: 1		Analysis Time..: 16:46		
Prep Batch #...: 5117679						
Mercury	0.60 NE	0.039	mg/kg	SW846 7471A	04/28/05	G8WT11AE
		Dilution Factor: 1		Analysis Time..: 18:14		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

N Spiked analyte recovery is outside stated control limits.

B Estimated result. Result is less than RL.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58840

TCLP Metals

Lot-Sample #...: F5D210354-017 **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
Leach Date.....: 04/28/05 **Leach Batch #..: P511814**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5119194						
Mercury	ND	10 Dilution Factor: 1	ug/L	SW846 7470A Analysis Time..: 11:18	04/29-05/02/05	G8WT11CC
Prep Batch #...: 5119272						
Arsenic	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 21:12	04/29-05/05/05	G8WT11AF
Barium	786	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 21:12	04/29-05/05/05	G8WT11AG
Cadmium	73.9	25 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 21:12	04/29-05/05/05	G8WT11AH
Chromium	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 21:12	04/29-05/05/05	G8WT11AJ
Lead	1440 N	250 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 21:12	04/29-05/05/05	G8WT11AK
Silver	ND	50 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 21:12	04/29-05/05/05	G8WT11AL
Selenium	ND	500 Dilution Factor: 1	ug/L	SW846 6010B Analysis Time..: 21:12	04/29-05/05/05	G8WT11CA
Zinc	67500 N	500 Dilution Factor: 5	ug/L	SW846 6010B Analysis Time..: 07:38	04/29-05/06/05	G8WT11CE

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

N Spiked analyte recovery is outside stated control limits.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58840

General Chemistry

Lot-Sample #...: F5D210354-017 **Work Order #...: G8WT1** **Matrix.....: SOLID**
Date Sampled...: 04/19/05 **Date Received..: 04/21/05**
% Moisture.....: 15

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	14.6	0.10	%	MCAWW 160.3 MOD	04/22-04/25/05	5112218

Dilution Factor: 1 Analysis Time..: 00:00

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58841

General Chemistry

Lot-Sample #...: F5D210354-018 **Work Order #...:** G8WT3 **Matrix.....:** SOLID
Date Sampled...: 04/19/05 **Date Received..:** 04/21/05
% Moisture.....: 20

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	8.1		No Units	SW846 9045A	04/25/05	5115278
		Dilution Factor: 1		Analysis Time..: 00:00		
Flashpoint	>60.0		deg C	SW846 1010	04/25/05	5115320
		Dilution Factor: 1		Analysis Time..: 00:00		
Paint Filter Test	PAS,S		No Units	SW846 9095	04/25/05	5115319
		Dilution Factor: 1		Analysis Time..: 00:00		
Percent Moisture	19.6	0.10	%	MCAWW 160.3 MOD	04/22-04/25/05	5112218
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Cyanide	0.062	0.062	mg/kg	SW846 7.3.3	05/04-05/06/05	5126308
		Dilution Factor: 1		Analysis Time..: 00:00		
Reactive Sulfide	ND	5.5	mg/kg	SW846 7.3.4	05/04-05/06/05	5126399
		Dilution Factor: 1		Analysis Time..: 00:00		

NOTE(S):

RL Reporting Limit

S The result was determined using the Method of Standard Additions (MSA).

Results and reporting limits have been adjusted for dry weight.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: F5D210354 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: F5D250000-187 **Prep Batch #...:** 5115187						
Antimony	ND	1 Dilution Factor: 5 Analysis Time..: 00:26	mg/kg	SW846 6020	04/27-04/28/05	G84MF1AN
Arsenic	0.66	1 Dilution Factor: 5 Analysis Time..: 00:26	mg/kg	SW846 6020	04/27-04/28/05	G84MF1AC
Barium	ND	10 Dilution Factor: 5 Analysis Time..: 00:26	mg/kg	SW846 6020	04/27-04/28/05	G84MF1AD
Beryllium	ND	0.5 Dilution Factor: 5 Analysis Time..: 00:26	mg/kg	SW846 6020	04/27-04/28/05	G84MF1AE
Cadmium	ND	1.25 Dilution Factor: 5 Analysis Time..: 00:26	mg/kg	SW846 6020	04/27-04/28/05	G84MF1AF
Chromium	ND	2.5 Dilution Factor: 5 Analysis Time..: 00:26	mg/kg	SW846 6020	04/27-04/28/05	G84MF1AH
Cobalt	ND	2.5 Dilution Factor: 5 Analysis Time..: 00:26	mg/kg	SW846 6020	04/27-04/28/05	G84MF1AG
Copper	ND	0.50 Dilution Factor: 1 Analysis Time..: 00:26	mg/kg	SW846 6020	04/27-04/28/05	G84MF1AJ
Lead	ND	0.30 Dilution Factor: 1 Analysis Time..: 00:26	mg/kg	SW846 6020	04/27-04/28/05	G84MF1AM
Manganese	0.14 B	5 Dilution Factor: 5 Analysis Time..: 00:26	mg/kg	SW846 6020	04/27-04/28/05	G84MF1AK
Nickel	ND	1 Dilution Factor: 5 Analysis Time..: 00:26	mg/kg	SW846 6020	04/27-04/28/05	G84MF1AL

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: F5D210354 **Matrix.....: SOLID**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Selenium	**0.27**	**1**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G84MF1AP**
		Dilution Factor: 5				
		Analysis Time..: 00:26				
Silver	ND	1	mg/kg	SW846 6020	04/27-04/28/05	G84MF1AA
		Dilution Factor: 5				
		Analysis Time..: 00:26				
Thallium	ND	0.5	mg/kg	SW846 6020	04/27-04/28/05	G84MF1AQ
		Dilution Factor: 5				
		Analysis Time..: 00:26				
Vanadium	**0.73 B**	**2.5**	**mg/kg**	**SW846 6020**	**04/27-04/28/05**	**G84MF1AR**
		Dilution Factor: 5				
		Analysis Time..: 00:26				
MB Lot-Sample #: F5D250000-193		**Prep Batch #...: 5115193**				
Calcium	**9.4 B**	**250**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G84N21AA**
		Dilution Factor: 1				
		Analysis Time..: 15:15				
Iron	**2.9 B**	**10**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G84N21AC**
		Dilution Factor: 1				
		Analysis Time..: 15:15				
Magnesium	**31.2 B**	**250**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G84N21AE**
		Dilution Factor: 1				
		Analysis Time..: 15:15				
Potassium	ND	300	mg/kg	SW846 6010B	04/27/05	G84N21AD
		Dilution Factor: 1				
		Analysis Time..: 15:15				
Sodium	ND	250	mg/kg	SW846 6010B	04/27/05	G84N21AF
		Dilution Factor: 1				
		Analysis Time..: 15:15				
Zinc	ND	2	mg/kg	SW846 6010B	04/27/05	G84N21AG
		Dilution Factor: 1				
		Analysis Time..: 15:15				
Aluminum	**6.6 B**	**10**	**mg/kg**	**SW846 6010B**	**04/27/05**	**G84N21AH**
		Dilution Factor: 1				
		Analysis Time..: 15:15				

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: F5D210354 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: F5D270000-679 **Prep Batch #...:** 5117679						
Mercury	ND	0.033	mg/kg	SW846 7471A	04/28/05	G9CTJ1AA
		Dilution Factor: 1				
		Analysis Time..: 17:18				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

TCLP Metals

Client Lot #...: F5D210354 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: F5D280000-400 Prep Batch #...: 5119272						
Leach Date.....: 04/28/05 Leach Batch #..: P511814						
Arsenic	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G9ECF1AA
		Dilution Factor: 1				
		Analysis Time..: 19:40				
Barium	161 B	500	ug/L	SW846 6010B	04/29-05/05/05	G9ECF1AC
		Dilution Factor: 1				
		Analysis Time..: 19:40				
Cadmium	ND	25	ug/L	SW846 6010B	04/29-05/05/05	G9ECF1AD
		Dilution Factor: 1				
		Analysis Time..: 19:40				
Chromium	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G9ECF1AE
		Dilution Factor: 1				
		Analysis Time..: 19:40				
Lead	ND	250	ug/L	SW846 6010B	04/29-05/05/05	G9ECF1AF
		Dilution Factor: 1				
		Analysis Time..: 19:40				
Silver	ND	50	ug/L	SW846 6010B	04/29-05/05/05	G9ECF1AG
		Dilution Factor: 1				
		Analysis Time..: 19:40				
Selenium	ND	500	ug/L	SW846 6010B	04/29-05/05/05	G9ECF1AH
		Dilution Factor: 1				
		Analysis Time..: 19:40				
MB Lot-Sample #: F5D280000-400 Prep Batch #...: 5119194						
Leach Date.....: 04/28/05 Leach Batch #..: P511814						
Mercury	ND	10.0	ug/L	SW846 7470A	04/29-05/02/05	G9ECF1AJ
		Dilution Factor: 5				
		Analysis Time..: 10:30				
MB Lot-Sample #: F5D280000-400 Prep Batch #...: 5119272						
Leach Date.....: 04/28/05 Leach Batch #..: P511814						
Zinc	35.6 B	100	ug/L	SW846 6010B	04/29-05/05/05	G9ECF1AK
		Dilution Factor: 1				
		Analysis Time..: 19:40				

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METHOD BLANK REPORT

TCLP Metals

Client Lot #...: F5D210354 **Matrix.....: SOLID**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: F5D210354 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Reactive Cyanide		Work Order #: G91171AA		MB Lot-Sample #:	F5E060000-308	
	ND	0.050	mg/kg	SW846 7.3.3	05/04-05/06/05	5126308
		Dilution Factor: 1				
		Analysis Time..: 00:00				
Reactive Sulfide		Work Order #: G92W41AA		MB Lot-Sample #:	F5E060000-399	
	ND	4.4	mg/kg	SW846 7.3.4	05/04-05/06/05	5126399
		Dilution Factor: 1				
		Analysis Time..: 00:00				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F5D210354 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: F5D250000-187 **Prep Batch #...:** 5115187					
Silver	70	(53 - 147)	SW846 6020	04/27-04/28/05	G84MF1AT
		Dilution Factor: 5	Analysis Time..: 00:32		
Arsenic	110	(80 - 120)	SW846 6020	04/27-04/28/05	G84MF1AU
		Dilution Factor: 5	Analysis Time..: 00:32		
Barium	107	(82 - 118)	SW846 6020	04/27-04/28/05	G84MF1AV
		Dilution Factor: 5	Analysis Time..: 00:32		
Beryllium	93	(82 - 118)	SW846 6020	04/27-04/28/05	G84MF1AW
		Dilution Factor: 5	Analysis Time..: 00:32		
Cadmium	99	(81 - 119)	SW846 6020	04/27-04/28/05	G84MF1AX
		Dilution Factor: 5	Analysis Time..: 00:32		
Cobalt	97	(73 - 127)	SW846 6020	04/27-04/28/05	G84MF1A0
		Dilution Factor: 5	Analysis Time..: 00:32		
Chromium	92	(78 - 121)	SW846 6020	04/27-04/28/05	G84MF1A1
		Dilution Factor: 5	Analysis Time..: 00:32		
Copper	94	(82 - 118)	SW846 6020	04/27-04/28/05	G84MF1A2
		Dilution Factor: 1	Analysis Time..: 00:32		
Manganese	96	(80 - 120)	SW846 6020	04/27-04/28/05	G84MF1A3
		Dilution Factor: 5	Analysis Time..: 00:32		
Nickel	97	(82 - 118)	SW846 6020	04/27-04/28/05	G84MF1A4
		Dilution Factor: 5	Analysis Time..: 00:32		
Lead	98	(80 - 120)	SW846 6020	04/27-04/28/05	G84MF1A5
		Dilution Factor: 1	Analysis Time..: 00:32		
Antimony	104	(10 - 150)	SW846 6020	04/27-04/28/05	G84MF1A6
		Dilution Factor: 5	Analysis Time..: 00:32		
Selenium	105	(76 - 124)	SW846 6020	04/27-04/28/05	G84MF1A7
		Dilution Factor: 5	Analysis Time..: 00:32		
Thallium	98	(76 - 125)	SW846 6020	04/27-04/28/05	G84MF1A8
		Dilution Factor: 5	Analysis Time..: 00:32		

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F5D210354 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	90	(75 - 125)	SW846 6020	04/27-04/28/05	G84MF1A9
		Dilution Factor: 5	Analysis Time..: 00:32		
LCS Lot-Sample#: F5D250000-193 **Prep Batch #...:** 5115193					
Calcium	106	(79 - 121)	SW846 6010B	04/27/05	G84N21AJ
		Dilution Factor: 1	Analysis Time..: 15:19		
Iron	93	(57 - 143)	SW846 6010B	04/27/05	G84N21AK
		Dilution Factor: 1	Analysis Time..: 15:19		
Potassium	101	(72 - 129)	SW846 6010B	04/27/05	G84N21AL
		Dilution Factor: 1	Analysis Time..: 15:19		
Magnesium	99	(77 - 123)	SW846 6010B	04/27/05	G84N21AM
		Dilution Factor: 1	Analysis Time..: 15:19		
Sodium	103	(56 - 144)	SW846 6010B	04/27/05	G84N21AN
		Dilution Factor: 1	Analysis Time..: 15:19		
Zinc	106	(79 - 121)	SW846 6010B	04/27/05	G84N21AP
		Dilution Factor: 1	Analysis Time..: 15:19		
Aluminum	83	(58 - 142)	SW846 6010B	04/27/05	G84N21AQ
		Dilution Factor: 1	Analysis Time..: 15:19		
LCS Lot-Sample#: F5D270000-679 **Prep Batch #...:** 5117679					
Mercury	89	(48 - 151)	SW846 7471A	04/28/05	G9CTJ1AC
		Dilution Factor: 20	Analysis Time..: 17:20		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TCLP Metals

Client Lot #...: F5D210354 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: F5D290000-194 **Prep Batch #...:** 5119194					
Mercury	84	(82 - 125)	SW846 7470A	04/29-05/02/05	G9GMT1AA
		Dilution Factor: 5	Analysis Time..: 10:32		
LCS Lot-Sample#: F5D290000-272 **Prep Batch #...:** 5119272					
Arsenic	103	(80 - 120)	SW846 6010B	04/29-05/05/05	G9G7V1AA
		Dilution Factor: 1	Analysis Time..: 19:44		
Barium	115	(80 - 120)	SW846 6010B	04/29-05/05/05	G9G7V1AC
		Dilution Factor: 1	Analysis Time..: 19:44		
Cadmium	101	(80 - 120)	SW846 6010B	04/29-05/05/05	G9G7V1AD
		Dilution Factor: 1	Analysis Time..: 19:44		
Chromium	100	(80 - 120)	SW846 6010B	04/29-05/05/05	G9G7V1AE
		Dilution Factor: 1	Analysis Time..: 19:44		
Lead	99	(80 - 120)	SW846 6010B	04/29-05/05/05	G9G7V1AF
		Dilution Factor: 1	Analysis Time..: 19:44		
Silver	102	(80 - 120)	SW846 6010B	04/29-05/05/05	G9G7V1AG
		Dilution Factor: 1	Analysis Time..: 19:44		
Selenium	106	(80 - 120)	SW846 6010B	04/29-05/05/05	G9G7V1AH
		Dilution Factor: 1	Analysis Time..: 19:44		
Zinc	103	(80 - 120)	SW846 6010B	04/29-05/05/05	G9G7V1AJ
		Dilution Factor: 1	Analysis Time..: 19:44		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: F5D210354 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)		Work Order #: G846W1AA	LCS Lot-Sample#: F5D250000-278		
	100	(99 - 101)	SW846 9045A	04/25/05	5115278
		Dilution Factor: 1	Analysis Time..: 00:00		
Flashpoint		Work Order #: G84881AA	LCS Lot-Sample#: F5D250000-320		
	103	(96 - 104)	SW846 1010	04/25/05	5115320
		Dilution Factor: 1	Analysis Time..: 00:00		
Reactive Cyanide		Work Order #: G91171AC	LCS Lot-Sample#: F5E060000-308		
	12	(10 - 100)	SW846 7.3.3	05/04-05/06/05	5126308
		Dilution Factor: 1	Analysis Time..: 00:00		
Reactive Sulfide		Work Order #: G92N41AC	LCS Lot-Sample#: F5E060000-399		
	33	(10 - 150)	SW846 7.3.4	05/04-05/06/05	5126399
		Dilution Factor: 1	Analysis Time..: 00:00		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F5D210354 **Matrix.....:** SOLID
Date Sampled...: 04/18/05 **Date Received..:** 04/21/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F5D210354-001 **Prep Batch #...:** 5115187						% Moisture.....: 24	
Antimony	81	(10 - 150)			SW846 6020	04/27-04/28/05	G8WP71DT
	46 *,N	(10 - 150)	22	(0-20)	SW846 6020	04/27-04/28/05	G8WP71DU
		Dilution Factor: 10					
		Analysis Time..: 00:42					
Arsenic	102	(73 - 111)			SW846 6020	04/27-04/28/05	G8WP71C5
	96	(73 - 111)	4.7	(0-30)	SW846 6020	04/27-04/28/05	G8WP71C6
		Dilution Factor: 10					
		Analysis Time..: 00:42					
Barium	428 N	(10 - 150)			SW846 6020	04/27-04/28/05	G8WP71C7
	343 N	(10 - 150)	6.6	(0-30)	SW846 6020	04/27-04/28/05	G8WP71C8
		Dilution Factor: 10					
		Analysis Time..: 00:42					
Beryllium	107	(86 - 111)			SW846 6020	04/27-04/28/05	G8WP71C9
	108	(86 - 111)	0.81	(0-30)	SW846 6020	04/27-04/28/05	G8WP71DA
		Dilution Factor: 10					
		Analysis Time..: 00:42					
Cadmium	38 N	(68 - 130)			SW846 6020	04/27-04/28/05	G8WP71DC
	0 N	(68 - 130)	0.0	(0-30)	SW846 6020	04/27-04/28/05	G8WP71DD
		Dilution Factor: 10					
		Analysis Time..: 00:42					
Chromium	0 N	(74 - 130)			SW846 6020	04/27-04/28/05	G8WP71DG
	0 N	(74 - 130)	0.0	(0-30)	SW846 6020	04/27-04/28/05	G8WP71DH
		Dilution Factor: 10					
		Analysis Time..: 00:42					
Cobalt	103	(69 - 120)			SW846 6020	04/27-04/28/05	G8WP71DE
	103	(69 - 120)	0.32	(0-30)	SW846 6020	04/27-04/28/05	G8WP71DF
		Dilution Factor: 10					
		Analysis Time..: 00:42					
Copper	17700 N	(63 - 110)			SW846 6020	04/27-04/28/05	G8WP71DJ
	3250 N,*	(63 - 110)	71	(0-30)	SW846 6020	04/27-04/28/05	G8WP71DK
		Dilution Factor: 20					
		Analysis Time..: 17:51					

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F5D210354 **Matrix.....:** SOLID
Date Sampled...: 04/18/05 **Date Received..:** 04/21/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	9080 N	(10 - 150)			SW846 6020	04/27-04/28/05	G8WP71DQ
	0 N,*	(10 - 150)	0.0	(0-30)	SW846 6020	04/27-04/28/05	G8WP71DR
		Dilution Factor: 20					
		Analysis Time..: 17:51					
Manganese	852 N	(75 - 125)			SW846 6020	04/27-04/28/05	G8WP71DL
	21 N	(75 - 125)	16	(0-30)	SW846 6020	04/27-04/28/05	G8WP71DM
		Dilution Factor: 10					
		Analysis Time..: 00:42					
Nickel	0 N	(62 - 120)			SW846 6020	04/27-04/28/05	G8WP71DN
	0 N	(62 - 120)	0.0	(0-30)	SW846 6020	04/27-04/28/05	G8WP71DP
		Dilution Factor: 10					
		Analysis Time..: 00:42					
Selenium	101	(16 - 145)			SW846 6020	04/27-04/28/05	G8WP71DV
	97	(16 - 145)	3.5	(0-30)	SW846 6020	04/27-04/28/05	G8WP71DW
		Dilution Factor: 10					
		Analysis Time..: 00:42					
Silver	135 N	(10 - 150)			SW846 6020	04/27-04/28/05	G8WP71C3
	0 N,*	(10 - 150)	0.0	(0-30)	SW846 6020	04/27-04/28/05	G8WP71C4
		Dilution Factor: 10					
		Analysis Time..: 00:42					
Thallium	97	(69 - 138)			SW846 6020	04/27-04/28/05	G8WP71DX
	96	(69 - 138)	0.76	(0-30)	SW846 6020	04/27-04/28/05	G8WP71D0
		Dilution Factor: 10					
		Analysis Time..: 00:42					
Vanadium	115	(71 - 128)			SW846 6020	04/27-04/28/05	G8WP71D1
	103	(71 - 128)	7.6	(0-30)	SW846 6020	04/27-04/28/05	G8WP71D2
		Dilution Factor: 10					
		Analysis Time..: 00:42					

MS Lot-Sample #: F5D210354-001 **Prep Batch #...:** 5115193
% Moisture.....: 24

Calcium	0 N	(75 - 125)			SW846 6010B	04/27/05	G8WP71D3
	536 N,*	(75 - 125)	0.0	(0-20)	SW846 6010B	04/27/05	G8WP71D4
		Dilution Factor: 1					
		Analysis Time..: 15:28					

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: F5D210354 Matrix.....: SOLID
Date Sampled...: 04/18/05 Date Received..: 04/21/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	0 N	(75 - 125)			SW846 6010B	04/27-04/28/05	G8WP71D5
	0 N	(75 - 125)	0.0	(0-20)	SW846 6010B	04/27-04/28/05	G8WP71D6
		Dilution Factor: 5					
		Analysis Time..: 08:23					
Magnesium	139 N	(75 - 125)			SW846 6010B	04/27/05	G8WP71D9
	75 *,N	(75 - 125)	29	(0-20)	SW846 6010B	04/27/05	G8WP71EA
		Dilution Factor: 1					
		Analysis Time..: 15:28					
Potassium	104	(75 - 125)			SW846 6010B	04/27/05	G8WP71D7
	57 N	(75 - 125)	20	(0-20)	SW846 6010B	04/27/05	G8WP71D8
		Dilution Factor: 1					
		Analysis Time..: 15:28					
Sodium	140 N	(75 - 125)			SW846 6010B	04/27/05	G8WP71CE
	75 *	(75 - 125)	24	(0-20)	SW846 6010B	04/27/05	G8WP71CF
		Dilution Factor: 1					
		Analysis Time..: 15:28					
Zinc	0 N	(75 - 125)			SW846 6010B	04/27-04/28/05	G8WP71CG
	0 N,*	(75 - 125)	0.0	(0-20)	SW846 6010B	04/27-04/28/05	G8WP71CH
		Dilution Factor: 5					
		Analysis Time..: 08:23					
Aluminum	2190 N	(75 - 125)			SW846 6010B	04/27/05	G8WP71CJ
	0 N,*	(75 - 125)	0.0	(0-20)	SW846 6010B	04/27/05	G8WP71CK
		Dilution Factor: 1					
		Analysis Time..: 15:28					

MB Lot-Sample #: F5D210354-001 Prep Batch #...: 5117679 % Moisture.....: 24

Mercury	33 N	(10 - 150)			SW846 7471A	04/28/05	G8WP71CL
	97	(10 - 150)	18	(0-30)	SW846 7471A	04/28/05	G8WP71CM
		Dilution Factor: 1					
		Analysis Time..: 17:24					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

* Relative percent difference (RPD) is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TCLP Metals

Client Lot #...: F5D210354 Matrix.....: SOLID
Date Sampled...: 04/18/05 Date Received..: 04/21/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F5D210354-001 Prep Batch #...: 5119194							
Leach Date.....: 04/28/05 Leach Batch #..: P511814							
Mercury	103	(64 - 122)			SW846 7470A	04/29-05/02/05	G8WP71EE
	99	(64 - 122)	3.2	(0-20)	SW846 7470A	04/29-05/02/05	G8WP71EF
		Dilution Factor: 1					
		Analysis Time..: 10:40					
MS Lot-Sample #: F5D210354-001 Prep Batch #...: 5119272							
Leach Date.....: 04/28/05 Leach Batch #..: P511814							
Arsenic	102	(83 - 111)			SW846 6010B	04/29-05/05/05	G8WP71CN
	101	(83 - 111)	0.93	(0-20)	SW846 6010B	04/29-05/05/05	G8WP71CP
		Dilution Factor: 1					
		Analysis Time..: 19:53					
Barium	104	(79 - 111)			SW846 6010B	04/29-05/05/05	G8WP71CQ
	102	(79 - 111)	1.6	(0-20)	SW846 6010B	04/29-05/05/05	G8WP71CR
		Dilution Factor: 1					
		Analysis Time..: 19:53					
Cadmium	83	(65 - 122)			SW846 6010B	04/29-05/05/05	G8WP71CT
	82	(65 - 122)	0.67	(0-20)	SW846 6010B	04/29-05/05/05	G8WP71CU
		Dilution Factor: 1					
		Analysis Time..: 19:53					
Chromium	97	(74 - 114)			SW846 6010B	04/29-05/05/05	G8WP71CV
	96	(74 - 114)	0.38	(0-20)	SW846 6010B	04/29-05/05/05	G8WP71CW
		Dilution Factor: 1					
		Analysis Time..: 19:53					
Lead	71 N	(65 - 121)			SW846 6010B	04/29-05/05/05	G8WP71CX
	69 N	(65 - 121)	0.42	(0-20)	SW846 6010B	04/29-05/05/05	G8WP71C0
		Dilution Factor: 1					
		Analysis Time..: 19:53					
Silver	99	(70 - 123)			SW846 6010B	04/29-05/05/05	G8WP71C1
	98	(70 - 123)	1.2	(0-20)	SW846 6010B	04/29-05/05/05	G8WP71C2
		Dilution Factor: 1					
		Analysis Time..: 19:53					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TCLP Metals

Client Lot #...: F5D210354 **Matrix.....:** SOLID
Date Sampled...: 04/18/05 **Date Received..:** 04/21/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Selenium	102	(76 - 124)			SW846 6010B	04/29-05/05/05	G8WP71EC
	101	(76 - 124)	1.2	(0-20)	SW846 6010B	04/29-05/05/05	G8WP71ED
		Dilution Factor: 1					
		Analysis Time..: 19:53					
Zinc	0 N	(10 - 150)			SW846 6010B	04/29-05/05/05	G8WP71EK
	0 N	(10 - 150)	0.0	(0-30)	SW846 6010B	04/29-05/05/05	G8WP71EL
		Dilution Factor: 1					
		Analysis Time..: 19:53					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: F5D210354
Date Sampled...: 04/19/05 Date Received..: 04/21/05 Matrix.....: SOLID

Percnt Moisture: 22

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Reactive Cyanide	7.7 N	(10 - 100)	Work Order #...: G8WQV1AG SW846 7.3.3 Dilution Factor: 1	MS Lot-Sample #: F5D210354-006 05/04-05/06/05 Analysis Time..: 00:00	5126308
Reactive Sulfide	0.0	(10 - 136)	Work Order #...: G8WQV1AH SW846 7.3.4 Dilution Factor: 1	MS Lot-Sample #: F5D210354-006 05/04-05/06/05 Analysis Time..: 00:00	5126399
Reactive Sulfide	0.0	(10 - 136)	Work Order #...: G817H1AN SW846 7.3.4 Dilution Factor: 1	MS Lot-Sample #: F5D220357-006 05/04-05/06/05 Analysis Time..: 00:00	5126399

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F5D210354 **Work Order #...:** G8Q90-SMP G8Q90-DUP **Matrix.....:** SOLID

Date Sampled...: 04/14/05 14:00 **Date Received..:** 04/20/05

% Moisture.....: 7.2

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
						SD Lot-Sample #:	F5D200334-002	
Percent Moisture	7.2	6.5	%	9.8	(0-30)	MCAWW 160.3 MOD	04/22-04/25/05	5112218

Dilution Factor: 1 Analysis Time..: 00:00

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F5D210354 **Work Order #...:** G8WQV-SMP G8WQV-DUP **Matrix.....:** SOLID

Date Sampled...: 04/19/05 **Date Received..:** 04/21/05

% Moisture.....: 23

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)						SD Lot-Sample #: F5D210354-006		
	8.0	8.0	No Units	1.0	(0-30)	SW846 9045A	04/25/05	5115278
			Dilution Factor: 1			Analysis Time..: 00:00		
Reactive Cyanide						SD Lot-Sample #: F5D210354-006		
	0.052 B	0.078	mg/kg	40	(0-30)	SW846 7.3.3	05/04-05/06/05	5126308
			Dilution Factor: 1			Analysis Time..: 00:00		
Reactive Sulfide						SD Lot-Sample #: F5D210354-006		
	ND	ND	mg/kg	0	(0-30)	SW846 7.3.4	05/04-05/06/05	5126399
			Dilution Factor: 1			Analysis Time..: 00:00		
Paint Filter Test						SD Lot-Sample #: F5D210354-006		
			No Units	0	(0-30)	SW846 9095	04/25/05	5115319
			Dilution Factor: 1			Analysis Time..: 00:00		
Flashpoint						SD Lot-Sample #: F5D210354-006		
	>60.0	>60.0	deg C	0.0	(0-30)	SW846 1010	04/25/05	5115320
			Dilution Factor: 1			Analysis Time..: 00:00		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F5D210354 **Work Order #...:** G817H-SMP G817H-DUP **Matrix.....:** SOLID

Date Sampled...: 04/20/05 **Date Received..:** 04/22/05

% Moisture.....: 22

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Reactive Sulfide						SD Lot-Sample #: F5D220357-006		
	ND	ND	mg/kg	0	(0-30)	SW846 7.3.4	05/04-05/06/05	5126399
			Dilution Factor: 1			Analysis Time..: 00:00		
Flashpoint						SD Lot-Sample #: F5D220357-006		
	>60.0	>60.0	deg C	0.0	(0-30)	SW846 1010	04/25/05	5115320
			Dilution Factor: 1			Analysis Time..: 00:00		

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A68
Date Received: 2005-04-21
Analytical Due Date: 2005-05-12
Report Due Date: 2005-05-16

Project Manager: EK
Quote #: 44975
SDG: F5D210354
Project: 31509
Los Alamos Non-Rad
PO#: 126310021
Report to: Joylene Valdez or Keith
Client: 108581 LOS ALAMOS NATIONAL LABORATORY
#SMPS in LOT: 18
Report Type: D Expanded Deliverable
EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample example header in the COC Field SDG = "Lot Number"
Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********
Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level
Rb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	A
1	RE73-05-58824	2005-04-18 / 0	G8WP7	SOLID

SAMPLE COMMENTS:

	MN	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	VX	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	TL	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	SE	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	SB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	PB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	NI	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	CU	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	CR	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	CO	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	AS	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	AG	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	BE	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	CD	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	BA	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	HG	O8	SW846 7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	HG	O9	SW846 7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	AG	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	ZN	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	AL	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	NA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	SE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	BA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	CR	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	AS	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	CD	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	PB	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	CA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	FE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	MX	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	MG	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	SB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06

STL - St. Louis Logged in by: WILSONS 2005-04-21 17:28:16 printed on: Friday, April 22, 2005 08:25 AM

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A68
Date Received: 2005-04-21
Analytical Due Date: 2005-05-12
Report Due Date: 2005-05-16
Report Type: D Expanded Deliverable
EDD Code: 99

Project Manager: EK
Project: 3159S
PO#: 126310021
Client: 106581 LOS ALAMOS NATIONAL LABORATORY

Quote #: 44975 SDG: F5D210354
Los Alamos Non-Rad
Report to: Joylene Valdez or Keith
#SMPS In LOT: 16

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"
Project Name = "Request number" ---------- METALS AND WETCHEMISTRY ----------
Can Initsh multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level
Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

D	CO	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	TL	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	SE	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	PB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	NI	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	MN	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	CU	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	CR	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	VX	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	AG	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	CD	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	BE	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	BA	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	AS	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	HG	CS	SW846 7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	HG	CO	SW846 7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	SE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	ZN	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	AL	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	AS	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	AG	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	PB	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	CR	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	BA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	CD	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	CA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	FE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	KX	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	MG	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	NA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	XX	ZZ	NONE NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	CR	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	SE	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	BE	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	CO	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	CD	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	MN	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A68
Date Received: 2005-04-21
Analytical Due Date: 2005-05-12
Report Due Date: 2005-05-16
Report Type: D Expanded Deliverable
EDD Code: 99

Project Manager: EK
Project: 31598
PO#: 126310021
Client: 108581 LOS ALAMOS NATIONAL LABORATORY
Quote #: 44975 SDG: F5D210354
Los Alamos Non-Rad
Report to: Joylene Valdez or Keith
#SMPS in LOT: 18

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"
Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********
Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level
Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is exempted with

S	NI	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	BA	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	PB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	VX	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	SB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	AG	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	TL	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	CU	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	AS	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	HG	O8	SW846 7470A	Mercury (7470A, Cold Vapor) - Liquid	08I	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	HG	O9	SW846 7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	SE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	FE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	ZN	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	AL	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	AS	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	BA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	MG	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	CA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	NA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	CR	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	CD	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	KX	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	AG	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	PB	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	XX	ZZ	NONE NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	A
2	RE73-05-58625	2005-04-19 / 0	G8WQL	SOLID

SAMPLE COMMENTS:

NI	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CO	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CU	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A67

Project Manager: EK | Quote #: 44975 | SDG: F5D210354

Date Received: 2005-04-21

Project: 31596 | Los Alamos Non-Rad

Analytical Due Date: 2005-05-12

PO#: 126310021 | Report to: Joylene Valdez or Keith

Report Due Date: 2005-05-18

Client: 108581 LOS ALAMOS NATIONAL LABORATORY

Report Type: D Expanded Deliverable

#SMPS In LOT: 18 EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ---------- METALS AND WETCHEMISTRY ----------

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Not Prep: EPAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is overspiked with

SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O8	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	A
3	RE78-05-58826	2005-04-19 / 0	G8WQN	SOLID

SAMPLE COMMENTS:

CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A67
Date Received: 2005-04-21
Analytical Due Date: 2005-05-12
Report Due Date: 2005-05-16
Report Type: D Expanded Deliverable
EDD Code: 99

Project Manager: EK
Quote #: 44975 SDG: F5D210354
Project: 31595 Los Alamos Non-Rad
PO#: 126310021 Report to: Joylene Valdez or Keith
Client: 106581 LOS ALAMOS NATIONAL LABORATORY #SMPS In LOT: 18

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"
Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********
Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level
Sb spike at 100 ppb Pb - Spike Soluble at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is exempted with

TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	CS	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	CS	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	A
4	RE73-05-58827	2005-04-19 / 0	G6WQR	SOLID

SAMPLE COMMENTS:

SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A54
Date Received: 2005-04-21
Analytical Due Date: 2006-05-12
Report Due Date: 2005-05-16
Report Type: D Expanded Deliverable
EDD Code: 99

Project Manager: EK
Project: 31596
PO#: 126310021
Client: 108581 LOS ALAMOS NATIONAL LABORATORY
Quote #: 44975 SDG: F5D210354
Los Alamos Non-Rad
Report to: Joylene Valdez or Keith
#SMPS In LOT: 18

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"
Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********
Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level
Mn spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O6	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	A
5	RE73-05-56826	2005-04-19 / 0	G6WQT	SOLID

SAMPLE COMMENTS:

MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A54
Date Received: 2005-04-21
Analytical Due Date: 2005-05-12
Report Due Date: 2005-05-16
Report Type: D Expanded Deliverable
EDD Code: 99

Project Manager: EK
Quote #: 44975
SDG: F5D210354
Project: 3159S
Los Alamos Non-Rad
PO#: 126310021
Report to: Joylene Valdez or Keith
Client: 106561 LOS ALAMOS NATIONAL LABORATORY
#SMPS in LOT: 18

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample labeler in the COC Field SDG = "Lot Number"
Project Name = "Request number" ---------- METALS AND WETCHEMISTRY ----------
Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: SRAA Spike Level and Standard Spike Level
Six spikes at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

	BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	HG	OS	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	HG	OS	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	NI	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	A
6	RE73-05-58629	2005-04-19 / 0	G8WQV	SOLID

SAMPLE COMMENTS:

	XX	AE	SW846	1010	Flash Point (1010, Closed Cup)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	XX	FK	SW846	9045A	pH (9045) - Non-Aqueous	82	LEACHATE, DI (Routine)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	XX	FQ	SW846	9095	Paint Filter Test (9095, Free Liquids)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	XX	GI	SW846	7.3.3	Cyanide, Reactive (SW7.3.3)	08	DISTILLATION, MACRO - Acid	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	XX	GJ	SW846	7.3.4	Sulfide, Reactive (SW7.3.4)	08	DISTILLATION, MACRO - Acid	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	XX	GI	SW846	7.3.3	Cyanide, Reactive (SW7.3.3)	08	DISTILLATION, MACRO - Acid	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	XX	GJ	SW846	7.3.4	Sulfide, Reactive (SW7.3.4)	08	DISTILLATION, MACRO - Acid	01	STANDARD TEST SET	PROT: A	WRK LOC	06
X	XX	FK	SW846	9045A	pH (9045) - Non-Aqueous	82	LEACHATE, DI (Routine)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
X	XX	GI	SW846	7.3.3	Cyanide, Reactive (SW7.3.3)	08	DISTILLATION, MACRO - Acid	01	STANDARD TEST SET	PROT: A	WRK LOC	06
X	XX	GJ	SW846	7.3.4	Sulfide, Reactive (SW7.3.4)	08	DISTILLATION, MACRO - Acid	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	A

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A54
Date Received: 2005-04-21
Analytical Due Date: 2005-05-12
Report Due Date: 2005-05-16
Report Type: D Expanded Deliverable
EDD Code: 99

Project Manager: EK
Quote #: 44975 SDG: F5D210354
Project: 3156S Los Alamos Non-Rad
PO#: 126310021 Report to: Joylene Valdez or Keith
Client: 108581 LOS ALAMOS NATIONAL LABORATORY #SMPS in LOT: 16

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"
Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********
Case batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level
Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is exempted with

7 RE73-06-68530 2005-04-19 / 0 G8WR6 SOLID

SAMPLE COMMENTS:

CO	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CU	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MN	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
TL	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NI	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
VX	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BE	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O6	SW846 7470A	Mercury (7470A, Cold Vapor) - Liquid	6M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O6	SW846 7471A	Mercury (7471A, Cold Vapor) - Solids	79	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
ZN	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AL	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MG	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
KX	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
FE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZZ	NONE NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	WM	MCAW W 160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE # CLIENT SAMPLE ID DATE/TIME SAMPLED WORKORDER A

STL - St Louis Logged in by: WILSONS 2005-04-21 17:26:10 printed on: Friday, April 22, 2005 08:25 AM

CLIENT ANALYSIS SUMMARY

F5D210354

Storage Loc: A54
Date Received: 2005-04-21
Analytical Due Date: 2005-05-12
Report Due Date: 2005-05-16

Project Manager: EK
Quote #: 44975
SDG: F5D210354
Project: 31596
Los Alamos Non-Rad
PO#: 126310021
Report to: Joylene Valdez or Keith
Report Type: D Expanded Deliverable
Client: 108581 LOS ALAMOS NATIONAL LABORATORY
#SMPS in LOT: 18
EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"
Project Name = "Request number" ---------- METALS AND WETCHEMISTRY ----------
Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Mat Prep: SPAA Spike Level and Standard Spike Level
Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is exempted with

8 RE73-05-58831 2005-04-19 / 0 G8WTA SOLID

SAMPLE COMMENTS:

CD	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NI	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MN	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CU	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
VX	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
TL	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BE	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CO	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O6	SW846 7470A	Mercury (7470A, Cold Vapor) - Liquid	6M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O9	SW846 7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
ZN	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AL	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MG	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
KX	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
FE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZZ	NONE NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	WM	MCAW W 160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE # CLIENT SAMPLE ID DATE/TIME SAMPLED WORKORDER A

STL - St. Louis Logged In by: WILSONS 2005-04-21 17:29:10 printed on: Friday, April 22, 2005 08:25 AM

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A44
Date Received: 2005-04-21
Analytical Due Date: 2005-05-12
Report Due Date: 2005-05-16
Report Type: D Expanded Deliverable
EDD Code: 99

Project Manager: EK
Quote #: 44975
SDG: F5D210354
Project: 3159S
Los Alamos Non-Rad
PO#: 126310021
Report to: Joylene Valdez or Keith
Client: 108581 LOS ALAMOS NATIONAL LABORATORY
#SMPS in LOT: 18

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"
Project Name = "Request number" ---------- METALS AND WETCHEMISTRY ----------
Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level
Mo spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike unless matrix spike is exempted with

9 RE73-05-59832 2005-04-19 / 0 GSWTE SOLID

SAMPLE COMMENTS:

CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O8	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE # CLIENT SAMPLE ID DATE/TIME SAMPLED WORKORDER A

STL - St. Louis Logged in by: WILSONS 2005-04-21 17:28:10 printed on: Friday, April 22, 2005 08:25 AM

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A44
Date Received: 2005-04-21
Analytical Due Date: 2005-05-12
Report Due Date: 2005-05-16
Report Type: D Expanded Deliverable
EDD Code: 99

Project Manager: EK
Quote #: 44975 SDG: F5D210354
Project: 31596 Los Alamos Non-Rad
PO#: 128310021 Report to: Joylene Valdez or Keith
Client: 106581 LOS ALAMOS NATIONAL LABORATORY #SMPS In LOT: 18

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"
Project Name = "Request number" ---------- METALS AND WETCHEMISTRY ----------
Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level
Mo spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Watson at 20 - Perform analytical spike when matrix spike is swamped with

10 RE73-05-56833 2005-04-19 / 0 GSWTG SOLID

SAMPLE COMMENTS:

CD	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
TL	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NI	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MN	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CU	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
VX	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BE	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CO	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	OS	SW846 7470A	Mercury (7470A, Cold Vapor) - Liquid	08I	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	OS	SW846 7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
ZN	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MG	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
KX	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
FE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AL	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZZ	NONE NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	WM	MCAW W 160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE # CLIENT SAMPLE ID DATE/TIME SAMPLED WORKORDER A

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A44
Date Received: 2005-04-21
Analytical Due Date: 2005-05-12
Report Due Date: 2005-05-16
Report Type: D Expanded Deliverable
EDD Code: 99

Project Manager: EK
Quote #: 44975
SDG: F5D210354
Project: 3159S
Los Alamos Non-Rad
PO#: 126310021
Report to: Joylene Valdez or Keith
Client: 106581 LOS ALAMOS NATIONAL LABORATORY
#SMPS in LOT: 16

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"
Project Name = "Request number" ---------- METALS AND WETCHEMISTRY ----------
Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Not Prep: GFAA Spike Level and Standard Spike Level
Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

11 RE73-05-66834 2005-04-19 / 0 GSWTR SOLID

SAMPLE COMMENTS:

CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
HG	O8	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	8M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC 06
HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC 06
ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC 06
XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC 06
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC 06

SAMPLE # CLIENT SAMPLE ID DATE/TIME SAMPLED WORKORDER A

STL - St. Louis Logged In by: WILSONS 2005-04-21 17:26:16 printed on: Friday, April 22, 2005 08:25 AM Page 12 of 18

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A67
Date Received: 2005-04-21
Analytical Due Date: 2005-05-12
Report Due Date: 2005-05-16
Report Type: D Expanded Deliverable
EDD Code: 99

Project Manager: EK
Project: 3159S
PO#: 126310021
Client: 106581 LOS ALAMOS NATIONAL LABORATORY
Quote #: 44975 SDG: F5D210354
Los Alamos Non-Rad
Report to: Joylene Valdez or Keith
#SMPS In LOT: 18

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"
Project Name = "Request number" ---------- METALS AND WETCHEMISTRY ----------
Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level
Mo spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is exempted with

12		RE73-05-55835		2005-04-19 / 0		G8WTT		SOLID		
SAMPLE COMMENTS:										
XX AE	SW846 1010	Flash Point (1010, Closed Cup)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
XX FK	SW846 9045A	pH (9045) - Non-Aqueous	82	LEACHATE, DI (Routine)	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
XX FQ	SW846 9095	Paint Filter Test (9095, Free Liquids)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
XX GI	SW846 7.3.3	Cyanide, Reactive (SW7.3.3)	08	DISTILLATION, MACRO - Acid	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
XX GJ	SW846 7.3.4	Sulfide, Reactive (SW7.3.4)	08	DISTILLATION, MACRO - Acid	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
XX WM	MCAW 160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06	

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	A
13	RE73-05-55835	2005-04-19 / 0	G8WTV	SOLID

SAMPLE COMMENTS:

BE	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NI	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CU	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CO	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
TL	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
VX	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MN	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O8	SW846 7470A	Mercury (7470A, Cold Vapor) - Liquid	08	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O9	SW846 7471A	Mercury (7471A, Cold Vapor) - Solids	79	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
ZN	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AL	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MG	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A44
Date Received: 2005-04-21
Analytical Due Date: 2005-05-12
Report Due Date: 2005-05-16

Project Manager: EK
Quote #: 44975
SDG: F5D210354
Project: 3159S
Los Alamos Non-Rad
PO#: 126310021
Report to: Joylene Valdez or Keith
Report Type: D Expanded Deliverable
Client: 106581 LOS ALAMOS NATIONAL LABORATORY
#SMPS In LOT: 18
EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"
Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********
Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level
Its spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	WM	MCAWW	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	A
14	RE73-05-58897	2005-04-19 / 0	G8WTW	SOLID

SAMPLE COMMENTS:

AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O8	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	6M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A44
Date Received: 2005-04-21
Analytical Due Date: 2005-05-12
Report Due Date: 2005-05-16
Report Type: D Expanded Deliverable
EDD Code: 99

Project Manager: EK
Quote #: 44975
SDG: F5D210354
Project: 3156S
Los Alamos Non-Rad
PO#: 126310021
Report to: Joylene Valdez or Keith
Client: 106581 LOS ALAMOS NATIONAL LABORATORY
#SMPS in LOT: 18

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"
Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********
Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level
Sb spike at 100 ppb Pb - Spike Selids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is exempted with

FE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
KX	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZZ	NONE NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	WM	MCAW W MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	A
15	RE73-05-56836	2005-04-19 / 0	G8WTX	SOLID

SAMPLE COMMENTS:

CR	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BE	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
TL	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
VX	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NI	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MN	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CU	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BE	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CO	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	MH	SW846 6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O8	SW846 7470A	Mercury (7470A, Cold Vapor) - Liquid	8M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O9	SW846 7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
KX	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
FE	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MG	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CA	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
ZN	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AL	QO	SW846 6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A44

Project Manager: EK | Quote #: 44975 | SDG: F5D210354

Project: 31598 | Los Alamos Non-Rad

PO#: 126310021 | Report to: Joylene Valdez or Keith

Client: 106581 LOS ALAMOS NATIONAL LABORATORY | #SMPS In LOT: 18

Date Received: 2005-04-21

Analytical Due Date: 2005-05-12

Report Due Date: 2005-05-16

Report Type: D Expanded Deliverable

EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ---------- METALS AND WETCHEMISTRY ----------

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is exempted with

AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	A
16	RE73-05-56839	2005-04-19 / 0	G8WT0	SOLID

SAMPLE COMMENTS:

BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O6	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	6M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O6	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A44
Date Received: 2005-04-21
Analytical Due Date: 2005-05-12
Report Due Date: 2005-05-16

Project Manager: EK
Quote #: 44975
SDG: F5D210354
Project: 31595
Los Alamos Non-Rad
PO#: 126310021
Report to: Joylene Valdez or Keith
Report Type: D Expanded Deliverable
Client: 108581 LOS ALAMOS NATIONAL LABORATORY
#SMPS in LOT: 18
EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"
Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********
Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level
Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	A
17	RE73-05-58940	2005-04-19 / 0	G6WT1	SOLID

SAMPLE COMMENTS:

CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O8	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	78	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A44
Date Received: 2005-04-21
Analytical Due Date: 2005-05-12
Report Due Date: 2005-05-16
Report Type: D Expanded Deliverable
EDD Code: 99

Project Manager: EK
Quote #: 44975 SDG: F5D210354
Project: 31598
Los Alamos Non-Rad
PO#: 126310021
Report to: Joylene Valdez or Keith
Client: 108581 LOS ALAMOS NATIONAL LABORATORY
#SMPS in LOT: 18

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"
Project Name = "Request number" ---------- METALS AND WETCHEMISTRY ----------
Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level
No spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is exempted with

PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	A
18	RE73-05-58841	2005-04-19 / 0	G8WT3	SOLID

SAMPLE COMMENTS:

XX	AE	SW846	1010	Flash Point (1010, Closed Cup)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	FK	SW846	9045A	pH (9045) - Non-Aqueous	82	LEACHATE, DI (Routine)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	FQ	SW846	9095	Paint Filter Test (9095, Free Liquids)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	GI	SW846	7.3.3	Cyanide, Reactive (SW7.3.3)	08	DISTILLATION, MACRO - Acid	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	GJ	SW846	7.3.4	Sulfide, Reactive (SW7.3.4)	08	DISTILLATION, MACRO - Acid	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

F5D210354

CLIENT COMMENTS SUMMARY

Storage Loc: A68
Date Received: 2005-04-21
Analytical Due Date: 2005-05-12
Report Due Date: 2005-05-16
Report Type: D Expanded Deliverable
EDD Code: 99

Project Manager: EK
Quote #: 44975 SDG: F5D210354
Project: 31698 Los Alamos Non-Rad
PO#: 126310021 Report to: Joylene Valdez or Keith
Client: 108581 LOS ALAMOS NATIONAL LABORATORY #SMPS in LOT: 18

Sample Receiving: LOS ALAMOS CLIENT REQUIREMEN
Enter COC NUMBER on sample sample header in the COC Fl
SDG = "Lot Number"
Project Name = "Request number"

********** METALS AND WETCHEMISTRY **********
Can batch multiple Lots together and report Client specific
Batch QC: Matrix Spike and Sample Duplicate
Met Prep: GFAA Spike Level and Standard Spike Level
Sb spike at 100 ppb
Pb - Spike Solids at 100 ppb, spike Waters at 20
- Perform analytical spike when matrix spike is swamped with
indigenous analyte.
********** GC/MS ORGANICS **********
Can batch multiple Lots together and report Client specific
Batch QC MS and MSD
Clouseau observations for:
- Dilutions and elevated detection limits
- Unknown aldol condensate in TIC report
USE GPC for sample extracts as required.
Put client ID on all raw data
Client requires qualifiers
********** GC/HPLC **********
Can batch multiple Lots together and report Client specific
Batch QC
USE GPC for sample extracts as required.
Client requires Qualifiers for both GC and HPLC
- No averaging of CCV compounds
- Include Form Xs in data packages
********** Radiochemistry **********
Rad Chem with no tracers require MS (spk <= 100 pCi/L or g)
and sample duplicate ..... Gamma does not require MS.
Radium 228 requires MS and Sample Duplicate
Radiological: "Do not include control chart, standard certif
certificates, or calibration data as part of data package"
- Tracers need to be added at a level to yield at least 400
- Report 1 sigma uncertainty
Gross Alpha/Beta requires a total digestion.

STL - St Louis Logged in by: WILSONS 2005-04-21 17:28:16 printed on: Friday, April 22, 2005 08:25 AM Page 1 of 1

Wednesday, April 20, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3159SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3159S

ANALYSIS TYPE: INORGANIC

cer 6121

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58824	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58825	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58826	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58827	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58828	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58829	6	500 ML POLY	RC+RS+ph+PF+I	ICE	S
RE73-05-58830	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58831	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58832	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58833	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58834	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58835	6	500 ML POLY	RC+RS+ph+PF+I	ICE	S
RE73-05-58836	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58837	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58838	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58839	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58840	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58841	6	500 ML POLY	RC+RS+ph+PF+I	ICE	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3159S

Relinquished By:	Date	Time	Received By:	Date	Time
Hadilla Abdella	4/20/05	1400	Sue Wilson	4.21.05	0900
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

PRINTED NAME SIGNATURE

LOT #E5D210354

REVISED

Wednesday, April 20, 2005

REQUEST NUMBER: 3159S

ANALYSIS TYPE: INORGANIC

Los Alamos
NATIONAL LABORATORY

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

SHIP DATE: 04/20/2005
REPORT DUE: 05/05/2005
TURN AROUND REQ'D: 15

These samples are on:

LANL Request Number: 3159S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

RAD SCREENING: NOT REQ
COMMENTS: NOTE: For 58829, 58835 and 58841 do full waste classification testing

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:6010B	RE73-05-58824	1	S	04/18/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58824	1	S	04/18/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58824	1	S	04/18/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58824	1	S	04/18/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58825	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58825	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58825	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58825	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58826	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58826	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58826	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58826	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58827	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58827	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58827	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58827	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58828	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58828	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58828	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58828	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:1020A	RE73-05-58829	6	S	04/19/2005	
SW-846:7.3	RE73-05-58829	6	S	04/19/2005	
SW-846:9045C	RE73-05-58829	6	S	04/19/2005	
SW-846:9095	RE73-05-58829	6	S	04/19/2005	
SW-846:6010B	RE73-05-58830	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58830	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58830	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58830	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58831	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58831	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58831	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58831	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58832	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58832	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58832	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58832	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58833	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58833	1	S	04/19/2005	Analyze for TCLP Zinc also

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:7470A_TCLP	RE73-05-58833	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58833	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58834	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58834	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58834	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58834	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:1020A	RE73-05-58835	6	S	04/19/2005	
SW-846:7.3	RE73-05-58835	6	S	04/19/2005	
SW-846:9045C	RE73-05-58835	6	S	04/19/2005	
SW-846:9095	RE73-05-58835	6	S	04/19/2005	
SW-846:6010B	RE73-05-58836	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58836	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58836	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58836	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58837	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58837	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58837	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58837	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58838	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58838	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58838	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58838	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58839	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58839	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58839	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58839	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58840	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58840	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58840	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58840	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:1020A	RE73-05-58841	6	S	04/19/2005	
SW-846:7.3	RE73-05-58841	6	S	04/19/2005	
SW-846:9045C	RE73-05-58841	6	S	04/19/2005	
SW-846:9095	RE73-05-58841	6	S	04/19/2005	

Final Page of REQUEST NUMBER 3159S

SEVERN TRENT **STL**

Lot No: F5D210354

Condition Upon Receipt Form
St. Louis Laboratory

Client: LANL 44975 Date: 4.21.05 Time: 0900

Quote No: Initiated by: SW

Shipper/No: FedX 695477892744 2733 COC/RPA Numbers: 31605C, 31595C, 31585C

Condition/Variance (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	(Y) N	Sample received in undamaged condition?	7.	(Y) N	Sample received with Chain of Custody?
2.	(Y) N	Sample received within 4°C ± 2°C* ?	8.	Y (N)	Chain of Custody matches sample IDs on containers?
		Record 4°	9.	(Y) N N/A	Custody seal received intact on cooler.?
3.	Y N (N/A)	Sample received with proper pH [1] ?	10.	(Y) N N/A	Custody seal tamper evident on cooler.?
4.	Y N	If N/A - Was pH taken by original STL lab?	11.	(Y) N N/A	Custody seal on bottles received intact?
5.	(Y) N	Sample received in proper containers?	12.	(Y) N N/A	Custody seal tamper evident on bottles?
6.	(Y) N	Sample volume sufficient for analysis?	13.	Y N	Was COR (equivalent) rec' d from original STL lab?

* Temperature Variance Does Not Affect the Following Analyses: Red cooler is ambient.

[1] For DOE-AL (Pantex, LANL, Sandia) sites, verify pH all containers received, except for VOA, TOX, and soils.

SW 4.21.05

Notes: ~~Did not receive any samples for COC 31595~~ and on 31585C, missing RE 73-05-58877

Corrective Action:

- ☐ Client's Name: _____ Informed by: _____ By: _____
- ☐ Sample(s) processed "as is". _____
- ☐ Sample(s) on hold until: _____ If released, notify: _____

Project Management Review: [signature] Date: 4/22/05

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED
IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIALS AND THE DATE NEXT TO THAT ITEM

6121

ADMIN-0004, Revised 2/17/04
\\Stlsvr01\QA\FORMS\ST-LOUIS\ADMIN\Admin004 rev7.doc

METALS SAMPLE AND QC SUMMARY RESULTS

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WP7 **Client ID:** RE73-05-58824

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 23.51

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	308.22	3.7	13.1	18800	N*	1	ICP	4/27/05	15:23
Calcium	317.93	2.9	327	44100	N*E	1	ICP	4/27/05	15:23
Iron	259.94	13.1	65.4	82200	N	5	ICP	4/28/05	8:19
Magnesium	383.27	15.4	327	3680	NE	1	ICP	4/27/05	15:23
Potassium	766.49	367	392	4950	N	1	ICP	4/27/05	15:23
Sodium	589	8.9	327	5410	N	1	ICP	4/27/05	15:23
Zinc	213.86	2.0	13.1	8220	N*	5	ICP	4/28/05	8:19

Comments: Lot #: F5D210354 Sample #: 1

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WQL **Client ID:** RE73-05-58825

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 24.74

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	308.22	3.8	13.3	12400	N*	1	ICP	4/27/05	15:41
Calcium	317.93	2.9	332	25200	N*E	1	ICP	4/27/05	15:41
Iron	259.94	13.3	66.4	144000	N	5	ICP	4/28/05	8:37
Magnesium	383.27	15.6	332	2640	NE	1	ICP	4/27/05	15:41
Potassium	766.49	373	399	2370	N	1	ICP	4/27/05	15:41
Sodium	589	9.0	332	1900	N	1	ICP	4/27/05	15:41
Zinc	213.86	2.0	13.3	3020	N*	5	ICP	4/28/05	8:37

Comments: Lot #: F5D210354 Sample #: 2

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WQN **Client ID:** RE73-05-58826

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 24.69

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	308.22	3.8	13.3	15200	N*	1	ICP	4/27/05	15:45
Calcium	317.93	2.9	332	27300	N*E	1	ICP	4/27/05	15:45
Iron	259.94	13.3	66.4	78400	N	5	ICP	4/28/05	8:41
Magnesium	383.27	15.6	332	2840	NE	1	ICP	4/27/05	15:45
Potassium	766.49	373	398	3820	N	1	ICP	4/27/05	15:45
Sodium	589	9.0	332	3690	N	1	ICP	4/27/05	15:45
Zinc	213.86	0.41	2.7	4360	N*	1	ICP	4/27/05	15:45

Comments: Lot #: F5D210354 Sample #: 3

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

REVISED

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WQR **Client ID:** RE73-05-58827

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 16.93

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	308.22	3.4	12.0	13400	N*	1	ICP	4/27/05	15:49
Calcium	317.93	2.7	301	22800	N*E	1	ICP	4/27/05	15:49
Iron	259.94	2.4	12.0	41800	N	1	ICP	4/27/05	15:49
Magnesium	383.27	14.1	301	2680	NE	1	ICP	4/27/05	15:49
Potassium	766.49	338	361	2490	N	1	ICP	4/27/05	15:49
Sodium	589	8.2	301	1990	N	1	ICP	4/27/05	15:49
Zinc	213.86	0.37	2.4	4450	N*	1	ICP	4/27/05	15:49

Comments: Lot #: F5D210354 Sample #: 4

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

REVISED

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WQT **Client ID:** RE73-05-58828

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 17.67

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	308.22	3.5	12.2	12200	N*	1	ICP	4/27/05	15:54
Calcium	317.93	2.7	304	27700	N*E	1	ICP	4/27/05	15:54
Iron	259.94	2.4	12.2	40900	N	1	ICP	4/27/05	15:54
Magnesium	383.27	14.3	304	2880	NE	1	ICP	4/27/05	15:54
Potassium	766.49	341	364	2680	N	1	ICP	4/27/05	15:54
Sodium	589	8.3	304	2450	N	1	ICP	4/27/05	15:54
Zinc	213.86	1.9	12.2	11300	N*	5	ICP	4/28/05	8:45

Comments: Lot #: F5D210354 Sample #: 5

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WR6 **Client ID:** RE73-05-58830

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 20.86

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	308.22	3.6	12.6	12100	N*	1	ICP	4/27/05	16:07
Calcium	317.93	2.8	316	30700	N*E	1	ICP	4/27/05	16:07
Iron	259.94	2.5	12.6	57100	N	1	ICP	4/27/05	16:07
Magnesium	383.27	14.8	316	57600	NE	1	ICP	4/27/05	16:07
Potassium	766.49	355	379	2220	N	1	ICP	4/27/05	16:07
Sodium	589	8.6	316	1510	N	1	ICP	4/27/05	16:07
Zinc	213.86	0.39	2.5	4880	N*	1	ICP	4/27/05	16:07

Comments: Lot #: F5D210354 Sample #: 7

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

REVISED

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WT0 **Client ID:** RE73-05-58839

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 24.96

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	308.22	3.8	13.3	13900	N*	1	ICP	4/27/05	16:42
Calcium	317.93	2.9	333	63900	N*E	1	ICP	4/27/05	16:42
Iron	259.94	13.3	66.6	93700	N	5	ICP	4/28/05	9:20
Magnesium	383.27	15.6	333	3210	NE	1	ICP	4/27/05	16:42
Potassium	766.49	374	400	2940	N	1	ICP	4/27/05	16:42
Sodium	589	9.1	333	3030	N	1	ICP	4/27/05	16:42
Zinc	213.86	0.41	2.7	4370	N*	1	ICP	4/27/05	16:42

Comments: Lot #: F5D210354 Sample #: 16

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WT1 **Client ID:** RE73-05-58840

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 14.65

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	308.22	3.3	11.7	20600	N*	1	ICP	4/27/05	16:46
Calcium	317.93	2.6	293	31000	N*E	1	ICP	4/27/05	16:46
Iron	259.94	11.7	58.6	99900	N	5	ICP	4/28/05	9:24
Magnesium	383.27	13.8	293	3760	NE	1	ICP	4/27/05	16:46
Potassium	766.49	329	352	4480	N	1	ICP	4/27/05	16:46
Sodium	589	8.0	293	5330	N	1	ICP	4/27/05	16:46
Zinc	213.86	0.36	2.3	5500	N*	1	ICP	4/27/05	16:46

Comments: Lot #: F5D210354 Sample #: 17

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

REVISED

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTA **Client ID:** RE73-05-58831

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 24.49

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	308.22	3.8	13.2	17700	N*	1	ICP	4/27/05	16:11
Calcium	317.93	2.9	331	31400	N*E	1	ICP	4/27/05	16:11
Iron	259.94	2.7	13.2	50000	N	1	ICP	4/27/05	16:11
Magnesium	383.27	15.6	331	3070	NE	1	ICP	4/27/05	16:11
Potassium	766.49	372	397	3860	N	1	ICP	4/27/05	16:11
Sodium	589	9.0	331	4050	N	1	ICP	4/27/05	16:11
Zinc	213.86	4.0	26.5	43000	N*	10	ICP	4/28/05	8:50

Comments: Lot #: F5D210354 Sample #: 8

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTE **Client ID:** RE73-05-58832

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 24.78

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	308.22	3.8	13.3	18200	N*	1	ICP	4/27/05	16:16
Calcium	317.93	2.9	332	34800	N*E	1	ICP	4/27/05	16:16
Iron	259.94	2.7	13.3	58300	N	1	ICP	4/27/05	16:16
Magnesium	383.27	15.6	332	3390	NE	1	ICP	4/27/05	16:16
Potassium	766.49	373	399	4370	N	1	ICP	4/27/05	16:16
Sodium	589	9.1	332	3960	N	1	ICP	4/27/05	16:16
Zinc	213.86	0.41	2.7	3940	N*	1	ICP	4/27/05	16:16

Comments: Lot #: F5D210354 Sample #: 9

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTG **Client ID:** RE73-05-58833

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 16.54

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	308.22	3.4	12.0	15800	N*	1	ICP	4/27/05	16:20
Calcium	317.93	2.6	300	27200	N*E	1	ICP	4/27/05	16:20
Iron	259.94	12.0	59.9	148000	N	5	ICP	4/28/05	8:54
Magnesium	383.27	14.1	300	2830	NE	1	ICP	4/27/05	16:20
Potassium	766.49	336	360	3200	N	1	ICP	4/27/05	16:20
Sodium	589	8.2	300	4750	N	1	ICP	4/27/05	16:20
Zinc	213.86	0.37	2.4	3760	N*	1	ICP	4/27/05	16:20

Comments: Lot #: F5D210354 Sample #: 10

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

REVISED

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTR **Client ID:** RE73-05-58834

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 24.71

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	308.22	3.8	13.3	13300	N*	1	ICP	4/27/05	16:24
Calcium	317.93	2.9	332	32900	N*E	1	ICP	4/27/05	16:24
Iron	259.94	13.3	66.4	125000	N	5	ICP	4/28/05	8:58
Magnesium	383.27	15.6	332	2940	NE	1	ICP	4/27/05	16:24
Potassium	766.49	373	399	2560	N	1	ICP	4/27/05	16:24
Sodium	589	9.0	332	3300	N	1	ICP	4/27/05	16:24
Zinc	213.86	2.0	13.3	9830	N*	5	ICP	4/28/05	8:58

Comments: Lot #: F5D210354 Sample #: 11

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

REVISED

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTV **Client ID:** RE73-05-58836

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 10.62

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	**308.22**	**79.8**	**280**	**4540**	**N***	**25**	**ICP**	**4/28/05**	**9:11**
Calcium	**317.93**	**61.7**	**6990**	**8420**	**N*E**	**25**	**ICP**	**4/28/05**	**9:11**
Iron	**259.94**	**55.9**	**280**	**425000**	**N**	**25**	**ICP**	**4/28/05**	**9:11**
Magnesium	**383.27**	**328**	**6990**	**1070**	**BNE**	**25**	**ICP**	**4/28/05**	**9:11**
Potassium	766.49	7850	8390	7850	UN	25	ICP	4/28/05	9:11
Sodium	**589**	**190**	**6990**	**822**	**BN**	**25**	**ICP**	**4/28/05**	**9:11**
Zinc	**213.86**	**8.5**	**55.9**	**939**	**N***	**25**	**ICP**	**4/28/05**	**9:11**

Comments: Lot #: F5D210354 Sample #: 13

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTW **Client ID:** RE73-05-58837

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 14.7

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	308.22	83.7	293	3870	N*	25	ICP	4/28/05	9:16
Calcium	317.93	64.6	7330	6640	BN*E	25	ICP	4/28/05	9:16
Iron	259.94	58.6	293	486000	N	25	ICP	4/28/05	9:16
Magnesium	383.27	344	7330	911	BNE	25	ICP	4/28/05	9:16
Potassium	766.49	329	352	723	N	1	ICP	4/27/05	16:33
Sodium	589	199	7330	363	BN	25	ICP	4/28/05	9:16
Zinc	213.86	8.9	58.6	823	N*	25	ICP	4/28/05	9:16

Comments: Lot #: F5D210354 Sample #: 14

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

REVISED

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTX **Client ID:** RE73-05-58838

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 25.28

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	308.22	3.8	13.4	11100	N*	1	ICP	4/27/05	16:37
Calcium	317.93	3.0	335	22600	N*E	1	ICP	4/27/05	16:37
Iron	259.94	2.7	13.4	53100	N	1	ICP	4/27/05	16:37
Magnesium	383.27	15.7	335	2070	NE	1	ICP	4/27/05	16:37
Potassium	766.49	376	402	2560	N	1	ICP	4/27/05	16:37
Sodium	589	9.1	335	1940	N	1	ICP	4/27/05	16:37
Zinc	213.86	0.41	2.7	4630	N*	1	ICP	4/27/05	16:37

Comments: Lot #: F5D210354 Sample #: 15

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

REVISED

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WP7 **Client ID:** RE73-05-58824

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/28/05 **Prep Batch:** 5117679

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 23.51

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0094	0.044	0.62	NE	1	CVAA	4/28/05	17:22

Comments: Lot #: F5D210354 Sample #: 1

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WQL **Client ID:** RE73-05-58825

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/28/05 **Prep Batch:** 5117679

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 24.74

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0096	0.044	1.2	NE	1	CVAA	4/28/05	17:34

Comments: Lot #: F5D210354 Sample #: 2

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

REVISED

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WQN **Client ID:** RE73-05-58826

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/28/05 **Prep Batch:** 5117679

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 24.69

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0096	0.044	0.70	NE	1	CVAA	4/28/05	17:44

Comments: Lot #: F5D210354 Sample #: 3

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WQR **Client ID:** RE73-05-58827

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/28/05 **Prep Batch:** 5117679

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 16.93

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0087	0.040	0.90	NE	1	CVAA	4/28/05	17:46

Comments: Lot #: F5D210354 Sample #: 4

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WQT **Client ID:** RE73-05-58828

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/28/05 **Prep Batch:** 5117679

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 17.67

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0088	0.041	0.92	NE	1	CVAA	4/28/05	17:49

Comments: Lot #: F5D210354 Sample #: 5

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

REVISED

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WR6 **Client ID:** RE73-05-58830

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/28/05 **Prep Batch:** 5117679

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 20.86

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0091	0.042	1.6	NE	1	CVAA	4/28/05	17:50

Comments: Lot #: F5D210354 Sample #: 7

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

REVISED

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WT0 **Client ID:** RE73-05-58839

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/28/05 **Prep Batch:** 5117679

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 24.96

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0096	0.044	1.2	NE	1	CVAA	4/28/05	18:12

Comments: Lot #: F5D210354 Sample #: 16

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WT1 **Client ID:** RE73-05-58840

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/28/05 **Prep Batch:** 5117679

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 14.65

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0084	0.039	0.60	NE	1	CVAA	4/28/05	18:14

Comments: Lot #: F5D210354 Sample #: 17

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

REVISED

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTA **Client ID:** RE73-05-58831

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/28/05 **Prep Batch:** 5117679

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 24.49

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0095	0.044	1.4	NE	1	CVAA	4/28/05	17:53

Comments: Lot #: F5D210354 Sample #: 8

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTE **Client ID:** RE73-05-58832

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/28/05 **Prep Batch:** 5117679

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 24.78

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0096	0.044	1.7	NE	1	CVAA	4/28/05	17:55

Comments: Lot #: F5D210354 Sample #: 9

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTG **Client ID:** RE73-05-58833

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/28/05 **Prep Batch:** 5117679

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 16.54

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.017	0.080	2.1	NE	2	CVAA	4/28/05	18:50

Comments: Lot #: F5D210354 Sample #: 10

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTR **Client ID:** RE73-05-58834

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/28/05 **Prep Batch:** 5117679

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 24.71

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0096	0.044	1.6	NE	1	CVAA	4/28/05	17:59

Comments: Lot #: F5D210354 Sample #: 11

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTV **Client ID:** RE73-05-58836

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/28/05 **Prep Batch:** 5117679

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 10.62

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0081	0.037	0.71	NE	1	CVAA	4/28/05	18:02

Comments: Lot #: F5D210354 Sample #: 13

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTW **Client ID:** RE73-05-58837

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/28/05 **Prep Batch:** 5117679

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 14.7

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0084	0.039	0.28	NE	1	CVAA	4/28/05	18:04

Comments: Lot #: F5D210354 Sample #: 14

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTX **Client ID:** RE73-05-58838

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/28/05 **Prep Batch:** 5117679

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 25.28

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0096	0.045	0.56	NE	1	CVAA	4/28/05	18:10

Comments: Lot #: F5D210354 Sample #: 15

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: CVAA

Units: ug/L

Chart Number: AA0428B.PRN

Acceptable Range: 80% - 120%

Standard Source: Leeman

Standard ID: SEE STANDARDS LOG

Element	WL/ Mass	True Conc	ICV 4/28/05 3:42 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	2.5	2.50	100.0								

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICP

Units: ug/L

Chart Number: 0427IE2.ARC

Acceptable Range: 90% - 110%

Standard Source: Solutions Plus

Standard ID: SEE STANDARDS LOG

Element	WL/ Mass	True Conc	ICV 4/27/05 2:16 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	40000.0	41151.61	**102.9**								
Calcium	317.933	20000.0	20717.00	**103.6**								
Iron	259.94	40000.0	42178.74	**105.4**								
Magnesium	383.273	20000.0	20506.06	**102.5**								
Potassium	766.49	40000.0	40141.41	**100.4**								
Sodium	588.995	40000.0	40106.14	**100.3**								
Zinc	213.856	4000.0	3989.28	**99.7**								

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: CVAA

Units: ug/L

Chart Number: AA0428B.PRN

Acceptable Range: 80% - 120%

Standard Source: Leeman

Standard ID: SEE STANDARDS LOG

Element	WL/ Mass	True Conc	CCV 4/28/05 3:48 PM		CCV 4/28/05 4:13 PM		CCV 4/28/05 4:38 PM		CCV 4/28/05 5:04 PM		CCV 4/28/05 5:28 PM	
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	5.0	5.08	**101.6**	5.46	**109.2**	5.34	**106.8**	5.21	**104.2**	5.63	**112.6**

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: CVAA **Units:** ug/L

Chart Number: AA0428B.PRN **Acceptable Range:** 80% - 120%

Standard Source: Leeman **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	CCV 4/28/05 5:40 PM Found	% Rec	CCV 4/28/05 6:06 PM Found	% Rec	CCV 4/28/05 6:19 PM Found	% Rec	CCV 4/28/05 6:51 PM Found	% Rec	Found	% Rec
Mercury	253.7	5.0	5.59	111.8	5.63	112.6	5.66	113.2	5.61	112.2		

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICP

Units: ug/L

Chart Number: 0427IE2.ARC

Acceptable Range: 90% - 110%

Standard Source: Solution Plus

Standard ID: SEE STANDARDS LOG

Element	WL/ Mass	True Conc	CCV 4/27/05 2:40 PM Found	% Rec	CCV 4/27/05 3:58 PM Found	% Rec	CCV 4/27/05 4:50 PM Found	% Rec	CCV 4/27/05 5:30 PM Found	% Rec	CCV 4/28/05 8:10 AM Found	% Rec
Aluminum	308.215	40000.0	40812.53	**102.0**	40983.86	**102.5**	40778.85	**101.9**	40705.80	**101.8**	41193.84	**103.0**
Calcium	317.933	20000.0	20437.35	**102.2**	20502.16	**102.5**	20250.10	**101.3**	20243.01	**101.2**	20457.38	**102.3**
Iron	259.94	40000.0	42557.83	**106.4**	42336.19	**105.8**	42059.52	**105.1**	42108.56	**105.3**	43286.07	**108.2**
Magnesium	383.273	20000.0	20211.66	**101.1**	20298.54	**101.5**	20083.23	**100.4**	20059.71	**100.3**	20577.19	**102.9**
Potassium	766.49	40000.0	40554.27	**101.4**	40603.80	**101.5**	40469.53	**101.2**	39289.72	**98.2**	40320.48	**100.8**
Sodium	588.995	40000.0	39720.31	**99.3**	39779.97	**99.4**	39722.30	**99.3**	39235.28	**98.1**	40778.00	**101.9**
Zinc	213.856	4000.0	3985.55	**99.6**	3974.19	**99.4**	3908.80	**97.7**	3911.72	**97.8**	4029.73	**100.7**

Version 4.75.1

Form 2A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICP

Units: ug/L

Chart Number: 0427IE2.ARC

Acceptable Range: 90% - 110%

Standard Source: Solution Plus

Standard ID: SEE STANDARDS LOG

Element	WL/ Mass	True Conc	CCV 4/28/05 9:03 AM Found	% Rec	CCV 4/28/05 9:55 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	40000.0	40957.99	102.4	41017.03	102.5						
Calcium	317.933	20000.0	20577.14	102.9	20820.80	104.1						
Iron	259.94	40000.0	42897.80	107.2	43052.74	107.6						
Magnesium	383.273	20000.0	20504.43	102.5	20565.04	102.8						
Potassium	766.49	40000.0	40188.94	100.5	40666.20	101.7						
Sodium	588.995	40000.0	40093.23	100.2	39934.31	99.8						
Zinc	213.856	4000.0	4003.69	100.1	3997.97	99.9						

STL-ST. LOUIS

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: CVAA **Units:** ug/L

Chart Number: AA0428B.PRN **Acceptable Range:** 50% - 150%

Standard Source: SPEX **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	CRA 4/28/05 3:46 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	0.2	0.23	113.5								

Version 4.75.1 *Form 2B Equivalent*

STL-ST. LOUIS

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: ICP **Units:** ug/L

Chart Number: 0427IE2.ARC **Acceptable Range:** 50% - 150%

Standard Source: Solutions Plus **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	CRI 4/27/05 2:25 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	200.0	235.44	**117.7**								
Calcium	317.933	5000.0	5254.26	**105.1**								
Iron	259.94	100.0	110.22	**110.2**								
Magnesium	383.273	5000.0	5189.65	**103.8**								
Potassium	766.49	5000.0	4791.32	**95.8**								
Sodium	588.995	5000.0	5035.19	**100.7**								
Zinc	213.856	20.0	20.12	**100.6**								

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: CVAA **Units:** ug/L

Chart Number: AA0428B.PRN

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 4/28/05 3:44 PM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.0	U								

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICP **Units:** ug/L

Chart Number: 0427IE2.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 4/27/05 2:20 PM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	308.215	100	28.5	U								
Calcium	317.933	2500	22.0	U								
Iron	259.94	100	20.0	U								
Magnesium	383.273	2500	117.0	U								
Potassium	766.49	3000	**2810.0**	U								
Sodium	588.995	2500	68.0	U								
Zinc	213.856	20	3.1	U								

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: CVAA **Units:** ug/L

Chart Number: AA0428B.PRN

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 4/28/05 3:50 PM Found	Q	CCB 4/28/05 4:15 PM Found	Q	CCB 4/28/05 4:40 PM Found	Q	CCB 4/28/05 5:06 PM Found	Q	CCB 4/28/05 5:30 PM Found	Q
Mercury	253.7	0.2	0.0	U	0.0	U	0.0	U	0.0	U	0.0	U

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: CVAA **Units:** ug/L

Chart Number: AA0428B.PRN

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 4/28/05 5:42 PM Found	Q	CCB 4/28/05 6:08 PM Found	Q	CCB 4/28/05 6:21 PM Found	Q	CCB 4/28/05 6:53 PM Found	Q	Found	Q
Mercury	253.7	0.2	0.0	U	0.0	U	0.0	U	0.0	U		

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICP **Units:** ug/L

Chart Number: 0427IE2.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 4/27/05 2:44 PM Found	Q	CCB 4/27/05 4:02 PM Found	Q	CCB 4/27/05 4:55 PM Found	Q	CCB 4/27/05 5:34 PM Found	Q	CCB 4/28/05 8:15 AM Found	Q
Aluminum	308.215	100	28.5	U	28.5	U	28.5	U	**37.0**	**B**	28.5	U
Calcium	317.933	2500	22.0	U	22.0	U	22.0	U	22.0	U	22.0	U
Iron	259.94	100	20.0	U	20.0	U	20.0	U	**20.5**	**B**	20.0	U
Magnesium	383.273	2500	117.0	U	117.0	U	117.0	U	117.0	U	117.0	U
Potassium	766.49	3000	**2810.0**	**U**	**2810.0**	**U**	**2810.0**	**U**	**2810.0**	**U**	**2810.0**	**U**
Sodium	588.995	2500	68.0	U	68.0	U	68.0	U	68.0	U	68.0	U
Zinc	213.856	20	**3.1**	**U**	**3.1**	**U**	**6.1**	**B**	**6.4**	**B**	**4.3**	**B**

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICP **Units:** ug/L

Chart Number: 0427IE2.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 4/28/05 9:07 AM Found	Q	CCB 4/28/05 9:59 AM Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	308.215	100	28.5	U	28.5	U						
Calcium	317.933	2500	22.0	U	22.0	U						
Iron	259.94	100	20.0	U	20.0	U						
Magnesium	383.273	2500	117.0	U	117.0	U						
Potassium	766.49	3000	**2810.0**	U	**2810.0**	U						
Sodium	588.995	2500	68.0	U	68.0	U						
Zinc	213.856	20	**3.1**	U	**3.1**	U						

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: G84N2B

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	**308.215**	**2.9**	**10.0**	**6.6**	**B**	**1**	**ICP**	**4/27/05**	**15:15**
Calcium	**317.933**	**2.2**	**250**	**9.4**	**B**	**1**	**ICP**	**4/27/05**	**15:15**
Iron	**259.94**	**2.0**	**10.0**	**2.9**	**B**	**1**	**ICP**	**4/27/05**	**15:15**
Magnesium	**383.273**	**11.7**	**250**	**31.2**	**B**	**1**	**ICP**	**4/27/05**	**15:15**
Potassium	766.49	281	300	281	U	1	ICP	4/27/05	15:15
Sodium	588.995	6.8	250	6.8	U	1	ICP	4/27/05	15:15
Zinc	213.856	0.31	2.0	0.31	U	1	ICP	4/27/05	15:15

Comments: Lot #: F5D210354

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: G9CTJB

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/28/05 **Prep Batch:** 5117679

Weight: 0.6 **Volume:** 100 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0072	0.033	0.0072	U	1	CVAA	4/28/05	17:18

Comments: Lot #: F5D210354

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICP **Units:** ug/L

Chart Number: 0427IE2.ARC **Acceptable Range:** 80% - 120%

Standard Source: Solution Plus **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 4/27/05 2:29 PM Found	Found	Found	Found	Found
Aluminum	308.215		500000	488000				
Calcium	317.933		500000	448000				
Iron	259.94		200000	180000				
Magnesium	383.273		500000	480000				
Potassium	766.49	3000		-880				
Sodium	588.995	2500		-58				
Zinc	213.856	20		-7				

STL-ST. LOUIS

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICP **Units:** ug/L

Chart Number: 0427IE2.ARC **Acceptable Range:** 80% - 120%

Standard Source: Ultra **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	ICSAB 4/27/05 2:33 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	500000	491634.8	98.3								
Calcium	317.933	500000	449245.0	89.8								
Iron	259.94	200000	181246.0	90.6								
Magnesium	383.273	500000	480380.6	96.1								
Potassium	766.49	20000	20966.9	104.8								
Sodium	588.995	20000	19927.5	99.6								
Zinc	213.856	1000	898.4	89.8								

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: G8WP7S

Original Sample ID: G8WP7 **Client ID:** RE73-05-58824 S

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 23.51

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Aluminum	308.2	18800		21600	N	130.74	2194.1	1	1	ICP	4/27/05	15:23	4/27/05	15:28
Calcium	317.9	44100		40500	N	3268.4	-111.5	1	1	ICP	4/27/05	15:23	4/27/05	15:28
Iron	259.9	82200		54200	N	65.368	2876.5	5	5	ICP	4/28/05	8:19	4/28/05	8:23
Magnesium	383.3	3680		8220	N	3268.4	138.8	1	1	ICP	4/27/05	15:23	4/27/05	15:28
Potassium	766.5	4950		8360		3268.4	104.3	1	1	ICP	4/27/05	15:23	4/27/05	15:28
Sodium	589	5410		9980	N	3268.4	139.9	1	1	ICP	4/27/05	15:23	4/27/05	15:28
Zinc	213.9	8220		5860	N	32.684	7213.0	5	5	ICP	4/28/05	8:19	4/28/05	8:23

Comments: Lot #: F5D210354 Sample #: 1

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: G8WP7S

Original Sample ID: G8WP7 **Client ID:** RE73-05-58824 S

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/28/05 **Prep Batch:** 5117679

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 23.51

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Mercury	253.7	0.62		0.70	N	0.2179	33.0	1	1	CVAA	4/28/05	17:22	4/28/05	17:24

Comments: Lot #: F5D210354 Sample #: 1

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: G8WP7D

Original Sample ID: G8WP7 **Client ID:** RE73-05-58824 D

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 23.51

Element	WL/ Mass	OS Conc	Q	MSD Conc	Q	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Aluminum	308.2	18800	N	14100	N *	130.74	3597.6	1	1	ICP	4/27/05	15:23	4/27/05	15:32
Calcium	317.9	44100	N	61700	N *	3268.4	536.2	1	1	ICP	4/27/05	15:23	4/27/05	15:32
Iron	259.9	82200	N	63600	N	65.368	8533.6	5	5	ICP	4/28/05	8:19	4/28/05	8:28
Magnesium	383.3	3680	N	6130	N	3268.4	74.9	1	1	ICP	4/27/05	15:23	4/27/05	15:32
Potassium	766.5	4950		6820	N	3268.4	57.2	1	1	ICP	4/27/05	15:23	4/27/05	15:32
Sodium	589	5410	N	7870		3268.4	75.4	1	1	ICP	4/27/05	15:23	4/27/05	15:32
Zinc	213.9	8220	N	3340	N *	32.684	4921.9	5	5	ICP	4/28/05	8:19	4/28/05	8:28

Comments: Lot #: F5D210354 Sample #: 1

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: G8WP7D

Original Sample ID: G8WP7 **Client ID:** RE73-05-58824 D

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/28/05 **Prep Batch:** 5117679

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 23.51

Element	WL/ Mass	OS Conc	Q	MSD Conc	Q	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Mercury	253.7	0.62	N	0.84		0.2179	97.0	1	1	CVAA	4/28/05	17:22	4/28/05	17:26

Comments: Lot #: F5D210354 Sample #: 1

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: G8WP7D

Matrix Spike Sample ID: G8WP7S **Client ID:** RE73-05-58824 D

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 23.51

Element	WL/ Mass	MS Conc	Q	MSD Conc	Q	% RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Aluminum	308.215	21600	N	14100	N *	42.4	1	1	ICP	4/27/05	15:28	4/27/05	15:32
Calcium	317.933	40500	N	61700	N *	41.5	1	1	ICP	4/27/05	15:28	4/27/05	15:32
Iron	259.94	54200	N	63600	N	15.9	5	5	ICP	4/28/05	8:23	4/28/05	8:28
Magnesium	383.273	8220	N	6130	N	29.1	1	1	ICP	4/27/05	15:28	4/27/05	15:32
Potassium	766.49	8360		6820	N	20.3	1	1	ICP	4/27/05	15:28	4/27/05	15:32
Sodium	588.995	9980	N	7870		23.6	1	1	ICP	4/27/05	15:28	4/27/05	15:32
Zinc	213.856	5860	N	3340	N *	54.8	5	5	ICP	4/28/05	8:23	4/28/05	8:28

Comments: Lot #: F5D210354 Sample #: 1

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 6 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: G8WP7D

Matrix Spike Sample ID: G8WP7S **Client ID:** RE73-05-58824 D

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/28/05 **Prep Batch:** 5117679

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 23.51

Element	WL/ Mass	MS Conc	Q	MSD Conc	Q	% RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Mercury	253.7	0.70	N	0.84		18.2	1	1	CVAA	4/28/05	17:24	4/28/05	17:26

Comments: Lot #: F5D210354 Sample #: 1

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 6 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: G84N2C

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Aluminum	308.215	6320	5270	83.4		58-142	1	ICP	4/27/05	15:19
Calcium	317.933	3320	3510	105.6		79.2-120.8	1	ICP	4/27/05	15:19
Iron	259.94	11200	10400	92.7		57.3-143	1	ICP	4/27/05	15:19
Magnesium	383.273	2040	2020	99.0		76.9-123	1	ICP	4/27/05	15:19
Potassium	766.49	1920	1930	100.7		71.4-129	1	ICP	4/27/05	15:19
Sodium	588.995	445	457	102.6		55.5-144.5	1	ICP	4/27/05	15:19
Zinc	213.856	165	175	105.8		79.4-120.6	1	ICP	4/27/05	15:19

Comments: Lot #: F5D210354

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 7 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: G9CTJC

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/28/05 **Prep Batch:** 5117679

Weight: 0.6 **Volume:** 100 **Percent Moisture:** NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Mercury	253.7	16.9	15.1	89.3		65-135	20	CVAA	4/28/05	17:20

Comments: Lot #: F5D210354

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 7 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: G8WP7V

Original Sample ID: G8WP7 **Client ID:** RE73-05-58824

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115193

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 23.51

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Aluminum	308.215	18800	N*	20100		7.1	1	5	ICP	4/27/05	15:23	4/27/05	15:36
Calcium	317.933	44100	N*	50400	E	14.1	1	5	ICP	4/27/05	15:23	4/27/05	15:36
Iron	259.94	82200	N	84700		3.0	5	25	ICP	4/28/05	8:19	4/28/05	8:32
Magnesium	383.273	3680	N	4110	E	11.5	1	5	ICP	4/27/05	15:23	4/27/05	15:36
Potassium	766.49	4950	N	4540			1	5	ICP	4/27/05	15:23	4/27/05	15:36
Sodium	588.995	5410	N	5640		4.3	1	5	ICP	4/27/05	15:23	4/27/05	15:36
Zinc	213.856	8220	N*	8230		0.1	5	25	ICP	4/28/05	8:19	4/28/05	8:32

Comments:

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
E Serial dilution percent difference not within limits

Form 9 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: G8WP7V

Original Sample ID: G8WP7 **Client ID:** RE73-05-58824

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/28/05 **Prep Batch:** 5117679

Weight: 0.6 **Volume:** 100 **Percent Moisture:** 23.51

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Mercury	253.7	0.62	N	0.66	E	5.4	1	5	CVAA	4/28/05	17:22	4/28/05	17:32

Comments:

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
E Serial dilution percent difference not within limits

Form 9 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Detection Limits

Instrument: CVAA **Units:** ug/L

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Mercury	253.70	0.2	0.043	8/2/04

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICP **Units:** ug/L

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Aluminum	308.21	100	28.5	2/9/04
Calcium	317.93	2500	22.0	2/9/04
Iron	259.94	100	20.0	2/9/04
Magnesium	383.27	2500	117	2/9/04
Potassium	766.49	3000	2810	2/9/04
Sodium	589.00	2500	68.0	2/9/04
Zinc	213.86	20	3.1	2/9/04

STL-ST. LOUIS

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICP **Date of IEC's:** 6/2/04

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	As(-0.002148), Cd(-0.000059), Cr(0.00001), Fe(0.00006), Mn(0.000011), Pb(0.001404), Se(-0.001822), Si(0.000412), Tl(0.00016), Zn(-0.000003)
Arsenic	193.696	Cd(0.00774)
Calcium	317.933	Ag(0.000008), Ba(-0.000006), Cu(0.00005), Mn(0.000014), Se(-0.00002), Si(0.000412), V(0.0004)
Iron	259.94	Ag(-0.00049), As(-0.000542), B(0.001012), Cd(0.000156), Co(0.00008), Cr(-0.000013), Cu(-0.000202), Mn(0.000161), Mo(0.000049), Sb(-0.000528), Se(0.004534), Si(-0.000876), Sn(-0.000083), Tl(-0.000251), V(0.00027), Zn(0.000012)
Magnesium	383.273	As(-0.000312), B(0.00019), Ba(0.000003), Co(-0.000018), Cr(-0.000014), Fe(0.00019), Mn(0.000028), Sb(0.000105), Se(-0.000102), Si(0.00004), Tl(-0.00028), V(0.000117)
Nickel	231.604	Cd(-0.000914), Co(0.000546), Zn(0.00503)
Sodium	588.995	K(-0.000963)
Thorium	283.73	Ag(-0.00253), Al(0.181039), As(-0.001959), B(0.00014), Ba(0.00031), Be(0.000015), Ca(0.0033), Co(-0.000854), Cr(-0.001124), Cu(0.002515), Fe(0.002718), K(-0.00082), Li(-0.00021), Mg(0.007), Mn(0.000103), Na(0.00042), Ni(-0.000169), Pb(-0.00176), Sb(-0.000639), Se(-0.002503), Si(0.00029), Sn(0.001125), Tl(-0.000627), V(0.00243)
Uranium	409.014	Ag(0.00107), Al(0.020406), As(0.00282), B(0.00036), Ba(0.00009), Be(0.000062), Ca(0.0052), Cd(-0.000037), Co(0.000098), Cr(-0.002773), Cu(0.001594), Fe(0.0018), K(-0.004418), Li(0.000075), Mg(0.0108), Mn(0.00031), Na(0.00041), Ni(0.000186), Pb(0.001642), Sb(0.000309), Se(0.001177), Si(-0.000876), Sn(0.00033), Sr(0.00007), Tl(0.00048), V(0.00161)

STL-ST. LOUIS

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: CVAA **Units:** ug/L

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Mercury	253.70	10	4/1/03

STL-ST. LOUIS

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICP **Units:** ug/L

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Aluminum	308.21	500000	10/26/04
Calcium	317.93	500000	10/26/04
Iron	259.94	500000	10/26/04
Magnesium	383.27	500000	10/26/04
Potassium	766.49	1000000	10/26/04
Sodium	589.00	500000	10/26/04
Zinc	213.86	50000	10/26/04

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Log

Preparation Batch: 5115193 **Instrument:** ICP **Matrix:** Soil

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
G84N2B	4/27/05	0.5	50	NA
G84N2C	4/27/05	0.5	50	NA
G8WP7	4/27/05	0.5	50	23.51
G8WP7D	4/27/05	0.5	50	23.51
G8WP7S	4/27/05	0.5	50	23.51
G8WQL	4/27/05	0.5	50	24.74
G8WQN	4/27/05	0.5	50	24.69
G8WQR	4/27/05	0.5	50	16.93
G8WQT	4/27/05	0.5	50	17.67
G8WR6	4/27/05	0.5	50	20.86
G8WT0	4/27/05	0.5	50	24.96
G8WT1	4/27/05	0.5	50	14.65
G8WTA	4/27/05	0.5	50	24.49
G8WTE	4/27/05	0.5	50	24.78
G8WTG	4/27/05	0.5	50	16.54
G8WTR	4/27/05	0.5	50	24.71
G8WTV	4/27/05	0.5	50	10.62
G8WTW	4/27/05	0.5	50	14.7
G8WTX	4/27/05	0.5	50	25.28

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Log

Preparation Batch: 5117679 **Instrument:** CVAA **Matrix:** Soil

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
G9CTJB	4/28/05	0.6	100	NA
G9CTJC	4/28/05	0.6	100	NA
G8WP7	4/28/05	0.6	100	23.51
G8WP7D	4/28/05	0.6	100	23.51
G8WP7S	4/28/05	0.6	100	23.51
G8WQL	4/28/05	0.6	100	24.74
G8WQN	4/28/05	0.6	100	24.69
G8WQR	4/28/05	0.6	100	16.93
G8WQT	4/28/05	0.6	100	17.67
G8WR6	4/28/05	0.6	100	20.86
G8WT0	4/28/05	0.6	100	24.96
G8WT1	4/28/05	0.6	100	14.65
G8WTA	4/28/05	0.6	100	24.49
G8WTE	4/28/05	0.6	100	24.78
G8WTG	4/28/05	0.6	100	16.54
G8WTR	4/28/05	0.6	100	24.71
G8WTV	4/28/05	0.6	100	10.62
G8WTW	4/28/05	0.6	100	14.7
G8WTX	4/28/05	0.6	100	25.28

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAA **Chart Number:** AA0428B.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
Std01Rep1		4/28/05	15:29
Std02Rep1		4/28/05	15:31
Std03Rep1		4/28/05	15:33
Std04Rep1		4/28/05	15:35
Std05Rep1		4/28/05	15:37
Std06Rep1		4/28/05	15:40
ICV		4/28/05	15:42
ICB		4/28/05	15:44
CRA		4/28/05	15:46
CCV		4/28/05	15:48
CCB		4/28/05	15:50
ZZZZZZ		4/28/05	15:52
ZZZZZZ		4/28/05	15:54
ZZZZZZ		4/28/05	15:56
ZZZZZZ		4/28/05	15:58
ZZZZZZ		4/28/05	16:01
ZZZZZZ		4/28/05	16:02
ZZZZZZ		4/28/05	16:04
ZZZZZZ		4/28/05	16:07
ZZZZZZ		4/28/05	16:09
ZZZZZZ		4/28/05	16:11
CCV		4/28/05	16:13
CCB		4/28/05	16:15
ZZZZZZ		4/28/05	16:17
ZZZZZZ		4/28/05	16:20
ZZZZZZ		4/28/05	16:22
ZZZZZZ		4/28/05	16:23
ZZZZZZ		4/28/05	16:26
ZZZZZZ		4/28/05	16:28
ZZZZZZ		4/28/05	16:30
ZZZZZZ		4/28/05	16:32
ZZZZZZ		4/28/05	16:34
ZZZZZZ		4/28/05	16:36
CCV		4/28/05	16:38
CCB		4/28/05	16:40
ZZZZZZ		4/28/05	16:42
ZZZZZZ		4/28/05	16:44
ZZZZZZ		4/28/05	16:46
ZZZZZZ		4/28/05	16:48

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAA **Chart Number:** AA0428B.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		4/28/05	16:51
ZZZZZZ		4/28/05	16:53
ZZZZZZ		4/28/05	16:55
ZZZZZZ		4/28/05	16:57
ZZZZZZ		4/28/05	16:59
ZZZZZZ		4/28/05	17:02
CCV		4/28/05	17:04
CCB		4/28/05	17:06
ZZZZZZ		4/28/05	17:08
ZZZZZZ		4/28/05	17:10
ZZZZZZ		4/28/05	17:12
ZZZZZZ		4/28/05	17:14
ZZZZZZ		4/28/05	17:16
G9CTJB		4/28/05	17:18
G9CTJC		4/28/05	17:20
G8WP7	RE73-05-58824	4/28/05	17:22
G8WP7S	RE73-05-58824 S	4/28/05	17:24
G8WP7D	RE73-05-58824 D	4/28/05	17:26
CCV		4/28/05	17:28
CCB		4/28/05	17:30
G8WP7V	RE73-05-58824	4/28/05	17:32
G8WQL	RE73-05-58825	4/28/05	17:34
ZZZZZZ		4/28/05	17:36
ZZZZZZ		4/28/05	17:38
CCV		4/28/05	17:40
CCB		4/28/05	17:42
G8WQN	RE73-05-58826	4/28/05	17:44
G8WQR	RE73-05-58827	4/28/05	17:46
G8WQT	RE73-05-58828	4/28/05	17:49
G8WR6	RE73-05-58830	4/28/05	17:50
G8WTA	RE73-05-58831	4/28/05	17:53
G8WTE	RE73-05-58832	4/28/05	17:55
ZZZZZZ		4/28/05	17:57
G8WTR	RE73-05-58834	4/28/05	17:59
G8WTV	RE73-05-58836	4/28/05	18:02
G8WTW	RE73-05-58837	4/28/05	18:04
CCV		4/28/05	18:06
CCB		4/28/05	18:08
G8WTX	RE73-05-58838	4/28/05	18:10

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAA **Chart Number:** AA0428B.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
G8WT0	RE73-05-58839	4/28/05	18:12
G8WT1	RE73-05-58840	4/28/05	18:14
ZZZZZZ		4/28/05	18:15
ZZZZZZ		4/28/05	18:17
CCV		4/28/05	18:19
CCB		4/28/05	18:21
G8WTG	RE73-05-58833	4/28/05	18:50
CCV		4/28/05	18:51
CCB		4/28/05	18:53

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICP **Chart Number:** 0427IE2.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
CALBLK		4/27/05	14:00
CAL1		4/27/05	14:05
CAL2		4/27/05	14:09
CAL3		4/27/05	14:13
ICV		4/27/05	14:16
ICB		4/27/05	14:20
CRI		4/27/05	14:25
ICSA		4/27/05	14:29
ICSAB		4/27/05	14:33
CCV		4/27/05	14:40
CCB		4/27/05	14:44
G84N2B		4/27/05	15:15
G84N2C		4/27/05	15:19
G8WP7	RE73-05-58824	4/27/05	15:23
G8WP7S	RE73-05-58824 S	4/27/05	15:28
G8WP7D	RE73-05-58824 D	4/27/05	15:32
G8WP7V	RE73-05-58824	4/27/05	15:36
G8WQL	RE73-05-58825	4/27/05	15:41
G8WQN	RE73-05-58826	4/27/05	15:45
G8WQR	RE73-05-58827	4/27/05	15:49
G8WQT	RE73-05-58828	4/27/05	15:54
CCV		4/27/05	15:58
CCB		4/27/05	16:02
G8WR6	RE73-05-58830	4/27/05	16:07
G8WTA	RE73-05-58831	4/27/05	16:11
G8WTE	RE73-05-58832	4/27/05	16:16
G8WTG	RE73-05-58833	4/27/05	16:20
G8WTR	RE73-05-58834	4/27/05	16:24
ZZZZZZ		4/27/05	16:29
G8WTW	RE73-05-58837	4/27/05	16:33
G8WTX	RE73-05-58838	4/27/05	16:37
G8WT0	RE73-05-58839	4/27/05	16:42
G8WT1	RE73-05-58840	4/27/05	16:46
CCV		4/27/05	16:50
CCB		4/27/05	16:55
ZZZZZZ		4/27/05	16:59
ZZZZZZ		4/27/05	17:03
ZZZZZZ		4/27/05	17:08
ZZZZZZ		4/27/05	17:12

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICP **Chart Number:** 0427IE2.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		4/27/05	17:17
ZZZZZZ		4/27/05	17:21
ZZZZZZ		4/27/05	17:25
CCV		4/27/05	17:30
CCB		4/27/05	17:34
CCV		4/28/05	8:10
CCB		4/28/05	8:15
G8WP7	RE73-05-58824	4/28/05	8:19
G8WP7S	RE73-05-58824 S	4/28/05	8:23
G8WP7D	RE73-05-58824 D	4/28/05	8:28
G8WP7V	RE73-05-58824	4/28/05	8:32
G8WQL	RE73-05-58825	4/28/05	8:37
G8WQN	RE73-05-58826	4/28/05	8:41
G8WQT	RE73-05-58828	4/28/05	8:45
G8WTA	RE73-05-58831	4/28/05	8:50
G8WTG	RE73-05-58833	4/28/05	8:54
G8WTR	RE73-05-58834	4/28/05	8:58
CCV		4/28/05	9:03
CCB		4/28/05	9:07
G8WTV	RE73-05-58836	4/28/05	9:11
G8WTW	RE73-05-58837	4/28/05	9:16
G8WT0	RE73-05-58839	4/28/05	9:20
G8WT1	RE73-05-58840	4/28/05	9:24
ZZZZZZ		4/28/05	9:29
ZZZZZZ		4/28/05	9:33
ZZZZZZ		4/28/05	9:38
ZZZZZZ		4/28/05	9:42
ZZZZZZ		4/28/05	9:46
ZZZZZZ		4/28/05	9:51
CCV		4/28/05	9:55
CCB		4/28/05	9:59
ZZZZZZ		4/28/05	10:04
ZZZZZZ		4/28/05	10:08
ZZZZZZ		4/28/05	10:12

METALS RAW DATA

4/27/05 SID C426C5 6010C

Analysis Report Summary 04/28/05 10:33:37 AM LATE

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	CALBLK	0427IE2	6010C	04/27/05	14:00		X	IR
2	CAL1	0427IE2	6010C	04/27/05	14:05		X	IR
3	CAL2	0427IE2	6010C	04/27/05	14:09		X	IR
4	CAL3	0427IE2	6010C	04/27/05	14:13		X	IR
5	ICV	0427IE2	6010C	04/27/05	14:16	STL	Q	CONC
6	ICB	0427IE2	6010C	04/27/05	14:20	STL	Q	CONC
7	LLC	0427IE2	6010C	04/27/05	14:25	STL	Q	CONC
8	ICSA	0427IE2	6010C	04/27/05	14:29	STL	Q	CONC
9	ICSAB	0427IE2	6010C	04/27/05	14:33	STL	Q	CONC
10	CCV	0427IE2	6010C	04/27/05	14:40	STL	Q	CONC
11	CCB	0427IE2	6010C	04/27/05	14:44	STL	Q	CONC
12	G84N2B	0427IE2	6010C	04/27/05	15:15	STL	S	CONC
13	G84N2C	0427IE2	6010C	04/27/05	15:19	STL	S	CONC
14	G8WP7	0427IE2	6010C	04/27/05	15:23	STL	S	CONC
15	G8WP7S	0427IE2	6010C	04/27/05	15:28	STL	S	CONC
16	G8WP7D	0427IE2	6010C	04/27/05	15:32	STL	S	CONC
17	G8WP7V 5X	0427IE2	6010C	04/27/05	15:36	STL	S	CONC
18	G8WQL	0427IE2	6010C	04/27/05	15:41	STL	S	CONC
19	G8WQN	0427IE2	6010C	04/27/05	15:45	STL	S	CONC
20	G8WQR	0427IE2	6010C	04/27/05	15:49	STL	S	CONC
21	G8WQT	0427IE2	6010C	04/27/05	15:54	STL	S	CONC
22	CCV	0427IE2	6010C	04/27/05	15:58	STL	Q	CONC
23	CCB	0427IE2	6010C	04/27/05	16:02	STL	Q	CONC
24	G8WR6	0427IE2	6010C	04/27/05	16:07	STL	S	CONC
25	G8WTA	0427IE2	6010C	04/27/05	16:11	STL	S	CONC
26	G8WTE	0427IE2	6010C	04/27/05	16:16	STL	S	CONC
27	G8WTG	0427IE2	6010C	04/27/05	16:20	STL	S	CONC
28	G8WTR	0427IE2	6010C	04/27/05	16:24	STL	S	CONC
29	G8WTV	0427IE2	6010C	04/27/05	16:29	STL	S	CONC
30	G8WTW	0427IE2	6010C	04/27/05	16:33	STL	S	CONC
31	G8WTX	0427IE2	6010C	04/27/05	16:37	STL	S	CONC
32	G8WT0	0427IE2	6010C	04/27/05	16:42	STL	S	CONC
33	G8WT1	0427IE2	6010C	04/27/05	16:46	STL	S	CONC
34	CCV	0427IE2	6010C	04/27/05	16:50	STL	Q	CONC
35	CCB	0427IE2	6010C	04/27/05	16:55	STL	Q	CONC
36	G817C	0427IE2	6010C	04/27/05	16:59	STL	S	CONC
37	G817CS	0427IE2	6010C	04/27/05	17:03	STL	S	CONC
38	G817CD	0427IE2	6010C	04/27/05	17:08	STL	S	CONC
39	G817D	0427IE2	6010C	04/27/05	17:12	STL	S	CONC
40	G817E	0427IE2	6010C	04/27/05	17:17	STL	S	CONC
41	G817F	0427IE2	6010C	04/27/05	17:21	STL	S	CONC
42	G817G	0427IE2	6010C	04/27/05	17:25	STL	S	CONC
43	CCV	0427IE2	6010C	04/27/05	17:30	STL	Q	CONC
44	CCB	0427IE2	6010C	04/27/05	17:34	STL	Q	CONC
45	CCV	0427IE2	6010C	04/28/05	08:10	STL	Q	CONC
46	CCB	0427IE2	6010C	04/28/05	08:15	STL	Q	CONC
47	G8WP7 5	0427IE2	6010C	04/28/05	08:19	STL	S	CONC
48	G8WP7S 5	0427IE2	6010C	04/28/05	08:23	STL	S	CONC
49	G8WP7D 5	0427IE2	6010C	04/28/05	08:28	STL	S	CONC
50	G8WP7V 25	0427IE2	6010C	04/28/05	08:32	STL	S	CONC
51	G8WQL 5	0427IE2	6010C	04/28/05	08:37	STL	S	CONC
52	G8WQN 5	0427IE2	6010C	04/28/05	08:41	STL	S	CONC
53	G8WQT 5	0427IE2	6010C	04/28/05	08:45	STL	S	CONC

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#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	G8WTA 10	0427IE2	6010C	04/28/05	08:50	STL	S	CONC
55	G8WTG 5	0427IE2	6010C	04/28/05	08:54	STL	S	CONC
56	G8WTR 5	0427IE2	6010C	04/28/05	08:58	STL	S	CONC
57	CCV	0427IE2	6010C	04/28/05	09:03	STL	Q	CONC
58	CCB	0427IE2	6010C	04/28/05	09:07	STL	Q	CONC
59	G8WTV 25	0427IE2	6010C	04/28/05	09:11	STL	S	CONC
60	G8WTW 25	0427IE2	6010C	04/28/05	09:16	STL	S	CONC
61	G8WT0 5	0427IE2	6010C	04/28/05	09:20	STL	S	CONC
62	G8WT1 5	0427IE2	6010C	04/28/05	09:24	STL	S	CONC
63	G817C 5	0427IE2	6010C	04/28/05	09:29	STL	S	CONC
64	G817CS 5	0427IE2	6010C	04/28/05	09:33	STL	S	CONC
65	G817CD 5	0427IE2	6010C	04/28/05	09:38	STL	S	CONC
66	G817D 5	0427IE2	6010C	04/28/05	09:42	STL	S	CONC
67	G817E 5	0427IE2	6010C	04/28/05	09:46	STL	S	CONC
68	G817F 25	0427IE2	6010C	04/28/05	09:51	STL	S	CONC
69	CCV	0427IE2	6010C	04/28/05	09:55	STL	Q	CONC
70	CCB	0427IE2	6010C	04/28/05	09:59	STL	Q	CONC
71	G817G 5	0427IE2	6010C	04/28/05	10:04	STL	S	CONC
72	CCV	0427IE2	6010C	04/28/05	10:08	STL	Q	CONC
73	CCB	0427IE2	6010C	04/28/05	10:12	STL	Q	CONC

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#	Sample Name	Al	Fe	K	Mg	Na	Zn
1	CALBLK	.1516	.02769	-.06158	.2105	.1419	.0006
2	CAL1						3.45879
3	CAL2	12.8777	28.1936	1.21461	4.87699	15.5622	
4	CAL3						
5	ICV	41.152	42.179	40.141	20.506	40.106	3.9893
6	ICB	.00517	.00124	-.54163	.00102	.00068	-.00029
7	LLC	.23544	.11022	4.7913	5.1897	5.0352	.02012
8	ICSA	488.35	179.71	-.88081	479.64	-.05768	-.00649
9	ICSAB	491.63	181.25	20.967	480.38	19.928	.89845
10	CCV	40.813	42.558	40.554	20.212	39.720	3.9856
11	CCB	.01105	.00259	1.1071	-.00357	.00326	-.00146
12	G84N2B	H.06628	.02860	-.35322	H.31207	.04221	.00175
13	G84N2C	52.730	103.82	19.336	20.205	4.5648	1.7463
14	G8WP7	143.58	~~H525.00~~	37.870	28.165	41.374	~~H56.076~~
15	G8WP7S	165.52	353.89	63.938	62.873	76.347	40.439
16	G8WP7D	107.60	422.22	52.163	46.891	60.226	23.811
17	G8WP7V 5X	30.742	128.92	6.9511	6.2800	8.6295	12.744
18	G8WQL	93.467	H866.72	17.849	19.853	14.322	~~21.189~~
19	G8WQN	114.46	~~H509.14~~	28.798	21.360	27.819	32.814
20	G8WQR	111.02	347.42	20.711	22.238	16.564	36.933
21	G8WQT	100.02	336.35	22.036	23.732	20.139	~~H79.262~~
22	CCV	40.984	42.336	40.604	20.299	39.780	3.9742
23	CCB	.00875	.00649	-.30616	-.00697	.00002	.00205
24	G8WR6	95.993	451.47	17.579	455.64	11.970	38.626
25	G8WTA	133.24	377.80	29.168	23.191	30.605	~~H240.20~~
26	G8WTE	136.77	438.18	32.879	25.517	29.799	29.648
27	G8WTG	132.12	~~H938.72~~	26.706	23.595	39.599	31.388
28	G8WTR	100.10	H746.84	19.297	22.121	24.837	~~H65.046~~
29	G8WTV	~~k38.826~~	S5681.4	~~k7.9167~~	~~k9.2491~~	k7.8049	k6.7138
30	G8WTW	~~k31.610~~	S5681.4	6.1697	~~k7.8232~~	~~k4.0099~~	~~k5.4851~~
31	G8WTX	82.926	397.01	19.143	15.487	14.523	34.608
32	G8WT0	104.37	~~H590.51~~	22.053	24.057	22.725	32.814
33	G8WT1	175.51	~~H552.76~~	38.208	32.049	45.500	46.901
34	CCV	40.779	42.060	40.470	20.083	39.722	3.9088
35	CCB	.02265	.01086	-.85869	.00986	.00588	.00610
36	G817C	136.57	~~H693.57~~	30.147	26.304	33.215	~~H58.136~~
37	G817CS	371.17	H594.09	61.005	53.358	92.897	~~34.290~~
38	G817CD	173.27	H697.71	54.816	47.020	56.326	~~H222.74~~
39	G817D	154.97	H515.00	36.108	36.881	39.865	49.449
40	G817E	69.451	H766.68	10.035	11.081	8.4218	14.664
41	G817F	~~k90.730~~	S5681.4	~~k11.085~~	~~k16.492~~	9.6011	~~k10.897~~
42	G817G	113.96	~~H661.93~~	17.127	22.726	26.594	17.269
43	CCV	40.706	42.109	39.290	20.060	39.235	3.9117
44	CCB	.03701	.02047	.22059	.03152	.01626	.00641
45	CCV	41.194	43.286	40.320	20.577	40.778	4.0297
46	CCB	-.00593	.00131	1.0490	.01752	-.00318	.00434
47	G8WP7 5	29.438	125.81	7.8095	6.0381	8.3987	12.573
48	G8WP7S 5	34.273	82.932	13.343	13.444	15.828	8.9664
49	G8WP7D 5	21.558	97.275	10.922	9.8570	11.980	5.1120
50	G8WP7V 25	5.8660	25.923	1.3044	1.2375	1.6485	2.5169
51	G8WQL 5	18.761	216.17	4.3510	4.1571	2.8436	4.5400
52	G8WQN 5	23.135	118.10	6.4633	4.5099	5.5907	7.0353
53	G8WQT 5	20.579	79.139	4.8867	5.1037	3.9714	18.653

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#	Sample Name	Al	Fe	K	Mg	Na	Zn
54	G8WTA 10	13.845	44.566	2.6089	2.5165	3.1031	32.456
55	G8WTG 5	27.459	247.32	6.2237	5.1578	8.1872	7.0676
56	G8WTR 5	20.507	187.56	4.4931	4.7690	4.9772	14.800
57	CCV	40.958	42.898	40.189	20.504	40.093	4.0037
58	CCB	-.01516	.00165	-.48729	-.02449	-.02394	.00145
59	G8WTV 25	1.6224	152.01	1.5288	.38156	.29375	.33570
60	G8WTW 25	1.3198	165.83	-.03332	.31082	.12389	.28078
61	G8WT0 5	20.880	140.56	5.9135	5.2450	4.4513	7.1698
62	G8WT1 5	27.721	170.48	6.3962	5.5942	6.6393	12.972
63	G817C 5	36.434	131.29	8.4920	6.9618	9.3934	10.285
64	G817CS 5	77.332	144.81	12.569	11.502	19.302	7.5933
65	G817CD 5	35.605	172.32	11.485	10.044	11.391	H58.292
66	G817D 5	31.430	119.84	7.2827	7.8181	7.9979	10.757
67	G817E 5	13.840	184.33	2.5784	2.3312	1.6504	3.1108
68	G817F 25	3.8084	97.359	1.2948	.71191	.37223	.51414
69	CCV	41.017	43.053	40.666	20.565	39.934	3.9980
70	CCB	-.00226	.00455	.49489	.00700	-.00252	.00000
71	G817G 5	23.414	162.92	3.9425	5.2538	5.3378	3.8027
72	CCV	41.378	43.493	41.204	20.693	40.627	4.0169
73	CCB	-.00551	.00270	-.85354	-.02018	-.02199	.00144

#	Sample Name	Ca3179
1	CALBLK	.04389
2	CAL1	
3	CAL2	11.2307
4	CAL3	
5	ICV	20.717
6	ICB	.00138
7	LLC	5.2543
8	ICSA	447.82
9	ICSAB	449.25
10	CCV	20.437
11	CCB	.00214
12	G84N2B	.09415
13	G84N2C	35.065
14	G8WP7	337.60
15	G8WP7S	309.71
16	G8WP7D	471.65
17	G8WP7V 5X	77.045
18	G8WQL	189.73
19	G8WQN	205.37
20	G8WQR	189.39
21	G8WQT	227.84
22	CCV	20.502
23	CCB	.00026
24	G8WR6	242.67
25	G8WTA	237.28
26	G8WTE	261.93
27	G8WTG	227.08
28	G8WTR	247.97
29	G8WTV	~~460.347~~
30	G8WTW	~~444.645~~

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#	Sample Name	Ca3179
31	G8WTX	168.52
32	G8WT0	479.14
33	G8WT1	264.52
34	CCV	20.250
35	CCB	.00598
36	G817C	231.49
37	G817CS	291.56
38	G817CD	216.23
39	G817D	294.41
40	G817E	138.70
41	G817F	129.11
42	G817G	~~H858.66~~
43	CCV	20.243
44	CCB	.01097
45	CCV	20.457
46	CCB	.00738
47	G8WP7 5	74.004
48	G8WP7S 5	68.992
49	G8WP7D 5	102.09
50	G8WP7V 25	15.155
51	G8WQL 5	41.471
52	G8WQN 5	44.350
53	G8WQT 5	50.654
54	G8WTA 10	26.682
55	G8WTG 5	51.732
56	G8WTR 5	55.059
57	CCV	20.577
58	CCB	-.00339
59	G8WTV 25	3.0088
60	G8WTW 25	2.2639
61	G8WT0 5	105.49
62	G8WT1 5	50.998
63	G817C 5	59.290
64	G817CS 5	65.624
65	G817CD 5	48.395
66	G817D 5	64.116
67	G817E 5	30.148
68	G817F 25	6.2442
69	CCV	20.821
70	CCB	.00660
71	G817G 5	199.42
72	CCV	20.847
73	CCB	-.00338

JJ 4/28/05

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Standardization Rpt.

STD 042605

04/27/05 02:05:17 PM

Cover Cover

Method: 6010C Standard: CALBLK
Run Time: 04/27/05 14:00:59

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Avge	-.00170	.15160	.00105	.01720	.00000	.00910	.06570
SDev	.00014	.00198	.00049	.00057	.00028	.00014	.00014
%RSD	8.3189	1.3060	47.140	3.2889	.00000	1.5541	.21526
#1	-.00180	.15020	.00140	.01680	-.00020	.00900	.06580
#2	-.00160	.15300	.00070	.01760	.00020	.00920	.06560

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Avge	.04390	.00010	.00110	.00590	.00280	.02770	-.06158
SDev	.00127	.00014	.00099	.00014	.00057	.00042	.00521
%RSD	2.8993	141.42	89.995	2.3970	20.203	1.5316	8.4651
#1	.04300	.00000	.00040	.00600	.00320	.02740	-.06527
#2	.04480	.00020	.00180	.00580	.00240	.02800	-.05790

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Avge	.78740	.21050	.01300	-.00010	.14190	.00010	-.00070
SDev	.01216	.00438	.00028	.00014	.00438	.00240	.00099
%RSD	1.5446	2.0827	2.1757	141.42	3.0895	2404.2	141.42
#1	.77880	.20740	.01280	.00000	.13880	-.00160	.00000
#2	.79600	.21360	.01320	-.00020	.14500	.00180	-.00140

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Avge	.00000	.00010	-.00130	.00270	-.00040	.01500	-.00120
SDev	.00000	.00042	.00071	.00212	.00028	.00028	.00141
%RSD	.00000	424.26	54.393	78.567	70.711	1.8856	117.85
#1	.00000	.00040	-.00080	.00120	-.00060	.01480	-.00020
#2	.00000	-.00020	-.00180	.00420	-.00020	.01520	-.00220

Elem	Tl	U	V	Zn
Avge	.00100	.00440	.04940	.00060
SDev	.00057	.00255	.00113	.00000
%RSD	56.569	57.854	2.2902	.00000
#1	.00060	.00620	.04860	.00060
#2	.00140	.00260	.05020	.00060

Method: 6010C Standard: CAL1
Run Time: 04/27/05 14:05:21

Elem	Ag	As1936	B	Ba	Be	Bi	Cd2288
Avge	1.2527	.43680	2.8507	9.9142	16.000	1.1970	8.1343
SDev	.0069	.00509	.0191	.0591	.116	.0020	.0318
%RSD	.55317	1.1656	.66973	.59626	.72655	.16540	.39118
#1	1.2478	.43320	2.8372	9.8724	15.918	1.1984	8.1118
#2	1.2576	.44040	2.8642	9.9560	16.082	1.1956	8.1568

Elem	Co	Cr	Cu	Li	Mn	Mo	Ni
Avge	4.7312	17.357	4.7401	46.394	7.8412	.49780	8.2566
SDev	.0127	.049	.0086	.297	.0554	.00255	.0023
%RSD	.26902	.28028	.18199	.63984	.70700	.51137	.02740
#1	4.7222	17.323	4.7340	46.604	7.8020	.49600	8.2582
#2	4.7402	17.391	4.7462	46.184	7.8804	.49960	8.2550

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Tl
Avge	.63410	.13740	.35100	3.0098	.04970	17.296	.46950
SDev	.00495	.00057	.00424	.0014	.00071	.106	.00665
%RSD	.78060	.41171	1.2087	.04698	1.4228	.61488	1.4157
#1	.63060	.13700	.34800	3.0088	.04920	17.221	.46480
#2	.63760	.13780	.35400	3.0108	.05020	17.371	.47420

Elem	U	V	Zn
Avge	.33100	4.8364	3.4588

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SDev	.00141	.0130	.0260
%RSD	.42725	.26902	.75233
#1	.33000	4.8272	3.4404
#2	.33200	4.8456	3.4772

Method: 6010C Standard: CAL2
Run Time: 04/27/05 14:09:33

Elem	Al	Ca3179	Fe	K	Mg	Na	P_1782
Avge	12.878	11.231	28.194	1.2146	4.8770	15.562	.13360
SDev	.073	.047	.236	.0126	.0263	.139	.00113
%RSD	.56776	.41429	.83869	1.0354	.53936	.89057	.84683
#1	12.826	11.198	28.026	1.2057	4.8584	15.464	.13440
#2	12.929	11.264	28.361	1.2235	4.8956	15.660	.13280

Method: 6010C Standard: CAL3
Run Time: 04/27/05 14:13:13

Elem	Th
Avge	2.3861
SDev	.0194
%RSD	.81198
#1	2.3724
#2	2.3998

Method: 6010C Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Ag	328.068	CAL1	CALBLK	1.60292	.002725	04/27/05 02:13:13
Al	308.215	CAL2	CALBLK	7.85787	-1.19125	04/27/05 02:13:13
As1936	193.696	CAL1	CALBLK	23.0137	-.024164	04/27/05 02:13:13
B	249.678	CAL1	CALBLK	3.53047	-.060724	04/27/05 02:13:13
Ba	455.403	CAL1	CALBLK	1.00875	.000000	04/27/05 02:13:13
Be	313.242	CAL1	CALBLK	.625394	-.005691	04/27/05 02:13:13
Bi	223.000	CAL1	CALBLK	8.86721	-.582576	04/27/05 02:13:13
Ca3179	317.933	CAL2	CALBLK	4.46955	-.196213	04/27/05 02:13:13
Cd2288	228.802	CAL1	CALBLK	1.23772	-.000124	04/27/05 02:13:13
Co	228.612	CAL1	CALBLK	2.11548	-.002327	04/27/05 02:13:13
Cr	267.716	CAL1	CALBLK	.574734	-.003391	04/27/05 02:13:13
Cu	324.754	CAL1	CALBLK	2.11427	-.005920	04/27/05 02:13:13
Fe	259.940	CAL2	CALBLK	3.55094	-.098361	04/27/05 02:13:13
K	766.490	CAL2	CALBLK	78.2822	4.82083	04/27/05 02:13:13
Li	670.789	CAL1	CALBLK	.219289	-.172669	04/27/05 02:13:13
Mg	383.273	CAL2	CALBLK	10.7585	-2.26466	04/27/05 02:13:13
Mn	257.610	CAL1	CALBLK	1.27783	-.016612	04/27/05 02:13:13
Mo	202.030	CAL1	CALBLK	20.0844	.002008	04/27/05 02:13:13
Na	588.995	CAL2	CALBLK	6.48496	-.920215	04/27/05 02:13:13
Ni	231.604	CAL1	CALBLK	1.21131	-.000121	04/27/05 02:13:13
P_1782	178.287	CAL2	CALBLK	36.1198	.025284	04/27/05 02:13:13
Pb	220.353	CAL1	CALBLK	15.7963	.000000	04/27/05 02:13:13
Sb	206.838	CAL1	CALBLK	72.8557	-.007286	04/27/05 02:13:13
Se1960	196.026	CAL1	CALBLK	28.4183	.036944	04/27/05 02:13:13
Si	251.616	CAL1	CALBLK	3.32255	-.008971	04/27/05 02:13:13

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Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Sn	189.989	CAL1	CALBLK	199.667	.079867	04/27/05 02:13:13
Sr	421.552	CAL1	CALBLK	.578711	-.008681	04/27/05 02:13:13
Th	283.730	CAL3	CALBLK	4.18883	.005027	04/27/05 02:13:13
Tl	190.801	CAL1	CALBLK	21.3550	-.021355	04/27/05 02:13:13
U	409.014	CAL1	CALBLK	30.6185	-.134721	04/27/05 02:13:13
V	292.402	CAL1	CALBLK	2.09235	-.103362	04/27/05 02:13:13
Zn	213.856	CAL1	CALBLK	2.90622	-.001744	04/27/05 02:13:13

Method: 6010C

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ag	328.068	CALBLK	.000000	-.000000	.000000
		CAL1	2.00000	2.01070	-.010700
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Al	308.215	CALBLK	.000000	-.000000	.000000
		CAL2	100.000	100.000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
As1936	193.696	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0282	-.028200
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
B	249.678	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0036	-.003600
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ba	455.403	CALBLK	.000000	.000000	.000000
		CAL1	10.0000	10.0009	-.000900
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Be	313.242	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0006	-.000620
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Bi	223.000	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0315	-.031480
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ca3179	317.933	CALBLK	.000000	-.000000	.000000
		CAL2	50.0000	50.0000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cd2288	228.802	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0679	-.067890

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Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Co	228.612	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0064	-.006440
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cr	267.716	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.97227	.027730
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cu	324.754	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0159	-.015940
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Fe	259.940	CALBLK	.000000	-.000000	.000000
		CAL2	100.000	100.015	-.015495
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
K	766.490	CALBLK	.000000	-.000000	.000000
		CAL2	100.000	99.9037	.096298
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Li	670.789	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0010	-.000980
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mg	383.273	CALBLK	.000000	-.000000	.000000
		CAL2	50.0000	50.2045	-.204498
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mn	257.610	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0031	-.003100
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mo	202.030	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Na	588.995	CALBLK	.000000	.000000	-.000000
		CAL2	100.000	100.000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ni	231.604	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0012	-.001200
			Known	Measured	Residual

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Element	Wavelength	Standard	Concentration	Concentration	Concentration
P_1782	178.287	CALBLK	.000000	.000000	-.000000
		CAL2	5.00000	4.85089	.149110
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Pb	220.353	CALBLK	.000000	.000000	.000000
		CAL1	10.0000	10.0164	-.016420
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sb	206.838	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0031	-.003090
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Se1960	196.026	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0118	-.011770
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Si	251.616	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	9.99124	.008760
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sn	189.989	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0033	-.003300
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sr	421.552	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0007	-.000700
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Th	283.730	CALBLK	.000000	-.000000	.000000
		CAL3	10.0000	10.0000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Tl	190.801	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0048	-.004800
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
U	409.014	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
V	292.402	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0161	-.016100
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Zn	213.856	CALBLK	.000000	.000000	-.000000

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	CAL1	10.0000	10.0503	-.050300

Method: 6010C Sample Name: ICV Operator: STL
Run Time: 04/27/05 14:16:32
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.81829	41.152	4.2139	4.0738	4.1300	3.9658	4.2757
SDev	.00079	.058	.0027	.0080	.0030	.0035	.0193
%RSD	.09701	.14065	.06392	.19691	.07289	.08901	.45137
#1	Q.81773	41.193	4.2158	4.0681	4.1279	3.9682	4.2621
#2	Q.81885	41.111	4.2120	4.0795	4.1322	3.9633	4.2894
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	40.000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.717	3.9752	3.9349	3.9475	3.9609	42.179	40.141
SDev	.029	.0089	.0009	.0004	.0081	.015	1.399
%RSD	.14061	.22483	.02326	.00904	.20565	.03632	3.4856
#1	20.696	3.9815	3.9342	3.9478	3.9667	42.168	41.131
#2	20.738	3.9689	3.9355	3.9473	3.9552	42.190	39.152
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.000	4.0000	4.0000	4.0000	4.0000	40.000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.0280	20.506	3.9571	4.0248	40.106	3.9095	3.9716
SDev	.0345	.006	.0011	.0057	.243	.0229	.1277
%RSD	.85735	.03073	.02832	.14112	.60583	.58680	3.2143
#1	4.0524	20.511	3.9563	4.0208	40.278	3.9257	4.0618
#2	4.0036	20.502	3.9579	4.0289	39.934	3.8932	3.8813
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	20.000	4.0000	4.0000	40.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9341	4.0737	3.8097	4.1387	4.1111	3.9599	3.7747
SDev	.0020	.0103	.0482	.0057	.2258	.0021	.0099
%RSD	.04989	.25190	1.2649	.13789	5.4935	.05396	.26233
#1	3.9355	4.0809	3.7757	4.1428	4.2708	3.9584	3.7817
#2	3.9328	4.0664	3.8438	4.1347	3.9514	3.9615	3.7677
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass

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Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	3.9247	4.0193	3.9649	3.9893
SDev	.0634	.1255	.0039	.0129
%RSD	1.6144	3.1232	.09884	.32225
#1	3.9695	4.1080	3.9676	3.9802
#2	3.8799	3.9305	3.9621	3.9984
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: ICB Operator: STL
Run Time: 04/27/05 14:20:54
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00296	.00518	-.03426	.00851	-.00009	.00007	-.00768
SDev	.00313	.01126	.03754	.00001	.00042	.00000	.00746
%RSD	105.82	217.52	109.57	.13386	465.41	3.9742	97.220
#1	-.00075	-.00278	-.06081	.00850	.00021	.00007	-.00240
#2	-.00518	.01314	-.00772	.00851	-.00039	.00007	-.01295
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.01000	.05000	.20000	.02500	.20000	.00500	.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00139	.00063	-.00084	-.00124	-.00069	.00124	-.54163
SDev	.00719	.00076	.00089	.00053	.00067	.00008	.44225
%RSD	517.41	119.39	106.22	42.677	97.930	6.3020	81.651
#1	-.00369	.00010	-.00021	-.00161	-.00116	.00119	-.22892
#2	.00647	.00117	-.00147	-.00086	-.00021	.00130	-.85435
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass

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Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.25000	.00500	.05000	.01000	.02500	.05000	2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00091	.00102	.00003	.00201	.00069	.00146	.03251
SDev	.00186	.02328	.00001	.00000	.01102	.00119	.07150
%RSD	204.51	2276.2	45.336	.00000	1601.6	81.541	219.95
#1	-.00223	-.01544	.00002	.00201	-.00711	.00231	-.01805
#2	.00041	.01748	.00004	.00201	.00848	.00062	.08307
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.01000	.25000	.01500	.04000	.25000	.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01724	-.03640	-.06526	.00457	.05994	-.00011	-.00521
SDev	.02005	.04122	.01601	.00145	.14117	.00000	.00206
%RSD	116.31	113.24	24.528	31.765	235.53	2.7716	39.419
#1	-.00306	Q-.06555	-.05394	.00560	Q.15976	-.00011	-.00376
#2	-.03142	-.00725	-.07658	.00354	-.03989	-.00011	-.00667
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.10000	.06000	.20000	.50000	.10000	.05000	.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.06402	-.09183	.00100	-.00030
SDev	.03018	.04329	.00126	.00040
%RSD	47.132	47.143	125.96	135.87
#1	-.04269	-.06122	.00011	-.00001
#2	-.08536	-.12244	.00189	-.00058
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000
Range	2.0000	.50000	.05000	.02000

STL ST LOUIS

Method: 6010C Sample Name: LLC Operator: STL
Run Time: 04/27/05 14:25:15
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01023	.23544	.17500	.20629	.20602	.00528	.21784
SDev	.00224	.00681	.01783	.00002	.00029	.00000	.00020
%RSD	21.901	2.8931	10.190	.00861	.14011	.03609	.09431
#1	.00864	.23063	.16239	.20630	.20622	.00528	.21798
#2	.01181	Q.24026	.18761	.20627	.20581	.00528	.21769
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.01000	.20000	.20000	.20000	.20000	.00500	.20000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.2543	Q.00600	.04769	Q.00688	.02221	.11023	4.7913
SDev	.0156	.00084	.00150	.00041	.00084	.00094	.7229
%RSD	.29763	13.944	3.1396	5.9876	3.7967	.85137	15.088
#1	5.2432	Q.00659	.04875	Q.00659	.02161	.10957	4.2802
#2	5.2653	.00541	.04663	Q.00717	.02281	.11089	5.3025
Errors	QC Pass	QC Fail	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass
Value	5.0000	.00500	.05000	.01000	.02500	.10000	5.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05108	5.1897	.01582	.04418	5.0352	.04225	.32311
SDev	.00015	.0300	.00017	.01420	.0092	.00000	.02555
%RSD	.29789	.57856	1.0749	32.145	.18242	.00838	7.9083
#1	.05098	5.1684	.01570	.03414	5.0417	.04225	.34118
#2	.05119	5.2109	.01594	Q.05422	5.0287	.04225	.30504
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.05000	5.0000	.01500	.04000	5.0000	.04000	.30000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.07710	Q.03613	.18893	.50459	Q.21897	.04939	.48052
SDev	.03356	.00001	.07634	.00519	.02823	.00000	.00193
%RSD	43.535	.02976	40.407	1.0290	12.890	.00429	.40114
#1	.10083	Q.03613	Q.13495	.50091	Q.19901	.04939	.47915
#2	Q.05337	Q.03612	Q.24291	.50826	Q.23892	.04939	.48188
Errors	QC Fail	QC Fail	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value	.10000	.06000	.20000	.50000	.10000	.05000	.50000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Tl	U	V	Zn

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Units	ppm	ppm	ppm	ppm
Avge	.20440	.41059	.05194	.02012
SDev	.02113	.03030	.00083	.00000
%RSD	10.340	7.3794	1.6002	.00010
#1	.18945	Q.38917	.05135	.02012
#2	.21934	.43202	.05252	.02012
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	.20000	.50000	.05000	.02000
Range	20.000	20.000	20.000	20.000

Method: 6010C Sample Name: ICSA Operator: STL
Run Time: 04/27/05 14:29:36
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01032	488.35	.02753	.01164	.00215	.00088	.16391
SDev	.00397	5.25	.04346	.00607	.00018	.00009	.00641
%RSD	38.445	1.0742	157.87	52.191	8.5096	10.126	3.9104
#1	-.01313	484.64	-.00320	.00734	.00202	.00082	.16844
#2	-.00751	492.06	.05826	.01594	.00228	.00095	.15938
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	500.00	.00000	.00000	.00000	.00000	.00000
Range	.02000	100.00	.20000	.02500	.20000	.01000	.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	447.82	.00159	.00298	.00776	-.00040	179.71	-.88081
SDev	9.16	.00005	.00006	.00165	.00002	2.03	.47568
%RSD	2.0444	2.9985	2.1073	21.241	6.1214	1.1290	54.005
#1	441.34	.00156	.00302	.00893	-.00038	178.28	-1.2172
#2	454.29	.00162	.00293	.00660	-.00042	181.15	-.54445
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.00	.00000	.00000	.00000	.00000	200.00	.00000
Range	100.00	.01000	.05000	.02000	.02500	40.000	2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782

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Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00201	479.64	.00796	.01128	-.05769	-.01089	.16584
SDev	.00438	5.30	.00059	.00274	.02385	.00565	.03017
%RSD	217.57	1.1060	7.3517	24.303	41.343	51.917	18.195
#1	-.00108	475.89	.00754	.00934	-.07455	-.00689	.18717
#2	.00511	483.39	.00837	.01322	-.04082	-.01488	.14450
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	500.00	.00000	.00000	.00000	.00000	.00000
Range	.01000	100.00	.01500	.04000	.25000	.04000	.25000

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02493	.01499	Q-.35583	-.02057	Q.17463	.00429	.04794
SDev	.03304	.04181	.07765	.00399	.16960	.00033	.00051
%RSD	132.55	278.83	21.821	19.382	97.115	7.6525	1.0546
#1	-.04829	-.01457	Q-.30093	-.02339	.05471	.00406	.04829
#2	-.00156	.04456	Q-.41073	-.01775	Q.29456	.00452	.04758
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Fail	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.10000	.06000	.20000	.50000	.10000	.05000	.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	Q-.20366	-.11544	-.00255	-.00650
SDev	.22424	.01380	.00277	.00049
%RSD	110.11	11.957	108.90	7.5945
#1	Q-.36222	-.10568	-.00451	-.00615
#2	-.04510	-.12520	-.00059	-.00685
Errors	QC Fail	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000
Range	.20000	.50000	.05000	.01000

Method: 6010C Sample Name: ICSAB Operator: STL
Run Time: 04/27/05 14:33:59
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi

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Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.94274	491.63	Q.71270	.96459	.48489	.44966	1.0850
SDev	.00760	1.44	.05605	.00734	.00315	.00283	.0163
%RSD	.80644	.29264	7.8647	.76078	.64985	.63023	1.5054
#1	.93737	490.62	Q.75234	.95941	.48266	.44765	1.0734
#2	.94812	492.65	Q.67307	.96978	.48712	.45166	1.0965
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	500.00	1.0000	1.0000	.50000	.50000	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	449.25	.90764	.41114	.44298	.47629	181.25	20.967
SDev	1.22	.00472	.00065	.00029	.00236	1.05	.809
%RSD	.27204	.52051	.15740	.06564	.49529	.57707	3.8608
#1	448.38	.90430	.41160	.44319	.47462	180.51	21.539
#2	450.11	.91098	.41069	.44277	.47796	181.99	20.394
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.00	1.0000	.50000	.50000	.50000	200.00	20.000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0656	480.38	.44156	.89491	19.928	Q.79092	Q.66615
SDev	.0007	.98	.00309	.00279	.049	.03203	.12132
%RSD	.06167	.20497	.69883	.31167	.24378	4.0494	18.212
#1	1.0661	479.68	.43938	.89294	19.962	.81357	Q.75194
#2	1.0651	481.08	.44374	.89689	19.893	Q.76828	.58036
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Fail
Value	1.0000	500.00	.50000	1.0000	20.000	1.0000	.50000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.94814	.83934	Q.65170	.98107	.91223	.92582	.93862
SDev	.01753	.03041	.04934	.00911	.14130	.00614	.01005
%RSD	1.8491	3.6231	7.5708	.92873	15.490	.66343	1.0707
#1	.96053	.86084	Q.68659	.98752	.81231	.92147	.94572
#2	.93574	.81784	Q.61682	.97463	1.0121	.93016	.93151
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	Q.79563	.80361	.44322	.89845
SDev	.12092	.05679	.00273	.00298
%RSD	15.198	7.0668	.61507	.33136

#1	Q.71013	.84377	.44130	.89635
#2	.88114	Q.76346	.44515	.90056
Errors	QC Fail	QC Pass	QC Pass	QC Pass
Value	1.0000	1.0000	.50000	1.0000
Range	20.000	20.000	20.000	20.000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 04/27/05 14:40:03
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.81846	40.813	4.2988	4.0792	4.1652	3.9798	4.2234
SDev	.00045	.130	.0372	.0110	.0113	.0064	.0117
%RSD	.05518	.31883	.86419	.27059	.27097	.16011	.27778
#1	Q.81814	40.721	4.3251	4.0713	4.1731	3.9843	4.2151
#2	Q.81878	40.905	4.2725	4.0870	4.1572	3.9753	4.2317
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	40.000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.437	3.9303	3.9067	3.9226	3.9279	42.558	40.554
SDev	.094	.0168	.0168	.0125	.0354	.104	.589
%RSD	.45882	.42730	.42907	.31965	.90062	.24479	1.4519
#1	20.371	3.9184	3.8948	3.9137	3.9029	42.631	40.138
#2	20.504	3.9421	3.9185	3.9314	3.9529	42.484	40.971
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.000	4.0000	4.0000	4.0000	4.0000	40.000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9837	20.212	3.9703	4.0349	39.720	3.8952	4.0122
SDev	.0044	.099	.0029	.0256	.024	.0319	.0105
%RSD	.10941	.49068	.07298	.63343	.06013	.81789	.26149

#1	3.9806	20.142	3.9724	4.0529	39.737	3.8726	4.0196
#2	3.9867	20.282	3.9683	4.0168	39.703	3.9177	4.0048
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	20.000	4.0000	4.0000	40.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.8856	3.8917	3.8417	4.1110	4.2709	3.9895	3.7292
SDev	.0047	.0411	.0958	.0286	.0564	.0107	.0361
%RSD	.12061	1.0574	2.4935	.69463	1.3207	.26884	.96692
#1	3.8889	3.8626	3.9094	4.0908	4.2310	3.9971	3.7037
#2	3.8823	3.9208	3.7739	4.1312	4.3108	3.9819	3.7547
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	3.8734	4.0193	3.9304	3.9856
SDev	.1480	.0562	.0143	.0100
%RSD	3.8204	1.3972	.36489	.25134
#1	3.7687	3.9796	3.9202	3.9926
#2	3.9780	4.0590	3.9405	3.9785
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 04/27/05 14:44:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00343	.01106	-.03543	.00850	-.00020	.00013	.02149
SDev	.00028	.02448	.05843	.00001	.00058	.00009	.01886
%RSD	8.0922	221.35	164.92	.16453	292.40	71.252	87.757

#1	-.00362	-.00625	.00589	.00849	-.00061	.00006	.00816
#2	-.00323	.02836	-.07675	.00851	.00021	.00019	.03483
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.01000	.05000	.20000	.02500	.20000	.00500	.20000
Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00214	.00164	.00149	-.00077	.00115	.00260	1.1071
SDev	.00855	.00010	.00239	.00091	.00138	.00011	.3635
%RSD	398.85	6.2633	160.37	117.66	119.93	4.4016	32.836
#1	-.00390	.00156	.00318	-.00013	.00213	.00252	1.3641
#2	.00819	.00171	-.00020	-.00141	.00018	.00268	.85003
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.25000	.00500	.05000	.01000	.02500	.05000	2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00034	-.00357	.00028	-.00402	.00327	.00316	.00000
SDev	.00379	.04478	.00002	.00852	.02204	.00121	.03578
%RSD	1103.3	1253.0	6.6433	212.13	674.08	38.185	976600.
#1	-.00302	-.03524	.00026	.00201	-.01231	.00231	.02530
#2	.00234	.02809	.00029	-.01004	.01885	.00401	-.02530
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.01000	.25000	.01500	.04000	.25000	.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00644	-.02911	.03990	.00558	.05992	.00001	.00798
SDev	.00888	.03092	.03606	.00276	.08469	.00017	.00560
%RSD	137.95	106.21	90.382	49.403	141.34	3263.2	70.212
#1	.01271	-.05098	.06540	.00363	Q.11980	-.00011	.01194
#2	.00016	-.00725	.01440	.00753	.00003	.00012	.00402
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.10000	.06000	.20000	.50000	.10000	.05000	.50000
Elem	Tl	U	V	Zn			
Units	ppm	ppm	ppm	ppm			
Avge	-.04054	-.07352	.00073	-.00147			
SDev	.01513	.06058	.00159	.00206			
%RSD	37.335	82.396	218.27	140.29			
#1	-.05124	-.03068	-.00039	-.00001			
#2	-.02984	-.11635	.00185	-.00293			
Errors	QC Pass	QC Pass	QC Pass	QC Pass			
Value	.00000	.00000	.00000	.00000			

Range	2.0000	.50000	.05000	.02000

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Method: 6010C Sample Name: G84N2B Operator: STL
Run Time: 04/27/05 15:15:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00049	H.06628	-.02572	.02397	.00062	-.00005	-.03340
SDev	.00153	.00193	.03919	.00198	.00028	.00000	.01768
%RSD	312.65	2.9130	152.35	8.2706	45.665	4.9018	52.937
#1	-.00157	H.06492	.00199	.02257	.00042	-.00005	-.02090
#2	.00059	H.06765	-.05344	.02537	.00082	-.00006	-.04590
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.05000	.20000	.20000	.20000	.00500	.20000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09416	.00019	-.00104	-.00182	.00002	.02861	-.35323
SDev	.00021	.00013	.00061	.00109	.00024	.00057	.04448
%RSD	.22766	70.111	58.309	59.858	1095.6	1.9970	12.592
#1	.09431	.00010	-.00061	-.00260	-.00015	.02901	-.32178
#2	.09400	.00029	-.00147	-.00105	.00019	.02820	-.38468
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.00500	.05000	.01000	.02500	.05000	2.0000
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00492	H.31208	.00041	.00402	.04221	-.00313	.04687
SDev	.00015	.00044	.00019	.00284	.00002	.00428	.04086
%RSD	3.0657	.14228	46.786	70.735	.03882	136.54	87.190
#1	-.00502	H.31239	.00055	.00602	.04222	-.00616	.01797
#2	-.00481	H.31176	.00028	.00201	.04220	-.00011	.07576
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.01000	.25000	.01500	.04000	.25000	.04000	
Low	-.01000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02830	.00731	.00873	.15736	.07992	-.00016	-.00302
SDev	.02673	.02062	.03210	.00137	.00001	.00008	.00327
%RSD	94.454	282.09	367.61	.87186	.01334	48.127	108.27
#1	-.04720	.02189	-.01397	.15833	.07993	-.00022	-.00071
#2	-.00940	-.00727	.03143	.15638	.07991	-.00011	-.00533
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.10000	.06000	.20000	.50000	.10000	.05000	.50000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn

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Units	ppm	ppm	ppm	ppm
Avge	-.04470	-.14084	-.00274	.00176
SDev	.00300	.04330	.00006	.00080
%RSD	6.7040	30.742	2.2505	45.539
#1	-.04682	-.17145	-.00269	.00119
#2	-.04258	-.11022	-.00278	.00232
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	.20000	.50000	.05000	.01000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G84N2C Operator: STL
Run Time: 04/27/05 15:19:25
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.4055	52.730	2.5941	1.0040	2.7898	1.0138	.47297
SDev	.0145	.096	.0532	.0006	.0040	.0010	.01791
%RSD	1.0316	.18211	2.0503	.05844	.14286	.09569	3.7870
#1	1.3953	52.798	2.5564	1.0035	2.7926	1.0145	.46031
#2	1.4158	52.662	2.6317	1.0044	2.7869	1.0131	.48564
Errors	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass	NOCHECK
High	1.9100	89.800		1.4000	2.9700	1.1100	
Low	.68900	36.600		.54500	2.0700	.77500	

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	35.065	1.3563	.38171	.71879	1.5970	103.82	19.336
SDev	.012	.0038	.00150	.00144	.0019	.06	.596
%RSD	.03526	.27943	.39196	.20077	.11809	.05984	3.0829
#1	35.074	1.3536	.38066	.71981	1.5956	103.86	18.915
#2	35.056	1.3590	.38277	.71777	1.5983	103.77	19.758
Errors	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	40.100		.44700	.84400	1.7400	160.00	24.700
Low	26.300		.25800	.54600	1.2200	64.200	13.700

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782

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Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06406	20.205	4.4477	.92683	4.5648	1.5851	4.6846
SDev	.00152	.060	.0020	.01988	.0349	.0005	.0408
%RSD	2.3710	.29817	.04525	2.1449	.76398	.03213	.87081
#1	.06299	20.248	4.4462	.94088	4.5402	1.5855	4.6557
#2	.06514	20.163	4.4491	.91277	4.5895	1.5848	4.7134
Errors	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High		25.100	4.9000	1.0100	6.4300	1.7400	
Low		15.700	3.2600	.66700	2.4700	1.2000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.5788	.69054	.45655	12.576	.58778	.84655	-.03761
SDev	.0244	.02063	.02819	.085	.02821	.00065	.01391
%RSD	1.5445	2.9877	6.1746	.67290	4.7998	.07699	36.973
#1	1.5960	.70513	.43662	12.636	.60773	.84701	-.02778
#2	1.5615	.67595	.47648	12.516	.56783	.84609	-.04744
Errors	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Pass	LC Pass	NOCHECK
High	1.7000	1.3600			.86400	1.0100	
Low	1.1400	.06000			.35700	.67000	

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.85895	-.26603	.99009	1.7463
SDev	.02719	.04319	.00165	.0033
%RSD	3.1653	16.235	.16653	.18864
#1	.83973	-.23549	.99125	1.7440
#2	.87818	-.29657	.98892	1.7486
Errors	LC Pass	NOCHECK	LC Pass	LC Pass
High	1.0500		1.2200	1.9900
Low	.63500		.72800	1.3100

Method: 6010C Sample Name: G8WP7 Operator: STL
Run Time: 04/27/05 15:23:47
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi

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Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.10667	143.58	5.3313	.96931	8.6475	.00344	2.1401
SDev	.00047	.16	.0430	.00752	.0180	.00000	.0014
%RSD	.43989	.10923	.80743	.77549	.20779	.00183	.06709
#1	.10634	143.47	5.3618	.96399	8.6602	.00344	2.1391
#2	.10700	143.69	5.3009	.97462	8.6348	.00344	2.1411
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	337.60	.03050	.12567	.81151	13.801	H525.00	37.870
SDev	1.17	.00154	.00077	.00234	.057	1.55	.713
%RSD	.34600	5.0375	.61602	.28860	.41134	.29547	1.8821
#1	336.77	.02941	.12512	.81316	13.761	H523.90	37.366
#2	338.42	.03159	.12622	.80985	13.841	H526.10	38.374
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08667	28.165	11.282	.12692	41.374	1.4231	54.015
SDev	.00028	.058	.029	.00860	.019	.0000	.003
%RSD	.31860	.20457	.25553	6.7738	.04655	.00000	.00546
#1	.08648	28.124	11.262	.13300	41.360	1.4231	54.013
#2	.08687	28.205	11.303	.12084	41.387	1.4231	54.017
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	24.264	.40345	L-1.7658	23.986	5.4346	.94507	-.04744
SDev	.190	.00087	.1593	.126	.1693	.00205	.00066
%RSD	.78171	.21608	9.0221	.52667	3.1151	.21650	1.3938
#1	24.130	.40283	L-1.8784	23.896	5.5543	.94652	-.04697
#2	24.398	.40406	L-1.6531	24.075	5.3149	.94363	-.04791
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.15918	-.00052	.12761	H56.076
SDev	.13899	.00085	.00022	.293
%RSD	87.317	163.70	.16925	.52315

#1	L-.25746	.00008	.12746	H55.868
#2	-.06090	-.00113	.12776	H56.283

Errors	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WP7S Operator: STL
Run Time: 04/27/05 15:28:08
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.13436	165.52	4.0921	.89008	10.757	.02720	1.9525
SDev	.00650	.41	.2380	.02318	.047	.00053	.0282
%RSD	4.8399	.24786	5.8170	2.6037	.43523	1.9508	1.4435
#1	.12976	165.23	3.9238	.87369	10.724	.02683	1.9325
#2	.13896	165.81	4.2604	.90646	10.790	.02758	1.9724
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	309.71	.05883	.32892	.64808	31.544	353.89	63.938
SDev	4.13	.00283	.00289	.00675	.017	5.03	1.873
%RSD	1.3347	4.8145	.87831	1.0422	.05284	1.4213	2.9290
#1	306.79	.06083	.32688	.64330	31.532	350.33	62.613
#2	312.64	.05682	.33096	.65286	31.556	357.45	65.262
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07343	62.873	11.970	.55908	76.347	1.0296	30.329
SDev	.00452	.283	.175	.02248	.121	.0057	.326
%RSD	6.1516	.44992	1.4647	4.0202	.15857	.54903	1.0757

#1	.07024	62.673	11.846	.54319	76.432	1.0256	30.099
#2	.07663	63.073	12.094	.57497	76.261	1.0336	30.560
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	39.360	.42687	L-.35716	30.848	9.7533	2.3443	-.04795
SDev	.641	.00749	.17903	.300	.3110	.0117	.00330
%RSD	1.6275	1.7541	50.127	.97385	3.1890	.49923	6.8774
#1	38.907	.43216	L-.48375	30.635	9.5333	2.3360	-.04562
#2	39.813	.42157	L-.23056	31.060	9.9732	2.3526	-.05029
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.84207	-.18344	.35138	40.439
SDev	.10899	.00276	.00530	.658
%RSD	12.943	1.5030	1.5074	1.6284
#1	.76500	-.18149	.34763	39.973
#2	.91914	-.18539	.35513	40.904
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WP7D Operator: STL
Run Time: 04/27/05 15:32:29
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09334	107.60	4.9879	.60815	10.259	.02703	1.8531
SDev	.00065	.20	.0333	.00514	.016	.00009	.0052
%RSD	.70159	.18877	.66728	.84523	.15300	.32411	.28043

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#1	.09288	107.46	5.0114	.60452	10.248	.02697	1.8568
#2	.09381	107.75	4.9643	.61179	10.270	.02709	1.8494
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000
Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	471.65	.02336	.31071	.60426	16.958	422.22	52.163
SDev	1.25	.00237	.00168	.00142	.039	1.41	.223
%RSD	.26466	10.138	.54078	.23568	.23209	.33409	.42734
#1	470.77	.02168	.30952	.60326	16.930	421.22	52.005
#2	472.54	.02503	.31190	.60527	16.986	423.21	52.321
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05808	46.891	10.110	.54569	60.226	.95754	123.51
SDev	.00073	.094	.032	.00277	.015	.01096	1.38
%RSD	1.2553	.19965	.31751	.50783	.02435	1.1448	1.1187
#1	.05756	46.825	10.087	.54373	60.216	.94979	124.49
#2	.05859	46.957	10.133	.54765	60.237	.96529	122.53
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.015	.41619	L-.71304	28.499	5.4661	1.6464	-.06550
SDev	.064	.02140	.06749	.145	.1131	.0021	.00607
%RSD	.42952	5.1407	9.4648	.50710	2.0683	.12920	9.2732
#1	14.970	.40106	L-.76076	28.397	5.3862	1.6449	-.06980
#2	15.061	.43132	L-.66532	28.601	5.5460	1.6479	-.06121
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000
Elem	Tl	U	V	Zn			
Units	ppm	ppm	ppm	ppm			
Avge	.93574	-.14812	.33352	23.811			
SDev	.09054	.01219	.00051	.125			
%RSD	9.6755	8.2274	.15335	.52586			
#1	.99976	-.15673	.33316	23.722			
#2	.87172	-.13950	.33389	23.899			
Errors	LC Pass	LC Pass	LC Pass	LC Pass			
High	50.000	50.000	50.000	50.000			

Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WP7V 5X Operator: STL
Run Time: 04/27/05 15:36:50
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02283	30.742	1.3341	.20563	1.8446	.00082	.52962
SDev	.00200	1.928	.0134	.01359	.0976	.00000	.04292
%RSD	8.7561	6.2713	1.0061	6.6107	5.2913	.09083	8.1039
#1	.02142	29.379	1.3436	.19602	1.7756	.00082	.49928
#2	.02425	32.105	1.3246	.21524	1.9137	.00082	.55997
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	77.045	.00263	.02977	.18207	2.9350	126.92	6.9511
SDev	4.703	.00127	.00185	.01023	.1464	6.70	.3717
%RSD	6.1046	48.260	6.2100	5.6176	4.9890	5.2764	5.3478
#1	73.720	.00173	.02846	.17484	2.8315	122.19	7.2139
#2	80.371	.00353	.03107	.18931	3.0386	131.66	6.6882
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01868	6.2800	2.5124	.03596	8.6295	.33336	12.416
SDev	.00151	.3793	.1388	.01169	.5704	.01936	.549
%RSD	8.1007	6.0396	5.5227	32.509	6.6103	5.8061	4.4195
#1	.01761	6.0118	2.4142	.04422	8.2262	.31967	12.028
#2	.01975	6.5482	2.6105	.02769	9.0329	.34705	12.804
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	

Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.6036	.09306	L-.35520	5.3678	1.3483	.20377	-.00771
SDev	.3279	.02435	.08566	.2891	.1417	.01056	.00697
%RSD	5.8524	26.163	24.116	5.3852	10.512	5.1806	90.382
#1	5.3717	.07585	L-.29463	5.1634	1.2481	.19630	-.00278
#2	5.8355	.11028	L-.41577	5.5722	1.4486	.21123	-.01263
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.05643	-.11297	.02854	12.744
SDev	.02403	.01370	.00070	.709
%RSD	42.586	12.126	2.4448	5.5657
#1	-.03944	-.12265	.02805	12.242
#2	-.07343	-.10328	.02903	13.245
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WQL Operator: STL
Run Time: 04/27/05 15:41:11
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.2633	93.467	8.9081	.72072	31.717	.00245	3.3201
SDev	.0012	.300	.1546	.00135	.124	.00000	.0140
%RSD	.09162	.32084	1.7352	.18755	.38952	.17430	.42072
#1	1.2625	93.255	9.0174	.72168	31.804	.00246	3.3300
#2	1.2642	93.679	8.7988	.71976	31.630	.00245	3.3103
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000

Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000
Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	189.73	L-.09304	.14076	.56617	7.0998	H866.72	17.849
SDev	.51	.00276	.00355	.00137	.0087	.34	.242
%RSD	.26666	2.9662	2.5218	.24127	.12306	.03880	1.3551
#1	189.37	L-.09499	.13825	.56520	7.1060	H866.48	18.020
#2	190.09	L-.09109	.14326	.56714	7.0937	H866.96	17.678
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09289	19.853	8.2969	.08808	14.322	.56627	19.045
SDev	.00021	.063	.0066	.00002	.085	.01370	.052
%RSD	.22127	.31539	.07936	.01871	.59530	2.4187	.27113
#1	.09274	19.809	8.3015	.08809	14.262	.55658	19.008
#2	.09303	19.897	8.2922	.08807	14.383	.57595	19.081
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	42.134	.61962	L-3.4644	22.645	12.012	.79420	-.07268
SDev	.058	.09257	.0128	.148	.056	.00279	.00074
%RSD	.13660	14.939	.37037	.65472	.47010	.35098	1.0145
#1	42.093	.68508	L-3.4553	22.540	12.052	.79617	-.07216
#2	42.174	.55417	L-3.4734	22.750	11.972	.79223	-.07321
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000
Elem	Tl	U	V	Zn			
Units	ppm	ppm	ppm	ppm			
Avge	.24841	-.19801	.07556	21.189			
SDev	.11481	.06912	.00100	.043			
%RSD	46.218	34.908	1.3185	.20324			
#1	.32959	-.24689	.07485	21.159			
#2	.16722	-.14914	.07626	21.220			
Errors	LC Pass	LC Pass	LC Pass	LC Pass			
High	50.000	50.000	50.000	50.000			
Low	-.20000	-.50000	-.05000	-.01000			

Method: 6010C Sample Name: G8WQN Operator: STL
Run Time: 04/27/05 15:45:31
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.40844	114.46	4.8827	.72747	10.480	.00357	2.1189
SDev	.00177	.20	.0913	.01641	.116	.00001	.0298
%RSD	.43417	.17045	1.8694	2.2558	1.1068	.17025	1.4083
#1	.40718	114.32	4.8181	.71587	10.398	.00357	2.0978
#2	.40969	114.60	4.9472	.73908	10.562	.00357	2.1400
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	205.37	.05547	.11186	.60266	13.990	H509.14	28.798
SDev	.64	.00122	.00222	.00686	.063	5.40	.337
%RSD	.30956	2.2035	1.9881	1.1386	.45322	1.0610	1.1704
#1	204.92	.05461	.11343	.59780	13.945	H505.32	29.036
#2	205.82	.05634	.11029	.60751	14.035	H512.96	28.560
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07292	21.360	9.3795	.11966	27.819	.55101	26.121
SDev	.00118	.058	.0868	.02530	.019	.01509	.066
%RSD	1.6117	.27055	.92541	21.142	.06910	2.7379	.25343
#1	.07209	21.319	9.3181	.10177	27.833	.54034	26.167
#2	.07375	21.401	9.4408	.13755	27.805	.56168	26.074
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th

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Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.605	.54092	L-1.8255	24.262	14.598	.70896	-.04581
SDev	.127	.01752	.0478	.043	.424	.00729	.00153
%RSD	.26177	3.2396	2.6174	.17772	2.9047	1.0283	3.3421
#1	48.515	.55331	L-1.7917	24.231	14.298	.70381	-.04690
#2	48.695	.52853	L-1.8592	24.292	14.898	.71412	-.04473
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.15032	-.08385	.09321	32.814
SDev	.01843	.09842	.00069	.344
%RSD	12.260	117.37	.74385	1.0471
#1	.13729	-.01426	.09370	32.571
#2	.16335	-.15344	.09272	33.057
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WQR Operator: STL
Run Time: 04/27/05 15:49:52
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0274	111.02	3.3918	.44768	32.487	.00407	1.4963
SDev	.0034	.36	.0400	.00074	.035	.00000	.0136
%RSD	.33302	.32160	1.1781	.16610	.10625	.02915	.91001
#1	1.0250	110.76	3.4201	.44715	32.511	.00407	1.4867
#2	1.0298	111.27	3.3636	.44820	32.462	.00406	1.5060
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K

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Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	189.39	.01052	.12471	.54673	10.473	347.42	20.711
SDev	.79	.00170	.00206	.00146	.016	.25	.369
%RSD	.41947	16.193	1.6559	.26642	.15705	.07139	1.7809
#1	188.83	.00931	.12325	.54570	10.461	347.25	20.972
#2	189.96	.01172	.12617	.54776	10.485	347.60	20.450
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06857	22.238	7.1989	.08942	16.564	.33394	15.982
SDev	.00172	.080	.0083	.01135	.039	.00479	.312
%RSD	2.5128	.36095	.11475	12.692	.23251	1.4354	1.9519
#1	.06735	22.181	7.1931	.08140	16.537	.33055	15.762
#2	.06978	22.295	7.2048	.09745	16.592	.33733	16.203
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.508	.34727	L-1.1751	23.082	4.9407	.78292	-.04551
SDev	.125	.06170	.0164	.002	.0000	.00008	.01031
%RSD	.63852	17.767	1.3936	.01070	.00051	.01065	22.656
#1	19.420	.39090	L-1.1636	23.080	4.9407	.78298	-.03822
#2	19.596	.30364	L-1.1867	23.084	4.9407	.78286	-.05280
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.09635	.00741	.11193	36.933
SDev	.18728	.02161	.00143	.084
%RSD	194.37	291.53	1.2733	.22803
#1	.03607	-.00787	.11092	36.874
#2	L-.22878	.02269	.11293	36.993
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WQT Operator: STL
Run Time: 04/27/05 15:54:13
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.26347	100.02	3.3888	.62721	9.1775	.01506	27.180
SDev	.01010	.57	.1175	.01321	.0327	.00018	.216
%RSD	3.8354	.57452	3.4674	2.1058	.35628	1.2067	.79373
#1	.25632	99.610	3.3057	.61787	9.1544	.01493	27.027
#2	.27061	100.42	3.4719	.63655	9.2007	.01519	27.332
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	227.84	.24931	.11014	.54745	H684.41	336.35	22.036
SDev	3.26	.00472	.00118	.00975	.38	4.00	.422
%RSD	1.4328	1.8933	1.0696	1.7815	.05606	1.1889	1.9159
#1	225.53	.24598	.10931	.54055	H684.68	333.52	22.335
#2	230.14	.25265	.11097	.55434	H684.14	339.18	21.738
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05867	23.732	H158.84	.14018	20.139	.80076	19.828
SDev	.00379	.176	2.44	.00833	.082	.00446	.258
%RSD	6.4642	.74246	1.5366	5.9390	.40546	.55726	1.3005
#1	.05599	23.608	H157.11	.13429	20.082	.79761	19.645
#2	.06135	23.857	H160.56	.14606	20.197	.80392	20.010
Errors	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.785	.10768	L-1.1304	24.849	4.6801	.78737	-.01261
SDev	.098	.16259	.0539	.190	.2545	.00312	.01042
%RSD	.61839	151.00	4.7688	.76598	5.4380	.39564	82.641

#1	15.716	.22265	L-1.0922	24.714	4.5002	.78517	-.00524
#2	15.854	-.00729	L-1.1685	24.984	4.8601	.78957	-.01997
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	L-1.1989	.17402	.19418	H79.362
SDev	.1965	.07575	.00480	1.025
%RSD	16.390	43.528	2.4717	1.2918
#1	L-1.3378	.22758	.19079	H78.637
#2	L-1.0599	.12046	.19758	H80.087

Errors	LC Low	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 04/27/05 15:58:35
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.81364	40.984	4.1939	4.0585	4.1148	3.9518	4.2706
SDev	.00229	.195	.1144	.0044	.0009	.0013	.0196
%RSD	.28145	.47652	2.7280	.10891	.02073	.03358	.45881
#1	Q.81202	40.846	4.1130	4.0616	4.1142	3.9509	4.2568
#2	Q.81526	41.122	4.2748	4.0554	4.1154	3.9527	4.2845
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	40.000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.502	3.9630	3.9281	3.9463	Q3.5287	42.336	40.604
SDev	.140	.0338	.0207	.0092	.0242	.092	.523
%RSD	.68451	.85236	.52626	.23403	.68512	.21717	1.2887

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#1	20.403	3.9392	3.9134	3.9398	Q3.5116	42.401	40.234
#2	20.601	3.9869	3.9427	3.9529	Q3.5458	42.271	40.974
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value	20.000	4.0000	4.0000	4.0000	4.0000	40.000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9870	20.299	4.0354	3.9847	39.780	3.9040	4.0081
SDev	.0092	.083	.0110	.0000	.189	.0176	.0457
%RSD	.23008	.40960	.27275	.00011	.47492	.45189	1.1405
#1	3.9806	20.240	4.0432	3.9847	39.646	3.9165	3.9758
#2	3.9935	20.357	4.0276	3.9847	39.914	3.8915	4.0404
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	20.000	4.0000	4.0000	40.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9265	3.9863	3.8827	4.2077	4.2109	3.9473	3.7477
SDev	.0092	.1339	.0410	.0181	.1412	.0006	.0153
%RSD	.23329	3.3589	1.0548	.43136	3.3533	.01453	.40896
#1	3.9329	3.8917	3.8537	4.1949	4.3108	3.9469	3.7369
#2	3.9200	4.0810	3.9116	4.2206	4.1111	3.9477	3.7586
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	3.8178	4.0071	3.9473	3.9742
SDev	.0151	.0130	.0142	.0063
%RSD	.39560	.32466	.35993	.15752
#1	3.8072	4.0163	3.9373	3.9698
#2	3.8285	3.9979	3.9574	3.9786
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 04/27/05 16:02:58
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00053	.00875	-.02973	.00849	.00021	.00025	.01438
SDev	.00044	.01221	.01792	.00201	.00028	.00009	.02869
%RSD	84.066	139.46	60.292	23.655	137.32	34.717	199.48
#1	.00021	.00012	-.01705	.00991	.00001	.00019	-.00590
#2	.00084	.01738	-.04240	.00707	.00041	.00032	.03467
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.01000	.05000	.20000	.02500	.20000	.00500	.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00027	.00109	.00022	-.00117	.01193	.00649	-.30617
SDev	.00565	.00090	.00179	.00076	.00121	.00048	.15345
%RSD	2114.2	82.951	830.86	64.311	10.125	7.4154	50.119
#1	-.00373	.00173	-.00105	-.00171	.01278	.00615	-.41467
#2	.00426	.00045	.00148	-.00064	.01107	.00683	-.19766
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.25000	.00500	.05000	.01000	.02500	.05000	2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00086	-.00698	.00091	.00201	.00002	-.00375	.02530
SDev	.00264	.03641	.00018	.00000	.02659	.00617	.07153
%RSD	306.23	521.80	19.483	.00117	122640.	164.45	282.76
#1	-.00100	-.03272	.00078	.00201	-.01878	-.00811	.07588
#2	.00272	.01877	.00103	.00201	.01883	.00061	-.02528
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.01000	.25000	.01500	.04000	.25000	.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00006	.00730	.07393	.03784	Q.11982	.00018	-.00376
SDev	.00003	.02060	.11654	.00047	.11295	.00008	.00088
%RSD	51.195	282.09	157.64	1.2365	94.263	45.885	23.360
#1	.00009	-.00726	.15633	.03817	.03996	.00012	-.00314
#2	.00004	.02187	-.00848	.03751	Q.19969	.00023	-.00439
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000

Range	.10000	.06000	.20000	.50000	.10000	.05000	.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.02988	-.04897	.00009	.00205
SDev	.06040	.00866	.00235	.00038
%RSD	202.14	17.691	2700.7	18.511
#1	.01283	-.05510	-.00158	.00178
#2	-.07259	-.04285	.00175	.00232
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000
Range	2.0000	.50000	.05000	.02000

Method: 6010C Sample Name: G8WR6 Operator: STL
Run Time: 04/27/05 16:07:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.38286	95.993	4.2223	.67632	13.192	.00395	1.7753
SDev	.00179	.803	.1544	.01902	.015	.00018	.0514
%RSD	.46719	.83701	3.6579	2.8126	.11356	4.5525	2.8948
#1	.38413	95.425	4.3315	.68977	13.181	.00382	1.8117
#2	.38160	96.561	4.1131	.66286	13.202	.00408	1.7390
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	242.67	.04427	.27323	1.1000	9.5513	451.47	17.579
SDev	1.51	.00112	.00169	.0028	.0840	1.62	.347
%RSD	.62159	2.5310	.61683	.25509	.87913	.35919	1.9721
#1	241.60	.04348	.27204	1.0980	9.4919	452.61	17.824
#2	243.73	.04506	.27442	1.1020	9.6107	450.32	17.334
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0

Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08764	455.64	15.252	.09236	11.970	4.0816	22.693
SDev	.00050	3.12	.003	.01712	.104	.0153	.040
%RSD	.56909	.68530	.01658	18.538	.86594	.37370	.17795
#1	.08729	453.43	15.254	.08025	11.897	4.0708	22.722
#2	.08800	457.85	15.250	.10447	12.043	4.0924	22.664
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	40.821	.56474	L-2.1444	26.319	4.2505	.67639	.00659
SDev	.287	.03999	.1729	.353	.0284	.00099	.01181
%RSD	.70351	7.0813	8.0630	1.3426	.66741	.14573	179.12
#1	40.617	.53646	L-2.0222	26.069	4.2706	.67569	-.00176
#2	41.024	.59302	L-2.2667	26.569	4.2304	.67709	.01495
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.02269	-.18358	.14403	38.626
SDev	.15635	.05114	.00137	.202
%RSD	689.05	27.854	.95126	.52345
#1	.08786	-.14742	.14306	38.769
#2	-.13324	-.21974	.14500	38.483
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WTA Operator: STL
Run Time: 04/27/05 16:11:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.39013	133.24	3.5414	.90430	13.356	.00318	1.9124
SDev	.00045	.39	.0869	.01244	.101	.00000	.0449
%RSD	.11469	.29365	2.4549	1.3758	.75838	.13832	2.3503
#1	.38981	133.52	3.4800	.91309	13.428	.00318	1.9442
#2	.39044	132.97	3.6029	.89550	13.285	.00318	1.8806
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	237.28	.55170	.11545	.67113	27.757	377.80	29.168
SDev	.09	.00229	.00067	.00136	.083	1.12	.699
%RSD	.03957	.41573	.58050	.20312	.29837	.29577	2.3950
#1	237.34	.55332	.11498	.67016	27.698	378.59	29.662
#2	237.21	.55008	.11593	.67209	27.816	377.01	28.674
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07461	23.191	9.8930	.19037	30.605	.84292	20.922
SDev	.00049	.067	.0302	.01983	.426	.00170	.247
%RSD	.66319	.29006	.30532	10.416	1.3935	.20212	1.1817
#1	.07426	23.238	9.9144	.20439	30.906	.84171	21.097
#2	.07496	23.143	9.8716	.17634	30.303	.84412	20.748
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	29.168	L-.18209	L-1.3379	25.797	10.634	.77504	-.03726
SDev	.002	.17581	.1400	.003	.254	.00565	.01392
%RSD	.00630	96.553	10.461	.00984	2.3889	.72929	37.358
#1	29.169	-.05777	L-1.4369	25.796	10.454	.77904	-.02742
#2	29.167	L-.30641	L-1.2390	25.799	10.813	.77105	-.04710
Errors	LC Pass	LC Low	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn

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Units	ppm	ppm	ppm	ppm
Avge	.08977	.15188	.12222	H240.20
SDev	.24770	.07433	.00259	.06
%RSD	275.94	48.939	2.1168	.02500
#1	.26492	.09932	.12039	H240.16
#2	-.08539	.20443	.12405	H240.24
Errors	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WTE Operator: STL
Run Time: 04/27/05 16:16:02
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.25287	136.77	4.1832	.70879	10.978	.00320	2.0558
SDev	.00095	.31	.0432	.00047	.048	.00001	.0021
%RSD	.37419	.22609	1.0337	.06634	.43793	.28475	.10266
#1	.25220	136.55	4.2138	.70845	11.012	.00319	2.0543
#2	.25354	136.98	4.1526	.70912	10.944	.00320	2.0573
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	261.93	.03271	.09756	.52808	14.135	438.18	32.879
SDev	.54	.00335	.00052	.00266	.092	1.06	.057
%RSD	.20720	10.245	.53797	.50366	.64930	.24254	.17238
#1	261.54	.03507	.09793	.52996	14.071	438.93	32.838
#2	262.31	.03034	.09719	.52620	14.200	437.43	32.919
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08135	25.517	10.122	.08297	29.799	.88717	21.236
SDev	.00109	.058	.021	.00847	.051	.00428	.299
%RSD	1.3399	.22762	.20562	10.208	.17228	.48193	1.4090
#1	.08058	25.476	10.137	.08896	29.763	.88415	21.025
#2	.08212	25.558	10.107	.07698	29.835	.89020	21.448
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.288	.28180	L-1.6691	25.711	5.9267	.87663	-.03938
SDev	.046	.02124	.0848	.044	.2540	.00393	.00797
%RSD	.26829	7.5361	5.0826	.16978	4.2863	.44858	20.250
#1	17.255	.29682	L-1.7291	25.680	5.7470	.87941	-.03374
#2	17.321	.26679	L-1.6091	25.742	6.1063	.87385	-.04502
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.02220	-.23771	.12212	29.648
SDev	.05448	.05700	.00112	.008
%RSD	245.42	23.978	.91480	.02618
#1	.01633	-.27801	.12133	29.653
#2	-.06072	-.19741	.12291	29.642
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WTG Operator: STL
Run Time: 04/27/05 16:20:23
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi

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Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.92586	132.12	9.3182	1.6387	20.131	.01015	3.6469
SDev	.00206	.03	.0977	.0211	.068	.00009	.0125
%RSD	.22241	.02452	1.0483	1.2859	.33589	.85195	.34189
#1	.92441	132.10	9.2491	1.6536	20.084	.01009	3.6557
#2	.92732	132.14	9.3873	1.6238	20.179	.01021	3.6381
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	227.08	L-.11816	.14490	.89581	8.9594	H938.72	26.706
SDev	.57	.00111	.00105	.00161	.0139	2.03	1.073
%RSD	.25129	.93512	.72482	.17986	.15470	.21608	4.0172
#1	226.68	L-.11895	.14415	.89695	8.9496	H940.15	25.948
#2	227.48	L-.11738	.14564	.89467	8.9692	H937.29	27.465

Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.11592	23.595	13.474	.22514	39.599	.78843	30.728
SDev	.00058	.014	.021	.00010	.123	.01404	.264
%RSD	.50292	.05954	.15653	.04414	.31038	1.7812	.86068
#1	.11551	23.585	13.459	.22507	39.686	.77850	30.915
#2	.11633	23.605	13.489	.22521	39.512	.79836	30.541

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.457	.49973	L-3.6270	24.664	6.1679	.87858	-.06168
SDev	.103	.03207	.0438	.063	.0281	.00311	.00162
%RSD	.52766	6.4171	1.2068	.25395	.45489	.35374	2.6322
#1	19.385	.52241	L-3.6580	24.619	6.1481	.87638	-.06282
#2	19.530	.47705	L-3.5961	24.708	6.1877	.88078	-.06053

Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.22349	-.27075	.10330	31.388
SDev	.06354	.03152	.00051	.060
%RSD	28.430	11.643	.49773	.18968

#1	.26842	-.29304	.10293	31.430
#2	.17856	-.24846	.10366	31.346
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WTR Operator: STL
Run Time: 04/27/05 16:24:45
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.38941	100.10	7.5112	.83277	7.4230	.00702	5.9391
SDev	.00138	.08	.2256	.01233	.0305	.00027	.0084
%RSD	.35371	.08404	3.0031	1.4811	.41140	3.8503	.14225
#1	.38844	100.16	7.6707	.84149	7.4446	.00721	5.9332
#2	.39039	100.04	7.3517	.82405	7.4014	.00683	5.9451
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	247.97	L-.02819	.12198	.62757	H233.75	H746.84	19.297
SDev	.24	.00016	.00279	.00017	.46	1.25	1.643
%RSD	.09872	.56897	2.2885	.02701	.19808	.16685	8.5164
#1	247.79	L-.02831	.12001	.62745	H233.43	H747.72	18.135
#2	248.14	L-.02808	.12395	.62769	H234.08	H745.96	20.460
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC High	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08804	22.121	17.993	.08190	24.837	1.8711	53.430
SDev	.00185	.023	.043	.01142	.033	.0014	.360
%RSD	2.1000	.10510	.24111	13.946	.13309	.07278	.67432

#1	.08673	22.138	18.023	.07383	24.860	1.8701	53.175
#2	.08935	22.105	17.962	.08998	24.813	1.8721	53.685
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H53.845	.98871	L-2.7622	21.439	11.263	.66545	-.05584
SDev	.286	.01102	.0286	.149	.310	.00287	.01385
%RSD	.53106	1.1148	1.0336	.69676	2.7564	.43129	24.799
#1	H53.643	.99650	L-2.7824	21.334	11.044	.66748	-.06564
#2	H54.048	.98092	L-2.7421	21.545	11.483	.66342	-.04605
Errors	LC High	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.06467	-.29006	.08854	H65.046
SDev	.26266	.07861	.00108	.043
%RSD	406.12	27.100	1.2157	.06686
#1	-.12105	-.34564	.08778	H65.077
#2	.25040	-.23448	.08931	H65.015
Errors	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WTV Operator: STL
Run Time: 04/27/05 16:29:06
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	k.79889	k38.826	k61.421	k-1.9110	5.2294	k.00211	k12.462
SDev	.00274	.012	.122	.0080	.0224	.00000	.016
%RSD	.34235	.03107	.19863	.41823	.42838	.06564	.13081

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#1	k.79696	k38.817	k61.507	k-1.9167	5.2135	k.00211	k12.450
#2	k.80083	k38.834	k61.335	k-1.9054	5.2452	k.00211	k12.473

Errors	LC Pass	LC Pass	LC High	LC Low	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	k60.347	k-1.1659	k.04050	k1.3944	k7.4451	S5681.4	k7.9167
SDev	.142	.0011	.00150	.0024	.0059	.0	.5013
%RSD	.23483	.09556	3.7031	.17036	.07986	.00000	6.3322
#1	k60.247	k-1.1666	k.03944	k1.3927	k7.4493	S5681.4	k7.5622
#2	k60.447	k-1.1651	k.04156	k1.3961	k7.4409	S5681.4	k8.2712

Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	k.44531	k9.2491	k14.881	k.02890	k7.8049	1.4484	k21.269
SDev	.00037	.0210	.055	.01704	.0330	.0057	.036
%RSD	.08309	.22677	.36679	58.965	.42288	.39013	.16816
#1	k.44557	k9.2343	k14.842	k.04095	k7.8283	1.4524	k21.295
#2	k.44505	k9.2640	k14.919	k.01685	k7.7816	1.4444	k21.244

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	k20.674	k3.0469	k-21.595	k17.586	k30.484	k.25051	k-1.5155
SDev	.058	.1030	.330	.016	.028	.00082	.0028
%RSD	.28101	3.3817	1.5262	.08828	.09260	.32730	.18492
#1	k20.633	k2.9740	k-21.829	k17.597	k30.504	k.24993	k-1.5135
#2	k20.715	k3.1197	k-21.362	k17.575	k30.464	k.25109	k-1.5175

Errors	LC Pass	LC Pass	LC Low	LC Pass	LC High	LC Pass	LC Low
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	k1.2772	k-2.3510	k-.82822	k6.7138
SDev	.2235	.0216	.00084	.0124
%RSD	17.499	.92002	.10176	.18408
#1	k1.1191	k-2.3357	k-.82762	k6.7051
#2	k1.4352	k-2.3663	k-.82881	k6.7225

Errors	LC Pass	LC Low	LC Low	LC Pass
High	50.000	50.000	50.000	50.000

Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WTW Operator: STL
Run Time: 04/27/05 16:33:27
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	k.66468	k31.610	k61.916	k-1.6930	4.4341	k.00178	k12.678
SDev	.00129	.075	.008	.0784	.0237	.00009	.036
%RSD	.19360	.23769	.01337	4.6312	.53427	5.2166	.28737
#1	k.66559	k31.557	k61.910	k-1.7484	4.4173	k.00172	k12.653
#2	k.66377	k31.663	k61.921	k-1.6376	4.4508	k.00185	k12.704
Errors	LC Pass	LC Pass	LC High	LC Low	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	k44.645	k-1.1756	k.09681	k1.2858	k4.5736	S5681.4	6.1697
SDev	.168	.0053	.00265	.0033	.0038	.0	.2470
%RSD	.37606	.45194	2.7427	.25578	.08252	.00000	4.0028
#1	k44.526	k-1.1794	k.09868	k1.2835	k4.5763	S5681.4	5.9950
#2	k44.763	k-1.1719	k.09493	k1.2881	k4.5710	S5681.4	6.3443
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	k.43955	k7.8232	k16.523	k.01886	k4.0099	1.3803	k19.596
SDev	.00038	.0412	.141	.01420	.0294	.0557	.526
%RSD	.08630	.52663	.85434	75.302	.73265	4.0328	2.6851
#1	k.43928	k7.7941	k16.423	k.02890	k3.9891	1.4197	k19.968
#2	k.43982	k7.8523	k16.622	k.00882	k4.0306	1.3410	k19.224
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	

Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	k29.850	k2.8430	k-21.470	k16.532	k36.015	k.20131	k-1.4500
SDev	.029	.0412	.671	.041	.565	.00115	.0016
%RSD	.09734	1.4490	3.1250	.24673	1.5682	.57171	.11022
#1	k29.829	k2.8722	k-20.995	k16.503	k35.615	k.20050	k-1.4488
#2	k29.871	k2.8139	k-21.944	k16.561	k36.414	k.20213	k-1.4511
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC High	LC Pass	LC Low
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	k1.1391	k-2.1870	k-.79144	k5.4851
SDev	.1420	.0736	.00042	.0763
%RSD	12.464	3.3651	.05308	1.3913
#1	k1.0387	k-2.1350	k-.79173	k5.4311
#2	k1.2395	k-2.2390	k-.79114	k5.5390

Errors	LC Pass	LC Low	LC Low	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WTX Operator: STL
Run Time: 04/27/05 16:37:49
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.73177	82.926	3.9231	.76654	18.170	.00305	1.9277
SDev	.00065	.489	.0509	.00427	.099	.00000	.0002
%RSD	.08932	.58982	1.2971	.55684	.54563	.02075	.01029
#1	.73131	82.580	3.8871	.76956	18.241	.00305	1.9279
#2	.73223	83.272	3.9591	.76352	18.100	.00305	1.9276
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000

Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000
Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	168.52	.42309	.08645	.42920	24.256	397.01	19.143
SDev	1.12	.00465	.00126	.00156	.113	.79	1.020
%RSD	.66650	1.0987	1.4569	.36334	.46696	.19974	5.3306
#1	167.72	.41981	.08556	.42809	24.336	397.57	18.422
#2	169.31	.42638	.08734	.43030	24.176	396.45	19.865
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06401	15.487	6.1959	.33604	14.523	.49406	14.448
SDev	.00087	.094	.0194	.02268	.069	.00719	.228
%RSD	1.3555	.60810	.31314	6.7504	.47356	1.4561	1.5792
#1	.06339	15.420	6.2096	.35208	14.475	.48897	14.287
#2	.06462	15.553	6.1822	.32000	14.572	.49914	14.610
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H97.655	1.0317	L-1.5519	19.341	H28.266	.61600	-.04624
SDev	.607	.0201	.1204	.154	.282	.00336	.00422
%RSD	.62152	1.9530	7.7601	.79732	.99873	.54482	9.1350
#1	H97.226	1.0174	L-1.6371	19.232	H28.066	.61837	-.04923
#2	H98.084	1.0459	L-1.4667	19.450	H28.465	.61363	-.04325
Errors	LC High	LC Pass	LC Low	LC Pass	LC High	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000
Elem	Tl	U	V	Zn			
Units	ppm	ppm	ppm	ppm			
Avge	.07521	.29160	.08946	34.608			
SDev	.06050	.00917	.00141	.006			
%RSD	80.433	3.1458	1.5724	.01659			
#1	.11799	.28511	.08846	34.612			
#2	.03243	.29808	.09045	34.604			
Errors	LC Pass	LC Pass	LC Pass	LC Pass			
High	50.000	50.000	50.000	50.000			
Low	-.20000	-.50000	-.05000	-.01000			

Method: 6010C Sample Name: G8WT0 Operator: STL
Run Time: 04/27/05 16:42:10
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.93535	104.37	6.2258	.79338	19.606	.00345	2.9809
SDev	.00091	.71	.0280	.01938	.007	.00000	.0113
%RSD	.09694	.68295	.44897	2.4434	.03631	.04516	.37774
#1	.93471	103.86	6.2456	.80709	19.611	.00344	2.9889
#2	.93599	104.87	6.2061	.77967	19.601	.00345	2.9730
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	479.14	.00650	.11995	.54184	27.432	H590.51	22.053
SDev	2.30	.00124	.00138	.00418	.016	5.96	.946
%RSD	.48101	19.011	1.1481	.77177	.05812	1.0087	4.2897
#1	477.51	.00563	.11898	.54480	27.443	H594.72	22.722
#2	480.77	.00737	.12093	.53889	27.421	H586.30	21.384
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07979	24.057	20.148	.13977	22.725	.63035	156.29
SDev	.00053	.183	.076	.00823	.237	.01217	.29
%RSD	.66472	.75872	.37920	5.8875	1.0413	1.9301	.18406
#1	.07942	23.928	20.202	.14559	22.558	.62175	156.49
#2	.08017	24.186	20.094	.13395	22.892	.63895	156.08
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H234.94	4.0036	L-2.0960	25.350	H39.583	1.2843	-.04602
SDev	1.23	.0343	.0045	.107	.735	.0001	.00667
%RSD	.52354	.85642	.21540	.42149	1.8560	.00621	14.483
#1	H234.07	4.0279	L-2.0928	25.275	H40.103	1.2844	-.05074
#2	H235.81	3.9794	L-2.0992	25.426	H39.064	1.2843	-.04131
Errors	LC High	LC Pass	LC Low	LC Pass	LC High	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.11840	-.08671	.11557	32.814
SDev	.08421	.02671	.00318	.292
%RSD	71.126	30.805	2.7562	.89084
#1	.05885	-.06782	.11332	33.021
#2	.17795	-.10560	.11782	32.607
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WT1 Operator: STL
Run Time: 04/27/05 16:46:31
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.47529	175.51	5.3238	1.1480	13.386	.00363	2.4575
SDev	.00059	.14	.2327	.0027	.025	.00026	.0797
%RSD	.12416	.08112	4.3703	.23609	.18544	7.2092	3.2431
#1	.47487	175.61	5.4883	1.1499	13.403	.00345	2.4012
#2	.47571	175.41	5.1593	1.1460	13.368	.00382	2.5139
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	264.52	.04107	.12700	.69814	22.153	H552.76	38.208
SDev	.15	.00029	.00007	.00007	.071	.74	.084
%RSD	.05582	.70605	.05300	.00960	.32026	.13318	.21953
#1	264.41	.04087	.12705	.69809	22.102	H552.23	38.149
#2	264.62	.04128	.12696	.69819	22.203	H553.28	38.267
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.10540	32.049	12.130	.10547	45.500	1.6376	25.055
SDev	.00018	.010	.010	.01992	.238	.0069	.185
%RSD	.16697	.02972	.08376	18.885	.52410	.41888	.73978
#1	.10528	32.043	12.123	.11956	45.669	1.6424	24.924
#2	.10553	32.056	12.137	.09139	45.332	1.6327	25.186
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	26.081	.33863	L-1.9143	21.727	6.6150	.96325	-.05854
SDev	.087	.00991	.0152	.022	.1412	.00205	.01174
%RSD	.33439	2.9272	.79150	.10083	2.1352	.21282	20.052
#1	26.019	.34564	L-1.9036	21.712	6.5152	.96470	-.05024
#2	26.142	.33162	L-1.9250	21.743	6.7149	.96180	-.06684
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.01764	-.10740	.12677	46.901
SDev	.13895	.05592	.00055	.158
%RSD	787.74	52.067	.43495	.33648
#1	-.08061	-.14694	.12716	46.790
#2	.11589	-.06786	.12638	47.013
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 04/27/05 16:50:52
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.80916	40.779	4.1910	4.0250	4.1006	3.9110	4.2263
SDev	.00295	.081	.0769	.0084	.0039	.0111	.0089
%RSD	.36415	.19831	1.8337	.20972	.09398	.28268	.21120
#1	Q.80708	40.722	4.1366	4.0190	4.0979	3.9032	4.2326
#2	Q.81125	40.836	4.2453	4.0309	4.1033	3.9189	4.2199
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	40.000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.250	3.9396	3.9027	3.9176	3.6492	42.060	40.470
SDev	.082	.0072	.0062	.0093	.0186	.040	.560
%RSD	.40274	.18182	.15999	.23857	.50845	.09431	1.3826
#1	20.192	3.9345	3.8982	3.9110	3.6360	42.031	40.074
#2	20.308	3.9446	3.9071	3.9242	3.6623	42.088	40.865
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.000	4.0000	4.0000	4.0000	4.0000	40.000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9787	20.083	3.9605	3.9927	39.722	3.9064	4.0258
SDev	.0125	.053	.0047	.0114	.122	.0618	.0102
%RSD	.31327	.26366	.11846	.28460	.30707	1.5831	.25290
#1	3.9875	20.046	3.9572	4.0008	39.809	3.8627	4.0330
#2	3.9698	20.121	3.9638	3.9847	39.636	3.9502	4.0186
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	20.000	4.0000	4.0000	40.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9062	3.9498	3.8832	4.1580	4.0912	3.9318	3.6974
SDev	.0245	.0206	.0563	.0047	.0282	.0065	.0047
%RSD	.62606	.52207	1.4491	.11291	.68998	.16444	.12821

#1	3.8889	3.9352	3.9230	4.1613	4.1112	3.9272	3.7008
#2	3.9235	3.9643	3.8434	4.1547	4.0712	3.9363	3.6941
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	3.7708	3.9493	3.9169	3.9088
SDev	.0453	.0000	.0092	.0096
%RSD	1.2013	.00019	.23413	.24434
#1	3.8029	3.9493	3.9104	3.9021
#2	3.7388	3.9493	3.9234	3.9156
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 04/27/05 16:55:15
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00229	.02266	-.02950	.00992	.00021	.00038	.02341
SDev	.00144	.01593	.06695	.00003	.00001	.00009	.01610
%RSD	62.871	70.306	226.99	.30285	5.3850	24.704	68.765
#1	-.00330	.01139	-.07684	.00989	.00021	.00032	.03479
#2	-.00127	.03392	.01785	.00994	.00022	.00045	.01202
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.01000	.05000	.20000	.02500	.20000	.00500	.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00598	.00159	-.00147	-.00308	.00358	.01087	-.85869
SDev	.00116	.00053	.00119	.00084	.00162	.00132	.34544
%RSD	19.386	33.359	80.956	27.357	45.210	12.113	40.228

#1	.00516	.00121	-.00063	-.00249	.00472	.01180	-.61443
#2	.00680	.00196	-.00231	-.00368	.00243	.00994	-1.1030
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.25000	.00500	.05000	.01000	.02500	.05000	2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00067	.00986	.00118	-.01004	.00589	.00001	-.02888
SDev	.00243	.03609	.00021	.00000	.01655	.00085	.00513
%RSD	362.35	365.85	17.785	.00074	281.21	6133.1	17.755
#1	-.00105	-.01565	.00104	-.01004	-.00582	.00061	-.02526
#2	.00239	.03538	.00133	-.01004	.01759	-.00058	-.03251
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.01000	.25000	.01500	.04000	.25000	.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00458	-.04367	-.00840	.03412	.09988	.00024	-.00353
SDev	.01105	.01028	.03203	.00667	.02820	.00017	.00974
%RSD	241.02	23.548	381.47	19.542	28.230	71.089	275.61
#1	.00323	-.03640	.01425	.03884	Q.11981	.00012	.00335
#2	-.01240	-.05095	-.03104	.02941	.07994	.00036	-.01042
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.10000	.06000	.20000	.50000	.10000	.05000	.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.01703	-.11634	.00187	.00610
SDev	.05431	.09521	.00195	.00042
%RSD	318.92	81.839	104.43	6.8070
#1	.02137	-.04901	.00049	.00581
#2	-.05544	-.18366	.00324	.00640
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000
Range	2.0000	.50000	.05000	.02000

Method: 6010C Sample Name: G817C Operator: STL
Run Time: 04/27/05 16:59:37
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.6935	136.57	6.8297	1.1818	28.548	.00289	2.7716
SDev	.0048	.61	.0208	.0111	.076	.00009	.0447
%RSD	.28380	.44602	.30382	.93933	.26787	3.0335	1.6136
#1	1.6901	136.14	6.8151	1.1897	28.494	.00283	2.7400
#2	1.6969	137.00	6.8444	1.1740	28.602	.00296	2.8033
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	231.49	.00913	.14546	.74797	8.5959	H693.57	30.147
SDev	1.09	.00125	.00074	.00119	.0025	2.03	.368
%RSD	.46963	13.644	.50706	.15839	.02908	.29202	1.2197
#1	230.72	.01001	.14598	.74880	8.5942	H695.00	30.407
#2	232.26	.00825	.14494	.74713	8.5977	H692.14	29.887
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09794	26.304	8.5423	.10661	33.215	1.6407	24.864
SDev	.00016	.114	.0033	.00862	.023	.0103	.374
%RSD	.16230	.43374	.03862	8.0862	.06905	.62640	1.5036
#1	.09805	26.224	8.5446	.10051	33.231	1.6334	24.600
#2	.09782	26.385	8.5400	.11270	33.198	1.6480	25.128
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.413	.26596	L-2.5228	23.953	7.1659	.96875	-.08151
SDev	.021	.08127	.0449	.173	.1128	.00262	.00418
%RSD	.13945	30.557	1.7783	.72345	1.5737	.27028	5.1239
#1	15.398	.20849	L-2.5545	23.830	7.0861	.96690	-.08446
#2	15.429	.32342	L-2.4911	24.075	7.2456	.97060	-.07856
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000

Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.31779	-.24539	.10847	H58.136
SDev	.14211	.00990	.00203	.258
%RSD	44.720	4.0355	1.8719	.44313
#1	.41828	-.25239	.10703	H58.319
#2	.21730	-.23839	.10990	H57.954
Errors	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G817CS Operator: STL
Run Time: 04/27/05 17:03:58
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.42721	371.17	5.9124	1.8034	13.488	.02690	2.5574
SDev	.00380	1.89	.2804	.0061	.125	.00009	.0335
%RSD	.89073	.50845	4.7421	.33960	.92336	.33266	1.3118
#1	.42452	369.84	5.7141	1.7990	13.400	.02684	2.5337
#2	.42990	372.51	6.1107	1.8077	13.576	.02696	2.5811
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	291.56	.05121	.34148	.82199	16.924	H594.09	61.005
SDev	.92	.00146	.00046	.00187	.066	1.95	.035
%RSD	.31631	2.8526	.13491	.22810	.38907	.32871	.05692
#1	290.91	.05224	.34115	.82067	16.877	H592.71	61.030
#2	292.21	.05017	.34180	.82332	16.970	H595.47	60.981
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0

Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08999	53.358	14.196	.62564	92.897	1.7498	23.937
SDev	.00102	.170	.090	.00843	.720	.0183	.095
%RSD	1.1383	.31828	.63446	1.3467	.77499	1.0474	.39772
#1	.09071	53.238	14.132	.61968	92.388	1.7628	23.870
#2	.08927	53.478	14.259	.63160	93.406	1.7369	24.004
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.169	.69491	L-.95619	32.500	6.2791	1.4162	-.08374
SDev	.116	.01140	.04446	.161	.2261	.0129	.00631
%RSD	.67478	1.6406	4.6496	.49448	3.6002	.91316	7.5367
#1	17.087	.68685	L-.98763	32.386	6.1192	1.4071	-.08821
#2	17.251	.70297	L-.92475	32.613	6.4389	1.4254	-.07928
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.86141	-.12467	.33859	34.290
SDev	.03638	.01838	.00039	.085
%RSD	4.2236	14.741	.11570	.24805
#1	.88714	-.11168	.33831	34.230
#2	.83569	-.13767	.33886	34.350
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G817CD Operator: STL
Run Time: 04/27/05 17:08:19
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.28244	173.27	7.4069	.90107	10.893	.02665	3.1287
SDev	.00080	.18	.0400	.00754	.018	.00009	.0140
%RSD	.28248	.10361	.53964	.83686	.16624	.33870	.44795
#1	.28301	173.14	7.3786	.90640	10.906	.02659	3.1387
#2	.28188	173.39	7.4351	.89574	10.880	.02672	3.1188
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	216.23	.03905	.33428	.89626	23.355	H697.71	54.816
SDev	.60	.00341	.00070	.00573	.065	1.11	.804
%RSD	.27691	8.7311	.20915	.63948	.27795	.15951	1.4660
#1	215.81	.04146	.33477	.89220	23.401	H696.92	55.385
#2	216.65	.03664	.33378	.90031	23.309	H698.50	54.248
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08650	47.020	12.335	.66676	56.326	1.8785	22.976
SDev	.00108	.074	.015	.02835	.140	.0152	.268
%RSD	1.2507	.15738	.12456	4.2518	.24910	.81175	1.1652
#1	.08573	46.968	12.324	.64671	56.425	1.8677	22.787
#2	.08726	47.073	12.346	.68680	56.226	1.8893	23.166
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	40.125	1.3152	L-1.6597	29.034	10.161	1.1628	-.08645
SDev	.308	.1024	.0685	.084	.282	.0019	.01260
%RSD	.76775	7.7866	4.1295	.28956	2.7800	.16172	14.579
#1	39.907	1.3876	L-1.7082	28.975	9.9615	1.1641	-.07754
#2	40.343	1.2428	L-1.6113	29.093	10.361	1.1615	-.09536
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn

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Units	ppm	ppm	ppm	ppm
Avge	.89021	-.18038	.30969	H222.74
SDev	.09971	.02654	.00068	.52
%RSD	11.201	14.711	.21825	.23262
#1	.81970	-.16162	.30921	H222.37
#2	.96071	-.19914	.31017	H223.11
Errors	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G817D Operator: STL
Run Time: 04/27/05 17:12:40
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.46875	154.97	5.1317	.90718	12.865	.00332	2.2624
SDev	.00098	.81	.0103	.01942	.021	.00001	.0360
%RSD	.20969	.52400	.20138	2.1402	.16633	.16141	1.5913
#1	.46945	154.39	5.1244	.92091	12.880	.00332	2.2370
#2	.46806	155.54	5.1390	.89345	12.849	.00331	2.2879
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	294.41	.03933	.13638	.60360	18.737	H515.00	36.108
SDev	1.30	.00298	.00009	.00153	.053	2.77	.633
%RSD	.44320	7.5653	.06894	.25359	.28167	.53859	1.7536
#1	293.49	.03723	.13645	.60252	18.699	H516.96	35.661
#2	295.33	.04143	.13631	.60469	18.774	H513.04	36.556
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782

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Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08774	36.881	13.743	.13544	39.865	1.3815	26.780
SDev	.00032	.140	.036	.01975	.267	.0106	.275
%RSD	.36252	.37914	.26261	14.580	.66937	.76804	1.0280
#1	.08796	36.782	13.768	.14940	39.677	1.3740	26.585
#2	.08751	36.980	13.717	.12148	40.054	1.3890	26.975
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.222	.19288	L-1.8640	21.138	5.2541	1.0084	-.06090
SDev	.166	.00162	.1169	.172	.0280	.0016	.00825
%RSD	.96549	.83846	6.2699	.81444	.53267	.15481	13.541
#1	17.104	.19402	L-1.7813	21.016	5.2343	1.0095	-.05507
#2	17.339	.19173	L-1.9466	21.260	5.2739	1.0073	-.06673
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.02239	-.03922	.12138	49.449
SDev	.13920	.08837	.00066	.238
%RSD	621.69	225.32	.54581	.48182
#1	.07604	-.10171	.12091	49.618
#2	-.12082	.02327	.12185	49.281
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G817E Operator: STL
Run Time: 04/27/05 17:17:01
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.47349	69.451	7.8036	.44974	13.685	.00265	2.7942
SDev	.00245	.222	.0887	.00336	.080	.00009	.0412
%RSD	.51799	.31962	1.1368	.74740	.58381	3.2744	1.4729
#1	.47522	69.294	7.7408	.44736	13.628	.00258	2.7651
#2	.47176	69.608	7.8663	.45212	13.741	.00271	2.8233
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	138.70	L-.10701	.12146	.54101	3.5035	H766.68	10.035
SDev	.62	.00064	.00152	.00241	.0108	3.32	.934
%RSD	.44697	.59456	1.2504	.44567	.30795	.43243	9.3100
#1	138.26	L-.10746	.12038	.53930	3.4959	H764.33	10.696
#2	139.13	L-.10656	.12253	.54271	3.5111	H769.02	9.3747
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07643	11.081	6.7519	.10503	8.4218	.71067	22.605
SDev	.00022	.001	.0296	.00016	.0073	.00103	.410
%RSD	.29356	.01143	.43887	.15467	.08701	.14529	1.8134
#1	.07627	11.082	6.7309	.10515	8.4167	.71140	22.315
#2	.07659	11.080	6.7728	.10492	8.4270	.70994	22.895
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.805	.41096	L-2.8272	17.586	9.7876	.46145	-.06561
SDev	.087	.03936	.1406	.077	.0844	.00245	.01449
%RSD	.41693	9.5767	4.9741	.43583	.86263	.53155	22.093
#1	20.744	.43879	L-2.7277	17.531	9.8473	.45972	-.05536
#2	20.867	.38313	L-2.9266	17.640	9.7279	.46319	-.07586
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.29813	-.28908	.04728	14.664
SDev	.15995	.03281	.00089	.092
%RSD	53.653	11.349	1.8776	.62924

#1	.41123	-.31228	.04791	14.599
#2	.18502	-.26589	.04665	14.730
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G817F Operator: STL
Run Time: 04/27/05 17:21:22
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	k1.6155	k90.730	k62.419	k-2.7094	13.354	k.00270	k10.618
SDev	.0002	.619	.245	.0110	.078	.00009	.021
%RSD	.01450	.68241	.39279	.40482	.58227	3.3069	.19526
#1	k1.6154	k90.292	k62.245	k-2.7172	13.299	k.00264	k10.603
#2	k1.6157	k91.168	k62.592	k-2.7017	13.409	k.00276	k10.632
Errors	LC Pass	LC Pass	LC High	LC Low	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	129.11	k-1.1669	k-.05357	k1.3925	k12.114	S5681.4	k11.085
SDev	.93	.0030	.00779	.0097	.025	.0	.492
%RSD	.71726	.25881	14.549	.69755	.20712	.00001	4.4409
#1	128.46	k-1.1690	k-.05908	k1.3857	k12.096	S5681.4	k11.433
#2	129.77	k-1.1647	k-.04806	k1.3994	k12.131	S5681.4	k10.737
Errors	LC Pass	LC Low	LC Low	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	k.45837	k16.492	k12.616	k-.06549	9.6011	1.2699	k35.954
SDev	.00025	.112	.064	.00284	.1146	.0214	.516
%RSD	.05440	.67898	.50421	4.3368	1.1941	1.6861	1.4355

#1	k.45820	k16.413	k12.571	k-.06750	9.5200	1.2850	k36.319
#2	k.45855	k16.572	k12.661	k-.06349	9.6822	1.2548	k35.589

Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	k24.869	k3.3302	k-21.425	k22.702	k17.706	.52242	k-1.8503
SDev	.305	.0515	.216	.093	.198	.00344	.0005
%RSD	1.2273	1.5472	1.0074	.40878	1.1163	.65815	.02604
#1	k24.653	k3.3666	k-21.273	k22.637	k17.846	.51999	k-1.8506
#2	k25.085	k3.2937	k-21.578	k22.768	k17.566	.52485	k-1.8499

Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Low
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	k.77543	k-2.7297	k-1.0245	k10.897
SDev	.06046	.0129	.0015	.056
%RSD	7.7972	.47356	.14868	.51775
#1	k.81819	k-2.7205	k-1.0256	k10.857
#2	k.73268	k-2.7388	k-1.0234	k10.937

Errors	LC Pass	LC Low	LC Low	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G817G Operator: STL
Run Time: 04/27/05 17:25:43
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.78877	113.96	6.6660	.77692	25.140	.00282	2.6945
SDev	.00381	.21	.0419	.00517	.303	.00000	.0449
%RSD	.48352	.18502	.62856	.66494	1.2042	.11435	1.6680

#1	.78607	113.81	6.6364	.77327	24.926	.00282	2.6627
#2	.79147	114.11	6.6957	.78057	25.354	.00282	2.7263
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000
Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H858.66	L-.07011	.14993	.56394	18.214	H661.93	17.127
SDev	2.08	.00018	.00014	.00539	.022	5.66	.600
%RSD	.24185	.26137	.09631	.95598	.11949	.85480	3.5053
#1	H857.19	L-.06998	.14982	.56013	18.199	H657.93	17.551
#2	H860.12	L-.07024	.15003	.56775	18.230	H665.93	16.702
Errors	LC High	LC Low	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09920	22.726	7.9700	.07401	26.594	5.3388	323.00
SDev	.00141	.071	.0759	.01108	.061	.0086	3.62
%RSD	1.4190	.31332	.95209	14.976	.22754	.16053	1.1199
#1	.09821	22.676	7.9163	.06617	26.637	5.3328	320.44
#2	.10020	22.777	8.0236	.08185	26.551	5.3449	325.56
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.811	.32854	L-2.2976	22.461	3.3296	1.1397	-.06361
SDev	.098	.00710	.1040	.054	.1134	.0128	.00496
%RSD	.83042	2.1598	4.5254	.23941	3.4071	1.1205	7.7976
#1	11.742	.33356	L-2.3711	22.423	3.2494	1.1307	-.06010
#2	11.880	.32353	L-2.2240	22.499	3.4098	1.1487	-.06711
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000
Elem	Tl	U	V	Zn			
Units	ppm	ppm	ppm	ppm			
Avge	.34649	-.09917	.13763	17.269			
SDev	.13318	.05084	.00071	.192			
%RSD	38.436	51.262	.51752	1.1140			
#1	.25232	-.06323	.13713	17.133			
#2	.44066	-.13512	.13813	17.405			
Errors	LC Pass	LC Pass	LC Pass	LC Pass			
High	50.000	50.000	50.000	50.000			

Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 04/27/05 17:30:05
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.80724	40.706	4.1651	4.0023	4.0661	3.9094	4.1866
SDev	.00478	.133	.1115	.0184	.0041	.0137	.0400
%RSD	.59265	.32558	2.6765	.45959	.10190	.35070	.95563
#1	Q.80386	40.612	4.0863	3.9893	4.0632	3.8997	4.1583
#2	Q.81062	40.800	4.2440	4.0153	4.0691	3.9191	4.2148
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	40.000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.243	3.9441	3.9122	3.9290	3.6651	42.109	39.290
SDev	.089	.0182	.0102	.0115	.0050	.079	.120
%RSD	.44113	.46157	.25991	.29392	.13649	.18736	.30439
#1	20.180	3.9312	3.9050	3.9208	3.6686	42.053	39.205
#2	20.306	3.9570	3.9194	3.9372	3.6615	42.164	39.374
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.000	4.0000	4.0000	4.0000	4.0000	40.000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9428	20.060	3.9402	3.9546	39.235	3.9028	4.0728
SDev	.0040	.084	.0092	.0199	.002	.0091	.0050
%RSD	.10247	.41711	.23379	.50287	.00472	.23257	.12331
#1	3.9400	20.001	3.9337	3.9686	39.234	3.9092	4.0764
#2	3.9457	20.119	3.9467	3.9405	39.237	3.8964	4.0693
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	20.000	4.0000	4.0000	40.000	4.0000	4.0000

Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9553	3.9498	3.6584	4.1694	4.0513	3.9017	3.6892
SDev	.0356	.0824	.0764	.0235	.1412	.0058	.0110
%RSD	.89975	2.0859	2.0883	.56337	3.4843	.14898	.29715
#1	3.9301	4.0080	3.7124	4.1528	4.1511	3.8976	3.6970
#2	3.9805	3.8915	3.6044	4.1860	3.9515	3.9058	3.6815
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	3.7900	3.9432	3.9178	3.9117
SDev	.1510	.0260	.0104	.0222
%RSD	3.9839	.65835	.26539	.56842
#1	3.8968	3.9616	3.9104	3.8960
#2	3.6833	3.9249	3.9251	3.9274
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 04/27/05 17:34:28
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00194	.03702	.01437	.00850	.00021	.00051	-.00410
SDev	.00120	.02065	.03458	.00194	.00002	.00008	.02302
%RSD	61.681	55.792	240.59	22.845	7.2693	15.428	560.86
#1	-.00110	.02241	-.01008	.00987	.00020	.00056	-.02038
#2	-.00279	Q.05162	.03883	.00712	.00023	.00045	.01217
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000

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Range	.01000	.05000	.20000	.02500	.20000	.00500	.20000
Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01097	.00161	-.00041	-.00192	.00339	.02048	.22060
SDev	.00085	.00011	.00032	.00256	.00123	.00171	1.5721
%RSD	7.7092	6.5450	77.394	133.60	36.261	8.3720	712.66
#1	.01038	.00169	-.00064	-.00011	.00426	.02169	1.3322
#2	.01157	.00154	-.00019	-.00373	.00252	.01927	-.89105
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.25000	.00500	.05000	.01000	.02500	.05000	2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00276	.03152	.00132	.00803	.01627	-.00374	.02530
SDev	.00060	.01849	.00005	.00852	.00924	.00923	.09193
%RSD	21.948	58.660	3.8169	106.08	56.790	246.87	363.33
#1	.00233	.01845	.00128	.01406	.00974	.00279	-.03970
#2	.00318	.04460	.00135	.00201	.02280	-.01027	.09031
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.01000	.25000	.01500	.04000	.25000	.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02070	.01462	-.01975	.03444	Q.11985	.00047	-.00300
SDev	.01541	.01035	.04800	.01472	.05653	.00001	.00395
%RSD	74.450	70.785	243.04	42.727	47.169	2.3743	131.61
#1	.03159	.00730	.01419	.04485	.07987	.00046	-.00021
#2	.00980	.02193	-.05369	.02404	Q.15982	.00048	-.00580
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.10000	.06000	.20000	.50000	.10000	.05000	.50000
Elem	Tl	U	V	Zn			
Units	ppm	ppm	ppm	ppm			
Avge	-.02129	-.13165	.00314	.00641			
SDev	.00612	.16019	.00204	.00005			
%RSD	28.729	121.68	65.013	.72694			
#1	-.02561	-.01838	.00170	.00638			
#2	-.01696	-.24493	.00458	.00644			
Errors	QC Pass	QC Pass	QC Pass	QC Pass			
Value	.00000	.00000	.00000	.00000			
Range	2.0000	.50000	.05000	.02000			

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Method: 6010C Sample Name: CCV Operator: STL
Run Time: 04/28/05 08:10:53
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.82798	41.194	4.3663	4.0681	4.2241	3.9756	4.1262
SDev	.00069	.090	.1508	.0014	.0078	.0058	.0336
%RSD	.08332	.21788	3.4526	.03522	.18555	.14688	.81418
#1	Q.82749	41.257	4.2597	4.0671	4.2296	3.9715	4.1499
#2	Q.82846	41.130	Q4.4729	4.0692	4.2185	3.9798	4.1024
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	40.000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.457	3.9141	3.9660	3.9699	3.7626	43.286	40.320
SDev	.036	.0110	.0141	.0045	.0137	.081	.108
%RSD	.17396	.28222	.35454	.11259	.36293	.18816	.26814
#1	20.432	3.9062	3.9561	3.9730	3.7722	43.228	40.244
#2	20.483	3.9219	3.9760	3.9667	3.7529	43.344	40.397
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.000	4.0000	4.0000	4.0000	4.0000	40.000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.1616	20.577	3.9801	4.1674	40.778	3.8851	3.8761
SDev	.0616	.000	.0088	.0312	.423	.0248	.2658
%RSD	1.4798	.00123	.22234	.74962	1.0368	.63929	6.8574
#1	4.2051	20.577	3.9738	4.1453	41.077	3.9027	3.6882
#2	4.1180	20.577	3.9863	4.1895	40.479	3.8675	4.0641
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	20.000	4.0000	4.0000	40.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.0445	3.8338	3.6662	4.1959	4.2111	4.0731	3.6838
SDev	.0202	.0000	.0277	.0062	.0283	.0050	.0169
%RSD	.50059	.00113	.75432	.14776	.67136	.12253	.45917
#1	4.0301	3.8338	3.6466	4.1915	4.1911	4.0766	3.6958
#2	4.0588	3.8338	3.6857	4.2003	4.2311	4.0696	3.6719
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Tl	U	V	Zn

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Units	ppm	ppm	ppm	ppm
Avge	3.7495	4.0650	4.0183	4.0297
SDev	.0272	.0259	.0088	.0182
%RSD	.72435	.63810	.21937	.45172
#1	3.7687	4.0834	4.0245	4.0169
#2	3.7303	4.0467	4.0120	4.0426
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 04/28/05 08:15:16
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00085	-.00594	.00611	.00569	.00032	.00013	-.01470
SDev	.00197	.00188	.01320	.00197	.00015	.00008	.00983
%RSD	231.74	31.628	215.93	34.686	46.939	63.463	66.850
#1	-.00225	-.00726	.01545	.00429	.00042	.00007	-.02165
#2	.00054	-.00461	-.00322	.00709	.00021	.00019	-.00775
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.01000	.05000	.20000	.02500	.20000	.00500	.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00739	.00082	.00106	-.00145	.00149	.00131	1.0490
SDev	.00034	.00081	.00120	.00047	.00049	.00012	.6176
%RSD	4.6036	98.619	113.14	32.366	33.011	9.0453	58.874
#1	.00763	.00025	.00191	-.00112	.00114	.00140	1.4857
#2	.00715	.00139	.00021	-.00178	.00184	.00123	.61229
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.25000	.00500	.05000	.01000	.02500	.05000	2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782

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Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00119	.01753	.00017	.00402	-.00319	.00280	.01083
SDev	.00002	.00071	.00016	.00284	.00553	.00034	.01022
%RSD	2.0645	4.0225	96.306	70.712	173.50	11.956	94.315
#1	-.00121	.01803	.00005	.00201	.00072	.00256	.01806
#2	-.00118	.01703	.00028	.00603	-.00710	.00304	.00361
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.01000	.25000	.01500	.04000	.25000	.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00020	-.02183	-.00273	.01186	.09989	.00007	-.00950
SDev	.00011	.00002	.03208	.00041	.08473	.00008	.00072
%RSD	53.963	.08980	1174.4	3.4920	84.831	115.96	7.6296
#1	.00028	-.02181	-.02542	.01215	Q.15980	.00001	-.01001
#2	.00012	-.02184	.01995	.01156	.03997	.00012	-.00898
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.10000	.06000	.20000	.50000	.10000	.05000	.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.01714	-.12549	.00148	.00435
SDev	.04829	.06495	.00049	.00123
%RSD	281.67	51.757	32.845	28.338
#1	-.01700	-.17141	.00114	.00347
#2	.05129	-.07956	.00182	.00522
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000
Range	2.0000	.50000	.05000	.02000

Method: 6010C Sample Name: G8WP7 5 Operator: STL
Run Time: 04/28/05 08:19:38
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi

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Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02575	29.438	1.1470	.20039	1.8276	.00070	.45193
SDev	.00001	.158	.0388	.00364	.0170	.00000	.01151
%RSD	.04392	.53671	3.3828	1.8158	.92930	.28415	2.5459
#1	.02575	29.326	1.1196	.19782	1.8156	.00070	.44380
#2	.02576	29.550	1.1745	.20296	1.8396	.00070	.46007
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	74.004	.00413	.02500	.17191	2.6583	125.81	7.8095
SDev	.589	.00242	.00161	.00008	.0239	1.44	.1402
%RSD	.79628	58.534	6.4245	.04499	.90065	1.1460	1.7953
#1	73.587	.00583	.02614	.17186	2.6414	124.79	7.7103
#2	74.421	.00242	.02386	.17197	2.6752	126.83	7.9086
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01417	6.0381	2.4382	.03200	8.3987	.30684	11.302
SDev	.00253	.0482	.0298	.01129	.0348	.00616	.079
%RSD	17.885	.79761	1.2210	35.288	.41477	2.0087	.70223
#1	.01238	6.0041	2.4172	.02401	8.4233	.31120	11.246
#2	.01596	6.0722	2.4593	.03998	8.3741	.30248	11.358
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.5691	.04876	L-.49557	4.6582	1.3882	.20261	-.01681
SDev	.0735	.02142	.02112	.0388	.0284	.00188	.00372
%RSD	1.3206	43.942	4.2616	.83259	2.0437	.93009	22.121
#1	5.5171	.03361	L-.48063	4.6308	1.3682	.20128	-.01418
#2	5.6212	.06391	L-.51050	4.6856	1.4083	.20395	-.01944
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.08836	-.16450	.02048	12.573
SDev	.04523	.03111	.00031	.154
%RSD	51.184	18.911	1.5244	1.2221

#1	-.05638	-.14250	.02070	12.464
#2	-.12034	-.18650	.02026	12.682
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WP7S 5 Operator: STL
Run Time: 04/28/05 08:23:59
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03024	34.273	.85928	.18493	2.2462	.00588	.42111
SDev	.00110	.136	.01365	.00897	.0004	.00027	.00509
%RSD	3.6370	.39795	1.5889	4.8521	.01834	4.6120	1.2076
#1	.02946	34.176	.86894	.17858	2.2464	.00569	.42471
#2	.03102	34.369	.84963	.19127	2.2459	.00608	.41752
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	68.992	.01303	.07259	.13697	6.0611	82.932	13.343
SDev	.997	.00295	.00218	.00063	.0237	1.097	.455
%RSD	1.4447	22.620	3.0006	.46097	.39037	1.3233	3.4107
#1	68.287	.01094	.07413	.13742	6.0444	82.156	13.665
#2	69.696	.01511	.07105	.13652	6.0779	83.708	13.021
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01117	13.444	2.5832	.11644	15.828	.23960	6.4067
SDev	.00506	.081	.0369	.00857	.081	.00703	.0082
%RSD	45.277	.60008	1.4279	7.3640	.50962	2.9359	.12724

#1	.00759	13.387	2.5571	.12251	15.885	.23463	6.4125
#2	.01474	13.501	2.6093	.11038	15.771	.24458	6.4010
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.1845	.08925	.00330	5.8210	2.4628	.49671	-.01672
SDev	.1831	.03155	.03587	.0572	.0846	.00058	.00547
%RSD	1.9940	35.347	1088.3	.98339	3.4344	.11668	32.706
#1	9.0550	.06695	.02866	5.7805	2.5226	.49630	-.01285
#2	9.3139	.11156	-.02207	5.8615	2.4030	.49712	-.02058
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.19046	-.07533	.07479	8.9664
SDev	.04842	.09583	.00464	.1627
%RSD	25.423	127.22	6.1992	1.8140
#1	.15622	-.00757	.07151	8.8514
#2	.22470	-.14309	.07807	9.0814
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WP7D 5 Operator: STL
Run Time: 04/28/05 08:28:21
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02131	21.558	1.0909	.12482	2.0864	.00582	.40005
SDev	.00039	.070	.0303	.00052	.0027	.00000	.00462
%RSD	1.8426	.32530	2.7735	.42072	.13011	.01391	1.1561

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#1	.02104	21.508	1.1123	.12444	2.0845	.00582	.40332
#2	.02159	21.607	1.0695	.12519	2.0883	.00582	.39678
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000
Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	102.09	.00347	.06696	.12375	3.2067	97.275	10.922
SDev	.54	.00159	.00056	.00055	.0112	.499	1.006
%RSD	.53193	45.638	.84309	.44163	.34789	.51264	9.2089
#1	101.70	.00459	.06656	.12413	3.1988	96.922	11.634
#2	102.47	.00235	.06736	.12336	3.2146	97.627	10.211
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00984	9.8570	2.1314	.12377	11.980	.21053	25.547
SDev	.00209	.0466	.0104	.01986	.021	.00634	.369
%RSD	21.220	.47280	.48784	16.044	.17612	3.0098	1.4433
#1	.00836	9.8241	2.1240	.10973	11.965	.21502	25.286
#2	.01131	9.8900	2.1387	.13782	11.995	.20605	25.807
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.3431	.05405	-.07868	5.3389	1.3259	.33884	-.01193
SDev	.0200	.01059	.03045	.0216	.0564	.00057	.00084
%RSD	.59920	19.585	38.706	.40384	4.2559	.16935	7.0128
#1	3.3290	.04656	-.10021	5.3236	1.3658	.33843	-.01252
#2	3.3573	.06153	-.05715	5.3541	1.2860	.33924	-.01134
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000
Elem	Tl	U	V	Zn			
Units	ppm	ppm	ppm	ppm			
Avge	.17729	-.11036	.06894	5.1120			
SDev	.03319	.01326	.00010	.0460			
%RSD	18.718	12.019	.14368	.90051			
#1	.20076	-.10098	.06901	5.0794			
#2	.15383	-.11973	.06887	5.1445			
Errors	LC Pass	LC Pass	LC Pass	LC Pass			
High	50.000	50.000	50.000	50.000			

Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WP7V 25 Operator: STL
Run Time: 04/28/05 08:32:42
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00571	5.8660	.23206	.03966	.36002	.00026	.07727
SDev	.00061	.0498	.06047	.00085	.00143	.00009	.01395
%RSD	10.656	.84918	26.056	2.1298	.39708	35.202	18.053
#1	.00614	5.8308	.18931	.03906	.35901	.00019	.06740
#2	.00528	5.9012	.27482	.04025	.36103	.00032	.08713
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.155	.00295	.00342	.03173	.53530	25.923	1.3044
SDev	.127	.00118	.00028	.00224	.00365	.167	.3613
%RSD	.83913	39.843	8.2219	7.0482	.68239	.64523	27.696
#1	15.065	.00379	.00322	.03332	.53272	25.805	1.0489
#2	15.245	.00212	.00362	.03015	.53789	26.041	1.5598
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00054	1.2375	.49279	.00676	1.6485	.06300	2.3023
SDev	.00082	.0241	.00359	.00853	.0211	.01217	.0156
%RSD	152.55	1.9448	.72904	126.11	1.2801	19.311	.67878
#1	-.00004	1.2204	.49025	.01279	1.6336	.05440	2.2912
#2	.00112	1.2545	.49533	.00073	1.6634	.07160	2.3133
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	

Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.1057	-.02186	-.00304	.87601	.34162	.03988	-.00581
SDev	.0111	.00010	.08791	.00036	.08473	.00025	.00110
%RSD	1.0072	.44893	2894.6	.04087	24.804	.62129	18.878
#1	1.0978	-.02193	-.06520	.87626	.28170	.03970	-.00504
#2	1.1136	-.02180	.05913	.87575	.40153	.04005	-.00659
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.04195	-.07864	.00365	2.5169
SDev	.00602	.02174	.00236	.0225
%RSD	14.359	27.641	64.779	.89529
#1	-.03769	-.06327	.00198	2.5010
#2	-.04620	-.09401	.00532	2.5328
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WQL 5 Operator: STL
Run Time: 04/28/05 08:37:02
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.26852	18.761	2.1351	.12983	6.4196	.00051	.71241
SDev	.00585	.253	.1117	.00693	.0033	.00009	.04202
%RSD	2.1796	1.3469	5.2324	5.3373	.05105	17.217	5.8987
#1	.26438	18.582	2.0561	.12493	6.4219	.00045	.68269
#2	.27266	18.939	2.2141	.13473	6.4173	.00057	.74212
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000

Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000
Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	41.471	L-.02562	.02629	.11548	1.3842	216.17	4.3510
SDev	.861	.00078	.00132	.00223	.0097	2.16	1.2044
%RSD	2.0758	3.0437	5.0113	1.9320	.69736	.99959	27.681
#1	40.862	L-.02507	.02536	.11390	1.3774	214.64	3.4994
#2	42.079	L-.02617	.02722	.11706	1.3911	217.70	5.2026
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01580	4.1571	1.7633	.02958	2.8436	.12465	4.0221
SDev	.00516	.1074	.0202	.00863	.0330	.00754	.1471
%RSD	32.658	2.5847	1.1478	29.168	1.1609	6.0456	3.6578
#1	.01215	4.0811	1.7490	.03568	2.8203	.11932	3.9180
#2	.01945	4.2330	1.7776	.02348	2.8670	.12998	4.1261
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.6450	.10737	L-.81301	3.7189	2.8932	.16574	-.02713
SDev	.1471	.03212	.12012	.0530	.1131	.00016	.00373
%RSD	1.5248	29.911	14.775	1.4264	3.9101	.09821	13.746
#1	9.5410	.08466	L-.72807	3.6814	2.8132	.16563	-.02449
#2	9.7490	.13008	L-.89795	3.7564	2.9732	.16586	-.02976
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000
Elem	Tl	U	V	Zn			
Units	ppm	ppm	ppm	ppm			
Avge	-.08045	-.14605	.00086	4.5400			
SDev	.06031	.01178	.00298	.0746			
%RSD	74.964	8.0676	347.82	1.6438			
#1	-.03781	-.15439	-.00125	4.4872			
#2	-.12310	-.13772	.00296	4.5928			
Errors	LC Pass	LC Pass	LC Pass	LC Pass			
High	50.000	50.000	50.000	50.000			
Low	-.20000	-.50000	-.05000	-.01000			

Method: 6010C Sample Name: G8WQN 5 Operator: STL
Run Time: 04/28/05 08:41:23
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08646	23.135	1.2023	.14717	2.1409	.00075	.45672
SDev	.00212	.084	.0138	.00062	.0044	.00009	.00266
%RSD	2.4519	.36334	1.1516	.42275	.20660	11.497	.58160
#1	.08496	23.075	1.1925	.14673	2.1440	.00069	.45484
#2	.08796	23.194	1.2121	.14761	2.1378	.00081	.45860
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	44.350	.00753	.02398	.12462	2.6843	118.10	6.4633
SDev	.300	.00054	.00153	.00036	.0111	.38	.3651
%RSD	.67663	7.2282	6.3653	.28994	.41277	.32184	5.6490
#1	44.138	.00715	.02506	.12487	2.6764	117.83	6.7215
#2	44.562	.00791	.02290	.12436	2.6921	118.37	6.2051
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01340	4.5099	1.9703	.03438	5.5907	.12307	5.5532
SDev	.00254	.0426	.0064	.00854	.0220	.00463	.0146
%RSD	18.940	.94413	.32642	24.838	.39392	3.7612	.26335
#1	.01161	4.4798	1.9657	.04042	5.6062	.12634	5.5635
#2	.01520	4.5400	1.9748	.02834	5.5751	.11979	5.5428
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.000	.08823	L-.32575	4.3364	3.2245	.14606	-.01852
SDev	.071	.00020	.07105	.0027	.0282	.00000	.00120
%RSD	.64834	.22736	21.811	.06192	.87499	.00145	6.4630
#1	10.950	.08808	L-.37599	4.3345	3.2444	.14607	-.01768
#2	11.051	.08837	L-.27551	4.3383	3.2045	.14606	-.01937
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.05698	-.03902	.01466	7.0353
SDev	.03926	.03011	.00014	.0596
%RSD	68.909	77.167	.96276	.84708
#1	.02922	-.06031	.01476	6.9932
#2	.08474	-.01773	.01456	7.0775
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WQT 5 Operator: STL
Run Time: 04/28/05 08:45:44
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05854	20.579	.82231	.13641	1.8954	.00325	6.1545
SDev	.00292	.131	.02790	.00057	.0113	.00009	.0884
%RSD	4.9892	.63739	3.3928	.41641	.59501	2.7878	1.4357
#1	.05648	20.486	.80259	.13681	1.8874	.00319	6.0920
#2	.06061	20.671	.84204	.13600	1.9034	.00332	6.2170
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K

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Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	50.654	.05109	.02349	.11664	H527.40	79.139	4.8867
SDev	.377	.00024	.00114	.00013	2.24	.608	.0865
%RSD	.74414	.47312	4.8682	.10855	.42383	.76791	1.7695
#1	50.387	.05091	.02268	.11656	H525.82	78.709	4.9478
#2	50.920	.05126	.02429	.11673	H528.98	79.568	4.8255
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01043	5.1037	30.018	.03227	3.9714	.19030	4.2751
SDev	.00179	.0521	.302	.01991	.0431	.00754	.0829
%RSD	17.136	1.0217	1.0075	61.697	1.0858	3.9628	1.9381
#1	.00917	5.0669	29.804	.04635	3.9409	.18497	4.2165
#2	.01170	5.1406	30.231	.01819	4.0019	.19563	4.3337
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.6777	-.00673	L-.26451	4.7245	1.1048	.16418	-.00622
SDev	.0982	.00034	.19490	.0568	.0846	.00107	.00854
%RSD	2.6690	5.1067	73.686	1.2033	7.6614	.64952	137.20
#1	3.6082	-.00698	-.12669	4.6843	1.1646	.16343	-.00019
#2	3.7471	-.00649	L-.40232	4.7647	1.0449	.16493	-.01226
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.19214	-.04358	.04020	18.653
SDev	.09970	.03493	.00199	.193
%RSD	51.888	80.153	4.9585	1.0330
#1	L-.26264	-.01888	.03879	18.517
#2	-.12164	-.06828	.04161	18.789
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WTA 10 Operator: STL
Run Time: 04/28/05 08:50:05
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04114	13.845	.41271	.09247	1.3927	.00032	.19502
SDev	.00047	.143	.06721	.00042	.0193	.00000	.00942
%RSD	1.1441	1.0322	16.285	.45006	1.3832	.84644	4.8284
#1	.04081	13.744	.36518	.09217	1.3791	.00031	.18836
#2	.04147	13.946	.46023	.09276	1.4064	.00032	.20168
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	26.682	.05677	.01060	.07216	2.8910	44.566	2.6089
SDev	.350	.00081	.00064	.00021	.0148	.628	.0838
%RSD	1.3109	1.4209	6.0790	.28877	.51276	1.4087	3.2110
#1	26.434	.05620	.01105	.07231	2.8805	44.122	2.6681
#2	26.929	.05734	.01014	.07202	2.9015	45.009	2.5496
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00337	2.5165	1.0751	.03999	3.1031	.10090	2.2240
SDev	.00350	.0371	.0142	.01133	.0220	.00343	.0829
%RSD	103.71	1.4727	1.3194	28.331	.70988	3.4006	3.7274
#1	.00090	2.4903	1.0651	.03198	3.0875	.09848	2.1654
#2	.00584	2.5427	1.0851	.04801	3.1186	.10333	2.2827
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.3615	-.00418	-.16853	2.4640	1.3415	.08177	-.01306
SDev	.0312	.05115	.05827	.0230	.0283	.00107	.00241
%RSD	.92680	1224.4	34.576	.93418	2.1097	1.3048	18.482

#1	3.3394	.03199	L-.20974	2.4478	1.3215	.08102	-.01477
#2	3.3835	-.04035	-.12733	2.4803	1.3615	.08253	-.01135
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.00563	-.04281	.01165	32.456
SDev	.04534	.04366	.00138	.480
%RSD	805.11	102.00	11.883	1.4802
#1	-.03769	-.01193	.01067	32.116
#2	.02643	-.07368	.01263	32.796
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WTG 5 Operator: STL
Run Time: 04/28/05 08:54:27
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.21028	27.459	2.5282	.34041	4.2844	.00226	.81833
SDev	.00419	.039	.0655	.00261	.0240	.00008	.01037
%RSD	1.9925	.14250	2.5905	.76533	.55938	3.5709	1.2667
#1	.20731	27.431	2.5745	.33857	4.3014	.00220	.81100
#2	.21324	27.486	2.4819	.34226	4.2675	.00231	.82566
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	51.732	L-.03471	.03330	.20100	1.8988	247.32	6.2237
SDev	.206	.00045	.00183	.00180	.0020	.41	.3233
%RSD	.39825	1.3092	5.4912	.89599	.10685	.16467	5.1946

#1	51.586	L-.03503	.03460	.20228	1.9002	247.03	5.9951
#2	51.878	L-.03439	.03201	.19973	1.8973	247.60	6.4523
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02615	5.1578	2.9892	.04613	8.1872	.18570	6.5795
SDev	.00270	.0234	.0048	.01134	.0110	.00103	.0314
%RSD	10.318	.45419	.16086	24.588	.13445	.55410	.47756
#1	.02424	5.1413	2.9858	.03811	8.1950	.18643	6.5573
#2	.02806	5.1744	2.9926	.05415	8.1795	.18497	6.6017
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.5672	.08847	L-.77939	4.6629	1.5181	.19086	-.02903
SDev	.0111	.02038	.10997	.0192	.0847	.00098	.00225
%RSD	.24302	23.039	14.109	.41072	5.5778	.51488	7.7399
#1	4.5594	.10288	L-.70163	4.6494	1.5780	.19156	-.02744
#2	4.5751	.07406	L-.85715	4.6765	1.4582	.19017	-.03062
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.09942	-.16661	.00784	7.0676
SDev	.01810	.00844	.00107	.0209
%RSD	18.211	5.0672	13.656	.29629
#1	.11222	-.17258	.00709	7.0528
#2	.08661	-.16064	.00860	7.0824
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WTR 5 Operator: STL
Run Time: 04/28/05 08:58:47
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08845	20.507	1.8249	.17078	1.5632	.00145	1.2921
SDev	.00110	.018	.0458	.00180	.0084	.00000	.0278
%RSD	1.2457	.08725	2.5083	1.0514	.53895	.19628	2.1497
#1	.08767	20.494	1.8572	.16951	1.5572	.00145	1.2725
#2	.08923	20.520	1.7925	.17205	1.5691	.00145	1.3117
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	55.059	L-.01125	.02591	.13574	40.412	187.56	4.4931
SDev	.288	.00141	.00139	.00010	.201	1.29	.3407
%RSD	.52281	12.546	5.3701	.07447	.49730	.68521	7.5835
#1	54.855	L-.01225	.02492	.13567	40.269	186.65	4.7340
#2	55.262	L-.01026	.02689	.13581	40.554	188.47	4.2522
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01741	4.7690	3.8810	.02495	4.9772	.40859	11.233
SDev	.00259	.0404	.0312	.00562	.0220	.00412	.130
%RSD	14.850	.84785	.80511	22.513	.44180	1.0074	1.1603
#1	.01558	4.7404	3.8589	.02098	4.9928	.40568	11.325
#2	.01924	4.7976	3.9031	.02893	4.9617	.41150	11.141
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.306	.22227	L-.64591	4.0963	2.9508	.14057	-.01851
SDev	.085	.01103	.00472	.0316	.0848	.00074	.00794
%RSD	.69012	4.9647	.73028	.77227	2.8752	.52614	42.915
#1	12.246	.21447	L-.64257	4.0739	2.8908	.14005	-.01289
#2	12.366	.23007	L-.64924	4.1186	3.0107	.14110	-.02413
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000

Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.03074	-.19289	.00953	14.800
SDev	.07239	.04400	.00093	.119
%RSD	235.51	22.812	9.7989	.80190
#1	.02045	-.16178	.00887	14.716
#2	-.08193	-.22401	.01019	14.884
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 04/28/05 09:03:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.81876	40.958	Q4.4394	4.0633	4.1293	3.9546	4.1450
SDev	.00277	.235	.0366	.0031	.0070	.0117	.0545
%RSD	.33843	.57328	.82439	.07692	.16908	.29516	1.3154
#1	Q.81681	40.792	Q4.4653	4.0655	4.1243	3.9464	4.1064
#2	Q.82072	41.124	Q4.4136	4.0611	4.1342	3.9629	4.1835
Errors	QC Fail	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	40.000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.577	3.9454	3.9544	3.9549	3.6624	42.898	40.189
SDev	.127	.0309	.0132	.0208	.0238	.094	.727
%RSD	.61646	.78385	.33288	.52672	.65098	.21974	1.8083
#1	20.487	3.9235	3.9451	3.9402	3.6456	42.831	40.703
#2	20.667	3.9672	3.9637	3.9697	3.6793	42.964	39.675
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.000	4.0000	4.0000	4.0000	4.0000	40.000	40.000

Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.0587	20.504	3.9878	4.0951	40.093	3.9240	3.9549
SDev	.0266	.154	.0103	.0880	.236	.0086	.0920
%RSD	.65418	.75230	.25763	2.1500	.58783	.21823	2.3264
#1	4.0399	20.395	3.9805	4.0328	39.927	3.9179	3.8899
#2	4.0774	20.614	3.9951	4.1574	40.260	3.9300	4.0200
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	20.000	4.0000	4.0000	40.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.0149	3.8846	3.7553	4.1777	4.1711	3.9764	3.6710
SDev	.0399	.0310	.0642	.0277	.0847	.0075	.0199
%RSD	.99319	.79678	1.7093	.66363	2.0314	.18931	.54076
#1	3.9867	3.8627	3.8007	4.1581	4.2311	3.9711	3.6570
#2	4.0431	3.9065	3.7099	4.1973	4.1112	3.9817	3.6850
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	3.8029	3.9919	3.9846	4.0037
SDev	.0000	.0258	.0241	.0193
%RSD	.00027	.64693	.60573	.48127
#1	3.8029	3.9736	3.9676	3.9901
#2	3.8030	4.0101	4.0017	4.0173
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 04/28/05 09:07:33
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00134	-.01516	-.01807	.00569	.00021	.00007	-.02878
SDev	.00176	.01283	.00501	.00202	.00000	.00000	.02232
%RSD	131.88	84.599	27.699	35.461	1.5663	3.7993	77.569
#1	-.00258	-.02423	-.01453	.00712	.00022	.00007	-.04456
#2	-.00009	-.00609	-.02161	.00427	.00021	.00007	-.01299
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.01000	.05000	.20000	.02500	.20000	.00500	.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00339	-.00048	-.00021	-.00177	.00084	.00166	-.48730
SDev	.00022	.00144	.00300	.00053	.00156	.00042	.43578
%RSD	6.4349	297.76	1461.5	30.101	185.88	25.527	89.429
#1	-.00324	-.00150	.00191	-.00139	.00194	.00136	-.79544
#2	-.00355	.00054	-.00232	-.00214	-.00026	.00195	-.17915
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.25000	.00500	.05000	.01000	.02500	.05000	2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00117	-.02450	.00016	.00603	-.02394	.00013	.03252
SDev	.00316	.03454	.00017	.00000	.01649	.00068	.00002
%RSD	269.40	140.99	101.18	.00041	68.875	504.66	.05048
#1	-.00341	-.04892	.00005	.00603	-.03560	-.00035	.03254
#2	.00106	-.00007	.00028	.00603	-.01228	.00062	.03251
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.01000	.25000	.01500	.04000	.25000	.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00296	.00732	.01998	.00954	.07991	.00001	-.00731
SDev	.00438	.00002	.00003	.00379	.00001	.00016	.00207
%RSD	147.94	.24719	.15445	39.723	.01492	1973.6	28.356
#1	-.00605	.00733	.02000	.00686	.07992	-.00011	-.00585
#2	.00014	.00731	.01995	.01223	.07990	.00012	-.00878
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.10000	.06000	.20000	.50000	.10000	.05000	.50000

Elem	Tl	U	V	Zn

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Units	ppm	ppm	ppm	ppm
Avge	-.06615	-.11631	-.00042	.00145
SDev	.02115	.04331	.00141	.00041
%RSD	31.978	37.237	335.56	28.535
#1	-.05119	-.14694	-.00142	.00175
#2	-.08111	-.08568	.00058	.00116
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000
Range	2.0000	.50000	.05000	.02000

Method: 6010C Sample Name: G8WTV 25 Operator: STL
Run Time: 04/28/05 09:11:55
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00435	1.6224	1.5378	.04474	.23060	.00007	.46244
SDev	.00177	.0295	.0521	.00360	.00114	.00000	.00048
%RSD	40.722	1.8159	3.3888	8.0483	.49430	2.9968	.10467
#1	.00310	1.6016	1.5746	.04220	.23141	.00007	.46210
#2	.00561	1.6432	1.5009	.04729	.22980	.00007	.46278
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.0088	L-.02887	.01446	.05065	.30837	152.01	1.5288
SDev	.0299	.00069	.00032	.00183	.00077	.43	.0826
%RSD	.99272	2.4031	2.2370	3.6080	.25105	.28050	5.4043
#1	2.9877	L-.02936	.01469	.05194	.30892	151.71	1.4704
#2	3.0299	L-.02838	.01423	.04935	.30782	152.31	1.5872
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00840	.38157	.72026	-.00142	.29375	.07183	.77881
SDev	.00227	.01846	.00247	.00002	.00368	.00376	.15754
%RSD	27.014	4.8391	.34308	1.4680	1.2528	5.2403	20.228
#1	.00680	.36851	.71851	-.00141	.29115	.07450	.89020
#2	.01001	.39462	.72200	-.00144	.29636	.06917	.66741
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0499	.03501	L-.52383	.60566	1.6899	.01100	-.02254
SDev	.0268	.00026	.03765	.00644	.0000	.00017	.00694
%RSD	2.5557	.72721	7.1866	1.0629	.00231	1.5100	30.778
#1	1.0310	.03483	L-.49721	.60111	1.6898	.01088	-.02745
#2	1.0689	.03519	L-.55045	.61021	1.6899	.01112	-.01764
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.05888	-.09534	-.01147	.33571
SDev	.05432	.03493	.00170	.00042
%RSD	92.246	36.636	14.815	.12469
#1	.09729	-.07064	-.01267	.33600
#2	.02048	-.12004	-.01026	.33541
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WTW 25 Operator: STL
Run Time: 04/28/05 09:16:16
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00192	1.3198	1.7705	.04377	.19872	.00007	.52882
SDev	.00422	.0222	.0019	.00270	.00114	.00000	.00909
%RSD	219.82	1.6824	.10623	6.1731	.57187	1.7328	1.7193
#1	.00106	1.3041	1.7692	.04186	.19953	.00007	.52240
#2	-.00490	1.3355	1.7718	.04569	.19792	.00007	.53525
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.2639	L-.03327	.01674	.04859	.18780	165.83	-.03333
SDev	.0090	.00180	.00093	.00149	.00078	.31	1.45630
%RSD	.39643	5.4073	5.5587	3.0583	.41577	.18870	4369.9
#1	2.2575	L-.03200	.01740	.04964	.18835	165.61	.99644
#2	2.2702	L-.03454	.01608	.04754	.18724	166.05	-1.0631
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00788	.31083	.80775	.00794	.12389	.07269	.82382
SDev	.00229	.03522	.00321	.00282	.00913	.00771	.00963
%RSD	29.053	11.330	.39718	35.571	7.3719	10.608	1.1687
#1	.00626	.28592	.80548	.00594	.11744	.06723	.83063
#2	.00950	.33573	.81002	.00994	.13035	.07814	.81701
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.5638	.04285	L-.54462	.58459	2.1902	.00886	-.02671
SDev	.0112	.00017	.03906	.00586	.0283	.00025	.01019
%RSD	.71533	.40206	7.1724	1.0019	1.2912	2.7838	38.164
#1	1.5717	.04273	L-.57224	.58874	2.1702	.00869	-.01950
#2	1.5559	.04297	L-.51699	.58045	2.2102	.00904	-.03392
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.04074	-.13412	-.01473	.28078
SDev	.03928	.01745	.00174	.00200
%RSD	96.438	13.010	11.815	.71114

#1	-.06851	-.12178	-.01596	.27937
#2	-.01296	-.14646	-.01350	.28220
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WT0 5 Operator: STL
Run Time: 04/28/05 09:20:37
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.19608	20.880	1.4705	.16687	3.9906	.00082	.64018
SDev	.00178	.093	.0515	.00080	.0271	.00001	.01103
%RSD	.90727	.44707	3.5005	.48112	.67906	.75817	1.7236
#1	.19482	20.814	1.4341	.16744	4.0098	.00081	.63238
#2	.19734	20.946	1.5069	.16630	3.9715	.00082	.64798
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	105.49	-.00483	.02432	.10961	5.5044	140.56	5.9135
SDev	.47	.00072	.00387	.00126	.0395	.20	.6145
%RSD	.44778	14.917	15.907	1.1496	.71697	.14250	10.391
#1	105.15	-.00432	.02706	.11050	5.4765	140.70	6.3480
#2	105.82	L-.00534	.02158	.10871	5.5323	140.42	5.4790
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01593	5.2450	4.2498	.03328	4.4513	.13737	32.983
SDev	.00104	.0289	.0043	.00851	.0009	.00394	.229
%RSD	6.5419	.55074	.10117	25.574	.02096	2.8653	.69564

#1	.01519	5.2245	4.2528	.03930	4.4506	.14015	32.821
#2	.01667	5.2654	4.2467	.02726	4.4519	.13459	33.145
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H52.425	.85130	L-.50313	4.3932	9.2363	.26708	-.01089
SDev	.465	.05141	.02508	.0275	.0565	.00155	.00227
%RSD	.88620	6.0389	4.9844	.62588	.61141	.58132	20.799
#1	H52.096	.81495	L-.52086	4.3738	9.1964	.26818	-.00929
#2	H52.753	.88766	L-.48540	4.4127	9.2763	.26598	-.01249
Errors	LC High	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.08863	-.11405	.02236	7.1698
SDev	.05134	.03449	.00131	.0284
%RSD	57.930	30.237	5.8781	.39599
#1	.12493	-.08967	.02143	7.1498
#2	.05232	-.13844	.02329	7.1899
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G8WT1 5 Operator: STL
Run Time: 04/28/05 09:24:59
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.35802	27.721	1.6710	.24952	5.8165	.00070	.60732
SDev	.00402	.177	.0722	.00268	.0291	.00000	.00631
%RSD	1.1222	.63958	4.3225	1.0728	.50041	.04815	1.0388

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#1	.35518	27.595	1.6199	.24763	5.7959	.00070	.60286
#2	.36086	27.846	1.7221	.25141	5.8371	.00070	.61179
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000
Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	50.998	-.00357	.02941	.15833	1.7763	170.48	6.3962
SDev	.436	.00004	.00079	.00163	.0107	1.39	.4405
%RSD	.85518	1.1445	2.6708	1.0324	.60447	.81387	6.8871
#1	50.690	-.00354	.02886	.15718	1.7687	169.50	6.0847
#2	51.307	-.00360	.02997	.15949	1.7839	171.46	6.7077
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01884	5.5942	1.8477	.02780	6.6393	.36595	5.3753
SDev	.00246	.0545	.0155	.00291	.0138	.00891	.0128
%RSD	13.082	.97419	.83849	10.462	.20721	2.4346	.23898
#1	.01710	5.5557	1.8368	.02985	6.6296	.37225	5.3662
#2	.02058	5.6327	1.8587	.02574	6.6490	.35965	5.3843
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.4721	.04493	L-.59193	4.2416	1.7913	.20377	-.03426
SDev	.0087	.01984	.00487	.0505	.0284	.00106	.01037
%RSD	.24955	44.151	.82288	1.1907	1.5833	.52184	30.266
#1	3.4660	.05895	L-.58849	4.2059	1.7712	.20302	-.02693
#2	3.4783	.03090	L-.59538	4.2774	1.8113	.20452	-.04159
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000
Elem	Tl	U	V	Zn			
Units	ppm	ppm	ppm	ppm			
Avge	-.00907	-.14586	.01551	12.972			
SDev	.00307	.00793	.00142	.138			
%RSD	33.803	5.4334	9.1803	1.0674			
#1	-.01124	-.15147	.01451	12.874			
#2	-.00691	-.14026	.01652	13.070			
Errors	LC Pass	LC Pass	LC Pass	LC Pass			
High	50.000	50.000	50.000	50.000			

Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G817C 5 Operator: STL
Run Time: 04/28/05 09:29:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.10228	36.434	1.2183	.23808	2.8215	.00081	.56432
SDev	.00093	.064	.0025	.00269	.0267	.00002	.01486
%RSD	.90871	.17488	.20579	1.1301	.94653	2.0414	2.6334
#1	.10163	36.389	1.2165	.23617	2.8026	.00080	.55381
#2	.10294	36.479	1.2201	.23998	2.8404	.00083	.57483
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	59.290	.00667	.02939	.15685	4.5879	131.29	8.4920
SDev	.248	.00198	.00548	.00424	.0175	1.48	.6959
%RSD	.41822	29.631	18.651	2.7000	.38118	1.1261	8.1952
#1	59.115	.00807	.03327	.15984	4.5756	130.25	8.9841
#2	59.466	.00528	.02551	.15385	4.6003	132.34	7.9999
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02073	6.9618	2.6123	.02570	9.3934	.38326	5.4987
SDev	.00206	.0522	.0289	.01996	.0109	.00562	.0789
%RSD	9.9590	.74915	1.1077	77.641	.11591	1.4670	1.4348
#1	.01927	6.9249	2.5918	.03981	9.4011	.38723	5.5545
#2	.02218	6.9987	2.6327	.01159	9.3857	.37928	5.4429
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	

Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.9590	.08086	L-.36153	4.4084	1.6282	.20596	-.01327
SDev	.0092	.04212	.06941	.0086	.0849	.00174	.01404
%RSD	.15523	52.085	19.200	.19425	5.2166	.84345	105.80
#1	5.9524	.05108	L-.31244	4.4024	1.5682	.20473	-.00334
#2	5.9655	.11065	L-.41061	4.4145	1.6883	.20719	-.02321
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.00999	-.02725	.02456	10.285
SDev	.10288	.26492	.00036	.132
%RSD	1029.6	972.33	1.4705	1.2821
#1	-.08274	.16008	.02431	10.192
#2	.06275	-.21457	.02482	10.379
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G817CS 5 Operator: STL
Run Time: 04/28/05 09:33:42
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09461	77.332	1.4378	.38976	2.8416	.00582	.56599
SDev	.00002	.812	.0210	.00142	.0071	.00001	.02786
%RSD	.01876	1.0503	1.4626	.36384	.25155	.09097	4.9215
#1	.09460	76.758	1.4229	.38875	2.8366	.00582	.54630
#2	.09463	77.906	1.4527	.39076	2.8467	.00583	.58569
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000

Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000
Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	65.624	.00845	.07281	.17952	3.5197	144.81	12.569
SDev	.694	.00106	.00234	.00023	.0113	.62	.862
%RSD	1.0574	12.586	3.2125	.12838	.32153	.43044	6.8606
#1	65.133	.00920	.07116	.17936	3.5117	144.37	13.179
#2	66.115	.00769	.07446	.17968	3.5277	145.25	11.959
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01598	11.502	3.0954	.13952	19.302	.39659	5.1951
SDev	.00071	.126	.0144	.00003	.115	.01423	.1440
%RSD	4.4308	1.0950	.46475	.02189	.59413	3.5874	2.7716
#1	.01548	11.413	3.0852	.13954	19.221	.38653	5.0933
#2	.01648	11.591	3.1055	.13950	19.383	.40665	5.2969
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	
Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9601	.18277	-.19465	6.6528	1.5495	.30128	-.02844
SDev	.0347	.03127	.01683	.0857	.0283	.00131	.01221
%RSD	.87743	17.107	8.6445	1.2879	1.8283	.43656	42.936
#1	3.9355	.16066	-.18275	6.5922	1.5295	.30035	-.01981
#2	3.9846	.20488	L-.20655	6.7134	1.5696	.30221	-.03708
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000
Elem	Tl	U	V	Zn			
Units	ppm	ppm	ppm	ppm			
Avge	.28443	-.12486	.06937	7.5933			
SDev	.04829	.08251	.00208	.0496			
%RSD	16.978	66.077	2.9963	.65351			
#1	.25029	-.06652	.06790	7.5582			
#2	.31858	-.18321	.07084	7.6284			
Errors	LC Pass	LC Pass	LC Pass	LC Pass			
High	50.000	50.000	50.000	50.000			
Low	-.20000	-.50000	-.05000	-.01000			

Method: 6010C Sample Name: G817CD 5 Operator: STL
Run Time: 04/28/05 09:38:03
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06401	35.605	1.7804	.18975	2.2744	.00583	.70875
SDev	.00216	.159	.0175	.00401	.0083	.00000	.01167
%RSD	3.3690	.44648	.98475	2.1115	.36391	.01417	1.6463
#1	.06248	35.493	1.7928	.19258	2.2685	.00582	.71700
#2	.06553	35.718	1.7680	.18691	2.2802	.00583	.70050
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.395	.00428	.07205	.19414	4.8164	172.32	11.485
SDev	.373	.00351	.00158	.00147	.0086	1.06	.362
%RSD	.77073	82.004	2.1906	.75680	.17828	.61665	3.1549
#1	48.131	.00180	.07317	.19310	4.8104	171.57	11.229
#2	48.659	.00675	.07094	.19518	4.8225	173.07	11.741
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01701	10.044	2.6624	.16027	11.391	.42130	4.9922
SDev	.00312	.082	.0172	.00847	.005	.00189	.0531
%RSD	18.366	.81937	.64517	5.2844	.04827	.44766	1.0631
#1	.01480	9.9855	2.6502	.15428	11.395	.41997	4.9547
#2	.01922	10.102	2.6745	.16625	11.387	.42264	5.0297
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th

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Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.1274	.25679	L-.47032	5.6604	2.4703	.24555	-.02304
SDev	.1003	.01090	.02851	.0455	.0281	.00074	.00119
%RSD	1.0992	4.2452	6.0628	.80388	1.1394	.30034	5.1836
#1	9.0565	.24908	L-.49048	5.6283	2.4902	.24503	-.02388
#2	9.1984	.26449	L-.45015	5.6926	2.4504	.24607	-.02219
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.18961	-.13778	.06080	H58.292
SDev	.09670	.01360	.00211	.519
%RSD	51.000	9.8729	3.4613	.89108
#1	.12123	-.12816	.05932	H57.925
#2	.25799	-.14740	.06229	H58.660
Errors	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G817D 5 Operator: STL
Run Time: 04/28/05 09:42:25
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09677	31.430	1.1342	.18872	2.6802	.00070	.51165
SDev	.00113	.107	.0281	.00320	.0380	.00001	.04215
%RSD	1.1732	.33905	2.4736	1.6982	1.4163	.82040	8.2391
#1	.09597	31.355	1.1143	.18645	2.6534	.00069	.48184
#2	.09757	31.505	1.1540	.19099	2.7071	.00070	.54146
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K

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Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	64.116	.00686	.02679	.12665	3.8331	119.84	7.2827
SDev	.670	.00110	.00195	.00143	.0140	1.92	.8147
%RSD	1.0448	16.050	7.2943	1.1298	.36415	1.5984	11.186
#1	63.642	.00609	.02540	.12564	3.8232	118.48	6.7066
#2	64.590	.00764	.02817	.12767	3.8430	121.19	7.8587
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01594	7.8181	2.9104	.03430	7.9979	.30005	5.6218
SDev	.00264	.0987	.0483	.01411	.0238	.00513	.0241
%RSD	16.557	1.2622	1.6603	41.135	.29766	1.7092	.42847
#1	.01407	7.7483	2.8763	.02432	8.0148	.30368	5.6047
#2	.01781	7.8878	2.9446	.04427	7.9811	.29643	5.6388
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.7767	.09619	L-.39579	4.1390	1.3078	.21268	-.00921
SDev	.1028	.00920	.08964	.0340	.0849	.00320	.00123
%RSD	2.7210	9.5663	22.647	.82140	6.4918	1.5037	13.336
#1	3.7040	.10270	L-.45917	4.1150	1.2478	.21042	-.00834
#2	3.8494	.08968	L-.33241	4.1631	1.3679	.21494	-.01008
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.00975	-.15533	.02292	10.757
SDev	.03941	.09202	.00172	.178
%RSD	404.35	59.244	7.5061	1.6535
#1	-.01812	-.09026	.02171	10.631
#2	.03762	-.22040	.02414	10.883
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G817E 5 Operator: STL
Run Time: 04/28/05 09:46:46
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.10424	13.840	1.8176	.08812	2.7658	.00057	.61167
SDev	.00202	.022	.0396	.00183	.0113	.00000	.01775
%RSD	1.9366	.15763	2.1785	2.0768	.40774	.58226	2.9024
#1	.10281	13.825	1.8456	.08682	2.7579	.00057	.59912
#2	.10567	13.856	1.7896	.08941	2.7738	.00057	.62422
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	30.148	L-.02711	.02202	.11188	.71912	184.33	2.5784
SDev	.162	.00021	.00100	.00187	.00482	1.25	.6328
%RSD	.53768	.77268	4.5195	1.6744	.67086	.67979	24.542
#1	30.034	L-.02697	.02273	.11320	.71571	183.44	2.1310
#2	30.263	L-.02726	.02132	.11055	.72253	185.21	3.0259
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01538	2.3312	1.4141	.02511	1.6504	.15069	4.8001
SDev	.00286	.0319	.0107	.00006	.0092	.00155	.2170
%RSD	18.619	1.3678	.75350	.24451	.55711	1.0271	4.5198
#1	.01335	2.3087	1.4066	.02515	1.6439	.14960	4.6467
#2	.01740	2.3538	1.4216	.02507	1.6569	.15179	4.9535
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.5748	.08225	L-.69231	2.9833	2.3115	.09422	-.02499
SDev	.0447	.01989	.00457	.0217	.1411	.00049	.00408
%RSD	.97773	24.177	.66062	.72818	6.1024	.52505	16.329

#1	4.5431	.09631	L-.68908	2.9679	2.4113	.09387	-.02210
#2	4.6064	.06819	L-.69555	2.9986	2.2118	.09457	-.02787
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.08263	-.13102	.00249	3.1108
SDev	.06937	.05267	.00094	.0221
%RSD	83.953	40.200	37.857	.71069
#1	.13168	-.09378	.00182	3.0952
#2	.03358	-.16826	.00316	3.1264

Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: G817F 25 Operator: STL
Run Time: 04/28/05 09:51:06
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02267	3.8084	.99843	.04172	.57844	.00013	.33218
SDev	.00085	.0273	.06949	.00194	.00142	.00008	.00821
%RSD	3.7708	.71667	6.9599	4.6454	.24503	65.875	2.4706
#1	.02328	3.7891	1.0476	.04035	.57744	.00007	.32637
#2	.02207	3.8277	.94929	.04309	.57944	.00019	.33798
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.2442	L-.01731	.01250	.04504	.48691	97.359	1.2948
SDev	.0552	.00075	.00380	.00284	.00398	1.081	1.8266
%RSD	.88451	4.3439	30.403	6.3177	.81639	1.1103	141.08

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#1	6.2052	L-.01784	.00981	.04303	.48410	96.595	.00313
#2	6.2833	L-.01677	.01518	.04705	.48972	98.124	2.5864

Errors							
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00692	.71191	.60661	.00326	.37224	.05851	1.3727
SDev	.00594	.07810	.00775	.00857	.03210	.00376	.0787
%RSD	85.847	10.970	1.2781	262.75	8.6225	6.4336	5.7322
#1	.00272	.65669	.60112	.00933	.34954	.05585	1.3170
#2	.01112	.76714	.61209	-.00280	.39493	.06117	1.4283

Errors							
High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
Low	10.000	500.00	50.000	50.000	500.00	50.000	
	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.2143	.08418	L-.34161	.76935	.94654	.02280	-.01155
SDev	.0579	.03150	.06027	.01227	.02818	.00032	.00724
%RSD	4.7717	37.417	17.643	1.5949	2.9770	1.4269	62.674
#1	1.1733	.06191	L-.38423	.76068	.96647	.02257	-.01667
#2	1.2553	.10645	L-.29900	.77803	.92662	.02303	-.00643

Errors							
High	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
Low	50.000	50.000	50.000	50.000	20.000	50.000	10.000
	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	.01738	-.03848	-.00385	.51415
SDev	.04233	.06860	.00372	.00443
%RSD	243.53	178.29	96.475	.86255
#1	-.01255	-.08699	-.00648	.51101
#2	.04731	.01003	-.00122	.51728

Errors				
High	LC Pass	LC Pass	LC Pass	LC Pass
Low	50.000	50.000	50.000	50.000
	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 04/28/05 09:55:28
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.81939	41.017	4.3284	4.0970	4.1392	3.9912	4.2492
SDev	.00384	.266	.0756	.0247	.0291	.0293	.1048
%RSD	.46895	.64892	1.7455	.60241	.70297	.73338	2.4670
#1	Q.81668	40.829	4.2750	4.0795	4.1187	3.9705	4.1751
#2	Q.82211	41.205	4.3818	4.1144	4.1598	4.0119	4.3233
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	40.000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.821	3.9714	3.9849	3.9804	3.7005	43.053	40.666
SDev	.136	.0110	.0179	.0176	.0002	.246	.242
%RSD	.65106	.27664	.44930	.44238	.00659	.57236	.59606
#1	20.725	3.9636	3.9722	3.9679	3.7003	42.879	40.495
#2	20.917	3.9791	3.9975	3.9928	3.7007	43.227	40.838
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.000	4.0000	4.0000	4.0000	4.0000	40.000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.0218	20.565	3.9957	4.1051	39.934	3.9620	4.0852
SDev	.0356	.145	.0290	.0341	.301	.0363	.0004
%RSD	.88553	.70408	.72662	.82998	.75320	.91640	.00866
#1	3.9966	20.463	3.9752	4.0810	39.722	3.9364	4.0850
#2	4.0470	20.667	4.0162	4.1292	40.147	3.9877	4.0855
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	20.000	4.0000	4.0000	40.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9848	3.9357	3.8800	4.1858	4.2110	3.9781	3.7271
SDev	.0732	.0207	.0156	.0316	.0282	.0293	.0048
%RSD	1.8378	.52613	.40119	.75614	.67048	.73639	.12928
#1	3.9330	3.9211	3.8690	4.1634	4.2310	3.9574	3.7305
#2	4.0366	3.9503	3.8910	4.2082	4.1911	3.9988	3.7237
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000

Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Tl	U	V	Zn			
Units	ppm	ppm	ppm	ppm			
Avge	3.8073	4.0282	3.9934	3.9980			
SDev	.0181	.0692	.0220	.0146			
%RSD	.47527	1.7173	.55129	.36516			
#1	3.7945	3.9793	3.9778	3.9877			
#2	3.8200	4.0771	4.0090	4.0083			
Errors	QC Pass	QC Pass	QC Pass	QC Pass			
Value	4.0000	4.0000	4.0000	4.0000			
Range	10.000	10.000	10.000	10.000			

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 04/28/05 09:59:51
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00051	-.00226	-.05478	.00711	.00012	.00020	-.00395
SDev	.00110	.01109	.03427	.00002	.00014	.00000	.01774
%RSD	217.04	490.58	62.552	.23343	118.37	1.1085	448.85
#1	-.00129	-.01010	-.03055	.00712	.00002	.00020	.00859
#2	.00027	.00558	-.07901	.00710	.00022	.00020	-.01649
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.01000	.05000	.20000	.02500	.20000	.00500	.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00661	.00141	-.00168	-.00122	-.00016	.00455	.49489
SDev	.00019	.00009	.00030	.00031	.00066	.00043	.65523
%RSD	2.8434	6.6331	17.910	25.153	404.62	9.4330	132.40
#1	.00674	.00134	-.00147	-.00101	.00030	.00425	.95821
#2	.00647	.00148	-.00190	-.00144	-.00063	.00486	.03158
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000

Range	.25000	.00500	.05000	.01000	.02500	.05000	2.0000
Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00023	.00701	.00017	.00402	-.00253	.00123	.03613
SDev	.00158	.01787	.00017	.00284	.00640	.00154	.00512
%RSD	696.90	254.93	97.740	70.714	253.19	125.17	14.162
#1	-.00134	-.00563	.00005	.00201	-.00706	.00014	.03974
#2	.00089	.01964	.00029	.00603	.00200	.00232	.03251
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.01000	.25000	.01500	.04000	.25000	.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00181	-.01453	.01718	.00486	.09989	.00007	-.01002
SDev	.00677	.03092	.02815	.00003	.08472	.00008	.00237
%RSD	374.17	212.80	163.85	.50859	84.816	116.53	23.627
#1	.00660	.00733	.03708	.00485	Q.15980	.00001	-.01169
#2	-.00298	-.03639	-.00272	.00488	.03998	.00012	-.00834
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.10000	.06000	.20000	.50000	.10000	.05000	.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.04478	-.14692	.00026	-.00001
SDev	.00303	.03463	.00230	.00164
%RSD	6.7708	23.569	889.07	25303.
#1	-.04263	-.17140	-.00137	-.00116
#2	-.04692	-.12243	.00189	.00115
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000
Range	2.0000	.50000	.05000	.02000

Method: 6010C Sample Name: G817G 5 Operator: STL
Run Time: 04/28/05 10:04:13
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.16956	23.414	1.5839	.16208	5.2456	.00082	.60750
SDev	.00297	.134	.0760	.00519	.0113	.00000	.00937
%RSD	1.7538	.57123	4.7959	3.1994	.21498	.11040	1.5427
#1	.16746	23.319	1.5302	.15841	5.2376	.00082	.60087
#2	.17166	23.508	1.6376	.16575	5.2535	.00082	.61412
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	500.00	50.000	50.000	50.000	20.000	50.000
Low	-.01000	-.05000	-.20000	-.20000	-.20000	-.00500	-.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	199.42	L-.01760	.03211	.11931	3.7756	162.92	3.9425
SDev	1.87	.00122	.00084	.00087	.0047	.84	.2050
%RSD	.93627	6.9374	2.6080	.73232	.12578	.51627	5.1996
#1	198.10	L-.01673	.03152	.11869	3.7790	162.32	3.7976
#2	200.74	L-.01846	.03270	.11993	3.7723	163.51	4.0875
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.00	50.000	50.000	50.000	50.000	500.00	1000.0
Low	-.25000	-.00500	-.05000	-.01000	-.02500	-.05000	-2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02013	5.2538	1.7465	.01813	5.3378	1.1936	70.981
SDev	.00254	.0454	.0110	.01140	.0477	.0046	.518
%RSD	12.643	.86451	.63208	62.905	.89326	.38759	.72908
#1	.01833	5.2216	1.7387	.02619	5.3041	1.1969	70.615
#2	.02193	5.2859	1.7543	.01006	5.3715	1.1904	71.347
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.000	500.00	50.000	50.000	500.00	50.000	
Low	-.05000	-.25000	-.01500	-.04000	-.25000	-.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.6724	.07712	L-.59986	4.1221	.87215	.24445	-.01358
SDev	.0356	.05199	.04940	.0506	.02818	.00049	.00868
%RSD	1.3303	67.413	8.2359	1.2268	3.2312	.20050	63.908
#1	2.6473	.04036	L-.63479	4.0864	.89208	.24410	-.01971
#2	2.6976	.11388	L-.56492	4.1579	.85222	.24480	-.00744
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	50.000	10.000
Low	-.10000	-.06000	-.20000	-.50000	-.10000	-.05000	-.50000

Elem	Tl	U	V	Zn

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Units	ppm	ppm	ppm	ppm
Avge	.12568	-.13825	.03100	3.8027
SDev	.00601	.01253	.00217	.0255
%RSD	4.7792	9.0656	6.9934	.66935
#1	.12993	-.14712	.02947	3.7847
#2	.12143	-.12939	.03254	3.8207
Errors	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000
Low	-.20000	-.50000	-.05000	-.01000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 04/28/05 10:08:35
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.82790	41.378	4.3904	4.1322	4.2234	4.0374	4.2363
SDev	.00724	.208	.0886	.0449	.0429	.0456	.0049
%RSD	.87398	.50381	2.0177	1.0869	1.0164	1.1303	.11675
#1	Q.82278	41.230	4.3277	4.1004	4.1931	4.0051	4.2328
#2	Q.83302	41.525	Q4.4530	4.1639	4.2538	4.0697	4.2398
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	40.000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.847	3.9720	3.9920	4.0018	3.7655	43.493	41.204
SDev	.133	.0180	.0257	.0240	.0254	.518	.408
%RSD	.63560	.45285	.64392	.59922	.67446	1.1912	.99005
#1	20.754	3.9592	3.9739	3.9848	3.7475	43.127	41.493
#2	20.941	3.9847	4.0102	4.0188	3.7834	43.859	40.916
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.000	4.0000	4.0000	4.0000	4.0000	40.000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.1134	20.693	4.0353	4.1553	40.627	3.9574	4.0245
SDev	.0273	.112	.0451	.0596	.245	.0010	.0757
%RSD	.66439	.53913	1.1172	1.4348	.60265	.02601	1.8813
#1	4.0940	20.614	4.0034	4.1132	40.454	3.9581	4.0781
#2	4.1327	20.772	4.0672	4.1975	40.801	3.9567	3.9710
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	20.000	4.0000	4.0000	40.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9842	3.8849	3.8108	4.2043	4.2509	4.0547	3.7772
SDev	.0070	.0306	.0467	.0248	.0847	.0414	.0303
%RSD	.17534	.78809	1.2264	.59024	1.9928	1.0213	.80263
#1	3.9892	3.9066	3.7778	4.1868	4.1910	4.0255	3.7558
#2	3.9793	3.8633	3.8439	4.2219	4.3108	4.0840	3.7986
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	3.8670	4.1134	4.0273	4.0169
SDev	.1631	.0255	.0255	.0538
%RSD	4.2164	.62037	.63271	1.3397
#1	3.9823	4.0954	4.0093	3.9788
#2	3.7517	4.1315	4.0453	4.0549
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 04/28/05 10:12:58
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As1936	B	Ba	Be	Bi

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00466	-.00552	-.05369	.00852	.00001	.00020	.01463
SDev	.00021	.01998	.02269	.00003	.00001	.00017	.03852
%RSD	4.5015	362.02	42.260	.34060	88.416	88.952	263.24
#1	-.00481	-.01965	-.06973	.00854	.00002	.00007	-.01261
#2	-.00451	.00861	-.03764	.00850	.00000	.00032	.04188
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.01000	.05000	.20000	.02500	.20000	.00500	.20000

Elem	Ca3179	Cd2288	Co	Cr	Cu	Fe	K
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00339	.00091	-.00062	-.00247	.00315	.00270	-.85355
SDev	.00029	.00035	.00179	.00083	.00288	.00188	1.59399
%RSD	8.5832	38.130	288.62	33.546	91.567	69.530	186.75
#1	-.00318	.00115	.00065	-.00188	.00111	.00137	.27357
#2	-.00359	.00066	-.00189	-.00305	.00518	.00403	-1.9807
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.25000	.00500	.05000	.01000	.02500	.05000	2.0000

Elem	Li	Mg	Mn	Mo	Na	Ni	P_1782
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00290	-.02019	.00029	-.00000	-.02200	.00256	.02169
SDev	.00499	.04352	.00034	.00284	.02107	.00205	.00509
%RSD	171.78	215.59	117.07	2330400.	95.767	80.130	23.467
#1	-.00643	-.05096	.00005	.00201	-.03690	.00111	.01809
#2	.00062	.01059	.00054	-.00201	-.00710	.00401	.02529
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.01000	.25000	.01500	.04000	.25000	.04000	

Elem	Pb	Sb	Se1960	Si	Sn	Sr	Th
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00926	.00733	.06266	.00554	Q.15977	.00001	.00557
SDev	.01332	.02060	.06833	.00191	.00003	.00016	.01319
%RSD	143.88	280.93	109.05	34.446	.01901	1824.7	236.52
#1	-.01867	-.00723	.01434	.00419	Q.15979	-.00010	-.00375
#2	.00016	.02190	.11098	.00689	Q.15975	.00012	.01490
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.10000	.06000	.20000	.50000	.10000	.05000	.50000

Elem	Tl	U	V	Zn
Units	ppm	ppm	ppm	ppm
Avge	-.06614	-.12557	-.00086	.00144
SDev	.03927	.04756	.00196	.00042
%RSD	59.367	37.873	228.62	29.261

#1	-.03838	-.15919	-.00224	.00174
#2	-.09391	-.09194	.00053	.00114
Errors	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000
Range	2.0000	.50000	.05000	.02000

Analytical Runlog for Mercury Analysis											
Run #: AA0428B											
Instrument ID:		HAA									
Seq	Sample ID	Run Date/Time		Instr Conc.	Dilution	Final Conc.		QC Expected		% Recovery
1	S0	4/28/2005	15:29:40		1					
2	S0.2	4/28/2005	15:31:41		1					
3	S0.5	4/28/2005	15:33:41		1					
4	S1	4/28/2005	15:35:42		1					
5	S5	4/28/2005	15:37:42		1					
6	S10	4/28/2005	15:40:17		1					
7	ICV	4/28/2005	15:42:21	2.5	1	2.5	ppb	2.5	ppb	100.0%
8	CCB	4/28/2005	15:44:22	0.012	1	0.012	ppb	<0.2	ppb	
9	CRA	4/28/2005	15:46:12	0.227	1	0.227	ppb	0.2	ppb	113.5%
10	CCV	4/28/2005	15:48:32	5.08	1	5.08	ppb	5	ppb	101.6%
11	CCB	4/28/2005	15:50:22	-0.023	1	-0.023	ppb	<0.2	ppb	
12	G9A8GB	4/28/2005	15:52:34	0.021	1	0.021	ppb			
13	G9A8GC	4/28/2005	15:54:34	4.44	20	88.8	ppb	101.4	ppb	87%
14	G8813	4/28/2005	15:56:23	-0.016	1	-0.016	ppb			
15	G8813S	4/28/2005	15:58:21	0.025	1	0.025	ppb	1	ppb	0%
16	G8813D	4/28/2005	16:01:02	0.031	1	0.031	ppb	1	ppb	0%
17	G8813V	4/28/2005	16:02:51	0.019	5	0.095	ppb			
18	G8814	4/28/2005	16:04:52	0.014	1	0.014	ppb			
19	G8815	4/28/2005	16:07:01	0.03	1	0.03	ppb			
20	G8816	4/28/2005	16:09:42	0.025	1	0.025	ppb			
21	G8817	4/28/2005	16:11:53	0.03	1	0.03	ppb			
22	CCV	4/28/2005	16:13:42	5.46	1	5.46	ppb	5	ppb	109.2%
23	CCB	4/28/2005	16:15:35	-0.003	1	-0.003	ppb	<0.2	ppb	
24	G8818	4/28/2005	16:17:35	0.03	1	0.03	ppb			
25	G8819	4/28/2005	16:20:07	0.017	1	0.017	ppb			
26	G882A	4/28/2005	16:22:05	0.017	1	0.017	ppb			
27	G882C	4/28/2005	16:23:53	0.02	1	0.02	ppb			
28	G882E	4/28/2005	16:26:13	0.02	1	0.02	ppb			
29	G882F	4/28/2005	16:28:12	0.018	1	0.018	ppb			
30	G882H	4/28/2005	16:30:03	0.021	1	0.021	ppb			
31	G882J	4/28/2005	16:32:12	0.016	1	0.016	ppb			
32	G882L	4/28/2005	16:34:25	0.03	1	0.03	ppb			
33	G9CTGB	4/28/2005	16:36:27	0.021	1	0.021	ppb			
34	CCV	4/28/2005	16:38:18	5.34	1	5.34	ppb	5	ppb	106.8%
35	CCB	4/28/2005	16:40:36	0.015	1	0.015	ppb	<0.2	ppb	
36	G9CTGC	4/28/2005	16:42:26	5.18	20	103.6	ppb	101.4	ppb	102%
37	G7NWL	4/28/2005	16:44:37	0.164	1	0.164	ppb			
38	G7NWLS	4/28/2005	16:46:41	1.38	1	1.38	ppb	1	ppb	121%
39	G7NWLD	4/28/2005	16:48:45	1.36	1	1.36	ppb	1	ppb	119%
40	G7NWLA	4/28/2005	16:51:04	1.13	1	1.13	ppb	1	ppb	96%
41	G7NWLV	4/28/2005	16:53:06	0.054	5	0.27	ppb			
42	G7NW8	4/28/2005	16:55:17	0.163	1	0.163	ppb			
43	G7NXD	4/28/2005	16:57:16	0.102	1	0.102	ppb			
44	G8E94	4/28/2005	16:59:15	0.146	1	0.146	ppb			
45	G8E95	4/28/2005	17:02:16	0.166	1	0.166	ppb			
46	CCV	4/28/2005	17:04:21	5.21	1	5.21	ppb	5	ppb	104.2%
47	CCB	4/28/2005	17:06:34	0.007	1	0.007	ppb	<0.2	ppb	

Analyst: [signature] 4/29/05

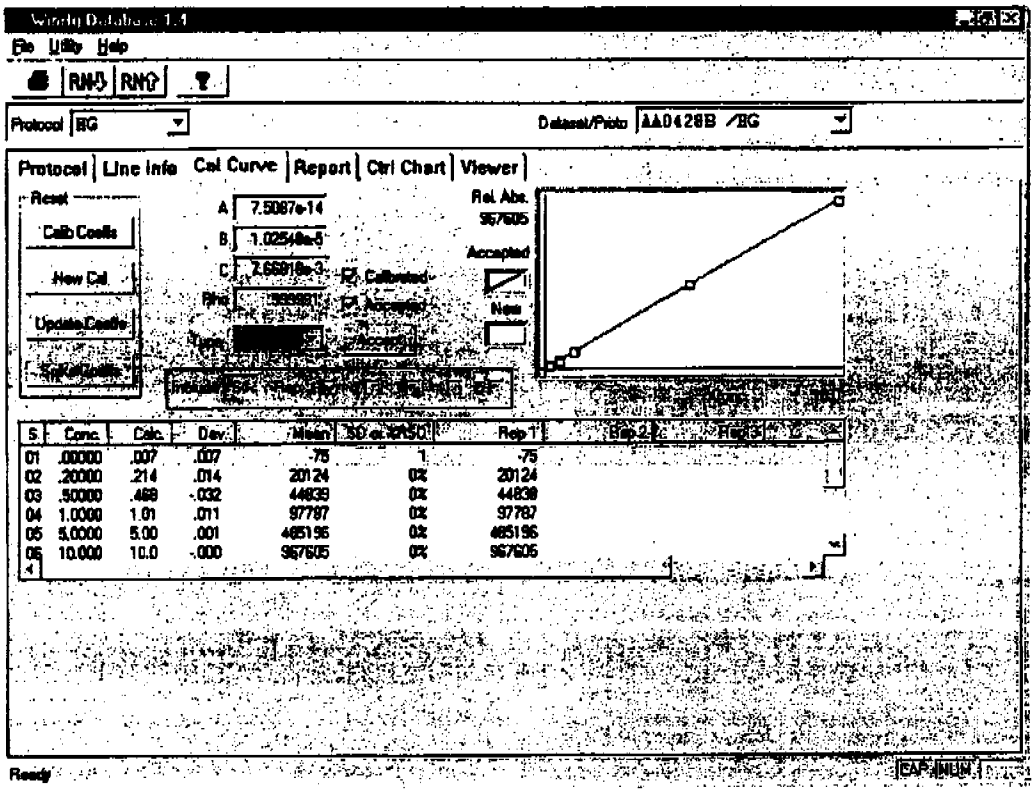
Reviewed by: [signature] 4/29/05

Analytical Runlog for Mercury Analysis										
Run #: AA0428B										
Instrument ID:	HAA									
Seq	Sample ID	Run Date/Time		Instr Conc.	Dilution	Final Conc.		QC Expected		% Recovery
48	G8E96	4/28/2005	17:08:35	0.116	1	0.116	ppb			
49	G8E97	4/28/2005	17:10:37	0.052	1	0.052	ppb			
50	G8E98	4/28/2005	17:12:49	0.13	1	0.13	ppb			
51	G8E99	4/28/2005	17:14:45	0.074	1	0.074	ppb			
52	G8FAC	4/28/2005	17:16:35	0.102	1	0.102	ppb			
53	G9CTJB	4/28/2005	17:18:30	0.03	1	0.03	ppb			
54	G9CTJC	4/28/2005	17:20:41	4.53	20	90.6	ppb	101.4	ppb	89%
55	G8WP7	4/28/2005	17:22:30	2.86	1	2.86	ppb			
56	G8WP7S	4/28/2005	17:24:21	3.19	1	3.19	ppb	1	ppb	332
57	G8WP7D	4/28/2005	17:26:12	3.83	1	3.83	ppb	1	ppb	97%
58	CCV	4/28/2005	17:28:22	5.63	1	5.63	ppb	5	ppb	112.6%
59	CCB	4/28/2005	17:30:33	0.006	1	0.006	ppb	<0.2	ppb	
60	G8WP7V	4/28/2005	17:32:23	0.603	5	3.015	ppb			
61	G8WQL	4/28/2005	17:34:34	5.3	1	5.3	ppb			
62	G8WQLX	4/28/2005	17:36:25	3.82	1	3.82	ppb			
63	G8WQLS	4/28/2005	17:38:27	3.89	1	3.89	ppb	1	ppb	0%
64	CCV	4/28/2005	17:40:27	5.59	1	5.59	ppb	5	ppb	111.8%
65	CCB	4/28/2005	17:42:38	0.002	1	0.002	ppb	<0.2	ppb	
66	G8WQN	4/28/2005	17:44:38	3.14	1	3.14	ppb			
67	G8WQR	4/28/2005	17:46:58	4.5	1	4.5	ppb			
68	G8WQT	4/28/2005	17:49:01	4.56	1	4.56	ppb			
69	G8WR6	4/28/2005	17:50:53	7.78	1	7.78	ppb			
70	G8WTA	4/28/2005	17:53:37	6.19	1	6.19	ppb			
71	G8WTE	4/28/2005	17:55:36	7.47	1	7.47	ppb			
72	G8WTG	4/28/2005	17:57:26	10.9	1	10.9	ppb	> highest cal std conc		
73	G8WTR	4/28/2005	17:59:16	7.08	1	7.08	ppb			
74	G8WTV	4/28/2005	18:02:18	3.79	1	3.79	ppb			
75	G8WTW	4/28/2005	18:04:13	1.42	1	1.42	ppb			
76	CCV	4/28/2005	18:06:13	5.63	1	5.63	ppb	5	ppb	112.6%
77	CCB	4/28/2005	18:08:14	0.001	1	0.001	ppb	<0.2	ppb	
78	G8WTX	4/28/2005	18:10:03	2.53	1	2.53	ppb			
79	G8WT0	4/28/2005	18:12:15	5.28	1	5.28	ppb			
80	G8WT1	4/28/2005	18:14:04	3.09	1	3.09	ppb			
81	G88C1	4/28/2005	18:15:54	1.52	1	1.52	ppb			
82	G88DA	4/28/2005	18:17:45	0.679	1	0.679	ppb			
83	CCV	4/28/2005	18:19:38	5.66	1	5.66	ppb	5	ppb	113.2%
84	CCB	4/28/2005	18:21:26	-0.014	1	-0.014	ppb	<0.2	ppb	
85	G8WTG	4/28/2005	18:50:05	5.15	2	10.3	ppb			
86	CCV	4/28/2005	18:51:55	5.61	1	5.61	ppb	5	ppb	112.2%
87	CCB	4/28/2005	18:53:47	-0.017	1	-0.017	ppb	<0.2	ppb	

Analyst: R 4/29/05

Reviewed by: SW 4/29/05

FC 4/28/05 16:04:28:05 7471



Folder: AA0428B Page 1
15:29:40 28 Apr 2005 Protocol: HG

R 4/29/05 HG042805 7471

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Standard: 1 Rep: 1				Seq: 1		15:29:40 28 Apr 05			HG
Hg	.000	ppb	-75						
*** Standard: 2 Rep: 1				Seq: 2		15:31:41 28 Apr 05			HG
Hg	.200	ppb	20124						
*** Standard: 3 Rep: 1				Seq: 3		15:33:41 28 Apr 05			HG
Hg	.500	ppb	44838						
*** Standard: 4 Rep: 1				Seq: 4		15:35:42 28 Apr 05			HG
Hg	1.00	ppb	97787						
*** Standard: 5 Rep: 1				Seq: 5		15:37:42 28 Apr 05			HG
Hg	5.00	ppb	485196						
*** Standard: 6 Rep: 1				Seq: 6		15:40:17 28 Apr 05			HG
Hg	10.0	ppb	967605						

*** Check Standard: 4 Ck4ICV Seq: 7 15:42:21 28 Apr 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		99.9	2.50	2.50	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 8 15:44:22 28 Apr 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		.012	.200	ppb	.000 %

*** Check Standard: 5 Ck5CRA Seq: 9 15:46:12 28 Apr 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		113.	.227	.200	ppb	.000 %

*** Check Standard: 2 Ck2CCV Seq: 10 15:48:32 28 Apr 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		102.	5.08	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 11 15:50:22 28 Apr 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.023	.200	ppb	.000 %

*** Sample ID: G9A8GB				Seq: 12		15:52:34 28 Apr 05			HG
Hg	.021	ppb	.000 %	.021					

Folder: AA0428B Page 2
15:54:34 28 Apr 2005 Protocol: HG

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: G9A8GC Seq: 13 15:54:34 28 Apr 05 HG
20X
Hg 4.44 ppb .000 % 4.44

*** Sample ID: G8813 Seq: 14 15:56:23 28 Apr 05 HG

Hg -.016 ppb .000 % -.016

*** Sample ID: G8813S Seq: 15 15:58:21 28 Apr 05 HG

Hg .025 ppb .000 % .025

*** Sample ID: G8813D Seq: 16 16:01:02 28 Apr 05 HG

Hg .031 ppb .000 % .031

*** Sample ID: G8813V Seq: 17 16:02:51 28 Apr 05 HG
5X
Hg .019 ppb .000 % .019

*** Sample ID: G8814 Seq: 18 16:04:52 28 Apr 05 HG

Hg .014 ppb .000 % .014

*** Sample ID: G8815 Seq: 19 16:07:01 28 Apr 05 HG

Hg .030 ppb .000 % .030

*** Sample ID: G8816 Seq: 20 16:09:42 28 Apr 05 HG

Hg .025 ppb .000 % .025

*** Sample ID: G8817 Seq: 21 16:11:53 28 Apr 05 HG

Hg .030 ppb .000 % .030

*** Check Standard: 2 Ck2CCV Seq: 22 16:13:42 28 Apr 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		109.	5.46	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 23 16:15:35 28 Apr 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.003	.200	ppb	.000 %

*** Sample ID: G8818 Seq: 24 16:17:35 28 Apr 05 HG

Hg .030 ppb .000 % .030

Folder: AA0428B Page 3
16:20:07 28 Apr 2005 Protocol: HG

Line	Conc.	Units	SD/RSD		1	2	3	4	5
*** Sample ID: G8819					Seq: 25	16:20:07 28 Apr 05		HG	
Hg	.017	ppb	.000	%	.017				
*** Sample ID: G882A					Seq: 26	16:22:05 28 Apr 05		HG	
Hg	.017	ppb	.000	%	.017				
*** Sample ID: G882C					Seq: 27	16:23:53 28 Apr 05		HG	
Hg	.020	ppb	.000	%	.020				
*** Sample ID: G882E					Seq: 28	16:26:13 28 Apr 05		HG	
Hg	.020	ppb	.000	%	.020				
*** Sample ID: G882F					Seq: 29	16:28:12 28 Apr 05		HG	
Hg	.018	ppb	.000	%	.018				
*** Sample ID: G882H					Seq: 30	16:30:03 28 Apr 05		HG	
Hg	.021	ppb	.000	%	.021				
*** Sample ID: G882J					Seq: 31	16:32:12 28 Apr 05		HG	
Hg	.016	ppb	.000	%	.016				
*** Sample ID: G882L					Seq: 32	16:34:25 28 Apr 05		HG	
Hg	.030	ppb	.000	%	.030				
*** Sample ID: G9CTGB					Seq: 33	16:36:27 28 Apr 05		HG	
Hg	.021	ppb	.000	%	.021				

*** Check Standard: 2 Ck2CCV				Seq: 34	16:38:18 28 Apr 05	HG
Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		107.	5.34	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB				Seq: 35	16:40:36 28 Apr 05	HG
Line	Flag	Found	Range(+/-)	Units	SD/RSD	
Hg		.015	.200	ppb	.000 %	

*** Sample ID: G9CTGC					Seq: 36	16:42:26 28 Apr 05		HG	
			20X						
Hg	5.18	ppb	.000	%	5.18				

Folder: AA0428B Page 4
16:44:37 28 Apr 2005 Protocol: HG

Line	Conc.	Units	SD/RSD		1	2	3	4	5
*** Sample ID: G7NWL					Seq: 37	16:44:37 28 Apr 05			HG
Hg	.164	ppb	.000	%	.164				
*** Sample ID: G7NWLS					Seq: 38	16:46:41 28 Apr 05			HG
Hg	1.38	ppb	.000	%	1.38				
*** Sample ID: G7NWLD					Seq: 39	16:48:45 28 Apr 05			HG
Hg	1.36	ppb	.000	%	1.36				
*** Sample ID: G7NWLA					Seq: 40	16:51:04 28 Apr 05			HG
Hg	1.13	ppb	.000	%	1.13				
*** Sample ID: G7NWLV 5X					Seq: 41	16:53:06 28 Apr 05			HG
Hg	.054	ppb	.000	%	.054				
*** Sample ID: G7NW8					Seq: 42	16:55:17 28 Apr 05			HG
Hg	.163	ppb	.000	%	.163				
*** Sample ID: G7NXD					Seq: 43	16:57:16 28 Apr 05			HG
Hg	.102	ppb	.000	%	.102				
*** Sample ID: G8E94					Seq: 44	16:59:15 28 Apr 05			HG
Hg	.146	ppb	.000	%	.146				
*** Sample ID: G8E95					Seq: 45	17:02:16 28 Apr 05			HG
Hg	.166	ppb	.000	%	.166				

*** Check Standard: 2 Ck2CCV Seq: 46 17:04:21 28 Apr 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		104.	5.21	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 47 17:06:34 28 Apr 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		.007	.200	ppb	.000 %

*** Sample ID: G8E96					Seq: 48	17:08:35 28 Apr 05			HG
Hg	.116	ppb	.000	%	.116				

Folder: AA0428B Page 5
17:10:37 28 Apr 2005 Protocol: HG

Line	Conc.	Units	SD/RSD		1	2	3	4	5
*** Sample ID: G8E97					Seq: 49	17:10:37 28 Apr 05		HG	
Hg	.052	ppb	.000	%	.052				
*** Sample ID: G8E98					Seq: 50	17:12:49 28 Apr 05		HG	
Hg	.130	ppb	.000	%	.130				
*** Sample ID: G8E99					Seq: 51	17:14:45 28 Apr 05		HG	
Hg	.074	ppb	.000	%	.074				
*** Sample ID: G8FAC					Seq: 52	17:16:35 28 Apr 05		HG	
Hg	.102	ppb	.000	%	.102				
*** Sample ID: G9CTJB					Seq: 53	17:18:30 28 Apr 05		HG	
Hg	.030	ppb	.000	%	.030				
*** Sample ID: G9CTJC					Seq: 54	17:20:41 28 Apr 05		HG	
			20X						
Hg	4.53	ppb	.000	%	4.53				
*** Sample ID: G8WP7					Seq: 55	17:22:30 28 Apr 05		HG	
Hg	2.86	ppb	.000	%	2.86				
*** Sample ID: G8WP7S					Seq: 56	17:24:21 28 Apr 05		HG	
Hg	3.19	ppb	.000	%	3.19				
*** Sample ID: G8WP7D					Seq: 57	17:26:12 28 Apr 05		HG	
Hg	3.83	ppb	.000	%	3.83				

*** Check Standard: 2 Ck2CCV Seq: 58 17:28:22 28 Apr 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		113.	5.63	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 59 17:30:33 28 Apr 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		.006	.200	ppb	.000 %

*** Sample ID: G8WP7V					Seq: 60	17:32:23 28 Apr 05		HG	
			5X						
Hg	.603	ppb	.000	%	.603				

Folder: AA0428B Page 6
17:34:34 28 Apr 2005 Protocol: HG

Line	Conc.	Units	SD/RSD		1	2	3	4	5

*** Sample ID: G8WQL Seq: 61 17:34:34 28 Apr 05 HG

Hg 5.30 ppb .000 % 5.30

*** Sample ID: G8WQLX Seq: 62 17:36:25 28 Apr 05 HG

Hg 3.82 ppb .000 % 3.82

*** Sample ID: G8WQLS Seq: 63 17:38:27 28 Apr 05 HG

Hg 3.89 ppb .000 % 3.89

*** Check Standard: 2 Ck2CCV Seq: 64 17:40:27 28 Apr 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		112.	5.59	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 65 17:42:38 28 Apr 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		.002	.200	ppb	.000 %

*** Sample ID: G8WQN Seq: 66 17:44:38 28 Apr 05 HG

Hg 3.14 ppb .000 % 3.14

*** Sample ID: G8WQR Seq: 67 17:46:58 28 Apr 05 HG

Hg 4.50 ppb .000 % 4.50

*** Sample ID: G8WQT Seq: 68 17:49:01 28 Apr 05 HG

Hg 4.56 ppb .000 % 4.56

*** Sample ID: G8WR6 Seq: 69 17:50:53 28 Apr 05 HG

Hg 7.78 ppb .000 % 7.78

*** Sample ID: G8WTA Seq: 70 17:53:37 28 Apr 05 HG

Hg 6.19 ppb .000 % 6.19

*** Sample ID: G8WTE Seq: 71 17:55:36 28 Apr 05 HG

Hg 7.47 ppb .000 % 7.47

*** Sample ID: G8WTG Seq: 72 17:57:26 28 Apr 05 HG

Hg 10.9 H ppb .000 % 10.9

17:59:16 28 Apr 2005 Folder: AA0428B Protocol: HG

Line	Conc.	Units	SD/RSD		1	2	3	4	5
*** Sample ID: G8WTR					Seq: 73		17:59:16 28 Apr 05		HG
Hg	7.08	ppb	.000	%	7.08				
*** Sample ID: G8WTV					Seq: 74		18:02:18 28 Apr 05		HG
Hg	3.79	ppb	.000	%	3.79				
*** Sample ID: G8WTW					Seq: 75		18:04:13 28 Apr 05		HG
Hg	1.42	ppb	.000	%	1.42				
*** Check Standard: 2 Ck2CCV					Seq: 76		18:06:13 28 Apr 05		HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		113.	5.63	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 77 18:08:14 28 Apr 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		.001	.200	ppb	.000 %

*** Sample ID: G8WTX					Seq: 78		18:10:03 28 Apr 05		HG
Hg	2.53	ppb	.000	%	2.53				
*** Sample ID: G8WT0					Seq: 79		18:12:15 28 Apr 05		HG
Hg	5.28	ppb	.000	%	5.28				
*** Sample ID: G8WT1					Seq: 80		18:14:04 28 Apr 05		HG
Hg	3.09	ppb	.000	%	3.09				
*** Sample ID: G88C1					Seq: 81		18:15:54 28 Apr 05		HG
Hg	1.52	ppb	.000	%	1.52				
*** Sample ID: G88DA					Seq: 82		18:17:45 28 Apr 05		HG
Hg	.679	ppb	.000	%	.679				
*** Check Standard: 2 Ck2CCV					Seq: 83		18:19:38 28 Apr 05		HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		113.	5.66	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 84 18:21:26 28 Apr 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.014	.200	ppb	.000 %

Folder: AA0428B Page 8
18:50:05 28 Apr 2005 Protocol: HG

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: G8WTG Seq: 85 18:50:05 28 Apr 05 HG

			2X		
Hg	5.15	ppb	.000	%	5.15

*** Check Standard: 2 Ck2CCV Seq: 86 18:51:55 28 Apr 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD	
Hg		112.	5.61	5.00	ppb	.000	%

*** Check Standard: 1 Ck1CCB Seq: 87 18:53:47 28 Apr 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD	
Hg		-.017	.200	ppb	.000	%

METALS MISCELLANEOUS DATA

SEVERN TRENT **STL** Metals Prep Report for Batch # 5115193

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Prep Method: SW-846 3050B 2% **SOP Number:** STL-IP-0013, Rev 8

Extraction Code: GK **Extraction:** TOTAL **Matrix:** SOLID **Prep Date:** 4/27/2005

Standard Log Ref#: MET-04/05-SOIL

Lot ID	Work Order #	Initial Wt/Vol	Final Volume	Lab Filtered	Due Date	Sample Location	Target List
F5D210354-001	G8WP7	0.50 g	50 mL	☐	05/09/2005	A68	AL CA FE K MG NA ZN
F5D210354-001D	G8WP7D	0.50 g	50 mL	☐		A68	
F5D210354-001S	G8WP7S	0.50 g	50 mL	☐		A68	
F5D210354-002	G8WQL	0.50 g	50 mL	☐	05/09/2005	A67	
F5D210354-003	G8WQN	0.50 g	50 mL	☐	05/09/2005	A67	
F5D210354-004	G8WQR	0.50 g	50 mL	☐	05/09/2005	A54	
F5D210354-005	G8WQT	0.50 g	50 mL	☐	05/09/2005	A54	
F5D210354-007	G8WR6	0.50 g	50 mL	☐	05/09/2005	A54	
F5D210354-008	G8WTA	0.50 g	50 mL	☐	05/09/2005	A54	
F5D210354-009	G8WTE	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-010	G8WTG	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-011	G8WTR	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-013	G8WTV	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-014	G8WTW	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-015	G8WTX	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-016	G8WT0	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-017	G8WT1	0.50 g	50 mL	☐	05/09/2005	A44	
F5D220357-001	G817C	0.50 g	50 mL	☐	05/04/2005	A57	

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.16, updated 2/7/2005

F5D220357-001D	G817CD	[redacted]	0.50 g	50 mL	☐		A57
F5D220357-001S	G817CS	[redacted]	0.50 g	50 mL	☐		A57
F5D220357-002	G817D	[redacted]	0.50 g	50 mL	☐	05/04/2005	A57
F5D220357-003	G817E	[redacted]	0.50 g	50 mL	☐	05/04/2005	A57
F5D220357-004	G817F	[redacted]	0.50 g	50 mL	☐	05/04/2005	A88
F5D220357-005	G817G	[redacted]	0.50 g	50 mL	☐	05/04/2005	A88
F5D250000-193B	G84N2B	[redacted]	0.50 g	50 mL	☐		
F5D250000-193C	G84N2C	[redacted]	0.50 g	50 mL	☐		

Comments:

Chemical Lot Information

Chemical	Lot Number
Hydrochloric Acid	4104090
Hydrogen Peroxide	A50478
Nitric Acid	1104100

Custody Information

Relinquished By: MC

Review/Received By: [signature]

Date of Transfer: 4-27-05

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.16, updated 2/7/2005

SEVERN TRENT **STL** Mercury Prep Report for Batch # 5117679

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Prep Method: SW-846 7471A **SOP Number:** STL-MT-0007, Rev 0

Extraction Code: 70 **Extraction:** TOTAL **Matrix:** SOLID **Prep Date:** 4/28/2005

Time In: 11:00 **Temp In:** 93° C

Time Out: 11:30 **Temp Out:** 94° C **Standard Log Ref#:** HG042805

Lot ID	Work Order #		Initial Wt/Vol	Final Volume	Lab Filtered	Due Date	Sample Location
F5D210354-001	G8WP7	[redacted]	0.60 g	100 mL	☐	05/09/2005	A68
F5D210354-001D	G8WP7D	[redacted]	0.60 g	100 mL	☐		A68
F5D210354-001S	G8WP7S	[redacted]	0.60 g	100 mL	☐		A68
F5D210354-002	G8WQL	[redacted]	0.60 g	100 mL	☐	05/09/2005	A67
F5D210354-002S	G8WQLS	[redacted]	0.60 g	100 mL	☐		A67
F5D210354-002X	G8WQLX	[redacted]	0.60 g	100 mL	☐		A67
F5D210354-003	G8WQN	[redacted]	0.60 g	100 mL	☐	05/09/2005	A67
F5D210354-004	G8WQR	[redacted]	0.60 g	100 mL	☐	05/09/2005	A54
F5D210354-005	G8WQT	[redacted]	0.60 g	100 mL	☐	05/09/2005	A54
F5D210354-007	G8WR6	[redacted]	0.60 g	100 mL	☐	05/09/2005	A54
F5D210354-008	G8WTA	[redacted]	0.60 g	100 mL	☐	05/09/2005	A54
F5D210354-009	G8WTE	[redacted]	0.60 g	100 mL	☐	05/09/2005	A44
F5D210354-010	G8WTG	[redacted]	0.60 g	100 mL	☐	05/09/2005	A44
F5D210354-011	G8WTR	[redacted]	0.60 g	100 mL	☐	05/09/2005	A44
F5D210354-013	G8WTV	[redacted]	0.60 g	100 mL	☐	05/09/2005	A44
F5D210354-014	G8WTW	[redacted]	0.60 g	100 mL	☐	05/09/2005	A44
F5D210354-015	G8WTX	[redacted]	0.60 g	100 mL	☐	05/09/2005	A44

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.16, updated 2/7/2005

F5D210354-016	G8WT0	[redacted]	0.60 g	100 mL	☐	05/09/2005	A44
F5D210354-017	G8WT1	[redacted]	0.60 g	100 mL	☐	05/09/2005	A44
F5D260340-011	G88C1	[redacted]	0.60 g	100 mL	☐	05/09/2005	A111
F5D260340-013	G88DA	[redacted]	0.60 g	100 mL	☐	05/08/2005	A113
F5D270000-679B	G9CTJB	[redacted]	0.60 g	100 mL	☐		
F5D270000-679C	G9CTJC	[redacted]	0.60 g	100 mL	☐		

Comments:

Custody Information

Relinquished By: DS

Review/Received By: AL

Date of Transfer: 4/28/05

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.16, updated 2/7/2005

METALS SAMPLE AND QC SUMMARY RESULTS

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WP7 **Client ID:** RE73-05-58824

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 23.51

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Antimony	123	0.38	0.52	33.4	N	10	ICPMS	4/28/05	0:37
Arsenic	75	0.37	0.52	42.0	E	10	ICPMS	4/28/05	0:37
Barium	135	0.40	5.2	1170	N	10	ICPMS	4/28/05	0:37
Beryllium	9	0.081	0.26	0.27		10	ICPMS	4/28/05	0:37
Cadmium	111	0.064	0.65	16.9	N	10	ICPMS	4/28/05	0:37
Chromium	52	1.0	1.3	102	N	10	ICPMS	4/28/05	0:37
Cobalt	59	0.17	1.3	16.2		10	ICPMS	4/28/05	0:37
Copper	65	1.2	2.6	1620	N*	20	ICPMS	4/28/05	17:48
Lead	208	0.49	1.6	3330	N*	20	ICPMS	4/28/05	17:48
Manganese	55	0.034	2.6	1520	N	10	ICPMS	4/28/05	0:37
Nickel	60	0.34	0.52	203	N	10	ICPMS	4/28/05	0:37
Selenium	82	0.20	0.52	1.1		10	ICPMS	4/28/05	0:37
Silver	107	0.16	0.52	17.5	N*	10	ICPMS	4/28/05	0:37
Thallium	205	0.20	0.26	0.54		10	ICPMS	4/28/05	0:37
Vanadium	51	1.5	2.6	16.1		10	ICPMS	4/28/05	0:37

Comments: Lot #: F5D210354 Sample #: 1

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WQL **Client ID:** RE73-05-58825

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 24.74

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Antimony	123	0.39	0.53	52.1	N	10	ICPMS	4/28/05	1:15
Arsenic	75	0.38	0.53	29.6	E	10	ICPMS	4/28/05	1:15
Barium	135	0.40	5.3	5030	N	10	ICPMS	4/28/05	1:15
Beryllium	9	0.082	0.27	0.21	B	10	ICPMS	4/28/05	1:15
Cadmium	111	0.065	0.66	12.4	N	10	ICPMS	4/28/05	1:15
Chromium	52	1.0	1.3	74.0	N	10	ICPMS	4/28/05	1:15
Cobalt	59	0.17	1.3	17.9		10	ICPMS	4/28/05	1:15
Copper	65	1.2	2.7	993	N*	20	ICPMS	4/28/05	18:04
Lead	208	0.49	1.6	6650	N*	20	ICPMS	4/28/05	18:04
Manganese	55	0.035	2.7	1270	N	10	ICPMS	4/28/05	1:15
Nickel	60	0.34	0.53	96.3	N	10	ICPMS	4/28/05	1:15
Selenium	82	0.21	0.53	1.6		10	ICPMS	4/28/05	1:15
Silver	107	0.16	0.53	190	N*	10	ICPMS	4/28/05	1:15
Thallium	205	0.21	0.27	0.21	U	10	ICPMS	4/28/05	1:15
Vanadium	51	1.5	2.7	12.8		10	ICPMS	4/28/05	1:15

Comments: Lot #: F5D210354 Sample #: 2

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WQN **Client ID:** RE73-05-58826

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 24.69

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Antimony	**123**	**0.39**	**0.53**	**48.4**	**N**	**10**	**ICPMS**	**4/28/05**	**1:20**
Arsenic	**75**	**0.38**	**0.53**	**22.7**	**E**	**10**	**ICPMS**	**4/28/05**	**1:20**
Barium	**135**	**0.40**	**5.3**	**1490**	**N**	**10**	**ICPMS**	**4/28/05**	**1:20**
Beryllium	**9**	**0.082**	**0.27**	**0.34**		**10**	**ICPMS**	**4/28/05**	**1:20**
Cadmium	**111**	**0.065**	**0.66**	**19.7**	**N**	**10**	**ICPMS**	**4/28/05**	**1:20**
Chromium	**52**	**1.0**	**1.3**	**77.0**	**N**	**10**	**ICPMS**	**4/28/05**	**1:20**
Cobalt	**59**	**0.17**	**1.3**	**13.8**		**10**	**ICPMS**	**4/28/05**	**1:20**
Copper	**65**	**1.2**	**2.7**	**1670**	**N***	**20**	**ICPMS**	**4/28/05**	**18:07**
Lead	**208**	**0.49**	**1.6**	**6700**	**N***	**20**	**ICPMS**	**4/28/05**	**18:07**
Manganese	**55**	**0.035**	**2.7**	**1230**	**N**	**10**	**ICPMS**	**4/28/05**	**1:20**
Nickel	**60**	**0.34**	**0.53**	**79.7**	**N**	**10**	**ICPMS**	**4/28/05**	**1:20**
Selenium	**82**	**0.20**	**0.53**	**1.1**		**10**	**ICPMS**	**4/28/05**	**1:20**
Silver	**107**	**0.16**	**0.53**	**54.9**	**N***	**10**	**ICPMS**	**4/28/05**	**1:20**
Thallium	205	0.21	0.27	0.21	U	10	ICPMS	4/28/05	1:20
Vanadium	**51**	**1.5**	**2.7**	**15.3**		**10**	**ICPMS**	**4/28/05**	**1:20**

Comments: Lot #: F5D210354 Sample #: 3

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WQR **Client ID:** RE73-05-58827

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 16.93

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Antimony	**123**	**0.35**	**0.48**	**32.8**	**N**	**10**	**ICPMS**	**4/28/05**	**1:25**
Arsenic	**75**	**0.34**	**0.48**	**33.6**	**E**	**10**	**ICPMS**	**4/28/05**	**1:25**
Barium	**135**	**0.37**	**4.8**	**4150**	**N**	**10**	**ICPMS**	**4/28/05**	**1:25**
Beryllium	**9**	**0.075**	**0.24**	**0.37**		**10**	**ICPMS**	**4/28/05**	**1:25**
Cadmium	**111**	**0.059**	**0.60**	**9.0**	**N**	**10**	**ICPMS**	**4/28/05**	**1:25**
Chromium	**52**	**0.93**	**1.2**	**61.3**	**N**	**10**	**ICPMS**	**4/28/05**	**1:25**
Cobalt	**59**	**0.15**	**1.2**	**11.3**		**10**	**ICPMS**	**4/28/05**	**1:25**
Copper	**65**	**0.53**	**1.2**	**1280**	**N***	**10**	**ICPMS**	**4/28/05**	**1:25**
Copper	**65**	**0.53**	**1.2**	**1270**	**N***	**10**	**ICPMS**	**4/28/05**	**18:19**
Manganese	**55**	**0.032**	**2.4**	**895**	**N**	**10**	**ICPMS**	**4/28/05**	**1:25**
Nickel	**60**	**0.31**	**0.48**	**43.7**	**N**	**10**	**ICPMS**	**4/28/05**	**1:25**
Selenium	**82**	**0.19**	**0.48**	**0.89**		**10**	**ICPMS**	**4/28/05**	**1:25**
Silver	**107**	**0.15**	**0.48**	**118**	**N***	**10**	**ICPMS**	**4/28/05**	**1:25**
Thallium	205	0.19	0.24	0.19	U	10	ICPMS	4/28/05	1:25
Vanadium	**51**	**1.3**	**2.4**	**14.1**		**10**	**ICPMS**	**4/28/05**	**1:25**

Comments: Lot #: F5D210354 Sample #: 4

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WQT **Client ID:** RE73-05-58828

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 17.67

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Antimony	**123**	**0.36**	**0.49**	**27.8**	**N**	**10**	**ICPMS**	**4/28/05**	**1:30**
Arsenic	**75**	**0.35**	**0.49**	**39.3**	**E**	**10**	**ICPMS**	**4/28/05**	**1:30**
Barium	**135**	**0.37**	**4.9**	**1550**	**N**	**10**	**ICPMS**	**4/28/05**	**1:30**
Beryllium	**9**	**0.075**	**0.24**	**2.4**		**10**	**ICPMS**	**4/28/05**	**1:30**
Cadmium	**111**	**0.060**	**0.61**	**48.3**	**N**	**10**	**ICPMS**	**4/28/05**	**1:30**
Chromium	**52**	**0.93**	**1.2**	**85.9**	**N**	**10**	**ICPMS**	**4/28/05**	**1:30**
Cobalt	**59**	**0.16**	**1.2**	**18.3**		**10**	**ICPMS**	**4/28/05**	**1:30**
Copper	**65**	**0.54**	**1.2**	**305000**	**N***	**10**	**ICPMS**	**4/28/05**	**1:30**
Copper	**65**	**10.7**	**24.3**	**219000**	**N***	**200**	**ICPMS**	**4/28/05**	**19:40**
Manganese	**55**	**0.032**	**2.4**	**21800**	**N**	**10**	**ICPMS**	**4/28/05**	**1:30**
Nickel	**60**	**0.32**	**0.49**	**146**	**N**	**10**	**ICPMS**	**4/28/05**	**1:30**
Selenium	**82**	**0.19**	**0.49**	**0.92**		**10**	**ICPMS**	**4/28/05**	**1:30**
Silver	**107**	**0.15**	**0.49**	**37.2**	**N***	**10**	**ICPMS**	**4/28/05**	**1:30**
Thallium	205	0.19	0.24	0.19	U	10	ICPMS	4/28/05	1:30
Vanadium	**51**	**1.3**	**2.4**	**24.7**		**10**	**ICPMS**	**4/28/05**	**1:30**

Comments: Lot #: F5D210354 Sample #: 5 200X

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WR6 **Client ID:** RE73-05-58830

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 20.86

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Antimony	123	0.37	0.51	73.1	N	10	ICPMS	4/28/05	1:35
Arsenic	75	0.36	0.51	26.1	E	10	ICPMS	4/28/05	1:35
Barium	135	0.38	5.1	1980	N	10	ICPMS	4/28/05	1:35
Beryllium	9	0.078	0.25	0.39		10	ICPMS	4/28/05	1:35
Cadmium	111	0.062	0.63	18.2	N	10	ICPMS	4/28/05	1:35
Chromium	52	0.97	1.3	154	N	10	ICPMS	4/28/05	1:35
Cobalt	59	0.16	1.3	40.3		10	ICPMS	4/28/05	1:35
Copper	65	1.1	2.5	1330	N*	20	ICPMS	4/28/05	18:25
Lead	208	0.47	1.5	6110	N*	20	ICPMS	4/28/05	18:25
Manganese	55	0.033	2.5	2190	N	10	ICPMS	4/28/05	1:35
Nickel	60	0.33	0.51	633	N	10	ICPMS	4/28/05	1:35
Selenium	82	0.20	0.51	0.81		10	ICPMS	4/28/05	1:35
Silver	107	0.16	0.51	54.0	N*	10	ICPMS	4/28/05	1:35
Thallium	205	0.20	0.25	0.20	U	10	ICPMS	4/28/05	1:35
Vanadium	51	1.4	2.5	20.9		10	ICPMS	4/28/05	1:35

Comments: Lot #: F5D210354 Sample #: 7

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WT0 **Client ID:** RE73-05-58839

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 24.96

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Antimony	**123**	**0.39**	**0.53**	**543**	**N**	**10**	**ICPMS**	**4/28/05**	**2:29**
Arsenic	**75**	**0.38**	**0.53**	**76.0**	**E**	**10**	**ICPMS**	**4/28/05**	**2:29**
Barium	**135**	**0.41**	**5.3**	**2870**	**N**	**10**	**ICPMS**	**4/28/05**	**2:29**
Beryllium	**9**	**0.083**	**0.27**	**0.33**		**10**	**ICPMS**	**4/28/05**	**2:29**
Cadmium	**111**	**0.065**	**0.67**	**16.4**	**N**	**10**	**ICPMS**	**4/28/05**	**2:29**
Chromium	**52**	**1.0**	**1.3**	**68.7**	**N**	**10**	**ICPMS**	**4/28/05**	**2:29**
Cobalt	**59**	**0.17**	**1.3**	**14.8**		**10**	**ICPMS**	**4/28/05**	**2:29**
Copper	**65**	**5.9**	**13.3**	**3820**	**N***	**100**	**ICPMS**	**4/28/05**	**18:59**
Lead	**208**	**2.5**	**8.0**	**33000**	**N***	**100**	**ICPMS**	**4/28/05**	**18:59**
Manganese	**55**	**0.035**	**2.7**	**2810**	**N**	**10**	**ICPMS**	**4/28/05**	**2:29**
Nickel	**60**	**0.35**	**0.53**	**98.6**	**N**	**10**	**ICPMS**	**4/28/05**	**2:29**
Selenium	**82**	**0.21**	**0.53**	**1.7**		**10**	**ICPMS**	**4/28/05**	**2:29**
Silver	**107**	**0.17**	**0.53**	**125**	**N***	**10**	**ICPMS**	**4/28/05**	**2:29**
Thallium	205	0.21	0.27	0.21	U	10	ICPMS	4/28/05	2:29
Vanadium	**51**	**1.5**	**2.7**	**15.1**		**10**	**ICPMS**	**4/28/05**	**2:29**

Comments: Lot #: F5D210354 Sample #: 16

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WT1 **Client ID:** RE73-05-58840

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 14.65

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Antimony	**123**	**0.34**	**0.47**	**19.9**	**N**	**10**	**ICPMS**	**4/28/05**	**2:34**
Arsenic	**75**	**0.33**	**0.47**	**22.1**	**E**	**10**	**ICPMS**	**4/28/05**	**2:34**
Barium	**135**	**0.36**	**4.7**	**3490**	**N**	**10**	**ICPMS**	**4/28/05**	**2:34**
Beryllium	**9**	**0.073**	**0.23**	**0.20**	**B**	**10**	**ICPMS**	**4/28/05**	**2:34**
Cadmium	**111**	**0.057**	**0.59**	**16.5**	**N**	**10**	**ICPMS**	**4/28/05**	**2:34**
Chromium	**52**	**0.90**	**1.2**	**85.0**	**N**	**10**	**ICPMS**	**4/28/05**	**2:34**
Cobalt	**59**	**0.15**	**1.2**	**14.4**		**10**	**ICPMS**	**4/28/05**	**2:34**
Copper	**65**	**0.52**	**1.2**	**1040**	**N***	**10**	**ICPMS**	**4/28/05**	**19:02**
Lead	**208**	**0.22**	**0.70**	**1950**	**N***	**10**	**ICPMS**	**4/28/05**	**2:34**
Manganese	**55**	**0.031**	**2.3**	**1050**	**N**	**10**	**ICPMS**	**4/28/05**	**2:34**
Nickel	**60**	**0.30**	**0.47**	**215**	**N**	**10**	**ICPMS**	**4/28/05**	**2:34**
Selenium	**82**	**0.18**	**0.47**	**0.94**		**10**	**ICPMS**	**4/28/05**	**2:34**
Silver	**107**	**0.15**	**0.47**	**187**	**N***	**10**	**ICPMS**	**4/28/05**	**2:34**
Thallium	205	0.18	0.23	0.18	U	10	ICPMS	4/28/05	2:34
Vanadium	**51**	**1.3**	**2.3**	**14.1**		**10**	**ICPMS**	**4/28/05**	**2:34**

Comments: Lot #: F5D210354 Sample #: 17

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTA **Client ID:** RE73-05-58831

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 24.49

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Antimony	123	0.39	0.53	27.8	N	10	ICPMS	4/28/05	1:40
Arsenic	75	0.38	0.53	19.0	E	10	ICPMS	4/28/05	1:40
Barium	135	0.40	5.3	1880	N	10	ICPMS	4/28/05	1:40
Beryllium	9	0.082	0.27	0.28		10	ICPMS	4/28/05	1:40
Cadmium	111	0.065	0.66	78.5	N	10	ICPMS	4/28/05	1:40
Chromium	52	1.0	1.3	88.5	N	10	ICPMS	4/28/05	1:40
Cobalt	59	0.17	1.3	15.1		10	ICPMS	4/28/05	1:40
Copper	65	1.5	3.3	4130	N*	25	ICPMS	4/28/05	18:28
Copper	65	0.58	1.3	4090	N*	10	ICPMS	4/28/05	1:40
Manganese	55	0.035	2.7	1330	N	10	ICPMS	4/28/05	1:40
Nickel	60	0.34	0.53	125	N	10	ICPMS	4/28/05	1:40
Selenium	82	0.20	0.53	1.7		10	ICPMS	4/28/05	1:40
Silver	107	0.16	0.53	49.5	N*	10	ICPMS	4/28/05	1:40
Thallium	205	0.21	0.27	0.21	U	10	ICPMS	4/28/05	1:40
Vanadium	51	1.5	2.7	17.2		10	ICPMS	4/28/05	1:40

Comments: Lot #: F5D210354 Sample #: 8

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTE **Client ID:** RE73-05-58832

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 24.78

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Antimony	123	0.39	0.53	29.1	N	10	ICPMS	4/28/05	1:45
Arsenic	75	0.38	0.53	20.5	E	10	ICPMS	4/28/05	1:45
Barium	135	0.40	5.3	1580	N	10	ICPMS	4/28/05	1:45
Beryllium	9	0.082	0.27	0.28		10	ICPMS	4/28/05	1:45
Cadmium	111	0.065	0.67	14.9	N	10	ICPMS	4/28/05	1:45
Chromium	52	1.0	1.3	66.8	N	10	ICPMS	4/28/05	1:45
Cobalt	59	0.17	1.3	13.2		10	ICPMS	4/28/05	1:45
Copper	65	0.59	1.3	1930	N*	10	ICPMS	4/28/05	18:31
Lead	208	0.25	0.80	2390	N*	10	ICPMS	4/28/05	1:45
Manganese	55	0.035	2.7	1380	N	10	ICPMS	4/28/05	1:45
Nickel	60	0.34	0.53	131	N	10	ICPMS	4/28/05	1:45
Selenium	82	0.21	0.53	0.68		10	ICPMS	4/28/05	1:45
Silver	107	0.16	0.53	35.6	N*	10	ICPMS	4/28/05	1:45
Thallium	205	0.21	0.27	0.21	U	10	ICPMS	4/28/05	1:45
Vanadium	51	1.5	2.7	17.1		10	ICPMS	4/28/05	1:45

Comments: Lot #: F5D210354 Sample #: 9

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTG **Client ID:** RE73-05-58833

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 16.54

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Antimony	**123**	**0.35**	**0.48**	**29.8**	**N**	**10**	**ICPMS**	**4/28/05**	**1:51**
Arsenic	**75**	**0.34**	**0.48**	**26.8**	**E**	**10**	**ICPMS**	**4/28/05**	**1:51**
Barium	**135**	**0.36**	**4.8**	**2660**	**N**	**10**	**ICPMS**	**4/28/05**	**1:51**
Beryllium	**9**	**0.074**	**0.24**	**1.2**		**10**	**ICPMS**	**4/28/05**	**1:51**
Cadmium	**111**	**0.059**	**0.60**	**7.7**	**N**	**10**	**ICPMS**	**4/28/05**	**1:51**
Chromium	**52**	**0.92**	**1.2**	**107**	**N**	**10**	**ICPMS**	**4/28/05**	**1:51**
Cobalt	**59**	**0.15**	**1.2**	**17.3**		**10**	**ICPMS**	**4/28/05**	**1:51**
Copper	**65**	**0.53**	**1.2**	**1190**	**N***	**10**	**ICPMS**	**4/28/05**	**18:35**
Lead	**208**	**0.22**	**0.72**	**2500**	**N***	**10**	**ICPMS**	**4/28/05**	**1:51**
Manganese	**55**	**0.031**	**2.4**	**1750**	**N**	**10**	**ICPMS**	**4/28/05**	**1:51**
Nickel	**60**	**0.31**	**0.48**	**115**	**N**	**10**	**ICPMS**	**4/28/05**	**1:51**
Selenium	**82**	**0.19**	**0.48**	**0.57**		**10**	**ICPMS**	**4/28/05**	**1:51**
Silver	**107**	**0.15**	**0.48**	**119**	**N***	**10**	**ICPMS**	**4/28/05**	**1:51**
Thallium	205	0.19	0.24	0.19	U	10	ICPMS	4/28/05	1:51
Vanadium	**51**	**1.3**	**2.4**	**12.9**		**10**	**ICPMS**	**4/28/05**	**1:51**

Comments: Lot #: F5D210354 Sample #: 10

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTR **Client ID:** RE73-05-58834

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 24.71

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Antimony	123	0.39	0.53	123	N	10	ICPMS	4/28/05	1:56
Arsenic	75	0.38	0.53	26.3	E	10	ICPMS	4/28/05	1:56
Barium	135	0.40	5.3	1000	N	10	ICPMS	4/28/05	1:56
Beryllium	9	0.082	0.27	0.74		10	ICPMS	4/28/05	1:56
Cadmium	111	0.065	0.66	15.4	N	10	ICPMS	4/28/05	1:56
Chromium	52	1.0	1.3	81.8	N	10	ICPMS	4/28/05	1:56
Cobalt	59	0.17	1.3	17.7		10	ICPMS	4/28/05	1:56
Copper	65	1.5	3.3	31500	N*	25	ICPMS	4/28/05	18:38
Lead	208	0.62	2.0	8770	N*	25	ICPMS	4/28/05	18:38
Manganese	55	0.035	2.7	2540	N	10	ICPMS	4/28/05	1:56
Nickel	60	0.34	0.53	295	N	10	ICPMS	4/28/05	1:56
Selenium	82	0.21	0.53	2.0		10	ICPMS	4/28/05	1:56
Silver	107	0.16	0.53	56.9	N*	10	ICPMS	4/28/05	1:56
Thallium	205	0.21	0.27	0.21	U	10	ICPMS	4/28/05	1:56
Vanadium	51	1.5	2.7	12.6		10	ICPMS	4/28/05	1:56

Comments: Lot #: F5D210354 Sample #: 11

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTV **Client ID:** RE73-05-58836

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 10.62

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Antimony	**123**	**0.33**	**0.45**	**36.2**	**N**	**10**	**ICPMS**	**4/28/05**	**2:13**
Arsenic	**75**	**0.32**	**0.45**	**66.4**	**E**	**10**	**ICPMS**	**4/28/05**	**2:13**
Barium	**135**	**0.34**	**4.5**	**643**	**N**	**10**	**ICPMS**	**4/28/05**	**2:13**
Beryllium	**9**	**0.069**	**0.22**	**0.11**	**B**	**10**	**ICPMS**	**4/28/05**	**2:13**
Cadmium	**111**	**0.055**	**0.56**	**4.1**	**N**	**10**	**ICPMS**	**4/28/05**	**2:13**
Chromium	**52**	**0.86**	**1.1**	**104**	**N**	**10**	**ICPMS**	**4/28/05**	**2:13**
Cobalt	**59**	**0.14**	**1.1**	**41.9**		**10**	**ICPMS**	**4/28/05**	**2:13**
Copper	**65**	**0.49**	**1.1**	**815**	**N***	**10**	**ICPMS**	**4/28/05**	**18:41**
Lead	**208**	**0.21**	**0.67**	**2840**	**N***	**10**	**ICPMS**	**4/28/05**	**2:13**
Manganese	**55**	**0.029**	**2.2**	**2050**	**N**	**10**	**ICPMS**	**4/28/05**	**2:13**
Nickel	**60**	**0.29**	**0.45**	**220**	**N**	**10**	**ICPMS**	**4/28/05**	**2:13**
Selenium	**82**	**0.17**	**0.45**	**0.45**		**10**	**ICPMS**	**4/28/05**	**2:13**
Silver	**107**	**0.14**	**0.45**	**21.2**	**N***	**10**	**ICPMS**	**4/28/05**	**2:13**
Thallium	205	0.17	0.22	0.17	U	10	ICPMS	4/28/05	2:13
Vanadium	**51**	**1.2**	**2.2**	**3.8**		**10**	**ICPMS**	**4/28/05**	**2:13**

Comments: Lot #: F5D210354 Sample #: 13

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTW **Client ID:** RE73-05-58837

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 14.7

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Antimony	**123**	**0.35**	**0.47**	**24.7**	**N**	**10**	**ICPMS**	**4/28/05**	**2:18**
Arsenic	**75**	**0.33**	**0.47**	**133**	**E**	**10**	**ICPMS**	**4/28/05**	**2:18**
Barium	**135**	**0.36**	**4.7**	**575**	**N**	**10**	**ICPMS**	**4/28/05**	**2:18**
Beryllium	**9**	**0.073**	**0.23**	**0.089**	**B**	**10**	**ICPMS**	**4/28/05**	**2:18**
Cadmium	**111**	**0.057**	**0.59**	**2.8**	**N**	**10**	**ICPMS**	**4/28/05**	**2:18**
Chromium	**52**	**0.90**	**1.2**	**94.4**	**N**	**10**	**ICPMS**	**4/28/05**	**2:18**
Cobalt	**59**	**0.15**	**1.2**	**49.7**		**10**	**ICPMS**	**4/28/05**	**2:18**
Copper	**65**	**0.52**	**1.2**	**490**	**N***	**10**	**ICPMS**	**4/28/05**	**18:44**
Lead	**208**	**0.22**	**0.70**	**4310**	**N***	**10**	**ICPMS**	**4/28/05**	**2:18**
Manganese	**55**	**0.031**	**2.3**	**2330**	**N**	**10**	**ICPMS**	**4/28/05**	**2:18**
Nickel	**60**	**0.30**	**0.47**	**219**	**N**	**10**	**ICPMS**	**4/28/05**	**2:18**
Selenium	**82**	**0.18**	**0.47**	**0.64**		**10**	**ICPMS**	**4/28/05**	**2:18**
Silver	**107**	**0.15**	**0.47**	**15.4**	**N***	**10**	**ICPMS**	**4/28/05**	**2:18**
Thallium	205	0.18	0.23	0.18	U	10	ICPMS	4/28/05	2:18
Vanadium	**51**	**1.3**	**2.3**	**4.1**		**10**	**ICPMS**	**4/28/05**	**2:18**

Comments: Lot #: F5D210354 Sample #: 14

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTX **Client ID:** RE73-05-58838

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 25.28

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Antimony	123	0.39	0.54	116	N	10	ICPMS	4/28/05	2:23
Arsenic	75	0.38	0.54	19.5	E	10	ICPMS	4/28/05	2:23
Barium	135	0.41	5.4	2600	N	10	ICPMS	4/28/05	2:23
Beryllium	9	0.083	0.27	0.33		10	ICPMS	4/28/05	2:23
Cadmium	111	0.066	0.67	67.5	N	10	ICPMS	4/28/05	2:23
Chromium	52	1.0	1.3	54.1	N	10	ICPMS	4/28/05	2:23
Cobalt	59	0.17	1.3	10.1		10	ICPMS	4/28/05	2:23
Copper	65	3.0	6.7	3260	N*	50	ICPMS	4/28/05	18:47
Lead	208	1.2	4.0	13700	N*	50	ICPMS	4/28/05	18:47
Manganese	55	0.035	2.7	859	N	10	ICPMS	4/28/05	2:23
Nickel	60	0.35	0.54	77.0	N	10	ICPMS	4/28/05	2:23
Selenium	82	0.21	0.54	1.2		10	ICPMS	4/28/05	2:23
Silver	107	0.17	0.54	95.7	N*	10	ICPMS	4/28/05	2:23
Thallium	205	0.21	0.27	0.21	U	10	ICPMS	4/28/05	2:23
Vanadium	51	1.5	2.7	14.5		10	ICPMS	4/28/05	2:23

Comments: Lot #: F5D210354 Sample #: 15

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICPMS **Units:** ug/L

Chart Number: 042705M2.REP **Acceptable Range:** 90% - 110%

Standard Source: Inorganic Ventures **Standard ID:** See Standards Log

Element	WL/ Mass	True Conc	ICV 4/27/05 7:26 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Antimony	123	200.0	197.63	**98.8**								
Arsenic	75	200.0	201.38	**100.7**								
Barium	135	200.0	204.65	**102.3**								
Beryllium	9	200.0	204.20	**102.1**								
Cadmium	111	200.0	191.39	**95.7**								
Chromium	52	200.0	194.41	**97.2**								
Cobalt	59	200.0	199.24	**99.6**								
Copper	65	200.0	200.73	**100.4**								
Lead	208	200.0	196.43	**98.2**								
Manganese	55	200.0	200.52	**100.3**								
Nickel	60	200.0	198.06	**99.0**								
Selenium	82	200.0	199.40	**99.7**								
Silver	107	50.0	48.13	**96.3**								
Thallium	205	200.0	192.66	**96.3**								
Vanadium	51	200.0	193.01	**96.5**								

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICPMS **Units:** ug/L

Chart Number: 042805M2.REP **Acceptable Range:** 90% - 110%

Standard Source: Inorganic Ventures **Standard ID:** See Standards Log

Element	WL/ Mass	True Conc	ICV 4/28/05 5:22 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Copper	65	200.0	189.35	**94.7**								
Lead	208	200.0	198.23	**99.1**								

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPMS **Units:** ug/L

Chart Number: 042705M2.REP **Acceptable Range:** 90% - 110%

Standard Source: Inorganic Ventures **Standard ID:** See Standards Log

Element	WL/ Mass	True Conc	CCV 4/27/05 7:56 PM Found	% Rec	CCV 4/27/05 8:42 PM Found	% Rec	CCV 4/27/05 9:46 PM Found	% Rec	CCV 4/27/05 10:50 PM Found	% Rec	CCV 4/27/05 11:54 PM Found	% Rec
Antimony	123	200.0	198.12	**99.1**	195.11	**97.6**	197.02	**98.5**	196.30	**98.1**	195.57	**97.8**
Arsenic	75	200.0	199.76	**99.9**	199.50	**99.7**	198.32	**99.2**	208.31	**104.2**	204.59	**102.3**
Barium	135	200.0	206.86	**103.4**	209.10	**104.5**	203.78	**101.9**	207.92	**104.0**	211.15	**105.6**
Beryllium	9	200.0	193.28	**96.6**	192.38	**96.2**	195.08	**97.5**	195.34	**97.7**	194.68	**97.3**
Cadmium	111	200.0	193.74	**96.9**	192.18	**96.1**	193.65	**96.8**	197.20	**98.6**	195.60	**97.8**
Chromium	52	200.0	195.89	**97.9**	195.26	**97.6**	194.53	**97.3**	200.25	**100.1**	204.28	**102.1**
Cobalt	59	200.0	203.91	**102.0**	188.89	**94.4**	191.64	**95.8**	192.28	**96.1**	198.47	**99.2**
Copper	65	200.0	199.87	**99.9**	192.34	**96.2**	198.99	**99.5**	198.91	**99.5**	203.81	**101.9**
Lead	208	200.0	194.30	**97.1**	193.74	**96.9**	193.18	**96.6**	191.47	**95.7**	186.67	**93.3**
Manganese	55	200.0	200.00	**100.0**	193.11	**96.6**	194.15	**97.1**	196.32	**98.2**	201.94	**101.0**
Nickel	60	200.0	196.87	**98.4**	191.78	**95.9**	198.14	**99.1**	198.21	**99.1**	203.60	**101.8**
Selenium	82	200.0	198.17	**99.1**	199.39	**99.7**	196.90	**98.5**	202.24	**101.1**	202.60	**101.3**
Silver	107	50.0	49.42	**98.8**	48.35	**96.7**	48.79	**97.6**	48.64	**97.3**	49.08	**98.2**
Thallium	205	200.0	190.51	**95.3**	192.45	**96.2**	190.85	**95.4**	187.72	**93.9**	185.78	**92.9**
Vanadium	51	200.0	194.78	**97.4**	188.54	**94.3**	191.66	**95.8**	195.10	**97.6**	195.98	**98.0**

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPMS **Units:** ug/L

Chart Number: 042705M2.REP **Acceptable Range:** 90% - 110%

Standard Source: Inorganic Ventures **Standard ID:** See Standards Log

Element	WL/ Mass	True Conc	CCV 4/28/05 12:57 AM Found	% Rec	CCV 4/28/05 2:01 AM Found	% Rec	CCV 4/28/05 3:04 AM Found	% Rec	Found	% Rec	Found	% Rec
Antimony	123	200.0	195.70	**97.9**	195.57	**97.8**	199.24	**99.6**				
Arsenic	75	200.0	207.54	**103.8**	199.99	**100.0**	197.11	**98.6**				
Barium	135	200.0	214.16	**107.1**	208.30	**104.2**	212.91	**106.5**				
Beryllium	9	200.0	194.40	**97.2**	217.73	**108.9**	211.05	**105.5**				
Cadmium	111	200.0	193.25	**96.6**	197.55	**98.8**	197.59	**98.8**				
Chromium	52	200.0	198.59	**99.3**	212.38	**106.2**	209.95	**105.0**				
Cobalt	59	200.0	198.99	**99.5**	211.75	**105.9**	214.43	**107.2**				
Copper	65	200.0	203.19	**101.6**	225.49	**112.7**	227.88	**113.9**				
Lead	208	200.0	189.13	**94.6**	197.22	**98.6**	198.64	**99.3**				
Manganese	55	200.0	197.48	**98.7**	207.86	**103.9**	206.98	**103.5**				
Nickel	60	200.0	202.26	**101.1**	215.96	**108.0**	218.89	**109.4**				
Selenium	82	200.0	203.38	**101.7**	192.17	**96.1**	194.60	**97.3**				
Silver	107	50.0	48.93	**97.9**	50.02	**100.0**	50.57	**101.1**				
Thallium	205	200.0	186.90	**93.4**	193.46	**96.7**	195.65	**97.8**				
Vanadium	51	200.0	197.14	**98.6**	202.96	**101.5**	205.49	**102.7**				

Version 4.75.1

Form 2A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPMS **Units:** ug/L

Chart Number: 042805M2.REP **Acceptable Range:** 90% - 110%

Standard Source: Inorganic Ventures **Standard ID:** See Standards Log

Element	WL/ Mass	True Conc	CCV 4/28/05 5:42 PM Found	% Rec	CCV 4/28/05 6:10 PM Found	% Rec	CCV 4/28/05 6:51 PM Found	% Rec	CCV 4/28/05 7:31 PM Found	% Rec	CCV 4/28/05 7:43 PM Found	% Rec
Copper	65	200.0	199.05	**99.5**	195.12	**97.6**	200.50	**100.3**	192.45	**96.2**	200.22	**100.1**
Lead	208	200.0	194.85	**97.4**	197.99	**99.0**	200.83	**100.4**	196.89	**98.4**	196.57	**98.3**

Version 4.75.1

Form 2A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: ICPMS **Units:** ug/L

Chart Number: 042705M2.REP **Acceptable Range:** 50% - 150%

Standard Source: Inorganic Ventures **Standard ID:** See Standards Log

Element	WL/ Mass	True Conc	CRI 4/27/05 7:39 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Antimony	123	60.0	58.77	**98.0**								
Arsenic	75	10.0	10.21	**102.1**								
Barium	135	200.0	204.35	**102.2**								
Beryllium	9	5.0	5.18	**103.7**								
Cadmium	111	5.0	4.92	**98.3**								
Chromium	52	10.0	9.90	**99.0**								
Cobalt	59	50.0	49.63	**99.3**								
Copper	65	25.0	24.99	**100.0**								
Lead	208	3.0	3.05	**101.6**								
Manganese	55	15.0	15.49	**103.3**								
Nickel	60	40.0	39.64	**99.1**								
Selenium	82	5.0	5.22	**104.5**								
Silver	107	10.0	9.86	**98.6**								
Thallium	205	10.0	9.63	**96.3**								
Vanadium	51	50.0	50.78	**101.6**								

Version 4.75.1

Form 2B Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: ICPMS **Units:** ug/L

Chart Number: 042805M2.REP **Acceptable Range:** 50% - 150%

Standard Source: Inorganic Ventures **Standard ID:** See Standards Log

Element	WL/ Mass	True Conc	CRI 4/28/05 5:30 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Copper	65	25.0	24.07	**96.3**								
Lead	208	3.0	3.00	**100.1**								

Version 4.75.1

Form 2B Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: 042705M2.REP

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 4/27/05 7:32 PM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Antimony	123	0.4	0.3	U								
Arsenic	75	0.4	**0.6**									
Barium	135	4	0.3	U								
Beryllium	9	0.2	0.1	U								
Cadmium	111	0.5	0.0	U								
Chromium	52	1	-0.8	B								
Cobalt	59	1	**0.1**	**U**								
Copper	65	1	0.4	U								
Lead	208	0.6	**0.2**	**U**								
Manganese	55	2	**0.0**	**B**								
Nickel	60	0.4	**0.3**	**U**								
Selenium	82	0.4	**0.3**	**B**								
Silver	107	0.4	0.1	U								
Thallium	205	0.2	**0.2**									
Vanadium	51	2	1.1	U								

Version 4.75.1

U Result is less than the IDL
B Result is between IDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: 042805M2.REP

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 4/28/05 5:26 PM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Copper	65	1	0.4	U								
Lead	208	0.6	0.2	U								

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: 042705M2.REP

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 4/27/05 8:01 PM Found	Q	CCB 4/27/05 8:48 PM Found	Q	CCB 4/27/05 9:52 PM Found	Q	CCB 4/27/05 10:56 PM Found	Q	CCB 4/28/05 12:00 AM Found	Q
Antimony	123	0.4	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Arsenic	75	0.4	**0.8**		0.3	U	**1.0**		**0.9**		**1.0**	
Barium	135	4	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Beryllium	9	0.2	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Cadmium	111	0.5	0.0	U	0.0	U	0.0	U	0.0	U	0.0	U
Chromium	52	1	**0.8**	**U**	**0.8**	**U**	-0.8	B	-1.0	B	-0.9	**B**
Cobalt	59	1	**0.1**	**U**	**0.1**	**U**	**0.1**	**U**	**0.1**	**U**	**0.1**	**U**
Copper	65	1	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
Lead	208	0.6	**0.2**	**U**	**0.2**	**U**	**0.2**	**U**	**0.2**	**U**	**0.2**	**U**
Manganese	55	2	**0.1**	**B**	**0.0**	**B**	0.0	U	**0.0**	**B**	0.0	U
Nickel	60	0.4	**0.3**	**U**	**0.3**	**U**	**0.3**	**U**	**0.3**	**U**	**0.3**	**U**
Selenium	82	0.4	**0.4**		**0.4**	**B**	**0.3**	**B**	**0.5**		**0.4**	**B**
Silver	107	0.4	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Thallium	205	0.2	**0.4**		**0.3**		**0.3**		**0.4**		**0.3**	
Vanadium	51	2	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U

Version 4.75.1

U Result is less than the IDL
B Result is between IDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: 042705M2.REP

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 4/28/05 1:04 AM Found	Q	CCB 4/28/05 2:07 AM Found	Q	CCB 4/28/05 3:11 AM Found	Q	Found	Q	Found	Q
Antimony	123	0.4	0.3	U	0.3	U	0.3	U				
Arsenic	75	0.4	**0.9**		**1.2**		**0.7**					
Barium	135	4	0.3	U	0.3	U	0.3	U				
Beryllium	9	0.2	0.1	U	0.1	U	0.1	U				
Cadmium	111	0.5	0.0	U	0.0	U	0.0	U				
Chromium	52	1	**0.8**	U	-0.9	B	**0.8**	U				
Cobalt	59	1	**0.1**	U	**0.1**	U	**0.1**	U				
Copper	65	1	0.4	U	**3.2**		0.4	U				
Lead	208	0.6	**0.2**	U	**0.3**	B	**0.2**	U				
Manganese	55	2	0.0	U	0.0	U	0.0	U				
Nickel	60	0.4	**0.3**	U	**0.3**	U	**0.3**	U				
Selenium	82	0.4	**0.3**	B	**0.3**	B	**0.4**					
Silver	107	0.4	0.1	U	0.1	U	0.1	U				
Thallium	205	0.2	**0.3**		**0.2**		**0.2**					
Vanadium	51	2	1.1	U	1.1	U	1.1	U				

Version 4.75.1

U Result is less than the IDL
B Result is between IDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPMS **Units:** ug/L

Chart Number: 042805M2.REP

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 4/28/05 5:45 PM Found	Q	CCB 4/28/05 6:14 PM Found	Q	CCB 4/28/05 6:55 PM Found	Q	CCB 4/28/05 7:36 PM Found	Q	CCB 4/28/05 7:47 PM Found	Q
Copper	65	1	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
Lead	208	0.6	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: G84MFB

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Antimony	123	0.15	0.20	0.15	U	5	ICPMS	4/28/05	0:26
Arsenic	**75**	**0.14**	**0.20**	**0.66**		**5**	**ICPMS**	**4/28/05**	**0:26**
Barium	135	0.15	2.0	0.15	U	5	ICPMS	4/28/05	0:26
Beryllium	9	0.031	0.10	0.031	U	5	ICPMS	4/28/05	0:26
Cadmium	111	0.025	0.25	0.025	U	5	ICPMS	4/28/05	0:26
Chromium	52	0.39	0.50	0.39	U	5	ICPMS	4/28/05	0:26
Cobalt	59	0.064	0.50	0.064	U	5	ICPMS	4/28/05	0:26
Manganese	**55**	**0.013**	**1.0**	**0.14**	**B**	**5**	**ICPMS**	**4/28/05**	**0:26**
Nickel	60	0.13	0.20	0.13	U	5	ICPMS	4/28/05	0:26
Selenium	**82**	**0.077**	**0.20**	**0.27**		**5**	**ICPMS**	**4/28/05**	**0:26**
Silver	107	0.062	0.20	0.062	U	5	ICPMS	4/28/05	0:26
Thallium	205	0.078	0.10	0.078	U	5	ICPMS	4/28/05	0:26
Vanadium	**51**	**0.55**	**1.0**	**0.73**	**B**	**5**	**ICPMS**	**4/28/05**	**0:26**

Comments: Lot #: F5D210354

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPMS **Units:** ug/L

Chart Number: 042705M2.REP **Acceptable Range:** 50% - 150%

Standard Source: Inorganic Ventures **Standard ID:** See Standards Log

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 4/27/05 7:51 PM Found	Found	Found	Found	Found
Antimony	123	0.4		0				
Arsenic	75	0.4		0				
Barium	135	4		0				
Beryllium	9	0.2		0				
Cadmium	111	0.5		0				
Chromium	52	1		1				
Cobalt	59	1		0				
Copper	65	1		0				
Lead	208	0.6		1				
Manganese	55	2		1				
Nickel	60	0.4		1				
Selenium	82	0.4		0				
Silver	107	0.4		0				
Thallium	205	0.2		0				
Vanadium	51	2		-1				

STL-ST. LOUIS

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPMS **Units:** ug/L

Chart Number: 042805M2.REP **Acceptable Range:** 50% - 150%

Standard Source: Inorganic Ventures **Standard ID:** See Standards Log

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 4/28/05 5:39 PM Found	Found	Found	Found	Found
Copper	65	1		0				
Lead	208	0.6		1				

STL-ST. LOUIS

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPMS **Units:** ug/L

Chart Number: 042705M2.REP **Acceptable Range:** 50% - 150%

Standard Source: Inorganic Ventures **Standard ID:** See Standards Log

Element	WL/ Mass	True Conc	ICSAB 4/27/05 7:45 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Antimony	123	100	101.5	**101.5**								
Arsenic	75	100	103.3	**103.3**								
Barium	135	50	50.9	**101.8**								
Beryllium	9	50	49.7	**99.4**								
Cadmium	111	100	99.2	**99.2**								
Chromium	52	50	51.8	**103.6**								
Cobalt	59	50	48.9	**97.7**								
Copper	65	50	48.2	**96.5**								
Lead	208	100	96.4	**96.4**								
Manganese	55	50	51.8	**103.6**								
Nickel	60	100	98.1	**98.1**								
Selenium	82	100	98.6	**98.6**								
Silver	107	100	93.0	**93.0**								
Thallium	205	100	98.3	**98.3**								
Vanadium	51	50	49.9	**99.8**								

STL-ST. LOUIS

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPMS **Units:** ug/L

Chart Number: 042805M2.REP **Acceptable Range:** 50% - 150%

Standard Source: Inorganic Ventures **Standard ID:** See Standards Log

Element	WL/ Mass	True Conc	ICSAB 4/28/05 5:34 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Copper	65	50	46.9	93.9								
Lead	208	100	98.9	98.9								

Version 4.75.1

U Result is less than the IDL
B Result is between IDL and RL
N Spike recovery failed

Form 4 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: G8WP7S

Original Sample ID: G8WP7 **Client ID:** RE73-05-58824 S

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 23.51

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Antimony	123	33.4		60.0		32.684	81.4	10	10	ICPMS	4/28/05	0:37	4/28/05	0:42
Arsenic	75	42.0		175		130.74	101.8	10	10	ICPMS	4/28/05	0:37	4/28/05	0:42
Barium	135	1170		1730	N	130.74	428.0	10	10	ICPMS	4/28/05	0:37	4/28/05	0:42
Beryllium	9	0.27		3.8		3.2684	107.1	10	10	ICPMS	4/28/05	0:37	4/28/05	0:42
Cadmium	111	16.9		18.1	N	3.2684	37.7	10	10	ICPMS	4/28/05	0:37	4/28/05	0:42
Chromium	52	102		92.4	N	13.074	-70.7	10	10	ICPMS	4/28/05	0:37	4/28/05	0:42
Cobalt	59	16.2		50.0		32.684	103.4	10	10	ICPMS	4/28/05	0:37	4/28/05	0:42
Copper	65	1620		4520	N	16.342	7738.4	20	20	ICPMS	4/28/05	17:48	4/28/05	17:51
Lead	208	3330		6300	N	32.684	9078.3	20	20	ICPMS	4/28/05	17:48	4/28/05	17:51
Manganese	55	1520		1790	N	32.684	852.2	10	10	ICPMS	4/28/05	0:37	4/28/05	0:42
Nickel	60	203		162	N	32.684	-127.0	10	10	ICPMS	4/28/05	0:37	4/28/05	0:42
Selenium	82	1.1		133		130.74	100.7	10	10	ICPMS	4/28/05	0:37	4/28/05	0:42
Silver	107	17.5		21.9	N	3.2684	135.1	10	10	ICPMS	4/28/05	0:37	4/28/05	0:42
Thallium	205	0.54		127		130.74	96.9	10	10	ICPMS	4/28/05	0:37	4/28/05	0:42
Vanadium	51	16.1		53.6		32.684	114.7	10	10	ICPMS	4/28/05	0:37	4/28/05	0:42

Comments: Lot #: F5D210354 Sample #: 1

Version 4.75.1

U Result is less than the IDL
B Result is between IDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: G8WP7D

Original Sample ID: G8WP7 **Client ID:** RE73-05-58824 D

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 23.51

Element	WL/ Mass	OS Conc	Q	MSD Conc	Q	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Antimony	123	33.4		48.3	N	32.684	45.5	10	10	ICPMS	4/28/05	0:37	4/28/05	0:47
Arsenic	75	42.0		167		130.74	95.6	10	10	ICPMS	4/28/05	0:37	4/28/05	0:47
Barium	135	1170	N	1620	N	130.74	343.2	10	10	ICPMS	4/28/05	0:37	4/28/05	0:47
Beryllium	9	0.27		3.8		3.2684	108.0	10	10	ICPMS	4/28/05	0:37	4/28/05	0:47
Cadmium	111	16.9	N	14.3	N	3.2684	-78.5	10	10	ICPMS	4/28/05	0:37	4/28/05	0:47
Chromium	52	102	N	83.8	N	13.074	-136.0	10	10	ICPMS	4/28/05	0:37	4/28/05	0:47
Cobalt	59	16.2		49.8		32.684	102.9	10	10	ICPMS	4/28/05	0:37	4/28/05	0:47
Copper	65	1620	N	2150	N *	16.342	3249.6	20	20	ICPMS	4/28/05	17:48	4/28/05	17:54
Lead	208	3330	N	2110	N *	32.684	3734.9	20	20	ICPMS	4/28/05	17:48	4/28/05	17:54
Manganese	55	1520	N	1520	N	32.684	20.8	10	10	ICPMS	4/28/05	0:37	4/28/05	0:47
Nickel	60	203	N	157	N	32.684	-140.7	10	10	ICPMS	4/28/05	0:37	4/28/05	0:47
Selenium	82	1.1		128		130.74	97.2	10	10	ICPMS	4/28/05	0:37	4/28/05	0:47
Silver	107	17.5	N	15.5	N *	3.2684	-59.6	10	10	ICPMS	4/28/05	0:37	4/28/05	0:47
Thallium	205	0.54		126		130.74	96.1	10	10	ICPMS	4/28/05	0:37	4/28/05	0:47
Vanadium	51	16.1		49.7		32.684	102.7	10	10	ICPMS	4/28/05	0:37	4/28/05	0:47

Comments: Lot #: F5D210354 Sample #: 1

Version 4.75.1

U Result is less than the IDL
B Result is between IDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: G8WP7D

Matrix Spike Sample ID: G8WP7S **Client ID:** RE73-05-58824 D

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 23.51

Element	WL/ Mass	MS Conc	Q	MSD Conc	Q	% RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Antimony	123	60.0		48.3	N	21.7	10	10	ICPMS	4/28/05	0:42	4/28/05	0:47
Arsenic	75	175		167		4.7	10	10	ICPMS	4/28/05	0:42	4/28/05	0:47
Barium	135	1730	N	1620	N	6.6	10	10	ICPMS	4/28/05	0:42	4/28/05	0:47
Beryllium	9	3.8		3.8		0.8	10	10	ICPMS	4/28/05	0:42	4/28/05	0:47
Cadmium	111	18.1	N	14.3	N	23.4	10	10	ICPMS	4/28/05	0:42	4/28/05	0:47
Chromium	52	92.4	N	83.8	N	9.7	10	10	ICPMS	4/28/05	0:42	4/28/05	0:47
Cobalt	59	50.0		49.8		0.3	10	10	ICPMS	4/28/05	0:42	4/28/05	0:47
Copper	65	4520	N	2150	N *	70.9	20	20	ICPMS	4/28/05	17:51	4/28/05	17:54
Lead	208	6300	N	2110	N *	99.7	20	20	ICPMS	4/28/05	17:51	4/28/05	17:54
Manganese	55	1790	N	1520	N	16.4	10	10	ICPMS	4/28/05	0:42	4/28/05	0:47
Nickel	60	162	N	157	N	2.8	10	10	ICPMS	4/28/05	0:42	4/28/05	0:47
Selenium	82	133		128		3.5	10	10	ICPMS	4/28/05	0:42	4/28/05	0:47
Silver	107	21.9	N	15.5	N *	34.0	10	10	ICPMS	4/28/05	0:42	4/28/05	0:47
Thallium	205	127		126		0.8	10	10	ICPMS	4/28/05	0:42	4/28/05	0:47
Vanadium	51	53.6		49.7		7.6	10	10	ICPMS	4/28/05	0:42	4/28/05	0:47

Comments: Lot #: F5D210354 Sample #: 1

Version 4.75.1

U Result is less than the IDL
B Result is between IDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 6 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: G84MFC

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Antimony	123	60.9	63.3	103.9		0-223.3	5	ICPMS	4/28/05	0:32
Arsenic	75	161	177	110.0		79.5-120.5	5	ICPMS	4/28/05	0:32
Barium	135	252	271	107.3		82-117.8	5	ICPMS	4/28/05	0:32
Beryllium	9	94.4	88.1	93.4		82-118	5	ICPMS	4/28/05	0:32
Cadmium	111	128	126	98.8		81.3-119	5	ICPMS	4/28/05	0:32
Chromium	52	69.5	63.9	92.0		78.5-121.4	5	ICPMS	4/28/05	0:32
Cobalt	59	35.2	34.2	97.1		73-127	5	ICPMS	4/28/05	0:32
Manganese	55	408	390	95.7		79.9-120	5	ICPMS	4/28/05	0:32
Nickel	60	147	142	96.8		81.6-118.4	5	ICPMS	4/28/05	0:32
Selenium	82	64.2	67.2	104.7		75.5-124.4	5	ICPMS	4/28/05	0:32
Silver	107	130	91.1	70.1		53-147	5	ICPMS	4/28/05	0:32
Thallium	205	84.0	82.4	98.1		75.6-125	5	ICPMS	4/28/05	0:32
Vanadium	51	97.3	87.6	90.1		74.8-125.4	5	ICPMS	4/28/05	0:32

Comments: Lot #: F5D210354

Version 4.75.1

U Result is less than the IDL

B Result is between IDL and RL

REVISED

Form 7 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: G8WP7V

Original Sample ID: G8WP7 **Client ID:** RE73-05-58824

Matrix: Soil **Units:** mg/kg **Prep Date:** 4/27/05 **Prep Batch:** 5115187

Weight: 0.5 **Volume:** 50 **Percent Moisture:** 23.51

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Antimony	123	33.4	N	32.5		2.8	10	50	ICPMS	4/28/05	0:37	4/28/05	1:10
Arsenic	75	42.0		52.0	E	23.7	10	50	ICPMS	4/28/05	0:37	4/28/05	1:10
Barium	135	1170	N	1190		1.6	10	50	ICPMS	4/28/05	0:37	4/28/05	1:10
Beryllium	9	0.27		0.41	U		10	50	ICPMS	4/28/05	0:37	4/28/05	1:10
Cadmium	111	16.9	N	16.3		3.8	10	50	ICPMS	4/28/05	0:37	4/28/05	1:10
Chromium	52	102	N	97.7		3.9	10	50	ICPMS	4/28/05	0:37	4/28/05	1:10
Cobalt	59	16.2		17.1		5.4	10	50	ICPMS	4/28/05	0:37	4/28/05	1:10
Copper	65	1620	N*	1700		4.5	20	100	ICPMS	4/28/05	17:48	4/28/05	18:01
Lead	208	3330	N*	3390		1.7	20	100	ICPMS	4/28/05	17:48	4/28/05	18:01
Manganese	55	1520	N	1560		2.7	10	50	ICPMS	4/28/05	0:37	4/28/05	1:10
Nickel	60	203	N	213		4.8	10	50	ICPMS	4/28/05	0:37	4/28/05	1:10
Selenium	82	1.1		2.5	B		10	50	ICPMS	4/28/05	0:37	4/28/05	1:10
Silver	107	17.5	N*	17.0		3.1	10	50	ICPMS	4/28/05	0:37	4/28/05	1:10
Thallium	205	0.54		1.0	U		10	50	ICPMS	4/28/05	0:37	4/28/05	1:10
Vanadium	51	16.1		28.3			10	50	ICPMS	4/28/05	0:37	4/28/05	1:10

Comments: 50X

Version 4.75.1

U Result is less than the IDL
B Result is between IDL and RL
E Serial dilution percent difference not within limits

Form 9 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICPMS **Units:** ppb

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Antimony	123.00	0.4	0.29	1/28/05
Arsenic	75.00	0.4	0.28	1/28/05
Barium	135.00	4	0.30	1/28/05
Beryllium	9.00	0.2	0.062	1/28/05
Cadmium	111.00	0.5	0.049	1/28/05
Chromium	52.00	1	0.77	1/28/05
Cobalt	59.00	1	0.13	1/28/05
Copper	65.00	1	0.44	1/28/05
Lead	208.00	0.6	0.19	1/28/05
Manganese	55.00	2	0.026	1/28/05
Nickel	60.00	0.4	0.26	1/28/05
Selenium	82.00	0.4	0.15	1/28/05
Silver	107.00	0.4	0.12	1/28/05
Thallium	205.00	0.2	0.16	1/28/05
Vanadium	51.00	2	1.1	1/28/05

STL-ST. LOUIS

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICPMS **Units:** ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Antimony	123.00	20000	6/21/04
Arsenic	75.00	20000	6/21/04
Barium	135.00	4000	6/21/04
Beryllium	9.00	4000	6/21/04
Cadmium	111.00	20000	6/21/04
Chromium	52.00	20000	6/21/04
Cobalt	59.00	20000	6/21/04
Copper	65.00	4000	6/21/04
Lead	208.00	4000	6/21/04
Manganese	55.00	20000	6/21/04
Nickel	60.00	20000	6/21/04
Selenium	82.00	20000	6/21/04
Silver	107.00	4000	6/21/04
Thallium	205.00	2000	6/21/04
Vanadium	51.00	4000	6/21/04

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Log

Preparation Batch: 5115187 **Instrument:** ICP **Matrix:** Soil

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
G84MFB	4/27/05	0.5	50	NA
G84MFC	4/27/05	0.5	50	NA
G8WP7	4/27/05	0.5	50	23.51
G8WP7D	4/27/05	0.5	50	23.51
G8WP7S	4/27/05	0.5	50	23.51
G8WQL	4/27/05	0.5	50	24.74
G8WQN	4/27/05	0.5	50	24.69
G8WQR	4/27/05	0.5	50	16.93
G8WQT	4/27/05	0.5	50	17.67
G8WR6	4/27/05	0.5	50	20.86
G8WT0	4/27/05	0.5	50	24.96
G8WT1	4/27/05	0.5	50	14.65
G8WTA	4/27/05	0.5	50	24.49
G8WTE	4/27/05	0.5	50	24.78
G8WTG	4/27/05	0.5	50	16.54
G8WTR	4/27/05	0.5	50	24.71
G8WTV	4/27/05	0.5	50	10.62
G8WTW	4/27/05	0.5	50	14.7
G8WTX	4/27/05	0.5	50	25.28

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPMS **Chart Number:** 042705M2.REP

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
Blank		4/27/05	18:55
Standard 1		4/27/05	19:00
Standard 2		4/27/05	19:06
Standard 3		4/27/05	19:11
Standard 4		4/27/05	19:16
Standard 5		4/27/05	19:21
ICV		4/27/05	19:26
ICB		4/27/05	19:32
CRI		4/27/05	19:39
ICSAB		4/27/05	19:45
ICSA		4/27/05	19:51
CCV		4/27/05	19:56
CCB		4/27/05	20:01
ZZZZZZ		4/27/05	20:06
ZZZZZZ		4/27/05	20:11
ZZZZZZ		4/27/05	20:16
ZZZZZZ		4/27/05	20:22
ZZZZZZ		4/27/05	20:27
ZZZZZZ		4/27/05	20:32
ZZZZZZ		4/27/05	20:37
CCV		4/27/05	20:42
CCB		4/27/05	20:48
ZZZZZZ		4/27/05	20:54
ZZZZZZ		4/27/05	21:00
ZZZZZZ		4/27/05	21:05
ZZZZZZ		4/27/05	21:10
ZZZZZZ		4/27/05	21:15
ZZZZZZ		4/27/05	21:20
ZZZZZZ		4/27/05	21:25
ZZZZZZ		4/27/05	21:31
ZZZZZZ		4/27/05	21:36
ZZZZZZ		4/27/05	21:41
CCV		4/27/05	21:46
CCB		4/27/05	21:52
ZZZZZZ		4/27/05	21:58
ZZZZZZ		4/27/05	22:04
ZZZZZZ		4/27/05	22:09
ZZZZZZ		4/27/05	22:14
ZZZZZZ		4/27/05	22:19

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPMS **Chart Number:** 042705M2.REP

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		4/27/05	22:24
ZZZZZZ		4/27/05	22:29
ZZZZZZ		4/27/05	22:34
ZZZZZZ		4/27/05	22:40
ZZZZZZ		4/27/05	22:45
CCV		4/27/05	22:50
CCB		4/27/05	22:56
ZZZZZZ		4/27/05	23:02
ZZZZZZ		4/27/05	23:07
ZZZZZZ		4/27/05	23:13
ZZZZZZ		4/27/05	23:18
ZZZZZZ		4/27/05	23:23
ZZZZZZ		4/27/05	23:28
ZZZZZZ		4/27/05	23:33
ZZZZZZ		4/27/05	23:38
ZZZZZZ		4/27/05	23:43
ZZZZZZ		4/27/05	23:48
CCV		4/27/05	23:54
CCB		4/28/05	0:00
ZZZZZZ		4/28/05	0:06
ZZZZZZ		4/28/05	0:11
ZZZZZZ		4/28/05	0:16
ZZZZZZ		4/28/05	0:21
G84MFB		4/28/05	0:26
G84MFC		4/28/05	0:32
G8WP7	RE73-05-58824	4/28/05	0:37
G8WP7S	RE73-05-58824 S	4/28/05	0:42
G8WP7D	RE73-05-58824 D	4/28/05	0:47
ZZZZZZ		4/28/05	0:52
CCV		4/28/05	0:57
CCB		4/28/05	1:04
G8WP7V	RE73-05-58824	4/28/05	1:10
G8WQL	RE73-05-58825	4/28/05	1:15
G8WQN	RE73-05-58826	4/28/05	1:20
G8WQR	RE73-05-58827	4/28/05	1:25
G8WQT	RE73-05-58828	4/28/05	1:30
G8WR6	RE73-05-58830	4/28/05	1:35
G8WTA	RE73-05-58831	4/28/05	1:40
G8WTE	RE73-05-58832	4/28/05	1:45

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPMS **Chart Number:** 042705M2.REP

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
G8WTG	RE73-05-58833	4/28/05	1:51
G8WTR	RE73-05-58834	4/28/05	1:56
CCV		4/28/05	2:01
CCB		4/28/05	2:07
G8WTV	RE73-05-58836	4/28/05	2:13
G8WTW	RE73-05-58837	4/28/05	2:18
G8WTX	RE73-05-58838	4/28/05	2:23
G8WT0	RE73-05-58839	4/28/05	2:29
G8WT1	RE73-05-58840	4/28/05	2:34
ZZZZZZ		4/28/05	2:39
ZZZZZZ		4/28/05	2:44
ZZZZZZ		4/28/05	2:49
ZZZZZZ		4/28/05	2:54
ZZZZZZ		4/28/05	2:59
CCV		4/28/05	3:04
CCB		4/28/05	3:11
ZZZZZZ		4/28/05	3:17
ZZZZZZ		4/28/05	3:22
ZZZZZZ		4/28/05	3:27
ZZZZZZ		4/28/05	3:33

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPMS **Chart Number:** 042805M2.REP

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
Blank		4/28/05	17:03
Standard 1		4/28/05	17:06
Standard 2		4/28/05	17:09
Standard 3		4/28/05	17:12
Standard 4		4/28/05	17:15
Standard 5		4/28/05	17:19
ICV		4/28/05	17:22
ICB		4/28/05	17:26
CRI		4/28/05	17:30
ICSAB		4/28/05	17:34
ICSA		4/28/05	17:39
CCV		4/28/05	17:42
CCB		4/28/05	17:45
G8WP7	RE73-05-58824	4/28/05	17:48
G8WP7S	RE73-05-58824 S	4/28/05	17:51
G8WP7D	RE73-05-58824 D	4/28/05	17:54
ZZZZZZ		4/28/05	17:57
G8WP7V	RE73-05-58824	4/28/05	18:01
G8WQL	RE73-05-58825	4/28/05	18:04
G8WQN	RE73-05-58826	4/28/05	18:07
CCV		4/28/05	18:10
CCB		4/28/05	18:14
G8WQR	RE73-05-58827	4/28/05	18:19
ZZZZZZ		4/28/05	18:22
G8WR6	RE73-05-58830	4/28/05	18:25
G8WTA	RE73-05-58831	4/28/05	18:28
G8WTE	RE73-05-58832	4/28/05	18:31
G8WTG	RE73-05-58833	4/28/05	18:35
G8WTR	RE73-05-58834	4/28/05	18:38
G8WTV	RE73-05-58836	4/28/05	18:41
G8WTW	RE73-05-58837	4/28/05	18:44
G8WTX	RE73-05-58838	4/28/05	18:47
CCV		4/28/05	18:51
CCB		4/28/05	18:55
G8WT0	RE73-05-58839	4/28/05	18:59
G8WT1	RE73-05-58840	4/28/05	19:02
ZZZZZZ		4/28/05	19:05
ZZZZZZ		4/28/05	19:08
ZZZZZZ		4/28/05	19:12

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPMS **Chart Number:** 042805M2.REP

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		4/28/05	19:15
ZZZZZZ		4/28/05	19:19
ZZZZZZ		4/28/05	19:22
ZZZZZZ		4/28/05	19:25
ZZZZZZ		4/28/05	19:28
CCV		4/28/05	19:31
CCB		4/28/05	19:36
G8WQT	RE73-05-58828	4/28/05	19:40
CCV		4/28/05	19:43
CCB		4/28/05	19:47

METALS RAW DATA

file : 042705M2

Sample/Batch Report

STL ST. LOUIS - PERKIN ELMER ELAN 6100 - METHOD 6020 / 200.8 QUANTITATIVE ANALYSIS REP

User Name: stlmetals
Computer Name: SLICP03
Sample File: D:\Elandata\Sample\SW846 TEMP.sam
Report Date/Time: Wednesday, April 27, 2005 18:50:27
Method File: d:\Elandata\Method\epa temp.mth
Tuning File: d:\Elandata\Tuning\epa tuning.tun
Optimization File: d:\Elandata\Optimize\EPA.dac
Calibration File:
Calibration Type: External Calibration
Number of Replicates: 3
Number of Readings: 1
Number of Sweeps: 10
Dual Detector Mode: Dual

A/S	Loc.	Batch ID	Sample ID	Description	Aliquot Vol.	Diluted Vol.
	158		ICSA			
	7		CCV			
	1		CCB			
	24	5115326	G849FB	2X		
	25	5115326	G849FC	2X		
	26	5115326	G833J	2X		
	27	5115326	G833JS	2X		
	28	5115326	G833JD	2X		
	29	5115326	G833JA	2X		
	30	5115326	G833JV	10X		
	31	5115332	G849VB	2X		
	32	5115332	G849VC	2X		
	33	5115332	G8170	2X		
	34	5115332	G8170X	2X		
	35	5115332	G8170S	2X		
	36	5115332	G8170S LL	2X		
	37	5115332	G8170V	10X		
	38	5115332	G84EP	5X		
	39	5109067	G8L0KB	5X		
	40	5109067	G8L0KC	5X		
	41	5109067	G8L0KC	5X		
	42	5109067	G7NWL	5X		
	43	5109067	G7NW8	5X		
	44	5109067	G7NW8S	5X		
	45	5109067	G7NW8D	25X		
	46	5109067	G7NW8V	5X		
	47	5109067	G7NXD	5X		
	48	5109067	G73N6	5X		
	49	5109067	G73N6S	5X		
	50	5109067	G73N6D	5X		
	51	5109067	G73N6	5X		
	52	5109067	G77EX	5X		
	53	5109067	G77EXS	5X		
	54	5109067	G77EXD	5X		
	55	5109067	G77FD	5X		
	56	5109067	G782L	5X		
	57	5109067	G782LS	5X		
	58	5109067	G782LD	5X		
	59	5109067	G783X	5X		
	60	5109067	G8JDL	5X		
	61	5109067	G8JDLS	5X		

62	5109067	G8JDLD	5X
63	5109067	G8JD2	5X
64	5109067	G8JEE	5X
65	5115187	G84MFB	5X
66	5115187	G84MFC	5X
67	5115187	G8WP7	10X
68	5115187	G8WP7S	10X
69	5115187	G8WP7D	10X
70	5115187	G8WP7S LL	10X
71	5115187	G8WP7V	50X
72	5115187	G8WQL	10X
73	5115187	G8WQN	10X
74	5115187	G8WQR	10X
75	5115187	G8WQT	10X
76	5115187	G8WR8	10X
77	5115187	G8WTA	10X
78	5115187	G8WTE	10X
79	5115187	G8WTG	10X
80	5115187	G8WTR	10X
81	5115187	G8WTV	10X
82	5115187	G8WTW	10X
83	5115187	G8WTX	10X
84	5115187	G8WT0	10X
85	5115187	G8WT1	10X
86	5115187	G817C	10X
87	5115187	G817CS	10X
88	5115187	G817CD	10X
89	5115187	G817D	10X
90	5115187	G817E	10X
91	5115187	G817F	10X
92	5115187	G817G	10X

Quantitative Analysis Calibration Report

File Name: 042705M2.cal
File Path: D:\Elandata\System
Calibration Type: External Calibration

Analyte	Mass	Curve Type	Slope	Intercept	Corr. Coeff.
Be	9.012	Linear Thru Zero	0.000382	0.00	0.999981
B	10.013	Linear Thru Zero	0.000072	0.00	0.999959
Na	22.990	Linear Thru Zero	0.008430	0.00	0.999993
Mg	23.985	Linear Thru Zero	0.006127	0.00	0.999993
Al	26.982	Linear Thru Zero	0.009368	0.00	0.999992
K	38.964	Linear Thru Zero	0.018130	0.00	0.999998
Ca	43.956	Linear Thru Zero	0.000581	0.00	0.999928
Sc-1	44.956	Linear Thru Zero	0.000000	0.00	0.000000
V	50.944	Linear Thru Zero	0.022635	0.00	0.999998
Cr	51.941	Linear Thru Zero	0.019942	0.00	0.999977
Mn	54.938	Linear Thru Zero	0.032781	0.00	0.999962
Fe	56.935	Linear Thru Zero	0.000689	0.00	0.999997
Co	58.933	Linear Thru Zero	0.025326	0.00	0.999992
Ni	59.933	Linear Thru Zero	0.005442	0.00	0.999990
Cu	64.928	Linear Thru Zero	0.005987	0.00	0.999997
Zn	65.926	Linear Thru Zero	0.003517	0.00	0.999991
Ge-1	71.922	Linear Thru Zero	0.000000	0.00	0.000000
As	74.922	Linear Thru Zero	0.002810	0.00	0.999994
Se	81.917	Linear Thru Zero	0.000311	0.00	0.999998
Mo	96.906	Linear Thru Zero	0.001936	0.00	0.999999
Ag	106.905	Linear Thru Zero	0.008999	0.00	0.999994
Cd	110.904	Linear Thru Zero	0.002066	0.00	0.999985
In-1	114.904	Linear Thru Zero	0.000000	0.00	0.000000
Sb	122.904	Linear Thru Zero	0.005147	0.00	0.999982
Ba	134.906	Linear Thru Zero	0.001503	0.00	0.999996
Ho-1	164.930	Linear Thru Zero	0.000000	0.00	0.000000
Tl	204.975	Linear Thru Zero	0.017287	0.00	0.999969
Pb	207.977	Linear Thru Zero	0.023674	0.00	0.999996
U	238.050	Linear Thru Zero	0.030302	0.00	0.999997
Sc-2	44.956	Linear Thru Zero	0.000000	0.00	0.000000
Cr	52.941	Linear Thru Zero	0.002733	0.00	0.998494
Fe	53.940	Linear Thru Zero	0.001566	0.00	0.999970
Ni	60.931	Linear Thru Zero	0.000244	0.00	0.999995
Cu	62.930	Linear Thru Zero	0.012387	0.00	0.999970
Zn	66.927	Linear Thru Zero	0.000621	0.00	0.999598
Ge	71.922	Linear Thru Zero	0.000000	0.00	0.000000
Se	76.920	Linear Thru Zero	0.000251	0.00	0.999978
Mo	97.906	Linear Thru Zero	0.004887	0.00	0.999993
Ag	108.905	Linear Thru Zero	0.009178	0.00	0.999989
In-2	114.904	Linear Thru Zero	0.000000	0.00	0.000000

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Cd	113.904	Linear Thru Zero	0.004615	0.00	0.999989
Sb	120.904	Linear Thru Zero	0.006741	0.00	0.999980
Ba	136.905	Linear Thru Zero	0.002563	0.00	0.999981
Ho-2	164.930	Linear Thru Zero	0.000000	0.00	0.000000
Tl	202.972	Linear Thru Zero	0.007347	0.00	0.999967
Pb	205.975	Linear Thru Zero	0.005901	0.00	0.999996
Pb	206.976	Linear Thru Zero	0.004973	0.00	0.999992
Sc	44.956	Linear Thru Zero	0.000000	0.00	0.000000
Ti	46.952	Linear Thru Zero	0.001635	0.00	0.999985
Sr	85.909	Linear Thru Zero	0.007936	0.00	0.999999
Sr	87.906	Linear Thru Zero	0.069070	0.00	0.999986
In	114.904	Linear Thru Zero	0.000000	0.00	0.000000
Sn	117.902	Linear Thru Zero	0.005668	0.00	0.999997
Sn	119.902	Linear Thru Zero	0.007458	0.00	0.999971

Instrument Tuning Report

File Name: EPA TUNING.tun
File Path: d:\Elandata\Tuning
Sample ID: daily check
Sample Date/Time: Wednesday, April 27, 2005 11:18:52

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
He	3.016	2.975	595	2079	0.668	
Mg	23.985	24.028	5677	2073	0.718	
Rh	102.905	102.879	24914	2066	0.727	
Ce	139.905	139.879	33928	2109	0.694	
Pb	207.977	207.927	50397	2284	0.733	

Replicates: 6

Meas. Intens. RSD	Mass
0.656	2.000
1.394	3.000
17.534	4.000
10.189	5.000
12.177	22.000
2.065	23.000
2.565	24.000
2.574	25.000
4.666	26.000
1.694	102.000
0.346	103.000
3.439	104.000
3.395	139.000
0.969	140.000
1.519	141.000
2.744	206.000
2.277	207.000
0.568	208.000
4.717	209.000

Report Date/Time: Wednesday, April 27, 2005 11:20:05
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Daily Performance Report

Sample ID: daily check
Sample Date/Time: Wednesday, April 27, 2005 11:22:54
Sample Description:
Method File: d:\Elandata\Method\DAILY EPA.mth
Dataset File: d:\Elandata\Dataset\DAILY PEFORMANCE EPA\daily check.177
Tuning File: d:\Elandata\Tuning\EPA TUNING.tun
Optimization File: d:\Elandata\Optimize\EPA.dac
Dual Detector Mode: Pulse
Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24.0	52822.2	52822.204	429.986	0.8
	Rh	102.9	419851.8	419851.764	3585.720	0.9
	Pb	208.0	270582.7	270582.682	1537.037	0.6
⌈>	Ba	137.9	416802.2	416802.188	3897.641	0.9
⌊	Ba++	69.0	5899.9	0.014	0.000	1.5
⌈>	Ce	139.9	501663.8	501663.842	1422.297	0.3
⌊	CeO	155.9	13643.3	0.027	0.000	1.7
	Bkgd	220.0	7.9	7.944	1.452	18.3

Current Optimization File Data

Current Value	Description
0.88	Nebulizer Gas Flow
8.75	Lens Voltage
1200.00	ICP RF Power
-2200.00	Analog Stage Voltage
1400.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-13.50	AC Rod Offset
60.00	Service DAC 1
0.00	Quadrupole Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	25	7.8	2935.3
Mg	24	25	5.8	58094.9
Co	59	25	6.8	190724.7
Rh	103	25	7.8	479282.3
In	115	25	8.0	555076.3
Ba	138	25	8.3	454846.5
Ce	140	25	8.3	543658.6
Pb	208	25	9.5	308645.5

QUANTITATIVE ANALYSIS REPORT

Sample ID: Blank
Sample Date/Time: Wednesday, April 27, 2005 18:55:49
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042705M2\Blank.003

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be			7.667	ug/L	
	10	B			27.667	ug/L	
	23	Na			18838.944	ug/L	
	24	Mg			2106.176	ug/L	
	27	Al			3413.777	ug/L	
	39	K			807733.282	ug/L	
	44	Ca			61872.368	ug/L	
>	45	Sc-1			454114.374	ug/L	
	51	V			-26072.212	ug/L	
	52	Cr			26547.338	ug/L	
	55	Mn			3062.361	ug/L	
	57	Fe			9798.695	ug/L	
	59	Co			232.338	ug/L	
	60	Ni			301.006	ug/L	
	65	Cu			168.336	ug/L	
	66	Zn			15137.170	ug/L	
>	72	Ge-1			739226.379	ug/L	
	75	As			-1945.453	ug/L	
	82	Se			-120.854	ug/L	
	97	Mo			72.001	ug/L	
	107	Ag			267.339	ug/L	
	111	Cd			39.334	ug/L	
>	115	In-1			1483966.870	ug/L	
	123	Sb			268.758	ug/L	
	135	Ba			112.002	ug/L	
>	165	Ho-1			1592460.464	ug/L	
	205	Tl			3951.949	ug/L	
	208	Pb			4580.000	ug/L	
	238	U			234.671	ug/L	
>	45	Sc-2			454114.374	ug/L	
	53	Cr			154333.029	ug/L	
	54	Fe			62090.940	ug/L	
	61	Ni			1661.113	ug/L	
	63	Cu			345.008	ug/L	
	67	Zn			9047.975	ug/L	
>	72	Ge			739226.379	ug/L	
	77	Se			8561.780	ug/L	
	98	Mo			141.970	ug/L	
	109	Ag			288.339	ug/L	
>	115	In-2			1483966.870	ug/L	
	114	Cd			84.731	ug/L	
	121	Sb			349.674	ug/L	
	137	Ba			156.669	ug/L	
>	165	Ho-2			1592460.464	ug/L	
	203	Tl			1582.773	ug/L	
	206	Pb			1161.392	ug/L	
	207	Pb			995.045	ug/L	
>	45	Sc			454114.374	ug/L	
	47	Ti			297.006	ug/L	
	86	Sr			716.656	ug/L	
	88	Sr			5834.250	ug/L	
>	115	In			1483966.870	ug/L	
	118	Sn			855.034	ug/L	
	120	Sn			1103.483	ug/L	

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10
	Na	23
	Mg	24
	Al	27
	K	39
	Ca	44
>	Sc-1	45
	V	51
	Cr	52
	Mn	55
	Fe	57
	Co	59
	Ni	60
	Cu	65
	Zn	66
>	Ge-1	72
	As	75
	Se	82
	Mo	97
	Ag	107
	Cd	111
>	In-1	115
	Sb	123
	Ba	135
>	Ho-1	165
	Tl	205
	Pb	208
	U	238
>	Sc-2	45
	Cr	53
	Fe	54
	Ni	61
	Cu	63
	Zn	67
>	Ge	72
	Se	77
	Mo	98
	Ag	109
>	In-2	115
	Cd	114
	Sb	121
	Ba	137
>	Ho-2	165
	Tl	203
	Pb	206
	Pb	207
>	Sc	45
	Ti	47
	Sr	86
	Sr	88
>	In	115
	Sn	118
	Sn	120

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: Standard 1
Sample Date/Time: Wednesday, April 27, 2005 19:00:56
Autosampler Position: 2
Dataset File: D:\Elandata\Dataset\042705M2\Standard 1.004

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	20.000000	2.828	3416.443	ug/L	7.667
	10	B	20.000000	4.287	657.022	ug/L	27.667
	23	Na			36669.719	ug/L	18838.944
	24	Mg			4869.212	ug/L	2106.176
	27	Al			9693.051	ug/L	3413.777
	39	K			798184.810	ug/L	807733.282
	44	Ca			66531.232	ug/L	61872.368
>	45	Sc-1			461404.320	ug/L	454114.374
	51	V	20.000000	1.075	181969.324	ug/L	-26072.212
	52	Cr	20.000000	4.797	218901.295	ug/L	26547.338
	55	Mn	20.000000	3.216	313098.106	ug/L	3062.361
	57	Fe			9848.596	ug/L	9798.695
	59	Co	20.000000	3.967	241779.530	ug/L	232.338
	60	Ni	20.000000	1.709	50807.036	ug/L	301.006
	65	Cu	20.000000	2.211	56749.396	ug/L	168.336
	66	Zn	20.000000	5.487	47957.879	ug/L	15137.170
>	72	Ge-1			739744.143	ug/L	739226.379
	75	As	20.000000	2.397	40933.560	ug/L	-1945.453
	82	Se	20.000000	0.348	4460.396	ug/L	-120.854
	97	Mo	20.000000	3.349	58605.202	ug/L	72.001
	107	Ag	4.000000	1.002	53647.081	ug/L	267.339
	111	Cd	20.000000	2.032	61013.645	ug/L	39.334
>	115	In-1			1446304.234	ug/L	1483966.870
	123	Sb	20.000000	0.574	154526.672	ug/L	268.758
	136	Ba	20.000000	0.747	49063.627	ug/L	112.002
>	165	Ho-1			1583142.734	ug/L	1592460.464
	205	Tl	20.000000	0.592	542762.502	ug/L	3951.949
	208	Pb	20.000000	0.627	762296.314	ug/L	4680.000
	238	U	20.000000	4.113	941022.019	ug/L	234.671
>	45	Sc-2			461404.320	ug/L	454114.374
	53	Cr	20.000000	48.870	189687.478	ug/L	154333.029
	54	Fe			64556.611	ug/L	62090.940
	61	Ni	20.000000	5.312	3885.901	ug/L	1661.113
	63	Cu	20.000000	3.976	118557.856	ug/L	345.008
	67	Zn	20.000000	18.401	15450.869	ug/L	9047.975
>	72	Ge			739744.143	ug/L	739226.379
	77	Se	20.000000	21.011	12525.180	ug/L	8561.760
	98	Mo	20.000000	0.955	146190.356	ug/L	141.970
	109	Ag	4.000000	1.507	55367.977	ug/L	288.339
>	115	In-2			1446304.234	ug/L	1483966.870
	114	Cd	20.000000	1.699	140068.705	ug/L	84.731
	121	Sb	20.000000	1.087	204609.088	ug/L	349.674
	137	Ba	20.000000	1.750	85000.644	ug/L	156.669
>	165	Ho-2			1583142.734	ug/L	1592460.464
	203	Tl	20.000000	1.374	226836.678	ug/L	1582.773
	206	Pb	20.000000	1.468	192180.292	ug/L	1161.392
	207	Pb	20.000000	0.604	162228.272	ug/L	995.045
>	45	Sc			461404.320	ug/L	454114.374
	47	Ti	20.000000	1.310	15129.482	ug/L	297.006
	86	Sr	20.000000	1.154	72931.787	ug/L	716.658
	88	Sr	20.000000	5.186	626921.262	ug/L	5834.250
>	115	In			1446304.234	ug/L	1483966.870
	118	Sn	20.000000	0.591	169078.134	ug/L	855.034
	120	Sn	20.000000	2.193	223660.760	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10
	Na	23
	Mg	24
	Al	27
	K	39
	Ca	44
>	Sc-1	45
	V	51
	Cr	52
	Mn	55
	Fe	57
	Co	59
	Ni	60
	Cu	65
	Zn	66
>	Ge-1	72
	As	75
	Se	82
	Mo	97
	Ag	107
	Cd	111
>	In-1	115
	Sb	123
	Ba	135
>	Ho-1	165
	Tl	205
	Pb	206
	U	238
>	Sc-2	45
	Cr	53
	Fe	54
	Ni	61
	Cu	63
	Zn	67
>	Ge	72
	Se	77
	Mo	98
	Ag	109
>	In-2	115
	Cd	114
	Sb	121
	Ba	137
>	Ho-2	165
	Tl	203
	Pb	208
	Pb	207
>	Sc	45
	Ti	47
	Sr	86
	Sr	88
>	In	115
	Sn	118
	Sn	120

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: Standard 2
Sample Date/Time: Wednesday, April 27, 2005 19:06:04
Autosampler Position: 3
Dataset File: D:\Elandata\Dataset\042705M2\Standard 2.005

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	50.084342	3.571	8489.942	ug/L	7.667
	10	B	50.557045	0.715	1708.453	ug/L	27.667
	23	Na			60742.218	ug/L	18838.944
	24	Mg			7143.192	ug/L	2106.176
	27	Al			6931.068	ug/L	3413.777
	39	K			784921.339	ug/L	807733.262
	44	Ca			68117.362	ug/L	61872.368
>	45	Sc-1			453669.751	ug/L	454114.374
	51	V	49.959641	1.294	483397.134	ug/L	-26072.212
	52	Cr	49.941689	4.141	489638.296	ug/L	26547.338
	55	Mn	50.085435	0.726	771425.525	ug/L	3062.361
	57	Fe			10551.822	ug/L	9798.695
	59	Co	49.840055	1.047	580376.795	ug/L	232.338
	60	Ni	50.079738	3.483	125884.729	ug/L	301.006
	65	Cu	49.829366	0.790	135905.776	ug/L	168.336
	66	Zn	50.086305	1.144	96250.788	ug/L	15137.170
>	72	Ge-1			742207.268	ug/L	739226.379
	75	As	49.727726	2.942	101495.323	ug/L	-1945.453
	82	Se	49.962436	1.680	11339.909	ug/L	-120.854
	97	Mo	49.919207	0.471	141878.510	ug/L	72.001
	107	Ag	9.950461	2.719	130998.059	ug/L	267.339
	111	Cd	49.713104	2.007	148534.101	ug/L	39.334
>	115	In-1			1467812.057	ug/L	1483966.870
	123	Sb	49.883183	1.647	385101.711	ug/L	268.758
	135	Ba	49.802066	1.567	119495.225	ug/L	112.002
>	165	Ho-1			1589172.952	ug/L	1592460.464
	205	Tl	49.889211	0.284	1334836.134	ug/L	3951.949
	208	Pb	49.884974	2.917	1866545.656	ug/L	4580.000
	238	U	50.091287	1.246	2393586.788	ug/L	234.671
>	45	Sc-2			453669.751	ug/L	454114.374
	53	Cr	49.266829	16.684	227410.470	ug/L	154333.029
	54	Fe			68297.378	ug/L	62090.940
	61	Ni	50.227342	2.804	7241.574	ug/L	1861.113
	63	Cu	49.956723	1.012	289114.396	ug/L	345.008
	67	Zn	50.080826	9.900	24824.498	ug/L	9047.975
>	72	Ge			742207.268	ug/L	739226.379
	77	Se	49.495622	4.712	17849.486	ug/L	8561.780
	98	Mo	49.829065	2.694	361704.073	ug/L	141.970
	109	Ag	9.964528	1.965	136535.786	ug/L	268.339
>	115	In-2			1467812.057	ug/L	1483966.870
	114	Cd	49.677277	2.263	339261.086	ug/L	84.731
	121	Sb	49.795155	1.238	503579.444	ug/L	349.674
	137	Ba	49.801014	0.555	207110.277	ug/L	156.669
>	165	Ho-2			1589172.952	ug/L	1592460.464
	203	Tl	50.012043	2.273	567804.025	ug/L	1582.773
	206	Pb	49.899468	3.940	473579.721	ug/L	1161.392
	207	Pb	49.924605	1.775	401211.416	ug/L	985.045
>	45	Sc			453669.751	ug/L	454114.374
	47	Ti	49.977909	2.123	36624.926	ug/L	297.006
	86	Sr	50.080515	1.568	180300.759	ug/L	716.858
	88	Sr	50.046812	1.324	1543393.200	ug/L	5834.250
>	115	In			1467812.057	ug/L	1483966.870
	118	Sn	49.818993	1.570	416740.961	ug/L	855.034
	120	Sn	49.973604	3.023	563675.221	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10
	Na	23
	Mg	24
	Al	27
	K	39
	Ca	44
>	Sc-1	45
	V	51
	Cr	52
	Mn	55
	Fe	57
	Co	59
	Ni	60
	Cu	65
	Zn	66
>	Ge-1	72
	As	75
	Se	82
	Mo	97
	Ag	107
	Cd	111
>	In-1	115
	Sb	123
	Ba	135
>	Ho-1	165
	Tl	205
	Pb	208
	U	238
>	Sc-2	45
	Cr	53
	Fe	54
	Ni	61
	Cu	63
	Zn	67
>	Ge	72
	Se	77
	Mo	98
	Ag	109
>	In-2	115
	Cd	114
	Sb	121
	Ba	137
>	Ho-2	165
	Tl	203
	Pb	206
	Pb	207
>	Sc	45
	Tl	47
	Sr	88
	Sr	88
>	In	115
	Sn	118
	Sn	120

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: Standard 3
Sample Date/Time: Wednesday, April 27, 2005 19:11:13
Autosampler Position: 4
Dataset File: D:\Elandata\Dataset\042705M2\Standard 3.006

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	200.323122	3.752	34848.564	ug/L	7.667
	10	B	199.722128	2.875	8530.891	ug/L	27.667
	23	Na	500.000000	1.417	1812455.730	ug/L	18838.944
	24	Mg	250.000000	4.511	655341.040	ug/L	2106.176
	27	Al	500.000000	4.187	2097096.985	ug/L	3413.777
	39	K	500.000000	2.816	4809970.860	ug/L	807733.262
	44	Ca	250.000000	3.285	140544.384	ug/L	61872.368
>	45	Sc-1			452988.498	ug/L	454114.374
	51	V	200.100530	1.362	2025405.873	ug/L	-26072.212
	52	Cr	199.634396	1.230	1829631.979	ug/L	26547.338
	55	Mn	199.533363	1.823	2965924.899	ug/L	3062.361
	57	Fe	500.000000	4.426	161145.570	ug/L	9796.695
	59	Co	199.810725	1.557	2292322.268	ug/L	232.338
	60	Ni	199.770661	2.795	492725.132	ug/L	301.006
	65	Cu	199.957196	4.565	542173.334	ug/L	168.336
	66	Zn	199.778921	2.620	333275.827	ug/L	15137.170
>	72	Ge-1			719651.870	ug/L	739226.379
	75	As	200.032279	1.730	402461.819	ug/L	-1945.453
	82	Se	200.113153	2.827	44711.644	ug/L	-120.854
	97	Mo	200.003284	0.746	559083.674	ug/L	72.001
	107	Ag	40.015405	2.286	520221.776	ug/L	267.339
	111	Cd	200.216343	2.235	597177.442	ug/L	39.334
>	115	In-1			1443960.816	ug/L	1483966.870
	123	Sb	199.890690	3.816	1483605.528	ug/L	268.758
	135	Ba	199.949126	3.525	470833.761	ug/L	112.002
>	165	Ho-1			1567164.675	ug/L	1592460.464
	205	Tl	200.420044	2.976	5430266.292	ug/L	3951.949
	208	Pb	200.102320	2.548	7424555.269	ug/L	4580.000
	238	U	200.111826	5.209	9492787.201	ug/L	234.671
>	45	Sc-2			452988.498	ug/L	454114.374
	53	Cr	197.106074	4.629	397942.113	ug/L	154333.029
	54	Fe	500.000000	5.054	437417.402	ug/L	62090.940
	61	Ni	199.948405	2.688	23763.320	ug/L	1661.113
	63	Cu	199.584523	3.036	1119859.429	ug/L	345.008
	67	Zn	198.474651	0.724	64851.551	ug/L	9047.975
>	72	Ge			719651.870	ug/L	739226.379
	77	Se	199.962407	2.584	44488.687	ug/L	8561.780
	98	Mo	199.832594	1.453	1410177.928	ug/L	141.970
	109	Ag	39.956360	0.690	529791.124	ug/L	288.339
>	115	In-2			1443960.816	ug/L	1483966.870
	114	Cd	199.883418	2.315	1331711.528	ug/L	84.731
	121	Sb	199.687983	3.482	1943054.940	ug/L	349.674
	137	Ba	199.703414	3.626	801563.380	ug/L	156.669
>	165	Ho-2			1567164.675	ug/L	1592460.464
	203	Tl	200.437257	3.135	2307868.407	ug/L	1582.773
	206	Pb	199.857866	2.068	1848718.071	ug/L	1161.392
	207	Pb	199.789941	4.109	1556785.249	ug/L	995.045
>	45	Sc			452988.498	ug/L	454114.374
	47	Ti	200.289850	3.802	148585.435	ug/L	297.006
	86	Sr	200.057238	1.093	719826.165	ug/L	716.656
	88	Sr	200.282339	0.560	6272235.909	ug/L	5834.250
>	115	In			1443960.816	ug/L	1483966.870
	118	Sn	199.950812	1.300	1637253.184	ug/L	855.034
	120	Sn	199.587286	1.992	2150083.669	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10
	Na	23
	Mg	24
	Al	27
	K	39
	Ca	44
>	Sc-1	45
	V	51
	Cr	52
	Mn	55
	Fe	57
	Co	59
	Ni	60
	Cu	65
	Zn	66
>	Ge-1	72
	As	75
	Se	82
	Mo	97
	Ag	107
	Cd	111
>	In-1	115
	Sb	123
	Ba	136
>	Ho-1	165
	Tl	205
	Pb	208
	U	238
>	Sc-2	45
	Cr	53
	Fe	54
	Ni	61
	Cu	63
	Zn	67
>	Ge	72
	Se	77
	Mo	98
	Ag	109
>	In-2	115
	Cd	114
	Sb	121
	Ba	137
>	Ho-2	165
	Tl	203
	Pb	208
	Pb	207
>	Sc	45
	Tl	47
	Sr	86
	Sr	88
>	In	115
	Sn	118
	Sn	120

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: Standard 4
Sample Date/Time: Wednesday, April 27, 2005 19:16:23
Autosampler Position: 5
Dataset File: D:\Elandata\Dataset\042705M2\Standard 4.007

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.036751	124.306	13.667	ug/L	7.667
	10	B	5.174197	23.855	192.337	ug/L	27.667
	23	Na	2008.381275	2.998	7606085.165	ug/L	18838.944
	24	Mg	1002.702180	3.185	2693573.782	ug/L	2106.176
	27	Al	2003.794878	0.324	8505812.744	ug/L	3413.777
	39	K	2003.681972	3.660	17036687.523	ug/L	807733.282
	44	Ca	990.884496	3.741	327777.278	ug/L	61872.368
>	45	Sc-1			445162.813	ug/L	454114.374
	51	V	0.059919	498.300	-24953.280	ug/L	-26072.212
	52	Cr	-0.059119	153.327	25504.698	ug/L	26547.338
	55	Mn	0.110884	20.619	4617.127	ug/L	3062.361
	57	Fe	2002.259604	2.819	616219.050	ug/L	9798.695
	59	Co	0.068165	23.566	994.046	ug/L	232.338
	60	Ni	0.097041	18.002	530.015	ug/L	301.006
	65	Cu	0.056748	19.573	313.340	ug/L	168.336
	66	Zn	1.462646	6.128	17112.750	ug/L	15137.170
>	72	Ge-1			719861.230	ug/L	739226.379
	75	As	0.778868	19.544	-321.657	ug/L	-1945.453
	82	Se	0.314540	29.078	-47.079	ug/L	-120.854
	97	Mo	0.144544	44.373	471.013	ug/L	72.001
	107	Ag	0.005603	29.553	331.674	ug/L	267.339
	111	Cd	0.012785	58.304	76.001	ug/L	39.334
>	115	In-1			1439464.290	ug/L	1483966.870
	123	Sb	0.122882	37.051	1167.893	ug/L	268.758
	135	Ba	0.512332	8.491	1327.742	ug/L	112.002
>	165	Ho-1			1581503.472	ug/L	1592460.464
	205	Tl	0.437819	48.490	15804.241	ug/L	3951.949
	208	Pb	0.054874	50.057	6587.007	ug/L	4580.000
	238	U	0.013679	98.695	879.045	ug/L	234.671
>	45	Sc-2			445162.813	ug/L	454114.374
	53	Cr	6.049469	108.562	158696.548	ug/L	154333.029
	54	Fe	1997.320766	4.227	1504017.694	ug/L	62090.940
	61	Ni	-0.860325	139.763	1566.435	ug/L	1661.113
	63	Cu	0.075245	22.969	752.027	ug/L	345.006
	67	Zn	8.521578	31.672	11232.212	ug/L	9047.975
>	72	Ge			719861.230	ug/L	739226.379
	77	Se	-11.468904	7.764	6263.062	ug/L	8561.760
	98	Mo	0.149391	42.052	1164.999	ug/L	141.970
	109	Ag	0.018247	38.446	520.015	ug/L	288.339
>	115	In-2			1439464.290	ug/L	1483966.870
	114	Cd	0.011585	78.026	158.492	ug/L	84.731
	121	Sb	0.119011	35.792	1490.096	ug/L	349.574
	137	Ba	0.534136	2.665	2319.545	ug/L	156.669
>	165	Ho-2			1581503.472	ug/L	1592460.464
	203	Tl	0.436836	51.581	6607.066	ug/L	1582.773
	206	Pb	0.061322	44.646	1629.110	ug/L	1161.392
	207	Pb	0.058824	38.193	1432.420	ug/L	996.045
>	45	Sc			445162.813	ug/L	454114.374
	47	Ti	0.249739	3.665	473.013	ug/L	297.006
	86	Sr	0.123469	26.456	1137.457	ug/L	716.656
	88	Sr	0.105870	11.291	8971.575	ug/L	5834.250
>	115	In			1439464.290	ug/L	1483966.870
	118	Sn	0.105117	42.797	1684.119	ug/L	855.034
	120	Sn	0.109373	30.118	2240.719	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

B	10
Na	23
Mg	24
Al	27
K	39
Ca	44
Sc-1	45
V	51
Cr	52
Mn	55
Fe	57
Co	59
Ni	60
Cu	65
Zn	66
Ge-1	72
As	75
Se	82
Mo	97
Ag	107
Cd	111
In-1	115
Sb	123
Ba	136
Ho-1	165
Tl	205
Pb	208
U	238
Sc-2	45
Cr	53
Fe	54
Ni	61
Cu	63
Zn	67
Ge	72
Se	77
Mo	98
Ag	109
In-2	116
Cd	114
Sb	121
Ba	137
Ho-2	165
Tl	203
Pb	206
Pb	207
Sc	45
Ti	47
Sr	86
Sr	88
In	115
Sn	118
Sn	120

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: Standard 5
Sample Date/Time: Wednesday, April 27, 2005 19:21:34
Autosampler Position: 6
Dataset File: D:\Elandata\Dataset\042705M2\Standard 5.008

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.003076	506.328	8.000	ug/L	7.667
	10	B	2.449690	17.783	105.001	ug/L	27.667
	23	Na	9987.032527	1.292	37346438.042	ug/L	18838.944
	24	Mg	5003.293048	1.707	13579685.718	ug/L	2106.176
	27	Al	9982.575978	2.023	41466399.402	ug/L	3413.777
	39	K	9997.879228	1.230	81070628.627	ug/L	807733.282
	44	Ca	4990.876768	2.360	1343540.196	ug/L	61872.368
>	45	Sc-1			442910.499	ug/L	454114.374
	51	V	-0.758847	146.196	-33030.257	ug/L	-26072.212
	52	Cr	0.079131	251.980	28590.728	ug/L	26547.338
	55	Mn	0.124076	5.111	4788.184	ug/L	3062.361
	57	Fe	10004.928314	0.388	3061061.837	ug/L	9798.695
	59	Co	0.269128	4.787	3245.402	ug/L	232.338
	60	Ni	0.181473	6.401	731.026	ug/L	301.006
	65	Cu	0.116337	5.056	472.579	ug/L	168.336
	66	Zn	0.970585	21.450	16275.765	ug/L	15137.170
>	72	Ge-1			743053.465	ug/L	739226.379
	75	As	0.560041	53.092	-791.534	ug/L	-1945.453
	82	Se	0.334825	52.268	-44.448	ug/L	-120.854
	97	Mo	0.053708	18.928	211.670	ug/L	72.001
	107	Ag	0.008924	30.381	361.008	ug/L	267.339
	111	Cd	0.003822	92.603	47.667	ug/L	39.334
>	115	In-1			1387502.391	ug/L	1483966.870
	123	Sb	0.062300	8.737	696.390	ug/L	268.758
	135	Ba	0.191024	9.129	555.683	ug/L	112.002
>	165	Ho-1			1555541.748	ug/L	1592460.464
	205	Tl	0.119567	44.769	7090.887	ug/L	3951.949
	208	Pb	0.060720	20.944	6714.687	ug/L	4580.000
	238	U	0.002921	7.231	367.008	ug/L	234.671
>	45	Sc-2			442910.499	ug/L	454114.374
	53	Cr	26.575373	51.663	182688.792	ug/L	154333.029
	54	Fe	9984.232207	0.776	6985017.754	ug/L	62090.940
	61	Ni	0.572617	221.593	1682.116	ug/L	1661.113
	63	Cu	0.216848	5.378	1526.097	ug/L	345.008
	67	Zn	17.740607	39.480	13703.125	ug/L	9047.975
>	72	Ge			743053.465	ug/L	739226.379
	77	Se	-16.009876	8.618	5616.398	ug/L	8561.780
	98	Mo	0.047551	16.338	455.464	ug/L	141.970
	109	Ag	0.014800	11.511	458.012	ug/L	288.339
>	115	In-2			1387502.391	ug/L	1483966.870
	114	Cd	0.005324	35.250	113.225	ug/L	84.731
	121	Sb	0.063666	18.235	923.373	ug/L	349.674
	137	Ba	0.185102	2.954	891.037	ug/L	156.669
>	165	Ho-2			1555541.748	ug/L	1592460.464
	203	Tl	0.117589	42.429	2895.998	ug/L	1582.773
	206	Pb	0.063052	15.740	1714.120	ug/L	1161.392
	207	Pb	0.062244	27.347	1454.756	ug/L	985.045
>	45	Sc			442910.499	ug/L	454114.374
	47	Ti	1.221538	7.143	1174.393	ug/L	297.006
	86	Sr	0.217417	3.431	1463.224	ug/L	716.656
	88	Sr	0.196959	1.508	11715.586	ug/L	5834.250
>	115	In			1387502.391	ug/L	1483966.870
	118	Sn	0.063181	1.890	1296.405	ug/L	855.034
	120	Sn	0.063250	7.728	1685.781	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

B	10
Na	23
Mg	24
Al	27
K	39
Ca	44
Sc-1	45
V	51
Cr	52
Mn	55
Fe	57
Co	59
Ni	60
Cu	65
Zn	66
Ge-1	72
As	75
Se	82
Mo	97
Ag	107
Cd	111
In-1	115
Sb	123
Ba	135
Ho-1	165
Tl	205
Pb	208
U	238
Sc-2	45
Cr	53
Fe	54
Ni	61
Cu	63
Zn	67
Ge	72
Se	77
Mo	98
Ag	109
In-2	115
Cd	114
Sb	121
Ba	137
Ho-2	165
Tl	203
Pb	206
Pb	207
Sc	45
Ti	47
Sr	88
Sr	88
In	115
Sn	118
Sn	120

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Wednesday, April 27, 2005 19:26:46
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 1.009

Sample Result Summary

Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
9	Be	204.197421	4.656	34000.769	ug/L	7.667
10	B	202.931479	3.799	6389.159	ug/L	27.667
23	Na	1910.932281	2.748	7042874.655	ug/L	18838.944
24	Mg	963.107668	4.718	2574487.603	ug/L	2106.176
27	Al	1970.902075	1.189	8057969.797	ug/L	3413.777
39	K	1945.902935	5.614	16151790.015	ug/L	807733.282
44	Ca	1032.084287	7.124	320463.169	ug/L	61872.368
> 45	Sc-1			436296.235	ug/L	454114.374
51	V	193.006472	2.198	1860532.791	ug/L	-26072.212
52	Cr	194.413417	1.670	1716407.733	ug/L	26547.338
55	Mn	200.820061	3.354	2869643.739	ug/L	3062.361
57	Fe	1949.200320	2.097	594800.464	ug/L	9798.695
59	Co	199.235070	5.248	2199472.453	ug/L	232.338
60	Ni	198.057053	2.873	470384.190	ug/L	301.006
65	Cu	200.734170	2.863	524203.763	ug/L	168.336
66	Zn	202.537083	3.297	325134.998	ug/L	15137.170
> 72	Ge-1			718305.334	ug/L	739226.379
75	As	201.376029	3.801	404394.742	ug/L	-1945.453
82	Se	199.397348	3.100	44467.681	ug/L	-120.854
97	Mo	198.991666	1.910	557809.368	ug/L	72.001
107	Ag	48.131516	1.261	627443.646	ug/L	267.339
111	Cd	191.387451	1.165	572577.664	ug/L	39.334
> 115	In-1			1447954.290	ug/L	1483966.870
123	Sb	197.625291	1.252	1473010.133	ug/L	268.758
135	Ba	204.654881	3.959	474855.084	ug/L	112.002
> 165	Ho-1			1544030.050	ug/L	1592460.464
205	Tl	192.667396	2.215	5144502.511	ug/L	3961.949
208	Pb	196.426367	0.930	7183424.354	ug/L	4580.000
238	U	195.891431	3.758	9159853.250	ug/L	234.671
> 45	Sc-2			436296.235	ug/L	454114.374
53	Cr	173.962869	4.475	355588.207	ug/L	154333.029
54	Fe	2024.674890	2.480	1442187.137	ug/L	62090.940
61	Ni	199.225819	8.548	22790.742	ug/L	1861.113
63	Cu	196.702442	1.781	1062995.175	ug/L	345.008
67	Zn	203.254065	1.639	63746.275	ug/L	9047.975
> 72	Ge			718305.334	ug/L	739226.379
77	Se	173.441682	3.144	39615.759	ug/L	8561.780
98	Mo	199.993034	0.072	1415449.878	ug/L	141.970
109	Ag	47.211617	1.878	627744.508	ug/L	288.339
> 115	In-2			1447954.290	ug/L	1483966.870
114	Cd	196.897148	1.081	1315828.576	ug/L	84.731
121	Sb	197.468252	1.868	1927561.821	ug/L	349.674
137	Ba	206.713986	3.945	817563.034	ug/L	156.669
> 165	Ho-2			1544030.050	ug/L	1592460.464
203	Tl	193.108888	2.605	2191324.139	ug/L	1582.773
206	Pb	196.491617	1.846	1809185.046	ug/L	1161.392
207	Pb	200.112774	1.584	1537183.862	ug/L	995.045
> 45	Sc			436296.235	ug/L	454114.374
47	Ti	197.376186	1.615	141053.172	ug/L	297.006
86	Sr	200.898598	3.201	694812.417	ug/L	716.856
88	Sr	202.418807	0.582	6105102.920	ug/L	5834.250
> 115	In			1447954.290	ug/L	1483966.870
118	Sn	199.602944	0.963	1639071.548	ug/L	855.034
120	Sn	201.823103	2.090	2180682.263	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		102.099

	B	10		101.466
	Na	23		96.547
	Mg	24		98.311
	Al	27		98.648
	K	39		97.295
	Ca	44		103.268
>	Sc-1	45	96.076	
	V	51		96.503
	Cr	52		97.207
	Mn	55		100.260
	Fe	57		97.480
	Co	59		99.518
	Ni	60		99.029
	Cu	65		100.347
	Zn	66		101.209
>	Ge-1	72	97.170	
	As	75		100.868
	Se	82		99.699
	Mo	97		99.486
	Ag	107		96.253
	Cd	111		95.864
>	In-1	115	97.573	
	Sb	123		96.813
	Ba	138		102.327
>	Ho-1	165	96.969	
	Tl	205		96.329
	Pb	208		98.213
	U	238		97.946
>	Sc-2	45	96.076	
	Cr	53		96.991
	Fe	54		101.234
	Ni	61		99.813
	Cu	63		98.391
	Zn	67		101.627
>	Ge	72	97.170	
	Se	77		96.721
	Mo	98		99.997
	Ag	109		94.423
>	In-2	115	97.573	
	Cd	114		96.449
	Sb	121		99.734
	Ba	137		103.357
>	Ho-2	165	96.969	
	Tl	203		96.564
	Pb	208		98.346
	Pb	207		100.666
>	Sc	45	96.076	
	Ti	47		96.888
	Sr	86		100.299
	Sr	88		101.209
>	In	115	97.573	
	Sn	118		99.901
	Sn	120		100.912

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cr	53	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Wednesday, April 27, 2005 19:32:56
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 2.010

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.004323	254.388	8.000	ug/L	7.667
	10	B	3.609398	22.308	138.335	ug/L	27.667
	23	Na	0.112589	189.200	18342.281	ug/L	18838.944
	24	Mg	0.017425	86.876	2051.501	ug/L	2106.176
	27	Al	0.016807	136.943	3312.751	ug/L	3413.777
	39	K	-5.518896	38.752	725705.295	ug/L	807733.282
	44	Ca	0.099781	630.863	58944.640	ug/L	61872.388
>	45	Sc-1			432458.282	ug/L	454114.374
	51	V	0.275949	169.363	-22192.566	ug/L	-26072.212
	52	Cr	-0.814483	22.970	18275.953	ug/L	26547.338
	55	Mn	0.043023	19.963	3527.472	ug/L	3082.361
	57	Fe	-3.086262	20.431	8411.950	ug/L	9798.695
	59	Co	0.009539	52.276	325.007	ug/L	232.338
	60	Ni	-0.002200	264.010	281.339	ug/L	301.006
	65	Cu	0.016256	46.822	202.337	ug/L	168.336
	66	Zn	-0.024539	394.858	14377.377	ug/L	15137.170
>	72	Ge-1			714291.692	ug/L	739226.379
	75	As	0.631649	14.614	-615.056	ug/L	-1945.453
	82	Se	0.321502	80.739	-45.294	ug/L	-120.854
	97	Mo	0.080182	43.180	294.006	ug/L	72.001
	107	Ag	0.002174	104.897	288.339	ug/L	267.339
	111	Cd	0.006060	26.312	56.334	ug/L	39.334
>	115	In-1			1443884.675	ug/L	1483966.870
	123	Sb	0.092345	33.170	947.208	ug/L	268.758
	135	Ba	-0.002524	123.981	102.668	ug/L	112.002
>	165	Ho-1			1544378.791	ug/L	1592460.464
	205	Tl	0.242489	51.628	10305.074	ug/L	3951.949
	208	Pb	0.807544	14.626	4718.018	ug/L	4580.000
	238	U	0.004618	10.456	443.678	ug/L	234.671
>	45	Sc-2			432458.282	ug/L	454114.374
	53	Cr	-17.721942	59.297	126186.136	ug/L	154333.029
	54	Fe	-0.437646	1000.818	58800.733	ug/L	62090.940
	61	Ni	-0.568712	68.382	1521.763	ug/L	1661.113
	63	Cu	0.013292	21.563	399.676	ug/L	345.008
	67	Zn	2.137176	164.893	9202.417	ug/L	9047.975
>	72	Ge			714291.692	ug/L	739226.379
	77	Se	-28.461946	12.631	3165.468	ug/L	6561.780
	98	Mo	0.088664	30.527	763.107	ug/L	141.970
	109	Ag	0.014907	21.437	478.013	ug/L	288.339
>	115	In-2			1443884.675	ug/L	1483966.870
	114	Cd	0.003574	79.394	106.172	ug/L	84.731
	121	Sb	0.094534	26.543	1259.736	ug/L	349.674
	137	Ba	0.003658	134.880	166.669	ug/L	156.669
>	165	Ho-2			1544378.791	ug/L	1592460.464
	203	Tl	0.247444	52.193	4343.753	ug/L	1582.773
	206	Pb	0.011071	24.447	1227.398	ug/L	1161.382
	207	Pb	0.006282	32.667	1013.379	ug/L	995.045
>	45	Sc			432458.282	ug/L	454114.374
	47	Ti	0.020022	224.477	297.339	ug/L	297.006
	88	Sr	-0.000438	5376.171	681.023	ug/L	716.656
	88	Sr	0.002928	131.636	5641.637	ug/L	5834.250
>	115	In			1443884.675	ug/L	1483966.870
	118	Sn	0.063130	26.499	1348.078	ug/L	855.034
	120	Sn	0.059240	33.988	1711.190	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		8.432

	B	10		360.938
	Na	23		0.113
	Mg	24		0.017
	Al	27		0.015
	K	39		-5.519
	Ca	44		0.100
>	Sc-1	45	95.231	
	V	51		27.586
	Cr	52		-81.448
	Mn	55		4.302
	Fe	57		-3.086
	Co	59		0.954
	Ni	60		-0.220
	Cu	65		1.528
	Zn	66		-3.454
>	Ge-1	72	96.627	
	As	75		53.185
	Se	82		32.180
	Mo	97		0.018
	Ag	107		0.217
	Cd	111		0.606
>	In-1	115	97.299	
	Sb	123		0.234
	Ba	135		-0.252
>	Ho-1	165	99.991	
	Tl	205		24.249
	Pb	208		0.754
	U	238		0.462
>	Sc-2	45	95.231	
	Cr	53		-1772.194
	Fe	54		-0.438
	Ni	61		-68.871
	Cu	63		1.329
	Zn	67		213.718
>	Ge	72	96.627	
	Se	77		-2846.195
	Mo	95		0.806
	Ag	109		1.491
>	In-2	115	97.299	
	Cd	114		0.367
	Sb	121		0.453
	Ba	137		0.396
>	Ho-2	165	99.991	
	Tl	203		24.744
	Pb	206		1.187
	Pb	207		0.628
>	Sc	45	95.231	
	Tl	47		2.002
	Sr	86		-0.044
	Sr	88		0.293
>	In	115	97.299	
	Sn	118		0.313
	Sn	120		0.934

QC Out Of Limits

Analyte	Mass	Out of Limits Message
B	10	Q
Cr	53	Q
Zn	67	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 3
Sample Date/Time: Wednesday, April 27, 2005 19:39:04
Autosampler Position: 160
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 3.011

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	6.184022	4.805	910.371	ug/L	7.667
	10	B	207.805223	4.379	6839.372	ug/L	27.667
	23	Na	4713.913671	2.320	18154386.149	ug/L	18838.944
	24	Mg	4775.421017	2.542	13344721.433	ug/L	2106.176
	27	Al	199.294044	1.198	855111.152	ug/L	3413.777
	39	K	4808.361680	3.497	40575050.846	ug/L	807733.282
	44	Ca	4829.823447	5.861	1339853.465	ug/L	61872.368
>	45	Sc-1			456283.090	ug/L	454114.374
	51	V	50.778846	5.656	497888.820	ug/L	-26072.212
	52	Cr	9.895816	3.906	116838.084	ug/L	26547.338
	55	Mn	15.488409	0.906	234705.031	ug/L	3062.361
	57	Fe	96.062570	8.610	39965.396	ug/L	9796.695
	59	Co	49.831178	5.145	573087.020	ug/L	232.338
	60	Ni	39.641618	4.431	98651.505	ug/L	301.006
	65	Cu	24.993797	5.880	68353.211	ug/L	168.336
	66	Zn	21.428193	6.349	49546.611	ug/L	15137.170
>	72	Ge-1			732723.484	ug/L	739226.379
	75	As	10.212656	1.692	19098.848	ug/L	-1945.453
	82	Se	5.223142	6.551	1072.456	ug/L	-120.854
	97	Mo	40.341252	1.280	114662.559	ug/L	72.001
	107	Ag	9.857392	1.095	130440.920	ug/L	267.339
	111	Cd	4.916668	0.321	14944.964	ug/L	39.334
>	115	In-1			1467378.174	ug/L	1483966.870
	123	Sb	58.773925	2.901	444031.337	ug/L	268.758
	135	Ba	204.349609	2.305	484902.037	ug/L	112.002
>	165	Ho-1			1578363.534	ug/L	1592460.464
	205	Tl	9.529465	2.811	266591.831	ug/L	3951.949
	208	Pb	3.047949	1.677	118410.421	ug/L	4580.000
	238	U	498.533848	4.206	23836862.715	ug/L	234.671
>	45	Sc-2			456283.090	ug/L	454114.374
	53	Cr	-6.966898	145.430	146667.906	ug/L	154333.029
	54	Fe	115.577492	6.461	144840.301	ug/L	62090.940
	61	Ni	40.750481	6.842	8201.408	ug/L	1861.113
	63	Cu	24.940705	3.584	141191.371	ug/L	345.008
	67	Zn	27.647614	4.300	16898.505	ug/L	9047.975
>	72	Ge			732723.484	ug/L	739226.379
	77	Se	-12.807761	34.631	6123.122	ug/L	8561.780
	98	Mo	41.622481	0.255	298644.796	ug/L	141.970
	109	Ag	9.237980	0.896	124696.434	ug/L	288.339
>	115	In-2			1467378.174	ug/L	1483966.870
	114	Cd	5.036462	2.136	34184.993	ug/L	84.731
	121	Sb	59.259575	1.608	586418.036	ug/L	349.674
	137	Ba	207.077795	3.306	837463.527	ug/L	166.669
>	165	Ho-2			1578363.534	ug/L	1592460.464
	203	Tl	9.396007	2.694	110494.187	ug/L	1582.773
	206	Pb	3.119367	2.941	30197.522	ug/L	1161.392
	207	Pb	3.128565	3.805	25534.394	ug/L	995.045
>	45	Sc			456283.090	ug/L	454114.374
	47	Ti	49.818591	4.947	37424.671	ug/L	297.006
	86	Sr	48.782869	3.203	177250.503	ug/L	716.656
	88	Sr	47.585741	2.879	1504544.697	ug/L	5834.250
>	115	In			1467378.174	ug/L	1483966.870
	118	Sn	101.776616	2.480	847551.801	ug/L	855.034
	120	Sn	102.516044	1.285	1123025.794	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		100.880

	B	10		103.903
	Na	23		94.276
	Mg	24		98.508
	Al	27		98.647
	K	39		96.167
	Ca	44		96.566
>	Sc-1	45	100.478	
	V	51		101.586
	Cr	52		98.958
	Mn	55		103.256
	Fe	57		98.053
	Co	59		98.262
	Ni	60		98.104
	Cu	65		98.975
	Zn	66		107.141
>	Ge-1	72	99.120	
	As	75		102.127
	Se	82		104.483
	Mo	97		100.963
	Ag	107		96.574
	Cd	111		98.333
>	In-1	115	99.882	
	Sb	123		97.887
	Ba	135		102.175
>	Ho-1	165	99.115	
	Tl	205		94.296
	Pb	208		101.586
	U	238		99.707
>	Sc-2	45	100.478	
	Cr	53		-49.999
	Fe	54		118.877
	Ni	61		101.878
	Cu	63		99.763
	Zn	67		137.738
>	Ge	72	99.120	
	Se	77		-256.155
	Mo	98		104.066
	Ag	109		92.380
>	In-2	115	99.882	
	Cd	114		100.729
	Sb	121		98.764
	Ba	137		103.539
>	Ho-2	165	99.115	
	Tl	203		93.960
	Pb	206		103.878
	Pb	207		104.266
>	Sc	45	100.478	
	Ti	47		99.637
	Sr	86		97.566
	Sr	88		96.171
>	In	115	99.882	
	Sn	118		101.777
	Sn	120		102.516

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cr	53	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 5
Sample Date/Time: Wednesday, April 27, 2005 19:45:13
Autosampler Position: 159
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 5.012

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	49.715128	6.166	6388.551	ug/L	7.667
	10	B	99.760604	3.359	3194.056	ug/L	27.667
	23	Na	1863.382832	2.564	6954261.838	ug/L	18838.944
	24	Mg	47048.681363	3.581	127272414.417	ug/L	2106.176
	27	Al	49990.489854	3.401	206769177.490	ug/L	3413.777
	39	K	1925.810478	3.604	16200056.214	ug/L	807733.282
	44	Ca	49661.042107	2.950	12790839.069	ug/L	61872.368
>	45	Sc-1			441614.661	ug/L	454114.374
	51	V	49.894701	3.726	473496.835	ug/L	-26072.212
	52	Cr	51.821427	3.612	482066.936	ug/L	26547.336
	55	Mn	81.782198	2.257	752470.100	ug/L	3062.361
	57	Fe	20028.639849	3.882	6098475.420	ug/L	9798.695
	59	Co	48.859841	0.790	546666.099	ug/L	232.338
	60	Ni	98.125198	3.709	236059.435	ug/L	301.006
	65	Cu	48.249489	3.340	127690.735	ug/L	168.336
	66	Zn	97.969237	2.031	166857.352	ug/L	15137.170
>	72	Ge-1			711926.280	ug/L	739226.379
	75	As	103.308060	2.193	204758.440	ug/L	-1945.453
	82	Se	98.638069	3.810	21748.258	ug/L	-120.854
	97	Mo	103.799791	2.604	277599.838	ug/L	72.001
	107	Ag	93.001224	1.767	1156279.392	ug/L	267.339
	111	Cd	99.249900	1.749	283253.481	ug/L	39.334
>	115	In-1			1381346.977	ug/L	1483966.870
	123	Sb	101.474768	1.700	721584.245	ug/L	268.758
	135	Ba	50.889214	2.158	116755.753	ug/L	112.002
>	165	Ho-1			1524865.283	ug/L	1592460.464
	205	Tl	98.251858	1.870	2593927.285	ug/L	3951.949
	208	Pb	96.423444	1.559	3486155.296	ug/L	4560.000
	238	U	102.620896	1.913	4737628.764	ug/L	234.671
>	45	Sc-2			441614.661	ug/L	454114.374
	53	Cr	67.094808	31.467	230956.822	ug/L	154333.029
	54	Fe	19740.238777	2.717	13708319.373	ug/L	62090.940
	61	Ni	105.894006	4.380	13029.406	ug/L	1661.113
	63	Cu	48.097377	2.390	263383.941	ug/L	345.008
	67	Zn	100.802014	8.873	36373.393	ug/L	9047.975
>	72	Ge			711926.280	ug/L	739226.379
	77	Se	87.722070	8.691	23943.016	ug/L	8561.780
	98	Mo	103.688112	0.718	700136.393	ug/L	141.970
	109	Ag	89.287200	1.205	1132310.887	ug/L	288.339
>	115	In-2			1381346.977	ug/L	1483966.870
	114	Cd	98.585881	1.676	628494.151	ug/L	84.731
	121	Sb	101.704336	1.674	947182.875	ug/L	349.674
	137	Ba	52.312339	1.072	204563.261	ug/L	156.669
>	165	Ho-2			1524865.283	ug/L	1592460.464
	203	Tl	95.102655	2.384	1068903.111	ug/L	1582.773
	206	Pb	98.365741	1.558	886219.227	ug/L	1161.392
	207	Pb	101.471043	1.302	770401.006	ug/L	995.045
>	45	Sc			441614.661	ug/L	454114.374
	47	Ti	51.386904	4.170	37384.583	ug/L	297.006
	86	Sr	98.641449	1.807	347078.379	ug/L	716.656
	88	Sr	100.803680	1.951	3079914.617	ug/L	5834.250
>	115	In			1381346.977	ug/L	1483966.870
	118	Sn	102.253898	0.810	801413.176	ug/L	855.034
	120	Sn	105.273712	1.602	1085564.337	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		99.432

	B	10		99.781
	Na	23		93.198
	Mg	24		94.097
	Al	27		99.961
	K	39		96.291
	Ca	44		99.322
>	Sc-1	45	97.247	
	V	51		99.789
	Cr	52		103.643
	Mn	55		103.584
	Fe	57		100.143
	Co	59		97.720
	Ni	60		98.125
	Cu	65		96.481
	Zn	66		97.969
>	Ge-1	72	96.307	
	As	75		103.368
	Se	82		99.838
	Mo	97		103.800
	Ag	107		93.001
	Cd	111		99.260
>	In-1	115	93.085	
	Sb	123		101.476
	Ba	135		101.776
>	Ho-1	165	96.756	
	Tl	205		99.252
	Pb	208		96.423
	U	238		102.521
>	Sc-2	45	97.247	
	Cr	53		134.199
	Fe	54		99.791
	Ni	61		105.884
	Cu	63		96.196
	Zn	67		100.802
>	Ge	72	96.307	
	Se	77		97.722
	Mo	98		103.696
	Ag	109		99.287
>	In-2	115	93.085	
	Cd	114		99.899
	Sb	121		101.704
	Ba	137		104.625
>	Ho-2	165	96.756	
	Tl	203		96.103
	Pb	208		96.366
	Pb	207		101.471
>	Sc	45	97.247	
	Tl	47		102.774
	Sr	86		99.841
	Sr	88		100.894
>	In	115	93.085	
	Sn	118		102.254
	Sn	120		105.274

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cr	53	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: ICSA
Sample Date/Time: Wednesday, April 27, 2005 19:51:21
Autosampler Position: 158
Dataset File: D:\Elandata\Dataset\042705M2\ICSA.013

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌈	9	Be	-0.016990	53.026	4.667	ug/L	7.667
|	10	B	3.744594	12.933	148.336	ug/L	27.667
|	23	Na	8.032742	1.873	49073.302	ug/L	18838.944
|	24	Mg	45319.705200	1.640	127544583.180	ug/L	2106.176
|	27	Al	49799.994868	1.490	209659471.771	ug/L	3413.777
|	39	K	-13.961058	10.243	685545.835	ug/L	807733.282
|	44	Ca	49323.708527	1.879	12926752.278	ug/L	61872.368
|>	45	Sc-1			449384.522	ug/L	454114.374
|	51	V	-1.249454	32.982	-38508.487	ug/L	-26072.212
|	52	Cr	0.892285	60.094	32484.898	ug/L	26547.338
|	55	Mn	1.114419	2.146	19446.423	ug/L	3062.361
|	57	Fe	19678.205955	1.023	8099446.306	ug/L	9796.895
|	59	Co	0.089024	3.460	1243.067	ug/L	232.338
|	60	Ni	1.141523	3.829	3090.032	ug/L	301.006
|	65	Cu	0.243851	2.473	822.699	ug/L	168.336
⌊	66	Zn	1.536710	2.170	17408.107	ug/L	15137.170
⌈>	72	Ge-1			745452.912	ug/L	739226.379
|	75	As	-0.485478	53.178	-2973.400	ug/L	-1945.453
⌊	82	Se	-0.023735	706.788	-126.902	ug/L	-120.854
⌈	97	Mo	0.087413	25.246	302.673	ug/L	72.001
|	107	Ag	0.015201	15.222	441.011	ug/L	267.339
|	111	Cd	0.015688	15.664	82.001	ug/L	39.334
|>	115	In-1			1391901.455	ug/L	1483966.870
⌊	123	Sb	0.142877	23.792	1274.036	ug/L	288.758
⌈	135	Ba	0.402850	0.327	1032.048	ug/L	112.002
|>	165	Ho-1			1526785.130	ug/L	1592460.464
|	205	Tl	0.130825	64.328	7235.684	ug/L	3951.949
|	208	Pb	0.533012	4.087	23652.524	ug/L	4580.000
⌊	238	U	0.005686	24.376	487.680	ug/L	234.671
⌈>	45	Sc-2			449384.522	ug/L	454114.374
|	53	Cr	33.458664	54.451	193877.243	ug/L	154333.029
|	54	Fe	19972.913749	1.611	14115446.765	ug/L	62090.940
|	61	Ni	8.146562	21.890	2537.918	ug/L	1661.113
|	63	Cu	0.133873	5.218	1086.719	ug/L	345.008
⌊	67	Zn	14.601960	45.179	13033.158	ug/L	9047.975
⌈>	72	Ge			745452.912	ug/L	739226.379
⌊	77	Se	12.219809	48.875	10910.030	ug/L	8561.780
⌈	98	Mo	0.085822	21.517	716.107	ug/L	141.970
|	109	Ag	0.015543	23.769	468.679	ug/L	288.339
|>	115	In-2			1391901.455	ug/L	1483966.870
|	114	Cd	0.011187	26.716	151.218	ug/L	84.731
⌊	121	Sb	0.136402	20.827	1624.777	ug/L	349.874
⌈	137	Ba	0.423763	2.123	1806.133	ug/L	156.669
|>	165	Ho-2			1526785.130	ug/L	1592460.464
|	203	Tl	0.138998	60.226	3073.381	ug/L	1582.773
|	206	Pb	0.560436	7.050	6161.059	ug/L	1161.392
⌊	207	Pb	0.544415	2.981	5086.957	ug/L	995.045
⌈>	45	Sc			449384.522	ug/L	454114.374
|	47	Ti	1.341626	11.128	1279.404	ug/L	297.006
|	86	Sr	0.613545	2.604	2697.402	ug/L	716.656
⌊	88	Sr	0.331674	4.418	16067.195	ug/L	5834.250
⌈>	115	In			1391901.455	ug/L	1483966.870
|	118	Sn	0.058065	24.974	1259.402	ug/L	855.034
⌊	120	Sn	0.058939	22.974	1645.896	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	99.958
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	100.842
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	93.796
	Sb	123	
	Ba	135	
>	Ho-1	165	95.876
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	99.958
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	100.842
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	93.796
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	95.876
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	99.958
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	93.796
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: CCV
Sample Date/Time: Wednesday, April 27, 2005 19:56:31
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042705M2\CCV.014

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	193.283507	3.479	33014.775	ug/L	7.667
	10	B	194.098809	1.240	6271.773	ug/L	27.667
	23	Na	1882.668422	1.957	7120216.928	ug/L	18838.944
	24	Mg	967.658604	2.174	2653782.641	ug/L	2106.176
	27	Al	1967.893497	0.750	8249347.518	ug/L	3413.777
	39	K	1959.800389	4.104	16660724.162	ug/L	807733.282
	44	Ca	1047.544205	4.360	332877.411	ug/L	61872.368
>	45	Sc-1			447375.499	ug/L	454114.374
	51	V	194.783129	1.810	1946498.141	ug/L	-26072.212
	52	Cr	195.891749	2.600	1773212.335	ug/L	26547.338
	55	Mn	199.995714	2.547	2938969.854	ug/L	3062.361
	57	Fe	1966.500771	1.078	612394.700	ug/L	9798.695
	59	Co	203.906192	2.373	2310324.429	ug/L	232.338
	60	Ni	196.873198	3.011	479537.948	ug/L	301.006
	65	Cu	199.870529	2.586	535363.509	ug/L	168.336
	66	Zn	198.274685	0.863	326853.904	ug/L	15137.170
>	72	Ge-1			734916.874	ug/L	739226.379
	75	As	198.759003	2.078	410586.785	ug/L	-1945.453
	82	Se	198.186137	2.161	45230.886	ug/L	-120.854
	97	Mo	201.442854	3.002	567763.360	ug/L	72.001
	107	Ag	49.421560	1.406	647820.913	ug/L	267.339
	111	Cd	193.744755	1.390	582835.446	ug/L	39.334
>	115	In-1			1456030.918	ug/L	1483966.870
	123	Sb	198.119845	1.254	1484960.726	ug/L	268.758
	135	Ba	206.884598	1.870	480028.806	ug/L	112.002
>	165	Ho-1			1543420.991	ug/L	1592460.464
	205	Tl	190.512722	3.833	5085553.575	ug/L	3951.949
	208	Pb	194.288788	1.470	7103252.367	ug/L	4580.000
	238	U	193.354380	3.126	9041372.855	ug/L	234.671
>	45	Sc-2			447375.499	ug/L	454114.374
	53	Cr	174.134718	2.484	364916.988	ug/L	154333.029
	54	Fe	2038.540242	1.574	1488974.107	ug/L	62090.940
	61	Ni	200.607670	6.472	23528.951	ug/L	1661.113
	63	Cu	203.406789	1.822	1127271.889	ug/L	345.008
	67	Zn	197.623233	1.320	63820.633	ug/L	9047.975
>	72	Ge			734916.874	ug/L	739226.379
	77	Se	176.603230	1.686	41129.971	ug/L	8561.780
	98	Mo	201.941383	1.014	1437139.836	ug/L	141.970
	109	Ag	48.485972	2.414	648053.261	ug/L	288.339
>	115	In-2			1456030.918	ug/L	1483966.870
	114	Cd	193.783801	0.561	1302241.361	ug/L	84.731
	121	Sb	196.818674	0.480	1931965.957	ug/L	349.874
	137	Ba	205.996220	2.935	814751.897	ug/L	156.889
>	165	Ho-2			1543420.991	ug/L	1592460.464
	203	Tl	191.487046	3.492	2172496.073	ug/L	1582.773
	206	Pb	197.389625	2.278	1798691.883	ug/L	1161.392
	207	Pb	198.488195	1.536	1524153.372	ug/L	985.045
>	45	Sc			447375.499	ug/L	454114.374
	47	Ti	196.897470	1.416	143580.825	ug/L	297.006
	86	Sr	199.731408	2.654	709833.585	ug/L	716.656
	88	Sr	199.811846	0.350	6173540.236	ug/L	5834.250
>	115	In			1456030.918	ug/L	1483966.870
	118	Sn	201.550593	0.230	1664313.234	ug/L	855.034
	120	Sn	204.256595	2.910	2219440.919	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	98.516
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	99.417
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.117
	Sb	123	
	Ba	135	
>	Ho-1	165	96.921
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	98.516
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	99.417
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.117
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	96.921
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	98.516
	Ti	47	
	Sr	88	
	Sr	88	
>	In	115	98.117
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: CCB
Sample Date/Time: Wednesday, April 27, 2005 20:01:41
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042705M2\CCB.015

Sample Result Summary

Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
9	Be	0.019603	134.951	11.000	ug/L	7.667
10	B	3.633709	21.718	146.336	ug/L	27.667
23	Na	-0.067454	209.824	18501.482	ug/L	18838.944
24	Mg	0.246513	26.789	2785.968	ug/L	2106.176
27	Al	0.336386	50.957	4841.220	ug/L	3413.777
39	K	-9.589404	37.363	725452.568	ug/L	807733.282
44	Ca	-0.122251	7584.074	61559.971	ug/L	61872.368
45	Sc-1			452530.902	ug/L	454114.374
51	V	0.105791	346.752	-24925.312	ug/L	-28072.212
52	Cr	-0.618651	29.090	20847.758	ug/L	26547.338
55	Mn	0.049475	14.598	3783.873	ug/L	3082.361
57	Fe	-2.836621	24.485	8875.106	ug/L	9798.895
59	Co	0.007996	48.213	324.340	ug/L	232.338
60	Ni	0.009427	166.728	324.007	ug/L	301.006
65	Cu	0.015834	29.974	210.337	ug/L	168.336
66	Zn	-0.076150	367.690	14952.972	ug/L	15137.170
72	Ge-1			728709.820	ug/L	739228.379
75	As	0.758601	26.388	-363.630	ug/L	-1945.453
82	Se	0.419606	34.400	-23.891	ug/L	-120.854
97	Mo	0.126860	45.488	441.679	ug/L	72.001
107	Ag	0.006371	35.714	344.341	ug/L	267.339
111	Cd	0.010460	57.289	72.334	ug/L	39.334
115	In-1			1507503.969	ug/L	1483966.870
123	Sb	0.163608	34.455	1537.655	ug/L	268.758
135	Ba	0.004617	103.890	123.002	ug/L	112.002
165	Ho-1			1594921.061	ug/L	1592460.464
206	Tl	0.375250	48.370	14335.642	ug/L	3951.949
208	Pb	-0.004031	117.197	4435.982	ug/L	4580.000
238	U	0.009531	25.092	696.358	ug/L	234.671
45	Sc-2			452530.902	ug/L	454114.374
53	Cr	-9.320626	144.492	141846.386	ug/L	154333.029
54	Fe	-1.537957	154.788	60743.234	ug/L	62090.940
61	Ni	-0.473738	138.481	1801.439	ug/L	1681.113
63	Cu	0.010601	40.290	402.676	ug/L	345.008
67	Zn	3.039486	120.535	9846.836	ug/L	9047.975
72	Ge			728709.820	ug/L	739228.379
77	Se	-23.401753	6.242	4153.948	ug/L	8561.780
98	Mo	0.124920	39.709	1060.910	ug/L	141.970
109	Ag	0.021536	40.380	589.685	ug/L	288.339
115	In-2			1507503.969	ug/L	1483966.870
114	Cd	0.006526	9.691	145.332	ug/L	84.731
121	Sb	0.169417	33.886	2070.511	ug/L	349.874
137	Ba	0.010995	55.138	202.003	ug/L	156.669
165	Ho-2			1594921.061	ug/L	1592460.464
203	Tl	0.356118	50.814	5771.334	ug/L	1582.773
206	Pb	-0.001823	341.373	1146.391	ug/L	1161.392
207	Pb	-0.007946	40.005	933.707	ug/L	995.045
45	Sc			452530.902	ug/L	454114.374
47	Ti	0.147949	127.257	405.344	ug/L	297.006
86	Sr	0.002140	990.831	721.606	ug/L	716.658
88	Sr	-0.001186	404.537	5772.891	ug/L	5834.250
115	In			1507503.969	ug/L	1483966.870
118	Sn	0.092152	40.576	1652.781	ug/L	855.034
120	Sn	0.104831	29.183	2293.688	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	99.891
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	98.577
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	101.586
	Sb	123	
	Ba	136	
>	Ho-1	165	100.155
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	99.891
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	98.577
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	101.586
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	100.155
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	99.891
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	101.586
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G849FB
Sample Date/Time: Wednesday, April 27, 2005 20:06:47
Autosampler Position: 24
Dataset File: D:\Elandata\Dataset\042705M2\G849FB.016

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.001458	2369.348	8.000	ug/L	7.667
	10	B	1.884681	27.209	90.001	ug/L	27.667
	23	Na	1.934226	2.535	26473.439	ug/L	18638.944
	24	Mg	4.967083	4.212	16118.921	ug/L	2106.176
	27	Al	2.619912	1.581	14257.587	ug/L	3413.777
	39	K	-9.841287	7.616	733061.825	ug/L	807733.282
	44	Ca	14.706345	24.392	66320.252	ug/L	61872.368
>	45	Sc-1			458095.076	ug/L	454114.374
	51	V	-0.632397	102.704	-32880.263	ug/L	-26072.212
	52	Cr	0.054984	592.162	27269.791	ug/L	26547.338
	55	Mn	0.137409	6.688	5152.981	ug/L	3062.361
	57	Fe	-2.197112	22.013	9190.648	ug/L	9798.695
	59	Co	0.004696	59.818	289.006	ug/L	232.338
	60	Ni	0.069170	9.185	476.013	ug/L	301.006
	65	Cu	0.109419	6.612	470.012	ug/L	168.336
	66	Zn	0.355033	21.615	15842.272	ug/L	15137.170
>	72	Ge-1			740698.030	ug/L	739226.379
	75	As	0.537367	44.851	-831.371	ug/L	-1945.453
	82	Se	0.224593	119.306	-69.182	ug/L	-120.854
	97	Mo	0.025879	32.680	147.002	ug/L	72.001
	107	Ag	0.021428	10.688	556.016	ug/L	267.339
	111	Cd	-0.000932	220.048	36.667	ug/L	39.334
>	115	In-1			1490875.110	ug/L	1483966.870
	123	Sb	0.121488	11.333	1201.785	ug/L	268.758
	135	Ba	0.122091	10.263	396.009	ug/L	112.002
>	165	Ho-1			1560328.388	ug/L	1592460.464
	205	Tl	0.070288	75.664	5761.266	ug/L	3951.949
	208	Pb	0.001404	865.685	4534.664	ug/L	4580.000
	238	U	-0.001630	23.573	143.335	ug/L	234.671
>	45	Sc-2			458095.076	ug/L	454114.374
	53	Cr	16.277178	84.721	175990.121	ug/L	154333.029
	54	Fe	15.726518	6.676	73912.400	ug/L	62090.940
	61	Ni	-1.280411	49.115	1532.098	ug/L	1661.113
	63	Cu	0.105771	4.776	948.374	ug/L	345.008
	67	Zn	10.054568	53.713	11980.190	ug/L	9047.975
>	72	Ge			740698.030	ug/L	739226.379
	77	Se	-16.715207	8.169	5467.683	ug/L	8561.780
	98	Mo	0.025054	15.916	325.089	ug/L	141.970
	109	Ag	0.029897	7.306	698.691	ug/L	288.339
>	115	In-2			1490875.110	ug/L	1483966.870
	114	Cd	-0.000920	144.916	76.830	ug/L	84.731
	121	Sb	0.122911	8.411	1586.104	ug/L	349.674
	137	Ba	0.124408	5.134	650.688	ug/L	156.669
>	165	Ho-2			1560328.388	ug/L	1592460.464
	203	Tl	0.075812	89.838	2418.237	ug/L	1582.773
	206	Pb	-0.000072	19362.816	1136.057	ug/L	1161.392
	207	Pb	0.000323	2920.278	976.710	ug/L	995.045
>	45	Sc			458095.076	ug/L	454114.374
	47	Ti	0.339007	75.761	553.350	ug/L	297.006
	86	Sr	0.016196	116.757	788.882	ug/L	716.656
	88	Sr	0.016116	6.758	6363.481	ug/L	5834.250
>	115	In			1490875.110	ug/L	1483966.870
	118	Sn	0.063802	6.186	1398.082	ug/L	855.034
	120	Sn	0.068532	12.511	1671.638	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	100.877
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	100.199
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	100.466
	Sb	123	
	Ba	135	
>	Ho-1	165	97.982
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	100.877
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	100.199
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	100.466
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	97.982
	Tl	205	
	Pb	208	
	Pb	207	
>	Sc	48	100.877
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	100.466
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G849FC
Sample Date/Time: Wednesday, April 27, 2005 20:11:53
Autosampler Position: 25
Dataset File: D:\Elandata\Dataset\042705M2\G849FC.017

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	244.406240	1.044	42959.940	ug/L	7.667
	10	B	6.313275	14.256	237.004	ug/L	27.667
	23	Na	4640.795791	1.481	18021935.310	ug/L	18838.944
	24	Mg	4592.885060	2.381	12952012.316	ug/L	2106.176
	27	Al	247.489223	0.483	1070303.602	ug/L	3413.777
	39	K	4693.894946	3.540	39976139.496	ug/L	807733.262
	44	Ca	4898.261842	2.505	1371055.226	ug/L	81872.368
>	45	Sc-1			460168.747	ug/L	454114.374
	51	V	245.840601	4.145	2532606.057	ug/L	-26072.212
	52	Cr	251.753068	2.492	2397263.624	ug/L	26547.338
	55	Mn	243.725544	1.526	3679401.390	ug/L	3062.361
	57	Fe	243.663928	1.696	87146.084	ug/L	9796.695
	59	Co	239.296820	1.310	2788953.478	ug/L	232.338
	60	Ni	242.493117	2.347	607657.959	ug/L	301.006
	65	Cu	244.372804	1.364	673481.066	ug/L	168.336
	66	Zn	237.178557	0.884	399175.482	ug/L	15137.170
>	72	Ge-1			736790.930	ug/L	739226.379
	75	As	255.412360	2.587	526641.047	ug/L	-1945.453
	82	Se	240.944702	2.089	55154.568	ug/L	-120.854
	97	Mo	248.214442	2.145	706409.896	ug/L	72.001
	107	Ag	59.621889	3.824	798495.429	ug/L	267.339
	111	Cd	239.436873	2.535	736159.719	ug/L	39.334
>	115	In-1			1488391.013	ug/L	1483966.870
	123	Sb	237.350915	1.616	1818116.090	ug/L	268.758
	135	Ba	257.898841	2.188	606473.426	ug/L	112.002
>	165	Ho-1			1564328.219	ug/L	1592460.464
	205	Tl	232.758570	1.514	6297742.757	ug/L	3951.949
	208	Pb	237.327068	0.921	8793355.005	ug/L	4580.000
	238	U	-0.001883	5.578	141.335	ug/L	234.671
>	45	Sc-2			460168.747	ug/L	454114.374
	53	Cr	252.298609	5.909	473643.721	ug/L	154333.029
	54	Fe	289.880625	3.662	271785.925	ug/L	62090.940
	61	Ni	249.376490	1.455	29699.475	ug/L	1661.113
	63	Cu	242.992711	2.094	1385316.907	ug/L	345.006
	67	Zn	249.080249	0.751	80335.747	ug/L	9047.975
>	72	Ge			736790.930	ug/L	739226.379
	77	Se	190.481891	1.052	43804.639	ug/L	8581.760
	96	Mo	245.480025	2.538	1785318.535	ug/L	141.970
	109	Ag	54.902890	2.220	750121.685	ug/L	288.339
>	115	In-2			1488391.013	ug/L	1483966.870
	114	Cd	234.631725	2.567	1610564.738	ug/L	84.731
	121	Sb	242.348581	2.859	2431041.151	ug/L	349.874
	137	Ba	257.631570	2.119	1032768.930	ug/L	156.669
>	165	Ho-2			1564328.219	ug/L	1592460.464
	203	Tl	230.220106	2.454	2646861.163	ug/L	1582.773
	206	Pb	244.282382	3.959	2266045.536	ug/L	1161.392
	207	Pb	239.989521	1.538	1867715.183	ug/L	995.045
>	45	Sc			460168.747	ug/L	454114.374
	47	Ti	0.352105	9.476	566.017	ug/L	297.006
	86	Sr	237.314176	2.557	867366.130	ug/L	716.656
	88	Sr	244.317641	1.856	7770565.333	ug/L	5834.250
>	115	In			1488391.013	ug/L	1483966.870
	118	Sn	0.076630	11.105	1503.761	ug/L	855.034
	120	Sn	0.088381	3.115	2087.752	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	101.333
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	99.671
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	100.299
	Sb	123	
	Ba	135	
>	Ho-1	165	99.233
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	101.333
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	99.671
	Se	77	
	Mo	95	
	Ag	109	
>	In-2	115	100.299
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	99.233
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	101.333
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	100.299
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G833J
Sample Date/Time: Wednesday, April 27, 2005 20:16:59
Autosampler Position: 26
Dataset File: D:\Elandata\Dataset\042705M2\G833J.018

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌈	9	Be	-0.002272	846.859	8.000	ug/L	7.667
|	10	B	4.308932	11.186	186.670	ug/L	27.667
|	23	Na	5391.730532	3.180	22888146.048	ug/L	18638.944
|	24	Mg	4758.242648	2.487	14663557.979	ug/L	2106.176
|	27	Al	50.726520	1.469	242890.438	ug/L	3413.777
|	39	K	1703.149038	3.766	16422660.708	ug/L	807733.282
|	44	Ca	12732.365877	4.586	3784045.495	ug/L	61872.368
|>	45	Sc-1			503147.755	ug/L	454114.374
|	51	V	4.210135	24.415	18889.512	ug/L	-26072.212
|	52	Cr	99.421388	3.500	1026520.884	ug/L	26547.338
|	55	Mn	6.282340	2.906	106950.274	ug/L	3062.361
|	57	Fe	21.835717	10.351	18410.786	ug/L	9798.695
|	59	Co	0.028460	26.670	618.353	ug/L	232.338
|	60	Ni	0.430780	4.530	1512.095	ug/L	301.006
|	65	Cu	0.237749	2.286	902.371	ug/L	168.336
|	66	Zn	2.581376	15.559	21326.122	ug/L	15137.170
|>	72	Ge-1			780086.284	ug/L	739226.379
|	75	As	0.661825	40.354	-602.135	ug/L	-1945.453
|	82	Se	0.730998	37.835	49.664	ug/L	-120.864
⌈	97	Mo	1.015118	6.637	2986.676	ug/L	72.001
|	107	Ag	0.004650	13.306	329.340	ug/L	267.339
|	111	Cd	0.011320	32.122	74.001	ug/L	39.334
|>	115	In-1			1483559.605	ug/L	1483986.870
|	123	Sb	0.318331	11.797	2699.116	ug/L	268.758
⌈	135	Ba	4.811709	3.331	11473.722	ug/L	112.002
|>	165	Ho-1			1571340.176	ug/L	1592460.484
|	205	Tl	0.500040	56.183	17408.351	ug/L	3951.949
|	208	Pb	0.056895	33.665	6828.671	ug/L	4580.000
|	238	U	0.308592	1.302	14923.942	ug/L	234.671
⌈>	45	Sc-2			503147.755	ug/L	454114.374
|	53	Cr	147.241739	15.722	373674.014	ug/L	154333.029
|	54	Fe	66.366548	8.687	121026.479	ug/L	62090.940
|	61	Ni	-0.390789	189.239	1790.797	ug/L	1661.113
|	63	Cu	0.296894	8.065	2230.197	ug/L	345.008
|	67	Zn	12.996013	27.626	14068.454	ug/L	9047.975
⌈>	72	Ge			780086.284	ug/L	739226.379
|	77	Se	33.959992	54.491	15584.776	ug/L	8561.780
⌈	98	Mo	1.042935	7.637	7703.354	ug/L	141.970
|	109	Ag	0.007375	29.230	388.676	ug/L	288.339
|>	115	In-2			1483559.605	ug/L	1483986.870
|	114	Cd	0.006602	26.584	129.890	ug/L	84.731
|	121	Sb	0.309403	12.056	3443.453	ug/L	349.674
⌈	137	Ba	4.838643	1.099	19637.352	ug/L	156.669
|>	165	Ho-2			1571340.176	ug/L	1592460.484
|	203	Tl	0.488030	61.345	7161.790	ug/L	1582.773
|	206	Pb	0.055895	34.892	1662.447	ug/L	1161.392
|	207	Pb	0.061778	31.087	1463.090	ug/L	995.045
⌈>	45	Sc			503147.755	ug/L	454114.374
|	47	Ti	1.254136	5.264	1359.745	ug/L	297.006
|	86	Sr	50.628761	5.387	202728.642	ug/L	716.656
|	88	Sr	48.654609	3.230	1696399.435	ug/L	5834.250
⌈>	115	In			1483559.605	ug/L	1483986.870
|	118	Sn	0.067310	5.734	1420.752	ug/L	855.034
|	120	Sn	0.073761	4.902	1919.217	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	110.798
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	105.827
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.873
	Sb	123	
	Ba	135	
>	Ho-1	165	98.674
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	110.798
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	105.827
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.873
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	98.674
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	110.798
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	98.873
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G833JS
Sample Date/Time: Wednesday, April 27, 2005 20:22:06
Autosampler Position: 27
Dataset File: D:\Elandata\Dataset\042705M2\G833JS.019

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	11.327484	2.830	2136.514	ug/L	7.667
	10	B	4.595559	12.337	192.337	ug/L	27.667
	23	Na	16661.416588	4.500	69112727.661	ug/L	18838.944
	24	Mg	15786.818259	2.598	47590427.717	ug/L	2106.176
	27	Al	519.948836	0.961	2400970.826	ug/L	3413.777
	39	K	13429.647959	2.185	120688730.282	ug/L	807733.282
	44	Ca	24582.816172	3.358	7121103.547	ug/L	61872.368
>	45	Sc-1			492181.002	ug/L	454114.374
	51	V	129.715072	0.542	1416764.848	ug/L	-26072.212
	52	Cr	144.287609	3.443	1444081.584	ug/L	26547.338
	55	Mn	116.977242	2.963	1890184.338	ug/L	3062.361
	57	Fe	232.980912	2.268	89559.743	ug/L	9798.695
	59	Co	112.678947	0.741	1403686.750	ug/L	232.338
	60	Ni	112.726841	1.333	302263.474	ug/L	301.006
	65	Cu	56.400052	3.373	166296.819	ug/L	168.336
	66	Zn	110.377963	2.148	207408.182	ug/L	15137.170
>	72	Ge-1			766429.644	ug/L	739226.379
	75	As	492.066281	2.234	1057565.043	ug/L	-1945.453
	82	Se	485.890628	0.267	111071.994	ug/L	-120.654
	97	Mo	256.532187	2.292	715952.166	ug/L	72.001
	107	Ag	11.923618	2.395	154891.118	ug/L	267.339
	111	Cd	12.573901	2.428	37478.153	ug/L	39.334
>	115	In-1			1441386.369	ug/L	1483966.870
	123	Sb	124.024894	1.975	920161.012	ug/L	268.758
	135	Ba	496.591552	1.942	1179043.044	ug/L	112.002
>	165	Ho-1			1579318.193	ug/L	1592460.464
	205	Tl	488.862437	1.134	12532387.084	ug/L	3951.949
	208	Pb	119.045214	1.983	4417837.240	ug/L	4580.000
	238	U	0.306000	1.193	14828.174	ug/L	234.671
>	45	Sc-2			492181.002	ug/L	454114.374
	53	Cr	196.722930	6.826	431795.071	ug/L	154333.029
	54	Fe	311.836409	5.676	307442.993	ug/L	52090.940
	61	Ni	116.378386	0.714	15863.742	ug/L	1661.113
	63	Cu	56.423956	2.255	344319.356	ug/L	345.008
	67	Zn	130.365000	3.717	49630.243	ug/L	9047.975
>	72	Ge			766429.644	ug/L	739226.379
	77	Se	456.838354	1.938	96868.892	ug/L	8561.780
	98	Mo	254.347352	1.263	1791709.556	ug/L	141.970
	109	Ag	11.874235	0.520	146781.064	ug/L	288.339
>	115	In-2			1441386.369	ug/L	1483966.870
	114	Cd	12.410360	1.617	82623.010	ug/L	84.731
	121	Sb	124.641964	3.124	1210925.603	ug/L	349.674
	137	Ba	498.309102	2.887	2017198.720	ug/L	156.669
>	165	Ho-2			1579318.193	ug/L	1592460.464
	203	Tl	455.902994	0.884	5291416.253	ug/L	1582.773
	206	Pb	118.281744	1.870	1103230.857	ug/L	1161.392
	207	Pb	122.490831	0.648	963009.729	ug/L	995.045
>	45	Sc			492181.002	ug/L	454114.374
	47	Ti	1.709455	8.609	1696.785	ug/L	297.006
	86	Sr	271.767786	4.246	1061792.825	ug/L	716.656
	88	Sr	272.303684	1.685	9261210.691	ug/L	5834.250
>	115	In			1441386.369	ug/L	1483966.870
	118	Sn	0.066925	4.665	1377.060	ug/L	855.034
	120	Sn	0.071218	1.235	1837.368	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	106.383
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	103.699
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	97.131
	Sb	123	
	Ba	135	
>	Ho-1	165	99.175
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	106.383
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	103.699
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	97.131
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	99.175
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	106.383
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	97.131
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G833JD
Sample Date/Time: Wednesday, April 27, 2005 20:27:13
Autosampler Position: 28
Dataset File: D:\Elandata\Dataset\042705M2\G833JD.020

Sample Result Summary

Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
9	Be	11.264966	3.192	2162.852	ug/L	7.667
10	B	4.790994	4.819	203.003	ug/L	27.867
23	Na	18658.804235	4.040	69921630.661	ug/L	18838.944
24	Mg	15749.102244	5.445	48310960.938	ug/L	2106.176
27	Al	514.266526	3.045	2417021.201	ug/L	3413.777
39	K	13054.753819	2.573	119427134.345	ug/L	807733.282
44	Ca	24412.803819	3.867	7164955.684	ug/L	61872.398
> 45	Sc-1			500966.022	ug/L	454114.374
51	V	128.604342	1.879	1429895.126	ug/L	-26072.212
52	Cr	144.076768	2.242	1468229.210	ug/L	26547.338
55	Mn	117.580207	1.366	1933915.254	ug/L	3062.361
57	Fe	233.042667	2.894	91178.311	ug/L	9798.695
59	Co	108.783050	2.493	1380050.300	ug/L	232.338
60	Ni	113.539311	1.725	309805.315	ug/L	301.006
65	Cu	85.232883	3.697	165767.409	ug/L	168.336
66	Zn	107.978346	2.035	206902.006	ug/L	15137.170
> 72	Ge-1			746825.101	ug/L	739226.379
75	As	503.092812	1.204	1053801.256	ug/L	-1945.453
82	Se	477.858836	1.257	111008.007	ug/L	-120.854
97	Mo	282.894534	2.583	706441.483	ug/L	72.001
107	Ag	11.735229	0.347	152672.447	ug/L	267.339
111	Cd	12.324500	1.916	36785.352	ug/L	39.334
> 115	In-1			1443160.325	ug/L	1483986.870
123	Sb	121.669171	2.429	903756.637	ug/L	268.758
135	Ba	503.097422	1.907	1169514.703	ug/L	112.002
> 165	Ho-1			1546348.522	ug/L	1592460.464
205	Tl	468.685852	2.935	12529717.479	ug/L	3951.949
208	Pb	120.162170	1.573	4402884.481	ug/L	4580.000
238	U	0.322688	3.608	15345.730	ug/L	234.671
> 45	Sc-2			500966.022	ug/L	454114.374
53	Cr	194.733717	8.430	436589.055	ug/L	154333.029
54	Fe	303.946684	5.127	306775.087	ug/L	62090.940
61	Ni	114.142819	4.171	15785.543	ug/L	1661.113
63	Cu	85.200621	0.424	342908.088	ug/L	345.008
67	Zn	126.433350	7.255	49275.083	ug/L	9047.975
> 72	Ge			746825.101	ug/L	739226.379
77	Se	458.842473	2.730	94769.345	ug/L	8561.780
98	Mo	248.938216	1.771	1755702.286	ug/L	141.970
109	Ag	10.837217	1.244	145140.039	ug/L	288.339
> 115	In-2			1443160.325	ug/L	1483986.870
114	Cd	12.516863	3.641	83420.860	ug/L	84.731
121	Sb	123.578786	0.935	1202385.837	ug/L	349.674
137	Ba	501.146372	1.521	1985829.050	ug/L	156.869
> 165	Ho-2			1546348.522	ug/L	1592460.464
203	Tl	469.081519	2.844	5216410.493	ug/L	1582.773
206	Pb	121.799201	2.949	1112376.553	ug/L	1161.392
207	Pb	126.037411	2.599	970034.425	ug/L	995.045
> 45	Sc			500966.022	ug/L	454114.374
47	Ti	1.774062	7.894	1779.462	ug/L	297.006
86	Sr	264.891050	1.844	1053727.869	ug/L	716.656
88	Sr	267.667230	1.147	9268954.758	ug/L	5834.250
> 115	In			1443160.325	ug/L	1483986.870
118	Sn	0.114961	3.616	1771.794	ug/L	855.034
120	Sn	0.130219	4.783	2474.066	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	110.317
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.028
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	97.250
	Sb	123	
	Ba	135	
>	Ho-1	165	97.194
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	46	110.317
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.028
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	97.250
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	97.194
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	110.317
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	97.250
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G833JA
Sample Date/Time: Wednesday, April 27, 2005 20:32:21
Autosampler Position: 29
Dataset File: D:\Elandata\Dataset\042705M2\G833JA.021

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	22.416066	1.521	4350.706	ug/L	7.667
	10	B	4.272818	15.257	187.003	ug/L	27.667
	23	Na	27681.261548	1.229	117988628.989	ug/L	18838.944
	24	Mg	26944.793579	4.141	83709006.529	ug/L	2106.176
	27	Al	990.706574	3.389	4709762.747	ug/L	3413.777
	39	K	25215.956696	5.327	232599994.366	ug/L	807733.282
	44	Ca	36258.805666	4.270	10739583.868	ug/L	61872.368
>	45	Sc-1			507409.917	ug/L	454114.374
	51	V	244.921567	1.715	2783419.540	ug/L	-26072.212
	52	Cr	186.089164	1.336	1912226.923	ug/L	26547.338
	55	Mn	228.097413	3.679	3795405.998	ug/L	3062.361
	57	Fe	434.446692	1.036	152718.875	ug/L	9798.695
	59	Co	217.047835	4.793	2786495.177	ug/L	232.338
	60	Ni	215.051306	1.793	583973.477	ug/L	301.006
	65	Cu	105.590570	3.094	320749.387	ug/L	168.336
	66	Zn	213.472382	4.957	397441.873	ug/L	15137.170
>	72	Ge-1			733163.866	ug/L	739226.379
	75	As	1129.431838	1.647	2324508.054	ug/L	-1945.453
	82	Se	963.199883	2.595	219782.665	ug/L	-120.854
	97	Mo	576.230183	1.783	1620342.988	ug/L	72.001
	107	Ag	23.105075	2.818	302251.108	ug/L	267.339
	111	Cd	25.116401	2.592	75405.914	ug/L	39.334
>	115	In-1			1452925.041	ug/L	1483966.870
	123	Sb	279.725687	1.060	2091643.548	ug/L	268.758
	135	Ba	1056.037482	1.444	2433379.208	ug/L	112.002
>	165	Ho-1			1532736.673	ug/L	1592460.464
	205	Tl	929.930360	1.880	24641946.493	ug/L	3951.949
	208	Pb	238.946589	0.821	8601972.858	ug/L	4580.000
	238	U	0.318107	0.912	14999.587	ug/L	234.671
>	45	Sc-2			507409.917	ug/L	454114.374
	53	Cr	220.352348	1.969	477930.718	ug/L	154333.029
	54	Fe	531.046169	4.916	490887.123	ug/L	62090.940
	61	Ni	220.120729	3.815	29100.901	ug/L	1661.113
	63	Cu	107.395295	3.338	674878.102	ug/L	345.008
	67	Zn	237.079737	1.439	84792.549	ug/L	9047.975
>	72	Ge			733163.866	ug/L	739226.379
	77	Se	875.869173	1.562	169662.335	ug/L	8561.780
	98	Mo	586.680718	2.367	4164164.335	ug/L	141.970
	109	Ag	21.863444	1.664	291642.810	ug/L	288.339
>	115	In-2			1452925.041	ug/L	1483966.870
	114	Cd	25.421010	1.754	170496.475	ug/L	84.731
	121	Sb	280.366097	1.654	2745560.671	ug/L	349.674
	137	Ba	1024.729060	1.604	4024816.150	ug/L	156.669
>	165	Ho-2			1532736.673	ug/L	1592460.464
	203	Tl	921.154742	1.381	10374147.480	ug/L	1582.773
	206	Pb	249.881785	1.325	2261465.466	ug/L	1161.392
	207	Pb	241.968482	2.623	1845097.900	ug/L	995.045
>	45	Sc			507409.917	ug/L	454114.374
	47	Ti	2.300862	7.128	2242.533	ug/L	297.006
	88	Sr	465.886314	5.328	1874647.545	ug/L	716.656
	88	Sr	482.849573	4.348	16912455.581	ug/L	5834.250
>	115	In			1452925.041	ug/L	1483966.870
	118	Sn	0.096733	5.994	1633.443	ug/L	855.034
	120	Sn	0.117166	4.303	2350.789	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	111.736
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	99.189
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	97.908
	Sb	123	
	Ba	136	
>	Ho-1	165	96.259
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	111.736
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	99.189
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	97.908
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	96.259
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	111.736
	Ti	47	
	Sr	88	
	Sr	88	
>	In	115	97.908
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G833JV
Sample Date/Time: Wednesday, April 27, 2005 20:37:29
Autosampler Position: 30
Dataset File: D:\Elandata\Dataset\042705M2\G833JV.022

Sample Result Summary

Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
9	Be	-0.003811	675.774	7.000	ug/L	7.667
10	B	1.944867	70.321	92.335	ug/L	27.667
23	Na	1168.782906	2.883	4513552.512	ug/L	18838.944
24	Mg	1050.983289	4.371	2963781.719	ug/L	2106.176
27	Al	13.321681	2.805	60883.416	ug/L	3413.777
39	K	349.180413	4.367	3730627.307	ug/L	807733.262
44	Ca	2575.217491	2.776	750519.025	ug/L	61872.368
45	Sc-1			460376.166	ug/L	454114.374
51	V	2.739473	3.014	2133.253	ug/L	-26072.212
52	Cr	20.092710	3.457	211238.217	ug/L	26547.338
55	Mn	1.312848	2.361	22906.916	ug/L	3062.361
57	Fe	3.100539	14.692	10913.382	ug/L	9796.695
59	Co	0.026853	14.976	548.349	ug/L	232.338
60	Ni	0.127866	10.189	625.020	ug/L	301.006
65	Cu	0.034900	12.950	266.338	ug/L	168.336
66	Zn	0.279146	196.375	15777.201	ug/L	15137.170
72	Ge-1			714353.543	ug/L	739226.379
75	As	1.431267	12.555	992.807	ug/L	-1945.453
82	Se	0.741743	10.485	48.212	ug/L	-120.854
97	Mo	0.420394	27.559	1283.406	ug/L	72.001
107	Ag	-0.001619	47.993	247.671	ug/L	267.339
111	Cd	-0.000806	199.048	37.000	ug/L	39.334
115	In-1			1487909.700	ug/L	1483966.870
123	Sb	1.086713	37.782	8595.758	ug/L	268.758
135	Ba	0.967013	4.200	2393.224	ug/L	112.002
165	Ho-1			1570626.233	ug/L	1592460.464
205	Tl	0.575543	34.286	19513.466	ug/L	3951.949
208	Pb	-0.007371	68.824	4242.290	ug/L	4580.000
238	U	0.058213	1.291	3002.012	ug/L	234.671
45	Sc-2			460376.166	ug/L	454114.374
53	Cr	-21.113121	2.265	129894.621	ug/L	154333.029
54	Fe	6.527134	67.761	57580.635	ug/L	62090.940
61	Ni	-1.011535	71.929	1569.102	ug/L	1861.113
63	Cu	0.839177	18.194	572.684	ug/L	345.008
67	Zn	-7.945259	11.259	6907.411	ug/L	9047.975
72	Ge			714353.543	ug/L	739226.379
77	Se	-12.748553	6.708	5985.340	ug/L	8561.780
98	Mo	0.441488	25.660	3353.485	ug/L	141.970
109	Ag	-0.003319	91.180	243.671	ug/L	288.339
115	In-2			1487908.700	ug/L	1483966.870
114	Cd	-0.002617	128.065	67.083	ug/L	84.731
121	Sb	1.119722	38.536	11585.257	ug/L	349.674
137	Ba	1.019233	5.812	4256.011	ug/L	156.669
165	Ho-2			1570626.233	ug/L	1592460.464
203	Tl	0.570732	38.394	8131.535	ug/L	1562.773
206	Pb	-0.005575	55.891	1093.719	ug/L	1161.392
207	Pb	-0.010517	101.343	898.704	ug/L	995.045
45	Sc			460376.166	ug/L	454114.374
47	Ti	0.249933	20.831	488.347	ug/L	297.006
86	Sr	10.743588	5.711	39927.192	ug/L	716.658
88	Sr	10.551836	1.979	341353.256	ug/L	5834.250
115	In			1487909.700	ug/L	1483966.870
118	Sn	0.038014	23.685	1177.394	ug/L	855.034
120	Sn	0.038392	14.862	1532.607	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	101.370
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	96.635
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	100.266
	Sb	123	
	Ba	136	
>	Ho-1	165	98.641
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	101.370
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	96.635
	Se	77	
	Mo	96	
	Ag	109	
>	In-2	115	100.266
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	98.641
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	101.370
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	100.266
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Wednesday, April 27, 2005 20:42:39
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 1.023

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Mass. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	192.378871	0.617	34681.729	ug/L	7.667
	10	B	187.997439	3.456	6409.189	ug/L	27.667
	23	Na	1838.533230	2.449	7334854.910	ug/L	16838.944
	24	Mg	922.814793	0.284	2670737.960	ug/L	2106.178
	27	Al	1904.538265	1.529	8424717.458	ug/L	3413.777
	39	K	1914.983363	1.180	17226068.587	ug/L	807733.282
	44	Ca	1016.229297	1.337	342469.317	ug/L	61872.368
>	45	Sc-1			471966.706	ug/L	454114.374
	51	V	188.538729	1.583	1987099.359	ug/L	-26072.212
	52	Cr	196.258825	1.667	1865239.556	ug/L	26547.338
	55	Mn	193.110467	1.331	2990955.747	ug/L	3062.361
	57	Fe	1874.386096	2.326	619366.240	ug/L	9798.595
	59	Co	188.886550	1.253	2256123.602	ug/L	232.338
	60	Ni	191.780983	3.127	492971.224	ug/L	301.006
	65	Cu	192.336646	1.358	543639.096	ug/L	168.336
	66	Zn	190.773280	2.280	332408.654	ug/L	15137.170
>	72	Ge-1			731720.822	ug/L	739226.379
	75	As	199.494973	3.229	408001.785	ug/L	-1945.453
	82	Se	199.395280	0.534	45309.383	ug/L	-120.854
	97	Mo	196.485415	2.309	563931.448	ug/L	72.001
	107	Ag	48.352069	1.750	648612.572	ug/L	267.339
	111	Cd	192.180068	0.904	591671.263	ug/L	39.334
>	115	In-1			1490135.733	ug/L	1483966.870
	123	Sb	195.109010	0.949	1496522.102	ug/L	268.758
	135	Ba	209.098998	1.249	485529.388	ug/L	112.002
>	165	Ho-1			1544250.330	ug/L	1592460.464
	205	Tl	192.445139	3.419	5140715.734	ug/L	3951.949
	208	Pb	193.741169	1.173	7086895.719	ug/L	4580.000
	238	U	194.335214	2.447	9092620.096	ug/L	234.671
>	45	Sc-2			471966.706	ug/L	454114.374
	53	Cr	179.739999	1.666	392223.784	ug/L	154333.029
	54	Fe	1979.576402	1.085	1527463.729	ug/L	62090.940
	61	Ni	190.858031	1.624	23696.543	ug/L	1661.113
	63	Cu	194.899629	2.114	1138633.325	ug/L	345.008
	67	Zn	181.077285	2.950	62471.317	ug/L	9047.975
>	72	Ge			731720.822	ug/L	739226.379
	77	Se	212.899225	1.427	47579.831	ug/L	8561.780
	98	Mo	196.996445	1.844	1434929.586	ug/L	141.970
	109	Ag	47.584883	1.576	651037.452	ug/L	288.339
>	115	In-2			1490135.733	ug/L	1483966.870
	114	Cd	196.233667	0.887	1349651.228	ug/L	84.731
	121	Sb	192.937223	0.489	1938199.013	ug/L	349.874
	137	Ba	211.503486	2.095	837059.887	ug/L	156.669
>	165	Ho-2			1544250.330	ug/L	1592460.464
	203	Tl	191.697095	2.758	2176158.519	ug/L	1582.773
	206	Pb	195.311187	0.888	1780944.949	ug/L	1161.392
	207	Pb	202.728009	1.292	1557744.522	ug/L	995.045
>	45	Sc			471966.706	ug/L	454114.374
	47	Ti	192.946856	1.140	149208.698	ug/L	297.006
	86	Sr	187.151910	1.661	701723.479	ug/L	716.656
	88	Sr	188.392041	0.326	6147377.527	ug/L	5834.250
>	115	In			1490135.733	ug/L	1483966.870
	118	Sn	196.770328	1.206	1662772.761	ug/L	855.034
	120	Sn	197.403667	1.863	2194774.099	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		96.188

]	B	10		93.999
]	Na	23		91.827
]	Mg	24		92.281
]	Al	27		95.237
]	K	39		96.750
]	Ca	44		101.822
]>	Sc-1	45	103.931	
]	V	51		94.266
]	Cr	52		97.829
]	Mn	55		96.566
]	Fe	57		93.719
]	Co	59		94.443
]	Ni	60		95.899
]	Cu	65		96.166
]	Zn	66		96.387
]>	Ge-1	72	99.995	
]	As	75		98.747
]	Se	82		99.693
]	Mo	97		97.743
]	Ag	107		95.704
]	Cd	111		96.090
]>	In-1	115	100.416	
]	Sb	123		97.566
]	Ba	135		104.549
]>	Ho-1	165	99.973	
]	Tl	205		96.223
]	Pb	208		96.871
]	U	238		97.188
]>	Sc-2	45	103.931	
]	Cr	53		99.679
]	Fe	54		99.979
]	Ni	61		96.329
]	Cu	63		97.386
]	Zn	67		99.539
]>	Ge	72	99.995	
]	Se	77		106.266
]	Mo	96		99.486
]	Ag	109		96.170
]>	In-2	115	100.416	
]	Cd	114		99.117
]	Sb	121		99.489
]	Ba	137		106.782
]>	Ho-2	165	99.973	
]	Tl	203		99.849
]	Pb	206		97.666
]	Pb	207		101.344
]>	Sc	45	103.931	
]	Ti	47		99.473
]	Sr	86		93.676
]	Sr	88		94.196
]>	In	115	100.416	
]	Sn	118		99.396
]	Sn	120		99.702

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cr	53	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Wednesday, April 27, 2005 20:48:49
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 2.024

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	-0.001314	2391.857	7.667	ug/L	7.667
	10	B	2.447365	28.323	110.666	ug/L	27.667
	23	Na	0.205335	26.775	20206.490	ug/L	18838.944
	24	Mg	0.046231	85.077	2299.542	ug/L	2106.178
	27	Al	0.001236	1137.204	3520.136	ug/L	3413.777
	39	K	-10.235690	21.093	744590.566	ug/L	807733.282
	44	Ca	-2.282783	234.973	83061.175	ug/L	61872.368
>	45	Sc-1			467539.448	ug/L	454114.374
	51	V	0.252354	343.623	-24174.726	ug/L	-25072.212
	52	Cr	0.088244	236.791	28148.405	ug/L	26547.338
	55	Mn	0.042170	45.279	3796.877	ug/L	3082.361
	57	Fe	-3.287850	24.598	9026.270	ug/L	9798.695
	59	Co	0.096819	155.743	1348.479	ug/L	232.338
	60	Ni	-0.009918	59.964	284.672	ug/L	301.006
	65	Cu	0.007140	129.136	193.003	ug/L	168.336
	66	Zn	-0.230105	26.492	15205.675	ug/L	15137.170
>	72	Ge-1			747851.937	ug/L	739226.379
	75	As	0.229879	96.821	-1483.362	ug/L	-1945.453
	82	Se	0.374867	21.838	-35.194	ug/L	-120.854
	97	Mo	0.113628	14.429	393.009	ug/L	72.001
	107	Ag	0.001419	84.302	282.339	ug/L	267.339
	111	Cd	0.004927	45.265	53.667	ug/L	39.334
>	115	In-1			1463063.528	ug/L	1483966.870
	123	Sb	0.219530	13.913	1919.279	ug/L	268.758
	135	Ba	-0.004585	104.378	101.335	ug/L	112.002
>	165	Ho-1			1598264.114	ug/L	1592460.464
	205	Tl	0.298641	43.408	12245.029	ug/L	3951.949
	208	Pb	-0.003395	102.745	4468.987	ug/L	4580.000
	238	U	0.005254	35.651	490.680	ug/L	234.671
>	45	Sc-2			467539.448	ug/L	454114.374
	53	Cr	5.397983	280.059	165738.949	ug/L	154333.029
	54	Fe	0.980667	371.185	64608.554	ug/L	62090.940
	61	Ni	-1.428203	10.389	1547.433	ug/L	1661.113
	63	Cu	0.010087	41.045	413.343	ug/L	345.008
	67	Zn	-0.763007	391.846	9093.670	ug/L	9047.975
>	72	Ge			747851.937	ug/L	739226.379
	77	Se	10.436343	62.142	10612.885	ug/L	8561.780
	98	Mo	0.113398	21.831	951.787	ug/L	141.970
	109	Ag	0.011679	24.188	444.011	ug/L	288.339
>	115	In-2			1463063.528	ug/L	1483966.870
	114	Cd	0.002950	59.208	103.524	ug/L	84.731
	121	Sb	0.227640	15.275	2590.597	ug/L	349.674
	137	Ba	0.003689	29.152	172.338	ug/L	156.669
>	165	Ho-2			1598264.114	ug/L	1592460.464
	203	Tl	0.290073	40.197	5004.641	ug/L	1582.773
	206	Pb	-0.003638	208.733	1131.723	ug/L	1161.392
	207	Pb	-0.004837	51.165	980.375	ug/L	995.045
>	45	Sc			467539.448	ug/L	454114.374
	47	Ti	0.040585	256.323	336.874	ug/L	297.006
	86	Sr	0.013201	148.354	787.249	ug/L	716.856
	88	Sr	-0.009085	29.029	5712.533	ug/L	5834.250
>	115	In			1463063.528	ug/L	1483966.870
	118	Sn	0.066733	23.848	1397.083	ug/L	855.034
	120	Sn	0.070008	31.432	1853.241	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		-0.131

	B	10		244.737
	Na	23		0.205
	Mg	24		0.046
	Al	27		0.091
	K	39		-10.236
	Ca	44		-2.283
>	Sc-1	45	102.966	
	V	51		28.236
	Cr	52		8.824
	Mn	55		4.217
	Fe	57		-3.288
	Co	59		8.582
	Ni	60		-6.992
	Cu	65		0.714
	Zn	66		-23.010
>	Ge-1	72	101.167	
	As	75		22.966
	Se	82		37.457
	Mo	97		11.363
	Ag	107		0.142
	Cd	111		0.493
>	In-1	115	98.991	
	Sb	123		21.963
	Ba	136		-0.488
>	Ho-1	165	100.364	
	Tl	205		29.864
	Pb	208		-0.340
	U	238		8.525
>	Sc-2	45	102.966	
	Cr	53		838.749
	Fe	54		0.981
	Ni	61		-142.928
	Cu	63		1.008
	Zn	67		-76.381
>	Ge	72	101.167	
	Se	77		1043.534
	Mo	98		11.340
	Ag	109		1.168
>	In-2	115	98.991	
	Cd	114		0.296
	Sb	121		22.754
	Ba	137		0.368
>	Ho-2	165	100.364	
	Tl	203		29.007
	Pb	208		-0.364
	Pb	207		-0.484
>	Sc	45	102.966	
	Ti	47		4.006
	Sr	86		1.329
	Sr	88		-0.909
>	In	115	98.991	
	Sn	118		6.873
	Sn	120		7.901

QC Out Of Limits

Analyte	Mass	Out of Limits Message
B	10	Q
Cr	53	Q
Ni	61	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: G849VB
Sample Date/Time: Wednesday, April 27, 2005 20:54:57
Autosampler Position: 31
Dataset File: D:\Elandata\Dataset\042705M2\G849VB.025

Sample Result Summary

Mass	Analyte	Conc. Mean	Conc. RSD	Mass. Intens. Mean	Sample Unit	Blank Intensity
9	Be	0.005058	349.346	9.333	ug/L	7.667
10	B	0.949385	47.039	63.667	ug/L	27.667
23	Na	1.756471	14.379	27815.669	ug/L	18838.944
24	Mg	4.857710	4.893	16999.280	ug/L	2106.176
27	Al	2.330812	0.974	14516.522	ug/L	3413.777
39	K	-12.289060	16.138	769092.211	ug/L	807733.282
44	Ca	9.566588	39.924	70108.349	ug/L	61872.368
45	Sc-1			494502.482	ug/L	454114.374
51	V	-1.335184	37.402	-43431.954	ug/L	-26072.212
52	Cr	0.929807	21.167	38110.679	ug/L	26547.338
55	Mn	0.108461	5.882	5091.625	ug/L	3082.361
57	Fe	-2.007239	12.295	9985.709	ug/L	9798.695
59	Co	0.006757	88.349	336.341	ug/L	232.338
60	Ni	0.063451	15.149	498.680	ug/L	301.006
65	Cu	0.037917	5.707	295.673	ug/L	168.336
66	Zn	-0.097727	130.385	16311.807	ug/L	15137.170
72	Ge-1			769793.759	ug/L	739226.379
75	As	-0.404011	21.937	-2899.468	ug/L	-1945.453
82	Se	0.487728	33.022	-9.027	ug/L	-120.854
97	Mo	0.026160	20.761	145.336	ug/L	72.001
107	Ag	-0.000779	310.756	253.671	ug/L	267.339
111	Cd	0.000286	484.507	39.667	ug/L	39.334
115	In-1			1465841.604	ug/L	1483966.870
123	Sb	0.144616	4.454	1356.249	ug/L	268.758
135	Ba	0.106979	6.381	370.675	ug/L	112.002
165	Ho-1			1614336.329	ug/L	1592460.464
205	Tl	0.109360	57.606	7069.565	ug/L	3951.949
208	Pb	-0.002170	368.087	4581.333	ug/L	4580.000
238	U	-0.002635	8.267	109.002	ug/L	234.671
45	Sc-2			494502.482	ug/L	454114.374
53	Cr	35.486018	34.885	218298.113	ug/L	154333.029
54	Fe	18.704288	33.480	82013.212	ug/L	62090.940
61	Ni	-1.862362	41.369	1606.773	ug/L	1661.113
63	Cu	0.033479	3.254	580.684	ug/L	345.008
67	Zn	5.330636	96.477	11515.835	ug/L	9047.975
72	Ge			769793.759	ug/L	739226.379
77	Se	27.162817	28.105	14170.239	ug/L	8581.780
98	Mo	0.034475	20.572	387.312	ug/L	141.970
109	Ag	0.005591	31.889	360.008	ug/L	268.339
115	In-2			1465841.604	ug/L	1483966.870
114	Cd	-0.002221	87.536	68.726	ug/L	84.731
121	Sb	0.141473	9.044	1742.791	ug/L	349.674
137	Ba	0.108507	9.240	607.686	ug/L	156.669
165	Ho-2			1614336.329	ug/L	1592460.464
203	Tl	0.113642	54.686	2957.349	ug/L	1582.773
206	Pb	0.001065	887.877	1188.062	ug/L	1161.392
207	Pb	-0.006404	73.933	957.375	ug/L	995.045
45	Sc			494502.482	ug/L	454114.374
47	Ti	0.065560	41.237	392.676	ug/L	297.006
86	Sr	0.027759	30.943	889.888	ug/L	716.856
88	Sr	0.006809	39.856	6584.250	ug/L	5834.250
115	In			1465841.604	ug/L	1483966.870
118	Sn	0.074598	11.460	1464.090	ug/L	855.034
120	Sn	0.086476	4.276	2035.270	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	108.894
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	104.135
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.779
	Sb	123	
	Ba	135	
>	Ho-1	165	101.374
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	108.894
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	104.135
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.779
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	101.374
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	108.894
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	98.779
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G849VC
Sample Date/Time: Wednesday, April 27, 2005 21:00:06
Autosampler Position: 32
Dataset File: D:\Elandata\Dataset\042705M2\G849VC.026

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	231.577690	2.199	43324.362	ug/L	7.667
	10	B	6.391919	13.481	255.336	ug/L	27.667
	23	Na	4505.621210	2.841	18623672.542	ug/L	18838.944
	24	Mg	4584.473200	4.180	13757322.130	ug/L	2106.176
	27	Al	240.701681	1.210	1106381.221	ug/L	3413.777
	39	K	4751.690800	3.006	43063044.723	ug/L	807733.282
	44	Ca	4769.956567	4.776	1422671.112	ug/L	61872.368
>	45	Sc-1			489971.030	ug/L	454114.374
	51	V	234.740960	3.159	2574676.836	ug/L	-26072.212
	52	Cr	242.240644	3.404	2394750.951	ug/L	26547.338
	55	Mn	233.206496	3.261	3747045.130	ug/L	3082.361
	57	Fe	227.446895	5.660	87245.880	ug/L	9796.696
	59	Co	231.068662	3.511	2885696.375	ug/L	232.338
	60	Ni	235.127926	1.454	627203.765	ug/L	301.006
	65	Cu	228.135866	1.777	689226.958	ug/L	188.336
	66	Zn	225.335844	3.469	404436.597	ug/L	15137.170
>	72	Ge-1			748330.879	ug/L	739226.379
	75	As	254.745762	3.031	533591.451	ug/L	-1945.453
	82	Se	239.358636	1.714	55667.429	ug/L	-120.854
	97	Mo	249.687634	0.751	715524.032	ug/L	72.001
	107	Ag	59.152918	1.107	788259.050	ug/L	267.339
	111	Cd	235.190632	1.335	719097.766	ug/L	39.334
>	115	In-1			1480273.134	ug/L	1483966.870
	123	Sb	236.005368	1.754	1796107.911	ug/L	268.758
	135	Ba	245.595327	2.869	588107.225	ug/L	112.002
>	165	Ho-1			1592888.462	ug/L	1592460.464
	205	Tl	227.813618	0.904	6277063.320	ug/L	3951.949
	208	Pb	232.540687	1.090	8773275.340	ug/L	4580.000
	238	U	-0.002183	16.552	129.335	ug/L	234.671
>	45	Sc-2			489971.030	ug/L	454114.374
	53	Cr	262.495525	7.404	517643.942	ug/L	154333.029
	54	Fe	277.129285	7.607	279357.288	ug/L	62090.940
	61	Ni	234.817149	3.347	29866.822	ug/L	1661.113
	63	Cu	228.004786	2.463	1390231.827	ug/L	345.008
	67	Zn	234.080967	3.491	80950.924	ug/L	9047.975
>	72	Ge			748330.879	ug/L	739226.379
	77	Se	229.121152	2.341	51752.887	ug/L	8561.780
	98	Mo	242.485112	1.199	1754385.695	ug/L	141.970
	109	Ag	55.338386	2.113	752072.012	ug/L	288.339
>	115	In-2			1480273.134	ug/L	1483966.870
	114	Cd	239.848529	2.164	1597734.981	ug/L	84.731
	121	Sb	237.775368	0.600	2372868.270	ug/L	349.674
	137	Ba	248.815591	3.653	1015574.341	ug/L	156.669
>	165	Ho-2			1592888.462	ug/L	1592460.464
	203	Tl	226.930302	2.118	2657034.157	ug/L	1582.773
	206	Pb	241.755573	2.122	2273586.866	ug/L	1161.392
	207	Pb	236.241290	3.368	1871965.733	ug/L	995.045
>	45	Sc			489971.030	ug/L	454114.374
	47	Ti	0.291034	4.616	553.683	ug/L	297.006
	86	Sr	222.719093	2.977	866408.479	ug/L	716.656
	88	Sr	225.949952	2.572	7851433.196	ug/L	5834.250
>	115	In			1480273.134	ug/L	1483966.870
	118	Sn	0.083410	6.942	1552.767	ug/L	855.034
	120	Sn	0.095893	9.398	2170.067	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	107.886
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.232
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.791
	Sb	123	
	Ba	136	
>	Ho-1	165	100.027
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	107.886
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.232
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	99.791
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	100.027
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	107.886
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	99.791
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8170
Sample Date/Time: Wednesday, April 27, 2005 21:05:16
Autosampler Position: 33
Dataset File: D:\Elandata\Dataset\042705M2\G8170.027

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌈	9	Be	-0.012403	153.003	6.000	ug/L	7.667
|	10	B	0.509291	14.186	48.001	ug/L	27.667
|	23	Na	31.706563	2.212	151927.523	ug/L	18838.944
|	24	Mg	12.885440	3.019	41126.548	ug/L	2106.176
|	27	Al	4.596802	3.980	24883.911	ug/L	3413.777
|	39	K	-0.152032	681.164	873823.072	ug/L	807733.282
|	44	Ca	51.799273	9.149	81830.620	ug/L	61872.368
|>	45	Sc-1			492067.864	ug/L	454114.374
|	51	V	-1.684872	20.557	-47001.342	ug/L	-26072.212
|	52	Cr	2.195219	12.652	50301.063	ug/L	26547.338
|	55	Mn	0.248418	3.558	7324.617	ug/L	3062.381
|	57	Fe	2.252583	20.073	11381.997	ug/L	9798.695
|	59	Co	0.011049	59.454	389.343	ug/L	232.338
|	60	Ni	0.103143	3.298	602.352	ug/L	301.006
|	65	Cu	0.282689	3.894	1015.046	ug/L	188.336
⌊	66	Zn	1.351932	25.351	18738.808	ug/L	15137.170
⌈>	72	Ge-1			763204.579	ug/L	739226.379
|	75	As	0.140616	115.623	-1703.221	ug/L	-1945.463
⌊	82	Se	0.466816	63.971	-14.096	ug/L	-120.854
⌈	97	Mo	0.158471	42.819	526.016	ug/L	72.001
|	107	Ag	0.010521	24.145	411.677	ug/L	267.339
|	111	Cd	0.011510	23.694	75.334	ug/L	39.334
|>	115	In-1			1498252.874	ug/L	1483966.870
⌊	123	Sb	0.264077	19.142	2306.718	ug/L	268.758
⌈	135	Ba	1.000761	1.621	2494.906	ug/L	112.002
|>	165	Ho-1			1584340.526	ug/L	1592460.464
|	205	Tl	0.316116	44.444	12581.335	ug/L	3951.949
|	208	Pb	0.164003	14.643	10706.358	ug/L	4580.000
⌊	238	U	-0.000954	6.604	187.670	ug/L	234.671
⌈>	45	Sc-2			492067.864	ug/L	454114.374
|	53	Cr	54.875418	28.583	240996.033	ug/L	154333.029
|	54	Fe	21.979448	6.344	84215.671	ug/L	62090.940
|	61	Ni	-1.749345	48.902	1589.438	ug/L	1661.113
|	63	Cu	0.273680	4.008	2041.500	ug/L	345.008
⌊	67	Zn	14.270066	33.299	14161.538	ug/L	9047.975
⌈>	72	Ge			763204.579	ug/L	739226.379
⌊	77	Se	22.976604	28.661	13229.488	ug/L	8561.780
⌈	98	Mo	0.160027	40.490	1314.234	ug/L	141.970
|	109	Ag	0.011226	26.300	445.345	ug/L	288.339
|>	115	In-2			1498252.874	ug/L	1483966.870
|	114	Cd	0.099013	51.171	147.801	ug/L	84.731
⌊	121	Sb	0.262963	15.100	3006.017	ug/L	349.674
⌈	137	Ba	1.010545	2.407	4258.677	ug/L	156.669
|>	165	Ho-2			1584340.526	ug/L	1592460.464
|	203	Tl	0.335048	44.811	5471.172	ug/L	1582.773
|	206	Pb	0.166688	17.845	2713.286	ug/L	1161.392
⌊	207	Pb	0.166292	12.571	2299.875	ug/L	995.045
⌈>	45	Sc			492067.864	ug/L	454114.374
|	47	Ti	0.086725	18.221	391.676	ug/L	297.006
|	86	Sr	0.257317	5.422	1781.219	ug/L	716.656
⌊	88	Sr	0.243984	0.575	14613.951	ug/L	5834.250
⌈>	115	In			1498252.874	ug/L	1483966.870
|	118	Sn	0.071893	2.175	1473.757	ug/L	855.034
⌊	120	Sn	0.073456	0.717	1934.922	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	100.388
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	103.244
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	100.963
	Sb	123	
	Ba	135	
>	Ho-1	165	99.490
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	100.388
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	103.244
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	100.963
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	99.490
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	100.388
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	100.963
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8170X
Sample Date/Time: Wednesday, April 27, 2005 21:10:28
Autosampler Position: 34
Dataset File: D:\Elandata\Dataset\042705M2\G8170X.028

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.000872	3205.794	8.333	ug/L	7.667
	10	B	0.534904	51.768	48.001	ug/L	27.667
	23	Na	32.091861	4.265	150659.884	ug/L	18838.944
	24	Mg	13.243349	4.711	41414.381	ug/L	2106.176
	27	Al	4.863859	0.058	24738.990	ug/L	3413.777
	39	K	-0.515048	325.912	854569.582	ug/L	807733.262
	44	Ca	49.557289	17.503	79686.792	ug/L	61872.368
>	45	Sc-1			483096.570	ug/L	454114.374
	51	V	-1.866424	32.520	-48092.345	ug/L	-26072.212
	52	Cr	1.683525	17.241	44437.925	ug/L	26547.338
	55	Mn	0.236577	3.898	7003.120	ug/L	3062.361
	57	Fe	5.697704	39.876	12312.085	ug/L	9798.695
	59	Co	0.007427	39.330	337.674	ug/L	232.338
	60	Ni	0.154333	6.589	725.692	ug/L	301.006
	65	Cu	0.390963	2.989	1309.406	ug/L	168.336
	66	Zn	0.622160	38.959	17154.465	ug/L	15137.170
>	72	Ge-1			753054.231	ug/L	739226.379
	75	As	-0.144600	479.689	-2285.395	ug/L	-1945.463
	82	Se	0.373861	46.031	-35.212	ug/L	-120.854
	97	Mo	0.033422	22.335	168.003	ug/L	72.001
	107	Ag	0.007618	17.769	368.575	ug/L	267.339
	111	Cd	0.004797	41.584	54.001	ug/L	39.334
>	115	In-1			1483090.901	ug/L	1483966.870
	123	Sb	0.099313	7.398	1026.849	ug/L	268.758
	135	Ba	0.947107	1.755	2357.885	ug/L	112.002
>	165	Ho-1			1577811.946	ug/L	1592460.464
	205	Tl	0.075759	55.872	5997.012	ug/L	3951.949
	208	Pb	0.155496	7.797	10341.248	ug/L	4580.000
	238	U	-0.001852	11.189	144.002	ug/L	234.671
>	45	Sc-2			483096.570	ug/L	454114.374
	53	Cr	57.978621	28.207	240498.922	ug/L	154333.029
	54	Fe	30.922136	7.967	89423.510	ug/L	82090.940
	61	Ni	-1.589560	43.360	1581.437	ug/L	1681.113
	63	Cu	0.400829	1.505	2765.295	ug/L	345.008
	67	Zn	13.779937	33.481	13746.116	ug/L	9047.975
>	72	Ge			753054.231	ug/L	739226.379
	77	Se	28.902287	15.777	14192.349	ug/L	8561.780
	98	Mo	0.046956	14.007	482.462	ug/L	141.970
	109	Ag	0.008386	23.241	402.343	ug/L	288.339
>	115	In-2			1483090.901	ug/L	1483966.870
	114	Cd	0.000136	1592.348	85.633	ug/L	84.731
	121	Sb	0.103839	11.871	1388.082	ug/L	349.674
	137	Ba	0.971546	3.133	4082.291	ug/L	156.669
>	165	Ho-2			1577811.946	ug/L	1592460.464
	203	Tl	0.079792	59.251	2487.914	ug/L	1582.773
	206	Pb	0.153297	7.356	2576.925	ug/L	1161.392
	207	Pb	0.159178	10.190	2233.530	ug/L	995.045
>	45	Sc			483096.570	ug/L	454114.374
	47	Ti	0.179586	47.625	458.679	ug/L	297.006
	86	Sr	0.245089	2.794	1701.583	ug/L	716.856
	88	Sr	0.236823	2.169	14106.436	ug/L	5834.250
>	115	In			1483090.901	ug/L	1483966.870
	118	Sn	0.059829	3.436	1355.745	ug/L	855.034
	120	Sn	0.073089	32.994	1912.285	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	100.382
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.871
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.941
	Sb	123	
	Ba	135	
>	Ho-1	165	99.090
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	100.382
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.871
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	99.941
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	99.090
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	100.382
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	99.941
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8170S
Sample Date/Time: Wednesday, April 27, 2005 21:15:36
Autosampler Position: 35
Dataset File: D:\Elandata\Dataset\042705M2\G8170S.029

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	11.806300	2.747	2218.861	ug/L	7.667
	10	B	0.572068	38.286	50.001	ug/L	27.667
	23	Na	11606.629970	2.460	47586634.083	ug/L	18838.944
	24	Mg	11616.426466	2.155	34899279.960	ug/L	2106.176
	27	Al	489.250618	3.877	2250920.266	ug/L	3413.777
	39	K	12040.274741	4.737	107883878.804	ug/L	807733.282
	44	Ca	12752.824529	3.068	3896572.376	ug/L	61872.368
>	45	Sc-1			490377.195	ug/L	454114.374
	51	V	128.291549	1.820	1395766.057	ug/L	-26072.212
	52	Cr	51.699477	2.109	533304.181	ug/L	26547.338
	55	Mn	114.199402	2.873	1838983.271	ug/L	3062.361
	57	Fe	218.714968	0.905	84436.714	ug/L	9798.695
	59	Co	116.121287	2.262	1442441.085	ug/L	232.338
	60	Ni	117.237647	0.705	313232.228	ug/L	301.006
	65	Cu	57.620966	1.725	169335.144	ug/L	168.336
	66	Zn	111.963728	1.403	209406.370	ug/L	15137.170
>	72	Ge-1			749802.048	ug/L	739226.379
	75	As	494.756249	0.821	1040346.452	ug/L	-1945.453
	82	Se	481.246667	1.351	112241.335	ug/L	-120.854
	97	Mo	258.623827	0.727	721162.533	ug/L	72.001
	107	Ag	12.041240	1.202	156392.289	ug/L	267.339
	111	Cd	12.608597	1.515	37577.083	ug/L	39.334
>	115	In-1			1440976.681	ug/L	1483966.870
	123	Sb	121.314164	1.486	899823.070	ug/L	268.758
	136	Ba	496.740917	0.224	1168627.438	ug/L	112.002
>	165	Ho-1			1564763.022	ug/L	1592460.464
	205	Tl	483.271643	1.894	12283409.894	ug/L	3981.949
	208	Pb	116.663622	2.531	4325730.699	ug/L	4580.000
	238	U	-0.001524	2.796	158.336	ug/L	234.671
>	45	Sc-2			490377.195	ug/L	454114.374
	53	Cr	114.323334	16.038	319745.591	ug/L	154333.029
	54	Fe	276.887704	0.898	279861.818	ug/L	62090.940
	61	Ni	117.501405	2.566	15859.292	ug/L	1561.113
	63	Cu	58.370878	1.868	354882.569	ug/L	345.008
	67	Zn	132.596683	3.426	50120.633	ug/L	9047.975
>	72	Ge			749802.048	ug/L	739226.379
	77	Se	431.846084	1.883	90060.814	ug/L	8561.780
	98	Mo	254.120260	3.523	1789244.788	ug/L	141.970
	109	Ag	11.149940	2.398	147719.364	ug/L	288.339
>	115	In-2			1440976.681	ug/L	1483966.870
	114	Cd	12.473650	0.493	83029.916	ug/L	84.731
	121	Sb	123.179870	1.184	1196845.583	ug/L	349.674
	137	Ba	491.193100	1.959	1969612.163	ug/L	156.669
>	165	Ho-2			1564763.022	ug/L	1592460.464
	203	Tl	441.149955	2.812	5072368.493	ug/L	1582.773
	206	Pb	117.921918	3.024	1089974.375	ug/L	1161.392
	207	Pb	120.017224	2.021	934798.509	ug/L	995.045
>	45	Sc			490377.195	ug/L	454114.374
	47	Ti	0.566094	12.234	775.029	ug/L	297.006
	86	Sr	225.848696	0.764	879668.437	ug/L	716.656
	88	Sr	226.691590	2.471	7683998.296	ug/L	5834.250
>	115	In			1440976.681	ug/L	1483966.870
	118	Sn	0.099686	7.360	1644.111	ug/L	855.034
	120	Sn	0.107429	4.330	2225.739	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	107.986
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.431
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	97.103
	Sb	123	
	Ba	135	
>	Ho-1	165	96.201
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	107.986
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.431
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	97.103
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	96.201
	Tl	205	
	Pb	206	
	Pb	207	
>	Sc	45	107.986
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	97.103
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8170S LL
Sample Date/Time: Wednesday, April 27, 2005 21:20:48
Autosampler Position: 36
Dataset File: D:\Elandata\Dataset\042705M2\G8170S LL.030

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.009254	243.514	10.000	ug/L	7.667
	10	B	0.178178	46.435	36.334	ug/L	27.667
	23	Na	33.124518	5.794	157886.309	ug/L	18838.944
	24	Mg	13.366470	2.156	42678.752	ug/L	2106.176
	27	Al	5.527021	0.332	29212.139	ug/L	3413.777
	39	K	-0.656666	461.745	869982.884	ug/L	807733.282
	44	Ca	42.685416	8.449	79320.108	ug/L	61872.368
>	45	Sc-1			492651.625	ug/L	454114.374
	51	V	-1.678544	9.966	-46973.178	ug/L	-26072.212
	52	Cr	5.363985	3.692	81471.160	ug/L	26547.338
	55	Mn	0.408858	3.377	9921.543	ug/L	3062.361
	57	Fe	14.602664	14.381	15572.912	ug/L	9798.695
	59	Co	0.023160	29.289	539.682	ug/L	232.338
	60	Ni	0.768193	6.404	2384.223	ug/L	301.006
	65	Cu	0.449964	3.617	1506.094	ug/L	168.336
	66	Zn	0.181889	144.943	16731.295	ug/L	15137.170
>	72	Ge-1			755403.964	ug/L	739226.379
	75	As	19.503722	3.550	39404.528	ug/L	-1945.463
	82	Se	5.194397	2.804	1098.193	ug/L	-120.854
	97	Mo	0.228349	27.847	730.360	ug/L	72.001
	107	Ag	0.011728	5.231	430.011	ug/L	267.338
	111	Cd	2.414074	2.425	7548.070	ug/L	39.334
>	115	In-1			1505240.760	ug/L	1483966.870
	123	Sb	47.025513	1.440	364552.624	ug/L	268.758
	135	Ba	0.993112	1.845	2503.244	ug/L	112.002
>	165	Ho-1			1601194.168	ug/L	1592460.464
	205	Tl	24.297269	2.695	676588.010	ug/L	3951.949
	208	Pb	9.713780	0.489	372828.445	ug/L	4580.000
	238	U	-0.001888	14.033	144.336	ug/L	234.671
>	45	Sc-2			492651.625	ug/L	454114.374
	53	Cr	70.567329	7.895	262543.831	ug/L	154333.029
	54	Fe	39.572784	12.763	97825.428	ug/L	62090.940
	61	Ni	-0.719948	74.272	1715.454	ug/L	1661.113
	63	Cu	0.453156	5.946	3137.376	ug/L	345.008
	67	Zn	12.192413	22.116	13557.261	ug/L	9047.975
>	72	Ge			755403.964	ug/L	739226.379
	77	Se	37.462654	12.199	15854.235	ug/L	8561.780
	98	Mo	0.241850	28.385	1925.051	ug/L	141.970
	109	Ag	0.017272	7.768	531.015	ug/L	268.339
>	115	In-2			1505240.760	ug/L	1483966.870
	114	Cd	2.410358	2.338	16828.522	ug/L	84.731
	121	Sb	48.143817	0.321	488820.988	ug/L	349.674
	137	Ba	1.080919	1.139	4592.784	ug/L	156.669
>	165	Ho-2			1601194.168	ug/L	1592460.464
	203	Tl	23.565407	2.752	278814.551	ug/L	1582.773
	206	Pb	9.814404	1.238	93908.648	ug/L	1161.392
	207	Pb	9.881677	1.493	79689.491	ug/L	995.045
>	45	Sc			492651.625	ug/L	454114.374
	47	Ti	0.178474	6.856	459.679	ug/L	297.006
	86	Sr	0.244804	11.134	1732.944	ug/L	716.656
	88	Sr	0.234358	7.078	14295.961	ug/L	5834.250
>	115	In			1505240.760	ug/L	1483966.870
	118	Sn	0.205069	111.378	2608.351	ug/L	855.034
	120	Sn	0.072385	9.120	1931.597	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	100.486
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	102.188
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	101.434
	Sb	123	
	Ba	135	
>	Ho-1	165	100.548
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	100.486
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	102.188
	Se	77	
	Mo	95	
	Ag	109	
>	In-2	115	101.434
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	100.548
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	46	100.486
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	101.434
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8170V
Sample Data/Time: Wednesday, April 27, 2005 21:25:59
Autosampler Position: 37
Dataset File: D:\Elandata\Dataset\042705M2\G8170V.031

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	-0.012691	86.489	5.667	ug/L	7.667
	10	B	-0.144578	49.261	23.667	ug/L	27.667
	23	Na	8.902065	1.743	54628.818	ug/L	16838.944
	24	Mg	10.422160	3.889	32097.682	ug/L	2106.176
	27	Al	3.831293	10.283	20332.040	ug/L	3413.777
	39	K	-4.638131	24.136	794326.411	ug/L	807733.282
	44	Ca	2.588365	202.193	64560.867	ug/L	61872.368
>	45	Sc-1			468805.348	ug/L	454114.374
	51	V	1.209508	22.662	-14045.476	ug/L	-26072.212
	52	Cr	-0.555267	14.858	22206.138	ug/L	26547.338
	55	Mn	0.079413	21.347	4378.716	ug/L	3082.361
	57	Fe	1.492419	43.307	10594.952	ug/L	9798.695
	59	Co	0.017849	4.929	451.678	ug/L	232.338
	60	Ni	0.079469	23.652	514.014	ug/L	301.006
	65	Cu	0.060363	14.773	343.341	ug/L	168.336
	66	Zn	0.116568	404.704	15809.908	ug/L	15137.170
>	72	Ge-1			720231.427	ug/L	739226.379
	75	As	1.273513	6.781	582.634	ug/L	-1945.453
	82	Se	0.283920	53.154	-54.122	ug/L	-120.854
	97	Mo	0.034447	23.356	174.689	ug/L	72.001
	107	Ag	-0.002155	126.602	243.671	ug/L	267.339
	111	Cd	-0.004431	3.979	26.334	ug/L	39.334
>	115	In-1			1517785.376	ug/L	1483966.870
	123	Sb	0.071279	17.081	831.052	ug/L	268.758
	135	Ba	0.206772	3.677	618.353	ug/L	112.002
>	165	Ho-1			1609162.761	ug/L	1592460.464
	205	Tl	0.285872	21.500	11962.543	ug/L	3951.949
	208	Pb	-0.004288	33.380	4464.984	ug/L	4680.000
	238	U	-0.003074	6.785	87.334	ug/L	234.671
>	45	Sc-2			468805.348	ug/L	454114.374
	53	Cr	-60.684476	8.121	94325.617	ug/L	154333.029
	54	Fe	1.913379	260.252	65459.182	ug/L	62090.940
	61	Ni	-0.380618	166.646	1674.782	ug/L	1661.113
	63	Cu	0.058922	13.458	680.890	ug/L	345.008
	67	Zn	-7.680975	22.571	7096.838	ug/L	9047.975
>	72	Ge			720231.427	ug/L	739226.379
	77	Se	-22.514746	2.132	4286.363	ug/L	8561.780
	98	Mo	0.044016	19.344	471.203	ug/L	141.970
	109	Ag	-0.003841	17.523	241.338	ug/L	288.339
>	115	In-2			1517785.376	ug/L	1483966.870
	114	Cd	-0.003764	53.525	60.297	ug/L	84.731
	121	Sb	0.074433	10.802	1118.388	ug/L	349.674
	137	Ba	0.206319	5.901	1017.713	ug/L	156.669
>	165	Ho-2			1609162.761	ug/L	1592460.464
	203	Tl	0.291942	19.201	5057.292	ug/L	1582.773
	206	Pb	-0.004348	93.716	1132.056	ug/L	1161.392
	207	Pb	-0.004036	73.039	973.376	ug/L	995.045
>	45	Sc			468805.348	ug/L	454114.374
	47	Ti	0.288936	73.324	530.016	ug/L	297.006
	86	Sr	0.083767	4.531	977.090	ug/L	716.856
	88	Sr	0.054630	15.603	7790.203	ug/L	5834.250
>	115	In			1517785.376	ug/L	1483966.870
	118	Sn	0.028512	5.722	1119.722	ug/L	855.034
	120	Sn	0.040983	18.284	1593.299	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	103.236
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	97.430
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	102.279
	Sb	123	
	Ba	136	
>	Ho-1	165	101.649
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	103.236
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	97.430
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	102.279
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	101.649
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	103.236
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	102.279
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G84EP
Sample Date/Time: Wednesday, April 27, 2005 21:31:11
Autosampler Position: 38
Dataset File: D:\Elandata\Dataset\042705M2\G84EP.032

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌜	9	Be	0.001164	2349.674	8.333	ug/L	7.667
|	10	B	0.037714	620.473	30.667	ug/L	27.667
|	23	Na	23.614398	3.430	116299.314	ug/L	18838.944
|	24	Mg	8.698887	4.683	27999.380	ug/L	2106.176
|	27	Al	4.481961	7.001	23920.931	ug/L	3413.777
|	39	K	-1.195115	291.522	849270.412	ug/L	807733.282
|	44	Ca	30.537093	14.213	74461.352	ug/L	61872.368
>	45	Sc-1			483766.664	ug/L	454114.374
|	51	V	-1.522925	41.039	-44574.084	ug/L	-26072.212
|	52	Cr	1.261191	19.987	40404.128	ug/L	26547.338
|	55	Mn	0.164380	13.763	5713.871	ug/L	3062.361
|	57	Fe	3.066041	38.593	11460.315	ug/L	9798.695
|	59	Co	0.007679	92.089	339.674	ug/L	232.338
|	60	Ni	0.096339	13.736	574.351	ug/L	301.006
|	65	Cu	0.127020	7.291	546.683	ug/L	168.336
⌊	66	Zn	0.550056	53.848	17049.672	ug/L	15137.170
>	72	Ge-1			764122.697	ug/L	739226.379
|	75	As	-0.209437	133.903	-2462.630	ug/L	-1945.453
⌊	82	Se	0.322494	95.597	-47.688	ug/L	-120.854
⌜	97	Mo	0.019000	15.312	128.335	ug/L	72.001
|	107	Ag	0.000070	2541.338	272.005	ug/L	267.339
|	111	Cd	-0.002318	61.383	32.667	ug/L	39.334
>	115	In-1			1504135.302	ug/L	1483966.870
⌊	123	Sb	0.063783	5.387	766.169	ug/L	268.758
⌜	135	Ba	0.339978	4.110	927.706	ug/L	112.002
>	165	Ho-1			1595857.330	ug/L	1592460.464
|	205	Tl	0.093162	74.336	6535.314	ug/L	3951.949
|	208	Pb	0.060627	3.680	6502.650	ug/L	4580.000
⌊	238	U	-0.002671	13.856	106.001	ug/L	234.671
>	45	Sc-2			483766.664	ug/L	454114.374
|	53	Cr	42.308869	33.405	220723.287	ug/L	154333.029
|	54	Fe	25.489268	25.760	85336.786	ug/L	62090.940
|	61	Ni	-0.616476	252.947	1692.451	ug/L	1661.113
|	63	Cu	0.121307	8.125	1093.053	ug/L	345.008
⌊	67	Zn	6.618102	86.028	11661.975	ug/L	9047.975
>	72	Ge			764122.697	ug/L	739226.379
⌊	77	Se	27.479134	17.268	14124.488	ug/L	8561.780
⌜	98	Mo	0.022590	28.748	310.162	ug/L	141.970
|	109	Ag	0.000931	834.282	292.673	ug/L	268.339
>	115	In-2			1504135.302	ug/L	1483966.870
|	114	Cd	-0.001668	79.313	74.355	ug/L	84.731
⌊	121	Sb	0.063671	11.927	1000.379	ug/L	349.674
⌜	137	Ba	0.344909	2.567	1567.435	ug/L	156.669
>	165	Ho-2			1595857.330	ug/L	1592460.464
|	203	Tl	0.096070	72.938	2702.632	ug/L	1582.773
|	206	Pb	0.046273	3.556	1599.772	ug/L	1161.392
⌊	207	Pb	0.053465	4.039	1421.418	ug/L	995.045
>	45	Sc			483766.664	ug/L	454114.374
|	47	Ti	0.148379	48.872	434.344	ug/L	297.006
|	86	Sr	0.129024	13.606	1257.615	ug/L	716.656
⌊	88	Sr	0.129611	9.581	10539.327	ug/L	5834.250
>	115	In			1504135.302	ug/L	1483966.870
|	118	Sn	0.042644	6.625	1229.399	ug/L	855.034
⌊	120	Sn	0.049862	10.715	1678.954	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte Mass	Int Std % Recovery	QC Std % Recovery
⌜	Be 9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	106.530
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	103.366
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	101.359
	Sb	128	
	Ba	135	
>	Ho-1	165	100.213
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	106.530
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	103.366
	Se	77	
	Mo	96	
	Ag	109	
>	In-2	115	101.359
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	100.213
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	106.530
	Tl	47	
	Sr	88	
	Sr	86	
>	In	115	101.359
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8L0KB
Sample Date/Time: Wednesday, April 27, 2005 21:36:23
Autosampler Position: 39
Dataset File: D:\Elandata\Dataset\042705M2\G8L0KB.033

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.012408	191.027	10.667	ug/L	7.667
	10	B	6.249499	14.831	250.671	ug/L	27.667
	23	Na	20.817785	3.453	106418.842	ug/L	18838.944
	24	Mg	98.505849	2.587	298209.329	ug/L	2106.176
	27	Al	23.872000	2.114	113353.746	ug/L	3413.777
	39	K	-4.220648	76.925	834512.213	ug/L	807733.282
	44	Ca	25.242887	22.020	73997.232	ug/L	61872.368
>	45	Sc-1			490533.956	ug/L	454114.374
	51	V	-0.259073	150.305	-31291.784	ug/L	-26072.212
	52	Cr	0.927617	13.034	37748.566	ug/L	26547.338
	55	Mn	0.295761	5.257	8059.687	ug/L	3062.361
	57	Fe	5.473679	20.869	12766.929	ug/L	9798.695
	59	Co	0.015919	16.513	448.345	ug/L	232.338
	60	Ni	0.190265	8.525	832.366	ug/L	301.006
	65	Cu	0.090777	2.104	448.345	ug/L	168.336
	66	Zn	0.621886	60.012	17413.114	ug/L	15137.170
>	72	Ge-1			753147.165	ug/L	739226.379
	75	As	0.463951	51.723	-999.221	ug/L	-1945.453
	82	Se	0.320014	67.953	-48.237	ug/L	-120.854
	97	Mo	0.042364	20.660	197.003	ug/L	72.001
	107	Ag	0.000964	160.156	285.006	ug/L	267.339
	111	Cd	-0.003122	45.215	30.334	ug/L	39.334
>	115	In-1			1510751.571	ug/L	1483966.870
	123	Sb	0.029494	13.467	502.682	ug/L	268.758
	135	Ba	0.133099	9.755	436.678	ug/L	112.002
>	165	Ho-1			1615439.172	ug/L	1592460.464
	205	Tl	0.028262	89.851	4795.884	ug/L	3951.949
	208	Pb	0.016848	29.785	5290.437	ug/L	4580.000
	238	U	-0.002249	11.441	128.002	ug/L	234.671
>	45	Sc-2			490533.956	ug/L	454114.374
	53	Cr	4.176843	134.618	172324.716	ug/L	154333.029
	54	Fe	22.778431	22.842	84500.938	ug/L	62090.940
	61	Ni	-1.743148	50.935	1583.770	ug/L	1661.113
	63	Cu	0.087501	3.645	904.038	ug/L	345.008
	67	Zn	0.220880	948.450	9841.164	ug/L	9047.975
>	72	Ge			753147.165	ug/L	739226.379
	77	Se	6.460951	34.229	9947.149	ug/L	8561.780
	98	Mo	0.053638	8.480	540.391	ug/L	141.970
	109	Ag	0.000894	316.763	300.340	ug/L	288.339
>	115	In-2			1510751.571	ug/L	1483966.870
	114	Cd	-0.003311	32.271	83.244	ug/L	84.731
	121	Sb	0.024397	19.336	804.019	ug/L	349.674
	137	Ba	0.127848	7.296	688.023	ug/L	156.669
>	165	Ho-2			1615439.172	ug/L	1592460.464
	203	Tl	0.036089	81.386	2020.832	ug/L	1582.773
	206	Pb	0.015157	47.601	1322.408	ug/L	1161.392
	207	Pb	0.018900	37.131	1161.392	ug/L	995.045
>	45	Sc			490533.956	ug/L	454114.374
	47	Ti	0.273925	27.166	539.682	ug/L	297.006
	86	Sr	0.049247	69.265	963.679	ug/L	716.656
	88	Sr	0.040016	18.266	7653.793	ug/L	5834.250
>	115	In			1510751.571	ug/L	1483966.870
	118	Sn	0.051128	6.102	1308.073	ug/L	855.034
	120	Sn	0.068463	17.746	1871.562	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	100.029
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.883
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	101.886
	Sb	123	
	Ba	135	
>	Ho-1	165	101.443
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	100.020
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.883
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	116	101.886
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	101.443
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	100.030
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	101.886
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8L0KC
Sample Date/Time: Wednesday, April 27, 2005 21:41:33
Autosampler Position: 40
Dataset File: D:\Elandata\Dataset\042705M2\G8L0KC.034

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	175.273658	2.052	34015.456	ug/L	7.667
	10	B	169.723062	4.886	6230.088	ug/L	27.667
	23	Na	740.635840	0.938	3193964.861	ug/L	18838.944
	24	Mg	3374.325988	2.134	10506784.084	ug/L	2106.176
	27	Al	9212.868874	1.718	43857121.501	ug/L	3413.777
	39	K	3284.188655	5.737	31146224.314	ug/L	807733.282
	44	Ca	5879.761773	2.607	1832869.908	ug/L	61872.368
>	45	Sc-1			508171.551	ug/L	454114.374
	51	V	176.313108	3.220	1998445.075	ug/L	-26072.212
	52	Cr	126.302966	1.583	1309426.643	ug/L	26547.338
	55	Mn	716.429184	2.425	11936538.030	ug/L	3062.361
	57	Fe	17649.382650	0.905	6187592.040	ug/L	9798.695
	59	Co	64.038901	3.442	824246.843	ug/L	232.338
	60	Ni	275.744671	2.987	782761.641	ug/L	301.006
	65	Cu	261.247858	3.014	794752.437	ug/L	168.336
	66	Zn	290.407214	1.673	535869.794	ug/L	15137.170
>	72	Ge-1			726190.073	ug/L	739226.379
	75	As	347.751725	3.009	707219.198	ug/L	-1945.453
	82	Se	134.294820	1.966	30250.864	ug/L	-120.854
	97	Mo	175.974327	3.480	498578.831	ug/L	72.001
	107	Ag	269.619891	1.565	3538064.558	ug/L	267.339
	111	Cd	259.297127	1.526	781149.000	ug/L	39.334
>	115	In-1			1458448.851	ug/L	1483966.870
	123	Sb	125.074213	1.195	938881.958	ug/L	268.758
	135	Ba	536.683700	1.007	1258173.253	ug/L	112.002
>	165	Ho-1			1559385.890	ug/L	1592460.464
	205	Tl	175.743794	2.603	4740507.157	ug/L	3951.949
	208	Pb	293.674132	1.874	10844468.916	ug/L	4580.000
	238	U	2.733816	2.177	129373.168	ug/L	234.671
>	45	Sc-2			508171.551	ug/L	454114.374
	53	Cr	91.648431	2.981	299943.096	ug/L	154333.029
	54	Fe	17845.309209	4.659	14266050.654	ug/L	62080.940
	61	Ni	275.998876	1.121	36097.579	ug/L	1661.113
	63	Cu	262.611183	1.517	1652986.064	ug/L	345.008
	67	Zn	276.880625	1.826	97389.203	ug/L	9047.975
>	72	Ge			726190.073	ug/L	739226.379
	77	Se	95.929782	5.653	25838.126	ug/L	8561.780
	98	Mo	177.982588	2.442	1268290.818	ug/L	141.970
	109	Ag	262.434268	2.009	3512055.610	ug/L	288.339
>	115	In-2			1458448.851	ug/L	1483966.870
	114	Cd	261.570421	1.225	1780461.815	ug/L	84.731
	121	Sb	125.165697	1.033	1230701.586	ug/L	349.674
	137	Ba	552.868106	3.735	2209051.962	ug/L	156.669
>	165	Ho-2			1559385.890	ug/L	1592460.464
	203	Tl	170.203649	2.131	1951373.194	ug/L	1582.773
	206	Pb	295.061096	2.862	2716003.116	ug/L	1161.392
	207	Pb	309.324760	3.621	2399126.990	ug/L	995.045
>	45	Sc			508171.551	ug/L	454114.374
	47	Ti	483.984976	1.766	402415.502	ug/L	297.006
	86	Sr	147.240771	4.027	594358.409	ug/L	716.656
	88	Sr	150.666138	2.020	5293811.782	ug/L	5834.250
>	115	In			1458448.851	ug/L	1483966.870
	118	Sn	124.886193	0.823	1033171.144	ug/L	855.034
	120	Sn	126.262829	2.548	1373965.307	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	111.904
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	96.236
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	96.289
	Sb	123	
	Ba	135	
>	Ho-1	165	97.923
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	111.904
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	96.236
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	96.289
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	97.923
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	111.904
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	96.280
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Wednesday, April 27, 2005 21:46:41
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 1.035

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	195.083176	3.724	33736.818	ug/L	7.667
	10	B	189.838405	5.694	6181.401	ug/L	27.667
	23	Na	1868.191568	3.067	7150230.239	ug/L	18838.944
	24	Mg	946.144024	4.291	2626789.774	ug/L	2106.176
	27	Al	1952.892069	1.124	8287701.438	ug/L	3413.777
	39	K	1919.764096	1.705	16568877.511	ug/L	807733.282
	44	Ca	1036.253108	3.371	334077.518	ug/L	61872.368
>	45	Sc-1			452883.208	ug/L	454114.374
	51	V	191.856691	1.561	1938534.024	ug/L	-26072.212
	52	Cr	194.629034	2.177	1783063.993	ug/L	26547.338
	55	Mn	194.163919	4.009	2885258.561	ug/L	3062.361
	57	Fe	1941.083333	3.450	615006.943	ug/L	9798.695
	59	Co	191.839062	3.836	2197786.450	ug/L	232.338
	60	Ni	198.138518	4.361	488581.610	ug/L	301.006
	65	Cu	196.968436	4.462	539539.750	ug/L	168.336
	66	Zn	193.285194	0.525	322948.564	ug/L	15137.170
>	72	Ge-1			724499.242	ug/L	739226.379
	75	As	196.318640	4.258	401712.180	ug/L	-1945.453
	82	Se	196.901894	1.387	44303.300	ug/L	-120.854
	97	Mo	197.251219	1.274	560879.572	ug/L	72.001
	107	Ag	48.790780	2.267	645251.576	ug/L	267.339
	111	Cd	193.862947	0.646	587708.945	ug/L	39.334
>	115	In-1			1468771.972	ug/L	1483966.670
	123	Sb	197.019577	1.655	1489407.800	ug/L	268.758
	135	Ba	203.779884	1.243	483960.875	ug/L	112.002
>	165	Ho-1			1579635.152	ug/L	1592460.464
	205	Tl	190.849265	3.325	5213955.761	ug/L	3951.949
	208	Pb	193.177596	1.590	7227334.360	ug/L	4580.000
	238	U	192.787379	2.621	9226134.173	ug/L	234.671
>	45	Sc-2			452883.208	ug/L	454114.374
	53	Cr	157.546418	10.638	348765.805	ug/L	154333.029
	54	Fe	2008.881827	2.758	1486344.129	ug/L	62090.940
	61	Ni	196.408938	2.457	23369.334	ug/L	1681.113
	63	Cu	196.277907	1.720	1101350.929	ug/L	345.008
	67	Zn	192.308345	4.004	63088.020	ug/L	9047.975
>	72	Ge			724499.242	ug/L	739226.379
	77	Se	173.663475	3.954	40012.716	ug/L	8561.760
	98	Mo	196.871769	2.843	1413160.694	ug/L	141.970
	109	Ag	47.714623	2.292	643495.710	ug/L	288.339
>	115	In-2			1468771.972	ug/L	1483966.670
	114	Cd	193.664213	2.965	1312475.748	ug/L	84.731
	121	Sb	197.822233	2.026	1958897.252	ug/L	349.674
	137	Ba	209.182866	2.089	846719.812	ug/L	156.669
>	165	Ho-2			1579635.152	ug/L	1592460.464
	203	Tl	190.021160	3.826	2205875.753	ug/L	1582.773
	206	Pb	193.459686	3.168	1803762.317	ug/L	1161.392
	207	Pb	199.494002	2.090	1567752.799	ug/L	995.045
>	45	Sc			452883.208	ug/L	454114.374
	47	Ti	199.217731	2.000	147801.840	ug/L	297.008
	86	Sr	190.545826	3.598	685429.060	ug/L	716.656
	88	Sr	193.151926	2.217	6047151.872	ug/L	5834.250
>	115	In			1468771.972	ug/L	1483966.670
	118	Sn	199.503070	0.905	1661763.876	ug/L	855.094
	120	Sn	202.626900	2.425	2220375.236	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		97.542

	B	10		94.518
	Na	23		93.410
	Mg	24		94.814
	Al	27		97.530
	K	39		96.868
	Ca	44		103.525
>	Sc-1	45	99.729	
	V	51		96.828
	Cr	52		97.296
	Mn	55		97.077
	Fe	57		97.864
	Co	59		99.820
	Ni	60		99.869
	Cu	65		99.494
	Zn	66		96.943
>	Ge-1	72	99.008	
	As	75		99.199
	Se	82		99.461
	Mo	97		99.626
	Ag	107		97.582
	Cd	111		96.826
>	In-1	115	99.976	
	Sb	123		96.510
	Ba	138		101.890
>	Ho-1	165	99.196	
	Tl	205		96.425
	Pb	208		96.699
	U	238		96.394
>	Sc-2	45	99.729	
	Cr	53		78.773
	Fe	54		100.444
	Ni	61		99.394
	Cu	63		99.139
	Zn	67		96.163
>	Ge	72	99.008	
	Se	77		99.832
	Mo	98		99.436
	Ag	109		95.429
>	In-2	115	99.976	
	Cd	114		99.832
	Sb	121		99.911
	Ba	137		104.591
>	Ho-2	165	99.196	
	Tl	203		95.011
	Pb	206		96.725
	Pb	207		96.747
>	Sc	45	99.729	
	Ti	47		99.899
	Sr	86		99.273
	Sr	88		96.676
>	In	115	99.976	
	Sn	118		99.782
	Sn	120		101.313

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cr	53	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Wednesday, April 27, 2005 21:52:51
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 2.036

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	-0.008246	102.400	6.000	ug/L	7.667
	10	B	3.623037	24.245	144.336	ug/L	27.667
	23	Na	-0.050294	160.252	18397.359	ug/L	18836.944
	24	Mg	0.059737	111.015	2240.865	ug/L	2106.176
	27	Al	0.161198	15.345	4045.614	ug/L	3413.777
	39	K	-6.802037	25.922	749720.918	ug/L	807733.262
	44	Ca	-4.993245	161.746	59727.559	ug/L	61872.368
>	45	Sc-1			448070.962	ug/L	454114.374
	51	V	0.531629	50.780	-20326.657	ug/L	-26072.212
	52	Cr	-0.778370	27.914	19219.510	ug/L	26547.338
	55	Mn	0.022561	29.168	3352.093	ug/L	3062.361
	57	Fe	-3.784735	23.078	8497.813	ug/L	9798.695
	59	Co	0.009426	52.805	336.674	ug/L	232.338
	60	Ni	-0.006391	99.669	281.339	ug/L	301.006
	65	Cu	0.023788	15.076	230.004	ug/L	168.336
	66	Zn	-0.198254	45.351	14621.959	ug/L	15137.170
>	72	Ge-1			718154.348	ug/L	739226.379
	75	As	0.996619	30.390	120.447	ug/L	-1945.453
	82	Se	0.320686	67.085	-45.706	ug/L	-120.854
	97	Mo	0.089212	35.593	326.674	ug/L	72.001
	107	Ag	0.007050	28.022	359.675	ug/L	267.339
	111	Cd	0.010675	6.033	71.668	ug/L	39.334
>	115	In-1			1476030.759	ug/L	1483966.870
	123	Sb	0.115501	26.194	1144.987	ug/L	268.758
	135	Ba	-0.006421	75.523	96.668	ug/L	112.002
>	165	Ho-1			1593960.540	ug/L	1592460.464
	205	Tl	0.316541	46.709	12645.437	ug/L	3951.949
	208	Pb	-0.008118	32.002	4277.980	ug/L	4580.000
	238	U	0.006502	16.032	549.016	ug/L	234.671
>	45	Sc-2			448070.962	ug/L	454114.374
	53	Cr	-20.837975	64.133	126602.043	ug/L	154333.029
	54	Fe	-3.542899	94.613	58754.296	ug/L	62090.940
	61	Ni	-0.703196	141.473	1561.434	ug/L	1661.113
	63	Cu	0.032569	13.510	521.348	ug/L	345.008
	67	Zn	0.929479	441.186	9174.394	ug/L	9047.975
>	72	Ge			718154.348	ug/L	739226.379
	77	Se	-27.864763	8.112	3287.666	ug/L	8561.780
	98	Mo	0.111411	24.424	945.457	ug/L	141.970
	109	Ag	0.014396	26.296	482.013	ug/L	288.339
>	115	In-2			1476030.759	ug/L	1483966.870
	114	Cd	0.008883	3.891	143.308	ug/L	84.731
	121	Sb	0.115425	26.133	1496.762	ug/L	349.674
	137	Ba	0.009098	12.533	194.003	ug/L	156.669
>	165	Ho-2			1593960.540	ug/L	1592460.464
	203	Tl	0.310157	46.342	5215.067	ug/L	1582.773
	206	Pb	-0.012304	29.207	1046.716	ug/L	1161.392
	207	Pb	-0.003606	166.691	967.376	ug/L	995.045
>	45	Sc			448070.962	ug/L	454114.374
	47	Ti	0.000204	12349.335	293.006	ug/L	297.006
	86	Sr	-0.000888	1800.707	703.352	ug/L	716.656
	88	Sr	0.001753	122.369	5810.239	ug/L	5834.250
>	115	In			1476030.759	ug/L	1483966.870
	118	Sn	0.064766	19.912	1392.749	ug/L	855.034
	120	Sn	0.071980	37.414	1890.629	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		-0.825

	B	10		382.304
	Na	23		-0.050
	Mg	24		0.000
	Al	27		0.101
	K	39		-5.802
	Ca	44		-4.993
>	Sc-1	45	98.899	
	V	51		83.163
	Cr	52		-77.837
	Mn	55		2.286
	Fe	57		-3.785
	Co	59		0.943
	Ni	60		-0.839
	Cu	65		2.379
	Zn	66		-19.825
>	Ge-1	72	97.149	
	As	75		99.582
	Se	82		32.089
	Mo	97		8.921
	Ag	107		0.795
	Cd	111		1.068
>	In-1	115	99.486	
	Sb	123		11.589
	Ba	135		-0.642
>	Ho-1	165	100.094	
	Tl	205		31.564
	Pb	208		-0.812
	U	238		0.560
>	Sc-2	45	98.899	
	Cr	53		-2083.798
	Fe	54		-3.543
	Ni	61		-70.320
	Cu	63		3.257
	Zn	67		92.948
>	Ge	72	97.149	
	Se	77		-2786.478
	Mo	98		11.141
	Ag	109		1.436
>	In-2	115	99.486	
	Cd	114		0.886
	Sb	121		11.542
	Ba	137		0.910
>	Ho-2	165	100.094	
	Tl	208		31.019
	Pb	206		-1.230
	Pb	207		-0.381
>	Sc	45	98.569	
	Ti	47		0.020
	Sr	86		-0.069
	Sr	88		0.175
>	In	115	99.486	
	Sn	118		6.477
	Sn	120		7.196

QC Out Of Limits

Analyte	Mass	Out of Limits Message
B	10	Q
Cr	53	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8L0KC ODD
Sample Date/Time: Wednesday, April 27, 2005 21:58:58
Autosampler Position: 41
Dataset File: D:\Elandata\Dataset\042705M2\G8L0KC ODD.037

Sample Result Summary

Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
9	Be	0.000326	951.903	7.667	ug/L	7.667
10	B	195.668890	2.230	6368.817	ug/L	27.667
23	Na	8.264638	7.093	50074.474	ug/L	18838.944
24	Mg	8.663007	3.982	25974.856	ug/L	2106.176
27	Al	3.875285	0.876	19755.166	ug/L	3413.777
39	K	-4.870368	52.148	761676.015	ug/L	807733.282
44	Ca	34.616007	9.511	70467.453	ug/L	61872.368
> 45	Sc-1			450755.756	ug/L	454114.374
51	V	0.222081	74.465	-23604.855	ug/L	-26072.212
52	Cr	-0.022352	591.875	26161.255	ug/L	26547.338
55	Mn	0.175584	2.965	5633.500	ug/L	3062.361
57	Fe	1.729762	65.195	10258.438	ug/L	9798.695
59	Co	0.026096	22.294	527.682	ug/L	232.338
60	Ni	0.142804	10.066	648.688	ug/L	301.008
65	Cu	0.250041	8.747	841.033	ug/L	168.336
66	Zn	1.996805	13.691	18185.083	ug/L	15137.170
> 72	Ge-1			734727.690	ug/L	739226.379
75	As	0.854661	13.941	-171.697	ug/L	-1945.453
82	Se	0.392737	31.734	-30.496	ug/L	-120.854
97	Mo	0.027139	28.321	149.336	ug/L	72.001
107	Ag	0.822866	2.055	11208.842	ug/L	267.339
111	Cd	0.128352	3.662	431.011	ug/L	39.334
> 115	In-1			1477746.490	ug/L	1483966.870
123	Sb	0.080765	11.816	729.823	ug/L	268.758
135	Ba	0.078154	3.248	298.673	ug/L	112.002
> 165	Ho-1			1589698.478	ug/L	1592460.464
205	Tl	0.134691	49.624	7666.557	ug/L	3951.949
208	Pb	0.019641	34.711	5308.104	ug/L	4580.000
238	U	187.058241	1.508	9008953.779	ug/L	234.671
> 45	Sc-2			450755.756	ug/L	454114.374
53	Cr	-24.616425	36.827	122982.010	ug/L	154333.029
54	Fe	20.630773	17.012	76159.776	ug/L	62090.940
61	Ni	-0.862981	128.794	1585.771	ug/L	1661.113
63	Cu	0.177394	9.525	1332.409	ug/L	345.008
67	Zn	0.186142	1260.116	9039.631	ug/L	9047.975
> 72	Ge			734727.690	ug/L	739226.379
77	Se	-25.183401	15.964	3858.608	ug/L	8561.780
98	Mo	0.034607	12.123	391.312	ug/L	141.970
109	Ag	0.039236	8.691	819.365	ug/L	288.339
> 115	In-2			1477746.490	ug/L	1483966.870
114	Cd	0.262879	31.543	1875.838	ug/L	84.731
121	Sb	0.066913	12.394	1014.713	ug/L	349.674
137	Ba	0.074775	8.137	460.679	ug/L	156.669
> 165	Ho-2			1589698.478	ug/L	1592460.464
203	Tl	0.133605	42.851	3147.390	ug/L	1582.773
206	Pb	0.022893	28.421	1373.747	ug/L	1161.392
207	Pb	0.018268	57.997	1144.391	ug/L	995.045
> 45	Sc			450755.756	ug/L	454114.374
47	Ti	198.823004	1.603	146582.671	ug/L	297.006
86	Sr	0.078773	7.738	992.840	ug/L	716.656
88	Sr	0.064943	7.648	7500.711	ug/L	5834.250
> 115	In			1477746.490	ug/L	1483966.870
118	Sn	200.955306	2.950	1684064.655	ug/L	855.034
120	Sn	196.668414	2.611	2168596.146	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	99.360
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	99.391
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.581
	Sb	123	
	Ba	136	
>	Ho-1	165	99.827
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	99.360
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	99.391
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	99.581
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	99.827
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	99.360
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	99.581
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G7NWL
Sample Date/Time: Wednesday, April 27, 2005 22:04:04
Autosampler Position: 42
Dataset File: D:\Elandata\Dataset\042705M2\G7NWL.038

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	1.386812	5.405	291.006	ug/L	7.667
	10	B	6.538397	8.810	283.006	ug/L	27.667
	23	Na	41.372037	4.106	207868.780	ug/L	18836.944
	24	Mg	9427.982160	3.881	30767775.473	ug/L	2106.176
	27	Al	22318.993865	5.305	111398735.225	ug/L	3413.777
	39	K	2348.206364	3.286	23623806.606	ug/L	807733.282
	44	Ca	18247.337007	2.332	5714435.250	ug/L	61872.368
>	45	Sc-1			532489.503	ug/L	454114.374
	51	V	37.866893	5.535	427294.739	ug/L	-26072.212
	52	Cr	33.584360	6.549	387649.571	ug/L	26547.338
	55	Mn	1215.876968	4.846	21236840.313	ug/L	3062.361
	57	Fe	37248.551839	5.371	13675476.389	ug/L	9798.695
	59	Co	27.244887	4.566	367868.808	ug/L	232.338
	60	Ni	31.822171	4.541	92816.218	ug/L	301.006
	65	Cu	24.205306	3.166	77385.758	ug/L	168.336
	66	Zn	93.930128	4.594	193738.223	ug/L	15137.170
>	72	Ge-1			747264.159	ug/L	739226.379
	75	As	6.450720	6.740	11577.775	ug/L	-1945.453
	82	Se	1.009635	7.110	112.751	ug/L	-120.854
	97	Mo	0.833171	6.987	2423.897	ug/L	72.001
	107	Ag	0.089115	3.757	1432.086	ug/L	267.339
	111	Cd	0.162725	0.926	529.015	ug/L	39.334
>	115	In-1			1458439.963	ug/L	1483966.870
	123	Sb	0.195486	7.077	1731.901	ug/L	268.758
	135	Ba	218.803261	7.675	517000.001	ug/L	112.002
>	165	Ho-1			1574326.976	ug/L	1592460.464
	205	Tl	0.358566	14.220	13656.384	ug/L	3951.949
	208	Pb	42.978909	7.571	1605578.561	ug/L	4580.000
	238	U	1.200708	11.067	57471.054	ug/L	234.671
>	45	Sc-2			532489.503	ug/L	454114.374
	53	Cr	7.454100	135.189	191671.409	ug/L	154333.029
	54	Fe	36832.025759	0.839	30785706.747	ug/L	62090.940
	61	Ni	33.558691	5.151	6312.126	ug/L	1661.113
	63	Cu	24.262263	6.886	160546.180	ug/L	345.008
	67	Zn	91.410481	2.211	40637.391	ug/L	9047.975
>	72	Ge			747264.159	ug/L	739226.379
	77	Se	-19.172095	10.870	5054.461	ug/L	8561.780
	98	Mo	0.835572	5.729	6097.485	ug/L	141.970
	109	Ag	0.050052	3.919	953.375	ug/L	288.339
>	115	In-2			1458439.963	ug/L	1483966.870
	114	Cd	0.156805	7.162	1152.682	ug/L	84.731
	121	Sb	0.193615	8.759	2246.200	ug/L	349.674
	137	Ba	221.036907	8.250	891446.759	ug/L	156.669
>	165	Ho-2			1574326.976	ug/L	1592460.464
	203	Tl	0.358416	17.007	5705.873	ug/L	1582.773
	206	Pb	43.738440	7.873	407289.073	ug/L	1161.392
	207	Pb	44.283256	7.072	347530.208	ug/L	995.045
>	45	Sc			532489.503	ug/L	454114.374
	47	Ti	286.902487	4.782	250245.699	ug/L	297.006
	86	Sr	16.975763	4.208	72607.121	ug/L	716.656
	88	Sr	17.212015	4.391	640159.180	ug/L	5834.250
>	115	In			1458439.963	ug/L	1483966.870
	118	Sn	1.842730	7.568	16082.249	ug/L	855.034
	120	Sn	1.898887	8.867	21753.192	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	117.259
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.067
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.280
	Sb	123	
	Ba	135	
>	Ho-1	165	98.861
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	117.259
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.067
	Se	77	
	Mo	95	
	Ag	109	
>	In-2	115	98.280
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	98.861
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	117.259
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	98.280
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G7NW8
Sample Date/Time: Wednesday, April 27, 2005 22:09:11
Autosampler Position: 43
Dataset File: D:\Elandata\Dataset\042705M2\G7NW8.039

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌜	9	Be	1.292762	7.597	248.005	ug/L	7.667
|	10	B	3.941906	9.616	167.336	ug/L	27.667
|	23	Na	64.596434	2.353	366561.121	ug/L	18838.944
|	24	Mg	10062.295627	3.059	29948287.023	ug/L	2106.176
|	27	Al	18977.733642	2.215	66362603.779	ug/L	3413.777
|	39	K	1978.430495	3.640	18285709.964	ug/L	807733.282
|	44	Ca	253322.282038	5.143	71488094.675	ug/L	61872.368
|>	45	Sc-1			485764.394	ug/L	454114.374
|	51	V	27.221434	2.056	271401.853	ug/L	-26072.212
|	52	Cr	25.922288	2.106	279508.762	ug/L	26547.338
|	55	Mn	782.578414	2.864	12463548.540	ug/L	3082.361
|	57	Fe	29036.452064	1.112	9723048.286	ug/L	9796.595
|	59	Co	16.121406	3.596	198558.492	ug/L	232.338
|	60	Ni	27.953980	2.847	74226.185	ug/L	301.006
|	65	Cu	22.421498	2.263	65383.639	ug/L	168.336
⌊	66	Zn	139.676512	4.307	254784.334	ug/L	15137.170
⌈>	72	Ge-1			724498.270	ug/L	739226.379
|	75	As	5.218348	13.554	8681.880	ug/L	-1945.453
⌊	82	Se	0.472986	43.140	-10.931	ug/L	-120.864
⌈	97	Mo	0.503818	3.187	1435.086	ug/L	72.001
|	107	Ag	0.084910	9.441	944.707	ug/L	267.339
|	111	Cd	0.113132	4.963	364.675	ug/L	39.334
|>	115	In-1			1402178.473	ug/L	1483966.870
⌊	123	Sb	0.103932	7.149	1003.158	ug/L	268.758
⌈	135	Ba	142.932627	1.492	327292.182	ug/L	112.002
|>	165	Ho-1			1522739.764	ug/L	1592460.464
|	205	Tl	0.230883	15.362	9850.510	ug/L	3951.949
|	208	Pb	20.153297	1.352	730824.984	ug/L	4580.000
⌊	238	U	0.732749	2.078	34031.166	ug/L	234.671
⌈>	45	Sc-2			485764.394	ug/L	454114.374
|	53	Cr	-8.366936	126.523	163939.574	ug/L	154333.029
|	54	Fe	29845.825855	2.444	22766414.483	ug/L	62090.940
|	61	Ni	63.221549	6.847	9274.442	ug/L	1661.113
|	63	Cu	22.150556	0.937	133845.901	ug/L	345.008
⌊	67	Zn	127.680188	3.597	48186.647	ug/L	9047.975
⌈>	72	Ge			724498.270	ug/L	739226.379
⌊	77	Se	-5.527219	64.722	7396.284	ug/L	8561.780
⌈	98	Mo	0.493474	1.943	3514.957	ug/L	141.970
|	109	Ag	0.021104	6.194	544.016	ug/L	288.339
|>	115	In-2			1402178.473	ug/L	1483966.870
|	114	Cd	0.102059	9.804	741.377	ug/L	84.731
⌊	121	Sb	0.097297	4.850	1249.400	ug/L	349.674
⌈	137	Ba	145.210140	2.091	566707.789	ug/L	156.669
|>	165	Ho-2			1522739.764	ug/L	1592460.464
|	203	Tl	0.232072	11.775	4107.633	ug/L	1582.773
|	206	Pb	20.395103	3.694	184389.418	ug/L	1181.392
⌊	207	Pb	20.501276	2.578	156171.325	ug/L	995.045
⌈>	45	Sc			485764.394	ug/L	454114.374
|	47	Ti	280.117410	1.374	222800.577	ug/L	297.006
|	86	Sr	361.118607	0.443	1392909.844	ug/L	716.656
⌊	88	Sr	367.227050	0.846	12327061.233	ug/L	5834.250
⌈>	115	In			1402178.473	ug/L	1483966.870
|	118	Sn	0.734647	4.233	6647.615	ug/L	855.034
⌊	120	Sn	0.728420	4.452	8634.442	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	106.970
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	98.006
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	94.469
	Sb	123	
	Ba	136	
>	Ho-1	165	95.822
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	106.970
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	98.006
	Se	77	
	Mo	96	
	Ag	109	
>	In-2	115	94.469
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	95.822
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	106.970
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	94.469
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G7NW8S
Sample Date/Time: Wednesday, April 27, 2005 22:14:18
Autosampler Position: 44
Dataset File: D:\Elandata\Dataset\042705M2\G7NW8S.040

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	6.127250	1.588	1360.745	ug/L	7.667
	10	B	145.673311	1.857	6086.360	ug/L	27.667
	23	Na	4074.089906	1.792	19846884.811	ug/L	18838.944
	24	Mg	15348.295178	1.520	54281531.042	ug/L	2106.176
	27	Al	38192.875880	1.514	195823571.437	ug/L	3413.777
	39	K	7120.660362	2.941	75574832.493	ug/L	807733.282
	44	Ca	20319.780031	2.344	6893550.156	ug/L	61872.368
>	45	Sc-1			577403.226	ug/L	454114.374
	51	V	83.641583	3.834	1060920.246	ug/L	-26072.212
	52	Cr	58.315552	1.591	705379.743	ug/L	26547.338
	55	Mn	954.806279	2.786	18082179.750	ug/L	3062.361
	57	Fe	42882.677873	1.874	17068750.829	ug/L	9798.695
	59	Co	63.640163	2.639	931249.745	ug/L	232.338
	60	Ni	82.462969	2.322	259444.441	ug/L	301.006
	65	Cu	53.584235	1.302	185386.187	ug/L	168.336
	66	Zn	191.703406	2.697	406510.377	ug/L	15137.170
>	72	Ge-1			760707.452	ug/L	739226.379
	75	As	219.093200	5.207	466323.911	ug/L	-1945.453
	82	Se	197.866328	5.553	46758.318	ug/L	-120.854
	97	Mo	103.666724	5.719	292767.720	ug/L	72.001
	107	Ag	5.861916	6.735	77201.103	ug/L	267.339
	111	Cd	5.719964	4.816	17279.623	ug/L	39.334
>	115	In-1			1459803.359	ug/L	1483966.870
	123	Sb	19.321825	8.635	145257.319	ug/L	268.758
	135	Ba	466.852200	3.277	1095687.830	ug/L	112.002
>	165	Ho-1			1560997.807	ug/L	1592460.464
	206	Tl	192.833163	4.118	5208079.729	ug/L	3951.949
	208	Pb	77.360706	4.178	2863442.484	ug/L	4580.000
	238	U	202.919263	5.121	9800937.352	ug/L	234.671
>	45	Sc-2			577403.226	ug/L	454114.374
	53	Cr	30.344585	33.643	243726.388	ug/L	154333.029
	54	Fe	42080.554518	1.790	38118451.679	ug/L	62090.940
	61	Ni	82.929771	2.659	13796.801	ug/L	1661.113
	63	Cu	53.509784	1.429	383293.661	ug/L	345.008
	67	Zn	189.402691	3.648	79371.499	ug/L	9047.975
>	72	Ge			760707.452	ug/L	739226.379
	77	Se	149.558518	2.720	37401.859	ug/L	8561.780
	98	Mo	104.935765	7.239	748078.272	ug/L	141.970
	109	Ag	4.866699	6.083	65423.951	ug/L	288.339
>	115	In-2			1459803.359	ug/L	1483966.870
	114	Cd	6.002886	6.380	40489.132	ug/L	84.731
	121	Sb	19.416201	6.780	191216.967	ug/L	349.674
	137	Ba	461.739629	2.640	1847442.784	ug/L	156.669
>	165	Ho-2			1560997.807	ug/L	1592460.464
	203	Tl	193.852916	3.304	2225185.467	ug/L	1582.773
	206	Pb	79.393178	6.730	732679.154	ug/L	1161.392
	207	Pb	81.336201	3.399	632403.212	ug/L	995.045
>	45	Sc			577403.226	ug/L	454114.374
	47	Ti	499.942642	3.129	472408.516	ug/L	297.006
	86	Sr	102.649113	2.786	471336.302	ug/L	716.656
	88	Sr	105.900729	3.933	4197943.808	ug/L	5834.250
>	115	In			1459803.359	ug/L	1483966.870
	118	Sn	200.049321	5.751	1654889.862	ug/L	855.034
	120	Sn	204.899802	6.078	2227950.665	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	127.149
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	102.906
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.372
	Sb	123	
	Ba	136	
>	Ho-1	165	98.024
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	127.149
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	102.906
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.372
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	166	98.024
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	127.149
	Tl	47	
	Sr	88	
	Sr	89	
>	In	115	98.372
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G7NW8D
Sample Date/Time: Wednesday, April 27, 2005 22:19:25
Autosampler Position: 45
Dataset File: D:\Elandata\Dataset\042705M2\G7NW8D.041

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	6.965975	6.861	1329.409	ug/L	7.667
	10	B	150.483220	4.939	6299.121	ug/L	27.667
	23	Na	4109.497891	4.264	20085776.698	ug/L	18838.944
	24	Mg	14272.924283	3.134	50631374.088	ug/L	2108.176
	27	Al	36204.119984	6.704	196433144.914	ug/L	3413.777
	39	K	7108.341509	4.660	75654617.216	ug/L	807733.282
	44	Ca	18193.723326	4.358	6193582.210	ug/L	61872.368
>	45	Sc-1			578827.890	ug/L	454114.374
	51	V	81.215116	2.330	1031126.332	ug/L	-26072.212
	52	Cr	56.872906	5.594	690515.218	ug/L	26547.338
	55	Mn	1050.441177	6.295	19940384.625	ug/L	3062.361
	57	Fe	45351.606368	3.572	18090062.666	ug/L	9798.695
	59	Co	65.926536	6.731	967094.742	ug/L	232.338
	60	Ni	82.876536	5.305	261518.963	ug/L	301.006
	65	Cu	52.888702	4.387	183522.971	ug/L	168.336
	66	Zn	168.638624	7.047	362716.323	ug/L	15137.170
>	72	Ge-1			740638.749	ug/L	739226.379
	75	As	225.454164	7.680	457042.917	ug/L	-1945.453
	82	Se	196.788236	8.071	45717.058	ug/L	-120.654
	97	Mo	104.483340	6.364	296968.723	ug/L	72.001
	107	Ag	5.885887	7.791	78007.608	ug/L	267.339
	111	Cd	5.761772	6.054	17481.886	ug/L	39.334
>	115	In-1			1468060.303	ug/L	1483966.870
	123	Sb	19.118627	8.808	144693.270	ug/L	268.758
	135	Ba	460.048047	8.378	1066946.640	ug/L	112.002
>	165	Ho-1			1542921.788	ug/L	1592460.464
	205	Tl	197.116063	6.110	5260209.565	ug/L	3951.949
	208	Pb	80.079181	6.784	2928742.898	ug/L	4580.000
	238	U	207.792855	7.434	9712506.872	ug/L	234.671
>	45	Sc-2			578827.890	ug/L	454114.374
	53	Cr	35.712780	15.311	253114.231	ug/L	154333.029
	54	Fe	43936.680797	4.317	39905687.356	ug/L	62090.940
	61	Ni	86.366677	4.353	14185.862	ug/L	1661.113
	63	Cu	83.613727	5.889	384206.169	ug/L	345.008
	67	Zn	168.139280	3.176	71961.978	ug/L	9047.975
>	72	Ge			740638.749	ug/L	739226.379
	77	Se	165.763949	3.255	39426.905	ug/L	8561.780
	98	Mo	104.035472	9.075	746423.958	ug/L	141.970
	109	Ag	4.931499	8.396	66723.794	ug/L	288.339
>	115	In-2			1468060.303	ug/L	1483966.870
	114	Cd	6.020203	5.654	40865.949	ug/L	84.731
	121	Sb	19.264125	6.881	190952.050	ug/L	349.674
	137	Ba	462.303875	6.855	1827612.541	ug/L	158.669
>	165	Ho-2			1542921.788	ug/L	1592460.464
	203	Tl	193.707580	10.278	2196569.517	ug/L	1582.773
	206	Pb	81.111733	9.075	739405.563	ug/L	1161.392
	207	Pb	83.441222	8.346	841061.906	ug/L	995.045
>	45	Sc			578827.890	ug/L	454114.374
	47	Ti	526.909654	2.895	499082.904	ug/L	297.006
	86	Sr	101.228142	5.353	485890.113	ug/L	716.656
	88	Sr	101.775632	6.968	4078805.208	ug/L	5834.250
>	115	In			1468060.303	ug/L	1483966.870
	118	Sn	203.447112	8.301	1893551.899	ug/L	855.034
	120	Sn	204.443842	7.340	2239361.805	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	127.463
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	100.191
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.928
	Sb	123	
	Ba	135	
>	Ho-1	165	98.889
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	127.463
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	100.191
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.928
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	98.889
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	127.463
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	98.928
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G7NW8V
Sample Date/Time: Wednesday, April 27, 2005 22:24:33
Autosampler Position: 46
Dataset File: D:\Elandata\Dataset\042705M2\G7NW8V.042

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.307868	15.350	61.557	ug/L	7.667
	10	B	6.585039	17.858	212.670	ug/L	27.667
	23	Na	22.695872	2.088	106567.441	ug/L	18838.944
	24	Mg	2327.972817	2.134	6554997.995	ug/L	2106.176
	27	Al	4397.061588	1.114	18928483.434	ug/L	3413.777
	39	K	443.144533	2.010	4507710.254	ug/L	807733.282
	44	Ca	54234.002193	1.340	14527587.902	ug/L	81872.368
>	45	Sc-1			459465.268	ug/L	454114.374
	51	V	7.966560	4.542	56448.231	ug/L	-26072.212
	52	Cr	4.547314	3.036	68507.691	ug/L	26547.338
	55	Mn	172.944931	1.363	2607531.933	ug/L	3062.361
	57	Fe	6217.923421	8.135	1976206.218	ug/L	9798.695
	59	Co	3.422505	2.540	40051.141	ug/L	232.338
	60	Ni	6.232086	4.515	15879.316	ug/L	301.006
	65	Cu	4.943460	4.400	13764.438	ug/L	168.336
	66	Zn	30.496368	1.928	64582.634	ug/L	15137.170
>	72	Ge-1			701991.646	ug/L	739226.379
	75	As	2.534731	2.089	3152.812	ug/L	-1945.453
	82	Se	0.674334	6.666	32.663	ug/L	-120.854
	97	Mo	0.138510	18.925	468.346	ug/L	72.001
	107	Ag	0.007467	20.136	366.006	ug/L	267.339
	111	Cd	0.019565	27.906	99.001	ug/L	39.334
>	115	In-1			1479571.203	ug/L	1483966.870
	123	Sb	0.021418	28.081	430.962	ug/L	268.758
	135	Ba	30.170086	2.007	70513.654	ug/L	112.002
>	165	Ho-1			1552420.941	ug/L	1592460.464
	205	Tl	0.425896	18.343	15282.089	ug/L	3951.949
	208	Pb	4.076701	0.645	154291.681	ug/L	4580.000
	238	U	0.149488	1.802	7260.584	ug/L	234.671
>	45	Sc-2			459465.268	ug/L	454114.374
	53	Cr	-89.741165	5.592	88608.119	ug/L	154333.029
	54	Fe	6355.363499	4.844	4633719.786	ug/L	62090.940
	61	Ni	14.344964	5.461	3288.745	ug/L	1661.113
	63	Cu	5.069619	2.397	29197.442	ug/L	345.008
	67	Zn	17.559508	2.239	14163.494	ug/L	9047.975
>	72	Ge			701991.646	ug/L	739226.379
	77	Se	-37.811252	2.133	1458.827	ug/L	8561.780
	98	Mo	0.154102	13.858	1255.629	ug/L	141.970
	109	Ag	-0.002143	80.560	258.338	ug/L	288.339
>	115	In-2			1479571.203	ug/L	1483966.870
	114	Cd	0.016746	11.137	192.023	ug/L	84.731
	121	Sb	0.018990	7.736	536.016	ug/L	349.674
	137	Ba	30.657067	1.464	122111.945	ug/L	156.669
>	165	Ho-2			1552420.941	ug/L	1592460.464
	203	Tl	0.416209	22.567	6287.806	ug/L	1582.773
	206	Pb	4.119245	0.927	38869.199	ug/L	1161.392
	207	Pb	4.130943	1.207	32860.747	ug/L	995.045
>	45	Sc			459465.268	ug/L	454114.374
	47	Ti	62.683183	2.442	47379.249	ug/L	297.006
	86	Sr	76.878015	3.535	280925.779	ug/L	716.656
	88	Sr	78.363931	3.078	2491789.154	ug/L	5834.250
>	115	In			1479571.203	ug/L	1483966.870
	118	Sn	0.218317	4.964	2683.279	ug/L	855.034
	120	Sn	0.231236	4.814	3651.658	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	101.178
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	94.963
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.704
	Sb	123	
	Ba	135	
>	Ho-1	165	97.486
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	101.178
	Cr	53	
	Fe	54	
	Ni	61	
	Ca	63	
	Zn	67	
>	Ge	72	94.963
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	99.704
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	97.486
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	101.178
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	99.704
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G7NXD
Sample Date/Time: Wednesday, April 27, 2005 22:29:41
Autosampler Position: 47
Dataset File: D:\Elandata\Dataset\042705M2\G7NXD.043

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	1.868985	4.956	432.011	ug/L	7.867
	10	B	6.045887	8.013	293.006	ug/L	27.667
	23	Na	85.012396	3.575	448292.963	ug/L	18838.944
	24	Mg	10956.909779	6.683	39694650.997	ug/L	2106.176
	27	Al	27291.697405	4.121	151173132.037	ug/L	3413.777
	39	K	1604.511530	4.553	18249401.682	ug/L	807733.282
	44	Ca	9241.516824	5.625	3252512.904	ug/L	81872.368
>	45	Sc-1			591258.242	ug/L	454114.374
	51	V	36.937094	8.819	460353.117	ug/L	-26072.212
	52	Cr	35.654551	5.948	454987.603	ug/L	26547.338
	55	Mn	14831.656994	5.099	287500277.878	ug/L	3082.381
	57	Fe	44892.732951	4.937	18212471.032	ug/L	9798.695
	59	Co	44.766960	4.300	670577.828	ug/L	232.338
	60	Ni	54.154766	1.758	174682.302	ug/L	301.006
	65	Cu	27.699895	6.401	98133.150	ug/L	168.336
	66	Zn	626.930998	6.044	1323277.888	ug/L	15137.170
>	72	Ge-1			761468.618	ug/L	739226.379
	75	As	19.881707	1.773	40533.547	ug/L	-1945.453
	82	Se	0.885093	42.650	86.502	ug/L	-120.854
	97	Mo	1.173163	7.258	3474.792	ug/L	72.001
	107	Ag	0.132962	4.307	2062.836	ug/L	267.339
	111	Cd	7.532187	6.643	23883.196	ug/L	39.334
>	115	In-1			1498766.059	ug/L	1483966.870
	123	Sb	0.160432	6.255	1508.586	ug/L	268.758
	135	Ba	647.918077	5.468	1547837.146	ug/L	112.002
>	165	Ho-1			1588114.454	ug/L	1592460.464
	205	Tl	0.475898	16.528	17026.445	ug/L	3951.949
	208	Pb	175.563676	4.005	6607868.894	ug/L	4580.000
	238	U	0.699706	4.310	33918.307	ug/L	234.671
>	45	Sc-2			591258.242	ug/L	454114.374
	53	Cr	-5.770781	197.616	191577.926	ug/L	154333.029
	54	Fe	44772.130706	4.317	41534449.349	ug/L	82090.940
	61	Ni	56.878359	6.951	10374.216	ug/L	1661.113
	63	Cu	27.814611	5.600	204156.482	ug/L	345.008
	67	Zn	571.211687	3.977	221491.719	ug/L	9047.975
>	72	Ge			761468.618	ug/L	739226.379
	77	Se	-31.969915	16.868	2685.337	ug/L	8561.780
	98	Mo	1.176582	7.976	8757.014	ug/L	141.970
	109	Ag	0.029563	2.483	697.691	ug/L	288.339
>	115	In-2			1498766.059	ug/L	1483966.870
	114	Cd	7.889212	6.130	54491.369	ug/L	84.731
	121	Sb	0.166304	12.219	2021.831	ug/L	349.674
	137	Ba	671.787034	2.017	2734593.174	ug/L	156.669
>	165	Ho-2			1588114.454	ug/L	1592460.464
	203	Tl	0.490218	15.734	7190.237	ug/L	1582.773
	206	Pb	176.032620	4.021	1670324.347	ug/L	1161.392
	207	Pb	176.964767	2.862	1399015.229	ug/L	995.045
>	45	Sc			591258.242	ug/L	454114.374
	47	Ti	118.466838	7.899	114922.826	ug/L	297.006
	86	Sr	10.705294	7.733	51169.807	ug/L	716.656
	88	Sr	10.767083	5.747	447342.432	ug/L	5834.250
>	115	In			1498766.059	ug/L	1483966.870
	118	Sn	1.015226	8.926	9482.918	ug/L	855.034
	120	Sn	1.019570	4.230	12508.302	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	130.200
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	103.000
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	100.997
	Sb	123	
	Ba	135	
>	Ho-1	165	99.727
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	130.200
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	103.000
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	100.997
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	99.727
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	130.200
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	100.997
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Sc-1	45	Q
Sc-2	45	Q
Sc	45	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: G73N6
Sample Date/Time: Wednesday, April 27, 2005 22:34:51
Autosampler Position: 48
Dataset File: D:\Elandata\Dataset\042705M2\G73N6.044

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.620010	26.177	137.335	ug/L	7.667
	10	B	3.107531	8.097	154.002	ug/L	27.667
	23	Na	43.291566	6.964	220003.291	ug/L	18838.944
	24	Mg	3972.689449	7.789	13181750.899	ug/L	2106.176
	27	Al	19743.761629	6.002	100119444.942	ug/L	3413.777
	39	K	1198.917935	6.805	12726880.782	ug/L	807733.282
	44	Ca	25915.884407	9.542	8217984.860	ug/L	61872.368
>	45	Sc-1			541043.834	ug/L	454114.374
	51	V	53.335655	6.090	622528.604	ug/L	-26072.212
	52	Cr	28.808715	9.174	353517.380	ug/L	26547.338
	55	Mn	201.411597	9.209	3577935.781	ug/L	3062.361
	57	Fe	56313.019058	9.663	21008017.536	ug/L	9788.695
	59	Co	5.164935	7.329	71075.556	ug/L	232.338
	60	Ni	18.174826	7.374	53921.013	ug/L	301.006
	65	Cu	25.901018	9.675	84180.581	ug/L	168.336
	66	Zn	49.278864	9.763	111867.330	ug/L	15137.170
>	72	Ge-1			762768.790	ug/L	739226.379
	75	As	12.357377	7.854	24507.903	ug/L	-1945.453
	82	Se	0.584542	36.343	14.648	ug/L	-120.854
	97	Mo	1.946387	7.778	5650.845	ug/L	72.001
	107	Ag	0.141105	9.561	2147.184	ug/L	267.339
	111	Cd	0.103878	9.340	357.006	ug/L	39.334
>	115	In-1			1480999.131	ug/L	1483966.870
	123	Sb	0.342180	10.800	2875.197	ug/L	268.758
	135	Ba	72.816091	7.288	169445.807	ug/L	112.002
>	165	Ho-1			1550232.500	ug/L	1592480.464
	205	Tl	0.502686	13.532	17332.443	ug/L	3951.949
	208	Pb	33.763412	8.640	1244157.041	ug/L	4580.000
	238	U	1.654443	6.602	77989.617	ug/L	234.671
>	45	Sc-2			541043.834	ug/L	454114.374
	53	Cr	16.242664	28.659	207795.925	ug/L	154333.029
	54	Fe	55252.928692	7.735	47750400.127	ug/L	62090.940
	61	Ni	22.460651	13.635	4946.910	ug/L	1661.113
	63	Cu	26.793609	7.405	173405.691	ug/L	345.008
	67	Zn	52.395364	5.593	28380.474	ug/L	9047.975
>	72	Ge			762768.790	ug/L	739226.379
	77	Se	-20.327243	12.616	4936.183	ug/L	8561.780
	98	Mo	1.969167	7.817	14536.573	ug/L	141.970
	109	Ag	0.028980	13.608	681.356	ug/L	288.339
>	115	In-2			1480999.131	ug/L	1483966.870
	114	Cd	0.067084	2.806	679.645	ug/L	84.731
	121	Sb	0.344712	9.076	3789.876	ug/L	348.674
	137	Ba	73.569210	8.109	292815.884	ug/L	156.669
>	165	Ho-2			1550232.500	ug/L	1592480.464
	203	Tl	0.496586	13.219	7202.236	ug/L	1582.773
	206	Pb	34.962608	6.975	321373.944	ug/L	1161.392
	207	Pb	34.274672	9.311	265417.640	ug/L	995.045
>	45	Sc			541043.834	ug/L	454114.374
	47	Ti	127.006287	9.350	112810.285	ug/L	297.006
	86	Sr	34.257297	10.071	148063.726	ug/L	716.656
	88	Sr	33.889336	6.518	1266395.585	ug/L	5834.250
>	115	In			1480999.131	ug/L	1483966.870
	118	Sn	1.474006	8.848	13223.608	ug/L	855.034
	120	Sn	1.456922	7.880	17521.778	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	119.143
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	103.186
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.800
	Sb	123	
	Ba	135	
>	Ho-1	165	97.348
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	119.143
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	103.186
	Se	77	
	Mo	99	
	Ag	109	
>	In-2	115	99.800
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	97.348
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	119.143
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	99.800
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G73N6S
Sample Date/Time: Wednesday, April 27, 2005 22:40:01
Autosampler Position: 49
Dataset File: D:\Elandata\Dataset\042705M2\G73N6S.045

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	4.897569	5.395	1032.714	ug/L	7.667
	10	B	132.687885	7.240	5262.025	ug/L	27.667
	23	Na	4212.218733	1.712	19449108.101	ug/L	18838.944
	24	Mg	9467.861849	6.287	31738521.323	ug/L	2106.176
	27	Al	28669.209980	4.305	136709120.212	ug/L	3413.777
	39	K	5588.448982	5.306	58407799.361	ug/L	807733.282
	44	Ca	27525.924214	8.847	8848854.294	ug/L	61872.368
>	45	Sc-1			547069.378	ug/L	454114.374
	51	V	94.909289	5.447	1144010.031	ug/L	-26072.212
	52	Cr	46.629236	4.160	540648.866	ug/L	26547.338
	55	Mn	254.826873	3.219	4574116.431	ug/L	3062.361
	57	Fe	44380.695982	5.170	16731246.381	ug/L	9798.695
	59	Co	51.230630	3.788	710133.495	ug/L	232.338
	60	Ni	61.164350	6.214	182483.333	ug/L	301.006
	65	Cu	46.560385	5.512	152679.835	ug/L	188.338
	66	Zn	93.050289	7.354	197267.975	ug/L	15137.170
>	72	Ge-1			746755.691	ug/L	739226.379
	75	As	229.510496	3.557	479661.476	ug/L	-1945.453
	82	Se	200.962990	9.097	46629.505	ug/L	-120.854
	97	Mo	106.489635	7.113	297378.046	ug/L	72.001
	107	Ag	6.020894	8.341	78401.111	ug/L	267.339
	111	Cd	6.757708	7.206	17193.538	ug/L	39.334
>	115	In-1			1442985.249	ug/L	1483966.870
	123	Sb	19.576192	6.897	145548.196	ug/L	268.758
	135	Ba	299.611686	6.740	685590.552	ug/L	112.002
>	165	Ho-1			1521701.991	ug/L	1592460.464
	205	Tl	195.217148	3.406	5140353.016	ug/L	3951.949
	208	Pb	80.891428	5.097	2919426.900	ug/L	4580.000
	238	U	204.997689	3.363	9454654.750	ug/L	234.671
>	45	Sc-2			547069.378	ug/L	454114.374
	53	Cr	30.240178	16.933	231130.020	ug/L	154333.029
	54	Fe	44783.114526	5.593	38421886.487	ug/L	62090.940
	61	Ni	65.555324	7.950	10757.502	ug/L	1661.113
	63	Cu	47.563729	3.962	322649.675	ug/L	345.008
	67	Zn	96.831462	2.005	43795.152	ug/L	9047.975
>	72	Ge			746755.691	ug/L	739226.379
	77	Se	152.571153	5.269	37289.367	ug/L	8561.780
	98	Mo	108.573727	8.160	765317.889	ug/L	141.970
	109	Ag	6.063674	6.153	67314.174	ug/L	288.339
>	115	In-2			1442985.249	ug/L	1483966.870
	114	Cd	6.698674	6.318	40668.094	ug/L	84.731
	121	Sb	19.662969	7.300	191482.660	ug/L	349.674
	137	Ba	299.528850	3.786	1168502.084	ug/L	156.669
>	165	Ho-2			1521701.991	ug/L	1592460.464
	203	Tl	197.225367	3.465	2206999.599	ug/L	1582.773
	206	Pb	83.277445	5.866	749203.044	ug/L	1161.382
	207	Pb	83.185846	4.458	830625.347	ug/L	995.045
>	45	Sc			547069.378	ug/L	454114.374
	47	Ti	235.550417	5.341	211066.161	ug/L	297.006
	86	Sr	116.346509	6.747	506009.834	ug/L	716.656
	88	Sr	119.297306	5.572	4514920.977	ug/L	5834.250
>	115	In			1442985.249	ug/L	1483966.870
	118	Sn	194.877946	7.068	1593741.796	ug/L	855.034
	120	Sn	196.277926	4.652	2112425.714	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	120.470
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.019
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	97.238
	Sb	123	
	Ba	135	
>	Ho-1	165	96.567
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	120.470
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.019
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	97.238
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	96.567
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	120.470
	Ti	47	
	Sr	88	
	Sr	88	
>	In	115	97.238
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G73N6D
Sample Date/Time: Wednesday, April 27, 2005 22:45:10
Autosampler Position: 50
Dataset File: D:\Elandata\Dataset\042705M2\G73N6D.046

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌈	9	Be	4.674607	3.396	852.701	ug/L	7.867
|	10	B	166.579112	4.343	5695.193	ug/L	27.667
|	23	Na	4388.788696	4.181	17515617.133	ug/L	18638.944
|	24	Mg	25162.288270	2.961	72932158.130	ug/L	2106.176
|	27	Al	11537.973103	1.781	51143105.745	ug/L	3413.777
|	39	K	5332.021758	2.288	46571468.848	ug/L	807733.282
|	44	Ca	406531.603567	2.889	111703615.264	ug/L	61872.388
|>	45	Sc-1			473238.015	ug/L	454114.374
|	51	V	67.499753	1.486	695950.741	ug/L	-26072.212
|	52	Cr	31.303706	4.059	322865.601	ug/L	26547.338
|	55	Mn	327.466932	1.895	5081835.822	ug/L	3062.361
|	57	Fe	22907.886297	2.809	7471949.906	ug/L	9798.695
|	59	Co	49.296445	2.621	590965.467	ug/L	232.338
|	60	Ni	61.925659	3.123	159721.602	ug/L	301.006
|	65	Cu	38.870139	5.347	110204.143	ug/L	188.336
⌊	66	Zn	77.723270	1.609	145096.692	ug/L	15137.170
⌈>	72	Ge-1			694990.262	ug/L	739226.379
|	75	As	219.411053	2.361	409020.979	ug/L	-1845.453
⌊	82	Se	187.863486	1.475	40544.032	ug/L	-120.854
⌈	97	Mo	101.374482	2.970	271508.075	ug/L	72.001
|	107	Ag	5.536086	0.193	69172.431	ug/L	267.339
|	111	Cd	5.279715	1.848	15125.822	ug/L	39.334
|>	115	In-1			1383394.462	ug/L	1483966.870
⌊	123	Sb	25.603867	1.102	182554.528	ug/L	268.758
⌈	135	Ba	283.281799	2.339	623008.229	ug/L	112.002
|>	165	Ho-1			1462817.878	ug/L	1592460.464
|	205	Tl	176.297479	2.124	4461852.650	ug/L	3951.949
|	208	Pb	59.652244	0.911	2069928.317	ug/L	4580.000
⌊	238	U	184.934040	1.010	8197827.644	ug/L	234.671
⌈>	45	Sc-2			473238.015	ug/L	454114.374
|	53	Cr	2.818201	362.086	164472.208	ug/L	154333.029
|	54	Fe	23651.188084	3.678	17579174.019	ug/L	62090.940
|	61	Ni	116.766304	2.395	15218.591	ug/L	1861.113
|	63	Cu	38.445979	1.706	225671.151	ug/L	345.008
⌊	67	Zn	82.816934	3.685	33670.998	ug/L	9047.975
⌈>	72	Ge			694990.262	ug/L	739226.379
⌊	77	Se	177.823486	2.428	39111.957	ug/L	8561.780
⌈	98	Mo	103.657391	0.203	700305.399	ug/L	141.970
|	109	Ag	4.387207	0.389	55975.011	ug/L	288.339
|>	115	In-2			1383394.462	ug/L	1483966.870
|	114	Cd	5.282377	3.182	33806.857	ug/L	84.731
⌊	121	Sb	26.009868	0.694	242858.017	ug/L	349.674
⌈	137	Ba	286.062231	0.924	1072476.437	ug/L	156.669
|>	165	Ho-2			1462817.878	ug/L	1592460.464
|	203	Tl	167.528748	1.112	1801925.025	ug/L	1582.773
|	206	Pb	60.954871	1.488	527229.181	ug/L	1161.392
⌊	207	Pb	61.840082	1.272	449336.471	ug/L	995.045
⌈>	45	Sc			473238.015	ug/L	454114.374
|	47	Ti	209.948188	1.746	162718.860	ug/L	297.008
|	86	Sr	402.712309	5.798	1511586.994	ug/L	716.656
⌊	88	Sr	403.700460	1.627	13196257.090	ug/L	6834.250
⌈>	115	In			1383394.462	ug/L	1483966.870
|	118	Sn	187.832801	1.226	1473721.876	ug/L	855.034
⌊	120	Sn	187.948260	1.855	1940114.529	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	104.211
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	94.016
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	93.223
	Sb	123	
	Ba	135	
>	Ho-1	165	91.589
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	104.211
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	94.016
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	93.223
	Cd	114	
	Sb	121	
	Be	137	
>	Ho-2	165	91.589
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	104.211
	Tl	47	
	Sr	88	
	Sr	88	
>	In	115	93.223
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Wednesday, April 27, 2005 22:50:22
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 1.047

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	196.342302	2.910	33915.888	ug/L	7.667
	10	B	191.429775	2.723	6286.113	ug/L	27.667
	23	Na	1900.866616	1.144	7306100.388	ug/L	18838.944
	24	Mg	981.434933	4.325	2650894.253	ug/L	2106.176
	27	Al	1976.101846	1.436	8421659.026	ug/L	3413.777
	39	K	1933.141536	1.127	16750574.752	ug/L	807733.282
	44	Ca	1037.143199	3.848	335638.664	ug/L	61872.368
>	45	Sc-1			454857.991	ug/L	454114.374
	51	V	196.103274	4.281	1980648.804	ug/L	-26072.212
	52	Cr	200.246551	4.864	1840935.737	ug/L	26547.338
	55	Mn	196.315764	2.324	2928588.570	ug/L	3062.361
	57	Fe	1951.480069	3.965	620498.880	ug/L	9798.695
	59	Co	192.283422	3.718	2213536.981	ug/L	232.338
	60	Ni	198.211367	3.474	490607.892	ug/L	301.006
	65	Cu	198.812484	5.073	541202.675	ug/L	168.336
	66	Zn	188.994975	4.968	317136.389	ug/L	15137.170
>	72	Ge-1			704388.418	ug/L	739226.379
	75	As	206.306839	4.041	410248.926	ug/L	-1945.453
	82	Se	202.237732	0.306	44245.898	ug/L	-120.854
	97	Mo	202.046650	1.251	579152.871	ug/L	72.001
	107	Ag	48.639235	2.358	648219.365	ug/L	267.338
	111	Cd	197.202167	2.358	603148.588	ug/L	39.334
>	115	In-1			1480515.571	ug/L	1483966.870
	123	Sb	196.298724	1.149	1495934.805	ug/L	268.758
	135	Ba	207.917721	2.349	482332.850	ug/L	112.002
>	165	Ho-1			1543167.876	ug/L	1592460.464
	205	Tl	187.724210	2.325	5010470.940	ug/L	3951.949
	208	Pb	191.469771	1.773	6997458.610	ug/L	4580.000
	238	U	186.943448	2.886	8691296.779	ug/L	234.671
>	45	Sc-2			454857.991	ug/L	454114.374
	53	Cr	157.016386	7.512	349419.115	ug/L	154333.029
	54	Fe	1997.289624	4.053	1483335.307	ug/L	62090.940
	61	Ni	196.066168	5.052	23410.737	ug/L	1661.113
	63	Cu	197.530007	2.383	1112890.631	ug/L	345.008
	67	Zn	192.541191	5.317	83375.588	ug/L	9047.976
>	72	Ge			704388.418	ug/L	739226.379
	77	Se	169.857051	1.544	38224.495	ug/L	8561.780
	98	Mo	197.908186	0.974	1432166.074	ug/L	141.970
	109	Ag	47.856373	1.537	850619.833	ug/L	288.339
>	115	In-2			1480515.571	ug/L	1483966.870
	114	Cd	194.087339	0.213	1326210.810	ug/L	84.731
	121	Sb	195.222780	0.919	1948462.721	ug/L	349.674
	137	Ba	212.812864	2.871	841417.643	ug/L	156.669
>	165	Ho-2			1543167.876	ug/L	1592460.464
	203	Tl	188.794660	2.425	2141247.322	ug/L	1562.773
	206	Pb	191.098207	2.022	1740983.557	ug/L	1161.392
	207	Pb	199.012735	3.842	1527331.010	ug/L	995.045
>	45	Sc			454857.991	ug/L	454114.374
	47	Ti	200.399660	2.516	149253.520	ug/L	297.006
	86	Sr	194.116861	3.903	700774.375	ug/L	716.658
	88	Sr	194.691951	1.495	6121873.887	ug/L	5834.250
>	115	In			1480515.571	ug/L	1483966.870
	118	Sn	201.072500	1.164	1688163.171	ug/L	855.034
	120	Sn	203.350505	1.190	2246640.322	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		97.871

	B	10	95.715
	Na	23	96.043
	Mg	24	96.143
	Al	27	96.305
	K	39	96.657
	Ca	44	103.714
>	Sc-1	45	100.164
	V	51	97.552
	Cr	52	100.123
	Mn	55	96.169
	Fe	57	97.574
	Co	59	96.142
	Ni	60	99.195
	Cu	65	99.456
	Zn	66	94.467
>	Ge-1	72	95.287
	As	75	104.153
	Se	82	101.119
	Mo	97	101.023
	Ag	107	97.278
	Cd	111	96.801
>	In-1	115	99.767
	Sb	123	96.149
	Ba	135	103.989
>	Ho-1	165	96.906
	Tl	205	93.882
	Pb	208	96.736
	U	238	92.972
>	Sc-2	45	100.164
	Cr	53	78.606
	Fe	54	96.863
	Ni	61	96.033
	Cu	63	96.765
	Zn	67	96.271
>	Ge	72	96.287
	Se	77	84.929
	Mo	98	96.954
	Ag	109	95.713
>	In-2	115	99.767
	Cd	114	97.044
	Sb	121	97.611
	Ba	137	106.406
>	Ho-2	165	96.906
	Tl	203	94.397
	Pb	208	96.840
	Pb	207	96.596
>	Sc	45	100.164
	Tl	47	100.209
	Sr	86	97.858
	Sr	88	97.346
>	In	115	99.767
	Sn	118	100.536
	Sn	120	101.575

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cr	53	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Wednesday, April 27, 2005 22:56:32
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 2.048

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.011304	227.175	9.667	ug/L	7.667
	10	B	3.765838	16.503	150.336	ug/L	27.667
	23	Na	0.239057	28.489	19694.758	ug/L	18838.944
	24	Mg	0.068789	40.363	2290.207	ug/L	2106.176
	27	Al	0.269979	12.116	4547.102	ug/L	3413.777
	39	K	-6.645274	36.967	750539.130	ug/L	807733.282
	44	Ca	-11.688960	46.966	58597.866	ug/L	61872.368
>	45	Sc-1			452807.103	ug/L	454114.374
	51	V	0.349727	127.757	-22439.607	ug/L	-26072.212
	52	Cr	-0.977334	19.340	17821.415	ug/L	26547.338
	55	Mn	0.031614	44.315	3520.136	ug/L	3062.361
	57	Fe	-3.749477	28.921	8585.541	ug/L	9798.695
	59	Co	0.010271	56.114	350.341	ug/L	232.338
	60	Ni	0.000587	2472.505	301.006	ug/L	301.006
	65	Cu	0.017132	42.522	214.004	ug/L	168.336
	66	Zn	-0.365785	48.927	14507.175	ug/L	15137.170
>	72	Ge-1			721111.754	ug/L	739226.379
	75	As	0.938709	12.982	1.136	ug/L	-1945.453
	82	Se	0.476643	54.017	-11.343	ug/L	-120.854
	97	Mo	0.105403	14.302	376.675	ug/L	72.001
	107	Ag	0.001930	73.812	294.006	ug/L	267.339
	111	Cd	0.005903	3.321	57.667	ug/L	39.334
>	115	In-1			1490071.919	ug/L	1483966.870
	123	Sb	0.092076	21.207	977.766	ug/L	268.758
	135	Ba	-0.000777	432.679	109.002	ug/L	112.002
>	165	Ho-1			1574954.964	ug/L	1592460.464
	206	Tl	0.362887	35.464	13748.664	ug/L	3951.949
	208	Pb	-0.017781	9.459	3866.242	ug/L	4580.000
	238	U	0.006584	19.381	496.014	ug/L	234.671
>	45	Sc-2			452807.103	ug/L	454114.374
	53	Cr	-27.039845	49.747	120187.067	ug/L	154333.029
	54	Fe	-0.837036	327.654	61288.579	ug/L	62090.940
	61	Ni	-0.895163	93.392	1556.100	ug/L	1661.113
	63	Cu	0.014044	7.851	422.677	ug/L	345.006
	67	Zn	-0.671156	619.915	8816.832	ug/L	9047.975
>	72	Ge			721111.754	ug/L	739226.379
	77	Se	-36.449767	6.302	1749.846	ug/L	8561.780
	98	Mo	0.099382	21.268	867.970	ug/L	141.970
	109	Ag	0.014680	29.213	490.680	ug/L	288.339
>	115	In-2			1490071.919	ug/L	1483966.870
	114	Cd	0.005032	30.878	119.758	ug/L	84.731
	121	Sb	0.091412	18.536	1271.070	ug/L	349.674
	137	Ba	0.005453	30.927	177.003	ug/L	156.669
>	165	Ho-2			1574954.964	ug/L	1592460.464
	203	Tl	0.352490	35.245	5627.673	ug/L	1582.773
	205	Pb	-0.017382	30.367	986.711	ug/L	1161.392
	207	Pb	-0.016527	19.256	854.701	ug/L	995.045
>	45	Sc			452807.103	ug/L	454114.374
	47	Ti	0.177281	12.337	427.677	ug/L	297.006
	86	Sr	0.032360	113.739	830.196	ug/L	716.656
	88	Sr	0.001953	198.325	5877.601	ug/L	5834.250
>	115	In			1490071.919	ug/L	1483966.870
	118	Sn	0.884828	13.257	1574.770	ug/L	855.034
	120	Sn	0.079816	20.413	1994.323	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		1.130

	B	10		376.594
	Na	23		0.230
	Mg	24		0.000
	Al	27		0.270
	K	39		-6.846
	Ca	44		-11.667
>	Sc-1	45	99.712	
	V	51		34.973
	Cr	52		-97.733
	Mn	55		3.161
	Fe	57		-3.749
	Co	59		1.827
	Ni	60		0.000
	Cu	65		1.713
	Zn	66		-38.579
>	Ge-1	72	97.589	
	As	75		93.571
	Se	82		47.664
	Mo	97		10.540
	Ag	107		0.193
	Cd	111		0.599
>	In-1	115	100.411	
	Sb	123		9.206
	Ba	135		-0.078
>	Ho-1	165	99.901	
	Tl	205		36.289
	Pb	208		-1.778
	U	238		0.599
>	Sc-2	45	99.712	
	Cr	53		-2703.884
	Fe	54		-0.837
	Ni	61		-99.816
	Cu	63		1.494
	Zn	67		-97.116
>	Ge	72	97.589	
	Se	77		-3844.977
	Mo	98		9.938
	Ag	109		1.488
>	In-2	115	100.411	
	Cd	114		0.503
	Sb	121		9.141
	Ba	137		0.848
>	Ho-2	165	99.901	
	Tl	203		36.249
	Pb	206		-1.739
	Pb	207		-1.983
>	Sc	45	99.712	
	Ti	47		17.728
	Sr	86		3.238
	Sr	88		8.186
>	In	115	100.411	
	Sn	118		8.483
	Sn	120		7.962

QC Out Of Limits

Analyte	Mass	Out of Limits Message
B	10	Q
Cr	53	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: G73N8
Sample Date/Time: Wednesday, April 27, 2005 23:02:40
Autosampler Position: 51
Dataset File: D:\Elandata\Dataset\042705M2\G73N8.049

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.581241	25.548	121.335	ug/L	7.667
	10	B	4.612019	58.833	200.004	ug/L	27.667
	23	Na	35.638943	1.937	173940.703	ug/L	18838.944
	24	Mg	8248.093213	4.860	25697895.831	ug/L	2106.176
	27	Al	17073.550873	1.176	81387873.536	ug/L	3413.777
	39	K	686.407980	2.741	7234775.980	ug/L	807733.282
	44	Ca	19597.890921	0.955	5857299.021	ug/L	61872.388
>	45	Sc-1			508832.492	ug/L	454114.374
	51	V	46.755488	2.289	509107.892	ug/L	-26072.212
	52	Cr	22.769413	4.216	260550.485	ug/L	26547.338
	55	Mn	1035.200503	2.004	17272227.426	ug/L	3062.361
	57	Fe	31838.832261	2.993	11152677.857	ug/L	9798.695
	59	Co	10.039622	1.464	129588.239	ug/L	232.338
	60	Ni	9.822067	1.867	27808.321	ug/L	301.006
	65	Cu	11.861847	1.666	36315.801	ug/L	188.336
	66	Zn	33.757675	0.555	77375.852	ug/L	15137.170
>	72	Ge-1			752518.800	ug/L	739226.379
	75	As	11.447347	2.841	22225.537	ug/L	-1945.453
	82	Se	0.685879	8.150	37.706	ug/L	-120.854
	97	Mo	2.023528	2.223	5788.698	ug/L	72.001
	107	Ag	0.136710	2.059	2058.836	ug/L	267.339
	111	Cd	0.084274	12.776	292.673	ug/L	39.334
>	115	In-1			1459897.558	ug/L	1483966.870
	123	Sb	0.411986	3.187	3359.373	ug/L	268.758
	135	Ba	169.983434	2.235	395691.678	ug/L	112.002
>	165	Ho-1			1548282.274	ug/L	1592460.464
	205	Tl	0.474785	16.189	16533.807	ug/L	3951.949
	208	Pb	26.084616	1.544	923819.859	ug/L	4580.000
	238	U	1.637983	2.742	77056.389	ug/L	234.671
>	45	Sc-2			508832.492	ug/L	454114.374
	53	Cr	-13.322292	94.375	154135.054	ug/L	154333.029
	54	Fe	31511.230912	3.121	25164230.864	ug/L	62090.940
	61	Ni	12.790977	10.244	3448.117	ug/L	1881.113
	63	Cu	12.101315	0.774	78654.262	ug/L	345.008
	67	Zn	37.276888	14.031	21891.011	ug/L	9047.975
>	72	Ge			752518.800	ug/L	739226.379
	77	Se	-35.333881	5.384	2035.107	ug/L	8561.780
	98	Mo	2.092115	0.801	15066.140	ug/L	141.970
	109	Ag	0.055752	8.510	1044.715	ug/L	288.339
>	115	In-2			1459897.558	ug/L	1483966.870
	114	Cd	0.067829	3.641	540.469	ug/L	84.731
	121	Sb	0.400289	2.022	4283.685	ug/L	349.674
	137	Ba	175.348364	1.478	695800.672	ug/L	156.669
>	165	Ho-2			1548282.274	ug/L	1592460.464
	203	Tl	0.471346	20.044	6892.087	ug/L	1582.773
	206	Pb	26.025716	2.146	238883.673	ug/L	1161.392
	207	Pb	25.661473	2.089	196535.682	ug/L	995.045
>	45	Sc			508832.492	ug/L	454114.374
	47	Ti	198.188678	5.697	165079.972	ug/L	297.006
	88	Sr	20.331374	3.474	82860.274	ug/L	716.656
	88	Sr	20.288864	0.357	719628.785	ug/L	5834.250
>	115	In			1459897.558	ug/L	1483966.870
	118	Sn	1.031673	1.414	9377.504	ug/L	855.034
	120	Sn	1.063154	1.642	12662.601	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	112.049
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.798
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.378
	Sb	123	
	Ba	135	
>	Ho-1	165	97.228
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	112.049
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.798
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.378
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	97.228
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	112.049
	Ti	47	
	Sr	88	
	Sr	88	
>	In	115	98.378
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G77EX
Sample Date/Time: Wednesday, April 27, 2005 23:07:52
Autosampler Position: 52
Dataset File: D:\Elandata\Dataset\042705M2\G77EX.050

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.309036	12.260	60.667	ug/L	7.667
	10	B	6.209680	12.145	228.671	ug/L	27.667
	23	Na	189.897077	2.974	739313.769	ug/L	18838.944
	24	Mg	7902.827793	3.131	21797969.029	ug/L	2106.176
	27	Al	3293.288166	2.765	13691629.587	ug/L	3413.777
	39	K	686.540468	1.916	6405022.529	ug/L	807733.282
	44	Ca	636994.019788	2.979	166512140.779	ug/L	61872.368
>	45	Sc-1			450326.247	ug/L	454114.374
	51	V	7.373456	10.301	49198.816	ug/L	-26072.212
	52	Cr	4.710281	8.986	68574.358	ug/L	26547.338
	55	Mn	190.813846	4.268	2813649.641	ug/L	3062.361
	57	Fe	7494.373570	9.350	2330849.907	ug/L	9798.895
	59	Co	3.611161	5.923	41384.672	ug/L	232.338
	60	Ni	18.224254	7.345	40023.833	ug/L	301.006
	65	Cu	5.233438	8.534	14259.943	ug/L	168.336
	66	Zn	14.025476	5.677	37206.098	ug/L	15137.170
>	72	Ge-1			659093.348	ug/L	739226.379
	75	As	1.066005	31.223	217.867	ug/L	-1945.453
	82	Se	0.332539	101.406	-39.860	ug/L	-120.854
	97	Mo	0.264941	7.509	761.695	ug/L	72.001
	107	Ag	0.026297	9.962	565.350	ug/L	267.339
	111	Cd	0.042588	9.869	155.336	ug/L	39.334
>	115	In-1			1356081.087	ug/L	1483966.870
	123	Sb	0.084539	2.155	835.710	ug/L	268.758
	135	Ba	23.832403	4.413	52415.952	ug/L	112.002
>	165	Ho-1			1472548.296	ug/L	1592460.464
	205	Tl	0.092302	40.516	6002.341	ug/L	3951.949
	208	Pb	5.085196	4.124	181498.555	ug/L	4580.000
	238	U	0.569288	4.340	25616.227	ug/L	234.671
>	45	Sc-2			450326.247	ug/L	454114.374
	53	Cr	-14.489573	45.057	135271.430	ug/L	154333.029
	54	Fe	7919.788527	6.187	5641602.766	ug/L	62090.940
	61	Ni	102.744746	3.867	12937.319	ug/L	1681.113
	63	Cu	4.794965	5.538	27071.256	ug/L	345.008
	67	Zn	14.795734	12.093	13108.150	ug/L	9047.975
>	72	Ge			659093.348	ug/L	739226.379
	77	Se	62.242107	10.425	17937.280	ug/L	8561.780
	98	Mo	0.242956	3.176	1739.877	ug/L	141.970
	109	Ag	0.010806	12.003	398.010	ug/L	288.339
>	115	In-2			1356081.087	ug/L	1483966.870
	114	Cd	0.039693	11.970	326.123	ug/L	84.731
	121	Sb	0.064311	6.056	907.705	ug/L	349.674
	137	Ba	24.196033	6.481	91442.724	ug/L	156.669
>	165	Ho-2			1472549.296	ug/L	1592460.464
	203	Tl	0.096280	36.428	2504.581	ug/L	1582.773
	206	Pb	5.309111	4.070	47206.410	ug/L	1161.392
	207	Pb	5.068033	4.570	38030.659	ug/L	995.045
>	45	Sc			450326.247	ug/L	454114.374
	47	Ti	47.464041	5.869	35209.066	ug/L	297.006
	86	Sr	636.124153	5.624	2286892.418	ug/L	716.656
	88	Sr	613.946073	5.125	19090245.147	ug/L	5834.250
>	115	In			1356081.087	ug/L	1483966.870
	118	Sn	0.274422	1.566	2890.968	ug/L	855.034
	120	Sn	0.299025	1.474	4032.906	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	99.166
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	99.160
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	91.382
	Sb	123	
	Ba	135	
>	Ho-1	165	92.470
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	99.166
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	99.160
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	116	91.382
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	92.470
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	99.166
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	91.382
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Ca	44	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: G77EXS
Sample Date/Time: Wednesday, April 27, 2005 23:13:03
Autosampler Position: 53
Dataset File: D:\Elandata\Dataset\042705M2\G77EXS.051

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	5.241221	4.718	1144.057	ug/L	7.667
	10	B	139.287445	2.957	5711.200	ug/L	27.667
	23	Na	4340.169939	6.370	20769013.131	ug/L	18838.944
	24	Mg	15873.359976	7.307	55149643.356	ug/L	2106.176
	27	Al	24391.427263	4.933	129545813.994	ug/L	3413.777
	39	K	5632.132438	6.417	58906681.826	ug/L	807733.282
	44	Ca	29950.214044	7.254	9936636.116	ug/L	81872.368
>	45	Sc-1			566580.947	ug/L	454114.374
	51	V	79.629440	6.218	989480.017	ug/L	-26072.212
	52	Cr	39.005811	8.796	474297.763	ug/L	26547.338
	55	Mn	283.682180	5.634	5276088.232	ug/L	3062.361
	57	Fe	49375.528860	6.644	19292312.318	ug/L	9798.695
	59	Co	54.318319	4.281	780138.350	ug/L	232.338
	60	Ni	64.648885	6.945	199585.803	ug/L	301.006
	65	Cu	46.217408	7.314	157121.925	ug/L	168.336
	66	Zn	101.074875	4.891	220410.874	ug/L	15137.170
>	72	Ge-1			728460.000	ug/L	739226.379
	75	As	226.114960	9.786	460548.795	ug/L	-1945.453
	82	Se	203.409632	7.869	46002.011	ug/L	-120.854
	97	Mo	105.806696	9.219	288970.876	ug/L	72.001
	107	Ag	6.111840	7.868	77820.143	ug/L	267.339
	111	Cd	5.907156	7.755	17247.960	ug/L	39.334
>	115	In-1			1409781.468	ug/L	1483966.870
	123	Sb	18.624599	8.116	136897.764	ug/L	268.758
	135	Ba	272.399871	9.476	639526.497	ug/L	112.002
>	165	Ho-1			1560990.235	ug/L	1592460.464
	205	Tl	200.487822	8.440	5414582.363	ug/L	3951.949
	208	Pb	78.624437	8.249	2910686.616	ug/L	4580.000
	238	U	212.084944	6.801	10032960.849	ug/L	234.671
>	45	Sc-2			566580.947	ug/L	454114.374
	53	Cr	1.221880	561.479	194322.533	ug/L	154333.029
	54	Fe	60762.460007	7.111	45152298.489	ug/L	82090.940
	61	Ni	70.560431	8.336	11842.716	ug/L	1661.113
	63	Cu	46.496874	5.387	326960.437	ug/L	345.008
	67	Zn	100.979022	4.216	46832.234	ug/L	9047.975
>	72	Ge			728460.000	ug/L	739226.379
	77	Se	133.694130	10.287	32876.831	ug/L	8561.780
	98	Mo	107.971626	7.634	744324.220	ug/L	141.970
	109	Ag	4.918671	4.408	63934.311	ug/L	288.339
>	115	In-2			1409781.468	ug/L	1483966.870
	114	Cd	6.009022	9.672	39198.073	ug/L	84.731
	121	Sb	19.235374	9.384	183206.450	ug/L	349.674
	137	Ba	272.292808	9.145	1089653.166	ug/L	156.669
>	165	Ho-2			1560990.235	ug/L	1592460.464
	203	Tl	202.529484	5.483	2324667.712	ug/L	1582.773
	206	Pb	80.501965	8.121	742857.532	ug/L	1161.392
	207	Pb	80.671689	8.697	627345.902	ug/L	965.045
>	45	Sc			566580.947	ug/L	454114.374
	47	Ti	188.581260	8.845	175265.939	ug/L	297.006
	86	Sr	101.944668	8.255	459748.704	ug/L	716.656
	88	Sr	101.788503	6.077	3993573.366	ug/L	5834.250
>	115	In			1409781.468	ug/L	1483966.870
	118	Sn	201.690765	6.435	1812973.512	ug/L	855.034
	120	Sn	203.140042	7.555	2137699.459	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	124.766
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	98.544
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.901
	Sb	123	
	Ba	135	
>	Ho-1	165	99.024
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	124.766
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	98.544
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.901
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	99.024
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	124.766
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	98.901
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G77EXD
Sample Date/Time: Wednesday, April 27, 2005 23:16:15
Autosampler Position: 54
Dataset File: D:\Elandata\Dataset\042705M2\G77EXD.052

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	4.914067	5.163	1003.379	ug/L	7.667
	10	B	136.188169	3.931	5221.007	ug/L	27.667
	23	Na	4217.971718	2.423	18864281.322	ug/L	18838.944
	24	Mg	47400.442864	5.806	153850438.896	ug/L	2106.176
	27	Al	20687.977334	3.789	102691321.592	ug/L	3413.777
	39	K	5327.748750	3.136	52126022.457	ug/L	807733.282
	44	Ca	67033.366361	3.624	26841466.377	ug/L	61672.368
>	45	Sc-1			529960.251	ug/L	454114.374
	51	V	72.879170	6.340	843395.469	ug/L	-26072.212
	52	Cr	36.298667	7.042	403826.465	ug/L	26547.338
	55	Mn	186.589819	3.409	3227073.586	ug/L	3062.361
	57	Fe	34756.599515	6.011	12689733.202	ug/L	9798.695
	59	Co	47.535326	3.987	638104.493	ug/L	232.338
	60	Ni	58.168221	5.005	168067.480	ug/L	301.006
	65	Cu	40.548928	6.214	128790.149	ug/L	168.336
	66	Zn	85.882846	5.411	177637.690	ug/L	15137.170
>	72	Ge-1			706248.799	ug/L	739226.379
	75	As	216.257768	4.672	426263.102	ug/L	-1945.453
	82	Se	194.942452	3.346	42868.246	ug/L	-120.854
	97	Mo	101.523162	3.501	270566.346	ug/L	72.001
	107	Ag	5.591947	3.447	89514.959	ug/L	257.339
	111	Cd	5.460155	4.285	15564.311	ug/L	39.334
>	115	In-1			1376127.562	ug/L	1483966.870
	123	Sb	16.517827	3.032	117252.356	ug/L	268.758
	136	Ba	251.486823	4.515	575917.875	ug/L	112.002
>	165	Ho-1			1522955.357	ug/L	1592460.464
	205	Tl	187.848962	4.724	4949708.414	ug/L	3951.949
	208	Pb	67.376170	4.450	2433730.440	ug/L	4580.000
	238	U	198.021661	3.105	9138918.636	ug/L	234.671
>	45	Sc-2			529960.251	ug/L	454114.374
	53	Cr	-3.976235	115.853	174411.382	ug/L	154333.029
	54	Fe	35401.791954	7.214	29433777.626	ug/L	62090.940
	61	Ni	70.320130	8.223	11031.043	ug/L	1661.113
	63	Cu	40.366389	3.988	265311.478	ug/L	345.008
	67	Zn	86.162681	4.018	38804.636	ug/L	9047.975
>	72	Ge			706248.799	ug/L	739226.379
	77	Se	134.517316	6.435	32133.893	ug/L	8561.780
	98	Mo	102.842256	4.092	691985.749	ug/L	141.970
	109	Ag	4.559767	2.132	57867.949	ug/L	288.339
>	115	In-2			1376127.562	ug/L	1483966.870
	114	Cd	5.499433	2.852	35010.662	ug/L	84.731
	121	Sb	16.629676	4.493	154616.288	ug/L	349.674
	137	Ba	250.795362	3.502	978987.186	ug/L	156.669
>	165	Ho-2			1522955.357	ug/L	1592460.464
	203	Tl	182.832463	4.471	2047343.858	ug/L	1582.773
	206	Pb	69.068334	3.920	621888.662	ug/L	1161.392
	207	Pb	69.529087	3.888	527576.586	ug/L	995.045
>	45	Sc			529960.251	ug/L	454114.374
	47	Ti	173.411614	8.526	150515.990	ug/L	297.006
	86	Sr	109.997317	6.467	463237.963	ug/L	716.656
	88	Sr	110.474844	3.082	4049606.146	ug/L	5834.250
>	115	In			1376127.562	ug/L	1483966.870
	118	Sn	182.942610	3.236	1428102.049	ug/L	865.034
	120	Sn	183.321030	3.477	1882885.748	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	116.706
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	95.899
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	92.733
	Sb	123	
	Ba	135	
>	Ho-1	165	95.635
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	116.706
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	95.899
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	92.733
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	95.635
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	116.706
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	92.733
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G77FD
Sample Date/Time: Wednesday, April 27, 2005 23:23:23
Autosampler Position: 55
Dataset File: D:\Elandata\Dataset\042705M2\G77FD.053

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	1.062840	2.074	210.337	ug/L	7.667
	10	B	6.331852	11.196	256.672	ug/L	27.667
	23	Na	82.629087	1.245	370688.088	ug/L	18838.944
	24	Mg	11318.538090	3.535	34840802.063	ug/L	2106.176
	27	Al	18289.933298	3.023	88093257.359	ug/L	3413.777
	39	K	696.171832	3.971	7235681.619	ug/L	807733.282
	44	Ca	33358.939811	5.442	9802180.631	ug/L	61872.368
>	45	Sc-1			502166.660	ug/L	454114.374
	51	V	45.131394	2.546	484284.842	ug/L	-26072.212
	52	Cr	22.467068	2.387	254328.583	ug/L	26547.338
	55	Mn	2983.113944	3.455	33820568.479	ug/L	3062.361
	57	Fe	26007.946399	2.624	9008475.261	ug/L	9798.695
	59	Co	17.184481	5.196	219899.579	ug/L	232.338
	60	Ni	12.295787	0.873	33942.647	ug/L	301.006
	65	Cu	12.696033	2.102	38369.247	ug/L	168.336
	66	Zn	46.719763	3.260	97522.276	ug/L	15137.170
>	72	Ge-1			729186.781	ug/L	739226.379
	75	As	16.024397	2.326	30908.078	ug/L	-1945.453
	82	Se	1.433491	13.453	206.086	ug/L	-120.854
	97	Mo	1.893249	10.611	5361.398	ug/L	72.001
	107	Ag	0.087307	8.805	1395.082	ug/L	267.339
	111	Cd	0.222772	7.945	703.024	ug/L	39.334
>	115	In-1			1445803.437	ug/L	1483966.870
	123	Sb	0.378384	8.022	3074.434	ug/L	268.758
	135	Ba	194.357766	7.539	456368.114	ug/L	112.002
>	165	Ho-1			1562311.603	ug/L	1592460.464
	205	Tl	0.722213	19.073	23367.986	ug/L	3951.949
	208	Pb	39.795906	6.901	1475842.506	ug/L	4580.000
	238	U	1.891068	5.095	89715.684	ug/L	234.671
>	45	Sc-2			502166.660	ug/L	454114.374
	53	Cr	-3.891464	252.577	185099.922	ug/L	154333.029
	54	Fe	26335.669186	3.354	20786031.506	ug/L	62090.940
	61	Ni	16.926383	8.943	3909.241	ug/L	1661.113
	63	Cu	13.026384	2.051	81437.288	ug/L	345.008
	67	Zn	51.621902	5.941	26067.398	ug/L	9047.975
>	72	Ge			729186.781	ug/L	739226.379
	77	Se	-33.878966	8.254	2239.603	ug/L	8561.780
	98	Mo	1.940281	12.439	13824.802	ug/L	141.970
	109	Ag	0.064798	6.729	1140.724	ug/L	288.339
>	115	In-2			1445803.437	ug/L	1483966.870
	114	Cd	0.211608	8.596	1493.096	ug/L	84.731
	121	Sb	0.378179	9.288	4021.274	ug/L	349.674
	137	Ba	198.198278	6.405	793324.834	ug/L	156.669
>	165	Ho-2			1562311.603	ug/L	1592460.464
	203	Tl	0.707794	18.690	9670.086	ug/L	1582.773
	206	Pb	41.059268	7.286	379556.932	ug/L	1161.392
	207	Pb	40.625450	5.642	316528.103	ug/L	995.045
>	45	Sc			502166.660	ug/L	454114.374
	47	Ti	246.060509	4.958	201695.806	ug/L	297.006
	86	Sr	39.426629	5.496	158050.679	ug/L	716.656
	88	Sr	38.841320	4.047	1354601.885	ug/L	5834.250
>	115	In			1445803.437	ug/L	1483966.870
	118	Sn	1.099183	8.901	9829.820	ug/L	855.034
	120	Sn	1.144906	9.408	13405.515	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	110.582
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	96.642
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	97.428
	Sb	123	
	Ba	135	
>	Ho-1	165	98.197
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	110.582
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	96.642
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	97.428
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	98.197
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	110.582
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	97.428
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G782L
Sample Date/Time: Wednesday, April 27, 2005 23:28:28
Autosampler Position: 56
Dataset File: D:\Elandata\Dataset\042705M2\G782L.054

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌜	9	Be	0.897729	15.008	189.670	ug/L	7.667
|	10	B	5.934916	7.566	257.005	ug/L	27.667
|	23	Na	20.756198	6.341	114053.333	ug/L	18838.944
|	24	Mg	1432.186270	3.146	4624285.889	ug/L	2106.178
|	27	Al	13477.836687	6.508	66543287.214	ug/L	3413.777
|	39	K	1011.498123	5.152	10597976.596	ug/L	807733.282
|	44	Ca	6047.784859	7.674	1922267.926	ug/L	61872.368
|>	45	Sc-1			526440.880	ug/L	454114.374
|	51	V	36.385569	6.443	439526.781	ug/L	-26072.212
|	52	Cr	21.187269	8.109	253487.899	ug/L	26547.338
|	55	Mn	438.391714	6.511	7576785.294	ug/L	3062.361
|	57	Fe	33026.648973	6.391	11996620.781	ug/L	9798.695
|	59	Co	11.358179	3.294	151787.369	ug/L	232.338
|	60	Ni	26.198890	7.039	75498.243	ug/L	301.006
|	65	Cu	26.884743	6.370	85004.192	ug/L	168.336
⌊	66	Zn	86.444788	3.165	177680.598	ug/L	15137.170
⌜>	72	Ge-1			749011.709	ug/L	739226.379
|	75	As	25.525801	9.717	51718.423	ug/L	-1945.463
⌊	82	Se	1.322699	16.375	186.158	ug/L	-120.854
⌜	97	Mo	1.885455	5.428	5485.103	ug/L	72.001
|	107	Ag	0.117575	4.085	1629.469	ug/L	267.339
|	111	Cd	0.312871	5.795	994.045	ug/L	39.334
|>	115	In-1			1476739.642	ug/L	1483966.870
⌊	123	Sb	0.460744	8.143	3771.972	ug/L	268.758
⌜	135	Ba	84.257985	8.693	197971.166	ug/L	112.002
|>	165	Ho-1			1562762.937	ug/L	1592460.464
|	205	Tl	0.439580	19.913	15741.943	ug/L	3951.949
|	208	Pb	29.053476	7.729	1078961.740	ug/L	4580.000
⌊	238	U	2.543230	9.059	120610.857	ug/L	234.671
⌜>	45	Sc-2			526440.880	ug/L	454114.374
|	53	Cr	0.771416	895.430	179666.139	ug/L	154333.029
|	54	Fe	33250.846336	4.013	27498504.982	ug/L	62090.940
|	61	Ni	27.341825	7.070	5443.094	ug/L	1661.113
|	63	Cu	27.374838	6.235	179066.862	ug/L	345.008
⌊	67	Zn	82.687548	4.688	37526.703	ug/L	9047.975
⌜>	72	Ge			749011.709	ug/L	739226.379
⌊	77	Se	-35.809167	3.657	1935.982	ug/L	8561.780
⌜	98	Mo	1.886698	5.277	13758.420	ug/L	141.970
|	109	Ag	0.086710	11.500	1463.423	ug/L	288.339
|>	115	In-2			1476739.642	ug/L	1483966.870
|	114	Cd	0.309652	6.072	2196.397	ug/L	84.731
⌊	121	Sb	0.486319	6.991	5193.000	ug/L	349.674
⌜	137	Ba	84.843570	8.866	339780.927	ug/L	156.669
|>	165	Ho-2			1562762.937	ug/L	1592460.464
|	203	Tl	0.436051	17.613	6555.252	ug/L	1582.773
|	206	Pb	29.729081	6.918	275222.240	ug/L	1161.392
⌊	207	Pb	29.942981	9.962	233564.550	ug/L	995.045
⌜>	45	Sc			526440.880	ug/L	454114.374
|	47	Ti	203.946670	5.433	176056.348	ug/L	297.006
|	86	Sr	16.914252	3.457	71529.904	ug/L	716.656
⌊	88	Sr	16.286390	4.692	599401.856	ug/L	5834.250
⌜>	115	In			1476739.642	ug/L	1483966.870
|	118	Sn	1.181266	5.039	10742.488	ug/L	855.034
⌊	120	Sn	1.189229	6.193	14204.814	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌜	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	115.927
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.334
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.513
	Sb	123	
	Ba	135	
>	Ho-1	165	98.136
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	46	115.927
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.334
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	99.513
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	98.136
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	115.927
	Ti	47	
	Sr	88	
	Sr	88	
>	In	115	99.513
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G782LS
Sample Date/Time: Wednesday, April 27, 2005 23:33:34
Autosampler Position: 57
Dataset File: D:\Elandata\Dataset\042705M2\G782LS.055

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌈	9	Be	4.518868	3.745	931.040	ug/L	7.667
|	10	B	137.222761	0.450	5305.371	ug/L	27.667
|	23	Na	4087.568884	1.870	18436891.302	ug/L	18838.944
|	24	Mg	5388.383402	4.102	17635214.945	ug/L	2106.176
|	27	Al	26136.101255	3.874	130862012.898	ug/L	3413.777
|	39	K	5215.573202	1.727	51481277.745	ug/L	807733.282
|	44	Ca	5918.595397	2.361	1906825.899	ug/L	61872.368
|>	45	Sc-1			534382.845	ug/L	454114.374
|	51	V	85.896481	0.699	1008356.420	ug/L	-26072.212
|	52	Cr	38.727655	1.894	454568.532	ug/L	26547.338
|	55	Mn	248.047470	2.086	4348316.260	ug/L	3062.361
|	57	Fe	42683.922536	6.140	15714874.106	ug/L	9796.696
|	59	Co	48.222361	3.206	652846.377	ug/L	232.338
|	60	Ni	55.491196	2.635	181722.400	ug/L	301.006
|	65	Cu	49.723531	3.295	130469.666	ug/L	168.336
⌊	66	Zn	86.377533	1.411	180142.522	ug/L	15137.170
⌈>	72	Ge-1			746780.316	ug/L	739226.379
|	75	As	207.314549	1.978	433072.136	ug/L	-1945.453
⌊	82	Se	181.175555	0.504	42012.208	ug/L	-120.854
⌈	97	Mo	99.615288	1.032	280183.216	ug/L	72.001
|	107	Ag	5.469153	2.542	71628.949	ug/L	287.339
|	111	Cd	5.237534	3.880	15759.525	ug/L	39.334
|>	115	In-1			1452555.083	ug/L	1483966.870
⌊	123	Sb	19.332159	1.683	144788.322	ug/L	268.758
⌈	135	Ba	266.079355	1.662	588994.809	ug/L	112.002
|>	165	Ho-1			1529762.358	ug/L	1592460.464
|	205	Tl	179.639609	1.471	4754101.829	ug/L	3951.949
|	208	Pb	61.144780	0.689	2218689.215	ug/L	4580.000
⌊	238	U	184.441121	1.898	8548392.282	ug/L	234.671
⌈>	45	Sc-2			534382.845	ug/L	454114.374
|	53	Cr	10.208681	60.696	196661.427	ug/L	154333.029
|	54	Fe	43545.516489	4.316	36506734.665	ug/L	62090.940
|	61	Ni	56.328662	4.175	9302.789	ug/L	1661.113
|	63	Cu	41.721232	1.880	276546.708	ug/L	345.008
⌊	67	Zn	89.329484	3.495	40283.131	ug/L	9047.975
⌈>	72	Ge			746780.316	ug/L	739226.379
⌊	77	Se	117.217371	1.943	30646.164	ug/L	8561.780
⌈	98	Mo	99.795072	0.656	708568.760	ug/L	141.970
|	109	Ag	4.564572	1.257	61142.547	ug/L	288.339
|>	115	In-2			1452555.083	ug/L	1483966.870
|	114	Cd	5.370893	0.979	36087.739	ug/L	84.731
⌊	121	Sb	19.457896	3.286	190865.585	ug/L	349.674
⌈	137	Ba	267.968196	2.130	1011425.704	ug/L	156.669
|>	165	Ho-2			1529762.358	ug/L	1592460.464
|	203	Tl	171.230461	0.602	1926112.435	ug/L	1582.773
|	206	Pb	62.561288	2.788	565740.570	ug/L	1161.392
⌊	207	Pb	62.886571	0.734	477824.134	ug/L	995.045
⌈>	45	Sc			534382.845	ug/L	454114.374
|	47	Ti	248.203608	3.692	217198.595	ug/L	287.006
|	86	Sr	90.188056	3.648	383261.469	ug/L	716.656
⌊	88	Sr	91.921012	3.564	3399259.145	ug/L	5834.250
⌈>	115	In			1452555.083	ug/L	1483966.870
|	118	Sn	185.147804	2.076	1525262.572	ug/L	855.034
⌊	120	Sn	184.830886	1.417	2003551.060	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	117.676
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.022
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	97.883
	Sb	123	
	Ba	135	
>	Ho-1	165	96.063
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	117.676
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.022
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	97.883
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	96.063
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	117.676
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	97.883
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G782LD
Sample Date/Time: Wednesday, April 27, 2005 23:38:40
Autosampler Position: 58
Dataset File: D:\Elandata\Dataset\042705M2\G782LD.056

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	5.041177	2.309	1053.716	ug/L	7.667
	10	B	152.264002	1.622	5969.974	ug/L	27.667
	23	Na	4174.568200	3.055	19116048.911	ug/L	18838.944
	24	Mg	5911.361351	3.908	19636110.102	ug/L	2106.176
	27	Al	20089.861723	2.432	101942713.019	ug/L	3413.777
	39	K	5478.249880	1.496	54844585.814	ug/L	807733.282
	44	Ca	10168.678297	3.051	3270812.720	ug/L	61872.368
>	45	Sc-1			542379.593	ug/L	454114.374
	51	V	81.675967	0.641	971638.311	ug/L	-26072.212
	52	Cr	38.628234	2.291	449632.180	ug/L	26547.338
	55	Mn	460.053128	1.369	8005690.865	ug/L	3062.361
	57	Fe	30316.590347	4.655	11338061.084	ug/L	9796.695
	59	Co	53.621414	0.789	736947.194	ug/L	232.338
	60	Ni	69.637861	3.155	206025.712	ug/L	301.006
	65	Cu	46.941224	3.361	152620.940	ug/L	168.336
	66	Zn	131.828266	2.516	269492.839	ug/L	15137.170
>	72	Ge-1			750712.663	ug/L	739226.379
	75	As	223.848828	3.352	470184.649	ug/L	-1945.453
	82	Se	196.930140	2.571	45679.476	ug/L	-120.854
	97	Mo	100.162884	2.696	288429.491	ug/L	72.001
	107	Ag	5.566867	0.675	74670.121	ug/L	267.339
	111	Cd	5.566534	2.123	17030.658	ug/L	39.334
>	115	In-1			1476564.162	ug/L	1483966.870
	123	Sb	21.205811	1.298	161436.108	ug/L	268.758
	136	Ba	289.833941	3.147	684494.395	ug/L	112.002
>	165	Ho-1			1571068.074	ug/L	1592460.464
	205	Tl	180.794863	3.466	4912769.209	ug/L	3951.949
	208	Pb	72.913768	3.151	2715823.949	ug/L	4580.000
	238	U	186.693777	4.283	6860267.417	ug/L	234.671
>	45	Sc-2			542379.593	ug/L	454114.374
	53	Cr	12.875826	81.626	203160.013	ug/L	154333.029
	54	Fe	30588.197117	4.163	26039401.890	ug/L	62090.940
	61	Ni	69.971778	2.389	11246.204	ug/L	1661.113
	63	Cu	47.643457	0.614	320529.674	ug/L	345.008
	67	Zn	130.708267	3.002	54821.934	ug/L	9047.975
>	72	Ge			750712.663	ug/L	739226.379
	77	Se	145.828361	3.055	36209.091	ug/L	8561.780
	98	Mo	100.788749	1.386	727455.465	ug/L	141.970
	109	Ag	4.673811	2.772	62290.987	ug/L	288.339
>	115	In-2			1476564.162	ug/L	1483966.870
	114	Cd	5.533907	0.989	37798.495	ug/L	84.731
	121	Sb	21.523184	1.542	214599.349	ug/L	349.674
	137	Ba	290.091369	5.295	1167641.757	ug/L	156.669
>	165	Ho-2			1571068.074	ug/L	1592460.464
	203	Tl	174.020325	6.045	2009019.542	ug/L	1582.773
	206	Pb	74.445854	3.031	691169.755	ug/L	1161.392
	207	Pb	76.811136	6.138	592967.895	ug/L	995.045
>	45	Sc			542379.593	ug/L	454114.374
	47	Ti	310.032168	3.194	275309.628	ug/L	297.006
	86	Sr	98.705523	1.142	425665.044	ug/L	716.656
	88	Sr	100.153330	2.208	3760239.210	ug/L	5834.250
>	115	In			1476564.162	ug/L	1483966.870
	118	Sn	186.886991	1.320	1565257.910	ug/L	855.034
	120	Sn	187.943382	2.154	2071358.033	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	119.437
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.594
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.501
	Sb	123	
	Ba	135	
>	Ho-1	165	96.657
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	119.437
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.594
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	99.501
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	96.657
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	119.437
	Tl	47	
	Sr	88	
	Sr	88	
>	In	115	99.501
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G783X
Sample Date/Time: Wednesday, April 27, 2005 23:43:46
Autosampler Position: 59
Dataset File: D:\Elandata\Dataset\042705M2\G783X.057

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.457759	4.673	100.668	ug/L	7.667
	10	B	5.175383	12.255	228.004	ug/L	27.667
	23	Na	26.048927	5.903	137264.575	ug/L	18838.944
	24	Mg	2136.293441	1.528	6877516.062	ug/L	2108.176
	27	Al	18122.886000	5.838	88280531.360	ug/L	3413.777
	39	K	841.749704	2.410	8953507.485	ug/L	807733.282
	44	Ca	5127.904730	2.658	1635428.152	ug/L	61872.368
>	45	Sc-1			525427.037	ug/L	454114.374
	51	V	57.569861	4.140	654555.719	ug/L	-26072.212
	52	Cr	47.136330	5.030	524805.467	ug/L	26547.338
	55	Mn	241.162215	5.595	4159613.334	ug/L	3062.361
	57	Fe	44971.798227	3.160	16283779.771	ug/L	9798.895
	59	Co	6.282081	2.689	70567.458	ug/L	232.338
	60	Ni	9.810778	7.441	28422.019	ug/L	301.006
	65	Cu	17.388196	4.444	54834.838	ug/L	168.336
	66	Zn	41.602270	7.111	94474.069	ug/L	15137.170
>	72	Ge-1			758359.335	ug/L	739226.379
	75	As	14.207454	9.840	28275.613	ug/L	-1945.453
	82	Se	0.753699	7.850	54.013	ug/L	-120.854
	97	Mo	2.111625	6.521	6178.401	ug/L	72.001
	107	Ag	0.148335	2.529	2236.197	ug/L	267.339
	111	Cd	0.133735	8.593	452.345	ug/L	39.334
>	115	In-1			1493761.853	ug/L	1483966.870
	123	Sb	0.429674	9.858	3673.678	ug/L	268.758
	135	Ba	84.234553	4.628	150097.629	ug/L	112.002
>	165	Ho-1			1553270.444	ug/L	1592460.464
	205	Tl	0.728587	26.968	23361.293	ug/L	3951.949
	208	Pb	26.514336	4.973	979395.646	ug/L	4580.000
	238	U	1.736354	5.185	81950.601	ug/L	234.671
>	45	Sc-2			525427.037	ug/L	454114.374
	53	Cr	18.736807	38.925	205280.390	ug/L	154333.029
	54	Fe	45854.709915	5.134	37796841.696	ug/L	62090.940
	61	Ni	9.171091	16.391	3098.702	ug/L	1661.113
	63	Cu	17.532762	4.519	114585.691	ug/L	345.008
	67	Zn	44.919116	4.146	25119.663	ug/L	9047.975
>	72	Ge			758359.335	ug/L	739226.379
	77	Se	-34.928390	0.970	2126.727	ug/L	8561.780
	98	Mo	2.100553	4.914	15477.638	ug/L	141.970
	109	Ag	0.039593	13.356	833.033	ug/L	288.339
>	115	In-2			1493761.853	ug/L	1483966.870
	114	Cd	0.103058	11.992	795.604	ug/L	84.731
	121	Sb	0.437644	5.016	4757.507	ug/L	349.674
	137	Ba	66.081578	5.049	259198.227	ug/L	156.669
>	165	Ho-2			1553270.444	ug/L	1592460.464
	203	Tl	0.713337	28.087	9683.165	ug/L	1582.773
	206	Pb	27.014146	5.241	248738.219	ug/L	1161.392
	207	Pb	27.127190	6.495	210495.843	ug/L	995.045
>	45	Sc			525427.037	ug/L	454114.374
	47	Ti	196.002461	3.152	167835.829	ug/L	297.008
	86	Sr	9.926716	3.144	42215.528	ug/L	716.656
	88	Sr	9.920336	4.417	366862.376	ug/L	5834.250
>	115	In			1493761.853	ug/L	1483966.870
	118	Sn	1.313561	5.703	11982.819	ug/L	855.034
	120	Sn	1.339818	6.219	16037.564	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	46	116.704
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	102.588
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	100.000
	Sb	123	
	Ba	135	
>	Ho-1	165	97.539
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	116.704
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	102.588
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	100.000
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	97.539
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	116.704
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	100.000
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8JDL
Sample Date/Time: Wednesday, April 27, 2005 23:48:53
Autosampler Position: 60
Dataset File: D:\Elandata\Dataset\042705M2\G8JDL.058

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.403552	1.331	87.334	ug/L	7.667
	10	B	2.088849	13.884	107.868	ug/L	27.667
	23	Na	15.481653	3.496	87682.558	ug/L	18838.944
	24	Mg	283.970376	6.664	889518.291	ug/L	2106.176
	27	Al	11612.387208	3.805	55524819.581	ug/L	3413.777
	39	K	747.915208	2.979	7831199.936	ug/L	807733.282
	44	Ca	170.116926	9.008	119991.897	ug/L	61872.366
>	45	Sc-1			510931.401	ug/L	454114.374
	51	V	38.580673	2.007	416583.852	ug/L	-26072.212
	52	Cr	20.048695	4.403	234068.973	ug/L	26547.338
	55	Mn	67.331139	4.450	1129627.309	ug/L	3082.361
	57	Fe	36791.918883	3.739	12942755.424	ug/L	9796.695
	59	Co	3.818413	4.867	49597.777	ug/L	232.338
	60	Ni	8.854052	4.877	24922.972	ug/L	301.006
	65	Cu	12.268567	5.336	37670.018	ug/L	168.336
	66	Zn	28.818673	5.278	68733.321	ug/L	15137.170
>	72	Ge-1			740095.043	ug/L	739226.379
	75	As	8.863406	3.820	16070.887	ug/L	-1945.453
	82	Se	0.479210	37.620	-10.634	ug/L	-120.854
	97	Mo	0.890310	4.132	2586.593	ug/L	72.001
	107	Ag	0.078257	2.190	1265.069	ug/L	267.339
	111	Cd	0.046213	8.520	175.003	ug/L	39.334
>	115	In-1			1460111.796	ug/L	1483966.870
	123	Sb	0.160693	5.160	1471.510	ug/L	268.758
	135	Ba	39.394589	2.204	91274.935	ug/L	112.002
>	165	Ho-1			1539614.730	ug/L	1592460.464
	205	Tl	0.281835	14.119	11327.968	ug/L	3951.849
	208	Pb	13.874350	1.449	510134.829	ug/L	4580.000
	238	U	1.135771	3.891	53211.546	ug/L	234.671
>	45	Sc-2			510931.401	ug/L	454114.374
	53	Cr	-13.373153	64.875	155036.428	ug/L	154333.029
	54	Fe	37095.966239	5.655	29701104.760	ug/L	62090.940
	61	Ni	7.192292	25.800	2759.628	ug/L	1661.113
	63	Cu	12.648680	5.210	79689.179	ug/L	345.008
	67	Zn	27.503316	11.031	18899.380	ug/L	9047.975
>	72	Ge			740095.043	ug/L	739226.379
	77	Se	-44.132706	7.952	367.819	ug/L	8581.780
	98	Mo	0.879399	1.139	6414.811	ug/L	141.970
	109	Ag	0.012984	22.576	458.012	ug/L	288.339
>	115	In-2			1460111.796	ug/L	1483966.870
	114	Cd	0.037416	11.414	335.664	ug/L	84.731
	121	Sb	0.158858	4.497	1907.480	ug/L	349.874
	137	Ba	40.500736	2.405	159920.176	ug/L	156.669
>	165	Ho-2			1539614.730	ug/L	1592460.464
	203	Tl	0.278641	17.914	4585.490	ug/L	1582.773
	206	Pb	14.299207	1.598	131040.049	ug/L	1161.392
	207	Pb	14.345601	2.023	110783.595	ug/L	995.045
>	45	Sc			510931.401	ug/L	454114.374
	47	Ti	96.036162	5.130	80500.328	ug/L	297.006
	86	Sr	0.936403	5.906	4596.534	ug/L	716.656
	88	Sr	0.977065	8.028	40959.395	ug/L	5834.250
>	115	In			1460111.796	ug/L	1483966.870
	118	Sn	0.791820	2.777	7393.967	ug/L	855.034
	120	Sn	0.821562	2.020	10032.719	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	112.512
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	100.118
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.392
	Sb	123	
	Ba	135	
>	Ho-1	165	96.892
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	112.512
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	100.118
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.392
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	96.892
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	112.512
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	98.392
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Wednesday, April 27, 2005 23:54:03
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 1.059

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	194.584367	3.534	33833.695	ug/L	7.667
	10	B	187.331365	6.748	6157.058	ug/L	27.667
	23	Na	1888.708297	4.755	7146527.060	ug/L	18838.944
	24	Mg	972.089877	5.756	2711826.472	ug/L	2106.176
	27	Al	2034.171692	5.214	8571394.001	ug/L	3413.777
	39	K	1978.887124	1.811	17137333.926	ug/L	807733.282
	44	Ca	1040.644885	4.200	336854.256	ug/L	61872.368
>	45	Sc-1			455217.281	ug/L	454114.374
	51	V	195.981385	7.671	1991247.419	ug/L	-28072.212
	52	Cr	204.279850	2.934	1880159.946	ug/L	26547.338
	55	Mn	201.943446	2.676	3015351.345	ug/L	3062.361
	57	Fe	2022.116466	1.220	643606.056	ug/L	9798.695
	59	Co	196.473480	2.449	2287742.667	ug/L	232.338
	60	Ni	203.597988	1.939	504660.930	ug/L	301.006
	65	Cu	203.808178	3.909	555270.386	ug/L	168.336
	66	Zn	192.007048	2.302	322459.582	ug/L	15137.170
>	72	Ge-1			726611.038	ug/L	739226.379
	75	As	204.588757	2.222	415659.558	ug/L	-1945.453
	82	Se	202.603482	3.206	45742.147	ug/L	-120.854
	97	Mo	197.914124	0.848	571690.148	ug/L	72.001
	107	Ag	49.084190	3.320	659367.282	ug/L	267.339
	111	Cd	195.603643	0.774	603000.812	ug/L	39.334
>	115	In-1			1492082.666	ug/L	1483966.870
	123	Sb	196.572996	2.175	1501843.996	ug/L	268.758
	135	Ba	211.146140	0.871	490531.467	ug/L	112.002
>	165	Ho-1			1545001.785	ug/L	1592460.464
	205	Tl	186.783767	2.864	4965450.377	ug/L	3951.849
	206	Pb	186.668602	1.718	6831768.272	ug/L	4580.000
	238	U	181.432854	1.336	8494014.204	ug/L	234.671
>	45	Sc-2			455217.281	ug/L	454114.374
	53	Cr	180.428350	9.500	354009.309	ug/L	154333.029
	54	Fe	2113.902221	1.727	1568769.853	ug/L	62090.940
	61	Ni	206.515149	2.902	24495.897	ug/L	1661.113
	63	Cu	206.685709	2.136	1159182.358	ug/L	345.008
	67	Zn	191.488490	4.591	63153.626	ug/L	9047.975
>	72	Ge			726611.038	ug/L	739226.379
	77	Se	168.734254	2.052	39233.814	ug/L	8561.780
	98	Mo	195.494612	1.986	1425572.379	ug/L	141.970
	109	Ag	48.111389	2.073	659065.594	ug/L	288.339
>	115	In-2			1492082.666	ug/L	1483966.870
	114	Cd	193.999764	0.642	1335867.794	ug/L	84.731
	121	Sb	196.334584	1.973	1974679.133	ug/L	349.574
	137	Ba	212.728008	2.367	842366.940	ug/L	156.669
>	165	Ho-2			1545001.785	ug/L	1592460.464
	203	Tl	175.947265	2.962	1998853.692	ug/L	1582.773
	206	Pb	187.614766	1.029	1711639.188	ug/L	1161.392
	207	Pb	196.468610	1.772	1502750.762	ug/L	995.045
>	45	Sc			455217.281	ug/L	454114.374
	47	Ti	205.332115	3.356	153051.737	ug/L	297.006
	86	Sr	194.986607	4.826	704707.541	ug/L	716.656
	88	Sr	191.997968	2.865	6040137.488	ug/L	5834.250
>	115	In			1492082.666	ug/L	1483966.870
	118	Sn	200.597580	1.991	1697251.125	ug/L	855.034
	120	Sn	201.062237	2.382	2238475.723	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		97.342

	B	10		93.666
	Na	23		92.936
	Mg	24		97.209
	Al	27		101.700
	K	39		96.944
	Ca	44		104.084
>	Sc-1	45	100.243	
	V	51		97.991
	Cr	52		102.140
	Mn	55		100.972
	Fe	57		101.106
	Co	59		99.237
	Ni	60		101.799
	Cu	65		101.994
	Zn	66		99.094
>	Ge-1	72	98.293	
	As	75		102.293
	Se	82		101.362
	Mo	97		96.957
	Ag	107		96.168
	Cd	111		97.802
>	In-1	115	100.547	
	Sb	123		97.706
	Ba	138		105.578
>	Ho-1	165	97.020	
	Tl	205		92.892
	Pb	208		93.334
	U	238		90.716
>	Sc-2	45	100.343	
	Cr	53		90.214
	Fe	54		105.606
	Ni	61		102.768
	Cu	63		102.793
	Zn	67		95.733
>	Ge	72	98.299	
	Se	77		84.367
	Mo	96		97.747
	Ag	109		96.223
>	In-2	115	100.547	
	Cd	114		96.999
	Sb	121		96.157
	Ba	137		106.364
>	Ho-2	165	97.020	
	Tl	203		97.974
	Pb	206		93.807
	Pb	207		97.734
>	Sc	45	100.343	
	Tl	47		102.996
	Sr	86		97.493
	Sr	88		96.999
>	In	115	100.547	
	Sn	118		100.299
	Sn	120		100.541

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cr	53	Q
Se	77	Q
Tl	203	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Thursday, April 28, 2005 00:00:13
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 2.060

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.009698	28.612	9.333	ug/L	7.667
	10	B	2.989525	18.772	124.668	ug/L	27.667
	23	Na	0.045732	394.120	18973.121	ug/L	18838.944
	24	Mg	0.027668	77.343	2179.188	ug/L	2106.176
	27	Al	0.444377	5.986	5294.034	ug/L	3413.777
	39	K	-5.376967	23.655	761974.934	ug/L	807733.282
	44	Ca	-12.225396	32.209	58527.570	ug/L	61872.368
>	45	Sc-1			453283.429	ug/L	454114.374
	51	V	0.506662	21.688	-20615.502	ug/L	-26072.212
	52	Cr	-0.929526	19.989	18073.646	ug/L	26547.338
	55	Mn	0.022437	48.847	3387.769	ug/L	3062.361
	57	Fe	-0.604426	119.613	9592.699	ug/L	9798.695
	59	Co	0.011431	40.621	363.675	ug/L	232.338
	60	Ni	-0.001923	545.351	295.673	ug/L	301.006
	65	Cu	0.011323	19.011	196.670	ug/L	158.336
	66	Zn	-0.161296	112.532	14867.217	ug/L	15137.170
>	72	Ge-1			729514.246	ug/L	739226.379
	75	As	0.966678	30.175	53.100	ug/L	-1945.453
	82	Se	0.371281	71.017	-34.211	ug/L	-120.854
	97	Mo	0.078372	46.267	301.006	ug/L	72.001
	107	Ag	0.000833	143.980	262.339	ug/L	257.339
	111	Cd	0.004868	105.612	55.001	ug/L	39.334
>	115	In-1			1504684.850	ug/L	1483966.870
	123	Sb	0.077853	27.131	873.425	ug/L	288.758
	135	Ba	0.003343	58.780	115.335	ug/L	112.002
>	165	Ho-1			1530245.833	ug/L	1592460.464
	205	Tl	0.275516	47.164	11082.688	ug/L	3951.849
	208	Pb	-0.023731	9.322	3540.541	ug/L	4580.000
	238	U	0.005672	31.607	487.660	ug/L	234.671
>	45	Sc-2			453283.429	ug/L	454114.374
	53	Cr	-27.896756	39.317	119321.368	ug/L	154333.029
	54	Fe	0.078132	2089.041	62020.721	ug/L	62090.940
	61	Ni	-1.097008	18.758	1536.431	ug/L	1661.113
	63	Cu	0.013696	14.868	421.344	ug/L	345.008
	67	Zn	-1.411719	260.041	8620.704	ug/L	9047.975
>	72	Ge			729514.246	ug/L	739226.379
	77	Se	-38.246853	4.535	1433.650	ug/L	8561.780
	98	Mo	0.067829	37.844	789.226	ug/L	141.970
	109	Ag	0.812029	28.570	458.345	ug/L	288.339
>	115	In-2			1504684.850	ug/L	1483966.870
	114	Cd	0.004613	76.970	117.867	ug/L	84.731
	121	Sb	0.079129	30.811	1156.393	ug/L	349.574
	137	Ba	0.012032	58.327	197.670	ug/L	156.669
>	165	Ho-2			1530245.833	ug/L	1592460.464
	203	Tl	0.279786	51.866	4666.205	ug/L	1582.773
	206	Pb	-0.023986	12.649	899.371	ug/L	1161.392
	207	Pb	-0.025918	15.533	758.694	ug/L	995.045
>	45	Sc			453283.429	ug/L	454114.374
	47	Ti	0.046940	127.333	330.007	ug/L	297.006
	86	Sr	0.008314	176.782	744.501	ug/L	716.656
	88	Sr	0.002041	352.177	5887.807	ug/L	5834.250
>	115	In			1504684.850	ug/L	1483966.870
	118	Sn	0.062166	28.842	1396.749	ug/L	855.034
	120	Sn	0.072583	20.443	1932.980	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		0.978

	B	10		296.963
	Na	23		0.046
	Mg	24		0.026
	Al	27		0.444
	K	39		-6.377
	Ca	44		-12.226
>	Sc-1	45	99.817	
	V	51		90.606
	Cr	52		-92.963
	Mn	55		2.244
	Fe	57		-9.804
	Co	59		1.143
	Ni	60		-0.192
	Cu	65		1.132
	Zn	66		-15.139
>	Ge-1	72	98.666	
	As	75		96.666
	Se	82		37.128
	Mo	97		7.837
	Ag	107		0.083
	Cd	111		0.467
>	In-1	115	101.396	
	Sb	123		7.766
	Ba	136		0.334
>	Ho-1	165	99.093	
	Tl	205		27.891
	Pb	208		-2.373
	U	238		8.867
>	Sc-2	45	99.817	
	Cr	53		-2789.578
	Fe	54		0.078
	Ni	61		-109.701
	Cu	63		1.370
	Zn	67		-141.172
>	Ge	72	98.666	
	Se	77		-3824.696
	Mo	98		8.783
	Ag	109		1.203
>	In-2	115	101.396	
	Cd	114		0.491
	Sb	121		7.913
	Ba	137		1.203
>	Ho-2	165	99.093	
	Tl	203		27.979
	Pb	206		-2.399
	Pb	207		-2.591
>	Sc	45	99.817	
	Ti	47		4.684
	Sr	86		0.831
	Sr	88		0.204
>	In	115	101.396	
	Sn	118		6.217
	Sn	120		7.258

QC Out Of Limits

Analyte	Mass	Out of Limits Message
B	10	Q
Cr	53	Q
Ni	61	Q
Zn	67	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8JDL8
Sample Date/Time: Thursday, April 28, 2005 00:06:20
Autosampler Position: 61
Dataset File: D:\Elandata\Dataset\042705M2\G8JDLS.061

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	4.952713	10.554	1023.714	ug/L	7.667
	10	B	140.996495	5.468	5474.438	ug/L	27.667
	23	Na	4343.344551	6.803	19671613.506	ug/L	18838.944
	24	Mg	6027.908919	10.156	16530276.719	ug/L	2106.176
	27	Al	19448.449296	7.461	97778748.215	ug/L	3413.777
	39	K	5676.553537	5.628	56200857.735	ug/L	807733.282
	44	Ca	4803.814100	10.684	1569292.233	ug/L	61872.368
>	45	Sc-1			536948.922	ug/L	454114.374
	51	V	89.307896	9.045	1053820.713	ug/L	-26072.212
	52	Cr	40.496176	6.495	464765.273	ug/L	26547.338
	55	Mn	117.398036	5.991	2069071.039	ug/L	3062.361
	57	Fe	36880.874578	7.048	13640908.230	ug/L	9798.685
	59	Co	60.275943	7.090	683634.064	ug/L	232.338
	60	Ni	67.690755	5.970	168869.089	ug/L	301.006
	65	Cu	37.358629	11.084	120183.459	ug/L	168.336
	66	Zn	78.444187	9.506	165919.593	ug/L	15137.170
>	72	Ge-1			763134.438	ug/L	739226.379
	75	As	218.733107	4.183	467375.411	ug/L	-1945.453
	82	Se	196.234063	4.276	46323.000	ug/L	-120.854
	97	Mo	106.660962	8.664	298995.787	ug/L	72.001
	107	Ag	5.991162	11.528	79043.564	ug/L	267.339
	111	Cd	5.578017	9.936	16880.847	ug/L	39.334
>	115	In-1			1463086.696	ug/L	1483966.870
	123	Sb	21.709117	9.123	163558.014	ug/L	268.758
	136	Ba	275.213418	8.205	629949.306	ug/L	112.002
>	165	Ho-1			1521712.160	ug/L	1592460.464
	205	Tl	191.828102	4.578	5061501.605	ug/L	3951.949
	208	Pb	66.234076	6.915	2391580.131	ug/L	4580.000
	238	U	280.284857	6.418	9239407.670	ug/L	234.671
>	45	Sc-2			536948.922	ug/L	454114.374
	53	Cr	6.096871	122.618	191526.002	ug/L	154333.029
	54	Fe	37063.161883	8.590	31213618.307	ug/L	62090.940
	61	Ni	57.092588	9.928	9442.890	ug/L	1861.113
	63	Cu	37.787915	7.505	251591.717	ug/L	345.008
	67	Zn	80.766661	8.574	37606.887	ug/L	9047.975
>	72	Ge			763134.438	ug/L	739226.379
	77	Se	132.138715	3.965	34168.346	ug/L	8561.780
	98	Mo	107.598536	9.218	768712.499	ug/L	141.970
	109	Ag	4.980412	7.108	67109.557	ug/L	288.339
>	115	In-2			1463086.696	ug/L	1483966.870
	114	Cd	5.820896	3.447	39371.393	ug/L	84.731
	121	Sb	21.880207	10.114	215870.282	ug/L	349.674
	137	Ba	280.107783	5.155	1092796.915	ug/L	156.669
>	165	Ho-2			1521712.160	ug/L	1592460.464
	203	Tl	190.525538	5.524	2133524.145	ug/L	1582.773
	206	Pb	67.931773	5.659	611376.706	ug/L	1161.392
	207	Pb	68.843362	6.823	522168.475	ug/L	995.045
>	45	Sc			536948.922	ug/L	454114.374
	47	Ti	219.333066	10.118	192754.801	ug/L	297.006
	86	Sr	91.948402	10.664	392313.414	ug/L	716.656
	88	Sr	93.407324	5.621	3469424.750	ug/L	5834.250
>	115	In			1463086.696	ug/L	1483966.870
	118	Sn	194.131634	10.774	1608810.173	ug/L	855.034
	120	Sn	192.221812	9.463	2096325.465	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	116.241
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	103.234
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	96.593
	Sb	123	
	Ba	135	
>	Ho-1	165	96.667
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	116.241
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	103.234
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	116	96.593
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	96.667
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	116.241
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	96.593
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8JDLD
Sample Date/Time: Thursday, April 28, 2005 00:11:28
Autosampler Position: 62
Dataset File: D:\Elandata\Dataset\042705M2\G8JDLD.062

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	4.783088	12.013	965.709	ug/L	7.667
	10	B	133.807068	2.628	5099.294	ug/L	27.667
	23	Na	4149.875812	3.451	18451116.134	ug/L	18838.944
	24	Mg	4800.213601	2.286	15495334.048	ug/L	2106.176
	27	Al	18328.921290	2.419	90473135.487	ug/L	3413.777
	39	K	5233.569305	2.656	50918129.275	ug/L	807733.282
	44	Ca	4512.936310	3.396	1451322.554	ug/L	61872.368
>	45	Sc-1			526899.466	ug/L	454114.374
	51	V	82.346484	4.820	951524.199	ug/L	-26072.212
	52	Cr	39.131516	6.592	441643.830	ug/L	26547.338
	55	Mn	106.443795	4.887	1841512.988	ug/L	3062.361
	57	Fe	35042.874713	2.986	12720484.584	ug/L	9798.695
	59	Co	47.836896	1.175	838884.700	ug/L	232.338
	60	Ni	55.143864	4.271	158516.427	ug/L	301.006
	65	Cu	34.739058	4.395	109750.261	ug/L	168.336
	66	Zn	73.340339	3.491	153456.490	ug/L	15137.170
>	72	Ge-1			737188.972	ug/L	739226.379
	75	As	207.339815	7.049	427176.820	ug/L	-1945.453
	82	Se	185.302826	3.355	42400.359	ug/L	-120.854
	97	Mo	97.760289	2.223	279756.846	ug/L	72.001
	107	Ag	5.509464	1.034	73529.488	ug/L	267.339
	111	Cd	5.194371	3.219	15897.005	ug/L	39.334
>	115	In-1			1477722.581	ug/L	1483966.870
	123	Sb	19.875681	2.664	151435.593	ug/L	288.758
	135	Ba	256.690178	1.860	590812.123	ug/L	112.002
>	165	Ho-1			1536811.667	ug/L	1582460.464
	205	Tl	178.847050	2.826	4755887.963	ug/L	3951.949
	208	Pb	80.721520	2.158	2213708.931	ug/L	4580.000
	238	U	184.166823	5.599	8577709.379	ug/L	234.671
>	45	Sc-2			526899.466	ug/L	454114.374
	53	Cr	10.157301	107.213	193483.938	ug/L	154333.029
	54	Fe	35682.550631	4.883	29487008.933	ug/L	62090.940
	61	Ni	53.613832	3.603	8819.476	ug/L	1661.113
	63	Cu	34.929787	3.792	228363.233	ug/L	345.008
	67	Zn	76.979313	3.069	35344.697	ug/L	9047.975
>	72	Ge			737188.972	ug/L	739226.379
	77	Se	127.685004	7.886	32167.832	ug/L	8561.780
	98	Mo	98.436001	1.629	711099.030	ug/L	141.970
	109	Ag	4.458665	2.774	60770.038	ug/L	288.339
>	115	In-2			1477722.581	ug/L	1483966.870
	114	Cd	5.126976	6.617	35049.606	ug/L	84.731
	121	Sb	20.458033	1.979	204139.326	ug/L	349.674
	137	Ba	255.810961	3.127	1007759.180	ug/L	156.669
>	165	Ho-2			1536811.667	ug/L	1582460.464
	203	Tl	172.192679	5.687	1946137.529	ug/L	1582.773
	206	Pb	81.867946	2.491	562255.383	ug/L	1161.392
	207	Pb	83.182341	3.573	483909.456	ug/L	995.045
>	45	Sc			526899.466	ug/L	454114.374
	47	Ti	210.195739	5.311	181321.169	ug/L	297.006
	86	Sr	86.301429	3.545	361527.643	ug/L	716.656
	88	Sr	87.677669	1.753	3197735.077	ug/L	5834.250
>	115	In			1477722.581	ug/L	1483966.870
	118	Sn	179.187767	1.476	1501757.659	ug/L	855.034
	120	Sn	178.429218	3.566	1967875.964	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	116.028
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	99.724
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.579
	Sb	123	
	Ba	136	
>	Ho-1	165	99.506
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	116.028
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	99.724
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	99.579
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	99.506
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	116.028
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	99.579
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8JD2
Sample Date/Time: Thursday, April 28, 2005 00:16:36
Autosampler Position: 63
Dataset File: D:\Elandata\Dataset\042705M2\G8JD2.063

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.444366	25.434	90.668	ug/L	7.667
	10	B	4.926967	11.483	202.670	ug/L	27.667
	23	Na	22.440067	6.875	112471.927	ug/L	16838.944
	24	Mg	576.237675	5.787	1722614.036	ug/L	2106.178
	27	Al	15201.903838	5.490	69447757.622	ug/L	3413.777
	39	K	586.566610	3.929	6050218.151	ug/L	807733.282
	44	Ca	953.934394	5.018	336429.983	ug/L	61872.368
>	45	Sc-1			487613.671	ug/L	454114.374
	51	V	51.180104	1.611	536838.521	ug/L	-26072.212
	52	Cr	34.404148	5.393	363013.455	ug/L	26547.338
	55	Mn	429.317646	4.558	6863401.017	ug/L	3062.361
	57	Fe	42208.956782	7.122	14180984.349	ug/L	9798.695
	59	Co	9.052484	4.180	112024.875	ug/L	232.338
	60	Ni	8.895059	7.256	23947.404	ug/L	301.006
	65	Cu	18.958647	6.019	32170.939	ug/L	168.336
	66	Zn	26.753683	4.428	62136.633	ug/L	15137.170
>	72	Ge-1			747908.613	ug/L	739226.379
	75	As	13.008401	4.156	26365.191	ug/L	-1945.453
	82	Se	1.246208	18.301	168.879	ug/L	-120.854
	97	Mo	1.802660	6.903	5177.326	ug/L	72.001
	107	Ag	0.106931	1.293	1671.448	ug/L	267.339
	111	Cd	0.064561	16.923	234.004	ug/L	39.334
>	115	In-1			1463053.620	ug/L	1483966.870
	123	Sb	0.351419	9.806	2911.464	ug/L	268.758
	135	Ba	48.336582	5.389	109140.449	ug/L	112.002
>	165	Ho-1			1500703.470	ug/L	1592460.464
	205	Tl	0.640215	26.218	20326.754	ug/L	3951.949
	208	Pb	21.116117	4.749	754438.065	ug/L	4580.000
	238	U	1.318741	5.596	60181.662	ug/L	234.671
>	45	Sc-2			487613.671	ug/L	454114.374
	53	Cr	12.440180	65.910	182146.099	ug/L	154333.029
	54	Fe	42418.749668	6.625	32437988.807	ug/L	62090.940
	61	Ni	8.421066	10.510	2764.299	ug/L	1661.113
	63	Cu	11.159273	3.318	67770.228	ug/L	345.008
	67	Zn	31.417068	6.667	19217.444	ug/L	9047.975
>	72	Ge			747908.613	ug/L	739226.379
	77	Se	-41.004929	4.630	959.684	ug/L	8561.780
	98	Mo	1.860399	5.138	13444.747	ug/L	141.970
	109	Ag	0.033109	8.275	729.026	ug/L	288.339
>	115	In-2			1463053.620	ug/L	1483966.870
	114	Cd	0.043347	13.263	376.371	ug/L	84.731
	121	Sb	0.362190	7.503	3818.560	ug/L	349.674
	137	Ba	48.486537	6.415	186569.158	ug/L	156.669
>	165	Ho-2			1500703.470	ug/L	1592460.464
	203	Tl	0.616552	25.365	8277.214	ug/L	1582.773
	206	Pb	21.574582	3.867	192143.164	ug/L	1161.392
	207	Pb	21.288874	6.264	159796.068	ug/L	995.045
>	45	Sc			487613.671	ug/L	454114.374
	47	Ti	176.257340	6.237	140783.458	ug/L	297.006
	86	Sr	5.157158	6.514	20717.835	ug/L	716.658
	88	Sr	5.149387	5.678	179733.343	ug/L	5834.250
>	115	In			1463053.620	ug/L	1483966.870
	118	Sn	1.077192	7.160	9778.454	ug/L	855.034
	120	Sn	1.105016	6.086	13147.416	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	107.377
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.175
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.891
	Sb	123	
	Ba	135	
>	Ho-1	165	94.238
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	107.377
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.175
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.891
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	94.238
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	107.377
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	98.891
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8JEE
Sample Date/Time: Thursday, April 28, 2005 00:21:45
Autosampler Position: 64
Dataset File: D:\Elandata\Dataset\042705M2\G8JEE.064

Sample Result Summary

Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
9	Be	0.572679	8.264	123.002	ug/L	7.667
10	B	2.571933	6.120	128.335	ug/L	27.667
23	Na	16.122397	2.358	92578.446	ug/L	18838.944
24	Mg	778.880366	2.541	2492008.954	ug/L	2106.176
27	Al	19913.814981	4.837	97389995.183	ug/L	3413.777
39	K	742.515736	3.448	7953403.251	ug/L	807733.282
44	Ca	1304.761082	3.244	466337.849	ug/L	61872.368
> 45	Sc-1			521781.766	ug/L	454114.374
51	V	65.425187	4.268	742981.620	ug/L	-26072.212
52	Cr	22.582539	2.814	265498.951	ug/L	26547.338
55	Mn	3224.174377	3.866	55162588.352	ug/L	3062.361
57	Fe	39718.219995	2.080	14283211.784	ug/L	9796.595
59	Co	21.427859	4.839	283436.005	ug/L	232.338
60	Ni	14.137954	3.650	40507.849	ug/L	301.006
65	Cu	12.920728	1.279	40558.585	ug/L	168.336
66	Zn	38.871489	5.239	88747.524	ug/L	15137.170
> 72	Ge-1			757211.740	ug/L	739226.379
75	As	16.893624	7.462	38204.049	ug/L	-1945.453
82	Se	0.753602	33.511	54.342	ug/L	-120.854
97	Mo	2.520619	2.197	7261.261	ug/L	72.001
107	Ag	0.159073	3.525	2381.889	ug/L	267.339
111	Cd	0.140894	1.426	469.346	ug/L	39.334
> 115	In-1			1477717.204	ug/L	1483966.870
123	Sb	0.589654	4.713	4751.532	ug/L	268.758
135	Ba	100.618372	6.304	226776.700	ug/L	112.002
> 165	Ho-1			1498318.010	ug/L	1592460.464
205	Tl	0.583083	9.833	19082.986	ug/L	3951.949
208	Pb	37.221715	4.124	1324635.002	ug/L	4560.000
238	U	2.622671	6.815	119316.476	ug/L	234.671
> 45	Sc-2			521781.766	ug/L	454114.374
53	Cr	-4.185872	196.473	171295.346	ug/L	154333.029
54	Fe	39565.898737	1.448	32397186.600	ug/L	62090.940
61	Ni	12.417244	4.939	3490.461	ug/L	1661.113
63	Cu	13.105129	5.275	85138.185	ug/L	345.008
67	Zn	43.443691	8.093	24468.208	ug/L	9047.975
> 72	Ge			757211.740	ug/L	739226.379
77	Se	-39.854706	2.551	1185.340	ug/L	8561.780
98	Mo	2.536089	4.242	18457.427	ug/L	141.970
109	Ag	0.058778	8.988	1043.382	ug/L	288.339
> 115	In-2			1477717.204	ug/L	1483966.870
114	Cd	0.127862	9.902	956.351	ug/L	84.731
121	Sb	0.606056	3.385	6374.486	ug/L	349.674
137	Ba	102.669415	4.298	394317.103	ug/L	156.669
> 165	Ho-2			1498318.010	ug/L	1592460.464
203	Tl	0.590037	12.329	7985.660	ug/L	1582.773
206	Pb	37.852727	5.950	335847.320	ug/L	1161.392
207	Pb	38.628907	4.218	288742.031	ug/L	995.045
> 45	Sc			521781.766	ug/L	454114.374
47	Ti	289.582636	4.140	247435.722	ug/L	297.006
86	Sr	10.635718	3.851	44872.614	ug/L	718.656
88	Sr	10.775560	4.216	395155.332	ug/L	5834.250
> 115	In			1477717.204	ug/L	1483966.870
118	Sn	1.141778	7.523	10414.577	ug/L	855.034
120	Sn	1.182761	4.406	14132.924	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	114.901
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	102.433
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.579
	Sb	123	
	Ba	135	
>	Ho-1	165	94.088
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	114.901
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	102.433
	Se	77	
	Mo	96	
	Ag	109	
>	In-2	115	99.579
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	94.088
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	114.901
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	99.579
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G84MFB
Sample Date/Time: Thursday, April 28, 2005 00:26:54
Autosampler Position: 65
Dataset File: D:\Elandata\Dataset\042705M2\G84MFB.065

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	-0.009812	109.803	6.000	ug/L	7.667
	10	B	4.711423	5.172	181.670	ug/L	27.667
	23	Na	14.578447	3.955	74763.403	ug/L	16838.944
	24	Mg	69.306269	1.741	195180.660	ug/L	2106.176
	27	Al	18.678662	1.514	83005.084	ug/L	3413.777
	39	K	1.131378	177.366	817984.681	ug/L	807733.282
	44	Ca	14.346578	29.365	65732.873	ug/L	61872.368
>	45	Sc-1			454770.913	ug/L	454114.374
	51	V	1.455701	8.241	-11142.899	ug/L	-26072.212
	52	Cr	-0.758467	8.921	19706.124	ug/L	26547.336
	55	Mn	0.272837	10.002	7136.859	ug/L	3062.361
	57	Fe	11.281869	8.834	13346.807	ug/L	9798.695
	59	Co	0.020759	12.201	471.346	ug/L	232.338
	60	Ni	0.140885	9.707	649.688	ug/L	301.006
	65	Cu	0.147424	6.046	569.684	ug/L	168.336
	66	Zn	0.206096	170.571	15480.539	ug/L	15137.170
>	72	Ge-1			721964.549	ug/L	739226.379
	75	As	1.316456	5.530	765.755	ug/L	-1945.453
	82	Se	0.836061	28.251	2.802	ug/L	-120.854
	97	Mo	0.029804	40.690	156.002	ug/L	72.001
	107	Ag	-0.002606	49.291	230.004	ug/L	267.339
	111	Cd	-0.004819	15.966	24.000	ug/L	39.334
>	115	In-1			1468107.650	ug/L	1483966.870
	123	Sb	-0.002923	78.434	243.648	ug/L	268.758
	135	Ba	0.139266	7.379	436.011	ug/L	112.002
>	165	Ho-1			1559768.762	ug/L	1582460.464
	205	Tl	0.093699	28.293	6388.500	ug/L	3951.949
	208	Pb	-0.001704	96.655	4422.649	ug/L	4580.000
	238	U	-0.002498	9.481	111.668	ug/L	234.671
>	45	Sc-2			454770.913	ug/L	454114.374
	53	Cr	-62.007074	3.166	89893.529	ug/L	154333.029
	54	Fe	22.944370	18.493	78490.440	ug/L	62090.940
	61	Ni	-0.280630	229.002	1631.443	ug/L	1661.113
	63	Cu	0.143734	9.757	1154.392	ug/L	345.008
	67	Zn	-6.161564	9.700	7319.281	ug/L	9047.975
>	72	Ge			721964.549	ug/L	739226.379
	77	Se	-38.838627	2.352	1317.806	ug/L	8561.780
	98	Mo	0.030507	10.283	359.421	ug/L	141.970
	109	Ag	-0.003088	14.268	243.671	ug/L	288.339
>	115	In-2			1468107.650	ug/L	1483966.870
	114	Cd	-0.003238	22.993	61.872	ug/L	84.731
	121	Sb	-0.004212	59.834	304.340	ug/L	349.674
	137	Ba	0.134076	5.716	689.024	ug/L	156.669
>	165	Ho-2			1559768.762	ug/L	1582460.464
	203	Tl	0.090715	19.291	2587.261	ug/L	1582.773
	206	Pb	-0.002987	91.482	1110.388	ug/L	1161.392
	207	Pb	-0.004603	159.253	939.040	ug/L	995.045
>	45	Sc			454770.913	ug/L	454114.374
	47	Ti	0.293233	41.878	516.661	ug/L	297.006
	86	Sr	0.045678	23.632	881.990	ug/L	716.656
	88	Sr	0.039189	11.921	7071.487	ug/L	5834.250
>	115	In			1468107.650	ug/L	1483966.870
	118	Sn	0.048259	11.253	1247.400	ug/L	855.034
	120	Sn	0.054174	4.627	1684.924	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	100.145
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	97.595
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.931
	Sb	123	
	Ba	135	
>	Ho-1	165	97.947
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	100.145
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	97.595
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.931
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	97.947
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	100.145
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	98.931
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G84MFC
Sample Date/Time: Thursday, April 28, 2005 00:32:04
Autosampler Position: 66
Dataset File: D:\Elandata\Dataset\042705M2\G84MFC.066

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	176.248235	1.641	32623.202	ug/L	7.667
	10	B	156.378575	0.877	5479.105	ug/L	27.667
	23	Na	731.365600	2.792	3007712.793	ug/L	18838.944
	24	Mg	3209.954639	0.730	9533955.722	ug/L	2106.176
	27	Al	8810.716763	3.215	40001862.318	ug/L	3413.777
	39	K	3168.344027	1.861	29608199.418	ug/L	807733.282
	44	Ca	5837.128829	1.357	1708119.178	ug/L	61872.368
>	45	Sc-1			484616.731	ug/L	454114.374
	51	V	175.242052	0.938	1894389.108	ug/L	-26072.212
	52	Cr	127.873900	1.216	1264013.766	ug/L	26547.338
	55	Mn	780.551784	1.343	12403650.736	ug/L	3062.361
	57	Fe	16738.264261	0.064	5596324.822	ug/L	9798.695
	59	Co	68.348761	1.686	839143.447	ug/L	232.338
	60	Ni	284.663365	2.498	751007.572	ug/L	301.006
	65	Cu	278.827609	2.649	809029.464	ug/L	168.336
	66	Zn	296.810967	1.931	522065.091	ug/L	15137.170
>	72	Ge-1			715255.273	ug/L	739226.379
	75	As	354.356085	0.231	710285.146	ug/L	-1945.453
	82	Se	134.427366	2.818	29821.035	ug/L	-120.854
	97	Mo	178.970896	2.253	507965.099	ug/L	72.001
	107	Ag	182.212806	3.660	2430712.581	ug/L	267.339
	111	Cd	252.844979	2.971	774440.969	ug/L	39.334
>	115	In-1			1482948.946	ug/L	1483966.870
	123	Sb	126.588338	2.273	966106.066	ug/L	268.758
	135	Ba	641.025643	1.859	1222183.175	ug/L	112.002
>	165	Ho-1			1502549.044	ug/L	1592460.464
	205	Tl	164.879679	0.665	4286369.662	ug/L	3951.949
	208	Pb	277.422011	0.524	9572408.843	ug/L	4580.000
	238	U	2.401144	2.595	109540.276	ug/L	234.671
>	45	Sc-2			484616.731	ug/L	454114.374
	53	Cr	58.506460	3.826	242166.809	ug/L	154333.029
	54	Fe	17111.236527	1.861	13049516.843	ug/L	62090.940
	61	Ni	289.225384	2.027	35994.669	ug/L	1661.113
	63	Cu	278.310775	2.367	1671024.321	ug/L	345.008
	67	Zn	270.518120	0.673	91058.894	ug/L	9047.975
>	72	Ge			715255.273	ug/L	739226.379
	77	Se	77.114979	5.711	22134.329	ug/L	8581.780
	98	Mo	177.306660	3.821	1284534.622	ug/L	141.970
	109	Ag	176.716160	2.618	2391224.928	ug/L	288.339
>	115	In-2			1482948.946	ug/L	1483966.870
	114	Cd	253.395324	3.649	1733403.454	ug/L	84.731
	121	Sb	126.037114	2.527	1259734.113	ug/L	349.674
	137	Ba	558.501514	1.967	2150741.686	ug/L	156.669
>	165	Ho-2			1502549.044	ug/L	1592460.464
	203	Tl	160.146478	1.666	1769421.662	ug/L	1582.773
	206	Pb	280.710385	1.092	2490045.089	ug/L	1161.392
	207	Pb	288.161110	2.149	2154111.067	ug/L	995.045
>	45	Sc			484616.731	ug/L	454114.374
	47	Ti	420.732773	2.511	333666.138	ug/L	297.008
	86	Sr	143.871203	2.870	554024.025	ug/L	716.656
	88	Sr	147.907212	1.758	4956474.070	ug/L	5834.250
>	115	In			1482948.946	ug/L	1483966.870
	118	Sn	126.212304	4.150	1061156.078	ug/L	855.034
	120	Sn	124.965857	2.325	1382963.968	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	106.717
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	96.767
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.931
	Sb	123	
	Ba	135	
>	Ho-1	165	94.354
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	106.717
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	96.767
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	99.931
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	94.354
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	106.717
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	99.931
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: GBWP7
Sample Date/Time: Thursday, April 28, 2005 00:37:14
Autosampler Position: 67
Dataset File: D:\Elandata\Dataset\042705M2\GBWP7.067

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌈	9	Be	0.203566	11.318	43.000	ug/L	7.667
|	10	B	83.256860	1.788	2749.625	ug/L	27.667
|	23	Na	3786.321581	2.284	14416578.806	ug/L	18838.944
|	24	Mg	2602.998166	2.002	7253366.628	ug/L	2106.176
|	27	Al	13922.287278	0.875	59312371.773	ug/L	3413.777
|	39	K	3506.817944	1.783	29737106.501	ug/L	807733.282
|	44	Ca	33618.219307	3.846	8987309.107	ug/L	61872.368
|>	45	Sc-1			454714.320	ug/L	454114.374
|	51	V	12.331186	16.077	100683.896	ug/L	-26072.212
|	52	Cr	77.728346	6.369	731126.593	ug/L	26547.338
|	55	Mn	1159.123546	2.657	17283006.162	ug/L	3062.361
|	57	Fe	55834.757371	2.467	17490581.707	ug/L	9798.896
|	59	Co	12.368018	1.590	142669.025	ug/L	232.338
|	60	Ni	155.311537	2.071	384668.886	ug/L	301.006
|	65	Cu	1344.964930	2.261	3661296.000	ug/L	168.336
L	66	Zn	6863.658363	1.835	9392936.543	ug/L	15137.170
⌈>	72	Ge-1			732517.577	ug/L	739228.379
|	75	As	32.148473	3.219	64243.137	ug/L	-1945.453
L	82	Se	0.803948	3.989	83.563	ug/L	-120.854
⌈	97	Mo	13.164958	1.784	36985.525	ug/L	72.001
|	107	Ag	13.377171	4.585	174741.586	ug/L	267.339
|	111	Cd	12.927742	2.606	38753.892	ug/L	39.334
|>	115	In-1			1449728.417	ug/L	1483966.870
L	123	Sb	25.650726	0.765	190895.459	ug/L	268.758
⌈	135	Ba	894.371496	4.800	2022486.725	ug/L	112.002
|>	165	Ho-1			1503731.937	ug/L	1592460.464
|	205	Tl	0.415813	39.786	14580.011	ug/L	3951.949
|	208	Pb	2417.223142	0.448	86054637.739	ug/L	4580.000
L	238	U	20.735467	1.565	944976.942	ug/L	234.671
⌈>	45	Sc-2			454714.320	ug/L	454114.374
|	53	Cr	1.798705	109.266	156769.887	ug/L	154333.029
|	54	Fe	58068.098880	0.631	39996439.039	ug/L	62090.940
|	61	Ni	161.084511	2.932	19542.890	ug/L	1661.113
|	63	Cu	1308.423347	0.952	7370447.462	ug/L	345.006
L	67	Zn	4746.718903	1.614	1349218.477	ug/L	9047.975
⌈>	72	Ge			732517.577	ug/L	739226.379
L	77	Se	-37.384242	1.606	1602.087	ug/L	8561.780
⌈	98	Mo	13.346777	1.969	94700.767	ug/L	141.970
|	109	Ag	12.391976	0.844	165168.349	ug/L	288.339
|>	115	In-2			1449728.417	ug/L	1483966.870
|	114	Cd	13.806432	3.139	92431.602	ug/L	84.731
L	121	Sb	26.060376	1.383	254400.172	ug/L	349.674
⌈	137	Ba	913.172548	1.439	3518857.999	ug/L	156.669
|>	165	Ho-2			1503731.937	ug/L	1592460.464
|	203	Tl	0.404833	28.827	5971.015	ug/L	1582.773
|	206	Pb	2431.867396	1.882	21579586.000	ug/L	1161.392
L	207	Pb	2495.452343	1.904	18660815.599	ug/L	995.045
⌈>	45	Sc			454714.320	ug/L	454114.374
|	47	Ti	286.164837	5.526	212244.658	ug/L	297.006
|	86	Sr	94.933638	4.681	343231.452	ug/L	716.656
L	88	Sr	97.054648	1.560	3054081.443	ug/L	5834.250
⌈>	115	In			1449728.417	ug/L	1483966.870
|	118	Sn	564.668103	1.784	4640619.922	ug/L	855.034
L	120	Sn	562.302719	0.257	6081034.059	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	100.132
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	99.092
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	116	97.693
	Sb	123	
	Ba	136	
>	Ho-1	165	94.428
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	100.132
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	99.092
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	97.693
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	94.428
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	100.132
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	97.693
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WP7S
Sample Data/Time: Thursday, April 28, 2005 00:42:24
Autosampler Position: 68
Dataset File: D:\Elandata\Dataset\042705M2\G8WP7S.068

Sample Result Summary

Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
9	Be	2.879861	0.995	530.015	ug/L	7.867
10	B	87.058844	1.165	3000.345	ug/L	27.667
23	Na	7667.322385	2.847	30701084.230	ug/L	18838.944
24	Mg	6530.887483	3.901	18996555.483	ug/L	2106.176
27	Al	18098.496571	2.846	80498684.631	ug/L	3413.777
39	K	8747.696595	4.614	58836601.098	ug/L	807733.282
44	Ca	35306.652686	6.223	9795390.436	ug/L	61872.368
45	Sc-1			474590.885	ug/L	454114.374
51	V	41.003043	3.214	413332.463	ug/L	-28072.212
52	Cr	70.656821	4.343	696127.627	ug/L	26547.338
55	Mn	1372.164518	3.892	21356249.453	ug/L	3062.361
57	Fe	39447.854644	1.184	12901477.091	ug/L	9798.695
59	Co	38.229702	5.321	459911.046	ug/L	232.338
60	Ni	123.553788	2.173	319441.811	ug/L	301.006
65	Cu	3328.772959	1.966	9453484.841	ug/L	168.336
66	Zn	4706.388893	3.201	7874378.092	ug/L	15137.170
72	Ge-1			727995.860	ug/L	739226.379
75	As	133.938450	3.553	272093.517	ug/L	-1945.453
82	Se	101.806057	5.736	22902.686	ug/L	-120.854
97	Mo	66.313608	3.864	187469.552	ug/L	72.001
107	Ag	16.755135	6.447	220338.794	ug/L	267.339
111	Cd	13.870362	5.066	41870.423	ug/L	39.334
115	In-1			1480273.502	ug/L	1483966.870
123	Sb	45.906500	6.618	345101.699	ug/L	268.758
135	Ba	1322.405711	4.012	2951907.946	ug/L	112.002
165	Ho-1			1484438.106	ug/L	1592460.464
205	Tl	97.286993	0.744	2499606.086	ug/L	3951.949
208	Pb	4515.965981	3.333	158720090.336	ug/L	4580.000
238	U	19.006082	3.613	855185.948	ug/L	234.671
45	Sc-2			474590.885	ug/L	454114.374
53	Cr	0.025860	9266.393	161318.338	ug/L	154333.029
54	Fe	40405.985073	4.113	30102851.160	ug/L	62090.940
61	Ni	128.698027	6.396	16650.224	ug/L	1861.113
63	Cu	3264.011130	3.460	19193465.049	ug/L	345.008
67	Zn	3815.446462	1.950	1134000.922	ug/L	9047.975
72	Ge			727995.860	ug/L	739226.379
77	Se	48.514373	3.574	16962.155	ug/L	8561.780
98	Mo	66.966876	8.730	477736.109	ug/L	141.970
109	Ag	15.775364	4.673	211655.620	ug/L	268.339
115	In-2			1480273.502	ug/L	1483966.870
114	Cd	16.293986	4.433	109669.447	ug/L	84.731
121	Sb	45.456780	4.164	447624.067	ug/L	349.674
137	Ba	1308.914324	3.193	4960397.263	ug/L	156.669
165	Ho-2			1484438.106	ug/L	1592460.464
203	Tl	94.496858	3.517	1032078.328	ug/L	1582.773
206	Pb	4548.765160	4.723	39850279.941	ug/L	1161.392
207	Pb	4741.673700	2.028	35001055.891	ug/L	995.045
45	Sc			474590.885	ug/L	454114.374
47	Ti	320.201738	3.213	248861.434	ug/L	297.006
86	Sr	245.292181	4.806	924943.069	ug/L	716.656
88	Sr	253.593092	3.998	8322480.200	ug/L	5834.250
115	In			1480273.502	ug/L	1483966.870
118	Sn	1110.758968	6.228	9191077.196	ug/L	855.034
120	Sn	1124.239580	4.980	12243667.667	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	104.509
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	98.481
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.483
	Sb	123	
	Ba	135	
>	Ho-1	165	93.217
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	104.509
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	98.481
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.483
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	93.217
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	104.509
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	98.483
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Pb	208	H
Pb	208	H
Pb	207	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WP7D
Sample Date/Time: Thursday, April 28, 2005 00:47:35
Autosampler Position: 69
Dataset File: D:\Elandata\Dataset\042705M2\G8WP7D.069

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	2.903457	9.827	497.347	ug/L	7.667
	10	B	56.575226	16.329	1827.471	ug/L	27.667
	23	Na	5977.004784	8.423	22277619.256	ug/L	18838.944
	24	Mg	4752.638907	11.647	12864945.758	ug/L	2106.176
	27	Al	11354.172429	8.537	46994296.789	ug/L	3413.777
	39	K	5407.042739	8.830	44096165.339	ug/L	807733.282
	44	Ca	53783.596588	8.990	13847595.650	ug/L	61872.368
>	45	Sc-1			441783.832	ug/L	454114.374
	51	V	38.006875	9.489	354724.924	ug/L	-26072.212
	52	Cr	84.126743	8.909	590743.501	ug/L	26547.338
	55	Mn	1164.311932	9.809	16864489.981	ug/L	3062.381
	57	Fe	48791.588947	10.012	14851153.113	ug/L	8798.695
	59	Co	38.105004	12.777	426830.327	ug/L	232.338
	60	Ni	120.130163	8.547	289116.588	ug/L	301.006
	65	Cu	1901.936375	7.774	5030404.059	ug/L	168.336
	66	Zn	2844.828794	9.035	4434857.862	ug/L	15137.170
>	72	Ge-1			729821.575	ug/L	739226.379
	75	As	127.753947	4.296	260213.359	ug/L	-1945.453
	82	Se	98.018878	8.776	22186.897	ug/L	-120.854
	97	Mo	63.342861	11.259	179109.382	ug/L	72.001
	107	Ag	11.886439	10.684	156476.707	ug/L	267.339
	111	Cd	10.965216	11.488	33119.254	ug/L	39.334
>	115	In-1			1462139.840	ug/L	1483966.870
	123	Sb	36.937357	9.469	277915.664	ug/L	268.758
	135	Ba	1237.649702	7.987	2742311.891	ug/L	112.002
>	165	Ho-1			1472471.484	ug/L	1592460.464
	205	Tl	96.627493	4.277	2462057.515	ug/L	3951.949
	208	Pb	1687.129062	6.492	58863594.598	ug/L	4580.000
	238	U	13.304625	5.807	594260.084	ug/L	234.671
>	45	Sc-2			441783.832	ug/L	454114.374
	53	Cr	-1.488899	416.069	148338.202	ug/L	154333.029
	54	Fe	49382.084681	11.492	34220020.582	ug/L	62090.940
	61	Ni	129.377225	12.205	15569.034	ug/L	1661.113
	63	Cu	1839.769245	9.010	10067751.805	ug/L	345.008
	67	Zn	2337.928660	6.865	650114.348	ug/L	9047.975
>	72	Ge			729821.575	ug/L	739226.379
	77	Se	42.177197	13.404	16203.854	ug/L	8561.780
	98	Mo	65.649496	11.789	468582.154	ug/L	141.970
	109	Ag	11.161351	8.103	149935.360	ug/L	288.339
>	115	In-2			1462139.840	ug/L	1483966.870
	114	Cd	12.666183	15.323	85408.258	ug/L	84.731
	121	Sb	37.229094	10.765	366775.373	ug/L	349.674
	137	Ba	1206.135869	5.890	4554759.356	ug/L	156.669
>	165	Ho-2			1472471.484	ug/L	1592460.464
	203	Tl	93.488188	5.819	1013566.237	ug/L	1582.773
	206	Pb	1710.903545	7.270	14880400.935	ug/L	1161.392
	207	Pb	1756.386432	3.271	12867706.460	ug/L	995.045
>	45	Sc			441783.832	ug/L	454114.374
	47	Ti	250.017634	10.274	180871.491	ug/L	297.006
	86	Sr	177.291797	11.043	622197.988	ug/L	716.656
	88	Sr	183.569681	10.250	5609835.655	ug/L	5634.250
>	115	In			1462139.840	ug/L	1483966.870
	118	Sn	588.084073	12.352	4867665.403	ug/L	855.034
	120	Sn	592.798342	9.987	6458362.101	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	97.285
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	98.728
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	96.529
	Sb	129	
	Ba	135	
>	Ho-1	165	92.465
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	97.285
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	98.728
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	96.529
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	92.465
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	97.285
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	96.529
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WP7S LL
Sample Date/Time: Thursday, April 28, 2005 00:52:47
Autosampler Position: 70
Dataset File: D:\Elandata\Dataset\042705M2\G8WP7S LL.070

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.232793	40.113	47.667	ug/L	7.867
	10	B	113.464891	5.186	3703.852	ug/L	27.867
	23	Na	3957.949957	6.026	15055191.674	ug/L	18838.944
	24	Mg	3252.592600	3.795	8981587.348	ug/L	2106.176
	27	Al	18984.879170	6.121	80188355.064	ug/L	3413.777
	39	K	3680.828392	2.845	30861514.009	ug/L	807733.282
	44	Ca	38118.033107	5.568	10032305.628	ug/L	61872.368
>	45	Sc-1			450294.149	ug/L	454114.374
	51	V	15.489876	13.414	132439.434	ug/L	-26072.212
	52	Cr	86.101778	10.546	792057.051	ug/L	26547.338
	55	Mn	1384.039028	3.060	20443061.503	ug/L	3062.361
	57	Fe	72308.584984	5.464	22446627.285	ug/L	9798.695
	59	Co	15.968114	5.026	182423.794	ug/L	232.338
	60	Ni	120.888233	6.238	296750.460	ug/L	301.006
	65	Cu	5819.590300	6.004	15887582.217	ug/L	168.336
	66	Zn	6740.833572	4.544	10695274.166	ug/L	15137.170
>	72	Ge-1			727667.021	ug/L	739226.379
	75	As	29.057441	7.712	57477.585	ug/L	-1945.453
	82	Se	1.634491	15.212	251.166	ug/L	-120.864
	97	Mo	12.940938	8.640	36474.480	ug/L	72.001
	107	Ag	12.240022	4.755	160298.450	ug/L	267.339
	111	Cd	13.748669	7.434	41312.998	ug/L	39.334
>	115	In-1			1452457.357	ug/L	1483966.870
	123	Sb	30.667022	6.960	229800.500	ug/L	268.758
	135	Ba	1158.860178	6.462	2544196.706	ug/L	112.002
>	165	Ho-1			1460657.627	ug/L	1592460.464
	205	Tl	4.861144	8.226	126329.762	ug/L	3951.949
	208	Pb	2616.365426	7.085	90447313.543	ug/L	4580.000
	238	U	17.286360	6.848	765062.538	ug/L	234.671
>	45	Sc-2			450294.149	ug/L	454114.374
	53	Cr	8.623282	27.033	163589.373	ug/L	164333.029
	54	Fe	72298.577776	3.937	51063911.053	ug/L	62090.940
	61	Ni	127.468966	4.969	15663.091	ug/L	1661.113
	63	Cu	5493.361991	4.452	30663507.167	ug/L	345.008
	67	Zn	5455.182896	5.313	1535672.130	ug/L	9047.975
>	72	Ge			727667.021	ug/L	739226.379
	77	Se	-40.338855	3.056	1050.891	ug/L	8561.780
	98	Mo	13.202935	7.276	93904.688	ug/L	141.970
	109	Ag	11.376068	9.178	152023.134	ug/L	288.339
>	115	In-2			1452457.357	ug/L	1483966.870
	114	Cd	14.690925	12.113	99628.581	ug/L	84.731
	121	Sb	31.468813	5.750	306536.328	ug/L	349.674
	137	Ba	1130.716555	7.999	4231141.841	ug/L	156.669
>	165	Ho-2			1460657.627	ug/L	1592460.464
	203	Tl	4.729496	7.949	52189.001	ug/L	1582.773
	206	Pb	2582.158404	8.116	22250709.354	ug/L	1161.392
	207	Pb	2719.247262	9.494	19744147.508	ug/L	995.045
>	45	Sc			450294.149	ug/L	454114.374
	47	Ti	332.514190	7.681	245355.782	ug/L	297.006
	86	Sr	104.406904	4.360	373993.758	ug/L	716.656
	88	Sr	106.982726	6.732	3306328.189	ug/L	5834.250
>	115	In			1452457.357	ug/L	1483966.870
	118	Sn	622.403228	4.338	5126482.601	ug/L	855.034
	120	Sn	632.409675	5.993	6854441.905	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	99.189
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	98.436
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	97.877
	Sb	123	
	Ba	135	
>	Ho-1	165	91.723
	Tl	208	
	Pb	208	
	U	238	
>	Sc-2	45	99.189
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	98.436
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	97.877
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	91.723
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	99.189
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	97.877
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Thursday, April 28, 2005 00:57:59
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 1.071

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	194.396200	6.036	33681.357	ug/L	7.667
	10	B	189.272170	5.585	6202.409	ug/L	27.667
	23	Na	1818.881906	4.187	6976568.732	ug/L	18838.944
	24	Mg	936.711472	2.153	2607249.268	ug/L	2106.176
	27	Al	1964.515796	2.876	8443468.453	ug/L	3413.777
	39	K	1985.497720	1.915	17156929.490	ug/L	807733.282
	44	Ca	1018.587511	4.919	330136.329	ug/L	61872.368
>	45	Sc-1			454074.907	ug/L	454114.374
	51	V	197.135198	1.983	1999461.726	ug/L	-26072.212
	52	Cr	196.585676	4.345	1823363.621	ug/L	26547.338
	55	Mn	197.481067	0.799	2942185.041	ug/L	3062.361
	57	Fe	1949.942146	4.362	619114.696	ug/L	9798.695
	59	Co	196.994097	4.119	2288058.312	ug/L	232.338
	60	Ni	202.260087	1.630	500001.803	ug/L	301.006
	65	Cu	203.192969	4.112	552155.117	ug/L	168.336
	66	Zn	196.386098	3.025	328648.964	ug/L	15137.170
>	72	Ge-1			712780.757	ug/L	739226.379
	75	As	207.537748	1.271	413739.896	ug/L	-1945.453
	82	Se	203.384849	2.376	45035.978	ug/L	-120.854
	97	Mo	201.037837	0.691	578244.121	ug/L	72.001
	107	Ag	48.830689	1.582	654475.900	ug/L	267.339
	111	Cd	193.247361	0.930	593260.771	ug/L	39.334
>	115	In-1			1485730.075	ug/L	1483966.870
	123	Sb	195.700083	2.450	1496456.592	ug/L	268.758
	135	Ba	214.155480	0.345	488468.249	ug/L	112.002
>	165	Ho-1			1516919.481	ug/L	1592460.464
	205	Tl	186.898896	4.059	4904034.959	ug/L	3951.949
	208	Pb	189.127490	1.544	6795812.795	ug/L	4580.000
	238	U	188.085835	3.267	8644509.699	ug/L	234.671
>	45	Sc-2			454074.907	ug/L	454114.374
	53	Cr	147.054999	7.813	336556.284	ug/L	154333.029
	54	Fe	1988.472568	2.408	1475355.018	ug/L	62090.940
	61	Ni	201.815992	3.713	24022.093	ug/L	1661.113
	63	Cu	204.168364	1.612	1148514.261	ug/L	345.008
	67	Zn	187.773897	5.010	61942.975	ug/L	9047.975
>	72	Ge			712780.757	ug/L	739226.379
	77	Se	167.328852	0.248	38229.755	ug/L	8561.780
	98	Mo	199.611849	4.719	1449219.843	ug/L	141.970
	109	Ag	48.669135	0.867	663941.870	ug/L	288.339
>	115	In-2			1485730.075	ug/L	1483966.870
	114	Cd	194.280240	2.420	1332017.163	ug/L	84.731
	121	Sb	196.257870	0.875	1966686.240	ug/L	349.674
	137	Ba	217.959485	0.343	847444.034	ug/L	168.669
>	165	Ho-2			1516919.481	ug/L	1592460.464
	203	Tl	182.442302	4.486	2034949.488	ug/L	1582.773
	206	Pb	190.031299	0.642	1702258.953	ug/L	1161.392
	207	Pb	195.739205	2.444	1477500.839	ug/L	995.045
>	45	Sc			454074.907	ug/L	454114.374
	47	Ti	186.438746	1.794	145384.447	ug/L	297.006
	86	Sr	194.210368	5.238	699956.737	ug/L	716.656
	88	Sr	196.421463	0.722	6228501.933	ug/L	5834.250
>	115	In			1485730.075	ug/L	1483966.870
	118	Sn	198.892441	2.393	1673994.971	ug/L	855.034
	120	Sn	205.786213	0.495	2281390.135	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		97.198

	B	10		94.636
	Na	23		90.944
	Mg	24		93.671
	Al	27		99.226
	K	39		99.275
	Ca	44		101.859
>	Sc-1	45	99.991	
	V	51		98.868
	Cr	52		99.293
	Mn	55		98.741
	Fe	57		97.487
	Co	59		99.497
	Ni	60		101.130
	Cu	65		101.396
	Zn	66		98.193
>	Ge-1	72	98.423	
	As	75		103.789
	Se	82		101.682
	Mo	97		100.519
	Ag	107		97.991
	Cd	111		96.634
>	In-1	115	100.119	
	Sb	123		97.889
	Ba	135		107.078
>	Ho-1	165	99.256	
	Tl	205		93.449
	Pb	208		94.864
	U	238		94.043
>	Sc-2	45	99.991	
	Cr	53		73.527
	Fe	54		99.424
	Ni	61		100.908
	Cu	63		102.084
	Zn	67		93.887
>	Ge	72	98.423	
	Se	77		83.864
	Mo	98		99.886
	Ag	109		97.338
>	In-2	115	100.119	
	Cd	114		97.140
	Sb	121		96.129
	Ba	137		108.980
>	Ho-2	165	99.256	
	Tl	203		91.221
	Pb	206		95.016
	Pb	207		97.879
>	Sc	45	99.991	
	Tl	47		97.719
	Sr	86		97.905
	Sr	88		99.211
>	In	115	100.119	
	Sn	118		99.348
	Sn	120		102.893

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cr	53	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Thursday, April 28, 2005 01:04:09
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 2.072

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.005536	282.794	8.333	ug/L	7.667
	10	B	3.615104	18.664	141.335	ug/L	27.667
	23	Na	0.153348	84.278	18814.910	ug/L	18838.944
	24	Mg	0.036493	46.659	2137.848	ug/L	2106.176
	27	Al	0.831601	7.392	5910.283	ug/L	3413.777
	39	K	0.411613	489.882	785487.918	ug/L	807733.282
	44	Ca	-9.517696	72.232	57481.009	ug/L	61872.368
>	45	Sc-1			439825.321	ug/L	454114.374
	51	V	0.361581	125.614	-21689.407	ug/L	-26072.212
	52	Cr	-0.190494	164.917	24023.904	ug/L	26547.338
	55	Mn	0.016479	11.196	3203.391	ug/L	3062.361
	57	Fe	2.207326	1.918	10158.983	ug/L	9798.696
	59	Co	0.009296	36.662	328.674	ug/L	232.338
	60	Ni	0.000965	982.680	294.006	ug/L	301.006
	65	Cu	0.090012	7.457	400.010	ug/L	168.336
	66	Zn	0.381982	66.500	15251.293	ug/L	15137.170
>	72	Ge-1			726269.534	ug/L	739226.379
	75	As	0.928711	29.762	-12.988	ug/L	-1945.453
	82	Se	0.322149	82.481	-46.412	ug/L	-120.854
	97	Mo	0.104047	31.715	382.342	ug/L	72.001
	107	Ag	0.035810	2.975	726.682	ug/L	267.339
	111	Cd	0.006775	35.001	59.001	ug/L	39.334
>	115	In-1			1454516.922	ug/L	1483966.870
	123	Sb	0.114473	32.301	1116.991	ug/L	288.758
	135	Ba	0.009766	22.801	130.002	ug/L	112.002
>	165	Ho-1			1528934.623	ug/L	1592460.484
	205	Tl	0.283418	41.887	11268.440	ug/L	3951.949
	206	Pb	0.056673	14.705	6446.304	ug/L	4580.000
	238	U	0.006207	22.561	512.348	ug/L	234.671
>	45	Sc-2			439825.321	ug/L	454114.374
	53	Cr	-17.335365	87.896	128534.703	ug/L	154333.029
	54	Fe	3.271881	109.669	62372.440	ug/L	62090.940
	61	Ni	-0.579470	3.497	1514.429	ug/L	1661.113
	63	Cu	0.082415	8.380	783.363	ug/L	345.006
	67	Zn	-0.716193	636.769	8560.682	ug/L	9047.975
>	72	Ge			726269.534	ug/L	739226.379
	77	Se	-28.534426	12.258	3206.526	ug/L	8561.780
	98	Mo	0.110504	30.157	921.681	ug/L	141.970
	109	Ag	0.056997	20.436	1041.715	ug/L	288.339
>	115	In-2			1454516.922	ug/L	1483966.870
	114	Cd	0.002684	7.165	101.079	ug/L	84.731
	121	Sb	0.106915	28.965	1387.083	ug/L	349.674
	137	Ba	0.009841	6.965	189.003	ug/L	156.669
>	165	Ho-2			1528934.623	ug/L	1592460.484
	203	Tl	0.274706	43.528	4598.493	ug/L	1582.773
	206	Pb	0.054013	18.123	1601.773	ug/L	1161.392
	207	Pb	0.059443	9.506	1407.083	ug/L	995.045
>	45	Sc			439825.321	ug/L	454114.374
	47	Ti	0.001459	2849.052	288.672	ug/L	297.006
	86	Sr	0.010646	126.823	731.204	ug/L	716.656
	88	Sr	0.006137	35.709	5837.251	ug/L	5834.250
>	115	In			1454516.922	ug/L	1483966.870
	118	Sn	0.400674	15.456	4134.977	ug/L	855.034
	120	Sn	0.413125	16.717	5553.663	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		0.554

|	B	10		361.619
|	Na	23		0.168
|	Mg	24		0.036
|	Al	27		0.832
|	K	39		0.412
|	Ca	44		-9.519
|>	Sc-1	45	99.863	
|	V	51		36.158
|	Cr	52		-19.048
|	Mn	55		1.848
|	Fe	57		2.207
|	Co	59		0.029
|	Ni	60		0.096
|	Cu	65		9.001
L	Zn	66		38.198
[>	Ge-1	72	99.347	
|	As	75		92.871
L	Se	82		32.216
[	Mo	97		10.406
|	Ag	107		3.551
|	Cd	111		0.578
|>	In-1	115	99.016	
L	Sb	123		11.447
[	Ba	135		0.977
|>	Ho-1	165	99.011	
|	Tl	205		28.342
|	Pb	208		5.667
L	U	238		0.821
[>	Sc-2	45	99.853	
|	Cr	53		-1733.538
|	Fe	54		3.372
|	Ni	61		-87.947
|	Cu	63		8.241
L	Zn	67		-71.819
[>	Ge	72	99.347	
L	Se	77		-2953.442
[	Mo	98		11.959
|	Ag	109		5.709
|>	In-2	115	99.016	
|	Cd	114		0.268
L	Sb	121		10.991
[	Ba	137		0.984
|>	Ho-2	165	99.011	
|	Tl	203		27.471
|	Pb	206		5.461
L	Pb	207		5.944
[>	Sc	46	99.863	
1	Ti	47		0.146
|	Sr	86		1.085
L	Sr	88		0.614
[>	In	115	99.016	
|	Sn	118		46.867
L	Sn	120		41.313

QC Out Of Limits

Analyte	Mass	Out of Limits Message
B	10	Q
Cr	53	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WP7V
Sample Date/Time: Thursday, April 28, 2005 01:10:14
Autosampler Position: 71
Dataset File: D:\Elandata\Dataset\042705M2\G8WP7V.073

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.028697	21.261	12.000	ug/L	7.667
	10	B	19.672726	4.994	636.021	ug/L	27.667
	23	Na	761.994724	0.660	2786751.597	ug/L	18838.944
	24	Mg	528.976042	0.767	1398950.461	ug/L	2106.176
	27	Al	2800.958041	1.342	11313597.534	ug/L	3413.777
	39	K	696.067211	2.265	6221737.775	ug/L	807733.282
	44	Ca	6847.084941	1.277	1771975.349	ug/L	61872.368
>	45	Sc-1			431017.805	ug/L	454114.374
	51	V	4.330024	5.051	17496.796	ug/L	-26072.212
	52	Cr	14.944707	3.826	153643.149	ug/L	26547.338
	55	Mn	238.031392	0.193	3366070.097	ug/L	3062.361
	57	Fe	11438.924433	1.328	3402118.689	ug/L	9798.695
	59	Co	2.608088	0.557	28691.070	ug/L	232.338
	60	Ni	32.539892	1.442	78617.028	ug/L	301.006
	65	Cu	278.004940	1.463	712373.263	ug/L	168.338
	66	Zn	1169.526961	0.784	1787212.626	ug/L	15137.170
>	72	Ge-1			698475.113	ug/L	739226.379
	75	As	7.953615	1.559	13774.619	ug/L	-1945.453
	82	Se	0.385693	48.839	-29.769	ug/L	-120.854
	97	Mo	2.527033	1.668	7285.596	ug/L	72.001
	107	Ag	2.583137	2.703	34670.036	ug/L	267.339
	111	Cd	2.488052	1.893	7618.107	ug/L	39.334
>	115	In-1			1474743.294	ug/L	1483966.870
	123	Sb	4.968545	1.337	37972.589	ug/L	268.758
	135	Ba	181.701306	1.561	416543.582	ug/L	112.002
>	165	Ho-1			1524921.859	ug/L	1592460.464
	205	Tl	0.101809	42.444	6468.226	ug/L	3951.949
	208	Pb	471.241446	1.084	17016545.570	ug/L	4580.000
	238	U	4.044276	2.257	187096.376	ug/L	234.671
>	45	Sc-2			431017.805	ug/L	454114.374
	53	Cr	-71.206208	4.954	82605.220	ug/L	154333.029
	54	Fe	11548.402439	0.866	7853133.321	ug/L	62090.940
	61	Ni	33.104502	2.559	5060.280	ug/L	1661.113
	63	Cu	275.867788	0.940	1473165.545	ug/L	345.008
	67	Zn	1017.466088	2.141	280888.687	ug/L	9047.975
>	72	Ge			698475.113	ug/L	739226.379
	77	Se	-40.769779	2.054	931.011	ug/L	8561.780
	98	Mo	2.561168	5.508	18521.954	ug/L	141.970
	109	Ag	2.443117	2.483	33346.543	ug/L	288.339
>	115	In-2			1474743.294	ug/L	1483966.870
	114	Cd	2.573180	6.851	17589.708	ug/L	84.731
	121	Sb	5.119776	4.216	51218.545	ug/L	349.674
	137	Ba	180.968703	2.214	707323.910	ug/L	156.669
>	165	Ho-2			1524921.859	ug/L	1592460.464
	203	Tl	0.106027	31.748	2703.620	ug/L	1582.773
	206	Pb	476.266967	1.567	4286896.905	ug/L	1161.392
	207	Pb	491.218642	2.331	3726055.099	ug/L	995.045
>	45	Sc			431017.805	ug/L	454114.374
	47	Ti	58.806732	1.638	41586.871	ug/L	297.006
	86	Sr	19.410710	1.683	67076.145	ug/L	716.656
	88	Sr	19.022113	1.843	571846.192	ug/L	5834.250
>	115	In			1474743.294	ug/L	1483966.870
	118	Sn	113.346857	1.847	948151.475	ug/L	855.034
	120	Sn	111.990709	3.153	1232429.019	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	94.914
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	94.487
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	99.378
	Sb	123	
	Ba	135	
>	Ho-1	165	96.759
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	94.914
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	94.487
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	99.378
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	96.759
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	94.914
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	99.378
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WQL
Sample Date/Time: Thursday, April 28, 2005 01:15:19
Autosampler Position: 72
Dataset File: D:\Elandata\Dataset\042705M2\G8WQL.074

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌈	9	Be	0.160186	2.535	36.000	ug/L	7.667
|	10	B	52.584652	9.862	1769.128	ug/L	27.667
|	23	Na	1431.391421	9.807	5575303.553	ug/L	18838.944
|	24	Mg	2046.486099	10.656	5774415.020	ug/L	2106.176
|	27	Al	10027.756796	8.999	43264863.312	ug/L	3413.777
|	39	K	1843.739272	8.541	16214706.190	ug/L	807733.282
|	44	Ca	21997.646578	9.589	5842633.950	ug/L	61872.368
|>	45	Sc-1			461285.917	ug/L	454114.374
|	51	V	9.631345	14.177	73809.896	ug/L	-26072.212
|	52	Cr	55.656110	13.211	537694.301	ug/L	26547.338
|	55	Mn	958.800838	8.284	14478424.184	ug/L	3082.361
|	57	Fe	109620.686215	13.628	34744066.681	ug/L	9798.895
|	59	Co	13.458365	9.635	157089.932	ug/L	232.338
|	60	Ni	72.602899	10.979	181960.577	ug/L	301.006
|	65	Cu	810.644105	14.936	2232590.879	ug/L	188.338
L	66	Zn	2537.260248	7.294	4125915.467	ug/L	15137.170
⌈>	72	Ge-1			760707.297	ug/L	739226.379
|	75	As	22.258839	9.830	45524.871	ug/L	-1945.453
L	82	Se	1.177642	22.444	153.454	ug/L	-120.854
⌈	97	Mo	11.983920	8.808	33971.598	ug/L	72.001
|	107	Ag	143.248813	6.104	1883896.873	ug/L	267.339
|	111	Cd	9.338441	8.299	28232.974	ug/L	39.334
|>	115	In-1			1480633.209	ug/L	1483966.870
L	123	Sb	39.204118	7.387	295092.809	ug/L	268.758
⌈	135	Ba	3786.160186	8.711	8219860.486	ug/L	112.002
|>	165	Ho-1			1443949.571	ug/L	1592460.464
|	205	Tl	0.133436	26.992	6916.430	ug/L	3951.949
|	208	Pb	4906.067281	8.535	167702766.537	ug/L	4580.000
L	238	U	16.333083	8.788	671189.711	ug/L	234.671
⌈>	45	Sc-2			461285.917	ug/L	454114.374
|	53	Cr	-21.865983	6.487	129218.572	ug/L	154333.029
|	54	Fe	111471.830227	10.705	80415136.339	ug/L	62090.940
|	61	Ni	76.446850	10.729	10279.810	ug/L	1661.113
|	63	Cu	771.616783	9.243	4402068.555	ug/L	345.008
L	67	Zn	2164.969676	11.801	827908.724	ug/L	9047.975
⌈>	72	Ge			760707.297	ug/L	739226.379
L	77	Se	-44.510016	1.728	301.042	ug/L	8561.780
⌈	98	Mo	12.234937	7.276	87518.663	ug/L	141.970
|	109	Ag	133.203248	7.056	1786785.490	ug/L	288.339
|>	115	In-2			1480633.209	ug/L	1483966.870
|	114	Cd	10.728720	8.683	72393.441	ug/L	64.731
L	121	Sb	39.018116	9.237	384695.922	ug/L	349.674
⌈	137	Ba	3646.795589	7.925	13496602.136	ug/L	156.669
|>	165	Ho-2			1443949.571	ug/L	1592460.464
|	203	Tl	0.131789	16.184	2834.311	ug/L	1582.773
|	206	Pb	4907.185525	7.908	41820586.220	ug/L	1161.392
L	207	Pb	5141.194289	9.049	38928863.018	ug/L	995.045
⌈>	45	Sc			461285.917	ug/L	454114.374
|	47	Ti	270.616747	11.765	203958.142	ug/L	297.006
|	86	Sr	88.802037	13.734	324249.118	ug/L	716.656
L	88	Sr	90.221083	7.711	2676615.184	ug/L	5834.250
⌈>	115	In			1480633.209	ug/L	1483966.870
|	118	Sn	1383.710048	8.615	11462934.982	ug/L	855.034
L	120	Sn	1364.678246	8.603	14874757.218	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	101.579
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	102.906
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.428
	Sb	123	
	Ba	135	
>	Ho-1	165	99.674
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	101.579
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	102.906
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.428
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	99.674
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	101.579
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	98.428
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Pb	208	H
Pb	206	H
Pb	207	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WQN
Sample Date/Time: Thursday, April 28, 2005 01:20:24
Autosampler Position: 73
Dataset File: D:\Elandata\Dataset\042705M2\G8WQN.075

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.286710	8.544	54.334	ug/L	7.667
	10	B	58.696747	5.288	2054.835	ug/L	27.667
	23	Na	2486.654203	2.242	9921085.978	ug/L	18838.944
	24	Mg	1910.299219	1.985	5530322.264	ug/L	2106.176
	27	Al	10942.310183	4.402	48395663.209	ug/L	3413.777
	39	K	2677.520001	4.427	23755209.864	ug/L	807733.282
	44	Ca	20242.964440	2.725	5613218.007	ug/L	61872.368
>	45	Sc-1			472328.858	ug/L	454114.374
	51	V	11.555207	16.927	96198.485	ug/L	-26072.212
	52	Cr	57.991082	7.718	573303.156	ug/L	26547.338
	55	Mn	926.250766	5.172	14336097.740	ug/L	3062.361
	57	Fe	51702.527624	2.342	18832028.802	ug/L	9798.695
	59	Co	10.390806	5.283	124467.305	ug/L	232.338
	60	Ni	60.011033	3.156	154539.961	ug/L	301.006
	65	Cu	1359.764460	1.870	3844466.027	ug/L	168.336
	66	Zn	3347.797962	3.605	5574158.915	ug/L	15137.170
>	72	Ge-1			737880.895	ug/L	739226.379
	75	As	17.080838	5.162	33442.669	ug/L	-1945.453
	82	Se	0.844763	9.967	73.767	ug/L	-120.854
	97	Mo	12.007178	0.965	34135.085	ug/L	72.001
	107	Ag	41.360737	4.185	545498.053	ug/L	267.339
	111	Cd	14.859621	2.766	45014.933	ug/L	39.334
>	115	In-1			1465563.499	ug/L	1483966.870
	123	Sb	36.462502	3.392	275177.959	ug/L	268.758
	135	Ba	1119.317896	2.543	2457557.560	ug/L	112.002
>	165	Ho-1			1466587.267	ug/L	1592460.464
	205	Tl	0.102774	17.168	6244.431	ug/L	3951.949
	208	Pb	4772.766108	0.945	165705107.317	ug/L	4580.000
	238	U	17.257123	2.052	767017.472	ug/L	234.671
>	45	Sc-2			472328.858	ug/L	454114.374
	53	Cr	-17.796096	11.677	137583.717	ug/L	154333.029
	54	Fe	51837.385961	1.432	38397021.390	ug/L	62090.940
	61	Ni	63.193119	2.021	9014.601	ug/L	1661.113
	63	Cu	1369.301598	3.491	7656881.357	ug/L	345.008
	67	Zn	2789.866494	2.936	827293.169	ug/L	9047.975
>	72	Ge			737880.895	ug/L	739226.379
	77	Se	-39.893206	2.679	1201.003	ug/L	8561.780
	98	Mo	12.275286	5.047	88013.674	ug/L	141.970
	109	Ag	38.884640	3.125	523145.434	ug/L	288.339
>	115	In-2			1465563.499	ug/L	1483966.870
	114	Cd	17.917800	3.370	121233.012	ug/L	84.731
	121	Sb	36.655706	1.886	362387.764	ug/L	349.674
	137	Ba	1095.213641	2.769	4115554.014	ug/L	156.669
>	165	Ho-2			1466587.267	ug/L	1592460.464
	203	Tl	0.106586	24.987	2605.265	ug/L	1582.773
	206	Pb	4738.483749	0.681	41012412.916	ug/L	1161.392
	207	Pb	5043.249136	3.548	36778658.281	ug/L	995.045
>	45	Sc			472328.858	ug/L	454114.374
	47	Ti	235.662096	2.850	182234.822	ug/L	297.006
	86	Sr	67.114622	2.526	252257.853	ug/L	716.656
	88	Sr	70.098298	3.956	2291667.378	ug/L	5834.250
>	115	In			1465563.499	ug/L	1483966.870
	118	Sn	1394.594403	3.365	11581703.345	ug/L	855.034
	120	Sn	1421.282590	2.854	15532050.060	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	104.011
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	98.818
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.760
	Sb	123	
	Ba	135	
>	Ho-1	165	92.096
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	104.011
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	98.818
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.760
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	92.096
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	104.011
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	98.760
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Pb	208	H
Pb	208	H
Pb	207	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WQR
Sample Date/Time: Thursday, April 28, 2005 01:25:29
Autosampler Position: 74
Dataset File: D:\Elandata\Dataset\042705M2\G8WQR.076

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.302831	20.625	61.667	ug/L	7.667
	10	B	37.527931	9.653	1252.737	ug/L	27.667
	23	Na	1470.931544	3.712	5785608.963	ug/L	18838.944
	24	Mg	2015.268440	5.341	5742171.988	ug/L	2106.176
	27	Al	10636.696707	9.032	46343949.906	ug/L	3413.777
	39	K	1928.673736	5.829	17081137.899	ug/L	807733.282
	44	Ca	19002.000971	7.501	5192591.930	ug/L	61872.368
>	45	Sc-1			464837.799	ug/L	454114.374
	51	V	11.689623	5.075	96356.756	ug/L	-26072.212
	52	Cr	80.903781	7.136	498204.362	ug/L	26547.338
	55	Mn	743.801737	11.765	11341791.568	ug/L	3062.361
	57	Fe	34628.530850	7.942	11087900.368	ug/L	9798.695
	59	Co	9.412521	10.450	111106.091	ug/L	232.338
	60	Ni	36.304724	8.318	92191.406	ug/L	301.006
	65	Cu	1063.758744	6.362	2960986.803	ug/L	188.336
	66	Zn	3877.838374	7.523	6357335.969	ug/L	15137.170
>	72	Ge-1			722326.791	ug/L	739226.379
	75	As	27.942341	5.880	54819.882	ug/L	-1945.453
	82	Se	0.735646	10.499	47.070	ug/L	-120.854
	97	Mo	7.158074	7.397	20388.114	ug/L	72.001
	107	Ag	98.365405	5.689	1298709.331	ug/L	267.339
	111	Cd	7.434378	7.002	22586.409	ug/L	39.334
>	115	In-1			1467403.363	ug/L	1483966.870
	123	Sb	27.238394	7.413	205863.255	ug/L	268.758
	135	Ba	3450.525630	6.979	7483107.947	ug/L	112.002
>	165	Ho-1			1442628.880	ug/L	1592460.464
	205	Tl	0.094356	22.992	5932.297	ug/L	3951.949
	208	Pb	1995.490440	6.567	68155628.810	ug/L	4580.000
	238	U	24.909877	8.153	1089031.582	ug/L	234.671
>	45	Sc-2			464837.799	ug/L	454114.374
	53	Cr	-17.264429	15.521	136043.457	ug/L	154333.029
	54	Fe	35083.553191	7.377	25601512.624	ug/L	62090.940
	61	Ni	39.368862	11.385	6167.065	ug/L	1661.113
	63	Cu	1022.571244	7.575	5890255.391	ug/L	345.008
	67	Zn	3278.868430	6.008	955157.758	ug/L	9047.975
>	72	Ge			722326.791	ug/L	739226.379
	77	Se	-36.760035	1.997	1690.181	ug/L	8561.780
	98	Mo	7.224205	9.258	51917.509	ug/L	141.970
	109	Ag	92.963635	7.326	1251690.666	ug/L	288.339
>	115	In-2			1467403.363	ug/L	1483966.870
	114	Cd	8.569577	12.447	58064.872	ug/L	84.731
	121	Sb	27.184866	7.293	269095.111	ug/L	349.674
	137	Ba	3387.160306	6.787	12520715.053	ug/L	156.669
>	165	Ho-2			1442628.880	ug/L	1592460.464
	203	Tl	0.099006	38.285	2482.911	ug/L	1582.773
	206	Pb	2030.201078	8.277	17284581.385	ug/L	1161.392
	207	Pb	2078.874637	8.974	14915836.016	ug/L	995.045
>	45	Sc			464837.799	ug/L	454114.374
	47	Ti	292.232592	9.341	222438.752	ug/L	297.006
	86	Sr	76.898948	7.134	284475.882	ug/L	716.656
	88	Sr	79.235461	7.883	2550752.344	ug/L	5834.250
>	115	In			1467403.363	ug/L	1483966.870
	118	Sn	509.440054	7.838	4235856.444	ug/L	855.034
	120	Sn	514.494847	8.370	5628501.404	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	102.381
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	97.714
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.884
	Sb	123	
	Ba	135	
>	Ho-1	165	90.891
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	102.381
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	97.714
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.884
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	90.891
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	102.381
	Ti	47	
	Sr	88	
	Sr	88	
>	In	115	98.884
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WQT
Sample Date/Time: Thursday, April 28, 2005 01:30:35
Autosampler Position: 75
Dataset File: D:\Elandata\Dataset\042705M2\G8WQT.077

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	1.997465	18.926	326.674	ug/L	7.667
	10	B	69.659730	9.133	2125.847	ug/L	27.667
	23	Na	2266.677127	10.766	8023228.954	ug/L	18838.944
	24	Mg	2777.663944	13.398	7136353.982	ug/L	2106.176
	27	Al	12541.293502	13.260	49270766.458	ug/L	3413.777
	39	K	2664.222001	12.250	20927926.387	ug/L	807733.282
	44	Ca	29944.068296	15.455	7346586.169	ug/L	61672.368
>	45	Sc-1			419241.075	ug/L	454114.374
	51	V	20.355336	13.144	169207.058	ug/L	-26072.212
	52	Cr	70.742734	12.954	615693.727	ug/L	26547.338
	55	Mn	17946.163348	13.160	246504688.162	ug/L	3062.361
	57	Fe	44801.392033	13.343	12937925.518	ug/L	9796.895
	59	Co	15.025177	13.432	159751.994	ug/L	232.338
	60	Ni	119.903711	10.790	273763.083	ug/L	301.006
	65	Cu	250979.356012	12.699	629794312.483	ug/L	168.336
	66	Zn	11821.334876	11.819	17443296.384	ug/L	15137.170
>	72	Ge-1			674024.356	ug/L	739226.379
	75	As	32.390564	8.536	59690.120	ug/L	-1945.453
	82	Se	0.755975	14.504	48.264	ug/L	-120.854
	97	Mo	16.030336	12.923	43893.741	ug/L	72.001
	107	Ag	30.604601	10.021	389257.025	ug/L	267.339
	111	Cd	39.721269	15.112	115921.494	ug/L	39.334
>	115	In-1			1413821.660	ug/L	1483966.870
	123	Sb	22.921931	13.285	166811.103	ug/L	268.758
	135	Ba	1278.088029	13.143	2786166.167	ug/L	112.002
>	165	Ho-1			1448804.709	ug/L	1592460.464
	205	Tl	0.116449	23.987	6516.898	ug/L	3951.949
	208	Pb	2029.049191	8.729	69636590.852	ug/L	4580.000
	238	U	8.936501	9.045	392736.798	ug/L	234.671
>	45	Sc-2			419241.075	ug/L	454114.374
	53	Cr	7.716787	85.898	151270.523	ug/L	164333.029
	54	Fe	45841.428395	15.440	30019239.792	ug/L	62090.940
	61	Ni	128.319750	14.604	14662.751	ug/L	1661.113
	63	Cu	239386.287490	10.350	1242689210.691	ug/L	345.008
	67	Zn	10069.847306	9.412	2628105.203	ug/L	9047.975
>	72	Ge			674024.356	ug/L	739226.379
	77	Se	-47.002990	0.505	-155.528	ug/L	8561.780
	98	Mo	16.609482	14.841	114739.382	ug/L	141.970
	109	Ag	28.333984	9.956	367626.849	ug/L	288.339
>	115	In-2			1413821.660	ug/L	1483966.870
	114	Cd	42.093063	12.672	274382.224	ug/L	84.731
	121	Sb	23.224115	13.584	221370.831	ug/L	349.674
	137	Ba	1229.868565	11.471	4589475.697	ug/L	156.669
>	165	Ho-2			1448804.709	ug/L	1592460.464
	203	Tl	0.122248	29.311	2743.962	ug/L	1582.773
	206	Pb	2048.326761	8.900	17505561.325	ug/L	1161.392
	207	Pb	2085.118769	7.409	15031387.144	ug/L	995.045
>	45	Sc			419241.075	ug/L	454114.374
	47	Ti	274.113162	16.656	188151.222	ug/L	297.006
	86	Sr	101.890449	14.298	339558.131	ug/L	716.856
	88	Sr	105.496501	9.835	3061425.361	ug/L	5834.250
>	115	In			1413821.660	ug/L	1483966.870
	118	Sn	651.374715	13.017	5214869.804	ug/L	855.034
	120	Sn	652.401611	11.944	5872011.732	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	92.321
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	91.180
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	95.273
	Sb	123	
	Ba	136	
>	Ho-1	165	90.979
	Tl	205	
	Pb	206	
	U	238	
>	Sc-2	45	92.321
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	91.180
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	95.273
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	90.979
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	92.321
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	95.273
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cu	65	H
Cu	63	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: G6WR6
Sample Date/Time: Thursday, April 28, 2005 01:35:41
Autosampler Position: 76
Dataset File: D:\Elandata\Dataset\042705M2\G6WR6.078

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.310976	18.750	59.334	ug/L	7.667
	10	B	65.896667	9.258	2100.510	ug/L	27.667
	23	Na	1129.387695	8.473	4184438.012	ug/L	18838.944
	24	Mg	44640.784585	7.377	119686134.100	ug/L	2106.176
	27	Al	9627.309155	9.801	39465546.364	ug/L	3413.777
	39	K	1725.076479	4.823	14467233.755	ug/L	807733.282
	44	Ca	27134.841667	5.586	6953506.131	ug/L	61872.368
>	45	Sc-1			437830.007	ug/L	454114.374
	51	V	16.497664	11.767	136226.158	ug/L	-26072.212
	52	Cr	121.562394	12.010	1086013.728	ug/L	26547.338
	55	Mn	1735.368772	8.038	24895109.234	ug/L	3062.361
	57	Fe	53642.944068	10.856	16169121.293	ug/L	9798.695
	59	Co	31.890013	8.367	353613.893	ug/L	232.338
	60	Ni	501.204575	10.645	1193787.841	ug/L	301.006
	65	Cu	1241.486154	9.078	3252233.603	ug/L	168.336
	66	Zn	4754.612555	8.609	7331620.201	ug/L	15137.170
>	72	Ge-1			730191.008	ug/L	739226.379
	75	As	20.615113	9.080	40320.424	ug/L	-1945.453
	82	Se	0.637069	19.572	25.179	ug/L	-120.854
	97	Mo	8.093600	8.427	21981.519	ug/L	72.001
	107	Ag	42.771177	5.395	538795.826	ug/L	267.339
	111	Cd	14.405075	10.337	41671.515	ug/L	39.334
>	115	In-1			1399216.329	ug/L	1483966.870
	123	Sb	57.860778	10.460	416774.074	ug/L	268.758
	135	Ba	1568.969756	9.016	3394832.843	ug/L	112.002
>	165	Ho-1			1440754.337	ug/L	1592460.464
	205	Tl	0.089001	42.570	5780.243	ug/L	3951.949
	208	Pb	4771.847011	10.552	162566357.853	ug/L	4580.000
	238	U	9.925145	11.615	432934.852	ug/L	234.671
>	45	Sc-2			437830.007	ug/L	454114.374
	53	Cr	46.254889	10.729	204097.261	ug/L	154333.029
	54	Fe	53416.366314	8.079	36657245.704	ug/L	62090.940
	61	Ni	522.396853	8.583	57406.091	ug/L	1661.113
	63	Cu	1147.126792	10.174	6217330.110	ug/L	345.008
	67	Zn	3688.957191	11.414	1065081.728	ug/L	9047.975
>	72	Ge			730191.008	ug/L	739226.379
	77	Se	-46.558227	0.787	-86.771	ug/L	8561.760
	98	Mo	8.329793	6.990	57084.795	ug/L	141.970
	109	Ag	39.290656	9.068	504747.775	ug/L	268.339
>	115	In-2			1399216.329	ug/L	1483966.870
	114	Cd	15.173043	8.851	98027.774	ug/L	84.731
	121	Sb	59.218685	10.052	558627.026	ug/L	349.674
	137	Ba	1623.813805	11.384	5618273.216	ug/L	156.669
>	165	Ho-2			1440754.337	ug/L	1592460.464
	203	Tl	0.084478	30.533	2322.880	ug/L	1582.773
	206	Pb	4647.888938	8.962	39479284.623	ug/L	1161.392
	207	Pb	5119.765880	12.798	36628955.656	ug/L	995.045
>	45	Sc			437830.007	ug/L	454114.374
	47	Ti	196.756180	11.606	141100.874	ug/L	297.006
	86	Sr	76.534541	8.943	266453.696	ug/L	716.656
	88	Sr	78.301152	7.807	2372203.329	ug/L	5834.250
>	115	In			1399216.329	ug/L	1483966.870
	118	Sn	503.597149	8.057	3993725.915	ug/L	855.034
	120	Sn	497.502410	10.661	5190489.423	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	96.414
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	98.778
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	94.288
	Sb	123	
	Ba	136	
>	Ho-1	165	98.473
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	96.414
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	98.778
	Se	77	
	Mo	96	
	Ag	109	
>	In-2	115	94.288
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	98.473
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	96.414
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	94.288
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Pb	208	H
Pb	206	H
Pb	207	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WTA
Sample Date/Time: Thursday, April 28, 2005 01:40:48
Autosampler Position: 77
Dataset File: D:\Elandata\Dataset\042705M2\G8WTA.079

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.207606	12.331	41.334	ug/L	7.667
	10	B	83.433787	2.974	2606.264	ug/L	27.667
	23	Na	2702.964332	1.406	9624291.040	ug/L	18638.944
	24	Mg	2078.146912	4.826	5475642.359	ug/L	2106.176
	27	Al	12388.880315	2.046	49927230.203	ug/L	3413.777
	39	K	2541.685189	2.487	20589755.611	ug/L	807733.282
	44	Ca	23709.385816	3.301	5877393.968	ug/L	61872.368
>	45	Sc-1			430370.109	ug/L	454114.374
	51	V	12.957085	16.693	100977.172	ug/L	-26072.212
	52	Cr	66.796136	6.841	597406.779	ug/L	26547.338
	55	Mn	1005.461361	0.467	14189273.325	ug/L	3062.361
	57	Fe	38572.963603	1.865	11437815.004	ug/L	9798.695
	59	Co	11.363239	4.277	123643.645	ug/L	232.338
	60	Ni	94.363724	1.210	221241.389	ug/L	301.006
	65	Cu	3085.804674	3.349	7944139.551	ug/L	168.336
	66	Zn	33740.122874	0.761	51074219.336	ug/L	15137.170
>	72	Ge-1			736290.140	ug/L	739226.379
	75	As	14.330667	4.458	27713.146	ug/L	-1945.453
	82	Se	1.302961	14.405	178.463	ug/L	-120.854
	97	Mo	10.173747	2.886	29490.370	ug/L	72.001
	107	Ag	37.342219	2.007	502329.429	ug/L	267.339
	111	Cd	59.309064	1.801	183116.135	ug/L	39.334
>	115	In-1			1494322.696	ug/L	1483966.870
	123	Sb	21.013180	1.286	161875.410	ug/L	268.758
	135	Ba	1422.103268	2.529	3083683.744	ug/L	112.002
>	165	Ho-1			1442786.066	ug/L	1592460.464
	205	Tl	0.050242	25.831	5587.824	ug/L	3951.949
	208	Pb	2984.227783	0.326	101938163.370	ug/L	4580.000
	238	U	39.469329	0.995	1725560.293	ug/L	234.671
>	45	Sc-2			430370.109	ug/L	454114.374
	53	Cr	-6.167312	11.433	139017.626	ug/L	154333.029
	54	Fe	38753.175611	4.128	26153283.895	ug/L	52090.940
	61	Ni	103.781244	4.392	12466.562	ug/L	1561.113
	63	Cu	2989.464975	0.432	15837246.695	ug/L	345.006
	67	Zn	28249.482926	1.163	7556144.393	ug/L	9047.975
>	72	Ge			736290.140	ug/L	739226.379
	77	Se	-44.008296	2.700	384.020	ug/L	8561.780
	98	Mo	10.475921	1.417	76642.802	ug/L	141.970
	109	Ag	34.939693	0.950	479516.716	ug/L	288.339
>	115	In-2			1494322.696	ug/L	1483966.870
	114	Cd	62.270794	2.871	429450.839	ug/L	84.731
	121	Sb	21.253596	1.170	214396.723	ug/L	349.674
	137	Ba	1376.140880	3.506	5085903.105	ug/L	156.669
>	165	Ho-2			1442786.066	ug/L	1592460.464
	203	Tl	0.078398	15.588	2286.536	ug/L	1582.773
	206	Pb	3025.028003	1.581	25754988.154	ug/L	1161.392
	207	Pb	3091.250981	2.340	22173976.049	ug/L	995.045
>	45	Sc			430370.109	ug/L	454114.374
	47	Ti	213.235824	4.326	150173.076	ug/L	297.008
	86	Sr	77.721669	6.250	265714.583	ug/L	716.656
	88	Sr	81.266296	3.577	2419067.885	ug/L	5834.250
>	115	In			1494322.896	ug/L	1483966.870
	118	Sn	989.838916	0.931	8384169.950	ug/L	855.034
	120	Sn	1013.178814	1.574	11295699.763	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	94.771
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	99.608
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	100.000
	Sb	123	
	Ba	135	
>	Ho-1	165	90.891
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	94.771
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	99.608
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	100.000
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	90.891
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	94.771
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	100.000
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Zn	66	H
Zn	67	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WTE
Sample Date/Time: Thursday, April 28, 2005 01:45:55
Autosampler Position: 78
Dataset File: D:\Elandata\Dataset\042705M2\G8WTE.080

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.209574	17.929	41.334	ug/L	7.667
	10	B	61.062775	5.485	1894.145	ug/L	27.667
	23	Na	2882.033763	3.469	9633650.533	ug/L	18838.944
	24	Mg	2301.559350	3.276	5999174.724	ug/L	2106.176
	27	Al	12746.055064	1.321	50802878.688	ug/L	3413.777
	39	K	3075.779438	1.086	24481093.068	ug/L	807733.282
	44	Ca	26348.454817	2.321	8564172.739	ug/L	61872.368
>	45	Sc-1			425516.856	ug/L	454114.374
	51	V	12.823831	2.003	99043.058	ug/L	-26072.212
	52	Cr	50.255412	1.571	451194.613	ug/L	26547.338
	55	Mn	1034.666139	1.881	14433126.854	ug/L	3062.361
	57	Fe	45239.251885	1.584	13261464.884	ug/L	9798.695
	59	Co	9.888991	2.975	106772.232	ug/L	232.338
	60	Ni	98.841191	0.402	229172.930	ug/L	301.006
	65	Cu	1620.603254	3.362	4126512.711	ug/L	168.336
	66	Zn	3322.832441	0.786	4866675.872	ug/L	15137.170
>	72	Ge-1			733474.439	ug/L	739226.379
	75	As	15.438722	3.109	29877.415	ug/L	-1945.453
	82	Se	0.508743	34.592	-2.967	ug/L	-120.854
	97	Mo	8.408852	1.314	22521.634	ug/L	72.001
	107	Ag	26.758143	0.182	332422.567	ug/L	267.339
	111	Cd	11.216375	0.637	31999.118	ug/L	39.334
>	115	In-1			1379434.461	ug/L	1483986.870
	123	Sb	21.889696	1.762	155642.307	ug/L	268.758
	135	Ba	1185.971389	3.501	2520424.502	ug/L	112.002
>	165	Ho-1			1414118.250	ug/L	1592460.464
	205	Tl	0.081488	21.139	5507.123	ug/L	3951.949
	208	Pb	1796.881826	0.679	60186785.883	ug/L	4580.000
	238	U	5.974191	3.422	256087.841	ug/L	234.671
>	45	Sc-2			425516.856	ug/L	454114.374
	53	Cr	-18.833897	6.956	122738.092	ug/L	154333.029
	54	Fe	45739.751046	2.542	30520972.084	ug/L	62090.940
	61	Ni	108.248133	2.957	12795.856	ug/L	1661.113
	63	Cu	1831.969751	0.487	8075529.955	ug/L	345.008
	67	Zn	2733.446327	2.103	730523.996	ug/L	9047.975
>	72	Ge			733474.439	ug/L	739226.379
	77	Se	-43.042052	0.721	561.063	ug/L	8561.780
	98	Mo	8.713717	1.711	58875.930	ug/L	141.970
	109	Ag	25.275887	1.169	320296.845	ug/L	288.339
>	115	In-2			1379434.461	ug/L	1483986.870
	114	Cd	12.605988	4.215	80313.208	ug/L	84.731
	121	Sb	22.184988	0.758	205323.734	ug/L	349.574
	137	Ba	1148.189947	2.828	4158367.403	ug/L	156.669
>	165	Ho-2			1414118.250	ug/L	1592460.464
	203	Tl	0.086037	28.391	2302.877	ug/L	1582.773
	206	Pb	1799.351503	2.189	15017813.815	ug/L	1161.392
	207	Pb	1840.720305	1.201	12943620.423	ug/L	995.045
>	45	Sc			425516.856	ug/L	454114.374
	47	Ti	224.681546	4.482	156480.425	ug/L	297.008
	86	Sr	89.916919	2.834	304166.176	ug/L	716.656
	88	Sr	92.534377	2.327	2723969.958	ug/L	5834.250
>	115	In			1379434.461	ug/L	1483986.870
	118	Sn	591.306386	0.963	4624193.982	ug/L	855.034
	120	Sn	592.951277	2.657	6101937.812	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	93.703
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	98.222
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	92.956
	Sb	123	
	Ba	135	
>	Ho-1	165	88.801
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	93.703
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	98.222
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	92.956
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	88.801
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	93.703
	Tl	47	
	Sr	88	
	Sr	86	
>	In	115	92.956
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WTG
Sample Date/Time: Thursday, April 28, 2005 01:51:04
Autosampler Position: 79
Dataset File: D:\Elandata\Dataset\042705M2\G8WTG.081

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.969414	5.687	156.669	ug/L	7.667
	10	B	137.837007	5.759	4035.945	ug/L	27.667
	23	Na	3627.616833	3.861	12396733.969	ug/L	18838.944
	24	Mg	2135.495660	3.269	5299737.909	ug/L	2106.176
	27	Al	12439.283193	2.777	47188511.438	ug/L	3413.777
	39	K	2443.315866	3.712	16855990.163	ug/L	807733.282
	44	Ca	24152.523102	2.919	5734189.419	ug/L	61872.368
>	45	Sc-1			405003.746	ug/L	454114.374
	51	V	10.779755	9.373	75670.094	ug/L	-26072.212
	52	Cr	89.463361	0.809	746147.741	ug/L	26547.338
	55	Mn	1457.275507	4.904	19347072.585	ug/L	3062.361
	57	Fe	118701.165540	2.193	33113029.767	ug/L	9798.695
	59	Co	14.398664	3.012	147869.144	ug/L	232.338
	60	Ni	96.153060	3.636	212134.466	ug/L	301.006
	65	Cu	1088.818778	3.734	2639871.789	ug/L	168.336
	66	Zn	3681.368006	4.299	5255291.466	ug/L	15137.170
>	72	Ge-1			733583.333	ug/L	739226.379
	75	As	22.344377	2.685	44120.782	ug/L	-1945.453
	82	Se	0.477714	22.644	-10.843	ug/L	-120.854
	97	Mo	25.824306	1.014	69861.773	ug/L	72.001
	107	Ag	99.224107	1.249	1247166.354	ug/L	267.339
	111	Cd	6.442762	0.105	18622.651	ug/L	39.334
>	115	In-1			1396257.245	ug/L	1483966.870
	123	Sb	24.827864	0.671	178656.341	ug/L	268.758
	135	Ba	2221.830822	1.888	4571231.696	ug/L	112.002
>	165	Ho-1			1398404.443	ug/L	1592460.464
	205	Tl	0.055650	40.638	4813.865	ug/L	3951.949
	208	Pb	2086.884222	1.099	69093477.551	ug/L	4580.000
	238	U	3.004443	2.831	127606.992	ug/L	234.671
>	45	Sc-2			405003.746	ug/L	454114.374
	53	Cr	16.234542	37.764	155582.774	ug/L	154333.029
	54	Fe	116994.321979	4.154	74240785.782	ug/L	62080.940
	61	Ni	104.671154	5.097	11827.016	ug/L	1661.113
	63	Cu	1022.797918	5.519	5129170.008	ug/L	345.008
	67	Zn	3072.733180	1.477	780671.169	ug/L	9047.975
>	72	Ge			733583.333	ug/L	739226.379
	77	Se	-44.529476	1.469	287.521	ug/L	8561.780
	96	Mo	26.447660	2.210	180647.207	ug/L	141.970
	109	Ag	91.415969	1.829	1171872.501	ug/L	288.339
>	115	In-2			1396257.245	ug/L	1483966.870
	114	Cd	7.198766	9.912	46469.499	ug/L	84.731
	121	Sb	25.516969	1.783	240477.737	ug/L	349.674
	137	Ba	2127.921015	1.132	7625659.662	ug/L	156.669
>	165	Ho-2			1398404.443	ug/L	1592460.464
	203	Tl	0.058811	32.511	1993.493	ug/L	1582.773
	206	Pb	2116.252166	1.307	17481569.302	ug/L	1161.392
	207	Pb	2121.493778	1.555	14753808.909	ug/L	995.045
>	45	Sc			405003.746	ug/L	454114.374
	47	Ti	241.799476	3.247	160425.889	ug/L	297.006
	86	Sr	95.093351	2.236	306219.835	ug/L	716.656
	88	Sr	95.988528	2.911	2889357.035	ug/L	5834.250
>	115	In			1396257.245	ug/L	1483966.870
	118	Sn	646.346118	3.253	5117493.851	ug/L	855.034
	120	Sn	645.305995	0.717	6721234.917	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	89.185
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	89.237
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	94.090
	Sb	123	
	Ba	135	
>	Ho-1	165	97.914
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	89.185
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	89.237
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	94.090
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	166	97.914
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	89.185
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	94.090
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WTR
Sample Date/Time: Thursday, April 28, 2005 01:56:12
Autosampler Position: 80
Dataset File: D:\Elandata\Dataset\042705M2\G8WTR.082

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.554612	2.209	93.001	ug/L	7.667
	10	B	70.899388	1.621	2096.175	ug/L	27.667
	23	Na	2232.363599	1.830	7671324.538	ug/L	18838.944
	24	Mg	2043.260309	3.184	5095627.789	ug/L	2106.176
	27	Al	9898.140622	1.481	36585568.964	ug/L	3413.777
	39	K	1761.661934	2.247	13714684.221	ug/L	807733.282
	44	Ca	25539.342509	3.607	6088165.641	ug/L	61872.368
>	45	Sc-1			406774.317	ug/L	454114.374
	51	V	9.461969	2.497	63755.223	ug/L	-26072.212
	52	Cr	61.671586	2.143	523244.390	ug/L	26547.338
	55	Mn	1914.463382	1.595	25528073.077	ug/L	3062.361
	57	Fe	89441.925239	4.175	25074436.310	ug/L	9798.695
	59	Co	13.323050	3.900	137490.555	ug/L	232.338
	60	Ni	222.330478	2.377	492624.261	ug/L	301.006
	65	Cu	22758.750336	1.212	55433977.430	ug/L	168.336
	66	Zn	7606.494211	1.297	11183180.839	ug/L	15137.170
>	72	Ge-1			724069.102	ug/L	739226.379
	75	As	19.774464	2.957	38295.950	ug/L	-1945.453
	82	Se	1.509068	8.108	222.455	ug/L	-120.854
	97	Mo	9.183382	2.993	25173.760	ug/L	72.001
	107	Ag	42.816068	2.748	544317.389	ug/L	267.339
	111	Cd	11.561261	1.427	33775.908	ug/L	39.334
>	115	In-1			1412299.557	ug/L	1483966.870
	123	Sb	92.551594	1.229	672896.328	ug/L	268.758
	135	Ba	755.631193	1.874	1625610.737	ug/L	112.002
>	165	Ho-1			1430981.180	ug/L	1592460.464
	205	Tl	0.062697	26.740	5097.965	ug/L	3951.949
	208	Pb	5624.207802	1.276	190533144.565	ug/L	4580.000
	238	U	3.813907	2.892	165592.094	ug/L	234.671
>	45	Sc-2			406774.317	ug/L	454114.374
	53	Cr	-11.409222	48.220	125619.863	ug/L	154333.029
	54	Fe	88810.196692	4.284	56644221.284	ug/L	62090.940
	61	Ni	227.476360	4.254	24082.221	ug/L	1661.113
	63	Cu	21661.900337	0.213	109144141.118	ug/L	345.008
	67	Zn	6268.341488	1.478	1590301.589	ug/L	9047.975
>	72	Ge			724069.102	ug/L	739226.379
	77	Se	-44.250979	1.296	333.958	ug/L	8561.780
	98	Mo	9.382819	3.388	64674.195	ug/L	141.970
	109	Ag	40.157702	1.994	520753.778	ug/L	288.339
>	115	In-2			1412299.557	ug/L	1483966.870
	114	Cd	12.870557	3.058	83942.370	ug/L	84.731
	121	Sb	93.902945	2.265	894279.568	ug/L	349.674
	137	Ba	806.709679	0.134	2954770.299	ug/L	156.669
>	165	Ho-2			1430981.180	ug/L	1592460.464
	203	Tl	0.068521	41.288	2037.834	ug/L	1582.773
	206	Pb	5710.319177	1.336	48222406.309	ug/L	1161.392
	207	Pb	5813.091812	1.860	41368844.729	ug/L	995.045
>	45	Sc			406774.317	ug/L	454114.374
	47	Ti	164.828410	6.935	108847.162	ug/L	297.006
	86	Sr	72.039318	1.969	233211.006	ug/L	716.656
	88	Sr	69.824788	1.540	1966647.799	ug/L	5834.250
>	115	In			1412299.557	ug/L	1483966.870
	118	Sn	1168.357853	1.772	9354368.180	ug/L	855.034
	120	Sn	1163.938169	0.867	12260463.864	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	89.675
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	97.950
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	95.171
	Sb	123	
	Ba	135	
>	Ho-1	165	99.999
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	89.575
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	97.950
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	95.171
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	99.940
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	89.575
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	95.171
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cu	65	H
Pb	208	H
Cu	63	H
Pb	206	H
Pb	207	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Thursday, April 28, 2005 02:01:22
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 1.083

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	217.731544	3.809	31985.101	ug/L	7.667
	10	B	211.096062	3.889	5862.262	ug/L	27.667
	23	Na	1931.712431	1.410	6280861.516	ug/L	18838.944
	24	Mg	962.646467	4.089	2270153.596	ug/L	2106.176
	27	Al	1967.162902	1.388	7094001.653	ug/L	3413.777
	39	K	1971.472297	2.589	14435795.146	ug/L	807733.262
	44	Ca	1033.420810	3.936	283171.030	ug/L	61872.368
>	45	Sc-1			384727.118	ug/L	454114.374
	51	V	202.956907	1.182	1745252.559	ug/L	-26072.212
	52	Cr	212.378819	3.835	1651350.772	ug/L	26547.338
	55	Mn	207.856413	2.599	2823464.380	ug/L	3062.361
	57	Fe	2130.875281	0.845	572799.245	ug/L	9798.695
	59	Co	211.746438	4.683	2063014.422	ug/L	232.338
	60	Ni	215.960624	2.784	452333.530	ug/L	301.006
	65	Cu	225.486328	1.639	519454.667	ug/L	168.336
	66	Zn	217.599455	3.176	307180.757	ug/L	15137.170
>	72	Ge-1			696567.295	ug/L	739226.379
	75	As	199.988976	5.181	399155.191	ug/L	-1945.453
	82	Se	192.172803	2.855	41567.471	ug/L	-120.854
	97	Mo	205.224676	2.062	542863.588	ug/L	72.001
	107	Ag	80.021671	4.766	615203.320	ug/L	267.339
	111	Cd	197.554001	1.130	557764.959	ug/L	39.334
>	115	In-1			1366386.752	ug/L	1483966.870
	123	Sb	195.586600	2.210	1375322.575	ug/L	268.758
	135	Ba	208.302791	2.173	449706.111	ug/L	112.002
>	165	Ho-1			1435741.618	ug/L	1592460.464
	205	Tl	193.458661	2.881	4804563.163	ug/L	3951.949
	208	Pb	197.220457	0.786	6707452.868	ug/L	4580.000
	238	U	192.619116	1.309	8380569.082	ug/L	234.671
>	45	Sc-2			384727.118	ug/L	454114.374
	53	Cr	161.375518	13.167	300319.580	ug/L	154333.029
	54	Fe	2173.540943	4.612	1361491.723	ug/L	62090.940
	61	Ni	224.884109	2.053	22524.971	ug/L	1661.113
	63	Cu	220.828213	1.330	1052612.398	ug/L	345.008
	67	Zn	215.478719	3.436	59124.709	ug/L	9047.975
>	72	Ge			696567.295	ug/L	739226.379
	77	Se	181.115337	2.916	36287.993	ug/L	8561.760
	98	Mo	204.075307	3.636	1362716.838	ug/L	141.970
	109	Ag	48.742376	2.182	611449.699	ug/L	288.339
>	115	In-2			1366386.752	ug/L	1483966.870
	114	Cd	194.688186	2.004	1227591.007	ug/L	84.731
	121	Sb	199.126625	0.876	1834286.813	ug/L	349.674
	137	Ba	211.919362	2.132	779914.083	ug/L	156.669
>	165	Ho-2			1435741.618	ug/L	1592460.464
	203	Tl	184.083225	1.370	1943178.985	ug/L	1582.773
	206	Pb	196.640711	0.629	1667088.012	ug/L	1161.392
	207	Pb	203.213683	1.481	1451808.383	ug/L	995.045
>	45	Sc			384727.118	ug/L	454114.374
	47	Ti	202.858900	2.716	127843.933	ug/L	297.006
	86	Sr	215.184733	3.526	857356.186	ug/L	716.856
	88	Sr	213.999872	0.969	5691713.283	ug/L	5834.250
>	115	In			1366386.752	ug/L	1483966.870
	118	Sn	202.934476	1.089	1572515.224	ug/L	855.034
	120	Sn	203.381380	0.309	2073703.651	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		166.886

	B	10		105.849
	Na	23		96.696
	Mg	24		96.256
	Al	27		98.386
	K	39		98.574
	Ca	44		103.342
>	Sc-1	45	94.720	
	V	51		101.478
	Cr	52		106.189
	Mn	55		103.928
	Fe	57		106.544
	Co	59		106.573
	Ni	60		107.990
	Cu	65		112.743
	Zn	66		108.909
>	Ge-1	72	94.229	
	As	75		99.993
	Se	82		99.098
	Mo	97		102.812
	Ag	107		100.043
	Cd	111		96.777
>	In-1	115	92.077	
	Sb	123		97.783
	Ba	135		104.151
>	Ho-1	165	90.199	
	Tl	205		96.728
	Pb	208		96.810
	U	238		96.310
>	Sc-2	45	94.720	
	Cr	53		80.688
	Fe	54		108.677
	Ni	61		112.492
	Cu	63		110.414
	Zn	67		107.739
>	Ge	72	94.229	
	Se	77		99.568
	Mo	98		102.838
	Ag	109		97.495
>	In-2	115	92.077	
	Cd	114		97.343
	Sb	121		99.583
	Ba	137		106.599
>	Ho-2	165	90.199	
	Tl	203		92.642
	Pb	206		96.329
	Pb	207		101.807
>	Sc	45	94.720	
	Ti	47		101.438
	Sr	86		107.582
	Sr	88		107.000
>	In	115	92.077	
	Sn	118		101.467
	Sn	120		101.891

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cu	65	Q
Cr	53	Q
Ni	61	Q
Cu	63	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Thursday, April 28, 2005 02:07:32
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042705MZ\QC Std 2.084

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.003607	498.817	7.000	ug/L	7.667
	10	B	4.267991	13.085	141.002	ug/L	27.667
	23	Na	0.306897	32.875	16893.155	ug/L	18838.944
	24	Mg	0.062674	105.168	1924.816	ug/L	2106.176
	27	Al	0.811069	10.581	5794.569	ug/L	3413.777
	39	K	11.193487	9.581	759545.705	ug/L	807733.282
	44	Ca	-9.959016	36.268	50010.571	ug/L	61872.368
>	45	Sc-1			383315.581	ug/L	454114.374
	51	V	0.011521	7749.910	-21871.232	ug/L	-26072.212
	52	Cr	-0.871128	18.871	15744.193	ug/L	26547.338
	55	Mn	0.010920	123.151	2709.951	ug/L	3062.361
	57	Fe	5.758932	11.903	9791.770	ug/L	9798.695
	59	Co	0.013062	64.420	323.007	ug/L	232.338
	60	Ni	0.015917	34.857	287.339	ug/L	301.006
	65	Cu	3.147046	3.236	7362.971	ug/L	168.336
	66	Zn	1.279636	22.940	14499.835	ug/L	15137.170
>	72	Ge-1			686736.011	ug/L	739226.379
	75	As	1.204185	5.353	516.086	ug/L	-1945.453
	82	Se	0.313463	31.288	-44.969	ug/L	-120.854
	97	Mo	0.090822	36.600	305.673	ug/L	72.001
	107	Ag	0.031686	18.596	632.384	ug/L	267.339
	111	Cd	0.010529	35.405	65.667	ug/L	39.334
>	115	In-1			1360472.963	ug/L	1483966.870
	123	Sb	0.134356	29.458	1186.684	ug/L	268.758
	135	Ba	0.010041	35.002	121.668	ug/L	112.002
>	165	Ho-1			1424054.230	ug/L	1592460.464
	205	Tl	0.212892	56.341	8808.694	ug/L	3951.949
	208	Pb	0.276060	4.019	13372.590	ug/L	4580.000
	238	U	0.007088	25.367	516.348	ug/L	234.671
>	45	Sc-2			383315.581	ug/L	454114.374
	53	Cr	-21.242227	59.210	107964.440	ug/L	154333.029
	54	Fe	3.551173	40.746	54545.487	ug/L	62090.940
	61	Ni	1.294289	67.315	1523.763	ug/L	1661.113
	63	Cu	3.261053	2.311	15773.864	ug/L	345.008
	67	Zn	2.251206	176.049	8168.434	ug/L	9047.975
>	72	Ge			686736.011	ug/L	739226.379
	77	Se	-38.019834	6.076	1388.799	ug/L	8561.780
	98	Mo	0.233174	10.416	1680.879	ug/L	141.970
	109	Ag	0.064539	19.353	1071.052	ug/L	288.339
>	115	In-2			1360472.963	ug/L	1483966.870
	114	Cd	0.007396	30.732	124.251	ug/L	84.731
	121	Sb	0.129474	31.281	1509.765	ug/L	349.574
	137	Ba	0.012806	65.322	187.003	ug/L	156.669
>	165	Ho-2			1424054.230	ug/L	1592460.464
	203	Tl	0.204013	54.413	3563.181	ug/L	1582.773
	206	Pb	0.276892	7.938	3359.096	ug/L	1161.392
	207	Pb	0.287001	1.255	2922.662	ug/L	995.045
>	45	Sc			383315.581	ug/L	454114.374
	47	Ti	0.644946	144.443	651.362	ug/L	297.006
	86	Sr	0.028704	35.003	692.374	ug/L	716.656
	88	Sr	0.017807	52.137	5390.072	ug/L	5834.250
>	115	In			1360472.963	ug/L	1483966.870
	118	Sn	0.714999	14.210	6303.137	ug/L	855.034
	120	Sn	0.699561	15.073	8116.937	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		0.361

	B	10		426.799
	Na	23		0.307
	Mg	24		0.883
	Al	27		0.811
	K	39		11.193
	Ca	44		-0.958
>	Sc-1	45	84.409	
	V	51		1.152
	Cr	52		-57.119
	Mn	55		1.082
	Fe	57		6.799
	Co	59		1.306
	Ni	60		1.892
	Cu	65		314.705
	Zn	66		127.994
>	Ge-1	72	92.899	
	As	75		120.418
	Se	82		31.346
	Mo	97		9.082
	Ag	107		3.159
	Cd	111		1.053
>	In-1	115	91.678	
	Sb	123		13.436
	Ba	135		1.004
>	Ho-1	165	89.425	
	Tl	205		21.289
	Pb	208		27.806
	U	238		0.709
>	Sc-2	45	84.409	
	Cr	53		-2124.223
	Fe	54		3.581
	Ni	61		128.429
	Cu	63		326.106
	Zn	67		226.121
>	Ge	72	92.899	
	Se	77		-3801.883
	Mo	98		23.317
	Ag	109		5.464
>	In-2	115	91.678	
	Cd	114		0.740
	Sb	121		12.947
	Ba	137		1.281
>	Ho-2	165	89.425	
	Tl	203		29.401
	Pb	206		27.589
	Pb	207		28.700
>	Sc	45	84.409	
	Ti	47		84.496
	Sr	86		2.879
	Sr	88		1.781
>	In	115	91.678	
	Sn	118		71.809
	Sn	120		69.855

QC Out Of Limits

Analyte	Mass	Out of Limits Message
B	10	Q
Cu	65	Q
Zn	66	Q
As	75	Q
Cr	53	Q
Ni	61	Q
Cu	63	Q
Zn	67	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WTV
Sample Date/Time: Thursday, April 28, 2005 02:13:40
Autosampler Position: 81
Dataset File: D:\Elandata\Dataset\042705M2\G8WTV.085

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.094806	41.498	18.667	ug/L	7.667
	10	B	40.906524	4.919	1057.383	ug/L	27.667
	23	Na	750.180566	5.706	2242457.543	ug/L	18838.944
	24	Mg	741.885119	3.741	1602850.288	ug/L	2106.176
	27	Al	3744.760205	5.570	12359596.067	ug/L	3413.777
	39	K	681.972982	3.651	4981188.565	ug/L	807733.282
	44	Ca	6693.583460	4.852	1416596.463	ug/L	61872.368
>	45	Sc-1			352211.050	ug/L	454114.374
	51	V	3.362193	5.043	6501.967	ug/L	-26072.212
	52	Cr	92.964064	6.481	673708.248	ug/L	26547.338
	55	Mn	1834.957339	5.641	21191394.212	ug/L	3062.361
	57	Fe	358904.911902	3.384	87072406.980	ug/L	9798.695
	59	Co	37.468493	2.359	334394.714	ug/L	232.338
	60	Ni	196.258023	5.795	376497.840	ug/L	301.006
	65	Cu	821.203471	5.269	1732160.763	ug/L	168.336
	66	Zn	897.631823	4.115	1123713.874	ug/L	15137.170
>	72	Ge-1			738094.551	ug/L	739226.379
	75	As	59.376470	8.498	121140.424	ug/L	-1945.453
	82	Se	0.401474	62.238	-28.573	ug/L	-120.854
	97	Mo	24.421358	3.964	61796.710	ug/L	72.001
	107	Ag	18.930537	3.231	222679.259	ug/L	267.339
	111	Cd	3.703560	4.948	10027.631	ug/L	39.334
>	115	In-1			1304961.818	ug/L	1483966.870
	123	Sb	32.392476	4.925	217976.393	ug/L	268.758
	135	Ba	574.390167	6.932	1172758.575	ug/L	112.002
>	165	Ho-1			1359309.597	ug/L	1592460.464
	205	Tl	0.120591	42.996	6169.430	ug/L	3951.949
	208	Pb	2542.054939	5.705	81728701.428	ug/L	4580.000
	238	U	3.965469	10.835	164114.293	ug/L	234.671
>	45	Sc-2			352211.050	ug/L	454114.374
	53	Cr	24.186220	4.994	142956.146	ug/L	154333.029
	54	Fe	359417.670784	3.634	198293943.364	ug/L	62090.940
	61	Ni	207.418924	3.105	19125.662	ug/L	1861.113
	63	Cu	826.287198	4.242	3605497.068	ug/L	345.008
	67	Zn	799.872494	6.408	181979.884	ug/L	9047.975
>	72	Ge			738094.551	ug/L	739226.379
	77	Se	-49.496868	1.108	-630.037	ug/L	8561.780
	98	Mo	24.841207	2.819	157354.006	ug/L	141.970
	109	Ag	17.893690	4.389	211142.739	ug/L	288.339
>	115	In-2			1304961.818	ug/L	1483966.870
	114	Cd	7.932475	39.681	48147.918	ug/L	84.731
	121	Sb	32.720517	4.342	288337.573	ug/L	349.674
	137	Ba	573.725512	10.541	1995911.085	ug/L	156.669
>	165	Ho-2			1359309.597	ug/L	1592460.464
	203	Tl	0.121113	44.979	2552.926	ug/L	1582.773
	206	Pb	2552.379458	5.913	20459570.029	ug/L	1161.392
	207	Pb	2579.766439	7.666	17420338.022	ug/L	995.045
>	45	Sc			352211.050	ug/L	454114.374
	47	Ti	134.887914	6.788	77925.787	ug/L	297.006
	86	Sr	30.439918	4.020	85643.209	ug/L	716.656
	88	Sr	30.112530	5.819	737034.242	ug/L	5834.250
>	115	In			1304961.818	ug/L	1483966.870
	118	Sn	3630.884229	1.031	26861676.746	ug/L	855.034
	120	Sn	3636.401561	3.445	35414192.971	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	77.880
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	96.847
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	87.937
	Sb	123	
	Ba	136	
>	Ho-1	166	85.359
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	46	77.880
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	96.847
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	87.937
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	85.359
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	77.880
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	87.937
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WTW
Sample Date/Time: Thursday, April 28, 2005 02:18:49
Autosampler Position: 82
Dataset File: D:\Elandata\Dataset\042705M2\G8WTW.086

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.078504	45.008	16.000	ug/L	7.667
	10	B	35.318875	1.488	910.705	ug/L	27.667
	23	Na	367.823718	3.080	1099603.202	ug/L	18838.944
	24	Mg	586.556637	3.001	1259491.231	ug/L	2106.176
	27	Al	3004.133282	3.578	9851735.512	ug/L	3413.777
	39	K	460.748819	2.239	3483355.049	ug/L	807733.282
	44	Ca	4808.282448	1.571	1024641.412	ug/L	61872.368
>	45	Sc-1			350174.318	ug/L	454114.374
	51	V	3.461812	30.650	7182.353	ug/L	-26072.212
	52	Cr	80.520662	4.365	582333.034	ug/L	26547.338
	55	Mn	1986.782282	2.739	22785776.208	ug/L	3062.361
	57	Fe	382308.348477	4.719	92118055.710	ug/L	9796.695
	59	Co	42.391665	0.865	376078.754	ug/L	232.338
	60	Ni	186.973394	2.960	356389.885	ug/L	301.006
	65	Cu	485.600087	5.137	975357.868	ug/L	168.336
	66	Zn	736.594879	1.518	918832.477	ug/L	15137.170
>	72	Ge-1			752008.281	ug/L	739226.379
	75	As	113.222895	2.808	237177.094	ug/L	-1945.453
	82	Se	0.847699	22.798	5.614	ug/L	-120.854
	97	Mo	23.436163	2.526	60458.611	ug/L	72.001
	107	Ag	13.095669	0.314	157164.474	ug/L	267.339
	111	Cd	2.370362	1.556	6555.236	ug/L	39.334
>	115	In-1			1331572.952	ug/L	1483966.870
	123	Sb	21.036509	2.483	144365.581	ug/L	268.756
	135	Ba	490.360340	3.653	976595.730	ug/L	112.002
>	165	Ho-1			1325333.327	ug/L	1592460.464
	205	Tl	0.081875	30.228	5156.664	ug/L	3951.949
	208	Pb	3676.298468	1.051	115334766.128	ug/L	4580.000
	238	U	3.732712	2.566	150046.099	ug/L	234.671
>	45	Sc-2			350174.318	ug/L	454114.374
	53	Cr	10.967227	48.262	129416.561	ug/L	154333.029
	54	Fe	374096.134212	3.782	205038332.022	ug/L	62090.940
	61	Ni	197.532453	2.618	18163.726	ug/L	1661.113
	63	Cu	463.166405	3.111	2008913.032	ug/L	345.008
	67	Zn	683.170724	3.422	148910.238	ug/L	9047.975
>	72	Ge			752008.281	ug/L	739226.379
	77	Se	-49.299619	1.147	-606.241	ug/L	8561.780
	98	Mo	23.926917	3.640	155780.761	ug/L	141.970
	109	Ag	12.200423	1.233	149387.926	ug/L	288.339
>	115	In-2			1331572.952	ug/L	1483966.870
	114	Cd	6.795476	18.797	41900.659	ug/L	84.731
	121	Sb	21.021043	2.930	188951.391	ug/L	349.674
	137	Ba	491.142910	2.216	1667835.814	ug/L	156.669
>	165	Ho-2			1325333.327	ug/L	1592460.464
	203	Tl	0.084528	33.456	2136.182	ug/L	1582.773
	206	Pb	3731.354875	2.178	29175390.604	ug/L	1161.392
	207	Pb	3833.553168	0.691	25268391.508	ug/L	995.045
>	45	Sc			350174.318	ug/L	454114.374
	47	Ti	150.203834	4.182	86188.662	ug/L	297.006
	86	Sr	23.146883	3.128	84843.255	ug/L	716.656
	88	Sr	23.816211	0.967	580544.637	ug/L	5834.250
>	115	In			1331572.952	ug/L	1483966.870
	118	Sn	4251.070221	3.446	32075379.476	ug/L	855.034
	120	Sn	4337.996197	2.244	43080887.942	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	77.111
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	101.729
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	89.731
	Sb	123	
	Ba	135	
>	Ho-1	165	83.226
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	77.111
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	101.729
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	89.731
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	83.226
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	46	77.111
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	89.731
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WTX
Sample Date/Time: Thursday, April 28, 2005 02:23:59
Autosampler Position: 83
Dataset File: D:\Elandata\Dataset\042705M2\G8WTX.087

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.243342	0.950	41.667	ug/L	7.667
	10	B	74.616132	2.989	2058.502	ug/L	27.667
	23	Na	1370.441780	0.652	4399515.106	ug/L	18838.944
	24	Mg	1441.741697	4.137	3352573.159	ug/L	2106.176
	27	Al	7961.147511	4.431	28293301.177	ug/L	3413.777
	39	K	1735.075557	6.199	12611859.104	ug/L	807733.282
	44	Ca	17374.646095	4.627	3877596.078	ug/L	61872.368
>	45	Sc-1			379444.773	ug/L	454114.374
	51	V	10.812122	3.911	71102.842	ug/L	-26072.212
	52	Cr	40.432826	0.779	328108.528	ug/L	26547.338
	55	Mn	641.728319	3.626	7982340.353	ug/L	3062.361
	57	Fe	41383.407191	5.017	10818679.512	ug/L	9798.695
	59	Co	7.541872	3.857	72649.744	ug/L	232.338
	60	Ni	57.522686	2.183	119027.405	ug/L	301.006
	65	Cu	2839.726658	2.779	6449724.178	ug/L	168.336
	66	Zn	3969.534038	5.756	5307911.801	ug/L	15137.170
>	72	Ge-1			679615.958	ug/L	739226.379
	75	As	14.572918	1.803	26036.136	ug/L	-1945.453
	82	Se	0.913025	32.528	82.737	ug/L	-120.854
	97	Mo	35.337920	2.061	91228.279	ug/L	72.001
	107	Ag	71.470626	1.883	857425.830	ug/L	267.339
	111	Cd	50.395812	1.206	138818.048	ug/L	39.334
>	115	In-1			1332979.816	ug/L	1483966.870
	123	Sb	86.321911	2.964	592239.353	ug/L	268.758
	135	Ba	1940.412745	3.254	3979315.846	ug/L	112.002
>	165	Ho-1			1364264.609	ug/L	1592460.464
	205	Tl	0.089433	24.654	5491.782	ug/L	3851.949
	208	Pb	10279.158924	1.795	331959627.366	ug/L	4580.000
	238	U	45.987386	2.780	1900822.800	ug/L	234.671
>	45	Sc-2			379444.773	ug/L	454114.374
	53	Cr	-27.326453	28.206	100553.033	ug/L	154333.029
	54	Fe	41726.895941	4.387	24835263.341	ug/L	62090.940
	61	Ni	64.640391	7.591	7373.313	ug/L	1661.113
	63	Cu	2666.907660	4.608	12530517.640	ug/L	345.008
	67	Zn	3264.448382	2.144	776593.237	ug/L	9047.975
>	72	Ge			679615.958	ug/L	739226.379
	77	Se	-44.057821	8.500	357.029	ug/L	8561.780
	98	Mo	38.279204	4.057	236379.072	ug/L	141.970
	109	Ag	66.413860	2.939	812679.483	ug/L	288.339
>	115	In-2			1332979.816	ug/L	1483966.870
	114	Cd	53.305791	3.237	327924.342	ug/L	84.731
	121	Sb	86.747053	2.272	779533.722	ug/L	349.674
	137	Ba	1885.845903	3.565	6591113.758	ug/L	156.669
>	165	Ho-2			1364264.609	ug/L	1592460.464
	203	Tl	0.083278	17.672	2189.857	ug/L	1582.773
	206	Pb	10721.121113	3.330	85298469.475	ug/L	1161.392
	207	Pb	10461.101622	3.492	70954392.976	ug/L	995.045
>	45	Sc			379444.773	ug/L	454114.374
	47	Ti	210.875140	0.902	131093.902	ug/L	297.006
	86	Sr	66.490297	2.234	200788.761	ug/L	716.656
	88	Sr	64.326770	4.420	1690217.201	ug/L	5834.250
>	115	In			1332979.816	ug/L	1483966.870
	118	Sn	2762.238813	4.372	20862583.135	ug/L	855.034
	120	Sn	2775.519124	2.661	27587607.454	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	83.557
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	91.936
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	89.826
	Sb	123	
	Ba	135	
>	Ho-1	165	86.670
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	83.557
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	91.936
	Se	77	
	Mo	96	
	Ag	109	
>	In-2	115	89.826
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	86.670
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	83.557
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	89.826
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Pb	208	H
Pb	208	H
Pb	207	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WT0
Sample Date/Time: Thursday, April 28, 2005 02:29:09
Autosampler Position: 84
Dataset File: D:\Elandata\Dataset\042705M2\G8WT0.088

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.249903	7.976	44.667	ug/L	7.667
	10	B	72.373515	1.088	2092.841	ug/L	27.667
	23	Na	2087.832981	1.294	7014295.777	ug/L	18838.944
	24	Mg	2324.077231	2.379	5662262.569	ug/L	2106.176
	27	Al	10124.268634	2.205	37716353.664	ug/L	3413.777
	39	K	2050.707685	2.975	15497266.999	ug/L	807733.282
	44	Ca	51160.619504	3.035	11865629.309	ug/L	51872.368
>	45	Sc-1			397577.213	ug/L	454114.374
	51	V	11.359664	9.363	79263.501	ug/L	-28072.212
	52	Cr	51.511590	3.371	431368.560	ug/L	26547.338
	55	Mn	2108.240614	1.851	27489003.812	ug/L	3062.361
	57	Fe	86092.446834	2.969	18083235.329	ug/L	9798.695
	59	Co	11.110415	0.606	112081.047	ug/L	232.338
	60	Ni	73.983073	1.738	180315.459	ug/L	301.006
	65	Cu	3095.059909	3.392	7362318.454	ug/L	168.336
	66	Zn	3806.527874	1.298	5334416.208	ug/L	15137.170
>	72	Ge-1			692764.437	ug/L	739226.379
	75	As	57.038450	0.823	109200.669	ug/L	-1945.453
	82	Se	1.259361	12.941	160.804	ug/L	-120.854
	97	Mo	14.182303	1.024	35510.774	ug/L	72.001
	107	Ag	94.051861	0.913	1093296.552	ug/L	267.339
	111	Cd	12.319910	0.179	32903.187	ug/L	39.334
>	115	In-1			1291309.232	ug/L	1483966.870
	123	Sb	407.420474	2.863	2706995.816	ug/L	268.758
	135	Ba	2153.922039	1.372	4280616.270	ug/L	112.002
>	165	Ho-1			1322016.858	ug/L	1592460.464
	205	Tl	0.089366	21.976	5324.717	ug/L	3951.949
	208	Pb	27039.481470	1.291	846234709.603	ug/L	4580.000
	238	U	18.087994	2.488	724709.174	ug/L	234.671
>	45	Sc-2			397577.213	ug/L	454114.374
	53	Cr	-25.405987	1.946	107521.485	ug/L	154333.029
	54	Fe	65482.729805	1.832	40813902.512	ug/L	62090.940
	61	Ni	86.773479	1.938	9777.110	ug/L	1661.113
	63	Cu	2931.289871	1.260	14439497.977	ug/L	345.008
	67	Zn	3174.426036	3.880	791003.185	ug/L	9047.975
>	72	Ge			692764.437	ug/L	739226.379
	77	Se	-42.631052	2.054	597.902	ug/L	8561.780
	98	Mo	14.656316	2.343	92595.809	ug/L	141.970
	109	Ag	86.629112	2.402	1026692.147	ug/L	268.339
>	115	In-2			1291309.232	ug/L	1483966.870
	114	Cd	14.749078	17.679	88043.788	ug/L	84.731
	121	Sb	404.186543	1.046	3518185.783	ug/L	349.674
	137	Ba	2086.394749	0.803	7068336.316	ug/L	156.669
>	165	Ho-2			1322016.858	ug/L	1592460.464
	203	Tl	0.082783	6.867	2116.178	ug/L	1582.773
	206	Pb	27882.877294	1.713	217523910.471	ug/L	1161.392
	207	Pb	27490.812664	1.151	180733143.839	ug/L	995.045
>	45	Sc			397577.213	ug/L	454114.374
	47	Ti	310.958230	3.286	202328.445	ug/L	297.006
	86	Sr	134.916586	4.378	425953.882	ug/L	716.656
	88	Sr	137.379068	0.577	3777233.791	ug/L	5834.250
>	115	In			1291309.232	ug/L	1483966.870
	118	Sn	4288.562094	3.048	31382448.140	ug/L	855.034
	120	Sn	4297.685414	1.493	41386108.101	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	87.500
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	93.718
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	87.017
	Sb	123	
	Ba	135	
>	Ho-1	165	83.017
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	87.500
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	93.718
	Se	77	
	Mo	96	
	Ag	109	
>	In-2	115	87.017
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	83.017
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	87.500
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	87.017
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Pb	208	H
Pb	206	H
Pb	207	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WT1
Sample Date/Time: Thursday, April 28, 2005 02:34:23
Autosampler Position: 85
Dataset File: D:\Elandata\Dataset\042705M2\G8WT1.069

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.173406	6.284	34.334	ug/L	7.667
	10	B	102.014271	0.734	3056.357	ug/L	27.667
	23	Na	3006.446224	2.378	10489070.128	ug/L	18838.944
	24	Mg	2336.218503	4.524	5915243.902	ug/L	2106.176
	27	Al	12566.151209	1.254	48647562.068	ug/L	3413.777
	39	K	2777.803384	2.240	21542683.381	ug/L	807733.282
	44	Ca	23386.030077	2.237	5866401.376	ug/L	61872.368
>	45	Sc-1			413222.544	ug/L	454114.374
	51	V	12.050416	8.863	89036.079	ug/L	-26072.212
	52	Cr	72.561164	2.288	622092.168	ug/L	26547.338
	55	Mn	896.473744	1.006	12146820.919	ug/L	3062.361
	57	Fe	78972.884181	2.395	22477836.799	ug/L	9796.695
	59	Co	12.319576	2.839	129122.029	ug/L	232.338
	60	Ni	183.870267	4.025	413693.822	ug/L	301.006
	65	Cu	983.273670	3.838	2432152.818	ug/L	168.336
	66	Zn	6551.147546	1.067	9533955.030	ug/L	15137.170
>	72	Ge-1			706180.748	ug/L	739226.379
	75	As	18.880607	1.429	35542.259	ug/L	-1945.463
	82	Se	0.800698	38.245	60.237	ug/L	-120.854
	97	Mo	10.984392	2.078	28533.090	ug/L	72.001
	107	Ag	159.170771	3.086	1918051.043	ug/L	267.339
	111	Cd	14.048961	4.245	38891.299	ug/L	39.334
>	115	In-1			1338926.600	ug/L	1483966.870
	123	Sb	16.948796	0.728	117040.546	ug/L	268.758
	135	Ba	2978.980959	1.216	6184118.199	ug/L	112.002
>	165	Ho-1			1381724.187	ug/L	1592460.464
	205	Tl	0.056821	27.463	4785.185	ug/L	3951.949
	208	Pb	1661.418578	0.497	54348805.257	ug/L	4580.000
	238	U	5.836043	1.650	244511.851	ug/L	234.671
>	45	Sc-2			413222.544	ug/L	454114.374
	53	Cr	-6.350140	87.539	133227.612	ug/L	154333.029
	54	Fe	77173.996145	1.487	49988567.197	ug/L	62090.940
	61	Ni	192.296263	6.752	20903.187	ug/L	1661.113
	63	Cu	931.491741	2.851	4767603.987	ug/L	345.008
	67	Zn	8483.469325	1.932	1416038.683	ug/L	9047.975
>	72	Ge			706180.748	ug/L	739226.379
	77	Se	-40.824854	3.707	935.645	ug/L	8561.780
	98	Mo	11.368652	1.850	74452.722	ug/L	141.970
	109	Ag	150.585485	1.880	1850679.435	ug/L	288.339
>	115	In-2			1338926.600	ug/L	1483966.870
	114	Cd	15.241899	3.193	94259.581	ug/L	84.731
	121	Sb	17.255519	2.605	156027.510	ug/L	349.674
	137	Ba	2908.324878	0.291	10291382.940	ug/L	156.669
>	165	Ho-2			1381724.187	ug/L	1592460.464
	203	Tl	0.057867	35.377	1958.821	ug/L	1582.773
	206	Pb	1674.631975	0.485	13855217.099	ug/L	1161.392
	207	Pb	1737.260646	1.729	11936440.039	ug/L	995.045
>	45	Sc			413222.544	ug/L	454114.374
	47	Ti	339.217022	5.233	229409.338	ug/L	297.006
	86	Sr	99.591694	4.849	327182.061	ug/L	716.656
	88	Sr	101.948539	1.344	2914817.683	ug/L	5834.250
>	115	In			1338926.600	ug/L	1483966.870
	118	Sn	739.815384	2.528	5815176.054	ug/L	855.034
	120	Sn	745.688557	1.427	7447203.278	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	90.995
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	85.639
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	90.226
	Sb	123	
	Ba	135	
>	Ho-1	165	86.767
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	90.995
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	85.639
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	90.226
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	86.767
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	90.995
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	90.226
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817C
Sample Date/Time: Thursday, April 28, 2005 02:39:30
Autosampler Position: 86
Dataset File: D:\Elandata\Dataset\042705M2\G817C.090

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.260926	8.994	48.334	ug/L	7.667
	10	B	104.259922	4.213	3135.376	ug/L	27.667
	23	Na	4187.343471	0.696	14663635.437	ug/L	18838.944
	24	Mg	2911.298817	1.893	7401247.922	ug/L	2106.176
	27	Al	16666.606538	1.882	64795261.659	ug/L	3413.777
	39	K	3495.068888	1.783	27027328.235	ug/L	807733.282
	44	Ca	27275.853647	2.891	6624561.393	ug/L	61872.368
>	45	Sc-1			414889.673	ug/L	454114.374
	51	V	13.248957	6.450	100564.477	ug/L	-26072.212
	52	Cr	58.384887	2.641	589948.966	ug/L	26547.338
	55	Mn	1257.424573	2.975	17105423.415	ug/L	3062.361
	57	Fe	59769.262771	1.002	17063590.390	ug/L	9796.695
	59	Co	13.035948	3.303	137150.093	ug/L	232.338
	60	Ni	186.526000	1.888	421378.859	ug/L	301.006
	65	Cu	2468.893512	1.448	6106546.540	ug/L	168.336
	66	Zn	5196.096536	1.827	7595010.356	ug/L	15137.170
>	72	Ge-1			717659.138	ug/L	739226.379
	75	As	23.740226	4.428	45963.592	ug/L	-1945.453
	82	Se	1.711513	13.160	264.832	ug/L	-120.854
	97	Mo	11.224679	0.763	29415.549	ug/L	72.001
	107	Ag	50.212340	1.113	610589.322	ug/L	267.339
	111	Cd	14.118521	1.609	39435.758	ug/L	39.334
>	115	In-1			1350804.543	ug/L	1483966.870
	123	Sb	25.984121	2.061	180858.264	ug/L	268.758
	135	Ba	1423.919275	2.147	3034798.746	ug/L	112.002
>	165	Ho-1			1417928.241	ug/L	1592460.464
	205	Tl	0.053882	27.434	4842.540	ug/L	3951.949
	208	Pb	2763.915779	1.569	92771187.456	ug/L	4580.000
	238	U	19.106927	3.360	820921.074	ug/L	234.671
>	45	Sc-2			414889.673	ug/L	454114.374
	53	Cr	-1.449974	200.709	139378.211	ug/L	154333.029
	54	Fe	59348.157847	2.263	38605244.574	ug/L	62090.940
	61	Ni	191.402652	1.720	20901.822	ug/L	1661.113
	63	Cu	2358.110430	1.027	12120236.615	ug/L	345.008
	67	Zn	4252.847714	1.951	1103693.126	ug/L	9047.975
>	72	Ge			717659.138	ug/L	739226.379
	77	Se	-35.425770	2.330	1920.784	ug/L	8561.780
	98	Mo	11.784923	1.947	77922.602	ug/L	141.970
	109	Ag	46.417453	4.039	575570.247	ug/L	288.339
>	115	In-2			1350804.543	ug/L	1483966.870
	114	Cd	15.503961	7.585	96671.356	ug/L	84.731
	121	Sb	26.347871	0.141	240221.850	ug/L	349.674
	137	Ba	1384.851257	2.146	5030845.915	ug/L	156.669
>	165	Ho-2			1417928.241	ug/L	1592460.464
	203	Tl	0.055528	17.842	1988.492	ug/L	1582.773
	206	Pb	2785.507201	2.371	23304605.754	ug/L	1161.392
	207	Pb	2899.306892	3.516	20441164.827	ug/L	995.045
>	45	Sc			414889.673	ug/L	454114.374
	47	Ti	258.800299	3.775	175789.225	ug/L	297.006
	86	Sr	102.661676	1.408	338310.541	ug/L	716.656
	88	Sr	104.473341	0.812	2999143.284	ug/L	5834.250
>	115	In			1350804.543	ug/L	1483966.870
	118	Sn	649.286821	1.130	4972602.703	ug/L	855.034
	120	Sn	854.591626	1.980	6594987.439	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	91.382
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	97.082
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	91.027
	Sb	123	
	Ba	135	
>	Ho-1	165	89.040
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	91.382
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	97.082
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	91.027
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	89.040
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	91.382
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	91.027
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817CS
Sample Date/Time: Thursday, April 28, 2005 02:44:34
Autosampler Position: 87
Dataset File: D:\Elandata\Dataset\042705M2\G817CS.091

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	2.840984	5.037	457.012	ug/L	7.667
	10	B	173.421348	3.873	5197.999	ug/L	27.667
	23	Na	8763.535752	1.380	30864147.586	ug/L	18838.944
	24	Mg	8050.812189	0.168	12838415.671	ug/L	2106.176
	27	Al	38533.571936	2.805	143140720.163	ug/L	3413.777
	39	K	5627.821176	2.300	43062012.352	ug/L	807733.282
	44	Ca	30802.119221	2.896	7424418.174	ug/L	61872.368
>	45	Sc-1			414791.609	ug/L	454114.374
	51	V	38.321701	2.861	338010.008	ug/L	-26072.212
	52	Cr	87.518589	1.819	748162.166	ug/L	26547.338
	55	Mn	1562.385102	4.435	21249222.335	ug/L	3062.361
	57	Fe	69511.252586	2.319	19861697.017	ug/L	9798.695
	59	Co	38.002753	4.246	399451.950	ug/L	232.338
	60	Ni	205.919588	0.510	465144.482	ug/L	301.006
	65	Cu	1998.150030	0.548	4962130.019	ug/L	168.336
	66	Zn	3956.359970	1.740	5785893.418	ug/L	15137.170
>	72	Ge-1			721579.744	ug/L	739226.379
	75	As	122.983227	5.816	247175.041	ug/L	-1945.453
	82	Se	90.578366	2.114	20230.696	ug/L	-120.854
	97	Mo	70.076872	2.482	189197.404	ug/L	72.001
	107	Ag	44.801872	3.711	562297.391	ug/L	267.339
	111	Cd	14.624578	2.088	42162.886	ug/L	39.334
>	115	In-1			1394588.022	ug/L	1483966.870
	123	Sb	67.561357	2.447	485034.373	ug/L	268.758
	135	Ba	1477.041198	1.739	3107522.315	ug/L	112.002
>	165	Ho-1			1399508.358	ug/L	1592460.464
	205	Tl	87.929409	4.392	2131619.851	ug/L	3951.949
	208	Pb	1867.811039	2.053	61877952.799	ug/L	4580.000
	238	U	19.228042	3.725	815727.136	ug/L	234.671
>	45	Sc-2			414791.609	ug/L	454114.374
	53	Cr	21.250809	31.249	165022.555	ug/L	154333.029
	54	Fe	68863.260028	1.749	44780710.018	ug/L	62090.940
	61	Ni	212.569841	2.549	23041.468	ug/L	1661.113
	63	Cu	1850.952889	2.839	9511724.784	ug/L	345.008
	67	Zn	3302.969777	0.902	859000.130	ug/L	9047.975
>	72	Ge			721579.744	ug/L	739226.379
	77	Se	49.478472	3.727	17331.745	ug/L	8561.760
	98	Mo	70.696309	3.538	481805.696	ug/L	141.970
	109	Ag	41.733969	2.447	534342.069	ug/L	288.339
>	115	In-2			1394588.022	ug/L	1483966.870
	114	Cd	15.208246	1.381	97978.098	ug/L	84.731
	121	Sb	68.339639	2.364	642522.131	ug/L	349.674
	137	Ba	1486.880688	0.804	5225243.823	ug/L	156.669
>	165	Ho-2			1399508.358	ug/L	1592460.464
	203	Tl	88.137160	3.851	887253.017	ug/L	1582.773
	206	Pb	1860.349080	3.371	15365337.320	ug/L	1161.392
	207	Pb	1966.730532	1.924	13588656.337	ug/L	995.045
>	45	Sc			414791.609	ug/L	454114.374
	47	Ti	327.227908	2.378	222190.153	ug/L	297.006
	86	Sr	161.587238	0.965	499654.430	ug/L	716.658
	88	Sr	155.051622	4.809	4447860.645	ug/L	5834.250
>	115	In			1394588.022	ug/L	1483966.870
	118	Sn	644.574810	2.661	5094886.053	ug/L	855.034
	120	Sn	643.174328	3.894	6889239.525	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	91.341
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	87.613
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	93.977
	Sb	123	
	Ba	135	
>	Ho-1	165	87.883
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	91.341
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	87.613
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	93.977
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	166	87.883
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	91.341
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	93.977
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817CD
Sample Date/Time: Thursday, April 28, 2005 02:49:39
Autosampler Position: 88
Dataset File: D:\Elandata\Dataset\042705M2\G817CD.092

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	2.873879	5.837	465.679	ug/L	7.667
	10	B	76.048016	4.612	2309.543	ug/L	27.867
	23	Na	5089.581335	1.795	17948471.860	ug/L	18838.944
	24	Mg	4254.399184	4.706	10690397.170	ug/L	2106.176
	27	Al	16206.371242	1.670	63480524.742	ug/L	3413.777
	39	K	6067.715683	5.244	39123187.043	ug/L	807733.282
	44	Ca	22523.553286	3.134	5520206.786	ug/L	61872.368
>	45	Sc-1			418020.488	ug/L	454114.374
	51	V	34.439714	2.123	301802.977	ug/L	-26072.212
	52	Cr	90.070476	2.603	774984.901	ug/L	26547.338
	55	Mn	1304.367141	1.556	17871902.186	ug/L	3062.361
	57	Fe	79866.751403	3.498	22988142.096	ug/L	9798.695
	59	Co	36.986806	3.762	391539.114	ug/L	232.338
	60	Ni	214.403884	3.588	487812.473	ug/L	301.006
	65	Cu	2669.858302	2.188	6680271.313	ug/L	168.336
	66	Zn	31918.117627	4.248	46904355.426	ug/L	15137.170
>	72	Ge-1			733468.936	ug/L	739226.379
	75	As	118.006244	1.259	241240.460	ug/L	-1945.453
	82	Se	88.333144	2.112	20055.130	ug/L	-120.854
	97	Mo	66.052074	1.439	177519.597	ug/L	72.001
	107	Ag	32.317306	0.175	403916.868	ug/L	267.339
	111	Cd	17.082991	0.506	49023.130	ug/L	39.334
>	115	In-1			1387970.997	ug/L	1483966.870
	123	Sb	166.218257	2.375	1187415.875	ug/L	268.758
	135	Ba	1223.563609	1.210	2542670.296	ug/L	112.002
>	165	Ho-1			1382537.119	ug/L	1592460.464
	205	Tl	86.178990	2.895	2109843.789	ug/L	3951.949
	208	Pb	4400.426813	0.990	144010062.108	ug/L	4580.000
	238	U	16.133871	2.467	675821.216	ug/L	234.671
>	45	Sc-2			418020.488	ug/L	454114.374
	53	Cr	17.964704	25.903	162506.468	ug/L	154333.029
	54	Fe	79134.285368	3.470	51824534.713	ug/L	62090.940
	61	Ni	227.518436	3.514	24735.646	ug/L	1661.113
	63	Cu	2536.105318	0.439	13127572.763	ug/L	345.008
	67	Zn	26713.072606	0.444	6941562.365	ug/L	9047.975
>	72	Ge			733468.936	ug/L	739226.379
	77	Se	40.229145	5.944	15909.222	ug/L	8561.780
	96	Mo	67.842973	3.784	460234.282	ug/L	141.970
	109	Ag	30.276186	1.861	385832.543	ug/L	288.339
>	115	In-2			1387970.997	ug/L	1483966.870
	114	Cd	19.461724	6.521	124705.183	ug/L	84.731
	121	Sb	166.488046	0.783	1557906.542	ug/L	349.674
	137	Ba	1175.405788	4.050	4161549.036	ug/L	156.889
>	165	Ho-2			1382537.119	ug/L	1592460.464
	203	Tl	87.226013	3.830	866821.942	ug/L	1582.773
	206	Pb	4405.014807	2.531	35926899.223	ug/L	1161.392
	207	Pb	4541.605536	2.745	31211308.659	ug/L	995.045
>	45	Sc			418020.488	ug/L	454114.374
	47	Ti	212.305567	3.601	145312.948	ug/L	297.006
	86	Sr	121.923704	3.521	404894.797	ug/L	716.656
	88	Sr	126.319044	2.872	3651633.956	ug/L	5834.250
>	115	In			1387970.997	ug/L	1483966.870
	118	Sn	1077.284377	1.445	8476194.946	ug/L	855.034
	120	Sn	1083.060441	1.725	11212772.738	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	92.052
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	99.221
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	93.531
	Sb	123	
	Ba	135	
>	Ho-1	165	86.818
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	92.052
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	99.221
	Se	77	
	Mo	95	
	Ag	109	
>	In-2	115	93.831
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	86.818
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	92.052
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	93.831
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Zn	66	H
Pb	208	H
Zn	67	H
Pb	206	H
Pb	207	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817D
Sample Date/Time: Thursday, April 28, 2005 02:54:44
Autosampler Position: 89
Dataset File: D:\Elandata\Dataset\042705M2\G817D.093

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.206871	29.694	39.334	ug/L	7.867
	10	B	79.696249	5.582	2377.222	ug/L	27.667
	23	Na	3601.474268	2.586	12149689.536	ug/L	18838.944
	24	Mg	3278.612306	2.930	8253091.110	ug/L	2106.176
	27	Al	14512.152732	2.400	55884476.122	ug/L	3413.777
	39	K	3336.754793	3.443	25598410.332	ug/L	807733.282
	44	Ca	29685.202388	2.267	7189997.537	ug/L	81872.368
>	45	Sc-1			411105.818	ug/L	454114.374
	51	V	12.344582	3.210	91240.917	ug/L	-26072.212
	52	Cr	58.396685	2.654	502657.288	ug/L	26547.338
	55	Mn	1426.963954	0.624	19232369.223	ug/L	3062.361
	57	Fe	55115.578743	3.179	15890814.073	ug/L	9798.695
	59	Co	13.575103	1.904	141562.027	ug/L	232.338
	60	Ni	163.115161	0.667	342878.151	ug/L	301.006
	65	Cu	2126.299163	3.290	5231982.899	ug/L	168.336
	66	Zn	5626.721265	2.694	8148206.846	ug/L	15137.170
>	72	Ge-1			719445.267	ug/L	739226.379
	75	As	45.587585	2.279	90226.727	ug/L	-1945.453
	82	Se	1.295770	8.991	172.910	ug/L	-120.854
	97	Mo	12.579673	0.996	33039.160	ug/L	72.001
	107	Ag	48.166004	0.290	587178.111	ug/L	267.339
	111	Cd	13.553041	1.159	37951.058	ug/L	39.334
>	115	In-1			1354083.744	ug/L	1483966.870
	123	Sb	22.089489	1.350	154181.691	ug/L	268.758
	135	Ba	1383.243448	1.852	2900434.685	ug/L	112.002
>	165	Ho-1			1394640.806	ug/L	1592460.464
	205	Tl	0.250958	34.875	9497.344	ug/L	3951.949
	208	Pb	1791.647633	0.350	59160068.953	ug/L	4580.000
	238	U	22.182602	2.088	937485.111	ug/L	234.671
>	45	Sc-2			411105.818	ug/L	454114.374
	53	Cr	-10.932610	36.208	127416.349	ug/L	154333.029
	54	Fe	55630.755945	1.722	35862020.434	ug/L	62090.940
	61	Ni	161.712441	4.343	17733.188	ug/L	1661.113
	63	Cu	2007.991102	0.497	10225127.908	ug/L	345.006
	67	Zn	4574.638377	3.187	1175607.328	ug/L	9047.975
>	72	Ge			719445.267	ug/L	739226.379
	77	Se	-34.072820	3.408	2168.722	ug/L	8561.780
	98	Mo	12.803709	2.271	84867.046	ug/L	141.970
	109	Ag	44.553063	0.900	553997.028	ug/L	288.339
>	115	In-2			1354083.744	ug/L	1483966.870
	114	Cd	14.310736	2.174	89510.757	ug/L	84.731
	121	Sb	22.669147	1.356	207222.314	ug/L	349.674
	137	Ba	1355.594671	2.032	4844206.556	ug/L	156.668
>	165	Ho-2			1394640.806	ug/L	1592460.464
	203	Tl	0.243919	34.232	3879.581	ug/L	1582.773
	206	Pb	1793.828453	1.812	14765742.922	ug/L	1161.392
	207	Pb	1865.888723	1.628	12940458.100	ug/L	995.045
>	45	Sc			411105.818	ug/L	454114.374
	47	Ti	230.638791	3.099	155269.346	ug/L	297.006
	86	Sr	106.774462	0.923	349021.683	ug/L	716.656
	88	Sr	108.611038	0.785	3089129.623	ug/L	5834.250
>	115	In			1354083.744	ug/L	1483966.870
	118	Sn	516.328390	2.180	3963816.550	ug/L	855.034
	120	Sn	522.161700	1.556	5274585.616	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	90.529
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	97.324
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	91.248
	Sb	123	
	Ba	135	
>	Ho-1	165	87.578
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	90.529
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	97.324
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	91.248
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	87.578
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	90.529
	Tl	47	
	Sr	86	
	Sr	88	
>	In	115	91.248
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817E
Sample Date/Time: Thursday, April 28, 2005 02:59:49
Autosampler Position: 90
Dataset File: D:\Elandata\Dataset\042705M2\G817E.094

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.181336	6.836	34.667	ug/L	7.667
	10	B	26.888452	7.319	801.364	ug/L	27.667
	23	Na	752.473470	3.774	2565519.615	ug/L	18838.844
	24	Mg	972.803374	5.457	2395614.975	ug/L	2106.176
	27	Al	8434.646958	3.555	24226047.551	ug/L	3413.777
	39	K	842.015769	6.119	6846136.993	ug/L	807733.282
	44	Ca	14146.508072	2.770	3355020.766	ug/L	81872.368
>	45	Sc-1			402082.706	ug/L	454114.374
	51	V	7.251760	2.571	42892.006	ug/L	-26072.212
	52	Cr	48.756313	0.775	414379.844	ug/L	26547.338
	55	Mn	702.189204	1.770	9255706.595	ug/L	3062.361
	57	Fe	88623.934136	4.404	24525003.749	ug/L	9798.695
	59	Co	11.892100	4.799	121233.605	ug/L	232.338
	60	Ni	83.038448	1.670	181920.989	ug/L	301.006
	65	Cu	400.947171	5.401	964265.776	ug/L	168.336
	66	Zn	1695.140638	4.283	2408843.388	ug/L	15137.170
>	72	Ge-1			732369.749	ug/L	739226.379
	75	As	32.497871	2.441	64951.609	ug/L	-1945.453
	82	Se	0.666430	24.328	32.423	ug/L	-120.854
	97	Mo	9.849148	0.453	26386.611	ug/L	72.001
	107	Ag	52.849403	0.783	656805.334	ug/L	267.339
	111	Cd	4.225537	2.240	12088.903	ug/L	39.334
>	115	In-1			1380462.742	ug/L	1483986.870
	123	Sb	12.373914	1.689	88161.153	ug/L	268.768
	135	Ba	1432.265969	3.416	3028215.265	ug/L	112.002
>	165	Ho-1			1406747.267	ug/L	1592460.464
	205	Tl	0.113620	24.909	6240.764	ug/L	3951.949
	208	Pb	2162.638636	2.281	71661550.615	ug/L	4580.000
	238	U	2.034639	5.078	86858.524	ug/L	234.671
>	45	Sc-2			402082.706	ug/L	454114.374
	53	Cr	-20.512352	37.742	113949.856	ug/L	154333.029
	54	Fe	88808.150399	3.878	55925258.829	ug/L	62090.940
	61	Ni	90.512976	7.785	10342.183	ug/L	1661.113
	63	Cu	385.717955	2.596	1920433.590	ug/L	345.006
	67	Zn	1464.091191	1.553	370962.253	ug/L	9047.976
>	72	Ge			732369.749	ug/L	739226.379
	77	Se	-40.766220	0.682	979.688	ug/L	8561.780
	98	Mo	9.960331	1.317	67331.564	ug/L	141.870
	109	Ag	48.654100	1.170	616720.248	ug/L	288.339
>	115	In-2			1380462.742	ug/L	1483986.870
	114	Cd	5.328550	17.923	34007.506	ug/L	84.731
	121	Sb	12.628433	2.562	117842.168	ug/L	349.674
	137	Ba	1387.536285	1.904	5000367.597	ug/L	156.669
>	165	Ho-2			1406747.267	ug/L	1592460.464
	203	Tl	0.119623	22.245	2629.269	ug/L	1582.773
	206	Pb	2102.781192	2.618	17454454.928	ug/L	1161.392
	207	Pb	2270.670421	4.437	15872037.464	ug/L	995.045
>	45	Sc			402082.706	ug/L	454114.374
	47	Ti	167.040753	5.147	109971.218	ug/L	297.006
	86	Sr	49.323003	3.894	157898.084	ug/L	716.656
	88	Sr	47.800619	2.359	1332030.784	ug/L	5834.250
>	115	In			1380462.742	ug/L	1483986.870
	118	Sn	977.263712	3.584	7648491.439	ug/L	855.034
	120	Sn	967.744322	2.637	9965596.217	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	88.642
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ge-1	72	99.072
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	93.825
	Sb	123	
	Ba	135	
>	Ho-1	165	88.338
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	88.642
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	99.072
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	93.825
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	88.338
	Tl	203	
	Pb	208	
	Pb	207	
>	Sc	45	88.642
	Ti	47	
	Sr	86	
	Sr	88	
>	In	115	93.825
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Thursday, April 28, 2005 03:04:58
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 1.095

Sample Result Summary

Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
9	Be	211.047843	2.748	31966.378	ug/L	7.667
10	B	208.102561	3.756	5957.635	ug/L	27.867
23	Na	1875.615470	2.149	6290763.493	ug/L	18838.944
24	Mg	951.805687	3.743	2314021.993	ug/L	2106.176
27	Al	1925.367251	3.941	7155263.992	ug/L	3413.777
39	K	1994.683473	4.719	15045497.691	ug/L	807733.282
44	Ca	1045.023960	4.864	294579.630	ug/L	61872.368
45	Sc-1			396709.968	ug/L	454114.374
51	V	205.488366	4.156	1821329.105	ug/L	-28072.212
52	Cr	209.945786	1.338	1684039.312	ug/L	26547.338
55	Mn	208.978469	3.579	2693198.293	ug/L	3062.361
57	Fe	2096.916917	3.224	581830.330	ug/L	9798.695
59	Co	214.430698	5.931	2152699.466	ug/L	232.338
60	Ni	218.888032	2.703	472711.230	ug/L	301.008
65	Cu	227.884929	3.804	541103.237	ug/L	168.335
66	Zn	218.593273	5.516	317978.516	ug/L	15137.170
72	Ge-1			718487.381	ug/L	739226.379
75	As	197.113144	3.083	395885.151	ug/L	-1945.453
82	Se	194.603196	0.729	43422.927	ug/L	-120.854
97	Mo	208.488986	2.945	551010.829	ug/L	72.001
107	Ag	50.568169	2.394	621399.252	ug/L	267.339
111	Cd	197.594717	1.123	557275.844	ug/L	39.334
115	In-1			1365012.280	ug/L	1483966.870
123	Sb	199.241672	1.402	1399962.787	ug/L	268.758
135	Ba	212.909521	1.509	452603.495	ug/L	112.002
165	Ho-1			1413966.961	ug/L	1592460.464
205	Tl	196.680942	2.979	4783699.621	ug/L	3951.949
208	Pb	196.636834	1.429	6652195.342	ug/L	4580.000
238	U	193.271098	1.721	8278969.113	ug/L	234.671
45	Sc-2			396709.968	ug/L	454114.374
53	Cr	170.964268	9.753	319966.964	ug/L	154333.029
54	Fe	2172.961365	3.708	1403310.252	ug/L	62090.940
61	Ni	225.045585	2.575	23239.454	ug/L	1661.113
63	Cu	220.871264	1.695	1085871.067	ug/L	345.008
67	Zn	209.763330	2.523	59554.807	ug/L	9047.975
72	Ge			718487.381	ug/L	739226.379
77	Se	163.886378	3.901	37865.453	ug/L	8561.780
98	Mo	207.675348	0.610	1385625.795	ug/L	141.970
109	Ag	49.221078	0.303	616944.825	ug/L	288.339
115	In-2			1365012.280	ug/L	1483966.870
114	Cd	196.592355	3.791	1238423.171	ug/L	84.731
121	Sb	198.612200	0.122	1827729.658	ug/L	349.674
137	Ba	215.608696	2.601	781083.688	ug/L	156.669
165	Ho-2			1413966.961	ug/L	1592460.464
203	Tl	185.310043	2.234	1926188.248	ug/L	1582.773
206	Pb	196.690696	2.294	1657744.751	ug/L	1161.392
207	Pb	203.467755	3.772	1430784.102	ug/L	995.045
45	Sc			396709.968	ug/L	454114.374
47	Ti	206.371318	3.320	134058.109	ug/L	297.006
86	Sr	212.346925	3.461	668883.228	ug/L	716.656
88	Sr	213.237284	3.604	5844805.736	ug/L	5834.250
115	In			1365012.280	ug/L	1483966.870
118	Sn	204.936267	0.891	1588434.261	ug/L	856.034
120	Sn	202.239279	1.391	2060054.464	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		106.834

	B	10		104.091
	Na	23		93.831
	Mg	24		96.181
	Al	27		98.269
	K	39		99.729
	Ca	44		104.502
>	Sc-1	45	97.359	
	V	51		102.744
	Cr	52		104.973
	Mn	55		103.489
	Fe	57		104.946
	Co	59		107.215
	Ni	60		108.444
	Cu	65		113.942
	Zn	66		109.297
>	Ge-1	72	97.194	
	As	75		96.867
	Se	82		97.302
	Mo	97		104.244
	Ag	107		101.136
	Cd	111		96.797
>	In-1	115	91.864	
	Sb	123		99.621
	Ba	135		106.486
>	Ho-1	165	88.791	
	Tl	205		97.835
	Pb	208		98.319
	U	238		96.838
>	Sc-2	45	97.359	
	Cr	53		85.482
	Fe	54		100.648
	Ni	61		112.823
	Cu	63		119.486
	Zn	67		104.852
>	Ge	72	97.194	
	Se	77		91.799
	Mo	98		103.839
	Ag	109		98.442
>	In-2	115	91.864	
	Cd	114		98.296
	Sb	121		98.306
	Ba	137		107.864
>	Ho-2	165	88.791	
	Tl	205		92.665
	Pb	206		98.295
	Pb	207		101.734
>	Sc	45	97.359	
	Ti	47		103.186
	Sr	86		106.173
	Sr	88		106.619
>	In	115	91.864	
	Sn	118		102.468
	Sn	120		101.128

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cu	65	Q
Cr	53	Q
Ni	61	Q
Cu	63	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Thursday, April 28, 2005 03:11:07
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 2.096

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.026650	94.030	11.000	ug/L	7.667
	10	B	3.575874	24.237	131.335	ug/L	27.667
	23	Na	0.158169	258.577	17527.598	ug/L	18838.944
	24	Mg	0.066028	79.539	2066.170	ug/L	2106.176
	27	Al	1.014765	6.809	6981.110	ug/L	3413.777
	39	K	4.500189	118.827	762164.065	ug/L	807733.282
	44	Ca	-14.280678	74.836	52439.942	ug/L	61872.368
>	45	Sc-1			410397.519	ug/L	454114.374
	51	V	0.038606	2543.226	-22912.577	ug/L	-26072.212
	52	Cr	-0.355873	99.577	20987.030	ug/L	26547.338
	55	Mn	0.006816	180.302	2879.319	ug/L	3062.361
	57	Fe	9.210888	32.894	11430.679	ug/L	9798.695
	59	Co	0.011766	63.728	334.674	ug/L	232.338
	60	Ni	0.005377	60.991	290.673	ug/L	301.006
	65	Cu	0.286566	7.996	855.701	ug/L	168.336
	66	Zn	0.919111	58.239	14961.334	ug/L	15137.170
>	72	Ge-1			695570.490	ug/L	739226.379
	75	As	0.659443	68.820	-539.813	ug/L	-1945.453
	82	Se	0.406303	23.448	-25.073	ug/L	-120.854
	97	Mo	0.098476	38.864	331.007	ug/L	72.001
	107	Ag	0.032610	8.372	658.022	ug/L	267.339
	111	Cd	0.007719	39.421	59.001	ug/L	39.334
>	115	In-1			1390115.257	ug/L	1483966.870
	123	Sb	0.152134	27.795	1336.133	ug/L	268.758
	138	Ba	0.014362	27.554	130.335	ug/L	112.002
>	165	Ho-1			1416760.774	ug/L	1562460.464
	205	Tl	0.212793	47.264	8752.596	ug/L	3951.949
	208	Pb	0.146564	1.778	8990.854	ug/L	4580.000
	238	U	0.007836	14.147	545.349	ug/L	234.671
>	45	Sc-2			410397.519	ug/L	454114.374
	53	Cr	-13.826416	141.137	123254.523	ug/L	154333.029
	54	Fe	2.935763	125.099	57939.603	ug/L	62090.940
	61	Ni	-0.449674	181.053	1453.755	ug/L	1661.113
	63	Cu	0.303910	6.623	1853.806	ug/L	345.008
	67	Zn	0.586169	1066.206	8273.513	ug/L	9047.975
>	72	Ge			695570.490	ug/L	739226.379
	77	Se	-22.376006	14.385	4143.244	ug/L	8551.780
	98	Mo	0.119122	28.318	939.275	ug/L	141.970
	109	Ag	0.071231	13.153	1177.394	ug/L	288.339
>	115	In-2			1390115.257	ug/L	1483966.870
	114	Cd	0.010607	31.899	147.249	ug/L	84.731
	121	Sb	0.149568	29.944	1723.791	ug/L	349.674
	137	Ba	0.020173	39.190	212.337	ug/L	156.669
>	165	Ho-2			1416760.774	ug/L	1562460.464
	203	Tl	0.221143	47.184	3721.553	ug/L	1582.773
	206	Pb	0.154406	7.442	2324.546	ug/L	1161.392
	207	Pb	0.154184	4.704	1971.156	ug/L	985.046
>	45	Sc			410397.519	ug/L	454114.374
	47	Ti	0.047324	146.381	301.340	ug/L	297.006
	86	Sr	-0.804065	618.847	631.787	ug/L	716.656
	88	Sr	0.012087	87.153	5605.489	ug/L	5834.250
>	115	In			1390115.257	ug/L	1483966.870
	118	Sn	1.009606	15.913	8738.787	ug/L	855.034
	120	Sn	1.079877	11.250	12212.527	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		2.666

	B	10		367.867
	Na	23		0.158
	Mg	24		0.066
	Al	27		1.015
	K	39		4.609
	Ca	44		-14.261
>	Sc-1	45	90.373	
	V	51		3.861
	Cr	52		-35.867
	Mn	55		0.852
	Fe	57		9.211
	Co	59		1.177
	Ni	60		0.838
	Cu	65		28.687
	Zn	66		91.911
>	Ge-1	72	94.094	
	As	75		85.944
	Se	82		40.936
	Mo	97		9.848
	Ag	107		3.261
	Cd	111		0.772
>	In-1	115	93.676	
	Sb	123		15.213
	Ba	135		1.436
>	Ho-1	165	86.967	
	Tl	205		21.279
	Pb	208		14.865
	U	238		8.783
>	Sc-2	45	90.373	
	Cr	53		-1382.842
	Fe	54		2.826
	Ni	61		-44.957
	Cu	63		30.381
	Zn	67		58.617
>	Ge	72	94.094	
	Se	77		-2237.801
	Mo	98		11.912
	Ag	109		7.123
>	In-2	115	93.676	
	Cd	114		1.061
	Sb	121		14.957
	Ba	137		2.017
>	Ho-2	165	86.967	
	Tl	203		22.114
	Pb	206		15.441
	Pb	207		15.419
>	Sc	45	90.373	
	Ti	47		4.732
	Sr	86		-0.406
	Sr	88		1.209
>	In	115	93.676	
	Sn	118		100.861
	Sn	120		107.986

QC Out Of Limits

Analyte	Mass	Out of Limits Message
B	10	Q
Cr	53	Q
Be	77	Q
Sn	118	Q
Sn	120	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817F
Sample Date/Time: Thursday, April 28, 2005 03:17:14
Autosampler Position: 91
Dataset File: D:\Elandata\Dataset\042705M2\G817F.097

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌜	9	Be	0.185778	27.829	33.000	ug/L	7.667
|	10	B	57.634606	3.518	1586.104	ug/L	27.667
|	23	Na	872.576445	1.653	2791874.571	ug/L	18838.944
|	24	Mg	1470.133446	4.341	3396532.046	ug/L	2106.176
|	27	Al	5704.144126	2.136	30766285.706	ug/L	3413.777
|	39	K	974.723306	4.148	7336178.779	ug/L	807733.282
|	44	Ca	13769.667839	4.312	3065623.630	ug/L	61872.368
|>	45	Sc-1			377399.897	ug/L	454114.374
|	51	V	5.480221	13.617	33711.039	ug/L	-26072.212
|	52	Cr	86.594625	3.169	573853.093	ug/L	26547.338
|	55	Mn	1609.177383	1.577	18868206.912	ug/L	3062.381
|	57	Fe	229246.760133	3.557	59553199.321	ug/L	9796.695
|	59	Co	30.179694	1.153	288591.955	ug/L	232.338
|	60	Ni	160.974247	2.987	330870.174	ug/L	301.006
|	65	Cu	1385.937665	2.621	3130763.996	ug/L	168.336
|	66	Zn	1260.061911	1.894	1684464.220	ug/L	15137.170
⌜>	72	Ge-1			741025.507	ug/L	739226.379
|	75	As	103.329347	2.872	213129.876	ug/L	-1945.453
⌊	82	Se	0.409700	25.299	-26.817	ug/L	-120.854
⌜	97	Mo	19.115179	1.741	50241.052	ug/L	72.001
|	107	Ag	58.525569	2.998	715401.858	ug/L	287.339
|	111	Cd	4.503383	2.077	12660.726	ug/L	39.334
|>	115	In-1			1356386.220	ug/L	1483966.870
⌊	123	Sb	48.537905	2.298	338912.206	ug/L	268.758
⌜	135	Ba	1451.563079	1.177	2993267.071	ug/L	112.002
|>	165	Ho-1			1371626.391	ug/L	1592460.464
|	205	Tl	0.124780	37.712	6360.841	ug/L	3951.949
|	208	Pb	2763.616392	2.439	89743400.064	ug/L	4580.000
⌊	238	U	2.583782	0.514	106757.486	ug/L	234.671
⌜>	45	Sc-2			377399.897	ug/L	454114.374
|	53	Cr	15.096841	32.613	143733.249	ug/L	154333.029
|	54	Fe	221919.902838	2.396	131159583.729	ug/L	62090.940
|	61	Ni	170.836106	2.662	17114.084	ug/L	1661.113
|	63	Cu	1316.876960	1.200	6152595.838	ug/L	345.008
⌊	67	Zn	1193.585292	2.837	287207.535	ug/L	9047.975
⌜>	72	Ge			741025.507	ug/L	739226.379
⌊	77	Se	-45.816733	1.640	51.001	ug/L	8561.780
⌜	98	Mo	19.464461	2.362	129098.756	ug/L	141.970
|	109	Ag	53.819283	1.812	670030.556	ug/L	288.339
|>	115	In-2			1356386.220	ug/L	1483966.870
|	114	Cd	7.611585	12.286	47782.014	ug/L	84.731
⌊	121	Sb	48.866149	2.736	446836.384	ug/L	349.674
⌜	137	Ba	1439.107686	2.392	5028650.466	ug/L	156.669
|>	165	Ho-2			1371626.391	ug/L	1592460.464
|	203	Tl	0.117287	35.966	2543.589	ug/L	1582.773
|	206	Pb	2773.924210	1.940	22453941.972	ug/L	1161.392
⌊	207	Pb	2838.076344	0.804	19360254.860	ug/L	995.045
⌜>	45	Sc			377399.897	ug/L	454114.374
|	47	Ti	150.279268	4.223	92907.427	ug/L	297.006
|	86	Sr	59.192859	3.532	177815.322	ug/L	716.656
⌊	88	Sr	57.706713	1.590	1506670.908	ug/L	5834.250
⌜>	115	In			1356386.220	ug/L	1483966.870
|	118	Sn	1848.917197	4.043	14206586.481	ug/L	855.034
⌊	120	Sn	1859.588604	2.918	18805565.965	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌜	Be	9		

	B	10
	Na	23
	Mg	24
	Al	27
	K	39
	Ca	44
>	Sc-1	45
	V	51
	Cr	52
	Mn	55
	Fe	57
	Co	59
	Ni	60
	Cu	65
	Zn	66
>	Ge-1	72
	As	75
	Se	82
	Mo	97
	Ag	107
	Cd	111
>	In-1	115
	Sb	123
	Ba	135
>	Ho-1	165
	Tl	205
	Pb	208
	U	238
>	Sc-2	45
	Cr	53
	Fe	54
	Ni	61
	Cu	63
	Zn	67
>	Ge	72
	Se	77
	Mo	96
	Ag	109
>	In-2	115
	Cd	114
	Sb	121
	Ba	137
>	Ho-2	165
	Tl	203
	Pb	206
	Pb	207
>	Sc	45
	Ti	47
	Sr	86
	Sr	88
>	In	115
	Sn	118
	Sn	120

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Sc-1	45	93.107
Ge-1	72	100.343
In-1	115	91.403
Ho-1	165	86.133
Sc-2	45	93.107
Ge	72	100.343
In-2	115	91.403
Ho-2	165	86.133
Sc	45	93.107
In	115	91.403

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817G
Sample Date/Time: Thursday, April 28, 2005 03:22:20
Autosampler Position: 92
Dataset File: D:\Elandata\Dataset\042705M2\G817G.098

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	9	Be	0.130911	36.289	26.000	ug/L	7.667
	10	B	68.841984	4.856	1944.485	ug/L	27.667
	23	Na	2346.696459	3.765	7717738.684	ug/L	18838.944
	24	Mg	2196.894027	0.990	5240502.010	ug/L	2106.176
	27	Al	10509.872892	3.693	38326804.631	ug/L	3413.777
	39	K	1482.329355	1.306	11151687.840	ug/L	807733.262
	44	Ca	93074.680542	3.237	21080884.436	ug/L	61872.368
>	45	Sc-1			389216.225	ug/L	454114.374
	51	V	11.685644	3.030	80413.990	ug/L	-26072.212
	52	Cr	52.534710	1.050	430614.462	ug/L	26547.338
	55	Mn	889.586788	0.974	11352969.896	ug/L	3062.361
	57	Fe	76896.434269	3.511	20621723.088	ug/L	9798.696
	59	Co	14.688937	0.541	144961.889	ug/L	232.338
	60	Ni	825.419628	1.765	1325154.570	ug/L	301.006
	65	Cu	2085.102970	1.755	4859316.616	ug/L	168.336
	66	Zn	2093.680459	0.698	2878792.227	ug/L	15137.170
>	72	Ge-1			689219.480	ug/L	738226.379
	75	As	16.625732	2.562	30377.281	ug/L	-1945.453
	82	Se	0.688851	44.931	31.255	ug/L	-120.854
	97	Mo	9.798665	1.390	24931.653	ug/L	72.001
	107	Ag	80.672839	1.883	952080.635	ug/L	267.339
	111	Cd	5.546519	1.562	15329.040	ug/L	39.334
>	115	In-1			1311183.781	ug/L	1483966.870
	123	Sb	23.577045	25.837	159112.415	ug/L	268.758
	135	Ba	2629.872848	2.263	5490251.196	ug/L	112.002
>	165	Ho-1			1389022.884	ug/L	1592460.464
	205	Tl	0.082066	22.460	5422.080	ug/L	3951.949
	208	Pb	1373.586759	2.483	45156945.899	ug/L	4580.000
	238	U	12.082670	4.577	508492.653	ug/L	234.671
>	45	Sc-2			389216.225	ug/L	454114.374
	53	Cr	-23.186313	10.686	107619.154	ug/L	154333.029
	54	Fe	77167.813685	2.409	47088018.246	ug/L	62090.940
	61	Ni	667.163818	2.111	64815.041	ug/L	1661.113
	63	Cu	1980.464699	3.663	9549103.075	ug/L	345.008
	67	Zn	1741.068549	3.018	428589.552	ug/L	9047.975
>	72	Ge			689219.480	ug/L	739226.379
	77	Se	-39.377805	3.539	1161.367	ug/L	8561.780
	98	Mo	10.084367	3.015	64540.886	ug/L	141.970
	109	Ag	75.077645	2.150	903704.212	ug/L	288.339
>	115	In-2			1311183.781	ug/L	1483966.870
	114	Cd	6.501910	2.069	39413.969	ug/L	84.731
	121	Sb	20.104839	1.603	177974.905	ug/L	349.674
	137	Ba	2605.040560	3.232	9269452.108	ug/L	166.669
>	165	Ho-2			1389022.884	ug/L	1592460.464
	203	Tl	0.089669	18.171	2297.209	ug/L	1582.773
	206	Pb	1388.849145	2.899	11381748.258	ug/L	1161.392
	207	Pb	1444.386962	2.844	9975685.634	ug/L	995.045
>	45	Sc			389216.225	ug/L	454114.374
	47	Ti	304.679286	3.502	194182.500	ug/L	297.006
	86	Sr	125.851968	0.587	399367.790	ug/L	716.656
	88	Sr	128.836032	0.675	3468612.682	ug/L	5834.250
>	115	In			1311183.781	ug/L	1483966.870
	118	Sn	355.201220	3.048	2640032.261	ug/L	855.034
	120	Sn	358.649496	1.607	3508241.925	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		

	B	10	
	Na	23	
	Mg	24	
	Al	27	
	K	39	
	Ca	44	
>	Sc-1	45	95.709
	V	51	
	Cr	52	
	Mn	55	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	66	
>	Ga-1	72	93.235
	As	75	
	Se	82	
	Mo	97	
	Ag	107	
	Cd	111	
>	In-1	115	98.357
	Sb	123	
	Ba	135	
>	Ho-1	165	97.225
	Tl	205	
	Pb	208	
	U	238	
>	Sc-2	45	95.709
	Cr	53	
	Fe	54	
	Ni	61	
	Cu	63	
	Zn	67	
>	Ge	72	93.235
	Se	77	
	Mo	98	
	Ag	109	
>	In-2	115	98.357
	Cd	114	
	Sb	121	
	Ba	137	
>	Ho-2	165	97.225
	Tl	203	
	Pb	206	
	Pb	207	
>	Sc	45	95.709
	Ti	47	
	Sr	88	
	Sr	88	
>	In	115	98.357
	Sn	118	
	Sn	120	

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Thursday, April 28, 2005 03:27:29
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 1.099

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌜	9	Be	213.490538	1.257	31626.289	ug/L	7.667
|	10	B	206.882080	4.033	5794.902	ug/L	27.667
|	23	Na	1839.302716	1.640	6030596.906	ug/L	18838.944
|	24	Mg	933.314957	1.494	2219786.379	ug/L	2106.176
|	27	Al	1937.984791	2.079	7046131.665	ug/L	3413.777
|	39	K	1950.989637	0.429	14406972.987	ug/L	807733.262
|	44	Ca	1014.228186	3.093	281189.312	ug/L	61872.368
|>	45	Sc-1			387858.810	ug/L	454114.374
|	51	V	201.306843	0.678	1745143.772	ug/L	-28072.212
|	52	Cr	207.658795	3.055	1627584.196	ug/L	26547.338
|	55	Mn	207.945081	1.992	2646609.973	ug/L	3062.361
|	57	Fe	2120.282833	3.579	574511.591	ug/L	9798.695
|	59	Co	210.371043	3.758	2066791.843	ug/L	232.338
|	60	Ni	214.866738	0.847	453804.264	ug/L	301.006
|	65	Cu	225.792342	3.644	524282.903	ug/L	168.336
|	66	Zn	219.814621	2.530	312560.011	ug/L	15137.170
⌈>	72	Ge-1			694493.000	ug/L	739226.379
|	75	As	198.899854	5.060	396083.633	ug/L	-1945.453
⌊	82	Se	196.997606	1.237	42488.896	ug/L	-120.854
⌈	97	Mo	205.181602	1.196	530607.365	ug/L	72.001
|	107	Ag	49.901937	1.708	600247.714	ug/L	267.339
|	111	Cd	199.526873	0.992	550901.315	ug/L	39.334
|>	115	In-1			1336168.386	ug/L	1483966.870
⌊	123	Sb	196.137148	2.935	1348658.719	ug/L	268.758
⌈	135	Ba	208.705689	1.880	442351.831	ug/L	112.002
|>	165	Ho-1			1409711.154	ug/L	1592460.464
|	205	Tl	199.447883	3.170	4863192.907	ug/L	3951.949
|	208	Pb	202.022529	1.521	6745501.590	ug/L	4580.000
⌊	238	U	197.826790	2.082	8449648.981	ug/L	234.671
⌈>	45	Sc-2			387858.810	ug/L	454114.374
|	53	Cr	187.856062	13.524	299187.702	ug/L	154333.029
|	54	Fe	2170.152496	2.795	1370762.053	ug/L	62090.940
|	61	Ni	219.219089	0.254	22177.425	ug/L	1661.113
|	63	Cu	216.948776	1.857	1052176.209	ug/L	345.008
⌊	67	Zn	211.092095	1.794	58559.369	ug/L	9047.975
⌈>	72	Ge			694493.000	ug/L	739226.379
⌊	77	Se	160.887720	0.929	36123.790	ug/L	8561.780
⌈	98	Mo	208.191164	3.359	1359309.036	ug/L	141.970
|	109	Ag	48.867469	1.436	599483.819	ug/L	286.339
|>	115	In-2			1336168.386	ug/L	1483966.870
|	114	Cd	197.838034	3.896	1219606.102	ug/L	84.731
⌊	121	Sb	199.814611	2.601	1797752.603	ug/L	349.674
⌈	137	Ba	213.069780	1.738	769792.654	ug/L	156.669
|>	165	Ho-2			1409711.154	ug/L	1592460.464
|	203	Tl	187.912959	2.038	1947388.956	ug/L	1582.773
|	206	Pb	202.285562	2.265	1683578.747	ug/L	1161.392
⌊	207	Pb	208.183485	2.770	1459953.177	ug/L	995.045
⌈>	45	Sc			387858.810	ug/L	454114.374
|	47	Ti	204.787492	2.428	130121.377	ug/L	297.006
|	86	Sr	213.473485	0.292	667709.435	ug/L	716.656
⌊	88	Sr	214.522484	0.836	5751971.075	ug/L	5834.250
⌈>	115	In			1336168.386	ug/L	1483966.870
|	118	Sn	204.019820	1.879	1545806.516	ug/L	865.034
⌊	120	Sn	203.338692	1.862	2027026.436	ug/L	1103.483

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Be	9		106.746

	B	10		103.441
	Na	23		91.966
	Mg	24		93.331
	Al	27		96.698
	K	39		97.549
	Ca	44		101.422
>	Sc-1	45	85.410	
	V	51		100.663
	Cr	52		103.778
	Mn	55		103.973
	Fe	57		106.013
	Co	59		105.186
	Ni	60		107.433
	Cu	65		112.896
	Zn	66		109.907
>	Ge-1	72	93.849	
	As	75		99.480
	Se	82		98.499
	Mo	97		102.891
	Ag	107		99.864
	Cd	111		99.763
>	In-1	115	90.040	
	Sb	123		96.069
	Ba	135		104.363
>	Ho-1	165	98.534	
	Tl	205		99.734
	Pb	208		101.011
	U	238		99.913
>	Sc-2	45	85.410	
	Cr	53		78.928
	Fe	54		106.508
	Ni	61		109.810
	Cu	63		109.474
	Zn	67		106.548
>	Ge	72	93.849	
	Se	77		80.444
	Mo	98		104.096
	Ag	109		97.736
>	In-2	115	90.040	
	Cd	114		99.918
	Sb	121		99.807
	Ba	137		106.536
>	Ho-2	165	98.534	
	Tl	203		99.968
	Pb	208		101.143
	Pb	207		104.077
>	Sc	45	85.410	
	Ti	47		102.389
	Sr	88		106.737
	Sr	88		107.281
>	In	115	90.040	
	Sn	118		102.910
	Sn	120		101.869

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cu	65	Q
Cr	53	Q
Se	77	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Thursday, April 28, 2005 03:33:38
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042705M2\QC Std 2.100

Sample Result Summary

Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
9	Be	0.006257	88.858	8.000	ug/L	7.667
10	B	3.398583	21.248	122.002	ug/L	27.667
23	Na	0.093439	154.199	16866.822	ug/L	18838.944
24	Mg	0.074475	42.579	2036.832	ug/L	2106.176
27	Al	1.027408	10.243	6849.045	ug/L	3413.777
39	K	4.483626	48.952	743466.160	ug/L	807733.282
44	Ca	-22.841841	26.251	49204.428	ug/L	61872.366
> 45	Sc-1			399822.033	ug/L	454114.374
51	V	-0.161633	416.578	-24391.689	ug/L	-26072.212
52	Cr	-0.574731	36.206	18788.263	ug/L	26547.338
55	Mn	0.003467	301.957	2739.957	ug/L	3062.361
57	Fe	2.289818	39.249	9246.706	ug/L	9798.695
59	Co	0.014631	56.605	352.675	ug/L	232.338
60	Ni	0.008556	161.196	283.672	ug/L	301.006
65	Cu	0.675053	3.608	1763.460	ug/L	168.336
66	Zn	0.976080	22.839	14697.372	ug/L	15137.170
> 72	Ge-1			705679.118	ug/L	739226.379
75	As	0.895000	17.543	-83.869	ug/L	-1945.453
82	Se	0.086180	275.611	-96.819	ug/L	-120.854
97	Mo	0.098947	35.327	324.340	ug/L	72.001
107	Ag	0.032235	17.167	636.021	ug/L	267.339
111	Cd	0.008169	65.361	58.667	ug/L	39.334
> 115	In-1			1359680.759	ug/L	1483966.870
123	Sb	0.146510	33.802	1263.720	ug/L	268.758
135	Ba	0.021701	54.365	145.002	ug/L	112.002
> 165	Ho-1			1407010.261	ug/L	1592460.464
205	Tl	0.233379	55.533	9156.251	ug/L	3951.949
208	Pb	0.128894	6.478	8338.710	ug/L	4580.000
238	U	0.009253	14.929	601.685	ug/L	234.671
> 45	Sc-2			399822.033	ug/L	454114.374
53	Cr	-21.991145	52.901	111864.898	ug/L	154333.029
54	Fe	2.090814	168.890	55952.732	ug/L	62090.940
61	Ni	0.505969	97.280	1511.762	ug/L	1661.113
63	Cu	0.700968	3.199	3773.870	ug/L	345.008
67	Zn	1.064436	418.823	8228.812	ug/L	9047.975
> 72	Ge			705679.118	ug/L	739226.379
77	Se	-32.938239	8.989	2333.297	ug/L	8561.760
98	Mo	0.138642	22.403	1048.024	ug/L	141.970
109	Ag	0.079866	33.059	1253.403	ug/L	288.339
> 115	In-2			1359680.759	ug/L	1483966.870
114	Cd	0.005660	88.268	111.827	ug/L	84.731
121	Sb	0.143971	30.302	1630.779	ug/L	349.674
137	Ba	0.018788	34.303	206.004	ug/L	156.669
> 165	Ho-2			1407010.261	ug/L	1592460.464
203	Tl	0.240583	56.100	3879.276	ug/L	1582.773
206	Pb	0.126172	7.860	2073.171	ug/L	1161.392
207	Pb	0.134633	3.194	1821.134	ug/L	995.045
> 45	Sc			399822.033	ug/L	454114.374
47	Ti	0.283136	77.234	432.345	ug/L	297.006
86	Sr	0.001187	2138.306	633.908	ug/L	716.658
88	Sr	0.018562	54.561	5646.506	ug/L	5834.250
> 115	In			1359680.759	ug/L	1483966.870
118	Sn	0.817413	14.501	7064.495	ug/L	855.034
120	Sn	0.876103	16.724	9862.758	ug/L	1103.483

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Be	9		0.827

	B	10		338.868
	Na	23		0.093
	Mg	24		0.074
	Al	27		1.027
	K	39		4.494
	Ca	44		-22.642
>	Sc-1	45	88.044	
	V	51		-15.183
	Cr	52		-57.473
	Mn	55		0.347
	Fe	57		2.260
	Co	59		1.493
	Ni	60		0.868
	Cu	65		97.865
	Zn	66		97.908
>	Ge-1	72	95.462	
	As	75		99.800
	Se	82		8.818
	Mo	97		9.895
	Ag	107		3.223
	Cd	111		0.817
>	In-1	115	91.625	
	Sb	123		14.681
	Ba	135		2.178
>	Ho-1	165	88.364	
	Tl	205		22.338
	Pb	208		12.899
	U	238		9.925
>	Sc-2	45	88.044	
	Cr	53		-2198.114
	Fe	54		2.991
	Ni	61		50.896
	Cu	63		70.896
	Zn	67		108.444
>	Ge	72	95.462	
	Se	77		-3293.824
	Mo	98		13.884
	Ag	109		7.987
>	In-2	115	91.625	
	Cd	114		9.596
	Sb	121		14.397
	Ba	137		1.979
>	Ho-2	165	88.364	
	Tl	203		24.886
	Pb	206		12.817
	Pb	207		13.493
>	Sc	45	88.044	
	Tl	47		26.313
	Sr	86		8.119
	Sr	88		1.586
>	In	115	91.625	
	Sn	118		81.741
	Sn	120		87.819

QC Out Of Limits

Analyte	Mass	Out of Limits Message
B	10	Q
Cr	53	Q
Zn	67	Q
Se	77	Q

FC 4/28/05

file 042805mz

Sample/Batch Report

STL ST. LOUIS - PERKIN ELMER ELAN 6100 - METHOD 6020 / 200.8 QUANTITATIVE ANALYSIS REP

User Name: stlmetals
Computer Name: SLICP03
Sample File: D:\Elandata\Sample\SW846 TEMP.sam
Report Date/Time: Thursday, April 28, 2005 19:38:20
Method File: d:\Elandata\Method\epa temp.mth
Tuning File: d:\Elandata\Tuning\epa tuning.tun
Optimization File: d:\Elandata\Optimize\EPA.dac
Calibration File:
Calibration Type: External Calibration
Number of Replicates: 3
Number of Readings: 1
Number of Sweeps: 10
Dual Detector Mode: Dual

M 5/2/2005

A/S Loc.	Batch ID	Sample ID	Description	Aliquot Vol.	Diluted Vol.
158		ICSA			
7		CCV			
1		CCB			
24	5115187	G8WP7	20X		
25	5115187	G8WP7S	20X		
26	5115187	G8WP7D	20X		
27	5115187	G8WP7S L5	20X		
28	5115187	G8WP7V	100X		
29	5115187	G8WQL	20X Pb,Cu		
30	5115187	G8WQN	20X Pb,Cu		
31	5115187	G8WQR	10X		
32	5115187	G8WQ[illegible]	[illegible]		
33	5115187	G8WR6	20X Pb,Cu		
34	5115187	G8WTA	25X Zn,Cu		
35	5115187	G8WTE	10X		
36	5115187	G8WTG	10X Cu		
37	5115187	G8WTR	25X Pb,Cu		
38	5115187	G8WTV	10X		
39	5115187	G8WTW	10X Cu		
40	5115187	G8WTX	50X		
41	5115187	G8WT0	100X Pb,Cu		
42	5115187	G8WT1	10X Cu		
43	5115187	G817C	50X		
44	5115187	G817CS	50X Zn,Pb,Cu		
45	5115187	G817CD	50X		
46	5115187	G817D	10X		
47	5115187	G817E	10X		
48	5115187	G817F	10X Cu		
49	5115187	G817G	10X		
50	5115187	G8W[illegible]	50X		
51	5115187	G8WQT	200X Cu		

Report Pb,Cu

Quantitative Analysis Calibration Report

File Name: 042805M2.cal
File Path: D:\Elandata\System
Calibration Type: External Calibration

Analyte	Mass	Curve Type	Slope	Intercept	Corr. Coeff.
Na	22.990	Linear Thru Zero	0.008702	0.00	0.999998
Mg	23.985	Linear Thru Zero	0.005834	0.00	0.999998
Al	26.982	Linear Thru Zero	0.008835	0.00	0.999998
K	38.964	Linear Thru Zero	0.015638	0.00	0.999993
Ca	43.956	Linear Thru Zero	0.000522	0.00	0.999925
Sc-1	44.956	Linear Thru Zero	0.000000	0.00	0.000000
Fe	56.935	Linear Thru Zero	0.000643	0.00	0.999994
Cu	64.928	Linear Thru Zero	0.005807	0.00	0.999979
Zn	65.926	Linear Thru Zero	0.003237	0.00	0.999977
Ho-1	164.930	Linear Thru Zero	0.000000	0.00	0.000000
Pb	207.977	Linear Thru Zero	0.020094	0.00	0.999921
Sc-2	44.956	Linear Thru Zero	0.000000	0.00	0.000000
Fe	53.940	Linear Thru Zero	0.001450	0.00	0.999969
Cu	62.930	Linear Thru Zero	0.011969	0.00	0.999987
Zn	66.927	Linear Thru Zero	0.000577	0.00	0.999597
Ho-2	164.930	Linear Thru Zero	0.000000	0.00	0.000000
Pb	205.975	Linear Thru Zero	0.005175	0.00	0.999957
Pb	206.976	Linear Thru Zero	0.004366	0.00	0.999976

Report Date/Time: Thursday, April 28, 2005 19:38:34
Page 1

Instrument Tuning Report

File Name: EPA TUNING.tun
File Path: d:\Elandata\Tuning
Sample ID: daily check
Sample Date/Time: Thursday, April 28, 2005 09:31:07

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
He	3.016	3.025	596	2079	0.648	
Mg	23.985	23.979	5675	2073	0.731	
Rh	102.905	102.879	24907	2066	0.720	
Ce	139.905	139.928	33933	2109	0.687	
Pb	207.977	207.975	50396	2284	0.717	

Replicates: 6

Meas. Intens. RSD	Mass
0.978	2.000
0.597	3.000
16.220	4.000
38.045	5.000
35.802	22.000
17.584	23.000
3.794	24.000
3.058	25.000
1.728	26.000
3.777	102.000
0.724	103.000
9.931	104.000
4.527	139.000
0.147	140.000
6.701	141.000
1.886	206.000
1.248	207.000
1.261	208.000
2.022	209.000

Report Date/Time: Thursday, April 28, 2005 09:32:21

Daily Performance Report

Sample ID: daily check
Sample Date/Time: Thursday, April 28, 2005 09:45:50
Sample Description:
Method File: d:\Elandata\Method\DAILY EPA.mth
Dataset File: d:\Elandata\Dataset\DAILY PEFORMANCE EPA\daily check.179
Tuning File: d:\Elandata\Tuning\EPA TUNING.tun
Optimization File: d:\Elandata\Optimize\EPA.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24.0	50291.7	50291.650	383.821	0.8
	Rh	102.9	394538.9	394538.940	2108.192	0.5
	Pb	208.0	281628.1	281628.098	2181.499	0.8
⌈>	Ba	137.9	388520.5	388520.542	1939.602	0.5
⌊	Ba++	69.0	5198.2	0.013	0.000	0.7
⌈>	Ce	139.9	468422.7	468422.710	4908.656	1.0
⌊	CeO	155.9	12219.7	0.026	0.001	2.1
	Bkgd	220.0	8.7	8.667	1.033	11.9

Current Optimization File Data

Current Value	Description
0.88	Nebulizer Gas Flow
8.75	Lens Voltage
1200.00	ICP RF Power
-2200.00	Analog Stage Voltage
1400.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-13.50	AC Rod Offset
60.00	Service DAC 1
0.00	Quadrupole Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	25	7.0	2702.3
Mg	24	25	4.5	64827.9
Co	59	25	5.8	182180.3
Rh	103	25	6.3	413158.3
In	115	25	7.0	483803.9
Ba	138	25	6.5	414292.5
Ce	140	25	7.0	483511.2
Pb	208	25	8.5	293571.8

QUANTITATIVE ANALYSIS REPORT

Sample ID: Blank
Sample Date/Time: Thursday, April 28, 2005 17:03:09
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042805M2\Blank.001

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na			9414.862	ug/L	
	24	Mg			774.695	ug/L	
	27	Al			3869.229	ug/L	
	39	K			625151.110	ug/L	
	44	Ca			33502.246	ug/L	
>	45	Sc-1			433946.682	ug/L	
	57	Fe			8492.631	ug/L	
	65	Cu			138.335	ug/L	
	66	Zn			1347.077	ug/L	
>	165	Ho-1			1653008.415	ug/L	
	208	Pb			11185.834	ug/L	
>	45	Sc-2			433946.682	ug/L	
	54	Fe			52661.795	ug/L	
	63	Cu			260.672	ug/L	
	67	Zn			3074.697	ug/L	
>	165	Ho-2			1653008.415	ug/L	
	206	Pb			2859.649	ug/L	
	207	Pb			2404.894	ug/L	

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45		
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165		
	Pb	208		
>	Sc-2	45		
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165		
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: Standard 1
Sample Date/Time: Thursday, April 28, 2005 17:06:18
Autosampler Position: 2
Dataset File: D:\Elandata\Dataset\042805M2\Standard 1.002

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na			28044.807	ug/L	9414.862
	24	Mg			3245.401	ug/L	774.695
	27	Al			9722.076	ug/L	3869.229
	39	K			623449.340	ug/L	625151.110
	44	Ca			37481.486	ug/L	33502.246
>	45	Sc-1			426973.626	ug/L	433946.682
	57	Fe			8715.536	ug/L	8492.631
	65	Cu	20.000000	1.197	52994.312	ug/L	138.335
	66	Zn	20.000000	2.357	30814.506	ug/L	1347.077
>	165	Ho-1			1611279.609	ug/L	1653008.415
	208	Pb	20.000000	0.685	890845.822	ug/L	11185.834
>	45	Sc-2			426973.626	ug/L	433946.682
	54	Fe			55713.395	ug/L	52661.795
	63	Cu	20.000000	2.431	107659.895	ug/L	260.672
	67	Zn	20.000000	2.747	9089.638	ug/L	3074.697
>	165	Ho-2			1611279.609	ug/L	1653008.415
	206	Pb	20.000000	2.463	176852.433	ug/L	2859.649
	207	Pb	20.000000	1.399	147713.621	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45		
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165		
	Pb	208		
>	Sc-2	45		
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165		
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: Standard 2
Sample Date/Time: Thursday, April 28, 2005 17:09:28
Autosampler Position: 3
Dataset File: D:\Elandata\Dataset\042805M2\Standard 2.003

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌈	23	Na			48841.208	ug/L	9414.882
|	24	Mg			5444.092	ug/L	774.695
|	27	Al			5481.774	ug/L	3869.229
|	39	K			623837.027	ug/L	625151.110
|	44	Ca			39959.885	ug/L	33502.246
|>	45	Sc-1			446454.488	ug/L	433946.682
|	57	Fe			9293.727	ug/L	8492.631
|	65	Cu	49.574996	1.036	130247.369	ug/L	138.335
⌊	66	Zn	49.490329	1.723	73136.827	ug/L	1347.077
⌈>	165	Ho-1			1619196.327	ug/L	1653008.415
⌊	208	Pb	49.972707	1.689	1712138.329	ug/L	11185.834
⌈>	45	Sc-2			446454.488	ug/L	433946.682
|	54	Fe			58679.679	ug/L	52861.795
|	63	Cu	49.682333	1.773	268660.667	ug/L	260.672
⌊	67	Zn	49.007828	1.332	16937.206	ug/L	3074.697
⌈>	165	Ho-2			1619196.327	ug/L	1653008.415
|	206	Pb	49.924926	2.360	435348.421	ug/L	2859.649
⌊	207	Pb	49.938711	0.746	384341.445	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Na	23		
|	Mg	24		
|	Al	27		
|	K	39		
|	Ca	44		
|>	Sc-1	45		
|	Fe	57		
|	Cu	65		
⌊	Zn	66		
⌈>	Ho-1	165		
⌊	Pb	208		
⌈>	Sc-2	45		
|	Fe	54		
|	Cu	63		
⌊	Zn	67		
⌈>	Ho-2	165		
|	Pb	206		
⌊	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: Standard 3
Sample Date/Time: Thursday, April 28, 2005 17:12:39
Autosampler Position: 4
Dataset File: D:\Elandata\Dataset\042805M2\Standard 3.004

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	500.000000	1.509	1851254.239	ug/L	9414.862
	24	Mg	250.000000	2.108	626237.039	ug/L	774.695
	27	Al	500.000000	2.217	1890633.794	ug/L	3869.229
	39	K	500.000000	2.304	3904918.248	ug/L	625151.110
	44	Ca	250.000000	1.448	104009.633	ug/L	33502.246
>	45	Sc-1			441678.299	ug/L	433946.682
	57	Fe	500.000000	2.247	143249.192	ug/L	8492.631
	65	Cu	199.820643	1.703	512575.813	ug/L	138.335
	66	Zn	199.951416	2.448	287164.064	ug/L	1347.077
>	165	Ho-1			1646147.737	ug/L	1653008.415
	208	Pb	199.325256	0.414	6604586.576	ug/L	11185.834
>	45	Sc-2			441678.299	ug/L	433946.682
	54	Fe	500.000000	0.882	387343.282	ug/L	52681.795
	63	Cu	199.848256	2.028	1056853.831	ug/L	260.672
	67	Zn	198.671799	2.139	53724.375	ug/L	3074.697
>	165	Ho-2			1646147.737	ug/L	1653008.415
	206	Pb	199.504531	1.554	1702603.584	ug/L	2858.649
	207	Pb	199.632495	0.592	1437320.823	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45		
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165		
	Pb	208		
>	Sc-2	45		
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165		
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: Standard 4
Sample Date/Time: Thursday, April 28, 2005 17:15:52
Autosampler Position: 5
Dataset File: D:\Elandata\Dataset\042805M2\Standard 4.005

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	2004.650216	1.637	7697668.619	ug/L	9414.862
	24	Mg	1002.114517	1.461	2602086.614	ug/L	774.695
	27	Al	2003.372868	2.004	7791968.257	ug/L	3869.229
	39	K	2004.812984	1.804	14302062.833	ug/L	625151.110
	44	Ca	989.728779	3.492	272460.168	ug/L	33502.246
>	45	Sc-1			442790.205	ug/L	433946.682
	57	Fe	2004.770507	1.014	571179.949	ug/L	8492.631
	65	Cu	0.049886	35.496	269.672	ug/L	138.335
	66	Zn	1.050110	5.524	2878.986	ug/L	1347.077
>	165	Ho-1			1642097.779	ug/L	1653008.415
	208	Pb	0.160833	11.529	16088.676	ug/L	11185.834
>	45	Sc-2			442790.205	ug/L	433946.682
	54	Fe	1999.638221	0.835	1386726.338	ug/L	52661.795
	63	Cu	0.078332	12.133	681.358	ug/L	260.672
	67	Zn	10.204973	20.590	5740.216	ug/L	3074.697
>	165	Ho-2			1642097.779	ug/L	1653008.415
	206	Pb	0.154386	11.718	4152.646	ug/L	2859.649
	207	Pb	0.169377	6.995	3531.805	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45		
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165		
	Pb	208		
>	Sc-2	45		
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165		
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: Standard 5
Sample Date/Time: Thursday, April 28, 2005 17:19:05
Autosampler Position: 6
Dataset File: D:\Elandata\Dataset\042805M2\Standard 5.006

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	10001.932908	2.439	37839713.093	ug/L	9414.862
	24	Mg	4996.939454	2.146	12677400.950	ug/L	774.695
	27	Al	10002.640097	2.948	38412118.463	ug/L	3869.229
	39	K	10006.645722	1.749	68657329.085	ug/L	625151.110
	44	Ca	4991.044634	3.398	1185403.774	ug/L	33502.246
>	45	Sc-1			434921.227	ug/L	433946.682
	57	Fe	10006.311497	1.491	2807089.852	ug/L	8492.631
	65	Cu	0.098669	13.322	379.342	ug/L	138.335
	66	Zn	1.348439	5.274	3247.068	ug/L	1347.077
>	165	Ho-1			1634070.685	ug/L	1653006.415
	208	Pb	0.145894	16.618	15848.618	ug/L	11185.834
>	45	Sc-2			434921.227	ug/L	433946.682
	54	Fe	9983.842006	2.170	5348311.962	ug/L	52661.795
	63	Cu	0.231295	5.464	1463.756	ug/L	260.672
	67	Zn	17.588581	14.448	7508.400	ug/L	3074.697
>	165	Ho-2			1634070.685	ug/L	1653006.415
	206	Pb	0.147973	19.036	4077.624	ug/L	2859.649
	207	Pb	0.136868	12.087	3353.427	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45		
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165		
	Pb	208		
>	Sc-2	45		
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165		
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Thursday, April 28, 2005 17:22:19
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042805M2\QC Std 1.007

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	1904.915186	2.528	7878531.560	ug/L	9414.862
	24	Mg	966.443643	5.512	2659487.519	ug/L	774.695
	27	Al	1933.860686	3.848	7907671.319	ug/L	3869.229
	39	K	1915.546228	3.044	14525504.530	ug/L	625151.110
	44	Ca	1930.352612	1.374	284502.355	ug/L	33502.245
>	45	Sc-1			462783.534	ug/L	433946.682
	57	Fe	1891.815381	3.030	572043.324	ug/L	8492.631
	65	Cu	188.354344	3.056	506764.109	ug/L	138.335
	66	Zn	189.903254	2.139	285804.626	ug/L	1347.077
>	165	Ho-1			1657828.008	ug/L	1653008.415
	208	Pb	198.232889	2.211	6612700.173	ug/L	11185.834
>	45	Sc-2			462783.534	ug/L	433946.682
	54	Fe	1989.783164	3.326	1391379.831	ug/L	52861.795
	63	Cu	191.894260	3.498	1082827.915	ug/L	260.672
	67	Zn	192.848563	3.669	54717.816	ug/L	3074.697
>	165	Ho-2			1657828.008	ug/L	1653008.415
	206	Pb	193.842827	1.127	1665801.617	ug/L	2859.649
	207	Pb	199.249883	2.464	1444244.444	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		96.248
	Mg	24		96.844
	Al	27		96.578
	K	39		95.777
	Ca	44		103.835
>	Sc-1	45	100.000	
	Fe	57		94.891
	Cu	65		94.877
	Zn	66		94.952
>	Ho-1	165	100.282	
	Pb	208		99.116
>	Sc-2	45	100.000	
	Fe	54		99.488
	Cu	63		96.947
	Zn	67		96.434
>	Ho-2	165	100.282	
	Pb	206		96.921
	Pb	207		99.635

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Thursday, April 28, 2005 17:26:30
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042805M2\QC Std 2.008

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	0.362278	29.271	11052.053	ug/L	9414.862
	24	Mg	0.037469	77.821	894.370	ug/L	774.695
	27	Al	0.107229	32.159	4402.723	ug/L	3869.229
	39	K	1.663413	171.883	653922.774	ug/L	625151.110
	44	Ca	8.813074	31.322	36622.005	ug/L	33502.248
>	45	Sc-1			445476.079	ug/L	433946.682
	57	Fe	3.772291	35.034	9818.156	ug/L	8492.631
	65	Cu	0.001968	186.437	147.336	ug/L	138.335
	66	Zn	-0.014333	243.321	1364.746	ug/L	1347.077
>	165	Ho-1			1639631.606	ug/L	1653008.415
	208	Pb	0.010197	295.770	11439.286	ug/L	11185.834
>	45	Sc-2			446476.079	ug/L	433946.682
	54	Fe	3.036936	102.019	56141.783	ug/L	52661.795
	63	Cu	-0.004057	87.732	246.338	ug/L	260.672
	67	Zn	6.357919	29.268	4803.529	ug/L	3074.697
>	165	Ho-2			1639631.606	ug/L	1653008.415
	208	Pb	0.010093	267.369	2923.997	ug/L	2859.649
	207	Pb	0.003243	1022.298	2410.562	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		0.362
	Mg	24		0.037
	Al	27		0.107
	K	39		1.663
	Ca	44		8.813
>	Sc-1	45	102.887	
	Fe	57		3.772
	Cu	65		0.197
	Zn	66		-1.433
>	Ho-1	165	99.191	
	Pb	208		1.028
>	Sc-2	45	102.887	
	Fe	54		3.037
	Cu	63		-0.408
	Zn	67		636.792
>	Ho-2	165	99.191	
	Pb	208		1.009
	Pb	207		0.324

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Zn	67	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 3
Sample Date/Time: Thursday, April 28, 2005 17:30:41
Autosampler Position: 160
Dataset File: D:\Elandata\Dataset\042805M2\QC Std 3.009

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	4788.859619	6.632	19250307.972	ug/L	9414.862
	24	Mg	4633.368217	7.268	13071494.809	ug/L	774.695
	27	Al	203.994773	8.514	839257.338	ug/L	3869.229
	39	K	4819.780123	7.377	35606244.901	ug/L	625151.110
	44	Ca	4716.199699	6.902	1176811.883	ug/L	33502.246
>	45	Sc-1			464639.789	ug/L	433946.682
	57	Fe	94.028718	4.463	37157.028	ug/L	8492.631
	65	Cu	24.069304	5.879	84864.037	ug/L	138.335
	66	Zn	21.111008	5.713	33131.706	ug/L	1347.077
>	165	Ho-1			1705688.179	ug/L	1653008.415
	208	Pb	3.002878	3.821	114440.658	ug/L	11185.834
>	45	Sc-2			464639.789	ug/L	433946.682
	54	Fe	120.714866	4.563	137632.900	ug/L	52861.795
	63	Cu	24.401302	6.096	135747.264	ug/L	260.672
	67	Zn	32.737947	12.376	12030.190	ug/L	3074.897
>	165	Ho-2			1705688.179	ug/L	1653008.415
	206	Pb	3.003910	4.002	29460.989	ug/L	2859.849
	207	Pb	3.010919	4.876	24901.288	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		96.377
	Mg	24		96.667
	Al	27		101.997
	K	39		96.396
	Ca	44		94.324
>	Sc-1	45	107.073	
	Fe	57		94.029
	Cu	65		96.277
	Zn	66		106.558
>	Ho-1	165	103.187	
	Pb	208		100.096
>	Sc-2	45	107.073	
	Fe	54		120.716
	Cu	63		97.606
	Zn	67		103.689
>	Ho-2	165	103.187	
	Pb	206		100.130
	Pb	207		100.364

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Zn	67	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 5
Sample Date/Time: Thursday, April 28, 2005 17:34:52
Autosampler Position: 159
Dataset File: D:\Elandata\Dataset\042805M2\QC Std 5.010

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	1928.544140	2.426	7153582.066	ug/L	9414.862
	24	Mg	50693.007353	3.004	126387715.860	ug/L	774.695
	27	Al	51523.594861	3.549	193787593.734	ug/L	3869.229
	39	K	1988.196128	3.577	13722540.300	ug/L	625151.110
	44	Ca	50119.333606	3.958	11166050.135	ug/L	33502.246
>	45	Sc-1			425819.458	ug/L	433946.682
	57	Fe	19293.638115	4.810	5290501.619	ug/L	8492.831
	65	Cu	46.927219	1.383	116177.512	ug/L	138.335
	66	Zn	100.346849	1.832	139806.317	ug/L	1347.077
>	165	Ho-1			1603615.949	ug/L	1653008.415
	208	Pb	98.895486	2.480	3197551.287	ug/L	11185.834
>	45	Sc-2			425819.458	ug/L	433946.682
	54	Fe	19314.338126	4.482	11977440.798	ug/L	52661.795
	63	Cu	47.169088	1.467	240628.079	ug/L	260.672
	67	Zn	106.667535	6.185	29192.456	ug/L	3074.697
>	165	Ho-2			1603615.949	ug/L	1653008.415
	206	Pb	98.113610	1.220	817063.911	ug/L	2859.649
	207	Pb	100.427576	4.319	705546.887	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		98.427
	Mg	24		101.796
	Al	27		103.047
	K	39		98.469
	Ca	44		100.239
>	Sc-1	45	98.127	
	Fe	57		96.498
	Cu	65		93.954
	Zn	66		100.347
>	Ho-1	165	97.012	
	Pb	208		98.895
>	Sc-2	45	98.127	
	Fe	54		96.572
	Cu	63		94.338
	Zn	67		106.668
>	Ho-2	165	97.012	
	Pb	206		98.114
	Pb	207		100.428

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: ICSA
Sample Date/Time: Thursday, April 28, 2005 17:39:02
Autosampler Position: 158
Dataset File: D:\Elandata\Dataset\042805M2\ICSA.011

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Interns. Mean	Sample Unit	Blank Intensity
	23	Na	7.903661	4.128	38572.408	ug/L	9414.862
	24	Mg	50505.166675	4.556	125567944.475	ug/L	774.695
	27	Al	51633.459590	4.901	194414813.620	ug/L	3869.229
	39	K	-2.100959	78.768	600233.967	ug/L	625151.110
	44	Ca	51385.103875	3.858	11463374.789	ug/L	33502.246
>	45	Sc-1			426486.635	ug/L	433946.682
	57	Fe	19641.573328	3.529	5394056.985	ug/L	8492.631
	65	Cu	0.226204	2.430	696.024	ug/L	138.335
	66	Zn	1.981015	2.935	4058.284	ug/L	1347.077
>	165	Ho-1			1639426.276	ug/L	1653008.415
	208	Pb	0.566389	7.633	29799.103	ug/L	11185.834
>	45	Sc-2			426486.635	ug/L	433946.682
	54	Fe	20161.331120	4.617	12517856.491	ug/L	52661.795
	63	Cu	0.131883	6.548	930.373	ug/L	260.672
	67	Zn	17.203967	22.311	7242.925	ug/L	3074.697
>	165	Ho-2			1639426.276	ug/L	1653008.415
	206	Pb	0.588216	7.403	7822.554	ug/L	2859.649
	207	Pb	0.546697	8.745	6293.450	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	98.291	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	99.178	
	Pb	208		
>	Sc-2	45	98.291	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	99.178	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Al	27	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: CCV
Sample Date/Time: Thursday, April 28, 2005 17:42:14
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042805M2\CCV.012

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌈	23	Na	1921.135160	1.666	7540521.500	ug/L	9414.662
|	24	Mg	991.677648	5.216	2604822.269	ug/L	774.695
|	27	Al	1990.428466	5.183	7919737.158	ug/L	3859.229
|	39	K	1970.823812	3.518	14526710.187	ug/L	625151.110
|	44	Ca	1047.819404	5.273	280908.945	ug/L	33502.246
|>	45	Sc-1			450686.356	ug/L	433946.682
|	57	Fe	1932.215277	3.240	568577.364	ug/L	8492.631
|	65	Cu	199.052514	5.224	520576.220	ug/L	138.336
⌊	66	Zn	196.999430	4.462	288511.762	ug/L	1347.077
⌈>	165	Ho-1			1678693.232	ug/L	1653008.415
⌊	208	Pb	194.884446	2.646	6580858.085	ug/L	11185.834
⌈>	45	Sc-2			450686.356	ug/L	433946.682
|	54	Fe	2038.375245	4.899	1385823.686	ug/L	52661.795
|	63	Cu	194.126673	3.662	1046530.988	ug/L	260.672
⌊	67	Zn	198.445391	2.330	54739.902	ug/L	3074.697
⌈>	165	Ho-2			1678693.232	ug/L	1653008.415
|	206	Pb	194.485323	3.646	1691452.661	ug/L	2859.649
⌊	207	Pb	195.272357	3.092	1432927.634	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Na	23		
|	Mg	24		
|	Al	27		
|	K	39		
|	Ca	44		
|>	Sc-1	45	103.886	
|	Fe	57		
|	Cu	65		
⌊	Zn	66		
⌈>	Ho-1	165	101.664	
⌊	Pb	208		
⌈>	Sc-2	45	103.886	
|	Fe	54		
|	Cu	63		
⌊	Zn	67		
⌈>	Ho-2	165	101.664	
|	Pb	206		
⌊	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: CCB
Sample Date/Time: Thursday, April 28, 2005 17:45:26
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042805M2\CCB.013

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	0.209613	7.048	10687.103	ug/L	9414.862
	24	Mg	0.278504	5.501	1549.766	ug/L	774.695
	27	Al	0.280701	15.793	5179.992	ug/L	3869.229
	39	K	-3.972048	28.315	626346.929	ug/L	625151.110
	44	Ca	6.192035	57.745	36542.714	ug/L	33502.246
>	45	Sc-1			454401.539	ug/L	433946.682
	57	Fe	5.251043	9.349	10428.885	ug/L	8492.631
	65	Cu	0.005181	126.231	158.666	ug/L	138.335
	66	Zn	-0.003442	373.287	1405.417	ug/L	1347.077
>	165	Ho-1			1645049.379	ug/L	1653008.415
	208	Pb	0.035978	48.786	12321.206	ug/L	11185.834
>	45	Sc-2			454401.539	ug/L	433946.682
	54	Fe	2.469045	110.854	58734.438	ug/L	52661.795
	63	Cu	0.001584	201.379	281.672	ug/L	260.672
	67	Zn	6.302220	25.811	5391.410	ug/L	3074.697
>	165	Ho-2			1645049.379	ug/L	1653008.415
	208	Pb	0.040961	36.837	3194.723	ug/L	2856.649
	207	Pb	0.031175	91.084	2617.267	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	104.714	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	99.518	
	Pb	208		
>	Sc-2	45	104.714	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	99.518	
	Pb	208		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WP7
Sample Date/Time: Thursday, April 28, 2005 17:48:34
Autosampler Position: 24
Dataset File: D:\Elandata\Dataset\042805M2\G8WP7.014

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	1981.256236	3.448	8382167.551	ug/L	9414.862
	24	Mg	1430.130015	5.721	4050540.262	ug/L	774.895
	27	Al	7280.146202	3.486	31151751.303	ug/L	3869.229
	39	K	1798.057781	4.209	14351645.871	ug/L	625151.110
	44	Ca	17375.468999	3.911	4439764.158	ug/L	33502.246
>	45	Sc-1			485831.837	ug/L	433946.662
	57	Fe	27716.735750	2.502	8867320.663	ug/L	8492.631
	65	Cu	520.494901	2.667	1749899.730	ug/L	138.335
	66	Zn	2994.137322	4.313	4706490.324	ug/L	1347.077
>	165	Ho-1			1675952.641	ug/L	1653008.415
	208	Pb	1273.276440	1.188	42587445.209	ug/L	11185.634
>	45	Sc-2			485831.837	ug/L	433946.662
	54	Fe	27913.964823	3.782	19718628.668	ug/L	52661.795
	63	Cu	842.513290	2.958	3735136.203	ug/L	260.672
	67	Zn	2457.974835	2.660	700245.073	ug/L	3074.697
>	165	Ho-2			1675952.641	ug/L	1653008.415
	206	Pb	1289.403048	0.609	10927337.830	ug/L	2859.649
	207	Pb	1258.548894	1.115	9213527.616	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	111.957	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	101.388	
	Pb	208		
>	Sc-2	45	111.957	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	101.388	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WP7S
Sample Date/Time: Thursday, April 28, 2005 17:51:42
Autosampler Position: 25
Dataset File: D:\Elandata\Dataset\042805M2\G8WP7S.015

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	4429.637498	1.073	18724244.517	ug/L	9414.862
	24	Mg	3686.577484	0.222	10468140.083	ug/L	774.695
	27	Al	9674.016036	1.319	41498859.964	ug/L	3869.229
	39	K	3587.688251	2.932	27934740.402	ug/L	625151.110
	44	Ca	18793.648862	0.620	4798696.108	ug/L	33502.246
>	45	Sc-1			485526.436	ug/L	433946.682
	57	Fe	20606.312615	2.619	6443455.192	ug/L	8462.631
	65	Cu	1729.143968	2.774	4874381.328	ug/L	138.335
	66	Zn	2494.852878	1.946	3921697.896	ug/L	1347.077
>	165	Ho-1			1692512.194	ug/L	1653008.415
	208	Pb	2408.060602	0.669	81903879.838	ug/L	11186.834
>	45	Sc-2			485526.436	ug/L	433946.682
	54	Fe	20953.702192	2.758	14815036.732	ug/L	52661.795
	63	Cu	1646.676141	3.639	9567828.676	ug/L	260.872
	67	Zn	2047.150193	2.350	576534.732	ug/L	3074.697
>	165	Ho-2			1692512.194	ug/L	1653008.415
	206	Pb	2346.529647	1.348	20556244.040	ug/L	2859.649
	207	Pb	2393.867626	1.069	17692912.643	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	111.886	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	102.390	
	Pb	208		
>	Sc-2	45	111.886	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	102.390	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WP7D
Sample Date/Time: Thursday, April 26, 2005 17:54:50
Autosampler Position: 26
Dataset File: D:\Elandata\Dataset\042805M2\G8WP7D.016

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	2970.041797	1.101	12467385.819	ug/L	9414.962
	24	Mg	2341.277613	1.468	6584026.129	ug/L	774.695
	27	Al	5353.808796	0.523	22802964.190	ug/L	3869.229
	39	K	2472.789296	3.227	19332733.456	ug/L	625151.110
	44	Ca	24356.306461	0.312	6183240.906	ug/L	33502.246
>	45	Sc-1			481998.091	ug/L	433946.682
	57	Fe	21820.397404	0.283	6774325.280	ug/L	8492.631
	65	Cu	823.592228	0.245	2305232.467	ug/L	138.335
	66	Zn	1157.391892	1.361	1807044.611	ug/L	1347.077
>	165	Ho-1			1657985.015	ug/L	1653008.415
	208	Pb	808.417146	1.784	26872863.277	ug/L	11185.834
>	45	Sc-2			481998.091	ug/L	433946.682
	54	Fe	22126.526883	0.997	15528032.874	ug/L	52661.795
	63	Cu	790.466654	1.019	4560479.435	ug/L	260.672
	67	Zn	1038.677280	1.820	282108.942	ug/L	3074.697
>	165	Ho-2			1657985.015	ug/L	1653008.415
	206	Pb	808.067317	2.673	6935069.876	ug/L	2859.849
	207	Pb	801.111674	2.859	5800542.058	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	111.073	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	100.381	
	Pb	208		
>	Sc-2	45	111.073	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	100.381	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WP7S LL
Sample Date/Time: Thursday, April 28, 2005 17:57:59
Autosampler Position: 27
Dataset File: D:\Elandata\Dataset\042805M2\G8WP7S LL.017

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	2278.316428	4.378	9674175.167	ug/L	9414.882
	24	Mg	1891.061605	4.224	5378545.325	ug/L	774.695
	27	Al	10618.178519	4.695	45730014.719	ug/L	3869.229
	39	K	2030.079885	5.042	16176022.599	ug/L	625151.110
	44	Ca	21152.463249	4.910	5420035.293	ug/L	33502.246
>	45	Sc-1			487793.942	ug/L	433946.682
	57	Fe	37157.614843	4.656	11659083.472	ug/L	8492.831
	65	Cu	3021.890344	5.108	8551481.244	ug/L	138.335
	66	Zn	3638.880254	4.802	5729516.386	ug/L	1347.077
>	165	Ho-1			1661081.783	ug/L	1653006.415
	208	Pb	1473.896996	2.519	49192754.494	ug/L	11185.834
>	45	Sc-2			487793.942	ug/L	433946.682
	54	Fe	38975.021673	2.727	27624041.038	ug/L	52661.795
	63	Cu	2910.959394	5.471	16880232.708	ug/L	260.672
	67	Zn	2986.704645	4.686	842948.414	ug/L	3074.697
>	165	Ho-2			1661081.783	ug/L	1653006.415
	206	Pb	1457.432794	2.539	12528800.927	ug/L	2659.649
	207	Pb	1459.342563	3.261	10582243.169	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	112.409	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	100.488	
	Pb	208		
>	Sc-2	45	112.409	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	100.488	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WP7V
Sample Date/Time: Thursday, April 28, 2005 18:01:08
Autosampler Position: 28
Dataset File: D:\Elandata\Dataset\042805M2\G8WP7V.018

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	395.818279	0.842	1771696.189	ug/L	9414.862
	24	Mg	292.281947	1.135	872354.305	ug/L	774.695
	27	Al	1464.578353	1.948	6617246.163	ug/L	3869.229
	39	K	389.843931	1.662	3692393.743	ug/L	625151.110
	44	Ca	3466.019696	0.827	960964.096	ug/L	33502.246
>	45	Sc-1			511136.124	ug/L	433946.682
	57	Fe	5248.223106	1.436	1735348.628	ug/L	8492.631
	65	Cu	128.628792	1.737	384904.510	ug/L	138.335
	66	Zn	546.287985	0.837	905371.184	ug/L	1347.077
>	165	Ho-1			1652008.481	ug/L	1653008.415
	208	Pb	258.884674	0.433	8805057.510	ug/L	11185.834
>	45	Sc-2			511136.124	ug/L	433946.682
	54	Fe	5849.542747	3.540	4175336.741	ug/L	52661.795
	63	Cu	129.857113	2.144	794606.592	ug/L	260.672
	67	Zn	477.675045	0.992	144406.636	ug/L	3074.697
>	165	Ho-2			1652008.481	ug/L	1653008.415
	208	Pb	260.593192	1.149	2230782.827	ug/L	2858.649
	207	Pb	255.433814	0.641	1845016.852	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	117.788	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	99.940	
	Pb	208		
>	Sc-2	45	117.788	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	99.940	
	Pb	208		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WQL
Sample Date/Time: Thursday, April 28, 2005 18:04:18
Autosampler Position: 29
Dataset File: D:\Elandata\Dataset\042805M2\G8WQL.019

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	785.359341	4.490	3184903.743	ug/L	9414.862
	24	Mg	1124.102361	3.330	3048269.581	ug/L	774.695
	27	Al	5326.515945	5.044	21863992.592	ug/L	3869.229
	39	K	952.505574	4.919	7589878.606	ug/L	625151.110
	44	Ca	10983.464905	4.488	2898687.734	ug/L	33502.246
>	45	Sc-1			465008.101	ug/L	433946.682
	57	Fe	54328.859725	4.628	16242851.368	ug/L	8492.631
	65	Cu	373.611568	7.872	1007338.121	ug/L	138.336
	66	Zn	1170.709398	4.776	1761659.052	ug/L	1347.077
>	165	Ho-1			1609998.932	ug/L	1653008.415
	208	Pb	2503.216980	6.807	80820250.606	ug/L	11186.834
>	45	Sc-2			465008.101	ug/L	433946.682
	54	Fe	55671.102228	3.615	37577733.384	ug/L	52661.795
	63	Cu	368.473706	6.286	2159536.033	ug/L	260.672
	67	Zn	1090.019755	5.424	295255.271	ug/L	3074.697
>	165	Ho-2			1609998.932	ug/L	1653008.415
	206	Pb	2433.782691	7.334	20236340.800	ug/L	2859.649
	207	Pb	2467.243365	6.899	17309522.114	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	107.156	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	97.398	
	Pb	208		
>	Sc-2	45	107.156	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	97.398	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WQN
Sample Date/Time: Thursday, April 28, 2005 18:07:28
Autosampler Position: 30
Dataset File: D:\Elandata\Dataset\042805M2\G8WQN.020

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	1372.794489	3.387	5888822.412	ug/L	9414.862
	24	Mg	1072.831965	1.478	3081001.735	ug/L	774.695
	27	Al	5763.366316	2.143	25063127.960	ug/L	3869.229
	39	K	1385.710222	0.624	11375334.494	ug/L	625151.110
	44	Ca	10463.695606	1.606	2725704.105	ug/L	33502.246
>	45	Sc-1			492190.682	ug/L	433946.682
	57	Fe	25918.664117	1.351	8214295.742	ug/L	8492.631
	65	Cu	627.163757	2.479	1782559.684	ug/L	138.335
	66	Zn	1686.520896	1.291	2668309.684	ug/L	1347.077
>	165	Ho-1			1681756.297	ug/L	1653008.415
	208	Pb	2521.013084	1.325	85194147.910	ug/L	11185.834
>	45	Sc-2			492190.682	ug/L	433946.682
	54	Fe	26809.822952	3.060	19059149.333	ug/L	52661.795
	63	Cu	661.988861	1.344	3699722.415	ug/L	260.672
	67	Zn	1412.735514	1.571	404466.248	ug/L	3074.697
>	165	Ho-2			1681756.297	ug/L	1653008.415
	206	Pb	2447.032036	1.366	21298304.962	ug/L	2659.649
	207	Pb	2480.687862	2.289	18218136.061	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	113.422	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	101.739	
	Pb	208		
>	Sc-2	45	113.422	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	101.739	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Thursday, April 28, 2005 18:10:41
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042805M2\QC Std 1.021

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	1944.090302	3.914	7681961.387	ug/L	9414.862
	24	Mg	1011.809606	4.876	2878691.042	ug/L	774.685
	27	Al	2003.884357	6.217	8027184.199	ug/L	3869.229
	39	K	1980.583196	5.498	14480051.038	ug/L	625151.110
	44	Ca	1019.971952	6.201	276240.433	ug/L	33502.246
>	45	Sc-1			454025.817	ug/L	433946.682
	57	Fe	1943.900444	4.234	575989.024	ug/L	8492.631
	65	Cu	195.123346	5.455	513790.901	ug/L	138.335
	66	Zn	193.863677	4.012	285947.885	ug/L	1347.077
>	165	Ho-1			1661365.590	ug/L	1653006.415
	208	Pb	197.969978	1.686	6619855.113	ug/L	11185.834
>	45	Sc-2			454025.817	ug/L	433946.682
	54	Fe	2011.219197	4.219	1377957.650	ug/L	52661.795
	63	Cu	193.155190	5.651	1048214.119	ug/L	260.672
	67	Zn	196.870405	6.073	52059.571	ug/L	3074.697
>	165	Ho-2			1661365.590	ug/L	1653006.415
	206	Pb	193.528787	0.825	1666922.155	ug/L	2859.649
	207	Pb	199.704106	1.463	1450946.385	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		97.206
	Mg	24		101.191
	Al	27		100.194
	K	39		97.529
	Ca	44		101.997
>	Sc-1	45	104.627	
	Fe	57		97.195
	Cu	65		97.562
	Zn	66		96.832
>	Ho-1	165	100.506	
	Pb	208		98.996
>	Sc-2	45	104.627	
	Fe	54		100.591
	Cu	63		98.578
	Zn	67		93.436
>	Ho-2	165	100.506	
	Pb	208		98.764
	Pb	207		99.562

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Thursday, April 28, 2005 18:14:53
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042805M2\QC Std 2.022

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	0.213894	29.297	10674.427	ug/L	9414.862
	24	Mg	0.070331	30.808	995.711	ug/L	774.695
	27	Al	0.131668	46.972	4570.779	ug/L	3869.229
	39	K	3.489748	80.754	577430.892	ug/L	625151.110
	44	Ca	6.822889	73.017	36544.720	ug/L	33502.248
>	45	Sc-1			453285.496	ug/L	433946.682
	57	Fe	7.717332	14.092	11116.165	ug/L	8492.631
	65	Cu	0.001494	232.490	148.336	ug/L	138.335
	66	Zn	0.012814	292.188	1425.419	ug/L	1347.077
>	165	Ho-1			1637992.283	ug/L	1653008.415
	208	Pb	0.048735	60.213	12683.323	ug/L	11185.834
>	45	Sc-2			453285.496	ug/L	433946.682
	54	Fe	2.815120	173.000	58851.984	ug/L	52661.795
	63	Cu	0.008750	25.805	309.006	ug/L	280.672
	67	Zn	3.205091	59.069	4045.952	ug/L	3074.697
>	165	Ho-2			1637992.283	ug/L	1653008.415
	206	Pb	0.046221	58.564	3224.397	ug/L	2859.849
	207	Pb	0.056310	55.742	2798.637	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		0.214
	Mg	24		0.070
	Al	27		0.132
	K	39		3.490
	Ca	44		6.823
>	Sc-1	45	104.486	
	Fe	57		7.717
	Cu	65		0.149
	Zn	66		1.281
>	Ho-1	165	99.082	
	Pb	208		4.873
>	Sc-2	45	104.486	
	Fe	54		2.815
	Cu	63		0.875
	Zn	67		320.509
>	Ho-2	165	99.082	
	Pb	206		4.622
	Pb	207		5.631

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Zn	67	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WQR
Sample Date/Time: Thursday, April 28, 2005 16:19:02
Autosampler Position: 31
Dataset File: D:\Elandata\Dataset\042805M2\G8WQR.023

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	1567.270361	4.253	6633242.268	ug/L	9414.662
	24	Mg	2224.458048	3.108	8223471.967	ug/L	774.695
	27	Al	11097.726625	1.099	47037147.071	ug/L	3869.229
	39	K	2015.391054	4.059	15803167.260	ug/L	625151.110
	44	Ca	19706.968017	3.203	4968033.964	ug/L	33502.245
>	45	Sc-1			479776.741	ug/L	433946.682
	57	Fe	34462.477144	4.115	10636857.806	ug/L	8492.631
	65	Cu	1050.660587	4.488	2924837.909	ug/L	136.335
	66	Zn	3905.151511	4.340	6060771.722	ug/L	1347.077
>	165	Ho-1			1683741.737	ug/L	1653008.415
	208	Pb	2061.892794	3.543	69709078.248	ug/L	11185.834
>	45	Sc-2			479776.741	ug/L	433946.682
	54	Fe	36004.343246	3.396	25101214.205	ug/L	52661.795
	63	Cu	969.222460	3.741	5676935.051	ug/L	260.672
	67	Zn	3325.506143	5.647	922520.741	ug/L	3074.697
>	165	Ho-2			1683741.737	ug/L	1653008.415
	206	Pb	2035.288601	3.331	17724685.803	ug/L	2859.849
	207	Pb	2006.931070	3.559	14744158.599	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	110.561	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	101.859	
	Pb	208		
>	Sc-2	45	110.561	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	101.859	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WQT
Sample Date/Time: Thursday, April 28, 2005 18:22:14
Autosampler Position: 32
Dataset File: D:\Elandata\Dataset\042805M2\G8WQT.024

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	1030.548317	1.447	4323259.270	ug/L	9414.862
	24	Mg	1288.481901	0.480	3615922.018	ug/L	774.695
	27	Al	5428.934721	2.454	23072027.256	ug/L	3869.229
	39	K	1114.997386	0.811	9079249.627	ug/L	625151.110
	44	Ca	12886.813809	0.822	3213627.665	ug/L	33502.246
>	45	Sc-1			480956.965	ug/L	433946.682
	57	Fe	18231.341397	1.640	5649178.377	ug/L	8492.631
	65	Cu	94248.451653	2.840	263194759.481	ug/L	138.335
	66	Zn	4570.542294	3.185	7115747.411	ug/L	1347.077
>	165	Ho-1			1698232.017	ug/L	1653008.415
	208	Pb	863.137134	2.424	29455597.197	ug/L	11185.834
>	45	Sc-2			480956.965	ug/L	433946.682
	54	Fe	18184.626912	1.524	12743956.916	ug/L	52661.795
	63	Cu	93253.230949	1.709	536800253.596	ug/L	260.672
	67	Zn	3585.576548	0.857	997871.954	ug/L	3074.597
>	165	Ho-2			1698232.017	ug/L	1653008.415
	206	Pb	863.763033	1.852	7592808.935	ug/L	2859.649
	207	Pb	868.881432	2.141	5374369.207	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	110.833	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	102.736	
	Pb	208		
>	Sc-2	45	110.833	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	102.736	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cu	65	H
Cu	63	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WR6
Sample Date/Time: Thursday, April 28, 2005 18:25:25
Autosampler Position: 33
Dataset File: D:\Elandata\Dataset\042805M2\G8WR6.025

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	660.497162	3.891	2750983.107	ug/L	9414.862
	24	Mg	25423.353012	3.151	71807582.683	ug/L	774.695
	27	Al	5250.169968	2.592	22463550.995	ug/L	3869.229
	39	K	933.072096	3.612	7762161.593	ug/L	625151.110
	44	Ca	14307.993396	4.070	3852231.649	ug/L	33502.246
>	45	Sc-1			484293.041	ug/L	433946.682
	57	Fe	25884.124683	2.496	8070733.429	ug/L	8492.631
	65	Cu	525.818474	3.518	1478401.908	ug/L	138.335
	66	Zn	2271.155801	3.292	3560557.024	ug/L	1347.077
>	165	Ho-1			1654423.660	ug/L	1653008.415
	208	Pb	2418.490525	4.957	80267836.217	ug/L	11165.834
>	45	Sc-2			484293.041	ug/L	433946.682
	54	Fe	25909.569389	1.578	18959415.778	ug/L	52661.795
	63	Cu	554.312687	0.805	3213144.454	ug/L	260.672
	67	Zn	1863.974176	3.122	523856.177	ug/L	3074.697
>	165	Ho-2			1654423.660	ug/L	1653008.415
	206	Pb	2307.253804	3.297	19748796.886	ug/L	2859.649
	207	Pb	2437.634284	4.956	17599744.127	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	111.802	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	100.086	
	Pb	208		
>	Sc-2	45	111.802	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	100.086	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G6WTA
Sample Date/Time: Thursday, April 28, 2005 18:28:37
Autosampler Position: 34
Dataset File: D:\Elandata\Dataset\042805M2\G6WTA.026

Sample Result Summary

Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
23	Na	1310.505793	1.665	5624310.302	ug/L	9414.862
24	Mg	1018.881680	0.866	2927135.089	ug/L	774.695
27	Al	5929.891536	2.990	25791778.941	ug/L	3869.229
39	K	1207.820978	4.195	10004030.735	ug/L	625151.110
44	Ca	10521.131655	3.231	2740499.014	ug/L	33502.246
45	Sc-1			492332.226	ug/L	433946.682
57	Fe	16255.889978	4.488	5156867.468	ug/L	8492.631
65	Cu	1247.234470	3.287	3565030.895	ug/L	138.335
66	Zn	13432.806700	3.004	21401784.276	ug/L	1347.077
165	Ho-1			1680676.990	ug/L	1653008.415
206	Pb	1304.297115	0.184	44059931.200	ug/L	11185.834
45	Sc-2			492332.226	ug/L	433946.682
54	Fe	16084.875872	4.540	11542315.556	ug/L	52661.795
63	Cu	1203.110736	4.206	7067687.591	ug/L	280.672
67	Zn	11430.393423	2.365	3248119.380	ug/L	3074.697
165	Ho-2			1680676.990	ug/L	1653008.415
206	Pb	1306.216913	1.223	11356610.854	ug/L	2859.549
207	Pb	1294.638403	1.811	9502944.096	ug/L	2404.894

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Na	23		
Mg	24		
Al	27		
K	39		
Ca	44		
Sc-1	45	113.468	
Fe	57		
Cu	65		
Zn	66		
Ho-1	165	101.674	
Pb	206		
Sc-2	45	113.468	
Fe	54		
Cu	63		
Zn	67		
Ho-2	165	101.674	
Pb	206		
Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WTE
Sample Date/Time: Thursday, April 28, 2005 18:31:50
Autosampler Position: 35
Dataset File: D:\Elandata\Dataset\042805M2\G8WTE.027

Sample Result Summary

Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
23	Na	2848.779894	3.318	11974396.455	ug/L	9414.862
24	Mg	2459.813783	3.782	6926144.540	ug/L	774.695
27	Al	13228.490632	3.464	56401458.512	ug/L	3869.229
39	K	3128.188280	4.702	24301669.731	ug/L	625151.110
44	Ca	26136.039730	3.166	8619656.811	ug/L	33502.246
> 45	Sc-1			482810.105	ug/L	433946.682
57	Fe	43414.832787	2.566	13488469.785	ug/L	8492.631
65	Cu	1484.411013	3.530	4076159.641	ug/L	138.335
66	Zn	3045.112633	3.661	4758117.819	ug/L	1347.077
> 165	Ho-1			1675800.486	ug/L	1653008.415
208	Pb	1811.423780	1.819	60995349.032	ug/L	11185.834
> 45	Sc-2			482810.105	ug/L	433946.682
54	Fe	44141.528626	3.673	30968378.895	ug/L	52661.795
63	Cu	1398.822857	3.716	8080361.922	ug/L	260.672
67	Zn	2495.209136	2.171	698026.625	ug/L	3074.697
> 165	Ho-2			1675800.486	ug/L	1653008.415
206	Pb	1786.534625	2.712	15492474.912	ug/L	2859.649
207	Pb	1784.786127	2.222	13068852.831	ug/L	2404.894

Internal Standard And QC Recoveries

Analyte	Mass	Int Std % Recovery	QC Std % Recovery
Na	23		
Mg	24		
Al	27		
K	39		
Ca	44		
Sc-1	45	111.289	
Fe	57		
Cu	65		
Zn	66		
Ho-1	165	101.379	
Pb	208		
Sc-2	45	111.289	
Fe	54		
Cu	63		
Zn	67		
Ho-2	165	101.379	
Pb	208		
Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WTG
Sample Date/Time: Thursday, April 28, 2005 18:35:03
Autosampler Position: 36
Dataset File: D:\Elandata\Dataset\042805M2\G8WTG.028

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	3914.474173	2.067	16089522.738	ug/L	9414.882
	24	Mg	2375.366615	3.200	6541597.559	ug/L	774.695
	27	Al	13600.262886	2.054	56725657.881	ug/L	3869.229
	39	K	2543.032834	0.936	19454493.375	ug/L	625151.110
	44	Ca	24033.888181	0.636	5957268.789	ug/L	33502.246
>	45	Sc-1			472119.234	ug/L	433946.882
	57	Fe	111563.795603	1.558	33884416.360	ug/L	8492.631
	65	Cu	993.348882	3.825	2722597.020	ug/L	138.335
	66	Zn	3442.937080	3.511	5261142.858	ug/L	1347.077
>	165	Ho-1			1656863.652	ug/L	1653008.415
	208	Pb	2133.482679	0.738	71033490.209	ug/L	11185.834
>	45	Sc-2			472119.234	ug/L	433946.882
	54	Fe	116475.116604	0.691	79129911.900	ug/L	52661.795
	63	Cu	968.762033	2.631	5422635.034	ug/L	260.572
	67	Zn	2888.094557	2.093	789541.159	ug/L	3074.697
>	165	Ho-2			1656863.652	ug/L	1653008.415
	206	Pb	2156.158586	0.943	18490069.092	ug/L	2859.649
	207	Pb	2072.708789	1.432	14995988.337	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	108.797	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	100.221	
	Pb	208		
>	Sc-2	45	108.797	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	100.221	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WTR
Sample Date/Time: Thursday, April 28, 2005 18:38:17
Autosampler Position: 37
Dataset File: D:\Elandata\Dataset\042805M2\G8WTR.029

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	1127.482222	1.887	4706729.643	ug/L	9414.862
	24	Mg	1056.549144	2.665	2950471.902	ug/L	774.695
	27	Al	4793.216259	1.096	20275731.327	ug/L	3869.229
	39	K	880.820536	0.817	7134802.773	ug/L	625151.110
	44	Ca	12039.160557	1.540	3045023.536	ug/L	33502.246
>	45	Sc-1			478780.365	ug/L	433946.682
	57	Fe	38662.097272	2.144	11911186.700	ug/L	8492.631
	65	Cu	9488.332480	3.235	26364678.928	ug/L	138.335
	66	Zn	3373.939216	1.926	5228104.892	ug/L	1347.077
>	165	Ho-1			1675618.612	ug/L	1653008.415
	208	Pb	2641.208793	0.644	88937019.970	ug/L	11185.834
>	45	Sc-2			478780.365	ug/L	433946.682
	54	Fe	40424.208281	2.057	28120942.210	ug/L	52661.795
	63	Cu	9226.522744	1.765	52662070.742	ug/L	260.672
	67	Zn	2735.829095	1.867	758496.944	ug/L	3074.697
>	165	Ho-2			1675618.612	ug/L	1653008.415
	206	Pb	2663.868994	1.185	23019622.359	ug/L	2859.649
	207	Pb	2580.807963	0.823	18686025.211	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	110.332	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	101.368	
	Pb	208		
>	Sc-2	45	110.332	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	101.368	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WTV
Sample Date/Time: Thursday, April 28, 2005 18:41:31
Autosampler Position: 38
Dataset File: D:\Elandata\Dataset\042805M2\G8WTV.030

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	809.643242	4.051	3043519.884	ug/L	9414.862
	24	Mg	840.660168	5.869	2113094.834	ug/L	774.685
	27	Al	4110.358603	1.689	15650850.150	ug/L	3869.229
	39	K	706.644084	3.513	5374467.244	ug/L	625151.110
	44	Ca	6757.977717	3.970	1552256.712	ug/L	33502.248
>	45	Sc-1			430976.936	ug/L	433946.682
	57	Fe	351161.992374	3.913	97318217.370	ug/L	8492.631
	65	Cu	728.767860	2.280	1823309.534	ug/L	138.335
	66	Zn	835.831055	1.861	1166962.290	ug/L	1347.077
>	165	Ho-1			1613126.617	ug/L	1653008.415
	208	Pb	2507.268517	3.071	81230179.942	ug/L	11185.834
>	45	Sc-2			430976.936	ug/L	433946.682
	54	Fe	355335.428852	5.025	222044352.849	ug/L	52661.795
	63	Cu	766.572343	3.207	3952659.501	ug/L	260.872
	67	Zn	736.630046	1.569	186091.835	ug/L	3074.697
>	165	Ho-2			1613126.617	ug/L	1653008.415
	206	Pb	2462.390708	3.670	20545818.413	ug/L	2859.649
	207	Pb	2454.275220	3.094	17278178.251	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	99.316	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	97.587	
	Pb	208		
>	Sc-2	45	99.316	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	97.587	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WTW
Sample Date/Time: Thursday, April 28, 2005 18:44:45
Autosampler Position: 39
Dataset File: D:\Elandata\Dataset\042805M2\G8WTW.031

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	393.929963	2.249	1430952.267	ug/L	9414.662
	24	Mg	655.795436	2.637	1587780.883	ug/L	774.695
	27	Al	3245.446408	1.667	11899596.671	ug/L	3869.229
	39	K	464.882732	1.456	3612593.815	ug/L	625151.110
	44	Ca	5027.518825	3.552	1120146.330	ug/L	33502.246
>	45	Sc-1			414933.331	ug/L	433946.682
	57	Fe	383119.579449	1.170	102247396.174	ug/L	8492.631
	65	Cu	417.685121	1.446	1006346.412	ug/L	138.335
	66	Zn	690.889916	1.144	929014.590	ug/L	1347.077
>	165	Ho-1			1601798.418	ug/L	1653008.415
	208	Pb	3627.438429	1.119	116762177.340	ug/L	11185.834
>	45	Sc-2			414933.331	ug/L	433946.682
	54	Fe	387221.509321	1.656	233071823.160	ug/L	52661.795
	63	Cu	441.879435	1.212	2195088.841	ug/L	260.672
	67	Zn	813.773875	1.655	149774.537	ug/L	3074.697
>	165	Ho-2			1601798.418	ug/L	1653008.415
	206	Pb	3678.797848	1.138	29670277.266	ug/L	2859.649
	207	Pb	3679.192852	1.319	25034813.228	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	95.619	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	96.802	
	Pb	208		
>	Sc-2	45	95.619	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	96.802	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WTX
Sample Date/Time: Thursday, April 28, 2005 18:47:57
Autosampler Position: 40
Dataset File: D:\Elandata\Dataset\042805M2\G8WTX.032

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	286.790649	3.959	1127328.154	ug/L	9414.862
	24	Mg	320.794200	2.114	839163.637	ug/L	774.695
	27	Al	1695.286774	3.295	6712517.063	ug/L	3869.229
	39	K	370.807744	6.203	3242102.287	ug/L	625151.110
	44	Ca	3347.070284	2.147	817033.757	ug/L	33502.246
>	45	Sc-1			448156.131	ug/L	433946.682
	57	Fe	8049.282441	4.690	2327053.075	ug/L	8492.631
	65	Cu	488.848444	2.718	1266450.400	ug/L	138.335
	66	Zn	675.879451	4.119	981027.024	ug/L	1347.077
>	165	Ho-1			1594167.305	ug/L	1653008.415
	208	Pb	2044.218330	1.874	65488586.187	ug/L	11185.834
>	45	Sc-2			448156.131	ug/L	433946.682
	54	Fe	8184.764068	3.256	5358702.255	ug/L	52661.795
	63	Cu	497.121004	3.548	2885189.174	ug/L	260.672
	67	Zn	505.996585	2.141	159961.878	ug/L	3074.697
>	165	Ho-2			1594167.305	ug/L	1653008.415
	206	Pb	2063.038623	1.795	17024743.187	ug/L	2859.649
	207	Pb	1972.801202	1.504	13733675.056	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	103.274	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	96.440	
	Pb	208		
>	Sc-2	45	103.274	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	96.440	
	Pb	208		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Thursday, April 28, 2005 18:51:07
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042805M2\QC Std 1.033

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	1981.999698	1.609	7142156.758	ug/L	9414.862
	24	Mg	1040.525607	4.228	2509871.905	ug/L	774.695
	27	Al	2026.833020	2.900	7407804.561	ug/L	3869.229
	39	K	1974.450230	2.956	13364646.262	ug/L	625151.110
	44	Ca	1038.752504	5.849	255960.823	ug/L	33502.245
>	45	Sc-1			413716.127	ug/L	433846.682
	57	Fe	1982.203626	5.106	535100.650	ug/L	8492.631
	65	Cu	200.801105	5.615	481255.012	ug/L	136.335
	66	Zn	198.981271	3.136	267566.277	ug/L	1347.077
>	165	Ho-1			1543323.978	ug/L	1653008.415
	208	Pb	200.834748	2.641	6238645.845	ug/L	11185.834
>	45	Sc-2			413716.127	ug/L	433846.682
	54	Fe	2092.158654	3.196	1305070.378	ug/L	52661.795
	63	Cu	202.058908	4.002	1000002.798	ug/L	260.672
	67	Zn	193.389752	3.353	49041.535	ug/L	3074.687
>	165	Ho-2			1543323.978	ug/L	1653008.415
	206	Pb	201.218649	2.315	1609403.430	ug/L	2859.649
	207	Pb	201.378688	2.445	1958865.764	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		99.100
	Mg	24		104.053
	Al	27		101.842
	K	39		98.722
	Ca	44		103.975
>	Sc-1	45	95.338	
	Fe	57		99.110
	Cu	65		100.281
	Zn	66		99.491
>	Ho-1	165	93.395	
	Pb	208		100.417
>	Sc-2	45	95.338	
	Fe	54		104.606
	Cu	63		101.029
	Zn	67		99.895
>	Ho-2	165	93.395	
	Pb	206		100.609
	Pb	207		100.899

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Thursday, April 28, 2005 18:55:19
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042805M2\QC Std 2.034

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	0.346773	22.856	10343.849	ug/L	9414.862
	24	Mg	0.089628	45.585	956.043	ug/L	774.695
	27	Al	0.257286	44.573	4683.485	ug/L	3869.229
	39	K	10.791249	2.436	673590.180	ug/L	625151.110
	44	Ca	-10.597689	28.661	29997.771	ug/L	33502.246
>	45	Sc-1			418542.163	ug/L	433946.682
	57	Fe	6.351388	11.689	9901.233	ug/L	8492.631
	65	Cu	0.345049	3.405	972.043	ug/L	138.335
	66	Zn	0.091916	36.896	1423.752	ug/L	1347.077
>	165	Ho-1			1556386.864	ug/L	1653008.415
	208	Pb	0.146040	23.095	15107.948	ug/L	11185.834
>	45	Sc-2			418542.163	ug/L	433946.682
	54	Fe	0.924001	501.614	51354.227	ug/L	52661.795
	63	Cu	0.354472	1.293	2027.164	ug/L	260.672
	67	Zn	3.337957	63.294	3770.875	ug/L	3074.697
>	165	Ho-2			1556388.864	ug/L	1653008.415
	206	Pb	0.148961	25.798	3894.573	ug/L	2859.649
	207	Pb	0.146176	22.552	3259.739	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		0.347
	Mg	24		0.090
	Al	27		0.257
	K	39		10.791
	Ca	44		-10.598
>	Sc-1	45	96.469	
	Fe	57		6.351
	Cu	65		34.505
	Zn	66		9.192
>	Ho-1	165	94.156	
	Pb	208		14.604
>	Sc-2	45	96.450	
	Fe	54		9.924
	Cu	63		35.447
	Zn	67		333.796
>	Ho-2	165	94.155	
	Pb	206		14.896
	Pb	207		14.618

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Zn	67	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WT0
Sample Date/Time: Thursday, April 28, 2005 18:59:27
Autosampler Position: 41
Dataset File: D:\Elandata\Dataset\042805M2\G8WT0.035

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌈	23	Na	227.770372	2.334	924256.677	ug/L	9414.882
|	24	Mg	284.685096	1.922	713063.457	ug/L	774.895
|	27	Al	1077.919207	1.155	4396744.311	ug/L	3869.229
|	39	K	228.927344	4.940	2315366.085	ug/L	625151.110
|	44	Ca	5077.403829	2.124	1257891.290	ug/L	33502.246
|>	45	Sc-1			461489.812	ug/L	433946.682
|	57	Fe	6287.691084	4.704	1873877.311	ug/L	8492.631
|	65	Cu	286.390857	2.209	767253.573	ug/L	138.335
⌊	66	Zn	346.071777	1.371	518212.232	ug/L	1347.077
⌈>	165	Ho-1			1645497.808	ug/L	1653008.415
⌊	208	Pb	2476.979666	1.656	81909280.477	ug/L	11185.834
⌈>	45	Sc-2			461489.812	ug/L	433946.682
|	54	Fe	6520.606742	3.906	4417829.693	ug/L	52661.795
|	63	Cu	287.327733	1.749	1586900.477	ug/L	260.672
⌊	67	Zn	302.493270	3.726	83715.443	ug/L	3074.697
⌈>	166	Ho-2			1645497.808	ug/L	1653008.415
|	206	Pb	2505.919655	0.793	21343620.222	ug/L	2859.649
⌊	207	Pb	2398.274061	1.834	17233341.712	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Na	23		
|	Mg	24		
|	Al	27		
|	K	39		
|	Ca	44		
|>	Sc-1	45	106.347	
|	Fe	57		
|	Cu	65		
⌊	Zn	66		
⌈>	Ho-1	165	99.648	
⌊	Pb	208		
⌈>	Sc-2	45	106.347	
|	Fe	54		
|	Cu	63		
⌊	Zn	67		
⌈>	Ho-2	166	99.548	
|	Pb	206		
⌊	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WT1
Sample Date/Time: Thursday, April 28, 2005 19:02:35
Autosampler Position: 42
Dataset File: D:\Elandata\Dataset\042805M2\G8WT1.036

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	3145.890965	4.030	12512955.218	ug/L	9414.862
	24	Mg	2577.032922	3.326	6867579.187	ug/L	774.695
	27	Al	13491.122243	4.270	54435826.488	ug/L	3869.229
	39	K	2852.694586	4.213	21033802.871	ug/L	625151.110
	44	Ca	23290.928822	3.515	5586846.884	ug/L	33502.246
>	45	Sc-1			457061.369	ug/L	433946.682
	57	Fe	76078.796855	4.142	22358553.005	ug/L	8492.631
	65	Cu	884.823232	5.317	2345996.802	ug/L	138.335
	66	Zn	6140.043205	5.466	9074532.268	ug/L	1347.077
>	165	Ho-1			1647991.803	ug/L	1653008.415
	208	Pb	1628.833446	4.128	5392464.700	ug/L	11185.834
>	45	Sc-2			457061.359	ug/L	433946.682
	54	Fe	76338.959121	3.374	50640350.051	ug/L	52661.795
	63	Cu	843.071573	4.269	4606386.406	ug/L	260.672
	67	Zn	5149.578477	3.157	1359738.261	ug/L	3074.697
>	165	Ho-2			1647991.803	ug/L	1653008.415
	206	Pb	1896.529841	3.563	13605929.065	ug/L	2859.649
	207	Pb	1621.789492	4.490	11666950.820	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	105.327	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	99.697	
	Pb	208		
>	Sc-2	45	105.327	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	99.697	
	Pb	208		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817C
Sample Date/Time: Thursday, April 28, 2005 19:05:44
Autosampler Position: 43
Dataset File: D:\Elandata\Dataset\042805M2\G817C.037

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	878.081127	3.157	3674529.268	ug/L	9414.862
	24	Mg	633.047716	0.559	1772201.283	ug/L	774.695
	27	Al	3814.636093	0.343	14886491.751	ug/L	3869.229
	39	K	724.993457	0.941	6129111.032	ug/L	625151.110
	44	Ca	5285.207733	1.922	1359804.721	ug/L	33502.246
>	45	Sc-1			479675.628	ug/L	433946.682
	57	Fe	11119.231482	0.819	3439868.557	ug/L	8492.631
	65	Cu	431.365176	1.773	1201530.651	ug/L	138.335
	66	Zn	906.173263	1.814	1408118.434	ug/L	1347.077
>	165	Ho-1			1658902.872	ug/L	1653008.415
	208	Pb	545.503195	2.036	18225770.586	ug/L	11185.834
>	45	Sc-2			479675.628	ug/L	433946.682
	54	Fe	11116.730575	0.212	7792338.668	ug/L	52661.795
	63	Cu	431.375882	1.808	2477027.836	ug/L	260.672
	67	Zn	792.672220	2.308	222626.091	ug/L	3074.697
>	165	Ho-2			1658902.872	ug/L	1653008.415
	206	Pb	540.317915	1.657	4841280.853	ug/L	2859.649
	207	Pb	539.813049	1.905	3910560.382	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	110.538	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	100.367	
	Pb	208		
>	Sc-2	45	110.538	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	100.367	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817CS
Sample Date/Time: Thursday, April 28, 2005 19:08:53
Autosampler Position: 44
Dataset File: D:\Elandata\Dataset\042805M2\G817CS.038

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	1828.173446	0.772	7634449.903	ug/L	9414.862
	24	Mg	1087.509471	1.857	3041227.064	ug/L	774.695
	27	Al	7583.513068	0.506	32113989.083	ug/L	3869.229
	39	K	1141.922066	1.821	9248779.382	ug/L	625151.110
	44	Ca	5996.708057	1.850	1536430.144	ug/L	33502.246
>	45	Sc-1			479242.107	ug/L	433946.682
	57	Fe	12682.326780	1.972	3891264.455	ug/L	8492.631
	65	Cu	344.624173	1.991	959147.696	ug/L	138.335
	66	Zn	686.551646	1.019	1064848.948	ug/L	1347.077
>	165	Ho-1			1690820.629	ug/L	1653008.415
	208	Pb	362.678337	2.209	12331626.602	ug/L	11185.834
>	45	Sc-2			479242.107	ug/L	433946.682
	54	Fe	12674.377348	2.525	8799650.494	ug/L	52661.795
	63	Cu	330.342333	1.007	1895206.020	ug/L	260.572
	67	Zn	603.802171	0.699	170265.740	ug/L	3074.697
>	165	Ho-2			1690820.629	ug/L	1653008.415
	206	Pb	368.847717	1.788	3160172.615	ug/L	2859.849
	207	Pb	362.522048	1.959	2878569.562	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	110.438	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	102.287	
	Pb	208		
>	Sc-2	45	110.438	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	102.287	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817CD
Sample Date/Time: Thursday, April 28, 2005 19:12:46
Autosampler Position: 45
Dataset File: D:\Elandata\Dataset\042805M2\G817CD.039

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	1109.382919	3.105	4673640.895	ug/L	9414.862
	24	Mg	967.776354	3.458	2727876.898	ug/L	774.695
	27	Al	3560.984638	4.584	15197727.905	ug/L	3869.229
	39	K	1066.136901	3.569	9674335.717	ug/L	625151.110
	44	Ca	4464.787336	3.077	1160240.175	ug/L	33502.246
>	45	Sc-1			483320.039	ug/L	433946.682
	57	Fe	14962.178347	2.967	4656803.317	ug/L	8492.631
	65	Cu	466.694724	2.256	1278544.362	ug/L	138.335
	66	Zn	5626.138419	4.562	5794266.236	ug/L	1347.077
>	165	Ho-1			1666971.537	ug/L	1653008.415
	208	Pb	852.803257	1.280	28574445.354	ug/L	11185.834
>	45	Sc-2			483320.039	ug/L	433946.682
	54	Fe	15172.987240	5.261	10686185.424	ug/L	52661.795
	63	Cu	466.551549	3.385	2691996.372	ug/L	260.672
	67	Zn	4606.358640	5.049	1286694.123	ug/L	3074.697
>	165	Ho-2			1666971.537	ug/L	1653008.415
	206	Pb	857.782061	1.518	7402640.897	ug/L	2859.549
	207	Pb	836.440625	3.086	6089714.002	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	111.378	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	100.846	
	Pb	208		
>	Sc-2	45	111.378	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	100.846	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817D
Sample Date/Time: Thursday, April 28, 2005 19:15:56
Autosampler Position: 46
Dataset File: D:\Elandata\Dataset\042805M2\G817D.040

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	3924.430160	1.578	15848491.547	ug/L	9414.862
	24	Mg	3721.200121	2.813	10069348.534	ug/L	774.695
	27	Al	15732.308222	0.781	64470058.569	ug/L	3869.229
	39	K	3573.879796	0.975	26589969.152	ug/L	625151.110
	44	Ca	29916.644826	1.510	7276405.983	ug/L	33502.246
>	45	Sc-1			453800.178	ug/L	433946.662
	57	Fe	53037.862866	1.527	15831314.486	ug/L	8492.831
	65	Cu	1911.606560	0.789	5148392.341	ug/L	138.335
	66	Zn	5241.758307	0.945	7870116.389	ug/L	1347.077
>	165	Ho-1			1637638.609	ug/L	1653008.415
	208	Pb	1838.217908	1.172	60493659.254	ug/L	11185.834
>	45	Sc-2			453800.178	ug/L	433946.662
	54	Fe	54247.558604	1.853	36550481.294	ug/L	52661.795
	63	Cu	1850.241016	1.405	10271327.492	ug/L	260.672
	67	Zn	4310.667931	1.577	1156198.865	ug/L	3074.697
>	165	Ho-2			1637638.609	ug/L	1653008.415
	206	Pb	1828.610374	2.320	15498246.057	ug/L	2859.849
	207	Pb	1811.887062	1.991	12956925.527	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	104.589	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	99.070	
	Pb	208		
>	Sc-2	45	104.589	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	99.070	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817E
Sample Date/Time: Thursday, April 28, 2005 19:19:06
Autosampler Position: 47
Dataset File: D:\Elandata\Dataset\042805M2\G817E.041

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
⌈	23	Na	899.185457	1.849	3544775.939	ug/L	9414.862
|	24	Mg	1184.638689	0.299	3123153.157	ug/L	774.695
|	27	Al	7601.061058	0.363	30344816.628	ug/L	3869.229
|	39	K	977.899398	2.280	7560193.538	ug/L	625151.110
|	44	Ca	15967.510143	1.560	3799332.559	ug/L	33502.246
|>	45	Sc-1			451805.437	ug/L	433946.682
|	57	Fe	93267.175621	0.940	27109528.277	ug/L	8492.631
|	65	Cu	386.412521	2.255	1013679.452	ug/L	138.335
⌊	66	Zn	1732.467280	1.242	2634791.350	ug/L	1347.077
⌈>	165	Ho-1			1663883.716	ug/L	1653008.415
⌊	208	Pb	2333.885821	2.197	76001830.360	ug/L	11185.834
⌈>	45	Sc-2			451805.437	ug/L	433946.682
|	54	Fe	93763.302823	1.942	61501207.324	ug/L	52661.795
|	63	Cu	399.085432	1.257	2158371.536	ug/L	260.672
⌊	67	Zn	1479.731282	1.019	388724.761	ug/L	3074.697
⌈>	165	Ho-2			1663883.716	ug/L	1653008.415
|	206	Pb	2280.214326	2.102	19633241.499	ug/L	2859.649
⌊	207	Pb	2327.918589	2.536	16909488.699	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
⌈	Na	23		
|	Mg	24		
|	Al	27		
|	K	39		
⌊	Ca	44		
|>	Sc-1	45	104.115	
|	Fe	57		
|	Cu	65		
⌊	Zn	66		
⌈>	Ho-1	165	100.668	
⌊	Pb	208		
⌈>	Sc-2	45	104.115	
|	Fe	54		
|	Cu	63		
⌊	Zn	67		
⌈>	Ho-2	165	100.668	
|	Pb	206		
⌊	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817F
Sample Date/Time: Thursday, April 28, 2005 19:22:17
Autosampler Position: 48
Dataset File: D:\Elandata\Dataset\042805M2\G817F.042

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	934.491483	4.611	3564922.333	ug/L	9414.862
	24	Mg	1806.972967	3.598	4100063.228	ug/L	774.695
	27	Al	9117.483207	4.462	35225473.188	ug/L	3869.229
	39	K	990.110434	5.367	7399948.144	ug/L	625151.110
	44	Ca	14096.051494	3.097	3250118.560	ug/L	33502.246
>	45	Sc-1			437338.114	ug/L	433946.682
	57	Fe	216492.569528	4.319	60884806.229	ug/L	8492.631
	65	Cu	1228.132097	1.959	3118789.012	ug/L	138.335
	66	Zn	1192.312433	1.646	1688679.211	ug/L	1347.077
>	165	Ho-1			1627890.560	ug/L	1653008.415
	208	Pb	2788.736998	2.148	91222476.851	ug/L	11185.834
>	45	Sc-2			437338.114	ug/L	433946.682
	54	Fe	213765.079193	0.701	135850741.761	ug/L	52661.795
	63	Cu	1191.581852	1.430	6237212.611	ug/L	260.672
	67	Zn	1101.180672	0.921	280797.585	ug/L	3074.697
>	165	Ho-2			1627890.560	ug/L	1653008.415
	206	Pb	2771.249369	1.391	23349048.697	ug/L	2859.649
	207	Pb	2717.842091	2.685	19316507.451	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	100.782	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	98.489	
	Pb	208		
>	Sc-2	45	100.782	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	98.489	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G817G
Sample Date/Time: Thursday, April 28, 2005 19:25:29
Autosampler Position: 49
Dataset File: D:\Elandata\Dataset\042805M2\G817G.043

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	2887.052090	0.340	11069501.648	ug/L	9414.862
	24	Mg	2787.110045	2.866	7158370.261	ug/L	774.695
	27	Al	13044.636432	2.443	50725525.829	ug/L	3869.229
	39	K	1797.121971	2.807	13002589.129	ug/L	625151.110
	44	Ca	109618.886170	2.014	25214138.849	ug/L	33502.246
>	45	Sc-1			440228.793	ug/L	433946.682
	57	Fe	85264.842213	3.221	24143264.921	ug/L	8492.631
	65	Cu	2170.076521	2.332	5545965.965	ug/L	138.336
	66	Zn	2171.855897	0.682	3095736.234	ug/L	1347.077
>	165	Ho-1			1597627.761	ug/L	1653006.415
	208	Pb	1671.019795	2.351	50434491.328	ug/L	11185.834
>	45	Sc-2			440228.793	ug/L	433946.682
	54	Fe	87144.576914	2.424	55685154.866	ug/L	52661.795
	63	Cu	2108.545972	3.544	11106034.232	ug/L	260.672
	67	Zn	1886.790479	3.592	481926.960	ug/L	3074.697
>	165	Ho-2			1597627.761	ug/L	1653006.415
	206	Pb	1567.972177	2.579	12881930.180	ug/L	2859.849
	207	Pb	1645.087542	2.756	10777958.906	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	101.448	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	96.680	
	Pb	208		
>	Sc-2	45	101.448	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	96.680	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WQT
Sample Date/Time: Thursday, April 28, 2005 19:28:41
Autosampler Position: 50
Dataset File: D:\Elandata\Dataset\042805M2\G8WQT.044

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	397.146545	2.615	1656341.569	ug/L	9414.862
	24	Mg	495.826917	3.798	1378235.829	ug/L	774.695
	27	Al	2116.761990	5.528	8906615.718	ug/L	3869.229
	39	K	445.681148	4.182	4005242.498	ug/L	625151.110
	44	Ca	4744.244063	4.639	1215454.336	ug/L	33502.246
>	45	Sc-1			476531.877	ug/L	433946.682
	57	Fe	7110.143373	4.599	2186731.197	ug/L	8492.631
	65	Cu	36608.787184	3.237	101237945.370	ug/L	136.335
	66	Zn	1769.284832	4.360	2728190.425	ug/L	1347.077
>	165	Ho-1			1697465.563	ug/L	1653008.415
	208	Pb	337.781852	3.212	11528880.489	ug/L	11185.834
>	45	Sc-2			476531.877	ug/L	433946.682
	54	Fe	7338.631081	4.790	5125868.530	ug/L	52861.795
	63	Cu	35297.589567	3.524	201190109.540	ug/L	260.672
	67	Zn	1430.265027	4.215	396107.990	ug/L	3074.697
>	165	Ho-2			1697465.563	ug/L	1653008.415
	208	Pb	338.188484	2.836	2973243.485	ug/L	2859.649
	207	Pb	334.973687	2.906	2484808.836	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	109.813	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	102.689	
	Pb	208		
>	Sc-2	45	109.813	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	102.689	
	Pb	208		
	Pb	207		

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Cu	65	H
Cu	63	H

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Thursday, April 28, 2005 19:31:54
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042805M2\QC Std 1.045

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	1899.688096	2.977	7583633.208	ug/L	9414.862
	24	Mg	994.210377	2.128	2658777.684	ug/L	774.695
	27	Al	1976.145768	1.985	8004214.986	ug/L	3869.229
	39	K	1938.908462	3.282	14551952.614	ug/L	625151.110
	44	Ca	1005.186296	3.791	276397.742	ug/L	33502.246
>	45	Sc-1			458316.753	ug/L	433946.682
	57	Fe	1897.705739	0.844	568371.649	ug/L	8492.631
	65	Cu	192.480996	2.895	512160.781	ug/L	138.335
	66	Zn	191.736367	2.465	285830.338	ug/L	1347.077
>	165	Ho-1			1649118.942	ug/L	1653008.415
	208	Pb	196.892757	2.629	6534082.142	ug/L	11185.834
>	45	Sc-2			458316.753	ug/L	433946.682
	54	Fe	2023.095460	0.763	1400565.704	ug/L	52661.795
	63	Cu	195.063098	1.611	1070157.506	ug/L	260.672
	67	Zn	186.187521	1.657	52460.388	ug/L	3074.597
>	165	Ho-2			1649118.942	ug/L	1653008.415
	206	Pb	195.394292	2.517	1670144.307	ug/L	2859.649
	207	Pb	199.847318	2.155	1441910.926	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		94.984
	Mg	24		99.421
	Al	27		98.897
	K	39		96.946
	Ca	44		100.519
>	Sc-1	45	105.616	
	Fe	57		94.886
	Cu	65		96.228
	Zn	66		95.899
>	Ho-1	165	99.795	
	Pb	208		98.446
>	Sc-2	45	105.616	
	Fe	54		101.188
	Cu	63		97.832
	Zn	67		93.994
>	Ho-2	165	99.795	
	Pb	206		97.887
	Pb	207		99.974

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Thursday, April 28, 2005 19:36:06
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042805M2\QC Std 2.046

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	0.395871	23.828	11316.595	ug/L	9414.862
	24	Mg	0.061764	40.997	1018.047	ug/L	774.695
	27	Al	0.249906	16.955	5009.596	ug/L	3869.229
	39	K	2.447572	57.962	665778.234	ug/L	625151.110
	44	Ca	-8.857397	15.254	32726.443	ug/L	33502.246
>	45	Sc-1			450235.146	ug/L	433946.682
	57	Fe	2.037591	26.550	9401.294	ug/L	8492.631
	65	Cu	0.312223	8.145	959.375	ug/L	138.335
	66	Zn	0.091506	11.663	1531.097	ug/L	1347.077
>	165	Ho-1			1639052.139	ug/L	1653008.415
	208	Pb	0.056168	64.123	12942.441	ug/L	11185.834
>	45	Sc-2			450235.146	ug/L	433946.682
	54	Fe	2.791160	137.619	56450.777	ug/L	52681.795
	63	Cu	0.325108	9.269	2021.497	ug/L	260.672
	67	Zn	2.352778	73.052	3803.883	ug/L	3074.697
>	165	Ho-2			1639052.139	ug/L	1653008.415
	206	Pb	0.052449	72.846	3280.745	ug/L	2859.649
	207	Pb	0.057814	68.510	2798.637	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		0.396
	Mg	24		0.062
	Al	27		0.250
	K	39		2.448
	Ca	44		-8.857
>	Sc-1	45	103.764	
	Fe	57		2.038
	Cu	65		31.222
	Zn	66		9.151
>	Ho-1	165	99.158	
	Pb	208		5.617
>	Sc-2	45	103.764	
	Fe	54		2.791
	Cu	63		32.511
	Zn	67		235.278
>	Ho-2	165	99.158	
	Pb	206		5.245
	Pb	207		5.781

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Zn	67	Q

QUANTITATIVE ANALYSIS REPORT

Sample ID: G8WQT
Sample Date/Time: Thursday, April 28, 2005 19:40:16
Autosampler Position: 51
Dataset File: D:\Elandata\Dataset\042805M2\G8WQT.047

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	106.339966	3.214	460547.749	ug/L	9414.862
	24	Mg	136.314682	4.732	384700.442	ug/L	774.685
	27	Al	636.986011	2.806	2311609.047	ug/L	3869.229
	39	K	116.142918	3.912	1583961.136	ug/L	625151.110
	44	Ca	1233.496428	2.338	350623.618	ug/L	33502.246
>	45	Sc-1			486443.933	ug/L	433946.682
	57	Fe	1776.418355	1.351	565400.744	ug/L	8492.631
	65	Cu	8994.884619	2.689	25401620.386	ug/L	138.335
	66	Zn	413.299365	1.059	652208.065	ug/L	1347.077
>	165	Ho-1			1677722.214	ug/L	1653008.415
	208	Pb	88.202108	1.093	2984724.040	ug/L	11185.834
>	45	Sc-2			486443.933	ug/L	433946.682
	54	Fe	1887.318457	1.276	1390858.476	ug/L	52661.795
	63	Cu	8773.119019	2.065	51089161.161	ug/L	260.672
	67	Zn	367.422023	1.774	103699.775	ug/L	3074.697
>	165	Ho-2			1677722.214	ug/L	1653008.415
	206	Pb	86.838831	1.824	756857.933	ug/L	2859.649
	207	Pb	88.807933	1.544	852991.506	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
>	Sc-1	45	112.068	
	Fe	57		
	Cu	65		
	Zn	66		
>	Ho-1	165	101.486	
	Pb	208		
>	Sc-2	45	112.068	
	Fe	54		
	Cu	63		
	Zn	67		
>	Ho-2	165	101.486	
	Pb	206		
	Pb	207		

QC Out Of Limits

Analyte Mass Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 1
Sample Date/Time: Thursday, April 28, 2005 19:43:30
Autosampler Position: 7
Dataset File: D:\Elandata\Dataset\042805M2\QC Std 1.048

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	1983.381184	1.355	7748490.657	ug/L	9414.862
	24	Mg	1022.100855	1.241	2874370.121	ug/L	774.695
	27	Al	2045.258451	1.344	8106520.048	ug/L	3869.229
	39	K	2001.785762	2.361	14882142.504	ug/L	625151.110
	44	Ca	1947.279890	2.744	279676.399	ug/L	33502.246
>	45	Sc-1			448379.384	ug/L	433946.682
	57	Fe	1970.963219	2.244	577205.380	ug/L	8492.631
	65	Cu	200.221615	1.655	521464.263	ug/L	138.335
	66	Zn	195.747263	2.000	285462.076	ug/L	1347.077
>	165	Ho-1			1621461.370	ug/L	1653008.415
	208	Pb	196.567771	2.156	6413607.588	ug/L	11185.834
>	45	Sc-2			448379.384	ug/L	433946.682
	54	Fe	2051.861641	1.330	1388828.572	ug/L	52661.795
	63	Cu	199.611251	0.728	1071488.977	ug/L	260.672
	67	Zn	191.082715	0.857	52584.800	ug/L	3074.697
>	165	Ho-2			1621461.370	ug/L	1653008.415
	206	Pb	196.407800	1.747	1567378.976	ug/L	2859.649
	207	Pb	196.328919	2.480	1406018.869	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		99.169
	Mg	24		102.210
	Al	27		102.263
	K	39		100.698
	Ca	44		104.726
>	Sc-1	45	103.326	
	Fe	57		98.548
	Cu	65		100.111
	Zn	66		97.674
>	Ho-1	165	98.082	
	Pb	208		98.284
>	Sc-2	45	103.326	
	Fe	54		102.593
	Cu	63		99.896
	Zn	67		96.841
>	Ho-2	165	98.082	
	Pb	206		98.204
	Pb	207		98.184

QC Out Of Limits

Analyte	Mass	Out of Limits Message

QUANTITATIVE ANALYSIS REPORT

Sample ID: QC Std 2
Sample Date/Time: Thursday, April 28, 2005 19:47:41
Autosampler Position: 1
Dataset File: D:\Elandata\Dataset\042805M2\QC Std 2.049

Sample Result Summary

	Mass	Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	23	Na	0.269214	43.196	11038.376	ug/L	9414.862
	24	Mg	0.109406	34.395	1112.721	ug/L	774.695
	27	Al	0.254817	29.652	5127.639	ug/L	3869.229
	39	K	1.046271	184.019	669136.783	ug/L	625151.110
	44	Ca	-8.872311	39.852	33813.985	ug/L	33602.246
>	45	Sc-1			459365.246	ug/L	433946.682
	57	Fe	2.311680	32.991	9875.487	ug/L	8492.631
	65	Cu	0.256365	3.008	830.032	ug/L	138.335
	66	Zn	0.857149	56.139	1511.429	ug/L	1347.077
>	165	Ho-1			1637659.560	ug/L	1653008.415
	208	Pb	-0.008624	582.466	10785.388	ug/L	11185.834
>	45	Sc-2			459365.246	ug/L	433946.682
	54	Fe	4.728482	113.608	58896.492	ug/L	52661.796
	63	Cu	0.267807	9.039	1747.791	ug/L	260.672
	67	Zn	2.361040	61.402	3882.237	ug/L	3074.697
>	165	Ho-2			1637659.560	ug/L	1653008.415
	206	Pb	-0.004519	1237.051	2790.638	ug/L	2859.649
	207	Pb	-0.011380	388.005	2298.210	ug/L	2404.894

Internal Standard And QC Recoveries

	Analyte	Mass	Int Std % Recovery	QC Std % Recovery
	Na	23		0.269
	Mg	24		0.109
	Al	27		0.255
	K	39		1.046
	Ca	44		-8.872
>	Sc-1	45	106.556	
	Fe	57		2.312
	Cu	65		25.637
	Zn	66		5.715
>	Ho-1	165	99.071	
	Pb	208		-0.862
>	Sc-2	45	106.556	
	Fe	54		4.728
	Cu	63		26.781
	Zn	67		236.104
>	Ho-2	165	99.071	
	Pb	206		-0.451
	Pb	207		-1.138

QC Out Of Limits

Analyte	Mass	Out of Limits Message
Zn	67	Q

METALS MISCELLANEOUS DATA

SEVERN TRENT **STL** Metals Prep Report for Batch # 5115187

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Prep Method: SW-846 6020, Soil 2% **SOP Number:** STL-IP-0013, Rev 6

Extraction Code: GK **Extraction:** TOTAL **Matrix:** SOLID **Prep Date:** 4/27/2005

Standard Log Ref#: MET-04/05-SOIL

Lot ID	Work Order #	Initial Wt/Vol	Final Volume	Lab Filtered	Due Date	Sample Location	Target List
F5D210354-001	G8WP7	0.50 g	50 mL	☐	05/09/2005	A68	AG 2 AS 2 BA 20 BE 1 CD 2.5 CO 5 CR 5 CU 5 MN 10 NI 2 PB 3 SB 2 SE 2 TL 1 V 5
F5D210354-001D	G8WP7D	0.50 g	50 mL	☐		A68	
F5D210354-001S	G8WP7S	0.50 g	50 mL	☐		A68	
F5D210354-002	G8WQL	0.50 g	50 mL	☐	05/09/2005	A67	
F5D210354-003	G8WQN	0.50 g	50 mL	☐	05/09/2005	A67	
F5D210354-004	G8WQR	0.50 g	50 mL	☐	05/09/2005	A54	
F5D210354-005	G8WQT	0.50 g	50 mL	☐	05/09/2005	A54	
F5D210354-007	G8WR6	0.50 g	50 mL	☐	05/09/2005	A54	
F5D210354-008	G8WTA	0.50 g	50 mL	☐	05/09/2005	A54	
F5D210354-009	G8WTE	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-010	G8WTG	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-011	G8WTR	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-013	G8WTV	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-014	G8WTW	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-015	G8WTX	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-016	G8WT0	0.50 g	50 mL	☐	05/09/2005	A44	
F5D210354-017	G8WT1	0.50 g	50 mL	☐	05/09/2005	A44	
F5D220357-001	G817C	0.50 g	50 mL	☐	05/04/2005	A57	

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.16, updated 2/7/2005

F5D220357-001D	G817CD	[redacted]	0.50 g	50 mL	☐		A57
F5D220357-001S	G817CS	[redacted]	0.50 g	50 mL	☐		A57
F5D220357-002	G817D	[redacted]	0.50 g	50 mL	☐	05/04/2005	A57
F5D220357-003	G817E	[redacted]	0.50 g	50 mL	☐	05/04/2005	A57
F5D220357-004	G817F	[redacted]	0.50 g	50 mL	☐	05/04/2005	A88
F5D220357-005	G817G	[redacted]	0.50 g	50 mL	☐	05/04/2005	A88
F5D250000-187B	G84MFB	[redacted]	0.50 g	50 mL	☐		
F5D250000-187C	G84MFC	[redacted]	0.50 g	50 mL	☐		

Comments:

Chemical Lot Information

Chemical	Lot Number
Hydrochloric Acid	4104090
Hydrochloric Acid	A50478
Nitric Acid	1104100

Custody Information

Relinquished By: WL

Review/Received By: R

Date of Transfer: 4-27-05

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.16, updated 2/7/2005

METALS SAMPLE AND QC SUMMARY RESULTS

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WP7 **Client ID:** RE73-05-58824

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119194

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.23	10.0	0.23	U	1	CVAA	5/2/05	10:34

Comments: Lot #: F5D210354 Sample #: 1

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WQL **Client ID:** RE73-05-58825

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119194

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.23	10.0	0.23	U	1	CVAA	5/2/05	10:46

Comments: Lot #: F5D210354 Sample #: 2

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WQN **Client ID:** RE73-05-58826

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119194

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.23	10.0	0.23	U	1	CVAA	5/2/05	10:48

Comments: Lot #: F5D210354 Sample #: 3

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WQR **Client ID:** RE73-05-58827

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119194

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.23	10.0	0.23	U	1	CVAA	5/2/05	10:50

Comments: Lot #: F5D210354 Sample #: 4

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WQT **Client ID:** RE73-05-58828

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119194

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.23	10.0	0.23	U	1	CVAA	5/2/05	10:52

Comments: Lot #: F5D210354 Sample #: 5

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WR6 **Client ID:** RE73-05-58830

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119194

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.23	10.0	0.23	U	1	CVAA	5/2/05	10:54

Comments: Lot #: F5D210354 Sample #: 7

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WT0 **Client ID:** RE73-05-58839

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119194

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.23	10.0	0.23	U	1	CVAA	5/2/05	11:16

Comments: Lot #: F5D210354 Sample #: 16

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WT1 **Client ID:** RE73-05-58840

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119194

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.23	10.0	0.23	U	1	CVAA	5/2/05	11:18

Comments: Lot #: F5D210354 Sample #: 17

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTA **Client ID:** RE73-05-58831

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119194

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.23	10.0	0.23	U	1	CVAA	5/2/05	10:57

Comments: Lot #: F5D210354 Sample #: 8

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTE **Client ID:** RE73-05-58832

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119194

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.23	10.0	0.23	U	1	CVAA	5/2/05	10:59

Comments: Lot #: F5D210354 Sample #: 9

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTG **Client ID:** RE73-05-58833

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119194

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.23	10.0	0.23	U	1	CVAA	5/2/05	11:05

Comments: Lot #: F5D210354 Sample #: 10

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTR **Client ID:** RE73-05-58834

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119194

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.23	10.0	0.23	U	1	CVAA	5/2/05	11:08

Comments: Lot #: F5D210354 Sample #: 11

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTV **Client ID:** RE73-05-58836

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119194

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.23	10.0	0.23	U	1	CVAA	5/2/05	11:10

Comments: Lot #: F5D210354 Sample #: 13

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTW **Client ID:** RE73-05-58837

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119194

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.23	10.0	0.23	U	1	CVAA	5/2/05	11:12

Comments: Lot #: F5D210354 Sample #: 14

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTX **Client ID:** RE73-05-58838

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119194

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.23	10.0	0.23	U	1	CVAA	5/2/05	11:14

Comments: Lot #: F5D210354 Sample #: 15

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WP7 **Client ID:** RE73-05-58824

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119272

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	154	500	154	U	1	ICPST	5/5/05	19:49
Barium	**493.41**	**2.0**	**500**	**884**		**1**	**ICPST**	**5/5/05**	**19:49**
Cadmium	**226.50**	**5.4**	**25.0**	**180**		**1**	**ICPST**	**5/5/05**	**19:49**
Chromium	267.76	11.9	50.0	11.9	U	1	ICPST	5/5/05	19:49
Lead	**220.35**	**112**	**250**	**3140**	**N**	**1**	**ICPST**	**5/5/05**	**19:49**
Selenium	196.03	184	500	184	U	1	ICPST	5/5/05	19:49
Silver	328.07	13.8	50.0	13.8	U	1	ICPST	5/5/05	19:49
Zinc	**213.86**	**7.4**	**100**	**37400**	**N**	**1**	**ICPST**	**5/5/05**	**19:49**

Comments: Lot #: F5D210354 Sample #: 1

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WQL **Client ID:** RE73-05-58825

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119272

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	154	500	154	U	1	ICPST	5/5/05	20:06
Barium	**493.41**	**2.0**	**500**	**1650**		**1**	**ICPST**	**5/5/05**	**20:06**
Cadmium	**226.50**	**5.4**	**25.0**	**91.2**		**1**	**ICPST**	**5/5/05**	**20:06**
Chromium	267.76	11.9	50.0	11.9	U	1	ICPST	5/5/05	20:06
Lead	**220.35**	**112**	**250**	**786**	**N**	**1**	**ICPST**	**5/5/05**	**20:06**
Selenium	196.03	184	500	184	U	1	ICPST	5/5/05	20:06
Silver	328.07	13.8	50.0	13.8	U	1	ICPST	5/5/05	20:06
Zinc	**213.86**	**7.4**	**100**	**19400**	**N**	**1**	**ICPST**	**5/5/05**	**20:06**

Comments: Lot #: F5D210354 Sample #: 2

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WQN **Client ID:** RE73-05-58826

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119272

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	154	500	154	U	1	ICPST	5/5/05	20:10
Barium	**493.41**	**2.0**	**500**	**1440**		**1**	**ICPST**	**5/5/05**	**20:10**
Cadmium	**226.50**	**5.4**	**25.0**	**105**		**1**	**ICPST**	**5/5/05**	**20:10**
Chromium	267.76	11.9	50.0	11.9	U	1	ICPST	5/5/05	20:10
Lead	**220.35**	**112**	**250**	**2390**	**N**	**1**	**ICPST**	**5/5/05**	**20:10**
Selenium	196.03	184	500	184	U	1	ICPST	5/5/05	20:10
Silver	328.07	13.8	50.0	13.8	U	1	ICPST	5/5/05	20:10
Zinc	**213.86**	**7.4**	**100**	**39100**	**N**	**1**	**ICPST**	**5/5/05**	**20:10**

Comments: Lot #: F5D210354 Sample #: 3

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WQR **Client ID:** RE73-05-58827

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119272

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	154	500	154	U	1	ICPST	5/5/05	20:15
Barium	**493.41**	**2.0**	**500**	**2400**		**1**	**ICPST**	**5/5/05**	**20:15**
Cadmium	**226.50**	**5.4**	**25.0**	**40.6**		**1**	**ICPST**	**5/5/05**	**20:15**
Chromium	267.76	11.9	50.0	11.9	U	1	ICPST	5/5/05	20:15
Lead	**220.35**	**112**	**250**	**6290**	**N**	**1**	**ICPST**	**5/5/05**	**20:15**
Selenium	196.03	184	500	184	U	1	ICPST	5/5/05	20:15
Silver	328.07	13.8	50.0	13.8	U	1	ICPST	5/5/05	20:15
Zinc	**213.86**	**7.4**	**100**	**19200**	**N**	**1**	**ICPST**	**5/5/05**	**20:15**

Comments: Lot #: F5D210354 Sample #: 4

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WQT **Client ID:** RE73-05-58828

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119272

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	154	500	154	U	1	ICPST	5/5/05	20:19
Barium	**493.41**	**2.0**	**500**	**1430**		**1**	**ICPST**	**5/5/05**	**20:19**
Cadmium	**226.50**	**5.4**	**25.0**	**133**		**1**	**ICPST**	**5/5/05**	**20:19**
Chromium	267.76	11.9	50.0	11.9	U	1	ICPST	5/5/05	20:19
Lead	**220.35**	**112**	**250**	**2560**	**N**	**1**	**ICPST**	**5/5/05**	**20:19**
Selenium	196.03	184	500	184	U	1	ICPST	5/5/05	20:19
Silver	328.07	13.8	50.0	13.8	U	1	ICPST	5/5/05	20:19
Zinc	**213.86**	**7.4**	**100**	**40500**	**N**	**1**	**ICPST**	**5/5/05**	**20:19**

Comments: Lot #: F5D210354 Sample #: 5

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WR6 **Client ID:** RE73-05-58830

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119272

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	154	500	154	U	1	ICPST	5/5/05	20:32
Barium	**493.41**	**2.0**	**500**	**3840**		**1**	**ICPST**	**5/5/05**	**20:32**
Cadmium	**226.50**	**5.4**	**25.0**	**1730**		**1**	**ICPST**	**5/5/05**	**20:32**
Chromium	267.76	11.9	50.0	11.9	U	1	ICPST	5/5/05	20:32
Lead	**220.35**	**112**	**250**	**3330**	**N**	**1**	**ICPST**	**5/5/05**	**20:32**
Selenium	196.03	184	500	184	U	1	ICPST	5/5/05	20:32
Silver	328.07	13.8	50.0	13.8	U	1	ICPST	5/5/05	20:32
Zinc	**213.86**	**7.4**	**100**	**35100**	**N**	**1**	**ICPST**	**5/5/05**	**20:32**

Comments: Lot #: F5D210354 Sample #: 7

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WT0 **Client ID:** RE73-05-58839

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119272

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	154	500	154	U	1	ICPST	5/5/05	21:07
Barium	**493.41**	**2.0**	**500**	**1590**		**1**	**ICPST**	**5/5/05**	**21:07**
Cadmium	**226.50**	**5.4**	**25.0**	**95.0**		**1**	**ICPST**	**5/5/05**	**21:07**
Chromium	267.76	11.9	50.0	11.9	U	1	ICPST	5/5/05	21:07
Lead	**220.35**	**112**	**250**	**1470**	**N**	**1**	**ICPST**	**5/5/05**	**21:07**
Selenium	196.03	184	500	184	U	1	ICPST	5/5/05	21:07
Silver	328.07	13.8	50.0	13.8	U	1	ICPST	5/5/05	21:07
Zinc	**213.86**	**7.4**	**100**	**33700**	**N**	**1**	**ICPST**	**5/5/05**	**21:07**

Comments: Lot #: F5D210354 Sample #: 16

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WT1 **Client ID:** RE73-05-58840

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119272

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	154	500	154	U	1	ICPST	5/5/05	21:12
Barium	**493.41**	**2.0**	**500**	**786**		**1**	**ICPST**	**5/5/05**	**21:12**
Cadmium	**226.50**	**5.4**	**25.0**	**73.9**		**1**	**ICPST**	**5/5/05**	**21:12**
Chromium	267.76	11.9	50.0	11.9	U	1	ICPST	5/5/05	21:12
Lead	**220.35**	**112**	**250**	**1440**	**N**	**1**	**ICPST**	**5/5/05**	**21:12**
Selenium	196.03	184	500	184	U	1	ICPST	5/5/05	21:12
Silver	328.07	13.8	50.0	13.8	U	1	ICPST	5/5/05	21:12
Zinc	**213.86**	**36.9**	**500**	**67500**	**N**	**5**	**ICPST**	**5/6/05**	**7:38**

Comments: Lot #: F5D210354 Sample #: 17

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTA **Client ID:** RE73-05-58831

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119272

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	154	500	154	U	1	ICPST	5/5/05	20:37
Barium	**493.41**	**2.0**	**500**	**1180**		**1**	**ICPST**	**5/5/05**	**20:37**
Cadmium	**226.50**	**5.4**	**25.0**	**134**		**1**	**ICPST**	**5/5/05**	**20:37**
Chromium	267.76	11.9	50.0	11.9	U	1	ICPST	5/5/05	20:37
Lead	**220.35**	**112**	**250**	**4370**	**N**	**1**	**ICPST**	**5/5/05**	**20:37**
Selenium	196.03	184	500	184	U	1	ICPST	5/5/05	20:37
Silver	328.07	13.8	50.0	13.8	U	1	ICPST	5/5/05	20:37
Zinc	**213.86**	**7.4**	**100**	**42400**	**N**	**1**	**ICPST**	**5/5/05**	**20:37**

Comments: Lot #: F5D210354 Sample #: 8

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTE **Client ID:** RE73-05-58832

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119272

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	154	500	154	U	1	ICPST	5/5/05	20:41
Barium	**493.41**	**2.0**	**500**	**1320**		**1**	**ICPST**	**5/5/05**	**20:41**
Cadmium	**226.50**	**5.4**	**25.0**	**40.3**		**1**	**ICPST**	**5/5/05**	**20:41**
Chromium	267.76	11.9	50.0	11.9	U	1	ICPST	5/5/05	20:41
Lead	**220.35**	**112**	**250**	**1080**	**N**	**1**	**ICPST**	**5/5/05**	**20:41**
Selenium	196.03	184	500	184	U	1	ICPST	5/5/05	20:41
Silver	328.07	13.8	50.0	13.8	U	1	ICPST	5/5/05	20:41
Zinc	**213.86**	**7.4**	**100**	**30300**	**N**	**1**	**ICPST**	**5/5/05**	**20:41**

Comments: Lot #: F5D210354 Sample #: 9

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTG **Client ID:** RE73-05-58833

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119272

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	154	500	154	U	1	ICPST	5/5/05	20:46
Barium	**493.41**	**2.0**	**500**	**939**		**1**	**ICPST**	**5/5/05**	**20:46**
Cadmium	**226.50**	**5.4**	**25.0**	**20.5**	**B**	**1**	**ICPST**	**5/5/05**	**20:46**
Chromium	267.76	11.9	50.0	11.9	U	1	ICPST	5/5/05	20:46
Lead	**220.35**	**112**	**250**	**633**	**N**	**1**	**ICPST**	**5/5/05**	**20:46**
Selenium	196.03	184	500	184	U	1	ICPST	5/5/05	20:46
Silver	328.07	13.8	50.0	13.8	U	1	ICPST	5/5/05	20:46
Zinc	**213.86**	**7.4**	**100**	**24900**	**N**	**1**	**ICPST**	**5/5/05**	**20:46**

Comments: Lot #: F5D210354 Sample #: 10

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTR **Client ID:** RE73-05-58834

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119272

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	154	500	154	U	1	ICPST	5/5/05	20:50
Barium	**493.41**	**2.0**	**500**	**1060**		**1**	**ICPST**	**5/5/05**	**20:50**
Cadmium	**226.50**	**5.4**	**25.0**	**31.6**		**1**	**ICPST**	**5/5/05**	**20:50**
Chromium	267.76	11.9	50.0	11.9	U	1	ICPST	5/5/05	20:50
Lead	**220.35**	**112**	**250**	**630**	**N**	**1**	**ICPST**	**5/5/05**	**20:50**
Selenium	196.03	184	500	184	U	1	ICPST	5/5/05	20:50
Silver	328.07	13.8	50.0	13.8	U	1	ICPST	5/5/05	20:50
Zinc	**213.86**	**36.9**	**500**	**57200**	**N**	**5**	**ICPST**	**5/6/05**	**7:34**

Comments: Lot #: F5D210354 Sample #: 11

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTV **Client ID:** RE73-05-58836

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119272

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	154	500	154	U	1	ICPST	5/5/05	20:54
Barium	**493.41**	**2.0**	**500**	**1760**		**1**	**ICPST**	**5/5/05**	**20:54**
Cadmium	**226.50**	**5.4**	**25.0**	**11.7**	**B**	**1**	**ICPST**	**5/5/05**	**20:54**
Chromium	267.76	11.9	50.0	11.9	U	1	ICPST	5/5/05	20:54
Lead	**220.35**	**112**	**250**	**792**	**N**	**1**	**ICPST**	**5/5/05**	**20:54**
Selenium	196.03	184	500	184	U	1	ICPST	5/5/05	20:54
Silver	328.07	13.8	50.0	13.8	U	1	ICPST	5/5/05	20:54
Zinc	**213.86**	**7.4**	**100**	**5100**	**N**	**1**	**ICPST**	**5/5/05**	**20:54**

Comments: Lot #: F5D210354 Sample #: 13

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTW **Client ID:** RE73-05-58837

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119272

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	154	500	154	U	1	ICPST	5/5/05	20:59
Barium	**493.41**	**2.0**	**500**	**1620**		**1**	**ICPST**	**5/5/05**	**20:59**
Cadmium	**226.50**	**5.4**	**25.0**	**11.2**	**B**	**1**	**ICPST**	**5/5/05**	**20:59**
Chromium	267.76	11.9	50.0	11.9	U	1	ICPST	5/5/05	20:59
Lead	**220.35**	**112**	**250**	**316**	**N**	**1**	**ICPST**	**5/5/05**	**20:59**
Selenium	196.03	184	500	184	U	1	ICPST	5/5/05	20:59
Silver	328.07	13.8	50.0	13.8	U	1	ICPST	5/5/05	20:59
Zinc	**213.86**	**7.4**	**100**	**8500**	**N**	**1**	**ICPST**	**5/5/05**	**20:59**

Comments: Lot #: F5D210354 Sample #: 14

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Sample Results

Lab Sample ID: G8WTX **Client ID:** RE73-05-58838

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119272

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	154	500	154	U	1	ICPST	5/5/05	21:03
Barium	**493.41**	**2.0**	**500**	**1790**		**1**	**ICPST**	**5/5/05**	**21:03**
Cadmium	**226.50**	**5.4**	**25.0**	**160**		**1**	**ICPST**	**5/5/05**	**21:03**
Chromium	267.76	11.9	50.0	11.9	U	1	ICPST	5/5/05	21:03
Lead	**220.35**	**112**	**250**	**2470**	**N**	**1**	**ICPST**	**5/5/05**	**21:03**
Selenium	196.03	184	500	184	U	1	ICPST	5/5/05	21:03
Silver	328.07	13.8	50.0	13.8	U	1	ICPST	5/5/05	21:03
Zinc	**213.86**	**7.4**	**100**	**36700**	**N**	**1**	**ICPST**	**5/5/05**	**21:03**

Comments: Lot #: F5D210354 Sample #: 15

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

REVISED

Form I Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: CVAA **Units:** ug/L

Chart Number: AA0502A.PRN **Acceptable Range:** 80% - 120%

Standard Source: Leeman **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	ICV 5/2/05 9:38 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	2.5	2.47	98.8								

Version 4.75.1

Form 2A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICPST **Units:** ug/L

Chart Number: 0505IT1.ARC **Acceptable Range:** 90% - 110%

Standard Source: Solutions Plus **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	ICV 5/5/05 2:35 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	4000.0	4020.05	100.5								
Barium	493.409	4000.0	4260.62	106.5								
Cadmium	226.502	4000.0	4023.06	100.6								
Chromium	267.76	4000.0	3940.77	98.5								
Lead	220.353	4000.0	3966.77	99.2								
Selenium	196.026	4000.0	4012.41	100.3								
Silver	328.068	1000.0	1004.54	100.5								
Zinc	213.856	4000.0	3986.72	99.7								

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: CVAA **Units:** ug/L

Chart Number: AA0502A.PRN **Acceptable Range:** 80% - 120%

Standard Source: Leeman **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	CCV 5/2/05 9:44 AM Found	% Rec	CCV 5/2/05 10:10 AM Found	% Rec	CCV 5/2/05 10:36 AM Found	% Rec	CCV 5/2/05 11:01 AM Found	% Rec	CCV 5/2/05 11:26 AM Found	% Rec
Mercury	253.7	5.0	5.20	**104.0**	5.33	**106.6**	5.38	**107.6**	5.44	**108.8**	5.48	**109.6**

Version 4.75.1

Form 2A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPST

Units: ug/L

Chart Number: 0505IT1.ARC

Acceptable Range: 90% - 110%

Standard Source: Solutions Plus

Standard ID: SEE STANDARDS LOG

Element	WL/ Mass	True Conc	CCV 5/5/05 3:03 PM Found	% Rec	CCV 5/5/05 4:01 PM Found	% Rec	CCV 5/5/05 4:54 PM Found	% Rec	CCV 5/5/05 5:46 PM Found	% Rec	CCV 5/5/05 6:39 PM Found	% Rec
Arsenic	189.042	4000.0	4126.45	**103.2**	4137.18	**103.4**	4099.67	**102.5**	4101.42	**102.5**	4156.39	**103.9**
Barium	493.409	4000.0	4354.84	**108.9**	4347.53	**108.7**	4311.14	**107.8**	4293.35	**107.3**	4354.82	**108.9**
Cadmium	226.502	4000.0	4120.69	**103.0**	4127.99	**103.2**	4073.39	**101.8**	4064.85	**101.6**	4113.38	**102.8**
Chromium	267.76	4000.0	4031.25	**100.8**	4029.39	**100.7**	3990.93	**99.8**	3978.68	**99.5**	4025.98	**100.6**
Lead	220.353	4000.0	4078.79	**102.0**	4062.70	**101.6**	4010.04	**100.3**	3990.18	**99.8**	4046.79	**101.2**
Selenium	196.026	4000.0	4128.96	**103.2**	4098.40	**102.5**	4058.36	**101.5**	4047.21	**101.2**	4131.51	**103.3**
Silver	328.068	1000.0	1028.93	**102.9**	1029.73	**103.0**	1022.50	**102.3**	1019.82	**102.0**	1034.71	**103.5**
Zinc	213.856	4000.0	4064.52	**101.6**	4063.71	**101.6**	4061.57	**101.5**	4035.77	**100.9**	4081.99	**102.0**

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPST

Units: ug/L

Chart Number: 0505IT1.ARC

Acceptable Range: 90% - 110%

Standard Source: Solutions Plus

Standard ID: SEE STANDARDS LOG

Element	WL/ Mass	True Conc	CCV 5/5/05 7:31 PM Found	% Rec	CCV1 5/5/05 8:24 PM Found	% Rec	CCV1 5/5/05 9:16 PM Found	% Rec	CCV 5/6/05 7:25 AM Found	% Rec	CCV 5/6/05 7:43 AM Found	% Rec
Arsenic	189.042	4000.0	4021.51	100.5	3909.57	97.7	3945.75	98.6	4017.06	100.4	4110.32	102.8
Barium	493.409	4000.0	4175.08	104.4	4060.90	101.5	4114.35	102.9	4333.43	108.3	4418.44	110.5
Cadmium	226.502	4000.0	3988.83	99.7	3885.95	97.1	3921.04	98.0	4023.76	100.6	4167.03	104.2
Chromium	267.76	4000.0	3886.02	97.2	3778.89	94.5	3819.53	95.5	3958.72	99.0	4090.70	102.3
Lead	220.353	4000.0	3909.85	97.7	3822.62	95.6	3863.58	96.6	3965.05	99.1	4109.32	102.7
Selenium	196.026	4000.0	3965.63	99.1	3891.73	97.3	3945.63	98.6	4040.04	101.0	4150.76	103.8
Silver	328.068	1000.0	997.89	99.8	969.95	97.0	982.20	98.2	1020.58	102.1	1035.81	103.6
Zinc	213.856	4000.0	3957.12	98.9	3868.22	96.7	3901.52	97.5	4052.13	101.3	4170.92	104.3

STL-ST. LOUIS

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: CVAA **Units:** ug/L

Chart Number: AA0502A.PRN **Acceptable Range:** 50% - 150%

Standard Source: SPEX **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	CRA 5/2/05 9:42 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	0.2	0.20	99.5								

STL-ST. LOUIS

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: ICPST

Units: ug/L

Chart Number: 0505IT1.ARC

Acceptable Range: 80% - 120%

Standard Source: Solutions Plus

Standard ID: SEE STANDARDS LOG

Element	WL/ Mass	True Conc	CRI 5/5/05 2:44 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	10.0	10.83	**108.3**								
Barium	493.409	200.0	221.04	**110.5**								
Cadmium	226.502	5.0	4.67	**93.4**								
Chromium	267.76	10.0	9.67	**96.7**								
Lead	220.353	10.0	10.89	**108.9**								
Selenium	196.026	15.0	15.56	**103.7**								
Zinc	213.856	20.0	21.86	**109.3**								

STL-ST. LOUIS

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: ICPST **Units:** ug/L

Chart Number: 0505IT1.ARC **Acceptable Range:** 80% - 120%

Standard Source: Solutions Plus **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	True Conc	CRI 5/5/05 2:48 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Silver	328.068	10.0	9.94	99.4								

Version 4.75.1

Form 2B Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: CVAA **Units:** ug/L

Chart Number: AA0502A.PRN

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 5/2/05 9:40 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Mercury	253.7	2	0.0	U								

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: 0505IT1.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB 5/5/05 2:39 PM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	200	61.5	U								
Barium	493.409	200	0.8	U								
Cadmium	226.502	10	**2.2**	**U**								
Chromium	267.76	20	**4.8**	**U**								
Lead	220.353	100	**44.8**	**U**								
Selenium	196.026	200	73.5	U								
Silver	328.068	20	5.5	U								
Zinc	213.856	40	**3.0**	**U**								

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: CVAA **Units:** ug/L

Chart Number: AA0502A.PRN

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 5/2/05 9:46 AM Found	Q	CCB 5/2/05 10:12 AM Found	Q	CCB 5/2/05 10:37 AM Found	Q	CCB 5/2/05 11:03 AM Found	Q	CCB 5/2/05 11:28 AM Found	Q
Mercury	253.7	2	0.0	U	-0.1	B	0.0	U	-0.1	B	0.0	U

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: 0505IT1.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 5/5/05 3:07 PM Found	Q	CCB 5/5/05 4:06 PM Found	Q	CCB 5/5/05 4:58 PM Found	Q	CCB 5/5/05 5:51 PM Found	Q	CCB 5/5/05 6:43 PM Found	Q
Arsenic	189.042	200	61.5	U	61.5	U	61.5	U	61.5	U	61.5	U
Barium	493.409	200	0.8	U	0.8	U	0.8	U	1.4	B	1.0	B
Cadmium	226.502	10	2.2	U	2.2	U	2.2	U	2.2	U	2.2	U
Chromium	267.76	20	4.8	U	4.8	U	4.8	U	4.8	U	4.8	U
Lead	220.353	100	44.8	U	44.8	U	44.8	U	44.8	U	44.8	U
Selenium	196.026	200	73.5	U	73.5	U	73.5	U	73.5	U	73.5	U
Silver	328.068	20	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U
Zinc	213.856	40	3.0	U	3.0	U	3.0	U	3.1	B	3.0	U

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: 0505IT1.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB 5/5/05 7:35 PM Found	Q	CCB1 5/5/05 8:28 PM Found	Q	CCB1 5/5/05 9:21 PM Found	Q	CCB 5/6/05 7:30 AM Found	Q	CCB 5/6/05 7:47 AM Found	Q
Arsenic	189.042	200	61.5	U	61.5	U	61.5	U	61.5	U	61.5	U
Barium	493.409	200	1.6	B	0.8	U	0.8	U	0.8	U	0.8	U
Cadmium	226.502	10	2.2	U	2.2	U	2.2	U	2.2	U	2.2	U
Chromium	267.76	20	4.8	U	4.8	U	4.8	U	4.8	U	4.8	U
Lead	220.353	100	44.8	U	44.8	U	44.8	U	44.8	U	44.8	U
Selenium	196.026	200	73.5	U	73.5	U	73.5	U	73.5	U	73.5	U
Silver	328.068	20	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U
Zinc	213.856	40	3.2	B	3.0	U	3.0	U	3.0	U	3.0	U

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: G9ECFB

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119194

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.23	10.0	0.23	U	1	CVAA	5/2/05	10:30

Comments: Lot #: F5D210354

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: G9ECFB

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119272

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.042	154	500	154	U	1	ICPST	5/5/05	19:40
Barium	**493.409**	**2.0**	**500**	**161**	**B**	**1**	**ICPST**	**5/5/05**	**19:40**
Cadmium	226.502	5.4	25.0	5.4	U	1	ICPST	5/5/05	19:40
Chromium	267.76	11.9	50.0	11.9	U	1	ICPST	5/5/05	19:40
Lead	220.353	112	250	112	U	1	ICPST	5/5/05	19:40
Selenium	196.026	184	500	184	U	1	ICPST	5/5/05	19:40
Silver	328.068	13.8	50.0	13.8	U	1	ICPST	5/5/05	19:40
Zinc	**213.856**	**7.4**	**100**	**35.6**	**B**	**1**	**ICPST**	**5/5/05**	**19:40**

Comments: Lot #: F5D210354

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPST **Units:** ug/L

Chart Number: 0505IT1.ARC **Acceptable Range:** 80% - 120%

Standard Source: Solutions Plus **Standard ID:** SEE STANDARDS LOG

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 5/5/05 2:52 PM Found	Found	Found	Found	Found
Arsenic	189.042	200		2				
Barium	493.409	200		2				
Cadmium	226.502	10		-7				
Chromium	267.76	20		0				
Lead	220.353	100		8				
Selenium	196.026	200		-3				
Silver	328.068	20		1				
Zinc	213.856	40		-4				

STL-ST. LOUIS

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPST

Units: ug/L

Chart Number: 0505IT1.ARC

Acceptable Range: 80% - 120%

Standard Source: Solutions Plus

Standard ID: SEE STANDARDS LOG

Element	WL/ Mass	True Conc	ICSAB 5/5/05 2:57 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	1000	976.1	**97.6**								
Barium	493.409	500	538.2	**107.6**								
Cadmium	226.502	1000	913.0	**91.3**								
Chromium	267.76	500	469.6	**93.9**								
Lead	220.353	1000	928.1	**92.8**								
Selenium	196.026	1000	973.9	**97.4**								
Silver	328.068	1000	1005.9	**100.6**								
Zinc	213.856	1000	958.3	**95.8**								

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: G8WP7S

Original Sample ID: G8WP7 **Client ID:** RE73-05-58824 S

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119194

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Mercury	253.7	0.23	U	25.7		25	102.6	1	1	CVAA	5/2/05	10:34	5/2/05	10:40

Comments: Lot #: F5D210354 Sample #: 1

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: G8WP7S

Original Sample ID: G8WP7 **Client ID:** RE73-05-58824 S

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119272

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Arsenic	189.0	154	U	5100		5000	102.1	1	1	ICPST	5/5/05	19:49	5/5/05	19:53
Barium	493.4	884		6100		5000	104.3	1	1	ICPST	5/5/05	19:49	5/5/05	19:53
Cadmium	226.5	180		284		125	83.1	1	1	ICPST	5/5/05	19:49	5/5/05	19:53
Chromium	267.8	11.9	U	484		500	96.8	1	1	ICPST	5/5/05	19:49	5/5/05	19:53
Lead	220.4	3140		4020	N	1250	70.7	1	1	ICPST	5/5/05	19:49	5/5/05	19:53
Selenium	196.0	184	U	5100		5000	102.1	1	1	ICPST	5/5/05	19:49	5/5/05	19:53
Silver	328.1	13.8	U	124		125	99.4	1	1	ICPST	5/5/05	19:49	5/5/05	19:53
Zinc	213.9	37400		35300	N	1250	-171.3	1	1	ICPST	5/5/05	19:49	5/5/05	19:53

Comments: Lot #: F5D210354 Sample #: 1

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: G8WP7D

Original Sample ID: G8WP7 **Client ID:** RE73-05-58824 D

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119194

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	MSD Conc	Q	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Mercury	253.7	0.23	U	24.9		25	99.4	1	1	CVAA	5/2/05	10:34	5/2/05	10:42

Comments: Lot #: F5D210354 Sample #: 1

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: G8WP7D

Original Sample ID: G8WP7 **Client ID:** RE73-05-58824 D

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119272

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	MSD Conc	Q	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Arsenic	189.0	154	U	5060		5000	101.1	1	1	ICPST	5/5/05	19:49	5/5/05	19:57
Barium	493.4	884		6000		5000	102.4	1	1	ICPST	5/5/05	19:49	5/5/05	19:57
Cadmium	226.5	180		282		125	81.6	1	1	ICPST	5/5/05	19:49	5/5/05	19:57
Chromium	267.8	11.9	U	482		500	96.4	1	1	ICPST	5/5/05	19:49	5/5/05	19:57
Lead	220.4	3140	N	4010	N	1250	69.3	1	1	ICPST	5/5/05	19:49	5/5/05	19:57
Selenium	196.0	184	U	5040		5000	100.8	1	1	ICPST	5/5/05	19:49	5/5/05	19:57
Silver	328.1	13.8	U	123		125	98.2	1	1	ICPST	5/5/05	19:49	5/5/05	19:57
Zinc	213.9	37400	N	35100	N	1250	-182.4	1	1	ICPST	5/5/05	19:49	5/5/05	19:57

Comments: Lot #: F5D210354 Sample #: 1

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: G8WP7D

Matrix Spike Sample ID: G8WP7S **Client ID:** RE73-05-58824 D

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119194

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	MS Conc	Q	MSD Conc	Q	% RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Mercury	253.7	25.7		24.9		0.8	1	1	CVAA	5/2/05	10:40	5/2/05	10:42

Comments: Lot #: F5D210354 Sample #: 1

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 6 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: G8WP7D

Matrix Spike Sample ID: G8WP7S **Client ID:** RE73-05-58824 D

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119272

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MS Conc	Q	MSD Conc	Q	% RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Arsenic	189.042	5100		5060		0.9	1	1	ICPST	5/5/05	19:53	5/5/05	19:57
Barium	493.409	6100		6000		1.6	1	1	ICPST	5/5/05	19:53	5/5/05	19:57
Cadmium	226.502	284		282		0.7	1	1	ICPST	5/5/05	19:53	5/5/05	19:57
Chromium	267.76	484		482		0.4	1	1	ICPST	5/5/05	19:53	5/5/05	19:57
Lead	220.353	4020	N	4010	N	0.4	1	1	ICPST	5/5/05	19:53	5/5/05	19:57
Selenium	196.026	5100		5040		1.2	1	1	ICPST	5/5/05	19:53	5/5/05	19:57
Silver	328.068	124		123		1.5	1	1	ICPST	5/5/05	19:53	5/5/05	19:57
Zinc	213.856	35300	N	35100	N	0.4	1	1	ICPST	5/5/05	19:53	5/5/05	19:57

Comments: Lot #: F5D210354 Sample #: 1

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed
NC Percent recovery was not calculated
* Duplicate analysis RPD was not within limits

Form 6 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: G9GMTC

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119194

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Mercury	253.7	25.0	20.9	83.6		82-125	1	CVAA	5/2/05	10:32

Comments: Lot #: F5D210354

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

REVISED

Form 7 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: G9G7VC

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119272

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Arsenic	189.042	2500	2580	103.2		80-120	1	ICPST	5/5/05	19:44
Barium	493.409	2500	2870	114.7		80-120	1	ICPST	5/5/05	19:44
Cadmium	226.502	2500	2520	100.7		80-120	1	ICPST	5/5/05	19:44
Chromium	267.76	2500	2500	100.0		80-120	1	ICPST	5/5/05	19:44
Lead	220.353	2500	2480	99.2		80-120	1	ICPST	5/5/05	19:44
Selenium	196.026	2500	2650	105.8		80-120	1	ICPST	5/5/05	19:44
Silver	328.068	625	637	102.0		80-120	1	ICPST	5/5/05	19:44
Zinc	213.856	2500	2570	102.9		80-120	1	ICPST	5/5/05	19:44

Comments: Lot #: F5D210354

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

Form 7 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: G8WP7V

Original Sample ID: G8WP7 **Client ID:** RE73-05-58824

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119194

Weight: 6 **Volume:** 30 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Mercury	253.7	0.23	U	1.2	U		1	5	CVAA	5/2/05	10:34	5/2/05	10:44

Comments:

Version 4.75.1

U Result is less than the MDL
B Result is between MDL and RL
E Serial dilution percent difference not within limits

Form 9 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: G8WP7V

Original Sample ID: G8WP7 **Client ID:** RE73-05-58824

Matrix: TCLP **Units:** ug/L **Prep Date:** 4/29/05 **Prep Batch:** 5119272

Weight: 20 **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Arsenic	189.042	154	U	769	U		1	5	ICPST	5/5/05	19:49	5/5/05	20:02
Barium	493.409	884		886	B	0.2	1	5	ICPST	5/5/05	19:49	5/5/05	20:02
Cadmium	226.502	180		181			1	5	ICPST	5/5/05	19:49	5/5/05	20:02
Chromium	267.76	11.9	U	59.7	U		1	5	ICPST	5/5/05	19:49	5/5/05	20:02
Lead	220.353	3140	N	3220			1	5	ICPST	5/5/05	19:49	5/5/05	20:02
Selenium	196.026	184	U	919	U		1	5	ICPST	5/5/05	19:49	5/5/05	20:02
Silver	328.068	13.8	U	69.1	U		1	5	ICPST	5/5/05	19:49	5/5/05	20:02
Zinc	213.856	37400	N	38500		3.1	1	5	ICPST	5/5/05	19:49	5/5/05	20:02

Comments:

Version 4.75.1

U Result is less than the MDL

B Result is between MDL and RL

E Serial dilution percent difference not within limits

Form 9 Equivalent

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Detection Limits

Instrument: CVAA **Units:** ug/L

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Mercury	253.70	2	0.046	8/16/04

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICPST **Units:** ug/L

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Arsenic	189.04	200	61.5	12/29/04
Barium	493.41	200	0.80	12/29/04
Cadmium	226.50	10	2.2	12/29/04
Chromium	267.76	20	4.8	12/29/04
Lead	220.35	100	44.8	12/29/04
Selenium	196.03	200	73.5	12/29/04
Silver	328.07	20	5.5	12/29/04
Zinc	213.86	40	3.0	12/29/04

STL-ST. LOUIS

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICPST **Date of IEC's:** 6/2/04

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	Pb(-0.000204)
Calcium	317.933	Sr(0.00002)
Iron	217.441	Cd(0.000075), Mn(0.000002), Pb(0.000031), Sb(0.000048), Se(-0.000184), Tl(-0.000813), Zn(0.000274)
Magnesium	279.078	Mn(0.000025), Zn(-0.000003)
Manganese	257.61	Cr(0.000228), Pb(0.000148), Se(0.000736), Tl(-0.000492)
Nickel	231.604	Co(0.000232), Pb(0.000099), Zn(0.00567)
Thorium	401.913	Ag(0.000475), Al(0.0062265), Cd(0.000027), Co(-0.00009), Cu(0.002327), Fe(-0.1011), Pb(0.000033), Sb(0.000007), Se(-0.000167), Sn(0.00021), Tl(-0.000314), V(0.00064)
Uranium	385.958	Ag(0.0012), Al(0.005), As(-0.000021), Co(0.000148), Cr(0.000488), Cu(0.00052), Fe(-0.048618), Mn(0.000226), Mo(-0.00046), Pb(0.001395), Sb(-0.00045), Se(0.000104), Sn(0.000185), Tl(-0.00043), V(-0.00018)

STL-ST. LOUIS

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: CVAA **Units:** ug/L

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Mercury	253.70	10	1/6/04

STL-ST. LOUIS

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICPST **Units:** ug/L

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Arsenic	189.04	20000	10/26/04
Barium	493.41	20000	10/26/04
Cadmium	226.50	20000	10/26/04
Chromium	267.76	50000	10/26/04
Lead	220.35	50000	10/26/04
Selenium	196.03	50000	10/26/04
Silver	328.07	10000	10/26/04
Zinc	213.86	5000	2/3/04

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Log

Preparation Batch: 5119194 **Instrument:** CVAA **Matrix:** TCLP

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
G9ECFB	4/29/05	6	30	NA
G9GMTC	4/29/05	6	30	NA
G8WP7	4/29/05	6	30	NA
G8WP7D	4/29/05	6	30	NA
G8WP7S	4/29/05	6	30	NA
G8WQL	4/29/05	6	30	NA
G8WQN	4/29/05	6	30	NA
G8WQR	4/29/05	6	30	NA
G8WQT	4/29/05	6	30	NA
G8WR6	4/29/05	6	30	NA
G8WT0	4/29/05	6	30	NA
G8WT1	4/29/05	6	30	NA
G8WTA	4/29/05	6	30	NA
G8WTE	4/29/05	6	30	NA
G8WTG	4/29/05	6	30	NA
G8WTR	4/29/05	6	30	NA
G8WTV	4/29/05	6	30	NA
G8WTW	4/29/05	6	30	NA
G8WTX	4/29/05	6	30	NA

STL-ST. LOUIS

Metals Data Reporting Form

Preparation Log

Preparation Batch: 5119272 **Instrument:** ICP **Matrix:** TCLP

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
G9ECFB	4/29/05	20	50	NA
G9G7VC	4/29/05	20	50	NA
G8WP7	4/29/05	20	50	NA
G8WP7D	4/29/05	20	50	NA
G8WP7S	4/29/05	20	50	NA
G8WQL	4/29/05	20	50	NA
G8WQN	4/29/05	20	50	NA
G8WQR	4/29/05	20	50	NA
G8WQT	4/29/05	20	50	NA
G8WR6	4/29/05	20	50	NA
G8WT0	4/29/05	20	50	NA
G8WT1	4/29/05	20	50	NA
G8WTA	4/29/05	20	50	NA
G8WTE	4/29/05	20	50	NA
G8WTG	4/29/05	20	50	NA
G8WTR	4/29/05	20	50	NA
G8WTV	4/29/05	20	50	NA
G8WTW	4/29/05	20	50	NA
G8WTX	4/29/05	20	50	NA

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAA **Chart Number:** AA0502A.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
Std01Rep1		5/2/05	9:27
Std02Rep1		5/2/05	9:28
Std03Rep1		5/2/05	9:30
Std04Rep1		5/2/05	9:32
Std05Rep1		5/2/05	9:34
Std06Rep1		5/2/05	9:36
ICV		5/2/05	9:38
ICB		5/2/05	9:40
CRA		5/2/05	9:42
CCV		5/2/05	9:44
CCB		5/2/05	9:46
ZZZZZZ		5/2/05	9:48
ZZZZZZ		5/2/05	9:50
ZZZZZZ		5/2/05	9:52
ZZZZZZ		5/2/05	9:54
ZZZZZZ		5/2/05	9:56
ZZZZZZ		5/2/05	9:58
ZZZZZZ		5/2/05	10:00
ZZZZZZ		5/2/05	10:02
ZZZZZZ		5/2/05	10:05
ZZZZZZ		5/2/05	10:06
CCV		5/2/05	10:10
CCB		5/2/05	10:12
ZZZZZZ		5/2/05	10:15
ZZZZZZ		5/2/05	10:17
ZZZZZZ		5/2/05	10:19
ZZZZZZ		5/2/05	10:21
ZZZZZZ		5/2/05	10:24
ZZZZZZ		5/2/05	10:26
ZZZZZZ		5/2/05	10:28
G9ECFB		5/2/05	10:30
G9GMTC		5/2/05	10:32
G8WP7	RE73-05-58824	5/2/05	10:34
CCV		5/2/05	10:36
CCB		5/2/05	10:37
G8WP7S	RE73-05-58824 S	5/2/05	10:40
G8WP7D	RE73-05-58824 D	5/2/05	10:42
G8WP7V	RE73-05-58824	5/2/05	10:44
G8WQL	RE73-05-58825	5/2/05	10:46

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAA **Chart Number:** AA0502A.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
G8WQN	RE73-05-58826	5/2/05	10:48
G8WQR	RE73-05-58827	5/2/05	10:50
G8WQT	RE73-05-58828	5/2/05	10:52
G8WR6	RE73-05-58830	5/2/05	10:54
G8WTA	RE73-05-58831	5/2/05	10:57
G8WTE	RE73-05-58832	5/2/05	10:59
CCV		5/2/05	11:01
CCB		5/2/05	11:03
G8WTG	RE73-05-58833	5/2/05	11:05
G8WTR	RE73-05-58834	5/2/05	11:08
G8WTV	RE73-05-58836	5/2/05	11:10
G8WTW	RE73-05-58837	5/2/05	11:12
G8WTX	RE73-05-58838	5/2/05	11:14
G8WT0	RE73-05-58839	5/2/05	11:16
G8WT1	RE73-05-58840	5/2/05	11:18
ZZZZZZ		5/2/05	11:20
ZZZZZZ		5/2/05	11:22
ZZZZZZ		5/2/05	11:24
CCV		5/2/05	11:26
CCB		5/2/05	11:28
ZZZZZZ		5/2/05	11:31
ZZZZZZ		5/2/05	11:33
ZZZZZZ		5/2/05	11:35
ZZZZZZ		5/2/05	11:37
ZZZZZZ		5/2/05	11:39
ZZZZZZ		5/2/05	11:41
ZZZZZZ		5/2/05	11:43
ZZZZZZ		5/2/05	11:45
ZZZZZZ		5/2/05	11:46
ZZZZZZ		5/2/05	11:48

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST **Chart Number:** 0505IT1.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
CALBLK		5/5/05	14:22
CAL1		5/5/05	14:27
CAL2		5/5/05	14:31
ICV		5/5/05	14:35
ICB		5/5/05	14:39
CRI		5/5/05	14:44
CRI		5/5/05	14:48
ICSA		5/5/05	14:52
ICSAB		5/5/05	14:57
CCV		5/5/05	15:03
CCB		5/5/05	15:07
ZZZZZZ		5/5/05	15:18
ZZZZZZ		5/5/05	15:22
ZZZZZZ		5/5/05	15:26
ZZZZZZ		5/5/05	15:31
ZZZZZZ		5/5/05	15:35
ZZZZZZ		5/5/05	15:39
ZZZZZZ		5/5/05	15:44
ZZZZZZ		5/5/05	15:48
ZZZZZZ		5/5/05	15:52
ZZZZZZ		5/5/05	15:57
CCV		5/5/05	16:01
CCB		5/5/05	16:06
ZZZZZZ		5/5/05	16:10
ZZZZZZ		5/5/05	16:14
ZZZZZZ		5/5/05	16:19
ZZZZZZ		5/5/05	16:23
ZZZZZZ		5/5/05	16:27
ZZZZZZ		5/5/05	16:32
ZZZZZZ		5/5/05	16:36
ZZZZZZ		5/5/05	16:41
ZZZZZZ		5/5/05	16:45
ZZZZZZ		5/5/05	16:49
CCV		5/5/05	16:54
CCB		5/5/05	16:58
ZZZZZZ		5/5/05	17:02
ZZZZZZ		5/5/05	17:07
ZZZZZZ		5/5/05	17:11
ZZZZZZ		5/5/05	17:16

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST **Chart Number:** 0505IT1.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		5/5/05	17:20
ZZZZZZ		5/5/05	17:24
ZZZZZZ		5/5/05	17:29
ZZZZZZ		5/5/05	17:33
ZZZZZZ		5/5/05	17:37
ZZZZZZ		5/5/05	17:42
CCV		5/5/05	17:46
CCB		5/5/05	17:51
ZZZZZZ		5/5/05	17:55
ZZZZZZ		5/5/05	17:59
ZZZZZZ		5/5/05	18:04
ZZZZZZ		5/5/05	18:08
ZZZZZZ		5/5/05	18:12
ZZZZZZ		5/5/05	18:17
ZZZZZZ		5/5/05	18:21
ZZZZZZ		5/5/05	18:25
ZZZZZZ		5/5/05	18:30
ZZZZZZ		5/5/05	18:34
CCV		5/5/05	18:39
CCB		5/5/05	18:43
ZZZZZZ		5/5/05	18:47
ZZZZZZ		5/5/05	18:52
ZZZZZZ		5/5/05	18:56
ZZZZZZ		5/5/05	19:00
ZZZZZZ		5/5/05	19:05
ZZZZZZ		5/5/05	19:09
ZZZZZZ		5/5/05	19:14
ZZZZZZ		5/5/05	19:18
ZZZZZZ		5/5/05	19:22
ZZZZZZ		5/5/05	19:27
CCV		5/5/05	19:31
CCB		5/5/05	19:35
G9ECFB		5/5/05	19:40
G9G7VC		5/5/05	19:44
G8WP7	RE73-05-58824	5/5/05	19:49
G8WP7S	RE73-05-58824 S	5/5/05	19:53
G8WP7D	RE73-05-58824 D	5/5/05	19:57
G8WP7V	RE73-05-58824	5/5/05	20:02
G8WQL	RE73-05-58825	5/5/05	20:06

STL-ST. LOUIS

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST **Chart Number:** 0505IT1.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
G8WQN	RE73-05-58826	5/5/05	20:10
G8WQR	RE73-05-58827	5/5/05	20:15
G8WQT	RE73-05-58828	5/5/05	20:19
CCV1		5/5/05	20:24
CCB1		5/5/05	20:28
G8WR6	RE73-05-58830	5/5/05	20:32
G8WTA	RE73-05-58831	5/5/05	20:37
G8WTE	RE73-05-58832	5/5/05	20:41
G8WTG	RE73-05-58833	5/5/05	20:46
G8WTR	RE73-05-58834	5/5/05	20:50
G8WTV	RE73-05-58836	5/5/05	20:54
G8WTW	RE73-05-58837	5/5/05	20:59
G8WTX	RE73-05-58838	5/5/05	21:03
G8WT0	RE73-05-58839	5/5/05	21:07
G8WT1	RE73-05-58840	5/5/05	21:12
CCV1		5/5/05	21:16
CCB1		5/5/05	21:21
CCV		5/6/05	7:25
CCB		5/6/05	7:30
G8WTR	RE73-05-58834	5/6/05	7:34
G8WT1	RE73-05-58840	5/6/05	7:38
CCV		5/6/05	7:43
CCB		5/6/05	7:47

METALS RAW DATA

JJ 5/5/05

Analysis Report Summary

STD 04/21/05 6010C

05/06/05 07:54:48 AM CVT

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	CALBLK	0505IT1	6010C	05/05/05	14:22		X	IR
2	CAL1	0505IT1	6010C	05/05/05	14:27		X	IR
3	CAL2	0505IT1	6010C	05/05/05	14:31		X	IR
4	ICV	0505IT1	6010C	05/05/05	14:35	STL	Q	CONC
5	ICB	0505IT1	6010C	05/05/05	14:39	STL	Q	CONC
6	LLC	0505IT1	6010C	05/05/05	14:44	STL	Q	CONC
7	LLC AG	0505IT1	6010C	05/05/05	14:48	STL	Q	CONC
8	ICSA	0505IT1	6010C	05/05/05	14:52	STL	Q	CONC
9	ICSAB	0505IT1	6010C	05/05/05	14:57	STL	Q	CONC
10	CCV	0505IT1	6010C	05/05/05	15:03	STL	Q	CONC
11	CCB	0505IT1	6010C	05/05/05	15:07	STL	Q	CONC
12	G71P3 20	0505IT1	6010C	05/05/05	15:18	STL	S	CONC
13	G71P5 20	0505IT1	6010C	05/05/05	15:22	STL	S	CONC
14	G71QJ 20	0505IT1	6010C	05/05/05	15:26	STL	S	CONC
15	G71QK 20	0505IT1	6010C	05/05/05	15:31	STL	S	CONC
16	G71QL 20	0505IT1	6010C	05/05/05	15:35	STL	S	CONC
17	G71QN 20	0505IT1	6010C	05/05/05	15:39	STL	S	CONC
18	G71QQ 20	0505IT1	6010C	05/05/05	15:44	STL	S	CONC
19	G71Q0 20	0505IT1	6010C	05/05/05	15:48	STL	S	CONC
20	G71Q1 20	0505IT1	6010C	05/05/05	15:52	STL	S	CONC
21	G71Q5 20	0505IT1	6010C	05/05/05	15:57	STL	S	CONC
22	CCV	0505IT1	6010C	05/05/05	16:01	STL	Q	CONC
23	CCB	0505IT1	6010C	05/05/05	16:06	STL	Q	CONC
24	G9HX1B	0505IT1	6010C	05/05/05	16:10	STL	S	CONC
25	G9MDJC	0505IT1	6010C	05/05/05	16:14	STL	S	CONC
26	G8170	0505IT1	6010C	05/05/05	16:19	STL	S	CONC
27	G8170X	0505IT1	6010C	05/05/05	16:23	STL	S	CONC
28	G8170S	0505IT1	6010C	05/05/05	16:27	STL	S	CONC
29	G8170D	0505IT1	6010C	05/05/05	16:32	STL	S	CONC
30	G8170V 5X	0505IT1	6010C	05/05/05	16:36	STL	S	CONC
31	G84EP	0505IT1	6010C	05/05/05	16:41	STL	S	CONC
32	G9GFM	0505IT1	6010C	05/05/05	16:45	STL	S	CONC
33	G9GFN	0505IT1	6010C	05/05/05	16:49	STL	S	CONC
34	CCV	0505IT1	6010C	05/05/05	16:54	STL	Q	CONC
35	CCB	0505IT1	6010C	05/05/05	16:58	STL	Q	CONC
36	G9GFP	0505IT1	6010C	05/05/05	17:02	STL	S	CONC
37	G9L66B	0505IT1	6010C	05/05/05	17:07	STL	S	CONC
38	G9L66C	0505IT1	6010C	05/05/05	17:11	STL	S	CONC
39	G9L66L	0505IT1	6010C	05/05/05	17:16	STL	S	CONC
40	G9H43	0505IT1	6010C	05/05/05	17:20	STL	S	CONC
41	G9H43V 5X	0505IT1	6010C	05/05/05	17:24	STL	S	CONC
42	G9L63B	0505IT1	6010C	05/05/05	17:29	STL	S	CONC
43	G9L63C	0505IT1	6010C	05/05/05	17:33	STL	S	CONC
44	G9L63L	0505IT1	6010C	05/05/05	17:37	STL	S	CONC
45	G9G4K	0505IT1	6010C	05/05/05	17:42	STL	S	CONC
46	CCV	0505IT1	6010C	05/05/05	17:46	STL	Q	CONC
47	CCB	0505IT1	6010C	05/05/05	17:51	STL	Q	CONC
48	G9G4KV 5X	0505IT1	6010C	05/05/05	17:55	STL	S	CONC
49	G9G4N	0505IT1	6010C	05/05/05	17:59	STL	S	CONC
50	G9G4P	0505IT1	6010C	05/05/05	18:04	STL	S	CONC
51	G9G4W	0505IT1	6010C	05/05/05	18:08	STL	S	CONC
52	G9G42	0505IT1	6010C	05/05/05	18:12	STL	S	CONC
53	G9G47	0505IT1	6010C	05/05/05	18:17	STL	S	CONC

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#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	G9G5A	0505IT1	6010C	05/05/05	18:21	STL	S	CONC
55	G9G5J	0505IT1	6010C	05/05/05	18:25	STL	S	CONC
56	G9G5N	0505IT1	6010C	05/05/05	18:30	STL	S	CONC
57	G9G5Q	0505IT1	6010C	05/05/05	18:34	STL	S	CONC
58	CCV	0505IT1	6010C	05/05/05	18:39	STL	Q	CONC
59	CCB	0505IT1	6010C	05/05/05	18:43	STL	Q	CONC
60	G9G5R	0505IT1	6010C	05/05/05	18:47	STL	S	CONC
61	G9G5W	0505IT1	6010C	05/05/05	18:52	STL	S	CONC
62	G9G50	0505IT1	6010C	05/05/05	18:56	STL	S	CONC
63	G9G56	0505IT1	6010C	05/05/05	19:00	STL	S	CONC
64	G9G59	0505IT1	6010C	05/05/05	19:05	STL	S	CONC
65	G9G6D	0505IT1	6010C	05/05/05	19:09	STL	S	CONC
66	G9G6E	0505IT1	6010C	05/05/05	19:14	STL	S	CONC
67	G9G6F	0505IT1	6010C	05/05/05	19:18	STL	S	CONC
68	G9H40	0505IT1	6010C	05/05/05	19:22	STL	S	CONC
69	G9H42	0505IT1	6010C	05/05/05	19:27	STL	S	CONC
70	CCV	0505IT1	6010C	05/05/05	19:31	STL	Q	CONC
71	CCB	0505IT1	6010C	05/05/05	19:35	STL	Q	CONC
72	G9ECFB	0505IT1	6010C	05/05/05	19:40	STL	S	CONC
73	G9G7VC	0505IT1	6010C	05/05/05	19:44	STL	S	CONC
74	G8WP7	0505IT1	6010C	05/05/05	19:49	STL	S	CONC
75	G8WP7S	0505IT1	6010C	05/05/05	19:53	STL	S	CONC
76	G8WP7D	0505IT1	6010C	05/05/05	19:57	STL	S	CONC
77	G8WP7V 5X	0505IT1	6010C	05/05/05	20:02	STL	S	CONC
78	G8WQL	0505IT1	6010C	05/05/05	20:06	STL	S	CONC
79	G8WQN	0505IT1	6010C	05/05/05	20:10	STL	S	CONC
80	G8WQR	0505IT1	6010C	05/05/05	20:15	STL	S	CONC
81	G8WQT	0505ITi	6010C	05/05/05	20:19	STL	S	CONC
82	CCV1	0505IT1	6010C	05/05/05	20:24	STL	Q	CONC
83	CCB1	0505IT1	6010C	05/05/05	20:28	STL	Q	CONC
84	G8WR6	0505IT1	6010C	05/05/05	20:32	STL	S	CONC
85	G8WTA	0505IT1	6010C	05/05/05	20:37	STL	S	CONC
86	G8WTE	0505IT1	6010C	05/05/05	20:41	STL	S	CONC
87	G8WTG	0505IT1	6010C	05/05/05	20:46	STL	S	CONC
88	G8WTR	0505IT1	6010C	05/05/05	20:50	STL	S	CONC
89	G8WTV	0505IT1	6010C	05/05/05	20:54	STL	S	CONC
90	G8WTW	0505IT1	6010C	05/05/05	20:59	STL	S	CONC
91	G8WTX	0505IT1	6010C	05/05/05	21:03	STL	S	CONC
92	G8WT0	0505IT1	6010C	05/05/05	21:07	STL	S	CONC
93	G8WT1	0505IT1	6010C	05/05/05	21:12	STL	S	CONC
94	CCV1	0505IT1	6010C	05/05/05	21:16	STL	Q	CONC
95	CCB1	0505IT1	6010C	05/05/05	21:21	STL	Q	CONC
96	CCV	0505IT1	6010C	05/06/05	07:25	STL	Q	CONC
97	CCB	0505IT1	6010C	05/06/05	07:30	STL	Q	CONC
98	G8WTR 5	0505IT1	6010C	05/06/05	07:34	STL	S	CONC
99	G8WT1 5	0505IT1	6010C	05/06/05	07:38	STL	S	CONC
100	CCV	0505IT1	6010C	05/06/05	07:43	STL	Q	CONC
101	CCB	0505IT1	6010C	05/06/05	07:47	STL	Q	CONC

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#	Sample Name	Ag3280	As1890	Ba4934	Be3130	Cd2265	Cr2677
1	CALBLK	-.06799	.41397	.02399	-1.1289	.05799	.07349
2	CAL1	281.783	1662.06	419.632	1608.06	1134.27	859.304
3	CAL2						
4	ICV	1.0045	4.0201	4.2606	4.2316	4.0231	3.9408
5	ICB	.00104	.00205	.00015	.00012	.00019	.00009
6	LLC	Q.01220	.01083	.22104	.00526	.00467	.00967
7	LLC AG	1.00994	.05030	.05289	.05459	.05174	.04911
8	ICSA	.00056	.00205	.00185	-.00061	-.00734	.00011
9	ICSAB	1.0059	.97607	.53818	.51989	.91299	.46956
10	CCV	1.0289	4.1265	4.3548	4.3187	4.1207	4.0313
11	CCB	.00089	.00111	.00053	.00055	.00043	.00014
12	G71P3 20	.05720	.00266	.05882	-.00022	.00180	.04218
13	G71P5 20	.11326	.00193	.07534	-.00024	.00270	.09027
14	G71QJ 20	.13500	.00270	.05887	-.00040	.00453	.08426
15	G71QK 20	.11418	.00145	.05887	-.00037	.00302	.09808
16	G71QL 20	.09172	.00202	.05973	-.00023	.00404	.05482
17	G71QN 20	.11117	.00273	.05467	-.00025	.00194	.06832
18	G71QQ 20	.08845	.00064	.03976	-.00041	.00364	.05267
19	G71Q0 20	.06418	.00130	.04780	-.00035	.00094	.04211
20	G71Q1 20	.07470	.00139	.04248	-.00028	.00118	.04803
21	G71Q5 20	.09261	.00048	.05365	-.00038	.00429	.05259
22	CCV	1.0297	4.1372	4.3475	4.3194	4.1280	4.0294
23	CCB	-.00009	.00140	-.00008	.00014	-.00009	.00045
24	G9HX1B	.00077	L.00060	.01347	-.00057	-.00050	.00015
25	G9MDJC	.24892	1.0217	1.1059	1.1062	1.0305	1.0076
26	G8170	-.00035	.00034	.06260	-.00058	-.00056	-.00018
27	G8170X	-.00033	-.00095	.06514	-.00064	-.00069	-.00108
28	G8170S	.04900	2.0408	2.2491	.05529	.05046	.20126
29	G8170D	.04960	2.0498	2.2423	.05541	.05082	.20185
30	G8170V 5X	.00078	.00012	.01214	-.00047	-.00040	-.00046
31	G84EP	-.00085	-.00043	.04136	-.00055	-.00070	-.00008
32	G9GFM	-.00656	L-.02226	.30096	.00373	L-.00592	12.615
33	G9GFN	.00058	-.00238	.14203	-.00053	-.00091	.98118
34	CCV	1.0225	4.0997	4.3111	4.2586	4.0734	3.9909
35	CCB	.00076	.00172	.00045	.00067	.00045	.00075
36	G9GFP	.00003	.00095	.12773	-.00042	.00914	.48032
37	G9L66B	-.00043	L-.00021	-.00034	-.00050	-.00056	-.00041
38	G9L66C	.24586	1.0127	1.0753	1.0890	1.0212	.99597
39	G9L66L	.24504	1.0081	1.0686	1.0841	1.0152	.98897
40	G9H43	-.00045	.00175	.00249	-.00032	.00075	.00046
41	G9H43V 5X	-.00058	.00091	-.00002	-.00044	-.00035	-.00012
42	G9L63B	-.00062	L-.00058	-.00040	-.00052	-.00061	-.00093
43	G9L63C	.22235	.92255	.96936	.98675	.92744	.90144
44	G9L63L	.24332	.99978	1.0584	1.0750	1.0074	.98097
45	G9G4K	.01977	-.00952	.07072	.00318	.00920	4.5238
46	CCV	1.0198	4.1014	4.2934	4.2400	4.0649	3.9787
47	CCB	.00042	.00393	.00142	.00168	.00139	.00088
48	G9G4KV 5X	.00461	-.00100	.01442	.00037	.00161	.96204
49	G9G4N	.00017	.00115	.03731	-.00044	.00033	.00094
50	G9G4P	.00271	.00273	.05986	.00685	.02931	.11660
51	G9G4W	.00149	.00149	.03287	-.00041	.00034	.06294
52	G9G42	.00606	-.00007	.05832	.01508	.05500	.23441
53	G9G47	.00123	.00109	.08474	-.00054	.16479	1.0779

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#	Sample Name	Ag3280	As1890	Ba4934	Be3130	Cd2265	Cr2677
54	G9G5A	.02935	.01128	.04895	.00618	.01003	.69825
55	G9G5J	.09999	.04252	.09210	.01375	.06972	.66980
56	G9G5N	.00494	-.00087	.05122	.01351	.05752	.22107
57	G9G5Q	.00997	.01766	.06511	.02411	.09250	.60075
58	CCV	1.0347	4.1564	4.3548	4.2747	4.1134	4.0260
59	CCB	.00002	.00181	.00103	.00124	.00104	.00096
60	G9G5R	.01582	L-.06174	.05582	.01071	.04250	18.384
61	G9G5W	.01116	.04085	.10667	.02008	.02283	.12659
62	G9G50	.01914	L-.09118	.04449	-.00004	.00353	27.061
63	G9G56	.00115	.02876	.17287	.00113	.00323	.00685
64	G9G59	.00000	.00150	.04789	-.00046	-.00015	.11421
65	G9G6D	.00098	.02102	.11202	.00746	.01374	.21823
66	G9G6E	.00282	.02265	.25100	.00848	.01179	1.7012
67	G9G6F	.01777	L-.14890	.08153	.00472	.01503	40.130
68	G9H40	.00583	.00120	.02267	.00014	.00110	.01767
69	G9H42	.00228	L-.02164	.02085	-.00011	.00061	5.8422
70	CCV	.99789	4.0215	4.1751	4.1497	3.9888	3.8860
71	CCB	.00024	.00331	.00159	.00197	.00160	.00137
72	G9ECFB	-.00005	L-.00010	.06436	-.00059	-.00054	-.00039
73	G9G7VC	.25498	1.0324	1.1471	1.0790	1.0073	.99956
74	G8WP7	.00020	.00616	.35360	-.00068	.07197	-.00055
75	G8WP7S	.04972	2.0414	2.4394	.05285	.11352	.19362
76	G8WP7D	.04911	2.0224	2.4017	.05256	.11276	.19287
77	G8WP7V 5X	-.00028	.00242	.07087	-.00042	.01448	-.00011
78	G8WQL	-.00063	-.00048	.65980	-.00066	.03646	-.00107
79	G8WQN	.00064	.00392	.57621	-.00057	.04197	-.00022
80	G8WQR	.00107	.00108	.96110	-.00049	.01622	-.00015
81	G8WQT	.00022	.00148	.57257	-.00050	.05329	-.00027
82	CCV1	.96995	3.9096	4.0609	4.0404	3.8860	3.7789
83	CCB1	.00024	.00044	-.00065	-.00042	-.00055	-.00026
84	G8WR6	-.00073	.00492	1.5339	-.00052	.69378	-.00030
85	G8WTA	-.00036	.00215	.46998	-.00054	.05353	-.00076
86	G8WTE	.00106	.00476	.52605	-.00056	.01612	-.00144
87	G8WTG	.00070	.00135	.37574	-.00052	.00819	-.00051
88	G8WTR	-.00012	.00004	.42214	-.00055	.01263	-.00020
89	G8WTV	-.00024	.00025	.70270	-.00059	.00469	-.00023
90	G8WTW	.00000	.00132	.64764	-.00063	.00447	-.00010
91	G8WTX	.00065	.00271	.71603	-.00046	.06394	.00014
92	G8WT0	.00073	.00134	.63657	-.00056	.03800	-.00057
93	G8WT1	.00047	.00106	.31450	-.00053	.02954	.00038
94	CCV1	.98220	3.9458	4.1144	4.0824	3.9210	3.8195
95	CCB1	-.00011	.00151	-.00029	-.00007	-.00043	-.00048
96	CCV	1.0206	4.0171	4.3334	4.3184	4.0238	3.9587
97	CCB	.00025	.00073	-.00052	-.00051	-.00056	-.00051
98	G8WTR 5	.00007	-.00026	.08880	-.00056	.00222	-.00056
99	G8WT1 5	-.00005	.00103	.06736	-.00055	.00591	-.00031
100	CCV	1.0358	4.1103	Q4.4184	Q4.4068	4.1670	4.0907
101	CCB	.00069	.00054	-.00039	-.00046	-.00032	-.00024

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#	Sample Name	Ni2316	Zn2138	Pb2203	Se1960	Sb2068	Fe
1	CALBLK	-.02799	.36398				-.00599
2	CAL1	227.236	204.438				
3	CAL2						385.435
4	ICV	3.9766	3.9867	3.9668	4.0124	3.9653	40.499
5	ICB	.00035	.00208	.00076	-.00038	.00176	.02581
6	LLC	.04045	.02186	.01089	.01556	.05759	.11656
7	LLC AG	.04976	.05147	.05006	.04795	.04971	.02354
8	ICSA	.00173	-.00444	Q.00769	-.00326	.00118	188.22
9	ICSAB	.91175	.95834	.92811	.97385	.96038	189.21
10	CCV	4.0715	4.0645	4.0788	4.1290	4.0763	41.375
11	CCB	-.00030	.00233	.00049	.00022	.00264	.02435
12	G71P3 20	.02285	.06172	.00951	-.00196	-.00056	8.7232
13	G71P5 20	.04230	.10391	.01206	-.00135	-.00163	9.0229
14	G71QJ 20	.04111	.11965	.01206	-.00178	-.00149	6.4720
15	G71QK 20	.04003	.10574	.01054	-.00233	-.00020	6.0853
16	G71QL 20	.02690	.08064	.01025	-.00078	-.00406	6.9708
17	G71QN 20	.03225	.08460	.01003	-.00082	-.00259	7.2015
18	G71QQ 20	.02402	.07602	.00750	-.00151	-.00374	4.6092
19	G71Q0 20	.02050	.05820	.00879	-.00160	.00072	6.1301
20	G71Q1 20	.02307	.06148	.00815	-.00124	-.00182	6.1163
21	G71Q5 20	.02591	.08074	.00940	-.00065	-.00393	6.3906
22	CCV	4.0781	4.0637	4.0627	4.0984	4.0490	41.412
23	CCB	-.00063	.00178	.00079	-.00036	.00012	.00103
24	G9HX1B	.00002	.00600	-.00050	-.00026	-.00073	.00644
25	G9MDJC	1.0091	1.0100	.99959	1.0256	1.0035	1.0995
26	G8170	-.00114	.01381	-.00009	-.00100	.00064	.00200
27	G8170X	-.00081	.01406	.00046	-.00123	.00099	-.00874
28	G8170S	.50251	.51133	.49724	2.0277	.48817	1.0417
29	G8170D	.50341	.51366	.50102	2.0405	.48995	1.0540
30	G8170V 5X	-.00008	.00502	.00025	.00015	.00225	.00317
31	G84EP	-.00129	.01676	.00099	-.00152	-.00244	-.00512
32	G9GFM	.81946	C.00000	.26389	.00035	.09085	130.72
33	G9GFN	.03979	.03614	.00599	-.00015	.00898	9.8187
34	CCV	4.0292	4.0616	4.0100	4.0584	4.0178	40.960
35	CCB	.00004	.00233	.00049	.00011	.00381	.01674
36	G9GFP	.28425	5.0808	.07848	-.00096	.00509	5.4376
37	G9L66B	-.00021	.00537	-.00043	-.00176	-.00085	-.00807
38	G9L66C	.99979	1.0048	.99044	1.0145	.99469	1.0876
39	G9L66L	.99273	.99331	.98221	1.0043	.98621	1.0873
40	G9H43	.00505	.01924	.02482	.00070	L-.01316	.09053
41	G9H43V 5X	.00015	.00641	.00427	.00078	-.00244	.01226
42	G9L63B	-.00074	.00200	-.00056	-.00158	-.00080	-.01982
43	G9L63C	.90641	.90335	.89941	.92439	.90033	.98453
44	G9L63L	.98644	.99057	.97899	1.0035	.98485	1.0794
45	G9G4K	.13034	1.3362	.58802	.00539	.06672	4.8740
46	CCV	4.0220	4.0358	3.9902	4.0472	3.9960	40.861
47	CCB	.00048	.00308	.00144	.00113	.00303	.01435
48	G9G4KV 5X	.02745	.28087	.12598	.00036	.01388	1.0382
49	G9G4N	.00070	.00410	.02787	-.00087	.00153	.00641
50	G9G4P	.01451	.23222	.03894	L-.00674	L-.02742	2.8598
51	G9G4W	.02019	.34618	.02015	-.00118	.00244	3.5562
52	G9G42	.09847	.44130	.08310	L-.00588	L-.03166	4.2307
53	G9G47	.25458	1.2499	.28768	.00445	.01707	.81988

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#	Sample Name	Ni2316	Zn2138	Pb2203	Se1960	Sb2068	Fe
54	G9G5A	.13232	.28507	.13683	.00104	L-.15946	2.3313
55	G9G5J	.23528	.71006	.34001	.06858	.03288	4.4873
56	G9G5N	.02283	.36617	.07930	L-.00546	L-.03770	3.4550
57	G9G5Q	.09569	.64935	.11759	.00288	L-.18585	6.5281
58	CCV	4.0734	4.0820	4.0468	4.1315	4.0746	41.384
59	CCB	.00054	.00252	.00145	.00179	.00278	.00847
60	G9G5R	.05972	.74353	1.0720	-.00456	.15972	9.2198
61	G9G5W	.45242	3.3018	.45602	.01726	.03134	6.0965
62	G9G50	.22089	1.4329	1.9315	.00221	.38610	9.6413
63	G9G56	.04296	.30883	.28755	.00085	.00787	3.9575
64	G9G59	.00409	.07826	.01255	.00194	.00144	.93745
65	G9G6D	.07229	8.0525	.99458	.00572	.02004	4.9348
66	G9G6E	.14040	.92075	.24253	-.00184	L-.03811	3.1474
67	G9G6F	.63909	3.3369	3.4847	-.00494	.51559	14.190
68	G9H40	.00593	.02933	.03330	.00359	-.00952	.25807
69	G9H42	.00567	.10265	.34181	.00050	.07357	.48186
70	CCV	3.9427	3.9571	3.9099	3.9656	3.9072	39.985
71	CCB	.00169	.00319	.00109	.00110	.00240	.01738
72	G9ECFB	-.00048	H.01422	.00246	-.00058	-.00007	.00628
73	G9G7VC	1.0033	1.0289	.99240	1.0583	1.0108	1.1119
74	G8WP7	.10573	14.956	1.2559	.00104	.01691	-.00126
75	G8WP7S	.57982	14.099	1.6094	2.0410	.50518	1.0771
76	G8WP7D	.57612	14.044	1.6026	2.0165	.49491	1.0133
77	G8WP7V 5X	.02109	3.0826	.25780	.00106	.00070	-.00554
78	G8WQL	.04001	7.7763	.31435	.00065	.00992	-.00959
79	G8WQN	.05739	15.641	.95774	-.00142	.08261	.00223
80	G8WQR	.02512	7.6756	2.5173	-.00057	.03136	.01841
81	G8WQT	.09094	16.185	1.0247	-.00051	.01452	-.00836
82	CCV1	3.8427	3.8682	3.8226	3.8917	3.8281	38.976
83	CCB1	-.00109	.00137	.00041	.00050	.00144	-.00042
84	G8WR6	.05862	14.051	1.3312	-.00066	.10965	-.00548
85	G8WTA	.13554	16.953	1.7473	-.00105	.01361	-.00682
86	G8WTE	.04969	12.131	.43072	-.00150	.03794	-.00528
87	G8WTG	.04813	9.9498	.25299	-.00048	.00735	-.00710
88	G8WTR	.06866	~~H21.475~~	.25187	-.00037	.00083	-.00511
89	G8WTV	.01788	2.0400	.31698	-.00096	.00100	-.00525
90	G8WTW	.01810	3.3994	.12648	-.00113	.00823	.00576
91	G8WTX	.04586	14.686	.98792	-.00010	.02265	.00095
92	G8WT0	.05125	13.497	.58727	.00037	.02648	.00175
93	G8WT1	.13899	~~H24.589~~	.57383	.00272	.03698	.00108
94	CCV1	3.8822	3.9015	3.8636	3.9456	3.8782	39.373
95	CCB1	-.00010	.00207	.00004	-.00021	.00086	-.00392
96	CCV	3.9918	4.0521	3.9651	4.0400	4.0168	40.822
97	CCB	-.00065	.00086	-.00055	-.00067	.00096	-.00361
98	G8WTR 5	.01388	4.5719	.05301	-.00061	.00184	-.00540
99	G8WT1 5	.02963	5.3957	.12270	.00015	.00717	-.00848
100	CCV	4.1332	4.1709	4.1093	4.1508	4.1047	42.104
101	CCB	-.00070	.00121	-.00015	-.00041	.00064	.00952

JJ 5/5/05 SID 042605 corr of T

Standardization Rpt. 05/05/05 02:27:08 PM

Method: 6010C Standard: CALBLK
Run Time: 05/05/05 14:22:49

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Avge	.01300	.23549	1.5824	-.19899	-.45248	.59347	3.2298
SDev	.32667	.32879	1.8136	1.50041	.59889	.24535	.0184
%RSD	2512.9	139.62	114.61	754.01	132.36	41.342	.56919
#1	-.21799	.46798	2.8649	-1.2599	-.02900	.41998	3.2428
#2	-.24399	.00300	.29998	-.86196	-.87596	.76696	3.2168

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Avge	.41398	.02400	-1.1289	.05800	.27899	.07350	-.00100
SDev	.00353	.00141	.0099	.00848	.00283	.10111	.00424
%RSD	.85399	5.8926	.87683	14.630	1.0138	137.57	424.26
#1	.41148	.02500	-1.1219	.06400	.28099	.14499	-.00400
#2	.41648	.02300	-1.1359	.05200	.27699	.00200	.00200

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Avge	.12749	-.00600	2.1574	1.0114	-.02800	-.06800	-.26549
SDev	.02050	.00141	.0205	.0078	.00283	.03111	.13222
%RSD	16.083	23.570	.95046	.76897	10.102	45.754	49.804
#1	.14199	-.00700	2.1719	1.0169	-.02600	-.04600	-.17199
#2	.11299	-.00500	2.1429	1.0059	-.03000	-.09000	-.35898

Elem	V 2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Avge	.01150	.36398	.02950	.01250	.01150	.01650	.03800
SDev	.00353	.00283	.01626	.00071	.02333	.03748	.17818
%RSD	30.744	.77704	55.130	5.6569	202.91	227.13	468.92
#1	.01400	.36598	.04100	.01300	.02800	.04300	.16399
#2	.00900	.36198	.01800	.01200	-.00500	-.01000	-.08800

Elem	Ti3349	Zr3496	Na3302
Avge	-.01300	103.48	11.873
SDev	.00141	1.08	.091
%RSD	10.879	1.0406	.76824
#1	-.01200	104.24	11.937
#2	-.01400	102.72	11.808

Method: 6010C Standard: CAL1
Run Time: 05/05/05 14:27:12

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	As1890
Avge	1032.9	934.57	2757.9	4780.4	605.94	690.03	1662.1
SDev	4.4	8.75	16.2	4.9	5.10	2.80	15.4
%RSD	.42949	.93581	.58713	.10194	.84098	.40547	.92606
#1	1036.0	940.75	2769.3	4783.9	609.55	692.01	1672.9
#2	1029.7	928.38	2746.4	4777.0	602.34	688.06	1651.2

Elem	Ba4934	Be3130	Cd2265	Cr2677	Co2286	Cu3247	Mn2576
Avge	419.63	1608.1	1134.3	859.30	142.81	164.91	837.64
SDev	5.86	12.3	6.6	6.99	1.10	2.38	6.85
%RSD	1.3963	.76517	.58485	.81296	.76745	1.4436	.81770

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#1	423.78	1616.8	1139.0	864.24	143.58	166.59	842.48
#2	415.49	1599.4	1129.6	854.36	142.03	163.23	832.80
Elem	Ni2316	Ag3280	Tl1908	V_2924	Zn2138	Mo2020	Sr4215
Avge	227.24	281.78	518.25	189.77	204.44	179.68	195.67
SDev	1.83	3.08	4.30	1.99	1.27	1.45	1.56
%RSD	.80560	1.0918	.82937	1.0477	.62047	.80553	.79573

#1	228.53	283.96	521.29	191.18	205.33	180.70	196.77
#2	225.94	279.61	515.22	188.36	203.54	178.66	194.56
Elem	Sn1899	Th	U	Ti3349	Zr3496		
Avge	127.99	174.56	40.360	198.29	295.09		
SDev	.88	2.38	.585	2.07	.67		
%RSD	.68999	1.3635	1.4488	1.0419	.22667		
#1	128.62	176.24	40.774	199.75	295.57		
#2	127.37	172.87	39.947	196.83	294.62		

Method: 6010C Standard: CAL2
Run Time: 05/05/05 14:31:35

Elem	Al	Ca	Fe	Mg	Na3302
Avge	329.96	118.70	385.44	195.38	29.964
SDev	2.06	.31	1.57	.37	.002
%RSD	.62465	.25792	.40633	.18783	.00708
#1	331.42	118.92	386.54	195.64	29.966
#2	328.50	118.49	384.33	195.12	29.963

Method: 6010C Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Sb1	206.831	CAL1	CALBLK	.009669	-.000126	05/05/05 02:31:35
Sb2	206.832	CAL1	CALBLK	.010698	-.002519	05/05/05 02:31:35
Pb1	220.351	CAL1	CALBLK	.003620	-.005728	05/05/05 02:31:35
Pb2	220.352	CAL1	CALBLK	.002095	.000417	05/05/05 02:31:35
Se1	196.021	CAL1	CALBLK	.016108	.007288	05/05/05 02:31:35
Se2	196.022	CAL1	CALBLK	.014514	-.008614	05/05/05 02:31:35
Al	308.215	CAL2	CALBLK	.306062	-.988531	05/05/05 02:31:35
As1890	189.042	CAL1	CALBLK	.006018	-.002491	05/05/05 02:31:35
Ba4934	493.409	CAL1	CALBLK	.023832	-.000572	05/05/05 02:31:35
Be3130	313.042	CAL1	CALBLK	.006214	.007016	05/05/05 02:31:35
Cd2265	226.502	CAL1	CALBLK	.008817	-.000511	05/05/05 02:31:35
Ca	317.933	CAL2	CALBLK	.422213	-.117792	05/05/05 02:31:35
Cr2677	267.760	CAL1	CALBLK	.011647	-.000856	05/05/05 02:31:35
Co2286	228.616	CAL1	CALBLK	.070045	.000070	05/05/05 02:31:35
Cu3247	324.753	CAL1	CALBLK	.060858	-.007759	05/05/05 02:31:35
Fe	217.441	CAL2	CALBLK	.259443	.001557	05/05/05 02:31:35
Mg	279.078	CAL2	CALBLK	.258775	-.558278	05/05/05 02:31:35
Mn2576	257.610	CAL1	CALBLK	.011955	-.012092	05/05/05 02:31:35
Ni2316	231.604	CAL1	CALBLK	.044002	.001232	05/05/05 02:31:35
Ag3280	328.068	CAL1	CALBLK	.007155	.000487	05/05/05 02:31:35
Tl1908	190.864	CAL1	CALBLK	.019262	.005114	05/05/05 02:31:35
V_2924	292.402	CAL1	CALBLK	.052723	-.000606	05/05/05 02:31:35

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Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Zn2138	213.856	CAL1	CALBLK	.542613	-.040509	05/05/05 02:31:35
Mo2020	202.030	CAL1	CALBLK	.055638	-.001641	05/05/05 02:31:35
Sr4215	421.552	CAL1	CALBLK	.051111	-.000639	05/05/05 02:31:35
Sn1899	189.989	CAL1	CALBLK	.078168	-.000899	05/05/05 02:31:35
Th	401.913	CAL1	CALBLK	.057620	-.000951	05/05/05 02:31:35
U	385.958	CAL1	CALBLK	.248723	-.009451	05/05/05 02:31:35
Pb2203	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
~~Se1960~~	~~196.026~~	~~NONE~~	~~NONE~~	~~.000000~~	~~.000000~~	~~*NOT STANDARDIZED~~
Sb2068	206.838	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Ti3349	334.941	CAL1	CALBLK	.050428	.000656	05/05/05 02:31:35
Zr3496	349.621	CAL1	CALBLK	.026095	-2.70034	05/05/05 02:31:35
Na3302	330.232	CAL2	CALBLK	5.52758	-65.6285	05/05/05 02:31:35

Method: 6010C

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sb1	206.831	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	9.98635	.013650

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sb2	206.832	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.99557	.004431

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Pb1	220.351	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.97654	.023456

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Pb2	220.352	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0168	-.016750

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Se1	196.021	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.76756	.232440

~~Element~~	~~Wavelength~~	~~Standard~~	Known Concentration	Measured Concentration	Residual Concentration
Se2	196.022	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0067	-.006726

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Al	308.215	CALBLK	.000000	-.000000	.000000
		CAL2	100.000	100.000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
As1890	189.042	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	9.99979	.000210

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Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ba4934	493.409	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0000	.000000
Be3130	313.042	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0000	.000000
Cd2265	226.502	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0003	-.000271
Ca	317.933	CALBLK	.000000	.000000	-.000000
		CAL2	50.0000	50.0000	.000000
Cr2677	267.760	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0072	-.007160
Co2286	228.616	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0029	-.002900
Cu3247	324.753	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0285	-.028476
Fe	217.441	CALBLK	.000000	-.000000	.000000
		CAL2	100.000	100.000	.000000
Mg	279.078	CALBLK	.000000	.000000	-.000000
		CAL2	50.0000	50.0000	.000000
Mn2576	257.610	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0023	-.002260
Ni2316	231.604	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration

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Element	Wavelength	Standard	Concentration	Concentration	Concentration
Ag3280	328.068	CALBLK	.000000	-.000000	.000000
		CAL1	2.00000	2.01675	-.016750

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Tl1908	190.864	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.98764	.012361

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
V_2924	292.402	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0046	-.004601

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Zn2138	213.856	CALBLK	.156992	.363982	-.206990
		CAL1	110.890	204.438	-93.5477

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mo2020	202.030	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	9.99540	.004600

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sr4215	421.552	CALBLK	.000000	.000000	-.000000
		CAL1	10.0000	10.0000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sn1899	189.989	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0040	-.003950

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Th	401.913	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0570	-.057000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
U	385.958	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0291	-.029115

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Pb2203	220.353	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Se1960	196.026	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Sb2068	206.838	NONE	.000000	.000000	.000000

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		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ti3349	334.941	CALBLK	.000000	-.000000	.000000
		CAL1	10.0000	10.0000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Zr3496	349.621	CALBLK	.000000	.000000	-.000000
		CAL1	5.00000	5.00000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Na3302	330.232	CALBLK	.000000	-.000002	.000002
		CAL2	100.000	100.000	.000000

Method: 6010C Sample Name: ICV Operator: STL
Run Time: 05/05/05 14:35:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	3.9636	3.9687	3.9862	3.9571	4.0363	4.0005	38.511
SDev	.0084	.0184	.0069	.0146	.0195	.0129	.169
%RSD	.21303	.46326	.17291	.36837	.48414	.32128	.43877
#1	3.9576	3.9817	3.9911	3.9468	4.0502	3.9914	38.630
#2	3.9695	3.9557	3.9813	3.9674	4.0225	4.0096	38.391
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.0201	4.2606	4.2316	4.0231	19.891	3.9408	3.9696
SDev	.0165	.0242	.0102	.0069	.041	.0117	.0096
%RSD	.40986	.56912	.24110	.17253	.20863	.29595	.24202
#1	4.0317	4.2778	4.2388	4.0280	19.920	3.9490	3.9764
#2	4.0084	4.2435	4.2244	4.0182	19.862	3.9325	3.9628
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.0153	40.499	19.636	4.0999	3.9766	1.0045	3.9008
SDev	.0244	.130	.018	.0129	.0067	.0044	.0102
%RSD	.60871	.32038	.09225	.31520	.16899	.44109	.26145
#1	4.0325	40.590	19.649	4.1090	3.9814	1.0077	3.9080
#2	3.9980	40.407	19.623	4.0907	3.9719	1.0014	3.8935

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Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.0100	3.9867	4.0890	4.2302	4.1229	Q3.2709	4.0527
SDev	.0135	.0128	.0087	.0183	.0059	.0174	.0065
%RSD	.33720	.32221	.21365	.43225	.14199	.53197	.16055
#1	4.0196	3.9958	4.0952	4.2432	4.1271	Q3.2832	4.0573
#2	4.0004	3.9776	4.0828	4.2173	4.1188	Q3.2586	4.0481

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	3.9668	4.0124	3.9653	4.1079	3.8178	40.214	
SDev	.0074	.0021	.0005	.0163	.0031	.328	
%RSD	.18723	.05148	.01237	.39668	.08227	.81640	
#1	3.9615	4.0110	3.9656	4.1194	3.8156	39.982	
#2	3.9720	4.0139	3.9649	4.0963	3.8200	40.446	

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	4.0000	4.0000	4.0000	4.0000	4.0000	
Range	10.000	10.000	10.000	10.000	10.000	

Method: 6010C Sample Name: ICB Operator: STL
Run Time: 05/05/05 14:39:48
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00339	-.00149	-.00222	.00226	-.00280	.00083	.01565
SDev	.00792	.00358	.00448	.00438	.00361	.00438	.00559
%RSD	233.39	240.46	201.27	193.70	128.72	530.26	35.745
#1	.00900	-.00402	-.00539	.00535	-.00536	.00392	.01961
#2	-.00221	.00104	.00094	-.00084	-.00025	-.00227	.01169

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00206	.00015	.00012	.00019	.01077	.00010	.00077
SDev	.00007	.00032	.00004	.00030	.00209	.00036	.00099
%RSD	3.6078	206.69	35.355	154.86	19.411	367.05	128.49
#1	.00201	.00038	.00016	.00040	.01224	.00035	.00147
#2	.00211	-.00007	.00009	-.00002	.00929	-.00016	.00007

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Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00017	.02582	.00944	.00013	.00035	.00105	.00175
SDev	.00019	.02471	.00988	.00018	.00100	.00197	.00078
%RSD	112.68	95.708	104.61	134.36	282.84	188.18	44.414
#1	.00030	.04329	.01643	.00025	.00106	.00245	.00120
#2	.00003	.00835	.00246	.00001	-.00035	-.00035	.00231

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00092	.00209	.00309	.00005	.00015	.00650	.00257
SDev	.00186	.00013	.00181	.00011	.00027	.01035	.00751
%RSD	202.27	6.4369	58.696	212.95	176.58	159.27	292.43
#1	.00223	.00218	.00437	.00013	.00035	.01381	.00788
#2	-.00040	.00199	.00181	-.00003	-.00004	-.00082	-.00274

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00077	-.00038	.00177	.00103	.01358	Q.45876
SDev	.00143	.00172	.00409	.00082	.05458	.98882
%RSD	186.38	447.89	231.41	79.334	402.03	215.54
#1	.00178	.00083	.00466	.00161	.05217	Q1.1580
#2	-.00024	-.00160	-.00113	.00045	-.02502	-.24044

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00300	.00400	.06000	.05000	.50000	.25000

Method: 601QC Sample Name: LLC Operator: STL
Run Time: 05/05/05 14:44:10
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.05682	.05914	.01057	.01105	.02012	.01329	.20127
SDev	.00018	.00208	.00023	.00190	.00016	.00132	.00154
%RSD	.32489	3.5225	2.1480	17.204	.79338	9.9480	.76726
#1	.05695	.06062	.01073	.01240	.02023	.01236	.20018
#2	.05669	.05767	.01041	.00971	.02000	.01423	.20237

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.20000
Range							20.000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.01083	.22104	.00526	.00468	5.0530	.00967	.05101
SDev	.00016	.00022	.00022	.00042	.0116	.00022	.00005
%RSD	1.5142	.09910	4.1742	8.9262	.23042	2.2612	.09999
#1	.01072	.22089	.00542	.00497	5.0448	.00983	.05105
#2	.01095	.22120	.00511	.00438	5.0612	.00952	.05097
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.01000	.20000	.00500	.00500	5.0000	.01000	.05000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.02432	.11656	4.9284	.01571	.04046	Q.01221	.02041
SDev	.00005	.00205	.0126	.00020	.00016	.00017	.00041
%RSD	.18541	1.7568	.25617	1.2535	.38451	1.4146	1.9913
#1	.02436	.11801	4.9194	.01585	.04057	Q.01233	.02070
#2	.02429	.11511	4.9373	.01557	.04035	Q.01209	.02012
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	.02500	.10000	5.0000	.01500	.04000	.01000	.02000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.05071	.02186	.04222	.05410	.10414	Q-.00301	.51746
SDev	.00048	.00024	.00055	.00015	.00265	.00124	.00950
%RSD	.95081	1.0881	1.2943	.26763	2.5461	41.091	1.8363
#1	.05105	.02203	.04260	.05420	.10226	Q-.00213	.51074
#2	.05037	.02169	.04183	.05400	.10601	Q-.00388	.52418
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	.05000	.02000	.04000	.05000	.10000	.50000	.50000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.01089	.01557	.05759	.05282	.46701	3.5209	
SDev	.00134	.00083	.00082	.00011	.00138	.0899	
%RSD	12.338	5.3254	1.4184	.20251	.29599	2.5531	
#1	.01184	.01498	.05817	.05290	.46799	3.4573	
#2	.00994	.01615	.05702	.05275	.46603	3.5845	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	
Value	.01000	.01500	.06000	.05000	.50000		
Range	20.000	20.000	20.000	20.000	20.000		

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Method: 6010C Sample Name: LLC AG Operator: STL
Run Time: 05/05/05 14:48:33
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.05109	.04694	.04852	.05084	.04582	.04902	.01610
SDev	.00937	.00385	.00492	.00299	.00473	.00160	.00019
%RSD	18.339	8.2063	10.134	5.8872	10.322	3.2733	1.2111
#1	.04447	.04967	.05200	.04872	.04917	.04788	.01624
#2	.05772	.04422	.04505	.05296	.04248	.05015	.01597
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.05030	.05289	.05459	.05175	.09542	.04911	.05077
SDev	.00031	.00039	.00020	.00040	.00179	.00105	.00020
%RSD	.62006	.73275	.36219	.77148	1.8773	2.1400	.40209
#1	.05008	.05262	.05445	.05147	.09415	.04986	.05063
#2	.05052	.05317	.05473	.05203	.09668	.04837	.05092
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.04899	.02354	.00246	.05171	.04976	.00995	.04891
SDev	.00111	.00588	.00073	.00013	.00050	.00003	.00007
%RSD	2.2549	24.967	29.773	.24636	1.0003	.29287	.15319
#1	.04977	.02770	.00298	.05162	.04941	.00997	.04896
#2	.04821	.01939	.00194	.05180	.05012	.00993	.04886
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value						.01000	
Range						20.000	

Elem	V 2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.04944	.05148	.05201	.05348	.04960	.10968	.03473
SDev	.00033	.00021	.00033	.00036	.00006	.00288	.04010
%RSD	.66028	.40819	.64041	.67564	.12516	2.6229	115.47
#1	.04921	.05133	.05224	.05323	.04956	.10764	.06308
#2	.04967	.05163	.05177	.05374	.04965	.11171	.00637
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.05007	.04795	.04971	.05116	.00932	-.26531
SDev	.00036	.00051	.00497	.00032	.01481	.40256
%RSD	.71691	1.0531	9.9915	.62730	158.86	151.73
#1	.04981	.04831	.04620	.05093	.01980	.01934
#2	.05032	.04760	.05322	.05138	-.00115	-.54997
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value						
Range						

Method: 6010C Sample Name: ICSA Operator: STL
Run Time: 05/05/05 14:52:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00463	-.00572	.13153	-.05414	.00567	-.00773	470.06
SDev	.00144	.00001	.00795	.00470	.00677	.00192	3.36
%RSD	31.056	.24756	6.0452	8.6779	119.29	24.831	.71503
#1	.00565	-.00573	.13715	-.05746	.01046	-.00637	467.69
#2	.00361	-.00571	.12591	-.05081	.00089	-.00909	472.44
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							500.00
Range							100.00

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00206	.00186	-.00062	-.00735	448.91	.00012	.00035
SDev	.00008	.00007	.00004	.00006	2.28	.00056	.00000
%RSD	3.6975	3.6262	7.1425	.80740	.50694	467.23	1.0940
#1	.00200	.00181	-.00058	-.00731	447.30	.00051	.00035
#2	.00211	.00191	-.00065	-.00739	450.52	-.00027	.00036
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	500.00	.00000	.00000
Range	.02000	.20000	.01000	.01000	100.00	.02000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.01350	188.22	490.39	.00383	.00174	.00057	.01211
SDev	.00107	1.21	2.18	.00003	.00034	.00021	.00208
%RSD	7.9023	.64089	.44416	.67615	19.692	36.161	17.201
#1	-.01274	187.36	488.85	.00385	.00198	.00042	.01358
#2	-.01425	189.07	491.93	.00381	.00150	.00072	.01064
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	200.00	500.00	.00000	.00000	.00000	.00000
Range	.02500	40.000	100.00	.01500	.04000	.02000	.02000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00310	-.00445	-.00221	-.00701	.00063	.00078	-.03092
SDev	.00078	.00001	.00022	.00003	.00005	.00153	.02474
%RSD	25.042	.33119	10.157	.38177	8.0864	195.37	80.008
#1	.00255	-.00444	-.00237	-.00703	.00067	-.00030	-.01343
#2	.00365	-.00446	-.00205	-.00699	.00059	.00186	-.04841
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.02000	.04000	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	Q.00769	-.00327	.00118	.00729	-.07393	-2.0727
SDev	.00049	.00353	.00096	.00004	.01894	.3322
%RSD	6.3157	108.17	80.645	.48934	25.618	16.028
#1	Q.00735	-.00077	.00186	.00731	-.06054	-1.8378
#2	Q.00803	-.00577	.00051	.00726	-.08733	-2.3077
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.00000	.00000	.00000	.00000	.00000	
Range	.00600	.01000	.06000	.05000	.50000	

Method: 6010C Sample Name: ICSAB Operator: STL
Run Time: 05/05/05 14:57:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.96106	.95902	1.0864	.84910	.98873	.96642	474.72
SDev	.01427	.00634	.0019	.00842	.00473	.01140	.34
%RSD	1.4848	.66136	.17301	.99103	.47813	1.1791	.07066
#1	.95097	.96350	1.0877	.84315	.99207	.95837	474.96
#2	.97115	.95453	1.0851	.85505	.98538	.97448	474.49
Errors	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value	1.0000	1.0000					500.00
Range	20.000	20.000					20.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.97607	.53819	.51989	.91299	452.41	.46957	.45218
SDev	.00147	.00135	.00017	.00045	.75	.00048	.00020
%RSD	.15039	.25048	.03211	.04943	.16550	.10292	.04350
#1	.97711	.53914	.52001	.91267	451.88	.46923	.45204
#2	.97503	.53724	.51978	.91331	452.94	.46991	.45232
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	.50000	.50000	1.0000	500.00	.50000	.50000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

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Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.53143	189.21	492.00	.49695	.91176	1.0059	.91081
SDev	.00215	.03	.19	.00035	.00106	.0022	.00232
%RSD	.40382	.01614	.03886	.07095	.11602	.22027	.25493
#1	.53295	189.23	491.87	.49720	.91101	1.0075	.90917
#2	.52991	189.18	492.14	.49670	.91250	1.0044	.91245
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	200.00	500.00	.50000	1.0000	1.0000	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.48838	.95835	.95527	1.0436	.94508	.79534	.98714
SDev	.00093	.00104	.00051	.0018	.00033	.00362	.00549
%RSD	.19015	.10864	.05380	.17459	.03507	.45472	.55635
#1	.48904	.95909	.95491	1.0449	.94485	.79790	.98325
#2	.48773	.95761	.95564	1.0423	.94532	.79278	.99102
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass
Value	.50000	1.0000	1.0000	1.0000	1.0000		1.0000
Range	20.000	20.000	20.000	20.000	20.000		20.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.92812	.97385	.96038	.51059	.80798	18.315
SDev	.00499	.00603	.00741	.00039	.01631	.352
%RSD	.53730	.61882	.77117	.07682	2.0192	1.9206
#1	.92459	.96959	.95514	.51086	Q.79644	18.066
#2	.93164	.97811	.96562	.51031	.81952	18.563
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	1.0000	1.0000	1.0000	.50000	1.0000	
Range	20.000	20.000	20.000	20.000	20.000	

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/05/05 15:03:25
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	4.0632	4.1026	4.1026	4.0669	4.1660	4.1105	39.493
SDev	.0300	.0411	.0207	.0107	.0372	.0319	.440
%RSD	.73753	1.0012	.50381	.26248	.89414	.77673	1.1148
#1	4.0844	4.0736	4.0880	4.0745	4.1397	4.1330	39.804
#2	4.0420	4.1317	4.1172	4.0594	4.1924	4.0879	39.182
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.1265	4.3548	4.3187	4.1207	20.427	4.0313	4.0610
SDev	.0323	.0707	.0444	.0302	.130	.0342	.0292
%RSD	.78261	1.6228	1.0279	.73403	.63575	.84741	.71916
#1	4.1493	Q4.4048	4.3501	4.1421	20.519	4.0554	4.0817
#2	4.1036	4.3049	4.2874	4.0993	20.335	4.0071	4.0404
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.1056	41.375	20.010	4.1907	4.0715	1.0289	3.9891
SDev	.0646	.334	.079	.0386	.0321	.0101	.0419
%RSD	1.5732	.80770	.39502	.92034	.78784	.98472	1.0509
#1	4.1512	41.611	20.066	4.2180	4.0942	1.0361	4.0188
#2	4.0599	41.138	19.955	4.1635	4.0488	1.0218	3.9595
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.1050	4.0645	4.1801	4.2892	4.2247	Q3.3625	4.1428
SDev	.0421	.0376	.0360	.0521	.0360	.0375	.0792
%RSD	1.0250	.92487	.86200	1.2158	.85245	1.1158	1.9126
#1	4.1347	4.0911	4.2056	4.3260	4.2502	Q3.3890	4.1988
#2	4.0752	4.0379	4.1547	4.2523	4.1993	Q3.3359	4.0867
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	4.0788	4.1290	4.0763	4.1998	3.8601	40.924
SDev	.0002	.0089	.0063	.0476	.0032	.840
%RSD	.00581	.21533	.15479	1.1343	.08195	2.0533
#1	4.0790	4.1352	4.0808	4.2335	3.8579	40.330
#2	4.0786	4.1227	4.0719	4.1661	3.8623	41.518
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 05/05/05 15:07:49
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

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Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00425	-.00056	-.00242	.00194	-.00162	.00114	.03820
SDev	.00728	.00310	.00558	.00403	.00721	.00327	.02373
%RSD	171.04	549.10	230.87	207.10	445.02	286.04	62.126
#1	-.00089	.00163	.00153	-.00090	.00348	-.00117	.02142
#2	.00940	-.00275	-.00636	.00479	-.00672	.00346	.05499
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00111	.00054	.00056	.00044	.02301	.00014	.00074
SDev	.00219	.00099	.00072	.00076	.02478	.00045	.00164
%RSD	197.35	185.42	128.85	172.62	107.69	316.39	222.40
#1	-.00044	-.00017	.00005	-.00010	.00549	-.00017	-.00042
#2	.00266	.00124	.00107	.00097	.04053	.00046	.00189
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00004	.02436	.02782	.00063	-.00031	.00090	.00302
SDev	.00043	.03712	.02196	.00065	.00205	.00212	.00059
%RSD	1143.0	152.38	78.933	102.98	666.70	236.06	19.605
#1	-.00034	-.00189	.01229	.00017	-.00176	-.00060	.00344
#2	.00026	Q.05060	.04334	.00108	.00114	.00239	.00260
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00097	.00234	.00211	.00043	-.00113	.00350	-.00252
SDev	.00275	.00053	.00036	.00087	.00022	.00614	.01905
%RSD	282.87	22.869	17.171	199.75	19.699	175.37	755.57
#1	-.00097	.00196	.00237	-.00018	-.00129	-.00084	.01095
#2	.00292	.00272	.00186	.00105	-.00098	.00784	-.01599
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00049	.00022	.00265	.00119	.04360	Q1.1276
SDev	.00083	.00022	.00382	.00082	.01328	.2697
%RSD	168.19	97.275	144.24	69.206	30.450	23.917

#1	-.00009	.00038	-.00005	.00061	.05298	Q1.3183
#2	.00108	.00007	.00535	.00176	.03421	Q.93688
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00300	.00400	.06000	.05000	.50000	.25000

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Method: 6010C Sample Name: G71P3 20 Operator: STL
Run Time: 05/05/05 15:18:03
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00197	-.00563	.01107	.00874	-.00440	-.00076	7.4552
SDev	.00314	.00225	.00668	.00276	.00283	.00429	.0024
%RSD	159.23	39.992	60.363	31.636	64.373	567.55	.03168
#1	-.00025	-.00404	.01580	.00678	-.00240	-.00379	7.4535
#2	.00419	-.00722	.00635	.01069	-.00640	.00228	7.4568
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00267	.05883	-.00023	.00180	9.4839	.04218	.00357
SDev	.00090	.00018	.00001	.00027	.0170	.00004	.00079
%RSD	33.832	.31510	5.8117	14.746	.17943	.08878	22.251
#1	.00203	.05869	-.00024	.00161	9.4719	.04216	.00301
#2	.00330	.05896	-.00022	.00199	9.4959	.04221	.00413
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.42583	8.7232	.93827	.29019	.02286	.05721	.00007
SDev	.00095	.0314	.00531	.00026	.00121	.00143	.00014
%RSD	.22366	.35966	.56554	.08805	5.3084	2.4973	192.65
#1	.42650	8.7010	.93452	.29001	.02200	.05620	.00018
#2	.42516	8.7454	.94202	.29038	.02372	.05822	-.00003
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01336	.06173	-.00011	.00985	.04674	.00218	-.00809
SDev	.00111	.00002	.00052	.00007	.00017	.00458	.00936
%RSD	8.3354	.02436	448.50	.73010	.35640	210.09	115.81
#1	.01257	.06171	.00025	.00980	.04662	-.00106	-.00146
#2	.01415	.06174	-.00048	.00990	.04686	.00541	-.01471
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00951	-.00197	-.00056	.09326	2.6673	.87055
SDev	.00038	.00192	.00134	.00032	.0183	.41429
%RSD	4.0219	97.310	239.83	.34409	.68533	47.589
#1	.00978	-.00332	-.00151	.09304	2.6544	.57760
#2	.00924	-.00061	.00039	.09349	2.6803	1.1635
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G71P5 20 Operator: STL
Run Time: 05/05/05 15:22:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00172	-.00837	.01812	.00905	-.00299	-.00054	10.289
SDev	.01053	.00494	.00949	.00598	.00956	.00488	.131
%RSD	610.65	59.051	52.374	66.076	319.40	903.69	1.2768
#1	-.00572	-.00488	.02483	.00482	.00377	-.00399	10.196
#2	.00917	-.01187	.01141	.01328	-.00975	.00291	10.382
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00193	.07534	-.00024	.00270	26.993	.09027	.00409
SDev	.00018	.00140	.00009	.00017	.252	.00012	.00055
%RSD	9.5203	1.8564	36.262	6.3885	.93344	.13436	13.483
#1	.00180	.07435	-.00018	.00258	26.815	.09019	.00370
#2	.00206	.07633	-.00030	.00283	27.171	.09036	.00448
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.87796	9.0229	1.3681	.19290	.04231	.11327	.00088
SDev	.01439	.1051	.0049	.00222	.00134	.00251	.00359
%RSD	1.6388	1.1652	.36111	1.1535	3.1623	2.2166	408.35
#1	.86778	8.9486	1.3646	.19133	.04136	.11149	.00342
#2	.88813	9.0973	1.3716	.19447	.04325	.11504	-.00166
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01623	.10392	-.00082	.01518	.10600	-.00461	-.03596
SDev	.00085	.00106	.00152	.00028	.00150	.00402	.04707
%RSD	5.2133	1.0196	184.22	1.8719	1.4164	87.201	130.88
#1	.01564	.10317	.00025	.01498	.10494	-.00745	-.00268
#2	.01683	.10467	-.00190	.01538	.10706	-.00177	-.06925
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.01207	-.00136	-.00164	.15213	6.0212	1.4150
SDev	.00083	.00007	.00537	.00221	.0272	.7543
%RSD	6.8580	5.1867	328.17	1.4531	.45191	53.309
#1	.01148	-.00141	-.00544	.15057	6.0020	1.9484
#2	.01265	-.00131	.00216	.15370	6.0405	.88160
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G71QJ 20 Operator: STL
Run Time: 05/05/05 15:26:48
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00086	-.00622	.01955	.00833	-.00133	-.00201	8.0771
SDev	.00377	.00158	.00181	.00132	.00269	.00351	.0699
%RSD	439.53	25.359	9.2822	15.886	202.07	174.95	.86522
#1	-.00181	-.00510	.02083	.00739	.00057	-.00449	8.0277
#2	.00352	-.00734	.01826	.00926	-.00323	.00048	8.1265
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00271	.05887	-.00040	.00453	26.389	.08426	.00360
SDev	.00013	.00076	.00007	.00007	.170	.00034	.00084
%RSD	4.9503	1.2880	17.406	1.5508	.64483	.40182	23.420
#1	.00261	.05834	-.00035	.00448	26.269	.08402	.00300
#2	.00280	.05941	-.00045	.00458	26.509	.08450	.00419
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

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Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.95375	6.4720	1.4978	.18326	.04112	.13501	.00088
SDev	.01084	.0592	.0018	.00128	.00078	.00177	.00105
%RSD	1.1362	.91410	.12216	.69673	1.8917	1.3125	119.97
#1	.94609	6.4302	1.4965	.18236	.04057	.13375	.00013
#2	.96141	6.5139	1.4991	.18417	.04167	.13626	.00162
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01184	.11965	-.00031	.01624	.11080	.00019	.00194
SDev	.00082	.00102	.00000	.00025	.00310	.00393	.00253
%RSD	6.9104	.84919	.38157	1.5372	2.7932	2059.3	130.76
#1	.01126	.11893	-.00030	.01606	.10861	-.00259	.00373
#2	.01241	.12037	-.00031	.01641	.11298	.00297	.00015
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.01206	-.00178	-.00150	.12201	6.2999	1.9290
SDev	.00028	.00145	.00199	.00153	.0251	.4885
%RSD	2.3073	81.108	132.47	1.2567	.39820	25.326
#1	.01187	-.00280	-.00290	.12092	6.2822	2.2745
#2	.01226	-.00076	-.00009	.12309	6.3177	1.5836
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G71QK 20 Operator: STL
Run Time: 05/05/05 15:31:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00385	-.00833	.01318	.00922	-.00646	-.00027	7.3585
SDev	.00426	.00362	.00831	.00458	.00791	.00213	.0548
%RSD	110.57	43.453	63.028	49.717	122.48	777.21	.74532
#1	.00084	-.00577	.01906	.00598	-.00086	-.00178	7.3973
#2	.00686	-.01089	.00731	.01246	-.01205	.00123	7.3198
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00145	.05887	-.00038	.00303	24.479	.09809	.00381
SDev	.00101	.00025	.00001	.00030	.138	.00041	.00134
%RSD	69.416	.42933	3.5064	9.9178	.56465	.42222	35.104
#1	.00074	.05905	-.00039	.00281	24.577	.09838	.00286
#2	.00217	.05869	-.00037	.00324	24.382	.09779	.00476
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.74201	6.0853	1.3233	.19061	.04004	.11419	.00042
SDev	.00902	.0158	.0002	.00119	.00019	.00116	.00099
%RSD	1.2160	.26000	.01383	.62153	.46622	1.0175	237.22
#1	.74839	6.0965	1.3232	.19145	.03991	.11336	-.00028
#2	.73563	6.0741	1.3234	.18977	.04017	.11501	.00112
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01125	.10574	-.00045	.01472	.10255	.00142	-.01175
SDev	.00171	.00088	.00035	.00000	.00116	.01146	.00543
%RSD	15.183	.83176	78.041	.01879	1.1351	806.37	46.263
#1	.01004	.10636	-.00020	.01471	.10337	-.00668	-.01559
#2	.01246	.10512	-.00070	.01472	.10173	.00952	-.00790
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.01054	-.00233	-.00021	.11268	5.7673	2.6835
SDev	.00029	.00121	.00163	.00032	.0257	.6097
%RSD	2.7549	51.891	790.74	.28481	.44480	22.721
#1	.01034	-.00148	-.00136	.11290	5.7855	2.2524
#2	.01075	-.00319	.00095	.11245	5.7492	3.1146
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C. Sample Name: G71QL 20 Operator: STL
Run Time: 05/05/05 15:35:31
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

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Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00449	-.00321	.01726	.00675	.00178	-.00207	7.2631
SDev	.00189	.00019	.00160	.00109	.00134	.00236	.0607
%RSD	41.966	5.8243	9.2682	16.137	75.700	114.39	.83622
#1	-.00316	-.00335	.01839	.00753	.00082	-.00374	7.3061
#2	-.00583	-.00308	.01613	.00598	.00273	-.00039	7.2202
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00202	.05973	-.00024	.00405	12.146	.05482	.00332
SDev	.00023	.00046	.00006	.00001	.066	.00032	.00035
%RSD	11.480	.76170	26.051	.23348	.54566	.57734	10.411
#1	.00186	.06005	-.00028	.00404	12.192	.05505	.00308
#2	.00218	.05941	-.00019	.00406	12.099	.05460	.00356
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.59696	6.9708	.97734	.18999	.02691	.09172	-.00060
SDev	.00595	.0437	.00092	.00129	.00028	.00035	.00095
%RSD	.99609	.62714	.09360	.67722	1.0407	.38002	160.22
#1	.60116	7.0017	.97670	.19090	.02671	.09197	.00008
#2	.59275	6.9398	.97799	.18908	.02710	.09148	-.00127
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01176	.08064	-.00014	.00957	.06499	-.00128	.00730
SDev	.00026	.00032	.00048	.00011	.00011	.00158	.00795
%RSD	2.2229	.40123	350.50	1.1190	.16731	123.74	108.91
#1	.01157	.08087	-.00047	.00965	.06491	-.00240	.00168
#2	.01194	.08041	.00020	.00949	.06507	-.00016	.01292
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.01025	-.00079	-.00407	.09868	3.6991	1.4067
SDev	.00126	.00202	.00120	.00078	.0042	.6019
%RSD	12.286	257.21	29.391	.79491	.11235	42.788

#1	.01114	-.00222	-.00322	.09924	3.7021	.98109
#2	.00936	.00064	-.00491	.09813	3.6962	1.8323
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G71QN 20 Operator: STL
Run Time: 05/05/05 15:39:53
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00280	-.00218	.01983	.00515	.00252	-.00250	7.6919
SDev	.00357	.00244	.00095	.00108	.00191	.00001	.0589
%RSD	127.35	111.76	4.7822	21.067	75.956	.24959	.76522
#1	-.00533	-.00046	.02050	.00438	.00387	-.00250	7.7335
#2	-.00028	-.00391	.01916	.00591	.00117	-.00249	7.6503
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00274	.05468	-.00025	.00194	15.159	.06833	.00360
SDev	.00085	.00042	.00005	.00007	.062	.00025	.00074
%RSD	31.271	.77043	19.205	3.6289	.40765	.36672	20.629
#1	.00213	.05498	-.00029	.00189	15.203	.06851	.00307
#2	.00334	.05438	-.00022	.00199	15.116	.06815	.00412
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.71024	7.2015	.98109	.20178	.03225	.11118	.00071
SDev	.00815	.0277	.00402	.00112	.00019	.00026	.00078
%RSD	1.1477	.38424	.41030	.55391	.57880	.23550	109.40
#1	.71600	7.2211	.97825	.20257	.03212	.11099	.00126
#2	.70448	7.1819	.98394	.20098	.03238	.11136	.00016
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01210	.08461	-.00005	.00971	.08262	-.00192	.00845
SDev	.00044	.00042	.00011	.00003	.00038	.00623	.00775
%RSD	3.6752	.49481	221.17	.35930	.46497	324.36	91.705

#1	.01179	.08490	.00003	.00974	.08235	-.00633	.00297
#2	.01242	.08431	-.00013	.00969	.08289	.00248	.01392
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.01004	-.00083	-.00260	.10398	4.6768	1.9926
SDev	.00041	.00063	.00157	.00043	.0024	.9615
%RSD	4.0581	76.593	60.464	.41150	.05084	48.252
#1	.00975	-.00038	-.00371	.10428	4.6785	1.3127
#2	.01033	-.00127	-.00149	.10368	4.6752	2.6724
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G71QQ 20 Operator: STL
Run Time: 05/05/05 15:44:15
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00322	-.00479	.01436	.00408	-.00024	-.00216	5.1225
SDev	.00030	.00018	.00184	.00154	.00077	.00292	.0067
%RSD	9.4468	3.6667	12.806	37.817	318.97	135.51	.13065
#1	-.00300	-.00491	.01566	.00299	-.00078	-.00009	5.1272
#2	-.00343	-.00466	.01306	.00518	.00030	-.00422	5.1177
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00064	.03976	-.00042	.00365	12.332	.05268	.00171
SDev	.00107	.00012	.00004	.00003	.007	.00010	.00035
%RSD	166.55	.29665	8.4430	.68151	.05326	.19086	20.380
#1	-.00011	.03984	-.00044	.00367	12.327	.05275	.00147
#2	.00140	.03968	-.00039	.00363	12.336	.05261	.00196
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.50959	4.6092	.89208	.16006	.02402	.08846	.00129
SDev	.00232	.0014	.00549	.00006	.00044	.00035	.00070
%RSD	.45499	.03140	.61532	.03878	1.8131	.39370	54.436

#1	.51123	4.6102	.88820	.16001	.02433	.08821	.00079
#2	.50795	4.6082	.89596	.16010	.02372	.08871	.00179
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00704	.07602	-.00095	.00952	.08047	-.00429	-.01142
SDev	.00023	.00021	.00005	.00004	.00056	.00089	.01337
%RSD	3.2110	.27551	4.7830	.37844	.68968	20.794	117.07
#1	.00720	.07617	-.00092	.00949	.08008	-.00492	-.00197
#2	.00688	.07587	-.00098	.00954	.08086	-.00365	-.02087
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00750	-.00152	-.00374	.07453	4.4282	1.0916
SDev	.00042	.00169	.00014	.00021	.0088	.5159
%RSD	5.5689	111.53	3.8569	.28705	.19961	47.260
#1	.00721	-.00032	-.00364	.07438	4.4219	.72684
#2	.00780	-.00272	-.00384	.07468	4.4344	1.4564
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G71Q0 20 Operator: STL
Run Time: 05/05/05 15:48:36
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00396	-.00575	.00934	.00852	-.00614	.00066	6.4020
SDev	.00347	.00373	.00470	.00263	.00295	.00072	.0162
%RSD	87.603	64.803	50.284	30.885	48.055	108.58	.25273
#1	.00641	-.00839	.00602	.01039	-.00822	.00117	6.4135
#2	.00151	-.00312	.01267	.00666	-.00405	.00015	6.3906
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00130	.04780	-.00036	.00094	10.380	.04211	.00273
SDev	.00220	.00014	.00001	.00007	.016	.00050	.00020
%RSD	169.02	.28200	3.6892	7.9634	.14955	1.1967	7.4193

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#1	-.00025	.04790	-.00037	.00100	10.391	.04176	.00287
#2	.00286	.04771	-.00035	.00089	10.369	.04247	.00259
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.41298	6.1301	.76697	.21078	.02050	.06418	-.00140
SDev	.00049	.0028	.00018	.00039	.00000	.00021	.00226
%RSD	.11858	.04559	.02385	.18376	.00000	.33309	161.75
#1	.41332	6.1281	.76684	.21105	.02050	.06433	-.00300
#2	.41263	6.1321	.76710	.21050	.02050	.06403	.00020
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01078	.05820	-.00132	.00953	.04737	-.00001	-.02907
SDev	.00023	.00015	.00064	.00000	.00115	.00003	.03060
%RSD	2.1337	.26091	48.722	.00326	2.4365	409.67	105.26
#1	.01061	.05831	-.00178	.00953	.04656	-.00003	-.05071
#2	.01094	.05810	-.00087	.00953	.04819	.00001	-.00743
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00880	-.00160	.00073	.08567	2.7839	.61906
SDev	.00019	.00050	.00107	.00007	.0004	.01172
%RSD	2.1761	31.313	147.77	.08323	.01384	1.8937
#1	.00893	-.00196	.00148	.08562	2.7836	.61077
#2	.00866	-.00125	-.00003	.08572	2.7842	.62734
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G71Q1 20 Operator: STL
Run Time: 05/05/05 15:52:58
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00108	-.00333	.01332	.00558	-.00010	-.00182	6.6242
SDev	.00094	.00190	.00032	.00015	.00419	.00133	.0095
%RSD	86.791	56.890	2.3636	2.6440	4281.2	73.323	.14307

#1	-.00174	-.00467	.01354	.00568	-.00306	-.00088	6.6309
#2	-.00042	-.00199	.01310	.00548	.00286	-.00276	6.6175
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00140	.04249	-.00029	.00119	10.713	.04804	.00245
SDev	.00068	.00017	.00003	.00017	.010	.00032	.00020
%RSD	48.664	.39658	10.645	14.646	.08917	.66036	8.0591
#1	.00188	.04261	-.00031	.00131	10.706	.04826	.00259
#2	.00092	.04237	-.00027	.00107	10.719	.04781	.00231
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.48036	6.1163	.73799	.16581	.02308	.07470	.00025
SDev	.00179	.0022	.00348	.00004	.00047	.00046	.00058
%RSD	.37365	.03587	.47108	.02443	2.0222	.61462	232.79
#1	.48163	6.1179	.73553	.16584	.02341	.07503	.00066
#2	.47909	6.1148	.74045	.16578	.02275	.07438	-.00016
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01084	.06149	-.00028	.00853	.05671	-.00052	.00104
SDev	.00030	.00003	.00011	.00011	.00067	.00350	.00808
%RSD	2.7519	.05450	41.161	1.2740	1.1736	667.04	777.67
#1	.01105	.06146	-.00036	.00860	.05624	.00195	.00675
#2	.01062	.06151	-.00020	.00845	.05718	-.00300	-.00467
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00816	-.00125	-.00183	.08467	3.2158	1.9124
SDev	.00020	.00051	.00125	.00021	.0077	.2931
%RSD	2.4916	40.517	68.645	.25269	.23874	15.328
#1	.00830	-.00160	-.00272	.08482	3.2104	1.7052
#2	.00801	-.00089	-.00094	.08451	3.2212	2.1197
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00

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Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G71Q5 20 Operator: STL
Run Time: 05/05/05 15:57:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00438	-.00303	.01622	.00601	.00245	-.00220	6.6601
SDev	.00431	.00004	.00211	.00344	.00341	.00410	.0243
%RSD	98.520	1.1712	13.003	57.200	139.11	186.00	.36441
#1	-.00133	-.00301	.01473	.00844	.00004	.00069	6.6429
#2	-.00743	-.00306	.01771	.00358	.00485	-.00510	6.6772
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00049	.05365	-.00038	.00430	13.225	.05259	.00238
SDev	.00074	.00002	.00009	.00002	.088	.00107	.00010
%RSD	151.20	.03141	24.145	.51210	.66592	2.0422	4.2333
#1	-.00003	.05364	-.00045	.00428	13.163	.05183	.00245
#2	.00101	.05367	-.00032	.00431	13.287	.05335	.00231
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.58499	6.3906	.98692	.20621	.02592	.09262	-.00271
SDev	.00060	.0394	.01446	.00107	.00050	.00030	.00065
%RSD	.10265	.61641	1.4646	.51939	1.9208	.32187	23.971
#1	.58457	6.3627	.97670	.20546	.02556	.09241	-.00225
#2	.58542	6.4184	.99714	.20697	.02627	.09283	-.00317
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00931	.08074	-.00132	.01077	.07137	-.00651	-.02047
SDev	.00045	.00041	.00040	.00004	.00160	.00132	.00929
%RSD	4.7891	.50952	30.199	.35175	2.2438	20.216	45.356
#1	.00962	.08045	-.00160	.01080	.07024	-.00558	-.02704
#2	.00899	.08103	-.00104	.01075	.07250	-.00744	-.01391
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000

Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00941	-.00066	-.00393	.08978	3.9590	.58589
SDev	.00159	.00160	.00289	.00039	.0409	.84031
%RSD	16.908	244.34	73.508	.43686	1.0320	143.42
#1	.01053	.00048	-.00189	.08951	3.9301	L-.00829
#2	.00828	-.00179	-.00597	.09006	3.9879	1.1801
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/05/05 16:01:43
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	4.0416	4.0638	4.0766	4.0558	4.1212	4.0870	39.403
SDev	.0059	.0355	.0170	.0045	.0333	.0065	.212
%RSD	.14543	.87393	.41691	.11118	.80843	.15908	.53927
#1	4.0458	4.0387	4.0645	4.0590	4.0977	4.0916	39.253
#2	4.0374	4.0889	4.0886	4.0526	4.1448	4.0824	39.554
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.1372	4.3475	4.3194	4.1280	20.407	4.0294	4.0629
SDev	.0306	.0274	.0197	.0203	.092	.0196	.0179
%RSD	.73966	.62983	.45675	.49073	.44911	.48541	.44119
#1	4.1155	4.3282	4.3055	4.1137	20.342	4.0156	4.0502
#2	4.1588	4.3669	4.3334	4.1423	20.472	4.0432	4.0756
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.1034	41.412	20.060	4.1881	4.0781	1.0297	3.9971
SDev	.0301	.208	.074	.0215	.0217	.0066	.0209
%RSD	.73263	.50178	.36849	.51341	.53251	.63750	.52280
#1	4.0821	41.265	20.008	4.1729	4.0628	1.0251	3.9823
#2	4.1246	41.559	20.113	4.2033	4.0935	1.0344	4.0119
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000

Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.1060	4.0637	4.1917	4.2434	4.2392	Q3.3641	4.1305
SDev	.0216	.0253	.0268	.0357	.0186	.0243	.0052
%RSD	.52714	.62236	.64012	.84224	.43923	.72092	.12540
#1	4.0907	4.0458	4.1728	4.2181	4.2261	Q3.3469	4.1269
#2	4.1213	4.0816	4.2107	4.2687	4.2524	Q3.3812	4.1342
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	4.0627	4.0984	4.0490	4.1974	3.7711	40.670
SDev	.0027	.0068	.0079	.0252	.0007	.238
%RSD	.06527	.16490	.19526	.60143	.01793	.58621
#1	4.0608	4.0936	4.0434	4.1795	3.7706	40.838
#2	4.0646	4.1032	4.0546	4.2152	3.7716	40.501
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 05/05/05 16:06:07
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00127	.00293	.00307	-.00035	.00337	-.00223	.02781
SDev	.00030	.00136	.00190	.00098	.00271	.00154	.00298
%RSD	23.894	46.308	61.861	284.97	80.527	69.011	10.701
#1	-.00105	.00388	.00441	-.00104	.00529	-.00332	.02991
#2	-.00148	.00197	.00173	.00035	.00145	-.00114	.02571
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00140	-.00008	.00015	-.00009	.00612	.00045	-.00007
SDev	.00064	.00002	.00001	.00003	.00090	.00048	.00010
%RSD	45.719	20.203	9.0270	33.018	14.630	104.82	138.26
#1	.00185	-.00010	.00014	-.00007	.00676	.00079	-.00000
#2	.00095	-.00007	.00016	-.00011	.00549	.00012	-.00014
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000

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Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00046	.00103	.01164	.00013	-.00064	-.00010	-.00024
SDev	.00026	.00752	.00494	.00008	.00065	.00028	.00082
%RSD	55.331	727.65	42.426	62.279	102.41	288.32	350.11
#1	-.00028	.00635	.01514	.00019	-.00110	.00010	.00035
#2	-.00064	-.00428	.00815	.00008	-.00018	-.00029	-.00082
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000
Elem	V 2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00021	.00179	.00262	-.00010	.00066	-.00024	.01107
SDev	.00004	.00012	.00098	.00004	.00077	.00068	.00228
%RSD	17.847	6.6090	37.579	35.331	116.73	288.06	20.574
#1	-.00018	.00187	.00332	-.00013	.00121	.00024	.01268
#2	-.00024	.00171	.00192	-.00008	.00012	-.00072	.00946
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00079	-.00036	.00013	.00045	.03190	Q.96175	
SDev	.00002	.00012	.00065	.00036	.02808	.70742	
%RSD	3.0205	33.478	507.62	78.567	88.019	73.555	
#1	.00078	-.00045	.00059	.00071	.05175	Q1.4620	
#2	.00081	-.00028	-.00033	.00020	.01205	Q.46153	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.00300	.00400	.06000	.05000	.50000	.25000	

Method: 6010C Sample Name: G9HX1B Operator: STL
Run Time: 05/05/05 16:10:29
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00119	.00017	-.00070	-.00040	.00521	-.00300	L.03236
SDev	.00237	.00091	.00164	.00201	.00353	.00037	.00240
%RSD	199.62	530.30	235.32	498.30	67.767	12.398	7.4266
#1	.00049	.00082	-.00186	.00102	.00271	-.00273	L.03406
#2	-.00286	-.00047	.00046	-.00182	.00771	-.00326	L.03066
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Low
High							.20000

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Low							.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L.00060	.01348	-.00058	-.00050	H.30250	.00016	.00003
SDev	.00088	.00005	.00000	.00005	.00090	.00008	.00094
%RSD	146.36	.37513	.00000	9.6577	.29607	53.435	2845.7
#1	L.00122	.01351	-.00058	-.00047	H.30187	.00021	.00070
#2	L-.00002	.01344	-.00058	-.00054	H.30313	.00010	-.00063
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	.00700	.20000	.20000	.00500	.25000	.01000	.05000
Low	.00700	-.20000	-.20000	-.00500	-.25000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00047	.00644	.03429	-.00027	.00002	.00078	.00023
SDev	.00032	.01522	.00366	.00006	.00072	.00102	.00006
%RSD	68.885	236.27	10.673	23.453	3252.7	130.59	26.889
#1	-.00024	.01720	.03687	-.00023	.00053	.00150	.00019
#2	-.00070	-.00432	.03170	-.00032	-.00048	.00006	.00028
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.02500	.05000	.25000	.01500	.04000	.01000	.01000
Low	-.02500	-.05000	-.25000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00037	.00600	-.00008	.00028	-.00082	.00254	.01516
SDev	.00123	.00004	.00016	.00007	.00000	.00537	.01509
%RSD	332.16	.62347	214.83	26.285	.47581	211.95	99.580
#1	.00124	.00597	.00004	.00033	-.00083	.00633	.02583
#2	-.00050	.00603	-.00019	.00022	-.00082	-.00126	.00448
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.04000	.05000	.10000	.50000	.50000
Low	-.05000	-.01000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	-.00050	-.00026	-.00073	-.00018	.02125	H3.0345
SDev	.00079	.00093	.00188	.00032	.01586	.4885
%RSD	158.35	351.53	256.73	181.83	74.625	16.100
#1	.00006	-.00092	.00060	.00005	.03246	H3.3799
#2	-.00106	.00039	-.00206	-.00040	.01004	H2.6890
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC High
High	.00300	.00500	.01000	.05000		.25000
Low	-.00300	-.00500	-.01000	-.05000		-.25000

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Method: 6010C Sample Name: G9MDJC Operator: STL
Run Time: 05/05/05 16:14:51
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	1.0026	1.0054	1.0016	.99860	1.0432	1.0167	1.0219
SDev	.0025	.0004	.0007	.00085	.0055	.0006	.0007
%RSD	.24838	.04319	.06803	.08554	.52513	.05775	.06992
#1	1.0044	1.0057	1.0021	.99920	1.0471	1.0172	1.0214
#2	1.0008	1.0051	1.0011	.99800	1.0394	1.0163	1.0224
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							1.2000
Low							.80000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.0218	1.1059	1.1062	1.0305	20.463	1.0076	1.0067
SDev	.0028	.0003	.0003	.0006	.003	.0002	.0009
%RSD	.27214	.02285	.02662	.05395	.01605	.01757	.09339
#1	1.0198	1.1061	1.1060	1.0301	20.465	1.0075	1.0074
#2	1.0237	1.1057	1.1064	1.0309	20.460	1.0078	1.0061
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2040	1.2040	1.2000	1.2040	24.000	1.2040	1.2000
Low	.79500	.79500	.80000	.79500	16.000	.79500	.80000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.0090	1.0995	19.722	1.0447	1.0091	.24893	.99377
SDev	.0014	.0149	.007	.0003	.0005	.00107	.00561
%RSD	.14368	1.3566	.03711	.02735	.04625	.42988	.56445
#1	1.0100	1.1101	19.717	1.0449	1.0094	.24968	.98981
#2	1.0079	1.0890	19.728	1.0445	1.0087	.24817	.99774
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2000	1.2000	24.000	1.2040	1.2000	.33700	1.2040
Low	.80000	.80000	16.000	.79500	.80000	.12300	.79500

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	1.0221	1.0100	1.0548	1.0769	L-.00136	L-.00304	L-.02705
SDev	.0014	.0007	.0005	.0001	.00166	.00386	.00824
%RSD	.13484	.07287	.04813	.01007	121.55	126.96	30.465
#1	1.0231	1.0095	1.0544	1.0770	L-.00019	L-.00031	L-.02122
#2	1.0211	1.0105	1.0551	1.0768	L-.00253	L-.00578	L-.03287
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Low	LC Low
High	1.2000	1.2000	1.2000	1.2000	2.4000	2.4000	2.4000
Low	.80000	.80000	.80000	.80000	1.6000	1.6000	1.6000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.99959	1.0256	1.0035	L.00050	L.03534	18.177
SDev	.00080	.0022	.0018	.00021	.00182	.125
%RSD	.07970	.21607	.17992	42.426	5.1484	.68809
#1	1.0002	1.0271	1.0048	L.00066	L.03405	18.088
#2	.99903	1.0240	1.0022	L.00035	L.03662	18.265
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Low	NOCHECK
High	1.2040	1.2040	1.2040	2.4000	2.4000	
Low	.79500	.79500	.79500	1.6000	1.6000	

Method: 6010C Sample Name: G8170 Operator: STL
Run Time: 05/05/05 16:19:13
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00064	.00066	-.00051	.00012	.00138	-.00220	.02814
SDev	.00631	.00420	.00554	.00279	.00336	.00105	.00552
%RSD	985.10	638.58	1081.9	2414.0	243.10	47.787	19.628
#1	-.00382	.00363	.00341	-.00186	.00376	-.00294	.03205
#2	.00510	-.00231	-.00443	.00209	-.00099	-.00145	.02423
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00035	.06260	-.00058	-.00057	.59508	-.00018	-.00066
SDev	.00058	.00081	.00007	.00002	.00328	.00098	.00035
%RSD	166.14	1.2920	12.856	3.2698	.55184	543.62	53.039
#1	.00076	.06203	-.00053	-.00056	.59276	.00051	-.00091
#2	-.00006	.06317	-.00063	-.00058	.59740	-.00087	-.00041
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00105	.00200	.04606	-.00040	-.00114	-.00036	-.00070
SDev	.00119	.00325	.00421	.00007	.00025	.00041	.00167
%RSD	113.27	162.13	9.1368	16.794	21.757	114.59	238.31
#1	-.00021	.00430	.04904	-.00036	-.00132	-.00065	.00048
#2	-.00189	-.00029	.04308	-.00045	-.00097	-.00007	-.00188
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00076	.01381	-.00001	.00052	-.00172	-.00364	-.01255
SDev	.00008	.00003	.00068	.00007	.00182	.00118	.03535
%RSD	10.685	.21927	11865.	13.762	105.89	32.356	281.64
#1	-.00071	.01383	.00048	.00047	-.00043	-.00448	.01244
#2	-.00082	.01379	-.00049	.00058	-.00300	-.00281	-.03755
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	-.00009	-.00101	.00065	-.00048	-.00586	2.2745
SDev	.00002	.00042	.00281	.00011	.03118	.6566
%RSD	16.551	41.664	434.94	22.330	532.07	28.869
#1	-.00010	-.00071	-.00134	-.00055	.01619	2.7388
#2	-.00008	-.00130	.00263	-.00040	-.02791	1.8102
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8170X Operator: STL
Run Time: 05/05/05 16:23:35
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00262	-.00225	-.00259	.00199	-.00297	-.00038	.02677
SDev	.01609	.00898	.01249	.00757	.01358	.00622	.00247
%RSD	614.96	398.74	482.88	380.12	457.54	1656.5	9.2107
#1	-.00876	.00410	.00624	-.00336	.00663	-.00477	.02851
#2	.01400	-.00860	-.01142	.00735	-.01257	.00402	.02502
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00096	.06514	-.00065	-.00069	.61809	-.00109	-.00077
SDev	.00117	.00049	.00005	.00006	.00179	.00159	.00070
%RSD	122.38	.75019	8.1589	8.0014	.28980	145.93	92.040
#1	-.00013	.06480	-.00061	-.00073	.61682	.00003	-.00126
#2	-.00179	.06549	-.00068	-.00065	.61936	-.00221	-.00027
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

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Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00180	-.00874	.04528	-.00049	-.00081	-.00034	-.00090
SDev	.00191	.00607	.00275	.00004	.00053	.00088	.00229
%RSD	106.20	69.382	6.0610	8.6876	64.977	261.81	253.91
#1	-.00045	-.01303	.04722	-.00046	-.00119	-.00096	.00072
#2	-.00315	-.00445	.04334	-.00053	-.00044	.00029	-.00252
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00098	.01406	-.00141	.00055	-.00159	-.00416	-.03778
SDev	.00058	.00009	.00094	.00004	.00264	.00363	.07142
%RSD	59.347	.60309	66.584	6.5663	165.60	87.082	189.02
#1	-.00139	.01400	-.00075	.00052	.00027	-.00673	.01272
#2	-.00057	.01412	-.00207	.00058	-.00346	-.00160	-.08829
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00047	-.00124	.00100	-.00053	-.01997	1.7743
SDev	.00089	.00038	.00774	.00018	.01724	.4416
%RSD	190.78	30.272	777.86	33.672	86.331	24.892
#1	-.00016	-.00097	-.00448	-.00066	-.00778	2.0866
#2	.00110	-.00150	.00647	-.00040	-.03216	1.4620
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8170S Operator: STL
Run Time: 05/05/05 16:27:58
Comment:
Mode: CONC -- Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.48731	.48990	.49692	.49742	2.0601	2.0114	2.0238
SDev	.00300	.00294	.00085	.00017	.0064	.0008	.0028
%RSD	.61553	.60104	.17158	.03377	.31192	.03970	.13776
#1	.48943	.49198	.49631	.49754	2.0647	2.0109	2.0258
#2	.48519	.48782	.49752	.49730	2.0556	2.0120	2.0218
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	2.0408	2.2491	.05530	.05047	50.792	.20126	.49462
SDev	.0073	.0130	.00013	.00012	.082	.00024	.00114
%RSD	.35893	.57990	.23044	.24558	.16046	.11714	.23062
#1	2.0460	2.2583	.05539	.05055	50.849	.20143	.49543
#2	2.0356	2.2399	.05521	.05038	50.734	.20110	.49382

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.25695	1.0417	49.464	.51663	.50252	.04900	1.9723
SDev	.00091	.0095	.055	.00178	.00100	.00087	.0045
%RSD	.35285	.91045	.11171	.34384	.19812	1.7717	.23010
#1	.25760	1.0484	49.503	.51789	.50322	.04961	1.9755
#2	.25631	1.0350	49.425	.51538	.50181	.04839	1.9691

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.51025	.51133	1.0439	1.0842	-.00250	-.00405	-.02749
SDev	.00268	.00168	.0040	.0050	.00050	.00133	.01144
%RSD	.52546	.32759	.38765	.45985	19.861	32.800	41.638
#1	.51214	.51252	1.0468	1.0877	-.00285	-.00311	-.03558
#2	.50835	.51015	1.0411	1.0807	-.00214	-.00499	-.01939

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.49725	2.0277	.48817	.00083	.02124	44.039
SDev	.00017	.0016	.00298	.00011	.01850	.156
%RSD	.03457	.07927	.61067	12.856	87.092	.35499
#1	.49713	2.0288	.49028	.00091	.00816	43.928
#2	.49737	2.0265	.48606	.00076	.03431	44.149

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8170D Operator: STL
Run Time: 05/05/05 16:32:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

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Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.48869	.49249	.50247	.50031	2.0699	2.0258	2.0349
SDev	.00487	.00149	.00873	.00008	.0041	.0216	.0033
%RSD	.99689	.30173	1.7384	.01546	.19891	1.0655	.16458
#1	.48525	.49144	.50864	.50036	2.0670	2.0411	2.0373
#2	.49214	.49355	.49629	.50025	2.0728	2.0106	2.0326
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	2.0498	2.2423	.05542	.05083	50.970	.20185	.49637
SDev	.0031	.0047	.00009	.00006	.002	.00175	.00025
%RSD	.14982	.20816	.16650	.12115	.00410	.86712	.05120
#1	2.0520	2.2456	.05548	.05078	50.969	.20309	.49619
#2	2.0477	2.2390	.05535	.05087	50.972	.20061	.49655
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.25703	1.0540	49.641	.51755	.50342	.04960	1.9810
SDev	.00197	.0084	.005	.00059	.00028	.00098	.0027
%RSD	.76613	.79830	.01106	.11419	.05562	1.9817	.13391
#1	.25842	1.0480	49.638	.51797	.50322	.04891	1.9828
#2	.25564	1.0599	49.645	.51713	.50362	.05030	1.9791
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.51094	.51366	1.0443	1.0857	-.00082	-.00252	-.00698
SDev	.00009	.00000	.0034	.0015	.00187	.00504	.04118
%RSD	.01665	.00076	.32203	.13980	228.68	199.76	589.65
#1	.51100	.51366	1.0467	1.0868	.00051	-.00609	.02213
#2	.51088	.51366	1.0419	1.0847	-.00214	.00104	-.03610
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.50103	2.0405	.48996	.00098	.04341	44.672
SDev	.00296	.0130	.00374	.00025	.00745	.168
%RSD	.59084	.63838	.76420	25.383	17.158	.37621

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#1	.50312	2.0497	.48731	.00081	.03814	44.553
#2	.49893	2.0313	.49261	.00116	.04867	44.791
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8170V 5X Operator: STL

~~Run Time: 05/05/05 16:36:42~~

Comment:

Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00471	-.00266	-.00297	.00187	-.00147	.00097	.02037
SDev	.00152	.00127	.00106	.00101	.00122	.00027	.00261
%RSD	32.245	47.561	35.674	54.233	82.687	27.476	12.787
#1	.00579	-.00356	-.00372	.00258	-.00234	.00078	.02222
#2	.00364	-.00177	-.00222	.00115	-.00061	.00116	.01853
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00012	.01214	-.00048	-.00041	.15178	-.00047	-.00003
SDev	.00043	.00005	.00003	.00009	.00209	.00041	.00044
%RSD	352.62	.41635	6.4702	21.314	1.3768	87.173	1328.9
#1	.00043	.01211	-.00045	-.00034	.15030	-.00018	.00028
#2	-.00018	.01218	-.00050	-.00047	.15326	-.00075	-.00035
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00136	.00318	.01139	-.00043	-.00009	.00078	.00056
SDev	-.00042	.00956	.00018	.00003	.00075	.00052	.00035
%RSD	30.704	301.02	1.6070	7.2411	848.53	66.247	63.369
#1	-.00107	.00994	.01151	-.00041	.00044	.00115	.00081
#2	-.00166	-.00359	.01126	-.00046	-.00062	.00042	.00031
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00005	.00502	-.00023	-.00028	-.00074	.00046	-.01033
SDev	.00004	.00001	.00027	.00000	.00000	.00251	.01036
%RSD	74.237	.13084	119.06	.01471	.32983	542.57	100.32

#1	.00008	.00502	-.00042	-.00028	-.00074	.00224	-.00300
#2	.00002	.00503	-.00004	-.00028	-.00074	-.00131	-.01765
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00025	.00015	.00226	-.00040	.00797	.79593
SDev	.00032	.00058	.00059	.00021	.01531	.39475
%RSD	126.26	377.52	26.230	53.033	192.08	49.596
#1	.00048	-.00026	.00268	-.00025	.01879	1.0751
#2	.00003	.00057	.00184	-.00055	-.00285	.51680
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G84EP Operator: STL
Run Time: 05/05/05 16:41:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00532	.00333	.00544	-.00122	.00239	-.00348	.02673
SDev	.00467	.00460	.00454	.00198	.00552	.00249	.00620
%RSD	87.772	138.14	83.437	162.53	231.03	71.469	23.201
#1	-.00863	.00658	.00865	-.00262	.00629	-.00524	.03112
#2	-.00202	.00008	.00223	.00018	-.00151	-.00172	.02235
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00043	.04137	-.00056	-.00070	.47476	-.00008	-.00109
SDev	.00000	.00064	.00011	.00011	.00269	.00082	.00025
%RSD	.64527	1.5478	20.427	15.167	.56594	992.02	23.201
#1	-.00043	.04092	-.00048	-.00078	.47286	.00050	-.00127
#2	-.00044	.04182	-.00064	-.00063	.47665	-.00067	-.00091
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00006	-.00512	.04606	-.00038	-.00130	-.00085	.00131
SDev	.00106	.00381	.00677	.00013	.00034	.00043	.00150
%RSD	1889.9	74.344	14.698	33.528	26.367	50.717	114.49

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#1	.00069	-.00243	.05085	-.00029	-.00154	-.00116	.00237
#2	-.00081	-.00781	.04127	-.00047	-.00106	-.00055	.00025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00084	.01676	-.00022	.00009	-.00008	-.00542	.01532
SDev	.00025	.00003	.00100	.00004	.00005	.00141	.03218
%RSD	30.367	.17268	463.26	38.918	62.123	25.950	210.13
#1	-.00102	.01674	.00049	.00007	-.00004	-.00641	.03807
#2	-.00066	.01678	-.00092	.00012	-.00011	-.00442	-.00744
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00100	-.00152	-.00244	-.00073	.00366	1.2768	
SDev	.00019	.00018	.00159	.00004	.03887	.8247	
%RSD	18.858	11.803	64.909	4.8766	1062.9	64.588	
#1	.00113	-.00140	-.00356	-.00076	.03115	1.8599	
#2	.00086	-.00165	-.00132	-.00071	-.02383	.69368	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9GFM Operator: STL
Run Time: 05/05/05 16:45:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.12091	.03065	.33901	.22640	.01747	-.00819	305.87
SDev	.00685	.00117	.00071	.00326	.00381	.00209	.81
%RSD	5.6651	3.8082	.20873	1.4391	21.805	25.492	.26644
#1	.11607	.03148	.33951	.22409	.02017	-.00966	305.30
#2	.12576	.02983	.33851	.22870	.01478	-.00671	306.45
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L-.02226	.30097	.00373	L-.00593	66.472	12.615	.12228
SDev	.00135	.00052	.00005	.00012	.334	.052	.00084
%RSD	6.0420	.17357	1.2953	1.9723	.50300	.41536	.69015

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#1	L-.02131	.30060	.00370	L-.00601	66.236	12.578	.12169
#2	L-.02321	.30134	.00377	L-.00585	66.709	12.652	.12288

Errors	LC Low	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.41676	130.72	2.4170	.68967	.81947	-.00656	.00325
SDev	.00056	.52	.0201	.00244	.00289	.00027	.00229
%RSD	.13568	.39661	.83274	.35335	.35310	4.0846	70.667
#1	.41636	130.35	2.4027	.68794	.81742	-.00675	.00487
#2	.41716	131.08	2.4312	.69139	.82151	-.00637	.00162

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.3751	C.00000	12.459	1.5492	.30420	.00066	-.03949
SDev	.0124	.00000	.047	.0035	.00127	.00124	.01721
%RSD	.28280	.00000	.37568	.22352	.41883	188.50	43.580
#1	4.3663	C.00000	12.426	1.5467	.30330	-.00022	-.02732
#2	4.3838	C.00000	12.493	1.5516	.30510	.00153	-.05166

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.26390	.00036	.09086	1.1733	L-.10307	H7487.1
SDev	.00194	.00012	.00418	.0042	.02823	10.4
%RSD	.73420	34.282	4.6008	.35860	27.390	.13948
#1	.26253	.00027	.08790	1.1703	L-.12304	H7479.7
#2	.26527	.00045	.09381	1.1763	-.08311	H7494.5

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9GFN Operator: STL
Run Time: 05/05/05 16:49:48
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.01419	-.00143	.00724	.00537	.00088	-.00067	14.787
SDev	.00710	.00491	.00690	.00309	.00566	.00148	.174
%RSD	50.048	342.56	95.258	57.429	646.24	219.03	1.1742

#1	.00917	.00204	.01212	.00319	.00488	-.00172	14.910
#2	.01921	-.00491	.00236	.00755	-.00313	.00037	14.665
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00238	.14203	-.00053	-.00092	15.725	.98119	.00458
SDev	.00149	.00192	.00006	.00046	.103	.00836	.00193
%RSD	62.462	1.3525	11.511	50.052	.65686	.85208	42.134
#1	-.00343	.14339	-.00058	-.00124	15.798	.98710	.00321
#2	-.00133	.14067	-.00049	-.00059	15.652	.97527	.00594
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.05583	9.8187	.29990	.03939	.03980	.00058	.00163
SDev	.00039	.0581	.00860	.00021	.00184	.00354	.00309
%RSD	.69188	.59199	2.8675	.52727	4.6124	605.47	189.90
#1	.05610	9.8598	.29382	.03954	.03850	-.00192	-.00056
#2	.05555	9.7776	.30599	.03925	.04110	.00309	.00381
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.40228	.03614	1.3756	.37127	.00696	.00340	.00030
SDev	.00247	.00023	.0146	.00556	.00115	.01337	.02094
%RSD	.61282	.65092	1.0632	1.4985	16.590	393.38	6983.8
#1	.40402	.03631	1.3859	.37520	.00614	-.00605	-.01451
#2	.40054	.03597	1.3652	.36734	.00777	.01285	.01511
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00599	-.00016	.00899	.06369	.03053	H607.52
SDev	.00024	.00090	.00310	.00007	.05171	5.28
%RSD	4.0067	569.96	34.504	.11197	169.37	.86916
#1	.00616	.00048	.00679	.06364	-.00603	H611.25
#2	.00582	-.00080	.01118	.06374	.06709	H603.78
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00

Low -.00500 -.00500 -.01000 -.05000 -.10000 .00000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/05/05 16:54:11
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	4.0146	4.0243	4.0165	4.0068	4.0644	4.0554	39.114
SDev	.0105	.0047	.0042	.0104	.0098	.0077	.047
%RSD	.26213	.11631	.10566	.26032	.24036	.19081	.11926
#1	4.0071	4.0276	4.0195	3.9994	4.0713	4.0499	39.081
#2	4.0220	4.0210	4.0135	4.0142	4.0575	4.0608	39.147
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.0997	4.3111	4.2586	4.0734	20.199	3.9909	4.0112
SDev	.0063	.0023	.0076	.0105	.050	.0088	.0085
%RSD	.15330	.05277	.17830	.25774	.24535	.21978	.21114
#1	4.0952	4.3095	4.2532	4.0660	20.164	3.9847	4.0052
#2	4.1041	4.3128	4.2639	4.0808	20.234	3.9971	4.0172
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.0779	40.960	19.821	4.1408	4.0292	1.0225	3.9651
SDev	.0027	.082	.051	.0074	.0047	.0012	.0082
%RSD	.06538	.19917	.25663	.17985	.11737	.11679	.20657
#1	4.0760	40.902	19.785	4.1356	4.0258	1.0217	3.9593
#2	4.0798	41.017	19.857	4.1461	4.0325	1.0233	3.9709
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.0590	4.0616	4.1546	4.2562	4.1950	Q3.3457	4.1047
SDev	.0053	.0092	.0111	.0106	.0116	.0019	.0052
%RSD	.13036	.22665	.26791	.24876	.27670	.05812	.12632
#1	4.0552	4.0551	4.1468	4.2487	4.1867	Q3.3443	4.1083
#2	4.0627	4.0681	4.1625	4.2636	4.2032	Q3.3470	4.1010
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000

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Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	4.0100	4.0584	4.0178	4.1591	3.6520	38.876	
SDev	.0055	.0019	.0055	.0065	.0065	.102	
%RSD	.13826	.04702	.13591	.15689	.17871	.26140	
#1	4.0061	4.0570	4.0140	4.1545	3.6474	38.804	
#2	4.0140	4.0597	4.0217	4.1638	3.6566	38.948	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000	
Range	10.000	10.000	10.000	10.000	10.000	10.000	

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 05/05/05 16:58:35
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00466	.00211	-.00050	.00099	-.00107	.00071	.03847
SDev	.01512	.00685	.01272	.00618	.01075	.00684	.00140
%RSD	324.31	324.59	2558.0	624.35	1005.3	968.66	3.6427
#1	-.00603	.00695	.00850	-.00338	.00653	-.00413	.03946
#2	.01535	-.00273	-.00949	.00536	-.00867	.00555	.03748
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00172	.00045	.00067	.00046	.00844	.00076	.00038
SDev	.00129	.00030	.00003	.00028	.00060	.00105	.00134
%RSD	74.819	66.989	5.2378	62.367	7.0710	138.73	349.12
#1	.00264	.00024	.00070	.00026	.00802	.00150	-.00056
#2	.00081	.00067	.00065	.00066	.00887	.00001	.00133
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00035	.01675	.01488	.00057	.00004	.00076	.00040
SDev	.00146	.01967	.00220	.00001	.00168	.00182	.00249
%RSD	422.80	117.42	14.757	1.6256	3818.4	238.23	620.79
#1	.00069	.00284	.01333	.00057	-.00114	-.00052	.00216
#2	-.00138	.03066	.01643	.00056	.00123	.00205	-.00136
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000

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Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00092	.00234	.00390	.00038	.00035	.00348	.00644
SDev	.00185	.00004	.00304	.00015	.00110	.00790	.03451
%RSD	201.04	1.8564	78.130	37.726	314.65	227.06	535.88
#1	-.00039	.00237	.00605	.00028	.00113	-.00211	.03084
#2	.00223	.00231	.00174	.00049	-.00043	.00906	-.01796
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00049	.00012	.00381	.00111	.04368	Q.93135
SDev	.00011	.00099	.00781	.00021	.00666	.21887
%RSD	22.808	855.49	204.74	19.285	15.256	23.501
#1	.00057	-.00058	-.00171	.00096	.03897	Q.77658
#2	.00042	.00081	.00933	.00126	.04839	Q1.0861
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00300	.00400	.06000	.05000	.50000	.25000

Method: 6010C Sample Name: G9GFP Operator: STL
Run Time: 05/05/05 17:02:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.01044	-.00561	.07865	.07840	.00415	-.00351	7.4046
SDev	.01069	.00481	.01138	.00761	.00968	.00547	.0771
%RSD	102.34	85.737	14.475	9.7039	233.15	155.83	1.0408
#1	.00289	-.00221	.08670	.07302	.01100	-.00738	7.4591
#2	.01800	-.00902	.07060	.08378	-.00269	.00036	7.3501
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00095	.12773	-.00042	.00914	6.8370	.48033	.03825
SDev	.00189	.00142	.00007	.00046	.0263	.00389	.00198
%RSD	199.13	1.1082	16.638	4.9708	.38425	.81028	5.1856
#1	-.00039	.12873	-.00047	.00882	6.8556	.48308	.03684
#2	.00229	.12673	-.00037	.00947	6.8184	.47757	.03965
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000

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Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	T11908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.51145	5.4376	.29706	.05881	.28426	.00003	.00389
SDev	.00829	.0014	.01263	.00011	.00034	.00317	.00072
%RSD	1.6217	.02581	4.2500	.18488	.12040	9476.3	18.502
#1	.51731	5.4367	.28813	.05869	.28402	-.00221	.00439
#2	.50558	5.4386	.30599	.05873	.28450	.00227	.00338
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.32533	5.0808	2.0703	.09160	.00637	.00351	.00057
SDev	.00057	.0337	.0172	.00112	.00033	.01523	.00655
%RSD	.17523	.66234	.83245	1.2224	5.1864	433.84	1158.9
#1	.32574	5.1046	2.0825	.09239	.00614	-.00726	.00520
#2	.32493	5.0570	2.0581	.09081	.00660	.01428	-.00407
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.07849	-.00096	.00510	.01667	.02166	H1191.1	
SDev	.00128	.00043	.00553	.00075	.06186	10.0	
%RSD	1.6355	44.484	108.43	4.4930	285.58	.83937	
#1	.07758	-.00126	.00119	.01614	-.02208	H1198.2	
#2	.07939	-.00066	.00900	.01720	.06541	H1184.0	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9L66B Operator: STL
Run Time: 05/05/05 17:07:19
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00120	-.00017	.00055	-.00093	.00489	-.00508	L.03071
SDev	.00115	.00181	.00098	.00049	.00438	.00192	.00415
%RSD	95.884	1095.1	178.50	52.787	89.583	37.764	13.505
#1	-.00039	-.00145	-.00014	-.00058	.00179	-.00644	L.02778
#2	-.00201	.00112	.00124	-.00127	.00798	-.00372	L.03364
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Low
High							.20000

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Low							.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L-.00022	-.00035	-.00050	-.00057	.03525	-.00042	-.00063
SDev	.00032	.00002	.00007	.00009	.00090	.00007	.00010
%RSD	147.20	4.8766	13.176	16.414	2.5405	16.875	15.530
#1	L-.00045	-.00033	-.00055	-.00050	.03462	-.00037	-.00056
#2	L.00001	-.00036	-.00045	-.00063	.03589	-.00047	-.00070
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00700	.20000	.20000	.00500	.25000	.01000	.05000
Low	.00700	-.20000	-.20000	-.00500	-.25000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00157	-.00808	.00181	-.00032	-.00022	-.00044	.00053
SDev	.00038	.00383	.00567	.00015	.00031	.00009	.00111
%RSD	24.394	47.381	313.14	48.493	141.42	20.029	208.41
#1	-.00130	-.00537	-.00220	-.00043	.00000	-.00038	.00132
#2	-.00184	-.01078	.00582	-.00021	-.00044	-.00050	-.00025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.02500	.05000	.25000	.01500	.04000	.01000	.01000
Low	-.02500	-.05000	-.25000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00084	.00538	.00078	-.00056	-.00059	-.00409	-.00023
SDev	.00011	.00009	.00059	.00004	.00011	.00000	.00703
%RSD	13.148	1.6955	76.187	6.4170	19.108	.01625	3070.5
#1	-.00092	.00532	.00120	-.00059	-.00066	-.00409	.00474
#2	-.00076	.00544	.00036	-.00054	-.00051	-.00409	-.00520
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.04000	.05000	.10000	.50000	.50000
Low	-.05000	-.01000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	-.00044	-.00176	-.00085	-.00050	.01587	L-.30124	
SDev	.00000	.00274	.00016	.00007	.03161	.73478	
%RSD	.14588	155.29	18.944	14.142	199.16	243.92	
#1	-.00044	-.00370	-.00074	-.00045	-.00648	L-.82081	
#2	-.00043	.00017	-.00097	-.00055	.03822	.21832	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Low	
High	.00300	.00500	.01000	.05000		.25000	
Low	-.00300	-.00500	-.01000	-.05000		-.25000	

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Method: 6010C Sample Name: G9L66C Operator: STL
Run Time: 05/05/05 17:11:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.99309	.99791	.99321	.98907	1.0341	1.0047	1.0053
SDev	.00068	.00257	.00303	.00051	.0037	.0005	.0012
%RSD	.06873	.25727	.30522	.05195	.35337	.04587	.12407
#1	.99357	.99972	.99535	.98870	1.0315	1.0051	1.0062
#2	.99260	.99609	.99107	.98943	1.0367	1.0044	1.0045
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							1.2000
Low							.80000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.0127	1.0753	1.0890	1.0212	20.068	.99598	.99394
SDev	.0021	.0033	.0013	.0010	.013	.00185	.00010
%RSD	.20780	.30558	.12024	.09581	.06694	.18565	.01011
#1	1.0142	1.0776	1.0899	1.0219	20.077	.99728	.99387
#2	1.0112	1.0729	1.0881	1.0205	20.058	.99467	.99401
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2040	1.2040	1.2000	1.2040	24.000	1.2040	1.2000
Low	.79500	.79500	.80000	.79500	16.000	.79500	.80000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.99229	1.0876	19.511	1.0324	.99980	.24586	.98817
SDev	.00361	.0050	.004	.0016	.00193	.00032	.00118
%RSD	.36383	.45616	.01970	.15213	.19294	.12985	.11928
#1	.99485	1.0911	19.508	1.0335	1.0012	.24609	.98900
#2	.98974	1.0841	19.513	1.0313	.99844	.24564	.98733
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2000	1.2000	24.000	1.2040	1.2000	.33700	1.2040
Low	.80000	.80000	16.000	.79500	.80000	.12300	.79500

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	1.0084	1.0048	1.0444	1.0651	L-.00062	L-.00325	L-.01609
SDev	.0017	.0010	.0007	.0028	.00050	.00024	.00720
%RSD	.16647	.09650	.06435	.26123	80.240	7.5113	44.775
#1	1.0096	1.0055	1.0449	1.0671	L-.00097	L-.00308	L-.01100
#2	1.0072	1.0041	1.0439	1.0631	L-.00027	L-.00342	L-.02119
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Low	LC Low
High	1.2000	1.2000	1.2000	1.2000	2.4000	2.4000	2.4000
Low	.80000	.80000	.80000	.80000	1.6000	1.6000	1.6000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.99045	1.0145	.99469	L.00043	L.04835	14.487
SDev	.00067	.0009	.00131	.00004	.01744	.270
%RSD	.06732	.08964	.13172	8.3189	36.068	1.8615
#1	.99092	1.0139	.99562	L.00040	L.03602	14.296
#2	.98998	1.0152	.99377	L.00045	L.06068	14.678
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Low	NOCHECK
High	1.2040	1.2040	1.2040	2.4000	2.4000	
Low	.79500	.79500	.79500	1.6000	1.6000	

Method: 6010C Sample Name: G9L66L Operator: STL
Run Time: 05/05/05 17:16:02
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.98244	.99376	.98522	.98071	1.0269	.99299	.99571
SDev	.00301	.00664	.00016	.00402	.0066	.00237	.00437
%RSD	.30622	.66769	.01649	.41021	.63913	.23826	.43919
#1	.98032	.98907	.98534	.97786	1.0223	.99466	.99262
#2	.98457	.99845	.98511	.98355	1.0316	.99132	.99880
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							1.2000
Low							.80000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.0081	1.0686	1.0841	1.0152	19.933	.98898	.98883
SDev	.0110	.0096	.0065	.0053	.105	.00530	.00585
%RSD	1.0910	.89408	.60350	.52002	.52868	.53585	.59187
#1	1.0003	1.0619	1.0795	1.0114	19.859	.98523	.98469
#2	1.0158	1.0754	1.0887	1.0189	20.008	.99273	.99297
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2040	1.2040	1.2000	1.2040	24.000	1.2040	1.2000
Low	.79500	.79500	.80000	.79500	16.000	.79500	.80000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.98641	1.0873	19.400	1.0260	.99274	.24505	.98187
SDev	.00734	.0143	.088	.0069	.00526	.00280	.00634
%RSD	.74399	1.3121	.45460	.67018	.52965	1.1430	.64515
#1	.98122	1.0773	19.338	1.0211	.98902	.24307	.97739
#2	.99160	1.0974	19.462	1.0308	.99646	.24703	.98635
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2000	1.2000	24.000	1.2040	1.2000	.33700	1.2040
Low	.80000	.80000	16.000	.79500	.80000	.12300	.79500

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	1.0019	.99331	1.0385	1.0596	L-.00218	L-.00305	L-.05079
SDev	.0077	.00640	.0053	.0089	.00203	.00431	.06263
%RSD	.76884	.64389	.51242	.83541	93.379	141.17	123.33
#1	.99644	.98879	1.0347	1.0533	L-.00074	L-.00610	L-.00650
#2	1.0073	.99783	1.0423	1.0658	L-.00362	L-.00001	L-.09508
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Low	LC Low
High	1.2000	1.2000	1.2000	1.2000	2.4000	2.4000	2.4000
Low	.80000	.80000	.80000	.80000	1.6000	1.6000	1.6000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.98221	1.0043	.98621	L.00030	L.04157	14.631
SDev	.00263	.0006	.00422	.00028	.02420	.504
%RSD	.26753	.06050	.42751	94.281	58.217	3.4461
#1	.98035	1.0039	.98323	L.00010	L.05868	14.987
#2	.98407	1.0047	.98919	L.00050	L.02446	14.274
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Low	NOCHECK
High	1.2040	1.2040	1.2040	2.4000	2.4000	
Low	.79500	.79500	.79500	1.6000	1.6000	

Method: 6010C Sample Name: G9H43 Operator: STL
Run Time: 05/05/05 17:20:24
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00360	-.03232	.02058	.02695	.00539	-.00163	.08741
SDev	.00551	.00140	.00208	.00222	.00175	.00267	.00271
%RSD	152.92	4.3190	10.094	8.2449	32.552	164.12	3.1059
#1	-.00750	-.03133	.02204	.02538	.00663	-.00352	.08549
#2	.00029	-.03330	.01911	.02852	.00415	.00026	.08933
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00176	.00249	-.00033	.00075	9.8236	.00046	-.00154
SDev	.00044	.00008	.00004	.00004	.0245	.00029	.00060
%RSD	25.294	3.3833	12.122	4.8818	.24919	63.252	38.629
#1	.00207	.00243	-.00030	.00073	9.8063	.00067	-.00196
#2	.00144	.00255	-.00035	.00078	9.8409	.00026	-.00112
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

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Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.15117	.09053	2.8193	.09455	.00506	-.00045	.00460
SDev	.00021	.00884	.0077	.00014	.00025	.00057	.00069
%RSD	.14167	9.7587	.27258	.14469	4.9190	126.17	15.028
#1	.15102	.08428	2.8139	.09445	.00488	-.00085	.00509
#2	.15132	.09678	2.8248	.09464	.00524	-.00005	.00411
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00393	.01924	3.8501	.07401	.19205	-.00039	-.00208
SDev	.00044	.00003	.0130	.00011	.00028	.00220	.00775
%RSD	11.318	.13602	.33812	.14582	.14440	562.85	373.41
#1	-.00424	.01923	3.8409	.07394	.19185	-.00195	.00341
#2	-.00361	.01926	3.8593	.07409	.19225	.00117	-.00756
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.02483	.00071	L-.01317	-.00003	-.02912	H2786.4
SDev	.00079	.00120	.00321	.00004	.01095	8.9
%RSD	3.1836	169.15	24.394	141.42	37.611	.31980
#1	.02427	-.00014	L-.01544	-.00000	-.03687	H2780.1
#2	.02538	.00155	L-.01089	-.00005	-.02138	H2792.8
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9H43V 5X Operator: STL
Run Time: 05/05/05 17:24:46
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00157	-.00421	.00559	.00361	.00766	-.00265	.03591
SDev	.00428	.00117	.00175	.00107	.00521	.00171	.00669
%RSD	272.10	27.747	31.229	29.646	67.969	64.487	18.623
#1	.00145	-.00503	.00436	.00437	.00398	-.00144	.03118
#2	-.00460	-.00338	.00683	.00285	.01134	-.00385	.04063
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00092	-.00002	-.00044	-.00035	2.1384	-.00012	-.00109
SDev	.00073	.00003	.00006	.00004	.0101	.00047	.00015
%RSD	79.811	141.42	12.857	10.647	.47466	374.44	13.383
#1	.00144	.00000	-.00048	-.00038	2.1312	-.00045	-.00119
#2	.00040	-.00005	-.00040	-.00033	2.1456	.00021	-.00098
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.02989	.01227	.59373	.01951	.00015	-.00058	.00098
SDev	.00038	.00257	.00842	.00015	.00003	.00027	.00069
%RSD	1.2688	20.982	1.4176	.75363	20.203	46.816	70.264
#1	.02962	.01409	.58778	.01941	.00018	-.00039	.00146
#2	.03016	.01045	.59968	.01962	.00013	-.00078	.00049
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00176	.00642	.82474	.01534	.04018	-.00372	-.00410
SDev	.00030	.00015	.00131	.00004	.00149	.00139	.02164
%RSD	17.173	2.3151	.15862	.23426	3.7050	37.250	527.14
#1	-.00198	.00631	.82382	.01532	.03913	-.00274	-.01941
#2	-.00155	.00652	.82567	.01537	.04123	-.00470	.01120
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00427	.00079	-.00245	-.00066	-.01131	H472.72
SDev	.00013	.00060	.00246	.00014	.02567	1.73
%RSD	3.0966	75.792	100.61	21.757	226.99	.36626
#1	.00437	.00036	-.00071	-.00055	-.02946	H471.50
#2	.00418	.00121	-.00419	-.00076	.00684	H473.95
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9L63B Operator: STL
Run Time: 05/05/05 17:29:08
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00076	-.00091	-.00079	-.00045	.00193	-.00333	L.03076
SDev	.00072	.00080	.00132	.00063	.00049	.00312	.00379
%RSD	95.395	87.525	167.35	141.38	25.198	93.651	12.319
#1	-.00127	-.00035	.00014	-.00089	.00227	-.00554	L.02808
#2	-.00025	-.00147	-.00172	-.00000	.00158	-.00113	L.03344

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Low
High							.20000
Low							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L-.00058	-.00041	-.00052	-.00062	.01604	-.00093	-.00087
SDev	.00045	.00000	.00004	.00001	.00060	.00014	.00005
%RSD	76.855	.00000	8.4179	1.9964	3.7216	15.218	5.6142
#1	L-.00090	-.00041	-.00055	-.00062	.01562	-.00103	-.00084
#2	L-.00027	-.00041	-.00049	-.00061	.01647	-.00083	-.00091

Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00700	.20000	.20000	.00500	.25000	.01000	.05000
Low	.00700	-.20000	-.20000	-.00500	-.25000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00220	-.01983	.00013	-.00051	-.00075	-.00063	.00089
SDev	.00026	.00169	.00402	.00008	.00044	.00000	.00128
%RSD	11.630	8.5124	3109.5	15.100	58.232	.31499	144.26
#1	-.00238	-.02102	-.00272	-.00056	-.00106	-.00063	-.00002
#2	-.00201	-.01863	.00298	-.00045	-.00044	-.00063	.00179

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.02500	.05000	.25000	.01500	.04000	.01000	.01000
Low	-.02500	-.05000	-.25000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00145	.00200	-.00007	-.00064	-.00144	-.00530	-.02596
SDev	.00015	.00006	-.00051	.00000	.00177	-.00197	.00335
%RSD	10.144	2.7794	759.10	.00187	122.83	37.280	12.902
#1	-.00156	.00196	.00030	-.00064	-.00269	-.00669	-.02359
#2	-.00135	.00204	-.00043	-.00064	-.00019	-.00390	-.02832

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.04000	.05000	.10000	.50000	.50000
Low	-.05000	-.01000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	-.00056	-.00158	-.00081	-.00068	.01318	L-.32611
SDev	.00002	.00192	.00022	.00011	.02170	.28531
%RSD	3.3889	121.43	26.880	15.713	164.63	87.489

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#1	-.00055	-.00294	-.00096	-.00076	-.00216	L-.52786
#2	-.00057	-.00022	-.00065	-.00061	.02852	-.12437
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Low
High	.00300	.00500	.01000	.05000		.25000
Low	-.00300	-.00500	-.01000	-.05000		-.25000

Method: 6010C Sample Name: G9L63C Operator: STL
Run Time: 05/05/05 17:33:30
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.89927	.90248	.90261	.89782	.94045	.91638	.91341
SDev	.00702	.00270	.00102	.00393	.00337	.00167	.00084
%RSD	.78042	.29881	.11249	.43817	.35809	.18174	.09179
#1	.89431	.90057	.90189	.89504	.93807	.91520	.91282
#2	.90423	.90438	.90332	.90060	.94283	.91756	.91401

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							1.2000
Low							.80000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.92256	.96937	.98675	.92744	18.159	.90145	.90154
SDev	.00538	.00265	.00276	.00259	.039	.00227	.00352
%RSD	.58298	.27292	.27965	.27881	.21701	.25151	.39015
#1	.91876	.96750	.98480	.92562	18.131	.89984	.89905
#2	.92636	.97124	.98870	.92927	18.187	.90305	.90403

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2040	1.2040	1.2000	1.2040	24.000	1.2040	1.2000
Low	.79500	.79500	.80000	.79500	16.000	.79500	.80000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.89118	.98453	17.696	.93382	.90641	.22236	.89732
SDev	.00270	.01756	.032	.00244	.00171	.00211	.00585
%RSD	.30343	1.7834	.18301	.26168	.18878	.94718	.65250
#1	.88927	.97212	17.673	.93209	.90520	.22087	.89318
#2	.89310	.99695	17.719	.93555	.90762	.22385	.90146

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2000	1.2000	24.000	1.2040	1.2000	.33700	1.2040
Low	.80000	.80000	16.000	.79500	.80000	.12300	.79500

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.91063	.90336	.94427	.95728	L-.00121	L-.00391	L-.01599
SDev	.00264	.00333	.00432	.00311	.00077	.00444	.00654
%RSD	.29021	.36904	.45796	.32459	64.045	113.39	40.882

#1	.90876	.90100	.94121	.95508	L-.00066	L-.00705	L-.01137
#2	.91250	.90572	.94733	.95948	L-.00175	L-.00078	L-.02061
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Low	LC Low
High	1.2000	1.2000	1.2000	1.2000	2.4000	2.4000	2.4000
Low	.80000	.80000	.80000	.80000	1.6000	1.6000	1.6000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.89941	.92439	.90034	L.00030	L.06325	13.390
SDev	.00296	.00223	.00558	.00036	.00258	.133
%RSD	.32933	.24148	.61966	117.85	4.0754	.99244
#1	.89732	.92282	.89639	L.00005	L.06507	13.484
#2	.90151	.92597	.90428	L.00055	L.06143	13.296
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Low	NOCHECK
High	1.2040	1.2040	1.2040	2.4000	2.4000	
Low	.79500	.79500	.79500	1.6000	1.6000	

Method: 6010C Sample Name: G9L63L Operator: STL
Run Time: 05/05/05 17:37:52
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.98309	.98840	.98032	.97833	1.0228	.99385	.98657
SDev	.01536	.01258	.00688	.00693	.0142	.00901	.01310
%RSD	1.5626	1.2728	.70141	.70792	1.3864	.90674	1.3278
#1	.97222	.97950	.97546	.97343	1.0127	.98748	.97731
#2	.99395	.99729	.98518	.98323	1.0328	1.0002	.99583
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							1.2000
Low							.80000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.99978	1.0584	1.0750	1.0074	19.777	.98097	.98046
SDev	.02004	.0305	.0215	.0167	.334	.01755	.01699
%RSD	2.0045	2.8816	2.0000	1.6540	1.6907	1.7892	1.7329
#1	.98561	1.0369	1.0598	.99566	19.540	.96856	.96845
#2	1.0140	1.0800	1.0902	1.0192	20.013	.99338	.99247
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2040	1.2040	1.2000	1.2040	24.000	1.2040	1.2000
Low	.79500	.79500	.80000	.79500	16.000	.79500	.80000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.97753	1.0794	19.253	1.0169	.98645	.24332	.97678
SDev	.02840	.0080	.252	.0203	.01571	.00497	.01916
%RSD	2.9047	.74021	1.3096	2.0005	1.5928	2.0419	1.9611

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#1	.95746	1.0737	19.074	1.0025	.97534	.23981	.96323
#2	.99761	1.0850	19.431	1.0313	.99756	.24683	.99032
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2000	1.2000	24.000	1.2040	1.2000	.33700	1.2040
Low	.80000	.80000	16.000	.79500	.80000	.12300	.79500

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.99372	.99058	1.0318	1.0466	L-.00136	L-.00099	L-.02405
SDev	.02076	.02084	.0201	.0283	.00176	.00494	.04800
%RSD	2.0890	2.1041	1.9500	2.7064	129.01	500.91	199.61
#1	.97904	.97584	1.0176	1.0266	L-.00012	L.00251	L.00990
#2	1.0084	1.0053	1.0460	1.0667	L-.00261	L-.00448	L-.05799
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Low	LC Low
High	1.2000	1.2000	1.2000	1.2000	2.4000	2.4000	2.4000
Low	.80000	.80000	.80000	.80000	1.6000	1.6000	1.6000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.97899	1.0035	.98485	L.00040	L.05012	14.316
SDev	.00691	.0107	.01443	.00028	.07108	1.176
%RSD	.70575	1.0695	1.4657	70.711	141.82	8.2177
#1	.97411	.99589	.97465	L.00061	L.10038	15.148
#2	.98388	1.0111	.99506	L.00020	L-.00014	13.484
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Low	NOCHECK
High	1.2040	1.2040	1.2040	2.4000	2.4000	
Low	.79500	.79500	.79500	1.6000	1.6000	

Method: 6010C Sample Name: G9G4K Operator: STL
Run Time: 05/05/05 17:42:14
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.07711	.04591	.58714	.58846	.00656	.00482	2.0694
SDev	.00710	.00477	.00584	.00320	.00759	.00150	.0114
%RSD	9.2090	10.378	.99460	.54322	115.64	31.158	.55090
#1	.07209	.04928	.59127	.58620	.01192	.00376	2.0614
#2	.08214	.04255	.58301	.59072	.00120	.00588	2.0775
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00952	.07073	.00318	.00921	28.790	4.5238	.00725
SDev	.00068	.00071	.00000	.00002	.168	.0281	.00090
%RSD	7.1143	1.0006	.00000	.16149	.58380	.62090	12.388

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#1	-.00904	.07023	.00318	.00922	28.671	4.5039	.00662
#2	L-.01000	.07123	.00318	.00920	28.909	4.5436	.00789
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.13819	4.8740	7.6480	10.277	.13035	.01978	.23322
SDev	.00006	.0317	.0349	.067	.00072	.00039	.00033
%RSD	.04449	.64966	.45696	.64722	.54897	1.9621	.14230
#1	.13815	4.8517	7.6232	10.230	.12984	.01950	.23345
#2	.13824	4.8964	7.6727	10.324	.13085	.02005	.23298
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00841	1.3362	.00499	.41501	.02544	-.00160	.02239
SDev	.00066	.0083	.00097	.00347	.00088	.00156	.04576
%RSD	7.8722	.62380	19.344	.83515	3.4468	97.977	204.37
#1	.00795	1.3303	.00567	.41256	.02606	-.00270	.05475
#2	.00888	1.3421	.00431	.41746	.02482	-.00049	-.00997
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.58802	.00540	.06672	.42363	.42683	214.23
SDev	.00019	.00153	.00315	.00364	.01128	1.76
%RSD	.03189	28.246	4.7208	.85853	2.6424	.82281
#1	.58789	.00648	.06450	.42106	.43480	212.98
#2	.58815	.00432	.06895	.42620	.41885	215.47
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/05/05 17:46:38
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	3.9871	4.0136	4.0007	3.9850	4.0650	4.0384	38.888
SDev	.0029	.0047	.0028	.0066	.0065	.0046	.059
%RSD	.07383	.11651	.07015	.16681	.15926	.11454	.15124

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#1	3.9892	4.0103	3.9987	3.9803	4.0604	4.0351	38.846
#2	3.9851	4.0169	4.0026	3.9897	4.0695	4.0416	38.930
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.1014	4.2934	4.2400	4.0649	20.148	3.9787	4.0023
SDev	.0078	.0040	.0053	.0081	.035	.0070	.0092
%RSD	.18897	.09419	.12425	.19835	.17337	.17682	.23016
#1	4.0959	4.2905	4.2362	4.0591	20.123	3.9737	3.9958
#2	4.1069	4.2962	4.2437	4.0706	20.172	3.9837	4.0088
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.0655	40.861	19.783	4.1356	4.0220	1.0198	3.9650
SDev	.0055	.058	.038	.0073	.0082	.0020	.0084
%RSD	.13424	.14262	.19146	.17723	.20422	.19662	.21165
#1	4.0616	40.820	19.756	4.1305	4.0162	1.0184	3.9590
#2	4.0693	40.902	19.810	4.1408	4.0278	1.0212	3.9709
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.0468	4.0358	4.1527	4.2433	4.1927	Q3.3352	4.0636
SDev	.0072	.0074	.0109	.0121	.0058	.0048	.0075
%RSD	.17768	.18274	.26138	.28445	.13843	.14420	.18350
#1	4.0417	4.0306	4.1450	4.2347	4.1886	Q3.3318	4.0689
#2	4.0518	4.0410	4.1604	4.2518	4.1968	Q3.3386	4.0583
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	3.9902	4.0472	3.9960	4.1450	Q3.5826	38.078
SDev	.0054	.0052	.0004	.0070	.0021	.004
%RSD	.13454	.12950	.01017	.16773	.05956	.01026
#1	3.9864	4.0435	3.9963	4.1401	Q3.5811	38.075
#2	3.9940	4.0509	3.9957	4.1499	Q3.5841	38.080
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000

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Range 10.000 10.000 10.000 10.000 10.000 10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 05/05/05 17:51:02
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00469	-.00028	-.00144	.00288	-.00101	.00221	.03647
SDev	.00927	.00502	.00989	.00441	.00618	.00408	.00874
%RSD	197.64	1817.6	685.55	152.98	611.19	184.73	23.969
#1	-.00186	.00327	.00555	-.00024	.00336	-.00068	.03029
#2	.01125	-.00383	-.00843	.00600	-.00538	.00510	.04265
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00393	.00143	.00168	.00139	.01203	.00088	.00158
SDev	.00194	.00118	.00099	.00110	.00567	.00045	.00134
%RSD	49.394	82.496	58.817	78.726	47.140	50.720	85.135
#1	.00256	.00060	.00098	.00062	.00802	.00120	.00063
#2	.00530	.00226	.00238	.00217	.01604	.00057	.00253
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00024	.01436	.01113	.00171	.00048	.00042	.00233
SDev	.00038	.01761	.00457	.00134	.00199	.00136	.00030
%RSD	156.19	122.70	41.111	78.060	411.41	321.07	13.092
#1	.00003	.00190	.00789	.00077	-.00092	-.00054	.00254
#2	-.00051	.02681	.01436	.00266	.00189	.00139	.00211
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00168	.00308	.00394	.00141	.00051	.00313	-.01805
SDev	.00204	.00089	.00101	.00101	.00099	.00580	.04593
%RSD	121.20	28.985	25.487	72.001	193.36	185.52	254.43
#1	.00024	.00245	.00465	.00069	.00121	-.00098	.01443
#2	.00312	.00371	.00323	.00212	-.00019	.00723	-.05054
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000

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Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00144	.00114	.00304	.00187	-.01002	Q-.39797	
SDev	.00035	.00066	.00451	.00100	.00466	.03517	
%RSD	24.220	58.416	148.57	53.511	46.545	8.8381	
#1	.00169	.00067	-.00015	.00116	-.00672	Q-.37310	
#2	.00120	.00161	.00623	.00257	-.01331	Q-.42284	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.00300	.00400	.06000	.05000	.50000	.25000	

Method: 6010C Sample Name: G9G4KV 5X Operator: STL
Run Time: 05/05/05 17:55:25
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.01564	.01036	.12693	.12551	.00438	-.00164	.42553
SDev	.00215	.00173	.00025	.00004	.00095	.00008	.00019
%RSD	13.747	16.690	.19824	.03241	21.786	4.7544	.04490
#1	.01412	.01159	.12711	.12554	.00505	-.00169	.42540
#2	.01717	.00914	.12675	.12548	.00370	-.00158	.42567
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00100	.01443	.00038	.00161	6.1646	.96204	.00143
SDev	.00038	.00008	.00003	.00007	.0505	.00850	.00054
%RSD	38.487	.58391	9.2735	4.2741	.81841	.88341	38.095
#1	-.00127	.01437	.00040	.00166	6.1290	.95603	.00181
#2	-.00073	.01449	.00035	.00156	6.2003	.96805	.00104
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.02801	1.0382	1.6192	2.2458	.02746	.00462	.05036
SDev	.00007	.0042	.0048	.0217	.00006	.00032	.00059
%RSD	.26920	.40604	.29381	.96711	.22663	6.9338	1.1732
#1	.02806	1.0352	1.6158	2.2304	.02750	.00484	.05078
#2	.02796	1.0412	1.6226	2.2611	.02741	.00439	.04994
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000

Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00158	.28088	.00104	.08740	.00445	.00118	.02088
SDev	.00011	.00268	.00087	.00101	.00127	.00222	.01055
%RSD	7.0878	.95511	83.778	1.1566	28.504	188.67	50.532
~~#1~~	~~.00166~~	~~.27898~~	~~.00165~~	~~.08669~~	~~.00535~~	~~-.00275~~	~~.02834~~
#2	.00151	.28278	.00042	.08811	.00355	-.00039	.01342
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.12598	.00037	.01389	.08915	.11502	37.016
SDev	.00011	.00027	.00086	.00100	.02838	.387
%RSD	.08805	72.708	6.1826	1.1199	24.675	1.0453
#1	.12606	.00055	.01328	.08845	.13509	37.290
#2	.12590	.00018	.01449	.08986	.09495	36.743
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9G4N Operator: STL
Run Time: 05/05/05 17:59:47
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00231	-.00002	.02638	.02862	.00593	-.00428	.03795
SDev	.00011	.00220	.00294	.00001	.00036	.00236	.00683
%RSD	4.6870	10912.	11.141	.04855	6.1269	55.213	17.989
#1	.00223	.00154	.02846	.02863	.00567	-.00595	.03313
#2	.00239	-.00158	.02430	.02861	.00619	-.00261	.04278
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00116	.03732	-.00045	.00033	7.6501	.00095	-.00025
SDev	.00006	.00034	.00004	.00009	.0340	.00003	.00035
%RSD	5.5261	.90308	9.8209	25.908	.44487	3.3533	139.13
#1	.00120	.03756	-.00048	.00027	7.6742	.00097	-.00049
#2	.00111	.03708	-.00042	.00040	7.6261	.00092	-.00000
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000

Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	T11908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00227	.00641	.01359	.00290	.00070	.00017	-.00010
SDev	.00017	.00721	.00695	.00009	.00025	.00046	.00178
%RSD	7.6963	112.50	51.181	2.9232	35.355	268.22	1804.2
#1	.00240	.00131	.00867	.00284	.00053	-.00015	.00116
#2	.00215	.01151	.01850	.00296	.00088	.00050	-.00136
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00019	.00410	.00580	.10981	.02962	-.00223	.02711
SDev	.00008	.00011	.00004	.00094	.00127	.00177	.00247
%RSD	39.896	2.7900	.65881	.85508	4.2915	79.237	9.1268
#1	.00024	.00402	.00577	.11047	.03052	-.00348	.02886
#2	.00014	.00418	.00583	.10914	.02872	-.00098	.02536
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.02788	-.00088	.00153	-.00023	.03416	H1303.1
SDev	.00099	.00170	.00066	.00018	.03276	8.8
%RSD	3.5442	193.14	43.078	78.567	95.896	.67276
#1	.02857	-.00208	.00200	-.00035	.01100	H1309.3
#2	.02718	.00032	.00107	-.00010	.05733	H1296.9
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9G4P Operator: STL
Run Time: 05/05/05 18:04:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.04548	.00876	.04234	.03725	-.00076	-.00974	1.6998
SDev	.00077	.00032	.00003	.00052	.00049	.00005	.0144
%RSD	1.6849	3.5965	.06894	1.3893	64.170	.49766	.84736
#1	-.04494	.00898	.04236	.03689	-.00042	-.00970	1.7100
#2	-.04603	.00854	.04232	.03762	-.00111	-.00977	1.6896
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00

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Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00274	.05986	.00685	.02931	43.458	.11661	.00920
SDev	.00135	.00081	.00002	.00012	.280	.00048	.00015
%RSD	49.477	1.3512	.25643	.42439	.64435	.41462	1.5821
#1	.00178	.06043	.00684	.02940	43.656	.11695	.00910
#2	.00369	.05929	.00687	.02922	43.260	.11627	.00930
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.03633	2.8598	13.320	H26.952	.01452	.00272	.01800
SDev	.00002	.0052	.048	.203	.00006	.00061	.00032
%RSD	.05515	.18016	.35991	.75221	.42855	22.585	1.8008
#1	.03635	2.8635	13.354	H27.096	.01448	.00228	.01823
#2	.03632	2.8562	13.286	H26.809	.01456	.00315	.01777
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V 2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01656	.23222	.02931	.26684	18.295	.00391	.03738
SDev	.00049	.00255	.00017	.00408	.177	.00362	.02233
%RSD	2.9370	1.0989	.57195	1.5283	.96766	92.689	59.729
#1	.01621	.23403	.02919	.26972	18.420	.00135	.02159
#2	.01690	.23042	.02943	.26395	18.170	.00647	.05317
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.03895	L-.00675	L-.02742	.03795	.19735	174.47
SDev	.00034	.00020	.00062	.00032	.05240	.54
%RSD	.86140	2.8917	2.2466	.84571	26.554	.30913
#1	.03871	L-.00661	L-.02699	.03817	.16029	174.85
#2	.03918	L-.00689	L-.02786	.03772	.23440	174.09
Errors	LC Pass	LC Low	LC Low	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9G4W Operator: STL
Run Time: 05/05/05 18:08:31
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00477	-.00222	.01679	.02183	-.00112	-.00122	.32654
SDev	.01524	.00977	.01551	.00860	.01166	.00672	.00476
%RSD	319.48	440.85	92.330	39.389	1040.1	548.93	1.4581
#1	-.00600	.00469	.02776	.01575	.00712	-.00597	.32318
#2	.01554	-.00912	.00583	.02790	-.00937	.00353	.32991
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00149	.03287	-.00041	.00035	26.398	.06295	.00160
SDev	.00103	.00022	.00000	.00043	.127	.00136	.00189
%RSD	68.756	.66635	1.0634	123.89	.47951	2.1643	118.02
#1	.00077	.03272	-.00041	.00004	26.487	.06391	.00026
#2	.00221	.03303	-.00042	.00065	26.308	.06198	.00294
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.02096	3.5562	8.5064	1.1068	.02020	.00150	.00284
SDev	.00143	.0163	.0201	.0073	.00212	.00352	.00122
%RSD	6.8265	.45892	.23661	.65982	10.476	234.96	42.919
#1	.02198	3.5446	8.5206	1.1119	.01870	-.00099	.00370
#2	.01995	3.5677	8.4922	1.1016	.02169	.00399	.00197
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00660	.34619	.00706	.41273	.15343	.00408	.04305
SDev	.00278	.00234	.00112	.00444	.00514	.01363	.03980
%RSD	42.152	.67530	15.867	1.0764	3.3473	334.42	92.451
#1	.00463	.34784	.00785	.41588	.15706	-.00556	.07119
#2	.00856	.34453	.00627	.40959	.14979	.01371	.01491
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.02015	-.00119	.00244	.00265	.03636	36.582
SDev	.00057	.00060	.00691	.00096	.04187	.719
%RSD	2.8319	50.212	282.81	36.365	115.17	1.9658
#1	.01975	-.00161	-.00244	.00197	.00675	36.074
#2	.02055	-.00077	.00733	.00333	.06596	37.091
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9G42 Operator: STL
Run Time: 05/05/05 18:12:52
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.05111	.00728	.08739	.08097	.00429	-.01096	3.2905
SDev	.00146	.00016	.00207	.00045	.00443	.00044	.0081
%RSD	2.8492	2.1760	2.3691	.55350	103.15	4.0323	.24687
#1	-.05214	.00739	.08885	.08065	.00743	-.01127	3.2962
#2	-.05008	.00717	.08592	.08129	.00116	-.01065	3.2847
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00007	.05833	.01508	.05500	56.032	.23442	.01989
SDev	.00031	.00039	.00003	.00019	.031	.00087	.00015
%RSD	426.38	.66449	.17481	.34952	.05488	.37292	.73455
#1	-.00029	.05860	.01506	.05514	56.054	.23504	.02000
#2	.00015	.05805	.01510	.05487	56.011	.23380	.01979
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.08733	4.2307	15.747	H57.157	.09847	.00607	.03349
SDev	.00115	.0135	.007	.030	.00037	.00020	.00229
%RSD	1.3196	.31951	.04183	.05219	.37915	3.3278	6.8447
#1	.08814	4.2403	15.743	H57.178	.09821	.00621	.03512
#2	.08651	4.2212	15.752	H57.136	.09873	.00592	.03187
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.02262	.44131	-.00959	.20308	19.135	.01127	.06899
SDev	.00004	.00056	.00044	.00094	.011	.00023	.01722
%RSD	.17785	.12641	4.5935	.46238	.05630	2.0203	24.962
#1	.02265	.44170	-.00928	.20375	19.143	.01144	.08117
#2	.02259	.44091	-.00990	.20242	19.127	.01111	.05681

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.08311	L-.00588	L-.03167	.05327	.41701	H304.00
SDev	.00039	.00118	.00092	.00011	.02036	.16
%RSD	.46987	20.070	2.9007	.20078	4.8826	.05400
#1	.08338	L-.00505	L-.03232	.05335	.40262	H304.12
#2	.08283	L-.00672	L-.03102	.05320	.43141	H303.88

Errors	LC Pass	LC Low	LC Low	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9G47 Operator: STL
Run Time: 05/05/05 18:17:14
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.01961	.01200	.28683	.28810	.00848	.00245	.43899
SDev	.00433	.00073	.00187	.00072	.00235	.00037	.00043
%RSD	22.085	6.0502	.65167	.24807	27.757	15.214	.09866
#1	.02267	.01148	.28551	.28861	.00682	.00271	.43930
#2	.01655	.01251	.28816	.28760	.01015	.00219	.43869

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00109	.08474	-.00055	.16479	126.57	1.0779	.07671
SDev	.00113	.00010	.00000	.00023	.16	.0025	.00025
%RSD	103.02	.11931	.79897	.14045	.12360	.23001	.32285
#1	.00189	.08467	-.00055	.16463	126.46	1.0761	.07688
#2	.00030	.08481	-.00055	.16496	126.68	1.0796	.07653

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

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Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.33041	.81989	8.6166	1.0346	.25458	.00124	.00274
SDev	.00096	.00941	.0088	.0016	.00012	.00098	.00052
%RSD	.28914	1.1477	.10193	.15282	.04888	79.530	19.166
#1	.32974	.82654	8.6104	1.0334	.25467	.00193	.00311
#2	.33109	.81323	8.6228	1.0357	.25449	.00054	.00237

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00444	1.2499	.00528	.62950	.00996	.00165	.23050
SDev	.00067	.0029	.00036	.00144	.00215	.00333	.00174
%RSD	15.063	.23004	6.7207	.22915	21.627	201.45	.75480
#1	.00492	1.2479	.00553	.62848	.01149	.00401	.23173
#2	.00397	1.2519	.00503	.63052	.00844	-.00070	.22927

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.28768	.00446	.01707	.01954	.25903	H330.75
SDev	.00015	.00054	.00265	.00025	.00066	.32
%RSD	.05067	12.011	15.502	1.2774	.25376	.09690
#1	.28758	.00408	.01895	.01972	.25950	H330.52
#2	.28778	.00484	.01520	.01936	.25857	H330.97

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9G5A Operator: STL
Run Time: 05/05/05 18:21:36
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.25928	.04047	.13488	.13781	.00478	-.00082	1.7195
SDev	.00349	.00698	.00448	.00446	.00523	.00249	.0167
%RSD	1.3455	17.251	3.3205	3.2370	109.48	305.94	.96832
#1	-.26175	.04541	.13805	.13466	.00848	-.00258	1.7078
#2	-.25681	.03554	.13171	.14097	.00108	.00095	1.7313

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.01129	.04896	.00618	.01003	14.133	.69825	.00942
SDev	.00075	.00066	.00002	.00037	.133	.00676	.00050
%RSD	6.6017	1.3423	.28426	3.6460	.93998	.96854	5.3043
#1	.01182	.04850	.00617	.00977	14.039	.69347	.00907
#2	.01076	.04942	.00620	.01029	14.227	.70304	.00978
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.06076	2.3313	9.4978	H59.369	.13233	.02935	.22853
SDev	.00020	.0274	.0851	.456	.00184	.00086	.00063
%RSD	.33749	1.1733	.89580	.76884	1.3872	2.9349	.27400
#1	.06091	2.3120	9.4377	H59.046	.13103	.02874	.22809
#2	.06062	2.3507	9.5580	H59.692	.13363	.02996	.22897
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01054	.28508	-.00324	.17121	H101.99	.00765	.02334
SDev	.00040	.00276	.00022	.00209	.86	.00275	.03169
%RSD	3.8186	.96779	6.8270	1.2227	.84512	35.935	135.80
#1	.01026	.28313	-.00340	.16973	H101.38	.00570	.04574
#2	.01083	.28703	-.00309	.17269	H102.60	.00959	.00093
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.13684	.00105	L-.15946	.39549	.39327	146.44
SDev	.00148	.00008	.00000	.00478	.00705	1.41
%RSD	1.0846	7.4649	.00112	1.2081	1.7927	.96618
#1	.13579	.00110	L-.15946	.39211	.39825	145.44
#2	.13789	.00099	L-.15946	.39887	.38828	147.44
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9G5J Operator: STL
Run Time: 05/05/05 18:25:58
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

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Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.03363	.03138	.34098	.33953	.07647	.06464	3.0977
SDev	.00036	.00114	.00075	.00080	.00342	.00145	.0103
%RSD	1.0611	3.6212	.21942	.23567	4.4669	2.2439	.33188
#1	.03338	.03058	.34151	.33896	.07405	.06567	3.0905
#2	.03389	.03218	.34045	.34009	.07889	.06362	3.1050
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.04252	.09211	.01375	.06972	54.760	.66980	.10681
SDev	.00004	.00010	.00004	.00019	.135	.00134	.00010
%RSD	.09491	.10977	.28750	.27768	.24587	.19968	.09193
#1	.04255	.09203	.01373	.06959	54.665	.66886	.10674
#2	.04250	.09218	.01378	.06986	54.855	.67075	.10687
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.17150	4.4873	14.069	H58.735	.23529	.10000	.25011
SDev	.00005	.0039	.039	.086	.00090	.00020	.00140
%RSD	.02687	.08695	.27701	.14726	.38348	.20523	.56074
#1	.17146	4.4900	14.041	H58.673	.23465	.10014	.24912
#2	.17153	4.4845	14.096	H58.796	.23593	.09985	.25110
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.02431	.71006	.19210	.33839	.10841	.01116	.63953
SDev	.00011	.00138	.00063	.00036	.00486	.00201	.00317
%RSD	.46776	.19398	.32843	.10600	4.4866	18.047	.49650
#1	.02423	.70909	.19165	.33814	.11185	.01259	.63728
#2	.02439	.71104	.19254	.33865	.10497	.00974	.64177
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.34001	.06858	.03288	.45212	.41557	249.66
SDev	.00028	.00017	.00062	.00036	.00784	.39
%RSD	.08369	.24788	1.8746	.07886	1.8876	.15811

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#1	.33981	.06846	.03245	.45187	.41002	249.38
#2	.34021	.06870	.03332	.45237	.42112	249.94
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9G5N Operator: STL
Run Time: 05/05/05 18:30:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.06055	.00804	.08304	.07744	.00309	-.00974	3.1808
SDev	.00085	.00031	.00101	.00048	.00030	.00013	.0010
%RSD	1.3997	3.8976	1.2101	.62272	9.8194	1.3710	.03036
#1	-.05995	.00782	.08233	.07710	.00330	-.00984	3.1815
#2	-.06114	.00826	.08375	.07778	.00288	-.00965	3.1801
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00087	.05122	.01351	.05752	18.730	.22107	.01743
SDev	.00016	.00008	.00000	.00001	.020	.00012	.00010
%RSD	18.788	.16448	.03252	.02291	.10838	.05354	.56136
#1	-.00099	.05128	.01351	.05753	18.744	.22116	.01736
#2	-.00076	.05116	.01352	.05751	18.716	.22099	.01750
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.06017	3.4550	12.569	H47.292	.02284	.00494	.03478
SDev	.00009	.0091	.001	.041	.00025	.00042	.00118
%RSD	.15392	.26414	.01164	.08613	1.0900	8.5872	3.3793
#1	.06023	3.4485	12.570	H47.321	.02266	.00464	.03395
#2	.06010	3.4615	12.568	H47.264	.02301	.00524	.03561
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.01867	.36618	-.00264	.15267	23.147	.00939	.05607
SDev	.00018	.00072	.00020	.00058	.032	.00093	.00843
%RSD	.99358	.19566	7.5841	.37848	.13826	9.9026	15.036

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#1	.01880	.36669	-.00279	.15308	23.170	.00873	.05011
#2	.01854	.36567	-.00250	.15226	23.124	.01005	.06203
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.07930	L-.00547	L-.03771	.05658	.25045	H788.81	
SDev	.00066	.00001	.00046	.00014	.00948	1.32	
%RSD	.82753	.21874	1.2223	.25209	3.7840	.16747	
#1	.07884	L-.00546	L-.03738	.05668	.24375	H789.74	
#2	.07977	L-.00548	L-.03803	.05648	.25715	H787.88	
Errors	LC Pass	LC Low	LC Low	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9G5Q Operator: STL
Run Time: 05/05/05 18:34:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.30081	.04441	.11738	.11770	.00772	.00046	5.2500
SDev	.00609	.00196	.00168	.00017	.00064	.00122	.0036
%RSD	2.0236	4.4096	1.4290	.14650	8.3003	264.31	.06774
#1	-.29651	.04302	.11619	.11782	.00818	.00133	5.2475
#2	-.30512	.04579	.11857	.11758	.00727	-.00040	5.2525
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.01766	.06512	.02412	.09250	27.703	.60075	.02966
SDev	.00017	.00005	.00007	.00011	.030	.00036	.00020
%RSD	.96327	.07763	.29151	.11518	.10991	.06001	.66652
#1	.01754	.06515	.02407	.09243	27.682	.60050	.02980
#2	.01778	.06508	.02417	.09258	27.725	.60101	.02952
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.10543	6.5281	21.481	H68.791	.09570	.00997	.17611
SDev	.00031	.0071	.024	.086	.00037	.00025	.00162
%RSD	.28993	.10806	.11329	.12537	.39013	2.4962	.91744

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#1	.10521	6.5331	21.463	H68.730	.09596	.01015	.17497
#2	.10564	6.5231	21.498	H68.852	.09543	.00980	.17725
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.03699	.64936	.31302	.21855	H113.47	.02189	.08613
SDev	.00060	.00079	.00094	.00004	.12	.00129	.00280
%RSD	1.6118	.12126	.30122	.01626	.10892	5.8819	3.2547
#1	.03741	.64880	.31235	.21852	H113.38	.02280	.08811
#2	.03656	.64992	.31368	.21857	H113.56	.02098	.08415
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.11759	.00288	L-.18585	.35311	.45807	H358.96
SDev	.00044	.00103	.00341	.00018	.00167	.01
%RSD	.37720	35.757	1.8337	.05049	.36540	.00328
#1	.11728	.00361	L-.18344	.35298	.45926	H358.95
#2	.11791	.00215	L-.18826	.35323	.45689	H358.97
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/05/05 18:39:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	4.0667	4.0905	4.0564	4.0420	4.1451	4.1247	39.440
SDev	.0073	.0075	.0064	.0056	.0164	.0049	.024
%RSD	.18019	.18236	.15813	.13785	.39610	.11856	.06084
#1	4.0615	4.0852	4.0518	4.0381	4.1335	4.1282	39.423
#2	4.0719	4.0958	4.0609	4.0459	4.1568	4.1212	39.457
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.1564	4.3548	4.2747	4.1134	20.386	4.0260	4.0452
SDev	.0030	.0044	.0062	.0040	.026	.0043	.0022
%RSD	.07114	.10021	.14390	.09736	.12741	.10563	.05389

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#1	4.1543	4.3579	4.2704	4.1106	20.368	4.0230	4.0437
#2	4.1585	4.3517	4.2791	4.1162	20.405	4.0290	4.0468
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.1328	41.384	19.958	4.1639	4.0734	1.0347	4.0098
SDev	.0018	.047	.042	.0067	.0056	.0010	.0077
%RSD	.04472	.11350	.21179	.16041	.13825	.09985	.19238
#1	4.1341	41.350	19.928	4.1591	4.0695	1.0340	4.0043
#2	4.1314	41.417	19.987	4.1686	4.0774	1.0354	4.0152
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.1023	4.0820	4.1994	4.3021	4.2452	Q3.4069	4.1662
SDev	.0026	.0048	.0030	.0083	.0066	.0012	.0097
%RSD	.06265	.11686	.07109	.19319	.15627	.03392	.23334
#1	4.1005	4.0786	4.1973	4.2963	4.2405	Q3.4061	4.1731
#2	4.1041	4.0854	4.2015	4.3080	4.2499	Q3.4077	4.1594
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	4.0468	4.1315	4.0746	4.2059	Q3.5218	36.920
SDev	.0059	.0022	.0074	.0024	.0053	.164
%RSD	.14462	.05339	.18093	.05764	.14990	.44462
#1	4.0427	4.1300	4.0694	4.2042	Q3.5181	36.804
#2	4.0509	4.1331	4.0798	4.2076	Q3.5255	37.036
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 05/05/05 18:43:28
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00364	.00107	.00113	.00162	.00414	.00063	.03176
SDev	.00374	.00241	.00206	.00237	.00305	.00211	.00227
%RSD	102.71	225.15	182.82	146.68	73.735	336.66	7.1323

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#1	.00628	-.00063	-.00033	.00330	.00198	.00212	.03016
#2	.00100	.00277	.00258	-.00006	.00630	-.00086	.03336
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00181	.00104	.00125	.00104	.00760	.00096	.00084
SDev	.00017	.00032	.00006	.00014	.00000	.00016	.00079
%RSD	9.2679	30.885	4.5847	13.616	.00000	16.507	94.244
#1	.00193	.00126	.00129	.00114	.00760	.00107	.00140
#2	.00169	.00081	.00121	.00094	.00760	.00085	.00028
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00042	.00848	-.00323	.00092	.00055	.00002	.00213
SDev	.00003	.01429	.00220	.00008	.00003	.00103	.00006
%RSD	7.7744	168.51	67.883	8.3480	5.6569	4853.7	3.0298
#1	-.00040	.01858	-.00479	.00098	.00053	.00075	.00218
#2	-.00044	-.00162	-.00168	.00087	.00057	-.00070	.00208
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00100	.00252	.00447	.00102	.02662	-.00045	-.01145
SDev	.00070	.00000	.00134	.00018	.00730	.00544	.00425
%RSD	70.411	.14127	29.857	17.680	27.408	1200.7	37.130
#1	.00150	.00252	.00542	.00115	.03178	.00340	-.01445
#2	.00050	.00253	.00353	.00089	.02146	-.00430	-.00844
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00145	.00180	.00278	.00139	-.07980	Q-1.8903
SDev	.00090	.00039	.00169	.00053	.00494	.0352
%RSD	61.716	21.655	60.773	38.569	6.1862	1.8609
#1	.00209	.00207	.00398	.00176	-.08329	Q-1.8655
#2	.00082	.00152	.00159	.00101	-.07631	Q-1.9152
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.00000	.00000	.00000	.00000	.00000	.00000

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Range .00300 .00400 .06000 .05000 .50000 .25000

Method: 6010C Sample Name: G9G5R Operator: STL
Run Time: 05/05/05 18:47:51
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.14491	.18942	1.0676	1.0743	-.00150	-.00609	2.9780
SDev	.00105	.00088	.0001	.0034	.00242	.00043	.0091
%RSD	.72758	.46245	.01240	.31391	161.36	7.0564	.30417
#1	.14565	.18880	1.0677	1.0767	.00021	-.00639	2.9716
#2	.14416	.19004	1.0675	1.0719	-.00322	-.00579	2.9844
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L-.06175	.05582	.01072	.04251	15.635	18.384	.01080
SDev	.00094	.00018	.00002	.00000	.036	.063	.00034
%RSD	1.5305	.33204	.20502	.00412	.22913	.34116	3.1874
#1	L-.06108	.05569	.01070	.04251	15.609	18.339	.01104
#2	L-.06241	.05595	.01073	.04251	15.660	18.428	.01056
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.37010	9.2198	11.227	H38.971	.05973	.01583	.10883
SDev	.00130	.0239	.029	.080	.00028	.00031	.00066
%RSD	.35227	.25959	.25913	.20423	.46880	1.9397	.60733
#1	.36918	9.2029	11.206	H38.915	.05953	.01604	.10836
#2	.37103	9.2367	11.247	H39.027	.05993	.01561	.10929
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.02085	.74353	.18418	.71528	H53.868	.01010	.04700
SDev	.00030	.00178	.00050	.00210	.110	.00157	.01760
%RSD	1.4356	.23984	.27330	.29294	.20398	15.540	37.461
#1	.02107	.74227	.18382	.71380	H53.790	.01121	.05944
#2	.02064	.74479	.18453	.71676	H53.946	.00899	.03455
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000

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Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	1.0720	-.00456	.15973	.22215	1.3641	H280.22	
SDev	.0023	.00052	.00041	.00053	.0070	.84	
%RSD	.21393	11.404	.25765	.24076	.51530	.30128	
#1	1.0737	-.00419	.16002	.22177	1.3691	H279.62	
#2	1.0704	-.00493	.15944	.22253	1.3591	H280.81	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9G5W Operator: STL
Run Time: 05/05/05 18:52:13
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.03376	.02653	.45768	.45520	.02030	.01575	3.1924
SDev	.00096	.00206	.00043	.00061	.00009	.00081	.0054
%RSD	2.8289	7.7782	.09482	.13476	.45904	5.1304	.16983
#1	.03308	.02507	.45799	.45476	.02037	.01518	3.1886
#2	.03443	.02799	.45738	.45563	.02024	.01632	3.1962
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.04086	.10668	.02008	.02284	35.815	.12659	.02237
SDev	.00126	.00008	.00004	.00007	.058	.00038	.00059
%RSD	3.0881	.07898	.19693	.29637	.16088	.30291	2.6556
#1	.04175	.10662	.02005	.02279	35.774	.12632	.02279
#2	.03997	.10674	.02011	.02289	35.856	.12687	.02195
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.29720	6.0965	10.310	16.432	.45242	.01116	.02469
SDev	.00056	.0118	.017	.021	.00034	.00005	.00199
%RSD	.18864	.19363	.16682	.12753	.07564	.47969	8.0685
#1	.29681	6.0882	10.298	16.417	.45218	.01113	.02329
#2	.29760	6.1049	10.322	16.447	.45267	.01120	.02610
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000

Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.02249	3.3018	1.0145	.26924	.08725	.01597	.07488
SDev	.00000	.0056	.0024	.00018	.00376	.00001	.00247
%RSD	.00202	.16860	.24032	.06668	4.3069	.08831	3.3035
#1	.02249	3.2979	1.0127	.26911	.08991	.01596	.07663
#2	.02249	3.3058	1.0162	.26937	.08460	.01598	.07313
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.45602	.01727	.03135	.05983	.07982	118.75
SDev	.00026	.00051	.00132	.00018	.00287	.32
%RSD	.05803	2.9418	4.2235	.29798	3.5951	.26990
#1	.45584	.01691	.03041	.05970	.07779	118.52
#2	.45621	.01762	.03229	.05996	.08185	118.97
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9G50 Operator: STL
Run Time: 05/05/05 18:56:35
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.44133	.27546	1.9192	1.9376	.00639	.00014	1.7667
SDev	.01542	.00590	.0100	.0170	.00950	.00685	.0204
%RSD	3.4941	2.1418	.51859	.87657	148.63	5023.4	1.1570
#1	.43043	.27964	1.9122	1.9256	.01311	-.00471	1.7523
#2	.45224	.27129	1.9263	1.9496	-.00033	.00498	1.7812
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L-.09118	.04449	-.00005	.00354	26.231	27.061	.01494
SDev	.00176	.00077	.00008	.00026	.237	.291	.00100
%RSD	1.9285	1.7422	159.10	7.3311	.90364	1.0761	6.6794
#1	L-.08994	.04394	.00001	.00336	26.064	26.855	.01424
#2	L-.09242	.04504	-.00011	.00372	26.399	27.266	.01565
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000

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Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.56370	9.6413	5.2618	2.5390	.22090	.01915	.03202
SDev	.00794	.1132	.0300	.0294	.00283	.00100	.00133
%RSD	1.4085	1.1742	.57029	1.1583	1.2817	5.1966	4.1562
#1	.55809	9.5612	5.2406	2.5182	.21890	.01844	.03296
#2	.56932	9.7213	5.2830	2.5598	.22290	.01985	.03107
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.02354	1.4329	.01931	1.0533	.04666	-.00352	.42529
SDev	.00077	.0168	.00176	.0168	.00226	.00280	.05446
%RSD	3.2765	1.1716	9.0955	1.5985	4.8358	79.447	12.805
#1	.02299	1.4210	.02055	1.0413	.04826	-.00550	.46380
#2	.02408	1.4448	.01806	1.0652	.04507	-.00154	.38678
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	1.9315	.00222	.38610	6.7568	1.5979	H2089.7	
SDev	.0146	.00140	.00833	.0909	.0301	23.9	
%RSD	.75813	63.295	2.1565	1.3457	1.8863	1.1422	
#1	1.9211	.00123	.38021	6.6925	1.6192	H2072.9	
#2	1.9418	.00321	.39199	6.8211	1.5766	H2106.6	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G9G56 Operator: STL
Run Time: 05/05/05 19:00:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00731	.00901	.28810	.28729	.00450	-.00097	1.5527
SDev	.00567	.00041	.00177	.00074	.00311	.00088	.0025
%RSD	77.519	4.5034	.61362	.25691	69.096	91.288	.15856
#1	.00330	.00930	.28935	.28677	.00669	-.00159	1.5545
#2	.01132	.00872	.28685	.28781	.00230	-.00034	1.5510
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00

Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.02876	.17288	.00113	.00324	38.221	.00686	.01354
SDev	.00068	.00035	.00003	.00016	.032	.00077	.00005
%RSD	2.3516	.20469	2.7122	4.9957	.08357	11.243	.35339
#1	.02828	.17313	.00111	.00312	38.199	.00631	.01358
#2	.02924	.17263	.00116	.00335	38.244	.00740	.01351
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.11504	3.9575	5.5806	3.4198	.04297	.00116	.00258
SDev	.00043	.0033	.0099	.0002	.00040	.00035	.00165
%RSD	.37364	.08411	.17705	.00710	.94136	30.270	63.860
#1	.11535	3.9551	5.5736	3.4200	.04268	.00091	.00375
#2	.11474	3.9598	5.5876	3.4197	.04325	.00141	.00142
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00514	.30883	.03338	.17122	.01505	-.00043	.00388
SDev	.00000	.00037	.00052	.00025	.00099	.00222	.01056
%RSD	.06461	.12106	1.5428	.14813	6.6058	521.72	272.45
#1	.00514	.30910	.03375	.17139	.01575	-.00199	.01134
#2	.00514	.30857	.03302	.17104	.01434	.00114	-.00359
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.28755	.00085	.00788	.01077	.10121	73.334	
SDev	.00010	.00044	.00364	.00025	.01741	.188	
%RSD	.03356	52.230	46.271	2.3184	17.207	.25583	
#1	.28762	.00116	.00530	.01059	.08890	73.201	
#2	.28749	.00054	.01045	.01094	.11353	73.466	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

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Method: 6010C Sample Name: G9G59 Operator: STL
Run Time: 05/05/05 19:05:19
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00234	-.00035	.01332	.01217	.00362	.00110	.76679
SDev	.00048	.00061	.00045	.00006	.00255	.00195	.00058
%RSD	20.699	175.11	3.3711	.48390	70.372	177.07	.07622
#1	.00200	.00008	.01300	.01213	.00182	.00248	.76637
#2	.00268	-.00078	.01363	.01221	.00543	-.00028	.76720
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00151	.04790	-.00047	-.00015	24.102	.11422	.00361
SDev	.00019	.00000	.00002	.00006	.064	.00018	.00024
%RSD	12.446	.00000	4.6828	35.861	.26754	.15800	6.7956
#1	.00164	.04790	-.00048	-.00011	24.057	.11434	.00378
#2	.00137	.04790	-.00045	-.00019	24.148	.11409	.00343
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.03080	.93746	9.3809	.18650	.00409	.00000	-.00001
SDev	.00003	.01145	.0269	.00066	.00044	.00068	.00210
%RSD	.10199	1.2210	.28672	.35544	10.645	42782.	14047.
#1	.03082	.94555	9.3619	.18604	.00378	.00048	-.00150
#2	.03078	.92936	9.3999	.18697	.00440	-.00048	.00147
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V 2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00058	.07827	.00267	.47516	.03689	-.00230	-.00040
SDev	.00056	.00027	.00013	.00094	.00138	.00083	.01863
%RSD	96.677	.34974	4.7406	.19748	3.7551	36.088	4607.5
#1	.00098	.07807	.00276	.47449	.03591	-.00171	.01277
#2	.00018	.07846	.00258	.47582	.03787	-.00289	-.01358
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.01255	.00194	.00144	.00174	.18162	177.40
SDev	.00019	.00045	.00012	.00025	.00649	.66
%RSD	1.5037	23.293	8.2268	14.347	3.5705	.37014
#1	.01242	.00226	.00136	.00192	.17703	176.93
#2	.01269	.00162	.00153	.00156	.18620	177.86
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9G6D Operator: STL
Run Time: 05/05/05 19:09:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.02432	.01148	.99456	.99460	.00936	.00391	1.5084
SDev	.00220	.00093	.00066	.00494	.00314	.00129	.0036
%RSD	9.0607	8.0947	.06615	.49681	33.544	32.933	.23647
#1	.02277	.01214	.99410	.99111	.00714	.00300	1.5059
#2	.02588	.01083	.99503	.99810	.01158	.00483	1.5109
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.02103	.11203	.00747	.01375	57.590	.21823	.01288
SDev	.00129	.00010	.00002	.00006	.148	.00049	.00044
%RSD	6.1606	.09025	.23531	.40058	.25712	.22679	3.4447
#1	.02011	.11196	.00746	.01371	57.486	.21788	.01320
#2	.02194	.11210	.00748	.01379	57.695	.21858	.01257
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.57693	4.9348	12.872	10.212	.07229	.00098	.00912
SDev	.00027	.0140	.037	.025	.00000	.00033	.00278
%RSD	.04619	.28312	.28573	.24107	.00000	33.430	30.425
#1	.57674	4.9249	12.846	10.194	.07229	.00121	.01109
#2	.57711	4.9447	12.898	10.229	.07229	.00075	.00716
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00965	8.0525	1.6758	.33430	.01619	-.00001	.14258
SDev	.00007	.0255	.0059	.00072	.00044	.00062	.01320
%RSD	.75231	.31639	.35177	.21532	2.7147	10191.	9.2592
#1	.00960	8.0345	1.6716	.33379	.01650	.00043	.15191
#2	.00970	8.0705	1.6800	.33481	.01588	-.00044	.13324
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.99459	.00573	.02005	.02688	.07309	228.02
SDev	.00351	.00191	.00116	.00014	.00209	.84
%RSD	.35340	33.266	5.7888	.53066	2.8636	.36681
#1	.99210	.00438	.01923	.02678	.07161	227.43
#2	.99707	.00707	.02087	.02698	.07457	228.61
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9G6E Operator: STL
Run Time: 05/05/05 19:14:03
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.08037	.04651	.24893	.23933	.00591	-.00571	10.949
SDev	.00183	.00395	.00089	.00137	.00252	.00143	.018
%RSD	2.2793	8.4996	.35924	.57207	42.586	24.998	.16038
#1	-.07907	.04930	.24956	.23837	.00769	-.00470	10.962
#2	-.08166	.04371	.24830	.24030	.00413	-.00672	10.937
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.02266	.25101	.00848	.01179	37.639	1.7012	.03543
SDev	.00002	.00081	.00001	.00007	.014	.0006	.00069
%RSD	.07429	.32223	.10360	.58235	.03729	.03356	1.9618
#1	.02264	.25158	.00848	.01184	37.629	1.7016	.03494
#2	.02267	.25044	.00849	.01175	37.649	1.7008	.03592
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

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Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.11371	3.1474	11.094	H57.934	.14040	.00283	.00821
SDev	.00064	.0010	.010	.031	.00068	.00057	.00042
%RSD	.56597	.03064	.09235	.05347	.48751	20.068	5.1266
#1	.11417	3.1467	11.087	H57.913	.14089	.00242	.00791
#2	.11326	3.1481	11.102	H57.956	.13992	.00323	.00851
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.03488	.92075	.00703	.97728	H50.012	.01048	.35456
SDev	.00008	.00072	.00150	.00224	.017	.00123	.00915
%RSD	.22075	.07855	21.312	.22930	.03449	11.769	2.5805
#1	.03493	.92126	.00809	.97887	H50.000	.00961	.36103
#2	.03482	.92024	.00597	.97570	H50.024	.01135	.34809
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.24253	-.00184	L-.03812	10.860	3.7672	H2842.6
SDev	.00061	.00179	.00254	.015	.0073	3.8
%RSD	.25375	97.277	6.6583	.13593	.19344	.13515
#1	.24210	-.00057	L-.03632	10.871	3.7621	H2845.3
#2	.24297	-.00311	L-.03991	10.850	3.7724	H2839.9
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9G6F Operator: STL
Run Time: 05/05/05 19:18:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.58306	.38047	3.4657	3.4941	.00444	-.00963	3.7182
SDev	.00847	.00076	.0032	.0234	.00562	.00352	.0104
%RSD	1.4527	.19970	.09235	.66840	126.67	36.518	.27868
#1	.57707	.38100	3.4634	3.4776	.00842	-.01212	3.7109
#2	.58905	.37993	3.4679	3.5106	.00046	-.00714	3.7255
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L-.14890	.08154	.00473	.01503	36.058	40.130	.01462
SDev	.00077	.00008	.00004	.00008	.147	.135	.00010
%RSD	.51749	.10333	.92918	.54877	.40817	.33710	.69377
#1	L-.14836	.08148	.00470	.01498	35.954	40.034	.01455
#2	L-.14945	.08160	.00476	.01509	36.162	40.226	.01469
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.44860	14.190	10.200	H40.194	.63909	.01777	.04280
SDev	.00034	.063	.053	.148	.00168	.00040	.00030
%RSD	.07565	.44390	.52381	.36770	.26289	2.2485	.69660
#1	.44884	14.145	10.162	H40.090	.63790	.01749	.04301
#2	.44836	14.234	10.238	H40.299	.64028	.01805	.04259
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.02210	3.3369	.01360	1.7931	7.8529	.00100	1.5072
SDev	.00018	.0099	.00019	.0026	.0453	.00181	.0175
%RSD	.82405	.29716	1.3871	.14293	.57717	180.71	1.1595
#1	.02197	3.3299	.01347	1.7913	7.8208	-.00028	1.5196
#2	.02223	3.3439	.01373	1.7949	7.8849	.00228	1.4949
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	3.4847	-.00495	.51559	.25916	3.2130	H1041.9
SDev	.0166	.00047	.00540	.00011	.0272	3.6
%RSD	.47762	9.5721	1.0467	.04127	.84500	.34512
#1	3.4729	L-.00528	.51178	.25909	3.1938	H1039.4
#2	3.4964	-.00461	.51941	.25924	3.2322	H1044.4
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9H40 Operator: STL
Run Time: 05/05/05 19:22:49
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00304	-.02251	.03277	.03357	.00742	.00169	.23429
SDev	.00303	.00191	.00241	.00226	.00122	.00206	.00049
%RSD	99.504	8.4757	7.3540	6.7346	16.432	122.00	.21083
#1	-.00518	-.02116	.03448	.03197	.00828	.00023	.23394
#2	-.00090	-.02386	.03107	.03517	.00655	.00315	.23463
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00121	.02267	.00015	.00110	11.433	.01768	.00230
SDev	.00075	.00015	.00001	.00003	.037	.00020	.00000
%RSD	62.077	.66884	5.8928	2.2521	.32380	1.1315	.12651
#1	.00068	.02257	.00016	.00108	11.406	.01782	.00230
#2	.00174	.02278	.00014	.00112	11.459	.01753	.00230
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00789	.25807	2.9404	4.9068	.00594	.00583	.00240
SDev	.00055	.00186	.0091	.0164	.00025	.00014	.00338
%RSD	6.9798	.71866	.31113	.33345	4.1903	2.3088	140.81
#1	.00828	.25676	2.9340	4.8952	.00576	.00574	.00479
#2	.00750	.25938	2.9469	4.9184	.00612	.00593	.00001
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00215	.02934	3.2599	.11494	.03493	-.00195	.05348
SDev	.00019	.00018	.0170	.00036	.00138	.00060	.01970
%RSD	8.8496	.60740	.52105	.31377	3.9457	30.879	36.839
#1	-.00202	.02921	3.2479	.11469	.03590	-.00237	.06741
#2	-.00229	.02946	3.2719	.11520	.03396	-.00152	.03955
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.03331	.00360	-.00952	.00401	-.02996	H719.32
SDev	.00071	.00097	.00138	.00011	.00172	3.01
%RSD	2.1180	26.975	14.529	2.6683	5.7311	.41783

#1	.03281	.00291	L-.01050	.00393	-.02875	H717.19
#2	.03381	.00428	-.00855	.00408	-.03118	H721.44

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G9H42 Operator: STL
Run Time: 05/05/05 19:27:11
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.09030	.04009	.33851	.34347	.00644	-.00246	.24231
SDev	.00090	.00288	.00163	.00148	.00038	.00261	.00659
%RSD	1.0000	7.1845	.48244	.43029	5.9669	106.13	2.7213
#1	.08966	.04213	.33967	.34242	.00671	-.00431	.23765
#2	.09094	.03805	.33736	.34451	.00617	-.00061	.24697
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L-.02165	.02085	-.00012	.00062	10.217	5.8422	-.00050
SDev	.00054	.00003	.00007	.00030	.035	.0305	.00099
%RSD	2.5042	.16163	59.546	48.298	.34478	.52125	199.12
#1	L-.02126	.02083	-.00017	.00041	10.242	5.8637	-.00119
#2	L-.02203	.02088	-.00007	.00083	10.193	5.8206	.00020

Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.09508	.48187	3.0406	2.6490	.00568	.00228	.00353
SDev	.00063	.01812	.0051	.0157	.00050	.00139	.00348
%RSD	.66294	3.7601	.16849	.59439	8.7703	60.964	98.369
#1	.09553	.46906	3.0370	2.6601	.00532	.00130	.00108
#2	.09463	.49468	3.0442	2.6379	.00603	.00327	.00599

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00163	.10266	2.8852	.25521	.13463	-.00344	.02802
SDev	.00138	.00062	.0123	.00246	.00211	.00700	.02230
%RSD	84.744	.60031	.42643	.96263	1.5642	203.34	79.574

#1	-.00260	.10310	2.8939	.25695	.13612	-.00840	.01225
#2	-.00065	.10222	2.8765	.25347	.13314	.00151	.04379
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.34182	.00050	.07358	.02993	.24529	H1475.6
SDev	.00044	.00161	.00036	.00025	.04204	8.2
%RSD	.12929	320.04	.48501	.83399	17.138	.55704
#1	.34150	-.00064	.07383	.02975	.21556	H1481.4
#2	.34213	.00164	.07333	.03010	.27501	H1469.7
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/05/05 19:31:34
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	3.8950	3.9317	3.9301	3.8998	3.9808	3.9580	37.903
SDev	.0263	.0131	.0140	.0204	.0125	.0221	.009
%RSD	.67597	.33429	.35652	.52208	.31418	.55922	.02322
#1	3.8763	3.9224	3.9201	3.8854	3.9720	3.9424	37.897
#2	3.9136	3.9410	3.9400	3.9142	3.9897	3.9737	37.909
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.0215	4.1751	4.1497	3.9888	19.747	3.8860	3.9199
SDev	.0062	.0072	.0035	.0011	.008	.0006	.0002
%RSD	.15384	.17355	.08523	.02862	.04233	.01581	.00499
#1	4.0259	4.1802	4.1522	3.9880	19.741	3.8856	3.9197
#2	4.0171	4.1700	4.1472	3.9896	19.753	3.8865	3.9200
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	3.9642	39.985	19.416	4.0245	3.9427	.99790	3.8805
SDev	.0065	.006	.018	.0011	.0030	.00091	.0005
%RSD	.16472	.01586	.09141	.02799	.07654	.09133	.01239

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#1	3.9689	39.989	19.404	4.0253	3.9405	.99854	3.8809
#2	3.9596	39.980	19.429	4.0237	3.9448	.99725	3.8802
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	V 2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	3.9539	3.9571	4.0677	4.1456	4.1213	Q3.2549	3.9758
SDev	.0022	.0008	.0011	.0019	.0006	.0064	.0072
%RSD	.05549	.01938	.02603	.04621	.01475	.19528	.18198
#1	3.9555	3.9577	4.0684	4.1443	4.1218	Q3.2594	3.9707
#2	3.9523	3.9566	4.0669	4.1470	4.1209	Q3.2504	3.9809
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	3.9099	3.9656	3.9072	4.0482	Q3.4603	37.116	
SDev	.0182	.0189	.0219	.0022	.0022	.379	
%RSD	.46666	.47731	.56148	.05550	.06359	1.0214	
#1	3.8970	3.9522	3.8917	4.0498	Q3.4587	36.848	
#2	3.9228	3.9790	3.9227	4.0466	Q3.4618	37.384	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000	
Range	10.000	10.000	10.000	10.000	10.000	10.000	

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 05/05/05 19:35:58
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00364	-.00007	.00011	.00158	.00156	.00088	.04143
SDev	.00017	.00124	.00082	.00048	.00091	.00218	.00741
%RSD	4.7588	1684.1	710.89	30.537	58.099	247.36	17.886
#1	.00376	-.00095	-.00046	.00124	.00092	.00242	.04667
#2	.00352	.00081	.00069	.00192	.00220	-.00066	.03619
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00331	.00160	.00198	.00161	.01245	.00138	.00140
SDev	.00123	.00084	.00082	.00080	.00328	.00070	.00109
%RSD	37.118	52.769	41.359	49.963	26.367	51.080	77.822

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#1	.00418	.00219	.00255	.00218	.01478	.00188	.00217
#2	.00244	.00100	.00140	.00104	.01013	.00088	.00063
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.00018	.01738	.01359	.00208	.00169	.00025	.00317
SDev	.00081	.01168	.00183	.00076	.00096	.00020	.00108
%RSD	442.78	67.229	13.469	36.738	56.936	82.594	34.149
#1	.00076	.02564	.01488	.00261	.00238	.00039	.00393
#2	-.00039	.00912	.01229	.00154	.00101	.00010	.00240
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00153	.00320	.00628	.00161	.00907	.00120	-.00785
SDev	.00153	.00072	.00303	.00072	.00072	.00326	.00793
%RSD	99.883	22.659	48.153	44.899	7.9320	272.64	101.02
#1	.00260	.00371	.00842	.00212	.00958	.00350	-.01347
#2	.00045	.00269	.00414	.00110	.00856	-.00111	-.00224
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00109	.00111	.00240	.00204	-.00826	Q-.25702
SDev	.00059	.00115	.00030	.00096	.00612	.02345
%RSD	54.354	103.90	12.444	47.140	74.056	9.1236
#1	.00067	.00192	.00219	.00272	-.01258	Q-.27360
#2	.00151	.00029	.00261	.00136	-.00393	-.24044
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00300	.00400	.06000	.05000	.50000	.25000

Method: 6010C Sample Name: G9ECFB Operator: STL
Run Time: 05/05/05 19:40:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00022	-.00068	.00239	.00250	.00562	-.00368	L.02297
SDev	.00101	.00214	.00277	.00137	.00026	.00002	.00188
%RSD	455.15	313.56	115.88	54.809	4.5888	.53229	8.1705

#1	.00094	-.00219	.00043	.00347	.00580	-.00369	L.02164
#2	-.00049	.00083	.00436	.00153	.00543	-.00366	L.02429
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Low
High							.20000
Low							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	L-.00011	.06437	-.00060	-.00054	H.62674	-.00040	-.00017
SDev	.00006	.00034	.00002	.00007	.00209	.00084	.00015
%RSD	60.356	.52358	2.9463	12.634	.33343	209.14	84.255
#1	L-.00006	.06413	-.00058	-.00059	H.62527	-.00099	-.00028
#2	L-.00015	.06460	-.00061	-.00049	H.62822	.00019	-.00007
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	.00700	.20000	.20000	.00500	.25000	.01000	.05000
Low	.00700	-.20000	-.20000	-.00500	-.25000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00170	.00628	.04904	-.00068	-.00048	-.00006	.00003
SDev	.00021	.00015	.00073	.00002	.00056	.00012	.00044
%RSD	12.335	2.3463	1.4926	3.3914	115.71	213.94	1455.3
#1	-.00184	.00618	.04852	-.00070	-.00088	.00003	-.00028
#2	-.00155	.00639	.04955	-.00067	-.00009	-.00014	.00034
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.02500	.05000	.25000	.01500	.04000	.01000	.01000
Low	-.02500	-.05000	-.25000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00066	H.01423	.00030	.00180	.00274	-.00231	-.00473
SDev	.00037	.00015	.00056	.00000	.00016	.00035	.00985
%RSD	56.857	1.0246	182.77	.00232	5.9886	15.230	208.41
#1	-.00092	H.01412	-.00009	.00180	.00262	-.00255	-.01169
#2	-.00039	H.01433	.00070	.00180	.00285	-.00206	.00224
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.04000	.05000	.10000	.50000	.50000
Low	-.05000	-.01000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00247	-.00058	-.00008	-.00030	-.06336	H565.02
SDev	.00001	.00007	.00004	.00007	.00223	2.45
%RSD	.36466	12.488	47.796	23.570	3.5240	.43441
#1	.00246	-.00053	-.00011	-.00035	-.06494	H563.28
#2	.00247	-.00063	-.00005	-.00025	-.06178	H566.76
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC High
High	.00300	.00500	.01000	.05000		.25000

Low	-.00300	-.00500	-.01000	-.05000	-.25000

Method: 6010C Sample Name: G9G7VC Operator: STL
Run Time: 05/05/05 19:44:43
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	1.0103	1.0119	.98708	.99507	1.0786	1.0481	1.1289
SDev	.0037	.0018	.00242	.00363	.0010	.0048	.0031
%RSD	.36588	.17686	.24473	.36445	.08971	.45956	.27127
#1	1.0077	1.0107	.98537	.99251	1.0793	1.0447	1.1311
#2	1.0129	1.0132	.98879	.99763	1.0780	1.0515	1.1268
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							1.2000
Low							.80000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	1.0324	1.1471	1.0790	1.0073	20.651	.99957	.99138
SDev	.0023	.0094	.0039	.0008	.037	.00232	.00174
%RSD	.21942	.81971	.36568	.07995	.17781	.23200	.17518
#1	1.0340	1.1537	1.0818	1.0079	20.677	1.0012	.99261
#2	1.0308	1.1404	1.0762	1.0067	20.625	.99793	.99015
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2040	1.2040	1.2000	1.2040	24.000	1.2040	1.2000
Low	.79500	.79500	.80000	.79500	16.000	.79500	.80000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.0666	1.1119	19.776	1.0276	1.0033	.25499	.98638
SDev	.0079	.0164	.008	.0038	.0023	.00032	.00278
%RSD	.74488	1.4745	.03978	.37409	.23256	.12392	.28204
#1	1.0722	1.1004	19.781	1.0303	1.0050	.25521	.98834
#2	1.0610	1.1235	19.770	1.0249	1.0017	.25476	.98441
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.2000	1.2000	24.000	1.2040	1.2000	.33700	1.2040
Low	.80000	.80000	16.000	.79500	.80000	.12300	.79500

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	1.0266	1.0289	1.0410	1.0864	L.00325	L-.00351	L-.00542
SDev	.0040	.0036	.0006	.0074	.00165	.00505	.02864
%RSD	.39199	.35045	.05795	.68520	50.893	143.82	528.36
#1	1.0295	1.0315	1.0406	1.0916	L.00208	L-.00708	L-.02567
#2	1.0238	1.0264	1.0414	1.0811	L.00441	L.00006	L.01483
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Low	LC Low
High	1.2000	1.2000	1.2000	1.2000	2.4000	2.4000	2.4000

Low	.80000	.80000	.80000	.80000	1.6000	1.6000	1.6000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.99241	1.0583	1.0108	L.00050	L-.08169	622.87	
SDev	.00322	.0029	.0031	.00036	.03595	3.02	
%RSD	.32479	.27314	.30286	70.711	44.006	.48442	
#1	.99013	1.0563	1.0087	L.00025	L-.10711	625.00	
#2	.99469	1.0603	1.0130	L.00076	L-.05627	620.74	
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Low	NOCHECK	
High	1.2040	1.2040	1.2040	2.4000	2.4000		
Low	.79500	.79500	.79500	1.6000	1.6000		

Method: 6010C Sample Name: G8WP7 Operator: STL
Run Time: 05/05/05 19:49:05
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.01762	.01550	1.2505	1.2586	.00561	-.00123	.00649
SDev	.00083	.00177	.0015	.0065	.00055	.00302	.00041
%RSD	4.6911	11.431	.12111	.51722	9.8060	245.27	6.3615
#1	.01704	.01675	1.2495	1.2540	.00522	-.00336	.00678
#2	.01820	.01425	1.2516	1.2632	.00600	.00090	.00620
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00616	.35361	-.00068	.07197	204.17	-.00056	.00971
SDev	.00000	.00022	.00001	.00013	.47	.00012	.00060
%RSD	.03352	.06196	1.2856	.18059	.23204	20.867	6.1256
#1	.00616	.35376	-.00069	.07188	203.84	-.00064	.00929
#2	.00616	.35345	-.00068	.07207	204.51	-.00047	.01013
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.5507	-.00127	11.082	1.9782	.10573	.00021	-.00219
SDev	.0010	.01157	.026	.0025	.00056	.00070	.00003
%RSD	.06423	911.09	.23280	.12392	.52967	339.49	1.4454
#1	1.5514	-.00945	11.063	1.9765	.10533	-.00029	-.00217
#2	1.5500	.00691	11.100	1.9799	.10613	.00070	-.00221
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000

Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00047	14.956	.00194	.54060	.00391	-.00271	-.00981
SDev	.00056	.037	.00004	.00023	.00006	.00340	.00301
%RSD	117.27	.24711	1.9537	.04187	1.4093	125.43	30.676
#1	-.00087	14.930	.00192	.54076	.00387	-.00511	-.00769
#2	-.00008	14.982	.00197	.54044	.00395	-.00031	-.01194
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	1.2559	.00105	.01691	-.00154	-.06951	H666.88	
SDev	.0048	.00220	.00004	.00011	.01208	.79	
%RSD	.38588	209.76	.22896	6.9551	17.374	.11839	
#1	1.2525	-.00051	.01694	-.00161	-.07805	H666.32	
#2	1.2593	.00260	.01689	-.00146	-.06097	H667.44	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G8WP7S Operator: STL
Run Time: 05/05/05 19:53:27
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.50373	.50808	1.6036	1.6123	2.0731	2.0250	2.1319
SDev	.01069	.00094	.0057	.0054	.0224	.0012	.0218
%RSD	2.1225	.18476	.35744	.33218	1.0828	.06098	1.0242
#1	.49617	.50742	1.5995	1.6085	2.0572	2.0241	2.1164
#2	.51129	.50875	1.6076	1.6161	2.0890	2.0259	2.1473
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	2.0414	2.4394	.05285	.11352	233.66	.19362	.48498
SDev	.0173	.0320	.00043	.00118	1.90	.00054	.00516
%RSD	.84853	1.3104	.80641	1.0361	.81411	.28089	1.0633
#1	2.0291	2.4168	.05255	.11269	232.32	.19324	.48133
#2	2.0536	2.4620	.05315	.11436	235.01	.19401	.48862
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000

Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.6803	1.0771	58.383	2.2941	.57982	.04972	1.9045
SDev	.0223	.0261	.439	.0230	.00498	.00161	.0200
%RSD	1.3275	2.4222	.75154	1.0026	.85854	3.2394	1.0490
#1	1.6645	1.0587	58.073	2.2779	.57630	.04858	1.8904
#2	1.6960	1.0956	58.693	2.3104	.58334	.05086	1.9186
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.50037	14.099	1.0096	1.5562	.00204	-.00491	-.02279
SDev	.00592	.117	.0110	.0207	.00137	.00401	.04523
%RSD	1.1825	.82778	1.0890	1.3282	67.443	81.563	198.47
#1	.49618	14.017	1.0019	1.5416	.00301	-.00774	.00919
#2	.50455	14.182	1.0174	1.5708	.00107	-.00208	-.05478
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	1.6094	2.0410	.50518	-.00003	-.05271	H675.74	
SDev	.0055	.0083	.00744	.00025	.02788	6.28	
%RSD	.34057	.40660	1.4735	989.95	52.890	.92889	
#1	1.6055	2.0352	.49992	-.00020	-.03300	H671.31	
#2	1.6133	2.0469	.51044	.00015	-.07243	H680.18	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G8WP7D Operator: STL
Run Time: 05/05/05 19:57:49
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.49408	.49659	1.5947	1.6066	2.0385	2.0055	2.1134
SDev	.00003	.00051	.0008	.0033	.0065	.0019	.0131
%RSD	.00571	.10271	.04908	.20644	.31928	.09276	.61824
#1	.49410	.49623	1.5941	1.6043	2.0339	2.0042	2.1042
#2	.49406	.49695	1.5952	1.6090	2.0431	2.0068	2.1226
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00

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Low							-.20000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	2.0224	2.4017	.05256	.11276	232.82	.19287	.48189
SDev	.0107	.0139	.00019	.00059	.88	.00043	.00139
%RSD	.53042	.57953	.35947	.52549	.37724	.22313	.28796
#1	2.0148	2.3919	.05243	.11234	232.20	.19257	.48091
#2	2.0299	2.4116	.05269	.11318	233.44	.19318	.48287
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.6523	1.0133	58.205	2.2748	.57613	.04911	1.8934
SDev	.0100	.0040	.210	.0105	.00180	.00007	.0087
%RSD	.60457	.39425	.36088	.46291	.31321	.14859	.45883
#1	1.6453	1.0161	58.057	2.2673	.57485	.04906	1.8873
#2	1.6594	1.0104	58.354	2.2822	.57740	.04917	1.8995
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.49568	14.044	1.0023	1.5374	.00301	-.00682	-.00606
SDev	.00227	.063	.0058	.0087	.00033	.00056	.00932
%RSD	.45851	.44844	.57652	.56774	10.949	8.1799	153.70
#1	.49407	13.999	.99824	1.5312	.00325	-.00643	.00053
#2	.49728	14.088	1.0064	1.5435	.00278	-.00722	-.01265
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	1.6026	2.0165	.49491	.00028	.00599	H670.86
SDev	.0025	.0034	.00015	.00004	.01033	3.63
%RSD	.15429	.16901	.03053	12.856	172.37	.54065
#1	1.6009	2.0141	.49481	.00025	.01330	H668.30
#2	1.6044	2.0189	.49502	.00030	-.00131	H673.43
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

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Method: 6010C Sample Name: G8WP7V 5X Operator: STL
Run Time: 05/05/05 20:02:11
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00053	.00318	.25940	.25701	.00368	-.00024	.01731
SDev	.00388	.00070	.00051	.00369	.00272	.00015	.00115
%RSD	735.23	22.028	.19686	1.4377	73.883	63.751	6.6399
#1	-.00327	.00367	.25904	.25439	.00560	-.00013	.01650
#2	.00222	.00268	.25976	.25962	.00176	-.00035	.01812
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00243	.07087	-.00043	.01448	42.129	-.00012	.00167
SDev	.00016	.00121	.00001	.00028	.252	.00024	.00050
%RSD	6.6526	1.7119	2.0495	1.9331	.59736	198.74	29.650
#1	.00231	.07001	-.00043	.01428	41.952	.00005	.00132
#2	.00254	.07173	-.00042	.01468	42.307	-.00029	.00203
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.29862	-.00555	2.2476	.40196	.02110	-.00029	.00115
SDev	.00150	.00674	.0254	.00224	.00028	.00075	.00062
%RSD	.50331	121.44	1.1316	.55755	1.3272	260.29	54.181
#1	.29756	-.01031	2.2296	.40038	.02090	-.00081	.00159
#2	.29968	-.00078	2.2656	.40354	.02130	.00024	.00071
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00037	3.0826	.00142	.10797	.00391	-.00336	.00760
SDev	.00041	.0174	.00095	.00097	.00083	.00297	.00723
%RSD	111.31	.56330	66.621	.89909	21.199	88.626	95.064
#1	-.00065	3.0703	.00209	.10728	.00449	-.00546	.01271
#2	-.00008	3.0949	.00075	.10865	.00332	-.00125	.00249
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.25780	.00106	.00071	-.00098	.00284	101.54
SDev	.00264	.00101	.00235	.00004	.00180	.71
%RSD	1.0219	94.606	333.68	3.6262	63.597	.70055
#1	.25594	.00178	-.00096	-.00101	.00156	101.04
#2	.25967	.00035	.00237	-.00096	.00411	102.04
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WQL Operator: STL
Run Time: 05/05/05 20:06:33
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.01080	.00815	.30948	.31679	.00337	-.00071	.02857
SDev	.00887	.00654	.00353	.00400	.00744	.00558	.00316
%RSD	82.076	80.234	1.1399	1.2638	220.77	789.93	11.048
#1	.00453	.01278	.31198	.31396	.00864	-.00465	.03080
#2	.01708	.00353	.30699	.31962	-.00189	.00324	.02634
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00049	.65981	-.00066	.03646	139.18	-.00107	.00914
SDev	.00148	.00605	.00007	.00018	.65	.00155	.00035
%RSD	302.61	.91685	10.574	.49545	.47017	144.21	3.8674
#1	.00056	.65553	-.00062	.03633	138.72	.00002	.00889
#2	-.00153	.66409	-.00071	.03659	139.64	-.00217	.00939
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.0071	-.00960	6.5709	1.6417	.04002	-.00063	-.00104
SDev	.0088	.00061	.0220	.0103	.00034	.00025	.00203
%RSD	.86923	6.3895	.33415	.62568	.85521	39.111	195.57
#1	1.0009	-.00917	6.5553	1.6344	.04026	-.00081	.00040
#2	1.0133	-.01003	6.5864	1.6489	.03978	-.00046	-.00247
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00122	7.7763	-.00138	.37468	.00298	-.00609	-.03803
SDev	.00040	.0459	.00120	.00317	.00071	.00204	.04327
%RSD	32.988	.58986	86.929	.84530	23.869	33.473	113.79
#1	-.00150	7.7439	-.00053	.37244	.00348	-.00753	-.00743
#2	-.00093	7.8088	-.00223	.37692	.00248	-.00465	-.06862

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.31436	.00065	.00992	-.00149	-.06096	H631.31
SDev	.00150	.00124	.00374	.00004	.02461	2.96
%RSD	.47574	190.73	37.669	2.3970	40.378	.46927
#1	.31330	-.00023	.00728	-.00151	-.04356	H629.21
#2	.31541	.00153	.01256	-.00146	-.07837	H633.40

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WQN Operator: STL
Run Time: 05/05/05 20:10:55
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.08309	.08166	.95313	.96006	.00086	-.00257	.01197
SDev	.00089	.00133	.00018	.00219	.00164	.00135	.00196
%RSD	1.0662	1.6235	.01921	.22821	189.98	52.485	16.366
#1	.08246	.08072	.95300	.95851	.00202	-.00352	.01058
#2	.08372	.08260	.95326	.96160	-.00030	-.00162	.01335

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00393	.57621	-.00057	.04198	191.03	-.00023	.00920
SDev	.00046	.00403	.00004	.00001	.39	.00014	.00024
%RSD	11.815	.69894	6.8799	.03001	.20222	61.282	2.6596
#1	.00360	.57906	-.00060	.04198	191.30	-.00033	.00902
#2	.00426	.57336	-.00055	.04197	190.76	-.00013	.00937

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.1462	.00224	9.9888	2.1513	.05740	.00065	.00027
SDev	.0077	.00230	.0143	.0080	.00009	.00024	.00062
%RSD	.66955	102.60	.14287	.37076	.16261	36.685	229.96
#1	1.1517	.00061	9.9989	2.1569	.05733	.00048	-.00017
#2	1.1408	.00386	9.9788	2.1457	.05746	.00081	.00071
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00032	15.641	.00058	.45102	.00109	-.00043	-.00112
SDev	.00056	.028	.00095	.00296	.00072	.00159	.02127
%RSD	177.71	.18102	163.44	.65533	66.032	373.44	1899.1
#1	-.00071	15.661	-.00009	.45311	.00161	-.00155	-.01616
#2	.00008	15.621	.00126	.44893	.00058	.00070	.01392
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.95775	-.00143	.08261	-.00141	-.00723	H630.46
SDev	.00152	.00035	.00103	.00014	.02858	2.11
%RSD	.15895	24.805	1.2496	10.102	395.29	.33476
#1	.95667	-.00168	.08188	-.00151	-.02744	H631.96
#2	.95882	-.00118	.08334	-.00131	.01298	H628.97
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WQR Operator: STL
Run Time: 05/05/05 20:15:17
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.03244	.02922	2.5160	2.5180	.00177	-.00175	.06666
SDev	.00518	.00334	.0055	.0118	.00847	.00642	.00558
%RSD	15.973	11.431	.21817	.46688	480.00	367.83	8.3741
#1	.02877	.03159	2.5121	2.5097	.00776	-.00628	.06272
#2	.03610	.02686	2.5198	2.5263	-.00423	.00279	.07061
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00108	.96111	-.00049	.01623	113.44	-.00016	.00872
SDev	.00034	.01146	.00002	.00017	.48	.00034	.00144
%RSD	31.059	1.1922	4.4472	1.0236	.42054	216.27	16.470
#1	.00085	.96921	-.00051	.01611	113.78	-.00039	.00770
#2	.00132	.95301	-.00048	.01634	113.10	.00008	.00973
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.0428	.01842	5.7071	1.9336	.02512	.00107	-.00035
SDev	.0117	.02735	.0128	.0129	.00168	.00177	.00073
%RSD	1.1210	148.51	.22442	.66940	6.6872	165.43	207.84
#1	1.0511	-.00092	5.7162	1.9428	.02394	-.00018	.00016
#2	1.0346	.03776	5.6981	1.9245	.02631	.00232	-.00087
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00008	7.6756	-.00131	.28361	.00149	-.00062	-.01208
SDev	.00149	.0501	.00032	.00303	.00016	.01042	.00891
%RSD	1922.4	.65306	24.282	1.0670	10.889	1673.7	73.786
#1	-.00097	7.7111	-.00154	.28575	.00137	-.00799	-.01838
#2	.00113	7.6402	-.00109	.28147	.00160	.00675	-.00578
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	2.5173	-.00058	.03137	-.00081	.00296	H624.51
SDev	.0097	.00146	.00234	.00050	.03328	3.88
%RSD	.38411	253.37	7.4704	61.872	1124.3	.62145
#1	2.5105	-.00161	.02971	-.00116	-.02058	H627.26
#2	2.5242	.00046	.03302	-.00045	.02650	H621.77
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WQT Operator: STL
Run Time: 05/05/05 20:19:40
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

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Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.01401	.01556	1.0194	1.0273	.00679	-.00416	.01422
SDev	.00269	.00187	.0003	.0014	.01099	.00277	.00347
%RSD	19.227	12.051	.02670	.13266	161.86	66.497	24.399
#1	.01592	.01423	1.0196	1.0282	-.00098	-.00220	.01177
#2	.01211	.01688	1.0192	1.0263	.01457	-.00612	.01668
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00148	.57258	-.00050	.05330	190.09	-.00027	.00891
SDev	.00036	.00260	.00008	.00011	.07	.00051	.00055
%RSD	24.682	.45322	15.713	.20768	.03533	185.27	6.1641
#1	.00174	.57441	-.00056	.05337	190.04	-.00063	.00930
#2	.00122	.57074	-.00045	.05322	190.14	.00008	.00852
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.2308	-.00837	8.9391	1.7259	.09095	.00022	-.00034
SDev	.0059	.01755	.0066	.0023	.00149	.00086	.00067
%RSD	.47563	209.73	.07369	.13213	1.6421	391.51	199.08
#1	1.2349	.00404	8.9344	1.7275	.09200	.00083	.00014
#2	1.2266	-.02077	8.9437	1.7243	.08989	-.00039	-.00081
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00058	16.185	-.00034	.46770	.00071	-.00410	-.00881
SDev	.00062	.005	.00005	.00181	.00060	.00591	.02870
%RSD	107.93	.03172	15.551	.38664	85.543	144.16	325.80
#1	-.00014	16.181	-.00038	.46898	.00028	.00008	-.02910
#2	-.00102	16.189	-.00030	.46642	.00113	-.00828	.01148
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	1.0247	-.00051	.01453	-.00164	-.00631	H615.10
SDev	.0010	.00182	.00117	.00018	.02431	.83
%RSD	.09756	354.16	8.0741	10.879	385.40	.13534

#1	1.0254	-.00180	.01536	-.00151	-.02350	H615.69
#2	1.0240	.00077	.01370	-.00176	.01088	H614.51
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: CCV1 Operator: STL
Run Time: 05/05/05 20:24:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	3.8172	3.8500	3.8331	3.8174	3.9042	3.8855	36.803
SDev	.0057	.0255	.0087	.0103	.0254	.0036	.365
%RSD	.14995	.66263	.22726	.27010	.65001	.09329	.99309
#1	3.8131	3.8680	3.8392	3.8101	3.9222	3.8830	36.544
#2	3.8212	3.8319	3.8269	3.8247	3.8863	3.8881	37.061
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	3.9096	4.0609	4.0404	3.8860	19.307	3.7789	3.8144
SDev	.0308	.0470	.0329	.0279	.123	.0315	.0303
%RSD	.78709	1.1565	.81475	.71699	.63552	.83457	.79312
#1	3.8878	4.0277	4.0172	3.8663	19.220	3.7566	3.7930
#2	3.9313	4.0941	4.0637	3.9057	19.393	3.8012	3.8358
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	3.8515	38.976	18.880	3.9245	3.8427	.96996	3.7814
SDev	.0439	.304	.116	.0337	.0284	.00804	.0306
%RSD	1.1399	.78068	.61541	.85814	.73840	.82934	.81054
#1	3.8205	38.761	18.797	3.9007	3.8227	.96427	3.7597
#2	3.8826	39.192	18.962	3.9483	3.8628	.97564	3.8030
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	3.8514	3.8682	3.9577	4.0422	3.9976	Q3.1781	3.8860
SDev	.0353	.0306	.0367	.0491	.0289	.0263	.0234
%RSD	.91532	.79061	.92669	1.2141	.72284	.82909	.60140

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#1	3.8265	3.8466	3.9318	4.0075	3.9772	Q3.1594	3.8694
#2	3.8763	3.8899	3.9837	4.0769	4.0181	Q3.1967	3.9025
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	3.8226	3.8917	3.8281	3.9399	Q3.3422	Q35.552
SDev	.0040	.0060	.0047	.0383	.0079	.207
%RSD	.10403	.15502	.12218	.97106	.23503	.58266
#1	3.8198	3.8960	3.8314	3.9129	Q3.3366	Q35.698
#2	3.8254	3.8875	3.8248	3.9670	Q3.3477	Q35.405
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Fail
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB1 Operator: STL
Run Time: 05/05/05 20:28:29
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00141	.00152	.00187	-.00031	.00286	-.00067	.01563
SDev	.00179	.00389	.00223	.00056	.00410	.00015	.00039
%RSD	127.54	257.03	119.07	181.95	143.19	21.526	2.5173
#1	.00014	.00427	.00345	.00009	.00576	-.00078	.01535
#2	.00267	-.00124	.00030	-.00071	-.00004	-.00057	.01590
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00044	-.00066	-.00042	-.00055	-.00127	-.00027	-.00042
SDev	.00089	.00012	.00010	.00007	.00060	.00015	.00010
%RSD	201.31	17.999	22.877	12.425	47.141	55.549	24.029
#1	.00107	-.00074	-.00049	-.00060	-.00169	-.00016	-.00049
#2	-.00019	-.00057	-.00035	-.00050	-.00084	-.00038	-.00035
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00211	-.00043	-.00440	-.00051	-.00110	.00024	.00155
SDev	.00010	.00208	.00165	.00002	.00006	.00010	.00137
%RSD	4.6239	485.47	37.435	3.9396	5.6569	42.840	88.087

#1	-.00217	-.00190	-.00556	-.00052	-.00106	.00017	.00252
#2	-.00204	.00104	-.00323	-.00049	-.00114	.00032	.00059
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00048	.00138	.00356	-.00066	.00305	.00191	.00323
SDev	.00011	.00000	.00138	.00004	.00072	.00171	.01407
%RSD	23.841	.01436	38.835	5.4377	23.481	89.574	435.75
#1	-.00040	.00138	.00454	-.00069	.00355	.00312	.01317
#2	-.00056	.00138	.00258	-.00064	.00254	.00070	-.00672
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.00042	.00050	.00144	-.00013	-.03091	Q-.85121
SDev	.00112	.00127	.00010	.00018	.01129	.16806
%RSD	268.54	251.84	7.0145	141.42	36.528	19.744
#1	.00121	.00140	.00151	-.00000	-.03889	Q-.97004
#2	-.00037	-.00039	.00137	-.00025	-.02292	Q-.73237
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00300	.00400	.06000	.05000	.50000	.25000

Method: 6010C Sample Name: G8WR6 Operator: STL
Run Time: 05/05/05 20:32:53
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.10923	.11052	1.3244	1.3346	.00549	-.00373	.02589
SDev	.00470	.00091	.0028	.0012	.00416	.00089	.00369
%RSD	4.3060	.82687	.21347	.09069	75.860	23.761	14.261
#1	.11256	.10987	1.3264	1.3338	.00254	-.00310	.02328
#2	.10590	.11116	1.3224	1.3355	.00843	-.00436	.02850
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00493	1.5339	-.00053	.69378	159.55	-.00030	.00661
SDev	.00076	.0030	.00008	.00029	.09	.00030	.00055
%RSD	15.374	.19774	14.974	.04204	.05408	99.095	8.2757

#1	.00439	1.5361	-.00058	.69399	159.49	-.00051	.00699
#2	.00546	1.5318	-.00047	.69358	159.61	-.00009	.00622

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.68574	-.00549	7.2381	1.6086	.05863	-.00073	-.00080
SDev	.00159	.01604	.0134	.0011	.00090	.00098	.00009
%RSD	.23152	292.36	.18454	.07060	1.5389	134.37	10.882
#1	.68686	.00585	7.2286	1.6094	.05927	-.00004	-.00086
#2	.68462	-.01683	7.2475	1.6078	.05799	-.00143	-.00074

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00140	14.051	.00072	.40910	.00180	-.00669	-.01353
SDev	.00134	.005	.00060	.00090	.00016	.00463	.01181
%RSD	95.822	.03321	83.055	.22127	9.1358	69.183	87.303
#1	-.00045	14.048	.00030	.40974	.00169	-.00342	-.02188
#2	-.00234	14.055	.00114	.40846	.00192	-.00997	-.00518

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	1.3312	-.00066	.10966	-.00111	.00452	H615.24
SDev	.0001	.00080	.00283	.00036	.01143	.79
%RSD	.01007	120.27	2.5833	32.141	253.04	.12832
#1	1.3313	-.00122	.11166	-.00086	-.00357	H615.79
#2	1.3311	-.00010	.10765	-.00136	.01260	H614.68

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WTA Operator: STL
Run Time: 05/05/05 20:37:16
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.01397	.01291	1.7423	1.7498	.00281	-.00298	.01448
SDev	.00229	.00103	.0020	.0073	.00001	.00190	.00061
%RSD	16.396	7.9955	.11502	.41503	.17434	63.819	4.1966

#1	.01235	.01364	1.7409	1.7447	.00281	-.00432	.01491
#2	.01559	.01218	1.7437	1.7550	.00281	-.00163	.01405
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00216	.46999	-.00054	.05354	185.09	-.00076	.00978
SDev	.00004	.00394	.00001	.00009	1.14	.00067	.00019
%RSD	1.8991	.83897	1.6256	.17509	.61645	87.548	1.9949
#1	.00218	.46720	-.00053	.05347	184.29	-.00029	.00991
#2	.00213	.47277	-.00055	.05361	185.90	-.00123	.00964
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	3.7154	-.00682	10.141	1.9065	.13554	-.00036	-.00100
SDev	.0303	.00361	.058	.0126	.00140	.00053	.00133
%RSD	.81585	52.924	.57199	.65910	1.0329	145.04	132.92
#1	3.6940	-.00427	10.100	1.8976	.13455	.00001	-.00006
#2	3.7368	-.00937	10.182	1.9154	.13653	-.00073	-.00194
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00095	16.953	-.00020	.42804	-.00031	-.00547	-.01154
SDev	.00034	.089	.00017	.00330	.00006	.00218	.02444
%RSD	35.725	.52420	84.286	.77144	19.475	39.941	211.70
#1	-.00071	16.891	-.00008	.42570	-.00035	-.00392	.00574
#2	-.00119	17.016	-.00032	.43037	-.00027	-.00701	-.02882
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	1.7473	-.00105	.01361	-.00113	-.00383	H630.70
SDev	.0055	.00127	.00118	.00018	.01271	4.52
%RSD	.31541	120.76	8.6958	15.713	331.80	.71698
#1	1.7434	-.00195	.01278	-.00101	.00516	H627.51
#2	1.7512	-.00015	.01445	-.00126	-.01282	H633.90
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00

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Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WTE Operator: STL
Run Time: 05/05/05 20:41:38
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.03903	.03578	.42731	.43243	.00234	-.00342	.02441
SDev	.00242	.00064	.00283	.00411	.00005	.00096	.00082
%RSD	6.1938	1.7918	.66283	.94986	2.2224	28.016	3.3712
#1	.04074	.03533	.42530	.42952	.00230	-.00410	.02383
#2	.03732	.03623	.42931	.43533	.00237	-.00274	.02499
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00476	.52606	-.00056	.01612	172.53	-.00145	.00549
SDev	.00025	.00094	.00000	.00003	.44	.00018	.00005
%RSD	5.2339	.17938	.78132	.19416	.25679	12.356	.86495
#1	.00458	.52539	-.00057	.01610	172.21	-.00157	.00546
#2	.00494	.52673	-.00056	.01614	172.84	-.00132	.00552
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.41776	-.00528	9.1578	8.4379	.04970	.00106	-.00115
SDev	.00146	.00108	.0196	.0197	.00072	.00006	.00110
%RSD	.34880	20.355	.21379	.23318	1.4399	6.1449	95.925
#1	.41673	-.00452	9.1440	8.4240	.04919	.00111	-.00037
#2	.41879	-.00605	9.1717	8.4519	.05020	.00102	-.00193
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00053	12.131	-.00009	.42719	.00055	-.00192	-.02200
SDev	.00004	.036	.00040	.00082	.00072	.00032	.01249
%RSD	7.4969	.29981	426.56	.19249	129.85	16.439	56.765
#1	-.00056	12.106	-.00038	.42661	.00005	-.00170	-.03083
#2	-.00050	12.157	.00019	.42777	.00106	-.00214	-.01317
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000

Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.43072	-.00151	.03794	-.00131	.03803	H628.22	
SDev	.00368	.00066	.00140	.00014	.00306	1.52	
%RSD	.85504	43.641	3.6864	10.879	8.0561	.24201	
#1	.42812	-.00197	.03893	-.00141	.03587	H627.15	
#2	.43333	-.00104	.03696	-.00121	.04020	H629.30	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

Method: 6010C Sample Name: G8WTG Operator: STL
Run Time: 05/05/05 20:46:01
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00837	.00533	.25124	.25387	.00513	-.00328	.03945
SDev	.00128	.00065	.00228	.00193	.00018	.00158	.00155
%RSD	15.352	12.130	.90587	.75852	3.5605	48.194	3.9281
#1	.00746	.00578	.25285	.25251	.00500	-.00440	.03836
#2	.00928	.00487	.24964	.25523	.00526	-.00216	.04055
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00135	.37575	-.00053	.00820	118.58	-.00051	.00745
SDev	.00064	.00447	.00001	.00007	1.00	.00055	.00025
%RSD	47.191	1.1884	1.6637	.84654	.84565	106.78	3.3682
#1	.00181	.37259	-.00052	.00815	117.87	-.00013	.00727
#2	.00090	.37891	-.00053	.00824	119.29	-.00090	.00763
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	1.1077	-.00710	6.7182	7.4170	.04814	.00071	-.00059
SDev	.0119	.00984	.0540	.0685	.00062	.00068	.00018
%RSD	1.0777	138.60	.80344	.92403	1.2927	96.853	29.595
#1	1.0993	-.00014	6.6801	7.3686	.04770	.00119	-.00047
#2	1.1161	-.01406	6.7564	7.4655	.04858	.00022	-.00072
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000

Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00055	9.9498	-.00218	.26462	.00106	-.00310	-.01690
SDev	.00008	.0811	.00084	.00291	.00144	.00206	.02461
%RSD	14.004	.81533	38.459	1.0986	136.17	66.414	145.63
#1	-.00050	9.8925	-.00159	.26256	.00004	-.00164	.00050
#2	-.00061	10.007	-.00277	.26667	.00208	-.00456	-.03430
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.25299	-.00048	.00736	-.00111	-.00474	H627.21
SDev	.00053	.00112	.00064	.00007	.01038	5.10
%RSD	.20812	232.01	8.7280	6.4282	218.83	.81381
#1	.25262	-.00127	.00690	-.00106	.00260	H623.60
#2	.25337	.00031	.00781	-.00116	-.01208	H630.82
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WTR Operator: STL
Run Time: 05/05/05 20:50:23
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	-.00062	.00374	.25266	.25149	.00569	-.00340	.05042
SDev	.00005	.00042	.00096	.00172	.00001	.00132	.00333
%RSD	8.7226	11.366	.38093	.68283	.17471	38.920	6.6013
#1	-.00066	.00404	.25334	.25027	.00570	-.00434	.05277
#2	-.00058	.00344	.25198	.25270	.00569	-.00246	.04807
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00004	.42215	-.00056	.01263	103.52	-.00021	.00709
SDev	.00061	.00018	.00004	.00007	.17	.00015	.00015
%RSD	1395.7	.04391	6.2854	.54177	.16237	71.760	2.1009
#1	.00047	.42202	-.00058	.01258	103.40	-.00031	.00699
#2	-.00039	.42228	-.00053	.01268	103.63	-.00010	.00720
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000

Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.88571	-.00512	7.0643	1.7192	.06866	-.00013	-.00107
SDev	.00047	.00152	.0091	.0019	.00016	.00007	.00089
%RSD	.05317	29.748	.12950	.11114	.22657	58.632	82.888
#1	.88537	-.00620	7.0579	1.7178	.06877	-.00007	-.00170
#2	.88604	-.00404	7.0708	1.7205	.06855	-.00018	-.00044
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00111	H21.475	-.00101	.25664	.00114	-.00545	-.00856
SDev	.00063	.052	.00020	.00003	.00055	.00148	.00194
%RSD	57.226	.24158	19.654	.01278	48.645	27.097	22.668
#1	-.00155	H21.438	-.00087	.25662	.00153	-.00650	-.00719
#2	-.00066	H21.512	-.00115	.25666	.00075	-.00441	-.00993
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.25188	-.00037	.00083	-.00113	-.01513	H592.45
SDev	.00082	.00088	.00011	.00004	.00426	.28
%RSD	.32750	236.48	12.680	3.1427	28.162	.04750
#1	.25129	-.00099	.00091	-.00116	-.01814	H592.25
#2	.25246	.00025	.00076	-.00111	-.01212	H592.65
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WTV Operator: STL
Run Time: 05/05/05 20:54:45
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00004	.00292	.31805	.31646	.00757	-.00522	.04967
SDev	.00063	.00081	.00112	.00038	.00090	.00032	.00748
%RSD	1450.0	27.567	.35270	.11841	11.861	6.0616	15.055
#1	-.00040	.00349	.31885	.31672	.00694	-.00545	.04438
#2	.00049	.00235	.31726	.31619	.00821	-.00500	.05496
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00

							-.20000
Low							
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00025	.70270	-.00059	.00469	50.878	-.00023	.00357
SDev	.00056	.01329	.00008	.00012	.501	.00045	.00049
%RSD	220.45	1.8920	14.068	2.6395	.98519	191.23	13.775
#1	-.00014	.71210	-.00065	.00460	51.232	-.00055	.00322
#2	.00065	.69330	-.00053	.00478	50.523	.00008	.00392
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.07627	-.00526	2.6030	3.1421	.01789	-.00024	-.00088
SDev	.00075	.01056	.0124	.0402	.00022	.00092	.00095
%RSD	.98610	200.98	.47799	1.2792	1.2176	382.33	108.30
#1	.07680	-.01273	2.6118	3.1705	.01773	-.00089	-.00021
#2	.07574	.00221	2.5942	3.1137	.01804	.00041	-.00155
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00110	2.0400	-.00153	.14042	.00168	-.00572	-.00819
SDev	.00049	.0270	.00009	.00252	.00012	.00291	.02636
%RSD	44.121	1.3255	5.9206	1.7943	6.8931	50.837	322.04
#1	-.00145	2.0591	-.00160	.14221	.00177	-.00777	-.02683
#2	-.00076	2.0209	-.00147	.13864	.00160	-.00366	.01045
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.31699	-.00096	.00100	-.00093	-.02318	H601.11	
SDev	.00062	.00051	.00015	.00032	.04546	7.72	
%RSD	.19669	53.032	15.213	34.400	196.10	1.2841	
#1	.31743	-.00132	.00089	-.00116	-.05532	H606.56	
#2	.31655	-.00060	.00111	-.00071	.00896	H595.65	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	
High	50.000	50.000	50.000	50.000	20.000	250.00	
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000	

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Method: 6010C Sample Name: G8WTW Operator: STL
Run Time: 05/05/05 20:59:08
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00916	.00638	.12473	.12736	.00366	-.00353	.03564
SDev	.00236	.00181	.00263	.00040	.00011	.00317	.00388
%RSD	25.814	28.425	2.1054	.31111	2.9730	89.823	10.886
#1	.01083	.00509	.12287	.12765	.00373	-.00129	.03289
#2	.00749	.00766	.12659	.12708	.00358	-.00578	.03838
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00132	.64764	-.00064	.00447	50.444	-.00010	.00325
SDev	.00182	.00192	.00004	.00007	.056	.00064	.00005
%RSD	137.95	.29662	6.2087	1.5298	.11126	632.87	1.6377
#1	.00003	.64900	-.00066	.00443	50.404	-.00055	.00329
#2	.00261	.64628	-.00061	.00452	50.484	.00035	.00322
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.15857	.00577	2.1155	.87747	.01811	-.00000	-.00220
SDev	.00015	.00255	.0088	.00054	.00003	.00049	.00067
%RSD	.09746	44.256	.41516	.06140	.17184	44249.	30.330
#1	.15846	.00396	2.1093	.87785	.01813	-.00035	-.00267
#2	.15868	.00757	2.1217	.87709	.01808	.00034	-.00173
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00069	3.3994	-.00129	.13573	.00200	-.00362	-.01255
SDev	.00071	.0013	.00068	.00036	.00121	.00160	.02655
%RSD	103.90	.03959	52.980	.26709	60.648	44.264	211.46
#1	-.00119	3.4003	-.00177	.13599	.00114	-.00475	-.03133
#2	-.00018	3.3984	-.00080	.13548	.00285	-.00248	.00622
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.12649	-.00114	.00823	-.00081	-.03138	H559.48
SDev	.00061	.00215	.00097	.00014	.02424	.00
%RSD	.48240	189.12	11.825	17.678	77.252	.00069
#1	.12606	.00038	.00892	-.00091	-.04853	H559.48
#2	.12692	-.00266	.00754	-.00071	-.01424	H559.48
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WTX Operator: STL
Run Time: 05/05/05 21:03:30
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.02236	.02324	.98335	.99021	.00539	-.00285	.02022
SDev	.00108	.00051	.00701	.00104	.00283	.00046	.00377
%RSD	4.8124	2.1735	.71267	.10487	52.498	16.126	18.630
#1	.02312	.02288	.98831	.99095	.00339	-.00318	.01756
#2	.02160	.02360	.97840	.98948	.00739	-.00253	.02289
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00271	.71604	-.00046	.06395	202.21	.00015	.00548
SDev	.00057	.00876	.00009	.00020	1.13	.00058	.00034
%RSD	21.105	1.2237	19.932	.31222	.55719	399.84	6.2908
#1	.00311	.72223	-.00053	.06409	203.00	-.00027	.00524
#2	.00231	.70984	-.00040	.06381	201.41	.00056	.00572
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.44945	.00096	9.5720	1.7127	.04587	.00066	.00049
SDev	.00513	.00240	.0318	.0130	.00009	.00006	.00016
%RSD	1.1414	250.74	.33261	.75629	.20349	9.7926	33.747
#1	.45308	-.00074	9.5945	1.7218	.04580	.00061	.00037
#2	.44582	.00265	9.5495	1.7035	.04594	.00070	.00060
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00003	14.686	.03424	.50034	.00312	.00074	.04750
SDev	.00045	.077	.00005	.00543	.00116	.00098	.01336
%RSD	1304.1	.52570	.13286	1.0861	37.315	133.30	28.127
#1	-.00028	14.741	.03421	.50419	.00394	.00004	.03805
#2	.00035	14.632	.03427	.49650	.00229	.00143	.05695
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.98793	-.00011	.02265	-.00151	.04548	H609.97
SDev	.00303	.00125	.00055	.00007	.03618	4.20
%RSD	.30633	1145.8	2.4256	4.7140	79.550	.68816
#1	.99007	-.00099	.02304	-.00156	.01990	H612.94
#2	.98579	.00077	.02226	-.00146	.07107	H607.01
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WT0 Operator: STL
Run Time: 05/05/05 21:07:53
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.02854	.02237	.58299	.58942	.00525	-.00206	.00926
SDev	.00319	.00153	.00135	.00258	.00796	.00079	.00401
%RSD	11.190	6.8587	.23109	.43762	151.55	38.630	43.290
#1	.02628	.02346	.58394	.58759	.01088	-.00262	.01210
#2	.03079	.02129	.58204	.59124	-.00038	-.00149	.00643
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00135	.63657	-.00056	.03801	207.12	-.00058	.00587
SDev	.00047	.00605	.00002	.00020	1.04	.00091	.00029
%RSD	34.977	.95030	3.9067	.52565	.50376	156.99	4.9829
#1	.00168	.63230	-.00055	.03787	206.38	.00006	.00608
#2	.00101	.64085	-.00058	.03815	207.85	-.00122	.00567
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

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Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.70623	.00175	10.887	1.7213	.05126	.00073	-.00220
SDev	.00618	.00475	.041	.0110	.00000	.00037	.00103
%RSD	.87456	271.24	.37645	.63831	.00000	50.526	46.998
#1	.70187	.00511	10.858	1.7135	.05126	.00099	-.00147
#2	.71060	-.00161	10.916	1.7291	.05126	.00047	-.00293
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00019	13.497	-.00014	.51553	.00168	-.00040	-.01119
SDev	.00030	.065	.00112	.00457	.00001	.00255	.03200
%RSD	162.31	.48358	773.89	.88623	.38357	641.41	285.86
#1	.00003	13.451	.00065	.51230	.00168	.00140	.01143
#2	-.00040	13.544	-.00093	.51876	.00169	-.00220	-.03382
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.58728	.00038	.02648	-.00071	-.00906	H611.07
SDev	.00127	.00212	.00162	.00007	.01777	5.20
%RSD	.21657	561.78	6.1127	10.102	196.17	.85130
#1	.58638	.00188	.02534	-.00066	.00351	H607.39
#2	.58818	-.00112	.02763	-.00076	-.02162	H614.75
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WT1 Operator: STL
Run Time: 05/05/05 21:12:15
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.03414	.04267	.57277	.57436	.00967	-.00073	.01177
SDev	.00181	.00181	.00546	.00370	.00599	.00274	.00065
%RSD	5.3082	4.2319	.95344	.64379	61.969	373.39	5.5319
#1	.03543	.04139	.56890	.57175	.00543	.00120	.01223
#2	.03286	.04394	.57663	.57698	.01390	-.00267	.01131
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00106	.31450	-.00053	.02954	185.93	.00038	.00575
SDev	.00002	.00194	.00004	.00004	.97	.00055	.00045
%RSD	2.1796	.61616	6.5777	.12975	.52022	144.73	7.7911
#1	.00108	.31313	-.00056	.02952	185.25	-.00001	.00606
#2	.00105	.31587	-.00051	.02957	186.62	.00077	.00543
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.57056	.00108	10.635	1.1643	.13899	.00047	-.00004
SDev	.00431	.01074	.052	.0064	.00006	.00073	.00222
%RSD	.75497	992.26	.49031	.54930	.04476	155.15	4975.7
#1	.56751	.00868	10.598	1.1598	.13895	.00099	.00153
#2	.57360	-.00651	10.672	1.1688	.13904	-.00005	-.00162
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00032	H24.589	.00142	.50742	.00035	-.00197	-.00298
SDev	.00018	.114	.00007	.00313	.00133	.00430	.01057
%RSD	57.586	.46497	5.2081	.61582	375.79	218.05	354.88
#1	-.00019	H24.508	.00147	.50521	-.00058	.00107	-.01046
#2	-.00044	H24.670	.00137	.50963	.00129	-.00501	.00450
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.57383	.00273	.03698	-.00154	-.00890	H613.17
SDev	.00428	.00017	.00061	.00018	.00551	3.40
%RSD	.74671	6.1585	1.6430	11.592	61.907	.55454
#1	.57080	.00261	.03741	-.00141	-.00500	H610.77
#2	.57686	.00285	.03655	-.00166	-.01279	H615.58
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: CCV1 Operator: STL
Run Time: 05/05/05 21:16:40
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

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Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	3.8653	3.9041	3.8703	3.8602	3.9564	3.9403	37.223
SDev	.0041	.0015	.0022	.0016	.0077	.0038	.109
%RSD	.10512	.03810	.05751	.04042	.19512	.09648	.29410
#1	3.8681	3.9031	3.8688	3.8613	3.9619	3.9429	37.145
#2	3.8624	3.9052	3.8719	3.8591	3.9510	3.9376	37.300
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	3.9458	4.1144	4.0824	3.9210	19.516	3.8195	3.8546
SDev	.0041	.0124	.0085	.0074	.047	.0092	.0104
%RSD	.10348	.30020	.20720	.18875	.24016	.24009	.26977
#1	3.9429	4.1056	4.0764	3.9158	19.483	3.8130	3.8472
#2	3.9486	4.1231	4.0884	3.9263	19.550	3.8260	3.8619
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	3.9056	39.373	19.048	3.9709	3.8822	.98221	3.8190
SDev	.0138	.067	.027	.0105	.0105	.00171	.0040
%RSD	.35322	.17025	.14312	.26459	.27168	.17460	.10452
#1	3.8958	39.326	19.029	3.9634	3.8747	.98099	3.8162
#2	3.9153	39.421	19.068	3.9783	3.8896	.98342	3.8218
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	3.8967	3.9015	3.9985	4.0855	4.0363	Q3.2230	3.9444
SDev	.0112	.0086	.0113	.0194	.0030	.0073	.0015
%RSD	.28689	.22115	.28142	.47587	.07527	.22601	.03794
#1	3.8888	3.8954	3.9905	4.0718	4.0342	Q3.2179	3.9433
#2	3.9046	3.9076	4.0064	4.0992	4.0384	Q3.2282	3.9454
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	3.8636	3.9456	3.8782	3.9870	Q3.3498	Q35.209
SDev	.0003	.0051	.0022	.0122	.0028	.004
%RSD	.00775	.12942	.05711	.30675	.08411	.01109

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#1	3.8638	3.9492	3.8798	3.9783	Q3.3517	Q35.212
#2	3.8634	3.9420	3.8766	3.9956	Q3.3478	Q35.206
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Fail
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB1 Operator: STL
Run Time: 05/05/05 21:21:05
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00211	-.00164	-.00023	.00019	-.00024	-.00020	.01759
SDev	.00339	.00184	.00146	.00009	.00297	.00048	.00463
%RSD	160.70	112.04	622.96	47.972	1254.9	236.78	26.333
#1	-.00029	-.00034	.00080	.00026	.00186	.00014	.02087
#2	.00451	-.00294	-.00127	.00013	-.00233	-.00054	.01431
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00151	-.00030	-.00007	-.00044	.00676	-.00049	-.00017
SDev	.00024	.00029	.00020	.00019	.00060	.00035	.00035
%RSD	15.586	96.167	271.06	44.098	8.8388	72.646	199.17
#1	.00168	-.00050	-.00022	-.00057	.00633	-.00073	-.00042
#2	.00135	-.00010	.00007	-.00030	.00718	-.00024	.00007
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00207	-.00393	-.00543	-.00018	-.00011	-.00012	.00014
SDev	.00004	.01200	.00384	.00014	.00009	.00077	.00179
%RSD	1.8760	305.69	70.712	80.639	84.853	661.13	1290.2
#1	-.00209	-.01241	-.00272	-.00028	-.00018	-.00066	.00140
#2	-.00204	.00456	-.00815	-.00008	-.00004	.00043	-.00113
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00034	.00208	.00258	-.00028	.00125	.00073	-.00758
SDev	.00045	.00006	.00197	.00022	.00005	.00117	.00297
%RSD	129.79	2.6373	76.083	77.098	4.3515	158.52	39.223

#1	-.00066	.00204	.00397	-.00043	.00121	-.00009	-.00969
#2	-.00003	.00211	.00119	-.00013	.00129	.00156	-.00548
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	.00005	-.00021	.00086	.00013	-.04549	Q-1.2298	
SDev	.00055	.00131	.00165	.00018	.02355	.4377	
%RSD	1109.4	611.32	191.51	141.42	51.774	35.594	
#1	.00044	.00071	-.00031	-.00000	-.02884	Q-.92030	
#2	-.00034	-.00114	.00203	.00025	-.06214	Q-1.5394	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.00300	.00400	.06000	.05000	.50000	.25000	

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Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/06/05 07:25:39
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	4.0223	4.0059	3.9987	3.9482	4.0603	4.0300	38.718
SDev	.0013	.0137	.0095	.0096	.0093	.0034	.113
%RSD	.03311	.34074	.23838	.24433	.22814	.08346	.29199
#1	4.0213	3.9962	3.9920	3.9414	4.0537	4.0276	38.638
#2	4.0232	4.0156	4.0055	3.9551	4.0668	4.0323	38.798
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.0171	4.3334	4.3184	4.0238	19.895	3.9587	4.0049
SDev	.0034	.0068	.0080	.0130	.057	.0124	.0114
%RSD	.08432	.15749	.18641	.32323	.28810	.31376	.28434
#1	4.0147	4.3286	4.3127	4.0146	19.854	3.9499	3.9969
#2	4.0195	4.3383	4.3241	4.0330	19.935	3.9675	4.0130
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.1272	40.822	19.646	4.1394	3.9918	1.0206	3.8979
SDev	.0055	.140	.069	.0112	.0136	.0018	.0125
%RSD	.13414	.34306	.35019	.27029	.34059	.17649	.32146
#1	4.1233	40.723	19.597	4.1315	3.9822	1.0193	3.8890
#2	4.1311	40.921	19.694	4.1473	4.0014	1.0219	3.9068
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.0510	4.0521	4.1267	4.0935	4.1051	Q3.3445	4.1227
SDev	.0098	.0129	.0176	.0259	.0082	.0050	.0064
%RSD	.24197	.31803	.42620	.63208	.19920	.14875	.15418
#1	4.0440	4.0430	4.1142	4.0752	4.0994	Q3.3409	4.1182
#2	4.0579	4.0613	4.1391	4.1118	4.1109	Q3.3480	4.1272
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302

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Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	3.9651	4.0400	4.0168	4.1441	3.8099	38.072
SDev	.0096	.0053	.0054	.0109	.0033	.270
%RSD	.24233	.13188	.13527	.26415	.08638	.70833
#1	3.9583	4.0363	4.0130	4.1363	3.8076	37.881
#2	3.9718	4.0438	4.0207	4.1518	3.8123	38.263
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 05/06/05 07:30:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00120	.00048	.00052	-.00110	-.00222	.00010	-.03582
SDev	.00096	.00116	.00119	.00035	.00108	.00211	.00034
%RSD	79.874	240.94	230.73	32.077	48.771	2083.2	.95016
#1	.00052	.00131	.00136	-.00134	-.00146	-.00139	-.03558
#2	.00188	-.00034	-.00033	-.00085	-.00299	.00159	-.03606
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00074	-.00052	-.00052	-.00056	-.00676	-.00051	-.00035
SDev	.00062	.00000	.00001	.00004	.00000	.00028	.00000
%RSD	84.769	.00000	2.5405	6.6217	.00000	54.775	.61011
#1	.00118	-.00052	-.00051	-.00059	-.00676	-.00031	-.00035
#2	.00029	-.00052	-.00053	-.00054	-.00676	-.00071	-.00035
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00076	-.00361	-.01203	-.00063	-.00066	.00025	.00065
SDev	.00094	.00094	.00256	.00005	.00050	.00003	.00025
%RSD	123.13	25.974	21.289	7.5662	75.425	12.796	38.774
#1	-.00010	-.00428	-.01022	-.00059	-.00031	.00023	.00047
#2	-.00143	-.00295	-.01384	-.00066	-.00101	.00027	.00083
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U

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Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00042	.00087	.00334	-.00064	.00227	-.00002	.00311
SDev	.00026	.00003	.00201	.00000	.00116	.00037	.01389
%RSD	61.418	3.0682	60.270	.00000	51.100	2079.7	446.38
#1	-.00060	.00088	.00476	-.00064	.00309	.00024	.01294
#2	-.00024	.00085	.00192	-.00064	.00145	-.00028	-.00671
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	-.00056	-.00067	.00096	-.00015	-.06954	Q-1.7162
SDev	.00016	.00104	.00025	.00021	.00958	.2345
%RSD	28.974	154.93	26.248	141.42	13.773	13.664
#1	-.00044	-.00141	.00078	-.00000	-.06276	Q-1.5504
#2	-.00067	.00006	.00114	-.00030	-.07631	Q-1.8820
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00300	.00400	.06000	.05000	.50000	.25000

Method: 6010C Sample Name: G8WTR 5 Operator: STL
Run Time: 05/06/05 07:34:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00282	-.00011	.05146	.05379	-.00114	-.00035	-.02522
SDev	.00047	.00072	.00016	.00129	.00006	.00073	.00123
%RSD	16.563	663.69	.31766	2.4059	5.3661	206.69	4.8578
#1	.00249	.00040	.05157	.05470	-.00110	.00016	-.02435
#2	.00315	-.00062	.05134	.05287	-.00119	-.00087	-.02609
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	-.00027	.08880	-.00057	.00223	21.559	-.00057	.00151
SDev	.00041	.00083	.00001	.00001	.117	.00011	.00025
%RSD	154.04	.92978	2.3184	.25003	.54282	19.879	16.496
#1	.00002	.08822	-.00058	.00223	21.476	-.00065	.00168
#2	-.00055	.08939	-.00056	.00222	21.642	-.00049	.00133
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908

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Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.17960	-.00540	1.4545	.36368	.01388	.00007	-.00025
SDev	.00108	.00769	.0060	.00199	.00009	.00045	.00051
%RSD	.59988	142.28	.41513	.54599	.67237	627.04	208.19
#1	.17884	.00003	1.4502	.36228	.01382	.00039	-.00061
#2	.18036	-.01084	1.4588	.36509	.01395	-.00025	.00012
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00069	4.5719	-.00020	.05167	-.00004	-.00151	-.01728
SDev	.00011	.0256	.00023	.00036	.00199	.00145	.00335
%RSD	16.489	.55962	115.70	.69484	5595.1	95.396	19.412
#1	-.00077	4.5538	-.00004	.05142	.00137	-.00049	-.01965
#2	-.00061	4.5900	-.00037	.05193	-.00144	-.00254	-.01490
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.05301	-.00062	.00184	-.00076	-.04505	100.87
SDev	.00092	.00051	.00007	.00007	.00490	.30
%RSD	1.7309	82.412	3.8065	9.4281	10.882	.30222
#1	.05366	-.00026	.00179	-.00071	-.04158	100.65
#2	.05236	-.00098	.00189	-.00081	-.04851	101.09
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: G8WT1 5 Operator: STL
Run Time: 05/06/05 07:38:49
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00643	.00867	.12349	.12232	.00104	-.00028	-.02961
SDev	.00059	.00189	.00081	.00045	.00110	.00135	.00280
%RSD	9.1358	21.767	.65428	.36463	105.97	483.75	9.4644
#1	.00685	.01001	.12406	.12200	.00182	-.00124	-.03159
#2	.00602	.00734	.12292	.12263	.00026	.00068	-.02763
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High							500.00
Low							-.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286

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Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00103	.06737	-.00056	.00592	39.696	-.00031	.00069
SDev	.00030	.00017	.00001	.00017	.107	.00006	.00030
%RSD	29.051	.25012	2.3701	2.9558	.26999	19.626	42.961
#1	.00125	.06725	-.00055	.00579	39.620	-.00027	.00048
#2	.00082	.06749	-.00057	.00604	39.771	-.00036	.00091
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	10.000	20.000	500.00	50.000	50.000
Low	-.01000	-.20000	-.00500	-.00500	-5.0000	-.01000	-.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	.11786	-.00849	2.2461	.25112	.02963	-.00006	-.00032
SDev	.00000	.00421	.0090	.00067	.00009	.00021	.00070
%RSD	.00220	49.545	.39917	.26668	.31497	376.64	218.25
#1	.11786	-.00551	2.2397	.25064	.02957	-.00021	-.00082
#2	.11786	-.01146	2.2524	.25159	.02970	.00009	.00017
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	500.00	200.00	20.000	50.000	10.000	50.000
Low	-.02500	-.10000	-5.0000	-.01500	-.04000	-.01000	-.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	-.00087	5.3957	-.00028	.10538	.00008	-.00276	-.01142
SDev	.00015	.0140	.00004	.00014	.00016	.00091	.00914
%RSD	17.392	.25925	12.396	.13514	203.21	32.910	80.035
#1	-.00076	5.3858	-.00031	.10528	.00020	-.00340	-.00496
#2	-.00098	5.4056	-.00026	.10548	-.00004	-.00212	-.01789
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	20.000	50.000	10.000	50.000	20.000	50.000
Low	-.05000	-.02000	-.04000	-.05000	-.10000	-.50000	-.50000

Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302
Units	ppm	ppm	ppm	ppm	ppm	PPM
Avge	.12271	.00016	.00718	-.00086	-.02429	106.01
SDev	.00003	.00054	.00102	.00000	.01331	.34
%RSD	.02317	336.26	14.217	.00000	54.788	.32076
#1	.12269	-.00022	.00790	-.00086	-.03370	105.77
#2	.12273	.00054	.00646	-.00086	-.01488	106.25
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.000	50.000	50.000	50.000	20.000	250.00
Low	-.00500	-.00500	-.01000	-.05000	-.10000	.00000

Method: 6010C Sample Name: CCV Operator: STL
Run Time: 05/06/05 07:43:12
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al

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Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	4.1104	4.0933	4.1399	4.0941	4.1729	4.1397	39.770
SDev	.0167	.0157	.0084	.0144	.0139	.0201	.048
%RSD	.40722	.38351	.20392	.35115	.33357	.48608	.12124
#1	4.0985	4.1044	4.1459	4.0839	4.1827	4.1255	39.804
#2	4.1222	4.0822	4.1339	4.1042	4.1631	4.1539	39.736
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							40.000
Range							10.000
Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	4.1103	Q4.4184	Q4.4068	4.1670	20.571	4.0907	4.1346
SDev	.0045	.0089	.0022	.0004	.005	.0011	.0017
%RSD	.10905	.20212	.04936	.00986	.02323	.02627	.04079
#1	4.1135	Q4.4248	Q4.4084	4.1673	20.568	4.0899	4.1358
#2	4.1072	Q4.4121	Q4.4053	4.1667	20.575	4.0915	4.1334
Errors	QC Pass	QC Fail	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	20.000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	4.1816	42.104	20.361	4.2682	4.1332	1.0358	3.9728
SDev	.0083	.013	.015	.0028	.0018	.0020	.0006
%RSD	.19929	.03185	.07459	.06524	.04441	.19073	.01498
#1	4.1875	42.114	20.350	4.2702	4.1319	1.0372	3.9732
#2	4.1757	42.095	20.371	4.2662	4.1345	1.0344	3.9724
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	40.000	20.000	4.0000	4.0000	1.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	4.1699	4.1709	4.2191	4.2826	4.1993	Q3.4130	4.2025
SDev	.0038	.0009	.0032	.0041	.0004	.0084	.0095
%RSD	.09191	.02236	.07470	.09535	.01053	.24511	.22687
#1	4.1726	4.1716	4.2169	4.2797	4.1990	Q3.4189	4.1957
#2	4.1672	4.1703	4.2213	4.2855	4.1996	Q3.4071	4.2092
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	4.1093	4.1508	4.1047	4.2575	3.9681	40.164	
SDev	.0068	.0088	.0059	.0045	.0002	.281	
%RSD	.16494	.21167	.14464	.10636	.00393	.70064	

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#1	4.1045	4.1445	4.1005	4.2607	3.9682	39.965
#2	4.1141	4.1570	4.1089	4.2543	3.9680	40.363
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	4.0000	4.0000	4.0000	4.0000	4.0000	40.000
Range	10.000	10.000	10.000	10.000	10.000	10.000

Method: 6010C Sample Name: CCB Operator: STL
Run Time: 05/06/05 07:47:36
Comment:
Mode: CONC Corr. Factor: 1

Elem	Sb1	Sb2	Pb1	Pb2	Se1	Se2	Al
Units	ppm	ppm	PPM	PPM	PPM	PPM	PPM
Avge	.00226	-.00259	-.00215	.00085	-.00199	.00037	-.01992
SDev	.00148	.00151	.00050	.00070	.00247	.00015	.00136
%RSD	65.603	58.511	23.158	83.118	124.03	41.670	6.8280
#1	.00331	-.00366	-.00180	.00035	-.00024	.00026	-.01896
#2	.00121	-.00152	-.00250	.00134	-.00373	.00047	-.02088
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value							.00000
Range							.20000

Elem	As1890	Ba4934	Be3130	Cd2265	Ca	Cr2677	Co2286
Units	PPM	ppm	ppm	ppm	PPM	ppm	ppm
Avge	.00055	-.00039	-.00046	-.00033	-.00443	-.00024	.00000
SDev	.00116	.00019	.00000	.00004	.00030	.00050	.00020
%RSD	211.97	47.140	.94911	11.077	6.7344	208.94	1436100.
#1	.00137	-.00026	-.00046	-.00030	-.00422	.00011	.00014
#2	-.00027	-.00052	-.00047	-.00035	-.00464	-.00060	-.00014
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.00700	.20000	.00500	.00500	.25000	.01000	.05000

Elem	Cu3247	Fe	Mg	Mn2576	Ni2316	Ag3280	Tl1908
Units	ppm	PPM	PPM	ppm	ppm	ppm	PPM
Avge	-.00038	.00953	-.00155	-.00044	-.00070	.00070	.00031
SDev	.00028	.01409	.00128	.00002	.00106	.00080	.00015
%RSD	74.414	147.87	82.497	4.8933	150.26	115.17	50.105
#1	-.00018	.01949	-.00065	-.00043	.00004	.00127	.00042
#2	-.00058	-.00043	-.00246	-.00046	-.00145	.00013	.00020
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.02500	.05000	.25000	.01500	.04000	.00500	.01000

Elem	V_2924	Zn2138	Mo2020	Sr4215	Sn1899	Th	U
Units	ppm	ppm	ppm	ppm	ppm	PPM	PPM
Avge	.00052	.00121	.00392	-.00054	-.00063	.00505	.00408
SDev	.00101	.00011	.00276	.00007	.00038	.00468	.01598
%RSD	191.80	8.8288	70.363	13.470	61.065	92.642	391.60

#1	.00124	.00129	.00588	-.00049	-.00036	.00835	.01538
#2	-.00019	.00114	.00197	-.00059	-.00090	.00174	-.00722
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	.05000	.01000	.02500	.05000	.10000	.50000	.50000
Elem	Pb2203	Se1960	Sb2068	Ti3349	Zr3496	Na3302	
Units	ppm	ppm	ppm	ppm	ppm	PPM	
Avge	-.00015	-.00042	.00065	.00010	-.02386	Q-.81528	
SDev	.00030	.00072	.00049	.00050	.01093	.25796	
%RSD	197.95	172.03	75.032	494.97	45.820	31.640	
#1	-.00037	.00009	.00099	.00045	-.01613	Q-.63288	
#2	.00006	-.00093	.00030	-.00025	-.03159	Q-.99768	
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	
Value	.00000	.00000	.00000	.00000	.00000	.00000	
Range	.00300	.00400	.06000	.05000	.50000	.25000	

Analytical Runlog for Mercury Analysis

Run #: AA0502A

Instrument ID:

Seq	Sample ID	Run Date/Time		Instr Conc.	Dilution	Final Conc.		QC Expected		% Recovery
1	S0	5/2/2005	9:27:01		1					
2	S0.2	5/2/2005	9:28:49		1					
3	S0.5	5/2/2005	9:30:50		1					
4	S1	5/2/2005	9:32:42		1					
5	S5	5/2/2005	9:34:33		1					
6	S10	5/2/2005	9:36:47		1					
7	ICV	5/2/2005	9:38:49	2.47	1	2.47	ppb	2.5	ppb	98.8%
8	~~CCB~~ ICB	5/2/2005	9:40:38	-0.02	1	-0.02	ppb	<0.2	ppb	
9	CRA	5/2/2005	9:42:28	0.199	1	0.199	ppb	0.2	ppb	99.5%
10	CCV	5/2/2005	9:44:37	5.2	1	5.2	ppb	5	ppb	104.0%
11	CCB	5/2/2005	9:46:36	-0.006	1	-0.006	ppb	<0.2	ppb	
12	G9EAVB	5/2/2005	9:48:25	0.019	1	0.019	ppb			✓
13	G9GMRC	5/2/2005	9:50:25	4.78	1	4.78	ppb	5		96
14	G843A	5/2/2005	9:52:13	0.091	1	0.091	ppb			
15	G843AS	5/2/2005	9:54:13	4.74	1	4.74	ppb	5		93
16	G843AD	5/2/2005	9:56:04	4.99	1	4.99	ppb	5		98
17	G843AV	5/2/2005	9:58:17	0.061	5	0.305	ppb			
18	G843D	5/2/2005	10:00:06	0.155	1	0.155	ppb			
19	G843F	5/2/2005	10:02:46	0.037	1	0.037	ppb			
20	G843H	5/2/2005	10:05:00	0.069	1	0.069	ppb			
21	G843M	5/2/2005	10:06:54	0.105	1	0.105	ppb			
22	CCV	5/2/2005	10:10:39	5.33	1	5.33	ppb	5	ppb	106.6%
23	CCB	5/2/2005	10:12:27	-0.061	1	-0.061	ppb	<0.2	ppb	
24	G843P	5/2/2005	10:15:27	-0.005	1	-0.005	ppb			
25	G843R	5/2/2005	10:17:18	0.03	1	0.03	ppb			
26	G843X	5/2/2005	10:19:59	0.003	1	0.003	ppb			
27	G85JQ	5/2/2005	10:21:53	0.007	1	0.007	ppb			
28	G89LL	5/2/2005	10:24:43	0.025	1	0.025	ppb			
29	G9A7F	5/2/2005	10:26:32	0.109	1	0.109	ppb			
30	G9A7P	5/2/2005	10:28:21	0.005	1	0.005	ppb			
31	G9ECFB	5/2/2005	10:30:31	0.008	1	0.008	ppb			✓
32	G9GMTC	5/2/2005	10:32:22	4.18	1	4.18	ppb	5		84
33	G8WP7	5/2/2005	10:34:13	-0.031	1	-0.031	ppb			
34	CCV	5/2/2005	10:36:05	5.38	1	5.38	ppb	5	ppb	107.6%
35	CCB	5/2/2005	10:37:59	-0.034	1	-0.034	ppb	<0.2	ppb	
36	G8WP7S	5/2/2005	10:40:29	5.13	1	5.13	ppb	5		103
37	G8WP7D	5/2/2005	10:42:21	4.97	1	4.97	ppb	5		99
38	G8WP7V	5/2/2005	10:44:30	0.022	5	0.11	ppb			
39	G8WQL	5/2/2005	10:46:29	0.007	1	0.007	ppb			
40	G8WQN	5/2/2005	10:48:23	0.01	1	0.01	ppb			
41	G8WQR	5/2/2005	10:50:14	-0.001	1	-0.001	ppb			
42	G8WQT	5/2/2005	10:52:48	0.015	1	0.015	ppb			
43	G8WR6	5/2/2005	10:54:48	0.027	1	0.027	ppb			
44	G8WTA	5/2/2005	10:57:20	0.01	1	0.01	ppb			
45	G8WTE	5/2/2005	10:59:50	0.008	1	0.008	ppb			
46	CCV	5/2/2005	11:01:49	5.44	1	5.44	ppb	5	ppb	108.8%
47	CCB	5/2/2005	11:03:37	-0.05	1	-0.05	ppb	<0.2	ppb	

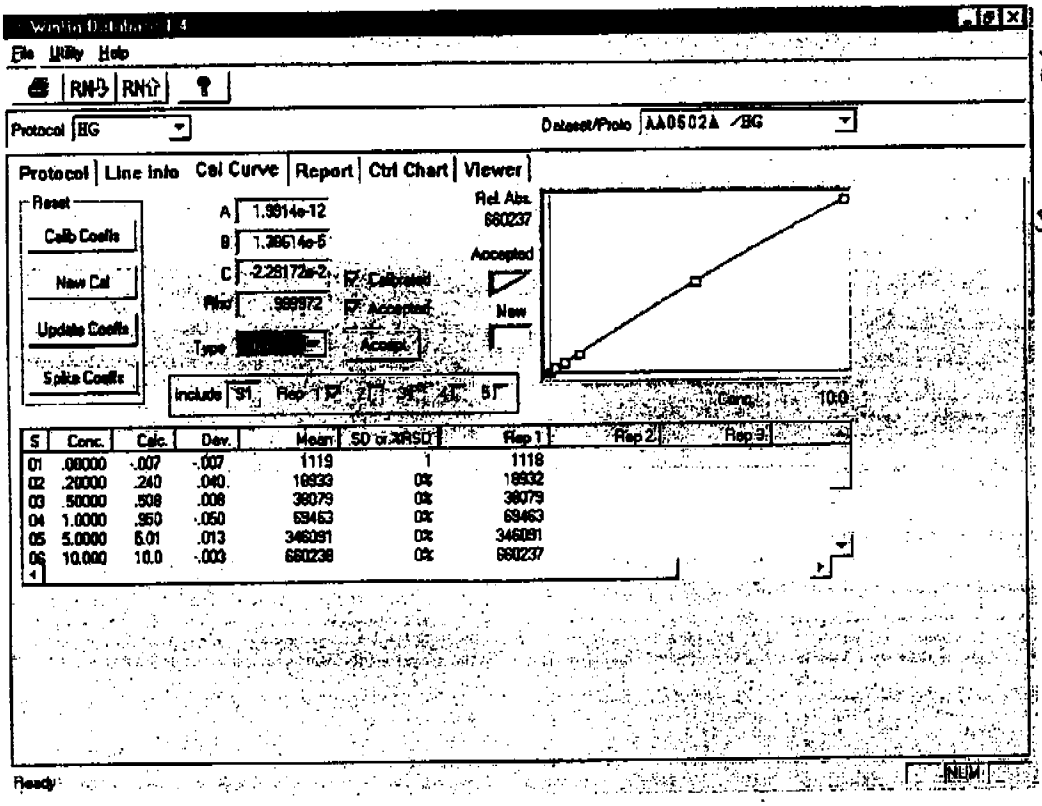
Analyst: JJ

Reviewed by: 5/4/05

Analytical Runlog for Mercury Analysis											
Run #: AA0502A											
Instrument ID:											
Seq	Sample ID	Run Date/Time		Instr Conc.	Dilution	Final Conc.		QC Expected		% Recovery
48	G8WTG	5/2/2005	11:05:57	0.009	1	0.009	ppb			
49	G8WTR	5/2/2005	11:08:20	0.004	1	0.004	ppb			
50	G8WTV	5/2/2005	11:10:44	-0.001	1	-0.001	ppb			
51	G8WTW	5/2/2005	11:12:53	-0.006	1	-0.006	ppb			
52	G8WTX	5/2/2005	11:14:42	0.011	1	0.011	ppb			
53	G8WT0	5/2/2005	11:16:45	0.011	1	0.011	ppb			
54	G8WT1	5/2/2005	11:18:46	0.007	1	0.007	ppb			
55	G9GNJB	5/2/2005	11:20:56	0.018	1	0.018	ppb			✓
56	G9GNJC	5/2/2005	11:22:45	1	1	1	ppb	1		100
57	G8C15	5/2/2005	11:24:58	0.01	1	0.01	ppb			
58	CCV	5/2/2005	11:26:47	5.48	1	5.48	ppb	5	ppb	109.6%
59	CCB	5/2/2005	11:28:39	-0.033	1	-0.033	ppb	<0.2	ppb	
60	G8H85	5/2/2005	11:31:18	0.022	1	0.022	ppb			
61	G813T	5/2/2005	11:33:29	1.81	1	1.81	ppb			
62	G8170	5/2/2005	11:35:19	-0.001	1	-0.001	ppb			
63	G84EP	5/2/2005	11:37:21	-0.004	1	-0.004	ppb			
64	G84EPX	5/2/2005	11:39:25	0.014	1	0.014	ppb			
65	G84EPS	5/2/2005	11:41:15	1.08	1	1.08	ppb	1		108
66	G84EPD	5/2/2005	11:43:18	0.962	1	0.962	ppb	1		96
67	G84EPV	5/2/2005	11:45:08	0.006	5	0.03	ppb			
68	CCV	5/2/2005	11:46:59	5.57	1	5.57	ppb	5	ppb	111.4%
69	CCB	5/2/2005	11:48:48	-0.058	1	-0.058	ppb	<0.2	ppb	

Analyst: _____

Reviewed by: _____ 5/4/05



12 for FC
5/2/05
7470A
STD #1604905

13 for FC 5/4/05

09:27:01 02 May 2005 Folder: AA0502A STD HG4705 7007 Page 1
Protocol: HG

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1 Seq: 1 09:27:01 02 May 05 HG

Hg .000 ppb 1118

*** Standard: 2 Rep: 1 Seq: 2 09:28:49 02 May 05 HG

Hg .200 ppb 18932

*** Standard: 3 Rep: 1 Seq: 3 09:30:50 02 May 05 HG

Hg .500 ppb 38079

*** Standard: 4 Rep: 1 Seq: 4 09:32:42 02 May 05 HG

Hg 1.00 ppb 69463

*** Standard: 5 Rep: 1 Seq: 5 09:34:33 02 May 05 HG

Hg 5.00 ppb 346091

*** Standard: 6 Rep: 1 Seq: 6 09:36:47 02 May 05 HG

Hg 10.0 ppb 660237

*** Check Standard: 4 Ck4ICV Seq: 7 09:38:49 02 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		98.9	2.47	2.50	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 8 09:40:38 02 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.020	.200	ppb	.000 %

*** Check Standard: 5 Ck5CRA Seq: 9 09:42:28 02 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		99.4	.199	.200	ppb	.000 %

*** Check Standard: 2 Ck2CCV Seq: 10 09:44:37 02 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		104.	5.20	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 11 09:46:36 02 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.006	.200	ppb	.000 %

*** Sample ID: G9EAVB AA0502A Seq: 12 09:48:25 02 May 05 HG

Hg .019 ppb .000 % .019

09:50:25 02 May 2005 Folder: AA0502A Protocol: HG

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID: G9GMRC		AA0502A	Seq: 13	09:50:25 02 May 05					HG
Hg	4.78	ppb	.000 %	4.78					
*** Sample ID: G843A		AA0502A	Seq: 14	09:52:13 02 May 05					HG
Hg	.091	ppb	.000 %	.091					
*** Sample ID: G843AS		AA0502A	Seq: 15	09:54:13 02 May 05					HG
Hg	4.74	ppb	.000 %	4.74					
*** Sample ID: G843AD		AA0502A	Seq: 16	09:56:04 02 May 05					HG
Hg	4.99	ppb	.000 %	4.99					
*** Sample ID: G843AV		AA0502A 5X	Seq: 17	09:58:17 02 May 05					HG
Hg	.061	ppb	.000 %	.061					
*** Sample ID: G843D		AA0502A	Seq: 18	10:00:06 02 May 05					HG
Hg	.155	ppb	.000 %	.155					
*** Sample ID: G843F		AA0502A	Seq: 19	10:02:46 02 May 05					HG
Hg	.037	ppb	.000 %	.037					
*** Sample ID: G843H		AA0502A	Seq: 20	10:05:00 02 May 05					HG
Hg	.069	ppb	.000 %	.069					
*** Sample ID: G843M		AA0502A	Seq: 21	10:06:54 02 May 05					HG
Hg	.105	ppb	.000 %	.105					

*** Check Standard: 2 Ck2CCV Seq: 22 10:10:39 02 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		107.	5.33	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 23 10:12:27 02 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.061	.200	ppb	.000 %

*** Sample ID: G843P		AA0502A	Seq: 24	10:15:27 02 May 05					HG
Hg	-.005	ppb	.000 %	-.005					

10:17:18 02 May 2005 Folder: AA0502A Protocol: HG

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID: G843R			AA0502A	Seq: 25		10:17:18 02 May 05			HG
Hg	.030	ppb	.000 %	.030					
*** Sample ID: G843X			AA0502A	Seq: 26		10:19:59 02 May 05			HG
Hg	.003	ppb	.000 %	.003					
*** Sample ID: G85JQ			AA0502A	Seq: 27		10:21:53 02 May 05			HG
Hg	.007	ppb	.000 %	.007					
*** Sample ID: G89LL			AA0502A	Seq: 28		10:24:43 02 May 05			HG
Hg	.025	ppb	.000 %	.025					
*** Sample ID: G9A7F			AA0502A	Seq: 29		10:26:32 02 May 05			HG
Hg	.109	ppb	.000 %	.109					
*** Sample ID: G9A7P			AA0502A	Seq: 30		10:28:21 02 May 05			HG
Hg	.005	ppb	.000 %	.005					
*** Sample ID: G9ECFB			AA0502A	Seq: 31		10:30:31 02 May 05			HG
Hg	.008	ppb	.000 %	.008					
*** Sample ID: G9GMTC			AA0502A	Seq: 32		10:32:22 02 May 05			HG
Hg	4.18	ppb	.000 %	4.18					
*** Sample ID: G8WP7			AA0502A	Seq: 33		10:34:13 02 May 05			HG
Hg	-.031	ppb	.000 %	-.031					
*** Check Standard: 2 Ck2CCV				Seq: 34		10:36:05 02 May 05			HG
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		108.	5.38	5.00	ppb	.000 %			
*** Check Standard: 1 Ck1CCB				Seq: 35		10:37:59 02 May 05			HG
Line	Flag	Found	Range(+/-)	Units		SD/RSD			
Hg		-.034	.200	ppb		.000 %			
*** Sample ID: G8WP7S			AA0502A	Seq: 36		10:40:29 02 May 05			HG
Hg	5.13	ppb	.000 %	5.13					

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: G8WP7D AA0502A Seq: 37 10:42:21 02 May 05 HG

Hg 4.97 ppb .000 % 4.97

*** Sample ID: G8WP7V AA0502A Seq: 38 10:44:30 02 May 05 HG
5X
Hg .022 ppb .000 % .022

*** Sample ID: G8WQL AA0502A Seq: 39 10:46:29 02 May 05 HG

Hg .007 ppb .000 % .007

*** Sample ID: G8WQN AA0502A Seq: 40 10:48:23 02 May 05 HG

Hg .010 ppb .000 % .010

*** Sample ID: G8WQR AA0502A Seq: 41 10:50:14 02 May 05 HG

Hg -.001 ppb .000 % -.001

*** Sample ID: G8WQT AA0502A Seq: 42 10:52:48 02 May 05 HG

Hg .015 ppb .000 % .015

*** Sample ID: G8WR6 AA0502A Seq: 43 10:54:48 02 May 05 HG

Hg .027 ppb .000 % .027

*** Sample ID: G8WTA AA0502A Seq: 44 10:57:20 02 May 05 HG

Hg .010 ppb .000 % .010

*** Sample ID: G8WTE AA0502A Seq: 45 10:59:50 02 May 05 HG

Hg .008 ppb .000 % .008

*** Check Standard: 2 Ck2CCV Seq: 46 11:01:49 02 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		109.	5.44	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 47 11:03:37 02 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.050	.200	ppb	.000 %

*** Sample ID: G8WTG AA0502A Seq: 48 11:05:57 02 May 05 HG

Hg .009 ppb .000 % .009

11:08:20 02 May 2005 Folder: AA0502A Protocol: HG

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID: G8WTR		AA0502A	Seq: 49	11:08:20 02 May 05					HG
Hg	.004	ppb	.000 %	.004					
*** Sample ID: G8WTV		AA0502A	Seq: 50	11:10:44 02 May 05					HG
Hg	-.001	ppb	.000 %	-.001					
*** Sample ID: G8WTW		AA0502A	Seq: 51	11:12:53 02 May 05					HG
Hg	-.006	ppb	.000 %	-.006					
*** Sample ID: G8WTX		AA0502A	Seq: 52	11:14:42 02 May 05					HG
Hg	.011	ppb	.000 %	.011					
*** Sample ID: G8WT0		AA0502A	Seq: 53	11:16:45 02 May 05					HG
Hg	.011	ppb	.000 %	.011					
*** Sample ID: G8WT1		AA0502A	Seq: 54	11:18:46 02 May 05					HG
Hg	.007	ppb	.000 %	.007					
*** Sample ID: G9GNJB		AA0502A	Seq: 55	11:20:56 02 May 05					HG
Hg	.018	ppb	.000 %	.018					
*** Sample ID: G9GNJC		AA0502A	Seq: 56	11:22:45 02 May 05					HG
Hg	1.00	ppb	.000 %	1.00					
*** Sample ID: G8C15		AA0502A	Seq: 57	11:24:58 02 May 05					HG
Hg	.010	ppb	.000 %	.010					

*** Check Standard: 2 Ck2CCV Seq: 58 11:26:47 02 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		110.	5.48	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 59 11:28:39 02 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.033	.200	ppb	.000 %

*** Sample ID: G8H85		AA0502A	Seq: 60	11:31:18 02 May 05					HG
Hg	.022	ppb	.000 %	.022					

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID: G813T			AA0502A	Seq: 61		11:33:29 02 May 05			HG
Hg	1.81	ppb	.000 %	1.81					
*** Sample ID: G8170			AA0502A	Seq: 62		11:35:19 02 May 05			HG
Hg	-.001	ppb	.000 %	-.001					
*** Sample ID: G84EP			AA0502A	Seq: 63		11:37:21 02 May 05			HG
Hg	-.004	ppb	.000 %	-.004					
*** Sample ID: G84EPX			AA0502A	Seq: 64		11:39:25 02 May 05			HG
Hg	.014	ppb	.000 %	.014					
*** Sample ID: G84EPS			AA0502A	Seq: 65		11:41:15 02 May 05			HG
Hg	1.08	ppb	.000 %	1.08					
*** Sample ID: G84EPD			AA0502A	Seq: 66		11:43:18 02 May 05			HG
Hg	.962	ppb	.000 %	.962					
*** Sample ID: G84EPV			AA0502A 5X	Seq: 67		11:45:08 02 May 05			HG
Hg	.006	ppb	.000 %	.006					

*** Check Standard: 2 Ck2CCV Seq: 68 11:46:59 02 May 05 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		111.	5.57	5.00	ppb	.000 %

*** Check Standard: 1 Ck1CCB Seq: 69 11:48:48 02 May 05 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.058	.200	ppb	.000 %

*** Sample ID: G9F5WC			AA0502A	Seq: 70		12:46:21 02 May 05			HG
Hg	1.75	ppb	.000 %	1.75					

METALS MISCELLANEOUS DATA

SEVERN TRENT **STL** Metals Prep Report for Batch # 5119272

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Prep Method: SW-846 3010A **SOP Number:** STL-IP-0013, Rev 6

Extraction Code: 34 **Extraction:** TCLP **Matrix:** SOLID **Prep Date:** 4/29/2005

Standard Log Ref#: MET-04/05-H20

Lot ID	Work Order #	Initial Wt/Vol	Final Volume	Lab Filtered	Due Date	Sample Location	Target List
F5D210354-001	G8WP7	20 mL	50 mL	☐	05/09/2005	A68	AG AS BA CD CR PB SE ZN
F5D210354-001D	G8WP7D	20 mL	50 mL	☐		A68	
F5D210354-001S	G8WP7S	20 mL	50 mL	☐		A68	
F5D210354-002	G8WQL	20 mL	50 mL	☐	05/09/2005	A67	
F5D210354-003	G8WQN	20 mL	50 mL	☐	05/09/2005	A67	
F5D210354-004	G8WQR	20 mL	50 mL	☐	05/09/2005	A54	
F5D210354-005	G8WQT	20 mL	50 mL	☐	05/09/2005	A54	
F5D210354-007	G8WR6	20 mL	50 mL	☐	05/09/2005	A54	
F5D210354-008	G8WTA	20 mL	50 mL	☐	05/09/2005	A54	
F5D210354-009	G8WTE	20 mL	50 mL	☐	05/09/2005	A44	
F5D210354-010	G8WTG	20 mL	50 mL	☐	05/09/2005	A44	
F5D210354-011	G8WTR	20 mL	50 mL	☐	05/09/2005	A44	
F5D210354-013	G8WTV	20 mL	50 mL	☐	05/09/2005	A44	
F5D210354-014	G8WTW	20 mL	50 mL	☐	05/09/2005	A44	
F5D210354-015	G8WTX	20 mL	50 mL	☐	05/09/2005	A44	
F5D210354-016	G8WT0	20 mL	50 mL	☐	05/09/2005	A44	
F5D210354-017	G8WT1	20 mL	50 mL	☐	05/09/2005	A44	
F5D280000-4008	G9ECFB	20 mL	50 mL	☐			

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.16, updated 2/7/2005

F5D290000-272C G9G7VC [barcode] 20 mL 50 mL ☐

Comments:

Chemical Lot Information

Chemical	Lot Number
Hydrochloric Acid	4104090
Nitric Acid	1104100

Custody Information

Relinquished By: ME

Review/Received By: [signature]

Date of Transfer: 5-2-05

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.16, updated 2/7/2005

LOT #FSD210354 ... REVISED ... 897 of 963

STL ST LOUIS

STL

TCLP Extraction Record/Chain of Custody

Form: SL-INORG-0067, Rev. 3/31/05; SW-846 Method 1311: SOP: STL-IP-0016, current revision

Logbook No.: 2651

	Fluid #1	Fluid #2	Fluid #3 (DI Water)Filter Only & Wet Chem
Daily pH Check	4.98 (4.88 – 4.95)	(2.82 – 2.93)	N/A
Lot #	0P0267-05		N/A

	Date	Time	Temp (°C) (2)
Rotation Started	4/28/05	1500	22
Rotation Ended	4/29/05	710	22
During Rotation	N/A	N/A	22-23

Batch #	P511814
Page #	1 of 2
Analyst	CB

511927Q

Filtration Start Date/Time: 4/29/05 940

Definition of QC Types: B=Blank, X=Duplicate, S=Matrix Spike, D=Matrix Spike Duplicate

Sample	Initial Vol. (ml)	Percent Solids Determination: Filter Tare	Sample Wt. (g)	Wt. Filtrate (g)	Wt. Dried Solids and Filter (g)	% Solids	Fluid Determination: pH #1	pH #2	Fluid #	Leachate Preparation: Wt. Sample (g) (1)	Wt. Filtrate a (g)	Volume Fluid Added (ml)	Wt. Leachate a (g)	Final pH	Size Reduction b	Requested Analytes c
FSD280000-400 G9ECF B	ICP	NA	—	—	—	—	—	—	1	—		2000		—	NA	M
FSD210354-1 AR G8WP7 S/D	ICP 20					100	8.40	1.87		100				5.62		
-2 AR G8WQ1	Hg 6						7.27	1.76						5.24		
-3 G8WQN	ICP						8.77	1.82						5.65		
-4 G8WQR	Hg						8.42	1.80						5.14		
-5 G8WQT	ICP						8.65	1.83						5.60		
-7 G8WR6	Hg						8.57	1.76						5.43		
-8 G8WYA	ICP						8.70	1.78						5.70		
-9 G8WTE	Hg						8.79	1.80						5.58		
-10 G8WTG	ICP						8.62	1.79						5.26		
-11 G8WTR	Hg				N/A	100	8.65	1.83	1	100		2000		5.18	NA	M

a Required for Immiscible Multi-Phasic Samples Only
b C=Cut, CR=Crush, G=Grind, O=Other _____
c B=BNA, H=Herbicides, P=Pesticides, M=Metals

Generate a NCM for the following anomalies: Multiphasic samples, single phase oils, or samples that contain liquids that didn't filter under test conditions.

(1) Sample weights less than the method requirement require immediate notification of the PM and generation of a NCM.
(2) Temperature excursions outside 23° C ± 2° C require the immediate generation of a NCM.
NCM(s):

What c	From	To	Date	Dept.
	CB	MET	4/29/05	TCLP

Metals Preserved By	Date
CB	4/29/05

Type	Standard Number(s) and Volume(s)			Expiration Date
ICP	MT	060251-05	500 ml	1/1/06
ICP	MT	060246-05	500 ml	1/1/06
HG	HG	010223-05	50 ml	5/26/05

LOT #F5D210354

STL ST LOUIS

TCLP Extraction Record/Chain of Custody

Form: SL-INORG-0087, Rev. 3/31/05; SW-846 Method 1311: SOP: STL-IP-0016, current revision

	Fluid #1	Fluid #2	Fluid #3 (DI Water)Filter Only & Wet Chem
Daily pH Check	4.98 (4.88 – 4.98)	(2.83 – 2.93)	N/A
Lot #	0P0267-05		N/A

Logbook No.: 2651

	Date	Time	Temp (°C) ☒
Rotation Started	4/28/05	1500	22
Rotation Ended	4/29/05	710	22
During Rotation	N/A	N/A	22-23

Batch #	P371814
Page #	2 of 2
Analyst	CB

Filtration Start Date/Time: 4/29/05 940

Definition of QC Types: B=Blank, X=Duplicate, S=Matrix Spike, D=Matrix Spike Duplicate

Sample	Initial Vol. (ml)	Percent Solids Determination: Filter Tare	Sample Wt. (g)	Wt. Filtrate (g)	Wt. Dried Solids and Filter (g)	% Solids	Fluid Determination: pH #1	pH #2	Fluid #	Leachate Preparation: Wt. Sample (g) [1]	Wt. Filtrate [a] (g)	Volume Fluid Added (ml)	Wt. Leachate [a] (g)	Final pH	Size Reduction [b]	Requested Analyses [c]
F5D210354-13 G8WTV	ICP	NA				110	8.53	1.71	1	100		2000		4.95	NA	M
-14 G8WTW	ICP						8.04	1.68						4.96		
-15 G8WTX	ICP						8.60	1.82						5.63		
-16 G8WTO	ICP						8.58	1.80						5.74		
-17 G8WTJ	ICP				NA	100	8.66	1.81	1	100		2000		5.69	NA	M
	ICP															
	ICP															
	ICP															
	ICP															
	ICP															
	ICP															
	ICP															

CB 4/29/05

a Required for Immiscible Multi-Phasic Samples Only
b C=Cut, CR=Crush, G=Grind, O=Other _____
c B=BNA, H=Herbicides, P=Pesticides, M=Metals

Generate a NCM for the following anomolies: Multiphasic samples, single phase oils, or samples that contain liquids that didn't filter under test conditions.

What [c]	From	To	Date	Dept.
	CB	MET	4/29/05	TCLP

Metals Preserved By	Date
CB	4/29/05

(1) Sample weights less than the method requirement require immediate notification of the PM and generation of a NCM.
(2) Temperature excursions outside 23° C ± 2° C require the immediate generation of a NCM.
NCM(s):

Type	Standard Number(s) and Volume(s)	Expiration Date
	See Page 1	

REVISED 898 of 963

SEVERN TRENT **STL** Mercury Prep Report for Batch # 5119194

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Prep Method: SW-846 7470A **SOP Number:** STL-MT-0005, Rev 0

Extraction Code: DM **Extraction:** TCLP **Matrix:** SOLID **Prep Date:** 4/29/2005

Time In: 14:00 **Temp In:** 94°C

Time Out: 16:00 **Temp Out:** 95°C **Standard Log Ref#:** HG042905

Lot ID	Work Order #	Initial Wt/Vol	Final Volume	Lab Filtered	Due Date	Sample Location
F5D210354-001	G8WP7	6 mL	30 mL	☐	05/09/2005	A68
F5D210354-001D	G8WP7D	6 mL	30 mL	☐		A68
F5D210354-001S	G8WP7S	6 mL	30 mL	☐		A68
F5D210354-002	G8WQL	6 mL	30 mL	☐	05/09/2005	A67
F5D210354-003	G8WQN	6 mL	30 mL	☐	05/09/2005	A67
F5D210354-004	G8WQR	6 mL	30 mL	☐	05/09/2005	A54
F5D210354-005	G8WQT	6 mL	30 mL	☐	05/09/2005	A54
F5D210354-007	G8WR6	6 mL	30 mL	☐	05/09/2005	A54
F5D210354-008	G8WTA	6 mL	30 mL	☐	05/09/2005	A54
F5D210354-009	G8WTE	6 mL	30 mL	☐	05/09/2005	A44
F5D210354-010	G8WTG	6 mL	30 mL	☐	05/09/2005	A44
F5D210354-011	G8WTR	6 mL	30 mL	☐	05/09/2005	A44
F5D210354-013	G8WTV	6 mL	30 mL	☐	05/09/2005	A44
F5D210354-014	G8WTW	6 mL	30 mL	☐	05/09/2005	A44
F5D210354-015	G8WTX	6 mL	30 mL	☐	05/09/2005	A44
F5D210354-016	G8WT0	6 mL	30 mL	☐	05/09/2005	A44
F5D210354-017	G8WT1	6 mL	30 mL	☐	05/09/2005	A44

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.16, updated 2/7/2005

F5D280000-400B	G9ECFB		6 mL	30 mL	☐
F5D290000-194C	G9GMTC		6 mL	30 mL	☐

Comments:

Custody Information

Relinquished By:

Review/Received By:

Date of Transfer: 4/29/05

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.16, updated 2/7/2005

LOT #F5D210354

STL ST LOUIS

TCLP Extraction Record/Chain of Custody

Form: SL-INORG-0067, Rev. 3/31/05; SW-846 Method 1311; SOP: STL-IP-0016, current revision

Logbook No.: 2651

	Fluid #1	Fluid #2	Fluid #3 (DI Water)Filter Only & Wet Chem
Daily pH Check	4.98 (4.88 – 4.98)	(2.83 – 2.93)	N/A
Lot #	0P0267-05		N/A

	Date	Time	Temp (°C) [2]
Rotation Started	4/28/05	1500	22
Rotation Ended	4/29/05	710	22
During Rotation	N/A	N/A	22-23

Batch #	P511814
Page #	1 of 2
Analyst	CB

Filtration Start Date/Time: 4/29/05 940

Definition of QC Types: B=Blank, X=Duplicate, S=Matrix Spike, D=Matrix Spike Duplicate

Sample	Initial Vol. (ml)	Percent Solids Determination: Filter Tare	Sample Wt. (g)	Wt. Filtrate (g)	Wt. Dried Solids and Filter (g)	% Solids	Fluid Determination: pH #1	pH #2	Fluid #	Leachate Preparation: Wt. Sample (g) [1]	Wt. Filtrate [a] (g)	Volume Fluid Added (ml)	Wt. Leachate [a] (g)	Final pH	Size Reduction [b]	Requested Analyses [c]
F5D280000-400 G1ECF B	ICP / Hg	NA				-	-	-	1	-		2000		-	NA	M
F5D210354-1 G8WP7 S/D	ICP 20 / Hg 6					100	8.40	1.87		100				5.62		
-2 G8WQ1	ICP / Hg						8.27	1.76						5.24		
-3 G8WQN	ICP / Hg						8.77	1.82						5.65		
-4 G8WQR	ICP / Hg						8.42	1.80						5.14		
-5 G8WQT	ICP / Hg						8.15	1.83						5.60		
-7 G8WR6	ICP / Hg						8.57	1.76						5.43		
-8 G8WTA	ICP / Hg						8.70	1.78						5.70		
-9 G8WTE	ICP / Hg						8.79	1.80						5.58		
-10 G8WTG	ICP / Hg						8.62	1.79						5.26		
-11 G8WTR	ICP / Hg					100	8.65	1.83	1	100		2000		5.18	NA	M

a Required for Immiscible Multi-Phasic Samples Only

b C=Cut, CR=Crush, G=Grind, O=Other ____

c B=BNA, H=Herbicides, P=Pesticides, M=Metals

Metals Preserved By	Date
CB	4/29/05

Generate a NCM for the following anomolies: Multiphasic samples, single phase oils, or samples that contain liquids that didn't filter under test conditions.

(1) Sample weights less than the method requirement require immediate notification of the PM and generation of a NCM.
(2) Temperature excursions outside 23° C ± 2° C require the immediate generation of a NCM.
NCM(s):

What [c]	From	To	Date	Dept.
	CB	MET	4/29/05	TCLP

Type	Standard Number(s) and Volume(s)			Expiration Date
ICP	MT	0234-05	500 ml	1/1/06
ICP	MT	0240-05	500 ml	1/1/06
HG	HG	01023-05	50 ml	5/26/05

REVISED

LOT #F5D210354

STL ST LOUIS

TCLP Extraction Record/Chain of Custody

Form: SL-INORG-0087, Rev. 3/31/05; SW-846 Method 1311: SOP: STL-IP-0016, current revision

	Fluid #1	Fluid #2	Fluid #3 (DI Water)Filter Only & Wet Chem
Daily pH Check	4.98 (4.88 – 4.96)	(2.83 – 2.93)	N/A
Lot #	OP0267-05		N/A

Logbook No.: 2651

	Date	Time	Temp (°C) [2]
Rotation Started	4/28/05	1500	22
Rotation Ended	4/29/05	710	22
During Rotation	N/A	N/A	22-23

Batch #	P571814
Page #	2 of 2
Analyst	CB

Filtration Start Date/Time: 4/29/05 940

Definition of QC Types: B=Blank, X=Duplicate, S=Matrix Spike, D=Matrix Spike Duplicate

Sample	Initial Vol. (ml)	Percent Solids Determination: Filter Tare	Sample Wt. (g)	Wt. Filtrate (g)	Wt. Dried Solids and Filter (g)	% Solids	Fluid Determination: pH #1	pH #2	Fluid #	Leachate Preparation: Wt. Sample (g) [1]	Wt. Filtrate [a] (g)	Volume Fluid Added (ml)	Wt. Leachate [a] (g)	Final pH	Size Reduction [b]	Requested Analyses [c]
F5D210354-13 G8WTV	ICP	NA				110	8.53	1.71	1	100		2000		4.95	NA	M
-14 G8WTW	ICP						8.04	1.68						4.96		
-15 G8WTX	ICP						8.60	1.82						5.63		
-16 G8WTO	ICP						8.58	1.80						5.74		
-17 G8WT1	ICP				NA	100	8.66	1.81	1	100		2000		5.69	NA	M
	ICP															
	ICP															
	ICP															
	ICP															
	ICP															
	ICP															

CB 4/29/05

a Required for Immiscible Multi-Phasic Samples Only
b C=Cut, CR=Crush, G=Grind, O=Other _____
c B=BNA, H=Herbicides, P=Pesticides, M=Metals

Generate a NCM for the following anomolies: Multiphasic samples, single phase oils, or samples that contain liquids that didn't filter under test conditions.

Metals Preserved By	Date
CB	4/29/05

(1) Sample weights less than the method requirement require immediate notification of the PM and generation of a NCM.
(2) Temperature excursions outside 23° C ± 2° C require the immediate generation of a NCM.
NCM(s):

What [c]	From	To	Date	Dept.
	CB	MET	4/29/05	TCLP

Type	Standard Number(s) and Volume(s)	Expiration Date
	See Page 1	

REVISED

WET CHEMISTRY

(ALPHABETICALLY BY ANALYSIS)

LOT #F5D210354

STL ST LOUIS

Severn Trent
St. Louis Laboratory

REACTIVE CYANIDE REPORT

SOP STL-IP-0001, current revision

Analyst: CF
Project No.:
Reviewed by: 5/10/05

Batch No.: 5126308

Prep Date: 5/4/2005
Analysis Date: 5/6/2005
Method No.: 9010
Date:

Laboratory ID	Standard ID	Raw Value (ug/L)	Dilution	Raw Value (mg/L)	Sample Weight (Kg)	Time of Measurement (seconds)	Scrubber Volume (L)	Reactive Cyanide Final Concentration (mg/Kg)	Percent Recovery	RPD	LCS True Value:
BLANK		0	1	0	0.01	1800	0.05	< 0.025			
LCS		152.42	1	0.15242	0.01	1800	0.05	0.76			
G8WQV		7.95	1	0.00795	0.01	1800	0.05	0.04			
G8WQV X		11.65	1	0.01165	0.01	1800	0.05	0.06			
G8WQV S		104.34	1	0.10434	0.01	1800	0.05	0.52			
G8WTT		14.08	1	0.01408	0.01	1800	0.05	0.07			
G8WT3		10.93	1	0.01093	0.01	1800	0.05	0.05			
G817H		21.27	1	0.02127	0.01	1800	0.05	0.11			
G817H X		11.42	1	0.01142	0.01	1800	0.05	0.06			
G817H S		116.97	1	0.11697	0.01	1800	0.05	0.58			
G88WQ		8.87	1	0.00887	0.01	1800	0.05	0.04			
G88W5		3.03	1	0.00303	0.01	1800	0.05	< 0.025			
G88W7		0.51	1	0.00051	0.01	1800	0.05	< 0.025			
G88XA		10.64	1	0.01064	0.01	1800	0.05	0.05			
G88XC		0	1	0	0.01	1800	0.05	< 0.025			
G88XD		0	1	0	0.01	1800	0.05	< 0.025			
G88XE		0	1	0	0.01	1800	0.05	< 0.025			
G896E		0	1	0	0.01	1800	0.05	< 0.025			
G8985		0	1	0	0.01	1800	0.05	< 0.025			
G899L		0	1	0	0.01	1800	0.05	< 0.025			
G9A7F		0.34	1	0.00034	0.01	1800	0.05	< 0.025			
G9A7P		33.71	1	0.03371	0.01	1800	0.05	0.17			

Control Limits (Water/Soil): LCS/MS = 10 - 100

$$\text{Total Available CN (mg/Kg)} = \frac{\text{raw value (mg/L) x scrubber volume(L) x 1800}}{\text{samples weight (Kg) x time (seconds)}}$$

File: Slsvr01\Wet Chem Results\ReacCN5605.xls, modified 3/22/04

REVISED

STL

STL St. Louis

DISTILLATION SHEET/EXTRACT CHAIN OF CUSTODY

Analysis: CN Total Prep Date: 5/5/05 Batch No.: _____

Method No.: _____ Analyst: CF

SEQUENCE NO.	SAMPLE NO.	SAMPLE Weight/Volume	FINAL VOLUME	Interference Check Performed?	COMMENTS
1	BLK		50mL	NA	
2	LCS			↓	
3	HCS			↓	
4	G9DTE	50mL		Yes	
5	-S	↓		↓	
6	G9EXT				
7	-X				
8	-S				
9	G9F0K				
10	G9K2T				
11	G9K2Y				
12	G9QQP				
13	G9QQ2				
14	G9QRE				
15	G9QRL				
16	G9QRX				
17	G9RJ1				
18	G9RK1				
19	G9TKF				
20	G9TN8	↓	↓	↓	
21	G9QHP				
22	G9QJM				
23	G9QKN				
24	G9QKQ				
25	G9QMT	↓	↓	↓	

Note: Document custody transfer on date of distillatio extraction.

DATE	RELEASED BY	RECEIVED BY
~~03/04~~		~~REVISED~~

LOT #F5D2 [illegible]

STL St. Louis

Reactive Cyanide/Sulfide

DISTILLATION SHEET/EXTRACT CHAIN OF CUSTODY

Analysis: Reactive CnS Prep Date: 5/5/05 Batch No.: _____

Method No.: _____ Analyst: JDJm

Flow rate maintained at 60 mL/min? X Yes ___No

Stirrer setting maintained at approximately 30 rpm? X Yes ___No

Length of time samples distilled: 30 min.

SEQUENCE NO.	SAMPLE NO.	SAMPLE Weight/Volume	FINAL VOLUME	COMMENTS
1	BLK	50ml	50ml	
2	LCS	↓	↓	
3	G9HTH	10ml	↓	Sulfide Only
4	G9HTHX	↓	↓	↑
5	G9HTHS	↓	↓	↓
6	G9H2D	↓	↓	↓
7	G9H22	↓	↓	↓
8	G9H26	↓	↓	↓
9	G9H3C	↓	↓	↓
10	G9H3F	↓	↓	↓
11	G9H3K	↓	↓	↓
12	G9H3M	↓	↓	↓
13	G9H3P	↓	↓	Sulfide Only
14	G9JG1	↓	↓	
15	G9JHQ	↓	↓	
16	G9RE6	~~5g~~ 10g	↓	
17	G9RFM ~~G9RE~~ Duplicate	10g	↓	
18	G9RF1	↓	↓	
19	G9RF4	↓	↓	
20	G9RGA	↓	↓	
21	G9P28	↓	↓	
22	G9P3M	10ml	↓	
23	G9JHQ-X	↓	↓	
24	G9JHQ-S	↓	↓	
25				

DATE	RELEASED BY	RECEIVED BY
		~~REVISED~~

LOT #F~~D010254~~

STL St. Louis

Reactive Cyanide/Sulfide

DISTILLATION SHEET/EXTRACT CHAIN OF CUSTODY

Analyte: Reactive CN/S Prep Date: 5/4/05 Batch No.: _____

Method No.: _____ Analyst: DZM

Flow rate maintained at 60 mL/min? X Yes ___ No

Stirrer setting maintained at approximately 30 rpm? X Yes ___ No

Length of time samples distilled: 30 min

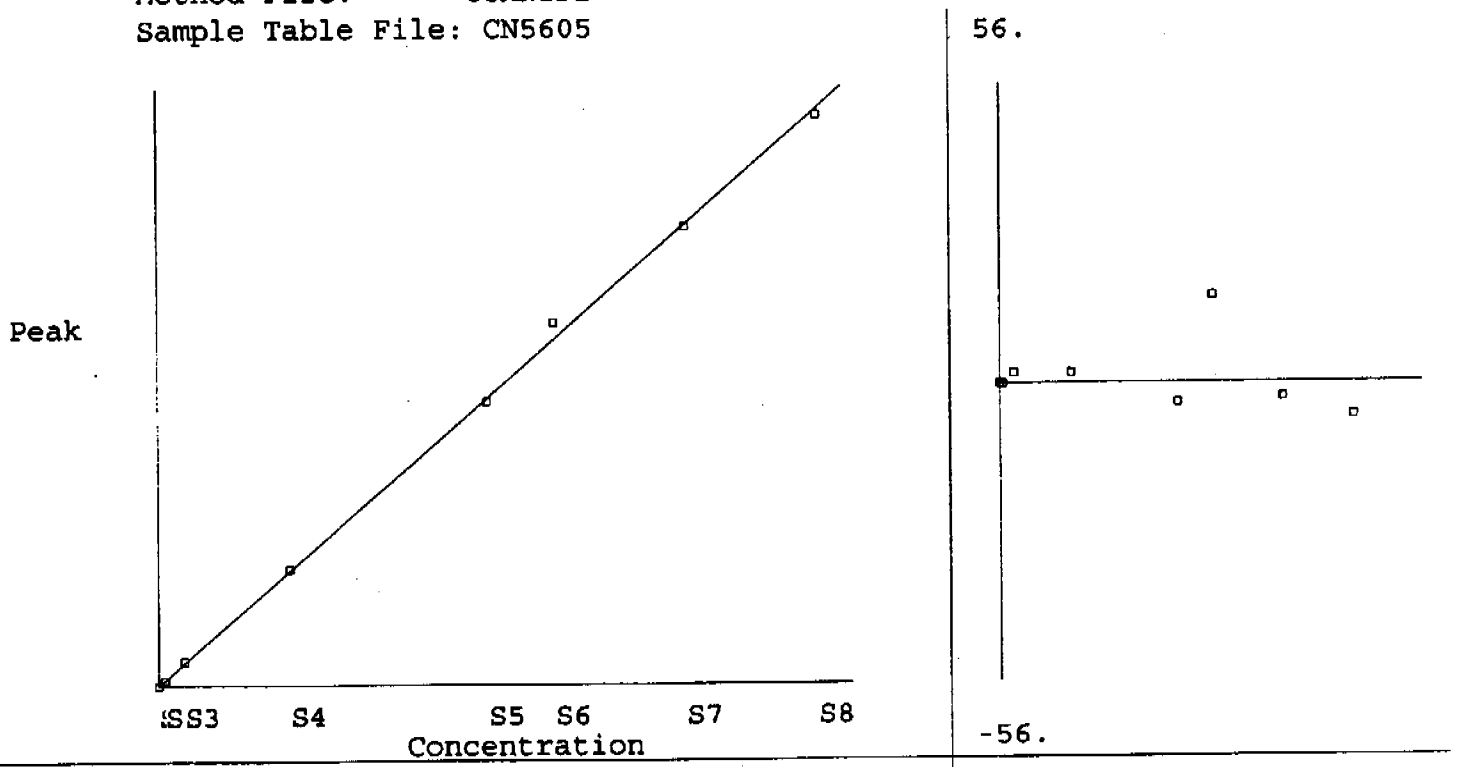
SEQUENCE NO.	SAMPLE NO.	SAMPLE Weight/Volume	FINAL VOLUME	COMMENTS
1	BLK	50ml	50ml	
2	LCS	↓		
3	G9A[illegible]F	10g		
4	G9A7P			
5	G8WQV			
6	G8WQV-X			
7	G8WQV-S			
8	G8WTT			
9	G8WT3			
10	G817H			
11	G817H-X			
12	G817H-S			
13	G88WQ			
14	G88W5			
15	G88W7			
16	G88XA			
17	G88XC			
18	G88XD			
19	G88XE			
20	G886E			
21	G8985			
22	G899L	↓	↓	
23				
24				
25				

DATE	RELEASED BY	RECEIVED BY
		REVISED

LOT #F5D210354

STL ST LOUIS 5/6/05 10:10 Standard Set #1.

Data File: CN5605
Method File: CYANIDE
Sample Table File: CN5605



S#	Peak	Value	Calc	Residual
S1	-0.01	0.00	-0.09	-0.09
S2	0.57	5.00	4.85	-0.15
S3	2.55	20.00	21.62	1.62
S4	11.97	100.00	101.66	1.66
S5	29.03	250.00	246.61	-3.39
S6	36.99	300.00	314.20	14.20
S7	46.78	400.00	397.35	-2.65
S8	58.20	500.00	494.39	-5.61

Coefficients:

Intercept :	0
Slope :	8.49407
Std Dev :	6.06029
Corr Coef :	0.999511 ✓
R^2 :	0.999022

STL ST LOUIS
Page: 1

Order of Fit: First
Coefs: 1st: 0.000000 2nd: 8.494066

Report Date: 5/6/05
Analysis Date: 5/6/05
Data File: CN5605
Method Name: CYANIDE
Units: ug/L
Description: Cyanide

R^2: 0.999022
Corr: 0.999511
Std. Dev.: 6.060290

Sample	Sample ID	Dilution	Weight	Corr. Conc.	Flags	Time
1	P			509.20		07:47:33
2	W			3.05	I	07:48:49
3	S1			0.00	-szI	07:50:05
4	S2			4.85	s	07:51:22
5	S3			21.62	s	07:52:34
6	S4			101.66	s	07:53:50
7	S5			246.61	s	07:55:05
8	S6			314.20	s	07:56:19
9	S7			397.35	s	07:57:35
10	S8			494.39	s	07:58:50
11	ICV			208.94/200 104%		08:00:05
12	ICB			0.00✓	-zRI	08:01:20
13	BLANK			0.00✓	-zRI	08:02:35
14	LCS			152.42		08:03:50
15	G9A7F			0.34	I	08:05:05
16	G9A7P			33.71		08:06:21
17	G8WQV			7.95		08:07:37
18	G8WQV X			11.65		08:08:52
19	G9WQV S			104.34		08:10:07
20	G8WTT			14.08		08:11:22
21	G8WT3			10.93		08:12:37
22	G817H			21.27		08:13:52
23	CCV			250.86/250 100%		08:15:06
24	CCB			0.00✓	-zRI	08:16:21
25	G817H X			11.42		08:17:37
26	G817H S			116.97		08:18:53
27	G88WQ			8.87		08:20:08
28	G88W5			3.03	I	08:21:22
29	G88W7			0.51	I	08:22:37
30	G88XA			10.64		08:23:52
31	G88XC			0.00	-zRI	08:25:07
32	G88XD			0.00	-zRI	08:26:22
33	G88XE			0.00	-zI	08:27:37
34	G886E			0.00	-zRI	08:28:53
35	CCV			252.54/250 101%		08:30:09
36	CCB			0.00✓	-zRI	08:31:24
37	G8985			0.00	-zRI	08:32:39
38	G899L			0.00	-zRI	08:33:54
39	BLANK			0.00	-zRI	08:35:09
40	LCS			138.91		08:36:25
41	G9JG1			0.00	-zRI	08:37:39
42	G9JHQ			0.00	-zRI	08:38:54
43	G9RE6			0.00	-zRI	08:40:09
44	G9RFM			0.00	-zRI	08:41:24
45	G9RF1			0.00	-zRI	08:42:39

Order of Fit: First
Coefs: 1st: 0.000000 2nd: 8.494066

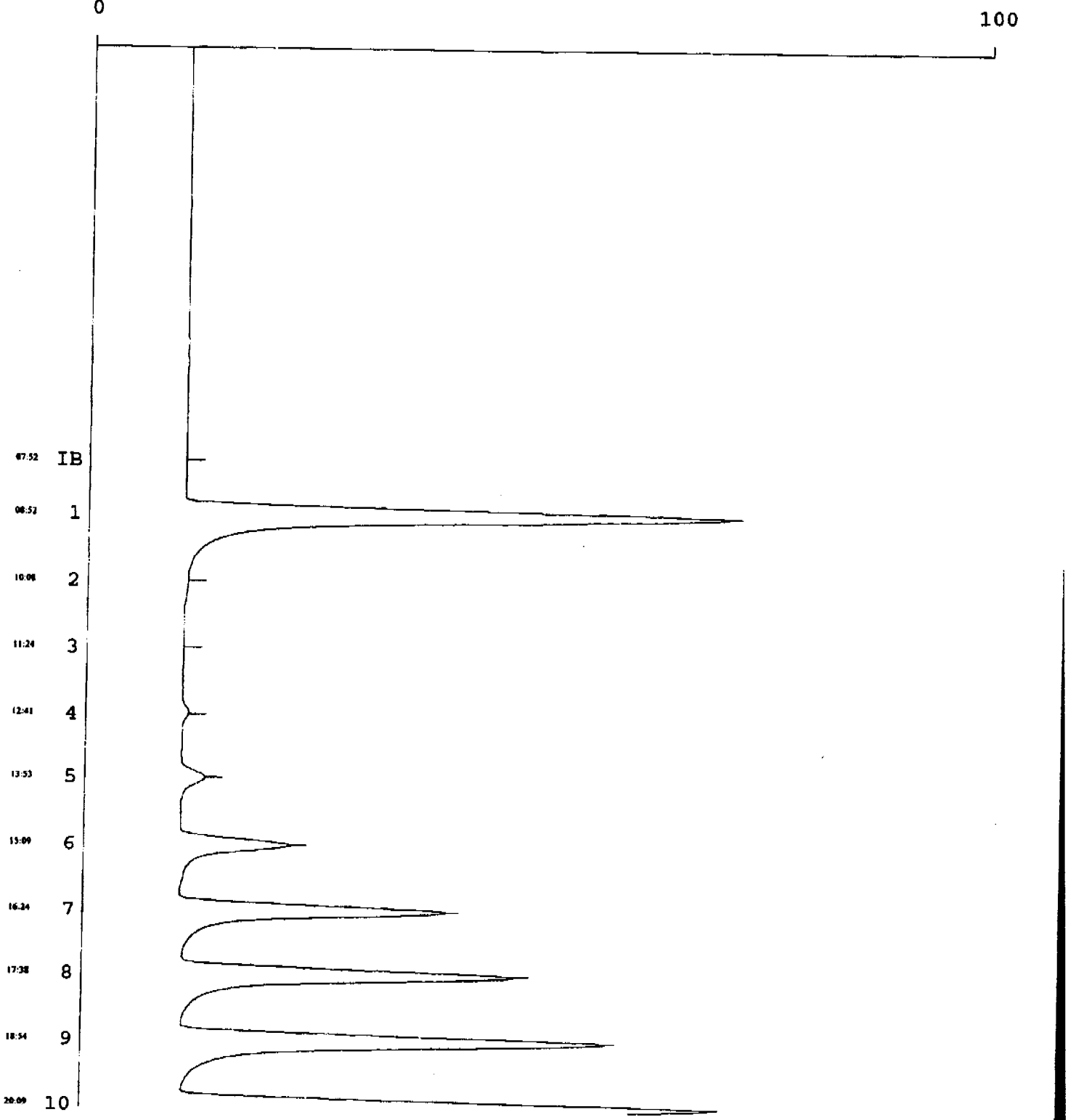
Report Date: 5/6/05
Analysis Date: 5/6/05
Data File: CN5605
Method Name: CYANIDE
Units: ug/L
Description: Cyanide

R^2: 0.999022
Corr: 0.999511
Std. Dev.: 6.060290

Sample	Sample ID	Dilution	Weight	Corr. Conc.	Flags	Time
46	G9RF4			0.00	-zRI	08:43:54
47	CCV			248.00/250 99%		08:45:09
48	CCB			0.00✓	-zRI	08:46:24
49	G9RGA			0.00	-zRI	08:47:39
50	G9P28			0.00	-zRI	08:48:54
51	G9P3M			0.00	-zRI	08:50:09
52	G9JHQ X			0.00	-zRI	08:51:25
53	G9JHQ S			175.62		08:52:41
54	BLANK			0.00✓	-zRI	08:53:56
55	LCS			102.75/100 103%		08:55:11
56	HCS			388.13/400 97%		08:56:27
57	G9DTE			14.52		08:57:41
58	G9DTE S			101.61		08:58:57
59	CCV			265.44/250 106%		09:00:12
60	CCB			0.00✓	-zRI	09:01:27
61	G9EXT			0.00	-zRI	09:02:42
62	G9EXT X			0.00	-zRI	09:03:57
63	G9EXT S			92.53		09:05:12
64	G9E0K			0.00	-zRI	09:06:27
65	G9K2T			142.04		09:07:43
66	G9K2V			139.72		09:08:58
67	G9QQP			0.00	-zRI	09:10:13
68	G9QQ2			0.00	-zRI	09:11:28
69	G9QRE			0.00	-zRI	09:12:43
70	G9QRL			43.76		09:13:59
71	CCV			258.21/250 103%		09:15:13
72	CCB			0.00✓	-zRI	09:16:28
73	G9QRX			0.00	-zRI	09:17:43
74	G9RJ1			0.00	-zRI	09:18:58
75	G9RKJ			0.00	-zRI	09:20:13
76	G9TKF			0.00	-zRI	09:21:28
77	G9TN8			0.00	-zRI	09:22:43
78	G9QHP			0.00	-zRI	09:23:58
79	G9QJM			0.00	-zRI	09:25:13
80	G9QKN			0.00	-zRI	09:26:28
81	G9QKQ			0.00	-zRI	09:27:43
82	G9QMT			0.00	-zRI	09:28:59
83	CCV			246.82/250 99%		09:30:15
84	CCB			0.00✓	-zRI	09:31:30
85	LCS			100.10		09:32:45
86	CCV			257.92/250 103%		09:34:00
87	CCB			0.00✓	-zRI	09:35:15
88	P			505.52		09:36:30

5/6/2005 10:10

Data: CN5605
Mthd: CYANIDE
Samp: CN5605



5/6/2005 10:10

Page:2

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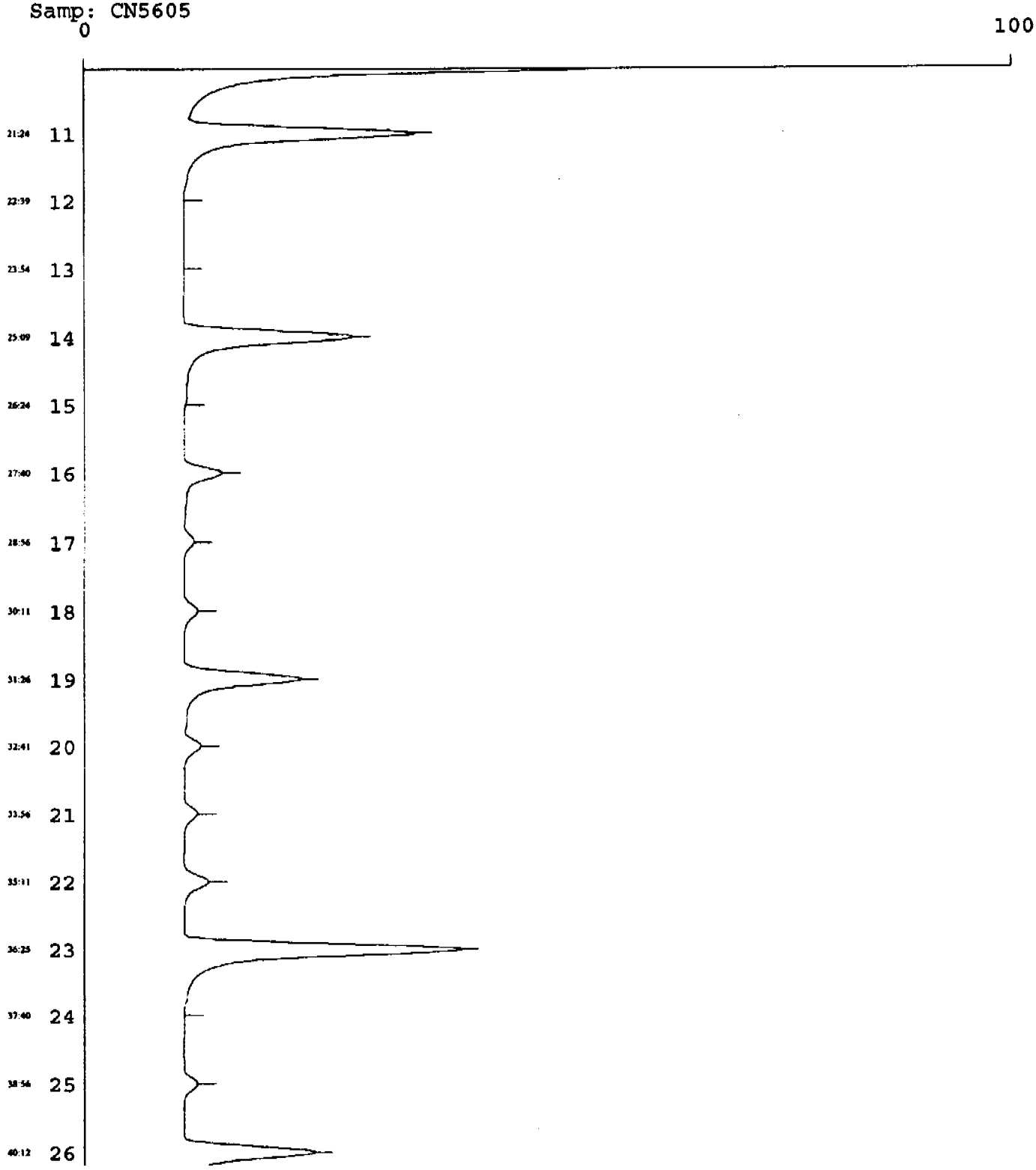
Mthd: CYANIDE
Samp: CN5605



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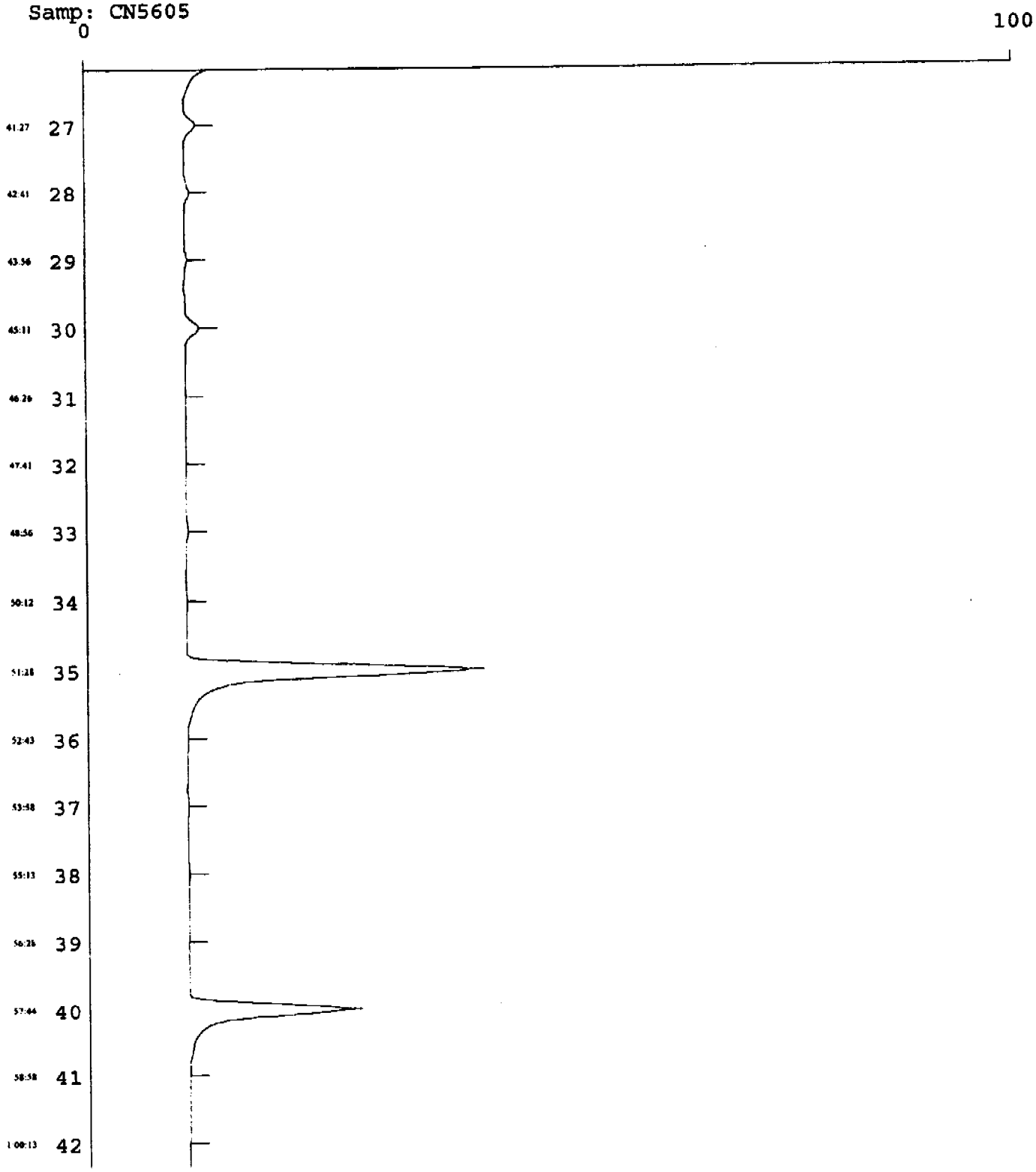

5/6/2005 10:10

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Mthd: CYANIDE
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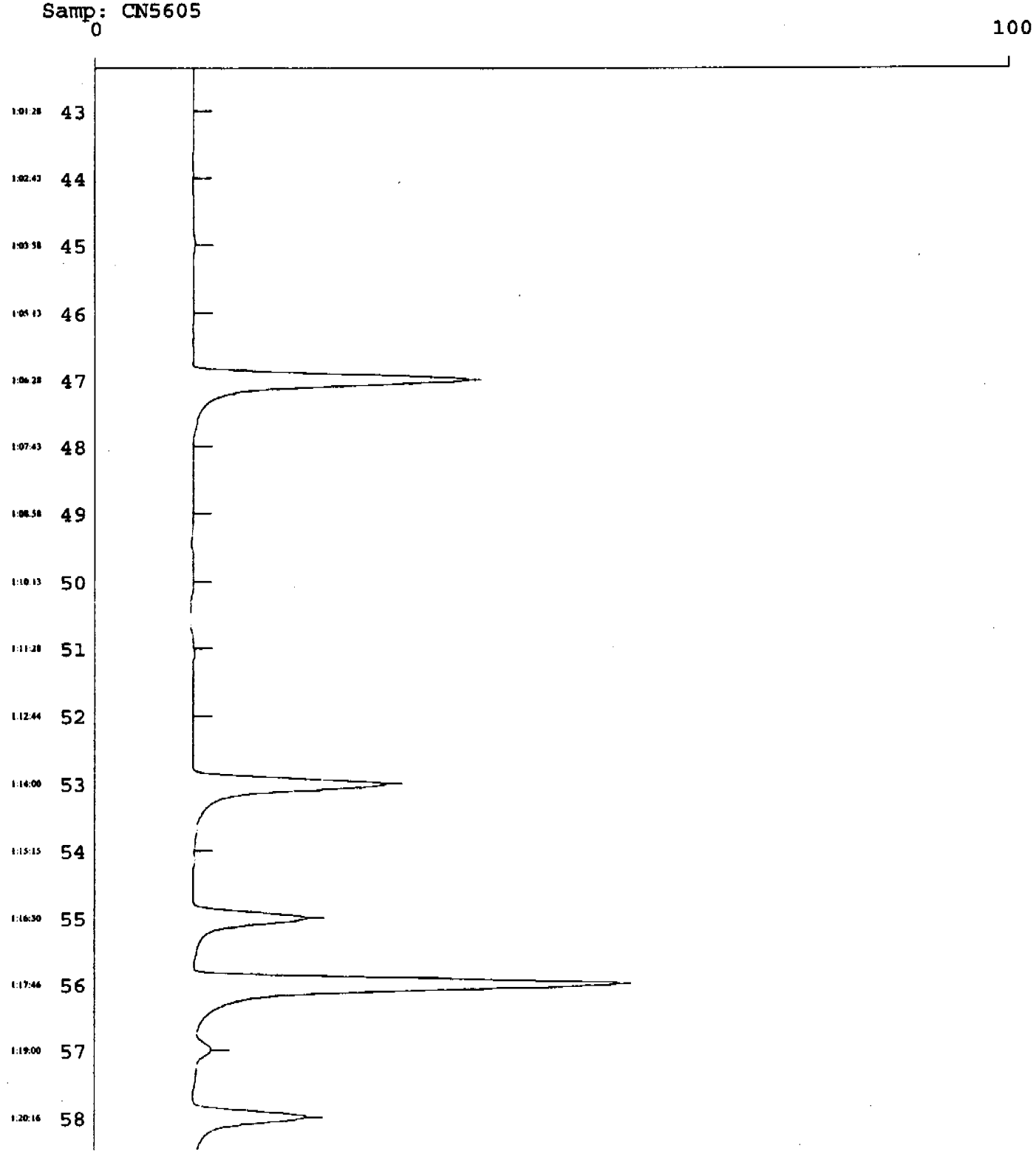

5/6/2005 10:10

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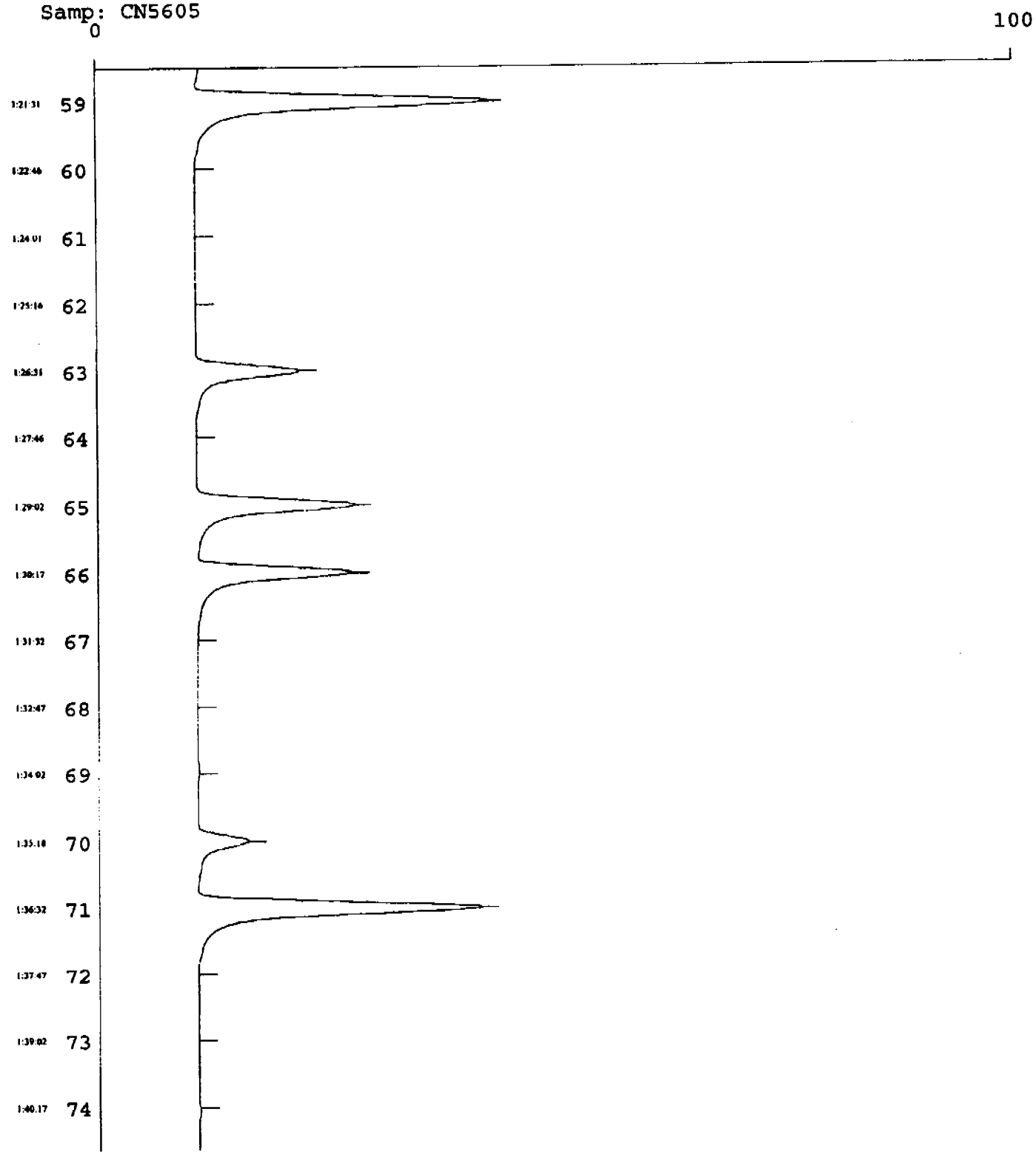
Samp: CN5605



5/6/2005 10:10

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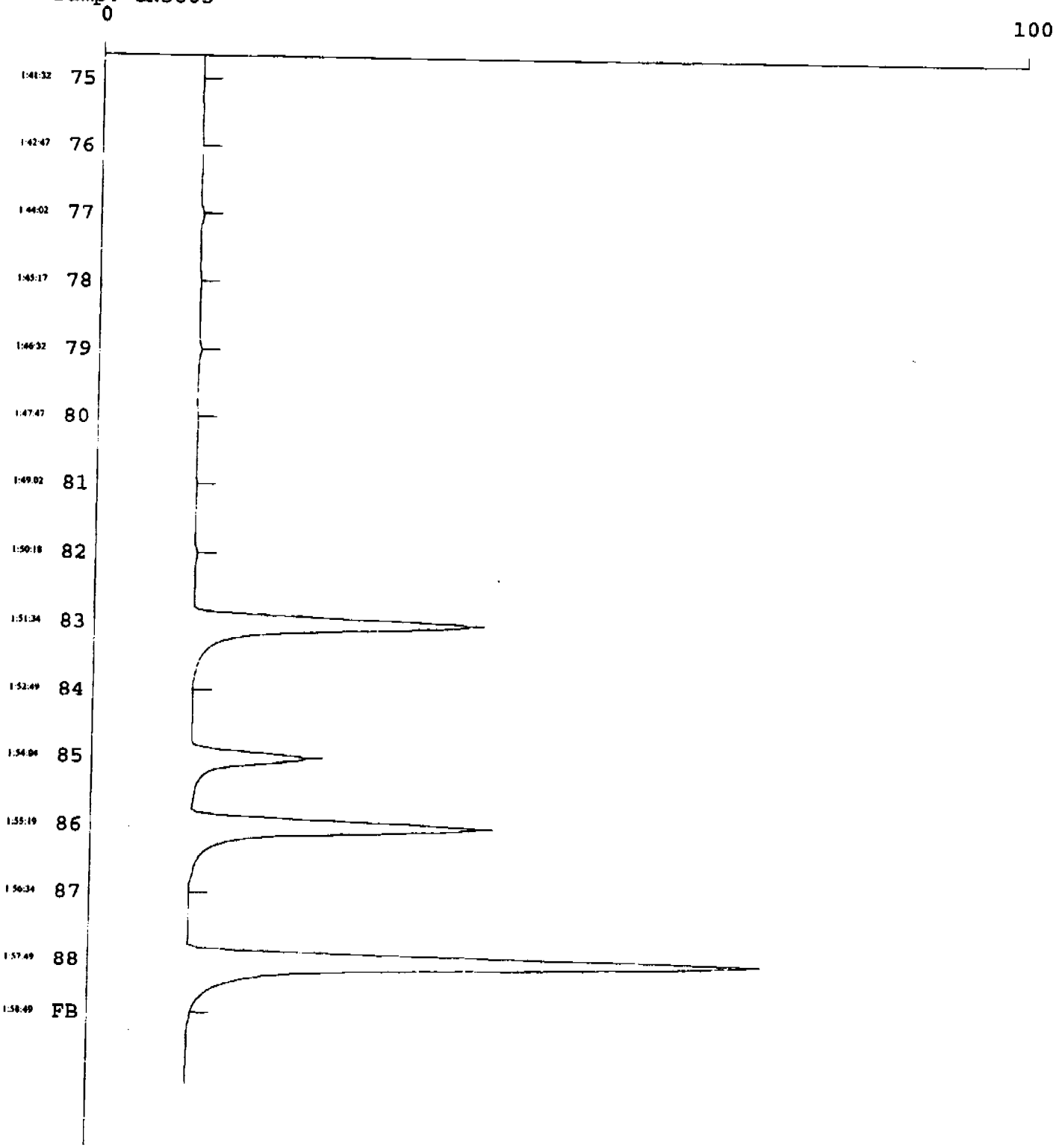
Mthd: CYANIDE
Samp: CN5605



PDE115

Severn Trent Laboratories, Inc.
Inorganics Batch Review
QC Batch **5115320**

Date 4/25/2005
Time 14:16:11

Method Code:**AE Flash Point (1010, Closed Cup)**
Analyst:**Brian M. Wingbermuehle**

Work Order	Result	Units	LDL/Dil	Prep. - Anal.	Total Solids	PSRL Flag	R/R	Rounded Output Result	LDL	Dil.
G8WQV-1-AM	>60	deg C		04/25/05	.00	N		60.0		1.00
G8WQV-1-AP	>60	deg C		04/25/05	.00	N		60.0		1.00
G8WTT-1-AG	>60	deg C		04/25/05	.00	N		60.0		1.00
G8WT3-1-AG	>60	deg C		04/25/05	.00	N		60.0		1.00
G817H-1-AF	>60	deg C		04/25/05	.00	N		60.0		1.00
G817H-1-AL	>60	deg C		04/25/05	.00	N		60.0		1.00
G826H-1-AE	>60	deg C		04/25/05	.00	N		60.0		1.00

Notes:

Check Standard

Work Order	Exception Code	True Spike	Measured Spike	Percent Recovered	Prep. - Anal.	Control Limits	Dil.
G8488-1-AA		27.2	28	102.94	04/25/05	(96-104)	1.00

Notes:

PRODUCTION TOTALS

TEST	TOTAL #	SAMPLE #	QC #	MATRIX #	OTHER #	MISC #	HOURS
	0	0	0	0	0	0	.0

STL

Batch #: 5115320-1
Analyst: BMW
Analysis Date: 4/25/05

STL
St. Louis
FLASHPOINT REPORT

(SOP No. STL-WC-0026, Current Revision)

SW 2RW 4/25/05

Lab ID	Flashpoint °C	Comments
LCS	28.0°C	
G8WQV	No Flash @ 60°C	
G8WQV-X	No Flash @ 60°C	
G826H	No Flash @ 60°C	
G8WTT	No Flash @ 60°C	
G8WT3	No Flash @ 60°C	
G817H	No Flash @ 60°C	
G817H-X	No Flash @ 60°C	
G8XQL	No Flash @ 60°C	lqvd
G8XQL-X	No Flash @ 60°C	
CCV	27.5°C	

The flashpoint of the p-Xylene check standard must be 27.2° C ± 1.1° C (26.1° C to 28.3° C).

LOT #F5D210354

STL ST LOUIS

STL St. Louis

Standards Preparation Logbook Summary

Apr-25-2005

Logbook: \\Qstlmo01\Stdslog\l-Prep.std

Date Prep/Opened	Std ID	Mix Name	Component	Parent ID	Parent Concentration	Aliquot	Final Volume	Final Concentration	Solvent	Analyst	Exp. Date(1)	Exp. Date(2)
08/03/2004	IP0907-04	P-Xylene	p-xylene		99.000 %			99.000 %	None	braatzs	07/16/2009	07/16/2009

Reviewed By: SWC 4/25/05

Page 1 of 1

REVISED

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STL St. Louis

Standards Preparation Logbook Record

Apr-25-2005

Logbook: \\Qstlmo01\Stdslog\I-Prep.std

IP0907-04. P-Xylene

Analyst: braatzs

Vendor: Aldrich
Lot No.: EA 43548tb
Vendor's Expiration Date: 07-16-2009
Solvent: None
Date Prep./Opened: 08-03-2004
Date Received: 09-16-2003
Date Expires(1): 07-16-2009 (5 Years)
Date Expires(2): 07-16-2009 (5 Years)

Component	Initial Conc (%)	Final Conc (%)
p-xylene	99.000	99.000

Page 1 of 1

PDE115

Severn Trent Laboratories, Inc.
Inorganics Batch Review
QC Batch 5112218

Date 4/25/2005
Time 8:12:03

Method Code:WM Moisture, Percent (160.3)
Analyst:Steve Braatz

Work Order	Result	Units	LDL/Dil	Prep. - Anal.	Total Solids	PSRL Flag	R/R	Rounded Result	Output LDL	Dil.
G8Q9X-1-AC	11.16	%	0.1	04/22-04/25/05	11.16	N		11.2	0.10	1.00
G8Q90-1-AC	7.19	%	0.1	04/22-04/25/05	.00	N		7.2	0.10	1.00
G8Q90-1-AE	6.52	%	0.1	04/22-04/25/05	.00	N		6.5	0.10	1.00
G8WP7-1-AA	23.51	%	0.1	04/22-04/25/05	.00	N		23.5	0.10	1.00
G8WQL-1-AM	24.74	%	0.1	04/22-04/25/05	.00	N		24.7	0.10	1.00
G8WQN-1-AM	24.69	%	0.1	04/22-04/25/05	.00	N		24.7	0.10	1.00
G8WQR-1-AM	16.93	%	0.1	04/22-04/25/05	.00	N		16.9	0.10	1.00
G8WQT-1-AM	17.67	%	0.1	04/22-04/25/05	.00	N		17.7	0.10	1.00
G8WQV-1-AA	23.46	%	0.1	04/22-04/25/05	.00	N		23.5	0.10	1.00
G8WR6-1-AM	20.86	%	0.1	04/22-04/25/05	.00	N		20.9	0.10	1.00
G8WTA-1-AM	24.49	%	0.1	04/22-04/25/05	.00	N		24.5	0.10	1.00
G8WTE-1-AM	24.78	%	0.1	04/22-04/25/05	.00	N		24.8	0.10	1.00
G8WTG-1-AM	16.54	%	0.1	04/22-04/25/05	.00	N		16.5	0.10	1.00
G8WTR-1-AM	24.71	%	0.1	04/22-04/25/05	.00	N		24.7	0.10	1.00
G8WTT-1-AA	23.76	%	0.1	04/22-04/25/05	.00	N		23.8	0.10	1.00
G8WTV-1-AM	10.62	%	0.1	04/22-04/25/05	.00	N		10.6	0.10	1.00
G8WTW-1-AM	14.70	%	0.1	04/22-04/25/05	.00	N		14.7	0.10	1.00
G8WTX-1-AM	25.28	%	0.1	04/22-04/25/05	.00	N		25.3	0.10	1.00
G8WT0-1-AM	24.96	%	0.1	04/22-04/25/05	.00	N		25.0	0.10	1.00
G8WT1-1-AM	14.65	%	0.1	04/22-04/25/05	.00	N		14.6	0.10	1.00
G8WT3-1-AA	19.65	%	0.1	04/22-04/25/05	.00	N		19.6	0.10	1.00

Notes:

PRODUCTION TOTALS

TEST	TOTAL #	SAMPLE #	QC #	MATRIX #	OTHER #	MISC #	HOURS
	0	0	0	0	0	0	.0

REVISED

STL ST LOUIS

LOT #F5D210354

Sheet1

Severn Trent St. Louis

Percent Total Solid/Percent Moisture Logsheet

STL-WC-0005, current revision

Analysis: %Moisture Time In: 11:11 Batch: 5112218

Prep Date: 04/22/04 Time Out: _____ Analyst: sdb

Anal Date: 4/13/05 Balance 1 SN: L22450 Reviewed By: SW 4/25/05

Balance 2 SN: L22450

Pan Number	Sample Id	Pan wt	Wet Sam + Pan g	Dry Sam + Pan wt	Results Total Solids %	Results MS %	Comments
1	G8WP7-001	0.9760	6.0660	4.8695	76.49	23.51	
2	G8WQL-001	0.9775	7.9281	6.2083	75.26	24.74	
3	G8WQN-001	0.9726	8.2996	6.4907	75.31	24.69	
4	G8WQR-001	0.9749	14.4596	12.1770	83.07	16.93	
5	G8WQT-001	0.9777	7.0813	6.0029	82.33	17.67	
6	G8WQV-001	0.9719	6.9060	5.5139	76.54	23.46	
7	G8WR6-001	0.9711	8.2611	6.7406	79.14	20.86	
8	G8WTA-001	0.9705	4.9547	3.9791	75.51	24.49	
9	G8WTE-001	0.9666	5.4834	4.3642	75.22	24.78	
10	G8WTG-001	0.9706	7.0689	6.0600	83.46	16.54	
11	G8WTR-001	0.9724	5.5964	4.4540	75.29	24.71	
12	G8WTT-001	0.9796	6.9622	5.5408	76.24	23.76	
13	G8WTV-001	0.9758	6.6919	6.1054	89.74	10.26	
14	G8WTW-00	0.9711	5.5073	4.8404	85.30	14.70	
15	G8WTX-001	0.9771	5.5045	4.3601	74.72	25.28	
16	G8WT0-001	0.9722	9.0340	7.0219	75.04	24.96	
17	G8WT1-001	0.9799	8.2743	7.2057	85.35	14.65	
18	G8WT3-001	0.9679	7.9510	6.5786	80.35	19.65	
19	G8Q9X-001	0.9730	11.7118	10.5129	88.84	11.16	
20	G8Q90-001	0.9726	13.5459	12.6425	92.81	7.19	
21	G8Q90X	0.9776	13.1800	12.3839	93.48	6.52	
22							
23							
24							
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35							
36							
37							

STL
St. Louis Laboratory

Data Tracking Sheet

Lot #: F5D210354
↓ 226357
23023

Batch #: 5115319

Analysis: Paint Filter

SDG:

Date Released by Lab:
SW 4/25/05

Date Received By Document Control:

Check as Applicable:

☐ **Certificate** ☐ **Data Package**

Notes:

RQC050 Severn Trent Laboratories, Inc. Run Date 4/25/05
WET CHEM BATCHSHEET Time 15:13:09

STL St. Louis

PRODUCTION FIGURES WET CHEM

TOTAL NUMBER	SAMPLE NUMBER	QC	RE-RUN MATRIX	RE-RUN OTHER	MISC NUMBER	TOTAL HOURS	EXPANDED DELIVERABLE

METHOD: FQ Paint Filter Test (9095, Free Liquids)
QC BATCH #: 5115319 INITIALS: DATA ENTRY:
PREP DATE: 4/25/05 PREP INITIALS
COMP DATE: 4/25/05 ANAL DATE
USER: WINGBERB

Work Order	Lab Number	Structured Analysis	Exp. Del.	Analysis Date	Sample ID
G8WQV-1 AL	F-5D210354-006	XX A 88 FQ 01	Y-D		RE73-05-58829
G8WQV-1 AR	F-5D210354-006-X	XX A 88 FQ 01	Y-D		RE73-05-58829 DUP
G8WTT-1 AF	F-5D210354-012	XX A 88 FQ 01	Y-D		RE73-05-58835
G8WT3-1 AF	F-5D210354-018	XX A 88 FQ 01	Y-D		RE73-05-58841
G817H-1 AE	F-5D220357-006	XX A 88 FQ 01	Y-D		RE73-05-58879
G826H-1 AF	F-5D230123-001	XX A 88 FQ 01	B		SB-1

Control Limits

PDE115

Severn Trent Laboratories, Inc.
Inorganics Batch Review
QC Batch **5115319**

Date 4/25/2005
Time 14:15:43

Method Code:**FQ Paint Filter Test (9095, Free Liquids)**
Analyst:**Brian M. Wingbermuehle**

Work Order	Result	Units	LDL/Dil	Prep. - Anal.	Total Solids	PSRL Flag	R/R	Rounded Result	Output LDL	Dil.
G8WQV-1-AL	PASS	No Units	0	04/25/05	.00	N		PAS,S	0.0	1.00
G8WQV-1-AR	PASS	No Units	0	04/25/05	.00	N		PAS,S	0.0	1.00
G8WTT-1-AF	PASS	No Units	0	04/25/05	.00	N		PAS,S	0.0	1.00
G8WT3-1-AF	PASS	No Units	0	04/25/05	.00	N		PAS,S	0.0	1.00
G817H-1-AE	PASS	No Units	0	04/25/05	.00	N		PAS,S	0.0	1.00
G826H-1-AF	PASS	No Units	0	04/25/05	.00	N		PAS,S	0.0	1.00

Notes:
S The result was determined using the Method of Standard Additions (
MSA).

PRODUCTION TOTALS

TEST	TOTAL #	SAMPLE #	QC #	MATRIX #	OTHER #	MISC #	HOURS
	0	0	0	0	0	0	.0

STL
St. Louis Laboratory

PAINT FILTER LIQUIDS TEST
(STL-WC-0031, Current Revision)

Analyst: SMW
Analysis Date: 4/25/05
Reviewed By: 4/25/05

Project No.:
Batch No.: 5115319

Laboratory ID	Sample Weight (g)	Start Time	Stop Time	PASS	FAIL
G8WQV	100.0g	13:30	13:35	✓	
G8WQV-X		13:32	13:37	✓	
G8WT1		13:35	13:40	✓	
G8WT3		13:38	13:43	✓	
G817H		13:41	13:46	✓	
G826H		13:42	13:47	✓	

PASS = Free liquids not present
FAIL = Free liquids present

PDE115

Severn Trent Laboratories, Inc.
Inorganics Batch Review
QC Batch **5115278**

Date 4/25/2005
Time 14:00:23

Method Code:**FK pH (9045) - Non-Aqueous**
Analyst:**Mike Anderson**

Work Order	Result	Units	LDL/Dil	Prep. - Anal.	Total Solids	PSRL Flag	R/R	Rounded Result	Output LDL	Dil.
G8WQV-1-AC	7.97	No Units	0	04/25/05	.00	N		8.0	0.0	1.00
G8WQV-1-AQ	8.05	No Units	0	04/25/05	.00	N		8.0	0.0	1.00
G8WTT-1-AC	8.05	No Units	0	04/25/05	.00	N		8.0	0.0	1.00
G8WT3-1-AC	8.13	No Units	0	04/25/05	.00	N		8.1	0.0	1.00
G817H-1-AA	8.26	No Units	0	04/25/05	.00	N		8.3	0.0	1.00
G817H-1-AP	8.19	No Units	0	04/25/05	.00	N		8.2	0.0	1.00

Notes:

Check Standard

Work Order	Exception Code	True Spike	Measured Spike	Percent Recovered	Prep. - Anal.	Control Limits	Dil.
G846W-1-AA		7	7.01	100.14	04/25/05	(99-101)	1.00

Notes:

PRODUCTION TOTALS

TEST	TOTAL #	SAMPLE #	QC #	MATRIX #	OTHER #	MISC #	HOURS
	0	0	0	0	0	0	.0

STL St. Louis

pH in Soil

(SOP # STL-WC-0021, Current Revision)

Method No.: SW846 9045 Analysis Date: 4-25-05 Page 1 of 1

Reviewed By: SW 4/25/05 Samples <20% Water? X Yes ____ No

Lab ID	SampleWeight (g)	Standard ID	Analysis Time	Temp. (°C)	Volume of Water or $CaCl_2$ (ml)	pH Reading
CAL 4			12:45	20.9	50	3.98
7				20.9	"	7.01
10				21.8	"	10.01
LCS				20.7	"	7.01
G8WQV	20g			21.8	40	7.97
G8WQV-X	"			21.5	"	8.05
G8WTT	"			21.8	"	8.05
G8WT3	"			21.7	"	8.13
G817H	"			21.6	"	5.26
G817H-X	"			21.6	"	8.19
CCV				20.2		7.01

REVISED

SL-INORG-0010, Revised 2/19/02

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LOT #F5D210354

STL ST LOUIS

STL St. Louis

Standards Preparation Logbook Summary

Apr-25-2005

Logbook: \\Qstlmo01\Stdslog\I-Prep.std
The following groups are in included in this report, either in whole or in part: PH042505

Date Prep/Opened	Std ID	Mix Name	Component	Parent ID	Parent Concentration	Aliquot	Final Volume	Final Concentration	Solvent	Analyst	Exp Date1	Exp Date2
03/02/2005	IP0321-05	Buffer solution LCS	DI WATER		100.00 %			100.00 %	None	andersonm	03/02/2007	03/02/2007
04/15/2005	IP0474-05	PH BUFFER 4	DI		99.900 %			99.900 %	Water	andersonm	05/15/2005	10/15/2006
04/15/2005	IP0475-05	PH BUFFER 7	DI		99.900 %			99.900 %	Water	andersonm	04/15/2006	04/15/2006
04/19/2005	IP0491-05	PH Buffer 10	DI		99.900 %			99.900 %	None	mueller d	01/31/2007	01/31/2007

REVISED

Reviewed By: SW 4/25/05

Page 1 of 1

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STL St. Louis

Standards Preparation Logbook Record

Apr-25-2005

Logbook: \\Qstlmo01\Stdslog\I-Prep.std
The following groups are in included in this report, either in whole or in part:
PH042505

IP0121-05, Buffer solution LCS

Analyst: andersonm

Vendor: solutions plus Lot No.: 3405080 Vendor's Expiration Date: 03-02-2007
Solvent: None
Date Prep./Opened: 03-02-2005 Date Received: 03-02-2005
Date Expires(1): 03-02-2007 (None)
Date Expires(2): 03-02-2007 (None)
24 mo exp. date

Component	Initial Conc (%)	Final Conc (%)
DI WATER	100.00	100.00

IP0474-05, PH BUFFER 4

Analyst: andersonm

Vendor: PROTOCOL Lot No.: V89591 Vendor's Expiration Date: 10-15-2006
Solvent: Water
Date Prep./Opened: 04-15-2005
Date Expires(1): 05-15-2005 (1 Month)
Date Expires(2): 10-15-2006 (None)

Component	Initial Conc (%)	Final Conc (%)
DI	99.900	99.900

IP0475-05, PH BUFFER 7

Analyst: andersonm

Vendor: PROTOCOL Lot No.: V88937 Vendor's Expiration Date: 09-15-2006
Solvent: Water
Date Prep./Opened: 04-15-2005
Date Expires(1): 04-15-2006 (1 Year)
Date Expires(2): 04-15-2006 (1 Year)

Component	Initial Conc (%)	Final Conc (%)
DI	99.900	99.900

IP0491-05, PH Buffer 10

Analyst: muellerd

Vendor: Fisher
Lot No.: V91772
Vendor's Expiration Date: 01-31-2007
Solvent: None
Date Prep./Opened: 04-19-2005
Date Received: 04-19-2005
Date Expires(1): 01-31-2007 (None)
Date Expires(2): 01-31-2007 (None)

Component	Initial Conc (%)	Final Conc (%)
DI	99.900	99.900

PDE115

Severn Trent Laboratories, Inc.
Inorganics Batch Review
QC Batch **5126399**

Date 5/06/2005
Time 15:48:55

Method Code:**GJ Sulfide, Reactive (SW7.3.4)**
Analyst:**Danielle Mueller**

Work Order	Result	Units	LDL/Dil	Prep. - Anal.	Total Solids	PSRL Flag	R/R	Rounded Result	Output LDL	Dil.
G8WQV-1-AE	ND	mg/kg	4.44	05/04-05/06/05	76.54	N		ND	5.8	1.00
G8WQV-1-AK	ND	mg/kg	4.44	05/04-05/06/05	76.54	N		ND	5.8	1.00
G8WTT-1-AE	ND	mg/kg	4.44	05/04-05/06/05	76.24	N		ND	5.8	1.00
G8WT3-1-AE	ND	mg/kg	4.44	05/04-05/06/05	80.35	N		ND	5.5	1.00
G817H-1-AD	ND	mg/kg	4.44	05/04-05/06/05	77.72	N		ND	5.7	1.00
G817H-1-AK	ND	mg/kg	4.44	05/04-05/06/05	77.72	N		ND	5.7	1.00
G88WQ-1-A4	ND	mg/kg	22.2	05/04-05/06/05	90.62	N		ND	24.5	1.00
G88W5-1-AF	ND	mg/kg	22.2	05/04-05/06/05	90.19	N		ND	24.6	1.00
G88W7-1-AF	ND	mg/kg	22.2	05/04-05/06/05	92.32	N		ND	24.0	1.00
G88XA-1-AF	ND	mg/kg	22.2	05/04-05/06/05	91.38	N		ND	24.3	1.00
G88XC-1-AF	ND	mg/kg	22.2	05/04-05/06/05	90.04	N		ND	24.7	1.00
G88XD-1-AF	ND	mg/kg	22.2	05/04-05/06/05	92.10	N		ND	24.1	1.00
G88XE-1-AF	ND	mg/kg	22.2	05/04-05/06/05	89.73	N		ND	24.7	1.00
G896E-1-A2	ND	mg/kg	22.2	05/04-05/06/05	96.38	N		ND	23.0	1.00
G8985-1-AD	ND	mg/kg	22.2	05/04-05/06/05	88.27	N		ND	25.2	1.00
G899L-1-AD	ND	mg/kg	22.2	05/04-05/06/05	89.59	N		ND	24.8	1.00
G9A7F-1-AD	ND	mg/kg	4.44	05/04-05/06/05	80.41	N		ND	5.5	1.00
G9A7P-1-AF	22.2	mg/kg	4.44	05/04-05/06/05	79.04	N		28.1	5.6	1.00
G92N4-1-AA	ND	mg/kg	4.44	05/04-05/06/05	.00			ND	4.4	1.00

Notes:
Results and reporting limits have been adjusted for dry weight.

Check Standard

Work Order	Exception Code	True Spike	Measured Spike	Percent Recovered	Prep. - Anal.	Control Limits	Dil.
G92N4-1-AC		200	66.5	33.25	05/04-05/06/05	(10-150)	1.00

Notes:

REVISED

PDE115

Severn Trent Laboratories, Inc.
Inorganics Batch Review
QC Batch **5126399**

Date 5/06/2005
Time 15:48:55

Method Code:**GJ Sulfide, Reactive (SW7.3.4)**
Analyst:**Danielle Mueller**
Measured Spike

Work Order	Exception Code	Measured Sample	True Spike	Measured Spike	Percent Recovered	Prep. - Anal.	Dil.
G8WQV-1-AH		ND	200	ND	.00	05/04-05/06/05	1.00
G817H-1-AN		ND	200	ND	.00	05/04-05/06/05	1.00

Notes:

PRODUCTION TOTALS

TEST	TOTAL #	SAMPLE #	QC #	MATRIX #	OTHER #	MISC #	HOURS
	0	0	0	0	0	0	0

Severn Trent
St. Louis Laboratory

REACTIVE SULFIDE REPORT

(SOP: STL-IP-0002, current revision)
Page: 1 of 1

Analyst: DLM
Reviewed by: SMD
Date: 5/6/05

Batch No.: 5126399

Prep Date: 5/4/2005
Analysis Date: 5/6/2005
Method No.: 9030

Laboratory ID	Standard ID	Raw Value (mg/L)	Sample Weight (kg)	Time of Measurement (seconds)	Scrubber Volume (L)	Reactive Sulfide Final Concentration (mg/Kg)	Percent Recovery	RPD	LCS True Value: mg/Kg
BLANK		0	0.01	1800	0.05	< 22.2			
LCS		13.3	0.01	1800	0.05	66.5			
G9A7F		0	0.01	1800	0.05	< 22.2			
G9A7P		4.44	0.01	1800	0.05	22.2			
G8WQV		0	0.01	1800	0.05	< 22.2			
G8WQV-X		0	0.01	1800	0.05	< 22.2			
G8WQV-S		0	0.01	1800	0.05	< 22.2			
G8WTT		0	0.01	1800	0.05	< 22.2			
G8WT3		0	0.01	1800	0.05	< 22.2			
G817H		0	0.01	1800	0.05	< 22.2			
G817H-X		0	0.01	1800	0.05	< 22.2			
G817H-S		0	0.01	1800	0.05	< 22.2			
G88WQ		0	0.01	1800	0.05	< 22.2			
G88W5		0	0.01	1800	0.05	< 22.2			
G88W7		0	0.01	1800	0.05	< 22.2			
G88XA		0	0.01	1800	0.05	< 22.2			
G88XC		0	0.01	1800	0.05	< 22.2			
G88XD		0	0.01	1800	0.05	< 22.2			
G88XE		0	0.01	1800	0.05	< 22.2			
G886E		0	0.01	1800	0.05	< 22.2			
G8985		0	0.01	1800	0.05	< 22.2			
G899L		0	0.01	1800	0.05	< 22.2			

Control Limits (Water/Soil): LCS = 10 - 150 MS = 10 - 136

Total Available S (mg/Kg) = $\frac{\text{raw value (mg/L) x scrubber volume(L) x 1800}}{\text{samples weight (Kg) x time (seconds)}}$

File: Slsvr01\Wet Chem Results\ReacS050605A.xls, modified 3/22/04

Severn Trent

St. Louis Laboratory

SULFIDE

(SOP # STL-WC-0012, current revision)

Analyst: DLM
Analysis Date: 4/6/2005
Reviewed By: SW
Date: 5/9/05

Method No.: EPA 9030/376.1
Batch No.:

Laboratory ID	True Value mg/L	Sample Vol., mL	Iodine (mL)	Titrant, mL $Na_2S_2O_3$ Initial	Final	Net	Sulfide mg/L	Percent Recovery	RPD
BLANK		45	10	0.00	10.00	10.00	4 U		
LCS		45	10	0.00	8.50	8.50	13.3		
G9A7F		45	10	0.00	9.90	9.90	4 U		
G9A7P		45	10	0.00	9.50	9.50	4.44		
G8WQV		45	10	0.00	9.80	9.80	4 U		
G8WQV-X		45	10	0.00	9.80	9.80	4 U		
G8WQV-S		45	10	0.00	9.70	9.70	4 U		
G8WTT		45	10	0.00	9.70	9.70	4 U		
G8WT3		45	10	0.00	9.70	9.70	4 U		
G817H		45	10	0.00	9.70	9.70	4 U		
G817H-X		45	10	0.00	9.80	9.80	4 U		
G817H-S		45	10	0.00	9.70	9.70	4 U		
G88WQ		45	10	0.00	9.80	9.80	4 U		
G88W5		45	10	0.00	9.80	9.80	4 U		
G88W7		45	10	0.00	9.80	9.80	4 U		
G88XA		45	10	0.00	9.80	9.80	4 U		
G88XC		45	10	0.00	9.80	9.80	4 U		
G88XD		45	10	0.00	9.80	9.80	4 U		
G88XE		45	10	0.00	9.70	9.70	4 U		
G886E		45	10	0.00	9.70	9.70	4 U		
G8985		45	10	0.00	9.70	9.70	4 U		
G899L		45	10	0.00	9.60	9.60	4 U		

Iodine (I_2) Normality (N) = 0.025
$Na_2S_2O_3$ Normality (N) = 0.025

$$\text{Sulfide mg/L} = \frac{[(\text{mL } I_2 \times \text{N } I_2) - (\text{mL } Na_2S_2O_3 \times \text{N } Na_2S_2O_3)] \times 16{,}000}{\text{mL Sample}}$$

Control Limits (Water)
LCS = 81 - 115 MS = 85 - 114

Control Limits (Soil)
LCS = 81 - 115 MS = 75 - 125

Severn Trent
St. Louis Laboratory
SULFIDE
(SOP # STL-WC-0012, current revision)

Analyst: DLM
Analysis Date: 4/6/2005
Reviewed By: [illegible]
Date: 5/[illegible]/05

Method No.: EPA 9030/376.1
Batch No.:

Laboratory ID	True Value mg/L	Sample Vol., mL	Iodine (mL)	Titrant, mL $Na_2S_2O_3$ Initial	Final	Net	Sulfide mg/L	Percent Recovery	RPD
BLANK		45	10	0.00	10.0	0.00	88.9		
LCS		45	10	0.00	8.5	0.00	88.9		
G9A7F		45	10	0.00	9.9	0.00	88.9		
G9A7P		45	10	0.00	9.5	0.00	88.9		
G8WQV		45	10	0.00	9.8	0.00	88.9		
G8WQV-X		45	10	0.00	9.8	0.00	88.9		
G8WQV-S		45	10	0.00	9.7	0.00	88.9		
G8WTT		45	10	0.00	9.7	0.00	88.9		
G8WT3		45	10	0.00	9.7	0.00	88.9		
G817H		45	10	0.00	9.7	0.00	88.9		
G817H-X		45	10	0.00	9.8	0.00	88.9		
G817H-S		45	10	0.00	9.7	0.00	88.9		
G88WQ		45	10	0.00	9.8	0.00	88.9		
G88W5		45	10	0.00	9.8	0.00	88.9		
G88W7		45	10	0.00	9.8	0.00	88.9		
G88XA		45	10	0.00	9.8	0.00	88.9		
G88XC		45	10	0.00	9.8	0.00	88.9		
G88XD		45	10	0.00	9.8	0.00	88.9		
G88XE		45	10	0.00	9.7	0.00	88.9		
G886E		45	10	0.00	9.7	0.00	88.9		
G8985		45	10	0.00	9.7	0.00	88.9		
G899L		45	10	0.00	9.6	0.00	88.9		

Iodine (I_2) Normality (N) = 0.025
$Na_2S_2O_3$ Normality (N) = 0.025

$$\text{Sulfide mg/L} = \frac{[(\text{mL } I_2 \times \text{N } I_2) - (\text{mL } Na_2S_2O_3 \times \text{N } Na_2S_2O_3)] \times 16{,}000}{\text{mL Sample}}$$

Control Limits (Water)
LCS = 81 - 115 MS = 85 - 114

Control Limits (Soil)
LCS = 81 - 115 MS = 75 - 125

STL St. Louis

Reactive Cyanide/Sulfide

DISTILLATION SHEET/EXTRACT CHAIN OF CUSTODY

Analysis: Reactive Cn/S Prep Date: 5/4/05 Batch No.: _____

Method No.: _____ Analyst: DZM

Flow rate maintained at 60 mL/min? X Yes ___ No

Stirrer setting maintained at approximately 30 rpm? X Yes ___ No

Length of time samples distilled: 30 min

SEQUENCE NO.	SAMPLE NO.	SAMPLE Weight/Volume	FINAL VOLUME	COMMENTS
1	BLK	50ml	50ml	
2	LCS	↓	↓	
3	G9A7F	10g		
4	G9A7P			
5	G8WQV			
6	G8WQV-X			
7	G8WQV-S			
8	G8WTT			
9	G8WT3			
10	G817H			
11	G817H-X			
12	G817H-S			
13	G88WQ			
14	G88W5			
15	G88W7			
16	G88XA			
17	G88XC			
18	G88XD			
19	G88XE			
20	G886E			
21	G8985			
22	G899L	↓	↓	
23				
24				
25				

DATE	RELEASED BY	RECEIVED BY

LOT #F5D210354 REVISED

LOT #F5D210354

STL ST LOUIS

STL St. Louis

Standards Preparation Logbook Summary

May-06-2005

Logbook: \\Qstlmo01\Stdslog\I-Prep.std

The following groups are in included in this report, either in whole or in part: RSULFIDE050605a

Dav Prep/Opened:	Std ID	Mix Name	Component	Parent ID	Parent Concentration	Aliquot	Final Volume	Final Concentration	Solvent	Analyst	Exp Date(1)	Exp Date(2)
02/24/2003	IP0154-03	Sodium Sulfide	sodium sulfide		13.351 %			13.351 %	None	wedem	02/24/2013	02/24/2013
10/26/2004	IP1221-04	HCL 6N	HCL		6.0000 N			6.0000 N	Water	mueller	08/31/2005	08/31/2005
03/28/2005	IP0368-05	Starch Indicator 2%	Starch Indicator		2.0000 %			2.0000 %	None	mueller	03/28/2006	05/31/2006
04/07/2005	IP0443-05	Sodium Thiosulfate	Sodium Thiosulfate		0.0250 N			0.0250 N	None	mueller	04/07/2006	04/07/2006
04/07/2005	IP0444-05	Iodine 0.025 N	Iodine		0.0250 N			0.0250 N	None	mueller	11/12/2005	11/12/2005
04/15/2005	IP0486-05	Sulfide spike 1000ppm	sodium sulfide	IP0154-03	13.351 %	7.5000 g	1,000.0 ml	1,001.3 ug/ml	Water	mueller	05/15/2005	05/15/2005
05/04/2005	IP0552-05	REACTIVE Sulfide LCS/MS	sodium sulfide	IP0486-05	1,001.3 ug/ml	2.0000 ml	50.000 ml	40.052 ug/ml	Water	mueller	05/11/2005	05/11/2005

REVISED

Reviewed By: SLO 5/9/05

938 of 963

STL St. Louis

Standards Preparation Logbook Record

May-06-2005

Logbook: \\Qstlmo01\Stdslog\I-Prep.std
The following groups are in included in this report, either in whole or in part:
RSULFIDE050605a

IP0154-03, Sodium Sulfide

Analyst: weders

Vendor: Fisher Lot No.: 985437
Solvent: None
Date Prep./Opened: 02-24-2003 Date Received: 02-24-2003
Date Expires(1): 02-24-2013 (10 Years)
Date Expires(2): 02-24-2013 (10 Years)

Component	Initial Conc (%)	Final Conc (%)
sodium sulfide	13.351	13.351

IP1221-04, HCL 6N

Analyst: muellerd

Vendor: Solutions Plus Lot No.: 3308014 Vendor's Expiration Date: 08-31-2005
Solvent: Water
Date Prep./Opened: 10-26-2004 Date Received: 10-26-2004
Date Expires(1): 08-31-2005 (1 Year)
Date Expires(2): 08-31-2005 (1 Year)

Component	Initial Conc (N)	Final Conc (N)
HCL	6.0000	6.0000

IP0368-05, Starch Indicator, 2%

Analyst: muellerd

Vendor: Solutions Plus Lot No.: 3503219 Vendor's Expiration Date: 05-31-2006
Solvent: None
Date Prep./Opened: 03-28-2005 Date Received: 03-24-2005
Date Expires(1): 03-28-2006 (1 Year)
Date Expires(2): 05-31-2006 (None)

Component	Initial Conc (%)	Final Conc (%)
Starch Indicator	2.0000	2.0000

IP0443-05, Sodium Thiosulfate

Analyst: muellerd

Lot No.: H371 A42422
Solvent: None
Date Prep./Opened: 04-07-2005 Date Received: 04-07-2005
Date Expires(1): 04-07-2006 (1 Year)
Date Expires(2): 04-07-2006 (1 Year)

Component	Initial Conc (N)	Final Conc (N)
Sodium Thiosulfate	0.0250	0.0250

IP0444-05, Iodine 0.025 N

Analyst: muellerd

Lot No.: 4307-17 Vendor's Expiration Date: 11-12-2005

Solvent: None
Date Prep./Opened: 04-07-2005 Date Received: 04-07-2005
Date Expires(1): 11-12-2005 (None)
Date Expires(2): 11-12-2005 (None)

Component	Initial Conc (N)	Final Conc (N)
Iodine	0.0250	0.0250

IP0486-05, Sulfide spike 1000ppm

Analyst: muellerd

Solvent: Water
Volume (ml): 1,000.0
Date Prep./Opened: 04-15-2005
Date Expires(1): 05-15-2005 (1 Month)
Date Expires(2): 05-15-2005 (1 Month)

Parent Std No.: IP0154-03, Sodium Sulfide Aliquot Amount (g): 7.5000
Parent Date Expires(1): 02-24-2013 Parent Date Expires(2): 02-24-2013

Component	Initial Conc (%)	Final Conc (ug/ml)
sodium sulfide	13.351	1,001.3

IP0552-05, REACTIVE Sulfide LCS/MS

Analyst: muellerd

Solvent: Water
Volume (ml): 50.000
Date Prep./Opened: 05-04-2005
Date Expires(1): 05-11-2005 (1 Week)
Date Expires(2): 05-11-2005 (1 Week)

Parent Std No.: IP0486-05, Sulfide spike 1000ppm Aliquot Amount (ml): 2.0000
Parent Date Expires(1): 05-15-2005 Parent Date Expires(2): 05-15-2005

Component	Initial Conc (ug/ml)	Final Conc (ug/ml)
sodium sulfide	1,001.3	40.052

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A68

Date Received: 2005-04-21

Project Manager: EK Quote #: 44975 SDG: F5D210354

Analytical Due Date: 2005-05-12

Project: 3159S Los Alamos Non-Rad

Report Due Date: 2005-05-16

PO#: 126310021 Report to: Joylene Valdez or Keith

Report Type: D Expanded Deliverable

Client: 108581 LOS ALAMOS NATIONAL LABORATORY

#SMPS in LOT: 18 EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	A
1	RE73-05-58824	2005-04-18 / 0	G8WP7	SOLID

SAMPLE COMMENTS:

	MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	HG	O8	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06

STL - St. Louis Logged in by: WILSONS 2005-04-21 17:28:10 printed on: Friday, April 22, 2005 08:25 AM

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A68

Project Manager: EK | Quote #: 44975 | SDG: F5D210354 | Date Received: 2005-04-21

Project: 3159S | Los Alamos Non-Rad | Analytical Due Date: 2005-05-12

PO#: 126310021 | Report to: Joylene Valdez or Keith | Report Due Date: 2005-05-16

Client: 108581 LOS ALAMOS NATIONAL LABORATORY | #SMPS in LOT: 18 | Report Type: D Expanded Deliverable | EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

D	CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	HG	O8	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
D	XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A68

Project Manager: EK | Quote #: 44975 | SDG: F5D210354

Date Received: 2005-04-21

Project: 3159S | Los Alamos Non-Rad

Analytical Due Date: 2005-05-12

PO#: 126310021 | Report to: Joylene Valdez or Keith

Report Due Date: 2005-05-16

Client: 108581 LOS ALAMOS NATIONAL LABORATORY

Report Type: D Expanded Deliverable

#SMPS In LOT: 18

EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

S	NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	HG	O8	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	A
2	RE73-05-58825	2005-04-19 / 0	G8WQL	SOLID

SAMPLE COMMENTS:

	NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A67

Date Received: 2005-04-21

Project Manager: EK | Quote #: 44975 | SDG: F5D210354

Analytical Due Date: 2005-05-12

Project: 3159S | Los Alamos Non-Rad

Report Due Date: 2005-05-16

PO#: 126310021 | Report to: Joylene Valdez or Keith

Report Type: D Expanded Deliverable

Client: 108581 LOS ALAMOS NATIONAL LABORATORY | #SMPS In LOT: 18 | EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ******** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O8	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	A
3	RE73-05-58826	2005-04-19 / 0	G8WQN	SOLID

SAMPLE COMMENTS:

CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A67

Date Received: 2005-04-21

Project Manager: EK Quote #: 44975 SDG: F5D210354

Analytical Due Date: 2005-05-12

Project: 3159S Los Alamos Non-Rad

Report Due Date: 2005-05-16

PO#: 126310021 Report to: Joylene Valdez or Keith

Report Type: D Expanded Deliverable

Client: 108581 LOS ALAMOS NATIONAL LABORATORY #SMPS in LOT: 18 EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
HG	O8	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06	

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	A
4	RE73-05-58827	2005-04-19 / 0	G8WQR	SOLID

SAMPLE COMMENTS:

SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A54

Date Received: 2005-04-21

Project Manager: EK Quote #: 44975 SDG: F5D210354

Analytical Due Date: 2005-05-12

Project: 3159S Los Alamos Non-Rad

Report Due Date: 2005-05-16

PO#: 126310021 Report to: Joylene Valdez or Keith

Report Type: D Expanded Deliverable

Client: 108581 LOS ALAMOS NATIONAL LABORATORY #SMPS in LOT: 18 EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O8	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	A
5	RE73-05-58828	2005-04-19 / 0	G8WQT	SOLID

SAMPLE COMMENTS:

MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A54

Project Manager: EK Quote #: 44975 SDG: F5D210354

Date Received: 2005-04-21

Project: 3159S Los Alamos Non-Rad

Analytical Due Date: 2005-05-12

PO#: 126310021 Report to: Joylene Valdez or Keith

Report Due Date: 2005-05-16

Client: 108581 LOS ALAMOS NATIONAL LABORATORY

Report Type: D Expanded Deliverable

#SMPS in LOT: 18 EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
HG	O8	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06	

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	A
6	RE73-05-58829	2005-04-19 / 0	G8WQV	SOLID

SAMPLE COMMENTS:

	XX	AE	SW846	1010	Flash Point (1010, Closed Cup)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	XX	FK	SW846	9045A	pH (9045) - Non-Aqueous	82	LEACHATE, DI (Routine)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	XX	FQ	SW846	9095	Paint Filter Test (9095, Free Liquids)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	XX	GI	SW846	7.3.3	Cyanide, Reactive (SW7.3.3)	08	DISTILLATION, MACRO - Acid	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	XX	GJ	SW846	7.3.4	Sulfide, Reactive (SW7.3.4)	08	DISTILLATION, MACRO - Acid	01	STANDARD TEST SET	PROT: A	WRK LOC	06
	XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	XX	GI	SW846	7.3.3	Cyanide, Reactive (SW7.3.3)	08	DISTILLATION, MACRO - Acid	01	STANDARD TEST SET	PROT: A	WRK LOC	06
S	XX	GJ	SW846	7.3.4	Sulfide, Reactive (SW7.3.4)	08	DISTILLATION, MACRO - Acid	01	STANDARD TEST SET	PROT: A	WRK LOC	06
X	XX	FK	SW846	9045A	pH (9045) - Non-Aqueous	82	LEACHATE, DI (Routine)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
X	XX	GI	SW846	7.3.3	Cyanide, Reactive (SW7.3.3)	08	DISTILLATION, MACRO - Acid	01	STANDARD TEST SET	PROT: A	WRK LOC	06
X	XX	GJ	SW846	7.3.4	Sulfide, Reactive (SW7.3.4)	08	DISTILLATION, MACRO - Acid	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	A

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A54

Date Received: 2005-04-21

Analytical Due Date: 2005-05-12

Report Due Date: 2005-05-16

Project Manager: EK Quote #: 44975 SDG: F5D210354

Project: 3159S Los Alamos Non-Rad

PO#: 126310021 Report to: Joylene Valdez or Keith

Client: 108581 LOS ALAMOS NATIONAL LABORATORY #SMPS in LOT: 18

Report Type: D Expanded Deliverable

EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

7 RE73-05-58830 2005-04-19 / 0 G8WR6 SOLID

SAMPLE COMMENTS:

CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
HG	O8	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06	

SAMPLE # CLIENT SAMPLE ID DATE/TIME SAMPLED WORKORDER A

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A54

Project Manager: EK | Quote #: 44975 | SDG: F5D210354 | Date Received: 2005-04-21

Project: 3159S | Los Alamos Non-Rad | Analytical Due Date: 2005-05-12

PO#: 126310021 | Report to: Joylene Valdez or Keith | Report Due Date: 2005-05-16

Client: 108581 LOS ALAMOS NATIONAL LABORATORY | #SMPS in LOT: 18 | Report Type: D Expanded Deliverable | EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

8 RE73-05-58831 2005-04-19 / 0 G8WTA SOLID

SAMPLE COMMENTS:

CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O8	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE # | CLIENT SAMPLE ID | DATE/TIME SAMPLED | WORKORDER | A

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A44

Project Manager: EK | Quote #: 44975 | SDG: F5D210354

Project: 3159S | Los Alamos Non-Rad

PO#: 126310021 | Report to: Joylene Valdez or Keith

Client: 108581 LOS ALAMOS NATIONAL LABORATORY | #SMPS in LOT: 18

Date Received: 2005-04-21

Analytical Due Date: 2005-05-12

Report Due Date: 2005-05-16

Report Type: D Expanded Deliverable

EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

9 | RE73-05-58832 | 2005-04-19 / 0 | G8WTE | SOLID

SAMPLE COMMENTS:

CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
HG	O8	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06	

SAMPLE # | CLIENT SAMPLE ID | DATE/TIME SAMPLED | WORKORDER | A

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A44

Project Manager: EK | Quote #: 44975 | SDG: F5D210354

Date Received: 2005-04-21

Project: 3159S | Los Alamos Non-Rad

Analytical Due Date: 2005-05-12

PO#: 126310021 | Report to: Joylene Valdez or Keith

Report Due Date: 2005-05-16

Client: 108581 LOS ALAMOS NATIONAL LABORATORY

Report Type: D Expanded Deliverable

#SMPS in LOT: 18 | EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

10 RE73-05-58833 2005-04-19 / 0 G8WTG SOLID

SAMPLE COMMENTS:

CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
HG	O8	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06	

SAMPLE # | CLIENT SAMPLE ID | DATE/TIME SAMPLED | WORKORDER | A

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A44

Project Manager: EK | Quote #: 44975 | SDG: F5D210354

Date Received: 2005-04-21

Project: 3159S | Los Alamos Non-Rad

Analytical Due Date: 2005-05-12

PO#: 126310021 | Report to: Joylene Valdez or Keith

Report Due Date: 2005-05-16

Client: 108581 LOS ALAMOS NATIONAL LABORATORY

Report Type: D Expanded Deliverable

#SMPS in LOT: 18 | EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

11 RE73-05-58834 2005-04-19 / 0 G8WTR SOLID

SAMPLE COMMENTS:

CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
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SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
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BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
HG	O8	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06	

SAMPLE # | CLIENT SAMPLE ID | DATE/TIME SAMPLED | WORKORDER | A

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A67

Date Received: 2005-04-21

Project Manager: EK Quote #: 44975 SDG: F5D210354

Analytical Due Date: 2005-05-12

Project: 3159S Los Alamos Non-Rad

Report Due Date: 2005-05-16

PO#: 126310021 Report to: Joylene Valdez or Keith

Report Type: D Expanded Deliverable

Client: 108581 LOS ALAMOS NATIONAL LABORATORY #SMPS in LOT: 18 EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	A
12	RE73-05-58835	2005-04-19 / 0	G8WTT	SOLID

SAMPLE COMMENTS:

XX	AE	SW846	1010	Flash Point (1010, Closed Cup)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	FK	SW846	9045A	pH (9045) - Non-Aqueous	82	LEACHATE, DI (Routine)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	FQ	SW846	9095	Paint Filter Test (9095, Free Liquids)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	GI	SW846	7.3.3	Cyanide, Reactive (SW7.3.3)	08	DISTILLATION, MACRO - Acid	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	GJ	SW846	7.3.4	Sulfide, Reactive (SW7.3.4)	08	DISTILLATION, MACRO - Acid	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	A
13	RE73-05-58836	2005-04-19 / 0	G8WTV	SOLID

SAMPLE COMMENTS:

BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O8	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06

F5D210354 CLIENT ANALYSIS SUMMARY

Storage Loc: A44

Project Manager: EK Quote #: 44975 SDG: F5D210354

Date Received: 2005-04-21

Project: 3159S Los Alamos Non-Rad

Analytical Due Date: 2005-05-12

PO#: 126310021 Report to: Joylene Valdez or Keith

Report Due Date: 2005-05-16

Client: 108581 LOS ALAMOS NATIONAL LABORATORY

Report Type: D Expanded Deliverable

#SMPS in LOT: 18 EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06	

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	A
14	RE73-05-58837	2005-04-19 / 0	G8WTW	SOLID

SAMPLE COMMENTS:

AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
HG	O8	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A44

Project Manager: EK | Quote #: 44975 | SDG: F5D210354

Project: 3159S | Los Alamos Non-Rad

PO#: 126310021 | Report to: Joylene Valdez or Keith

Client: 108581 LOS ALAMOS NATIONAL LABORATORY

#SMPS in LOT: 18

Date Received: 2005-04-21

Analytical Due Date: 2005-05-12

Report Due Date: 2005-05-16

Report Type: D Expanded Deliverable

EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06	

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	A
15	RE73-05-58838	2005-04-19 / 0	G8WTX	SOLID

SAMPLE COMMENTS:

CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
HG	O8	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	
AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06	

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A44

Project Manager: EK | Quote #: 44975 | SDG: F5D210354

Date Received: 2005-04-21

Project: 3159S | Los Alamos Non-Rad

Analytical Due Date: 2005-05-12

PO#: 126310021 | Report to: Joylene Valdez or Keith

Report Due Date: 2005-05-16

Client: 108581 LOS ALAMOS NATIONAL LABORATORY

Report Type: D Expanded Deliverable

#SMPS In LOT: 18

EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	A
16	RE73-05-58839	2005-04-19 / 0	G8WT0	SOLID

SAMPLE COMMENTS:

BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O8	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A44

Date Received: 2005-04-21

Project Manager: EK Quote #: 44975 SDG: F5D210354

Analytical Due Date: 2005-05-12

Project: 3159S Los Alamos Non-Rad

Report Due Date: 2005-05-16

PO#: 126310021 Report to: Joylene Valdez or Keith

Report Type: D Expanded Deliverable

Client: 108581 LOS ALAMOS NATIONAL LABORATORY #SMPS in LOT: 18 EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	A
17	RE73-05-58840	2005-04-19 / 0	G8WT1	SOLID

SAMPLE COMMENTS:

CD	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
TL	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
PB	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NI	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MN	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CU	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
VX	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CO	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BE	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	MH	SW846	6020	Inductively Coupled Plasma Mass Spectrometry(6020)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O8	SW846	7470A	Mercury (7470A, Cold Vapor) - Liquid	0M	TCLP(1311) -> METALS, TOTAL (Method exclusive)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
HG	O9	SW846	7471A	Mercury (7471A, Cold Vapor) - Solids	70	METALS, TOTAL (Method Exclusive) - Solids	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AS	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
ZN	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CR	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
AL	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CD	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
CA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
NA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
BA	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
MG	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
KX	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
FE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	GK	METALS, TOTAL - 2% HCL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SE	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06

F5D210354

CLIENT ANALYSIS SUMMARY

Storage Loc: A44

Project Manager: EK Quote #: 44975 SDG: F5D210354

Date Received: 2005-04-21

Project: 3159S Los Alamos Non-Rad

Analytical Due Date: 2005-05-12

PO#: 126310021 Report to: Joylene Valdez or Keith

Report Due Date: 2005-05-16

Client: 108581 LOS ALAMOS NATIONAL LABORATORY

Report Type: D Expanded Deliverable

#SMPS in LOT: 18 EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ********** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

PB	QO	SW846	6010B	Inductively Coupled Plasma (6010B)	34	TCLP(1311) -> METALS, TOTAL	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZZ	NONE	NONE	Archive	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	A
18	RE73-05-58841	2005-04-19 / 0	G8WT3	SOLID

SAMPLE COMMENTS:

XX	AE	SW846	1010	Flash Point (1010, Closed Cup)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	FK	SW846	9045A	pH (9045) - Non-Aqueous	82	LEACHATE, DI (Routine)	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	FQ	SW846	9095	Paint Filter Test (9095, Free Liquids)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	GI	SW846	7.3.3	Cyanide, Reactive (SW7.3.3)	08	DISTILLATION, MACRO - Acid	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	GJ	SW846	7.3.4	Sulfide, Reactive (SW7.3.4)	08	DISTILLATION, MACRO - Acid	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC	06

F5D210354

CLIENT COMMENTS SUMMARY

Storage Loc: A68
Date Received: 2005-04-21
Analytical Due Date: 2005-05-12
Report Due Date: 2005-05-16
Report Type: D Expanded Deliverable
EDD Code: 99

Project Manager: EK
Quote #: 44975 SDG: F5D210354
Project: 3159S Los Alamos Non-Rad
PO#: 126310021 Report to: Joylene Valdez or Keith
Client: 108581 LOS ALAMOS NATIONAL LABORATORY
#SMPS in LOT: 18

Sample Receiving: LOS ALAMOS CLIENT REQUIREMEN
Enter COC NUMBER on sample sample header in the COC Fi
SDG = "Lot Number"
Project Name = "Request number"

********** METALS AND WETCHEMISTRY **********
Can batch multiple Lots together and report Client specific
Batch QC: Matrix Spike and Sample Duplicate
Met Prep: GFAA Spike Level and Standard Spike Level
Sb spike at 100 ppb
Pb - Spike Solids at 100 ppb, spike Waters at 20
- Perform analytical spike when matrix spike is swamped with indigenous analyte.
********** GC/MS ORGANICS **********
Can batch multiple Lots together and report Client specific
Batch QC MS and MSD
Clouseau observations for:
- Dilutions and elevated detection limits
- Unknown aldol condensate in TIC report
USE GPC for sample extracts as required.
Put client ID on all raw data
Client requires qualifiers
********** GC/HPLC **********
Can batch multiple Lots together and report Client specific
Batch QC
USE GPC for sample extracts as required.
Client requires Qualifiers for both GC and HPLC
- No averaging of CCV compounds
- Include Form Xs in data packages
********** Radiochemistry **********
Rad Chem with no tracers require MS (spk <= 100 pCi/L or g) and sample duplicate ..... Gamma does not require MS.
Radium 228 requires MS and Sample Duplicate
Radiological: "Do not include control chart, standard certif certificates, or calibration data as part of data package"
- Tracers need to be added at a level to yield at least 400
- Report 1 sigma uncertainty
Gross Alpha/Beta requires a total digestion.

SEVERN TRENT **STL**

Lot No: F5D210354

Condition Upon Receipt Form
St. Louis Laboratory

Client: LANL Date: 4.21.05 Time: 0900

Quote No: 44975 Initiated by: SW

Shipper/No: FedX 695477892744 2733 COC/RFA Numbers: 31605C, 31595C, 31585C

Condition/Variance (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	(Y) N	Sample received in undamaged condition?	7.	(Y) N	Sample received with Chain of Custody?
2.	(Y) N	Sample received within 4°C ± 2°C* ?	8.	Y (N)	Chain of Custody matches sample IDs on containers?
		Record 4°	9.	(Y) N N/A	Custody seal received intact on cooler.?
3.	Y N (N/A)	Sample received with proper pH [1] ?	10.	(Y) N N/A	Custody seal tamper evident on cooler.?
4.	Y N	If N/A - Was pH taken by original STL lab?	11.	(Y) N N/A	Custody seal on bottles received intact?
5.	(Y) N	Sample received in proper containers?	12.	(Y) N N/A	Custody seal tamper evident on bottles?
6.	(Y) N	Sample volume sufficient for analysis?	13.	Y N	Was CUR (equivalent) rec' d from original STL lab?

* Temperature Variance Does Not Affect the Following Analyses: Red cooler is ambient.

[1]For DOE-AL (Pantex, LANL, Sandia) sites, verify pH all containers received, except for VOA, TOX, and soils.

Notes: ~~Did not receive any samples for COC 31595~~ SW 4.21.05

and on 31585C, missing RE 73-05-58877

Corrective Action:

☐ Client's Name: _____ Informed by: _____ By: _____

☐ Sample(s) processed "as is". _____

☐ Sample(s) on hold until: _____ If released, notify: _____

Project Management Review: Amy Lolley Date: 4/22/05

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED
IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIALS AND THE DATE NEXT TO THAT ITEM

Wednesday, April 20, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3159SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3159S

ANALYSIS TYPE: INORGANIC

cer 6121

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58824	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58825	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58826	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58827	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58828	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58829	6	500 ML POLY	RC+RS+ph+PF+I	ICE	S
RE73-05-58830	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58831	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58832	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58833	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58834	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58835	6	500 ML POLY	RC+RS+ph+PF+I	ICE	S
RE73-05-58836	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58837	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58838	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58839	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58840	1	1 L POLY	TAL metals + TCLP metals	ICE	S
RE73-05-58841	6	500 ML POLY	RC+RS+ph+PF+I	ICE	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3159S

Relinquished By:	Date	Time	Received By:	Date	Time
Hadilla Abdel	4/20/05	1400	Sue Wilson	4.21.05	0900
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

PRINTED NAME SIGNATURE

Wednesday, April 20, 2005

REQUEST NUMBER: 3159S

Los Alamos
NATIONAL LABORATORY

ANALYSIS TYPE: INORGANIC

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

These samples are on:

SHIP DATE: 04/20/2005
REPORT DUE: 05/05/2005
TURN AROUND REQ'D: 15

LANL Request Number: 3159S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

RAD SCREENING: NOT REQ
COMMENTS: NOTE: For 58829, 58835 and 58841 do full waste classification testing

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:6010B	RE73-05-58824	1	S	04/18/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58824	1	S	04/18/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58824	1	S	04/18/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58824	1	S	04/18/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58825	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58825	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58825	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58825	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58826	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58826	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58826	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58826	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58827	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58827	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58827	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58827	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58828	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58828	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58828	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58828	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:1020A	RE73-05-58829	6	S	04/19/2005	
SW-846:7.3	RE73-05-58829	6	S	04/19/2005	
SW-846:9045C	RE73-05-58829	6	S	04/19/2005	
SW-846:9095	RE73-05-58829	6	S	04/19/2005	
SW-846:6010B	RE73-05-58830	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58830	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58830	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58830	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58831	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58831	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58831	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58831	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58832	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58832	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58832	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58832	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58833	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58833	1	S	04/19/2005	Analyze for TCLP Zinc also

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:7470A_TCLP	RE73-05-58833	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58833	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58834	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58834	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58834	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58834	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:1020A	RE73-05-58835	6	S	04/19/2005	
SW-846:7.3	RE73-05-58835	6	S	04/19/2005	
SW-846:9045C	RE73-05-58835	6	S	04/19/2005	
SW-846:9095	RE73-05-58835	6	S	04/19/2005	
SW-846:6010B	RE73-05-58836	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58836	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58836	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58836	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58837	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58837	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58837	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58837	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58838	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58838	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58838	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58838	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58839	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58839	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58839	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58839	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6010B	RE73-05-58840	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:6020_TCLP	RE73-05-58840	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7470A_TCLP	RE73-05-58840	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:7471A	RE73-05-58840	1	S	04/19/2005	Analyze for TCLP Zinc also
SW-846:1020A	RE73-05-58841	6	S	04/19/2005	
SW-846:7.3	RE73-05-58841	6	S	04/19/2005	
SW-846:9045C	RE73-05-58841	6	S	04/19/2005	
SW-846:9095	RE73-05-58841	6	S	04/19/2005	

Final Page of REQUEST NUMBER 3159S Page 2

Wednesday, April 20, 2005

REQUEST NUMBER: 3158S

Los Alamos
NATIONAL LABORATORY

ANALYSIS TYPE: ORGANIC

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

These samples are on:

SHIP DATE: 04/20/2005
REPORT DUE: 05/05/2005
TURN AROUND REQ'D: 15

LANL Request Number: 3158S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

RAD SCREENING: NOT REQ
COMMENTS: NOTE: Please do the GPC for all 8270 + 8082.

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:8082	RE73-05-58829	1	S	04/19/2005	
SW-846:8270C	RE73-05-58829	1	S	04/19/2005	
SW-846:8260B	RE73-05-58829	2	S	04/19/2005	
SW-846:8082	RE73-05-58835	1	S	04/19/2005	
SW-846:8270C	RE73-05-58835	1	S	04/19/2005	
SW-846:8260B	RE73-05-58835	2	S	04/19/2005	
SW-846:8082	RE73-05-58841	1	S	04/19/2005	
SW-846:8270C	RE73-05-58841	1	S	04/19/2005	
SW-846:8260B	RE73-05-58841	2	S	04/19/2005	
SW-846:8260B	RE73-05-58877	1	S	04/20/2005	

Final Page of REQUEST NUMBER 3158S

Wednesday, April 20, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3158SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3158S

ANALYSIS TYPE: ORGANIC

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58829	1	250 ML AMBER GLASS	8270C+8082	ICE	S
RE73-05-58829	2	125 SEPTUM AMBER GLASS	8260B	ICE	S
RE73-05-58835	1	250 ML AMBER GLASS	8270C+8082	ICE	S
RE73-05-58835	2	125 SEPTUM AMBER GLASS	8260B	ICE	S
RE73-05-58841	1	250 ML AMBER GLASS	8270C+8082	ICE	S
RE73-05-58841	2	125 SEPTUM AMBER GLASS	8260B	ICE	S
RE73-05-58877	1	125 SEPTUM AMBER GLASS	8260B	ICE	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3158S

Relinquished By:		Date	Time	Received By:		Date	Time
Priscilla [illegible]	[illegible]	4/20/05	1400				
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		

Received for DISPOSAL By:		Date	Time	Remarks:
PRINTED NAME	SIGNATURE			

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 219142 **Event ID:**4802

SAMPLE ID: RE73-05-58829 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	8260B	~~125 SEPTUM AMBER GLASS~~ 2x6" SS TUBE	Ice	Y		
1	8270C+8082	250 ML AMBER GLASS	Ice	Y		
3	8290	125 ML GLASS	Ice	Y		
4	8290	125 ML GLASS	Ice	Y		
5	PSDA+PROP-DBS	~~PROTECORE BAG~~ 2"x6" SS TUBE	Ice	Y		
6	RC+RS+ph+PF+I	500 ML POLY	Ice	Y		

RELINQUISHED BY (printed name): K Ellwood (signature):	Date/Time: 4.19.05 1705	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): Eugene Jay (signature):	Date/Time: 4-19-05 1705	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 219152 Event ID:4802

SAMPLE ID: RE73-05-58835 ER TEAM LEADER: Terry Rust DESTINATION: SMO

SAMPLE ORDER MATRIX: Soil FIELD TEAM LEADER: John Tymkowych DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	8260B	~~125 SEPTUM AMBER GLASS~~ 2"x6" SS TUBE	Ice	Y		
1	8270C+8082	250 ML AMBER GLASS	Ice	Y		
3	8290	125 ML GLASS	Ice	Y		
4	8290	125 ML GLASS	Ice	Y		
5	PSDA+PROP-DBS	~~PROTECORE BAG~~ 2"x6" SS TUBE	Ice	Y		
6	RC+RS+ph+PF+I	500 ML POLY	Ice	Y		

RELINQUISHED BY (printed name): K Rhoad (signature):	Date/Time: 4.19.05 17:05	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4-19-05 1705	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 219162 Event ID:4802

SAMPLE ID: RE73-05-58841 ER TEAM LEADER: Terry Rust DESTINATION: SMO

SAMPLE ORDER MATRIX: Soil FIELD TEAM LEADER: John Tymkowych DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	8260B	~~125 SEPTUM AMBER GLASS~~ RE 2"x6" SS TUBE	Ice	Y		
1	8270C+8082	250 ML AMBER GLASS	Ice	Y		
3	8290	125 ML GLASS	Ice	Y		
4	8290	125 ML GLASS	Ice	Y		
5	PSDA+PROP-DBS	~~PROTECORE BAG~~ RE 2"x6" SS TUBE	Ice	Y		
6	RC+RS+ph+PF+I	500 ML POLY	Ice	Y		

RELINQUISHED BY (printed name): (signature):	Date/Time:	RELINQUISHED BY (printed name): (signature):	Date/Time:
K Leonard	4-19-05 1655		
RECEIVED BY (printed name): (signature):	**Date/Time:**	**RECEIVED BY (printed name): (signature):**	**Date/Time:**
Jaylen Jos	4-19-05 1655		

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218712 **Event ID:**4802

SAMPLE ID: RE73-05-58826 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	**Date/Time:** 4.19.05 17:10	**RELINQUISHED BY (printed name):** (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4/19/05 17:10	**RECEIVED BY (printed name):** (signature):	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218692 **Event ID:**4802

SAMPLE ID: RE73-05-58824 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): K R Leonard **(signature):**	**Date/Time:** 4.19.05 1710	**RELINQUISHED BY (printed name):** **(signature):**	**Date/Time:**
RECEIVED BY (printed name): **(signature):**	**Date/Time:** 4-19-05 1710	**RECEIVED BY (printed name):** **(signature):**	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218722 Event ID:4802

SAMPLE ID: RE73-05-58827

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): K Kleona (signature):	Date/Time: 4.19.06 1705	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/06 1705	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

EVENT NAME: TA-73 Ash Pile

FIELD CHAIN OF CUSTODY

COC ID: 218702 Event ID:4802

SAMPLE ID: RE73-05-58825
SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 17:05	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 17:05	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

EVENT NAME: TA-73 Ash Pile

FIELD CHAIN OF CUSTODY

COC ID: 218672 Event ID:4802

SAMPLE ID: RE73-05-58877
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
1	8260B	125 SEPTUM AMBER GLASS	Ice	Y		

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 1705	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 1705	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218732 Event ID:4802

SAMPLE ID: RE73-05-58828 ER TEAM LEADER: Terry Rust DESTINATION: SMO

SAMPLE ORDER MATRIX: Soil FIELD TEAM LEADER: John Tymkowych DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 1705	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 1705	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218812 **Event ID:**4802

SAMPLE ID: RE73-05-58838
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	**Date/Time:** 4.19.05 1655	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4/19/05 16:55	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218822 Event ID:4802

SAMPLE ID: RE73-05-58839 ER TEAM LEADER: Terry Rust DESTINATION: SMO

SAMPLE ORDER MATRIX: Soil FIELD TEAM LEADER: John Tymkowych DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 1655	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4-19-05 1655	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218742 Event ID:4802

SAMPLE ID: RE73-05-58830 | ER TEAM LEADER: Terry Rust | DESTINATION: SMO

SAMPLE ORDER MATRIX: Soil | FIELD TEAM LEADER: John Tymkowych | DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 1655	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4-19-05 1655	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218782 Event ID:4802

SAMPLE ID: RE73-05-58834 ER TEAM LEADER: Terry Rust DESTINATION: SMO

SAMPLE ORDER MATRIX: Soil FIELD TEAM LEADER: John Tymkowych DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time:	RELINQUISHED BY (printed name): (signature):	Date/Time:
	4.19.05 16:55		
RECEIVED BY (printed name): (signature):	**Date/Time:**	**RECEIVED BY (printed name): (signature):**	**Date/Time:**
	4/19/05 1655		

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218832 **Event ID:**4802

SAMPLE ID: RE73-05-58840
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	**Date/Time:** 4/19.05 1655	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4/19/05 1655	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218762 **Event ID:**4802

SAMPLE ID: RE73-05-58832 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): [illegible] **(signature):** [illegible]	**Date/Time:** 4.19.05 1655	**RELINQUISHED BY (printed name):** **(signature):**	**Date/Time:**
RECEIVED BY (printed name): [illegible] **(signature):** [illegible]	**Date/Time:** 4/19/05 1655	**RECEIVED BY (printed name):** **(signature):**	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218752 **Event ID:**4802

SAMPLE ID: RE73-05-58831 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): [illegible] **(signature):**	**Date/Time:** 4.19.05 1655	**RELINQUISHED BY (printed name):** **(signature):**	**Date/Time:**
RECEIVED BY (printed name): **(signature):**	**Date/Time:** 4/19/05 1655	**RECEIVED BY (printed name):** **(signature):**	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218772 **Event ID:**4802

SAMPLE ID: RE73-05-58833 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 1655	**RELINQUISHED BY** (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 1655	**RECEIVED BY** (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218802 **Event ID:**4802

SAMPLE ID: RE73-05-58837 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): KR Leonard (signature):	**Date/Time:** 4.19.05 1655	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4/19/05 1655	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218792 Event ID:4802

SAMPLE ID: RE73-05-58836
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 1655	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4-19-05 1655	RECEIVED BY (printed name): (signature):	Date/Time:

Rad Screening Data Release Form

The Following samples were received at the Field Support Facility (FSF) without screening data (list sample number):

These samples will not be shipped until radiological screening data documentation arrives at the FSF. I understand that it is my responsibility to ensure this information arrives at the FSF in a timely manner. If holding times are missed because screening data does not arrive, I will pick up the samples.

The following samples do not require rad screening data for the reasons stated (list sample numbers):

RE73-05-58824,
" " -58825
" " -58826
-58827
-58828
-58829
-58830
-58831
-58832
-58833
-58834
-58835

RE73-05-58836
" " -58837
" " -58838
-58839
-58840
-58841
-58777

Reason: SCREENED IN THE FIELD BY RCT

Print Last Name Kenneth R. LEONARD Signature [signature] Date 4/19/05

Data-Validation Cover Sheet

☒ Rejected Data

Section I

Request Number: 3158S Validation Date: 03-Jun-05 Lab Code: STL St Louis

Contract Laboratory Name: _____

Validator: Clifford Deiner Organization: ENV-ECR

Analytical Suite (check all that apply):
- ☒ Volatile Organics
- ☒ Semivolatile Organics
- ☒ Organochlorine Pesticides/Polychlorinated Biphenyls
- ☐ High Explosives
- ☐ Inorganics
- ☐ Radiochemistry

Other (describe): _____

Section II—Completeness Check

Yes	No	n/a	(check one)	Yes	No	n/a	(check one)
☒	☐	☐	1. Chain-of-custody form(s)	☒	☐	☐	6. Raw/BSS data
☒	☐	☐	2. Case narrative	☒	☐	☐	7. Quality control forms
☒	☐	☐	3. Sample result forms	☒	☐	☐	8. Quantitation reports
☒	☐	☐	4. Sample chromatograms	☒	☐	☐	9. TICs forms
☒	☐	☐	5. Standard chromatograms	☒	☐	☐	10. TICs mass spectra

Identify any samples in the assigned Request Number that are missing:

_____ _____ _____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____ _____ _____

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

Volatiles:

Method blank contamination was present for bromomethane and methylene chloride and the sample results were qualified U,V4. Some initial and continuing calibrations did not meet acceptance limits sample results were qualified UJ,V7a. Some surrogates did not meet acceptance limits and affected sample results were qualified J+,V3. Some internal standards did not meet acceptance limits and affected sample results were qualifed J,V1a or UJ,V1a. The mass spectrum for 1,3-dichlorobenzene for RE73-05-58835 did not meet method specifications and the sample result was qualified U,V8. All other QCs met acceptance limits.

Semivolatiles:

The continuing calibration for benzyl alcohol did not meet acceptance limits and sample results were qualified UJ,SV7a. Some internal standards did not meet acceptance limits and affected sample results were qualified J,SV1a or UJ,SV1a. The LCS recoveries for some analytes did not meet acceptance limits and affected sample results were qualified J-,SV12b or UJ,SV12c. The LCS recovery for benzo(g,h,i)perylene(7.5%) was less than the 10% lower limit of acceptance and the detected sample results were qualified J-,SV12a while the nondetected sample result for RE73-05-58841 was qualified R,SV12a. The sample were reextracted out of holding time and these sample results were qualified R,SV19. The mass spectrum for fluorene for RE73-05-58829 did not meet method specifications and the sample result was qualified U,SV8. All other QCs met acceptance limits.

PCBs:

CD

All QCs met acceptance limits.

Validator's signature: _____ Date: 6-3-05

(Attach additional comment sheets as necessary.)

PEST/PCB Data-Validation Checklist

Yes	No	n/a	(check one)	Assign qualifier listed below if criteria = Yes: Detected analyte	Assign qualifier listed below if criteria = Yes: Undetected analyte
☐	☒	☐	1. The breakdown performance check is not present.	R, P10b	R, P10b
☐	☒	☐	2. The breakdown performance exceeds criteria for individual or combined.	J-, P10	---[a], P10
☐	☒	☐	3. The Breakdown performance exceeds criteria and the associated breakdown products are present in sample.	J+, P10a	UJ, P10a
☐	☒	☐	4. Initial calibration is not present.	R, P16	R, P16
☐	☒	☐	5. Initial calibration does not have 5 calibration points and/or low standard at or below the reporting limit.	J, P7	R, P7
☐	☒	☐	6. Initial calibration analyte %RSD is >20% or RSD is <0.995.	J, P7a	UJ, P7a
☐	☒	☐	7. The CCV is not present or analyzed at proper frequency.	R, P16	R, P16
☐	☒	☐	8. Continuing calibration analyte %D is >15%.	J, P7a	UJ, P7a
☐	☒	☐	9. A multicomponent analyte is reported with no standard being analyzed within 72 h of the initial analysis.	J, P7b	N/A
☐	☒	☐	10. The RT window information is not present.	R, P11	R, P11
☐	☒	☐	11. RT window for individual analytes in the CCV have shifted more than 0.05 minutes from the RT window from the initial calibration.	---[b], P11a	---[c], P11a
☐	☒	☐	12. The method blank is not reported.	R, P4b	R, P4b
☐	☒	☐	13. The analyte detected in blank and sample result for analyte < 5x the amount in blank.	UJ, P4	N/A
☐	☒	☐	14. The analyte detected in blank and sample result for analyte > 5x the amount in blank.	J, P4a	N/A
☐	☒	☐	15. The confirmation information is not present for positive results.	R, P8a	R, P8a
☐	☒	☐	16. The analyte reported was not confirmed on a second dissimilar column or detector.	UJ, P8	N/A
☐	☒	☐	17. The analyte reported exceeds the RT window but was confirmed.	J, P11b	N/A
☐	☒	☐	18. The multicomponent analyte is reported but does not match the pattern for the analyte in the associated standard.	J, P7b	N/A
☐	☒	☐	19. Surrogate information is not present.	R, P3f	R, P3f
☐	☒	☐	20. Surrogate % recovery is > the UAL.	J+, P3	N/A
☐	☒	☐	21. Surrogate % recovery is < LAL but ≥10%.	J-, P3a	UJ, P3c
☐	☒	☐	22. Surrogate % recovery is < 10%.	J-, P3b	R, P3d
☐	☒	☐	23. One surrogate recovery is < LAL and one surrogate recovery is > UAL.	J, P3e	UJ, P3e
☐	☒	☐	24. The LCS information is not present.	R, P12	R, P12
☐	☒	☐	25. LCS % recovery is >130%.	J+, P12d	N/A
☐	☒	☐	26. LCS % recovery is < 70% but ≥10%.	J-, P12b	UJ, P12c
☐	☒	☐	27. LCS % recovery is < 10%.	J-, P12a	R, P12a
☐	☒	☐	28. The sample was extracted outside of the appropriate hold time.	J-, P9	UJ, P9
☐	☒	☐	29. The sample was extracted 2 times the appropriate holding time.	R, P9a	R, P9a
☐	☒	☐	30. The sample was analyzed outside the analytical holding time.	R, P9b	R, P9b
☐	☒	☐	31. The sample was diluted inappropriately.	N/A	U, P10c
☐	☒	☐	32. The other obvious data quality issues identified.	__, P19	__, P19

CD

Attachment D: SVOC Data-Validation Checklist

Yes	No	(check one)	Assign qualifier listed below if criteria = Yes	
			Detected analyte	Undetected analyte
☐	☒	1. The Sample was extracted >1 to ≤2 times the appropriate hold time requirement.	J-, SV9	UJ, SV9
☐	☒	2. The Sample was extracted >2 times the appropriate holding time requirement.	R, SV9a	R, SV9a
☐	☒	3. The Sample was analyzed outside the analytical holding time requirement.	R, SV9b	R, SV9b
☐	☒	4. The instrument performance check (DFTPP) is not present or fails acceptance criteria.	R, SV16A	R, SV16A
☐	☒	5. The initial calibration is not present.	R, SV16	R, SV16
☐	☒	6. The initial calibration does not have either 5 calibration points or a low standard at the reporting limit.	R, SV7	R, SV7
☐	☒	7. The initial calibration analyte %RSD is >30%.	J, SV7a	UJ, SV7a
☐	☒	8. The analyte minimum RRF is <0.05 in the initial calibration.	J, SV7b	R, SV7b
☐	☒	9. CCV is not present.	R, SV16	R, SV16
☒	☐	10. The continuing calibration analyte %D is >25%.	J, SV7a	UJ, SV7a
☐	☒	11. The analyte minimum RRF is <0.05 in the continuing calibration.	J, SV7b	R, SV7b
☐	☒	12. The method blank information is not present.	R, SV4b	R, SV4b
☐	☒	13. The analyte detected in the method blank and sample result for analyte is ≤5x/10x the amount in blank.	U, SV4	N/A
☐	☒	14. The analyte detected in the method blank and sample result for analyte is >5x/10x the amount in method blank	J, SV4a	N/A
☐	☒	15. IS information is not present.	R, SV2a	R, SV2a
☐	☒	16. The IS area in the CCV is <50%R or >200%R.	J, SV1	UJ, SV1
☐	☒	17. The IS retention times have shifted by more 30 s.	J, SV0	R, SV0
☐	☒	18. The sample IS area is >200%R.	J, SV1b	N/A
☒	☐	19. The sample IS area is <50%R but ≥10%R.The s	J, SV1a	UJ, SV1a
☐	☒	20. The Sample IS area is <10%R.	J, SV2	R, SV2
☐	☒	21. The surrogate information is not present.	R, SV3f	R, SV3f
☐	☒	22. The surrogate %R is greater than the UAL.	J+, SV3	N/A
☐	☒	23. The surrogate %R is less than the LAL but ≥10%.	J-, SV3a	UJ, SV3c
☐	☒	24. The surrogate %R is <10%.	J-, SV3b	R, SV3d
☐	☒	25. There is one surrogate %R <LAL and one surrogate %R >UAL.	J, SV3e	UJ, SV3e
☐	☒	26. LCS information is not present.	R, SV12	R, SV12
☐	☒	27. The LCS %R is >UAL.	J+, SV12d	N/A
☒	☐	28. The LCS %R is <LAL but ≥10%.	J-, SV12b	UJ, SV12c
☒	☐	29. The LCS %R is <10%	J-, SV12a	R, SV12a
☐	☒	30. Mass spectral information is missing.	R, SV8a	R, SV8a
☒	☐	31. The mass spectrum does not meet method specifications.	U, SV8	N/A
☐	☒	32. TICs were requested but not reported.	none	none
☐	☒	33. The samplewas diluted inappropriately.	N/A	UJ, V10
☒	☐	34. Other obvious data quality issues were identified.	__, SV19	__, SV19

CD

VOC Data-Validation Checklist

Yes	No	n/a	(check one)	Assign qualifier listed below if criteria = Yes: Detected analyte	Assign qualifier listed below if criteria = Yes: Undetected analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	J, V9	UJ, V9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, V9a	R, V9a
☐	☒	☐	3. The instrument performance check was not present or fails acceptance criteria.	R, V16a	R, V16a
☐	☒	☐	4. The initial calibration was not present.	R, V16	R, V16
☐	☒	☐	5. The initial calibration did not have 5 calibration points and a low standard at the reporting limit.	R, V7	R, V7
☐	☒	☐	6. The initial calibration analyte %RSD was >30% .	J, V7a	UJ, V7a
☐	☒	☐	7. The analyte minimum RRF was <0.05.	J, V7b	R, V7b
☐	☒	☐	8. The CCV was not present.	R, V16	R, V16
☒	☐	☐	9. The continuing calibration analyte %D was >25%.	J, V7a	UJ, V7a
☐	☒	☐	10. The analyte minimum RRF was <0.05.	J, V7b	R, V7b
☐	☒	☐	11. The method blank was not reported.	R, V4b	R, V4b
☒	☐	☐	12. The analyte detected in the method blank and sample result for analyte was < 5x/10x the amount in the blank.	U, V4	N/A
☐	☒	☐	13. The analyte detected in the method blank and sample result for analyte was >5x/10x the amount in the method blank.	J, V4a	N/A
☐	☒	☐	14. The IS information was not present.	R, V2a	R, V2a
☐	☒	☐	15. The IS areas in CCV were <50% or >200% of the previous days' IS areas.	J, V1	UJ, V1
☐	☒	☐	16. The IS retention times had shifted by >30 s.	J, V0	UJ, V0
☐	☒	☐	17. The sample IS areas were >200% of the daily CCV IS areas.	J, V1b	N/A
☒	☐	☐	18. The sample IS areas were <50% but are ≥10% of the daily CCV IS areas.	J, V1a	UJ, V1a
☐	☒	☐	19. The sample IS areas were <10% of the daily CCV IS areas.	J, V2	R, V2
☐	☒	☐	20. The surrogate information was not present.	R, V3f	R, V3f
☒	☐	☐	21. The surrogate %R was >UAL.	J+, V3	N/A
☐	☒	☐	22. The surrogate %R was <LAL but ≥10%.	J-, V3a	UJ, V3c
☐	☒	☐	23. The surrogate %R was <10%.	J-, V3b	R, V3d
☐	☒	☐	24. The surrogate recoveries were (1) <LAL and (1) >UAL.	J, V3e	UJ, V3e
☐	☒	☐	25. The LCS information was not present.	R, V12	R, V12
☐	☒	☐	26. The LCS %R was >UAL.	J+, V12d	N/A
☐	☒	☐	27. The LCS %R was <LAL but ≥10%.	J-, V12b	UJ, V12c
☐	☒	☐	28. The LCS %R was <10%.	J-, V12a	R, V12a
☐	☒	☐	29. The mass spectral information was missing.	R, V8a	R, V8a
☒	☐	☐	30. The mass spectrum did not meet method specifications.	U, V8	N/A
☐	☒	☐	31. The TICs were requested but not reported.	R, V11	R, V11
☐	☒	☐	32. The sample was diluted inappropriately.	N/A	U, V10
☒	☐	☐	33. Other obvious data-quality issues were identified.	__, V19	__, V19

CD

STL ST. LOUIS
Wednesday, April 20, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3158SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3158S

ANALYSIS TYPE: ORGANIC

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58829	1	250 ML AMBER GLASS	8270C+8082	ICE	S
RE73-05-58829	2	125 SEPTUM AMBER GLASS	8260B	ICE	S
RE73-05-58835	1	250 ML AMBER GLASS	8270C+8082	ICE	S
RE73-05-58835	2	125 SEPTUM AMBER GLASS	8260B	ICE	S
RE73-05-58841	1	250 ML AMBER GLASS	8270C+8082	ICE	S
RE73-05-58841	2	125 SEPTUM AMBER GLASS	8260B	ICE	S
RE73-05-58877	1	125 SEPTUM AMBER GLASS	8260B	ICE	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3158S

+ 8oz liner, mat 125 glass. SW
4.21.05
did not recv. 58877

Relinquished By:		Date	Time	Received By:		Date	Time
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
Received for DISPOSAL By:		**Date**	**Time**	**Remarks:**			
PRINTED NAME	SIGNATURE						

LOT# F5D210380

REQUEST NUMBER: 3158S

Los Alamos
NATIONAL LABORATORY

ANALYSIS TYPE: ORGANIC

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

These samples are on:

SHIP DATE: 04/20/2005
REPORT DUE: 05/05/2005
TURN AROUND REQ'D: 15

LANL Request Number: 3158S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

RAD SCREENING: NOT REQ
COMMENTS: NOTE: Please do the GPC for all 8270 + 8082.

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:8082	RE73-05-58829	1	S	04/19/2005	
SW-846:8270C	RE73-05-58829	1	S	04/19/2005	
SW-846:8260B	RE73-05-58829	2	S	04/19/2005	
SW-846:8082	RE73-05-58835	1	S	04/19/2005	
SW-846:8270C	RE73-05-58835	1	S	04/19/2005	
SW-846:8260B	RE73-05-58835	2	S	04/19/2005	
SW-846:8082	RE73-05-58841	1	S	04/19/2005	
SW-846:8270C	RE73-05-58841	1	S	04/19/2005	
SW-846:8260B	RE73-05-58841	2	S	04/19/2005	
SW-846:8260B	RE73-05-58877	1	S	04/20/2005	

Final Page of REQUEST NUMBER 3158S

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58829

GC Semivolatiles

Lot-Sample #...: F5D210380-001	**Work Order #...:** G8WXJ1AE	**Matrix.....:** SOLID	
Date Sampled...: 04/19/05	**Date Received..:** 04/21/05		
Prep Date.....: 04/29/05	**Analysis Date..:** 05/09/05		
Prep Batch #...: 5119298	**Analysis Time..:** 17:28		
Dilution Factor: 1			
% Moisture.....: 20	**Method.....:** SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	41	ug/kg
Aroclor 1221	ND	41	ug/kg
Aroclor 1232	ND	41	ug/kg
Aroclor 1242	ND	41	ug/kg
Aroclor 1248	ND	41	ug/kg
Aroclor 1254	ND	41	ug/kg
Aroclor 1260	ND	41	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	111	(30 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58835

GC Semivolatiles

Lot-Sample #...:	F5D210380-002	**Work Order #...:**	G8WXV1AE	**Matrix.....:**	SOLID
Date Sampled...:	04/19/05	**Date Received..:**	04/21/05		
Prep Date.....:	04/29/05	**Analysis Date..:**	05/09/05		
Prep Batch #...:	5119298	**Analysis Time..:**	17:44		
Dilution Factor:	1				
% Moisture.....:	19	**Method.....:**	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	41	ug/kg
Aroclor 1221	ND	41	ug/kg
Aroclor 1232	ND	41	ug/kg
Aroclor 1242	ND	41	ug/kg
Aroclor 1248	ND	41	ug/kg
Aroclor 1254	**58**	**41**	**ug/kg**
Aroclor 1260	ND	41	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	126	(30 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58841

GC Semivolatiles

Lot-Sample #...:	F5D210380-003	**Work Order #...:**	G8WXX1AE	**Matrix.....:**	SOLID
Date Sampled...:	04/19/05	**Date Received..:**	04/21/05		
Prep Date.....:	04/29/05	**Analysis Date..:**	05/09/05		
Prep Batch #...:	5119298	**Analysis Time..:**	18:01		
Dilution Factor:	1				
% Moisture.....:	20	**Method.....:**	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	41	ug/kg
Aroclor 1221	ND	41	ug/kg
Aroclor 1232	ND	41	ug/kg
Aroclor 1242	ND	41	ug/kg
Aroclor 1248	ND	41	ug/kg
Aroclor 1254	96	41	ug/kg
Aroclor 1260	ND	41	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	115	(30 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58829

GC/MS Volatiles

Lot-Sample #...: F5D210380-001	Work Order #...: G8WXJ1AC	Matrix.....: SOLID	
Date Sampled...: 04/19/05	Date Received..: 04/21/05		
Prep Date.....: 04/27/05	Analysis Date..: 04/27/05		
Prep Batch #...: 5117629	Analysis Time..: 14:43		
Dilution Factor: 1			
% Moisture.....: 20	Method.....: SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	13	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	3.5 J,B	13	ug/kg U, V4; UJ, V7a
Chloroethane	ND	13	ug/kg
Trichlorofluoromethane	ND	13	ug/kg
Trichlorotrifluoroethane	ND	6.3	ug/kg
Acetone	ND	25	ug/kg UJ, V7a
1,1-Dichloroethene	ND	6.3	ug/kg
Iodomethane	ND	6.3	ug/kg
Methylene chloride	11 B	6.3	ug/kg U, V4
Carbon disulfide	ND	6.3	ug/kg
1,1-Dichloroethane	ND	6.3	ug/kg
2-Butanone (MEK)	ND	25	ug/kg
2,2-Dichloropropane	ND	6.3	ug/kg
1,2-Dichloroethene (total)	ND	6.3	ug/kg
Chloroform	ND	6.3	ug/kg
Bromochloromethane	ND	6.3	ug/kg
1,1,1-Trichloroethane	ND	6.3	ug/kg
1,1-Dichloropropene	ND	6.3	ug/kg
Carbon tetrachloride	ND	6.3	ug/kg
1,2-Dichloroethane	ND	6.3	ug/kg
Benzene	ND	6.3	ug/kg
Trichloroethene	0.71 J	6.3	ug/kg
1,2-Dichloropropane	ND	6.3	ug/kg
Bromodichloromethane	ND	6.3	ug/kg
Dibromomethane	ND	6.3	ug/kg
4-Methyl-2-pentanone	ND	25	ug/kg UJ, V7a
cis-1,3-Dichloropropene	ND	6.3	ug/kg
Toluene	ND	6.3	ug/kg UJ, V1a
trans-1,3-Dichloropropene	ND	6.3	ug/kg
1,1,2-Trichloroethane	ND	6.3	ug/kg
2-Hexanone	ND	25	ug/kg ; UJ, V7a
1,3-Dichloropropane	ND	6.3	ug/kg
Tetrachloroethene	ND	6.3	ug/kg
Chlorodibromomethane	ND	6.3	ug/kg
1,2-Dibromoethane	ND	6.3	ug/kg
Chlorobenzene	ND	6.3	ug/kg

(Continued on next page)

CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RF73-05-58829

GC/MS Volatiles

Lot-Sample #...: F5D210380-001 Work Order #...: G8WXJ1AC Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,1,1,2-Tetrachloroethane	ND	6.3	ug/kg UJ, V1a
Ethylbenzene	ND	6.3	ug/kg UJ, V1a
Vinyl chloride	ND	6.3	ug/kg
Xylenes (total)	ND	6.3	ug/kg UJ, V1a
Styrene	ND	6.3	ug/kg
Bromoform	ND	6.3	ug/kg
Isopropylbenzene	ND	6.3	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.3	ug/kg
1,2,3-Trichloropropane	ND	6.3	ug/kg
n-Propylbenzene	ND	6.3	ug/kg
Bromobenzene	ND	6.3	ug/kg
2-Chlorotoluene	ND	6.3	ug/kg
1,3,5-Trimethylbenzene	ND	6.3	ug/kg
4-Chlorotoluene	ND	6.3	ug/kg
tert-Butylbenzene	ND	6.3	ug/kg
1,2,4-Trimethylbenzene	0.79 J	6.3	ug/kg J, V1a
sec-Butylbenzene	ND	6.3	ug/kg UJ, V1a
p-Isopropyltoluene	17	6.3	ug/kg J, V1a
1,3-Dichlorobenzene	ND	6.3	ug/kg UJ, V1a
1,4-Dichlorobenzene	ND	6.3	ug/kg
n-Butylbenzene	ND	6.3	ug/kg
1,2-Dichlorobenzene	ND	6.3	ug/kg
1,2-Dibromo-3-chloro-propane	ND	13	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	160 *	(60 - 148)
Dibromofluoromethane	115	(61 - 140)
1,2-Dichloroethane-d4	111	(56 - 149)
4-Bromofluorobenzene	133	(56 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

CW

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58835

GC/MS Volatiles

Lot-Sample #...: F5D210380-002 Work Order #...: G8WXV1AC Matrix.....: SOLID
Date Sampled...: 04/19/05 Date Received..: 04/21/05
Prep Date.....: 04/27/05 Analysis Date..: 04/27/05
Prep Batch #...: 5117629 Analysis Time..: 16:33
Dilution Factor: 1
% Moisture.....: 19 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	12	ug/kg
Chloromethane	ND	12	ug/kg
Bromomethane	4.7 J,B	12	ug/kg U, V4; UJ, V7a
Chloroethane	ND	12	ug/kg
Trichlorofluoromethane	ND	12	ug/kg
Trichlorotrifluoroethane	ND	6.2	ug/kg
Acetone	ND	25	ug/kg UJ, V7a
1,1-Dichloroethene	ND	6.2	ug/kg
Iodomethane	ND	6.2	ug/kg
Methylene chloride	12 B	6.2	ug/kg U, V4
Carbon disulfide	ND	6.2	ug/kg
1,1-Dichloroethane	ND	6.2	ug/kg
2-Butanone (MEK)	ND	25	ug/kg
2,2-Dichloropropane	ND	6.2	ug/kg
1,2-Dichloroethene (total)	ND	6.2	ug/kg
Chloroform	ND	6.2	ug/kg
Bromochloromethane	ND	6.2	ug/kg
1,1,1-Trichloroethane	ND	6.2	ug/kg
1,1-Dichloropropene	ND	6.2	ug/kg
Carbon tetrachloride	ND	6.2	ug/kg
1,2-Dichloroethane	ND	6.2	ug/kg
Benzene	ND	6.2	ug/kg
Trichloroethene	ND	6.2	ug/kg
1,2-Dichloropropane	ND	6.2	ug/kg
Bromodichloromethane	ND	6.2	ug/kg
Dibromomethane	ND	6.2	ug/kg
4-Methyl-2-pentanone	ND	25	ug/kg UJ, V7a
cis-1,3-Dichloropropene	ND	6.2	ug/kg CO 6-2-05
Toluene	0.99 J	6.2	ug/kg ~~J+, P3~~ J+, V3; J, V1a
trans-1,3-Dichloropropene	ND	6.2	ug/kg UJ, V1a
1,1,2-Trichloroethane	ND	6.2	ug/kg
2-Hexanone	ND	25	ug/kg [redacted] V7a
1,3-Dichloropropane	ND	6.2	ug/kg
Tetrachloroethene	ND	6.2	ug/kg
Chlorodibromomethane	ND	6.2	ug/kg
1,2-Dibromoethane	ND	6.2	ug/kg
Chlorobenzene	ND	6.2	ug/kg

(Continued on next page)

CO

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58835

GC/MS Volatiles

Lot-Sample #...: F5D210380-002 Work Order #...: G8WXV1AC Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,1,1,2-Tetrachloroethane	ND	6.2	ug/kg UJ, V1a
Ethylbenzene	ND	6.2	ug/kg UJ. V1a
Vinyl chloride	ND	6.2	ug/kg
Xylenes (total)	ND	6.2	ug/kg UJ, V1a
Styrene	ND	6.2	ug/kg
Bromoform	ND	6.2	ug/kg
Isopropylbenzene	ND	6.2	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.2	ug/kg
1,2,3-Trichloropropane	ND	6.2	ug/kg
n-Propylbenzene	ND	6.2	ug/kg
Bromobenzene	ND	6.2	ug/kg
2-Chlorotoluene	ND	6.2	ug/kg
1,3,5-Trimethylbenzene	ND	6.2	ug/kg
4-Chlorotoluene	ND	6.2	ug/kg
tert-Butylbenzene	ND	6.2	ug/kg
1,2,4-Trimethylbenzene	ND	6.2	ug/kg
sec-Butylbenzene	ND	6.2	ug/kg
p-Isopropyltoluene	ND	6.2	ug/kg
1,3-Dichlorobenzene	2.1 J	6.2	ug/kg ~~J+, P3~~ J+, V3 U, V8; UJ. V1a CD 6-2-05
1,4-Dichlorobenzene	ND	6.2	ug/kg UJ. V1a
n-Butylbenzene	ND	6.2	ug/kg UJ. V1a
1,2-Dichlorobenzene	2.6 J	6.2	ug/kg ~~J+, P3~~ J+, V3, UJ. V1a
1,2-Dibromo-3-chloropropane	ND	12	ug/kg UJ, V1a

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	174 *	(60 - 148)
Dibromofluoromethane	137	(61 - 140)
1,2-Dichloroethane-d4	122	(56 - 149)
4-Bromofluorobenzene	182 *	(56 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58841

GC/MS Volatiles

Lot-Sample #...: F5D210380-003 Work Order #...: G8WXX1AC Matrix.....: SOLID
Date Sampled...: 04/19/05 Date Received..: 04/21/05
Prep Date.....: 04/27/05 Analysis Date..: 04/27/05
Prep Batch #...: 5117629 Analysis Time..: 17:10
Dilution Factor: 1
% Moisture.....: 20 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	13	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	2.4 J,B	13	ug/kg U, U4, UJ, V7a
Chloroethane	ND	13	ug/kg
Trichlorofluoromethane	ND	13	ug/kg
Trichlorotrifluoroethane	ND	6.3	ug/kg
Acetone	ND	25	ug/kg UJ, V7a
1,1-Dichloroethene	ND	6.3	ug/kg
Iodomethane	ND	6.3	ug/kg
Methylene chloride	6.6 B	6.3	ug/kg U, U4
Carbon disulfide	ND	6.3	ug/kg
1,1-Dichloroethane	ND	6.3	ug/kg
2-Butanone (MEK)	ND	25	ug/kg
2,2-Dichloropropane	ND	6.3	ug/kg
1,2-Dichloroethene (total)	ND	6.3	ug/kg
Chloroform	ND	6.3	ug/kg
Bromochloromethane	ND	6.3	ug/kg
1,1,1-Trichloroethane	ND	6.3	ug/kg
1,1-Dichloropropene	ND	6.3	ug/kg
Carbon tetrachloride	ND	6.3	ug/kg
1,2-Dichloroethane	ND	6.3	ug/kg
Benzene	ND	6.3	ug/kg
Trichloroethene	ND	6.3	ug/kg
1,2-Dichloropropane	ND	6.3	ug/kg
Bromodichloromethane	ND	6.3	ug/kg
Dibromomethane	ND	6.3	ug/kg
4-Methyl-2-pentanone	ND	25	ug/kg UJ, V7a
cis-1,3-Dichloropropene	ND	6.3	ug/kg
Toluene	ND	6.3	ug/kg
trans-1,3-Dichloropropene	ND	6.3	ug/kg
1,1,2-Trichloroethane	ND	6.3	ug/kg
2-Hexanone	ND	25	ug/kg UJ, V7a
1,3-Dichloropropane	ND	6.3	ug/kg
Tetrachloroethene	ND	6.3	ug/kg
Chlorodibromomethane	ND	6.3	ug/kg
1,2-Dibromoethane	ND	6.3	ug/kg
Chlorobenzene	ND	6.3	ug/kg

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cD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58841

GC/MS Volatiles

Lot-Sample #...: F5D210380-003 **Work Order #...: G8WXX1AC** **Matrix.....: SOLID**

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,1,1,2-Tetrachloroethane	ND	6.3	ug/kg
Ethylbenzene	ND	6.3	ug/kg
Vinyl chloride	ND	6.3	ug/kg
Xylenes (total)	ND	6.3	ug/kg
Styrene	ND	6.3	ug/kg
Bromoform	ND	6.3	ug/kg
Isopropylbenzene	ND	6.3	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.3	ug/kg
1,2,3-Trichloropropane	ND	6.3	ug/kg UJ, V1a
n-Propylbenzene	ND	6.3	ug/kg
Bromobenzene	ND	6.3	ug/kg
2-Chlorotoluene	ND	6.3	ug/kg
1,3,5-Trimethylbenzene	ND	6.3	ug/kg
4-Chlorotoluene	ND	6.3	ug/kg
tert-Butylbenzene	ND	6.3	ug/kg
1,2,4-Trimethylbenzene	ND	6.3	ug/kg
sec-Butylbenzene	ND	6.3	ug/kg
p-Isopropyltoluene	1.3 J	6.3	ug/kg J, V1a
1,3-Dichlorobenzene	ND	6.3	ug/kg UJ, V1a
1,4-Dichlorobenzene	ND	6.3	ug/kg
n-Butylbenzene	ND	6.3	ug/kg
1,2-Dichlorobenzene	ND	6.3	ug/kg
1,2-Dibromo-3-chloro-propane	ND	13	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	126	(60 - 148)
Dibromofluoromethane	110	(61 - 140)
1,2-Dichloroethane-d4	112	(56 - 149)
4-Bromofluorobenzene	85	(56 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58829

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-001	**Work Order #...:** G8WXJ1AD	**Matrix.....:** SOLID
Date Sampled...: 04/19/05	**Date Received..:** 04/21/05	
Prep Date.....: 04/29/05	**Analysis Date..:** 05/10/05	
Prep Batch #...: 5119285	**Analysis Time..:** 17:46	
Dilution Factor: 1		
% Moisture.....: 20	**Method.....:** SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
N-Nitrosodimethylamine	ND	410	ug/kg
Phenol	ND	410	ug/kg
Aniline	ND	410	ug/kg
bis(2-Chloroethyl)-ether	ND	410	ug/kg
2-Chlorophenol	ND	410	ug/kg
1,3-Dichlorobenzene	**160 J**	**410**	**ug/kg**
1,4-Dichlorobenzene	**170 J**	**410**	**ug/kg**
Benzyl alcohol	ND	410	ug/kg UJ,SV7a
1,2-Dichlorobenzene	**150 J**	**410**	**ug/kg**
2-Methylphenol	ND	410	ug/kg
3-Methylphenol & 4-Methylphenol	ND	410	ug/kg
2,2'-oxybis(1-Chloropropane)	ND	410	ug/kg
N-Nitrosodi-n-propyl-amine	ND	410	ug/kg
Hexachloroethane	ND	410	ug/kg
Nitrobenzene	**210 J**	**410**	**ug/kg**
Isophorone	ND	410	ug/kg
2-Nitrophenol	**180 J**	**410**	**ug/kg**
2,4-Dimethylphenol	ND	410	ug/kg
bis(2-Chloroethoxy) methane	ND	410	ug/kg
Benzoic acid	**830 J**	**2000**	**ug/kg**
2,4-Dichlorophenol	ND	410	ug/kg
1,2,4-Trichloro-benzene	**180 J**	**410**	**ug/kg**
Naphthalene	**130 J**	**410**	**ug/kg**
4-Chloroaniline	ND	410	ug/kg
Hexachlorobutadiene	**140 J**	**410**	**ug/kg**
4-Chloro-3-methylphenol	ND	410	ug/kg
2-Methylnaphthalene	**120 J**	**410**	**ug/kg**
Hexachlorocyclopenta-diene	ND	2000	ug/kg
2,4,6-Trichloro-phenol	**130 J**	**410**	**ug/kg**
2,4,5-Trichloro-phenol	ND	410	ug/kg

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58829

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-001 Work Order #...: G8WXJ1AD Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Chloronaphthalene	**140 J**	**410**	**ug/kg**
2-Nitroaniline	ND	2000	ug/kg
Dimethyl phthalate	ND	410	ug/kg
Acenaphthylene	**150 J**	**410**	**ug/kg**
2,6-Dinitrotoluene	ND	410	ug/kg
3-Nitroaniline	ND	2000	ug/kg
Acenaphthene	**130 J**	**410**	**ug/kg**
2,4-Dinitrophenol	ND	2000	ug/kg
4-Nitrophenol	ND	2000	ug/kg
Dibenz(a,h)anthracene	**86 J**	**410**	**ug/kg**
Dibenzofuran	**140 J**	**410**	**ug/kg**
2,4-Dinitrotoluene	ND	410	ug/kg
Diethyl phthalate	ND	410	ug/kg CD 6-3-05
Fluorene	**150 J**	**410**	**ug/kg** U, U8 → U, SU8
4-Chlorophenyl phenyl ether	**190 J**	**410**	**ug/kg**
4-Nitroaniline	ND	2000	ug/kg
4,6-Dinitro-2-methylphenol	ND	2000	ug/kg
N-Nitrosodiphenylamine	**190 J**	**410**	**ug/kg**
Azobenzene	ND	410	ug/kg
Pyrene	**470**	**410**	**ug/kg** J, SU1a ; J-, SU12b — CD 6-3-05
4-Bromophenyl phenyl ether	**190 J**	**410**	**ug/kg**
Hexachlorobenzene	**450**	**410**	**ug/kg** ~~UJ, SU12a~~ J-, SU12b — CD 6-3-05
Pentachlorophenol	**180 J**	**2000**	**ug/kg**
Phenanthrene	**150 J**	**410**	**ug/kg**
Anthracene	**140 J**	**410**	**ug/kg**
Di-n-butyl phthalate	ND	410	ug/kg
Fluoranthene	**140 J**	**410**	**ug/kg** J-, SU12b
Butyl benzyl phthalate	ND	410	ug/kg UJ, SU1a
Benzo(a)anthracene	**150 J**	**410**	**ug/kg** J, SU1a
3,3'-Dichlorobenzidine	ND	2000	ug/kg UJ, SU1a
Chrysene	**160 J**	**410**	**ug/kg** J, SU1a
bis(2-Ethylhexyl) phthalate	**88 J**	**410**	**ug/kg** J, SU1a
Di-n-octyl phthalate	ND	410	ug/kg UJ, SU1a
Benzo(b)fluoranthene	**180 J**	**410**	**ug/kg** J, SU1a
Benzo(k)fluoranthene	**150 J**	**410**	**ug/kg** J, SU1a
Benzo(a)pyrene	**540**	**410**	**ug/kg** ~~J~~ J, SU1a ; J-, SU12b
Indeno(1,2,3-cd)pyrene	**530**	**410**	**ug/kg** ↓ ; J-, SU12b
Benzo(ghi)perylene	**130 J**	**410**	**ug/kg** ~~R, SU1a~~ J-, SU12a — CD 6-2-05

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CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58829

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-001 Work Order #...: G8WXJ1AD Matrix.....: SOLID

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	68	(40 - 103)
Phenol-d5	71	(36 - 105)
Nitrobenzene-d5	81	(45 - 114)
2-Fluorobiphenyl	76	(49 - 120)
2,4,6-Tribromophenol	68	(39 - 114)
Terphenyl-d14	78	(42 - 108)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58829

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-001 Work Order #...: G8WXJ2AD Matrix.....: SOLID
Date Sampled...: 04/19/05 Date Received..: 04/21/05
Prep Date.....: 05/11/05 Analysis Date..: 05/12/05
Prep Batch #...: 5131374 Analysis Time..: 22:14
Dilution Factor: 1
% Moisture.....: 20 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
N-Nitrosodimethylamine	ND	830	ug/kg
Phenol	ND	830	ug/kg
Aniline	ND	830	ug/kg
bis(2-Chloroethyl)-ether	ND	830	ug/kg
2-Chlorophenol	ND	830	ug/kg
1,3-Dichlorobenzene	ND	830	ug/kg
1,4-Dichlorobenzene	ND	830	ug/kg
Benzyl alcohol	ND	830	ug/kg
1,2-Dichlorobenzene	ND	830	ug/kg
2-Methylphenol	ND	830	ug/kg
3-Methylphenol & 4-Methylphenol	ND	830	ug/kg
2,2'-oxybis(1-Chloropropane)	ND	830	ug/kg
N-Nitrosodi-n-propyl-amine	ND	830	ug/kg
Hexachloroethane	ND	830	ug/kg
Nitrobenzene	ND	830	ug/kg
Isophorone	ND	830	ug/kg
2-Nitrophenol	ND	830	ug/kg
2,4-Dimethylphenol	ND	830	ug/kg
bis(2-Chloroethoxy) methane	ND	830	ug/kg
Benzoic acid	ND	4000	ug/kg
2,4-Dichlorophenol	ND	830	ug/kg
1,2,4-Trichloro-benzene	ND	830	ug/kg
Naphthalene	ND	830	ug/kg
4-Chloroaniline	ND	830	ug/kg
Hexachlorobutadiene	ND	830	ug/kg
4-Chloro-3-methylphenol	ND	830	ug/kg
2-Methylnaphthalene	ND	830	ug/kg
Hexachlorocyclopenta-diene	ND	4000	ug/kg
2,4,6-Trichloro-phenol	ND	830	ug/kg
2,4,5-Trichloro-phenol	ND	830	ug/kg

RSV19

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58829

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-001 Work Order #...: G8WXJ2AD Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Chloronaphthalene	ND	830	ug/kg
2-Nitroaniline	ND	4000	ug/kg
Dimethyl phthalate	ND	830	ug/kg
Acenaphthylene	ND	830	ug/kg
2,6-Dinitrotoluene	ND	830	ug/kg
3-Nitroaniline	ND	4000	ug/kg
Acenaphthene	ND	830	ug/kg
2,4-Dinitrophenol	ND	4000	ug/kg
4-Nitrophenol	ND	4000	ug/kg
Dibenz(a,h)anthracene	ND	830	ug/kg
Dibenzofuran	ND	830	ug/kg
2,4-Dinitrotoluene	ND	830	ug/kg
Diethyl phthalate	ND	830	ug/kg
Fluorene	ND	830	ug/kg
4-Chlorophenyl phenyl ether	ND	830	ug/kg
4-Nitroaniline	ND	4000	ug/kg
4,6-Dinitro-2-methylphenol	ND	4000	ug/kg
N-Nitrosodiphenylamine	ND	830	ug/kg
Azobenzene	ND	830	ug/kg
Pyrene	ND	830	ug/kg
4-Bromophenyl phenyl ether	ND	830	ug/kg
Hexachlorobenzene	ND	830	ug/kg
Pentachlorophenol	ND	4000	ug/kg
Phenanthrene	ND	830	ug/kg
Anthracene	ND	830	ug/kg
Di-n-butyl phthalate	500 J	830	ug/kg
Fluoranthene	ND	830	ug/kg
Butyl benzyl phthalate	ND	830	ug/kg
Benzo(a)anthracene	ND	830	ug/kg
3,3'-Dichlorobenzidine	ND	4000	ug/kg
Chrysene	ND	830	ug/kg
bis(2-Ethylhexyl) phthalate	ND	830	ug/kg
Di-n-octyl phthalate	ND	830	ug/kg
Benzo(b)fluoranthene	ND	830	ug/kg
Benzo(k)fluoranthene	ND	830	ug/kg
Benzo(a)pyrene	ND	830	ug/kg
Indeno(1,2,3-cd)pyrene	ND	830	ug/kg
Benzo(ghi)perylene	420 J	830	ug/kg

R, SV19

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CJ

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: ER73-05-58829

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-001 **Work Order #...:** G8WXJ2AD **Matrix.....:** SOLID

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	78	(40 - 103)
Phenol-d5	79	(36 - 105)
Nitrobenzene-d5	90	(45 - 114)
2-Fluorobiphenyl	89	(49 - 120)
2,4,6-Tribromophenol	75	(39 - 114)
Terphenyl-d14	89	(42 - 108)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RF73-05-58835

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-002	**Work Order #...:** G8WXV1AD	**Matrix.....:** SOLID
Date Sampled...: 04/19/05	**Date Received..:** 04/21/05	
Prep Date.....: 04/29/05	**Analysis Date..:** 05/10/05	
Prep Batch #...: 5119285	**Analysis Time..:** 03:38	
Dilution Factor: 1		
% Moisture.....: 19	**Method.....:** SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
N-Nitrosodimethylamine	ND	410	ug/kg
Phenol	ND	410	ug/kg
Aniline	ND	410	ug/kg
bis(2-Chloroethyl)-ether	ND	410	ug/kg
2-Chlorophenol	ND	410	ug/kg
1,3-Dichlorobenzene	ND	410	ug/kg
1,4-Dichlorobenzene	ND	410	ug/kg
Benzyl alcohol	ND	410	ug/kg UJSV7E
1,2-Dichlorobenzene	ND	410	ug/kg
2-Methylphenol	ND	410	ug/kg
3-Methylphenol & 4-Methylphenol	ND	410	ug/kg
2,2'-oxybis(1-Chloropropane)	ND	410	ug/kg
N-Nitrosodi-n-propyl-amine	ND	410	ug/kg
Hexachloroethane	ND	410	ug/kg
Nitrobenzene	ND	410	ug/kg
Isophorone	ND	410	ug/kg
2-Nitrophenol	ND	410	ug/kg
2,4-Dimethylphenol	ND	410	ug/kg
bis(2-Chloroethoxy) methane	ND	410	ug/kg
Benzoic acid	**490 J**	**2000**	**ug/kg**
2,4-Dichlorophenol	ND	410	ug/kg
1,2,4-Trichloro-benzene	ND	410	ug/kg
Naphthalene	ND	410	ug/kg
4-Chloroaniline	ND	410	ug/kg
Hexachlorobutadiene	ND	410	ug/kg
4-Chloro-3-methylphenol	ND	410	ug/kg
2-Methylnaphthalene	ND	410	ug/kg
Hexachlorocyclopenta-diene	ND	2000	ug/kg
2,4,6-Trichloro-phenol	ND	410	ug/kg
2,4,5-Trichloro-phenol	ND	410	ug/kg

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CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RR73-05-58835

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-002 Work Order #...: G8WXV1AD Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Chloronaphthalene	ND	410	ug/kg
2-Nitroaniline	ND	2000	ug/kg
Dimethyl phthalate	ND	410	ug/kg
Acenaphthylene	ND	410	ug/kg
2,6-Dinitrotoluene	ND	410	ug/kg
3-Nitroaniline	ND	2000	ug/kg
Acenaphthene	ND	410	ug/kg
2,4-Dinitrophenol	ND	2000	ug/kg
4-Nitrophenol	ND	2000	ug/kg
Dibenz(a,h)anthracene	ND	410	ug/kg
Dibenzofuran	ND	410	ug/kg
2,4-Dinitrotoluene	ND	410	ug/kg
Diethyl phthalate	ND	410	ug/kg
Fluorene	ND	410	ug/kg
4-Chlorophenyl phenyl ether	ND	410	ug/kg
4-Nitroaniline	ND	2000	ug/kg
4,6-Dinitro-2-methylphenol	ND	2000	ug/kg
N-Nitrosodiphenylamine	ND	410	ug/kg
Azobenzene	ND	410	ug/kg
Pyrene	110 J	410	ug/kg J-,SV12b
4-Bromophenyl phenyl ether	ND	410	ug/kg
Hexachlorobenzene	110 J	410	ug/kg J-,SV12b
Pentachlorophenol	ND	2000	ug/kg
Phenanthrene	ND	410	ug/kg
Anthracene	ND	410	ug/kg
Di-n-butyl phthalate	ND	410	ug/kg
Fluoranthene	ND	410	ug/kg UJ,SV12c
Butyl benzyl phthalate	ND	410	ug/kg
Benzo(a)anthracene	ND	410	ug/kg
3,3'-Dichlorobenzidine	ND	2000	ug/kg
Chrysene	ND	410	ug/kg
bis(2-Ethylhexyl) phthalate	97 J	410	ug/kg
Di-n-octyl phthalate	ND	410	ug/kg
Benzo(b)fluoranthene	ND	410	ug/kg
Benzo(k)fluoranthene	ND	410	ug/kg
Benzo(a)pyrene	ND	410	ug/kg ~~J-,SV12b~~ UJ,SV12c
Indeno(1,2,3-cd)pyrene	ND	410	ug/kg ~~J-,SV12b~~ UJ,SV12c
Benzo(ghi)perylene	340 J	410	ug/kg J-,SV12a

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CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58835

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-002 Work Order #...: G8WXV1AD Matrix.....: SOLID

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	66	(40 - 103)
Phenol-d5	67	(36 - 105)
Nitrobenzene-d5	74	(45 - 114)
2-Fluorobiphenyl	72	(49 - 120)
2,4,6-Tribromophenol	73	(39 - 114)
Terphenyl-d14	68	(42 - 108)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58835

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-002	**Work Order #...:** G8WXV2AD	**Matrix.....:** SOLID	
Date Sampled...: 04/19/05	**Date Received..:** 04/21/05		
Prep Date.....: 05/11/05	**Analysis Date..:** 05/14/05		
Prep Batch #...: 5131374	**Analysis Time..:** 14:45		
Dilution Factor: 1			
% Moisture.....: 19	**Method.....:** SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
N-Nitrosodimethylamine	ND	820	ug/kg
Phenol	ND	820	ug/kg
Aniline	ND	820	ug/kg
bis(2-Chloroethyl)-ether	ND	820	ug/kg
2-Chlorophenol	ND	820	ug/kg
1,3-Dichlorobenzene	ND	820	ug/kg
1,4-Dichlorobenzene	ND	820	ug/kg
Benzyl alcohol	ND	820	ug/kg
1,2-Dichlorobenzene	ND	820	ug/kg
2-Methylphenol	ND	820	ug/kg
3-Methylphenol & 4-Methylphenol	ND	820	ug/kg
2,2'-oxybis(1-Chloropropane)	ND	820	ug/kg
N-Nitrosodi-n-propyl-amine	ND	820	ug/kg
Hexachloroethane	ND	820	ug/kg
Nitrobenzene	ND	820	ug/kg
Isophorone	ND	820	ug/kg
2-Nitrophenol	ND	820	ug/kg
2,4-Dimethylphenol	ND	820	ug/kg
bis(2-Chloroethoxy) methane	ND	820	ug/kg
Benzoic acid	ND	4000	ug/kg
2,4-Dichlorophenol	ND	820	ug/kg
1,2,4-Trichloro-benzene	ND	820	ug/kg
Naphthalene	ND	820	ug/kg
4-Chloroaniline	ND	820	ug/kg
Hexachlorobutadiene	ND	820	ug/kg
4-Chloro-3-methylphenol	ND	820	ug/kg
2-Methylnaphthalene	ND	820	ug/kg
Hexachlorocyclopenta-diene	ND	4000	ug/kg
2,4,6-Trichloro-phenol	ND	820	ug/kg
2,4,5-Trichloro-phenol	ND	820	ug/kg

R.SU19

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: EE73-05-58835

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-002 Work Order #...: G8WXV2AD Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Chloronaphthalene	ND	820	ug/kg
2-Nitroaniline	ND	4000	ug/kg
Dimethyl phthalate	ND	820	ug/kg
Acenaphthylene	ND	820	ug/kg
2,6-Dinitrotoluene	ND	820	ug/kg
3-Nitroaniline	ND	4000	ug/kg
Acenaphthene	ND	820	ug/kg
2,4-Dinitrophenol	ND	4000	ug/kg
4-Nitrophenol	ND	4000	ug/kg
Dibenz(a,h)anthracene	ND	820	ug/kg
Dibenzofuran	ND	820	ug/kg
2,4-Dinitrotoluene	ND	820	ug/kg
Diethyl phthalate	ND	820	ug/kg
Fluorene	ND	820	ug/kg
4-Chlorophenyl phenyl ether	ND	820	ug/kg
4-Nitroaniline	ND	4000	ug/kg
4,6-Dinitro-2-methylphenol	ND	4000	ug/kg
N-Nitrosodiphenylamine	ND	820	ug/kg
Azobenzene	ND	820	ug/kg
Pyrene	ND	820	ug/kg
4-Bromophenyl phenyl ether	ND	820	ug/kg
Hexachlorobenzene	ND	820	ug/kg
Pentachlorophenol	ND	4000	ug/kg
Phenanthrene	ND	820	ug/kg
Anthracene	ND	820	ug/kg
Di-n-butyl phthalate	ND	820	ug/kg
Fluoranthene	ND	820	ug/kg
Butyl benzyl phthalate	ND	820	ug/kg
Benzo(a)anthracene	ND	820	ug/kg
3,3'-Dichlorobenzidine	ND	820	ug/kg
Chrysene	ND	4000	ug/kg
bis(2-Ethylhexyl) phthalate	ND	820	ug/kg
Di-n-octyl phthalate	ND	820	ug/kg
Benzo(b)fluoranthene	ND	820	ug/kg
Benzo(k)fluoranthene	ND	820	ug/kg
Benzo(a)pyrene	ND	820	ug/kg
Indeno(1,2,3-cd)pyrene	ND	820	ug/kg
Benzo(ghi)perylene	ND	820	ug/kg

R, SU19

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CO

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58835

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-002 Work Order #...: G8WXV2AD Matrix.....: SOLID

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	72	(40 - 103)
Phenol-d5	80	(36 - 105)
Nitrobenzene-d5	84	(45 - 114)
2-Fluorobiphenyl	76	(49 - 120)
2,4,6-Tribromophenol	68	(39 - 114)
Terphenyl-d14	72	(42 - 108)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

CW

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58841

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-003 Work Order #...: G8WXX1AD Matrix.....: SOLID
Date Sampled...: 04/19/05 Date Received..: 04/21/05
Prep Date.....: 04/29/05 Analysis Date..: 05/10/05
Prep Batch #...: 5119285 Analysis Time..: 19:23
Dilution Factor: 1
% Moisture.....: 20 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
N-Nitrosodimethylamine	ND	410	ug/kg
Phenol	ND	410	ug/kg
Aniline	ND	410	ug/kg
bis(2-Chloroethyl)-ether	ND	410	ug/kg
2-Chlorophenol	ND	410	ug/kg
1,3-Dichlorobenzene	ND	410	ug/kg
1,4-Dichlorobenzene	ND	410	ug/kg
Benzyl alcohol	ND	410	ug/kg
1,2-Dichlorobenzene	ND	410	ug/kg UJ,SU7a
2-Methylphenol	ND	410	ug/kg
3-Methylphenol & 4-Methylphenol	ND	410	ug/kg
2,2'-oxybis(1-Chloropropane)	ND	410	ug/kg
N-Nitrosodi-n-propyl-amine	ND	410	ug/kg
Hexachloroethane	ND	410	ug/kg
Nitrobenzene	ND	410	ug/kg
Isophorone	ND	410	ug/kg
2-Nitrophenol	ND	410	ug/kg
2,4-Dimethylphenol	ND	410	ug/kg
bis(2-Chloroethoxy) methane	ND	410	ug/kg
Benzoic acid	ND	2000	ug/kg
2,4-Dichlorophenol	ND	410	ug/kg
1,2,4-Trichloro-benzene	ND	410	ug/kg
Naphthalene	ND	410	ug/kg
4-Chloroaniline	ND	410	ug/kg
Hexachlorobutadiene	ND	410	ug/kg
4-Chloro-3-methylphenol	ND	410	ug/kg
2-Methylnaphthalene	ND	410	ug/kg
Hexachlorocyclopenta-diene	ND	2000	ug/kg
2,4,6-Trichloro-phenol	ND	410	ug/kg
2,4,5-Trichloro-phenol	ND	410	ug/kg

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CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58841

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-003 Work Order #...: G8WXX1AD Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Chloronaphthalene	ND	410	ug/kg
2-Nitroaniline	ND	2000	ug/kg
Dimethyl phthalate	ND	410	ug/kg
Acenaphthylene	ND	410	ug/kg
2,6-Dinitrotoluene	ND	410	ug/kg
3-Nitroaniline	ND	2000	ug/kg
Acenaphthene	ND	410	ug/kg
2,4-Dinitrophenol	ND	2000	ug/kg
4-Nitrophenol	ND	2000	ug/kg
Dibenz(a,h)anthracene	ND	410	ug/kg
Dibenzofuran	ND	410	ug/kg
2,4-Dinitrotoluene	ND	410	ug/kg
Diethyl phthalate	ND	410	ug/kg
Fluorene	ND	410	ug/kg
4-Chlorophenyl phenyl ether	ND	410	ug/kg
4-Nitroaniline	ND	2000	ug/kg
4,6-Dinitro-2-methylphenol	ND	2000	ug/kg
N-Nitrosodiphenylamine	ND	410	ug/kg
Azobenzene	ND	410	ug/kg
Pyrene	320 J	410	ug/kg J-,SV12b
4-Bromophenyl phenyl ether	ND	410	ug/kg
Hexachlorobenzene	ND	410	ug/kg UJ,SV12c
Pentachlorophenol	ND	2000	ug/kg
Phenanthrene	200 J	410	ug/kg
Anthracene	ND	410	ug/kg
Di-n-butyl phthalate	ND	410	ug/kg
Fluoranthene	300 J	410	ug/kg J-,SV12b
Butyl benzyl phthalate	ND	410	ug/kg
Benzo(a)anthracene	150 J	410	ug/kg
3,3'-Dichlorobenzidine	ND	2000	ug/kg
Chrysene	150 J	410	ug/kg
bis(2-Ethylhexyl) phthalate	98 J	410	ug/kg
Di-n-octyl phthalate	ND	410	ug/kg
Benzo(b)fluoranthene	120 J	410	ug/kg
Benzo(k)fluoranthene	120 J	410	ug/kg
Benzo(a)pyrene	110 J	410	ug/kg J-,SV12b
Indeno(1,2,3-cd)pyrene	ND	410	ug/kg UJ,SV12c
Benzo(ghi)perylene	ND	410	ug/kg R,SV12a

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CD

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58841

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-003 Work Order #...: G8WXX1AD Matrix.....: SOLID

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	64	(40 - 103)
Phenol-d5	66	(36 - 105)
Nitrobenzene-d5	76	(45 - 114)
2-Fluorobiphenyl	70	(49 - 120)
2,4,6-Tribromophenol	72	(39 - 114)
Terphenyl-d14	74	(42 - 108)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58841

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-003	**Work Order #...:** G8WXX2AD	**Matrix.....:** SOLID	
Date Sampled...: 04/19/05	**Date Received..:** 04/21/05		
Prep Date.....: 05/11/05	**Analysis Date..:** 05/14/05		
Prep Batch #...: 5131374	**Analysis Time..:** 15:17		
Dilution Factor: 1			
% Moisture.....: 20	**Method.....:** SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
N-Nitrosodimethylamine	ND	830	ug/kg
Phenol	ND	830	ug/kg
Aniline	ND	830	ug/kg
bis(2-Chloroethyl)-ether	ND	830	ug/kg
2-Chlorophenol	ND	830	ug/kg
1,3-Dichlorobenzene	ND	830	ug/kg
1,4-Dichlorobenzene	ND	830	ug/kg
Benzyl alcohol	ND	830	ug/kg
1,2-Dichlorobenzene	ND	830	ug/kg
2-Methylphenol	ND	830	ug/kg
3-Methylphenol & 4-Methylphenol	ND	830	ug/kg
2,2'-oxybis(1-Chloropropane)	ND	830	ug/kg
N-Nitrosodi-n-propyl-amine	ND	830	ug/kg
Hexachloroethane	ND	830	ug/kg
Nitrobenzene	ND	830	ug/kg
Isophorone	ND	830	ug/kg
2-Nitrophenol	ND	830	ug/kg
2,4-Dimethylphenol	ND	830	ug/kg
bis(2-Chloroethoxy) methane	ND	830	ug/kg
Benzoic acid	ND	4000	ug/kg
2,4-Dichlorophenol	ND	830	ug/kg
1,2,4-Trichloro-benzene	ND	830	ug/kg
Naphthalene	ND	830	ug/kg
4-Chloroaniline	ND	830	ug/kg
Hexachlorobutadiene	ND	830	ug/kg
4-Chloro-3-methylphenol	ND	830	ug/kg
2-Methylnaphthalene	ND	830	ug/kg
Hexachlorocyclopenta-diene	ND	4000	ug/kg
2,4,6-Trichloro-phenol	ND	830	ug/kg
2,4,5-Trichloro-phenol	ND	830	ug/kg

R, SU19

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58841

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-003 Work Order #...: G8WXX2AD Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Chloronaphthalene	ND	830	ug/kg
2-Nitroaniline	ND	4000	ug/kg
Dimethyl phthalate	ND	830	ug/kg
Acenaphthylene	ND	830	ug/kg
2,6-Dinitrotoluene	ND	830	ug/kg
3-Nitroaniline	ND	4000	ug/kg
Acenaphthene	ND	830	ug/kg
2,4-Dinitrophenol	ND	4000	ug/kg
4-Nitrophenol	ND	4000	ug/kg
Dibenz(a,h)anthracene	ND	830	ug/kg
Dibenzofuran	ND	830	ug/kg
2,4-Dinitrotoluene	ND	830	ug/kg
Diethyl phthalate	ND	830	ug/kg
Fluorene	ND	830	ug/kg
4-Chlorophenyl phenyl ether	ND	830	ug/kg
4-Nitroaniline	ND	4000	ug/kg
4,6-Dinitro-2-methylphenol	ND	4000	ug/kg
N-Nitrosodiphenylamine	ND	830	ug/kg
Azobenzene	ND	830	ug/kg
Pyrene	ND	830	ug/kg
4-Bromophenyl phenyl ether	ND	830	ug/kg
Hexachlorobenzene	ND	830	ug/kg
Pentachlorophenol	ND	4000	ug/kg
Phenanthrene	ND	830	ug/kg
Anthracene	ND	830	ug/kg
Di-n-butyl phthalate	ND	830	ug/kg
Fluoranthene	ND	830	ug/kg
Butyl benzyl phthalate	ND	830	ug/kg
Benzo(a)anthracene	ND	830	ug/kg
3,3'-Dichlorobenzidine	ND	4000	ug/kg
Chrysene	ND	830	ug/kg
bis(2-Ethylhexyl) phthalate	ND	830	ug/kg
Di-n-octyl phthalate	ND	830	ug/kg
Benzo(b)fluoranthene	ND	830	ug/kg
Benzo(k)fluoranthene	ND	830	ug/kg
Benzo(a)pyrene	ND	830	ug/kg
Indeno(1,2,3-cd)pyrene	ND	830	ug/kg
Benzo(ghi)perylene	ND	830	ug/kg

R, SU19

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CO

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58841

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-003 **Work Order #...:** G8WXX2AD **Matrix.....:** SOLID

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	76	(40 - 103)
Phenol-d5	82	(36 - 105)
Nitrobenzene-d5	84	(45 - 114)
2-Fluorobiphenyl	81	(49 - 120)
2,4,6-Tribromophenol	80	(39 - 114)
Terphenyl-d14	73	(42 - 108)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

CD

DATA VALIDATION COVER SHEET (Example)

SECTION I.

REQUEST NUMBER: 31585 COST CODE: _____

VALIDATION DATE: _____

LAB NAME: STL LAB CODE: _____

VALIDATOR: _____ ORGANIZATION: _____

ANALYTICAL SUITE:
___ VOLATILES ___ HIGH EXPLOSIVES
___ SEMIVOLATILES ___ INORGANICS
___ PESTICIDES/AROCLORS ___ RADIOCHEMISTRY

OTHER (describe) _____

SECTION II. COMPLETENESS CHECKLIST

Item	Present? (Y/N/NA)	Item	Present? (Y/N/NA)
1. COC form(s)		2. Case Narrative	
3. Sample Results		4. Sample Chromatograms	
5. Standard Chromatograms		6. Quantitation Reports	
7. QC Forms			

Identify any samples in the assigned Request Number that are missing:

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

Comments: include information about requests to the laboratory and agreed upon date of resolution and lab contact: (Attach additional comment sheets as necessary)

_____

_____

_____

Signature/1st validation: _____ Date/1st validation: _____

Signature/2nd validation: _____ Date/2nd validation: _____

SEVERN TRENT STL

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Tel: 314 298 8566 Fax: 314 298 8757
www.stl-inc.com

REC'D MAY 23 2005

ANALYTICAL REPORT

PROJECT NO. 31588

Los Alamos Non-Rad

Lot #: FSD210380

Joylene Valdez or Keith Greene

Los Alamos National Laboratory
SMO TA-00 Bldg 1237
DP: 03U; MS: 707
Los Alamos, NM 87545

SEVERN TRENT LABORATORIES, INC.

Elaine Wild for

Ed Kao
Project Manager

May 17, 2005

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CLIENT CHAIN OF CUSTODY 1245

TOTAL # OF PAGES IN PACKAGE 1247

Case Narrative
LOT NUMBER: **F5D210380**
LANL Request Number: **3158S**

This report contains the analytical results for the three samples received under chain of custody number by STL St. Louis on April 21, 2005. These samples are associated with your Los Alamos Non-Rad project.

All applicable quality control procedures met method-specified acceptance criteria except as noted on the following page.

This report is incomplete without the case narrative. All chemical analysis results are based upon dry weight correction as required per the statement of work. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances

Sample Receiving

Samples were received at 4.0 °C.

Volatile Organics Method 8260B

QC Batch: 5117629

The Method Blank shows contamination below the reporting limit for Bromochloromethane. Methylene chloride was observed above the reporting limit. Methylene chloride and Acetone are recognized potential laboratory contaminants. Concentrations up to five times the level observed in the method blank, in associated laboratory samples, may be attributed to its presence in the laboratory. Surrogate recoveries are within laboratory stated limits.

The LCS is in control for spike and surrogate compounds, except 2-Chlorotoluene. The LCS recoveries are outside QC limits for less than 10% of the compounds spiked. Laboratory QC practices, based on federal guidance documents, allow for up to 10% of the spike compounds to be outside QC criteria without necessitating re-preparation/re-analysis. Sample purge efficiency and compliance is demonstrated by the remaining acceptable LCS recoveries.

The Batch QC Matrix Spike and Matrix Spike Duplicate was performed on F5D210380-001. The Matrix Spike and Matrix Spike Duplicate recoveries and RPD values are inside stated limits, except for Trichlorofluromethane, Trichlorotrifluoroethane, Toluene, 1,1,2-Trichloroethane, 2-Hexanone, 1,3-Dichloropropene, Tetrachloroethane, Chlorodibromomethane, 1,2-Dibromoethane, 1,1,1,2-Tetrachlorochloroethane, Isopropylbenzene, n-Propylbenzene, Bromobenzene, 2-Chlorotoluene, 1,3,5-Trimethylbenzene, 4-Chlorotoluene, tert-Butylbenzene, sec-Butylbenzene, p-Isopropyltoluene, n-Butylbenzene, and 1,2-Dibromo-3-chloropropane. The MS BFB surrogate recovery is outside stated limits and remaining MS/MSD surrogates are in control.

Affected Samples:
F5D210380 (1): RE73-05-58829
F5D210380 (2): RE73-05-58835
F5D210380 (3): RE73-05-58841

Sample matrix interference resulted in internal standard recovery below acceptance criteria for all three samples including MS/MSD. As a result, sample surrogate recoveries and MS/MSD recoveries were above acceptance criteria. Internal standard failure in the sample is confirmed by the MS/MSD.

Semivolatile Organics Method 8270C

QC Batch: 5119285

Sample and QC extracts were taken through GPC cleanup.

The Method Blank shows no contamination below the reporting limit. Surrogate recoveries are within laboratory stated limits.

The LCS is in control for spike and surrogate compounds, except for 4-Chloroaniline, Pyrene, Hexachlorobenzene, Indeno(1,2,3) pyrene, and Benzo(a)pyrene. The LCS analyte recovery for Bezo(ghi)perylene is less than 10% (2.7%). Sample was reprepared outside holding time. The reanalysis, with an acceptable LCS, yielded comparable results. Both results are reported for your review.

The Batch QC Matrix Spike and Matrix Spike Duplicate was performed on F5D200213-001. The Matrix Spike and Matrix Spike Duplicate recoveries and RPD values are inside stated limits. Surrogates are in control for both the MS and MSD.

Affected Samples:
F5D210380 (1): RE73-05-58829

The Internal Standard recoveries for Chrysene-d12 and Perylene-d12 are low resulting in a positive bias result for the target analytes associated with the Internal Standard. The MSD internal standards recoveries were also low indicating a matrix interference is present in the sample. Sample results are provided with this narrative.

QC Batch: 5131374

Sample and QC extracts were taken through GPC cleanup.

The Method Blank shows no contamination below the reporting limit. Surrogate recoveries are within laboratory stated limits.

The LCS is in control for spike and surrogate compounds, except 2-Methylnaphthalene. The LCS recoveries are outside QC limits for less than 10% of the compounds spiked. Laboratory QC practices, based on federal guidance documents, allow for up to 10% of the spike compounds to be outside QC criteria without necessitating re-preparation/re-analysis. Sample extraction efficiency and compliance is demonstrated by the remaining acceptable LCS recoveries.

The Batch QC Matrix Spike and Matrix Spike Duplicate was performed on F5D210380-001. The Matrix Spike and Matrix Spike Duplicate recoveries and RPD values are inside stated limits. Surrogates are in control for both the MS and MSD.

PCBs Method 8082

QC Batch: 5119298

Sample and QC extracts were taken through GPC cleanup.

The Method Blank shows no contamination below the reporting limit. Surrogate recoveries are within laboratory stated limits.

The LCS is in control for spike and surrogate compounds.

The Batch QC Matrix Spike and Matrix Spike Duplicate was performed on F5D210380-003. The Matrix Spike and Matrix Spike Duplicate recoveries and RPD values are inside stated limits. The MS surrogate recovery is outside stated limits. The MSD surrogate is in control.

Affected Samples:
F5D210380 (3): RE73-05-58841

The method requires 3-5 peaks be used for PCB quantitation. Due to the present of matrix interferences in the sample, only 3 peaks were used for quantitation on Channel B, the confirmation channel. Results are reported with this narrative.

I certify that this data is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the signature on the front page, has authorized release of the data contained in this hardcopy.

METHODS SUMMARY

F5D210380

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
PCBs by SW-846 8082	SW846 8082	SW846 3550B/366
Semivolatile Organic Compounds by GC/MS	SW846 8270C	SW846 3550B
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

F5D210380

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
G8WXJ	001	RE73-05-58829	04/19/05	
G8WXV	002	RE73-05-58835	04/19/05	
G8WXX	003	RE73-05-58841	04/19/05	

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

QC DATA ASSOCIATION SUMMARY

F5D210380

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SOLID	SW846 8082		5119298	5119200
	SOLID	SW846 8260B		5117629	5132284
	SOLID	SW846 8270C		5119285	5119189
	SOLID	SW846 8270C		5131374	5131220
	SOLID	MCAWW 160.3 MOD		5112220	5112221
002	SOLID	SW846 8082		5119298	5119200
	SOLID	SW846 8260B		5117629	5132284
	SOLID	SW846 8270C		5119285	5119187
	SOLID	SW846 8270C		5131374	5131220
	SOLID	MCAWW 160.3 MOD		5112220	5112221
003	SOLID	SW846 8082		5119298	5119200
	SOLID	SW846 8260B		5117629	5132284
	SOLID	SW846 8270C		5119285	5119187
	SOLID	SW846 8270C		5131374	5131220
	SOLID	MCAWW 160.3 MOD		5112220	5112221

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58829

GC/MS Volatiles

Lot-Sample #...:	F5D210380-001	Work Order #...:	G8WXJ1AC	Matrix.....:	SOLID
Date Sampled...:	04/19/05	Date Received..:	04/21/05		
Prep Date.....:	04/27/05	Analysis Date..:	04/27/05		
Prep Batch #...:	5117629	Analysis Time..:	14:43		
Dilution Factor:	1				
% Moisture.....:	20	Method.....:	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	13	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	**3.5 J,B**	**13**	**ug/kg**
Chloroethane	ND	13	ug/kg
Trichlorofluoromethane	ND	13	ug/kg
Trichlorotrifluoroethane	ND	6.3	ug/kg
Acetone	ND	25	ug/kg
1,1-Dichloroethene	ND	6.3	ug/kg
Iodomethane	ND	6.3	ug/kg
Methylene chloride	**11 B**	**6.3**	**ug/kg**
Carbon disulfide	ND	6.3	ug/kg
1,1-Dichloroethane	ND	6.3	ug/kg
2-Butanone (MEK)	ND	25	ug/kg
2,2-Dichloropropane	ND	6.3	ug/kg
1,2-Dichloroethene (total)	ND	6.3	ug/kg
Chloroform	ND	6.3	ug/kg
Bromochloromethane	ND	6.3	ug/kg
1,1,1-Trichloroethane	ND	6.3	ug/kg
1,1-Dichloropropene	ND	6.3	ug/kg
Carbon tetrachloride	ND	6.3	ug/kg
1,2-Dichloroethane	ND	6.3	ug/kg
Benzene	ND	6.3	ug/kg
Trichloroethene	**0.71 J**	**6.3**	**ug/kg**
1,2-Dichloropropane	ND	6.3	ug/kg
Bromodichloromethane	ND	6.3	ug/kg
Dibromomethane	ND	6.3	ug/kg
4-Methyl-2-pentanone	ND	25	ug/kg
cis-1,3-Dichloropropene	ND	6.3	ug/kg
Toluene	ND	6.3	ug/kg
trans-1,3-Dichloropropene	ND	6.3	ug/kg
1,1,2-Trichloroethane	ND	6.3	ug/kg
2-Hexanone	ND	25	ug/kg
1,3-Dichloropropane	ND	6.3	ug/kg
Tetrachloroethene	ND	6.3	ug/kg
Chlorodibromomethane	ND	6.3	ug/kg
1,2-Dibromoethane	ND	6.3	ug/kg
Chlorobenzene	ND	6.3	ug/kg

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: KK73-05-58829

GC/MS Volatiles

Lot-Sample #...: F5D210380-001 Work Order #...: G8WXJ1AC Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,1,1,2-Tetrachloroethane	ND	6.3	ug/kg
Ethylbenzene	ND	6.3	ug/kg
Vinyl chloride	ND	6.3	ug/kg
Xylenes (total)	ND	6.3	ug/kg
Styrene	ND	6.3	ug/kg
Bromoform	ND	6.3	ug/kg
Isopropylbenzene	ND	6.3	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.3	ug/kg
1,2,3-Trichloropropane	ND	6.3	ug/kg
n-Propylbenzene	ND	6.3	ug/kg
Bromobenzene	ND	6.3	ug/kg
2-Chlorotoluene	ND	6.3	ug/kg
1,3,5-Trimethylbenzene	ND	6.3	ug/kg
4-Chlorotoluene	ND	6.3	ug/kg
tert-Butylbenzene	ND	6.3	ug/kg
1,2,4-Trimethylbenzene	**0.79 J**	**6.3**	**ug/kg**
sec-Butylbenzene	ND	6.3	ug/kg
p-Isopropyltoluene	**17**	**6.3**	**ug/kg**
1,3-Dichlorobenzene	ND	6.3	ug/kg
1,4-Dichlorobenzene	ND	6.3	ug/kg
n-Butylbenzene	ND	6.3	ug/kg
1,2-Dichlorobenzene	ND	6.3	ug/kg
1,2-Dibromo-3-chloro-propane	ND	13	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	160 *	(60 - 148)
Dibromofluoromethane	115	(61 - 140)
1,2-Dichloroethane-d4	111	(56 - 149)
4-Bromofluorobenzene	133	(56 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58829

GC/MS Semivolatiles

Lot-Sample #...:	F5D210380-001	**Work Order #...:**	G8WXJ1AD	**Matrix.....:**	SOLID
Date Sampled...:	04/19/05	**Date Received..:**	04/21/05		
Prep Date.....:	04/29/05	**Analysis Date..:**	05/10/05		
Prep Batch #...:	5119285	**Analysis Time..:**	17:46		
Dilution Factor:	1				
% Moisture.....:	20	**Method.....:**	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
N-Nitrosodimethylamine	ND	410	ug/kg
Phenol	ND	410	ug/kg
Aniline	ND	410	ug/kg
bis(2-Chloroethyl)-ether	ND	410	ug/kg
2-Chlorophenol	ND	410	ug/kg
1,3-Dichlorobenzene	**160 J**	**410**	**ug/kg**
1,4-Dichlorobenzene	**170 J**	**410**	**ug/kg**
Benzyl alcohol	ND	410	ug/kg
1,2-Dichlorobenzene	**150 J**	**410**	**ug/kg**
2-Methylphenol	ND	410	ug/kg
3-Methylphenol & 4-Methylphenol	ND	410	ug/kg
2,2'-oxybis(1-Chloropropane)	ND	410	ug/kg
N-Nitrosodi-n-propyl-amine	ND	410	ug/kg
Hexachloroethane	ND	410	ug/kg
Nitrobenzene	**210 J**	**410**	**ug/kg**
Isophorone	ND	410	ug/kg
2-Nitrophenol	**180 J**	**410**	**ug/kg**
2,4-Dimethylphenol	ND	410	ug/kg
bis(2-Chloroethoxy) methane	ND	410	ug/kg
Benzoic acid	**830 J**	**2000**	**ug/kg**
2,4-Dichlorophenol	ND	410	ug/kg
1,2,4-Trichloro-benzene	**180 J**	**410**	**ug/kg**
Naphthalene	**130 J**	**410**	**ug/kg**
4-Chloroaniline	ND	410	ug/kg
Hexachlorobutadiene	**140 J**	**410**	**ug/kg**
4-Chloro-3-methylphenol	ND	410	ug/kg
2-Methylnaphthalene	**120 J**	**410**	**ug/kg**
Hexachlorocyclopenta-diene	ND	2000	ug/kg
2,4,6-Trichloro-phenol	**130 J**	**410**	**ug/kg**
2,4,5-Trichloro-phenol	ND	410	ug/kg

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58829

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-001 Work Order #...: G8WXJ1AD Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Chloronaphthalene	**140 J**	**410**	**ug/kg**
2-Nitroaniline	ND	2000	ug/kg
Dimethyl phthalate	ND	410	ug/kg
Acenaphthylene	**150 J**	**410**	**ug/kg**
2,6-Dinitrotoluene	ND	410	ug/kg
3-Nitroaniline	ND	2000	ug/kg
Acenaphthene	**130 J**	**410**	**ug/kg**
2,4-Dinitrophenol	ND	2000	ug/kg
4-Nitrophenol	ND	2000	ug/kg
Dibenz(a,h)anthracene	**86 J**	**410**	**ug/kg**
Dibenzofuran	**140 J**	**410**	**ug/kg**
2,4-Dinitrotoluene	ND	410	ug/kg
Diethyl phthalate	ND	410	ug/kg
Fluorene	**150 J**	**410**	**ug/kg**
4-Chlorophenyl phenyl ether	**190 J**	**410**	**ug/kg**
4-Nitroaniline	ND	2000	ug/kg
4,6-Dinitro-2-methylphenol	ND	2000	ug/kg
N-Nitrosodiphenylamine	**190 J**	**410**	**ug/kg**
Azobenzene	ND	410	ug/kg
Pyrene	**470**	**410**	**ug/kg**
4-Bromophenyl phenyl ether	**190 J**	**410**	**ug/kg**
Hexachlorobenzene	**450**	**410**	**ug/kg**
Pentachlorophenol	**180 J**	**2000**	**ug/kg**
Phenanthrene	**150 J**	**410**	**ug/kg**
Anthracene	**140 J**	**410**	**ug/kg**
Di-n-butyl phthalate	ND	410	ug/kg
Fluoranthene	**140 J**	**410**	**ug/kg**
Butyl benzyl phthalate	ND	410	ug/kg
Benzo(a)anthracene	**150 J**	**410**	**ug/kg**
3,3'-Dichlorobenzidine	ND	2000	ug/kg
Chrysene	**160 J**	**410**	**ug/kg**
bis(2-Ethylhexyl) phthalate	**88 J**	**410**	**ug/kg**
Di-n-octyl phthalate	ND	410	ug/kg
Benzo(b)fluoranthene	**180 J**	**410**	**ug/kg**
Benzo(k)fluoranthene	**150 J**	**410**	**ug/kg**
Benzo(a)pyrene	**540**	**410**	**ug/kg**
Indeno(1,2,3-cd)pyrene	**530**	**410**	**ug/kg**
Benzo(ghi)perylene	**130 J**	**410**	**ug/kg**

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58829

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-001 **Work Order #...:** G8WXJ1AD **Matrix.....:** SOLID

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	68	(40 - 103)
Phenol-d5	71	(36 - 105)
Nitrobenzene-d5	81	(45 - 114)
2-Fluorobiphenyl	76	(49 - 120)
2,4,6-Tribromophenol	68	(39 - 114)
Terphenyl-d14	78	(42 - 108)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58829

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-001	**Work Order #...:** G8WXJ2AD	**Matrix.....:** SOLID
Date Sampled...: 04/19/05	**Date Received..:** 04/21/05	
Prep Date.....: 05/11/05	**Analysis Date..:** 05/12/05	
Prep Batch #...: 5131374	**Analysis Time..:** 22:14	
Dilution Factor: 1		
% Moisture.....: 20	**Method.....:** SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
N-Nitrosodimethylamine	ND	830	ug/kg
Phenol	ND	830	ug/kg
Aniline	ND	830	ug/kg
bis(2-Chloroethyl)-ether	ND	830	ug/kg
2-Chlorophenol	ND	830	ug/kg
1,3-Dichlorobenzene	ND	830	ug/kg
1,4-Dichlorobenzene	ND	830	ug/kg
Benzyl alcohol	ND	830	ug/kg
1,2-Dichlorobenzene	ND	830	ug/kg
2-Methylphenol	ND	830	ug/kg
3-Methylphenol & 4-Methylphenol	ND	830	ug/kg
2,2'-oxybis(1-Chloropropane)	ND	830	ug/kg
N-Nitrosodi-n-propyl-amine	ND	830	ug/kg
Hexachloroethane	ND	830	ug/kg
Nitrobenzene	ND	830	ug/kg
Isophorone	ND	830	ug/kg
2-Nitrophenol	ND	830	ug/kg
2,4-Dimethylphenol	ND	830	ug/kg
bis(2-Chloroethoxy) methane	ND	830	ug/kg
Benzoic acid	ND	4000	ug/kg
2,4-Dichlorophenol	ND	830	ug/kg
1,2,4-Trichloro-benzene	ND	830	ug/kg
Naphthalene	ND	830	ug/kg
4-Chloroaniline	ND	830	ug/kg
Hexachlorobutadiene	ND	830	ug/kg
4-Chloro-3-methylphenol	ND	830	ug/kg
2-Methylnaphthalene	ND	830	ug/kg
Hexachlorocyclopenta-diene	ND	4000	ug/kg
2,4,6-Trichloro-phenol	ND	830	ug/kg
2,4,5-Trichloro-phenol	ND	830	ug/kg

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58829

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-001 **Work Order #...:** G8WXJ2AD **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Chloronaphthalene	ND	830	ug/kg
2-Nitroaniline	ND	4000	ug/kg
Dimethyl phthalate	ND	830	ug/kg
Acenaphthylene	ND	830	ug/kg
2,6-Dinitrotoluene	ND	830	ug/kg
3-Nitroaniline	ND	4000	ug/kg
Acenaphthene	ND	830	ug/kg
2,4-Dinitrophenol	ND	4000	ug/kg
4-Nitrophenol	ND	4000	ug/kg
Dibenz(a,h)anthracene	ND	830	ug/kg
Dibenzofuran	ND	830	ug/kg
2,4-Dinitrotoluene	ND	830	ug/kg
Diethyl phthalate	ND	830	ug/kg
Fluorene	ND	830	ug/kg
4-Chlorophenyl phenyl ether	ND	830	ug/kg
4-Nitroaniline	ND	4000	ug/kg
4,6-Dinitro-2-methylphenol	ND	4000	ug/kg
N-Nitrosodiphenylamine	ND	830	ug/kg
Azobenzene	ND	830	ug/kg
Pyrene	ND	830	ug/kg
4-Bromophenyl phenyl ether	ND	830	ug/kg
Hexachlorobenzene	ND	830	ug/kg
Pentachlorophenol	ND	4000	ug/kg
Phenanthrene	ND	830	ug/kg
Anthracene	ND	830	ug/kg
Di-n-butyl phthalate	**500 J**	**830**	**ug/kg**
Fluoranthene	ND	830	ug/kg
Butyl benzyl phthalate	ND	830	ug/kg
Benzo(a)anthracene	ND	830	ug/kg
3,3'-Dichlorobenzidine	ND	4000	ug/kg
Chrysene	ND	830	ug/kg
bis(2-Ethylhexyl) phthalate	ND	830	ug/kg
Di-n-octyl phthalate	ND	830	ug/kg
Benzo(b)fluoranthene	ND	830	ug/kg
Benzo(k)fluoranthene	ND	830	ug/kg
Benzo(a)pyrene	ND	830	ug/kg
Indeno(1,2,3-cd)pyrene	ND	830	ug/kg
Benzo(ghi)perylene	**420 J**	**830**	**ug/kg**

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RR73-05-58829

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-001 **Work Order #...:** G8WXJ2AD **Matrix.....:** SOLID

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	78	(40 - 103)
Phenol-d5	79	(36 - 105)
Nitrobenzene-d5	90	(45 - 114)
2-Fluorobiphenyl	89	(49 - 120)
2,4,6-Tribromophenol	75	(39 - 114)
Terphenyl-d14	89	(42 - 108)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58829

GC Semivolatiles

Lot-Sample #...:	F5D210380-001	**Work Order #...:**	G8WXJ1AE	**Matrix.....:**	SOLID
Date Sampled...:	04/19/05	**Date Received..:**	04/21/05		
Prep Date.....:	04/29/05	**Analysis Date..:**	05/09/05		
Prep Batch #...:	5119298	**Analysis Time..:**	17:28		
Dilution Factor:	1				
% Moisture.....:	20	**Method.....:**	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	41	ug/kg
Aroclor 1221	ND	41	ug/kg
Aroclor 1232	ND	41	ug/kg
Aroclor 1242	ND	41	ug/kg
Aroclor 1248	ND	41	ug/kg
Aroclor 1254	ND	41	ug/kg
Aroclor 1260	ND	41	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	111	(30 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58829

General Chemistry

Lot-Sample #...: F5D210380-001 Work Order #...: G8WXJ Matrix.....: SOLID
Date Sampled...: 04/19/05 Date Received..: 04/21/05
% Moisture.....: 20

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	20.1	0.10	%	MCAWW 160.3 MOD	04/22-04/25/05	5112220

Dilution Factor: 1 Analysis Time..: 00:00

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58835

GC/MS Volatiles

Lot-Sample #...: F5D210380-002	Work Order #...: G8WXV1AC	Matrix.....: SOLID
Date Sampled...: 04/19/05	Date Received..: 04/21/05	
Prep Date.....: 04/27/05	Analysis Date..: 04/27/05	
Prep Batch #...: 5117629	Analysis Time..: 16:33	
Dilution Factor: 1		
% Moisture.....: 19	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	12	ug/kg
Chloromethane	ND	12	ug/kg
Bromomethane	**4.7 J,B**	**12**	**ug/kg**
Chloroethane	ND	12	ug/kg
Trichlorofluoromethane	ND	12	ug/kg
Trichlorotrifluoroethane	ND	6.2	ug/kg
Acetone	ND	25	ug/kg
1,1-Dichloroethene	ND	6.2	ug/kg
Iodomethane	ND	6.2	ug/kg
Methylene chloride	**12 B**	**6.2**	**ug/kg**
Carbon disulfide	ND	6.2	ug/kg
1,1-Dichloroethane	ND	6.2	ug/kg
2-Butanone (MEK)	ND	25	ug/kg
2,2-Dichloropropane	ND	6.2	ug/kg
1,2-Dichloroethene (total)	ND	6.2	ug/kg
Chloroform	ND	6.2	ug/kg
Bromochloromethane	ND	6.2	ug/kg
1,1,1-Trichloroethane	ND	6.2	ug/kg
1,1-Dichloropropene	ND	6.2	ug/kg
Carbon tetrachloride	ND	6.2	ug/kg
1,2-Dichloroethane	ND	6.2	ug/kg
Benzene	ND	6.2	ug/kg
Trichloroethene	ND	6.2	ug/kg
1,2-Dichloropropane	ND	6.2	ug/kg
Bromodichloromethane	ND	6.2	ug/kg
Dibromomethane	ND	6.2	ug/kg
4-Methyl-2-pentanone	ND	25	ug/kg
cis-1,3-Dichloropropene	ND	6.2	ug/kg
Toluene	**0.99 J**	**6.2**	**ug/kg**
trans-1,3-Dichloropropene	ND	6.2	ug/kg
1,1,2-Trichloroethane	ND	6.2	ug/kg
2-Hexanone	ND	25	ug/kg
1,3-Dichloropropane	ND	6.2	ug/kg
Tetrachloroethene	ND	6.2	ug/kg
Chlorodibromomethane	ND	6.2	ug/kg
1,2-Dibromoethane	ND	6.2	ug/kg
Chlorobenzene	ND	6.2	ug/kg

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58835

GC/MS Volatiles

Lot-Sample #...: F5D210380-002 **Work Order #...:** G8WXV1AC **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,1,1,2-Tetrachloroethane	ND	6.2	ug/kg
Ethylbenzene	ND	6.2	ug/kg
Vinyl chloride	ND	6.2	ug/kg
Xylenes (total)	ND	6.2	ug/kg
Styrene	ND	6.2	ug/kg
Bromoform	ND	6.2	ug/kg
Isopropylbenzene	ND	6.2	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.2	ug/kg
1,2,3-Trichloropropane	ND	6.2	ug/kg
n-Propylbenzene	ND	6.2	ug/kg
Bromobenzene	ND	6.2	ug/kg
2-Chlorotoluene	ND	6.2	ug/kg
1,3,5-Trimethylbenzene	ND	6.2	ug/kg
4-Chlorotoluene	ND	6.2	ug/kg
tert-Butylbenzene	ND	6.2	ug/kg
1,2,4-Trimethylbenzene	ND	6.2	ug/kg
sec-Butylbenzene	ND	6.2	ug/kg
p-Isopropyltoluene	ND	6.2	ug/kg
1,3-Dichlorobenzene	**2.1 J**	**6.2**	**ug/kg**
1,4-Dichlorobenzene	ND	6.2	ug/kg
n-Butylbenzene	ND	6.2	ug/kg
1,2-Dichlorobenzene	**2.6 J**	**6.2**	**ug/kg**
1,2-Dibromo-3-chloro-propane	ND	12	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	174 *	(60 - 148)
Dibromofluoromethane	137	(61 - 140)
1,2-Dichloroethane-d4	122	(56 - 149)
4-Bromofluorobenzene	182 *	(56 - 150)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RR73-05-58835

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-002	**Work Order #...:** G8WXV1AD	**Matrix.....:** SOLID
Date Sampled...: 04/19/05	**Date Received..:** 04/21/05	
Prep Date.....: 04/29/05	**Analysis Date..:** 05/10/05	
Prep Batch #...: 5119285	**Analysis Time..:** 03:38	
Dilution Factor: 1		
% Moisture.....: 19	**Method.....:** SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
N-Nitrosodimethylamine	ND	410	ug/kg
Phenol	ND	410	ug/kg
Aniline	ND	410	ug/kg
bis(2-Chloroethyl)-ether	ND	410	ug/kg
2-Chlorophenol	ND	410	ug/kg
1,3-Dichlorobenzene	ND	410	ug/kg
1,4-Dichlorobenzene	ND	410	ug/kg
Benzyl alcohol	ND	410	ug/kg
1,2-Dichlorobenzene	ND	410	ug/kg
2-Methylphenol	ND	410	ug/kg
3-Methylphenol & 4-Methylphenol	ND	410	ug/kg
2,2'-oxybis(1-Chloropropane)	ND	410	ug/kg
N-Nitrosodi-n-propyl-amine	ND	410	ug/kg
Hexachloroethane	ND	410	ug/kg
Nitrobenzene	ND	410	ug/kg
Isophorone	ND	410	ug/kg
2-Nitrophenol	ND	410	ug/kg
2,4-Dimethylphenol	ND	410	ug/kg
bis(2-Chloroethoxy) methane	ND	410	ug/kg
Benzoic acid	**490 J**	**2000**	**ug/kg**
2,4-Dichlorophenol	ND	410	ug/kg
1,2,4-Trichloro-benzene	ND	410	ug/kg
Naphthalene	ND	410	ug/kg
4-Chloroaniline	ND	410	ug/kg
Hexachlorobutadiene	ND	410	ug/kg
4-Chloro-3-methylphenol	ND	410	ug/kg
2-Methylnaphthalene	ND	410	ug/kg
Hexachlorocyclopenta-diene	ND	2000	ug/kg
2,4,6-Trichloro-phenol	ND	410	ug/kg
2,4,5-Trichloro-phenol	ND	410	ug/kg

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58835

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-002 Work Order #...: G8WXV1AD Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Chloronaphthalene	ND	410	ug/kg
2-Nitroaniline	ND	2000	ug/kg
Dimethyl phthalate	ND	410	ug/kg
Acenaphthylene	ND	410	ug/kg
2,6-Dinitrotoluene	ND	410	ug/kg
3-Nitroaniline	ND	2000	ug/kg
Acenaphthene	ND	410	ug/kg
2,4-Dinitrophenol	ND	2000	ug/kg
4-Nitrophenol	ND	2000	ug/kg
Dibenz(a,h)anthracene	ND	410	ug/kg
Dibenzofuran	ND	410	ug/kg
2,4-Dinitrotoluene	ND	410	ug/kg
Diethyl phthalate	ND	410	ug/kg
Fluorene	ND	410	ug/kg
4-Chlorophenyl phenyl ether	ND	410	ug/kg
4-Nitroaniline	ND	2000	ug/kg
4,6-Dinitro-2-methylphenol	ND	2000	ug/kg
N-Nitrosodiphenylamine	ND	410	ug/kg
Azobenzene	ND	410	ug/kg
Pyrene	110 J	410	ug/kg
4-Bromophenyl phenyl ether	ND	410	ug/kg
Hexachlorobenzene	110 J	410	ug/kg
Pentachlorophenol	ND	2000	ug/kg
Phenanthrene	ND	410	ug/kg
Anthracene	ND	410	ug/kg
Di-n-butyl phthalate	ND	410	ug/kg
Fluoranthene	ND	410	ug/kg
Butyl benzyl phthalate	ND	410	ug/kg
Benzo(a)anthracene	ND	410	ug/kg
3,3'-Dichlorobenzidine	ND	2000	ug/kg
Chrysene	ND	410	ug/kg
bis(2-Ethylhexyl) phthalate	97 J	410	ug/kg
Di-n-octyl phthalate	ND	410	ug/kg
Benzo(b)fluoranthene	ND	410	ug/kg
Benzo(k)fluoranthene	ND	410	ug/kg
Benzo(a)pyrene	ND	410	ug/kg
Indeno(1,2,3-cd)pyrene	ND	410	ug/kg
Benzo(ghi)perylene	340 J	410	ug/kg

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58835

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-002 **Work Order #...:** G8WXV1AD **Matrix.....:** SOLID

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	66	(40 - 103)
Phenol-d5	67	(36 - 105)
Nitrobenzene-d5	74	(45 - 114)
2-Fluorobiphenyl	72	(49 - 120)
2,4,6-Tribromophenol	73	(39 - 114)
Terphenyl-d14	68	(42 - 108)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58835

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-002	**Work Order #...:** G8WXV2AD	**Matrix.....:** SOLID
Date Sampled...: 04/19/05	**Date Received..:** 04/21/05	
Prep Date.....: 05/11/05	**Analysis Date..:** 05/14/05	
Prep Batch #...: 5131374	**Analysis Time..:** 14:45	
Dilution Factor: 1		
% Moisture.....: 19	**Method.....:** SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
N-Nitrosodimethylamine	ND	820	ug/kg
Phenol	ND	820	ug/kg
Aniline	ND	820	ug/kg
bis(2-Chloroethyl)-ether	ND	820	ug/kg
2-Chlorophenol	ND	820	ug/kg
1,3-Dichlorobenzene	ND	820	ug/kg
1,4-Dichlorobenzene	ND	820	ug/kg
Benzyl alcohol	ND	820	ug/kg
1,2-Dichlorobenzene	ND	820	ug/kg
2-Methylphenol	ND	820	ug/kg
3-Methylphenol & 4-Methylphenol	ND	820	ug/kg
2,2'-oxybis(1-Chloropropane)	ND	820	ug/kg
N-Nitrosodi-n-propyl-amine	ND	820	ug/kg
Hexachloroethane	ND	820	ug/kg
Nitrobenzene	ND	820	ug/kg
Isophorone	ND	820	ug/kg
2-Nitrophenol	ND	820	ug/kg
2,4-Dimethylphenol	ND	820	ug/kg
bis(2-Chloroethoxy) methane	ND	820	ug/kg
Benzoic acid	ND	4000	ug/kg
2,4-Dichlorophenol	ND	820	ug/kg
1,2,4-Trichloro-benzene	ND	820	ug/kg
Naphthalene	ND	820	ug/kg
4-Chloroaniline	ND	820	ug/kg
Hexachlorobutadiene	ND	820	ug/kg
4-Chloro-3-methylphenol	ND	820	ug/kg
2-Methylnaphthalene	ND	820	ug/kg
Hexachlorocyclopenta-diene	ND	4000	ug/kg
2,4,6-Trichloro-phenol	ND	820	ug/kg
2,4,5-Trichloro-phenol	ND	820	ug/kg

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58835

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-002 Work Order #...: G8WXV2AD Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Chloronaphthalene	ND	820	ug/kg
2-Nitroaniline	ND	4000	ug/kg
Dimethyl phthalate	ND	820	ug/kg
Acenaphthylene	ND	820	ug/kg
2,6-Dinitrotoluene	ND	820	ug/kg
3-Nitroaniline	ND	4000	ug/kg
Acenaphthene	ND	820	ug/kg
2,4-Dinitrophenol	ND	4000	ug/kg
4-Nitrophenol	ND	4000	ug/kg
Dibenz(a,h)anthracene	ND	820	ug/kg
Dibenzofuran	ND	820	ug/kg
2,4-Dinitrotoluene	ND	820	ug/kg
Diethyl phthalate	ND	820	ug/kg
Fluorene	ND	820	ug/kg
4-Chlorophenyl phenyl ether	ND	820	ug/kg
4-Nitroaniline	ND	4000	ug/kg
4,6-Dinitro-2-methylphenol	ND	4000	ug/kg
N-Nitrosodiphenylamine	ND	820	ug/kg
Azobenzene	ND	820	ug/kg
Pyrene	ND	820	ug/kg
4-Bromophenyl phenyl ether	ND	820	ug/kg
Hexachlorobenzene	ND	820	ug/kg
Pentachlorophenol	ND	4000	ug/kg
Phenanthrene	ND	820	ug/kg
Anthracene	ND	820	ug/kg
Di-n-butyl phthalate	ND	820	ug/kg
Fluoranthene	ND	820	ug/kg
Butyl benzyl phthalate	ND	820	ug/kg
Benzo(a)anthracene	ND	820	ug/kg
3,3'-Dichlorobenzidine	ND	4000	ug/kg
Chrysene	ND	820	ug/kg
bis(2-Ethylhexyl) phthalate	ND	820	ug/kg
Di-n-octyl phthalate	ND	820	ug/kg
Benzo(b)fluoranthene	ND	820	ug/kg
Benzo(k)fluoranthene	ND	820	ug/kg
Benzo(a)pyrene	ND	820	ug/kg
Indeno(1,2,3-cd)pyrene	ND	820	ug/kg
Benzo(ghi)perylene	ND	820	ug/kg

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58835

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-002 Work Order #...: G8WXV2AD Matrix.....: SOLID

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	72	(40 - 103)
Phenol-d5	80	(36 - 105)
Nitrobenzene-d5	84	(45 - 114)
2-Fluorobiphenyl	76	(49 - 120)
2,4,6-Tribromophenol	68	(39 - 114)
Terphenyl-d14	72	(42 - 108)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58835

GC Semivolatiles

Lot-Sample #...:	F5D210380-002	**Work Order #...:**	G8WXV1AE	**Matrix.....:**	SOLID
Date Sampled...:	04/19/05	**Date Received..:**	04/21/05		
Prep Date.....:	04/29/05	**Analysis Date..:**	05/09/05		
Prep Batch #...:	5119298	**Analysis Time..:**	17:44		
Dilution Factor:	1				
% Moisture.....:	19	**Method.....:**	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	41	ug/kg
Aroclor 1221	ND	41	ug/kg
Aroclor 1232	ND	41	ug/kg
Aroclor 1242	ND	41	ug/kg
Aroclor 1248	ND	41	ug/kg
Aroclor 1254	**58**	**41**	**ug/kg**
Aroclor 1260	ND	41	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	126	(30 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58835

General Chemistry

Lot-Sample #...: F5D210380-002 **Work Order #...:** G8WXV **Matrix.....:** SOLID
Date Sampled...: 04/19/05 **Date Received..:** 04/21/05
% Moisture.....: 19

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	19.2	0.10	%	NCAWW 160.3 MOD	04/22-04/25/05	5112220

Dilution Factor: 1 Analysis Time..: 00:00

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58841

GC/MS Volatiles

Lot-Sample #...: F5D210380-003	Work Order #...: G8WXX1AC	Matrix.....: SOLID
Date Sampled...: 04/19/05	Date Received..: 04/21/05	
Prep Date.....: 04/27/05	Analysis Date..: 04/27/05	
Prep Batch #...: 5117629	Analysis Time..: 17:10	
Dilution Factor: 1		
% Moisture.....: 20	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	13	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	2.4 J,B	13	ug/kg
Chloroethane	ND	13	ug/kg
Trichlorofluoromethane	ND	13	ug/kg
Trichlorotrifluoroethane	ND	6.3	ug/kg
Acetone	ND	25	ug/kg
1,1-Dichloroethene	ND	6.3	ug/kg
Iodomethane	ND	6.3	ug/kg
Methylene chloride	6.6 B	6.3	ug/kg
Carbon disulfide	ND	6.3	ug/kg
1,1-Dichloroethane	ND	6.3	ug/kg
2-Butanone (MEK)	ND	25	ug/kg
2,2-Dichloropropane	ND	6.3	ug/kg
1,2-Dichloroethene (total)	ND	6.3	ug/kg
Chloroform	ND	6.3	ug/kg
Bromochloromethane	ND	6.3	ug/kg
1,1,1-Trichloroethane	ND	6.3	ug/kg
1,1-Dichloropropene	ND	6.3	ug/kg
Carbon tetrachloride	ND	6.3	ug/kg
1,2-Dichloroethane	ND	6.3	ug/kg
Benzene	ND	6.3	ug/kg
Trichloroethene	ND	6.3	ug/kg
1,2-Dichloropropane	ND	6.3	ug/kg
Bromodichloromethane	ND	6.3	ug/kg
Dibromomethane	ND	6.3	ug/kg
4-Methyl-2-pentanone	ND	25	ug/kg
cis-1,3-Dichloropropene	ND	6.3	ug/kg
Toluene	ND	6.3	ug/kg
trans-1,3-Dichloropropene	ND	6.3	ug/kg
1,1,2-Trichloroethane	ND	6.3	ug/kg
2-Hexanone	ND	25	ug/kg
1,3-Dichloropropane	ND	6.3	ug/kg
Tetrachloroethene	ND	6.3	ug/kg
Chlorodibromomethane	ND	6.3	ug/kg
1,2-Dibromoethane	ND	6.3	ug/kg
Chlorobenzene	ND	6.3	ug/kg

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58841

GC/MS Volatiles

Lot-Sample #...: F5D210380-003 Work Order #...: G8WXX1AC Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,1,1,2-Tetrachloroethane	ND	6.3	ug/kg
Ethylbenzene	ND	6.3	ug/kg
Vinyl chloride	ND	6.3	ug/kg
Xylenes (total)	ND	6.3	ug/kg
Styrene	ND	6.3	ug/kg
Bromoform	ND	6.3	ug/kg
Isopropylbenzene	ND	6.3	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.3	ug/kg
1,2,3-Trichloropropane	ND	6.3	ug/kg
n-Propylbenzene	ND	6.3	ug/kg
Bromobenzene	ND	6.3	ug/kg
2-Chlorotoluene	ND	6.3	ug/kg
1,3,5-Trimethylbenzene	ND	6.3	ug/kg
4-Chlorotoluene	ND	6.3	ug/kg
tert-Butylbenzene	ND	6.3	ug/kg
1,2,4-Trimethylbenzene	ND	6.3	ug/kg
sec-Butylbenzene	ND	6.3	ug/kg
p-Isopropyltoluene	1.3 J	6.3	ug/kg
1,3-Dichlorobenzene	ND	6.3	ug/kg
1,4-Dichlorobenzene	ND	6.3	ug/kg
n-Butylbenzene	ND	6.3	ug/kg
1,2-Dichlorobenzene	ND	6.3	ug/kg
1,2-Dibromo-3-chloro-propane	ND	13	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	126	(60 - 148)
Dibromofluoromethane	110	(61 - 140)
1,2-Dichloroethane-d4	112	(56 - 149)
4-Bromofluorobenzene	85	(56 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58841

GC/MS Semivolatiles

Lot-Sample #...:	F5D210380-003	**Work Order #...:**	G8WXX1AD	**Matrix.....:**	SOLID
Date Sampled...:	04/19/05	**Date Received..:**	04/21/05		
Prep Date.....:	04/29/05	**Analysis Date..:**	05/10/05		
Prep Batch #...:	5119285	**Analysis Time..:**	19:23		
Dilution Factor:	1				
% Moisture.....:	20	**Method.....:**	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
N-Nitrosodimethylamine	ND	410	ug/kg
Phenol	ND	410	ug/kg
Aniline	ND	410	ug/kg
bis(2-Chloroethyl)-ether	ND	410	ug/kg
2-Chlorophenol	ND	410	ug/kg
1,3-Dichlorobenzene	ND	410	ug/kg
1,4-Dichlorobenzene	ND	410	ug/kg
Benzyl alcohol	ND	410	ug/kg
1,2-Dichlorobenzene	ND	410	ug/kg
2-Methylphenol	ND	410	ug/kg
3-Methylphenol & 4-Methylphenol	ND	410	ug/kg
2,2'-oxybis(1-Chloropropane)	ND	410	ug/kg
N-Nitrosodi-n-propyl-amine	ND	410	ug/kg
Hexachloroethane	ND	410	ug/kg
Nitrobenzene	ND	410	ug/kg
Isophorone	ND	410	ug/kg
2-Nitrophenol	ND	410	ug/kg
2,4-Dimethylphenol	ND	410	ug/kg
bis(2-Chloroethoxy) methane	ND	410	ug/kg
Benzoic acid	ND	2000	ug/kg
2,4-Dichlorophenol	ND	410	ug/kg
1,2,4-Trichloro-benzene	ND	410	ug/kg
Naphthalene	ND	410	ug/kg
4-Chloroaniline	ND	410	ug/kg
Hexachlorobutadiene	ND	410	ug/kg
4-Chloro-3-methylphenol	ND	410	ug/kg
2-Methylnaphthalene	ND	410	ug/kg
Hexachlorocyclopenta-diene	ND	2000	ug/kg
2,4,6-Trichloro-phenol	ND	410	ug/kg
2,4,5-Trichloro-phenol	ND	410	ug/kg

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58841

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-003 Work Order #...: G8WXX1AD Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Chloronaphthalene	ND	410	ug/kg
2-Nitroaniline	ND	2000	ug/kg
Dimethyl phthalate	ND	410	ug/kg
Acenaphthylene	ND	410	ug/kg
2,6-Dinitrotoluene	ND	410	ug/kg
3-Nitroaniline	ND	2000	ug/kg
Acenaphthene	ND	410	ug/kg
2,4-Dinitrophenol	ND	2000	ug/kg
4-Nitrophenol	ND	2000	ug/kg
Dibenz(a,h)anthracene	ND	410	ug/kg
Dibenzofuran	ND	410	ug/kg
2,4-Dinitrotoluene	ND	410	ug/kg
Diethyl phthalate	ND	410	ug/kg
Fluorene	ND	410	ug/kg
4-Chlorophenyl phenyl ether	ND	410	ug/kg
4-Nitroaniline	ND	2000	ug/kg
4,6-Dinitro-2-methylphenol	ND	2000	ug/kg
N-Nitrosodiphenylamine	ND	410	ug/kg
Azobenzene	ND	410	ug/kg
Pyrene	**320 J**	**410**	**ug/kg**
4-Bromophenyl phenyl ether	ND	410	ug/kg
Hexachlorobenzene	ND	410	ug/kg
Pentachlorophenol	ND	2000	ug/kg
Phenanthrene	**200 J**	**410**	**ug/kg**
Anthracene	ND	410	ug/kg
Di-n-butyl phthalate	ND	410	ug/kg
Fluoranthene	**300 J**	**410**	**ug/kg**
Butyl benzyl phthalate	ND	410	ug/kg
Benzo(a)anthracene	**150 J**	**410**	**ug/kg**
3,3'-Dichlorobenzidine	ND	2000	ug/kg
Chrysene	**150 J**	**410**	**ug/kg**
bis(2-Ethylhexyl) phthalate	**98 J**	**410**	**ug/kg**
Di-n-octyl phthalate	ND	410	ug/kg
Benzo(b)fluoranthene	**120 J**	**410**	**ug/kg**
Benzo(k)fluoranthene	**120 J**	**410**	**ug/kg**
Benzo(a)pyrene	**110 J**	**410**	**ug/kg**
Indeno(1,2,3-cd)pyrene	ND	410	ug/kg
Benzo(ghi)perylene	ND	410	ug/kg

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58841

GC/MS Semivolatiles

Lot-Sample #...: P5D210380-003 Work Order #...: G8WXX1AD Matrix.....: SOLID

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	64	(40 - 103)
Phenol-d5	66	(36 - 105)
Nitrobenzene-d5	76	(45 - 114)
2-Fluorobiphenyl	70	(49 - 120)
2,4,6-Tribromophenol	72	(39 - 114)
Terphenyl-d14	74	(42 - 108)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58841

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-003	**Work Order #...:** G8WXX2AD	**Matrix.....:** SOLID	
Date Sampled...: 04/19/05	**Date Received..:** 04/21/05		
Prep Date.....: 05/11/05	**Analysis Date..:** 05/14/05		
Prep Batch #...: 5131374	**Analysis Time..:** 15:17		
Dilution Factor: 1			
% Moisture.....: 20	**Method.....:** SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
N-Nitrosodimethylamine	ND	830	ug/kg
Phenol	ND	830	ug/kg
Aniline	ND	830	ug/kg
bis(2-Chloroethyl)-ether	ND	830	ug/kg
2-Chlorophenol	ND	830	ug/kg
1,3-Dichlorobenzene	ND	830	ug/kg
1,4-Dichlorobenzene	ND	830	ug/kg
Benzyl alcohol	ND	830	ug/kg
1,2-Dichlorobenzene	ND	830	ug/kg
2-Methylphenol	ND	830	ug/kg
3-Methylphenol & 4-Methylphenol	ND	830	ug/kg
2,2'-oxybis(1-Chloropropane)	ND	830	ug/kg
N-Nitrosodi-n-propyl-amine	ND	830	ug/kg
Hexachloroethane	ND	830	ug/kg
Nitrobenzene	ND	830	ug/kg
Isophorone	ND	830	ug/kg
2-Nitrophenol	ND	830	ug/kg
2,4-Dimethylphenol	ND	830	ug/kg
bis(2-Chloroethoxy) methane	ND	830	ug/kg
Benzoic acid	ND	4000	ug/kg
2,4-Dichlorophenol	ND	830	ug/kg
1,2,4-Trichloro-benzene	ND	830	ug/kg
Naphthalene	ND	830	ug/kg
4-Chloroaniline	ND	830	ug/kg
Hexachlorobutadiene	ND	830	ug/kg
4-Chloro-3-methylphenol	ND	830	ug/kg
2-Methylnaphthalene	ND	830	ug/kg
Hexachlorocyclopenta-diene	ND	4000	ug/kg
2,4,6-Trichloro-phenol	ND	830	ug/kg
2,4,5-Trichloro-phenol	ND	830	ug/kg

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RF73-05-58841

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-003 Work Order #...: G8WXX2AD Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Chloronaphthalene	ND	830	ug/kg
2-Nitroaniline	ND	4000	ug/kg
Dimethyl phthalate	ND	830	ug/kg
Acenaphthylene	ND	830	ug/kg
2,6-Dinitrotoluene	ND	830	ug/kg
3-Nitroaniline	ND	4000	ug/kg
Acenaphthene	ND	830	ug/kg
2,4-Dinitrophenol	ND	4000	ug/kg
4-Nitrophenol	ND	4000	ug/kg
Dibenz(a,h)anthracene	ND	830	ug/kg
Dibenzofuran	ND	830	ug/kg
2,4-Dinitrotoluene	ND	830	ug/kg
Diethyl phthalate	ND	830	ug/kg
Fluorene	ND	830	ug/kg
4-Chlorophenyl phenyl ether	ND	830	ug/kg
4-Nitroaniline	ND	4000	ug/kg
4,6-Dinitro-2-methylphenol	ND	4000	ug/kg
N-Nitrosodiphenylamine	ND	830	ug/kg
Azobenzene	ND	830	ug/kg
Pyrene	ND	830	ug/kg
4-Bromophenyl phenyl ether	ND	830	ug/kg
Hexachlorobenzene	ND	830	ug/kg
Pentachlorophenol	ND	4000	ug/kg
Phenanthrene	ND	830	ug/kg
Anthracene	ND	830	ug/kg
Di-n-butyl phthalate	ND	830	ug/kg
Fluoranthene	ND	830	ug/kg
Butyl benzyl phthalate	ND	830	ug/kg
Benzo(a)anthracene	ND	830	ug/kg
3,3'-Dichlorobenzidine	ND	4000	ug/kg
Chrysene	ND	830	ug/kg
bis(2-Ethylhexyl) phthalate	ND	830	ug/kg
Di-n-octyl phthalate	ND	830	ug/kg
Benzo(b)fluoranthene	ND	830	ug/kg
Benzo(k)fluoranthene	ND	830	ug/kg
Benzo(a)pyrene	ND	830	ug/kg
Indeno(1,2,3-cd)pyrene	ND	830	ug/kg
Benzo(ghi)perylene	ND	830	ug/kg

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LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58841

GC/MS Semivolatiles

Lot-Sample #...: F5D210380-003 **Work Order #...:** G8WXX2AD **Matrix.....:** SOLID

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	76	(40 - 103)
Phenol-d5	82	(36 - 105)
Nitrobenzene-d5	84	(45 - 114)
2-Fluorobiphenyl	81	(49 - 120)
2,4,6-Tribromophenol	80	(39 - 114)
Terphenyl-d14	73	(42 - 108)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58841

GC Semivolatiles

Lot-Sample #...:	F5D210380-003	Work Order #...:	G8WXX1AE	Matrix.....:	SOLID
Date Sampled...:	04/19/05	Date Received..:	04/21/05		
Prep Date.....:	04/29/05	Analysis Date..:	05/09/05		
Prep Batch #...:	5119298	Analysis Time..:	18:01		
Dilution Factor:	1				
% Moisture.....:	20	Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	41	ug/kg
Aroclor 1221	ND	41	ug/kg
Aroclor 1232	ND	41	ug/kg
Aroclor 1242	ND	41	ug/kg
Aroclor 1248	ND	41	ug/kg
Aroclor 1254	96	41	ug/kg
Aroclor 1260	ND	41	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	115	(30 - 150)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

LOS ALAMOS NATIONAL LABORATORY

Client Sample ID: RE73-05-58841

General Chemistry

Lot-Sample #...: F5D210380-003 Work Order #...: G8WXX Matrix.....: SOLID
Date Sampled...: 04/19/05 Date Received..: 04/21/05
% Moisture.....: 20

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	20.3	0.10	%	MCAWW 160.3 MOD	04/22-04/25/05	5112220

Dilution Factor: 1 Analysis Time..: 00:00

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F5D210380 **Work Order #...:** G9CJP1AA **Matrix.....:** SOLID
MB Lot-Sample #: F5D270000-629

Prep Date.....: 04/27/05 **Analysis Time..:** 12:04
Analysis Date..: 04/27/05 **Prep Batch #...:** 5117629
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dichlorodifluoromethane	ND	10	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Bromomethane	**1.8 J**	**10**	**ug/kg**	**SW846 8260B**
Chloroethane	ND	10	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	10	ug/kg	SW846 8260B
Trichlorotrifluoroethane	ND	5.0	ug/kg	SW846 8260B
Acetone	ND	20	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Iodomethane	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	**5.2**	**5.0**	**ug/kg**	**SW846 8260B**
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone (MEK)	ND	20	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
Bromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
Dibromomethane	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	20	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
2-Hexanone	ND	20	ug/kg	SW846 8260B
1,3-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Chlorodibromomethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromoethane	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F5D210380 **Work Order #...:** G9CJP1AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260B
Bromobenzene	ND	5.0	ug/kg	SW846 8260B
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromo-3-chloropropane	ND	10	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	99	(60 - 148)
Dibromofluoromethane	102	(61 - 140)
1,2-Dichloroethane-d4	97	(56 - 149)
4-Bromofluorobenzene	108	(56 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: F5D210380 **Work Order #...:** G9HAL1AA **Matrix.....:** SOLID
MB Lot-Sample #: F5D290000-285

Prep Date.....: 04/29/05 **Analysis Time..:** 18:37
Analysis Date..: 05/09/05 **Prep Batch #...:** 5119285
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
N-Nitrosodimethylamine	ND	330	ug/kg	SW846 8270C
Phenol	ND	330	ug/kg	SW846 8270C
Aniline	ND	330	ug/kg	SW846 8270C
bis(2-Chloroethyl)-ether	ND	330	ug/kg	SW846 8270C
2-Chlorophenol	ND	330	ug/kg	SW846 8270C
1,3-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
1,4-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
Benzyl alcohol	ND	330	ug/kg	SW846 8270C
1,2-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
2-Methylphenol	ND	330	ug/kg	SW846 8270C
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	SW846 8270C
2,2'-oxybis(1-Chloropropa	ND	330	ug/kg	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	330	ug/kg	SW846 8270C
Hexachloroethane	ND	330	ug/kg	SW846 8270C
Nitrobenzene	ND	330	ug/kg	SW846 8270C
Isophorone	ND	330	ug/kg	SW846 8270C
2-Nitrophenol	ND	330	ug/kg	SW846 8270C
2,4-Dimethylphenol	ND	330	ug/kg	SW846 8270C
bis(2-Chloroethoxy) methane	ND	330	ug/kg	SW846 8270C
Benzoic acid	ND	1600	ug/kg	SW846 8270C
2,4-Dichlorophenol	ND	330	ug/kg	SW846 8270C
1,2,4-Trichloro-benzene	ND	330	ug/kg	SW846 8270C
Naphthalene	ND	330	ug/kg	SW846 8270C
4-Chloroaniline	ND	330	ug/kg	SW846 8270C
Hexachlorobutadiene	ND	330	ug/kg	SW846 8270C
4-Chloro-3-methylphenol	ND	330	ug/kg	SW846 8270C
2-Methylnaphthalene	ND	330	ug/kg	SW846 8270C
Hexachlorocyclopenta-diene	ND	1600	ug/kg	SW846 8270C
2,4,6-Trichloro-phenol	ND	330	ug/kg	SW846 8270C
2,4,5-Trichloro-phenol	ND	330	ug/kg	SW846 8270C
2-Chloronaphthalene	ND	330	ug/kg	SW846 8270C
2-Nitroaniline	ND	1600	ug/kg	SW846 8270C
Dimethyl phthalate	ND	330	ug/kg	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: F5D210380 **Work Order #...:** G9HAL1AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthylene	ND	330	ug/kg	SW846 8270C
2,6-Dinitrotoluene	ND	330	ug/kg	SW846 8270C
3-Nitroaniline	ND	1600	ug/kg	SW846 8270C
Acenaphthene	ND	330	ug/kg	SW846 8270C
2,4-Dinitrophenol	ND	1600	ug/kg	SW846 8270C
4-Nitrophenol	ND	1600	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	ND	330	ug/kg	SW846 8270C
Dibenzofuran	ND	330	ug/kg	SW846 8270C
2,4-Dinitrotoluene	ND	330	ug/kg	SW846 8270C
Diethyl phthalate	ND	330	ug/kg	SW846 8270C
Fluorene	ND	330	ug/kg	SW846 8270C
4-Chlorophenyl phenyl ether	ND	330	ug/kg	SW846 8270C
4-Nitroaniline	ND	1600	ug/kg	SW846 8270C
4,6-Dinitro-2-methylphenol	ND	1600	ug/kg	SW846 8270C
N-Nitrosodiphenylamine	ND	330	ug/kg	SW846 8270C
Azobenzene	ND	330	ug/kg	SW846 8270C
Pyrene	ND	330	ug/kg	SW846 8270C
4-Bromophenyl phenyl ether	ND	330	ug/kg	SW846 8270C
Hexachlorobenzene	ND	330	ug/kg	SW846 8270C
Pentachlorophenol	ND	1600	ug/kg	SW846 8270C
Phenanthrene	ND	330	ug/kg	SW846 8270C
Anthracene	ND	330	ug/kg	SW846 8270C
Di-n-butyl phthalate	ND	330	ug/kg	SW846 8270C
Fluoranthene	ND	330	ug/kg	SW846 8270C
Butyl benzyl phthalate	ND	330	ug/kg	SW846 8270C
Benzo(a)anthracene	ND	330	ug/kg	SW846 8270C
3,3'-Dichlorobenzidine	ND	1600	ug/kg	SW846 8270C
Chrysene	ND	330	ug/kg	SW846 8270C
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	SW846 8270C
Di-n-octyl phthalate	ND	330	ug/kg	SW846 8270C
Benzo(b)fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo(k)fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo(a)pyrene	ND	330	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	SW846 8270C
Benzo(ghi)perylene	ND	330	ug/kg	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	81	(40 - 103)
Phenol-d5	80	(36 - 105)
Nitrobenzene-d5	72	(45 - 114)

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: F5D210380 **Work Order #...:** G9HAL1AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2-Fluorobiphenyl	62	(49 - 120)		
2,4,6-Tribromophenol	46	(39 - 114)		
Terphenyl-d14	60	(42 - 108)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: F5D210380 **Work Order #...:** HAAT21AA **Matrix.....:** SOLID
MB Lot-Sample #: F5E110000-374

Prep Date.....: 05/11/05 **Analysis Time..:** 18:00
Analysis Date..: 05/12/05 **Prep Batch #...:** 5131374
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
N-Nitrosodimethylamine	ND	660	ug/kg	SW846 8270C
Phenol	ND	660	ug/kg	SW846 8270C
Aniline	ND	660	ug/kg	SW846 8270C
bis(2-Chloroethyl)-ether	ND	660	ug/kg	SW846 8270C
2-Chlorophenol	ND	660	ug/kg	SW846 8270C
1,3-Dichlorobenzene	ND	660	ug/kg	SW846 8270C
1,4-Dichlorobenzene	ND	660	ug/kg	SW846 8270C
Benzyl alcohol	ND	660	ug/kg	SW846 8270C
1,2-Dichlorobenzene	ND	660	ug/kg	SW846 8270C
2-Methylphenol	ND	660	ug/kg	SW846 8270C
3-Methylphenol & 4-Methylphenol	ND	660	ug/kg	SW846 8270C
2,2'-oxybis(1-Chloropropa	ND	660	ug/kg	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	660	ug/kg	SW846 8270C
Hexachloroethane	ND	660	ug/kg	SW846 8270C
Nitrobenzene	ND	660	ug/kg	SW846 8270C
Isophorone	ND	660	ug/kg	SW846 8270C
2-Nitrophenol	ND	660	ug/kg	SW846 8270C
2,4-Dimethylphenol	ND	660	ug/kg	SW846 8270C
bis(2-Chloroethoxy) methane	ND	660	ug/kg	SW846 8270C
Benzoic acid	ND	3200	ug/kg	SW846 8270C
2,4-Dichlorophenol	ND	660	ug/kg	SW846 8270C
1,2,4-Trichloro-benzene	ND	660	ug/kg	SW846 8270C
Naphthalene	ND	660	ug/kg	SW846 8270C
4-Chloroaniline	ND	660	ug/kg	SW846 8270C
Hexachlorobutadiene	ND	660	ug/kg	SW846 8270C
4-Chloro-3-methylphenol	ND	660	ug/kg	SW846 8270C
2-Methylnaphthalene	ND	660	ug/kg	SW846 8270C
Hexachlorocyclopenta-diene	ND	3200	ug/kg	SW846 8270C
2,4,6-Trichloro-phenol	ND	660	ug/kg	SW846 8270C
2,4,5-Trichloro-phenol	ND	660	ug/kg	SW846 8270C
2-Chloronaphthalene	ND	660	ug/kg	SW846 8270C
2-Nitroaniline	ND	3200	ug/kg	SW846 8270C
Dimethyl phthalate	ND	660	ug/kg	SW846 8270C

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GC/MS Semivolatiles

Client Lot #...: F5D210380 **Work Order #...:** HAAT21AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthylene	ND	660	ug/kg	SW846 8270C
2,6-Dinitrotoluene	ND	660	ug/kg	SW846 8270C
3-Nitroaniline	ND	3200	ug/kg	SW846 8270C
Acenaphthene	ND	660	ug/kg	SW846 8270C
2,4-Dinitrophenol	ND	3200	ug/kg	SW846 8270C
4-Nitrophenol	ND	3200	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	ND	660	ug/kg	SW846 8270C
Dibenzofuran	ND	660	ug/kg	SW846 8270C
2,4-Dinitrotoluene	ND	660	ug/kg	SW846 8270C
Diethyl phthalate	ND	660	ug/kg	SW846 8270C
Fluorene	ND	660	ug/kg	SW846 8270C
4-Chlorophenyl phenyl ether	ND	660	ug/kg	SW846 8270C
4-Nitroaniline	ND	3200	ug/kg	SW846 8270C
4,6-Dinitro-2-methylphenol	ND	3200	ug/kg	SW846 8270C
N-Nitrosodiphenylamine	ND	660	ug/kg	SW846 8270C
Azobenzene	ND	660	ug/kg	SW846 8270C
Pyrene	ND	660	ug/kg	SW846 8270C
4-Bromophenyl phenyl ether	ND	660	ug/kg	SW846 8270C
Hexachlorobenzene	ND	660	ug/kg	SW846 8270C
Pentachlorophenol	ND	3200	ug/kg	SW846 8270C
Phenanthrene	ND	660	ug/kg	SW846 8270C
Anthracene	ND	660	ug/kg	SW846 8270C
Di-n-butyl phthalate	ND	660	ug/kg	SW846 8270C
Fluoranthene	ND	660	ug/kg	SW846 8270C
Butyl benzyl phthalate	ND	660	ug/kg	SW846 8270C
Benzo(a)anthracene	ND	660	ug/kg	SW846 8270C
3,3'-Dichlorobenzidine	ND	3200	ug/kg	SW846 8270C
Chrysene	ND	660	ug/kg	SW846 8270C
bis(2-Ethylhexyl) phthalate	ND	660	ug/kg	SW846 8270C
Di-n-octyl phthalate	ND	660	ug/kg	SW846 8270C
Benzo(b)fluoranthene	ND	660	ug/kg	SW846 8270C
Benzo(k)fluoranthene	ND	660	ug/kg	SW846 8270C
Benzo(a)pyrene	ND	660	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	660	ug/kg	SW846 8270C
Benzo(ghi)perylene	ND	660	ug/kg	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	85	(40 - 103)
Phenol-d5	82	(36 - 105)
Nitrobenzene-d5	92	(45 - 114)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: F5D210380 **Work Order #...:** HAAT21AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2-Fluorobiphenyl	85	(49 - 120)		
2,4,6-Tribromophenol	74	(39 - 114)		
Terphenyl-d14	74	(42 - 108)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F5D210380 **Work Order #...:** G9HD11AA **Matrix.....:** SOLID
MB Lot-Sample #: F5D290000-298

Prep Date.....: 04/29/05 **Analysis Time..:** 16:55
Analysis Date..: 05/09/05 **Prep Batch #...:** 5119298
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	33	ug/kg	SW846 8082
Aroclor 1221	ND	33	ug/kg	SW846 8082
Aroclor 1232	ND	33	ug/kg	SW846 8082
Aroclor 1242	ND	33	ug/kg	SW846 8082
Aroclor 1248	ND	33	ug/kg	SW846 8082
Aroclor 1254	ND	33	ug/kg	SW846 8082
Aroclor 1260	ND	33	ug/kg	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	107	(30 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F5D210380 Work Order #...: G9CJP1AC Matrix.....: SOLID
LCS Lot-Sample#: F5D270000-629
Prep Date.....: 04/27/05 Analysis Date..: 04/27/05
Prep Batch #...: 5117629 Analysis Time..: 10:51
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Dichlorodifluoromethane (Freon 12)	93	(30 - 150)	SW846 8260B
Chloromethane	99	(30 - 150)	SW846 8260B
Bromomethane	67	(30 - 142)	SW846 8260B
Chloroethane	106	(57 - 145)	SW846 8260B
Trichlorofluoromethane	103	(57 - 142)	SW846 8260B
Trichlorotrifluoroethane	104	(60 - 139)	SW846 8260B
Acetone	79	(30 - 150)	SW846 8260B
1,1-Dichloroethene	94	(56 - 130)	SW846 8260B
Methylene chloride	93	(31 - 148)	SW846 8260B
Carbon disulfide	100	(45 - 150)	SW846 8260B
1,1-Dichloroethane	103	(68 - 126)	SW846 8260B
2-Butanone (MEK)	112	(31 - 150)	SW846 8260B
2,2-Dichloropropane	99	(64 - 141)	SW846 8260B
1,2-Dichloroethene (total)	104	(72 - 125)	SW846 8260B
Chloroform	98	(72 - 125)	SW846 8260B
Bromochloromethane	105	(77 - 122)	SW846 8260B
1,1,1-Trichloroethane	100	(68 - 133)	SW846 8260B
1,1-Dichloropropene	104	(77 - 126)	SW846 8260B
Carbon tetrachloride	98	(65 - 136)	SW846 8260B
1,2-Dichloroethane	95	(66 - 132)	SW846 8260B
Benzene	103	(77 - 115)	SW846 8260B
Trichloroethene	102	(74 - 120)	SW846 8260B
1,2-Dichloropropane	105	(75 - 122)	SW846 8260B
Bromodichloromethane	94	(72 - 124)	SW846 8260B
4-Methyl-2-pentanone	107	(30 - 144)	SW846 8260B
cis-1,3-Dichloropropene	96	(77 - 125)	SW846 8260B
Toluene	104	(73 - 122)	SW846 8260B
trans-1,3-Dichloropropene	111	(81 - 137)	SW846 8260B
1,1,2-Trichloroethane	102	(75 - 117)	SW846 8260B
2-Hexanone	127	(54 - 143)	SW846 8260B
1,3-Dichloropropane	104	(74 - 122)	SW846 8260B
Tetrachloroethene	95	(48 - 125)	SW846 8260B

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F5D210380 Work Order #...: G9CJP1AC Matrix.....: SOLID
LCS Lot-Sample#: F5D270000-629

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Chlorodibromomethane	**100**	**(73 - 125)**	**SW846 8260B**
1,2-Dibromoethane	**104**	**(79 - 121)**	**SW846 8260B**
Chlorobenzene	**100**	**(81 - 116)**	**SW846 8260B**
1,1,1,2-Tetrachloroethane	**98**	**(80 - 119)**	**SW846 8260B**
Ethylbenzene	**106**	**(81 - 116)**	**SW846 8260B**
Vinyl chloride	**109**	**(48 - 148)**	**SW846 8260B**
Styrene	**110**	**(76 - 125)**	**SW846 8260B**
Bromoform	**100**	**(69 - 133)**	**SW846 8260B**
Isopropylbenzene	**119**	**(80 - 143)**	**SW846 8260B**
1,1,2,2-Tetrachloroethane	**105**	**(64 - 134)**	**SW846 8260B**
n-Propylbenzene	**101**	**(69 - 129)**	**SW846 8260B**
Bromobenzene	**97**	**(75 - 125)**	**SW846 8260B**
2-Chlorotoluene	**132 a**	**(65 - 127)**	**SW846 8260B**
1,3,5-Trimethylbenzene	**98**	**(70 - 126)**	**SW846 8260B**
4-Chlorotoluene	**81**	**(67 - 130)**	**SW846 8260B**
tert-Butylbenzene	**70**	**(53 - 123)**	**SW846 8260B**
sec-Butylbenzene	**93**	**(76 - 115)**	**SW846 8260B**
p-Isopropyltoluene	**102**	**(80 - 127)**	**SW846 8260B**
1,3-Dichlorobenzene	**102**	**(82 - 114)**	**SW846 8260B**
1,4-Dichlorobenzene	**100**	**(79 - 109)**	**SW846 8260B**
n-Butylbenzene	**109**	**(77 - 128)**	**SW846 8260B**
1,2-Dichlorobenzene	**113**	**(82 - 115)**	**SW846 8260B**
1,2-Dibromo-3-chloropropane (DBCP)	**106**	**(72 - 133)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	98	(72 - 131)
Dibromofluoromethane	97	(74 - 128)
1,2-Dichloroethane-d4	99	(69 - 134)
4-Bromofluorobenzene	98	(70 - 131)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D210380 Work Order #...: G9HAL1AC Matrix.....: SOLID
LCS Lot-Sample#: F5D290000-285
Prep Date.....: 04/29/05 Analysis Date..: 05/09/05
Prep Batch #...: 5119285 Analysis Time..: 19:09
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Phenol	81	(49 - 92)	SW846 8270C
bis(2-Chloroethyl)-ether	78	(43 - 94)	SW846 8270C
2-Chlorophenol	77	(49 - 92)	SW846 8270C
2-Methylphenol	69	(48 - 92)	SW846 8270C
3-Methylphenol & 4-Methylphenol	71	(47 - 100)	SW846 8270C
2,2'-oxybis(1-Chloropropa	72	(44 - 102)	SW846 8270C
N-Nitrosodi-n-propyl-amine	78	(55 - 108)	SW846 8270C
Hexachloroethane	47	(43 - 100)	SW846 8270C
Nitrobenzene	63	(50 - 102)	SW846 8270C
Isophorone	82	(57 - 110)	SW846 8270C
2-Nitrophenol	65	(50 - 99)	SW846 8270C
2,4-Dimethylphenol	77	(48 - 97)	SW846 8270C
bis(2-Chloroethoxy) methane	78	(53 - 103)	SW846 8270C
2,4-Dichlorophenol	76	(51 - 98)	SW846 8270C
1,2,4-Trichloro-benzene	57	(50 - 101)	SW846 8270C
Naphthalene	59	(52 - 102)	SW846 8270C
4-Chloroaniline	20 a	(21 - 96)	SW846 8270C
Hexachlorobutadiene	60	(50 - 102)	SW846 8270C
4-Chloro-3-methylphenol	76	(52 - 100)	SW846 8270C
2-Methylnaphthalene	59	(38 - 112)	SW846 8270C
Hexachlorocyclopenta-diene	73	(41 - 117)	SW846 8270C
2,4,6-Trichloro-phenol	68	(52 - 100)	SW846 8270C
2,4,5-Trichloro-phenol	80	(53 - 101)	SW846 8270C
2-Nitroaniline	71	(45 - 114)	SW846 8270C
Dimethyl phthalate	79	(55 - 105)	SW846 8270C
Acenaphthylene	64	(56 - 107)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D210380 Work Order #...: G9HAL1AC Matrix.....: SOLID
LCS Lot-Sample#: F5D290000-285

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,6-Dinitrotoluene	76	(55 - 108)	SW846 8270C
3-Nitroaniline	37	(30 - 94)	SW846 8270C
Acenaphthene	59	(56 - 107)	SW846 8270C
2,4-Dinitrophenol	65	(10 - 91)	SW846 8270C
4-Nitrophenol	84	(44 - 109)	SW846 8270C
Dibenzofuran	61	(46 - 108)	SW846 8270C
Dibenz(a,h)anthracene	61	(42 - 133)	SW846 8270C
2,4-Dinitrotoluene	80	(56 - 117)	SW846 8270C
Diethyl phthalate	80	(56 - 111)	SW846 8270C
Fluorene	61	(56 - 105)	SW846 8270C
4-Chlorophenyl phenyl ether	64	(56 - 105)	SW846 8270C
4-Nitroaniline	70	(42 - 109)	SW846 8270C
4,6-Dinitro-2-methylphenol	95	(27 - 100)	SW846 8270C
N-Nitrosodiphenylamine	79	(58 - 114)	SW846 8270C
Pyrene	40 a	(54 - 114)	SW846 8270C
4-Bromophenyl phenyl ether	65	(54 - 106)	SW846 8270C
Hexachlorobenzene	47 a	(57 - 111)	SW846 8270C
Pentachlorophenol	45	(37 - 102)	SW846 8270C
Phenanthrene	58	(57 - 108)	SW846 8270C
Anthracene	59	(55 - 107)	SW846 8270C
Di-n-butyl phthalate	76	(55 - 109)	SW846 8270C
Fluoranthene	52 a	(56 - 106)	SW846 8270C
Butyl benzyl phthalate	80	(55 - 115)	SW846 8270C
Benzo(a)anthracene	58	(56 - 112)	SW846 8270C
3,3'-Dichlorobenzidine	43	(32 - 95)	SW846 8270C
Chrysene	58	(55 - 112)	SW846 8270C
bis(2-Ethylhexyl) phthalate	77	(53 - 112)	SW846 8270C
Di-n-octyl phthalate	80	(49 - 112)	SW846 8270C
Benzo(b)fluoranthene	59	(53 - 112)	SW846 8270C
Benzo(k)fluoranthene	60	(60 - 126)	SW846 8270C
Benzo(a)pyrene	25 a	(54 - 109)	SW846 8270C
Indeno(1,2,3-cd)pyrene	30 a	(42 - 129)	SW846 8270C
Benzo(ghi)perylene	2.7 a	(37 - 139)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D210380 **Work Order #...:** G9HAL1AC **Matrix.....:** SOLID
LCS Lot-Sample#: F5D290000-285

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	77	(50 - 98)
Phenol-d5	81	(51 - 95)
Nitrobenzene-d5	69	(50 - 111)
2-Fluorobiphenyl	69	(57 - 117)
2,4,6-Tribromophenol	59	(53 - 108)
Terphenyl-d14	60	(49 - 107)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D210380 Work Order #...: HAAT21AC Matrix.....: SOLID
LCS Lot-Sample#: F5E110000-374
Prep Date.....: 05/11/05 Analysis Date..: 05/12/05
Prep Batch #...: 5131374 Analysis Time..: 18:32
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Phenol	78	(49 - 92)	SW846 8270C
bis(2-Chloroethyl)-ether	76	(43 - 94)	SW846 8270C
2-Chlorophenol	86	(49 - 92)	SW846 8270C
2-Methylphenol	81	(48 - 92)	SW846 8270C
3-Methylphenol & 4-Methylphenol	79	(47 - 100)	SW846 8270C
2,2'-oxybis(1-Chloropropa	83	(44 - 102)	SW846 8270C
N-Nitrosodi-n-propyl-amine	93	(55 - 108)	SW846 8270C
Hexachloroethane	87	(43 - 100)	SW846 8270C
Nitrobenzene	85	(50 - 102)	SW846 8270C
Isophorone	90	(57 - 110)	SW846 8270C
2-Nitrophenol	85	(50 - 99)	SW846 8270C
2,4-Dimethylphenol	89	(48 - 97)	SW846 8270C
bis(2-Chloroethoxy) methane	86	(53 - 103)	SW846 8270C
2,4-Dichlorophenol	86	(51 - 98)	SW846 8270C
1,2,4-Trichloro-benzene	89	(50 - 101)	SW846 8270C
Naphthalene	87	(52 - 102)	SW846 8270C
4-Chloroaniline	50	(21 - 96)	SW846 8270C
Hexachlorobutadiene	91	(50 - 102)	SW846 8270C
4-Chloro-3-methylphenol	91	(52 - 100)	SW846 8270C
2-Methylnaphthalene	115 a	(38 - 112)	SW846 8270C
Hexachlorocyclopenta-diene	106	(41 - 117)	SW846 8270C
2,4,6-Trichloro-phenol	89	(52 - 100)	SW846 8270C
2,4,5-Trichloro-phenol	85	(53 - 101)	SW846 8270C
2-Nitroaniline	82	(45 - 114)	SW846 8270C
Dimethyl phthalate	88	(55 - 105)	SW846 8270C
Acenaphthylene	95	(56 - 107)	SW846 8270C

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D210380 Work Order #...: HAAT21AC Matrix.....: SOLID
LCS Lot-Sample#: F5E110000-374

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,6-Dinitrotoluene	86	(55 - 108)	SW846 8270C
3-Nitroaniline	51	(30 - 94)	SW846 8270C
Acenaphthene	87	(56 - 107)	SW846 8270C
2,4-Dinitrophenol	40	(10 - 91)	SW846 8270C
4-Nitrophenol	86	(44 - 109)	SW846 8270C
Dibenzofuran	86	(46 - 108)	SW846 8270C
Dibenz(a,h)anthracene	84	(42 - 133)	SW846 8270C
2,4-Dinitrotoluene	87	(56 - 117)	SW846 8270C
Diethyl phthalate	89	(56 - 111)	SW846 8270C
Fluorene	90	(56 - 105)	SW846 8270C
4-Chlorophenyl phenyl ether	91	(56 - 105)	SW846 8270C
4-Nitroaniline	80	(42 - 109)	SW846 8270C
4,6-Dinitro-2-methylphenol	80	(27 - 100)	SW846 8270C
N-Nitrosodiphenylamine	98	(58 - 114)	SW846 8270C
Pyrene	86	(54 - 114)	SW846 8270C
4-Bromophenyl phenyl ether	90	(54 - 106)	SW846 8270C
Hexachlorobenzene	93	(57 - 111)	SW846 8270C
Pentachlorophenol	53	(37 - 102)	SW846 8270C
Phenanthrene	85	(57 - 108)	SW846 8270C
Anthracene	85	(55 - 107)	SW846 8270C
Di-n-butyl phthalate	86	(55 - 109)	SW846 8270C
Fluoranthene	79	(56 - 106)	SW846 8270C
Butyl benzyl phthalate	89	(55 - 115)	SW846 8270C
Benzo(a)anthracene	85	(56 - 112)	SW846 8270C
3,3'-Dichlorobenzidine	61	(32 - 95)	SW846 8270C
Chrysene	86	(55 - 112)	SW846 8270C
bis(2-Ethylhexyl) phthalate	86	(53 - 112)	SW846 8270C
Di-n-octyl phthalate	91	(49 - 112)	SW846 8270C
Benzo(b)fluoranthene	92	(53 - 112)	SW846 8270C
Benzo(k)fluoranthene	89	(60 - 126)	SW846 8270C
Benzo(a)pyrene	86	(54 - 109)	SW846 8270C
Indeno(1,2,3-cd)pyrene	81	(42 - 129)	SW846 8270C
Benzo(ghi)perylene	66	(37 - 139)	SW846 8270C

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D210380 **Work Order #...:** HAAT21AC **Matrix.....:** SOLID
LCS Lot-Sample#: F5E110000-374

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	86	(50 - 98)
Phenol-d5	83	(51 - 95)
Nitrobenzene-d5	89	(50 - 111)
2-Fluorobiphenyl	90	(57 - 117)
2,4,6-Tribromophenol	100	(53 - 108)
Terphenyl-d14	78	(49 - 107)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F5D210380
LCS Lot-Sample#: F5D290000-298
Prep Date.....: 04/29/05
Prep Batch #...: 5119298
Dilution Factor: 1

Work Order #...: G9HD11AC

Analysis Date..: 05/09/05
Analysis Time..: 17:11

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	**98**	**(73 - 141)**	**SW846 8082**
Aroclor 1260	**101**	**(72 - 144)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	109	(73 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F5D210380 Work Order #...: G8WXJ1AF-MS Matrix.....: SOLID
MS Lot-Sample #: F5D210380-001 G8WXJ1AG-MSD
Date Sampled...: 04/19/05 Date Received..: 04/21/05
Prep Date.....: 04/27/05 Analysis Date..: 04/27/05
Prep Batch #...: 5117629 Analysis Time..: 15:57
Dilution Factor: 1 % Moisture.....: 20

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Dichlorodifluoromethane (Freon 12)	130	(30 - 150)			SW846 8260B
	129	(30 - 150)	0.58	(0-30)	SW846 8260B
Chloromethane	138	(30 - 150)			SW846 8260B
	136	(30 - 150)	1.2	(0-30)	SW846 8260B
Bromomethane	95	(30 - 150)			SW846 8260B
	89	(30 - 150)	5.3	(0-30)	SW846 8260B
Chloroethane	142	(42 - 150)			SW846 8260B
	142	(42 - 150)	0.25	(0-30)	SW846 8260B
Trichlorofluoromethane	148 a	(48 - 145)			SW846 8260B
	146 a	(48 - 145)	1.2	(0-30)	SW846 8260B
Trichlorotrifluoroethane	147 a	(54 - 136)			SW846 8260B
	144 a	(54 - 136)	2.4	(0-30)	SW846 8260B
Acetone	108	(30 - 150)			SW846 8260B
	99	(30 - 150)	8.2	(0-30)	SW946 8260B
1,1-Dichloroethene	119	(39 - 144)			SW846 8260B
	115	(39 - 144)	4.2	(0-30)	SW846 8260B
Methylene chloride	111	(30 - 143)			SW846 8260B
	101	(30 - 143)	7.5	(0-30)	SW846 8260B
Carbon disulfide	97	(30 - 150)			SW846 8260B
	95	(30 - 150)	2.5	(0-30)	SW846 8260B
1,1-Dichloroethane	134	(52 - 141)			SW846 8260B
	133	(52 - 141)	1.1	(0-30)	SW846 8260B
2-Butanone (MEK)	119	(30 - 150)			SW846 8260B
	121	(30 - 150)	2.2	(0-30)	SW846 8260B
2,2-Dichloropropane	138	(51 - 148)			SW846 8260B
	142	(51 - 148)	3.2	(0-30)	SW846 8260B
1,2-Dichloroethene (total)	113	(41 - 150)			SW846 8260B
	110	(41 - 150)	2.1	(0-30)	SW846 8260B
Chloroform	123	(57 - 140)			SW846 8260B
	122	(57 - 140)	0.96	(0-30)	SW846 8260B
Bromochloromethane	128	(57 - 147)			SW846 8260B
	126	(57 - 147)	1.8	(0-30)	SW846 8260B
1,1,1-Trichloroethane	137	(55 - 145)			SW846 8260B
	135	(55 - 145)	1.0	(0-30)	SW846 8260B
1,1-Dichloropropene	116	(61 - 139)			SW846 8260B
	113	(61 - 139)	1.9	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F5D210380 Work Order #...: G8WXJ1AF-MS Matrix.....: SOLID
MS Lot-Sample #: F5D210380-001 G8WXJ1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Carbon tetrachloride	135	(52 - 147)			SW846 8260B
	132	(52 - 147)	2.2	(0-30)	SW846 8260B
1,2-Dichloroethane	118	(55 - 150)			SW846 8260B
	115	(55 - 150)	2.8	(0-30)	SW846 8260B
Benzene	117	(59 - 135)			SW846 8260B
	115	(59 - 135)	2.1	(0-30)	SW846 8260B
Trichloroethene	106	(30 - 150)			SW846 8260B
	106	(30 - 150)	0.05	(0-30)	SW846 8260B
1,2-Dichloropropane	126	(55 - 143)			SW846 8260B
	131	(55 - 143)	4.4	(0-30)	SW846 8260B
Bromodichloromethane	112	(51 - 145)			SW846 8260B
	109	(51 - 145)	2.6	(0-30)	SW846 8260B
4-Methyl-2-pentanone	142	(30 - 150)			SW846 8260B
	137	(30 - 150)	3.6	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	97	(56 - 141)			SW846 8260B
	91	(56 - 141)	6.1	(0-30)	SW846 8260B
Toluene	158 a	(53 - 146)			SW846 8260B
	155 a	(53 - 146)	1.7	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	136	(51 - 150)			SW846 8260B
	137	(51 - 150)	1.1	(0-30)	SW846 8260B
1,1,2-Trichloroethane	180 a	(41 - 150)			SW846 8260B
	179 a	(41 - 150)	0.76	(0-30)	SW846 8260B
2-Hexanone	198 a	(30 - 150)			SW846 8260B
	194 a	(30 - 150)	2.3	(0-30)	SW846 8260B
1,3-Dichloropropane	167 a	(41 - 150)			SW846 8260B
	170 a	(41 - 150)	2.1	(0-30)	SW846 8260B
Tetrachloroethene	146 a	(30 - 136)			SW846 8260B
	153 a	(30 - 136)	4.6	(0-30)	SW846 8260B
Chlorodibromomethane	156 a	(51 - 150)			SW846 8260B
	163 a	(51 - 150)	4.5	(0-30)	SW846 8260B
1,2-Dibromoethane	150	(50 - 150)			SW846 8260B
	151 a	(50 - 150)	0.44	(0-30)	SW846 8260B
Chlorobenzene	103	(60 - 136)			SW846 8260B
	102	(60 - 136)	0.66	(0-30)	SW846 8260B
1,1,1,2-Tetrachloroethane	189 a	(55 - 148)			SW846 8260B
	181 a	(55 - 148)	4.2	(0-30)	SW846 8260B
Ethylbenzene	157 a	(60 - 134)			SW846 8260B
	146 a	(60 - 134)	7.2	(0-30)	SW846 8260B
Vinyl chloride	143	(37 - 150)			SW846 8260B
	145	(37 - 150)	1.6	(0-30)	SW846 8260B
Styrene	77	(58 - 138)			SW846 8260B
	83	(58 - 138)	7.8	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F5D210380 Work Order #...: G8WXJ1AF-MS Matrix.....: SOLID
MS Lot-Sample #: F5D210380-001 G8WXJ1AG-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Bromoform	138	(51 - 150)			SW846 8260B
	144	(51 - 150)	4.0	(0-30)	SW846 8260B
Isopropylbenzene	181 a	(61 - 150)			SW846 8260B
	191 a	(61 - 150)	5.3	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	157	(40 - 163)			SW846 8260B
	158	(40 - 163)	0.44	(0-30)	SW846 8260B
n-Propylbenzene	280 a	(35 - 150)			SW846 8260B
	252 a	(35 - 150)	11	(0-30)	SW846 8260B
Bromobenzene	164 a	(30 - 150)			SW846 8260B
	146	(30 - 150)	11	(0-30)	SW846 8260B
2-Chlorotoluene	238 a	(30 - 150)			SW846 8260B
	186 a	(30 - 150)	25	(0-30)	SW846 8260B
1,3,5-Trimethylbenzene	307 a	(30 - 150)			SW846 8260B
	261 a	(30 - 150)	17	(0-30)	SW846 8260B
4-Chlorotoluene	164 a	(45 - 150)			SW846 8260B
	166 a	(45 - 150)	1.3	(0-30)	SW846 8260B
tert-Butylbenzene	269 a	(32 - 148)			SW846 8260B
	219 a	(32 - 148)	20	(0-30)	SW846 8260B
sec-Butylbenzene	314 a	(42 - 150)			SW846 8260B
	263 a	(42 - 150)	18	(0-30)	SW846 8260B
p-Isopropyltoluene	358 a	(49 - 150)			SW846 8260B
	312 a	(49 - 150)	14	(0-30)	SW846 8260B
1,3-Dichlorobenzene	121	(57 - 136)			SW846 8260B
	117	(57 - 136)	2.7	(0-30)	SW846 8260B
1,4-Dichlorobenzene	98	(51 - 133)			SW846 8260B
	97	(51 - 133)	0.06	(0-30)	SW846 8260B
n-Butylbenzene	217 a	(34 - 150)			SW846 8260B
	205 a	(34 - 150)	5.8	(0-30)	SW846 8260B
1,2-Dichlorobenzene	128	(53 - 141)			SW846 8260B
	114	(53 - 141)	12	(0-30)	SW846 8260B
1,2-Dibromo-3-chloropropane (DBCP)	275 a	(30 - 150)			SW846 8260B
	244 a	(30 - 150)	12	(0-30)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	151 *	(60 - 148)
	147	(60 - 148)
Dibromofluoromethane	119	(61 - 140)
	118	(61 - 140)

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F5D210380 Work Order #...: G8WXJ1AF-MS Matrix.....: SOLID
MS Lot-Sample #: F5D210380-001 G8WXJ1AG-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	121	(56 - 149)
	115	(56 - 149)
4-Bromofluorobenzene	171 *	(56 - 150)
	132	(56 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

* Surrogate recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...:	F5D210380	Work Order #...:	G8QE31CW-MS	Matrix.....:	SOLID
MS Lot-Sample #:	F5D200213-001		G8QE31CX-MSD		
Date Sampled...:	04/19/05 10:30	Date Received..:	04/20/05		
Prep Date.....:	04/29/05	Analysis Date..:	05/10/05		
Prep Batch #...:	5119285	Analysis Time..:	02:35		
Dilution Factor:	1	% Moisture.....:	20		

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Phenol	85	(41 - 97)			SW846 8270C
	73	(41 - 97)	17	(0-30)	SW846 8270C
bis(2-Chloroethyl)-ether	80	(38 - 98)			SW846 8270C
	71	(38 - 98)	13	(0-30)	SW846 8270C
2-Chlorophenol	81	(41 - 96)			SW846 8270C
	71	(41 - 96)	16	(0-30)	SW846 8270C
2-Methylphenol	77	(43 - 95)			SW846 8270C
	68	(43 - 95)	15	(0-30)	SW846 8270C
3-Methylphenol & 4-Methylphenol	81	(41 - 103)			SW846 8270C
	72	(41 - 103)	17	(0-30)	SW846 8270C
2,2'-oxybis(1-Chloropropa	77	(41 - 102)			SW846 8270C
	70	(41 - 102)	11	(0-30)	SW846 8270C
N-Nitrosodi-n-propyl-amine	93	(51 - 109)			SW846 8270C
	83	(51 - 109)	13	(0-30)	SW846 8270C
Hexachloroethane	77	(36 - 99)			SW846 8270C
	70	(36 - 99)	12	(0-30)	SW846 8270C
Nitrobenzene	81	(45 - 105)			SW846 8270C
	74	(45 - 105)	10	(0-30)	SW846 8270C
Isophorone	91	(47 - 117)			SW846 8270C
	84	(47 - 117)	10	(0-30)	SW846 8270C
2-Nitrophenol	82	(36 - 108)			SW846 8270C
	74	(36 - 108)	12	(0-30)	SW846 8270C
2,4-Dimethylphenol	74	(36 - 105)			SW846 8270C
	65	(36 - 105)	15	(0-30)	SW846 8270C
bis(2-Chloroethoxy) methane	84	(46 - 107)			SW846 8270C
	75	(46 - 107)	13	(0-30)	SW846 8270C
2,4-Dichlorophenol	86	(40 - 105)			SW846 8270C
	74	(40 - 105)	17	(0-30)	SW846 8270C
1,2,4-Trichloro-benzene	82	(44 - 102)			SW846 8270C
	74	(44 - 102)	11	(0-30)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D210380 Work Order #...: G8QE31CW-MS Matrix.....: SOLID
MS Lot-Sample #: F5D200213-001 G8QE31CX-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Naphthalene	79	(10 - 150)			SW846 8270C
	71	(10 - 150)	12	(0-30)	SW846 8270C
4-Chloroaniline	44	(11 - 99)			SW846 8270C
	43	(11 - 99)	3.9	(0-30)	SW846 8270C
Hexachlorobutadiene	79	(40 - 105)			SW846 8270C
	72	(40 - 105)	12	(0-30)	SW846 8270C
4-Chloro-3-methylphenol	91	(41 - 107)			SW846 8270C
	79	(41 - 107)	16	(0-30)	SW846 8270C
2-Methylnaphthalene	80	(35 - 118)			SW846 8270C
	71	(35 - 118)	14	(0-30)	SW846 8270C
Hexachlorocyclopentadiene	91	(10 - 120)			SW846 8270C
	80	(10 - 120)	14	(0-30)	SW846 8270C
2,4,6-Trichlorophenol	88	(40 - 105)			SW846 8270C
	77	(40 - 105)	16	(0-30)	SW846 8270C
2,4,5-Trichlorophenol	93	(39 - 108)			SW846 8270C
	80	(39 - 108)	18	(0-30)	SW846 8270C
2-Nitroaniline	88	(42 - 114)			SW846 8270C
	78	(42 - 114)	14	(0-30)	SW846 8270C
Dimethyl phthalate	91	(46 - 110)			SW846 8270C
	79	(46 - 110)	16	(0-30)	SW846 8270C
Acenaphthylene	92	(48 - 110)			SW846 8270C
	81	(48 - 110)	15	(0-30)	SW846 8270C
2,6-Dinitrotoluene	91	(47 - 111)			SW846 8270C
	79	(47 - 111)	16	(0-30)	SW846 8270C
3-Nitroaniline	69	(23 - 102)			SW846 8270C
	62	(23 - 102)	12	(0-30)	SW846 8270C
Acenaphthene	86	(48 - 112)			SW846 8270C
	76	(48 - 112)	15	(0-30)	SW846 8270C
2,4-Dinitrophenol	54	(10 - 109)			SW846 8270C
	44	(10 - 109)	22	(0-30)	SW846 8270C
4-Nitrophenol	108	(33 - 114)			SW846 8270C
	91	(33 - 114)	19	(0-30)	SW846 8270C
Dibenzofuran	89	(46 - 107)			SW846 8270C
	77	(46 - 107)	16	(0-30)	SW846 8270C
Dibenz(a,h)anthracene	92	(33 - 131)			SW846 8270C
	80	(33 - 131)	16	(0-30)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D210380 Work Order #...: G8QE31CW-MS Matrix.....: SOLID
MS Lot-Sample #: F5D200213-001 G8QE31CX-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2,4-Dinitrotoluene	99	(47 - 120)			SW846 8270C
	85	(47 - 120)	17	(0-30)	SW846 8270C
Diethyl phthalate	97	(46 - 115)			SW846 8270C
	83	(46 - 115)	18	(0-30)	SW846 8270C
Fluorene	91	(47 - 109)			SW846 8270C
	79	(47 - 109)	16	(0-30)	SW846 8270C
4-Chlorophenyl phenyl ether	94	(47 - 109)			SW846 8270C
	81	(47 - 109)	17	(0-30)	SW846 8270C
4-Nitroaniline	88	(21 - 116)			SW846 8270C
	78	(21 - 116)	13	(0-30)	SW846 8270C
4,6-Dinitro-2-methylphenol	80	(10 - 108)			SW846 8270C
	67	(10 - 108)	19	(0-30)	SW846 8270C
N-Nitrosodiphenylamine	96	(47 - 120)			SW846 8270C
	81	(47 - 120)	18	(0-30)	SW846 8270C
Pyrene	87	(41 - 121)			SW846 8270C
	73	(41 - 121)	19	(0-30)	SW846 8270C
4-Bromophenyl phenyl ether	87	(46 - 110)			SW846 8270C
	75	(46 - 110)	17	(0-30)	SW846 8270C
Hexachlorobenzene	91	(48 - 115)			SW846 8270C
	79	(48 - 115)	16	(0-30)	SW846 8270C
Pentachlorophenol	78	(11 - 110)			SW846 8270C
	67	(11 - 110)	18	(0-30)	SW846 8270C
Phenanthrene	84	(39 - 122)			SW846 8270C
	73	(39 - 122)	16	(0-30)	SW846 8270C
Anthracene	86	(46 - 111)			SW846 8270C
	74	(46 - 111)	16	(0-30)	SW846 8270C
Di-n-butyl phthalate	86	(45 - 114)			SW846 8270C
	73	(45 - 114)	17	(0-30)	SW846 8270C
Fluoranthene	81	(39 - 116)			SW846 8270C
	69	(39 - 116)	18	(0-30)	SW846 8270C
Butyl benzyl phthalate	90	(44 - 121)			SW846 8270C
	78	(44 - 121)	16	(0-30)	SW846 8270C
Benzo(a)anthracene	88	(46 - 117)			SW846 8270C
	76	(46 - 117)	16	(0-30)	SW846 8270C
3,3'-Dichlorobenzidine	63	(10 - 116)			SW846 8270C
	56	(10 - 116)	14	(0-30)	SW846 8270C

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D210380 Work Order #...: G8QE31CW-MS Matrix.....: SOLID
MS Lot-Sample #: F5D200213-001 G8QE31CX-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Chrysene	90	(43 - 119)			SW846 8270C
	78	(43 - 119)	17	(0-30)	SW846 8270C
bis(2-Ethylhexyl) phthalate	85	(43 - 118)			SW846 8270C
	74	(43 - 118)	16	(0-30)	SW846 8270C
Di-n-octyl phthalate	87	(35 - 120)			SW846 8270C
	75	(35 - 120)	16	(0-30)	SW846 8270C
Benzo(b)fluoranthene	92	(39 - 124)			SW846 8270C
	77	(39 - 124)	20	(0-30)	SW846 8270C
Benzo(k)fluoranthene	92	(43 - 131)			SW846 8270C
	77	(43 - 131)	20	(0-30)	SW846 8270C
Benzo(a)pyrene	88	(43 - 114)			SW846 8270C
	76	(43 - 114)	16	(0-30)	SW846 8270C
Indeno(1,2,3-cd)pyrene	84	(31 - 129)			SW846 8270C
	73	(31 - 129)	16	(0-30)	SW846 8270C
Benzo(ghi)perylene	85	(26 - 140)			SW846 8270C
	74	(26 - 140)	15	(0-30)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	79	(40 - 103)
	68	(40 - 103)
Phenol-d5	87	(36 - 105)
	74	(36 - 105)
Nitrobenzene-d5	82	(45 - 114)
	74	(45 - 114)
2-Fluorobiphenyl	88	(49 - 120)
	75	(49 - 120)
2,4,6-Tribromophenol	98	(39 - 114)
	83	(39 - 114)
Terphenyl-d14	76	(42 - 108)
	66	(42 - 108)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D210380
MS Lot-Sample #: F5D210380-001
Date Sampled...: 04/19/05
Prep Date.....: 04/29/05
Prep Batch #...: 5119285
Dilution Factor: 1

Work Order #...: G8WXJ1AH-MS
G8WXJ1AJ-MSD
Date Received..: 04/21/05
Analysis Date..: 05/10/05
Analysis Time..: 18:19
% Moisture.....: 20

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Phenol	78	(41 - 97)			SW846 8270C
	77	(41 - 97)	2.4	(0-30)	SW846 8270C
bis(2-Chloroethyl)-ether	79	(38 - 98)			SW846 8270C
	76	(38 - 98)	5.4	(0-30)	SW846 8270C
2-Chlorophenol	75	(41 - 96)			SW846 8270C
	73	(41 - 96)	4.1	(0-30)	SW846 8270C
2-Methylphenol	60	(43 - 95)			SW846 8270C
	60	(43 - 95)	0.95	(0-30)	SW846 8270C
3-Methylphenol & 4-Methylphenol	124 a	(41 - 103)			SW846 8270C
	125 a	(41 - 103)	0.63	(0-30)	SW846 8270C
2,2'-oxybis(1-Chloropropa	74	(41 - 102)			SW846 8270C
	77	(41 - 102)	2.9	(0-30)	SW846 8270C
N-Nitrosodi-n-propyl-amine	89	(51 - 109)			SW846 8270C
	90	(51 - 109)	0.81	(0-30)	SW846 8270C
Hexachloroethane	57	(36 - 99)			SW846 8270C
	71	(36 - 99)	20	(0-30)	SW846 8270C
Nitrobenzene	63	(45 - 105)			SW846 8270C
	76	(45 - 105)	18	(0-30)	SW846 8270C
Isophorone	90	(47 - 117)			SW846 8270C
	92	(47 - 117)	1.1	(0-30)	SW846 8270C
2-Nitrophenol	67	(36 - 108)			SW846 8270C
	75	(36 - 108)	11	(0-30)	SW846 8270C
2,4-Dimethylphenol	32 a	(36 - 105)			SW846 8270C
	35 a	(36 - 105)	8.7	(0-30)	SW846 8270C
bis(2-Chloroethoxy) methane	81	(46 - 107)			SW846 8270C
	82	(46 - 107)	0.27	(0-30)	SW846 8270C
2,4-Dichlorophenol	77	(40 - 105)			SW846 8270C
	77	(40 - 105)	1.5	(0-30)	SW846 8270C
1,2,4-Trichloro-benzene	61	(44 - 102)			SW846 8270C
	73	(44 - 102)	16	(0-30)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D210380 Work Order #...: G8WXJ1AH-MS Matrix.....: SOLID
MS Lot-Sample #: F5D210380-001 G8WXJ1AJ-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Naphthalene	59	(10 - 150)			SW846 8270C
	72	(10 - 150)	18	(0-30)	SW846 8270C
4-Chloroaniline	21	(11 - 99)			SW846 8270C
	22	(11 - 99)	4.8	(0-30)	SW846 8270C
Hexachlorobutadiene	62	(40 - 105)			SW846 8270C
	75	(40 - 105)	17	(0-30)	SW846 8270C
4-Chloro-3-methylphenol	80	(41 - 107)			SW846 8270C
	83	(41 - 107)	2.1	(0-30)	SW846 8270C
2-Methylnaphthalene	58	(35 - 118)			SW846 8270C
	73	(35 - 118)	21	(0-30)	SW846 8270C
Hexachlorocyclopenta-diene	67	(10 - 120)			SW846 8270C
	81	(10 - 120)	18	(0-30)	SW846 8270C
2,4,6-Trichloro-phenol	71	(40 - 105)			SW846 8270C
	74	(40 - 105)	2.9	(0-30)	SW846 8270C
2,4,5-Trichloro-phenol	84	(39 - 108)			SW846 8270C
	83	(39 - 108)	2.4	(0-30)	SW846 8270C
2-Nitroaniline	73	(42 - 114)			SW846 8270C
	79	(42 - 114)	6.2	(0-30)	SW846 8270C
Dimethyl phthalate	88	(46 - 110)			SW846 8270C
	87	(46 - 110)	1.8	(0-30)	SW846 8270C
Acenaphthylene	67	(48 - 110)			SW846 8270C
	79	(48 - 110)	15	(0-30)	SW846 8270C
2,6-Dinitrotoluene	86	(47 - 111)			SW846 8270C
	84	(47 - 111)	4.0	(0-30)	SW846 8270C
3-Nitroaniline	58	(23 - 102)			SW846 8270C
	56	(23 - 102)	3.8	(0-30)	SW846 8270C
Acenaphthene	64	(48 - 112)			SW846 8270C
	75	(48 - 112)	13	(0-30)	SW846 8270C
2,4-Dinitrophenol	42	(10 - 109)			SW846 8270C
	40	(10 - 109)	4.2	(0-30)	SW846 8270C
4-Nitrophenol	101	(33 - 114)			SW846 8270C
	103	(33 - 114)	0.16	(0-30)	SW846 8270C
Dibenzofuran	62	(46 - 107)			SW846 8270C
	76	(46 - 107)	18	(0-30)	SW846 8270C
Dibenz(a,h)anthracene	116	(33 - 131)			SW846 8270C
	138 a	(33 - 131)	16	(0-30)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D210380 Work Order #...: G8WXJ1AH-MS Matrix.....: SOLID
MS Lot-Sample #: F5D210380-001 G8WXJ1AJ-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2,4-Dinitrotoluene	94	(47 - 120)			SW846 8270C
	92	(47 - 120)	3.7	(0-30)	SW846 8270C
Diethyl phthalate	93	(46 - 115)			SW846 8270C
	92	(46 - 115)	2.4	(0-30)	SW846 8270C
Fluorene	65	(47 - 109)			SW846 8270C
	80	(47 - 109)	19	(0-30)	SW846 8270C
4-Chlorophenyl phenyl ether	69	(47 - 109)			SW846 8270C
	87	(47 - 109)	21	(0-30)	SW846 8270C
4-Nitroaniline	74	(21 - 116)			SW846 8270C
	76	(21 - 116)	2.1	(0-30)	SW846 8270C
4,6-Dinitro-2-methylphenol	70	(10 - 108)			SW846 8270C
	70	(10 - 108)	1.3	(0-30)	SW846 8270C
N-Nitrosodiphenylamine	73	(47 - 120)			SW846 8270C
	88	(47 - 120)	18	(0-30)	SW846 8270C
Pyrene	56	(41 - 121)			SW846 8270C
	72	(41 - 121)	22	(0-30)	SW846 8270C
4-Bromophenyl phenyl ether	67	(46 - 110)			SW846 8270C
	84	(46 - 110)	20	(0-30)	SW846 8270C
Hexachlorobenzene	64	(48 - 115)			SW846 8270C
	77	(48 - 115)	16	(0-30)	SW846 8270C
Pentachlorophenol	42	(11 - 110)			SW846 8270C
	43	(11 - 110)	2.0	(0-30)	SW846 8270C
Phenanthrene	63	(39 - 122)			SW846 8270C
	74	(39 - 122)	14	(0-30)	SW846 8270C
Anthracene	63	(46 - 111)			SW846 8270C
	74	(46 - 111)	14	(0-30)	SW846 8270C
Di-n-butyl phthalate	80	(45 - 114)			SW846 8270C
	81	(45 - 114)	0.63	(0-30)	SW846 8270C
Fluoranthene	53	(39 - 116)			SW846 8270C
	62	(39 - 116)	14	(0-30)	SW846 8270C
Butyl benzyl phthalate	94	(44 - 121)			SW846 8270C
	95	(44 - 121)	0.67	(0-30)	SW846 8270C
Benzo(a)anthracene	61	(46 - 117)			SW846 8270C
	71	(46 - 117)	13	(0-30)	SW846 8270C
3,3'-Dichlorobenzidine	29	(10 - 116)			SW846 8270C
	36	(10 - 116)	21	(0-30)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D210380 Work Order #...: G8WXJ1AH-MS Matrix.....: SOLID
MS Lot-Sample #: F5D210380-001 G8WXJ1AJ-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Chrysene	60	(43 - 119)			SW846 8270C
	70	(43 - 119)	14	(0-30)	SW846 8270C
bis(2-Ethylhexyl) phthalate	88	(43 - 118)			SW846 8270C
	89	(43 - 118)	0.25	(0-30)	SW846 8270C
Di-n-octyl phthalate	75	(35 - 120)			SW846 8270C
	80	(35 - 120)	5.9	(0-30)	SW846 8270C
Benzo(b)fluoranthene	53	(39 - 124)			SW846 8270C
	67	(39 - 124)	22	(0-30)	SW846 8270C
Benzo(k)fluoranthene	59	(43 - 131)			SW846 8270C
	66	(43 - 131)	8.7	(0-30)	SW846 8270C
Benzo(a)pyrene	30 a	(43 - 114)			SW846 8270C
	48 p	(43 - 114)	38	(0-30)	SW846 8270C
Indeno(1,2,3-cd)pyrene	31	(31 - 129)			SW846 8270C
	46 p	(31 - 129)	33	(0-30)	SW846 8270C
Benzo(ghi)perylene	9.7 a	(26 - 140)			SW846 8270C
	29 p	(26 - 140)	91	(0-30)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	73	(40 - 103)
	67	(40 - 103)
Phenol-d5	84	(36 - 105)
	79	(36 - 105)
Nitrobenzene-d5	68	(45 - 114)
	77	(45 - 114)
2-Fluorobiphenyl	66	(49 - 120)
	81	(49 - 120)
2,4,6-Tribromophenol	69	(39 - 114)
	84	(39 - 114)
Terphenyl-d14	68	(42 - 108)
	79	(42 - 108)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

p Relative percent difference (RPD) is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D210380 Work Order #...: G8WXJ1AK-MS Matrix.....: SOLID
MS Lot-Sample #: F5D210380-001 G8WXJ1AL-MSD
Date Sampled...: 04/19/05 Date Received..: 04/21/05
Prep Date.....: 05/11/05 Analysis Date..: 05/12/05
Prep Batch #...: 5131374 Analysis Time..: 22:46
Dilution Factor: 1 % Moisture.....: 20

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Phenol	82	(41 - 97)			SW846 8270C
	79	(41 - 97)	1.9	(0-30)	SW846 8270C
bis(2-Chloroethyl)-ether	86	(38 - 98)			SW846 8270C
	80	(38 - 98)	5.1	(0-30)	SW846 8270C
2-Chlorophenol	89	(41 - 96)			SW846 8270C
	83	(41 - 96)	4.4	(0-30)	SW846 8270C
2-Methylphenol	72	(43 - 95)			SW846 8270C
	71	(43 - 95)	0.17	(0-30)	SW846 8270C
3-Methylphenol & 4-Methylphenol	71	(41 - 103)			SW846 8270C
	69	(41 - 103)	1.2	(0-30)	SW846 8270C
2,2'-oxybis(1-Chloropropa	89	(41 - 102)			SW846 8270C
	88	(41 - 102)	0.17	(0-30)	SW846 8270C
N-Nitrosodi-n-propyl-amine	100	(51 - 109)			SW846 8270C
	101	(51 - 109)	2.7	(0-30)	SW846 8270C
Hexachloroethane	94	(36 - 99)			SW846 8270C
	91	(36 - 99)	0.75	(0-30)	SW846 8270C
Nitrobenzene	89	(45 - 105)			SW846 8270C
	88	(45 - 105)	0.03	(0-30)	SW846 8270C
Isophorone	97	(47 - 117)			SW846 8270C
	97	(47 - 117)	1.1	(0-30)	SW846 8270C
2-Nitrophenol	89	(36 - 108)			SW846 8270C
	89	(36 - 108)	1.6	(0-30)	SW846 8270C
2,4-Dimethylphenol	50	(36 - 105)			SW846 8270C
	44	(36 - 105)	12	(0-30)	SW846 8270C
bis(2-Chloroethoxy) methane	93	(46 - 107)			SW846 8270C
	93	(46 - 107)	1.3	(0-30)	SW846 8270C
2,4-Dichlorophenol	86	(40 - 105)			SW846 8270C
	83	(40 - 105)	1.8	(0-30)	SW846 8270C
1,2,4-Trichloro-benzene	95	(44 - 102)			SW846 8270C
	93	(44 - 102)	0.90	(0-30)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D210380 Work Order #...: G8WXJ1AK-MS Matrix.....: SOLID
MS Lot-Sample #: F5D210380-001 G8WXJ1AL-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Naphthalene	94	(10 - 150)			SW846 8270C
	90	(10 - 150)	2.7	(0-30)	SW846 8270C
4-Chloroaniline	37	(11 - 99)			SW846 8270C
	35	(11 - 99)	2.9	(0-30)	SW846 8270C
Hexachlorobutadiene	97	(40 - 105)			SW846 8270C
	95	(40 - 105)	0.63	(0-30)	SW846 8270C
4-Chloro-3-methylphenol	91	(41 - 107)			SW846 8270C
	89	(41 - 107)	0.60	(0-30)	SW846 8270C
2-Methylnaphthalene	117	(35 - 118)			SW846 8270C
	115	(35 - 118)	0.14	(0-30)	SW846 8270C
Hexachlorocyclopenta-diene	118	(10 - 120)			SW846 8270C
	108	(10 - 120)	6.7	(0-30)	SW846 8270C
2,4,6-Trichloro-phenol	90	(40 - 105)			SW846 8270C
	86	(40 - 105)	2.9	(0-30)	SW846 8270C
2,4,5-Trichloro-phenol	89	(39 - 108)			SW846 8270C
	86	(39 - 108)	2.0	(0-30)	SW846 8270C
2-Nitroaniline	86	(42 - 114)			SW846 8270C
	86	(42 - 114)	1.6	(0-30)	SW846 8270C
Dimethyl phthalate	98	(46 - 110)			SW846 8270C
	95	(46 - 110)	0.92	(0-30)	SW846 8270C
Acenaphthylene	103	(48 - 110)			SW846 8270C
	99	(48 - 110)	2.2	(0-30)	SW846 8270C
2,6-Dinitrotoluene	93	(47 - 111)			SW846 8270C
	93	(47 - 111)	1.2	(0-30)	SW846 8270C
3-Nitroaniline	50	(23 - 102)			SW846 8270C
	54	(23 - 102)	10	(0-30)	SW846 8270C
Acenaphthene	94	(48 - 112)			SW846 8270C
	91	(48 - 112)	1.5	(0-30)	SW846 8270C
2,4-Dinitrophenol	32	(10 - 109)			SW846 8270C
	27	(10 - 109)	14	(0-30)	SW846 8270C
4-Nitrophenol	88	(33 - 114)			SW846 8270C
	85	(33 - 114)	0.91	(0-30)	SW846 8270C
Dibenzofuran	89	(46 - 107)			SW846 8270C
	87	(46 - 107)	0.53	(0-30)	SW846 8270C
Dibenz(a,h)anthracene	98	(33 - 131)			SW846 8270C
	93	(33 - 131)	3.4	(0-30)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D210380 Work Order #...: G8WXJ1AK-MS Matrix.....: SOLID
MS Lot-Sample #: F5D210380-001 G8WXJ1AL-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2,4-Dinitrotoluene	89	(47 - 120)			SW846 8270C
	89	(47 - 120)	1.2	(0-30)	SW846 8270C
Diethyl phthalate	95	(46 - 115)			SW846 8270C
	93	(46 - 115)	0.72	(0-30)	SW846 8270C
Fluorene	92	(47 - 109)			SW846 8270C
	91	(47 - 109)	0.13	(0-30)	SW846 8270C
4-Chlorophenyl phenyl ether	98	(47 - 109)			SW846 8270C
	93	(47 - 109)	2.9	(0-30)	SW846 8270C
4-Nitroaniline	71	(21 - 116)			SW846 8270C
	72	(21 - 116)	3.7	(0-30)	SW846 8270C
4,6-Dinitro-2-methylphenol	76	(10 - 108)			SW846 8270C
	62	(10 - 108)	18	(0-30)	SW846 8270C
N-Nitrosodiphenylamine	107	(47 - 120)			SW846 8270C
	94	(47 - 120)	11	(0-30)	SW846 8270C
Pyrene	105	(41 - 121)			SW846 8270C
	110	(41 - 121)	5.9	(0-30)	SW846 8270C
4-Bromophenyl phenyl ether	103	(46 - 110)			SW846 8270C
	95	(46 - 110)	6.3	(0-30)	SW846 8270C
Hexachlorobenzene	103	(48 - 115)			SW846 8270C
	97	(48 - 115)	4.1	(0-30)	SW846 8270C
Pentachlorophenol	42	(11 - 110)			SW846 8270C
	33	(11 - 110)	20	(0-30)	SW846 8270C
Phenanthrene	88	(39 - 122)			SW846 8270C
	83	(39 - 122)	3.8	(0-30)	SW846 8270C
Anthracene	88	(46 - 111)			SW846 8270C
	84	(46 - 111)	2.8	(0-30)	SW846 8270C
Di-n-butyl phthalate	75	(45 - 114)			SW846 8270C
	77	(45 - 114)	4.2	(0-30)	SW846 8270C
Fluoranthene	66	(39 - 116)			SW846 8270C
	67	(39 - 116)	4.2	(0-30)	SW846 8270C
Butyl benzyl phthalate	98	(44 - 121)			SW846 8270C
	97	(44 - 121)	1.0	(0-30)	SW846 8270C
Benzo(a)anthracene	87	(46 - 117)			SW846 8270C
	85	(46 - 117)	0.35	(0-30)	SW846 8270C
3,3'-Dichlorobenzidine	41	(10 - 116)			SW846 8270C
	40	(10 - 116)	2.1	(0-30)	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: F5D210380 Work Order #...: G8WXJ1AK-MS Matrix.....: SOLID
MS Lot-Sample #: F5D210380-001 G8WXJ1AL-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Chrysene	85	(43 - 119)			SW846 8270C
	79	(43 - 119)	5.4	(0-30)	SW846 8270C
bis(2-Ethylhexyl) phthalate	97	(43 - 118)			SW846 8270C
	94	(43 - 118)	2.0	(0-30)	SW846 8270C
Di-n-octyl phthalate	87	(35 - 120)			SW846 8270C
	80	(35 - 120)	7.1	(0-30)	SW846 8270C
Benzo(b)fluoranthene	84	(39 - 124)			SW846 8270C
	77	(39 - 124)	6.4	(0-30)	SW846 8270C
Benzo(k)fluoranthene	89	(43 - 131)			SW846 8270C
	81	(43 - 131)	7.6	(0-30)	SW846 8270C
Benzo(a)pyrene	78	(43 - 114)			SW846 8270C
	72	(43 - 114)	6.4	(0-30)	SW846 8270C
Indeno(1,2,3-cd)pyrene	85	(31 - 129)			SW846 8270C
	79	(31 - 129)	5.3	(0-30)	SW846 8270C
Benzo(ghi)perylene	81	(26 - 140)			SW846 8270C
	80	(26 - 140)	0.03	(0-30)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	83	(40 - 103)
	83	(40 - 103)
Phenol-d5	87	(36 - 105)
	82	(36 - 105)
Nitrobenzene-d5	91	(45 - 114)
	92	(45 - 114)
2-Fluorobiphenyl	97	(49 - 120)
	96	(49 - 120)
2,4,6-Tribromophenol	87	(39 - 114)
	85	(39 - 114)
Terphenyl-d14	90	(42 - 108)
	92	(42 - 108)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...:	F5D210380	**Work Order #...:**	G8WXX1AF-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	F5D210380-003		G8WXX1AG-MSD		
Date Sampled...:	04/19/05	**Date Received..:**	04/21/05		
Prep Date.....:	04/29/05	**Analysis Date..:**	05/09/05		
Prep Batch #...:	5119298	**Analysis Time..:**	18:17		
Dilution Factor:	1	**% Moisture.....:**	20		

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**96**	**(30 - 150)**			**SW846 8082**
	100	**(30 - 150)**	**3.5**	**(0-30)**	**SW846 8082**
Aroclor 1260	**93**	**(30 - 150)**			**SW846 8082**
	98	**(30 - 150)**	**4.6**	**(0-30)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	162 *	(30 - 150)
	118	(30 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

* Surrogate recovery is outside stated control limits.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F5D210380 **Work Order #...:** G8X0F-SMP G8X0F-DUP **Matrix.....:** SOLID

Date Sampled...: 04/20/05 13:15 **Date Received..:** 04/22/05

% Moisture.....: 22

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture						SD Lot-Sample #: F5D220120-002		
	21.7	21.4	%	1.3	(0-30)	MCAWW 160.3 MOD	04/22-04/25/05	5112220

Dilution Factor: 1 Analysis Time..: 00:00

GC SAMPLE AND QC DATA SUMMARY- FORMS I
PCB'S

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8082
PCBs (8082)

Sample WT/Vol: 30.37 / g Date Received: 04/21/05
Work Order: G8WXJ1AE Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/09/05
Moisture %:20

QC Batch: 5119298

Client Sample Id: RE73-05-58829

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor 1016	41	U
11104-28-2	Aroclor 1221	41	U
11141-16-5	Aroclor 1232	41	U
53469-21-9	Aroclor 1242	41	U
12672-29-6	Aroclor 1248	41	U
11097-69-1	Aroclor 1254	41	U
11096-82-5	Aroclor 1260	41	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Decachlorobiphenyl	111	(30 - 150)

FORM I

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID
Method: SW846 8082
PCBs (8082)

Lab Sample ID:F5D210380 002

Sample WT/Vol: 30.049 / g
Work Order: G8WXV1AE
Dilution factor: 1
Moisture %:19

Date Received: 04/21/05
Date Extracted:04/29/05
Date Analyzed: 05/09/05

QC Batch: 5119298

Client Sample Id: RE73-05-58835

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor 1016	41	U
11104-28-2	Aroclor 1221	41	U
11141-16-5	Aroclor 1232	41	U
53469-21-9	Aroclor 1242	41	U
12672-29-6	Aroclor 1248	41	U
11097-69-1	**Aroclor 1254**	**58**	
11096-82-5	Aroclor 1260	41	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Decachlorobiphenyl	126	(30 - 150)

FORM I

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 003
Method: SW846 8082
PCBs (8082)

Sample WT/Vol: 30.877 / g Date Received: 04/21/05
Work Order: G8WXX1AE Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/09/05
Moisture %:20

QC Batch: 5119298

Client Sample Id: RE73-05-58841

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor 1016	41	U
11104-28-2	Aroclor 1221	41	U
11141-16-5	Aroclor 1232	41	U
53469-21-9	Aroclor 1242	41	U
12672-29-6	Aroclor 1248	41	U
11097-69-1	**Aroclor 1254**	**96**	
11096-82-5	Aroclor 1260	41	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Decachlorobiphenyl	115	(30 - 150)

FORM I

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D290000 298
Method: SW846 8082
PCBs (8082)

Sample WT/Vol: 30 / g Date Received: 04/20/05
Work Order: G9HD11AA Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/09/05
Moisture %:NA

QC Batch: 5119298

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor 1016	33	U
11104-28-2	Aroclor 1221	33	U
11141-16-5	Aroclor 1232	33	U
53469-21-9	Aroclor 1242	33	U
12672-29-6	Aroclor 1248	33	U
11097-69-1	Aroclor 1254	33	U
11096-82-5	Aroclor 1260	33	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Decachlorobiphenyl	107	(30 - 150)

FORM I

LOS ALAMOS NATIONAL LABORATORY
CHECK SAMPLE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D290000 298
Method: SW846 8082
PCBs (8082)

Sample WT/Vol: 30 / g Date Received: 04/20/05
Work Order: G9HD11AC Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/09/05
Moisture %:NA

QC Batch: 5119298

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor 1016	327	
11096-82-5	Aroclor 1260	336	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Decachlorobiphenyl	109	(73 - 150)

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID
Method: SW846 8082
PCBs (8082)

Lab Sample ID:F5D210380 003

Sample WT/Vol: 30.511 / g
Work Order: G8WXX1AG
Dilution factor: 1
Moisture %:20

Date Received: 04/21/05
Date Extracted:04/29/05
Date Analyzed: 05/09/05

QC Batch: 5119298

Client Sample Id: RE73-05-58841

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor 1016	411	
11096-82-5	Aroclor 1260	405	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Decachlorobiphenyl	118	(30 - 150)

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID
Method: SW846 8082
PCBs (8082)

Lab Sample ID:F5D210380 003

Sample WT/Vol: 30.256 / g
Work Order: G8WXX1AF
Dilution factor: 1
Moisture %:20

Date Received: 04/21/05
Date Extracted:04/29/05
Date Analyzed: 05/09/05

QC Batch: 5119298

Client Sample Id: RE73-05-58841

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor 1016	397	
11096-82-5	Aroclor 1260	386	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Decachlorobiphenyl	162	(30 - 150)

GC ADDITIONAL QC SUMMARY DATA
FORMS 2 THROUGH 4

SW846 8082 SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Lot #: F5D210380

Extraction: XXA71QH01

	CLIENT ID.	SRG01	TOT OUT
01	RE73-05-58829	111	00
02	RE73-05-58835	126	00
03	RE73-05-58841	115	00
04	METHOD BLK. G9HD11AA	107	00
05	LCS G9HD11AC	109	00
06	RE73-05-58841 D	118	00
07	RE73-05-58841 S	162*	01

SURROGATES		QC LIMITS
SRG01	= Decachlorobiphenyl	(30-150)

\# Column to be used to flag recovery values
* Values outside of required QC Limits
D System monitoring Compound diluted out

FORM II

SW846 8082 MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Matrix Spike ID: RE73-05-58841

Lot #: F5D210380 WO #: G8WXX1AF
BATCH: 5119298

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Aroclor 1016	414	ND	397	96	30 - 150	
Aroclor 1260	414	ND	386	93	30 - 150	

NOTES(S):

Results and reporting limits have been adjusted for dry weight.

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM III

SW846 8082 MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Matrix Spike ID: RE73-05-58841

Lot #: F5D210380 WO #: G8WXX1AG
BATCH: 5119298

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
Aroclor 1016	411	411	100	3.5	30	30 - 150	
Aroclor 1260	411	405	98	4.6	30	30 - 150	

NOTES(S):

Results and reporting limits have been adjusted for dry weight.

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 2 outside limits
Spike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM III

SW846 8082 CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Lot #: F5D290000 WO #: G9HD11AC
BATCH: 5119298

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
Aroclor 1016	333	327	98	73 - 141	
Aroclor 1260	333	336	101	72 - 144	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM III

SW846 8082 METHOD BLANK SUMMARY

BLANK WORKORDER NO.: G9HD11AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: STLSTL — SDG Number: F5D210380

Lab File ID: PBLK931. — Lot Number: F5D210380

Matrix: SOLID — Extraction Method: 3550B/3665A

Date Extracted: 04/29/05

Date Analyzed(1): 05/09/05 — Date Analyzed(2): N/A

Time Analyzed(1): 16:55 — Time Analyzed(2): N/A

Instrument ID(1): GCP — Instrument ID(2): N/A

GC Column(1): RTX-CLP ID: 053 — GC Column(2): N/A ID: N/A

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, AND MSD:

	CLIENT ID.	SAMPLE WORK ORDER #	DATE ANALYZED(1)	DATE ANALYZED(2)
01	RE73-05-58829	G8WXJ1AE	05/09/05	N/A
02	RE73-05-58835	G8WXV1AE	05/09/05	N/A
03	RE73-05-58841	G8WXX1AE	05/09/05	N/A
04	RE73-05-58841	G8WXX1AF S	05/09/05	N/A
05	RE73-05-58841	G8WXX1AG D	05/09/05	N/A
06	CHECK SAMPLE	G9HD11AC C	05/09/05	N/A
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

COMMENTS:

FORM IV

GC STANDARDS DATA

Report Date : 05-Apr-2005 12:00 Page 1

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 04-APR-2005 16:50
End Cal Date : 04-APR-2005 20:37
Quant Method : ESTD
Origin : Disabled
Target Version : 4.10
Integrator : Falcon
Method file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Cal Date : 05-Apr-2005 11:59 owenb
Curve Type : Average

Calibration File Names:
Level 2: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL114.D
Level 3: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL115.D
Level 4: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL127.D
Level 5: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL117.D
Level 6: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL118.D
Level 7: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL119.D
Level 8: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL120.D

BO 4/05/05

Compound	100.000 Level 2	250.000 Level 3	500.000 Level 4	1000.000 Level 5	1500.000 Level 6	2500.000 Level 7	RRF	% RSD	
	4000.000 Level 8								
22 Aroclor-1016(1)	6563	5536	5023	4701	4312	4076			
	3975						4884	18.881	
(2)	11901	10355	9589	9020	8099	7472			
	7557						9142	17.686	
(3)	25256	22640	21302	20188	18617	17632			
	17552						20455	13.882	
(4)	9460	8372	7748	7340	6910	6142			
	6370						7477	15.593	
(5)	10139	9003	8415	8008	7072	6178			
	6937						7965	17.041	
23 Aroclor-1221(1)	+++++	+++++	814	+++++	+++++	+++++			
	+++++						814	0.000	<-
(2)	+++++	+++++	2519	+++++	+++++	+++++			
	+++++						2519	0.000	<-
(3)	+++++	+++++	6942	+++++	+++++	+++++			
	+++++						6942	0.000	<-
24 Aroclor-1232(1)	+++++	+++++	5856	+++++	+++++	+++++			
	+++++						5856	0.000	
(2)	+++++	+++++	4301	+++++	+++++	+++++			
	+++++						4301	0.000	
(3)	+++++	+++++	8860	+++++	+++++	+++++			

	+++++						8860	0.000
(4)	+++++	+++++	5537	+++++	+++++	+++++		
	+++++						5537	0.000
(5)	+++++	+++++	2901	+++++	+++++	+++++		
	+++++						2901	0.000

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 04-APR-2005 16:50
End Cal Date : 04-APR-2005 20:37
Quant Method : ESTD
Origin : Disabled
Target Version : 4.10
Integrator : Falcon
Method file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Cal Date : 05-Apr-2005 11:59 owenb
Curve Type : Average

Compound	100.000 Level 2	250.000 Level 3	500.000 Level 4	1000.000 Level 5	1500.000 Level 6	2500.000 Level 7	4000.000 Level 8	RRF	% RSD
25 Aroclor-1242(1)	+++++	+++++	7221	+++++	+++++	+++++	+++++	7221	0.000
(2)	+++++	+++++	5593	+++++	+++++	+++++	+++++	5593	0.000
(3)	+++++	+++++	16034	+++++	+++++	+++++	+++++	16034	0.000
(4)	+++++	+++++	6044	+++++	+++++	+++++	+++++	6044	0.000
(5)	+++++	+++++	2557	+++++	+++++	+++++	+++++	2557	0.000
26 Aroclor-1248(1)	+++++	+++++	11017	+++++	+++++	+++++	+++++	11017	0.000
(2)	+++++	+++++	15686	+++++	+++++	+++++	+++++	15686	0.000
(3)	+++++	+++++	18993	+++++	+++++	+++++	+++++	18993	0.000
(4)	+++++	+++++	11346	+++++	+++++	+++++	+++++	11346	0.000
(5)	+++++	+++++	5362	+++++	+++++	+++++	+++++	5362	0.000
27 Aroclor-1254(1)	+++++	+++++	7602	+++++	+++++	+++++	+++++	7602	0.000
(2)	+++++	+++++	20468	+++++	+++++	+++++	+++++	20468	0.000
(3)	+++++	+++++	16194	+++++	+++++	+++++	+++++	16194	0.000
(4)	+++++	+++++	11627	+++++	+++++	+++++			

	+++++						11627	0.000
(5)	+++++	+++++	16805	+++++	+++++	+++++		
	+++++						16805	0.000

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 04-APR-2005 16:50
End Cal Date : 04-APR-2005 20:37
Quant Method : ESTD
Origin : Disabled
Target Version : 4.10
Integrator : Falcon
Method file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Cal Date : 05-Apr-2005 11:59 owenb
Curve Type : Average

Compound	100.000 Level 2	250.000 Level 3	500.000 Level 4	1000.000 Level 5	1500.000 Level 6	2500.000 Level 7	RRF	% RSD
	4000.000 Level 8							
28 Aroclor-1260(1)	15121	13480	12391	11764	10790	9914		
	10104						11938	15.867
(2)	26044	23513	21741	20599	18879	17556		
	17743						20868	15.067
(3)	22581	20664	19197	18240	16559	15161		
	15925						18333	14.644
(4)	32524	30223	28058	26678	23760	21834		
	23576						26665	14.545
(5)	8454	7535	6963	6634	6119	5613		
	5942						6751	14.715
35 Aroclor-1262(1)	+++++	+++++	9480	+++++	+++++	+++++		
	+++++						9480	0.000
(2)	+++++	+++++	13200	+++++	+++++	+++++		
	+++++						13200	0.000
(3)	+++++	+++++	14268	+++++	+++++	+++++		
	+++++						14268	0.000
(4)	+++++	+++++	30358	+++++	+++++	+++++		
	+++++						30358	0.000
(5)	+++++	+++++	10517	+++++	+++++	+++++		
	+++++						10517	0.000
36 Aroclor-1268(1)	+++++	+++++	31225	+++++	+++++	+++++		
	+++++						31225	0.000
(2)	+++++	+++++	32422	+++++	+++++	+++++		
	+++++						32422	0.000
(3)	+++++	+++++	25142	+++++	+++++	+++++		
	+++++						25142	0.000
(4)	+++++	+++++	9957	+++++	+++++	+++++		

	+++++							9957	0.000
(5)	+++++	+++++	64547	+++++	+++++	+++++			
	+++++							64547	0.000

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 04-APR-2005 16:50
End Cal Date : 04-APR-2005 20:37
Quant Method : ESTD
Origin : Disabled
Target Version : 4.10
Integrator : Falcon
Method file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Cal Date : 05-Apr-2005 11:59 owenb
Curve Type : Average

Compound	100.000 Level 2	250.000 Level 3	500.000 Level 4	1000.000 Level 5	1500.000 Level 6	2500.000 Level 7	4000.000 Level 8	RRF	% RSD	
M 37 PCB (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
$ 32 Decachlorobiphenyl	250400	224908	207267	196795	196312	165039	175593	202331	14.292	

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL114.D
Report Date: 05-Apr-2005 12:11

STL St. Louis

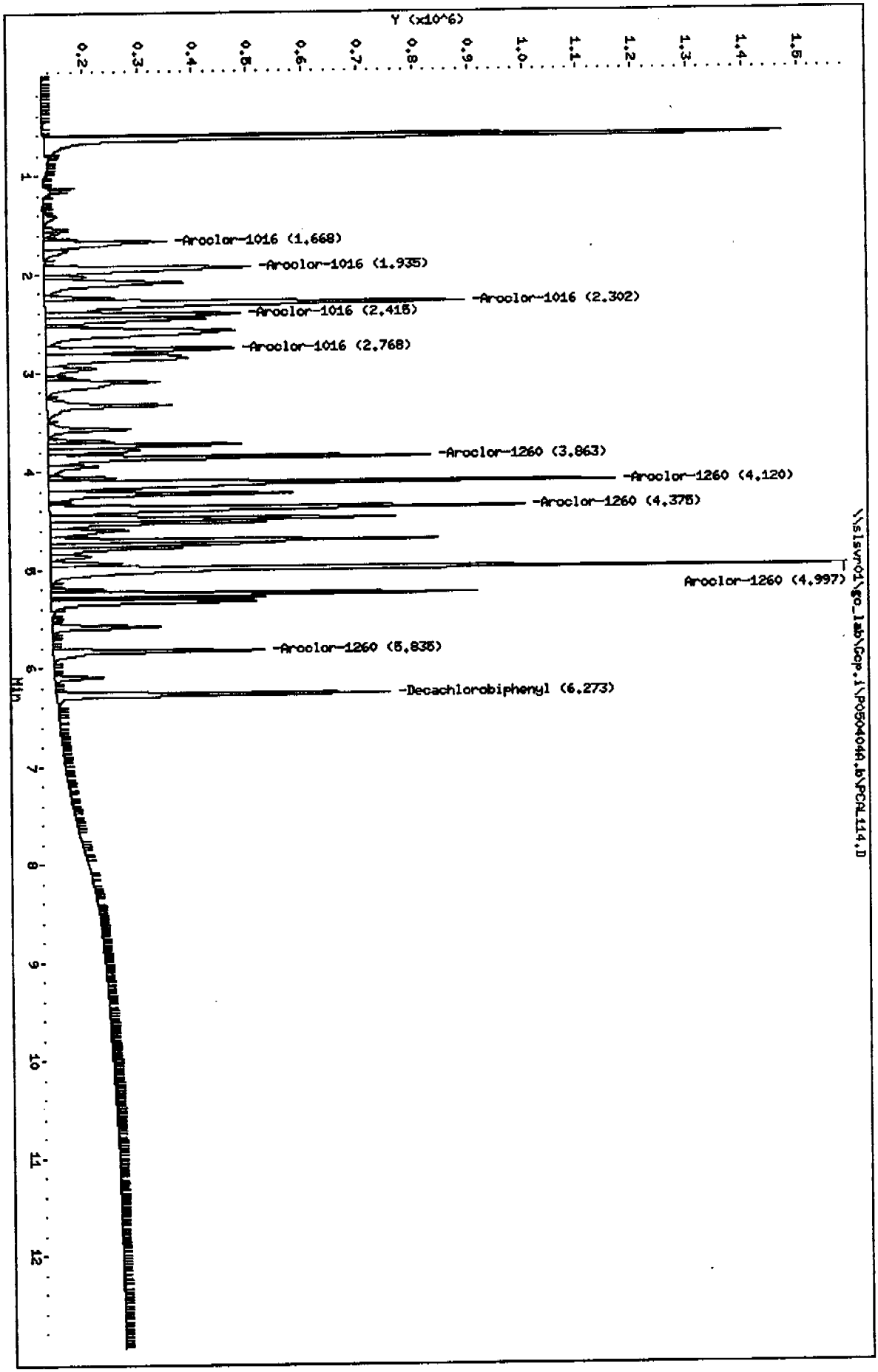
Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL114.D
Lab Smp Id: ICAL2
Inj Date : 04-APR-2005 16:50
Operator : BLO Inst ID: Gcp.i
Smp Info : ICAL2
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:00 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.668	1.668	0.000	656271	100.000	134.4	80.00- 120.00	100.00
1.934	1.933	0.001	1190059	100.000	130.2	165.85- 248.78	181.34
2.301	2.303	-0.002	2525616	100.000	123.5	384.65- 576.97	384.84
2.414	2.413	0.001	945992	100.000	126.5	140.52- 210.78	144.15
2.768	2.768	0.000	1013873	100.000	127.3	148.90- 223.36	154.49
		Average of Peak Amounts =			128.4		
28 Aroclor-1260					CAS #: 11096-82-5		
3.863	3.863	0.000	1512137	100.000	126.7	80.00- 120.00	100.00
4.119	4.121	-0.002	2604359	100.000	124.8	141.10- 211.66	172.23
4.374	4.375	-0.001	2258138	100.000	123.2	136.45- 204.67	149.33
4.996	4.998	-0.002	3252441	100.000	122.0	158.92- 238.38	215.09
5.834	5.835	-0.001	845400	100.000	125.2	38.21- 57.31	55.91
		Average of Peak Amounts =			124.4		
$ 32 Decachlorobiphenyl					CAS #:		
6.273	6.273	0.000	1252001	5.00000	6.188		

BLD 4105105



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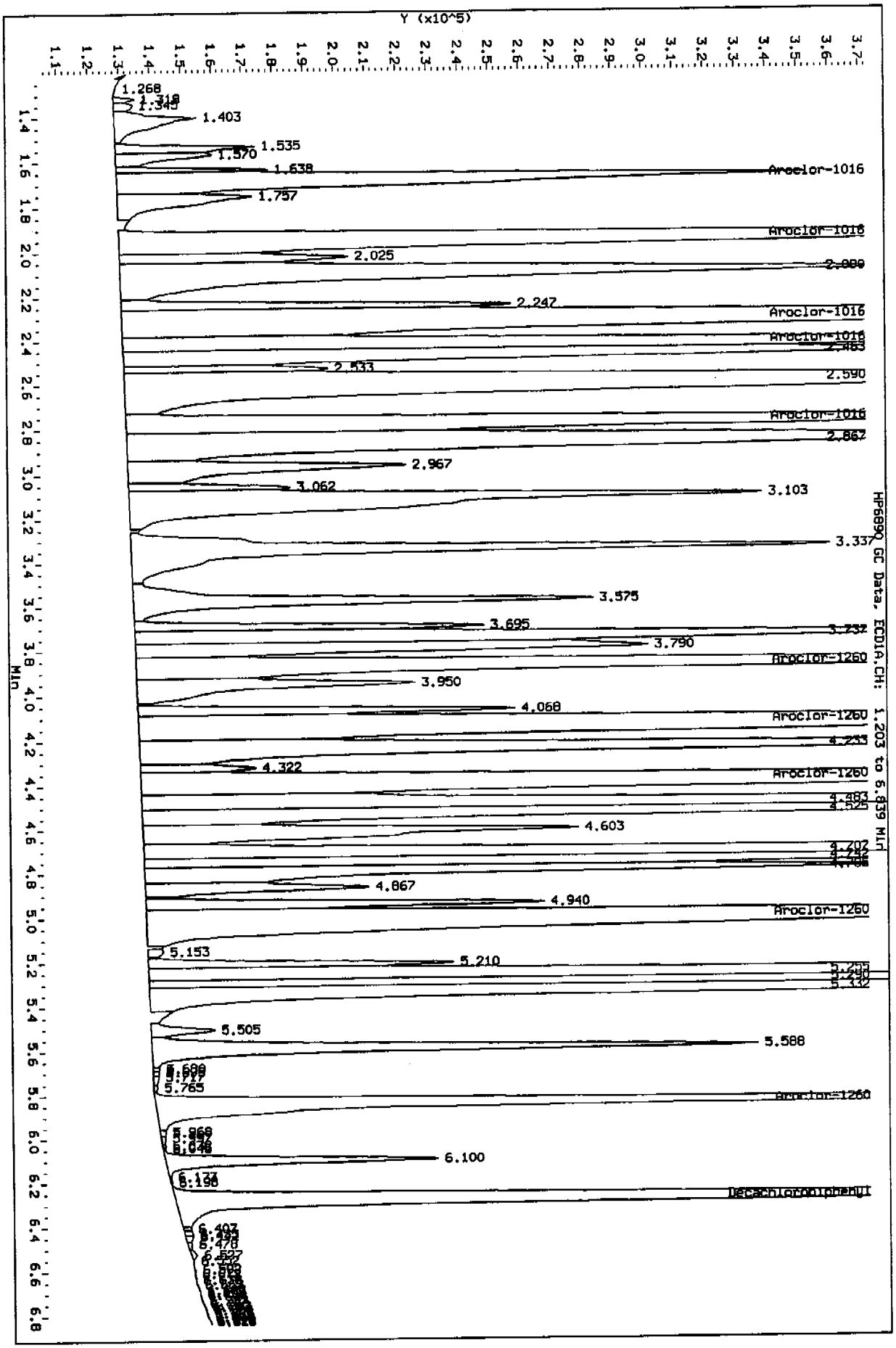
Date : 04-APR-2005 16:50
Client ID:
Sample Info: ICAL2
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^5)
Min
Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL114.D
Injection Date: 04-APR-2005 16:50
Instrument: Gcp.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 1.203 to 6.839 Min
1.268
1.403
1.535
1.570
1.638
Aroclor-1016
1.757
Aroclor-1016
2.025
2.247
Aroclor-1016
Aroclor-1016
2.533
2.590
Aroclor-1016
2.967
3.062
3.103
3.337
3.575
3.695
3.790
Aroclor-1260
3.950
4.068
Aroclor-1260
4.322
Aroclor-1260
4.603
4.867
4.940
Aroclor-1260
5.153
5.210
5.332
5.505
5.588
5.765
Aroclor-1260
6.100
Decachlorobiphenyl

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL115.D
Report Date: 05-Apr-2005 12:11

STL St. Louis

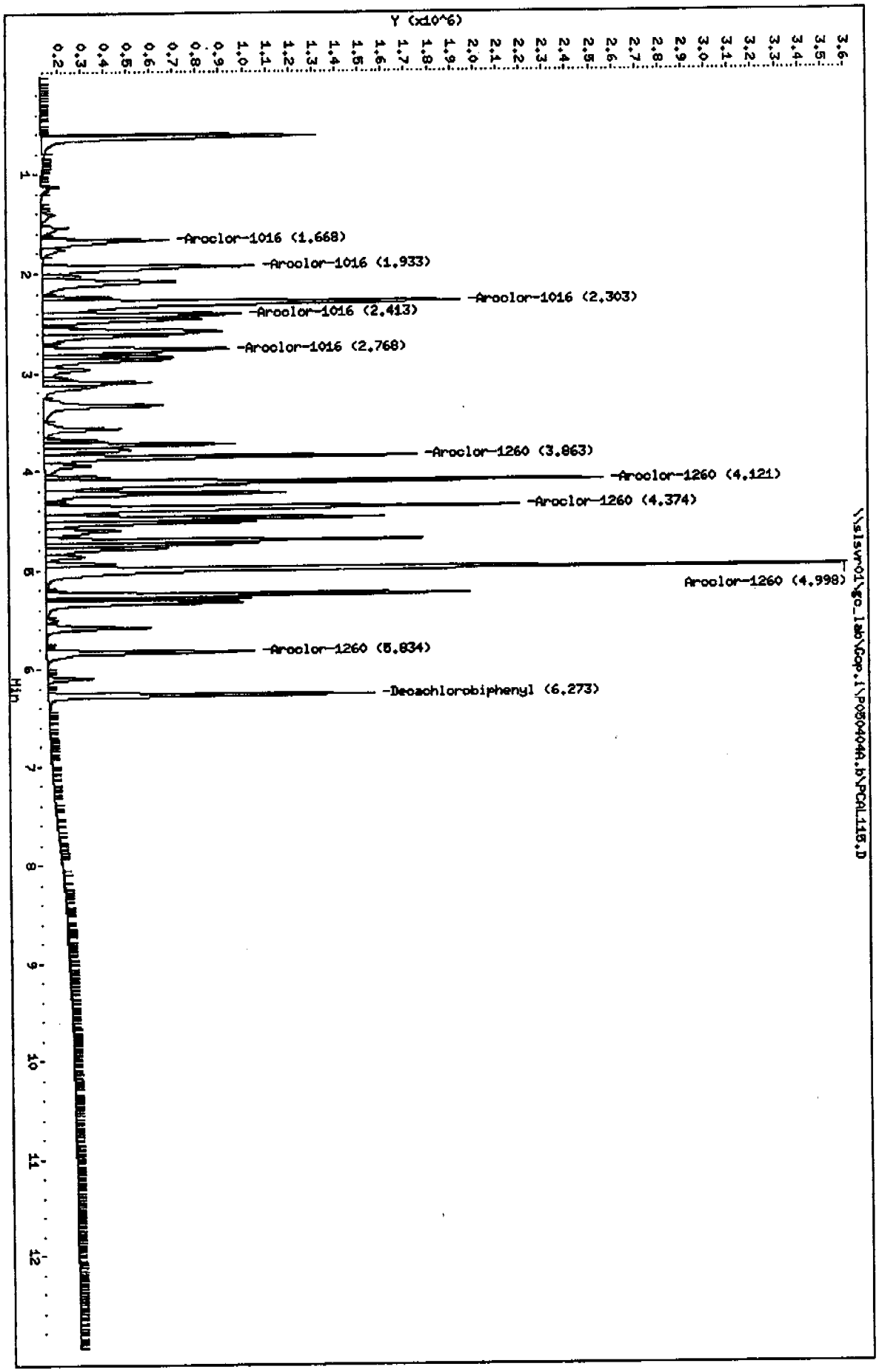
Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL115.D
Lab Smp Id: ICAL3
Inj Date : 04-APR-2005 17:07 Inst ID: Gcp.i
Operator : BLO
Smp Info : ICAL3
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:00 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

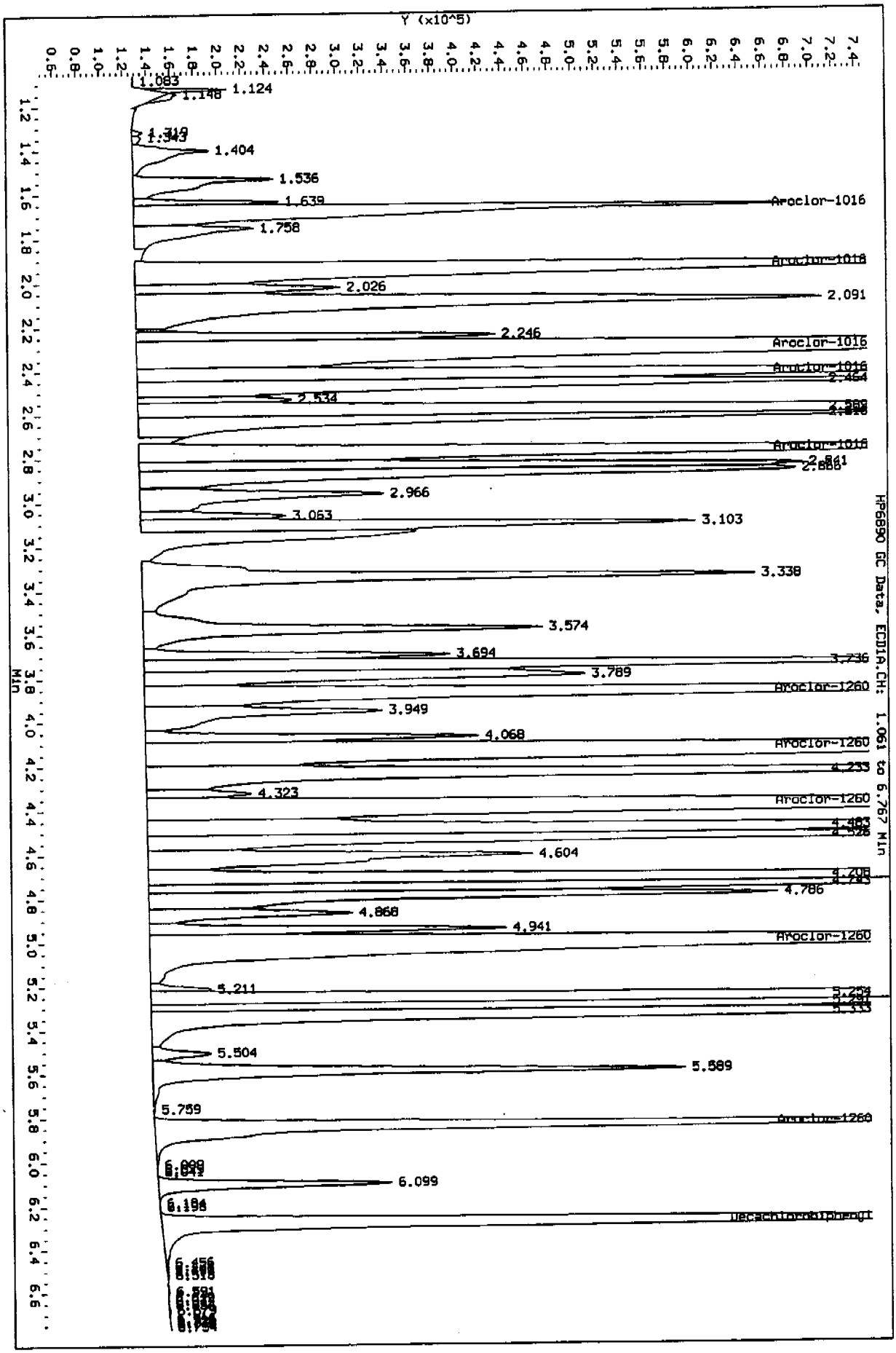
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.667	1.668	-0.001	1384021	250.000	283.4	80.00- 120.00	100.00
1.932	1.933	-0.001	2588636	250.000	283.2	165.85- 248.78	187.04
2.302	2.303	-0.001	5659940	250.000	276.7	384.65- 576.97	408.95
2.412	2.413	-0.001	2093051	250.000	279.9	140.52- 210.78	151.23
2.767	2.768	-0.001	2250824	250.000	282.6	148.90- 223.36	162.63
		Average of Peak Amounts =			281.2		
28 Aroclor-1260					CAS #: 11096-82-5		
3.862	3.863	-0.001	3369925	250.000	282.3	80.00- 120.00	100.00
4.121	4.121	0.000	5878312	250.000	281.7	141.10- 211.66	174.43
4.374	4.375	-0.001	5166007	250.000	281.8	136.45- 204.67	153.30
4.997	4.998	-0.001	7555629	250.000	283.4	158.92- 238.38	224.21
5.834	5.835	-0.001	1883640	250.000	279.0	38.21- 57.31	55.90
		Average of Peak Amounts =			281.6		
$ 32 Decachlorobiphenyl					CAS #:		
6.272	6.273	-0.001	2811347	12.5000	13.89		

BLO 4/05/05



Data File: \\slsvr01\gc_lab\Gcp.i\P0504044.b\PCAL115.D
Date : 04-APR-2005 17:07
Client ID:
Sample Info: ICAL3
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^5)
Min
1.083
1.124
1.148
1.319
1.343
1.404
1.536
1.639
Aroclor-1016
1.758
2.026
2.091
2.246
2.534
2.841
2.966
3.063
3.103
3.338
3.574
3.694
3.789
Aroclor-1260
3.949
4.068
4.323
4.604
4.786
4.868
4.941
5.211
5.504
5.589
5.759
6.099
6.456
HP6890 GC Data, ECDIA.CH: 1.061 to 6.767 Min
Data File: \\slavr01\gc_lab\Gcp.1\P050404A.b\PCAL115.D
Injection Date: 04-APR-2005 17:07
Instrument: Gcp.1
Client Sample ID:

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL116.D
Report Date: 05-Apr-2005 12:11

STL St. Louis

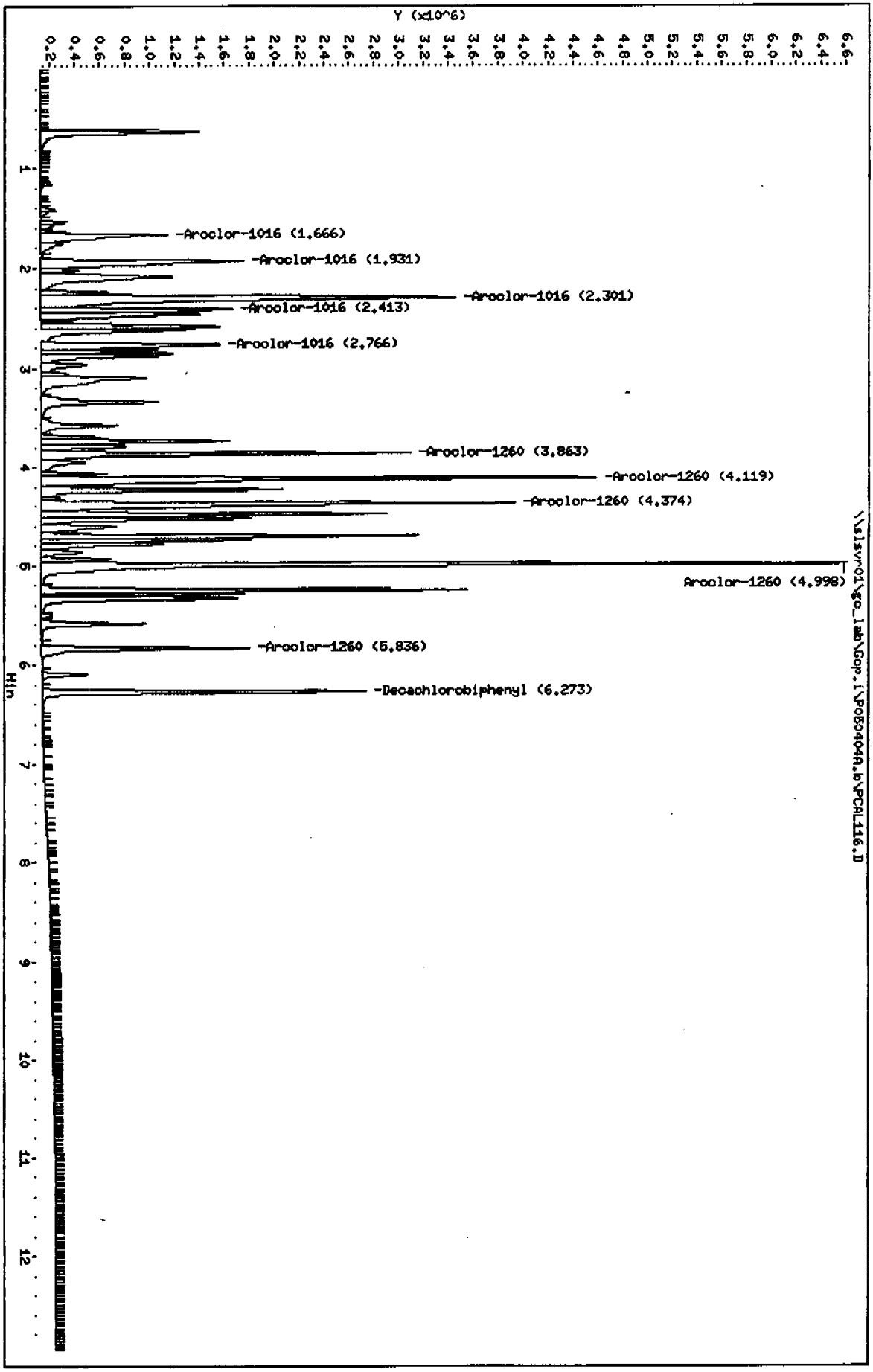
Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL116.D
Lab Smp Id: ICAL4
Inj Date : 04-APR-2005 17:23
Operator : BLO Inst ID: Gcp.i
Smp Info : ICAL4
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:00 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

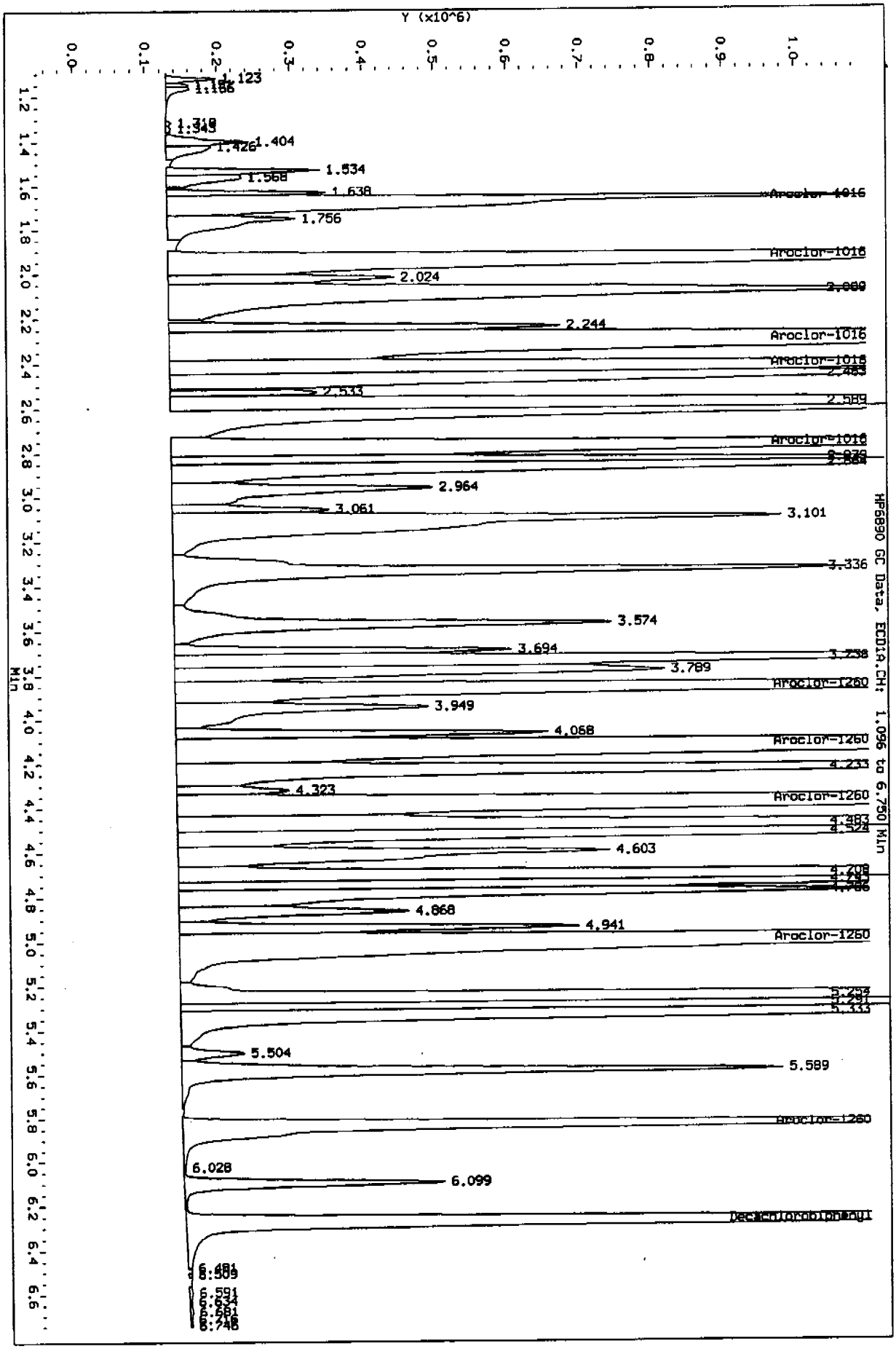
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.666	1.668	-0.002	2511519	500.000	514.3	80.00- 120.00	100.00
1.931	1.933	-0.002	4794433	500.000	524.5	165.85- 248.78	190.90
2.301	2.303	-0.002	10651023	500.000	520.7	384.65- 576.97	424.09
2.412	2.413	-0.001	3874001	500.000	518.1	140.52- 210.78	154.25
2.766	2.768	-0.002	4207477	500.000	528.3	148.90- 223.36	167.53
		Average of Peak Amounts =			521.2		
28 Aroclor-1260					CAS #: 11096-82-5		
3.862	3.863	-0.001	6195496	500.000	519.0	80.00- 120.00	100.00
4.119	4.121	-0.002	10870556	500.000	520.9	141.10- 211.66	175.46
4.374	4.375	-0.001	9598390	500.000	523.6	136.45- 204.67	154.93
4.997	4.998	-0.001	14028904	500.000	526.1	158.92- 238.38	226.44
5.836	5.835	0.001	3481469	500.000	515.7	38.21- 57.31	56.19
		Average of Peak Amounts =			521.1		
$ 32 Decachlorobiphenyl					CAS #:		
6.272	6.273	-0.001	5181685	25.0000	25.61		

BLO 4/05/05



Data File: \\slsvr01\go_lab\Gop.i\P050404A.b\PCAL116.D
Date : 04-APR-2005 17:23
Client ID:
Sample Info: ICAL4
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gop.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.123
1.404
1.534
1.638
1.756
2.024
2.244
2.533
2.589
2.964
3.061
3.101
3.336
3.574
3.694
3.789
3.949
4.068
4.323
4.603
4.868
4.941
5.504
5.589
6.028
6.099
Aroclor-1016
Aroclor-1260
Decachlorobiphenyl
Min
Data File: \\slsvr01\gc_lab\Gcp.1\P050404A.b\PCAL116.D
Injection Date: 04-APR-2005 17:23
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 1.096 to 6.750 Min

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL117.D
Report Date: 05-Apr-2005 12:12

STL St. Louis

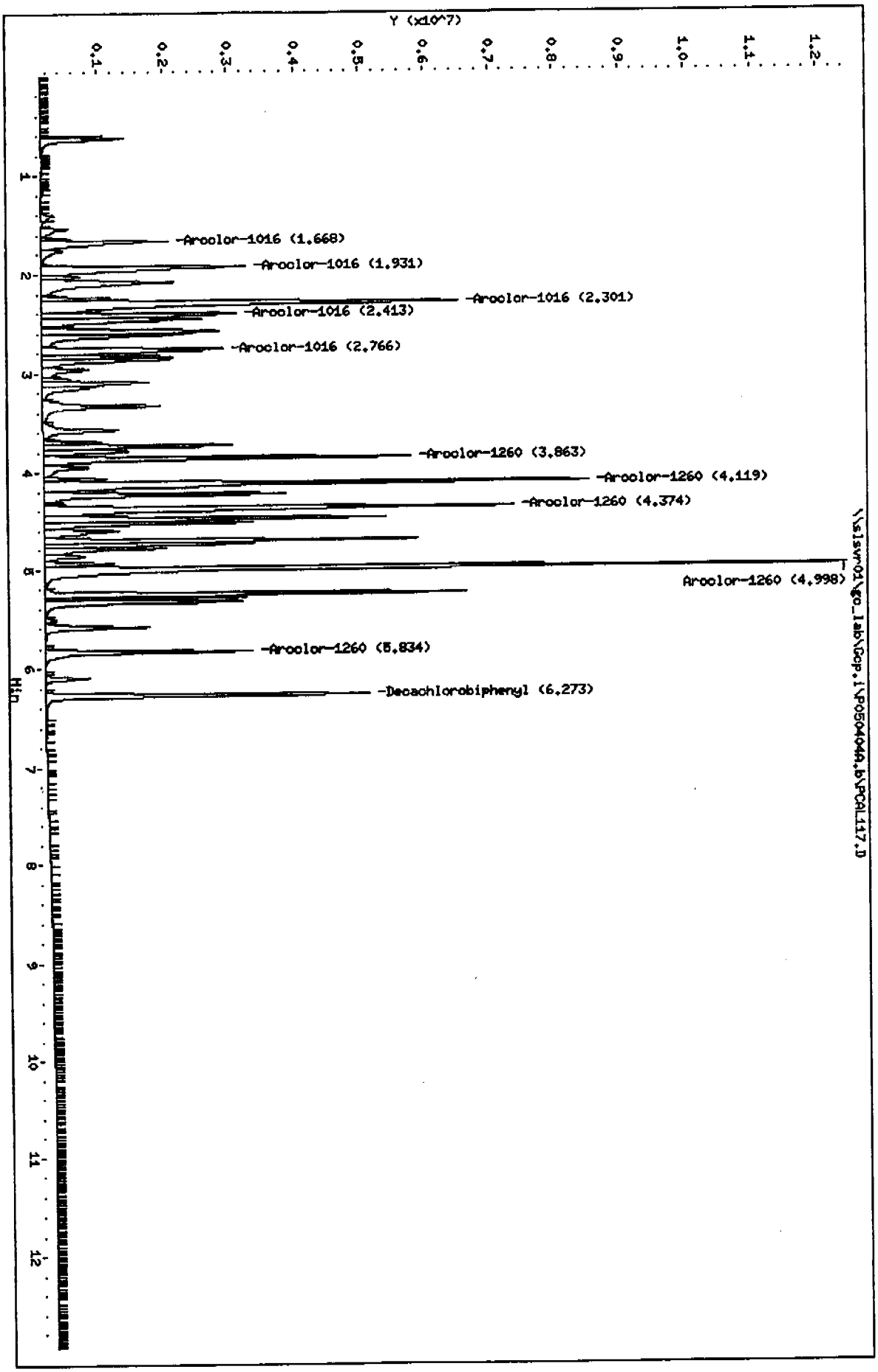
Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL117.D
Lab Smp Id: ICAL5
Inj Date : 04-APR-2005 17:39
Operator : BLO Inst ID: Gcp.i
Smp Info : ICAL5
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:00 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

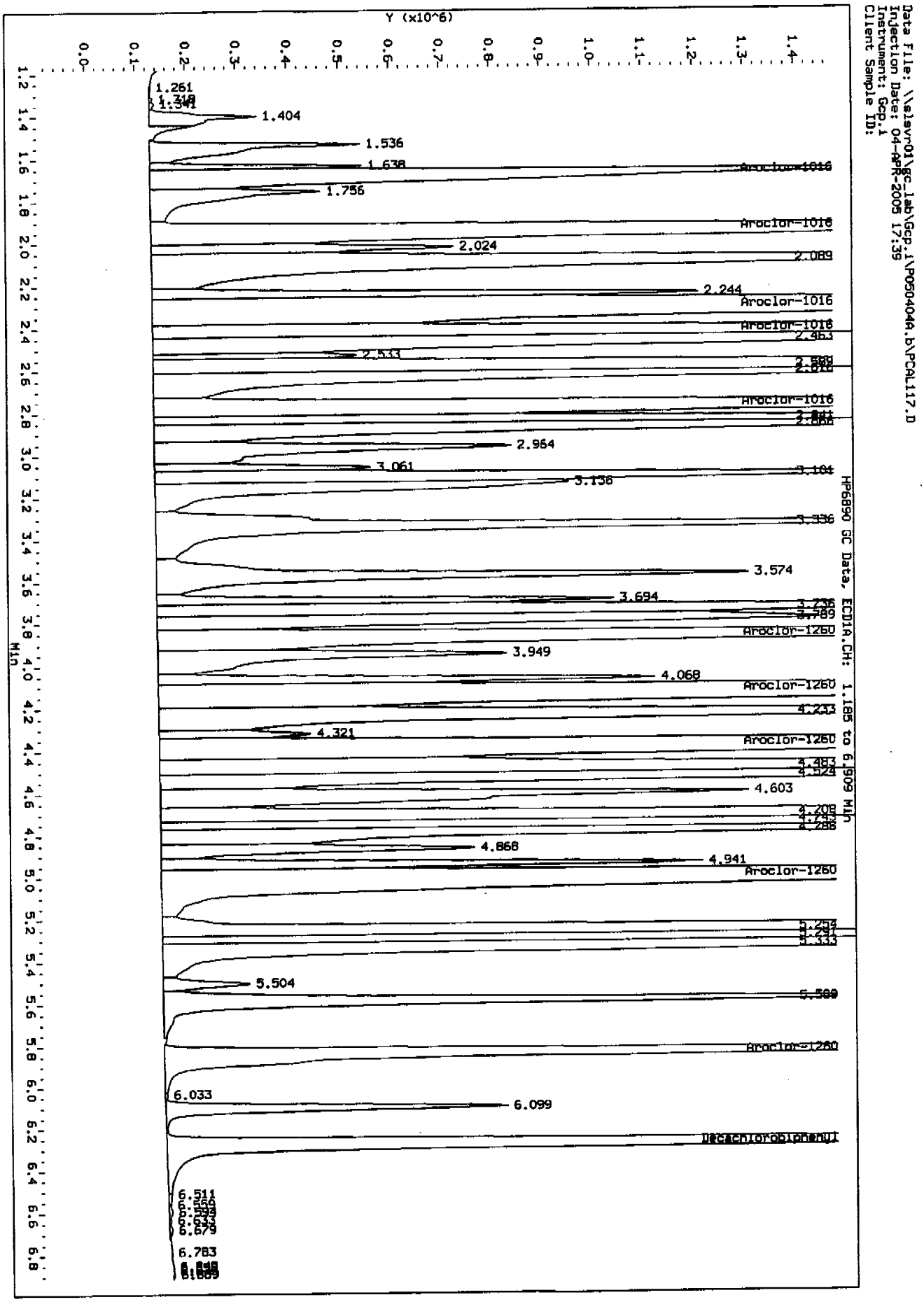
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.667	1.668	-0.001	4700878	1000.00	962.6	80.00- 120.00	100.00
1.930	1.933	-0.003	9019502	1000.00	986.6	165.85- 248.78	191.87
2.300	2.303	-0.003	20188345	1000.00	986.9	384.65- 576.97	429.46
2.412	2.413	-0.001	7339625	1000.00	981.6	140.52- 210.78	156.13
2.765	2.768	-0.003	8008111	1000.00	1005	148.90- 223.36	170.35
		Average of Peak Amounts =			984.6		
28 Aroclor-1260					CAS #: 11096-82-5		
3.862	3.863	-0.001	11763687	1000.00	985.4	80.00- 120.00	100.00
4.119	4.121	-0.002	20598790	1000.00	987.1	141.10- 211.66	175.10
4.374	4.375	-0.001	18240138	1000.00	995.0	136.45- 204.67	155.05
4.997	4.998	-0.001	26678204	1000.00	1000	158.92- 238.38	226.78
5.834	5.835	-0.001	6634249	1000.00	982.6	38.21- 57.31	56.40
		Average of Peak Amounts =			990.1		
$ 32 Decachlorobiphenyl					CAS #:		
6.272	6.273	-0.001	9839755	50.0000	48.63		

BWO 4/05/05



Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL117.D
Date : 04-APR-2005 17:39
Client ID:
Sample Info: ICAL5
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4
Min
1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0 3.2 3.4 3.6 3.8 4.0 4.2 4.4 4.6 4.8 5.0 5.2 5.4 5.6 5.8 6.0 6.2 6.4 6.6 6.8
Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL117.D
Injection Date: 04-APR-2005 17:39
Instrument: Gcp.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 1.185 to 6.909 Min
1.261
1.404
1.536
1.638
Aroclor-1016
1.756
Aroclor-1016
2.024
2.089
2.244
Aroclor-1016
Aroclor-1016
2.533
Aroclor-1016
2.964
3.061
3.136
3.574
3.694
Aroclor-1260
3.949
4.068
Aroclor-1260
4.321
Aroclor-1260
4.603
4.868
4.941
Aroclor-1260
5.504
Aroclor-1260
6.033
6.099
Decachlorobiphenyl
6.511
6.679
6.783

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL118.D
Report Date: 05-Apr-2005 12:12

STL St. Louis

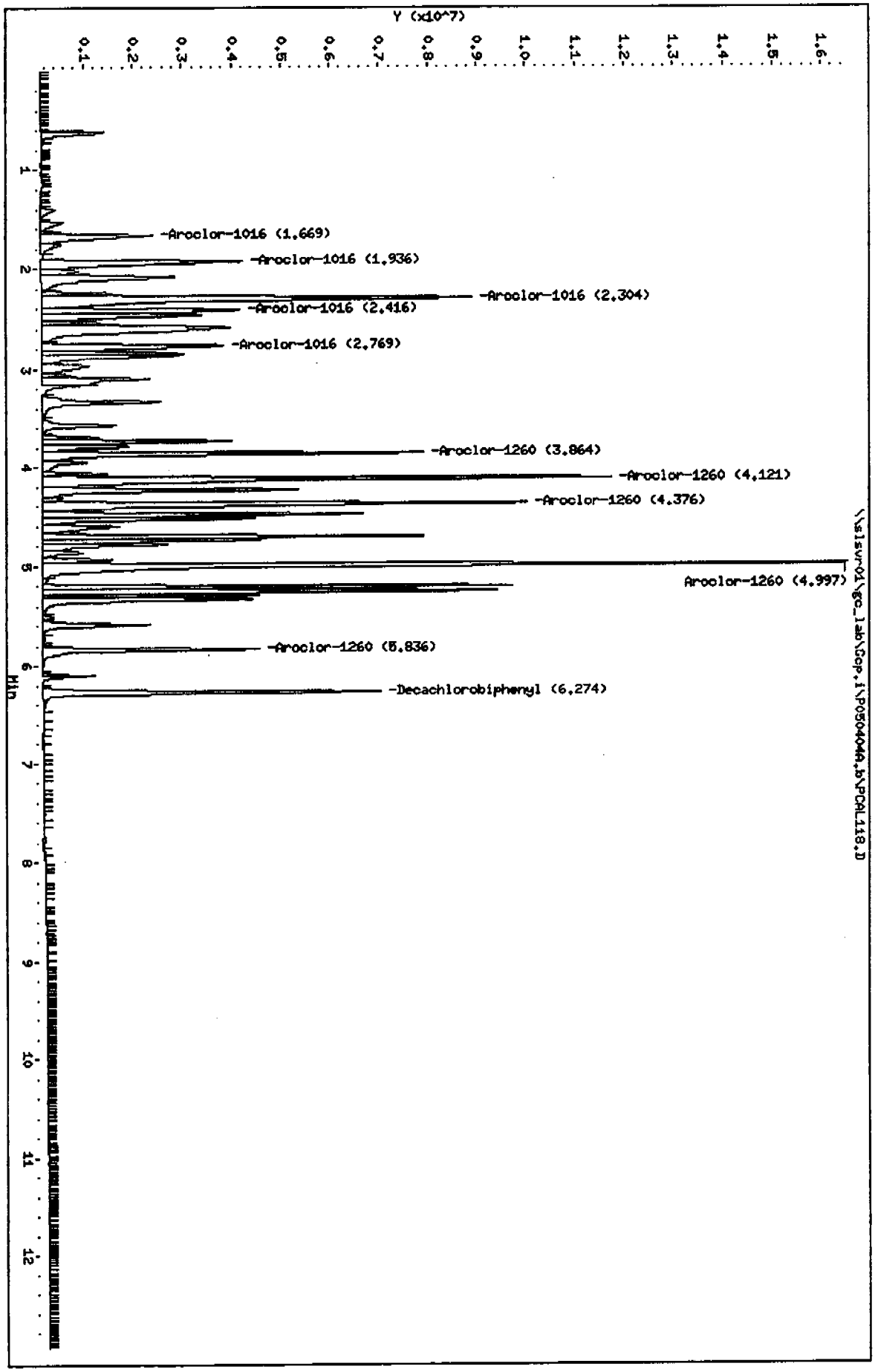
Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL118.D
Lab Smp Id: ICAL6
Inj Date : 04-APR-2005 17:55
Operator : BLO Inst ID: Gcp.i
Smp Info : ICAL6
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:00 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

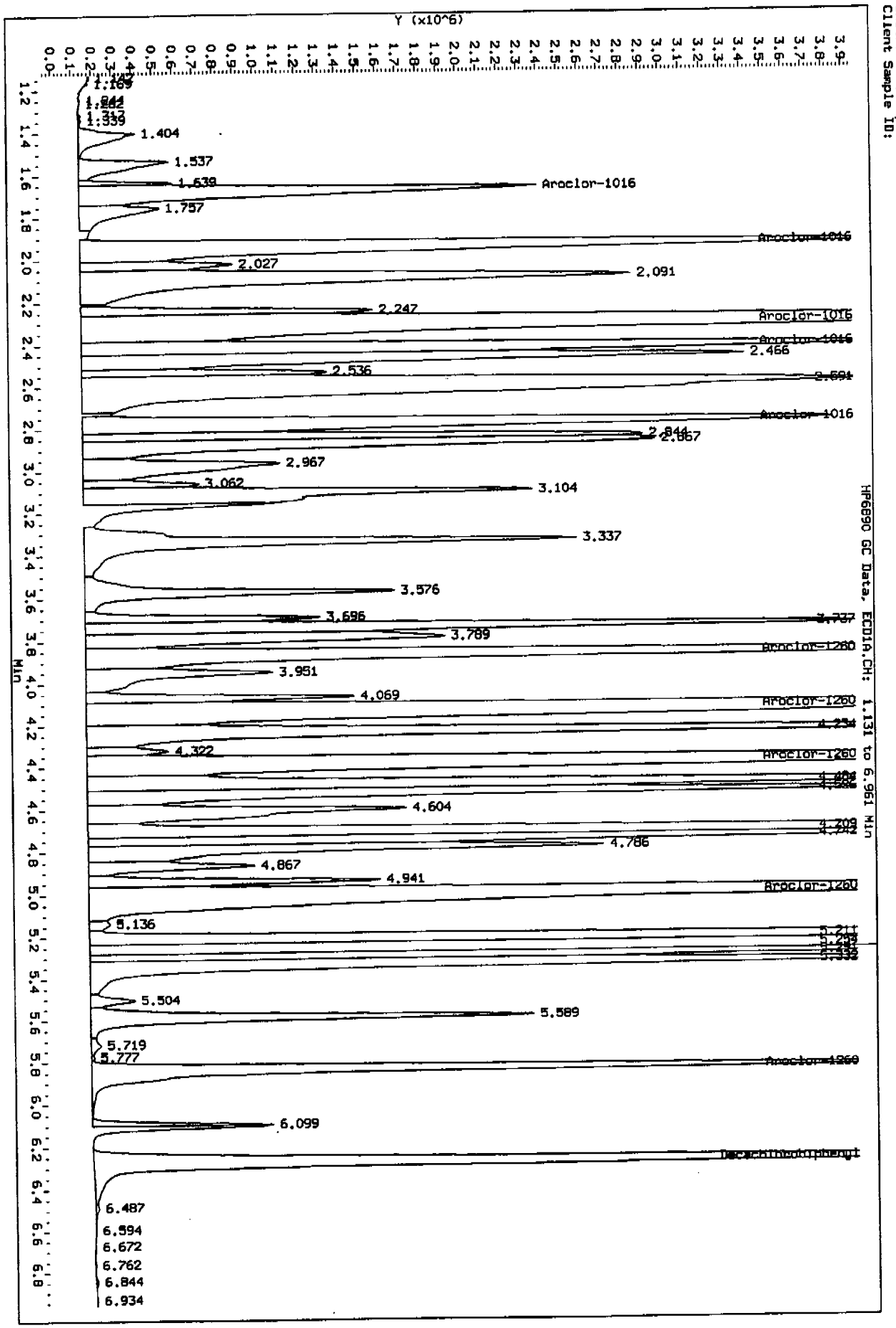
				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.669	1.668	0.001	6468387	1500.00	1324	80.00- 120.00	100.00
1.935	1.933	0.002	12148358	1500.00	1329	165.85- 248.78	187.81
2.304	2.303	0.001	27925658	1500.00	1365	384.65- 576.97	431.73
2.415	2.413	0.002	10364470	1500.00	1386	140.52- 210.78	160.23
2.769	2.768	0.001	10608159	1500.00	1332	148.90- 223.36	164.00
	Average of Peak Amounts =				1347		
28 Aroclor-1260					CAS #: 11096-82-5		
3.864	3.863	0.001	16184824	1500.00	1356	80.00- 120.00	100.00
4.120	4.121	-0.001	28318455	1500.00	1357	141.10- 211.66	174.97
4.375	4.375	0.000	24838426	1500.00	1355	136.45- 204.67	153.47
4.997	4.998	-0.001	35639998	1500.00	1336	158.92- 238.38	220.21
5.835	5.835	0.000	9178300	1500.00	1359	38.21- 57.31	56.71
	Average of Peak Amounts =				1353		
$ 32 Decachlorobiphenyl					CAS #:		
6.274	6.273	0.001	14723396	75.0000	72.77		

BLO 4/05/05



Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL118.D
Date : 04-APR-2005 17:55
Client ID:
Sample Info: ICAL6
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLD
Column diameter: 0.53


Y (x10^6)
Data File: \\alsvr01\gc_lab\Gcp_1\P0504A.b\PCAL118.D
Injection Date: 04-APR-2005 17:55
Instrument: Gcp_1
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 1.131 to 6.961 Min
Min
1.404
1.537
1.639
Aroclor-1016
1.757
2.027
2.091
2.247
2.466
2.536
2.844
2.967
3.062
3.104
3.337
3.576
3.696
3.789
3.951
4.069
4.322
4.604
4.786
4.867
4.941
5.136
5.504
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6.099
6.487
6.594
6.672
6.762
6.844
6.934

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL119.D
Report Date: 05-Apr-2005 12:12

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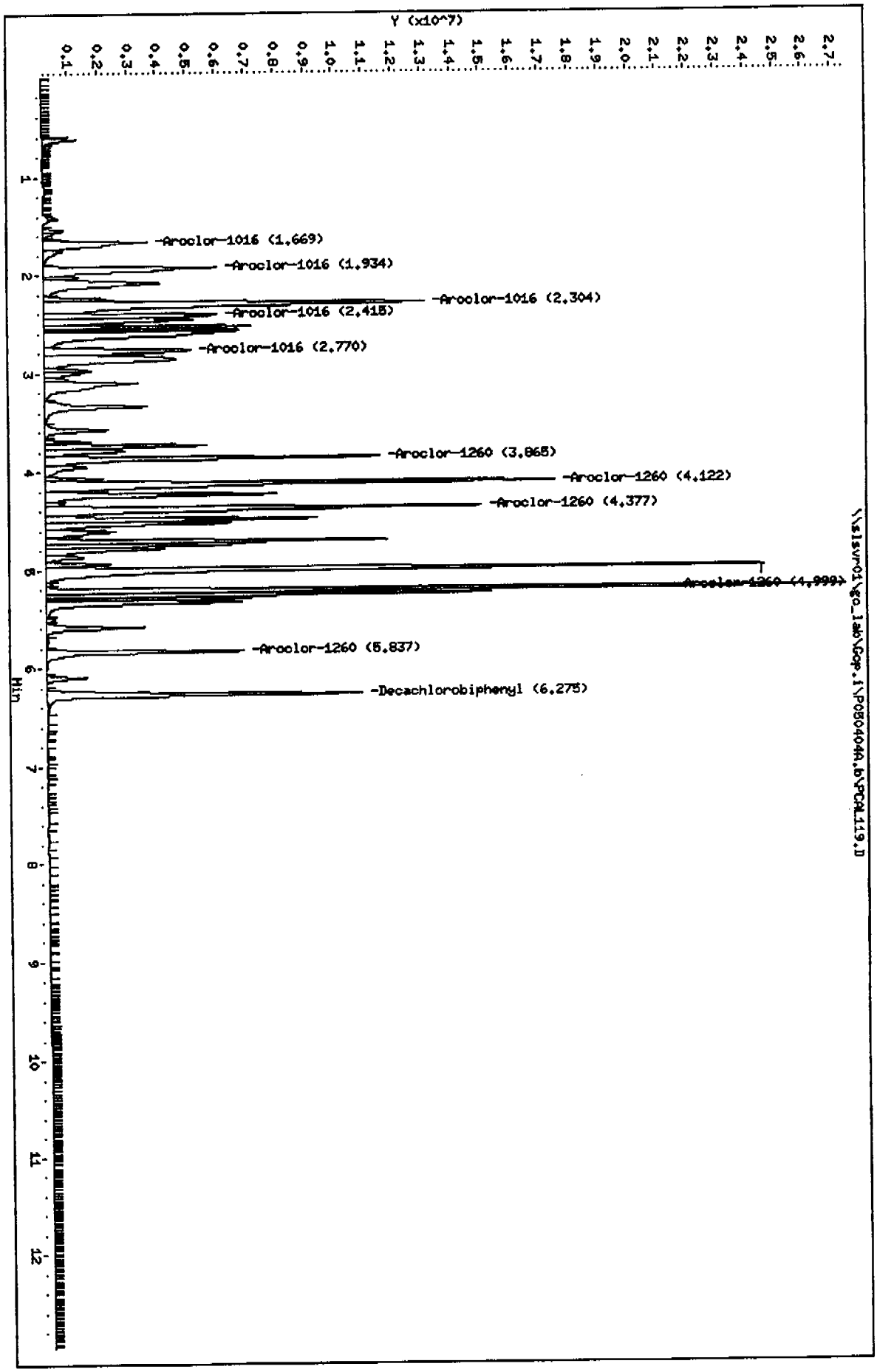
Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL119.D
Lab Smp Id: ICAL7
Inj Date : 04-APR-2005 18:11
Operator : BLO Inst ID: Gcp.i
Smp Info : ICAL7
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:00 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

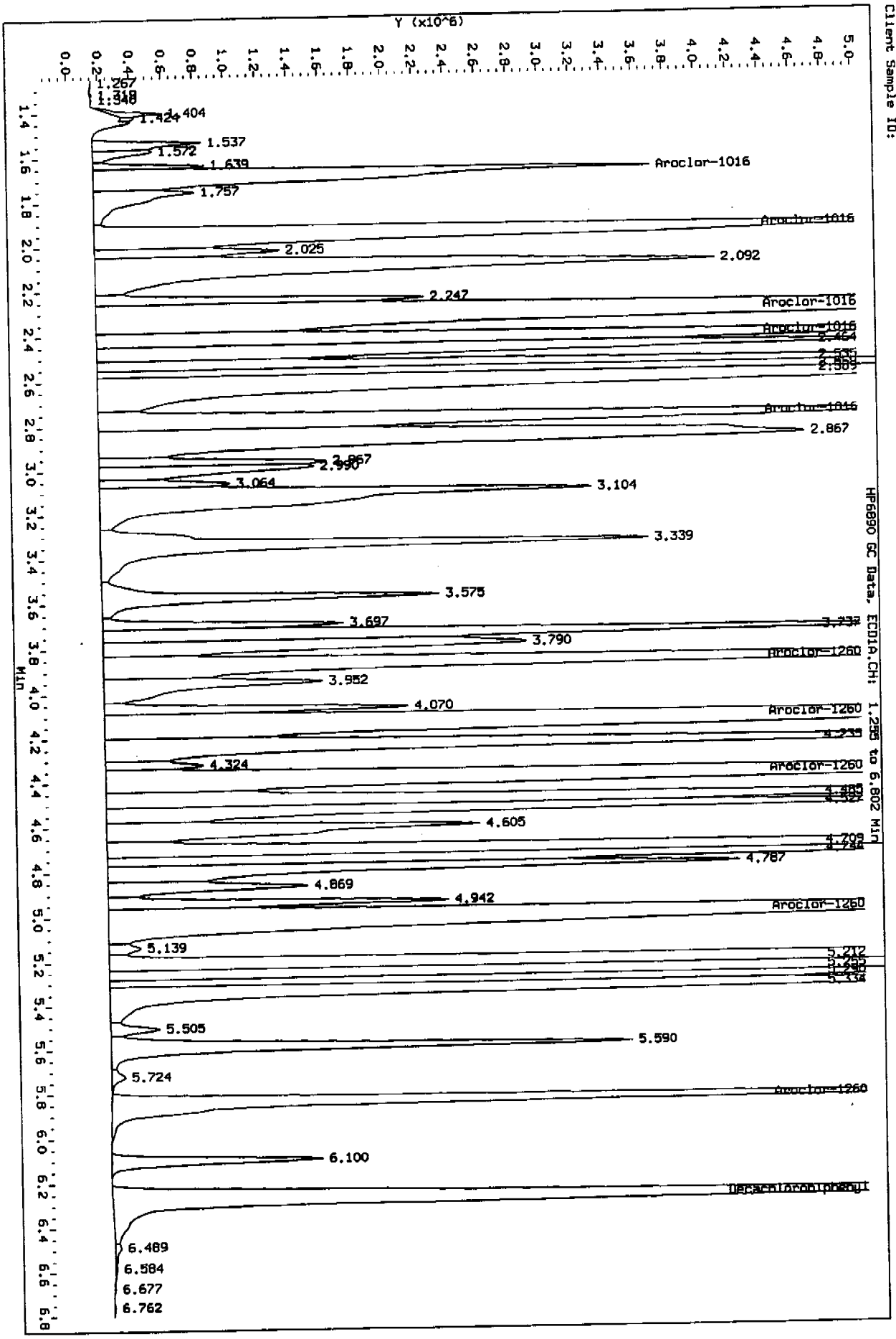
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.668	1.668	0.000	10189950	2500.00	2086	80.00- 120.00	100.00
1.933	1.933	0.000	18679067	2500.00	2043	165.85- 248.78	183.31
2.303	2.303	0.000	44081030	2500.00	2155	384.65- 576.97	432.59
2.415	2.413	0.002	15354199	2500.00	2053	140.52- 210.78	150.68
2.770	2.768	0.002	15445963	2500.00	1939	148.90- 223.36	151.58
		Average of Peak Amounts =			2056		
28 Aroclor-1260					CAS #: 11096-82-5		
3.865	3.863	0.002	24783844	2500.00	2076	80.00- 120.00	100.00
4.121	4.121	0.000	43889068	2500.00	2103	141.10- 211.66	177.09
4.376	4.375	0.001	37903635	2500.00	2068	136.45- 204.67	152.94
4.998	4.998	0.000	54584395	2500.00	2047	158.92- 238.38	220.24
5.836	5.835	0.001	14032027	2500.00	2078	38.21- 57.31	56.62
		Average of Peak Amounts =			2074		
$ 32 Decachlorobiphenyl					CAS #:		
6.275	6.273	0.002	24755884	150.000	122.4		

BLO 4/05/05



Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL119.D
Date : 04-APR-2005 18:11
Client ID:
Sample Info: ICAL7
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLD
Column diameter: 0.53


Y (x10^6)
Data File: \\slsvr01\gc_lab\Gcp.1\P050404A.b\PCAL119.D
Injection Date: 04-APR-2005 18:11
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 1.255 to 6.802 Min
Min
1.267
1.318
1.348
1.404
1.424
1.537
1.572
1.639
Aroclor-1016
1.757
2.025
2.092
2.247
2.867
2.990
3.064
3.104
3.339
3.575
3.697
3.790
Aroclor-1260
3.952
4.070
4.324
4.605
4.787
4.869
4.942
5.139
5.505
5.590
5.724
6.100
6.489
6.584
6.677
6.762

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL120.D
Report Date: 05-Apr-2005 12:12

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Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL120.D
Lab Smp Id: ICAL8
Inj Date : 04-APR-2005 18:28
Operator : BLO Inst ID: Gcp.i
Smp Info : ICAL8
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:00 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

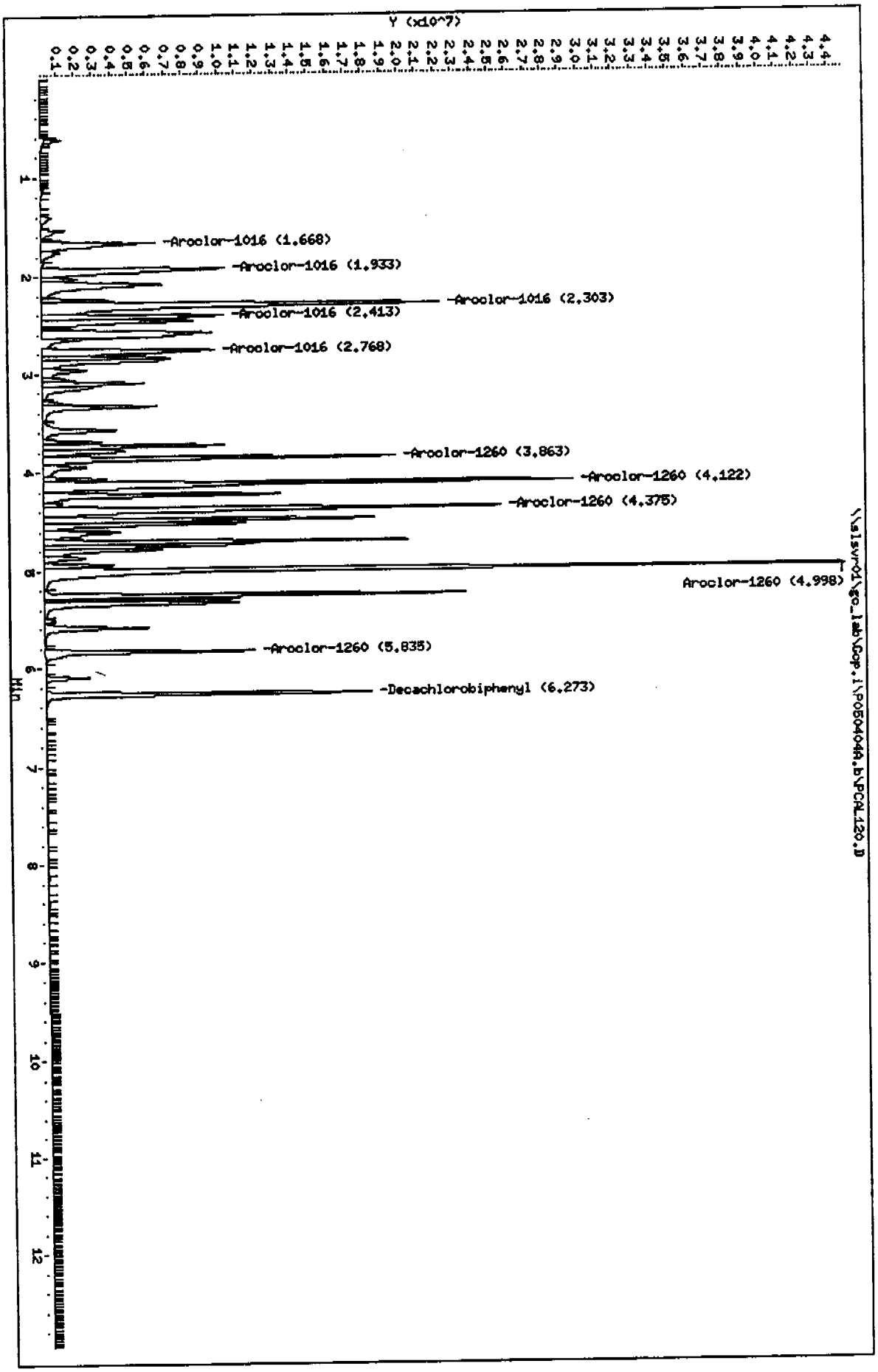
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.668	1.668	0.000	15900795	4000.00	3256	80.00- 120.00	100.00
1.933	1.933	0.000	30229942	4000.00	3307	165.85- 248.78	190.12
2.303	2.303	0.000	70209157	4000.00	3432	384.65- 576.97	441.54
2.413	2.413	0.000	25479175	4000.00	3408	140.52- 210.78	160.24
2.768	2.768	0.000	27749846	4000.00	3484	148.90- 223.36	174.52
		Average of Peak Amounts =			3377		
28 Aroclor-1260					CAS #: 11096-82-5		
3.863	3.863	0.000	40416367	4000.00	3386	80.00- 120.00	100.00(M)
4.121	4.121	0.000	70971878	4000.00	3401	141.10- 211.66	175.60
4.375	4.375	0.000	63699753	4000.00	3475	136.45- 204.67	157.61
4.998	4.998	0.000	94304462	4000.00	3537	158.92- 238.38	233.33
5.835	5.835	0.000	23768438	4000.00	3520	38.21- 57.31	58.81
		Average of Peak Amounts =			3464		
$ 32 Decachlorobiphenyl					CAS #:		
6.273	6.273	0.000	35118549	200.000	173.6		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 4/05/05

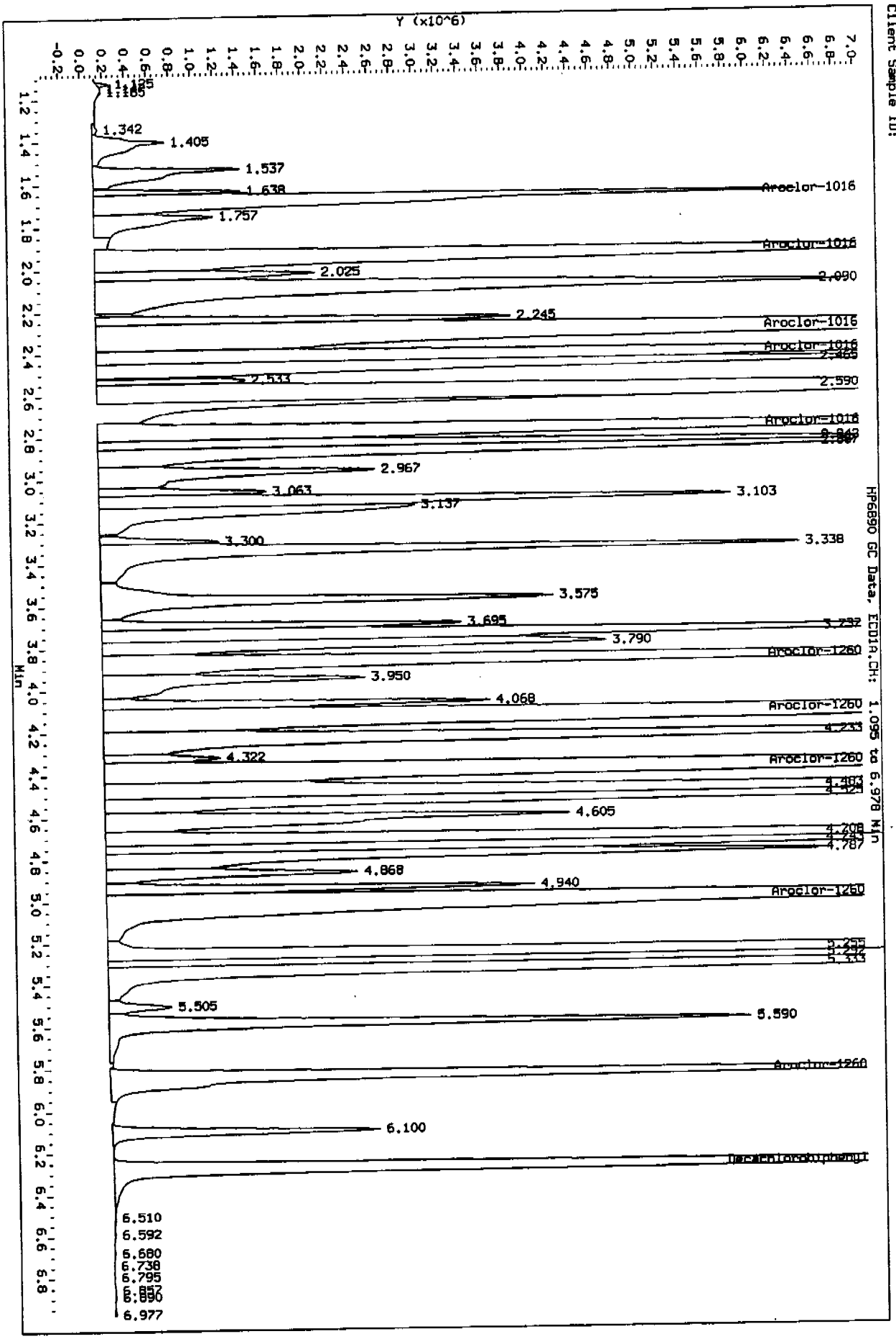
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\gc_lab\Gcp.i\P0504049.b\PCAL120.D
Date : 04-APR-2005 18:28
Client ID:
Sample Info: ICAL8
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
Data File: \\slavr01\gc_lab\Gcp.i\P050404A.b\PCAL120.D
Injection Date: 04-APR-2005 18:28
Instrument: Gcp.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 1.095 to 6.978 Min
1.342
1.405
1.537
1.638
Aroclor-1016
1.757
2.025
2.245
2.533
2.590
2.967
3.063
3.103
3.137
3.300
3.338
3.575
3.695
3.790
Aroclor-1260
3.950
4.068
4.322
4.605
4.868
4.940
5.505
5.590
6.100
6.510
6.592
6.680
6.738
6.795
6.890
6.977

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Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b/PICV121.D
Report Date: 04/05/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PICV121.D
Analysis Type: SOIL

Injection Date: 04-APR-2005 19:00
Lab Sample ID: ICV
Method File: \\slsvr01\gc_lab\Gcp.i\P050404A.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
23 Aroclor-1016	1000.0000	889.9407	11.0	15.0	
29 Aroclor-1260	1000.0000	891.1039	10.9	15.0	
34 Decachlorobiphenyl	~~50.0000~~	~~0.0000~~	~~100.0~~	~~15.0~~	<<

BLD 4/05/05

LOT# F5D210380

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PICV121.D
Report Date: 05-Apr-2005 12:14

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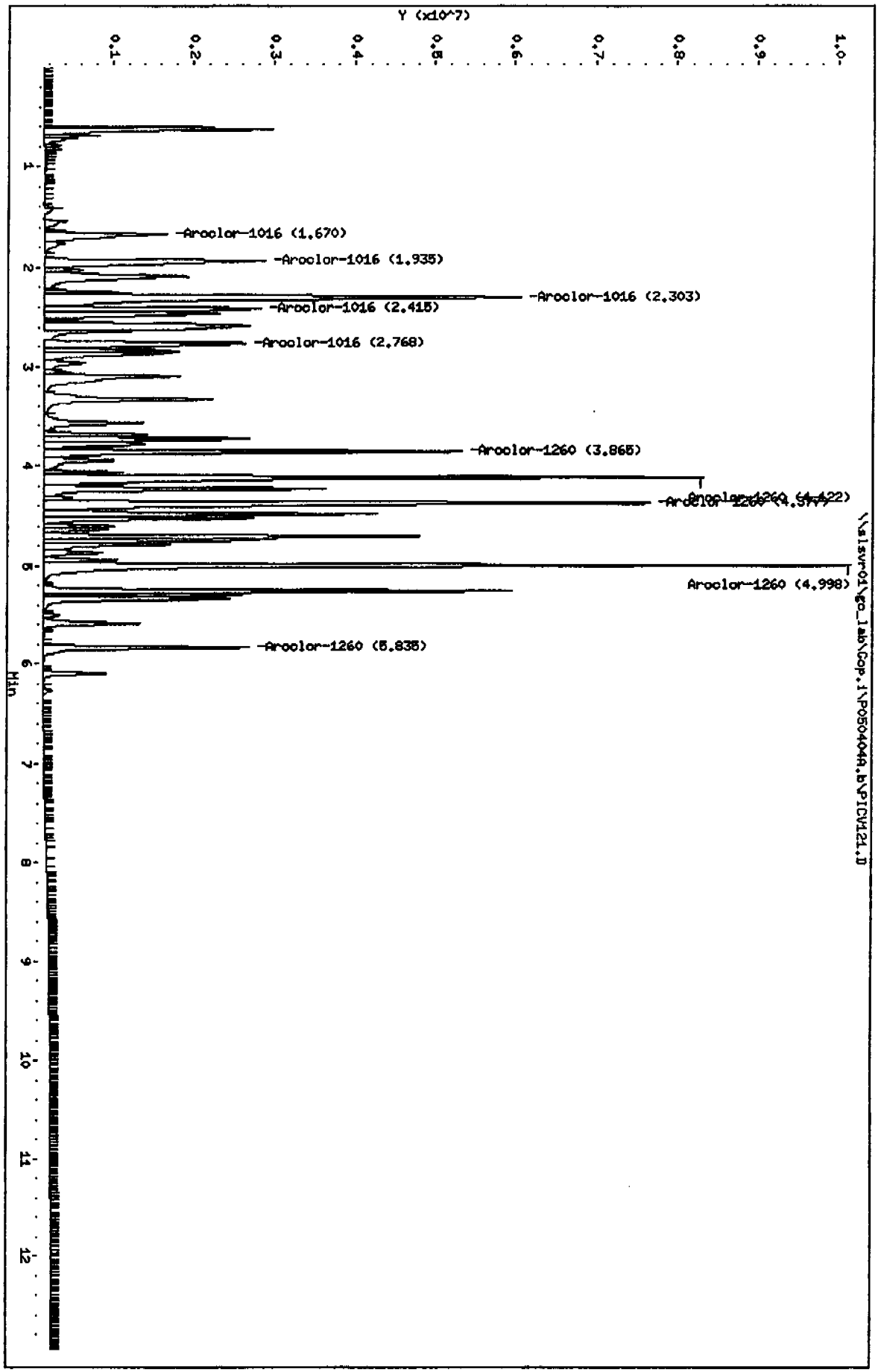
Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PICV121.D
Lab Smp Id: ICV
Inj Date : 04-APR-2005 19:00
Operator : BLO
Inst ID: Gcp.i
Smp Info : ICV
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:14 owenb
Quant Type: ESTD
Cal Date : 04-APR-2005 20:37
Cal File: PCAL127.D
Als bottle: 11
Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon
Compound Sublist: Ar1660.sub
Target Version: 4.10
Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.669	1.668	0.001	3919745	1000.00	802.6	80.00- 120.00	100.00
1.934	1.933	0.001	8126359	1000.00	888.9	165.85- 248.78	207.32
2.303	2.303	0.000	18846433	1000.00	921.3	384.65- 576.97	480.81
2.414	2.413	0.001	6885006	1000.00	920.8	140.52- 210.78	175.65
2.768	2.768	0.000	7295848	1000.00	916.0	148.90- 223.36	186.13
		Average of Peak Amounts =			889.9		
28 Aroclor-1260					CAS #: 11096-82-5		
3.864	3.863	0.001	10958924	1000.00	918.0	80.00- 120.00	100.00
4.121	4.121	0.000	19329304	1000.00	926.3	141.10- 211.66	176.38
4.376	4.375	0.001	18691428	1000.00	1020	136.45- 204.67	170.56
4.998	4.998	0.000	21769615	1000.00	816.4	158.92- 238.38	198.65
5.834	5.835	-0.001	5233847	1000.00	775.2	38.21- 57.31	47.76
		Average of Peak Amounts =			891.1		

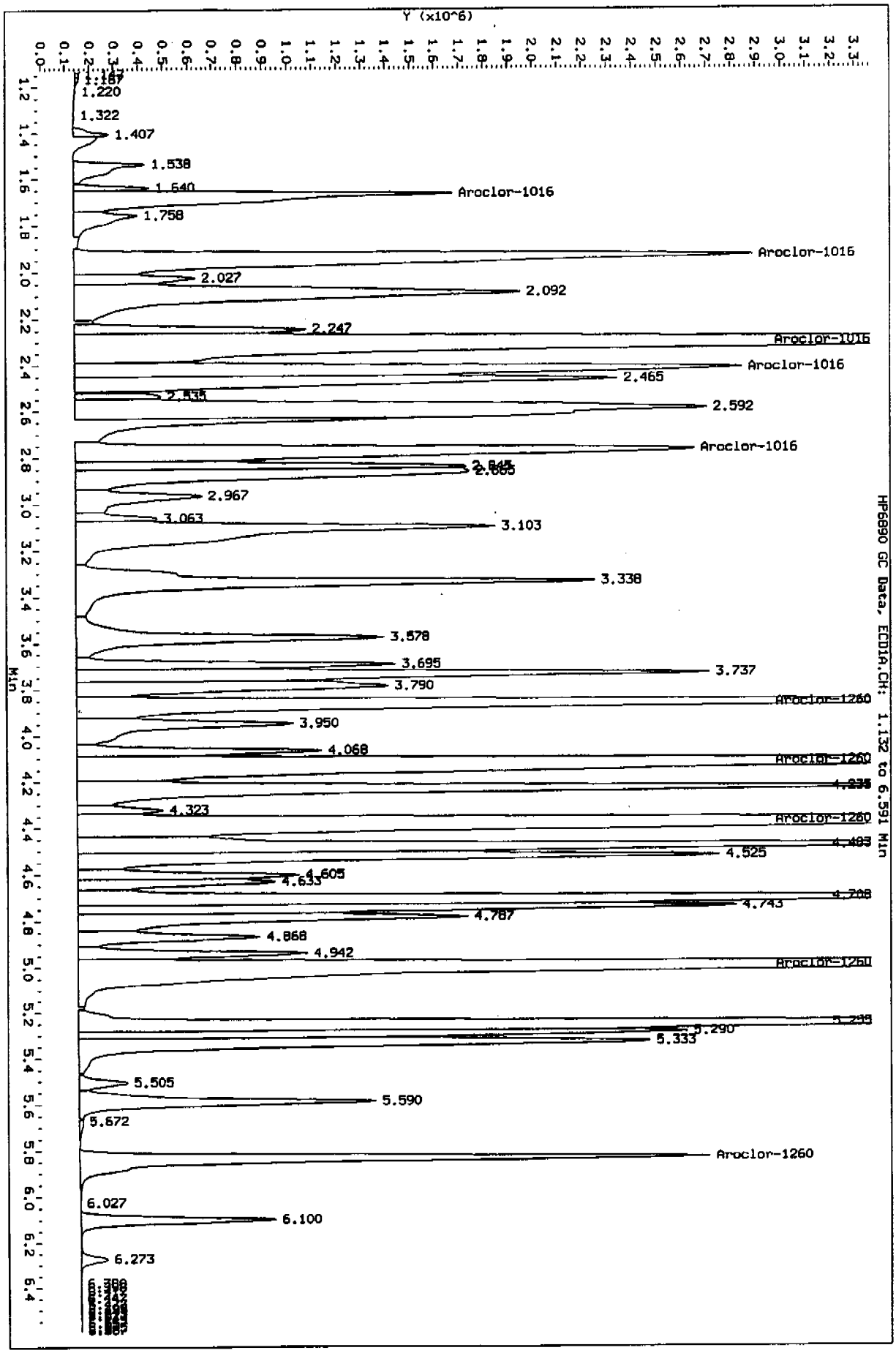
BLO 4/05/05



Data File: \\slsvr01\go_lab\Gop.1\P0504048.b\PICV121.D
Date : 04-APR-2005 19:00
Client ID:
Sample Info: ICV
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gop.1
Operator: BLO
Column diameter: 0.53

\\slsvr01\go_lab\Gop.1\P0504048.b\PICV121.D


Y (x10^6)
Min
1.187
1.220
1.322
1.407
1.538
1.640
Aroclor-1016
1.758
Aroclor-1016
2.027
2.092
2.247
Aroclor-1016
Aroclor-1016
2.465
2.535
2.592
Aroclor-1016
2.967
3.063
3.103
3.338
3.578
3.695
3.737
3.790
Aroclor-1260
3.950
4.068
Aroclor-1260
4.323
Aroclor-1260
4.525
4.605
4.633
4.743
4.787
4.868
4.942
Aroclor-1260
5.290
5.333
5.505
5.590
5.672
Aroclor-1260
6.027
6.100
6.273
Data File: \\slsvr01\gc_lab\Gcp.1\P0504044.b\PICV121.D
Injection Date: 04-APR-2005 19:00
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 1.132 to 6.591 Min

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL122.D
Report Date: 05-Apr-2005 12:13

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL122.D
Lab Smp Id: 1232
Inj Date : 04-APR-2005 19:16
Operator : BLO Inst ID: Gcp.i
Smp Info : 1232
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:00 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 12 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1232.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

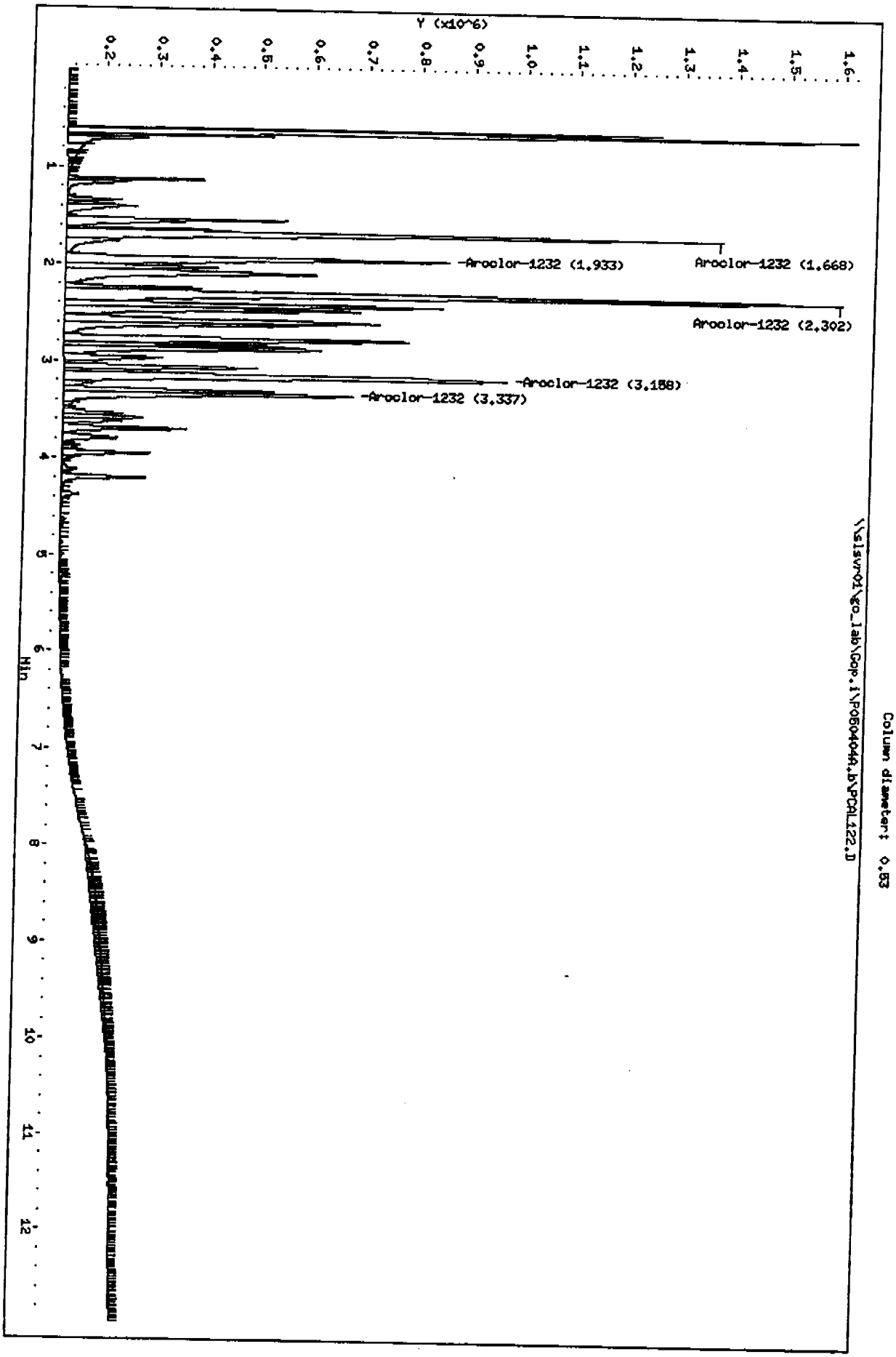
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
24 Aroclor-1232					CAS #: 1114-16-5		
1.668	1.668	0.000	2928234	500.000	500.0	80.00- 120.00	100.00(M)
1.933	1.933	0.000	2150574	500.000	500.0	58.75- 88.13	73.44
2.301	2.301	0.000	4430090	500.000	500.0	121.03- 181.55	151.29
3.158	3.158	0.000	2768496	500.000	500.0	75.64- 113.45	94.54
3.336	3.336	0.000	1450443	500.000	500.0	39.63- 59.44	49.53
		Average of Peak Amounts =			500		

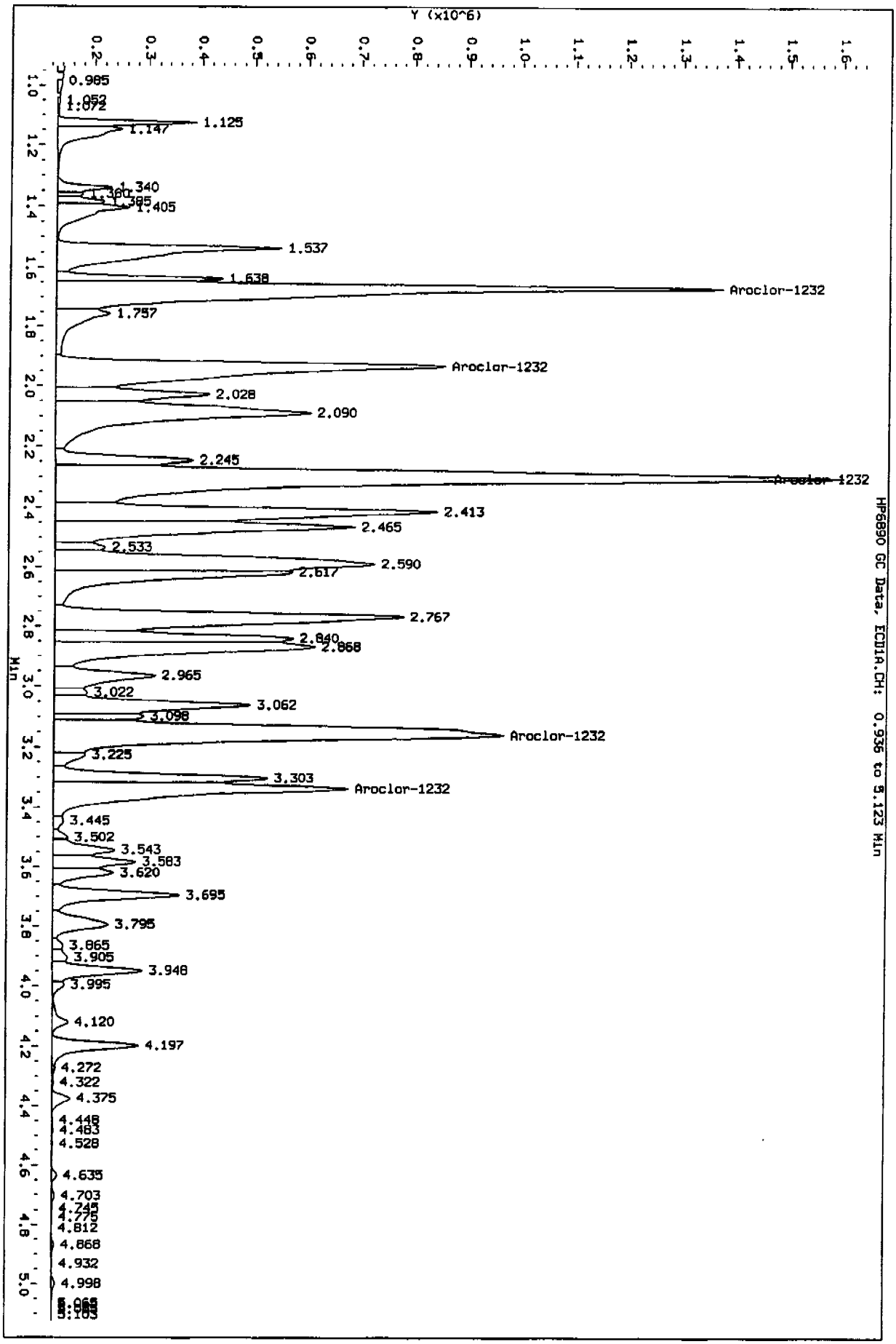
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 4/05/05

QC Flag Legend

M - Compound response manually integrated.


Data File: \\slsvr01\gc_lab\Gcp.i\P0604044.b\PCAL122.D
Date : 04-APR-2006 19:16
Client ID:
Sample Info: 1232
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53
Y (x10^6)
Aroclor-1232 (1.933)
Aroclor-1232 (1.668)
Aroclor-1232 (2.302)
Aroclor-1232 (3.158)
Aroclor-1232 (3.337)
\\slsvr01\gc_lab\Gcp.i\P0604044.b\PCAL122.D
Min


Y (x10^6)
Min
0.985
1.052
1.072
1.125
1.147
1.340
1.360
1.385
1.405
1.537
1.638
Aroclor-1232
1.757
Aroclor-1232
2.028
2.090
2.245
Aroclor-1232
2.413
2.465
2.533
2.590
2.617
2.767
2.840
2.868
2.965
3.022
3.062
3.098
Aroclor-1232
3.225
3.303
Aroclor-1232
3.445
3.502
3.543
3.583
3.620
3.695
3.795
3.865
3.905
3.948
3.995
4.120
4.197
4.272
4.322
4.375
4.448
4.483
4.528
4.635
4.703
4.745
4.775
4.812
4.868
4.932
4.998
Data File: \\slsvr01\gc_lab\Gcp.i\PC50404A.b\PCAL122.D
Injection Date: 04-APR-2005 19:16
Instrument: Gcp.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 0.936 to 5.123 Min

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL123.D Page 1
Report Date: 05-Apr-2005 12:13

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL123.D
Lab Smp Id: 1242
Inj Date : 04-APR-2005 19:32
Operator : BLO Inst ID: Gcp.i
Smp Info : 1242
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:00 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 13 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1242.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

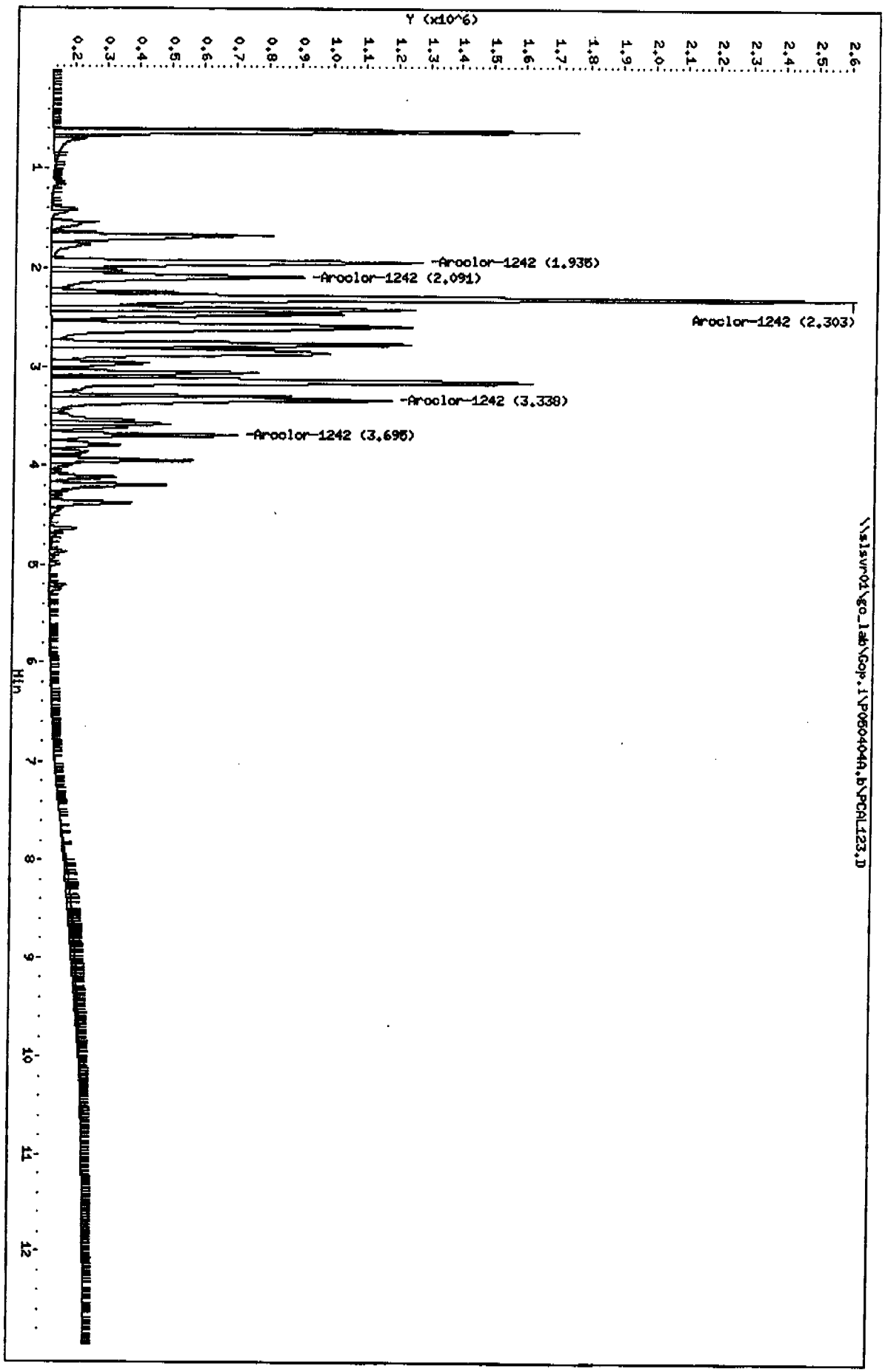
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
25 Aroclor-1242					CAS #: 53469-21-9		
1.934	1.934	0.000	3610396	500.000	500.0	80.00- 120.00	100.00(M)
2.091	2.091	0.000	2796559	500.000	500.0	61.97- 92.95	77.46
2.302	2.302	0.000	8017071	500.000	500.0	177.64- 266.47	222.06
3.337	3.337	0.000	3022049	500.000	500.0	66.96- 100.44	83.70
3.694	3.694	0.000	1278309	500.000	500.0	28.33- 42.49	35.41
Average of Peak Amounts =					500		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 4/05/05

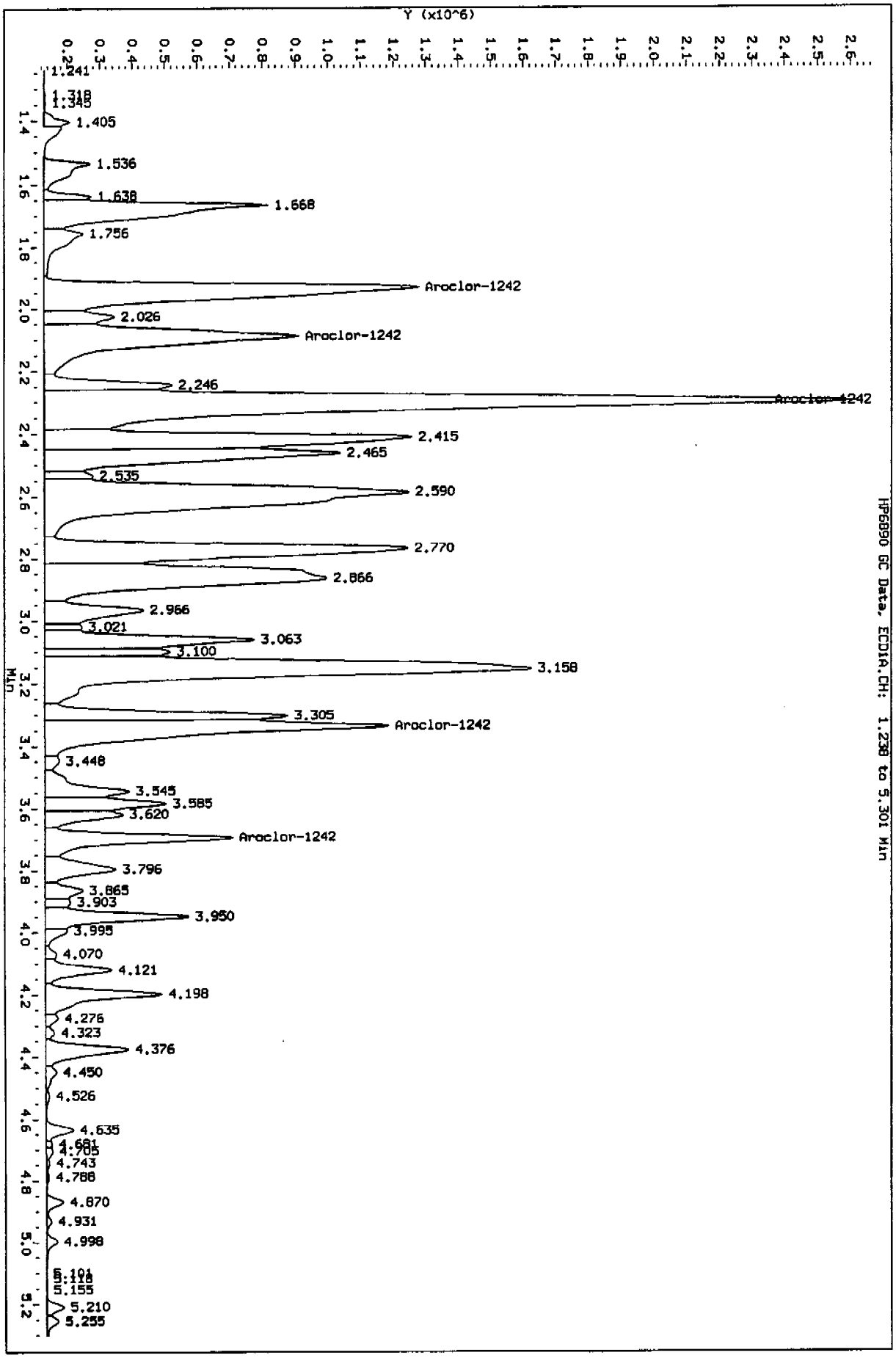
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\gc_lab\Gcp.i\P060404A.b\PCAL123.D
Date : 04-APR-2005 19:32
Client ID:
Sample Info: 1242
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
1.241
1.318
1.345
1.405
1.536
1.638
1.668
1.756
Aroclor-1242
2.026
Aroclor-1242
2.246
Aroclor-1242
2.415
2.465
2.535
2.590
2.770
2.866
2.966
3.021
3.063
3.100
3.158
3.305
Aroclor-1242
3.448
3.545
3.585
3.620
Aroclor-1242
3.796
3.865
3.903
3.950
3.995
4.070
4.121
4.198
4.276
4.323
4.376
4.450
4.526
4.635
4.681
4.705
4.743
4.788
4.870
4.931
4.998
5.101
5.178
5.155
5.210
5.255
Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL123.D
Injection Date: 04-APR-2005 19:32
Instrument: Gcp.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 1.238 to 5.301 Min

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL124.D
Report Date: 05-Apr-2005 12:13

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL124.D
Lab Smp Id: 1248
Inj Date : 04-APR-2005 19:48
Operator : BLO Inst ID: Gcp.i
Smp Info : 1248
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:00 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1248.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

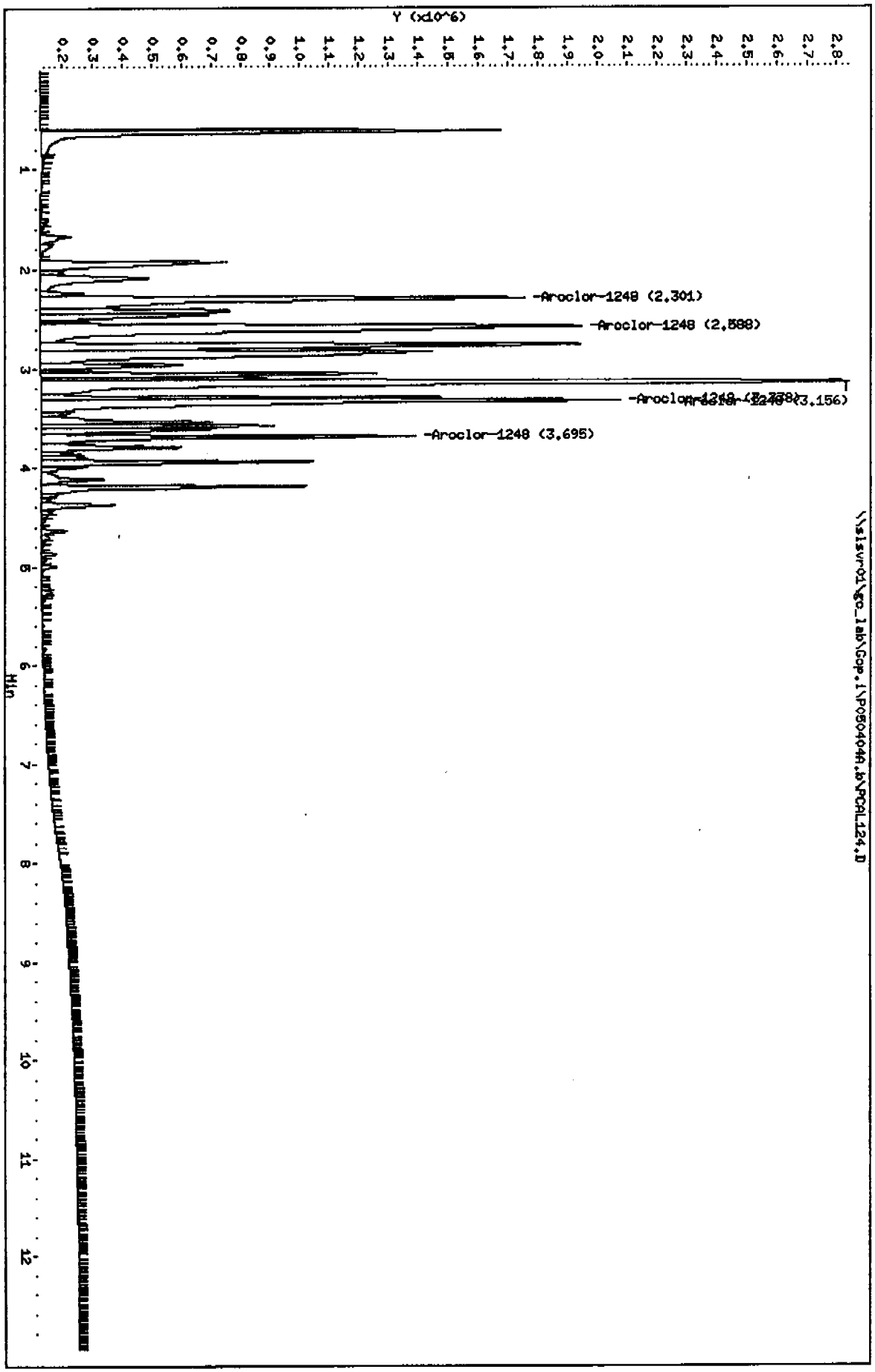
			AMOUNTS				
RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
26 Aroclor-1248					CAS #: 12672-29-6		
2.301	2.301	0.000	5508284	500.000	500.0	80.00- 120.00	100.00(M)
2.587	2.587	0.000	7842839	500.000	500.0	113.91- 170.86	142.38
3.156	3.156	0.000	9496651	500.000	500.0	137.93- 206.89	172.41
3.337	3.337	0.000	5673110	500.000	500.0	82.39- 123.59	102.99
3.694	3.694	0.000	2680988	500.000	500.0	38.94- 58.41	48.67
		Average of Peak Amounts =			500		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other_____

BLO 4/05/05

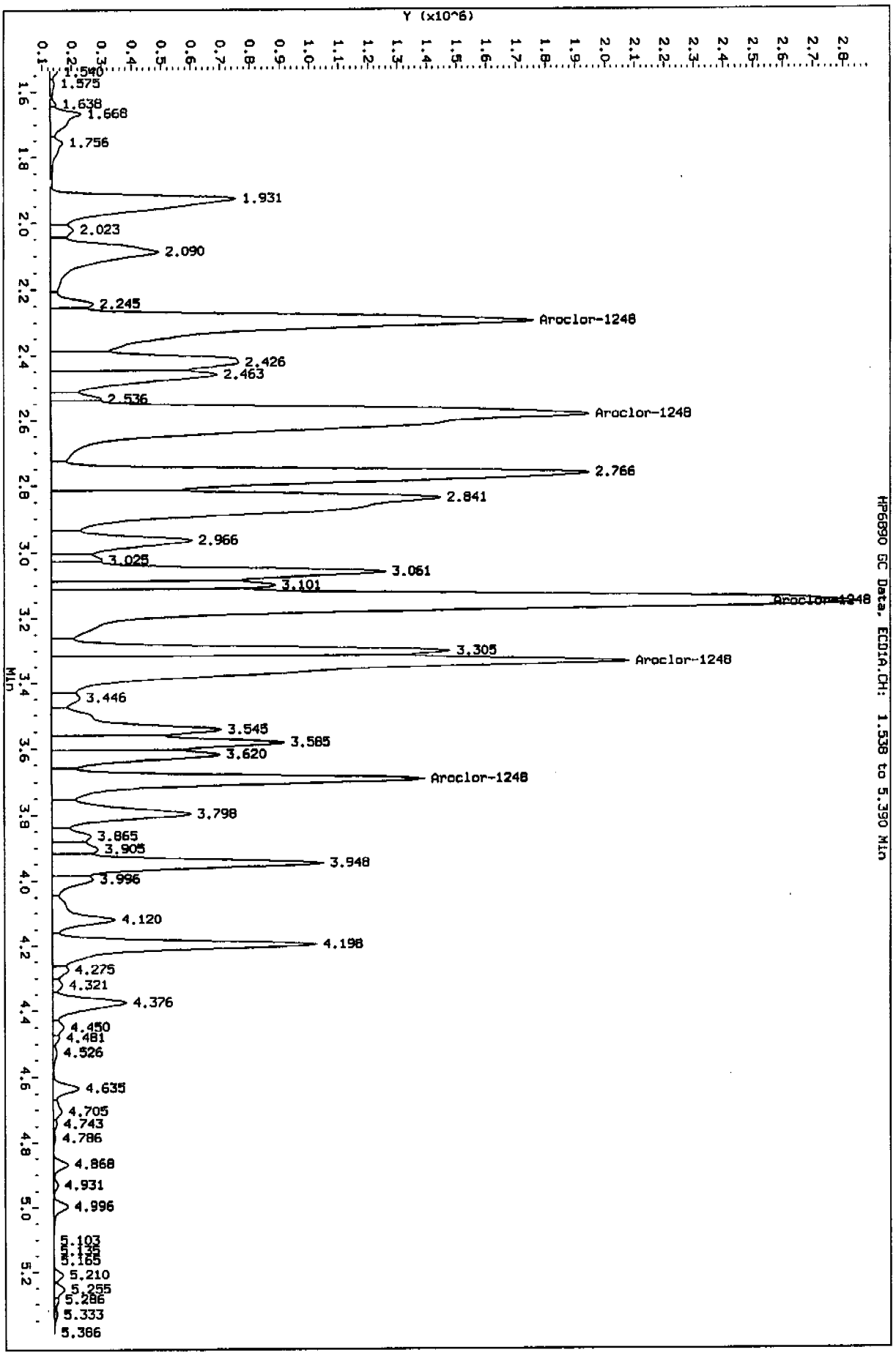
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\go_lab\Gop.i\P050404A.b\PCAL124.D
Date : 04-APR-2005 19:48
Client ID:
Sample Info: 1248
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gop.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
1.540
1.575
1.638
1.668
1.756
1.931
2.023
2.090
2.245
Aroclor-1248
2.426
2.463
2.536
Aroclor-1248
2.766
2.841
2.966
3.025
3.061
3.101
Aroclor-1248
3.305
Aroclor-1248
3.446
3.545
3.585
3.620
Aroclor-1248
3.798
3.865
3.905
3.948
3.996
4.120
4.198
4.275
4.321
4.376
4.450
4.481
4.526
4.635
4.705
4.743
4.786
4.868
4.931
4.996
5.103
5.135
5.165
5.210
5.255
5.286
5.333
5.386
HP6890 GC Data. EC01A.CH: 1.538 to 5.390 Min
Data File: \\stlsvr01\gc_lab\Gcp.1\P050404A.b\PCAL124.D
Injection Date: 04-APR-2005 19:48
Instrument: Gcp.1
Client Sample ID:

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL125.D
Report Date: 05-Apr-2005 12:13

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL125.D
Lab Smp Id: 1254
Inj Date : 04-APR-2005 20:05
Operator : BLO
Inst ID: Gcp.i
Smp Info : 1254
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:00 owenb
Quant Type: ESTD
Cal Date : 04-APR-2005 20:37
Cal File: PCAL127.D
Als bottle: 15
Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon
Compound Sublist: Ar2154.sub
Target Version: 4.10
Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

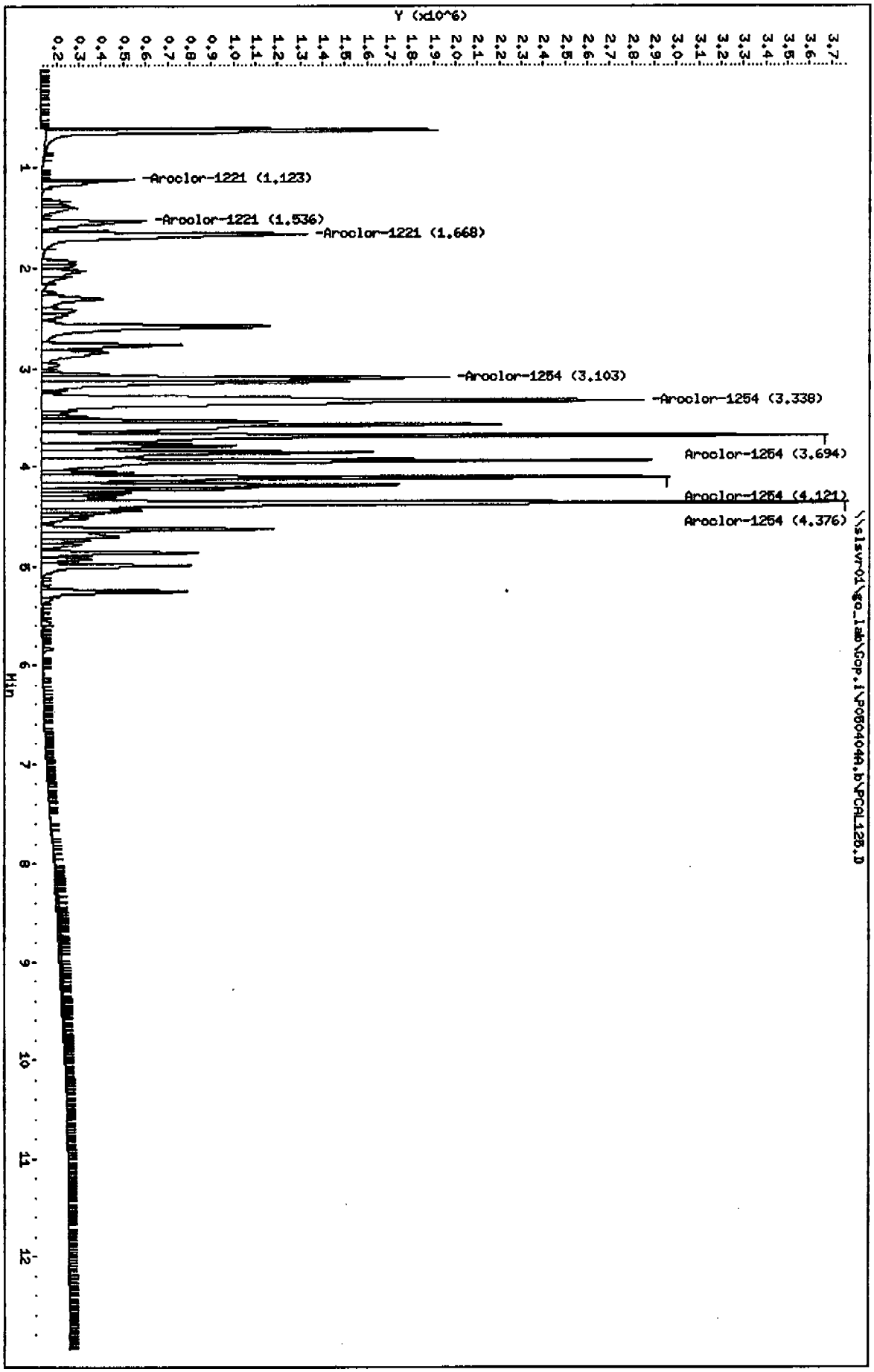
RT	EXP RT	DLT RT	AMOUNTS RESPONSE	CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
23 Aroclor-1221					CAS #: 11104-28-2		
1.122	1.122	0.000	407215	500.000	500.0	80.00- 120.00	100.00(M)
1.536	1.536	0.000	1259407	500.000	500.0	247.42- 371.13	309.27
1.667	1.667	0.000	3471051	500.000	500.0	681.91-1022.87	852.39
		Average of Peak Amounts =			500		
27 Aroclor-1254					CAS #: 11097-69-1		
3.102	3.102	0.000	3800823	500.000	500.0	80.00- 120.00	100.00(M)
3.337	3.337	0.000	10234178	500.000	500.0	215.41- 323.11	269.26
3.694	3.694	0.000	8097218	500.000	500.0	170.43- 255.65	213.04
4.121	4.121	0.000	5813590	500.000	500.0	122.36- 183.55	152.96
4.376	4.376	0.000	8402617	500.000	500.0	176.86- 265.29	221.07
		Average of Peak Amounts =			500		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 4/05/05

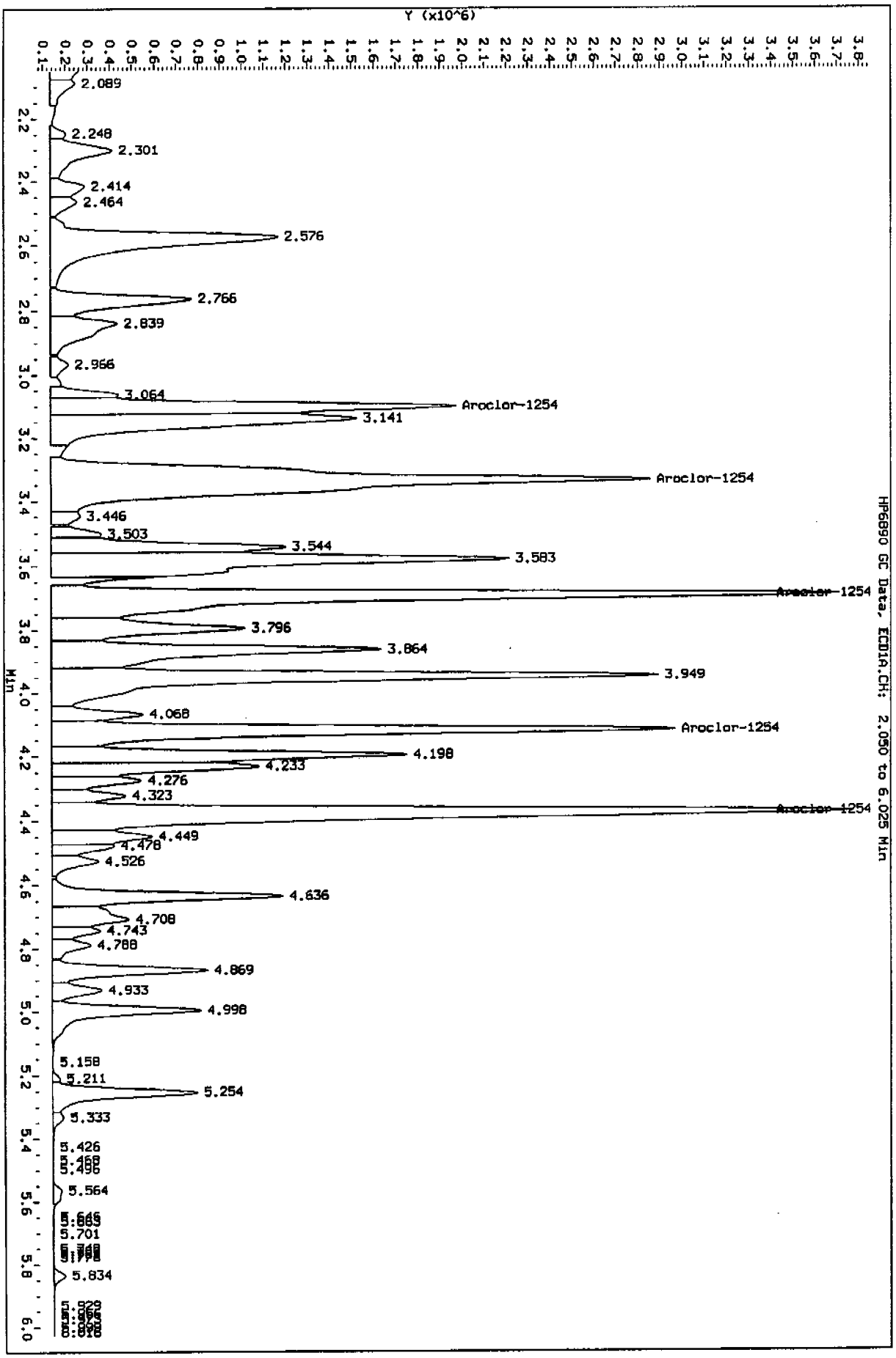
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\gc_lab\Gcp.1\P0804040.b\PCAL125.D
Date : 04-APR-2008 20:05
Client ID:
Sample Info: 1254
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.1
Operator: BLG
Column diameter: 0.53


Y (x10^6)
Min
Data File: \\elsvr01\gc_lab\Gcp.i\P050404A.b\PCAL125.D
Injection Date: 04-APR-2005 20:05
Instrument: Gcp.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH; 2.050 to 6.025 Min
2.089
2.248
2.301
2.414
2.464
2.576
2.766
2.839
2.966
3.064
Aroclor-1254
3.141
Aroclor-1254
3.446
3.503
3.544
3.583
Aroclor-1254
3.796
3.864
3.949
4.068
Aroclor-1254
4.198
4.233
4.276
4.323
Aroclor-1254
4.449
4.478
4.526
4.636
4.708
4.743
4.788
4.869
4.933
4.998
5.158
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5.254
5.333
5.426
5.564
5.701
5.834

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL126.D
Report Date: 05-Apr-2005 12:14

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL126.D
Lab Smp Id: 1262
Inj Date : 04-APR-2005 20:21
Operator : BLO Inst ID: Gcp.i
Smp Info : 1262
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:00 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 16 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1262.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

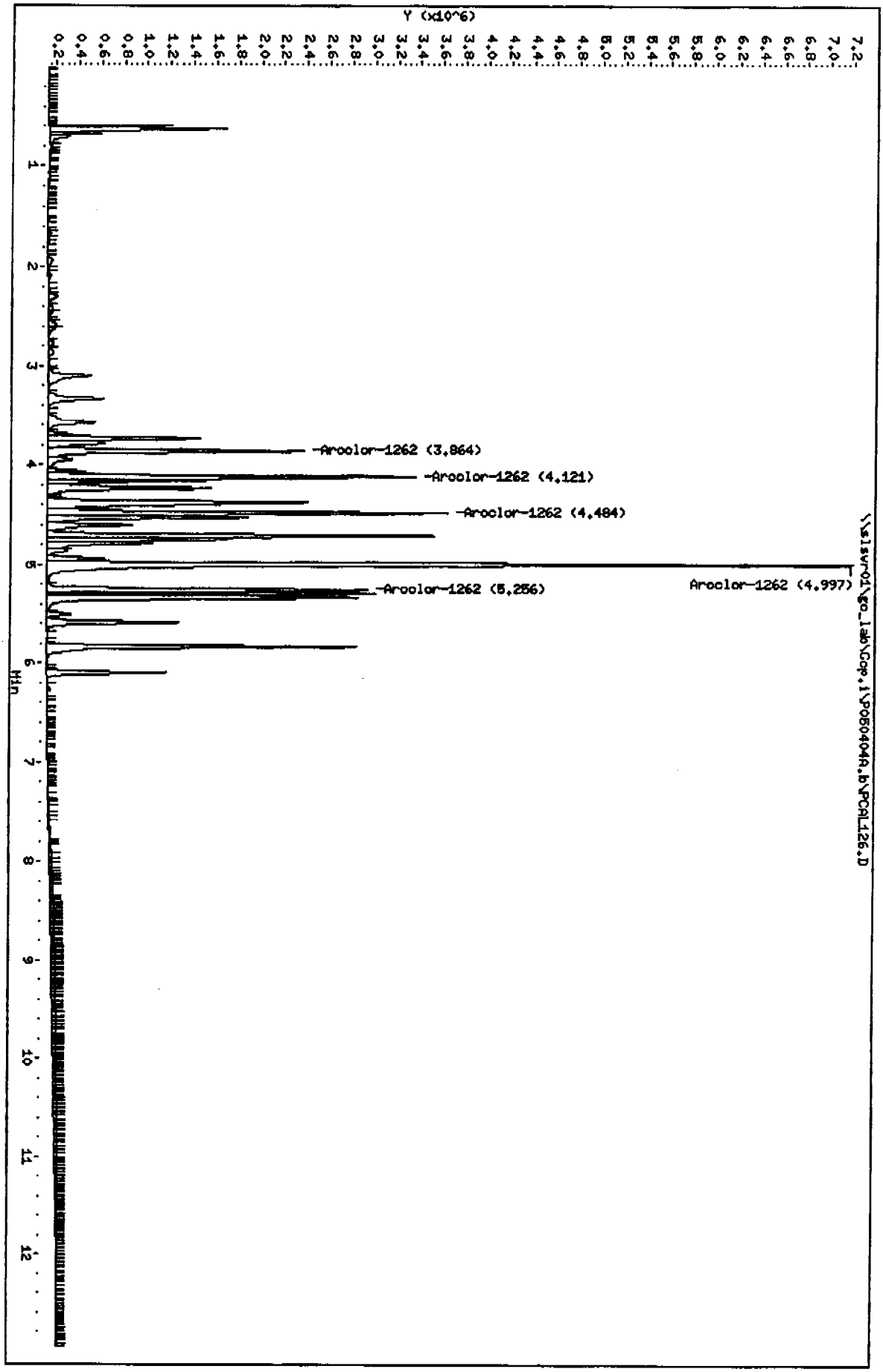
				AMOUNTS				
RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO	
35 Aroclor-1262					CAS #: 37324-23-5			
3.864	3.864	0.000	4739884	500.000	500.0	80.00- 120.00	100.00	(M)
4.120	4.120	0.000	6600035	500.000	500.0	111.40- 167.09	139.24	
4.484	4.484	0.000	7133757	500.000	500.0	120.40- 180.61	150.50	
4.997	4.997	0.000	15179184	500.000	500.0	256.20- 384.29	320.24	
5.255	5.255	0.000	5258404	500.000	500.0	88.75- 133.13	110.94	
		Average of Peak Amounts =			500			

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 4/05/05

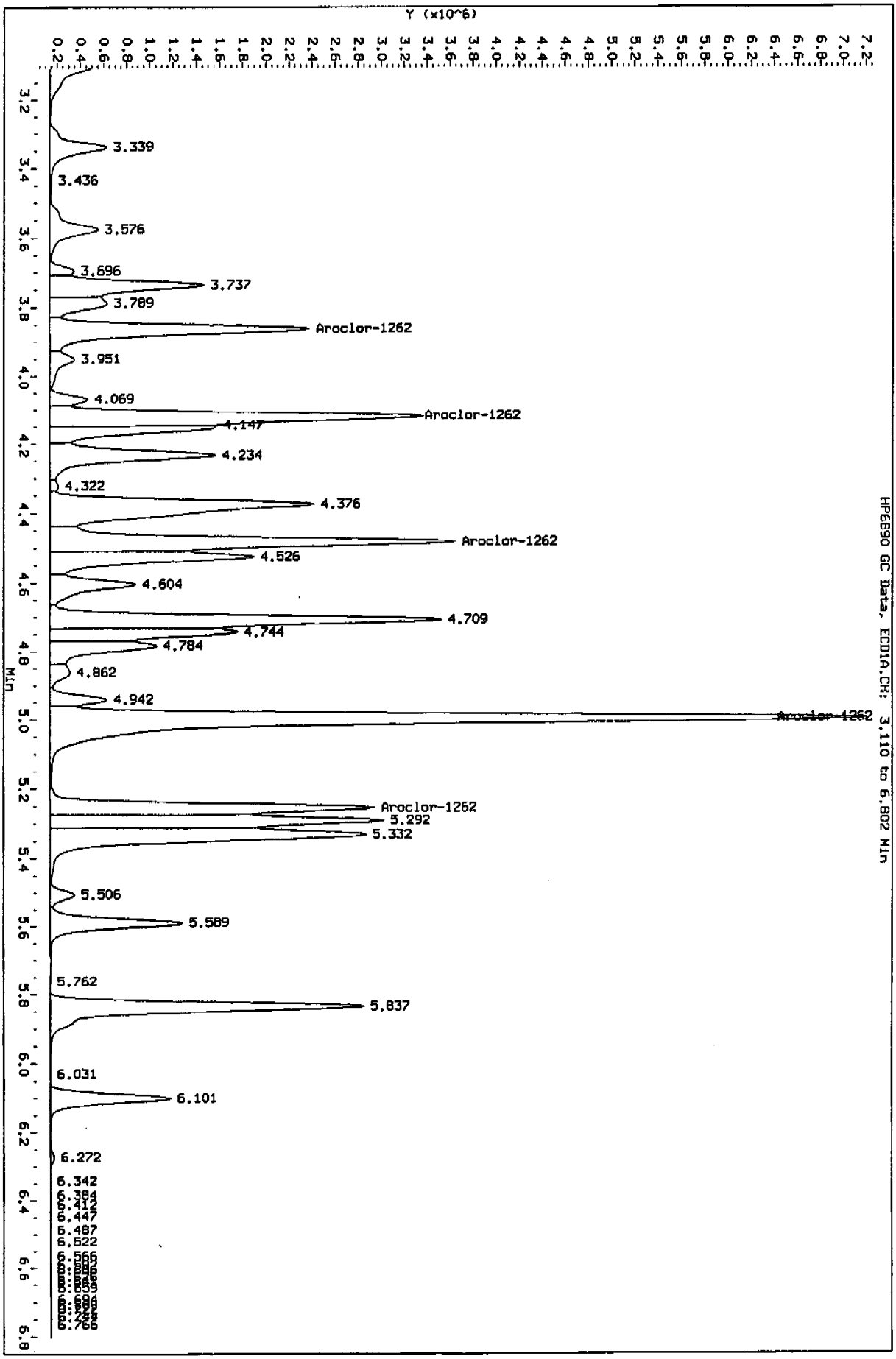
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL126.D
Date : 04-APR-2005 20:21
Client ID:
Sample Info: 1262
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
3.339
3.436
3.576
3.696
3.737
3.789
Aroclor-1262
3.951
4.069
Aroclor-1262
4.147
4.234
4.322
4.376
Aroclor-1262
4.526
4.604
4.709
4.744
4.784
4.862
4.942
Aroclor-1262
Aroclor-1262
5.292
5.332
5.506
5.589
5.762
5.837
6.031
6.101
6.272
6.342
6.384
6.412
6.447
6.487
6.522
HP6890 GC Data, ECD1A.CH: 3.110 to 6.802 Min
Data file: \\slsvr01\gc_lab\Gcp.1\P050404A.b\PCAL126.D
Injection Date: 04-APR-2005 20:21
Instrument: Gcp.1
Client Sample ID:

Data File: \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL127.D
Report Date: 05-Apr-2005 12:14

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PCAL127.D
Lab Smp Id: 1268
Inj Date : 04-APR-2005 20:37
Operator : BLO Inst ID: Gcp.i
Smp Info : 1268
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404A.b\PPCB05A.m
Meth Date : 05-Apr-2005 12:00 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 17 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1268.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

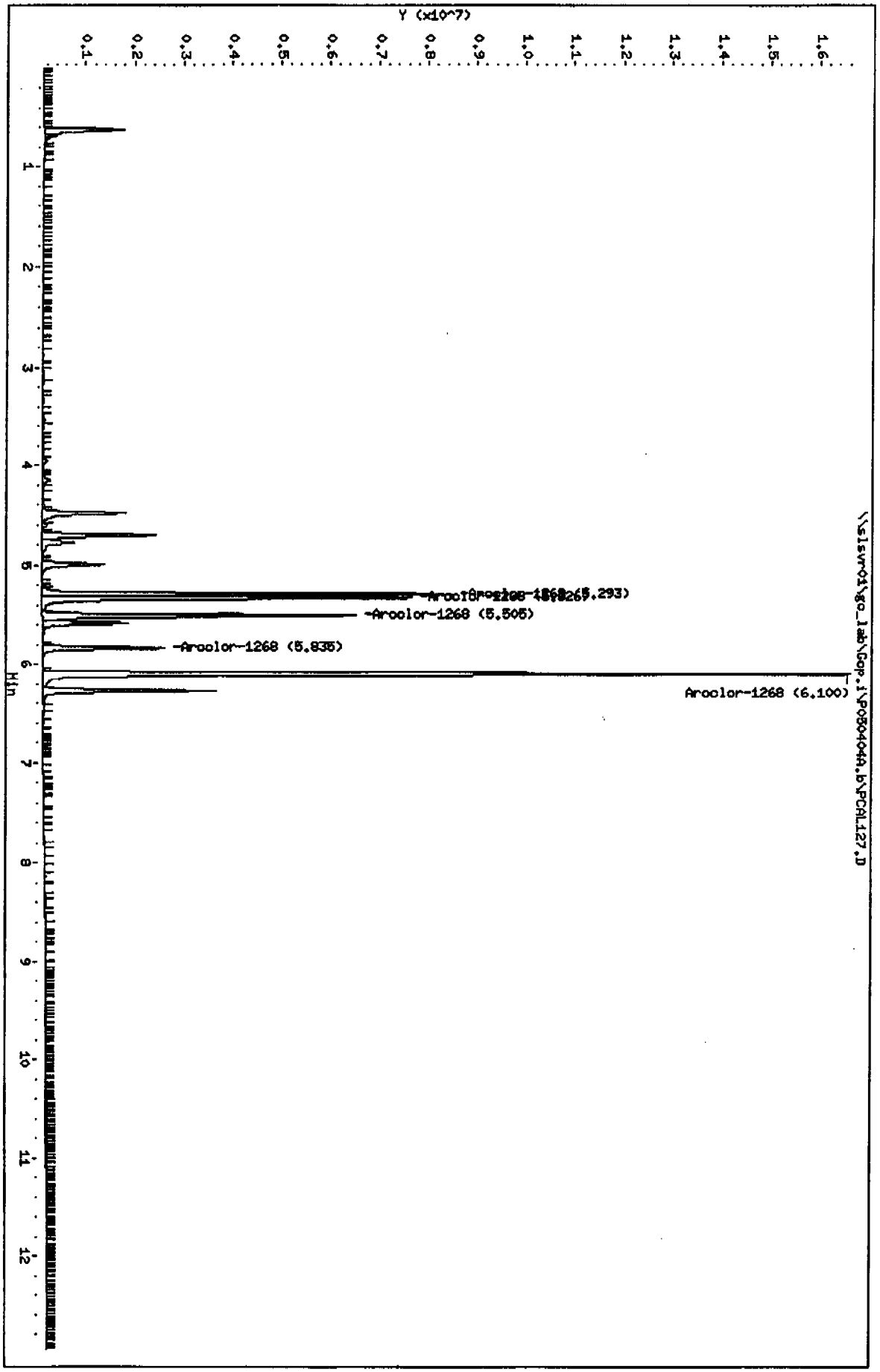
			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ng/mL)	TARGET RANGE	RATIO
36 Aroclor-1268					CAS #: 11100-14-4		
5.293	5.293	0.000	15612725	500.000	500.0	80.00- 120.00	100.00(M)
5.326	5.326	0.000	16211130	500.000	500.0	83.07- 124.60	103.83
5.504	5.504	0.000	12571036	500.000	500.0	64.41- 96.62	80.52
5.834	5.834	0.000	4978357	500.000	500.0	25.51- 38.26	31.89
6.099	6.099	0.000	32273411	500.000	500.0	165.37- 248.05	206.71
		Average of Peak Amounts =			500		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other_____

BLO 4/05/05

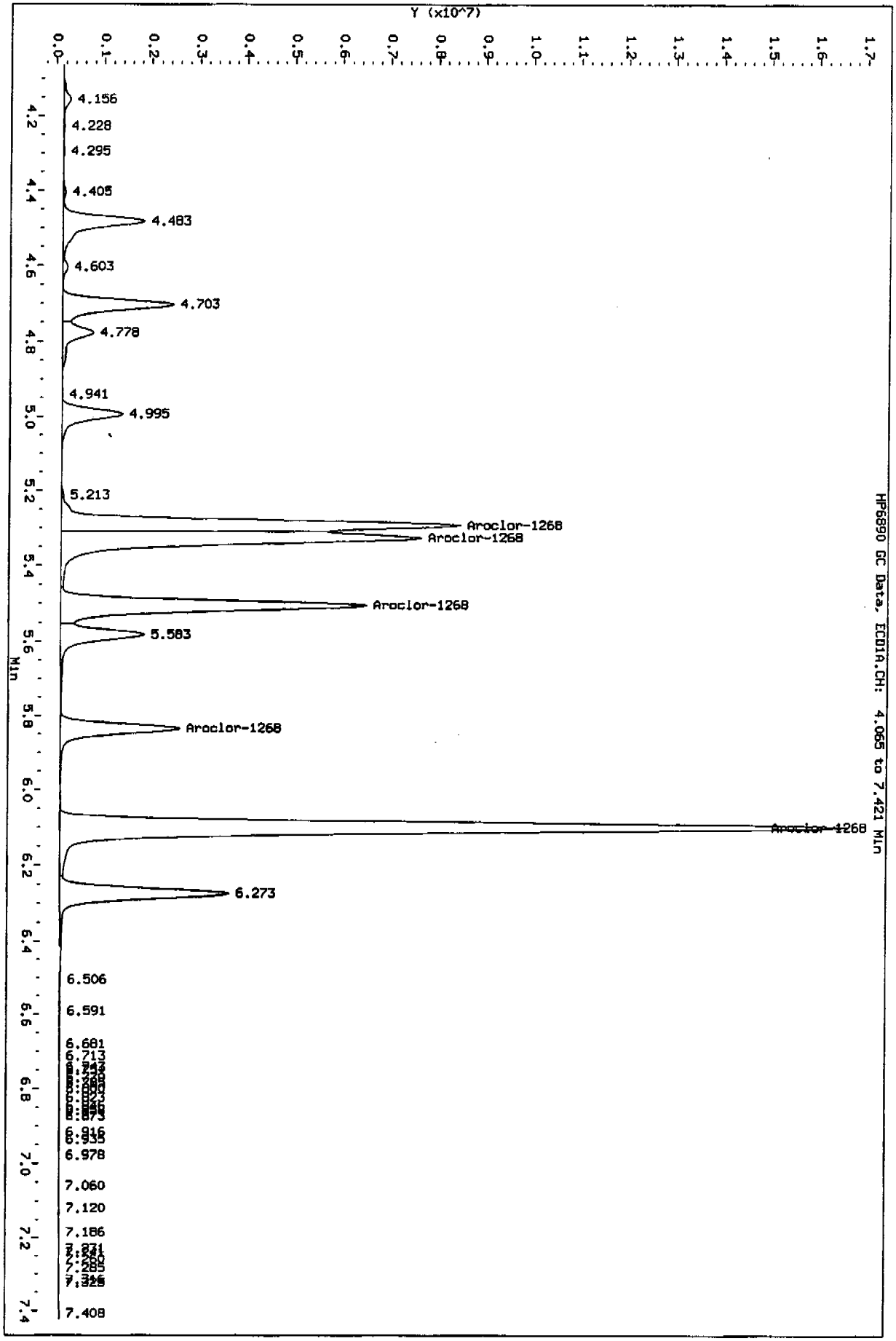
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\go_lab\Gcp.i\P0804044.b\PCAL127.D
Date : 04-APR-2008 20:37
Client ID:
Sample Info: 1268
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^7)
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
Min
4.2
4.4
4.6
4.8
5.0
5.2
5.4
5.6
5.8
6.0
6.2
6.4
6.6
6.8
7.0
7.2
7.4
4.156
4.228
4.295
4.405
4.483
4.603
4.703
4.778
4.941
4.995
5.213
Aroclor-1268
Aroclor-1268
Aroclor-1268
5.583
Aroclor-1268
Aroclor-1268
6.273
6.506
6.591
6.681
6.916
6.935
6.978
7.060
7.120
7.186
7.408
Data File: \\alsvr01\gc_lab\Gcp.i\P0504044.b\PCAL127.D
Injection Date: 04-APR-2005 20:37
Instrument: Gcp.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 4.065 to 7.421 Min

Report Date : 05-Apr-2005 12:09 Page 1

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 04-APR-2005 16:50
End Cal Date : 04-APR-2005 20:37
Quant Method : ESTD
Origin : Disabled
Target Version : 4.10
Integrator : Falcon
Method file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Cal Date : 05-Apr-2005 12:09 owenb
Curve Type : Average

Calibration File Names:
Level 2: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL114.D
Level 3: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL115.D
Level 4: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL127.D
Level 5: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL117.D
Level 6: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL118.D
Level 7: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL119.D
Level 8: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL120.D

BLO 4/05/05

Compound	100.000 Level 2	250.000 Level 3	500.000 Level 4	1000.000 Level 5	1500.000 Level 6	2500.000 Level 7	RRF	% RSD	
	4000.000 Level 8								
22 Aroclor-1016(1)	6608	5703	5266	4912	4407	4118			
	3982						5000	18.842	
(2)	12756	10998	10119	9373	8458	7831			
	7584						9588	19.385	
(3)	23996	21615	20199	18968	17424	16382			
	16051						19234	15.143	
(4)	10559	9288	8624	8085	7365	6784			
	6747						8208	17.055	
(5)	7784	6870	6516	6126	5611	5079			
	5036						6146	16.275	
23 Aroclor-1221(1)	+++++	+++++	2042	+++++	+++++	+++++			
	+++++						2042	0.000	<-
(2)	+++++	+++++	2683	+++++	+++++	+++++			
	+++++						2683	0.000	<-
(3)	+++++	+++++	6565	+++++	+++++	+++++			
	+++++						6565	0.000	<-
24 Aroclor-1232(1)	+++++	+++++	5966	+++++	+++++	+++++			
	+++++						5966	0.000	
(2)	+++++	+++++	4156	+++++	+++++	+++++			
	+++++						4156	0.000	
(3)	+++++	+++++	8450	+++++	+++++	+++++			

	+++++						8450	0.000
(4)	+++++	+++++	3254	+++++	+++++	+++++		
	+++++						3254	0.000
(5)	+++++	+++++	4227	+++++	+++++	+++++		
	+++++						4227	0.000

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 04-APR-2005 16:50
End Cal Date : 04-APR-2005 20:37
Quant Method : ESTD
Origin : Disabled
Target Version : 4.10
Integrator : Falcon
Method file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Cal Date : 05-Apr-2005 12:09 owenb
Curve Type : Average

Compound	100.000 Level 2 / 4000.000 Level 8	250.000 Level 3	500.000 Level 4	1000.000 Level 5	1500.000 Level 6	2500.000 Level 7	RRF	% RSD
25 Aroclor-1242(1)	+++++ / +++++	+++++	7652	+++++	+++++	+++++	7652	0.000
(2)	+++++ / +++++	+++++	3931	+++++	+++++	+++++	3931	0.000
(3)	+++++ / +++++	+++++	15020	+++++	+++++	+++++	15020	0.000
(4)	+++++ / +++++	+++++	7203	+++++	+++++	+++++	7203	0.000
(5)	+++++ / +++++	+++++	2867	+++++	+++++	+++++	2867	0.000
26 Aroclor-1248(1)	+++++ / +++++	+++++	5878	+++++	+++++	+++++	5878	0.000
(2)	+++++ / +++++	+++++	7920	+++++	+++++	+++++	7920	0.000
(3)	+++++ / +++++	+++++	10999	+++++	+++++	+++++	10999	0.000
(4)	+++++ / +++++	+++++	13226	+++++	+++++	+++++	13226	0.000
(5)	+++++ / +++++	+++++	5756	+++++	+++++	+++++	5756	0.000
27 Aroclor-1254(1)	+++++ / +++++	+++++	9588	+++++	+++++	+++++	9588	0.000
(2)	+++++ / +++++	+++++	10182	+++++	+++++	+++++	10182	0.000
(3)	+++++ / +++++	+++++	16192	+++++	+++++	+++++	16192	0.000
(4)	+++++	+++++	13191	+++++	+++++	+++++		

	+++++						13191	0.000
(5)	+++++	+++++	16683	+++++	+++++	+++++		
	+++++						16683	0.000

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 04-APR-2005 16:50
End Cal Date : 04-APR-2005 20:37
Quant Method : ESTD
Origin : Disabled
Target Version : 4.10
Integrator : Falcon
Method file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Cal Date : 05-Apr-2005 12:09 owenb
Curve Type : Average

Compound	100.000 Level 2	250.000 Level 3	500.000 Level 4	1000.000 Level 5	1500.000 Level 6	2500.000 Level 7	RRF	% RSD
	4000.000 Level 8							
28 Aroclor-1260(1)	15778	13988	12803	12065	11183	10453		
	10242						12359	16.224
(2)	17901	15880	14543	13650	12933	12172		
	11674						14107	15.579
(3)	16828	14998	13771	13100	12110	11279		
	11265						13336	15.374
(4)	14626	13147	12093	11494	10714	10022		
	9969						11723	14.624
(5)	29251	26673	24612	23388	22022	20950		
	20825						23960	13.060
35 Aroclor-1262(1)	+++++	+++++	9666	+++++	+++++	+++++		
	+++++						9666	0.000
(2)	+++++	+++++	11209	+++++	+++++	+++++		
	+++++						11209	0.000
(3)	+++++	+++++	14104	+++++	+++++	+++++		
	+++++						14104	0.000
(4)	+++++	+++++	19397	+++++	+++++	+++++		
	+++++						19397	0.000
(5)	+++++	+++++	10596	+++++	+++++	+++++		
	+++++						10596	0.000
36 Aroclor-1268(1)	+++++	+++++	30544	+++++	+++++	+++++		
	+++++						30544	0.000
(2)	+++++	+++++	29297	+++++	+++++	+++++		
	+++++						29297	0.000
(3)	+++++	+++++	23819	+++++	+++++	+++++		
	+++++						23819	0.000
(4)	+++++	+++++	9281	+++++	+++++	+++++		

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	+++++						9281	0.000
(5)	+++++	+++++	63014	+++++	+++++	+++++		
	+++++						63014	0.000

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INITIAL CALIBRATION DATA

Start Cal Date : 04-APR-2005 16:50
End Cal Date : 04-APR-2005 20:37
Quant Method : ESTD
Origin : Disabled
Target Version : 4.10
Integrator : Falcon
Method file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Cal Date : 05-Apr-2005 12:09 owenb
Curve Type : Average

Compound	100.000 Level 2	250.000 Level 3	500.000 Level 4	1000.000 Level 5	1500.000 Level 6	2500.000 Level 7	4000.000 Level 8	RRF	% RSD	
M 37 PCB (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
$ 32 Decachlorobiphenyl	246034 +++++	219512	200905	188715	176291	138561		195003	18.933	

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL114.D
Report Date: 05-Apr-2005 12:18

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL114.D
Lab Smp Id: ICAL2
Inj Date : 04-APR-2005 16:50
Operator : BLO Inst ID: Gcp.i
Smp Info : ICAL2
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:09 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

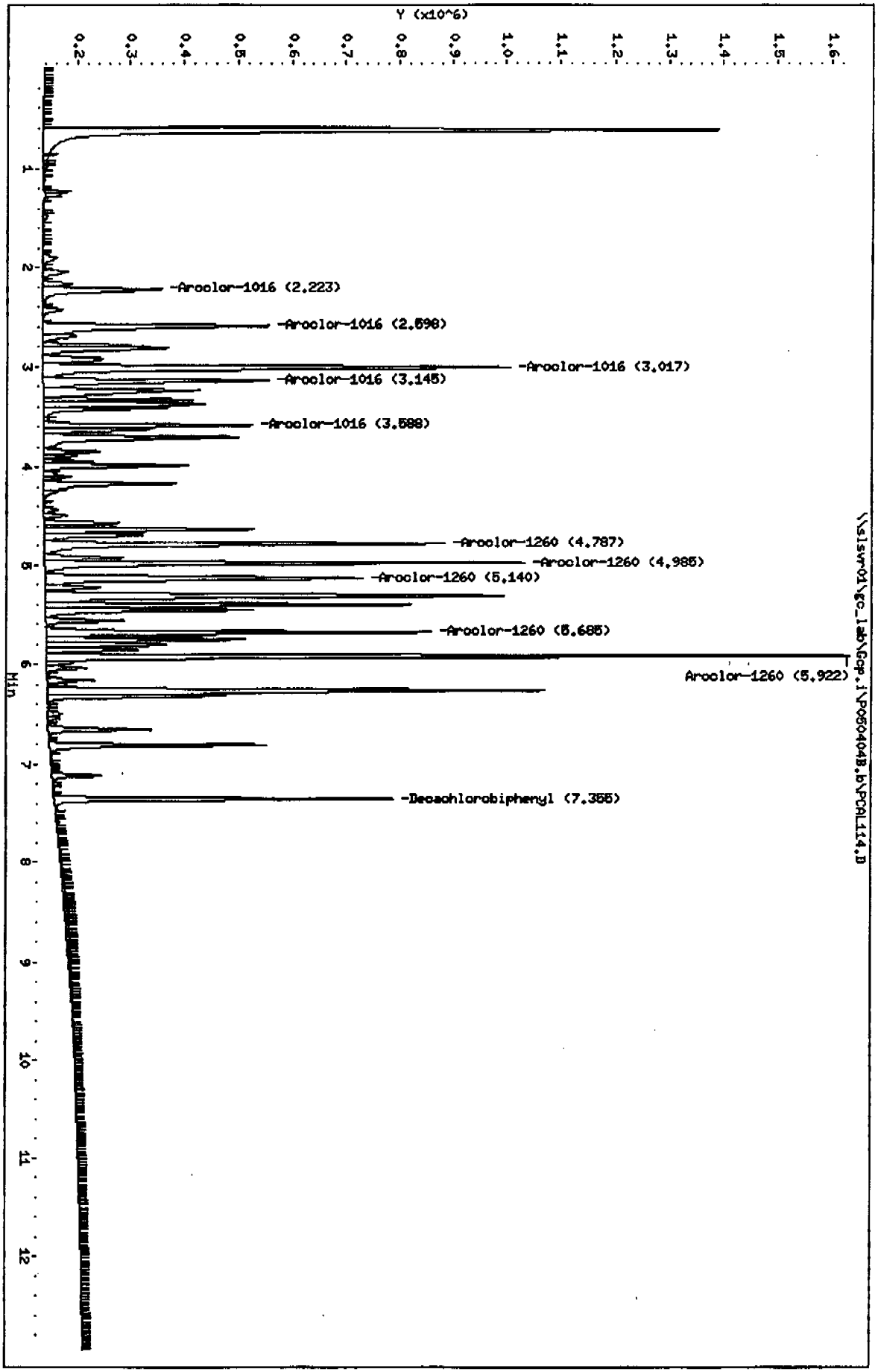
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)	TARGET RANGE	RATIO	
22 Aroclor-1016					CAS #: 12674-11-2			
2.223	2.223	0.000	660813	100.000	132.2	80.00- 120.00	100.00	(M)
2.598	2.598	0.000	1275551	100.000	133.0	164.40- 246.61	193.03	
3.016	3.016	0.000	2399649	100.000	124.8	337.81- 506.71	363.14	
3.145	3.145	0.000	1055937	100.000	128.6	144.30- 216.45	159.79	
3.588	3.590	-0.002	778448	100.000	126.6	106.98- 160.47	117.80	
		Average of Peak Amounts =			129.1			
28 Aroclor-1260					CAS #: 11096-82-5			
4.786	4.788	-0.002	1577760	100.000	127.7	80.00- 120.00	100.00	(M)
4.985	4.986	-0.001	1790102	100.000	126.9	87.40- 131.10	113.46	
5.140	5.140	0.000	1682766	100.000	126.2	85.10- 127.64	106.66	
5.685	5.685	0.000	1462591	100.000	124.8	67.08- 100.62	92.70	
5.921	5.923	-0.002	2925099	100.000	122.1	130.81- 196.21	185.40	
		Average of Peak Amounts =			125.5			
$ 32 Decachlorobiphenyl					CAS #:			
7.355	7.355	0.000	1230171	5.00000	6.308			(M)

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other _____

BLO 4/05/05

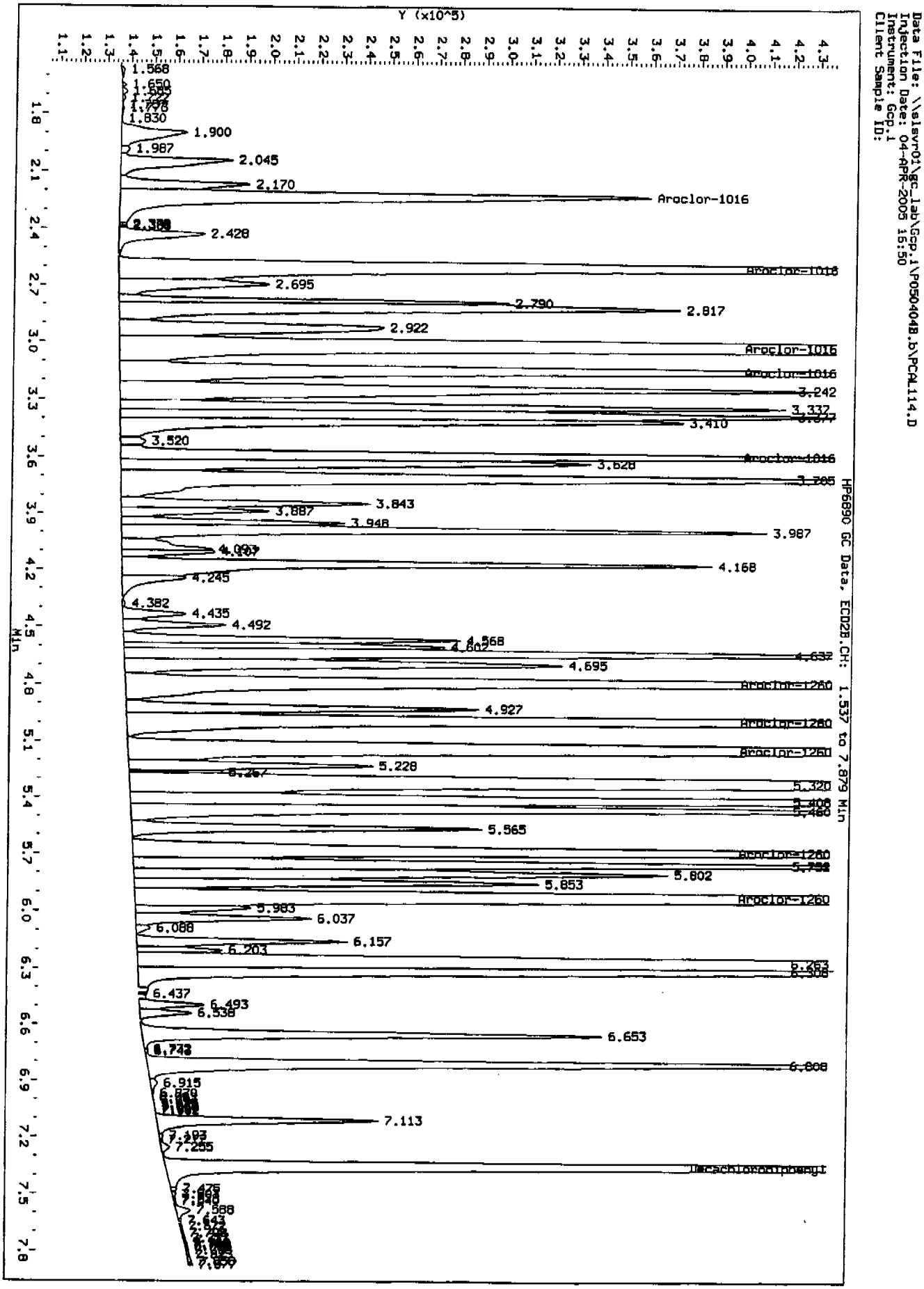
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL114.D
Date : 04-APR-2005 16:50
Client ID:
Sample Info: ICAL2
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLD
Column diameter: 0.53


Y (x10^5)
Min
HP6890 GC Data, ECD2B.CH: 1.537 to 7.879 Min
Data File: \\slsvr01\gc_lab\Gcp.1\P0504048.b\PCAL114.D
Injection Date: 04-APR-2005 15:50
Instrument: Gcp.1
Client Sample ID:
1.568
1.650
1.830
1.900
1.987
2.045
2.170
Aroclor-1016
2.428
Aroclor-1016
2.695
2.790
2.817
2.922
Aroclor-1016
Aroclor-1016
3.242
3.332
3.410
3.520
Aroclor-1016
3.628
3.705
3.843
3.887
3.948
3.987
4.168
4.245
4.382
4.435
4.492
4.695
Aroclor-1260
4.927
Aroclor-1260
Aroclor-1260
5.228
5.320
5.565
Aroclor-1260
5.802
5.853
Aroclor-1260
5.983
6.037
6.088
6.157
6.203
6.437
6.493
6.538
6.653
6.915
7.113
7.193
7.255
Decachlorobiphenyl
7.588

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL115.D
Report Date: 05-Apr-2005 12:18

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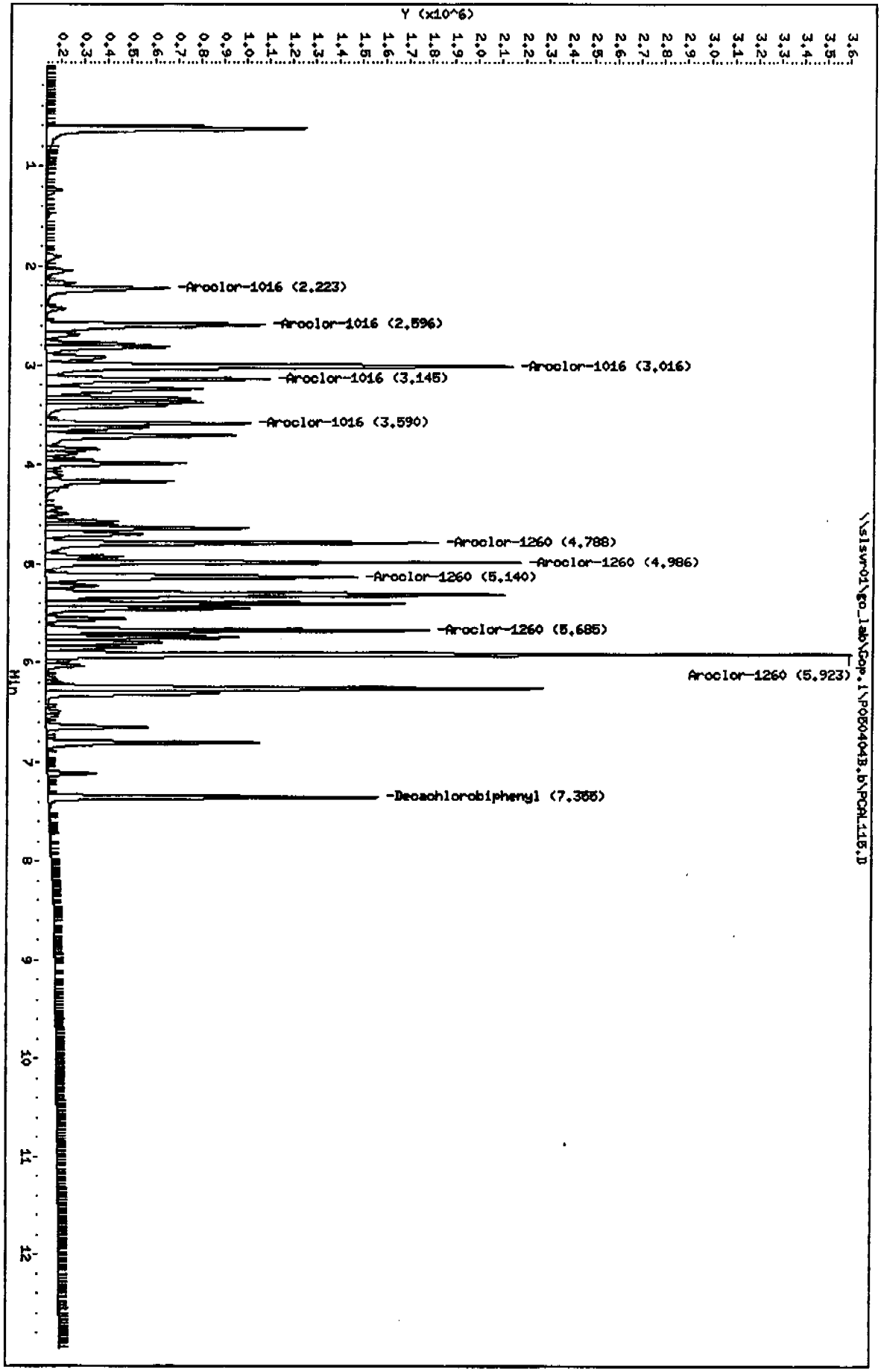
Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL115.D
Lab Smp Id: ICAL3
Inj Date : 04-APR-2005 17:07
Operator : BLO Inst ID: Gcp.i
Smp Info : ICAL3
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:09 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

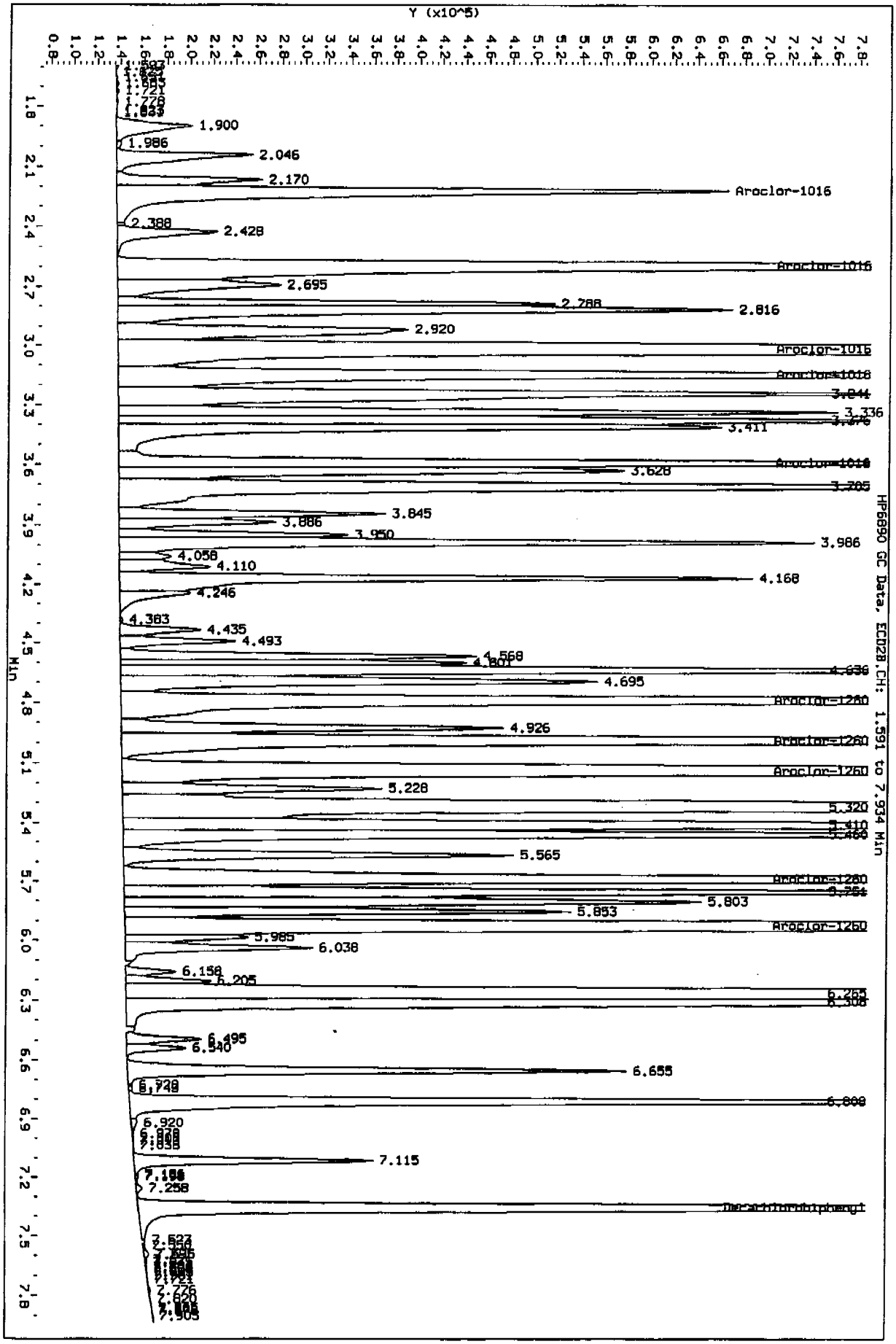
				AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.222	2.223	-0.001	1425823	250.000	285.2	80.00- 120.00	100.00
2.596	2.598	-0.002	2749476	250.000	286.8	164.40- 246.61	192.83
3.016	3.016	0.000	5403796	250.000	281.0	337.81- 506.71	378.99
3.144	3.145	-0.001	2322118	250.000	282.9	144.30- 216.45	162.86
3.589	3.590	-0.001	1717425	250.000	279.4	106.98- 160.47	120.45
		Average of Peak Amounts =			283.1		
28 Aroclor-1260					CAS #: 11096-82-5		
4.787	4.788	-0.001	3497107	250.000	283.0	80.00- 120.00	100.00
4.986	4.986	0.000	3969999	250.000	281.4	87.40- 131.10	113.52
5.139	5.140	-0.001	3749501	250.000	281.2	85.10- 127.64	107.22
5.684	5.685	-0.001	3286824	250.000	280.4	67.08- 100.62	93.99
5.922	5.923	-0.001	6668191	250.000	278.3	130.81- 196.21	190.68
		Average of Peak Amounts =			280.8		
$ 32 Decachlorobiphenyl					CAS #:		
7.354	7.355	-0.001	2743904	12.5000	14.07		

BLO 4/05/05



Data File: \\slsvr01\go_lab\Gop.i\P050404B.b\PCAL115.D
Date : 04-APR-2005 17:07
Client ID:
Sample Info: ICAL3
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gop.i
Operator: BLO
Column diameter: 0.53


Y (x10^5)
Min
1.900
1.986
2.046
2.170
Aroclor-1016
2.388
2.428
Aroclor-1016
2.695
2.788
2.816
2.920
Aroclor-1016
Aroclor-1016
3.336
3.411
Aroclor-1016
3.628
3.705
3.845
3.886
3.950
3.986
4.058
4.110
4.168
4.246
4.363
4.435
4.493
4.568
4.695
Aroclor-1260
4.926
Aroclor-1260
Aroclor-1260
5.228
5.320
5.565
Aroclor-1260
5.803
5.853
Aroclor-1260
5.985
6.038
6.158
6.205
6.495
6.655
6.920
7.115
7.258
Decachlorobiphenyl
HP6890 GC Data, ECD2B.CH: 1.591 to 7.934 Min
Data File: \\slsvr01\gc_lab\Gcp.1\P050404B.b\PCAL115.D
Injection Date: 04-APR-2005 17:07
Instrument: Gcp.1
Client Sample ID:

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL116.D Page 1
Report Date: 05-Apr-2005 12:18

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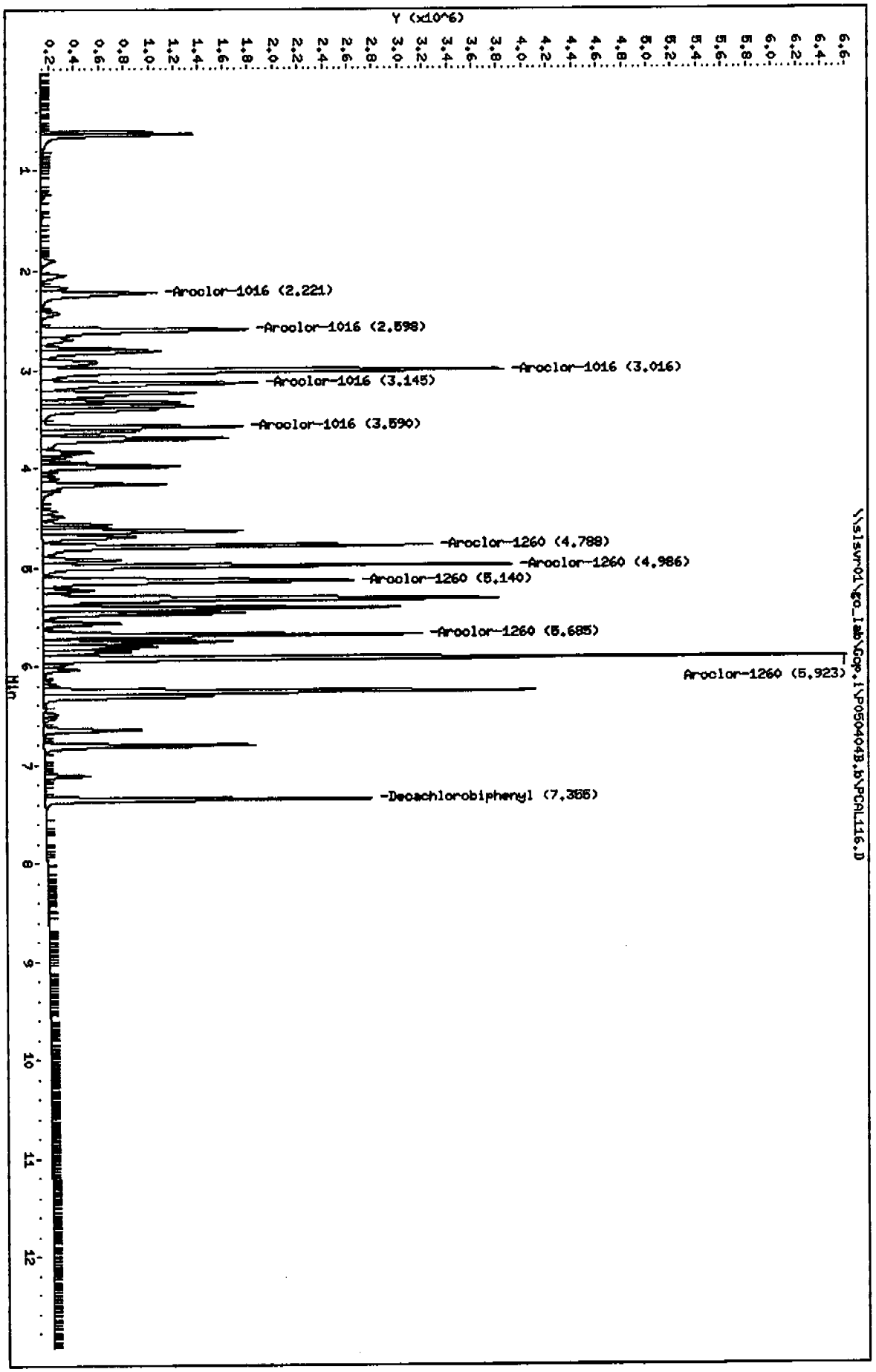
Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL116.D
Lab Smp Id: ICAL4
Inj Date : 04-APR-2005 17:23
Operator : BLO Inst ID: Gcp.i
Smp Info : ICAL4
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:09 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

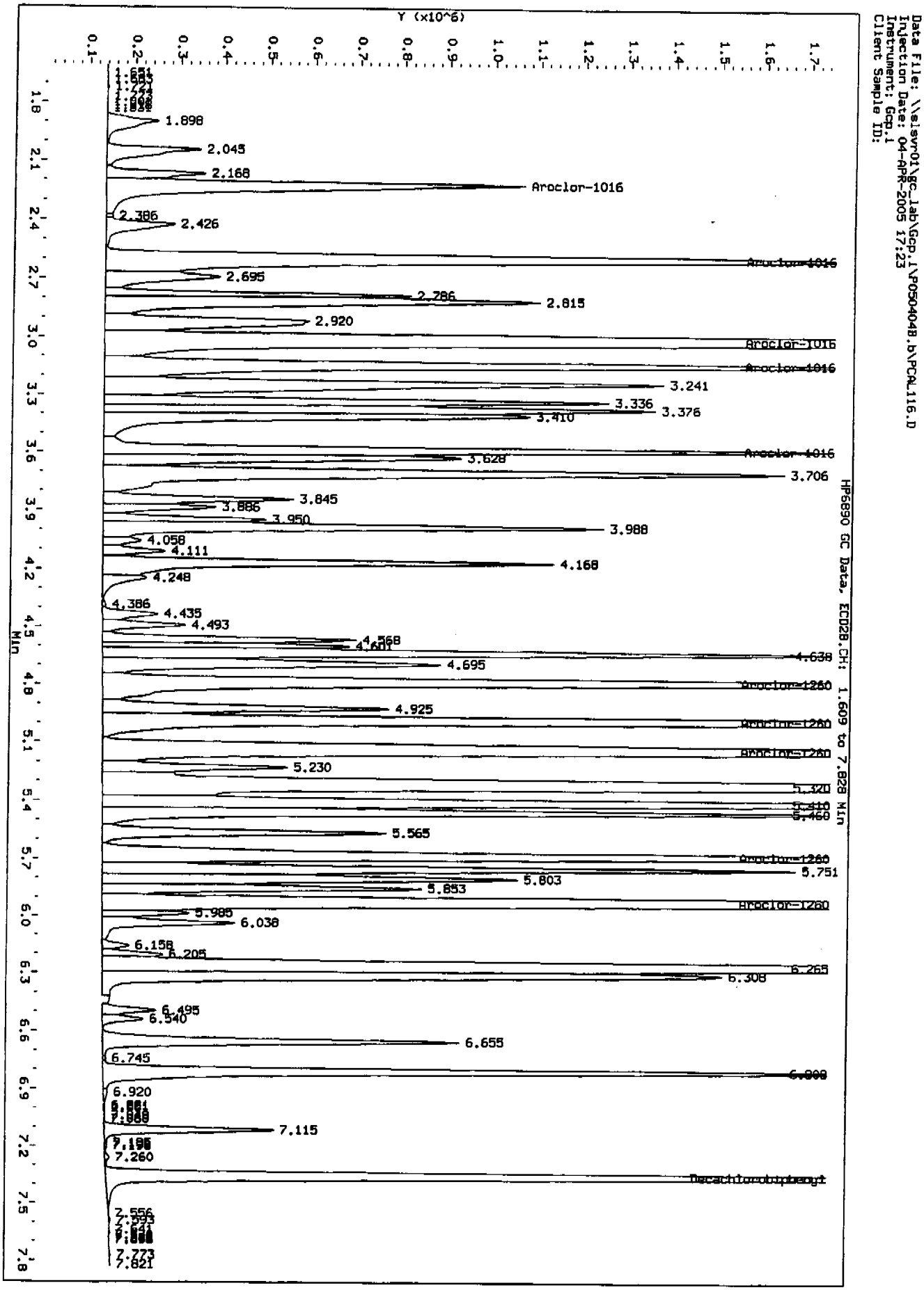
				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.221	2.223	-0.002	2632961	500.000	526.6	80.00- 120.00	100.00
2.597	2.598	-0.001	5059471	500.000	527.7	164.40- 246.61	192.16
3.016	3.016	0.000	10099413	500.000	525.1	337.81- 506.71	383.58
3.144	3.145	-0.001	4311817	500.000	525.3	144.30- 216.45	163.76
3.589	3.590	-0.001	3257841	500.000	530.1	106.98- 160.47	123.73
Average of Peak Amounts =					527		
28 Aroclor-1260					CAS #: 11096-82-5		
4.787	4.788	-0.001	6401738	500.000	518.0	80.00- 120.00	100.00
4.986	4.986	0.000	7271274	500.000	515.4	87.40- 131.10	113.58
5.139	5.140	-0.001	6885446	500.000	516.3	85.10- 127.64	107.56
5.684	5.685	-0.001	6046266	500.000	515.7	67.08- 100.62	94.45
5.922	5.923	-0.001	12305788	500.000	513.6	130.81- 196.21	192.23
Average of Peak Amounts =					515.8		
$ 32 Decachlorobiphenyl					CAS #:		
7.354	7.355	-0.001	5022615	25.0000	25.76		

BLO 4/05/05



Data File: \\slsvr01\go_lab\Gcp.i\P050404B.b\PCAL116.D
Date : 04-APR-2005 17:23
Client ID:
Sample Info: ICAL4
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
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0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
Min
1.8
2.1
2.4
2.7
3.0
3.3
3.6
3.9
4.2
4.5
4.8
5.1
5.4
5.7
6.0
6.3
6.6
6.9
7.2
7.5
7.8
1.898
2.045
2.168
Aroclor-1016
2.386
2.426
2.695
2.786
2.815
2.920
3.241
3.336
3.376
3.410
3.628
3.706
3.845
3.886
3.950
3.988
4.058
4.111
4.168
4.248
4.386
4.435
4.493
4.695
4.925
5.230
5.565
5.751
5.803
5.853
5.985
6.038
6.158
6.205
6.308
6.495
6.540
6.655
6.745
6.920
7.115
7.260
7.556
7.773
7.821
Data File: \\slsvr01\gc_lab\Gcp.1\P050404B.b\PCAL116.D
Injection Date: 04-APR-2005 17:23
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data, ECD2B.Ch: 1.609 to 7.828 Min

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL117.D
Report Date: 05-Apr-2005 12:19

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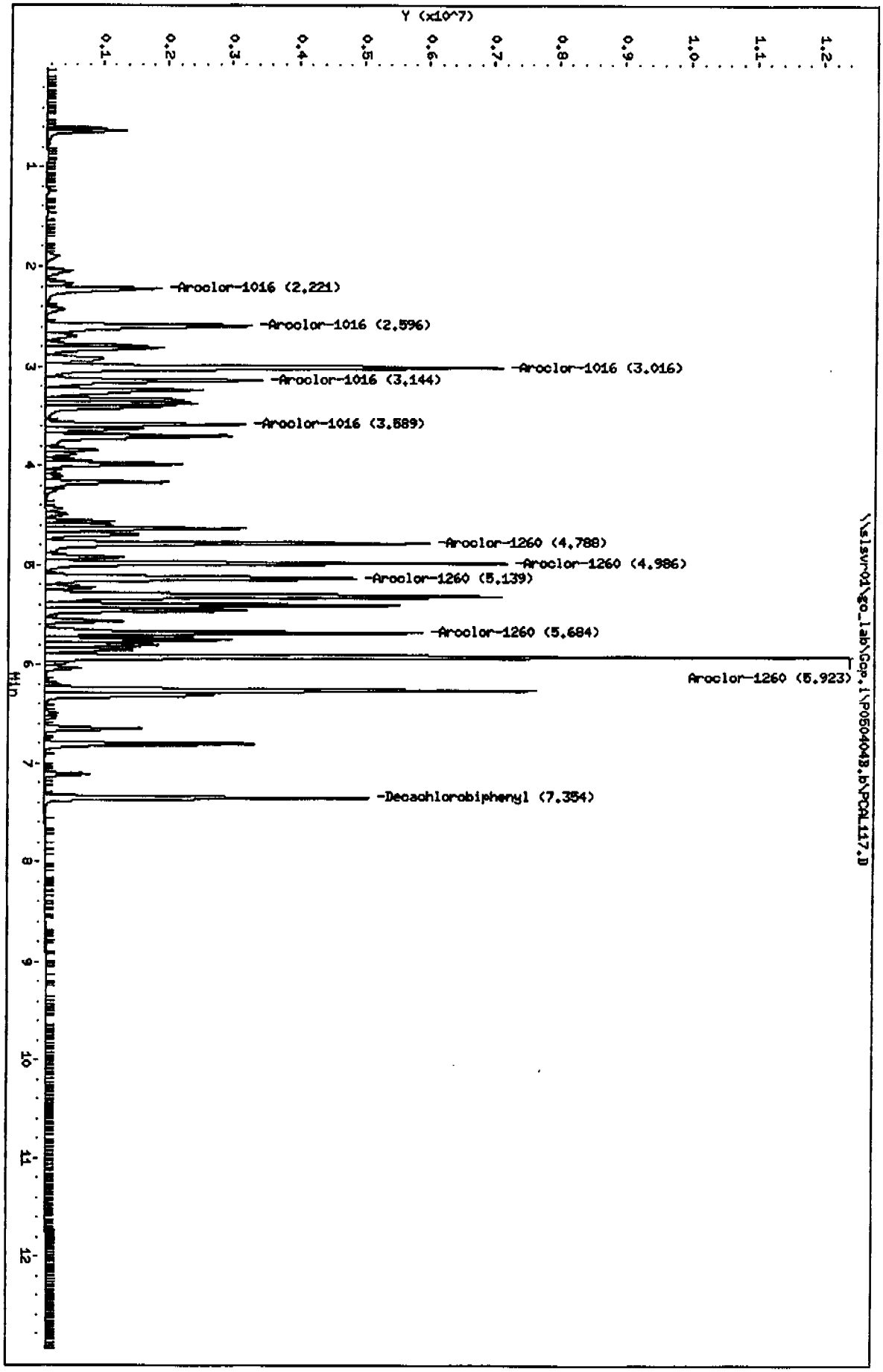
Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL117.D
Lab Smp Id: ICAL5
Inj Date : 04-APR-2005 17:39
Operator : BLO Inst ID: Gcp.i
Smp Info : ICAL5
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:09 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

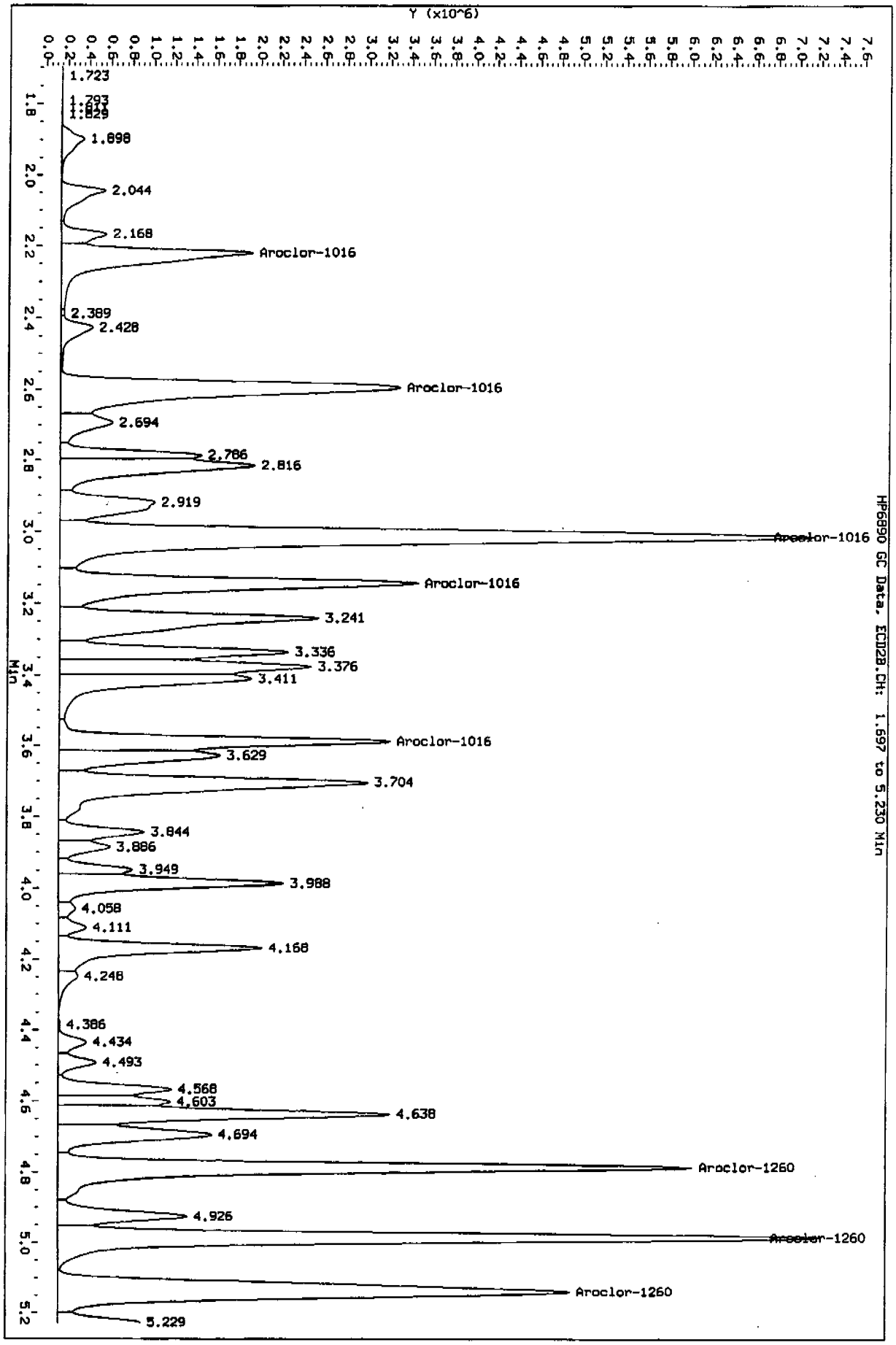
				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.221	2.223	-0.002	4912099	1000.00	982.5	80.00- 120.00	100.00
2.596	2.598	-0.002	9372530	1000.00	977.5	164.40- 246.61	190.80
3.016	3.016	0.000	18967867	1000.00	986.2	337.81- 506.71	386.15
3.144	3.145	-0.001	8084814	1000.00	985.0	144.30- 216.45	164.59
3.589	3.590	-0.001	6126297	1000.00	996.8	106.98- 160.47	124.72
		Average of Peak Amounts =			985.6		
28 Aroclor-1260					CAS #: 11096-82-5		
4.787	4.788	-0.001	12064522	1000.00	976.2	80.00- 120.00	100.00
4.986	4.986	0.000	13649861	1000.00	967.6	87.40- 131.10	113.14
5.139	5.140	-0.001	13099792	1000.00	982.3	85.10- 127.64	108.58
5.684	5.685	-0.001	11493646	1000.00	980.4	67.08- 100.62	95.27
5.922	5.923	-0.001	23387749	1000.00	976.1	130.81- 196.21	193.86
		Average of Peak Amounts =			976.5		
$ 32 Decachlorobiphenyl					CAS #:		
7.354	7.355	-0.001	9435757	50.0000	48.39		

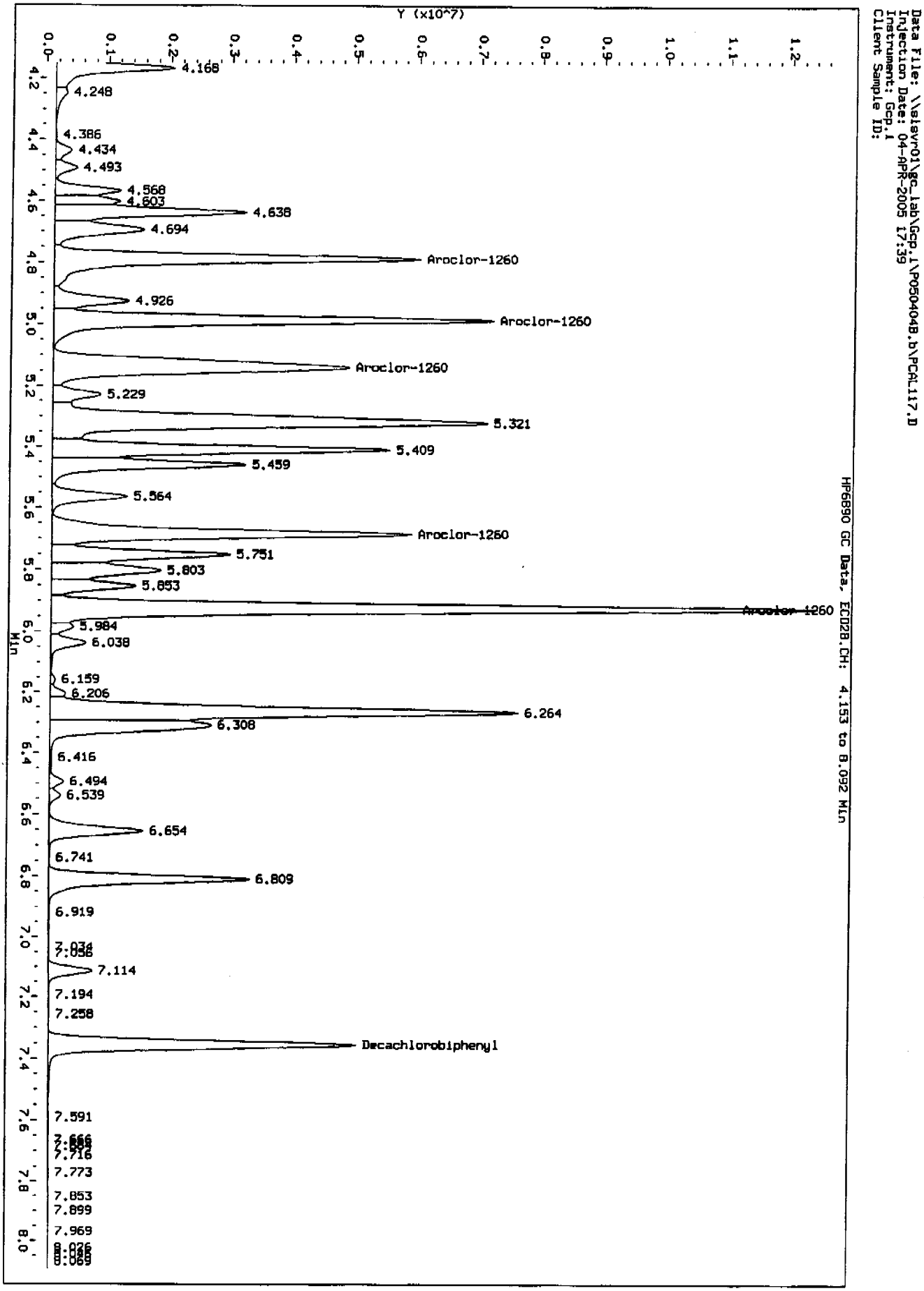
BLO 4/05/05



Data File: \\slsvr01\go_lab\Gcp.i\P0504043.b\PCAL117.D
Date : 04-APR-2005 17:39
Client ID:
Sample Info: ICAL5
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
1.723
1.793
1.827
1.829
1.898
2.044
2.168
Aroclor-1016
2.389
2.428
Aroclor-1016
2.694
2.766
2.816
2.919
Aroclor-1016
Aroclor-1016
3.241
3.336
3.376
3.411
Aroclor-1016
3.629
3.704
3.844
3.886
3.949
3.988
4.058
4.111
4.168
4.248
4.386
4.434
4.493
4.568
4.603
4.638
4.694
Aroclor-1260
4.926
Aroclor-1260
Aroclor-1260
5.229
Data File: \\slevr01\gc_lab\Gcp.1\P050404B.b\PCAL117.D
Injection Date: 04-APR-2005 17:39
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 1.697 to 5.230 Min


Y (x10^7)
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0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
4.168
4.248
4.386
4.434
4.493
4.568
4.603
4.638
4.694
Aroclor-1260
4.926
Aroclor-1260
Aroclor-1260
5.229
5.321
5.409
5.459
5.564
Aroclor-1260
5.751
5.803
5.853
Aroclor-1260
5.984
6.038
6.159
6.206
6.264
6.308
6.416
6.494
6.539
6.654
6.741
6.809
6.919
7.034
7.056
7.114
7.194
7.258
Decachlorobiphenyl
7.591
7.716
7.773
7.853
7.899
7.969
8.026
8.069
Min
4.2
4.4
4.6
4.8
5.0
5.2
5.4
5.6
5.8
6.0
6.2
6.4
6.6
6.8
7.0
7.2
7.4
7.6
7.8
8.0
Data File: \\stlsvr01\gc_lab\Gcp.1\P050404B.b\PCAL117.D
Injection Date: 04-APR-2005 17:39
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data, ECD2B.CH; 4.153 to 8.092 Min

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL118.D
Report Date: 05-Apr-2005 12:19

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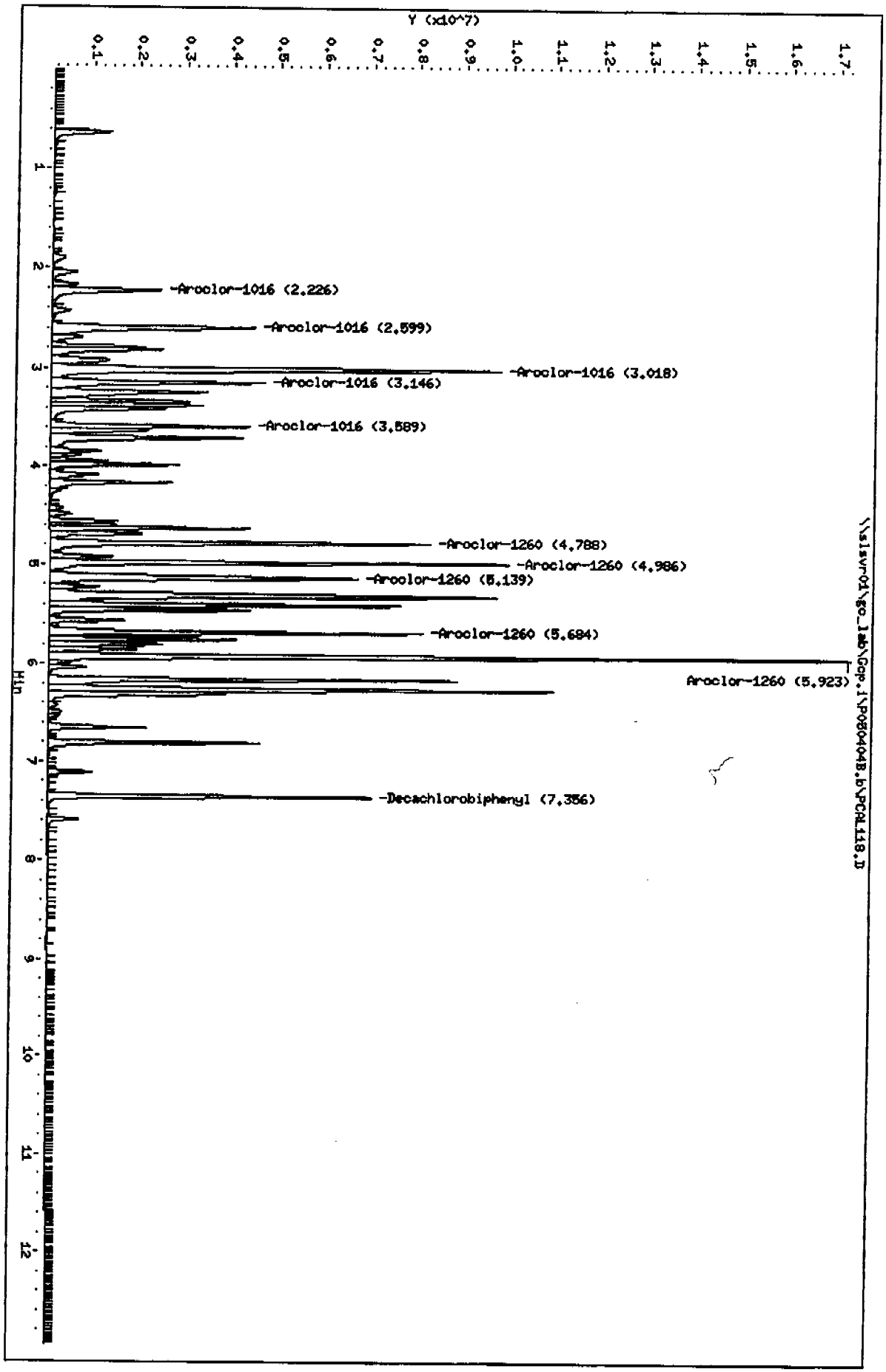
Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL118.D
Lab Smp Id: ICAL6
Inj Date : 04-APR-2005 17:55
Operator : BLO Inst ID: Gcp.i
Smp Info : ICAL6
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:09 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

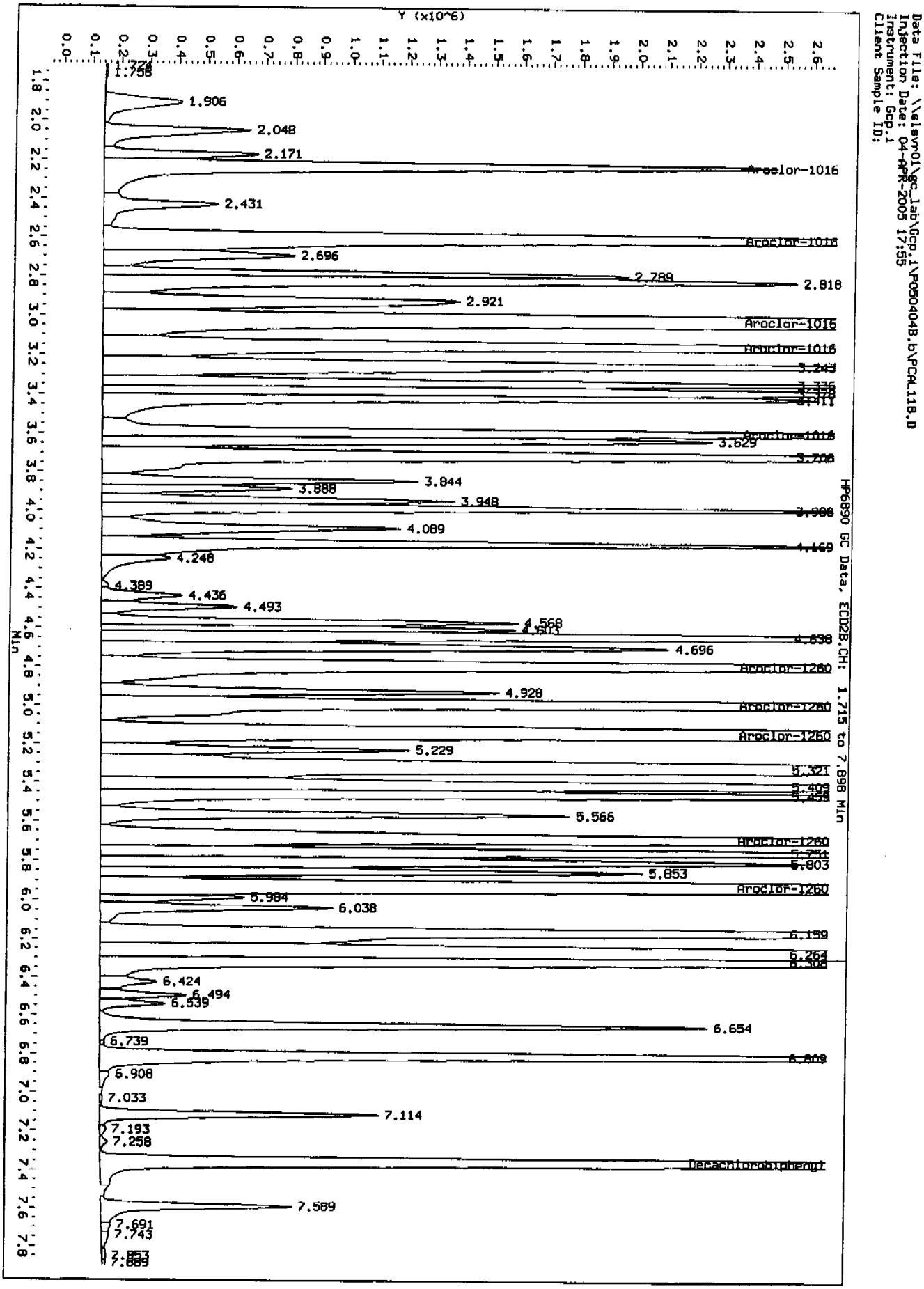
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.225	2.223	0.002	6610679	1500.00	1322	80.00- 120.00	100.00
2.599	2.598	0.001	12686999	1500.00	1323	164.40- 246.61	191.92
3.017	3.016	0.001	26136421	1500.00	1359	337.81- 506.71	395.37
3.145	3.145	0.000	11047796	1500.00	1346	144.30- 216.45	167.12
3.589	3.590	-0.001	8417213	1500.00	1370	106.98- 160.47	127.33
	Average of Peak Amounts =				1344		
28 Aroclor-1260					CAS #: 11096-82-5		
4.787	4.788	-0.001	16774252	1500.00	1357	80.00- 120.00	100.00
4.985	4.986	-0.001	19399382	1500.00	1375	87.40- 131.10	115.65
5.139	5.140	-0.001	18164635	1500.00	1362	85.10- 127.64	108.29
5.684	5.685	-0.001	16070723	1500.00	1371	67.08- 100.62	95.81
5.922	5.923	-0.001	33033231	1500.00	1379	130.81- 196.21	196.93
	Average of Peak Amounts =				1369		
$ 32 Decachlorobiphenyl					CAS #:		
7.355	7.355	0.000	13221826	75.0000	67.80		

BLO 4/05/05



Data File: \\slsvr01\go_lab\Gcp.i\P050404B.b\PCAL118.D
Date : 04-APR-2005 17:55
Client ID:
Sample Info: ICAL6
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
HP6890 GC Data, ECD2B.CH: 1.715 to 7.898 Min
Data File: \\alavr01\gc_lab\Gcp.1\P0504048.b\PCAL118.D
Injection Date: 04-APR-2005 17:55
Instrument: Gcp.1
Client Sample ID:
1.758
1.906
2.048
2.171
Aroclor-1016
2.431
Aroclor-1016
2.696
2.789
2.818
2.921
Aroclor-1016
Aroclor-1016
3.243
3.629
3.706
3.844
3.888
3.948
4.089
4.248
4.389
4.436
4.493
4.696
Aroclor-1260
4.928
Aroclor-1260
Aroclor-1260
5.229
5.321
5.566
Aroclor-1260
5.803
5.853
Aroclor-1260
5.984
6.038
6.159
6.264
6.424
6.494
6.539
6.654
6.739
6.809
6.908
7.033
7.114
7.193
7.258
Decachlorobiphenyl
7.589
7.691
7.743

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL119.D
Report Date: 05-Apr-2005 12:19

STL St. Louis

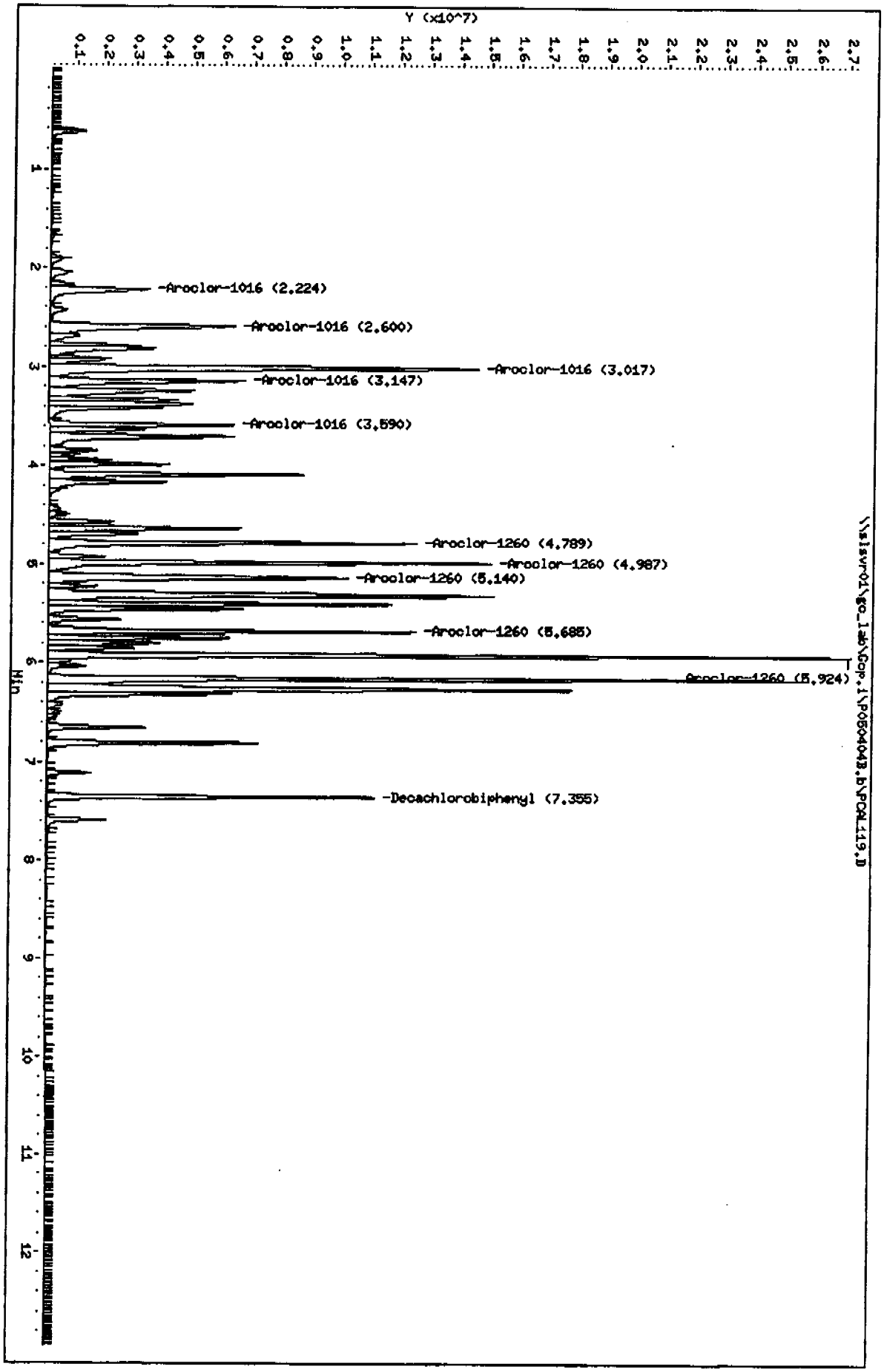
Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL119.D
Lab Smp Id: ICAL7
Inj Date : 04-APR-2005 18:11
Operator : BLO Inst ID: Gcp.i
Smp Info : ICAL7
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:09 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

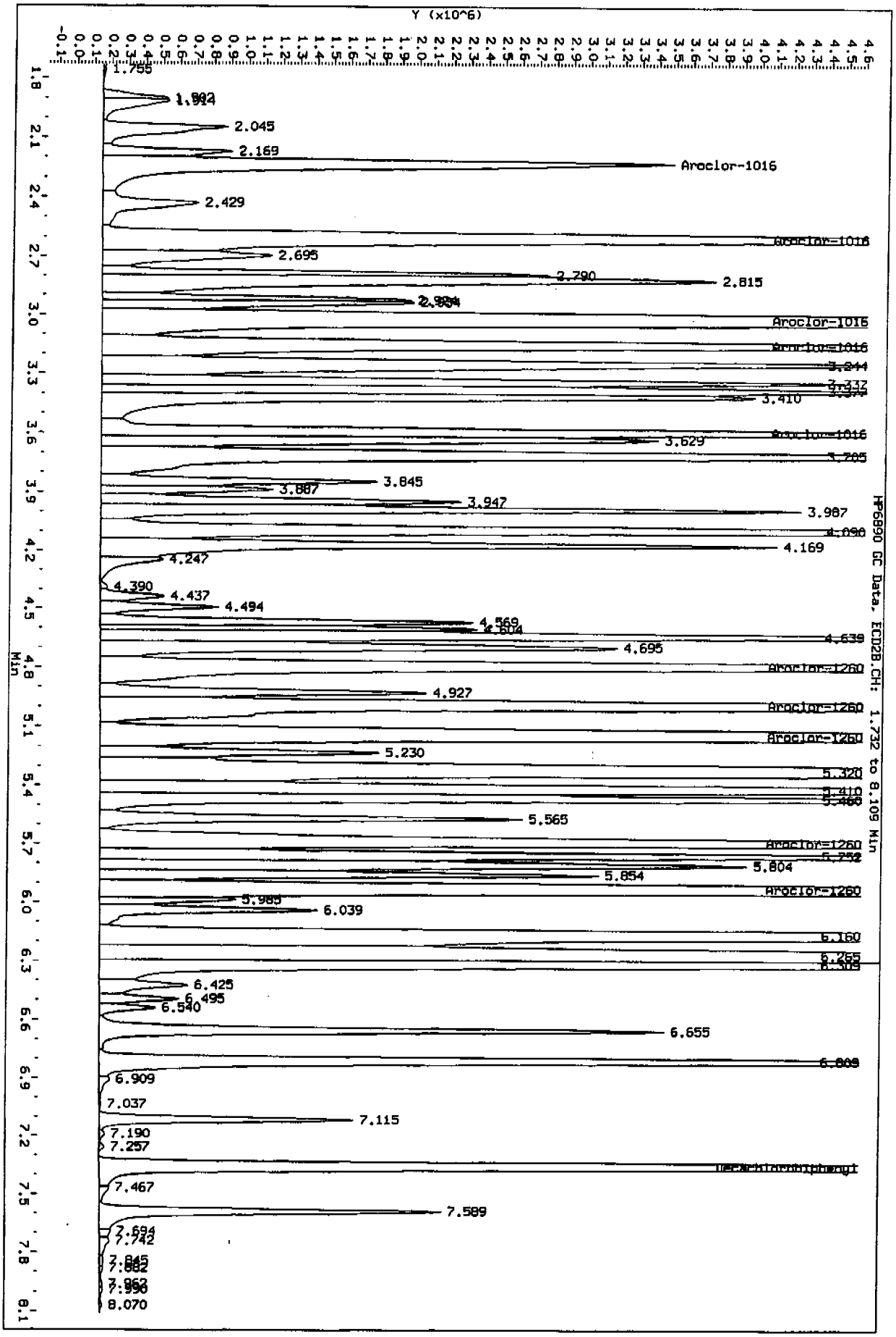
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.223	2.223	0.000	10295781	2500.00	2059	80.00- 120.00	100.00
2.600	2.598	0.002	19577065	2500.00	2042	164.40- 246.61	190.15
3.017	3.016	0.001	40954161	2500.00	2129	337.81- 506.71	397.78
3.147	3.145	0.002	16960942	2500.00	2066	144.30- 216.45	164.74
3.590	3.590	0.000	12696558	2500.00	2066	106.98- 160.47	123.32
		Average of Peak Amounts =			2073		
28 Aroclor-1260					CAS #: 11096-82-5		
4.788	4.788	0.000	26132305	2500.00	2114	80.00- 120.00	100.00
4.987	4.986	0.001	30429849	2500.00	2157	87.40- 131.10	116.45
5.140	5.140	0.000	28197137	2500.00	2114	85.10- 127.64	107.90
5.685	5.685	0.000	25054028	2500.00	2137	67.08- 100.62	95.87
5.923	5.923	0.000	52374963	2500.00	2186	130.81- 196.21	200.42
		Average of Peak Amounts =			2142		
$ 32 Decachlorobiphenyl					CAS #:		
7.355	7.355	0.000	20784182	150.000	106.6		

BLO 4/05/05



Data File: \\slsvr01\gc_lab\Gcp.i\P0504043.b\PCAL119.D
Date : 04-APR-2005 18:11
Client ID:
Sample Info: ICAL7
Volume Injected (uL): 2.0
Column Phase: CLPEST-2

Instrument: Gcp.i
Operator: BLD
Column diameter: 0.53


Y (x10^6)
Min
1.755
1.902
2.045
2.169
Aroclor-1016
2.429
Aroclor-1016
2.695
2.790
2.815
Aroclor-1016
3.410
Aroclor-1016
3.629
3.845
3.887
3.947
3.987
4.169
4.247
4.390
4.437
4.494
4.639
4.695
Aroclor-1260
4.927
Aroclor-1260
Aroclor-1260
5.230
5.565
Aroclor-1260
5.804
5.854
Aroclor-1260
5.985
6.039
6.425
6.495
6.540
6.655
6.909
7.037
7.115
7.190
7.257
7.467
7.589
8.070
HP6890 GC Data, ECD2B.CH: 1.732 to 8.109 Min
Data File: \\alsvr01\gc_lab\Gcp_1\P050404B.b\PCAL119.D
Injection Date: 04-APR-2005 18:11
Instrument: Gcp_1
Client Sample ID:

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL120.D Page 1
Report Date: 05-Apr-2005 12:19

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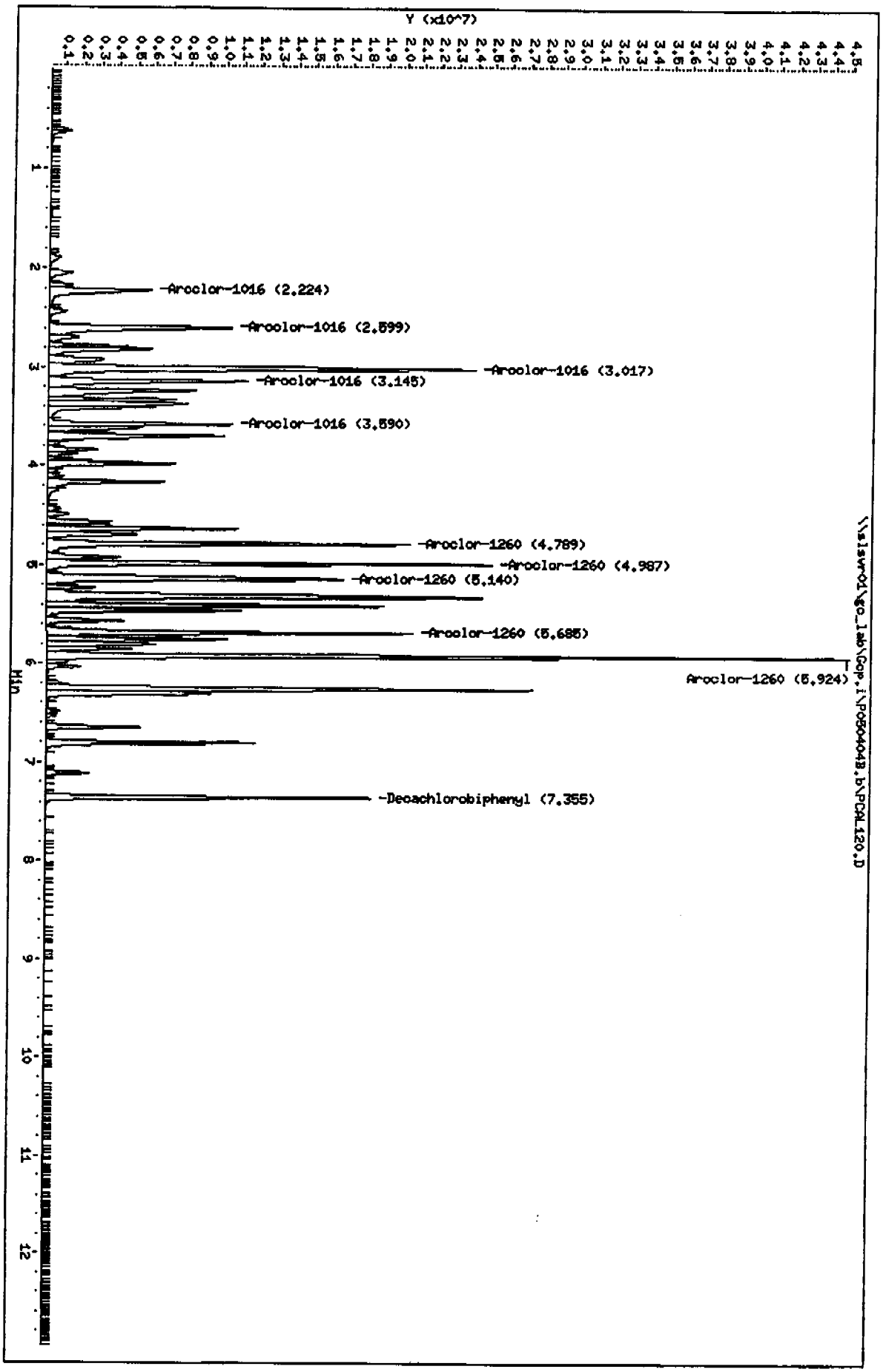
Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL120.D
Lab Smp Id: ICAL8
Inj Date : 04-APR-2005 18:28
Operator : BLO Inst ID: Gcp.i
Smp Info : ICAL8
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:09 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

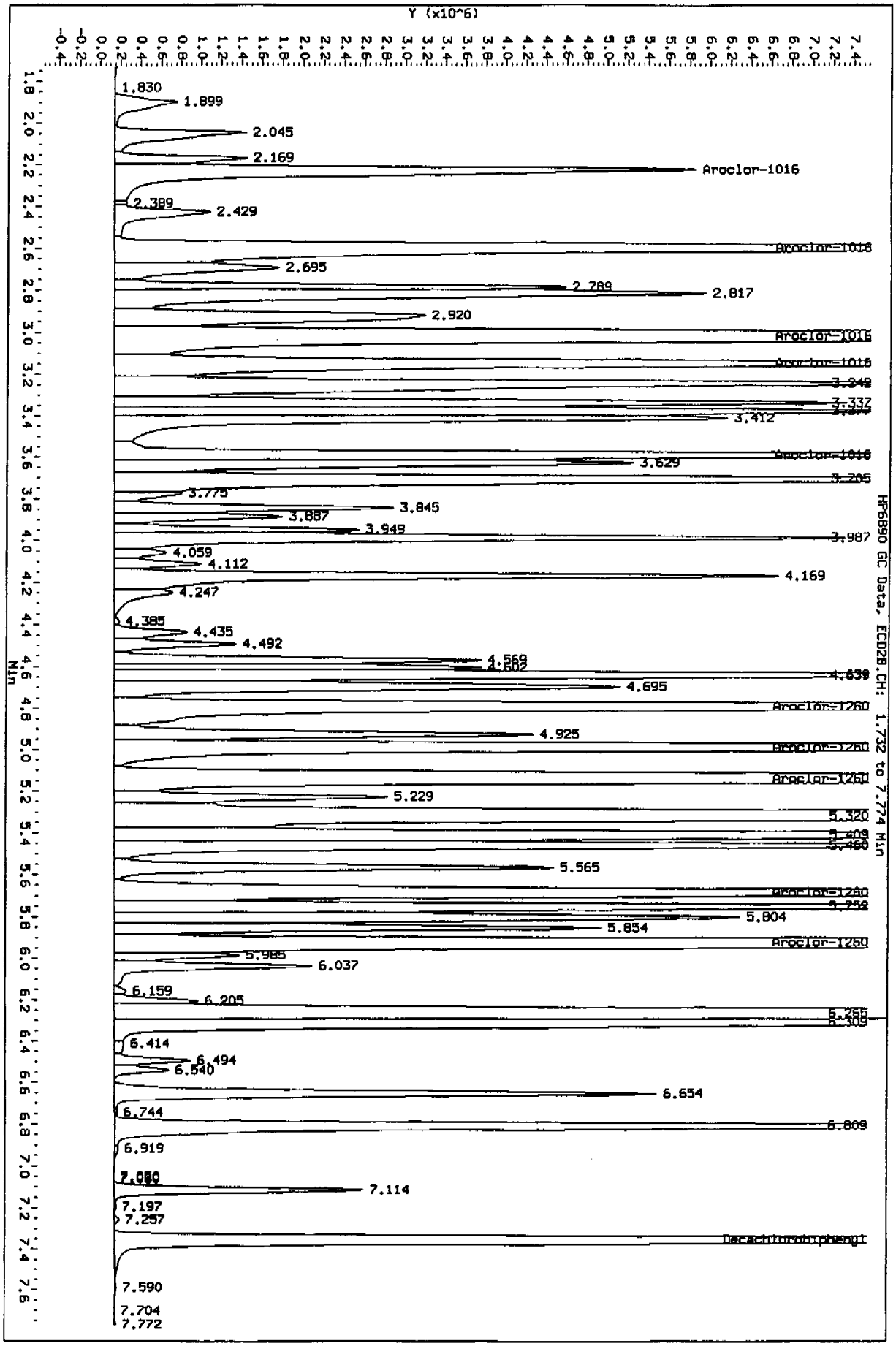
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ng/mL)	TARGET RANGE		RATIO
22 Aroclor-1016					CAS #: 12674-11-2			
2.223	2.223	0.000	15927558	4000.00	3186	80.00-	120.00	100.00
2.598	2.598	0.000	30337718	4000.00	3164	164.40-	246.61	190.47
3.016	3.016	0.000	64203782	4000.00	3338	337.81-	506.71	403.10
3.145	3.145	0.000	26987340	4000.00	3288	144.30-	216.45	169.44
3.590	3.590	0.000	20143298	4000.00	3277	106.98-	160.47	126.47
	Average of Peak Amounts =				3251			
28 Aroclor-1260					CAS #: 11096-82-5			
4.788	4.788	0.000	40968762	4000.00	3315	80.00-	120.00	100.00
4.986	4.986	0.000	46695023	4000.00	3310	87.40-	131.10	113.98
5.140	5.140	0.000	45061279	4000.00	3379	85.10-	127.64	109.99
5.685	5.685	0.000	39875092	4000.00	3401	67.08-	100.62	97.33
5.923	5.923	0.000	83299858	4000.00	3477	130.81-	196.21	203.33
	Average of Peak Amounts =				3376			
$ 32 Decachlorobiphenyl					CAS #:			
7.355	7.355	0.000	33612143	200.000	172.4			

BLO 4/05/05



Data File: \\slsvr01\go_lab\Gop.i\P050404B.b\PCAL120.D
Date : 04-APR-2005 18:28
Client ID:
Sample Info: ICALB
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gop.i
Operator: BLD
Column diameter: 0.53


Y (x10^6)
Min
Data File: \\slsvr01\gc_lab\Gcp.1\P050404B.b\PCAL120.D
Injection Date: 04-APR-2005 18:28
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 1.732 to 7.774 Min
1.830
1.899
2.045
2.169
Aroclor-1016
2.389
2.429
2.695
2.789
2.817
2.920
3.412
3.629
3.775
3.845
3.887
3.949
4.059
4.112
4.169
4.247
4.385
4.435
4.492
4.695
4.925
5.229
5.565
5.804
5.854
5.985
6.037
6.159
6.205
6.414
6.494
6.540
6.654
6.744
6.809
6.919
7.050
7.114
7.197
7.257
7.590
7.704
7.772

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b/PICV121.D
Report Date: 04/05/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PICV121.D
Analysis Type: SOIL

Injection Date: 04-APR-2005 19:00
Lab Sample ID: ICV
Method File: \\slsvr01\gc_lab\Gcp.i\P050404B.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
23 Aroclor-1016	1000.0000	904.0362	9.6	15.0	
29 Aroclor-1260	1000.0000	888.5741	11.1	15.0	
34 Decachlorobiphenyl	~~50.0000~~	~~0.0000~~	~~100.0~~	~~15.0~~	<-

BLO 4/05/05

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PICV121.D
Report Date: 05-Apr-2005 12:29

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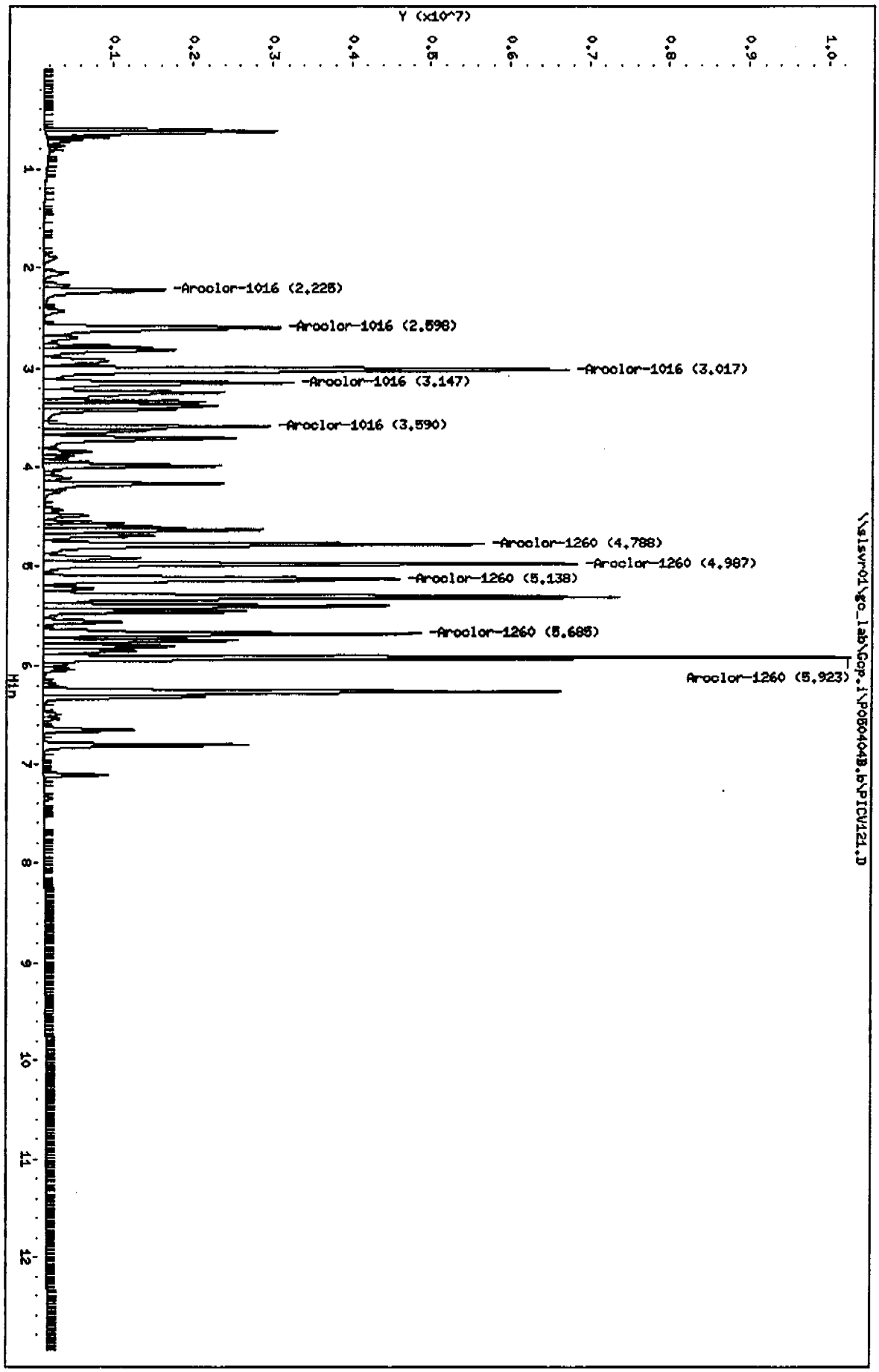
Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PICV121.D
Lab Smp Id: ICV
Inj Date : 04-APR-2005 19:00
Operator : BLO Inst ID: Gcp.i
Smp Info : ICV
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:29 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

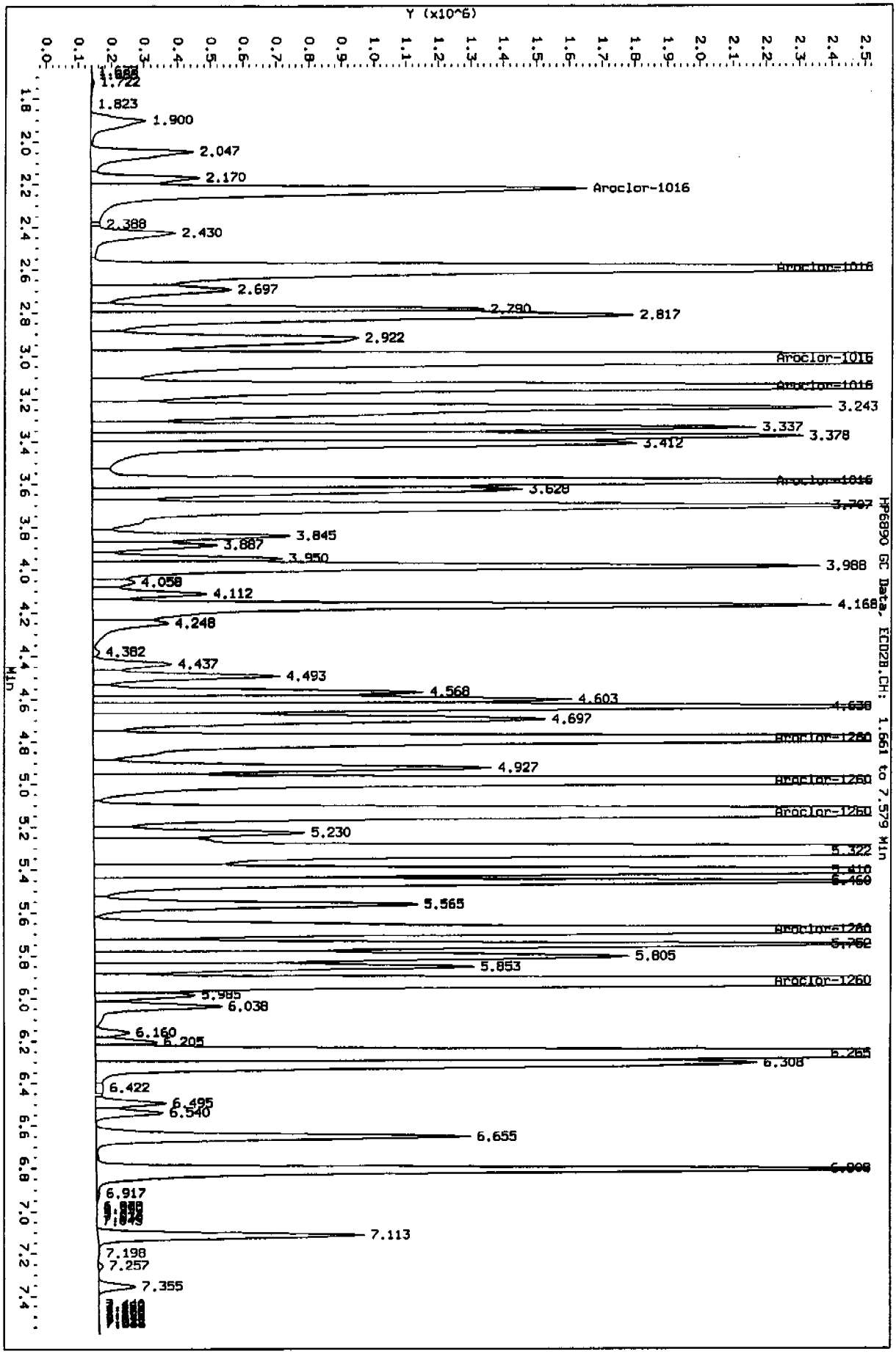
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.225	2.223	0.002	4219580	1000.00	844.0	80.00- 120.00	100.00
2.598	2.598	0.000	8671421	1000.00	904.4	164.40- 246.61	205.50
3.016	3.016	0.000	17817654	1000.00	926.4	337.81- 506.71	422.26
3.146	3.145	0.001	7611061	1000.00	927.3	144.30- 216.45	180.37
3.590	3.590	0.000	5642679	1000.00	918.1	106.98- 160.47	133.73
	Average of Peak Amounts =				904		
28 Aroclor-1260					CAS #: 11096-82-5		
4.788	4.788	0.000	11757188	1000.00	951.3	80.00- 120.00	100.00
4.986	4.986	0.000	12844934	1000.00	910.5	87.40- 131.10	109.25
5.138	5.140	-0.002	12506210	1000.00	937.8	85.10- 127.64	106.37
5.685	5.685	0.000	9858367	1000.00	840.9	67.08- 100.62	83.85
5.923	5.923	0.000	19223939	1000.00	802.3	130.81- 196.21	163.51
	Average of Peak Amounts =				888.6		

BLO 4/05/05



Data File: \\slsvr01\gc_lab\Gcp.i\P0504048.b\PICV121.D
Date : 04-APR-2005 19:00
Client ID:
Sample Info: ICV
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
Data File: \\slsvr01\gc_lab\Gcp_1\P0504048.b\PICV121.D
Injection Date: 04-APR-2005 19:00
Instrument: Gcp_1
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 1.661 to 7.579 Min
1.722
1.823
1.900
2.047
2.170
Aroclor-1016
2.388
2.430
2.697
2.790
2.817
2.922
3.243
3.337
3.378
3.412
3.628
3.845
3.887
3.950
3.988
4.058
4.112
4.168
4.248
4.382
4.437
4.493
4.568
4.603
4.697
Aroclor-1260
4.927
5.230
5.322
5.565
5.805
5.853
5.985
6.038
6.160
6.205
6.265
6.308
6.422
6.495
6.540
6.655
6.917
7.113
7.198
7.257
7.355

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL122.D
Report Date: 05-Apr-2005 12:19

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Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL122.D
Lab Smp Id: 1232
Inj Date : 04-APR-2005 19:16
Operator : BLO Inst ID: Gcp.i
Smp Info : 1232
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:09 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 12 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1232.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

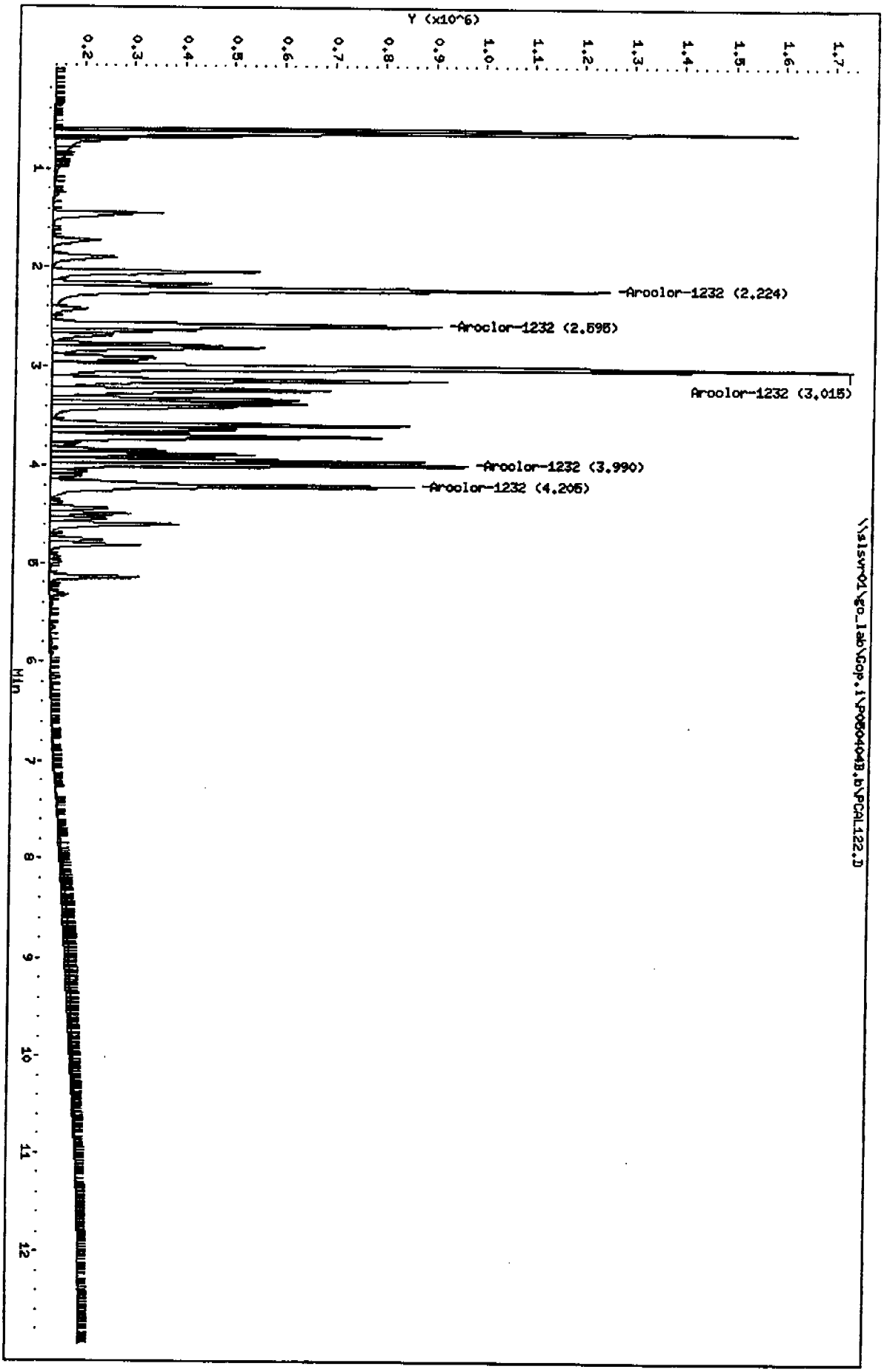
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
24 Aroclor-1232					CAS #: 1114-16-5		
2.223	2.223	0.000	2982752	500.000	500.0	80.00- 120.00	100.00(M)
2.595	2.595	0.000	2078084	500.000	500.0	55.74- 83.60	69.67
3.015	3.015	0.000	4225077	500.000	500.0	113.32- 169.98	141.65
3.990	3.990	0.000	1626831	500.000	500.0	43.63- 65.45	54.54
4.205	4.205	0.000	2113658	500.000	500.0	56.69- 85.04	70.86
		Average of Peak Amounts =			500		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other_____

BLO 4/05/05

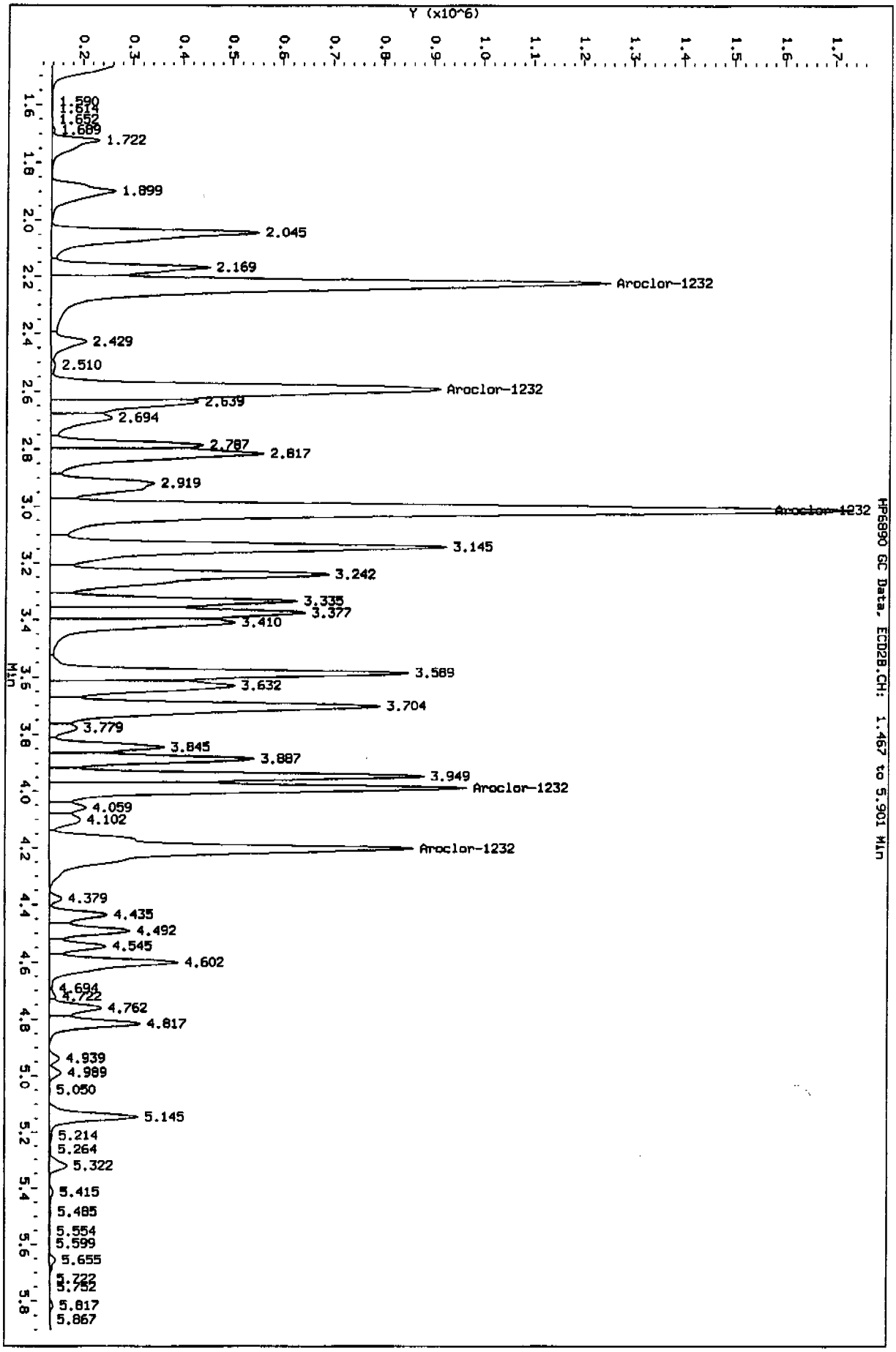
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\go_lab\Gop.i\P050404B.b\PCAL122.D
Date : 04-APR-2005 19:16
Client ID:
Sample Info: 1232
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gop.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
1.590
1.614
1.652
1.689
1.722
1.899
2.045
2.169
Aroclor-1232
2.429
2.510
Aroclor-1232
2.639
2.694
2.787
2.817
2.919
Aroclor-1232
3.145
3.242
3.335
3.377
3.410
3.589
3.632
3.704
3.779
3.845
3.887
3.949
Aroclor-1232
4.059
4.102
Aroclor-1232
4.379
4.435
4.492
4.545
4.602
4.694
4.722
4.762
4.817
4.939
4.989
5.050
5.145
5.214
5.264
5.322
5.415
5.485
5.554
5.599
5.655
5.722
5.752
5.817
5.867
Data File: \\alsvr01\gc_lab\Gcp.i\P050404B.b\PCAL122.D
Injection Date: 04-APR-2005 19:15
Instrument: Gcp.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 1.467 to 5.901 Min

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL123.D
Report Date: 05-Apr-2005 12:20

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Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL123.D
Lab Smp Id: 1242
Inj Date : 04-APR-2005 19:32
Operator : BLO Inst ID: Gcp.i
Smp Info : 1242
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:09 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 13 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1242.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

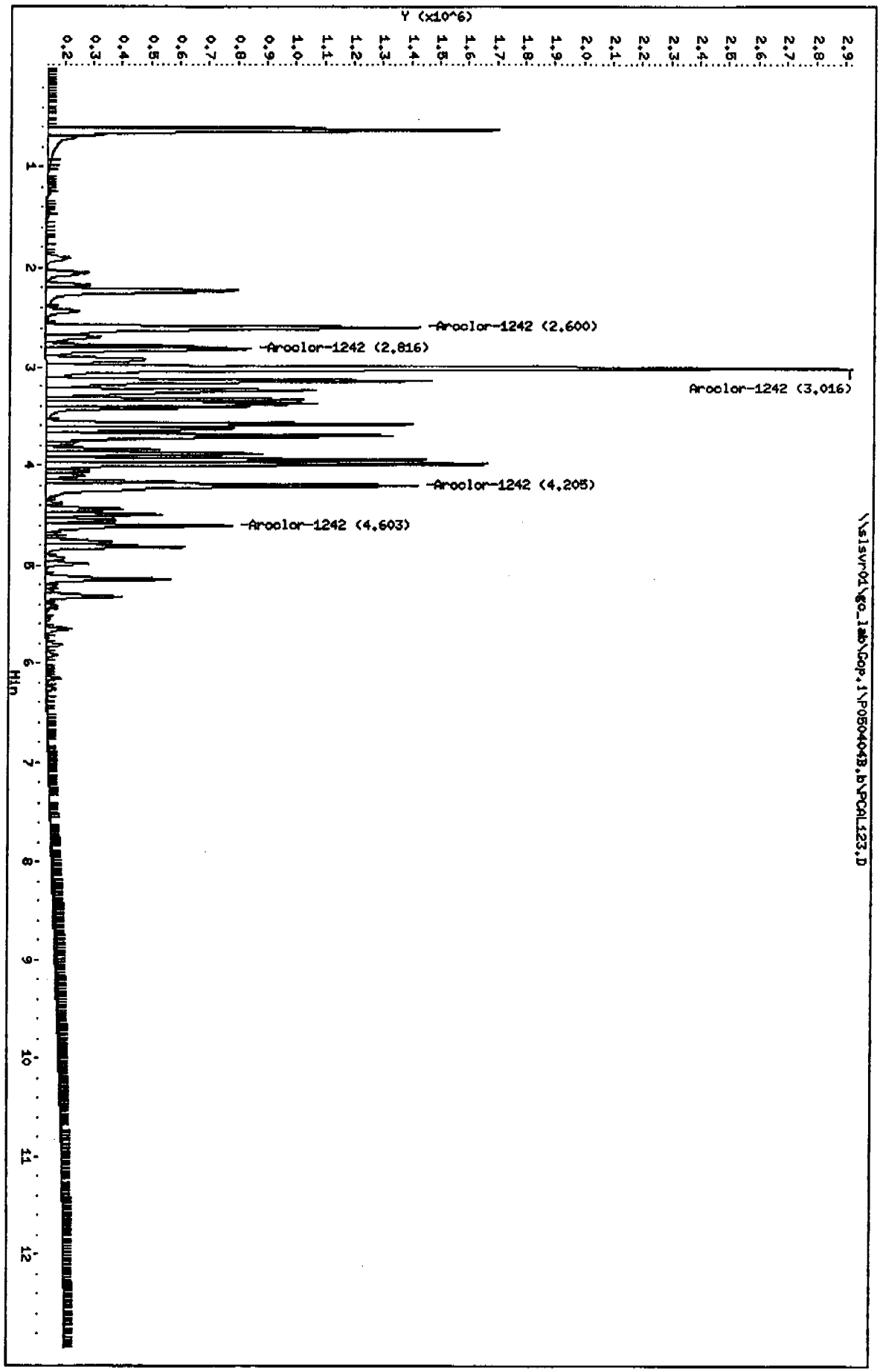
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)	TARGET RANGE	RATIO
25 Aroclor-1242					CAS #: 53469-21-9		
2.599	2.599	0.000	3825858	500.000	500.0	80.00- 120.00	100.00(M)
2.816	2.816	0.000	1965464	500.000	500.0	41.10- 61.65	51.37
3.016	3.016	0.000	7509788	500.000	500.0	157.03- 235.55	196.29
4.204	4.204	0.000	3601525	500.000	500.0	75.31- 112.96	94.14
4.603	4.603	0.000	1433658	500.000	500.0	29.98- 44.97	37.47
		Average of Peak Amounts =			500		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 4/05/05

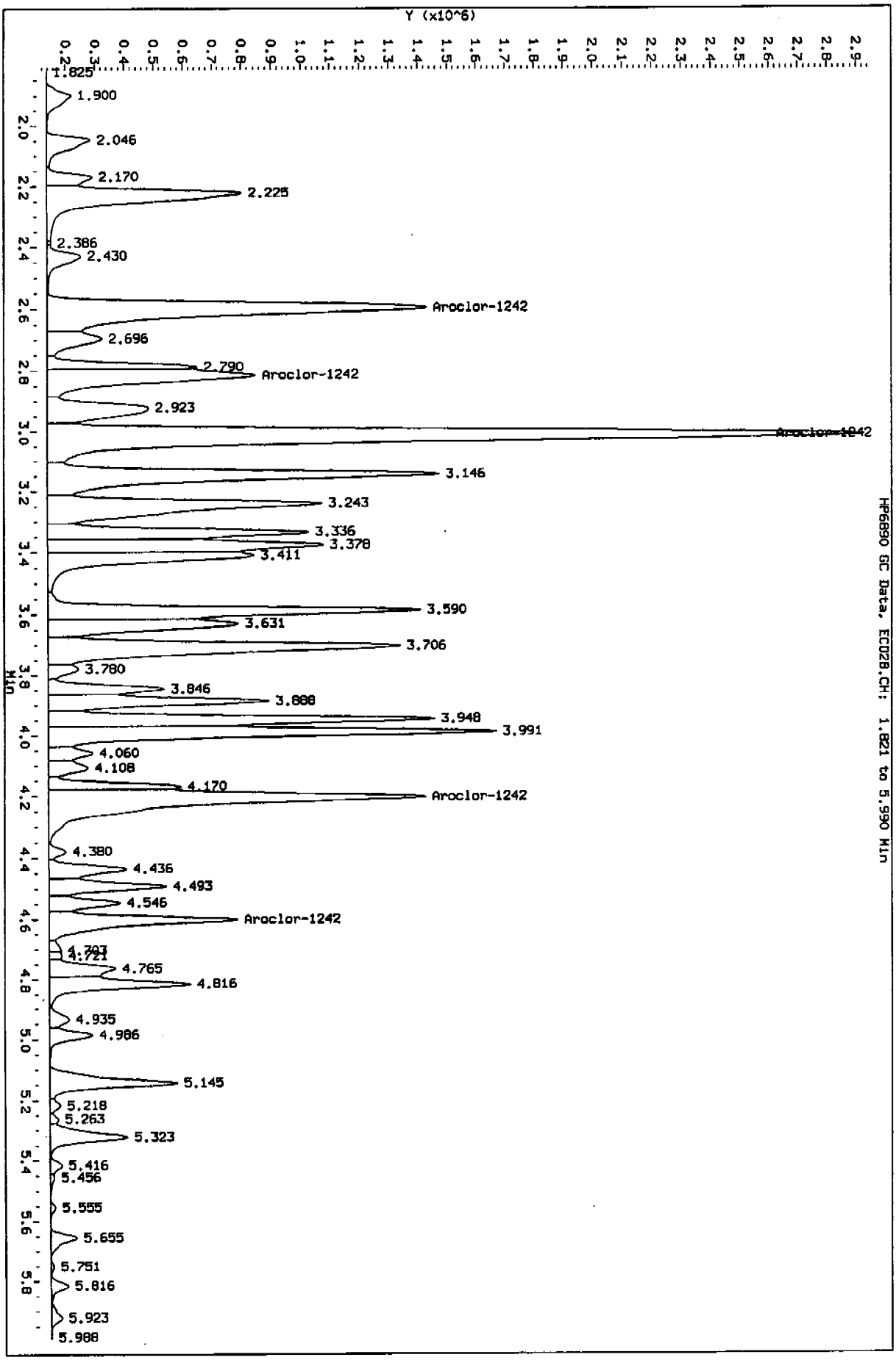
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL123.D
Date : 04-APR-2005 19:32
Client ID:
Sample Info: 1242
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
1.825
1.900
2.046
2.170
2.225
2.386
2.430
Aroclor-1242
2.696
2.790
Aroclor-1242
2.923
Aroclor-1242
3.146
3.243
3.336
3.378
3.411
3.590
3.631
3.706
3.780
3.846
3.888
3.948
3.991
4.060
4.108
4.170
Aroclor-1242
4.380
4.436
4.493
4.546
Aroclor-1242
4.707
4.721
4.765
4.816
4.935
4.986
5.145
5.218
5.263
5.323
5.416
5.456
5.555
5.655
5.751
5.816
5.923
5.988
Data File: \\alevr01\gc_lab\Gcp.1\P050404B.b\PCAL123.D
Injection Date: 04-APR-2005 19:32
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 1.821 to 5.990 Min

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL124.D
Report Date: 05-Apr-2005 12:20

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Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL124.D
Lab Smp Id: 1248
Inj Date : 04-APR-2005 19:48
Operator : BLO Inst ID: Gcp.i
Smp Info : 1248
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:09 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1248.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

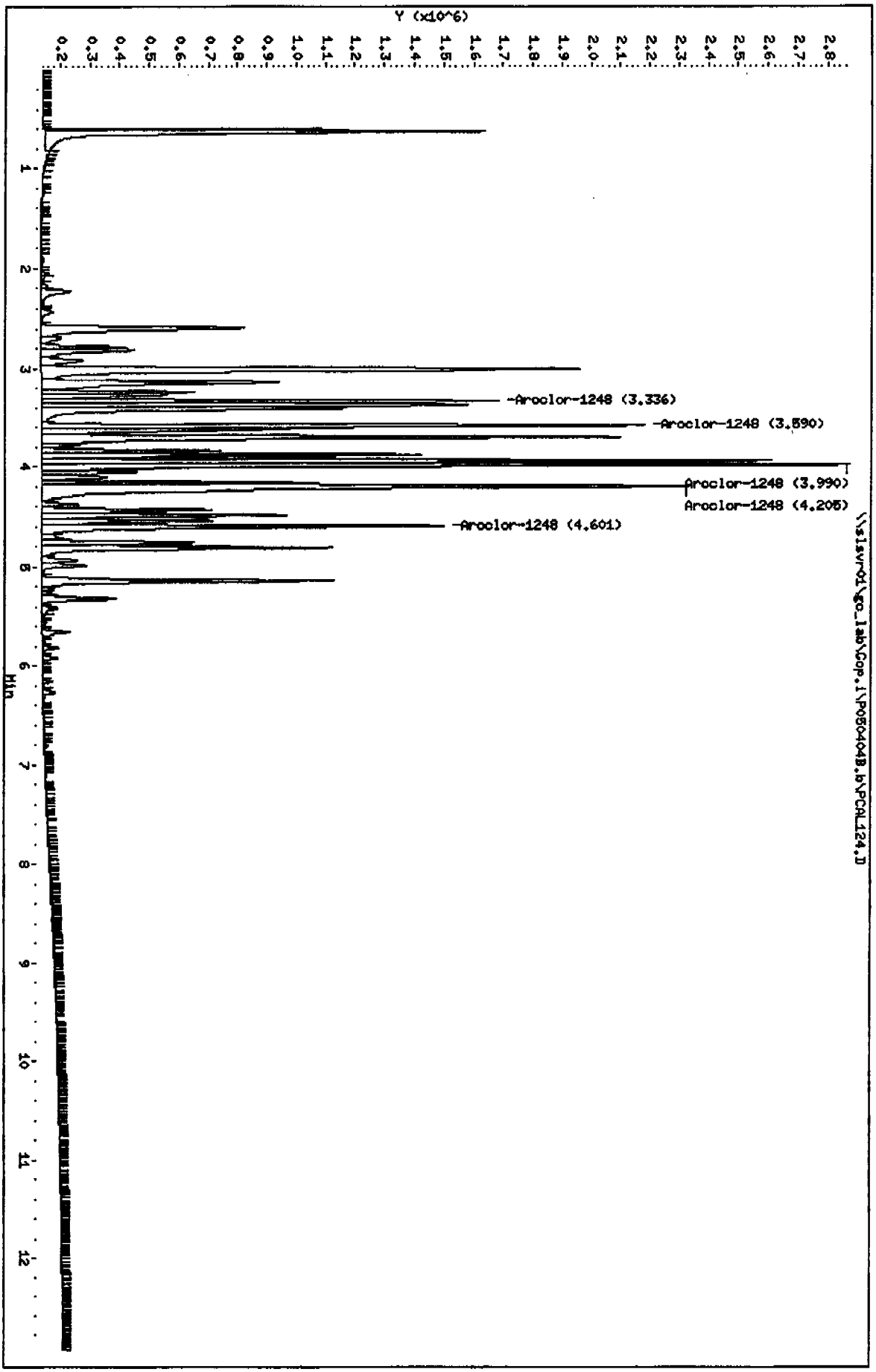
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
26 Aroclor-1248					CAS #: 12672-29-6		
3.336	3.336	0.000	2939031	500.000	500.0	80.00- 120.00	100.00(M)
3.589	3.589	0.000	3960174	500.000	500.0	107.80- 161.69	134.74
3.989	3.989	0.000	5499498	500.000	500.0	149.70- 224.54	187.12
4.204	4.204	0.000	6613231	500.000	500.0	180.01- 270.02	225.01
4.601	4.601	0.000	2877767	500.000	500.0	78.33- 117.50	97.92
		Average of Peak Amounts =			500		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other _____

BLO 4/05/05

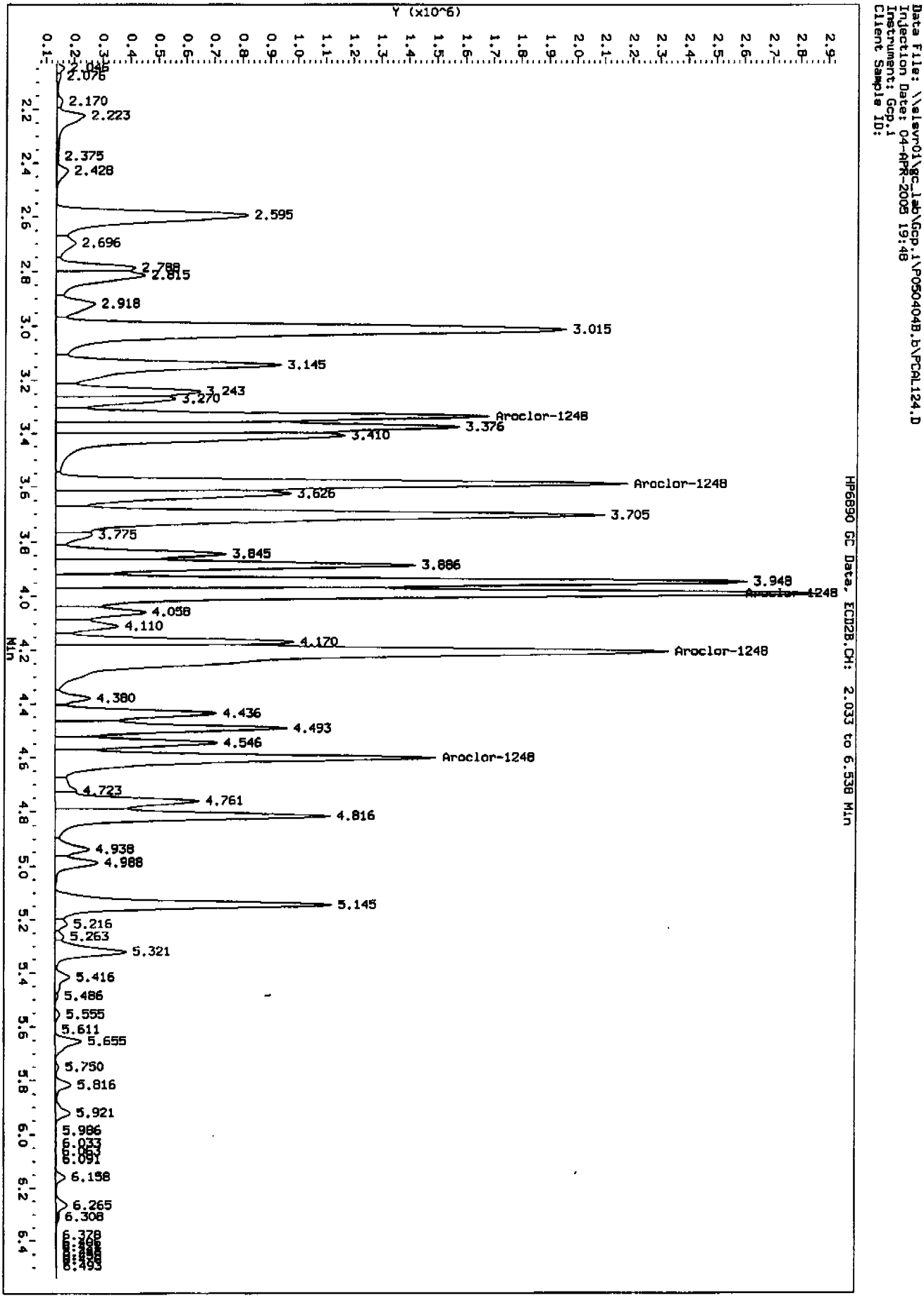
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL124.D
Date : 04-APR-2005 19:48
Client ID:
Sample Info: 1248
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL124.D
Injection Date: 04-APR-2005 19:48
Instrument: Gcp.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 2.033 to 6.538 Min
2.045
2.076
2.170
2.223
2.375
2.428
2.595
2.696
2.788
2.815
2.918
3.015
3.145
3.243
3.270
Aroclor-1248
3.376
3.410
Aroclor-1248
3.626
3.705
3.775
3.845
3.886
3.948
Aroclor-1248
4.058
4.110
4.170
Aroclor-1248
4.380
4.436
4.493
4.546
Aroclor-1248
4.723
4.761
4.816
4.938
4.988
5.145
5.216
5.263
5.321
5.416
5.486
5.555
5.611
5.655
5.750
5.816
5.921
5.986
6.033
6.063
6.091
6.158
6.265
6.308
6.378
6.493

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL125.D Page 1
Report Date: 05-Apr-2005 12:20

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL125.D
Lab Smp Id: 1254
Inj Date : 04-APR-2005 20:05
Operator : BLO Inst ID: Gcp.i
Smp Info : 1254
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:09 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 15 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar2154.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

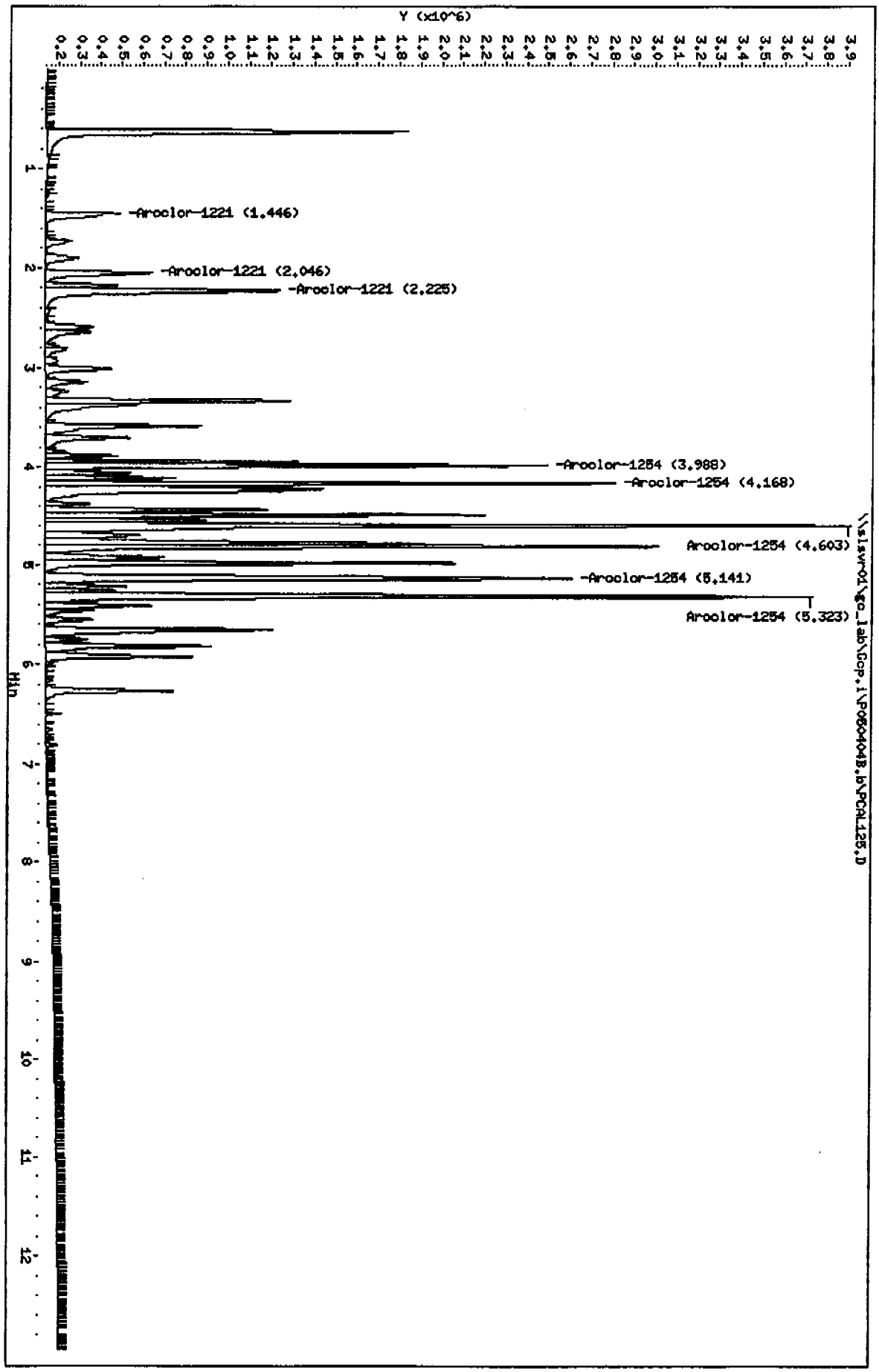
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
23 Aroclor-1221					CAS #: 11104-28-2		
1.446	1.446	0.000	1020950	500.000	500.0	80.00- 120.00	100.00(M)
2.046	2.046	0.000	1341501	500.000	500.0	105.12- 157.68	131.40
2.224	2.224	0.000	3282536	500.000	500.0	257.21- 385.82	321.52
Average of Peak Amounts =					500		
27 Aroclor-1254					CAS #: 11097-69-1		
3.987	3.987	0.000	4793873	500.000	500.0	80.00- 120.00	100.00(M)
4.167	4.167	0.000	5091216	500.000	500.0	84.96- 127.44	106.20
4.602	4.602	0.000	8095826	500.000	500.0	135.10- 202.65	168.88
5.141	5.141	0.000	6595365	500.000	500.0	110.06- 165.09	137.58
5.322	5.322	0.000	8341616	500.000	500.0	139.20- 208.81	174.01
Average of Peak Amounts =					500		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other_____

BW 4/05/05

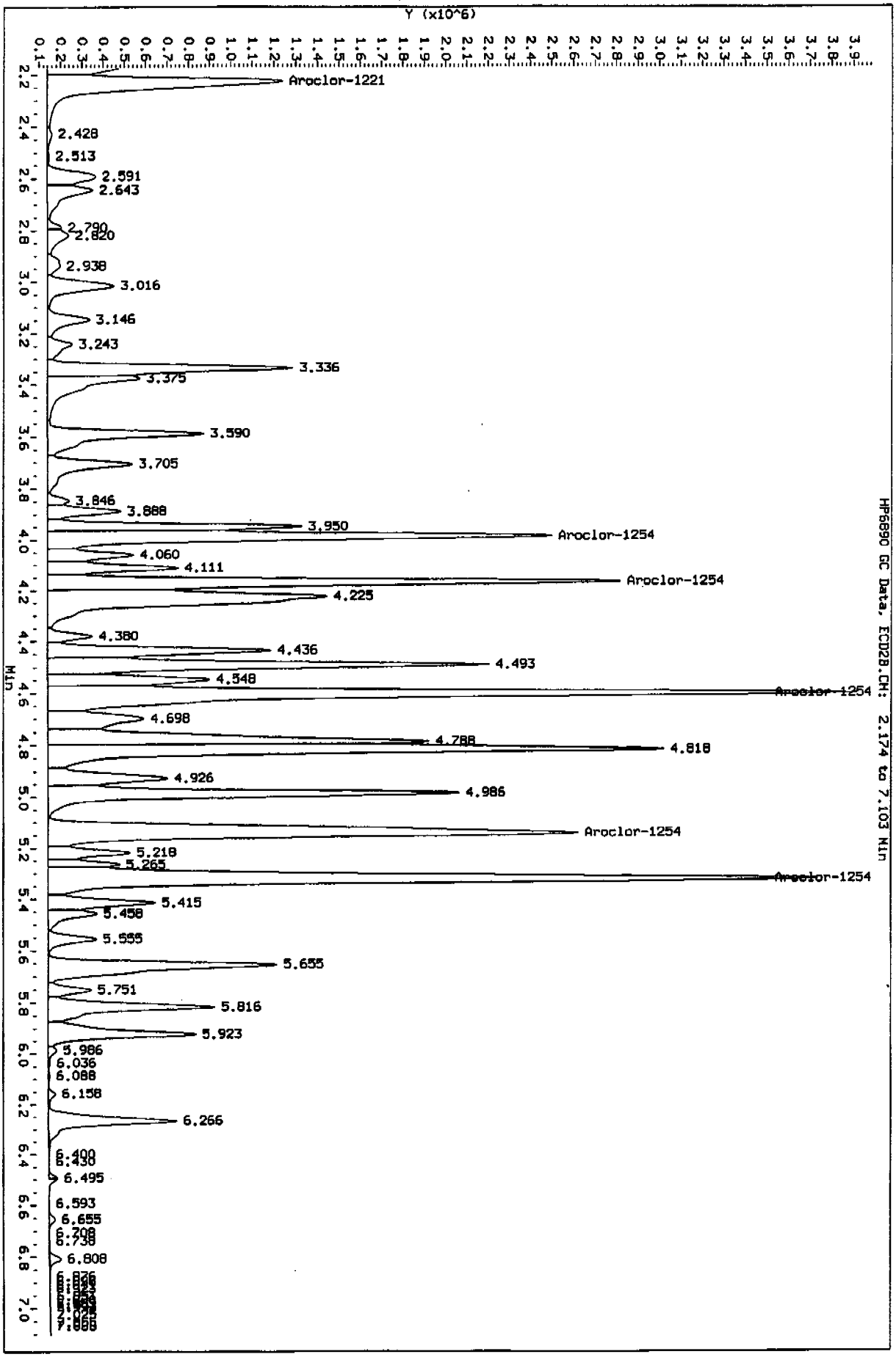
QC Flag Legend

M - Compound response manually integrated.



Data File: \\slsvr01\gc_lab\Gcp.i\P080404B.b\PCAL125.D
Date : 04-APR-2008 20:05
Client ID:
Sample Info: 1254
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
Aroclor-1221
2.428
2.513
2.591
2.643
2.790
2.820
2.938
3.016
3.146
3.243
3.336
3.375
3.590
3.705
3.846
3.888
3.950
Aroclor-1254
4.060
4.111
Aroclor-1254
4.225
4.380
4.436
4.493
4.548
Aroclor-1254
4.698
4.788
4.818
4.926
4.986
Aroclor-1254
5.218
5.265
Aroclor-1254
5.415
5.458
5.555
5.655
5.751
5.816
5.923
5.986
6.036
6.088
6.158
6.266
6.400
6.430
6.495
6.593
6.655
6.708
6.738
6.808
HP6890 GC Data, ECD2B.CH: 2.174 to 7.103 Min
Data File: \\alsvr01\gc_lab\Gcp.1\P0504048.b\PCAL125.D
Injection Date: 04-APR-2005 20:05
Instrument: Gcp.1
Client Sample ID:

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL126.D Page 1
Report Date: 05-Apr-2005 12:20

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL126.D
Lab Smp Id: 1262
Inj Date : 04-APR-2005 20:21
Operator : BLO Inst ID: Gcp.i
Smp Info : 1262
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:09 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 16 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1262.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
35 Aroclor-1262					CAS #: 37324-23-5		
4.787	4.787	0.000	4833174	500.000	500.0	80.00- 120.00	100.00(M)
4.987	4.987	0.000	5604560	500.000	500.0	92.77- 139.15	115.96
5.409	5.409	0.000	7051953	500.000	500.0	116.73- 175.09	145.91
6.262	6.262	0.000	9698541	500.000	500.0	160.53- 240.80	200.67
6.809	6.809	0.000	5298016	500.000	500.0	87.69- 131.54	109.62
		Average of Peak Amounts =			500		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

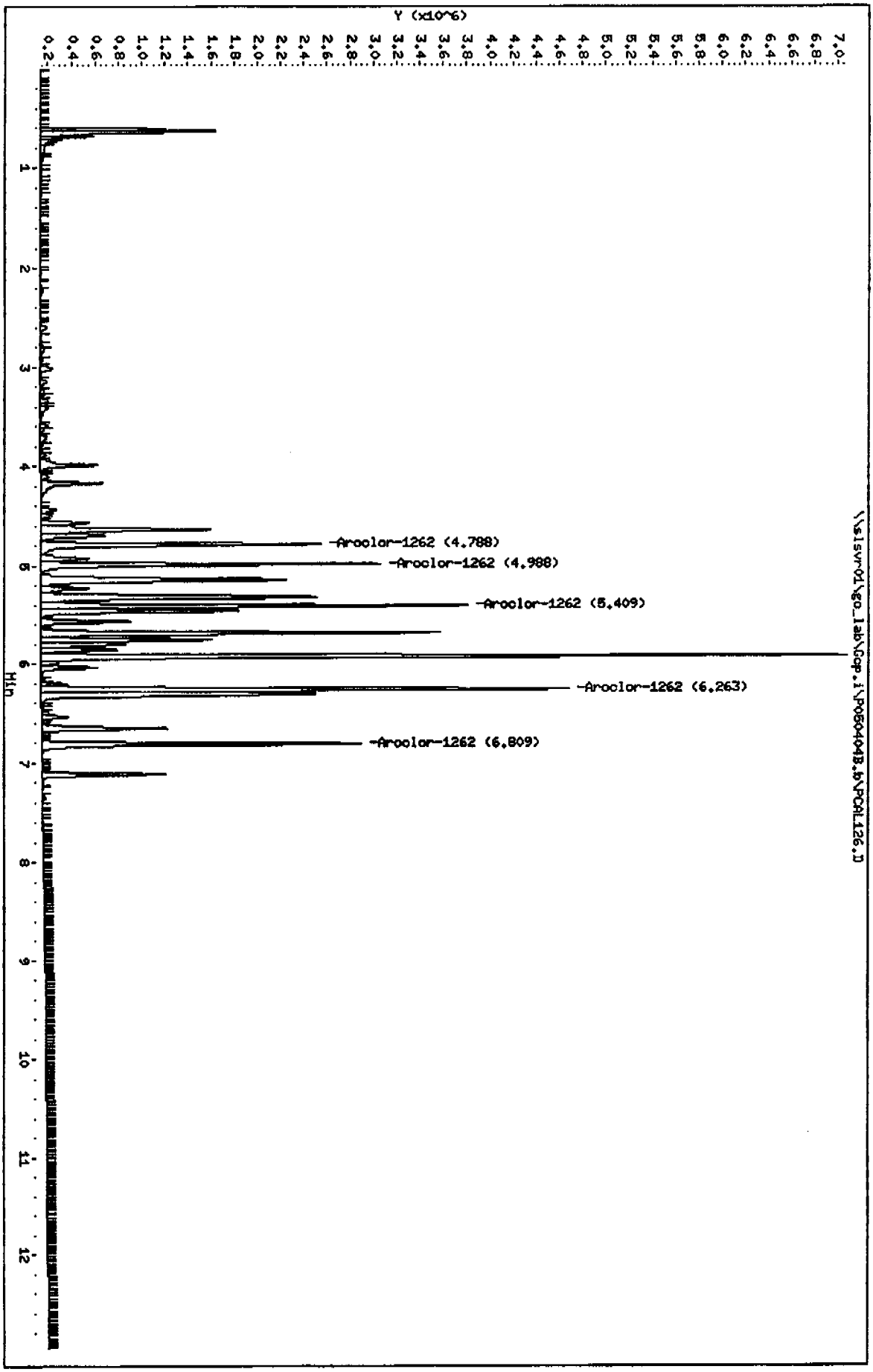
BLO 4/05/05

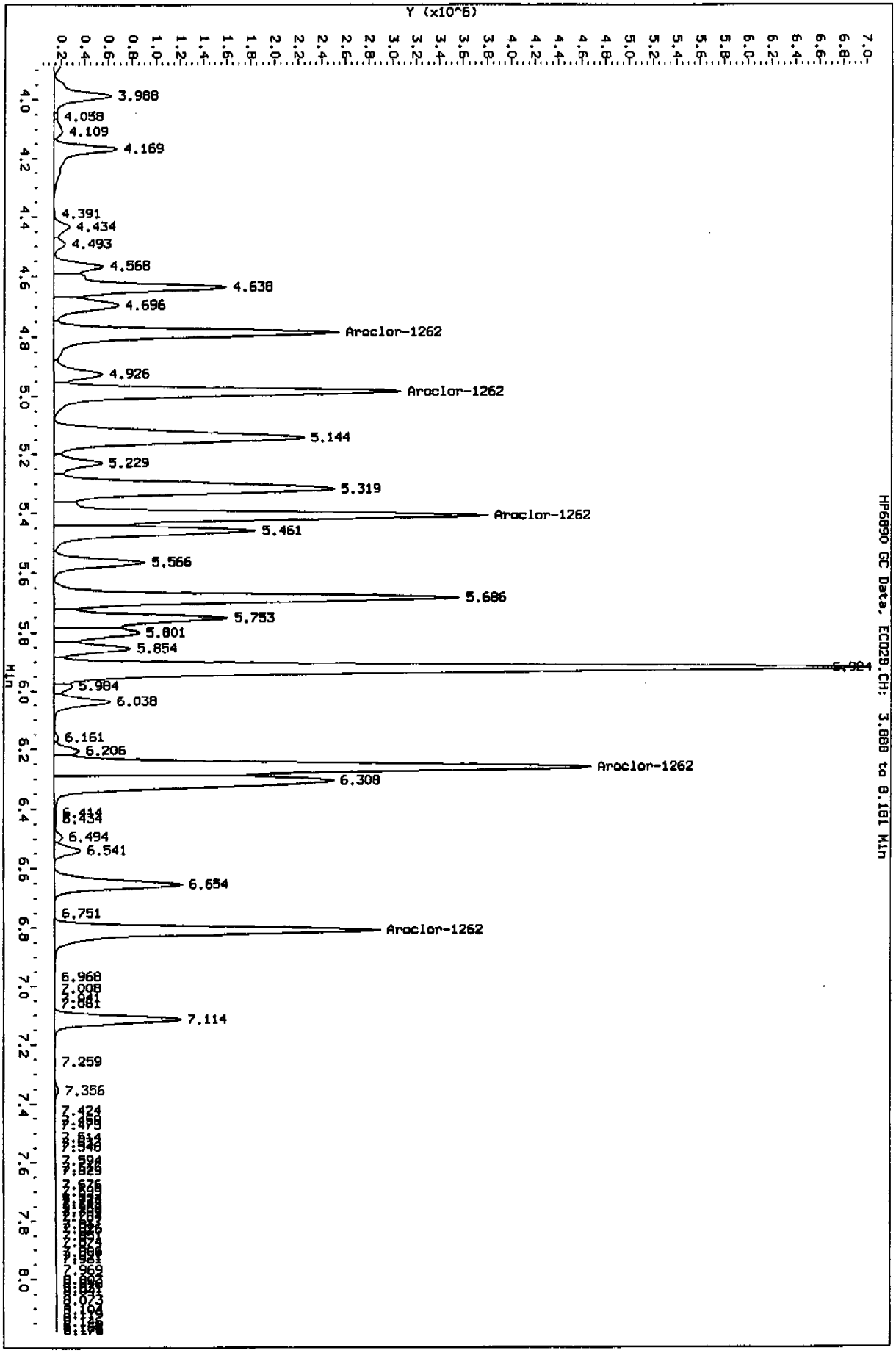
QC Flag Legend

M - Compound response manually integrated.

Data File: \\slsvr01\go_lab\Gcp.i\P050404B.b\PCAL126.D
Date : 04-APR-2005 20:21
Client ID:
Sample Info: 1262
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53




Y (x10^6)
Min
3.988
4.058
4.109
4.169
4.391
4.434
4.493
4.568
4.638
4.696
Aroclor-1262
4.926
Aroclor-1262
5.144
5.229
5.319
Aroclor-1262
5.461
5.566
5.686
5.753
5.801
5.854
5.984
6.038
6.161
6.206
Aroclor-1262
6.308
6.494
6.541
6.654
6.751
Aroclor-1262
6.968
7.008
7.041
7.081
7.114
7.259
7.356
HP6890 GC Data, EC028.CH: 3.888 to 8.161 Min
Data File: \\slevr01\gc_lab\Gcp.i\P050404B.b\PCAL126.D
Injection Date: 04-APR-2005 20:21
Instrument: Gcp.i
Client Sample ID:

Data File: \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL127.D
Report Date: 05-Apr-2005 12:20

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PCAL127.D
Lab Smp Id: 1268
Inj Date : 04-APR-2005 20:37
Operator : BLO Inst ID: Gcp.i
Smp Info : 1268
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050404B.b\PPCB05B.m
Meth Date : 05-Apr-2005 12:09 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 17 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1268.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

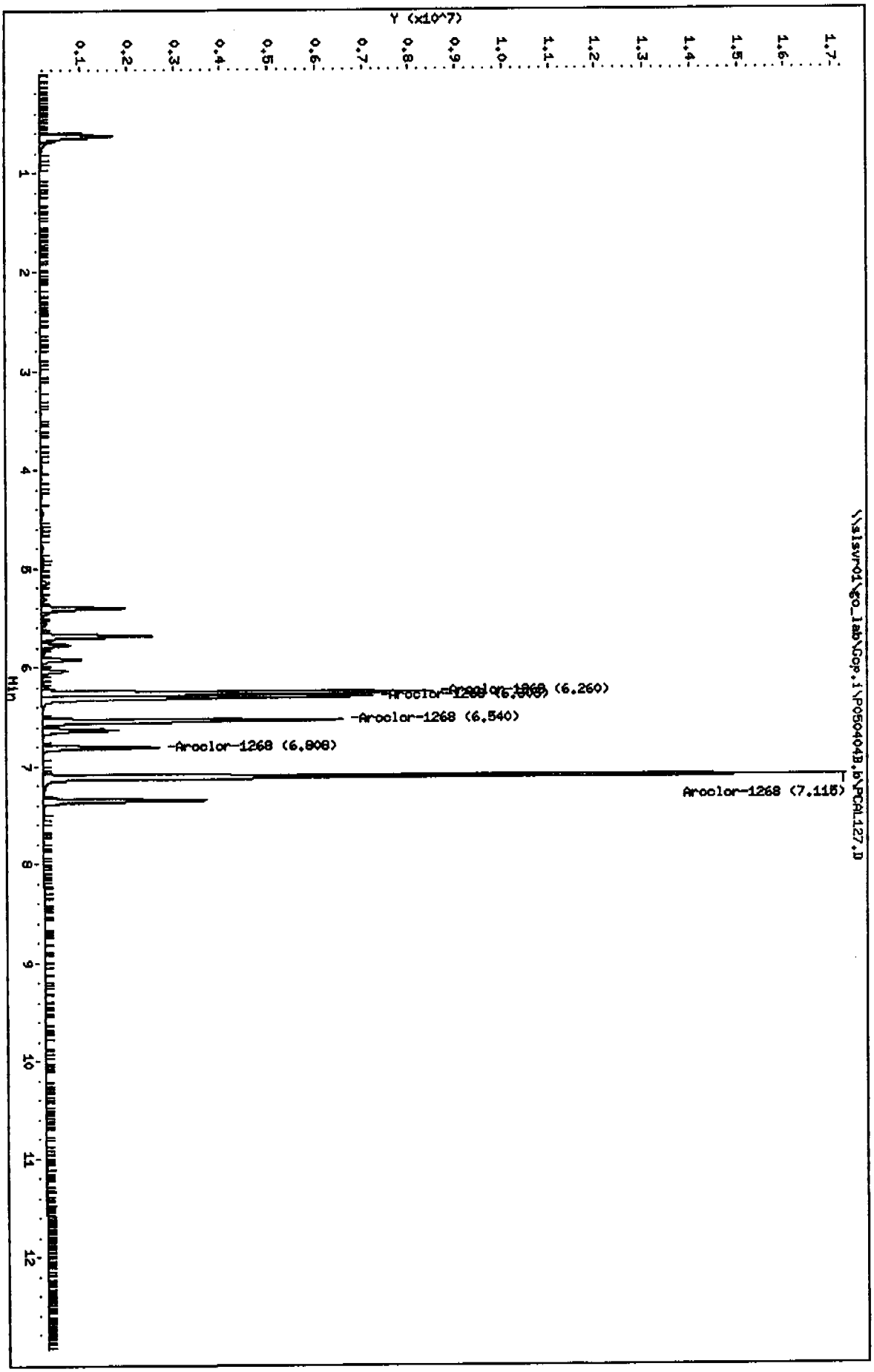
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
36 Aroclor-1268					CAS #: 11100-14-4		
6.259	6.259	0.000	15272244	500.000	500.0	80.00- 120.00	100.00(M)
6.303	6.303	0.000	14648534	500.000	500.0	76.73- 115.10	95.92
6.539	6.539	0.000	11909662	500.000	500.0	62.39- 93.58	77.98
6.808	6.808	0.000	4640307	500.000	500.0	24.31- 36.46	30.38
7.114	7.114	0.000	31506871	500.000	500.0	165.04- 247.56	206.30
		Average of Peak Amounts =			500		

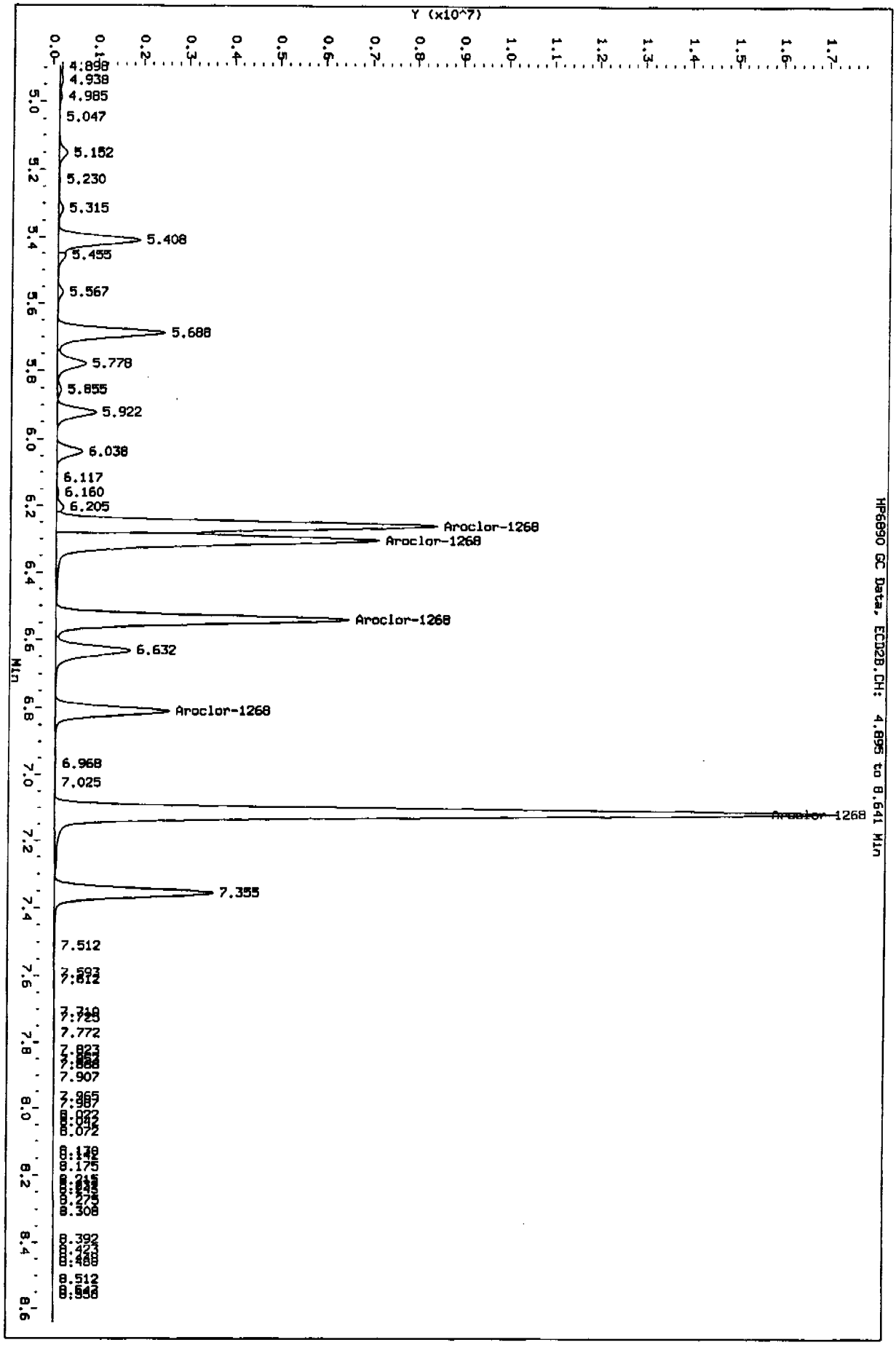
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other _____

BLO 4/05/05

QC Flag Legend

M - Compound response manually integrated.


Data File: \\slsvr01\go_lab\Gop.i\P050404B.b\PCAL127.D
Date : 04-APR-2005 20:37
Client ID:
Sample Info: 1268
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gop.i
Operator: BLO
Column diameter: 0.53
Y (x10^7)
Min
Arocolor-1268 (6.260)
Arocolor-1268 (6.540)
Arocolor-1268 (6.808)
Arocolor-1268 (7.115)
\\slsvr01\go_lab\Gop.i\P050404B.b\PCAL127.D


Y (x10^7)
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
4.898
4.938
4.985
5.047
5.152
5.230
5.315
5.408
5.455
5.567
5.688
5.778
5.855
5.922
6.038
6.117
6.160
6.205
Aroclor-1268
Aroclor-1268
Aroclor-1268
6.632
Aroclor-1268
6.968
7.025
Aroclor-1268
7.355
7.512
7.772
7.907
8.072
8.308
8.392
8.512
Min
5.0
5.2
5.4
5.6
5.8
6.0
6.2
6.4
6.6
6.8
7.0
7.2
7.4
7.6
7.8
8.0
8.2
8.4
8.6
Data File: \\slsvr01\gc_lab\Gcp_1\P0504048.b\PCAL127.D
Injection Date: 04-APR-2005 20:37
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.895 to 8.641 Min

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Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b/PCAL927.D
Report Date: 05/10/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PCAL927.D
Analysis Type: SOIL

Injection Date: 09-MAY-2005 15:39
Lab Sample ID: CCAL1000
Method File: \\slsvr01\gc_lab\Gcp.i\P050509A.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	924.7255	7.5	15.0
29 Aroclor-1260	1000.0000	956.0039	4.4	15.0
34 Decachlorobiphenyl	50.0000	49.3681	1.3	15.0

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL927.D
Report Date: 10-May-2005 09:45

STL St. Louis

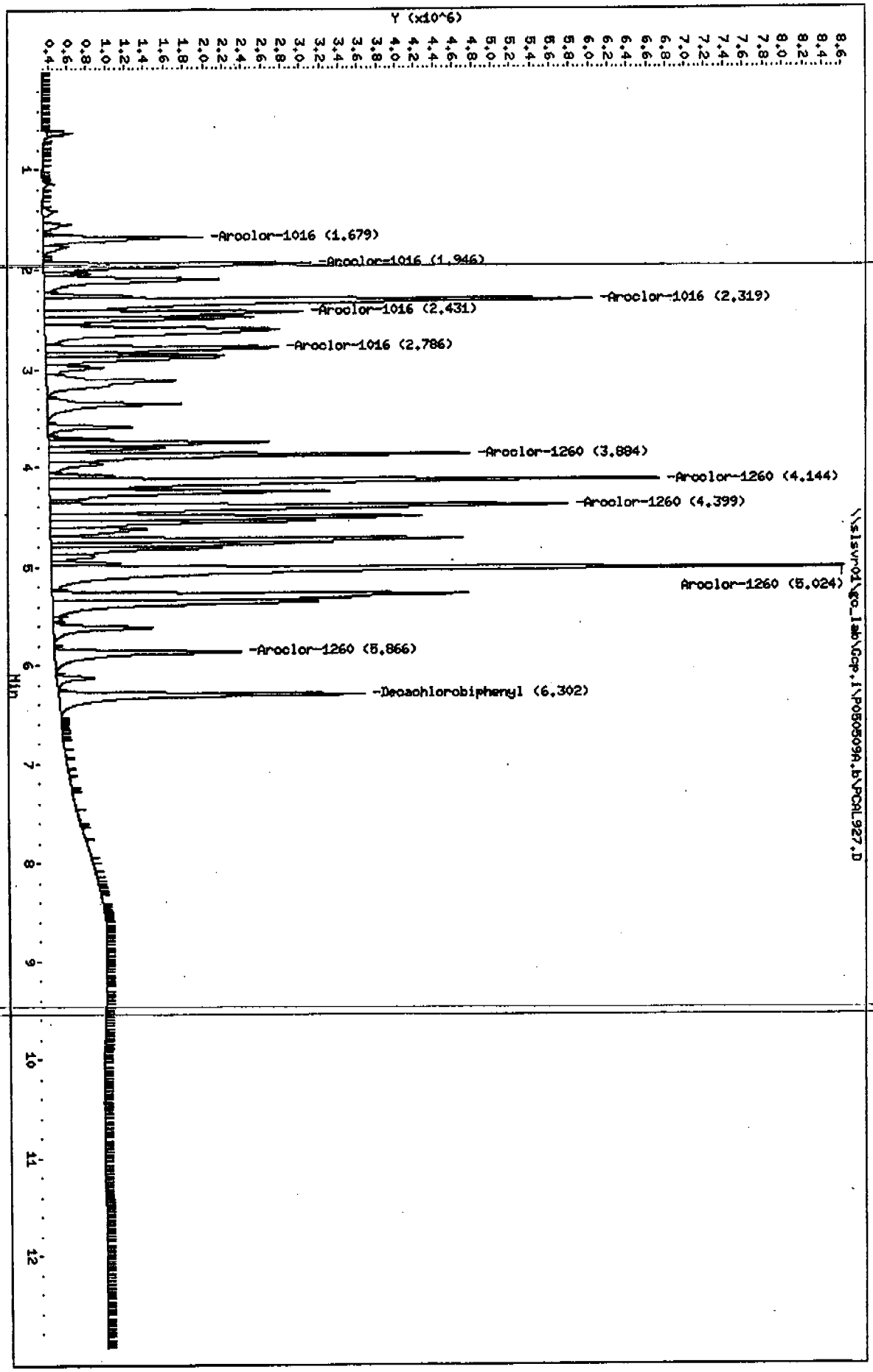
Data file : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL927.D
Lab Smp Id: CCAL1000
Inj Date : 09-MAY-2005 15:39
Operator : BLO Inst ID: Gcp.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Meth Date : 10-May-2005 09:43 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

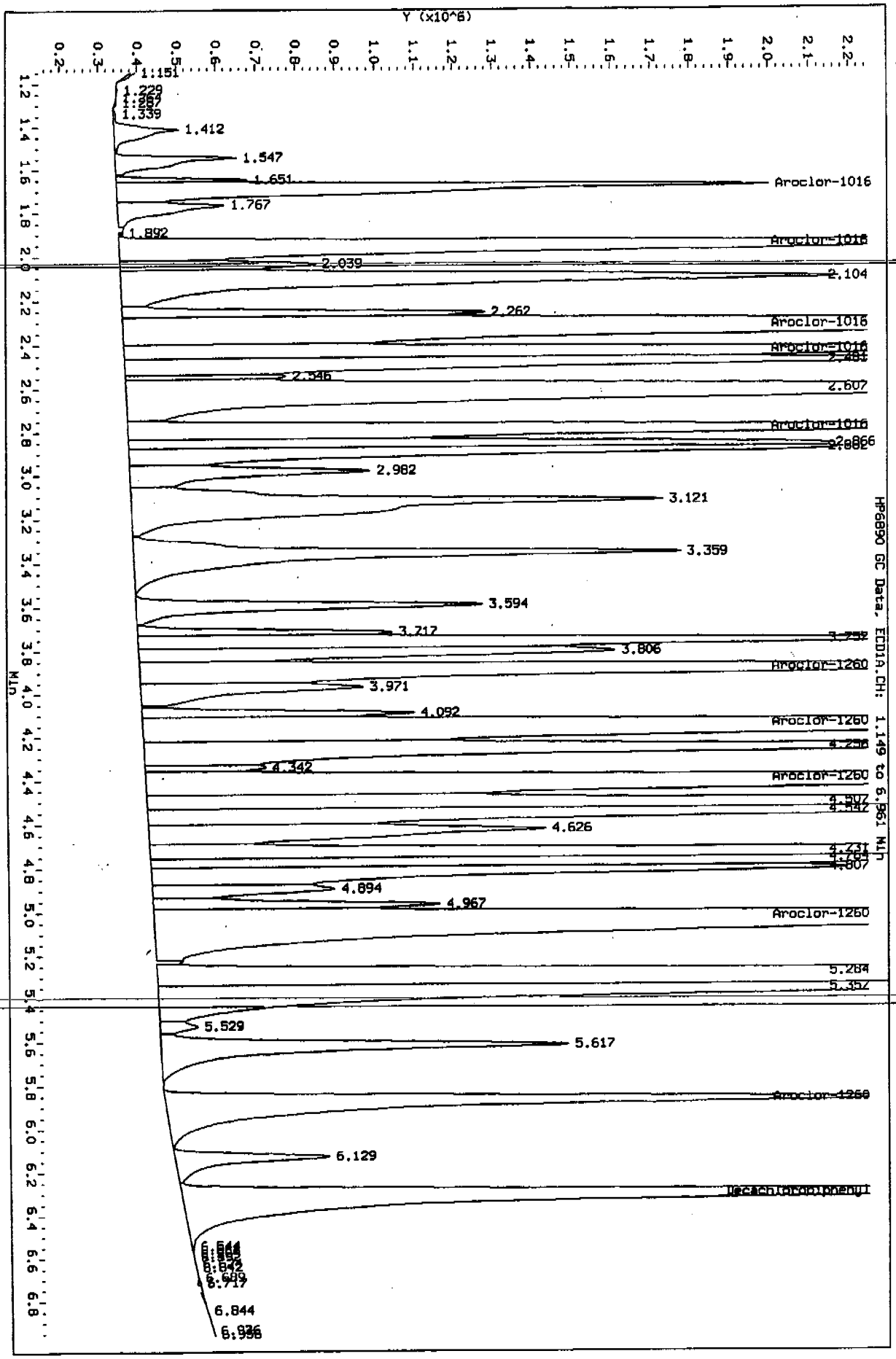
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.678	1.668	0.010	4281214	1000.00	876.6	80.00- 120.00	100.00
1.945	1.933	0.012	8266976	1000.00	904.3	154.48- 231.72	193.10
2.318	2.303	0.015	19582445	1000.00	957.3	365.92- 548.88	457.40
2.430	2.413	0.017	7197204	1000.00	962.5	134.49- 201.73	168.11
2.785	2.768	0.017	7349951	1000.00	922.8	137.34- 206.01	171.68
		Average of Peak Amounts =			924.7		
28 Aroclor-1260					CAS #: 11096-82-5		
3.883	3.896	-0.013	11124804	1000.00	931.9	80.00- 120.00	100.00
4.143	4.156	-0.013	19358801	1000.00	927.7	139.21- 208.82	174.01
4.398	4.412	-0.014	17041997	1000.00	929.6	122.55- 183.83	153.19
5.023	5.039	-0.016	27183574	1000.00	1019	195.48- 293.22	244.35
5.865	5.882	-0.017	6557960	1000.00	971.4	47.16- 70.74	58.95
		Average of Peak Amounts =			956		
$ 32 Decachlorobiphenyl					CAS #:		
6.302	6.273	0.029	9988681	50.0000	49.37		

BLO 5/10/05



Data File: \\slsvr01\gc_lab\Gcp.i\P0505090.b\PCAL927.D
Date : 09-MAY-2005 15:39
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLD
Column diameter: 0.53


Y (x10^6)
Min
Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL927.D
Injection Date: 09-MAY-2005 15:39
Instrument: Gcp.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 1.149 to 6.961 Min
1.151
1.412
1.547
1.651
Aroclor-1016
1.767
1.892
Aroclor-1016
2.039
2.104
2.262
Aroclor-1016
Aroclor-1016
2.546
2.607
Aroclor-1016
2.982
3.121
3.359
3.594
3.717
3.806
Aroclor-1260
3.971
4.092
Aroclor-1260
4.342
Aroclor-1260
4.626
4.894
4.967
Aroclor-1260
5.284
5.352
5.529
5.617
Aroclor-1260
6.129
Decachlorobiphenyl
6.844

STL ST. LOUIS

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b/PCAL927.D
Report Date: 05/10/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PCAL927.D
Analysis Type: SOIL

Injection Date: 09-MAY-2005 15:39
Lab Sample ID: CCAL1000
Method File: \\slsvr01\gc_lab\Gcp.i\P050509B.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	919.9676	8.0	15.0
29 Aroclor-1260	1000.0000	969.2943	3.1	15.0
34 Decachlorobiphenyl	50.0000	46.7843	6.4	15.0

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PCAL927.D
Report Date: 10-May-2005 11:32

STL St. Louis

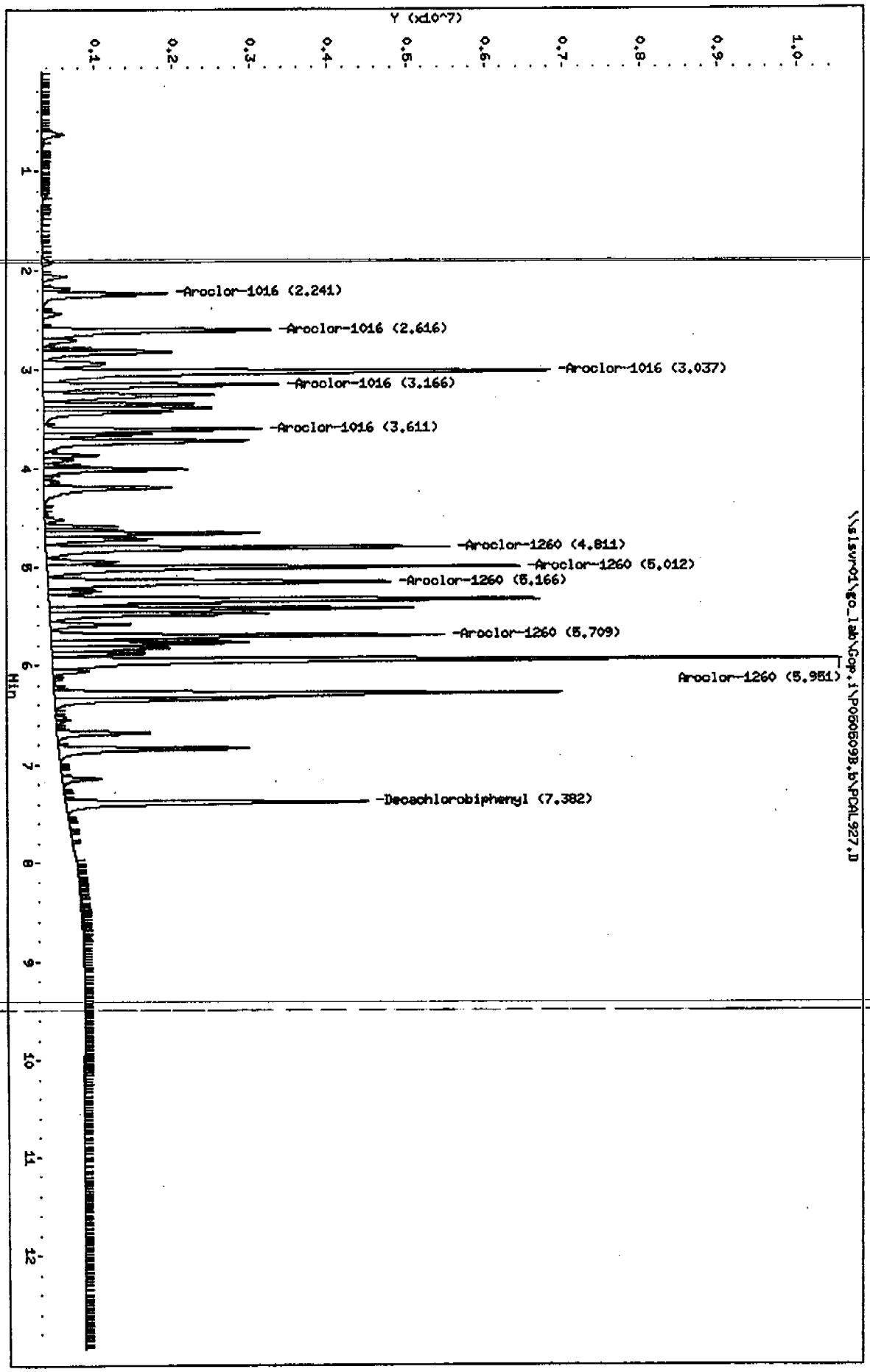
Data file : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PCAL927.D
Lab Smp Id: CCAL1000
Inj Date : 09-MAY-2005 15:39
Operator : BLO Inst ID: Gcp.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Meth Date : 10-May-2005 11:31 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

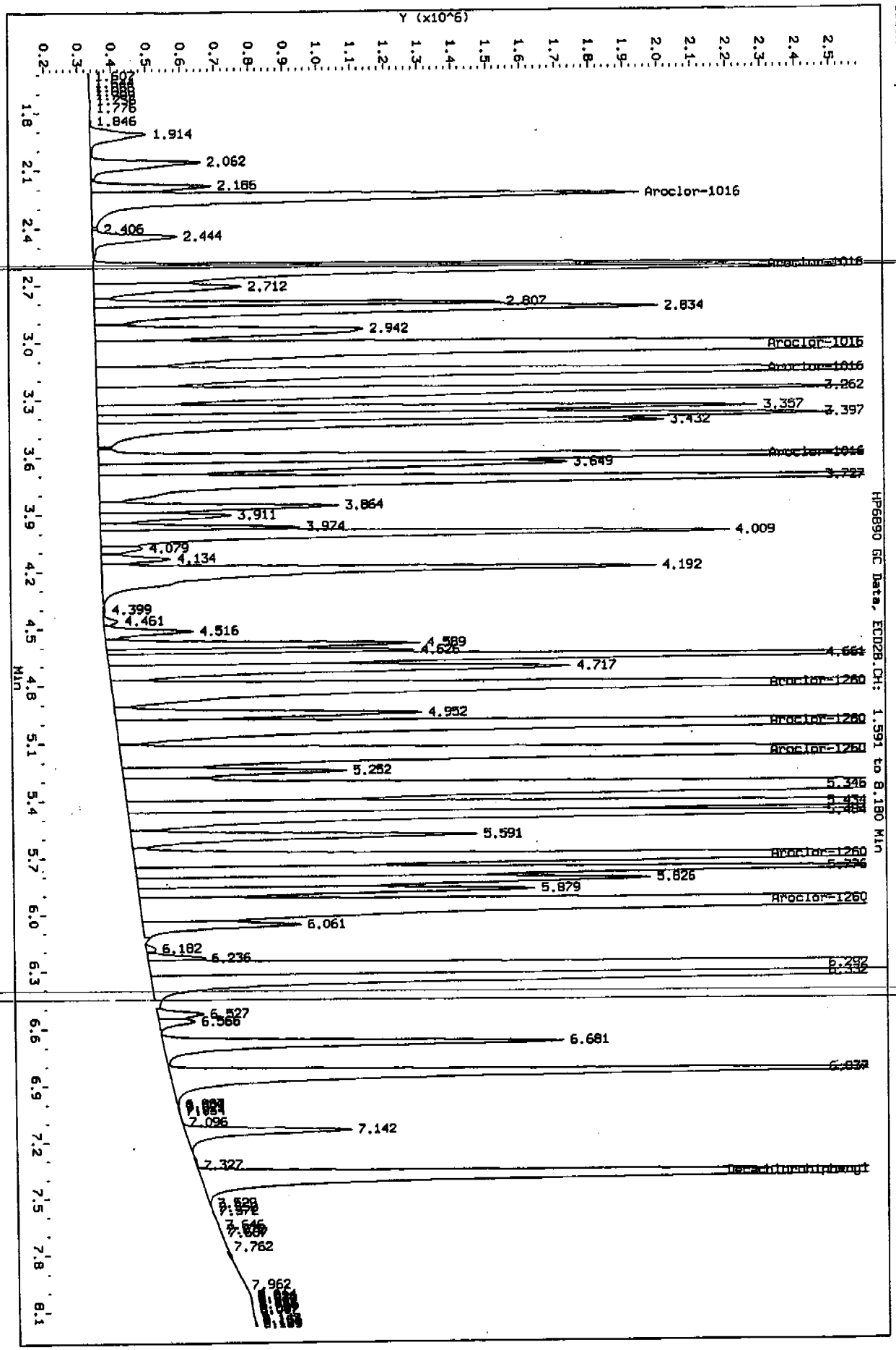
Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.240	2.223	0.017	4289071	1000.00	857.9	80.00- 120.00	100.00
2.615	2.598	0.017	8653223	1000.00	902.5	161.40- 242.10	201.75
3.037	3.016	0.021	18595364	1000.00	966.8	346.84- 520.26	433.55
3.165	3.145	0.020	7266265	1000.00	946.2	144.86- 217.29	181.07
3.610	3.590	0.020	5693757	1000.00	926.4	106.20- 159.30	132.75
Average of Peak Amounts =					920		
28 Aroclor-1260					CAS #: 11096-82-5		
4.810	4.788	0.022	11700097	1000.00	946.7	80.00- 120.00	100.00
5.012	5.019	-0.007	13721253	1000.00	972.6	93.82- 140.73	117.27
5.165	5.140	0.025	12734035	1000.00	954.9	87.07- 130.60	108.84
5.709	5.685	0.024	11191230	1000.00	954.6	76.52- 114.78	95.65
5.950	5.959	-0.009	24383162	1000.00	1018	166.72- 250.08	208.40
Average of Peak Amounts =					969.3		
$ 32 Decachlorobiphenyl					CAS #:		
7.382	7.391	-0.009	9123081	50.0000	46.78		

BLO 5-10-05


Y (x10^7)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Min
1
2
3
4
5
6
7
8
9
10
11
12
-Aroclor-1016 (2.241)
-Aroclor-1016 (2.616)
-Aroclor-1016 (3.037)
-Aroclor-1016 (3.166)
-Aroclor-1016 (3.611)
-Aroclor-1260 (4.811)
-Aroclor-1260 (5.012)
-Aroclor-1260 (5.166)
-Aroclor-1260 (5.709)
Aroclor-1260 (5.951)
-Decachlorobiphenyl (7.382)
\\slsvr01\go_lab\Gcp.i\P060609B.b\PCAL927.D
Data File: \\slsvr01\go_lab\Gcp.i\P060609B.b\PCAL927.D
Date : 09-MAY-2006 18:39
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Data File: \\slevr01\gc_lab\Gcp_1\P050509B.b\PCAL927.D
Injection Date: 09-MAY-2005 15:39
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 1.591 to 8.180 Min
Min
1.776
1.846
1.914
2.062
2.186
Aroclor-1016
2.406
2.444
2.712
2.807
2.834
2.942
3.262
3.357
3.397
3.432
3.649
3.727
3.864
3.911
3.974
4.009
4.079
4.134
4.192
4.399
4.461
4.516
4.589
4.626
4.661
4.717
Aroclor-1260
4.952
5.252
5.346
5.591
5.826
5.879
6.061
6.182
6.236
6.527
6.566
6.681
6.837
7.096
7.142
7.327
Decachlorobiphenyl
7.762
7.962

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b/PCAL930.D
Report Date: 05/10/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PCAL930.D
Analysis Type: SOIL

Injection Date: 09-MAY-2005 16:38
Lab Sample ID: CCAL1000
Method File: \\slsvr01\gc_lab\Gcp.i\P050509A.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	913.1572	8.7	15.0
29 Aroclor-1260	1000.0000	944.0001	5.6	15.0
34 Decachlorobiphenyl	50.0000	49.1846	1.6	15.0

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL930.D
Report Date: 10-May-2005 09:45

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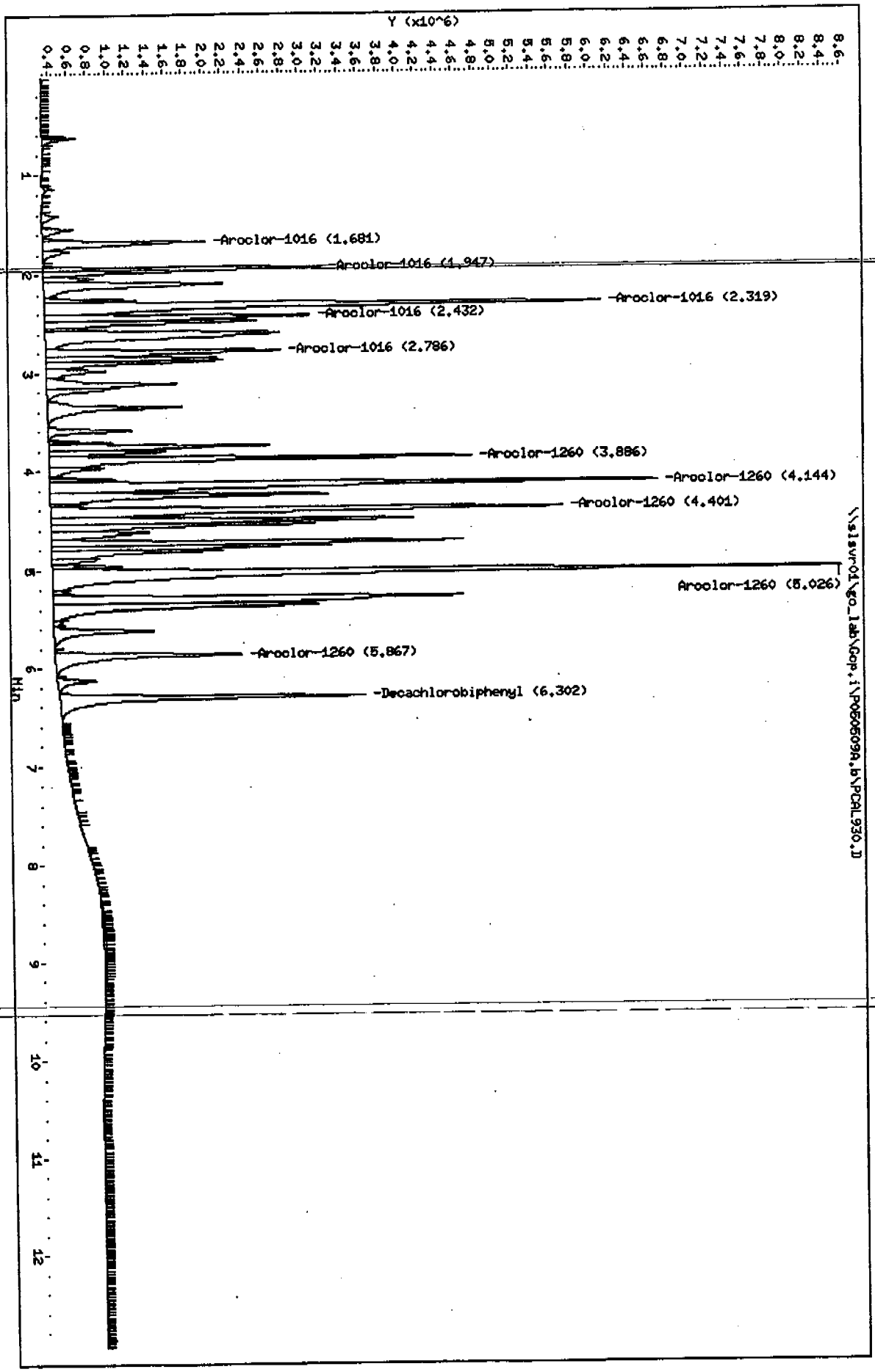
Data file : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL930.D
Lab Smp Id: CCAL1000
Inj Date : 09-MAY-2005 16:38
Operator : BLO
Inst ID: Gcp.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Meth Date : 10-May-2005 09:43 owenb
Quant Type: ESTD
Cal Date : 04-APR-2005 20:37
Cal File: PCAL127.D
Als bottle: 3
Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon
Compound Sublist: Ar1660.sub
Target Version: 4.10
Sample Matrix: SOIL
Processing Host: SLGC06

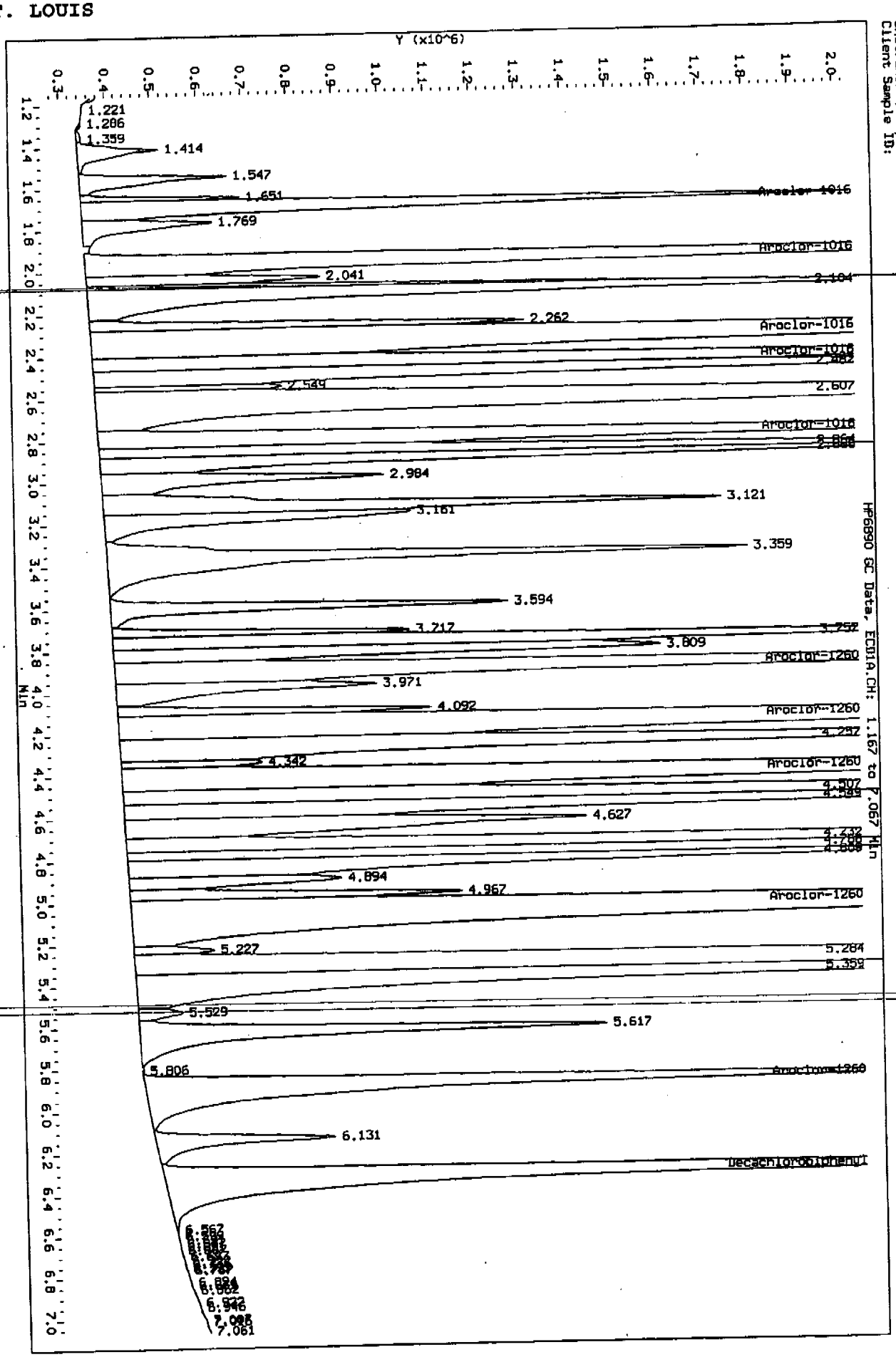
Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.680	1.668	0.012	4257140	1000.00	871.7	80.00- 120.00	100.00
1.947	1.933	0.014	8220859	1000.00	899.3	154.49- 231.73	193.11
2.318	2.303	0.015	19350776	1000.00	946.0	363.64- 545.46	454.55
2.432	2.413	0.019	7062514	1000.00	944.5	132.72- 199.08	165.90
2.785	2.768	0.017	7202380	1000.00	904.3	135.35- 203.02	169.18
		Average of Peak Amounts =			913.2		
28 Aroclor-1260					CAS #: 11096-82-5		
3.885	3.896	-0.011	11018350	1000.00	923.0	80.00- 120.00	100.00
4.143	4.156	-0.013	19131629	1000.00	916.8	138.91- 208.36	173.63
4.400	4.412	-0.012	16688508	1000.00	910.3	121.17- 181.75	151.46
5.025	5.039	-0.014	26788614	1000.00	1005	194.50- 291.75	243.13
5.867	5.882	-0.015	6516633	1000.00	965.2	47.31- 70.97	59.14
		Average of Peak Amounts =			944		
$ 32 Decachlorobiphenyl					CAS #:		
6.302	6.273	0.029	9951545	50.0000	49.18		

BLO 5/10/05


Y (x10^6)
Min
-Aroclor-1016 (1.681)
-Aroclor-1016 (1.947)
-Aroclor-1016 (2.319)
-Aroclor-1016 (2.432)
-Aroclor-1016 (2.786)
-Aroclor-1260 (3.886)
-Aroclor-1260 (4.144)
-Aroclor-1260 (4.401)
-Aroclor-1260 (5.026)
-Aroclor-1260 (5.867)
-Decachlorobiphenyl (6.302)
Data File: \\slsvr01\go_lab\Gop.i\P050509A.b\PCAL930.D
Date : 09-MAY-2005 16:38
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gop.i
Operator: BLO
Column diameter: 0.53
\\slsvr01\go_lab\Gop.i\P050509A.b\PCAL930.D


Y (x10^6)
Min
Data File: \\alsvr01\gc_lab\Gcp.1\P050509A.b\PCAL930.D
Injection Date: 09-MAY-2005 16:38
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 1.167 to 7.067 Min
1.221
1.286
1.359
1.414
1.547
1.651
Aroclor-1016
1.769
Aroclor-1016
2.041
2.262
Aroclor-1016
2.549
2.607
Aroclor-1016
2.984
3.121
3.161
3.359
3.594
3.717
3.809
Aroclor-1260
3.971
4.092
Aroclor-1260
4.342
Aroclor-1260
4.627
4.894
4.967
Aroclor-1260
5.227
5.284
5.359
5.529
5.617
5.806
Aroclor-1260
6.131
Decachlorobiphenyl

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b/PCAL930.D
Report Date: 05/10/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PCAL930.D
Analysis Type: SOIL

Injection Date: 09-MAY-2005 16:38
Lab Sample ID: CCAL1000
Method File: \\slsvr01\gc_lab\Gcp.i\P050509B.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	910.9358	8.9	15.0
29 Aroclor-1260	1000.0000	962.9417	3.7	15.0
34 Decachlorobiphenyl	50.0000	47.2977	5.4	15.0

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PCAL930.D
Report Date: 10-May-2005 11:33

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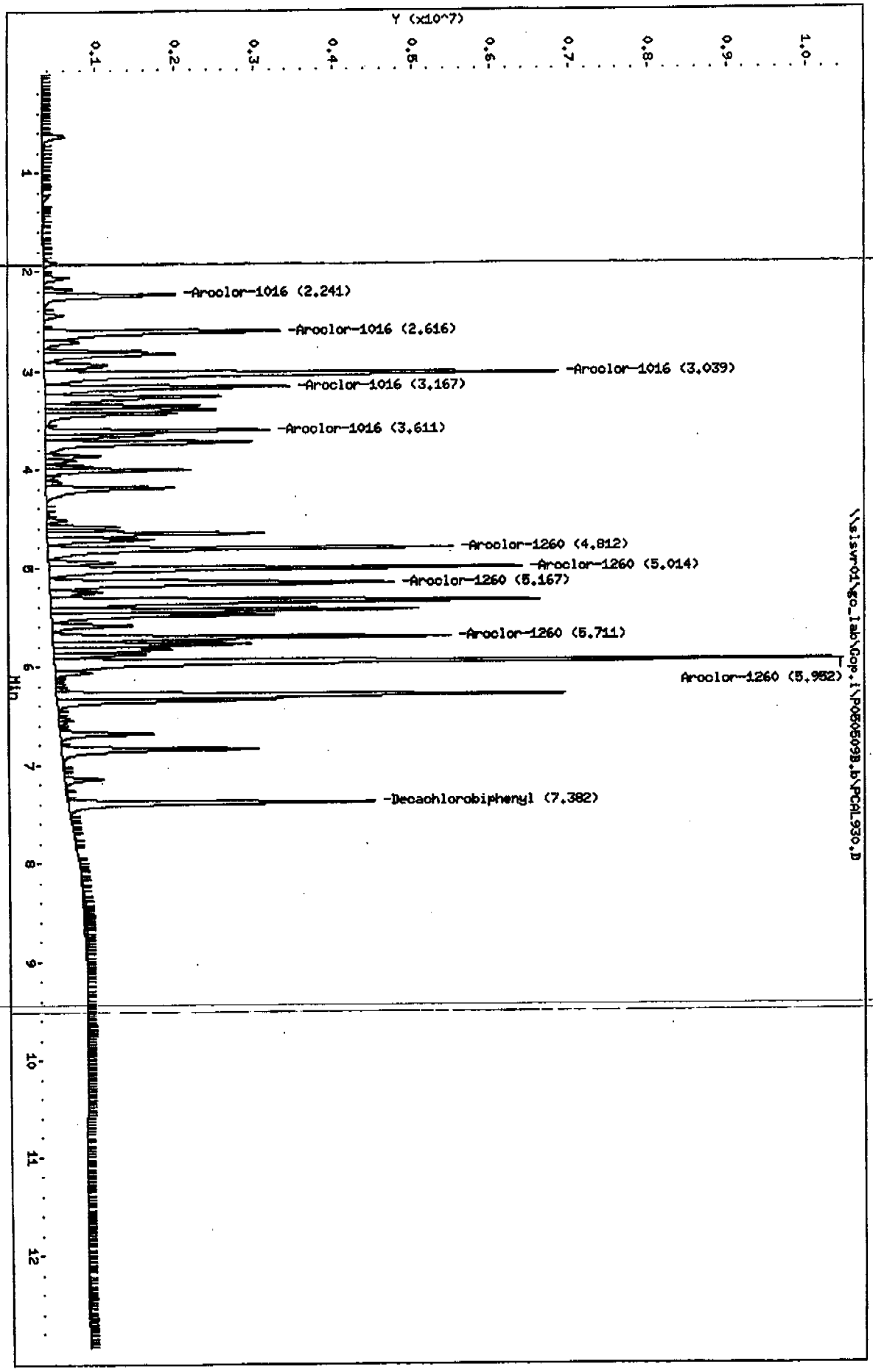
Data file : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PCAL930.D
Lab Smp Id: CCAL1000
Inj Date : 09-MAY-2005 16:38
Operator : BLO Inst ID: Gcp.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Meth Date : 10-May-2005 11:31 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

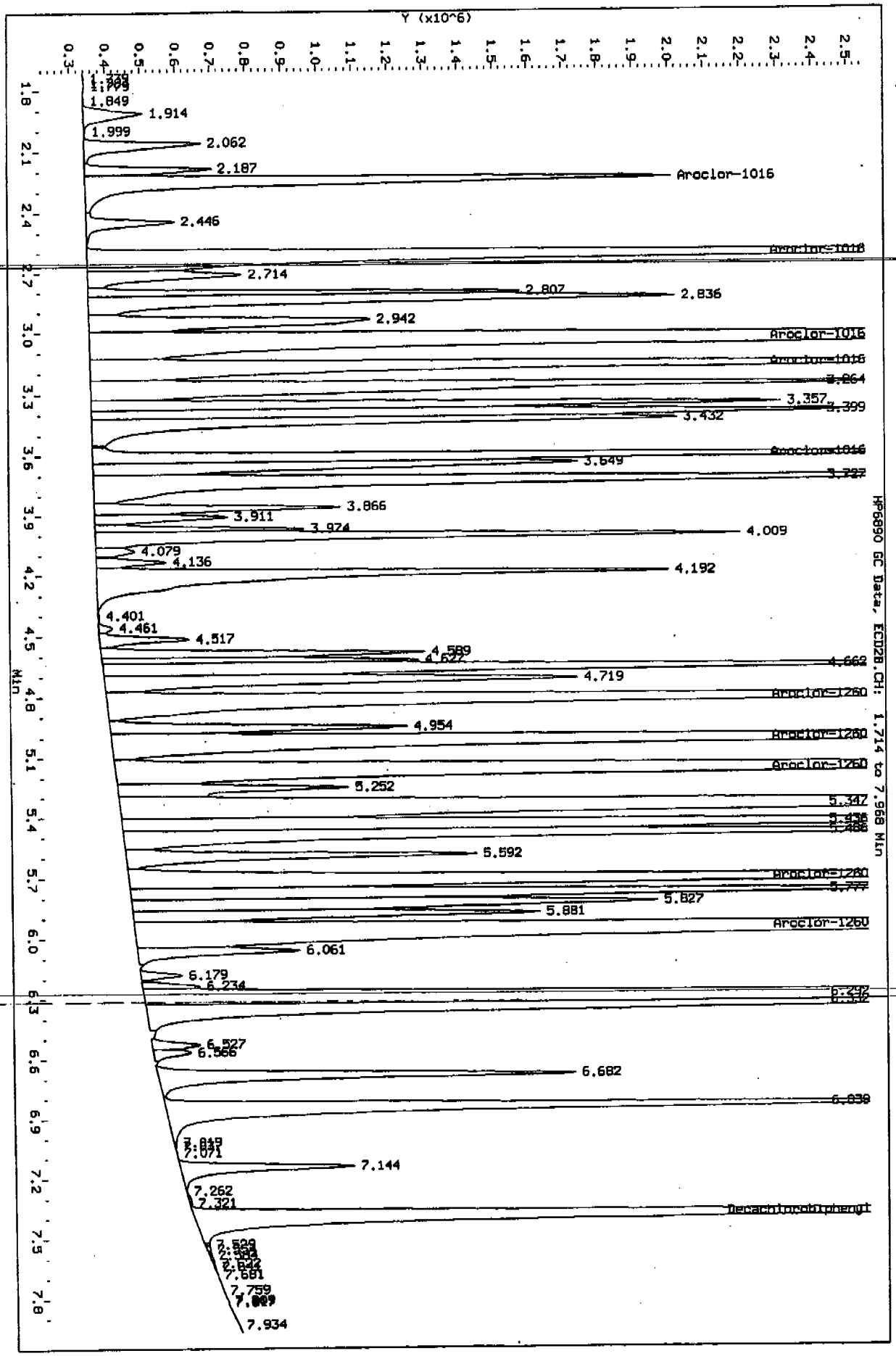
Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.240	2.223	0.017	4242168	1000.00	848.5	80.00- 120.00	100.00
2.615	2.598	0.017	8595150	1000.00	896.4	162.09- 243.13	202.61
3.039	3.016	0.023	18455762	1000.00	959.6	348.04- 522.07	435.05
3.167	3.145	0.022	7695021	1000.00	937.6	145.11- 217.67	181.39
3.610	3.590	0.020	5609051	1000.00	912.6	105.78- 158.67	132.22
		Average of Peak Amounts =			910.9		
28 Aroclor-1260					CAS #: 11096-82-5		
4.812	4.788	0.024	11605792	1000.00	939.1	80.00- 120.00	100.00
5.014	5.019	-0.005	13636854	1000.00	966.6	94.00- 141.00	117.50
5.167	5.140	0.027	12654985	1000.00	949.0	87.23- 130.85	109.04
5.710	5.685	0.025	11073388	1000.00	944.6	76.33- 114.50	95.41
5.952	5.959	-0.007	24331170	1000.00	1015	167.72- 251.58	209.65
		Average of Peak Amounts =			962.9		
$ 32 Decachlorobiphenyl					CAS #:		
7.382	7.391	-0.009	9223191	50.0000	47.30		

BLO 5-10-05


Y (x10^7)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1
2
3
4
5
6
7
8
9
10
11
12
Min
-Aroclor-1016 (2.241)
-Aroclor-1016 (2.616)
-Aroclor-1016 (3.039)
-Aroclor-1016 (3.167)
-Aroclor-1016 (3.611)
-Aroclor-1260 (4.812)
-Aroclor-1260 (5.014)
-Aroclor-1260 (5.167)
-Aroclor-1260 (5.711)
Aroclor-1260 (5.952)
-Decachlorobiphenyl (7.382)
Data File: \\slsvr01\gc_lab\Gcp.i\P0505098.b\PCAL930.D
Date : 09-MAY-2005 16:38
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-2
\\slsvr01\gc_lab\Gcp.i\P0505098.b\PCAL930.D
Instrument: Gcp.i
Operator: BLD
Column diameter: 0.53


Y (x10^6)
Min
Data File: \\slsvr01\gc_lab\Gcp1\P050509B.b\PCAL930.D
Injection Date: 09-MAY-2005 16:38
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 1.714 to 7.968 Min
1.849
1.914
1.999
2.062
2.187
Aroclor-1016
2.446
2.714
2.807
2.836
2.942
3.357
3.432
3.649
3.866
3.911
3.974
4.009
4.079
4.136
4.192
4.401
4.461
4.517
4.589
4.719
Aroclor-1260
4.954
5.252
5.592
5.827
5.881
6.061
6.179
6.234
6.527
6.566
6.682
7.144
7.262
7.321
Decachlorobiphenyl
7.759
7.934

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b/PCAL939.D
Report Date: 05/10/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PCAL939.D
Analysis Type: SOIL

Injection Date: 09-MAY-2005 19:07
Lab Sample ID: CCAL1000
Method File: \\slsvr01\gc_lab\Gcp.i\P050509A.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	932.2012	6.8	15.0
29 Aroclor-1260	1000.0000	959.0214	4.1	15.0
34 Decachlorobiphenyl	50.0000	48.9959	2.0	15.0

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL939.D
Report Date: 10-May-2005 09:46

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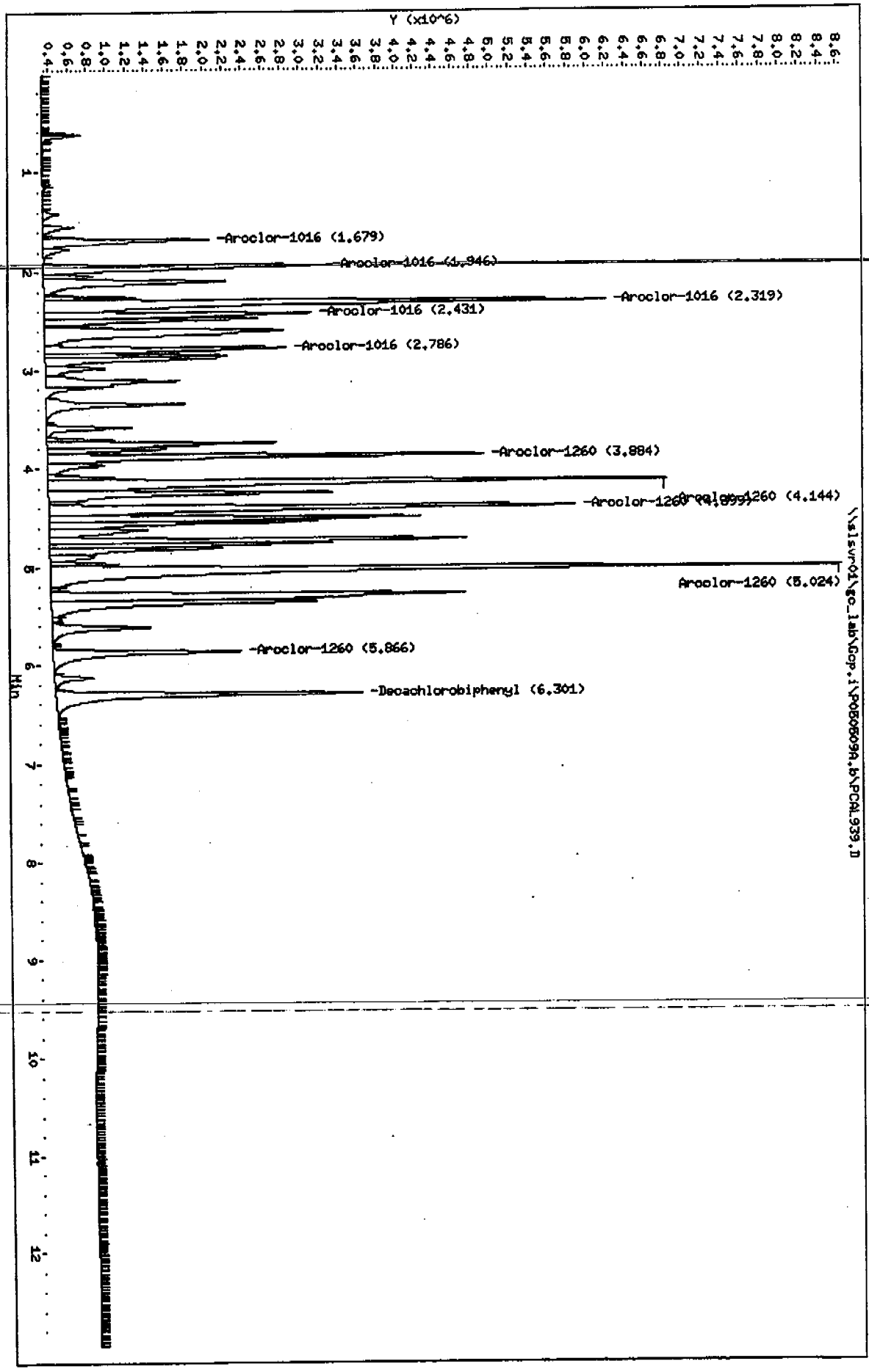
Data file : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL939.D
Lab Smp Id: CCAL1000
Inj Date : 09-MAY-2005 19:07 Inst ID: Gcp.i
Operator : BLO
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Meth Date : 10-May-2005 09:43 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 14 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.678	1.668	0.010	4331236	1000.00	886.9	80.00- 120.00	100.00
1.945	1.933	0.012	8315890	1000.00	909.7	153.60- 230.40	192.00
2.318	2.303	0.015	19585230	1000.00	957.4	361.75- 542.62	452.19
2.430	2.413	0.017	7262294	1000.00	971.2	134.14- 201.21	167.67
2.785	2.768	0.017	7453047	1000.00	935.8	137.66- 206.49	172.08
Average of Peak Amounts =					932.2		
28 Aroclor-1260					CAS #: 11096-82-5		
3.883	3.896	-0.013	11339777	1000.00	949.9	80.00- 120.00	100.00
4.143	4.156	-0.013	19446539	1000.00	931.9	137.19- 205.79	171.49
4.398	4.412	-0.014	17194338	1000.00	937.9	121.30- 181.95	151.63
5.023	5.039	-0.016	26990059	1000.00	1012	190.41- 285.61	238.01
5.865	5.882	-0.017	6502750	1000.00	963.2	45.88- 68.81	57.34
Average of Peak Amounts =					959		
$ 32 Decachlorobiphenyl					CAS #:		
6.300	6.273	0.027	9913380	50.0000	49.00		

BLO 5/10/05


Y (x10^6)
Min
-Aroclor-1016 (1.679)
-Aroclor-1016 (1.946)
-Aroclor-1016 (2.319)
-Aroclor-1016 (2.431)
-Aroclor-1016 (2.786)
-Aroclor-1260 (3.884)
-Aroclor-1260 (4.144)
Aroclor-1260 (5.024)
-Aroclor-1260 (5.866)
-Decachlorobiphenyl (6.301)
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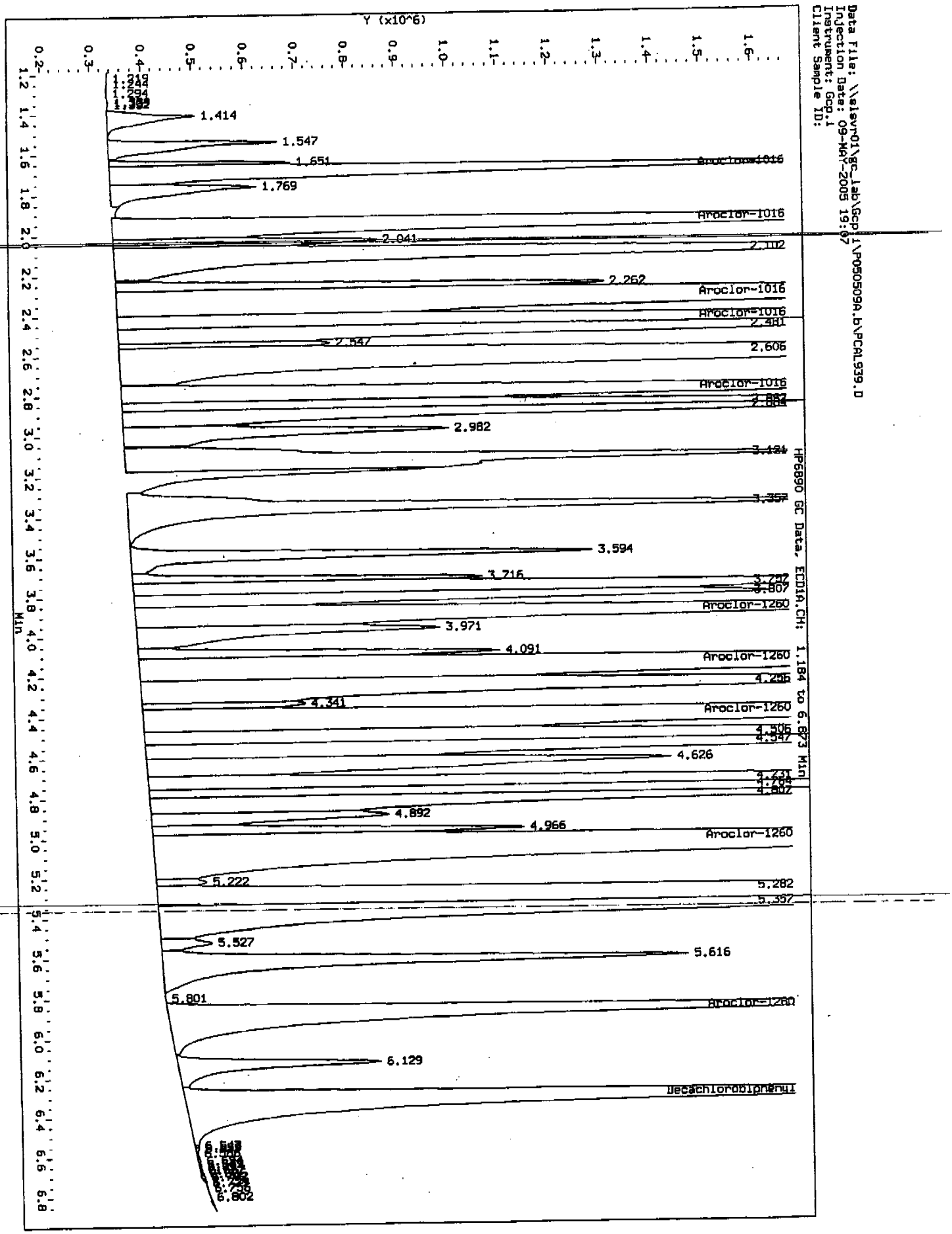
Data File: \\slsvr01\gc_lab\Gcp,i\P0B0609A.b\PCAL939.D
Date : 09-MAY-2005 19:07
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gcp,i
Operator: BLD
Column diameter: 0.53


Y (x10^6)
Min
Data File: \\slsvr01\gc_lab\Gcp1\P050509A.b\PCAL939.D
Injection Date: 09-MAY-2005 19:07
Instrument: Gcp.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 1.184 to 6.873 Min
1.414
1.547
1.651
Aroclor-1016
1.769
Aroclor-1016
2.041
2.102
2.262
Aroclor-1016
Aroclor-1016
2.441
2.547
2.606
Aroclor-1016
2.982
3.357
3.594
3.716
3.807
Aroclor-1260
3.971
4.091
Aroclor-1260
4.255
4.341
Aroclor-1260
4.506
4.547
4.626
4.764
4.802
4.892
4.966
Aroclor-1260
5.222
5.282
5.357
5.527
5.616
5.801
Aroclor-1260
6.129
Decachlorobiphenyl
6.802

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b/PCAL939.D
Report Date: 05/10/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PCAL939.D
Analysis Type: SOIL

Injection Date: 09-MAY-2005 19:07
Lab Sample ID: CCAL1000
Method File: \\slsvr01\gc_lab\Gcp.i\P050509B.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	934.3231	6.6	15.0
29 Aroclor-1260	1000.0000	975.3976	2.5	15.0
34 Decachlorobiphenyl	50.0000	46.7400	6.5	15.0

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PCAL939.D
Report Date: 10-May-2005 11:33

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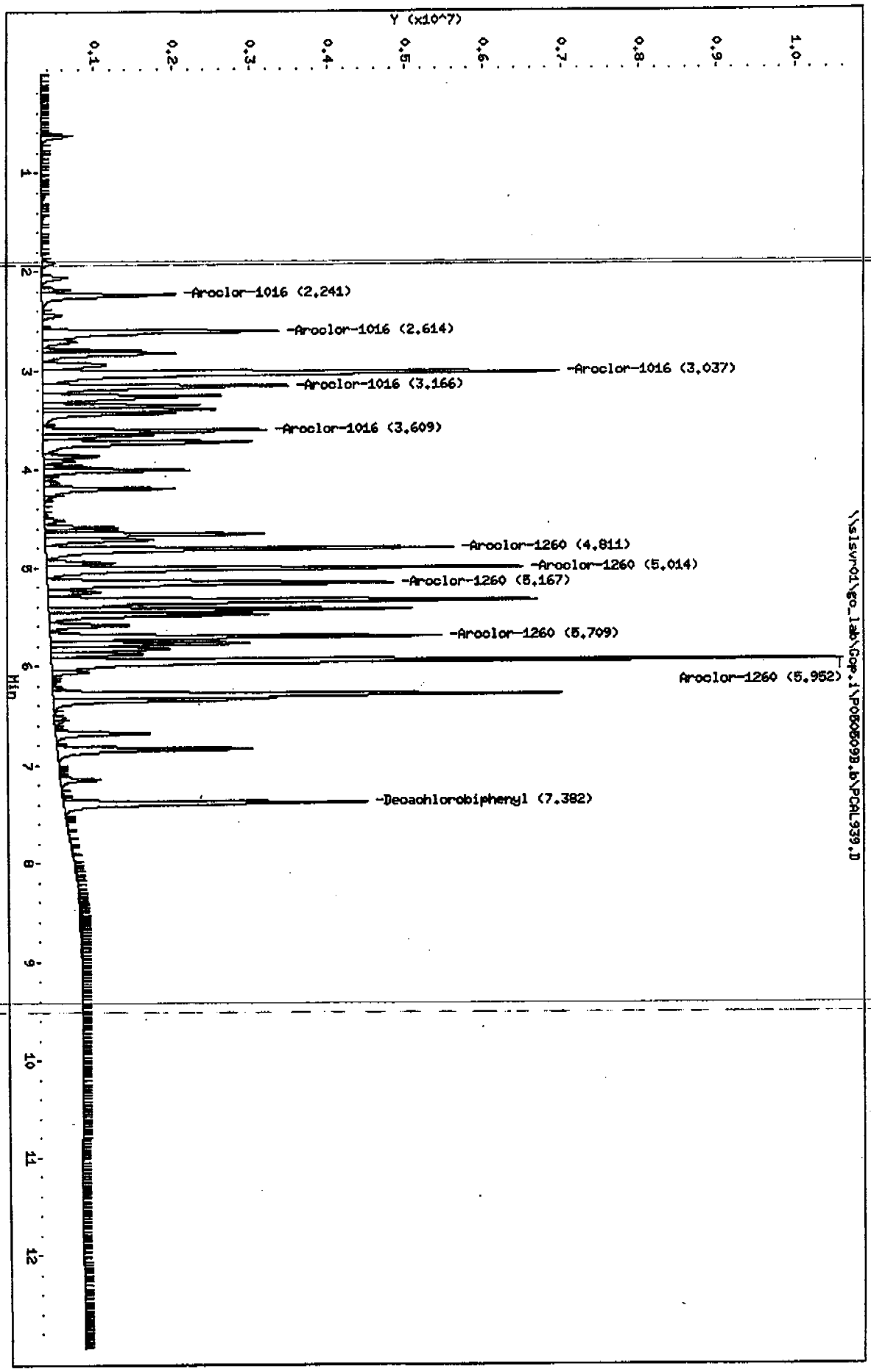
Data file : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PCAL939.D
Lab Smp Id: CCAL1000
Inj Date : 09-MAY-2005 19:07
Operator : BLO Inst ID: Gcp.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Meth Date : 10-May-2005 11:31 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 14 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

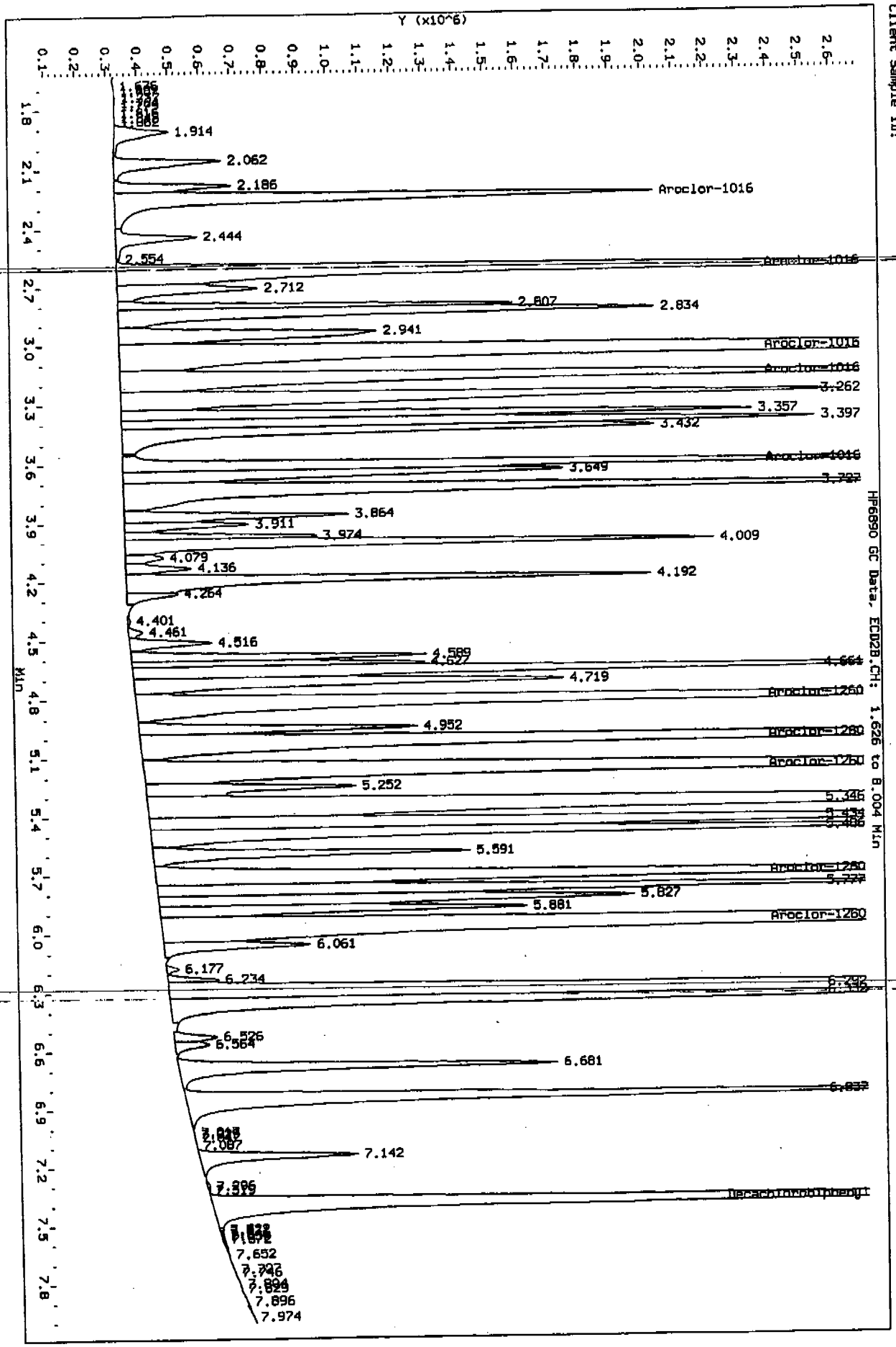
Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	AMOUNTS RESPONSE	CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.240	2.223	0.017	4372529	1000.00	874.6	80.00- 120.00	100.00
2.614	2.598	0.016	8752831	1000.00	912.9	160.14- 240.21	200.18
3.037	3.016	0.021	18793093	1000.00	977.1	343.84- 515.76	429.80
3.165	3.145	0.020	7899397	1000.00	962.4	144.53- 216.79	180.66
3.609	3.590	0.019	5805582	1000.00	944.6	106.22- 159.33	132.77
		Average of Peak Amounts =			934.3		
28 Aroclor-1260					CAS #: 11096-82-5		
4.810	4.788	0.022	11836715	1000.00	957.8	80.00- 120.00	100.00
5.014	5.019	-0.005	13849894	1000.00	981.7	93.61- 140.41	117.01
5.167	5.140	0.027	12885817	1000.00	966.3	87.09- 130.64	108.86
5.709	5.685	0.024	11140624	1000.00	950.3	75.30- 112.94	94.12
5.952	5.959	-0.007	24461726	1000.00	1021	165.33- 247.99	206.66
		Average of Peak Amounts =			975.4		
$ 32 Decachlorobiphenyl					CAS #:		
7.382	7.391	-0.009	9114453	50.0000	46.74		

BLO 5-10-05


Y (x10^7)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Min
1
2
3
4
5
6
7
8
9
10
11
12
-Aroclor-1016 (2,241)
-Aroclor-1016 (2,614)
-Aroclor-1016 (3,037)
-Aroclor-1016 (3,166)
-Aroclor-1016 (3,609)
-Aroclor-1260 (4,811)
-Aroclor-1260 (5,014)
-Aroclor-1260 (5,167)
-Aroclor-1260 (5,709)
Aroclor-1260 (5,952)
-Decachlorobiphenyl (7,382)
\\slsvr01\go_lab\Gcp.i\P0505093.b\PCAL939.D
Data File: \\slsvr01\go_lab\Gcp.i\P0505093.b\PCAL939.D
Date : 09-MAY-2005 19:07
Client ID:
Sample Info: DCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
Data File: \\slsvr01\gc_lab\Gcp_1\P050509B.b\PCAL939.D
Injection Date: 09-MAY-2005 19:07
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 1.626 to 8.004 Min
1.914
2.062
2.186
Aroclor-1016
2.444
2.554
2.712
2.807
2.834
2.941
3.262
3.357
3.397
3.432
3.649
3.864
3.911
3.974
4.009
4.079
4.136
4.192
4.264
4.401
4.461
4.516
4.589
4.719
Aroclor-1260
4.952
5.252
5.591
5.827
5.881
6.061
6.177
6.234
6.526
6.564
6.681
7.067
7.142
Decachlorobiphenyl
7.652
7.746
7.894
7.896
7.974

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Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b/PCAL950.D
Report Date: 05/10/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PCAL950.D
Analysis Type: SOIL

Injection Date: 09-MAY-2005 22:08
Lab Sample ID: CCAL1000
Method File: \\slsvr01\gc_lab\Gcp.i\P050509A.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	942.4074	5.8	15.0
29 Aroclor-1260	1000.0000	965.8430	3.4	15.0
34 Decachlorobiphenyl	50.0000	49.6075	0.8	15.0

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL950.D
Report Date: 10-May-2005 09:46

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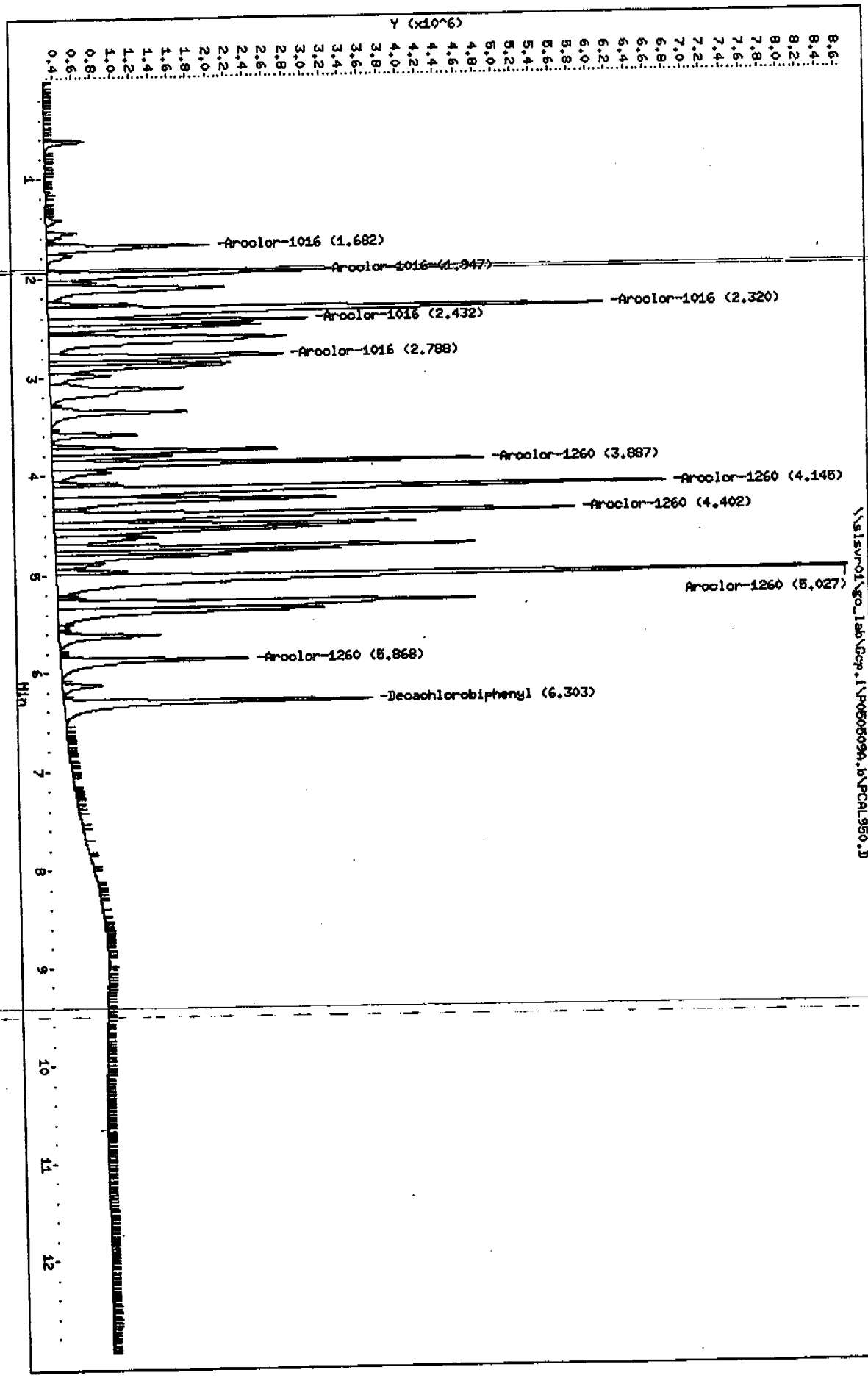
Data file : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL950.D
Lab Smp Id: CCAL1000
Inj Date : 09-MAY-2005 22:08 Inst ID: Gcp.i
Operator : BLO
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Meth Date : 10-May-2005 09:43 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 14 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

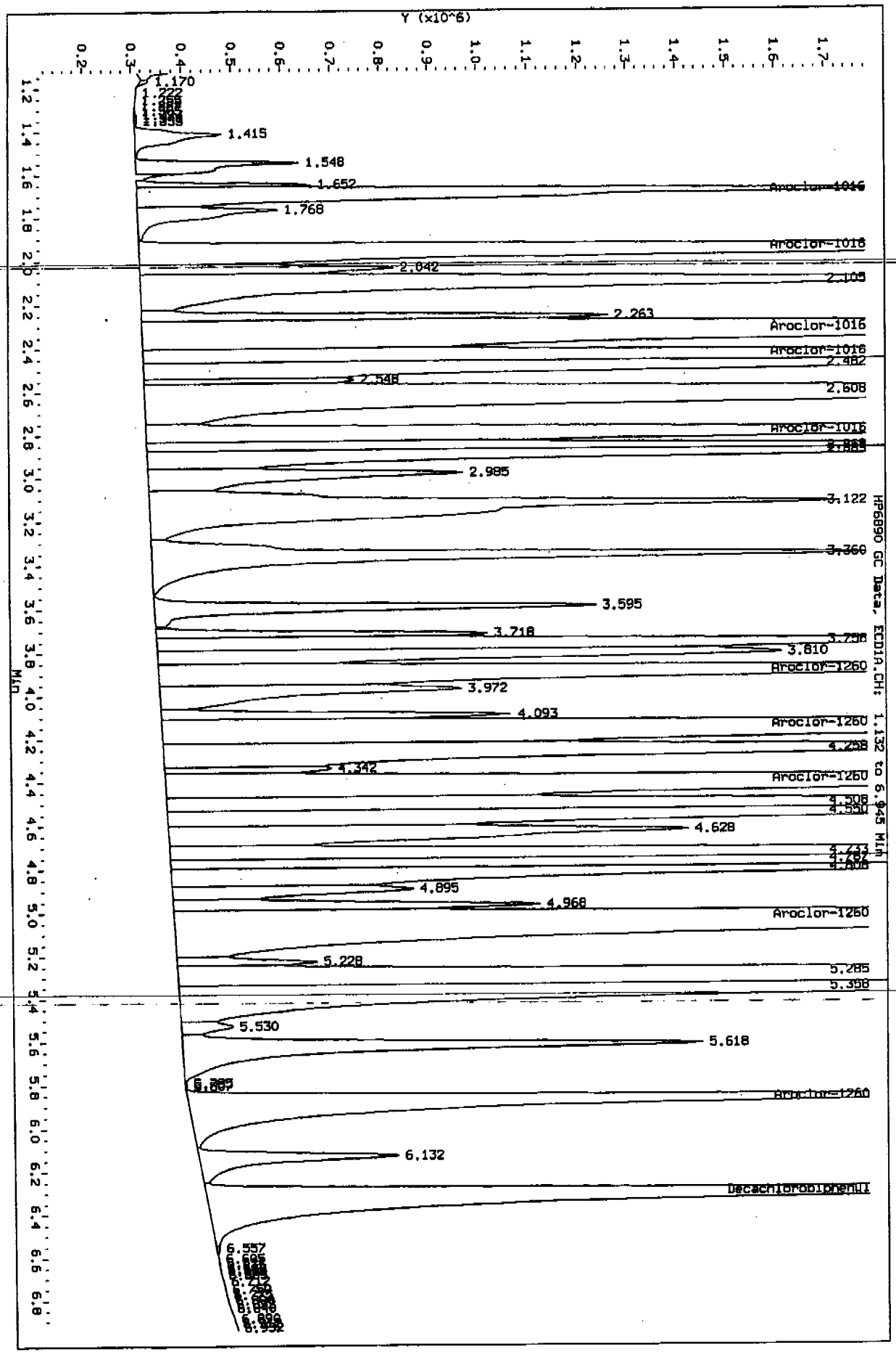
Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.681	1.668	0.013	4432390	1000.00	907.6	80.00- 120.00	100.00
1.946	1.933	0.013	8450650	1000.00	924.4	152.53- 228.79	190.66
2.319	2.303	0.016	20043444	1000.00	979.8	361.76- 542.64	452.20
2.431	2.413	0.018	7192879	1000.00	982.0	129.82- 194.74	162.28
2.788	2.768	0.020	7472641	1000.00	938.2	134.87- 202.31	168.59
	Average of Peak Amounts =				942.4		
28 Aroclor-1260					CAS #: 11096-82-5		
3.886	3.896	-0.010	11450043	1000.00	959.2	80.00- 120.00	100.00
4.144	4.156	-0.012	19738784	1000.00	945.9	137.91- 206.87	172.39
4.401	4.412	-0.011	17095458	1000.00	932.5	119.44- 179.17	149.30
5.026	5.039	-0.013	27145981	1000.00	1018	189.67- 284.50	237.08
5.868	5.882	-0.014	6573048	1000.00	973.6	45.93- 68.89	57.41
	Average of Peak Amounts =				965.8		
$ 32 Decachlorobiphenyl					CAS #:		
6.303	6.273	0.030	10037116	50.0000	49.61		

BLO 5/10/05



LOT# F5D210380


Y (x10^6)
Min
Data File: \\slsvr01\gc_lab\Gcp_1\P050509A.b\PCAL950.D
Injection Date: 09-MAY-2005 22:08
Instrument: Gcp.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 1.132 to 6.945 Min
1.170
1.415
1.548
1.652
Aroclor-1016
1.768
Aroclor-1016
2.042
2.105
2.263
Aroclor-1016
Aroclor-1016
2.482
2.548
2.608
Aroclor-1016
2.985
3.122
3.360
3.595
3.718
3.756
3.810
Aroclor-1260
3.972
4.093
Aroclor-1260
4.258
4.342
Aroclor-1260
4.506
4.550
4.628
4.895
4.968
Aroclor-1260
5.228
5.285
5.358
5.530
5.618
Aroclor-1260
6.132
DecachlorobiphenyI
6.557

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b/PCAL961.D
Report Date: 05/10/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PCAL961.D
Analysis Type: SOIL

Injection Date: 10-MAY-2005 01:10
Lab Sample ID: CCAL1000
Method File: \\slsvr01\gc_lab\Gcp.i\P050509A.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	974.7110	2.5	15.0
29 Aroclor-1260	1000.0000	1000.1829	0.0	15.0
34 Decachlorobiphenyl	50.0000	50.2869	0.6	15.0

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL961.D
Report Date: 10-May-2005 09:47

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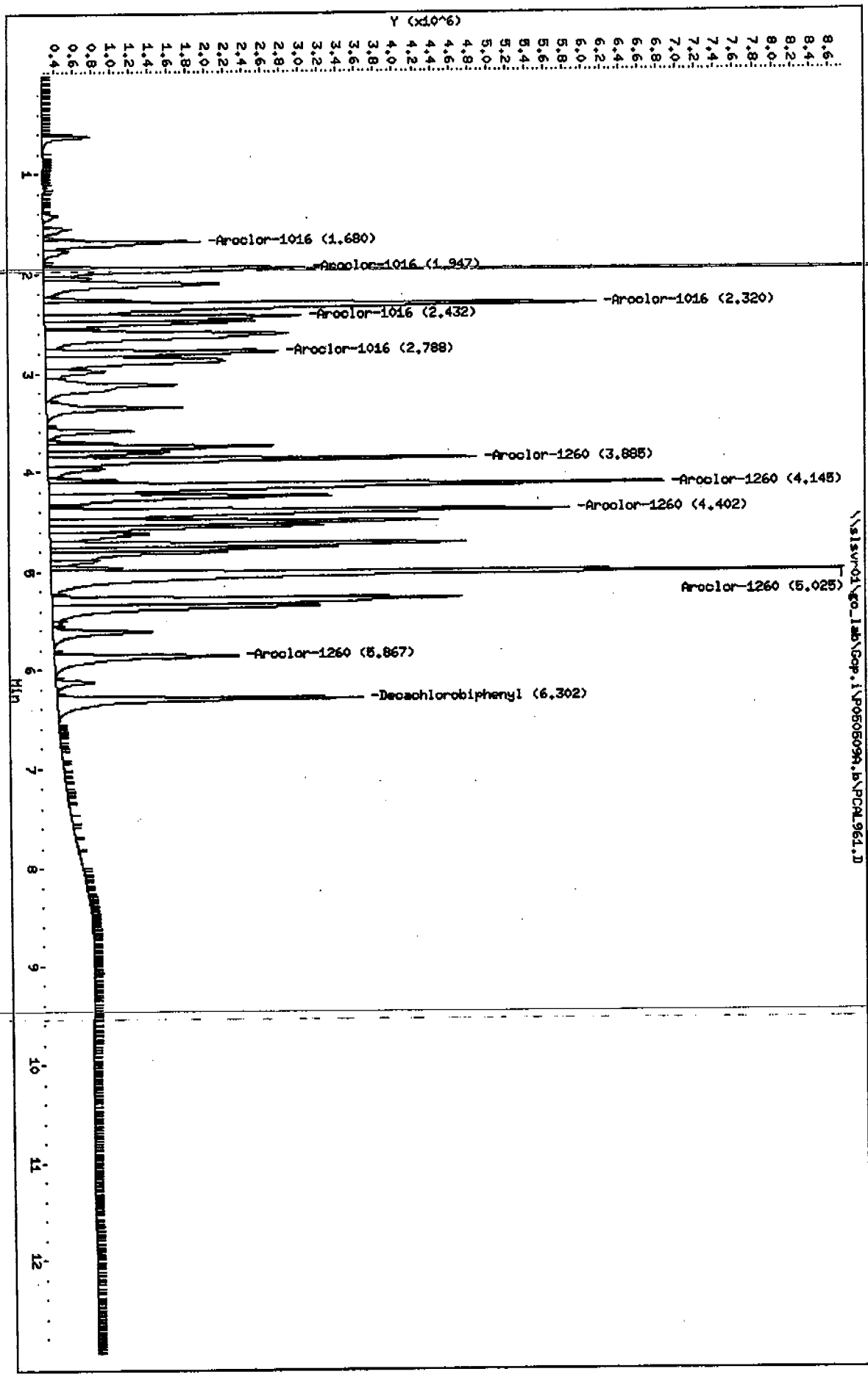
Data file : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL961.D
Lab Smp Id: CCAL1000
Inj Date : 10-MAY-2005 01:10
Operator : BLO Inst ID: Gcp.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Meth Date : 10-May-2005 09:43 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 35 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

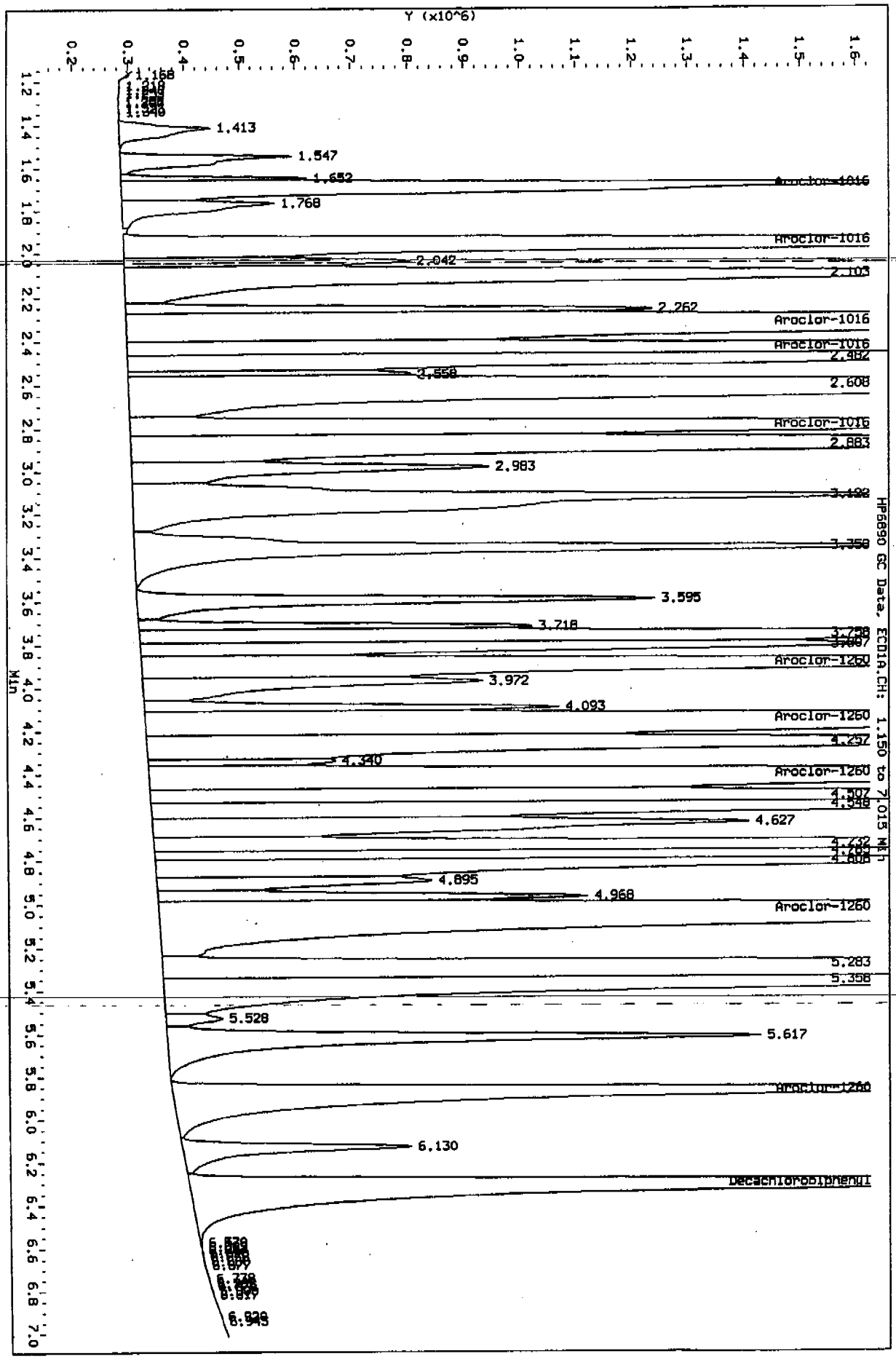
Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.679	1.668	0.011	4548243	1000.00	931.3	80.00- 120.00	100.00
1.946	1.933	0.013	8669058	1000.00	948.3	152.48- 228.72	190.60
2.319	2.303	0.016	20702588	1000.00	1012	364.14- 546.21	455.18
2.431	2.413	0.018	7511657	1000.00	1004	132.12- 198.19	165.16
2.788	2.768	0.020	7783648	1000.00	977.3	136.91- 205.36	171.14
		Average of Peak Amounts =			974.7		
28 Aroclor-1260					CAS #: 11096-82-5		
3.884	3.896	-0.012	11763752	1000.00	985.4	80.00- 120.00	100.00
4.144	4.156	-0.012	20381994	1000.00	976.7	138.61- 207.91	173.26
4.401	4.412	-0.011	18035213	1000.00	983.8	122.65- 183.97	153.31
5.024	5.039	-0.015	28343962	1000.00	1063	192.75- 289.13	240.94
5.866	5.882	-0.016	6697329	1000.00	992.0	45.55- 68.32	56.93
		Average of Peak Amounts =			1000		
$ 32 Decachlorobiphenyl					CAS #:		
6.301	6.273	0.028	10174573	50.0000	50.29		

BLO 5/10/05


Y (x10^6)
Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL961.D
Date : 10-MAY-2005 01:10
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gcp.i
Operator BLO
Column diameter: 0.53
-Aroclor-1016 (1.680)
-Aroclor-1016 (1.947)
-Aroclor-1016 (2.320)
-Aroclor-1016 (2.432)
-Aroclor-1016 (2.788)
-Aroclor-1260 (3.885)
-Aroclor-1260 (4.145)
-Aroclor-1260 (4.402)
Aroclor-1260 (5.025)
-Aroclor-1260 (5.867)
-Decachlorobiphenyl (6.302)
\\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL961.D
Min


Y (x10^6)
Min
Data File: \\slsvr01\gc_lab\Gcp_1\P050509A.b\FCAL961.D
Injection Date: 10-MAY-2005 01:10
Instrument: Gcp_1
Client Sample ID:
HP6890 GC Data, ECD1A,CH: 1.150 to 7.015 Min
1.413
1.547
1.652
Aroclor-1016
1.768
Aroclor-1016
2.042
2.103
2.262
Aroclor-1016
Aroclor-1016
2.482
2.558
2.608
Aroclor-1016
2.883
2.983
3.498
3.750
3.595
3.718
3.798
3.907
Aroclor-1260
3.972
4.093
Aroclor-1260
4.257
4.340
Aroclor-1260
4.507
4.548
4.627
4.632
4.695
4.968
Aroclor-1260
5.283
5.358
5.528
5.617
Aroclor-1260
6.130
Decachlorobiphenyl

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b/PCAL961.D
Report Date: 05/10/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PCAL961.D
Analysis Type: SOIL

Injection Date: 10-MAY-2005 01:10
Lab Sample ID: CCAL1000
Method File: \\slsvr01\gc_lab\Gcp.i\P050509B.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	961.0706	3.9	15.0
29 Aroclor-1260	1000.0000	1002.9723	0.3	15.0
34 Decachlorobiphenyl	50.0000	47.6462	4.7	15.0

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PCAL961.D
Report Date: 10-May-2005 11:34

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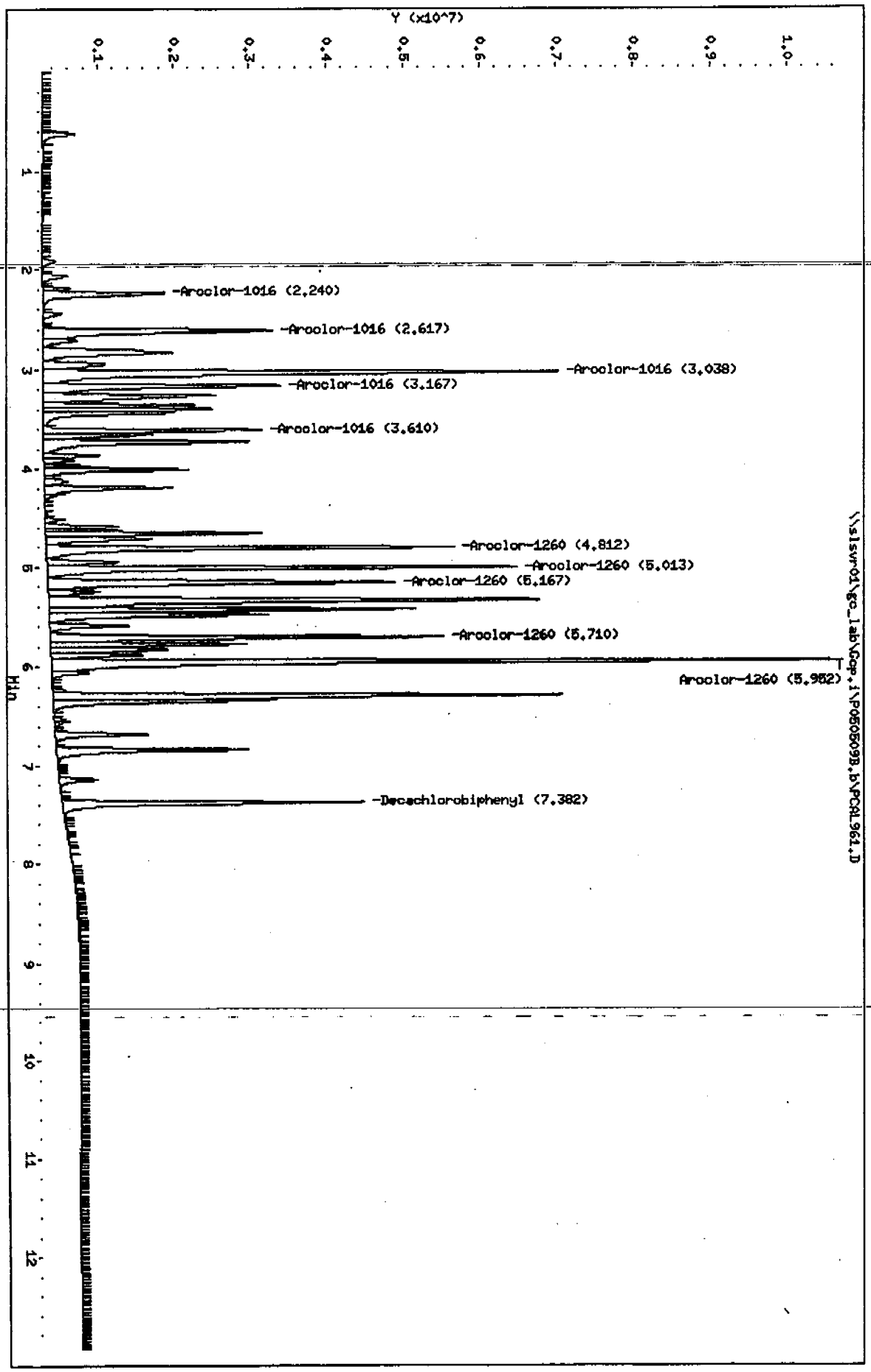
Data file : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PCAL961.D
Lab Smp Id: CCAL1000
Inj Date : 10-MAY-2005 01:10
Operator : BLO Inst ID: Gcp.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Meth Date : 10-May-2005 11:31 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 35 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

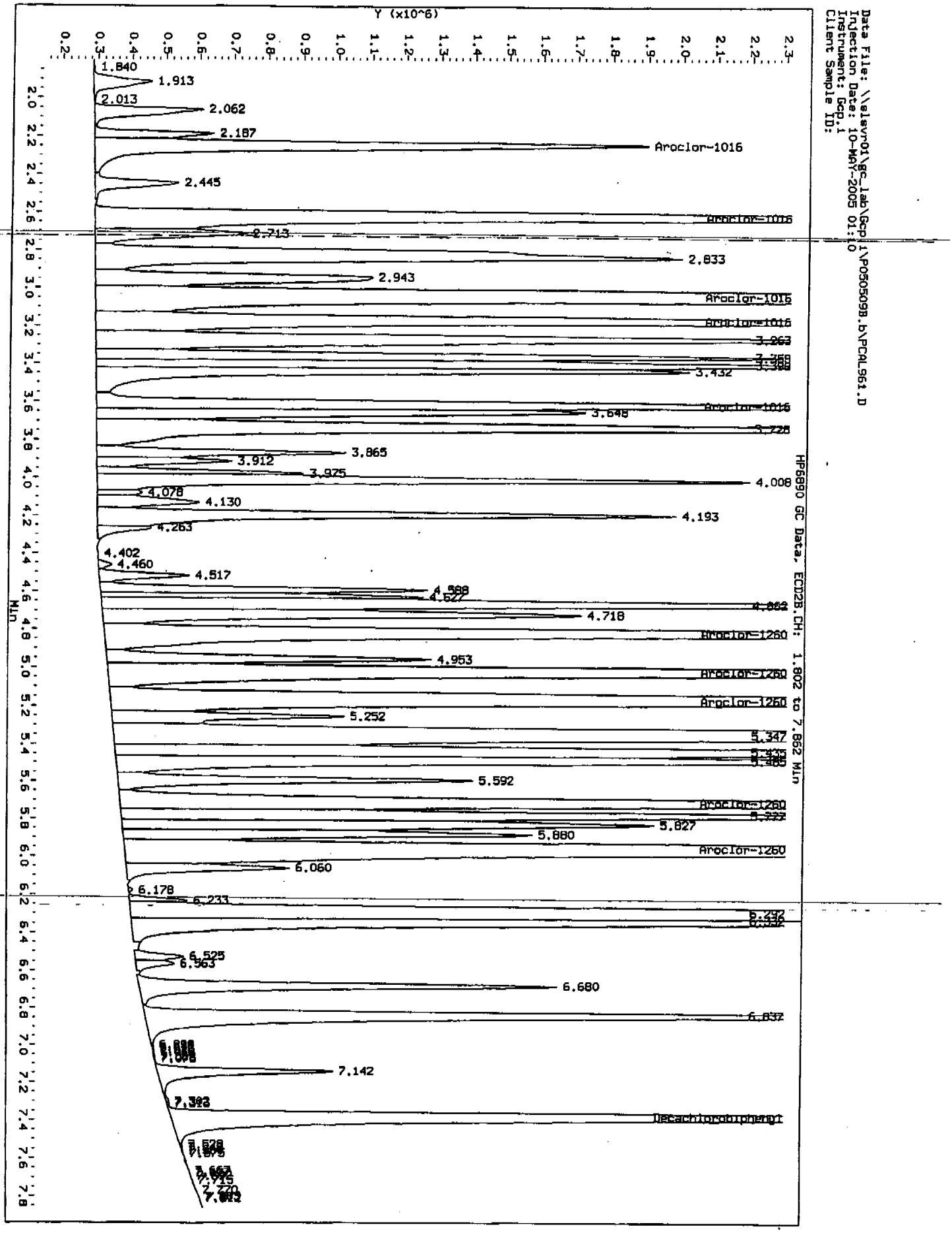
Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.240	2.223	0.017	4496916	1000.00	899.5	80.00- 120.00	100.00
2.616	2.598	0.018	9017601	1000.00	940.5	160.42- 240.63	200.53
3.038	3.016	0.022	19384058	1000.00	1008	344.84- 517.26	431.05
3.166	3.145	0.021	8094705	1000.00	986.2	144.00- 216.01	180.01
3.610	3.590	0.020	5969816	1000.00	971.3	106.20- 159.30	132.75
Average of Peak Amounts =					961.1		
28 Aroclor-1260					CAS #: 11096-82-5		
4.811	4.788	0.023	12166971	1000.00	984.5	80.00- 120.00	100.00
5.013	5.019	-0.006	14236544	1000.00	1009	93.61- 140.41	117.01
5.166	5.140	0.026	13252411	1000.00	993.8	87.14- 130.71	108.92
5.710	5.685	0.025	11455573	1000.00	977.2	75.32- 112.98	94.15
5.951	5.959	-0.008	25165882	1000.00	1050	165.47- 248.21	206.84
Average of Peak Amounts =					1003		
$ 32 Decachlorobiphenyl					CAS #:		
7.381	7.391	-0.010	9291155	50.0000	47.65		

BLO 5-10-05


Y (x10^7)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Min
1
2
3
4
5
6
7
8
9
10
11
12
-Aroclor-1016 (2.240)
-Aroclor-1016 (2.617)
-Aroclor-1016 (3.038)
-Aroclor-1016 (3.167)
-Aroclor-1016 (3.610)
-Aroclor-1260 (4.812)
-Aroclor-1260 (5.013)
-Aroclor-1260 (5.167)
-Aroclor-1260 (5.710)
Aroclor-1260 (5.952)
-Decachlorobiphenyl (7.382)
Data File: \\slsvr01\gc_lab\Gcp.i\P0505093.b\PCAL961.D
Date : 10-MAY-2005 01:10
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-2
\\slsvr01\gc_lab\Gcp.i\P0505093.b\PCAL961.D
Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53
Page 2


Y (x10^6)
Min
HP6890 GC Data, ECD2B.CH: 1.802 to 7.862 Min
Data File: \\slsvr01\gc_lab\Gcp1\P050509B.b\PCAL961.D
Injection Date: 10-MAY-2005 01:10
Instrument: Gcp.1
Client Sample ID:
1.840
1.913
2.013
2.062
2.187
Aroclor-1016
2.445
2.713
2.833
2.943
Aroclor-1016
Aroclor-1016
3.263
3.432
Aroclor-1016
3.645
3.865
3.912
3.975
4.008
4.078
4.130
4.193
4.263
4.402
4.460
4.517
4.718
Aroclor-1260
4.953
Aroclor-1260
Aroclor-1260
5.252
5.347
5.592
Aroclor-1260
5.827
5.880
Aroclor-1260
6.060
6.178
6.233
6.525
6.563
6.680
7.142
Decachlorobiphenyl

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Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b/PCAL971.D
Report Date: 05/10/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PCAL971.D
Analysis Type: SOIL

Injection Date: 10-MAY-2005 03:54
Lab Sample ID: CCAL1000
Method File: \\slsvr01\gc_lab\Gcp.i\P050509A.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
23 Aroclor-1016	1000.0000	963.0547	3.7	15.0	
29 Aroclor-1260	1000.0000	903.0970	9.7	15.0	
34 Decachlorobiphenyl	50.0000	41.8466	16.3	15.0	<-

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL971.D
Report Date: 10-May-2005 09:47

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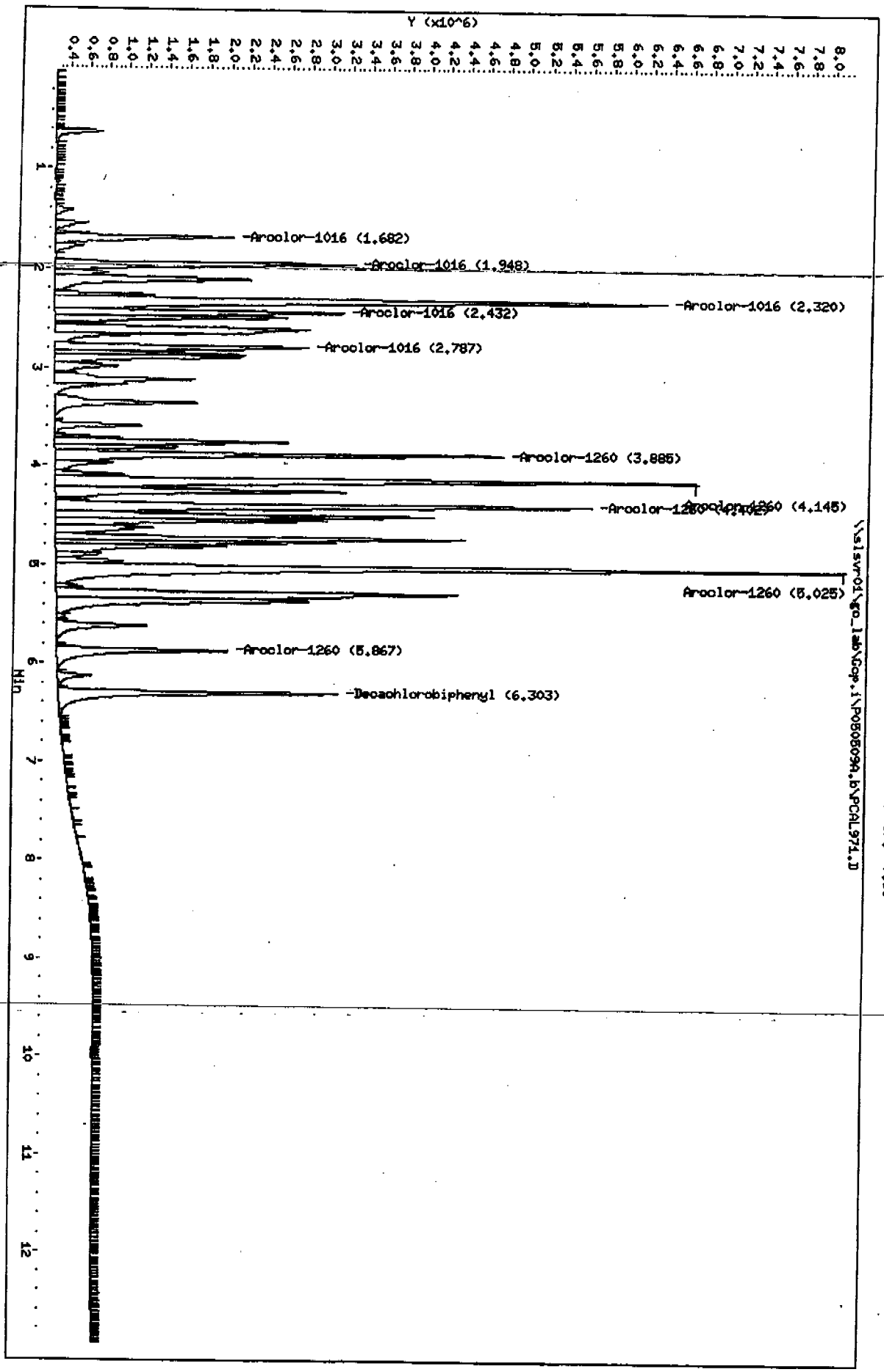
Data file : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL971.D
Lab Smp Id: CCAL1000
Inj Date : 10-MAY-2005 03:54
Operator : BLO Inst ID: Gcp.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Meth Date : 10-May-2005 09:43 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 35 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

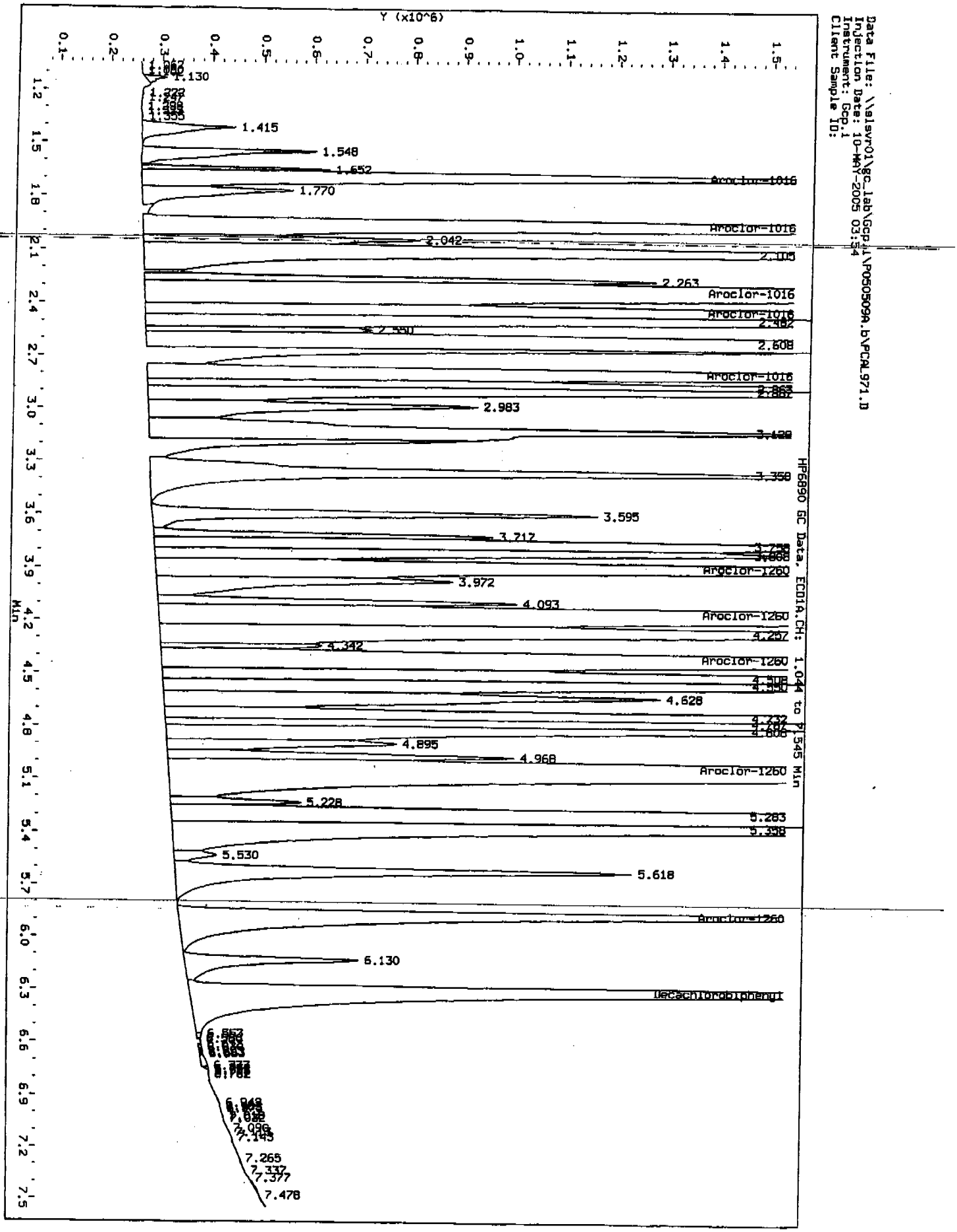
Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.681	1.668	0.013	4584474	1000.00	938.7	80.00- 120.00	100.00
1.948	1.933	0.015	8687523	1000.00	950.3	151.60- 227.40	189.50
2.319	2.303	0.016	20434591	1000.00	999.0	356.59- 534.88	445.73
2.431	2.413	0.018	7331288	1000.00	980.5	127.93- 191.90	159.92
2.786	2.768	0.018	7540755	1000.00	946.8	131.59- 197.38	164.48
		Average of Peak Amounts =			963.1		
28 Aroclor-1260					CAS #: 11096-82-5		
3.884	3.896	-0.012	11184588	1000.00	936.9	80.00- 120.00	100.00
4.144	4.156	-0.012	19267170	1000.00	923.3	137.81- 206.72	172.27
4.401	4.412	-0.011	16500858	1000.00	900.1	118.03- 177.04	147.53
5.024	5.039	-0.015	25005300	1000.00	937.8	178.86- 268.28	223.57
5.866	5.882	-0.016	5518639	1000.00	817.4	39.47- 59.21	49.34
		Average of Peak Amounts =			903.1		
$ 32 Decachlorobiphenyl					CAS #:		
6.303	6.273	0.030	8466845	50.0000	41.85		

BLO 5/10/05



LOT# F5D210380


Y (x10^6)
Data File: \\slsvr01\gc_lab\Gcp\LP050509A.b\FCAL971.D
Injection Date: 10-MAY-2005 03:54
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 1.044 to 7.545 Min
Min
1.130
1.415
1.548
1.652
Aroclor-1016
1.770
Aroclor-1016
2.042
2.105
2.263
Aroclor-1016
Aroclor-1016
2.608
Aroclor-1016
2.983
3.350
3.595
3.717
Aroclor-1260
3.972
4.093
Aroclor-1260
4.257
4.342
Aroclor-1260
4.628
4.895
4.968
Aroclor-1260
5.228
5.283
5.358
5.530
5.618
Aroclor-1260
6.130
Decachlorobiphenyl
7.265
7.337
7.377
7.478

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b/PCAL971.D
Report Date: 05/10/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PCAL971.D
Analysis Type: SOIL

Injection Date: 10-MAY-2005 03:54
Lab Sample ID: CCAL1000
Method File: \\slsvr01\gc_lab\Gcp.i\P050509B.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
23 Aroclor-1016	1000.0000	940.7308	5.9	15.0	
29 Aroclor-1260	1000.0000	892.9667	10.7	15.0	
34 Decachlorobiphenyl	50.0000	39.4769	21.0	15.0	<-

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PCAL971.D
Report Date: 10-May-2005 11:35

STL St. Louis

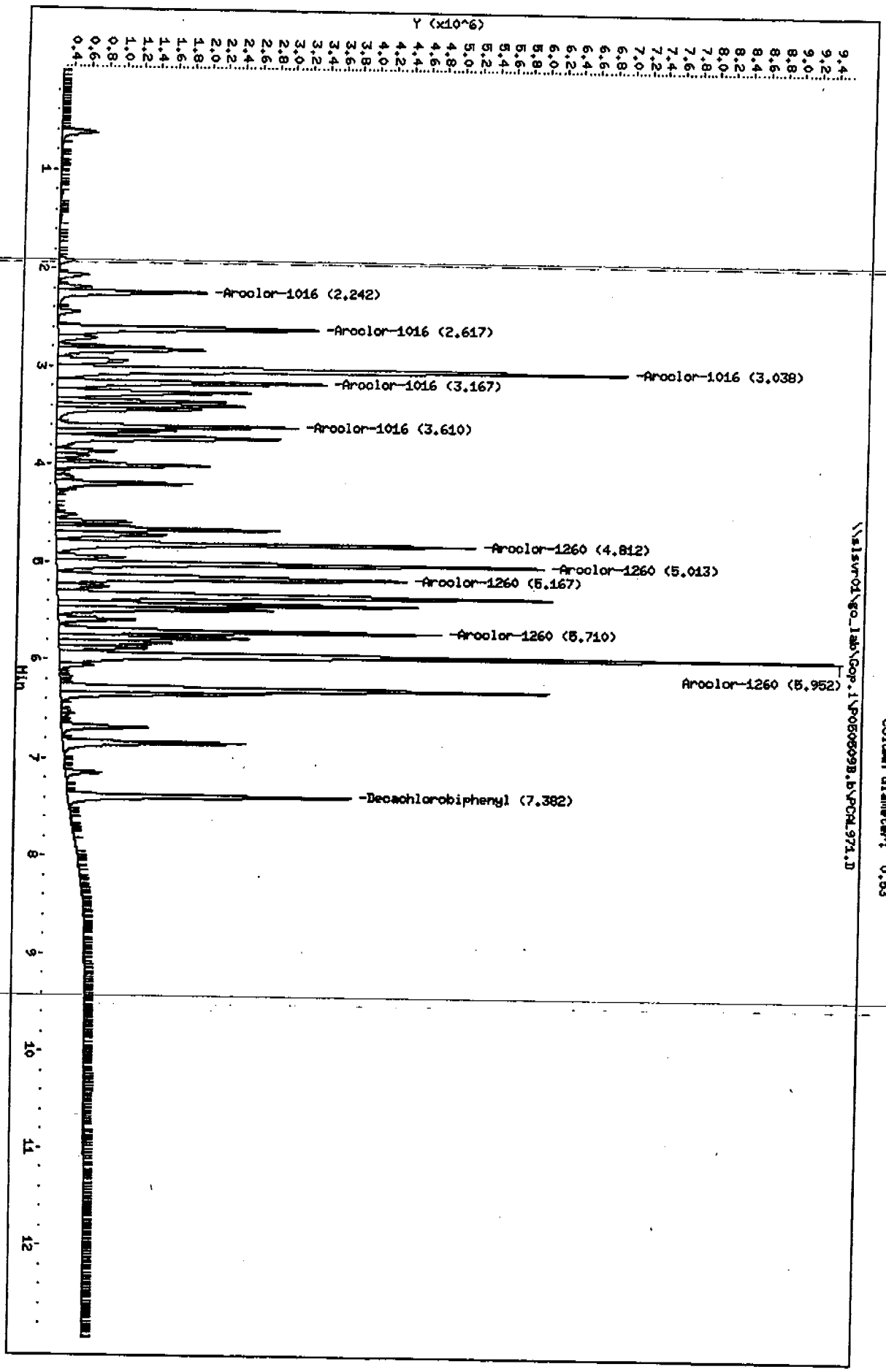
Data file : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PCAL971.D
Lab Smp Id: CCAL1000
Inj Date : 10-MAY-2005 03:54
Operator : BLO Inst ID: Gcp.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Meth Date : 10-May-2005 11:31 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 35 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

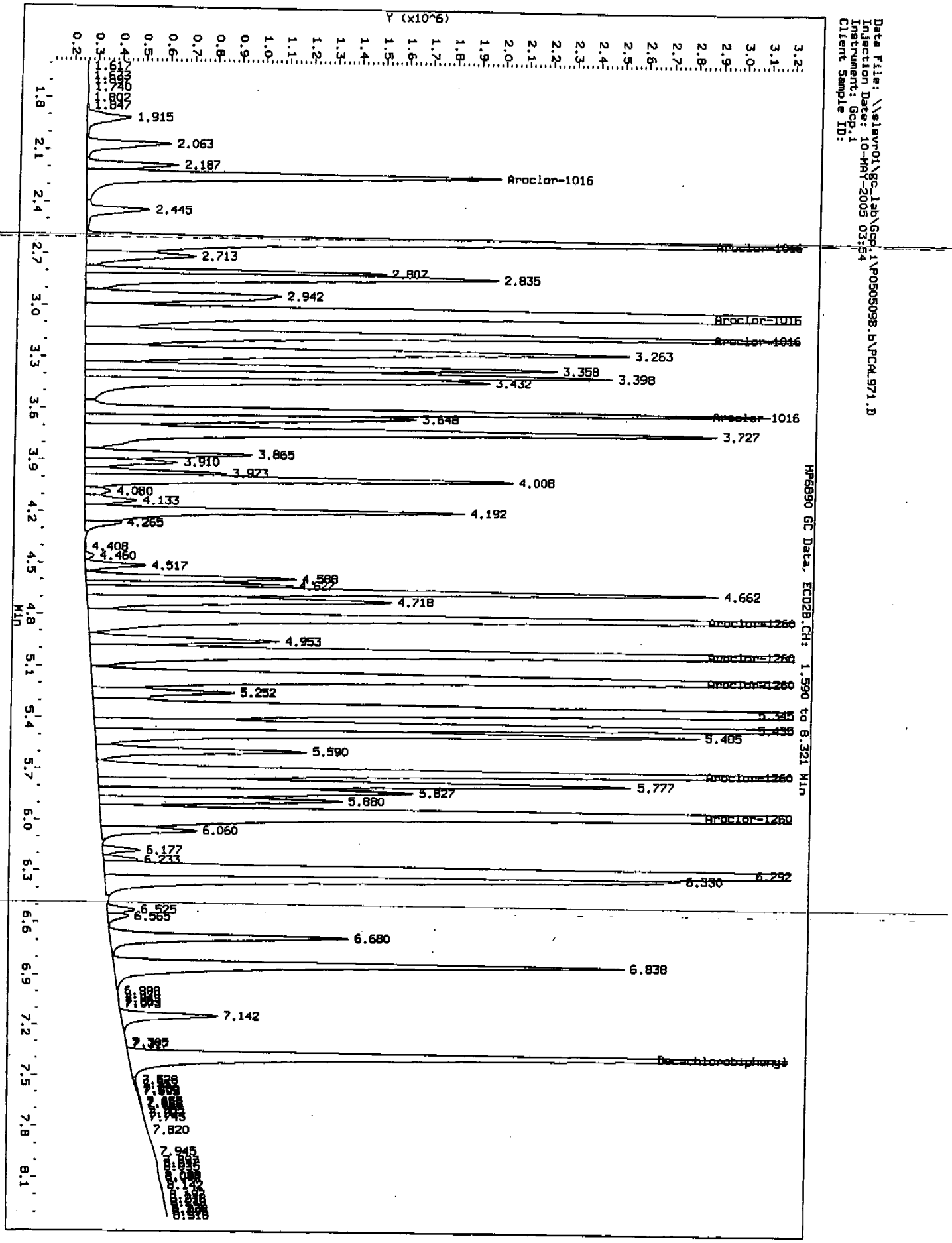
Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.241	2.223	0.018	4484424	1000.00	897.0	80.00- 120.00	100.00
2.616	2.598	0.018	8937980	1000.00	932.2	159.45- 239.17	199.31
3.038	3.016	0.022	19021328	1000.00	989.0	339.33- 509.00	424.16
3.166	3.145	0.021	7923393	1000.00	965.4	141.35- 212.02	176.69
3.610	3.590	0.020	5655357	1000.00	920.2	100.89- 151.33	126.11
		Average of Peak Amounts =			940.7		
28 Aroclor-1260					CAS #: 11096-82-5		
4.811	4.788	0.023	11083799	1000.00	896.8	80.00- 120.00	100.00
5.013	5.019	-0.006	12897287	1000.00	914.2	93.09- 139.63	116.36
5.166	5.140	0.026	11864657	1000.00	889.7	85.64- 128.45	107.05
5.710	5.685	0.025	9893543	1000.00	843.9	71.41- 107.11	89.26
5.951	5.959	-0.008	22047522	1000.00	920.2	159.13- 238.70	198.92
		Average of Peak Amounts =			893		
$ 32 Decachlorobiphenyl					CAS #:		
7.381	7.391	-0.010	7698112	50.0000	39.48		

BLO 5-10-05


Y (x10^6)
Min
-Aroclor-1016 (2.242)
-Aroclor-1016 (2.617)
-Aroclor-1016 (3.038)
-Aroclor-1016 (3.167)
-Aroclor-1016 (3.610)
-Aroclor-1260 (4.812)
-Aroclor-1260 (5.013)
-Aroclor-1260 (5.167)
-Aroclor-1260 (5.710)
Aroclor-1260 (5.952)
-Decachlorobiphenyl (7.382)
Data File: \\slsvr01\go_lab\Gop.i\P0505098.b\PCAL971.D
Date : 10-MAY-2005 03:54
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-2
\\slsvr01\go_lab\Gop.i\P0505098.b\PCAL971.D
Instrument: Gop.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Data File: \\slsvr01\gc_lab\Gcp.1\P0505098.b\PCAL971.D
Injection Date: 10-MAY-2005 03:54
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 1.590 to 8.321 Min
Min
1.915
2.063
2.187
Aroclor-1016
2.445
2.713
2.807
2.835
2.942
3.263
3.358
3.398
3.432
3.648
3.727
3.865
3.910
3.923
4.008
4.060
4.133
4.192
4.265
4.408
4.460
4.517
4.588
4.627
4.662
4.718
Aroclor-1260
4.953
5.252
5.345
5.436
5.485
5.590
5.777
5.827
5.880
6.060
6.177
6.233
6.292
6.330
6.525
6.565
6.680
6.838
7.142
7.820
7.945

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b/PCAL978.D
Report Date: 05/10/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PCAL978.D
Analysis Type: SOIL

Injection Date: 10-MAY-2005 05:49
Lab Sample ID: CCAL1000
Method File: \\slsvr01\gc_lab\Gcp.i\P050509A.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
23 Aroclor-1016	1000.0000	1002.7388	0.3	15.0
29 Aroclor-1260	1000.0000	946.9730	5.3	15.0
34 Decachlorobiphenyl	50.0000	43.0382	13.9	15.0

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL978.D
Report Date: 10-May-2005 09:48

STL St. Louis

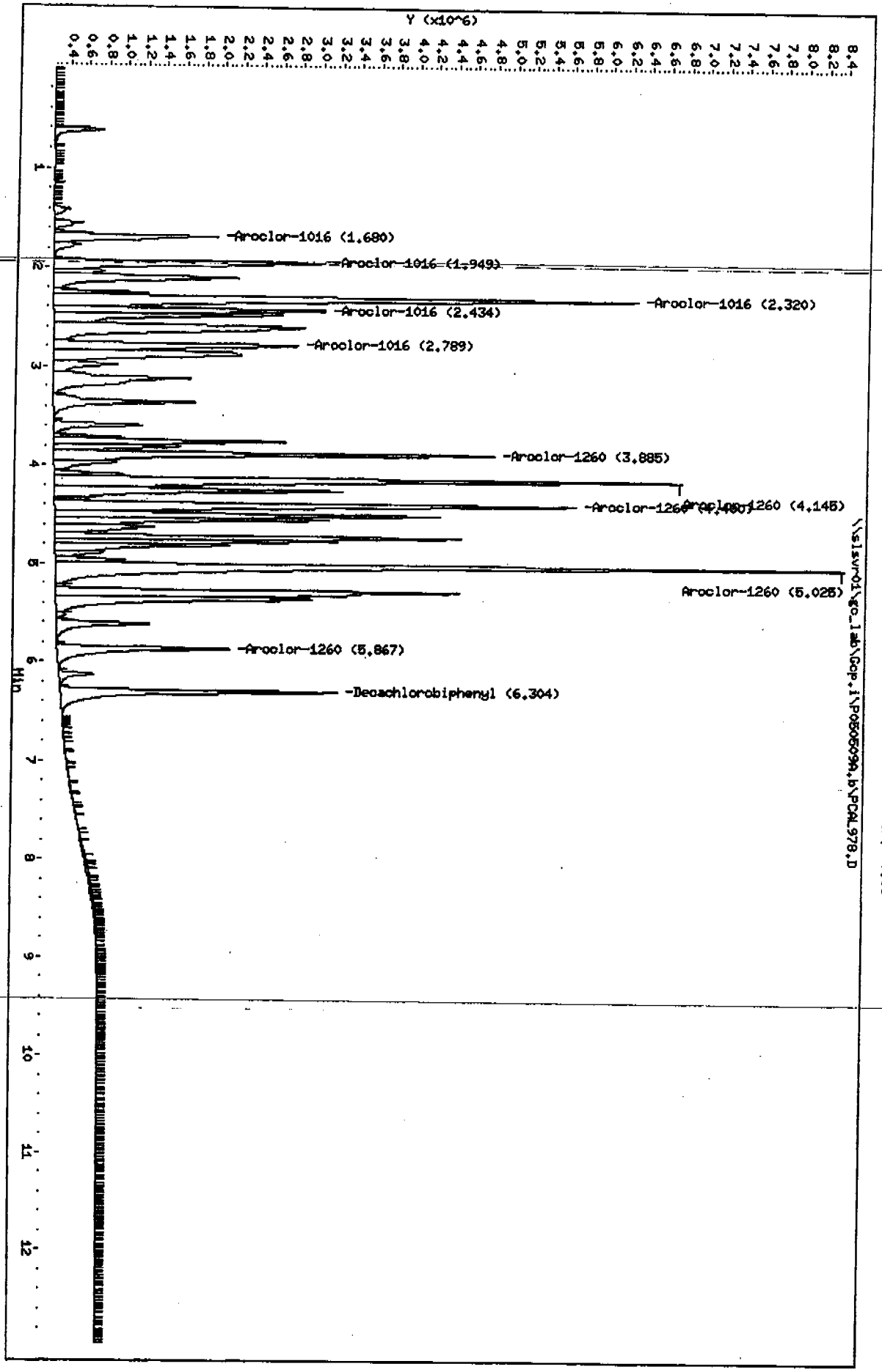
Data file : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL978.D
Lab Smp Id: CCAL1000
Inj Date : 10-MAY-2005 05:49
Operator : BLO Inst ID: Gcp.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Meth Date : 10-May-2005 09:43 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 51 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	AMOUNTS ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.680	1.668	0.012	4759275	1000.00	974.5	80.00- 120.00	100.00
1.948	1.933	0.015	8999866	1000.00	984.5	151.28- 226.92	189.10
2.320	2.303	0.017	21432008	1000.00	1048	360.26- 540.38	450.32
2.433	2.413	0.020	7563432	1000.00	1012	127.14- 190.70	158.92
2.788	2.768	0.020	7928268	1000.00	995.4	133.27- 199.90	166.59
		Average of Peak Amounts =			1003		
28 Aroclor-1260					CAS #: 11096-82-5		
3.885	3.896	-0.011	11733143	1000.00	982.9	80.00- 120.00	100.00
4.145	4.156	-0.011	19946053	1000.00	955.8	136.00- 204.00	170.00
4.400	4.412	-0.012	17420544	1000.00	950.2	118.78- 178.17	148.47
5.025	5.039	-0.014	26487399	1000.00	993.4	180.60- 270.90	225.75
5.867	5.882	-0.015	5755923	1000.00	852.6	39.25- 58.87	49.06
		Average of Peak Amounts =			947		
$ 32 Decachlorobiphenyl					CAS #:		
6.303	6.273	0.030	8707953	50.0000	43.04		

BLO 5/10/05


Y (x10^6)
Aroclor-1016 (1.680)
Aroclor-1016 (1.949)
Aroclor-1016 (2.320)
Aroclor-1016 (2.434)
Aroclor-1016 (2.789)
Aroclor-1260 (3.885)
Aroclor-1260 (4.145)
Aroclor-1260 (5.025)
Aroclor-1260 (5.867)
Decachlorobiphenyl (6.304)
Min
Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL978.D
Date : 10-MAY-2005 05:49
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53
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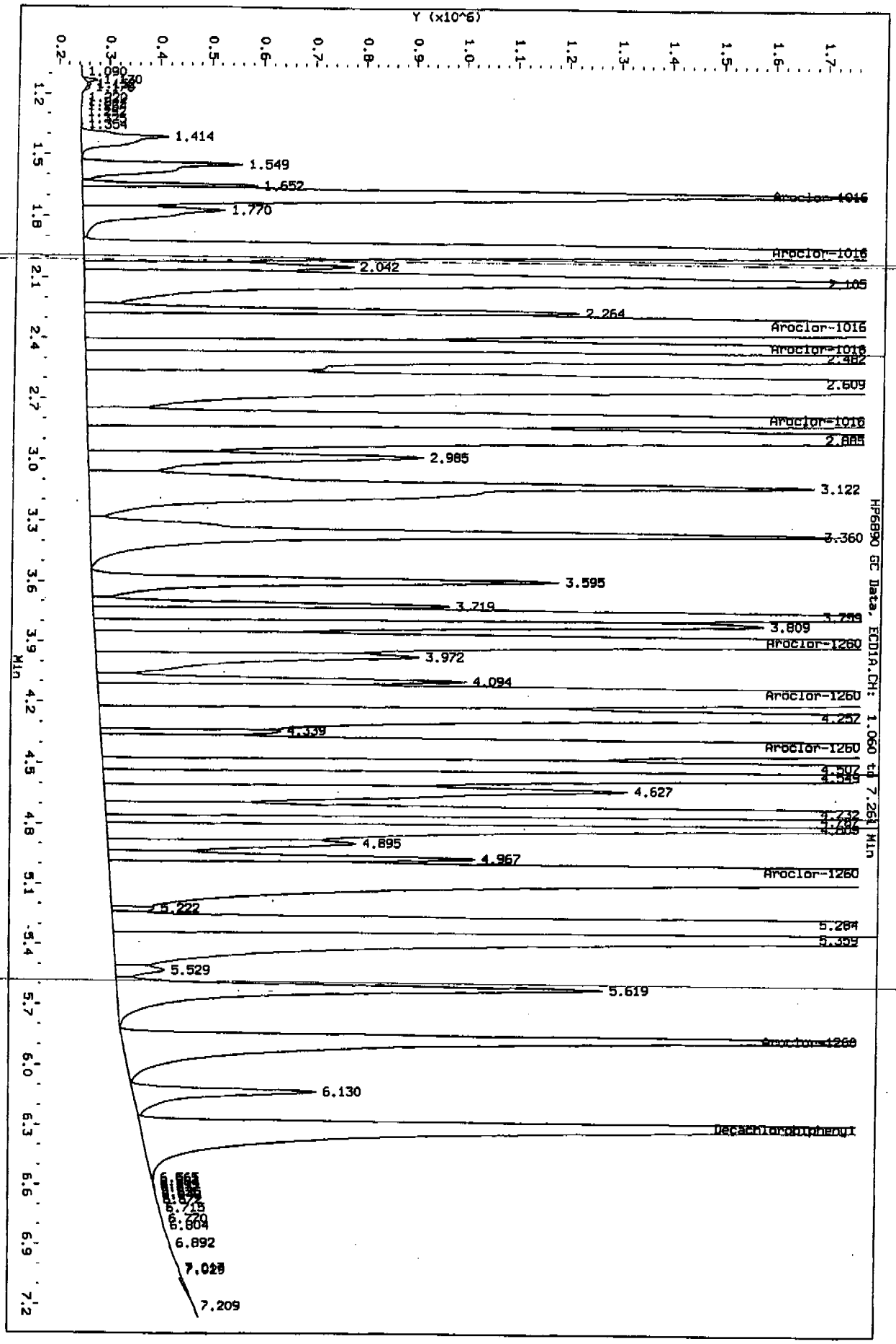
Y (x10^6)
Min
1.414
1.549
1.652
Aroclor-1016
1.770
Aroclor-1016
2.042
2.105
2.264
Aroclor-1016
Aroclor-1016
2.482
2.609
Aroclor-1016
2.885
2.985
3.122
3.360
3.595
3.719
3.809
Aroclor-1260
3.972
4.094
Aroclor-1260
4.252
4.339
Aroclor-1260
4.627
4.895
4.967
Aroclor-1260
5.222
5.284
5.529
5.619
6.130
Decachlorobiphenyl
6.892
7.209
Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PCAL978.D
Injection Date: 10-MAY-2005 05:49
Instrument: Gcp.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 1.060 to 7.268 Min

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Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b/PCAL978.D
Report Date: 05/10/2005

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: Gcp.i
Lab File ID: PCAL978.D
Analysis Type: SOIL

Injection Date: 10-MAY-2005 05:49
Lab Sample ID: CCAL1000
Method File: \\slsvr01\gc_lab\Gcp.i\P050509B.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
23 Aroclor-1016	1000.0000	981.8169	1.8	15.0	
29 Aroclor-1260	1000.0000	945.8896	5.4	15.0	
34 Decachlorobiphenyl	50.0000	40.5757	18.8	15.0	<-

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PCAL978.D
Report Date: 10-May-2005 11:35

STL St. Louis

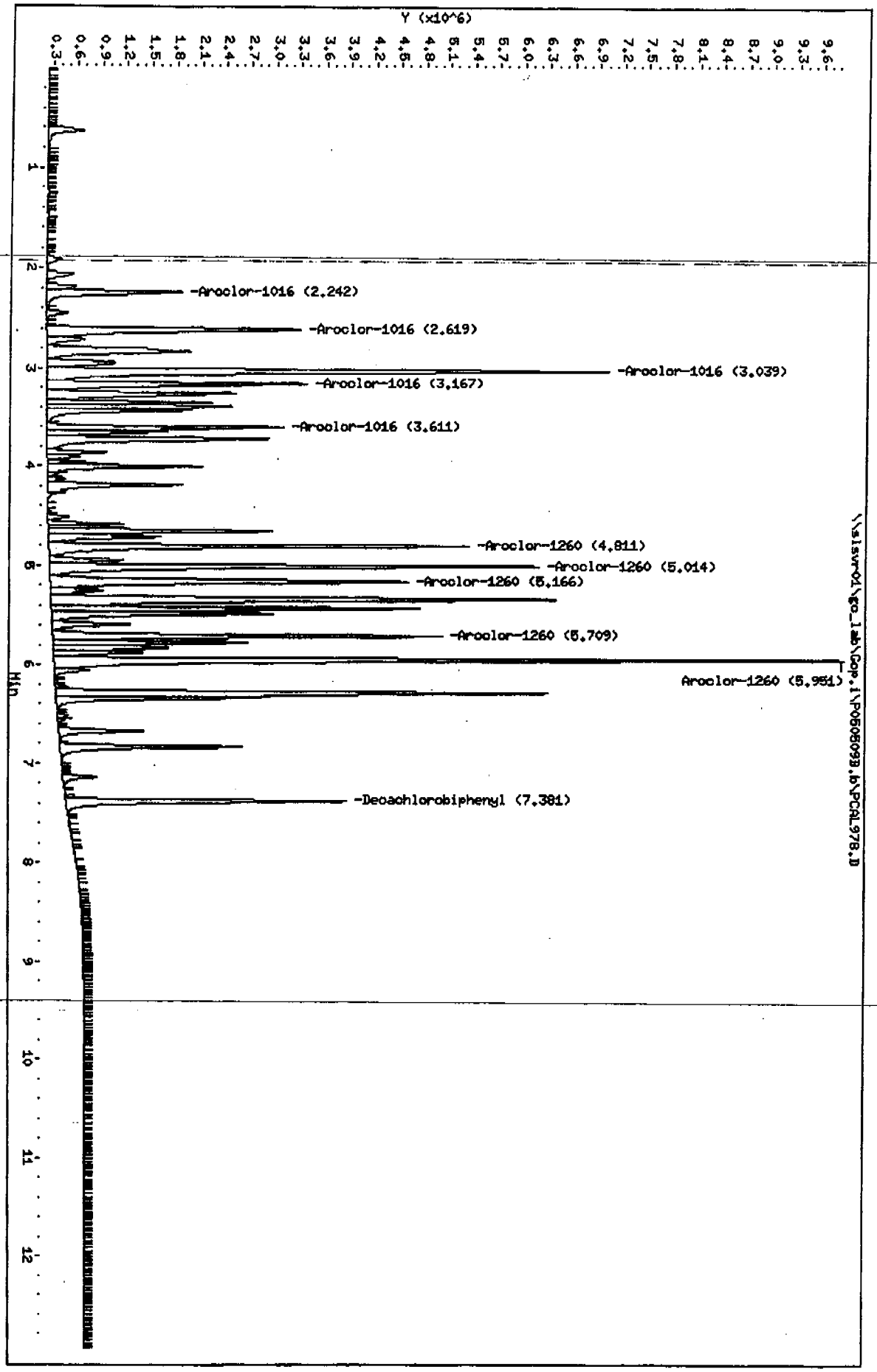
Data file : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PCAL978.D
Lab Smp Id: CCAL1000
Inj Date : 10-MAY-2005 05:49
Operator : BLO Inst ID: Gcp.i
Smp Info : CCAL1000
Misc Info :
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Meth Date : 10-May-2005 11:31 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 51 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Ar1660.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

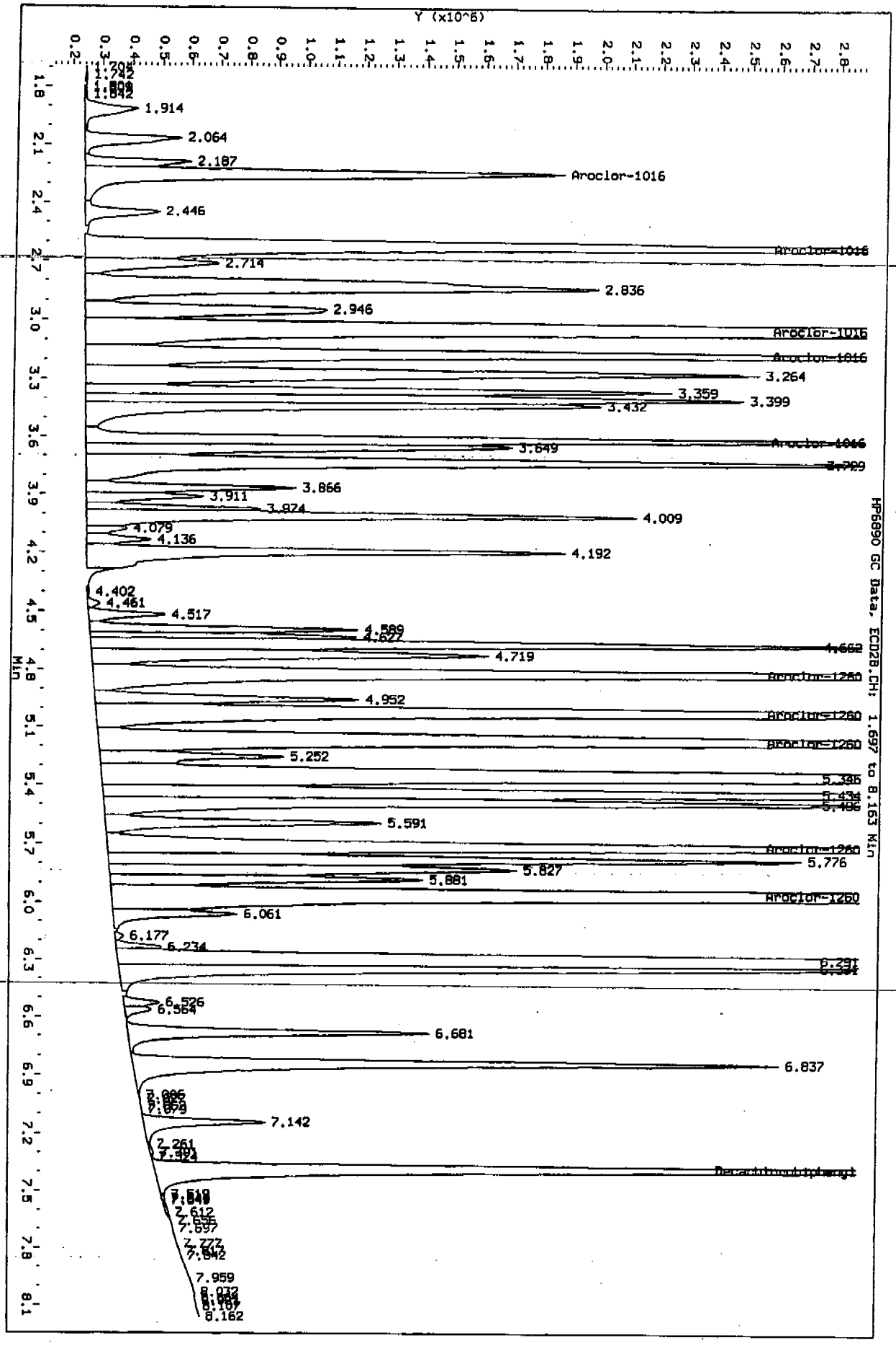
Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng/mL)	ON-COL (ng/mL)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.242	2.223	0.019	4669810	1000.00	934.0	80.00- 120.00	100.00
2.618	2.598	0.020	9260579	1000.00	965.8	158.65- 237.97	198.31
3.038	3.016	0.022	19805975	1000.00	1030	339.30- 508.95	424.13
3.167	3.145	0.022	8271548	1000.00	1008	141.70- 212.55	177.13
3.610	3.590	0.020	5971816	1000.00	971.6	102.31- 153.46	127.88
		Average of Peak Amounts =			981.8		
28 Aroclor-1260					CAS #: 11096-82-5		
4.810	4.788	0.022	11785174	1000.00	953.6	80.00- 120.00	100.00
5.013	5.019	-0.006	13755289	1000.00	975.0	93.37- 140.06	116.72
5.165	5.140	0.025	12627412	1000.00	946.9	85.72- 128.58	107.15
5.708	5.685	0.023	10511899	1000.00	896.7	71.36- 107.04	89.20
5.950	5.959	-0.009	22936503	1000.00	957.3	155.70- 233.55	194.62
		Average of Peak Amounts =			945.9		
$ 32 Decachlorobiphenyl					CAS #:		
7.380	7.391	-0.011	7912392	50.0000	40.58		

BLO 5-10-05


Y (x10^6)
Min
-Aroclor-1016 (2.242)
-Aroclor-1016 (2.619)
-Aroclor-1016 (3.039)
-Aroclor-1016 (3.167)
-Aroclor-1016 (3.611)
-Aroclor-1260 (4.811)
-Aroclor-1260 (5.014)
-Aroclor-1260 (5.166)
-Aroclor-1260 (5.709)
Aroclor-1260 (5.951)
-Decachlorobiphenyl (7.381)
\\slsvr01\gc_lab\Gcp.i\P050509B.b\PCAL978.D
Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PCAL978.D
Date : 10-MAY-2005 05:49
Client ID:
Sample Info: CCAL1000
Volume Injected (uL): 2.0
Column Phase: CLPEST-2
Instrument: Gcp.i
Operator: BLD
Column diameter: 0.53


Y (x10^6)
Min
Data File: \\stlsvr01\gc_lab\Gcp.i\P050509B.b\PCAL978.D
Injection Date: 10-MAY-2005 05:49
Instrument: Gcp.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 1.697 to 8.163 Min
1.914
2.064
2.187
Aroclor-1016
2.446
2.714
2.836
2.946
3.264
3.359
3.399
3.432
3.649
3.866
3.911
3.924
4.009
4.079
4.136
4.192
4.402
4.461
4.517
4.719
4.952
5.252
5.591
5.776
5.827
5.881
Aroclor-1260
6.061
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6.681
6.837
7.142
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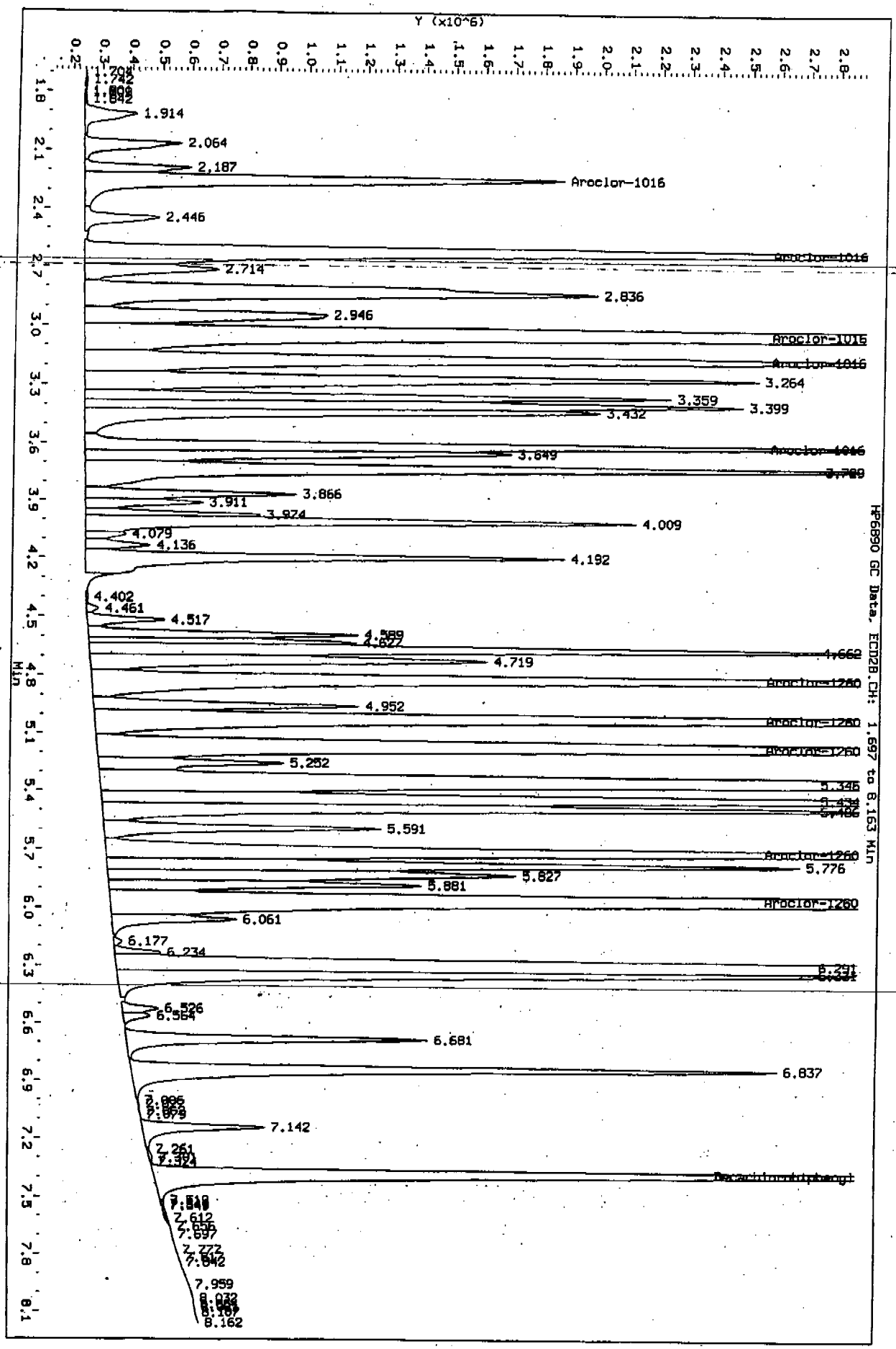
8.107
8.162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Data File: \\slsvr01\gc_lab\Gcp_1\P050509B.b\PCN1978.D
Injection Date: 10-MAY-2005 05:49
Instrument: Gcp.1
Client Sample ID:
HP6890 GC Data. ECN2B.CH: 1.697 to 8.163 Min
Min
1.914
2.064
2.187
Aroclor-1016
2.446
2.714
2.836
2.946
3.264
3.359
3.399
3.432
3.649
3.866
3.911
3.974
4.009
4.079
4.136
4.192
4.402
4.461
4.517
4.719
4.952
5.252
5.591
5.776
5.827
5.881
6.061
6.177
6.234
6.526
6.564
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7.324
7.612
7.697
7.959
8.032
8.162

GC RAW SAMPLE DATA

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PSMP933.D
Report Date: 10-May-2005 10:20

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PSMP933.D
Lab Smp Id: G8WXJ1AE
Client Smp ID: RE73-05-58829
Inj Date : 09-MAY-2005 17:28
Operator : BLO
Inst ID: Gcp.i
Smp Info : G8WXJ1AE
Misc Info : F5D210380-001
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Meth Date : 10-May-2005 09:43 owenb
Quant Type: ESTD
Cal Date : 04-APR-2005 20:37
Cal File: PCAL127.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: Falcon
Compound Sublist: son05.sub
Target Version: 4.10
Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.370	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ug/Kg)	TARGET RANGE	RATIO
$ 32 Decachlorobiphenyl					CAS #:		
6.301	6.273	0.028	9013507	44.5484	14.67		

BLO 5/10/05

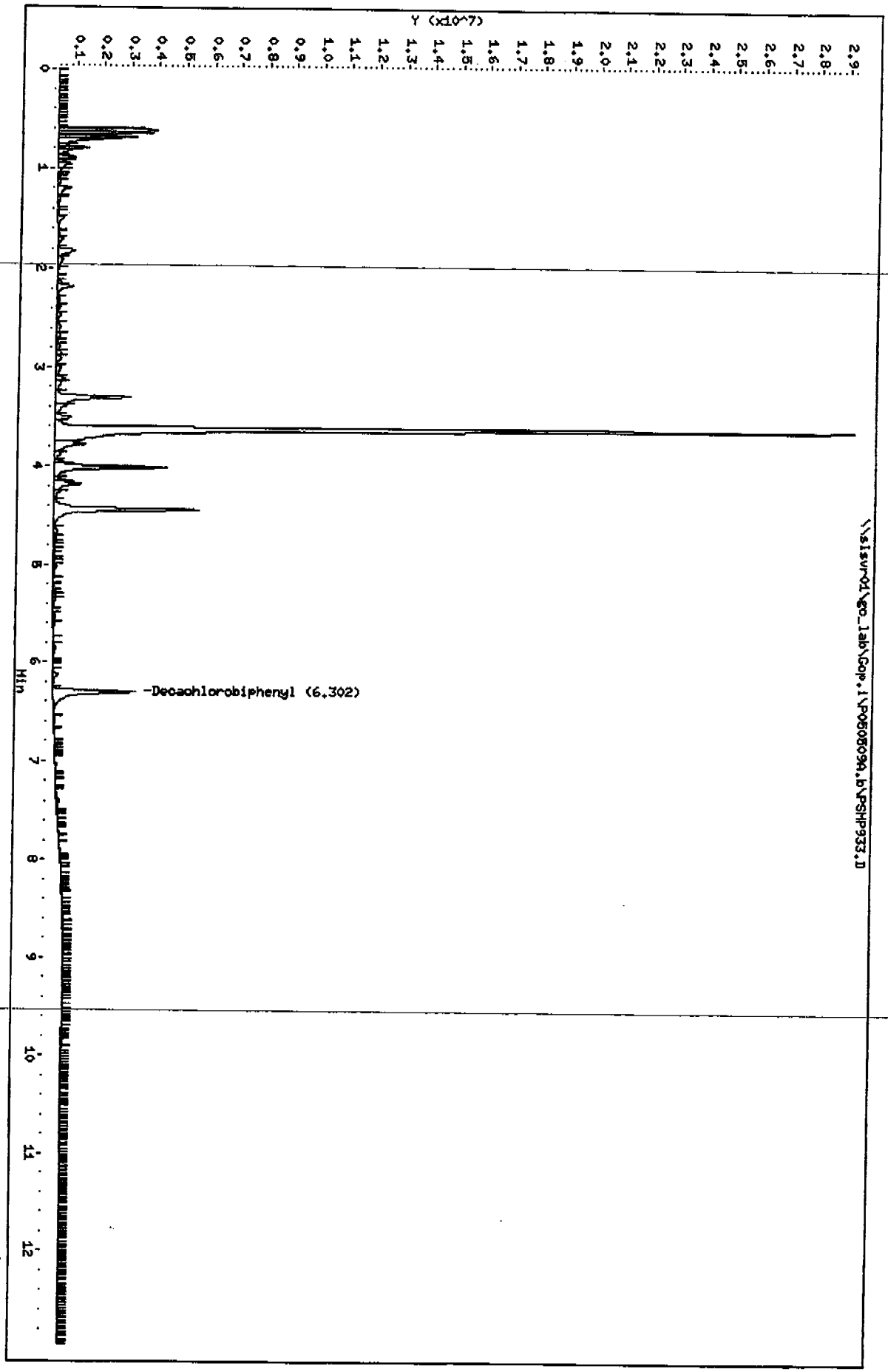
Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PSMP933.D
Report Date: 10-May-2005 10:20

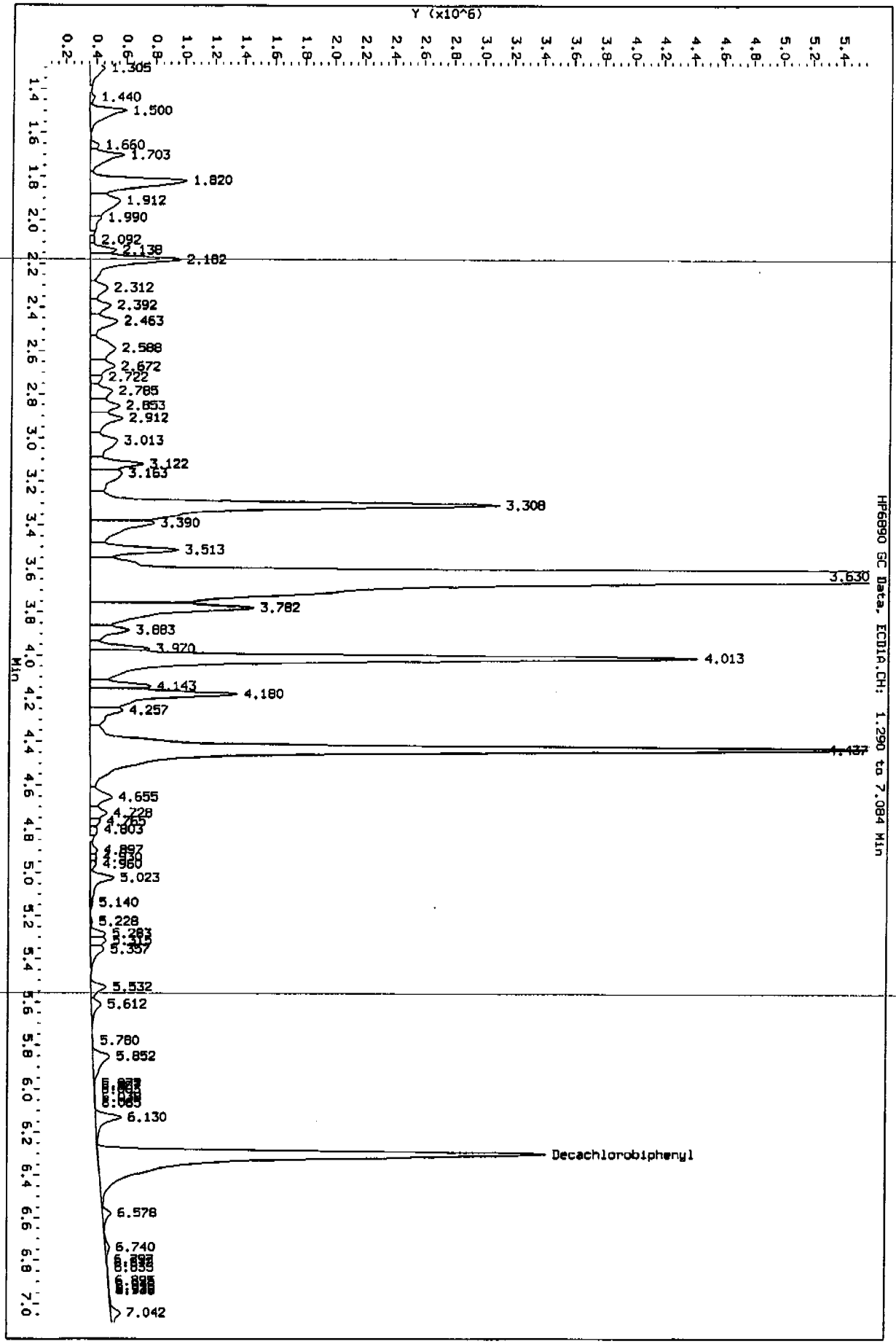
STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 21-APR-2005 00:00 Client SDG: F5D2103
Sample Matrix: SOLID Fraction: PCB
Lab Smp Id: G8WXJ1AE Client Smp ID: RE73-05-58829
Level: LOW Operator: BLO
Data Type: GC MULTI COMP SampleType: SAMPLE
SpikeList File: SOILSPKPCB.spk Quant Type: ESTD
Sublist File: son05.sub
Method File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Misc Info: F5D210380-001

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 32 Decachlorobiphenyl	13.17	14.67	111.37	30-150


Data File: \\slsvr01\gc_lab\Gcp.i\P0505094.b\PSHP933.D
Date : 09-MAY-2005 17:28
Client ID: RE73-05-58829
Sample Info: C8WXJAE
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53
\\slsvr01\gc_lab\Gcp.i\P0505094.b\PSHP933.D
Y (x10^7)
Min
-Decachlorobiphenyl (6.302)


Y (x10^6)
Data File: \\elsvr01\gc_lab\Gcp_1\P050509A.b\PSWP933.D
Injection Date: 09-MAY-2005 17:28
Instrument: Gcp_1
Client Sample ID: RE73-05-58829
HP6890 GC Data, ECD1A.CH: 1.290 to 7.084 Min
Min
1.305
1.440
1.500
1.660
1.703
1.820
1.912
1.990
2.092
2.138
2.182
2.312
2.392
2.463
2.588
2.672
2.722
2.785
2.853
2.912
3.013
3.122
3.163
3.308
3.390
3.513
3.630
3.782
3.883
3.970
4.013
4.143
4.180
4.257
4.437
4.655
4.728
4.765
4.803
4.897
4.930
4.960
5.023
5.140
5.228
5.283
5.315
5.357
5.532
5.612
5.780
5.852
6.130
Decachlorobiphenyl
6.578
6.740
7.042

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PSMP934.D
Report Date: 10-May-2005 10:24

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PSMP934.D
Lab Smp Id: G8WXV1AE
Client Smp ID: RE73-05-58835
Inj Date : 09-MAY-2005 17:44
Operator : BLO
Inst ID: Gcp.i
Smp Info : G8WXV1AE
Misc Info : F5D210380-002
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Meth Date : 10-May-2005 09:43 owenb
Quant Type: ESTD
Cal Date : 04-APR-2005 20:37
Cal File: PCAL127.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: Falcon
Compound Sublist: son05.sub
Target Version: 4.10
Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.049	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng/mL)	FINAL (ug/Kg)	TARGET RANGE	RATIO
27 Aroclor-1254					CAS #: 11097-69-1		
3.123	3.102	0.021	1014237	133.423	44.40	80.00- 120.00	100.00(M)
3.393	3.337	0.056	1902541	92.9504	30.93	215.41- 323.11	187.58
3.716	3.694	0.022	2721571	168.056	55.93	170.43- 255.65	268.34
4.144	4.121	0.023	1534940	132.013	43.93	122.36- 183.55	151.34
4.434	4.376	0.058	3038585	180.812	60.17	176.86- 265.29	299.59
		Average of Peak Concentrations =			47.07		
$ 32 Decachlorobiphenyl					CAS #:		
6.303	6.273	0.030	10201529	50.4201	16.78		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 5/10/05

QC Flag Legend

M - Compound response manually integrated.

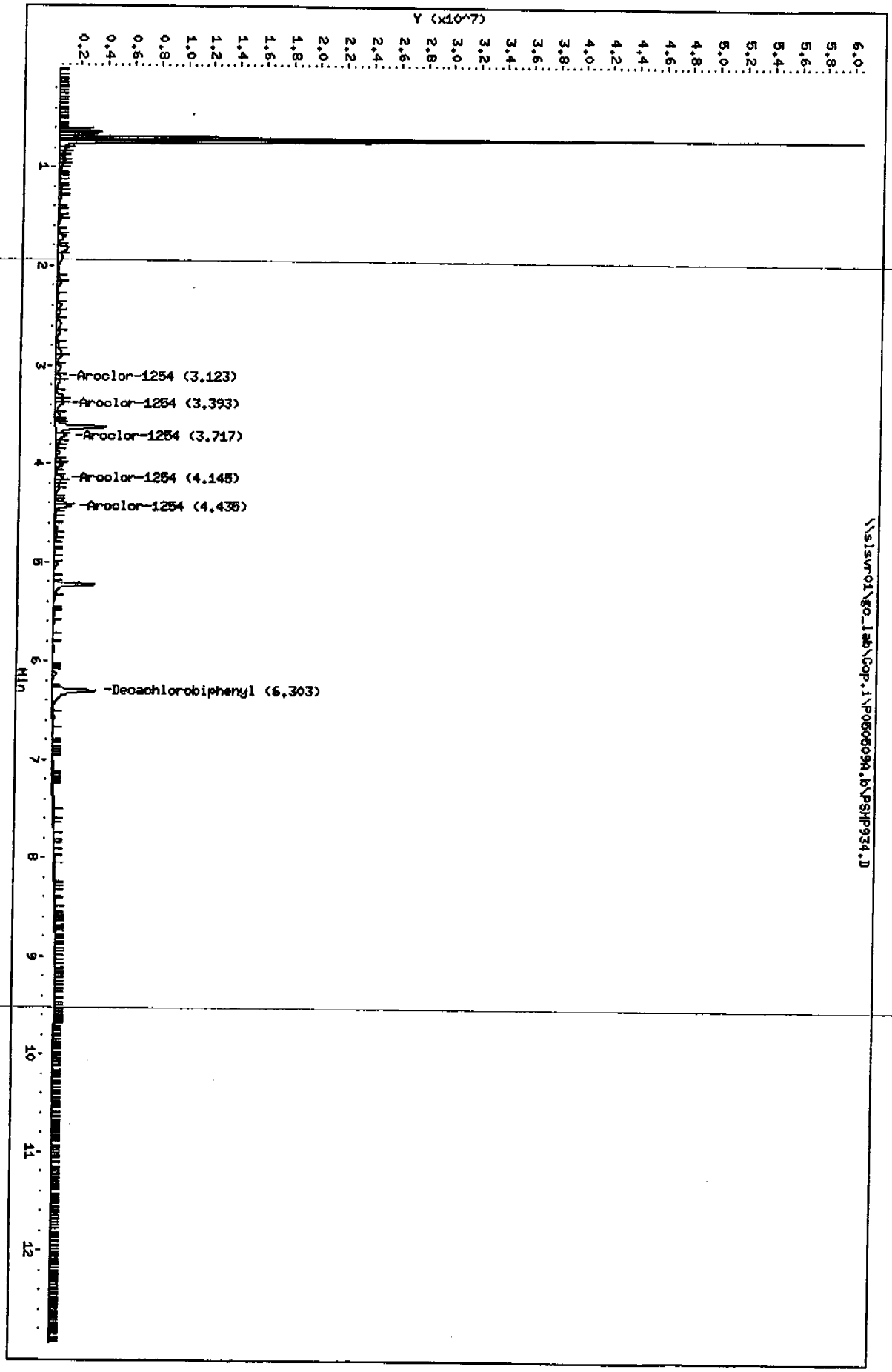
Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PSMP934.D Page 2
Report Date: 10-May-2005 10:24

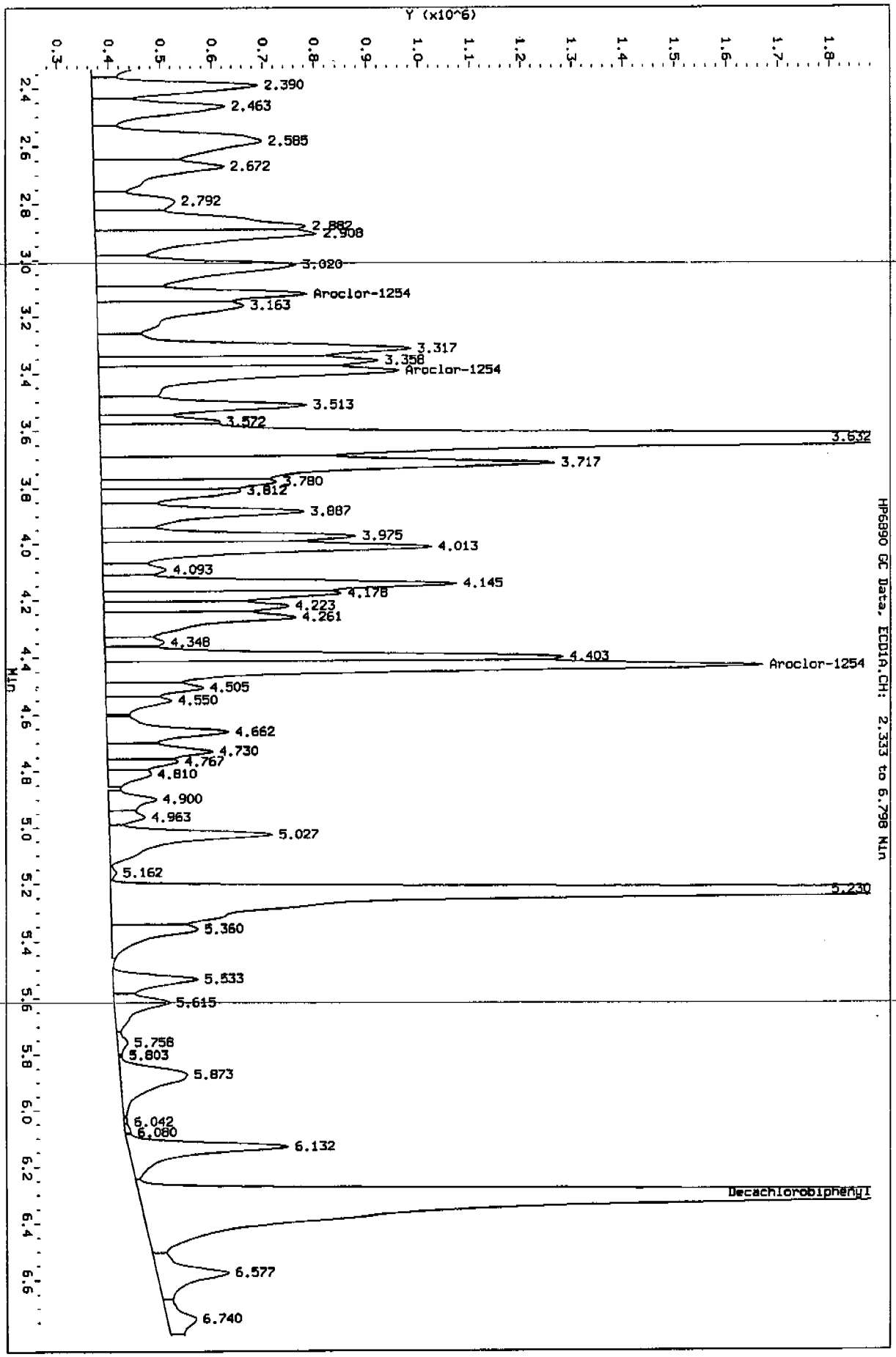
STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 21-APR-2005 00:00 Client SDG: F5D2103
Sample Matrix: SOLID Fraction: PCB
Lab Smp Id: G8WXV1AE Client Smp ID: RE73-05-58835
Level: LOW Operator: BLO
Data Type: GC MULTI COMP SampleType: SAMPLE
SpikeList File: SOILSPKPCB.spk Quant Type: ESTD
Sublist File: son05.sub
Method File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Misc Info: F5D210380-002

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 32 Decachlorobiphenyl	13.31	16.78	126.05	30-150


Y (x10^7)
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4
2.6
2.8
3.0
3.2
3.4
3.6
3.8
4.0
4.2
4.4
4.6
4.8
5.0
5.2
5.4
5.6
5.8
6.0
1
2
3
4
5
6
7
8
9
10
11
12
Min
-Aroclor-1254 (3.123)
-Aroclor-1254 (3.393)
-Aroclor-1254 (3.717)
-Aroclor-1254 (4.145)
-Aroclor-1254 (4.436)
-Decachlorobiphenyl (6.303)
Data File: \\slsvr01\go_lab\Gcp.i\P050609A.b\PSHP934.D
Date : 09-MAY-2005 17:44
Client ID: RE73-05-58835
Sample Info: GBWX1AE
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53
\\slsvr01\go_lab\Gcp.i\P050609A.b\PSHP934.D


Y (x10^6)
Data File: \\sisvr01\gc_lab\Gcp.i\P050509A.b\PSMP934.D
Injection Date: 09-MAY-2005 17:44
Instrument: Gcp.i
Client Sample ID: RE23-05-58835
HP6890 GC Data, ECD1A.CH: 2.333 to 6.798 Min
Min
2.390
2.463
2.585
2.672
2.792
2.882
2.908
3.020
Aroclor-1254
3.163
3.317
3.358
Aroclor-1254
3.513
3.572
3.634
3.717
3.780
3.812
3.887
3.975
4.013
4.093
4.145
4.178
4.223
4.261
4.348
4.403
Aroclor-1254
4.505
4.550
4.662
4.730
4.767
4.810
4.900
4.963
5.027
5.162
5.230
5.360
5.533
5.615
5.756
5.803
5.873
6.042
6.080
6.132
Decachlorobiphenyl
6.577
6.740

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PSMP934.D
Report Date: 10-May-2005 11:09

CONFIRMATION DATA

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PSMP934.D
Lab Smp Id: G8WXV1AE
Client Smp ID: RE73-05-58835
Inj Date : 09-MAY-2005 17:44
Operator : BLO
Inst ID: Gcp.i
Smp Info : G8WXV1AE
Misc Info : F5D210380-002
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Meth Date : 09-May-2005 12:12 owenb
Quant Type: ESTD
Cal Date : 04-APR-2005 20:37
Cal File: PCAL127.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: Falcon
Compound Sublist: son05.sub
Target Version: 4.10
Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.049	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng/mL)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO	
27 Aroclor-1254					CAS #: 11097-69-1			
4.008	3.987	0.021	1073102	111.924	37.25	80.00- 120.00	100.00	(M)
4.191	4.167	0.024	2861264	281.000	93.51	84.96- 127.44	266.63	
4.628	4.602	0.026	2300532	142.081	47.28	135.10- 202.65	214.38	
5.170	5.141	0.029	2032414	154.079	51.28	110.06- 165.09	189.40	
5.350	5.322	0.028	5292247	317.220	105.6	139.20- 208.81	493.17	
Average of Peak Concentrations =					66.98			
$ 32 Decachlorobiphenyl					CAS #:			
7.383	7.391	-0.008	9757591	50.0381	16.65			

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 5/10/05

QC Flag Legend

M - Compound response manually integrated.

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PSMP934.D
Report Date: 10-May-2005 11:09

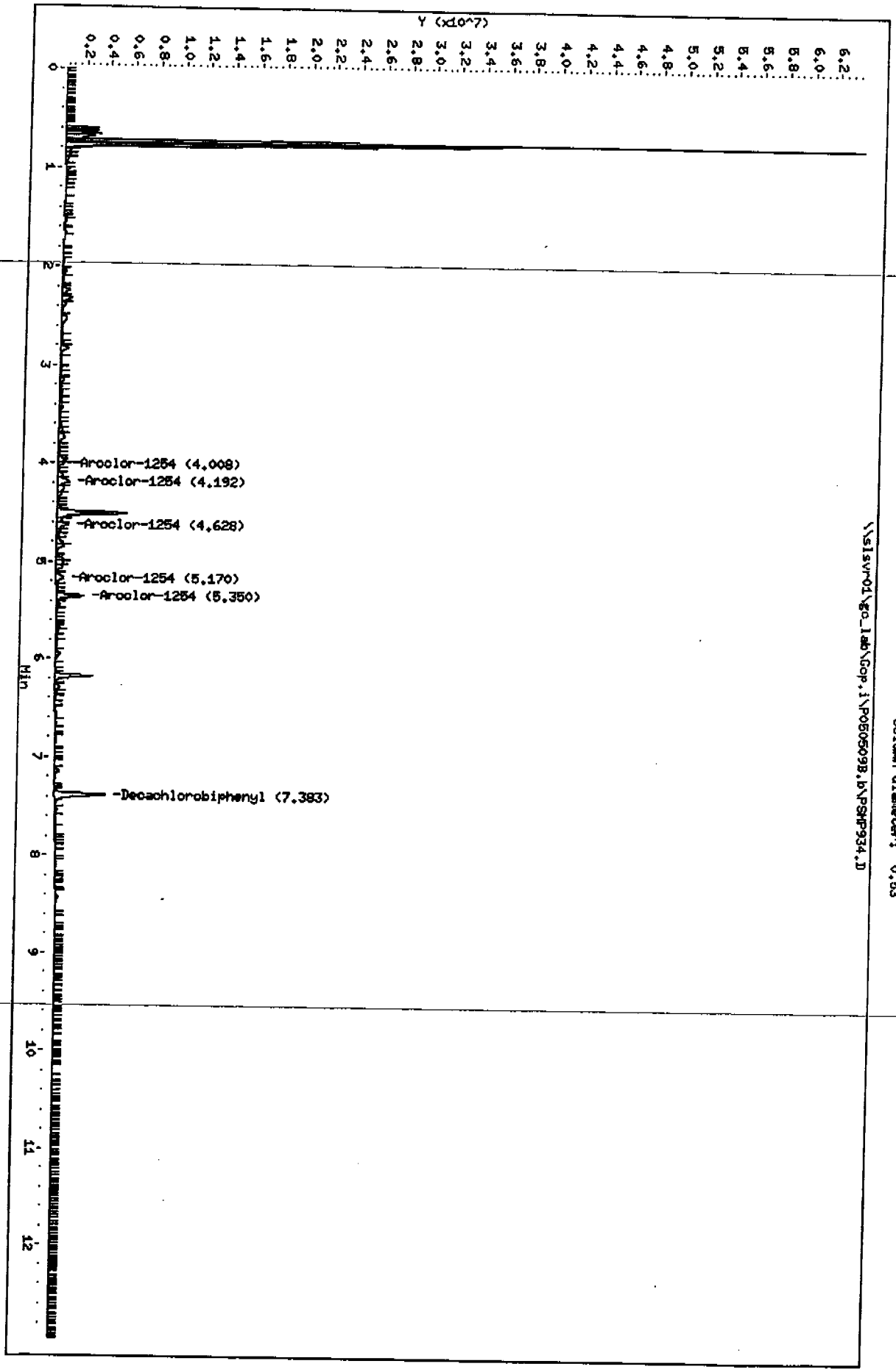
STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 21-APR-2005 00:00 Client SDG: F5D2103
Sample Matrix: SOLID
Lab Smp Id: G8WXV1AE
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: SOILSPKPCB.spk
Sublist File: son05.sub
Method File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Misc Info: F5D210380-002

Fraction: PCB
Client Smp ID: RE73-05-58835
Operator: BLO
SampleType: SAMPLE
Quant Type: ESTD

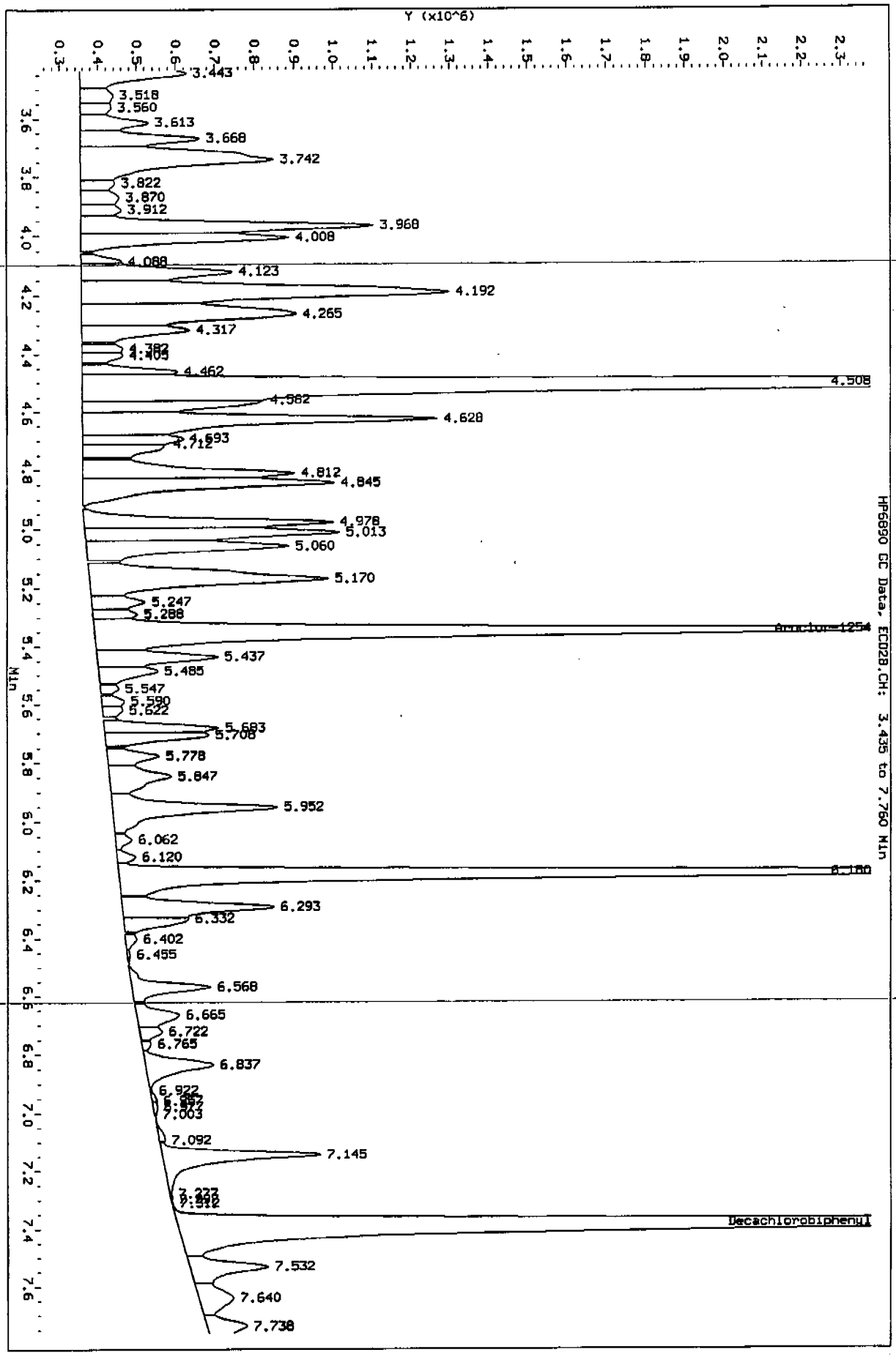
SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 32 Decachlorobiphenyl	13.31	16.65	125.10	30-150



Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PSHP934.D
Date : 09-MAY-2005 17:44
Client ID: RE73-05-88838
Sample Info: C8WKYIAE
Volume Injected (uL): 2.0
Column phase: CLPEST-2

\\slsvr01\gc_lab\Gcp.i\P050509B.b\PSHP934.D

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
Data File: \\elsvr01\gc_lab\Gcp.i\P0505098.b\PSMP934.D
Injection Date: 09-MAY-2005 17:44
Instrument: Gcp.i
Client Sample ID: RE73-05-58835
HP6890 GC Data, ECD2B.CH: 3.435 to 7.760 Min
Aroclor-1254
Decachlorobiphenyl

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PSMP935.D
Report Date: 10-May-2005 10:40

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PSMP935.D
Lab Smp Id: G8WXX1AE Client Smp ID: RE73-05-58841
Inj Date : 09-MAY-2005 18:01
Operator : BLO Inst ID: Gcp.i
Smp Info : G8WXX1AE
Misc Info : F5D210380-003
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Meth Date : 10-May-2005 09:43 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: son05.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.877	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng/mL)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
27 Aroclor-1254					CAS #: 11097-69-1		
3.119	3.102	0.017	2040604	268.442	86.94	80.00- 120.00	100.00(M)
3.356	3.337	0.019	2579908	126.044	40.82	215.41- 323.11	126.43
3.714	3.694	0.020	5975607	368.991	119.5	170.43- 255.65	292.84
4.143	4.121	0.022	3014911	259.299	83.98	122.36- 183.55	147.75
4.404	4.376	0.028	2721337	161.934	52.44	176.86- 265.29	933.11
		Average of Peak Concentrations =			76.74		
$ 32 Decachlorobiphenyl					CAS #:		
6.299	6.273	0.026	9298011	45.9545	14.88		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 5/10/05

QC Flag Legend

M - Compound response manually integrated.

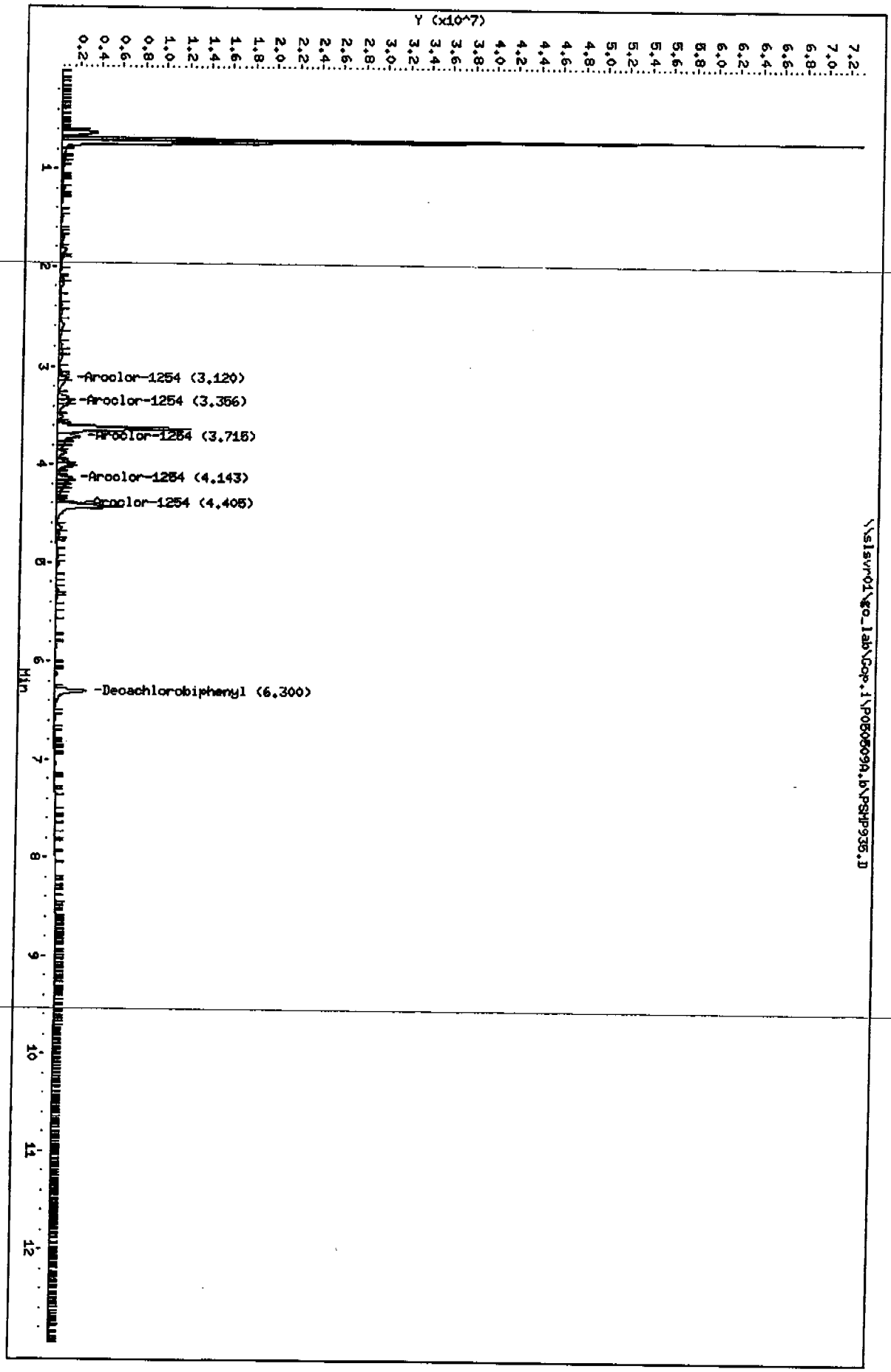
Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PSMP935.D Page 2
Report Date: 10-May-2005 10:40

STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 21-APR-2005 00:00 Client SDG: F5D2103
Sample Matrix: SOLID Fraction: PCB
Lab Smp Id: G8WXX1AE Client Smp ID: RE73-05-58841
Level: LOW Operator: BLO
Data Type: GC MULTI COMP SampleType: SAMPLE
SpikeList File: SOILSPKPCB.spk Quant Type: ESTD
Sublist File: son05.sub
Method File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Misc Info: F5D210380-003

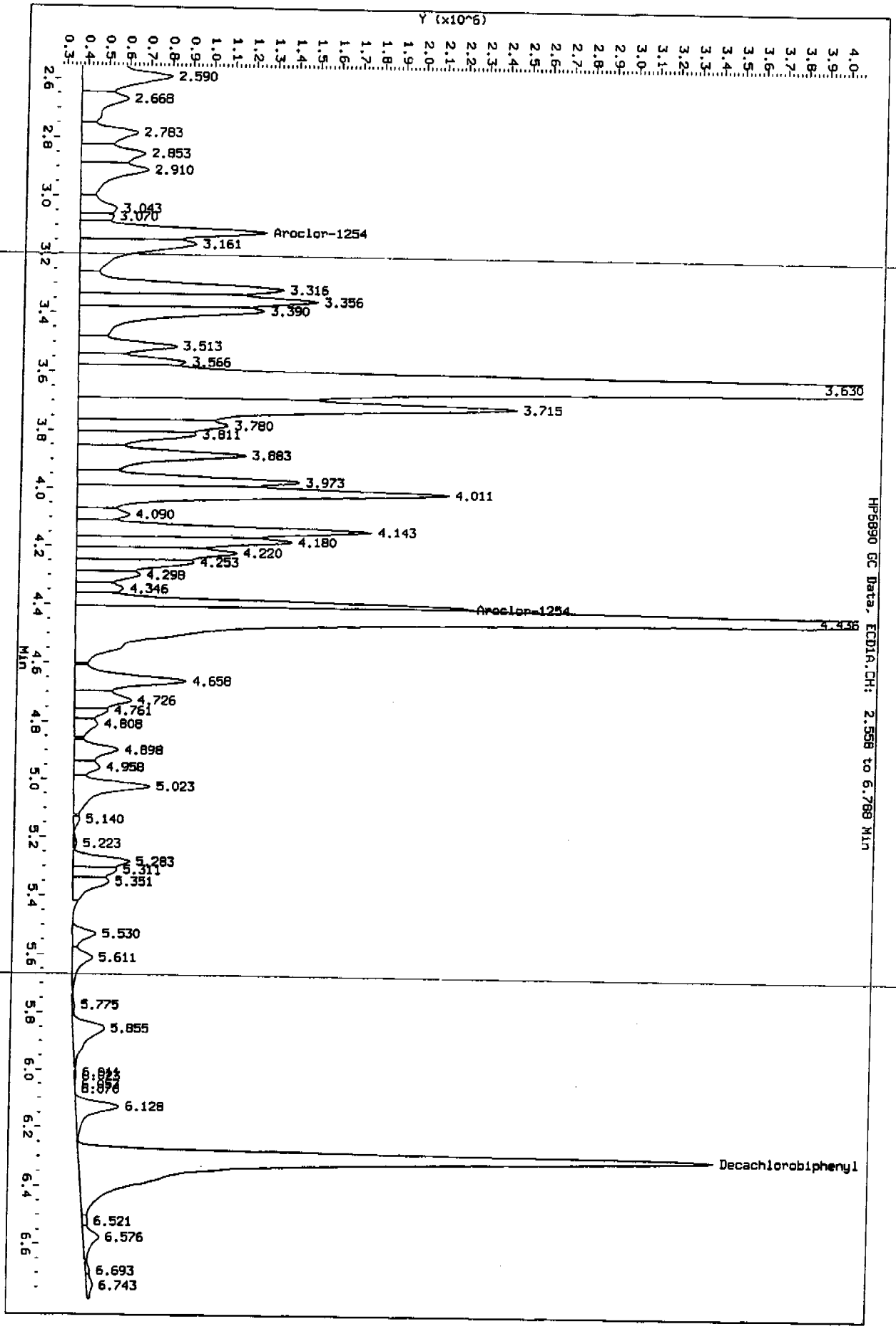
SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 32 Decachlorobiphenyl	12.95	14.88	114.89	30-150



Data File: \\slsvr01\gc_lab\Gcp.i\P0505009A.b\PSHP935.D
Date : 09-MAY-2005 18:01
Client ID: RE73-05-58841
Sample Info: C8MXX1AE
Volume Injected (uL): 2.0
Column phase: CLPEST-2

\\slsvr01\gc_lab\Gcp.i\P0505009A.b\PSHP935.D

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Data File: \\alsvr01\gc_lab\Gcp_1\P0505099.b\PSMP935.D
Injection Date: 09-MAY-2005 18:01
Instrument: Gcp_1
Client Sample ID: RE73-05-58841
HP6890 GC Data, ECD1A.CH: 2.556 to 6.788 Min
Min
2.590
2.668
2.783
2.853
2.910
3.043
3.070
Aroclor-1254
3.161
3.316
3.356
3.390
3.513
3.566
3.630
3.715
3.780
3.811
3.883
3.973
4.011
4.090
4.143
4.180
4.220
4.253
4.298
4.346
Aroclor-1254
4.436
4.658
4.726
4.761
4.808
4.898
4.958
5.023
5.140
5.223
5.283
5.311
5.351
5.530
5.611
5.775
5.855
6.128
Decachlorobiphenyl
6.521
6.576
6.693
6.743

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PSMP935.D
Report Date: 10-May-2005 11:16

CONFIRMATION DATA

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PSMP935.D
Lab Smp Id: G8WXX1AE Client Smp ID: RE73-05-58841
Inj Date : 09-MAY-2005 18:01
Operator : BLO Inst ID: Gcp.i
Smp Info : G8WXX1AE
Misc Info : F5D210380-003
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Meth Date : 09-May-2005 12:12 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: son05.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.877	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng/mL)	FINAL (ug/Kg)	TARGET RANGE	RATIO
27 Aroclor-1254					CAS #: 11097-69-1		
4.008	3.987	0.021	2413863	251.765	81.54	80.00- 120.00	100.00(M)
4.167	4.167	0.000	0			84.96- 127.44	0.00
4.624	4.602	0.022	4394772	271.422	87.90	135.10- 202.65	182.06
5.168	5.141	0.027	3623099	274.670	88.96	110.06- 165.09	150.10
5.322	5.322	0.000	0			139.20- 208.81	0.00
Average of Peak Concentrations =					86.13		
$ 32 Decachlorobiphenyl					CAS #:		
7.381	7.391	-0.010	9012533	46.2174	14.97		

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 5/10/05

QC Flag Legend

M - Compound response manually integrated.

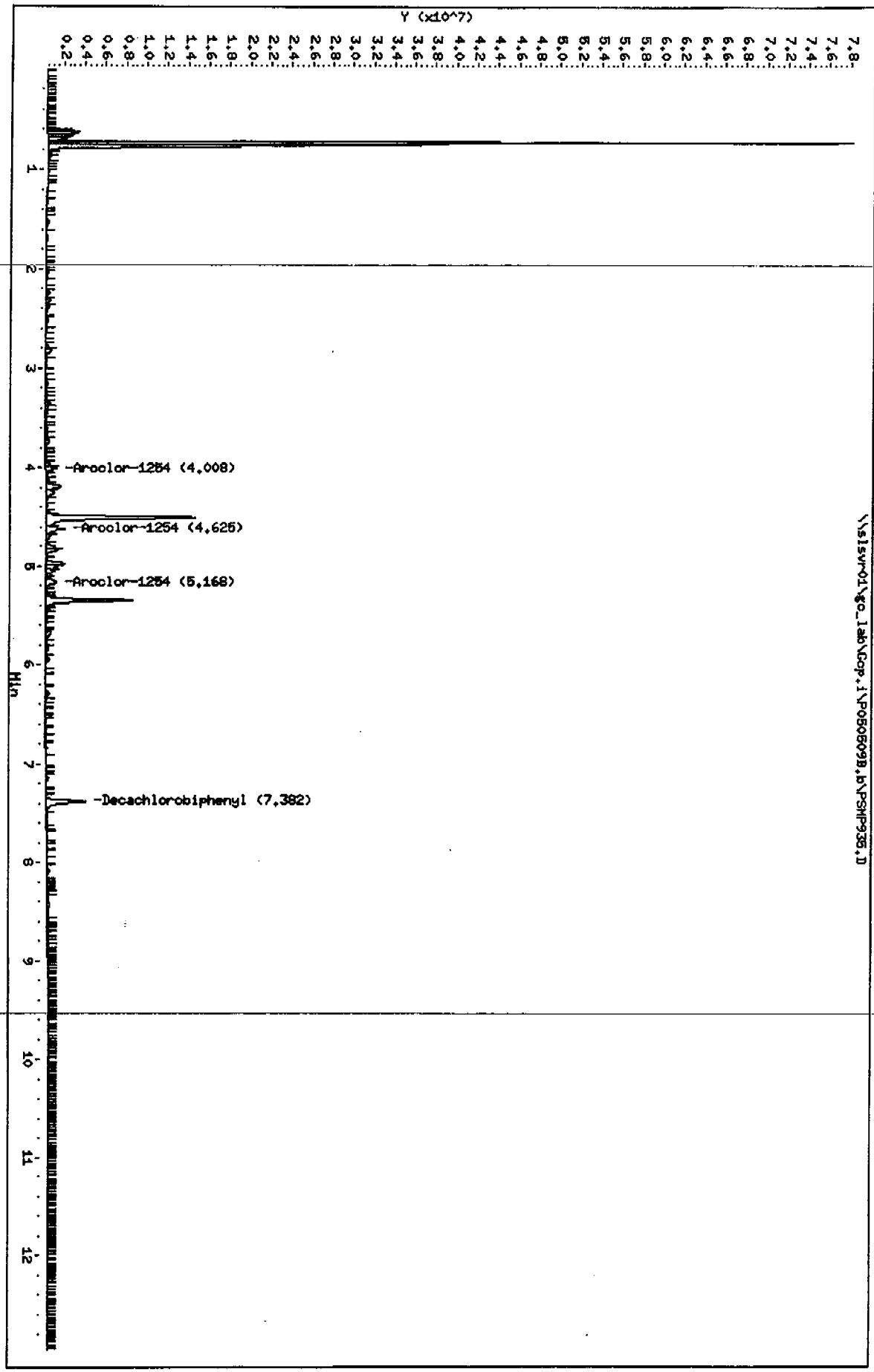
Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PSMP935.D Page 2
Report Date: 10-May-2005 11:16

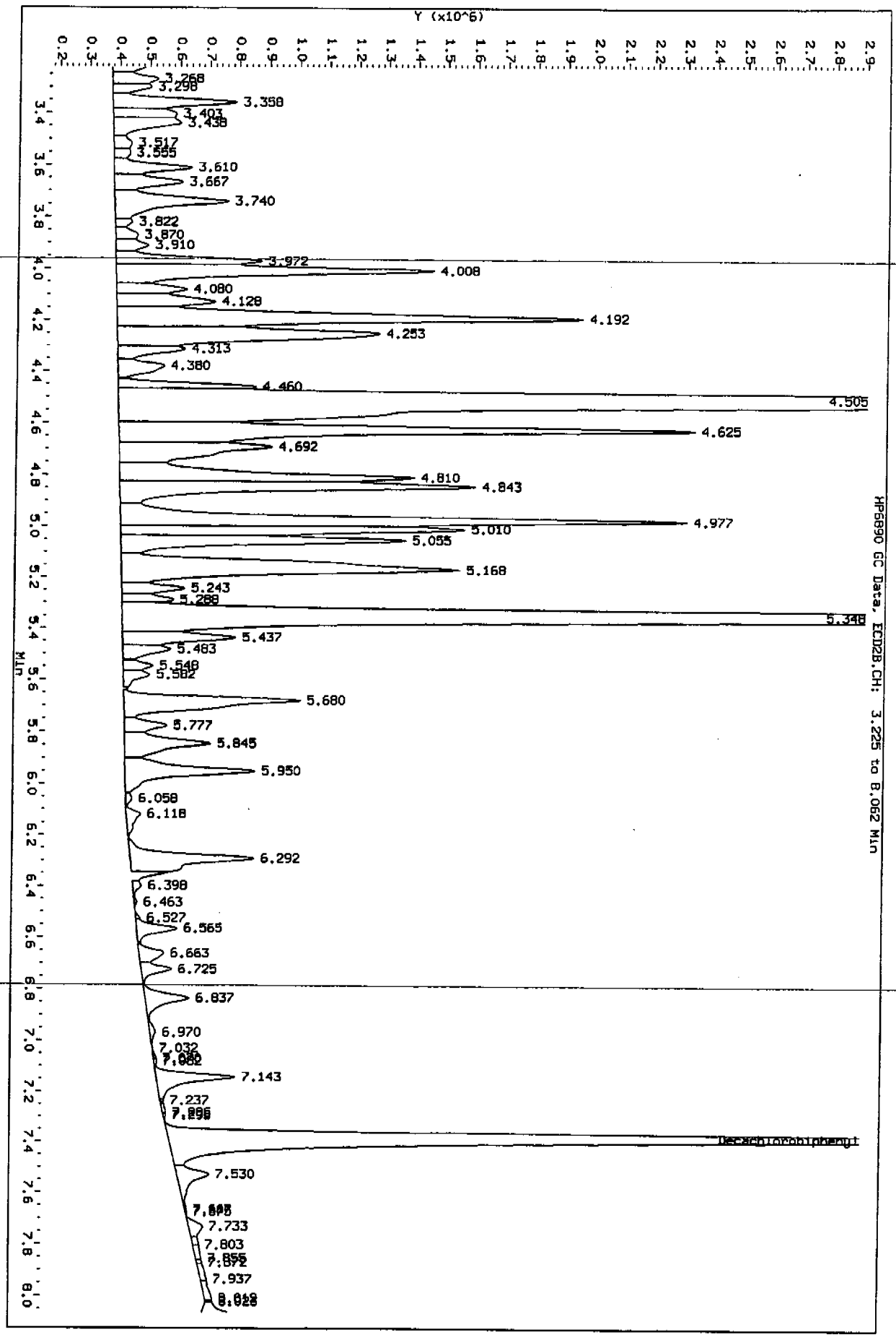
STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 21-APR-2005 00:00 Client SDG: F5D2103
Sample Matrix: SOLID Fraction: PCB
Lab Smp Id: G8WXX1AE Client Smp ID: RE73-05-58841
Level: LOW Operator: BLO
Data Type: GC MULTI COMP SampleType: SAMPLE
SpikeList File: SOILSPKPCB.spk Quant Type: ESTD
Sublist File: son05.sub
Method File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Misc Info: F5D210380-003

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 32 Decachlorobiphenyl	12.95	14.97	115.54	30-150


Y (x10^7)
Aroclor-1254 (4.008)
Aroclor-1254 (4.625)
Aroclor-1254 (5.168)
Decachlorobiphenyl (7.382)
Min
\\slsvr01\gc_lab\Gcp.i\P050509B.b\PSMP935.D
Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PSMP935.D
Date : 09-MAY-2005 18:01
Client ID: RE73-05-58841
Sample Info: G8AXX1AE
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PSMP935.D
Injection Date: 09-MAY-2005 18:01
Instrument: Gcp.i
Client Sample ID: RE73-05-58841
HP6890 GC Data, ECD2B.CH: 3.225 to 8.062 Min
Min
3.268
3.298
3.358
3.403
3.438
3.517
3.555
3.610
3.667
3.740
3.822
3.870
3.910
3.972
4.008
4.080
4.128
4.192
4.253
4.313
4.380
4.460
4.505
4.625
4.692
4.810
4.843
4.977
5.010
5.055
5.168
5.243
5.288
5.348
5.437
5.483
5.548
5.582
5.680
5.777
5.845
5.950
6.058
6.118
6.292
6.398
6.463
6.527
6.565
6.663
6.725
6.837
6.970
7.032
7.143
7.237
Decachlorobiphenyl
7.530
7.733
7.803
7.937

GC RAW QC DATA

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PBLK931.D
Report Date: 10-May-2005 10:17

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PBLK931.D
Lab Smp Id: G9HD11AA — Client Smp ID: INTRA-LAB BLANK
Inj Date : 09-MAY-2005 16:55
Operator : BLO — Inst ID: Gcp.i
Smp Info : G9HD11AA
Misc Info : F5D290000-298B
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Meth Date : 10-May-2005 09:43 owenb — Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 — Cal File: PCAL127.D
Als bottle: 6 — QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon — Compound Sublist: QCson05.sub
Target Version: 4.10 — Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
	RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ug/Kg)	TARGET RANGE	RATIO
$ 32 Decachlorobiphenyl						CAS #:		
	6.303	6.273	0.030	8644034	42.7223	14.24		

BLO 5/10/05

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PBLK931.D
Report Date: 10-May-2005 10:17

STL St. Louis

RECOVERY REPORT

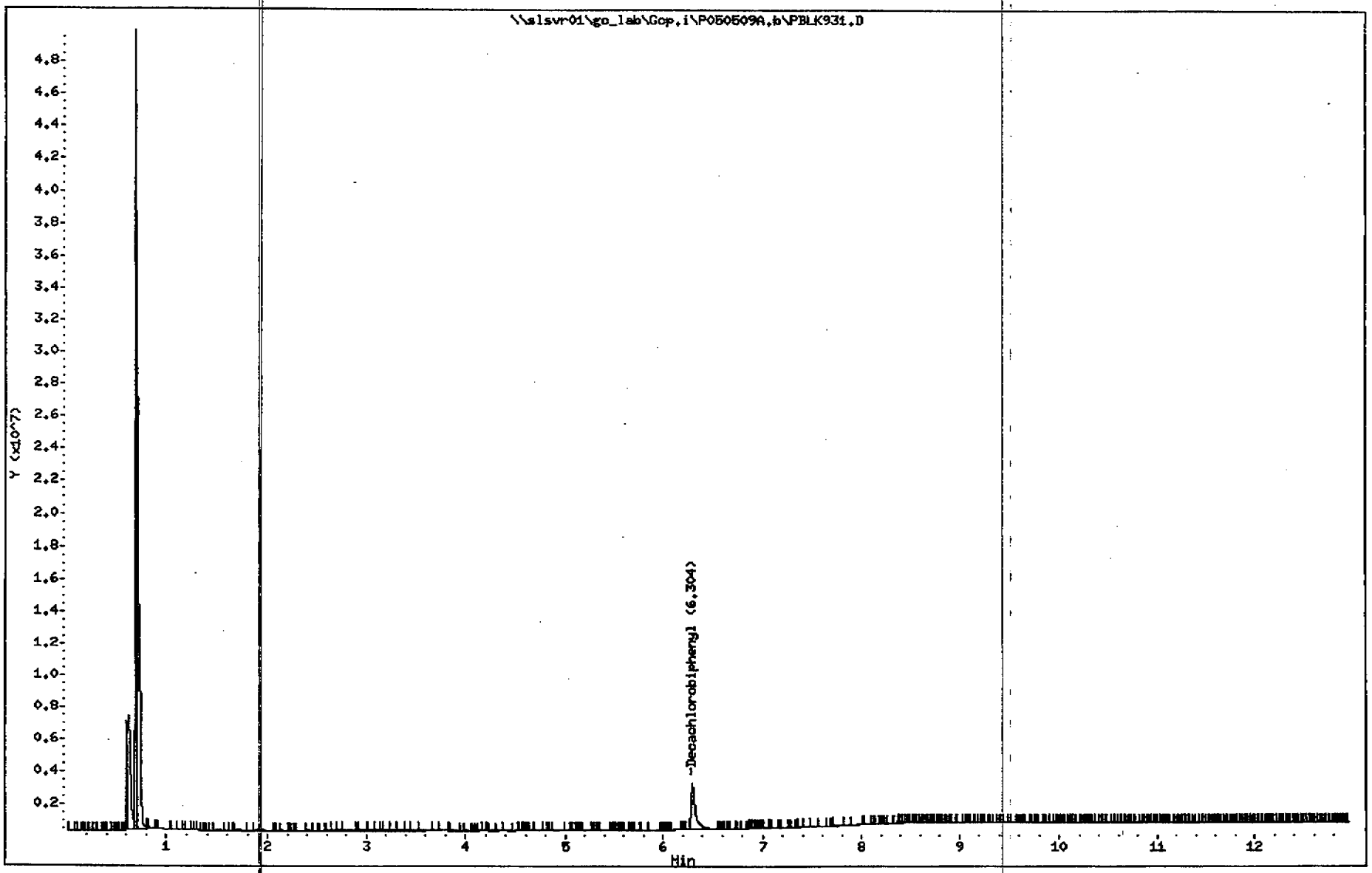
Client Name:
Sample Matrix: SOLID
Lab Smp Id: G9HD11AA
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: SOILSPKPCB.spk
Sublist File: QCson05.sub
Method File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Misc Info: F5D290000-298B

Client SDG: F5D290000
Fraction: PCB
Client Smp ID: INTRA-LAB BLANK
Operator: BLO
SampleType: BLANK
Quant Type: ESTD

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 32 Decachlorobiphenyl	13.33	14.24	106.81	73-150

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PBLK931.D
Date : 09-MAY-2005 16:55
Client ID: INTRA-LAB BLANK
Sample Info: C9HD11AA
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53



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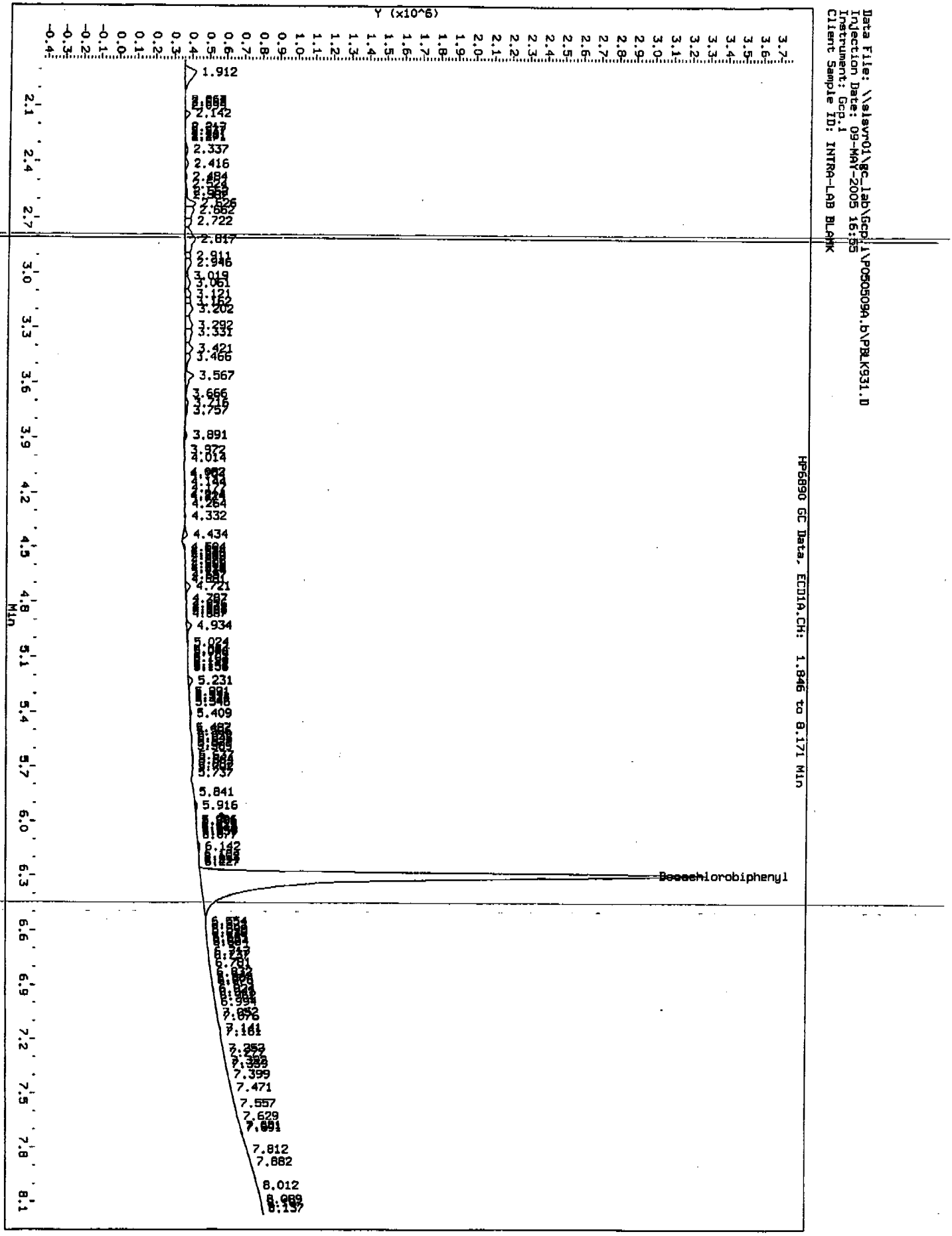
LOT# F5D210380


Y (x10^6)
Min
Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PBLK931.D
Injection Date: 09-MAY-2005 16:55
Instrument: Gcp.i
Client Sample ID: INTRA-LAB BLANK
HP6890 GC Data, ECD1A.CH: 1.846 to 8.171 Min
Decachlorobiphenyl

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PBLK931.D
Report Date: 10-May-2005 11:01

CONFIRMATION DATA

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PBLK931.D
Lab Smp Id: G9HD11AA Client Smp ID: INTRA-LAB BLANK
Inj Date : 09-MAY-2005 16:55
Operator : BLO Inst ID: Gcp.i
Smp Info : G9HD11AA
Misc Info : F5D290000-298B
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Meth Date : 09-May-2005 12:12 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: QCson05.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng/mL)	(ug/Kg)	TARGET RANGE	RATIO
$ 32 Decachlorobiphenyl					CAS #:		
7.382	7.391	-0.009	8194592	42.0229	14.01		

BLO 5/10/05

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PBLK931.D
Report Date: 10-May-2005 11:01

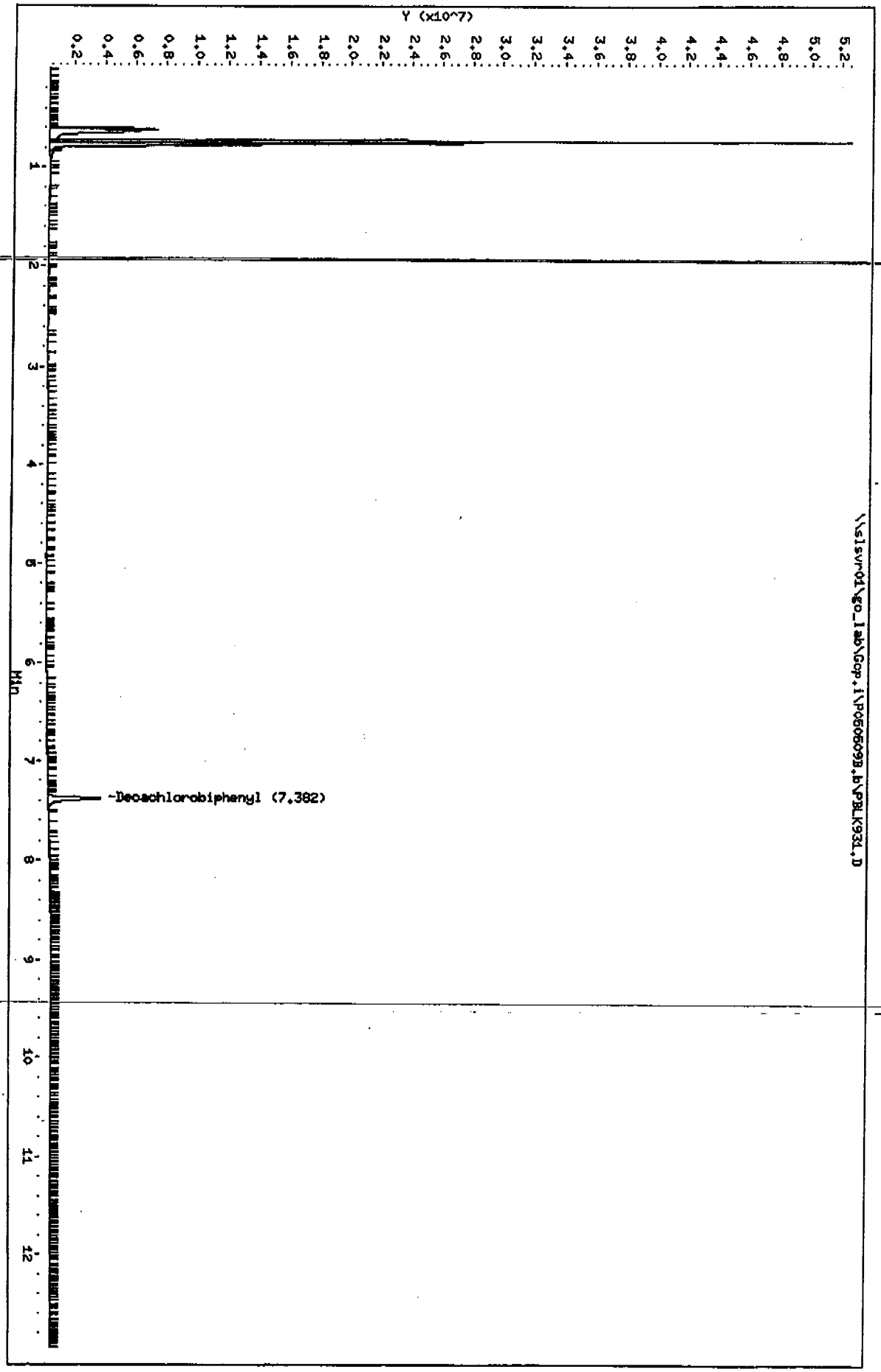
STL St. Louis

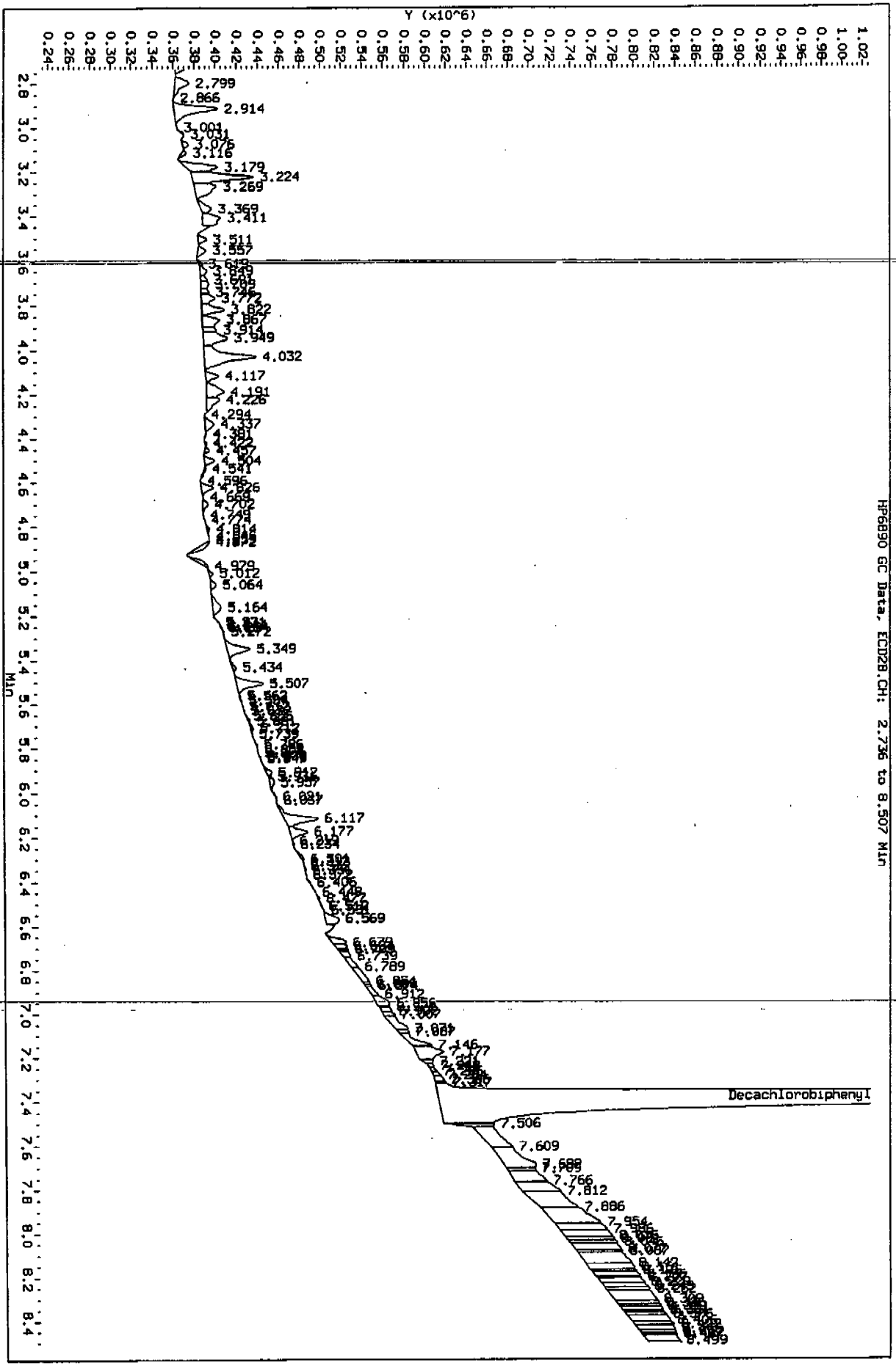
RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: G9HD11AA
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: SOILSPKPCB.spk
Sublist File: QCson05.sub
Method File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Misc Info: F5D290000-298B

Client SDG: F5D290000
Fraction: PCB
Client Smp ID: INTRA-LAB BLANK
Operator: BLO
SampleType: BLANK
Quant Type: ESTD

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 32 Decachlorobiphenyl	13.33	14.01	105.06	73-150


Y (x10^7)
5.2
5.0
4.8
4.6
4.4
4.2
4.0
3.8
3.6
3.4
3.2
3.0
2.8
2.6
2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
1
2
3
4
5
6
7
8
9
10
11
12
Min
-Decachlorobiphenyl (7.382)
\\slsvr01\go_lab\Gcp.i\P0505093.b\PBLK934.D
Data File: \\slsvr01\go_lab\Gcp.i\P0505093.b\PBLK934.D
Date : 09-MAY-2005 16:55
Client ID: INTRA-LAB BLANK
Sample Info: C9HD1AA
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
Data File: \\slavr01\gc_lab\Gcp1\P0505098.b\PBLK931.D
Injection Date: 09-MAY-2005 16:55
Instrument: Gcp.i
Client Sample ID: INTRA-LAB BLANK
HP6890 GC Data, ECD2B.CH: 2.736 to 8.507 Min
Decachlorobiphenyl

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PLCS932.D Page 1
Report Date: 10-May-2005 10:19

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PLCS932.D
Lab Smp Id: G9HD11AC Client Smp ID: INTRA-LAB CHECK
Inj Date : 09-MAY-2005 17:11
Operator : BLO Inst ID: Gcp.i
Smp Info : G9HD11AC
Misc Info : F5D290000-298C
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Meth Date : 10-May-2005 09:43 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 7 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: QCson05.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng/mL)	FINAL (ug/Kg)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.680	1.668	0.012	4428601	906.806	302.3	80.00- 120.00	100.00
1.946	1.933	0.013	8851324	968.242	322.7	151.28- 226.92	199.87
2.320	2.303	0.017	20670492	1010.51	336.8	360.26- 540.38	466.75
2.431	2.413	0.018	7639185	1021.65	340.6	127.14- 190.70	172.50
2.786	2.768	0.018	7976352	1001.46	333.8	133.27- 199.90	180.11
Average of Peak Concentrations =					327.2		
28 Aroclor-1260					CAS #: 11096-82-5		
3.886	3.896	-0.010	12287037	1029.27	343.1	80.00- 120.00	100.00
4.145	4.156	-0.011	21336671	1022.47	340.8	136.00- 204.00	173.65
4.401	4.412	-0.011	20763772	1132.62	377.5	118.78- 178.17	168.99
5.026	5.039	-0.013	25885254	970.769	323.6	180.60- 270.90	210.67
5.868	5.882	-0.014	5960118	882.802	294.3	39.25- 58.87	48.51
Average of Peak Concentrations =					335.9		
$ 32 Decachlorobiphenyl					CAS #:		
6.303	6.273	0.030	8857525	43.7775	14.59		

BLO 5/10/05

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PLCS932.D Page 2
Report Date: 10-May-2005 10:19

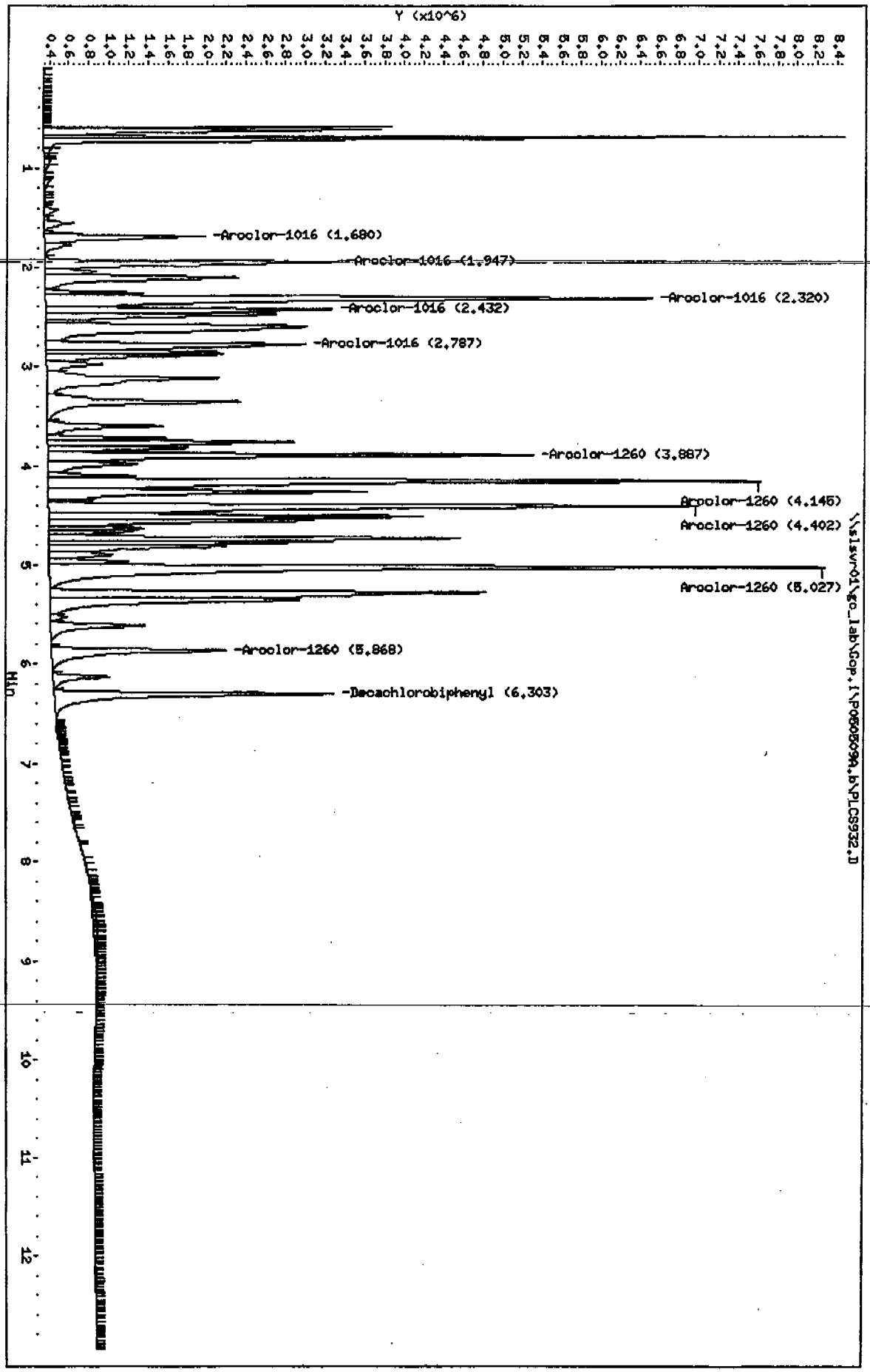
STL St. Louis

RECOVERY REPORT

Client Name: Client SDG: F5D290000
Sample Matrix: SOLID Fraction: PCB
Lab Smp Id: G9HD11AC Client Smp ID: INTRA-LAB CHECK
Level: LOW Operator: BLO
Data Type: GC MULTI COMP SampleType: LCS
SpikeList File: son051cs.spk Quant Type: ESTD
Sublist File: QCson05.sub
Method File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Misc Info: F5D290000-298C

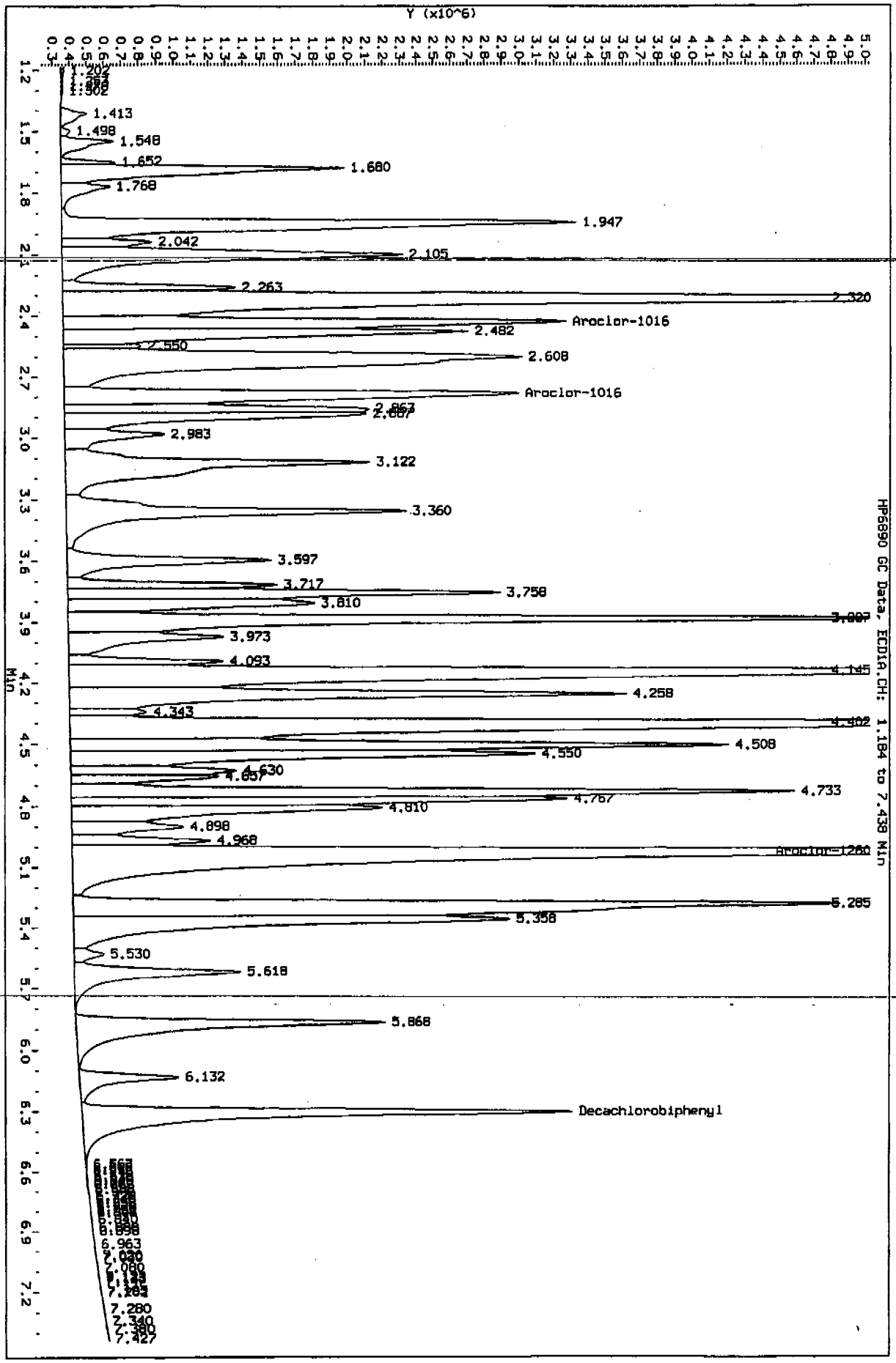
SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
22 Aroclor-1016	333.3	327.2	98.16	73-141
28 Aroclor-1260	333.3	335.9	100.77	72-144

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 32 Decachlorobiphenyl	13.33	14.59	109.44	73-150



Data File: \\slsvr01\gc_lab\Gcp.i\P0505094.b\PLCS932.D
Date : 09-MAY-2005 17:11
Client ID: INTRA-LAB CHECK
Sample Info: C9H011AC
Volume Injected (uL): 2.0
Column phase: CLPEST-2

Instrument: Gcp.i
Operator: RLO
Column diameter: 0.53


Y (x10^6)
Data File: \\elsvr01\gc_lab\Gcp1\P050509A.b\PLCS932.D
Injection Date: 09-MAY-2005 17:11
Instrument: Gcp.1
Client Sample ID: INTRA-LAB CHECK
HP6890 GC Data, ECD1A.CH: 1.184 to 7.438 Min
Min
1.413
1.498
1.548
1.652
1.680
1.768
1.947
2.042
2.105
2.263
2.320
Aroclor-1016
2.482
2.550
2.608
Aroclor-1016
2.983
3.122
3.360
3.597
3.717
3.758
3.810
3.973
4.093
4.258
4.343
4.508
4.550
4.630
4.657
4.733
4.767
4.810
4.898
4.968
Aroclor-1260
5.285
5.358
5.530
5.618
5.868
6.132
Decachlorobiphenyl
6.963
7.280
7.340
7.380
7.427

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PLCS932.D Page 1
Report Date: 10-May-2005 11:02

CONFIRMATION DATA

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PLCS932.D
Lab Smp Id: G9HD11AC Client Smp ID: INTRA-LAB CHECK
Inj Date : 09-MAY-2005 17:11
Operator : BLO Inst ID: Gcp.i
Smp Info : G9HD11AC
Misc Info : F5D290000-298C
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Meth Date : 09-May-2005 12:12 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 7 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: QCson05.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng/mL)	FINAL (ug/Kg)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.241	2.223	0.018	4365071	873.095	291.0	80.00- 120.00	100.00
2.616	2.598	0.018	9152821	954.582	318.2	159.64- 239.46	209.68
3.040	3.016	0.024	19781550	1028.49	342.8	341.61- 512.42	453.18
3.168	3.145	0.023	8333980	1015.41	338.5	142.58- 213.87	190.92
3.611	3.590	0.021	5991622	974.880	325.0	104.73- 157.09	137.26
		Average of Peak Concentrations =			323.1		
28 Aroclor-1260					CAS #: 11096-82-5		
4.811	4.788	0.023	13283331	1074.80	358.3	80.00- 120.00	100.00
5.013	5.019	-0.006	14974871	1061.49	353.8	93.73- 140.59	112.73
5.166	5.140	0.026	14226977	1066.83	355.6	87.79- 131.68	107.10
5.710	5.685	0.025	11184225	954.011	318.0	76.27- 114.40	84.20
5.951	5.959	-0.008	23235912	969.778	323.2	167.38- 251.07	174.93
		Average of Peak Concentrations =			341.8		
$ 32 Decachlorobiphenyl					CAS #:		
7.383	7.391	-0.008	8129072	41.6869	13.90		

BLO 5/10/05

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PLCS932.D
Report Date: 10-May-2005 11:02

STL St. Louis

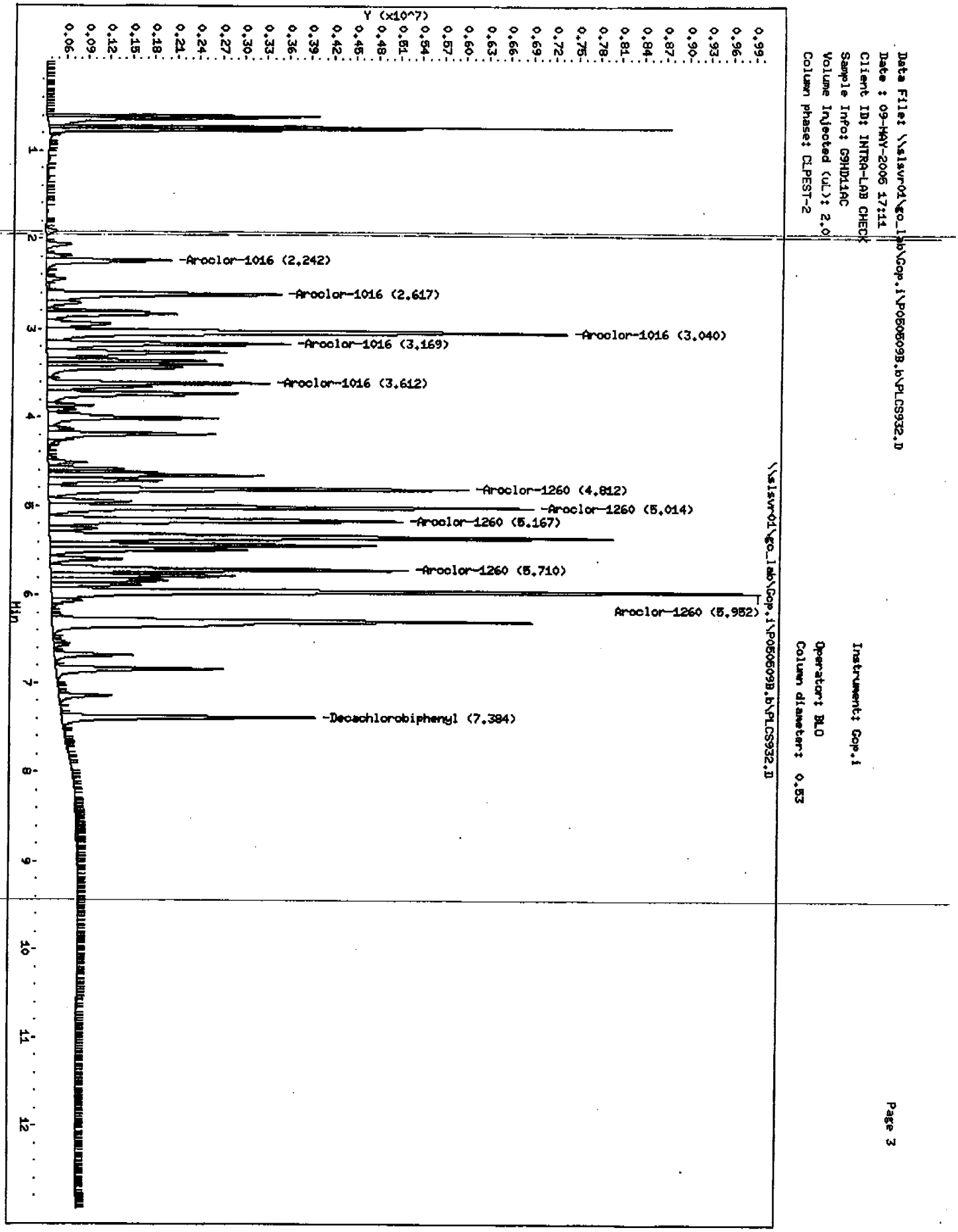
RECOVERY REPORT

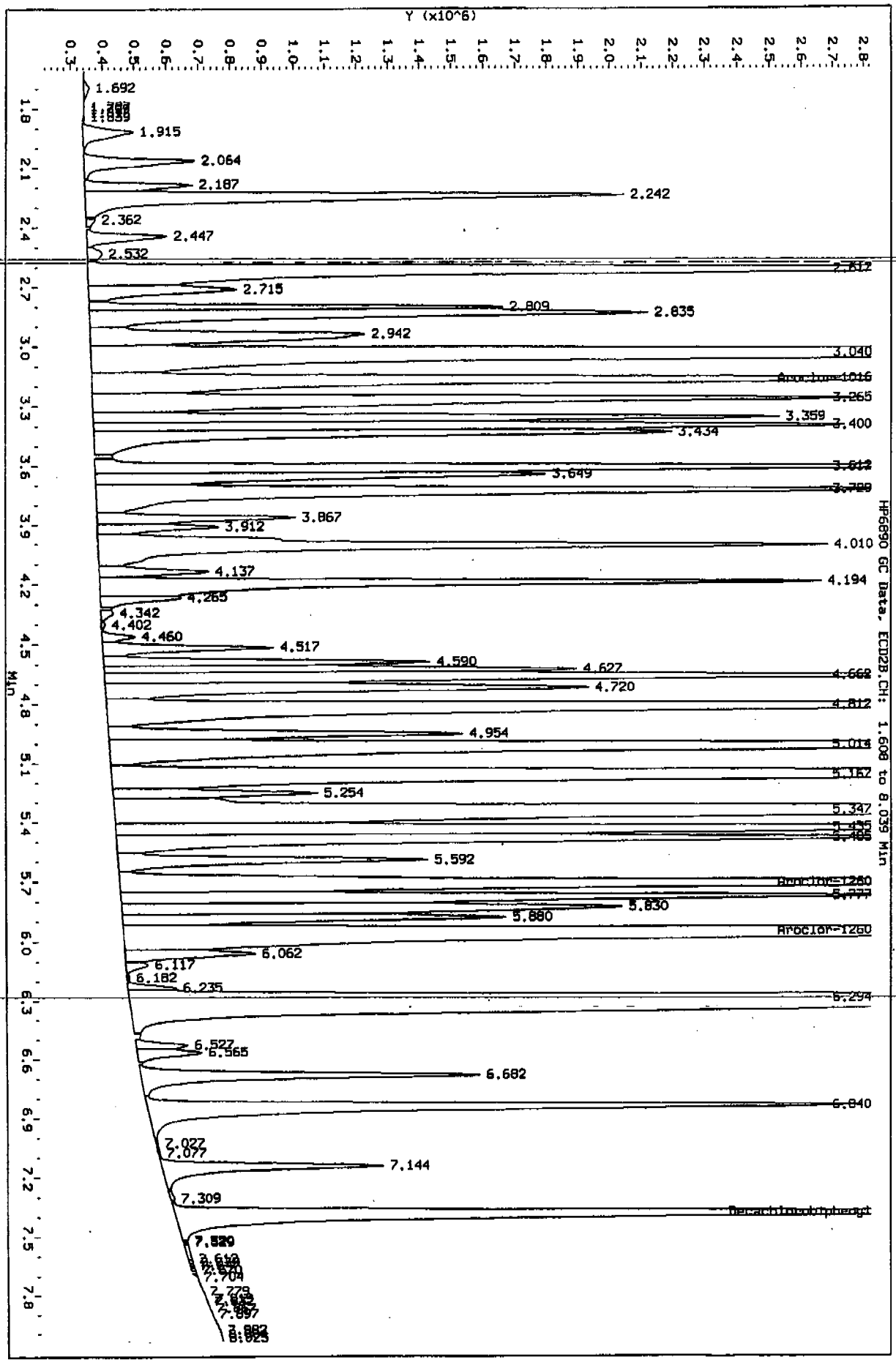
Client Name:
Sample Matrix: SOLID
Lab Smp Id: G9HD11AC
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: son051cs.spk
Sublist File: QCson05.sub
Method File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Misc Info: F5D290000-298C

Client SDG: F5D290000
Fraction: PCB
Client Smp ID: INTRA-LAB CHECK
Operator: BLO
SampleType: LCS
Quant Type: ESTD

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
22 Aroclor-1016	333.3	323.1	96.93	73-141
28 Aroclor-1260	333.3	341.8	102.54	72-144

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 32 Decachlorobiphenyl	13.33	13.90	104.22	73-150


Y (x10^7)
0.06
0.09
0.12
0.15
0.18
0.21
0.24
0.27
0.30
0.33
0.36
0.39
0.42
0.45
0.48
0.51
0.54
0.57
0.60
0.63
0.66
0.69
0.72
0.75
0.78
0.81
0.84
0.87
0.90
0.93
0.96
0.99
Min
1
2
3
4
5
6
7
8
9
10
11
12
-Aroclor-1016 (2.242)
-Aroclor-1016 (2.617)
-Aroclor-1016 (3.040)
-Aroclor-1016 (3.169)
-Aroclor-1016 (3.612)
-Aroclor-1260 (4.812)
-Aroclor-1260 (5.014)
-Aroclor-1260 (5.167)
-Aroclor-1260 (5.710)
Aroclor-1260 (5.952)
-Decachlorobiphenyl (7.384)
Data File: \\slsvr01\go_lab\Gop.i\P060609B.b\PLCS932.D
Date : 09-MAY-2006 17:11
Client ID: INTRA-LAB CHECK
Sample Info: 59HD1AC
Volume Injected (uL): 2.0
Column phase: CLPEST-2
\\slsvr01\go_lab\Gop.i\P060609B.b\PLCS932.D
Instrument: Gop.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
1.692
1.915
2.064
2.187
2.242
2.362
2.447
2.532
2.715
2.809
2.835
2.942
3.040
3.265
3.359
3.400
3.434
3.649
3.867
3.912
4.010
4.137
4.194
4.265
4.342
4.402
4.460
4.517
4.590
4.627
4.720
4.954
5.254
5.592
5.830
5.880
Aroclor-1260
6.062
6.117
6.182
6.235
6.527
6.565
6.682
6.840
7.027
7.077
7.144
7.309
7.829
Data File: \\slsvr01\gc_lab\Gcp.1\P050509B.b\PLC5932.D
Injection Date: 09-MAY-2005 17:11
Instrument: Gcp.1
Client Sample ID: INTRA-LAB CHECK
HP6890 GC Data, ECD2B.CH: 1.608 to 8.039 Min

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PSMP936.D Page 1
Report Date: 10-May-2005 10:43

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PSMP936.D
Lab Smp Id: G8WXX1AF Client Smp ID: RE73-05-58841
Inj Date : 09-MAY-2005 18:17
Operator : BLO Inst ID: Gcp.i
Smp Info : G8WXX1AF
Misc Info : F5D210380-003S
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Meth Date : 10-May-2005 09:43 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 11 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: son05.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.256	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng/mL)	FINAL (ug/Kg)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
1.681	1.668	0.013	4492553	919.901	304.0	80.00- 120.00	100.00
1.948	1.933	0.015	8584934	939.102	310.4	151.28- 226.92	191.09
2.319	2.303	0.016	19686712	962.419	318.1	360.26- 540.38	438.21
~~2.431~~	~~2.413~~	~~0.018~~	~~7413874~~	~~991.522~~	~~327.7~~	~~127.14- 190.70~~	~~165.03~~
2.784	2.768	0.016	7730986	970.654	320.8	133.27- 199.90	172.08
		Average of Peak Concentrations =			316.2		
27 Aroclor-1254					CAS #: 11097-69-1		
3.121	3.102	0.019	6148861	808.885	267.3	80.00- 120.00	100.00(M)
3.358	3.337	0.021	9253381	452.082	149.4	215.41- 323.11	150.49
3.716	3.694	0.022	6553319	404.665	133.7	170.43- 255.65	106.58
4.144	4.121	0.023	23112231	1987.78	657.0	122.36- 183.55	375.88
4.401	4.376	0.025	15025208	894.079	295.5	176.86- 265.29	244.36
		Average of Peak Concentrations =			300.6		
28 Aroclor-1260					CAS #: 11096-82-5		
3.884	3.896	-0.012	12623334	1057.44	349.5	80.00- 120.00	100.00
4.144	4.156	-0.012	23112231	1107.56	366.1	136.00- 204.00	183.09

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 5/10/05

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PSMP936.D
Report Date: 10-May-2005 10:43

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng/mL)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO	
28 Aroclor-1260 (continued)								
4.401	4.412	-0.011	15025208	819.593	270.9	118.78- 178.17	119.03	
5.024	5.039	-0.015	23232264	871.275	288.0	180.60- 270.90	184.04	
5.866	5.882	-0.016	5436304	805.216	266.1	39.25- 58.87	43.07	
Average of Peak Concentrations =					308.1			
$ 32 Decachlorobiphenyl					CAS #:			
6.303	6.273	0.030	13073941	64.6167	21.36			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PSMP936.D Page 3
Report Date: 10-May-2005 10:43

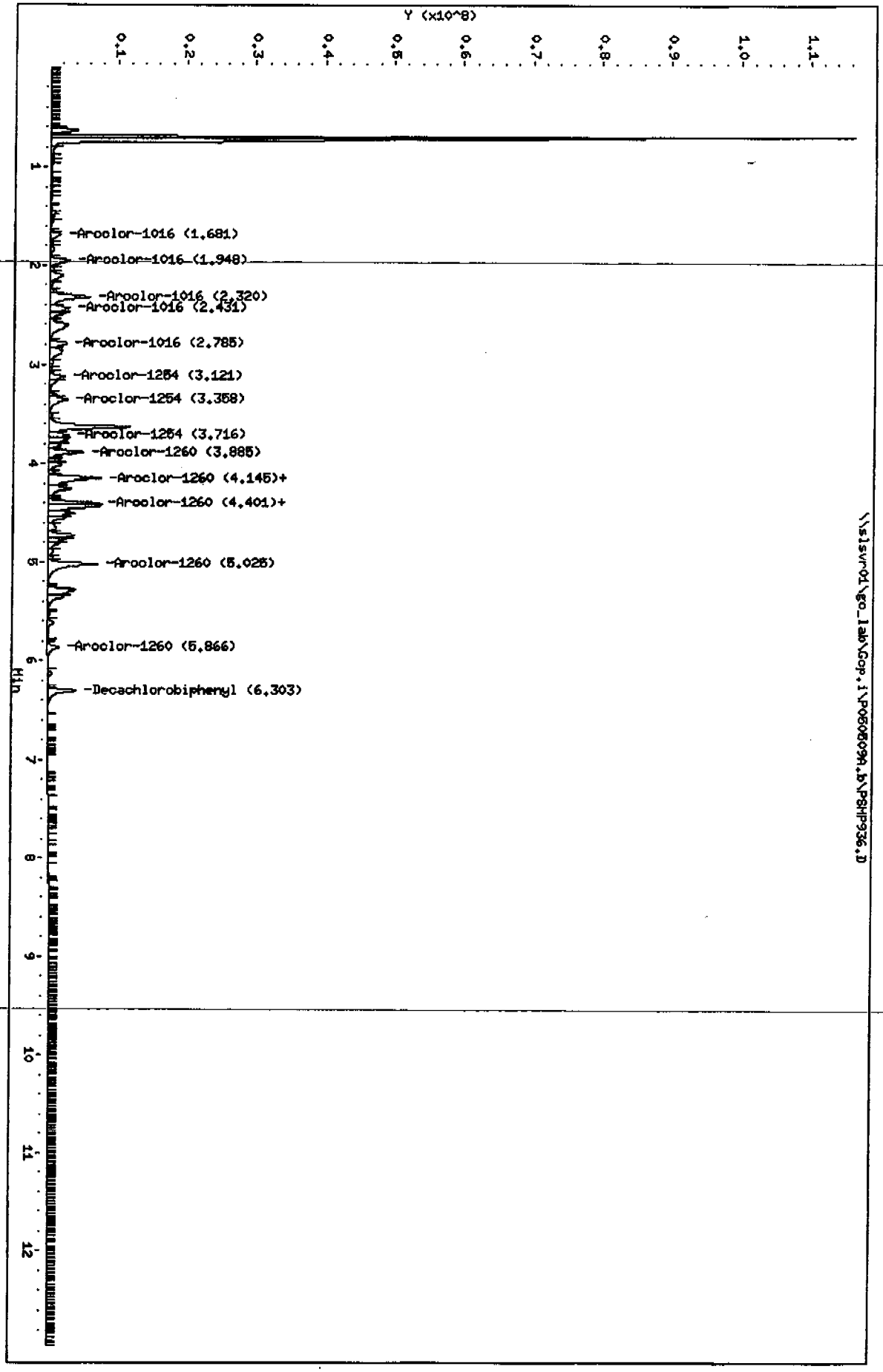
STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 21-APR-2005 00:00 Client SDG: F5D2103
Sample Matrix: SOLID Fraction: PCB
Lab Smp Id: G8WXX1AF Client Smp ID: RE73-05-58841
Level: LOW Operator: BLO
Data Type: GC MULTI COMP SampleType: MS
SpikeList File: son05ms.spk Quant Type: ESTD
Sublist File: son05.sub
Method File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Misc Info: F5D210380-003S

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
22 Aroclor-1016	330.5	316.2	95.67	30-150
28 Aroclor-1260	330.5	308.1	93.22	30-150

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 32 Decachlorobiphenyl	13.22	21.36	161.54*	30-150


Y (x10^8)
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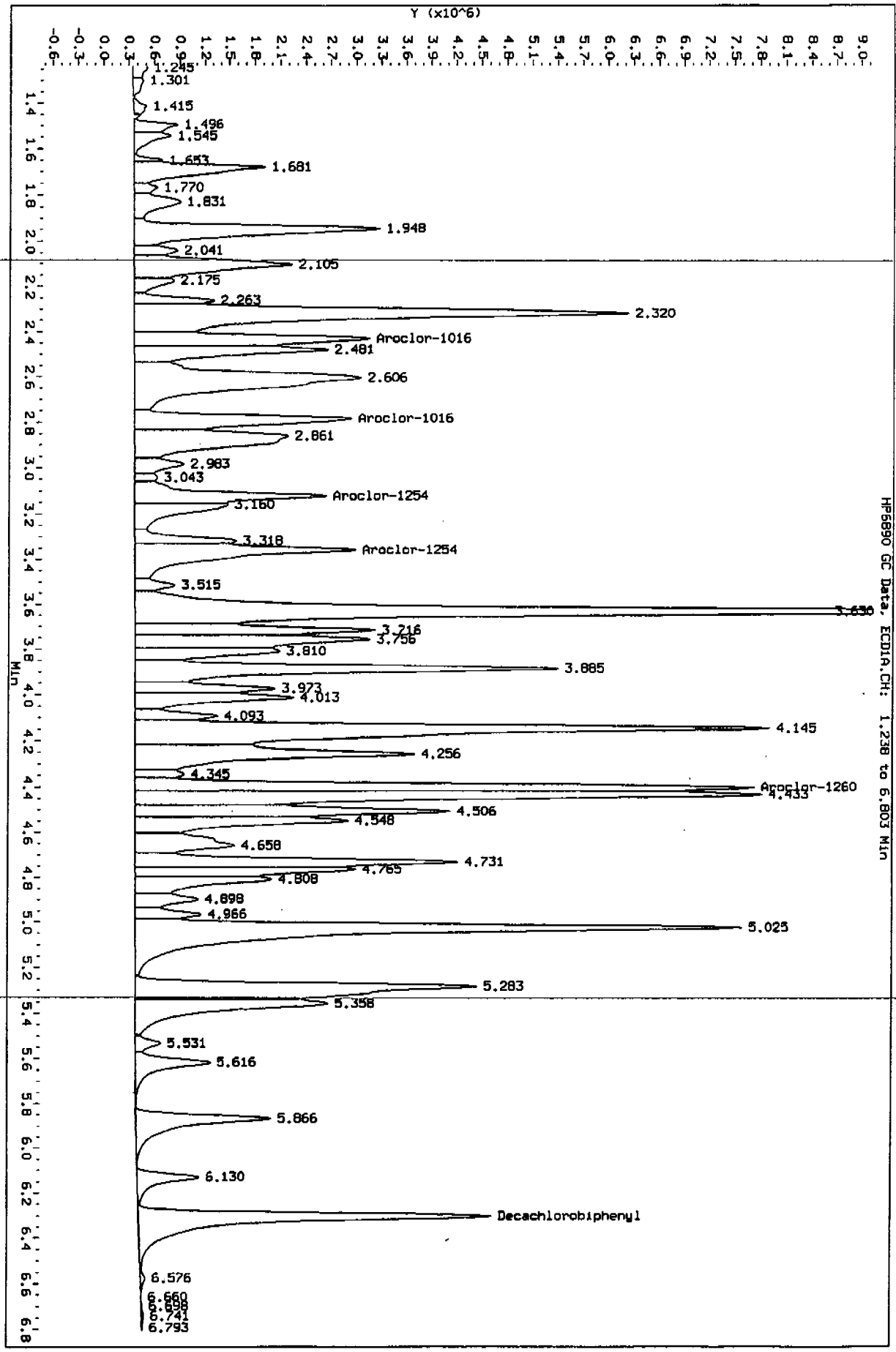
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1
2
3
4
5
6
7
8
9
10
11
12
Min
-Aroclor-1016 (1.681)
-Aroclor-1016 (1.948)
-Aroclor-1016 (2.320)
-Aroclor-1016 (2.431)
-Aroclor-1016 (2.785)
-Aroclor-1254 (3.121)
-Aroclor-1254 (3.368)
-Aroclor-1254 (3.716)
-Aroclor-1260 (3.885)
-Aroclor-1260 (4.145)+
-Aroclor-1260 (4.401)+
-Aroclor-1260 (5.025)
-Aroclor-1260 (5.866)
-Decachlorobiphenyl (6.303)
\\slsvr01\go_lab\Gop.i\P0508096.b\PSHP936.D
Data File: \\slsvr01\go_lab\Gop.i\P0505096.b\PSHP936.D
Date : 09-MAY-2008 18:17
Client ID: RE73-05-58841
Sample Info: G8HX01AF
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gop.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
Data File: \\slevr01\gc_lab\Gcp_1\P050509A.b\PSMP936.D
Injection Date: 09-MAY-2005 18:17
Instrument: Gcp.1
Client Sample ID: RE73-05-58841
HP6890 GC Data, ECD1A.CH: 1.238 to 6.803 Min
1.245
1.301
1.415
1.496
1.545
1.653
1.681
1.770
1.831
1.948
2.041
2.105
2.175
2.263
2.320
Aroclor-1016
2.481
2.606
Aroclor-1016
2.861
2.983
3.043
Aroclor-1254
3.160
3.318
Aroclor-1254
3.515
3.630
3.716
3.756
3.810
3.885
3.973
4.013
4.093
4.145
4.256
4.345
Aroclor-1260
4.433
4.506
4.548
4.658
4.731
4.765
4.808
4.898
4.966
5.025
5.283
5.358
5.531
5.616
5.866
6.130
Decachlorobiphenyl
6.576
6.660
6.698
6.741
6.793

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PSMP936.D Page 1
Report Date: 10-May-2005 11:18

CONFIRMATION DATA

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PSMP936.D
Lab Smp Id: G8WXX1AF Client Smp ID: RE73-05-58841
Inj Date : 09-MAY-2005 18:17
Operator : BLO Inst ID: Gcp.i
Smp Info : G8WXX1AF
Misc Info : F5D210380-003S
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Meth Date : 09-May-2005 12:12 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 11 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: son05.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.256	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng/mL)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO	
22 Aroclor-1016					CAS #: 12674-11-2			
2.241	2.223	0.018	4229036	845.885	279.6	80.00- 120.00	100.00	
2.614	2.598	0.016	8720624	909.506	300.6	159.64- 239.46	206.21	
3.038	3.016	0.022	18482793	960.963	317.6	341.61- 512.42	437.05	
~~3.166~~	~~3.145~~	~~0.021~~	~~8412511~~	~~1024.97~~	~~338.8~~	~~142.58- 213.87~~	~~198.92~~	
3.611	3.590	0.021	5913344	962.143	318.0	104.73- 157.09	139.83	
		Average of Peak Concentrations =			310.9			
27 Aroclor-1254					CAS #: 11097-69-1			
4.009	3.987	0.022	6484146	676.295	223.5	80.00- 120.00	100.00(M)	
4.193	4.167	0.026	7534581	739.959	244.6	84.96- 127.44	116.20	
4.586	4.602	-0.016	3094106	191.093	63.16	135.10- 202.65	47.72	
5.166	5.141	0.025	15706742	1190.74	393.6	110.06- 165.09	242.23	
5.348	5.322	0.026	33864218	2029.84	670.9	139.20- 208.81	522.26	
		Average of Peak Concentrations =			319.1			
28 Aroclor-1260					CAS #: 11096-82-5			
4.811	4.788	0.023	15886301	1285.42	424.8	80.00- 120.00	100.00	
5.013	5.019	-0.006	17644922	1250.75	413.4	93.73- 140.59	111.07	

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other_____

BLO 5/10/05

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng/mL)	FINAL (ug/Kg)	TARGET RANGE	RATIO
28 Aroclor-1260 (continued)							
5.166	5.140	0.026	15706742	1177.79	389.3	87.79- 131.68	98.87
5.709	5.685	0.024	11169498	952.755	314.9	76.27- 114.40	70.31
5.951	5.959	-0.008	21550319	899.428	297.3	167.38- 251.07	135.65
		Average of Peak Concentrations =			367.9		
$ 32 Decachlorobiphenyl					CAS #:		
7.383	7.391	-0.008	12639767	64.8183	21.42		(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PSMP936.D Page 3
Report Date: 10-May-2005 11:18

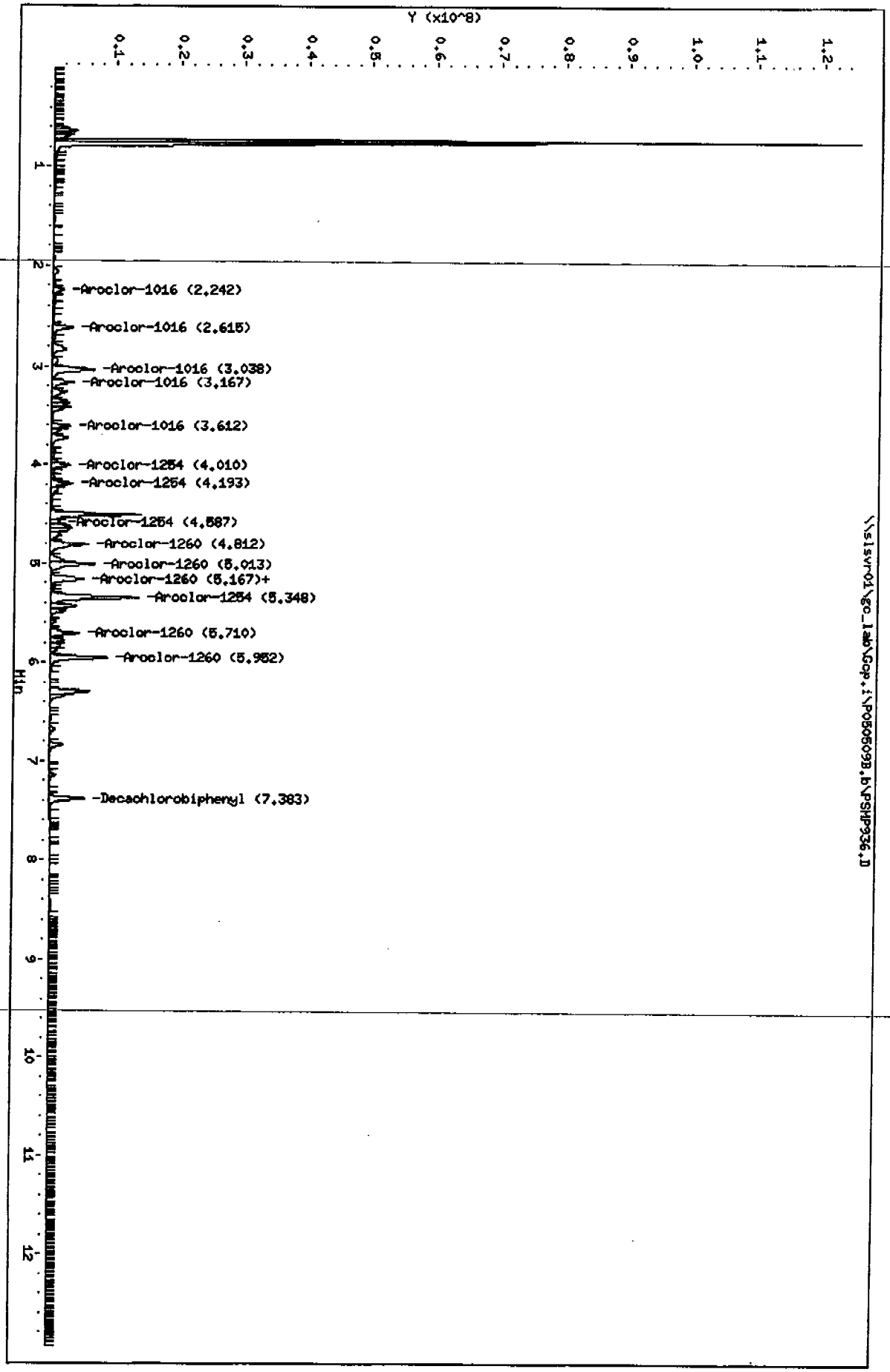
STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 21-APR-2005 00:00 Client SDG: F5D2103
Sample Matrix: SOLID Fraction: PCB
Lab Smp Id: G8WXX1AF Client Smp ID: RE73-05-58841
Level: LOW Operator: BLO
Data Type: GC MULTI COMP SampleType: MS
SpikeList File: son05ms.spk Quant Type: ESTD
Sublist File: son05.sub
Method File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Misc Info: F5D210380-003S

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
22 Aroclor-1016	330.5	310.9	94.07	30-150
28 Aroclor-1260	330.5	367.9	111.31	30-150

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 32 Decachlorobiphenyl	13.22	21.42	162.05*	30-150


Y (x10^8)
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0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1
2
3
4
5
6
7
8
9
10
11
12
Min
-Aroclor-1016 (2,242)
-Aroclor-1016 (2,615)
-Aroclor-1016 (3,038)
-Aroclor-1016 (3,167)
-Aroclor-1016 (3,612)
-Aroclor-1254 (4,010)
-Aroclor-1254 (4,193)
-Aroclor-1254 (4,587)
-Aroclor-1260 (4,812)
-Aroclor-1260 (5,013)
-Aroclor-1260 (5,167)+
-Aroclor-1254 (5,348)
-Aroclor-1260 (5,710)
-Aroclor-1260 (5,952)
-Decachlorobiphenyl (7,383)
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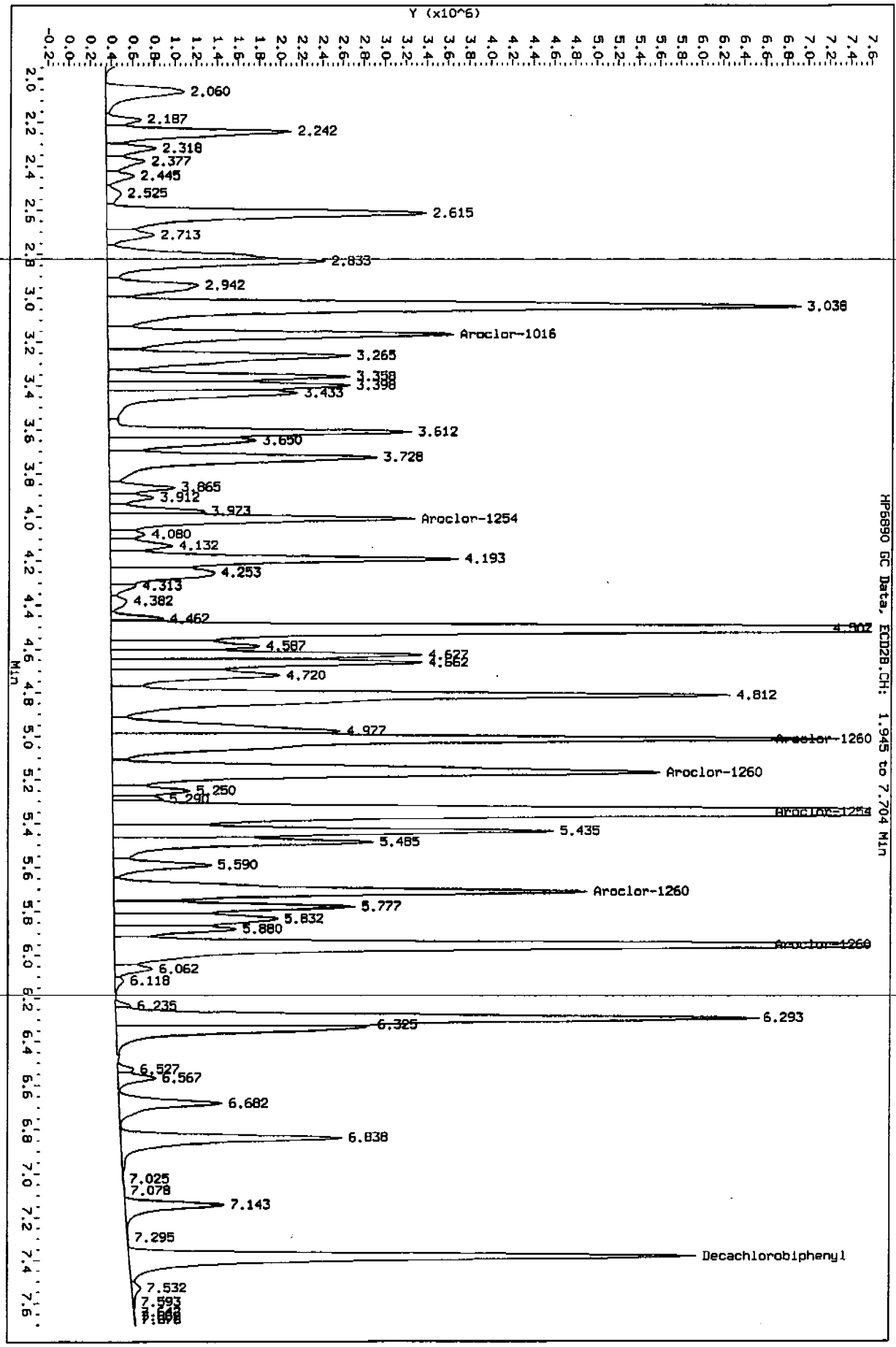
Data File: \\slsvr01\go_lab\Gcp.i\P0505093.b\PSHP936.D
Date : 09-MAY-2005 18:17
Client ID: RE73-05-58941
Sample Info: CSWXXLAF
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gcp.i
Operator: BLD
Column diameter: 0.53


Y (x10^6)
Min
Data File: \\slsvr01\gc_lab\Gcp1\P0505098.b\PSMP936.D
Injection Date: 09-MAY-2005 18:17
Instrument: Gcp.1
Client Sample ID: RE73-05-58841
HP6890 GC Data, ECD2B.CH: 1.945 to 7.704 Min
2.060
2.187
2.242
2.318
2.377
2.445
2.525
2.615
2.713
2.833
2.942
3.038
Aroclor-1016
3.265
3.358
3.398
3.433
3.612
3.650
3.728
3.865
3.912
3.973
Aroclor-1254
4.080
4.132
4.193
4.253
4.313
4.382
4.462
4.507
4.587
4.627
4.662
4.720
4.812
4.977
Aroclor-1260
Aroclor-1260
5.250
5.290
Aroclor-1254
5.435
5.485
5.590
Aroclor-1260
5.777
5.832
5.880
Aroclor-1260
6.062
6.118
6.235
6.293
6.325
6.527
6.567
6.682
6.838
7.025
7.078
7.143
7.295
Decachlorobiphenyl
7.532
7.593

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PSMP937.D Page 1
Report Date: 10-May-2005 10:45

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PSMP937.D
Lab Smp Id: G8WXX1AG Client Smp ID: RE73-05-58841
Inj Date : 09-MAY-2005 18:34
Operator : BLO Inst ID: Gcp.i
Smp Info : G8WXX1AG
Misc Info : F5D210380-003D
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Meth Date : 10-May-2005 09:43 owenb Quant Type: ESTD
Cal Date : 04-APR-2005 20:37 Cal File: PCAL127.D
Als bottle: 12 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: son05.sub
Target Version: 4.10 Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.511	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng/mL)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO	
22 Aroclor-1016					CAS #: 12674-11-2			
1.679	1.668	0.011	4644506	951.015	311.7	80.00- 120.00	100.00	
1.945	1.933	0.012	8934839	977.378	320.3	151.28- 226.92	192.37	
2.319	2.303	0.016	21007526	1026.99	336.6	360.26- 540.38	452.31	
2.430	2.413	0.017	7798236	1042.93	341.8	127.14- 190.70	167.90	
2.784	2.768	0.016	7936210	996.420	326.6	133.27- 199.90	170.87	
		Average of Peak Concentrations =			327.4			
27 Aroclor-1254					CAS #: 11097-69-1			
3.120	3.102	0.018	5504224	724.083	237.3	80.00- 120.00	100.00(M)	
3.357	3.337	0.020	9787988	478.201	156.7	215.41- 323.11	177.83	
3.715	3.694	0.021	6934516	428.204	140.3	170.43- 255.65	125.99	
4.144	4.121	0.023	24158109	2077.73	681.0	122.36- 183.55	438.90	
4.400	4.376	0.024	16187960	963.269	315.7	176.86- 265.29	294.10	
		Average of Peak Concentrations =			306.2			
28 Aroclor-1260					CAS #: 11096-82-5			
3.885	3.896	-0.011	13282458	1112.66	364.7	80.00- 120.00	100.00	
4.144	4.156	-0.012	24158109	1157.68	379.4	136.00- 204.00	181.88	

1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

BLO 5/10/05

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng/mL)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
28 Aroclor-1260 (continued)							
4.400	4.412	-0.012	16187960	883.019	289.4	118.78- 178.17	121.87
5.024	5.039	-0.015	24504884	919.001	301.2	180.60- 270.90	184.49
5.865	5.882	-0.017	5734759	849.423	278.4	39.25- 58.87	43.18
		Average of Peak Concentrations =			322.6		
$ 32 Decachlorobiphenyl					CAS #:		
6.302	6.273	0.029	9547059	47.1854	15.46		

QC Flag Legend

M - Compound response manually integrated.

Data File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PSMP937.D
Report Date: 10-May-2005 10:45

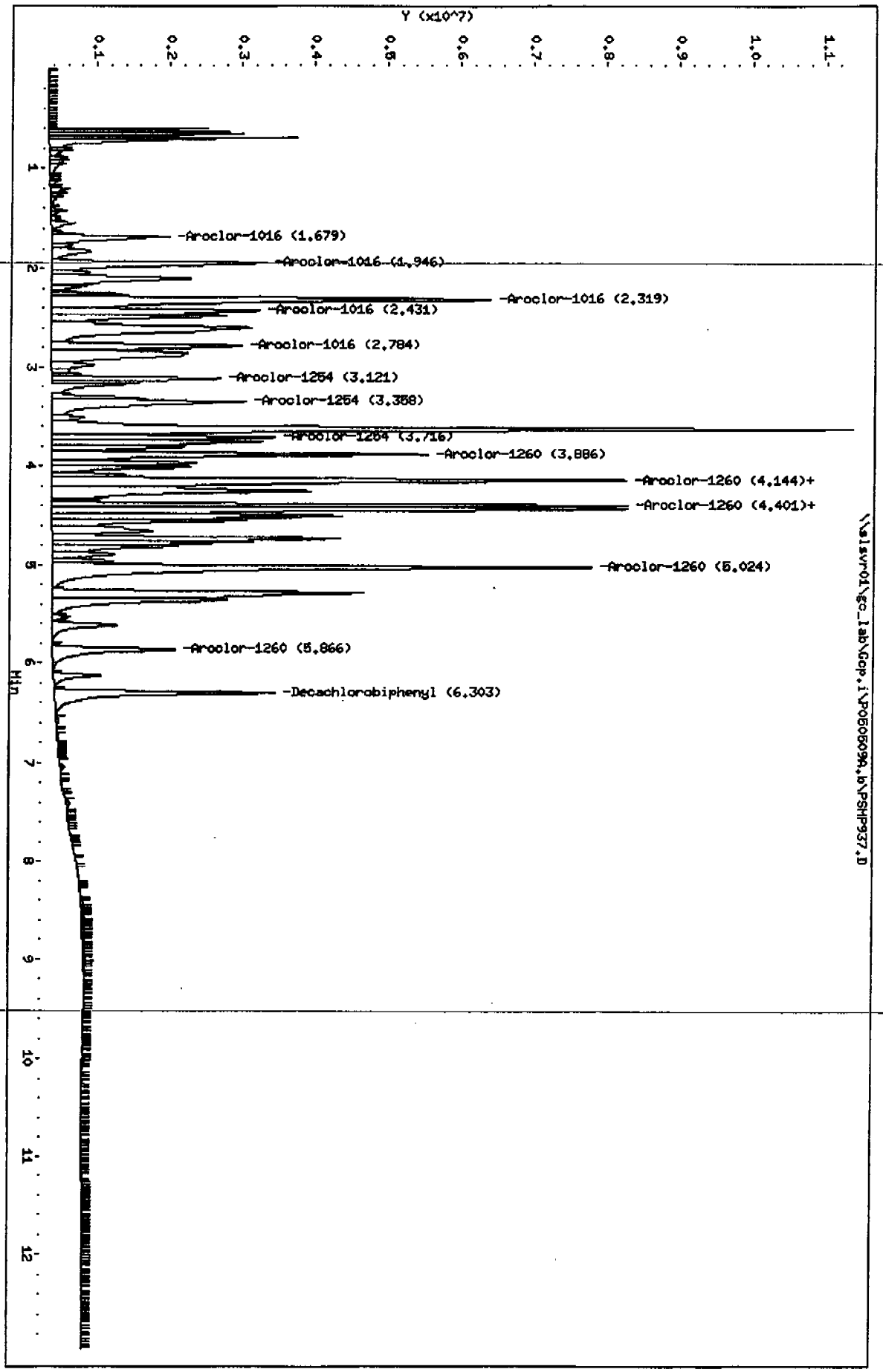
STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 21-APR-2005 00:00 Client SDG: F5D2103
Sample Matrix: SOLID Fraction: PCB
Lab Smp Id: G8WXX1AG Client Smp ID: RE73-05-58841
Level: LOW Operator: BLO
Data Type: GC MULTI COMP SampleType: MSD
SpikeList File: son05ms.spk Quant Type: ESTD
Sublist File: son05.sub
Method File: \\slsvr01\gc_lab\Gcp.i\P050509A.b\PPCB05A.m
Misc Info: F5D210380-003D

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
22 Aroclor-1016	327.8	327.4	99.89	30-150
28 Aroclor-1260	327.8	322.6	98.43	30-150

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 32 Decachlorobiphenyl	13.11	15.46	117.96	30-150


Y (x10^7)
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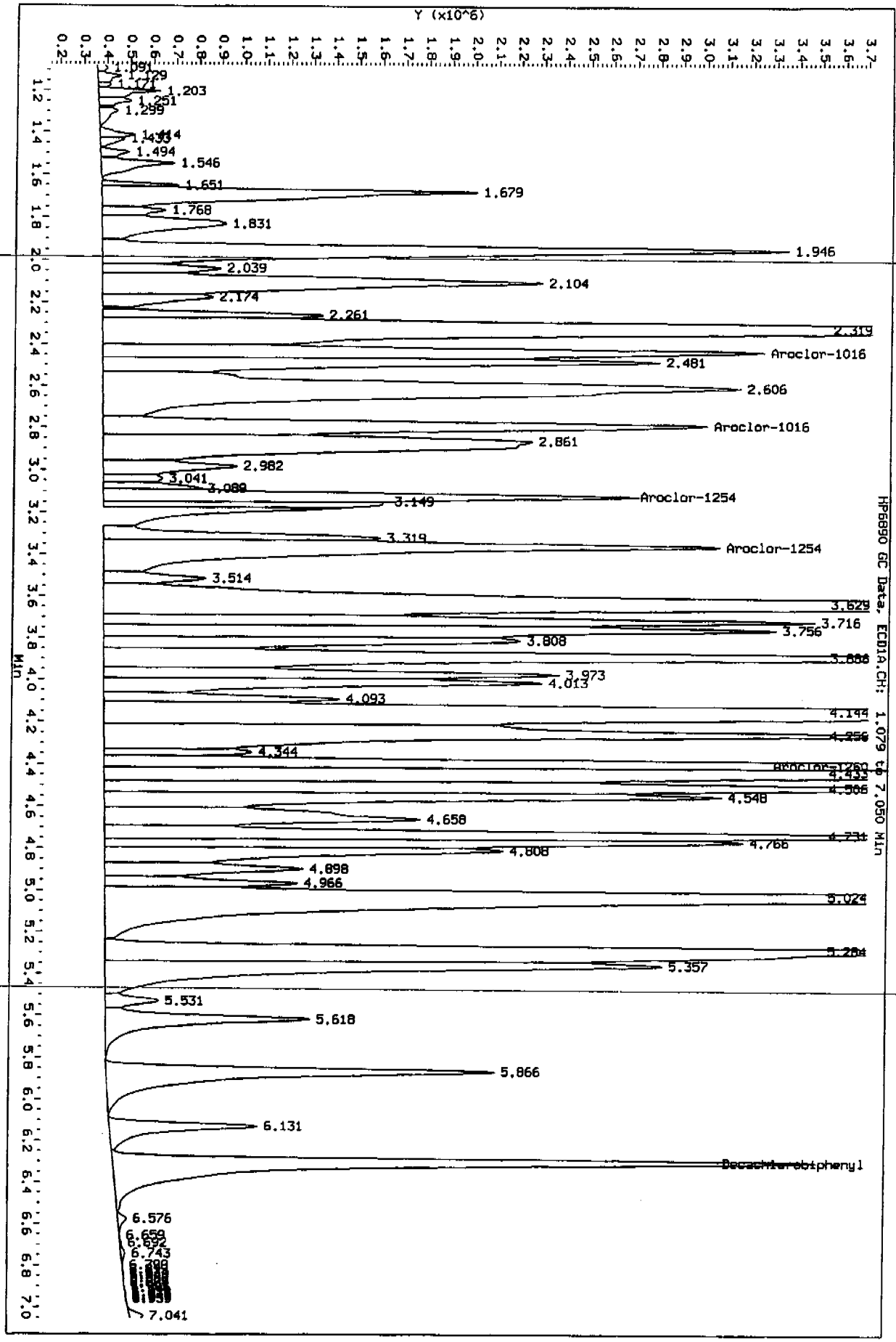
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1
2
3
4
5
6
7
8
9
10
11
12
Min
-Aroclor-1016 (1.679)
-Aroclor-1016 (1.946)
-Aroclor-1016 (2.319)
-Aroclor-1016 (2.431)
-Aroclor-1016 (2.784)
-Aroclor-1254 (3.121)
-Aroclor-1254 (3.358)
-Aroclor-1254 (3.716)
-Aroclor-1260 (3.886)
-Aroclor-1260 (4.144)+
-Aroclor-1260 (4.401)+
-Aroclor-1260 (5.024)
-Aroclor-1260 (5.866)
-Decachlorobiphenyl (6.303)
\\slsvr01\gc_lab\Gcp.i\P0505094.b\PSHP937.D
Data File: \\slsvr01\gc_lab\Gcp.i\P0505094.b\PSHP937.D
Date : 09-MAY-2005 18:34
Client ID: RE73-05-58841
Sample Info: GBMXMLAG
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
Data File: \\slsvr01\gc_lab\Gcp_1\P050509A.b\PSMP937.D
Injection Date: 09-MAY-2005 18:34
Instrument: Gcp.1
Client Sample ID: RE73-05-58841
HP6890 GC Data, ECD1A.CH: 1.079 to 7.050 Min
1.203
1.299
1.494
1.546
1.651
1.679
1.768
1.831
1.946
2.039
2.104
2.174
2.261
2.319
Aroclor-1016
2.481
2.606
Aroclor-1016
2.861
2.982
3.041
3.089
3.149
Aroclor-1254
3.319
Aroclor-1254
3.514
3.629
3.716
3.756
3.808
3.973
4.013
4.093
4.344
4.548
4.658
4.766
4.808
4.898
4.966
5.531
5.618
5.866
6.131
6.576
6.659
6.692
6.743
7.041

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PSMP937.D
Report Date: 10-May-2005 11:24

CONFIRMATION DATA

STL St. Louis

Data file : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PSMP937.D
Lab Smp Id: G8WXX1AG
Client Smp ID: RE73-05-58841
Inj Date : 09-MAY-2005 18:34
Operator : BLO
Inst ID: Gcp.i
Smp Info : G8WXX1AG
Misc Info : F5D210380-003D
Comment :
Method : \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Meth Date : 09-May-2005 12:12 owenb
Quant Type: ESTD
Cal Date : 04-APR-2005 20:37
Cal File: PCAL127.D
Als bottle: 12
QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon
Compound Sublist: son05.sub
Target Version: 4.10
Sample Matrix: SOIL
Processing Host: SLGC06

Concentration Formula: Amt * DF * Uf *Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	Correction factor
Vt	10.000	Volume of final extract (ml)
Vi	2.000	Injection Volume (ul)
Ws	30.511	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

BLO 5/10/05

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng/mL)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
22 Aroclor-1016					CAS #: 12674-11-2		
2.241	2.223	0.018	4440356	888.153	291.1	80.00- 120.00	100.00
2.616	2.598	0.018	9244751	964.169	316.0	159.64- 239.46	208.20
3.039	3.016	0.023	19585950	1018.32	333.8	341.61- 512.42	441.09
~~3.166~~	~~3.145~~	~~0.021~~	~~8833184~~	~~1076.23~~	~~352.7~~	~~142.58- 213.87~~	~~198.93~~
3.611	3.590	0.021	6164197	1002.96	328.7	104.73- 157.09	138.82
		Average of Peak Concentrations =			324.5		
27 Aroclor-1254					CAS #: 11097-69-1		
3.974	3.987	-0.013	1502023	156.661	51.34	80.00- 120.00	100.00
4.192	4.167	0.025	7701126	756.315	247.9	84.96- 127.44	512.72
4.586	4.602	-0.016	3190298	197.034	64.58	135.10- 202.65	212.40
5.166	5.141	0.025	17399830	1319.10	432.3	110.06- 165.09	1158.43
5.349	5.322	0.027	36983339	2216.80	726.6	139.20- 208.81	2462.23
		Average of Peak Concentrations =			304.5		
28 Aroclor-1260					CAS #: 11096-82-5		
4.811	4.788	0.023	17556386	1420.55	465.6	80.00- 120.00	100.00
5.012	5.019	-0.007	18909759	1340.41	439.3	93.73- 140.59	107.71

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng/mL)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
28 Aroclor-1260 (continued)							
5.166	5.140	0.026	17399830	1304.75	427.6	87.79- 131.68	99.11
5.709	5.685	0.024	12101887	1032.29	338.3	76.27- 114.40	68.93
5.952	5.959	-0.007	22992309	959.611	314.5	167.38- 251.07	130.96
		Average of Peak Concentrations =			397.1		
$ 32 Decachlorobiphenyl					CAS #:		
7.382	7.391	-0.009	9312349	47.7549	15.65		

Data File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PSMP937.D
Report Date: 10-May-2005 11:24

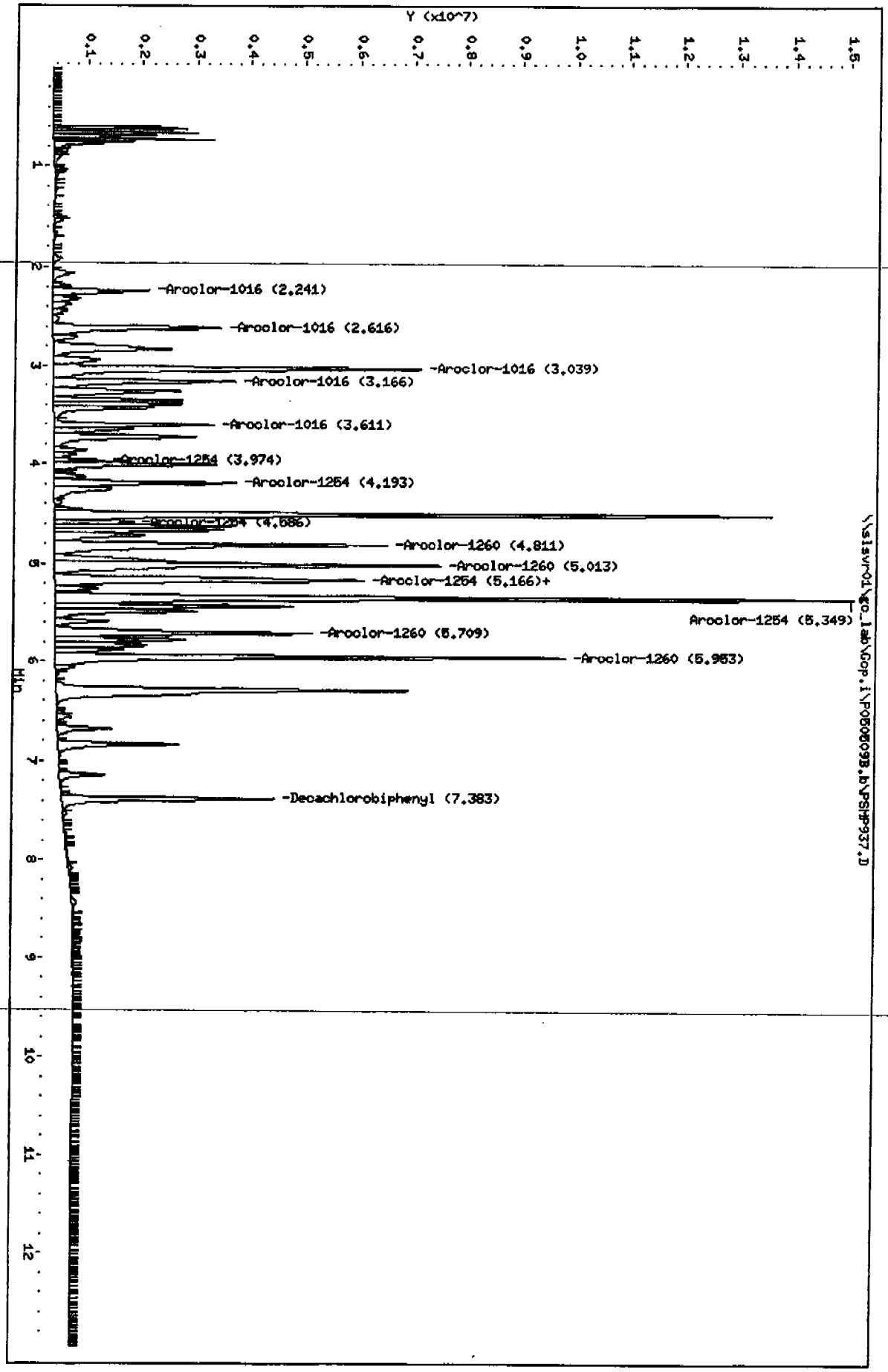
STL St. Louis

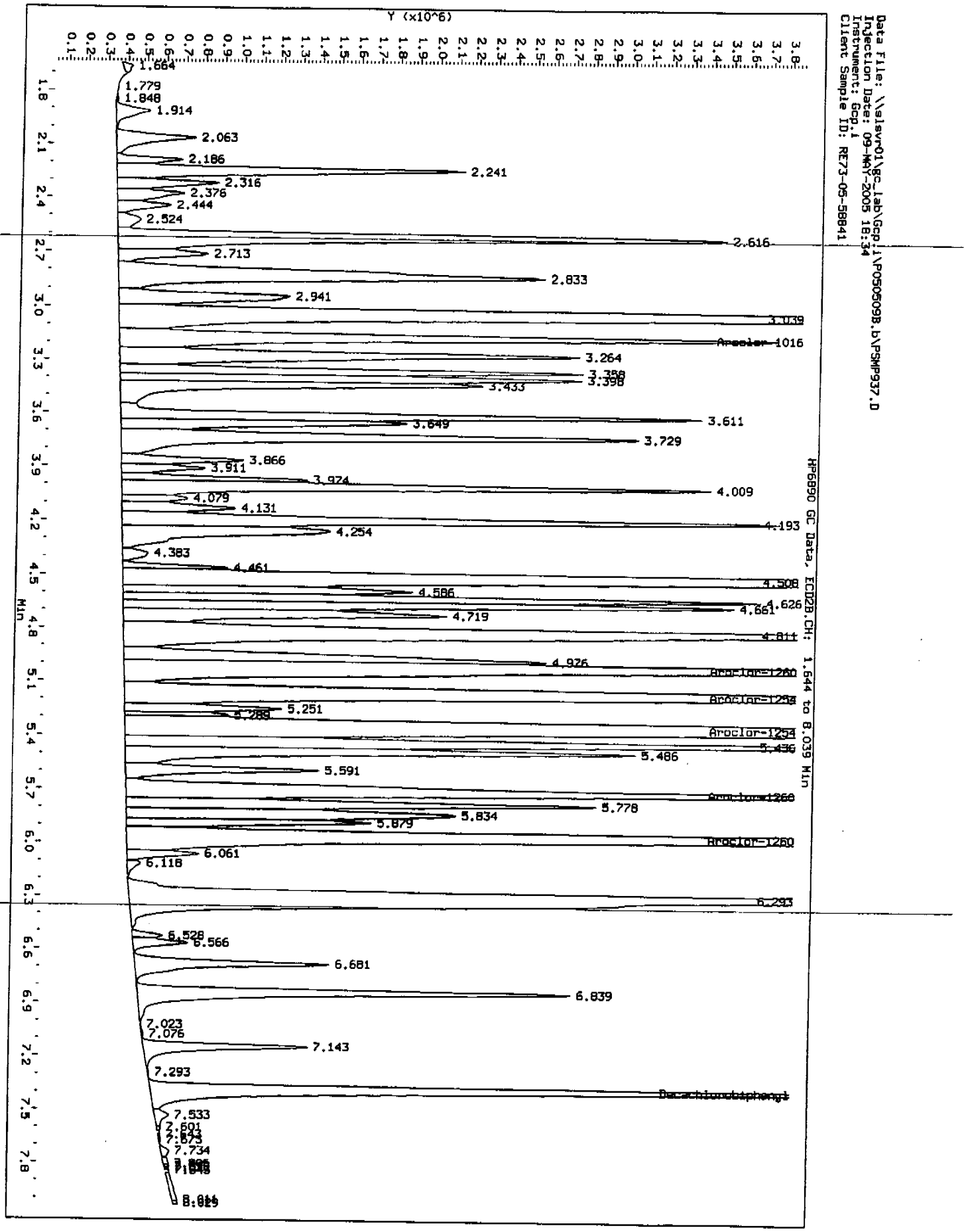
RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 21-APR-2005 00:00 Client SDG: F5D2103
Sample Matrix: SOLID Fraction: PCB
Lab Smp Id: G8WXX1AG Client Smp ID: RE73-05-58841
Level: LOW Operator: BLO
Data Type: GC MULTI COMP SampleType: MSD
SpikeList File: son05ms.spk Quant Type: ESTD
Sublist File: son05.sub
Method File: \\slsvr01\gc_lab\Gcp.i\P050509B.b\PPCB05B.m
Misc Info: F5D210380-003D

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
22 Aroclor-1016	327.8	324.5	99.01	30-150
28 Aroclor-1260	327.8	397.1	121.16	30-150

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 32 Decachlorobiphenyl	13.11	15.65	119.39	30-150


Y (x10^7)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
Min
1
2
3
4
5
6
7
8
9
10
11
12
-Aroclor-1016 (2.241)
-Aroclor-1016 (2.616)
-Aroclor-1016 (3.039)
-Aroclor-1016 (3.166)
-Aroclor-1016 (3.611)
-Aroclor-1254 (3.974)
-Aroclor-1254 (4.193)
-Aroclor-1254 (4.586)
-Aroclor-1260 (4.811)
-Aroclor-1260 (5.013)
-Aroclor-1254 (5.166)+
Aroclor-1254 (5.349)
-Aroclor-1260 (5.709)
-Aroclor-1260 (5.963)
-Decachlorobiphenyl (7.383)
\\slsvr01\go_lab\Gcp.i\P050509B.b\PSHP937.D
Data File: \\slsvr01\go_lab\Gcp.i\P050509B.b\PSHP937.D
Date : 09-MAY-2005 18:34
Client ID: RE73-05-58841
Sample Info: GSMXXLAG
Volume Injected (uL): 2.0
Column phase: CLPEST-2
Instrument: Gcp.i
Operator: BLO
Column diameter: 0.53


Y (x10^6)
Min
1.664
1.779
1.848
1.914
2.063
2.186
2.241
2.316
2.376
2.444
2.524
2.616
2.713
2.833
2.941
3.039
Aroclor-1016
3.264
3.356
3.398
3.433
3.611
3.649
3.729
3.866
3.911
3.974
4.009
4.079
4.131
4.193
4.254
4.383
4.461
4.508
4.586
4.626
4.661
4.719
4.811
4.926
Aroclor-1260
Aroclor-1254
5.251
5.289
Aroclor-1254
5.436
5.486
5.591
Aroclor-1260
5.778
5.834
5.879
Aroclor-1260
6.061
6.118
6.293
6.528
6.566
6.681
6.839
7.023
7.076
7.143
7.293
Decachlorobiphenyl
7.533
7.601
7.734
HP6890 GC Data, ECD2B.CH; 1.644 to 8.039 Min
Data File: \\alsvr01\gc_lab\Gcp.i\P050509B.b\PSMP937.D
Injection Date: 09-MAY-2005 18:34
Instrument: Gcp.i
Client Sample ID: RE73-05-58841

GC MISCELLANEOUS DATA

LOT# F5D210380

STL ST. LOUIS

SEVERN TRENT **STL**

Organic Prep Report for Batch #5119298

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Prep Method: SW846 3550B

SOP Number: STL-OP-0002, Rev 4

Prep Description: SONICATION w/ACID STRIP (PCB)

Matrix: SOLID

Extraction Date: 4/29/2005

Lot Number	WorkOrder No	Initials: JW Wt/Vol	pH 1	pH 2	Extr Unit	Initials: Concentration 1 Volume	Date	Initials: JW Cleanup 1 Method	Date	Initials: Cleanup 2 Method	Date
F5D200213-001	G8QE31A8	30.034 g				10 mL			05-06-05	3665	5-8-5
F5D200213-001D	G8QE31CV	30.18 g				10 mL					
F5D200213-001S	G8QE31CU	30.513 g				10 mL					
F5D210380-001	G8WXJ1AE	30.37 g				5 ~~10 mL~~		3640A	05-06-05		
F5D210380-002	G8WXV1AE	30.049 g				5 ~~10 mL~~					
F5D210380-003	G8WXX1AE	30.877 g				5 ~~10 mL~~					
F5D210380-003D	G8WXX1AG	30.511 g				5 ~~10 mL~~					
F5D210380-003S	G8WXX1AF	30.256 g				5 ~~10 mL~~					
F5D220273-002	G81GA1AD	30.522 g				5 ~~10 mL~~					
F5D290000-298B	G9HD11AA	30 g				5 ~~10 mL~~					
F5D290000-298C	G9HD11AC	30 g				5 ~~10 mL~~					

BJ 5.18 — PNL 5-12 — 5.10

Spike Information

Name	Standard ID	Exp Date	Vol Added
PCB SPIKE	OP0181-05	9/28/2005	1000 uL
PCB SURR	OP0179-05	9/25/2005	1000 uL

Spiking verified by: SL

Miscellaneous Information

Start: Stop:

Extr 1:

Extr 2:

Conc Method: steam bath

Conc Temp C: 95

Chemical Lot Information

Chemical	Lot Number
Acetone	B08E10
Hexane	B05E59
Methylene Chloride	B08E10
Methylene Chloride	B12E02
Sodium Sulfate	A51621

Comments: For samples processed through GPC, final concentration is equivalent to 10ml due to 1/2 of extract being lost due to cleanup. JAM 05-06-05

Custody Information

Relinquished By: SDM **Review/Received By:** BLD **Date of Transfer:** 5.9.5

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.15, updated 10/20/2004

Logbook No.: 2646 — Instrument ID No.: GC P

STL St. Louis
GC Runlog

#	Data File	Clock	Lab I.D.	Dil.	STD#	Date	Oper.	Matrix	Method
1	PSMP106	P050402A	B G6TQF2AC	10x		4-2-05	BLD	SOLID	8082
2	↓ 107		↓ H2AC	20x				SOIL	
3	PCAL108		CCAL1000	4x	GC0946-04				
4	PSMP109		G6TQN2AC	10x					
5	PCAL110	↓	CCAL1000	4x	GC0946-04	↓	↓	↓	↓
6	PCND111	P050404A	B crd-std	1x		4-4-05	BLD		8082
7	PHEX112		hex						
8	PCAL113		ICAL 1	80x	GC0946-05				
9	114		2	40x					
10	115		3	16x					
11	116		4	8x					
12	117		5	4x					
13	118		6	2.75x					
14	119		7	1.7x					
15	↓ 120		8	1x					
16	PHEX 120								
17	PICV 121		Verification	10x					
18	PCAL122		1232	8x					
19	123		1242						
20	124		1248						
21	125		2154						
22	126		1262						
23	↓ 127		1268	↓					
24	PSMP128		G6X6J2AE	10x					
25	129		↓ M2AE	40x					
26	130		G6DCQ2AE	10x					
27	131		↓ T2AE	10x					
28	132		G62WG2AE	50x					
29	133		G6TNG2AC	100x					
30	134		G6TNR2AC	50x					
31	↓ 135		↓ 62AC	50x					
32	PCAL136	↓	CCAL1000	4x	GC0946-04	↓	↓		↓
33									
34									
35									

Review documented on next page.

Form: SL-ORG-0008, Rev. 1/4/05

QC Types: BLK or B = Blank; LCS or C = Laboratory Control Sample; LCSD or L = Laboratory Control Sample Duplicate; S = Matrix Spike; D = Matrix Spike Duplicate; SMP = Sample, Matrix Spike or Matrix Spike Duplicate, CAL = Calibration Standard or Continuing Calibration Standard.

SOP References: STL-GC-0015, current revisions.

Logbook No.: 2646 — Instrument ID No.: GC P

STL St. Louis
GC Runlog

#	Batch #	Comments	
1	5090194	FSC 230213-018 (10x) 1254 (J)	B
2		-019 (20x) 1254 (>5ppm)	B,A
3		ICCAL A: 12604; B:OK	B,A
4	↓	-020 (10x) 1254 (J)	B
5		ICCAL A: 12604 DCBT; B:OK	B,A
6			
7		ICAL Data - Good on Both 100 ppb - 4000 ppb	
8		↓	
9			
10			
11			
12			
13			
14			
15			
16		↓	
17		2nd Source verification good on both Ind Analyte Data	
18		↓	
19			
20			
21			
22			
23			
24	5089416	FSC240276-002 (10x) 1254	A
25	↓	-003 (40x) 1254	↓
26		FSC240286-002 (10x) 1254	
27		-007 (10x) 1254	
28	↓	FSC250210-002 (50x) 1254	↓
29	5089416	FSC230208-019 (100x) 1254 (>50ppm)	A,B
30	5090194	FSC230213-002 (50x) 1254	
31	↓	-004 (50x) 1254 (>50ppm)	↓
32		CCAL A:OK	
33			
34			
35			

Reviewed By: _____

Form: SL-ORG-0008, Rev. 1/4/05

QC Types: BLK or B = Blank; LCS or C = Laboratory Control Sample; LCSD or L = Laboratory Control Sample Duplicate; S = Matrix Spike; D = Matrix Spike Duplicate; SMP = Sample, Matrix Spike or Matrix Spike Duplicate, CAL = Calibration Standard or Continuing Calibration Standard.

SOP References: STL-GC-0015, current revisions.

LOT# F5D210380

Logbook No.: 2646 — Instrument ID No.: GC P

STL St. Louis
GC Runlog

#	Data File	Clock	Lab I.D.	Dil.	STD#	Date	Oper.	Matrix	Method
1	PSMP910	0951926	G9DR1IAC	10x		5-04-05	BLO	SOLID SOIL	8082
2	911		7IAC						
3	912		8IAC						
4	913		G9DTC1AC						
5	914		G1AC						
6	915		L1AC						
7	916		Q1AC	↓					
8	917		X1AC	4x					
9	918		X1AD	↓					
10	919		X1AE	↓					
11	PCAL920		CCAL1000	Ax	000946-04				
12	PSMP921		G9DT31AC	10x					
13	922		5IAC	↓					
14	923		7IAC	↓					
15	PCAL924	↓	CCAL1000	Ax	000946-01	↓	↓	↓	↓
16	PCND925	0950329	Cnd. std.	1x	↓	5-01-05	BLO		8082
17	PHEX926		hex						
18	PCAL927		CCAL1000	Ax	000946-04				
19	PSMP928		G9DRW2AC	100x				SOLID SOIL	
20	929		G9DVR2AC	100x				↓	
21	PCAL930		CCAL1000	Ax	000946-04				
22	PBLK931		G9HDIIAA					SOLID SOIL	
23	PLCS932		11AC						
24	PSMP933		G8WKJIAE						
25	934		V1AE						
26	935		X1AE						
27	936		Y1AE						
28	937		X1AG						
29	938		G81GA1AD						
30	PCAL939		CCAL1000	Ax	000946-04				
31	PSMP940		G8QE31A8						
32	941		31CW						
33	942		31CV					↓	
34	PBLK943		G9PX51AA						
35	PLCS944	↓	51AC						

Review documented on next page.

QC Types: BLK or B = Blank; LCS or C = Laboratory Control Sample; LCSD or L = Laboratory Control Sample Duplicate; S = Matrix Spike; D = Matrix Spike Duplicate; SMP = Sample, Matrix Spike or Matrix Spike Duplicate, CAL = Calibration Standard or Continuing Calibration Standard.

SOP References: STL-GC-0015, current revisions.

Form: SL-ORG-0008, Rev. 1/4/05

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Logbook No.: 2646 — Instrument ID No.: GC P

STL St. Louis
GC Runlog

Batch #	Comments	#
5123340	FSD280194-009 No hits	A 1
	-011 No hits	2
	-012 1254 (J)	3
	-013 1254 (>5ppm)	A,B 4
	-014 1254 (>5ppm)	5
	-015 1254 (>5ppm)	6
	-016 1254 (J)	A 7
	-017 1254 (J)	8
	-017S 1016 / 54 / 60% RPD Good	9
	-017D 1016 / 54 / 60%	10
	CCAL A:OK ; B:OK	A,B 11
	-018 No hits	12
	-019 1254 (>5ppm)	A 13
	-020 No hits	A,B 14
	CCAL A:OK ; B:OK	A 15
		16
		17
	CCAL A:OK ; B:OK	A,B 18
5123340	FSD280194-007 (100x) 1254 (>50ppm)	19
5123470	FSD280202-020 (100x) 1254 (>50ppm)	20
	CCAL A:OK ; B:OK	A,B 21
5119298	FSD290000-298B (GPC clean-up) OK on Both	A,B 22
	-298C OK on Both	23
	FSD210380-001 No hits	24
	-002 1254	25
	-003 1254 (-20% on B)	26
	RPD Good -0035 1016 / 54 / 60 DCBTA[B]	27
	-003D 1016 / 54 / 60 OK on A,B	28
	FSD220273-002 ↓ 1254	29
	CCAL A:OK ; B:OK	A,B 30
	FSD200213-001 No hits	A 31
	-001S 1016 / 1260 OK	32
	-001D 1016 / 1260 OK RPD Good	33
5123324	FSE030000-324B OK	34
	-324C OK	35

Reviewed By: Dennis Vinyard 5/9/05

QC Types: BLK or B = Blank; LCS or C = Laboratory Control Sample; LCSD or L = Laboratory Control Sample Duplicate; S = Matrix Spike; D = Matrix Spike Duplicate; SMP = Sample, Matrix Spike or Matrix Spike Duplicate, CAL = Calibration Standard or Continuing Calibration Standard.

SOP References: STL-GC-0015, current revisions.

Form: SL-ORG-0008, Rev. 1/4/05

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STL ST. LOUIS

306 of 1247

Logbook No.: 2646 | Instrument ID No.: GC P

STL St. Louis
GC Runlog

#	Data File	Clock	Lab I.D.	Dil.	STD#	Date	Oper.	Matrix	Method
1	PSMP945	R55509	G9DQDIAC			5-9-05	BLO	SOIL	8082
2	946		DIAE						
3	947		DIAF						
4	948		7IAC						
5	949		9IAC						
6	PCAL950		CCAL1000	4x	CC0946-04				
7	PSMP951		G9DRAIAC						
8	952		G8104IAE						
9	953		G811WIAE						
10	954		11AE						
11	955		G813AIAE						
12	956		DIAE						
13	957		HIAE						
14	958		NIAE						
15	959		PIAE						
16	960		G9APU1IAD						
17	PCAL961		CCAL1000	4x	CC0946-04				
18	PBLK962		G9VA91AA						
19	PLCS963		91AC						
20	PSMP964		G88W01A9						
21	965		51AL						
22	966		71AL						
23	967		G88XA1AL						
24	968		CIAL						
25	969		DIAL						
26	970		EIAL						
27	PCAL971		CCAL1000	4x	CC0946-04				
28	PSMP972		G896E1A7						
29	973		G8985IAJ						
30	974		G899LIAJ						
31	975		LIA2						
32	976		LIA3						
33	977		G9GG21AU						
34	PCAL978		CCAL1000	4x	CC0946-04				
35					5-10-05				

Review documented on next page.
QC Types: BLK or B = Blank; LCS or C = Laboratory Control Sample; LCSD or L = Laboratory Control Sample Duplicate; S = Matrix Spike; D = Matrix Spike Duplicate; SMP = Sample, Matrix Spike or Matrix Spike Duplicate, CAL = Calibration Standard or Continuing Calibration Standard.
SOP References: STL-GC-0015, current revisions.

Form: SL-ORG-0006, Rev. 1/4/05

Logbook No.: 2646 | Instrument ID No.: GC P

STL St. Louis
GC Runlog

Batch #	Comments	#
5123324	FSD280191-001 No hits	A 1
	-0015 OK	2
	-001D OK RPD OK	3
	-002 No hits	4
	-003 No hits	5
	CCAL A: OK	A 6
	-004 No hits	A 7
	FSD220333-001 No hits	8
	-002 No hits	9
	-003 No hits	10
	-004 No hits	11
	-005 No hits	12
	-006 No hits	13
	-007 No hits	14
	-008 No hits	15
	FSD280189-001 No hits	16
	CCAL A: OK; B: OK	A,B 17
5124531	FSE040000-531B OK on Both	A,B 18
	-531C OK on Both	19
	FSD270110-001 1254/60	A,B 20
	-002 1254/60	21
	-003 1254/60	22
	-004 1254/60 DCB↑A	23
	-005 1254/60	24
	-006 1254/60	25
	-007 1254/60	26
	CCAL A: DCB↓; B: DCB↓	A,B 27
	FSD270229-011 1254/60	A,B 28
	-012 1254/60	29
	-013 1254/60	30
	RPD OK -0135 1016/54/60	31
	-013D 1016/54/60 DCB↑A	32
	FSD290140-006 No hits	A 33
	CCAL A: OK; B: DCB↓	A,B 34
	BLO 5-10-05	35

Reviewed By: Dennis Kingsley 5/10/05

QC Types: BLK or B = Blank; LCS or C = Laboratory Control Sample; LCSD or L = Laboratory Control Sample Duplicate; S = Matrix Spike; D = Matrix Spike Duplicate; SMP = Sample, Matrix Spike or Matrix Spike Duplicate, CAL = Calibration Standard or Continuing Calibration Standard.
SOP References: STL-GC-0015, current revisions.

Form: SL-ORG-0006, Rev. 1/4/05

GC/MS SAMPLE AND QC DATA SUMMARY – FORM I
SEMIVOLATILES

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D200213 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.415 / g Date Received: 04/20/05
Work Order: G8QE31A9 Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:20

QC Batch: 5119285

Client Sample Id: INTRA-LAB QC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	410	U
111-44-4	bis(2-Chloroethyl) ether	410	U
95-57-8	2-Chlorophenol	410	U
95-48-7	2-Methylphenol	410	U
65794-96-9	3-Methylphenol & 4-Methylphe	830	U
108-60-1	2,2'-oxybis(1-Chloropropane)	410	U
621-64-7	N-Nitrosodi-n-propylamine	410	U
67-72-1	Hexachloroethane	410	U
98-95-3	Nitrobenzene	410	U
78-59-1	Isophorone	410	U
88-75-5	2-Nitrophenol	410	U
105-67-9	2,4-Dimethylphenol	410	U
111-91-1	bis(2-Chloroethoxy)methane	410	U
120-83-2	2,4-Dichlorophenol	410	U
120-82-1	1,2,4-Trichlorobenzene	410	U
91-20-3	Naphthalene	410	U
106-47-8	4-Chloroaniline	410	U
87-68-3	Hexachlorobutadiene	410	U
59-50-7	4-Chloro-3-methylphenol	410	U
91-57-6	2-Methylnaphthalene	410	U
77-47-4	Hexachlorocyclopentadiene	2000	U
88-06-2	2,4,6-Trichlorophenol	410	U
95-95-4	2,4,5-Trichlorophenol	410	U
88-74-4	2-Nitroaniline	2000	U
131-11-3	Dimethyl phthalate	410	U
208-96-8	Acenaphthylene	410	U
606-20-2	2,6-Dinitrotoluene	410	U
99-09-2	3-Nitroaniline	2000	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D200213 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.415 / g Date Received: 04/20/05
Work Order: G8QE31A9 Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:20

QC Batch: 5119285

Client Sample Id: INTRA-LAB QC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
83-32-9	Acenaphthene	410	U
51-28-5	2,4-Dinitrophenol	2000	U
100-02-7	4-Nitrophenol	2000	U
53-70-3	Dibenz(a,h)anthracene	410	U
132-64-9	Dibenzofuran	410	U
121-14-2	2,4-Dinitrotoluene	410	U
84-66-2	Diethyl phthalate	410	U
86-73-7	Fluorene	410	U
7005-72-3	4-Chlorophenyl phenyl ether	410	U
100-01-6	4-Nitroaniline	2000	U
534-52-1	4,6-Dinitro-2-methylphenol	2000	U
86-30-6	N-Nitrosodiphenylamine	410	U
129-00-0	Pyrene	410	U
101-55-3	4-Bromophenyl phenyl ether	410	U
118-74-1	Hexachlorobenzene	410	U
87-86-5	Pentachlorophenol	2000	U
85-01-8	Phenanthrene	410	U
120-12-7	Anthracene	410	U
86-74-8	Carbazole	410	U
84-74-2	Di-n-butyl phthalate	410	U
206-44-0	Fluoranthene	410	U
85-68-7	Butyl benzyl phthalate	410	U
56-55-3	Benzo(a)anthracene	410	U
91-94-1	3,3'-Dichlorobenzidine	2000	U
218-01-9	Chrysene	410	U
117-81-7	bis(2-Ethylhexyl) phthalate	410	U
117-84-0	Di-n-octyl phthalate	410	U
205-99-2	Benzo(b)fluoranthene	410	U

FORM I

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D200213 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.415 / g Date Received: 04/20/05
Work Order: G8QE31A9 Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:20

QC Batch: 5119285

Client Sample Id: INTRA-LAB QC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
207-08-9	Benzo(k)fluoranthene	410	U
50-32-8	Benzo(a)pyrene	410	U
193-39-5	Indeno(1,2,3-cd)pyrene	410	U
191-24-2	Benzo(ghi)perylene	410	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	65	(40 - 103)
Phenol-d5	65	(36 - 105)
Nitrobenzene-d5	71	(45 - 114)
2-Fluorobiphenyl	67	(49 - 120)
2,4,6-Tribromophenol	76	(39 - 114)
Terphenyl-d14	65	(42 - 108)

FORM I

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.805 / g Date Received: 04/21/05
Work Order: G8WXJ1AD Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:20

QC Batch: 5119285

Client Sample Id: RE73-05-58829

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
62-75-9	N-Nitrosodimethylamine	410	U
108-95-2	Phenol	410	U
62-53-3	Aniline	410	U
111-44-4	bis(2-Chloroethyl) ether	410	U
95-57-8	2-Chlorophenol	410	U
541-73-1	**1,3-Dichlorobenzene**	**160**	**J**
106-46-7	**1,4-Dichlorobenzene**	**170**	**J**
100-51-6	Benzyl alcohol	410	U
95-50-1	**1,2-Dichlorobenzene**	**150**	**J**
95-48-7	2-Methylphenol	410	U
65794-96-9	3-Methylphenol & 4-Methylphe	410	U
108-60-1	2,2'-oxybis(1-Chloropropane)	410	U
621-64-7	N-Nitrosodi-n-propylamine	410	U
67-72-1	Hexachloroethane	410	U
98-95-3	**Nitrobenzene**	**210**	**J**
78-59-1	Isophorone	410	U
88-75-5	**2-Nitrophenol**	**180**	**J**
105-67-9	2,4-Dimethylphenol	410	U
111-91-1	bis(2-Chloroethoxy)methane	410	U
65-85-0	**Benzoic acid**	**830**	**J**
120-83-2	2,4-Dichlorophenol	410	U
120-82-1	**1,2,4-Trichlorobenzene**	**180**	**J**
91-20-3	**Naphthalene**	**130**	**J**
106-47-8	4-Chloroaniline	410	U
87-68-3	**Hexachlorobutadiene**	**140**	**J**
59-50-7	4-Chloro-3-methylphenol	410	U
91-57-6	**2-Methylnaphthalene**	**120**	**J**
77-47-4	Hexachlorocyclopentadiene	2000	U

FORM I

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.805 / g Date Received: 04/21/05
Work Order: G8WXJ1AD Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:20

QC Batch: 5119285

Client Sample Id: RE73-05-58829

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
88-06-2	**2,4,6-Trichlorophenol**	**130**	**J**
95-95-4	2,4,5-Trichlorophenol	410	U
91-58-7	**2-Chloronaphthalene**	**140**	**J**
88-74-4	2-Nitroaniline	2000	U
131-11-3	Dimethyl phthalate	410	U
208-96-8	**Acenaphthylene**	**150**	**J**
606-20-2	2,6-Dinitrotoluene	410	U
99-09-2	3-Nitroaniline	2000	U
83-32-9	**Acenaphthene**	**130**	**J**
51-28-5	2,4-Dinitrophenol	2000	U
100-02-7	4-Nitrophenol	2000	U
53-70-3	**Dibenz(a,h)anthracene**	**86**	**J**
132-64-9	**Dibenzofuran**	**140**	**J**
121-14-2	2,4-Dinitrotoluene	410	U
84-66-2	Diethyl phthalate	410	U
86-73-7	**Fluorene**	**150**	**J**
7005-72-3	**4-Chlorophenyl phenyl ether**	**190**	**J**
100-01-6	4-Nitroaniline	2000	U
534-52-1	4,6-Dinitro-2-methylphenol	2000	U
86-30-6	**N-Nitrosodiphenylamine**	**190**	**J**
103-33-3	Azobenzene	410	U
129-00-0	**Pyrene**	**470**	
101-55-3	**4-Bromophenyl phenyl ether**	**190**	**J**
118-74-1	**Hexachlorobenzene**	**450**	
87-86-5	**Pentachlorophenol**	**180**	**J**
85-01-8	**Phenanthrene**	**150**	**J**
120-12-7	**Anthracene**	**140**	**J**
84-74-2	Di-n-butyl phthalate	410	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.805 / g Date Received: 04/21/05
Work Order: G8WXJ1AD Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:20

QC Batch: 5119285

Client Sample Id: RE73-05-58829

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
206-44-0	**Fluoranthene**	**140**	**J**
85-68-7	Butyl benzyl phthalate	410	U
56-55-3	**Benzo(a)anthracene**	**150**	**J**
91-94-1	3,3'-Dichlorobenzidine	2000	U
218-01-9	**Chrysene**	**160**	**J**
117-81-7	**bis(2-Ethylhexyl) phthalate**	**88**	**J**
117-84-0	Di-n-octyl phthalate	410	U
205-99-2	**Benzo(b)fluoranthene**	**180**	**J**
207-08-9	**Benzo(k)fluoranthene**	**150**	**J**
50-32-8	**Benzo(a)pyrene**	**540**	
193-39-5	**Indeno(1,2,3-cd)pyrene**	**530**	
191-24-2	**Benzo(ghi)perylene**	**130**	**J**

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	68	(40 - 103)
Phenol-d5	71	(36 - 105)
Nitrobenzene-d5	81	(45 - 114)
2-Fluorobiphenyl	76	(49 - 120)
2,4,6-Tribromophenol	68	(39 - 114)
Terphenyl-d14	78	(42 - 108)

FORM I

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.134 / g Date Received: 04/21/05
Work Order: G8WXJ2AD Date Extracted:05/11/05
Dilution factor: 1 Date Analyzed: 05/12/05
Moisture %:20

QC Batch: 5131374

Client Sample Id: RE73-05-58829 -RE 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
62-75-9	N-Nitrosodimethylamine	830	U
108-95-2	Phenol	830	U
62-53-3	Aniline	830	U
111-44-4	bis(2-Chloroethyl) ether	830	U
95-57-8	2-Chlorophenol	830	U
541-73-1	1,3-Dichlorobenzene	830	U
106-46-7	1,4-Dichlorobenzene	830	U
100-51-6	Benzyl alcohol	830	U
95-50-1	1,2-Dichlorobenzene	830	U
95-48-7	2-Methylphenol	830	U
65794-96-9	3-Methylphenol & 4-Methylphe	830	U
108-60-1	2,2'-oxybis(1-Chloropropane)	830	U
621-64-7	N-Nitrosodi-n-propylamine	830	U
67-72-1	Hexachloroethane	830	U
98-95-3	Nitrobenzene	830	U
78-59-1	Isophorone	830	U
88-75-5	2-Nitrophenol	830	U
105-67-9	2,4-Dimethylphenol	830	U
111-91-1	bis(2-Chloroethoxy)methane	830	U
65-85-0	Benzoic acid	4000	U
120-83-2	2,4-Dichlorophenol	830	U
120-82-1	1,2,4-Trichlorobenzene	830	U
91-20-3	Naphthalene	830	U
106-47-8	4-Chloroaniline	830	U
87-68-3	Hexachlorobutadiene	830	U
59-50-7	4-Chloro-3-methylphenol	830	U
91-57-6	2-Methylnaphthalene	830	U
77-47-4	Hexachlorocyclopentadiene	4000	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.134 / g Date Received: 04/21/05
Work Order: G8WXJ2AD Date Extracted:05/11/05
Dilution factor: 1 Date Analyzed: 05/12/05
Moisture %:20

QC Batch: 5131374

Client Sample Id: RE73-05-58829 -RE 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
88-06-2	2,4,6-Trichlorophenol	830	U
95-95-4	2,4,5-Trichlorophenol	830	U
91-58-7	2-Chloronaphthalene	830	U
88-74-4	2-Nitroaniline	4000	U
131-11-3	Dimethyl phthalate	830	U
208-96-8	Acenaphthylene	830	U
606-20-2	2,6-Dinitrotoluene	830	U
99-09-2	3-Nitroaniline	4000	U
83-32-9	Acenaphthene	830	U
51-28-5	2,4-Dinitrophenol	4000	U
100-02-7	4-Nitrophenol	4000	U
53-70-3	Dibenz(a,h)anthracene	830	U
132-64-9	Dibenzofuran	830	U
121-14-2	2,4-Dinitrotoluene	830	U
84-66-2	Diethyl phthalate	830	U
86-73-7	Fluorene	830	U
7005-72-3	4-Chlorophenyl phenyl ether	830	U
100-01-6	4-Nitroaniline	4000	U
534-52-1	4,6-Dinitro-2-methylphenol	4000	U
86-30-6	N-Nitrosodiphenylamine	830	U
103-33-3	Azobenzene	830	U
129-00-0	Pyrene	830	U
101-55-3	4-Bromophenyl phenyl ether	830	U
118-74-1	Hexachlorobenzene	830	U
87-86-5	Pentachlorophenol	4000	U
85-01-8	Phenanthrene	830	U
120-12-7	Anthracene	830	U
84-74-2	**Di-n-butyl phthalate**	**500**	**J**

FORM I

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.134 / g Date Received: 04/21/05
Work Order: G8WXJ2AD Date Extracted:05/11/05
Dilution factor: 1 Date Analyzed: 05/12/05
Moisture %:20

QC Batch: 5131374

Client Sample Id: RE73-05-58829 -RE 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
206-44-0	Fluoranthene	830	U
85-68-7	Butyl benzyl phthalate	830	U
56-55-3	Benzo(a)anthracene	830	U
91-94-1	3,3'-Dichlorobenzidine	4000	U
218-01-9	Chrysene	830	U
117-81-7	bis(2-Ethylhexyl) phthalate	830	U
117-84-0	Di-n-octyl phthalate	830	U
205-99-2	Benzo(b)fluoranthene	830	U
207-08-9	Benzo(k)fluoranthene	830	U
50-32-8	Benzo(a)pyrene	830	U
193-39-5	Indeno(1,2,3-cd)pyrene	830	U
191-24-2	**Benzo(ghi)perylene**	**420**	**J**

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	78	(40 - 103)
Phenol-d5	79	(36 - 105)
Nitrobenzene-d5	90	(45 - 114)
2-Fluorobiphenyl	89	(49 - 120)
2,4,6-Tribromophenol	75	(39 - 114)
Terphenyl-d14	89	(42 - 108)

FORM I

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 002
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.108 / g Date Received: 04/21/05
Work Order: G8WXV1AD Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:19

QC Batch: 5119285

Client Sample Id: RE73-05-58835

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
62-75-9	N-Nitrosodimethylamine	410	U
108-95-2	Phenol	410	U
62-53-3	Aniline	410	U
111-44-4	bis(2-Chloroethyl) ether	410	U
95-57-8	2-Chlorophenol	410	U
541-73-1	1,3-Dichlorobenzene	410	U
106-46-7	1,4-Dichlorobenzene	410	U
100-51-6	Benzyl alcohol	410	U
95-50-1	1,2-Dichlorobenzene	410	U
95-48-7	2-Methylphenol	410	U
65794-96-9	3-Methylphenol & 4-Methylphe	410	U
108-60-1	2,2'-oxybis(1-Chloropropane)	410	U
621-64-7	N-Nitrosodi-n-propylamine	410	U
67-72-1	Hexachloroethane	410	U
98-95-3	Nitrobenzene	410	U
78-59-1	Isophorone	410	U
88-75-5	2-Nitrophenol	410	U
105-67-9	2,4-Dimethylphenol	410	U
111-91-1	bis(2-Chloroethoxy)methane	410	U
65-85-0	**Benzoic acid**	**490**	**J**
120-83-2	2,4-Dichlorophenol	410	U
120-82-1	1,2,4-Trichlorobenzene	410	U
91-20-3	Naphthalene	410	U
106-47-8	4-Chloroaniline	410	U
87-68-3	Hexachlorobutadiene	410	U
59-50-7	4-Chloro-3-methylphenol	410	U
91-57-6	2-Methylnaphthalene	410	U
77-47-4	Hexachlorocyclopentadiene	2000	U

FORM I

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 002
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.108 / g Date Received: 04/21/05
Work Order: G8WXV1AD Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:19

QC Batch: 5119285

Client Sample Id: RE73-05-58835

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
88-06-2	2,4,6-Trichlorophenol	410	U
95-95-4	2,4,5-Trichlorophenol	410	U
91-58-7	2-Chloronaphthalene	410	U
88-74-4	2-Nitroaniline	2000	U
131-11-3	Dimethyl phthalate	410	U
208-96-8	Acenaphthylene	410	U
606-20-2	2,6-Dinitrotoluene	410	U
99-09-2	3-Nitroaniline	2000	U
83-32-9	Acenaphthene	410	U
51-28-5	2,4-Dinitrophenol	2000	U
100-02-7	4-Nitrophenol	2000	U
53-70-3	Dibenz(a,h)anthracene	410	U
132-64-9	Dibenzofuran	410	U
121-14-2	2,4-Dinitrotoluene	410	U
84-66-2	Diethyl phthalate	410	U
86-73-7	Fluorene	410	U
7005-72-3	4-Chlorophenyl phenyl ether	410	U
100-01-6	4-Nitroaniline	2000	U
534-52-1	4,6-Dinitro-2-methylphenol	2000	U
86-30-6	N-Nitrosodiphenylamine	410	U
103-33-3	Azobenzene	410	U
129-00-0	**Pyrene**	**110**	**J**
101-55-3	4-Bromophenyl phenyl ether	410	U
118-74-1	**Hexachlorobenzene**	**110**	**J**
87-86-5	Pentachlorophenol	2000	U
85-01-8	Phenanthrene	410	U
120-12-7	Anthracene	410	U
84-74-2	Di-n-butyl phthalate	410	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 002
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.108 / g Date Received: 04/21/05
Work Order: G8WXV1AD Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:19

QC Batch: 5119285

Client Sample Id: RE73-05-58835

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
206-44-0	Fluoranthene	410	U
85-68-7	Butyl benzyl phthalate	410	U
56-55-3	Benzo(a)anthracene	410	U
91-94-1	3,3'-Dichlorobenzidine	2000	U
218-01-9	Chrysene	410	U
117-81-7	**bis(2-Ethylhexyl) phthalate**	**97**	**J**
117-84-0	Di-n-octyl phthalate	410	U
205-99-2	Benzo(b)fluoranthene	410	U
207-08-9	Benzo(k)fluoranthene	410	U
50-32-8	Benzo(a)pyrene	410	U
193-39-5	Indeno(1,2,3-cd)pyrene	410	U
191-24-2	**Benzo(ghi)perylene**	**340**	**J**

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	66	(40 - 103)
Phenol-d5	67	(36 - 105)
Nitrobenzene-d5	74	(45 - 114)
2-Fluorobiphenyl	72	(49 - 120)
2,4,6-Tribromophenol	73	(39 - 114)
Terphenyl-d14	68	(42 - 108)

FORM I

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 002
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.21 / g Date Received: 04/21/05
Work Order: G8WXV2AD Date Extracted:05/11/05
Dilution factor: 1 Date Analyzed: 05/14/05
Moisture %:19

QC Batch: 5131374

Client Sample Id: RE73-05-58835 -RE 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
62-75-9	N-Nitrosodimethylamine	820	U
108-95-2	Phenol	820	U
62-53-3	Aniline	820	U
111-44-4	bis(2-Chloroethyl) ether	820	U
95-57-8	2-Chlorophenol	820	U
541-73-1	1,3-Dichlorobenzene	820	U
106-46-7	1,4-Dichlorobenzene	820	U
100-51-6	Benzyl alcohol	820	U
95-50-1	1,2-Dichlorobenzene	820	U
95-48-7	2-Methylphenol	820	U
65794-96-9	3-Methylphenol & 4-Methylphe	820	U
108-60-1	2,2'-oxybis(1-Chloropropane)	820	U
621-64-7	N-Nitrosodi-n-propylamine	820	U
67-72-1	Hexachloroethane	820	U
98-95-3	Nitrobenzene	820	U
78-59-1	Isophorone	820	U
88-75-5	2-Nitrophenol	820	U
105-67-9	2,4-Dimethylphenol	820	U
111-91-1	bis(2-Chloroethoxy)methane	820	U
65-85-0	Benzoic acid	4000	U
120-83-2	2,4-Dichlorophenol	820	U
120-82-1	1,2,4-Trichlorobenzene	820	U
91-20-3	Naphthalene	820	U
106-47-8	4-Chloroaniline	820	U
87-68-3	Hexachlorobutadiene	820	U
59-50-7	4-Chloro-3-methylphenol	820	U
91-57-6	2-Methylnaphthalene	820	U
77-47-4	Hexachlorocyclopentadiene	4000	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 002
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.21 / g Date Received: 04/21/05
Work Order: G8WXV2AD Date Extracted:05/11/05
Dilution factor: 1 Date Analyzed: 05/14/05
Moisture %:19

QC Batch: 5131374

Client Sample Id: RE73-05-58835 -RE 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
88-06-2	2,4,6-Trichlorophenol	820	U
95-95-4	2,4,5-Trichlorophenol	820	U
91-58-7	2-Chloronaphthalene	820	U
88-74-4	2-Nitroaniline	4000	U
131-11-3	Dimethyl phthalate	820	U
208-96-8	Acenaphthylene	820	U
606-20-2	2,6-Dinitrotoluene	820	U
99-09-2	3-Nitroaniline	4000	U
83-32-9	Acenaphthene	820	U
51-28-5	2,4-Dinitrophenol	4000	U
100-02-7	4-Nitrophenol	4000	U
53-70-3	Dibenz(a,h)anthracene	820	U
132-64-9	Dibenzofuran	820	U
121-14-2	2,4-Dinitrotoluene	820	U
84-66-2	Diethyl phthalate	820	U
86-73-7	Fluorene	820	U
7005-72-3	4-Chlorophenyl phenyl ether	820	U
100-01-6	4-Nitroaniline	4000	U
534-52-1	4,6-Dinitro-2-methylphenol	4000	U
86-30-6	N-Nitrosodiphenylamine	820	U
103-33-3	Azobenzene	820	U
129-00-0	Pyrene	820	U
101-55-3	4-Bromophenyl phenyl ether	820	U
118-74-1	Hexachlorobenzene	820	U
87-86-5	Pentachlorophenol	4000	U
85-01-8	Phenanthrene	820	U
120-12-7	Anthracene	820	U
84-74-2	Di-n-butyl phthalate	820	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 002
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.21 / g Date Received: 04/21/05
Work Order: G8WXV2AD Date Extracted:05/11/05
Dilution factor: 1 Date Analyzed: 05/14/05
Moisture %:19

QC Batch: 5131374

Client Sample Id: RE73-05-58835 -RE 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
206-44-0	Fluoranthene	820	U
85-68-7	Butyl benzyl phthalate	820	U
56-55-3	Benzo(a)anthracene	820	U
91-94-1	3,3'-Dichlorobenzidine	4000	U
218-01-9	Chrysene	820	U
117-81-7	bis(2-Ethylhexyl) phthalate	820	U
117-84-0	Di-n-octyl phthalate	820	U
205-99-2	Benzo(b)fluoranthene	820	U
207-08-9	Benzo(k)fluoranthene	820	U
50-32-8	Benzo(a)pyrene	820	U
193-39-5	Indeno(1,2,3-cd)pyrene	820	U
191-24-2	Benzo(ghi)perylene	820	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	72	(40 - 103)
Phenol-d5	80	(36 - 105)
Nitrobenzene-d5	84	(45 - 114)
2-Fluorobiphenyl	76	(49 - 120)
2,4,6-Tribromophenol	68	(39 - 114)
Terphenyl-d14	72	(42 - 108)

FORM I

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 003
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.5 / g Date Received: 04/21/05
Work Order: G8WXX1AD Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:20

QC Batch: 5119285

Client Sample Id: RE73-05-58841

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
62-75-9	N-Nitrosodimethylamine	410	U
108-95-2	Phenol	410	U
62-53-3	Aniline	410	U
111-44-4	bis(2-Chloroethyl) ether	410	U
95-57-8	2-Chlorophenol	410	U
541-73-1	1,3-Dichlorobenzene	410	U
106-46-7	1,4-Dichlorobenzene	410	U
100-51-6	Benzyl alcohol	410	U
95-50-1	1,2-Dichlorobenzene	410	U
95-48-7	2-Methylphenol	410	U
65794-96-9	3-Methylphenol & 4-Methylphe	410	U
108-60-1	2,2'-oxybis(1-Chloropropane)	410	U
621-64-7	N-Nitrosodi-n-propylamine	410	U
67-72-1	Hexachloroethane	410	U
98-95-3	Nitrobenzene	410	U
78-59-1	Isophorone	410	U
88-75-5	2-Nitrophenol	410	U
105-67-9	2,4-Dimethylphenol	410	U
111-91-1	bis(2-Chloroethoxy)methane	410	U
65-85-0	Benzoic acid	2000	U
120-83-2	2,4-Dichlorophenol	410	U
120-82-1	1,2,4-Trichlorobenzene	410	U
91-20-3	Naphthalene	410	U
106-47-8	4-Chloroaniline	410	U
87-68-3	Hexachlorobutadiene	410	U
59-50-7	4-Chloro-3-methylphenol	410	U
91-57-6	2-Methylnaphthalene	410	U
77-47-4	Hexachlorocyclopentadiene	2000	U

FORM I

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 003
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.5 / g Date Received: 04/21/05
Work Order: G8WXX1AD Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:20

QC Batch: 5119285

Client Sample Id: RE73-05-58841

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
88-06-2	2,4,6-Trichlorophenol	410	U
95-95-4	2,4,5-Trichlorophenol	410	U
91-58-7	2-Chloronaphthalene	410	U
88-74-4	2-Nitroaniline	2000	U
131-11-3	Dimethyl phthalate	410	U
208-96-8	Acenaphthylene	410	U
606-20-2	2,6-Dinitrotoluene	410	U
99-09-2	3-Nitroaniline	2000	U
83-32-9	Acenaphthene	410	U
51-28-5	2,4-Dinitrophenol	2000	U
100-02-7	4-Nitrophenol	2000	U
53-70-3	Dibenz(a,h)anthracene	410	U
132-64-9	Dibenzofuran	410	U
121-14-2	2,4-Dinitrotoluene	410	U
84-66-2	Diethyl phthalate	410	U
86-73-7	Fluorene	410	U
7005-72-3	4-Chlorophenyl phenyl ether	410	U
100-01-6	4-Nitroaniline	2000	U
534-52-1	4,6-Dinitro-2-methylphenol	2000	U
86-30-6	N-Nitrosodiphenylamine	410	U
103-33-3	Azobenzene	410	U
129-00-0	**Pyrene**	**320**	**J**
101-55-3	4-Bromophenyl phenyl ether	410	U
118-74-1	Hexachlorobenzene	410	U
87-86-5	Pentachlorophenol	2000	U
85-01-8	**Phenanthrene**	**200**	**J**
120-12-7	Anthracene	410	U
84-74-2	Di-n-butyl phthalate	410	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 003
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.5 / g Date Received: 04/21/05
Work Order: G8WXX1AD Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:20

QC Batch: 5119285

Client Sample Id: RE73-05-58841

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
206-44-0	**Fluoranthene**	**300**	**J**
85-68-7	Butyl benzyl phthalate	410	U
56-55-3	**Benzo(a)anthracene**	**150**	**J**
91-94-1	3,3'-Dichlorobenzidine	2000	U
218-01-9	**Chrysene**	**150**	**J**
117-81-7	**bis(2-Ethylhexyl) phthalate**	**98**	**J**
117-84-0	Di-n-octyl phthalate	410	U
205-99-2	**Benzo(b)fluoranthene**	**120**	**J**
207-08-9	**Benzo(k)fluoranthene**	**120**	**J**
50-32-8	**Benzo(a)pyrene**	**110**	**J**
193-39-5	Indeno(1,2,3-cd)pyrene	410	U
191-24-2	Benzo(ghi)perylene	410	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	64	(40 - 103)
Phenol-d5	66	(36 - 105)
Nitrobenzene-d5	76	(45 - 114)
2-Fluorobiphenyl	70	(49 - 120)
2,4,6-Tribromophenol	72	(39 - 114)
Terphenyl-d14	74	(42 - 108)

FORM I

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 003
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.2 / g Date Received: 04/21/05
Work Order: G8WXX2AD Date Extracted:05/11/05
Dilution factor: 1 Date Analyzed: 05/14/05
Moisture %:20

QC Batch: 5131374

Client Sample Id: RE73-05-58841 -RE 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
62-75-9	N-Nitrosodimethylamine	830	U
108-95-2	Phenol	830	U
62-53-3	Aniline	830	U
111-44-4	bis(2-Chloroethyl) ether	830	U
95-57-8	2-Chlorophenol	830	U
541-73-1	1,3-Dichlorobenzene	830	U
106-46-7	1,4-Dichlorobenzene	830	U
100-51-6	Benzyl alcohol	830	U
95-50-1	1,2-Dichlorobenzene	830	U
95-48-7	2-Methylphenol	830	U
65794-96-9	3-Methylphenol & 4-Methylphe	830	U
108-60-1	2,2'-oxybis(1-Chloropropane)	830	U
621-64-7	N-Nitrosodi-n-propylamine	830	U
67-72-1	Hexachloroethane	830	U
98-95-3	Nitrobenzene	830	U
78-59-1	Isophorone	830	U
88-75-5	2-Nitrophenol	830	U
105-67-9	2,4-Dimethylphenol	830	U
111-91-1	bis(2-Chloroethoxy)methane	830	U
65-85-0	Benzoic acid	4000	U
120-83-2	2,4-Dichlorophenol	830	U
120-82-1	1,2,4-Trichlorobenzene	830	U
91-20-3	Naphthalene	830	U
106-47-8	4-Chloroaniline	830	U
87-68-3	Hexachlorobutadiene	830	U
59-50-7	4-Chloro-3-methylphenol	830	U
91-57-6	2-Methylnaphthalene	830	U
77-47-4	Hexachlorocyclopentadiene	4000	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 003
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.2 / g Date Received: 04/21/05
Work Order: G8WXX2AD Date Extracted:05/11/05
Dilution factor: 1 Date Analyzed: 05/14/05
Moisture %:20

QC Batch: 5131374

Client Sample Id: RE73-05-58841 -RE 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
88-06-2	2,4,6-Trichlorophenol	830	U
95-95-4	2,4,5-Trichlorophenol	830	U
91-58-7	2-Chloronaphthalene	830	U
88-74-4	2-Nitroaniline	4000	U
131-11-3	Dimethyl phthalate	830	U
208-96-8	Acenaphthylene	830	U
606-20-2	2,6-Dinitrotoluene	830	U
99-09-2	3-Nitroaniline	4000	U
83-32-9	Acenaphthene	830	U
51-28-5	2,4-Dinitrophenol	4000	U
100-02-7	4-Nitrophenol	4000	U
53-70-3	Dibenz(a,h)anthracene	830	U
132-64-9	Dibenzofuran	830	U
121-14-2	2,4-Dinitrotoluene	830	U
84-66-2	Diethyl phthalate	830	U
86-73-7	Fluorene	830	U
7005-72-3	4-Chlorophenyl phenyl ether	830	U
100-01-6	4-Nitroaniline	4000	U
534-52-1	4,6-Dinitro-2-methylphenol	4000	U
86-30-6	N-Nitrosodiphenylamine	830	U
103-33-3	Azobenzene	830	U
129-00-0	Pyrene	830	U
101-55-3	4-Bromophenyl phenyl ether	830	U
118-74-1	Hexachlorobenzene	830	U
87-86-5	Pentachlorophenol	4000	U
85-01-8	Phenanthrene	830	U
120-12-7	Anthracene	830	U
84-74-2	Di-n-butyl phthalate	830	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 003
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.2 / g Date Received: 04/21/05
Work Order: G8WXX2AD Date Extracted:05/11/05
Dilution factor: 1 Date Analyzed: 05/14/05
Moisture %:20

QC Batch: 5131374

Client Sample Id: RE73-05-58841 -RE 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
206-44-0	Fluoranthene	830	U
85-68-7	Butyl benzyl phthalate	830	U
56-55-3	Benzo(a)anthracene	830	U
91-94-1	3,3'-Dichlorobenzidine	4000	U
218-01-9	Chrysene	830	U
117-81-7	bis(2-Ethylhexyl) phthalate	830	U
117-84-0	Di-n-octyl phthalate	830	U
205-99-2	Benzo(b)fluoranthene	830	U
207-08-9	Benzo(k)fluoranthene	830	U
50-32-8	Benzo(a)pyrene	830	U
193-39-5	Indeno(1,2,3-cd)pyrene	830	U
191-24-2	Benzo(ghi)perylene	830	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	76	(40 - 103)
Phenol-d5	82	(36 - 105)
Nitrobenzene-d5	84	(45 - 114)
2-Fluorobiphenyl	81	(49 - 120)
2,4,6-Tribromophenol	80	(39 - 114)
Terphenyl-d14	73	(42 - 108)

FORM I

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D290000 285
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30 / g Date Received: 04/21/05
Work Order: G9HAL1AA Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/09/05
Moisture %:NA

QC Batch: 5119285

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
62-75-9	N-Nitrosodimethylamine	330	U
108-95-2	Phenol	330	U
62-53-3	Aniline	330	U
111-44-4	bis(2-Chloroethyl) ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
100-51-6	Benzyl alcohol	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
65794-96-9	3-Methylphenol & 4-Methylphe	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
621-64-7	N-Nitrosodi-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
65-85-0	Benzoic acid	1600	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	1600	U

FORM I

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D290000 285
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30 / g Date Received: 04/21/05
Work Order: G9HAL1AA Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/09/05
Moisture %:NA

QC Batch: 5119285

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	330	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethyl phthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	330	U
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
53-70-3	Dibenz(a,h)anthracene	330	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethyl phthalate	330	U
86-73-7	Fluorene	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine	330	U
103-33-3	Azobenzene	330	U
129-00-0	Pyrene	330	U
101-55-3	4-Bromophenyl phenyl ether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
84-74-2	Di-n-butyl phthalate	330	U

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D290000 285
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30 / g Date Received: 04/21/05
Work Order: G9HAL1AA Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/09/05
Moisture %:NA

QC Batch: 5119285

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
206-44-0	Fluoranthene	330	U
85-68-7	Butyl benzyl phthalate	330	U
56-55-3	Benzo(a)anthracene	330	U
91-94-1	3,3'-Dichlorobenzidine	1600	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl) phthalate	330	U
117-84-0	Di-n-octyl phthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
191-24-2	Benzo(ghi)perylene	330	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	81	(40 - 103)
Phenol-d5	80	(36 - 105)
Nitrobenzene-d5	72	(45 - 114)
2-Fluorobiphenyl	62	(49 - 120)
2,4,6-Tribromophenol	46	(39 - 114)
Terphenyl-d14	60	(42 - 108)

FORM I

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5E110000 374
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30 / g Date Received: 04/21/05
Work Order: HAAT21AA Date Extracted:05/11/05
Dilution factor: 1 Date Analyzed: 05/12/05
Moisture %:NA

QC Batch: 5131374

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
62-75-9	N-Nitrosodimethylamine	660	U
108-95-2	Phenol	660	U
62-53-3	Aniline	660	U
111-44-4	bis(2-Chloroethyl) ether	660	U
95-57-8	2-Chlorophenol	660	U
541-73-1	1,3-Dichlorobenzene	660	U
106-46-7	1,4-Dichlorobenzene	660	U
100-51-6	Benzyl alcohol	660	U
95-50-1	1,2-Dichlorobenzene	660	U
95-48-7	2-Methylphenol	660	U
65794-96-9	3-Methylphenol & 4-Methylphe	660	U
108-60-1	2,2'-oxybis(1-Chloropropane)	660	U
621-64-7	N-Nitrosodi-n-propylamine	660	U
67-72-1	Hexachloroethane	660	U
98-95-3	Nitrobenzene	660	U
78-59-1	Isophorone	660	U
88-75-5	2-Nitrophenol	660	U
105-67-9	2,4-Dimethylphenol	660	U
111-91-1	bis(2-Chloroethoxy)methane	660	U
65-85-0	Benzoic acid	3200	U
120-83-2	2,4-Dichlorophenol	660	U
120-82-1	1,2,4-Trichlorobenzene	660	U
91-20-3	Naphthalene	660	U
106-47-8	4-Chloroaniline	660	U
87-68-3	Hexachlorobutadiene	660	U
59-50-7	4-Chloro-3-methylphenol	660	U
91-57-6	2-Methylnaphthalene	660	U
77-47-4	Hexachlorocyclopentadiene	3200	U

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5E110000 374
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30 / g Date Received: 04/21/05
Work Order: HAAT21AA Date Extracted:05/11/05
Dilution factor: 1 Date Analyzed: 05/12/05
Moisture %:NA

QC Batch: 5131374

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
88-06-2	2,4,6-Trichlorophenol	660	U
95-95-4	2,4,5-Trichlorophenol	660	U
91-58-7	2-Chloronaphthalene	660	U
88-74-4	2-Nitroaniline	3200	U
131-11-3	Dimethyl phthalate	660	U
208-96-8	Acenaphthylene	660	U
606-20-2	2,6-Dinitrotoluene	660	U
99-09-2	3-Nitroaniline	3200	U
83-32-9	Acenaphthene	660	U
51-28-5	2,4-Dinitrophenol	3200	U
100-02-7	4-Nitrophenol	3200	U
53-70-3	Dibenz(a,h)anthracene	660	U
132-64-9	Dibenzofuran	660	U
121-14-2	2,4-Dinitrotoluene	660	U
84-66-2	Diethyl phthalate	660	U
86-73-7	Fluorene	660	U
7005-72-3	4-Chlorophenyl phenyl ether	660	U
100-01-6	4-Nitroaniline	3200	U
534-52-1	4,6-Dinitro-2-methylphenol	3200	U
86-30-6	N-Nitrosodiphenylamine	660	U
103-33-3	Azobenzene	660	U
129-00-0	Pyrene	660	U
101-55-3	4-Bromophenyl phenyl ether	660	U
118-74-1	Hexachlorobenzene	660	U
87-86-5	Pentachlorophenol	3200	U
85-01-8	Phenanthrene	660	U
120-12-7	Anthracene	660	U
84-74-2	Di-n-butyl phthalate	660	U

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5E110000 374
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30 / g Date Received: 04/21/05
Work Order: HAAT21AA Date Extracted:05/11/05
Dilution factor: 1 Date Analyzed: 05/12/05
Moisture %:NA

QC Batch: 5131374

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
206-44-0	Fluoranthene	660	U
85-68-7	Butyl benzyl phthalate	660	U
56-55-3	Benzo(a)anthracene	660	U
91-94-1	3,3'-Dichlorobenzidine	3200	U
218-01-9	Chrysene	660	U
117-81-7	bis(2-Ethylhexyl) phthalate	660	U
117-84-0	Di-n-octyl phthalate	660	U
205-99-2	Benzo(b)fluoranthene	660	U
207-08-9	Benzo(k)fluoranthene	660	U
50-32-8	Benzo(a)pyrene	660	U
193-39-5	Indeno(1,2,3-cd)pyrene	660	U
191-24-2	Benzo(ghi)perylene	660	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	85	(40 - 103)
Phenol-d5	82	(36 - 105)
Nitrobenzene-d5	92	(45 - 114)
2-Fluorobiphenyl	85	(49 - 120)
2,4,6-Tribromophenol	74	(39 - 114)
Terphenyl-d14	74	(42 - 108)

FORM I

LOS ALAMOS NATIONAL LABORATORY
CHECK SAMPLE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D290000 285
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30 / g Date Received: 04/21/05
Work Order: G9HAL1AC Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/09/05
Moisture %:NA

QC Batch: 5119285

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	5390	
111-44-4	bis(2-Chloroethyl) ether	5190	
95-57-8	2-Chlorophenol	5130	
95-48-7	2-Methylphenol	4580	
65794-96-9	3-Methylphenol & 4-Methylphe	4740	
108-60-1	2,2'-oxybis(1-Chloropropane)	4810	
621-64-7	N-Nitrosodi-n-propylamine	5210	
67-72-1	Hexachloroethane	3140	
98-95-3	Nitrobenzene	4200	
78-59-1	Isophorone	5470	
88-75-5	2-Nitrophenol	4310	
105-67-9	2,4-Dimethylphenol	5140	
111-91-1	bis(2-Chloroethoxy)methane	5210	
120-83-2	2,4-Dichlorophenol	5090	
120-82-1	1,2,4-Trichlorobenzene	3820	
91-20-3	Naphthalene	3930	
106-47-8	4-Chloroaniline	1340	a
87-68-3	Hexachlorobutadiene	4020	
59-50-7	4-Chloro-3-methylphenol	5080	
91-57-6	2-Methylnaphthalene	3950	
77-47-4	Hexachlorocyclopentadiene	4900	
88-06-2	2,4,6-Trichlorophenol	4550	
95-95-4	2,4,5-Trichlorophenol	5310	
88-74-4	2-Nitroaniline	4730	
131-11-3	Dimethyl phthalate	5250	
208-96-8	Acenaphthylene	4280	
606-20-2	2,6-Dinitrotoluene	5090	
99-09-2	3-Nitroaniline	2490	

FORM I

LOS ALAMOS NATIONAL LABORATORY
CHECK SAMPLE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D290000 285
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30 / g Date Received: 04/21/05
Work Order: G9HAL1AC Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/09/05
Moisture %:NA

QC Batch: 5119285

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
83-32-9	Acenaphthene	3950	
51-28-5	2,4-Dinitrophenol	4350	
100-02-7	4-Nitrophenol	5610	
53-70-3	Dibenz(a,h)anthracene	4040	
132-64-9	Dibenzofuran	4040	
121-14-2	2,4-Dinitrotoluene	5310	
84-66-2	Diethyl phthalate	5340	
86-73-7	Fluorene	4100	
7005-72-3	4-Chlorophenyl phenyl ether	4270	
100-01-6	4-Nitroaniline	4640	
534-52-1	4,6-Dinitro-2-methylphenol	6330	
86-30-6	N-Nitrosodiphenylamine	5240	
129-00-0	Pyrene	2670	a
101-55-3	4-Bromophenyl phenyl ether	4340	
118-74-1	Hexachlorobenzene	3120	a
87-86-5	Pentachlorophenol	3010	
85-01-8	Phenanthrene	3850	
120-12-7	Anthracene	3900	
84-74-2	Di-n-butyl phthalate	5040	
206-44-0	Fluoranthene	3440	a
85-68-7	Butyl benzyl phthalate	5300	
56-55-3	Benzo(a)anthracene	3900	
91-94-1	3,3'-Dichlorobenzidine	2840	
218-01-9	Chrysene	3840	
117-81-7	bis(2-Ethylhexyl) phthalate	5160	
117-84-0	Di-n-octyl phthalate	5330	
205-99-2	Benzo(b)fluoranthene	3950	
207-08-9	Benzo(k)fluoranthene	3980	

FORM I

LOS ALAMOS NATIONAL LABORATORY
CHECK SAMPLE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D290000 285
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30 / g Date Received: 04/21/05
Work Order: G9HAL1AC Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/09/05
Moisture %:NA

QC Batch: 5119285

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
50-32-8	Benzo(a)pyrene	1670	a
193-39-5	Indeno(1,2,3-cd)pyrene	2030	a
191-24-2	Benzo(ghi)perylene	177	a

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	77	(50 - 98)
Phenol-d5	81	(51 - 95)
Nitrobenzene-d5	69	(50 - 111)
2-Fluorobiphenyl	69	(57 - 117)
2,4,6-Tribromophenol	59	(53 - 108)
Terphenyl-d14	60	(49 - 107)

FORM I

LOS ALAMOS NATIONAL LABORATORY
CHECK SAMPLE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5E110000 374
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30 / g Date Received: 04/21/05
Work Order: HAAT21AC Date Extracted:05/11/05
Dilution factor: 1 Date Analyzed: 05/12/05
Moisture %:NA

QC Batch: 5131374

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	5170	
111-44-4	bis(2-Chloroethyl) ether	5040	
95-57-8	2-Chlorophenol	5740	
95-48-7	2-Methylphenol	5420	
65794-96-9	3-Methylphenol & 4-Methylphe	5240	
108-60-1	2,2'-oxybis(1-Chloropropane)	5540	
621-64-7	N-Nitrosodi-n-propylamine	6180	
67-72-1	Hexachloroethane	5820	
98-95-3	Nitrobenzene	5690	
78-59-1	Isophorone	6000	
88-75-5	2-Nitrophenol	5660	
105-67-9	2,4-Dimethylphenol	5970	
111-91-1	bis(2-Chloroethoxy)methane	5740	
120-83-2	2,4-Dichlorophenol	5700	
120-82-1	1,2,4-Trichlorobenzene	5900	
91-20-3	Naphthalene	5810	
106-47-8	4-Chloroaniline	3320	
87-68-3	Hexachlorobutadiene	6040	
59-50-7	4-Chloro-3-methylphenol	6060	
91-57-6	2-Methylnaphthalene	7680	a
77-47-4	Hexachlorocyclopentadiene	7050	
88-06-2	2,4,6-Trichlorophenol	5940	
95-95-4	2,4,5-Trichlorophenol	5700	
88-74-4	2-Nitroaniline	5450	
131-11-3	Dimethyl phthalate	5890	
208-96-8	Acenaphthylene	6350	
606-20-2	2,6-Dinitrotoluene	5740	
99-09-2	3-Nitroaniline	3420	

LOS ALAMOS NATIONAL LABORATORY
CHECK SAMPLE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5E110000 374
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30 / g Date Received: 04/21/05
Work Order: HAAT21AC Date Extracted:05/11/05
Dilution factor: 1 Date Analyzed: 05/12/05
Moisture %:NA

QC Batch: 5131374

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
83-32-9	Acenaphthene	5810	
51-28-5	2,4-Dinitrophenol	2680	
100-02-7	4-Nitrophenol	5720	
53-70-3	Dibenz(a,h)anthracene	5610	
132-64-9	Dibenzofuran	5710	
121-14-2	2,4-Dinitrotoluene	5780	
84-66-2	Diethyl phthalate	5930	
86-73-7	Fluorene	6030	
7005-72-3	4-Chlorophenyl phenyl ether	6040	
100-01-6	4-Nitroaniline	5360	
534-52-1	4,6-Dinitro-2-methylphenol	5360	
86-30-6	N-Nitrosodiphenylamine	6520	
129-00-0	Pyrene	5710	
101-55-3	4-Bromophenyl phenyl ether	5970	
118-74-1	Hexachlorobenzene	6170	
87-86-5	Pentachlorophenol	3560	
85-01-8	Phenanthrene	5640	
120-12-7	Anthracene	5700	
84-74-2	Di-n-butyl phthalate	5700	
206-44-0	Fluoranthene	5300	
85-68-7	Butyl benzyl phthalate	5920	
56-55-3	Benzo(a)anthracene	5640	
91-94-1	3,3'-Dichlorobenzidine	4080	
218-01-9	Chrysene	5710	
117-81-7	bis(2-Ethylhexyl) phthalate	5720	
117-84-0	Di-n-octyl phthalate	6060	
205-99-2	Benzo(b)fluoranthene	6130	
207-08-9	Benzo(k)fluoranthene	5960	

LOS ALAMOS NATIONAL LABORATORY
CHECK SAMPLE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5E110000 374
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30 / g Date Received: 04/21/05
Work Order: HAAT21AC Date Extracted:05/11/05
Dilution factor: 1 Date Analyzed: 05/12/05
Moisture %:NA

QC Batch: 5131374

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
50-32-8	Benzo(a)pyrene	5760	
193-39-5	Indeno(1,2,3-cd)pyrene	5380	
191-24-2	Benzo(ghi)perylene	4370	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	86	(50 - 98)
Phenol-d5	83	(51 - 95)
Nitrobenzene-d5	89	(50 - 111)
2-Fluorobiphenyl	90	(57 - 117)
2,4,6-Tribromophenol	100	(53 - 108)
Terphenyl-d14	78	(49 - 107)

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D200213 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.659 / g Date Received: 04/20/05
Work Order: G8QE31CX Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:20

QC Batch: 5119285

Client Sample Id: LAB MS/MSD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	5980	
111-44-4	bis(2-Chloroethyl) ether	5830	
95-57-8	2-Chlorophenol	5800	
95-48-7	2-Methylphenol	5550	
65794-96-9	3-Methylphenol & 4-Methylphe	5660	
108-60-1	2,2'-oxybis(1-Chloropropane)	5770	
621-64-7	N-Nitrosodi-n-propylamine	6790	
67-72-1	Hexachloroethane	5700	
98-95-3	Nitrobenzene	6080	
78-59-1	Isophorone	6850	
88-75-5	2-Nitrophenol	6070	
105-67-9	2,4-Dimethylphenol	5360	
111-91-1	bis(2-Chloroethoxy)methane	6170	
120-83-2	2,4-Dichlorophenol	6060	
120-82-1	1,2,4-Trichlorobenzene	6090	
91-20-3	Naphthalene	5840	
106-47-8	4-Chloroaniline	3560	
87-68-3	Hexachlorobutadiene	5890	
59-50-7	4-Chloro-3-methylphenol	6450	
91-57-6	2-Methylnaphthalene	5830	
77-47-4	Hexachlorocyclopentadiene	6590	
88-06-2	2,4,6-Trichlorophenol	6290	
95-95-4	2,4,5-Trichlorophenol	6520	
88-74-4	2-Nitroaniline	6400	
131-11-3	Dimethyl phthalate	6470	
208-96-8	Acenaphthylene	6590	
606-20-2	2,6-Dinitrotoluene	6440	
99-09-2	3-Nitroaniline	5110	

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D200213 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.659 / g Date Received: 04/20/05
Work Order: G8QE31CX Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:20

QC Batch: 5119285

Client Sample Id: LAB MS/MSD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
83-32-9	Acenaphthene	6200	
51-28-5	2,4-Dinitrophenol	3610	
100-02-7	4-Nitrophenol	7430	
53-70-3	Dibenz(a,h)anthracene	6530	
132-64-9	Dibenzofuran	6290	
121-14-2	2,4-Dinitrotoluene	6970	
84-66-2	Diethyl phthalate	6770	
86-73-7	Fluorene	6440	
7005-72-3	4-Chlorophenyl phenyl ether	6610	
100-01-6	4-Nitroaniline	6410	
534-52-1	4,6-Dinitro-2-methylphenol	5520	
86-30-6	N-Nitrosodiphenylamine	6670	
129-00-0	Pyrene	5980	
101-55-3	4-Bromophenyl phenyl ether	6100	
118-74-1	Hexachlorobenzene	6470	
87-86-5	Pentachlorophenol	5490	
85-01-8	Phenanthrene	5960	
120-12-7	Anthracene	6080	
84-74-2	Di-n-butyl phthalate	5990	
206-44-0	Fluoranthene	5640	
85-68-7	Butyl benzyl phthalate	6390	
56-55-3	Benzo(a)anthracene	6240	
91-94-1	3,3'-Dichlorobenzidine	4600	
218-01-9	Chrysene	6370	
117-81-7	bis(2-Ethylhexyl) phthalate	6090	
117-84-0	Di-n-octyl phthalate	6160	
205-99-2	Benzo(b)fluoranthene	6270	
207-08-9	Benzo(k)fluoranthene	6320	

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D200213 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.659 / g Date Received: 04/20/05
Work Order: G8QE31CX Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:20

QC Batch: 5119285

Client Sample Id: LAB MS/MSD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
50-32-8	Benzo(a)pyrene	6230	
193-39-5	Indeno(1,2,3-cd)pyrene	5950	
191-24-2	Benzo(ghi)perylene	6090	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	68	(40 - 103)
Phenol-d5	74	(36 - 105)
Nitrobenzene-d5	74	(45 - 114)
2-Fluorobiphenyl	75	(49 - 120)
2,4,6-Tribromophenol	83	(39 - 114)
Terphenyl-d14	66	(42 - 108)

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.421 / g Date Received: 04/21/05
Work Order: G8WXJ1AJ Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:20

QC Batch: 5119285

Client Sample Id: RE73-05-58829

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	6310	
111-44-4	bis(2-Chloroethyl) ether	6230	
95-57-8	2-Chlorophenol	5970	
95-48-7	2-Methylphenol	4970	
65794-96-9	3-Methylphenol & 4-Methylphe	5120	a
108-60-1	2,2'-oxybis(1-Chloropropane)	6300	
621-64-7	N-Nitrosodi-n-propylamine	7440	
67-72-1	Hexachloroethane	5800	
98-95-3	Nitrobenzene	6500	
78-59-1	Isophorone	7570	
88-75-5	2-Nitrophenol	6400	
105-67-9	2,4-Dimethylphenol	2870	a
111-91-1	bis(2-Chloroethoxy)methane	6730	
120-83-2	2,4-Dichlorophenol	6320	
120-82-1	1,2,4-Trichlorobenzene	6190	
91-20-3	Naphthalene	6050	
106-47-8	4-Chloroaniline	1800	
87-68-3	Hexachlorobutadiene	6330	
59-50-7	4-Chloro-3-methylphenol	6820	
91-57-6	2-Methylnaphthalene	6160	
77-47-4	Hexachlorocyclopentadiene	6690	
88-06-2	2,4,6-Trichlorophenol	6190	
95-95-4	2,4,5-Trichlorophenol	6800	
88-74-4	2-Nitroaniline	6510	
131-11-3	Dimethyl phthalate	7190	
208-96-8	Acenaphthylene	6610	
606-20-2	2,6-Dinitrotoluene	6900	
99-09-2	3-Nitroaniline	4650	

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.421 / g Date Received: 04/21/05
Work Order: G8WXJ1AJ Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:20

QC Batch: 5119285

Client Sample Id: RE73-05-58829

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
83-32-9	Acenaphthene	6270	
51-28-5	2,4-Dinitrophenol	3330	
100-02-7	4-Nitrophenol	8440	
53-70-3	Dibenz(a,h)anthracene	5760	a
132-64-9	Dibenzofuran	6410	
121-14-2	2,4-Dinitrotoluene	7560	
84-66-2	Diethyl phthalate	7580	
86-73-7	Fluorene	6750	
7005-72-3	4-Chlorophenyl phenyl ether	7310	
100-01-6	4-Nitroaniline	6250	
534-52-1	4,6-Dinitro-2-methylphenol	5750	
86-30-6	N-Nitrosodiphenylamine	7450	
129-00-0	Pyrene	6400	
101-55-3	4-Bromophenyl phenyl ether	7070	
118-74-1	Hexachlorobenzene	6760	
87-86-5	Pentachlorophenol	3720	
85-01-8	Phenanthrene	6210	
120-12-7	Anthracene	6210	
84-74-2	Di-n-butyl phthalate	6650	
206-44-0	Fluoranthene	5220	
85-68-7	Butyl benzyl phthalate	7860	
56-55-3	Benzo(a)anthracene	5960	
91-94-1	3,3'-Dichlorobenzidine	2940	
218-01-9	Chrysene	5890	
117-81-7	bis(2-Ethylhexyl) phthalate	7380	
117-84-0	Di-n-octyl phthalate	6620	
205-99-2	Benzo(b)fluoranthene	5730	
207-08-9	Benzo(k)fluoranthene	5560	

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.421 / g Date Received: 04/21/05
Work Order: G8WXJ1AJ Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:20

QC Batch: 5119285

Client Sample Id: RE73-05-58829

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
50-32-8	Benzo(a)pyrene	4490	p
193-39-5	Indeno(1,2,3-cd)pyrene	4300	p
191-24-2	Benzo(ghi)perylene	2500	p

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	67	(40 - 103)
Phenol-d5	79	(36 - 105)
Nitrobenzene-d5	77	(45 - 114)
2-Fluorobiphenyl	81	(49 - 120)
2,4,6-Tribromophenol	84	(39 - 114)
Terphenyl-d14	79	(42 - 108)

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.085 / g Date Received: 04/21/05
Work Order: G8WXJ1AL Date Extracted:05/11/05
Dilution factor: 1 Date Analyzed: 05/12/05
Moisture %:20

QC Batch: 5131374

Client Sample Id: RE73-05-58829

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	6570	
111-44-4	bis(2-Chloroethyl) ether	6640	
95-57-8	2-Chlorophenol	6940	
95-48-7	2-Methylphenol	5870	
65794-96-9	3-Methylphenol & 4-Methylphe	5740	
108-60-1	2,2'-oxybis(1-Chloropropane)	7300	
621-64-7	N-Nitrosodi-n-propylamine	8380	
67-72-1	Hexachloroethane	7610	
98-95-3	Nitrobenzene	7280	
78-59-1	Isophorone	8040	
88-75-5	2-Nitrophenol	7410	
105-67-9	2,4-Dimethylphenol	3620	
111-91-1	bis(2-Chloroethoxy)methane	7710	
120-83-2	2,4-Dichlorophenol	6920	
120-82-1	1,2,4-Trichlorobenzene	7700	
91-20-3	Naphthalene	7500	
106-47-8	4-Chloroaniline	2920	
87-68-3	Hexachlorobutadiene	7860	
59-50-7	4-Chloro-3-methylphenol	7380	
91-57-6	2-Methylnaphthalene	9550	
77-47-4	Hexachlorocyclopentadiene	9000	
88-06-2	2,4,6-Trichlorophenol	7180	
95-95-4	2,4,5-Trichlorophenol	7150	
88-74-4	2-Nitroaniline	7150	
131-11-3	Dimethyl phthalate	7930	
208-96-8	Acenaphthylene	8240	
606-20-2	2,6-Dinitrotoluene	7730	
99-09-2	3-Nitroaniline	4480	

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.085 / g Date Received: 04/21/05
Work Order: G8WXJ1AL Date Extracted:05/11/05
Dilution factor: 1 Date Analyzed: 05/12/05
Moisture %:20

QC Batch: 5131374

Client Sample Id: RE73-05-58829

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
83-32-9	Acenaphthene	7550	
51-28-5	2,4-Dinitrophenol	2290	
100-02-7	4-Nitrophenol	7100	
53-70-3	Dibenz(a,h)anthracene	7720	
132-64-9	Dibenzofuran	7200	
121-14-2	2,4-Dinitrotoluene	7380	
84-66-2	Diethyl phthalate	7710	
86-73-7	Fluorene	7550	
7005-72-3	4-Chlorophenyl phenyl ether	7750	
100-01-6	4-Nitroaniline	6010	
534-52-1	4,6-Dinitro-2-methylphenol	5180	
86-30-6	N-Nitrosodiphenylamine	7830	
129-00-0	Pyrene	9120	
101-55-3	4-Bromophenyl phenyl ether	7890	
118-74-1	Hexachlorobenzene	8070	
87-86-5	Pentachlorophenol	2790	
85-01-8	Phenanthrene	6940	
120-12-7	Anthracene	7030	
84-74-2	Di-n-butyl phthalate	6940	
206-44-0	Fluoranthene	5610	
85-68-7	Butyl benzyl phthalate	8110	
56-55-3	Benzo(a)anthracene	7090	
91-94-1	3,3'-Dichlorobenzidine	3310	
218-01-9	Chrysene	6590	
117-81-7	bis(2-Ethylhexyl) phthalate	7790	
117-84-0	Di-n-octyl phthalate	6650	
205-99-2	Benzo(b)fluoranthene	6440	
207-08-9	Benzo(k)fluoranthene	6780	

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.085 / g Date Received: 04/21/05
Work Order: G8WXJ1AL Date Extracted:05/11/05
Dilution factor: 1 Date Analyzed: 05/12/05
Moisture %:20

QC Batch: 5131374

Client Sample Id: RE73-05-58829

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
50-32-8	Benzo(a)pyrene	5950	
193-39-5	Indeno(1,2,3-cd)pyrene	6550	
191-24-2	Benzo(ghi)perylene	7070	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	83	(40 - 103)
Phenol-d5	82	(36 - 105)
Nitrobenzene-d5	92	(45 - 114)
2-Fluorobiphenyl	96	(49 - 120)
2,4,6-Tribromophenol	85	(39 - 114)
Terphenyl-d14	92	(42 - 108)

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D200213 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.079 / g Date Received: 04/20/05
Work Order: G8QE31CW Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:20

QC Batch: 5119285

Client Sample Id: LAB MS/MSD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	7070	
111-44-4	bis(2-Chloroethyl) ether	6660	
95-57-8	2-Chlorophenol	6800	
95-48-7	2-Methylphenol	6420	
65794-96-9	3-Methylphenol & 4-Methylphe	6720	
108-60-1	2,2'-oxybis(1-Chloropropane)	6410	
621-64-7	N-Nitrosodi-n-propylamine	7730	
67-72-1	Hexachloroethane	6450	
98-95-3	Nitrobenzene	6730	
78-59-1	Isophorone	7580	
88-75-5	2-Nitrophenol	6870	
105-67-9	2,4-Dimethylphenol	6210	
111-91-1	bis(2-Chloroethoxy)methane	7010	
120-83-2	2,4-Dichlorophenol	7210	
120-82-1	1,2,4-Trichlorobenzene	6830	
91-20-3	Naphthalene	6610	
106-47-8	4-Chloroaniline	3700	
87-68-3	Hexachlorobutadiene	6630	
59-50-7	4-Chloro-3-methylphenol	7590	
91-57-6	2-Methylnaphthalene	6690	
77-47-4	Hexachlorocyclopentadiene	7580	
88-06-2	2,4,6-Trichlorophenol	7380	
95-95-4	2,4,5-Trichlorophenol	7780	
88-74-4	2-Nitroaniline	7330	
131-11-3	Dimethyl phthalate	7590	
208-96-8	Acenaphthylene	7640	
606-20-2	2,6-Dinitrotoluene	7580	
99-09-2	3-Nitroaniline	5740	

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D200213 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.079 / g Date Received: 04/20/05
Work Order: G8QE31CW Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:20

QC Batch: 5119285

Client Sample Id: LAB MS/MSD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
83-32-9	Acenaphthene	7190	
51-28-5	2,4-Dinitrophenol	4520	
100-02-7	4-Nitrophenol	9020	
53-70-3	Dibenz(a,h)anthracene	7640	
132-64-9	Dibenzofuran	7420	
121-14-2	2,4-Dinitrotoluene	8250	
84-66-2	Diethyl phthalate	8070	
86-73-7	Fluorene	7590	
7005-72-3	4-Chlorophenyl phenyl ether	7860	
100-01-6	4-Nitroaniline	7320	
534-52-1	4,6-Dinitro-2-methylphenol	6700	
86-30-6	N-Nitrosodiphenylamine	8000	
129-00-0	Pyrene	7230	
101-55-3	4-Bromophenyl phenyl ether	7260	
118-74-1	Hexachlorobenzene	7630	
87-86-5	Pentachlorophenol	6540	
85-01-8	Phenanthrene	7000	
120-12-7	Anthracene	7150	
84-74-2	Di-n-butyl phthalate	7140	
206-44-0	Fluoranthene	6780	
85-68-7	Butyl benzyl phthalate	7480	
56-55-3	Benzo(a)anthracene	7340	
91-94-1	3,3'-Dichlorobenzidine	5280	
218-01-9	Chrysene	7540	
117-81-7	bis(2-Ethylhexyl) phthalate	7120	
117-84-0	Di-n-octyl phthalate	7250	
205-99-2	Benzo(b)fluoranthene	7650	
207-08-9	Benzo(k)fluoranthene	7700	

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D200213 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.079 / g Date Received: 04/20/05
Work Order: G8QE31CW Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:20

QC Batch: 5119285

Client Sample Id: LAB MS/MSD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
50-32-8	Benzo(a)pyrene	7330	
193-39-5	Indeno(1,2,3-cd)pyrene	7010	
191-24-2	Benzo(ghi)perylene	7070	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	79	(40 - 103)
Phenol-d5	87	(36 - 105)
Nitrobenzene-d5	82	(45 - 114)
2-Fluorobiphenyl	88	(49 - 120)
2,4,6-Tribromophenol	98	(39 - 114)
Terphenyl-d14	76	(42 - 108)

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.06 / g Date Received: 04/21/05
Work Order: G8WXJ1AH Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:20

QC Batch: 5119285

Client Sample Id: RE73-05-58829

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	6460	
111-44-4	bis(2-Chloroethyl) ether	6570	
95-57-8	2-Chlorophenol	6220	
95-48-7	2-Methylphenol	5020	
65794-96-9	3-Methylphenol & 4-Methylphe	5160	a
108-60-1	2,2'-oxybis(1-Chloropropane)	6130	
621-64-7	N-Nitrosodi-n-propylamine	7380	
67-72-1	Hexachloroethane	4760	
98-95-3	Nitrobenzene	5420	
78-59-1	Isophorone	7480	
88-75-5	2-Nitrophenol	5730	
105-67-9	2,4-Dimethylphenol	2630	a
111-91-1	bis(2-Chloroethoxy)methane	6750	
120-83-2	2,4-Dichlorophenol	6420	
120-82-1	1,2,4-Trichlorobenzene	5250	
91-20-3	Naphthalene	5040	
106-47-8	4-Chloroaniline	1710	
87-68-3	Hexachlorobutadiene	5340	
59-50-7	4-Chloro-3-methylphenol	6680	
91-57-6	2-Methylnaphthalene	4990	
77-47-4	Hexachlorocyclopentadiene	5570	
88-06-2	2,4,6-Trichlorophenol	6010	
95-95-4	2,4,5-Trichlorophenol	6970	
88-74-4	2-Nitroaniline	6120	
131-11-3	Dimethyl phthalate	7330	
208-96-8	Acenaphthylene	5700	
606-20-2	2,6-Dinitrotoluene	7190	
99-09-2	3-Nitroaniline	4830	

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.06 / g Date Received: 04/21/05
Work Order: G8WXJ1AH Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:20

QC Batch: 5119285

Client Sample Id: RE73-05-58829

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
83-32-9	Acenaphthene	5490	
51-28-5	2,4-Dinitrophenol	3470	
100-02-7	4-Nitrophenol	8430	
53-70-3	Dibenz(a,h)anthracene	4930	
132-64-9	Dibenzofuran	5340	
121-14-2	2,4-Dinitrotoluene	7840	
84-66-2	Diethyl phthalate	7760	
86-73-7	Fluorene	5600	
7005-72-3	4-Chlorophenyl phenyl ether	5920	
100-01-6	4-Nitroaniline	6130	
534-52-1	4,6-Dinitro-2-methylphenol	5820	
86-30-6	N-Nitrosodiphenylamine	6240	
129-00-0	Pyrene	5110	
101-55-3	4-Bromophenyl phenyl ether	5810	
118-74-1	Hexachlorobenzene	5770	
87-86-5	Pentachlorophenol	3640	
85-01-8	Phenanthrene	5370	
120-12-7	Anthracene	5400	
84-74-2	Di-n-butyl phthalate	6690	
206-44-0	Fluoranthene	4540	
85-68-7	Butyl benzyl phthalate	7800	
56-55-3	Benzo(a)anthracene	5210	
91-94-1	3,3'-Dichlorobenzidine	2390	
218-01-9	Chrysene	5140	
117-81-7	bis(2-Ethylhexyl) phthalate	7400	
117-84-0	Di-n-octyl phthalate	6240	
205-99-2	Benzo(b)fluoranthene	4590	
207-08-9	Benzo(k)fluoranthene	5090	

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.06 / g Date Received: 04/21/05
Work Order: G8WXJ1AH Date Extracted:04/29/05
Dilution factor: 1 Date Analyzed: 05/10/05
Moisture %:20

QC Batch: 5119285

Client Sample Id: RE73-05-58829

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
50-32-8	Benzo(a)pyrene	3050	a
193-39-5	Indeno(1,2,3-cd)pyrene	3080	
191-24-2	Benzo(ghi)perylene	936	a

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	73	(40 - 103)
Phenol-d5	84	(36 - 105)
Nitrobenzene-d5	68	(45 - 114)
2-Fluorobiphenyl	66	(49 - 120)
2,4,6-Tribromophenol	69	(39 - 114)
Terphenyl-d14	68	(42 - 108)

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.648 / g Date Received: 04/21/05
Work Order: G8WXJ1AK Date Extracted:05/11/05
Dilution factor: 1 Date Analyzed: 05/12/05
Moisture %:20

QC Batch: 5131374

Client Sample Id: RE73-05-58829

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	6690	
111-44-4	bis(2-Chloroethyl) ether	6990	
95-57-8	2-Chlorophenol	7260	
95-48-7	2-Methylphenol	5880	
65794-96-9	3-Methylphenol & 4-Methylphe	5810	
108-60-1	2,2'-oxybis(1-Chloropropane)	7280	
621-64-7	N-Nitrosodi-n-propylamine	8160	
67-72-1	Hexachloroethane	7670	
98-95-3	Nitrobenzene	7290	
78-59-1	Isophorone	7950	
88-75-5	2-Nitrophenol	7290	
105-67-9	2,4-Dimethylphenol	4070	
111-91-1	bis(2-Chloroethoxy)methane	7620	
120-83-2	2,4-Dichlorophenol	7050	
120-82-1	1,2,4-Trichlorobenzene	7770	
91-20-3	Naphthalene	7700	
106-47-8	4-Chloroaniline	3010	
87-68-3	Hexachlorobutadiene	7910	
59-50-7	4-Chloro-3-methylphenol	7430	
91-57-6	2-Methylnaphthalene	9540	
77-47-4	Hexachlorocyclopentadiene	9620	
88-06-2	2,4,6-Trichlorophenol	7390	
95-95-4	2,4,5-Trichlorophenol	7300	
88-74-4	2-Nitroaniline	7040	
131-11-3	Dimethyl phthalate	8000	
208-96-8	Acenaphthylene	8420	
606-20-2	2,6-Dinitrotoluene	7640	
99-09-2	3-Nitroaniline	4050	

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.648 / g Date Received: 04/21/05
Work Order: G8WXJ1AK Date Extracted:05/11/05
Dilution factor: 1 Date Analyzed: 05/12/05
Moisture %:20

QC Batch: 5131374

Client Sample Id: RE73-05-58829

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
83-32-9	Acenaphthene	7660	
51-28-5	2,4-Dinitrophenol	2640	
100-02-7	4-Nitrophenol	7160	
53-70-3	Dibenz(a,h)anthracene	7990	
132-64-9	Dibenzofuran	7240	
121-14-2	2,4-Dinitrotoluene	7290	
84-66-2	Diethyl phthalate	7770	
86-73-7	Fluorene	7540	
7005-72-3	4-Chlorophenyl phenyl ether	7980	
100-01-6	4-Nitroaniline	5790	
534-52-1	4,6-Dinitro-2-methylphenol	6230	
86-30-6	N-Nitrosodiphenylamine	8740	
129-00-0	Pyrene	8600	
101-55-3	4-Bromophenyl phenyl ether	8400	
118-74-1	Hexachlorobenzene	8410	
87-86-5	Pentachlorophenol	3410	
85-01-8	Phenanthrene	7210	
120-12-7	Anthracene	7230	
84-74-2	Di-n-butyl phthalate	6660	
206-44-0	Fluoranthene	5380	
85-68-7	Butyl benzyl phthalate	8030	
56-55-3	Benzo(a)anthracene	7120	
91-94-1	3,3'-Dichlorobenzidine	3380	
218-01-9	Chrysene	6960	
117-81-7	bis(2-Ethylhexyl) phthalate	7950	
117-84-0	Di-n-octyl phthalate	7140	
205-99-2	Benzo(b)fluoranthene	6860	
207-08-9	Benzo(k)fluoranthene	7310	

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 30.648 / g Date Received: 04/21/05
Work Order: G8WXJ1AK Date Extracted:05/11/05
Dilution factor: 1 Date Analyzed: 05/12/05
Moisture %:20

QC Batch: 5131374

Client Sample Id: RE73-05-58829

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
50-32-8	Benzo(a)pyrene	6350	
193-39-5	Indeno(1,2,3-cd)pyrene	6900	
191-24-2	Benzo(ghi)perylene	7070	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
2-Fluorophenol	83	(40 - 103)
Phenol-d5	87	(36 - 105)
Nitrobenzene-d5	91	(45 - 114)
2-Fluorobiphenyl	97	(49 - 120)
2,4,6-Tribromophenol	87	(39 - 114)
Terphenyl-d14	90	(42 - 108)

FORM I

GC/MS ADDITIONAL QC DATA SUMMARY
FORMS 2 THROUGH 4
SEMIVOLATILES

SW846 8270C SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Lot #: F5D210380

Extraction: XXA13QL01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
01	INTRA-LAB QC	65	65	71	67	76	65	00
02	RE73-05-58829	68	71	81	76	68	78	00
03	RE73-05-58829 RE-1	78	79	90	89	75	89	00
04	RE73-05-58835	66	67	74	72	73	68	00
05	RE73-05-58835 RE-1	72	80	84	76	68	72	00
06	RE73-05-58841	64	66	76	70	72	74	00
07	RE73-05-58841 RE-1	76	82	84	81	80	73	00
08	METHOD BLK. G9HAL1AA	81	80	72	62	46	60	00
09	METHOD BLK. HAAT21AA	85	82	92	85	74	74	00
10	LCS G9HAL1AC	77	81	69	69	59	60	00
11	LCS HAAT21AC	86	83	89	90	100	78	00
12	LAB MS/MSD D	68	74	74	75	83	66	00
13	RE73-05-58829 D	67	79	77	81	84	79	00
14	RE73-05-58829 D	83	82	92	96	85	92	00
15	LAB MS/MSD S	79	87	82	88	98	76	00
16	RE73-05-58829 S	73	84	68	66	69	68	00
17	RE73-05-58829 S	83	87	91	97	87	90	00

SURROGATES		QC LIMITS
SRG01	= 2-Fluorophenol	(40-103)
SRG02	= Phenol-d5	(36-105)
SRG03	= Nitrobenzene-d5	(45-114)
SRG04	= 2-Fluorobiphenyl	(49-120)
SRG05	= 2,4,6-Tribromophenol	(39-114)
SRG06	= Terphenyl-d14	(42-108)

\# Column to be used to flag recovery values
* Values outside of required QC Limits
D System monitoring Compound diluted out

FORM II

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Matrix Spike ID: LAB MS/MSD Level:(low/med) LOW

Lot #: F5D200213 WO #: G8QE31CW
BATCH: 5119285

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Phenol	8350	ND	7070	85	41 - 97	
bis(2-Chloroethyl) ether	8350	ND	6660	80	38 - 98	
2-Chlorophenol	8350	ND	6800	81	41 - 96	
2-Methylphenol	8350	ND	6420	77	43 - 95	
2,2'-oxybis(1-Chloropropa	8350	ND	6410	77	41 - 102	
3-Methylphenol & 4-Methyl	8350	ND	6720	81	41 - 103	
N-Nitrosodi-n-propylamine	8350	ND	7730	93	51 - 109	
Hexachloroethane	8350	ND	6450	77	36 - 99	
Nitrobenzene	8350	ND	6730	81	45 - 105	
Isophorone	8350	ND	7580	91	47 - 117	
2-Nitrophenol	8350	ND	6870	82	36 - 108	
2,4-Dimethylphenol	8350	ND	6210	74	36 - 105	
bis(2-Chloroethoxy)methan	8350	ND	7010	84	46 - 107	
2,4-Dichlorophenol	8350	ND	7210	86	40 - 105	
1,2,4-Trichlorobenzene	8350	ND	6830	82	44 - 102	
Naphthalene	8350	ND	6610	79	10 - 150	
4-Chloroaniline	8350	ND	3700	44	11 - 99	
Hexachlorobutadiene	8350	ND	6630	79	40 - 105	
4-Chloro-3-methylphenol	8350	ND	7590	91	41 - 107	
2-Methylnaphthalene	8350	ND	6690	80	35 - 118	
Hexachlorocyclopentadiene	8350	ND	7580	91	10 - 120	
2,4,6-Trichlorophenol	8350	ND	7380	88	40 - 105	
2,4,5-Trichlorophenol	8350	ND	7780	93	39 - 108	
2-Nitroaniline	8350	ND	7330	88	42 - 114	
Dimethyl phthalate	8350	ND	7590	91	46 - 110	
Acenaphthylene	8350	ND	7640	92	48 - 110	
2,6-Dinitrotoluene	8350	ND	7580	91	47 - 111	
3-Nitroaniline	8350	ND	5740	69	23 - 102	

(Continued on next page)

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Matrix Spike ID: LAB MS/MSD Level: (low/med) LOW

Lot #: F5D200213 WO #: G8QE31CW
BATCH: 5119285

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Acenaphthene	8350	ND	7190	86	48 - 112	
2,4-Dinitrophenol	8350	ND	4520	54	10 - 109	
4-Nitrophenol	8350	ND	9020	108	33 - 114	
Dibenzofuran	8350	ND	7420	89	46 - 107	
2,4-Dinitrotoluene	8350	ND	8250	99	47 - 120	
Diethyl phthalate	8350	ND	8070	97	46 - 115	
4-Chlorophenyl phenyl eth	8350	ND	7860	94	47 - 109	
Fluorene	8350	ND	7590	91	47 - 109	
4-Nitroaniline	8350	ND	7320	88	21 - 116	
4,6-Dinitro-2-methylpheno	8350	ND	6700	80	10 - 108	
N-Nitrosodiphenylamine	8350	ND	8000	96	47 - 120	
4-Bromophenyl phenyl ethe	8350	ND	7260	87	46 - 110	
Hexachlorobenzene	8350	ND	7630	91	48 - 115	
Pentachlorophenol	8350	ND	6540	78	11 - 110	
Phenanthrene	8350	ND	7000	84	39 - 122	
Anthracene	8350	ND	7150	86	46 - 111	
Di-n-butyl phthalate	8350	ND	7140	86	45 - 114	
Fluoranthene	8350	ND	6780	81	39 - 116	
Pyrene	8350	ND	7230	87	41 - 121	
Butyl benzyl phthalate	8350	ND	7480	90	44 - 121	
3,3'-Dichlorobenzidine	8350	ND	5280	63	10 - 116	
Benzo(a)anthracene	8350	ND	7340	88	46 - 117	
Chrysene	8350	ND	7540	90	43 - 119	
bis(2-Ethylhexyl) phthala	8350	ND	7120	85	43 - 118	
Di-n-octyl phthalate	8350	ND	7250	87	35 - 120	
Benzo(b)fluoranthene	8350	ND	7650	92	39 - 124	
Benzo(k)fluoranthene	8350	ND	7700	92	43 - 131	
Benzo(a)pyrene	8350	ND	7330	88	43 - 114	

(Continued on next page)

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Matrix Spike ID: LAB MS/MSD Level:(low/med) LOW

Lot #: F5D200213 WO #: G8QE31CW
BATCH: 5119285

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Indeno(1,2,3-cd)pyrene	8350	ND	7010	84	31 - 129	
Dibenz(a,h)anthracene	8350	ND	7640	92	33 - 131	
Benzo(ghi)perylene	8350	ND	7070	85	26 - 140	

NOTES(S):

Results and reporting limits have been adjusted for dry weight.

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 59 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Matrix Spike ID: RE73-05-58829 Level:(low/med) LOW

Lot #: F5D210380 WO #: G8WXJ1AH
BATCH: 5119285

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Phenol	8330	ND	6460	78	41 - 97	
bis(2-Chloroethyl) ether	8330	ND	6570	79	38 - 98	
2-Chlorophenol	8330	ND	6220	75	41 - 96	
2-Methylphenol	8330	ND	5020	60	43 - 95	
2,2'-oxybis(1-Chloropropa	8330	ND	6130	74	41 - 102	
3-Methylphenol & 4-Methyl	4160	ND	5160	124*	41 - 103	a
N-Nitrosodi-n-propylamine	8330	ND	7380	89	51 - 109	
Hexachloroethane	8330	ND	4760	57	36 - 99	
Nitrobenzene	8330	210	5420	63	45 - 105	
Isophorone	8330	ND	7480	90	47 - 117	
2-Nitrophenol	8330	180	5730	67	36 - 108	
2,4-Dimethylphenol	8330	ND	2630	32*	36 - 105	a
bis(2-Chloroethoxy)methan	8330	ND	6750	81	46 - 107	
2,4-Dichlorophenol	8330	ND	6420	77	40 - 105	
1,2,4-Trichlorobenzene	8330	180	5250	61	44 - 102	
Naphthalene	8330	130	5040	59	10 - 150	
4-Chloroaniline	8330	ND	1710	21	11 - 99	
Hexachlorobutadiene	8330	140	5340	62	40 - 105	
4-Chloro-3-methylphenol	8330	ND	6680	80	41 - 107	
2-Methylnaphthalene	8330	120	4990	58	35 - 118	
Hexachlorocyclopentadiene	8330	ND	5570	67	10 - 120	
2,4,6-Trichlorophenol	8330	130	6010	71	40 - 105	
2,4,5-Trichlorophenol	8330	ND	6970	84	39 - 108	
2-Nitroaniline	8330	ND	6120	73	42 - 114	
Dimethyl phthalate	8330	ND	7330	88	46 - 110	
Acenaphthylene	8330	150	5700	67	48 - 110	
2,6-Dinitrotoluene	8330	ND	7190	86	47 - 111	
3-Nitroaniline	8330	ND	4830	58	23 - 102	

(Continued on next page)

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Matrix Spike ID: RE73-05-58829 Level:(low/med) LOW

Lot #: F5D210380 WO #: G8WXJ1AH
BATCH: 5119285

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Acenaphthene	8330	130	5490	64	48 - 112	
2,4-Dinitrophenol	8330	ND	3470	42	10 - 109	
4-Nitrophenol	8330	ND	8430	101	33 - 114	
Dibenzofuran	8330	140	5340	62	46 - 107	
2,4-Dinitrotoluene	8330	ND	7840	94	47 - 120	
Diethyl phthalate	8330	ND	7760	93	46 - 115	
4-Chlorophenyl phenyl eth	8330	190	5920	69	47 - 109	
Fluorene	8330	150	5600	65	47 - 109	
4-Nitroaniline	8330	ND	6130	74	21 - 116	
4,6-Dinitro-2-methylpheno	8330	ND	5820	70	10 - 108	
N-Nitrosodiphenylamine	8330	190	6240	73	47 - 120	
4-Bromophenyl phenyl ethe	8330	190	5810	67	46 - 110	
Hexachlorobenzene	8330	450	5770	64	48 - 115	
Pentachlorophenol	8330	180	3640	42	11 - 110	
Phenanthrene	8330	150	5370	63	39 - 122	
Anthracene	8330	140	5400	63	46 - 111	
Di-n-butyl phthalate	8330	ND	6690	80	45 - 114	
Fluoranthene	8330	140	4540	53	39 - 116	
Pyrene	8330	470	5110	56	41 - 121	
Butyl benzyl phthalate	8330	ND	7800	94	44 - 121	
3,3'-Dichlorobenzidine	8330	ND	2390	29	10 - 116	
Benzo(a)anthracene	8330	150	5210	61	46 - 117	
Chrysene	8330	160	5140	60	43 - 119	
bis(2-Ethylhexyl) phthala	8330	88	7400	88	43 - 118	
Di-n-octyl phthalate	8330	ND	6240	75	35 - 120	
Benzo(b)fluoranthene	8330	180	4590	53	39 - 124	
Benzo(k)fluoranthene	8330	150	5090	59	43 - 131	
Benzo(a)pyrene	8330	540	3050	30*	43 - 114	a

(Continued on next page)

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Matrix Spike ID: RE73-05-58829 Level: (low/med) LOW

Lot #: F5D210380 WO #: G8WXJ1AH
BATCH: 5119285

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Indeno(1,2,3-cd)pyrene	8330	530	3080	31	31 - 129	
Dibenz(a,h)anthracene	4160	86	4930	116	33 - 131	
Benzo(ghi)perylene	8330	130	936	9*	26 - 140	a

NOTES(S):

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 4 out of 59 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Matrix Spike ID: RE73-05-58829 Level:(low/med) LOW

Lot #: F5D210380 WO #: G8WXJ1AK
BATCH: 5131374

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Phenol	8170	ND	6690	82	41- 97	
bis(2-Chloroethyl) ether	8170	ND	6990	86	38- 98	
2-Chlorophenol	8170	ND	7260	89	41- 96	
2-Methylphenol	8170	ND	5880	72	43- 95	
2,2'-oxybis(1-Chloropropa	8170	ND	7280	89	41- 102	
3-Methylphenol & 4-Methyl	8170	ND	5810	71	41- 103	
N-Nitrosodi-n-propylamine	8170	ND	8160	100	51- 109	
Hexachloroethane	8170	ND	7670	94	36- 99	
Nitrobenzene	8170	ND	7290	89	45- 105	
Isophorone	8170	ND	7950	97	47- 117	
2-Nitrophenol	8170	ND	7290	89	36- 108	
2,4-Dimethylphenol	8170	ND	4070	50	36- 105	
bis(2-Chloroethoxy)methan	8170	ND	7620	93	46- 107	
2,4-Dichlorophenol	8170	ND	7050	86	40- 105	
1,2,4-Trichlorobenzene	8170	ND	7770	95	44- 102	
Naphthalene	8170	ND	7700	94	10- 150	
4-Chloroaniline	8170	ND	3010	37	11- 99	
Hexachlorobutadiene	8170	ND	7910	97	40- 105	
4-Chloro-3-methylphenol	8170	ND	7430	91	41- 107	
2-Methylnaphthalene	8170	ND	9540	117	35- 118	
Hexachlorocyclopentadiene	8170	ND	9620	118	10- 120	
2,4,6-Trichlorophenol	8170	ND	7390	90	40- 105	
2,4,5-Trichlorophenol	8170	ND	7300	89	39- 108	
2-Nitroaniline	8170	ND	7040	86	42- 114	
Dimethyl phthalate	8170	ND	8000	98	46- 110	
Acenaphthylene	8170	ND	8420	103	48- 110	
2,6-Dinitrotoluene	8170	ND	7640	93	47- 111	
3-Nitroaniline	8170	ND	4050	50	23- 102	

(Continued on next page)

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Matrix Spike ID: RE73-05-58829 Level:(low/med) LOW

Lot #: F5D210380 WO #: G8WXJ1AK
BATCH: 5131374

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Acenaphthene	8170	ND	7660	94	48 - 112	
2,4-Dinitrophenol	8170	ND	2640	32	10 - 109	
4-Nitrophenol	8170	ND	7160	88	33 - 114	
Dibenzofuran	8170	ND	7240	89	46 - 107	
2,4-Dinitrotoluene	8170	ND	7290	89	47 - 120	
Diethyl phthalate	8170	ND	7770	95	46 - 115	
4-Chlorophenyl phenyl eth	8170	ND	7980	98	47 - 109	
Fluorene	8170	ND	7540	92	47 - 109	
4-Nitroaniline	8170	ND	5790	71	21 - 116	
4,6-Dinitro-2-methylpheno	8170	ND	6230	76	10 - 108	
N-Nitrosodiphenylamine	8170	ND	8740	107	47 - 120	
4-Bromophenyl phenyl ethe	8170	ND	8400	103	46 - 110	
Hexachlorobenzene	8170	ND	8410	103	48 - 115	
Pentachlorophenol	8170	ND	3410	42	11 - 110	
Phenanthrene	8170	ND	7210	88	39 - 122	
Anthracene	8170	ND	7230	88	46 - 111	
Di-n-butyl phthalate	8170	500	6660	75	45 - 114	
Fluoranthene	8170	ND	5380	66	39 - 116	
Pyrene	8170	ND	8600	105	41 - 121	
Butyl benzyl phthalate	8170	ND	8030	98	44 - 121	
3,3'-Dichlorobenzidine	8170	ND	3380	41	10 - 116	
Benzo(a)anthracene	8170	ND	7120	87	46 - 117	
Chrysene	8170	ND	6960	85	43 - 119	
bis(2-Ethylhexyl) phthala	8170	ND	7950	97	43 - 118	
Di-n-octyl phthalate	8170	ND	7140	87	35 - 120	
Benzo(b)fluoranthene	8170	ND	6860	84	39 - 124	
Benzo(k)fluoranthene	8170	ND	7310	89	43 - 131	
Benzo(a)pyrene	8170	ND	6350	78	43 - 114	

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SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Matrix Spike ID: RE73-05-58829 Level:(low/med) LOW

Lot #: F5D210380 WO #: G8WXJ1AK
BATCH: 5131374

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Indeno(1,2,3-cd)pyrene	8170	ND	6900	85	31 - 129	
Dibenz(a,h)anthracene	8170	ND	7990	98	33 - 131	
Benzo(ghi)perylene	8170	420	7070	81	26 - 140	

NOTES(S):

Results and reporting limits have been adjusted for dry weight.

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 59 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Matrix Spike ID: LAB MS/MSD Level:(low/med) LOW

Lot #: F5D200213 WO #: G8QE31CX
BATCH: 5119285

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD		QC LIMITS RPD	QC LIMITS REC	QUAL
Phenol	8190	5980	73	17		30	41 - 97	
bis(2-Chloroethyl) ether	8190	5830	71	13		30	38 - 98	
2-Chlorophenol	8190	5800	71	16		30	41 - 96	
2-Methylphenol	8190	5550	68	15		30	43 - 95	
2,2'-oxybis(1-Chloropropa	8190	5770	70	11		30	41 - 102	
3-Methylphenol & 4-Methyl	7810	5660	72	17		30	41 - 103	
N-Nitrosodi-n-propylamine	8190	6790	83	13		30	51 - 109	
Hexachloroethane	8190	5700	70	12		30	36 - 99	
Nitrobenzene	8190	6080	74	10		30	45 - 105	
Isophorone	8190	6850	84	10		30	47 - 117	
2-Nitrophenol	8190	6070	74	12		30	36 - 108	
2,4-Dimethylphenol	8190	5360	65	15		30	36 - 105	
bis(2-Chloroethoxy)methan	8190	6170	75	13		30	46 - 107	
2,4-Dichlorophenol	8190	6060	74	17		30	40 - 105	
1,2,4-Trichlorobenzene	8190	6090	74	11		30	44 - 102	
Naphthalene	8190	5840	71	12		30	10 - 150	
4-Chloroaniline	8190	3560	43	3.9		30	11 - 99	
Hexachlorobutadiene	8190	5890	72	12		30	40 - 105	
4-Chloro-3-methylphenol	8190	6450	79	16		30	41 - 107	
2-Methylnaphthalene	8190	5830	71	14		30	35 - 118	
Hexachlorocyclopentadiene	8190	6590	80	14		30	10 - 120	
2,4,6-Trichlorophenol	8190	6290	77	16		30	40 - 105	
2,4,5-Trichlorophenol	8190	6520	80	18		30	39 - 108	
2-Nitroaniline	8190	6400	78	14		30	42 - 114	
Dimethyl phthalate	8190	6470	79	16		30	46 - 110	
Acenaphthylene	8190	6590	81	15		30	48 - 110	
2,6-Dinitrotoluene	8190	6440	79	16		30	47 - 111	
3-Nitroaniline	8190	5110	62	12		30	23 - 102	

(Continued on next page)

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Matrix Spike ID: LAB MS/MSD Level: (low/med) LOW

Lot #: F5D200213 WO #: G8QE31CX
BATCH: 5119285

COMPOUND	SPIKE ADDED	MSD CONCENT.	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
Acenaphthene	8190	6200	76	15	30	48 - 112	
2,4-Dinitrophenol	8190	3610	44	22	30	10 - 109	
4-Nitrophenol	8190	7430	91	19	30	33 - 114	
Dibenzofuran	8190	6290	77	16	30	46 - 107	
2,4-Dinitrotoluene	8190	6970	85	17	30	47 - 120	
Diethyl phthalate	8190	6770	83	18	30	46 - 115	
4-Chlorophenyl phenyl eth	8190	6610	81	17	30	47 - 109	
Fluorene	8190	6440	79	16	30	47 - 109	
4-Nitroaniline	8190	6410	78	13	30	21 - 116	
4,6-Dinitro-2-methylpheno	8190	5520	67	19	30	10 - 108	
N-Nitrosodiphenylamine	8190	6670	81	18	30	47 - 120	
4-Bromophenyl phenyl ethe	8190	6100	75	17	30	46 - 110	
Hexachlorobenzene	8190	6470	79	16	30	48 - 115	
Pentachlorophenol	8190	5490	67	18	30	11 - 110	
Phenanthrene	8190	5960	73	16	30	39 - 122	
Anthracene	8190	6080	74	16	30	46 - 111	
Di-n-butyl phthalate	8190	5990	73	17	30	45 - 114	
Fluoranthene	8190	5640	69	18	30	39 - 116	
Pyrene	8190	5980	73	19	30	41 - 121	
Butyl benzyl phthalate	8190	6390	78	16	30	44 - 121	
3,3'-Dichlorobenzidine	8190	4600	56	14	30	10 - 116	
Benzo(a)anthracene	8190	6240	76	16	30	46 - 117	
Chrysene	8190	6370	78	17	30	43 - 119	
bis(2-Ethylhexyl) phthala	8190	6090	74	16	30	43 - 118	
Di-n-octyl phthalate	8190	6160	75	16	30	35 - 120	
Benzo(b)fluoranthene	8190	6270	77	20	30	39 - 124	
Benzo(k)fluoranthene	8190	6320	77	20	30	43 - 131	
Benzo(a)pyrene	8190	6230	76	16	30	43 - 114	

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SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Matrix Spike ID: LAB MS/MSD Level:(low/med) LOW

Lot #: F5D200213 WO #: G8QE31CX
BATCH: 5119285

COMPOUND	SPIKE ADDED	MSD CONCENT.	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
Indeno(1,2,3-cd)pyrene	8190	5950	73	16	30	31 - 129	
Dibenz(a,h)anthracene	8190	6530	80	16	30	33 - 131	
Benzo(ghi)perylene	8190	6090	74	15	30	26 - 140	

NOTES(S):

Results and reporting limits have been adjusted for dry weight.

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 59 outside limits
Spike Recovery: 0 out of 59 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Matrix Spike ID: RE73-05-58829 Level:(low/med) LOW

Lot #: F5D210380 WO #: G8WXJ1AJ
BATCH: 5119285

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
Phenol	8230	6310	77	2.4	30	41 - 97	
bis(2-Chloroethyl) ether	8230	6230	76	5.4	30	38 - 98	
2-Chlorophenol	8230	5970	73	4.1	30	41 - 96	
2-Methylphenol	8230	4970	60	0.95	30	43 - 95	
2,2'-oxybis(1-Chloropropa	8230	6300	77	2.9	30	41 - 102	
3-Methylphenol & 4-Methyl	4110	5120	125*	0.63	30	41 - 103	a
N-Nitrosodi-n-propylamine	8230	7440	90	0.81	30	51 - 109	
Hexachloroethane	8230	5800	71	20	30	36 - 99	
Nitrobenzene	8230	6500	76	18	30	45 - 105	
Isophorone	8230	7570	92	1.1	30	47 - 117	
2-Nitrophenol	8230	6400	75	11	30	36 - 108	
2,4-Dimethylphenol	8230	2870	35*	8.7	30	36 - 105	a
bis(2-Chloroethoxy)methan	8230	6730	82	0.27	30	46 - 107	
2,4-Dichlorophenol	8230	6320	77	1.5	30	40 - 105	
1,2,4-Trichlorobenzene	8230	6190	73	16	30	44 - 102	
Naphthalene	8230	6050	72	18	30	10 - 150	
4-Chloroaniline	8230	1800	22	4.8	30	11 - 99	
Hexachlorobutadiene	8230	6330	75	17	30	40 - 105	
4-Chloro-3-methylphenol	8230	6820	83	2.1	30	41 - 107	
2-Methylnaphthalene	8230	6160	73	21	30	35 - 118	
Hexachlorocyclopentadiene	8230	6690	81	18	30	10 - 120	
2,4,6-Trichlorophenol	8230	6190	74	2.9	30	40 - 105	
2,4,5-Trichlorophenol	8230	6800	83	2.4	30	39 - 108	
2-Nitroaniline	8230	6510	79	6.2	30	42 - 114	
Dimethyl phthalate	8230	7190	87	1.8	30	46 - 110	
Acenaphthylene	8230	6610	79	15	30	48 - 110	
2,6-Dinitrotoluene	8230	6900	84	4.0	30	47 - 111	
3-Nitroaniline	8230	4650	56	3.8	30	23 - 102	

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SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Matrix Spike ID: RE73-05-58829 Level: (low/med) LOW

Lot #: F5D210380 WO #: G8WXJ1AJ
BATCH: 5119285

COMPOUND	SPIKE ADDED	MSD CONCENT.	MSD % REC	% RPD		QC LIMITS RPD	QC LIMITS REC	QUAL
Acenaphthene	8230	6270	75	13		30	48 - 112	
2,4-Dinitrophenol	8230	3330	40	4.2		30	10 - 109	
4-Nitrophenol	8230	8440	103	0.16		30	33 - 114	
Dibenzofuran	8230	6410	76	18		30	46 - 107	
2,4-Dinitrotoluene	8230	7560	92	3.7		30	47 - 120	
Diethyl phthalate	8230	7580	92	2.4		30	46 - 115	
4-Chlorophenyl phenyl eth	8230	7310	87	21		30	47 - 109	
Fluorene	8230	6750	80	19		30	47 - 109	
4-Nitroaniline	8230	6250	76	2.1		30	21 - 116	
4,6-Dinitro-2-methylpheno	8230	5750	70	1.3		30	10 - 108	
N-Nitrosodiphenylamine	8230	7450	88	18		30	47 - 120	
4-Bromophenyl phenyl ethe	8230	7070	84	20		30	46 - 110	
Hexachlorobenzene	8230	6760	77	16		30	48 - 115	
Pentachlorophenol	8230	3720	43	2.0		30	11 - 110	
Phenanthrene	8230	6210	74	14		30	39 - 122	
Anthracene	8230	6210	74	14		30	46 - 111	
Di-n-butyl phthalate	8230	6650	81	0.63		30	45 - 114	
Fluoranthene	8230	5220	62	14		30	39 - 116	
Pyrene	8230	6400	72	22		30	41 - 121	
Butyl benzyl phthalate	8230	7860	95	0.67		30	44 - 121	
3,3'-Dichlorobenzidine	8230	2940	36	21		30	10 - 116	
Benzo(a)anthracene	8230	5960	71	13		30	46 - 117	
Chrysene	8230	5890	70	14		30	43 - 119	
bis(2-Ethylhexyl) phthala	8230	7380	89	0.25		30	43 - 118	
Di-n-octyl phthalate	8230	6620	80	5.9		30	35 - 120	
Benzo(b)fluoranthene	8230	5730	67	22		30	39 - 124	
Benzo(k)fluoranthene	8230	5560	66	8.7		30	43 - 131	
Benzo(a)pyrene	8230	4490	48	38	*	30	43 - 114	p

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SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Matrix Spike ID: RE73-05-58829 Level:(low/med) LOW

Lot #: F5D210380 WO #: G8WXJ1AJ
BATCH: 5119285

COMPOUND	SPIKE ADDED	MSD CONCENT.	MSD % REC	% RPD		QC LIMITS RPD	QC LIMITS REC	QUAL
Indeno(1,2,3-cd)pyrene	8230	4300	46	33	*	30	31 - 129	p
Dibenz(a,h)anthracene	4110	5760	138*	16		30	33 - 131	a
Benzo(ghi)perylene	8230	2500	29	91	*	30	26 - 140	p

NOTES(S):

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

p Relative percent difference (RPD) is outside stated control limits.

\# Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 3 out of 59 outside limits
Spike Recovery: 3 out of 59 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Matrix Spike ID: RE73-05-58829 Level:(low/med) LOW

Lot #: F5D210380 WO #: G8WXJ1AL
BATCH: 5131374

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
Phenol	8320	6570	79	1.9	30	41 - 97	
bis(2-Chloroethyl) ether	8320	6640	80	5.1	30	38 - 98	
2-Chlorophenol	8320	6940	83	4.4	30	41 - 96	
2-Methylphenol	8320	5870	71	0.17	30	43 - 95	
2,2'-oxybis(1-Chloropropa	8320	7300	88	0.17	30	41 - 102	
3-Methylphenol & 4-Methyl	8320	5740	69	1.2	30	41 - 103	
N-Nitrosodi-n-propylamine	8320	8380	101	2.7	30	51 - 109	
Hexachloroethane	8320	7610	91	0.75	30	36 - 99	
Nitrobenzene	8320	7280	88	0.030	30	45 - 105	
Isophorone	8320	8040	97	1.1	30	47 - 117	
2-Nitrophenol	8320	7410	89	1.6	30	36 - 108	
2,4-Dimethylphenol	8320	3620	44	12	30	36 - 105	
bis(2-Chloroethoxy)methan	8320	7710	93	1.3	30	46 - 107	
2,4-Dichlorophenol	8320	6920	83	1.8	30	40 - 105	
1,2,4-Trichlorobenzene	8320	7700	93	0.90	30	44 - 102	
Naphthalene	8320	7500	90	2.7	30	10 - 150	
4-Chloroaniline	8320	2920	35	2.9	30	11 - 99	
Hexachlorobutadiene	8320	7860	95	0.63	30	40 - 105	
4-Chloro-3-methylphenol	8320	7380	89	0.60	30	41 - 107	
2-Methylnaphthalene	8320	9550	115	0.14	30	35 - 118	
Hexachlorocyclopentadiene	8320	9000	108	6.7	30	10 - 120	
2,4,6-Trichlorophenol	8320	7180	86	2.9	30	40 - 105	
2,4,5-Trichlorophenol	8320	7150	86	2.0	30	39 - 108	
2-Nitroaniline	8320	7150	86	1.6	30	42 - 114	
Dimethyl phthalate	8320	7930	95	0.92	30	46 - 110	
Acenaphthylene	8320	8240	99	2.2	30	48 - 110	
2,6-Dinitrotoluene	8320	7730	93	1.2	30	47 - 111	
3-Nitroaniline	8320	4480	54	10	30	23 - 102	

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SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Matrix Spike ID: RE73-05-58829 Level:(low/med) LOW

Lot #: F5D210380 WO #: G8WXJ1AL
BATCH: 5131374

COMPOUND	SPIKE ADDED	MSD CONCENT.	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
Acenaphthene	8320	7550	91	1.5	30	48 - 112	
2,4-Dinitrophenol	8320	2290	27	14	30	10 - 109	
4-Nitrophenol	8320	7100	85	0.91	30	33 - 114	
Dibenzofuran	8320	7200	87	0.53	30	46 - 107	
2,4-Dinitrotoluene	8320	7380	89	1.2	30	47 - 120	
Diethyl phthalate	8320	7710	93	0.72	30	46 - 115	
4-Chlorophenyl phenyl eth	8320	7750	93	2.9	30	47 - 109	
Fluorene	8320	7550	91	0.13	30	47 - 109	
4-Nitroaniline	8320	6010	72	3.7	30	21 - 116	
4,6-Dinitro-2-methylpheno	8320	5180	62	18	30	10 - 108	
N-Nitrosodiphenylamine	8320	7830	94	11	30	47 - 120	
4-Bromophenyl phenyl ethe	8320	7890	95	6.3	30	46 - 110	
Hexachlorobenzene	8320	8070	97	4.1	30	48 - 115	
Pentachlorophenol	8320	2790	33	20	30	11 - 110	
Phenanthrene	8320	6940	83	3.8	30	39 - 122	
Anthracene	8320	7030	84	2.8	30	46 - 111	
Di-n-butyl phthalate	8320	6940	77	4.2	30	45 - 114	
Fluoranthene	8320	5610	67	4.2	30	39 - 116	
Pyrene	8320	9120	110	5.9	30	41 - 121	
Butyl benzyl phthalate	8320	8110	97	1.0	30	44 - 121	
3,3'-Dichlorobenzidine	8320	3310	40	2.1	30	10 - 116	
Benzo(a)anthracene	8320	7090	85	0.35	30	46 - 117	
Chrysene	8320	6590	79	5.4	30	43 - 119	
bis(2-Ethylhexyl) phthala	8320	7790	94	2.0	30	43 - 118	
Di-n-octyl phthalate	8320	6650	80	7.1	30	35 - 120	
Benzo(b)fluoranthene	8320	6440	77	6.4	30	39 - 124	
Benzo(k)fluoranthene	8320	6780	81	7.6	30	43 - 131	
Benzo(a)pyrene	8320	5950	72	6.4	30	43 - 114	

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SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Matrix Spike ID: RE73-05-58829 Level:(low/med) LOW

Lot #: F5D210380 WO #: G8WXJ1AL
BATCH: 5131374

COMPOUND	SPIKE ADDED	MSD CONCENT.	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
Indeno(1,2,3-cd)pyrene	8320	6550	79	5.3	30	31- 129	
Dibenz(a,h)anthracene	8320	7720	93	3.4	30	33- 131	
Benzo(ghi)perylene	8320	7070	80	0.030	30	26- 140	

NOTES(S):

Results and reporting limits have been adjusted for dry weight.

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 59 outside limits
Spike Recovery: 0 out of 59 outside limits

COMMENTS:

FORM III

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Lot #: F5D290000 WO #: G9HAL1AC
BATCH: 5119285

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
Phenol	6670	5390	81	49 - 92	
bis(2-Chloroethyl) ether	6670	5190	78	43 - 94	
2-Chlorophenol	6670	5130	77	49 - 92	
2-Methylphenol	6670	4580	69	48 - 92	
2,2'-oxybis(1-Chloropropa	6670	4810	72	44 - 102	
3-Methylphenol & 4-Methyl	6670	4740	71	47 - 100	
N-Nitrosodi-n-propylamine	6670	5210	78	55 - 108	
Hexachloroethane	6670	3140	47	43 - 100	
Nitrobenzene	6670	4200	63	50 - 102	
Isophorone	6670	5470	82	57 - 110	
2-Nitrophenol	6670	4310	65	50 - 99	
2,4-Dimethylphenol	6670	5140	77	48 - 97	
bis(2-Chloroethoxy)methan	6670	5210	78	53 - 103	
2,4-Dichlorophenol	6670	5090	76	51 - 98	
1,2,4-Trichlorobenzene	6670	3820	57	50 - 101	
Naphthalene	6670	3930	59	52 - 102	
4-Chloroaniline	6670	1340	20*	21 - 96	a
Hexachlorobutadiene	6670	4020	60	50 - 102	
4-Chloro-3-methylphenol	6670	5080	76	52 - 100	
2-Methylnaphthalene	6670	3950	59	38 - 112	
Hexachlorocyclopentadiene	6670	4900	73	41 - 117	
2,4,6-Trichlorophenol	6670	4550	68	52 - 100	
2,4,5-Trichlorophenol	6670	5310	80	53 - 101	
2-Nitroaniline	6670	4730	71	45 - 114	
Dimethyl phthalate	6670	5250	79	55 - 105	
Acenaphthylene	6670	4280	64	56 - 107	
2,6-Dinitrotoluene	6670	5090	76	55 - 108	
3-Nitroaniline	6670	2490	37	30 - 94	
Acenaphthene	6670	3950	59	56 - 107	
2,4-Dinitrophenol	6670	4350	65	10 - 91	
4-Nitrophenol	6670	5610	84	44 - 109	

(Continued on next page)

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Lot #: F5D290000 WO #: G9HAL1AC
BATCH: 5119285

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
Dibenzofuran	6670	4040	61	46 - 108	
2,4-Dinitrotoluene	6670	5310	80	56 - 117	
Diethyl phthalate	6670	5340	80	56 - 111	
4-Chlorophenyl phenyl eth	6670	4270	64	56 - 105	
Fluorene	6670	4100	61	56 - 105	
4-Nitroaniline	6670	4640	70	42 - 109	
4,6-Dinitro-2-methylpheno	6670	6330	95	27 - 100	
N-Nitrosodiphenylamine	6670	5240	79	58 - 114	
4-Bromophenyl phenyl ethe	6670	4340	65	54 - 106	
Hexachlorobenzene	6670	3120	47*	57 - 111	a
Pentachlorophenol	6670	3010	45	37 - 102	
Phenanthrene	6670	3850	58	57 - 108	
Anthracene	6670	3900	59	55 - 107	
Di-n-butyl phthalate	6670	5040	76	55 - 109	
Fluoranthene	6670	3440	52*	56 - 106	a
Pyrene	6670	2670	40*	54 - 114	a
Butyl benzyl phthalate	6670	5300	80	55 - 115	
3,3'-Dichlorobenzidine	6670	2840	43	32 - 95	
Benzo(a)anthracene	6670	3900	58	56 - 112	
Chrysene	6670	3840	58	55 - 112	
bis(2-Ethylhexyl) phthala	6670	5160	77	53 - 112	
Di-n-octyl phthalate	6670	5330	80	49 - 112	
Benzo(b)fluoranthene	6670	3950	59	53 - 112	
Benzo(k)fluoranthene	6670	3980	60	60 - 126	
Benzo(a)pyrene	6670	1670	25*	54 - 109	a
Indeno(1,2,3-cd)pyrene	6670	2030	30*	42 - 129	a
Dibenz(a,h)anthracene	6670	4040	61	42 - 133	
Benzo(ghi)perylene	6670	177	2*	37 - 139	a

NOTES (S) :

a Spiked analyte recovery is outside stated control limits.

* Values outside of QC limits

Spike Recovery: 7 out of 59 outside limits

COMMENTS:

FORM III

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Lot #: F5E110000 WO #: HAAT21AC
BATCH: 5131374

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
Phenol	6670	5170	78	49 - 92	
bis(2-Chloroethyl) ether	6670	5040	76	43 - 94	
2-Chlorophenol	6670	5740	86	49 - 92	
2-Methylphenol	6670	5420	81	48 - 92	
2,2'-oxybis(1-Chloropropa	6670	5540	83	44 - 102	
3-Methylphenol & 4-Methyl	6670	5240	79	47 - 100	
N-Nitrosodi-n-propylamine	6670	6180	93	55 - 108	
Hexachloroethane	6670	5820	87	43 - 100	
Nitrobenzene	6670	5690	85	50 - 102	
Isophorone	6670	6000	90	57 - 110	
2-Nitrophenol	6670	5660	85	50 - 99	
2,4-Dimethylphenol	6670	5970	89	48 - 97	
bis(2-Chloroethoxy)methan	6670	5740	86	53 - 103	
2,4-Dichlorophenol	6670	5700	86	51 - 98	
1,2,4-Trichlorobenzene	6670	5900	89	50 - 101	
Naphthalene	6670	5810	87	52 - 102	
4-Chloroaniline	6670	3320	50	21 - 96	
Hexachlorobutadiene	6670	6040	91	50 - 102	
4-Chloro-3-methylphenol	6670	6060	91	52 - 100	
2-Methylnaphthalene	6670	7680	115*	38 - 112	a
Hexachlorocyclopentadiene	6670	7050	106	41 - 117	
2,4,6-Trichlorophenol	6670	5940	89	52 - 100	
2,4,5-Trichlorophenol	6670	5700	85	53 - 101	
2-Nitroaniline	6670	5450	82	45 - 114	
Dimethyl phthalate	6670	5890	88	55 - 105	
Acenaphthylene	6670	6350	95	56 - 107	
2,6-Dinitrotoluene	6670	5740	86	55 - 108	
3-Nitroaniline	6670	3420	51	30 - 94	
Acenaphthene	6670	5810	87	56 - 107	
2,4-Dinitrophenol	6670	2680	40	10 - 91	
4-Nitrophenol	6670	5720	86	44 - 109	

(Continued on next page)

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Lot #: F5E110000 WO #: HAAT21AC
BATCH: 5131374

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
Dibenzofuran	6670	5710	86	46 - 108	
2,4-Dinitrotoluene	6670	5780	87	56 - 117	
Diethyl phthalate	6670	5930	89	56 - 111	
4-Chlorophenyl phenyl eth	6670	6040	91	56 - 105	
Fluorene	6670	6030	90	56 - 105	
4-Nitroaniline	6670	5360	80	42 - 109	
4,6-Dinitro-2-methylpheno	6670	5360	80	27 - 100	
N-Nitrosodiphenylamine	6670	6520	98	58 - 114	
4-Bromophenyl phenyl ethe	6670	5970	90	54 - 106	
Hexachlorobenzene	6670	6170	93	57 - 111	
Pentachlorophenol	6670	3560	53	37 - 102	
Phenanthrene	6670	5640	85	57 - 108	
Anthracene	6670	5700	85	55 - 107	
Di-n-butyl phthalate	6670	5700	86	55 - 109	
Fluoranthene	6670	5300	79	56 - 106	
Pyrene	6670	5710	86	54 - 114	
Butyl benzyl phthalate	6670	5920	89	55 - 115	
3,3'-Dichlorobenzidine	6670	4080	61	32 - 95	
Benzo(a)anthracene	6670	5640	85	56 - 112	
Chrysene	6670	5710	86	55 - 112	
bis(2-Ethylhexyl) phthala	6670	5720	86	53 - 112	
Di-n-octyl phthalate	6670	6060	91	49 - 112	
Benzo(b)fluoranthene	6670	6130	92	53 - 112	
Benzo(k)fluoranthene	6670	5960	89	60 - 126	
Benzo(a)pyrene	6670	5760	86	54 - 109	
Indeno(1,2,3-cd)pyrene	6670	5380	81	42 - 129	
Dibenz(a,h)anthracene	6670	5610	84	42 - 133	
Benzo(ghi)perylene	6670	4370	66	37 - 139	

NOTES(S):

a Spiked analyte recovery is outside stated control limits.

* Values outside of QC limits

Spike Recovery: 1 out of 59 outside limits

COMMENTS:

FORM III

SW846 8270C METHOD BLANK SUMMARY

BLANK WORKORDER NO.: G9HAL1AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: STLSTL — SDG Number: F5D210380

Lab File ID: KBLK3007 — Lot Number: F5D210380

Date Analyzed: 05/09/05 — Time Analyzed: 18:37

Matrix: SOLID — Date Extracted: 04/29/05

GC Column: RTX-5MS ID: .25 — Extraction Method: 3550B

Instrument ID: MSK — Level: (low/med) LOW

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS, LCSD, MS , MSD:

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	INTRA-LAB QC	G8QE31A9	KSMP3021	05/10/05	02:03
02	LAB MS/MSD	G8QE31CW S	KSMP3022	05/10/05	02:35
03	LAB MS/MSD	G8QE31CX D	KSMP3023	05/10/05	03:06
04	RE73-05-58829	G8WXJ1AD	KSMP3042	05/10/05	17:46
05	RE73-05-58829	G8WXJ1AH S	KSMP3043	05/10/05	18:19
06	RE73-05-58829	G8WXJ1AJ D	KSMP3044	05/10/05	18:51
07	RE73-05-58835	G8WXV1AD	KSMP3024	05/10/05	03:38
08	RE73-05-58841	G8WXX1AD	KSMP3045	05/10/05	19:23
09	CHECK SAMPLE	G9HAL1AC C	KLCS3008	05/09/05	19:09
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COMMENTS:

FORM IV

SW846 8270C METHOD BLANK SUMMARY

BLANK WORKORDER NO.: HAAT21AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: STLSTL — SDG Number: F5D210380

Lab File ID: KBLK3104 — Lot Number: F5D210380

Date Analyzed: 05/12/05 — Time Analyzed: 18:00

Matrix: SOLID — Date Extracted: 05/11/05

GC Column: RTX-5MS ID: .25 — Extraction Method: 3550B

Instrument ID: MSK — Level: (low/med) LOW

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS, LCSD, MS , MSD:

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	RE73-05-58829	G8WXJ1AK S	KSMP3113	05/12/05	22:46
02	RE73-05-58829	G8WXJ1AL D	KSMP3114	05/12/05	23:18
03	RE73-05-58829	G8WXJ2AD	KSMP3112	05/12/05	22:14
04	RE73-05-58835	G8WXV2AD	KSMP3147	05/14/05	14:45
05	RE73-05-58841	G8WXX2AD	KSMP3148	05/14/05	15:17
06	CHECK SAMPLE	HAAT21AC C	KLCS3105	05/12/05	18:32
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COMMENTS:

FORM IV

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D210380

Lab File ID: KDFT2578 DFTPP Injection Date: 04/28/05

Instrument ID: MSK DFTPP Injection Time: 1120

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	45.2
68	Less than 2.0% of mass 69	0.5 (0.9)1
69	Mass 69 relative abundance	52.5
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	47.7
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.4
275	10.0 - 30.0% of mass 198	27.3
365	Greater than 1.0% of mass 198	4.0
441	Present, but less than mass 443	10.8
442	Greater than 40.0% of mass 198	82.7
443	17.0 - 23.0% of mass 442	15.1 (18.3)2

1-Value is % of mass 69 2-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050APPIX	SSTD050APPIX	KCAL2579	04/28/05	1141
02	SSTD200APPIX	SSTD200APPIX	KCAL2580	04/28/05	1215
03	SSTD160APPIX	SSTD160APPIX	KCAL2581	04/28/05	1250
04	SSTD120APPIX	SSTD120APPIX	KCAL2582	04/28/05	1324
05	SSTD080APPIX	SSTD080APPIX	KCAL2583	04/28/05	1359
06	SSTD020APPIX	SSTD020APPIX	KCAL2584	04/28/05	1433
07	SSTD010APPIX	SSTD010APPIX	KCAL2585	04/28/05	1508
08	SSTD002APPIX	SSTD002APPIX	KCAL2586	04/28/05	1542
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5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D210380

Lab File ID: KDFT2993 DFTPP Injection Date: 05/09/05

Instrument ID: MSK DFTPP Injection Time: 1140

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	46.8
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	55.2
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	48.4
197	Less than 1.0% of mass 198	0.4
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.3
275	10.0 - 30.0% of mass 198	25.1
365	Greater than 1.0% of mass 198	3.2
441	Present, but less than mass 443	10.1
442	Greater than 40.0% of mass 198	59.4
443	17.0 - 23.0% of mass 442	12.1 (20.4)2

1-Value is % of mass 69 2-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	SSTD050	KCAL2994	05/09/05	1201
02	SSTD160	SSTD160	KCAL2995	05/09/05	1233
03	SSTD120	SSTD120	KCAL2996	05/09/05	1304
04	SSTD080	SSTD080	KCAL2997	05/09/05	1336
05	SSTD020	SSTD020	KCAL2998	05/09/05	1408
06	SSTD010	SSTD010	KCAL2999	05/09/05	1440
07	SSTD002	SSTD002	KCAL3000	05/09/05	1512
08	SSTD050 ICV	SSTD050 ICV	KCAL3001	05/09/05	1544
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5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D210380

Lab File ID: KDFT3002 DFTPP Injection Date: 05/09/05

Instrument ID: MSK DFTPP Injection Time: 1609

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	46.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	53.8
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	49.6
197	Less than 1.0% of mass 198	0.2
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.8
275	10.0 - 30.0% of mass 198	27.3
365	Greater than 1.0% of mass 198	3.4
441	Present, but less than mass 443	11.7
442	Greater than 40.0% of mass 198	69.6
443	17.0 - 23.0% of mass 442	12.9 (18.5)2

1-Value is % of mass 69 2-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	SSTD050	KCAL3003	05/09/05	1630
02	SSTD050APPIX	SSTD050APPIX	KCAL3004	05/09/05	1702
03	SVBLKK129A	G9HAL1AA	KBLK3007	05/09/05	1837
04	SVLCSK129A	G9HAL1AC	KLCS3008	05/09/05	1909
05					
06					
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5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D210380

Lab File ID: KDFT3031 DFTPP Injection Date: 05/10/05

Instrument ID: MSK DFTPP Injection Time: 1159

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	47.5
68	Less than 2.0% of mass 69	0.5 (0.8)1
69	Mass 69 relative abundance	54.9
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	49.1
197	Less than 1.0% of mass 198	0.3
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	7.0
275	10.0 - 30.0% of mass 198	26.6
365	Greater than 1.0% of mass 198	3.5
441	Present, but less than mass 443	9.4
442	Greater than 40.0% of mass 198	65.8
443	17.0 - 23.0% of mass 442	11.8 (17.9)2

1-Value is % of mass 69 2-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	SSTD050	KCAL3033	05/10/05	1253
02	58829	G8WXJ1AD	KSMP3042	05/10/05	1746
03	58829MS	G8WXJ1AH	KSMP3043	05/10/05	1819
04	58829MSD	G8WXJ1AJ	KSMP3044	05/10/05	1851
05	58841	G8WXX1AD	KSMP3045	05/10/05	1923
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5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D210380

Lab File ID: KDFT3092 DFTPP Injection Date: 05/12/05

Instrument ID: MSK DFTPP Injection Time: 1148

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	44.7
68	Less than 2.0% of mass 69	0.8 (1.5)1
69	Mass 69 relative abundance	54.0
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	49.0
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	7.0
275	10.0 - 30.0% of mass 198	26.2
365	Greater than 1.0% of mass 198	3.1
441	Present, but less than mass 443	10.3
442	Greater than 40.0% of mass 198	67.1
443	17.0 - 23.0% of mass 442	12.3 (18.3)2

1-Value is % of mass 69 2-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	SSTD050	KCAL3094	05/12/05	1241
02	SVBLKK132D	HAAT21AA	KBLK3104	05/12/05	1800
03	SVLCSK132E	HAAT21AC	KLCS3105	05/12/05	1832
04	58829RE	G8WXJ2AD	KSMP3112	05/12/05	2214
05	58829REMS	G8WXJ1AK	KSMP3113	05/12/05	2246
06	58829REMSD	G8WXJ1AL	KSMP3114	05/12/05	2318
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5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D210380

Lab File ID: KDFT3125 DFTPP Injection Date: 05/13/05

Instrument ID: MSK DFTPP Injection Time: 1049

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	39.3
68	Less than 2.0% of mass 69	0.3 (0.6)1
69	Mass 69 relative abundance	49.1
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	44.7
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.5
275	10.0 - 30.0% of mass 198	26.3
365	Greater than 1.0% of mass 198	3.3
441	Present, but less than mass 443	12.5
442	Greater than 40.0% of mass 198	74.4
443	17.0 - 23.0% of mass 442	13.5 (18.1)2

1-Value is % of mass 69 2-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	SSTD050	KCAL3128	05/13/05	1214
02	SSTD160	SSTD160	KCAL3129	05/13/05	1318
03	SSTD120	SSTD120	KCAL3130	05/13/05	1350
04	SSTD080	SSTD080	KCAL3131	05/13/05	1422
05	SSTD020	SSTD020	KCAL3132	05/13/05	1454
06	SSTD010	SSTD010	KCAL3133	05/13/05	1526
07	SSTD002	SSTD002	KCAL3134	05/13/05	1558
08	SSTD050ICV	SSTD050ICV	KCAL3135	05/13/05	1630
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10					
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5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D210380

Lab File ID: KDFT3136 DFTPP Injection Date: 05/14/05

Instrument ID: MSK DFTPP Injection Time: 0836

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	38.2
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	46.1
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	45.9
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.2
275	10.0 - 30.0% of mass 198	28.6
365	Greater than 1.0% of mass 198	4.0
441	Present, but less than mass 443	13.5
442	Greater than 40.0% of mass 198	81.8
443	17.0 - 23.0% of mass 442	15.5 (18.9)2

1-Value is % of mass 69 2-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	SSTD050	KCAL3140	05/14/05	1032
02	SSTD050ICV	SSTD050ICV	KCAL3139A	05/14/05	1135
03	58835RE	G8WXV2AD	KSMP3147	05/14/05	1445
04	58841RE	G8WXX2AD	KSMP3148	05/14/05	1517
05					
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8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D210380

Lab File ID (Standard): KCAL3003 Date Analyzed: 05/09/05

Instrument ID: MSK Time Analyzed: 1630

		IS1 (ANT) AREA #	RT	IS2 (DCB) AREA #	RT	IS3 (CRY) AREA #	RT
	12 HOUR STD	276841	8.83	138615	4.56	445673	16.65
	UPPER LIMIT	553682	9.33	277230	5.06	891346	17.15
	LOWER LIMIT	138421	8.33	69308	4.06	222837	16.15
	EPA SAMPLE NO.						
01	SVBLKK129A	229870	8.82	114522	4.55	316826	16.64
02	SVLCSK129A	290157	8.82	171483	4.56	334742	16.65
03							
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IS1 (ANT) = Acenaphthene-d10
IS2 (DCB) = 1,4-Dichlorobenzene-d4
IS3 (CRY) = Chrysene-d12

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk.

FORM VIII SV-1 1/87 Rev.

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D210380

Lab File ID (Standard): KCAL3003 Date Analyzed: 05/09/05

Instrument ID: MSK Time Analyzed: 1630

		IS4 (NPT) AREA #	RT	IS5 (PRY) AREA #	RT	IS6 (PHN) AREA #	RT
	12 HOUR STD	492644	6.14	381519	19.27	505686	11.49
	UPPER LIMIT	985288	6.64	763038	19.77	1011372	11.99
	LOWER LIMIT	246322	5.64	190760	18.77	252843	10.99
	EPA SAMPLE NO.						
01	SVBLKK129A	409624	6.13	277586	19.25	374225	11.48
02	SVLCSK129A	565666	6.14	253365	19.25	455143	11.48
03							
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22							

IS4 (NPT) = Naphthalene-d8
IS5 (PRY) = Perylene-d12
IS6 (PHN) = Phenanthrene-d10

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk.

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D210380

Lab File ID (Standard): KCAL3033 Date Analyzed: 05/10/05

Instrument ID: MSK Time Analyzed: 1253

		IS1 (ANT) AREA #	RT	IS2 (DCB) AREA #	RT	IS3 (CRY) AREA #	RT
	12 HOUR STD	251365	8.79	121829	4.53	406157	16.62
	UPPER LIMIT	502730	9.29	243658	5.03	812314	17.12
	LOWER LIMIT	125683	8.29	60915	4.03	203079	16.12
	EPA SAMPLE NO.						
01	58829	193700	8.79	101748	4.53	195083*	16.60
02	58829MS	232741	8.79	115213	4.54	232277	16.62
03	58829MSD	199101	8.80	101813	4.54	191878*	16.63
04	58841	234889	8.80	119392	4.54	218686	16.63
05							
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22							

IS1 (ANT) = Acenaphthene-d10
IS2 (DCB) = 1,4-Dichlorobenzene-d4
IS3 (CRY) = Chrysene-d12

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk.

8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D210380

Lab File ID (Standard): KCAL3033 Date Analyzed: 05/10/05

Instrument ID: MSK Time Analyzed: 1253

		IS4(NPT) AREA #	RT	IS5(PRY) AREA #	RT	IS6(PHN) AREA #	RT
	12 HOUR STD	427782	6.12	339675	19.22	466667	11.45
	UPPER LIMIT	855564	6.62	679350	19.72	933334	11.95
	LOWER LIMIT	213891	5.62	169838	18.72	233334	10.95
	EPA SAMPLE NO.						
01	58829	369586	6.11	167760*	19.21	324690	11.44
02	58829MS	415838	6.12	212615	19.23	401772	11.45
03	58829MSD	356343	6.12	164866*	19.24	338364	11.46
04	58841	429023	6.12	189817	19.24	388802	11.46
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IS4 (NPT) = Naphthalene-d8
IS5 (PRY) = Perylene-d12
IS6 (PHN) = Phenanthrene-d10

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk.

FORM VIII SV-2 1/87 Rev.

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D210380

Lab File ID (Standard): KCAL3094 Date Analyzed: 05/12/05

Instrument ID: MSK Time Analyzed: 1241

		IS1 (ANT) AREA #	RT	IS2 (DCB) AREA #	RT	IS3 (CRY) AREA #	RT
	12 HOUR STD	335274	8.80	167849	4.54	548402	16.63
	UPPER LIMIT	670548	9.30	335698	5.04	1096804	17.13
	LOWER LIMIT	167637	8.30	83925	4.04	274201	16.13
	EPA SAMPLE NO.						
01	SVBLKK132D	275418	8.78	144365	4.53	386698	16.60
02	SVLCSK132E	375784	8.79	209213	4.53	471640	16.62
03	58829RE	341418	8.78	187242	4.53	257673*	16.60
04	58829REMS	425122	8.79	264668	4.54	291252	16.62
05	58829REMSD	310622	8.78	185682	4.53	224481*	16.60
06							
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IS1 (ANT) = Acenaphthene-d10
IS2 (DCB) = 1,4-Dichlorobenzene-d4
IS3 (CRY) = Chrysene-d12

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk.

FORM VIII SV-1 1/87 Rev.

8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D210380

Lab File ID (Standard): KCAL3094 Date Analyzed: 05/12/05

Instrument ID: MSK Time Analyzed: 1241

		IS4(NPT) AREA #	RT	IS5(PRY) AREA #	RT	IS6(PHN) AREA #	RT
	12 HOUR STD	587608	6.12	477098	19.23	627534	11.46
	UPPER LIMIT	1175216	6.62	954196	19.73	1255068	11.96
	LOWER LIMIT	293804	5.62	238549	18.73	313767	10.96
	EPA SAMPLE NO.						
01	SVBLKK132D	517624	6.10	329928	19.22	467610	11.44
02	SVLCSK132E	714988	6.11	349220	19.23	642751	11.45
03	58829RE	669547	6.11	226147*	19.22	503303	11.44
04	58829REMS	907172	6.12	232621*	19.23	632630	11.45
05	58829REMSD	637307	6.11	193051*	19.21	493193	11.44
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IS4 (NPT) = Naphthalene-d8
IS5 (PRY) = Perylene-d12
IS6 (PHN) = Phenanthrene-d10

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk.

FORM VIII SV-2 1/87 Rev.

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D210380

Lab File ID (Standard): KCAL3140 Date Analyzed: 05/14/05

Instrument ID: MSK Time Analyzed: 1032

		IS1 (ANT) AREA #	RT	IS2 (DCB) AREA #	RT	IS3 (CRY) AREA #	RT
	12 HOUR STD	342243	8.75	175542	4.51	515242	16.56
	UPPER LIMIT	684486	9.25	351084	5.01	1030484	17.06
	LOWER LIMIT	171122	8.25	87771	4.01	257621	16.06
	EPA SAMPLE NO.						
01	58835RE	305764	8.76	150230	4.52	361484	16.57
02	58841RE	343124	8.75	174812	4.51	364207	16.56
03							
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22							

IS1 (ANT) = Acenaphthene-d10
IS2 (DCB) = 1,4-Dichlorobenzene-d4
IS3 (CRY) = Chrysene-d12

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk.

8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D210380

Lab File ID (Standard): KCAL3140 Date Analyzed: 05/14/05

Instrument ID: MSK Time Analyzed: 1032

		IS4 (NPT) AREA #	RT	IS5 (PRY) AREA #	RT	IS6 (PHN) AREA #	RT
	12 HOUR STD	614562	6.09	429113	19.17	614709	11.41
	UPPER LIMIT	1229124	6.59	858226	19.67	1229418	11.91
	LOWER LIMIT	307281	5.59	214557	18.67	307355	10.91
	EPA SAMPLE NO.						
01	58835RE	548643	6.09	276852	19.18	513022	11.41
02	58841RE	634803	6.08	293381	19.17	576002	11.40
03							
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22							

IS4 (NPT) = Naphthalene-d8
IS5 (PRY) = Perylene-d12
IS6 (PHN) = Phenanthrene-d10

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk.

GC/MS STANDARDS DATA
SEMIVOLATILES

STL ST. LOUIS

DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	45.22		PASS
68	Less than 2% of mass 69	0.49	(0.93)	PASS
69	Mass 69 relative abundance	52.53		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	47.71		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.42		PASS
275	10 - 30% of mass 198	27.32		PASS
365	Greater than 1% of mass 198	4.06		PASS
441	Present, but less than mass 443	10.78	(71.35)	PASS
442	Greater than 40% of mass 198	82.70		PASS
443	17 - 23% of mass 442	15.10	(18.26)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.1570776	5.000	PASS
Benzidine	1.0036036	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	165399			N/A
4,4-DDE	11531	6.5	15.0	PASS
4,4-DDD	1112	0.7	15.0	PASS
4,4-DDD + DDE	12643	7.1	15.0	PASS

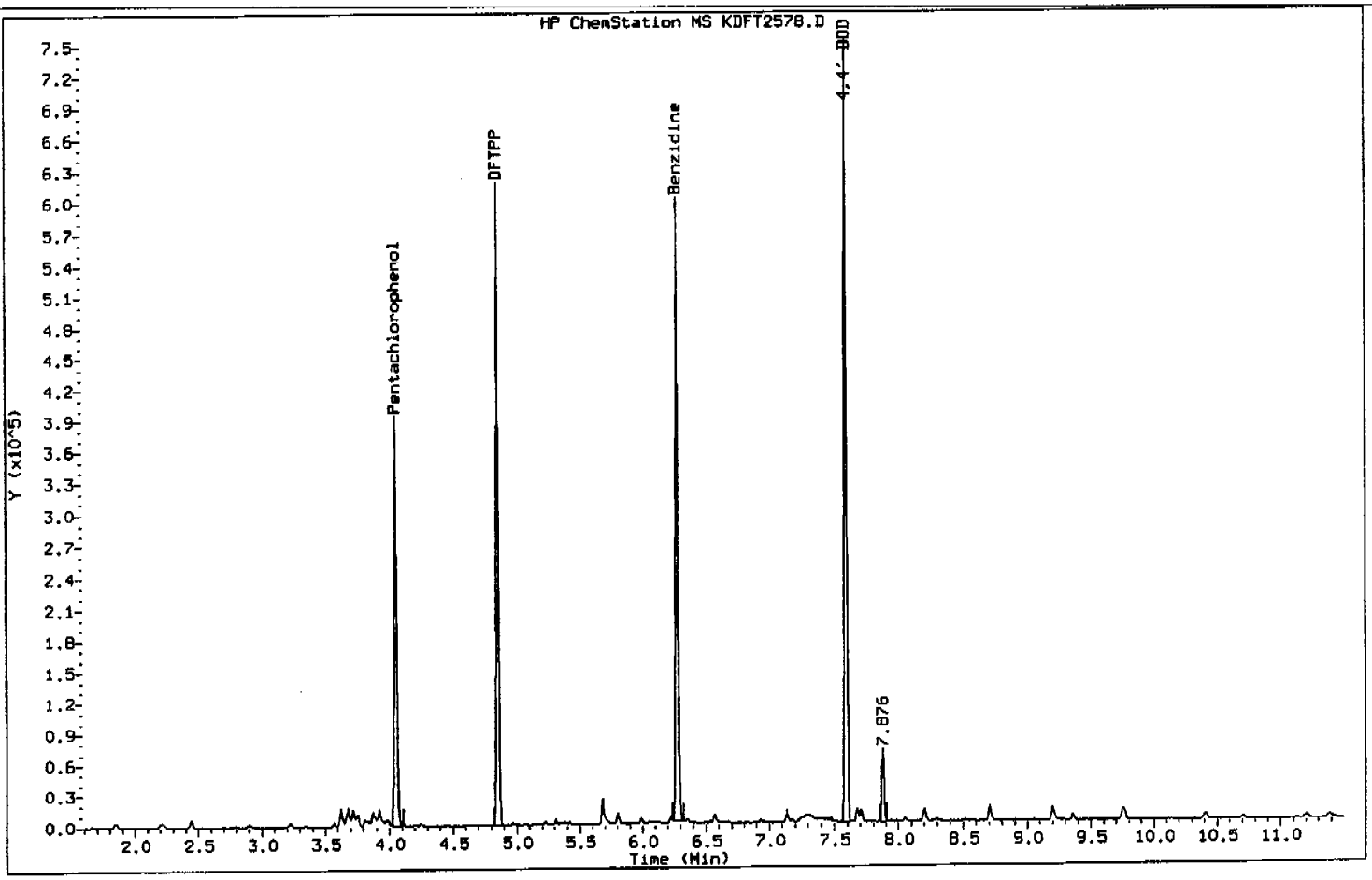
********** Tuning Sample, //Slsvr01/BNA_LAB/MSK.i/K050428B.B/KDFT2578.D/KDFT2578.D,*** PASSED **********

04/28/05

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

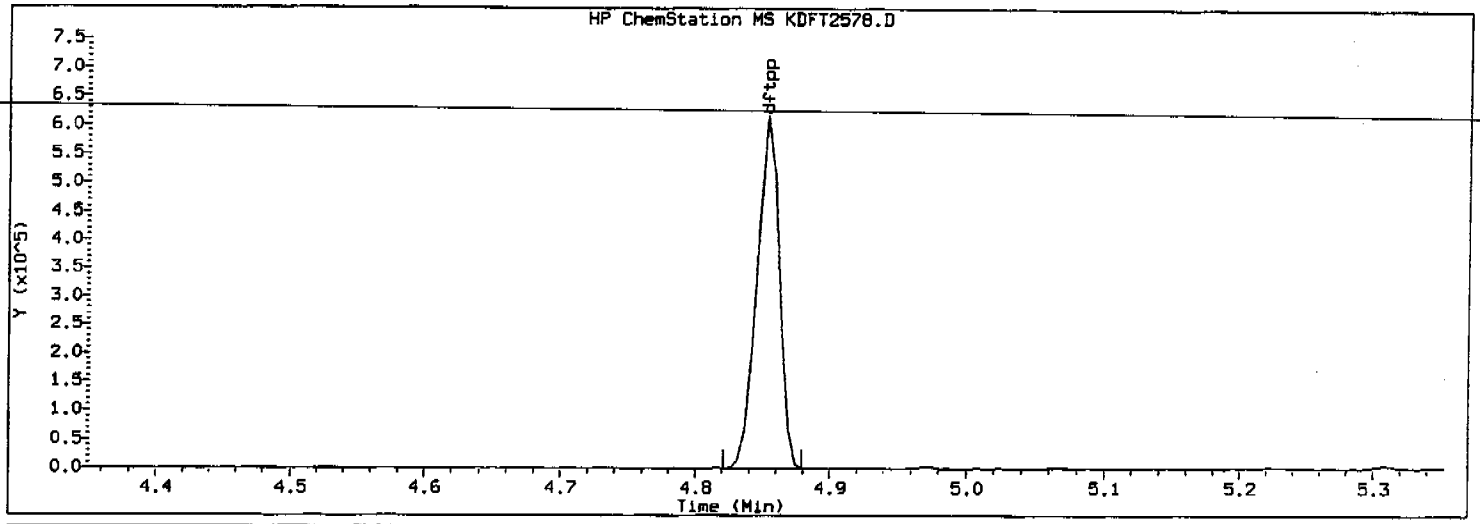
Report Date: 04/28/2005 15:23

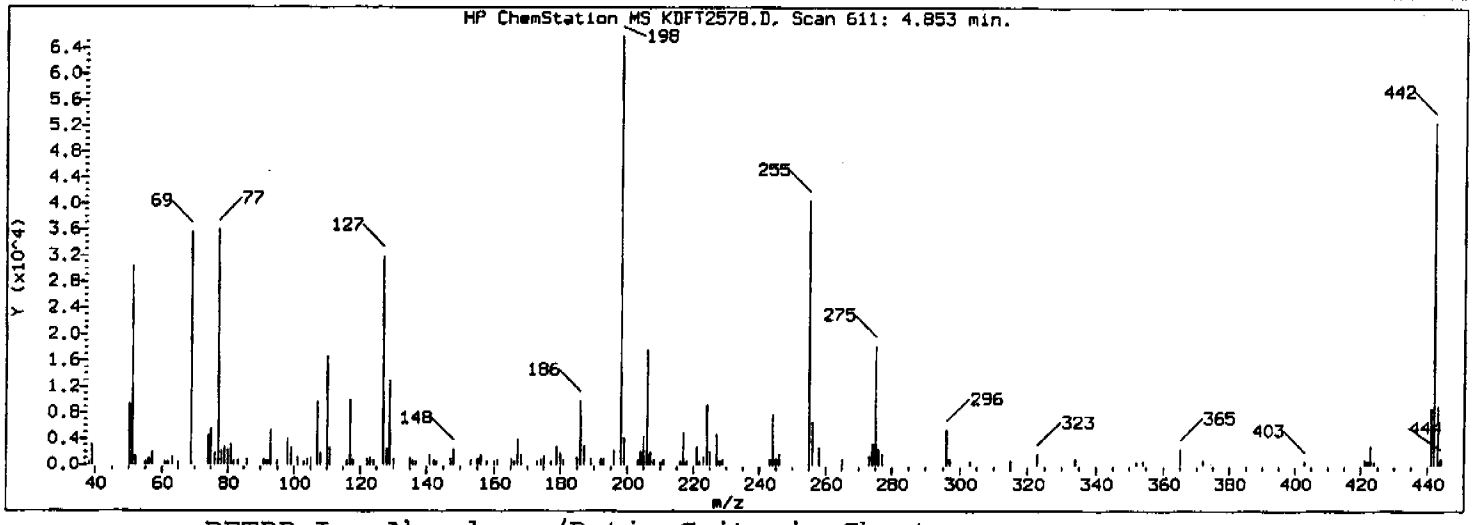
Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050428B.B/KDFT2578.D/KDFT2578.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050428B.B\sw846tun.m Inst: MSK
Injection Date: 28-APR-2005 11:20 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0193-05 (50NG)



Report Date: 04/28/2005 15:23

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050428B.B/KDFT2578.D/KDFT2578.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050428B.B\sw846tun.m Inst: MSK
Injection Date: 28-APR-2005 11:20 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0193-05 (50NG)



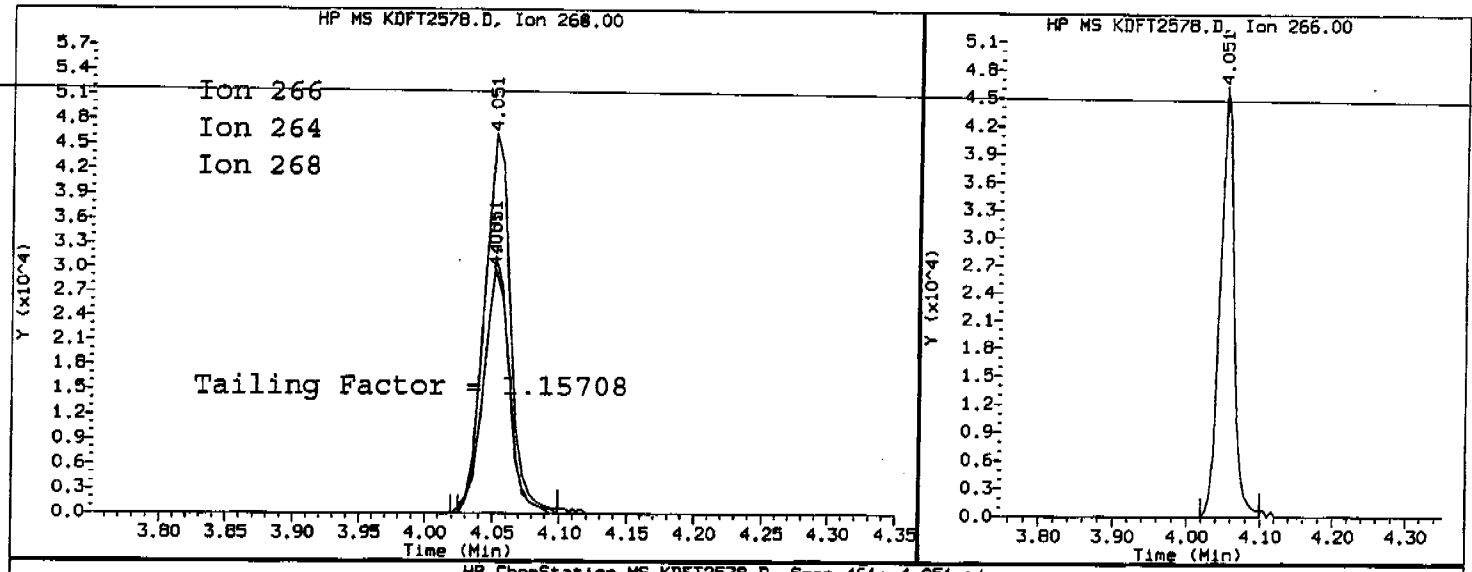


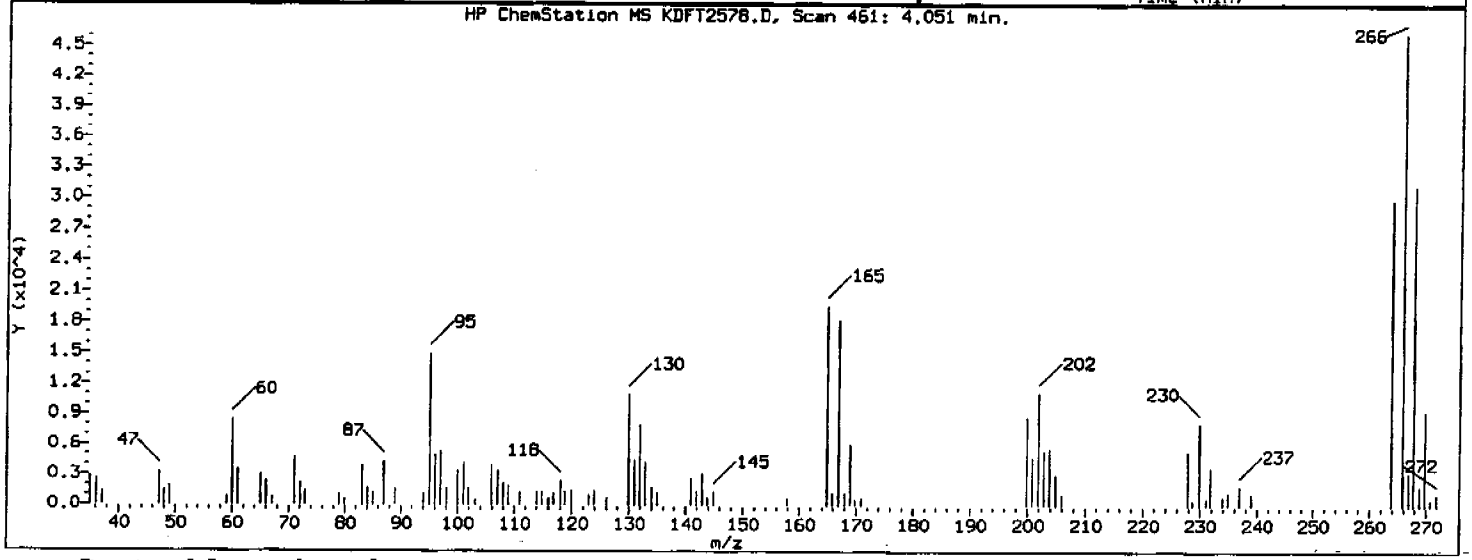
DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	45.22		PASS
68	Less than 2% of mass 69	0.49	(0.93)	PASS
69	Mass 69 relative abundance	52.53		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	47.71		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.42		PASS
275	10 - 30% of mass 198	27.32		PASS
365	Greater than 1% of mass 198	4.06		PASS
441	Present, but less than mass 443	10.78	(71.35)	PASS
442	Greater than 40% of mass 198	82.70		PASS
443	17 - 23% of mass 442	15.10	(18.26)	PASS

Report Date: 04/28/2005 15:23

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050428B.B/KDFT2578.D/KDFT2578.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050428B.B\sw846tun.m\resolut.m Inst:
Injection Date: 28-APR-2005 11:20 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)





Pentachlorophenol
==========

Exp. RT = 4.063
Found RT = 4.051

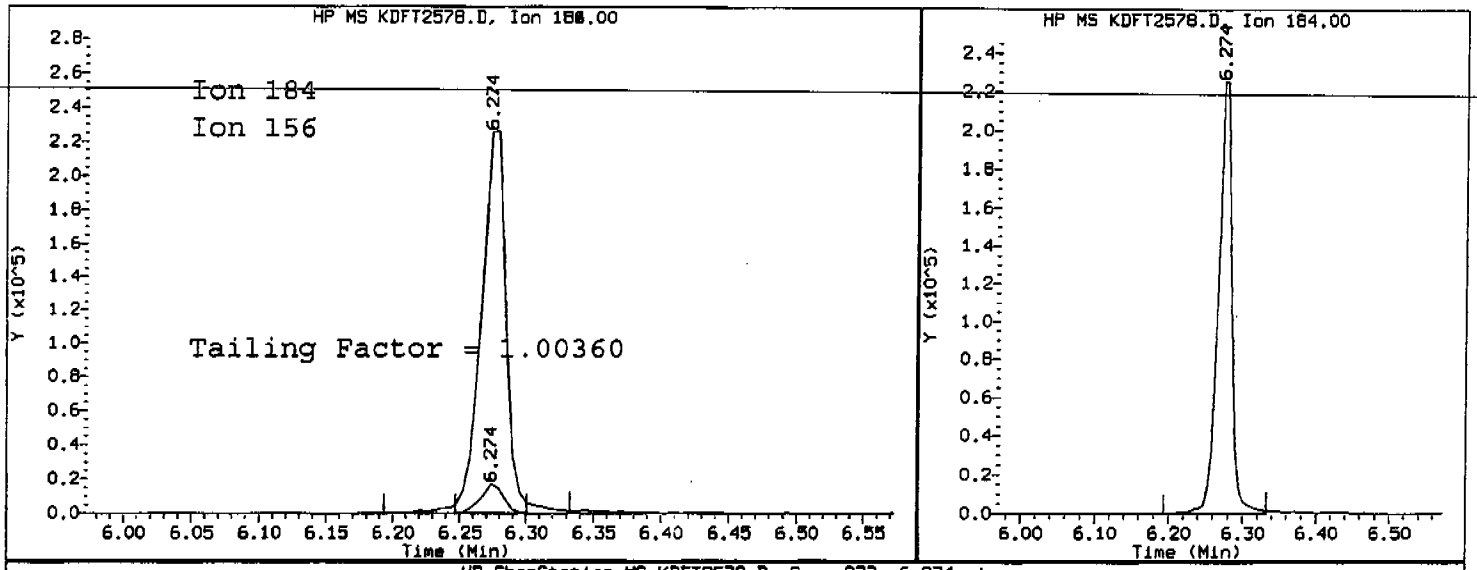
Mass	Area	Ratio
266	62964	100.00
264	39801	63.21
268	41066	65.22

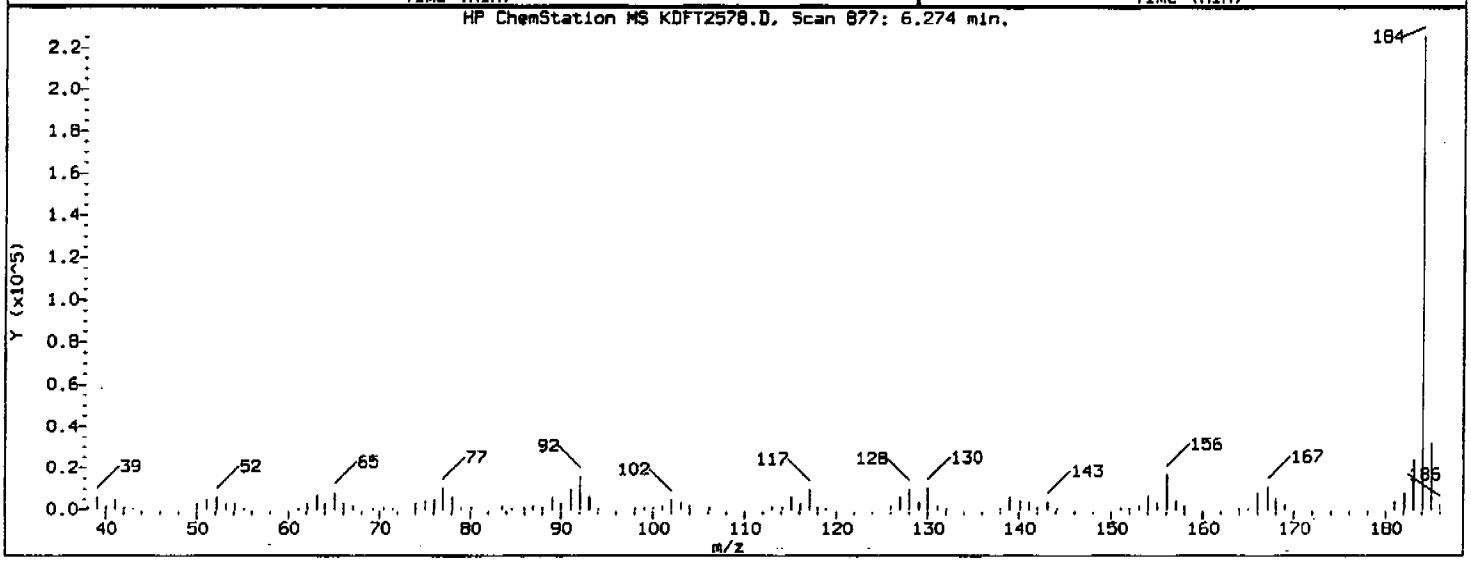
Tailing factor for Pentachlorophenol OK

Tail Factor = 1.157 Maximum Allowed = 5.0

Report Date: 04/28/2005 15:23

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050428B.B/KDFT2578.D/KDFT2578.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050428B.B\sw846tun.m\resolut.m Inst:
Injection Date: 28-APR-2005 11:20 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)





Benzidine
=========

Exp. RT = 6.285
Found RT = 6.274

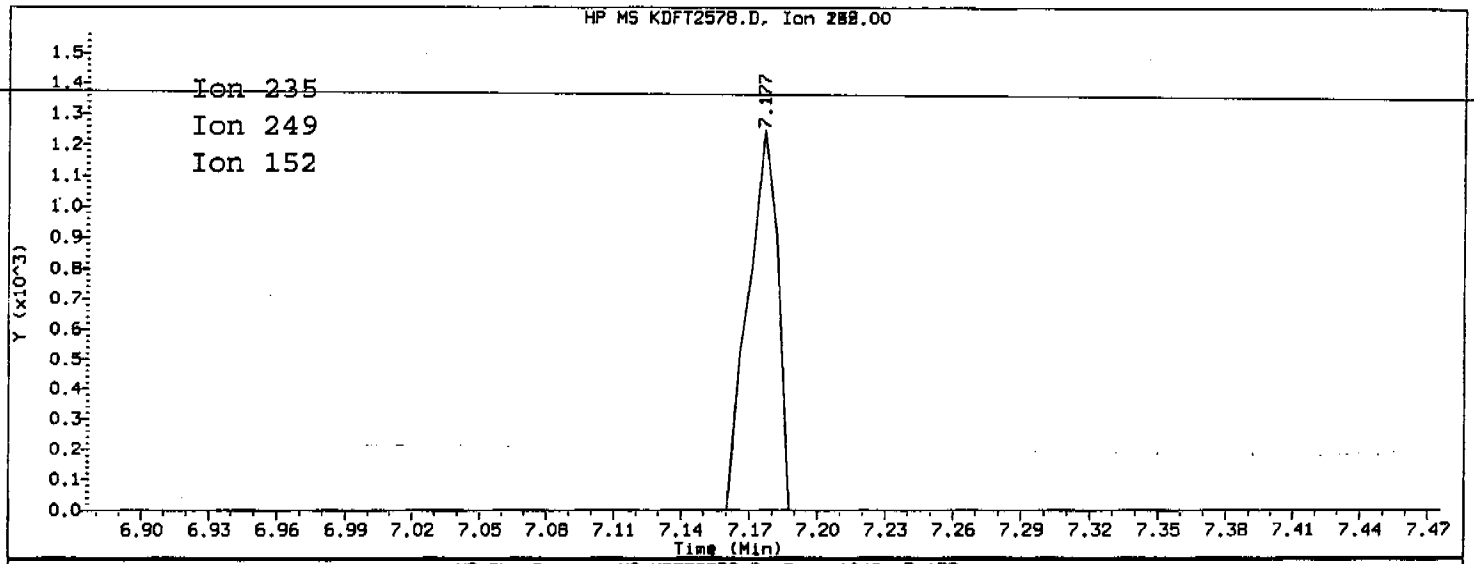
Mass	Area	Ratio
184	297080	100.00
156	20138	6.78

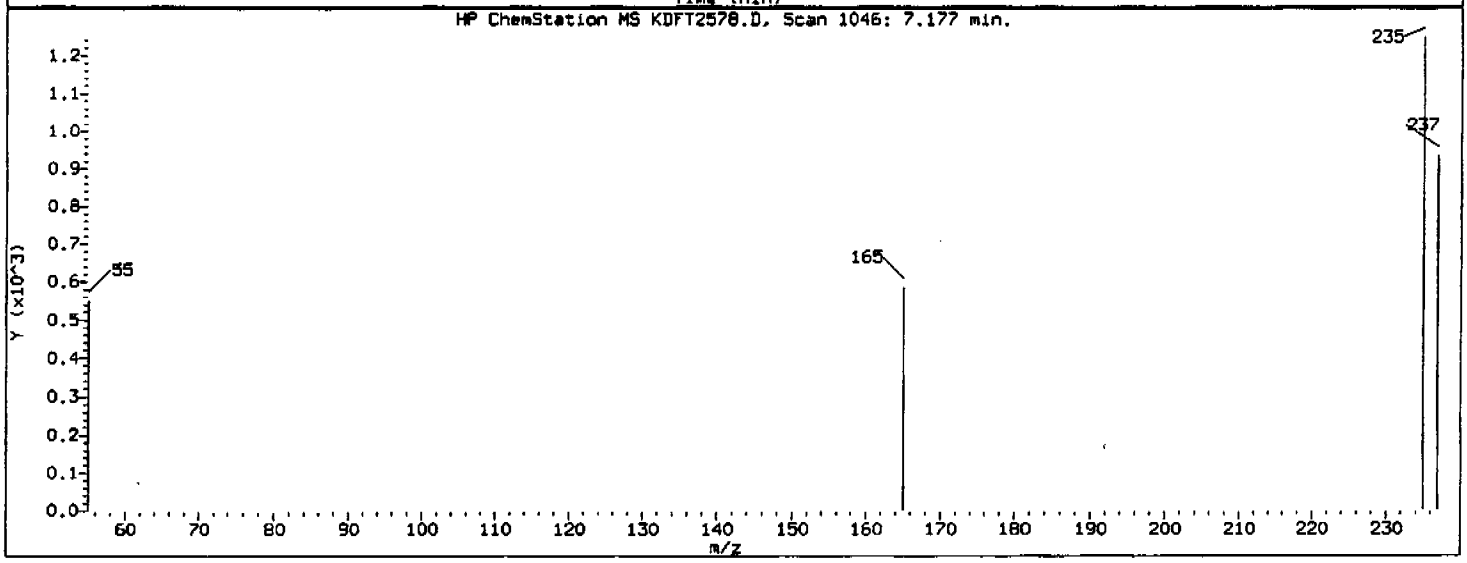
Tailing factor for Benzidine OK

Tail Factor = 1.004 Maximum Allowed = 3.0

Report Date: 04/28/2005 15:23

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050428B.B/KDFT2578.D/KDFT2578.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050428B.B\sw846tun.m\resolut.m Inst:
Injection Date: 28-APR-2005 11:20 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)





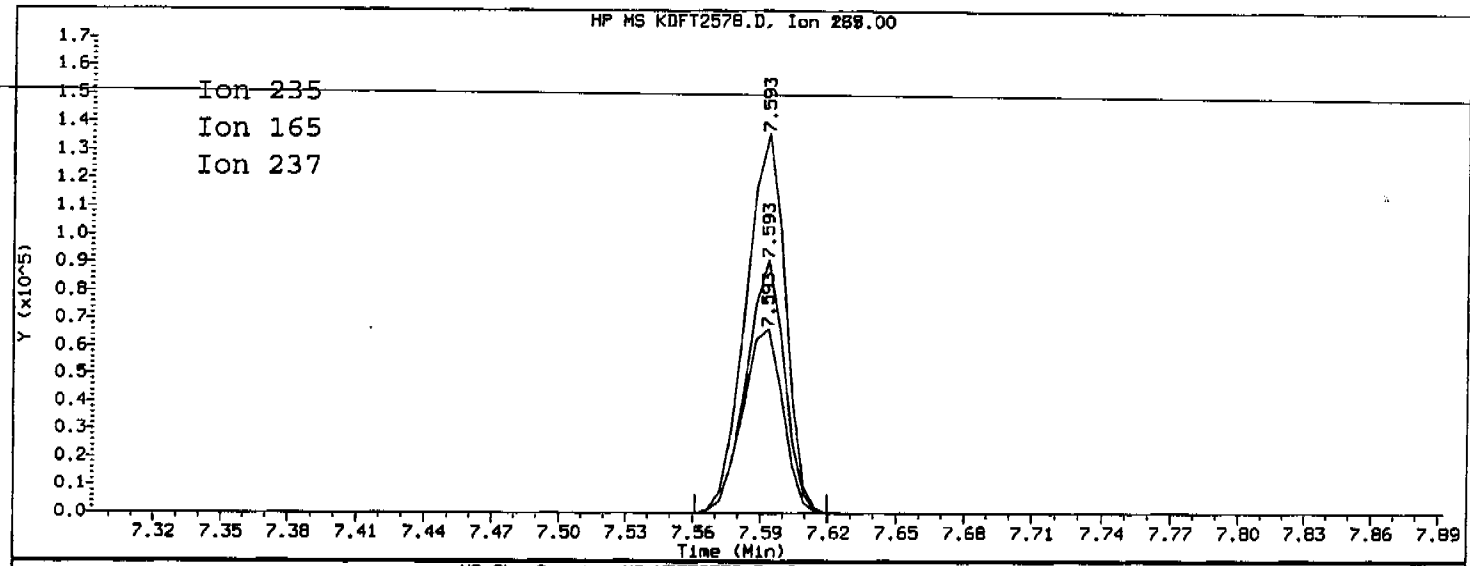
4,4'-DDD

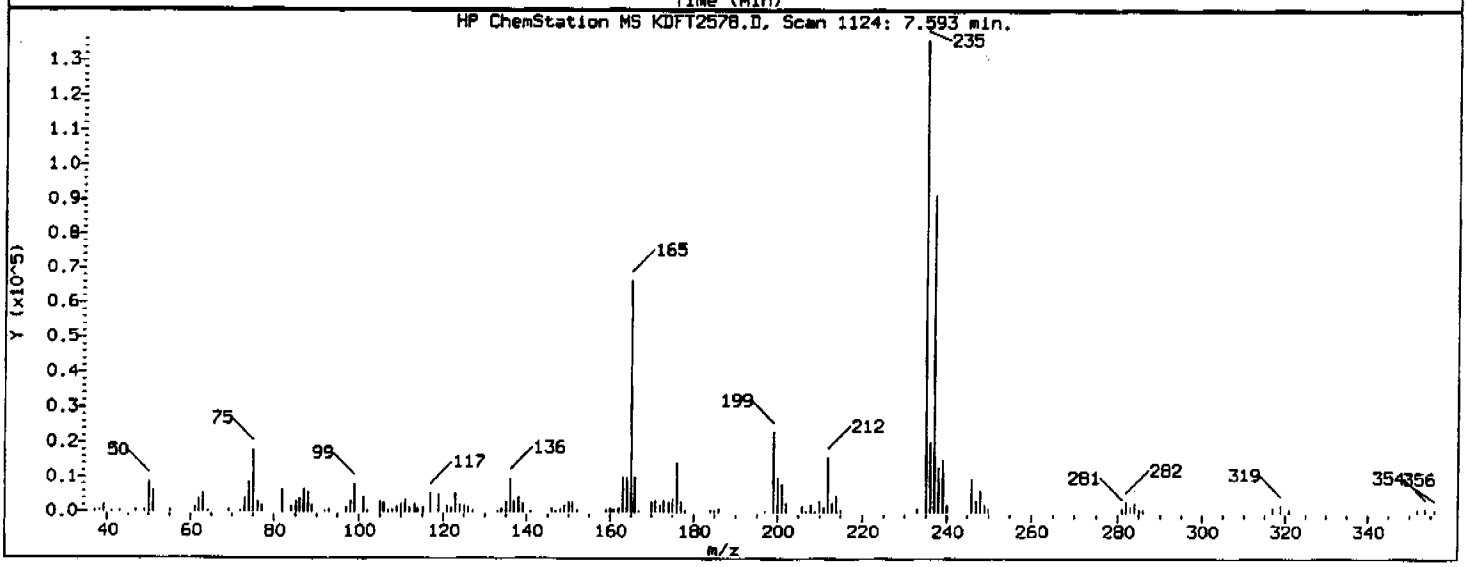
Exp. RT = 6.734
Found RT = 7.177

Mass	Area	Ratio
235	1112	100.00
249	0	0.00
152	1277	114.77

Report Date: 04/28/2005 15:23

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050428B.B/KDFT2578.D/KDFT2578.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050428B.B\sw846tun.m\resolut.m Inst:
Injection Date: 28-APR-2005 11:20 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)





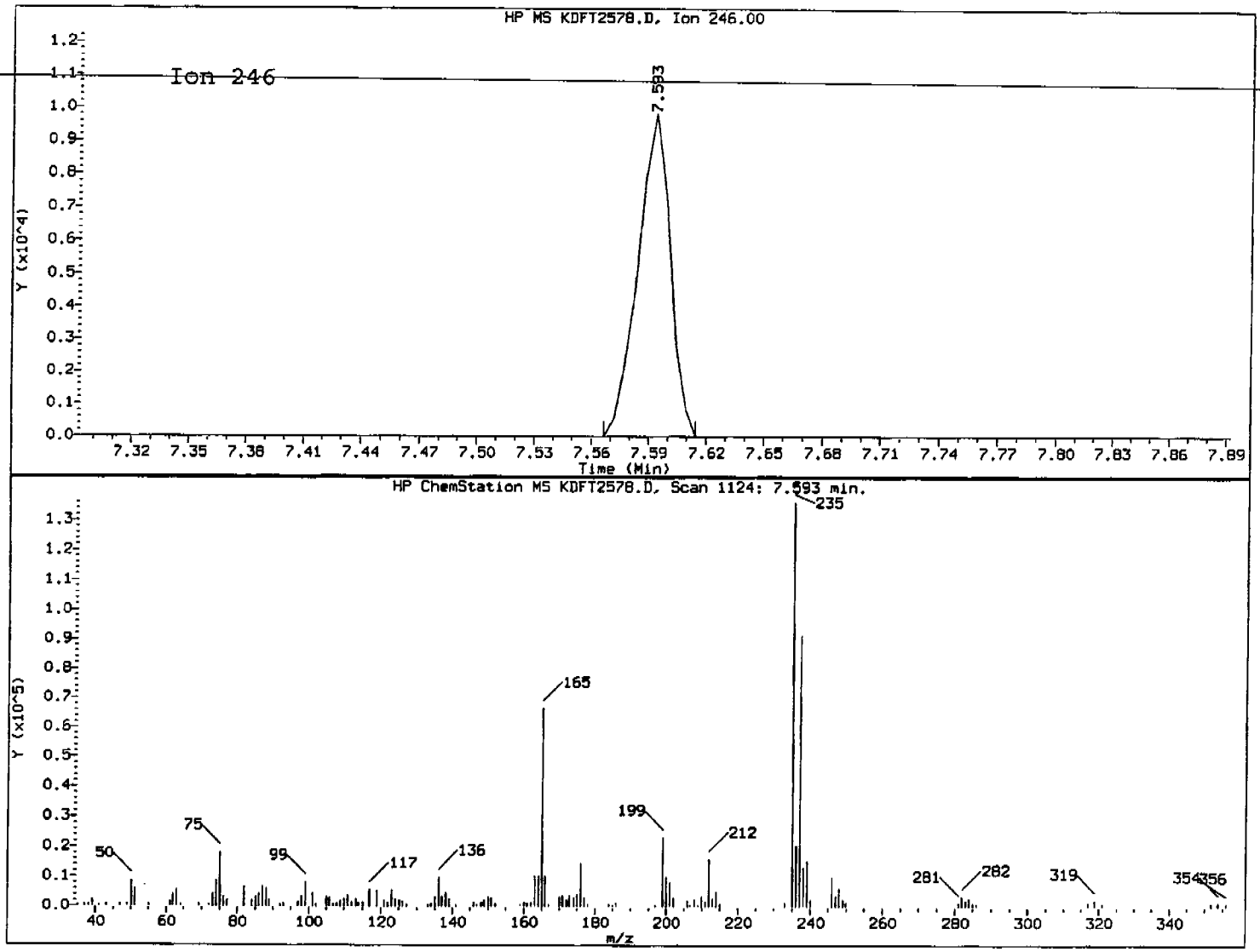
4,4'-DDT

Exp. RT = 7.600
Found RT = 7.593

Mass	Area	Ratio
235	165399	100.00
165	82214	49.71
237	106341	64.29

Report Date: 04/28/2005 15:23

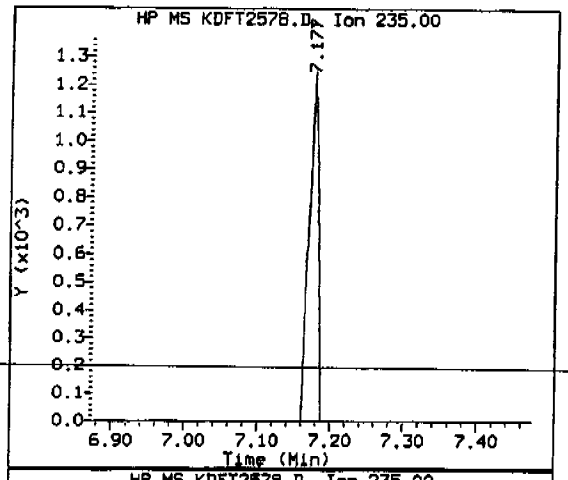
Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050428B.B/KDFT2578.D/KDFT2578.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050428B.B\sw846tun.m\resolut.m Inst:
Injection Date: 28-APR-2005 11:20 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)



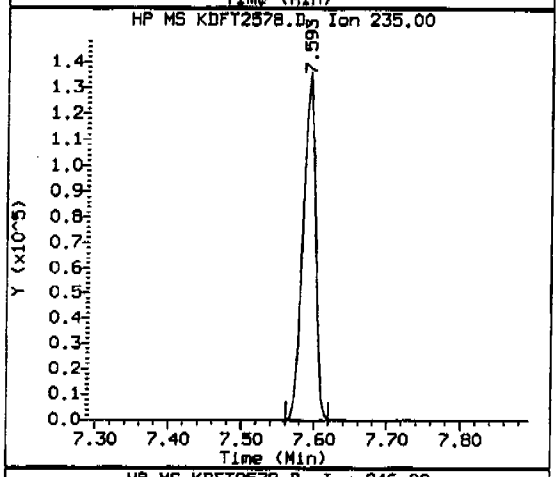
4,4'-DDE

Exp. RT = 8.000
Found RT = 7.593

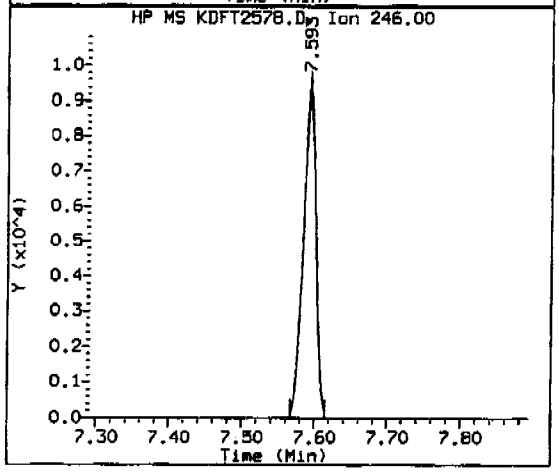
Mass	Area	Ratio
246	11531	100.00



Compound: 4,4'-DDD
Quant Mass: 235
RT: 7.177
Area: 1112



Compound: 4,4'-DDT
Quant Mass: 235
RT: 7.593
Area: 165399



Compound: 4,4'-DDE
Quant Mass: 246
RT: 7.593
Area: 11531

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	165399			N/A
4,4-DDE	11531	6.5	15.0	PASS
4,4-DDD	1112	0.7	15.0	PASS
4,4-DDD + DDE	12643	7.1	15.0	PASS

****
TUNE SAMPLE *** PASSED *** DDT BREAKDOWN TEST
****

Report Date : 29-Apr-2005 10:26

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 29-APR-2005 01:44
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Calibration File Names:
Level 1: \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\KCAL2601.D
Level 2: \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\KCAL2600.D
Level 3: \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\KCAL2599.D
Level 4: \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\KCAL2595.D
Level 5: \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\KCAL2598.D
Level 6: \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\KCAL2597.D
Level 7: \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\KCAL2596.D

04/29/05

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
1 1,4-Dioxane	0.37860	0.43472	0.42645	0.38576	0.43423	0.42074	0.43063	0.41588	5.675	
2 Methyl methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
3 Pyridine	+++++	1.28795	1.40374	1.26051	1.29997	1.25121	1.35686	1.31004	4.513	<-
4 N-Nitrosodimethylamine	0.70861	0.74519	0.74513	0.69246	0.75157	0.74567	0.74317	0.73312	3.122	
5 Dimethylformamide	0.80592	0.88454	0.94889	0.89923	0.93709	0.94499	0.92505	0.90653	5.554	
6 Ethyl methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
7 2-Picoline	1.11672	1.19222	1.23144	1.30096	1.31132	1.30450	1.39292	1.26430	7.204	
8 N-Nitrosomethylethylamine	0.46950	0.57796	0.56912	0.57845	0.60310	0.58248	0.59178	0.56748	7.853	
9 Methyl methanesulfonate	0.35479	0.41151	0.41103	0.41324	0.46135	0.46437	0.49021	0.42950	10.596	
11 Cyclohexanol	1.13159	1.24663	1.34703	1.34793	1.44324	1.47767	1.45606	1.35002	9.303	

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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
12 N-Nitrosodiethylamine	0.61009	0.64225	0.62511	0.63051	0.70280	0.70476			
	0.71974						0.66218	6.828	
13 Ethyl Methanesulfonate	1.10180	1.07409	1.10510	1.05473	1.17698	1.15933			
	1.19896						1.12443	4.846	
14 Benzaldehyde	1.16166	1.23901	1.24283	1.29144	1.30102	1.36353			
	1.39704						1.28522	6.202	
16 Phenol	1.59182	1.65799	1.78303	1.78168	1.89286	1.96944			
	1.93915						1.80228	7.873	
17 Aniline	2.08985	2.12108	2.23541	2.05933	2.19179	2.21418			
	2.13936						2.15014	3.059	
18 Pentachloroethane	0.51171	0.48710	0.50536	0.53152	0.54099	0.55718			
	0.58367						0.53108	6.205	
19 Bis(2-chloroethyl)ether	1.42044	1.43863	1.43338	1.49434	1.54137	1.59087			
	1.59782						1.50241	5.015	
20 2-Chlorophenol	1.28743	1.29925	1.32343	1.32585	1.40017	1.43353			
	1.40842						1.35401	4.325	
21 1,3-Dichlorobenzene	1.52475	1.48639	1.46266	1.47287	1.54872	1.57694			
	1.59821						1.52436	3.462	
23 1,4-Dichlorobenzene	1.54939	1.55653	1.55992	1.59034	1.66583	1.68150			
	1.69627						1.61425	3.997	
24 Benzenethiol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
25 Benzyl Alcohol	0.20792	0.56942	0.67392	0.74425	0.77275	0.89502			
	0.79588						0.66559	33.933	<-
26 1,2-Dichlorobenzene	1.42590	1.38985	1.41334	1.47439	1.56405	1.58796			
	1.63615						1.49880	6.455	

STL St. Louis

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Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD
	160.000 Level 7							
27 2-Methylphenol	1.11759	1.06078	1.16201	1.11714	1.18554	1.21224		
	1.20803						1.15190	4.848
28 2,2-oxybis(1-Chloropropane)	1.59518	1.44250	1.51851	1.51069	1.52027	1.52384		
	1.52052						1.51879	2.914
29 3 and 4-Methylphenol	1.10198	1.21132	1.26515	1.28160	1.34240	1.39381		
	1.36611						1.28034	7.868
30 Acetophenone	0.52107	0.53512	0.55618	0.57812	0.59620	0.62523		
	0.65259						0.58065	8.209
31 N-Nitrosopyrrolidine	0.17843	0.18370	0.18226	0.18768	0.19258	0.19901		
	0.21721						0.19155	6.907
32 N-Nitrosodinpropylamine	1.17472	1.17979	1.26477	1.29461	1.31770	1.31229		
	1.29274						1.26237	4.799
33 N-Nitrosomorpholine	0.06774	0.07645	0.07726	0.08065	0.08961	0.09511		
	0.10449						0.08447	14.906
34 O-Toluidine	0.56236	0.55680	0.56227	0.60066	0.63366	0.66229		
	0.71711						0.61359	9.900
35 Hexachloroethane	0.69167	0.65406	0.66038	0.69598	0.72422	0.72017		
	0.73528						0.69739	4.518
37 Nitrobenzene	0.57795	0.54753	0.52882	0.55654	0.55527	0.57193		
	0.57827						0.55947	3.229
38 N-Nitrosopiperidine	0.16432	0.16882	0.17079	0.17616	0.18096	0.18588		
	0.19442						0.17733	5.933
39 Isophorone	0.75985	0.74151	0.77064	0.77514	0.76787	0.77803		
	0.77937						0.76749	1.727
40 2-Nitrophenol	0.18384	0.19376	0.20079	0.20500	0.21118	0.21588		
	0.21957						0.20429	6.181

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Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
41 2,4-Dimethylphenol	0.36687	0.39732	0.41399	0.44987	0.45674	0.47620			
	0.47283						0.43340	9.563	
42 Bis(2-chloroethoxy)methane	0.46695	0.45137	0.46047	0.48273	0.48105	0.49765			
	0.50608						0.47804	4.135	
43 o,o,o-Triethyl-Phosphorothioa	0.21535	0.22497	0.22572	0.23460	0.25461	0.26744			
	0.27953						0.24317	9.968	
44 Benzoic Acid	+++++	0.15128	0.18577	0.20987	0.23413	0.23921			
	0.24655						0.21113	17.465	
45 2,4-Dichlorophenol	0.24137	0.31577	0.31239	0.33166	0.33816	0.35171			
	0.35348						0.32065	11.976	
46 a,a-Dimethyl-phenethylamine	0.51145	0.76309	0.77322	0.78410	0.80856	0.82953			
	0.87545						0.76363	15.399	
47 1,2,4-Trichlorobenzene	0.35599	0.36527	0.35831	0.37853	0.39270	0.40331			
	0.41205						0.38088	5.863	
49 4-Chlorobenzenethiol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
50 Naphthalene	1.01653	1.01021	1.01516	1.08561	1.12092	1.18774			
	1.22348						1.09424	7.966	
51 4-Chloroaniline	0.36882	0.41649	0.44559	0.44690	0.48477	0.51837			
	0.51096						0.45598	11.705	
52 2,6-Dichlorophenol	0.25469	0.24292	0.25839	0.31185	0.29618	0.31378			
	0.32831						0.28659	11.858	
53 Hexachloropropene	0.31733	0.32521	0.33376	0.35006	0.35945	0.38047			
	0.38884						0.35073	7.781	
54 Hexachlorobutadiene	0.27711	0.26631	0.25418	0.27483	0.28212	0.29209			
	0.29748						0.27773	5.319	

STL St. Louis

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Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
55 Benzothiazole	0.50139	0.46477	0.48632	0.49913	0.53104	0.55241			
	0.59151						0.51808	8.350	
56 Caprolactam	0.10983	0.13715	0.14068	0.13986	0.07457	0.14270			
	0.14775						0.12751	20.686	
57 n-Nitrosodi-n-butylamine	0.31342	0.29750	0.30099	0.31842	0.31943	0.33002			
	0.35040						0.31860	5.621	
58 p-Phenylenediamine	0.21874	0.29578	0.28872	0.36365	0.28733	0.27992			
	0.31741						0.29308	14.829	
59 4-Chloro-3-Methylphenol	0.27808	0.34113	0.38324	0.38943	0.39827	0.41002			
	0.41138						0.37308	12.893	
60 p-Chlorophenyl methyl sulfide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
61 Safrole	0.25500	0.27963	0.29140	0.29580	0.30963	0.32648			
	0.34629						0.30061	10.041	
62 2-Methylnaphthalene	0.79005	0.77460	0.80188	0.80540	0.82653	0.86454			
	0.87146						0.81921	4.504	
63 Phthalic anhydride	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
64 cis-Isosafrole	0.04748	0.05826	0.05654	0.05553	0.05574	0.05770			
	0.05995						0.05589	7.184	
65 1,2,4,5-Tetrachlorobenzene	1.42931	1.31274	1.32205	1.39168	1.47308	1.54004			
	1.62334						1.44175	7.870	
66 Hexachlorocyclopentadiene	0.22609	0.37005	0.39916	0.44764	0.46898	0.49181			
	0.51922						0.41756	23.679	
67 2,4,6-Trichlorophenol	0.40347	0.44812	0.45383	0.47650	0.47896	0.50316			
	0.52140						0.46935	8.264	

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Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
68 2,4,5-Trichlorophenol	0.36628	0.45864	0.48372	0.52869	0.54048	0.56219			
	0.59062						0.50438	14.983	
70 trans-Isosafrole	0.56648	0.54163	0.54100	0.56420	0.59728	0.65850			
	0.75581						0.60356	12.995	
71 Biphenyl	1.54419	1.44874	1.47932	1.53624	1.66716	1.76228			
	1.79160						1.60422	8.519	
72 2-Chloronaphthalene	1.25515	1.23404	1.24704	1.29040	1.30943	1.38174			
	1.41165						1.30421	5.273	
73 2-Nitroaniline	0.48861	0.52007	0.54325	0.55904	0.55542	0.57208			
	0.58880						0.54675	6.131	
74 1,4-Naphthoquinone	0.27176	0.36890	0.37704	0.33375	0.21032	0.17342			
	0.12916						0.26634	36.895	<-
75 1,4-Dinitrobenzene	0.07763	0.12369	0.12115	0.12521	0.13042	0.13540			
	0.14150						0.12214	17.086	
76 Dimethylphthalate	1.45815	1.46456	1.50902	1.54752	1.58543	1.66616			
	1.69761						1.56121	6.025	
77 1,3-Dinitrobenzene	0.16587	0.22945	0.23025	0.24388	0.24166	0.24971			
	0.25601						0.23098	13.109	
78 N-(hydroxymethyl) phthalimide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
79 Acenaphthylene	1.75108	1.80726	1.83748	1.93134	1.98476	2.10600			
	2.17096						1.94127	8.057	
80 2,6-Dinitrotoluene	0.27499	0.31443	0.32749	0.33945	0.34305	0.35873			
	0.36389						0.33172	9.117	
81 3-Nitroaniline	0.24423	0.31322	0.32741	0.34492	0.35639	0.37039			
	0.36835						0.33213	13.258	

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Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
83 Acenaphthene	1.21878	1.13268	1.15338	1.22752	1.25002	1.31922			
	1.35473						1.23662	6.527	
84 2,4-Dinitrophenol	+++++	0.14781	0.19757	0.22407	0.24736	0.26118			
	0.26135						0.22322	19.856	<-
85 4-Nitrophenol	+++++	0.23727	0.27068	0.33499	0.33003	0.34462			
	0.34414						0.31029	14.573	
86 Dibenzofuran	1.72238	1.80014	1.77031	1.85902	1.87922	1.98809			
	2.03288						1.86458	6.079	
87 Pentachlorobenzene	0.70728	0.65613	0.66649	0.68327	0.70614	0.73519			
	0.75466						0.70131	5.086	
88 2,4-Dinitrotoluene	0.35745	0.42076	0.43608	0.45496	0.45904	0.47489			
	0.48091						0.44058	9.574	
89 1-Naphthylamine	1.03800	1.06591	1.04498	1.10302	1.05391	1.16285			
	1.16394						1.09037	4.961	
90 2-Naphthylamine	0.97677	0.98368	0.94490	1.00433	0.88786	1.05261			
	1.06727						0.98820	6.232	
91 Phenyl sulfide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
92 2,3,4,6-Tetrachlorophenol	0.22811	0.28943	0.32362	0.39276	0.41144	0.42643			
	0.46069						0.36178	23.112	
93 Diethylphthalate	1.41548	1.46650	1.48688	1.54557	1.60229	1.68658			
	1.73510						1.56263	7.554	
94 Fluorene	1.36651	1.41878	1.43699	1.51034	1.54068	1.61649			
	1.66344						1.50761	7.166	
95 4-Chlorophenyl-phenylether	0.76544	0.78936	0.79757	0.81479	0.85758	0.90175			
	0.93474						0.83732	7.491	

STL St. Louis

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Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	%RSD	
96 Thionazin	0.23139	0.25240	0.25864	0.26567	0.28537	0.29086	0.29032	0.26781	8.348	
97 5-Nitro-o-toluidine	0.15995	0.20034	0.19875	0.21045	0.21494	0.21816	0.22533	0.20399	10.587	
98 4-Nitroaniline	0.23718	0.30399	0.34479	0.34033	0.35333	0.35639	0.36113	0.32816	13.516	
99 4,6-Dinitro-2-methylphenol	0.09625	0.15210	0.16791	0.18306	0.19296	0.20080	0.20396	0.17101	22.084	
100 N-Nitrosodiphenylamine	0.54329	0.53324	0.53718	0.57973	0.61558	0.65237	0.66501	0.58949	9.412	
101 tri-n-butylphosphate	1.52154	1.63086	1.65030	1.71460	1.82251	1.87783	2.01075	1.74692	9.553	
102 Azobenzene	1.15917	1.09995	1.11092	1.18849	1.28315	1.31452	1.35621	1.21606	8.384	
103 Benzal Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
105 Sulfotepp	0.13055	0.14332	0.15072	0.15105	0.16041	0.16417	0.16883	0.15272	8.604	
106 Diallate (peak 1)	0.27906	0.28345	0.29123	0.30014	0.31100	0.32036	0.33572	0.30299	6.788	
107 1,3,5-Trinitrobenzene	0.05460	0.08597	0.09688	0.10024	0.10572	0.10753	0.11048	0.09449	20.515	
108 Phorate	0.49946	0.50445	0.50760	0.53049	0.56947	0.58636	0.62513	0.54614	8.860	
109 4-Bromophenyl-phenylether	0.25303	0.26866	0.26842	0.28618	0.29408	0.30240	0.30815	0.28299	7.152	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 29-APR-2005 01:44
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
110 Phenacetin	0.38624	0.41341	0.42268	0.42532	0.42504	0.42869			
	0.43971						0.42015	4.015	
111 Diallate (peak 2)	0.06683	0.06004	0.06289	0.06373	0.06488	0.06546			
	0.06814						0.06457	4.135	
112 Hexachlorobenzene	0.28686	0.29871	0.29767	0.30893	0.31951	0.32920			
	0.33236						0.31046	5.537	
113 Dimethoate	0.27185	0.28949	0.28826	0.27480	0.21882	0.21567			
	0.18694						0.24940	16.564	
114 Atrazine	0.22048	0.24204	0.23940	0.24289	0.25564	0.25595			
	0.26658						0.24614	6.060	
115 tris(2-chloroethyl)phosphate	0.22625	0.21717	0.22304	0.21944	0.21858	0.22085			
	0.22796						0.22190	1.817	
116 4-Aminobiphenyl	0.70998	0.67001	0.68070	0.79368	0.77334	0.82627			
	0.87380						0.76111	10.111	
117 Pentachlorophenol	+++++	0.13566	0.16827	0.19160	0.20843	0.21816			
	0.21672						0.18981	17.112	
118 Pronamide	0.37755	0.36975	0.37320	0.37153	0.37705	0.38333			
	0.39158						0.37771	2.012	
119 Pentachloronitrobenzene	0.11754	0.12476	0.12783	0.13205	0.13537	0.13783			
	0.13768						0.13044	5.767	
120 Phenyl disulfide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
122 Phenanthrene	1.20008	1.16461	1.15560	1.20830	1.25524	1.28359			
	1.29872						1.22373	4.615	
123 Disulfoton	0.35737	0.36108	0.36643	0.37668	0.39485	0.40708			
	0.42916						0.38466	6.946	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 29-APR-2005 01:44
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
124 Anthracene	1.10677	1.13662	1.12604	1.17583	1.21539	1.24242			
	1.24655						1.17852	4.866	
125 Dinoseb	0.13116	0.20289	0.23168	0.24451	0.26321	0.27373			
	0.28489						0.23315	22.611	
126 Carbazole	0.91819	0.96755	0.98977	1.02265	1.04991	1.07633			
	1.07010						1.01350	5.742	
127 Phenyl sulfone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
128 Methyl Parathion	0.22472	0.25273	0.25605	0.24165	0.20186	0.19848			
	0.17806						0.22194	13.501	
129 Di-n-Butylphthalate	1.17605	1.24618	1.26765	1.32252	1.36383	1.39771			
	1.40499						1.31127	6.499	
130 Parathion	0.13719	0.18275	0.18212	0.18480	0.18353	0.18558			
	0.18900						0.17785	10.162	
131 4-Nitroquinoline-1-oxide	+++++	0.06721	0.07979	0.10710	0.08542	0.08685			
	0.08235						0.08479	15.310	<-
132 Methapyrilene	0.34073	0.34857	0.33447	0.27766	0.21659	0.20104			
	0.18189						0.27156	26.360	
133 Isodrin	0.14938	0.13071	0.13659	0.12878	0.13896	0.13984			
	0.14629						0.13865	5.427	
134 Fluoranthene	1.19499	1.27310	1.28215	1.34880	1.38469	1.42778			
	1.40738						1.33127	6.332	
135 Benzidine	0.33912	0.41910	0.54791	0.48481	0.58860	0.56062			
	0.54024						0.49720	17.998	
136 Bis (4-chlorophenyl) disulfid	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 29-APR-2005 01:44
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
137 Pyrene	1.35449	1.40228	1.45272	1.58969	1.57324	1.61414			
	1.70160						1.52688	8.240	
138 4-chlorophenyl sulfone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
140 Aramite (peak 1)	0.05375	0.06879	0.07594	0.07526	0.07359	0.07265			
	0.07371						0.07053	10.986	
141 Kepone	+++++	0.00357	0.00453	0.00668	0.00729	0.00747			
	0.00748						0.00617	27.492	<-
142 Aramite (peak 2)	0.08770	0.10236	0.10922	0.11671	0.11420	0.11097			
	0.11134						0.10750	9.129	
143 p-(Dimethylamino)azobenzene	0.29047	0.32717	0.33641	0.34730	0.34129	0.34067			
	0.34674						0.33286	5.977	
144 Chlorobenzilate	0.40399	0.42688	0.44410	0.45660	0.49105	0.50109			
	0.53020						0.46484	9.587	
145 3,3-Dimethylbenzidine	0.44768	0.57060	0.62408	0.55179	0.62907	0.63004			
	0.62720						0.58292	11.596	
146 Butylbenzylphthalate	0.56589	0.56619	0.59126	0.58216	0.60822	0.61084			
	0.64514						0.59567	4.745	
147 Acrylamide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
148 2-Acetylaminofluorene(1)	0.44078	0.49973	0.51625	0.54235	0.55089	0.55882			
	0.56140						0.52432	8.256	
(2)	0.35522	0.39267	0.39584	0.41786	0.42490	0.43100			
	0.43659						0.40773	7.007	
149 Famphur	+++++	0.02197	0.03377	0.05429	0.01871	0.01486			
	0.00621						0.02497	67.953	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 29-APR-2005 01:44
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
150 Benzo(a)Anthracene	1.28334	1.27385	1.29850	1.37124	1.42584	1.44876			
	1.49673						1.37118	6.471	
151 4,4'-Methylenebis(2-Chloroani	0.10305	0.10187	0.11221	0.12299	0.11640	0.12512			
	0.13117						0.11611	9.589	
152 3,3'-Dichlorobenzidine	0.43617	0.42622	0.48158	0.52939	0.61023	0.62557			
	0.65260						0.53739	17.346	
154 Chrysene	1.19485	1.16590	1.19487	1.28390	1.35974	1.41466			
	1.45936						1.29618	9.039	
155 bis(2-ethylhexyl)Phthalate	0.66987	0.67984	0.68614	0.73988	0.75919	0.78014			
	0.82384						0.73413	7.905	
M 156 Toluenediamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
157 Triethylamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
158 Di-n-octylphthalate	1.20577	1.35313	1.39312	1.44437	1.55177	1.58020			
	1.55559						1.44057	9.405	
159 1,2-Dinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
160 Benzo(b)fluoranthene	1.23246	1.39824	1.38832	1.49419	1.57091	1.70833			
	1.63839						1.49012	11.004	
161 Benzo(k)fluoranthene	1.52204	1.42449	1.42726	1.44412	1.54371	1.49258			
	1.57284						1.48958	3.982	
162 7,12-Dimethylbenz(a)anthracen	0.63206	0.67147	0.70278	0.74963	0.79123	0.82571			
	0.80112						0.73914	9.807	
163 Hexachlorophene	+++++	0.00594	0.00928	0.01407	0.00882	0.00689			
	0.09695						0.02366	152.219	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 29-APR-2005 01:44
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
164 N,N-Dimethylamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
165 Benzo(a)pyrene	1.21296	1.27868	1.32447	1.35229	1.40893	1.45743			
	1.46739						1.35745	6.919	
167 Carbofuran Phenol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
168 2,3- and 3,5-Diaminotoluene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
169 3-methylcholanthrene	0.67245	0.68361	0.68395	0.73820	0.79182	0.82758			
	0.85552						0.75045	10.005	
170 2,6- and 2,4-Diaminotoluene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
171 Limonene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
172 n-Decane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
173 Indeno(1,2,3-cd)pyrene	1.00017	1.16843	1.21446	1.31979	1.50474	1.68529			
	1.82842						1.38876	21.388	
174 Dibenzo(a,h)anthracene	1.11032	1.14511	1.25654	1.37646	1.49801	1.68131			
	1.80231						1.41001	18.762	
175 Dibenz(e,a) Pyrene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
176 n-tridecane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
177 Benzo(g,h,i)perylene	1.12458	1.13862	1.17441	1.24352	1.37253	1.56810			
	1.63125						1.32186	15.727	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 29-APR-2005 01:44
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050428C.B\8270K.m
Cal Date : 29-Apr-2005 10:26 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
179 Phthalic Acid	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-
180 n-Dodecane	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-
M 181 Isosafrole	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	
$ 10 2-Fluorophenol	1.16730	1.16660	1.22691	1.23825	1.31981	1.35326			
	1.33401						1.25802	6.209	
$ 15 Phenol-d5	1.40728	1.53966	1.63802	1.70991	1.81475	1.87254			
	1.85644						1.69123	10.304	
$ 36 Nitrobenzene-d5	0.51707	0.51455	0.51984	0.53587	0.53545	0.54672			
	0.55055						0.53144	2.728	
$ 69 2-Fluorobiphenyl	1.39007	1.44968	1.46792	1.55481	1.60295	1.67991			
	1.75634						1.55738	8.465	
$ 104 2,4,6-Tribromophenol	0.19239	0.25734	0.27614	0.27826	0.28395	0.30209			
	0.30120						0.27019	13.920	
$ 139 Terphenyl-d14	1.05246	1.12964	1.15253	1.28007	1.27584	1.30784			
	1.37605						1.22492	9.392	
$ 178 2,4,6-Trichlorophenol-d2	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-

STL ST. LOUIS

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B/KCAL2579.D
Report Date: 04/29/2005

INITIAL CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL2579.D
Analysis Type: WATER

Injection Date: 28-APR-2005 11:41
Lab Sample ID: SSTD050APPIX
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270

COMPOUND	%RSD
2-Picoline	7.2
N-Nitrosomethylethylamine	7.9
Methyl methanesulfonate	10.6
N-Nitrosodiethylamine	6.8
Methyl methacrylate	0.0
Ethyl methacrylate	0.0
Ethyl Methanesulfonate	4.8
Pentachloroethane	6.2
Acetophenone	7.4
N-Nitrosopyrrolidine	6.9
N-Nitrosomorpholine	14.9
O-Toluidine	9.9
N-Nitrosopiperidine	5.9
o,o,o-Triethyl-Phosphorothioa	10.0
a,a-Dimethyl-phenethylamine	15.4
Hexachloropropene	7.8
2,6-Dichlorophenol	11.9
Benzothiazole	8.3
p-Phenylenediamine	14.8
n-Nitrosodi-n-butylamine	5.6
Safrole	10.0
1,2,4,5-Tetrachlorobenzene	7.9
cis-Isosafrole	7.2
trans-Isosafrole	13.0
1,4-Naphthoquinone	36.9
1,4-Dinitrobenzene	17.1
1,3-Dinitrobenzene	13.1
Pentachlorobenzene	5.1
1-Naphthylamine	5.0
2-Naphthylamine	6.2
2,3,4,6-Tetrachlorophenol	23.1
Thionazin	8.3
5-Nitro-o-toluidine	10.6
tri-n-butylphosphate	9.6
Sulfotepp	8.6
Diallate (peak 1)	6.8
Phorate	8.9
1,3,5-Trinitrobenzene	20.5
Diallate (peak 2)	4.1

LOT# F5D210380

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B/KCAL2579.D
Report Date: 04/29/2005

INITIAL CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL2579.D
Analysis Type: WATER

Injection Date: 28-APR-2005 11:41
Lab Sample ID: SSTD050APPIX
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050428A

COMPOUND	%RSD
Phenacetin	4.0
Dimethoate	16.6
4-Aminobiphenyl	10.1
tris(2-chloroethyl)phosphate	1.8
Pentachloronitrobenzene	5.8
Pronamide	2.0
Disulfoton	6.9
Dinoseb	22.6
Methyl Parathion	13.5
4-Nitroquinoline-1-oxide	15.3
Parathion	10.2
Methapyrilene	26.4
Isodrin	5.4
Kepone	27.5
Aramite (peak 1)	11.0
Aramite (peak 2)	9.1
p-(Dimethylamino)azobenzene	6.0
Chlorobenzilate	9.6
2-Acetylaminofluorene	8.3
Famphur	68.0
4,4'-Methylenebis(2-Chloroani	9.6
7,12-Dimethylbenz(a)anthracen	9.8
Hexachlorophene	152.2
3-methylcholanthrene	10.0

The average of all %RSD's in the initial calibration is 13.4

04/29/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2579.D
Report Date: 29-Apr-2005 09:06

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2579.D
Lab Smp Id: SSTD050APPIX Client Smp ID: SSTD050APPIX
Inj Date : 28-APR-2005 11:41
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD050APPIX
Misc Info : SV0185-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Meth Date : 29-Apr-2005 09:06 hongs Quant Type: ISTD
Cal Date : 28-APR-2005 16:17 Cal File: KCAL2587.D
Als bottle: 3 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIX.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
7	2-Picoline	93	2.541	2.541	(0.550)	263681	50.0000	51.45
8	N-Nitrosomethylethylamine	88	2.733	2.733	(0.592)	117240	50.0000	50.96(M)
9	Methyl methanesulfonate	80	3.102	3.102	(0.672)	83757	50.0000	48.11
12	N-Nitrosodiethylamine	102	3.492	3.492	(0.756)	127793	50.0000	47.61
13	Ethyl Methanesulfonate	79	3.871	3.871	(0.838)	213773	50.0000	46.90
18	Pentachloroethane	117	4.277	4.277	(0.926)	107729	50.0000	50.04
* 22	1,4-Dichlorobenzene-d4	152	4.619	4.619	(1.000)	162145	40.0000	
30	Acetophenone	105	5.159	5.159	(0.831)	380454	50.0000	49.30
31	N-Nitrosopyrrolidine	100	5.180	5.180	(0.835)	125730	50.0000	48.99
33	N-Nitrosomorpholine	116	5.212	5.212	(0.840)	54028	50.0000	47.74
34	O-Toluidine	106	5.228	5.228	(0.842)	402395	50.0000	48.94
38	N-Nitrosopiperidine	114	5.565	5.565	(0.897)	118015	50.0000	49.67
43	o,o,o-Triethyl-Phosphorothioa	198	5.987	5.987	(0.965)	157161	50.0000	48.24
* 48	Naphthalene-d8	136	6.206	6.206	(1.000)	535939	40.0000	
46	a,a-Dimethyl-phenethylamine	58	6.083	6.083	(0.980)	525288	50.0000	51.34(M)
52	2,6-Dichlorophenol	162	6.393	6.393	(1.030)	208918	50.0000	54.41
53	Hexachloropropene	213	6.387	6.387	(1.029)	234511	50.0000	49.90
55	Benzothiazole	135	6.596	6.596	(1.063)	334378	50.0000	48.17
58	p-Phenylenediamine	108	6.879	6.879	(1.108)	243620	50.0000	62.04
57	n-Nitrosodi-n-butylamine	84	6.884	6.884	(1.109)	213314	50.0000	49.97
61	Safrole	162	7.124	7.124	(1.148)	198165	50.0000	49.20

04/29/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
65	1,2,4,5-Tetrachlorobenzene	216	7.525	7.525	(0.845)	535105	50.0000	48.26
64	cis-Isosafrole	162	7.563	7.563	(0.849)	21352	50.0000	49.68(M)
70	trans-Isosafrole	162	7.920	7.920	(0.889)	216935	50.0000	46.74
74	1,4-Naphthoquinone	158	8.278	8.278	(0.929)	128327	50.0000	62.66
75	1,4-Dinitrobenzene	168	8.444	8.444	(1.361)	83882	50.0000	51.26
77	1,3-Dinitrobenzene	168	8.636	8.636	(0.969)	93774	50.0000	52.79
* 82	Acenaphthene-d10	164	8.909	8.909	(1.000)	307602	40.0000	
87	Pentachlorobenzene	250	9.283	9.283	(1.042)	262718	50.0000	48.71
89	1-Naphthylamine	143	9.422	9.422	(1.058)	424114	50.0000	50.58
90	2-Naphthylamine	143	9.560	9.560	(1.073)	386166	50.0000	50.82
92	2,3,4,6-Tetrachlorophenol	232	9.598	9.598	(1.077)	151016	50.0000	54.28
96	Thionazin	107	10.020	10.020	(1.125)	102152	50.0000	49.60
97	5-Nitro-o-toluidine	152	10.025	10.025	(0.866)	151109	50.0000	51.58
101	tri-n-butylphosphate	99	10.303	10.303	(1.156)	659269	50.0000	49.08
105	Sulfotepp	97	10.709	10.709	(0.925)	108455	50.0000	49.45
106	Diallate (peak 1)	86	10.778	10.778	(0.931)	215506	50.0000	49.53
108	Phorate	75	10.795	10.795	(0.932)	380896	50.0000	48.57
111	Diallate (peak 2)	86	10.917	10.917	(0.943)	45759	50.0000	49.35
107	1,3,5-Trinitrobenzene	213	10.875	10.875	(0.939)	71975	50.0000	53.04
110	Phenacetin	108	10.923	10.923	(0.943)	305382	50.0000	50.61
113	Dimethoate	87	11.158	11.158	(0.964)	197308	50.0000	55.09
116	4-Aminobiphenyl	169	11.329	11.329	(0.978)	569868	50.0000	52.14
115	tris(2-chloroethyl)phosphate	63	11.393	11.393	(0.984)	157558	50.0000	49.44
119	Pentachloronitrobenzene	237	11.542	11.542	(0.997)	94810	50.0000	50.62
118	Pronamide	173	11.596	11.596	(1.001)	266760	50.0000	49.18
* 121	Phenanthrene-d10	188	11.580	11.580	(1.000)	574409	40.0000	
123	Disulfoton	88	11.783	11.783	(1.018)	270463	50.0000	48.96
125	Dinoseb	211	11.826	11.826	(1.021)	175561	50.0000	52.44
128	Methyl Parathion	109	12.509	12.509	(1.080)	173505	50.0000	54.44
131	4-Nitroquinoline-1-oxide	190	13.236	13.236	(1.143)	76901	50.0000	63.16
130	Parathion	97	13.300	13.300	(1.149)	132687	50.0000	51.95
132	Methapyrilene	97	13.487	13.487	(1.165)	199360	50.0000	51.12(M)
133	Isodrin	193	13.637	13.637	(1.178)	92464	50.0000	46.44
141	Kepone	272	14.790	14.790	(0.884)	4340	50.0000	54.16
140	Aramite (peak 1)	185	14.876	14.876	(0.889)	48864	50.0000	53.36
142	Aramite (peak 2)	185	15.031	15.031	(0.898)	75776	50.0000	54.28
143	p-(Dimethylamino)azobenzene	120	15.106	15.106	(0.903)	225484	50.0000	52.17
144	Chlorobenzilate	251	15.245	15.245	(0.911)	296445	50.0000	49.11
148	2-Acetylaminofluorene	181	16.308	16.308	(0.974)	352117	50.0000	51.72
149	Famphur	218	16.698	16.698	(0.998)	35246	50.0000	108.7(M)
* 153	Chrysene-d12	240	16.735	16.735	(1.000)	519397	40.0000	
151	4,4'-Methylenebis(2-Chloroani	266	16.815	16.815	(1.005)	79848	50.0000	52.96
162	7,12-Dimethylbenz(a)anthracen	256	18.760	18.760	(0.970)	412760	50.0000	50.71
163	Hexachlorophene	196	19.198	19.198	(0.992)	7749	50.0000	29.74
* 166	Perylene-d12	264	19.347	19.347	(1.000)	440492	40.0000	
169	3-methylcholanthrene	268	19.898	19.898	(1.028)	406465	50.0000	49.18

QC Flag Legend

M - Compound response manually integrated.

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

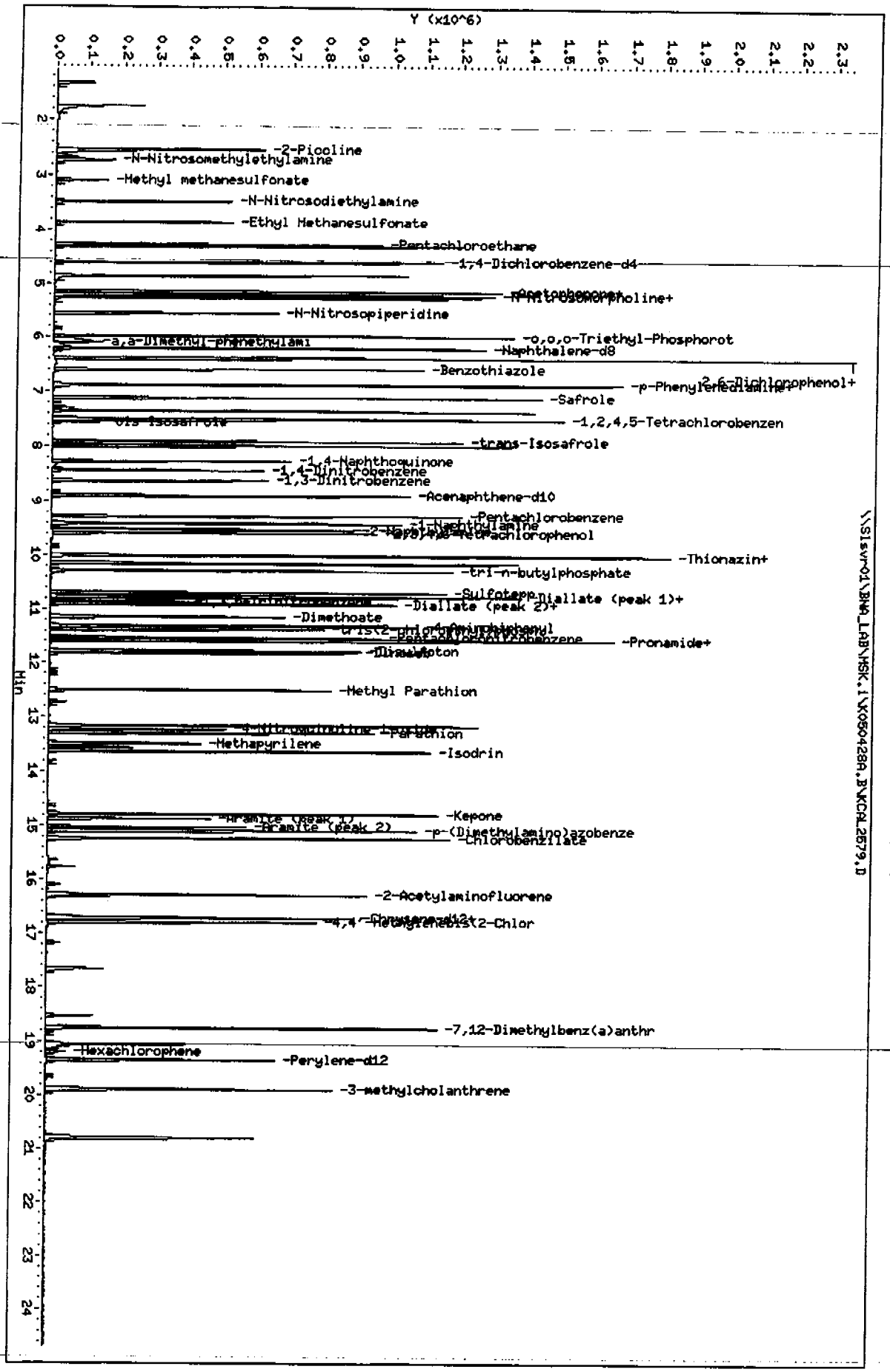
Instrument ID: MSK.i
Lab File ID: KCAL2579.D
Lab Smp Id: SSTD050APPIX
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Misc Info: SV0185-05

Calibration Date: 28-APR-2005
Calibration Time: 11:41
Client Smp ID: SSTD050APPIX
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	162145	81073	324290	162145	0.00
48 Naphthalene-d8	535939	267970	1071878	535939	0.00
82 Acenaphthene-d10	307602	153801	615204	307602	0.00
121 Phenanthrene-d10	574409	287205	1148818	574409	0.00
153 Chrysene-d12	519397	259699	1038794	519397	0.00
166 Perylene-d12	440492	220246	880984	440492	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.62	4.12	5.12	4.62	0.00
48 Naphthalene-d8	6.21	5.71	6.71	6.21	0.00
82 Acenaphthene-d10	8.91	8.41	9.41	8.91	0.00
121 Phenanthrene-d10	11.58	11.08	12.08	11.58	0.00
153 Chrysene-d12	16.74	16.24	17.24	16.74	0.00
166 Perylene-d12	19.35	18.85	19.85	19.35	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

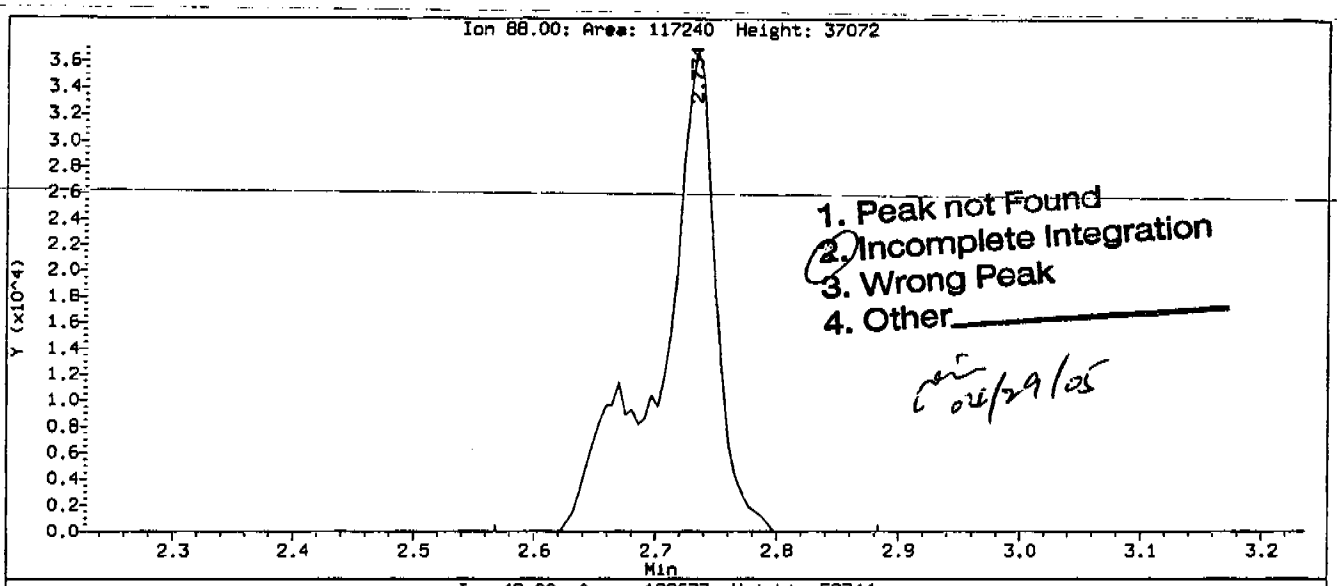


Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2579.D
Date : 28-APR-2005 11:41
Client ID: SSTD050APPIX
Sample Info: SSTD050APPIX
Volume Injected (uL): 1.0
Column phase:

Instrument: MSK.i
Operator: XIA
Column diameter: 2.00

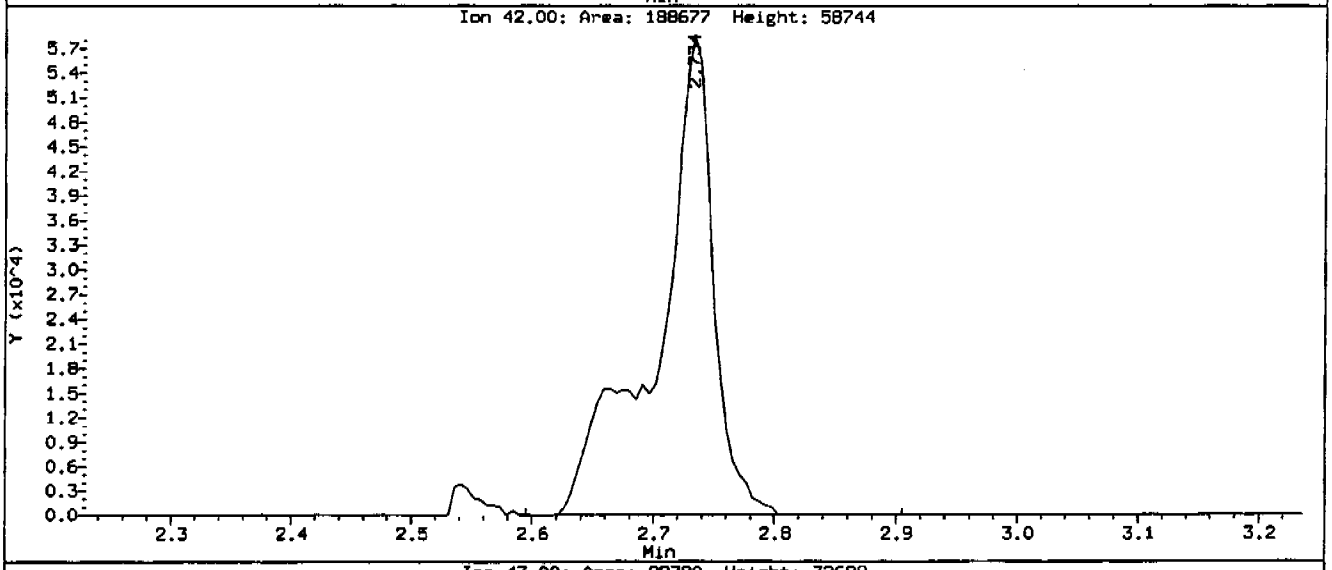
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2579.D
Injection Date: 28-APR-2005 11:41
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

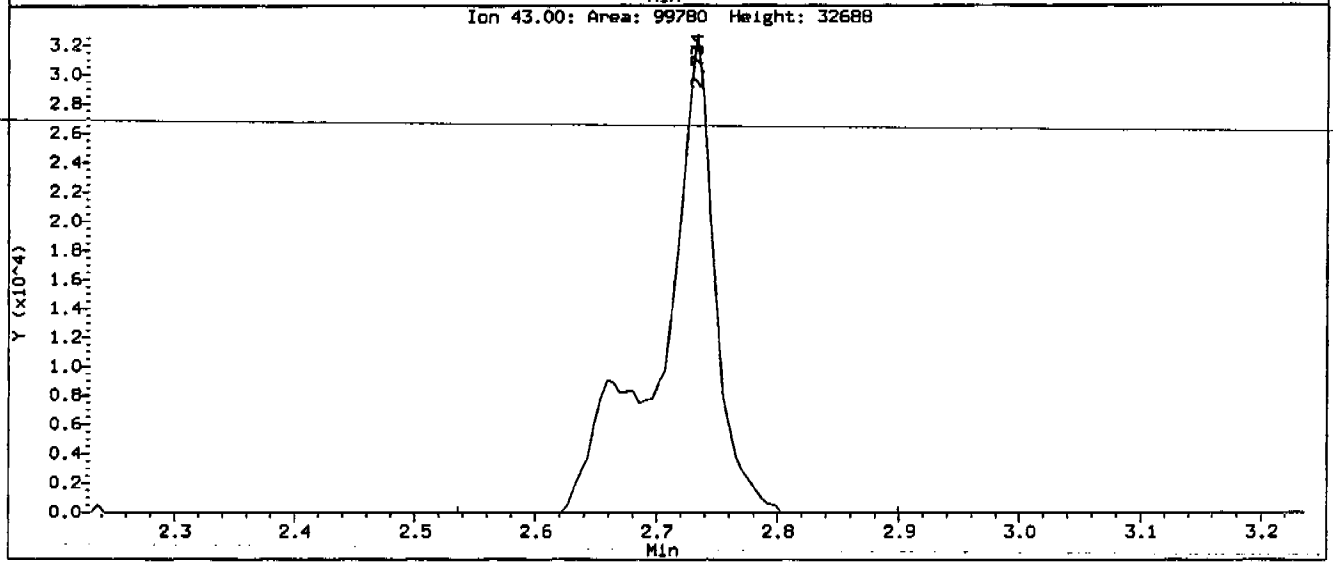
Compound: N-Nitrosomethylethylamine
CAS Number: 10595-95-6



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

[signature] 04/29/05

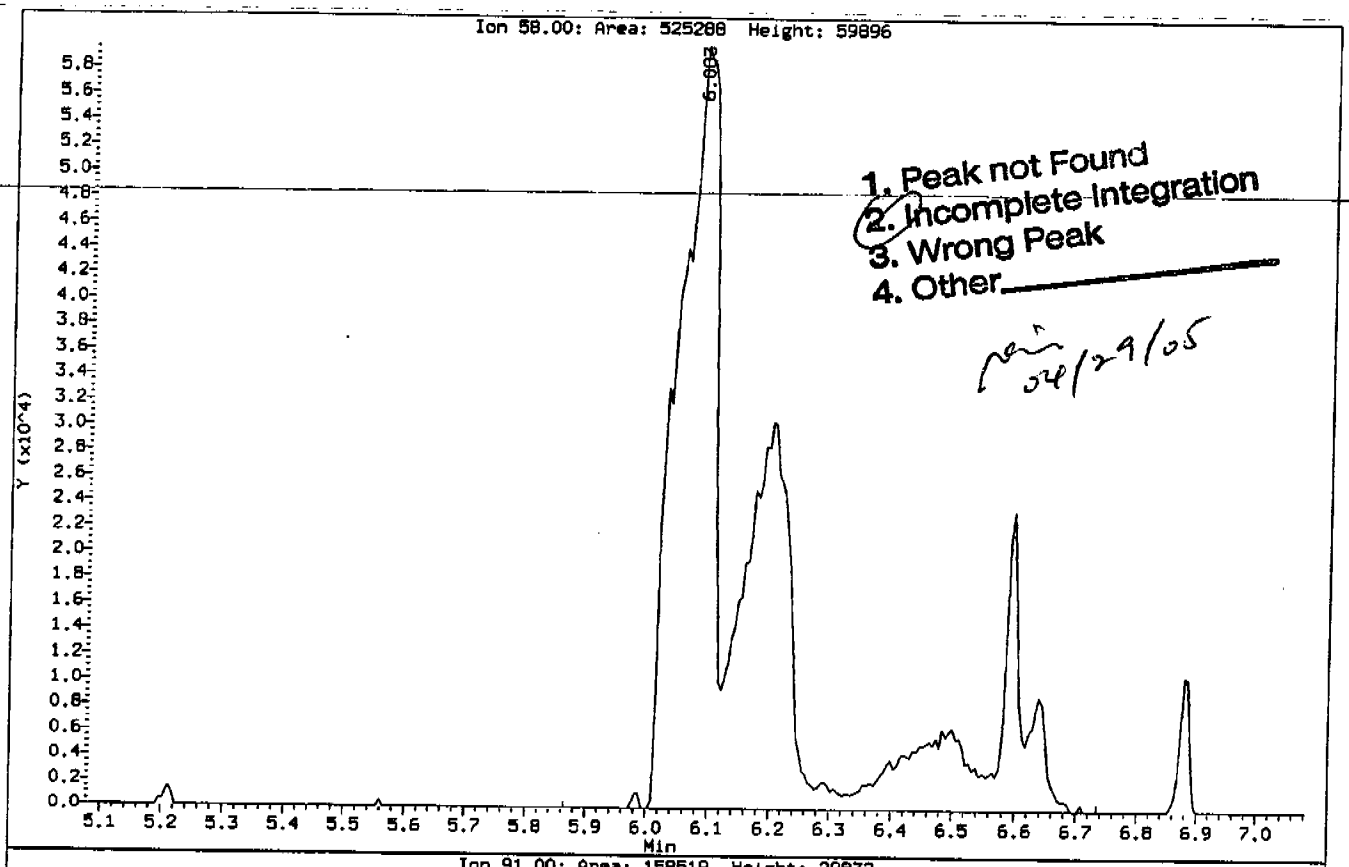




LOT# F5D210380

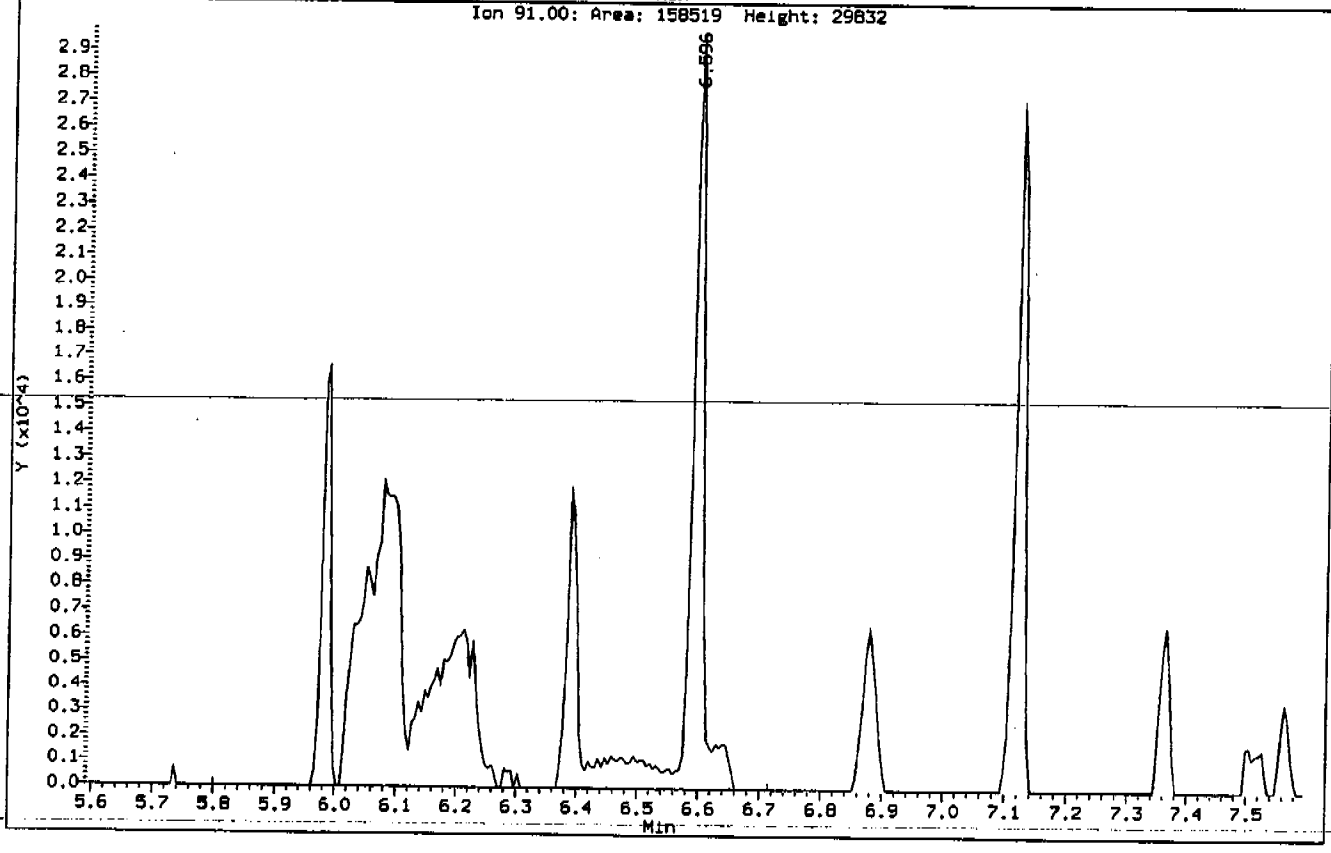
Data File: \\Slavr01\BNA_LAB\MSK.i\K050428A.B\KCAL2579.D
Injection Date: 28-APR-2005 11:41
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

Compound: a,a-Dimethyl-phenethylamine
CAS Number: 122-09-8



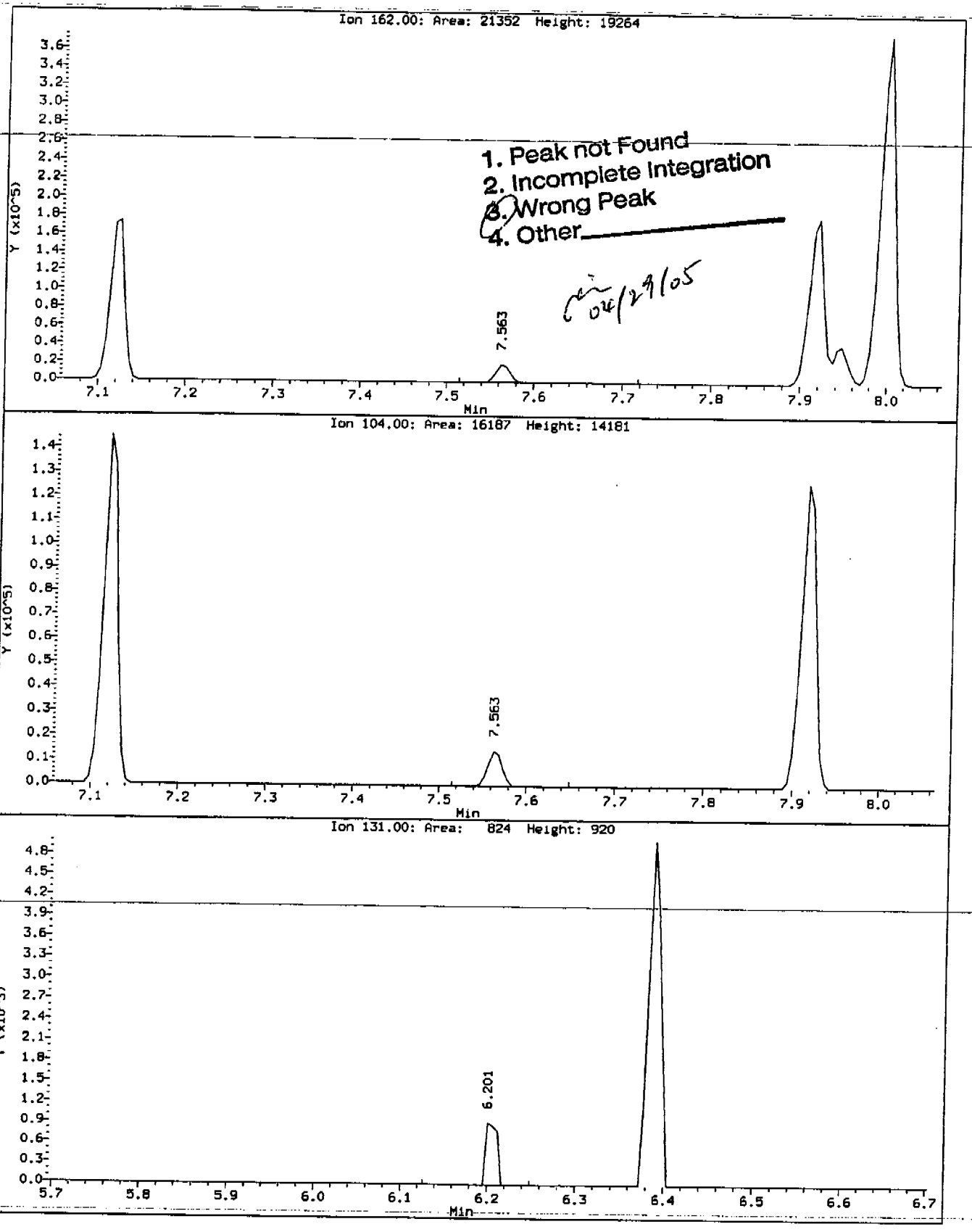
1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other _____

JM 4/29/05



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2579.D
Injection Date: 28-APR-2005 11:41
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

Compound: cis-Isosafrole
CAS Number: 120-58-1



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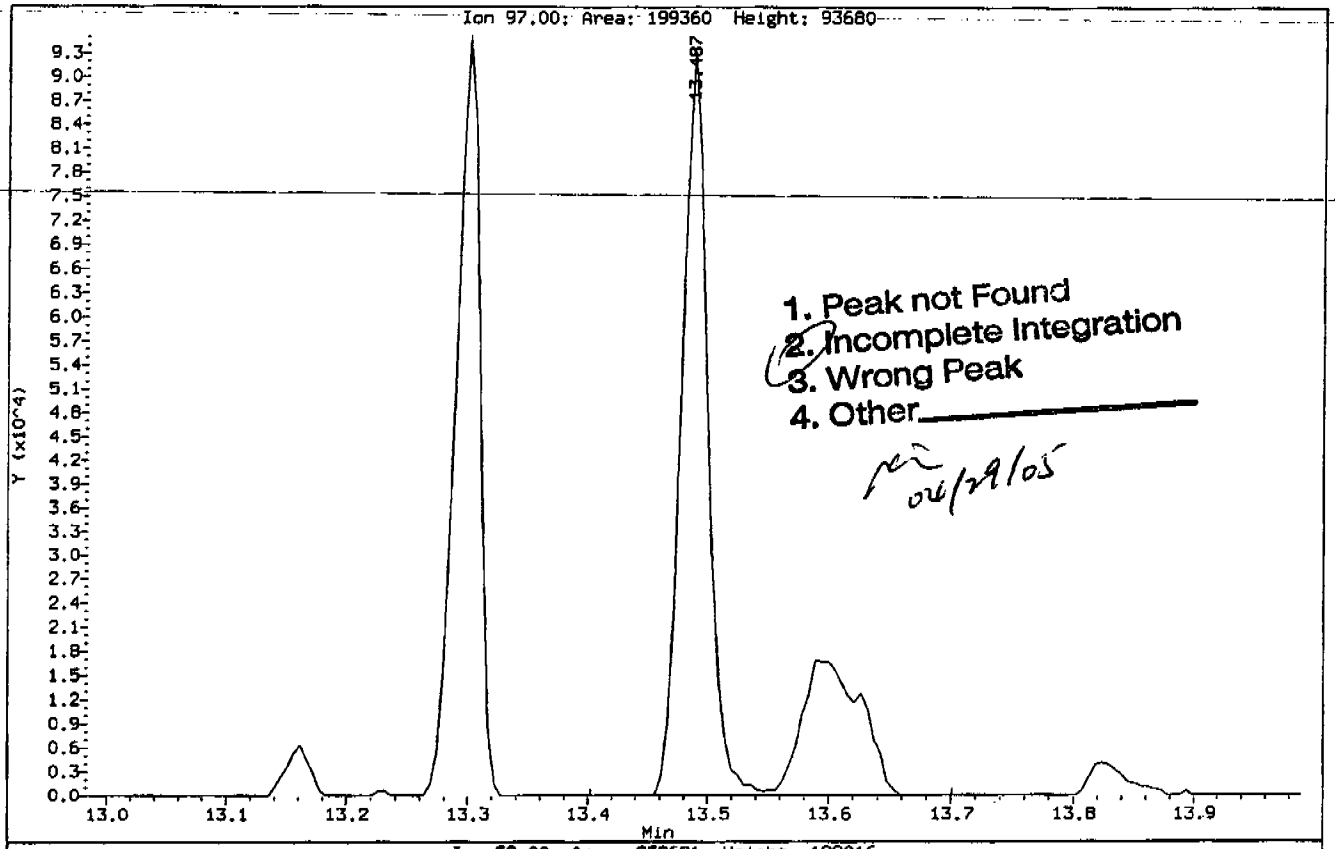
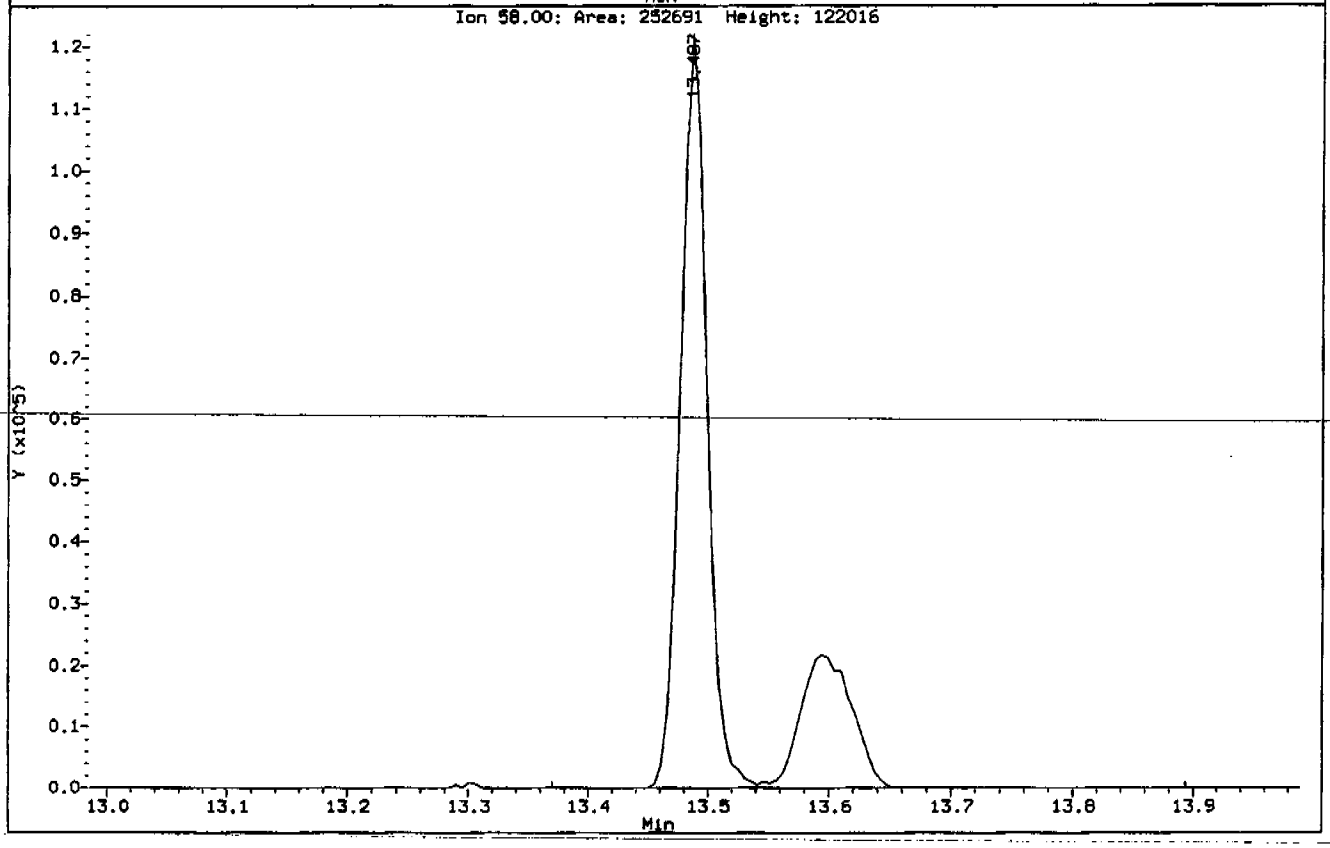
Injection Date: 28-APR-2005 11:41
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

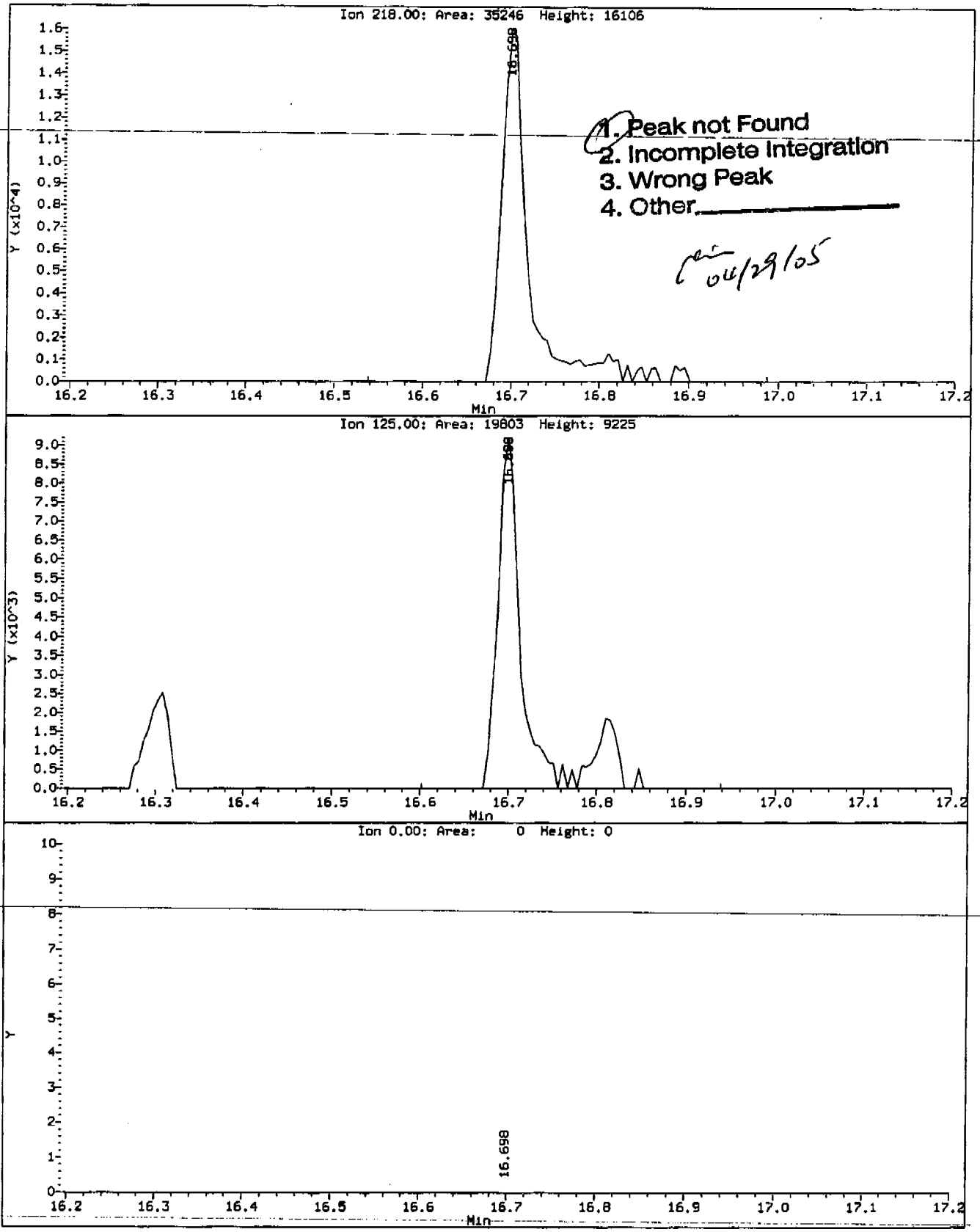
Compound: Methapyrilene
CAS Number: 91-80-5





Data File: \\Slavr01\BNA_LAB\MSK.i\K050428A.B\KCAL2579.D
Injection Date: 28-APR-2005 11:41
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

Compound: Famphur
CAS Number: 52-85-7



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

04/29/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2581.D
Report Date: 29-Apr-2005 09:08

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2581.D
Lab Smp Id: SSTD160APPIX Client Smp ID: SSTD160APPIX
Inj Date : 28-APR-2005 12:50
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD160APPIX
Misc Info : SV0188-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Meth Date : 29-Apr-2005 09:07 hongs Quant Type: ISTD
Cal Date : 28-APR-2005 12:50 Cal File: KCAL2581.D
Als bottle: 5 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIX.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
7	2-Picoline	93	2.527	2.527	(0.548)	876346	160.000	176.3(A)
8	N-Nitrosomethylethylamine	88	2.730	2.730	(0.592)	372315	160.000	166.8(AM)
9	Methyl methanesulfonate	80	3.098	3.098	(0.672)	308410	160.000	182.6(A)
12	N-Nitrosodiethylamine	102	3.493	3.493	(0.758)	452820	160.000	173.9(A)
13	Ethyl Methanesulfonate	79	3.883	3.883	(0.842)	754320	160.000	170.6(A)
18	Pentachloroethane	117	4.268	4.268	(0.926)	367211	160.000	175.8(A)
* 22	1,4-Dichlorobenzene-d4	152	4.610	4.610	(1.000)	157286	40.0000	
30	Acetophenone	105	5.160	5.160	(0.833)	1458049	160.000	180.3(A)
31	N-Nitrosopyrrolidine	100	5.219	5.219	(0.843)	485296	160.000	181.4(A)
33	N-Nitrosomorpholine	116	5.235	5.235	(0.846)	233456	160.000	197.9(A)
34	O-Toluidine	106	5.235	5.235	(0.846)	1602194	160.000	187.0(A)
38	N-Nitrosopiperidine	114	5.572	5.572	(0.900)	434379	160.000	175.4(A)
43	o,o,o-Triethyl-Phosphorothioa	198	5.983	5.983	(0.966)	624538	160.000	183.9(A)
* 48	Naphthalene-d8	136	6.191	6.191	(1.000)	558559	40.0000	
46	a,a-Dimethyl-phenethylamine	58	6.074	6.074	(0.981)	1955959	160.000	183.4(AM)
52	2,6-Dichlorophenol	162	6.405	6.405	(1.035)	733515	160.000	183.3(A)
53	Hexachloropropene	213	6.378	6.378	(1.030)	868770	160.000	177.4(A)
55	Benzothiazole	135	6.597	6.597	(1.066)	1321579	160.000	182.7(A)
58	p-Phenylenediamine	108	6.902	6.902	(1.115)	709176	160.000	173.3(A)
57	n-Nitrosodi-n-butylamine	84	6.891	6.891	(1.113)	782887	160.000	176.0(A)
61	Safrole	162	7.121	7.121	(1.150)	773703	160.000	184.3(A)

04/29/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
65	1,2,4,5-Tetrachlorobenzene	216	7.527	7.527	(0.846)	2151431	160.000	180.2(A)
64	cis-Isosafrole	162	7.554	7.554	(0.849)	79454	160.000	171.6(AM)
70	trans-Isosafrole	162	7.922	7.922	(0.891)	1001681	160.000	200.4(A)
74	1,4-Naphthoquinone	158	8.264	8.264	(0.929)	171180	160.000	77.59
75	1,4-Dinitrobenzene	168	8.451	8.451	(1.365)	316148	160.000	185.4(A)
77	1,3-Dinitrobenzene	168	8.643	8.643	(0.972)	339294	160.000	177.3(A)
* 82	Acenaphthene-d10	164	8.894	8.894	(1.000)	331327	40.0000	
87	Pentachlorobenzene	250	9.284	9.284	(1.044)	1000152	160.000	172.2(A)
89	1-Naphthylamine	143	9.429	9.429	(1.060)	1542575	160.000	170.8(A)
90	2-Naphthylamine	143	9.573	9.573	(1.076)	1414457	160.000	172.8(A)
92	2,3,4,6-Tetrachlorophenol	232	9.605	9.605	(1.080)	610558	160.000	203.7(A)
96	Thionazin	107	10.048	10.048	(1.130)	384758	160.000	173.4(A)
97	5-Nitro-o-toluidine	152	10.070	10.070	(0.869)	564722	160.000	176.7(A)
101	tri-n-butylphosphate	99	10.326	10.326	(1.161)	2664863	160.000	184.2(A)
105	Sulfotepp	97	10.721	10.721	(0.925)	423104	160.000	176.9(A)
106	Diallate (peak 1)	86	10.775	10.775	(0.929)	841377	160.000	177.3(A)
108	Phorate	75	10.802	10.802	(0.932)	1566675	160.000	183.1(A)
111	Diallate (peak 2)	86	10.908	10.908	(0.941)	170770	160.000	168.8(A)
107	1,3,5-Trinitrobenzene	213	10.898	10.898	(0.940)	276885	160.000	187.1(A)
110	Phenacetin	108	10.994	10.994	(0.948)	1101975	160.000	167.4(A)
113	Dimethoate	87	11.202	11.202	(0.966)	468512	160.000	119.9
116	4-Aminobiphenyl	169	11.346	11.346	(0.979)	2189894	160.000	183.7(A)
115	tris(2-chloroethyl)phosphate	63	11.437	11.437	(0.987)	571306	160.000	164.4(A)
119	Pentachloronitrobenzene	237	11.544	11.544	(0.996)	345040	160.000	168.9(A)
118	Pronamide	173	11.630	11.630	(1.003)	981361	160.000	165.9(A)
* 121	Phenanthrene-d10	188	11.592	11.592	(1.000)	626541	40.0000	
123	Disulfoton	88	11.790	11.790	(1.017)	1075549	160.000	178.5(A)
125	Dinoseb	211	11.843	11.843	(1.022)	713987	160.000	195.5(A)
128	Methyl Parathion	109	12.511	12.511	(1.079)	446238	160.000	128.4
131	4-Nitroquinoline-1-oxide	190	13.248	13.248	(1.143)	206373	160.000	155.4
130	Parathion	97	13.312	13.312	(1.148)	473659	160.000	170.0(A)
132	Methapyrilene	97	13.515	13.515	(1.166)	455839	160.000	107.2(M)
133	Isodrin	193	13.633	13.633	(1.176)	366639	160.000	168.8(A)
141	Kepone	272	14.781	14.781	(0.884)	16008	160.000	194.0(A)
140	Aramite (peak 1)	185	14.872	14.872	(0.889)	157712	160.000	167.2(A)
142	Aramite (peak 2)	185	15.033	15.033	(0.899)	238217	160.000	165.7(A)
143	p-(Dimethylamino)azobenzene	120	15.113	15.113	(0.904)	741843	160.000	166.7(A)
144	Chlorobenzilate	251	15.252	15.252	(0.912)	1134368	160.000	182.5(A)
148	2-Acetylaminofluorene	181	16.347	16.347	(0.978)	1201114	160.000	171.3(A)
149	Famphur	218	16.721	16.721	(1.000)	13284	160.000	39.79(M)
* 153	Chrysene-d12	240	16.721	16.721	(1.000)	534877	40.0000	
151	4,4'-Methylenebis(2-Chloroani	266	16.822	16.822	(1.006)	280639	160.000	180.7(A)
162	7,12-Dimethylbenz(a)anthracen	256	18.767	18.767	(0.970)	1455402	160.000	173.4(A)
163	Hexachlorophene	196	19.205	19.205	(0.993)	176125	160.000	655.6(A)
* 166	Perylene-d12	264	19.338	19.338	(1.000)	454175	40.0000	
169	3-methylcholanthrene	268	19.921	19.921	(1.030)	1554224	160.000	182.4(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2581.D
Report Date: 29-Apr-2005 08:42

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

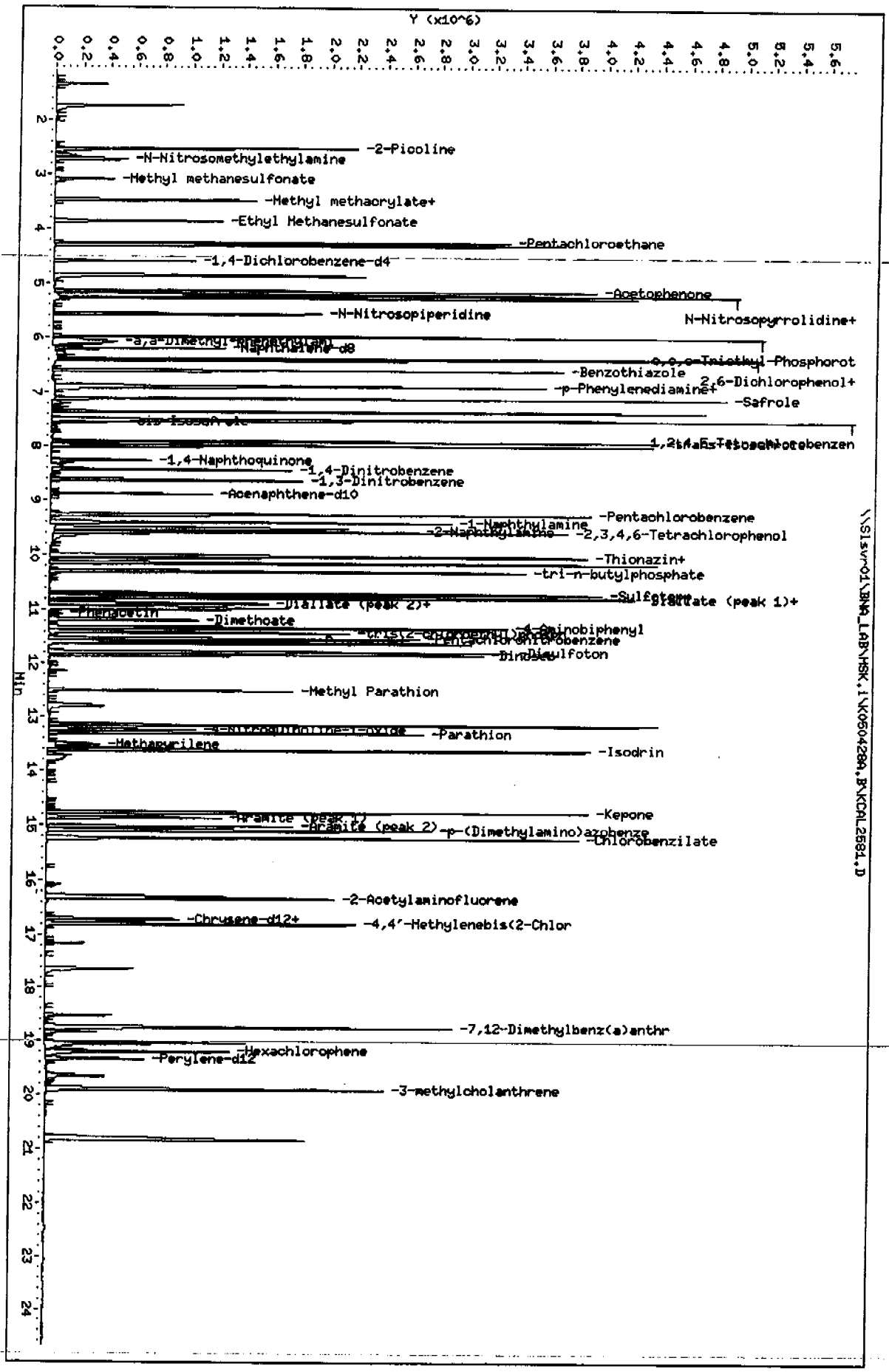
Instrument ID: MSK.i
Lab File ID: KCAL2581.D
Lab Smp Id: SSTD160APPIX
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Misc Info: SV0188-05

Calibration Date: 28-APR-2005
Calibration Time: 11:41
Client Smp ID: SSTD160APPIX
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	162145	81073	324290	157286	-3.00
48 Naphthalene-d8	535939	267970	1071878	558559	4.22
82 Acenaphthene-d10	307602	153801	615204	331327	7.71
121 Phenanthrene-d10	574409	287205	1148818	626541	9.08
153 Chrysene-d12	519397	259699	1038794	534877	2.98
166 Perylene-d12	440492	220246	880984	454175	3.11

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.62	4.12	5.12	4.61	-0.20
48 Naphthalene-d8	6.21	5.71	6.71	6.19	-0.23
82 Acenaphthene-d10	8.91	8.41	9.41	8.89	-0.16
121 Phenanthrene-d10	11.58	11.08	12.08	11.59	0.11
153 Chrysene-d12	16.74	16.24	17.24	16.72	-0.09
166 Perylene-d12	19.35	18.85	19.85	19.34	-0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

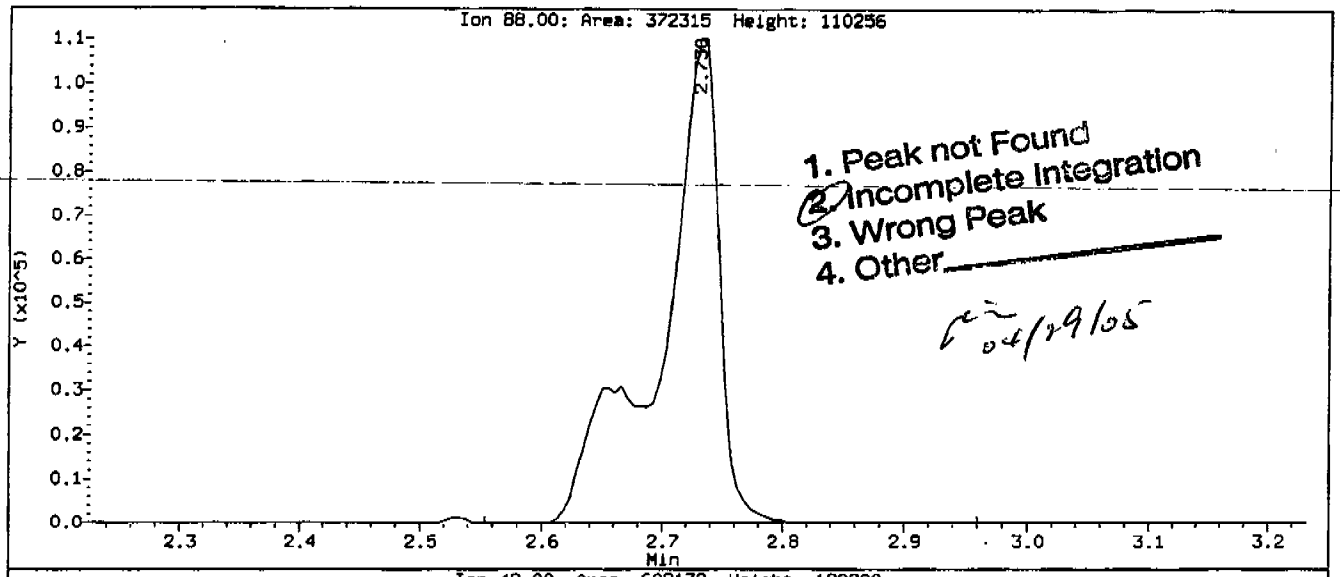


Data File: \\Slsvr01\BNA_LAB\HSK.i\K050428A.B\KCAL2581.D
Date : 28-APR-2005 12:50
Client ID: SSTD160APPIX
Sample Info: SSTD160APPIX
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

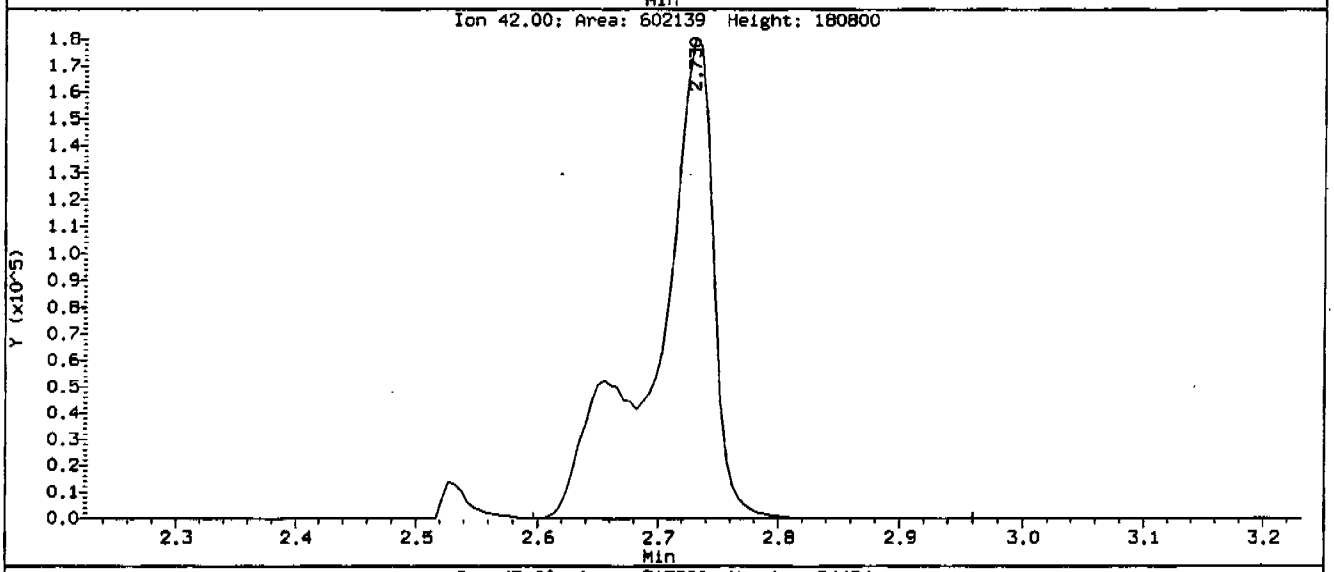
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2581.D
Injection Date: 28-APR-2005 12:50
Instrument: MSK.i
Client Sample ID: SSTD160APPIX

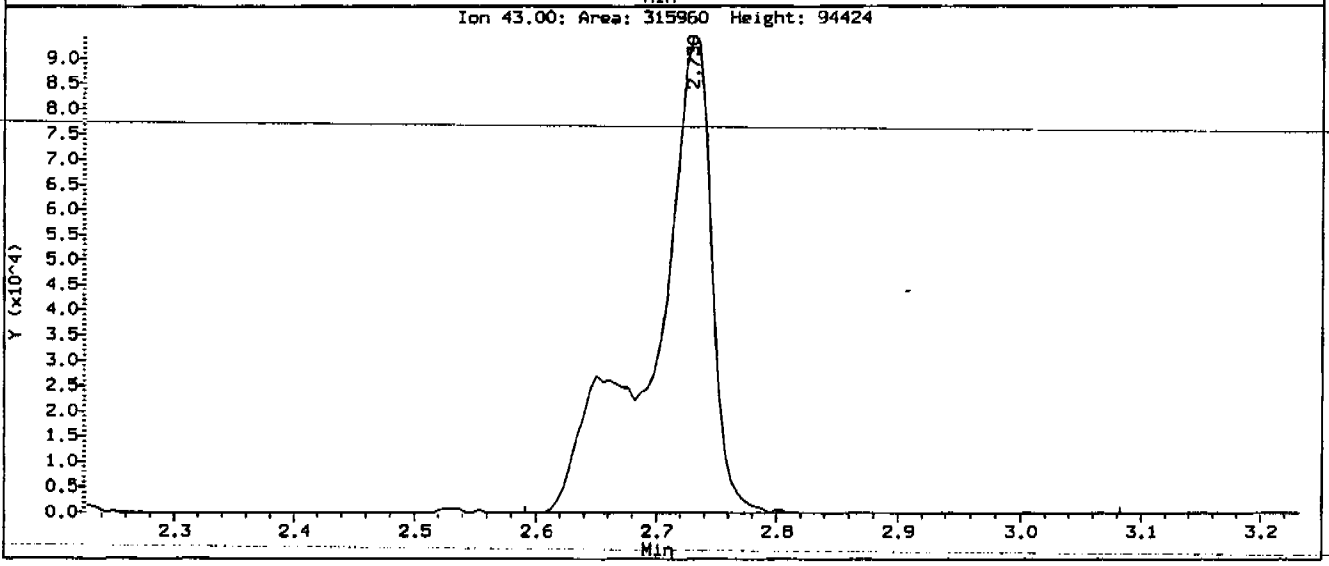
Compound: N-Nitrosomethylethylamine
CAS Number: 10595-95-6



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

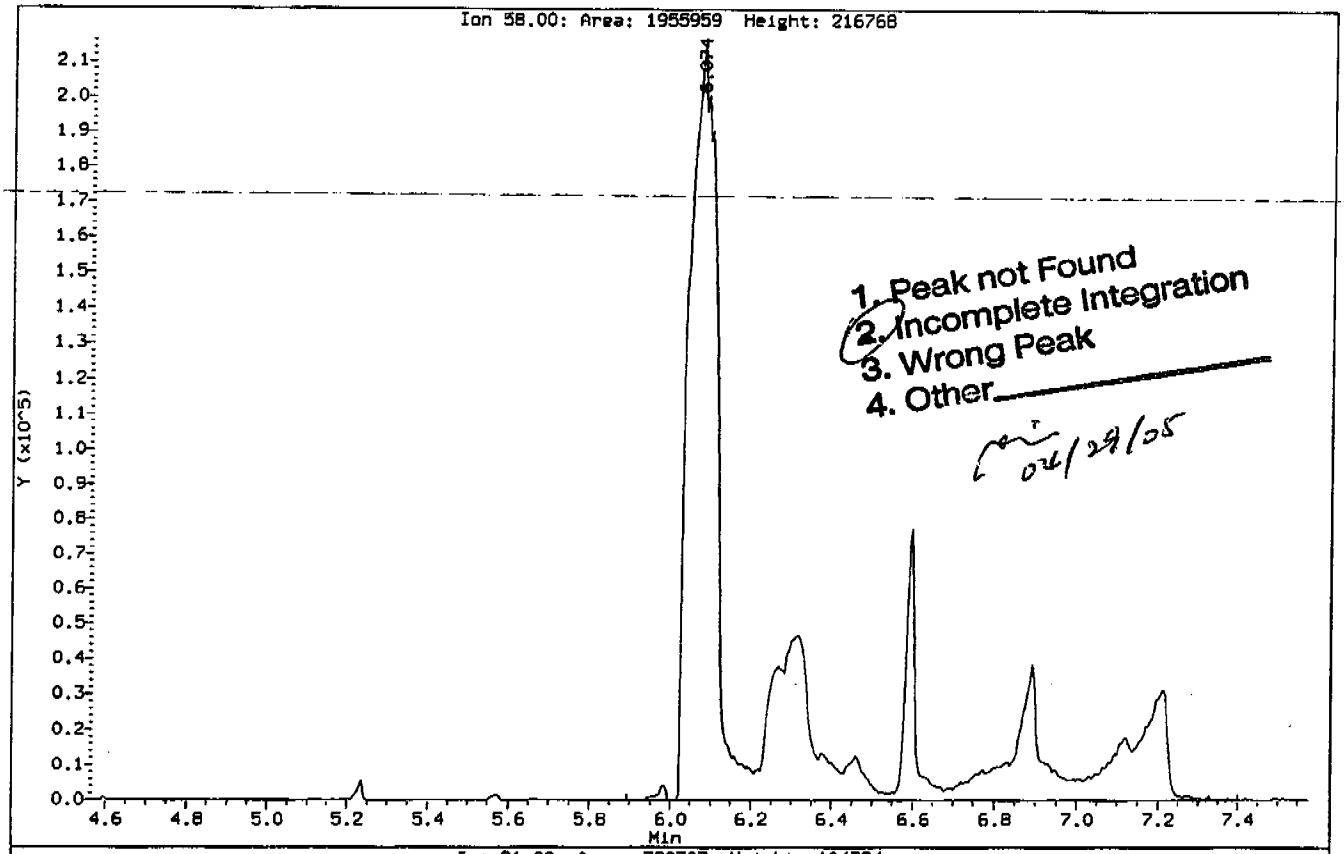
04/29/05

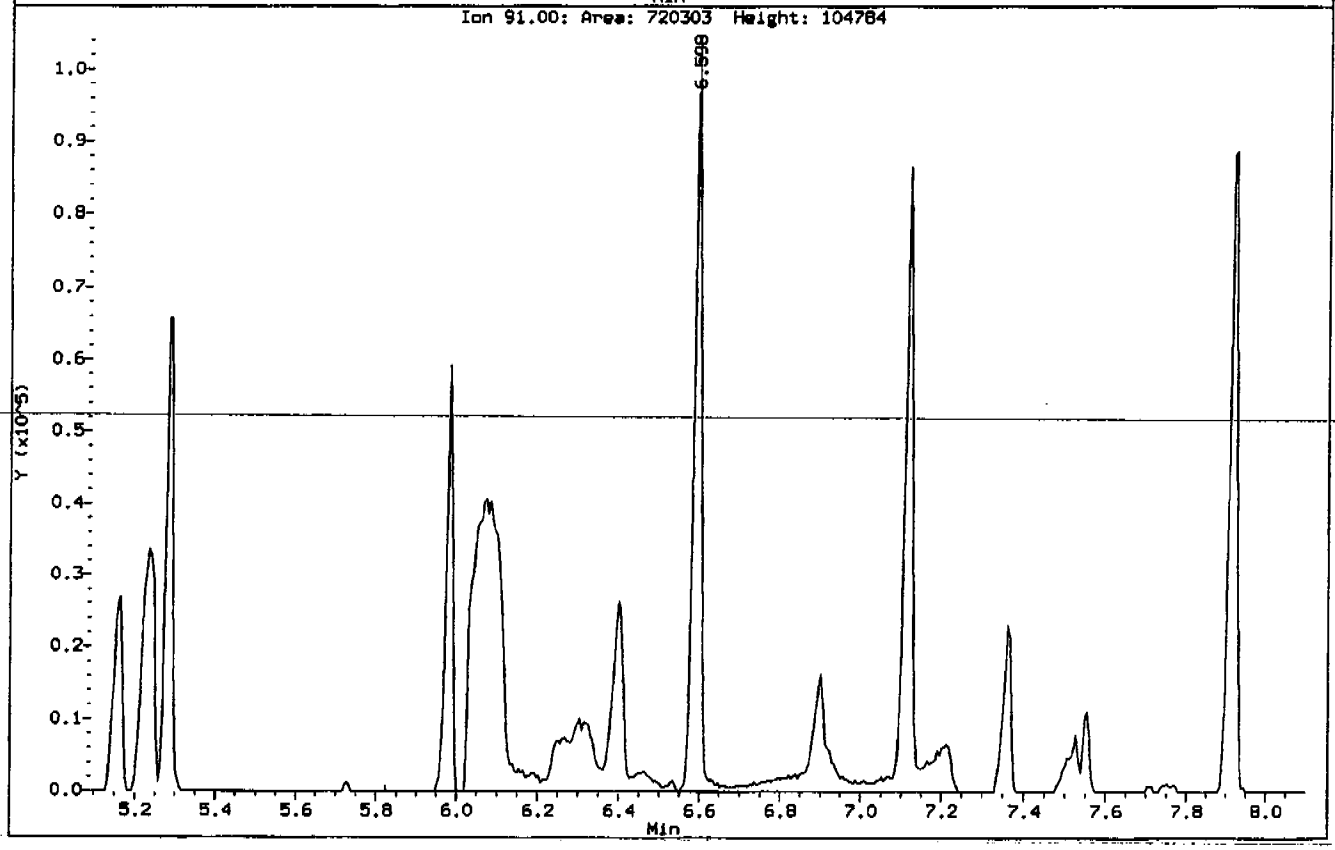




Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2581.D
Injection Date: 28-APR-2005 12:50
Instrument: MSK.i
Client Sample ID: SSTD160APPIX

Compound: a,a-Dimethyl-phenethylamine
CAS Number: 122-09-8





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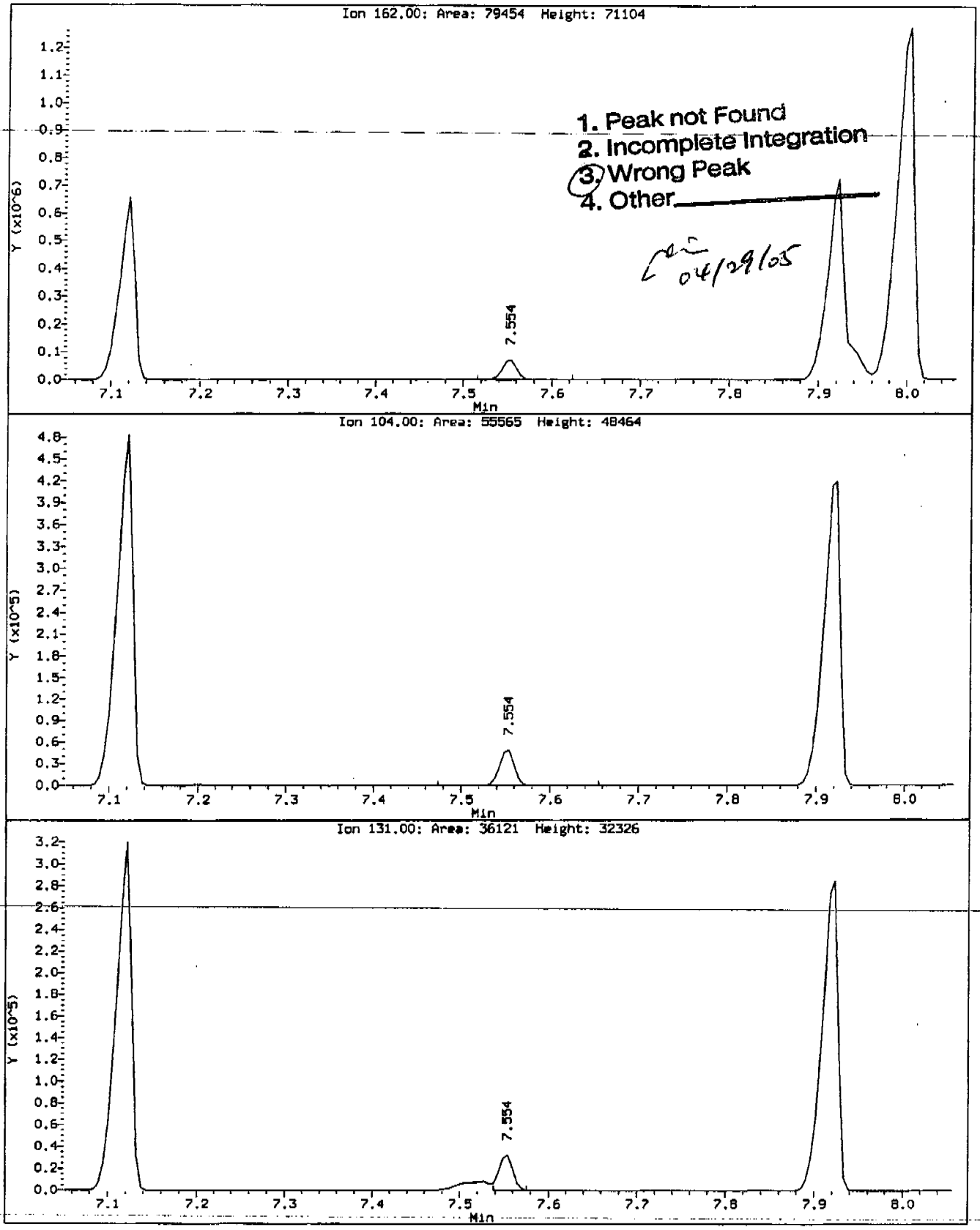
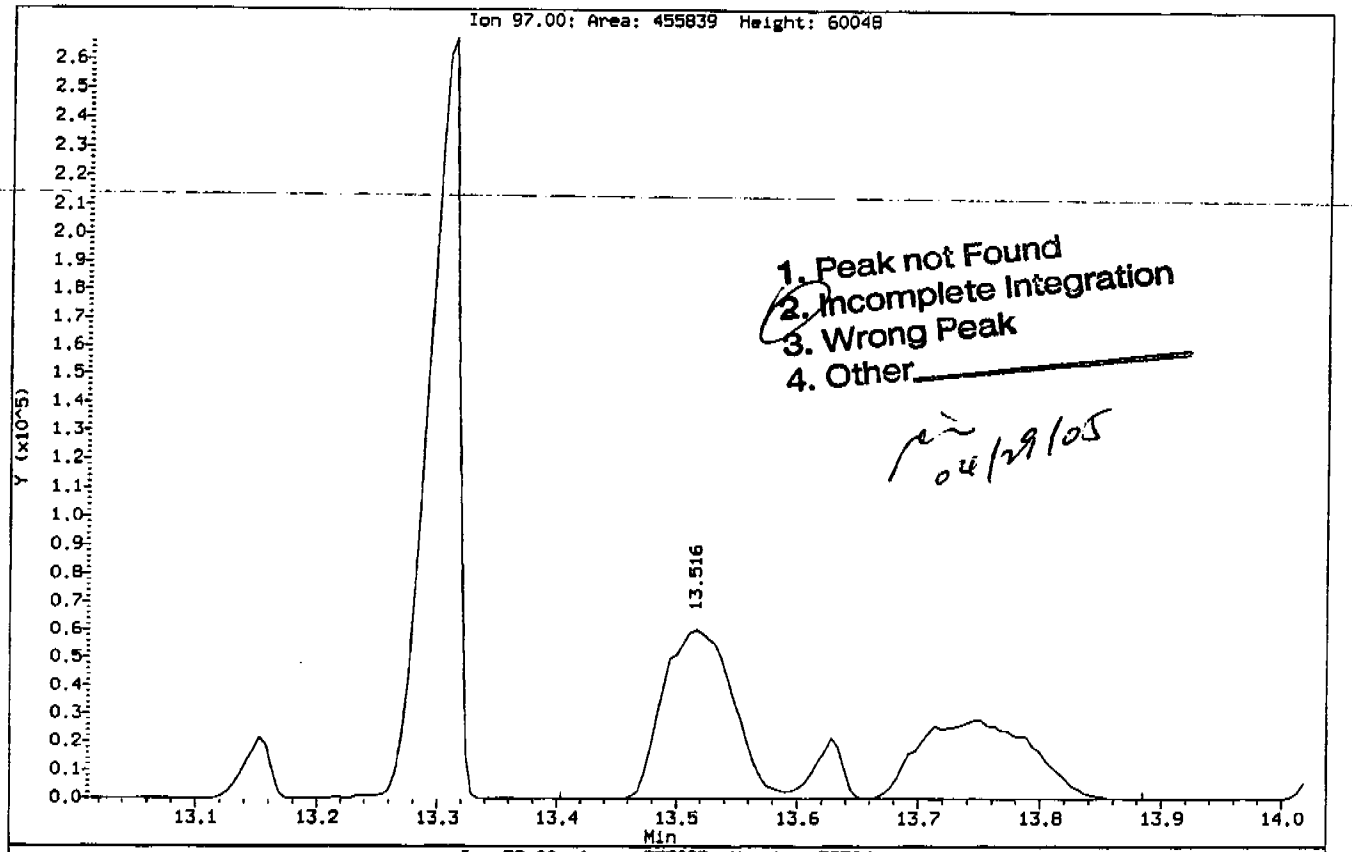
Injection Date: 28-APR-2005 12:50
Instrument: MSK.i
Client Sample ID: SSTD160APPIX

Compound: cis-Isosafrole
CAS Number: 120-58-1



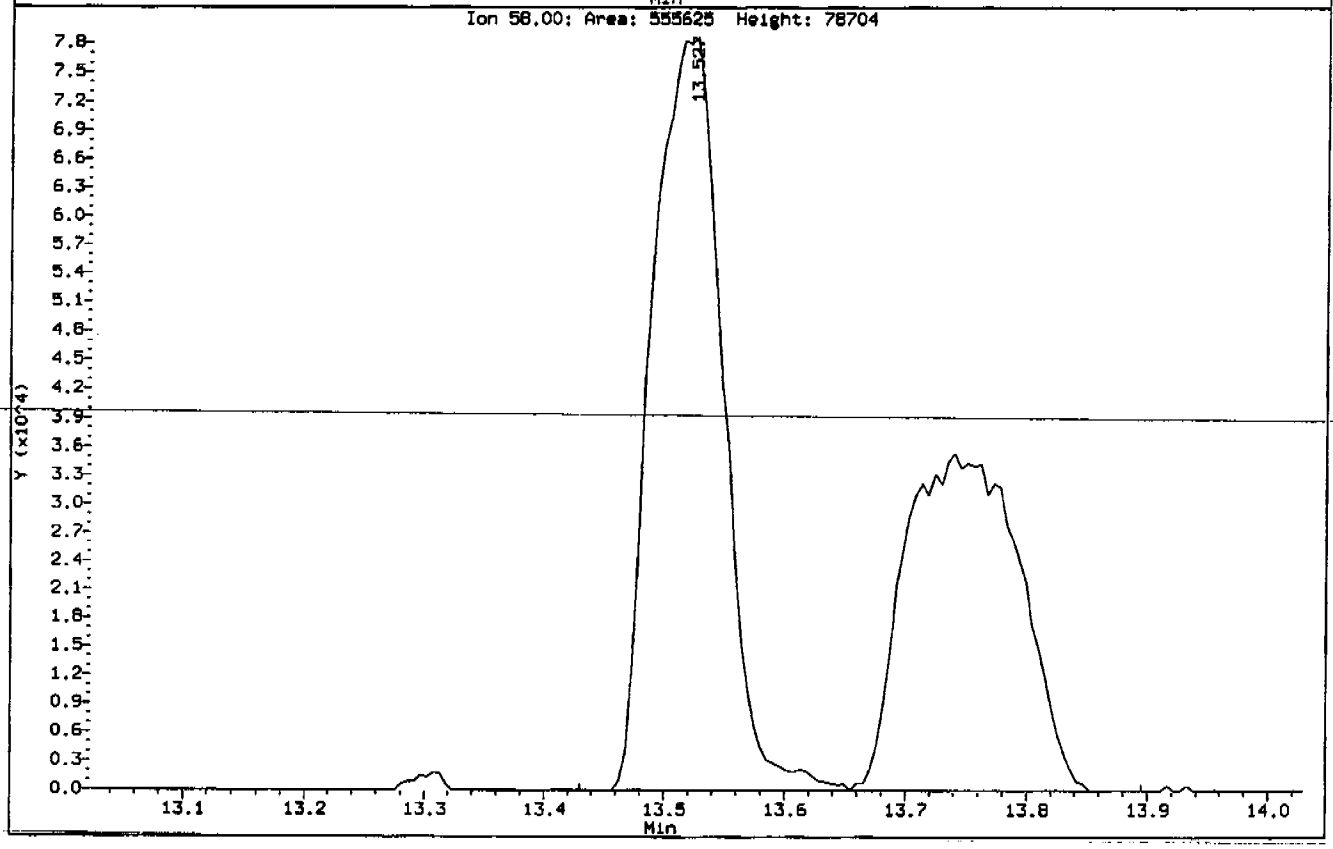
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2581.D
Injection Date: 28-APR-2005 12:50
Instrument: MSK.i
Client Sample ID: SSTD160APPIX

Compound: Methapyrilene
CAS Number: 91-80-5



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

04/29/05



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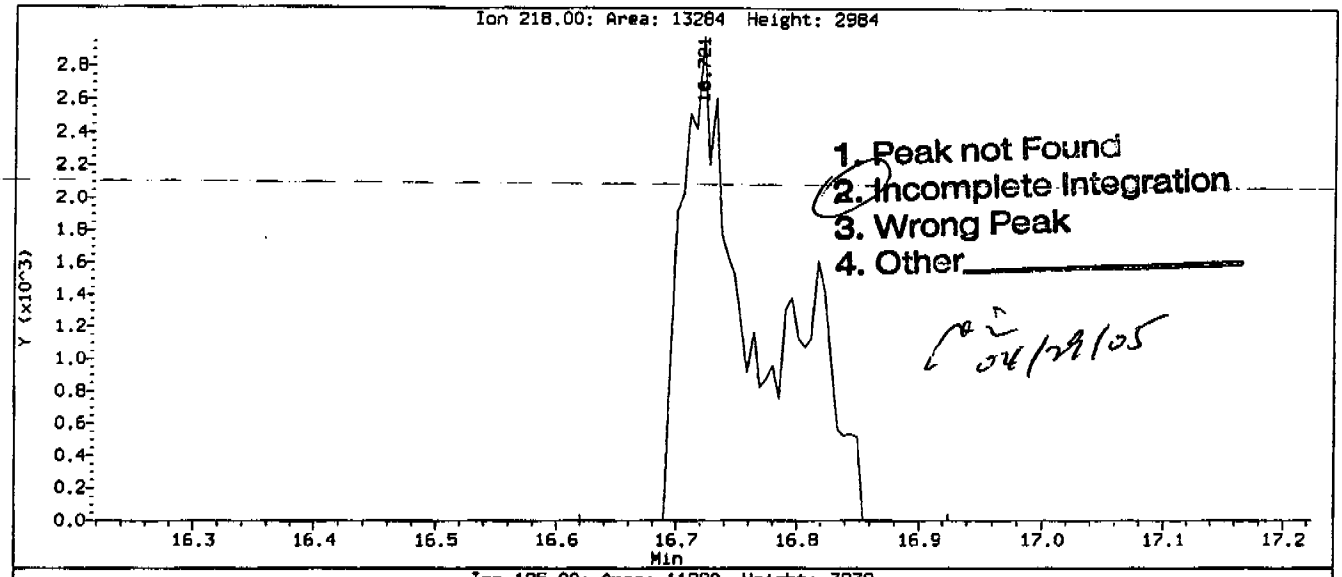
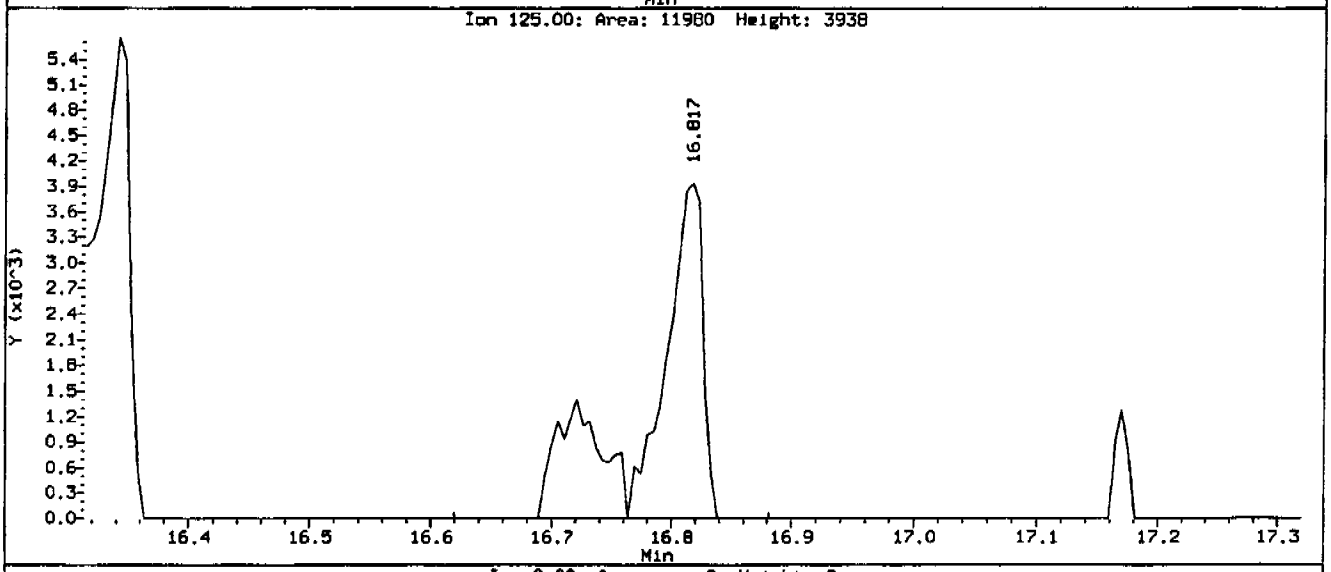
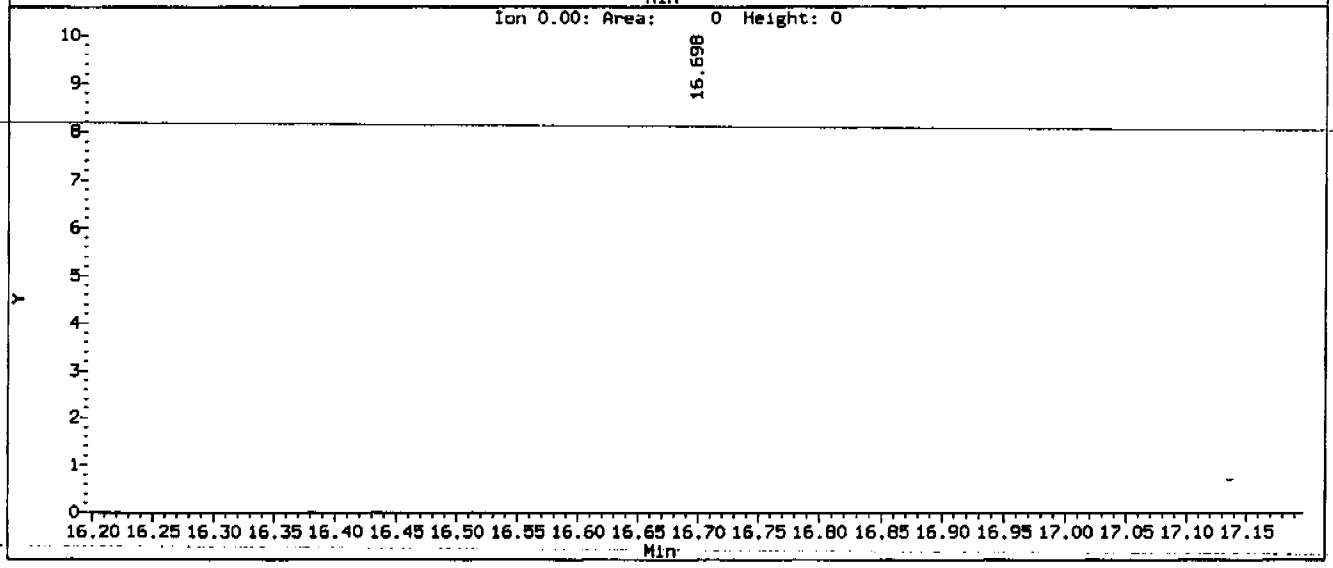
Injection Date: 28-APR-2005 12:50
Instrument: MSK.i
Client Sample ID: SSTD160APPIX

Compound: Famphur
CAS Number: 52-85-7







Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2582.D
Report Date: 29-Apr-2005 08:42

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2582.D
Lab Smp Id: SSTD120APPIX Client Smp ID: SSTD120APPIX
Inj Date : 28-APR-2005 13:24
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD120APPIX
Misc Info : SV0187-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Meth Date : 29-Apr-2005 08:42 hongs Quant Type: ISTD
Cal Date : 28-APR-2005 13:24 Cal File: KCAL2582.D
Als bottle: 6 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIX.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
7 2-Picoline	93	2.530	2.530	(0.549)	632693	120.000	124.4
8 N-Nitrosomethylethylamine	88	2.727	2.727	(0.592)	282509	120.000	123.6(M)
9 Methyl methanesulfonate	80	3.096	3.096	(0.672)	225225	120.000	128.9
12 N-Nitrosodiethylamine	102	3.491	3.491	(0.758)	341812	120.000	126.7
13 Ethyl Methanesulfonate	79	3.876	3.876	(0.841)	562282	120.000	122.4
18 Pentachloroethane	117	4.271	4.271	(0.927)	270238	120.000	125.9
* 22 1,4-Dichlorobenzene-d4	152	4.608	4.608	(1.000)	161669	40.0000	
30 Acetophenone	105	5.158	5.158	(0.833)	1068225	120.000	126.9
31 N-Nitrosopyrrolidine	100	5.206	5.206	(0.840)	340903	120.000	124.2
33 N-Nitrosomorpholine	116	5.227	5.227	(0.844)	162928	120.000	134.1
34 O-Toluidine	106	5.238	5.238	(0.846)	1134515	120.000	129.1
38 N-Nitrosopiperidine	114	5.569	5.569	(0.899)	318413	120.000	125.6
43 o,o,o-Triethyl-Phosphorothioa	198	5.981	5.981	(0.966)	458138	120.000	131.2
* 48 Naphthalene-d8	136	6.194	6.194	(1.000)	571006	40.0000	
46 a,a-Dimethyl-phenethylamine	58	6.071	6.071	(0.980)	1420992	120.000	130.9(M)
52 2,6-Dichlorophenol	162	6.397	6.397	(1.033)	537519	120.000	133.3
53 Hexachloropropene	213	6.381	6.381	(1.030)	651747	120.000	130.1(M)
55 Benzothiazole	135	6.595	6.595	(1.065)	946286	120.000	127.2
58 p-Phenylenediamine	108	6.894	6.894	(1.113)	479505	120.000	119.4
57 n-Nitrosodi-n-butylamine	84	6.889	6.889	(1.112)	565324	120.000	124.3
61 Safrole	162	7.118	7.118	(1.149)	559272	120.000	130.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
65	1,2,4,5-Tetrachlorobenzene	216	7.524	7.524	(0.846)	1545981	120.000	127.4
64	cis-Isosafrole	162	7.556	7.556	(0.849)	57922	120.000	123.8(M)
70	trans-Isosafrole	162	7.920	7.920	(0.890)	661037	120.000	129.5
74	1,4-Naphthoquinone	158	8.267	8.267	(0.929)	174093	120.000	81.58
75	1,4-Dinitrobenzene	168	8.443	8.443	(1.363)	231938	120.000	133.6
77	1,3-Dinitrobenzene	168	8.641	8.641	(0.971)	250675	120.000	131.0
* 82	Acenaphthene-d10	164	8.897	8.897	(1.000)	334620	40.0000	
87	Pentachlorobenzene	250	9.282	9.282	(1.043)	738024	120.000	125.3
89	1-Naphthylamine	143	9.426	9.426	(1.059)	1167335	120.000	128.2
90	2-Naphthylamine	143	9.570	9.570	(1.076)	1056669	120.000	128.2
92	2,3,4,6-Tetrachlorophenol	232	9.603	9.603	(1.079)	428079	120.000	143.5
96	Thionazin	107	10.035	10.035	(1.128)	291978	120.000	130.2
97	5-Nitro-o-toluidine	152	10.046	10.046	(0.867)	409426	120.000	129.0
101	tri-n-butylphosphate	99	10.313	10.313	(1.159)	1885082	120.000	128.6
105	Sulfotepp	97	10.714	10.714	(0.925)	308094	120.000	128.8
106	Diallate (peak 1)	86	10.772	10.772	(0.930)	601217	120.000	126.7
108	Phorate	75	10.794	10.794	(0.932)	1100425	120.000	128.2
111	Diallate (peak 2)	86	10.906	10.906	(0.941)	122849	120.000	121.4
107	1,3,5-Trinitrobenzene	213	10.885	10.885	(0.940)	201804	120.000	138.0
110	Phenacetin	108	10.970	10.970	(0.947)	804532	120.000	122.7
113	Dimethoate	87	11.189	11.189	(0.966)	404758	120.000	105.6
116	4-Aminobiphenyl	169	11.339	11.339	(0.979)	1550673	120.000	131.2
115	tris(2-chloroethyl)phosphate	63	11.419	11.419	(0.986)	414473	120.000	119.2
119	Pentachloronitrobenzene	237	11.547	11.547	(0.997)	258669	120.000	127.1
118	Pronamide	173	11.616	11.616	(1.003)	719402	120.000	121.4
* 121	Phenanthrene-d10	188	11.584	11.584	(1.000)	625572	40.0000	
123	Disulfoton	88	11.782	11.782	(1.017)	763969	120.000	126.6
125	Dinoseb	211	11.836	11.836	(1.022)	513710	120.000	142.0
128	Methyl Parathion	109	12.509	12.509	(1.080)	372484	120.000	108.9
131	4-Nitroquinoline-1-oxide	190	13.241	13.241	(1.143)	162994	120.000	129.8
130	Parathion	97	13.305	13.305	(1.148)	348277	120.000	126.0
132	Methapyrilene	97	13.497	13.497	(1.165)	377298	120.000	89.17(M)
133	Isodrin	193	13.630	13.630	(1.177)	262442	120.000	119.6
141	Kepone	272	14.779	14.779	(0.884)	12345	120.000	147.7
140	Aramite (peak 1)	185	14.870	14.870	(0.889)	120048	120.000	125.0
142	Aramite (peak 2)	185	15.030	15.030	(0.899)	183382	120.000	125.7
143	p-(Dimethylamino)azobenzene	120	15.105	15.105	(0.903)	562960	120.000	123.7
144	Chlorobenzilate	251	15.249	15.249	(0.912)	828063	120.000	129.0
148	2-Acetylaminofluorene	181	16.334	16.334	(0.977)	923451	120.000	128.6
149	Famphur	218	16.702	16.702	(0.999)	24563	120.000	93.37(M)
* 153	Chrysene-d12	240	16.724	16.724	(1.000)	550836	40.0000	
151	4,4'-Methylenebis(2-Chloroani	266	16.814	16.814	(1.005)	206761	120.000	130.6
162	7,12-Dimethylbenz(a)anthracen	256	18.764	18.764	(0.970)	1109134	120.000	134.4
163	Hexachlorophene	196	19.047	19.047	(0.985)	9258	120.000	32.34(H)
* 166	Perylene-d12	264	19.341	19.341	(1.000)	447751	40.0000	
169	3-methylcholanthrene	268	19.907	19.907	(1.029)	1111655	120.000	132.0

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2582.D Page 3
Report Date: 29-Apr-2005 08:42

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

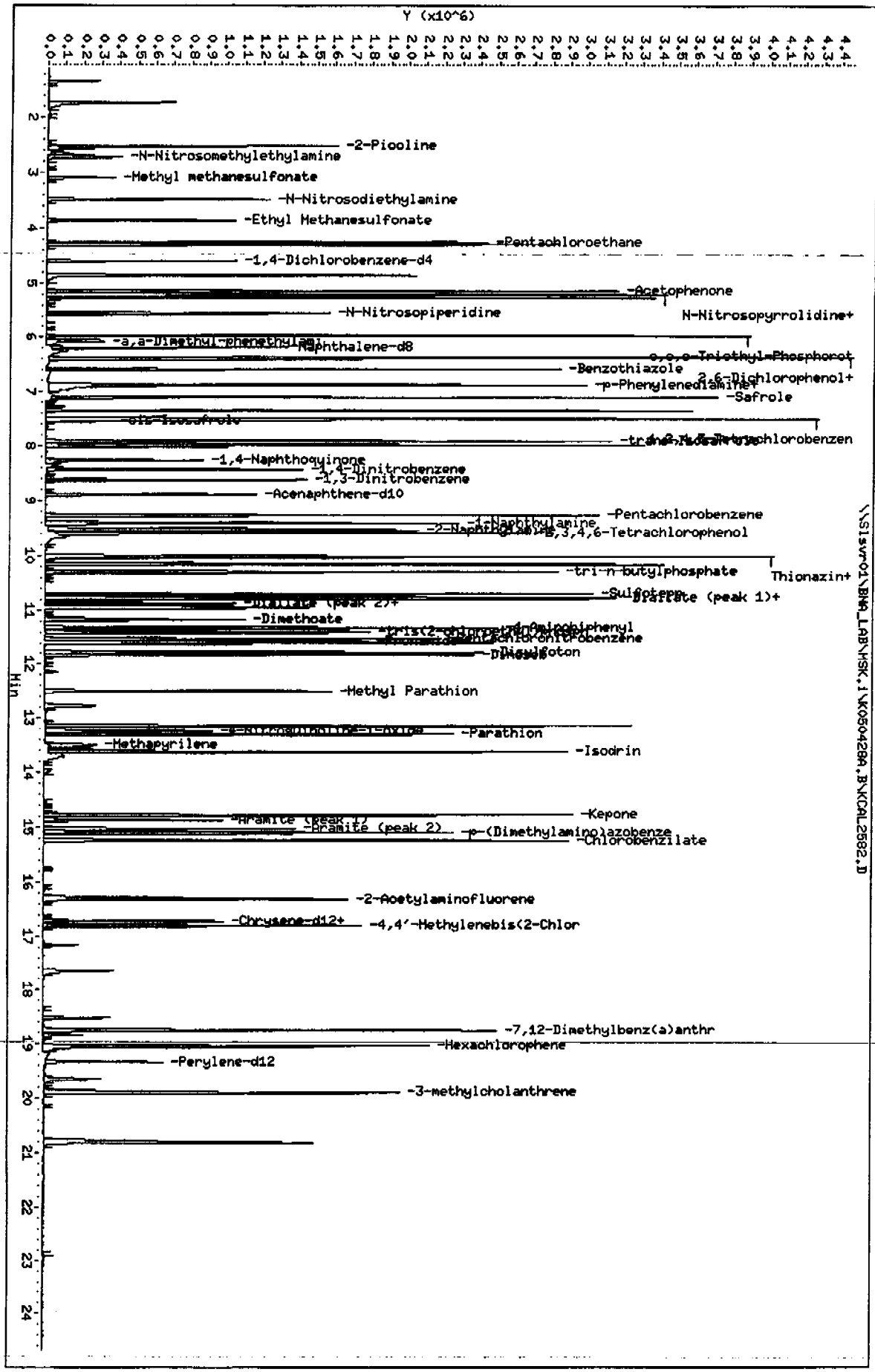
Instrument ID: MSK.i
Lab File ID: KCAL2582.D
Lab Smp Id: SSTD120APPIX
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Misc Info: SV0187-05

Calibration Date: 28-APR-2005
Calibration Time: 11:41
Client Smp ID: SSTD120APPIX
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	162145	81073	324290	161669	-0.29
48 Naphthalene-d8	535939	267970	1071878	571006	6.54
82 Acenaphthene-d10	307602	153801	615204	334620	8.78
121 Phenanthrene-d10	574409	287205	1148818	625572	8.91
153 Chrysene-d12	519397	259699	1038794	550836	6.05
166 Perylene-d12	440492	220246	880984	447751	1.65

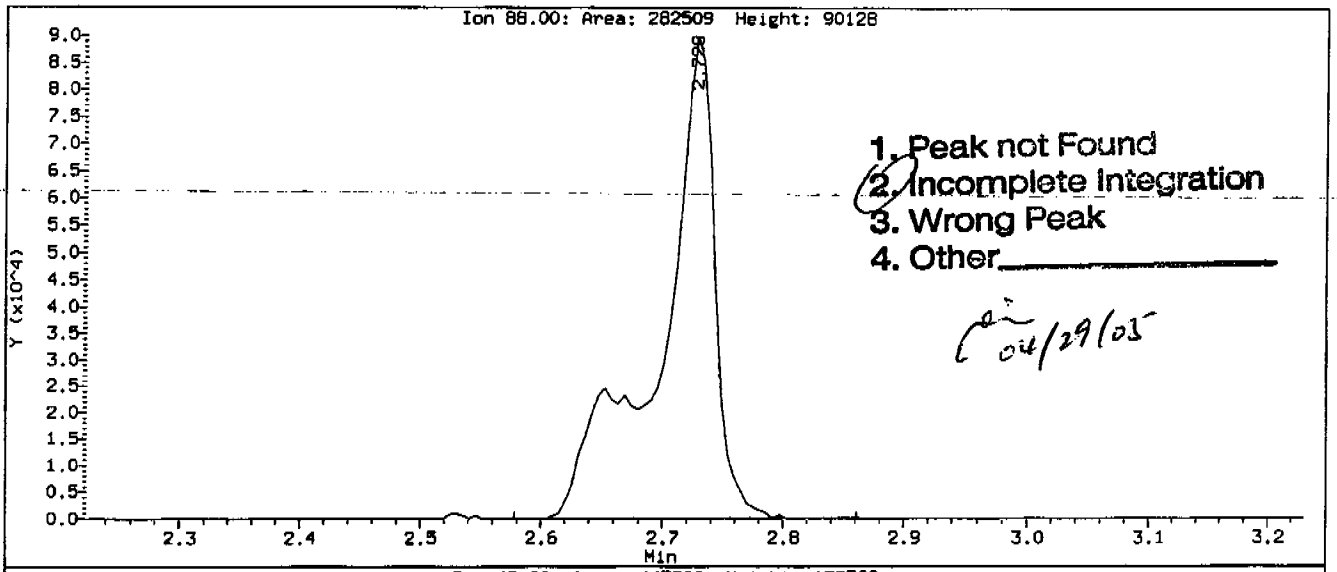
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.62	4.12	5.12	4.61	-0.25
48 Naphthalene-d8	6.21	5.71	6.71	6.19	-0.18
82 Acenaphthene-d10	8.91	8.41	9.41	8.90	-0.13
121 Phenanthrene-d10	11.58	11.08	12.08	11.58	0.04
153 Chrysene-d12	16.74	16.24	17.24	16.72	-0.07
166 Perylene-d12	19.35	18.85	19.85	19.34	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^6)
Min
-2-Picoline
-N-Nitrosomethylethylamine
-Methyl methanesulfonate
-N-Nitrosodiethylamine
-Ethyl Methanesulfonate
-Pentachloroethane
-1,4-Dichlorobenzene-d4
-Acetophenone
-N-Nitrosopiperidine
N-Nitrosopyrrolidine+
-a,a-Dimethyl-phenethylam
Naphthalene-d8
-Benzothiazole
-p-Phenylenediamine+
2,6-Dichlorophenol+
-Safrole
-1,4-Naphthoquinone
-1,4-Dinitrobenzene
-1,3-Dinitrobenzene
-Acenaphthene-d10
-Pentachlorobenzene
-1-Naphthylamine
-2-Naphthylamine
2,3,4,6-Tetrachlorophenol
-tri-n-butylphosphate
Thionazin+
-Dimethoate
-Methyl Parathion
-Parathion
-Methapyrilene
-Isodrin
-Kepone
-Aramite (peak 2)
-p-(Dimethylamino)azobenze
-Chlorobenzilate
-2-Acetylaminofluorene
-Chrysene-d12+
-4,4'-Methylenebis(2-Chlor
-7,12-Dimethylbenz(a)anthr
-Hexachlorophene
-Perylene-d12
-3-methylcholanthrene
\\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2582.D
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2582.D
Date : 28-APR-2005 13:24
Client ID: SSTD120APPIX
Sample Info: SSTD120APPIX
Volume Injected (uL): 1.0
Column phase:
Instrument: MSK.i
Operator: XIA
Column diameter: 2.00
Page 4

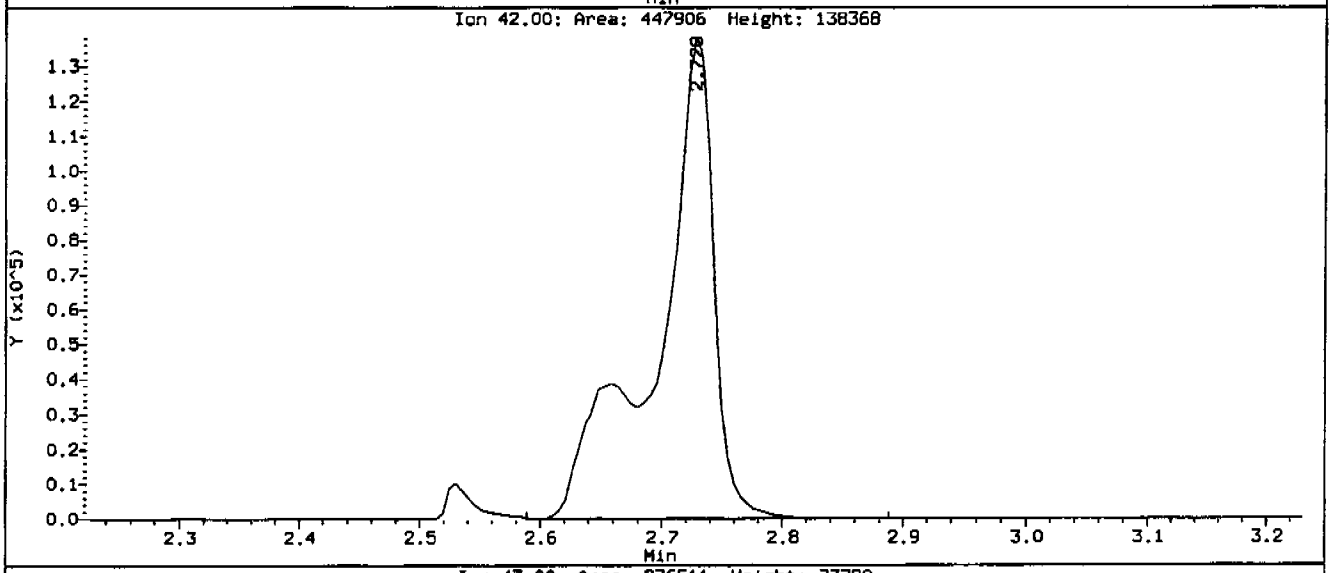
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2582.D
Injection Date: 28-APR-2005 13:24
Instrument: MSK.i
Client Sample ID: SSTD120APPIX

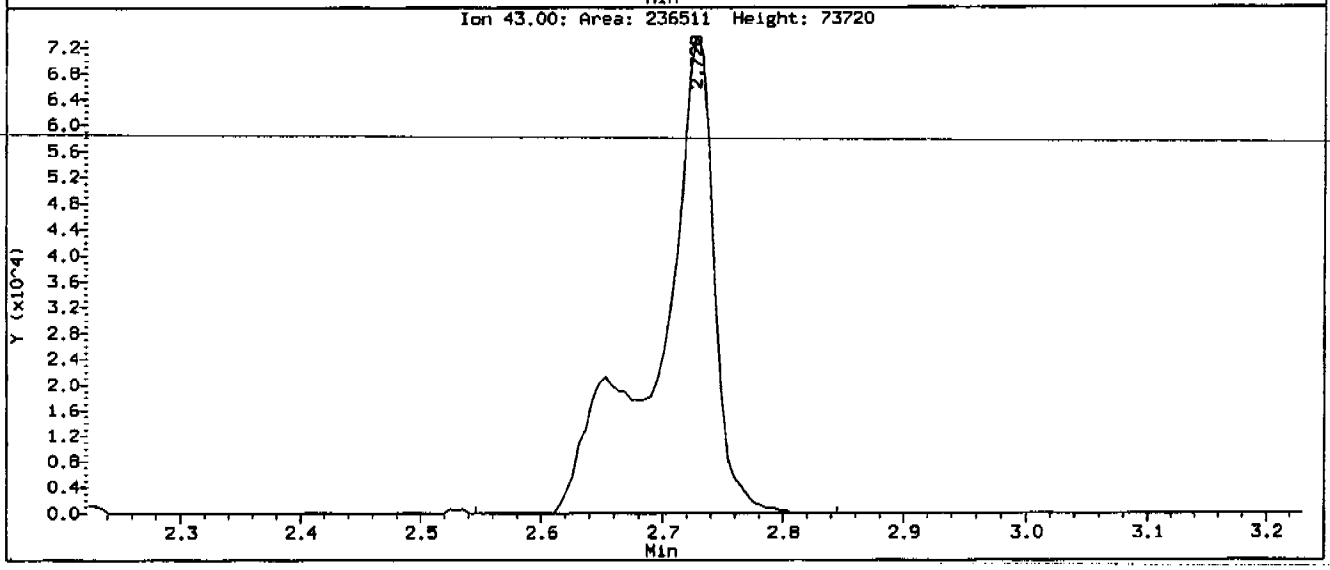
Compound: N-Nitrosomethylethylamine
CAS Number: 10595-95-6



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

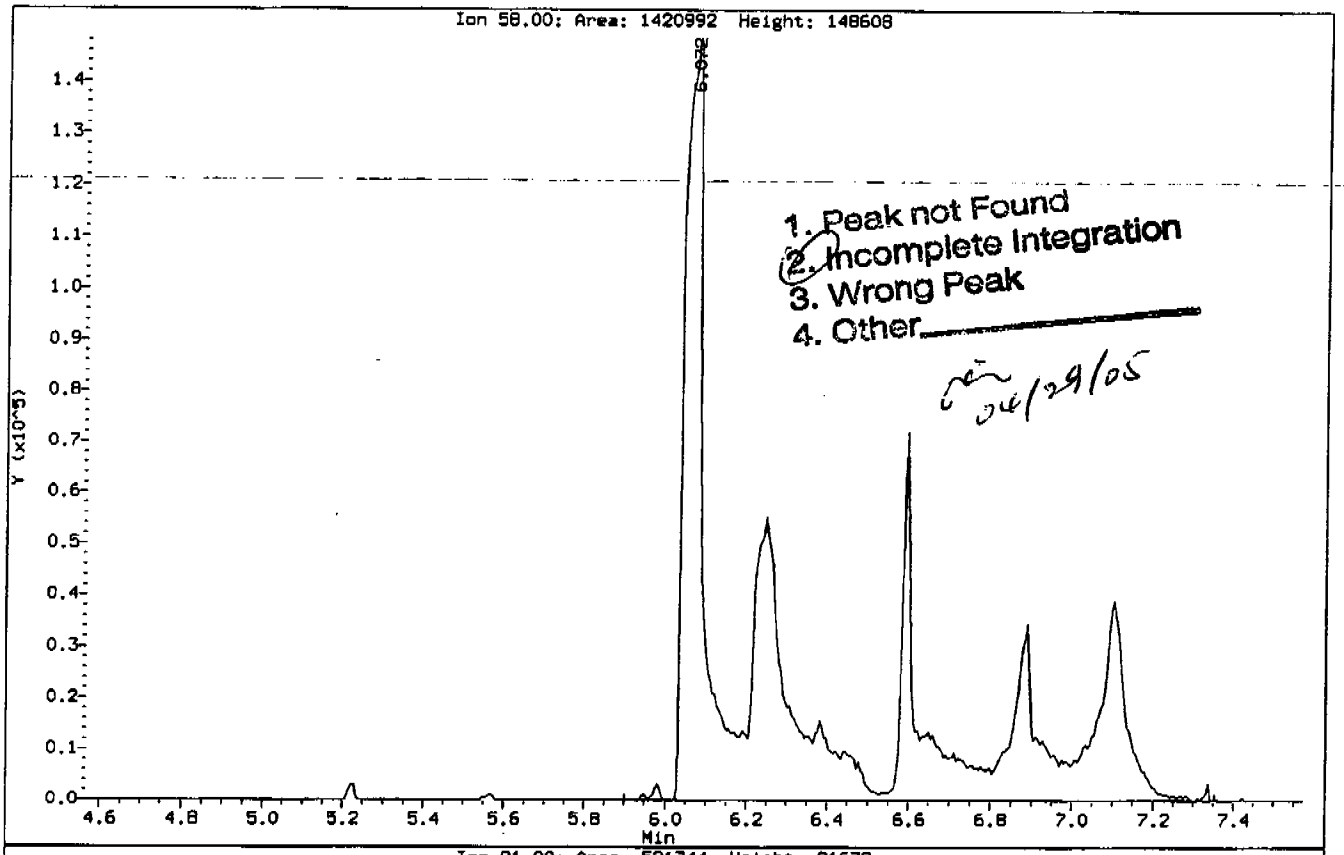
04/29/05

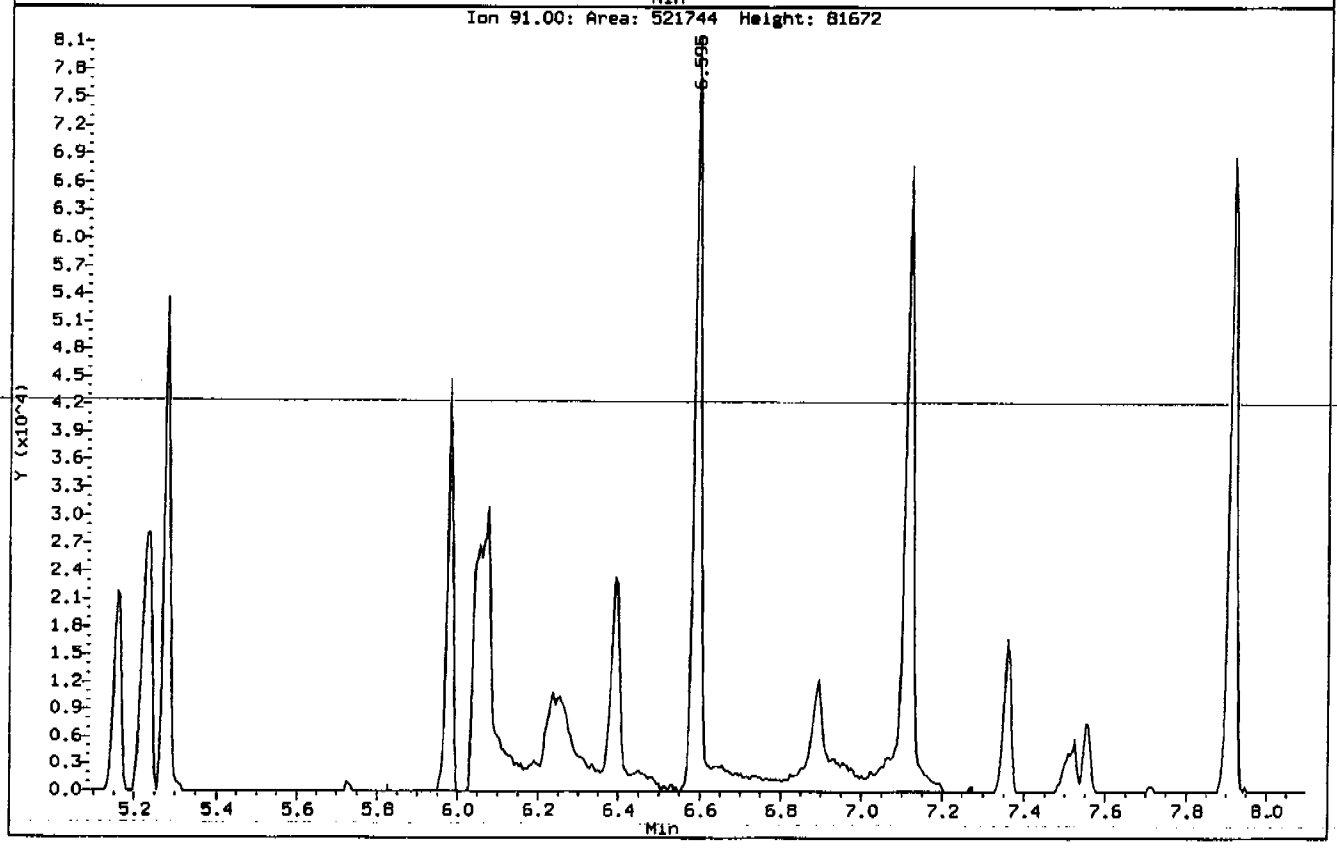




Data File: \\Slevr01\BNA_LAB\MSK.i\K050428A.B\KCAL2582.D
Injection Date: 28-APR-2005 13:24
Instrument: MSK.i
Client Sample ID: SSTD120APPIX

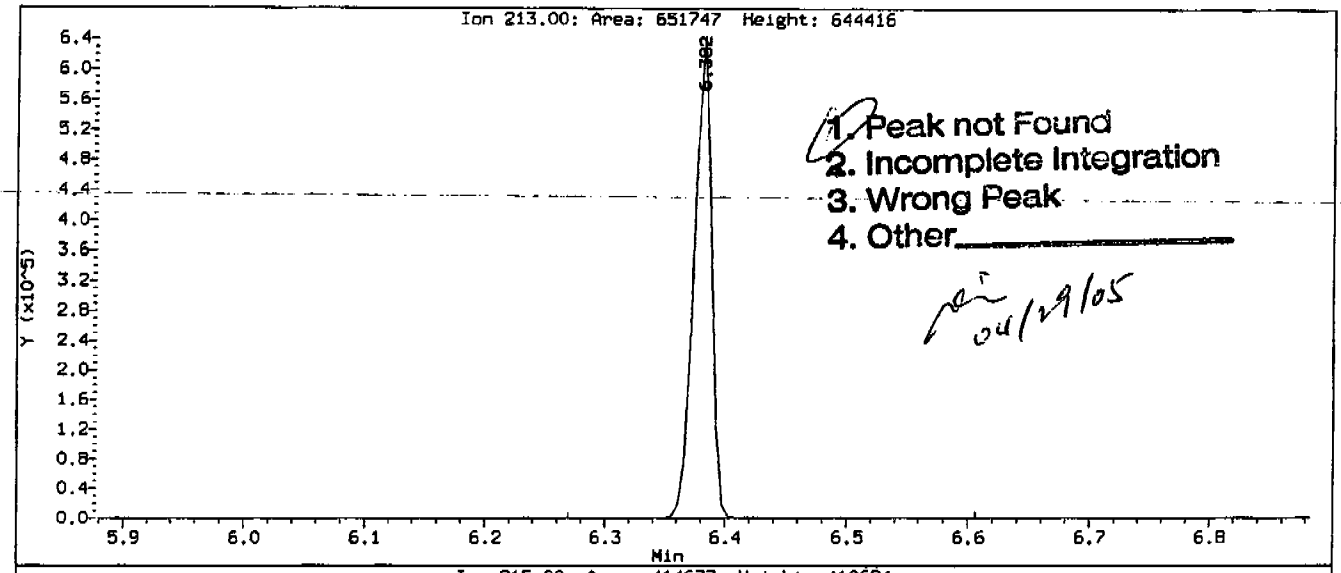
Compound: a,a-Dimethyl-phenethylamine
CAS Number: 122-09-8

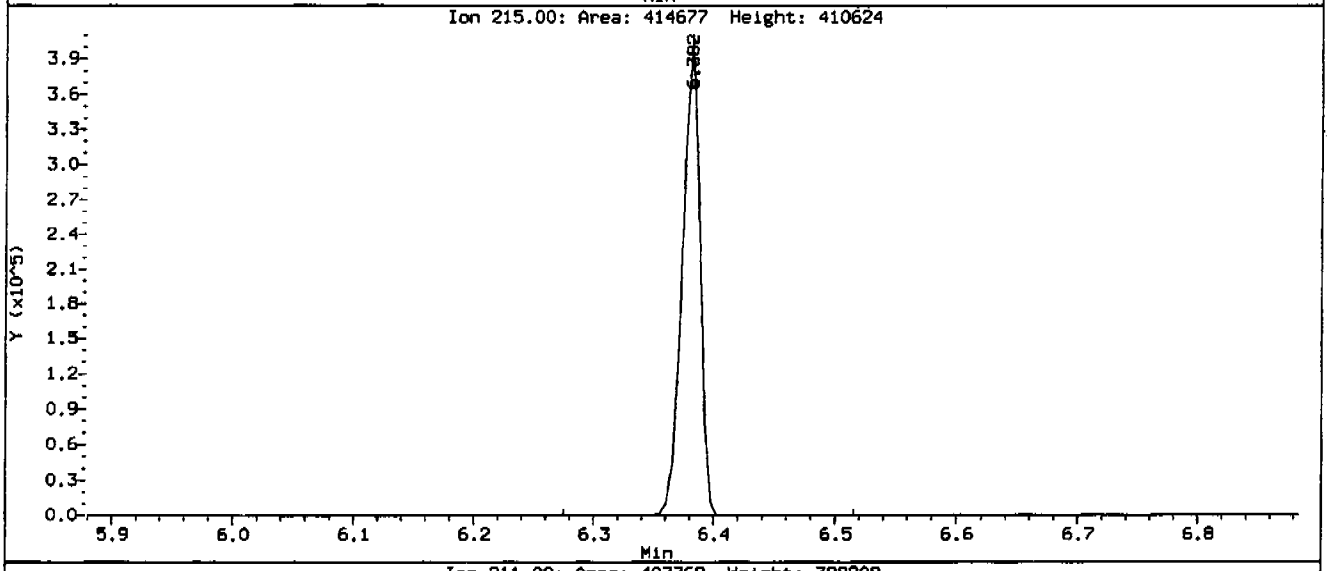


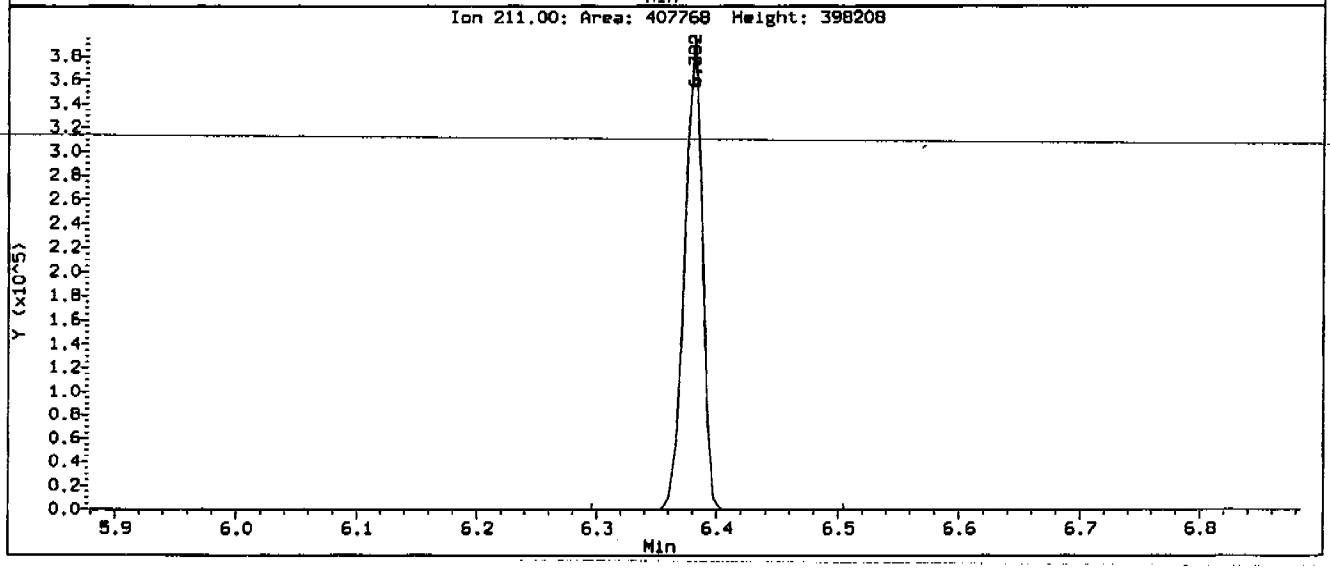


Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2582.D
Injection Date: 28-APR-2005 13:24
Instrument: MSK.i
Client Sample ID: SSTD120APPIX

Compound: Hexachloropropene
CAS Number: 1888-71-7

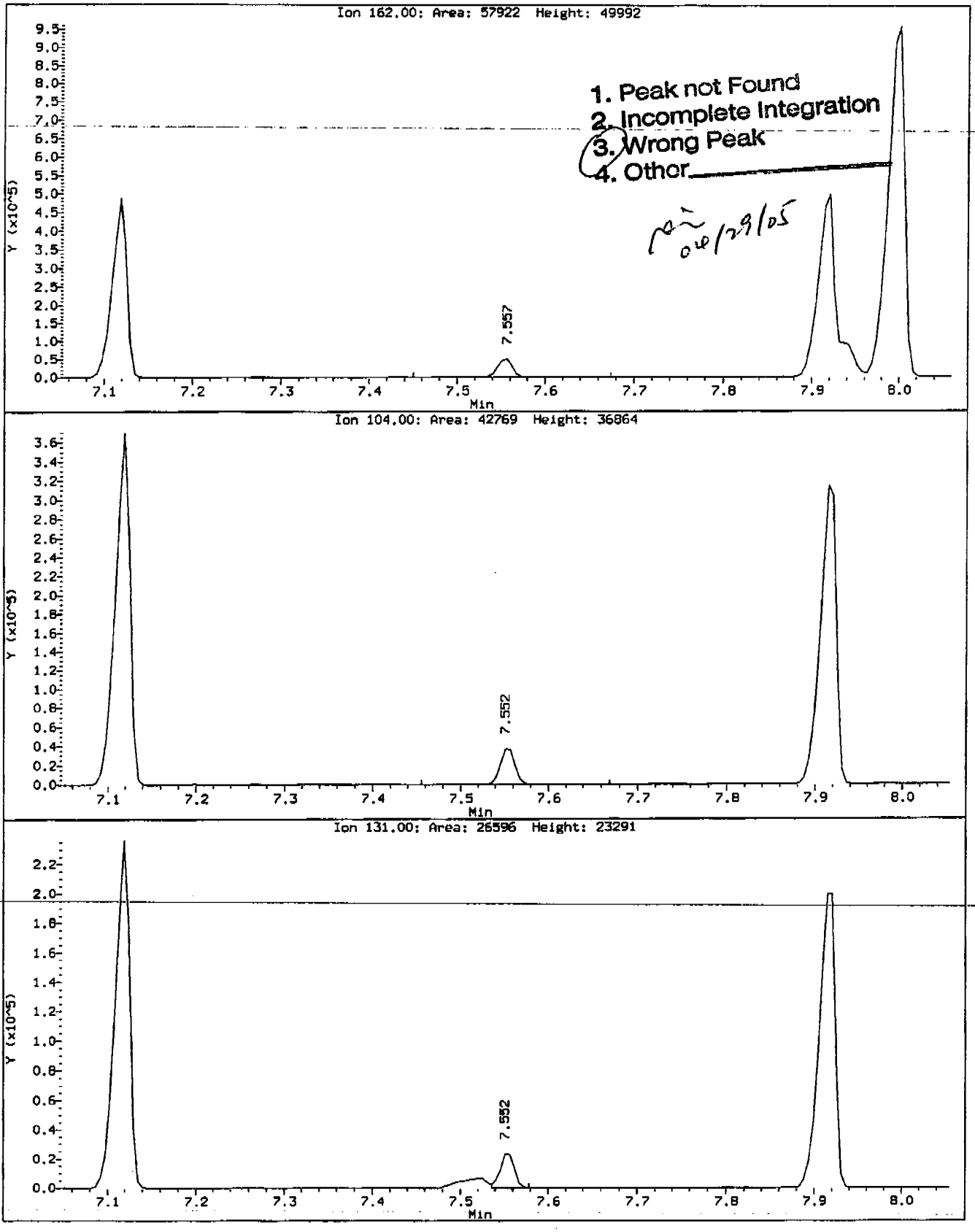






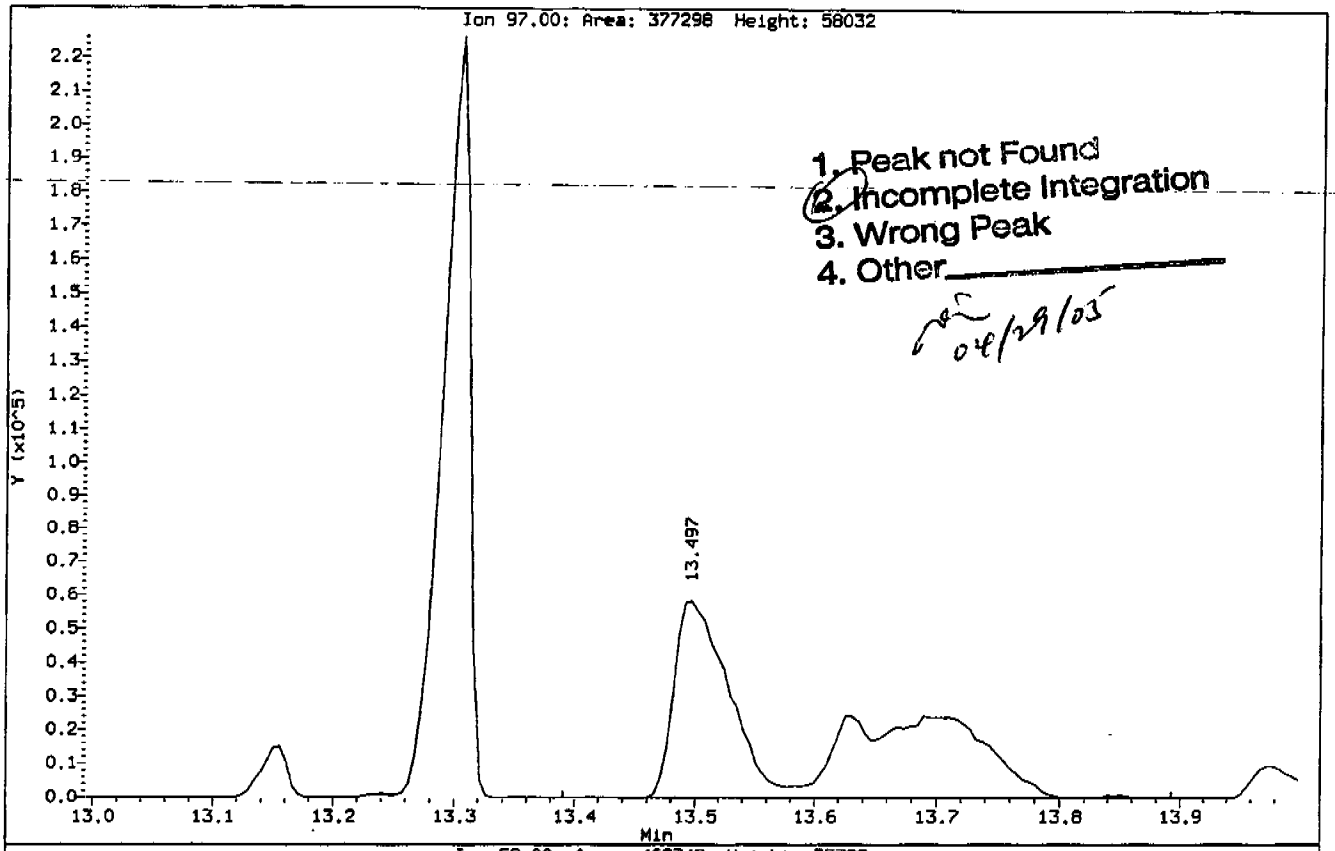
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2582.D
Injection Date: 28-APR-2005 13:24
Instrument: MSK.i
Client Sample ID: SSTD120APPIX

Compound: cis-Isosafrole
CAS Number: 120-58-1



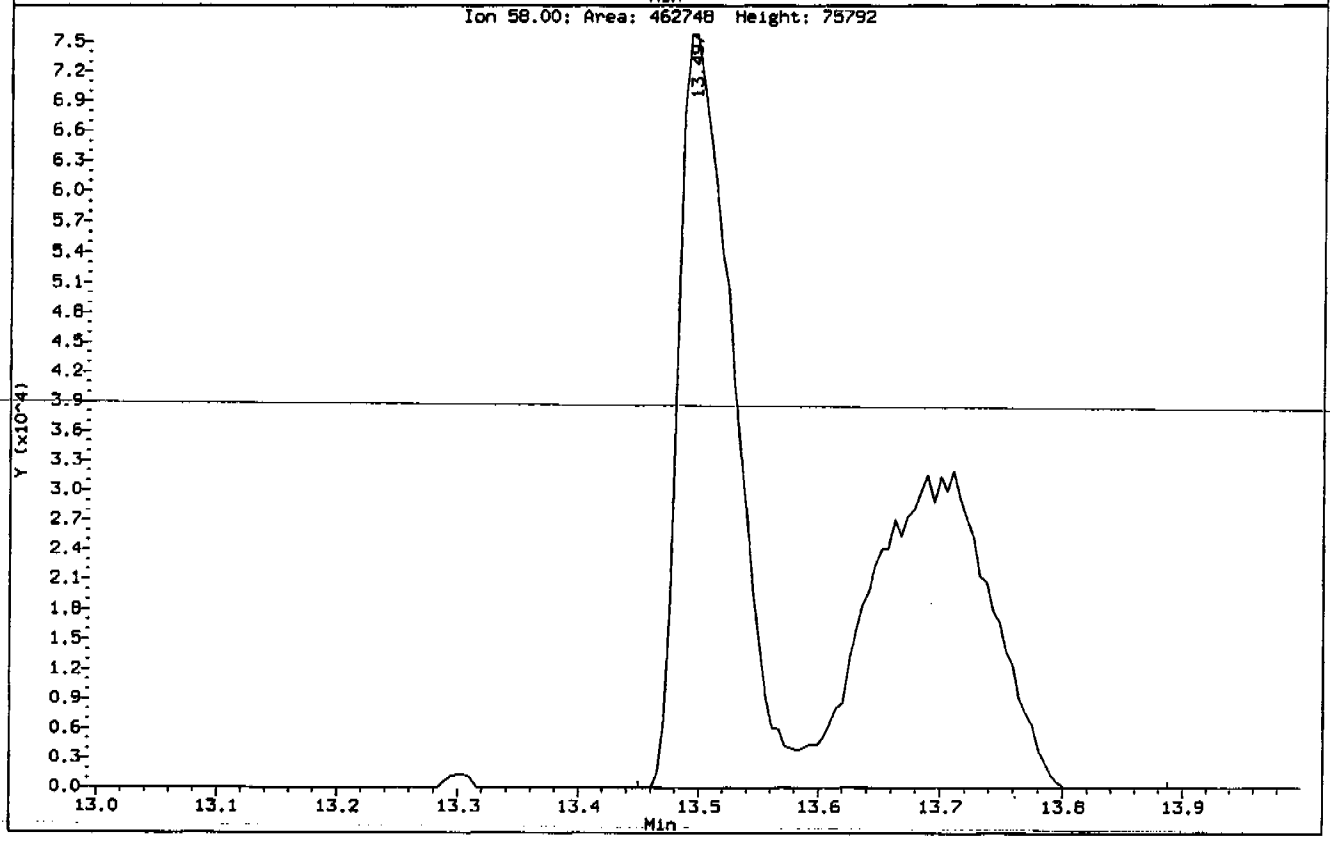
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2582.D
Injection Date: 28-APR-2005 13:24
Instrument: MSK.i
Client Sample ID: SSTD120APPIX

Compound: Methapyrilene
CAS Number: 91-80-5



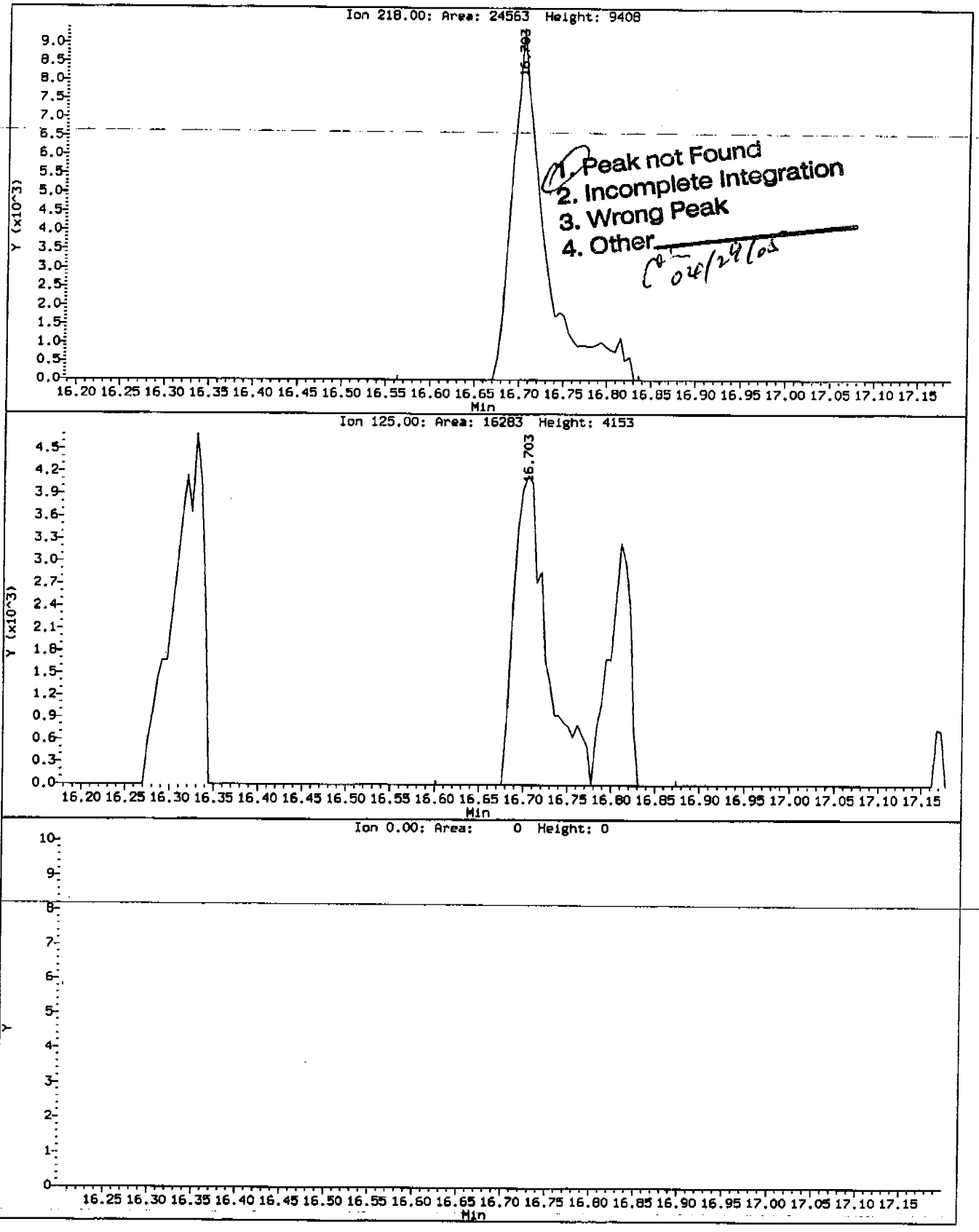
1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other _____

04/29/05



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2582.D
Injection Date: 28-APR-2005 13:24
Instrument: MSK.i
Client Sample ID: SSTD120APPIX

Compound: Famphur
CAS Number: 52-85-7



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2583.D
Report Date: 29-Apr-2005 08:42

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2583.D
Lab Smp Id: SSTD080APPIX Client Smp ID: SSTD080APPIX
Inj Date : 28-APR-2005 13:59
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD080APPIX
Misc Info : SV0186-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Meth Date : 29-Apr-2005 08:42 hongs Quant Type: ISTD
Cal Date : 28-APR-2005 13:59 Cal File: KCAL2583.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIX.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
7	2-Picoline	93	2.529	2.529	(0.549)	542817	80.0000	83.38
8	N-Nitrosomethylethylamine	88	2.727	2.727	(0.592)	249649	80.0000	85.29(M)
9	Methyl methanesulfonate	80	3.090	3.090	(0.671)	190976	80.0000	85.39
12	N-Nitrosodiethylamine	102	3.485	3.485	(0.757)	290922	80.0000	84.24
13	Ethyl Methanesulfonate	79	3.870	3.870	(0.840)	487207	80.0000	82.88
18	Pentachloroethane	117	4.265	4.265	(0.926)	223939	80.0000	81.50
* 22	1,4-Dichlorobenzene-d4	152	4.607	4.607	(1.000)	206973	40.0000	
30	Acetophenone	105	5.152	5.152	(0.832)	903227	80.0000	81.52
31	N-Nitrosopyrrolidine	100	5.195	5.195	(0.839)	289442	80.0000	80.16
33	N-Nitrosomorpholine	116	5.216	5.216	(0.842)	134677	80.0000	84.23
34	O-Toluidine	106	5.227	5.227	(0.844)	952376	80.0000	82.33
38	N-Nitrosopiperidine	114	5.564	5.564	(0.898)	271976	80.0000	81.54
43	o,o,o-Triethyl-Phosphorothioa	198	5.980	5.980	(0.966)	382674	80.0000	83.27
* 48	Naphthalene-d8	136	6.194	6.194	(1.000)	751488	40.0000	
46	a,a-Dimethyl-phenethylamine	58	6.071	6.071	(0.980)	1215241	80.0000	85.09(M)
52	2,6-Dichlorophenol	162	6.386	6.386	(1.031)	445156	80.0000	83.91
53	Hexachloropropene	213	6.376	6.376	(1.029)	540244	80.0000	81.96(M)
55	Benzothiazole	135	6.589	6.589	(1.064)	798146	80.0000	81.50
58	p-Phenylenediamine	108	6.888	6.888	(1.112)	431852	80.0000	81.71
57	n-Nitrosodi-n-butylamine	84	6.883	6.883	(1.111)	480097	80.0000	80.20
61	Safrole	162	7.113	7.113	(1.148)	465364	80.0000	82.18

4/29/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
65	1,2,4,5-Tetrachlorobenzene	216	7.519	7.519	(0.846)	1289990	80.0000	81.27
64	cis-Isosafrole	162	7.551	7.551	(0.849)	48813	80.0000	79.71(M)
70	trans-Isosafrole	162	7.909	7.909	(0.889)	523046	80.0000	78.32
74	1,4-Naphthoquinone	158	8.261	8.261	(0.929)	184181	80.0000	65.96
75	1,4-Dinitrobenzene	168	8.438	8.438	(1.362)	196025	80.0000	85.78
77	1,3-Dinitrobenzene	168	8.630	8.630	(0.971)	211623	80.0000	84.49
* 82	Acenaphthene-d10	164	8.892	8.892	(1.000)	437854	40.0000	
87	Pentachlorobenzene	250	9.276	9.276	(1.043)	618369	80.0000	80.21
89	1-Naphthylamine	143	9.415	9.415	(1.059)	922915	80.0000	77.47
90	2-Naphthylamine	143	9.554	9.554	(1.074)	777503	80.0000	72.07
92	2,3,4,6-Tetrachlorophenol	232	9.592	9.592	(1.079)	360302	80.0000	92.30
96	Thionazin	107	10.024	10.024	(1.127)	249899	80.0000	85.13
97	5-Nitro-o-toluidine	152	10.035	10.035	(0.867)	348398	80.0000	84.74
101	tri-n-butylphosphate	99	10.307	10.307	(1.159)	1595987	80.0000	83.20
105	Sulfotepp	97	10.708	10.708	(0.925)	260012	80.0000	83.87
106	Diallate (peak 1)	86	10.767	10.767	(0.930)	504111	80.0000	81.98
108	Phorate	75	10.788	10.788	(0.932)	923069	80.0000	83.02
111	Diallate (peak 2)	86	10.900	10.900	(0.941)	105163	80.0000	80.21
107	1,3,5-Trinitrobenzene	213	10.879	10.879	(0.940)	171358	80.0000	90.42
110	Phenacetin	108	10.954	10.954	(0.946)	688956	80.0000	81.10
113	Dimethoate	87	11.173	11.173	(0.965)	354688	80.0000	71.40
116	4-Aminobiphenyl	169	11.333	11.333	(0.979)	1253532	80.0000	81.87
115	tris(2-chloroethyl)phosphate	63	11.408	11.408	(0.985)	354305	80.0000	78.66
119	Pentachloronitrobenzene	237	11.536	11.536	(0.996)	219429	80.0000	83.20
118	Pronamide	173	11.606	11.606	(1.002)	611165	80.0000	79.64
* 121	Phenanthrene-d10	188	11.579	11.579	(1.000)	810464	40.0000	
123	Disulfoton	88	11.776	11.776	(1.017)	640017	80.0000	81.83
125	Dinoseb	211	11.825	11.825	(1.021)	426638	80.0000	91.05
128	Methyl Parathion	109	12.503	12.503	(1.080)	327207	80.0000	73.86
131	4-Nitroquinoline-1-oxide	190	13.230	13.230	(1.143)	138460	80.0000	85.08
130	Parathion	97	13.294	13.294	(1.148)	297494	80.0000	83.10
132	Methapyrilene	97	13.486	13.486	(1.165)	351070	80.0000	64.04(M)
133	Isodrin	193	13.619	13.619	(1.176)	225244	80.0000	79.24
141	Kepone	272	14.773	14.773	(0.884)	10335	80.0000	96.10
140	Aramite (peak 1)	185	14.864	14.864	(0.889)	104338	80.0000	84.42
142	Aramite (peak 2)	185	15.024	15.024	(0.899)	161918	80.0000	86.22
143	p-(Dimethylamino)azobenzene	120	15.099	15.099	(0.903)	483880	80.0000	82.62
144	Chlorobenzilate	251	15.238	15.238	(0.911)	696198	80.0000	84.26
148	2-Acetylaminofluorene	181	16.317	16.317	(0.976)	781046	80.0000	84.54
149	Famphur	218	16.691	16.691	(0.998)	26526	80.0000	78.35(M)
* 153	Chrysene-d12	240	16.718	16.718	(1.000)	708894	40.0000	
151	4,4'-Methylenebis(2-Chloroani	266	16.809	16.809	(1.005)	165025	80.0000	80.99
162	7,12-Dimethylbenz(a)anthracen	256	18.753	18.753	(0.970)	932901	80.0000	85.84
163	Hexachlorophene	196	19.042	19.042	(0.985)	10398	80.0000	27.58(H)
* 166	Perylene-d12	264	19.341	19.341	(1.000)	589528	40.0000	
169	3-methylcholanthrene	268	19.897	19.897	(1.029)	933604	80.0000	84.18

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2583.D
Report Date: 29-Apr-2005 08:42

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

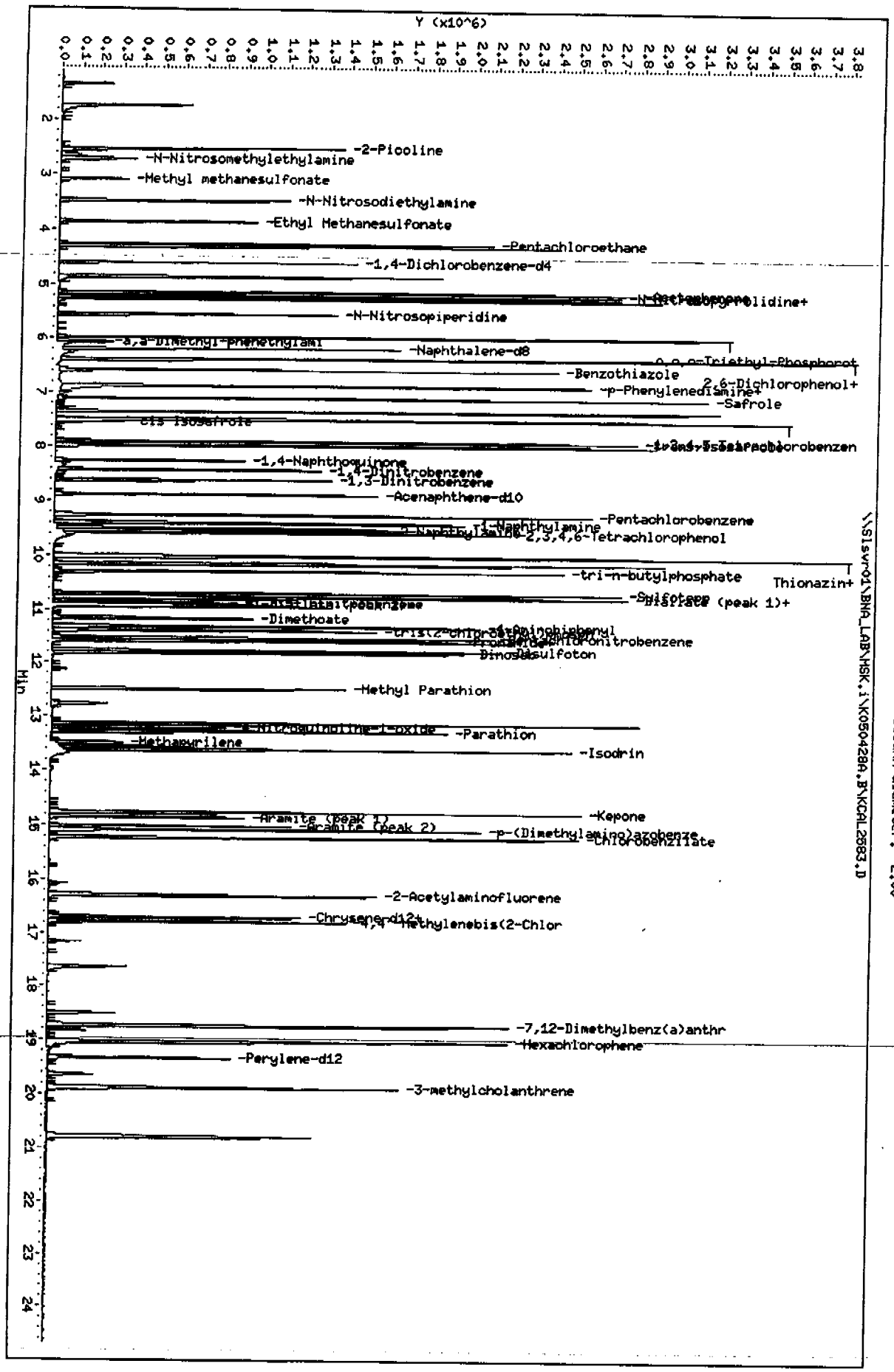
Instrument ID: MSK.i
Lab File ID: KCAL2583.D
Lab Smp Id: SSTD080APPIX
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Misc Info: SV0186-05

Calibration Date: 28-APR-2005
Calibration Time: 11:41
Client Smp ID: SSTD080APPIX
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	162145	81073	324290	206973	27.65
48 Naphthalene-d8	535939	267970	1071878	751488	40.22
82 Acenaphthene-d10	307602	153801	615204	437854	42.34
121 Phenanthrene-d10	574409	287205	1148818	810464	41.10
153 Chrysene-d12	519397	259699	1038794	708894	36.48
166 Perylene-d12	440492	220246	880984	589528	33.83

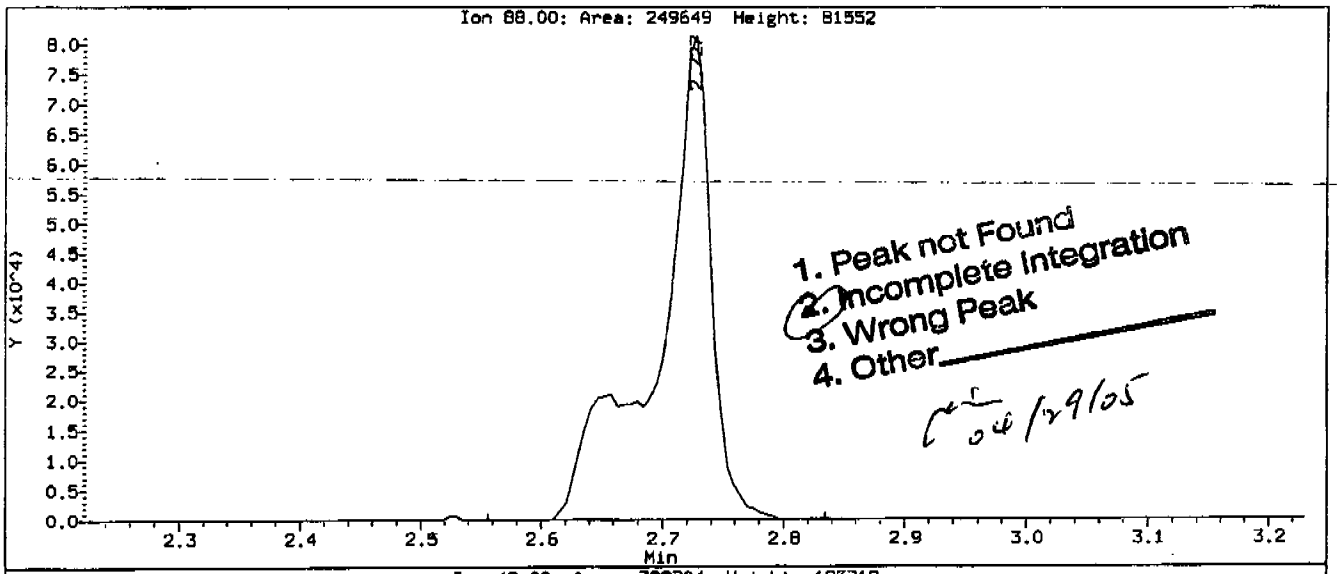
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.62	4.12	5.12	4.61	-0.25
48 Naphthalene-d8	6.21	5.71	6.71	6.19	-0.19
82 Acenaphthene-d10	8.91	8.41	9.41	8.89	-0.19
121 Phenanthrene-d10	11.58	11.08	12.08	11.58	-0.01
153 Chrysene-d12	16.74	16.24	17.24	16.72	-0.10
166 Perylene-d12	19.35	18.85	19.85	19.34	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^6)
Min
-2-Picoline
-N-Nitrosomethylethylamine
-Methyl methanesulfonate
-N-Nitrosodiethylamine
-Ethyl Methanesulfonate
-Pentachloroethane
-1,4-Dichlorobenzene-d4
-N-Nitrosopiperidine
-Naphthalene-d8
-Benzothiazole
-p-Phenylenediamine+
2,6-Dichlorophenol+
-Safrole
-1,4-Naphthoquinone
-1,4-Dinitrobenzene
-1,3-Dinitrobenzene
-Acenaphthene-d10
-Pentachlorobenzene
-tri-n-butylphosphate
Thionazin+
-Dimethoate
-Methyl Parathion
-Parathion
-Isodrin
-Kepone
-Aramite (peak 1)
-Aramite (peak 2)
-p-(Dimethylamino)azobenze
-Chlorobenzilate
-2-Acetylaminofluorene
-Chrysene-d12+
-7,12-Dimethylbenz(a)anthr
-Hexachlorophene
-Perylene-d12
-3-methylcholanthrene
Data File: \\Slsvr01\BNA_LAB\HSK.i\K050428A.B\KCAL2583.D
Date : 28-APR-2005 13:59
Client ID: SSTD080APPIX
Sample Info: SSTD080APPIX
Volume Injected (uL): 1.0
Column phase:
\\Slsvr01\BNA_LAB\HSK.i\K050428A.B\KCAL2583.D
Instrument: HSK.i
Operator: XIA
Column diameter: 2.00
Page 4

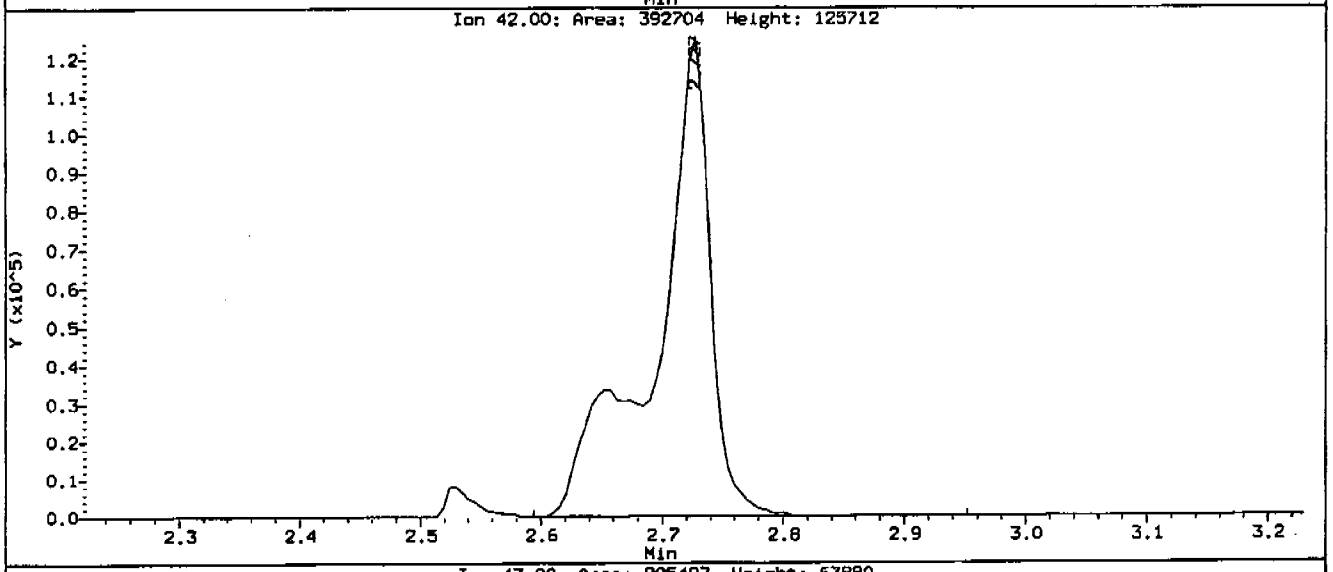
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2583.D
Injection Date: 28-APR-2005 13:59
Instrument: MSK.i
Client Sample ID: SSTD080APPIX

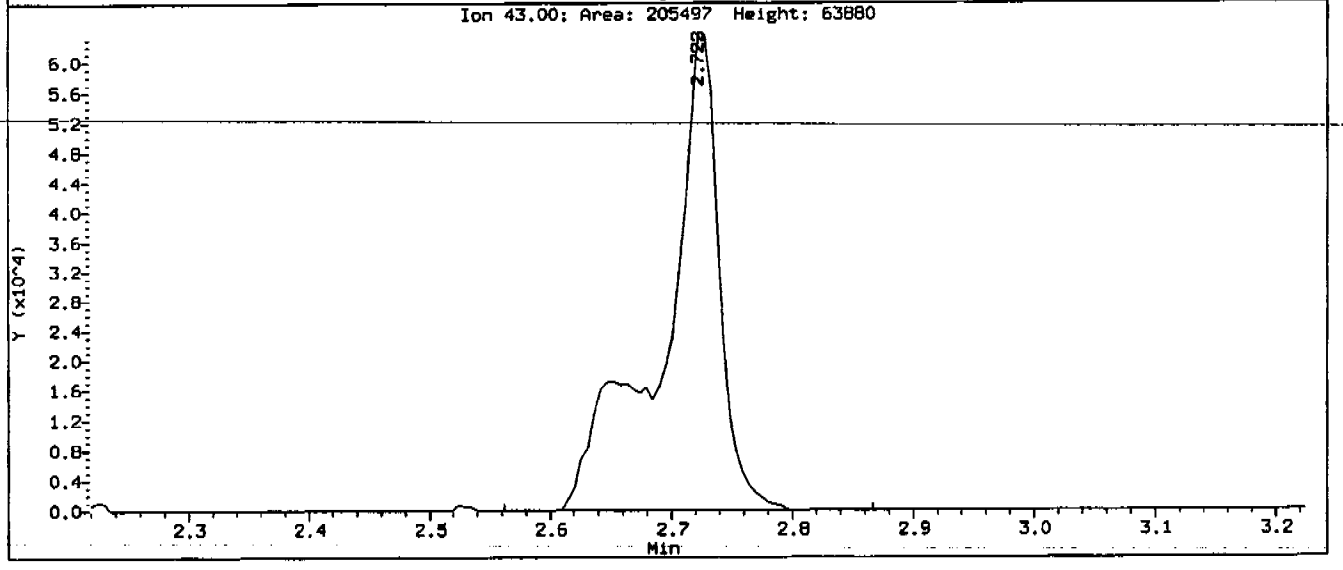
Compound: N-Nitrosomethylethylamine
CAS Number: 10595-95-6



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

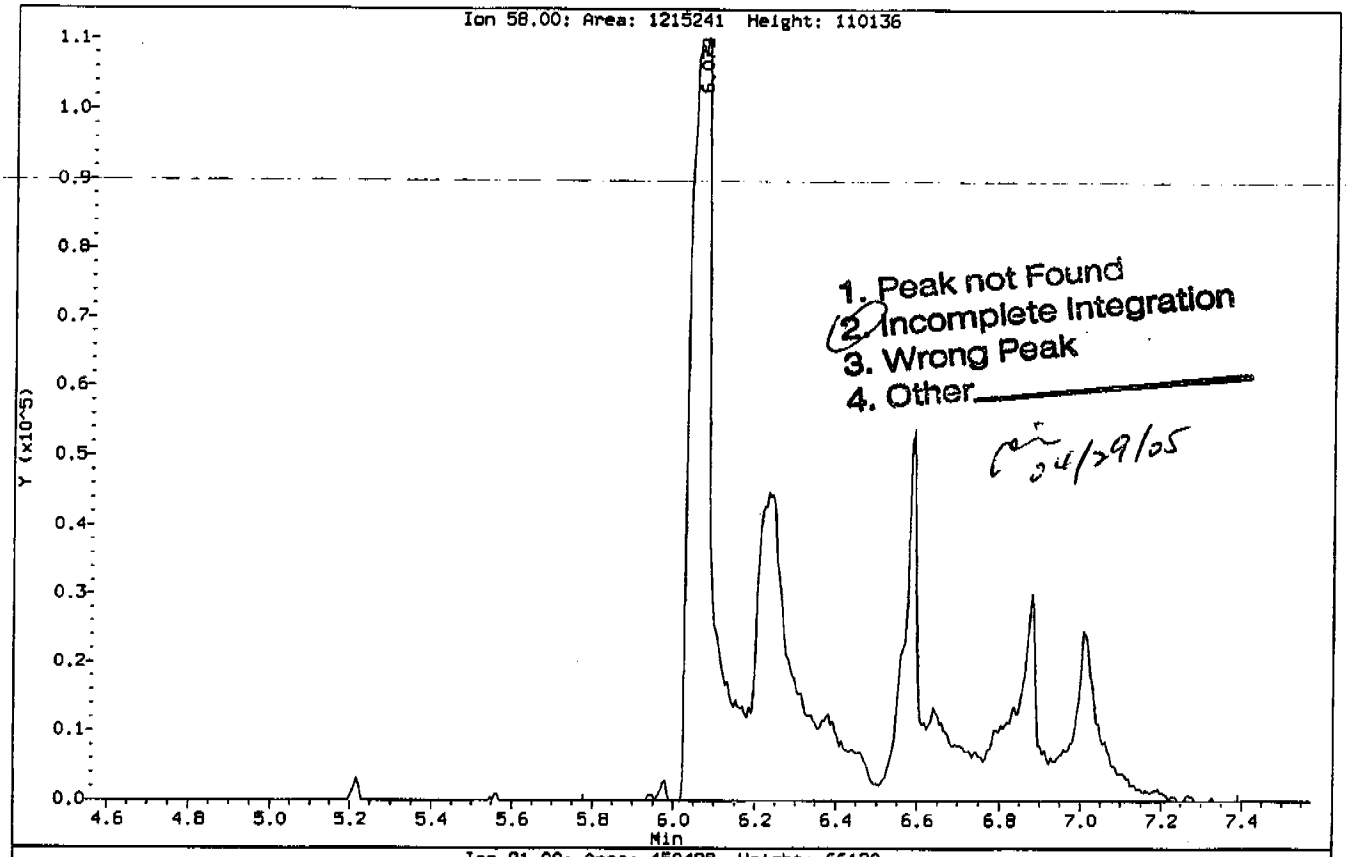
4/29/05

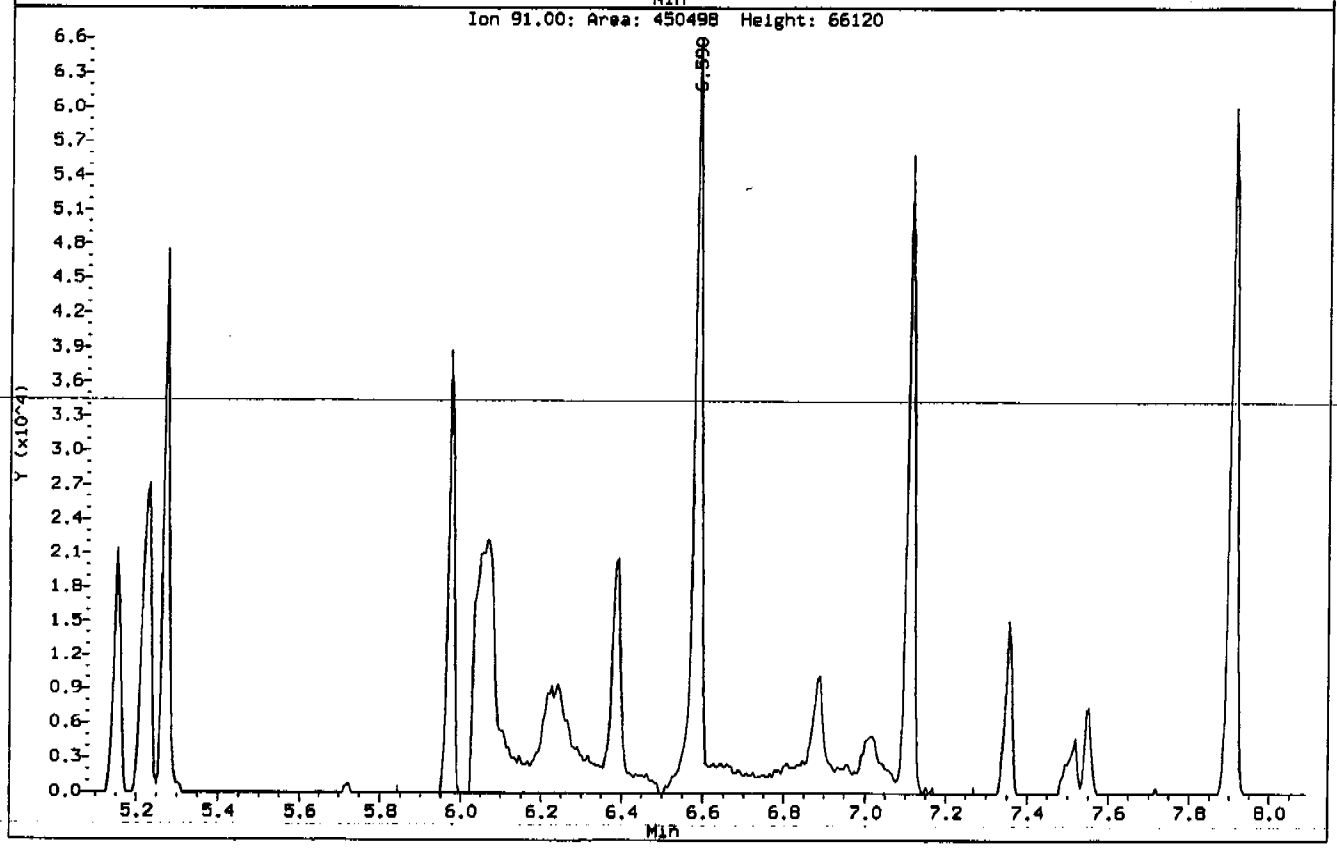




Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2583.D
Injection Date: 28-APR-2005 13:59
Instrument: MSK.i
Client Sample ID: SSTD080APPIX

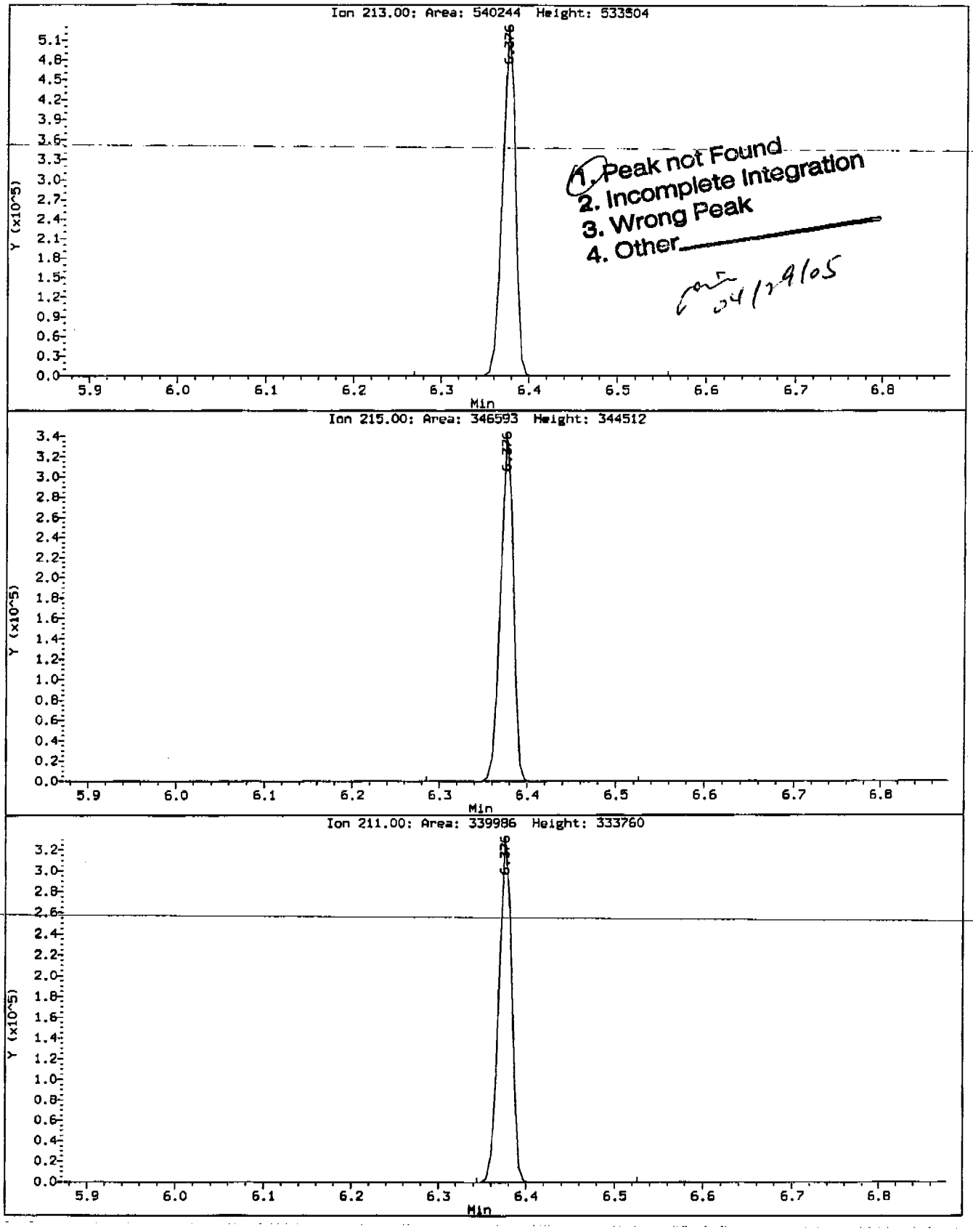
Compound: a,a-Dimethyl-phenethylamine
CAS Number: 122-09-8





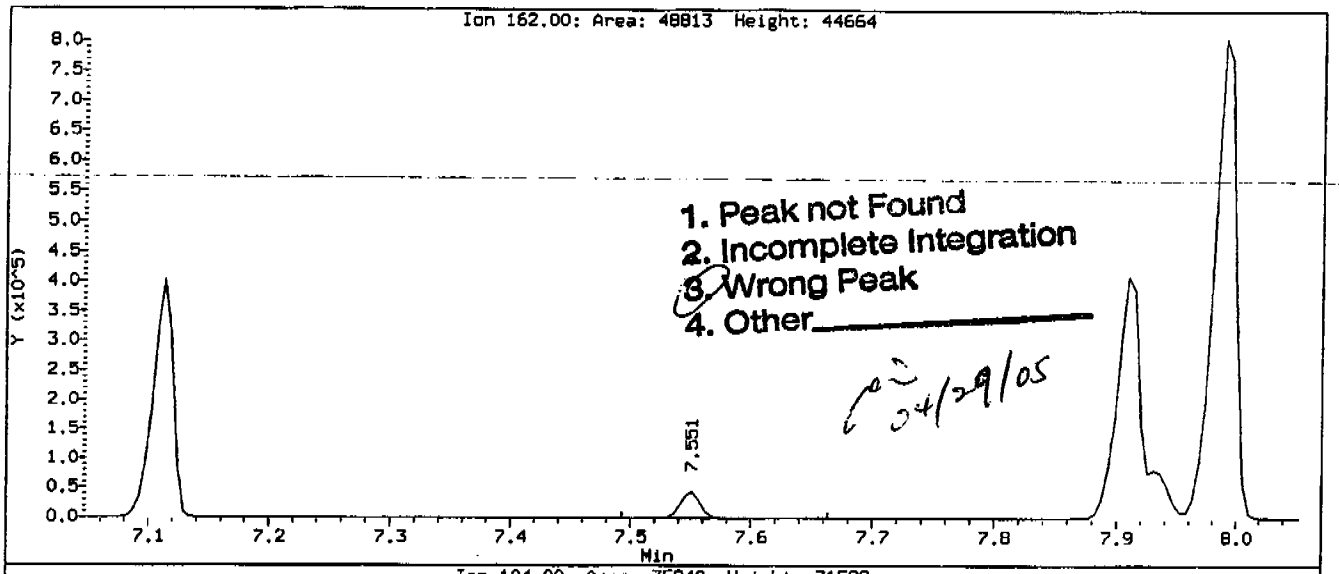
Data File: \\Slevr01\BNA_LAB\MSK.i\K050428A.B\KCAL2583.D
Injection Date: 28-APR-2005 13:59
Instrument: MSK.i
Client Sample ID: SSTD080APPIX

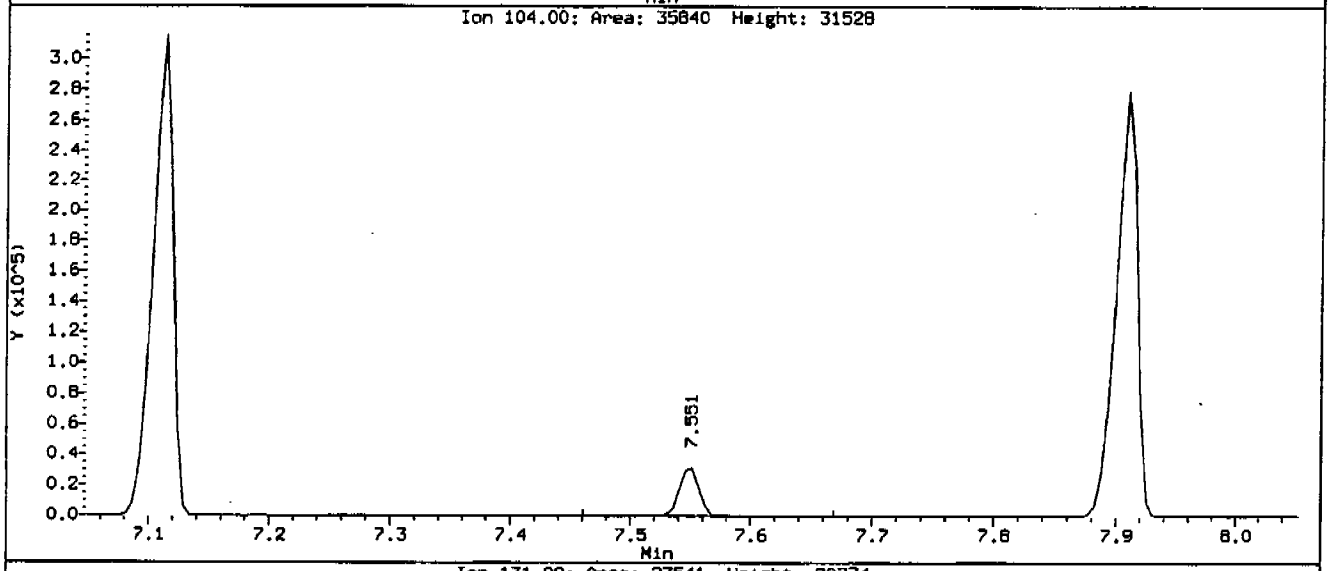
Compound: Hexachloropropene
CAS Number: 1888-71-7

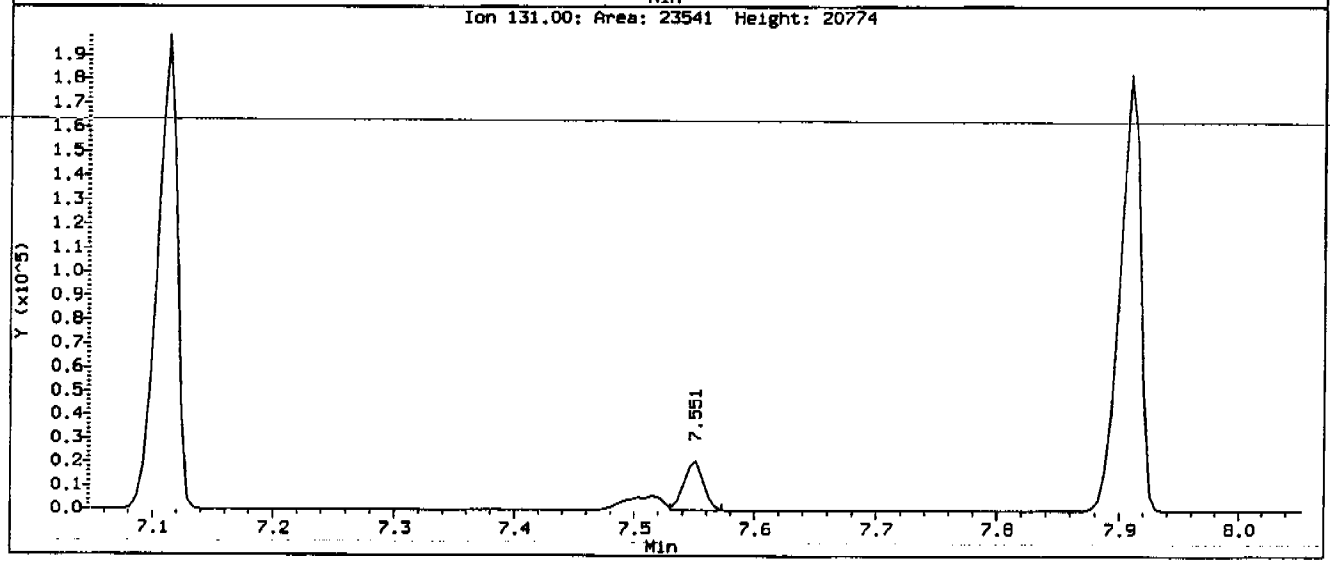


Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2583.D
Injection Date: 28-APR-2005 13:59
Instrument: MSK.i
Client Sample ID: SSTD080APPIX

Compound: cis-Isosafrole
CAS Number: 120-58-1

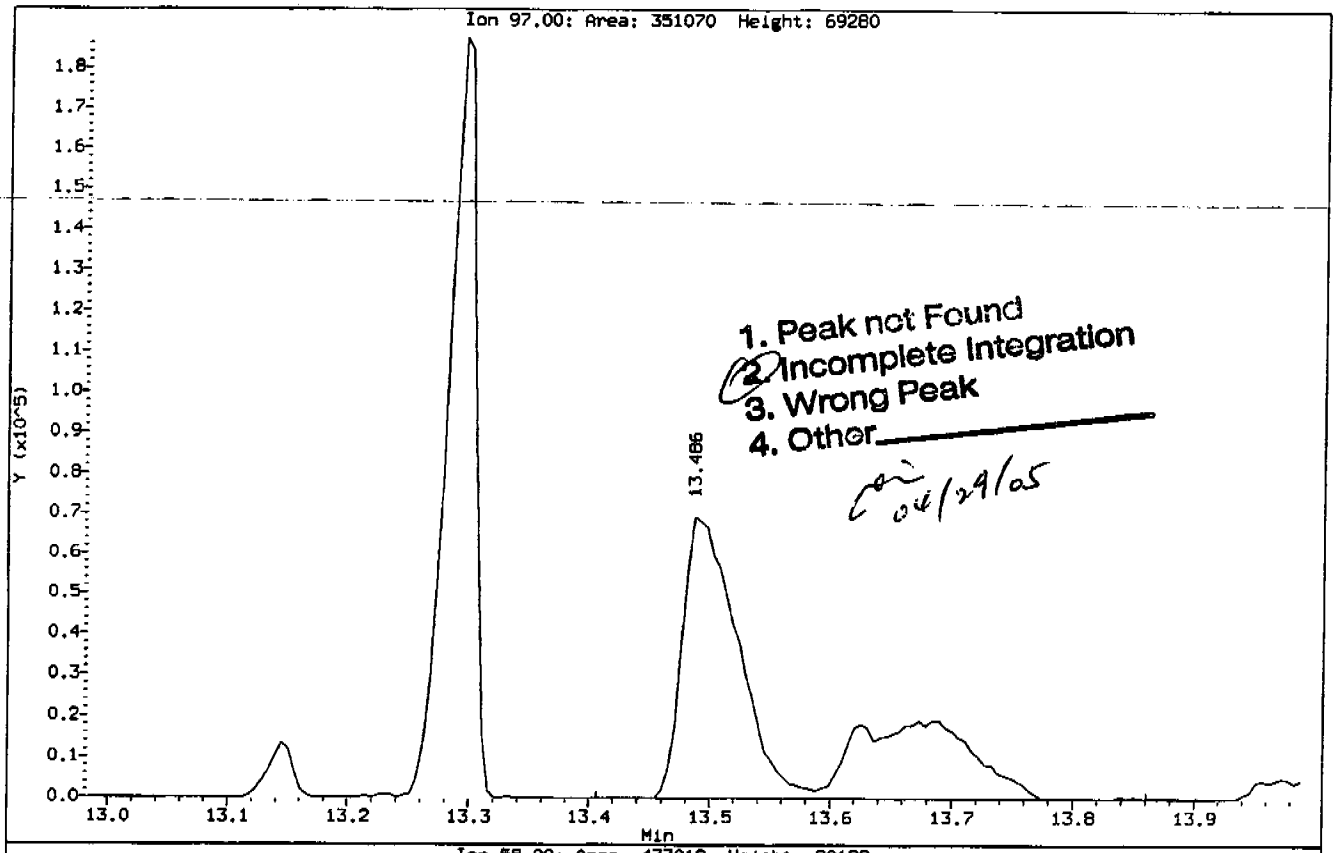






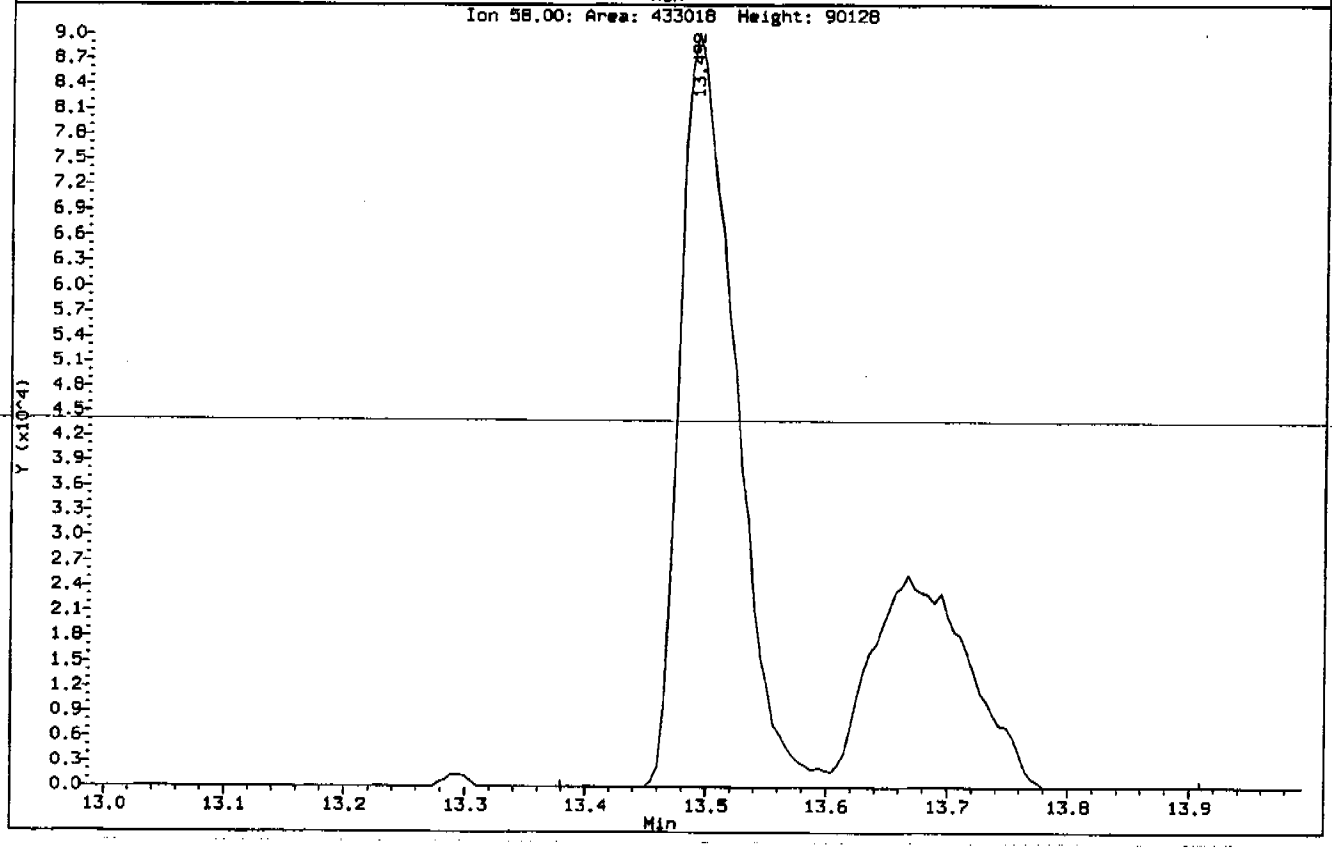
Data File: \\Slevr01\BNA_LAB\MSK.i\K050428A.B\KCAL2583.D
Injection Date: 28-APR-2005 13:59
Instrument: MSK.i
Client Sample ID: SSTD080APPIX

Compound: Methapyrilene
CAS Number: 91-80-5



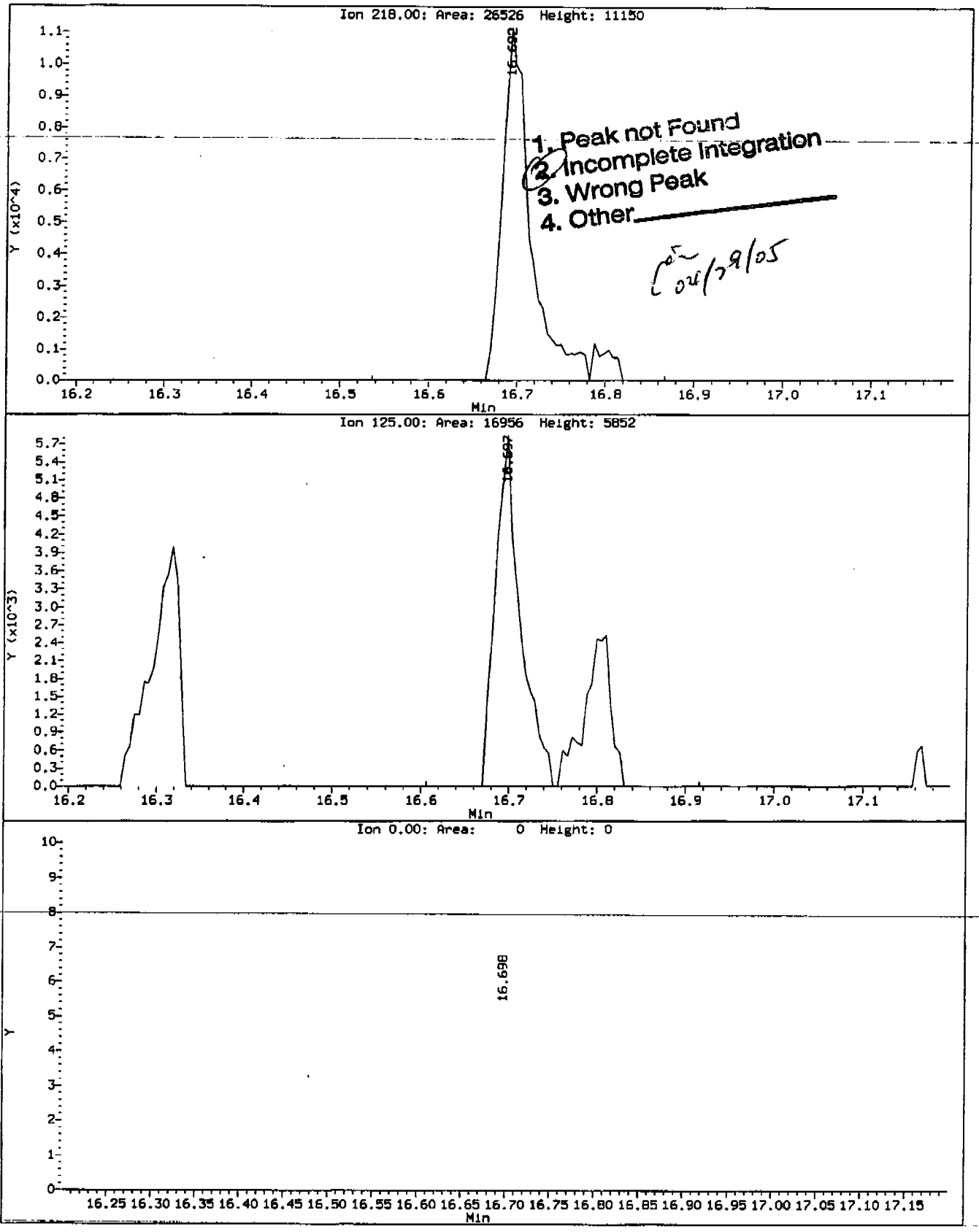
1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

10/29/05



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2583.D
Injection Date: 28-APR-2005 13:59
Instrument: MSK.i
Client Sample ID: SSTD080APPIX

Compound: Famphur
CAS Number: 52-85-7



STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2584.D
Lab Smp Id: SSTD020APPIX Client Smp ID: SSTD020APPIX
Inj Date : 28-APR-2005 14:33
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD020APPIX
Misc Info : SV0184-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Meth Date : 29-Apr-2005 08:42 hongs Quant Type: ISTD
Cal Date : 28-APR-2005 14:33 Cal File: KCAL2584.D
Als bottle: 8 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIX.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
7	2-Picoline	93	2.553	2.553	(0.553)	81734	20.0000	19.57
8	N-Nitrosomethylethylamine	88	2.735	2.735	(0.593)	37774	20.0000	20.12(M)
9	Methyl methanesulfonate	80	3.098	3.098	(0.671)	27281	20.0000	19.02
12	N-Nitrosodiethylamine	102	3.488	3.488	(0.756)	41490	20.0000	18.73
13	Ethyl Methanesulfonate	79	3.862	3.862	(0.837)	73348	20.0000	19.46
18	Pentachloroethane	117	4.273	4.273	(0.926)	33542	20.0000	19.03
* 22	1,4-Dichlorobenzene-d4	152	4.615	4.615	(1.000)	132745	40.0000	
30	Acetophenone	105	5.155	5.155	(0.832)	133053	20.0000	18.92
31	N-Nitrosopyrrolidine	100	5.171	5.171	(0.834)	43456	20.0000	18.96
33	N-Nitrosomorpholine	116	5.197	5.197	(0.839)	18421	20.0000	18.16
34	O-Toluidine	106	5.219	5.219	(0.842)	134064	20.0000	18.26
38	N-Nitrosopiperidine	114	5.550	5.550	(0.896)	40721	20.0000	19.24
43	o,o,o-Triethyl-Phosphorothioa	198	5.977	5.977	(0.965)	53818	20.0000	18.46
* 48	Naphthalene-d8	136	6.196	6.196	(1.000)	476866	40.0000	
46	a,a-Dimethyl-phenethylamine	58	6.581	6.581	(1.062)	184361	20.0000	20.34(M)
52	2,6-Dichlorophenol	162	6.378	6.378	(1.029)	61609	20.0000	18.30
53	Hexachloropropene	213	6.383	6.383	(1.030)	79579	20.0000	19.03(M)
55	Benzothiazole	135	6.586	6.586	(1.063)	115955	20.0000	18.66
58	p-Phenylenediamine	108	6.869	6.869	(1.109)	68841	20.0000	20.53
57	n-Nitrosodi-n-butylamine	84	6.869	6.869	(1.109)	71767	20.0000	18.89
61	Safrole	162	7.115	7.115	(1.148)	69479	20.0000	19.34

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
65	1,2,4,5-Tetrachlorobenzene	216	7.510	7.510	(0.844)	186190	20.0000	18.23
64	cis-Isosafrole	162	7.559	7.559	(0.849)	7963	20.0000	20.21(M)
70	trans-Isosafrole	162	7.906	7.906	(0.888)	76191	20.0000	17.73
74	1,4-Naphthoquinone	158	8.269	8.269	(0.929)	53100	20.0000	29.56
75	1,4-Dinitrobenzene	168	8.435	8.435	(1.361)	28885	20.0000	19.92
77	1,3-Dinitrobenzene	168	8.622	8.622	(0.969)	32427	20.0000	20.12
* 82	Acenaphthene-d10	164	8.899	8.899	(1.000)	281668	40.0000	
87	Pentachlorobenzene	250	9.273	9.273	(1.042)	93864	20.0000	18.92
89	1-Naphthylamine	143	9.407	9.407	(1.057)	147169	20.0000	19.20
90	2-Naphthylamine	143	9.540	9.540	(1.072)	133074	20.0000	19.18
92	2,3,4,6-Tetrachlorophenol	232	9.594	9.594	(1.078)	45577	20.0000	18.15
96	Thionazin	107	10.000	10.000	(1.124)	36425	20.0000	19.29
97	5-Nitro-o-toluidine	152	10.005	10.005	(0.865)	51440	20.0000	19.59
101	tri-n-butylphosphate	99	10.294	10.294	(1.157)	232419	20.0000	18.84
105	Sulfotepp	97	10.694	10.694	(0.925)	39009	20.0000	19.70
106	Diallate (peak 1)	86	10.764	10.764	(0.931)	75374	20.0000	19.19
108	Phorate	75	10.780	10.780	(0.932)	131374	20.0000	18.50
111	Diallate (peak 2)	86	10.908	10.908	(0.943)	16276	20.0000	19.44
107	1,3,5-Trinitrobenzene	213	10.865	10.865	(0.939)	25075	20.0000	20.72
110	Phenacetin	108	10.892	10.892	(0.942)	109395	20.0000	20.16
113	Dimethoate	87	11.132	11.132	(0.963)	74605	20.0000	23.51
116	4-Aminobiphenyl	169	11.314	11.314	(0.978)	176174	20.0000	18.02
115	tris(2-chloroethyl)phosphate	63	11.367	11.367	(0.983)	57727	20.0000	20.07
119	Pentachloronitrobenzene	237	11.528	11.528	(0.997)	33084	20.0000	19.64
118	Pronamide	173	11.576	11.576	(1.001)	96589	20.0000	19.71
* 121	Phenanthrene-d10	188	11.565	11.565	(1.000)	517629	40.0000	
123	Disulfoton	88	11.774	11.774	(1.018)	94837	20.0000	18.99
125	Dinoseb	211	11.811	11.811	(1.021)	59961	20.0000	20.04
128	Methyl Parathion	109	12.495	12.495	(1.080)	66269	20.0000	23.42
131	4-Nitroquinoline-1-oxide	190	13.216	13.216	(1.143)	20651	20.0000	19.87
130	Parathion	97	13.285	13.285	(1.149)	47136	20.0000	20.61
132	Methapyrilene	97	13.478	13.478	(1.165)	86566	20.0000	24.72(M)
133	Isodrin	193	13.627	13.627	(1.178)	35352	20.0000	19.47
141	Kepone	272	14.781	14.781	(0.884)	1123	20.0000	14.94
140	Aramite (peak 1)	185	14.867	14.867	(0.889)	18807	20.0000	21.78
142	Aramite (peak 2)	185	15.022	15.022	(0.898)	27049	20.0000	20.61
143	p-(Dimethylamino)azobenzene	120	15.091	15.091	(0.902)	83312	20.0000	20.36
144	Chlorobenzilate	251	15.235	15.235	(0.911)	109981	20.0000	19.05
148	2-Acetylaminofluorene	181	16.282	16.282	(0.973)	127850	20.0000	19.80
149	Famphur	218	16.688	16.688	(0.998)	8362	20.0000	35.35(M)
* 153	Chrysene-d12	240	16.726	16.726	(1.000)	495300	40.0000	
151	4,4'-Methylenebis(2-Chloroani	266	16.800	16.800	(1.004)	27789	20.0000	19.52
162	7,12-Dimethylbenz(a)anthracen	256	18.740	18.740	(0.969)	149973	20.0000	19.06
163	Hexachlorophene	196	19.044	19.044	(0.985)	1981	20.0000	7.259
* 166	Perylene-d12	264	19.338	19.338	(1.000)	426799	40.0000	
169	3-methylcholanthrene	268	19.872	19.872	(1.028)	145954	20.0000	18.18

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2584.D Page 3
Report Date: 29-Apr-2005 08:43

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

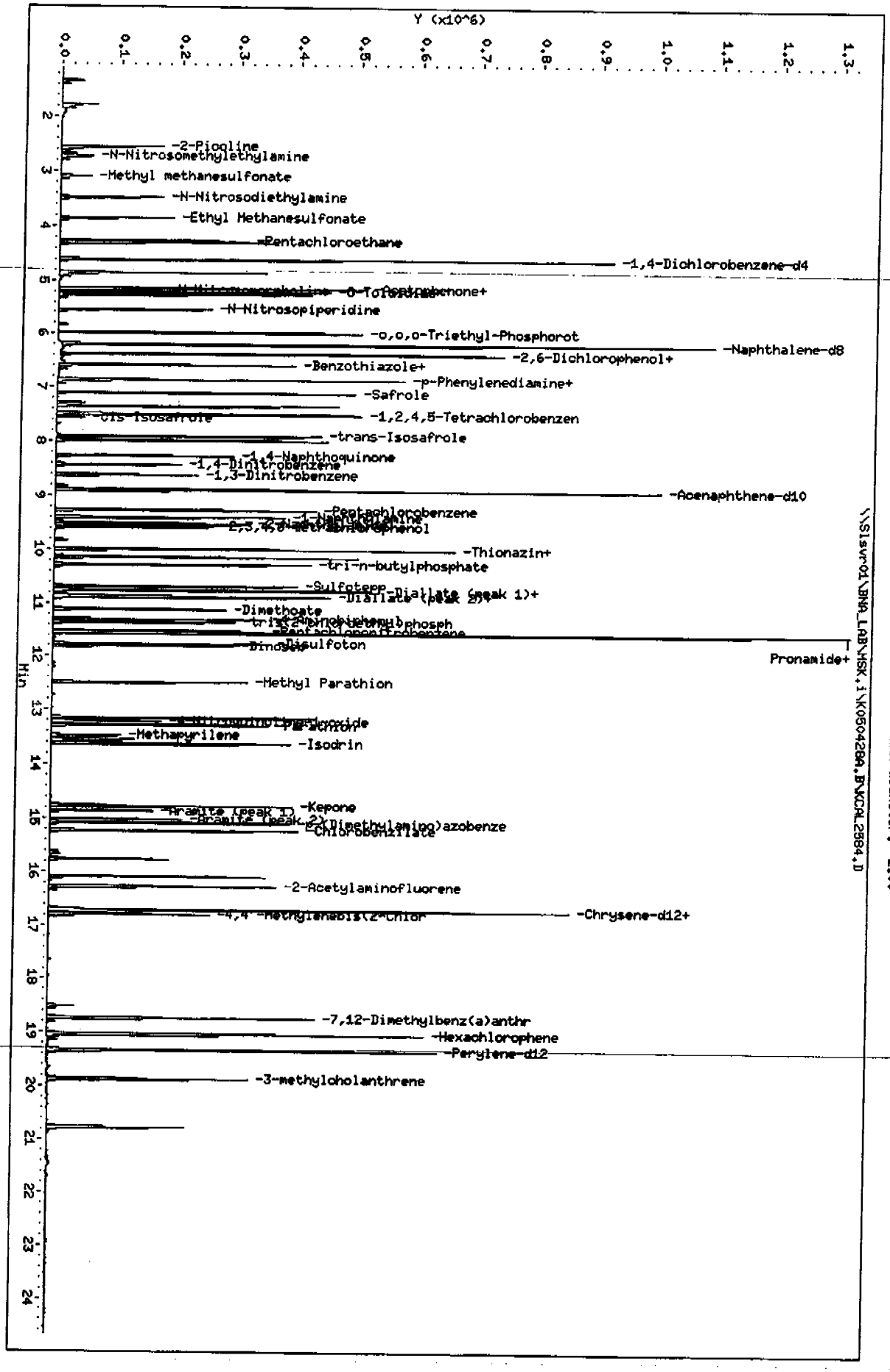
Instrument ID: MSK.i
Lab File ID: KCAL2584.D
Lab Smp Id: SSTD020APPIX
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Misc Info: SV0184-05

Calibration Date: 28-APR-2005
Calibration Time: 11:41
Client Smp ID: SSTD020APPIX
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	162145	81073	324290	132745	-18.13
48 Naphthalene-d8	535939	267970	1071878	476866	-11.02
82 Acenaphthene-d10	307602	153801	615204	281668	-8.43
121 Phenanthrene-d10	574409	287205	1148818	517629	-9.88
153 Chrysene-d12	519397	259699	1038794	495300	-4.64
166 Perylene-d12	440492	220246	880984	426799	-3.11

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.62	4.12	5.12	4.62	-0.09
48 Naphthalene-d8	6.21	5.71	6.71	6.20	-0.15
82 Acenaphthene-d10	8.91	8.41	9.41	8.90	-0.10
121 Phenanthrene-d10	11.58	11.08	12.08	11.57	-0.13
153 Chrysene-d12	16.74	16.24	17.24	16.73	-0.06
166 Perylene-d12	19.35	18.85	19.85	19.34	-0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



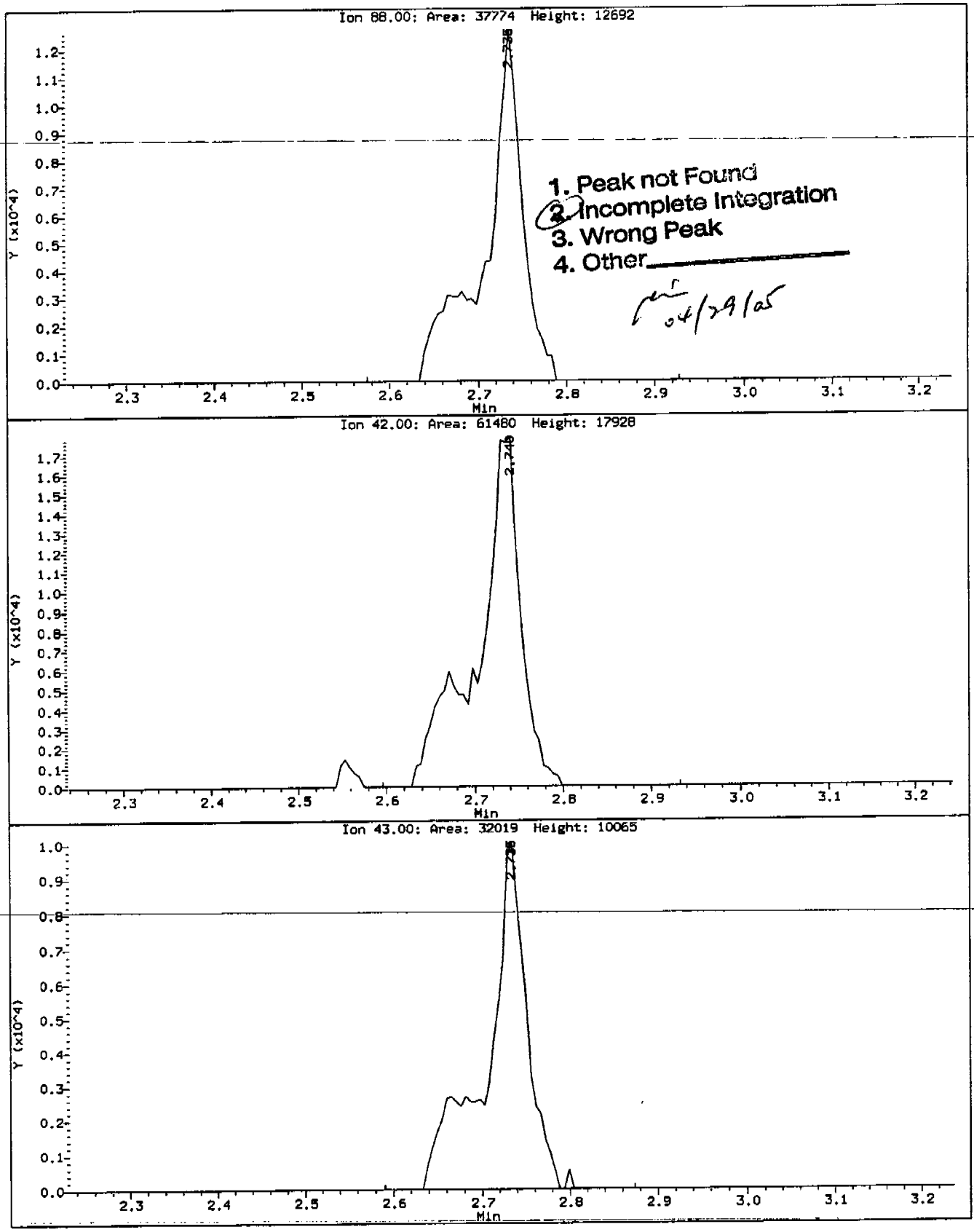
Data File: \\Slsvr01\BNA_LAB\HSK.i\K0504280.B\KCAL2684.D
Date : 28-APR-2005 14:33
Client ID: SSTD020APPIX
Sample Info: SSTD020APPIX
Volume Injected (uL): 1.0
Column phase:

\\Slsvr01\BNA_LAB\HSK.i\K0504280.B\KCAL2684.D

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2584.D
Injection Date: 28-APR-2005 14:33
Instrument: MSK.i
Client Sample ID: SSTD020APPIX

Compound: N-Nitrosomethylethylamine
CAS Number: 10595-95-6



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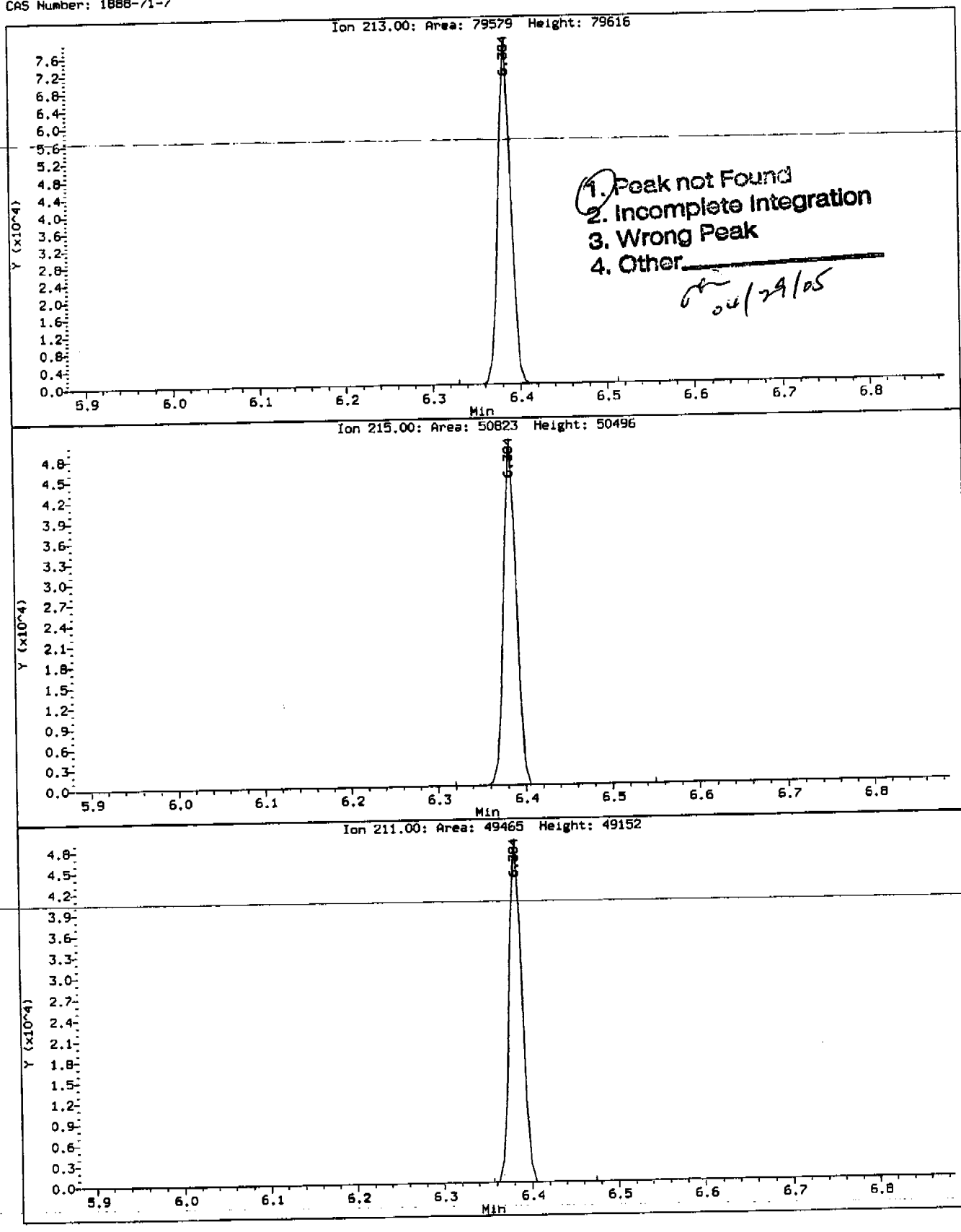
Injection Date: 28-APR-2005 14:33
Instrument: MSK.i
Client Sample ID: SSTD020APPIX

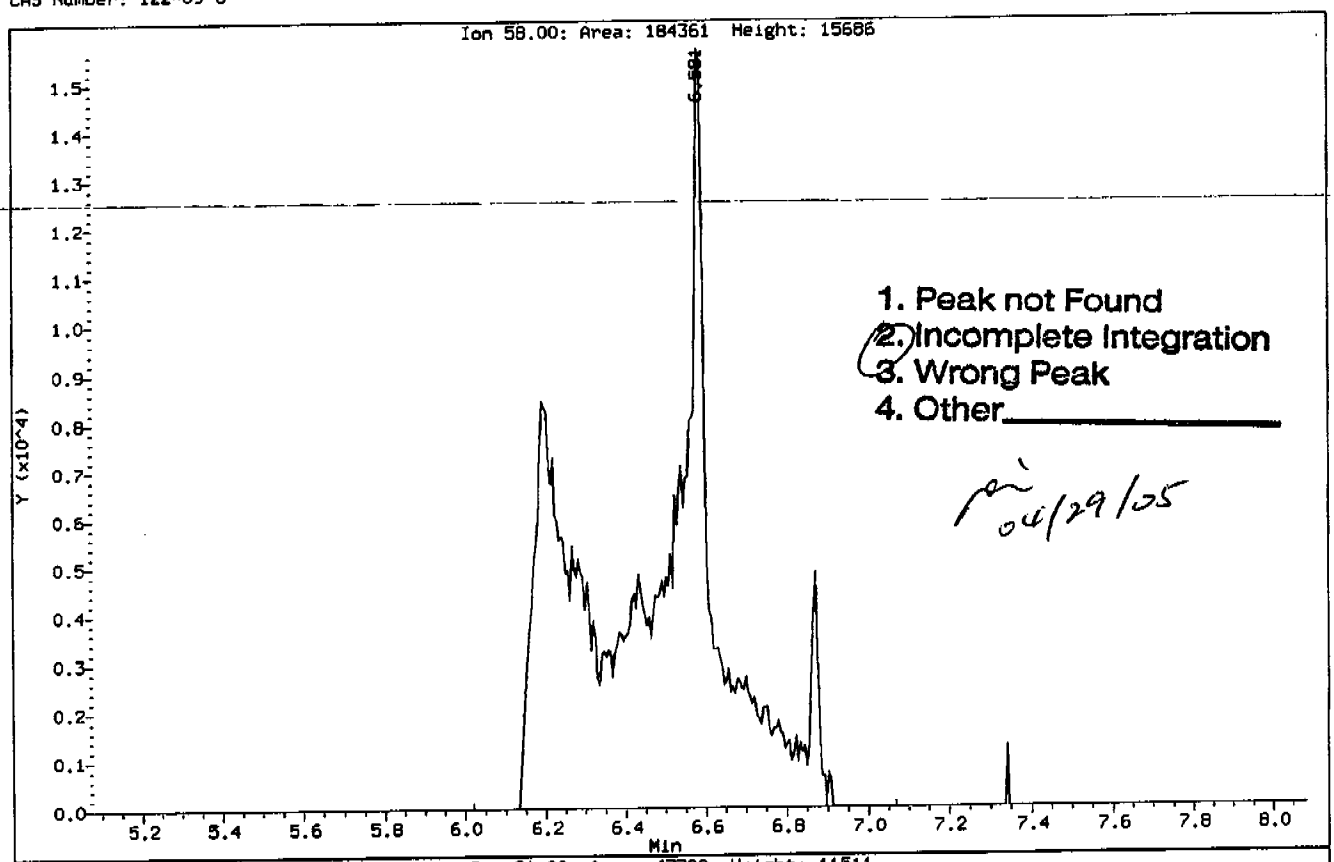
Compound: Hexachloropropene
CAS Number: 1888-71-7

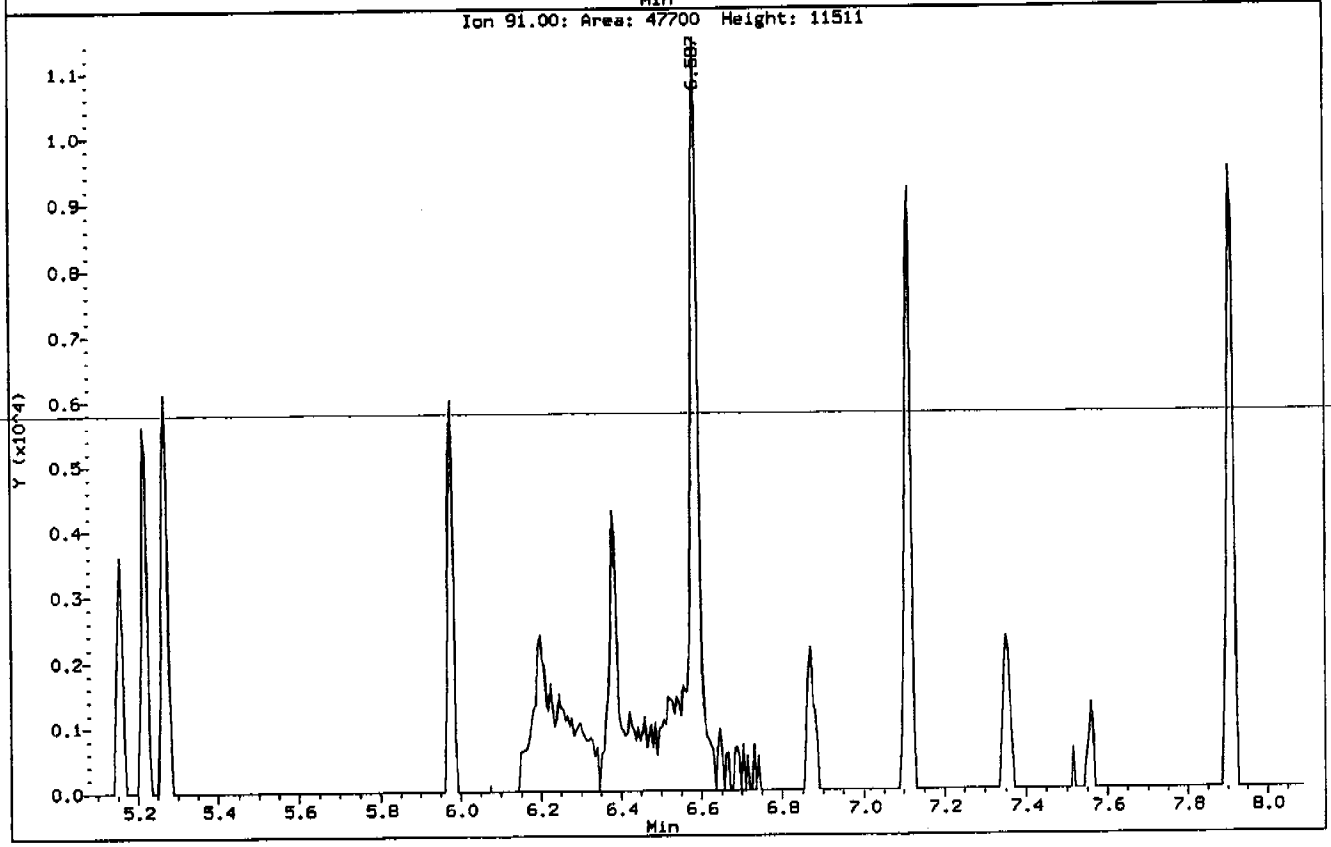


04/29/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2584.D
Injection Date: 28-APR-2005 14:33
Instrument: MSK.i
Client Sample ID: SSTD020APPIX

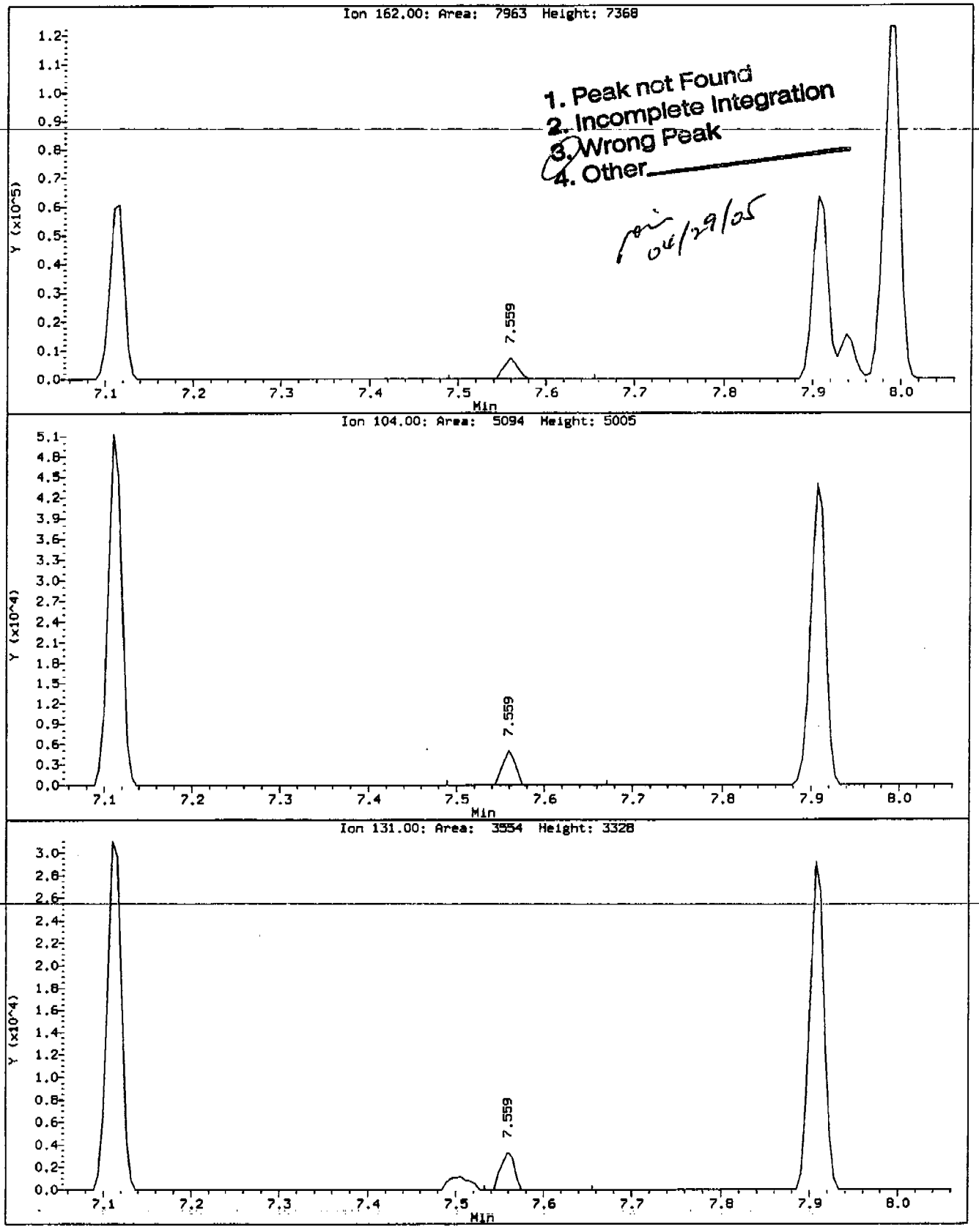
Compound: a,a-Dimethyl-phenethylamine
CAS Number: 122-09-8





Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2584.D
Injection Date: 28-APR-2005 14:33
Instrument: MSK.i
Client Sample ID: SSTD020APPIX

Compound: cis-Isosafrole
CAS Number: 120-58-1

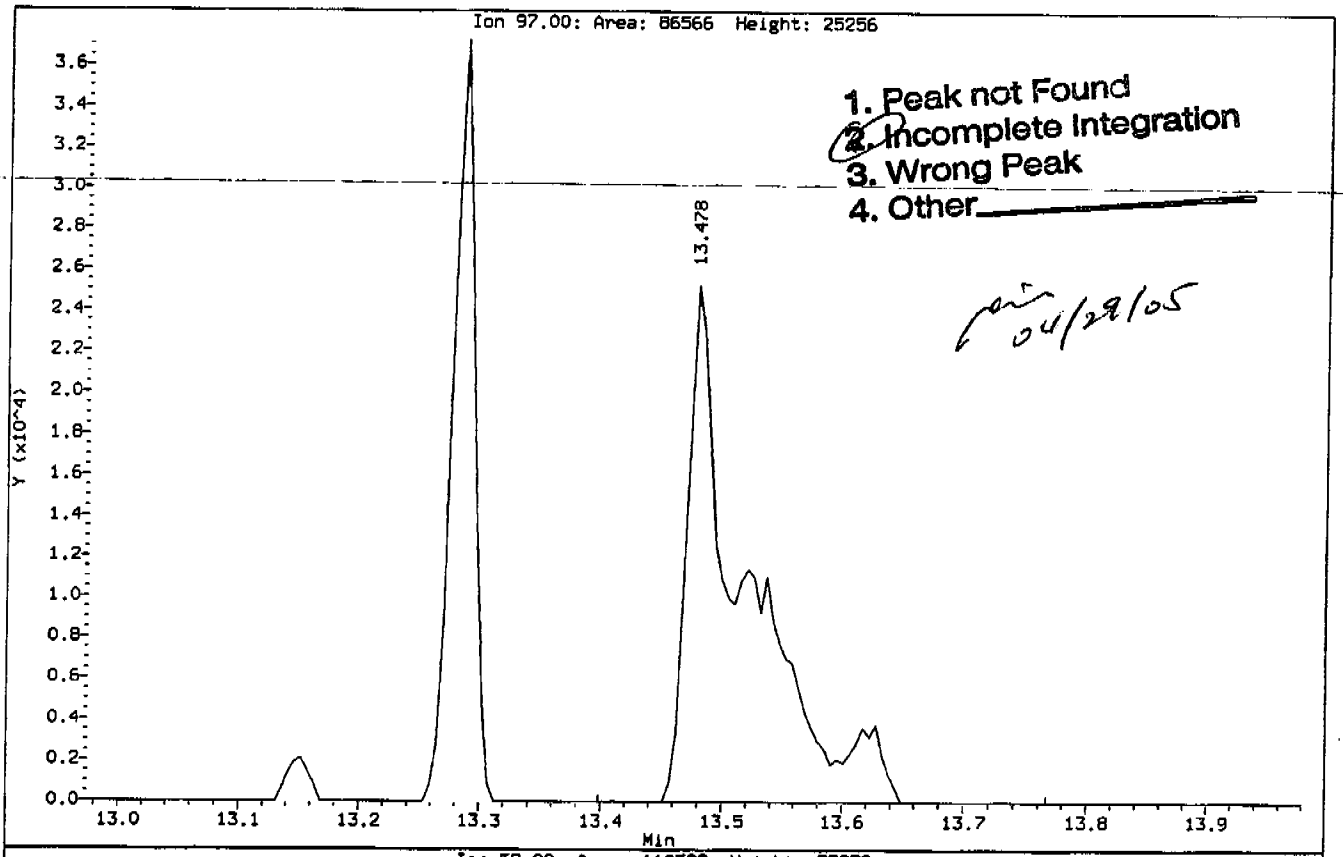


1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

04/29/05

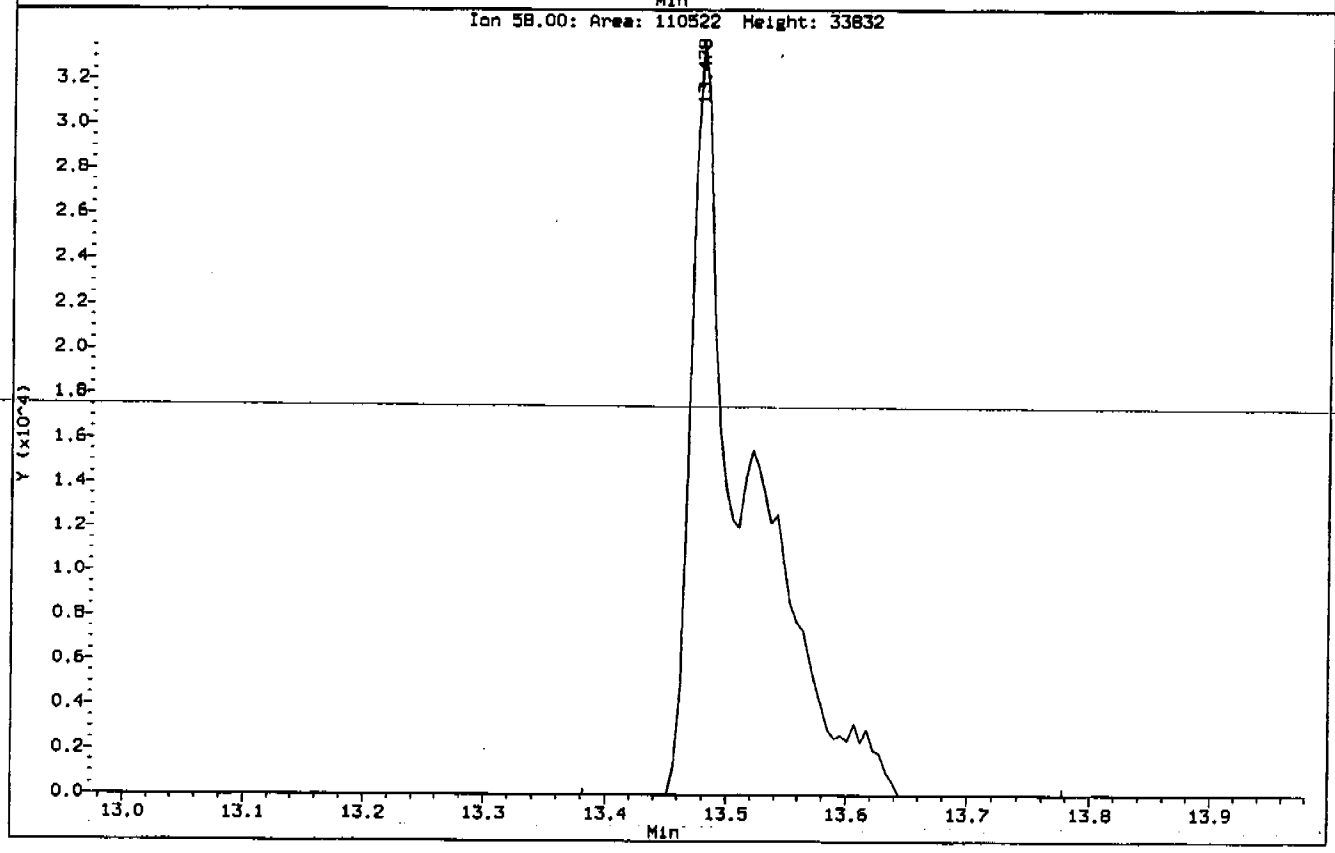
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2584.D
Injection Date: 28-APR-2005 14:33
Instrument: MSK.i
Client Sample ID: SSTD020APPIX

Compound: Methapyrilene
CAS Number: 91-80-5



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

04/29/05



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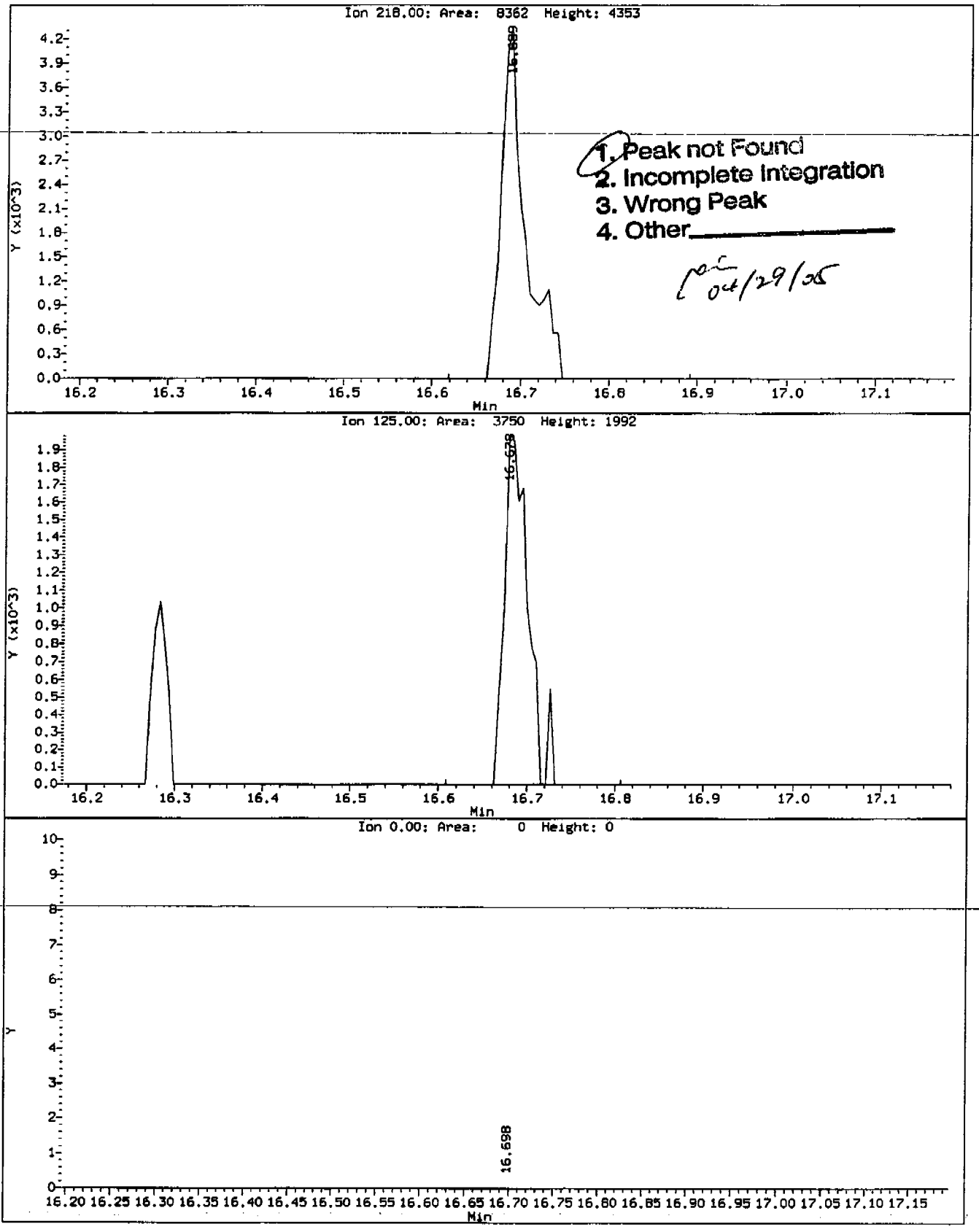
Injection Date: 28-APR-2005 14:33
Instrument: MSK.i
Client Sample ID: SSTD020APPIX

Compound: Famphur
CAS Number: 52-85-7



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2585.D Page 1
Report Date: 29-Apr-2005 08:43

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2585.D
Lab Smp Id: SSTD010APPIX Client Smp ID: SSTD010APPIX
Inj Date : 28-APR-2005 15:08
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD010APPIX
Misc Info : SV0183-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Meth Date : 29-Apr-2005 08:43 hongs Quant Type: ISTD
Cal Date : 28-APR-2005 15:08 Cal File: KCAL2585.D
Als bottle: 9 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIX.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
7	2-Picoline	93	2.563	2.563	(0.555)	41702	10.0000	9.476(a)
8	N-Nitrosomethylethylamine	88	2.740	2.740	(0.594)	20216	10.0000	10.22(M)
9	Methyl methanesulfonate	80	3.103	3.103	(0.672)	14394	10.0000	9.521
12	N-Nitrosodiethylamine	102	3.487	3.487	(0.756)	22465	10.0000	9.622
13	Ethyl Methanesulfonate	79	3.861	3.861	(0.837)	37570	10.0000	9.455
18	Pentachloroethane	117	4.273	4.273	(0.926)	17038	10.0000	9.173
* 22	1,4-Dichlorobenzene-d4	152	4.615	4.615	(1.000)	139914	40.0000	
30	Acetophenone	105	5.149	5.149	(0.831)	69882	10.0000	9.375
31	N-Nitrosopyrrolidine	100	5.159	5.159	(0.833)	23217	10.0000	9.558
33	N-Nitrosomorpholine	116	5.192	5.192	(0.838)	9662	10.0000	8.982
34	O-Toluidine	106	5.213	5.213	(0.841)	70372	10.0000	9.043
38	N-Nitrosopiperidine	114	5.549	5.549	(0.896)	21337	10.0000	9.510
43	o,o,o-Triethyl-Phosphorothioa	198	5.971	5.971	(0.964)	28433	10.0000	9.197
* 48	Naphthalene-d8	136	6.196	6.196	(1.000)	505544	40.0000	
46	a,a-Dimethyl-phenethylamine	58	6.436	6.436	(1.039)	96444	10.0000	10.04(M)
52	2,6-Dichlorophenol	162	6.377	6.377	(1.029)	30702	10.0000	8.603
53	Hexachloropropene	213	6.377	6.377	(1.029)	41102	10.0000	9.269(M)
55	Benzothiazole	135	6.580	6.580	(1.062)	58740	10.0000	8.916(a)
58	p-Phenylenediamine	108	6.864	6.864	(1.108)	37382	10.0000	10.51
57	n-Nitrosodi-n-butylamine	84	6.864	6.864	(1.108)	37600	10.0000	9.337
61	Safrole	162	7.109	7.109	(1.147)	35341	10.0000	9.277

5/2/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
65	1,2,4,5-Tetrachlorobenzene	216	7.505	7.505	(0.844)	98617	10.0000	9.053
64	cis-Isosafrole	162	7.553	7.553	(0.849)	4377	10.0000	10.41
70	trans-Isosafrole	162	7.900	7.900	(0.888)	40689	10.0000	8.878
74	1,4-Naphthoquinone	158	8.263	8.263	(0.929)	27713	10.0000	14.46
75	1,4-Dinitrobenzene	168	8.424	8.424	(1.360)	15633	10.0000	10.17
77	1,3-Dinitrobenzene	168	8.616	8.616	(0.969)	17237	10.0000	10.03
* 82	Acenaphthene-d10	164	8.894	8.894	(1.000)	300491	40.0000	
87	Pentachlorobenzene	250	9.268	9.268	(1.042)	49290	10.0000	9.316
89	1-Naphthylamine	143	9.401	9.401	(1.057)	80074	10.0000	9.794
90	2-Naphthylamine	143	9.535	9.535	(1.072)	73897	10.0000	9.981
92	2,3,4,6-Tetrachlorophenol	232	9.588	9.588	(1.078)	21743	10.0000	8.116
96	Thionazin	107	9.989	9.989	(1.123)	18961	10.0000	9.412(a)
97	5-Nitro-o-toluidine	152	9.994	9.994	(0.865)	28198	10.0000	9.873
101	tri-n-butylphosphate	99	10.283	10.283	(1.156)	122515	10.0000	9.307
105	Sulfotepp	97	10.689	10.689	(0.925)	20173	10.0000	9.367
106	Diallate (peak 1)	86	10.758	10.758	(0.931)	39897	10.0000	9.340
108	Phorate	75	10.769	10.769	(0.932)	71003	10.0000	9.193
111	Diallate (peak 2)	86	10.902	10.902	(0.943)	8451	10.0000	9.279
107	1,3,5-Trinitrobenzene	213	10.865	10.865	(0.940)	12101	10.0000	9.192(a)
110	Phenacetin	108	10.876	10.876	(0.941)	58189	10.0000	9.860(a)
113	Dimethoate	87	11.116	11.116	(0.962)	40747	10.0000	11.81
116	4-Aminobiphenyl	169	11.303	11.303	(0.978)	94306	10.0000	8.866
115	tris(2-chloroethyl)phosphate	63	11.356	11.356	(0.982)	30567	10.0000	9.769
119	Pentachloronitrobenzene	237	11.522	11.522	(0.997)	17560	10.0000	9.584
118	Pronamide	173	11.565	11.565	(1.000)	52043	10.0000	9.762
* 121	Phenanthrene-d10	188	11.559	11.559	(1.000)	563013	40.0000	
123	Disulfoton	88	11.762	11.762	(1.018)	50823	10.0000	9.354
125	Dinoseb	211	11.805	11.805	(1.021)	28558	10.0000	8.773
128	Methyl Parathion	109	12.489	12.489	(1.080)	35573	10.0000	11.56
131	4-Nitroquinoline-1-oxide	190	13.205	13.205	(1.142)	9460	10.0000	8.367
130	Parathion	97	13.274	13.274	(1.148)	25722	10.0000	10.34
132	Methapyrilene	97	13.477	13.477	(1.166)	49062	10.0000	12.88(M)
133	Isodrin	193	13.616	13.616	(1.178)	18398	10.0000	9.317
141	Kepone	272	14.775	14.775	(0.884)	495	10.0000	5.875
140	Aramite (peak 1)	185	14.855	14.855	(0.888)	9551	10.0000	9.864
142	Aramite (peak 2)	185	15.010	15.010	(0.898)	14213	10.0000	9.660
143	p-(Dimethylamino)azobenzene	120	15.080	15.080	(0.902)	45427	10.0000	9.900
144	Chlorobenzilate	251	15.224	15.224	(0.911)	59272	10.0000	9.156
148	2-Acetylaminofluorene	181	16.271	16.271	(0.973)	69387	10.0000	9.586
149	Famphur	218	16.677	16.677	(0.997)	3050	10.0000	11.50(M)
* 153	Chrysene-d12	240	16.720	16.720	(1.000)	555393	40.0000	
151	4,4'-Methylenebis(2-Chloroani	266	16.795	16.795	(1.004)	14144	10.0000	8.860(a)
162	7,12-Dimethylbenz(a)anthracen	256	18.729	18.729	(0.969)	81942	10.0000	9.106
163	Hexachlorophene	196	19.033	19.033	(0.985)	725	10.0000	2.323(M)
* 166	Perylene-d12	264	19.332	19.332	(1.000)	488134	40.0000	
169	3-methylcholanthrene	268	19.861	19.861	(1.027)	83423	10.0000	9.085

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2585.D Page 3
Report Date: 29-Apr-2005 08:43

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

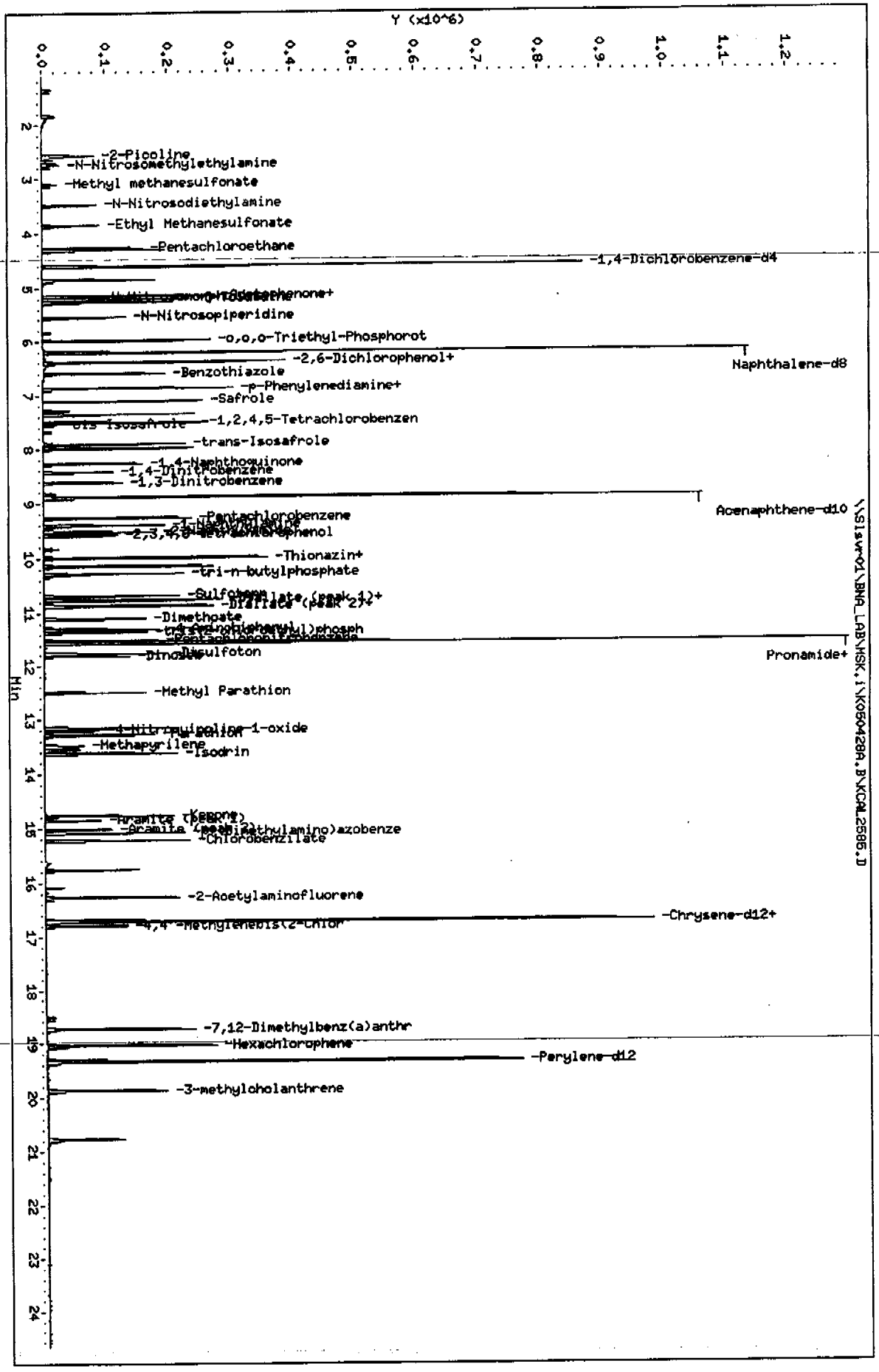
Instrument ID: MSK.i
Lab File ID: KCAL2585.D
Lab Smp Id: SSTD010APPIX
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Misc Info: SV0183-05

Calibration Date: 28-APR-2005
Calibration Time: 11:41
Client Smp ID: SSTD010APPIX
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	162145	81073	324290	139914	-13.71
48 Naphthalene-d8	535939	267970	1071878	505544	-5.67
82 Acenaphthene-d10	307602	153801	615204	300491	-2.31
121 Phenanthrene-d10	574409	287205	1148818	563013	-1.98
153 Chrysene-d12	519397	259699	1038794	555393	6.93
166 Perylene-d12	440492	220246	880984	488134	10.82

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.62	4.12	5.12	4.62	-0.10
48 Naphthalene-d8	6.21	5.71	6.71	6.20	-0.16
82 Acenaphthene-d10	8.91	8.41	9.41	8.89	-0.17
121 Phenanthrene-d10	11.58	11.08	12.08	11.56	-0.18
153 Chrysene-d12	16.74	16.24	17.24	16.72	-0.09
166 Perylene-d12	19.35	18.85	19.85	19.33	-0.08

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



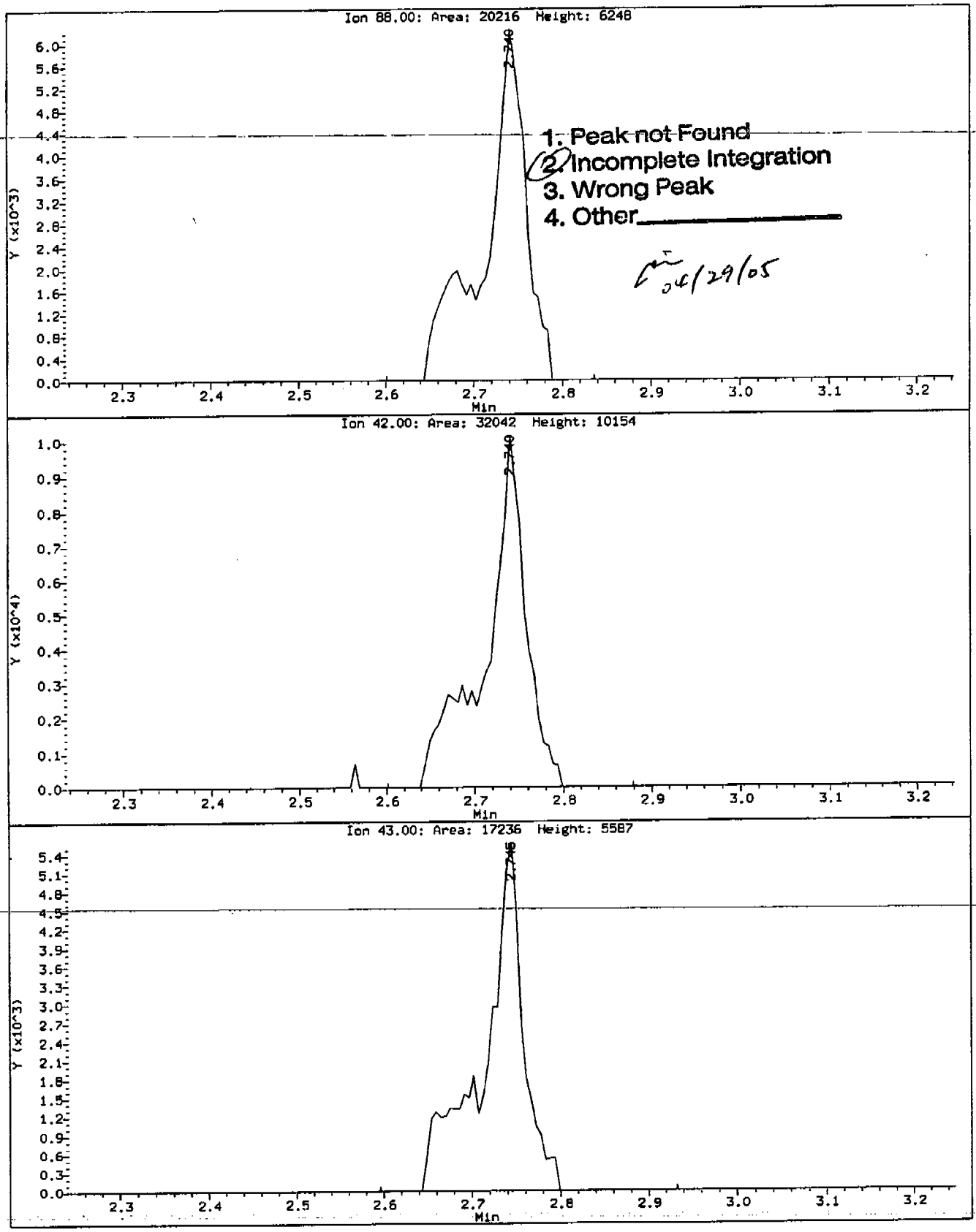
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2585.D
Date : 28-APR-2005 15:08
Client ID: SSTD010APPIX
Sample Info: SSTD010APPIX
Volume Injected (ul): 1.0
Column phase:

\\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2585.D

Instrument: MSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2585.D
Injection Date: 28-APR-2005 15:08
Instrument: MSK.i
Client Sample ID: 55TD010APPIX

Compound: N-Nitrosomethylethylamine
CAS Number: 10595-95-6



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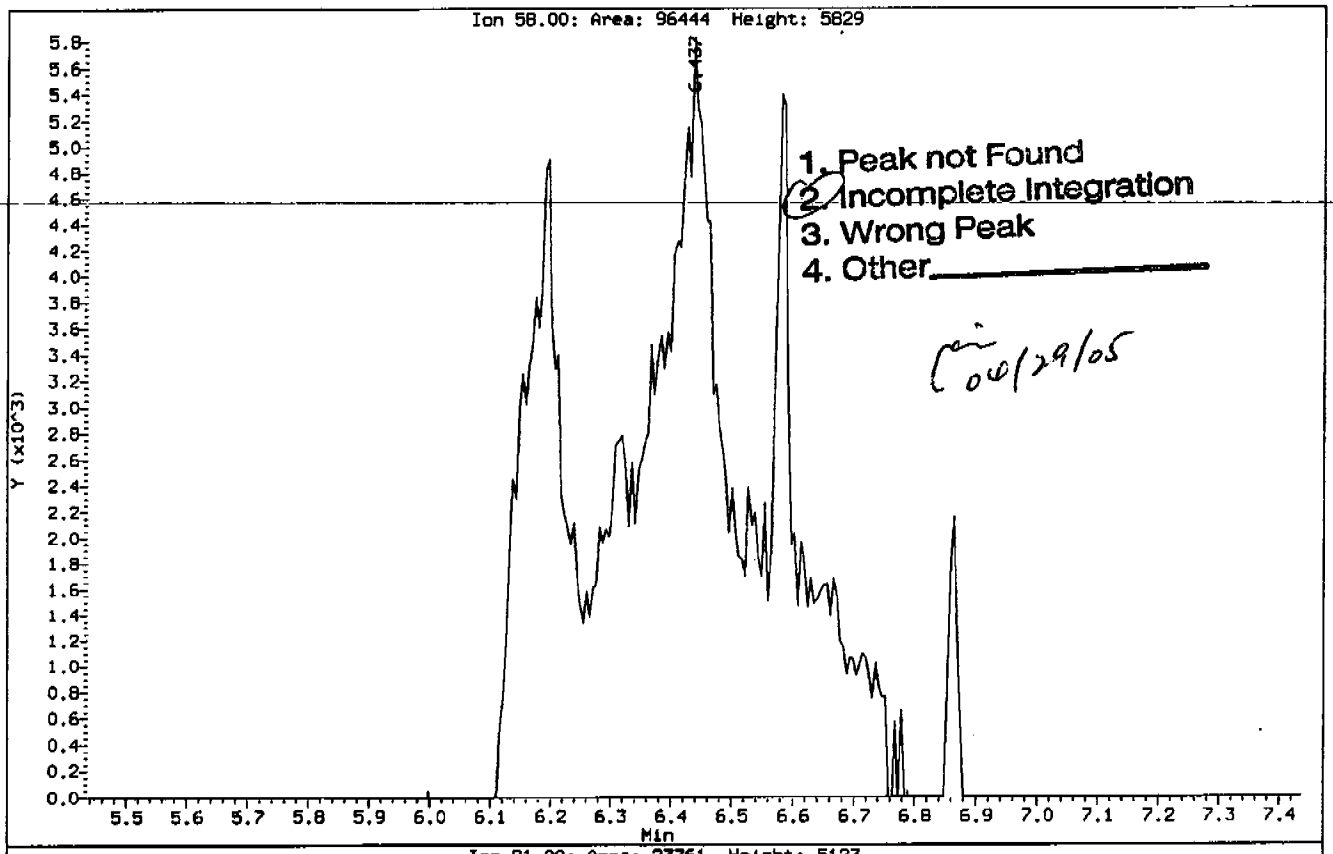
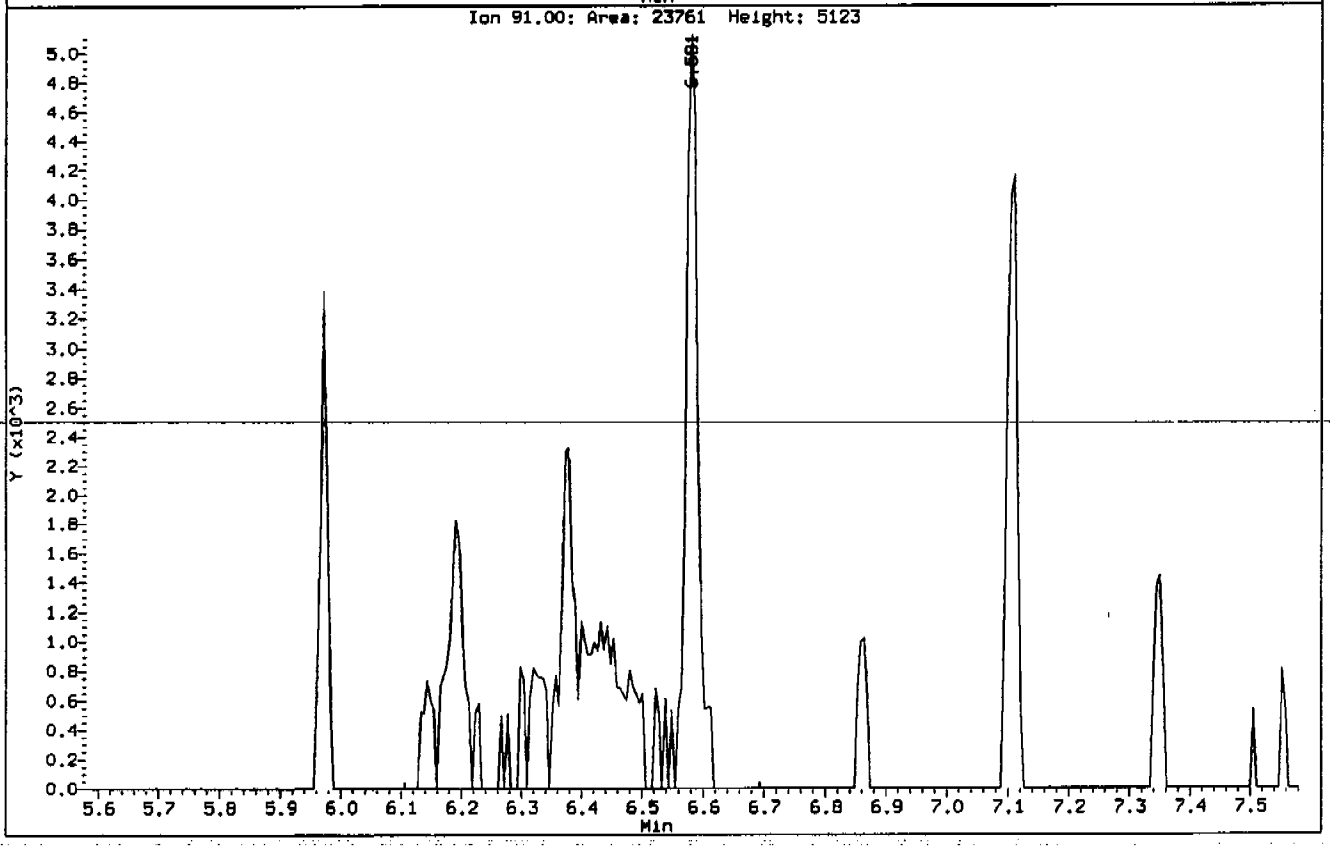
Injection Date: 28-APR-2005 15:08
Instrument: MSK.i
Client Sample ID: SSTD010APPIX

Compound: a,a-Dimethyl-phenethylamine
CAS Number: 122-09-8





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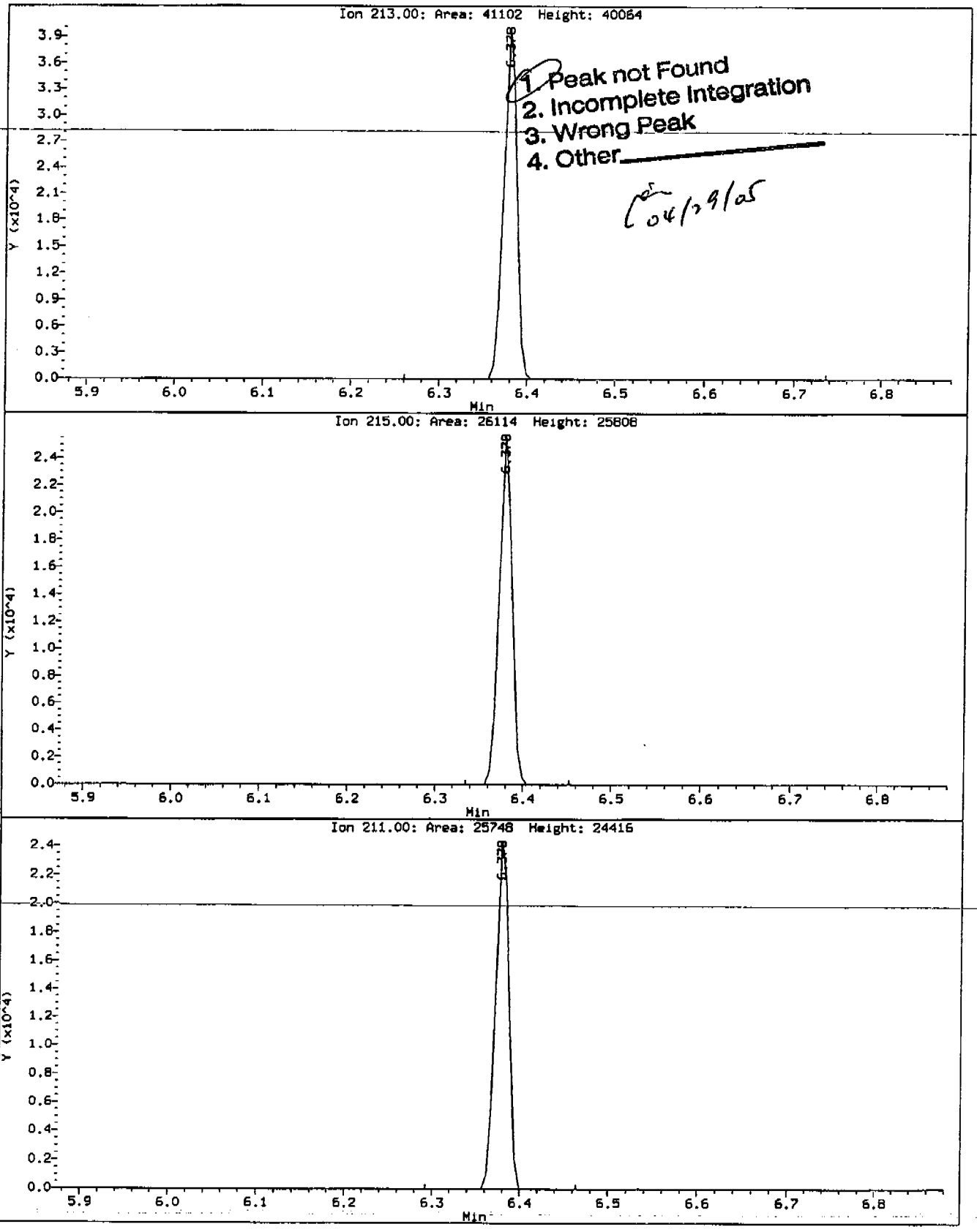
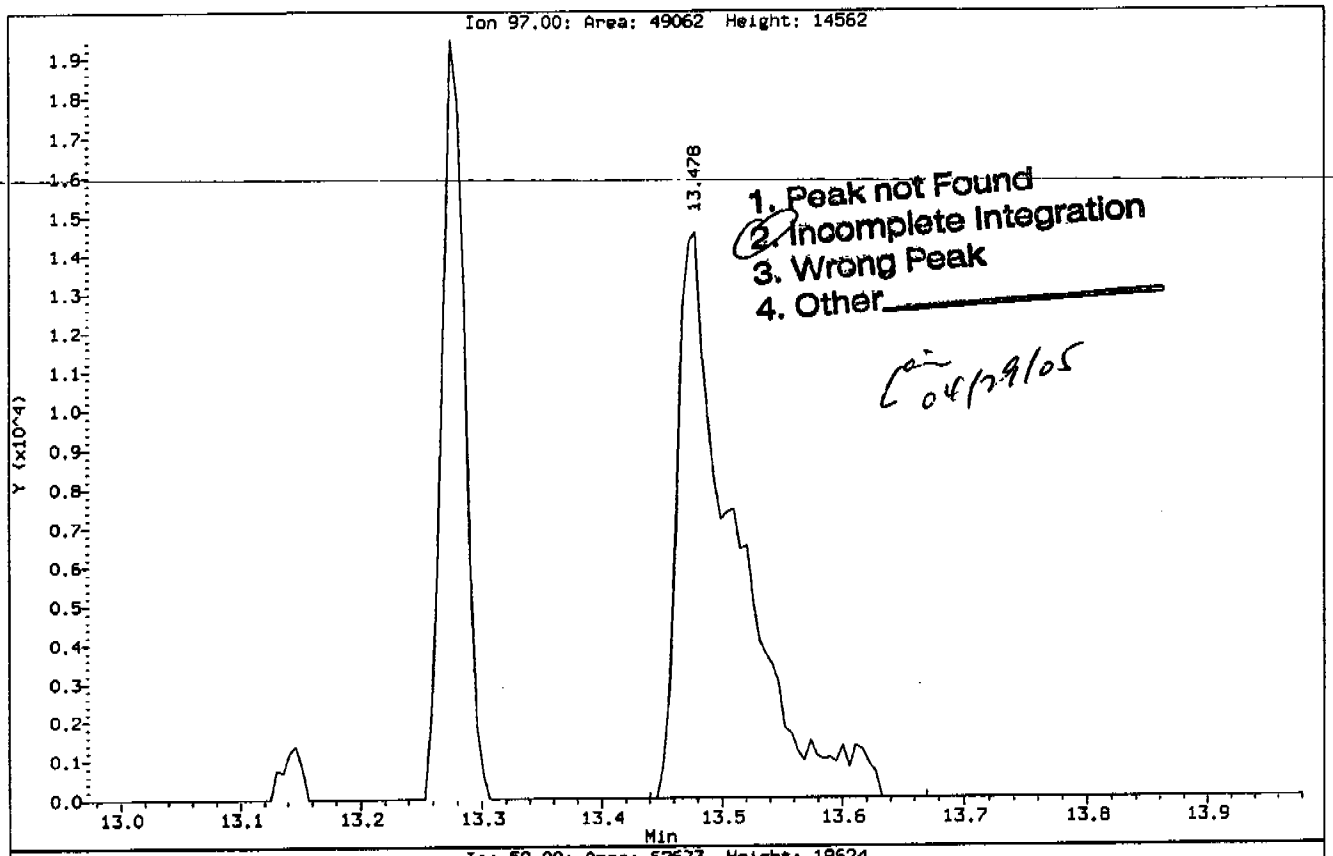
Injection Date: 28-APR-2005 15:08
Instrument: MSK.i
Client Sample ID: SSTD010APPIX

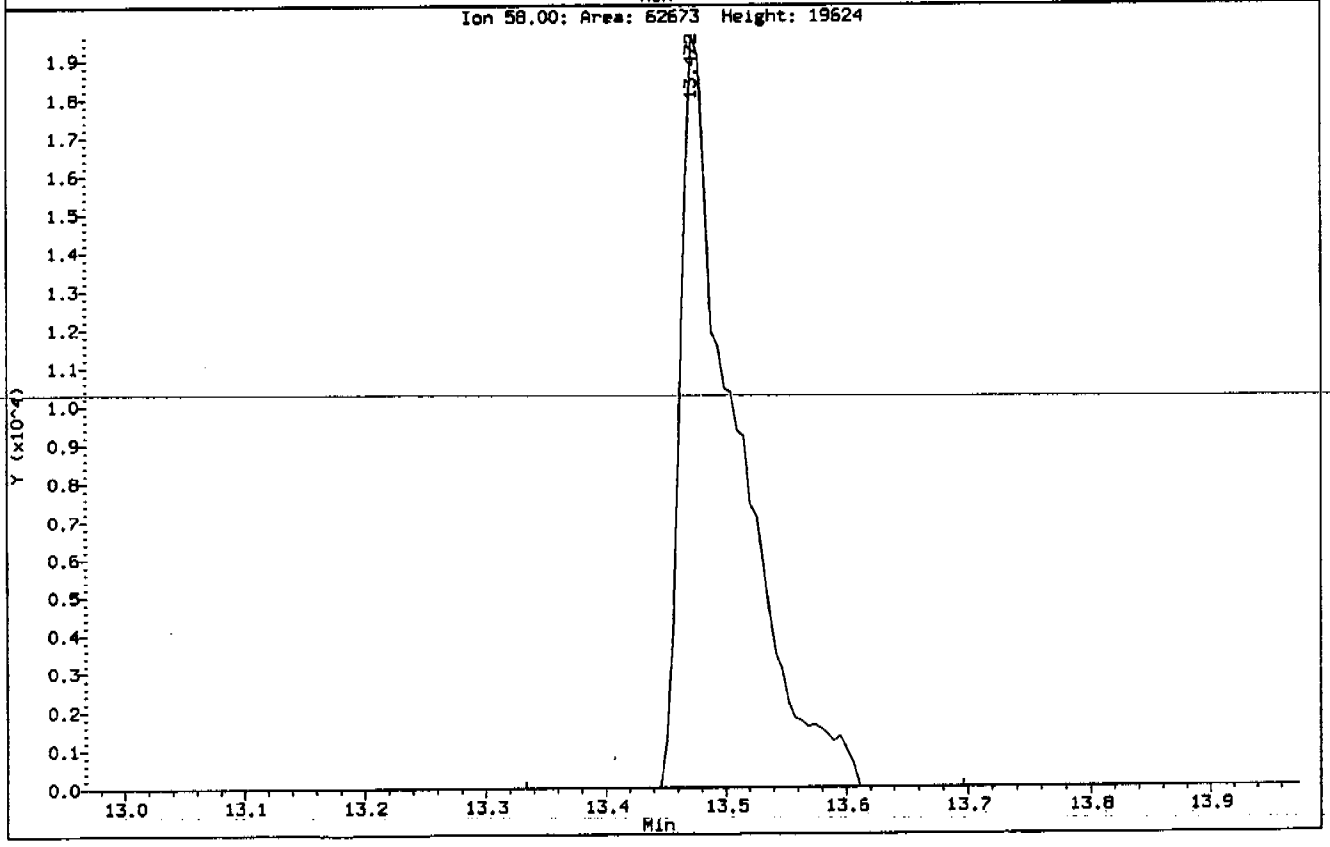
Compound: Hexachloropropene
CAS Number: 1888-71-7



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2585.D
Injection Date: 28-APR-2005 15:08
Instrument: MSK.i
Client Sample ID: SSTD010APPIX

Compound: Methapyrilene
CAS Number: 91-80-5





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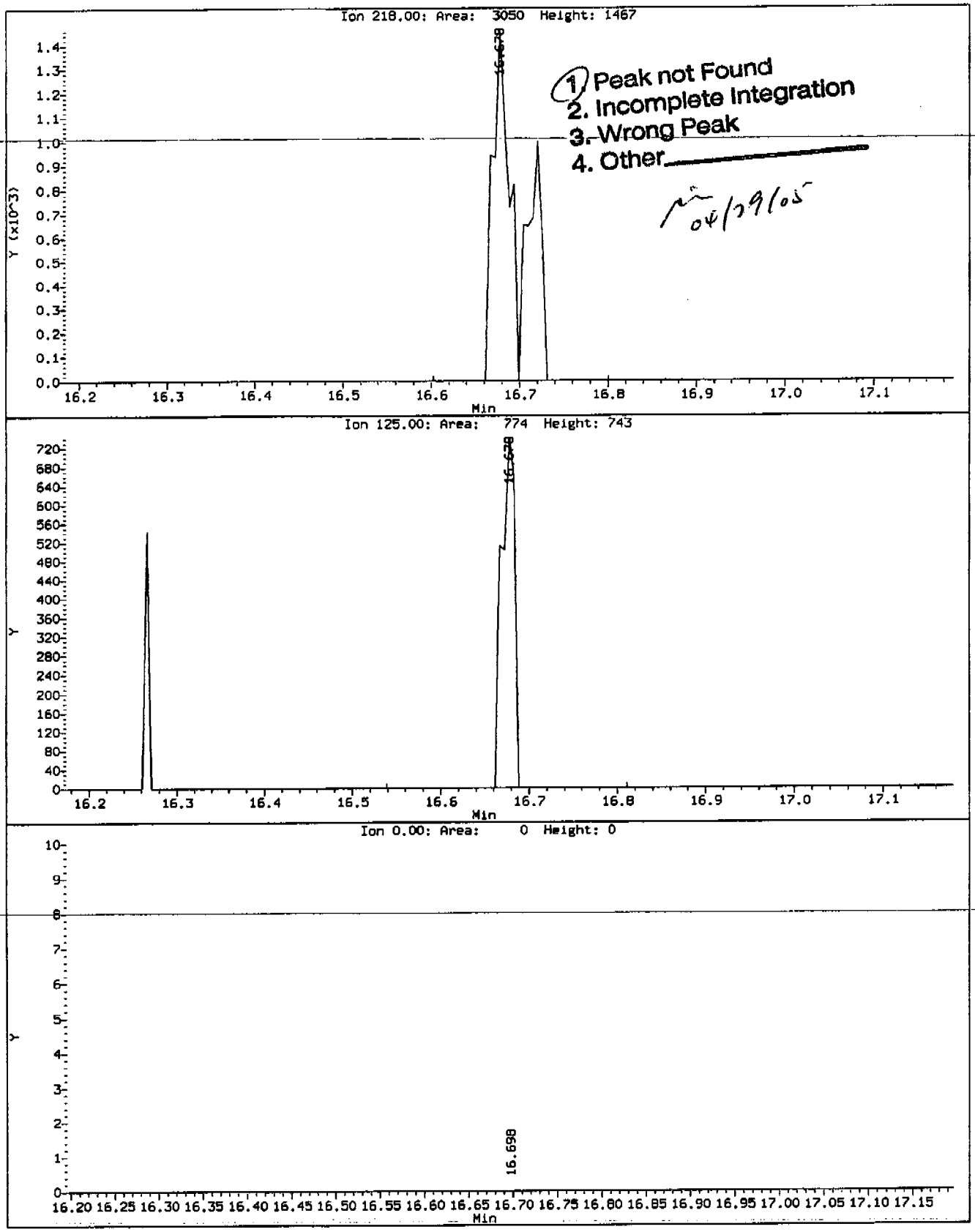
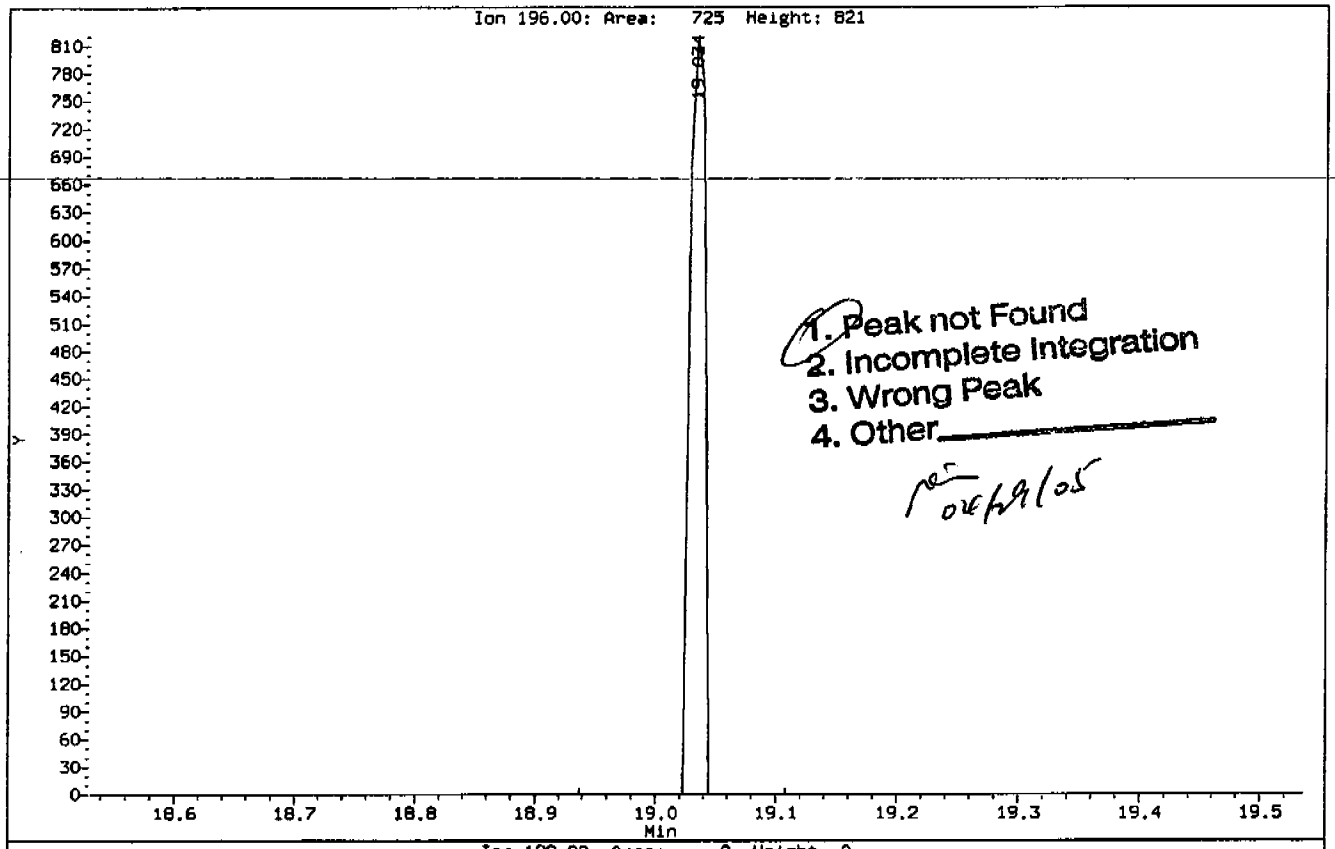
Injection Date: 28-APR-2005 15:08
Instrument: MSK.i
Client Sample ID: SSTD010APPIX

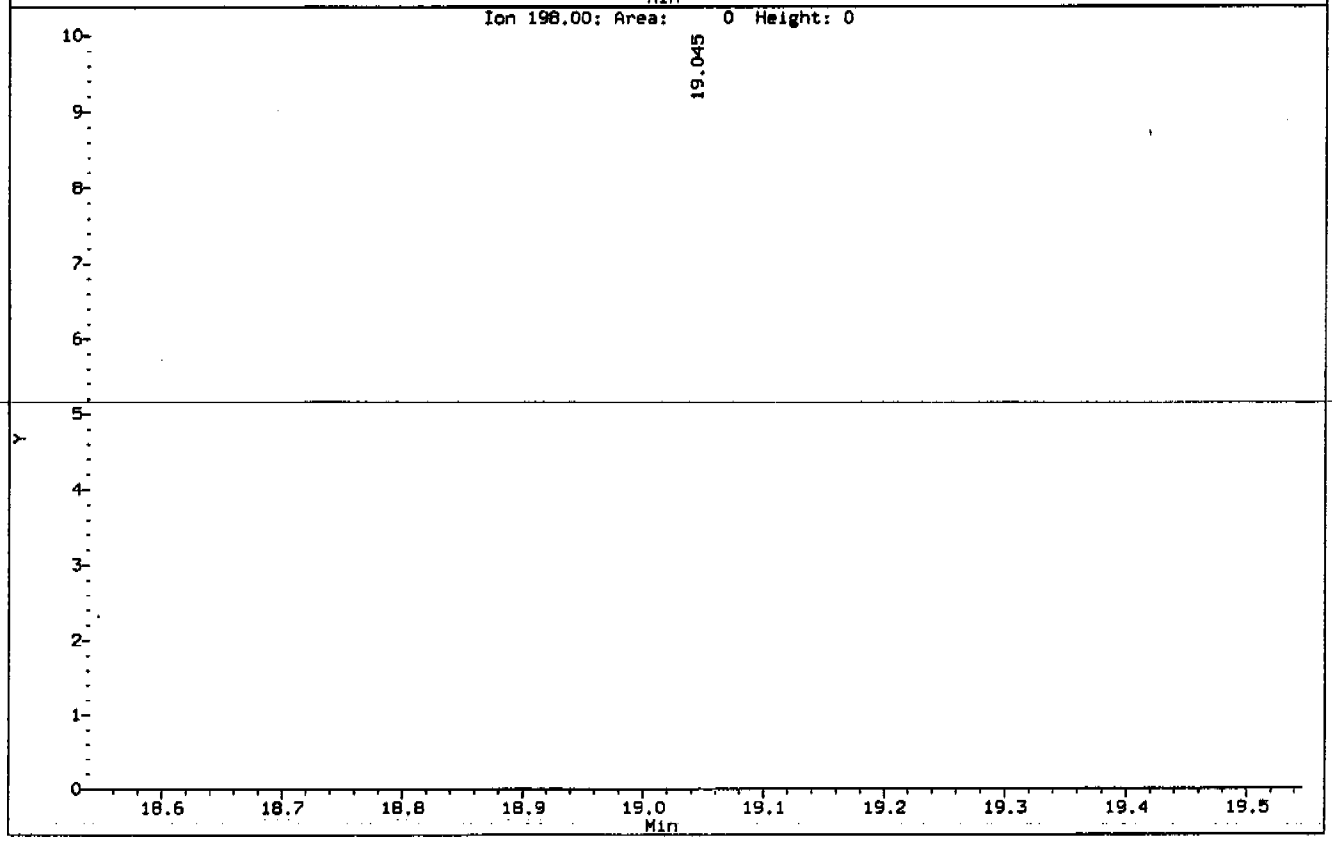
Compound: Famphur
CAS Number: 52-85-7



Data File: \\Slavr01\BNA_LAB\MSK,i\K050428A.B\KCAL2585.D
Injection Date: 28-APR-2005 15:08
Instrument: MSK.i
Client Sample ID: SSTD010APPIX

Compound: Hexachlorophene
CAS Number: 70-30-7





Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D
Report Date: 29-Apr-2005 08:43

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D
Lab Smp Id: SSTD002APPIX Client Smp ID: SSTD002APPIX
Inj Date : 28-APR-2005 15:42
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD002APPIX
Misc Info : SV0182-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Meth Date : 29-Apr-2005 08:43 hongs Quant Type: ISTD
Cal Date : 28-APR-2005 15:42 Cal File: KCAL2586.D
Als bottle: 10 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIX.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
7 2-Picoline	93	2.597	2.597	(0.563)	7038	2.00000	1.775(a)
8 N-Nitrosomethylethylamine	88	2.747	2.747	(0.596)	2959	2.00000	1.660(aM)
9 Methyl methanesulfonate	80	3.110	3.110	(0.674)	2236	2.00000	1.642(aM)
12 N-Nitrosodiethylamine	102	3.495	3.495	(0.758)	3845	2.00000	1.828(a)
13 Ethyl Methanesulfonate	79	3.863	3.863	(0.838)	6944	2.00000	1.940(a)
18 Pentachloroethane	117	4.269	4.269	(0.926)	3225	2.00000	1.927(a)
* 22 1,4-Dichlorobenzene-d4	152	4.611	4.611	(1.000)	126048	40.0000	
30 Acetophenone	105	5.151	5.151	(0.832)	12525	2.00000	1.867(a)
31 N-Nitrosopyrrolidine	100	5.162	5.162	(0.834)	4059	2.00000	1.857(a)
33 N-Nitrosomorpholine	116	5.194	5.194	(0.839)	1541	2.00000	1.592(a)
34 O-Toluidine	106	5.210	5.210	(0.841)	12793	2.00000	1.826(a)
38 N-Nitrosopiperidine	114	5.552	5.552	(0.896)	3738	2.00000	1.851(a)
43 o,o,o-Triethyl-Phosphorothioa	198	5.974	5.974	(0.965)	4899	2.00000	1.761(a)
* 48 Naphthalene-d8	136	6.193	6.193	(1.000)	454977	40.0000	
46 a,a-Dimethyl-phenethylamine	58	6.267	6.267	(1.012)	11635	2.00000	1.346(aM)
52 2,6-Dichlorophenol	162	6.374	6.374	(1.029)	5794	2.00000	1.804(a)
53 Hexachloropropene	213	6.380	6.380	(1.030)	7219	2.00000	1.809(aM)
55 Benzothiazole	135	6.583	6.583	(1.063)	11406	2.00000	1.924(a)
58 p-Phenylenediamine	108	6.871	6.871	(1.110)	4976	2.00000	1.555(a)
57 n-Nitrosodi-n-butylamine	84	6.860	6.860	(1.108)	7130	2.00000	1.967(a)
61 Safrole	162	7.106	7.106	(1.148)	5801	2.00000	1.692(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
65	1,2,4,5-Tetrachlorobenzene	216	7.501	7.501	(0.844)	18303	2.00000	1.971(aM)
64	cis-Isosafrole	162	7.560	7.560	(0.850)	608	2.00000	1.697(aM)
70	trans-Isosafrole	162	7.902	7.902	(0.889)	7254	2.00000	1.857(a)
74	1,4-Naphthoquinone	158	8.265	8.265	(0.930)	3480	2.00000	2.130
75	1,4-Dinitrobenzene	168	8.426	8.426	(1.361)	1766	2.00000	1.276(a)
77	1,3-Dinitrobenzene	168	8.618	8.618	(0.969)	2124	2.00000	1.450(a)
* 82	Acenaphthene-d10	164	8.890	8.890	(1.000)	256109	40.0000	
87	Pentachlorobenzene	250	9.270	9.270	(1.043)	9057	2.00000	2.008
89	1-Naphthylamine	143	9.398	9.398	(1.057)	13292	2.00000	1.908(a)
90	2-Naphthylamine	143	9.531	9.531	(1.072)	12508	2.00000	1.982(a)
92	2,3,4,6-Tetrachlorophenol	232	9.585	9.585	(1.078)	2921	2.00000	1.279(a)
96	Thionazin	107	9.991	9.991	(1.124)	2963	2.00000	1.726(a)
97	5-Nitro-o-toluidine	152	9.996	9.996	(0.865)	3662	2.00000	1.576(a)
101	tri-n-butylphosphate	99	10.285	10.285	(1.157)	19484	2.00000	1.737(a)
105	Sulfotepp	97	10.685	10.685	(0.925)	2989	2.00000	1.706(a)
106	Diallate (peak 1)	86	10.755	10.755	(0.931)	6389	2.00000	1.839(a)
108	Phorate	75	10.771	10.771	(0.932)	11435	2.00000	1.820(a)
111	Diallate (peak 2)	86	10.894	10.894	(0.943)	1530	2.00000	2.066
107	1,3,5-Trinitrobenzene	213	10.862	10.862	(0.940)	1250	2.00000	1.167(aM)
110	Phenacetin	108	10.862	10.862	(0.940)	8843	2.00000	1.842(a)
113	Dimethoate	87	11.107	11.107	(0.961)	6224	2.00000	2.218
116	4-Aminobiphenyl	169	11.300	11.300	(0.978)	16255	2.00000	1.879(a)
115	tris(2-chloroethyl)phosphate	63	11.353	11.353	(0.982)	5180	2.00000	2.035
119	Pentachloronitrobenzene	237	11.519	11.519	(0.997)	2691	2.00000	1.806(a)
118	Pronamide	173	11.561	11.561	(1.000)	8644	2.00000	1.994(a)
* 121	Phenanthrene-d10	188	11.556	11.556	(1.000)	457899	40.0000	
123	Disulfoton	88	11.759	11.759	(1.018)	8182	2.00000	1.852(a)
125	Dinoseb	211	11.802	11.802	(1.021)	3003	2.00000	1.134(a)
128	Methyl Parathion	109	12.486	12.486	(1.080)	5145	2.00000	2.056
130	Parathion	97	13.276	13.276	(1.149)	3141	2.00000	1.553(a)
132	Methapyrilene	97	13.485	13.485	(1.167)	7801	2.00000	2.519
133	Isodrin	193	13.613	13.613	(1.178)	3420	2.00000	2.129
140	Aramite (peak 1)	185	14.858	14.858	(0.889)	1208	2.00000	1.542(a)
142	Aramite (peak 2)	185	15.013	15.013	(0.898)	1971	2.00000	1.655(a)
143	p-(Dimethylamino)azobenzene	120	15.077	15.077	(0.902)	6528	2.00000	1.758(a)
144	Chlorobenzilate	251	15.221	15.221	(0.911)	9079	2.00000	1.733(a)
148	2-Acetylaminofluorene	181	16.263	16.263	(0.973)	9906	2.00000	1.691(a)
* 153	Chrysene-d12	240	16.717	16.717	(1.000)	449472	40.0000	
151	4,4'-Methylenebis(2-Chloroani	266	16.797	16.797	(1.005)	2316	2.00000	1.793(a)
162	7,12-Dimethylbenz(a)anthracen	256	18.731	18.731	(0.969)	13129	2.00000	1.714(a)
* 166	Perylene-d12	264	19.329	19.329	(1.000)	415435	40.0000	
169	3-methylcholanthrene	268	19.858	19.858	(1.027)	13968	2.00000	1.787(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D Page 3
Report Date: 29-Apr-2005 08:43

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

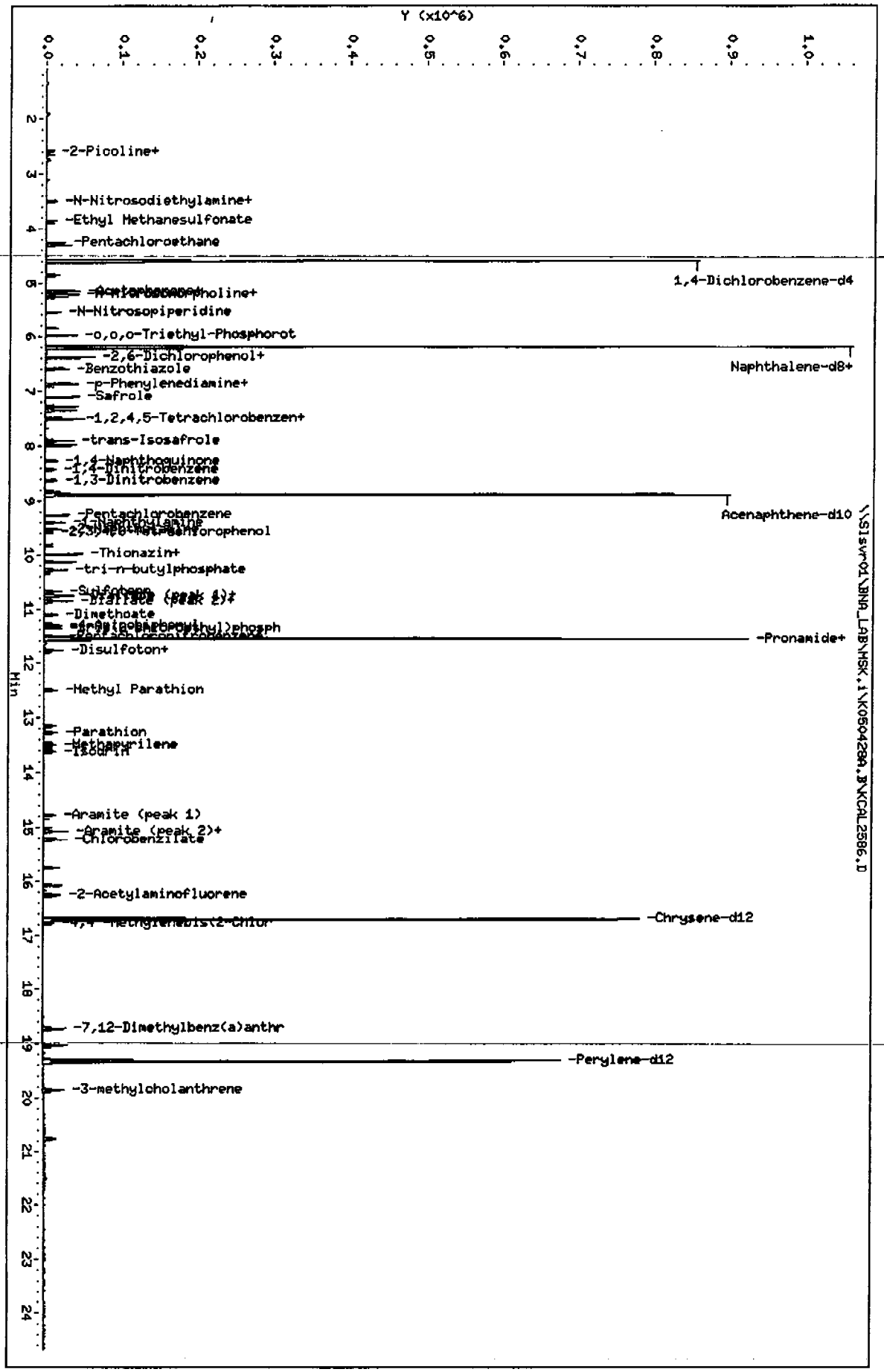
Instrument ID: MSK.i
Lab File ID: KCAL2586.D
Lab Smp Id: SSTD002APPIX
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\8270K.m
Misc Info: SV0182-05

Calibration Date: 28-APR-2005
Calibration Time: 11:41
Client Smp ID: SSTD002APPIX
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	162145	81073	324290	126048	-22.26
48 Naphthalene-d8	535939	267970	1071878	454977	-15.11
82 Acenaphthene-d10	307602	153801	615204	256109	-16.74
121 Phenanthrene-d10	574409	287205	1148818	457899	-20.28
153 Chrysene-d12	519397	259699	1038794	449472	-13.46
166 Perylene-d12	440492	220246	880984	415435	-5.69

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.62	4.12	5.12	4.61	-0.17
48 Naphthalene-d8	6.21	5.71	6.71	6.19	-0.21
82 Acenaphthene-d10	8.91	8.41	9.41	8.89	-0.21
121 Phenanthrene-d10	11.58	11.08	12.08	11.56	-0.20
153 Chrysene-d12	16.74	16.24	17.24	16.72	-0.11
166 Perylene-d12	19.35	18.85	19.85	19.33	-0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



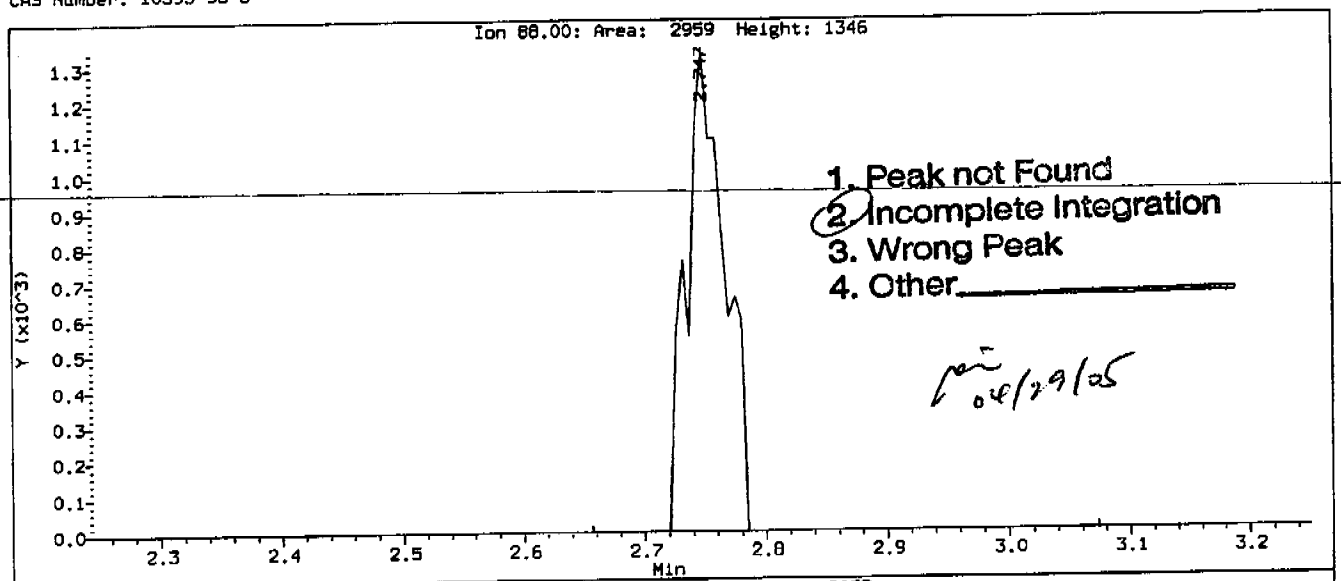
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D
Date : 28-APR-2005 15:42
Client ID: SSTD0028PPIX
Sample Info: SSTD002APPIX
Volume Injected (uL): 1.0
Column phase:

\\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D

Instrument: MSK.i
Operator: XIA
Column diameter: 2.00

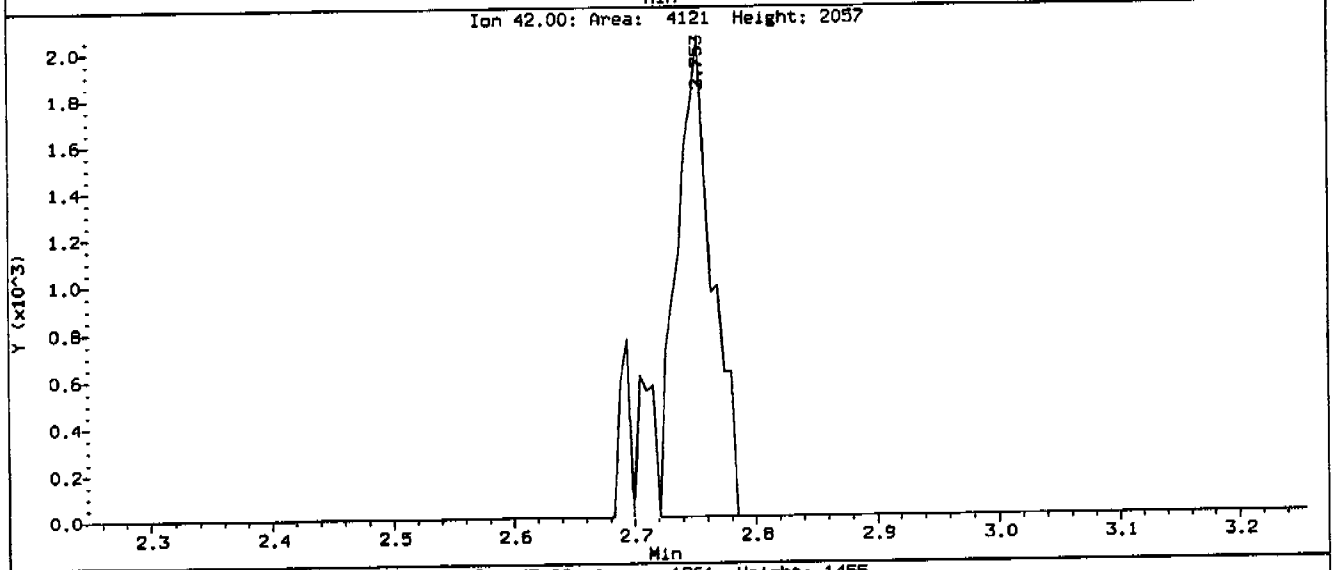
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D
Injection Date: 28-APR-2005 15:42
Instrument: MSK.i
Client Sample ID: SSTD002APPIX

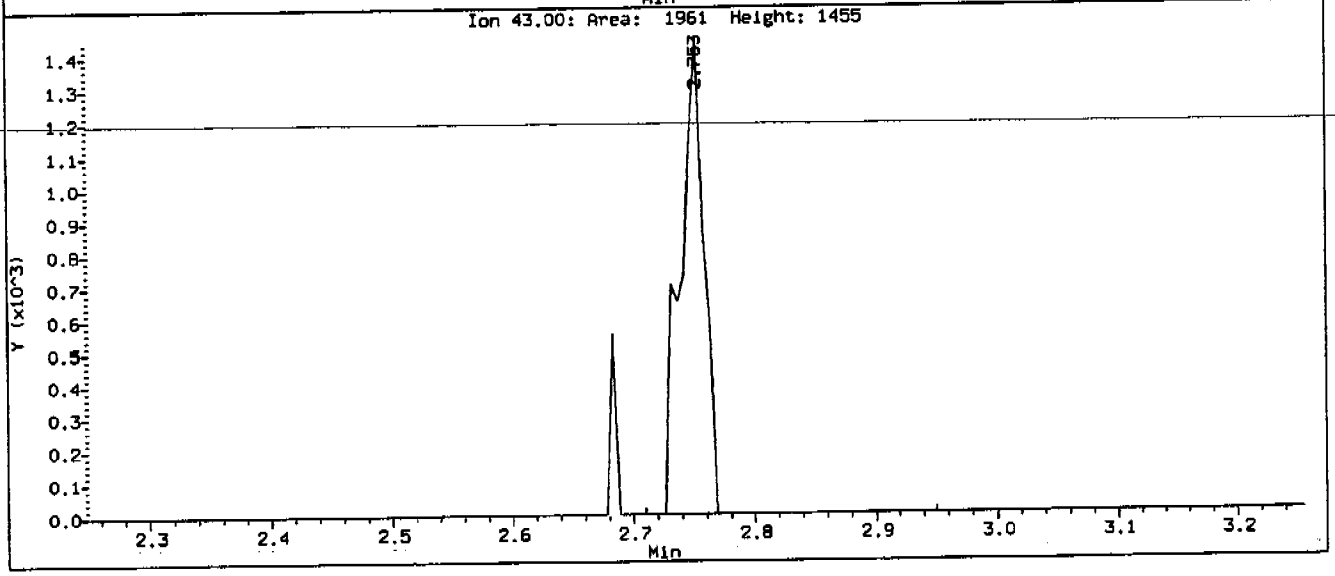
Compound: N-Nitrosomethylethylamine
CAS Number: 10595-95-6



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

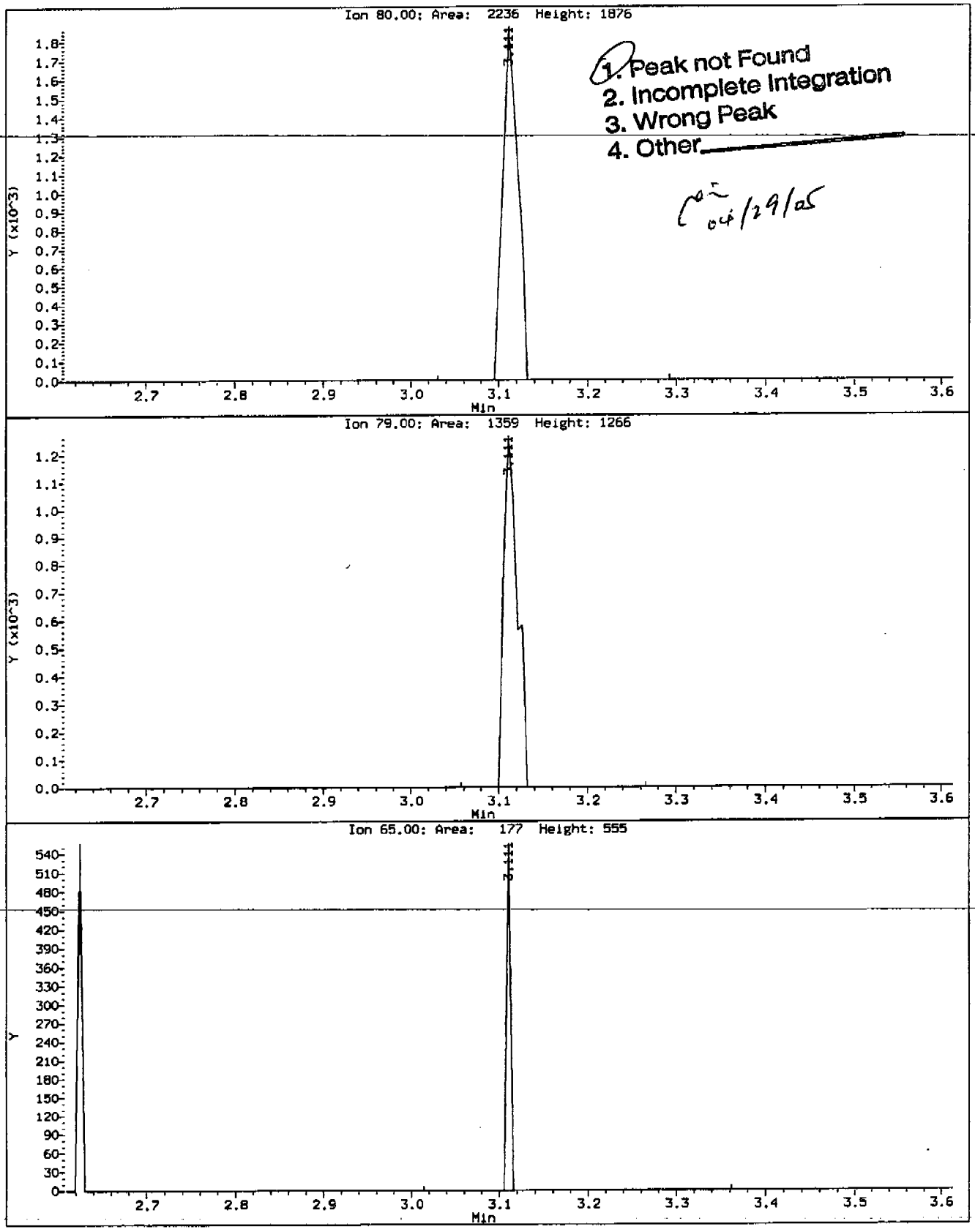
04/29/05





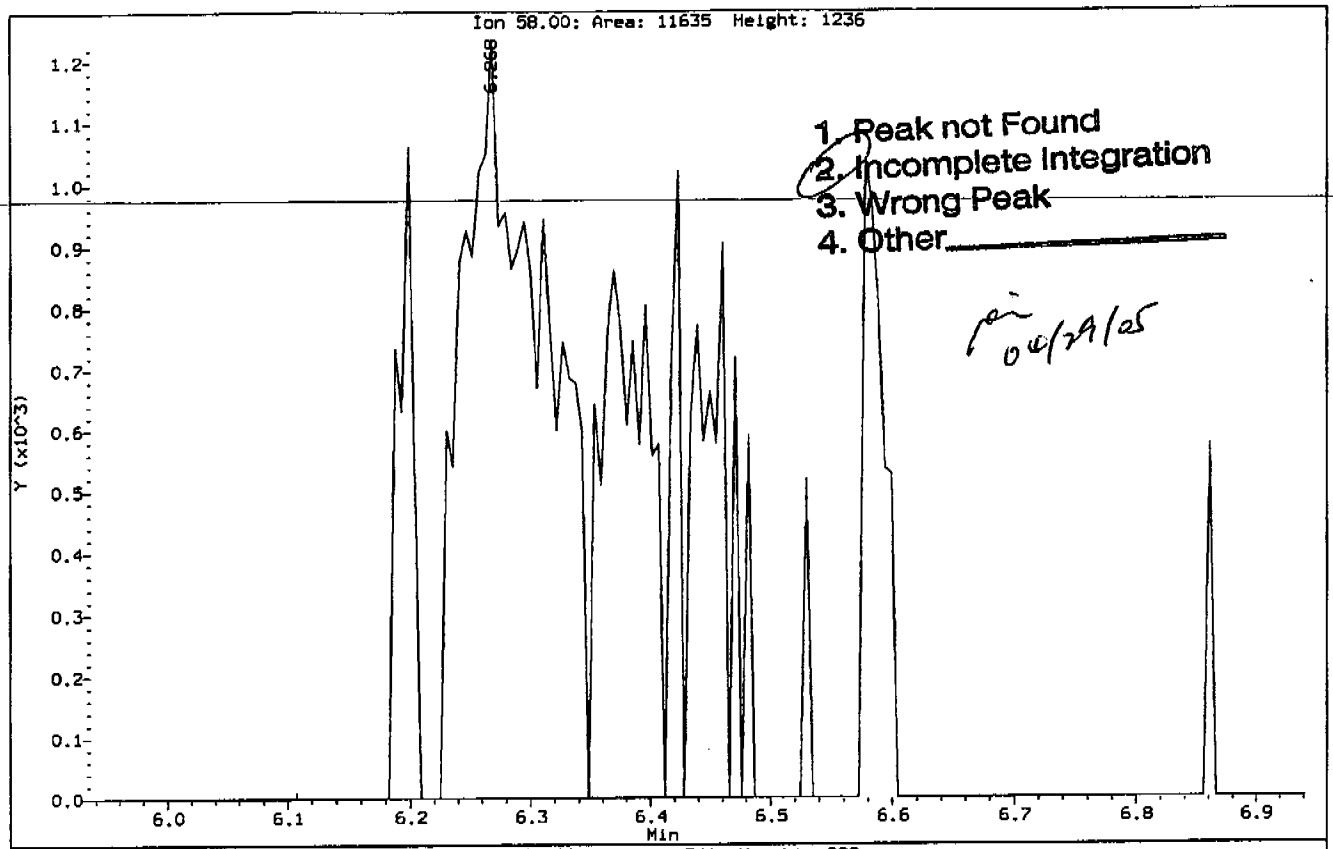
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D
Injection Date: 28-APR-2005 15:42
Instrument: MSK.i
Client Sample ID: SSTD002APPIX

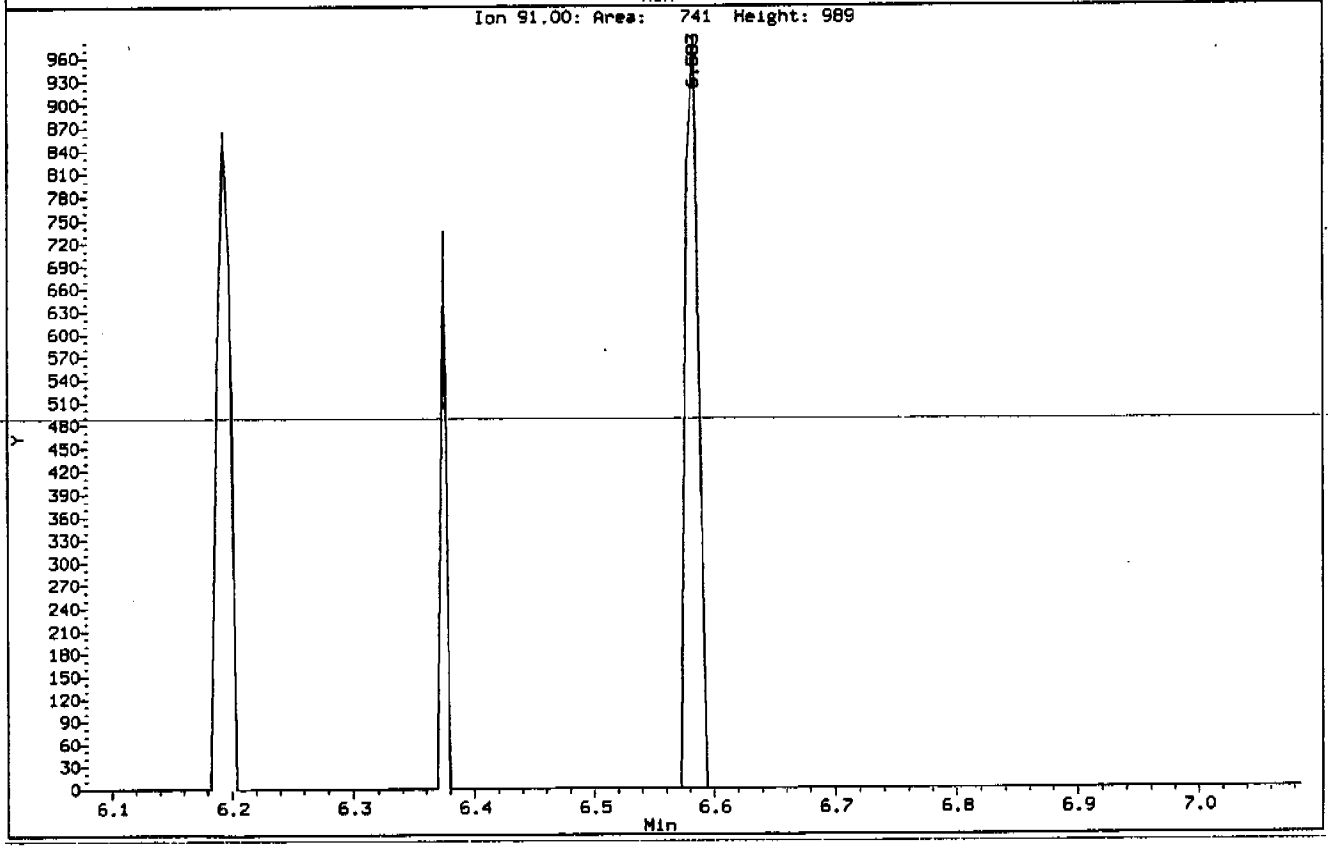
Compound: Methyl methanesulfonate
CAS Number: 66-27-3



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D
Injection Date: 28-APR-2005 15:42
Instrument: MSK.i
Client Sample ID: SSTD002APPIX

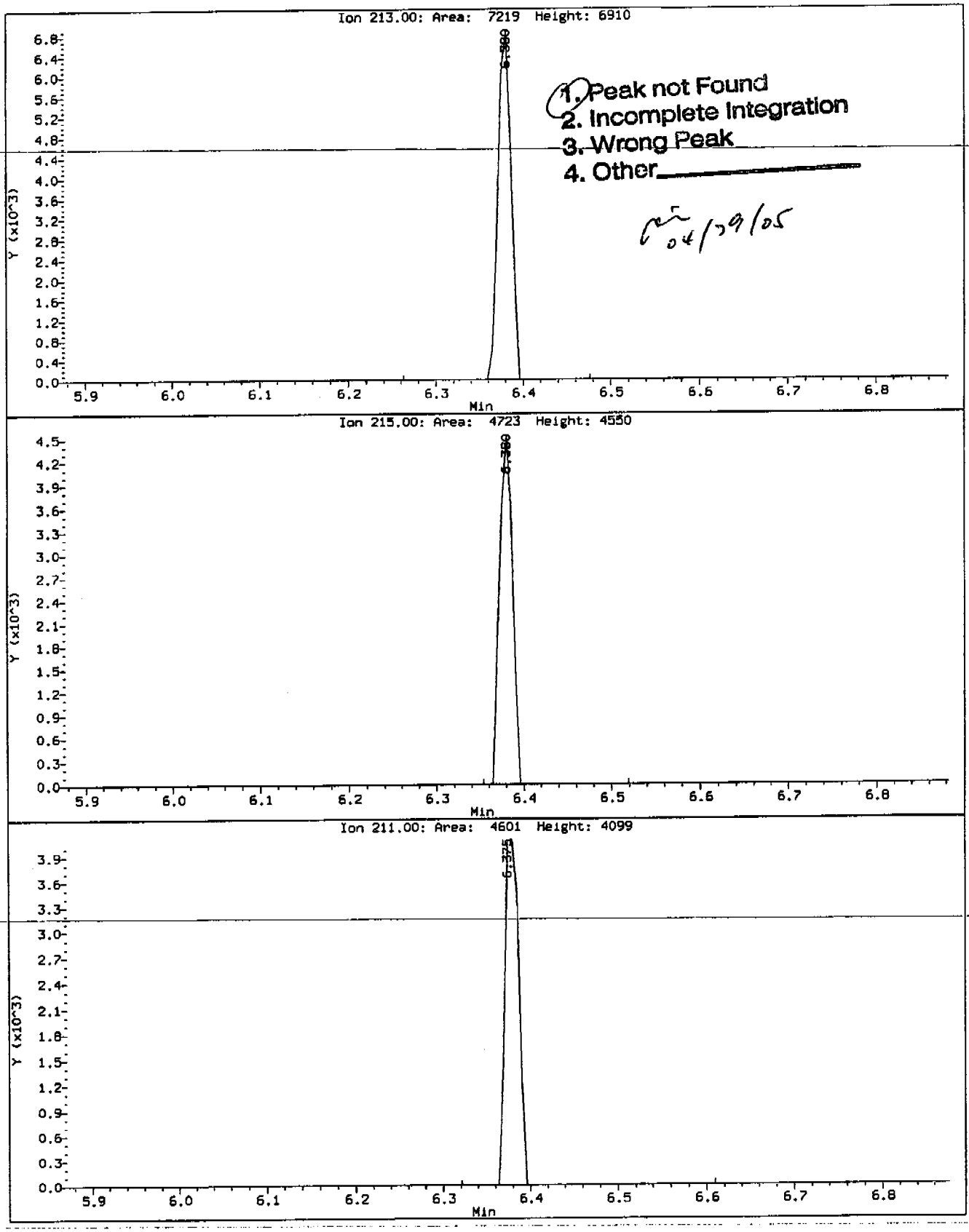
Compound: a,a-Dimethyl-phenethylamine
CAS Number: 122-09-8





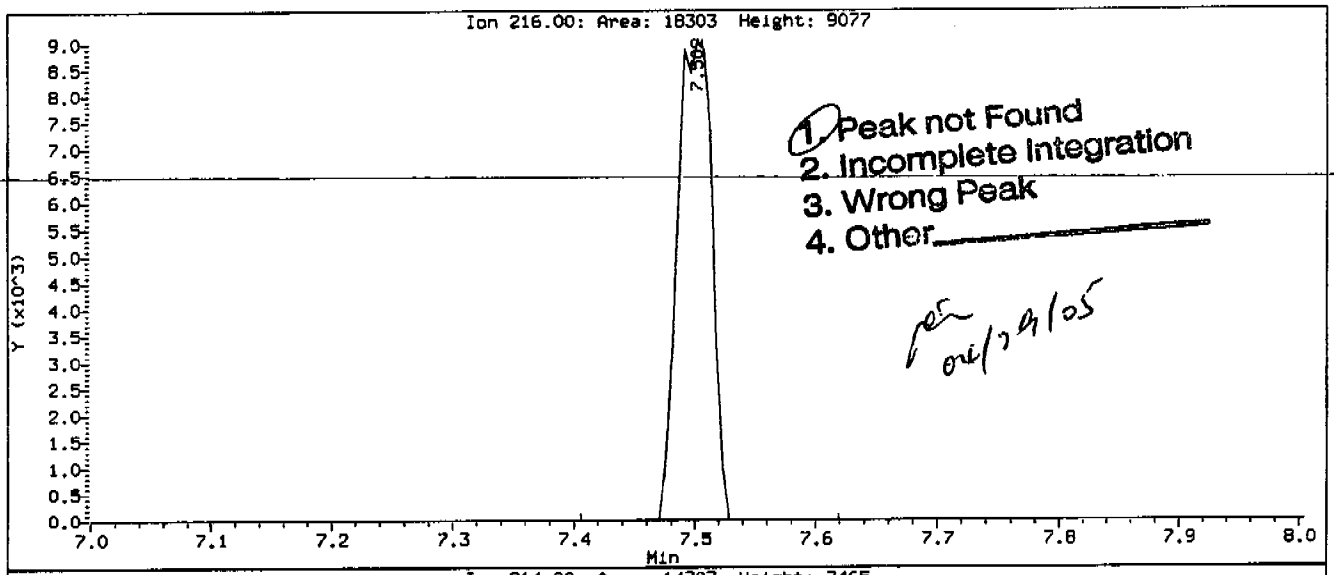
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D
Injection Date: 28-APR-2005 15:42
Instrument: MSK.i
Client Sample ID: SSTD002APPIX

Compound: Hexachloropropene
CAS Number: 1888-71-7

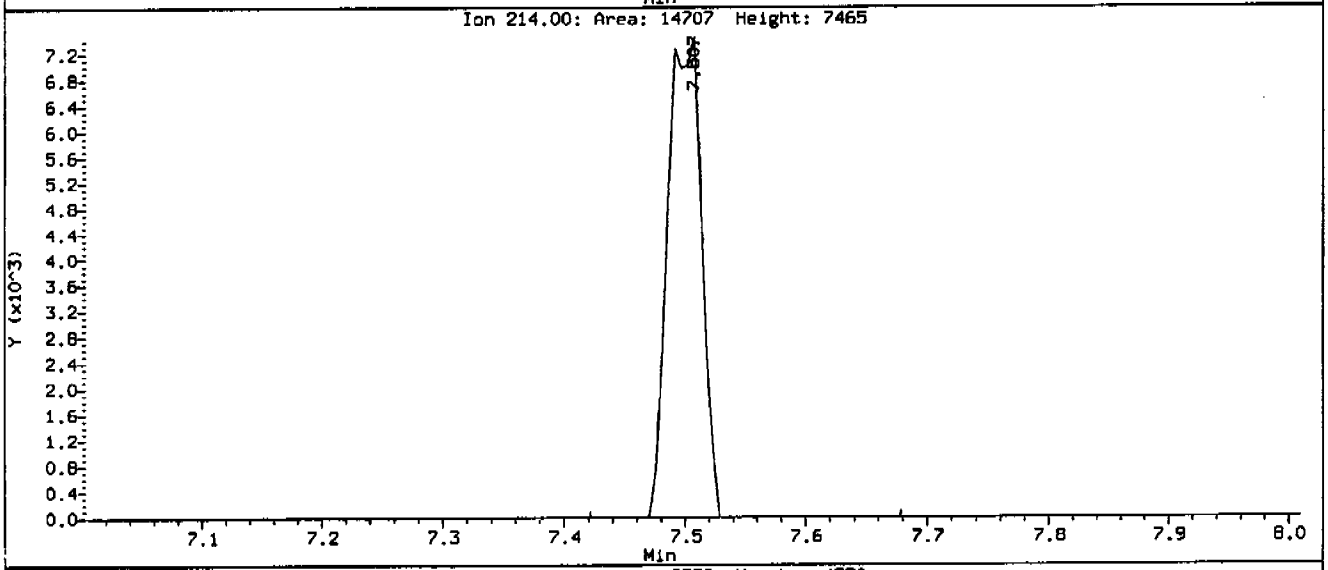


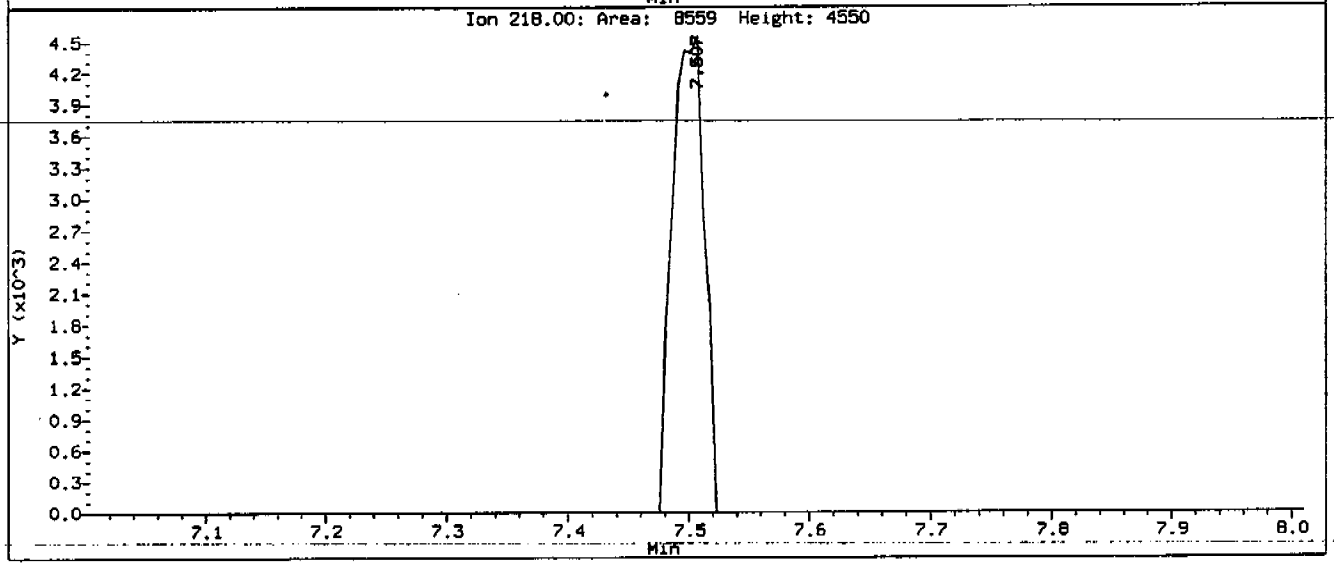
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D
Injection Date: 28-APR-2005 15:42
Instrument: MSK.i
Client Sample ID: SSTD002APPIX

Compound: 1,2,4,5-Tetrachlorobenzene
CAS Number: 95-94-3



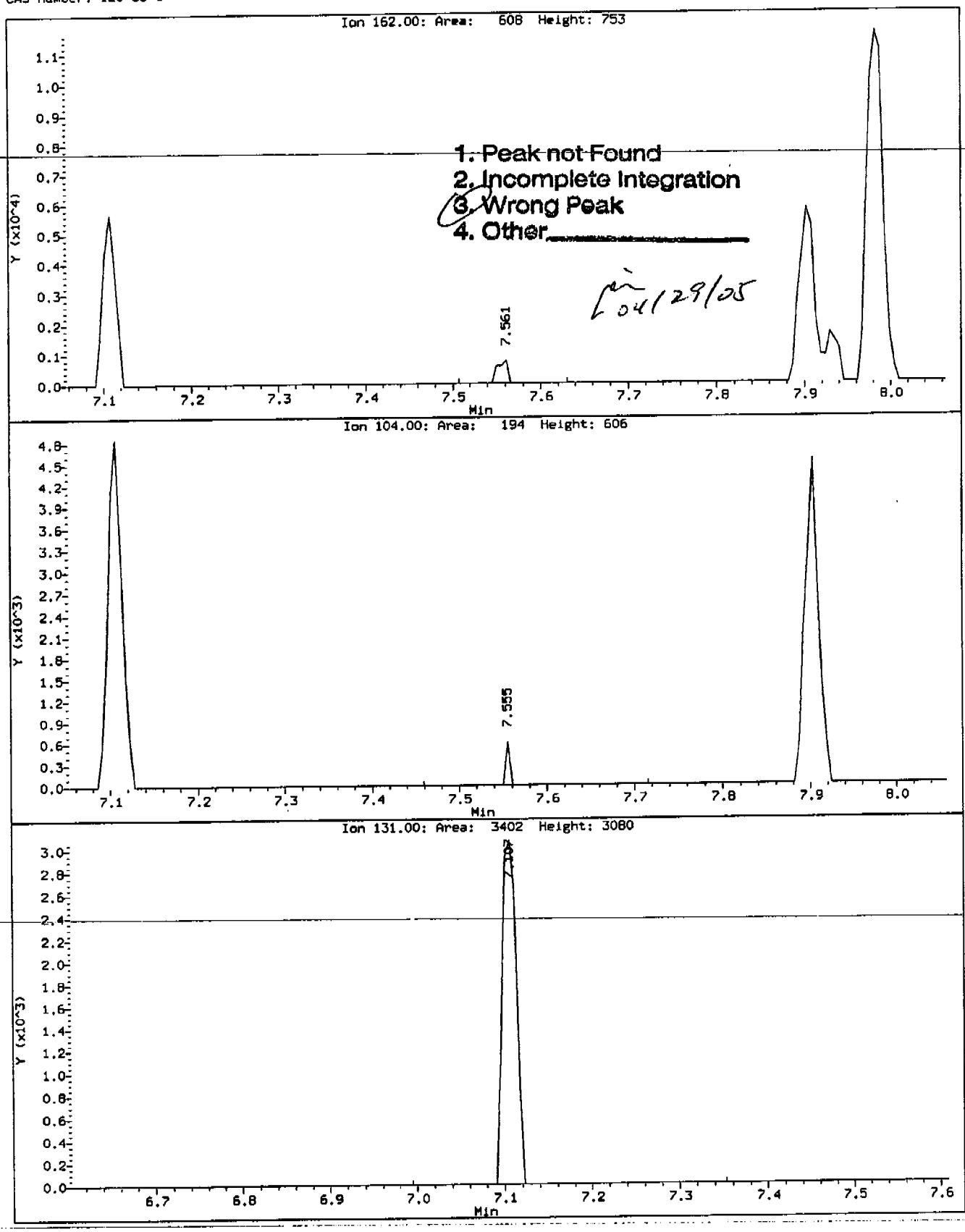
per 04/29/05





Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D
Injection Date: 28-APR-2005 15:42
Instrument: MSK.i
Client Sample ID: SSTD002APPIX

Compound: cis-Isosafrole
CAS Number: 120-58-1

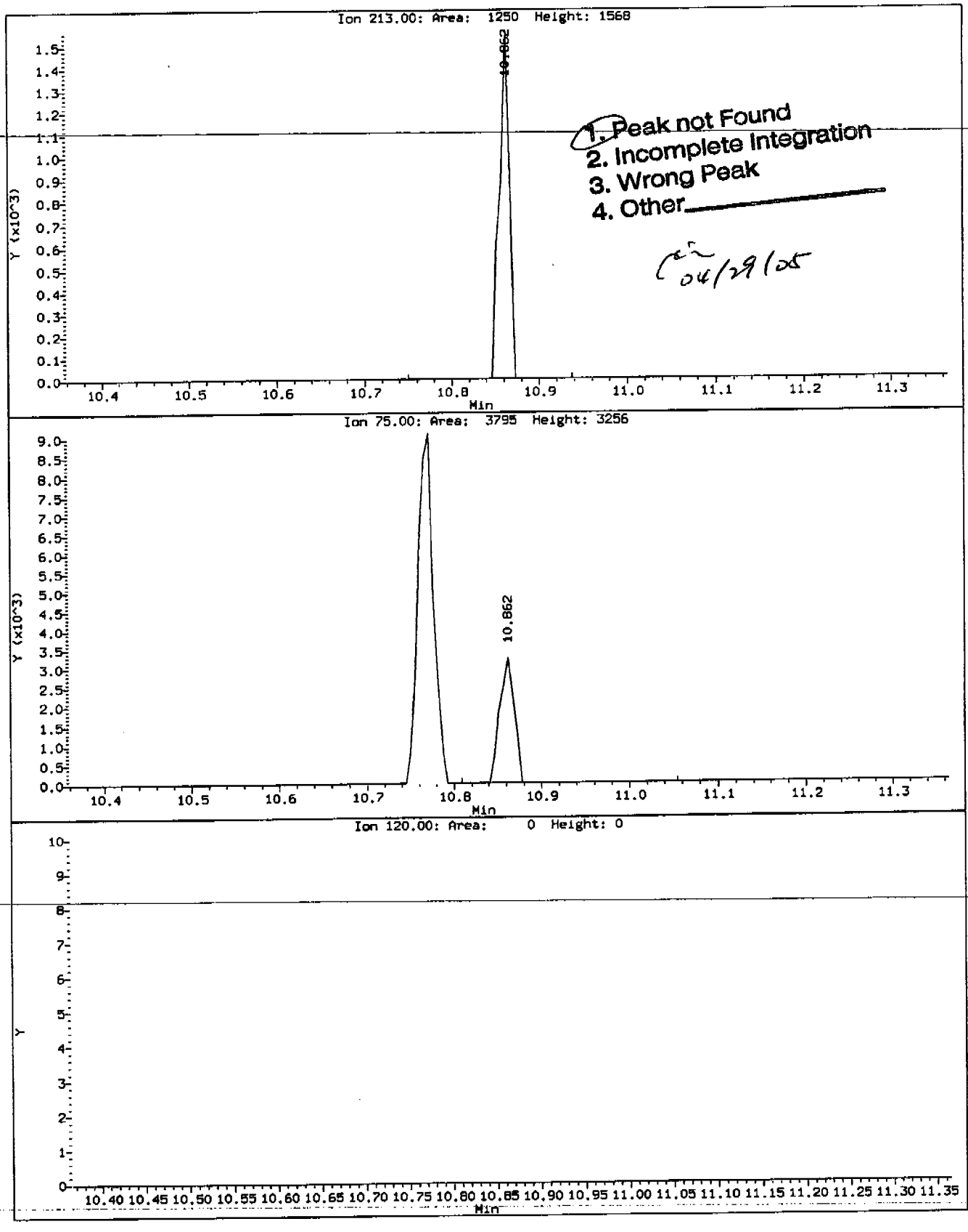


1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other _____

04/29/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050428A.B\KCAL2586.D
Injection Date: 28-APR-2005 15:42
Instrument: MSK.i
Client Sample ID: SSTD002APPIX

Compound: 1,3,5-Trinitrobenzene
CAS Number: 99-35-4



DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	46.77		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	55.18		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	48.39		PASS
197	0 - 1% of mass 198	0.43		PASS
199	5 - 9% of mass 198	6.30		PASS
275	10 - 30% of mass 198	25.11		PASS
365	Greater than 1% of mass 198	3.20		PASS
441	Present, but less than mass 443	10.10	(83.21)	PASS
442	Greater than 40% of mass 198	59.38		PASS
443	17 - 23% of mass 442	12.13	(20.43)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.6370614	5.000	PASS
Benzidine	0.7718855	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	251287			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	3331	1.3	15.0	PASS
4,4-DDD + DDE	3331	1.3	15.0	PASS

****

Tuning Sample, //Slsvr01/BNA_LAB/MSK.i/K050509B.B/KDFT2993.D/KDFT2993.D,*** PASSED

****

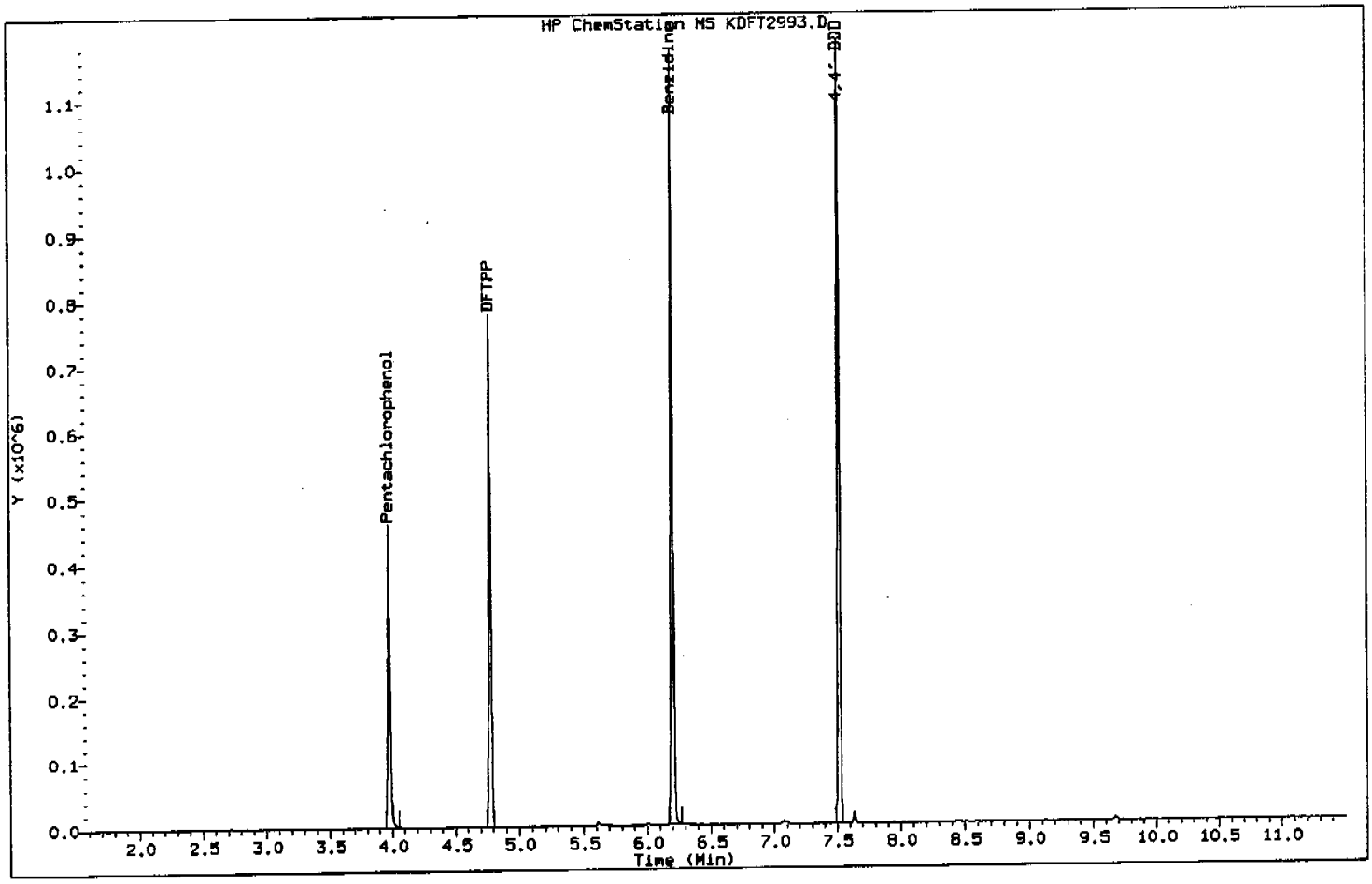
05/10/05

STL ST. LOUIS

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 05/09/2005 18:48

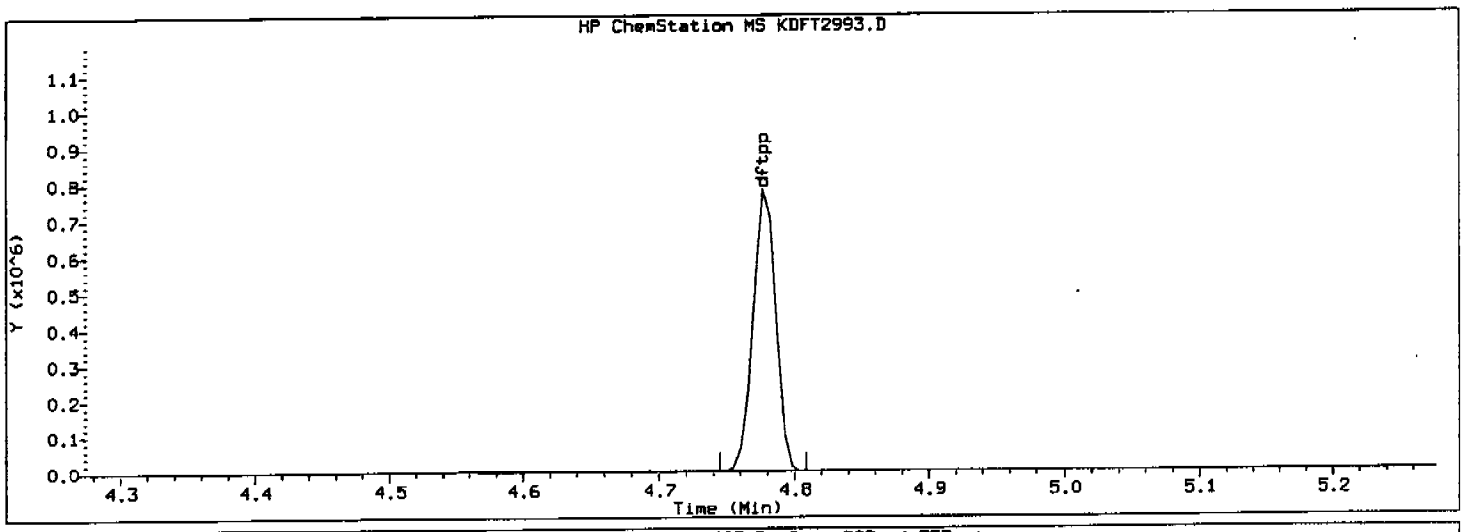
Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509B.B/KDFT2993.D/KDFT2993.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509B.B\sw846tun.m Inst: MSK
Injection Date: 09-MAY-2005 11:40 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0193-05 (50NG)

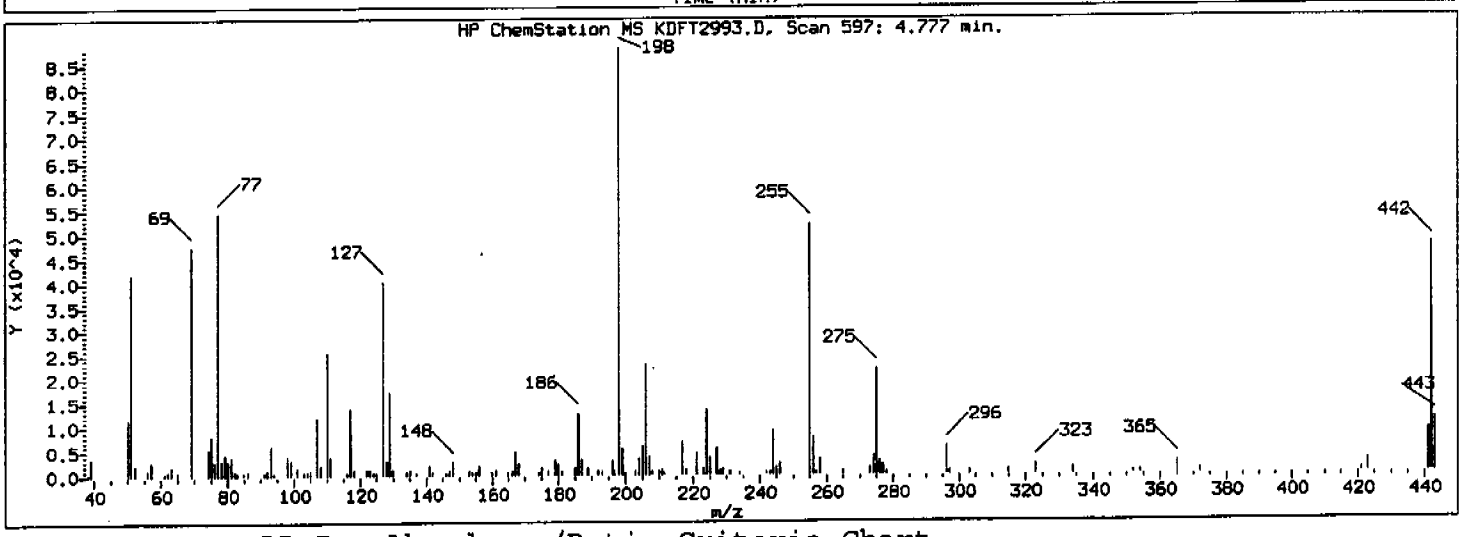


STL ST. LOUIS

Report Date: 05/09/2005 18:48

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509B.B/KDFT2993.D/KDFT2993.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509B.B\sw846tun.m Inst: MSK
Injection Date: 09-MAY-2005 11:40 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0193-05 (50NG)



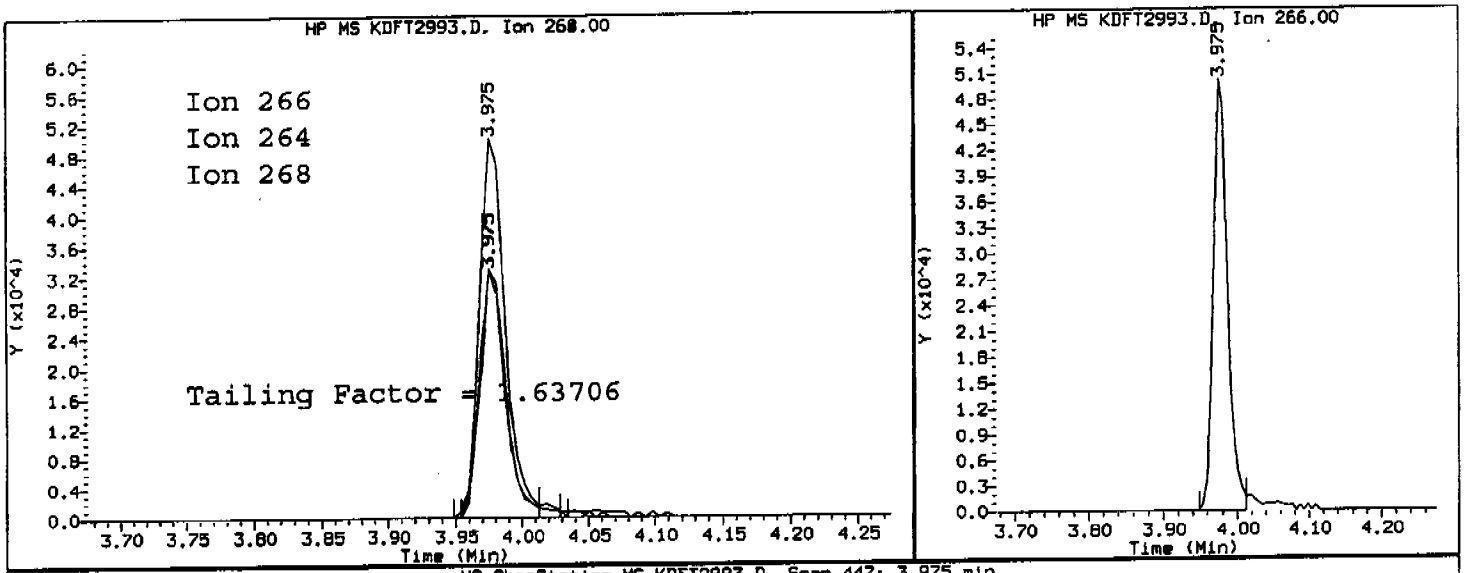


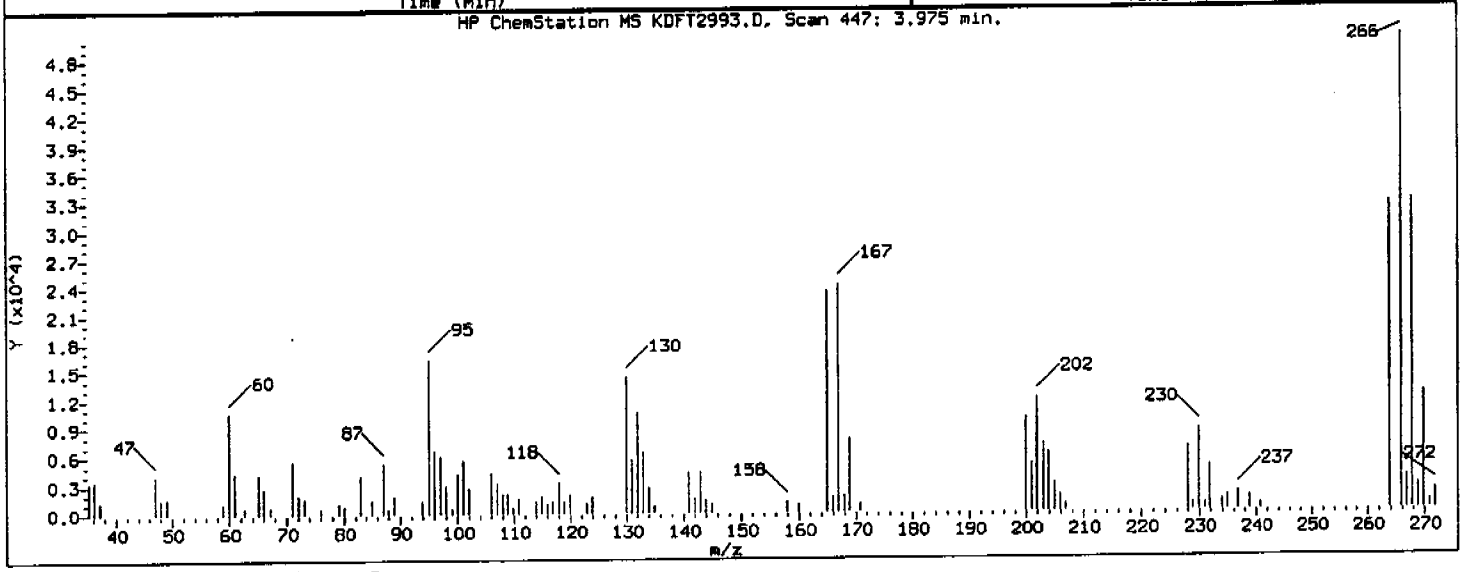
DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	46.77		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	55.18		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	48.39		PASS
197	0 - 1% of mass 198	0.43		PASS
199	5 - 9% of mass 198	6.30		PASS
275	10 - 30% of mass 198	25.11		PASS
365	Greater than 1% of mass 198	3.20		PASS
441	Present, but less than mass 443	10.10	(83.21)	PASS
442	Greater than 40% of mass 198	59.38		PASS
443	17 - 23% of mass 442	12.13	(20.43)	PASS

Report Date: 05/09/2005 18:48

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509B.B/KDFT2993.D/KDFT2993.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509B.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 11:40 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)





Pentachlorophenol
==========

Exp. RT =	3.975
Found RT =	3.975

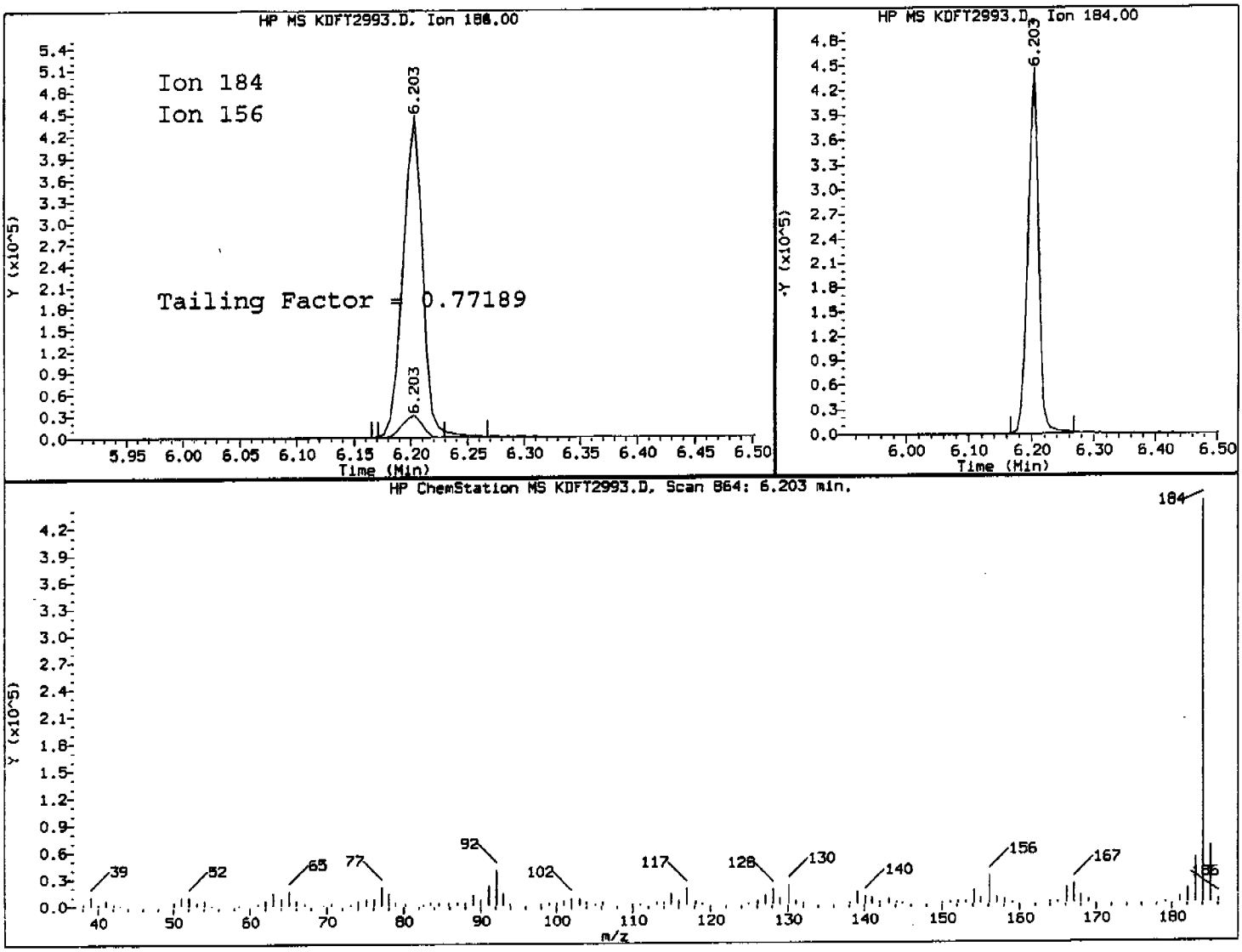
Mass	Area	Ratio
266	68571	100.00
264	43740	63.79
268	46831	68.30

Tailing factor for Pentachlorophenol OK

Tail Factor = 1.637 Maximum Allowed = 5.0

Report Date: 05/09/2005 18:48

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509B.B/KDFT2993.D/KDFT2993.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509B.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 11:40 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)



Benzidine
=========
Exp. RT = 6.203
Found RT = 6.203

Mass	Area	Ratio
184	536527	100.00
156	37459	6.98

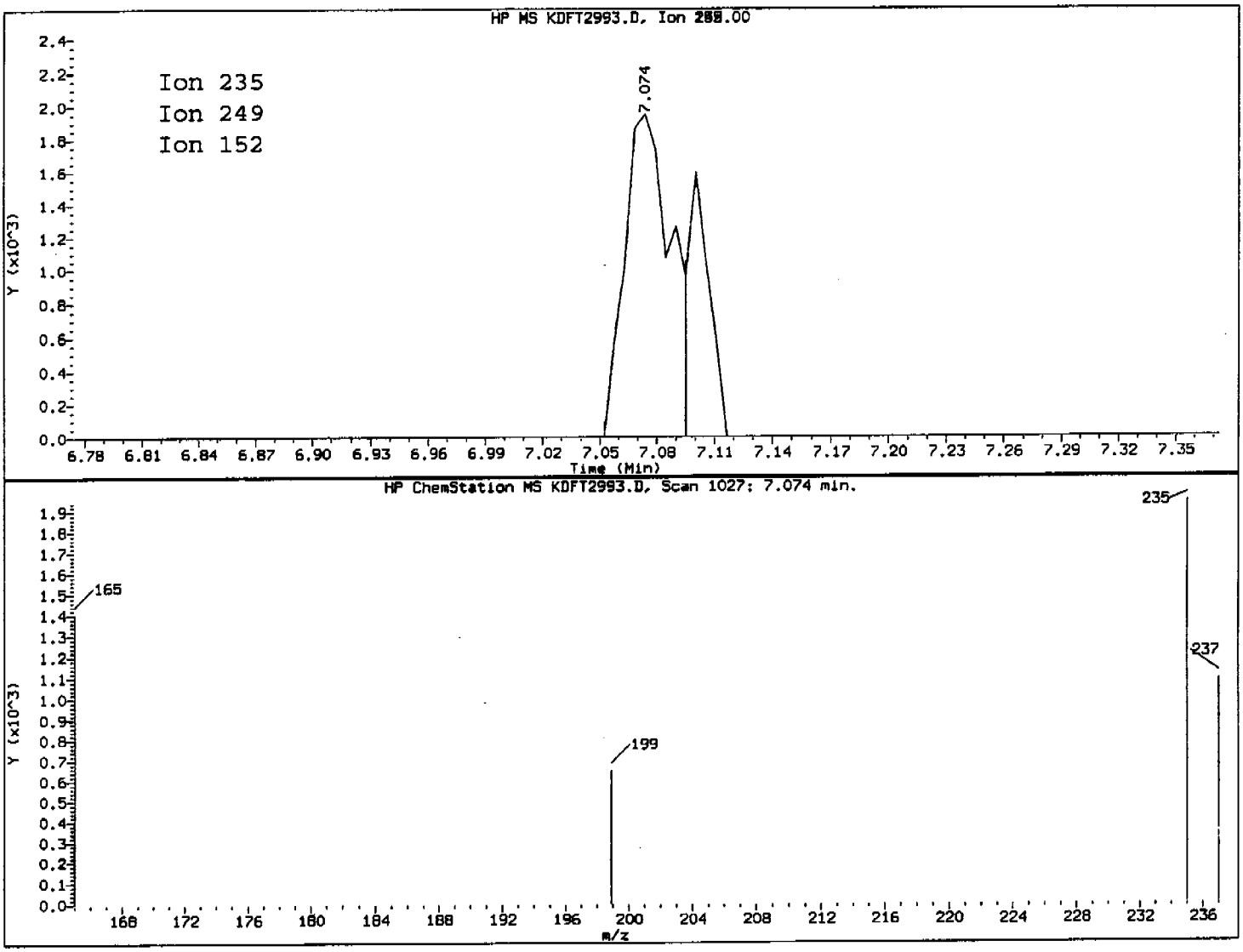
Tailing factor for Benzidine OK

Tail Factor = 0.772 Maximum Allowed = 3.0

STL ST. LOUIS

Report Date: 05/09/2005 18:48

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509B.B/KDFT2993.D/KDFT2993.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509B.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 11:40 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)

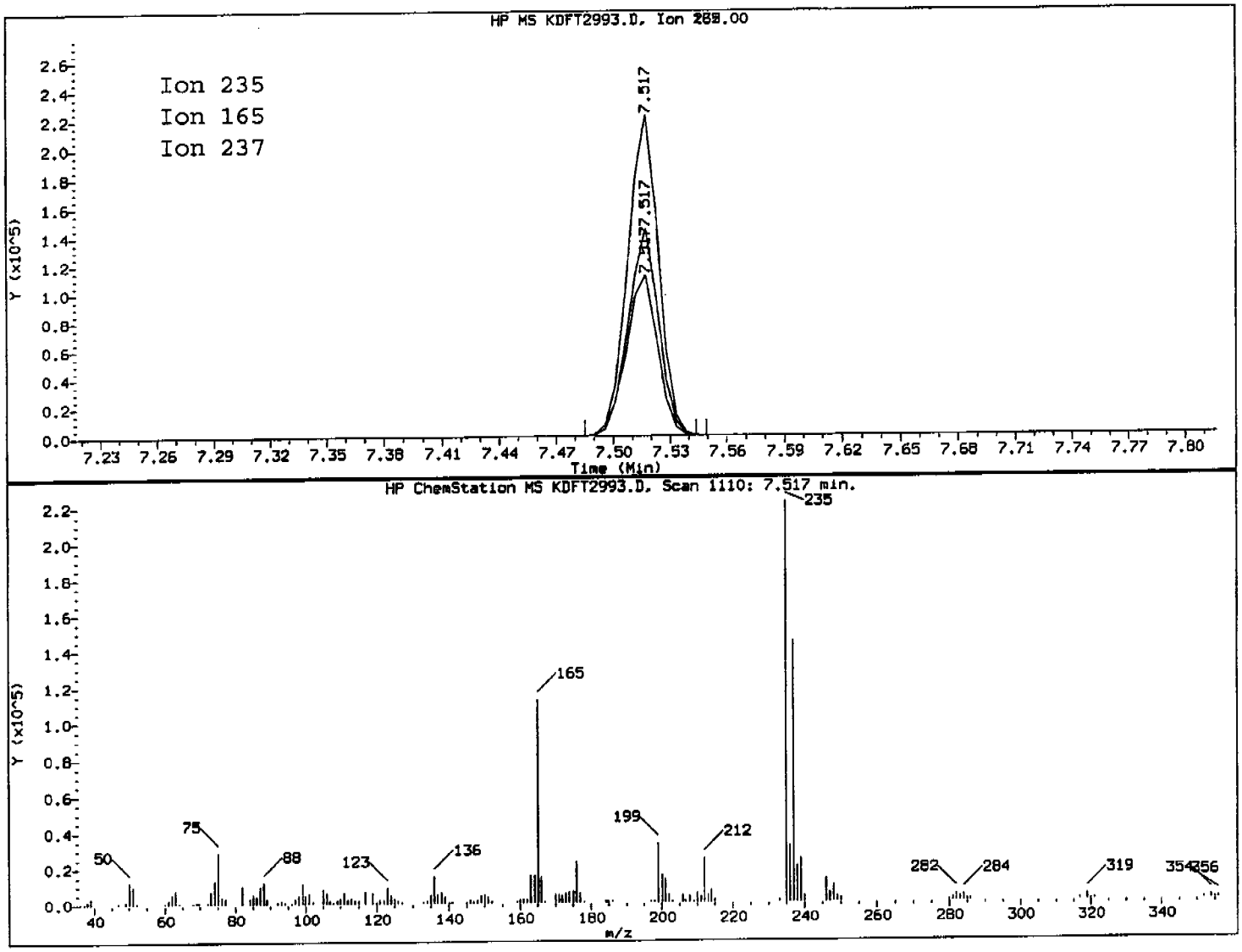


4,4'-DDD
========
Exp. RT = 6.734
Found RT = 7.074

Mass	Area	Ratio
235	3331	100.00
249	0	0.00
152	0	0.00

Report Date: 05/09/2005 18:48

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509B.B/KDFT2993.D/KDFT2993.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509B.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 11:40 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)

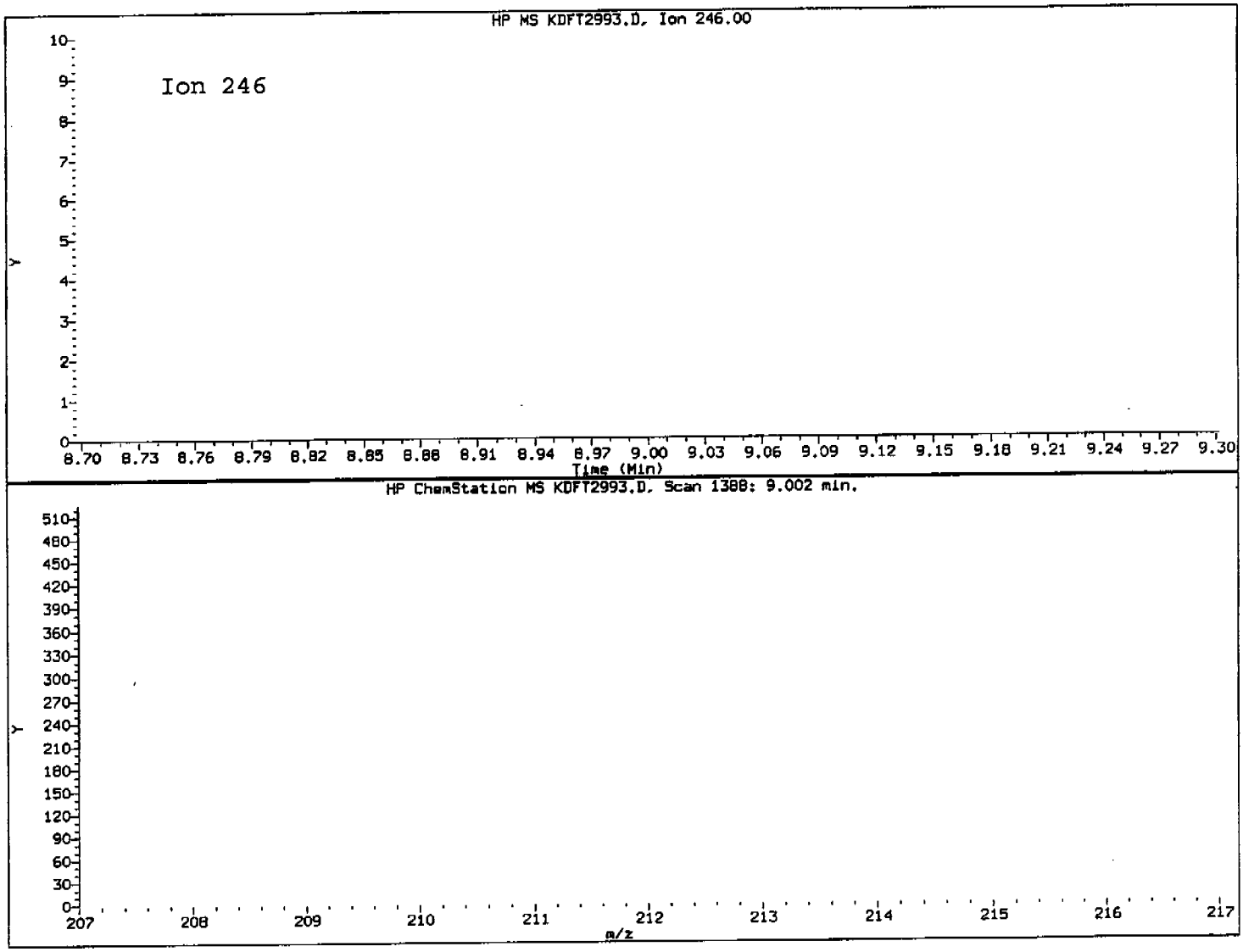


4,4'-DDT
========
Exp. RT = 7.517
Found RT = 7.517

Mass	Area	Ratio
235	251287	100.00
165	128167	51.00
237	161136	64.12

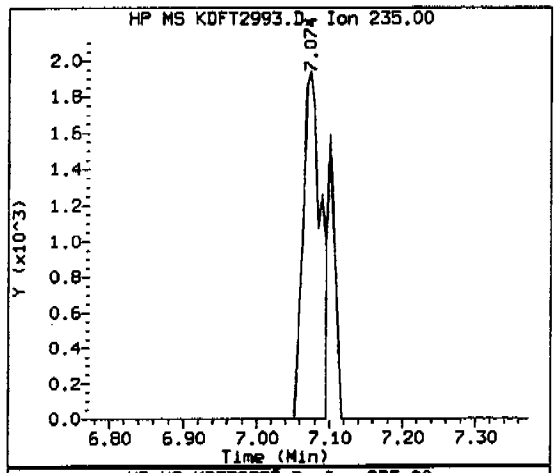
Report Date: 05/09/2005 18:48

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509B.B/KDFT2993.D/KDFT2993.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509B.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 11:40 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0193-05 (50NG)

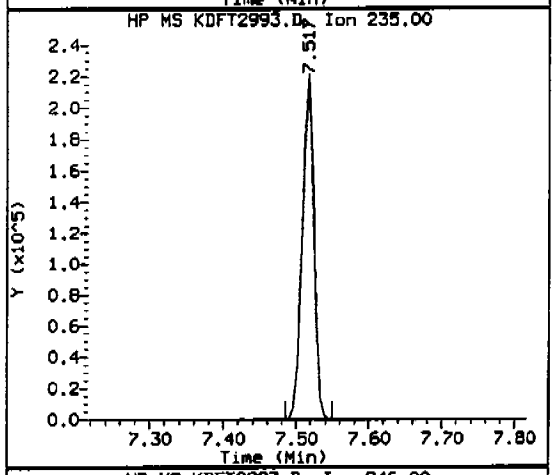


4,4'-DDE
========
Exp. RT = 9.000
Found RT = 0.000

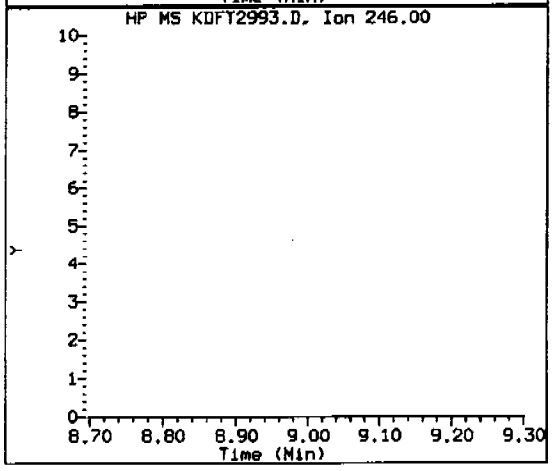
Mass	Area	Ratio
246	0	0.00



Compound: 4,4'-DDD
Quant Mass: 235
RT: 7.074
Area: 3331



Compound: 4,4'-DDT
Quant Mass: 235
RT: 7.517
Area: 251287



Compound: 4,4'-DDE
Quant Mass: 246
RT: 0.000
Area: 0

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	251287			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	3331	1.3	15.0	PASS
4,4-DDD + DDE	3331	1.3	15.0	PASS

****
TUNE SAMPLE *** PASSED *** DDT BREAKDOWN TEST
****

Report Date : 10-May-2005 11:11

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 09-MAY-2005 15:12
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Calibration File Names:
Level 1: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3000.D
Level 2: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2999.D
Level 3: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2998.D
Level 4: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2994.D
Level 5: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2997.D
Level 6: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2996.D
Level 7: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D

05/10/05

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	$\overline{RRF}$	% RSD
1 1,4-Dioxane	0.32546	0.33816	0.32341	0.50359	0.35085	0.35544	0.35011	0.36386	17.282
2 Methyl methacrylate	0.39326	0.35373	0.33429	0.32307	0.34005	0.34871	0.35814	0.35018	6.411
3 Pyridine	+++++	1.11948	1.14510	1.48184	1.03085	1.12933	1.19771	1.18405	13.139 <- ✓
4 N-Nitrosodimethylamine	0.61845	0.66640	0.64576	0.81336	0.63292	0.65133	0.66872	0.67099	9.721
5 Dimethylformamide	0.83086	0.96586	0.87552	0.95582	0.87657	0.84417	0.86133	0.88716	5.972
6 Ethyl methacrylate	1.06706	1.00921	1.00424	1.00134	1.03952	1.06985	1.11023	1.04307	3.955
7 2-Picoline	1.11672	1.19222	1.23144	1.30096	1.31132	1.30450	1.39292	1.26430	7.204
8 N-Nitrosomethylethylamine	0.46950	0.57796	0.56912	0.57845	0.60310	0.58248	0.59178	0.56748	7.853
9 Methyl methanesulfonate	0.35479	0.41151	0.41103	0.41324	0.46135	0.46437	0.49021	0.42950	10.596
11 Cyclohexanol	1.05566	1.27759	1.36047	1.55265	1.46743	1.45101	1.51047	1.38218	12.376

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 09-MAY-2005 15:12
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
12 N-Nitrosodiethylamine	0.61009	0.64225	0.62511	0.63051	0.70280	0.70476			
	0.71974						0.66218	6.828	
13 Ethyl Methanesulfonate	1.10180	1.07409	1.10510	1.05473	1.17698	1.15933			
	1.19896						1.12443	4.846	
14 Benzaldehyde	1.16166	1.23901	1.24283	1.29144	1.30102	1.36353			
	1.39704						1.28522	6.202	
16 Phenol	1.75195	1.80726	1.80491	1.85564	1.92061	1.93297			
	2.03172						1.87215	5.112	
17 Aniline	2.24940	2.24921	2.20195	2.21999	2.19252	2.09327			
	2.16052						2.19527	2.503	
18 Pentachloroethane	0.51171	0.48710	0.50536	0.53152	0.54099	0.55718			
	0.58367						0.53108	6.205	
19 Bis(2-chloroethyl)ether	1.42232	1.47518	1.46771	1.55891	1.62362	1.63312			
	1.69518						1.55372	6.546	
20 2-Chlorophenol	1.28515	1.30101	1.32448	1.34175	1.38475	1.38970			
	1.44860						1.35363	4.237	
21 1,3-Dichlorobenzene	1.52181	1.46761	1.48915	1.52485	1.59798	1.57360			
	1.66128						1.54804	4.344	
23 1,4-Dichlorobenzene	1.55923	1.55572	1.56936	1.62612	1.67774	1.73057			
	1.78914						1.64398	5.584	
24 Benzenethiol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
25 Benzyl Alcohol	+++++	0.49127	0.58220	0.78070	0.64756	0.69172			
	0.79794						0.66523	17.674	<- ✓
26 1,2-Dichlorobenzene	1.43601	1.42040	1.42896	1.48191	1.57067	1.60879			
	1.69602						1.52039	7.010	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 09-MAY-2005 15:12
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD
27 2-Methylphenol	1.34278	1.17468	1.16266	1.18079	1.19779	1.12644	1.20617	1.19876	5.722
28 2,2-oxybis(1-Chloropropane)	1.67111	1.59997	1.59493	1.59685	1.59156	1.56857	1.62414	1.60673	2.035
29 3 and 4-Methylphenol	1.21193	1.26835	1.25588	1.26547	1.29313	1.29765	1.35632	1.27839	3.477
30 Acetophenone	0.52107	0.53512	0.55618	0.57812	0.59620	0.62523	0.65259	0.58065	8.209
31 N-Nitrosopyrrolidine	0.17843	0.18370	0.18226	0.18768	0.19258	0.19901	0.21721	0.19155	6.907
32 N-Nitrosodinpropylamine	1.38412	1.32641	1.26395	1.26954	1.26179	1.14049	1.16971	1.25943	6.672
33 N-Nitrosomorpholine	0.06774	0.07645	0.07726	0.08065	0.08961	0.09511	0.10449	0.08447	14.906
34 O-Toluidine	0.56236	0.55680	0.56227	0.60066	0.63366	0.66229	0.71711	0.61359	9.900
35 Hexachloroethane	0.70621	0.69185	0.70131	0.71315	0.73556	0.73034	0.75336	0.71883	3.022
37 Nitrobenzene	0.63400	0.57304	0.55569	0.57990	0.56649	0.57833	0.58613	0.58194	4.297
38 N-Nitrosopiperidine	0.16432	0.16882	0.17079	0.17616	0.18096	0.18588	0.19442	0.17733	5.933
39 Isophorone	0.79023	0.78961	0.74316	0.78684	0.73887	0.73151	0.73022	0.75864	3.777
40 2-Nitrophenol	0.17199	0.19185	0.20165	0.21063	0.20833	0.21370	0.21316	0.20162	7.519

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 09-MAY-2005 15:12
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
41 2,4-Dimethylphenol	0.39464	0.37840	0.42507	0.44929	0.44026	0.45231			
	0.45507						0.42786	7.082	
42 Bis(2-chloroethoxy)methane	0.46580	0.48169	0.45850	0.48935	0.48546	0.49802			
	0.50632						0.48359	3.492	
43 o,o,o-Triethyl-Phosphorothioa	0.21535	0.22497	0.22572	0.23460	0.25461	0.26744			
	0.27953						0.24317	9.968	
44 Benzoic Acid	+++++	0.14938	0.18186	0.21149	0.21321	0.21904			
	0.22206						0.19951	14.257	
45 2,4-Dichlorophenol	0.30283	0.30485	0.29951	0.31953	0.31683	0.32533			
	0.33330						0.31460	4.011	
46 a,a-Dimethyl-phenethylamine	0.51145	0.76309	0.77322	0.78410	0.80856	0.82953			
	0.87545						0.76363	15.399	
47 1,2,4-Trichlorobenzene	0.34185	0.35746	0.35339	0.37615	0.38417	0.40103			
	0.40951						0.37479	6.739	
49 4-Chlorobenzenethiol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
50 Naphthalene	1.08753	1.03581	1.04396	1.10589	1.13745	1.25732			
	1.25971						1.13252	8.197	
51 4-Chloroaniline	0.42703	0.43777	0.42550	0.46414	0.46498	0.49216			
	0.49838						0.45857	6.485	
52 2,6-Dichlorophenol	0.25469	0.24292	0.25839	0.31185	0.29618	0.31378			
	0.32831						0.28659	11.858	
53 Hexachloropropene	0.31733	0.32521	0.33376	0.35006	0.35945	0.38047			
	0.38884						0.35073	7.781	
54 Hexachlorobutadiene	0.24195	0.24282	0.24506	0.25838	0.26695	0.28293			
	0.28415						0.26032	7.019	

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INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
55 Benzothiazole	0.50139	0.46477	0.48632	0.49913	0.53104	0.55241			
	0.59151						0.51808	8.350	
56 Caprolactam	0.10983	0.13715	0.14068	0.13986	0.07457	0.14270			
	0.14775						0.12751	20.686	
57 n-Nitrosodi-n-butylamine	0.31342	0.29750	0.30099	0.31842	0.31943	0.33002			
	0.35040						0.31860	5.621	
58 p-Phenylenediamine	0.21874	0.29578	0.28872	0.36365	0.28733	0.27992			
	0.31741						0.29308	14.829	
59 4-Chloro-3-Methylphenol	0.35913	0.37813	0.35270	0.37066	0.36191	0.36373			
	0.37227						0.36550	2.376	
60 p-Chlorophenyl methyl sulfide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
61 Safrole	0.25500	0.27963	0.29140	0.29580	0.30963	0.32648			
	0.34629						0.30061	10.041	
62 2-Methylnaphthalene	0.88794	0.77032	0.78270	0.76612	0.79672	0.83407			
	0.83285						0.81010	5.427	
63 Phthalic anhydride	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
64 cis-Isosafrole	0.04748	0.05826	0.05654	0.05553	0.05574	0.05770			
	0.05995						0.05589	7.184	
65 1,2,4,5-Tetrachlorobenzene	1.42931	1.31274	1.32205	1.39168	1.47308	1.54004			
	1.62334						1.44175	7.870	
66 Hexachlorocyclopentadiene	+++++	0.29082	0.35057	0.42042	0.45653	0.51871			
	0.52918						0.42770	21.970	<- ✓
67 2,4,6-Trichlorophenol	0.40366	0.42817	0.43253	0.47073	0.47695	0.50392			
	0.51562						0.46165	8.996	

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Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
68 2,4,5-Trichlorophenol	0.36126	0.43572	0.45465	0.50975	0.52709	0.55460			
	0.57227						0.48790	15.302	
70 trans-Isosafrole	0.56648	0.54163	0.54100	0.56420	0.59728	0.65850			
	0.75581						0.60356	12.995	
71 Biphenyl	1.54419	1.44874	1.47932	1.53624	1.66716	1.76228			
	1.79160						1.60422	8.519	
72 2-Chloronaphthalene	1.28459	1.25429	1.24868	1.32305	1.37165	1.45131			
	1.49304						1.34666	7.145	
73 2-Nitroaniline	0.56068	0.59450	0.57200	0.58974	0.57864	0.58108			
	0.58409						0.58010	1.943	
74 1,4-Naphthoquinone	0.27176	0.36890	0.37704	0.33375	0.21032	0.17342			
	0.12916						0.26634	36.895	<-
75 1,4-Dinitrobenzene	0.07763	0.12369	0.12115	0.12521	0.13042	0.13540			
	0.14150						0.12214	17.086	
76 Dimethylphthalate	1.57249	1.50395	1.43024	1.51359	1.54841	1.59042			
	1.63647						1.54223	4.349	
77 1,3-Dinitrobenzene	0.16587	0.22945	0.23025	0.24388	0.24166	0.24971			
	0.25601						0.23098	13.109	
78 N-(hydroxymethyl) phthalimide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
79 Acenaphthylene	1.78264	1.85350	1.83334	1.95068	2.03538	2.19201			
	2.25001						1.98537	9.151	
80 2,6-Dinitrotoluene	0.30857	0.32443	0.31805	0.33652	0.33313	0.34221			
	0.34386						0.32954	3.966	
81 3-Nitroaniline	0.25688	0.31276	0.31966	0.34362	0.33774	0.34638			
	0.34913						0.32374	10.054	

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Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
83 Acenaphthene	1.19257	1.18915	1.16644	1.23299	1.27111	1.34989	1.37401	1.25374	6.511	
84 2,4-Dinitrophenol	+++++	0.13442	0.15447	0.20910	0.21489	0.22765	0.24059	0.19685	21.590	<- ✓
85 4-Nitrophenol	0.15488	0.28040	0.26095	0.29424	0.29900	0.29630	0.30603	0.27026	19.615	
86 Dibenzofuran	1.78899	1.75960	1.76044	1.83238	1.86554	1.95736	2.00179	1.85230	5.169	
87 Pentachlorobenzene	0.70728	0.65613	0.66649	0.68327	0.70614	0.73519	0.75466	0.70131	5.086	
88 2,4-Dinitrotoluene	0.38300	0.41425	0.42398	0.43887	0.43395	0.42886	0.44351	0.42378	4.817	
89 1-Naphthylamine	1.03800	1.06591	1.04498	1.10302	1.05391	1.16285	1.16394	1.09037	4.961	
90 2-Naphthylamine	0.97677	0.98368	0.94490	1.00433	0.88786	1.05261	1.06727	0.98820	6.232	
91 Phenyl sulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
92 2,3,4,6-Tetrachlorophenol	0.22811	0.28943	0.32362	0.39276	0.41144	0.42643	0.46069	0.36178	23.112	
93 Diethylphthalate	1.56646	1.51584	1.44594	1.50369	1.52783	1.59118	1.65448	1.54363	4.364	
94 Fluorene	1.39067	1.44170	1.39895	1.46920	1.50943	1.57478	1.59250	1.48246	5.410	
95 4-Chlorophenyl-phenylether	0.73220	0.77757	0.74123	0.78963	0.80878	0.85753	0.89151	0.79978	7.294	

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Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
96 Thionazin	0.23139	0.25240	0.25864	0.26567	0.28537	0.29086			
	0.29032						0.26781	8.348	
97 5-Nitro-o-toluidine	0.15995	0.20034	0.19875	0.21045	0.21494	0.21816			
	0.22533						0.20399	10.587	
98 4-Nitroaniline	0.25531	0.32144	0.31357	0.34297	0.32244	0.32011			
	0.33335						0.31560	8.966	
99 4,6-Dinitro-2-methylphenol	0.07096	0.14315	0.16182	0.17810	0.19059	0.20299			
	0.21255						0.16574	28.998	
100 N-Nitrosodiphenylamine	0.54502	0.54591	0.55655	0.59577	0.63362	0.68390			
	0.70231						0.60901	10.793	
101 tri-n-butylphosphate	1.52154	1.63086	1.65030	1.71460	1.82251	1.87783			
	2.01075						1.74692	9.553	
102 Azobenzene	1.28418	1.25396	1.25360	1.32115	1.40244	1.51255			
	1.53490						1.36611	8.724	
103 Benzal Chloride	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
105 Sulfotepp	0.13055	0.14332	0.15072	0.15105	0.16041	0.16417			
	0.16883						0.15272	8.604	
106 Diallate (peak 1)	0.27906	0.28345	0.29123	0.30014	0.31100	0.32036			
	0.33572						0.30299	6.788	
107 1,3,5-Trinitrobenzene	0.05460	0.08597	0.09688	0.10024	0.10572	0.10753			
	0.11048						0.09449	20.515	
108 Phorate	0.49946	0.50445	0.50760	0.53049	0.56947	0.58636			
	0.62513						0.54614	8.860	
109 4-Bromophenyl-phenylether	0.25905	0.25934	0.26729	0.27474	0.28488	0.30609			
	0.30705						0.27978	7.282	

STL St. Louis

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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
110 Phenacetin	0.38624	0.41341	0.42268	0.42532	0.42504	0.42869			
	0.43971						0.42015	4.015	
111 Diallate (peak 2)	0.06683	0.06004	0.06289	0.06373	0.06488	0.06546			
	0.06814						0.06457	4.135	
112 Hexachlorobenzene	0.25197	0.27497	0.27003	0.28362	0.29496	0.31040			
	0.31347						0.28563	7.789	
113 Dimethoate	0.27185	0.28949	0.28826	0.27480	0.21882	0.21567			
	0.18694						0.24940	16.564	
114 Atrazine	0.22048	0.24204	0.23940	0.24289	0.25564	0.25595			
	0.26658						0.24614	6.060	
115 tris(2-chloroethyl)phosphate	0.22625	0.21717	0.22304	0.21944	0.21858	0.22085			
	0.22796						0.22190	1.817	
116 4-Aminobiphenyl	0.70998	0.67001	0.68070	0.79368	0.77334	0.82627			
	0.87380						0.76111	10.111	
117 Pentachlorophenol	+++++	0.09961	0.13222	0.16057	0.17722	0.19094			
	0.19524						0.15930	23.341	<- ✓
118 Pronamide	0.37755	0.36975	0.37320	0.37153	0.37705	0.38333			
	0.39158						0.37771	2.012	
119 Pentachloronitrobenzene	0.11754	0.12476	0.12783	0.13205	0.13537	0.13783			
	0.13768						0.13044	5.767	
120 Phenyl disulfide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
122 Phenanthrene	1.21323	1.16781	1.16800	1.21492	1.25092	1.29887			
	1.33464						1.23548	5.134	
123 Disulfoton	0.35737	0.36108	0.36643	0.37668	0.39485	0.40708			
	0.42916						0.38466	6.946	

STL St. Louis

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Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
124 Anthracene	1.13256	1.14117	1.14674	1.19216	1.20907	1.25945			
	1.27953						1.19438	4.909	
125 Dinoseb	0.13116	0.20289	0.23168	0.24451	0.26321	0.27373			
	0.28489						0.23315	22.611	
126 Carbazole	1.00112	0.99272	0.98565	1.01718	1.02179	1.05115			
	1.07363						1.02046	3.134	
127 Phenyl sulfone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
128 Methyl Parathion	0.22472	0.25273	0.25605	0.24165	0.20186	0.19848			
	0.17806						0.22194	13.501	
129 Di-n-Butylphthalate	1.23844	1.28428	1.29851	1.34131	1.36909	1.40220			
	1.42548						1.33705	5.027	
130 Parathion	0.13719	0.18275	0.18212	0.18480	0.18353	0.18558			
	0.18900						0.17785	10.162	
131 4-Nitroquinoline-1-oxide	+++++	0.06721	0.07979	0.10710	0.08542	0.08685			
	0.08235						0.08479	15.310	<- ✓
132 Methapyrilene	0.34073	0.34857	0.33447	0.27766	0.21659	0.20104			
	0.18189						0.27156	26.360	
133 Isodrin	0.14938	0.13071	0.13659	0.12878	0.13896	0.13984			
	0.14629						0.13865	5.427	
134 Fluoranthene	1.21184	1.25632	1.24105	1.28408	1.28872	1.31276			
	1.34336						1.27688	3.478	
135 Benzidine	+++++	0.56417	0.62359	0.60667	0.62876	0.61166			
	0.60503						0.60665	3.765	<- ✓
136 Bis (4-chlorophenyl) disulfid	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-

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Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
137 Pyrene	1.44013	1.49471	1.52186	1.60419	1.69360	1.79125			
	1.83598						1.62596	9.363	
138 4-chlorophenyl sulfone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
140 Aramite (peak 1)	0.05375	0.06879	0.07594	0.07526	0.07359	0.07265			
	0.07371						0.07053	10.986	
141 Kepone	+++++	0.00357	0.00453	0.00668	0.00729	0.00747			
	0.00748						0.00617	27.492	<-
142 Aramite (peak 2)	0.08770	0.10236	0.10922	0.11671	0.11420	0.11097			
	0.11134						0.10750	9.129	
143 p-(Dimethylamino)azobenzene	0.29047	0.32717	0.33641	0.34730	0.34129	0.34067			
	0.34674						0.33286	5.977	
144 Chlorobenzilate	0.40399	0.42688	0.44410	0.45660	0.49105	0.50109			
	0.53020						0.46484	9.587	
145 3,3-Dimethylbenzidine	0.51683	0.65871	0.66384	0.65632	0.68561	0.66412			
	0.66962						0.64501	8.888	
146 Butylbenzylphthalate	0.61722	0.65246	0.65102	0.67786	0.68656	0.70064			
	0.72090						0.67238	5.180	
147 Acrylamide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
148 2-Acetylaminofluorene(1)	0.44078	0.49973	0.51625	0.54235	0.55089	0.55882			
	0.56140						0.52432	8.256	
(2)	0.35522	0.39267	0.39584	0.41786	0.42490	0.43100			
	0.43659						0.40773	7.007	
149 Famphur	+++++	0.02197	0.03377	0.05429	0.01871	0.01486			
	0.00621						0.02497	67.953	<-

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Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
150 Benzo(a)Anthracene	1.33032	1.33059	1.34078	1.40754	1.43063	1.45272			
	1.51202						1.40066	5.006	
151 4,4'-Methylenebis(2-Chloroani	0.10305	0.10187	0.11221	0.12299	0.11640	0.12512			
	0.13117						0.11611	9.589	
152 3,3'-Dichlorobenzidine	0.38645	0.46904	0.50749	0.55099	0.58964	0.62806			
	0.64364						0.53933	17.052	
154 Chrysene	1.24032	1.23554	1.25004	1.31476	1.36190	1.43672			
	1.49079						1.33287	7.614	
155 bis(2-ethylhexyl)Phthalate	0.77256	0.78002	0.79798	0.83297	0.86561	0.89738			
	0.94556						0.84173	7.673	
M 156 Toluenediamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
157 Triethylamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
158 Di-n-octylphthalate	1.48067	1.57388	1.62112	1.70384	1.73235	1.85490			
	1.96432						1.70444	9.730	
159 1,2-Dinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
160 Benzo(b)fluoranthene	1.39885	1.41621	1.46035	1.50973	1.61109	1.70381			
	1.77235						1.55320	9.373	
161 Benzo(k)fluoranthene	1.44545	1.46282	1.50254	1.54138	1.54230	1.60109			
	1.70323						1.54269	5.715	
162 7,12-Dimethylbenz(a)anthracen	0.63206	0.67147	0.70278	0.74963	0.79123	0.82571			
	0.80112						0.73914	9.807	
163 Hexachlorophene	+++++	0.00594	0.00928	0.01407	0.00882	0.00689			
	0.09695						0.02366	152.219	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 09-MAY-2005 15:12
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
164 N,N-Dimethylamine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
165 Benzo(a)pyrene	1.23142	1.31720	1.35705	1.40635	1.45618	1.49417	1.55026	1.40180	7.800	
167 Carbofuran Phenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
168 2,3- and 3,5-Diaminotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
169 3-methylcholanthrene	0.67245	0.68361	0.68395	0.73820	0.79182	0.82758	0.85552	0.75045	10.005	
170 2,6- and 2,4-Diaminotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
171 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
172 n-Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
173 Indeno(1,2,3-cd)pyrene	1.20009	1.14841	1.17194	1.21828	1.41867	1.44023	1.49853	1.29945	11.293	
174 Dibenzo(a,h)anthracene	1.08721	1.10761	1.17629	1.24035	1.36991	1.39823	1.44700	1.26094	11.521	
175 Dibenz(e,a) Pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
176 n-tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
177 Benzo(g,h,i)perylene	1.08831	1.11124	1.08242	1.09329	1.22378	1.25186	1.26999	1.16013	7.262	

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Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Cal Date : 10-May-2005 10:48 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
179 Phthalic Acid	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
180 n-Dodecane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
M 181 Isosafrole	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
$ 10 2-Fluorophenol	0.96999	1.19014	1.19591	1.29262	1.25592	1.24397			
	1.30984						1.20834	9.450	
$ 15 Phenol-d5	1.43393	1.65988	1.64749	1.73098	1.76944	1.74661			
	1.85043						1.69125	7.830	
$ 36 Nitrobenzene-d5	0.52895	0.54117	0.53680	0.56299	0.54978	0.55813			
	0.56579						0.54909	2.547	
$ 69 2-Fluorobiphenyl	1.47081	1.43281	1.46322	1.59566	1.67063	1.80245			
	1.83885						1.61063	10.315	
$ 104 2,4,6-Tribromophenol	0.19056	0.22276	0.21223	0.22962	0.22832	0.23715			
	0.24461						0.22361	7.970	
$ 139 Terphenyl-d14	1.09963	1.13587	1.18869	1.25768	1.32471	1.39043			
	1.44767						1.26353	10.347	
$ 178 2,4,6-Trichlorophenol-d2	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-

Report Date : 10-May-2005 11:32

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INITIAL CALIBRATION DATA

Start Cal Date : 09-MAY-2005 12:01
End Cal Date : 09-MAY-2005 15:12
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\8270K.m
Cal Date : 10-May-2005 11:31 hongs
Curve Type : Average

Calibration File Names:
Level 1: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\KCAL3000.D
Level 2: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\KCAL2999.D
Level 3: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\KCAL2998.D
Level 4: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\KCAL2994.D
Level 5: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\KCAL2997.D
Level 6: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\KCAL2996.D
Level 7: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\KCAL2995.D

pm 05/10/05

8270 only

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3			.000 6	RRF	% RSD	
	160.000 Level 7								
1 1,4-Dioxane	0.32546	0.33816	0.3			5544			
	0.35011						0.36386	17.282	
2 Methyl methacrylate	+++++	+++++	+++++		+++++	+++++			
	+++++						+++++	+++++	<-
3 Pyridine	+++++	1.11948	1.14510	1.48184	1.03085	1.12933			
	1.19771						1.18405	13.139	<-
4 N-Nitrosodimethylamine	0.61845	0.66640	0.64576	0.81336	0.63292	0.65133			
	0.66872						0.67099	9.721	
5 Dimethylformamide	0.83086	0.96586	0.87552	0.95582	0.87657	0.84417			
	0.86133						0.88716	5.972	
6 Ethyl methacrylate	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
7 2-Picoline	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
8 N-Nitrosomethylethylamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
9 Methyl methanesulfonate	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
11 Cyclohexanol	1.05566	1.27759	1.36047	1.55265	1.46743	1.45101			
	1.51047						1.38218	12.376	

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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\8270K.m
Cal Date : 10-May-2005 11:31 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
12 N-Nitrosodiethylamine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
13 Ethyl Methanesulfonate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
14 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
16 Phenol	1.75195	1.80726	1.80491	1.85564	1.92061	1.93297	2.03172	1.87215	5.112	
17 Aniline	2.24940	2.24921	2.20195	2.21999	2.19252	2.09327	2.16052	2.19527	2.503	
18 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
19 Bis(2-chloroethyl)ether	1.42232	1.47518	1.46771	1.55891	1.62362	1.63312	1.69518	1.55372	6.546	
20 2-Chlorophenol	1.28515	1.30101	1.32448	1.34175	1.38475	1.38970	1.44860	1.35363	4.237	
21 1,3-Dichlorobenzene	1.52181	1.46761	1.48915	1.52485	1.59798	1.57360	1.66128	1.54804	4.344	
23 1,4-Dichlorobenzene	1.55923	1.55572	1.56936	1.62612	1.67774	1.73057	1.78914	1.64398	5.584	
24 Benzenethiol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
25 Benzyl Alcohol	+++++	0.49127	0.58220	0.78070	0.64756	0.69172	0.79794	0.66523	17.674	<-
26 1,2-Dichlorobenzene	1.43601	1.42040	1.42896	1.48191	1.57067	1.60879	1.69602	1.52039	7.010	

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Cal Date : 10-May-2005 11:31 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
27 2-Methylphenol	1.34278	1.17468	1.16266	1.18079	1.19779	1.12644			
	1.20617						1.19876	5.722	
28 2,2-oxybis(1-Chloropropane)	1.67111	1.59997	1.59493	1.59685	1.59156	1.56857			
	1.62414						1.60673	2.035	
29 3 and 4-Methylphenol	1.21193	1.26835	1.25588	1.26547	1.29313	1.29765			
	1.35632						1.27839	3.477	
30 Acetophenone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
31 N-Nitrosopyrrolidine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
32 N-Nitrosodinpropylamine	1.38412	1.32641	1.26395	1.26954	1.26179	1.14049			
	1.16971						1.25943	6.672	
33 N-Nitrosomorpholine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
34 O-Toluidine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
35 Hexachloroethane	0.70621	0.69185	0.70131	0.71315	0.73556	0.73034			
	0.75336						0.71883	3.022	
37 Nitrobenzene	0.63400	0.57304	0.55569	0.57990	0.56649	0.57833			
	0.58613						0.58194	4.297	
38 N-Nitrosopiperidine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
39 Isophorone	0.79023	0.78961	0.74316	0.78684	0.73887	0.73151			
	0.73022						0.75864	3.777	
40 2-Nitrophenol	0.17199	0.19185	0.20165	0.21063	0.20833	0.21370			
	0.21316						0.20162	7.519	

STL St. Louis

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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\8270K.m
Cal Date : 10-May-2005 11:31 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
41 2,4-Dimethylphenol	0.39464	0.37840	0.42507	0.44929	0.44026	0.45231			
	0.45507						0.42786	7.082	
42 Bis(2-chloroethoxy)methane	0.46580	0.48169	0.45850	0.48935	0.48546	0.49802			
	0.50632						0.48359	3.492	
43 o,o,o-Triethyl-Phosphorothioa	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
44 Benzoic Acid	+++++	0.14938	0.18186	0.21149	0.21321	0.21904			
	0.22206						0.19951	14.257	
45 2,4-Dichlorophenol	0.30283	0.30485	0.29951	0.31953	0.31683	0.32533			
	0.33330						0.31460	4.011	
46 a,a-Dimethyl-phenethylamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
47 1,2,4-Trichlorobenzene	0.34185	0.35746	0.35339	0.37615	0.38417	0.40103			
	0.40951						0.37479	6.739	
49 4-Chlorobenzenethiol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
50 Naphthalene	1.08753	1.03581	1.04396	1.10589	1.13745	1.25732			
	1.25971						1.13252	8.197	
51 4-Chloroaniline	0.42703	0.43777	0.42550	0.46414	0.46498	0.49216			
	0.49838						0.45857	6.485	
52 2,6-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
53 Hexachloropropene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
54 Hexachlorobutadiene	0.24195	0.24282	0.24506	0.25838	0.26695	0.28293			
	0.28415						0.26032	7.019	

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Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
55 Benzothiazole	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
56 Caprolactam	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
57 n-Nitrosodi-n-butylamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
58 p-Phenylenediamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
59 4-Chloro-3-Methylphenol	0.35913	0.37813	0.35270	0.37066	0.36191	0.36373			
	0.37227						0.36550	2.376	
60 p-Chlorophenyl methyl sulfide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
61 Safrole	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
62 2-Methylnaphthalene	0.88794	0.77032	0.78270	0.76612	0.79672	0.83407			
	0.83285						0.81010	5.427	
63 Phthalic anhydride	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
64 cis-Isosafrole	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
65 1,2,4,5-Tetrachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
66 Hexachlorocyclopentadiene	+++++	0.29082	0.35057	0.42042	0.45653	0.51871			
	0.52918						0.42770	21.970	<-
67 2,4,6-Trichlorophenol	0.40366	0.42817	0.43253	0.47073	0.47695	0.50392			
	0.51562						0.46165	8.996	

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Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
68 2,4,5-Trichlorophenol	0.36126	0.43572	0.45465	0.50975	0.52709	0.55460	0.57227	0.48790	15.302	
70 trans-Isosafrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
71 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
72 2-Chloronaphthalene	1.28459	1.25429	1.24868	1.32305	1.37165	1.45131	1.49304	1.34666	7.145	
73 2-Nitroaniline	0.56068	0.59450	0.57200	0.58974	0.57864	0.58108	0.58409	0.58010	1.943	
74 1,4-Naphthoquinone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
75 1,4-Dinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
76 Dimethylphthalate	1.57249	1.50395	1.43024	1.51359	1.54841	1.59042	1.63647	1.54223	4.349	
77 1,3-Dinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
78 N-(hydroxymethyl) phthalimide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
79 Acenaphthylene	1.78264	1.85350	1.83334	1.95068	2.03538	2.19201	2.25001	1.98537	9.151	
80 2,6-Dinitrotoluene	0.30857	0.32443	0.31805	0.33652	0.33313	0.34221	0.34386	0.32954	3.966	
81 3-Nitroaniline	0.25688	0.31276	0.31966	0.34362	0.33774	0.34638	0.34913	0.32374	10.054	

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Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
83 Acenaphthene	1.19257	1.18915	1.16644	1.23299	1.27111	1.34989			
	1.37401						1.25374	6.511	
84 2,4-Dinitrophenol	+++++	0.13442	0.15447	0.20910	0.21489	0.22765			
	0.24059						0.19685	21.590	<-
85 4-Nitrophenol	0.15488	0.28040	0.26095	0.29424	0.29900	0.29630			
	0.30603						0.27026	19.615	
86 Dibenzofuran	1.78899	1.75960	1.76044	1.83238	1.86554	1.95736			
	2.00179						1.85230	5.169	
87 Pentachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
88 2,4-Dinitrotoluene	0.38300	0.41425	0.42398	0.43887	0.43395	0.42886			
	0.44351						0.42378	4.817	
89 1-Naphthylamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
90 2-Naphthylamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
91 Phenyl sulfide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
92 2,3,4,6-Tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
93 Diethylphthalate	1.56646	1.51584	1.44594	1.50369	1.52783	1.59118			
	1.65448						1.54363	4.364	
94 Fluorene	1.39067	1.44170	1.39895	1.46920	1.50943	1.57478			
	1.59250						1.48246	5.410	
95 4-Chlorophenyl-phenylether	0.73220	0.77757	0.74123	0.78963	0.80878	0.85753			
	0.89151						0.79978	7.294	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAY-2005 12:01
End Cal Date : 09-MAY-2005 15:12
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\8270K.m
Cal Date : 10-May-2005 11:31 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
96 Thionazin	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
97 5-Nitro-o-toluidine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
98 4-Nitroaniline	0.25531	0.32144	0.31357	0.34297	0.32244	0.32011			
	0.33335						0.31560	8.966	
99 4,6-Dinitro-2-methylphenol	0.07096	0.14315	0.16182	0.17810	0.19059	0.20299			
	0.21255						0.16574	28.998	
100 N-Nitrosodiphenylamine	0.54502	0.54591	0.55655	0.59577	0.63362	0.68390			
	0.70231						0.60901	10.793	
101 tri-n-butylphosphate	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
102 Azobenzene	1.28418	1.25396	1.25360	1.32115	1.40244	1.51255			
	1.53490						1.36611	8.724	
103 Benzal Chloride	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
105 Sulfotepp	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
106 Diallate (peak 1)	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
107 1,3,5-Trinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
108 Phorate	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
109 4-Bromophenyl-phenylether	0.25905	0.25934	0.26729	0.27474	0.28488	0.30609			
	0.30705						0.27978	7.282	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAY-2005 12:01
End Cal Date : 09-MAY-2005 15:12
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\8270K.m
Cal Date : 10-May-2005 11:31 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
110 Phenacetin	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
111 Diallate (peak 2)	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
112 Hexachlorobenzene	0.25197	0.27497	0.27003	0.28362	0.29496	0.31040			
	0.31347						0.28563	7.789	
113 Dimethoate	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
114 Atrazine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
115 tris(2-chloroethyl)phosphate	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
116 4-Aminobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
117 Pentachlorophenol	+++++	0.09961	0.13222	0.16057	0.17722	0.19094			
	0.19524						0.15930	23.341	<-
118 Pronamide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
119 Pentachloronitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
120 Phenyl disulfide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
122 Phenanthrene	1.21323	1.16781	1.16800	1.21492	1.25092	1.29887			
	1.33464						1.23548	5.134	
123 Disulfoton	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAY-2005 12:01
End Cal Date : 09-MAY-2005 15:12
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\8270K.m
Cal Date : 10-May-2005 11:31 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
124 Anthracene	1.13256	1.14117	1.14674	1.19216	1.20907	1.25945			
	1.27953						1.19438	4.909	
125 Dinoseb	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
126 Carbazole	1.00112	0.99272	0.98565	1.01718	1.02179	1.05115			
	1.07363						1.02046	3.134	
127 Phenyl sulfone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
128 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
129 Di-n-Butylphthalate	1.23844	1.28428	1.29851	1.34131	1.36909	1.40220			
	1.42548						1.33705	5.027	
130 Parathion	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
131 4-Nitroquinoline-1-oxide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
132 Methapyrilene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
133 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
134 Fluoranthene	1.21184	1.25632	1.24105	1.28408	1.28872	1.31276			
	1.34336						1.27688	3.478	
135 Benzidine	+++++	0.56417	0.62359	0.60667	0.62876	0.61166			
	0.60503						0.60665	3.765	<-
136 Bis (4-chlorophenyl) disulfid	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAY-2005 12:01
End Cal Date : 09-MAY-2005 15:12
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\8270K.m
Cal Date : 10-May-2005 11:31 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
137 Pyrene	1.44013	1.49471	1.52186	1.60419	1.69360	1.79125			
	1.83598						1.62596	9.363	
138 4-chlorophenyl sulfone	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-
140 Aramite (peak 1)	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-
141 Kepone	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-
142 Aramite (peak 2)	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-
143 p-(Dimethylamino)azobenzene	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-
144 Chlorobenzilate	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-
145 3,3-Dimethylbenzidine	0.51683	0.65871	0.66384	0.65632	0.68561	0.66412			
	0.66962						0.64501	8.888	
146 Butylbenzylphthalate	0.61722	0.65246	0.65102	0.67786	0.68656	0.70064			
	0.72090						0.67238	5.180	
147 Acrylamide	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-
148 2-Acetylaminofluorene(1)	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-
(2)	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-
149 Famphur	*****	*****	*****	*****	*****	*****			
	*****						*****	*****	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAY-2005 12:01
End Cal Date : 09-MAY-2005 15:12
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\8270K.m
Cal Date : 10-May-2005 11:31 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
150 Benzo(a)Anthracene	1.33032	1.33059	1.34078	1.40754	1.43063	1.45272			
	1.51202						1.40066	5.006	
151 4,4'-Methylenebis(2-Chloroani	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
152 3,3'-Dichlorobenzidine	0.38645	0.46904	0.50749	0.55099	0.58964	0.62806			
	0.64364						0.53933	17.052	
154 Chrysene	1.24032	1.23554	1.25004	1.31476	1.36190	1.43672			
	1.49079						1.33287	7.614	
155 bis(2-ethylhexyl)Phthalate	0.77256	0.78002	0.79798	0.83297	0.86561	0.89738			
	0.94556						0.84173	7.673	
M 156 Toluenediamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
157 Triethylamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
158 Di-n-octylphthalate	1.48067	1.57388	1.62112	1.70384	1.73235	1.85490			
	1.96432						1.70444	9.730	
159 1,2-Dinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
160 Benzo(b)fluoranthene	1.39885	1.41621	1.46035	1.50973	1.61109	1.70381			
	1.77235						1.55320	9.373	
161 Benzo(k)fluoranthene	1.44545	1.46282	1.50254	1.54138	1.54230	1.60109			
	1.70323						1.54269	5.715	
162 7,12-Dimethylbenz(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
163 Hexachlorophene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAY-2005 12:01
End Cal Date : 09-MAY-2005 15:12
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\8270K.m
Cal Date : 10-May-2005 11:31 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
164 N,N-Dimethylamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
165 Benzo(a)pyrene	1.23142	1.31720	1.35705	1.40635	1.45618	1.49417			
	1.55026						1.40180	7.800	
167 Carbofuran Phenol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
168 2,3- and 3,5-Diaminotoluene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
169 3-methylcholanthrene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
170 2,6- and 2,4-Diaminotoluene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
171 Limonene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
172 n-Decane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
173 Indeno(1,2,3-cd)pyrene	1.20009	1.14841	1.17194	1.21828	1.41867	1.44023			
	1.49853						1.29945	11.293	
174 Dibenzo(a,h)anthracene	1.08721	1.10761	1.17629	1.24035	1.36991	1.39823			
	1.44700						1.26094	11.521	
175 Dibenz(e,a) Pyrene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
176 n-tridecane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
177 Benzo(g,h,i)perylene	1.08831	1.11124	1.08242	1.09329	1.22378	1.25186			
	1.26999						1.16013	7.262	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAY-2005 12:01
End Cal Date : 09-MAY-2005 15:12
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270\8270K.m
Cal Date : 10-May-2005 11:31 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
179 Phthalic Acid	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
180 n-Dodecane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
M 181 Isosafrole	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
$ 10 2-Fluorophenol	0.96999	1.19014	1.19591	1.29262	1.25592	1.24397			
	1.30984						1.20834	9.450	
$ 15 Phenol-d5	1.43393	1.65988	1.64749	1.73098	1.76944	1.74661			
	1.85043						1.69125	7.830	
$ 36 Nitrobenzene-d5	0.52895	0.54117	0.53680	0.56299	0.54978	0.55813			
	0.56579						0.54909	2.547	
$ 69 2-Fluorobiphenyl	1.47081	1.43281	1.46322	1.59566	1.67063	1.80245			
	1.83885						1.61063	10.315	
$ 104 2,4,6-Tribromophenol	0.19056	0.22276	0.21223	0.22962	0.22832	0.23715			
	0.24461						0.22361	7.970	
$ 139 Terphenyl-d14	1.09963	1.13587	1.18869	1.25768	1.32471	1.39043			
	1.44767						1.26353	10.347	
$ 178 2,4,6-Trichlorophenol-d2	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-

STL ST. LOUIS

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B/KCAL2994.D
Report Date: 05/10/2005

INITIAL CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL2994.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 12:01
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270

COMPOUND	%RSD
1,4-Dioxane	17.3
Pyridine	13.1
N-Nitrosodimethylamine	9.7
Dimethylformamide	6.0
2-Fluorophenol	9.5
Cyclohexanol	12.4
Aniline	2.5
Phenol-d5	7.8
Bis(2-chloroethyl)ether	6.5
Phenol	5.1
2-Chlorophenol	4.2
1,3-Dichlorobenzene	4.3
1,4-Dichlorobenzene	5.6
1,2-Dichlorobenzene	7.0
Benzyl Alcohol	17.7
2,2-oxybis(1-Chloropropane)	2.0
2-Methylphenol	5.7
N-Nitrosodinpropylamine	6.7
Hexachloroethane	3.0
3 and 4-Methylphenol	3.5
Nitrobenzene-d5	2.5
Nitrobenzene	4.3
Isophorone	3.8
2-Nitrophenol	7.5
2,4-Dimethylphenol	7.1
Bis(2-chloroethoxy)methane	3.5
2,4-Dichlorophenol	4.0
1,2,4-Trichlorobenzene	6.7
Benzoic Acid	14.3
Naphthalene	8.2
4-Chloroaniline	6.5
Hexachlorobutadiene	7.0
4-Chloro-3-Methylphenol	2.4
2-Methylnaphthalene	5.4
Hexachlorocyclopentadiene	22.0
2,4,6-Trichlorophenol	9.0
2,4,5-Trichlorophenol	15.3
2-Fluorobiphenyl	10.3
2-Chloronaphthalene	7.1

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B/KCAL2994.D
Report Date: 05/10/2005

INITIAL CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL2994.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 12:01
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A

COMPOUND	%RSD
2-Nitroaniline	1.9
Dimethylphthalate	4.3
Acenaphthylene	9.2
2,6-Dinitrotoluene	4.0
Acenaphthene	6.5
3-Nitroaniline	10.1
2,4-Dinitrophenol	21.6
Dibenzofuran	5.2
2,4-Dinitrotoluene	4.8
4-Nitrophenol	19.6
Fluorene	5.4
Diethylphthalate	4.4
4-Chlorophenyl-phenylether	7.3
4-Nitroaniline	9.0
4,6-Dinitro-2-methylphenol	29.0
N-Nitrosodiphenylamine	10.8
Azobenzene	8.7
2,4,6-Tribromophenol	8.0
4-Bromophenyl-phenylether	7.3
Hexachlorobenzene	7.8
Pentachlorophenol	23.3
Phenanthrene	5.1
Anthracene	4.9
Carbazole	3.1
Di-n-Butylphthalate	5.0
Fluoranthene	3.5
Benzidine	3.8
Pyrene	9.4
Terphenyl-d14	10.3
3,3-Dimethylbenzidine	8.9
Butylbenzylphthalate	5.2
Benzo(a)Anthracene	5.0
Chrysene	7.6
3,3'-Dichlorobenzidine	17.1
bis(2-ethylhexyl)Phthalate	7.7
Di-n-octylphthalate	9.7
Benzo(b)fluoranthene	9.4
Benzo(k)fluoranthene	5.7
Benzo(a)pyrene	7.8

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B/KCAL2994.D
Report Date: 05/10/2005

INITIAL CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL2994.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 12:01
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A

COMPOUND	%RSD
Indeno(1,2,3-cd)pyrene	11.3
Dibenzo(a,h)anthracene	11.5
Benzo(g,h,i)perylene	7.3
Dibenz(e,a) Pyrene	0.0

The average of all %RSD's in the initial calibration is 8.1

05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2994.D Page 1
Report Date: 10-May-2005 09:44

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2994.D
Lab Smp Id: SSTD050 Client Smp ID: SSTD050
Inj Date : 09-MAY-2005 12:01
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD050
Misc Info : SV0220-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Meth Date : 10-May-2005 09:44 hongs Quant Type: ISTD
Cal Date : 07-MAY-2005 22:18 Cal File: KCAL2963.D
Als bottle: 3 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 1,4-Dioxane	88	1.260	1.260	(0.277)	121671	50.0000	69.20
	4 N-Nitrosodimethylamine	74	1.693	1.693	(0.372)	196514	50.0000	60.61
	3 Pyridine	79	1.672	1.672	(0.367)	358024	50.0000	62.58
	5 Dimethylformamide	44	2.136	2.136	(0.469)	230934	50.0000	53.87(M)
$	10 2-Fluorophenol	112	3.237	3.237	(0.710)	312307	50.0000	53.49
	11 Cyclohexanol	57	3.258	3.258	(0.715)	375133	50.0000	56.17
	17 Aniline	93	4.252	4.252	(0.933)	536367	50.0000	50.56
	19 Bis(2-chloroethyl)ether	93	4.327	4.327	(0.950)	376645	50.0000	50.17
$	15 Phenol-d5	99	4.321	4.321	(0.948)	418217	50.0000	51.17
	16 Phenol	94	4.332	4.332	(0.951)	448336	50.0000	49.56
	20 2-Chlorophenol	128	4.385	4.385	(0.962)	324176	50.0000	49.56
	21 1,3-Dichlorobenzene	146	4.508	4.508	(0.989)	368416	50.0000	49.25
*	22 1,4-Dichlorobenzene-d4	152	4.556	4.556	(1.000)	193286	40.0000	
	23 1,4-Dichlorobenzene	146	4.578	4.578	(1.005)	392882	50.0000	49.46
	26 1,2-Dichlorobenzene	146	4.797	4.797	(1.053)	358040	50.0000	48.73
	25 Benzyl Alcohol	108	4.807	4.807	(1.055)	188623	50.0000	58.68
	28 2,2-oxybis(1-Chloropropane)	45	4.968	4.968	(1.090)	385812	50.0000	49.69
	27 2-Methylphenol	108	5.010	5.010	(1.100)	285287	50.0000	49.25
	35 Hexachloroethane	117	5.155	5.155	(1.131)	172303	50.0000	49.60
	32 N-Nitrosodinpropylamine	70	5.155	5.155	(1.131)	306731	50.0000	50.40
	29 3 and 4-Methylphenol	108	5.203	5.203	(1.142)	611494	100.000	98.99

05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2994.D
Report Date: 10-May-2005 09:44

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.283	5.283	(0.860)	462544	50.0000	51.26
	37 Nitrobenzene	77	5.304	5.304	(0.863)	476435	50.0000	49.82
	39 Isophorone	82	5.598	5.598	(0.911)	646454	50.0000	51.86
	40 2-Nitrophenol	139	5.705	5.705	(0.929)	173054	50.0000	52.24
	41 2,4-Dimethylphenol	107	5.833	5.833	(0.950)	369130	50.0000	52.50
	42 Bis(2-chloroethoxy)methane	93	5.913	5.913	(0.963)	402042	50.0000	50.60
	45 2,4-Dichlorophenol	162	6.041	6.041	(0.983)	262524	50.0000	50.78
	47 1,2,4-Trichlorobenzene	180	6.095	6.095	(0.992)	309040	50.0000	50.18
*	48 Naphthalene-d8	136	6.143	6.143	(1.000)	657267	40.0000	
	44 Benzoic Acid	122	6.111	6.111	(0.995)	173756	50.0000	53.00
	50 Naphthalene	128	6.164	6.164	(1.003)	908585	50.0000	48.82
	51 4-Chloroaniline	127	6.319	6.319	(1.029)	381333	50.0000	50.61
	54 Hexachlorobutadiene	225	6.415	6.415	(1.044)	212280	50.0000	49.63
	62 2-Methylnaphthalene	142	7.131	7.131	(1.161)	629429	50.0000	47.28
	59 4-Chloro-3-Methylphenol	107	7.083	7.083	(1.153)	304532	50.0000	50.70
	66 Hexachlorocyclopentadiene	237	7.473	7.473	(0.847)	184654	50.0000	49.15
	67 2,4,6-Trichlorophenol	196	7.660	7.660	(0.868)	206752	50.0000	50.98
	68 2,4,5-Trichlorophenol	196	7.746	7.746	(0.878)	223889	50.0000	52.24
$	69 2-Fluorobiphenyl	172	7.756	7.756	(0.879)	700840	50.0000	49.54
	72 2-Chloronaphthalene	162	7.874	7.874	(0.892)	581107	50.0000	49.12
	73 2-Nitroaniline	65	8.168	8.168	(0.926)	259023	50.0000	50.83
	76 Dimethylphthalate	163	8.536	8.536	(0.967)	664795	50.0000	49.07
	79 Acenaphthylene	152	8.558	8.558	(0.970)	856771	50.0000	49.13
	80 2,6-Dinitrotoluene	165	8.654	8.654	(0.981)	147807	50.0000	51.06
*	82 Acenaphthene-d10	164	8.825	8.825	(1.000)	351374	40.0000	
	83 Acenaphthene	153	8.883	8.883	(1.007)	541550	50.0000	49.17
	81 3-Nitroaniline	138	8.889	8.889	(1.007)	150922	50.0000	53.07
	84 2,4-Dinitrophenol	184	9.070	9.070	(1.028)	91839	50.0000	53.11
	86 Dibenzofuran	168	9.161	9.161	(1.038)	804815	50.0000	49.46
	88 2,4-Dinitrotoluene	165	9.332	9.332	(1.058)	192761	50.0000	51.78
	85 4-Nitrophenol	109	9.380	9.380	(1.063)	129235	50.0000	50.82
	93 Diethylphthalate	149	9.802	9.802	(1.111)	660447	50.0000	48.71
	94 Fluorene	166	9.776	9.776	(1.108)	645297	50.0000	49.55
	95 4-Chlorophenyl-phenylether	204	9.824	9.824	(1.113)	346818	50.0000	49.36
	98 4-Nitroaniline	138	10.011	10.011	(1.134)	150637	50.0000	54.34
	99 4,6-Dinitro-2-methylphenol	198	10.064	10.064	(0.876)	136357	50.0000	53.73
	100 N-Nitrosodiphenylamine	169	10.091	10.091	(0.878)	456129	50.0000	48.91
	102 Azobenzene	77	10.107	10.107	(0.880)	1011491	50.0000	48.35
$	104 2,4,6-Tribromophenol	330	10.278	10.278	(1.165)	100852	50.0000	51.34
	109 4-Bromophenyl-phenylether	248	10.705	10.705	(0.932)	210343	50.0000	49.10
	112 Hexachlorobenzene	284	10.935	10.935	(0.952)	217142	50.0000	49.65
	117 Pentachlorophenol	266	11.341	11.341	(0.987)	122937	50.0000	50.40
*	121 Phenanthrene-d10	188	11.490	11.490	(1.000)	612492	40.0000	
	122 Phenanthrene	178	11.533	11.533	(1.004)	930158	50.0000	49.17
	124 Anthracene	178	11.619	11.619	(1.011)	912739	50.0000	49.91
	126 Carbazole	167	12.019	12.019	(1.046)	778766	50.0000	49.84
	129 Di-n-Butylphthalate	149	12.906	12.906	(1.123)	1026929	50.0000	50.16
	134 Fluoranthene	202	13.830	13.830	(1.204)	983110	50.0000	50.28
	135 Benzidine	184	14.226	14.226	(0.854)	375164	50.0000	50.00
	137 Pyrene	202	14.247	14.247	(0.855)	992029	50.0000	49.33
$	139 Terphenyl-d14	244	14.690	14.690	(0.882)	777748	50.0000	49.77
	145 3,3-Dimethylbenzidine	212	15.689	15.689	(0.942)	405868	50.0000	50.88
	146 Butylbenzylphthalate	149	15.812	15.812	(0.949)	419190	50.0000	50.41
	150 Benzo(a)Anthracene	228	16.624	16.624	(0.998)	870421	50.0000	50.24

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2994.D
Report Date: 10-May-2005 09:44

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.656	16.656	(1.000)	494718	40.0000	
152 3,3'-Dichlorobenzidine	252	16.720	16.720	(1.004)	340729	50.0000	51.08
154 Chrysene	228	16.710	16.710	(1.003)	813043	50.0000	49.32
155 bis(2-ethylhexyl)Phthalate	149	17.036	17.036	(1.023)	515108	50.0000	49.48
158 Di-n-octylphthalate	149	18.184	18.184	(0.944)	871339	50.0000	49.98
160 Benzo(b)fluoranthene	252	18.628	18.628	(0.967)	772068	50.0000	48.60
161 Benzo(k)fluoranthene	252	18.676	18.676	(0.969)	788255	50.0000	49.96
165 Benzo(a)pyrene	252	19.167	19.167	(0.995)	719204	50.0000	50.16
* 166 Perylene-d12	264	19.269	19.269	(1.000)	409117	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.989	20.989	(1.089)	623024	50.0000	46.88
174 Dibenzo(a,h)anthracene	278	21.031	21.031	(1.091)	634309	50.0000	49.18
177 Benzo(g,h,i)perylene	276	21.443	21.443	(1.113)	559104	50.0000	47.12

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2994.D Page 1
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STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

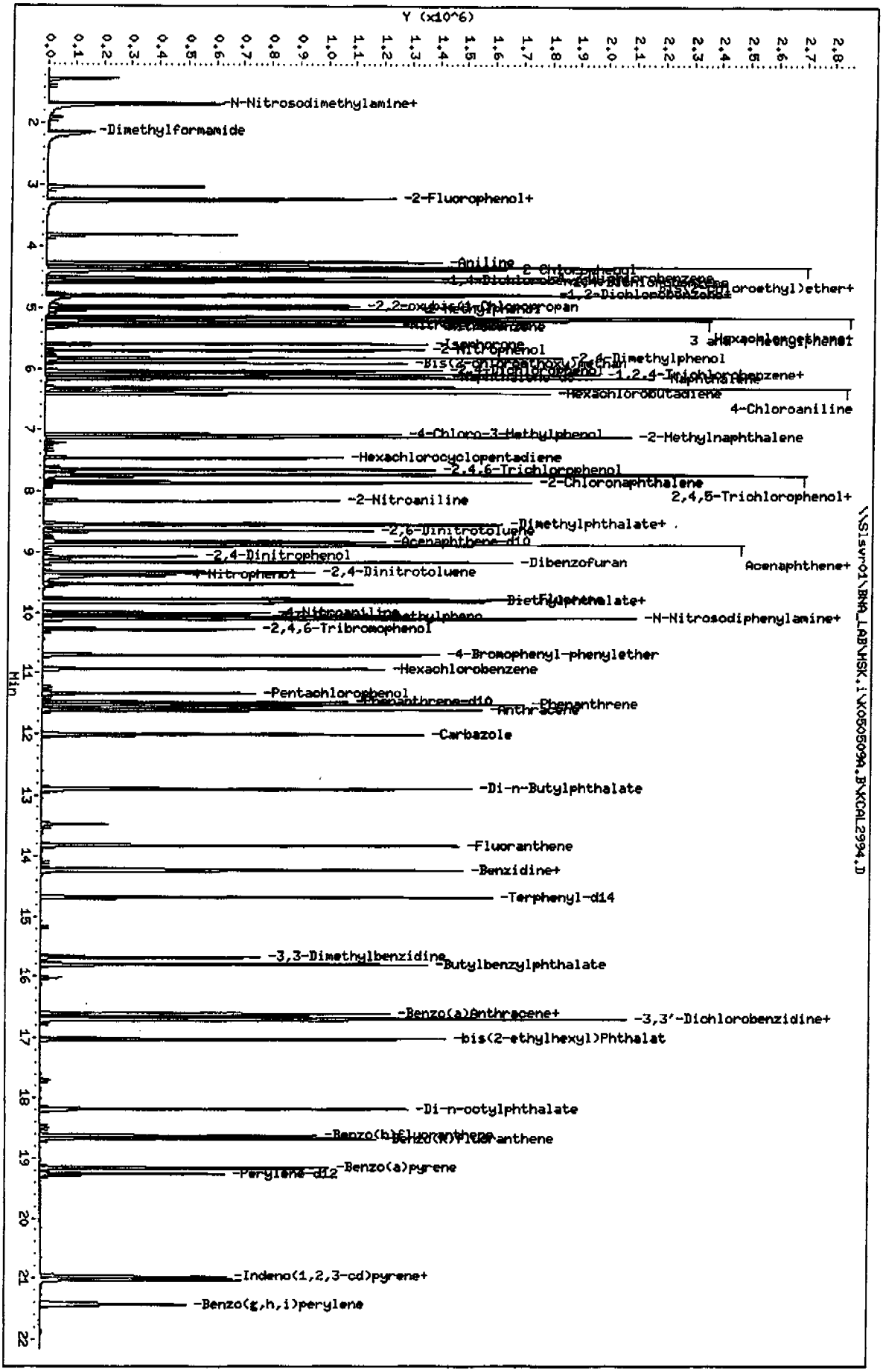
Instrument ID: MSK.i
Lab File ID: KCAL2994.D
Lab Smp Id: SSTD050
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Misc Info: SV0220-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD050
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	193286	0.00
48 Naphthalene-d8	657267	328634	1314534	657267	0.00
82 Acenaphthene-d10	351374	175687	702748	351374	0.00
121 Phenanthrene-d10	612492	306246	1224984	612492	0.00
153 Chrysene-d12	494718	247359	989436	494718	0.00
166 Perylene-d12	409117	204559	818234	409117	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.56	0.00
48 Naphthalene-d8	6.14	5.64	6.64	6.14	0.00
82 Acenaphthene-d10	8.83	8.33	9.33	8.83	0.00
121 Phenanthrene-d10	11.49	10.99	11.99	11.49	0.00
153 Chrysene-d12	16.66	16.16	17.16	16.66	0.00
166 Perylene-d12	19.27	18.77	19.77	19.27	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

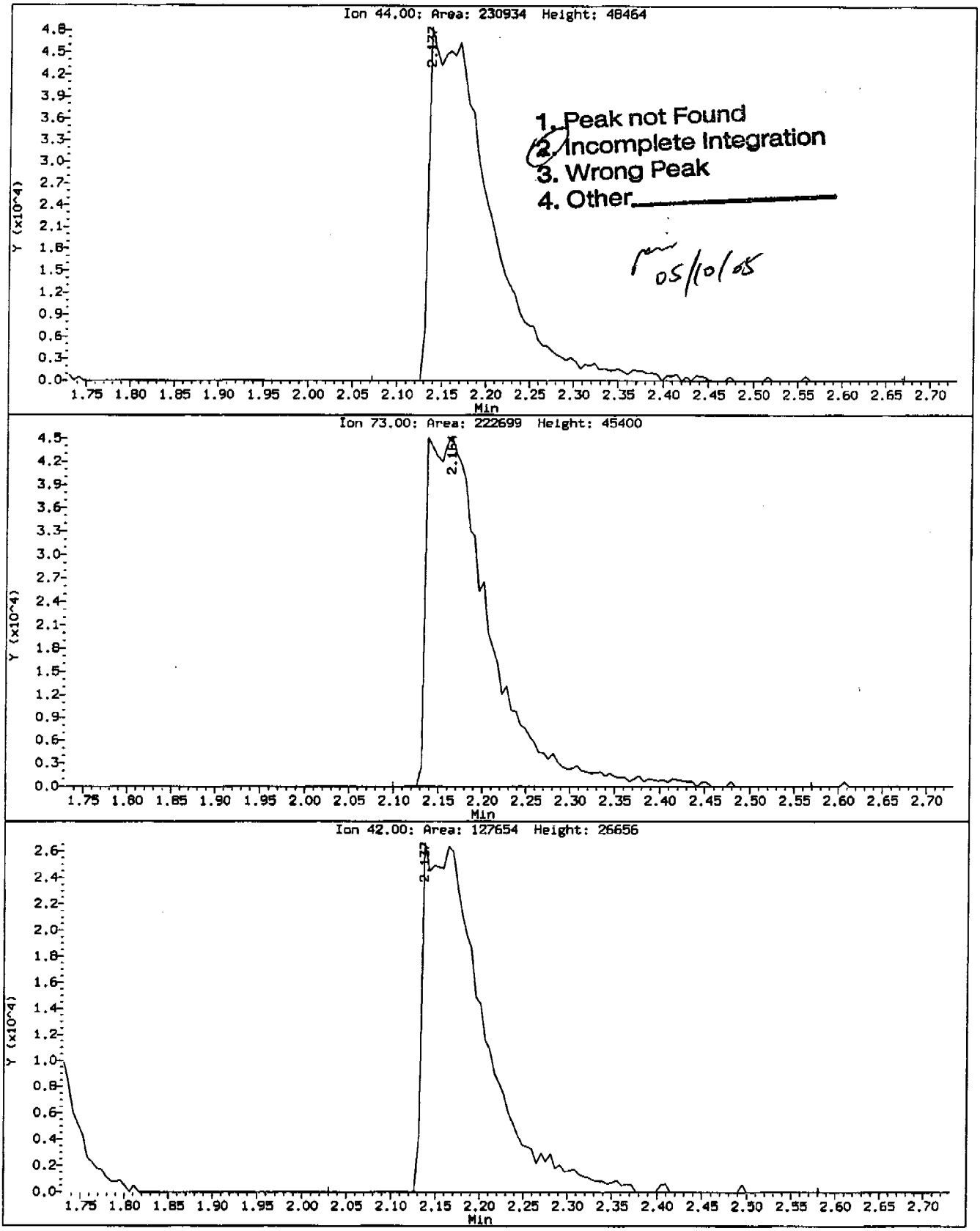


Data File: \\Slsvr01\BNA_LAB\HSK.i\K050509A.B\KCAL2994.D
Date : 09-MAY-2005 12:01
Client ID: SSTD050
Sample Info: SSTD050
Volume Injected (ul): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2994.D
Injection Date: 09-MAY-2005 12:01
Instrument: MSK.i
Client Sample ID: SSTD050

Compound: Dimethylformamide
CAS Number: 68-12-2



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D Page 1
Report Date: 10-May-2005 09:41

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D
Lab Smp Id: SSTD160 Client Smp ID: SSTD160
Inj Date : 09-MAY-2005 12:33
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD160
Misc Info : SV0218-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Meth Date : 10-May-2005 09:41 hongs Quant Type: ISTD
Cal Date : 07-MAY-2005 22:49 Cal File: KCAL2964.D
Als bottle: 4 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 1,4-Dioxane	88	1.353	1.353	(0.297)	267010	160.000	174.9(AM)
	4 N-Nitrosodimethylamine	74	1.812	1.812	(0.397)	509995	160.000	171.9(AM)
	3 Pyridine	79	1.786	1.786	(0.391)	913431	160.000	176.6(AM)
	5 Dimethylformamide	44	2.272	2.272	(0.498)	656888	160.000	160.1(AM)
$	10 2-Fluorophenol	112	3.276	3.276	(0.718)	998948	160.000	176.2(A)
	11 Cyclohexanol	57	3.281	3.281	(0.719)	1151960	160.000	179.0(AM)
	17 Aniline	93	4.270	4.270	(0.936)	1647716	160.000	157.9
	19 Bis(2-chloroethyl)ether	93	4.350	4.350	(0.953)	1292825	160.000	174.9(A)
$	15 Phenol-d5	99	4.344	4.344	(0.952)	1411227	160.000	175.0(A)
	16 Phenol	94	4.355	4.355	(0.954)	1549489	160.000	174.1(A)
	20 2-Chlorophenol	128	4.409	4.409	(0.966)	1104771	160.000	170.9(A)
	21 1,3-Dichlorobenzene	146	4.521	4.521	(0.991)	1266969	160.000	171.6(A)
*	22 1,4-Dichlorobenzene-d4	152	4.563	4.563	(1.000)	190662	40.0000	
	23 1,4-Dichlorobenzene	146	4.585	4.585	(1.005)	1364483	160.000	174.3(A)
	26 1,2-Dichlorobenzene	146	4.809	4.809	(1.054)	1293464	160.000	177.8(A)
	25 Benzyl Alcohol	108	4.836	4.836	(1.060)	608544	160.000	191.4(A)
	28 2,2-oxybis(1-Chloropropane)	45	4.975	4.975	(1.090)	1238647	160.000	162.4(A)
	27 2-Methylphenol	108	5.023	5.023	(1.101)	919886	160.000	160.1(A)
	35 Hexachloroethane	117	5.156	5.156	(1.130)	574546	160.000	167.5(A)
	32 N-Nitrosodinpropylamine	70	5.183	5.183	(1.136)	892076	160.000	147.9
	29 3 and 4-Methylphenol	108	5.231	5.231	(1.146)	2068790	320.000	336.4(A)

05/10/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.301	5.301	(0.863)	1461871	160.000	166.3(A)
	37 Nitrobenzene	77	5.327	5.327	(0.867)	1514410	160.000	162.2(A)
	39 Isophorone	82	5.627	5.627	(0.916)	1886717	160.000	155.0
	40 2-Nitrophenol	139	5.717	5.717	(0.930)	550746	160.000	169.8(A)
	41 2,4-Dimethylphenol	107	5.851	5.851	(0.952)	1175775	160.000	170.6(A)
	42 Bis(2-chloroethoxy)methane	93	5.926	5.926	(0.964)	1308198	160.000	168.4(A)
	45 2,4-Dichlorophenol	162	6.049	6.049	(0.984)	861154	160.000	169.7(A)
	47 1,2,4-Trichlorobenzene	180	6.102	6.102	(0.993)	1058079	160.000	175.1(A)
*	48 Naphthalene-d8	136	6.145	6.145	(1.000)	645937	40.0000	
	44 Benzoic Acid	122	6.177	6.177	(1.005)	573755	160.000	180.1(AM)
	50 Naphthalene	128	6.177	6.177	(1.005)	3254779	160.000	178.2(A)
	51 4-Chloroaniline	127	6.337	6.337	(1.031)	1287687	160.000	174.6(A)
	54 Hexachlorobutadiene	225	6.417	6.417	(1.044)	734169	160.000	175.0(A)
	62 2-Methylnaphthalene	142	7.138	7.138	(1.162)	2151870	160.000	163.8(A)
	59 4-Chloro-3-Methylphenol	107	7.090	7.090	(1.154)	961862	160.000	162.7(A)
	66 Hexachlorocyclopentadiene	237	7.475	7.475	(0.847)	686031	160.000	199.3(A)
	67 2,4,6-Trichlorophenol	196	7.667	7.667	(0.869)	668451	160.000	178.9(A)
	68 2,4,5-Trichlorophenol	196	7.747	7.747	(0.878)	741890	160.000	187.7(A)
$	69 2-Fluorobiphenyl	172	7.769	7.769	(0.880)	2383905	160.000	183.1(A)
	72 2-Chloronaphthalene	162	7.886	7.886	(0.893)	1935583	160.000	177.5(A)
	73 2-Nitroaniline	65	8.185	8.185	(0.927)	757215	160.000	162.1(A)
	76 Dimethylphthalate	163	8.559	8.559	(0.970)	2121539	160.000	169.6(A)
	79 Acenaphthylene	152	8.570	8.570	(0.971)	2916936	160.000	181.2(A)
	80 2,6-Dinitrotoluene	165	8.672	8.672	(0.982)	445782	160.000	166.8(A)
*	82 Acenaphthene-d10	164	8.826	8.826	(1.000)	324102	40.0000	
	83 Acenaphthene	153	8.891	8.891	(1.007)	1781284	160.000	175.1(A)
	81 3-Nitroaniline	138	8.912	8.912	(1.010)	452616	160.000	172.0(A)
	84 2,4-Dinitrophenol	184	9.088	9.088	(1.030)	311902	160.000	196.4(A)
	86 Dibenzofuran	168	9.174	9.174	(1.039)	2595137	160.000	172.6(A)
	88 2,4-Dinitrotoluene	165	9.350	9.350	(1.059)	574969	160.000	166.3(A)
	85 4-Nitrophenol	109	9.387	9.387	(1.064)	396744	160.000	170.0(A)
	93 Diethylphthalate	149	9.825	9.825	(1.113)	2144878	160.000	170.6(A)
	94 Fluorene	166	9.788	9.788	(1.109)	2064525	160.000	171.0(A)
	95 4-Chlorophenyl-phenylether	204	9.836	9.836	(1.114)	1155756	160.000	177.8(A)
	98 4-Nitroaniline	138	10.061	10.061	(1.140)	432152	160.000	168.7(A)
	99 4,6-Dinitro-2-methylphenol	198	10.103	10.103	(0.879)	458082	160.000	205.5(A)
	100 N-Nitrosodiphenylamine	169	10.114	10.114	(0.880)	1513586	160.000	184.9(A)
	102 Azobenzene	77	10.119	10.119	(0.881)	3307965	160.000	180.6(A)
$	104 2,4,6-Tribromophenol	330	10.290	10.290	(1.166)	317115	160.000	173.9(A)
	109 4-Bromophenyl-phenylether	248	10.718	10.718	(0.933)	661751	160.000	175.4(A)
	112 Hexachlorobenzene	284	10.947	10.947	(0.953)	675585	160.000	175.9(A)
	117 Pentachlorophenol	266	11.353	11.353	(0.988)	420779	160.000	196.9(A)
*	121 Phenanthrene-d10	188	11.492	11.492	(1.000)	538792	40.0000	
	122 Phenanthrene	178	11.546	11.546	(1.005)	2876383	160.000	172.6(A)
	124 Anthracene	178	11.631	11.631	(1.012)	2757609	160.000	171.1(A)
	126 Carbazole	167	12.037	12.037	(1.047)	2313859	160.000	167.9(A)
	129 Di-n-Butylphthalate	149	12.913	12.913	(1.124)	3072143	160.000	170.6(A)
	134 Fluoranthene	202	13.843	13.843	(1.205)	2895172	160.000	167.7(A)
	135 Benzidine	184	14.233	14.233	(0.854)	948875	160.000	160.4(A)
	137 Pyrene	202	14.259	14.259	(0.856)	2879391	160.000	180.3(A)
$	139 Terphenyl-d14	244	14.697	14.697	(0.882)	2270400	160.000	183.1(A)
	145 3,3-Dimethylbenzidine	212	15.702	15.702	(0.942)	1050179	160.000	165.6(A)
	146 Butylbenzylphthalate	149	15.819	15.819	(0.949)	1130601	160.000	172.4(A)
	150 Benzo(a)Anthracene	228	16.637	16.637	(0.998)	2371324	160.000	173.2(A)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.663	16.663	(1.000)	392079	40.0000	
152 3,3'-Dichlorobenzidine	252	16.728	16.728	(1.004)	1009432	160.000	193.1(A)
154 Chrysene	228	16.722	16.722	(1.004)	2338031	160.000	179.3(A)
155 bis(2-ethylhexyl)Phthalate	149	17.037	17.037	(1.022)	1482940	160.000	181.2(A)
158 Di-n-octylphthalate	149	18.191	18.191	(0.944)	2386651	160.000	180.8(A)
160 Benzo(b)fluoranthene	252	18.645	18.645	(0.968)	2153409	160.000	178.2(A)
161 Benzo(k)fluoranthene	252	18.693	18.693	(0.970)	2069426	160.000	172.8(A)
165 Benzo(a)pyrene	252	19.185	19.185	(0.996)	1883560	160.000	176.9(A)
* 166 Perylene-d12	264	19.265	19.265	(1.000)	303750	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	21.007	21.007	(1.090)	1820713	160.000	193.4(A)
174 Dibenzo(a,h)anthracene	278	21.060	21.060	(1.093)	1758104	160.000	192.2(A)
177 Benzo(g,h,i)perylene	276	21.477	21.477	(1.115)	1543039	160.000	183.0(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D Page 4
Report Date: 10-May-2005 09:41

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

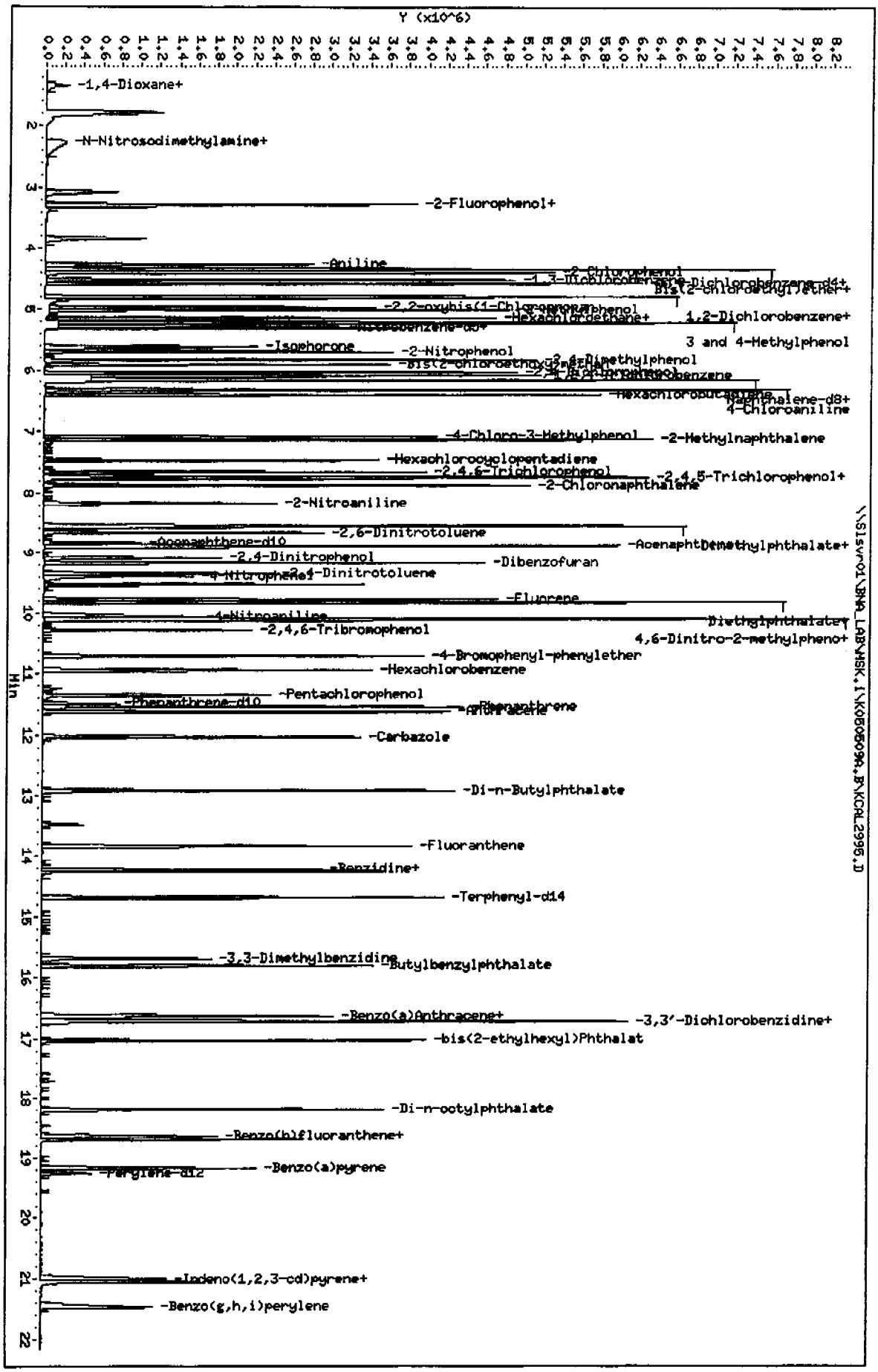
Instrument ID: MSK.i
Lab File ID: KCAL2995.D
Lab Smp Id: SSTD160
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Misc Info: SV0218-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD160
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	190662	-1.36
48 Naphthalene-d8	657267	328634	1314534	645937	-1.72
82 Acenaphthene-d10	351374	175687	702748	324102	-7.76
121 Phenanthrene-d10	612492	306246	1224984	538792	-12.03
153 Chrysene-d12	494718	247359	989436	392079	-20.75
166 Perylene-d12	409117	204559	818234	303750	-25.75

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.56	0.16
48 Naphthalene-d8	6.14	5.64	6.64	6.15	0.03
82 Acenaphthene-d10	8.83	8.33	9.33	8.83	0.02
121 Phenanthrene-d10	11.49	10.99	11.99	11.49	0.02
153 Chrysene-d12	16.66	16.16	17.16	16.66	0.04
166 Perylene-d12	19.27	18.77	19.77	19.27	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

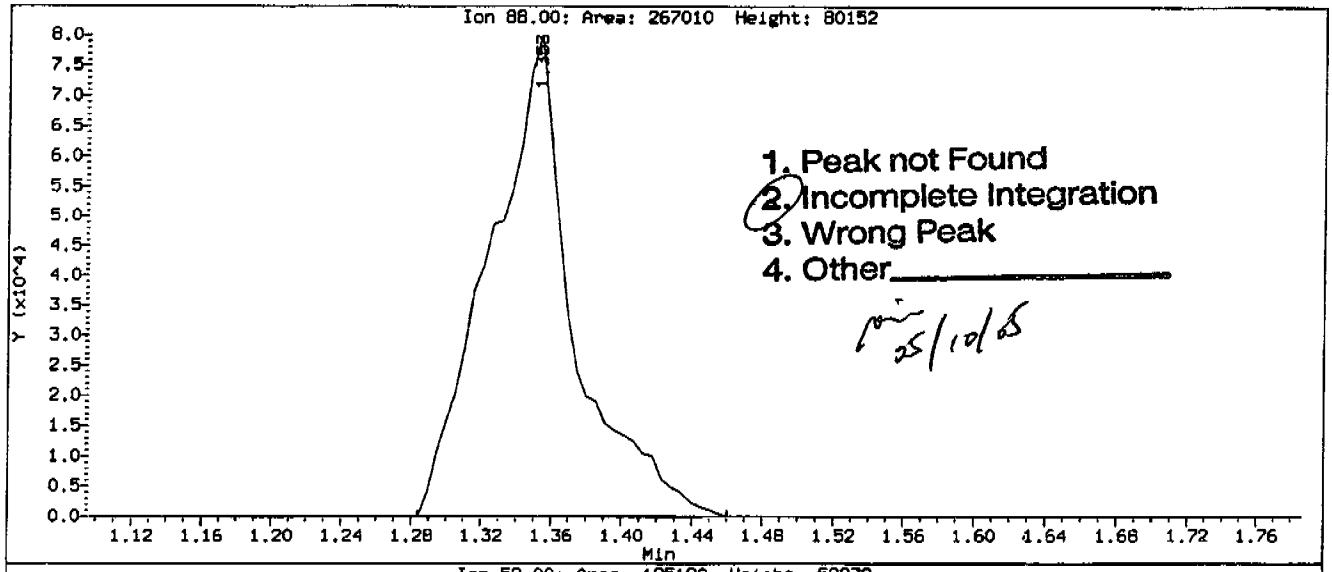


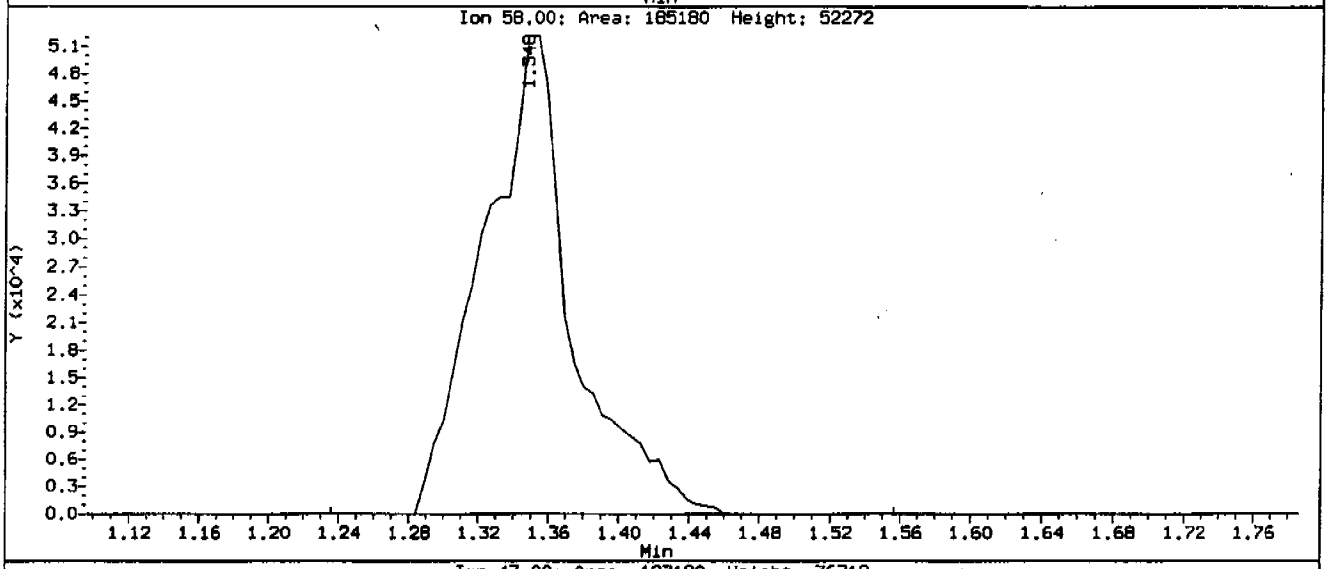
Data File: \\Slsvr01\BNA_LAB\HSK.i\K050509A.B\KCAL2995.D
Date : 09-MAY-2005 12:33
Client ID: SSTD160
Sample Info: SSTD160
Volume Injected (uL): 1.0
Column phase:

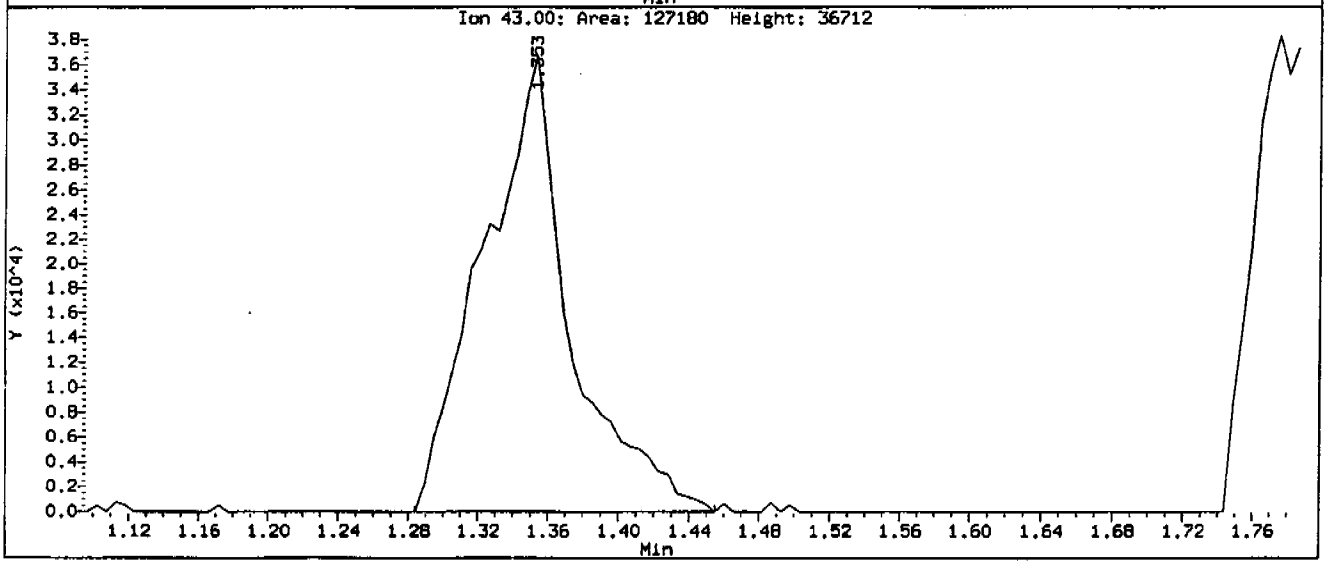
Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D
Injection Date: 09-MAY-2005 12:33
Instrument: MSK.i
Client Sample ID: SSTD160

Compound: 1,4-Dioxane
CAS Number:

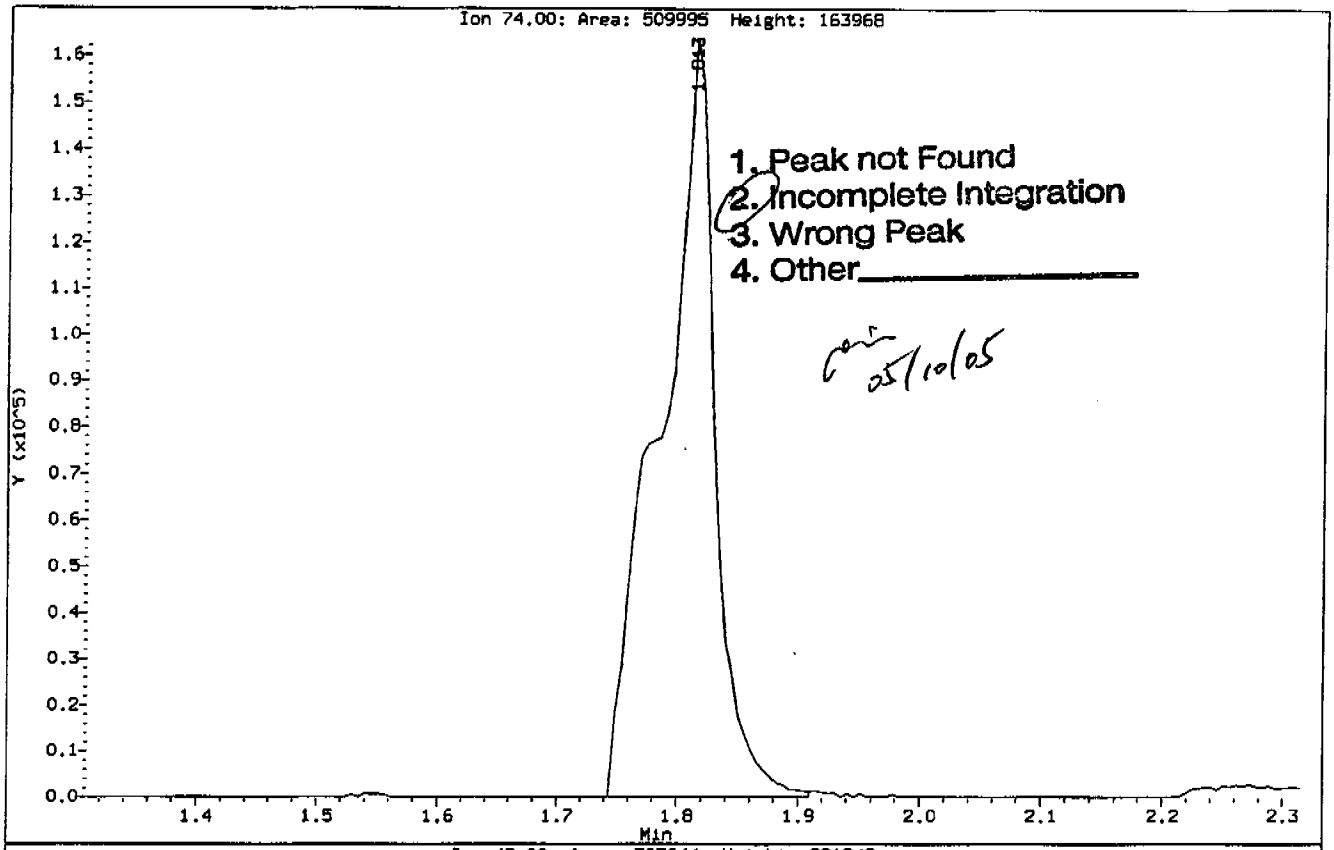


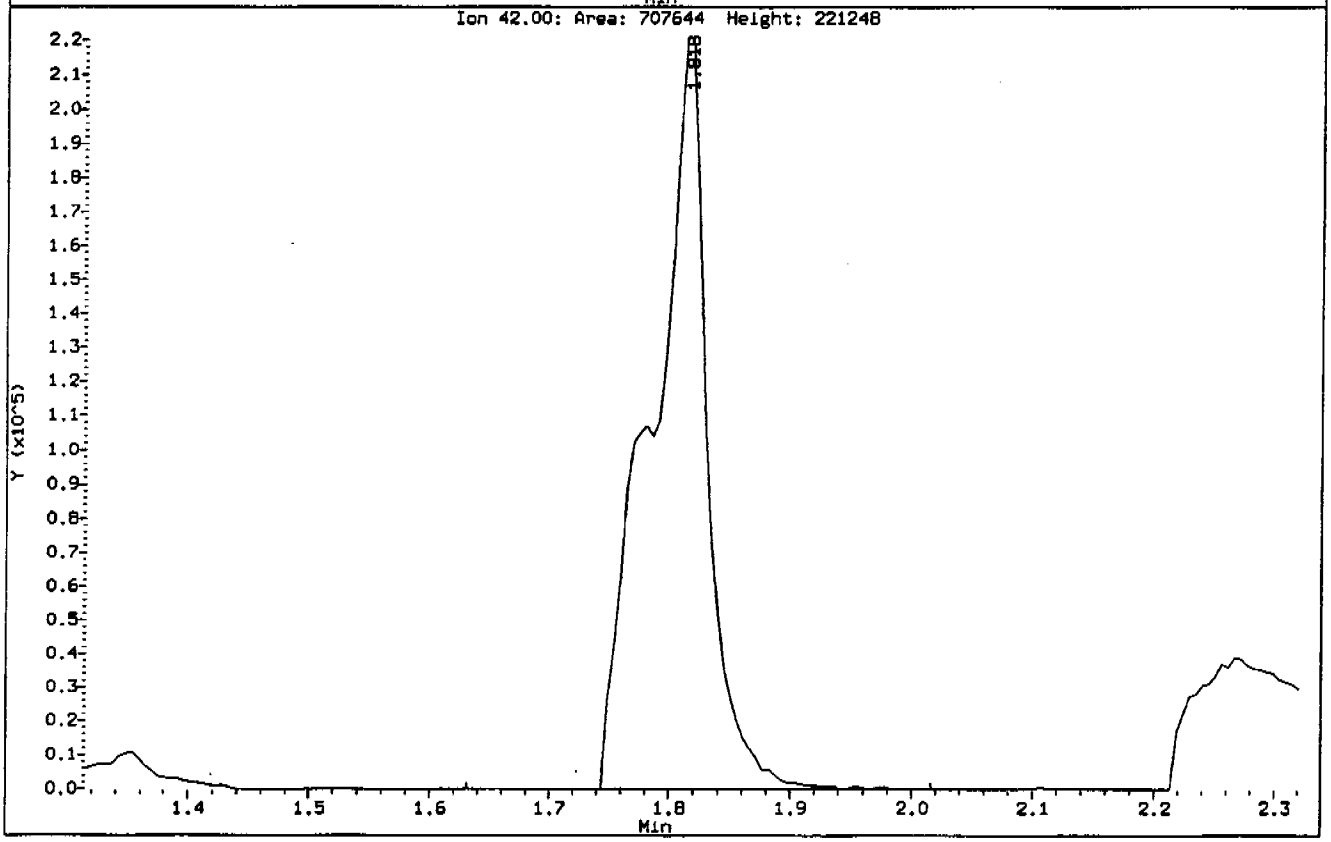




Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D
Injection Date: 09-MAY-2005 12:33
Instrument: MSK.i
Client Sample ID: SSTD160

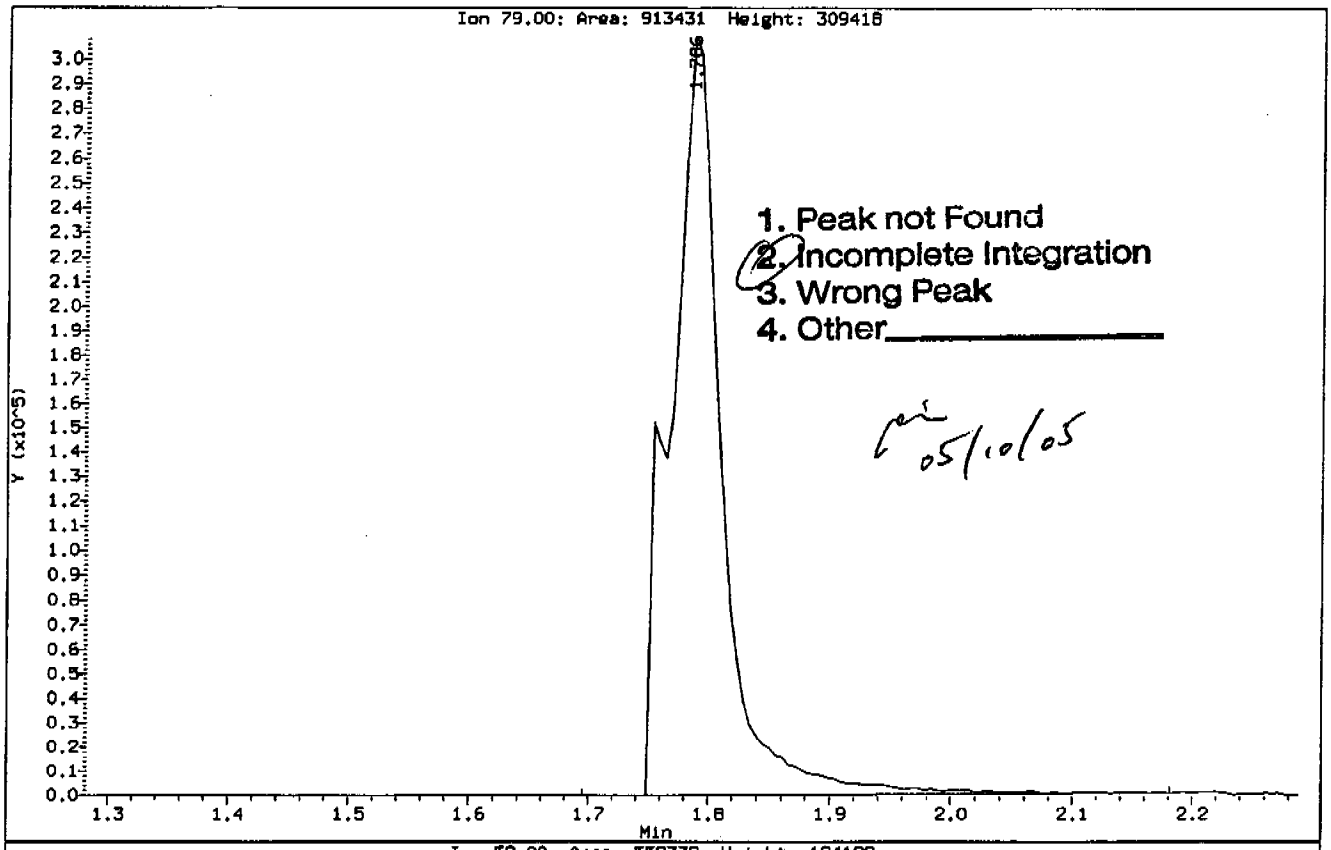
Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9

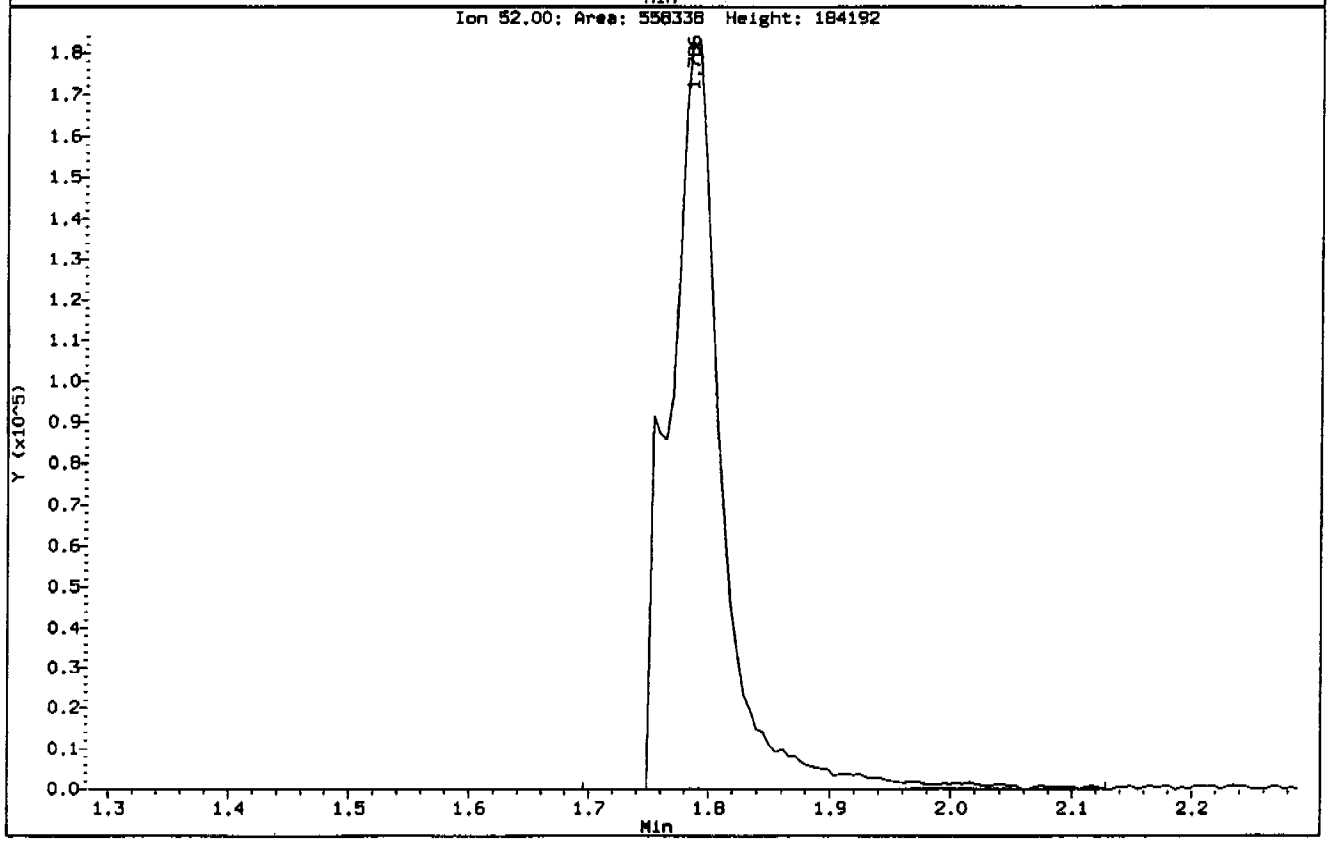




Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D
Injection Date: 09-MAY-2005 12:33
Instrument: MSK.i
Client Sample ID: SSTD160

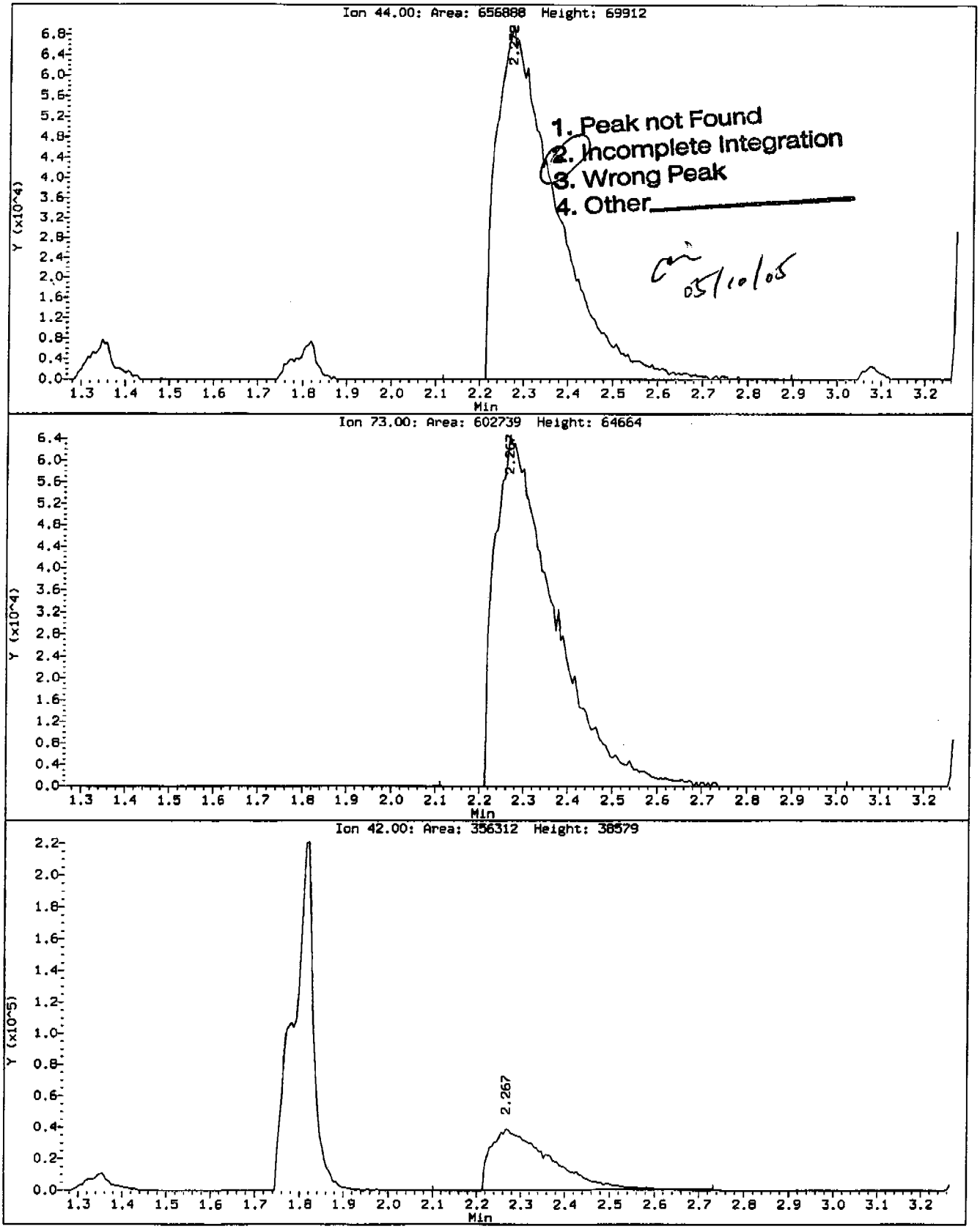
Compound: Pyridine
CAS Number: 110-86-1





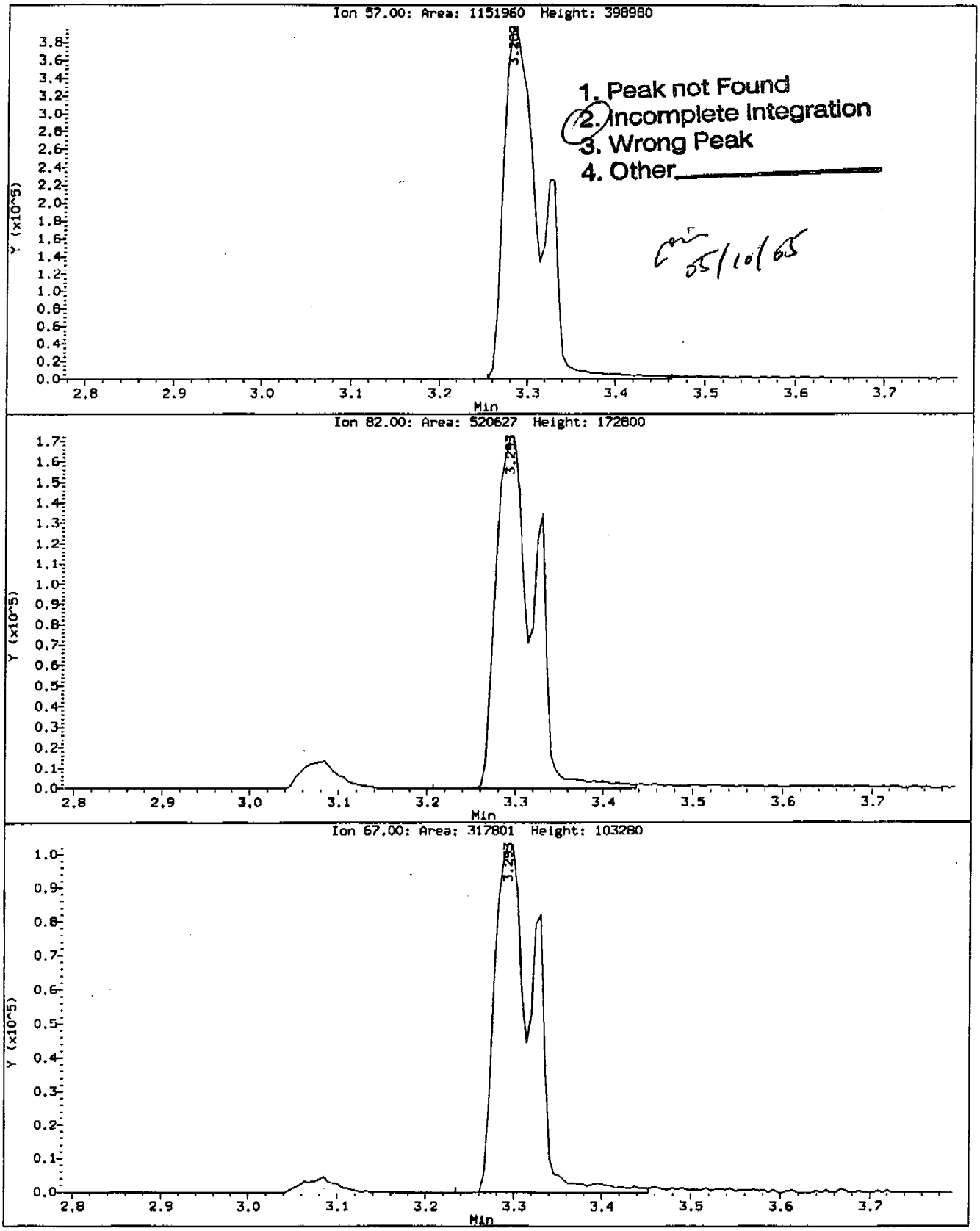
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D
Injection Date: 09-MAY-2005 12:33
Instrument: MSK.i
Client Sample ID: SSTD160

Compound: Dimethylformamide
CAS Number: 68-12-2



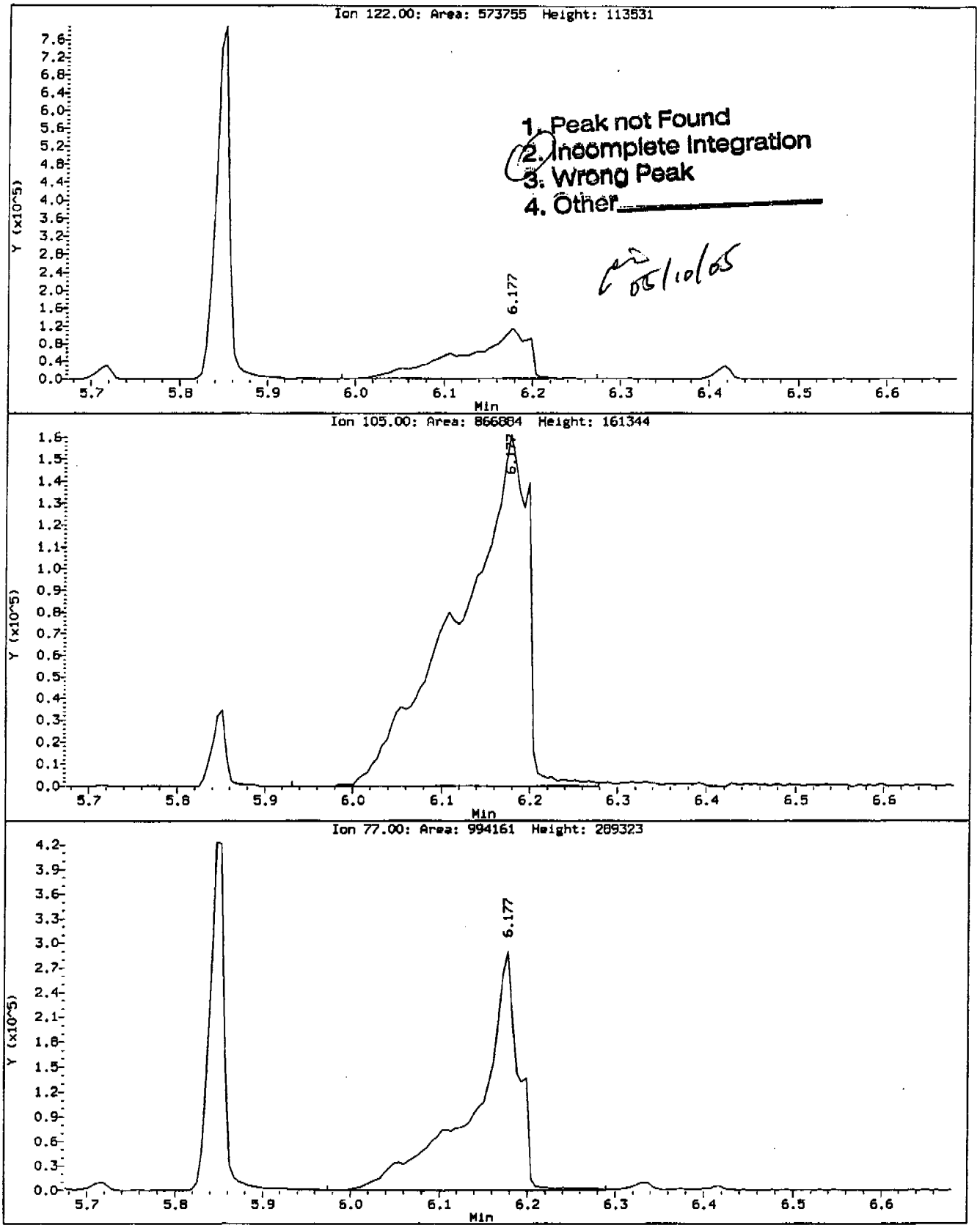
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D
Injection Date: 09-MAY-2005 12:33
Instrument: MSK.i
Client Sample ID: SSTD160

Compound: Cyclohexanol
CAS Number:



Data File: \\Slevr01\BNA_LAB\MSK.i\K050509A.B\KCAL2995.D
Injection Date: 09-MAY-2005 12:33
Instrument: MSK.i
Client Sample ID: SSTD160

Compound: Benzoic Acid
CAS Number: 65-85-0



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2996.D Page 1
Report Date: 10-May-2005 09:41

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2996.D
Lab Smp Id: SSTD120 Client Smp ID: SSTD120
Inj Date : 09-MAY-2005 13:04
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD120
Misc Info : SV0217-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Meth Date : 10-May-2005 09:41 hongs Quant Type: ISTD
Cal Date : 07-MAY-2005 23:21 Cal File: KCAL2965.D
Als bottle: 5 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 1,4-Dioxane	88	1.347	1.347	(0.295)	256244	120.000	133.1
	4 N-Nitrosodimethylamine	74	1.806	1.806	(0.395)	469566	120.000	125.6
	3 Pyridine	79	1.774	1.774	(0.388)	814171	120.000	124.9
	5 Dimethylformamide	44	2.271	2.271	(0.497)	608591	120.000	117.7(M)
$	10 2-Fluorophenol	112	3.275	3.275	(0.717)	896818	120.000	125.5
	11 Cyclohexanol	57	3.280	3.280	(0.718)	1046076	120.000	128.9(M)
	17 Aniline	93	4.274	4.274	(0.936)	1509104	120.000	114.7
	19 Bis(2-chloroethyl)ether	93	4.349	4.349	(0.952)	1177364	120.000	126.4
$	15 Phenol-d5	99	4.343	4.343	(0.951)	1259183	120.000	123.9
	16 Phenol	94	4.354	4.354	(0.953)	1393535	120.000	124.2
	20 2-Chlorophenol	128	4.408	4.408	(0.965)	1001875	120.000	122.9
	21 1,3-Dichlorobenzene	146	4.520	4.520	(0.989)	1134454	120.000	121.9
*	22 1,4-Dichlorobenzene-d4	152	4.568	4.568	(1.000)	240310	40.0000	
	23 1,4-Dichlorobenzene	146	4.589	4.589	(1.005)	1247621	120.000	126.5
	26 1,2-Dichlorobenzene	146	4.808	4.808	(1.053)	1159824	120.000	126.5
	25 Benzyl Alcohol	108	4.835	4.835	(1.058)	498679	120.000	124.4
	28 2,2-oxybis(1-Chloropropane)	45	4.974	4.974	(1.089)	1130826	120.000	117.6
	27 2-Methylphenol	108	5.022	5.022	(1.099)	812085	120.000	112.1
	35 Hexachloroethane	117	5.161	5.161	(1.130)	526521	120.000	121.8
	32 N-Nitrosodinpropylamine	70	5.182	5.182	(1.134)	822211	120.000	108.2
	29 3 and 4-Methylphenol	108	5.230	5.230	(1.145)	1871029	240.000	241.4(A)

05/10/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.300	5.300	(0.862)	1325489	120.000	123.0
	37 Nitrobenzene	77	5.326	5.326	(0.866)	1373484	120.000	120.0
	39 Isophorone	82	5.626	5.626	(0.915)	1737253	120.000	116.5
	40 2-Nitrophenol	139	5.716	5.716	(0.930)	507512	120.000	127.7
	41 2,4-Dimethylphenol	107	5.850	5.850	(0.951)	1074185	120.000	127.2
	42 Bis(2-chloroethoxy)methane	93	5.925	5.925	(0.964)	1182746	120.000	124.2
	45 2,4-Dichlorophenol	162	6.048	6.048	(0.983)	772628	120.000	124.2
	47 1,2,4-Trichlorobenzene	180	6.101	6.101	(0.992)	952409	120.000	128.6
*	48 Naphthalene-d8	136	6.149	6.149	(1.000)	791632	40.0000	
	44 Benzoic Acid	122	6.181	6.181	(1.005)	520186	120.000	133.2(M)
	50 Naphthalene	128	6.176	6.176	(1.004)	2986007	120.000	133.4
	51 4-Chloroaniline	127	6.336	6.336	(1.030)	1168839	120.000	129.3
	54 Hexachlorobutadiene	225	6.422	6.422	(1.044)	671937	120.000	130.7
	62 2-Methylnaphthalene	142	7.137	7.137	(1.161)	1980827	120.000	123.1
	59 4-Chloro-3-Methylphenol	107	7.089	7.089	(1.153)	863827	120.000	119.2
	66 Hexachlorocyclopentadiene	237	7.474	7.474	(0.847)	619963	120.000	146.5
	67 2,4,6-Trichlorophenol	196	7.666	7.666	(0.869)	602283	120.000	131.1
	68 2,4,5-Trichlorophenol	196	7.746	7.746	(0.878)	662861	120.000	136.4
$	69 2-Fluorobiphenyl	172	7.762	7.762	(0.880)	2154301	120.000	134.6
	72 2-Chloronaphthalene	162	7.885	7.885	(0.893)	1734620	120.000	129.4
	73 2-Nitroaniline	65	8.184	8.184	(0.927)	694512	120.000	121.0
	76 Dimethylphthalate	163	8.553	8.553	(0.969)	1900885	120.000	123.7
	79 Acenaphthylene	152	8.569	8.569	(0.971)	2619906	120.000	132.4
	80 2,6-Dinitrotoluene	165	8.671	8.671	(0.982)	409009	120.000	124.5
*	82 Acenaphthene-d10	164	8.826	8.826	(1.000)	398402	40.0000	
	83 Acenaphthene	153	8.890	8.890	(1.007)	1613401	120.000	129.0
	81 3-Nitroaniline	138	8.911	8.911	(1.010)	414000	120.000	127.9
	84 2,4-Dinitrophenol	184	9.087	9.087	(1.030)	272087	120.000	139.4
	86 Dibenzofuran	168	9.173	9.173	(1.039)	2339446	120.000	126.5
	88 2,4-Dinitrotoluene	165	9.349	9.349	(1.059)	512576	120.000	120.6
	85 4-Nitrophenol	109	9.386	9.386	(1.064)	354145	120.000	123.5
	93 Diethylphthalate	149	9.819	9.819	(1.113)	1901787	120.000	123.1
	94 Fluorene	166	9.787	9.787	(1.109)	1882183	120.000	126.8
	95 4-Chlorophenyl-phenylether	204	9.830	9.830	(1.114)	1024928	120.000	128.3
	98 4-Nitroaniline	138	10.054	10.054	(1.139)	382600	120.000	121.5
	99 4,6-Dinitro-2-methylphenol	198	10.097	10.097	(0.879)	396980	120.000	147.2
	100 N-Nitrosodiphenylamine	169	10.108	10.108	(0.880)	1337473	120.000	135.0
	102 Azobenzene	77	10.118	10.118	(0.881)	2958046	120.000	133.5
$	104 2,4,6-Tribromophenol	330	10.289	10.289	(1.166)	283446	120.000	126.5
	109 4-Bromophenyl-phenylether	248	10.717	10.717	(0.933)	598607	120.000	131.2
	112 Hexachlorobenzene	284	10.946	10.946	(0.953)	607039	120.000	130.7
	117 Pentachlorophenol	266	11.352	11.352	(0.988)	373419	120.000	144.4
*	121 Phenanthrene-d10	188	11.491	11.491	(1.000)	651890	40.0000	
	122 Phenanthrene	178	11.545	11.545	(1.005)	2540162	120.000	126.0
	124 Anthracene	178	11.630	11.630	(1.012)	2463069	120.000	126.3
	126 Carbazole	167	12.031	12.031	(1.047)	2055697	120.000	123.3
	129 Di-n-Butylphthalate	149	12.912	12.912	(1.124)	2742246	120.000	125.8
	134 Fluoranthene	202	13.836	13.836	(1.204)	2567323	120.000	122.9
	135 Benzidine	184	14.232	14.232	(0.854)	879145	120.000	121.6
	137 Pyrene	202	14.258	14.258	(0.856)	2574568	120.000	131.9
$	139 Terphenyl-d14	244	14.697	14.697	(0.882)	1998477	120.000	131.9
	145 3,3-Dimethylbenzidine	212	15.695	15.695	(0.942)	954543	120.000	123.2
	146 Butylbenzylphthalate	149	15.818	15.818	(0.949)	1007040	120.000	125.7
	150 Benzo(a)Anthracene	228	16.636	16.636	(0.998)	2088005	120.000	124.8

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2996.D
Report Date: 10-May-2005 09:41

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.662	16.662	(1.000)	479102	40.0000	
152 3,3'-Dichlorobenzidine	252	16.727	16.727	(1.004)	902708	120.000	141.3
154 Chrysene	228	16.721	16.721	(1.004)	2065002	120.000	129.6
155 bis(2-ethylhexyl)Phthalate	149	17.036	17.036	(1.022)	1289803	120.000	129.0
158 Di-n-octylphthalate	149	18.190	18.190	(0.944)	2138603	120.000	128.1
160 Benzo(b)fluoranthene	252	18.644	18.644	(0.968)	1964404	120.000	128.5
161 Benzo(k)fluoranthene	252	18.692	18.692	(0.970)	1845977	120.000	121.8
165 Benzo(a)pyrene	252	19.184	19.184	(0.996)	1722701	120.000	127.9
* 166 Perylene-d12	264	19.269	19.269	(1.000)	384316	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	21.006	21.006	(1.090)	1660507	120.000	139.4
174 Dibenzo(a,h)anthracene	278	21.059	21.059	(1.093)	1612090	120.000	139.3
177 Benzo(g,h,i)perylene	276	21.476	21.476	(1.114)	1443328	120.000	135.2

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2996.D
Report Date: 10-May-2005 09:41

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

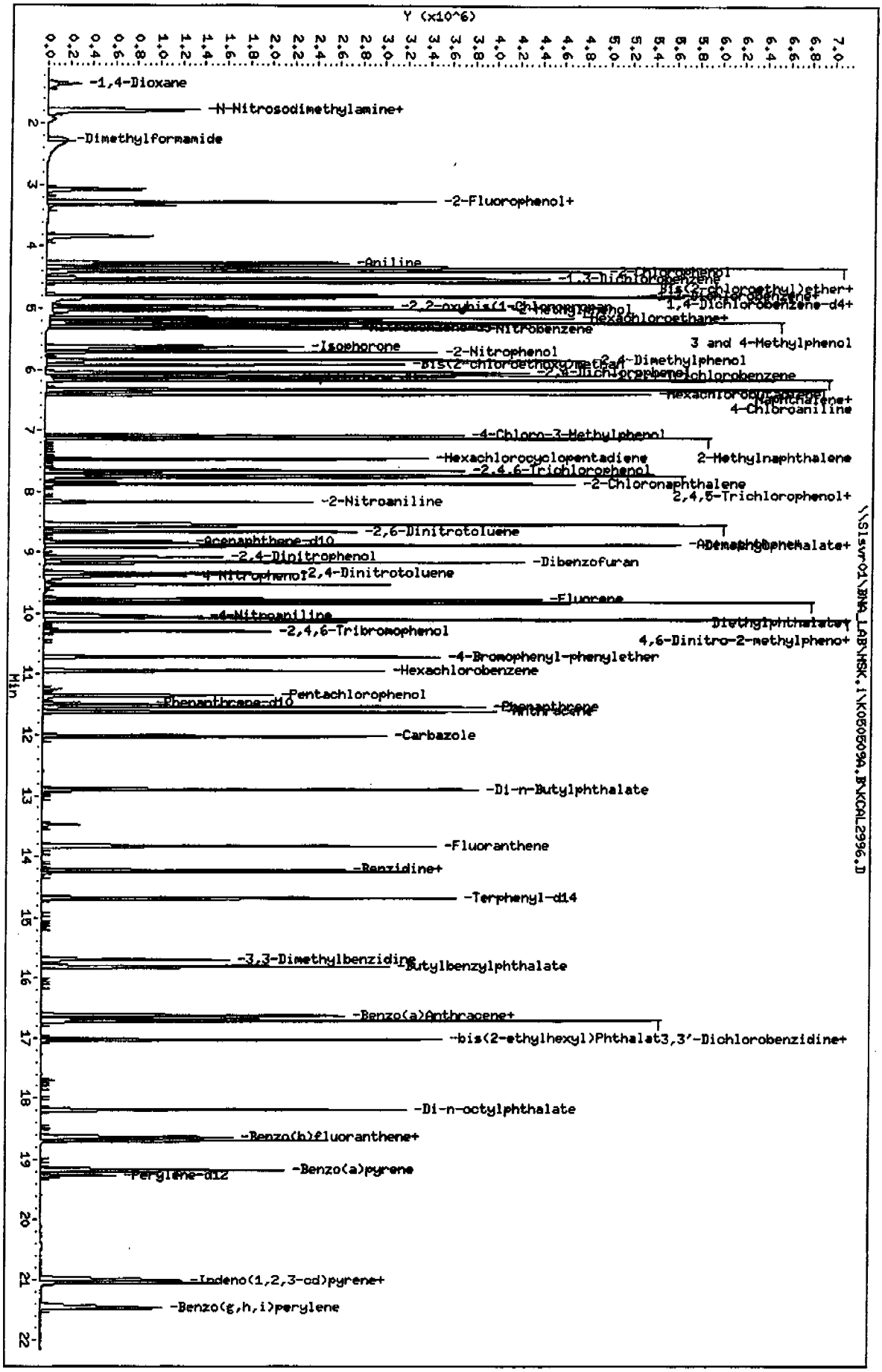
Instrument ID: MSK.i
Lab File ID: KCAL2996.D
Lab Smp Id: SSTD120
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Misc Info: SV0217-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD120
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	240310	24.33
48 Naphthalene-d8	657267	328634	1314534	791632	20.44
82 Acenaphthene-d10	351374	175687	702748	398402	13.38
121 Phenanthrene-d10	612492	306246	1224984	651890	6.43
153 Chrysene-d12	494718	247359	989436	479102	-3.16
166 Perylene-d12	409117	204559	818234	384316	-6.06

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.57	0.25
48 Naphthalene-d8	6.14	5.64	6.64	6.15	0.10
82 Acenaphthene-d10	8.83	8.33	9.33	8.83	0.01
121 Phenanthrene-d10	11.49	10.99	11.99	11.49	0.01
153 Chrysene-d12	16.66	16.16	17.16	16.66	0.04
166 Perylene-d12	19.27	18.77	19.77	19.27	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

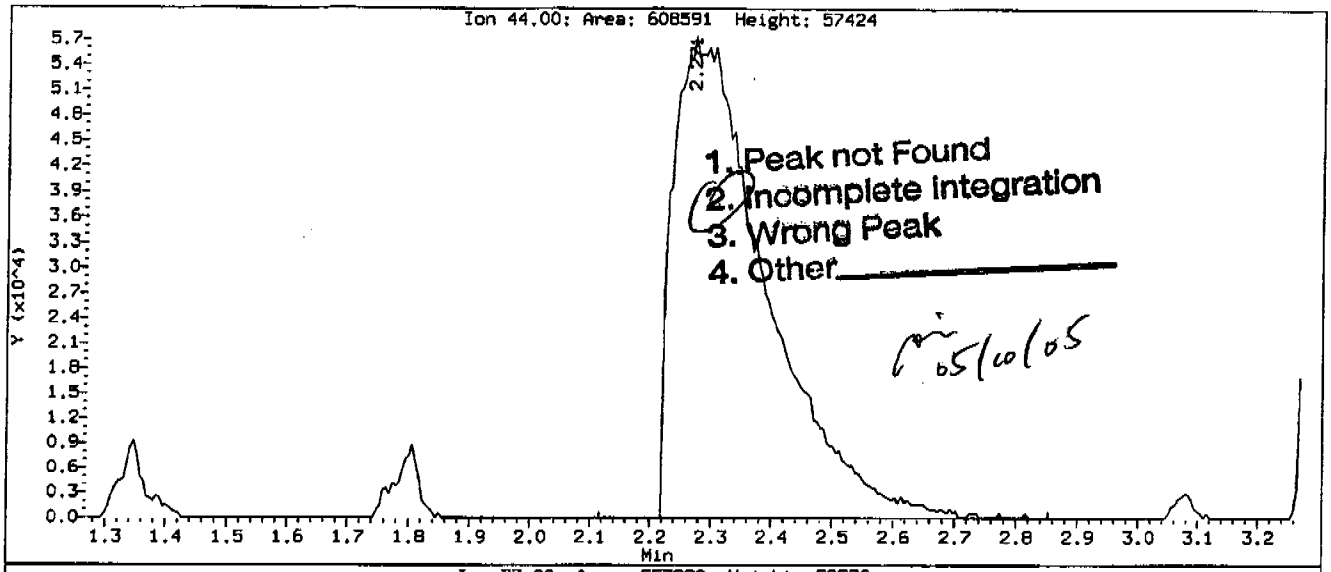


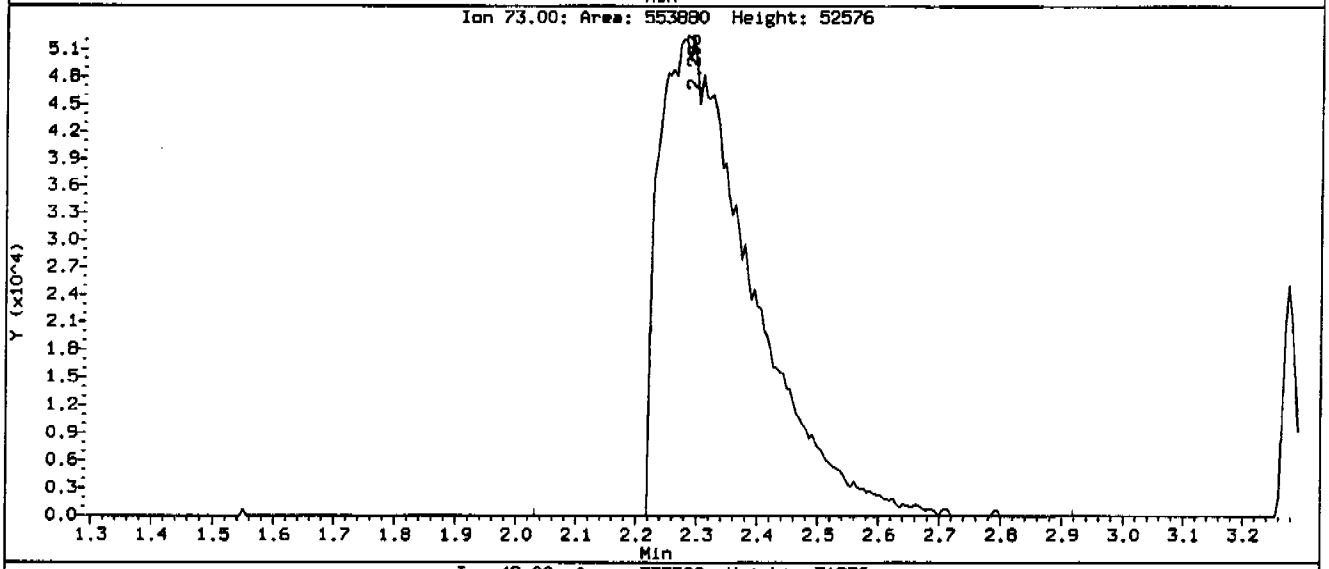
Data File: \\Slsvr01\BNA_LAB\HSK,i\K050509A,B\KCAL2996,D
Date : 09-MAY-2005 13:04
Client ID: SSTD120
Sample Info: SSTD120
Volume Injected (uL): 1.0
Column phase:

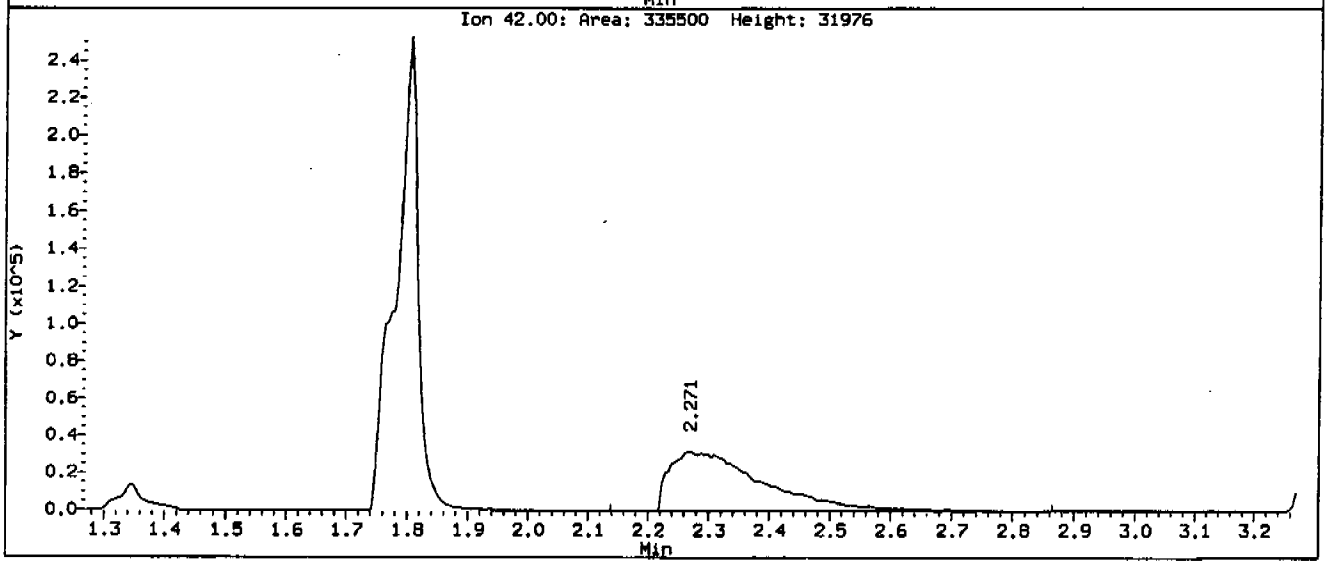
Instrument: HSK,i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2996.D
Injection Date: 09-MAY-2005 13:04
Instrument: MSK.i
Client Sample ID: SSTD120

Compound: Dimethylformamide
CAS Number: 68-12-2

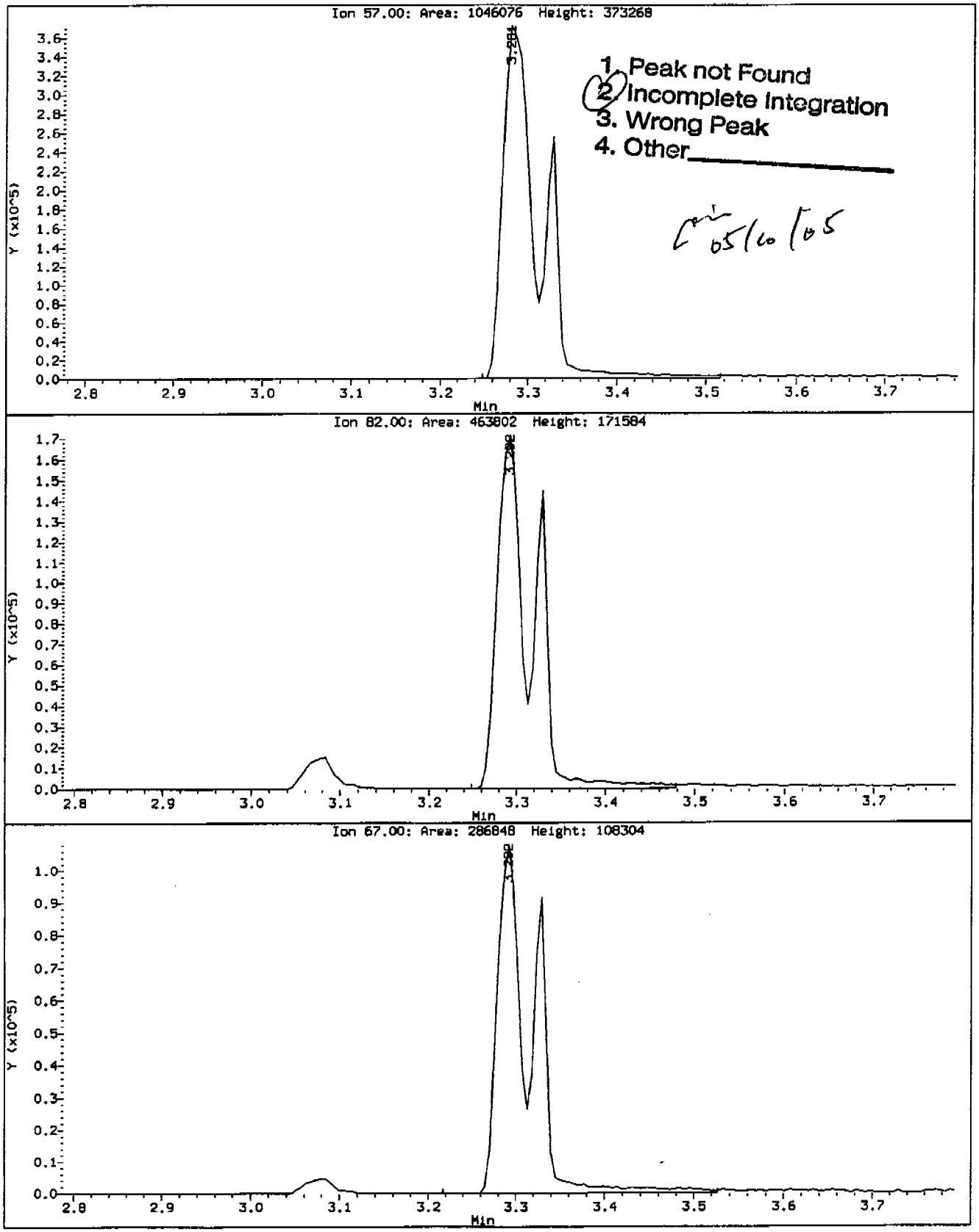






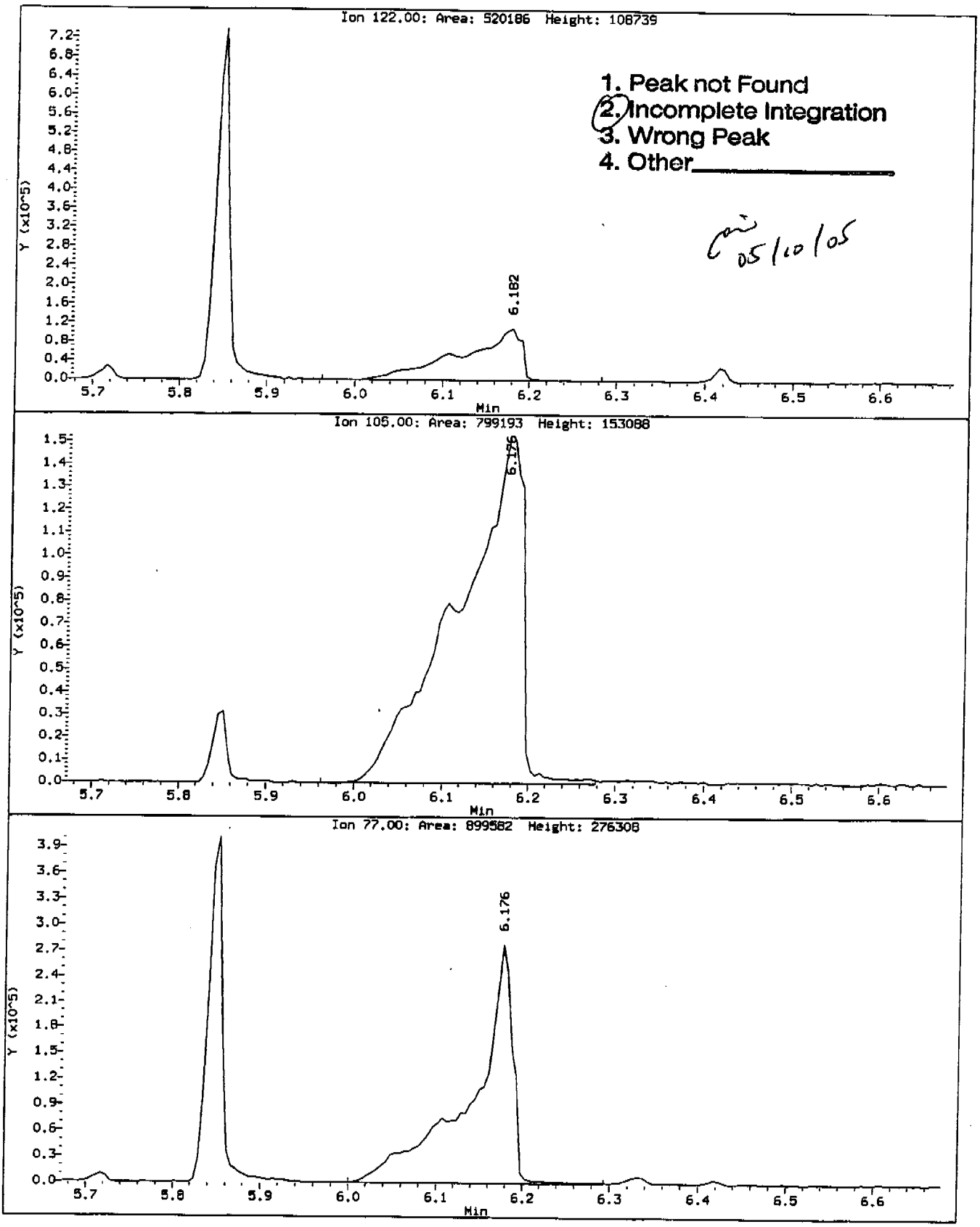
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2996.D
Injection Date: 09-MAY-2005 13:04
Instrument: MSK.i
Client Sample ID: SSTD120

Compound: Cyclohexanol
CAS Number:



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2996.D
Injection Date: 09-MAY-2005 13:04
Instrument: MSK.i
Client Sample ID: SSTD120

Compound: Benzoic Acid
CAS Number: 65-85-0



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2997.D Page 1
Report Date: 10-May-2005 09:41

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2997.D
Lab Smp Id: SSTD080 Client Smp ID: SSTD080
Inj Date : 09-MAY-2005 13:36
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD080
Misc Info : SV0216-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Meth Date : 10-May-2005 09:41 hongs Quant Type: ISTD
Cal Date : 07-MAY-2005 23:52 Cal File: KCAL2966.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 1,4-Dioxane	88	1.292	1.292	(0.284)	150283	80.0000	87.62
	4 N-Nitrosodimethylamine	74	1.725	1.725	(0.379)	271108	80.0000	81.36
	3 Pyridine	79	1.687	1.687	(0.371)	441556	80.0000	75.99
	5 Dimethylformamide	44	2.211	2.211	(0.486)	375473	80.0000	81.48(M)
$	10 2-Fluorophenol	112	3.247	3.247	(0.714)	537962	80.0000	84.48
	11 Cyclohexanol	57	3.263	3.263	(0.717)	628563	80.0000	86.94(M)
	17 Aniline	93	4.251	4.251	(0.934)	939148	80.0000	80.12
	19 Bis(2-chloroethyl)ether	93	4.326	4.326	(0.951)	695464	80.0000	83.78
$	15 Phenol-d5	99	4.321	4.321	(0.950)	757925	80.0000	83.67
	16 Phenol	94	4.337	4.337	(0.953)	822676	80.0000	82.29
	20 2-Chlorophenol	128	4.385	4.385	(0.964)	593146	80.0000	81.67
	21 1,3-Dichlorobenzene	146	4.508	4.508	(0.991)	684483	80.0000	82.53
*	22 1,4-Dichlorobenzene-d4	152	4.551	4.551	(1.000)	214171	40.0000	
	23 1,4-Dichlorobenzene	146	4.572	4.572	(1.005)	718646	80.0000	81.74
	26 1,2-Dichlorobenzene	146	4.796	4.796	(1.054)	672785	80.0000	82.35
	25 Benzyl Alcohol	108	4.812	4.812	(1.058)	277377	80.0000	77.67
	28 2,2-oxybis(1-Chloropropane)	45	4.962	4.962	(1.090)	681730	80.0000	79.57
	27 2-Methylphenol	108	5.005	5.005	(1.100)	513065	80.0000	79.49
	35 Hexachloroethane	117	5.149	5.149	(1.131)	315071	80.0000	81.79
	32 N-Nitrosodinpropylamine	70	5.154	5.154	(1.133)	540476	80.0000	79.79
	29 3 and 4-Methylphenol	108	5.208	5.208	(1.144)	1107804	160.000	160.4(A)

05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2997.D
Report Date: 10-May-2005 09:41

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.282	5.282	(0.861)	827697	80.0000	80.80
	37 Nitrobenzene	77	5.304	5.304	(0.865)	852849	80.0000	78.40
	39 Isophorone	82	5.603	5.603	(0.914)	1112366	80.0000	78.42
	40 2-Nitrophenol	139	5.699	5.699	(0.929)	313638	80.0000	82.99
	41 2,4-Dimethylphenol	107	5.833	5.833	(0.951)	662810	80.0000	82.54
	42 Bis(2-chloroethoxy)methane	93	5.907	5.907	(0.963)	730860	80.0000	80.71
	45 2,4-Dichlorophenol	162	6.036	6.036	(0.984)	476989	80.0000	80.64
	47 1,2,4-Trichlorobenzene	180	6.089	6.089	(0.993)	578366	80.0000	82.12
*	48 Naphthalene-d8	136	6.132	6.132	(1.000)	752750	40.0000	
	44 Benzoic Acid	122	6.142	6.142	(1.002)	320981	80.0000	86.47(M)
	50 Naphthalene	128	6.164	6.164	(1.005)	1712436	80.0000	80.44
	51 4-Chloroaniline	127	6.319	6.319	(1.030)	700021	80.0000	81.47
	54 Hexachlorobutadiene	225	6.404	6.404	(1.044)	401894	80.0000	82.21
	62 2-Methylnaphthalene	142	7.125	7.125	(1.162)	1199456	80.0000	78.37
	59 4-Chloro-3-Methylphenol	107	7.072	7.072	(1.153)	544849	80.0000	79.10
	66 Hexachlorocyclopentadiene	237	7.462	7.462	(0.847)	360749	80.0000	85.96
	67 2,4,6-Trichlorophenol	196	7.654	7.654	(0.868)	376888	80.0000	82.74
	68 2,4,5-Trichlorophenol	196	7.734	7.734	(0.878)	416508	80.0000	86.46
$	69 2-Fluorobiphenyl	172	7.745	7.745	(0.879)	1320142	80.0000	83.18
	72 2-Chloronaphthalene	162	7.868	7.868	(0.893)	1083887	80.0000	81.54
	73 2-Nitroaniline	65	8.167	8.167	(0.927)	457240	80.0000	80.31
	76 Dimethylphthalate	163	8.536	8.536	(0.968)	1223560	80.0000	80.26
	79 Acenaphthylene	152	8.552	8.552	(0.970)	1608365	80.0000	81.96
	80 2,6-Dinitrotoluene	165	8.648	8.648	(0.981)	263240	80.0000	80.78
*	82 Acenaphthene-d10	164	8.814	8.814	(1.000)	395102	40.0000	
	83 Acenaphthene	153	8.872	8.872	(1.007)	1004433	80.0000	81.00
	81 3-Nitroaniline	138	8.888	8.888	(1.008)	266880	80.0000	83.17
	84 2,4-Dinitrophenol	184	9.065	9.065	(1.028)	169807	80.0000	87.72
	86 Dibenzofuran	168	9.155	9.155	(1.039)	1474158	80.0000	80.41
	88 2,4-Dinitrotoluene	165	9.326	9.326	(1.058)	342909	80.0000	81.36
	85 4-Nitrophenol	109	9.369	9.369	(1.063)	236269	80.0000	83.06
	93 Diethylphthalate	149	9.802	9.802	(1.112)	1207295	80.0000	78.78
	94 Fluorene	166	9.764	9.764	(1.108)	1192761	80.0000	81.02
	95 4-Chlorophenyl-phenylether	204	9.813	9.813	(1.113)	639104	80.0000	80.65
	98 4-Nitroaniline	138	10.021	10.021	(1.137)	254791	80.0000	81.61
	99 4,6-Dinitro-2-methylphenol	198	10.069	10.069	(0.877)	256005	80.0000	92.15
	100 N-Nitrosodiphenylamine	169	10.085	10.085	(0.879)	851106	80.0000	83.39
	102 Azobenzene	77	10.101	10.101	(0.880)	1883800	80.0000	82.53
$	104 2,4,6-Tribromophenol	330	10.267	10.267	(1.165)	180419	80.0000	81.18
	109 4-Bromophenyl-phenylether	248	10.699	10.699	(0.932)	382658	80.0000	81.38
	112 Hexachlorobenzene	284	10.924	10.924	(0.952)	396201	80.0000	82.78
	117 Pentachlorophenol	266	11.335	11.335	(0.987)	238053	80.0000	89.38
*	121 Phenanthrene-d10	188	11.479	11.479	(1.000)	671617	40.0000	
	122 Phenanthrene	178	11.527	11.527	(1.004)	1680282	80.0000	80.88
	124 Anthracene	178	11.607	11.607	(1.011)	1624068	80.0000	80.84
	126 Carbazole	167	12.013	12.013	(1.047)	1372503	80.0000	79.92
	129 Di-n-Butylphthalate	149	12.895	12.895	(1.123)	1839014	80.0000	81.91
	134 Fluoranthene	202	13.819	13.819	(1.204)	1731055	80.0000	80.44
	135 Benzidine	184	14.214	14.214	(0.854)	638851	80.0000	83.36
	137 Pyrene	202	14.236	14.236	(0.855)	1720770	80.0000	83.16
$	139 Terphenyl-d14	244	14.679	14.679	(0.882)	1345965	80.0000	83.79
	145 3,3-Dimethylbenzidine	212	15.678	15.678	(0.942)	696606	80.0000	84.76
	146 Butylbenzylphthalate	149	15.801	15.801	(0.949)	697571	80.0000	82.10
	150 Benzo(a)Anthracene	228	16.613	16.613	(0.998)	1453581	80.0000	81.92

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.645	16.645	(1.000)	508021	40.0000	
152 3,3'-Dichlorobenzidine	252	16.709	16.709	(1.004)	599098	80.0000	88.45
154 Chrysene	228	16.699	16.699	(1.003)	1383746	80.0000	81.89
155 bis(2-ethylhexyl)Phthalate	149	17.024	17.024	(1.023)	879499	80.0000	82.95
158 Di-n-octylphthalate	149	18.173	18.173	(0.944)	1453848	80.0000	79.74
160 Benzo(b)fluoranthene	252	18.622	18.622	(0.967)	1352082	80.0000	81.02
161 Benzo(k)fluoranthene	252	18.670	18.670	(0.970)	1294351	80.0000	78.25
165 Benzo(a)pyrene	252	19.161	19.161	(0.995)	1222080	80.0000	83.10
* 166 Perylene-d12	264	19.252	19.252	(1.000)	419618	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.978	20.978	(1.090)	1190598	80.0000	91.53
174 Dibenzo(a,h)anthracene	278	21.026	21.026	(1.092)	1149677	80.0000	90.96
177 Benzo(g,h,i)perylene	276	21.437	21.437	(1.113)	1027037	80.0000	88.15

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2997.D Page 4
Report Date: 10-May-2005 09:41

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

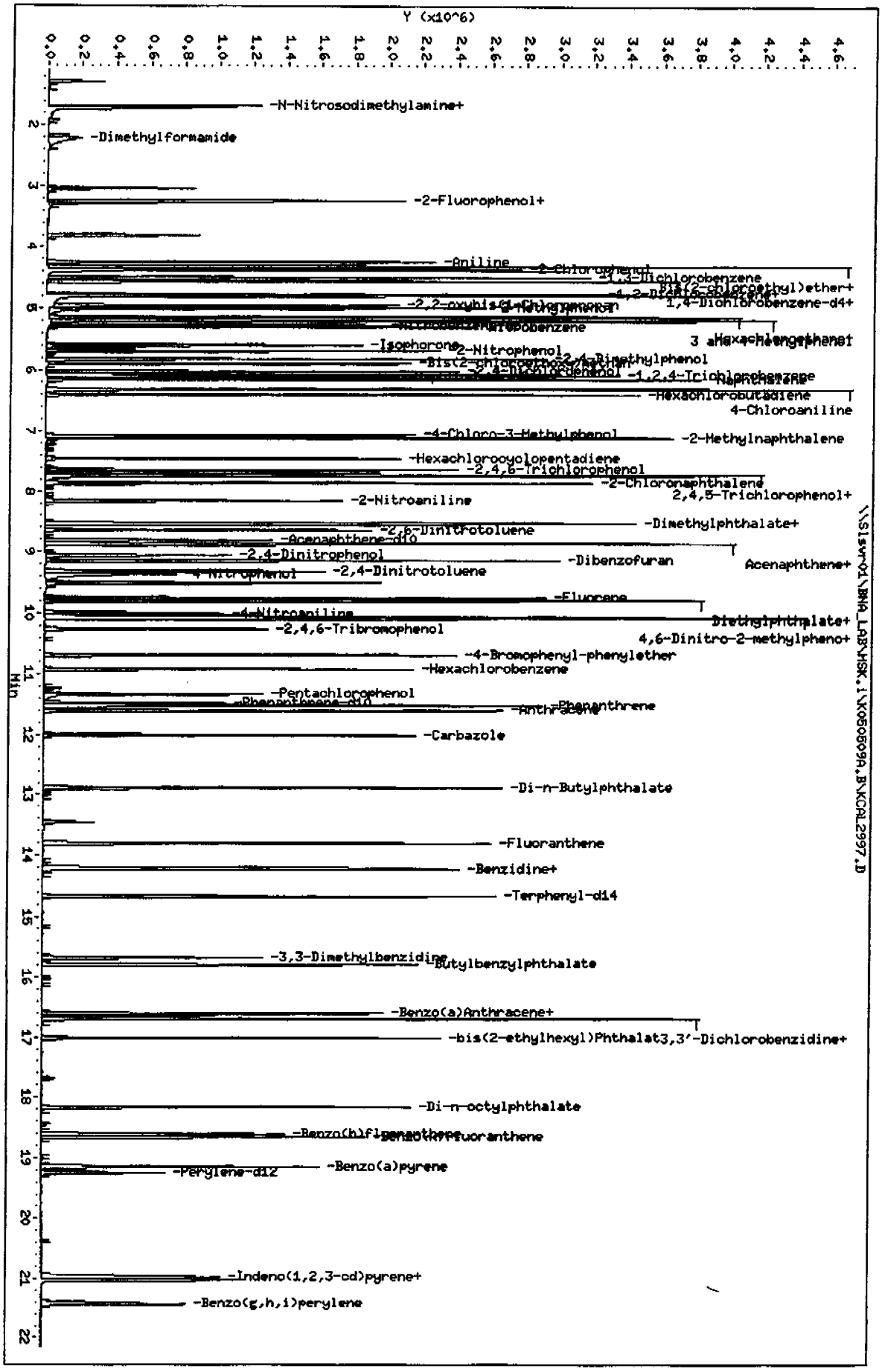
Instrument ID: MSK.i
Lab File ID: KCAL2997.D
Lab Smp Id: SSTD080
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Misc Info: SV0216-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD080
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	214171	10.81
48 Naphthalene-d8	657267	328634	1314534	752750	14.53
82 Acenaphthene-d10	351374	175687	702748	395102	12.44
121 Phenanthrene-d10	612492	306246	1224984	671617	9.65
153 Chrysene-d12	494718	247359	989436	508021	2.69
166 Perylene-d12	409117	204559	818234	419618	2.57

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.55	-0.13
48 Naphthalene-d8	6.14	5.64	6.64	6.13	-0.18
82 Acenaphthene-d10	8.83	8.33	9.33	8.81	-0.13
121 Phenanthrene-d10	11.49	10.99	11.99	11.48	-0.10
153 Chrysene-d12	16.66	16.16	17.16	16.65	-0.07
166 Perylene-d12	19.27	18.77	19.77	19.25	-0.09

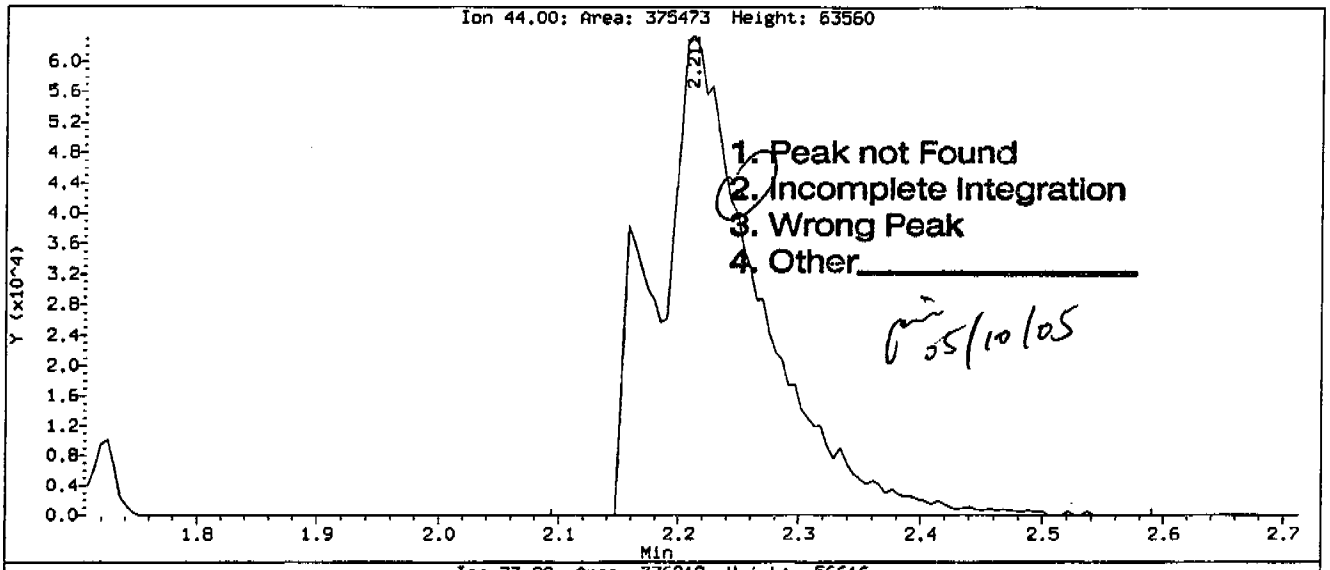
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

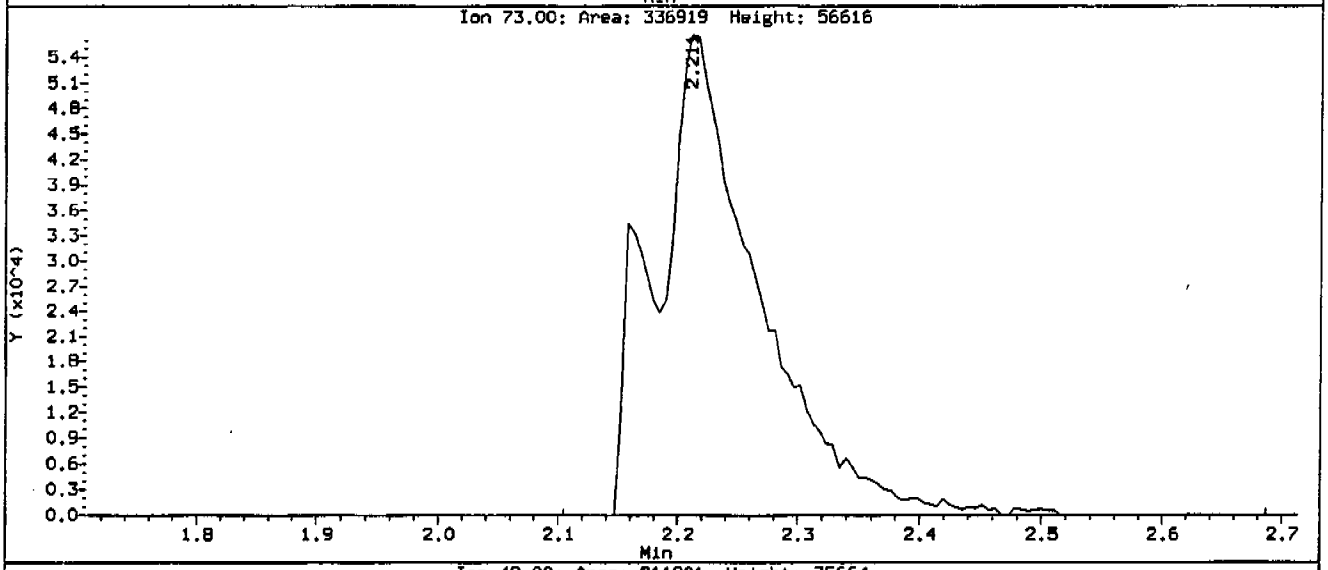


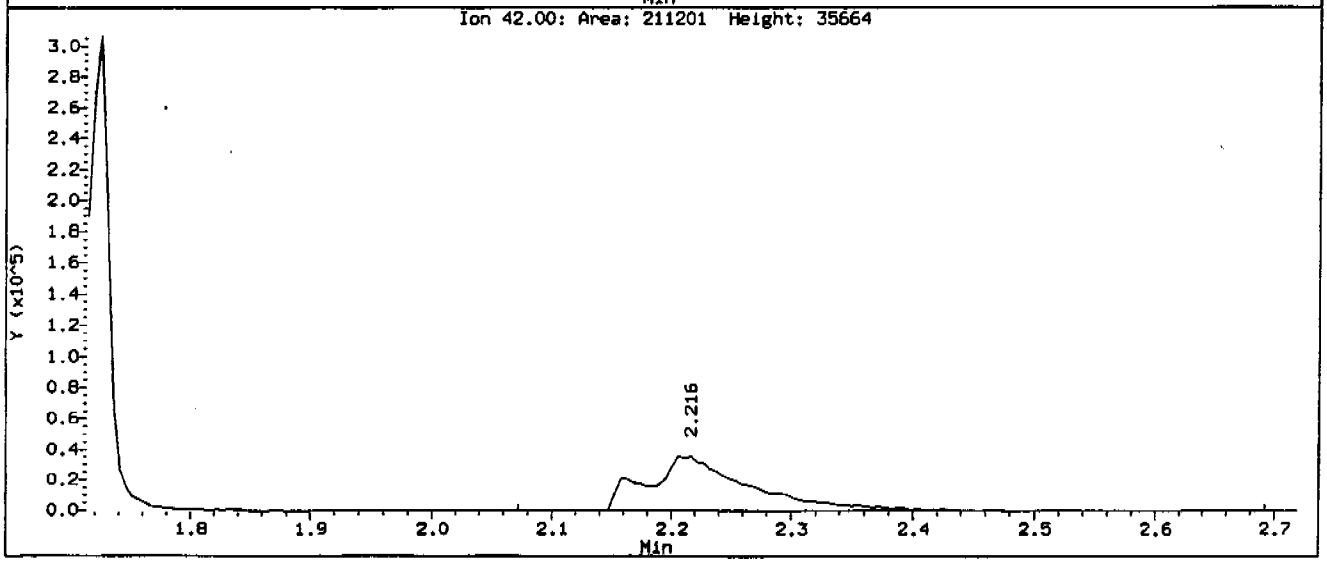
Data File: \\Slsvr01\BNA_LAB\HSK.i\K050509A.B\KCAL2997.D
Date : 09-MAY-2005 13:36
Client ID: SSTD080
Sample Info: SSTD080
Volume Injected (uL): 1.0
Column phase:
Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2997.D
Injection Date: 09-MAY-2005 13:36
Instrument: MSK.i
Client Sample ID: SSTD080

Compound: Dimethylformamide
CAS Number: 68-12-2

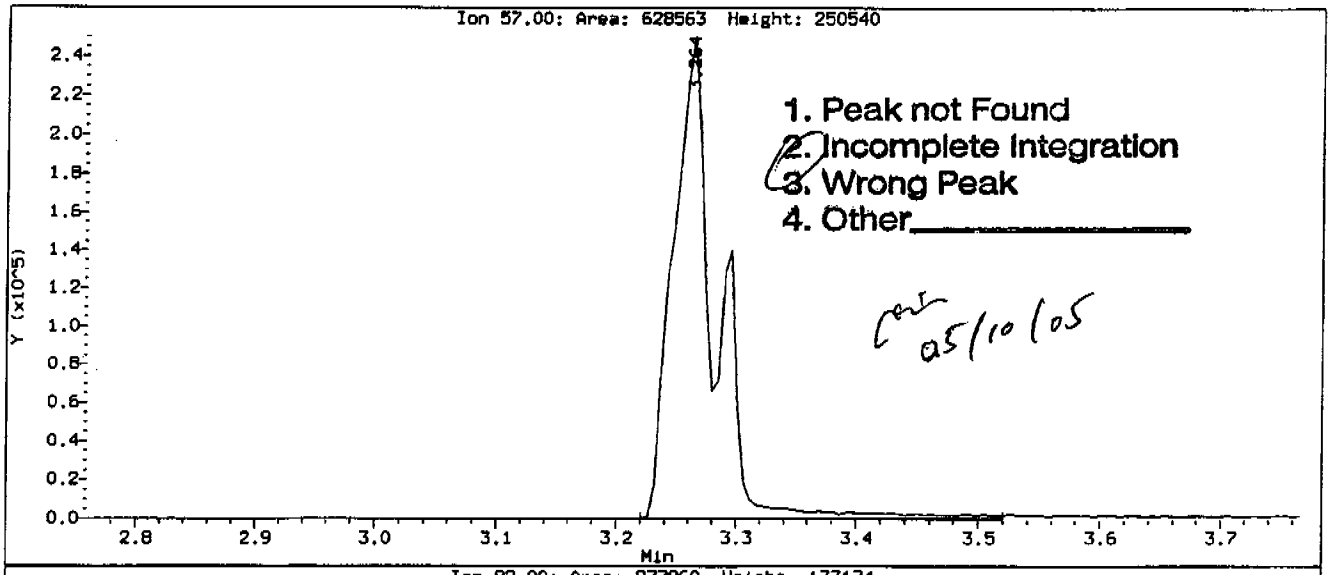






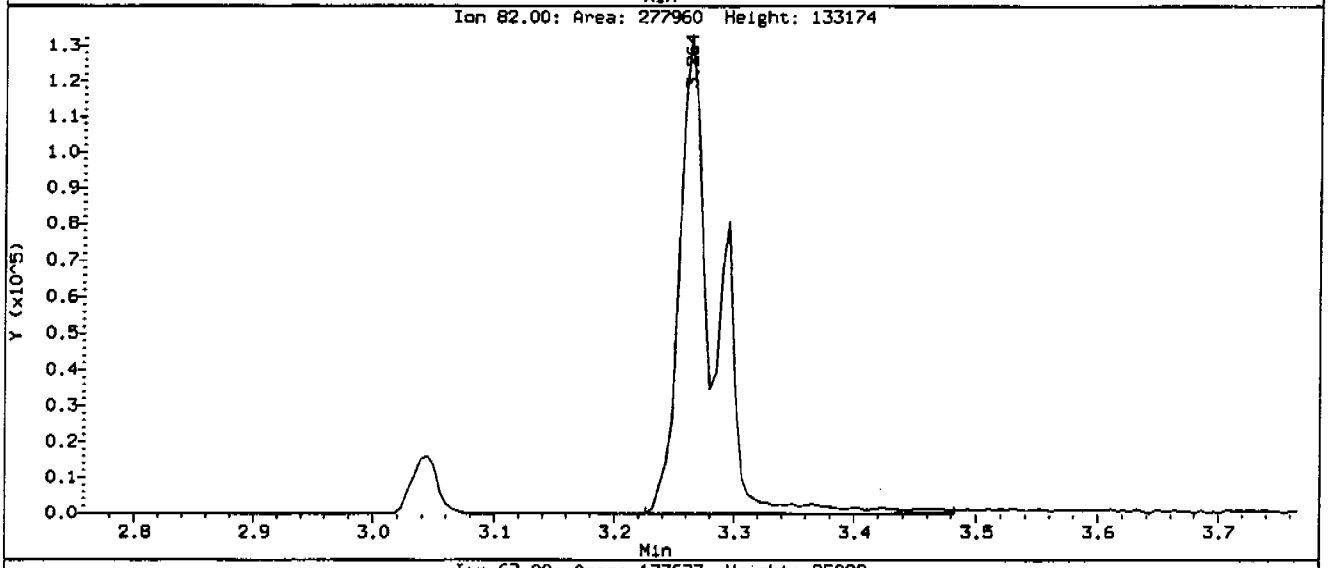
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2997.D
Injection Date: 09-MAY-2005 13:36
Instrument: MSK.i
Client Sample ID: SSTD080

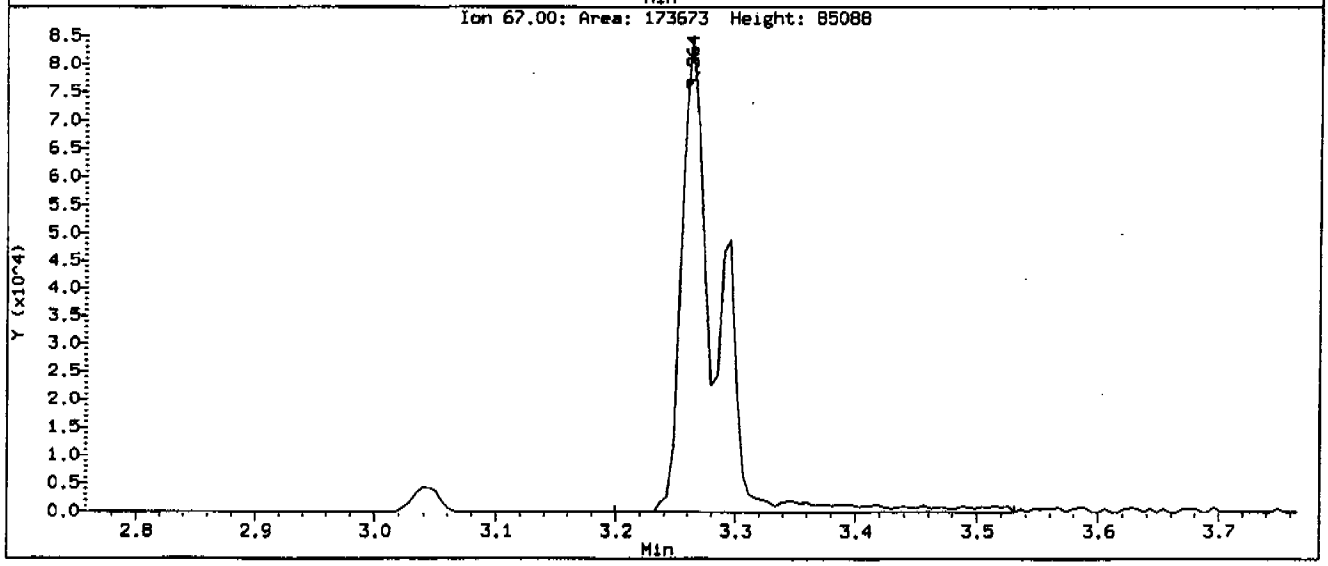
Compound: Cyclohexanol
CAS Number:



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

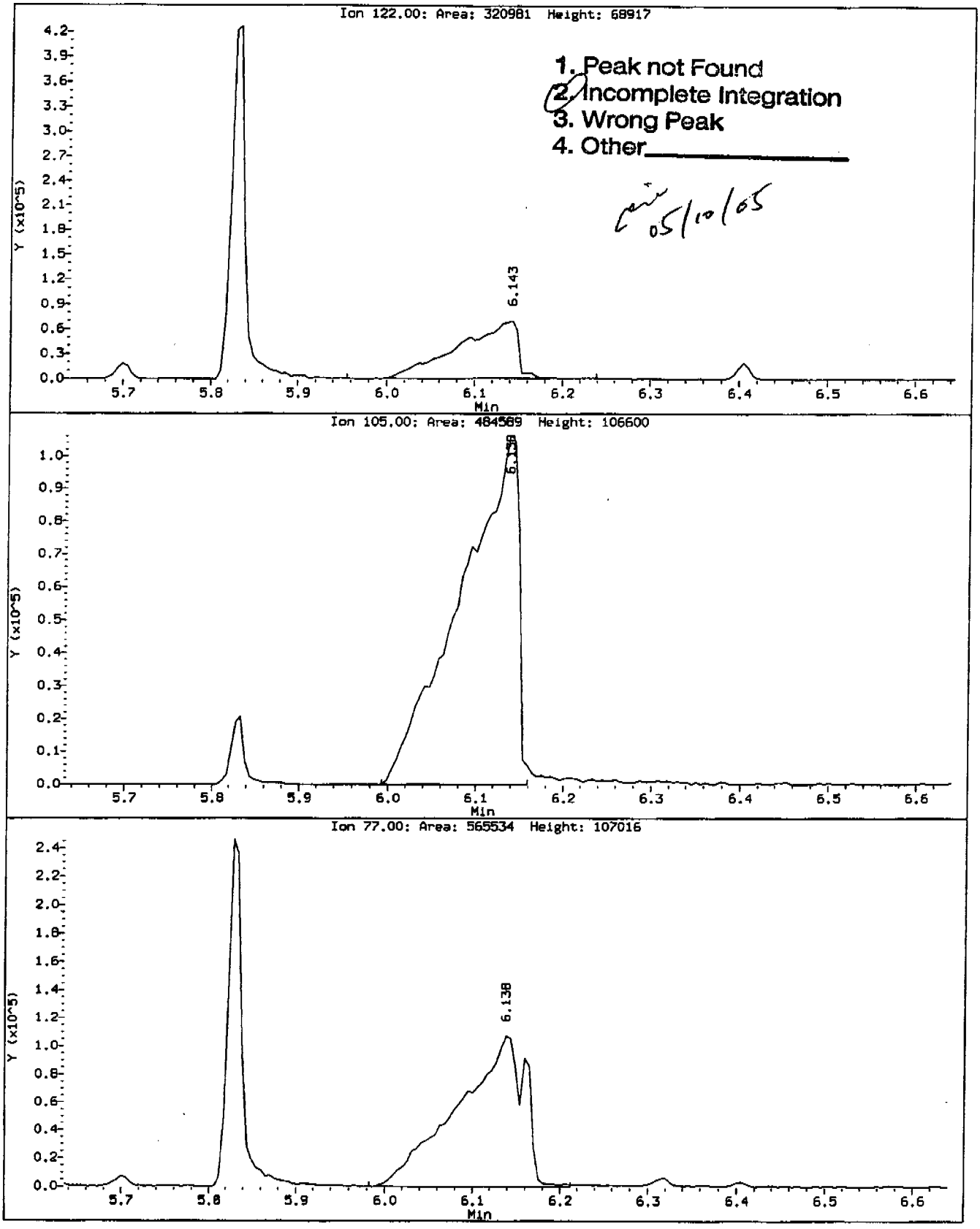
[signature] 05/10/05





Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2997.D
Injection Date: 09-MAY-2005 13:36
Instrument: MSK.i
Client Sample ID: SSTD080

Compound: Benzoic Acid
CAS Number: 65-85-0



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2998.D
Report Date: 10-May-2005 09:41

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2998.D
Lab Smp Id: SSTD020 Client Smp ID: SSTD020
Inj Date : 09-MAY-2005 14:08
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD020
Misc Info : SV0214-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Meth Date : 10-May-2005 09:41 hongs Quant Type: ISTD
Cal Date : 08-MAY-2005 00:24 Cal File: KCAL2967.D
Als bottle: 7 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 1,4-Dioxane	88	1.269	1.269	(0.279)	29079	20.0000	20.19
	4 N-Nitrosodimethylamine	74	1.691	1.691	(0.372)	58063	20.0000	20.75
	3 Pyridine	79	1.680	1.680	(0.370)	102961	20.0000	21.10(M)
	5 Dimethylformamide	44	2.134	2.134	(0.470)	78722	20.0000	20.35(M)
$	10 2-Fluorophenol	112	3.224	3.224	(0.710)	107530	20.0000	20.11
	11 Cyclohexanol	57	3.245	3.245	(0.714)	122326	20.0000	20.15
	17 Aniline	93	4.239	4.239	(0.933)	197987	20.0000	20.12
	19 Bis(2-chloroethyl)ether	93	4.314	4.314	(0.949)	131968	20.0000	18.93
$	15 Phenol-d5	99	4.308	4.308	(0.948)	148133	20.0000	19.48(a)
	16 Phenol	94	4.324	4.324	(0.952)	162288	20.0000	19.33(a)
	20 2-Chlorophenol	128	4.372	4.372	(0.962)	119090	20.0000	19.53(a)
	21 1,3-Dichlorobenzene	146	4.495	4.495	(0.989)	133896	20.0000	19.23(a)
*	22 1,4-Dichlorobenzene-d4	152	4.543	4.543	(1.000)	179829	40.0000	
	23 1,4-Dichlorobenzene	146	4.565	4.565	(1.005)	141108	20.0000	19.11(a)
	26 1,2-Dichlorobenzene	146	4.784	4.784	(1.053)	128484	20.0000	18.73
	25 Benzyl Alcohol	108	4.789	4.789	(1.054)	52348	20.0000	17.46(a)
	28 2,2-oxybis(1-Chloropropane)	45	4.955	4.955	(1.091)	143407	20.0000	19.93
	27 2-Methylphenol	108	4.997	4.997	(1.100)	104540	20.0000	19.29(a)
	35 Hexachloroethane	117	5.142	5.142	(1.132)	63058	20.0000	19.50(a)
	32 N-Nitrosodinpropylamine	70	5.131	5.131	(1.129)	113647	20.0000	19.98
	29 3 and 4-Methylphenol	108	5.190	5.190	(1.142)	225844	40.0000	38.93

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Report Date: 10-May-2005 09:41

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.270	5.270	(0.860)	176284	20.0000	19.72(a)
	37 Nitrobenzene	77	5.291	5.291	(0.864)	182487	20.0000	19.23(a)
	39 Isophorone	82	5.580	5.580	(0.911)	244054	20.0000	19.72(a)
	40 2-Nitrophenol	139	5.692	5.692	(0.929)	66222	20.0000	20.08
	41 2,4-Dimethylphenol	107	5.815	5.815	(0.949)	139592	20.0000	19.92(a)
	42 Bis(2-chloroethoxy)methane	93	5.895	5.895	(0.962)	150571	20.0000	19.06(a)
	45 2,4-Dichlorophenol	162	6.028	6.028	(0.984)	98358	20.0000	19.06(a)
	47 1,2,4-Trichlorobenzene	180	6.082	6.082	(0.993)	116052	20.0000	18.88(a)
*	48 Naphthalene-d8	136	6.125	6.125	(1.000)	656798	40.0000	
	44 Benzoic Acid	122	6.050	6.050	(0.988)	59723	20.0000	18.44
	50 Naphthalene	128	6.151	6.151	(1.004)	342835	20.0000	18.46(a)
	51 4-Chloroaniline	127	6.301	6.301	(1.029)	139735	20.0000	18.64(a)
	54 Hexachlorobutadiene	225	6.402	6.402	(1.045)	80479	20.0000	18.87(a)
	62 2-Methylnaphthalene	142	7.113	7.113	(1.161)	257037	20.0000	19.25
	59 4-Chloro-3-Methylphenol	107	7.075	7.075	(1.155)	115826	20.0000	19.27(a)
	66 Hexachlorocyclopentadiene	237	7.460	7.460	(0.847)	63417	20.0000	16.50(a)
	67 2,4,6-Trichlorophenol	196	7.647	7.647	(0.868)	78242	20.0000	18.76(a)
	68 2,4,5-Trichlorophenol	196	7.738	7.738	(0.879)	82243	20.0000	18.64(a)
$	69 2-Fluorobiphenyl	172	7.733	7.733	(0.878)	264688	20.0000	18.21(a)
	72 2-Chloronaphthalene	162	7.855	7.855	(0.892)	225879	20.0000	18.56(a)
	73 2-Nitroaniline	65	8.149	8.149	(0.925)	103471	20.0000	19.85(a)
	76 Dimethylphthalate	163	8.518	8.518	(0.967)	258723	20.0000	18.53(a)
	79 Acenaphthylene	152	8.539	8.539	(0.970)	331641	20.0000	18.46(a)
	80 2,6-Dinitrotoluene	165	8.630	8.630	(0.980)	57534	20.0000	19.28(a)
*	82 Acenaphthene-d10	164	8.806	8.806	(1.000)	361789	40.0000	
	83 Acenaphthene	153	8.860	8.860	(1.006)	211003	20.0000	18.58(a)
	81 3-Nitroaniline	138	8.865	8.865	(1.007)	57825	20.0000	19.68
	84 2,4-Dinitrophenol	184	9.052	9.052	(1.028)	27942	20.0000	15.76(a)
	86 Dibenzofuran	168	9.143	9.143	(1.038)	318454	20.0000	18.97(a)
	88 2,4-Dinitrotoluene	165	9.309	9.309	(1.057)	76696	20.0000	19.87(a)
	85 4-Nitrophenol	109	9.373	9.373	(1.064)	47204	20.0000	18.12
	93 Diethylphthalate	149	9.773	9.773	(1.110)	261563	20.0000	18.64(a)
	94 Fluorene	166	9.752	9.752	(1.107)	253062	20.0000	18.77(a)
	95 4-Chlorophenyl-phenylether	204	9.805	9.805	(1.113)	134085	20.0000	18.48(a)
	98 4-Nitroaniline	138	9.976	9.976	(1.133)	56723	20.0000	19.84(a)
	99 4,6-Dinitro-2-methylphenol	198	10.035	10.035	(0.875)	51467	20.0000	19.56(a)
	100 N-Nitrosodiphenylamine	169	10.062	10.062	(0.877)	177010	20.0000	18.31(a)
	102 Azobenzene	77	10.083	10.083	(0.879)	398707	20.0000	18.44(a)
$	104 2,4,6-Tribromophenol	330	10.254	10.254	(1.164)	38392	20.0000	18.86(a)
	109 4-Bromophenyl-phenylether	248	10.687	10.687	(0.932)	85013	20.0000	19.09(a)
	112 Hexachlorobenzene	284	10.911	10.911	(0.951)	85884	20.0000	18.94(a)
	117 Pentachlorophenol	266	11.322	11.322	(0.987)	42051	20.0000	16.67(a)
*	121 Phenanthrene-d10	188	11.472	11.472	(1.000)	636100	40.0000	
	122 Phenanthrene	178	11.509	11.509	(1.003)	371481	20.0000	18.88(a)
	124 Anthracene	178	11.590	11.590	(1.010)	364721	20.0000	19.17(a)
	126 Carbazole	167	11.996	11.996	(1.046)	313486	20.0000	19.27(a)
	129 Di-n-Butylphthalate	149	12.882	12.882	(1.123)	412990	20.0000	19.42(a)
	134 Fluoranthene	202	13.801	13.801	(1.203)	394716	20.0000	19.37(a)
	135 Benzidine	184	14.202	14.202	(0.854)	163298	20.0000	20.67
	137 Pyrene	202	14.218	14.218	(0.855)	398526	20.0000	18.68(a)
$	139 Terphenyl-d14	244	14.667	14.667	(0.882)	311279	20.0000	18.80(a)
	145 3,3-Dimethylbenzidine	212	15.666	15.666	(0.942)	173839	20.0000	20.52
	146 Butylbenzylphthalate	149	15.789	15.789	(0.949)	170482	20.0000	19.46(a)
	150 Benzo(a)Anthracene	228	16.601	16.601	(0.998)	351106	20.0000	19.19(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.638	16.638	(1.000)	523735	40.0000	
152 3,3'-Dichlorobenzidine	252	16.697	16.697	(1.004)	132894	20.0000	19.03(a)
154 Chrysene	228	16.681	16.681	(1.003)	327346	20.0000	18.79(a)
155 bis(2-ethylhexyl)Phthalate	149	17.017	17.017	(1.023)	208965	20.0000	19.12(a)
158 Di-n-octylphthalate	149	18.160	18.160	(0.944)	352302	20.0000	18.65(a)
160 Benzo(b)fluoranthene	252	18.604	18.604	(0.967)	317363	20.0000	18.36(a)
161 Benzo(k)fluoranthene	252	18.641	18.641	(0.969)	326532	20.0000	19.06(a)
165 Benzo(a)pyrene	252	19.138	19.138	(0.994)	294915	20.0000	19.36(a)
* 166 Perylene-d12	264	19.245	19.245	(1.000)	434641	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.949	20.949	(1.089)	254686	20.0000	18.90(a)
174 Dibenzo(a,h)anthracene	278	20.997	20.997	(1.091)	255631	20.0000	19.53(a)
177 Benzo(g,h,i)perylene	276	21.398	21.398	(1.112)	235233	20.0000	19.49(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2998.D Page 4
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STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

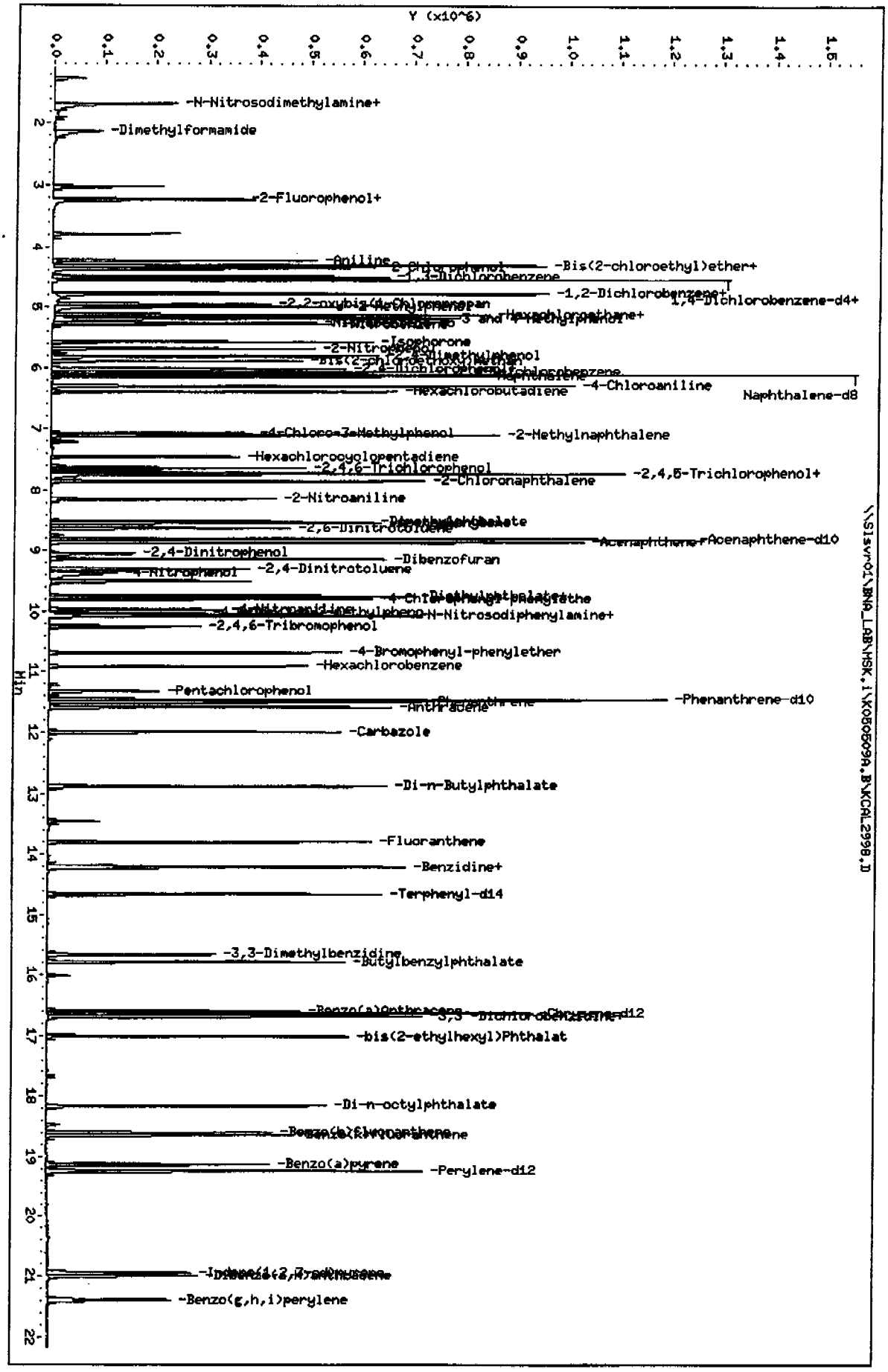
Instrument ID: MSK.i
Lab File ID: KCAL2998.D
Lab Smp Id: SSTD020
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Misc Info: SV0214-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD020
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	179829	-6.96
48 Naphthalene-d8	657267	328634	1314534	656798	-0.07
82 Acenaphthene-d10	351374	175687	702748	361789	2.96
121 Phenanthrene-d10	612492	306246	1224984	636100	3.85
153 Chrysene-d12	494718	247359	989436	523735	5.87
166 Perylene-d12	409117	204559	818234	434641	6.24

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.54	-0.29
48 Naphthalene-d8	6.14	5.64	6.64	6.13	-0.30
82 Acenaphthene-d10	8.83	8.33	9.33	8.81	-0.21
121 Phenanthrene-d10	11.49	10.99	11.99	11.47	-0.16
153 Chrysene-d12	16.66	16.16	17.16	16.64	-0.11
166 Perylene-d12	19.27	18.77	19.77	19.25	-0.12

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.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0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
Min
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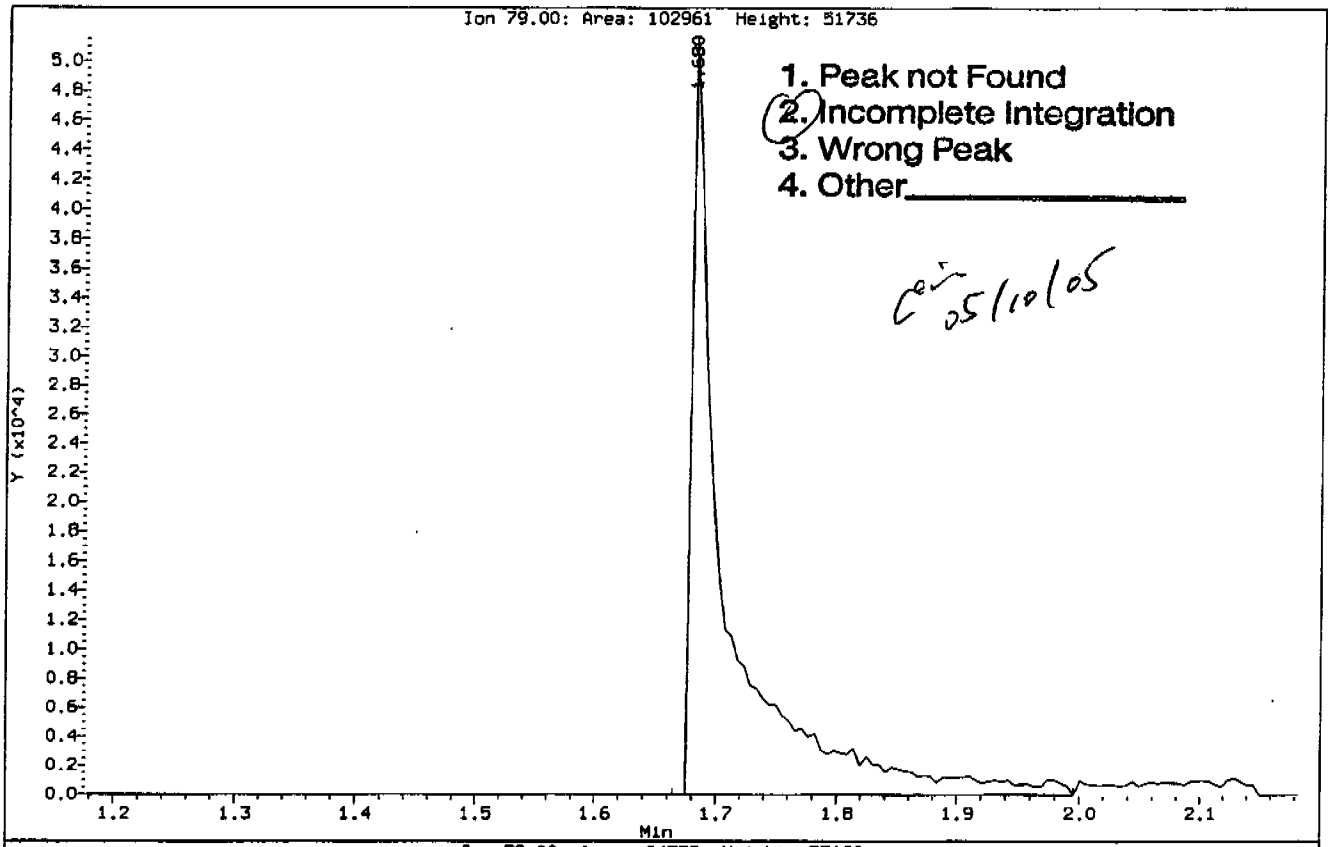
20
21
22
-N-Nitrosodimethylamine+
-Dimethylformamide
-2-Fluorophenol+
-Aniline
-Bis(2-chloroethyl)ether+
-1,2-Dichlorobenzene+
1,4-Dichlorobenzene-d4+
-Isophorone
-2-Nitrophenol
-Naphthalene
-4-Chloroaniline
Naphthalene-d8
-Hexachlorobutadiene
-2-Methylnaphthalene
-Hexachlorocyclopentadiene
-2,4,6-Trichlorophenol
-2,4,5-Trichlorophenol+
-2-Chloronaphthalene
-2-Nitroaniline
-2,6-Dinitrotoluene
-Acenaphthene
Acenaphthene-d10
-2,4-Dinitrophenol
-Dibenzofuran
-4-Nitrophenol
-2,4-Dinitrotoluene
-N-Nitrosodiphenylamine+
-2,4,6-Tribromophenol
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Pentachlorophenol
-Phenanthrene-d10
-Anthracene
-Carbazole
-Di-n-Butylphthalate
-Fluoranthene
-Benzidine+
-Terphenyl-d14
-3,3-Dimethylbenzidine
-Butylbenzylphthalate
-bis(2-ethylhexyl)Phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(a)pyrene
-Perylene-d12
-Indeno(1,2,3-cd)Pyrene
-Benzo(g,h,i)perylene
\\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2998.D
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2998.D
Date : 09-MAY-2005 14:08
Client ID: SSTD020
Sample Info: SSTD020
Volume Injected (uL): 1.0
Column phase:
Instrument: MSK.i
Operator: XIA
Column diameter: 2.00
Page 5

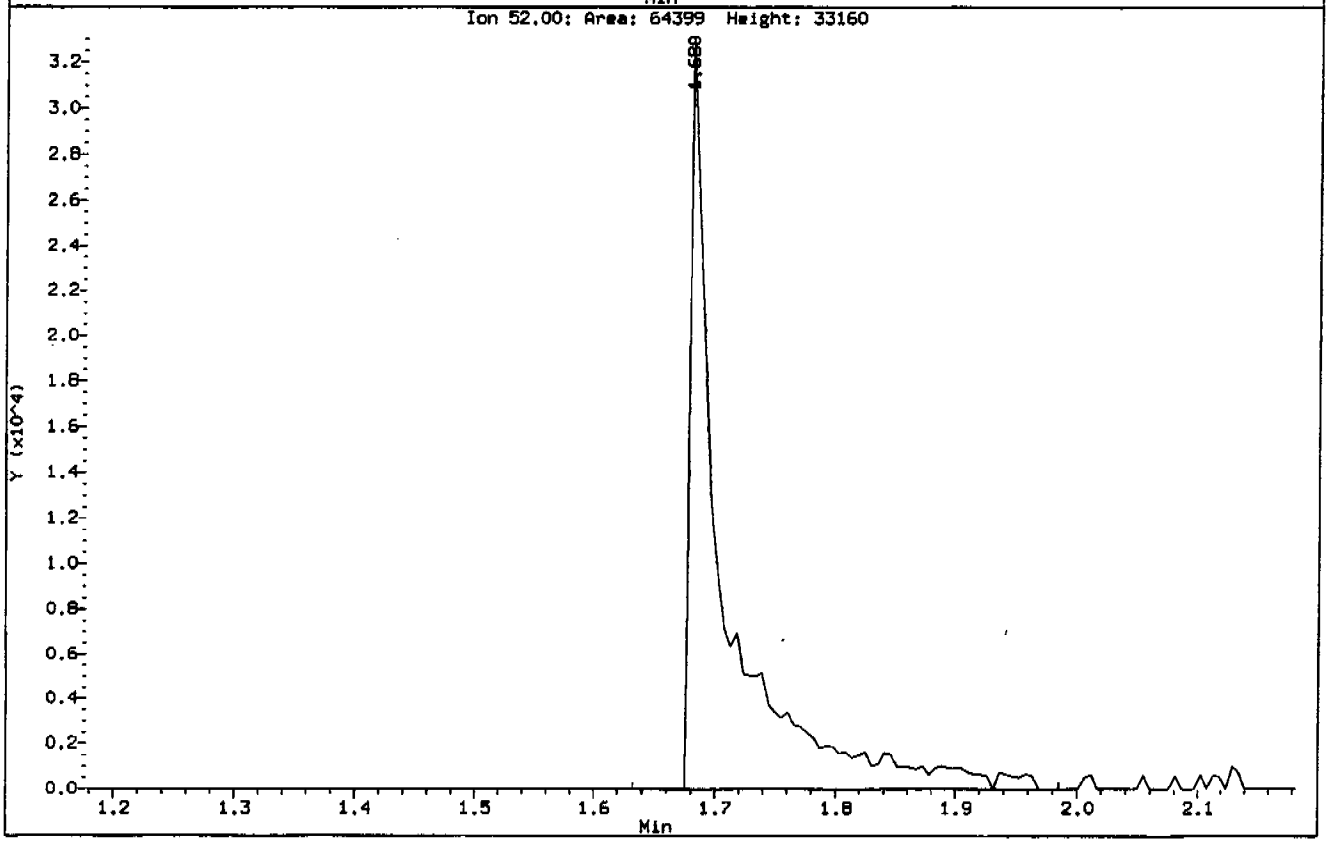
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2998.D
Injection Date: 09-MAY-2005 14:08
Instrument: MSK.i
Client Sample ID: SSTD020

Compound: Pyridine
CAS Number: 110-86-1



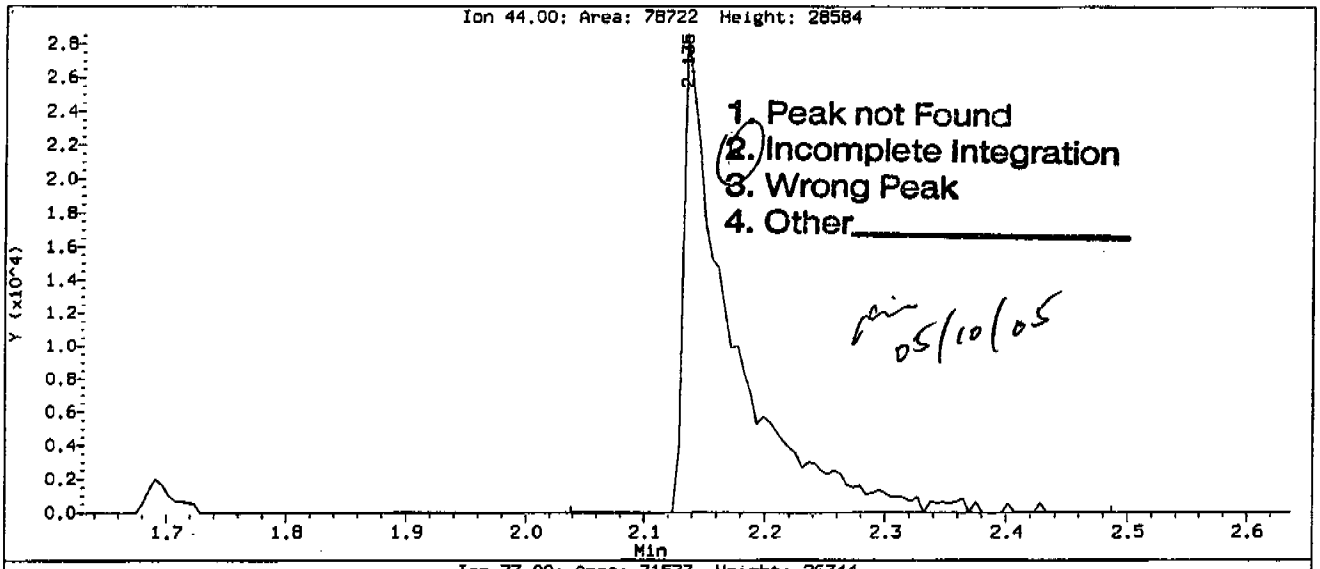
1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

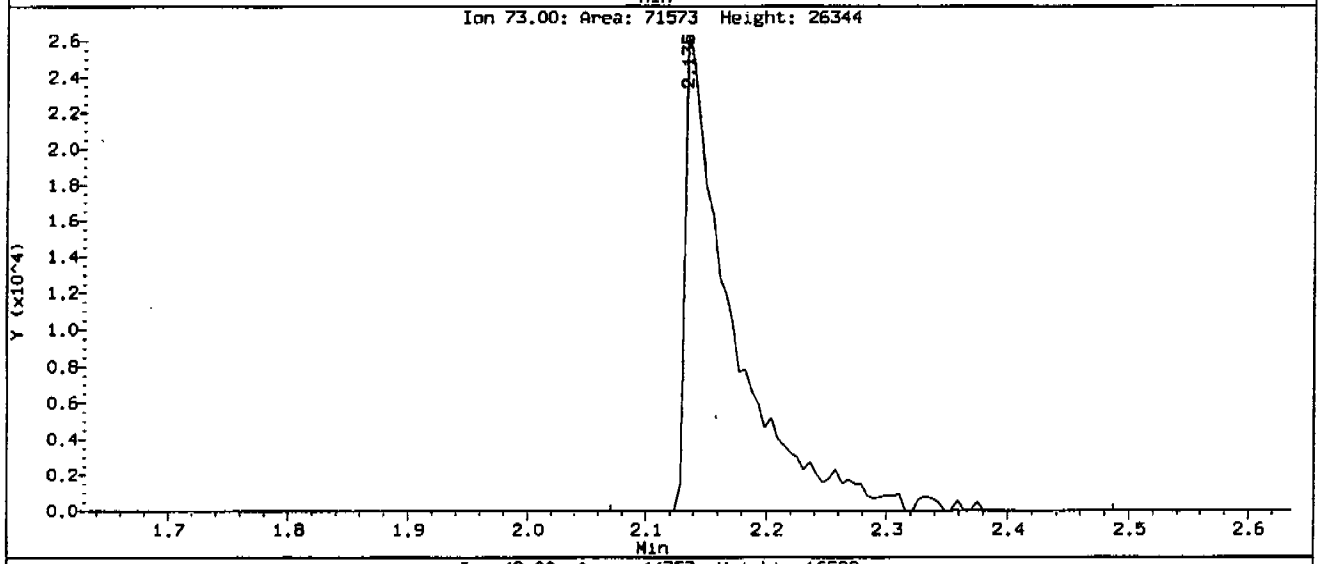
CEV 05/10/05

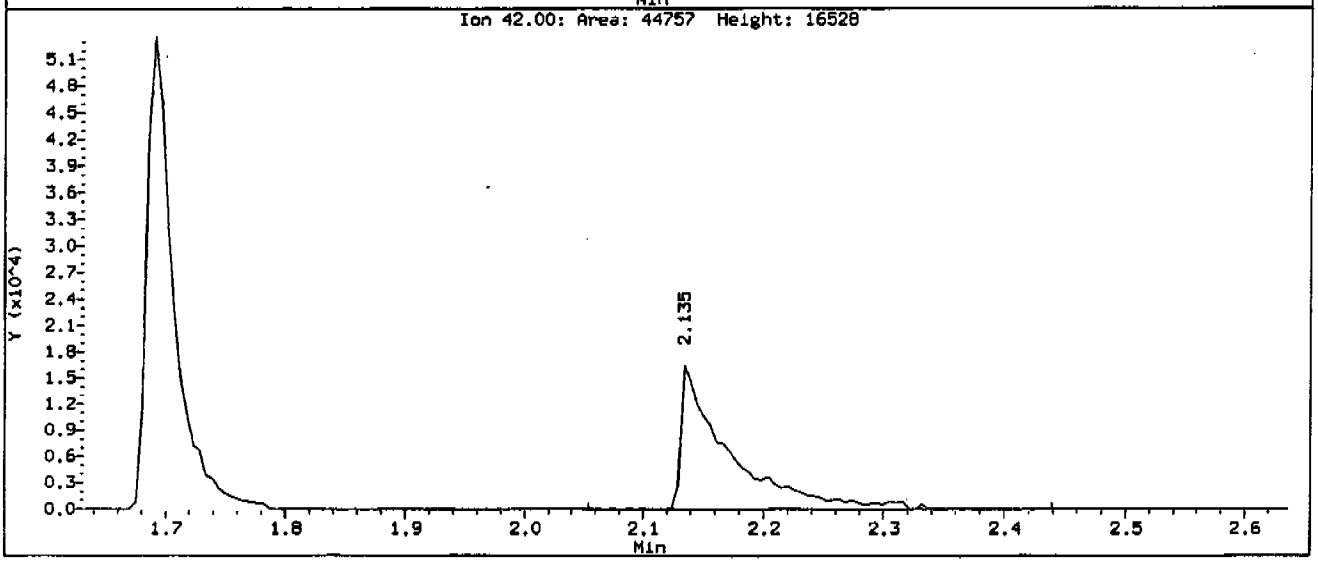


Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2998.D
Injection Date: 09-MAY-2005 14:08
Instrument: MSK.i
Client Sample ID: SSTD020

Compound: Dimethylformamide
CAS Number: 68-12-2







Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2999.D Page 1
Report Date: 10-May-2005 09:41

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2999.D
Lab Smp Id: SSTD010 Client Smp ID: SSTD010
Inj Date : 09-MAY-2005 14:40
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD010
Misc Info : SV0213-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Meth Date : 10-May-2005 09:41 hongs Quant Type: ISTD
Cal Date : 08-MAY-2005 00:55 Cal File: KCAL2968.D
Als bottle: 8 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 1,4-Dioxane	88	1.282	1.282	(0.282)	13457	10.0000	10.56
	4 N-Nitrosodimethylamine	74	1.704	1.704	(0.375)	26519	10.0000	10.71(a)
	3 Pyridine	79	1.720	1.720	(0.379)	44549	10.0000	10.32(M)
	5 Dimethylformamide	44	2.158	2.158	(0.475)	38436	10.0000	11.22(aM)
$	10 2-Fluorophenol	112	3.227	3.227	(0.711)	47361	10.0000	10.01(a)
	11 Cyclohexanol	57	3.243	3.243	(0.714)	50841	10.0000	9.461(a)
	17 Aniline	93	4.236	4.236	(0.933)	89506	10.0000	10.27
	19 Bis(2-chloroethyl)ether	93	4.311	4.311	(0.949)	58704	10.0000	9.515(a)
$	15 Phenol-d5	99	4.311	4.311	(0.949)	66054	10.0000	9.811(a)
	16 Phenol	94	4.322	4.322	(0.952)	71919	10.0000	9.680(a)
	20 2-Chlorophenol	128	4.370	4.370	(0.962)	51773	10.0000	9.591(a)
	21 1,3-Dichlorobenzene	146	4.493	4.493	(0.989)	58403	10.0000	9.474(a)
*	22 1,4-Dichlorobenzene-d4	152	4.541	4.541	(1.000)	159178	40.0000	
	23 1,4-Dichlorobenzene	146	4.562	4.562	(1.005)	61909	10.0000	9.474(a)
	26 1,2-Dichlorobenzene	146	4.781	4.781	(1.053)	56524	10.0000	9.309(a)
	25 Benzyl Alcohol	108	4.786	4.786	(1.054)	19550	10.0000	7.366(a)
	28 2,2-oxybis(1-Chloropropane)	45	4.952	4.952	(1.091)	63670	10.0000	9.999(a)
	27 2-Methylphenol	108	4.995	4.995	(1.100)	46746	10.0000	9.745(a)
	35 Hexachloroethane	117	5.139	5.139	(1.132)	27532	10.0000	9.616(a)
	32 N-Nitrosodinpropylamine	70	5.123	5.123	(1.128)	52784	10.0000	10.48
	29 3 and 4-Methylphenol	108	5.182	5.182	(1.141)	100947	20.0000	19.66

05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2999.D
Report Date: 10-May-2005 09:41

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.262	5.262	(0.860)	79356	10.0000	9.941(a)
	37 Nitrobenzene	77	5.283	5.283	(0.863)	84029	10.0000	9.913(a)
	39 Isophorone	82	5.572	5.572	(0.910)	115786	10.0000	10.48(a)
	40 2-Nitrophenol	139	5.689	5.689	(0.929)	28132	10.0000	9.554(a)
	41 2,4-Dimethylphenol	107	5.812	5.812	(0.949)	55487	10.0000	8.867(a)
	42 Bis(2-chloroethoxy)methane	93	5.892	5.892	(0.962)	70633	10.0000	10.01(a)
	45 2,4-Dichlorophenol	162	6.026	6.026	(0.984)	44702	10.0000	9.699(a)
	47 1,2,4-Trichlorobenzene	180	6.079	6.079	(0.993)	52416	10.0000	9.551(a)
*	48 Naphthalene-d8.	136	6.122	6.122	(1.000)	586546	40.0000	
	44 Benzoic Acid	122	6.020	6.020	(0.983)	21905	10.0000	7.573(a)
	50 Naphthalene	128	6.143	6.143	(1.003)	151887	10.0000	9.157(a)
	51 4-Chloroaniline	127	6.298	6.298	(1.029)	64193	10.0000	9.588(a)
	54 Hexachlorobutadiene	225	6.394	6.394	(1.044)	35607	10.0000	9.347(a)
	62 2-Methylnaphthalene	142	7.110	7.110	(1.161)	112957	10.0000	9.471(a)
	59 4-Chloro-3-Methylphenol	107	7.073	7.073	(1.155)	55447	10.0000	10.33(a)
	66 Hexachlorocyclopentadiene	237	7.452	7.452	(0.846)	24292	10.0000	6.845(a)
	67 2,4,6-Trichlorophenol	196	7.639	7.639	(0.868)	35765	10.0000	9.285(a)
	68 2,4,5-Trichlorophenol	196	7.735	7.735	(0.879)	36396	10.0000	8.934(a)
$	69 2-Fluorobiphenyl	172	7.730	7.730	(0.878)	119684	10.0000	8.917(a)
	72 2-Chloronaphthalene	162	7.847	7.847	(0.891)	104772	10.0000	9.321(a)
	73 2-Nitroaniline	65	8.141	8.141	(0.925)	49659	10.0000	10.31(a)
	76 Dimethylphthalate	163	8.510	8.510	(0.967)	125626	10.0000	9.745(a)
	79 Acenaphthylene	152	8.531	8.531	(0.969)	154824	10.0000	9.329(a)
	80 2,6-Dinitrotoluene	165	8.622	8.622	(0.979)	27100	10.0000	9.833(a)
*	82 Acenaphthene-d10	164	8.804	8.804	(1.000)	334123	40.0000	
	83 Acenaphthene	153	8.852	8.852	(1.005)	99331	10.0000	9.473(a)
	81 3-Nitroaniline	138	8.857	8.857	(1.006)	26125	10.0000	9.627(a)
	84 2,4-Dinitrophenol	184	9.044	9.044	(1.027)	11228	10.0000	6.858(a)
	86 Dibenzofuran	168	9.135	9.135	(1.038)	146981	10.0000	9.480(a)
	88 2,4-Dinitrotoluene	165	9.301	9.301	(1.056)	34603	10.0000	9.708(a)
	85 4-Nitrophenol	109	9.381	9.381	(1.066)	23422	10.0000	9.736(aM)
	93 Diethylphthalate	149	9.765	9.765	(1.109)	126619	10.0000	9.770(a)
	94 Fluorene	166	9.744	9.744	(1.107)	120426	10.0000	9.673(a)
	95 4-Chlorophenyl-phenylether	204	9.797	9.797	(1.113)	64951	10.0000	9.692(a)
	98 4-Nitroaniline	138	9.958	9.958	(1.131)	26850	10.0000	10.17(a)
	99 4,6-Dinitro-2-methylphenol	198	10.027	10.027	(0.875)	22033	10.0000	8.652(a)
	100 N-Nitrosodiphenylamine	169	10.054	10.054	(0.877)	84023	10.0000	8.981(a)
	102 Azobenzene	77	10.075	10.075	(0.879)	193002	10.0000	9.224(a)
$	104 2,4,6-Tribromophenol	330	10.246	10.246	(1.164)	18607	10.0000	9.900(a)
	109 4-Bromophenyl-phenylether	248	10.684	10.684	(0.932)	39916	10.0000	9.260(a)
	112 Hexachlorobenzene	284	10.903	10.903	(0.951)	42322	10.0000	9.646(a)
	117 Pentachlorophenol	266	11.315	11.315	(0.987)	15331	10.0000	6.279(a)
*	121 Phenanthrene-d10	188	11.464	11.464	(1.000)	615657	40.0000	
	122 Phenanthrene	178	11.501	11.501	(1.003)	179743	10.0000	9.439(a)
	124 Anthracene	178	11.582	11.582	(1.010)	175642	10.0000	9.537(a)
	126 Carbazole	167	11.988	11.988	(1.046)	152794	10.0000	9.706(a)
	129 Di-n-Butylphthalate	149	12.874	12.874	(1.123)	197669	10.0000	9.605(a)
	134 Fluoranthene	202	13.793	13.793	(1.203)	193365	10.0000	9.802(a)
	135 Benzidine	184	14.194	14.194	(0.854)	74647	10.0000	9.349(a)
	137 Pyrene	202	14.210	14.210	(0.854)	197771	10.0000	9.174(a)
$	139 Terphenyl-d14	244	14.659	14.659	(0.881)	150292	10.0000	8.981(a)
	145 3,3-Dimethylbenzidine	212	15.663	15.663	(0.942)	87156	10.0000	10.18
	146 Butylbenzylphthalate	149	15.781	15.781	(0.949)	86330	10.0000	9.754(a)
	150 Benzo(a)Anthracene	228	16.593	16.593	(0.998)	176056	10.0000	9.524(a)

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2999.D Page 3
Report Date: 10-May-2005 09:41

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.630	16.630	(1.000)	529256	40.0000	
152 3,3'-Dichlorobenzidine	252	16.689	16.689	(1.004)	62060	10.0000	8.795(a)
154 Chrysene	228	16.667	16.667	(1.002)	163479	10.0000	9.287(a)
155 bis(2-ethylhexyl)Phthalate	149	17.009	17.009	(1.023)	103208	10.0000	9.344(a)
158 Di-n-octylphthalate	149	18.152	18.152	(0.944)	178439	10.0000	9.055(a)
160 Benzo(b)fluoranthene	252	18.590	18.590	(0.966)	160563	10.0000	8.902(a)
161 Benzo(k)fluoranthene	252	18.633	18.633	(0.969)	165847	10.0000	9.277(a)
165 Benzo(a)pyrene	252	19.125	19.125	(0.994)	149337	10.0000	9.396(a)
* 166 Perylene-d12	264	19.237	19.237	(1.000)	453500	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.936	20.936	(1.088)	130201	10.0000	9.262(a)
174 Dibenzo(a,h)anthracene	278	20.984	20.984	(1.091)	125575	10.0000	9.193(a)
177 Benzo(g,h,i)perylene	276	21.384	21.384	(1.112)	125987	10.0000	10.00(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2999.D Page 4
Report Date: 10-May-2005 09:41

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

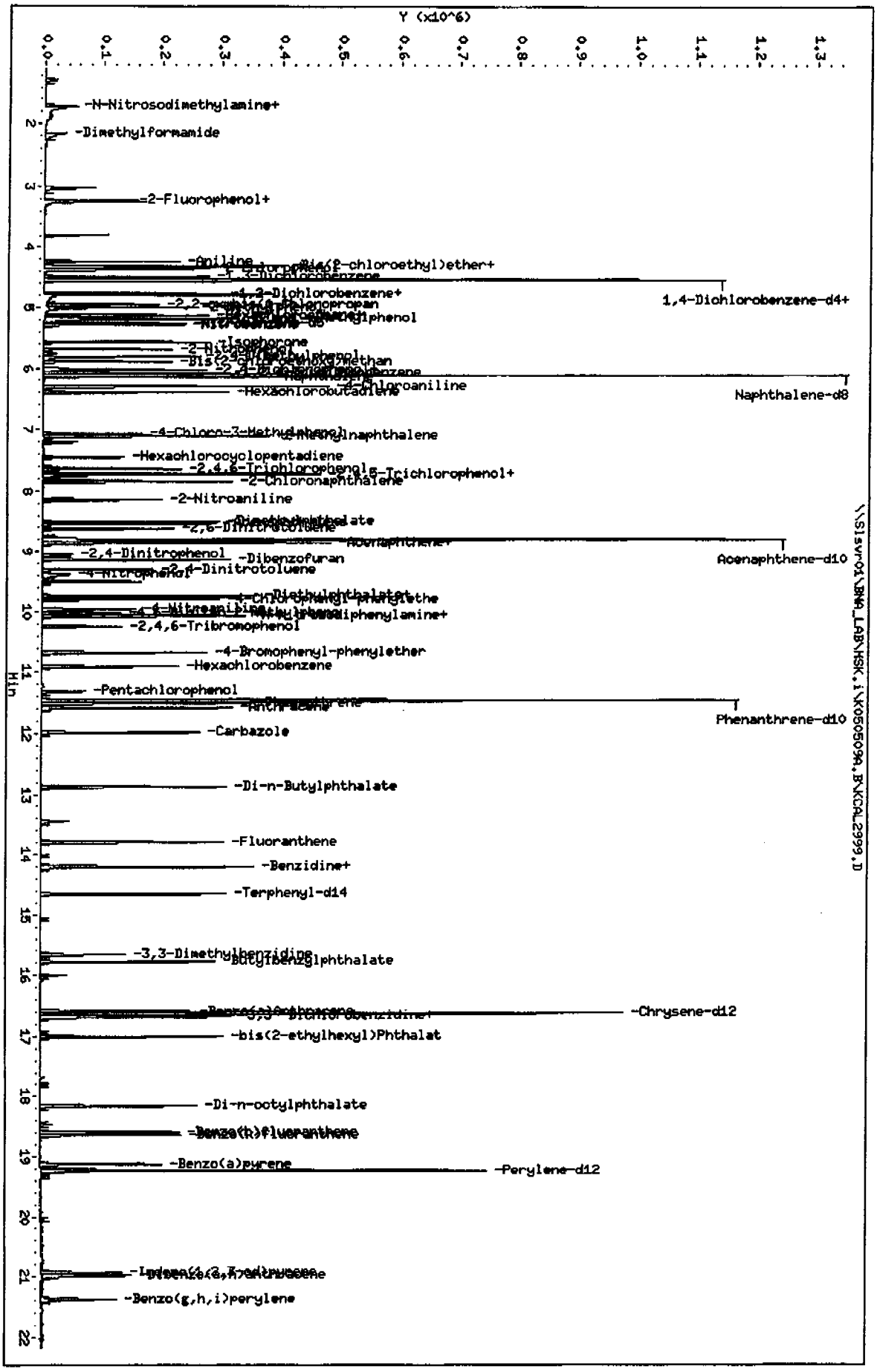
Instrument ID: MSK.i
Lab File ID: KCAL2999.D
Lab Smp Id: SSTD010
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Misc Info: SV0213-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD010
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	159178	-17.65
48 Naphthalene-d8	657267	328634	1314534	586546	-10.76
82 Acenaphthene-d10	351374	175687	702748	334123	-4.91
121 Phenanthrene-d10	612492	306246	1224984	615657	0.52
153 Chrysene-d12	494718	247359	989436	529256	6.98
166 Perylene-d12	409117	204559	818234	453500	10.85

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.54	-0.34
48 Naphthalene-d8	6.14	5.64	6.64	6.12	-0.34
82 Acenaphthene-d10	8.83	8.33	9.33	8.80	-0.24
121 Phenanthrene-d10	11.49	10.99	11.99	11.46	-0.23
153 Chrysene-d12	16.66	16.16	17.16	16.63	-0.16
166 Perylene-d12	19.27	18.77	19.77	19.24	-0.16

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.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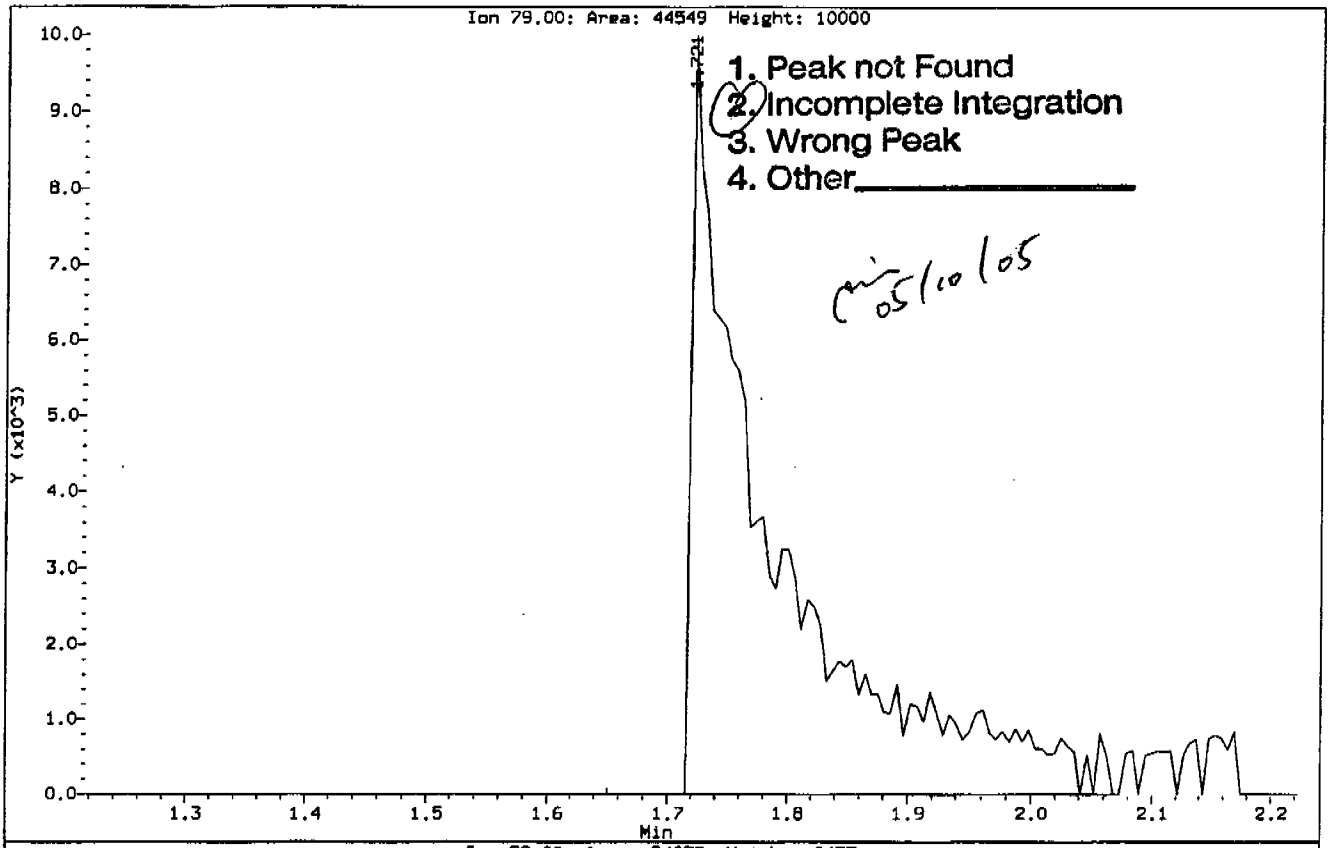
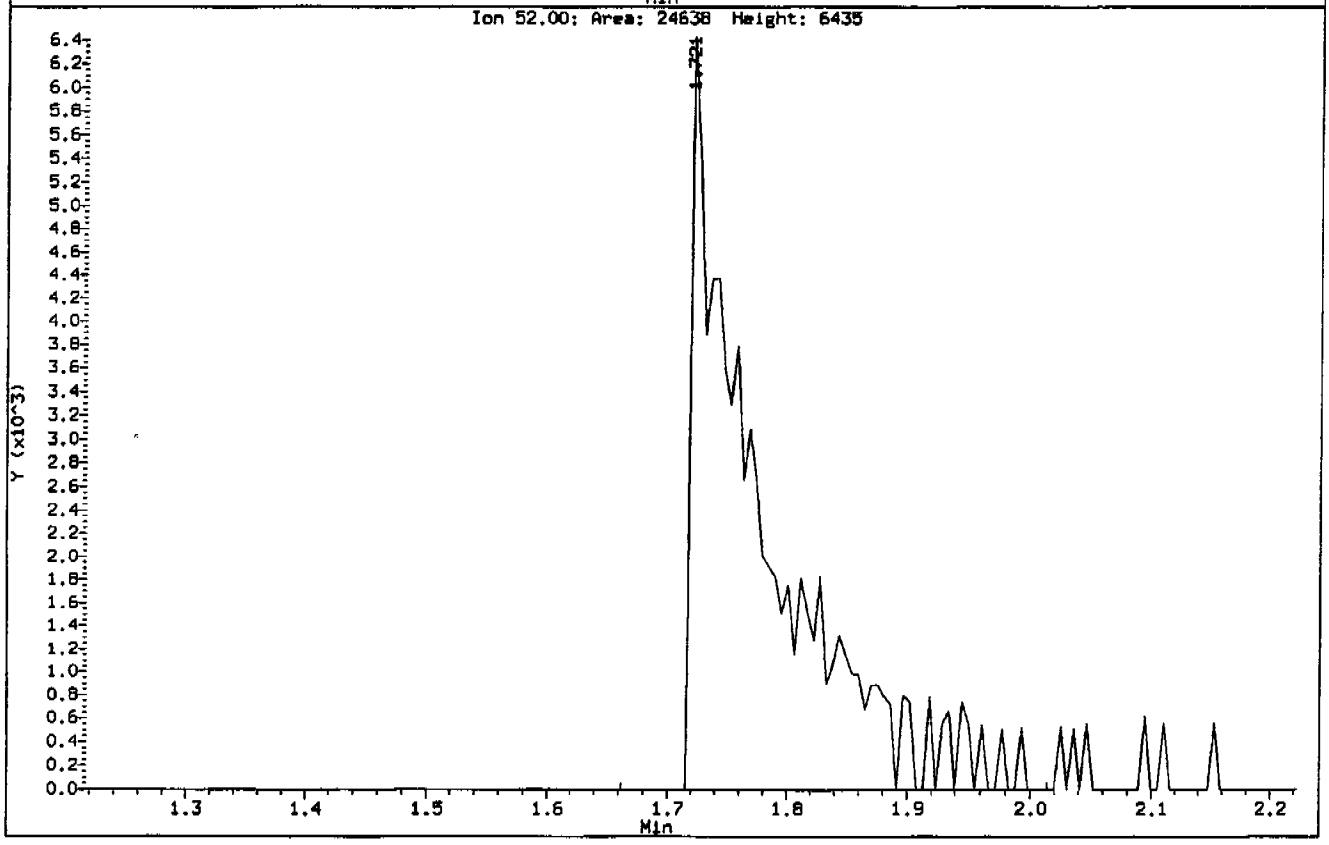
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
-N-Nitrosodimethylamine+
-Dimethylformamide
=2-Fluorophenol+
-Aniline
-Bis(2-chloroethyl)ether+
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene+
1,4-Dichlorobenzene-d4+
-2,2-oxybis(1-Chloropropan
-Phenol
-Nitrobenzene-d5
-Isophorone
-2-Nitrophenol
-Bis(2-chloroethoxy)methan
-2,4-Dichlorophenol
-Naphthalene
-4-Chloroaniline
-Hexachlorobutadiene
Naphthalene-d8
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene
-Hexachlorocyclopentadiene
-2,4,6-Trichlorophenol+
-2,6-Trichlorophenol+
-2-Chloronaphthalene
-2-Nitroaniline
-Dimethylphthalate
-2,6-Dinitrotoluene
-Acenaphthylene+
-2,4-Dinitrophenol
-Dibenzofuran
Acenaphthene-d10
-4-Nitrophenol
-2,4-Dinitrotoluene
-Diethylphthalate
-4-Chlorophenyl-phenylethe
-4,6-Dinitro-2-Methylphenol
-Diphenylamine+
-2,4,6-Tribromophenol
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Pentachlorophenol
-Phenanthrene
-Anthracene
Phenanthrene-d10
-Carbazole
-Di-n-Butylphthalate
-Fluoranthene
-Benzidine+
-Terphenyl-d14
-3,3-Dimethylbenzidine
-Butylbenzylphthalate
-Benzo(a)anthracene
-3,3-Dichlorobenzidine+
-Chrysene-d12
-bis(2-ethylhexyl)Phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-d12
-Indeno(1,2,3-cd)pyrene
-Dibenz(a,h)anthracene
-Benzo(g,h,i)perylene
Hin
\\Slsvr01\BNA_LAB\HSK.i\K050509A.B\KCAL2999.D
Data File: \\Slsvr01\BNA_LAB\HSK.i\K050509A.B\KCAL2999.D
Date : 09-MAY-2005 14:40
Client ID: SSTD010
Sample Info: SSTD010
Volume Injected (uL): 1.0
Column phase:
Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL2999.D
Injection Date: 09-MAY-2005 14:40
Instrument: MSK.i
Client Sample ID: SSTD010

Compound: Pyridine
CAS Number: 110-86-1





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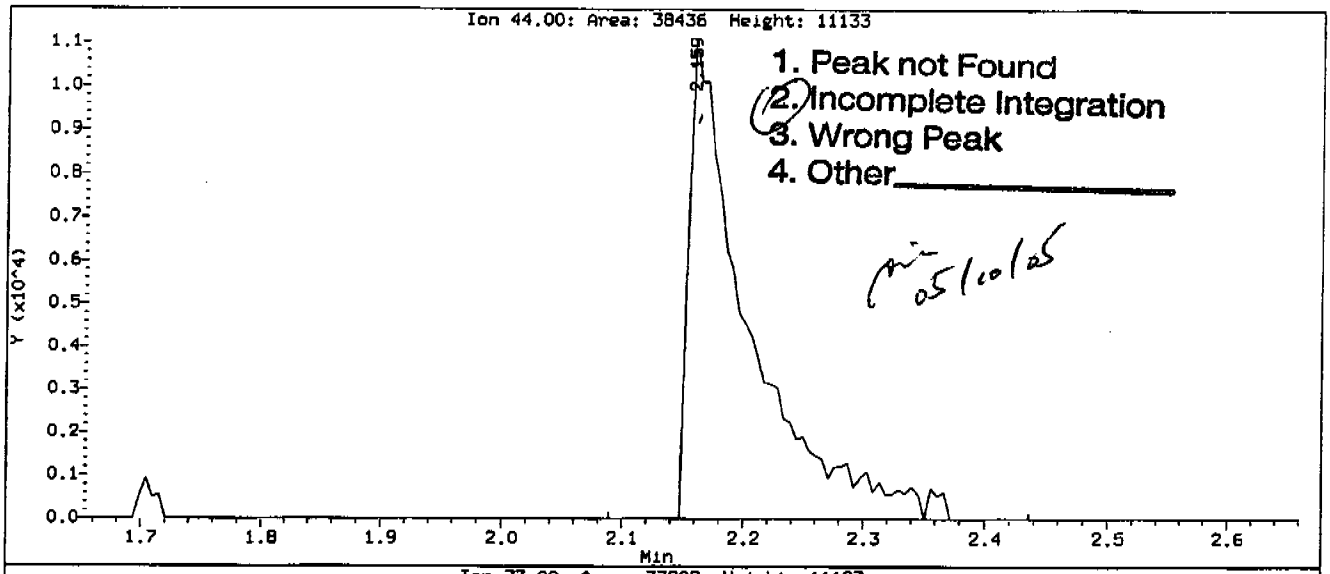
Injection Date: 09-MAY-2005 14:40
Instrument: MSK.i
Client Sample ID: SSTD010

Compound: Dimethylformamide
CAS Number: 68-12-2



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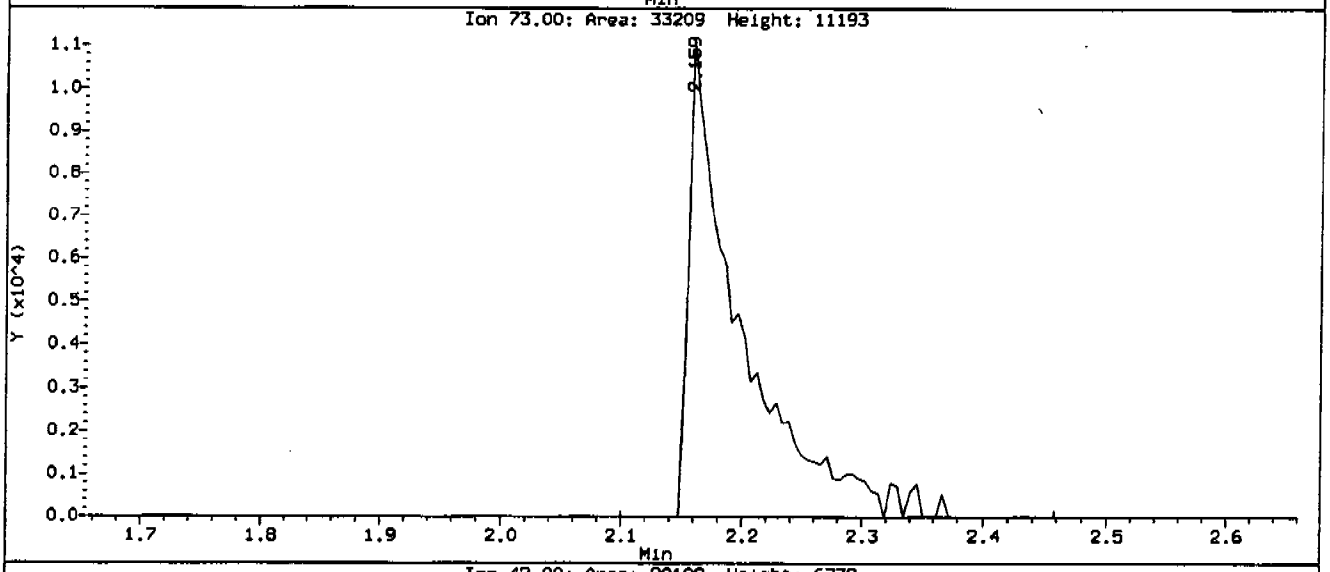
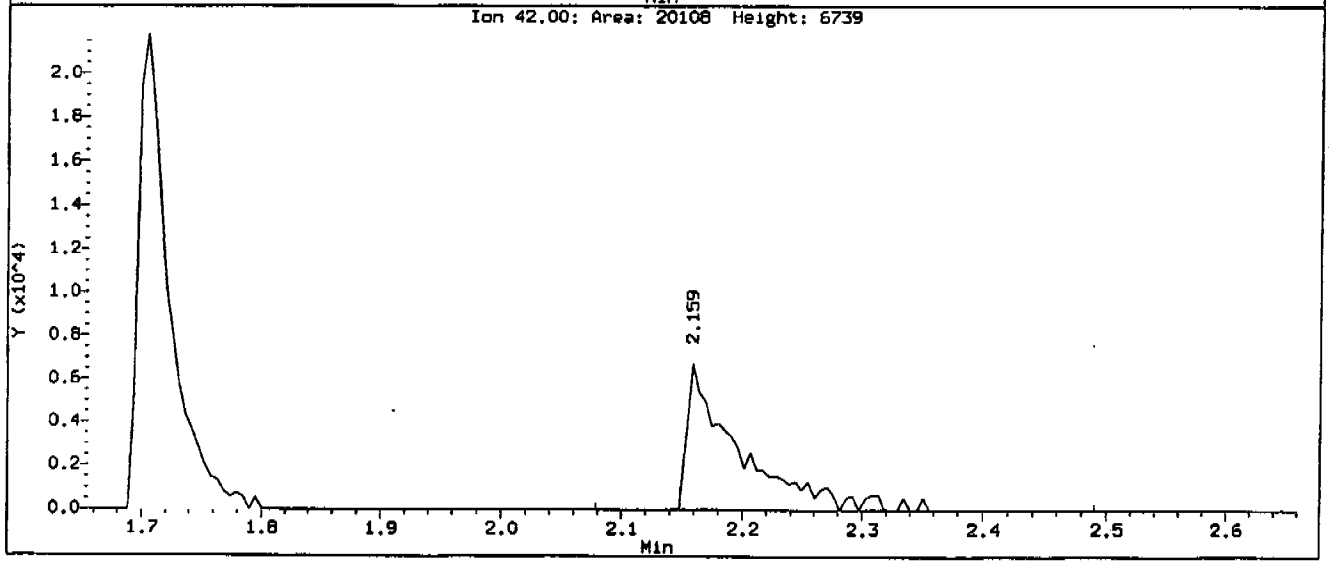
2. Incomplete Integration
3. Wrong Peak
4. Other_____

05/10/05





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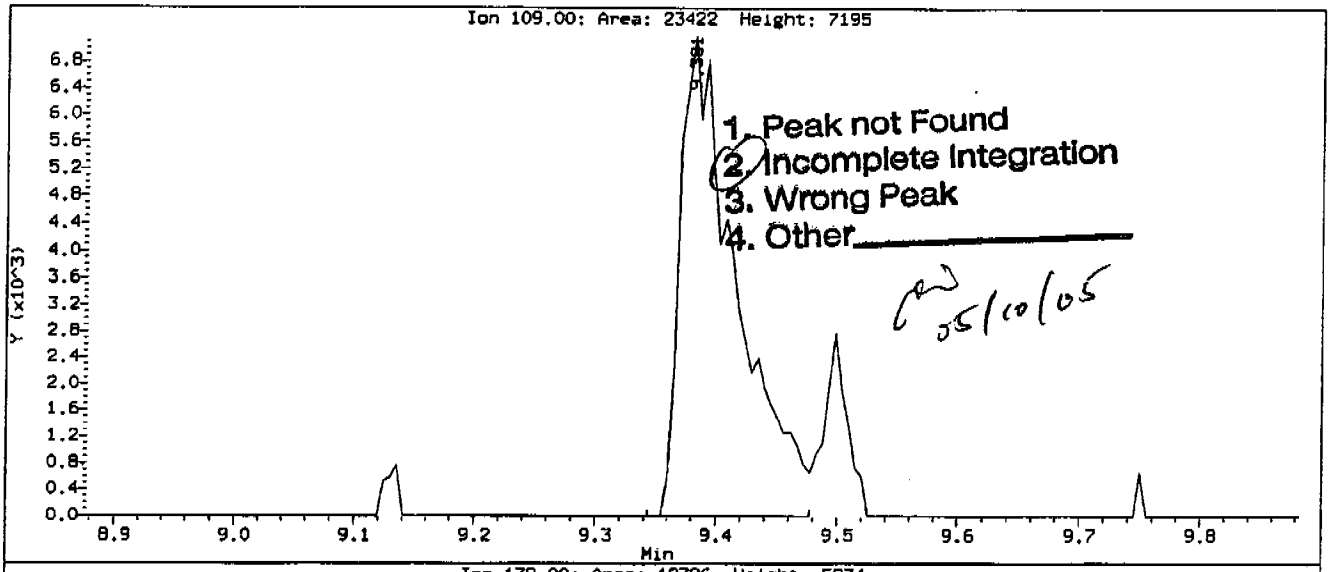
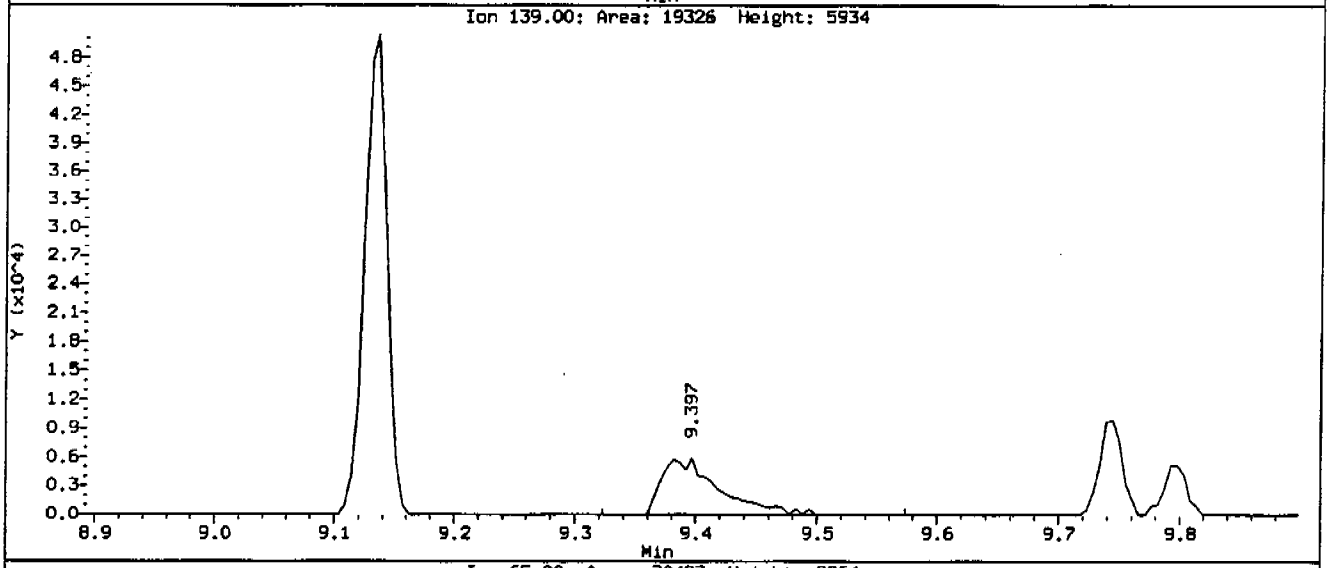
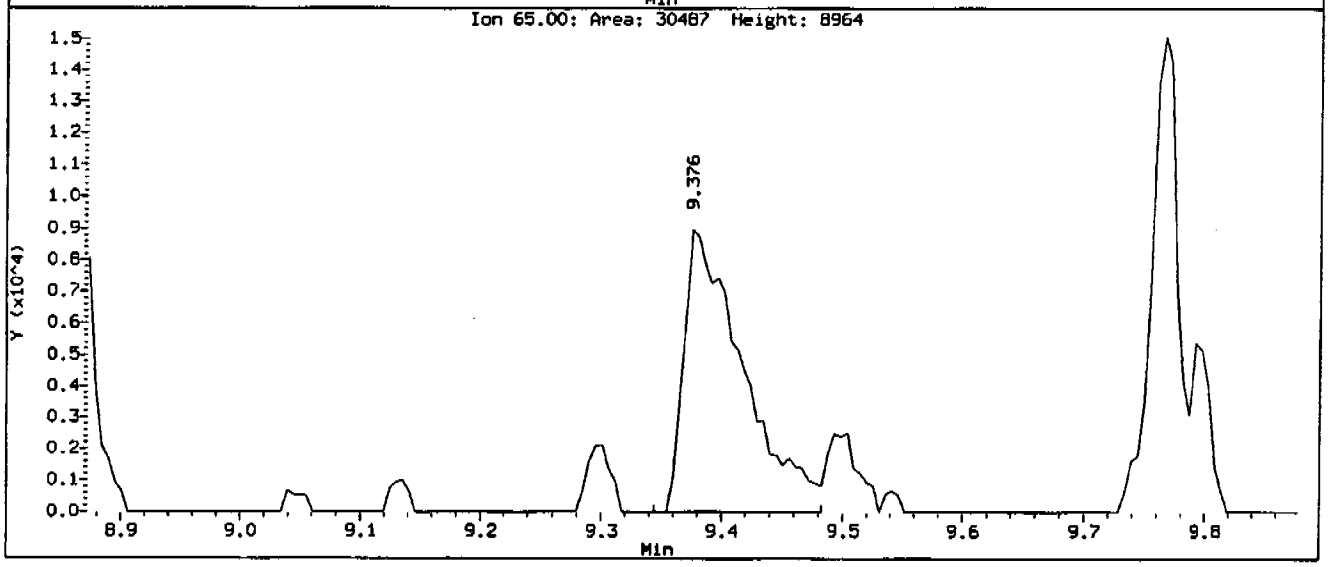
Injection Date: 09-MAY-2005 14:40
Instrument: MSK.i
Client Sample ID: SSTD010

Compound: 4-Nitrophenol
CAS Number: 100-02-7







Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3000.D Page 1
Report Date: 10-May-2005 09:42

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3000.D
Lab Smp Id: SSTD002 Client Smp ID: SSTD002
Inj Date : 09-MAY-2005 15:12
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD002
Misc Info : SV0212-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Meth Date : 10-May-2005 09:41 hongs Quant Type: ISTD
Cal Date : 08-MAY-2005 01:27 Cal File: KCAL2969.D
Als bottle: 9 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	1.286	1.286	(0.283)	2496	2.00000	2.032(a)
4	N-Nitrosodimethylamine	74	1.724	1.724	(0.379)	4743	2.00000	1.987(a)
5	Dimethylformamide	44	2.232	2.232	(0.491)	6372	2.00000	1.931(aM)
11	Cyclohexanol	57	3.263	3.263	(0.717)	8096	2.00000	1.564(a)
17	Aniline	93	4.251	4.251	(0.934)	17251	2.00000	2.055(a)
19	Bis(2-chloroethyl)ether	93	4.320	4.320	(0.950)	10908	2.00000	1.835(a)
16	Phenol	94	4.342	4.342	(0.954)	13436	2.00000	1.877(a)
20	2-Chlorophenol	128	4.390	4.390	(0.965)	9856	2.00000	1.895(a)
21	1,3-Dichlorobenzene	146	4.502	4.502	(0.989)	11671	2.00000	1.965(a)
* 22	1,4-Dichlorobenzene-d4	152	4.550	4.550	(1.000)	153383	40.0000	
23	1,4-Dichlorobenzene	146	4.566	4.566	(1.004)	11958	2.00000	1.899(a)
26	1,2-Dichlorobenzene	146	4.791	4.791	(1.053)	11013	2.00000	1.882(a)
28	2,2-oxybis(1-Chloropropane)	45	4.962	4.962	(1.090)	12816	2.00000	2.089(a)
27	2-Methylphenol	108	5.010	5.010	(1.101)	10298	2.00000	2.228(a)
35	Hexachloroethane	117	5.148	5.148	(1.131)	5416	2.00000	1.963(a)
32	N-Nitrosodinpropylamine	70	5.138	5.138	(1.129)	10615	2.00000	2.188(aM)
29	3 and 4-Methylphenol	108	5.202	5.202	(1.143)	18589	4.00000	3.757(a)
37	Nitrobenzene	77	5.298	5.298	(0.864)	17871	2.00000	2.194(a)
39	Isophorone	82	5.587	5.587	(0.911)	22275	2.00000	2.097(a)
40	2-Nitrophenol	139	5.704	5.704	(0.930)	4848	2.00000	1.713(a)
41	2,4-Dimethylphenol	107	5.827	5.827	(0.950)	11124	2.00000	1.850(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
42	Bis(2-chloroethoxy)methane	93	5.902	5.902	(0.963)	13130	2.00000	1.936(a)
45	2,4-Dichlorophenol	162	6.046	6.046	(0.986)	8536	2.00000	1.927(a)
47	1,2,4-Trichlorobenzene	180	6.089	6.089	(0.993)	9636	2.00000	1.827(a)
* 48	Naphthalene-d8	136	6.131	6.131	(1.000)	563757	40.0000	
50	Naphthalene	128	6.153	6.153	(1.003)	30655	2.00000	1.923(a)
51	4-Chloroaniline	127	6.308	6.308	(1.029)	12037	2.00000	1.870(a)
54	Hexachlorobutadiene	225	6.409	6.409	(1.045)	6820	2.00000	1.863(a)
62	2-Methylnaphthalene	142	7.120	7.120	(1.161)	25029	2.00000	2.183(a)
59	4-Chloro-3-Methylphenol	107	7.098	7.098	(1.158)	10123	2.00000	1.962(aM)
67	2,4,6-Trichlorophenol	196	7.659	7.659	(0.869)	6427	2.00000	1.751(a)
68	2,4,5-Trichlorophenol	196	7.761	7.761	(0.880)	5752	2.00000	1.481(a)
$ 69	2-Fluorobiphenyl	172	7.739	7.739	(0.878)	23418	2.00000	1.831(a)
72	2-Chloronaphthalene	162	7.862	7.862	(0.892)	20453	2.00000	1.909(a)
73	2-Nitroaniline	65	8.161	8.161	(0.925)	8927	2.00000	1.946(a)
76	Dimethylphthalate	163	8.519	8.519	(0.966)	25037	2.00000	2.038(a)
79	Acenaphthylene	152	8.546	8.546	(0.969)	28383	2.00000	1.794(a)
80	2,6-Dinitrotoluene	165	8.637	8.637	(0.979)	4913	2.00000	1.870(a)
* 82	Acenaphthene-d10	164	8.819	8.819	(1.000)	318437	40.0000	
83	Acenaphthene	153	8.867	8.867	(1.005)	18988	2.00000	1.900(a)
81	3-Nitroaniline	138	8.872	8.872	(1.006)	4090	2.00000	1.581(a)
86	Dibenzofuran	168	9.150	9.150	(1.038)	28484	2.00000	1.928(a)
88	2,4-Dinitrotoluene	165	9.315	9.315	(1.056)	6098	2.00000	1.795(a)
85	4-Nitrophenol	109	9.465	9.465	(1.073)	2466	2.00000	1.076(aM)
93	Diethylphthalate	149	9.780	9.780	(1.109)	24941	2.00000	2.019(a)
94	Fluorene	166	9.759	9.759	(1.107)	22142	2.00000	1.866(a)
95	4-Chlorophenyl-phenylether	204	9.812	9.812	(1.113)	11658	2.00000	1.825(a)
98	4-Nitroaniline	138	9.978	9.978	(1.131)	4065	2.00000	1.615(a)
99	4,6-Dinitro-2-methylphenol	198	10.042	10.042	(0.875)	2054	2.00000	0.8577(a)
100	N-Nitrosodiphenylamine	169	10.069	10.069	(0.877)	15777	2.00000	1.793(a)
102	Azobenzene	77	10.085	10.085	(0.879)	37174	2.00000	1.889(a)
109	4-Bromophenyl-phenylether	248	10.694	10.694	(0.932)	7499	2.00000	1.850(a)
112	Hexachlorobenzene	284	10.918	10.918	(0.951)	7294	2.00000	1.768(a)
* 121	Phenanthrene-d10	188	11.479	11.479	(1.000)	578952	40.0000	
122	Phenanthrene	178	11.516	11.516	(1.003)	35120	2.00000	1.961(a)
124	Anthracene	178	11.596	11.596	(1.010)	32785	2.00000	1.893(a)
126	Carbazole	167	12.002	12.002	(1.046)	28980	2.00000	1.958(a)
129	Di-n-Butylphthalate	149	12.889	12.889	(1.123)	35850	2.00000	1.852(a)
134	Fluoranthene	202	13.813	13.813	(1.203)	35080	2.00000	1.891(a)
137	Pyrene	202	14.225	14.225	(0.855)	36982	2.00000	1.768(a)
$ 139	Terphenyl-d14	244	14.674	14.674	(0.882)	28238	2.00000	1.739(a)
145	3,3-Dimethylbenzidine	212	15.678	15.678	(0.942)	13272	2.00000	1.597(a)
146	Butylbenzylphthalate	149	15.790	15.790	(0.949)	15850	2.00000	1.845(a)
150	Benzo(a)Anthracene	228	16.607	16.607	(0.998)	34162	2.00000	1.904(a)
* 153	Chrysene-d12	240	16.639	16.639	(1.000)	513592	40.0000	
152	3,3'-Dichlorobenzidine	252	16.704	16.704	(1.004)	9924	2.00000	1.449(a)
154	Chrysene	228	16.682	16.682	(1.003)	31851	2.00000	1.864(a)
155	bis(2-ethylhexyl)Phthalate	149	17.019	17.019	(1.023)	19839	2.00000	1.851(a)
158	Di-n-octylphthalate	149	18.167	18.167	(0.943)	33553	2.00000	1.704(aM)
160	Benzo(b)fluoranthene	252	18.605	18.605	(0.966)	31699	2.00000	1.759(a)
161	Benzo(k)fluoranthene	252	18.643	18.643	(0.968)	32755	2.00000	1.833(a)
165	Benzo(a)pyrene	252	19.145	19.145	(0.994)	27905	2.00000	1.757(a)
* 166	Perylene-d12	264	19.257	19.257	(1.000)	453215	40.0000	
173	Indeno(1,2,3-cd)pyrene	276	20.951	20.951	(1.088)	27195	2.00000	1.936(a)
174	Dibenzo(a,h)anthracene	278	21.004	21.004	(1.091)	24637	2.00000	1.805(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
177 Benzo(g,h,i)perylene	276	21.405	21.405	(1.112)	24662	2.00000	1.960(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3000.D Page 4
Report Date: 10-May-2005 09:42

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

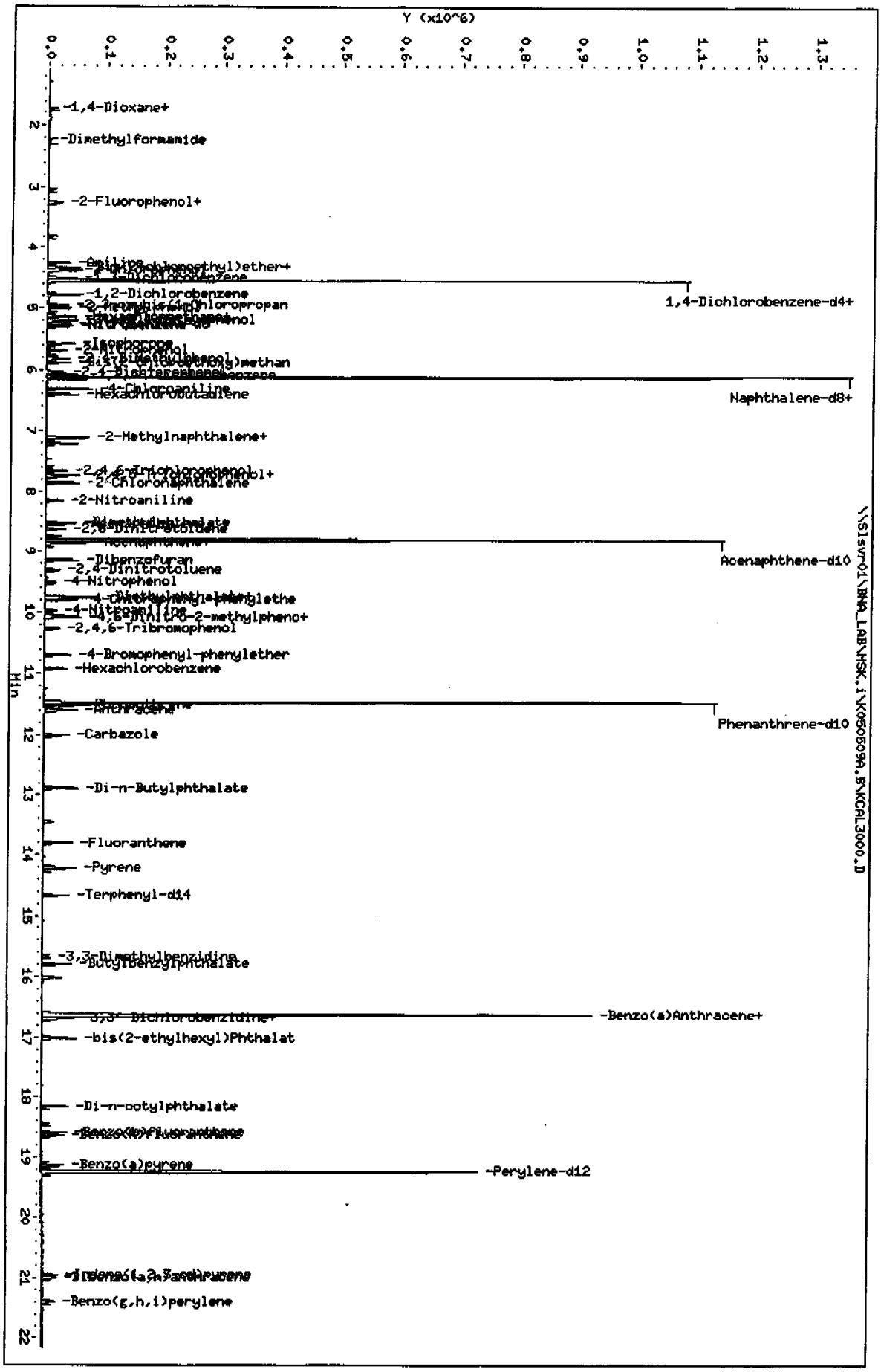
Instrument ID: MSK.i
Lab File ID: KCAL3000.D
Lab Smp Id: SSTD002
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Misc Info: SV0212-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD002
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	153383	-20.64
48 Naphthalene-d8	657267	328634	1314534	563757	-14.23
82 Acenaphthene-d10	351374	175687	702748	318437	-9.37
121 Phenanthrene-d10	612492	306246	1224984	578952	-5.48
153 Chrysene-d12	494718	247359	989436	513592	3.82
166 Perylene-d12	409117	204559	818234	453215	10.78

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.55	-0.14
48 Naphthalene-d8	6.14	5.64	6.64	6.13	-0.19
82 Acenaphthene-d10	8.83	8.33	9.33	8.82	-0.07
121 Phenanthrene-d10	11.49	10.99	11.99	11.48	-0.10
153 Chrysene-d12	16.66	16.16	17.16	16.64	-0.10
166 Perylene-d12	19.27	18.77	19.77	19.26	-0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.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0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
Min
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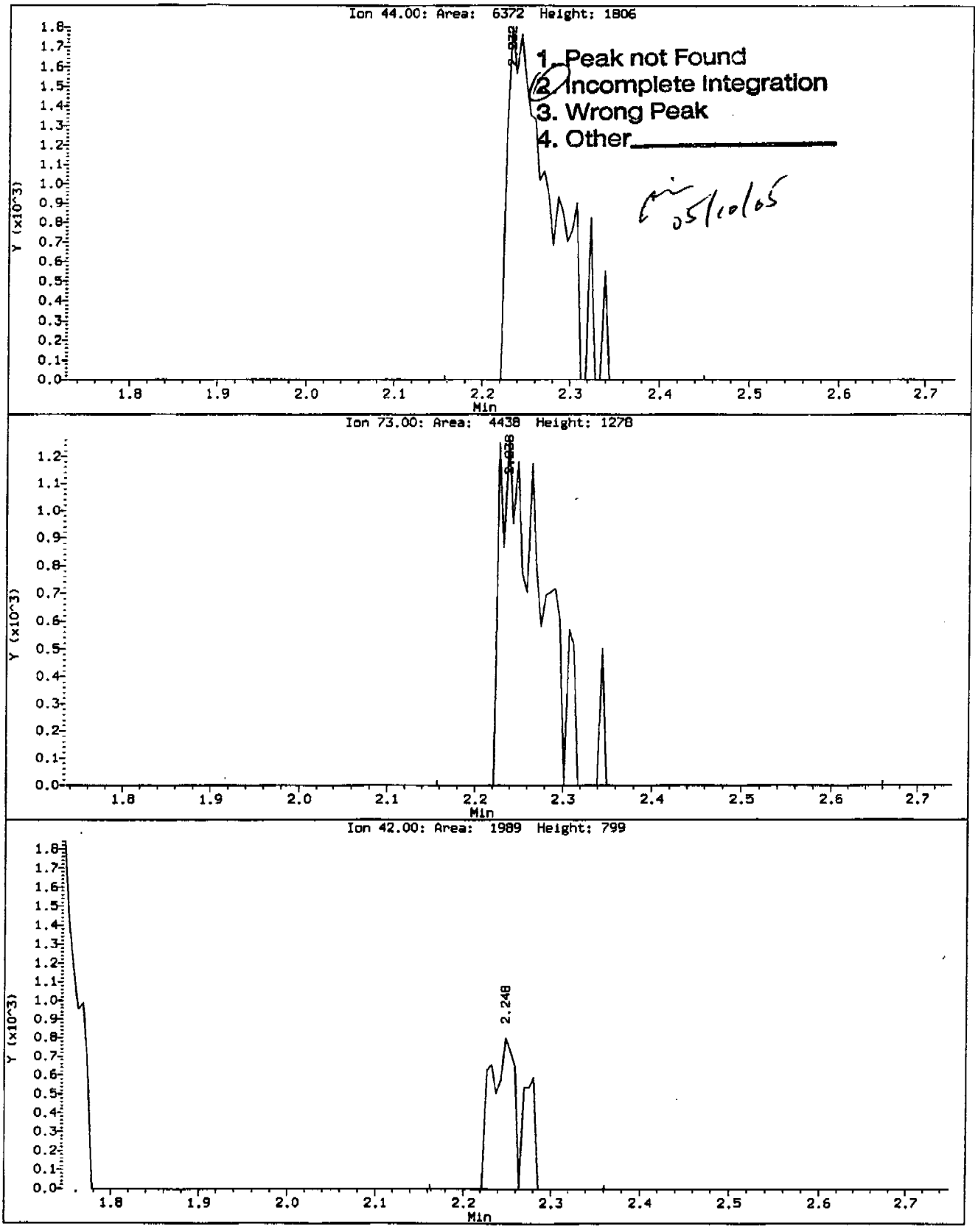
17
18
19
20
21
22
-1,4-Dioxane+
-Dimethylformamide
-2-Fluorophenol+
-Isophorone
-2-Nitrophenol
-Hexachlorobutadiene
-4-Chloroaniline
-2-Methylnaphthalene+
-2-Chloronaphthalene
-2-Nitroaniline
-Dibenzofuran
-2,4-Dinitrotoluene
-4-Nitrophenol
-2,4,6-Tribromophenol
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Anthracene
-Carbazole
-Di-n-Butylphthalate
-Fluoranthene
-Pyrene
-Terphenyl-d14
-3,3-Dimethylbenzidine
-Butylbenzylphthalate
-Benzo(a)Anthracene+
-bis(2-ethylhexyl)Phthalat
-Di-n-octylphthalate
-Benzo(a)pyrene
-Perylene-d12
-Benzo(g,h,i)perylene
1,4-Dichlorobenzene-d4+
Naphthalene-d8+
Acenaphthene-d10
Phenanthrene-d10
\\Slsvr01\BNA_LAB\HSK.i\K050509A.B\KCAL3000.D
Data File: \\Slsvr01\BNA_LAB\HSK.i\K050509A.B\KCAL3000.D
Date : 09-MAY-2005 15:12
Client ID: SSTD002
Sample Info: SSTD002
Volume Injected (ul): 1.0
Column phase:
Instrument: HSK.i
Operator: XIA
Column diameter: 2.00
Page 5

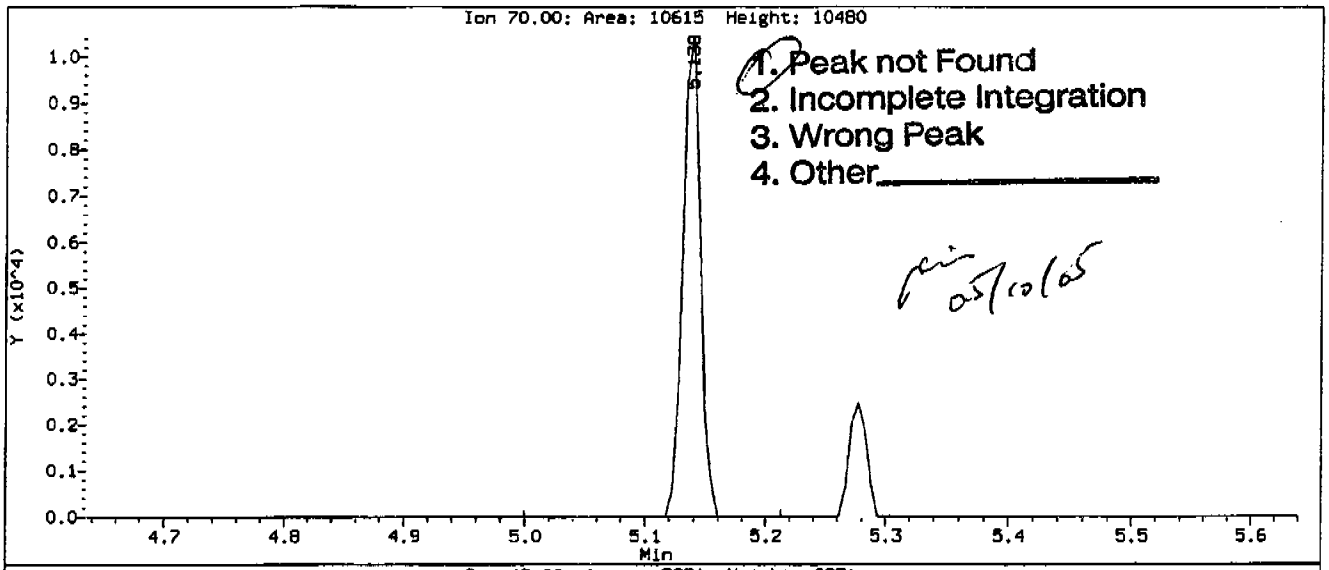
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3000.D
Injection Date: 09-MAY-2005 15:12
Instrument: MSK.i
Client Sample ID: SSTD002

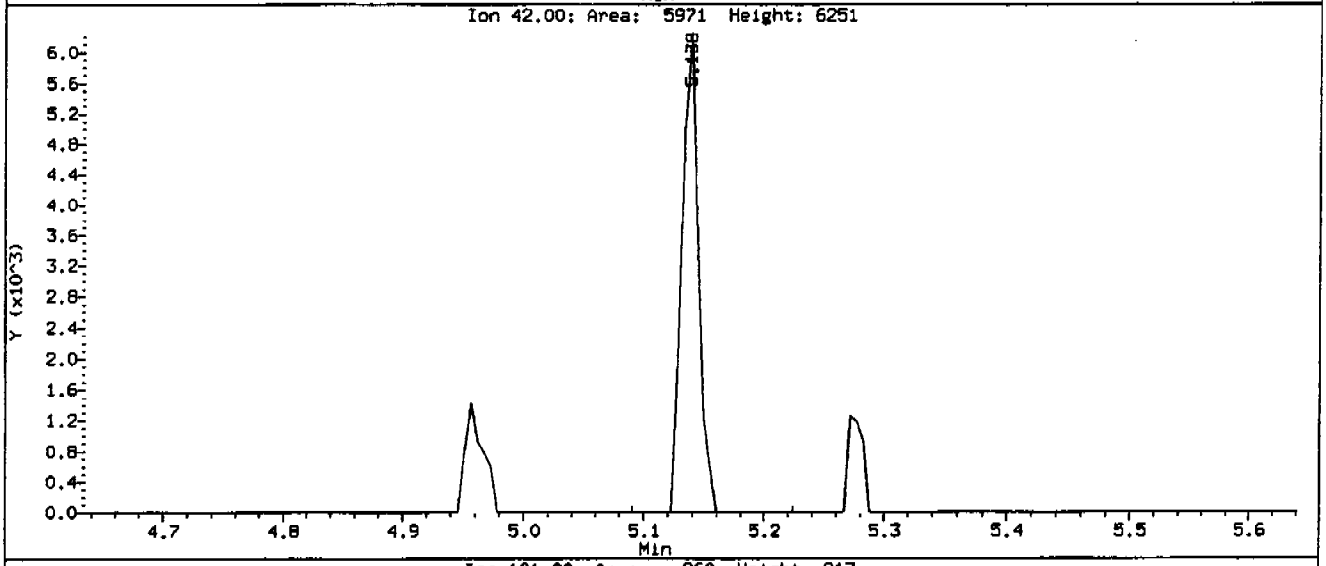
Compound: Dimethylformamide
CAS Number: 68-12-2

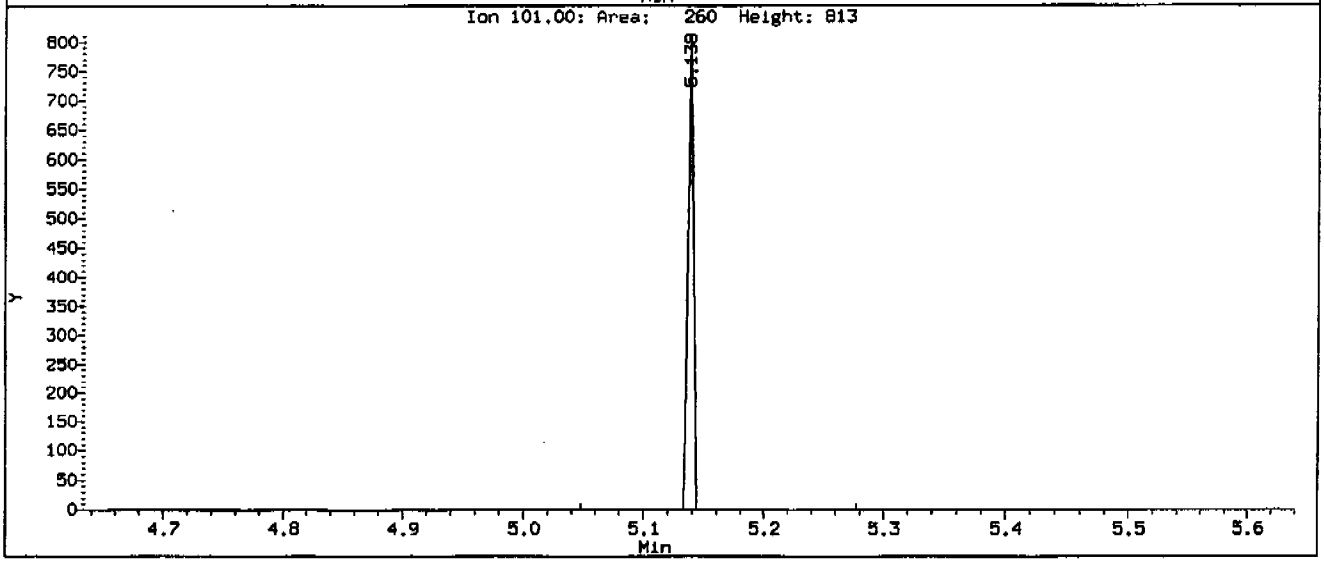


Data File: \\Slsvr01\BNA_LAB\M5K.i\K050509A.B\KCAL3000.D
Injection Date: 09-MAY-2005 15:12
Instrument: M5K.i
Client Sample ID: S5TD002

Compound: N-Nitrosodinpropylamine
CAS Number: 621-64-7

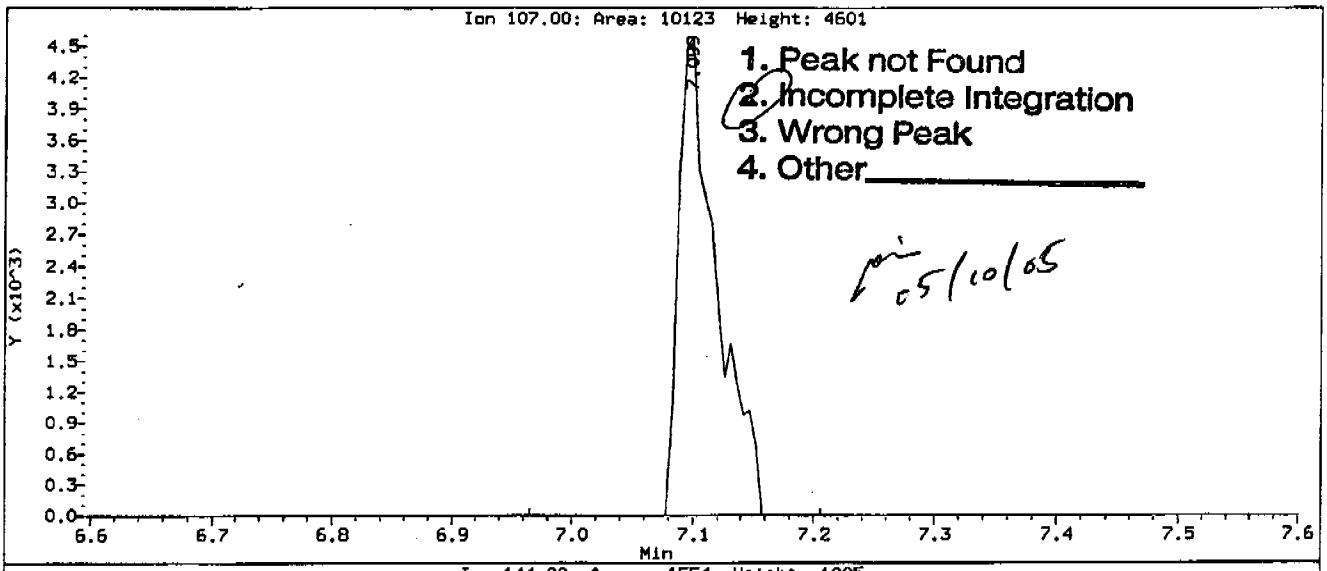


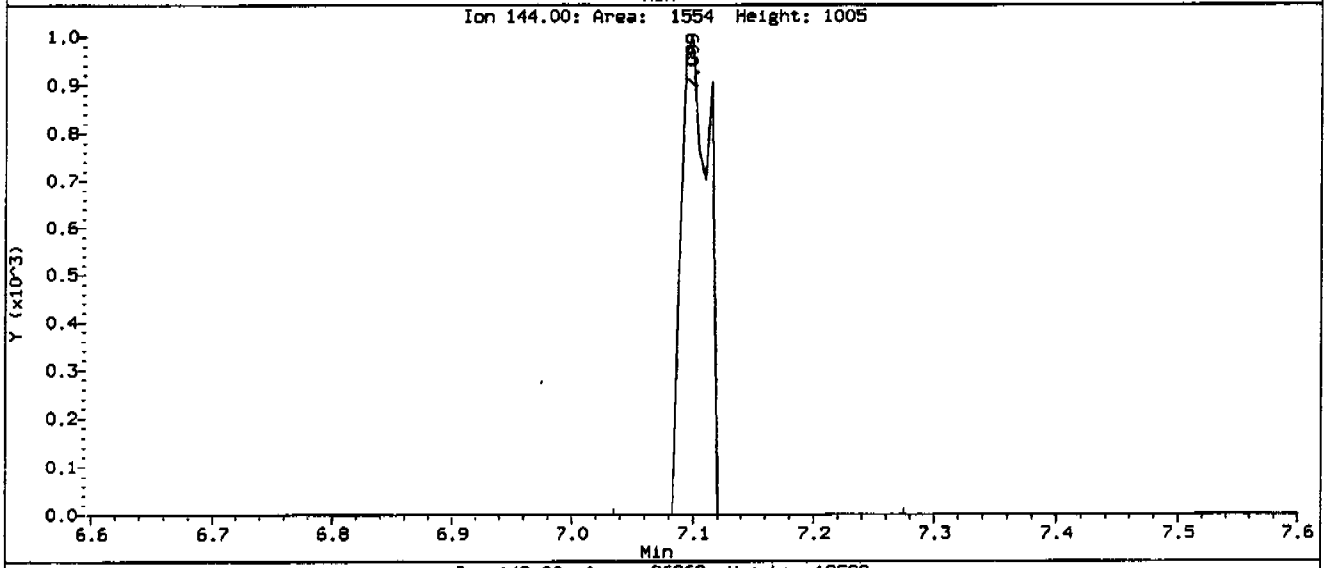


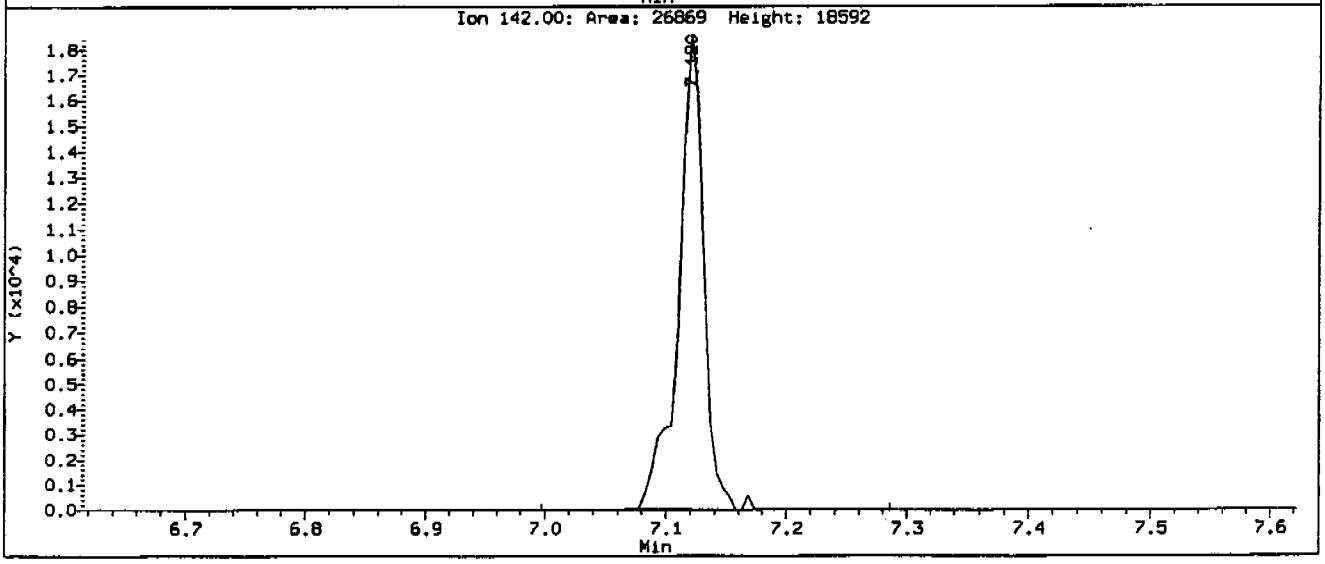


Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3000.D
Injection Date: 09-MAY-2005 15:12
Instrument: MSK.i
Client Sample ID: SSTD002

Compound: 4-Chloro-3-Methylphenol
CAS Number: 59-50-7





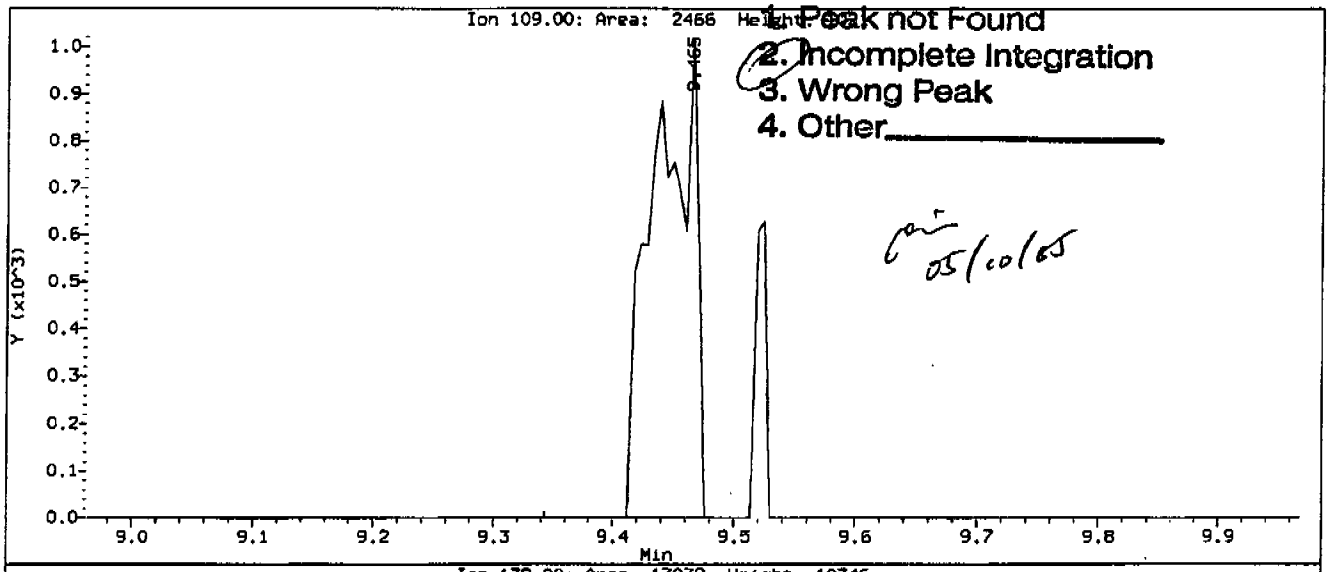


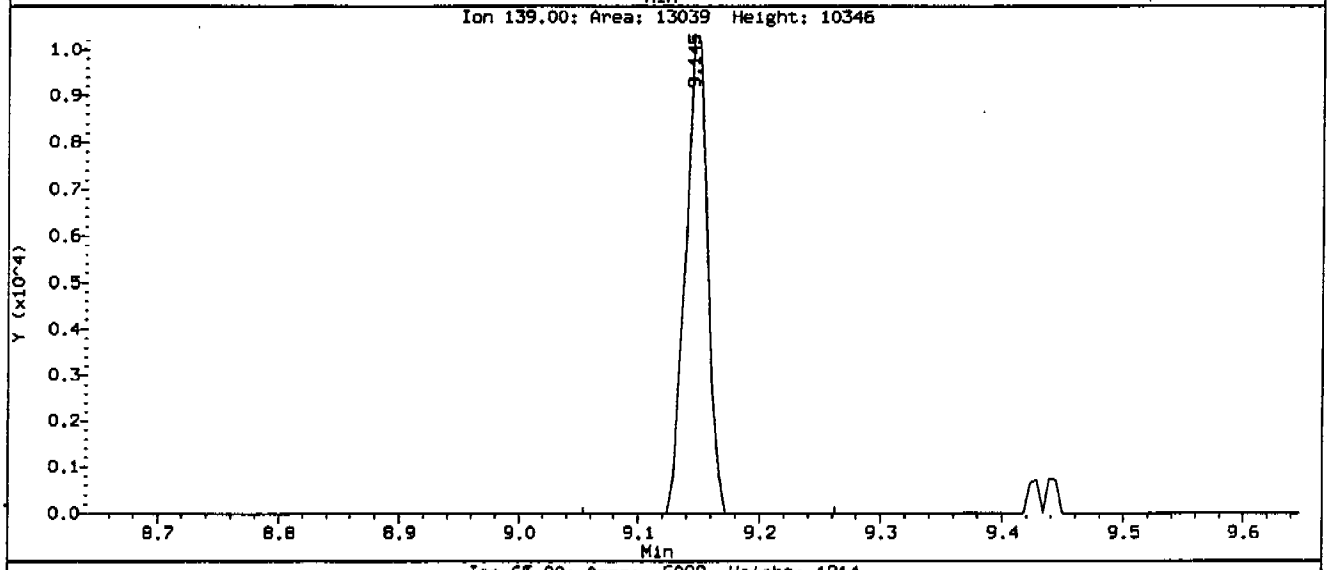
Data File: \\Slavr01\BNA_LAB\MSK.i\K050509A.B\KCAL3000.D
Injection Date: 09-MAY-2005 15:12
Instrument: MSK.i
Client Sample ID: SSTD002

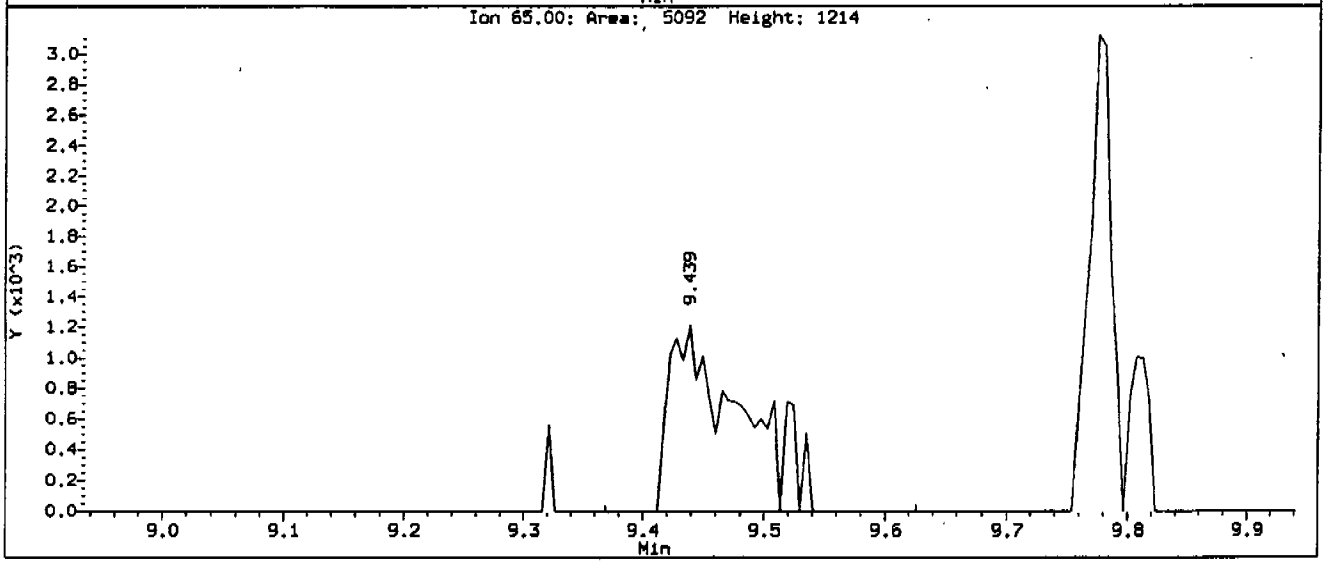
Compound: 4-Nitrophenol
CAS Number: 100-02-7

1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

05/10/05

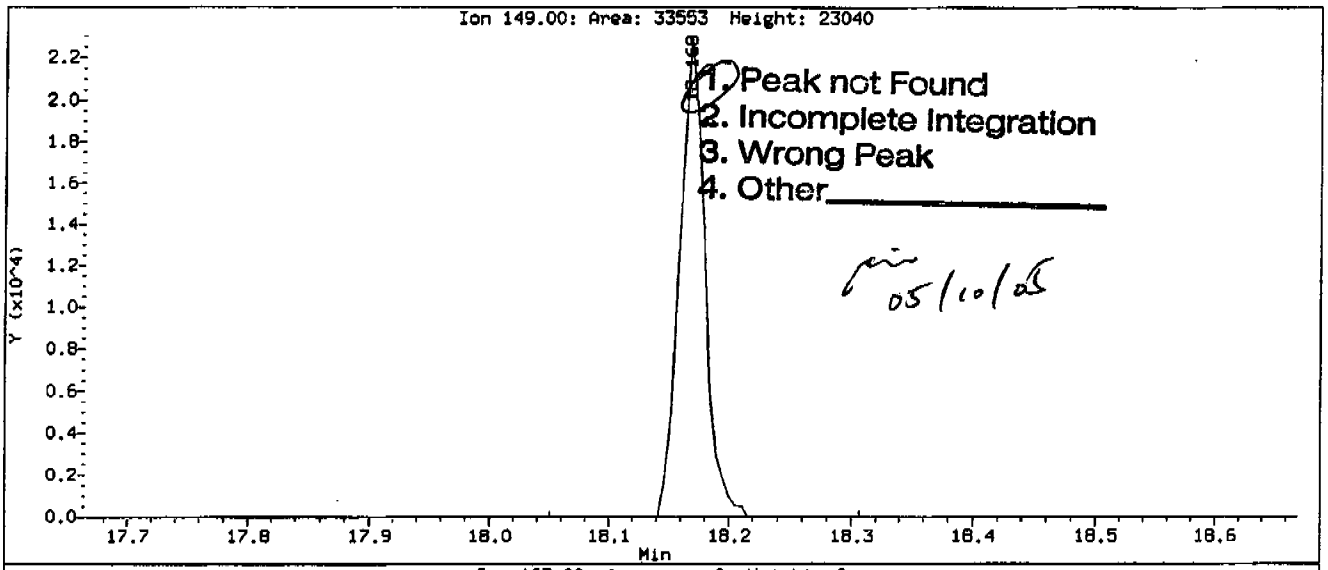


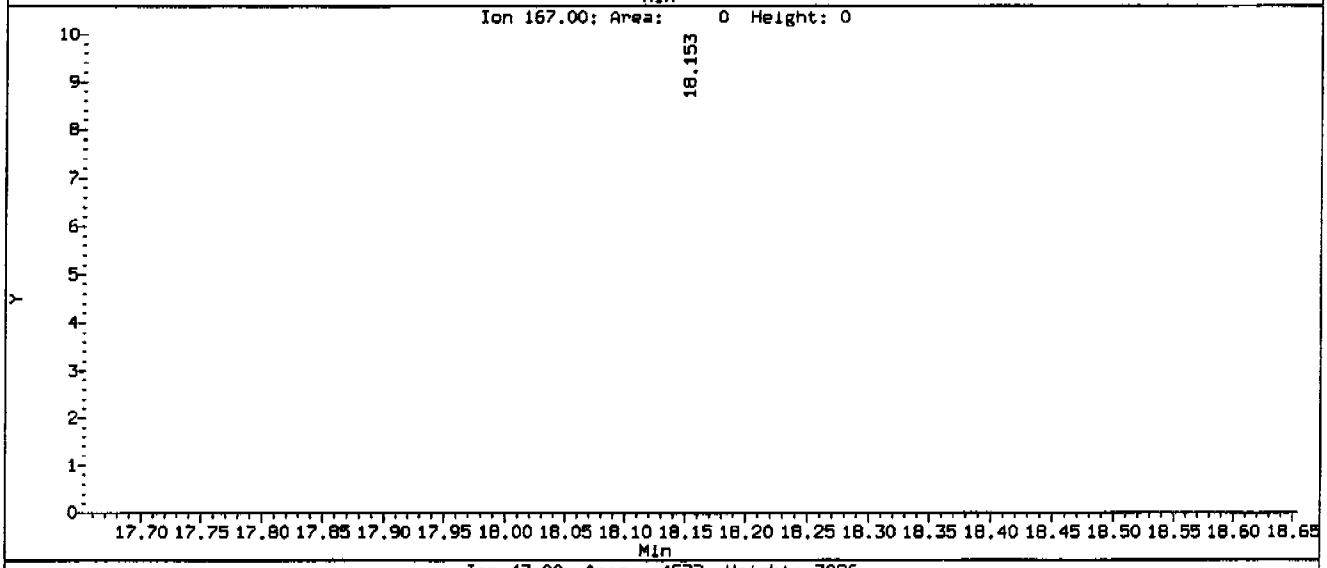


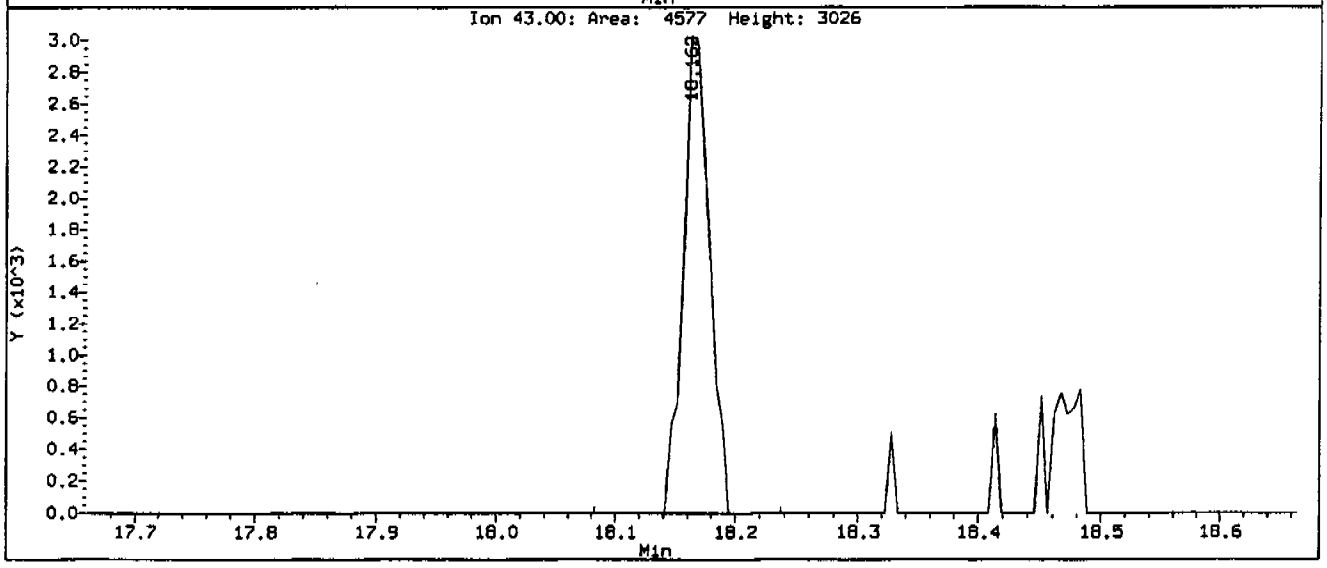


Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3000.D
Injection Date: 09-MAY-2005 15:12
Instrument: MSK.i
Client Sample ID: SSTD002

Compound: Di-n-octylphthalate
CAS Number: 117-84-0







Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3001.D
Report Date: 10-May-2005 11:19

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i Injection Date: 09-MAY-2005 15:44
Lab File ID: KCAL3001.D Init. Cal. Date(s): 28-APR-2005 09-MAY-2005
Analysis Type: WATER Init. Cal. Times: 11:41 15:12
Lab Sample ID: SSTD050 ICV Quant Type: ISTD
Method: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
3 Pyridine	1.18405	1.06280	0.010	10.24006	60.00000	Averaged
4 N-Nitrosodimethylamine	0.67099	0.66420	0.010	1.01160	60.00000	Averaged
16 Phenol	1.87215	1.67271	0.010	10.65310	20.00000	Averaged
17 Aniline	2.19527	1.64590	0.010	25.02511	60.00000	Averaged
19 Bis(2-chloroethyl)ether	1.55372	1.39051	0.010	10.50411	60.00000	Averaged
20 2-Chlorophenol	1.35363	1.22899	0.010	9.20788	60.00000	Averaged
21 1,3-Dichlorobenzene	1.54804	1.45721	0.010	5.86750	60.00000	Averaged
23 1,4-Dichlorobenzene	1.64398	1.49999	0.010	8.75897	20.00000	Averaged
25 Benzyl Alcohol	0.66523	0.56023	0.010	15.78438	60.00000	Averaged
26 1,2-Dichlorobenzene	1.52039	1.39846	0.010	8.01975	60.00000	Averaged
27 2-Methylphenol	1.19876	1.05197	0.010	12.24528	60.00000	Averaged
28 2,2-oxybis(1-Chloropropane)	1.60673	1.52631	0.010	5.00525	60.00000	Averaged
29 3 and 4-Methylphenol	1.27839	1.19156	0.010	6.79260	60.00000	Averaged
32 N-Nitrosodinpropylamine	1.25943	1.35997	0.010	-7.98337	60.00000	Averaged
35 Hexachloroethane	0.71883	0.67952	0.010	5.46847	60.00000	Averaged
37 Nitrobenzene	0.58194	0.54845	0.010	5.75527	60.00000	Averaged
39 Isophorone	0.75864	0.77508	0.010	-2.16739	60.00000	Averaged
40 2-Nitrophenol	0.20162	0.18658	0.010	7.45577	20.00000	Averaged
41 2,4-Dimethylphenol	0.42786	0.38515	0.010	9.98164	60.00000	Averaged
42 Bis(2-chloroethoxy)methane	0.48359	0.45359	0.010	6.20445	60.00000	Averaged
44 Benzoic Acid	0.19951	0.19718	0.010	1.16556	60.00000	Averaged
45 2,4-Dichlorophenol	0.31460	0.28939	0.010	8.01092	20.00000	Averaged
47 1,2,4-Trichlorobenzene	0.37479	0.34434	0.010	8.12648	60.00000	Averaged
50 Naphthalene	1.13252	1.02520	0.010	9.47687	60.00000	Averaged
51 4-Chloroaniline	0.45857	0.33989	0.010	25.87888	60.00000	Averaged
54 Hexachlorobutadiene	0.26032	0.23890	0.010	8.22692	20.00000	Averaged
59 4-Chloro-3-Methylphenol	0.36550	0.34728	0.010	4.98607	20.00000	Averaged
62 2-Methylnaphthalene	0.81010	0.72506	0.010	10.49802	60.00000	Averaged
66 Hexachlorocyclopentadiene	0.42770	0.43177	0.010	-0.94995	60.00000	Averaged
67 2,4,6-Trichlorophenol	0.46165	0.40974	0.010	11.24484	20.00000	Averaged
68 2,4,5-Trichlorophenol	0.48790	0.43052	0.010	11.76164	60.00000	Averaged
72 2-Chloronaphthalene	1.34666	1.19855	0.010	10.99843	60.00000	Averaged
73 2-Nitroaniline	0.58010	0.52251	0.010	9.92746	60.00000	Averaged
76 Dimethylphthalate	1.54223	1.35328	0.010	12.25155	60.00000	Averaged
79 Acenaphthylene	1.98537	1.89571	0.010	4.51600	60.00000	Averaged
80 2,6-Dinitrotoluene	0.32954	0.30516	0.010	7.39848	60.00000	Averaged
81 3-Nitroaniline	0.32374	0.29251	0.010	9.64753	60.00000	Averaged
83 Acenaphthene	1.25374	1.15247	0.010	8.07772	20.00000	Averaged
84 2,4-Dinitrophenol	0.19685	0.18564	0.010	5.69283	60.00000	Averaged
85 4-Nitrophenol	0.27026	0.26209	0.010	3.02151	60.00000	Averaged
86 Dibenzofuran	1.85230	1.65041	0.010	10.89935	60.00000	Averaged
88 2,4-Dinitrotoluene	0.42378	0.41413	0.010	2.27670	60.00000	Averaged

05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3001.D
Report Date: 10-May-2005 11:19

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i Injection Date: 09-MAY-2005 15:44
Lab File ID: KCAL3001.D Init. Cal. Date(s): 28-APR-2005 09-MAY-2005
Analysis Type: WATER Init. Cal. Times: 11:41 15:12
Lab Sample ID: SSTD050 ICV Quant Type: ISTD
Method: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
93 Diethylphthalate	1.54363	1.43694	0.010	6.91171	60.00000	Averaged
94 Fluorene	1.48246	1.41494	0.010	4.55432	60.00000	Averaged
95 4-Chlorophenyl-phenylether	0.79978	0.73202	0.010	8.47167	60.00000	Averaged
98 4-Nitroaniline	0.31560	0.28998	0.010	8.11578	60.00000	Averaged
99 4,6-Dinitro-2-methylphenol	0.16574	0.16089	0.010	2.92711	60.00000	Averaged
100 N-Nitrosodiphenylamine	0.60901	0.59265	0.010	2.68550	20.00000	Averaged
102 Azobenzene	1.36611	1.20009	0.010	12.15278	60.00000	Averaged
109 4-Bromophenyl-phenylether	0.27978	0.24895	0.010	11.01973	60.00000	Averaged
112 Hexachlorobenzene	0.28563	0.27139	0.010	4.98466	60.00000	Averaged
117 Pentachlorophenol	0.15930	0.13403	0.010	15.86074	20.00000	Averaged
122 Phenanthrene	1.23548	1.10027	0.010	10.94400	60.00000	Averaged
124 Anthracene	1.19438	1.06485	0.010	10.84544	60.00000	Averaged
126 Carbazole	1.02046	0.90651	0.010	11.16721	60.00000	Averaged
129 Di-n-Butylphthalate	1.33705	1.25693	0.010	5.99179	60.00000	Averaged
134 Fluoranthene	1.27688	1.21064	0.010	5.18714	20.00000	Averaged
135 Benzidine	0.60665	0.07765	0.010	87.20027	100	Averaged
137 Pyrene	1.62596	1.37557	0.010	15.39978	60.00000	Averaged
146 Butylbenzylphthalate	0.67238	0.61596	0.010	8.39160	60.00000	Averaged
150 Benzo(a)Anthracene	1.40066	1.26605	0.010	9.61027	60.00000	Averaged
152 3,3'-Dichlorobenzidine	0.53933	0.46193	0.010	14.35060	60.00000	Averaged
154 Chrysene	1.33287	1.15064	0.010	13.67193	60.00000	Averaged
155 bis(2-ethylhexyl)Phthalate	0.84173	0.74134	0.010	11.92668	60.00000	Averaged
158 Di-n-octylphthalate	1.70444	1.61732	0.010	5.11152	20.00000	Averaged
160 Benzo(b)fluoranthene	1.55320	1.52120	0.010	2.06032	60.00000	Averaged
161 Benzo(k)fluoranthene	1.54269	1.43396	0.010	7.04813	60.00000	Averaged
165 Benzo(a)pyrene	1.40180	1.28979	0.010	7.99070	20.00000	Averaged
173 Indeno(1,2,3-cd)pyrene	1.29945	1.15572	0.010	11.06052	60.00000	Averaged
174 Dibenzo(a,h)anthracene	1.26094	1.19655	0.010	5.10626	60.00000	Averaged
177 Benzo(g,h,i)perylene	1.16013	1.07534	0.010	7.30843	60.00000	Averaged

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B/KCAL3001.D
Report Date: 05/10/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3001.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 15:44
Lab Sample ID: SSTD050 ICV
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270

COMPOUND	%D
Pyridine	10.2
N-Nitrosodimethylamine	1.0
Aniline	25.0
Bis(2-chloroethyl)ether	10.5
Phenol	10.7
2-Chlorophenol	9.2
1,3-Dichlorobenzene	5.9
1,4-Dichlorobenzene	8.8
1,2-Dichlorobenzene	8.0
Benzyl Alcohol	15.8
2,2-oxybis(1-Chloropropane)	5.0
2-Methylphenol	12.2
N-Nitrosodinpropylamine	8.0
Hexachloroethane	5.5
3 and 4-Methylphenol	6.8
Nitrobenzene	5.8
Isophorone	2.2
2-Nitrophenol	7.5
2,4-Dimethylphenol	10.0
Bis(2-chloroethoxy)methane	6.2
2,4-Dichlorophenol	8.0
1,2,4-Trichlorobenzene	8.1
Benzoic Acid	1.2
Naphthalene	9.5
4-Chloroaniline	25.9
Hexachlorobutadiene	8.2
4-Chloro-3-Methylphenol	5.0
2-Methylnaphthalene	10.5
Hexachlorocyclopentadiene	0.9
2,4,6-Trichlorophenol	11.2
2,4,5-Trichlorophenol	11.8
2-Chloronaphthalene	11.0
2-Nitroaniline	9.9
Dimethylphthalate	12.3
Acenaphthylene	4.5
2,6-Dinitrotoluene	7.4
Acenaphthene	8.1
3-Nitroaniline	9.6
2,4-Dinitrophenol	5.7

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B/KCAL3001.D
Report Date: 05/10/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3001.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 15:44
Lab Sample ID: SSTD050 ICV
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A

COMPOUND	%D
Dibenzofuran	10.9
2,4-Dinitrotoluene	2.3
4-Nitrophenol	3.0
Fluorene	4.6
Diethylphthalate	6.9
4-Chlorophenyl-phenylether	8.5
4-Nitroaniline	8.1
4,6-Dinitro-2-methylphenol	2.9
N-Nitrosodiphenylamine	2.7
Azobenzene	12.2
4-Bromophenyl-phenylether	11.0
Hexachlorobenzene	5.0
Pentachlorophenol	15.9
Phenanthrene	10.9
Anthracene	10.8
Carbazole	11.2
Di-n-Butylphthalate	6.0
Fluoranthene	5.2
Benzidine	87.2
Pyrene	15.4
Butylbenzylphthalate	8.4
Benzo(a)Anthracene	9.6
Chrysene	13.7
3,3'-Dichlorobenzidine	14.4
bis(2-ethylhexyl)Phthalate	11.9
Di-n-octylphthalate	5.1
Benzo(b)fluoranthene	2.1
Benzo(k)fluoranthene	7.0
Benzo(a)pyrene	8.0
Indeno(1,2,3-cd)pyrene	11.1
Dibenzo(a,h)anthracene	5.1
Benzo(g,h,i)perylene	7.3

The average of %D's in the continuing calibration is 9.7

05/10/05

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3001.D
Lab Smp Id: SSTD050 ICV Client Smp ID: SSTD050 ICV
Inj Date : 09-MAY-2005 15:44
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD050 ICV
Misc Info : OP0052-05 2X
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Meth Date : 10-May-2005 11:19 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12 Cal File: KCAL3000.D
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270ICV.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
3	Pyridine	79	1.724	1.724	(0.379)	192054	50.0000	44.88
4	N-Nitrosodimethylamine	74	1.745	1.745	(0.383)	120025	50.0000	49.49
16	Phenol	94	4.331	4.331	(0.951)	302267	50.0000	44.67
17	Aniline	93	4.251	4.251	(0.933)	297422	50.0000	37.49
19	Bis(2-chloroethyl)ether	93	4.325	4.325	(0.950)	251273	50.0000	44.75
20	2-Chlorophenol	128	4.384	4.384	(0.962)	222085	50.0000	45.40
21	1,3-Dichlorobenzene	146	4.507	4.507	(0.989)	263325	50.0000	47.07
* 22	1,4-Dichlorobenzene-d4	152	4.555	4.555	(1.000)	144564	40.0000	
23	1,4-Dichlorobenzene	146	4.577	4.577	(1.005)	271055	50.0000	45.62
25	Benzyl Alcohol	108	4.801	4.801	(1.054)	101236	50.0000	42.11
26	1,2-Dichlorobenzene	146	4.796	4.796	(1.053)	252709	50.0000	45.99
27	2-Methylphenol	108	5.009	5.009	(1.100)	190096	50.0000	43.88
28	2,2-oxybis(1-Chloropropane)	45	4.961	4.961	(1.089)	275812	50.0000	47.50
29	3 and 4-Methylphenol	108	5.196	5.196	(1.141)	430640	100.000	93.21
32	N-Nitrosodinpropylamine	70	5.148	5.148	(1.130)	245754	50.0000	53.99
35	Hexachloroethane	117	5.148	5.148	(1.130)	122792	50.0000	47.26
37	Nitrobenzene	77	5.298	5.298	(0.864)	356837	50.0000	47.12
39	Isophorone	82	5.592	5.592	(0.912)	504290	50.0000	51.08
40	2-Nitrophenol	139	5.698	5.698	(0.929)	121397	50.0000	46.27
41	2,4-Dimethylphenol	107	5.827	5.827	(0.950)	250593	50.0000	45.01
42	Bis(2-chloroethoxy)methane	93	5.907	5.907	(0.963)	295118	50.0000	46.90

pm 05/10/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
44	Benzoic Acid	122	6.094	6.094	(0.994)	128292	50.0000	49.42
45	2,4-Dichlorophenol	162	6.035	6.035	(0.984)	188289	50.0000	45.99
47	1,2,4-Trichlorobenzene	180	6.088	6.088	(0.993)	224036	50.0000	45.94
* 48	Naphthalene-d8	136	6.131	6.131	(1.000)	520505	40.0000	
50	Naphthalene	128	6.158	6.158	(1.004)	667025	50.0000	45.26
51	4-Chloroaniline	127	6.307	6.307	(1.029)	221146	50.0000	37.06
54	Hexachlorobutadiene	225	6.409	6.409	(1.045)	155439	50.0000	45.89
59	4-Chloro-3-Methylphenol	107	7.077	7.077	(1.154)	225951	50.0000	47.51
62	2-Methylnaphthalene	142	7.119	7.119	(1.161)	471744	50.0000	44.75
66	Hexachlorocyclopentadiene	237	7.467	7.467	(0.847)	159938	50.0000	50.47
67	2,4,6-Trichlorophenol	196	7.648	7.648	(0.868)	151779	50.0000	44.38
68	2,4,5-Trichlorophenol	196	7.739	7.739	(0.878)	159476	50.0000	44.12
72	2-Chloronaphthalene	162	7.862	7.862	(0.892)	443975	50.0000	44.50
73	2-Nitroaniline	65	8.156	8.156	(0.925)	193553	50.0000	45.04
76	Dimethylphthalate	163	8.530	8.530	(0.968)	501292	50.0000	43.87
79	Acenaphthylene	152	8.551	8.551	(0.970)	702222	50.0000	47.74
80	2,6-Dinitrotoluene	165	8.642	8.642	(0.981)	113039	50.0000	46.30
81	3-Nitroaniline	138	8.877	8.877	(1.007)	108352	50.0000	45.18
* 82	Acenaphthene-d10	164	8.813	8.813	(1.000)	296342	40.0000	
83	Acenaphthene	153	8.872	8.872	(1.007)	426905	50.0000	45.96
84	2,4-Dinitrophenol	184	9.059	9.059	(1.028)	68768	50.0000	47.15
85	4-Nitrophenol	109	9.374	9.374	(1.064)	97086	50.0000	48.49
86	Dibenzofuran	168	9.149	9.149	(1.038)	611358	50.0000	44.55
88	2,4-Dinitrotoluene	165	9.315	9.315	(1.057)	153404	50.0000	48.86
93	Diethylphthalate	149	9.785	9.785	(1.110)	532282	50.0000	46.54
94	Fluorene	166	9.758	9.758	(1.107)	524134	50.0000	47.72
95	4-Chlorophenyl-phenylether	204	9.812	9.812	(1.113)	271162	50.0000	45.76
98	4-Nitroaniline	138	9.993	9.993	(1.134)	107418	50.0000	45.94
99	4,6-Dinitro-2-methylphenol	198	10.047	10.047	(0.875)	103028	50.0000	48.54
100	N-Nitrosodiphenylamine	169	10.074	10.074	(0.878)	379525	50.0000	48.66
102	Azobenzene	77	10.095	10.095	(0.879)	768515	50.0000	43.92
109	4-Bromophenyl-phenylether	248	10.693	10.693	(0.932)	159421	50.0000	44.49
112	Hexachlorobenzene	284	10.923	10.923	(0.952)	173796	50.0000	47.51
117	Pentachlorophenol	266	11.329	11.329	(0.987)	85833	50.0000	42.07
* 121	Phenanthrene-d10	188	11.479	11.479	(1.000)	512305	40.0000	
122	Phenanthrene	178	11.521	11.521	(1.004)	704594	50.0000	44.53
124	Anthracene	178	11.601	11.601	(1.011)	681909	50.0000	44.58
126	Carbazole	167	12.007	12.007	(1.046)	580509	50.0000	44.42
129	Di-n-Butylphthalate	149	12.894	12.894	(1.123)	804916	50.0000	47.00
134	Fluoranthene	202	13.813	13.813	(1.203)	775273	50.0000	47.41
135	Benzidine	184	14.208	14.208	(0.854)	43983	50.0000	6.400(a)
137	Pyrene	202	14.230	14.230	(0.855)	779165	50.0000	42.30
146	Butylbenzylphthalate	149	15.795	15.795	(0.949)	348899	50.0000	45.80
150	Benzo(a)Anthracene	228	16.612	16.612	(0.998)	717132	50.0000	45.19
* 153	Chrysene-d12	240	16.644	16.644	(1.000)	453146	40.0000	
152	3,3'-Dichlorobenzidine	252	16.703	16.703	(1.004)	261653	50.0000	42.82
154	Chrysene	228	16.693	16.693	(1.003)	651759	50.0000	43.16
155	bis(2-ethylhexyl)Phthalate	149	17.024	17.024	(1.023)	419917	50.0000	44.04
158	Di-n-octylphthalate	149	18.172	18.172	(0.944)	695232	50.0000	47.44
160	Benzo(b)fluoranthene	252	18.616	18.616	(0.967)	653913	50.0000	48.97
161	Benzo(k)fluoranthene	252	18.658	18.658	(0.969)	616411	50.0000	46.48
165	Benzo(a)pyrene	252	19.150	19.150	(0.995)	554439	50.0000	46.00
* 166	Perylene-d12	264	19.251	19.251	(1.000)	343894	40.0000	
173	Indeno(1,2,3-cd)pyrene	276	20.966	20.966	(1.089)	496808	50.0000	44.47

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
174 Dibenzo(a,h)anthracene	278	21.014	21.014	(1.092)	514360	50.0000	47.45
177 Benzo(g,h,i)perylene	276	21.420	21.420	(1.113)	462254	50.0000	46.34

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3001.D Page 4
Report Date: 10-May-2005 10:45

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

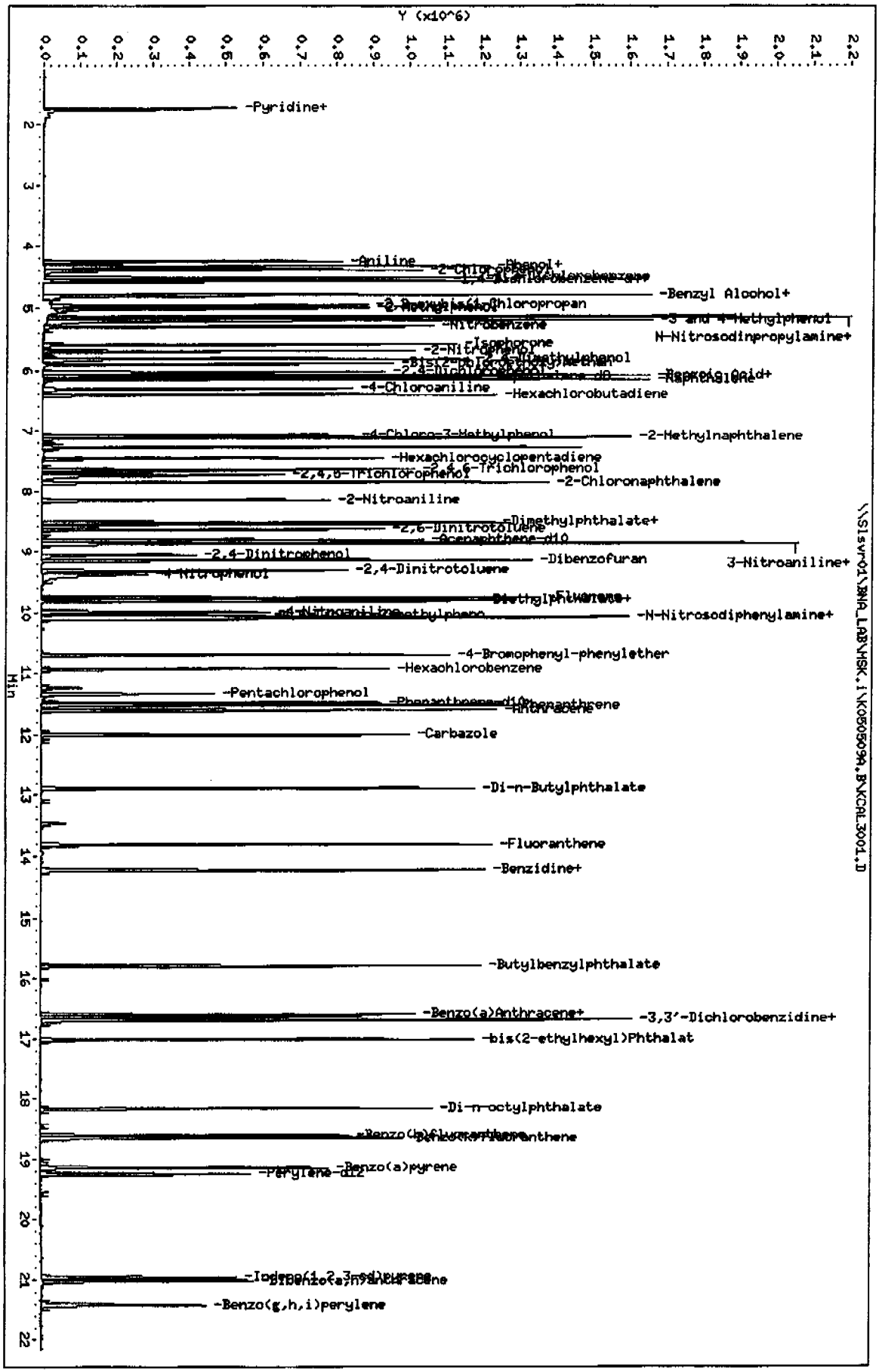
Instrument ID: MSK.i
Lab File ID: KCAL3001.D
Lab Smp Id: SSTD050 ICV
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\8270K.m
Misc Info: OP0052-05 2X

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD050 ICV
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	144564	-25.21
48 Naphthalene-d8	657267	328634	1314534	520505	-20.81
82 Acenaphthene-d10	351374	175687	702748	296342	-15.66
121 Phenanthrene-d10	612492	306246	1224984	512305	-16.36
153 Chrysene-d12	494718	247359	989436	453146	-8.40
166 Perylene-d12	409117	204559	818234	343894	-15.94

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.56	-0.03
48 Naphthalene-d8	6.14	5.64	6.64	6.13	-0.19
82 Acenaphthene-d10	8.83	8.33	9.33	8.81	-0.13
121 Phenanthrene-d10	11.49	10.99	11.99	11.48	-0.10
153 Chrysene-d12	16.66	16.16	17.16	16.64	-0.07
166 Perylene-d12	19.27	18.77	19.77	19.25	-0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509A.B\KCAL3001.D
Date : 09-MAY-2005 15:44
Client ID: SSTD050 ICV
Sample Info: SSTD050 ICV
Volume Injected (uL): 1.0
Column phase:

Instrument: MSK.i
Operator: XIA
Column diameter: 2.00

DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	39.30		PASS
68	Less than 2% of mass 69	0.30	(0.60)	PASS
69	Mass 69 relative abundance	49.09		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	44.68		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.51		PASS
275	10 - 30% of mass 198	26.27		PASS
365	Greater than 1% of mass 198	3.35		PASS
441	Present, but less than mass 443	12.49	(92.61)	PASS
442	Greater than 40% of mass 198	74.40		PASS
443	17 - 23% of mass 442	13.49	(18.13)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.1073298	5.000	PASS
Benzidine	0.7302738	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	339046			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	2403	0.7	15.0	PASS
4,4-DDD + DDE	2403	0.7	15.0	PASS

****
Tuning Sample, //Slsvr01/BNA_LAB/MSK.i/K050513B.B/KDFT3125.D/KDFT3125.D,*** PASSED
****

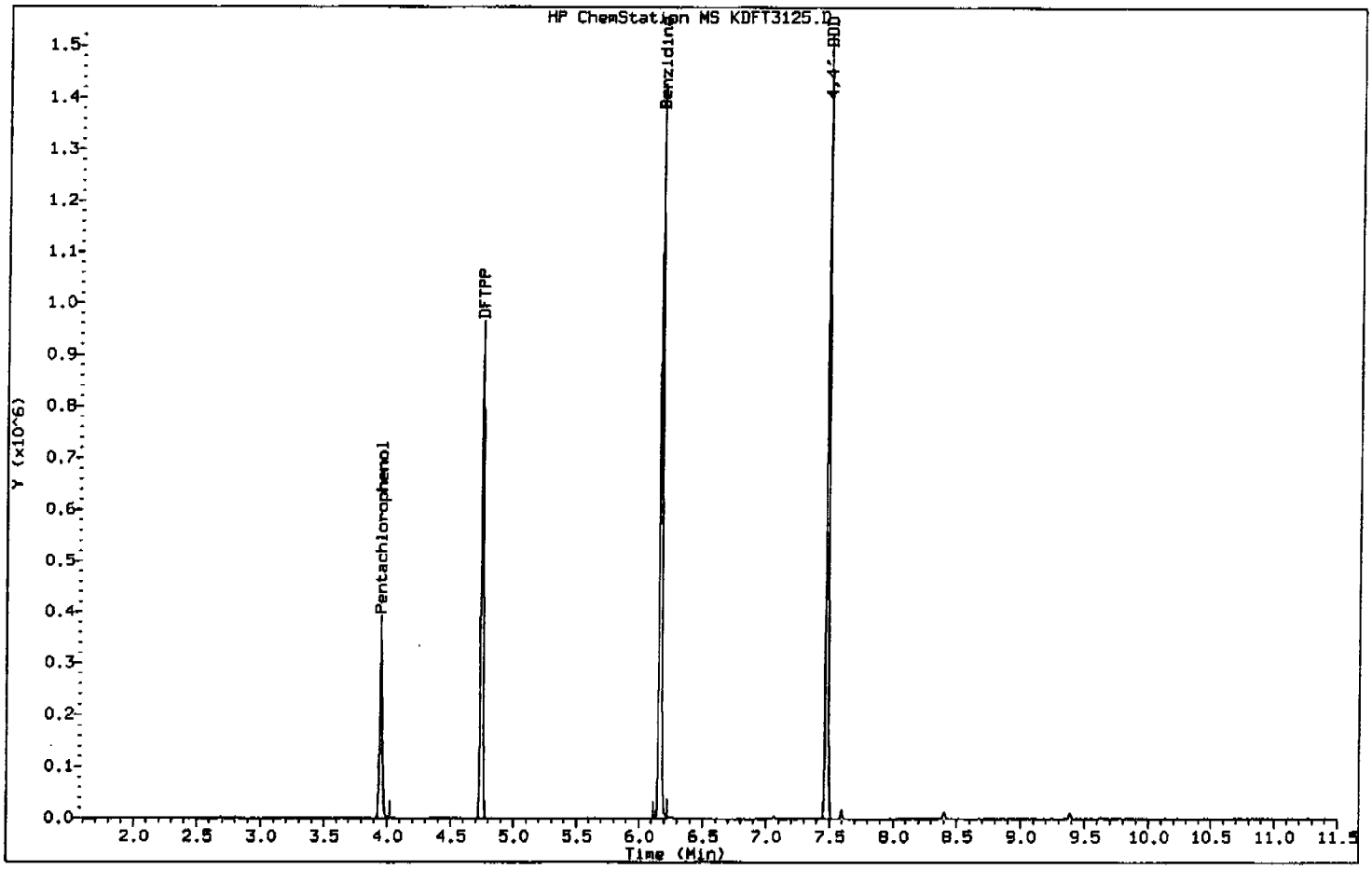
5/14/05

STL ST. LOUIS

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 05/14/2005 09:32

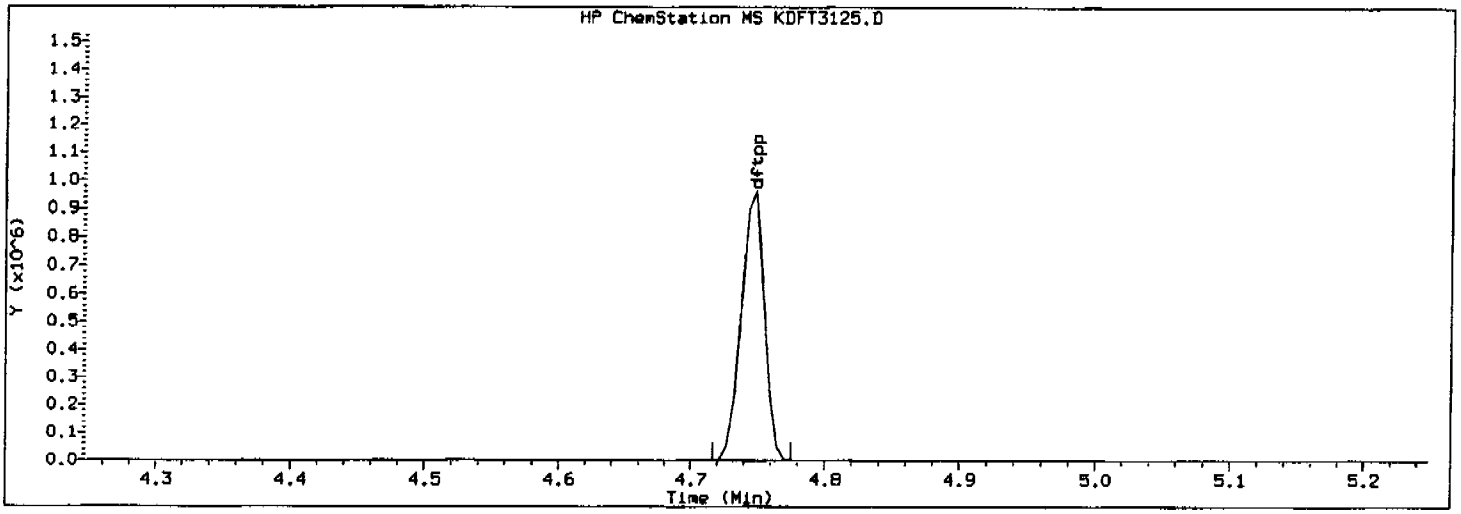
Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050513B.B/KDFT3125.D/KDFT3125.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050513B.B\sw846tun.m Inst: MSK
Injection Date: 13-MAY-2005 10:49 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0232-05 (50NG)

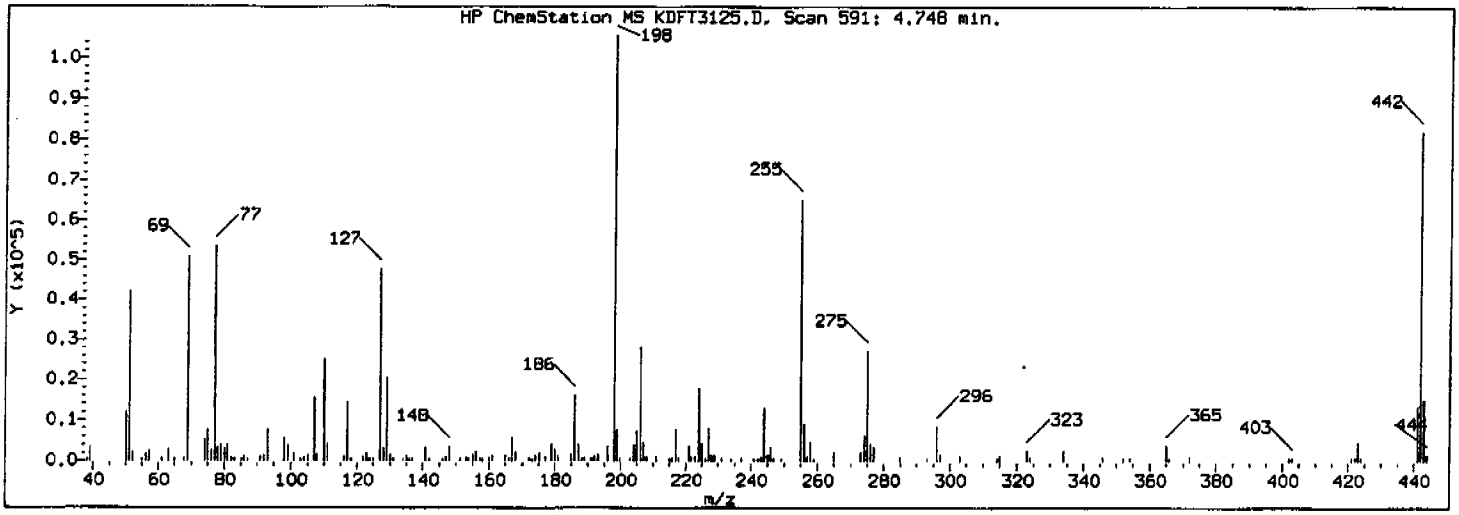


LOT# F5D210380

Report Date: 05/14/2005 09:32

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050513B.B/KDFT3125.D/KDFT3125.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050513B.B\sw846tun.m Inst: MSK
Injection Date: 13-MAY-2005 10:49 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0232-05 (50NG)





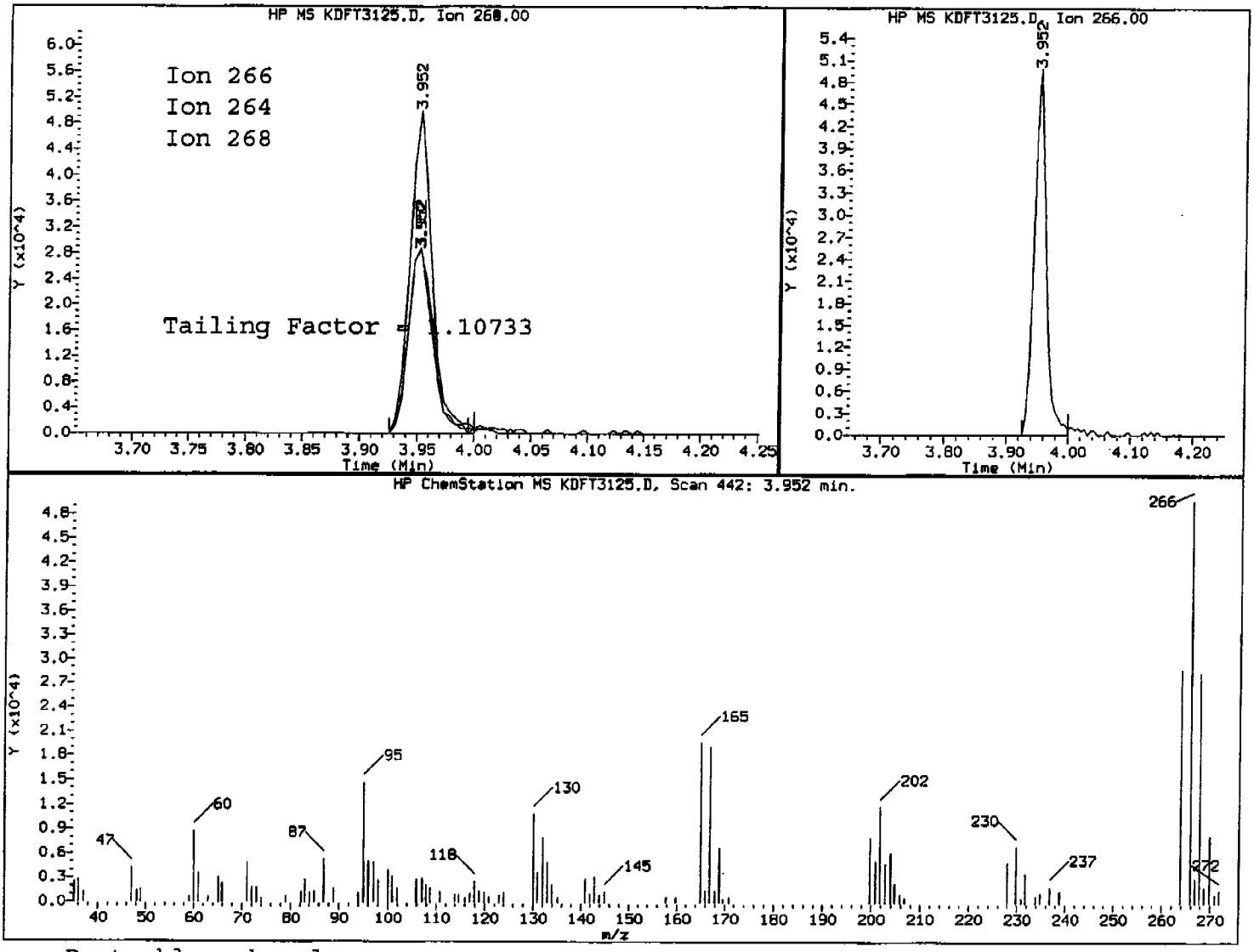
DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	39.30		PASS
68	Less than 2% of mass 69	0.30	(0.60)	PASS
69	Mass 69 relative abundance	49.09		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	44.68		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.51		PASS
275	10 - 30% of mass 198	26.27		PASS
365	Greater than 1% of mass 198	3.35		PASS
441	Present, but less than mass 443	12.49	(92.61)	PASS
442	Greater than 40% of mass 198	74.40		PASS
443	17 - 23% of mass 442	13.49	(18.13)	PASS

STL ST. LOUIS

Report Date: 05/14/2005 09:32

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050513B.B/KDFT3125.D/KDFT3125.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050513B.B\sw846tun.m\resolut.m Inst:
Injection Date: 13-MAY-2005 10:49 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



Pentachlorophenol

Exp. RT =	3.952
Found RT =	3.952

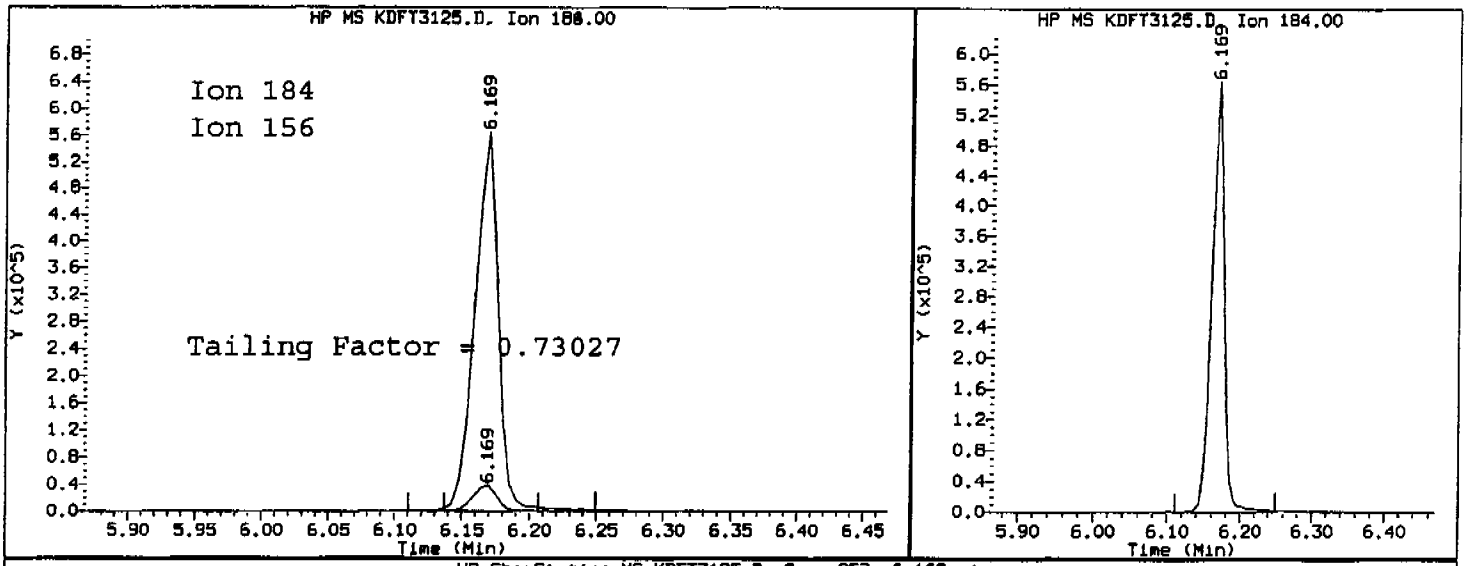
Mass	Area	Ratio
266	68194	100.00
264	42309	62.04
268	43378	63.61

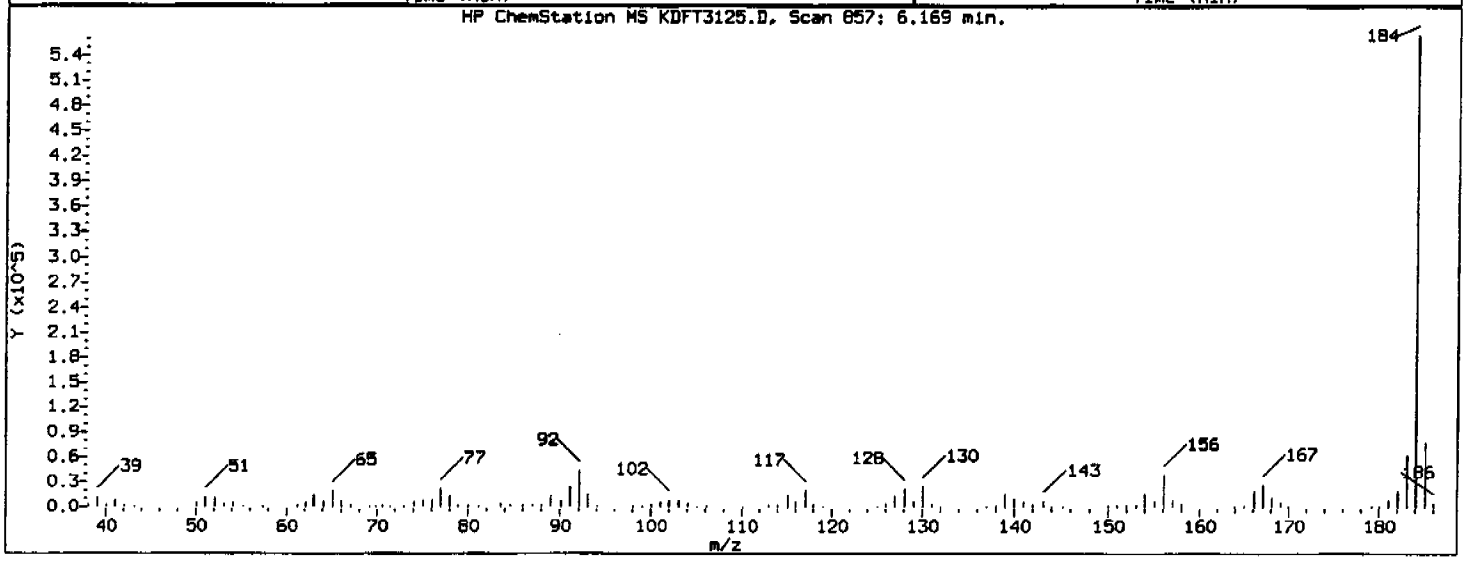
Tailing factor for Pentachlorophenol OK

Tail Factor = 1.107 Maximum Allowed = 5.0

Report Date: 05/14/2005 09:32

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050513B.B/KDFT3125.D/KDFT3125.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050513B.B\sw846tun.m\resolut.m Inst:
Injection Date: 13-MAY-2005 10:49 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)





Benzidine
=========
Exp. RT = 6.169
Found RT = 6.169

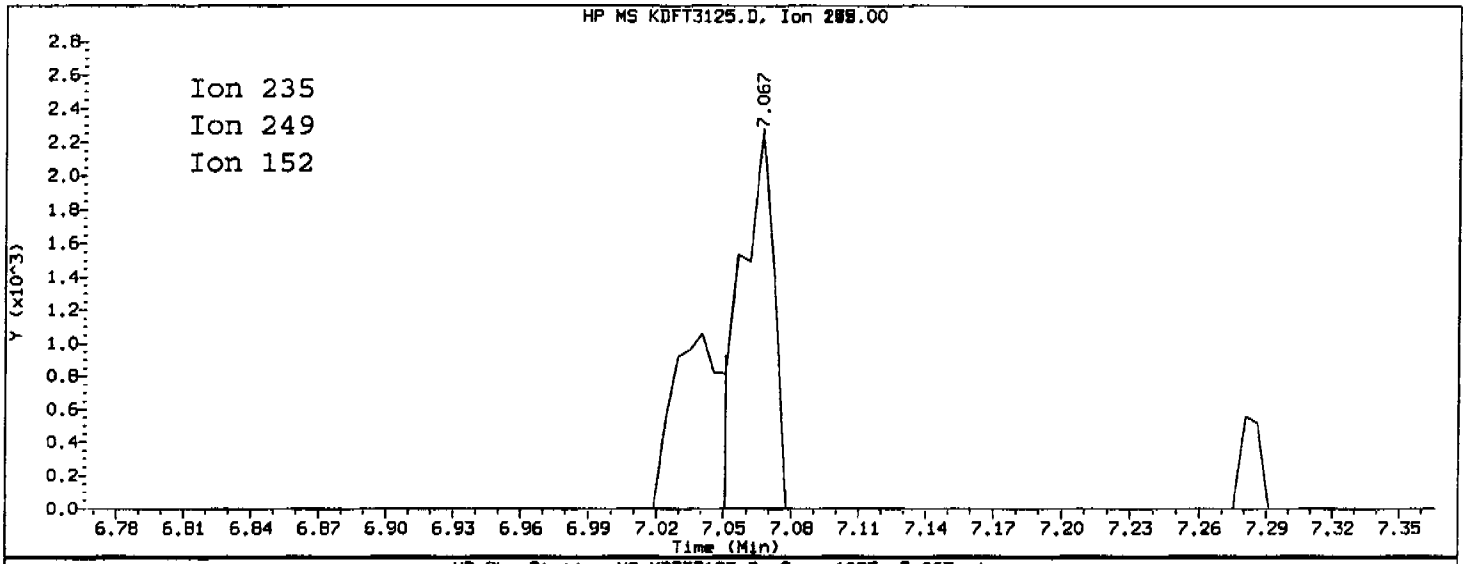
Mass	Area	Ratio
184	680984	100.00
156	48451	7.11

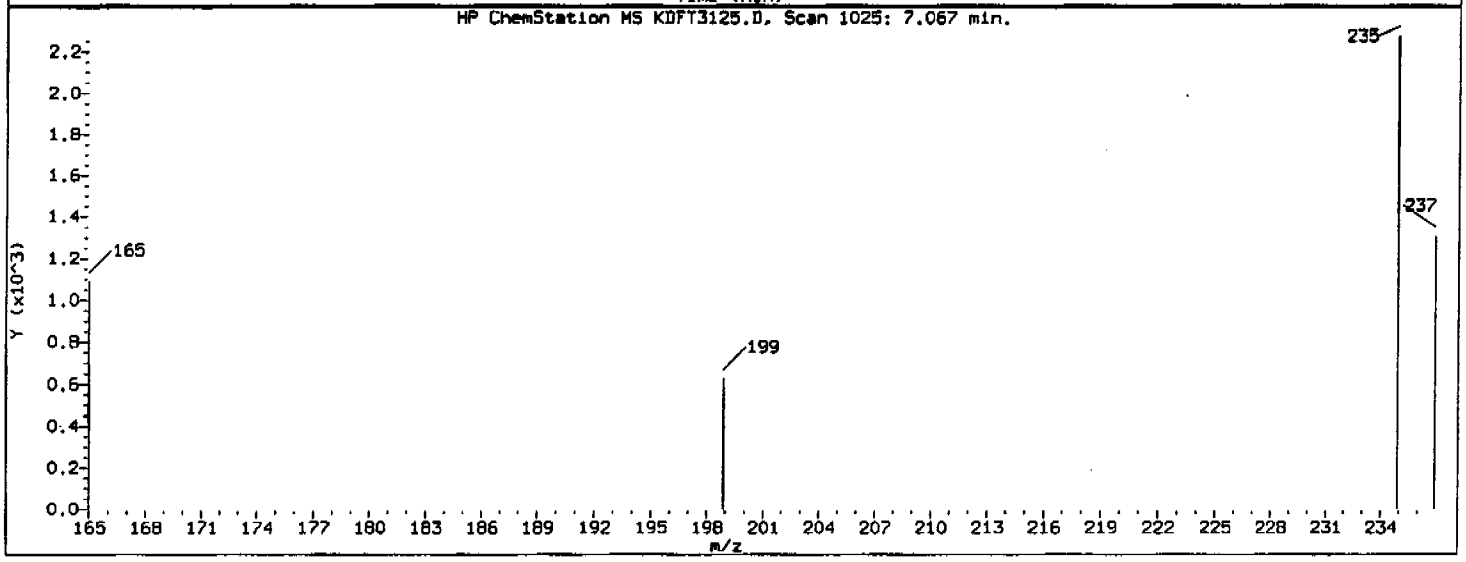
Tailing factor for Benzidine OK

Tail Factor = 0.730 Maximum Allowed = 3.0

STL ST. LOUIS
Report Date: 05/14/2005 09:32

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050513B.B/KDFT3125.D/KDFT3125.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050513B.B\sw846tun.m\resolut.m Inst:
Injection Date: 13-MAY-2005 10:49 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)





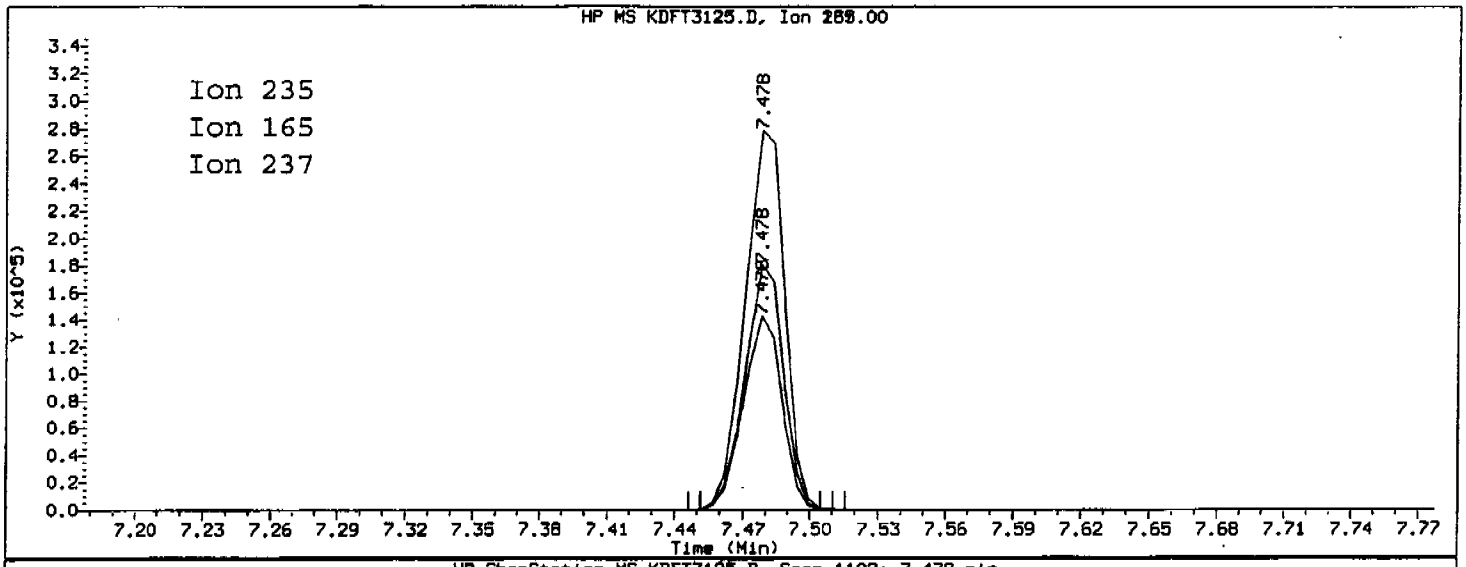
4,4'-DDD
========
Exp. RT = 7.074
Found RT = 7.067

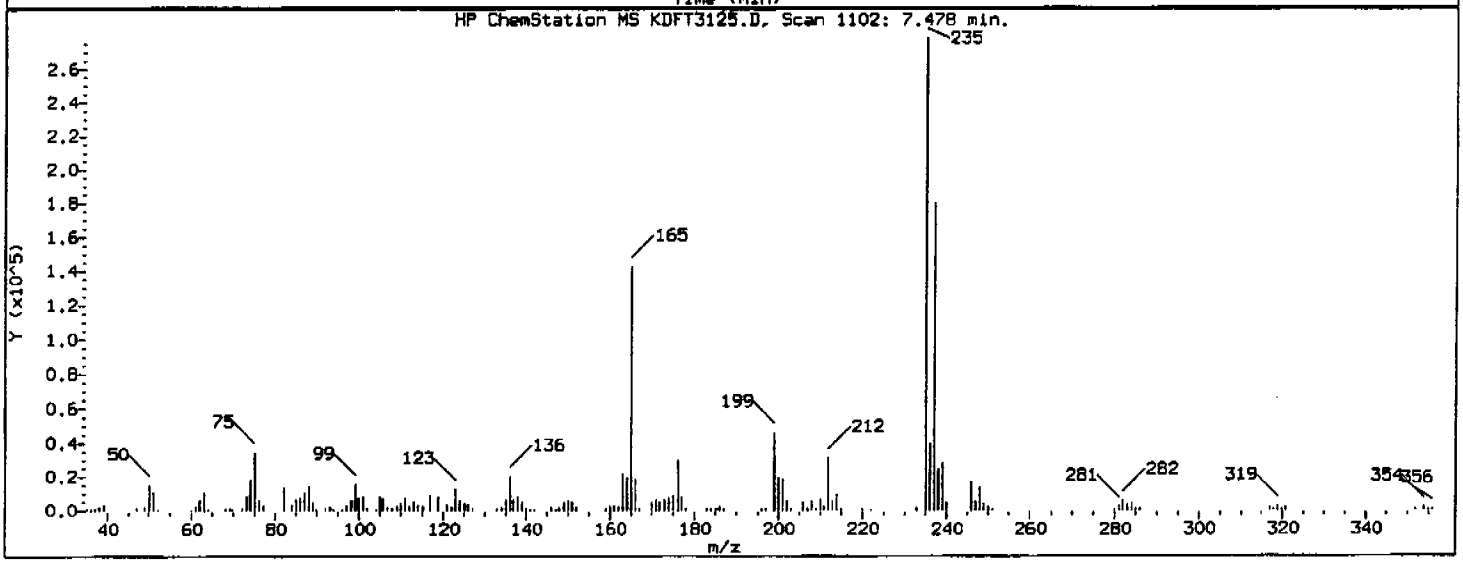
Mass	Area	Ratio
235	2403	100.00
249	5626	234.12
152	2338	97.30

STL ST. LOUIS

Report Date: 05/14/2005 09:32

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050513B.B/KDFT3125.D/KDFT3125.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050513B.B\sw846tun.m\resolut.m Inst:
Injection Date: 13-MAY-2005 10:49 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



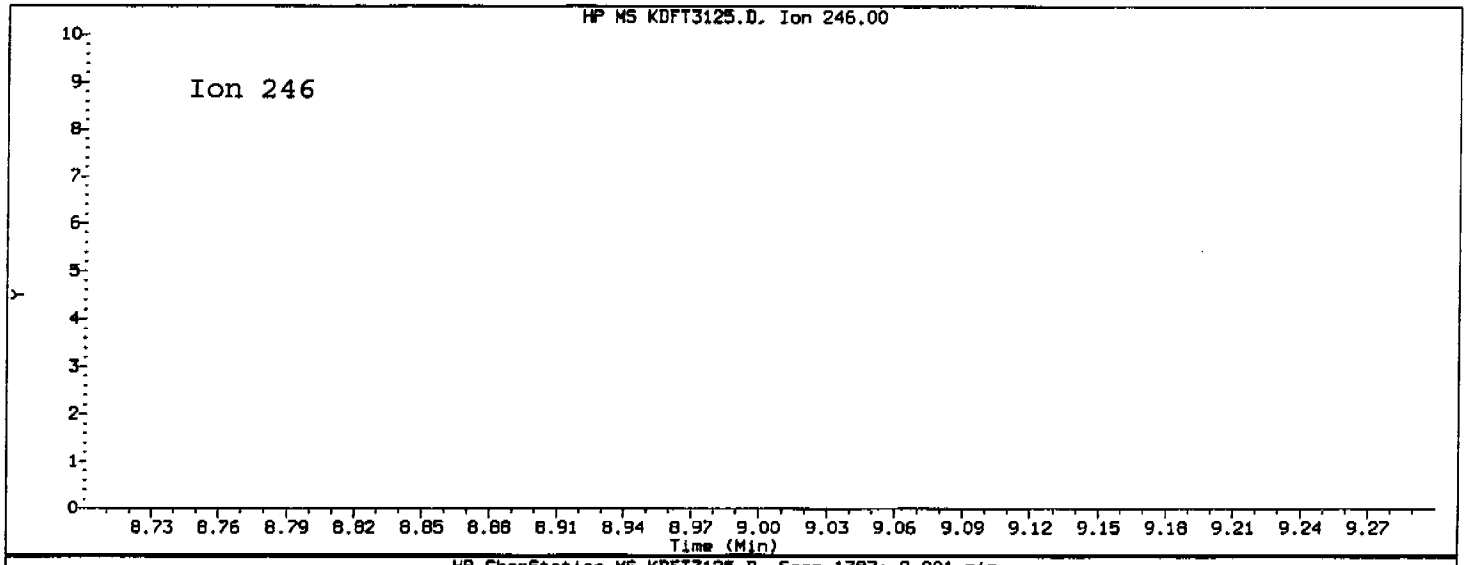


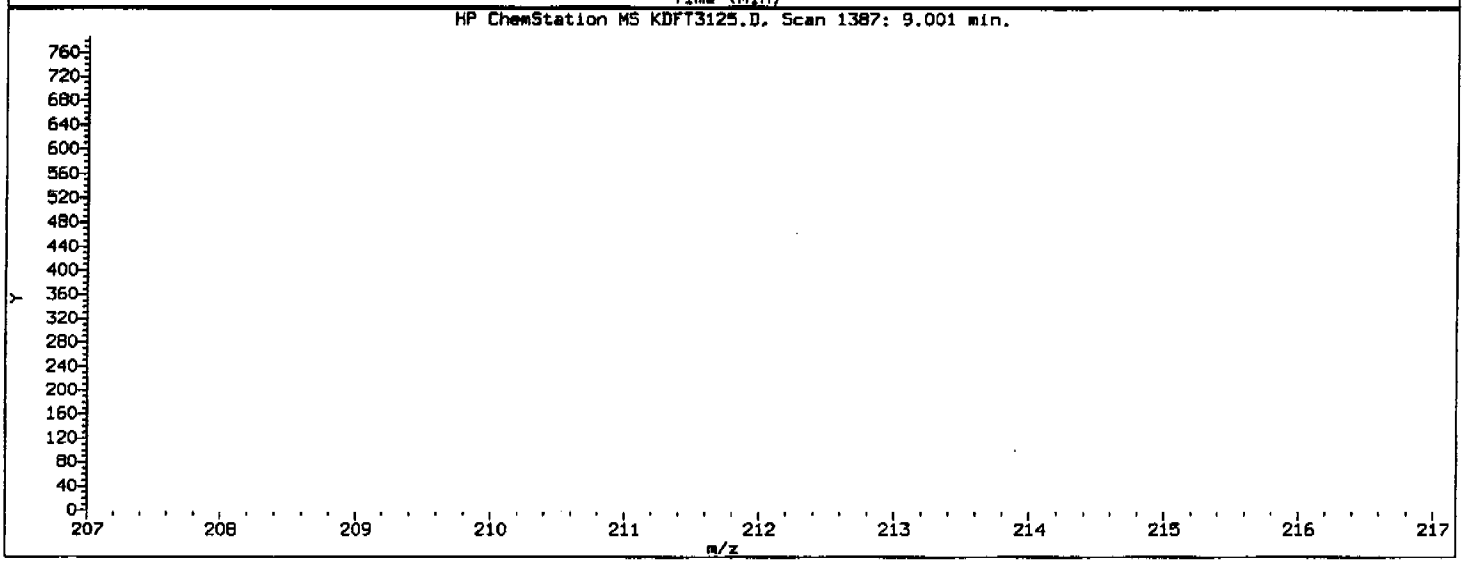
4,4'-DDT
========
Exp. RT = 7.478
Found RT = 7.478

Mass	Area	Ratio
235	339046	100.00
165	169460	49.98
237	214215	63.18

Report Date: 05/14/2005 09:32

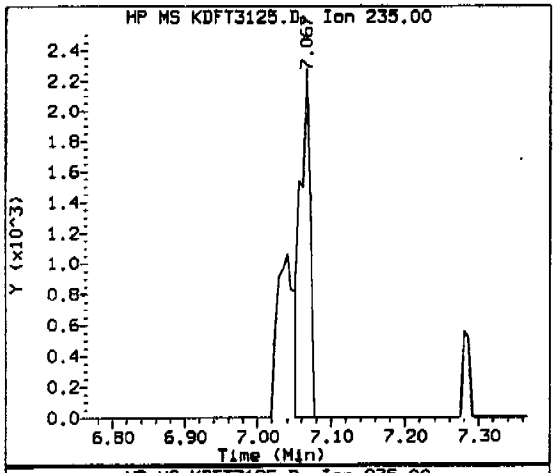
Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050513B.B/KDFT3125.D/KDFT3125.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050513B.B\sw846tun.m\resolut.m Inst:
Injection Date: 13-MAY-2005 10:49 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



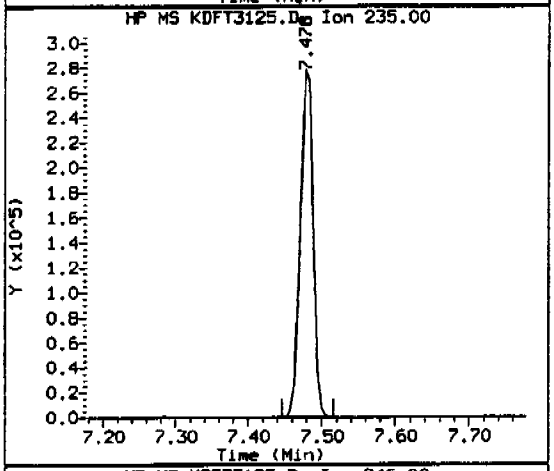


4,4'-DDE
========
Exp. RT = 9.000
Found RT = 0.000

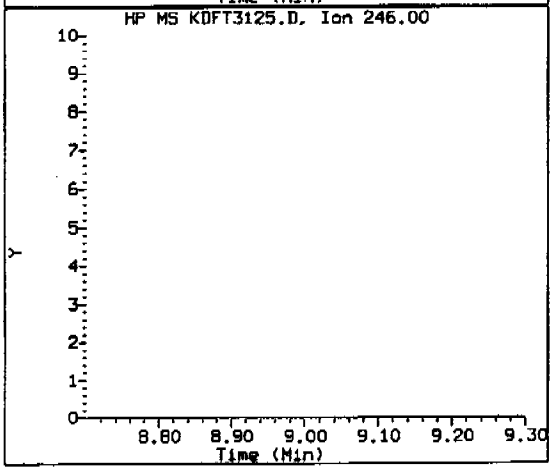
Mass	Area	Ratio
246	0	0.00



Compound: 4,4'-DDD
Quant Mass: 235
RT: 7.067
Area: 2403



Compound: 4,4'-DDT
Quant Mass: 235
RT: 7.478
Area: 339046



Compound: 4,4'-DDE
Quant Mass: 246
RT: 0.000
Area: 0

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	339046			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	2403	0.7	15.0	PASS
4,4-DDD + DDE	2403	0.7	15.0	PASS

****
TUNE SAMPLE *** PASSED *** DDT BREAKDOWN TEST
****

Report Date : 16-May-2005 10:02

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 13-MAY-2005 15:58
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Cal Date : 14-May-2005 09:51 hongs
Curve Type : Average

Calibration File Names:
Level 1: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3134.D
Level 2: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3133.D
Level 3: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3132.D
Level 4: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3128.D
Level 5: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3131.D
Level 6: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3130.D
Level 7: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3129.D

05/16/05

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD
1 1,4-Dioxane	0.37862	0.32816	0.35442	0.34835	0.37303	0.41020	0.39818	0.37014	7.764
2 Methyl methacrylate	0.39326	0.35373	0.33429	0.32307	0.34005	0.34871	0.35814	0.35018	6.411
3 Pyridine	0.76874	1.15077	1.10698	1.31678	1.26606	1.28389	1.22882	1.16029	16.196
4 N-Nitrosodimethylamine	0.54706	0.66485	0.62129	0.63232	0.64197	0.69892	0.66426	0.63867	7.486
5 Dimethylformamide	0.83190	0.89234	0.83166	0.89436	0.85963	0.90961	0.82106	0.86294	4.161
6 Ethyl methacrylate	1.06706	1.00921	1.00424	1.00134	1.03952	1.06985	1.11023	1.04307	3.955
7 2-Picoline	1.11672	1.19222	1.23144	1.30096	1.31132	1.30450	1.39292	1.26430	7.204
8 N-Nitrosomethylethylamine	0.46950	0.57796	0.56912	0.57845	0.60310	0.58248	0.59178	0.56748	7.853
9 Methyl methanesulfonate	0.35479	0.41151	0.41103	0.41324	0.46135	0.46437	0.49021	0.42950	10.596
11 Cyclohexanol	1.14284	1.28527	1.26472	1.41967	1.23002	1.26739	1.36333	1.28189	6.989

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 13-MAY-2005 15:58
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Cal Date : 14-May-2005 09:51 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
12 N-Nitrosodiethylamine	0.61009	0.64225	0.62511	0.63051	0.70280	0.70476			
	0.71974						0.66218	6.828	
13 Ethyl Methanesulfonate	1.10180	1.07409	1.10510	1.05473	1.17698	1.15933			
	1.19896						1.12443	4.846	
14 Benzaldehyde	1.16166	1.23901	1.24283	1.29144	1.30102	1.36353			
	1.39704						1.28522	6.202	
16 Phenol	1.53303	1.63969	1.59972	1.70345	1.71918	1.73714			
	1.73171						1.66627	4.673	
17 Aniline	1.88911	2.10603	2.03553	2.12064	2.12742	2.06643			
	1.98660						2.04739	4.204	
18 Pentachloroethane	0.51171	0.48710	0.50536	0.53152	0.54099	0.55718			
	0.58367						0.53108	6.205	
19 Bis(2-chloroethyl)ether	1.33671	1.31862	1.33970	1.38758	1.44667	1.54236			
	1.48880						1.40863	6.095	
20 2-Chlorophenol	1.20022	1.27654	1.26087	1.31241	1.39128	1.44545			
	1.43953						1.33233	7.109	
21 1,3-Dichlorobenzene	1.47668	1.52710	1.47174	1.48777	1.57680	1.64380			
	1.62720						1.54444	4.666	
23 1,4-Dichlorobenzene	1.50041	1.54886	1.54349	1.58473	1.70985	1.77960			
	1.77490						1.63455	7.175	
24 Benzenethiol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
25 Benzyl Alcohol	+++++	0.46952	0.50089	0.73159	0.70409	0.60631			
	0.71534						0.62129	18.439	<-
26 1,2-Dichlorobenzene	1.35598	1.42034	1.40106	1.47216	1.57273	1.66249			
	1.66998						1.50782	8.468	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 13-MAY-2005 15:58
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Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Cal Date : 14-May-2005 09:51 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD
	160.000 Level 7							
27 2-Methylphenol	1.16708	1.06962	1.01701	1.15013	1.11660	1.03739		
	1.06963						1.08964	5.190
28 2,2-oxybis(1-Chloropropane)	1.45185	1.45657	1.40122	1.45772	1.48577	1.63728		
	1.45175						1.47745	5.063
29 3 and 4-Methylphenol	1.10277	1.17577	1.10881	1.21768	1.30946	1.30063		
	1.30412						1.21703	7.470
30 Acetophenone	0.52107	0.53512	0.55618	0.57812	0.59620	0.62523		
	0.65259						0.58065	8.209
31 N-Nitrosopyrrolidine	0.17843	0.18370	0.18226	0.18768	0.19258	0.19901		
	0.21721						0.19155	6.907
32 N-Nitrosodinpropylamine	1.13965	1.17494	1.16333	1.24110	1.21205	1.09218		
	0.94666						1.13856	8.548
33 N-Nitrosomorpholine	0.06774	0.07645	0.07726	0.08065	0.08961	0.09511		
	0.10449						0.08447	14.906
34 O-Toluidine	0.56236	0.55680	0.56227	0.60066	0.63366	0.66229		
	0.71711						0.61359	9.900
35 Hexachloroethane	0.69979	0.66205	0.66976	0.69589	0.72599	0.75711		
	0.73027						0.70584	4.834
37 Nitrobenzene	0.54798	0.54566	0.53528	0.55584	0.55743	0.60197		
	0.57574						0.55999	3.989
38 N-Nitrosopiperidine	0.16432	0.16882	0.17079	0.17616	0.18096	0.18588		
	0.19442						0.17733	5.933
39 Isophorone	0.73002	0.72558	0.71129	0.76330	0.73584	0.72957		
	0.69965						0.72789	2.749
40 2-Nitrophenol	0.18204	0.19465	0.19793	0.20823	0.20679	0.20565		
	0.20996						0.20075	4.967

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 13-MAY-2005 15:58
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Cal Date : 14-May-2005 09:51 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
41 2,4-Dimethylphenol	0.34888	0.38212	0.39699	0.44252	0.45133	0.45371			
	0.45572						0.41875	10.184	
42 Bis(2-chloroethoxy)methane	0.45307	0.45244	0.44062	0.46937	0.47763	0.49256			
	0.47093						0.46523	3.792	
43 o,o,o-Triethyl-Phosphorothioa	0.21535	0.22497	0.22572	0.23460	0.25461	0.26744			
	0.27953						0.24317	9.968	
44 Benzoic Acid	+++++	0.14181	0.17137	0.18919	0.21255	0.19597			
	0.19621						0.18452	13.434	
45 2,4-Dichlorophenol	0.26343	0.31056	0.30704	0.32147	0.32633	0.32267			
	0.33650						0.31257	7.607	
46 a,a-Dimethyl-phenethylamine	0.51145	0.76309	0.77322	0.78410	0.80856	0.82953			
	0.87545						0.76363	15.399	
47 1,2,4-Trichlorobenzene	0.36821	0.36433	0.37242	0.38796	0.39915	0.40189			
	0.42712						0.38873	5.789	
49 4-Chlorobenzenethiol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
50 Naphthalene	1.01288	1.02591	1.01947	1.09141	1.17800	1.21790			
	1.26700						1.11608	9.376	
51 4-Chloroaniline	0.37261	0.42887	0.42081	0.44828	0.47982	0.49069			
	0.50694						0.44972	10.381	
52 2,6-Dichlorophenol	0.25469	0.24292	0.25839	0.31185	0.29618	0.31378			
	0.32831						0.28659	11.858	
53 Hexachloropropene	0.31733	0.32521	0.33376	0.35006	0.35945	0.38047			
	0.38884						0.35073	7.781	
54 Hexachlorobutadiene	0.27122	0.26958	0.26663	0.27961	0.28863	0.28529			
	0.30689						0.28112	4.991	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 13-MAY-2005 15:58
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Cal Date : 14-May-2005 09:51 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
55 Benzothiazole	0.50139	0.46477	0.48632	0.49913	0.53104	0.55241			
	0.59151						0.51808	8.350	
56 Caprolactam	0.10983	0.13715	0.14068	0.13986	0.07457	0.14270			
	0.14775						0.12751	20.686	
57 n-Nitrosodi-n-butylamine	0.31342	0.29750	0.30099	0.31842	0.31943	0.33002			
	0.35040						0.31860	5.621	
58 p-Phenylenediamine	0.21874	0.29578	0.28872	0.36365	0.28733	0.27992			
	0.31741						0.29308	14.829	
59 4-Chloro-3-Methylphenol	0.29775	0.33931	0.35279	0.39258	0.38181	0.37267			
	0.37936						0.35947	9.104	
60 p-Chlorophenyl methyl sulfide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
61 Safrole	0.25500	0.27963	0.29140	0.29580	0.30963	0.32648			
	0.34629						0.30061	10.041	
62 2-Methylnaphthalene	0.93483	0.95814	0.97833	1.06312	1.10176	0.85354			
	0.95881						0.97836	8.416	
63 Phthalic anhydride	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
64 cis-Isosafrole	0.04748	0.05826	0.05654	0.05553	0.05574	0.05770			
	0.05995						0.05589	7.184	
65 1,2,4,5-Tetrachlorobenzene	1.42931	1.31274	1.32205	1.39168	1.47308	1.54004			
	1.62334						1.44175	7.870	
66 Hexachlorocyclopentadiene	0.19007	0.30694	0.40058	0.44486	0.48746	0.54587			
	0.56963						0.42077	32.094	<-
67 2,4,6-Trichlorophenol	0.38970	0.42616	0.43931	0.47761	0.49780	0.51137			
	0.52967						0.46738	10.828	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 13-MAY-2005 15:58
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Cal Date : 14-May-2005 09:51 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
68 2,4,5-Trichlorophenol	0.36241	0.44920	0.48184	0.49971	0.50763	0.54884	0.56451	0.48773	13.854	
70 trans-Isosafrole	0.56648	0.54163	0.54100	0.56420	0.59728	0.65850	0.75581	0.60356	12.995	
71 Biphenyl	1.54419	1.44874	1.47932	1.53624	1.66716	1.76228	1.79160	1.60422	8.519	
72 2-Chloronaphthalene	1.21989	1.24431	1.23798	1.32319	1.37430	1.48708	1.52425	1.34443	9.155	
73 2-Nitroaniline	0.46201	0.53797	0.51708	0.56564	0.55165	0.60849	0.54883	0.54166	8.309	
74 1,4-Naphthoquinone	0.27176	0.36890	0.37704	0.33375	0.21032	0.17342	0.12916	0.26634	36.895	<-
75 1,4-Dinitrobenzene	0.07763	0.12369	0.12115	0.12521	0.13042	0.13540	0.14150	0.12214	17.086	
76 Dimethylphthalate	1.36788	1.45850	1.43897	1.54384	1.59126	1.63664	1.65331	1.52720	7.080	
77 1,3-Dinitrobenzene	0.16587	0.22945	0.23025	0.24388	0.24166	0.24971	0.25601	0.23098	13.109	
78 N-(hydroxymethyl) phthalimide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
79 Acenaphthylene	1.80849	1.86172	1.83355	1.94960	2.08728	2.26639	2.33200	2.01986	10.543	
80 2,6-Dinitrotoluene	0.28268	0.31173	0.30838	0.33640	0.33591	0.33070	0.33444	0.32003	6.303	
81 3-Nitroaniline	+++++	0.28756	0.30743	0.33203	0.32860	0.32821	0.32259	0.31774	5.401	<-

STL St. Louis

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Cal Date : 14-May-2005 09:51 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
83 Acenaphthene	1.10718	1.16325	1.15913	1.21146	1.25389	1.35133			
	1.37954						1.23225	8.284	
84 2,4-Dinitrophenol	+++++	0.03524	0.12609	0.13104	0.17042	0.18665			
	0.19482						0.14071	41.866	<-
85 4-Nitrophenol	0.15552	0.20972	0.29984	0.34019	0.33108	0.33756			
	0.33039						0.28633	25.756	
86 Dibenzofuran	1.72543	1.77903	1.73945	1.83161	1.89687	1.95602			
	2.01842						1.84955	6.041	
87 Pentachlorobenzene	0.70728	0.65613	0.66649	0.68327	0.70614	0.73519			
	0.75466						0.70131	5.086	
88 2,4-Dinitrotoluene	0.30137	0.40022	0.40091	0.44395	0.43251	0.42113			
	0.42306						0.40331	11.813	
89 1-Naphthylamine	1.03800	1.06591	1.04498	1.10302	1.05391	1.16285			
	1.16394						1.09037	4.961	
90 2-Naphthylamine	0.97677	0.98368	0.94490	1.00433	0.88786	1.05261			
	1.06727						0.98820	6.232	
91 Phenyl sulfide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
92 2,3,4,6-Tetrachlorophenol	0.22811	0.28943	0.32362	0.39276	0.41144	0.42643			
	0.46069						0.36178	23.112	
93 Diethylphthalate	1.37912	1.48082	1.42529	1.53633	1.57757	1.65726			
	1.64336						1.52853	6.938	
94 Fluorene	1.30627	1.42107	1.41091	1.50082	1.54058	1.59073			
	1.62452						1.48498	7.554	
95 4-Chlorophenyl-phenylether	0.73873	0.79821	0.77569	0.82196	0.87067	0.90277			
	0.95621						0.83775	9.092	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
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Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Cal Date : 14-May-2005 09:51 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
96 Thionazin	0.23139	0.25240	0.25864	0.26567	0.28537	0.29086			
	0.29032						0.26781	8.348	
97 5-Nitro-o-toluidine	0.15995	0.20034	0.19875	0.21045	0.21494	0.21816			
	0.22533						0.20399	10.587	
98 4-Nitroaniline	0.20949	0.29382	0.29170	0.32846	0.32232	0.29738			
	0.30206						0.29218	13.395	
99 4,6-Dinitro-2-methylphenol	0.04779	0.10523	0.13547	0.15673	0.18126	0.19632			
	0.20289						0.14652	37.941	<-
100 N-Nitrosodiphenylamine	0.54054	0.54211	0.54805	0.58125	0.63751	0.70539			
	0.71117						0.60943	12.386	
101 tri-n-butylphosphate	1.52154	1.63086	1.65030	1.71460	1.82251	1.87783			
	2.01075						1.74692	9.553	
102 Azobenzene	1.19507	1.14605	1.18220	1.24135	1.35295	1.65149			
	1.50509						1.32489	14.324	
103 Benzal Chloride	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
105 Sulfotepp	0.13055	0.14332	0.15072	0.15105	0.16041	0.16417			
	0.16883						0.15272	8.604	
106 Diallate (peak 1)	0.27906	0.28345	0.29123	0.30014	0.31100	0.32036			
	0.33572						0.30299	6.788	
107 1,3,5-Trinitrobenzene	0.05460	0.08597	0.09688	0.10024	0.10572	0.10753			
	0.11048						0.09449	20.515	
108 Phorate	0.49946	0.50445	0.50760	0.53049	0.56947	0.58636			
	0.62513						0.54614	8.860	
109 4-Bromophenyl-phenylether	0.25938	0.27319	0.27535	0.28709	0.30058	0.31682			
	0.32395						0.29091	8.209	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 13-MAY-2005 15:58
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Cal Date : 14-May-2005 09:51 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
110 Phenacetin	0.38624	0.41341	0.42268	0.42532	0.42504	0.42869			
	0.43971						0.42015	4.015	
111 Diallate (peak 2)	0.06683	0.06004	0.06289	0.06373	0.06488	0.06546			
	0.06814						0.06457	4.135	
112 Hexachlorobenzene	0.29255	0.28996	0.28657	0.29560	0.30801	0.31934			
	0.33506						0.30387	5.884	
113 Dimethoate	0.27185	0.28949	0.28826	0.27480	0.21882	0.21567			
	0.18694						0.24940	16.564	
114 Atrazine	0.22048	0.24204	0.23940	0.24289	0.25564	0.25595			
	0.26658						0.24614	6.060	
115 tris(2-chloroethyl)phosphate	0.22625	0.21717	0.22304	0.21944	0.21858	0.22085			
	0.22796						0.22190	1.817	
116 4-Aminobiphenyl	0.70998	0.67001	0.68070	0.79368	0.77334	0.82627			
	0.87380						0.76111	10.111	
117 Pentachlorophenol	+++++	+++++	0.09373	0.11849	0.15127	0.15538			
	0.16249						0.13627	21.405	
118 Pronamide	0.37755	0.36975	0.37320	0.37153	0.37705	0.38333			
	0.39158						0.37771	2.012	
119 Pentachloronitrobenzene	0.11754	0.12476	0.12783	0.13205	0.13537	0.13783			
	0.13768						0.13044	5.767	
120 Phenyl disulfide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
122 Phenanthrene	1.16212	1.17324	1.15781	1.20946	1.24682	1.31784			
	1.33193						1.22846	5.929	
123 Disulfoton	0.35737	0.36108	0.36643	0.37668	0.39485	0.40708			
	0.42916						0.38466	6.946	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 13-MAY-2005 15:58
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Cal Date : 14-May-2005 09:51 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
124 Anthracene	1.11462	1.12807	1.12308	1.16790	1.20838	1.24988	1.28307	1.18214	5.636	
125 Dinoseb	0.13116	0.20289	0.23168	0.24451	0.26321	0.27373	0.28489	0.23315	22.611	
126 Carbazole	0.87731	0.96630	0.94610	0.99346	1.01497	1.02311	1.03577	0.97957	5.631	
127 Phenyl sulfone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
128 Methyl Parathion	0.22472	0.25273	0.25605	0.24165	0.20186	0.19848	0.17806	0.22194	13.501	
129 Di-n-Butylphthalate	1.16636	1.24010	1.24212	1.30012	1.33986	1.41074	1.39822	1.29964	6.903	
130 Parathion	0.13719	0.18275	0.18212	0.18480	0.18353	0.18558	0.18900	0.17785	10.162	
131 4-Nitroquinoline-1-oxide	+++++	0.06721	0.07979	0.10710	0.08542	0.08685	0.08235	0.08479	15.310	<-
132 Methapyrilene	0.34073	0.34857	0.33447	0.27766	0.21659	0.20104	0.18189	0.27156	26.360	
133 Isodrin	0.14938	0.13071	0.13659	0.12878	0.13896	0.13984	0.14629	0.13865	5.427	
134 Fluoranthene	1.18791	1.25088	1.21835	1.27716	1.29265	1.27906	1.32234	1.26119	3.636	
135 Benzidine	0.44820	0.50969	0.56913	0.57976	0.57370	0.60014	0.57432	0.55071	9.638	
136 Bis (4-chlorophenyl) disulfid	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
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Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Cal Date : 14-May-2005 09:51 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
137 Pyrene	1.41800	1.47049	1.57296	1.57235	1.68981	1.87286			
	1.87066						1.63816	11.060	
138 4-chlorophenyl sulfone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
140 Aramite (peak 1)	0.05375	0.06879	0.07594	0.07526	0.07359	0.07265			
	0.07371						0.07053	10.986	
141 Kepone	+++++	0.00357	0.00453	0.00668	0.00729	0.00747			
	0.00748						0.00617	27.492	<-
142 Aramite (peak 2)	0.08770	0.10236	0.10922	0.11671	0.11420	0.11097			
	0.11134						0.10750	9.129	
143 p-(Dimethylamino)azobenzene	0.29047	0.32717	0.33641	0.34730	0.34129	0.34067			
	0.34674						0.33286	5.977	
144 Chlorobenzilate	0.40399	0.42688	0.44410	0.45660	0.49105	0.50109			
	0.53020						0.46484	9.587	
145 3,3-Dimethylbenzidine	0.53327	0.58984	0.63308	0.66866	0.63590	0.65696			
	0.64732						0.62358	7.535	
146 Butylbenzylphthalate	0.59089	0.59833	0.60904	0.62580	0.64754	0.72733			
	0.69909						0.64258	8.146	
147 Acrylamide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
148 2-Acetylaminofluorene(1)	0.44078	0.49973	0.51625	0.54235	0.55089	0.55882			
	0.56140						0.52432	8.256	
(2)	0.35522	0.39267	0.39584	0.41786	0.42490	0.43100			
	0.43659						0.40773	7.007	
149 Pamphur	+++++	0.02197	0.03377	0.05429	0.01871	0.01486			
	0.00621						0.02497	67.953	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 13-MAY-2005 15:58
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Cal Date : 14-May-2005 09:51 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
150 Benzo(a)Anthracene	1.27172	1.29369	1.32369	1.36431	1.40964	1.49131			
	1.51169						1.38086	6.819	
151 4,4'-Methylenebis(2-Chloroani	0.10305	0.10187	0.11221	0.12299	0.11640	0.12512			
	0.13117						0.11611	9.589	
152 3,3'-Dichlorobenzidine	0.40230	0.40459	0.46392	0.54703	0.57830	0.61752			
	0.63950						0.52188	18.874	
154 Chrysene	1.25069	1.15490	1.20813	1.26121	1.36371	1.43428			
	1.47540						1.30690	9.158	
155 bis(2-ethylhexyl)Phthalate	0.69639	0.74430	0.76016	0.78178	0.82025	0.90163			
	0.87118						0.79653	9.093	
M 156 Toluenediamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
157 Triethylamine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
158 Di-n-octylphthalate	1.28664	1.43409	1.53192	1.63301	1.70704	1.97908			
	1.97856						1.65005	15.888	
159 1,2-Dinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
160 Benzo(b)fluoranthene	1.36955	1.41553	1.48683	1.58665	1.56414	1.79131			
	1.87761						1.58452	11.902	
161 Benzo(k)fluoranthene	1.38387	1.46898	1.44154	1.57245	1.63200	1.65836			
	1.75652						1.55910	8.564	
162 7,12-Dimethylbenz(a)anthracen	0.63206	0.67147	0.70278	0.74963	0.79123	0.82571			
	0.80112						0.73914	9.807	
163 Hexachlorophene	+++++	0.00594	0.00928	0.01407	0.00882	0.00689			
	0.09695						0.02366	152.219	<-

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 13-MAY-2005 15:58
Quant Method : ISTD
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Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Cal Date : 14-May-2005 09:51 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	160.000 Level 7	RRF	% RSD	
164 N,N-Dimethylamine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
165 Benzo(a)pyrene	1.24103	1.26672	1.34384	1.40159	1.47692	1.52883	1.60172	1.40867	9.562	
167 Carbofuran Phenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
168 2,3- and 3,5-Diaminotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
169 3-methylcholanthrene	0.67245	0.68361	0.68395	0.73820	0.79182	0.82758	0.85552	0.75045	10.005	
170 2,6- and 2,4-Diaminotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
171 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
172 n-Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
173 Indeno(1,2,3-cd)pyrene	1.05173	1.16814	1.17303	1.29456	1.44432	1.54132	1.60916	1.32604	15.851	
174 Dibenzo(a,h)anthracene	1.05388	1.08075	1.20397	1.27535	1.38727	1.45376	1.50707	1.28029	13.895	
175 Dibens(e,a) Pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
176 n-tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
177 Benzo(g,h,i)perylene	1.03350	1.06863	1.09531	1.11693	1.23843	1.29015	1.30745	1.16434	9.608	

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 28-APR-2005 11:41
End Cal Date : 13-MAY-2005 15:58
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Cal Date : 14-May-2005 09:51 hongs
Curve Type : Average

Compound	2.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000 Level 6	RRF	% RSD	
	160.000 Level 7								
179 Phthalic Acid	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
180 n-Dodecane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
M 181 Isosafrole	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
$ 10 2-Fluorophenol	1.10733	1.17138	1.14442	1.22320	1.28159	1.24663			
	1.20069						1.19646	5.036	
$ 15 Phenol-d5	1.63460	1.42481	1.41421	1.56052	1.63148	1.63063			
	1.62474						1.56014	6.377	
$ 36 Nitrobenzene-d5	0.51993	0.52727	0.52076	0.54335	0.53671	0.57465			
	0.54499						0.53824	3.526	
$ 69 2-Fluorobiphenyl	1.44061	1.46663	1.47215	1.54037	1.64876	1.82670			
	1.92208						1.61676	11.807	
$ 104 2,4,6-Tribromophenol	0.18392	0.23304	0.22560	0.24780	0.25341	0.22899			
	0.25981						0.23322	10.838	
$ 139 Terphenyl-d14	1.13987	1.14470	1.22684	1.24992	1.33349	1.44169			
	1.46938						1.28656	10.343	
$ 178 2,4,6-Trichlorophenol-d2	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B/KCAL3128.D
Report Date: 05/14/2005

INITIAL CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3128.D
Analysis Type: WATER

Injection Date: 13-MAY-2005 12:14
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270

COMPOUND	%RSD
1,4-Dioxane	7.8
Pyridine	16.2
N-Nitrosodimethylamine	7.5
Dimethylformamide	4.2
Cyclohexanol	7.0
2-Fluorophenol	5.0
Aniline	4.2
Bis(2-chloroethyl)ether	6.1
Phenol-d5	6.4
Phenol	4.7
2-Chlorophenol	7.1
1,3-Dichlorobenzene	4.7
1,4-Dichlorobenzene	7.2
1,2-Dichlorobenzene	8.5
Benzyl Alcohol	18.4
2,2-oxybis(1-Chloropropane)	5.1
2-Methylphenol	5.2
N-Nitrosodinpropylamine	8.5
Hexachloroethane	4.8
3 and 4-Methylphenol	7.5
Nitrobenzene-d5	3.5
Nitrobenzene	4.0
Isophorone	2.7
2-Nitrophenol	5.0
2,4-Dimethylphenol	10.2
Bis(2-chloroethoxy)methane	3.8
2,4-Dichlorophenol	7.6
1,2,4-Trichlorobenzene	5.8
Benzoic Acid	13.4
Naphthalene	9.4
4-Chloroaniline	10.4
Hexachlorobutadiene	5.0
4-Chloro-3-Methylphenol	9.1
2-Methylnaphthalene	8.4
Hexachlorocyclopentadiene	32.1
2,4,6-Trichlorophenol	10.8
2-Fluorobiphenyl	11.8
2,4,5-Trichlorophenol	13.9
2-Chloronaphthalene	9.2

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B/KCAL3128.D
Report Date: 05/14/2005

INITIAL CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3128.D
Analysis Type: WATER

Injection Date: 13-MAY-2005 12:14
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050513A

COMPOUND	%RSD
2-Nitroaniline	8.3
Dimethylphthalate	7.1
Acenaphthylene	10.5
2,6-Dinitrotoluene	6.3
Acenaphthene	8.3
3-Nitroaniline	5.4
2,4-Dinitrophenol	41.9
Dibenzofuran	6.0
2,4-Dinitrotoluene	11.8
4-Nitrophenol	25.8
Fluorene	7.6
Diethylphthalate	6.9
4-Chlorophenyl-phenylether	9.1
4-Nitroaniline	13.4
4,6-Dinitro-2-methylphenol	37.9
N-Nitrosodiphenylamine	12.4
Azobenzene	14.3
2,4,6-Tribromophenol	10.8
4-Bromophenyl-phenylether	8.2
Hexachlorobenzene	5.9
Pentachlorophenol	21.4
Phenanthrene	5.9
Anthracene	5.6
Carbazole	5.6
Di-n-Butylphthalate	6.9
Fluoranthene	3.6
Benzidine	9.6
Pyrene	11.1
Terphenyl-d14	10.3
3,3-Dimethylbenzidine	7.5
Butylbenzylphthalate	8.1
Benzo(a)Anthracene	6.8
Chrysene	9.2
3,3'-Dichlorobenzidine	18.9
bis(2-ethylhexyl)Phthalate	9.1
Di-n-octylphthalate	15.9
Benzo(b)fluoranthene	11.9
Benzo(k)fluoranthene	8.6
Benzo(a)pyrene	9.6

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B/KCAL3128.D
Report Date: 05/14/2005

INITIAL CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3128.D
Analysis Type: WATER

Injection Date: 13-MAY-2005 12:14
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050513A

COMPOUND	%RSD
Indeno(1,2,3-cd)pyrene	15.9
Dibenzo(a,h)anthracene	13.9
Benzo(g,h,i)perylene	9.6
Dibenz(e,a) Pyrene	0.0

The average of all %RSD's in the initial calibration is 9.8

05/16/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3128.D
Report Date: 14-May-2005 09:51

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3128.D
Lab Smp Id: SSTD050 Client Smp ID: SSTD050
Inj Date : 13-MAY-2005 12:14
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD050
Misc Info : SV0222-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Meth Date : 14-May-2005 09:51 hongs Quant Type: ISTD
Cal Date : 13-MAY-2005 12:14 Cal File: KCAL3128.D
Als bottle: 3 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 1,4-Dioxane	88	1.233	1.233	(0.273)	78844	50.0000	47.06
	4 N-Nitrosodimethylamine	74	1.660	1.660	(0.367)	143115	50.0000	49.50
	3 Pyridine	79	1.639	1.639	(0.362)	298031	50.0000	56.74(M)
	5 Dimethylformamide	44	2.136	2.136	(0.472)	202423	50.0000	51.82(M)
$	10 2-Fluorophenol	112	3.231	3.231	(0.714)	276851	50.0000	51.12
	11 Cyclohexanol	57	3.231	3.231	(0.714)	321317	50.0000	55.37
	17 Aniline	93	4.219	4.219	(0.933)	479969	50.0000	51.79
	19 Bis(2-chloroethyl)ether	93	4.294	4.294	(0.949)	314055	50.0000	49.25
$	15 Phenol-d5	99	4.315	4.315	(0.954)	353196	50.0000	50.01
	16 Phenol	94	4.331	4.331	(0.957)	385546	50.0000	51.12
	20 2-Chlorophenol	128	4.369	4.369	(0.966)	297041	50.0000	49.25
	21 1,3-Dichlorobenzene	146	4.476	4.476	(0.989)	336731	50.0000	48.16
*	22 1,4-Dichlorobenzene-d4	152	4.524	4.524	(1.000)	181066	40.0000	
	23 1,4-Dichlorobenzene	146	4.545	4.545	(1.005)	358677	50.0000	48.48
	26 1,2-Dichlorobenzene	146	4.764	4.764	(1.053)	333198	50.0000	48.82
	25 Benzyl Alcohol	108	4.780	4.780	(1.057)	165583	50.0000	58.88
	28 2,2-oxybis(1-Chloropropane)	45	4.935	4.935	(1.091)	329929	50.0000	49.33
	27 2-Methylphenol	108	5.004	5.004	(1.106)	260311	50.0000	52.78
	35 Hexachloroethane	117	5.122	5.122	(1.132)	157503	50.0000	49.30
	32 N-Nitrosodinpropylamine	70	5.122	5.122	(1.132)	280901	50.0000	54.50
	29 3 and 4-Methylphenol	108	5.186	5.186	(1.146)	551201	100.000	100.0

05/16/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3128.D
Report Date: 14-May-2005 09:51

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.250	5.250	(0.860)	426189	50.0000	50.47
	37 Nitrobenzene	77	5.272	5.272	(0.864)	435986	50.0000	49.63
	39 Isophorone	82	5.565	5.565	(0.912)	598717	50.0000	52.43
	40 2-Nitrophenol	139	5.672	5.672	(0.929)	163329	50.0000	51.86
	41 2,4-Dimethylphenol	107	5.811	5.811	(0.952)	347101	50.0000	52.84
	42 Bis(2-chloroethoxy)methane	93	5.881	5.881	(0.963)	368159	50.0000	50.44
	45 2,4-Dichlorophenol	162	6.030	6.030	(0.988)	252154	50.0000	51.42
	47 1,2,4-Trichlorobenzene	180	6.062	6.062	(0.993)	304306	50.0000	49.90
*	48 Naphthalene-d8	136	6.105	6.105	(1.000)	627500	40.0000	
	44 Benzoic Acid	122	6.094	6.094	(0.998)	148395	50.0000	51.27
	50 Naphthalene	128	6.132	6.132	(1.004)	856074	50.0000	48.89
	51 4-Chloroaniline	127	6.287	6.287	(1.030)	351620	50.0000	49.84
	54 Hexachlorobutadiene	225	6.377	6.377	(1.045)	219321	50.0000	49.73
	62 2-Methylnaphthalene	142	7.088	7.088	(1.161)	833882	50.0000	54.33
	59 4-Chloro-3-Methylphenol	107	7.072	7.072	(1.158)	307932	50.0000	54.61
	66 Hexachlorocyclopentadiene	237	7.430	7.430	(0.847)	199340	50.0000	52.86
	67 2,4,6-Trichlorophenol	196	7.627	7.627	(0.869)	214016	50.0000	51.10
	68 2,4,5-Trichlorophenol	196	7.745	7.745	(0.883)	223916	50.0000	51.23
$	69 2-Fluorobiphenyl	172	7.708	7.708	(0.878)	690232	50.0000	47.64
	72 2-Chloronaphthalene	162	7.830	7.830	(0.892)	592916	50.0000	49.21
	73 2-Nitroaniline	65	8.130	8.130	(0.926)	253459	50.0000	52.21
	76 Dimethylphthalate	163	8.493	8.493	(0.968)	691788	50.0000	50.54
	79 Acenaphthylene	152	8.509	8.509	(0.970)	873604	50.0000	48.26
	80 2,6-Dinitrotoluene	165	8.610	8.610	(0.981)	150741	50.0000	52.56
*	82 Acenaphthene-d10	164	8.776	8.776	(1.000)	358476	40.0000	
	83 Acenaphthene	153	8.829	8.829	(1.006)	542851	50.0000	49.16
	81 3-Nitroaniline	138	8.845	8.845	(1.008)	148779	50.0000	52.25
	84 2,4-Dinitrophenol	184	9.027	9.027	(1.029)	58720	50.0000	46.56
	86 Dibenzofuran	168	9.113	9.113	(1.038)	820734	50.0000	49.52
	88 2,4-Dinitrotoluene	165	9.284	9.284	(1.058)	198934	50.0000	55.04
	85 4-Nitrophenol	109	9.428	9.428	(1.074)	152439	50.0000	59.40(M)
	93 Diethylphthalate	149	9.748	9.748	(1.111)	688424	50.0000	50.26
	94 Fluorene	166	9.722	9.722	(1.108)	672512	50.0000	50.53
	95 4-Chlorophenyl-phenylether	204	9.775	9.775	(1.114)	368317	50.0000	49.06
	98 4-Nitroaniline	138	9.962	9.962	(1.135)	147180	50.0000	56.21
	99 4,6-Dinitro-2-methylphenol	198	10.015	10.015	(0.876)	128368	50.0000	53.48
	100 N-Nitrosodiphenylamine	169	10.037	10.037	(0.878)	476075	50.0000	47.69
	102 Azobenzene	77	10.053	10.053	(0.879)	1016740	50.0000	46.85
$	104 2,4,6-Tribromophenol	330	10.229	10.229	(1.166)	111038	50.0000	53.12
	109 4-Bromophenyl-phenylether	248	10.656	10.656	(0.932)	235144	50.0000	49.34
	112 Hexachlorobenzene	284	10.881	10.881	(0.952)	242114	50.0000	48.64
	117 Pentachlorophenol	266	11.298	11.298	(0.988)	97051	50.0000	43.48
*	121 Phenanthrene-d10	188	11.431	11.431	(1.000)	655247	40.0000	
	122 Phenanthrene	178	11.474	11.474	(1.004)	990615	50.0000	49.23
	124 Anthracene	178	11.559	11.559	(1.011)	956577	50.0000	49.40
	126 Carbazole	167	11.971	11.971	(1.047)	813702	50.0000	50.71
	129 Di-n-Butylphthalate	149	12.852	12.852	(1.124)	1064872	50.0000	50.02
	134 Fluoranthene	202	13.766	13.766	(1.204)	1046067	50.0000	50.63
	135 Benzidine	184	14.166	14.166	(0.854)	387867	50.0000	52.64
	137 Pyrene	202	14.182	14.182	(0.855)	1051918	50.0000	47.99
$	139 Terphenyl-d14	244	14.631	14.631	(0.882)	836207	50.0000	48.58
	145 3,3-Dimethylbenzidine	212	15.630	15.630	(0.942)	447342	50.0000	53.62
	146 Butylbenzylphthalate	149	15.753	15.753	(0.949)	418665	50.0000	48.69
	150 Benzo(a)Anthracene	228	16.560	16.560	(0.998)	912733	50.0000	49.40

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.592	16.592	(1.000)	535207	40.0000	
152 3,3'-Dichlorobenzidine	252	16.661	16.661	(1.004)	365968	50.0000	52.41
154 Chrysene	228	16.645	16.645	(1.003)	843758	50.0000	48.25
155 bis(2-ethylhexyl)Phthalate	149	16.976	16.976	(1.023)	523019	50.0000	49.07
158 Di-n-octylphthalate	149	18.125	18.125	(0.944)	871684	50.0000	49.48
160 Benzo(b)fluoranthene	252	18.563	18.563	(0.967)	846934	50.0000	50.07
161 Benzo(k)fluoranthene	252	18.606	18.606	(0.969)	839355	50.0000	50.43
165 Benzo(a)pyrene	252	19.097	19.097	(0.995)	748153	50.0000	49.75
* 166 Perylene-d12	264	19.199	19.199	(1.000)	427031	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.903	20.903	(1.089)	691023	50.0000	48.81
174 Dibenzo(a,h)anthracene	278	20.951	20.951	(1.091)	680769	50.0000	49.81
177 Benzo(g,h,i)perylene	276	21.351	21.351	(1.112)	596207	50.0000	47.96

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3128.D
Report Date: 14-May-2005 09:51

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

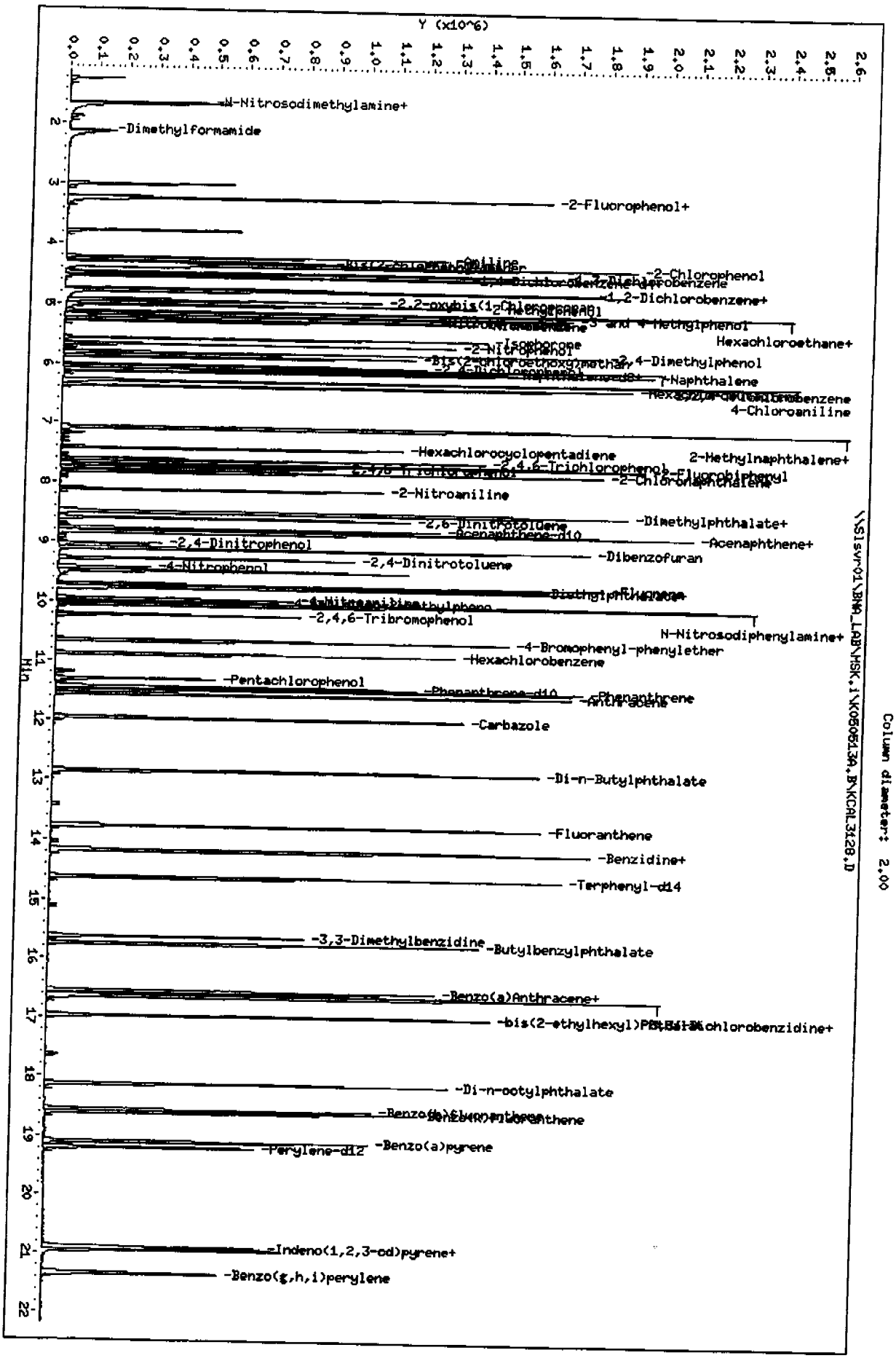
Instrument ID: MSK.i
Lab File ID: KCAL3128.D
Lab Smp Id: SSTD050
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Misc Info: SV0222-05

Calibration Date: 13-MAY-2005
Calibration Time: 12:14
Client Smp ID: SSTD050
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	181066	90533	362132	181066	0.00
48 Naphthalene-d8	627500	313750	1255000	627500	0.00
82 Acenaphthene-d10	358476	179238	716952	358476	0.00
121 Phenanthrene-d10	655247	327624	1310494	655247	0.00
153 Chrysene-d12	535207	267604	1070414	535207	0.00
166 Perylene-d12	427031	213516	854062	427031	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.52	4.02	5.02	4.52	0.00
48 Naphthalene-d8	6.11	5.61	6.61	6.11	0.00
82 Acenaphthene-d10	8.78	8.28	9.28	8.78	0.00
121 Phenanthrene-d10	11.43	10.93	11.93	11.43	0.00
153 Chrysene-d12	16.59	16.09	17.09	16.59	0.00
166 Perylene-d12	19.20	18.70	19.70	19.20	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

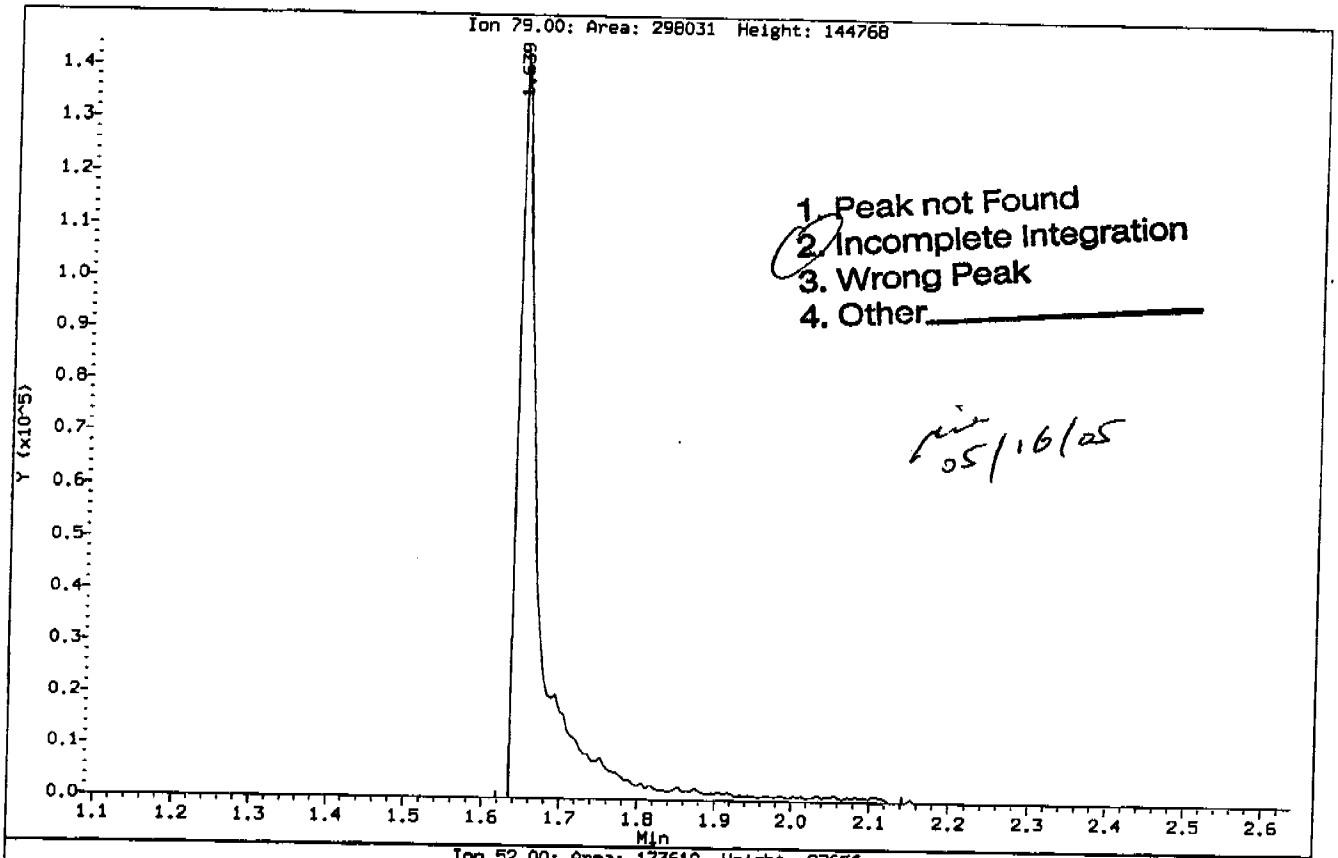


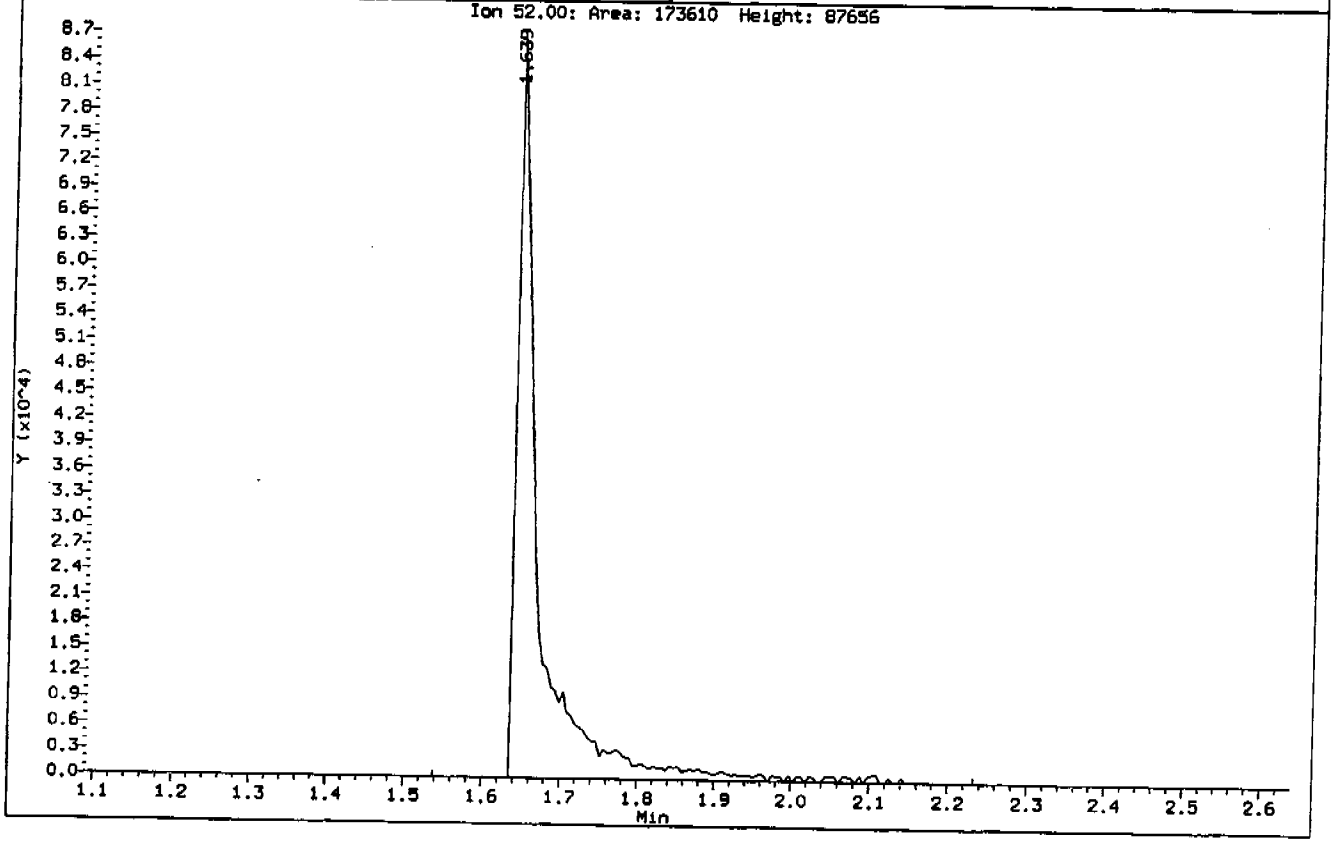
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050613A.B\KCAL3128.D
Date : 13-MAY-2005 12:14
Client ID: SSTD050
Sample Info: SSTD050
Volume Injected (uL): 1.0
Column phase:

Instrument: MSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3128.D
Injection Date: 13-MAY-2005 12:14
Instrument: MSK.i
Client Sample ID: SSTD050

Compound: Pyridine
CAS Number: 110-86-1

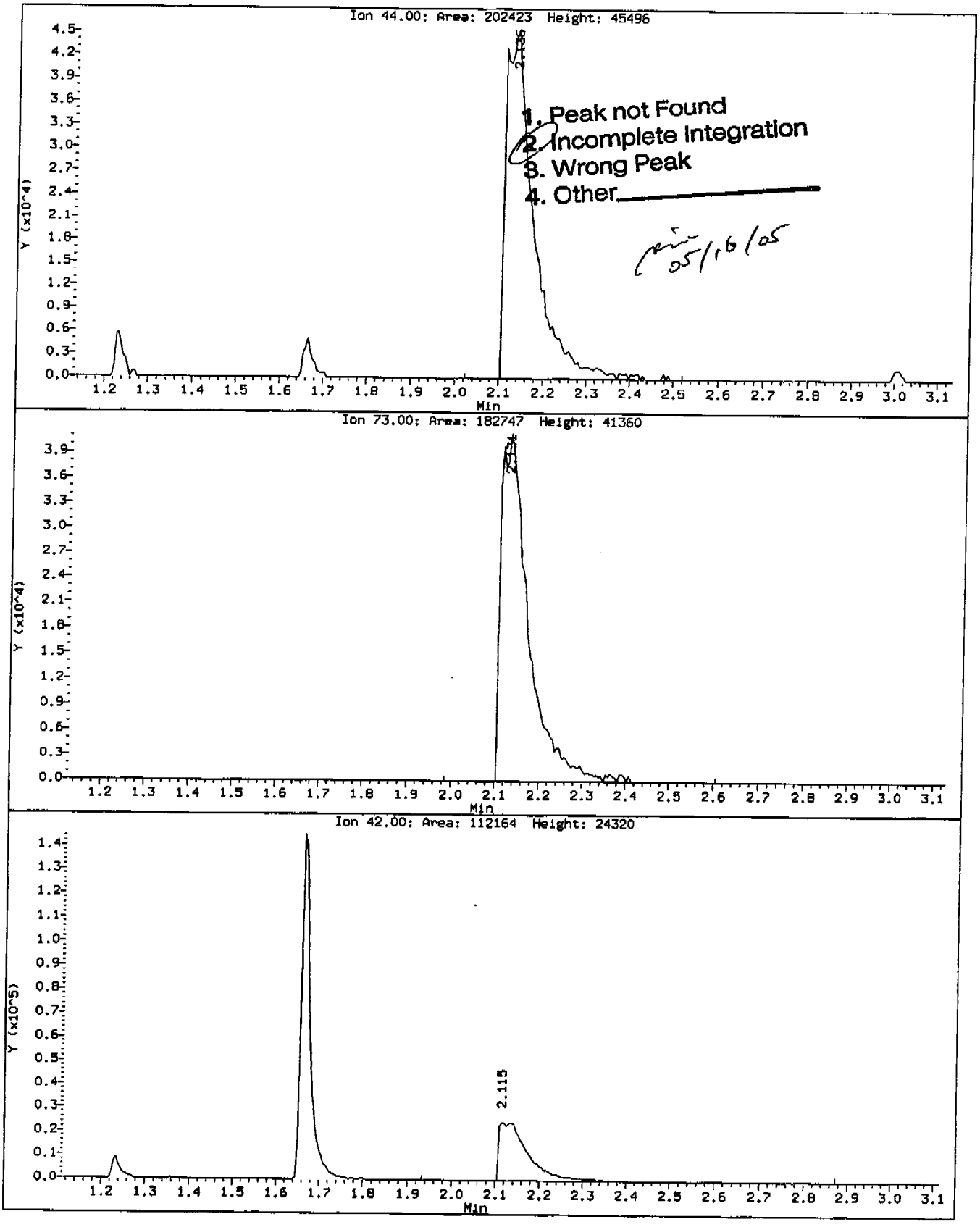




LOT# F5D210380

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3128.D
Injection Date: 13-MAY-2005 12:14
Instrument: MSK.i
Client Sample ID: SSTD050

Compound: Dimethylformamide
CAS Number: 68-12-2



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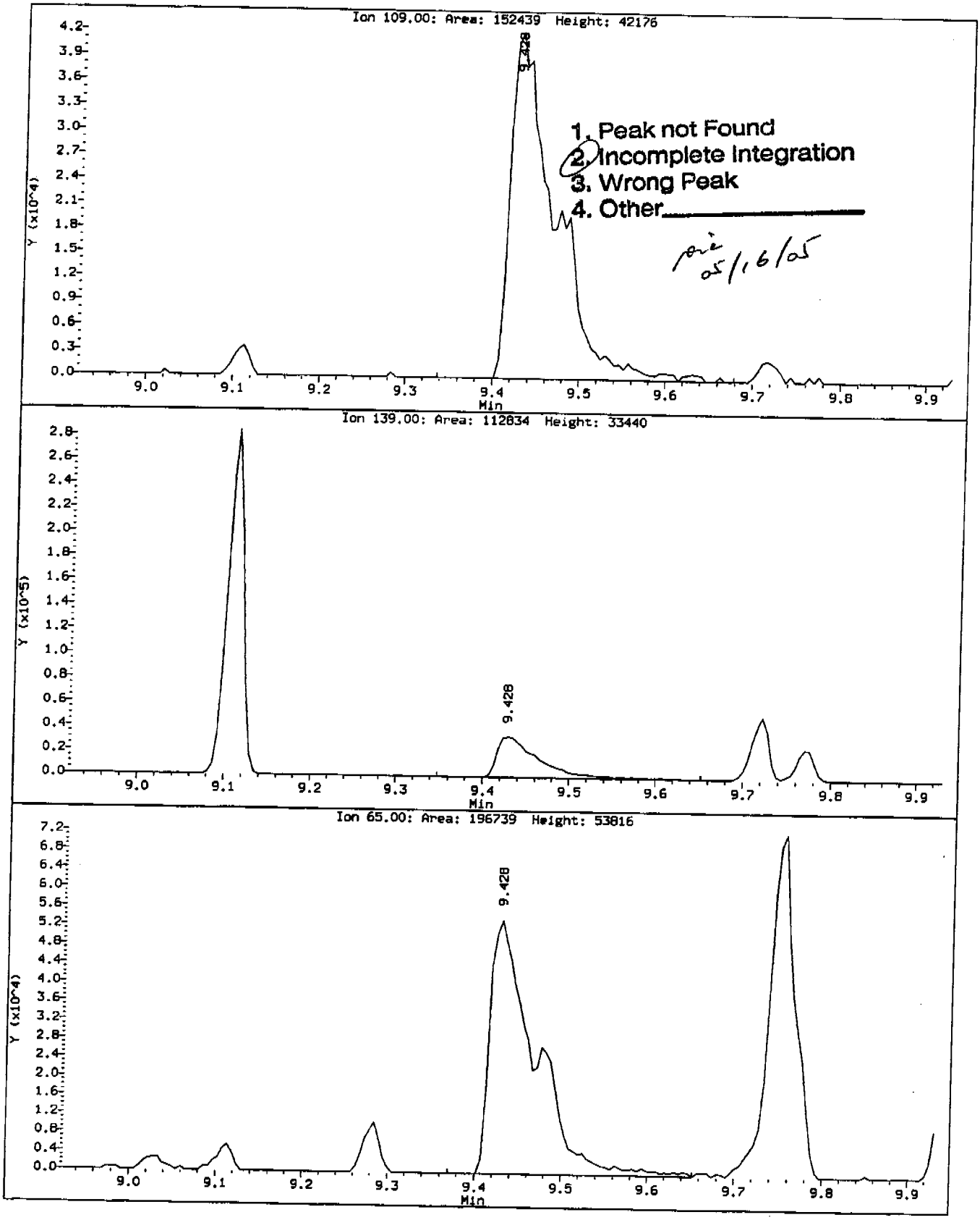
Injection Date: 13-MAY-2005 12:14
Instrument: MSK.i
Client Sample ID: SSTD050

Compound: 4-Nitrophenol
CAS Number: 100-02-7



LOT# F5D210380

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3129.D
Report Date: 14-May-2005 09:51

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3129.D
Lab Smp Id: SSTD160 Client Smp ID: SSTD160
Inj Date : 13-MAY-2005 13:18
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD160
Misc Info : SV0218-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Meth Date : 14-May-2005 09:51 hongs Quant Type: ISTD
Cal Date : 13-MAY-2005 13:18 Cal File: KCAL3129.D
Als bottle: 5 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	1.347	1.347	(0.297)	378690	160.000	172.1(AM)
4	N-Nitrosodimethylamine	74	1.812	1.812	(0.400)	631740	160.000	166.4(AM)
3	Pyridine	79	1.785	1.785	(0.394)	1168662	160.000	169.4(AM)
5	Dimethylformamide	44	2.245	2.245	(0.495)	780862	160.000	152.2(M)
$ 10	2-Fluorophenol	112	3.265	3.265	(0.721)	1141905	160.000	160.6(A)
11	Cyclohexanol	57	3.265	3.265	(0.721)	1296588	160.000	170.2(AM)
17	Aniline	93	4.237	4.237	(0.935)	1889342	160.000	155.2
19	Bis(2-chloroethyl)ether	93	4.301	4.301	(0.949)	1415910	160.000	169.1(AM)
$ 15	Phenol-d5	99	4.323	4.323	(0.954)	1545197	160.000	166.6(A)
16	Phenol	94	4.339	4.339	(0.958)	1646934	160.000	166.3(A)
20	2-Chlorophenol	128	4.382	4.382	(0.967)	1369058	160.000	172.9(A)
21	1,3-Dichlorobenzene	146	4.483	4.483	(0.989)	1547535	160.000	168.6(A)
* 22	1,4-Dichlorobenzene-d4	152	4.531	4.531	(1.000)	237761	40.0000	
23	1,4-Dichlorobenzene	146	4.553	4.553	(1.005)	1688007	160.000	173.7(A)
26	1,2-Dichlorobenzene	146	4.772	4.772	(1.053)	1588221	160.000	177.2(A)
25	Benzyl Alcohol	108	4.804	4.804	(1.060)	680320	160.000	184.2(A)
28	2,2-oxybis(1-Chloropropane)	45	4.942	4.942	(1.091)	1380677	160.000	157.2
27	2-Methylphenol	108	5.001	5.001	(1.104)	1017263	160.000	157.1
35	Hexachloroethane	117	5.119	5.119	(1.130)	694520	160.000	165.5(A)
32	N-Nitrosodinpropylamine	70	5.151	5.151	(1.137)	900311	160.000	133.0
29	3 and 4-Methylphenol	108	5.210	5.210	(1.150)	2480547	320.000	342.9(A)

rev 05/16/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.263	5.263	(0.862)	1697999	160.000	162.0(A)
	37 Nitrobenzene	77	5.290	5.290	(0.866)	1793788	160.000	164.5(A)
	39 Isophorone	82	5.600	5.600	(0.917)	2179838	160.000	153.8
	40 2-Nitrophenol	139	5.685	5.685	(0.931)	654147	160.000	167.3(A)
	41 2,4-Dimethylphenol	107	5.824	5.824	(0.954)	1419847	160.000	174.1(A)
	42 Bis(2-chloroethoxy)methane	93	5.893	5.893	(0.965)	1467237	160.000	162.0(A)
	45 2,4-Dichlorophenol	162	6.027	6.027	(0.987)	1048394	160.000	172.2(A)
	47 1,2,4-Trichlorobenzene	180	6.064	6.064	(0.993)	1330754	160.000	175.8(A)
*	48 Naphthalene-d8	136	6.107	6.107	(1.000)	778906	40.0000	
	44 Benzoic Acid	122	6.139	6.139	(1.005)	611319	160.000	170.1(AM)
	50 Naphthalene	128	6.139	6.139	(1.005)	3947501	160.000	181.6(A)
	51 4-Chloroaniline	127	6.299	6.299	(1.031)	1579421	160.000	180.4(A)
	54 Hexachlorobutadiene	225	6.380	6.380	(1.045)	956149	160.000	174.7(A)
	62 2-Methylnaphthalene	142	7.095	7.095	(1.162)	2987282	160.000	156.8
	59 4-Chloro-3-Methylphenol	107	7.063	7.063	(1.157)	1181933	160.000	168.8(AM)
	66 Hexachlorocyclopentadiene	237	7.427	7.427	(0.847)	903487	160.000	216.6(A)
	67 2,4,6-Trichlorophenol	196	7.630	7.630	(0.870)	840117	160.000	181.3(A)
	68 2,4,5-Trichlorophenol	196	7.720	7.720	(0.880)	895364	160.000	185.2(A)
$	69 2-Fluorobiphenyl	172	7.715	7.715	(0.879)	3048608	160.000	190.2(A)
	72 2-Chloronaphthalene	162	7.838	7.838	(0.893)	2417616	160.000	181.4(A)
	73 2-Nitroaniline	65	8.142	8.142	(0.928)	870492	160.000	162.1(A)
	76 Dimethylphthalate	163	8.511	8.511	(0.970)	2622309	160.000	173.2(A)
	79 Acenaphthylene	152	8.516	8.516	(0.971)	3698789	160.000	184.7(A)
	80 2,6-Dinitrotoluene	165	8.629	8.629	(0.984)	530459	160.000	167.2(A)
*	82 Acenaphthene-d10	164	8.773	8.773	(1.000)	396525	40.0000	
	83 Acenaphthene	153	8.842	8.842	(1.008)	2188087	160.000	179.1(A)
	81 3-Nitroaniline	138	8.869	8.869	(1.011)	511655	160.000	162.4(A)
	84 2,4-Dinitrophenol	184	9.045	9.045	(1.031)	309007	160.000	221.5(A)
	86 Dibenzofuran	168	9.125	9.125	(1.040)	3201412	160.000	174.6(A)
	88 2,4-Dinitrotoluene	165	9.302	9.302	(1.060)	671022	160.000	167.8(A)
	85 4-Nitrophenol	109	9.398	9.398	(1.071)	524034	160.000	184.6(AM)
	93 Diethylphthalate	149	9.777	9.777	(1.114)	2606531	160.000	172.0(A)
	94 Fluorene	166	9.734	9.734	(1.110)	2576645	160.000	175.0(A)
	95 4-Chlorophenyl-phenylether	204	9.782	9.782	(1.115)	1516644	160.000	182.6(A)
	98 4-Nitroaniline	138	10.018	10.018	(1.142)	479101	160.000	165.4(A)
	99 4,6-Dinitro-2-methylphenol	198	10.050	10.050	(0.879)	532681	160.000	221.5(AM)
	100 N-Nitrosodiphenylamine	169	10.060	10.060	(0.880)	1867167	160.000	186.7(A)
	102 Azobenzene	77	10.066	10.066	(0.880)	3951603	160.000	181.8(A)
$	104 2,4,6-Tribromophenol	330	10.237	10.237	(1.167)	412078	160.000	178.2(A)
	109 4-Bromophenyl-phenylether	248	10.659	10.659	(0.932)	850524	160.000	178.2(A)
	112 Hexachlorobenzene	284	10.888	10.888	(0.952)	879685	160.000	176.4(A)
	117 Pentachlorophenol	266	11.310	11.310	(0.989)	426620	160.000	190.8(A)
*	121 Phenanthrene-d10	188	11.433	11.433	(1.000)	656372	40.0000	
	122 Phenanthrene	178	11.487	11.487	(1.005)	3496955	160.000	173.5(A)
	124 Anthracene	178	11.572	11.572	(1.012)	3368691	160.000	173.7(A)
	126 Carbazole	167	11.978	11.978	(1.048)	2719412	160.000	169.2(A)
	129 Di-n-Butylphthalate	149	12.854	12.854	(1.124)	3671009	160.000	172.1(A)
	134 Fluoranthene	202	13.778	13.778	(1.205)	3471786	160.000	167.8(A)
	135 Benzidine	184	14.168	14.168	(0.854)	1064449	160.000	166.9(A)
	137 Pyrene	202	14.195	14.195	(0.855)	3467095	160.000	182.7(A)
$	139 Terphenyl-d14	244	14.633	14.633	(0.882)	2723361	160.000	182.7(A)
	145 3,3-Dimethylbenzidine	212	15.637	15.637	(0.942)	1199754	160.000	166.1(A)
	146 Butylbenzylphthalate	149	15.755	15.755	(0.949)	1295711	160.000	174.1(A)
	150 Benzo(a)Anthracene	228	16.572	16.572	(0.999)	2801780	160.000	175.2(A)

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3129.D
Report Date: 14-May-2005 09:51

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.594	16.594	(1.000)	463353	40.0000	
152 3,3'-Dichlorobenzidine	252	16.663	16.663	(1.004)	1185265	160.000	196.1(A)
154 Chrysene	228	16.658	16.658	(1.004)	2734530	160.000	180.6(A)
155 bis(2-ethylhexyl)Phthalate	149	16.978	16.978	(1.023)	1614658	160.000	175.0(A)
158 Di-n-octylphthalate	149	18.127	18.127	(0.944)	2624373	160.000	191.8(A)
160 Benzo(b)fluoranthene	252	18.576	18.576	(0.968)	2490477	160.000	189.6(A)
161 Benzo(k)fluoranthene	252	18.624	18.624	(0.970)	2329862	160.000	180.2(A)
165 Benzo(a)pyrene	252	19.115	19.115	(0.996)	2124537	160.000	181.9(A)
* 166 Perylene-d12	264	19.195	19.195	(1.000)	331602	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.921	20.921	(1.090)	2134402	160.000	194.2(A)
174 Dibenzo(a,h)anthracene	278	20.969	20.969	(1.092)	1998993	160.000	188.3(A)
177 Benzo(g,h,i)perylene	276	21.375	21.375	(1.114)	1734207	160.000	179.7(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3129.D
Report Date: 14-May-2005 09:51

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

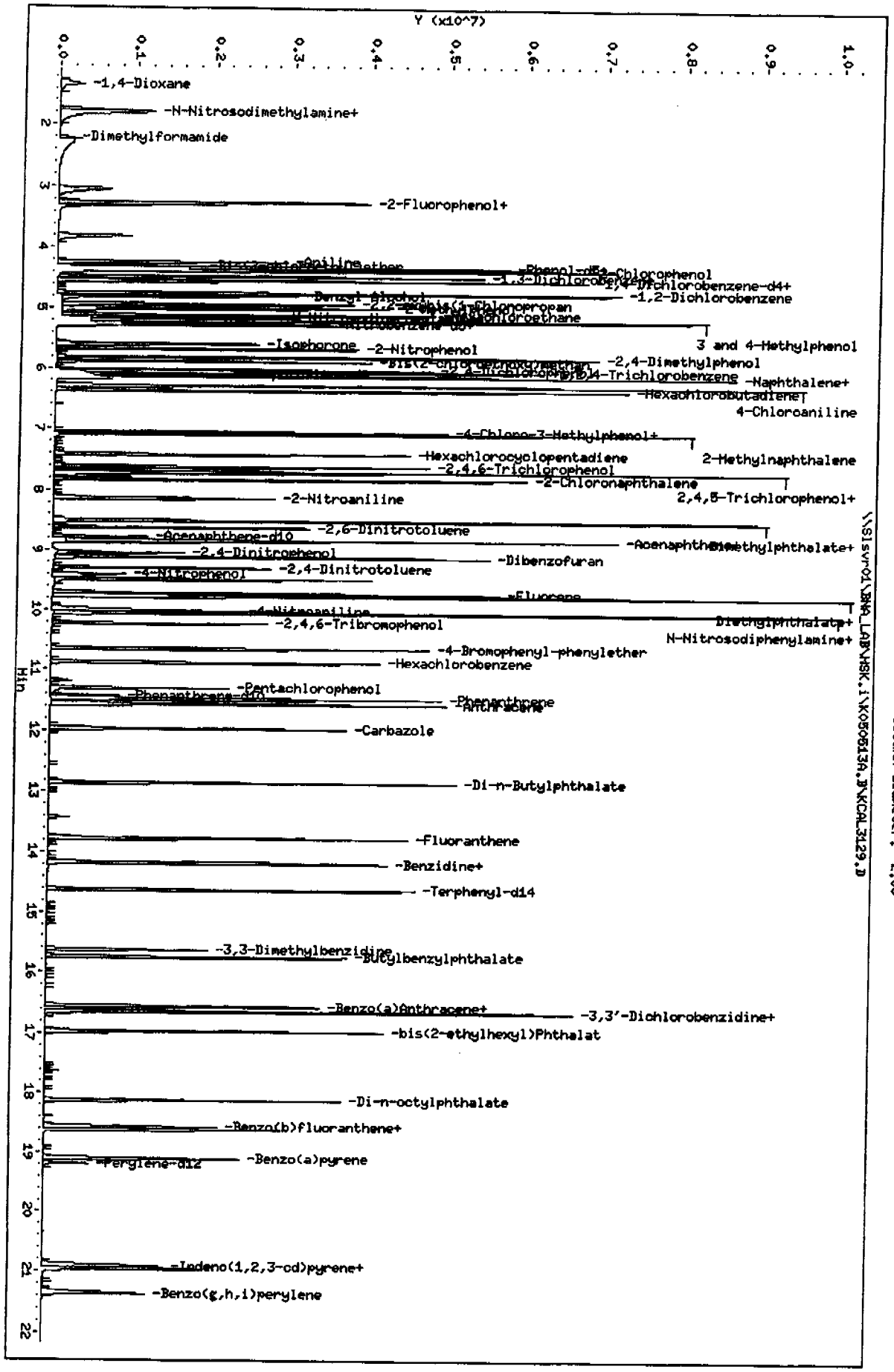
Instrument ID: MSK.i
Lab File ID: KCAL3129.D
Lab Smp Id: SSTD160
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Misc Info: SV0218-05

Calibration Date: 13-MAY-2005
Calibration Time: 12:14
Client Smp ID: SSTD160
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	181066	90533	362132	237761	31.31
48 Naphthalene-d8	627500	313750	1255000	778906	24.13
82 Acenaphthene-d10	358476	179238	716952	396525	10.61
121 Phenanthrene-d10	655247	327624	1310494	656372	0.17
153 Chrysene-d12	535207	267604	1070414	463353	-13.43
166 Perylene-d12	427031	213516	854062	331602	-22.35

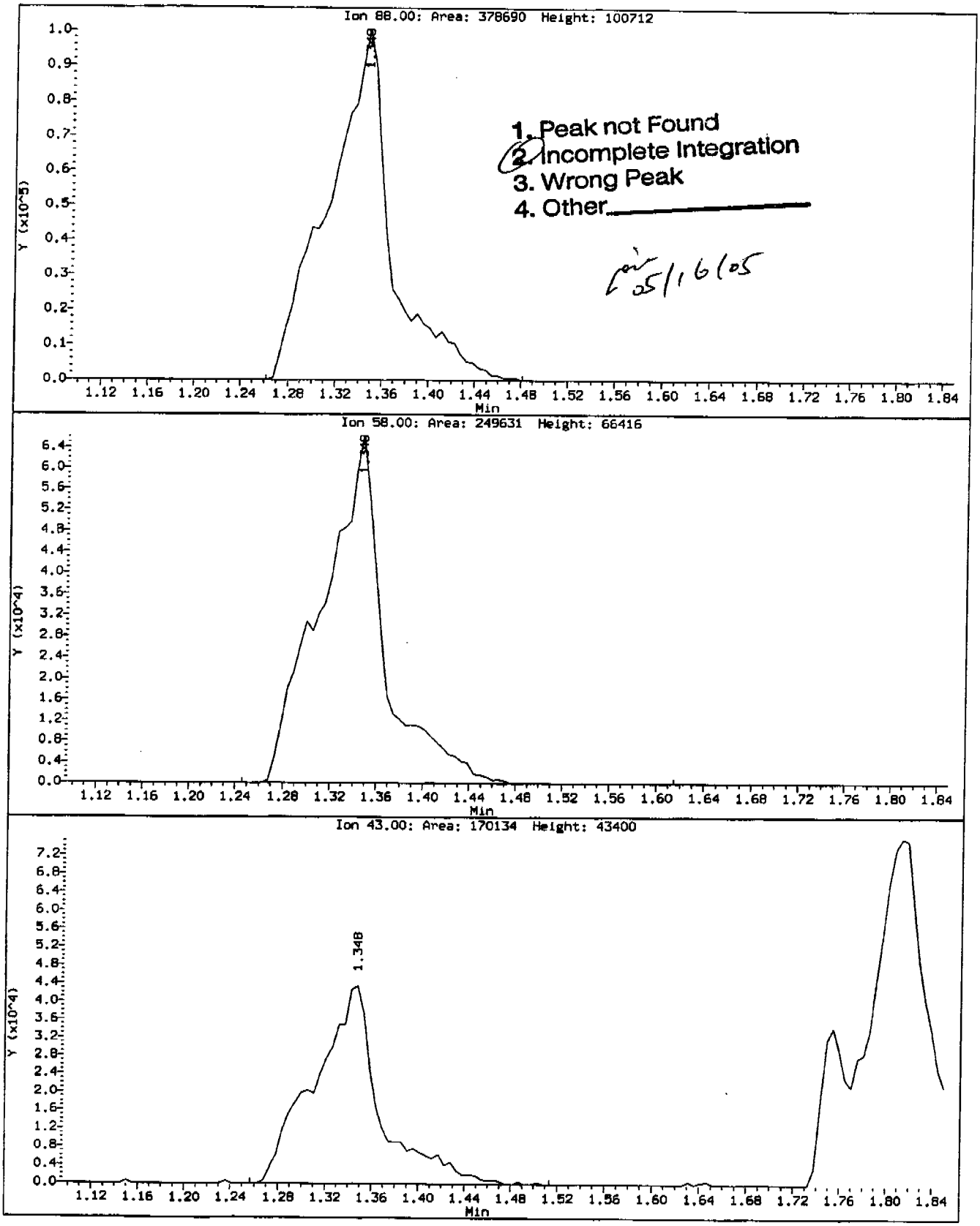
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.52	4.02	5.02	4.53	0.16
48 Naphthalene-d8	6.11	5.61	6.61	6.11	0.03
82 Acenaphthene-d10	8.78	8.28	9.28	8.77	-0.04
121 Phenanthrene-d10	11.43	10.93	11.93	11.43	0.02
153 Chrysene-d12	16.59	16.09	17.09	16.59	0.01
166 Perylene-d12	19.20	18.70	19.70	19.20	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^7)
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
-1,4-Dioxane
-N-Nitrosodimethylamine+
-Dimethylformamide
-2-Fluorophenol+
-Phenol-d6
-2-Chlorophenol
-1,3-Dichlorobenzene-d4+
-1,4-Dichlorobenzene-d4+
-1,2-Dichlorobenzene
-Benzyl Alcohol
-2,2'-oxybis(1-Chloropropan
-Hexachloroethane
3 and 4-Methylphenol
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-1,2,4-Trichlorobenzene
-Naphthalene+
-Hexachlorobutadiene
4-Chloroaniline
-4-Chloro-3-Methylphenol+
-Hexachlorocyclopentadiene
2-Methylnaphthalene
-2,4,6-Trichlorophenol
-2-Chloronaphthalene
2,4,5-Trichlorophenol+
-2-Nitroaniline
-2,6-Dinitrotoluene
-Acenaphthene-d10
-Acenaphthene
-Dimethylphthalate+
-2,4-Dinitrophenol
-Dibenzofuran
-4-Nitrophenol
-2,4-Dinitrotoluene
-Fluorene
-4-Nitroaniline
-2,4,6-Tribromophenol
Diethylphthalate+
N-Nitrosodiphenylamine+
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Pentachlorophenol
-Phenanthrene-d10
-Phenanthrene
-Anthracene
-Carbazole
-Di-n-Butylphthalate
-Fluoranthene
-Benzidine+
-Terphenyl-d14
-3,3-Dimethylbenzidine
-Butylbenzylphthalate
-Benzo(a)Anthracene+
-3,3'-Dichlorobenzidine+
-bis(2-ethylhexyl)Phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene+
-Perylene-d12
-Benzo(a)pyrene
-Indeno(1,2,3-cd)pyrene+
-Benzo(g,h,i)perylene
Min
\\Slsvr01\BNA_LAB\HSK.i\K050513A.B\KCAL3129.D
Data File: \\Slsvr01\BNA_LAB\HSK.i\K050513A.B\KCAL3129.D
Date : 13-MAY-2005 13:18
Client ID: SSTD160
Sample Info: SSTD160
Volume Injected (uL): 1.0
Column phase:
Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3129.D
Injection Date: 13-MAY-2005 13:18
Instrument: MSK.i
Client Sample ID: SSTD160

Compound: 1,4-Dioxane
CAS Number:



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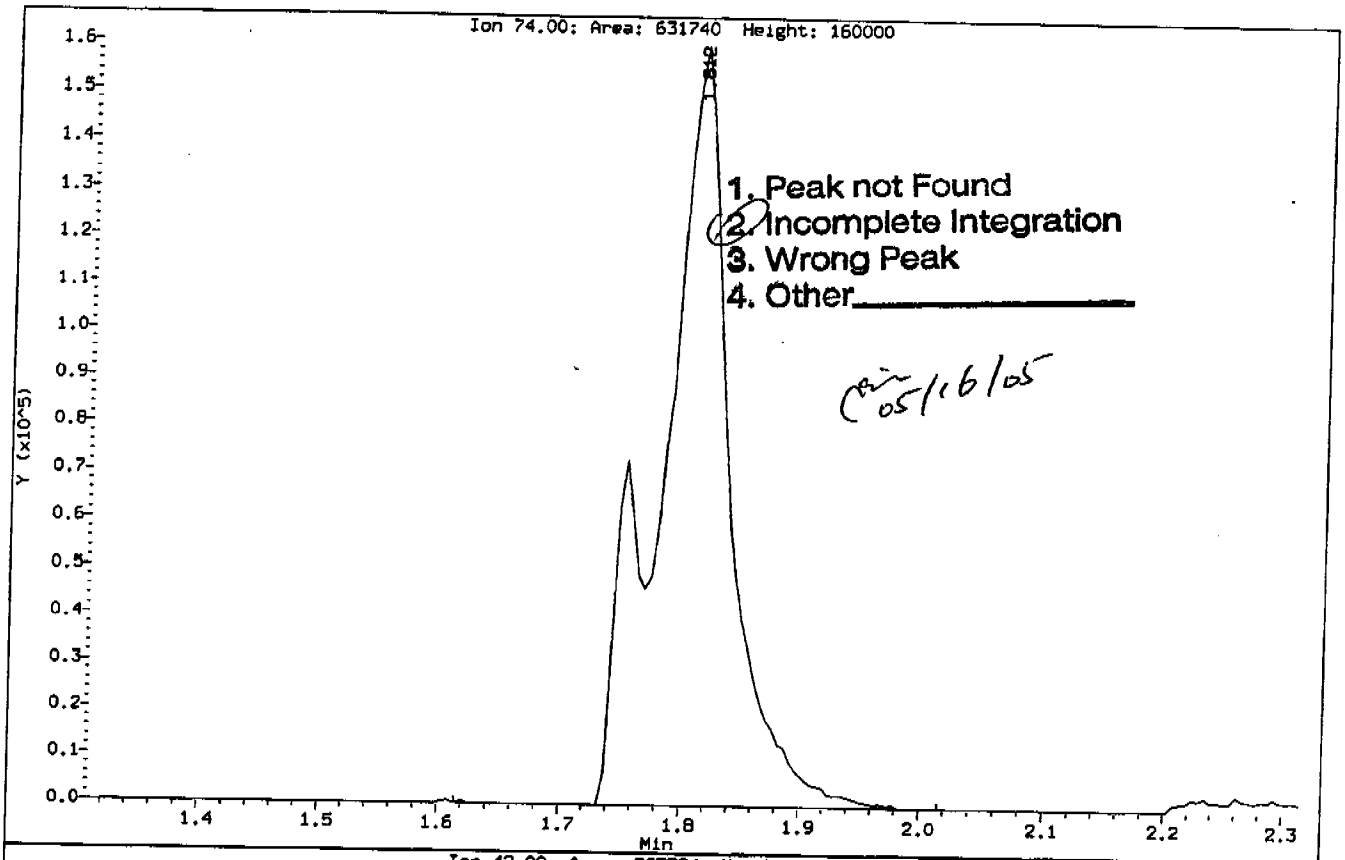
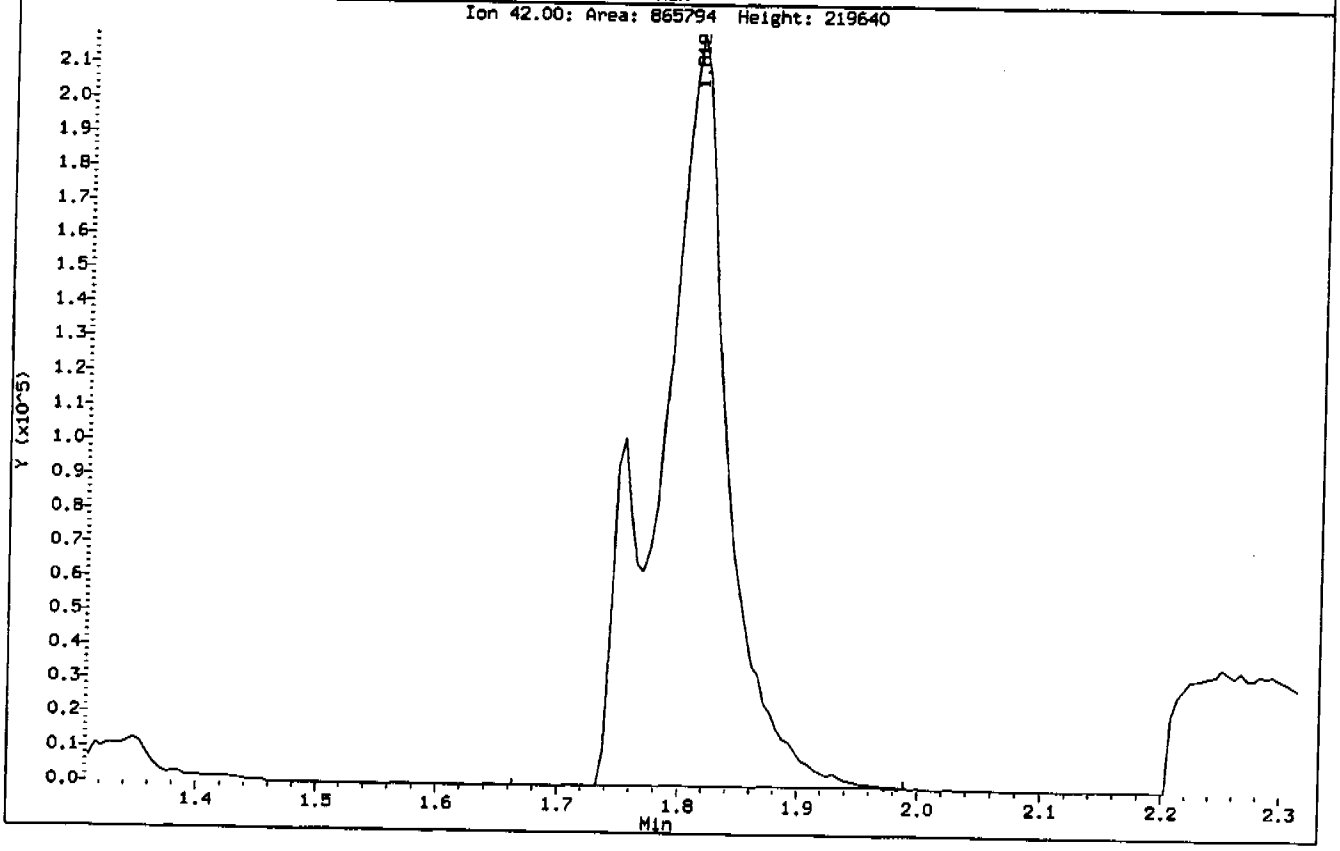
Injection Date: 13-MAY-2005 13:18
Instrument: MSK.i
Client Sample ID: SSTD160

Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9





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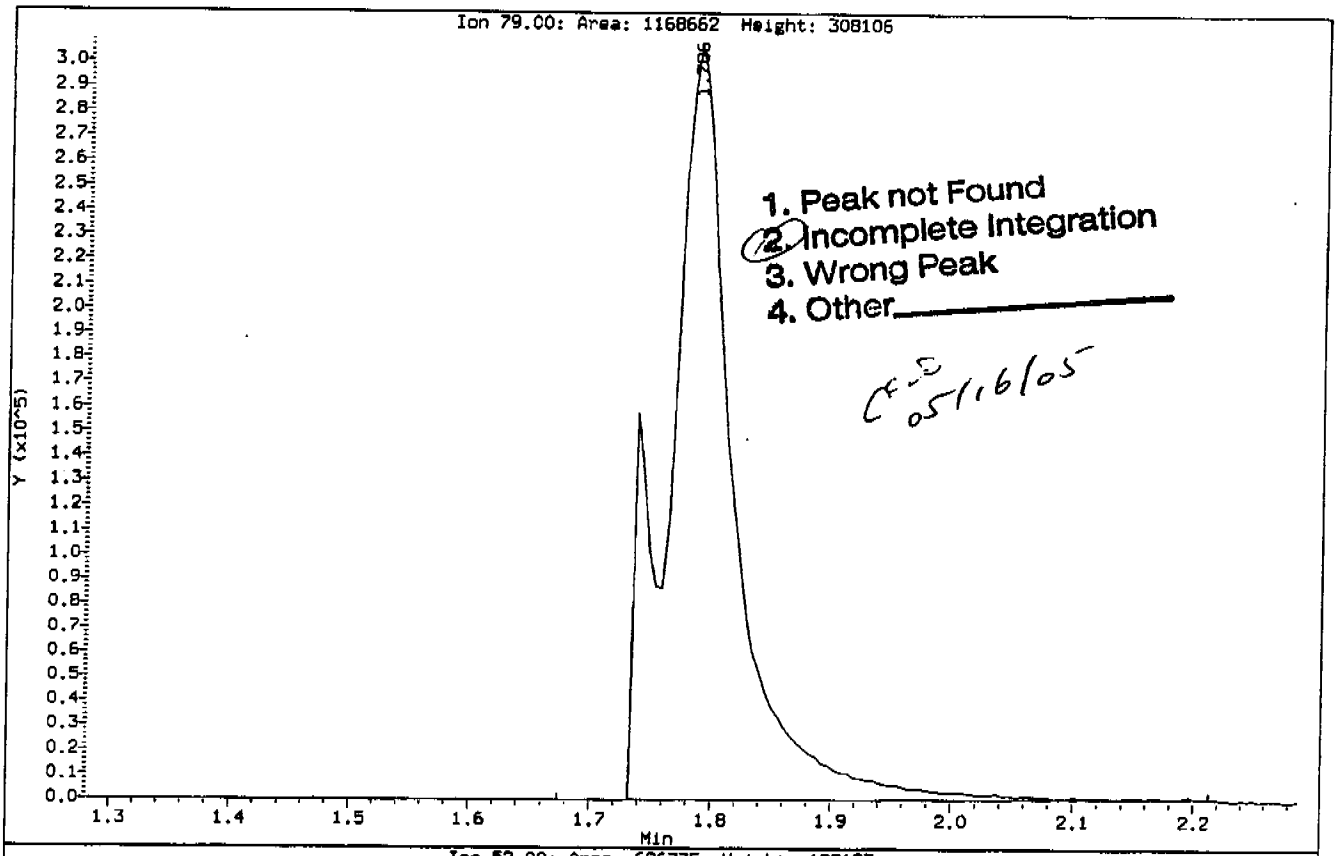
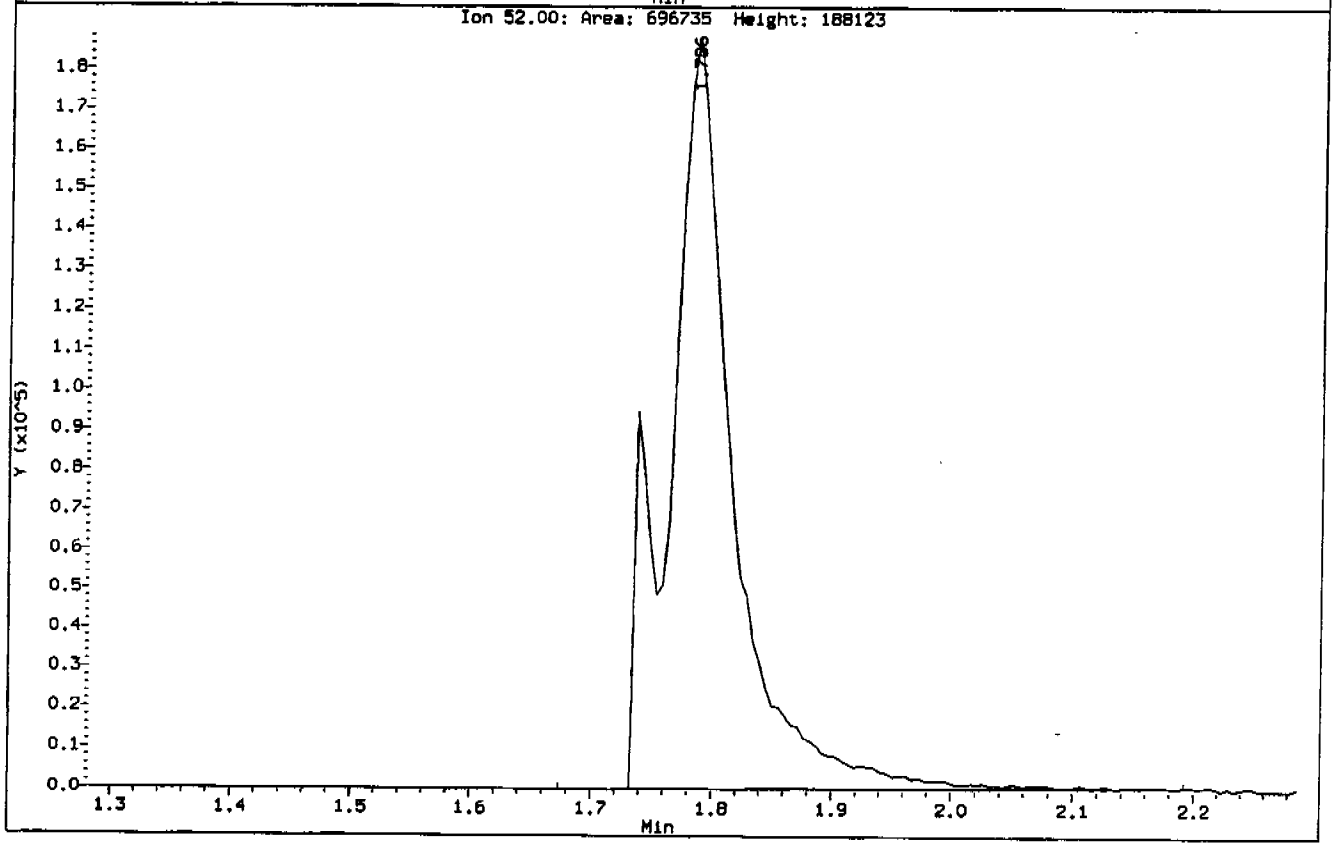
Injection Date: 13-MAY-2005 13:18
Instrument: MSK.i
Client Sample ID: SSTD160

Compound: Pyridine
CAS Number: 110-86-1





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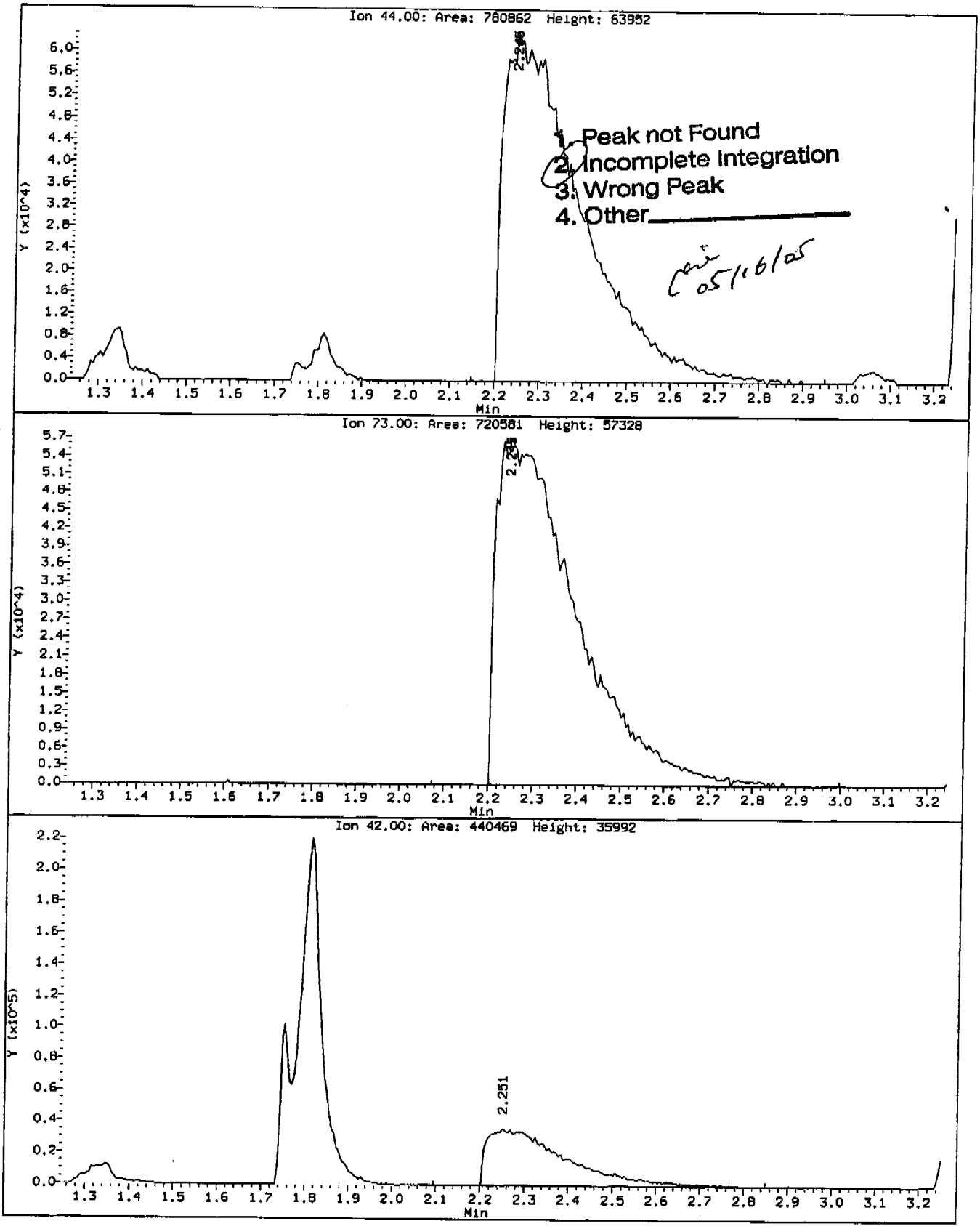
Injection Date: 13-MAY-2005 13:18
Instrument: MSK.i
Client Sample ID: SSTD160

Compound: Dimethylformamide
CAS Number: 68-12-2



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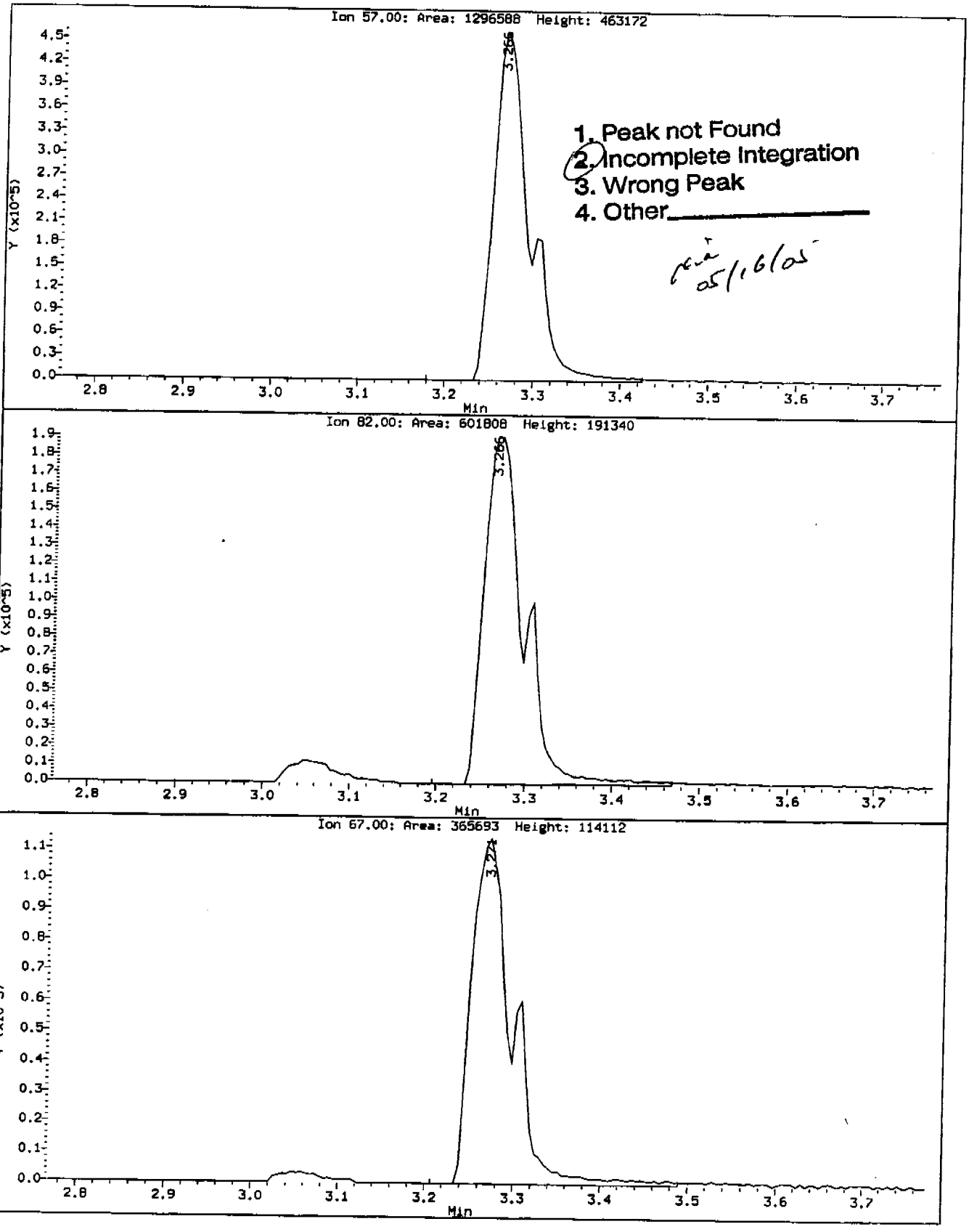
Injection Date: 13-MAY-2005 13:18
Instrument: MSK.i
Client Sample ID: SSTD160

Compound: Cyclohexanol
CAS Number:



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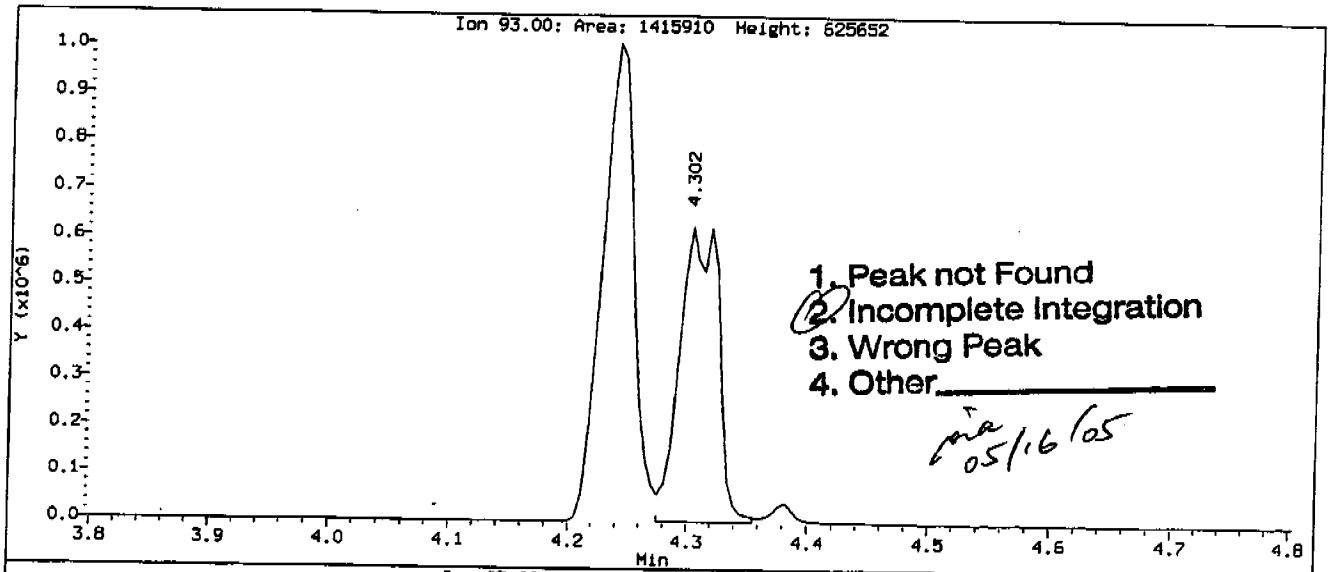
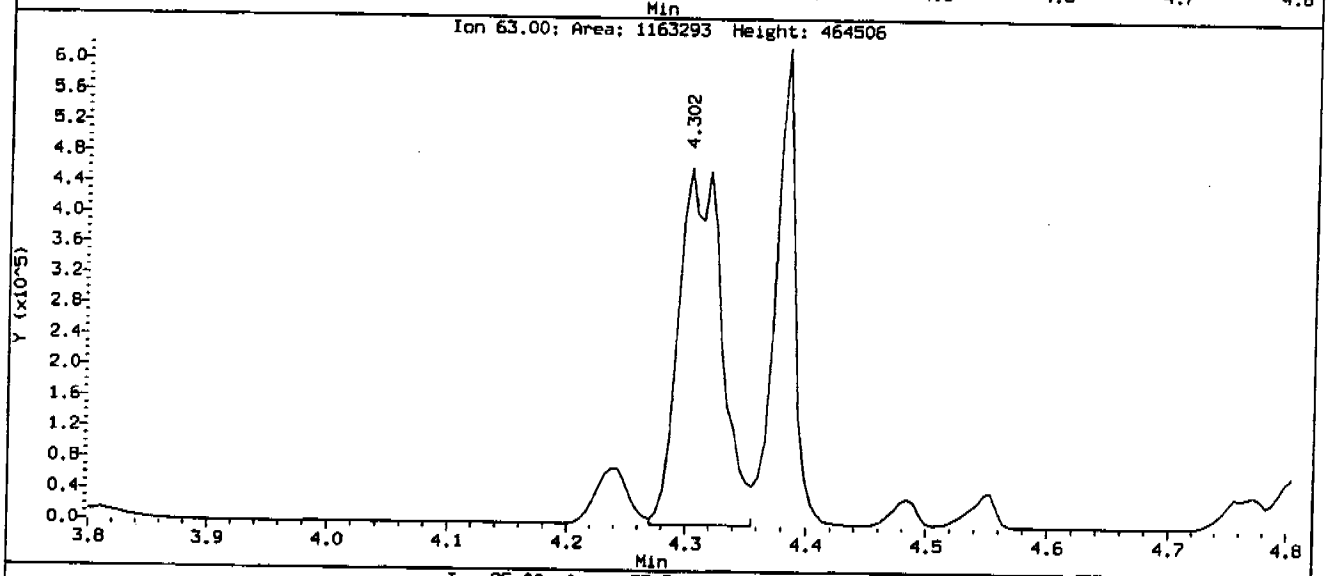
Injection Date: 13-MAY-2005 13:18
Instrument: MSK.i
Client Sample ID: SSTD160

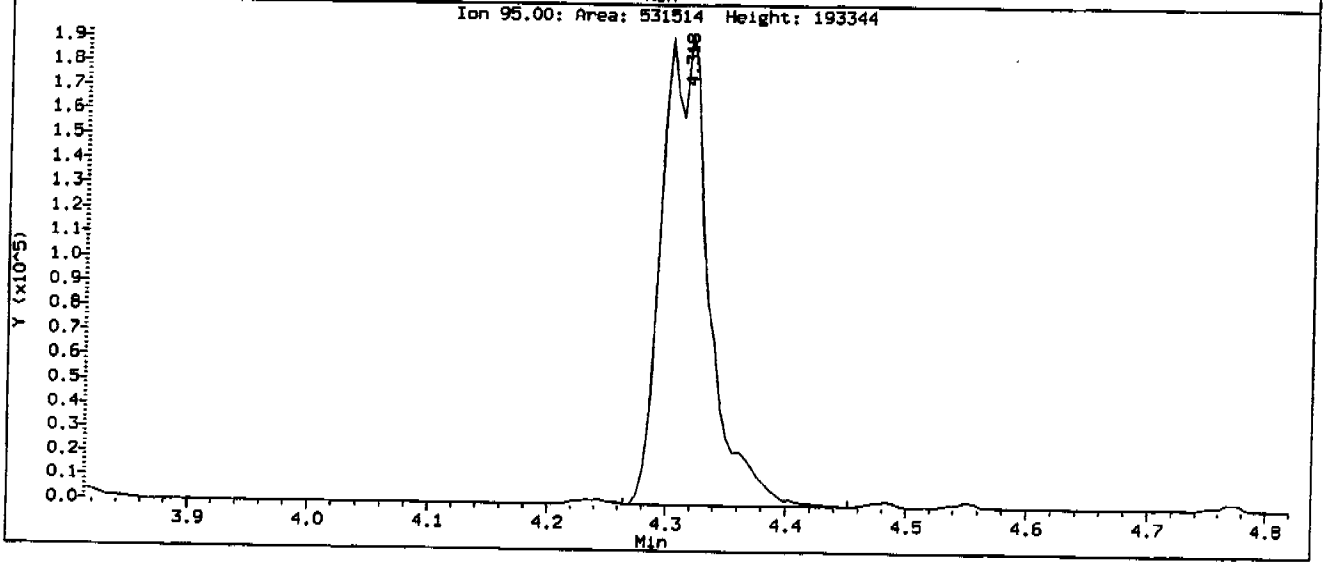
Compound: Bis(2-chloroethyl)ether
CAS Number: 111-44-4



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

ma 05/16/05





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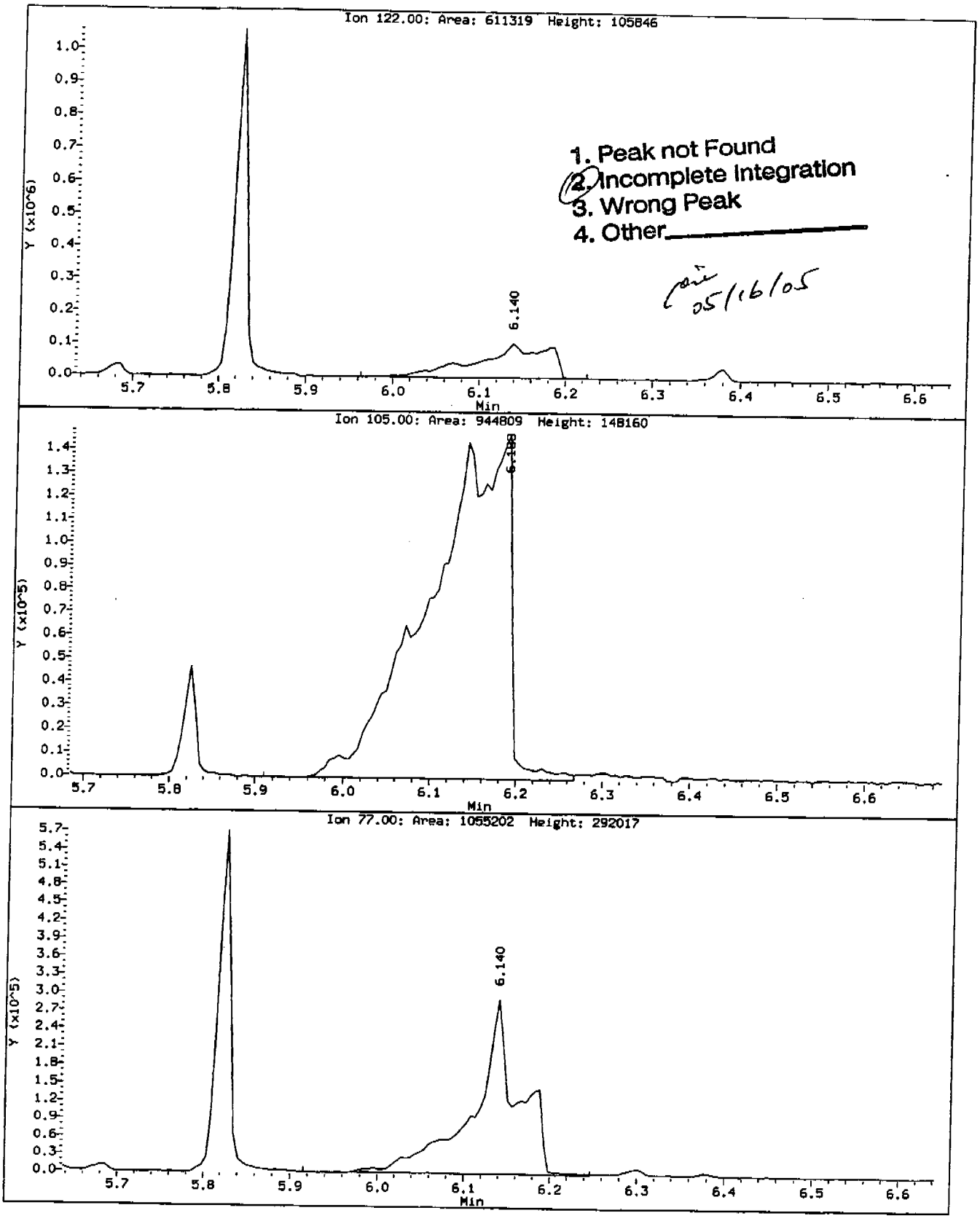
Injection Date: 13-MAY-2005 13:18
Instrument: MSK.i
Client Sample ID: SSTD160

Compound: Benzoic Acid
CAS Number: 65-85-0



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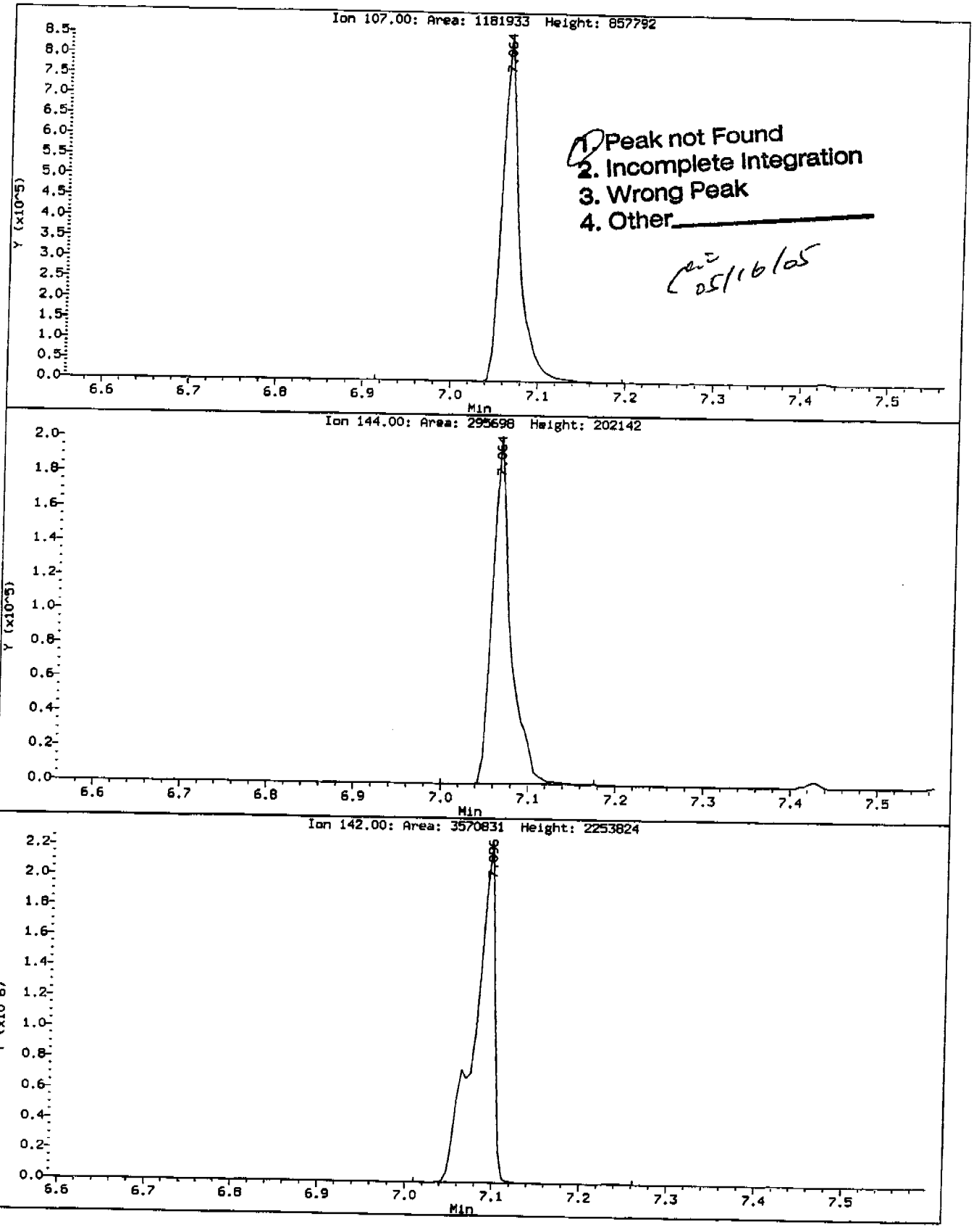
Injection Date: 13-MAY-2005 13:18
Instrument: MSK.i
Client Sample ID: SSTD160

Compound: 4-Chloro-3-Methylphenol
CAS Number: 59-50-7



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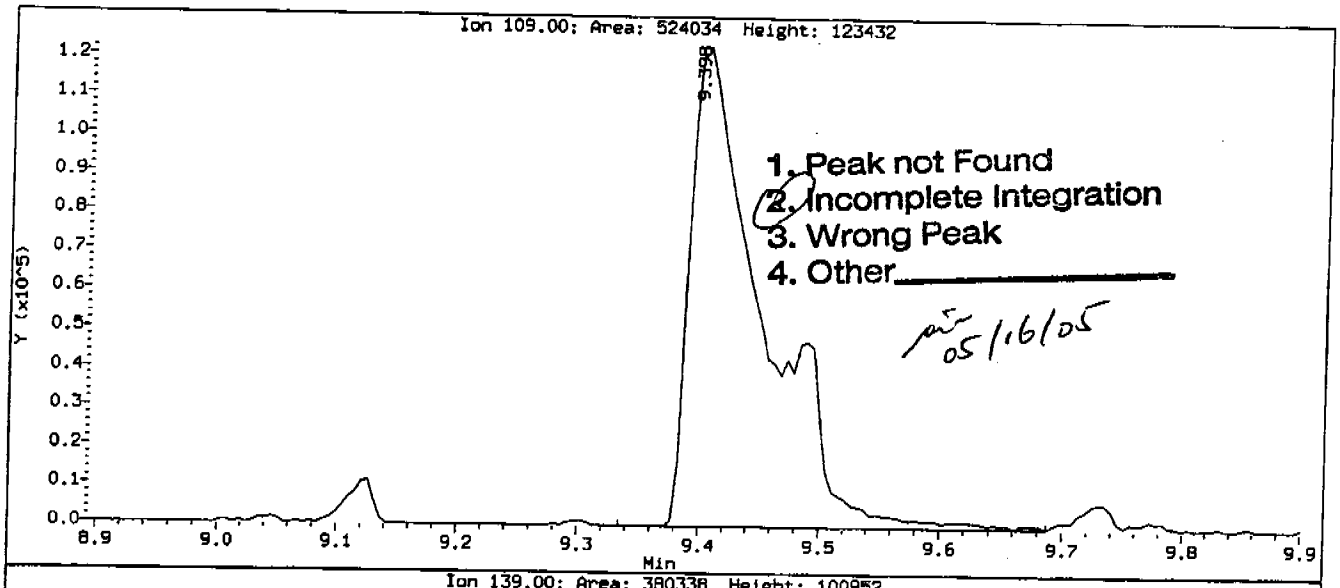
Injection Date: 13-MAY-2005 13:18
Instrument: MSK.i
Client Sample ID: SSTD160

Compound: 4-Nitrophenol
CAS Number: 100-02-7



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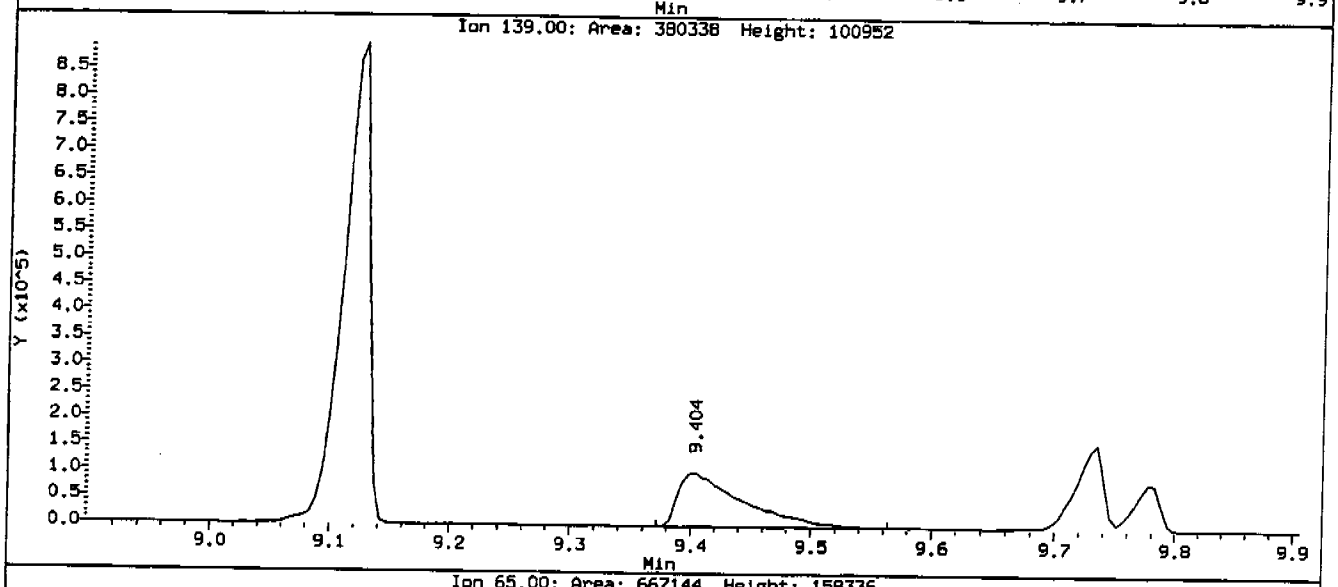
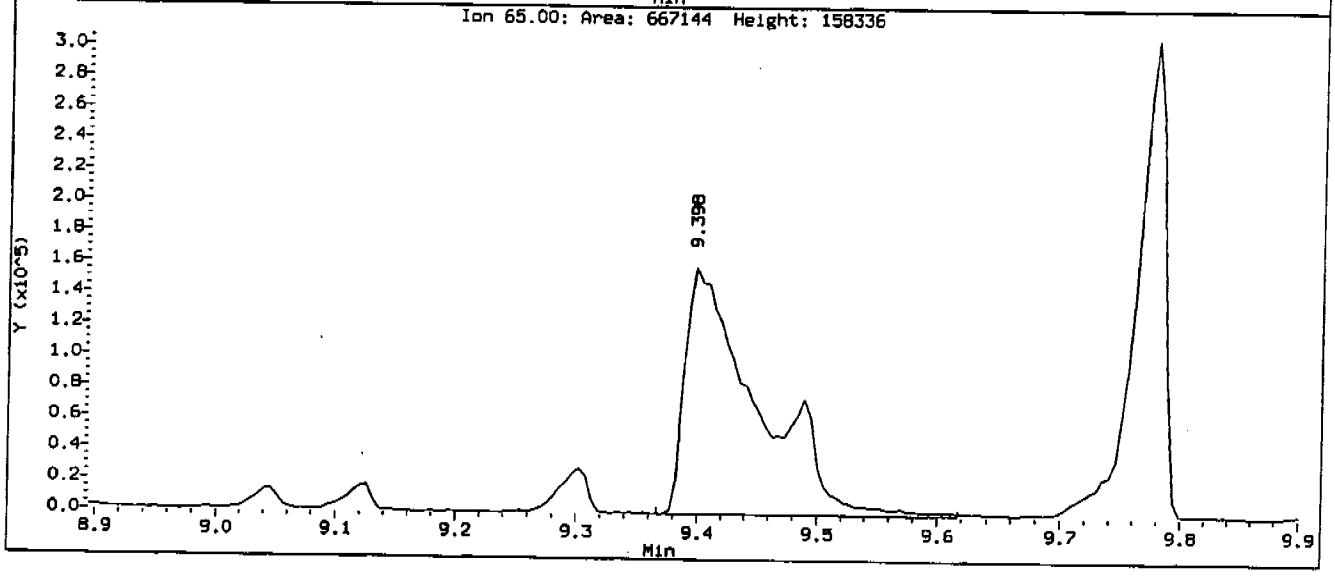
2. Incomplete Integration
3. Wrong Peak
4. Other _____

05/16/05





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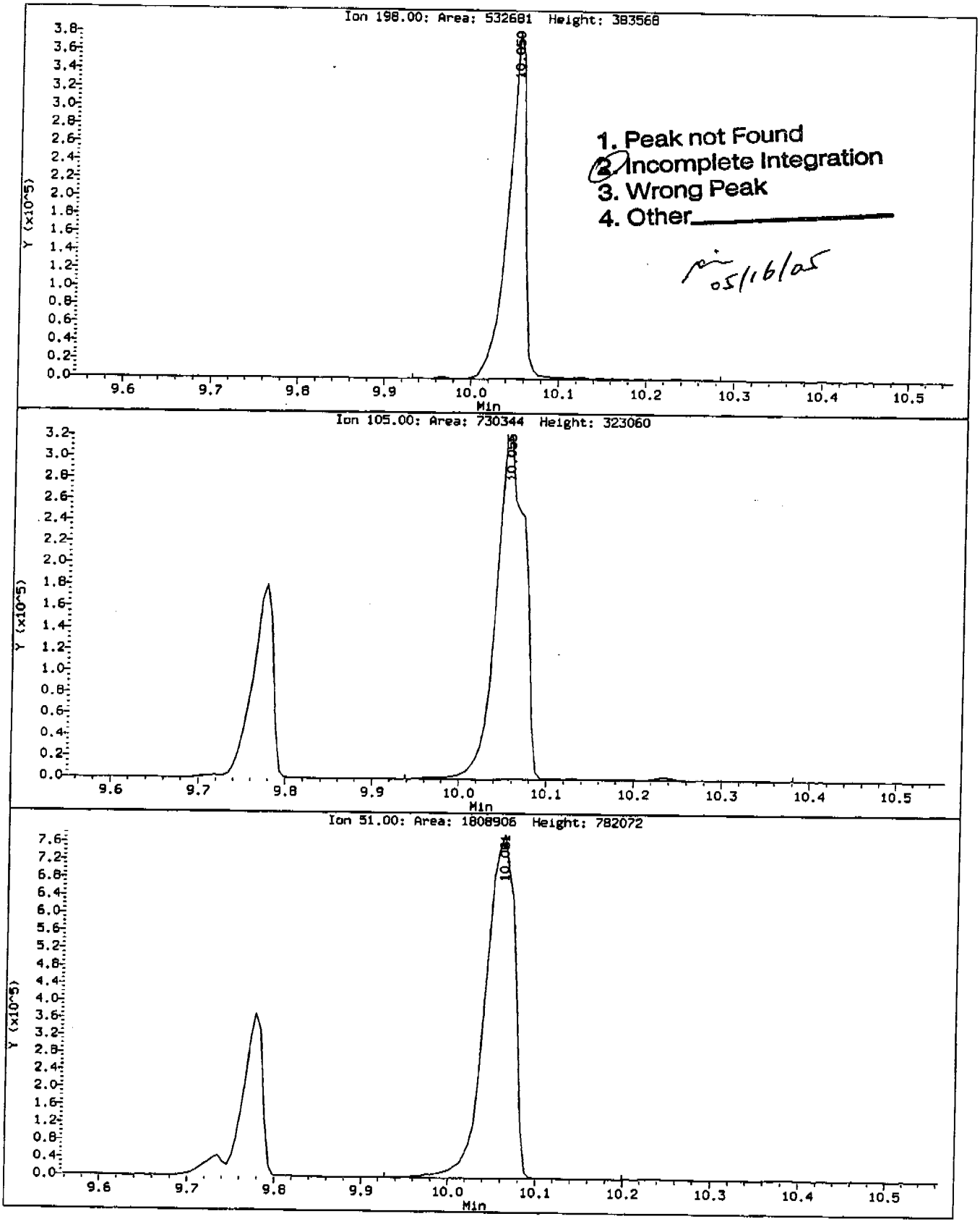
Injection Date: 13-MAY-2005 13:18
Instrument: MSK.i
Client Sample ID: SSTD160

Compound: 4,6-Dinitro-2-methylphenol
CAS Number: 534-52-1



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

pi 05/16/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3130.D
Report Date: 14-May-2005 09:51

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3130.D
Lab Smp Id: SSTD120 Client Smp ID: SSTD120
Inj Date : 13-MAY-2005 13:50
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD120
Misc Info : SV0217-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Meth Date : 14-May-2005 09:51 hongs Quant Type: ISTD
Cal Date : 13-MAY-2005 13:50 Cal File: KCAL3130.D
Als bottle: 6 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 1,4-Dioxane	88	1.347	1.347	(0.297)	315333	120.000	133.0(M)
	4 N-Nitrosodimethylamine	74	1.812	1.812	(0.399)	537283	120.000	131.3
	3 Pyridine	79	1.785	1.785	(0.393)	986967	120.000	132.8(M)
	5 Dimethylformamide	44	2.261	2.261	(0.498)	699244	120.000	126.5(M)
$	10 2-Fluorophenol	112	3.270	3.270	(0.720)	958323	120.000	125.0
	11 Cyclohexanol	57	3.270	3.270	(0.720)	974284	120.000	118.6
	17 Aniline	93	4.248	4.248	(0.935)	1588531	120.000	121.1
	19 Bis(2-chloroethyl)ether	93	4.312	4.312	(0.949)	1185659	120.000	131.4(M)
$	15 Phenol-d5	99	4.333	4.333	(0.954)	1253514	120.000	125.4
	16 Phenol	94	4.344	4.344	(0.956)	1335396	120.000	125.1
	20 2-Chlorophenol	128	4.392	4.392	(0.967)	1111161	120.000	130.2
	21 1,3-Dichlorobenzene	146	4.494	4.494	(0.989)	1263641	120.000	127.7
*	22 1,4-Dichlorobenzene-d4	152	4.542	4.542	(1.000)	256244	40.0000	
	23 1,4-Dichlorobenzene	146	4.558	4.558	(1.004)	1368038	120.000	130.6
	26 1,2-Dichlorobenzene	146	4.782	4.782	(1.053)	1278008	120.000	132.3
	25 Benzyl Alcohol	108	4.814	4.814	(1.060)	466089	120.000	117.1
	28 2,2-oxybis(1-Chloropropane)	45	4.953	4.953	(1.091)	1258630	120.000	133.0
	27 2-Methylphenol	108	5.012	5.012	(1.103)	797478	120.000	114.2
	35 Hexachloroethane	117	5.129	5.129	(1.129)	582014	120.000	128.7
	32 N-Nitrosodinpropylamine	70	5.161	5.161	(1.136)	839594	120.000	115.1
	29 3 and 4-Methylphenol	108	5.220	5.220	(1.149)	1999669	240.000	256.5(A)

05/16/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.273	5.273	(0.862)	1468099	120.000	128.1
	37 Nitrobenzene	77	5.300	5.300	(0.866)	1537898	120.000	129.0
	39 Isophorone	82	5.605	5.605	(0.916)	1863896	120.000	120.3
	40 2-Nitrophenol	139	5.690	5.690	(0.930)	525388	120.000	122.9
	41 2,4-Dimethylphenol	107	5.834	5.834	(0.954)	1159120	120.000	130.0
	42 Bis(2-chloroethoxy)methane	93	5.904	5.904	(0.965)	1258382	120.000	127.0
	45 2,4-Dichlorophenol	162	6.037	6.037	(0.987)	824346	120.000	123.9
	47 1,2,4-Trichlorobenzene	180	6.075	6.075	(0.993)	1026743	120.000	124.1
*	48 Naphthalene-d8	136	6.118	6.118	(1.000)	851595	40.0000	
	44 Benzoic Acid	122	6.150	6.150	(1.005)	500658	120.000	127.4(M)
	50 Naphthalene	128	6.150	6.150	(1.005)	3111485	120.000	130.9
	51 4-Chloroaniline	127	6.310	6.310	(1.031)	1253597	120.000	130.9
	54 Hexachlorobutadiene	225	6.390	6.390	(1.045)	728848	120.000	121.8
	62 2-Methylnaphthalene	142	7.106	7.106	(1.162)	2180611	120.000	104.7
	59 4-Chloro-3-Methylphenol	107	7.074	7.074	(1.156)	952085	120.000	124.4(M)
	66 Hexachlorocyclopentadiene	237	7.442	7.442	(0.847)	677409	120.000	155.7
	67 2,4,6-Trichlorophenol	196	7.645	7.645	(0.870)	634600	120.000	131.3
	68 2,4,5-Trichlorophenol	196	7.736	7.736	(0.880)	681095	120.000	135.0
$	69 2-Fluorobiphenyl	172	7.731	7.731	(0.880)	2266899	120.000	135.6
	72 2-Chloronaphthalene	162	7.854	7.854	(0.894)	1845435	120.000	132.7
	73 2-Nitroaniline	65	8.153	8.153	(0.928)	755120	120.000	134.8
	76 Dimethylphthalate	163	8.522	8.522	(0.970)	2031042	120.000	128.6
	79 Acenaphthylene	152	8.532	8.532	(0.971)	2812547	120.000	134.6
	80 2,6-Dinitrotoluene	165	8.639	8.639	(0.983)	410387	120.000	124.0
*	82 Acenaphthene-d10	164	8.789	8.789	(1.000)	413660	40.0000	
	83 Acenaphthene	153	8.853	8.853	(1.007)	1676968	120.000	131.6
	81 3-Nitroaniline	138	8.879	8.879	(1.010)	407305	120.000	124.0
	84 2,4-Dinitrophenol	184	9.056	9.056	(1.030)	231630	120.000	159.2
	86 Dibenzofuran	168	9.136	9.136	(1.040)	2427386	120.000	126.9
	88 2,4-Dinitrotoluene	165	9.312	9.312	(1.060)	522620	120.000	125.3
	85 4-Nitrophenol	109	9.419	9.419	(1.072)	418904	120.000	141.5(M)
	93 Diethylphthalate	149	9.788	9.788	(1.114)	2056626	120.000	130.1
	94 Fluorene	166	9.745	9.745	(1.109)	1974065	120.000	128.5
	95 4-Chlorophenyl-phenylether	204	9.793	9.793	(1.114)	1120314	120.000	129.3
	98 4-Nitroaniline	138	10.028	10.028	(1.141)	369041	120.000	122.1
	99 4,6-Dinitro-2-methylphenol	198	10.060	10.060	(0.879)	392495	120.000	160.8(AM)
	100 N-Nitrosodiphenylamine	169	10.071	10.071	(0.880)	1410288	120.000	138.9
	102 Azobenzene	77	10.081	10.081	(0.881)	3301828	120.000	149.6
$	104 2,4,6-Tribromophenol	330	10.252	10.252	(1.167)	284172	120.000	117.8
	109 4-Bromophenyl-phenylether	248	10.674	10.674	(0.932)	633421	120.000	130.7
	112 Hexachlorobenzene	284	10.904	10.904	(0.952)	638459	120.000	126.1
	117 Pentachlorophenol	266	11.321	11.321	(0.989)	310649	120.000	136.8
*	121 Phenanthrene-d10	188	11.449	11.449	(1.000)	666434	40.0000	
	122 Phenanthrene	178	11.502	11.502	(1.005)	2634766	120.000	128.7
	124 Anthracene	178	11.588	11.588	(1.012)	2498894	120.000	126.9
	126 Carbazole	167	11.994	11.994	(1.048)	2045508	120.000	125.3
	129 Di-n-Butylphthalate	149	12.870	12.870	(1.124)	2820501	120.000	130.2
	134 Fluoranthene	202	13.789	13.789	(1.204)	2557231	120.000	121.7
	135 Benzidine	184	14.184	14.184	(0.854)	820460	120.000	130.8
	137 Pyrene	202	14.211	14.211	(0.856)	2560403	120.000	137.2
$	139 Terphenyl-d14	244	14.649	14.649	(0.882)	1970958	120.000	134.5
	145 3,3-Dimethylbenzidine	212	15.653	15.653	(0.942)	898144	120.000	126.4
	146 Butylbenzylphthalate	149	15.771	15.771	(0.950)	994341	120.000	135.8
	150 Benzo(a)Anthracene	228	16.583	16.583	(0.998)	2038786	120.000	129.6

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3130.D
Report Date: 14-May-2005 09:51

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.609	16.609	(1.000)	455704	40.0000	
152 3,3'-Dichlorobenzidine	252	16.679	16.679	(1.004)	844213	120.000	142.0
154 Chrysene	228	16.674	16.674	(1.004)	1960817	120.000	131.7
155 bis(2-ethylhexyl)Phthalate	149	16.994	16.994	(1.023)	1232628	120.000	135.8
158 Di-n-octylphthalate	149	18.143	18.143	(0.944)	2027409	120.000	143.9
160 Benzo(b)fluoranthene	252	18.591	18.591	(0.968)	1835058	120.000	135.7
161 Benzo(k)fluoranthene	252	18.639	18.639	(0.970)	1698860	120.000	127.6
165 Benzo(a)pyrene	252	19.131	19.131	(0.996)	1566165	120.000	130.2
* 166 Perylene-d12	264	19.211	19.211	(1.000)	341474	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.942	20.942	(1.090)	1578959	120.000	139.5
174 Dibenzo(a,h)anthracene	278	20.990	20.990	(1.093)	1489265	120.000	136.2
177 Benzo(g,h,i)perylene	276	21.396	21.396	(1.114)	1321659	120.000	133.0

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3130.D
Report Date: 14-May-2005 09:51

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

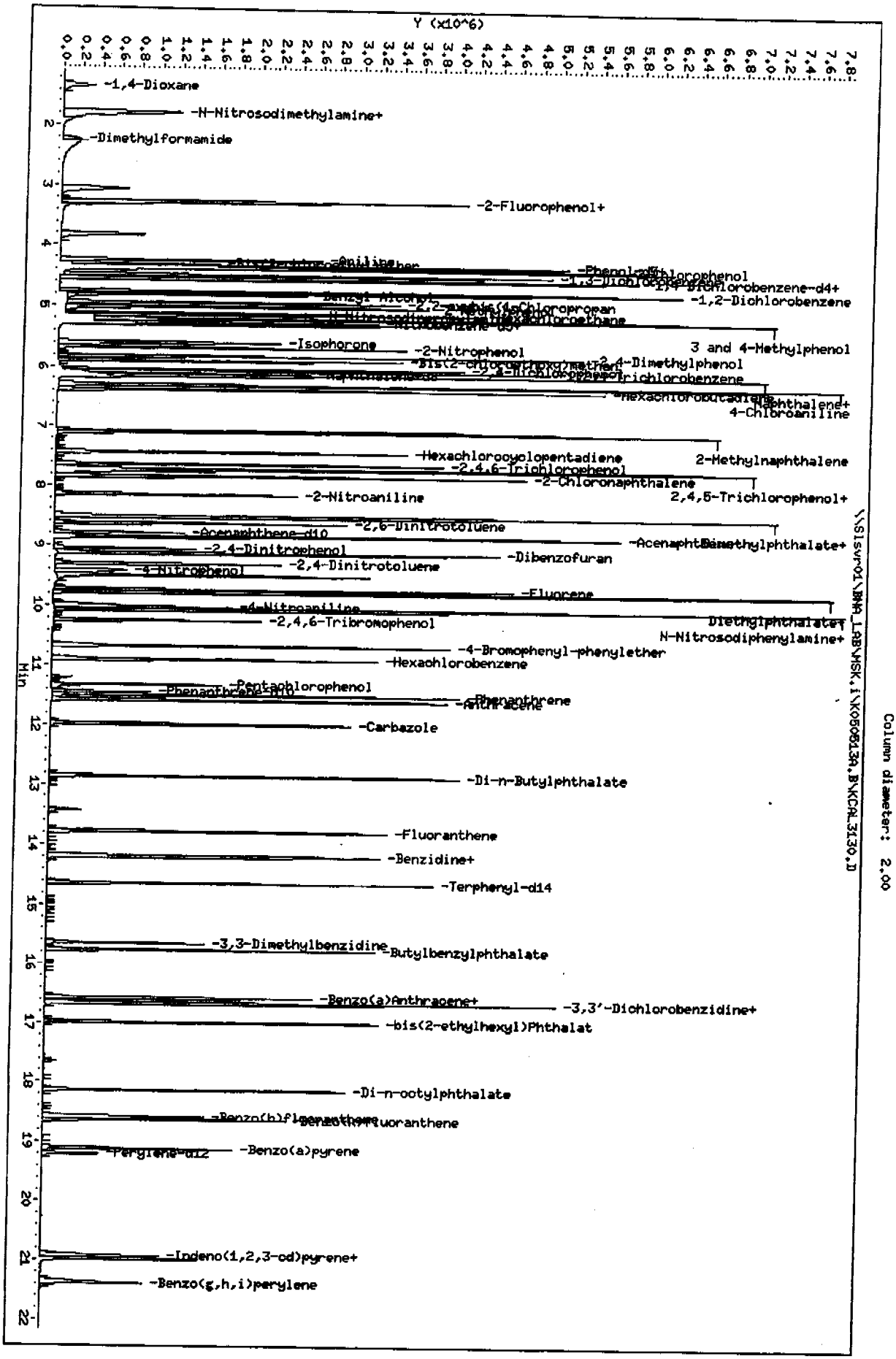
Instrument ID: MSK.i
Lab File ID: KCAL3130.D
Lab Smp Id: SSTD120
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Misc Info: SV0217-05

Calibration Date: 13-MAY-2005
Calibration Time: 12:14
Client Smp ID: SSTD120
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	181066	90533	362132	256244	41.52
48 Naphthalene-d8	627500	313750	1255000	851595	35.71
82 Acenaphthene-d10	358476	179238	716952	413660	15.39
121 Phenanthrene-d10	655247	327624	1310494	666434	1.71
153 Chrysene-d12	535207	267604	1070414	455704	-14.85
166 Perylene-d12	427031	213516	854062	341474	-20.04

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.52	4.02	5.02	4.54	0.40
48 Naphthalene-d8	6.11	5.61	6.61	6.12	0.21
82 Acenaphthene-d10	8.78	8.28	9.28	8.79	0.14
121 Phenanthrene-d10	11.43	10.93	11.93	11.45	0.16
153 Chrysene-d12	16.59	16.09	17.09	16.61	0.11
166 Perylene-d12	19.20	18.70	19.70	19.21	0.07

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

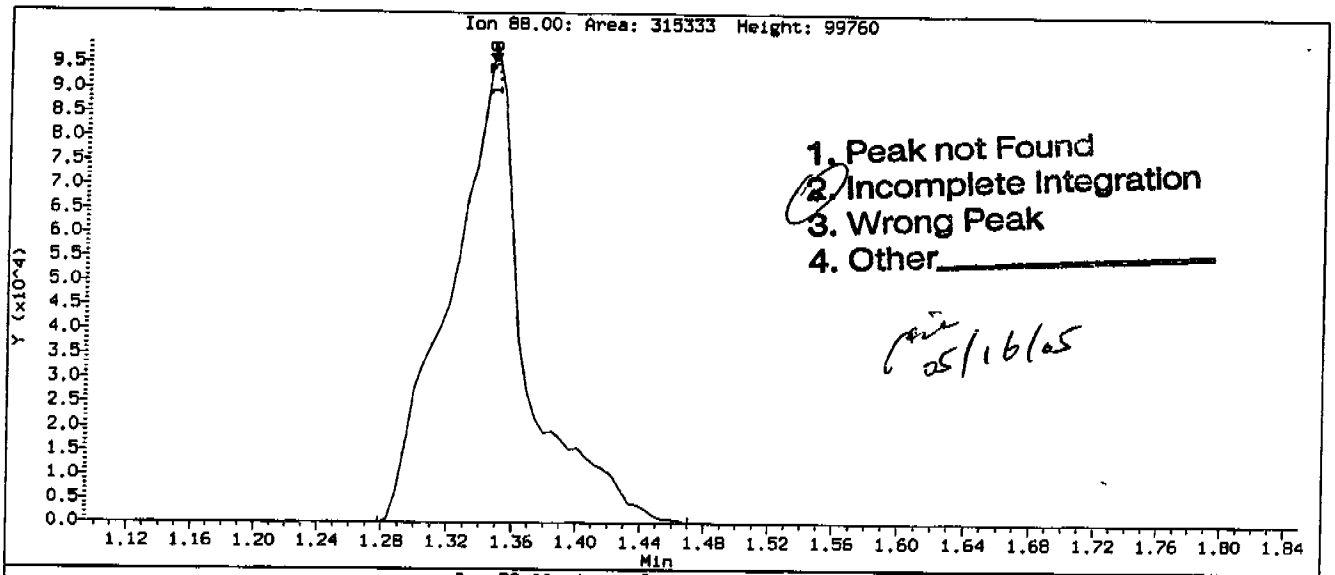


Data File: \\Slsvr01\BNA_LAB\HSK.i\K050513A.B\KCAL3130.D
Date : 13-MAY-2005 13:50
Client ID: SSTD120
Sample Info: SSTD120
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

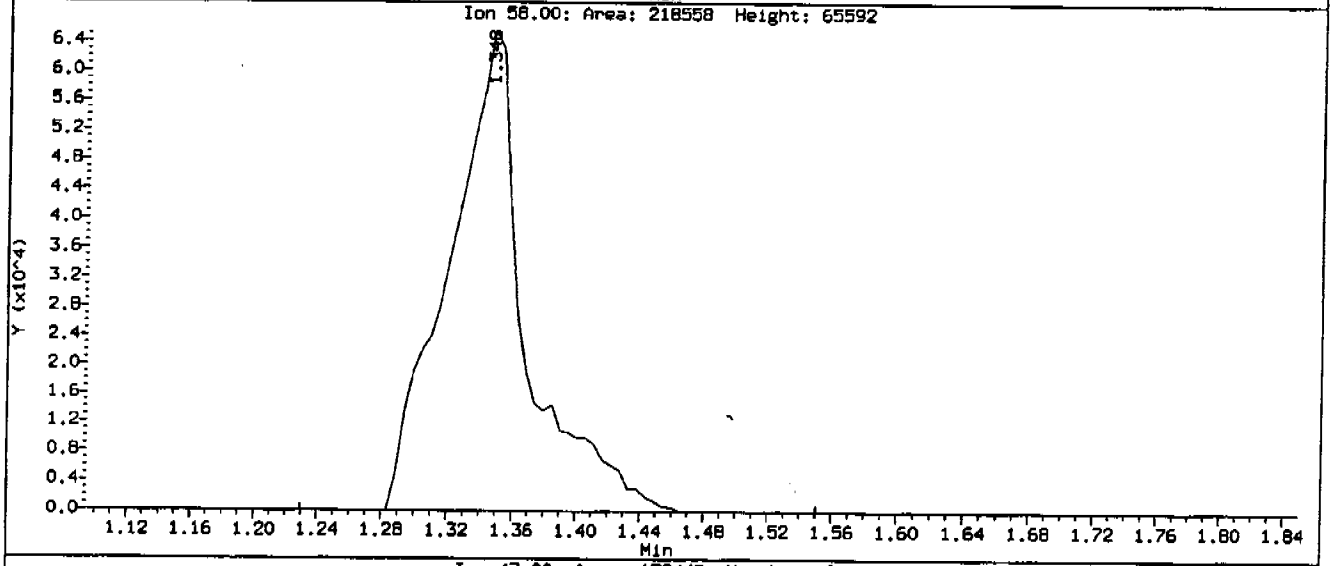
Data File: \\Slevr01\BNA_LAB\MSK_1\K050513A.B\KCAL3130.D
Injection Date: 13-MAY-2005 13:50
Instrument: MSK.i
Client Sample ID: SSTD120

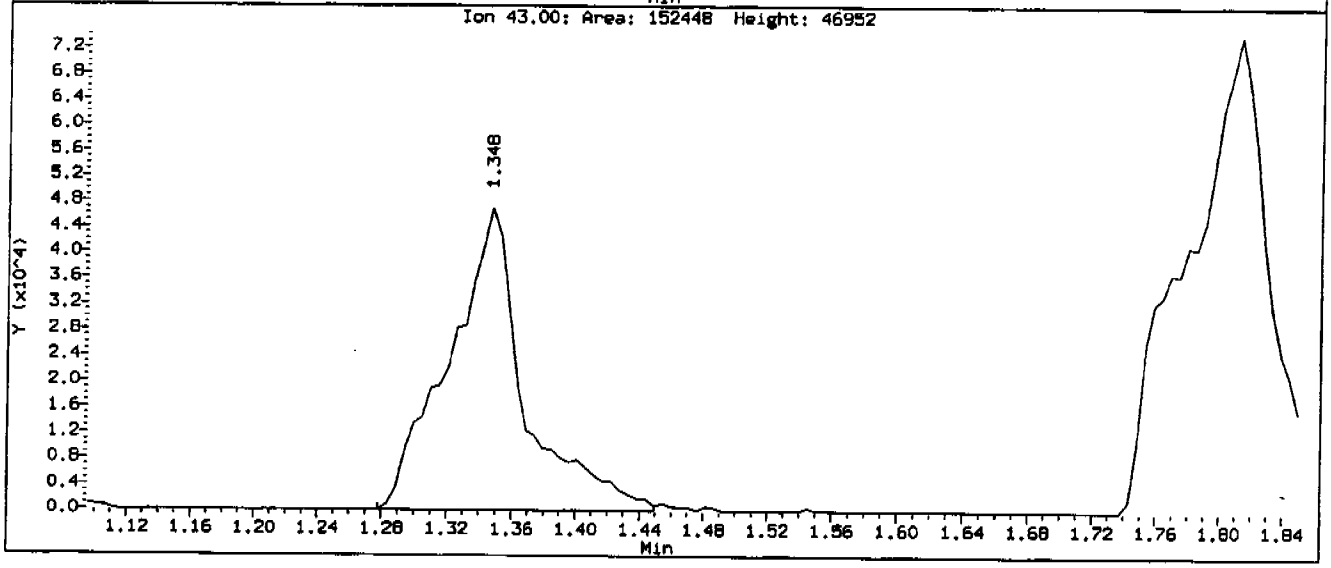
Compound: 1,4-Dioxane
CAS Number:



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

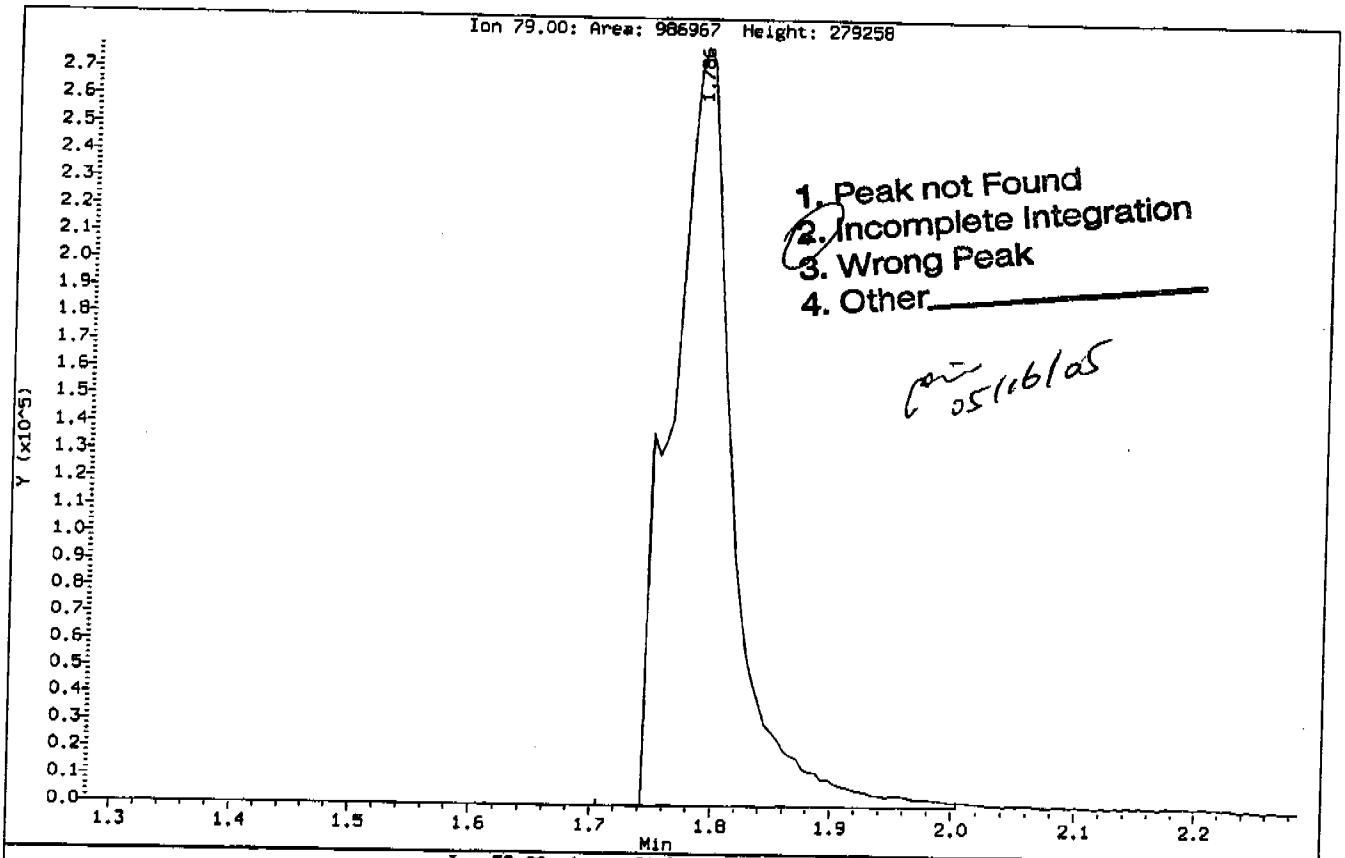
05/16/05

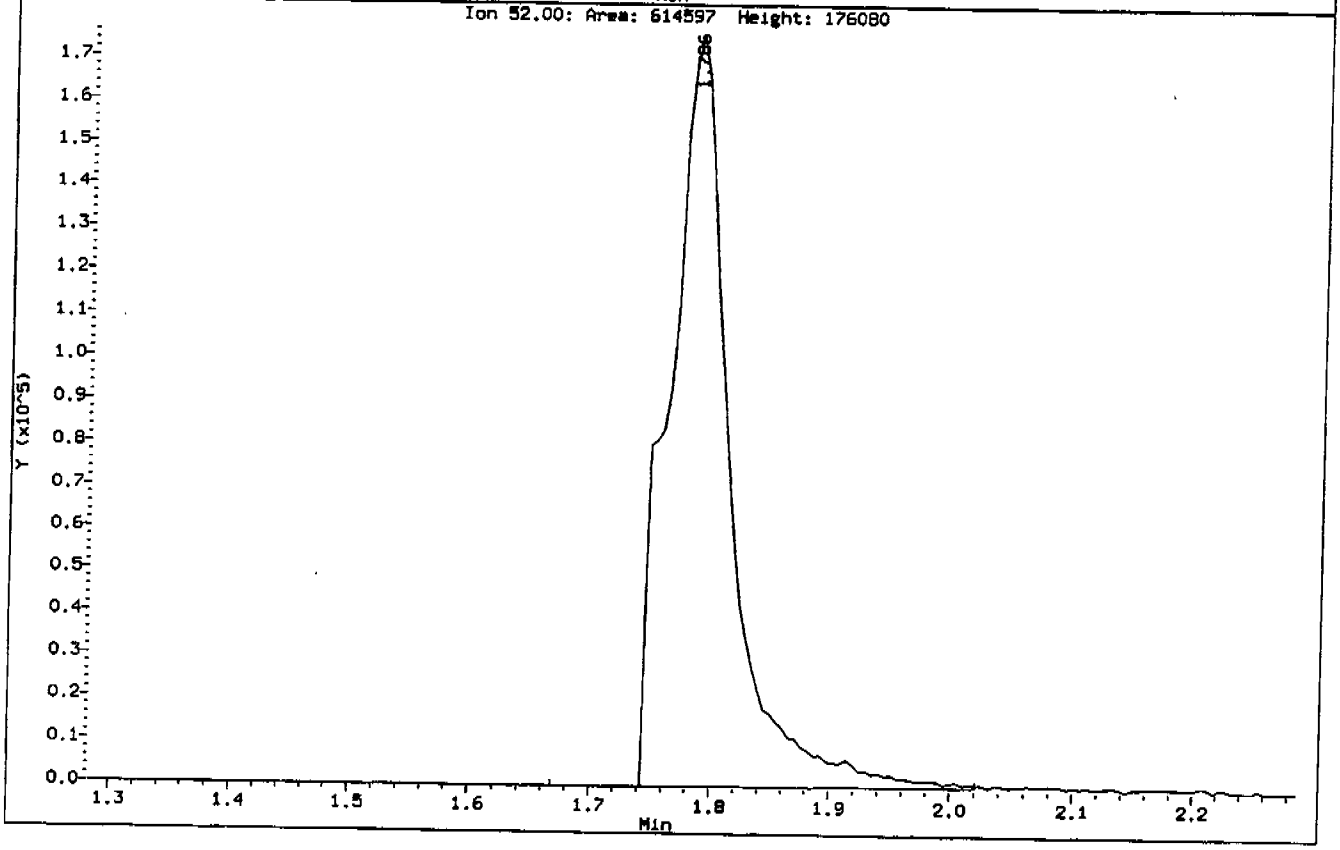




Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3130.D
Injection Date: 13-MAY-2005 13:50
Instrument: MSK.i
Client Sample ID: SSTD120

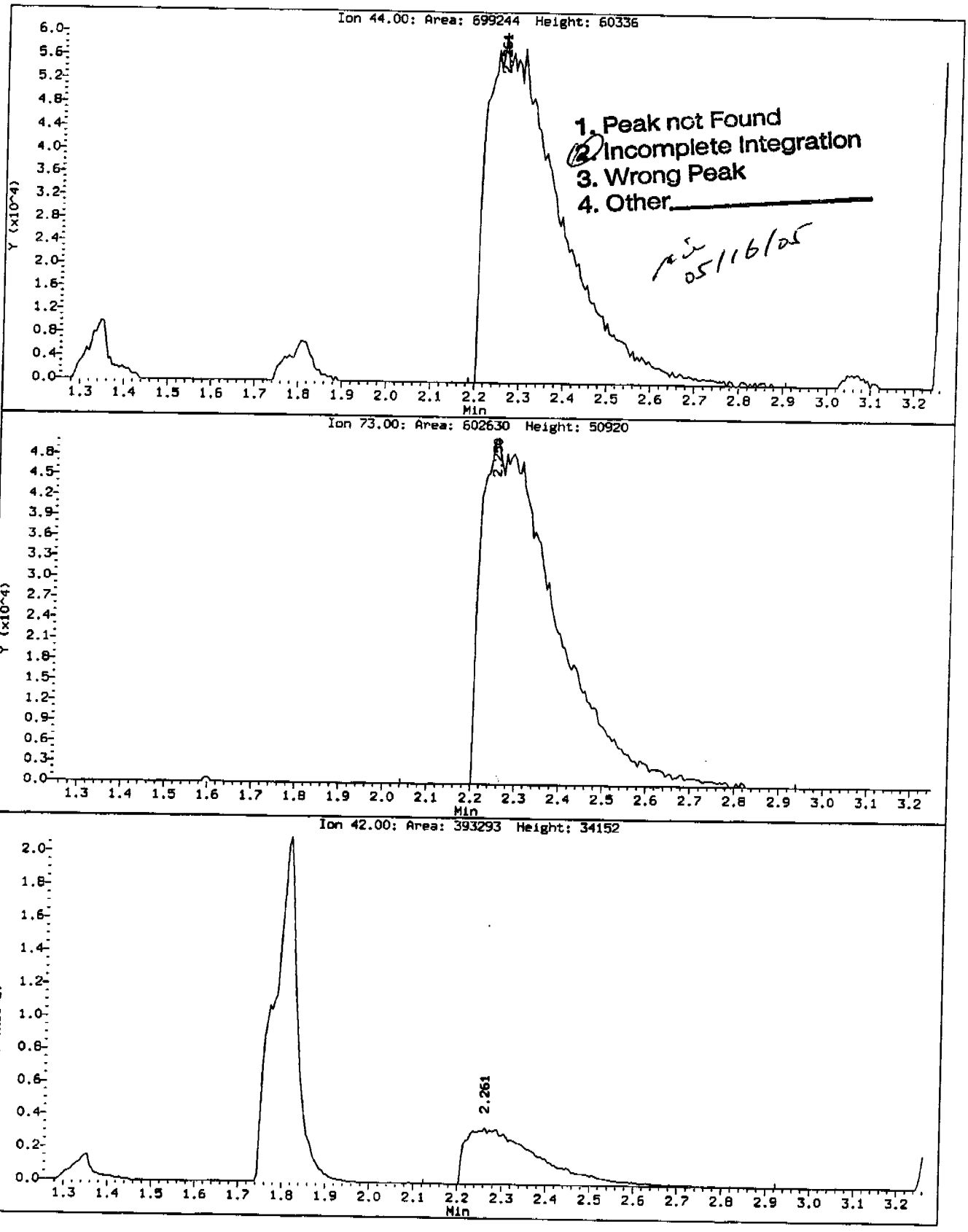
Compound: Pyridine
CAS Number: 110-86-1





Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3130.D
Injection Date: 13-MAY-2005 13:50
Instrument: MSK.i
Client Sample ID: SSTD120

Compound: Dimethylformamide
CAS Number: 68-12-2



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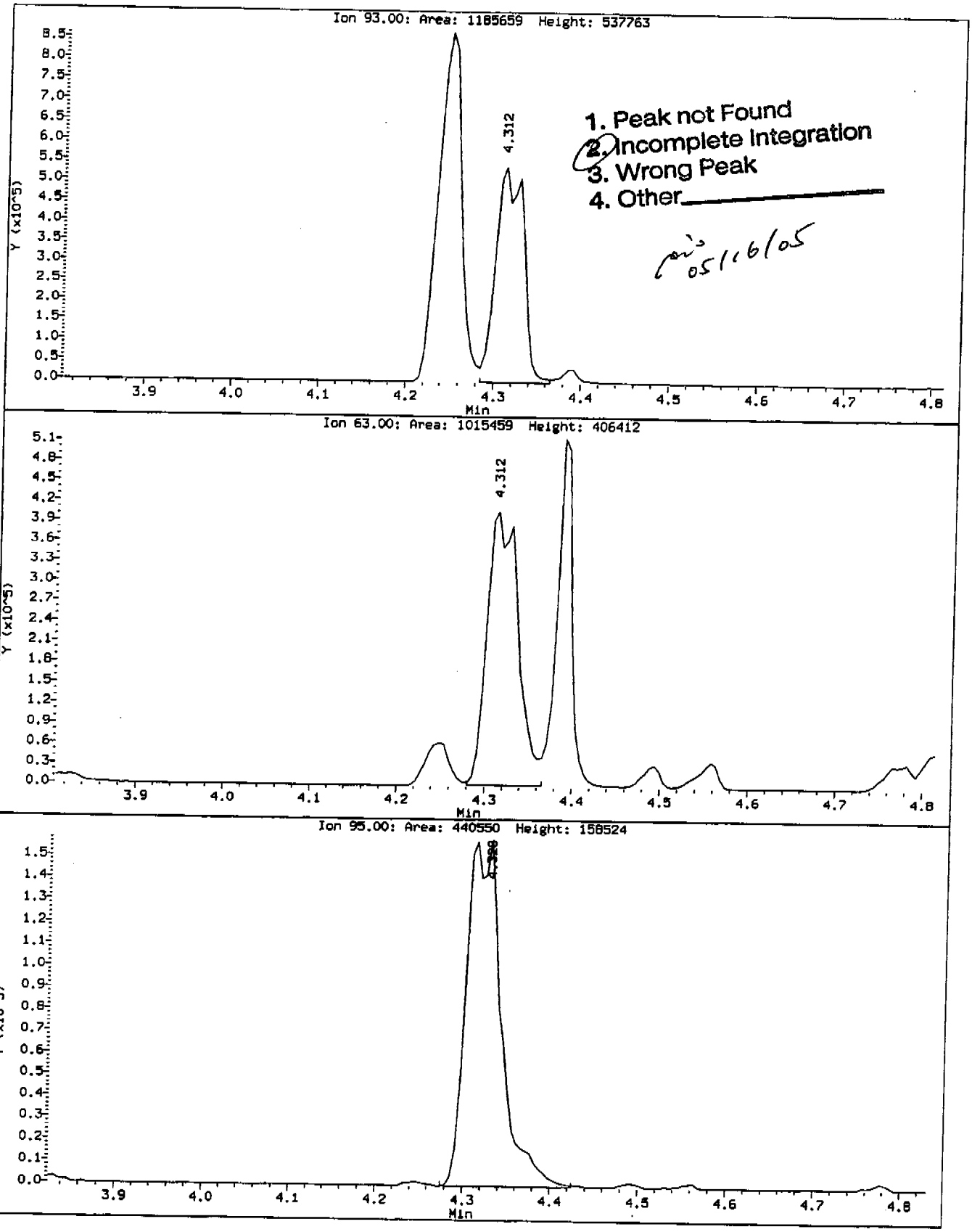
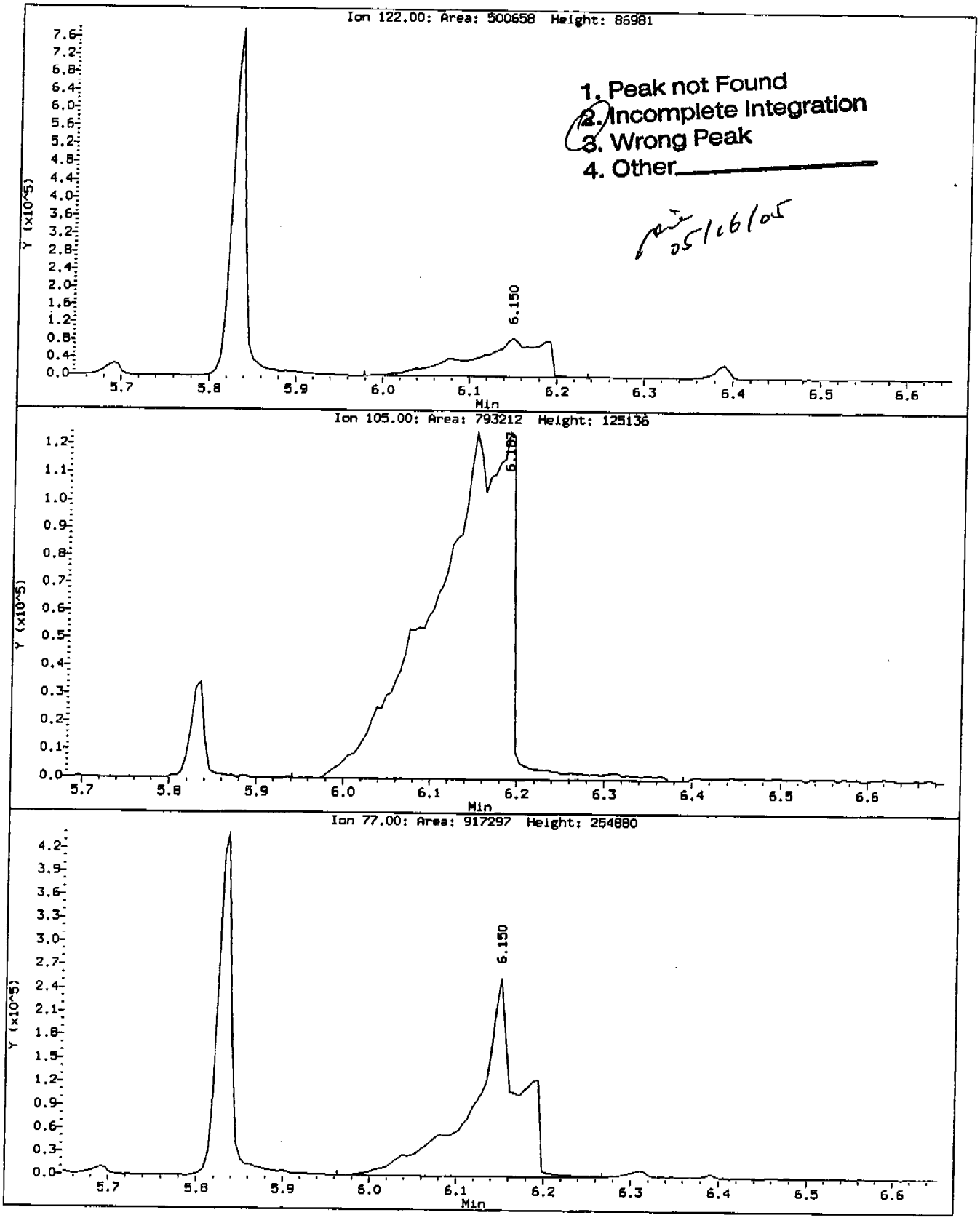
Injection Date: 13-MAY-2005 13:50
Instrument: MSK.i
Client Sample ID: SSTD120

Compound: Bis(2-chloroethyl)ether
CAS Number: 111-44-4



Data File: \\Slavr01\BNA_LAB\MSK.i\K050513A.B\KCAL3130.D
Injection Date: 13-MAY-2005 13:50
Instrument: MSK.i
Client Sample ID: SSTD120

Compound: Benzoic Acid
CAS Number: 65-85-0



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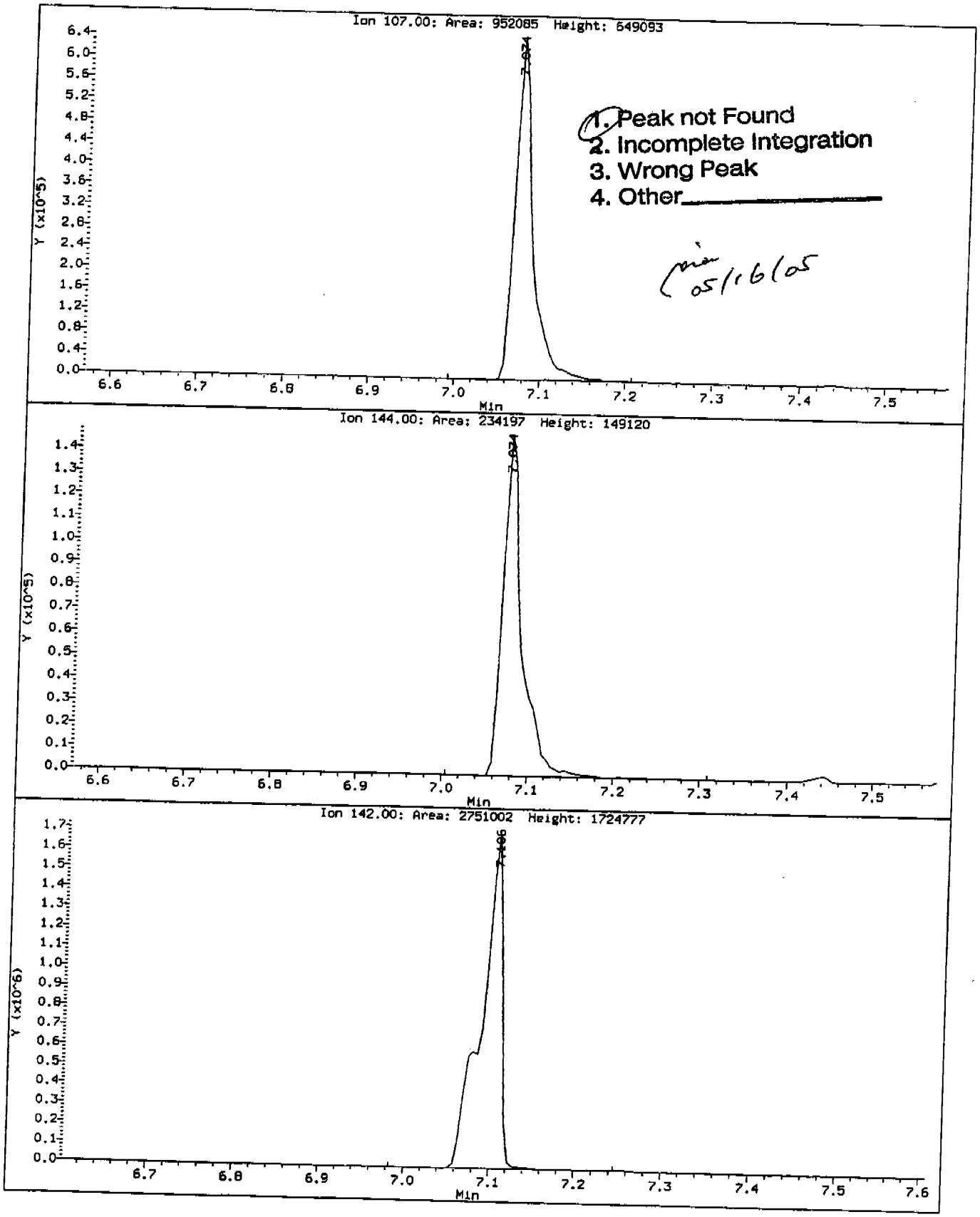
Injection Date: 13-MAY-2005 13:50
Instrument: MSK.i
Client Sample ID: SSTD120

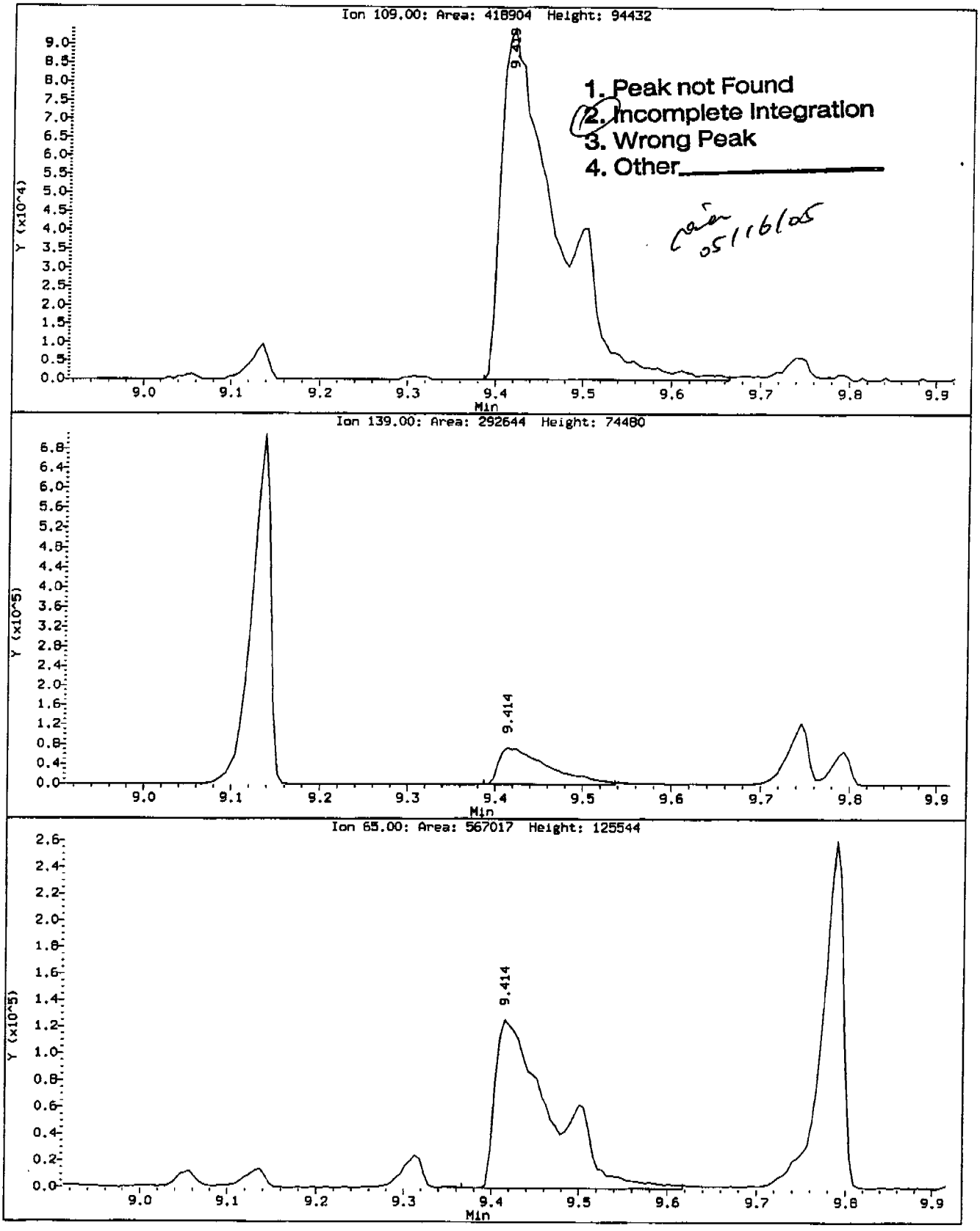
Compound: 4-Chloro-3-Methylphenol
CAS Number: 59-50-7



LOT# F5D210380

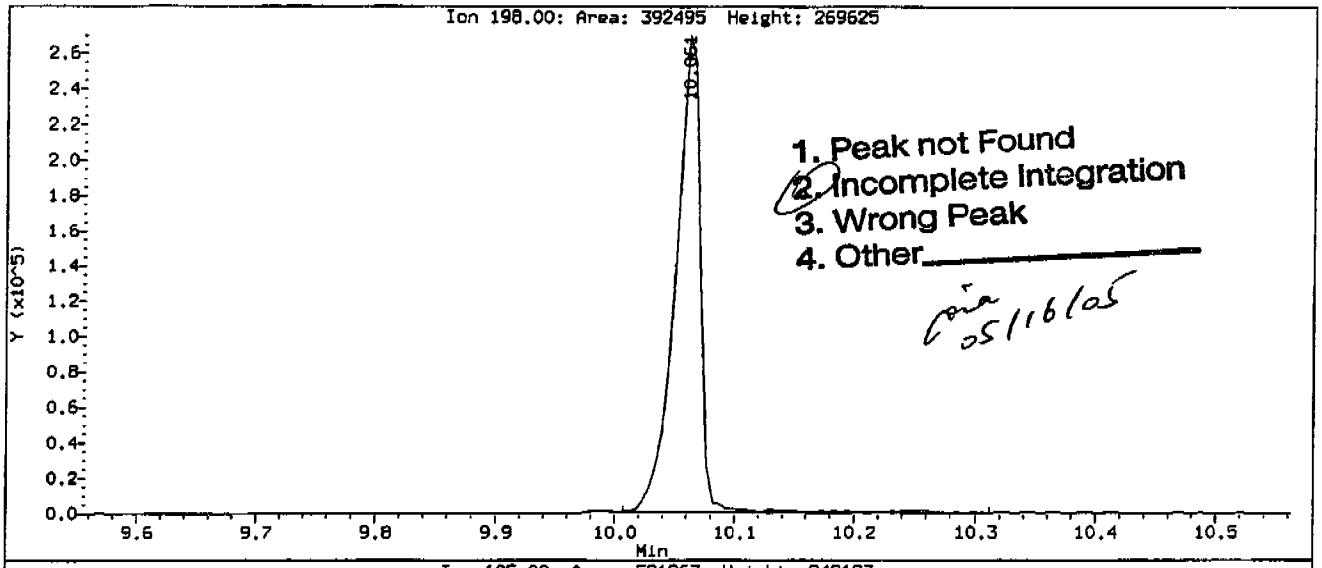
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3130.D
Injection Date: 13-MAY-2005 13:50
Instrument: MSK.i
Client Sample ID: SSTD120

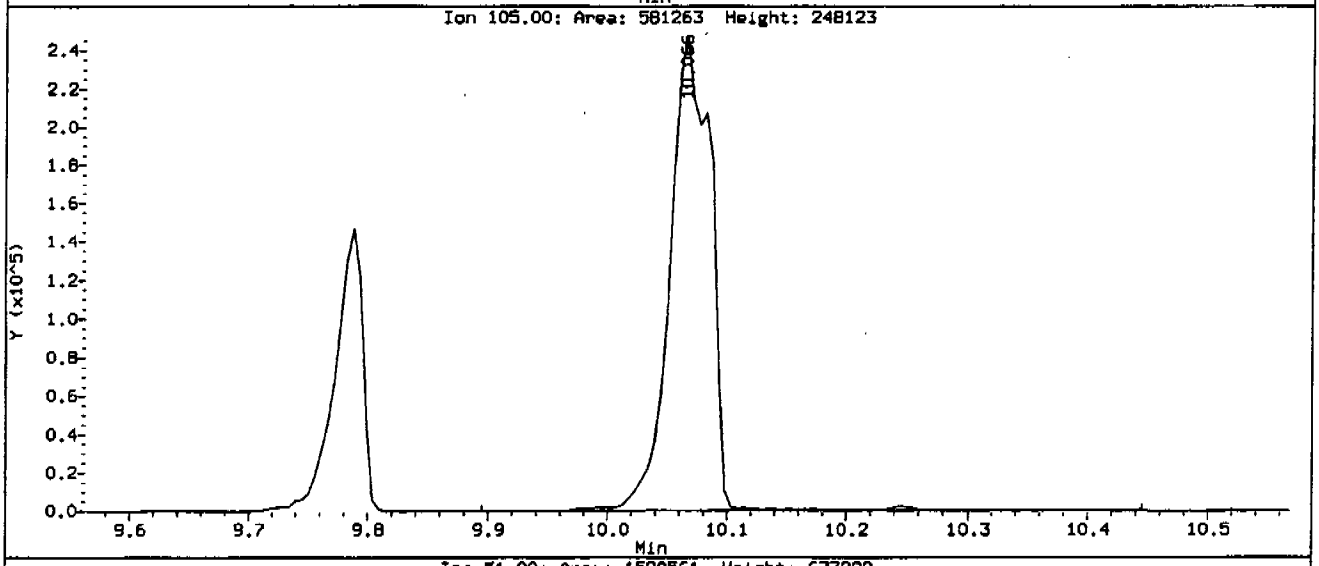
Compound: 4-Nitrophenol
CAS Number: 100-02-7

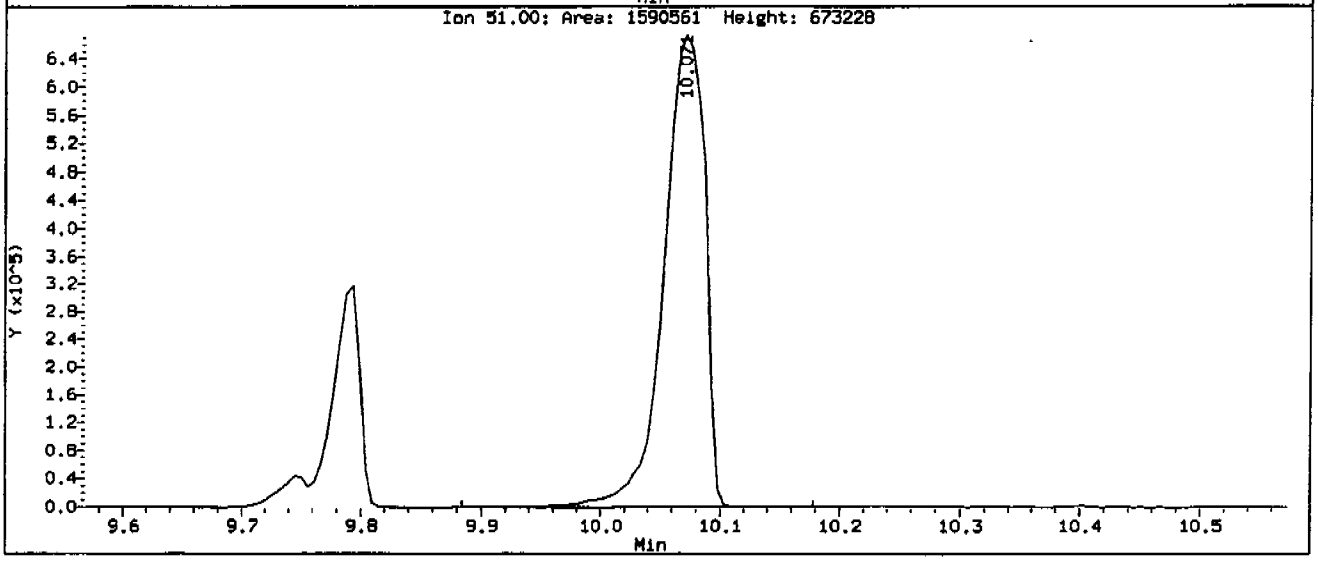


Data File: \\Sievr01\BNA_LAB\MSK.i\K050513A.B\KCAL3130.D
Injection Date: 13-MAY-2005 13:50
Instrument: MSK.i
Client Sample ID: S5TD120

Compound: 4,6-Dinitro-2-methylphenol
CAS Number: 534-52-1







Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3131.D Page 1
Report Date: 14-May-2005 09:51

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3131.D
Lab Smp Id: SSTD080 Client Smp ID: SSTD080
Inj Date : 13-MAY-2005 14:22
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD080
Misc Info : SV0216-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Meth Date : 14-May-2005 09:51 hongs Quant Type: ISTD
Cal Date : 13-MAY-2005 14:22 Cal File: KCAL3131.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 1,4-Dioxane	88	1.248	1.248	(0.276)	182106	80.0000	80.62
	4 N-Nitrosodimethylamine	74	1.686	1.686	(0.372)	313399	80.0000	80.41
	3 Pyridine	79	1.649	1.649	(0.364)	618072	80.0000	87.29(M)
	5 Dimethylformamide	44	2.183	2.183	(0.482)	419660	80.0000	79.69(M)
$	10 2-Fluorophenol	112	3.230	3.230	(0.713)	625652	80.0000	85.69
	11 Cyclohexanol	57	3.236	3.236	(0.715)	600474	80.0000	76.76
	17 Aniline	93	4.224	4.224	(0.933)	1038572	80.0000	83.13
	19 Bis(2-chloroethyl)ether	93	4.299	4.299	(0.949)	706241	80.0000	82.16
$	15 Phenol-d5	99	4.309	4.309	(0.952)	796463	80.0000	83.66
	16 Phenol	94	4.325	4.325	(0.955)	839275	80.0000	82.54
	20 2-Chlorophenol	128	4.368	4.368	(0.965)	679202	80.0000	83.54
	21 1,3-Dichlorobenzene	146	4.480	4.480	(0.989)	769767	80.0000	81.68
*	22 1,4-Dichlorobenzene-d4	152	4.528	4.528	(1.000)	244092	40.0000	
	23 1,4-Dichlorobenzene	146	4.544	4.544	(1.004)	834721	80.0000	83.68
	26 1,2-Dichlorobenzene	146	4.769	4.769	(1.053)	767781	80.0000	83.44
	25 Benzyl Alcohol	108	4.790	4.790	(1.058)	343726	80.0000	90.66
	28 2,2-oxybis(1-Chloropropane)	45	4.934	4.934	(1.090)	725329	80.0000	80.45
	27 2-Methylphenol	108	4.998	4.998	(1.104)	545107	80.0000	81.98
	35 Hexachloroethane	117	5.121	5.121	(1.131)	354415	80.0000	82.28
	32 N-Nitrosodinpropylamine	70	5.137	5.137	(1.134)	591703	80.0000	85.16
	29 3 and 4-Methylphenol	108	5.196	5.196	(1.147)	1278514	160.000	172.2(A)

5/16/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.255	5.255	(0.861)	918435	80.0000	79.77
	37 Nitrobenzene	77	5.282	5.282	(0.865)	953903	80.0000	79.64
	39 Isophorone	82	5.581	5.581	(0.914)	1259197	80.0000	80.87
	40 2-Nitrophenol	139	5.677	5.677	(0.930)	353865	80.0000	82.41
	41 2,4-Dimethylphenol	107	5.816	5.816	(0.953)	772338	80.0000	86.22
	42 Bis(2-chloroethoxy)methane	93	5.885	5.885	(0.964)	817341	80.0000	82.13
	45 2,4-Dichlorophenol	162	6.024	6.024	(0.987)	558429	80.0000	83.52
	47 1,2,4-Trichlorobenzene	180	6.062	6.062	(0.993)	683047	80.0000	82.14
*	48 Naphthalene-d8	136	6.104	6.104	(1.000)	855620	40.0000	
	44 Benzoic Acid	122	6.136	6.136	(1.005)	363720	80.0000	92.15(M)
	50 Naphthalene	128	6.136	6.136	(1.005)	2015844	80.0000	84.44
	51 4-Chloroaniline	127	6.291	6.291	(1.031)	821094	80.0000	85.36
	54 Hexachlorobutadiene	225	6.377	6.377	(1.045)	493913	80.0000	82.14
	62 2-Methylnaphthalene	142	7.093	7.093	(1.162)	1885368	80.0000	90.09
	59 4-Chloro-3-Methylphenol	107	7.066	7.066	(1.158)	653363	80.0000	84.97
	66 Hexachlorocyclopentadiene	237	7.429	7.429	(0.847)	460472	80.0000	92.68
	67 2,4,6-Trichlorophenol	196	7.627	7.627	(0.869)	470240	80.0000	85.21
	68 2,4,5-Trichlorophenol	196	7.734	7.734	(0.881)	479520	80.0000	83.26
$	69 2-Fluorobiphenyl	172	7.712	7.712	(0.879)	1557465	80.0000	81.58
	72 2-Chloronaphthalene	162	7.835	7.835	(0.893)	1298204	80.0000	81.78
	73 2-Nitroaniline	65	8.134	8.134	(0.927)	521102	80.0000	81.47
	76 Dimethylphthalate	163	8.503	8.503	(0.969)	1503152	80.0000	83.36
	79 Acenaphthylene	152	8.514	8.514	(0.970)	1971704	80.0000	82.67
	80 2,6-Dinitrotoluene	165	8.615	8.615	(0.982)	317308	80.0000	83.97
*	82 Acenaphthene-d10	164	8.775	8.775	(1.000)	472315	40.0000	
	83 Acenaphthene	153	8.834	8.834	(1.007)	1184466	80.0000	81.40
	81 3-Nitroaniline	138	8.856	8.856	(1.009)	310407	80.0000	82.74
	84 2,4-Dinitrophenol	184	9.032	9.032	(1.029)	160987	80.0000	96.89
	86 Dibenzofuran	168	9.117	9.117	(1.039)	1791838	80.0000	82.05
	88 2,4-Dinitrotoluene	165	9.294	9.294	(1.059)	408561	80.0000	85.79
	85 4-Nitrophenol	109	9.406	9.406	(1.072)	312750	80.0000	92.50(M)
	93 Diethylphthalate	149	9.764	9.764	(1.113)	1490216	80.0000	82.57
	94 Fluorene	166	9.726	9.726	(1.108)	1455277	80.0000	83.00
	95 4-Chlorophenyl-phenylether	204	9.774	9.774	(1.114)	822457	80.0000	83.14
	98 4-Nitroaniline	138	9.993	9.993	(1.139)	304476	80.0000	88.25
	99 4,6-Dinitro-2-methylphenol	198	10.031	10.031	(0.878)	299526	80.0000	98.96(M)
	100 N-Nitrosodiphenylamine	169	10.052	10.052	(0.879)	1053491	80.0000	83.68
	102 Azobenzene	77	10.057	10.057	(0.880)	2235769	80.0000	81.69
$	104 2,4,6-Tribromophenol	330	10.234	10.234	(1.166)	239382	80.0000	86.92
	109 4-Bromophenyl-phenylether	248	10.656	10.656	(0.932)	496709	80.0000	82.66
	112 Hexachlorobenzene	284	10.886	10.886	(0.952)	508989	80.0000	81.09
	117 Pentachlorophenol	266	11.302	11.302	(0.989)	249973	80.0000	88.80
*	121 Phenanthrene-d10	188	11.430	11.430	(1.000)	826255	40.0000	
	122 Phenanthrene	178	11.484	11.484	(1.005)	2060377	80.0000	81.20
	124 Anthracene	178	11.564	11.564	(1.012)	1996867	80.0000	81.78
	126 Carbazole	167	11.975	11.975	(1.048)	1677254	80.0000	82.89
	129 Di-n-Butylphthalate	149	12.851	12.851	(1.124)	2214124	80.0000	82.48
	134 Fluoranthene	202	13.770	13.770	(1.205)	2136121	80.0000	82.00
	135 Benzidine	184	14.171	14.171	(0.854)	731828	80.0000	83.34
	137 Pyrene	202	14.187	14.187	(0.855)	2155550	80.0000	82.52
$	139 Terphenyl-d14	244	14.630	14.630	(0.882)	1701021	80.0000	82.92
	145 3,3-Dimethylbenzidine	212	15.635	15.635	(0.942)	811168	80.0000	81.58
	146 Butylbenzylphthalate	149	15.758	15.758	(0.949)	826021	80.0000	80.62
	150 Benzo(a)Anthracene	228	16.564	16.564	(0.998)	1798170	80.0000	81.67

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.596	16.596	(1.000)	637810	40.0000	
152 3,3'-Dichlorobenzidine	252	16.660	16.660	(1.004)	737693	80.0000	88.65
154 Chrysene	228	16.650	16.650	(1.003)	1739582	80.0000	83.48
155 bis(2-ethylhexyl)Phthalate	149	16.981	16.981	(1.023)	1046329	80.0000	82.38
158 Di-n-octylphthalate	149	18.124	18.124	(0.944)	1750660	80.0000	82.76
160 Benzo(b)fluoranthene	252	18.573	18.573	(0.967)	1604105	80.0000	78.97
161 Benzo(k)fluoranthene	252	18.621	18.621	(0.970)	1673700	80.0000	83.74
165 Benzo(a)pyrene	252	19.107	19.107	(0.995)	1514663	80.0000	83.88
* 166 Perylene-d12	264	19.198	19.198	(1.000)	512776	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.918	20.918	(1.090)	1481228	80.0000	87.14
174 Dibenzo(a,h)anthracene	278	20.966	20.966	(1.092)	1422713	80.0000	86.68
177 Benzo(g,h,i)perylene	276	21.372	21.372	(1.113)	1270074	80.0000	85.09

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3131.D
Report Date: 14-May-2005 09:51

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

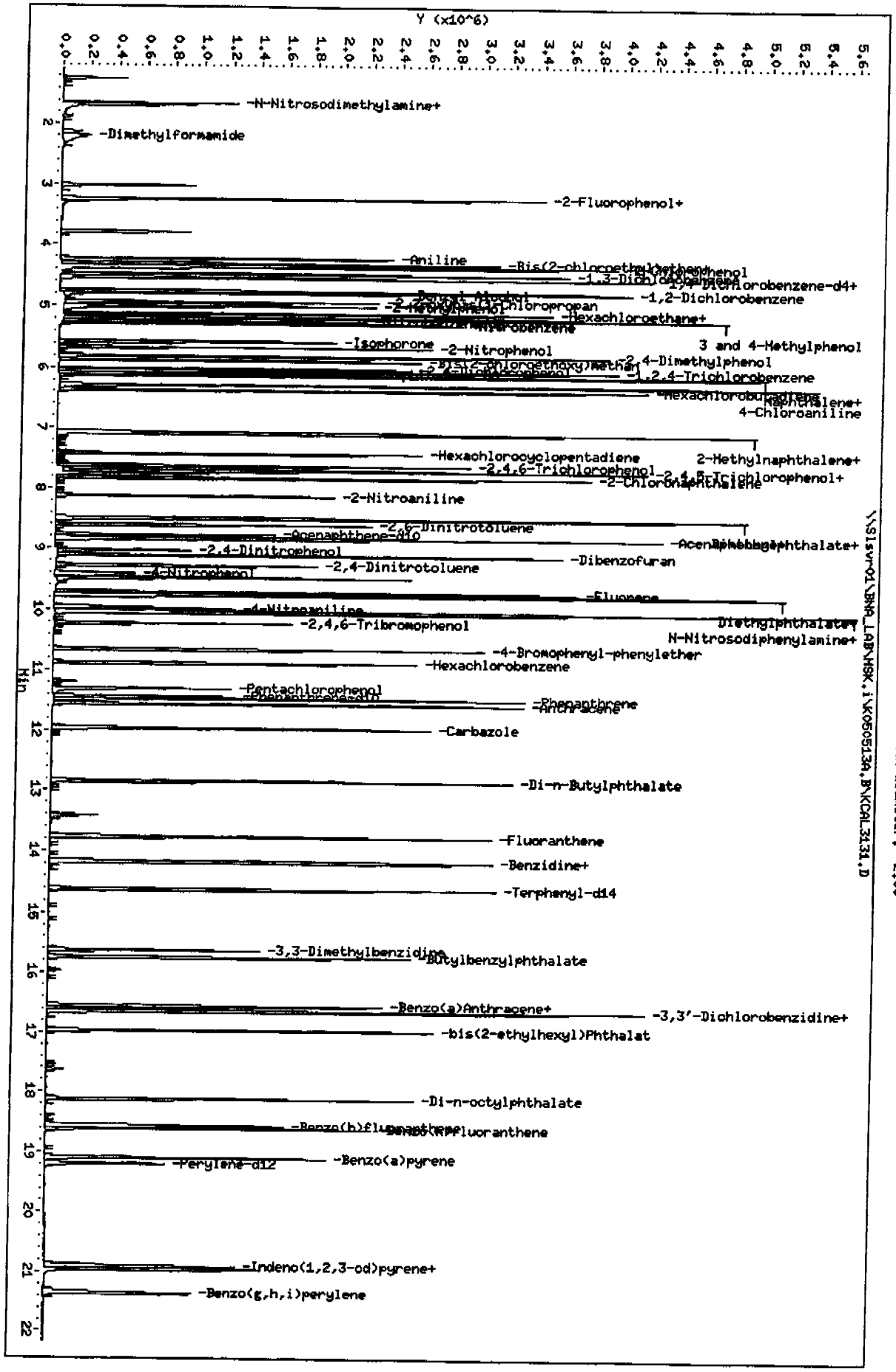
Instrument ID: MSK.i
Lab File ID: KCAL3131.D
Lab Smp Id: SSTD080
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Misc Info: SV0216-05

Calibration Date: 13-MAY-2005
Calibration Time: 12:14
Client Smp ID: SSTD080
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	181066	90533	362132	244092	34.81
48 Naphthalene-d8	627500	313750	1255000	855620	36.35
82 Acenaphthene-d10	358476	179238	716952	472315	31.76
121 Phenanthrene-d10	655247	327624	1310494	826255	26.10
153 Chrysene-d12	535207	267604	1070414	637810	19.17
166 Perylene-d12	427031	213516	854062	512776	20.08

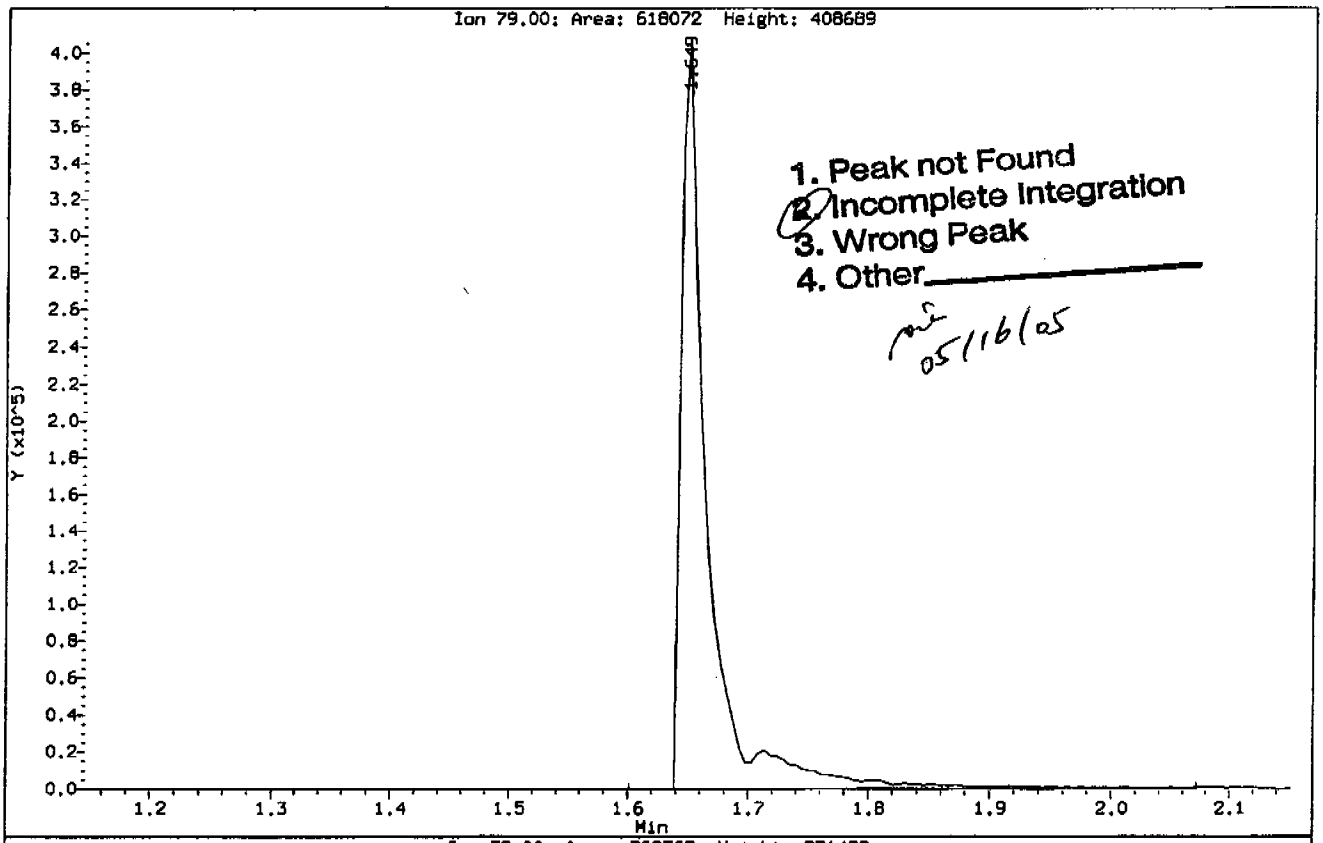
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.52	4.02	5.02	4.53	0.10
48 Naphthalene-d8	6.11	5.61	6.61	6.10	-0.01
82 Acenaphthene-d10	8.78	8.28	9.28	8.78	-0.01
121 Phenanthrene-d10	11.43	10.93	11.93	11.43	-0.01
153 Chrysene-d12	16.59	16.09	17.09	16.60	0.03
166 Perylene-d12	19.20	18.70	19.70	19.20	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^6)
Min
-N-Nitrosodimethylamine+
-Dimethylformamide
-2-Fluorophenol+
-Aniline
-1,2-Dichlorobenzene
-Hexachloroethane+
-Isophorone
-2-Nitrophenol
3 and 4-Methylphenol
-2,4-Dimethylphenol
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene+
4-Chloroaniline
-Hexachlorocyclopentadiene
2-Methylnaphthalene+
-2,4,6-Trichlorophenol
-2,4,5-Trichlorophenol+
-2-Chloronaphthalene
-2-Nitroaniline
-2,6-Dinitrotoluene
-Acenaphthylene+
-2,4-Dinitrophenol
-Dibenzofuran
-2,4-Dinitrotoluene
-4-Nitrophenol
-Fluorene
-4-Nitroaniline
-2,4,6-Tribromophenol
Diethylphthalate+
N-Nitrosodiphenylamine+
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Pentachlorophenol
-Phenanthrene
-Anthracene
-Carbazole
-Di-n-Butylphthalate
-Fluoranthene
-Benzidine+
-Terphenyl-d14
-3,3-Dimethylbenzidine
-Butylbenzylphthalate
-Benzo(a)Anthracene+
-3,3'-Dichlorobenzidine+
-bis(2-ethylhexyl)Phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Perylene-d12
-Benzo(a)pyrene
-Indeno(1,2,3-cd)pyrene+
-Benzo(g,h,i)perylene
\\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3131.D
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3134.D
Date : 13-MAY-2005 14:22
Client ID: SSTD080
Sample Info: SSTD080
Volume Injected (uL): 1.0
Column phase:
Instrument: MSK.i
Operator: KIA
Column diameter: 2.00
Page 5

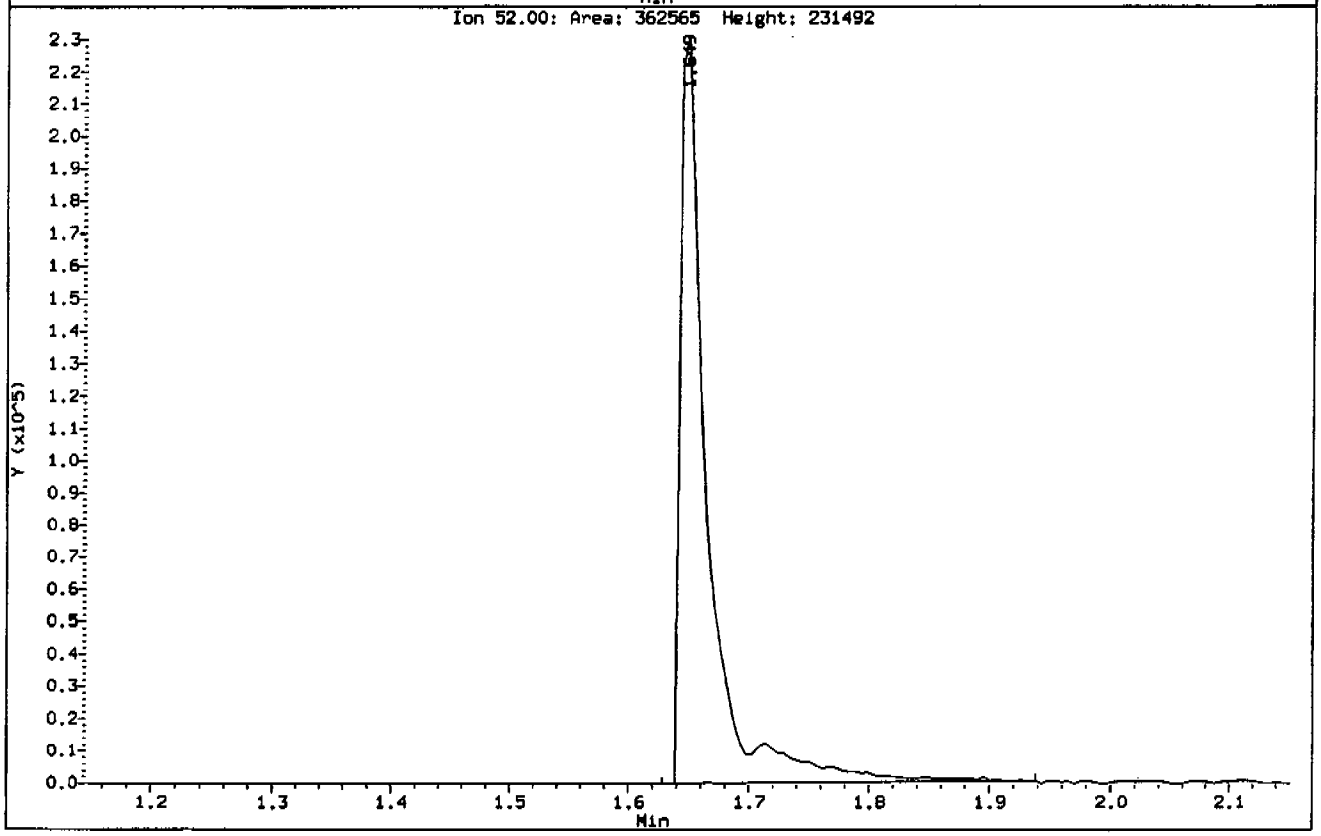
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3131.D
Injection Date: 13-MAY-2005 14:22
Instrument: MSK.i
Client Sample ID: SSTD080

Compound: Pyridine
CAS Number: 110-86-1



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other _____

05/16/05



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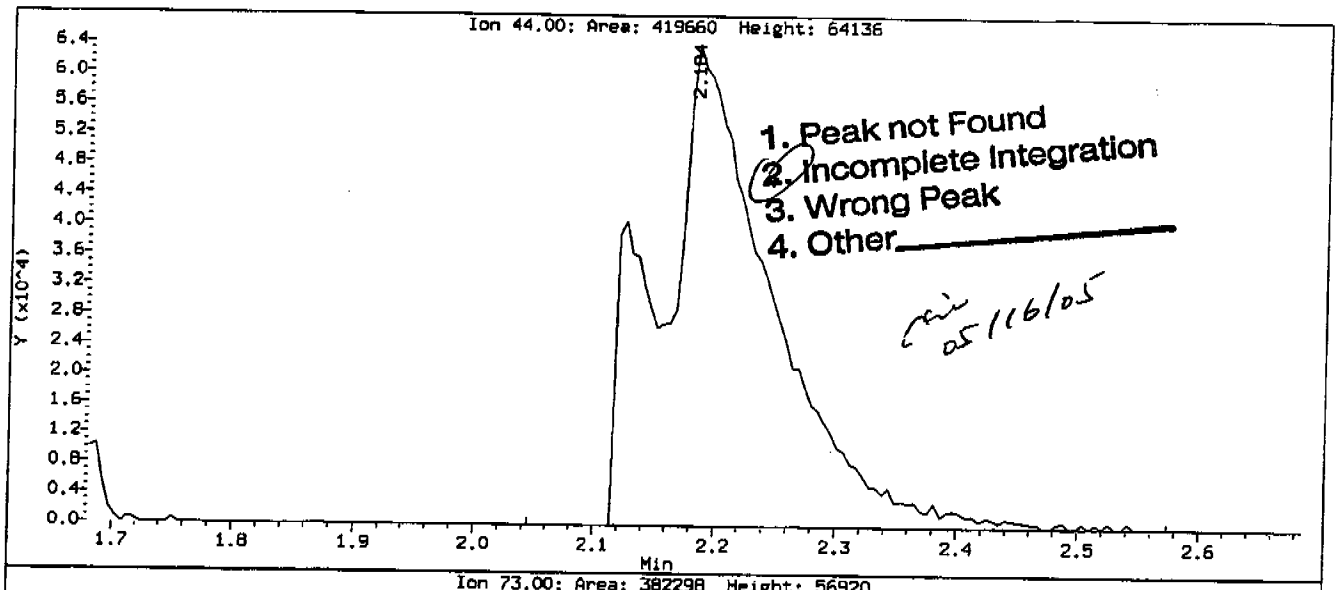
Injection Date: 13-MAY-2005 14:22
Instrument: MSK.i
Client Sample ID: SSTD080

Compound: Dimethylformamide
CAS Number: 68-12-2



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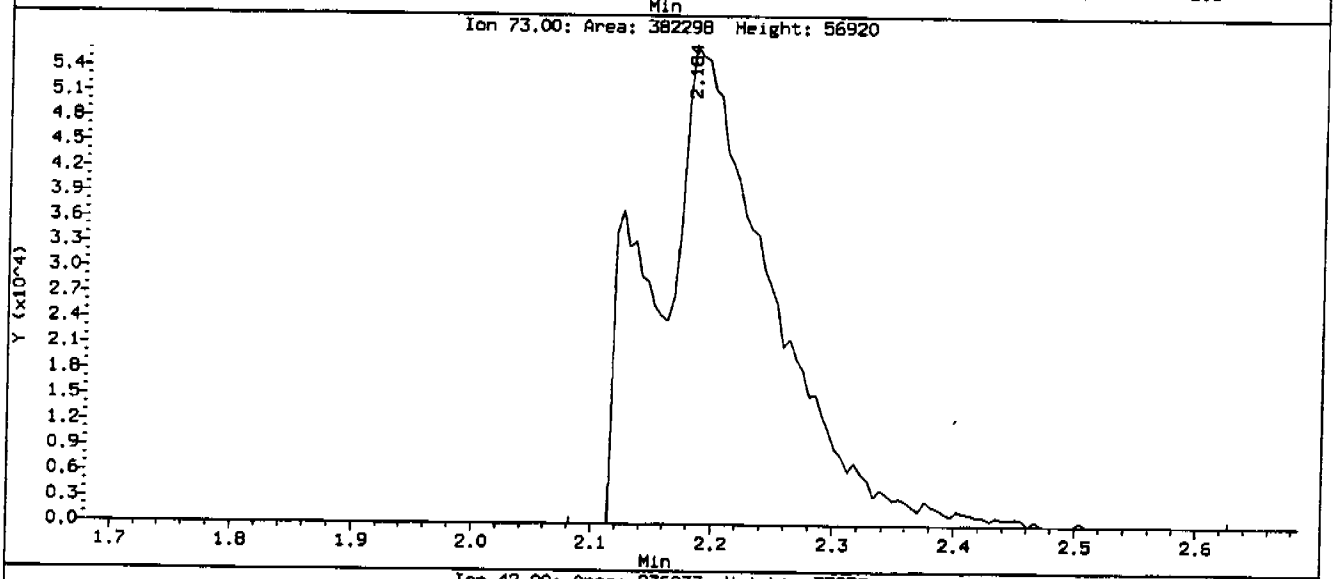
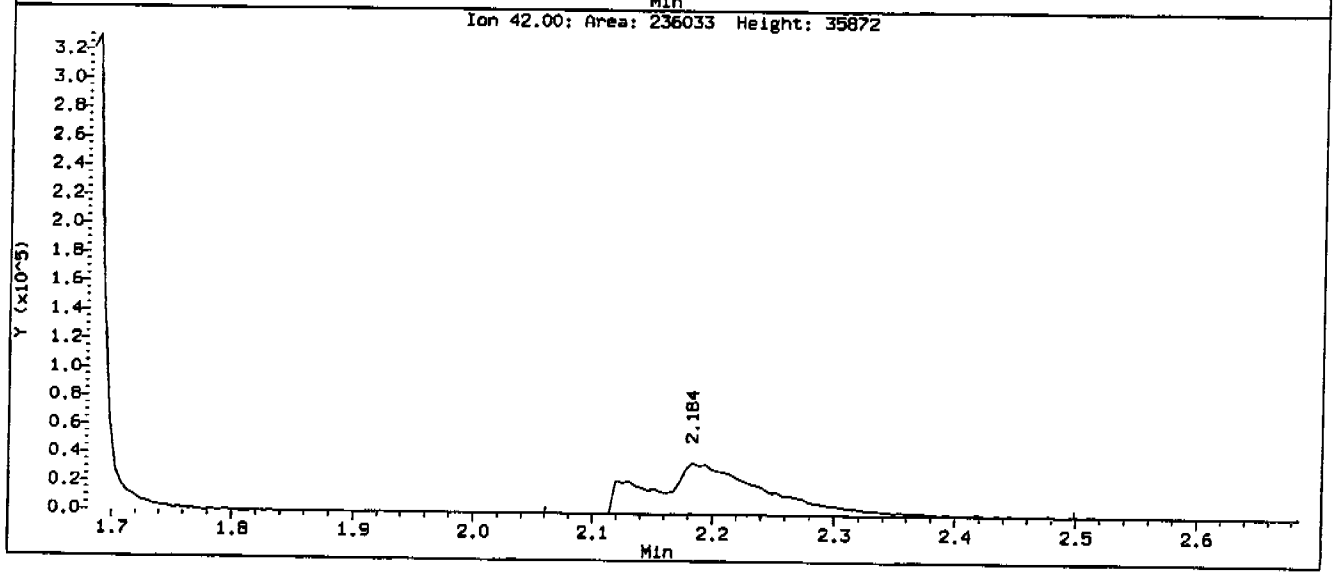
3. Wrong Peak
4. Other

5/16/05





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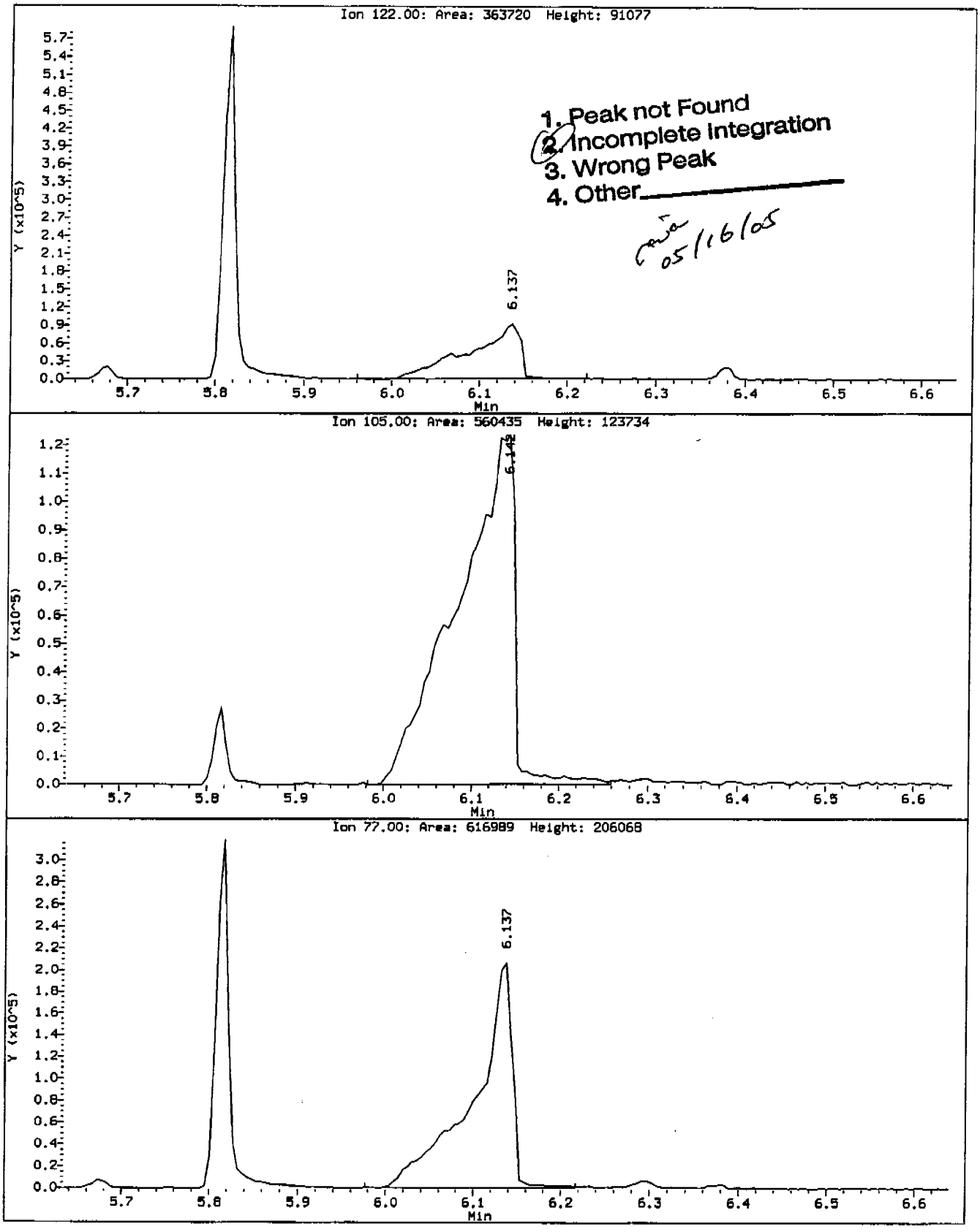
Injection Date: 13-MAY-2005 14:22
Instrument: MSK.i
Client Sample ID: SSTD080

Compound: Benzoic Acid
CAS Number: 65-85-0



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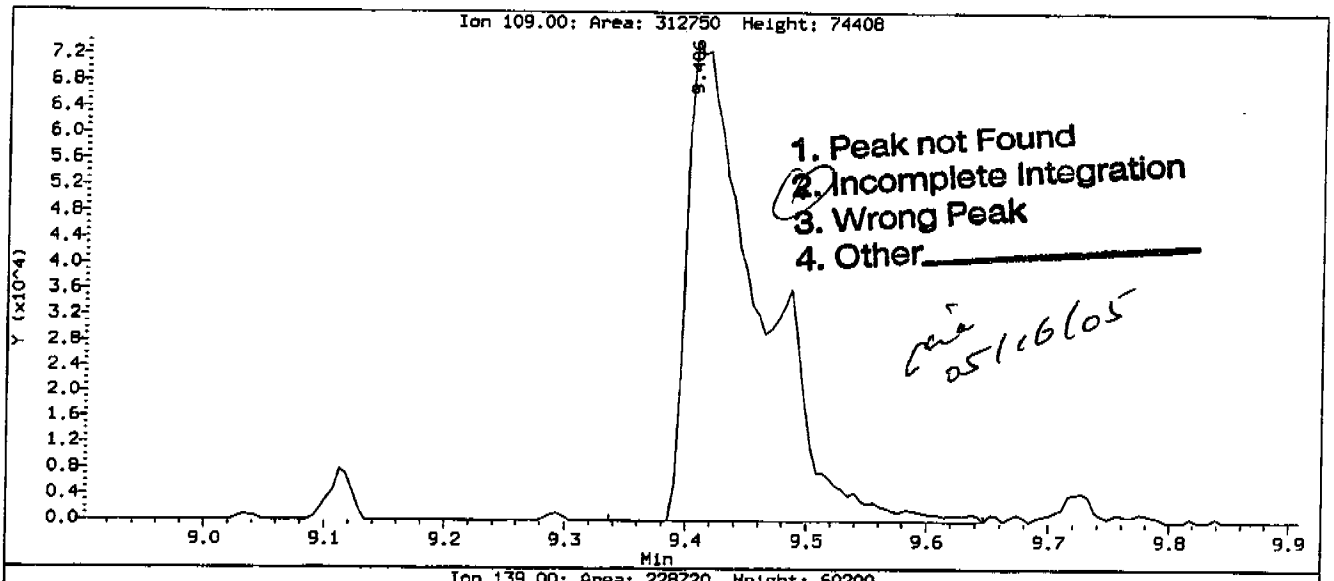
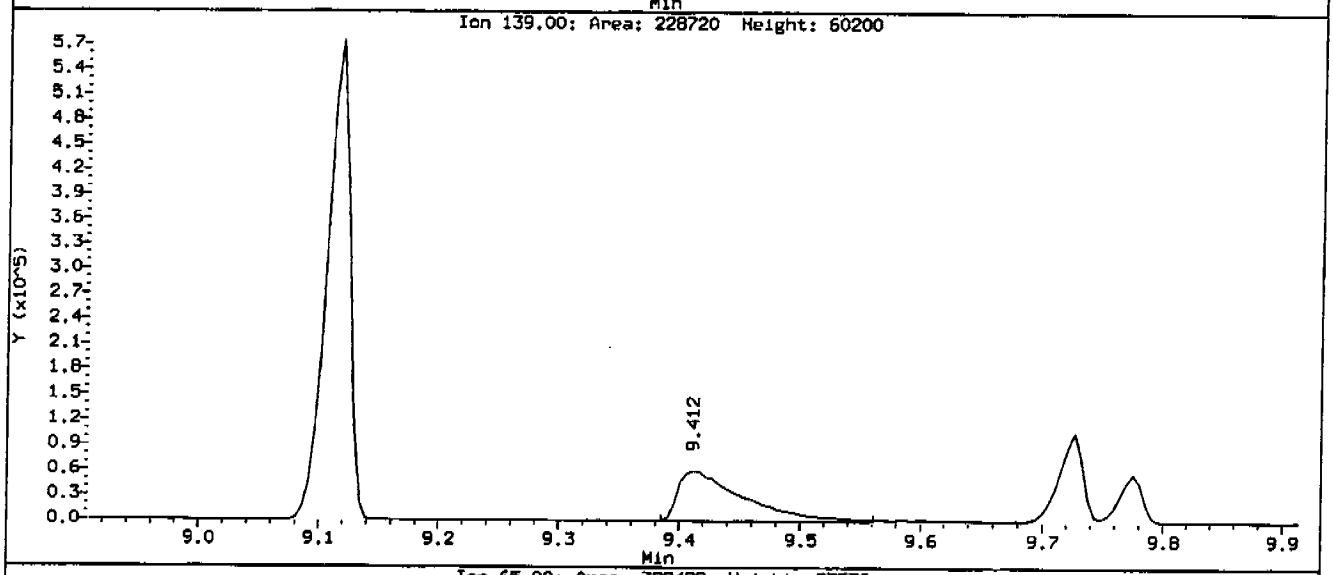
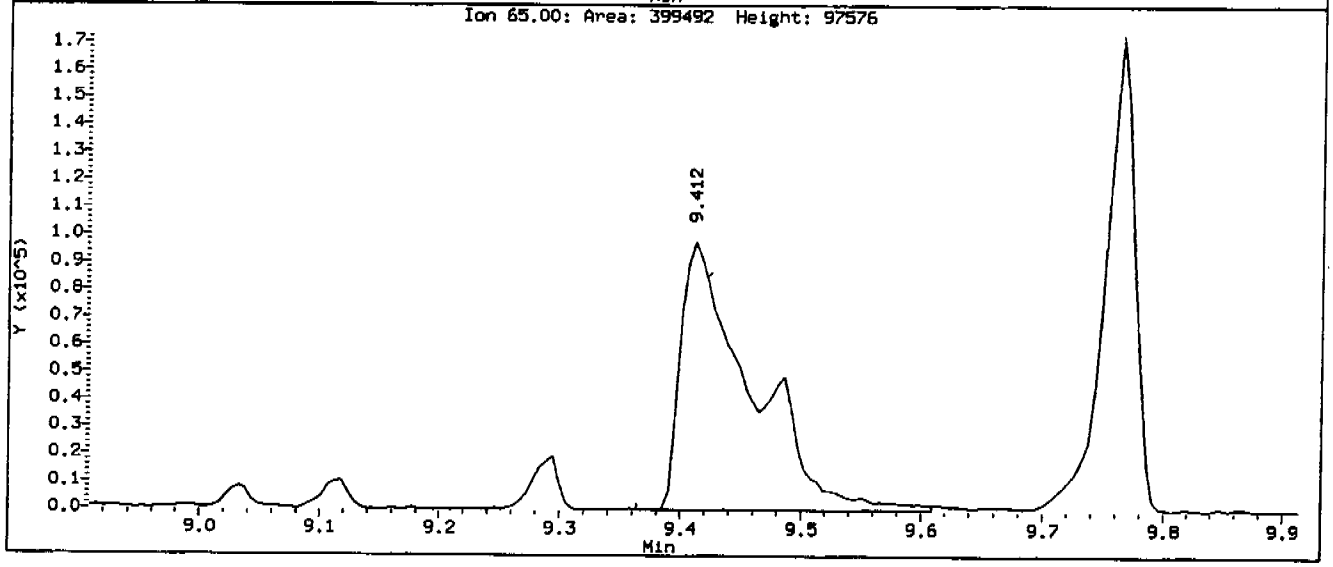
Injection Date: 13-MAY-2005 14:22
Instrument: MSK.i
Client Sample ID: SSTD080

Compound: 4-Nitrophenol
CAS Number: 100-02-7

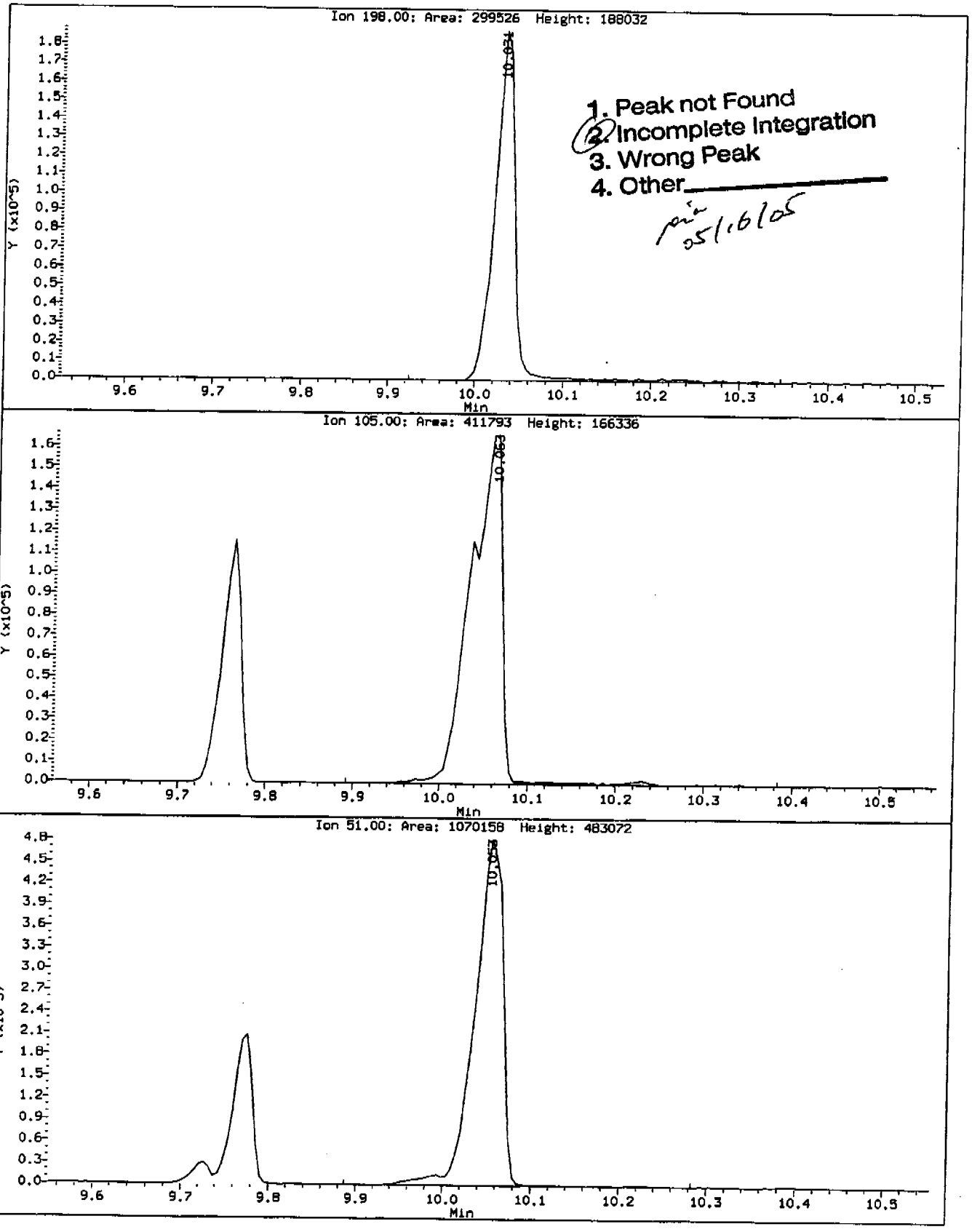






Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3131.D
Injection Date: 13-MAY-2005 14:22
Instrument: MSK.i
Client Sample ID: SSTD080

Compound: 4,6-Dinitro-2-methylphenol
CAS Number: 534-52-1



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3132.D
Report Date: 14-May-2005 09:51

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3132.D
Lab Smp Id: SSTD020 Client Smp ID: SSTD020
Inj Date : 13-MAY-2005 14:54
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD020
Misc Info : SV0214-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Meth Date : 14-May-2005 09:51 hongs Quant Type: ISTD
Cal Date : 13-MAY-2005 14:54 Cal File: KCAL3132.D
Als bottle: 8 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 1,4-Dioxane	88	1.238	1.238	(0.274)	52436	20.0000	19.15
	4 N-Nitrosodimethylamine	74	1.665	1.665	(0.369)	91918	20.0000	19.46(a)
	3 Pyridine	79	1.649	1.649	(0.365)	163775	20.0000	19.08(M)
	5 Dimethylformamide	44	2.109	2.109	(0.467)	123042	20.0000	19.28(aM)
$	10 2-Fluorophenol	112	3.230	3.230	(0.715)	169313	20.0000	19.13(a)
	11 Cyclohexanol	57	3.225	3.225	(0.714)	187112	20.0000	19.73(a)
	17 Aniline	93	4.213	4.213	(0.933)	301150	20.0000	19.88
	19 Bis(2-chloroethyl)ether	93	4.288	4.288	(0.949)	198205	20.0000	19.02
$	15 Phenol-d5	99	4.315	4.315	(0.955)	209228	20.0000	18.13(a)
	16 Phenol	94	4.331	4.331	(0.959)	236674	20.0000	19.20(a)
	20 2-Chlorophenol	128	4.363	4.363	(0.966)	186542	20.0000	18.93(a)
	21 1,3-Dichlorobenzene	146	4.470	4.470	(0.989)	217739	20.0000	19.06(a)
*	22 1,4-Dichlorobenzene-d4	152	4.518	4.518	(1.000)	295894	40.0000	
	23 1,4-Dichlorobenzene	146	4.539	4.539	(1.005)	228354	20.0000	18.88(a)
	26 1,2-Dichlorobenzene	146	4.758	4.758	(1.053)	207282	20.0000	18.58
	25 Benzyl Alcohol	108	4.774	4.774	(1.057)	74105	20.0000	16.12(a)
	28 2,2-oxybis(1-Chloropropane)	45	4.929	4.929	(1.091)	207306	20.0000	18.97
	27 2-Methylphenol	108	4.999	4.999	(1.106)	150464	20.0000	18.67(a)
	35 Hexachloroethane	117	5.116	5.116	(1.132)	99089	20.0000	18.98(a)
	32 N-Nitrosodinpropylamine	70	5.111	5.111	(1.131)	172111	20.0000	20.44
	29 3 and 4-Methylphenol	108	5.186	5.186	(1.148)	328091	40.0000	36.44

05/16/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.244	5.244	(0.860)	268744	20.0000	19.35(a)
	37 Nitrobenzene	77	5.266	5.266	(0.863)	276240	20.0000	19.12(a)
	39 Isophorone	82	5.560	5.560	(0.912)	367073	20.0000	19.54(a)
	40 2-Nitrophenol	139	5.666	5.666	(0.929)	102146	20.0000	19.72(a)
	41 2,4-Dimethylphenol	107	5.805	5.805	(0.952)	204872	20.0000	18.96(a)
	42 Bis(2-chloroethoxy)methane	93	5.875	5.875	(0.963)	227390	20.0000	18.94(a)
	45 2,4-Dichlorophenol	162	6.024	6.024	(0.988)	158450	20.0000	19.64(a)
	47 1,2,4-Trichlorobenzene	180	6.056	6.056	(0.993)	192195	20.0000	19.16(a)
*	48 Naphthalene-d8	136	6.099	6.099	(1.000)	1032129	40.0000	
	44 Benzoic Acid	122	6.062	6.062	(0.994)	88436	20.0000	18.57
	50 Naphthalene	128	6.126	6.126	(1.004)	526114	20.0000	18.27(a)
	51 4-Chloroaniline	127	6.275	6.275	(1.029)	217166	20.0000	18.71(a)
	54 Hexachlorobutadiene	225	6.372	6.372	(1.045)	137597	20.0000	18.97(a)
	62 2-Methylnaphthalene	142	7.082	7.082	(1.161)	504881	20.0000	20.00
	59 4-Chloro-3-Methylphenol	107	7.077	7.077	(1.160)	182063	20.0000	19.63(a)
	66 Hexachlorocyclopentadiene	237	7.424	7.424	(0.847)	115837	20.0000	19.04(a)
	67 2,4,6-Trichlorophenol	196	7.622	7.622	(0.869)	127037	20.0000	18.80(a)
	68 2,4,5-Trichlorophenol	196	7.750	7.750	(0.884)	139336	20.0000	19.76(a)
$	69 2-Fluorobiphenyl	172	7.702	7.702	(0.878)	425707	20.0000	18.21(a)
	72 2-Chloronaphthalene	162	7.819	7.819	(0.892)	357989	20.0000	18.42(a)
	73 2-Nitroaniline	65	8.118	8.118	(0.926)	149526	20.0000	19.09(a)
	76 Dimethylphthalate	163	8.482	8.482	(0.967)	416112	20.0000	18.84(a)
	79 Acenaphthylene	152	8.503	8.503	(0.970)	530213	20.0000	18.16(a)
	80 2,6-Dinitrotoluene	165	8.599	8.599	(0.981)	89174	20.0000	19.27(a)
*	82 Acenaphthene-d10	164	8.770	8.770	(1.000)	578346	40.0000	
	83 Acenaphthene	153	8.824	8.824	(1.006)	335188	20.0000	18.81(a)
	81 3-Nitroaniline	138	8.834	8.834	(1.007)	88900	20.0000	19.35
	84 2,4-Dinitrophenol	184	9.016	9.016	(1.028)	36463	20.0000	17.92(aM)
	86 Dibenzofuran	168	9.101	9.101	(1.038)	503002	20.0000	18.81(a)
	88 2,4-Dinitrotoluene	165	9.272	9.272	(1.057)	115933	20.0000	19.88(a)
	85 4-Nitrophenol	109	9.438	9.438	(1.076)	86707	20.0000	20.94(M)
	93 Diethylphthalate	149	9.737	9.737	(1.110)	412154	20.0000	18.65(a)
	94 Fluorene	166	9.710	9.710	(1.107)	407997	20.0000	19.00(a)
	95 4-Chlorophenyl-phenylether	204	9.764	9.764	(1.113)	224309	20.0000	18.52(a)
	98 4-Nitroaniline	138	9.945	9.945	(1.134)	84353	20.0000	19.97(a)
	99 4,6-Dinitro-2-methylphenol	198	9.999	9.999	(0.875)	69577	20.0000	18.49(a)
	100 N-Nitrosodiphenylamine	169	10.026	10.026	(0.878)	281473	20.0000	17.98(a)
	102 Azobenzene	77	10.042	10.042	(0.879)	607161	20.0000	17.85(a)
$	104 2,4,6-Tribromophenol	330	10.218	10.218	(1.165)	65238	20.0000	19.35(a)
	109 4-Bromophenyl-phenylether	248	10.645	10.645	(0.932)	141418	20.0000	18.93(a)
	112 Hexachlorobenzene	284	10.870	10.870	(0.951)	147179	20.0000	18.86(a)
	117 Pentachlorophenol	266	11.292	11.292	(0.988)	48139	20.0000	13.76(a)
*	121 Phenanthrene-d10	188	11.425	11.425	(1.000)	1027175	40.0000	
	122 Phenanthrene	178	11.468	11.468	(1.004)	594638	20.0000	18.85(a)
	124 Anthracene	178	11.548	11.548	(1.011)	576799	20.0000	19.00(a)
	126 Carbazole	167	11.954	11.954	(1.046)	485903	20.0000	19.32(a)
	129 Di-n-Butylphthalate	149	12.841	12.841	(1.124)	637935	20.0000	19.11(a)
	134 Fluoranthene	202	13.754	13.754	(1.204)	625731	20.0000	19.32(a)
	135 Benzidine	184	14.160	14.160	(0.854)	232312	20.0000	20.67
	137 Pyrene	202	14.171	14.171	(0.854)	642062	20.0000	19.20(a)
$	139 Terphenyl-d14	244	14.620	14.620	(0.881)	500783	20.0000	19.07(a)
	145 3,3-Dimethylbenzidine	212	15.624	15.624	(0.942)	258416	20.0000	20.30
	146 Butylbenzylphthalate	149	15.742	15.742	(0.949)	248604	20.0000	18.96(a)
	150 Benzo(a)Anthracene	228	16.548	16.548	(0.998)	540314	20.0000	19.17(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.586	16.586	(1.000)	816376	40.0000	
152 3,3'-Dichlorobenzidine	252	16.650	16.650	(1.004)	189368	20.0000	17.78(a)
154 Chrysene	228	16.634	16.634	(1.003)	493145	20.0000	18.49(a)
155 bis(2-ethylhexyl)Phthalate	149	16.970	16.970	(1.023)	310287	20.0000	19.09(a)
158 Di-n-octylphthalate	149	18.114	18.114	(0.944)	519866	20.0000	18.57(a)
160 Benzo(b)fluoranthene	252	18.552	18.552	(0.966)	504564	20.0000	18.77(a)
161 Benzo(k)fluoranthene	252	18.594	18.594	(0.969)	489196	20.0000	18.49(a)
165 Benzo(a)pyrene	252	19.086	19.086	(0.994)	456041	20.0000	19.08(a)
* 166 Perylene-d12	264	19.198	19.198	(1.000)	678712	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.892	20.892	(1.088)	398075	20.0000	17.69(aH)
174 Dibenzo(a,h)anthracene	278	20.934	20.934	(1.090)	408573	20.0000	18.81(a)
177 Benzo(g,h,i)perylene	276	21.330	21.330	(1.111)	371699	20.0000	18.81(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3132.D
Report Date: 14-May-2005 09:51

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

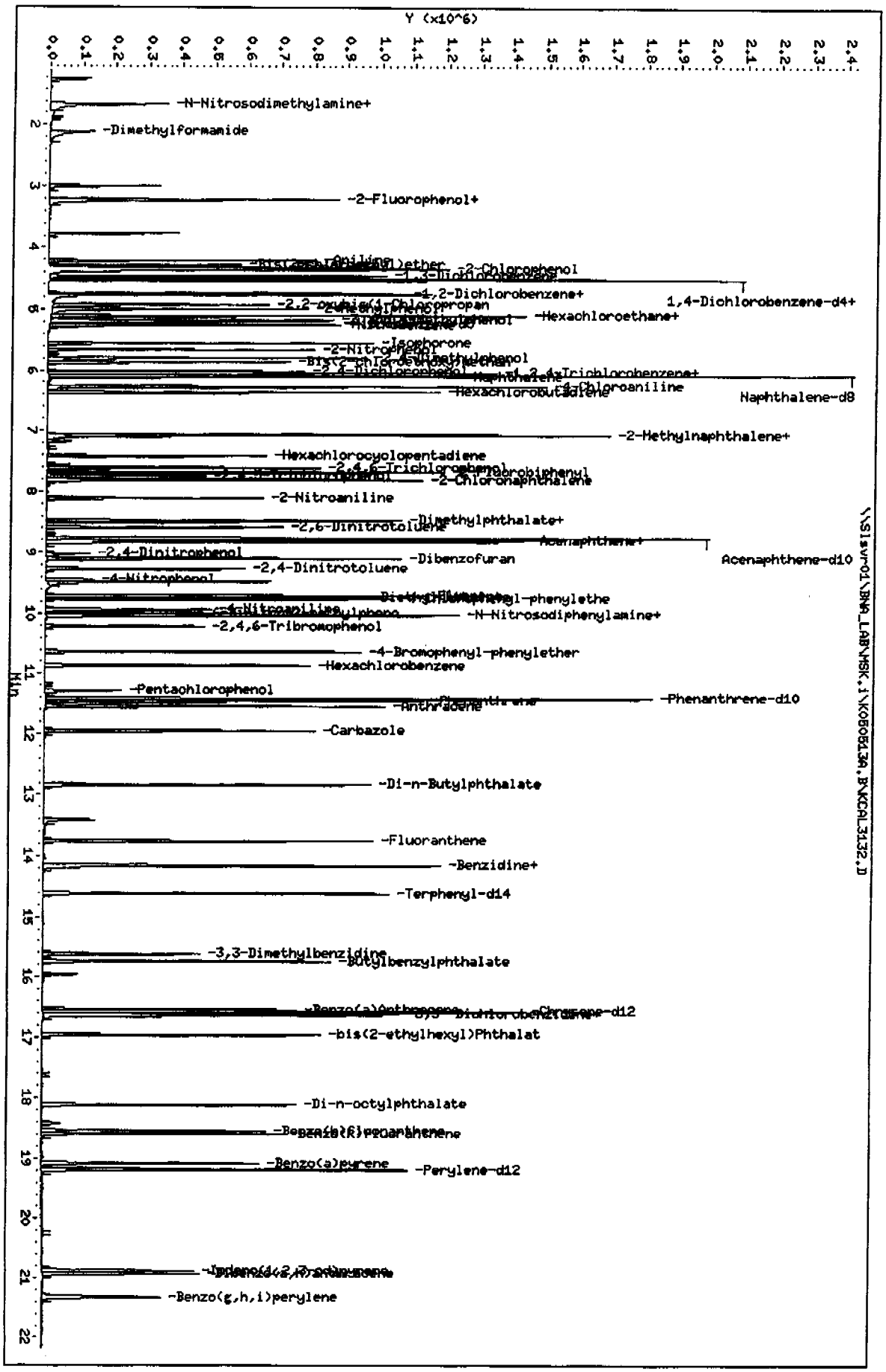
Instrument ID: MSK.i
Lab File ID: KCAL3132.D
Lab Smp Id: SSTD020
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Misc Info: SV0214-05

Calibration Date: 13-MAY-2005
Calibration Time: 12:14
Client Smp ID: SSTD020
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	181066	90533	362132	295894	63.42
48 Naphthalene-d8	627500	313750	1255000	1032129	64.48
82 Acenaphthene-d10	358476	179238	716952	578346	61.33
121 Phenanthrene-d10	655247	327624	1310494	1027175	56.76
153 Chrysene-d12	535207	267604	1070414	816376	52.53
166 Perylene-d12	427031	213516	854062	678712	58.94

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.52	4.02	5.02	4.52	-0.13
48 Naphthalene-d8	6.11	5.61	6.61	6.10	-0.10
82 Acenaphthene-d10	8.78	8.28	9.28	8.77	-0.07
121 Phenanthrene-d10	11.43	10.93	11.93	11.43	-0.05
153 Chrysene-d12	16.59	16.09	17.09	16.59	-0.04
166 Perylene-d12	19.20	18.70	19.70	19.20	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



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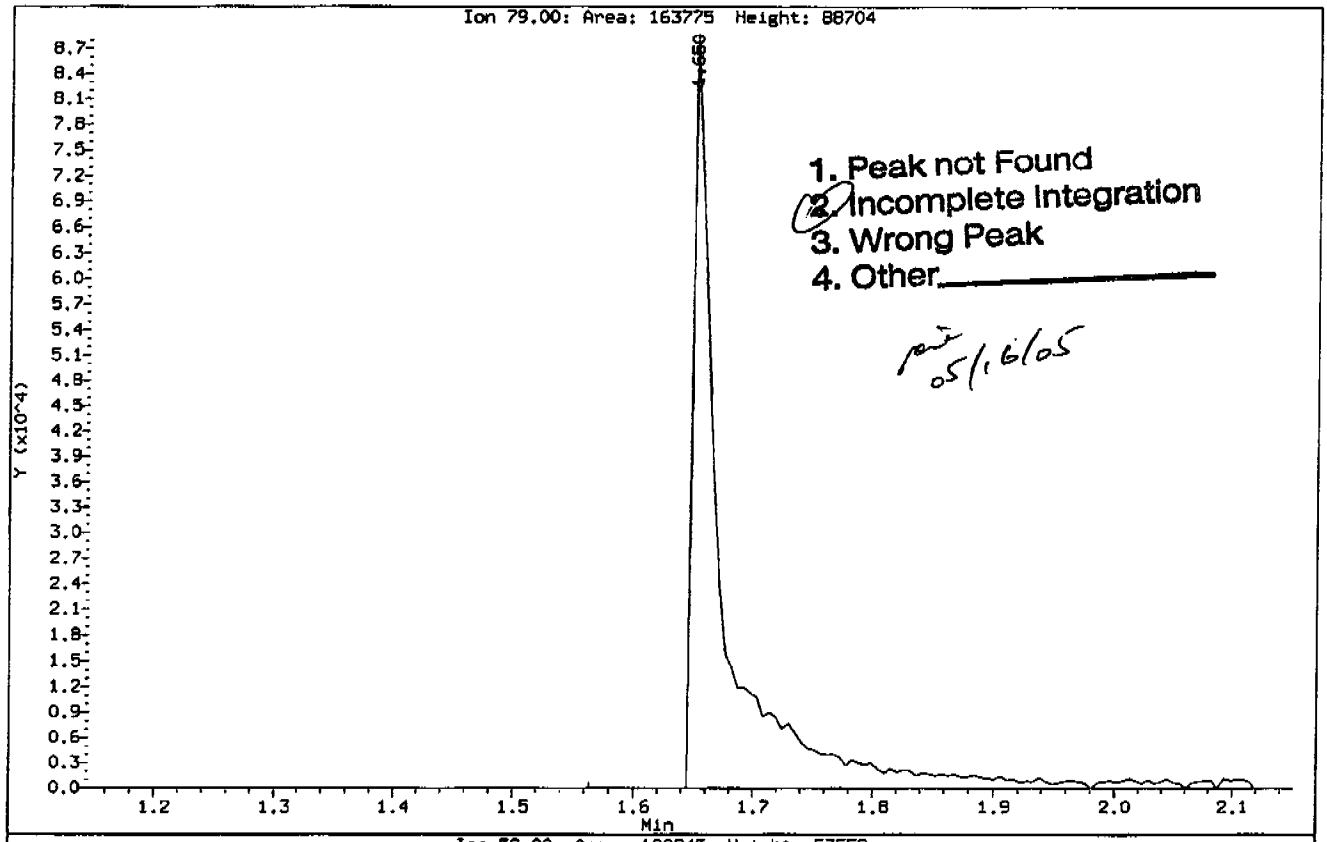
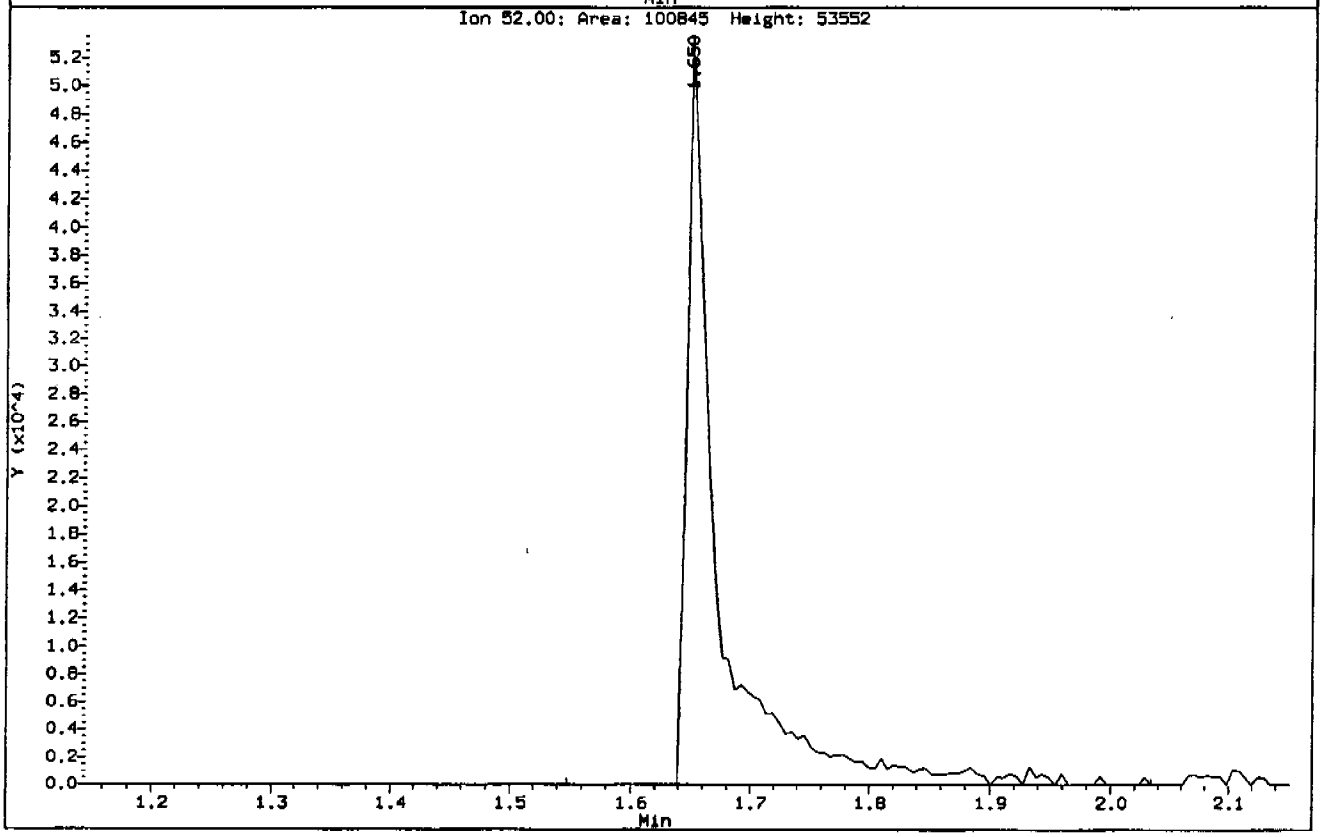
Date : 13-MAY-2005 14:54
Client ID: SSTD020
Sample Info: SSTD020
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3133.D
Injection Date: 13-MAY-2005 14:54
Instrument: MSK.i
Client Sample ID: SSTD020

Compound: Pyridine
CAS Number: 110-86-1





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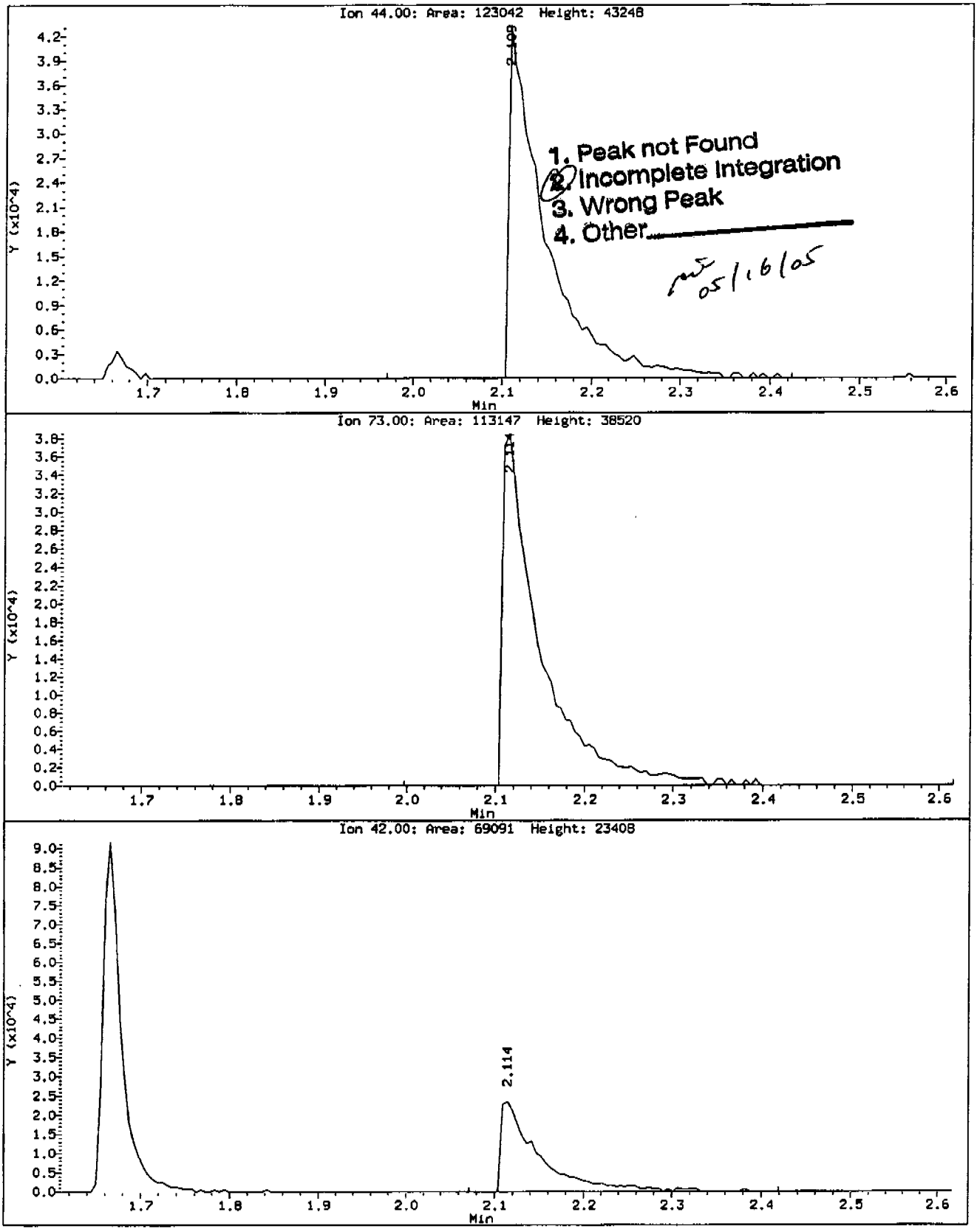
Injection Date: 13-MAY-2005 14:54
Instrument: MSK.i
Client Sample ID: SSTD020

Compound: Dimethylformamide
CAS Number: 68-12-2



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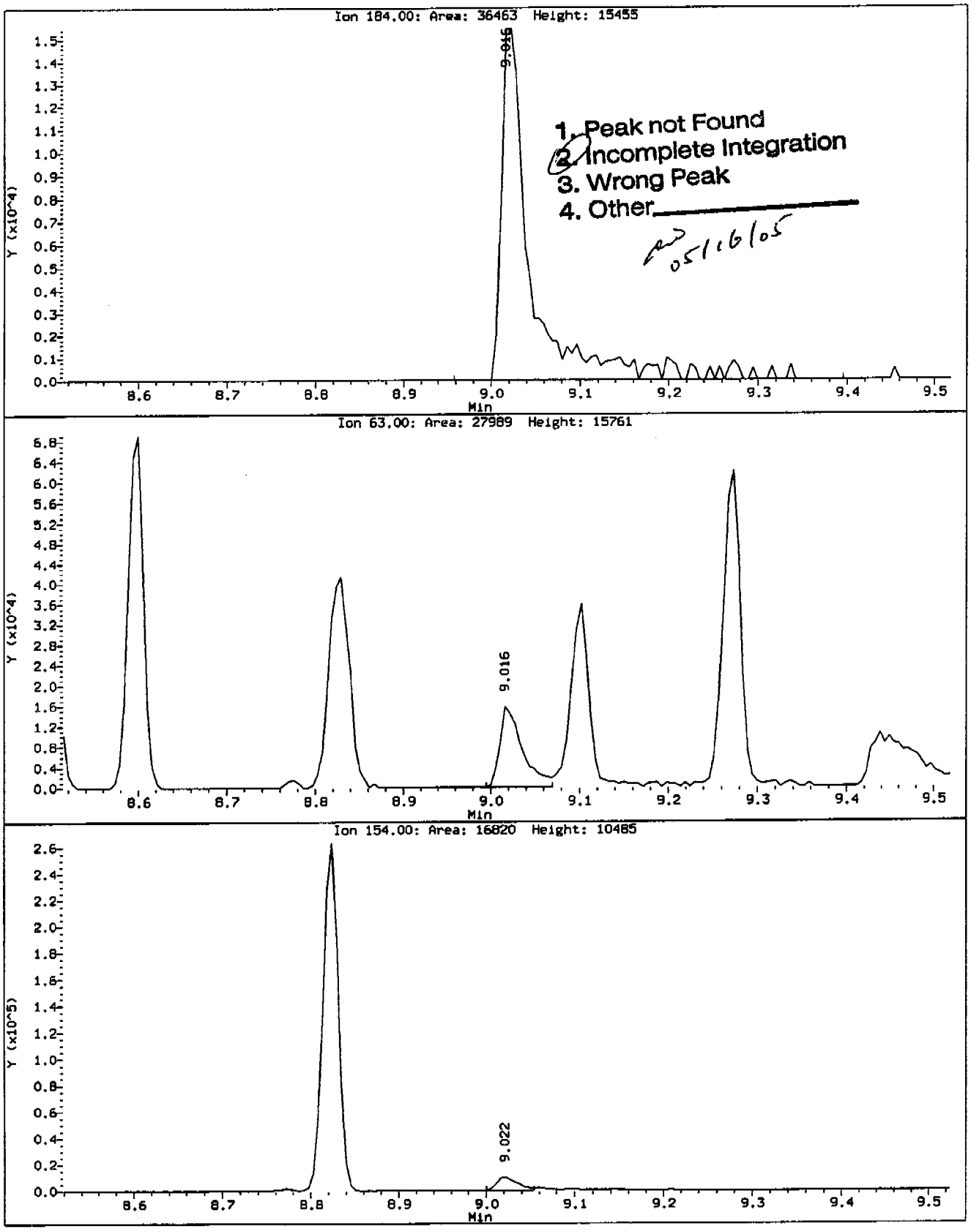
Injection Date: 13-MAY-2005 14:54
Instrument: MSK.i
Client Sample ID: SSTD020

Compound: 2,4-Dinitrophenol
CAS Number: 51-28-5



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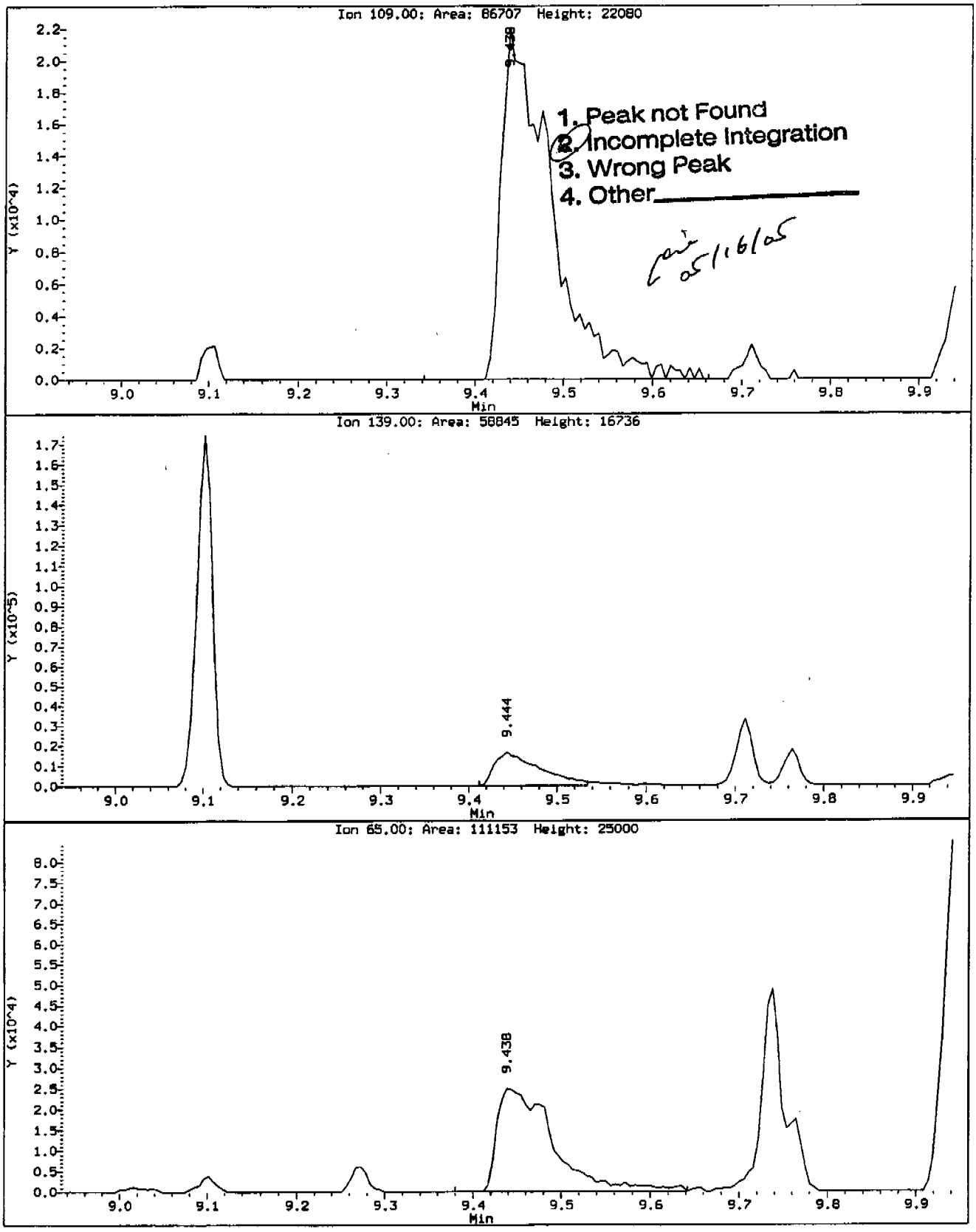
Injection Date: 13-MAY-2005 14:54
Instrument: MSK.i
Client Sample ID: SSTD020

Compound: 4-Nitrophenol
CAS Number: 100-02-7



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3133.D Page 1
Report Date: 14-May-2005 09:51

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GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3133.D
Lab Smp Id: SSTD010 Client Smp ID: SSTD010
Inj Date : 13-MAY-2005 15:26
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD010
Misc Info : SV0213-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Meth Date : 14-May-2005 09:51 hongs Quant Type: ISTD
Cal Date : 13-MAY-2005 15:26 Cal File: KCAL3133.D
Als bottle: 9 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 1,4-Dioxane	88	1.235	1.235	(0.273)	17328	10.0000	8.866(a)
	4 N-Nitrosodimethylamine	74	1.667	1.667	(0.368)	35106	10.0000	10.41(a)
	3 Pyridine	79	1.673	1.673	(0.370)	60764	10.0000	9.918(aM)
	5 Dimethylformamide	44	2.127	2.127	(0.470)	47118	10.0000	10.34(aM)
$	10 2-Fluorophenol	112	3.243	3.243	(0.717)	61852	10.0000	9.790(a)
	11 Cyclohexanol	57	3.227	3.227	(0.713)	67866	10.0000	10.03(a)
	17 Aniline	93	4.221	4.221	(0.933)	111204	10.0000	10.29
	19 Bis(2-chloroethyl)ether	93	4.296	4.296	(0.949)	69627	10.0000	9.361(a)
$	15 Phenol-d5	99	4.333	4.333	(0.958)	75234	10.0000	9.132(a)
	16 Phenol	94	4.349	4.349	(0.961)	86580	10.0000	9.840(a)
	20 2-Chlorophenol	128	4.376	4.376	(0.967)	67405	10.0000	9.581(a)
	21 1,3-Dichlorobenzene	146	4.477	4.477	(0.989)	80635	10.0000	9.888(a)
*	22 1,4-Dichlorobenzene-d4	152	4.525	4.525	(1.000)	211211	40.0000	
	23 1,4-Dichlorobenzene	146	4.547	4.547	(1.005)	81784	10.0000	9.476(a)
	26 1,2-Dichlorobenzene	146	4.766	4.766	(1.053)	74998	10.0000	9.420(a)
	25 Benzyl Alcohol	108	4.776	4.776	(1.055)	24792	10.0000	7.557(a)
	28 2,2-oxybis(1-Chloropropane)	45	4.937	4.937	(1.091)	76911	10.0000	9.859(a)
	27 2-Methylphenol	108	5.006	5.006	(1.106)	56479	10.0000	9.816(a)
	35 Hexachloroethane	117	5.124	5.124	(1.132)	34958	10.0000	9.380(a)
	32 N-Nitrosodinpropylamine	70	5.113	5.113	(1.130)	62040	10.0000	10.32
	29 3 and 4-Methylphenol	108	5.193	5.193	(1.148)	124168	20.0000	19.32

05/16/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.246	5.246	(0.859)	99912	10.0000	9.796(a)
	37 Nitrobenzene	77	5.273	5.273	(0.864)	103396	10.0000	9.744(a)
	39 Isophorone	82	5.562	5.562	(0.911)	137488	10.0000	9.968(a)
	40 2-Nitrophenol	139	5.674	5.674	(0.929)	36884	10.0000	9.696(a)
	41 2,4-Dimethylphenol	107	5.813	5.813	(0.952)	72407	10.0000	9.125(a)
	42 Bis(2-chloroethoxy)methane	93	5.877	5.877	(0.962)	85732	10.0000	9.725(a)
	45 2,4-Dichlorophenol	162	6.037	6.037	(0.989)	58847	10.0000	9.936(a)
	47 1,2,4-Trichlorobenzene	180	6.064	6.064	(0.993)	69037	10.0000	9.372(a)
*	48 Naphthalene-d8	136	6.107	6.107	(1.000)	757952	40.0000	
	44 Benzoic Acid	122	6.037	6.037	(0.989)	26871	10.0000	7.685(a)
	50 Naphthalene	128	6.128	6.128	(1.003)	194397	10.0000	9.192(a)
	51 4-Chloroaniline	127	6.283	6.283	(1.029)	81265	10.0000	9.536(a)
	54 Hexachlorobutadiene	225	6.379	6.379	(1.045)	51082	10.0000	9.589(a)
	62 2-Methylnaphthalene	142	7.090	7.090	(1.161)	181556	10.0000	9.793(a)
	59 4-Chloro-3-Methylphenol	107	7.090	7.090	(1.161)	64296	10.0000	9.439(a)
	66 Hexachlorocyclopentadiene	237	7.437	7.437	(0.847)	32879	10.0000	7.295(a)
	67 2,4,6-Trichlorophenol	196	7.629	7.629	(0.869)	45650	10.0000	9.118(a)
	68 2,4,5-Trichlorophenol	196	7.768	7.768	(0.885)	48117	10.0000	9.210(a)
$	69 2-Fluorobiphenyl	172	7.709	7.709	(0.878)	157103	10.0000	9.071(a)
	72 2-Chloronaphthalene	162	7.827	7.827	(0.892)	133288	10.0000	9.255(a)
	73 2-Nitroaniline	65	8.126	8.126	(0.926)	57626	10.0000	9.932(a)
	76 Dimethylphthalate	163	8.489	8.489	(0.967)	156232	10.0000	9.550(a)
	79 Acenaphthylene	152	8.511	8.511	(0.970)	199424	10.0000	9.217(a)
	80 2,6-Dinitrotoluene	165	8.601	8.601	(0.980)	33392	10.0000	9.740(a)
*	82 Acenaphthene-d10	164	8.778	8.778	(1.000)	428473	40.0000	
	83 Acenaphthene	153	8.831	8.831	(1.006)	124605	10.0000	9.440(a)
	81 3-Nitroaniline	138	8.842	8.842	(1.007)	30803	10.0000	9.050(a)
	84 2,4-Dinitrophenol	184	9.034	9.034	(1.029)	3775	10.0000	2.504(aM)
	86 Dibenzofuran	168	9.109	9.109	(1.038)	190567	10.0000	9.619(a)
	88 2,4-Dinitrotoluene	165	9.280	9.280	(1.057)	42871	10.0000	9.923(a)
	85 4-Nitrophenol	109	9.483	9.483	(1.080)	22465	10.0000	7.324(a)
	93 Diethylphthalate	149	9.739	9.739	(1.110)	158623	10.0000	9.688(a)
	94 Fluorene	166	9.718	9.718	(1.107)	152222	10.0000	9.570(a)
	95 4-Chlorophenyl-phenylether	204	9.771	9.771	(1.113)	85503	10.0000	9.528(a)
	98 4-Nitroaniline	138	9.942	9.942	(1.133)	31474	10.0000	10.06(a)
	99 4,6-Dinitro-2-methylphenol	198	10.001	10.001	(0.875)	20689	10.0000	7.182(a)
	100 N-Nitrosodiphenylamine	169	10.028	10.028	(0.877)	106582	10.0000	8.895(a)
	102 Azobenzene	77	10.049	10.049	(0.879)	225321	10.0000	8.650(a)
$	104 2,4,6-Tribromophenol	330	10.225	10.225	(1.165)	24963	10.0000	9.992(a)
	109 4-Bromophenyl-phenylether	248	10.653	10.653	(0.932)	53710	10.0000	9.391(a)
	112 Hexachlorobenzene	284	10.877	10.877	(0.951)	57008	10.0000	9.542(a)
	117 Pentachlorophenol	266	11.299	11.299	(0.988)	9726	10.0000	3.630(aM)
*	121 Phenanthrene-d10	188	11.433	11.433	(1.000)	786425	40.0000	
	122 Phenanthrene	178	11.470	11.470	(1.003)	230667	10.0000	9.550(a)
	124 Anthracene	178	11.556	11.556	(1.011)	221786	10.0000	9.542(a)
	126 Carbazole	167	11.967	11.967	(1.047)	189980	10.0000	9.864(a)
	129 Di-n-Butylphthalate	149	12.848	12.848	(1.124)	243812	10.0000	9.542(a)
	134 Fluoranthene	202	13.762	13.762	(1.204)	245931	10.0000	9.918(a)
	135 Benzidine	184	14.168	14.168	(0.854)	87679	10.0000	9.255(a)
	137 Pyrene	202	14.179	14.179	(0.854)	252960	10.0000	8.976(a)
$	139 Terphenyl-d14	244	14.627	14.627	(0.882)	196916	10.0000	8.897(a)
	145 3,3-Dimethylbenzidine	212	15.632	15.632	(0.942)	101467	10.0000	9.459(a)
	146 Butylbenzylphthalate	149	15.749	15.749	(0.949)	102927	10.0000	9.311(a)
	150 Benzo(a)Anthracene	228	16.556	16.556	(0.998)	222546	10.0000	9.369(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.593	16.593	(1.000)	688097	40.0000	
152 3,3'-Dichlorobenzidine	252	16.657	16.657	(1.004)	69600	10.0000	7.753(a)
154 Chrysene	228	16.636	16.636	(1.003)	198671	10.0000	8.837(a)
155 bis(2-ethylhexyl)Phthalate	149	16.978	16.978	(1.023)	128038	10.0000	9.344(a)
158 Di-n-octylphthalate	149	18.121	18.121	(0.944)	214397	10.0000	8.691(a)
160 Benzo(b)fluoranthene	252	18.554	18.554	(0.966)	211623	10.0000	8.934(a)
161 Benzo(k)fluoranthene	252	18.596	18.596	(0.968)	219614	10.0000	9.422(a)
165 Benzo(a)pyrene	252	19.093	19.093	(0.994)	189376	10.0000	8.992(a)
* 166 Perylene-d12	264	19.205	19.205	(1.000)	598003	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.894	20.894	(1.088)	174638	10.0000	8.809(aH)
174 Dibenzo(a,h)anthracene	278	20.942	20.942	(1.090)	161573	10.0000	8.441(a)
177 Benzo(g,h,i)perylene	276	21.332	21.332	(1.111)	159761	10.0000	9.178(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3133.D
Report Date: 14-May-2005 09:51

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

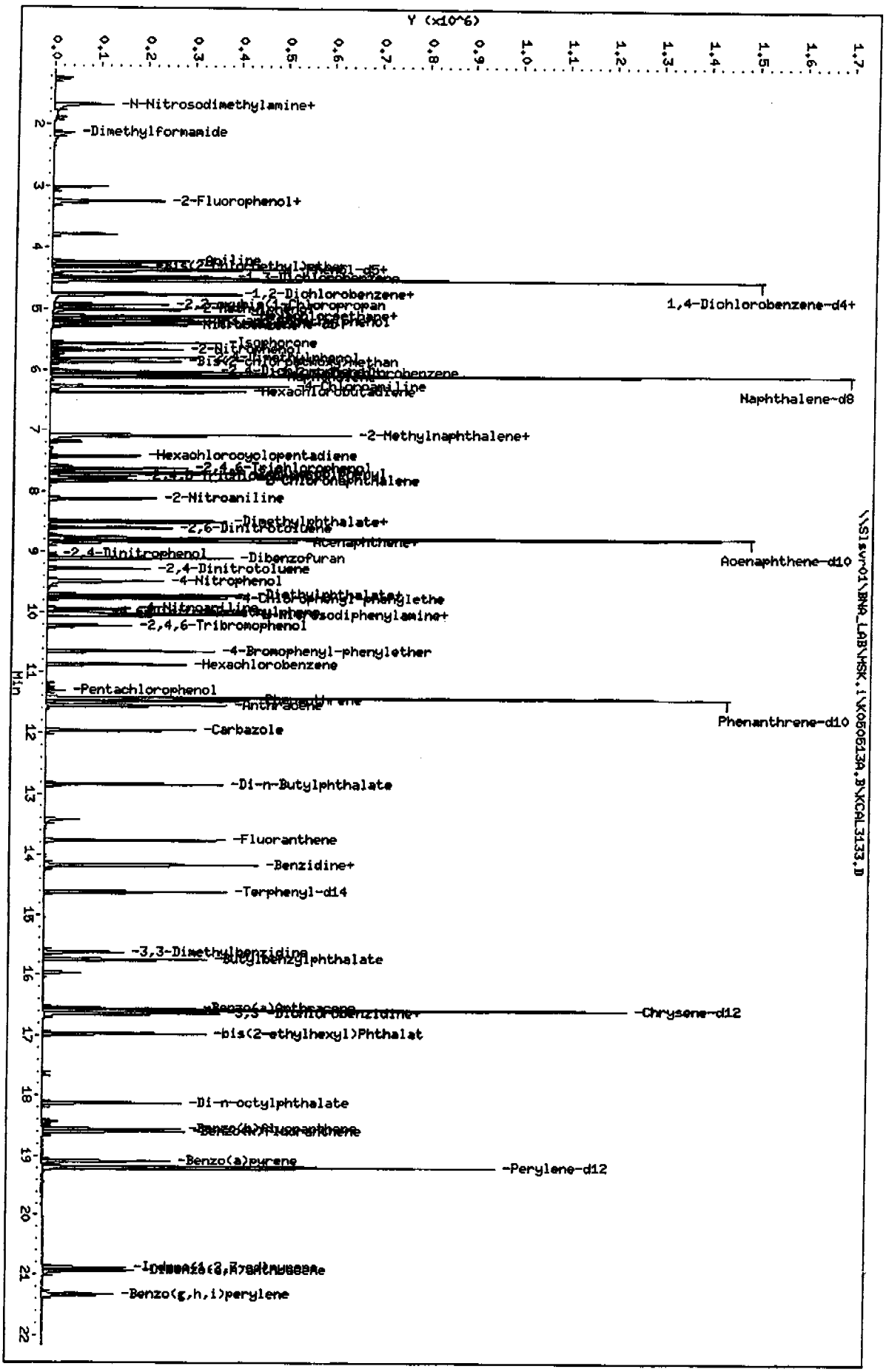
Instrument ID: MSK.i
Lab File ID: KCAL3133.D
Lab Smp Id: SSTD010
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Misc Info: SV0213-05

Calibration Date: 13-MAY-2005
Calibration Time: 12:14
Client Smp ID: SSTD010
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	181066	90533	362132	211211	16.65
48 Naphthalene-d8	627500	313750	1255000	757952	20.79
82 Acenaphthene-d10	358476	179238	716952	428473	19.53
121 Phenanthrene-d10	655247	327624	1310494	786425	20.02
153 Chrysene-d12	535207	267604	1070414	688097	28.57
166 Perylene-d12	427031	213516	854062	598003	40.04

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.52	4.02	5.02	4.53	0.04
48 Naphthalene-d8	6.11	5.61	6.61	6.11	0.03
82 Acenaphthene-d10	8.78	8.28	9.28	8.78	0.02
121 Phenanthrene-d10	11.43	10.93	11.93	11.43	0.01
153 Chrysene-d12	16.59	16.09	17.09	16.59	0.01
166 Perylene-d12	19.20	18.70	19.70	19.21	0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.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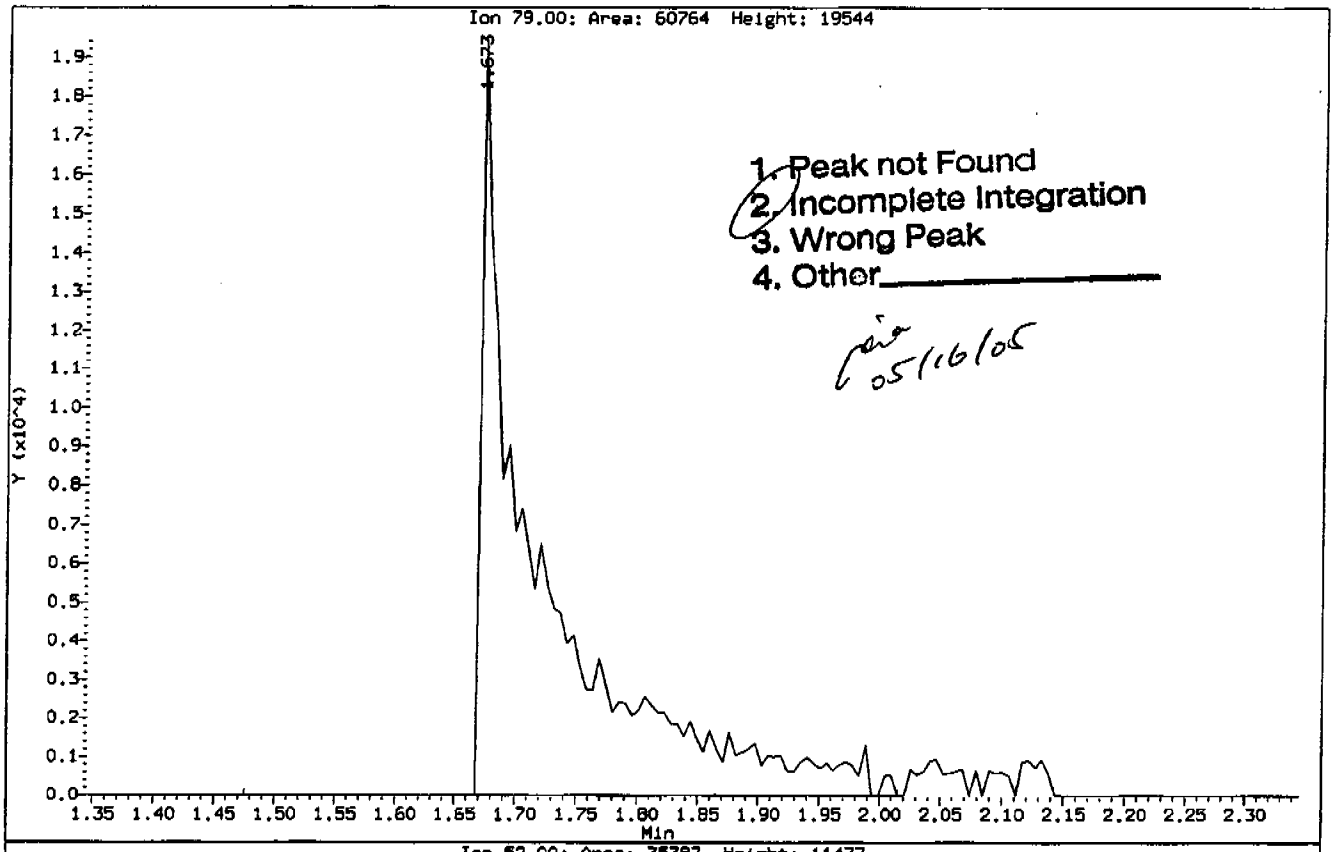
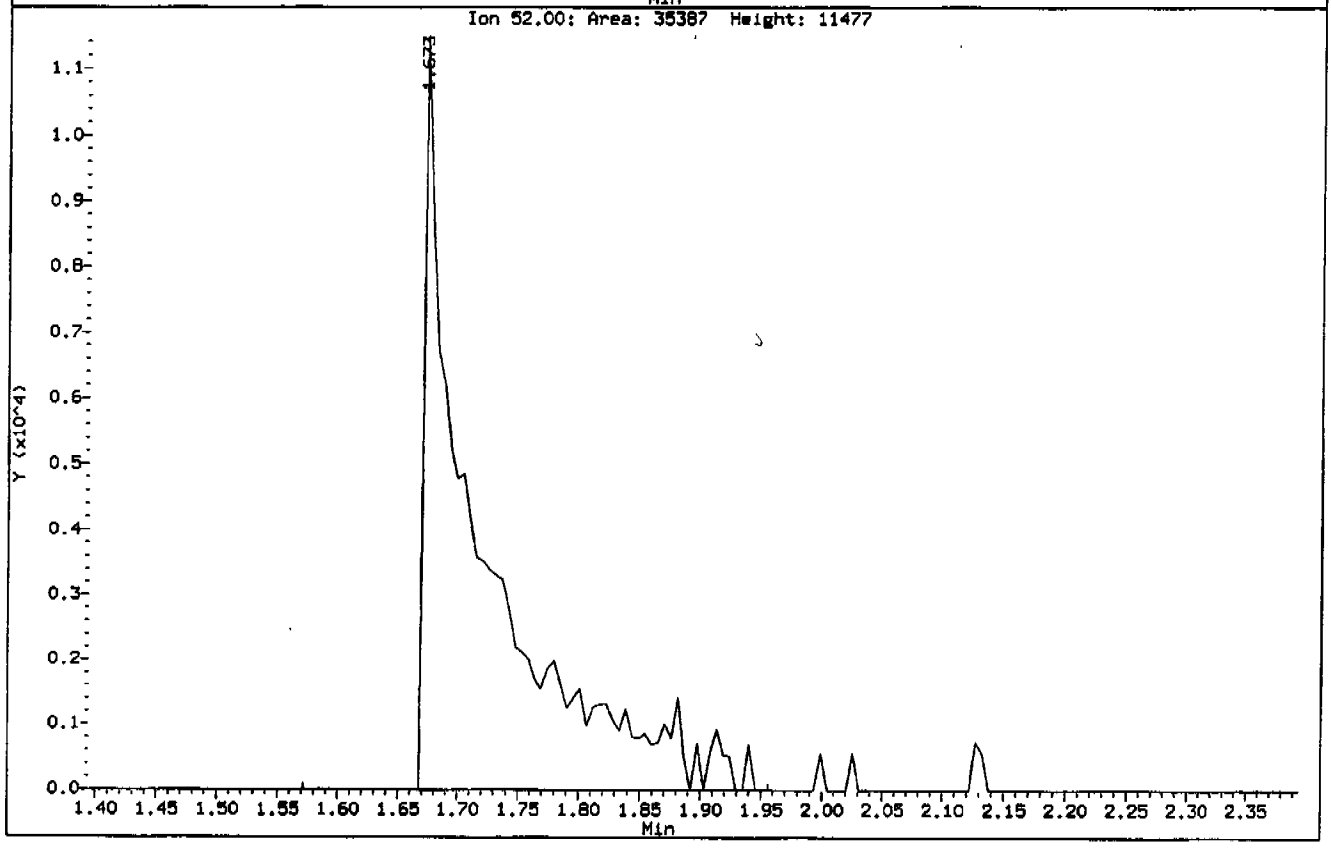
22
-N-Nitrosodimethylamine+
-Dimethylformamide
-2-Fluorophenol+
Aniline
-1,2-Dichlorobenzene+
1,4-Dichlorobenzene-d4+
Isophorone
Naphthalene-d8
-2-Methylnaphthalene+
-Hexachlorocyclopentadiene
-2-Nitroaniline
-Dimethylphthalate+
-2,6-Dinitrotoluene
Acenaphthene+
Acenaphthene-d10
-2,4-Dinitrophenol
-Dibenzofuran
-2,4-Dinitrotoluene
-4-Nitrophenol
-N-Nitrosodiphenylamine+
-2,4,6-Tribromophenol
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Pentachlorophenol
-Anthracene
Phenanthrene-d10
-Carbazole
-Di-n-Butylphthalate
-Fluoranthene
-Benzidine+
-Terphenyl-d14
-3,3-Dimethylbenzidine
-Chrysene-d12
-bis(2-ethylhexyl)Phthalat
-Di-n-octylphthalate
-Benzo(a)pyrene
-Perylene-d12
-Benzo(g,h,i)perylene
Data File: \\Slsvr01\BNA_LAB\HSK.i\K050513A.B\KCAL3133.D
Date : 13-MAY-2005 15:26
Client ID: SSTD010
Sample Info: SSTD010
Volume Injected (uL): 1.0
Column phase:
Instrument: HSK.i
Operator: KIA
Column diameter: 2.00
\\Slsvr01\BNA_LAB\HSK.i\K050513A.B\KCAL3133.D

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3133.D
Injection Date: 13-MAY-2005 15:26
Instrument: MSK.i
Client Sample ID: SSTD010

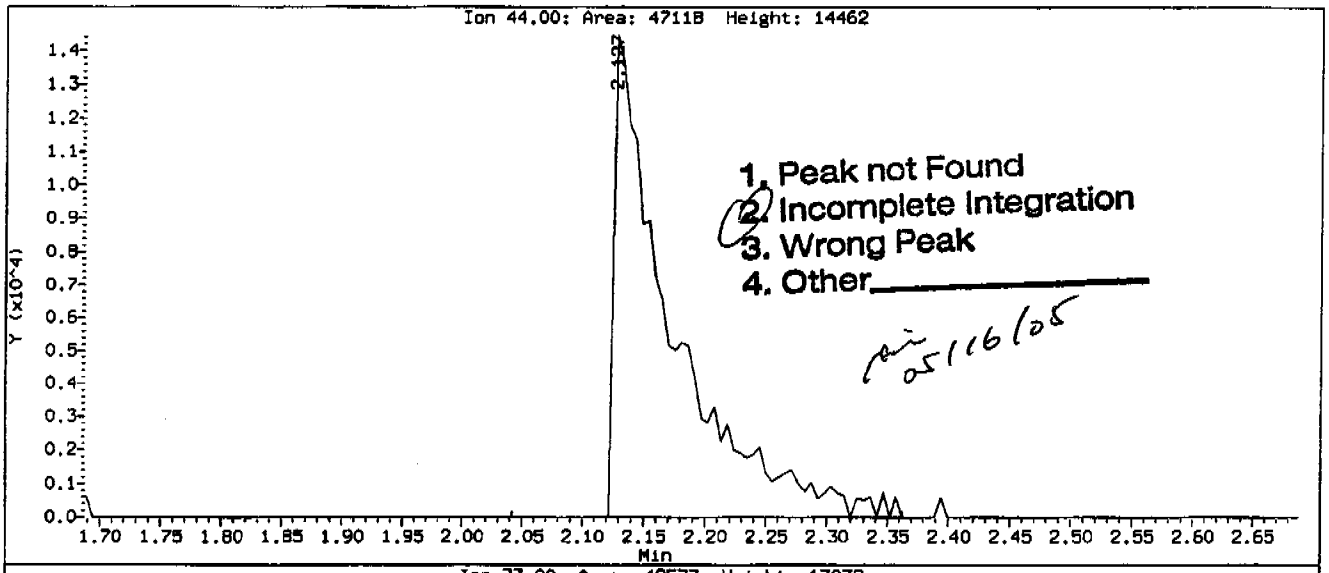
Compound: Pyridine
CAS Number: 110-86-1

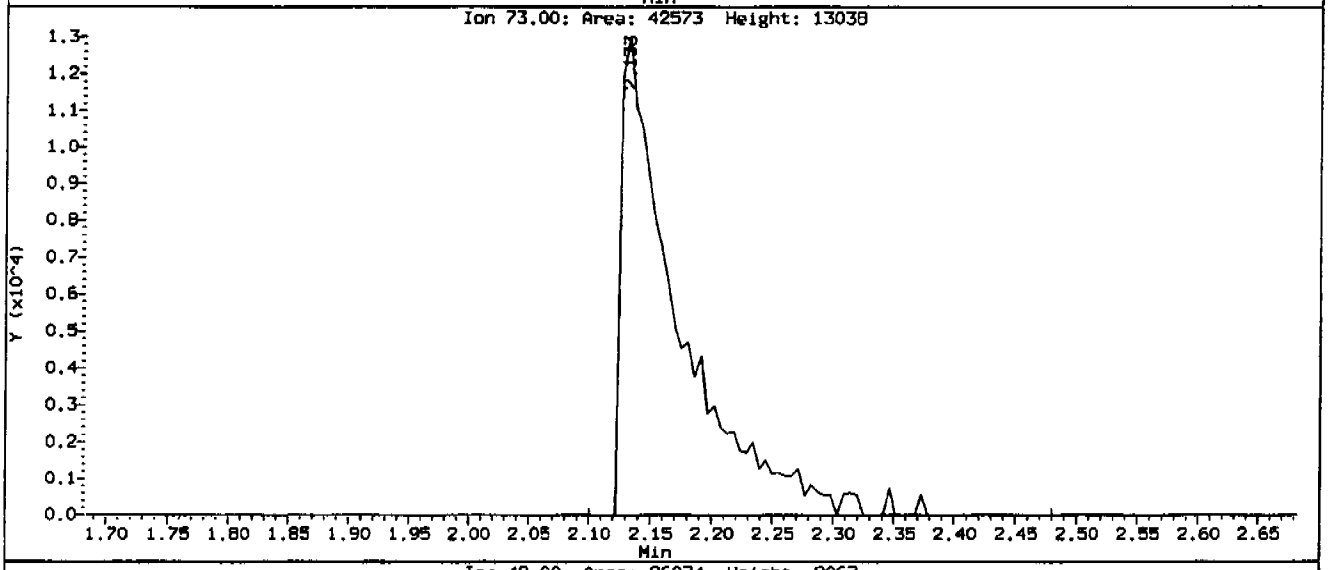


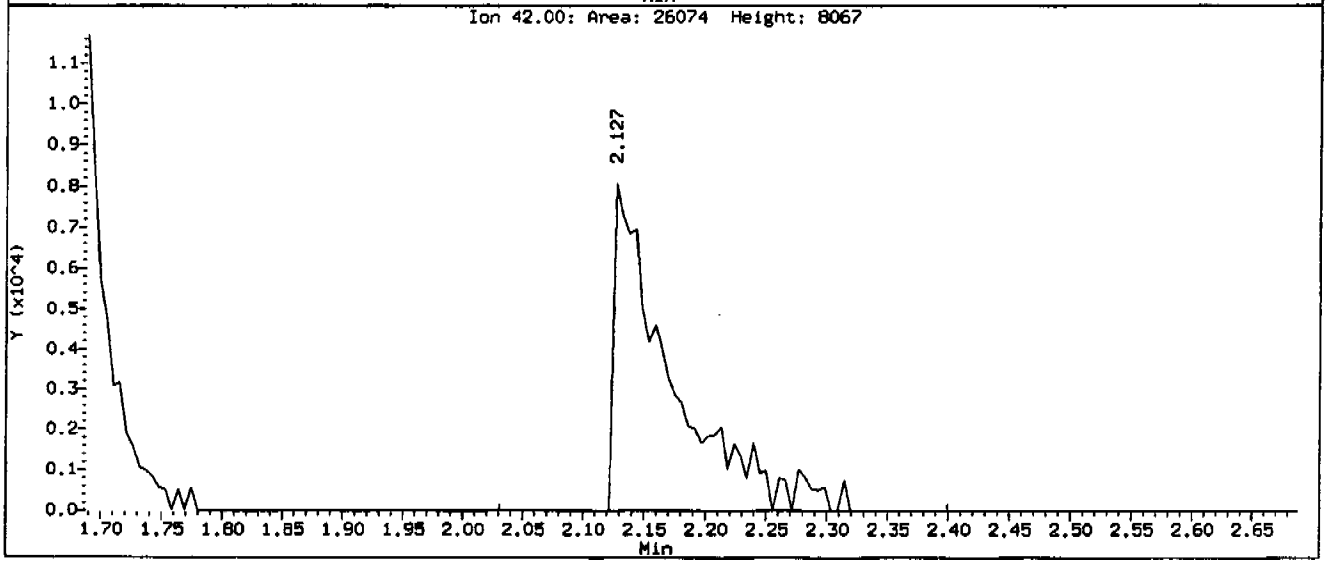


Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3133.D
Injection Date: 13-MAY-2005 15:26
Instrument: MSK.i
Client Sample ID: SSTD010

Compound: Dimethylformamide
CAS Number: 68-12-2

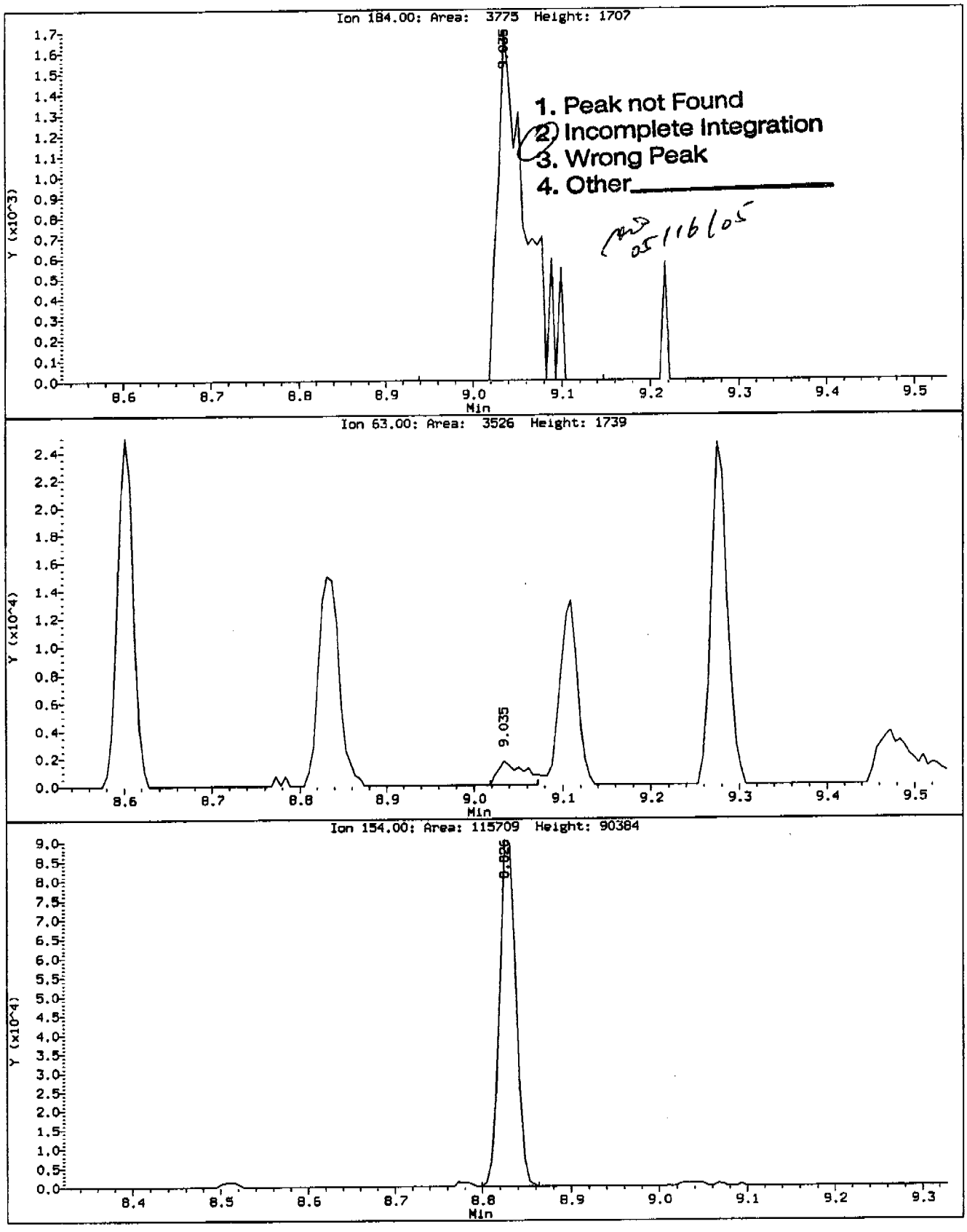






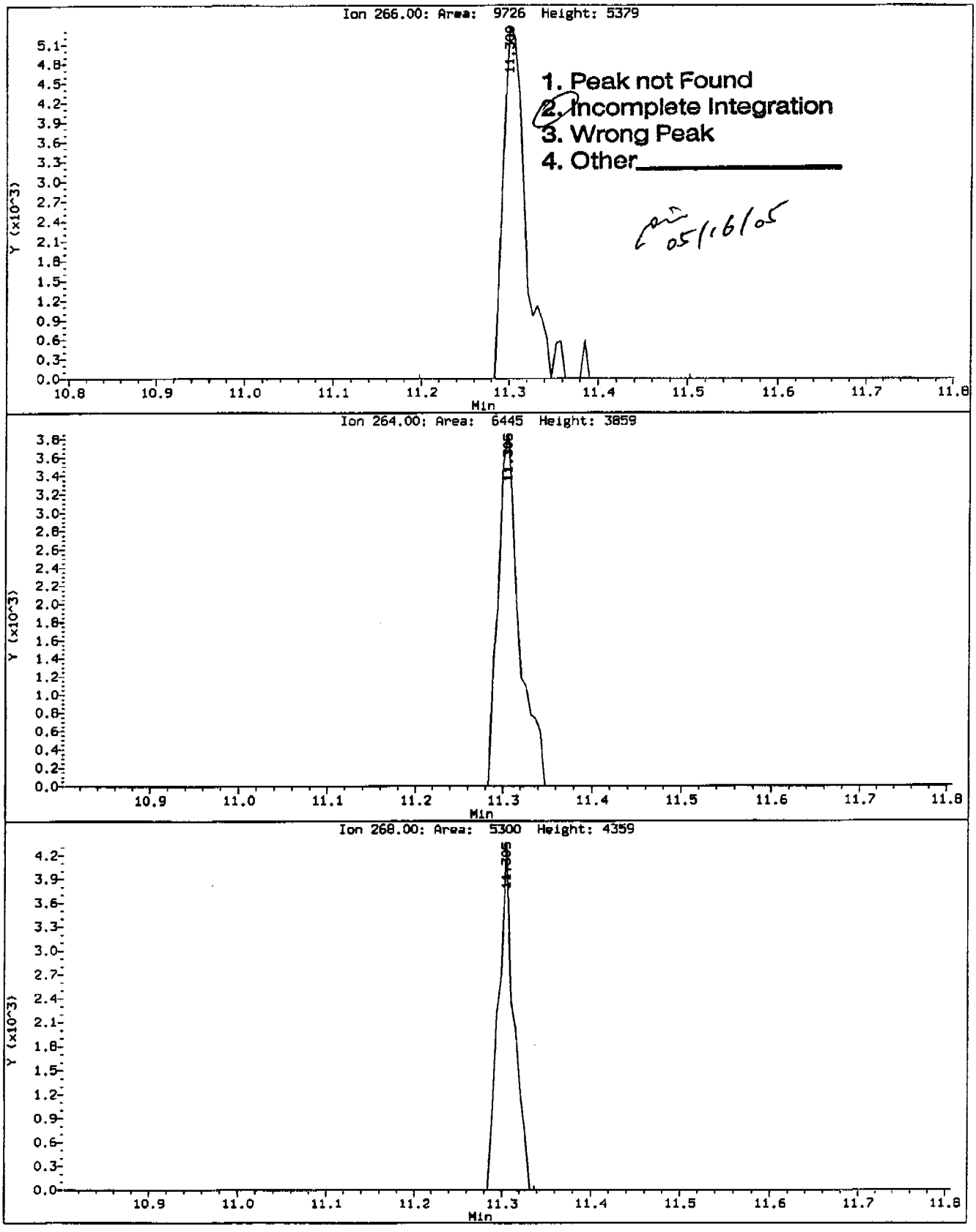
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3133.D
Injection Date: 13-MAY-2005 15:26
Instrument: MSK.i
Client Sample ID: SSTD010

Compound: 2,4-Dinitrophenol
CAS Number: 51-28-5



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3133.D
Injection Date: 13-MAY-2005 15:26
Instrument: MSK.i
Client Sample ID: SSTD010

Compound: Pentachlorophenol
CAS Number: 87-86-5



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3134.D Page 1
Report Date: 14-May-2005 09:51

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3134.D
Lab Smp Id: SSTD002 Client Smp ID: SSTD002
Inj Date : 13-MAY-2005 15:58
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD002
Misc Info : SV0212-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Meth Date : 14-May-2005 09:51 hongs Quant Type: ISTD
Cal Date : 13-MAY-2005 15:58 Cal File: KCAL3134.D
Als bottle: 10 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	1.251	1.251	(0.277)	5107	2.00000	2.046(a)
4	N-Nitrosodimethylamine	74	1.689	1.689	(0.374)	7379	2.00000	1.713(a)
3	Pyridine	79	1.844	1.844	(0.408)	10369	2.00000	1.325(aM)
5	Dimethylformamide	44	2.186	2.186	(0.484)	11221	2.00000	1.928(aM)
11	Cyclohexanol	57	3.233	3.233	(0.715)	15415	2.00000	1.783(a)
17	Aniline	93	4.221	4.221	(0.934)	25481	2.00000	1.845(a)
19	Bis(2-chloroethyl)ether	93	4.296	4.296	(0.950)	18030	2.00000	1.898(a)
$ 15	Phenol-d5	99	4.344	4.344	(0.961)	22048	2.00000	2.095(aM)
16	Phenol	94	4.360	4.360	(0.965)	20678	2.00000	1.840(a)
20	2-Chlorophenol	128	4.376	4.376	(0.968)	16189	2.00000	1.802(a)
21	1,3-Dichlorobenzene	146	4.478	4.478	(0.991)	19918	2.00000	1.912(a)
* 22	1,4-Dichlorobenzene-d4	152	4.520	4.520	(1.000)	269767	40.0000	
23	1,4-Dichlorobenzene	146	4.542	4.542	(1.005)	20238	2.00000	1.836(a)
26	1,2-Dichlorobenzene	146	4.761	4.761	(1.053)	18290	2.00000	1.799(a)
28	2,2-oxybis(1-Chloropropane)	45	4.932	4.932	(1.091)	19583	2.00000	1.965(a)
27	2-Methylphenol	108	5.012	5.012	(1.109)	15742	2.00000	2.142(a)
35	Hexachloroethane	117	5.119	5.119	(1.132)	9439	2.00000	1.983(a)
32	N-Nitrosodinpropylamine	70	5.108	5.108	(1.130)	15372	2.00000	2.002(a)
29	3 and 4-Methylphenol	108	5.204	5.204	(1.151)	29749	4.00000	3.624(a)
37	Nitrobenzene	77	5.268	5.268	(0.863)	26397	2.00000	1.957(a)
39	Isophorone	82	5.557	5.557	(0.911)	35166	2.00000	2.006(a)

05/16/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3134.D Page 2
Report Date: 14-May-2005 09:51

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	40 2-Nitrophenol	139	5.669	5.669	(0.929)	8769	2.00000	1.814(a)
	41 2,4-Dimethylphenol	107	5.819	5.819	(0.954)	16806	2.00000	1.666(a)
	42 Bis(2-chloroethoxy)methane	93	5.872	5.872	(0.962)	21825	2.00000	1.948(a)
	45 2,4-Dichlorophenol	162	6.048	6.048	(0.991)	12690	2.00000	1.686(a)
	47 1,2,4-Trichlorobenzene	180	6.059	6.059	(0.993)	17737	2.00000	1.894(a)
*	48 Naphthalene-d8	136	6.102	6.102	(1.000)	963429	40.0000	
	44 Benzoic Acid	122	6.022	6.022	(0.987)	3432	2.00000	0.7722(aM)
	50 Naphthalene	128	6.123	6.123	(1.004)	48792	2.00000	1.815(a)
	51 4-Chloroaniline	127	6.278	6.278	(1.029)	17949	2.00000	1.657(a)
	54 Hexachlorobutadiene	225	6.374	6.374	(1.045)	13065	2.00000	1.930(a)
	62 2-Methylnaphthalene	142	7.085	7.085	(1.161)	45032	2.00000	1.911(a)
	59 4-Chloro-3-Methylphenol	107	7.101	7.101	(1.164)	14343	2.00000	1.657(a)
	66 Hexachlorocyclopentadiene	237	7.432	7.432	(0.847)	4973	2.00000	0.9034(aM)
	67 2,4,6-Trichlorophenol	196	7.630	7.630	(0.870)	10196	2.00000	1.668(a)
	68 2,4,5-Trichlorophenol	196	7.779	7.779	(0.887)	9482	2.00000	1.486(a)
$	69 2-Fluorobiphenyl	172	7.699	7.699	(0.878)	37692	2.00000	1.782(a)
	72 2-Chloronaphthalene	162	7.822	7.822	(0.892)	31917	2.00000	1.815(a)
	73 2-Nitroaniline	65	8.121	8.121	(0.926)	12088	2.00000	1.706(a)
	76 Dimethylphthalate	163	8.479	8.479	(0.967)	35789	2.00000	1.791(aM)
	79 Acenaphthylene	152	8.506	8.506	(0.970)	47317	2.00000	1.791(a)
	80 2,6-Dinitrotoluene	165	8.597	8.597	(0.980)	7396	2.00000	1.766(a)
*	82 Acenaphthene-d10	164	8.773	8.773	(1.000)	523277	40.0000	
	83 Acenaphthene	153	8.821	8.821	(1.005)	28968	2.00000	1.797(a)
	86 Dibenzofuran	168	9.104	9.104	(1.038)	45144	2.00000	1.866(a)
	88 2,4-Dinitrotoluene	165	9.275	9.275	(1.057)	7885	2.00000	1.494(a)
	85 4-Nitrophenol	109	9.510	9.510	(1.084)	4069	2.00000	1.086(aM)
	93 Diethylphthalate	149	9.734	9.734	(1.110)	36083	2.00000	1.804(a)
	94 Fluorene	166	9.708	9.708	(1.107)	34177	2.00000	1.759(a)
	95 4-Chlorophenyl-phenylether	204	9.766	9.766	(1.113)	19328	2.00000	1.764(a)
	98 4-Nitroaniline	138	9.948	9.948	(1.134)	5481	2.00000	1.434(aM)
	99 4,6-Dinitro-2-methylphenol	198	10.002	10.002	(0.875)	2129	2.00000	0.6522(aM)
	100 N-Nitrosodiphenylamine	169	10.023	10.023	(0.877)	24083	2.00000	1.774(a)
	102 Azobenzene	77	10.039	10.039	(0.878)	53244	2.00000	1.804(a)
	109 4-Bromophenyl-phenylether	248	10.648	10.648	(0.932)	11556	2.00000	1.783(a)
	112 Hexachlorobenzene	284	10.872	10.872	(0.951)	13034	2.00000	1.925(a)
*	121 Phenanthrene-d10	188	11.428	11.428	(1.000)	891064	40.0000	
	122 Phenanthrene	178	11.465	11.465	(1.003)	51776	2.00000	1.892(a)
	124 Anthracene	178	11.545	11.545	(1.010)	49660	2.00000	1.886(a)
	126 Carbazole	167	11.957	11.957	(1.046)	39087	2.00000	1.791(a)
	129 Di-n-Butylphthalate	149	12.844	12.844	(1.124)	51965	2.00000	1.795(a)
	134 Fluoranthene	202	13.757	13.757	(1.204)	52925	2.00000	1.884(a)
	135 Benzidine	184	14.168	14.168	(0.854)	16708	2.00000	1.628(a)
	137 Pyrene	202	14.174	14.174	(0.854)	52860	2.00000	1.731(a)
$	139 Terphenyl-d14	244	14.622	14.622	(0.881)	42492	2.00000	1.772(a)
	145 3,3-Dimethylbenzidine	212	15.627	15.627	(0.942)	19879	2.00000	1.710(a)
	146 Butylbenzylphthalate	149	15.744	15.744	(0.949)	22027	2.00000	1.839(a)
	150 Benzo(a)Anthracene	228	16.551	16.551	(0.998)	47407	2.00000	1.842(a)
*	153 Chrysene-d12	240	16.588	16.588	(1.000)	745557	40.0000	
	152 3,3'-Dichlorobenzidine	252	16.658	16.658	(1.004)	14997	2.00000	1.542(a)
	154 Chrysene	228	16.626	16.626	(1.002)	46623	2.00000	1.914(a)
	155 bis(2-ethylhexyl)Phthalate	149	16.973	16.973	(1.023)	25960	2.00000	1.748(a)
	158 Di-n-octylphthalate	149	18.116	18.116	(0.944)	41977	2.00000	1.560(aM)
	160 Benzo(b)fluoranthene	252	18.549	18.549	(0.966)	44682	2.00000	1.729(a)
	161 Benzo(k)fluoranthene	252	18.592	18.592	(0.968)	45149	2.00000	1.775(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
165 Benzo(a)pyrene	252	19.088	19.088	(0.994)	40489	2.00000	1.762(a)
* 166 Perylene-d12	264	19.201	19.201	(1.000)	652504	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.883	20.883	(1.088)	34313	2.00000	1.586(a)
174 Dibenzo(a,h)anthracene	278	20.937	20.937	(1.090)	34383	2.00000	1.646(a)
177 Benzo(g,h,i)perylene	276	21.327	21.327	(1.111)	33718	2.00000	1.775(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3134.D
Report Date: 14-May-2005 09:51

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

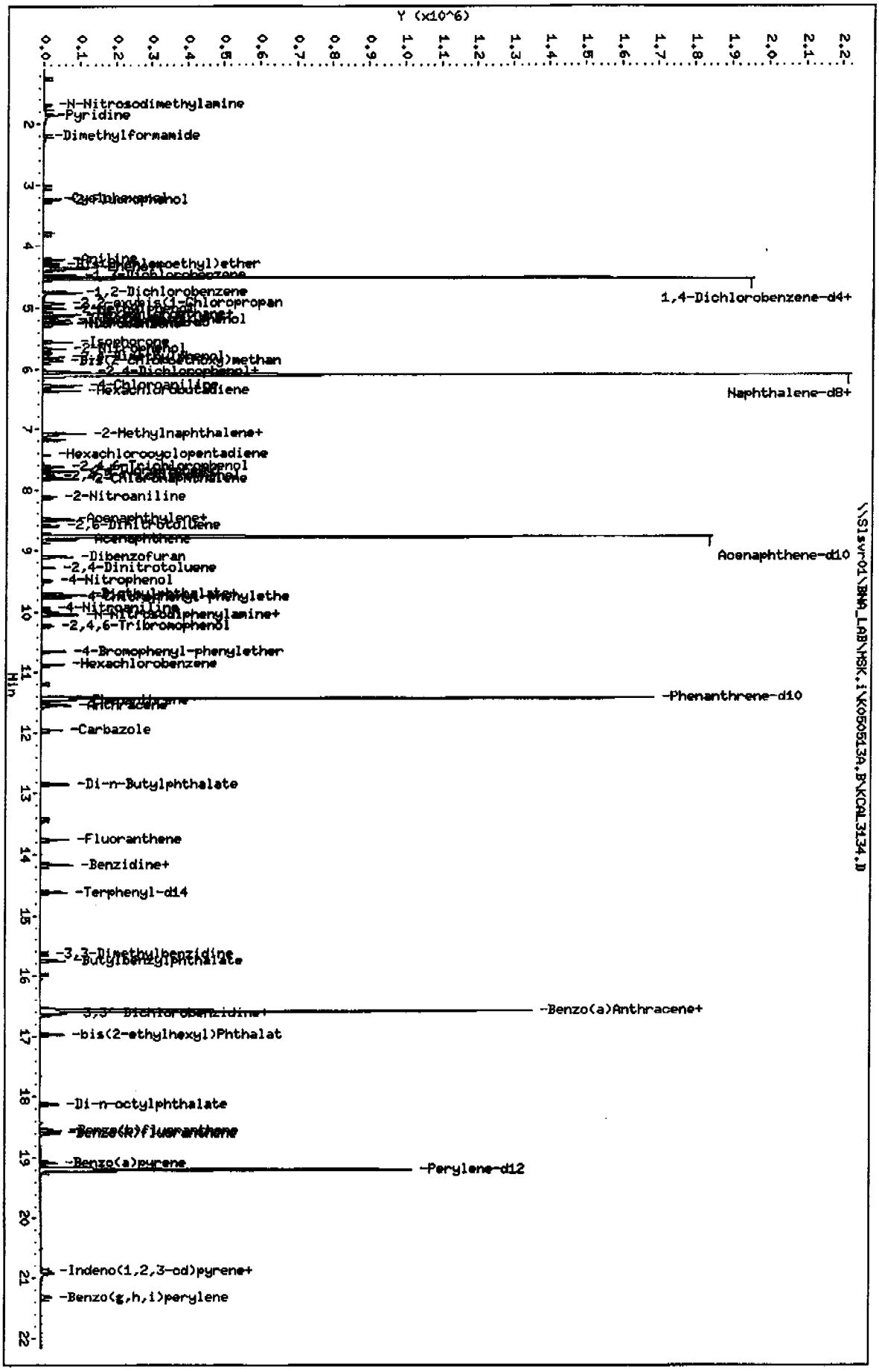
Instrument ID: MSK.i
Lab File ID: KCAL3134.D
Lab Smp Id: SSTD002
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\8270K.m
Misc Info: SV0212-05

Calibration Date: 13-MAY-2005
Calibration Time: 12:14
Client Smp ID: SSTD002
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	181066	90533	362132	269767	48.99
48 Naphthalene-d8	627500	313750	1255000	963429	53.53
82 Acenaphthene-d10	358476	179238	716952	523277	45.97
121 Phenanthrene-d10	655247	327624	1310494	891064	35.99
153 Chrysene-d12	535207	267604	1070414	745557	39.30
166 Perylene-d12	427031	213516	854062	652504	52.80

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.52	4.02	5.02	4.52	-0.07
48 Naphthalene-d8	6.11	5.61	6.61	6.10	-0.05
82 Acenaphthene-d10	8.78	8.28	9.28	8.77	-0.04
121 Phenanthrene-d10	11.43	10.93	11.93	11.43	-0.03
153 Chrysene-d12	16.59	16.09	17.09	16.59	-0.02
166 Perylene-d12	19.20	18.70	19.70	19.20	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

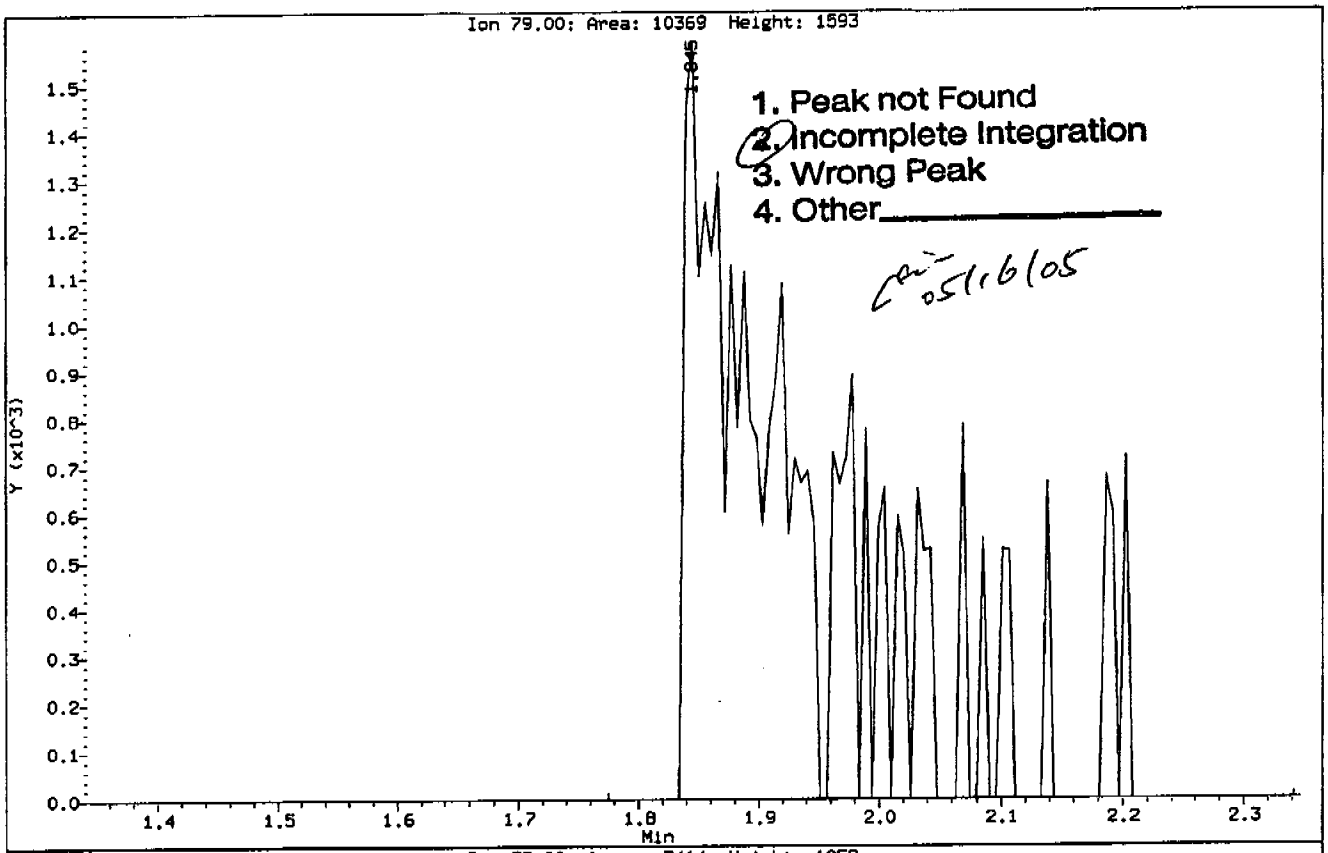


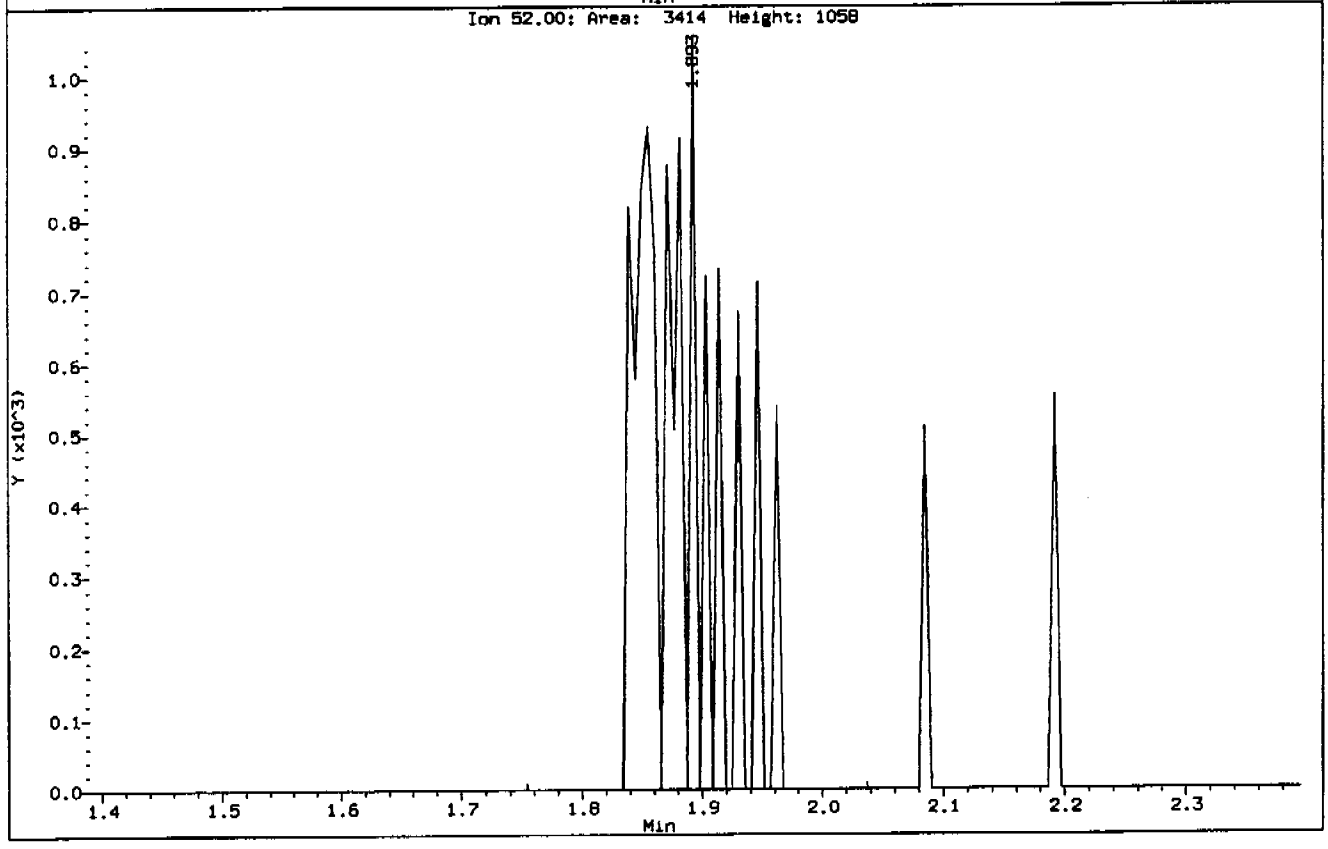
Data File: \\Slsvr01\BNA_LAB\HSK.i\K050513A.B\KCAL3134.D
Date : 13-MAY-2005 15:58
Client ID: SSTD002
Sample Info: SSTD002
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3134.D
Injection Date: 13-MAY-2005 15:58
Instrument: MSK.i
Client Sample ID: SSTD002

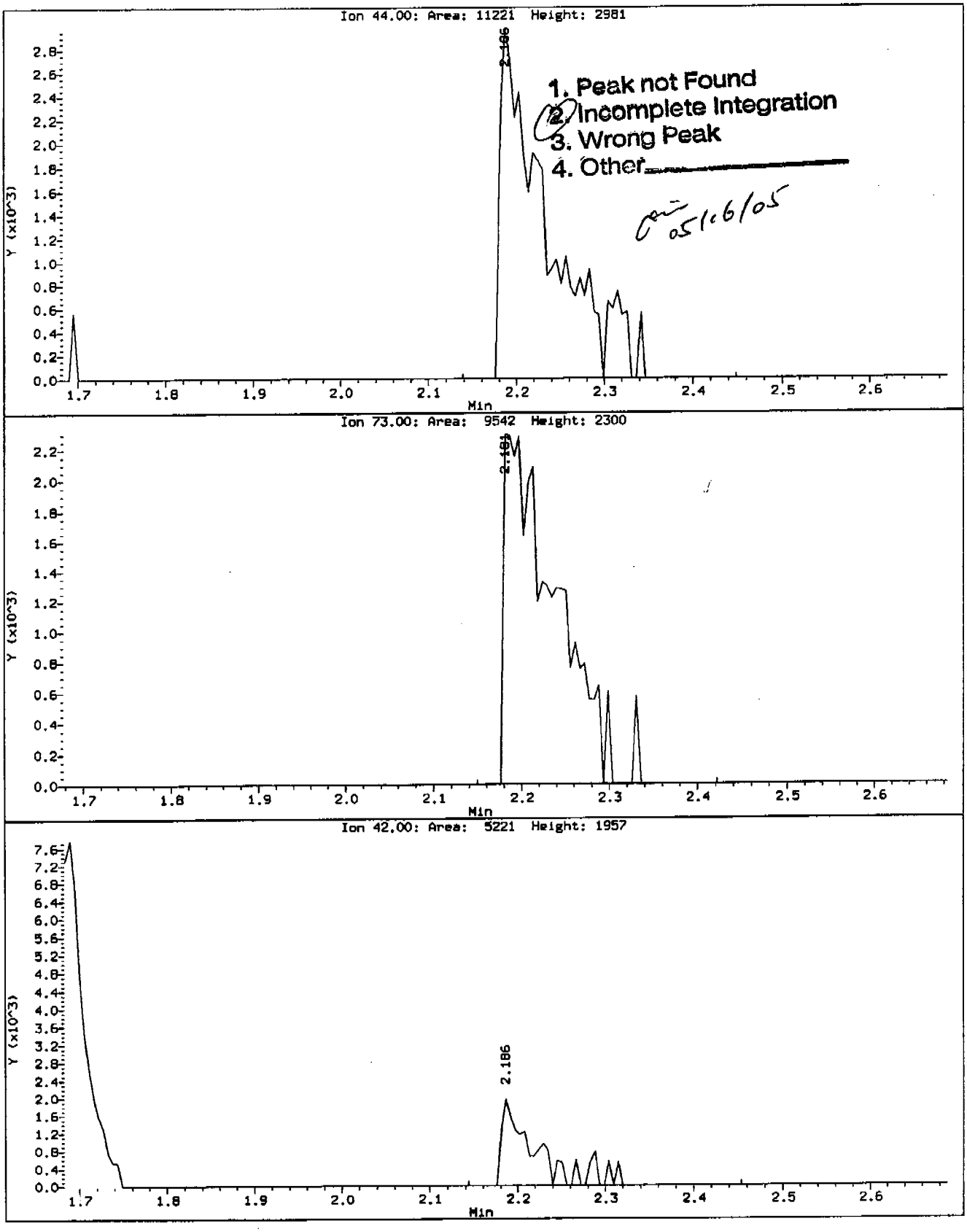
Compound: Pyridine
CAS Number: 110-86-1





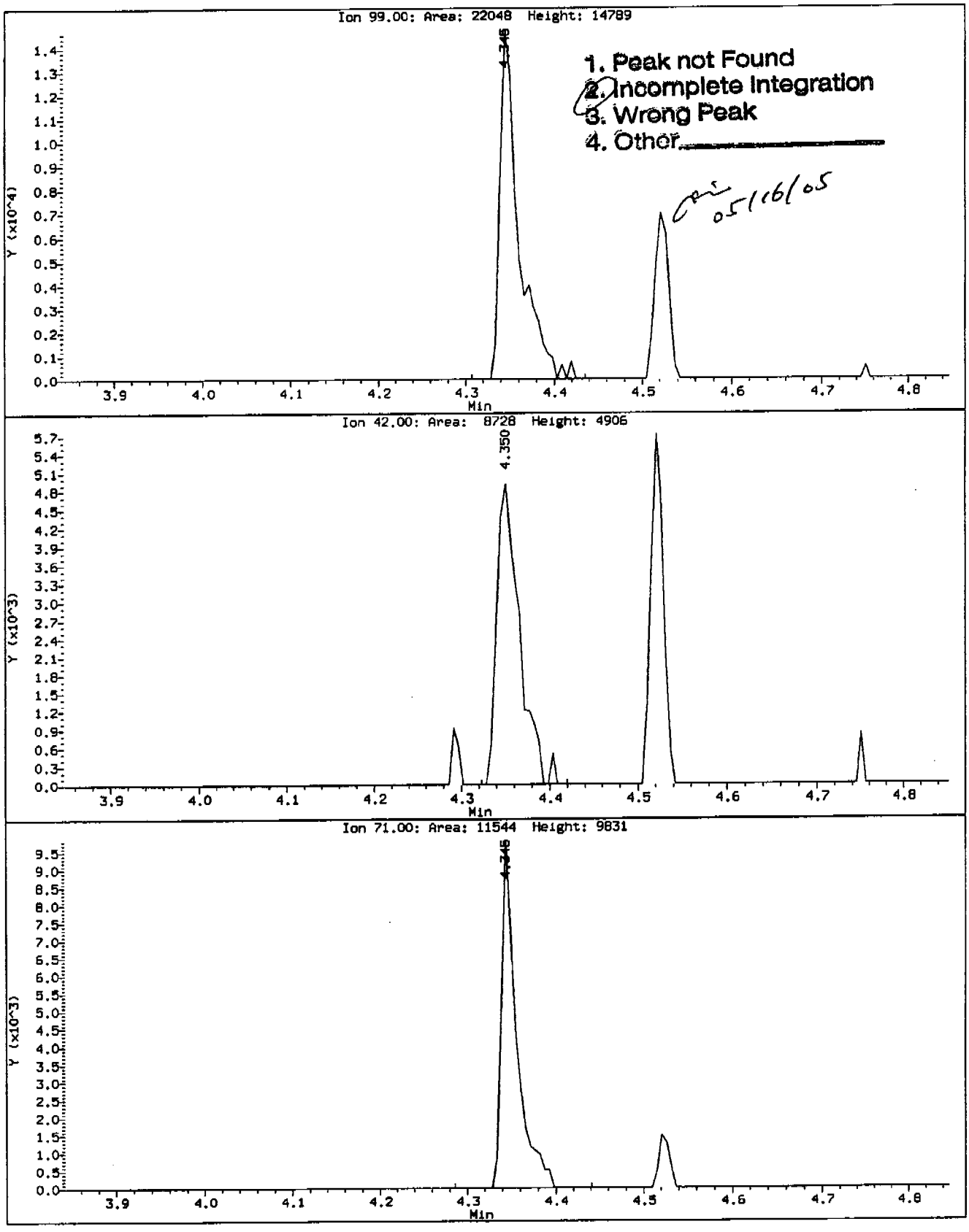
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3134.D
Injection Date: 13-MAY-2005 15:58
Instrument: MSK.i
Client Sample ID: SSTD002

Compound: Dimethylformamide
CAS Number: 68-12-2



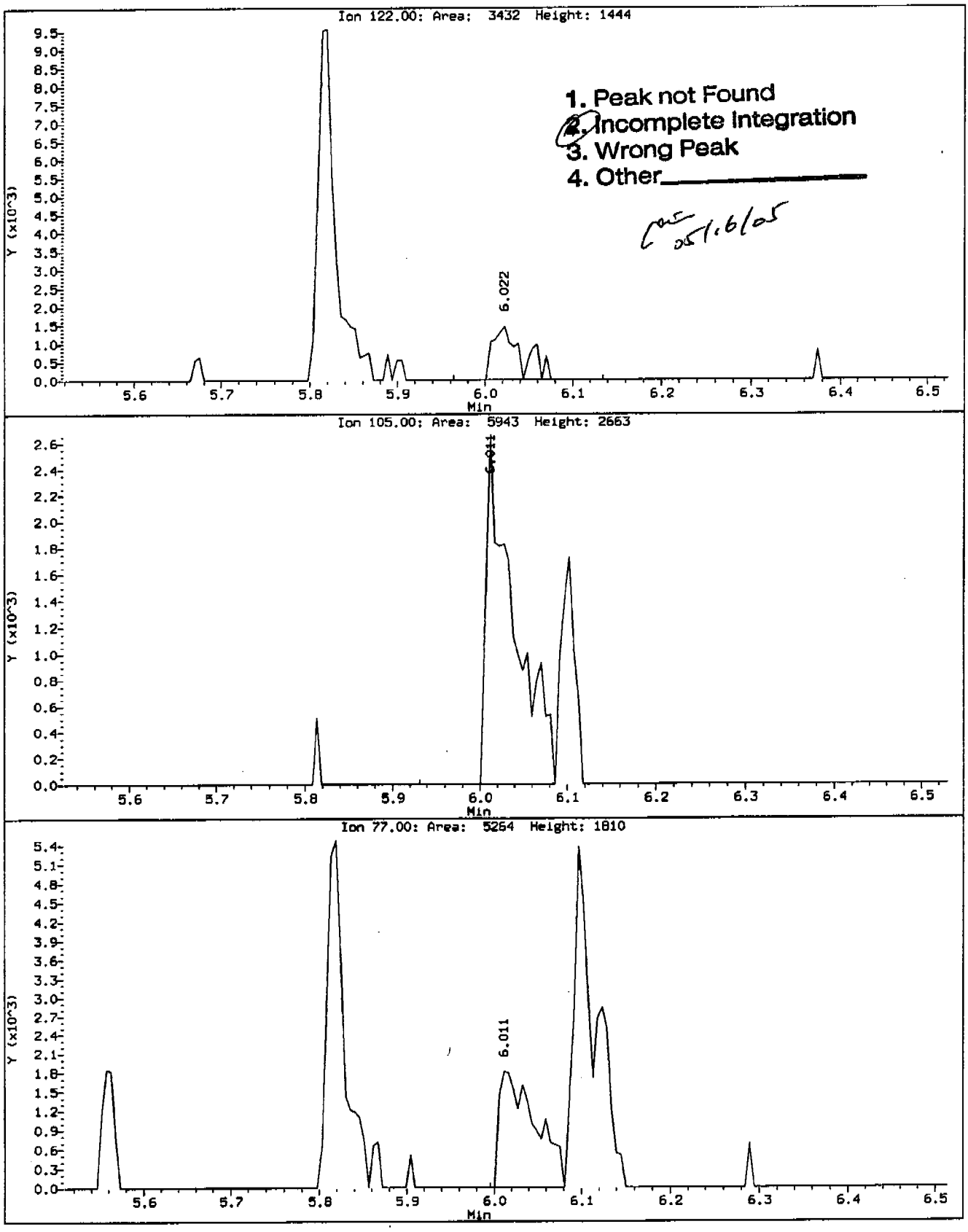
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3134.D
Injection Date: 13-MAY-2005 15:58
Instrument: MSK.i
Client Sample ID: SSTD002

Compound: Phenol-d5
CAS Number: 4165-62-2



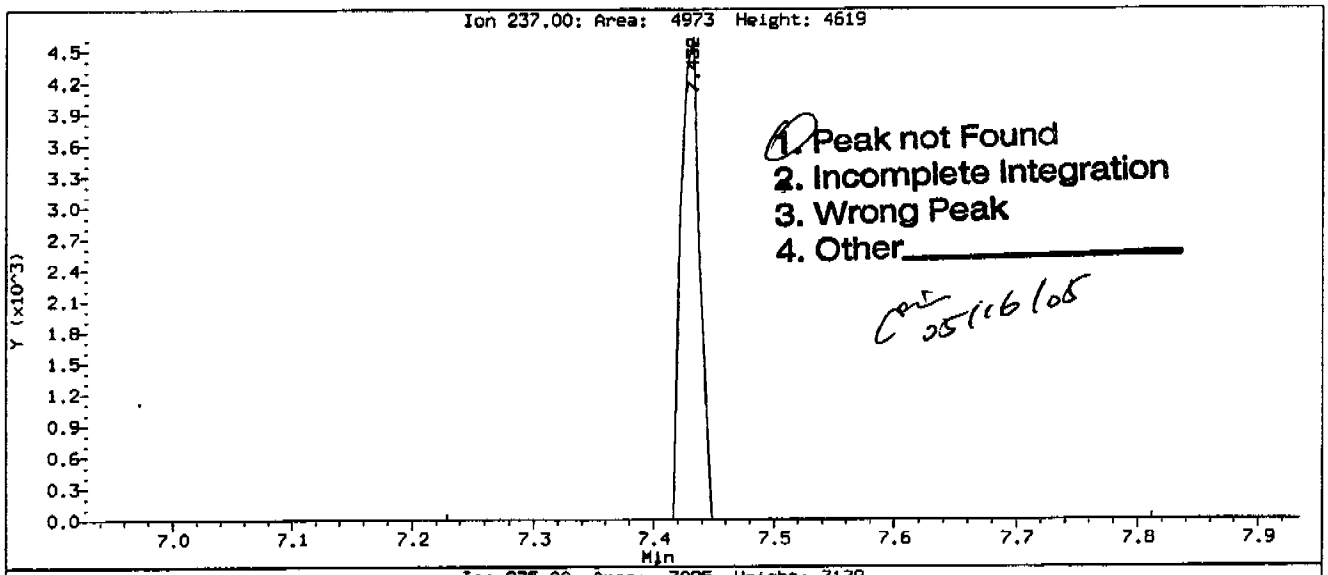
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3134.D
Injection Date: 13-MAY-2005 15:58
Instrument: MSK.i
Client Sample ID: 5STD002

Compound: Benzoic Acid
CAS Number: 65-85-0



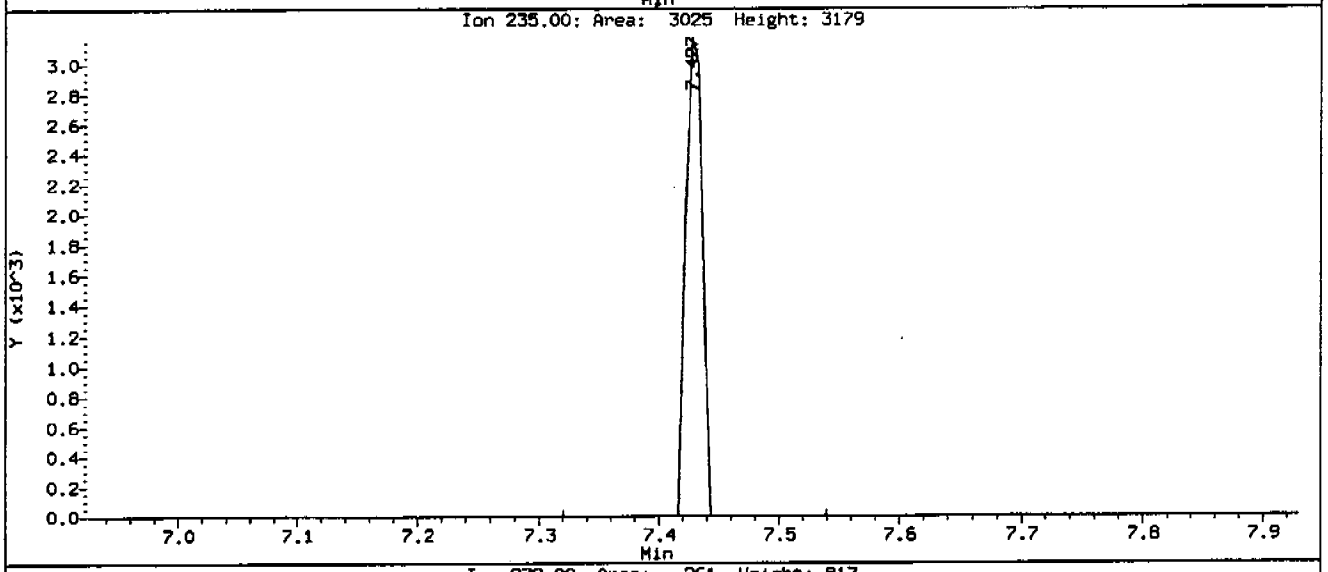
Data File: \\SlsvrO1\BNA_LAB\MSK,i\K050513A,B\KCAL3134.D
Injection Date: 13-MAY-2005 15:58
Instrument: MSK,i
Client Sample ID: SSTD002

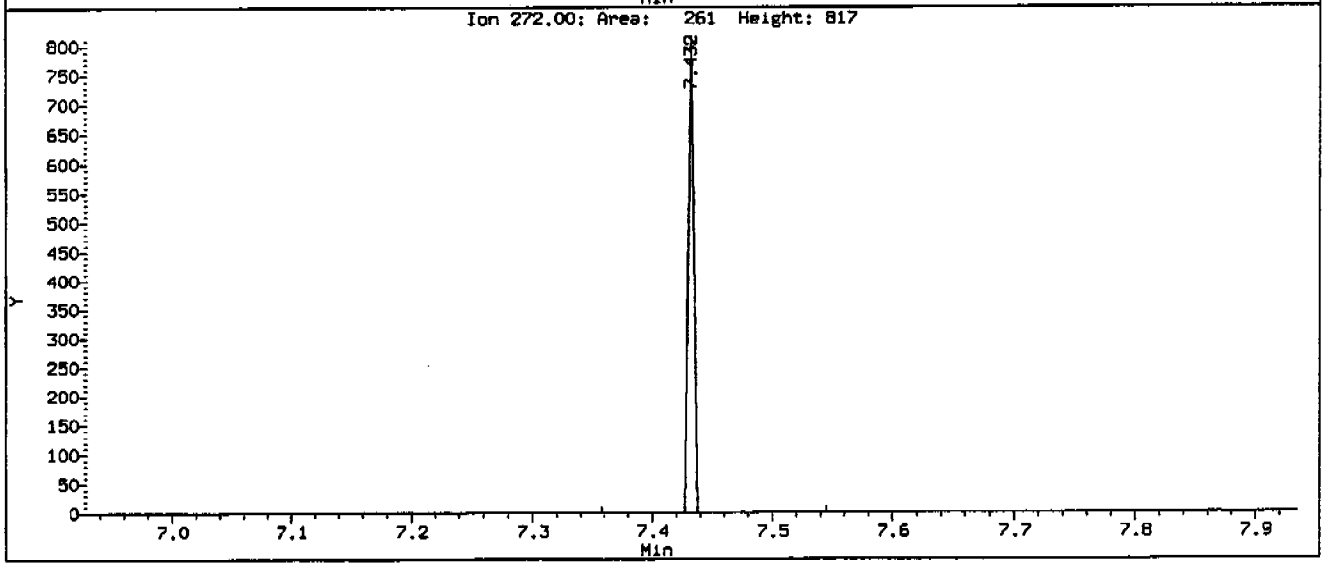
Compound: Hexachlorocyclopentadiene
CAS Number: 77-47-4



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

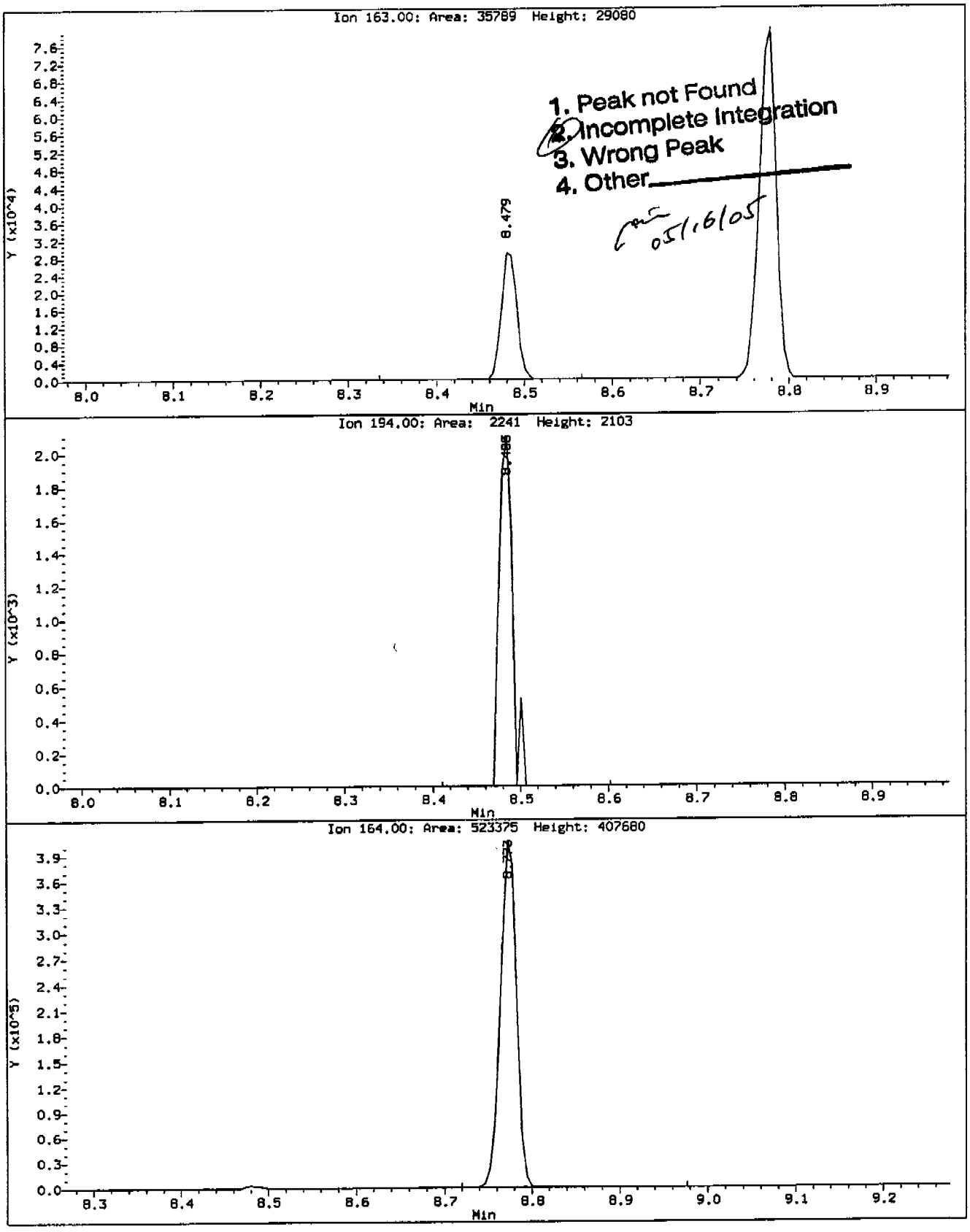
Cont 05/16/05





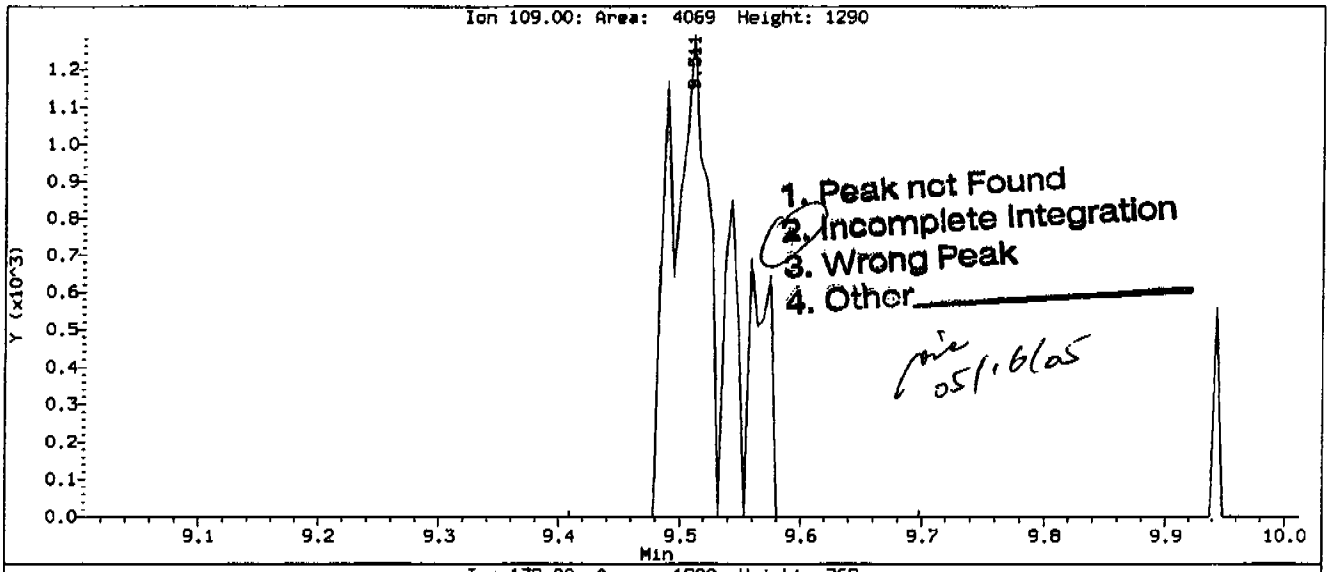
Data File: \\Slavr01\BNA_LAB\MSK.i\K050513A.B\KCAL3134.D
Injection Date: 13-MAY-2005 15:58
Instrument: MSK.i
Client Sample ID: SSTD002

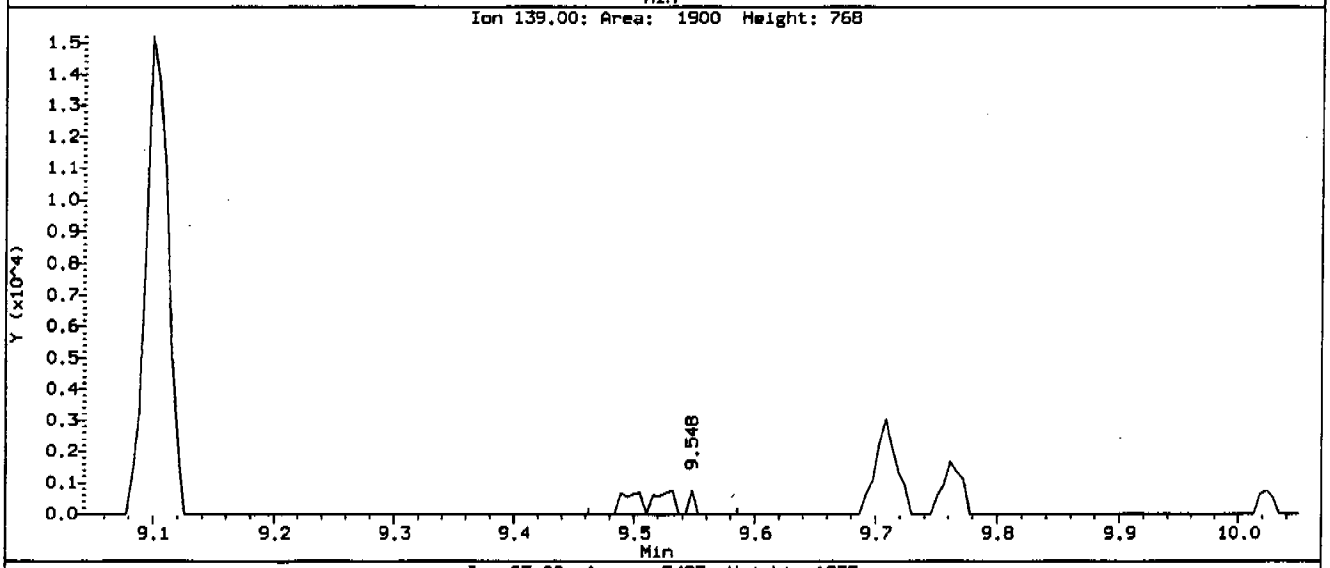
Compound: Dimethylphthalate
CAS Number: 131-11-3

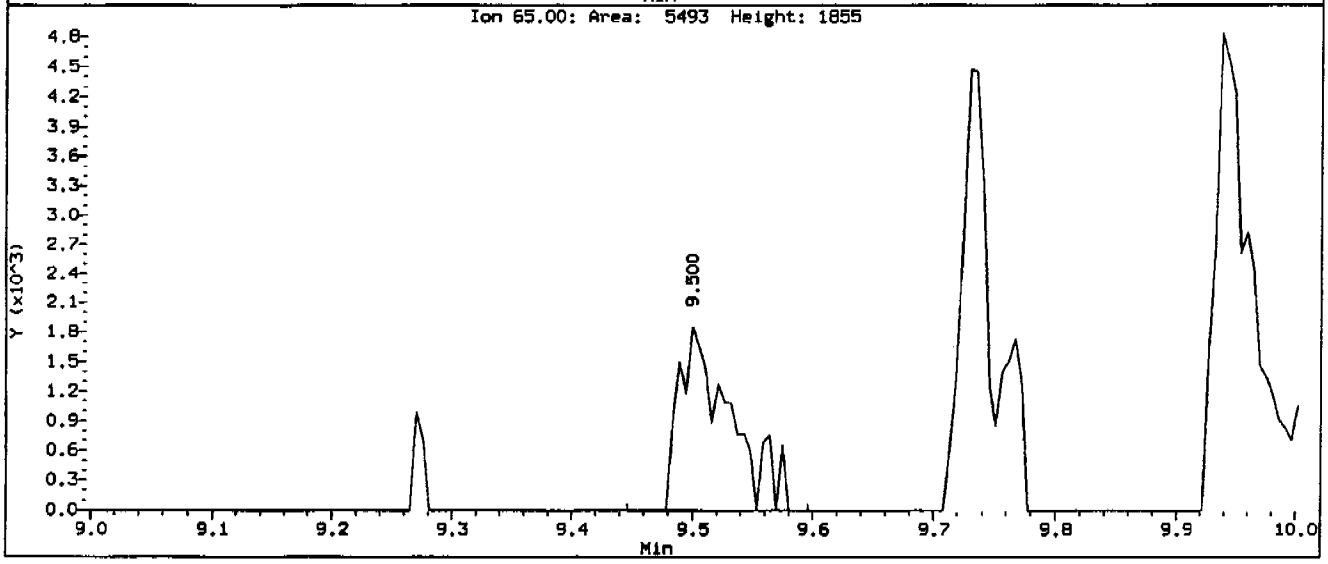


Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3134.D
Injection Date: 13-MAY-2005 15:58
Instrument: MSK.i
Client Sample ID: SSTD002

Compound: 4-Nitrophenol
CAS Number: 100-02-7

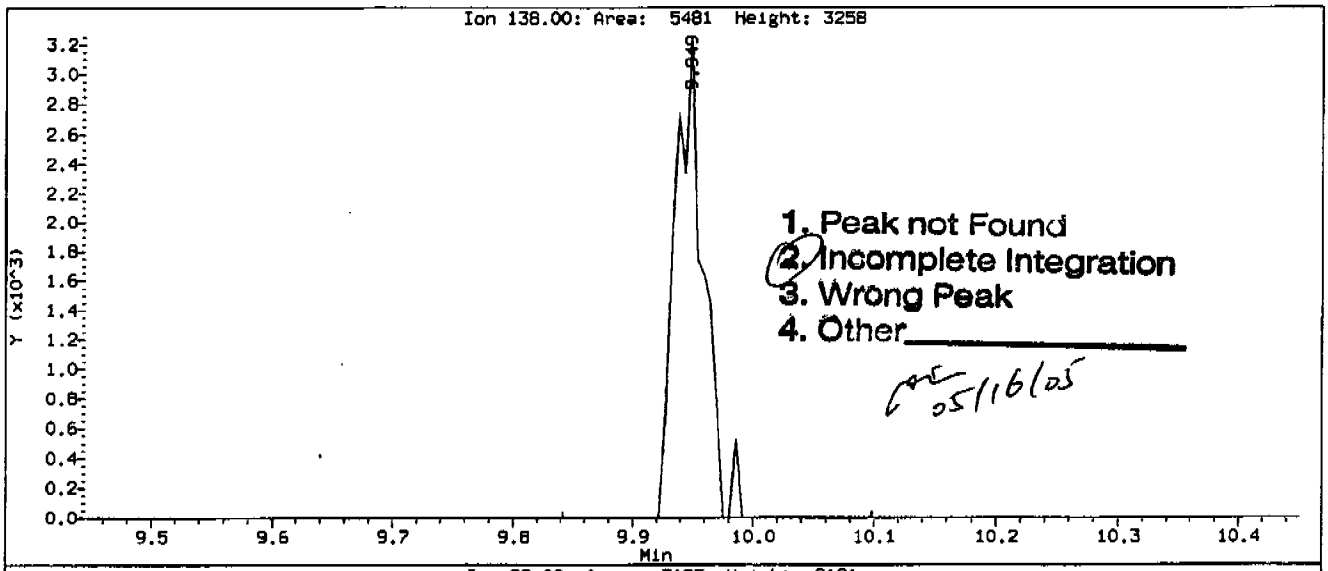


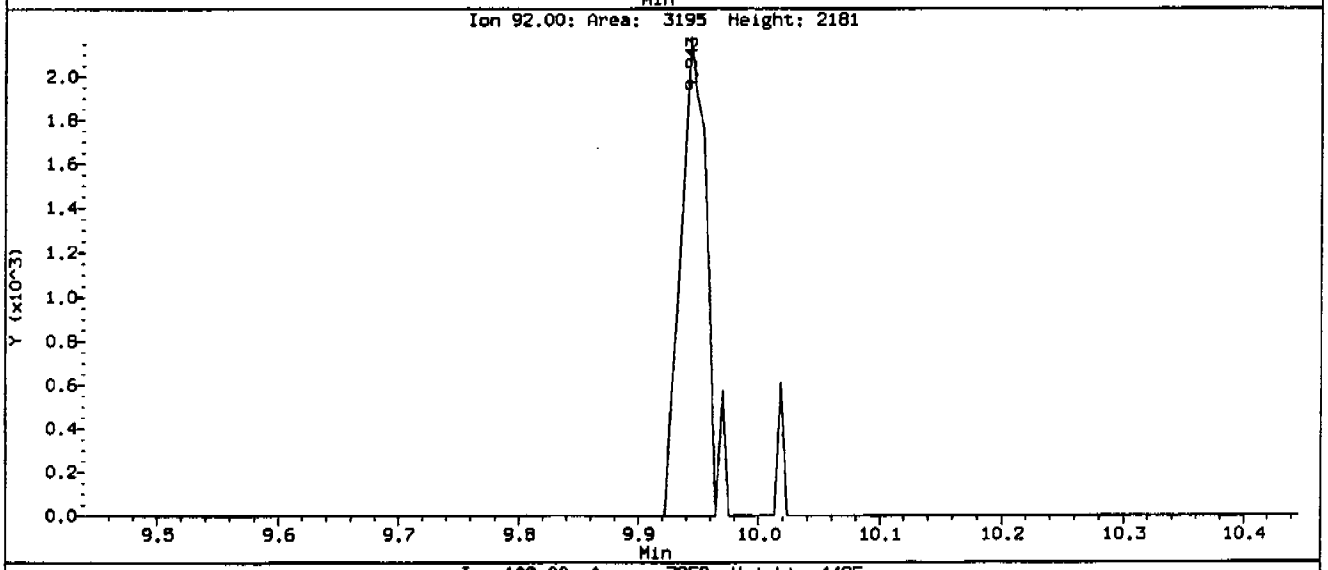


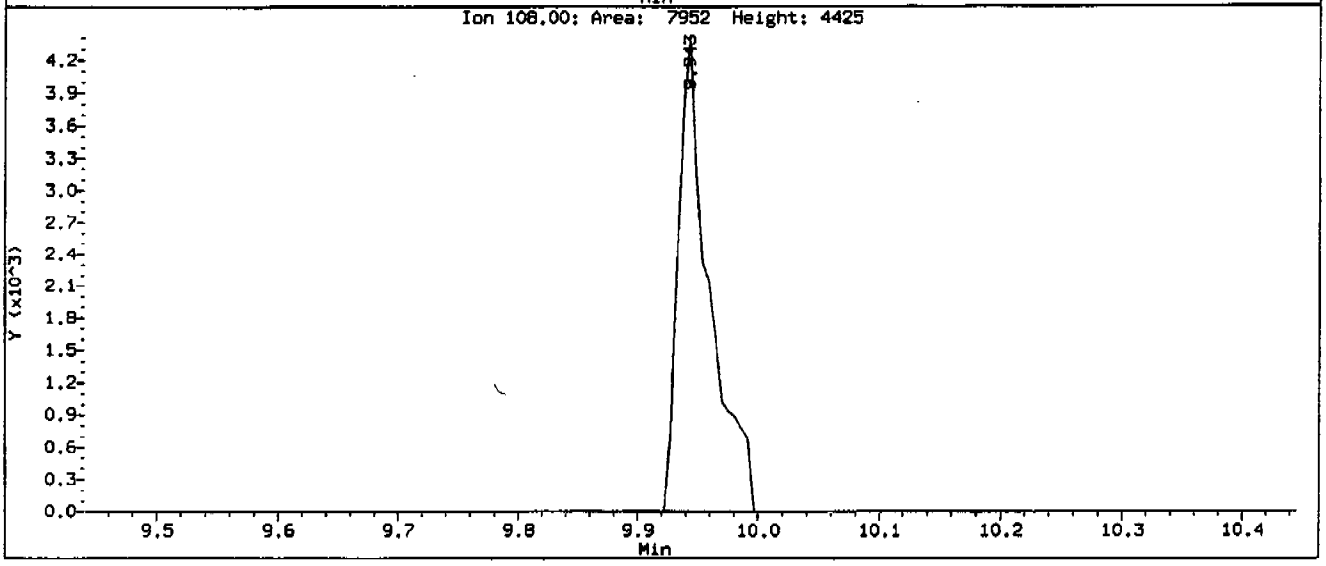


Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3134.D
Injection Date: 13-MAY-2005 15:58
Instrument: MSK.i
Client Sample ID: SSTD002

Compound: 4-Nitroaniline
CAS Number: 100-01-6

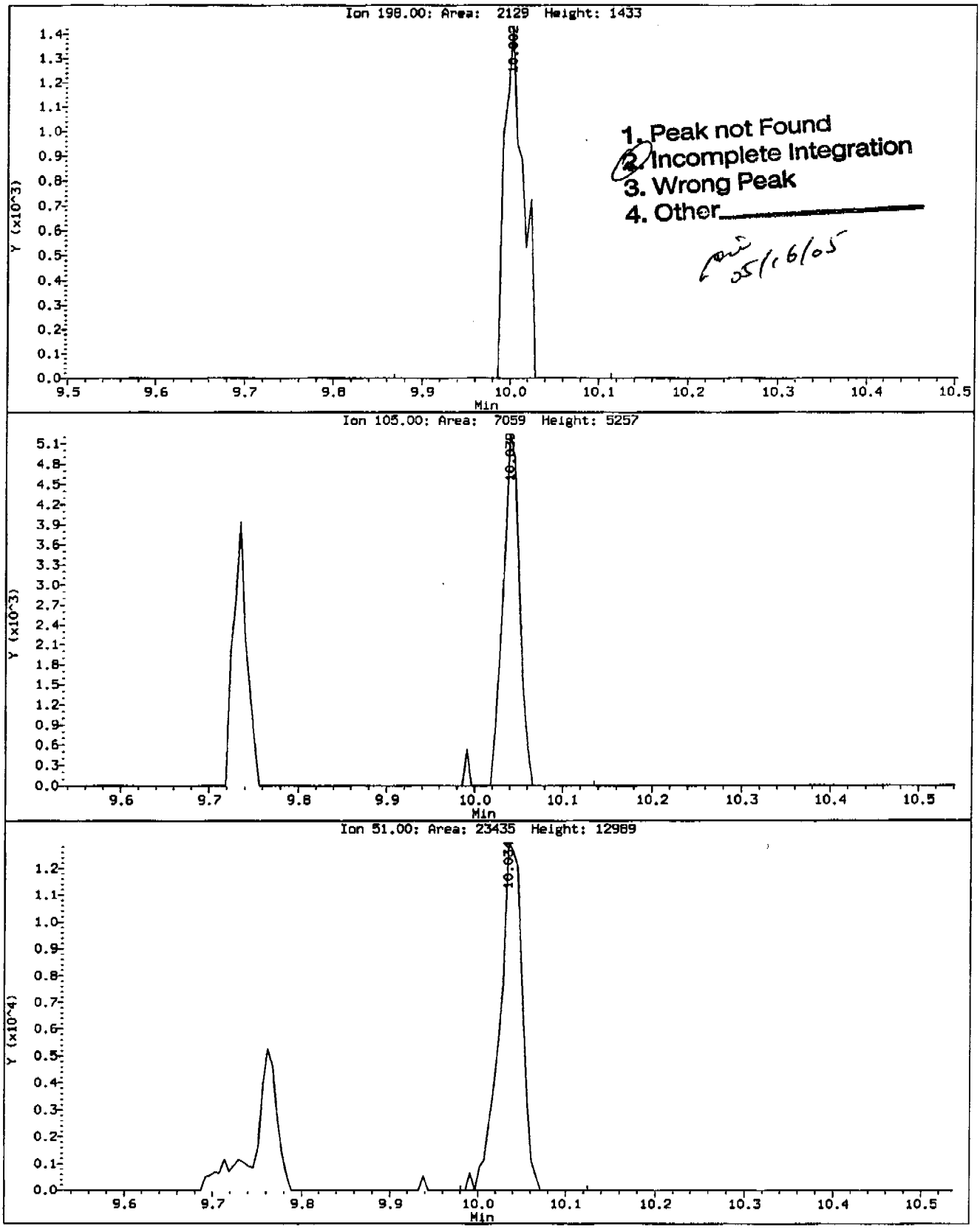






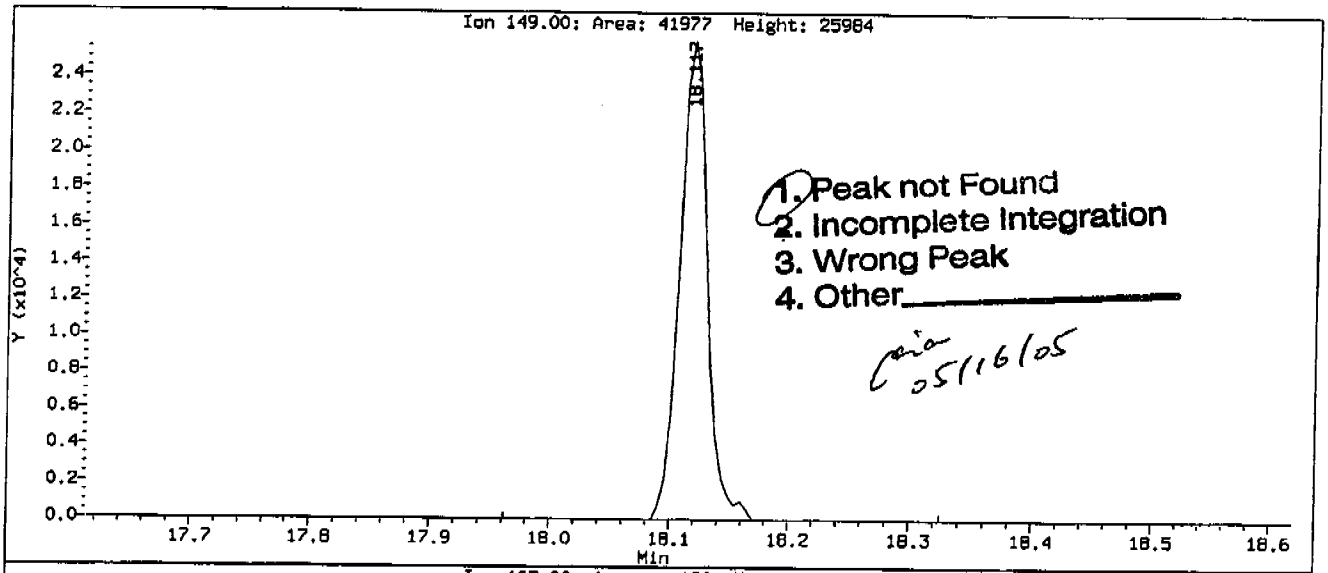
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050513A.B\KCAL3134.D
Injection Date: 13-MAY-2005 15:58
Instrument: MSK.i
Client Sample ID: SSTD002

Compound: 4,6-Dinitro-2-methylphenol
CAS Number: 534-52-1



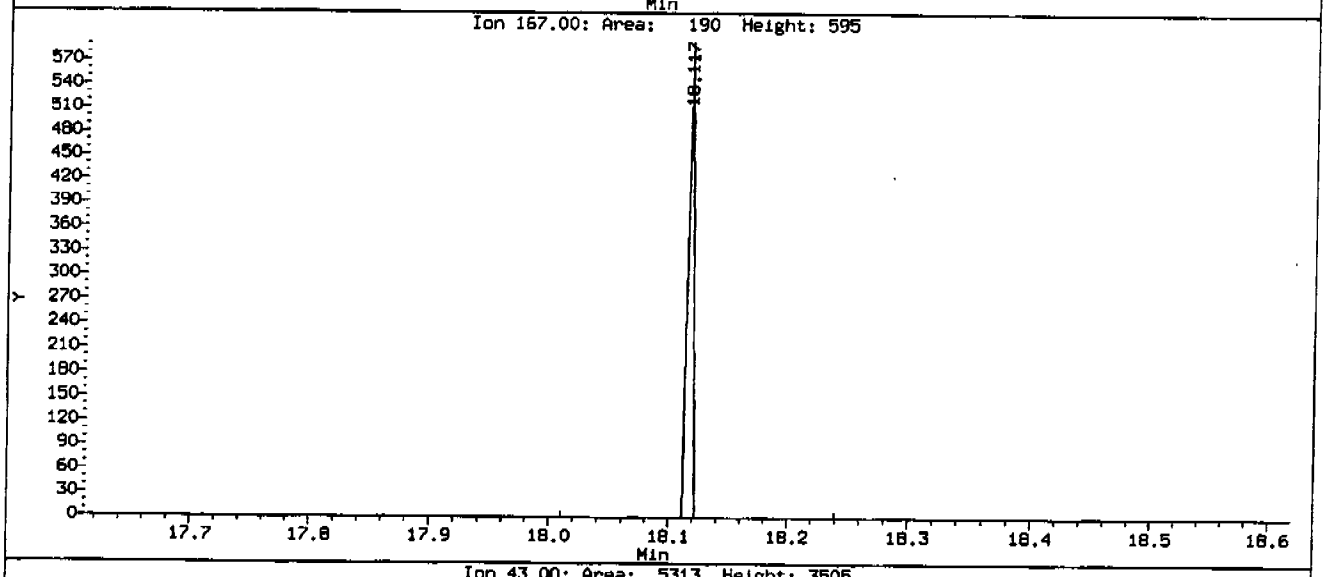
Data File: \\Slsvr01\BNA_LAB\M5K.i\K050513A.B\KCAL3134.D
Injection Date: 13-MAY-2005 15:58
Instrument: M5K.i
Client Sample ID: SSTD002

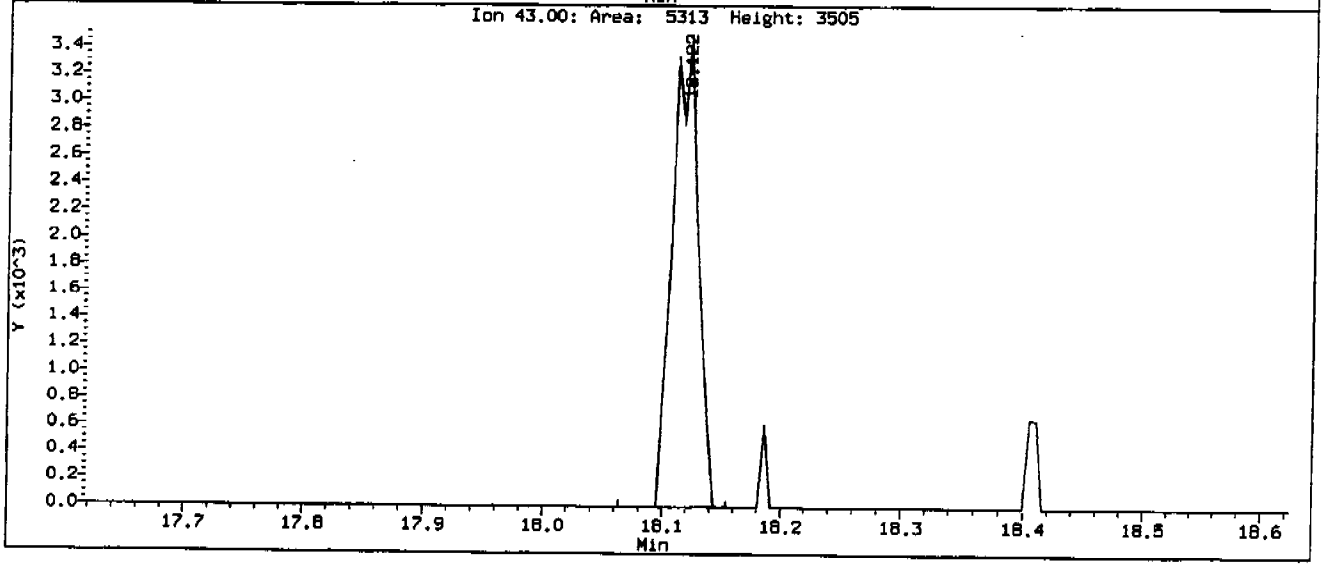
Compound: Di-n-octylphthalate
CAS Number: 117-84-0



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

Cria 05/16/05





STL ST. LOUIS

DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	38.17		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	46.07		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	45.94		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.23		PASS
275	10 - 30% of mass 198	28.64		PASS
365	Greater than 1% of mass 198	3.96		PASS
441	Present, but less than mass 443	13.47	(86.95)	PASS
442	Greater than 40% of mass 198	81.79		PASS
443	17 - 23% of mass 442	15.49	(18.94)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.8965885	5.000	PASS
Benzidine	0.8384548	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	394051			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	3048	0.8	15.0	PASS
4,4-DDD + DDE	3048	0.8	15.0	PASS

****
Tuning Sample, //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D,*** PASSED
****

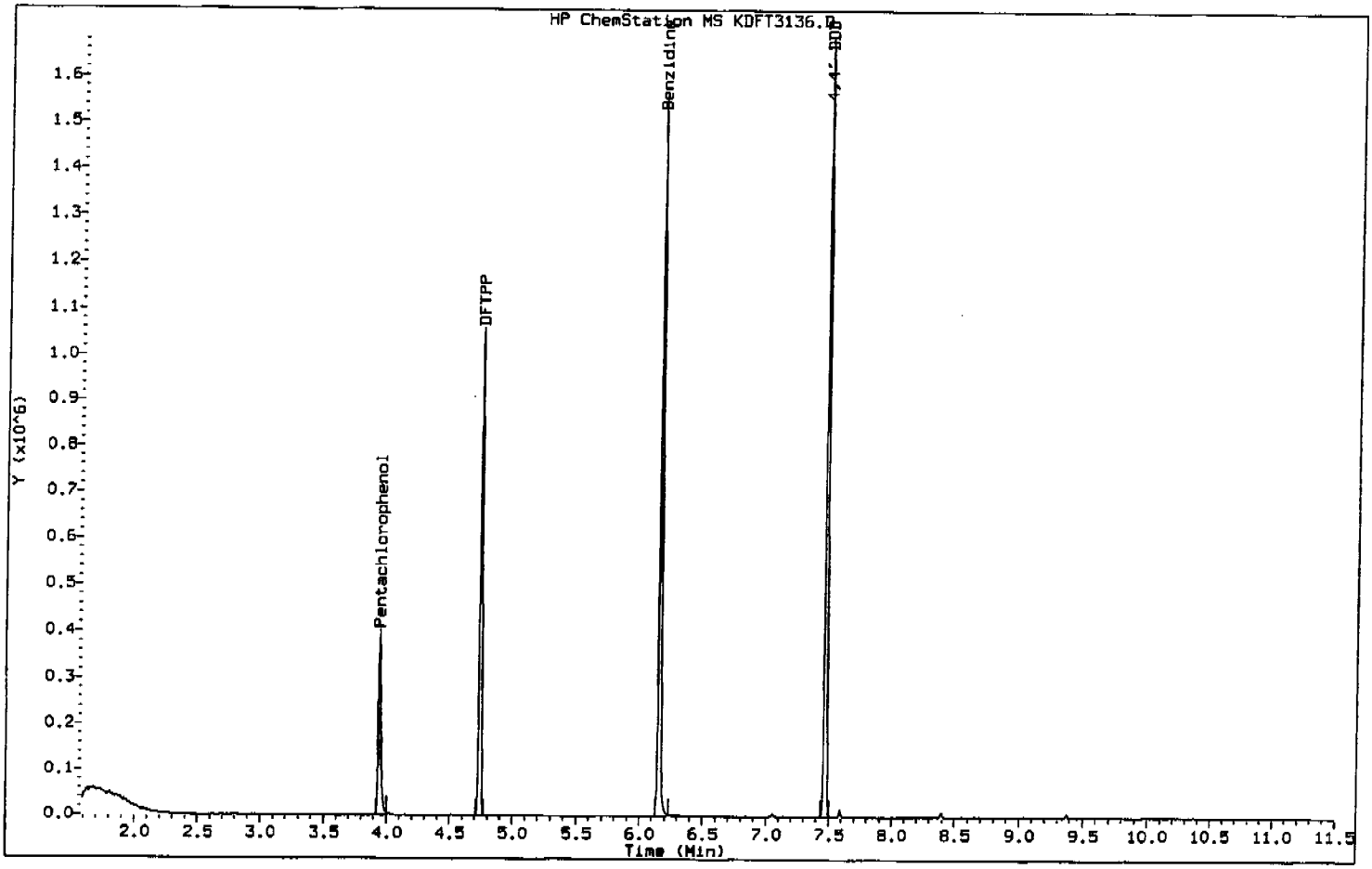
05/16/05

STL ST. LOUIS

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 05/16/2005 10:10

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m Inst: MSK
Injection Date: 14-MAY-2005 08:36 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0232-05 (50NG)

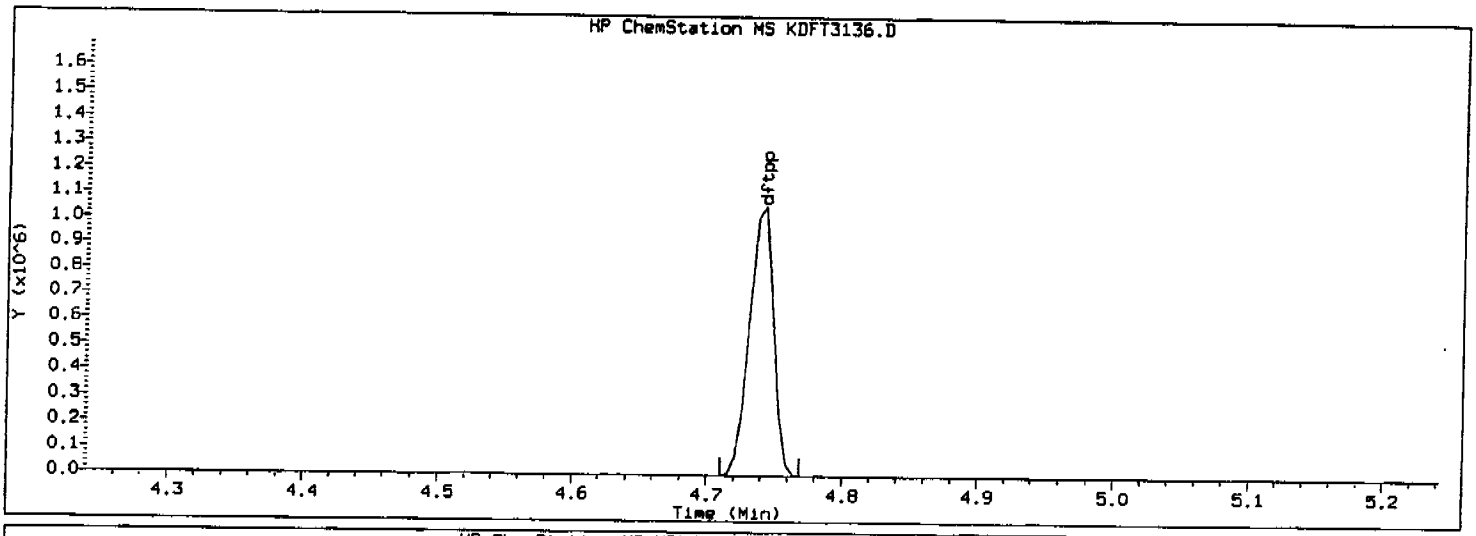


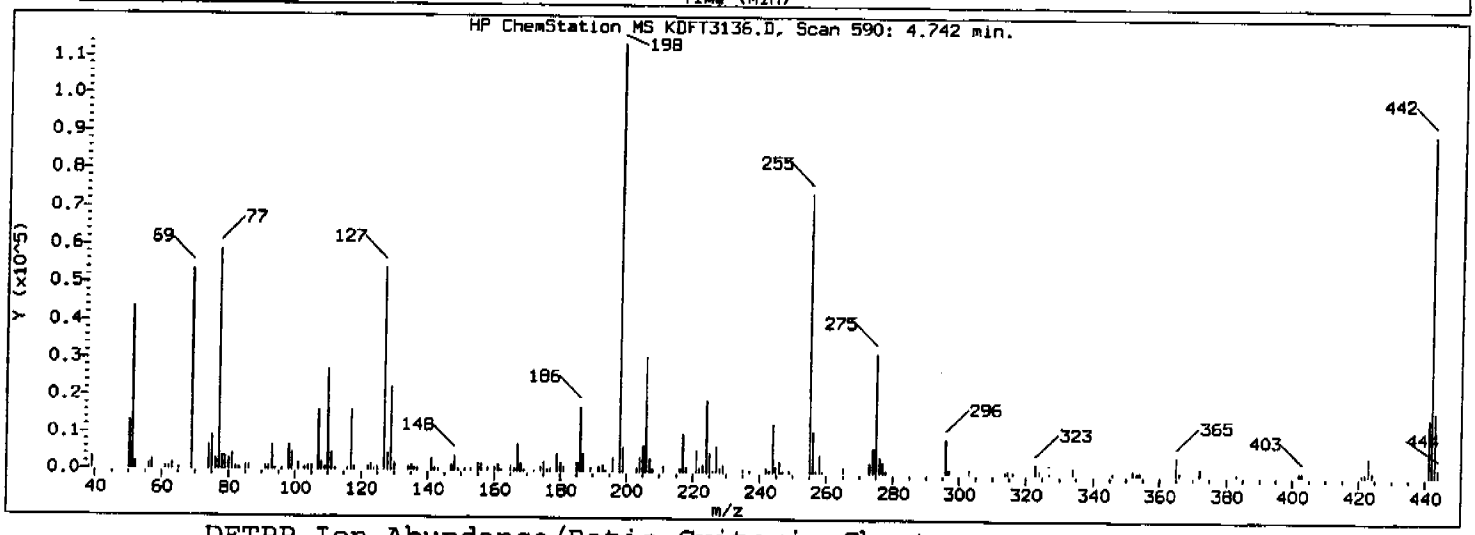
LOT# F5D210380

STL ST. LOUIS

Report Date: 05/16/2005 10:10

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m Inst: MSK
Injection Date: 14-MAY-2005 08:36 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0232-05 (50NG)





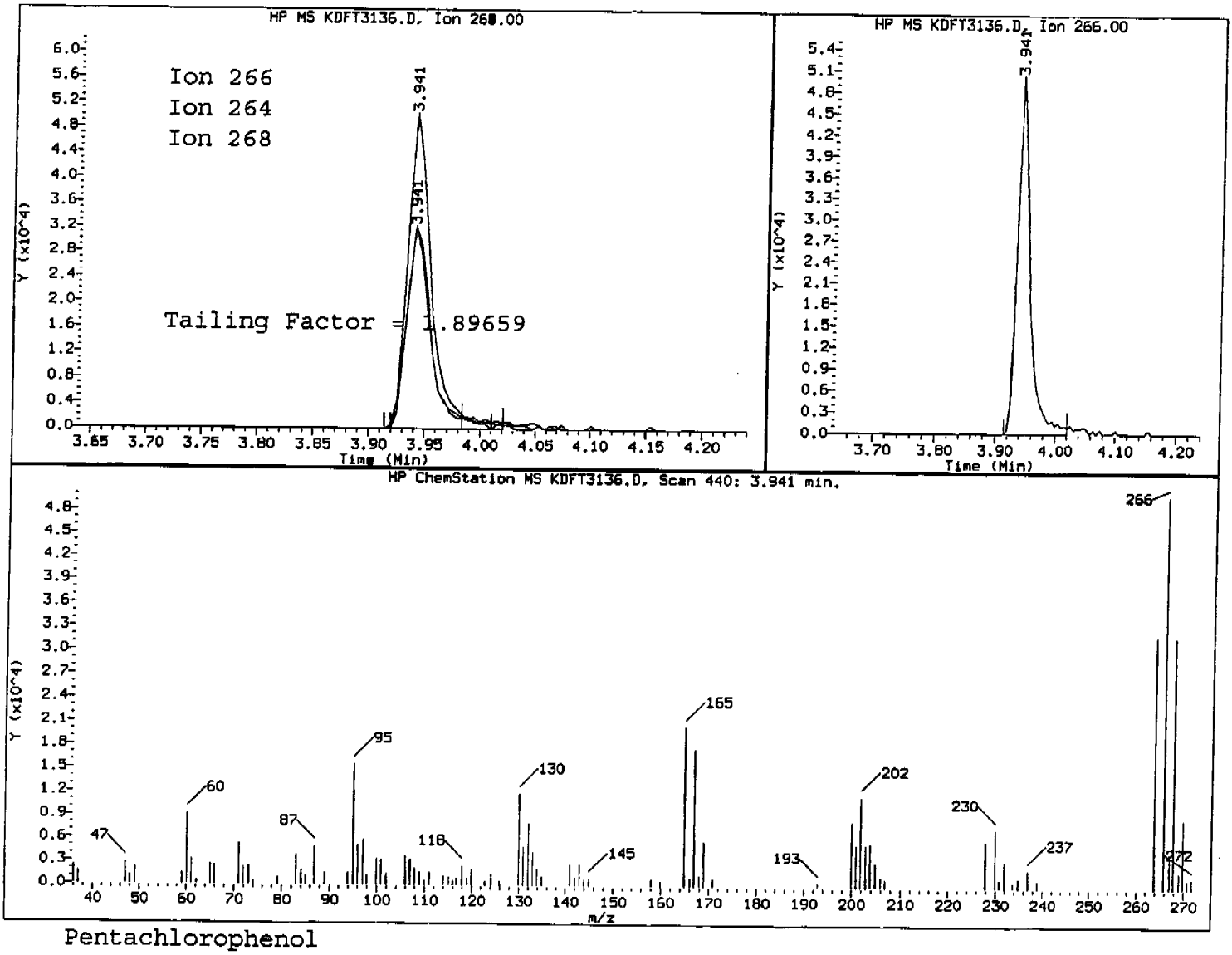
DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	38.17		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	46.07		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	45.94		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.23		PASS
275	10 - 30% of mass 198	28.64		PASS
365	Greater than 1% of mass 198	3.96		PASS
441	Present, but less than mass 443	13.47	(86.95)	PASS
442	Greater than 40% of mass 198	81.79		PASS
443	17 - 23% of mass 442	15.49	(18.94)	PASS

STL ST. LOUIS

Report Date: 05/16/2005 10:10

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m\resolut.m Inst:
Injection Date: 14-MAY-2005 08:36 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



Pentachlorophenol

Exp. RT = 3.952
Found RT = 3.941

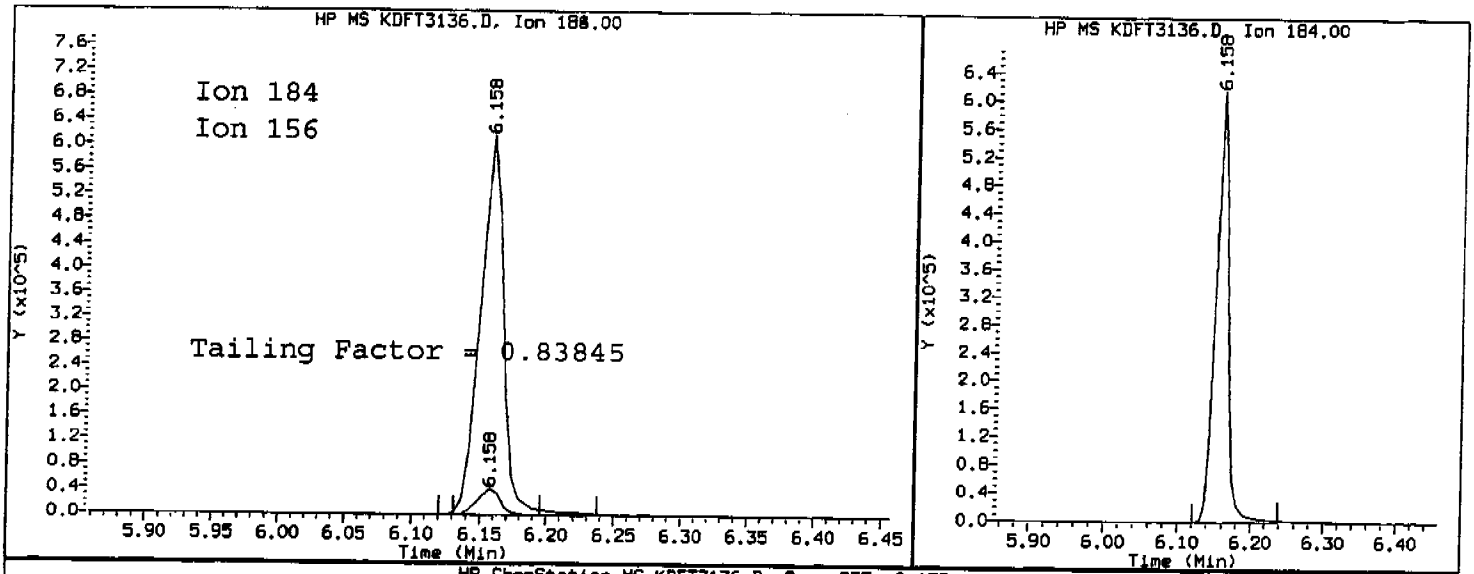
Mass	Area	Ratio
266	75398	100.00
264	47882	63.51
268	47165	62.56

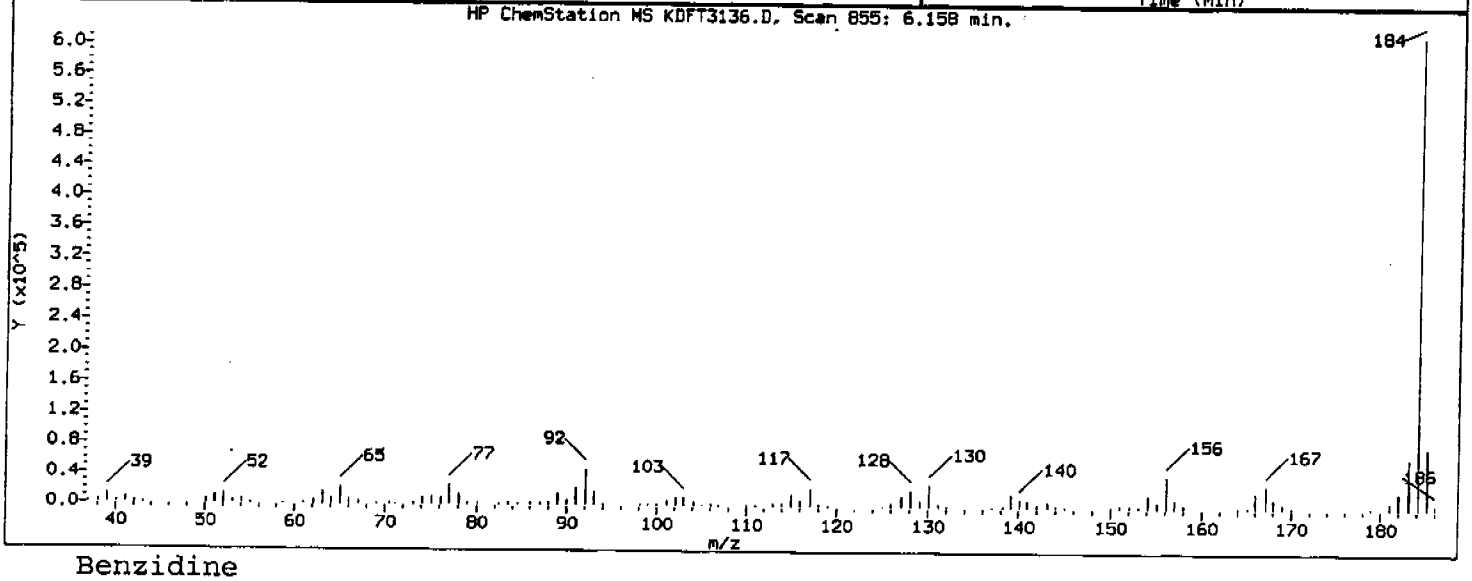
Tailing factor for Pentachlorophenol OK

Tail Factor = 1.897 Maximum Allowed = 5.0

Report Date: 05/16/2005 10:10

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m\resolut.m Inst:
Injection Date: 14-MAY-2005 08:36 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)





Benzidine
=========
Exp. RT = 6.169
Found RT = 6.158

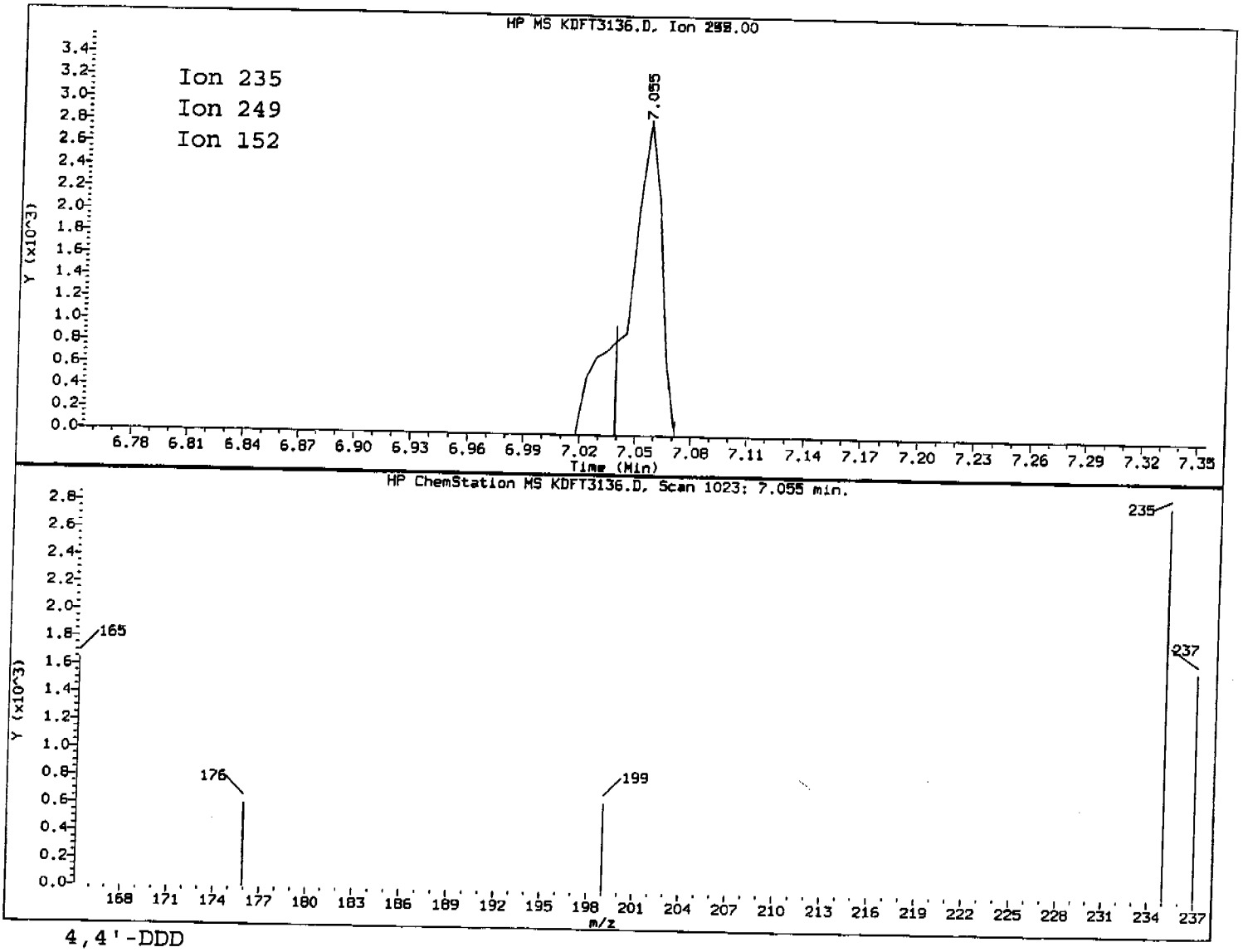
Mass	Area	Ratio
184	742279	100.00
156	50775	6.84

Tailing factor for Benzidine OK

Tail Factor = 0.838 Maximum Allowed = 3.0

Report Date: 05/16/2005 10:10

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m\resolut.m Inst:
Injection Date: 14-MAY-2005 08:36 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



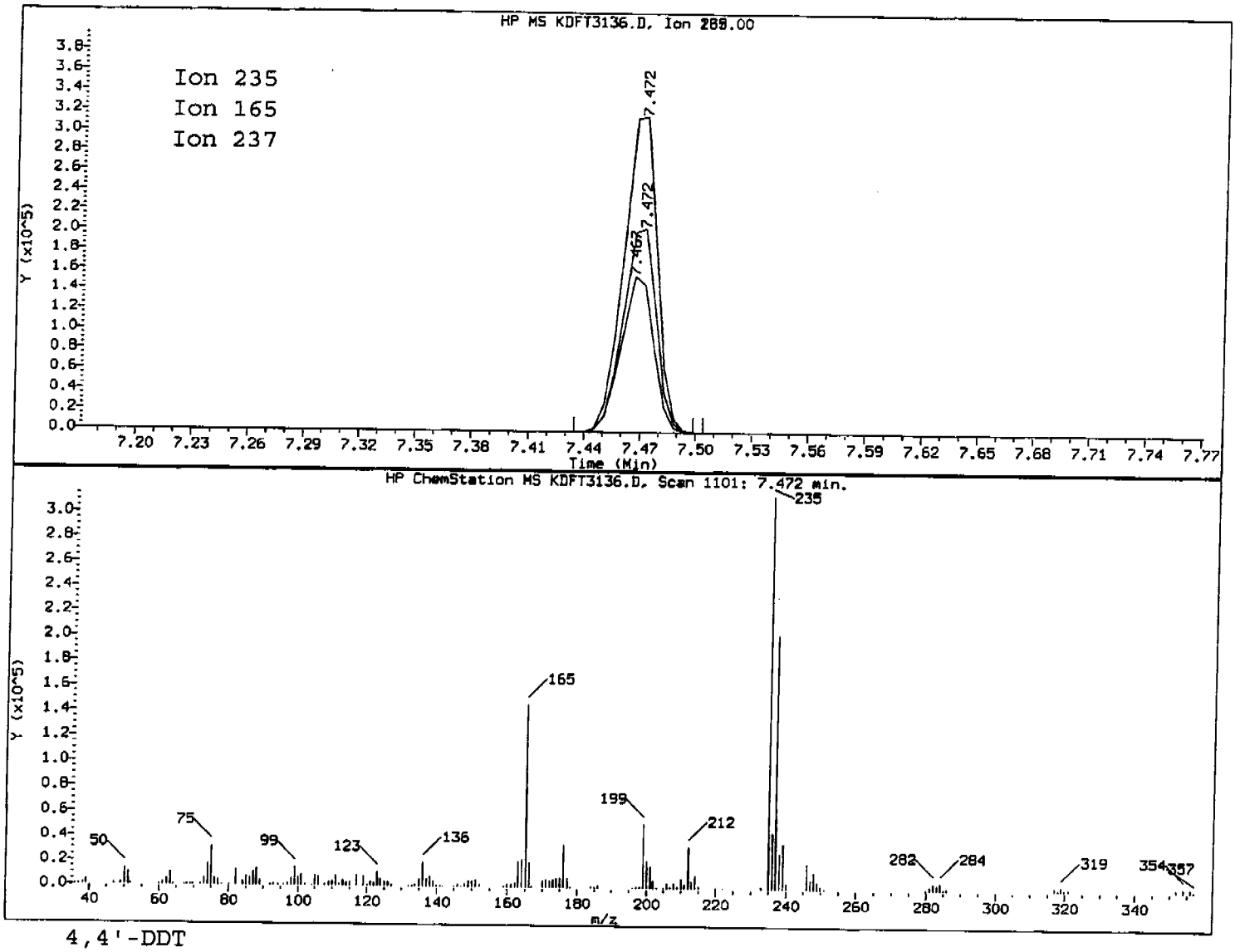
4,4'-DDD
========
Exp. RT = 7.074
Found RT = 7.055

Mass	Area	Ratio
235	3048	100.00
249	6148	201.72
152	2277	74.71

STL ST. LOUIS

Report Date: 05/16/2005 10:10

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m\resolut.m Inst:
Injection Date: 14-MAY-2005 08:36 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



4,4'-DDT

Exp. RT = 7.478
Found RT = 7.472

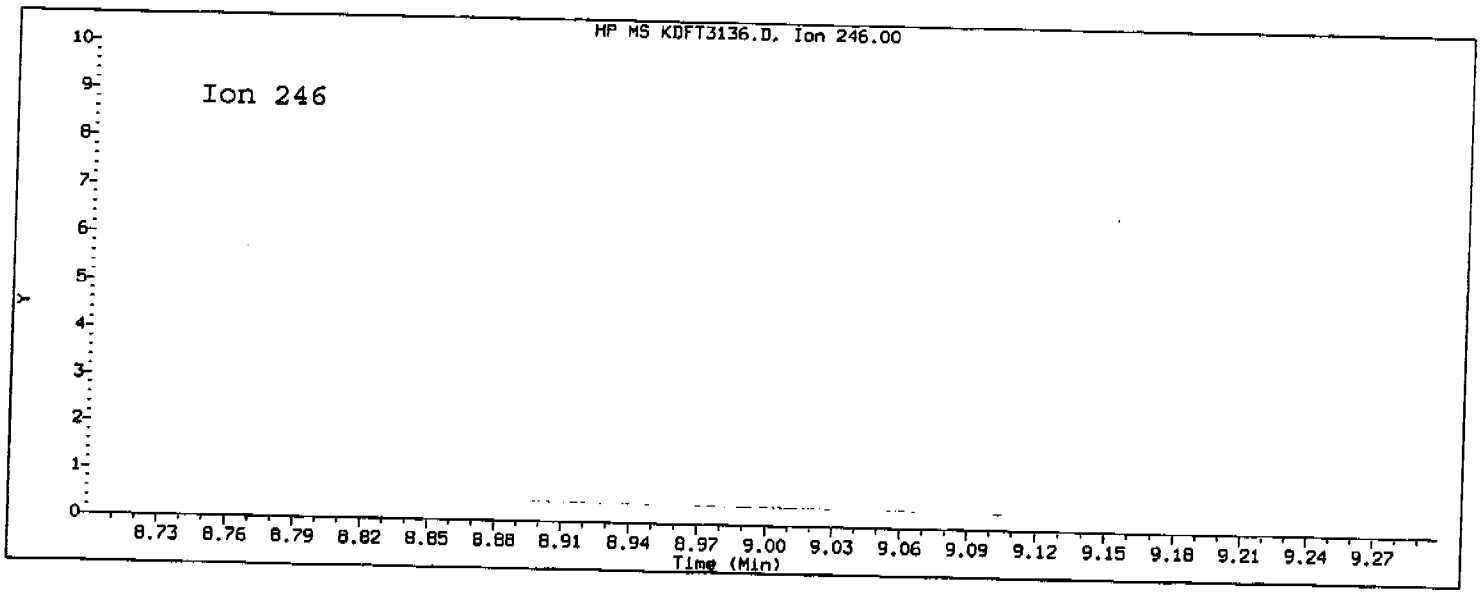
Mass	Area	Ratio
235	394051	100.00
165	189423	48.07
237	252444	64.06

LOT# F5D210380

STL ST. LOUIS

Report Date: 05/16/2005 10:10

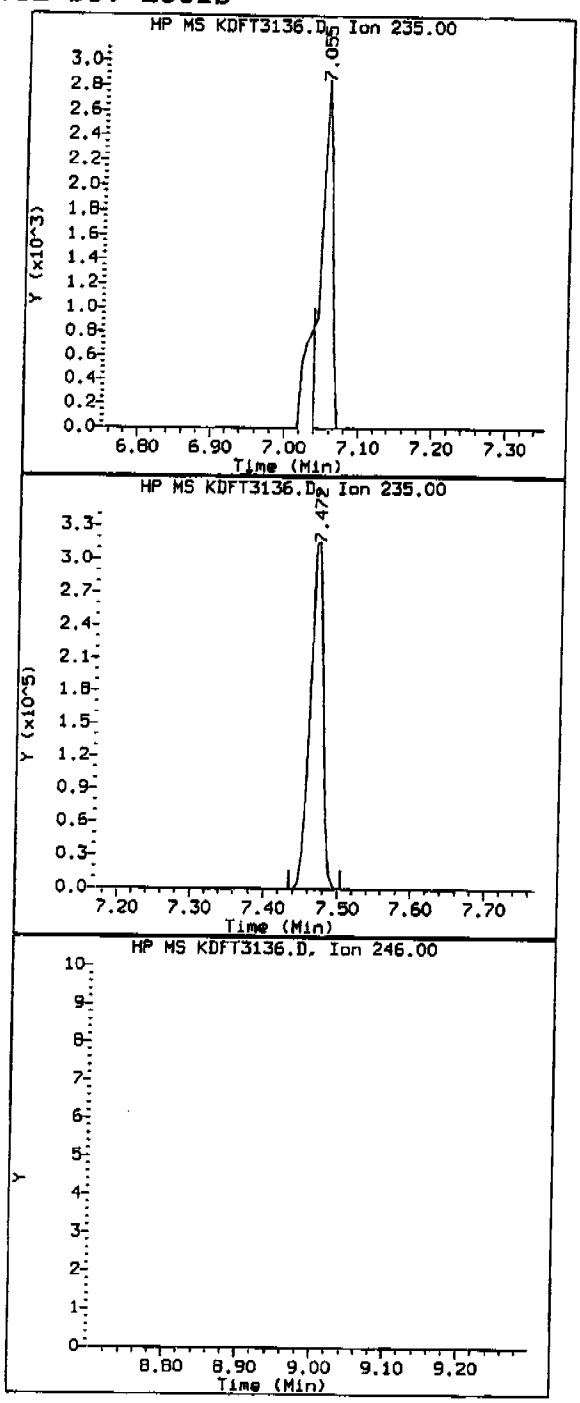
Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m\resolut.m Inst:
Injection Date: 14-MAY-2005 08:36 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



4,4'-DDE
========
Exp. RT = 9.000
Found RT = 0.000

Mass	Area	Ratio
246	0	0.00

LOT# F5D210380



Compound: 4,4'-DDD
Quant Mass: 235
RT: 7.055
Area: 3048

Compound: 4,4'-DDT
Quant Mass: 235
RT: 7.472
Area: 394051

Compound: 4,4'-DDE
Quant Mass: 246
RT: 0.000
Area: 0

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	394051			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	3048	0.8	15.0	PASS
4,4-DDD + DDE	3048	0.8	15.0	PASS

****
TUNE SAMPLE *** PASSED *** DDT BREAKDOWN TEST
****

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3139A.D
Report Date: 16-May-2005 10:07

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i
Lab File ID: KCAL3139A.D
Analysis Type: WATER
Lab Sample ID: SSTD050ICV
Method: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270K.m

Injection Date: 14-MAY-2005 11:35
Init. Cal. Date(s): 28-APR-2005 13-MAY-2005
Init. Cal. Times: 11:41 15:58
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
3 Pyridine	1.16029	1.13775	0.010	1.94327	60.00000	Averaged
4 N-Nitrosodimethylamine	0.63867	0.75524	0.010	-18.25195	60.00000	Averaged
16 Phenol	1.66627	1.41584	0.010	15.02935	20.00000	Averaged
17 Aniline	2.04739	1.57265	0.010	23.18777	60.00000	Averaged
19 Bis(2-chloroethyl)ether	1.40863	1.30386	0.010	7.43808	60.00000	Averaged
20 2-Chlorophenol	1.33233	1.14469	0.010	14.08377	60.00000	Averaged
21 1,3-Dichlorobenzene	1.54444	1.43681	0.010	6.96869	60.00000	Averaged
23 1,4-Dichlorobenzene	1.63455	1.51781	0.010	7.14217	20.00000	Averaged
25 Benzyl Alcohol	0.62129	0.63601	0.010	-2.36918	60.00000	Averaged
26 1,2-Dichlorobenzene	1.50782	1.37336	0.010	8.91737	60.00000	Averaged
27 2-Methylphenol	1.08964	0.94117	0.010	13.62539	60.00000	Averaged
28 2,2-oxybis(1-Chloropropane)	1.47745	1.40382	0.010	4.98360	60.00000	Averaged
29 3 and 4-Methylphenol	1.21703	1.07243	0.010	11.88179	60.00000	Averaged
32 N-Nitrosodinpropylamine	1.13856	1.21319	0.050	-6.55539	60.00000	Averaged
35 Hexachloroethane	0.70584	0.66550	0.010	5.71457	60.00000	Averaged
37 Nitrobenzene	0.55999	0.53697	0.010	4.11084	60.00000	Averaged
39 Isophorone	0.72789	0.74174	0.010	-1.90262	60.00000	Averaged
40 2-Nitrophenol	0.20075	0.18496	0.010	7.86287	20.00000	Averaged
41 2,4-Dimethylphenol	0.41875	0.38660	0.010	7.67867	60.00000	Averaged
42 Bis(2-chloroethoxy)methane	0.46523	0.43849	0.010	5.74843	60.00000	Averaged
44 Benzoic Acid	0.18452	0.17182	0.010	6.87785	60.00000	Averaged
45 2,4-Dichlorophenol	0.31257	0.28390	0.010	9.17252	20.00000	Averaged
47 1,2,4-Trichlorobenzene	0.38873	0.36137	0.010	7.03877	60.00000	Averaged
50 Naphthalene	1.11608	1.02497	0.010	8.16347	60.00000	Averaged
51 4-Chloroaniline	0.44972	0.35549	0.010	20.95202	60.00000	Averaged
54 Hexachlorobutadiene	0.28112	0.25345	0.050	9.84229	20.00000	Averaged
59 4-Chloro-3-Methylphenol	0.35947	0.33428	0.010	7.00757	20.00000	Averaged
62 2-Methylnaphthalene	0.97836	0.90745	0.010	7.24796	60.00000	Averaged
66 Hexachlorocyclopentadiene	0.42077	0.48640	0.010	-15.59650	60.00000	Averaged
67 2,4,6-Trichlorophenol	0.46738	0.42509	0.010	9.04797	20.00000	Averaged
68 2,4,5-Trichlorophenol	0.48773	0.42951	0.010	11.93687	60.00000	Averaged
72 2-Chloronaphthalene	1.34443	1.22540	0.010	8.85362	60.00000	Averaged
73 2-Nitroaniline	0.54166	0.50555	0.010	6.66805	60.00000	Averaged
76 Dimethylphthalate	1.52720	1.39312	0.010	8.77927	60.00000	Averaged
79 Acenaphthylene	2.01986	1.93295	0.010	4.30293	60.00000	Averaged
80 2,6-Dinitrotoluene	0.32003	0.29524	0.010	7.74624	60.00000	Averaged
81 3-Nitroaniline	0.31774	0.28138	0.010	11.44196	60.00000	Averaged
83 Acenaphthene	1.23225	1.15891	0.010	5.95223	20.00000	Averaged
84 2,4-Dinitrophenol	0.14071	0.14540	0.050	-3.33066	60.00000	Averaged
85 4-Nitrophenol	0.28633	0.26627	0.050	7.00638	60.00000	Averaged
86 Dibenzofuran	1.84955	1.64550	0.010	11.03238	60.00000	Averaged
88 2,4-Dinitrotoluene	0.40331	0.39744	0.010	1.45603	60.00000	Averaged

Cont 051,6105

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3139A.D
Report Date: 16-May-2005 10:07

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i
Lab File ID: KCAL3139A.D
Analysis Type: WATER
Lab Sample ID: SSTD050ICV
Method: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270K.m

Injection Date: 14-MAY-2005 11:35
Init. Cal. Date(s): 28-APR-2005 13-MAY-2005
Init. Cal. Times: 11:41 15:58
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
93 Diethylphthalate	1.52853	1.44782	0.010	5.28049	60.00000	Averaged
94 Fluorene	1.48498	1.41628	0.010	4.62669	60.00000	Averaged
95 4-Chlorophenyl-phenylether	0.83775	0.73813	0.010	11.89138	60.00000	Averaged
98 4-Nitroaniline	0.29218	0.27112	0.010	7.20781	60.00000	Averaged
99 4,6-Dinitro-2-methylphenol	0.14652	0.14745	0.010	-0.63423	60.00000	Averaged
100 N-Nitrosodiphenylamine	0.60943	0.59367	0.010	2.58671	20.00000	Averaged
102 Azobenzene	1.32489	1.26192	0.010	4.75290	60.00000	Averaged
109 4-Bromophenyl-phenylether	0.29091	0.25877	0.010	11.04619	60.00000	Averaged
112 Hexachlorobenzene	0.30387	0.28059	0.010	7.66266	60.00000	Averaged
117 Pentachlorophenol	0.13627	0.11625	0.010	14.69184	20.00000	Averaged
122 Phenanthrene	1.22846	1.07876	0.010	12.18558	60.00000	Averaged
124 Anthracene	1.18214	1.04970	0.010	11.20367	60.00000	Averaged
126 Carbazole	0.97957	0.86352	0.010	11.84782	60.00000	Averaged
129 Di-n-Butylphthalate	1.29964	1.23476	0.010	4.99260	60.00000	Averaged
134 Fluoranthene	1.26119	1.17664	0.010	6.70389	20.00000	Averaged
135 Benzidine	0.55071	0.07389	0.010	86.58328	100	Averaged
137 Pyrene	1.63816	1.46448	0.010	10.60240	60.00000	Averaged
146 Butylbenzylphthalate	0.64258	0.63546	0.010	1.10656	60.00000	Averaged
150 Benzo(a)Anthracene	1.38086	1.28615	0.010	6.85931	60.00000	Averaged
152 3,3'-Dichlorobenzidine	0.52188	0.43086	0.010	17.44028	60.00000	Averaged
154 Chrysene	1.30690	1.18321	0.010	9.46432	60.00000	Averaged
155 bis(2-ethylhexyl)Phthalate	0.79653	0.75810	0.010	4.82389	60.00000	Averaged
158 Di-n-octylphthalate	1.65005	1.71039	0.010	-3.65727	20.00000	Averaged
160 Benzo(b)fluoranthene	1.58452	1.51176	0.010	4.59164	60.00000	Averaged
161 Benzo(k)fluoranthene	1.55910	1.59484	0.010	-2.29210	60.00000	Averaged
165 Benzo(a)pyrene	1.40867	1.33158	0.010	5.47195	20.00000	Averaged
173 Indeno(1,2,3-cd)pyrene	1.32604	1.22423	0.010	7.67733	60.00000	Averaged
174 Dibenzo(a,h)anthracene	1.28029	1.25124	0.010	2.26884	60.00000	Averaged
177 Benzo(g,h,i)perylene	1.16434	1.13873	0.010	2.20007	60.00000	Averaged

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Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B/KCAL3139A.D
Report Date: 05/16/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3139A.D
Analysis Type: WATER

Injection Date: 14-MAY-2005 11:35
Lab Sample ID: SSTD050ICV
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270

COMPOUND	%D
Pyridine	1.9
N-Nitrosodimethylamine	18.3
Aniline	23.2
Bis(2-chloroethyl)ether	7.4
Phenol	15.0
2-Chlorophenol	14.1
1,3-Dichlorobenzene	7.0
1,4-Dichlorobenzene	7.1
1,2-Dichlorobenzene	8.9
Benzyl Alcohol	2.4
2,2-oxybis(1-Chloropropane)	5.0
2-Methylphenol	13.6
Hexachloroethane	5.7
N-Nitrosodinpropylamine	6.6
3 and 4-Methylphenol	11.9
Nitrobenzene	4.1
Isophorone	1.9
2-Nitrophenol	7.9
2,4-Dimethylphenol	7.7
Bis(2-chloroethoxy)methane	5.7
2,4-Dichlorophenol	9.2
1,2,4-Trichlorobenzene	7.0
Benzoic Acid	6.9
Naphthalene	8.2
4-Chloroaniline	21.0
Hexachlorobutadiene	9.8
4-Chloro-3-Methylphenol	7.0
2-Methylnaphthalene	7.2
Hexachlorocyclopentadiene	15.6
2,4,6-Trichlorophenol	9.0
2,4,5-Trichlorophenol	11.9
2-Chloronaphthalene	8.9
2-Nitroaniline	6.7
Dimethylphthalate	8.8
Acenaphthylene	4.3
2,6-Dinitrotoluene	7.7
Acenaphthene	6.0
3-Nitroaniline	11.4
2,4-Dinitrophenol	3.3

LOT# F5D210380

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B/KCAL3139A.D
Report Date: 05/16/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3139A.D
Analysis Type: WATER

Injection Date: 14-MAY-2005 11:35
Lab Sample ID: SSTD050ICV
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050514A

COMPOUND	%D
Dibenzofuran	11.0
2,4-Dinitrotoluene	1.5
4-Nitrophenol	7.0
Fluorene	4.6
Diethylphthalate	5.3
4-Chlorophenyl-phenylether	11.9
4-Nitroaniline	7.2
4,6-Dinitro-2-methylphenol	0.6
N-Nitrosodiphenylamine	2.6
Azobenzene	4.8
4-Bromophenyl-phenylether	11.0
Hexachlorobenzene	7.7
Pentachlorophenol	14.7
Phenanthrene	12.2
Anthracene	11.2
Carbazole	11.8
Di-n-Butylphthalate	5.0
Fluoranthene	6.7
Benzidine	86.6
Pyrene	10.6
Butylbenzylphthalate	1.1
Benzo(a)Anthracene	6.9
Chrysene	9.5
3,3'-Dichlorobenzidine	17.4
bis(2-ethylhexyl)Phthalate	4.8
Di-n-octylphthalate	3.7
Benzo(b)fluoranthene	4.6
Benzo(k)fluoranthene	2.3
Benzo(a)pyrene	5.5
Indeno(1,2,3-cd)pyrene	7.7
Dibenzo(a,h)anthracene	2.3
Benzo(g,h,i)perylene	2.2

The average of %D's in the continuing calibration is 9.1

05/16/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3139A.D
Report Date: 16-May-2005 10:07

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GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3139A.D
Lab Smp Id: SSTD050ICV Client Smp ID: SSTD050ICV
Inj Date : 14-MAY-2005 11:35
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD050ICV
Misc Info : OP052-05 2X
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270K.m
Meth Date : 16-May-2005 10:04 hongs Quant Type: ISTD
Cal Date : 13-MAY-2005 15:58 Cal File: KCAL3134.D
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270ICV.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
3	Pyridine	79	1.785	1.785	(0.395)	354193	50.0000	49.03
4	N-Nitrosodimethylamine	74	1.806	1.806	(0.400)	235114	50.0000	59.12(M)
16	Phenol	94	4.317	4.317	(0.955)	440768	50.0000	42.48
17	Aniline	93	4.221	4.221	(0.934)	489583	50.0000	38.41
19	Bis(2-chloroethyl)ether	93	4.290	4.290	(0.949)	405906	50.0000	46.28
20	2-Chlorophenol	128	4.359	4.359	(0.965)	356354	50.0000	42.96
21	1,3-Dichlorobenzene	146	4.472	4.472	(0.989)	447296	50.0000	46.52
* 22	1,4-Dichlorobenzene-d4	152	4.520	4.520	(1.000)	249049	40.0000	
23	1,4-Dichlorobenzene	146	4.541	4.541	(1.005)	472510	50.0000	46.43
25	Benzyl Alcohol	108	4.771	4.771	(1.056)	197997	50.0000	51.18
26	1,2-Dichlorobenzene	146	4.760	4.760	(1.053)	427543	50.0000	45.54
27	2-Methylphenol	108	4.984	4.984	(1.103)	292997	50.0000	43.19
28	2,2-oxybis(1-Chloropropane)	45	4.926	4.926	(1.090)	437025	50.0000	47.51
29	3 and 4-Methylphenol	108	5.171	5.171	(1.144)	667718	100.000	88.12
32	N-Nitrosodinpropylamine	70	5.118	5.118	(1.132)	377681	50.0000	53.28
35	Hexachloroethane	117	5.113	5.113	(1.131)	207178	50.0000	47.14
37	Nitrobenzene	77	5.268	5.268	(0.864)	555765	50.0000	47.94
39	Isophorone	82	5.561	5.561	(0.912)	767710	50.0000	50.95
40	2-Nitrophenol	139	5.668	5.668	(0.930)	191440	50.0000	46.07
41	2,4-Dimethylphenol	107	5.796	5.796	(0.951)	400132	50.0000	46.16
42	Bis(2-chloroethoxy)methane	93	5.871	5.871	(0.963)	453839	50.0000	47.12

05/16/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3139A.D
Report Date: 16-May-2005 10:07

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	44 Benzoic Acid	122	6.090	6.090	(0.999)	177840	50.0000	46.56
	45 2,4-Dichlorophenol	162	6.010	6.010	(0.986)	293839	50.0000	45.41
	47 1,2,4-Trichlorobenzene	180	6.053	6.053	(0.993)	374017	50.0000	46.48
*	48 Naphthalene-d8	136	6.096	6.096	(1.000)	828008	40.0000	
	50 Naphthalene	128	6.122	6.122	(1.004)	1060856	50.0000	45.92
	51 4-Chloroaniline	127	6.272	6.272	(1.029)	367937	50.0000	39.52
	54 Hexachlorobutadiene	225	6.368	6.368	(1.045)	262325	50.0000	45.08
	59 4-Chloro-3-Methylphenol	107	7.047	7.047	(1.156)	345980	50.0000	46.50
	62 2-Methylnaphthalene	142	7.079	7.079	(1.161)	939218	50.0000	46.38(M)
	66 Hexachlorocyclopentadiene	237	7.420	7.420	(0.846)	277192	50.0000	57.80
	67 2,4,6-Trichlorophenol	196	7.607	7.607	(0.868)	242252	50.0000	45.48
	68 2,4,5-Trichlorophenol	196	7.714	7.714	(0.880)	244773	50.0000	44.03
	72 2-Chloronaphthalene	162	7.816	7.816	(0.892)	698337	50.0000	45.57
	73 2-Nitroaniline	65	8.115	8.115	(0.926)	288104	50.0000	46.66
	76 Dimethylphthalate	163	8.484	8.484	(0.968)	793922	50.0000	45.61
	79 Acenaphthylene	152	8.500	8.500	(0.970)	1101560	50.0000	47.85
	80 2,6-Dinitrotoluene	165	8.601	8.601	(0.981)	168255	50.0000	46.13
	81 3-Nitroaniline	138	8.831	8.831	(1.007)	160355	50.0000	44.28
*	82 Acenaphthene-d10	164	8.767	8.767	(1.000)	455909	40.0000	
	83 Acenaphthene	153	8.820	8.820	(1.006)	660445	50.0000	47.02
	84 2,4-Dinitrophenol	184	9.012	9.012	(1.028)	82861	50.0000	51.66
	85 4-Nitrophenol	109	9.376	9.376	(1.069)	151743	50.0000	46.50(M)
	86 Dibenzofuran	168	9.098	9.098	(1.038)	937747	50.0000	44.48
	88 2,4-Dinitrotoluene	165	9.274	9.274	(1.058)	226494	50.0000	49.27
	93 Diethylphthalate	149	9.744	9.744	(1.112)	825093	50.0000	47.36
	94 Fluorene	166	9.707	9.707	(1.107)	807118	50.0000	47.69
	95 4-Chlorophenyl-phenylether	204	9.760	9.760	(1.113)	420649	50.0000	44.05
	98 4-Nitroaniline	138	9.953	9.953	(1.135)	154506	50.0000	46.40
	99 4,6-Dinitro-2-methylphenol	198	10.001	10.001	(0.876)	143414	50.0000	50.32
	100 N-Nitrosodiphenylamine	169	10.027	10.027	(0.878)	577401	50.0000	48.71
	102 Azobenzene	77	10.043	10.043	(0.879)	1227339	50.0000	47.62
	109 4-Bromophenyl-phenylether	248	10.642	10.642	(0.932)	251683	50.0000	44.48
	112 Hexachlorobenzene	284	10.866	10.866	(0.951)	272897	50.0000	46.17
	117 Pentachlorophenol	266	11.277	11.277	(0.987)	113066	50.0000	42.65
*	121 Phenanthrene-d10	188	11.422	11.422	(1.000)	778080	40.0000	
	122 Phenanthrene	178	11.464	11.464	(1.004)	1049206	50.0000	43.91
	124 Anthracene	178	11.545	11.545	(1.011)	1020939	50.0000	44.40
	126 Carbazole	167	11.951	11.951	(1.046)	839856	50.0000	44.08
	129 Di-n-Butylphthalate	149	12.837	12.837	(1.124)	1200926	50.0000	47.50
	134 Fluoranthene	202	13.751	13.751	(1.204)	1144404	50.0000	46.65
	135 Benzidine	184	14.152	14.152	(0.854)	57239	50.0000	6.708(a)
	137 Pyrene	202	14.168	14.168	(0.855)	1134507	50.0000	44.70
	146 Butylbenzylphthalate	149	15.738	15.738	(0.949)	492285	50.0000	49.45
	150 Benzo(a)Anthracene	228	16.545	16.545	(0.998)	996358	50.0000	46.57
*	153 Chrysene-d12	240	16.577	16.577	(1.000)	619748	40.0000	
	152 3,3'-Dichlorobenzidine	252	16.641	16.641	(1.004)	333784	50.0000	41.28
	154 Chrysene	228	16.630	16.630	(1.003)	916618	50.0000	45.27
	155 bis(2-ethylhexyl)Phthalate	149	16.962	16.962	(1.023)	587292	50.0000	47.59
	158 Di-n-octylphthalate	149	18.110	18.110	(0.944)	948508	50.0000	51.83
	160 Benzo(b)fluoranthene	252	18.548	18.548	(0.967)	838355	50.0000	47.70
	161 Benzo(k)fluoranthene	252	18.591	18.591	(0.969)	884426	50.0000	51.15
	165 Benzo(a)pyrene	252	19.082	19.082	(0.995)	738437	50.0000	47.26
*	166 Perylene-d12	264	19.184	19.184	(1.000)	443644	40.0000	
	173 Indeno(1,2,3-cd)pyrene	276	20.883	20.883	(1.089)	678905	50.0000	46.16

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3139A.D
Report Date: 16-May-2005 10:07

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
174 Dibenzo(a,h)anthracene	278	20.925	20.925	(1.091)	693884	50.0000	48.86
177 Benzo(g,h,i)perylene	276	21.326	21.326	(1.112)	631486	50.0000	48.90

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3139A.D
Report Date: 16-May-2005 10:07

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

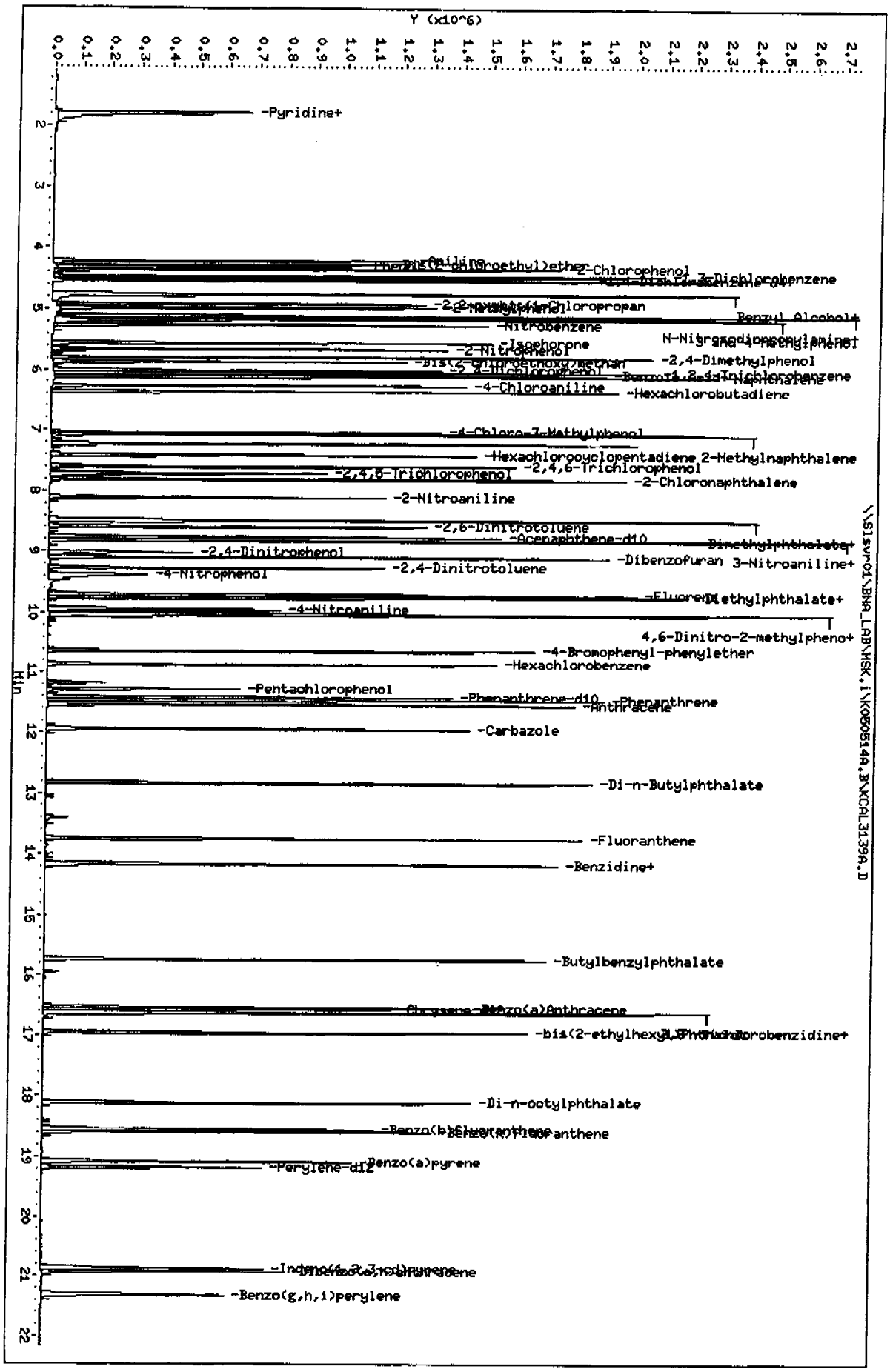
Instrument ID: MSK.i
Lab File ID: KCAL3139A.D
Lab Smp Id: SSTD050ICV
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270K.m
Misc Info: OP052-05 2X

Calibration Date: 13-MAY-2005
Calibration Time: 12:14
Client Smp ID: SSTD050ICV
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	181066	90533	362132	249049	37.55
48 Naphthalene-d8	627500	313750	1255000	828008	31.95
82 Acenaphthene-d10	358476	179238	716952	455909	27.18
121 Phenanthrene-d10	655247	327624	1310494	778080	18.75
153 Chrysene-d12	535207	267604	1070414	619748	15.80
166 Perylene-d12	427031	213516	854062	443644	3.89

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.52	4.02	5.02	4.52	-0.09
48 Naphthalene-d8	6.11	5.61	6.61	6.10	-0.15
82 Acenaphthene-d10	8.78	8.28	9.28	8.77	-0.11
121 Phenanthrene-d10	11.43	10.93	11.93	11.42	-0.08
153 Chrysene-d12	16.59	16.09	17.09	16.58	-0.09
166 Perylene-d12	19.20	18.70	19.70	19.18	-0.08

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

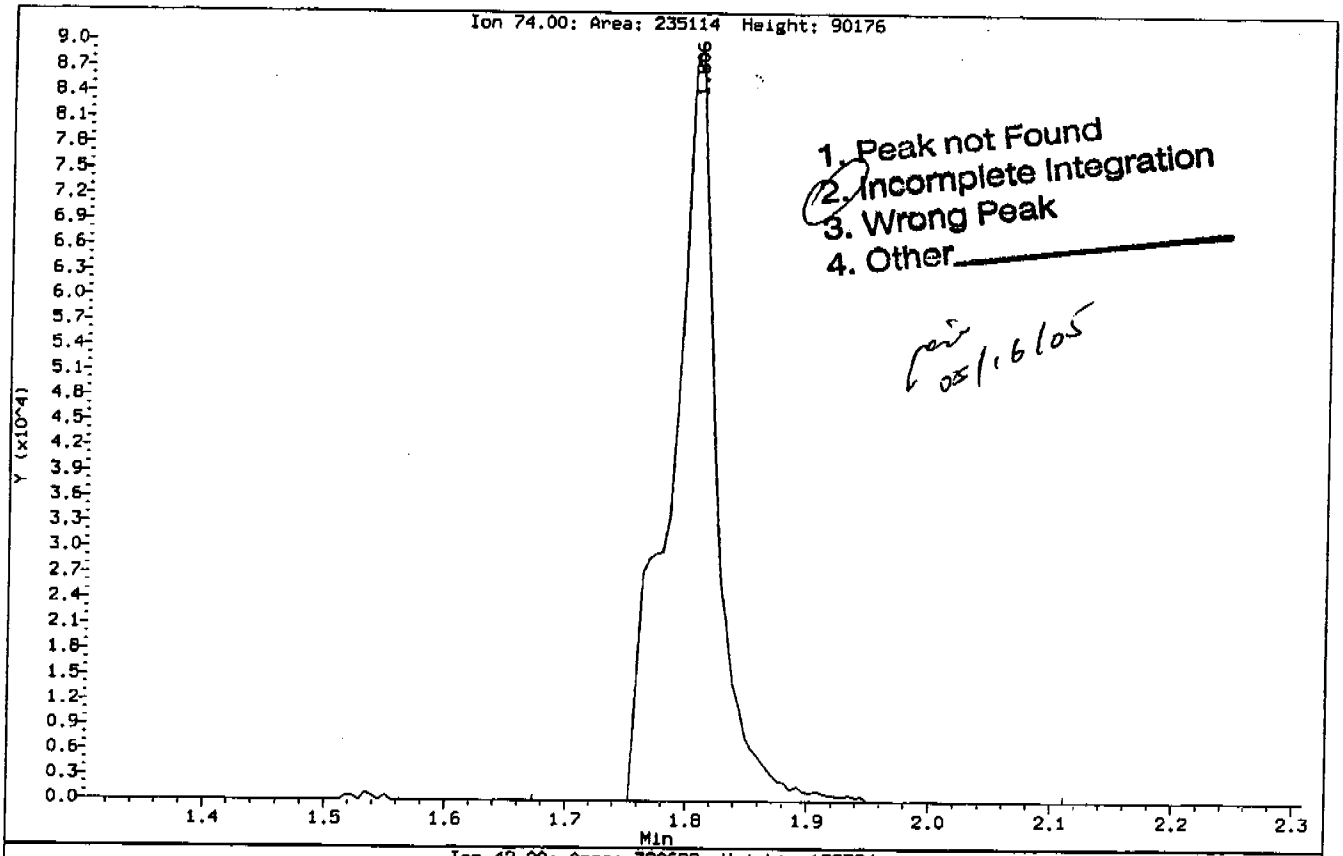


Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL31390.D
Date : 14-MAY-2005 11:35
Client ID: SSTD050ICV
Sample Info: SSTD050ICV
Volume Injected (uL): 1.0
Column phase:

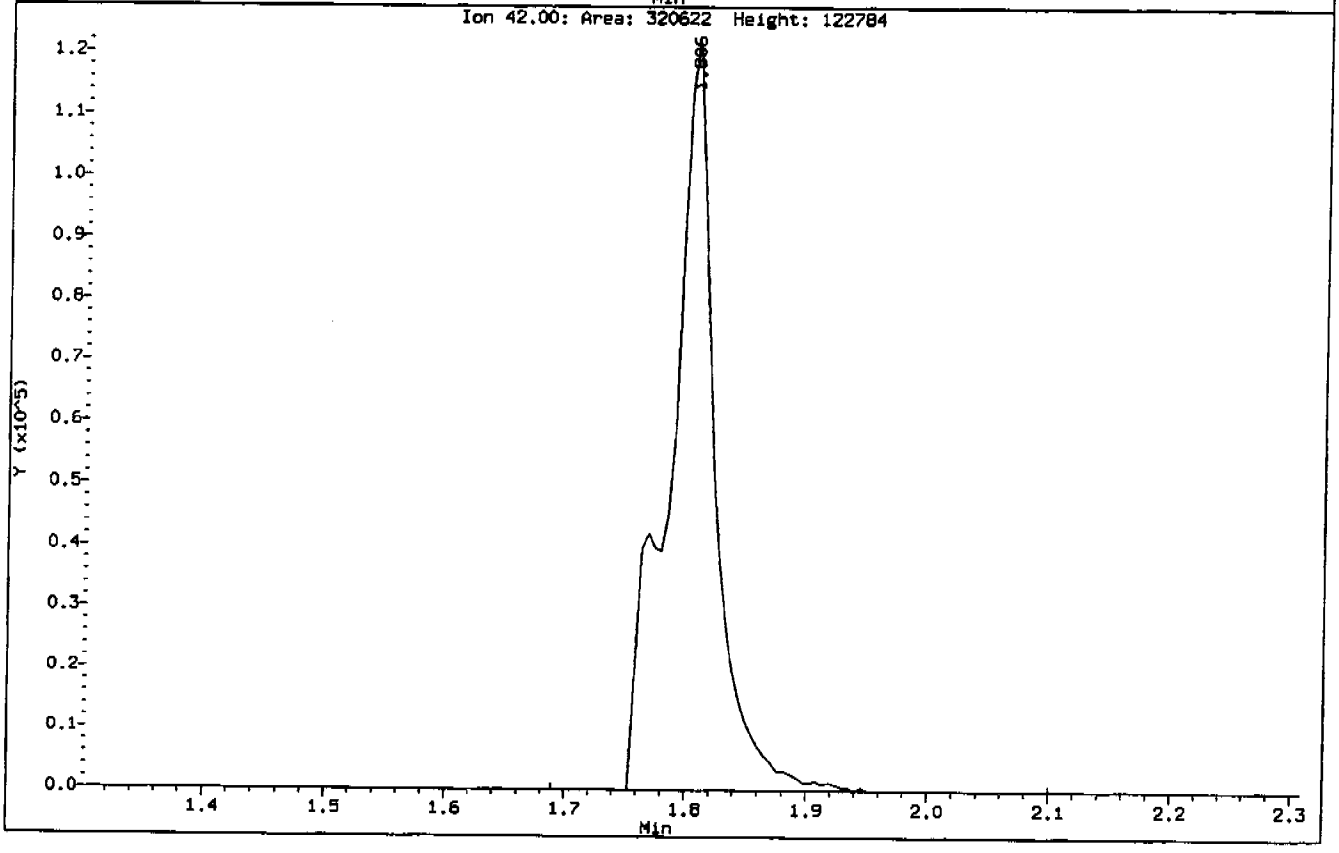
Instrument: MSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3139A.D
Injection Date: 14-MAY-2005 11:35
Instrument: MSK.i
Client Sample ID: SSTD050ICV

Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9

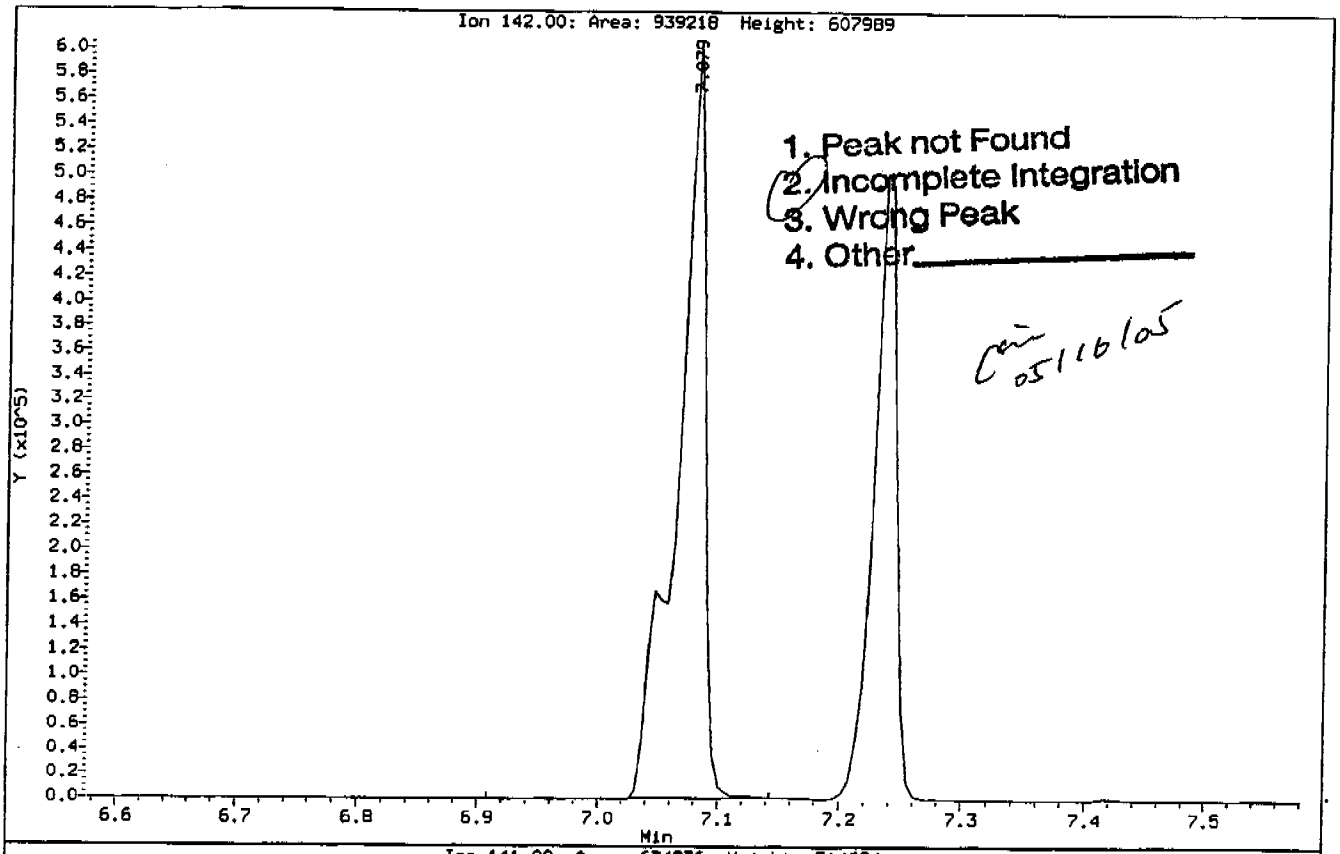


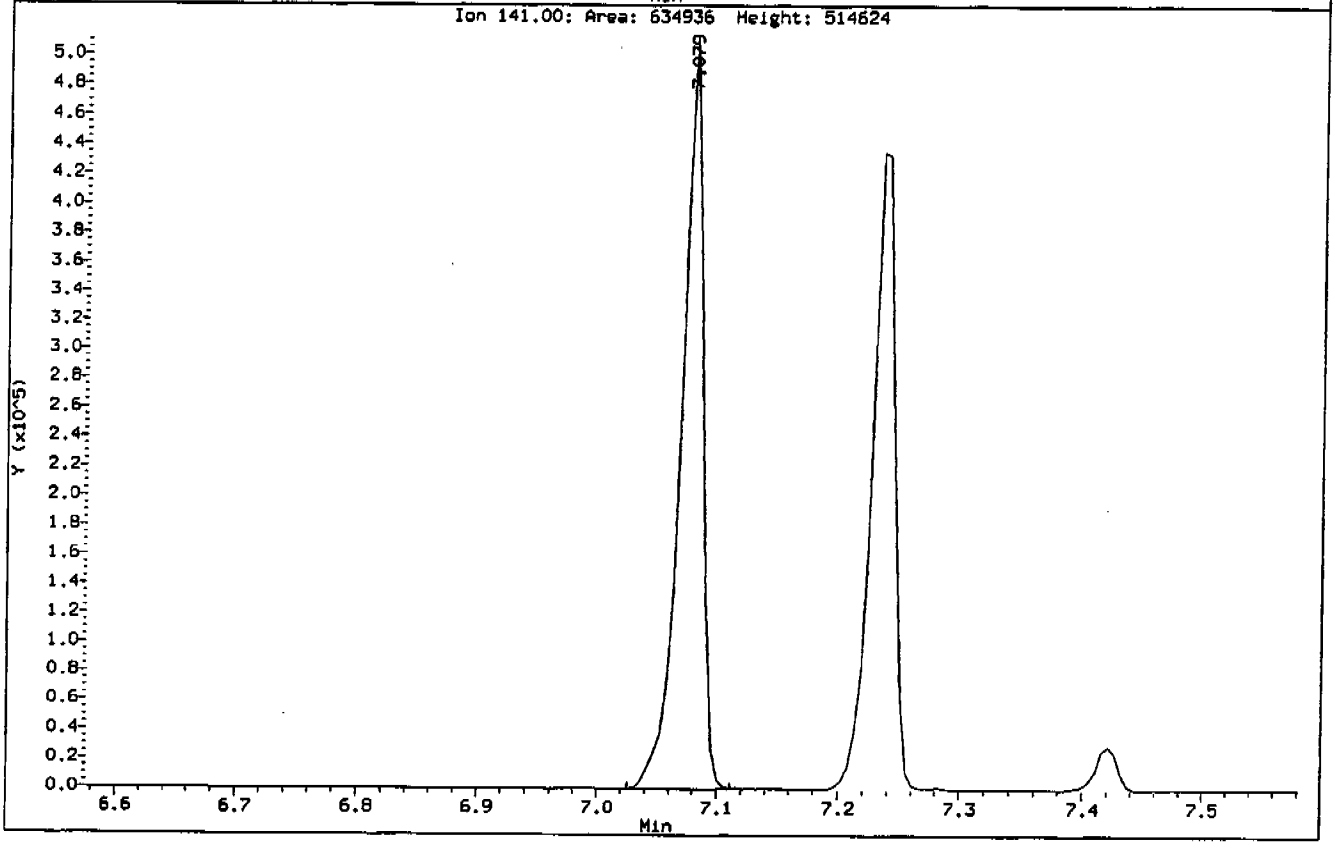
1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3139A.D
Injection Date: 14-MAY-2005 11:35
Instrument: MSK.i
Client Sample ID: SSTD050ICV

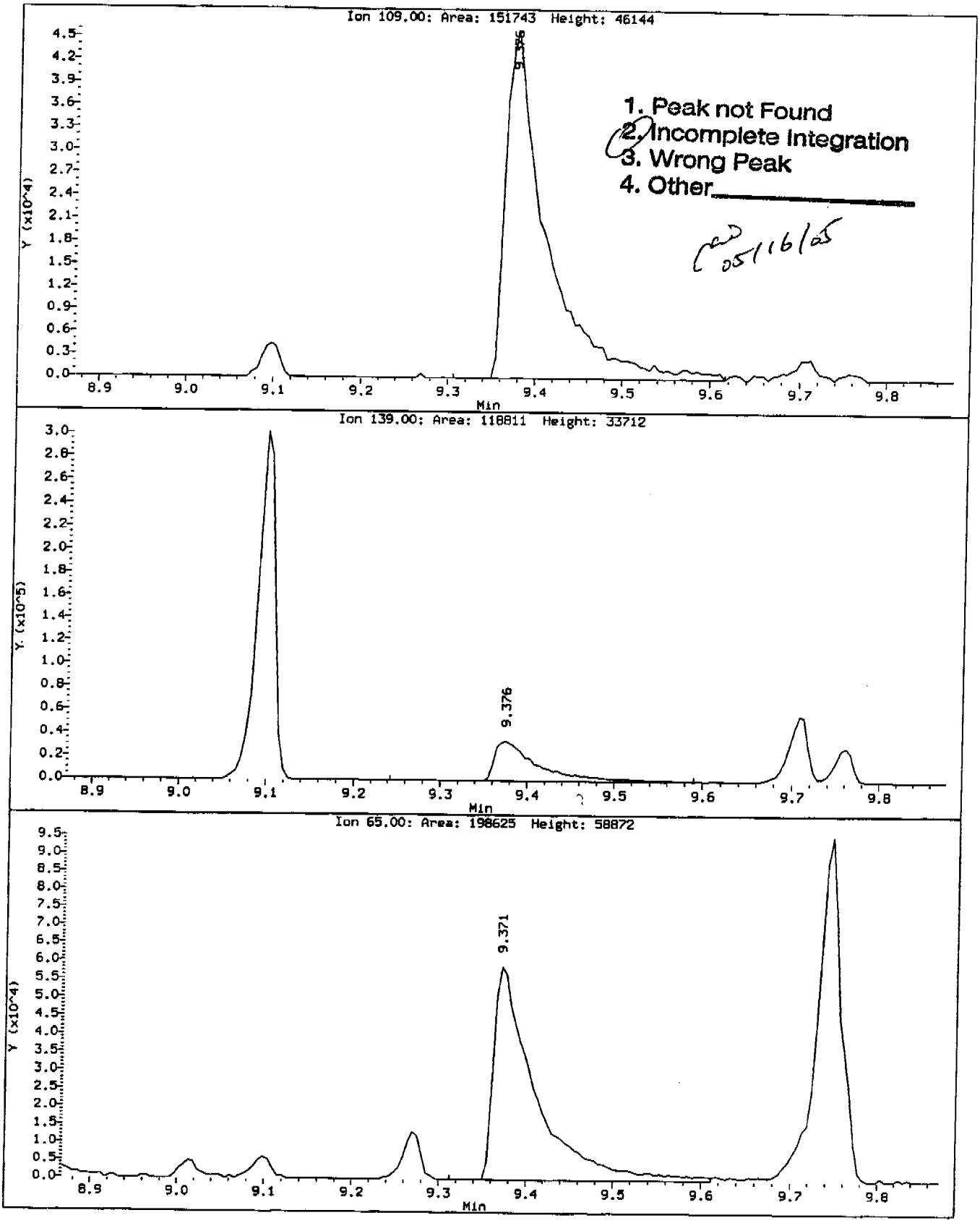
Compound: 2-Methylnaphthalene
CAS Number: 91-57-6





Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3139A.D
Injection Date: 14-MAY-2005 11:35
Instrument: MSK.i
Client Sample ID: SSTD050ICV

Compound: 4-Nitrophenol
CAS Number: 100-02-7



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DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	46.63		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	53.75		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	49.63		PASS
197	0 - 1% of mass 198	0.20		PASS
199	5 - 9% of mass 198	6.79		PASS
275	10 - 30% of mass 198	27.30		PASS
365	Greater than 1% of mass 198	3.38		PASS
441	Present, but less than mass 443	11.73	(91.21)	PASS
442	Greater than 40% of mass 198	69.63		PASS
443	17 - 23% of mass 442	12.86	(18.47)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.7361894	5.000	PASS
Benzidine	0.8528897	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	308167			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	801	0.3	15.0	PASS
4,4-DDD + DDE	801	0.3	15.0	PASS

****

Tuning Sample, //Slsvr01/BNA_LAB/MSK.i/K050509D.B/KDFT3002.D/KDFT3002.D,*** PASSED

****

5/10/05

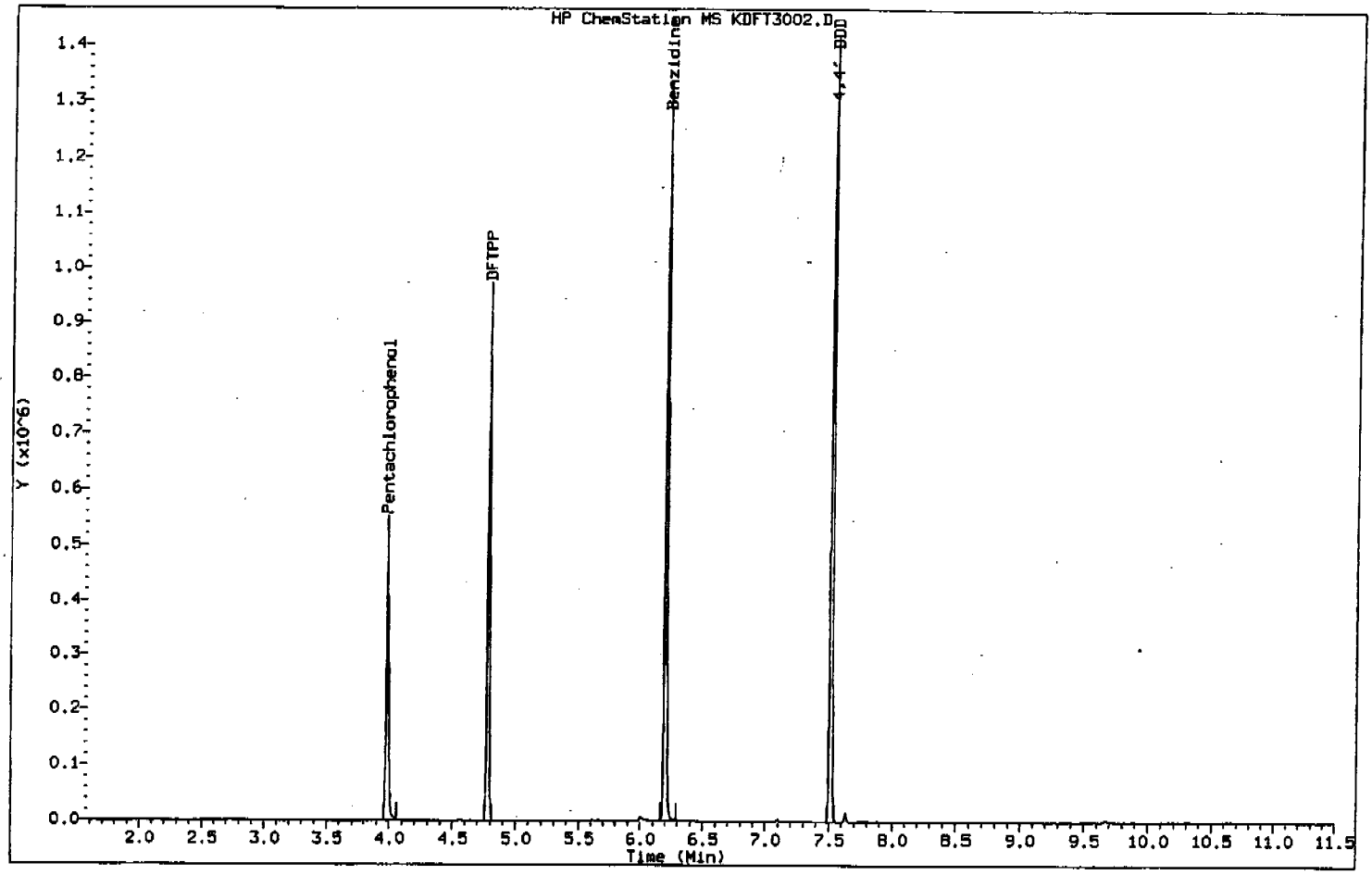
LOT# F5D210380

STL ST. LOUIS

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 05/09/2005 18:49

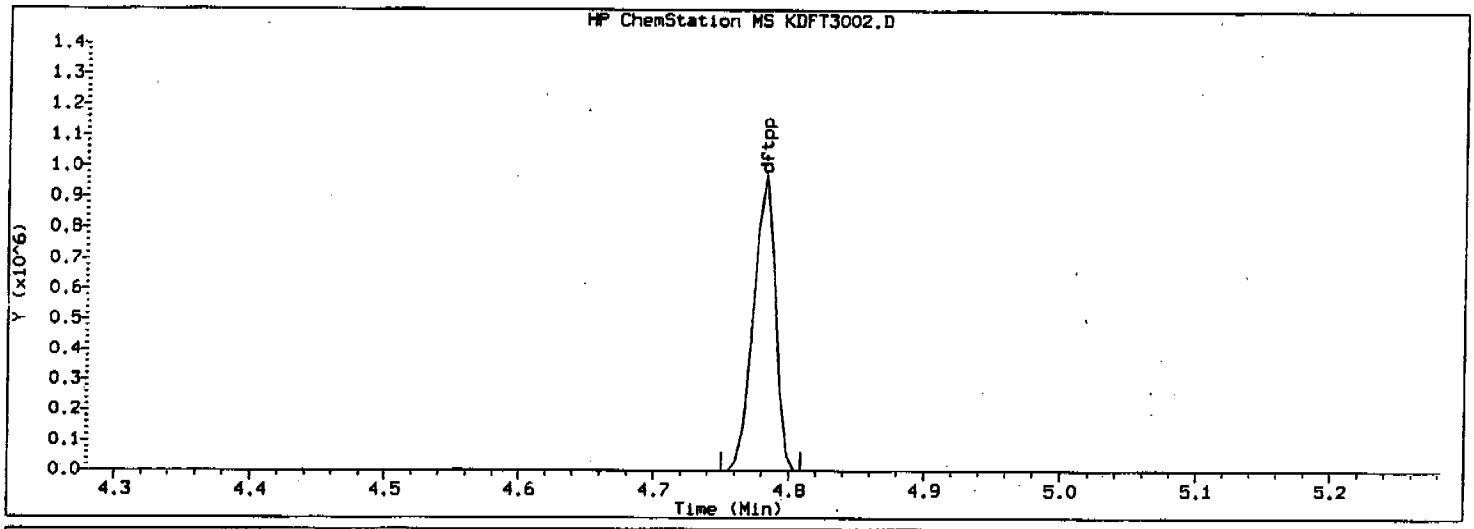
Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509D.B/KDFT3002.D/KDFT3002.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509D.B\sw846tun.m Inst: MSK
Injection Date: 09-MAY-2005 16:09 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0232-05 (50NG)

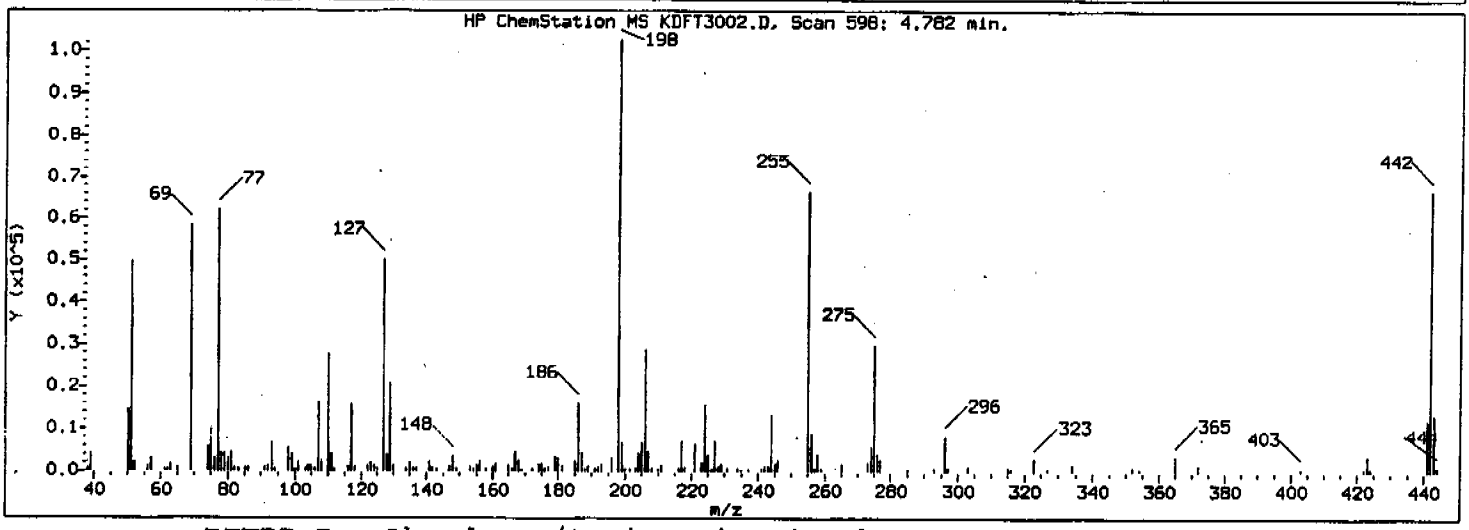


LOT# F5D210380

Report Date: 05/09/2005 18:49

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509D.B/KDFT3002.D/KDFT3002.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509D.B\sw846tun.m Inst: MSK
Injection Date: 09-MAY-2005 16:09 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0232-05 (50NG)



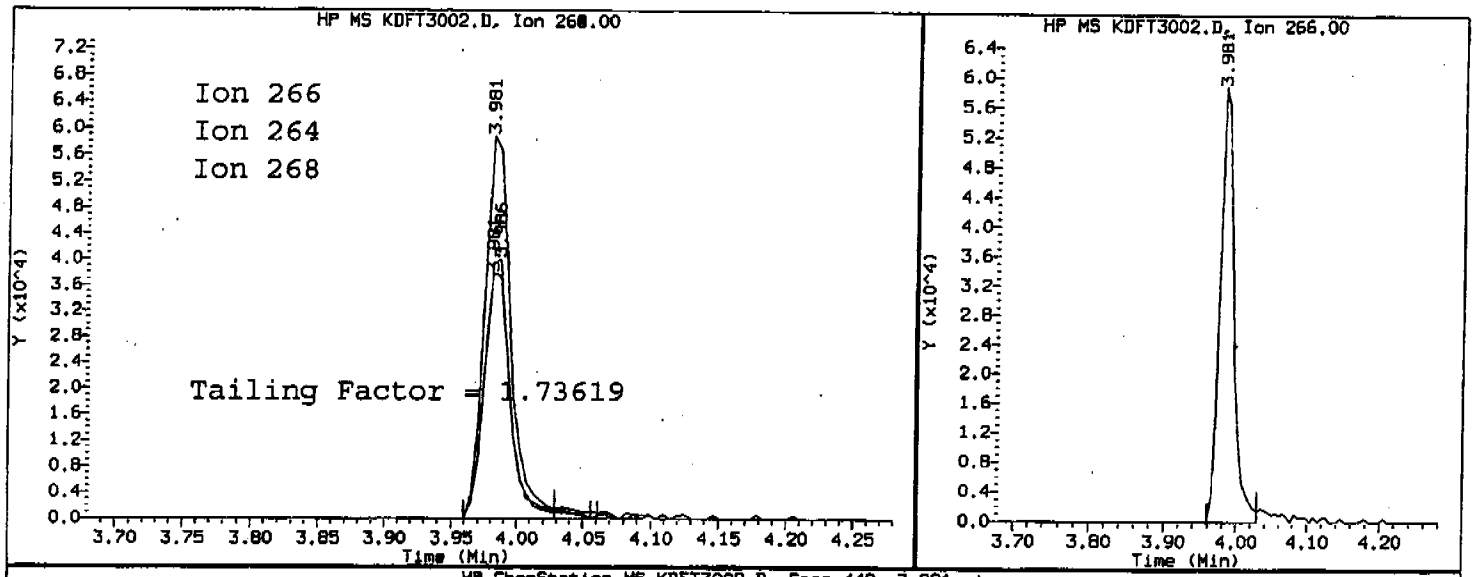


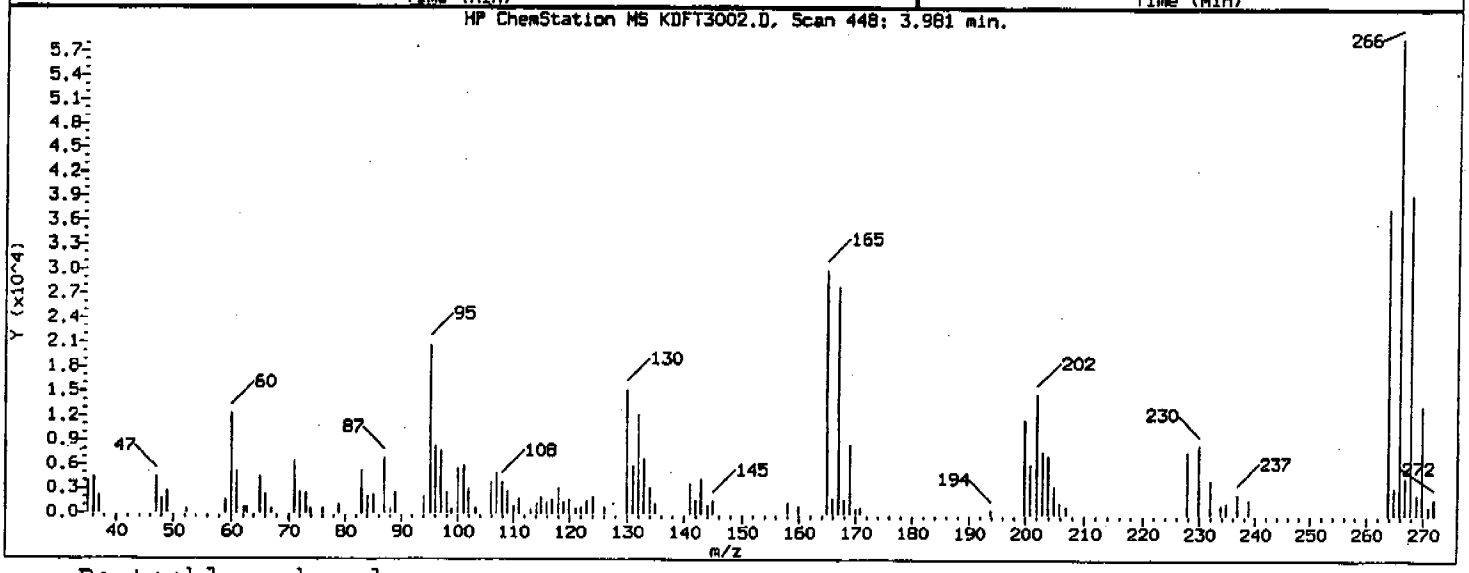
DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	46.63		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	53.75		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	49.63		PASS
197	0 - 1% of mass 198	0.20		PASS
199	5 - 9% of mass 198	6.79		PASS
275	10 - 30% of mass 198	27.30		PASS
365	Greater than 1% of mass 198	3.38		PASS
441	Present, but less than mass 443	11.73	(91.21)	PASS
442	Greater than 40% of mass 198	69.63		PASS
443	17 - 23% of mass 442	12.86	(18.47)	PASS

Report Date: 05/09/2005 18:49

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509D.B/KDFT3002.D/KDFT3002.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509D.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 16:09 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)





Pentachlorophenol
==========

Exp. RT =	3.975
Found RT =	3.981

Mass	Area	Ratio
266	82286	100.00
264	53687	65.25
268	56009	68.07

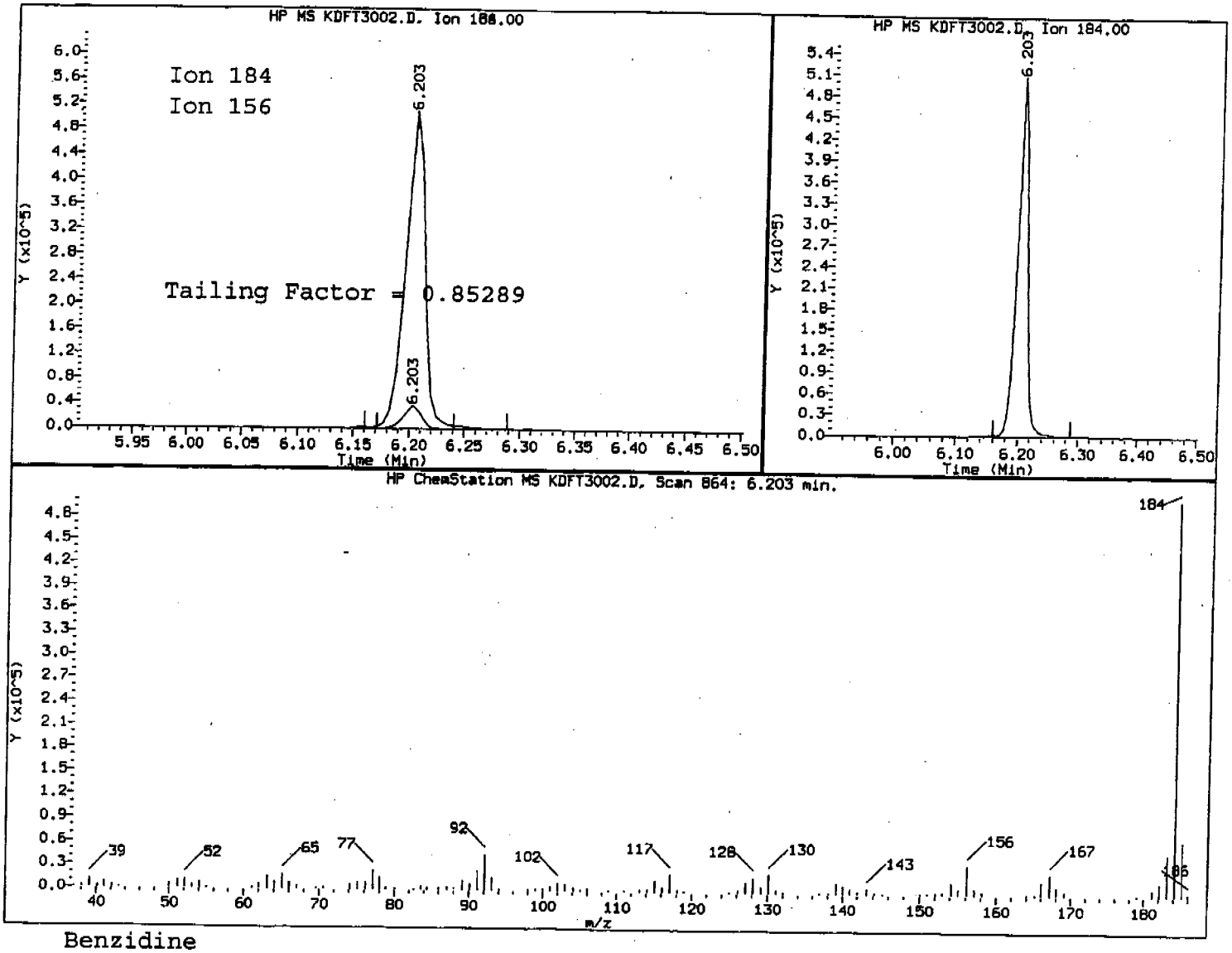
Tailing factor for Pentachlorophenol OK

Tail Factor = 1.736 Maximum Allowed = 5.0

STL ST. LOUIS

Report Date: 05/09/2005 18:49

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509D.B/KDFT3002.D/KDFT3002.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509D.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 16:09 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



Benzidine
=========
Exp. RT = 6.203
Found RT = 6.203

Mass	Area	Ratio
184	614002	100.00
156	42723	6.96

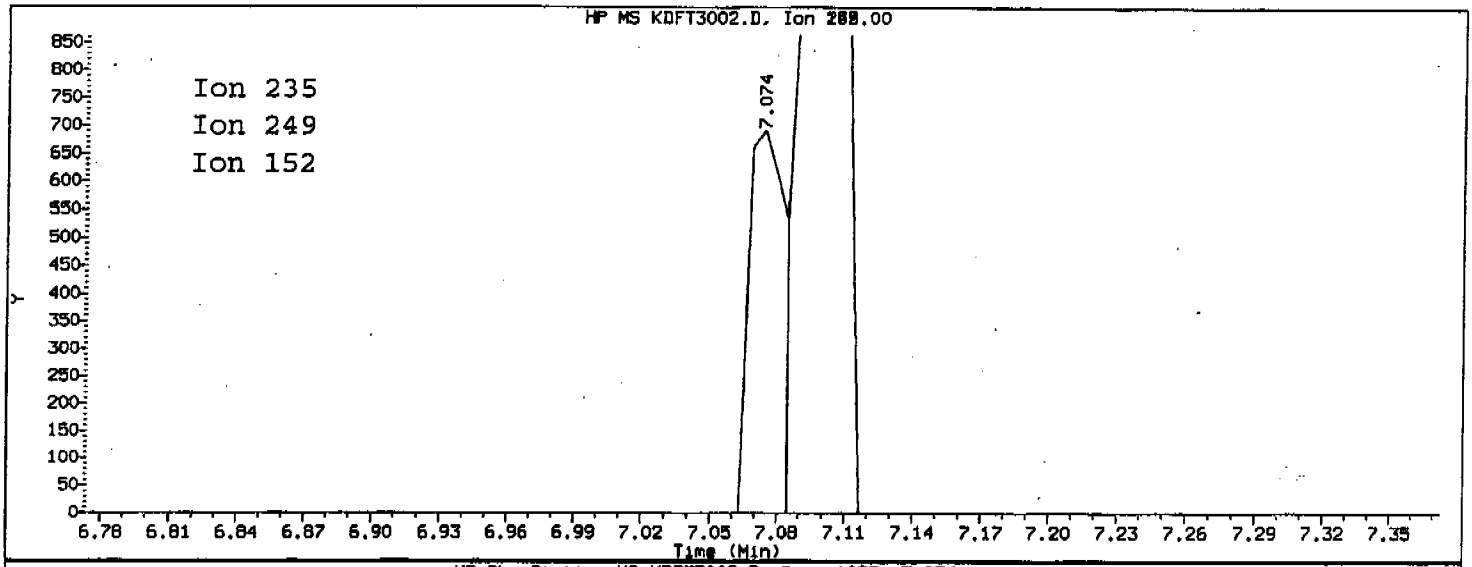
Tailing factor for Benzidine OK

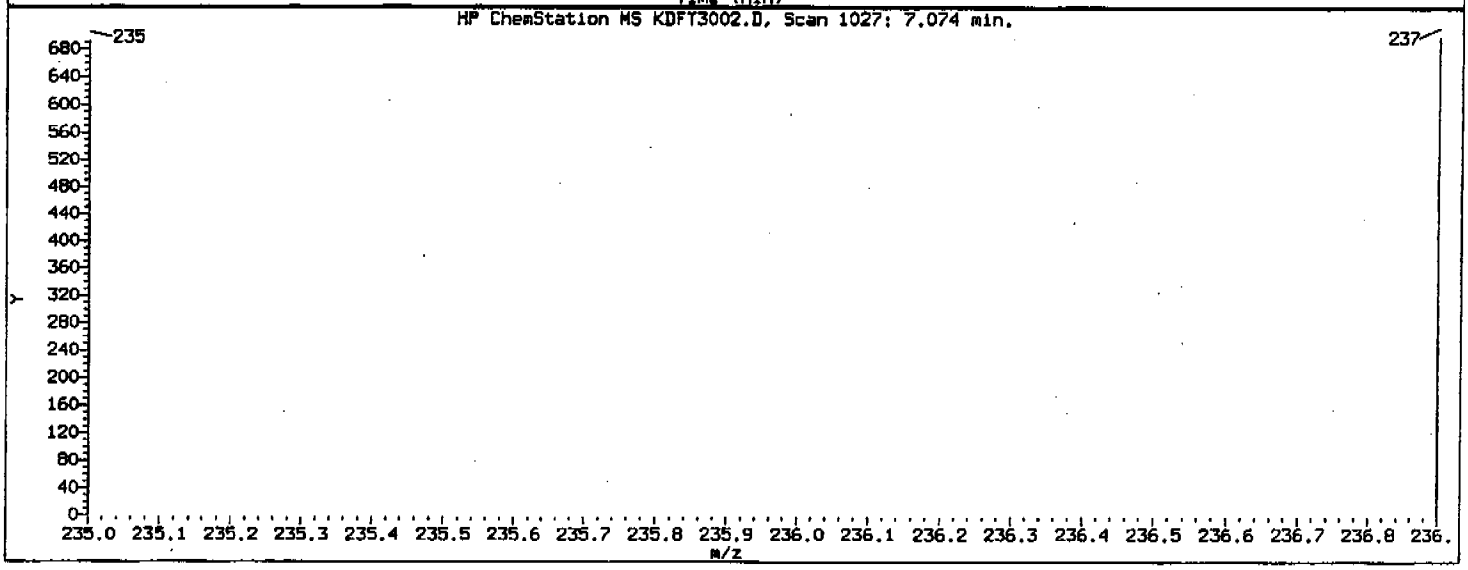
Tail Factor = 0.853 Maximum Allowed = 3.0

LOT# F5D210380

Report Date: 05/09/2005 18:49

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509D.B/KDFT3002.D/KDFT3002.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509D.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 16:09 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)





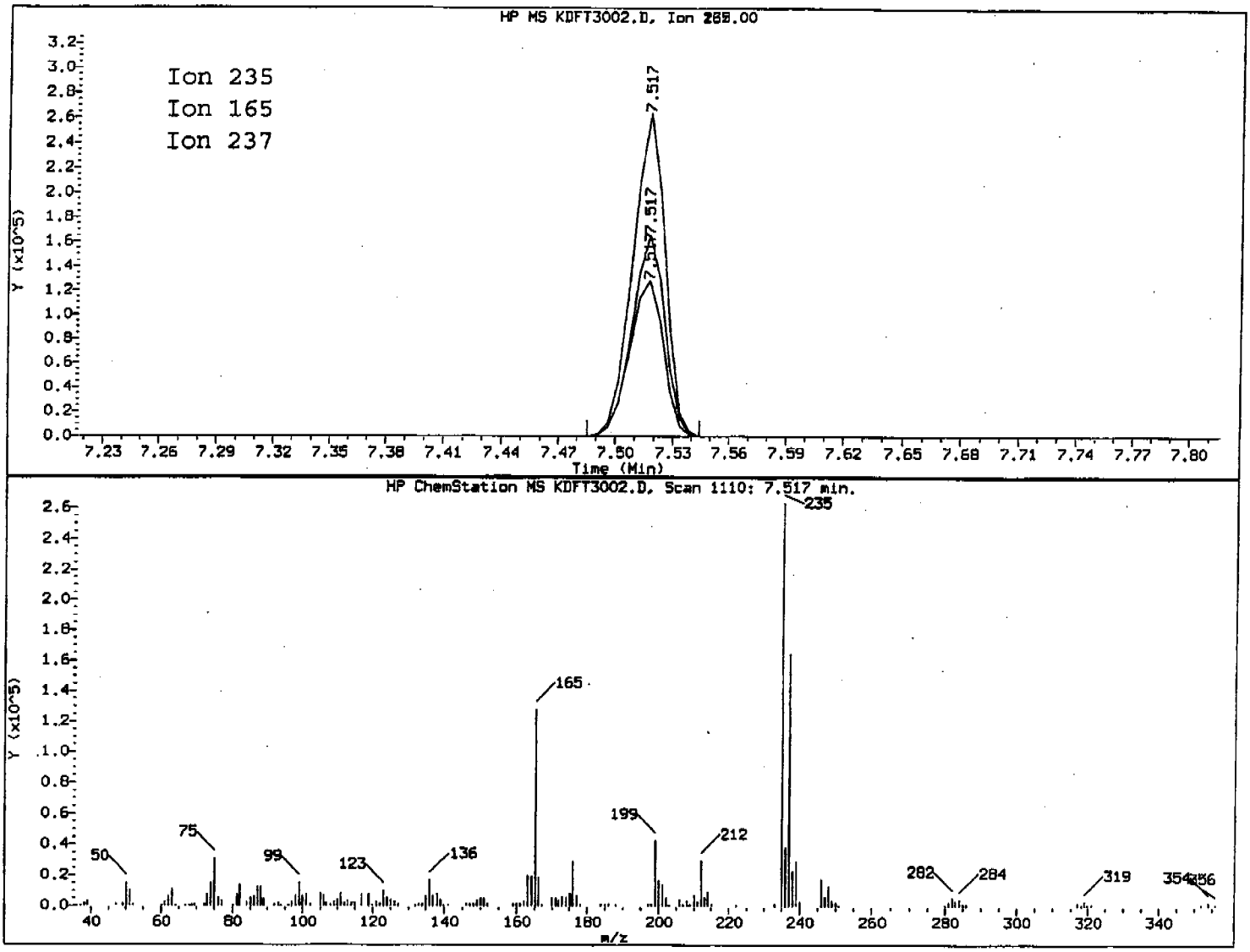
4,4'-DDD
========
Exp. RT = 6.734
Found RT = 7.074

Mass	Area	Ratio
235	801	100.00
249	0	0.00
152	0	0.00

STL ST. LOUIS

Report Date: 05/09/2005 18:49

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509D.B/KDFT3002.D/KDFT3002.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509D.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 16:09 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



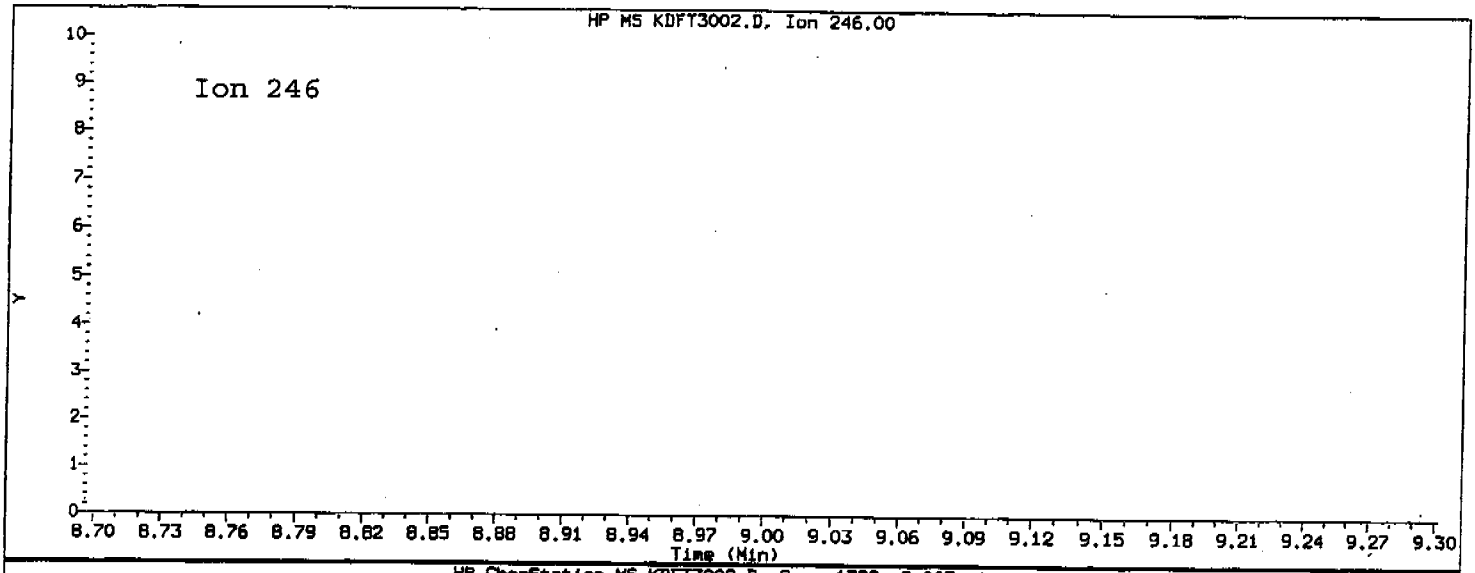
4,4'-DDT

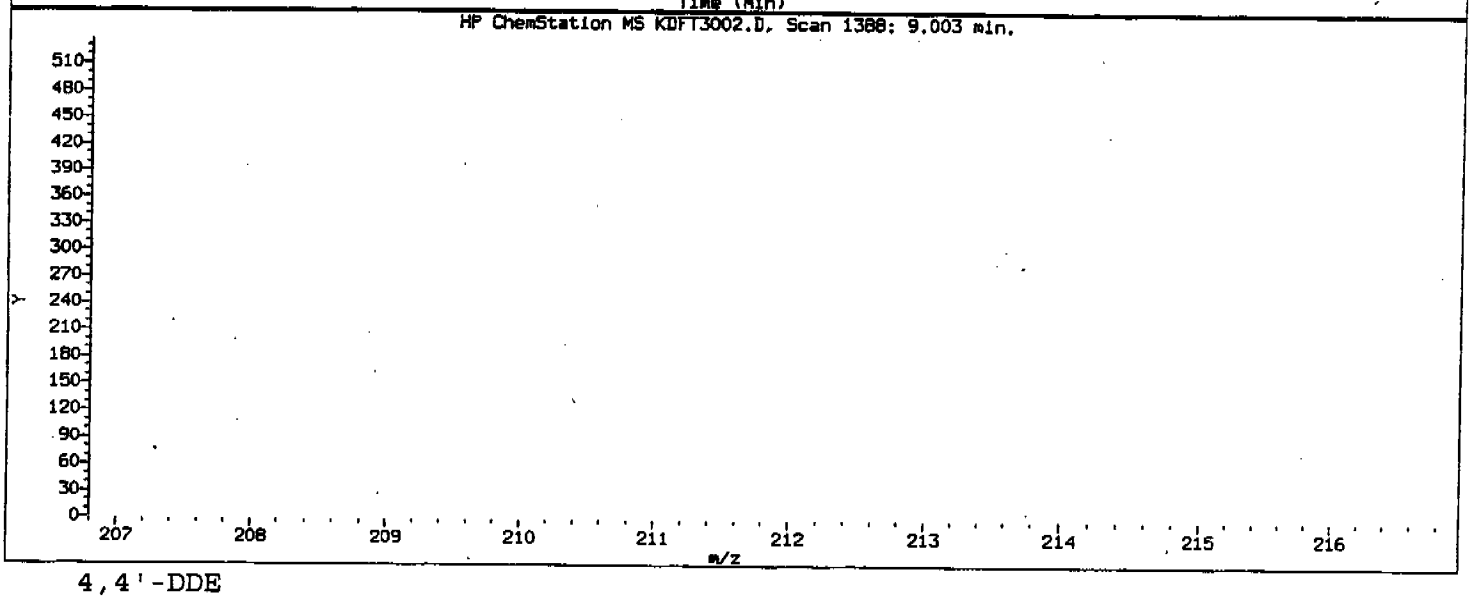
Exp. RT = 7.517
Found RT = 7.517

Mass	Area	Ratio
235	308167	100.00
165	156087	50.65
237	194611	63.15

Report Date: 05/09/2005 18:49

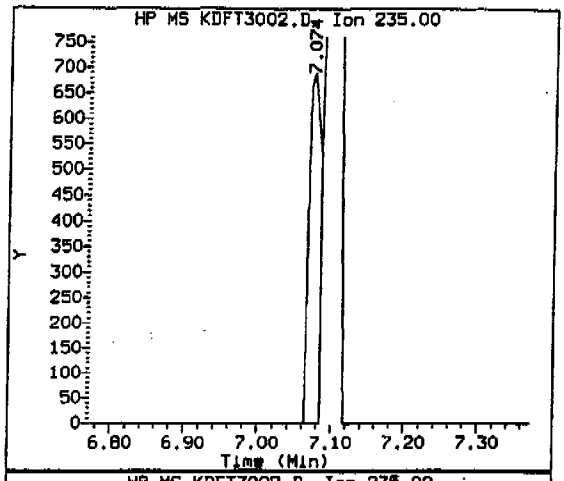
Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050509D.B/KDFT3002.D/KDFT3002.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050509D.B\sw846tun.m\resolut.m Inst:
Injection Date: 09-MAY-2005 16:09 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



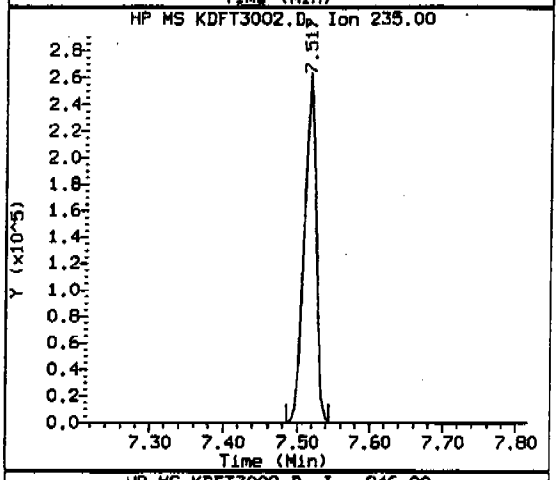


4,4'-DDE
=======
Exp. RT = 9.000
Found RT = 0.000

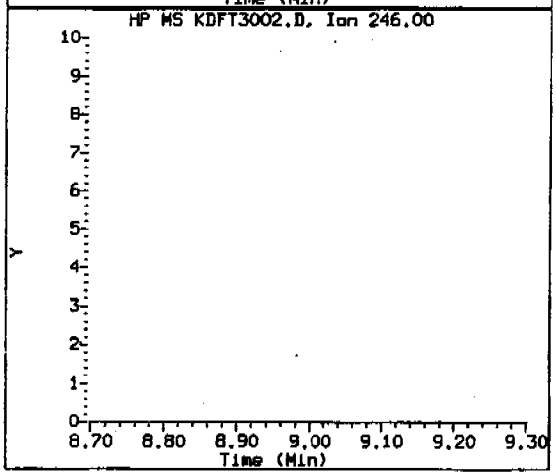
Mass	Area	Ratio
246	0	0.00



Compound: 4,4'-DDD
Quant Mass: 235
RT: 7.074
Area: 801



Compound: 4,4'-DDT
Quant Mass: 235
RT: 7.517
Area: 308167



Compound: 4,4'-DDE
Quant Mass: 246
RT: 0.000
Area: 0

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	308167			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	801	0.3	15.0	PASS
4,4-DDD + DDE	801	0.3	15.0	PASS

****
TUNE SAMPLE *** PASSED *** DDT BREAKDOWN TEST
****

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3003.D
Report Date: 10-May-2005 11:12

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i
Lab File ID: KCAL3003.D
Analysis Type: WATER
Lab Sample ID: SSTD050
Method: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m

Injection Date: 09-MAY-2005 16:30
Init. Cal. Date(s): 28-APR-2005 09-MAY-2005
Init. Cal. Times: 11:41 15:12
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	1 1,4-Dioxane	0.36386	0.50663	0.010	-39.23785	60.00000	Averaged
	4 N-Nitrosodimethylamine	0.67099	0.83858	0.010	-24.97558	60.00000	Averaged
	3 Pyridine	1.18405	1.34863	0.010	-13.89987	60.00000	Averaged
	5 Dimethylformamide	0.88716	1.03657	0.010	-16.84088	60.00000	Averaged
$	10 2-Fluorophenol	1.20834	1.28294	0.010	-6.17335	40.00000	Averaged
	11 Cyclohexanol	1.38218	1.52736	0.010	-10.50307	60.00000	Averaged
	17 Aniline	2.19527	2.27159	0.010	-3.47688	60.00000	Averaged
	19 Bis(2-chloroethyl)ether	1.55372	1.54112	0.010	0.81089	60.00000	Averaged
$	15 Phenol-d5	1.69125	1.73291	0.010	-2.46358	40.00000	Averaged
	16 Phenol	1.87215	1.88299	0.010	-0.57912	20.00000	Averaged
	20 2-Chlorophenol	1.35363	1.36577	0.010	-0.89695	60.00000	Averaged
	21 1,3-Dichlorobenzene	1.54804	1.52239	0.010	1.65683	60.00000	Averaged
	23 1,4-Dichlorobenzene	1.64398	1.60727	0.010	2.23336	20.00000	Averaged
	26 1,2-Dichlorobenzene	1.52039	1.47987	0.010	2.66503	60.00000	Averaged
	25 Benzyl Alcohol	0.66523	0.74125	0.010	-11.42801	60.00000	Averaged
	28 2,2-oxybis(1-Chloropropane)	1.60673	1.63313	0.010	-1.64284	60.00000	Averaged
	27 2-Methylphenol	1.19876	1.23079	0.010	-2.67169	60.00000	Averaged
	35 Hexachloroethane	0.71883	0.70023	0.010	2.58685	60.00000	Averaged
	32 N-Nitrosodinpropylamine	1.25943	1.33482	0.010	-5.98634	60.00000	Averaged
	29 3 and 4-Methylphenol	1.27839	1.30207	0.010	-1.85221	60.00000	Averaged
$	36 Nitrobenzene-d5	0.54909	0.56874	0.010	-3.57902	40.00000	Averaged
	37 Nitrobenzene	0.58194	0.57972	0.010	0.38182	60.00000	Averaged
	39 Isophorone	0.75864	0.80201	0.010	-5.71685	60.00000	Averaged
	40 2-Nitrophenol	0.20162	0.20832	0.010	-3.32746	20.00000	Averaged
	41 2,4-Dimethylphenol	0.42786	0.44536	0.010	-4.08872	60.00000	Averaged
	42 Bis(2-chloroethoxy)methane	0.48359	0.48404	0.010	-0.09202	60.00000	Averaged
	45 2,4-Dichlorophenol	0.31460	0.32447	0.010	-3.13836	20.00000	Averaged
	47 1,2,4-Trichlorobenzene	0.37479	0.37174	0.010	0.81541	60.00000	Averaged
	44 Benzoic Acid	0.19951	0.22097	0.010	-10.75894	60.00000	Averaged
	50 Naphthalene	1.13252	1.07973	0.010	4.66168	60.00000	Averaged
	51 4-Chloroaniline	0.45857	0.46054	0.010	-0.43080	60.00000	Averaged
	54 Hexachlorobutadiene	0.26032	0.25642	0.010	1.49849	20.00000	Averaged
	62 2-Methylnaphthalene	0.81010	0.79832	0.010	1.45448	60.00000	Averaged
	59 4-Chloro-3-Methylphenol	0.36550	0.38676	0.010	-5.81566	20.00000	Averaged
	66 Hexachlorocyclopentadiene	0.42770	0.38659	0.010	9.61316	60.00000	Averaged
	67 2,4,6-Trichlorophenol	0.46165	0.46748	0.010	-1.26175	20.00000	Averaged
	68 2,4,5-Trichlorophenol	0.48790	0.51049	0.010	-4.62929	60.00000	Averaged
$	69 2-Fluorobiphenyl	1.61063	1.52859	0.010	5.09379	40.00000	Averaged
	72 2-Chloronaphthalene	1.34666	1.28880	0.010	4.29645	60.00000	Averaged
	73 2-Nitroaniline	0.58010	0.61700	0.010	-6.36032	60.00000	Averaged
	76 Dimethylphthalate	1.54223	1.55842	0.010	-1.04999	60.00000	Averaged
	79 Acenaphthylene	1.98537	1.92794	0.010	2.89233	60.00000	Averaged

05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3003.D
Report Date: 10-May-2005 11:12

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i
Lab File ID: KCAL3003.D
Analysis Type: WATER
Lab Sample ID: SSTD050
Method: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m

Injection Date: 09-MAY-2005 16:30
Init. Cal. Date(s): 28-APR-2005 09-MAY-2005
Init. Cal. Times: 11:41 15:12
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
80	2,6-Dinitrotoluene	0.32954	0.33779	0.010	-2.50495	60.00000	Averaged
83	Acenaphthene	1.25374	1.21995	0.010	2.69513	20.00000	Averaged
81	3-Nitroaniline	0.32374	0.34996	0.010	-8.09967	60.00000	Averaged
84	2,4-Dinitrophenol	0.19685	0.22366	0.010	-13.61751	60.00000	Averaged
86	Dibenzofuran	1.85230	1.82840	0.010	1.29050	60.00000	Averaged
88	2,4-Dinitrotoluene	0.42378	0.45817	0.010	-8.11681	60.00000	Averaged
85	4-Nitrophenol	0.27026	0.32435	0.010	-20.01541	60.00000	Averaged
93	Diethylphthalate	1.54363	1.56163	0.010	-1.16602	60.00000	Averaged
94	Fluorene	1.48246	1.50068	0.010	-1.22923	60.00000	Averaged
95	4-Chlorophenyl-phenylether	0.79978	0.80006	0.010	-0.03520	60.00000	Averaged
98	4-Nitroaniline	0.31560	0.35225	0.010	-11.61243	60.00000	Averaged
99	4,6-Dinitro-2-methylphenol	0.16574	0.18472	0.010	-11.45589	60.00000	Averaged
100	N-Nitrosodiphenylamine	0.60901	0.58024	0.010	4.72325	20.00000	Averaged
102	Azobenzene	1.36611	1.30190	0.010	4.70030	60.00000	Averaged
$ 104	2,4,6-Tribromophenol	0.22361	0.23768	0.010	-6.29452	40.00000	Averaged
109	4-Bromophenyl-phenylether	0.27978	0.27375	0.010	2.15303	60.00000	Averaged
112	Hexachlorobenzene	0.28563	0.27963	0.010	2.10045	60.00000	Averaged
117	Pentachlorophenol	0.15930	0.16669	0.010	-4.63974	20.00000	Averaged
122	Phenanthrene	1.23548	1.22276	0.010	1.02999	60.00000	Averaged
124	Anthracene	1.19438	1.18909	0.010	0.44340	60.00000	Averaged
126	Carbazole	1.02046	1.02865	0.010	-0.80196	60.00000	Averaged
129	Di-n-Butylphthalate	1.33705	1.35998	0.010	-1.71537	60.00000	Averaged
134	Fluoranthene	1.27688	1.32780	0.010	-3.98786	20.00000	Averaged
135	Benzidine	0.60665	0.60339	0.010	0.53606	100	Averaged
137	Pyrene	1.62596	1.52498	0.010	6.21025	60.00000	Averaged
$ 139	Terphenyl-d14	1.26353	1.19387	0.010	5.51310	40.00000	Averaged
145	3,3-Dimethylbenzidine	0.64501	0.66446	0.010	-3.01621	60.00000	Averaged
146	Butylbenzylphthalate	0.67238	0.65828	0.010	2.09737	60.00000	Averaged
150	Benzo(a)Anthracene	1.40066	1.38240	0.010	1.30347	60.00000	Averaged
152	3,3'-Dichlorobenzidine	0.53933	0.55489	0.010	-2.88559	60.00000	Averaged
154	Chrysene	1.33287	1.27881	0.010	4.05568	60.00000	Averaged
155	bis(2-ethylhexyl)Phthalate	0.84173	0.81999	0.010	2.58283	60.00000	Averaged
158	Di-n-octylphthalate	1.70444	1.65468	0.010	2.91940	20.00000	Averaged
160	Benzo(b)fluoranthene	1.55320	1.56410	0.010	-0.70203	60.00000	Averaged
161	Benzo(k)fluoranthene	1.54269	1.56410	0.010	-1.38816	60.00000	Averaged
165	Benzo(a)pyrene	1.40180	1.38181	0.010	1.42611	20.00000	Averaged
173	Indeno(1,2,3-cd)pyrene	1.29945	1.27426	0.010	1.93863	60.00000	Averaged
174	Dibenzo(a,h)anthracene	1.26094	1.29028	0.010	-2.32704	60.00000	Averaged
177	Benzo(g,h,i)perylene	1.16013	1.15239	0.010	0.66722	60.00000	Averaged

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B/KCAL3003.D
Report Date: 05/10/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3003.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 16:30
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270

COMPOUND	%D
1,4-Dioxane	39.2
Pyridine	13.9
N-Nitrosodimethylamine	25.0
Dimethylformamide	16.8
2-Fluorophenol	6.2
Cyclohexanol	10.5
Aniline	3.5
Bis(2-chloroethyl)ether	0.8
Phenol-d5	2.5
Phenol	0.6
2-Chlorophenol	0.9
1,3-Dichlorobenzene	1.7
1,4-Dichlorobenzene	2.2
1,2-Dichlorobenzene	2.7
Benzyl Alcohol	11.4
2,2-oxybis(1-Chloropropane)	1.6
2-Methylphenol	2.7
N-Nitrosodinpropylamine	6.0
Hexachloroethane	2.6
3 and 4-Methylphenol	1.9
Nitrobenzene-d5	3.6
Nitrobenzene	0.4
Isophorone	5.7
2-Nitrophenol	3.3
2,4-Dimethylphenol	4.1
Bis(2-chloroethoxy)methane	0.1
2,4-Dichlorophenol	3.1
1,2,4-Trichlorobenzene	0.8
Benzoic Acid	10.8
Naphthalene	4.7
4-Chloroaniline	0.4
Hexachlorobutadiene	1.5
4-Chloro-3-Methylphenol	5.8
2-Methylnaphthalene	1.5
Hexachlorocyclopentadiene	9.6
2,4,6-Trichlorophenol	1.3
2,4,5-Trichlorophenol	4.6
2-Fluorobiphenyl	5.1
2-Chloronaphthalene	4.3

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B/KCAL3003.D
Report Date: 05/10/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3003.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 16:30
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C

COMPOUND	%D
2-Nitroaniline	6.4
Dimethylphthalate	1.0
Acenaphthylene	2.9
2,6-Dinitrotoluene	2.5
Acenaphthene	2.7
3-Nitroaniline	8.1
2,4-Dinitrophenol	13.6
Dibenzofuran	1.3
2,4-Dinitrotoluene	8.1
4-Nitrophenol	20.0
Fluorene	1.2
Diethylphthalate	1.2
4-Chlorophenyl-phenylether	0.0
4-Nitroaniline	11.6
4,6-Dinitro-2-methylphenol	11.5
N-Nitrosodiphenylamine	4.7
Azobenzene	4.7
2,4,6-Tribromophenol	6.3
4-Bromophenyl-phenylether	2.2
Hexachlorobenzene	2.1
Pentachlorophenol	4.6
Phenanthrene	1.0
Anthracene	0.4
Carbazole	0.8
Di-n-Butylphthalate	1.7
Fluoranthene	4.0
Benzidine	0.5
Pyrene	6.2
Terphenyl-d14	5.5
3,3-Dimethylbenzidine	3.0
Butylbenzylphthalate	2.1
Benzo(a)Anthracene	1.3
Chrysene	4.1
3,3'-Dichlorobenzidine	2.9
bis(2-ethylhexyl)Phthalate	2.6
Di-n-octylphthalate	2.9
Benzo(k)fluoranthene	1.4
Benzo(b)fluoranthene	0.7
Benzo(a)pyrene	1.4

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B/KCAL3003.D
Report Date: 05/10/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3003.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 16:30
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C

COMPOUND	%D
Indeno(1,2,3-cd)pyrene	1.9
Dibenzo(a,h)anthracene	2.3
Benzo(g,h,i)perylene	0.7
Dibenz(e,a) Pyrene	100.0

The average of %D's in the continuing calibration is 5.9

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Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3003.D Page 1
Report Date: 10-May-2005 11:12

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3003.D
Lab Smp Id: SSTD050 Client Smp ID: SSTD050
Inj Date : 09-MAY-2005 16:30
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD050
Misc Info : SV0220-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Meth Date : 10-May-2005 11:12 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12 Cal File: KCAL3000.D
Als bottle: 12 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	1.279	1.279	(0.281)	87783	50.0000	69.62
4	N-Nitrosodimethylamine	74	1.706	1.706	(0.374)	145299	50.0000	62.49
3	Pyridine	79	1.690	1.690	(0.371)	233676	50.0000	56.95
5	Dimethylformamide	44	2.144	2.144	(0.470)	179605	50.0000	58.42(M)
$ 10	2-Fluorophenol	112	3.245	3.245	(0.712)	222293	50.0000	53.09
11	Cyclohexanol	57	3.261	3.261	(0.715)	264643	50.0000	55.25
17	Aniline	93	4.254	4.254	(0.933)	393596	50.0000	51.74
19	Bis(2-chloroethyl)ether	93	4.324	4.324	(0.948)	267028	50.0000	49.59
$ 15	Phenol-d5	99	4.324	4.324	(0.948)	300260	50.0000	51.23
16	Phenol	94	4.334	4.334	(0.951)	326264	50.0000	50.29
20	2-Chlorophenol	128	4.388	4.388	(0.963)	236646	50.0000	50.45
21	1,3-Dichlorobenzene	146	4.511	4.511	(0.989)	263783	50.0000	49.17
* 22	1,4-Dichlorobenzene-d4	152	4.559	4.559	(1.000)	138615	40.0000	
23	1,4-Dichlorobenzene	146	4.575	4.575	(1.004)	278489	50.0000	48.88
26	1,2-Dichlorobenzene	146	4.799	4.799	(1.053)	256416	50.0000	48.67
25	Benzyl Alcohol	108	4.804	4.804	(1.054)	128436	50.0000	55.71(H)
28	2,2-oxybis(1-Chloropropane)	45	4.965	4.965	(1.089)	282970	50.0000	50.82
27	2-Methylphenol	108	5.013	5.013	(1.100)	213257	50.0000	51.34
35	Hexachloroethane	117	5.157	5.157	(1.131)	121328	50.0000	48.71
32	N-Nitrosodinpropylamine	70	5.152	5.152	(1.130)	231283	50.0000	52.99
29	3 and 4-Methylphenol	108	5.205	5.205	(1.142)	451216	100.000	101.8

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.285	5.285	(0.861)	350233	50.0000	51.79
	37 Nitrobenzene	77	5.307	5.307	(0.864)	356993	50.0000	49.81
	39 Isophorone	82	5.595	5.595	(0.911)	493879	50.0000	52.86
	40 2-Nitrophenol	139	5.702	5.702	(0.929)	128287	50.0000	51.66
	41 2,4-Dimethylphenol	107	5.830	5.830	(0.950)	274252	50.0000	52.04
	42 Bis(2-chloroethoxy)methane	93	5.910	5.910	(0.963)	298072	50.0000	50.05
	45 2,4-Dichlorophenol	162	6.038	6.038	(0.983)	199810	50.0000	51.57
	47 1,2,4-Trichlorobenzene	180	6.097	6.097	(0.993)	228918	50.0000	49.59
*	48 Naphthalene-d8	136	6.140	6.140	(1.000)	492644	40.0000	
	44 Benzoic Acid	122	6.097	6.097	(0.993)	136075	50.0000	55.38
	50 Naphthalene	128	6.167	6.167	(1.004)	664903	50.0000	47.67
	51 4-Chloroaniline	127	6.316	6.316	(1.029)	283604	50.0000	50.22
	54 Hexachlorobutadiene	225	6.412	6.412	(1.044)	157905	50.0000	49.25
	62 2-Methylnaphthalene	142	7.128	7.128	(1.161)	491608	50.0000	49.27
	59 4-Chloro-3-Methylphenol	107	7.080	7.080	(1.153)	238169	50.0000	52.91
	66 Hexachlorocyclopentadiene	237	7.475	7.475	(0.847)	133779	50.0000	45.19
	67 2,4,6-Trichlorophenol	196	7.662	7.662	(0.868)	161771	50.0000	50.63
	68 2,4,5-Trichlorophenol	196	7.748	7.748	(0.878)	176656	50.0000	52.31
$	69 2-Fluorobiphenyl	172	7.753	7.753	(0.878)	528971	50.0000	47.45
	72 2-Chloronaphthalene	162	7.876	7.876	(0.892)	445991	50.0000	47.85
	73 2-Nitroaniline	65	8.170	8.170	(0.926)	213513	50.0000	53.18
	76 Dimethylphthalate	163	8.539	8.539	(0.967)	539293	50.0000	50.52
	79 Acenaphthylene	152	8.560	8.560	(0.970)	667167	50.0000	48.55
	80 2,6-Dinitrotoluene	165	8.651	8.651	(0.980)	116894	50.0000	51.25
*	82 Acenaphthene-d10	164	8.827	8.827	(1.000)	276841	40.0000	
	83 Acenaphthene	153	8.880	8.880	(1.006)	422165	50.0000	48.65
	81 3-Nitroaniline	138	8.886	8.886	(1.007)	121104	50.0000	54.05
	84 2,4-Dinitrophenol	184	9.067	9.067	(1.027)	77397	50.0000	56.81
	86 Dibenzofuran	168	9.158	9.158	(1.038)	632719	50.0000	49.35
	88 2,4-Dinitrotoluene	165	9.329	9.329	(1.057)	158551	50.0000	54.06
	85 4-Nitrophenol	109	9.377	9.377	(1.062)	112242	50.0000	60.01
	93 Diethylphthalate	149	9.799	9.799	(1.110)	540404	50.0000	50.58
	94 Fluorene	166	9.773	9.773	(1.107)	519313	50.0000	50.61
	95 4-Chlorophenyl-phenylether	204	9.821	9.821	(1.113)	276862	50.0000	50.02
	98 4-Nitroaniline	138	10.008	10.008	(1.134)	121895	50.0000	55.81
	99 4,6-Dinitro-2-methylphenol	198	10.061	10.061	(0.876)	116765	50.0000	55.73
	100 N-Nitrosodiphenylamine	169	10.088	10.088	(0.878)	366777	50.0000	47.64
	102 Azobenzene	77	10.104	10.104	(0.880)	822940	50.0000	47.65
$	104 2,4,6-Tribromophenol	330	10.275	10.275	(1.164)	82250	50.0000	53.15
	109 4-Bromophenyl-phenylether	248	10.707	10.707	(0.932)	173042	50.0000	48.92
	112 Hexachlorobenzene	284	10.932	10.932	(0.952)	176758	50.0000	48.95
	117 Pentachlorophenol	266	11.338	11.338	(0.987)	105367	50.0000	52.32
*	121 Phenanthrene-d10	188	11.487	11.487	(1.000)	505686	40.0000	
	122 Phenanthrene	178	11.530	11.530	(1.004)	772915	50.0000	49.48
	124 Anthracene	178	11.616	11.616	(1.011)	751632	50.0000	49.78
	126 Carbazole	167	12.016	12.016	(1.046)	650215	50.0000	50.40
	129 Di-n-Butylphthalate	149	12.903	12.903	(1.123)	859654	50.0000	50.86
	134 Fluoranthene	202	13.827	13.827	(1.204)	839310	50.0000	51.99
	135 Benzidine	184	14.223	14.223	(0.854)	336146	50.0000	49.73
	137 Pyrene	202	14.244	14.244	(0.855)	849555	50.0000	46.89
$	139 Terphenyl-d14	244	14.687	14.687	(0.882)	665093	50.0000	47.24
	145 3,3-Dimethylbenzidine	212	15.686	15.686	(0.942)	370166	50.0000	51.51
	146 Butylbenzylphthalate	149	15.809	15.809	(0.949)	366722	50.0000	48.95
	150 Benzo(a)Anthracene	228	16.621	16.621	(0.998)	770123	50.0000	49.35

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3003.D Page 3
Report Date: 10-May-2005 11:12

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.653	16.653	(1.000)	445673	40.0000	
152 3,3'-Dichlorobenzidine	252	16.717	16.717	(1.004)	309125	50.0000	51.44
154 Chrysene	228	16.707	16.707	(1.003)	712414	50.0000	47.97
155 bis(2-ethylhexyl)Phthalate	149	17.038	17.038	(1.023)	456807	50.0000	48.71
158 Di-n-octylphthalate	149	18.181	18.181	(0.944)	789115	50.0000	48.54
160 Benzo(b)fluoranthene	252	18.630	18.630	(0.967)	745918	50.0000	50.35
161 Benzo(k)fluoranthene	252	18.630	18.630	(0.967)	745918	50.0000	50.69
165 Benzo(a)pyrene	252	19.164	19.164	(0.995)	658985	50.0000	49.29
* 166 Perylene-d12	264	19.266	19.266	(1.000)	381519	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.986	20.986	(1.089)	607692	50.0000	49.03
174 Dibenzo(a,h)anthracene	278	21.034	21.034	(1.092)	615335	50.0000	51.16
177 Benzo(g,h,i)perylene	276	21.440	21.440	(1.113)	549572	50.0000	49.67

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3003.D Page 1
Report Date: 12-May-2005 08:53

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

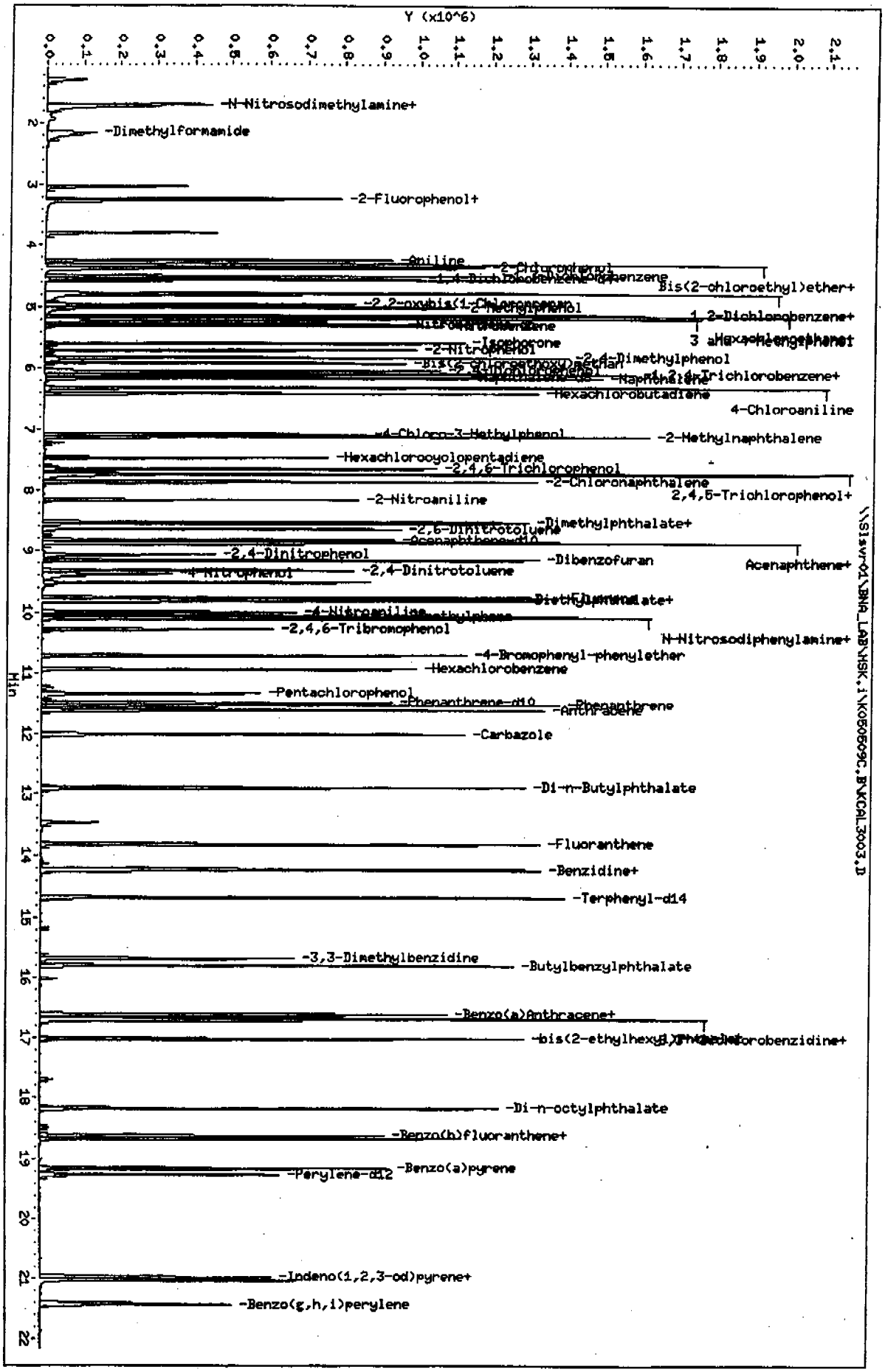
Instrument ID: MSK.i
Lab File ID: KCAL3003.D
Lab Smp Id: SSTD050
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Misc Info: SV0220-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD050
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	138615	-28.29
48 Naphthalene-d8	657267	328634	1314534	492644	-25.05
82 Acenaphthene-d10	351374	175687	702748	276841	-21.21
121 Phenanthrene-d10	612492	306246	1224984	505686	-17.44
153 Chrysene-d12	494718	247359	989436	445673	-9.91
166 Perylene-d12	409117	204559	818234	381519	-6.75

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.56	0.05
48 Naphthalene-d8	6.14	5.64	6.64	6.14	-0.05
82 Acenaphthene-d10	8.83	8.33	9.33	8.83	0.03
121 Phenanthrene-d10	11.49	10.99	11.99	11.49	-0.03
153 Chrysene-d12	16.66	16.16	17.16	16.65	-0.02
166 Perylene-d12	19.27	18.77	19.77	19.27	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

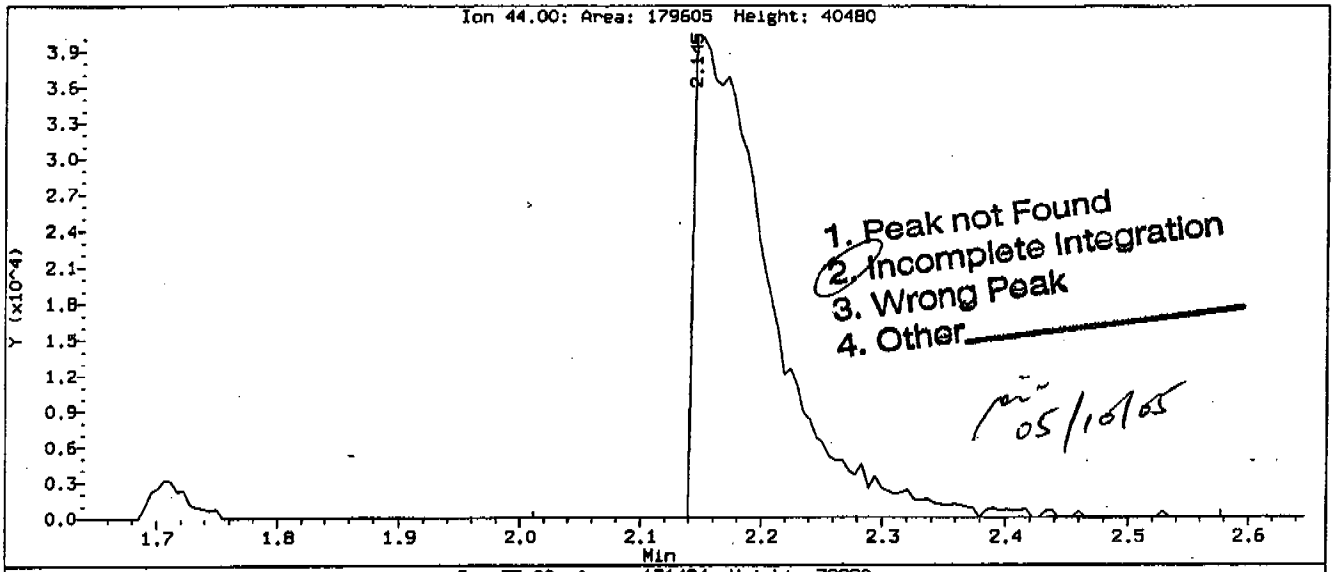


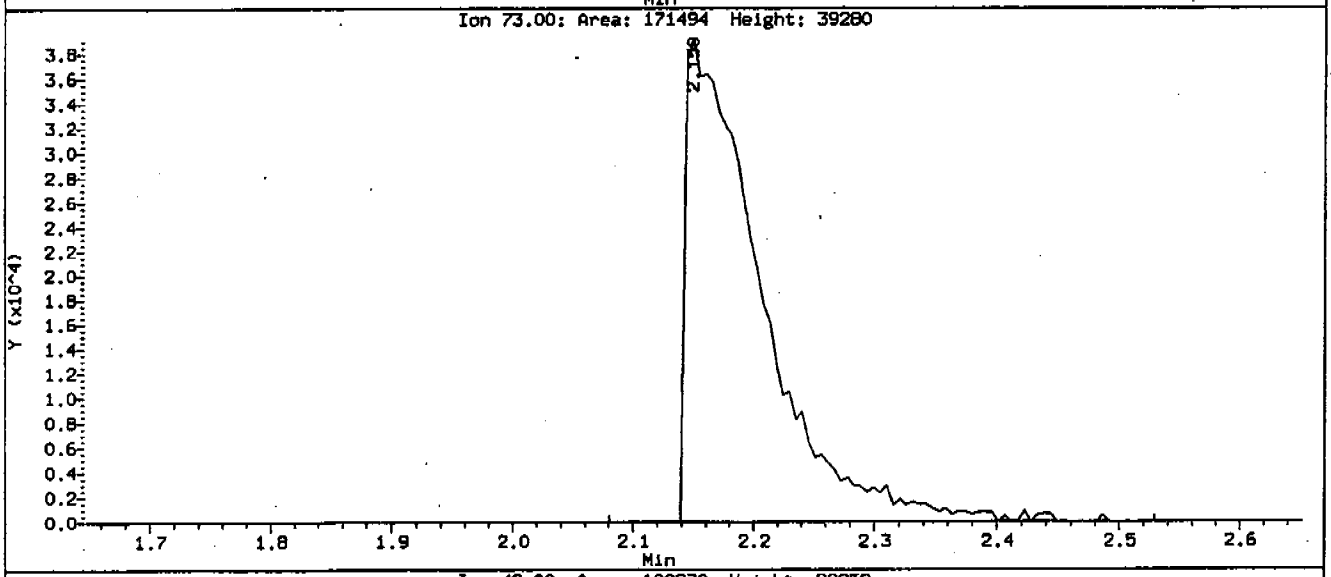
Data File: \\Slsvr01\BNA_LAB\HSK.i\K050509C.B\KCAL3003.D
Date : 09-MAY-2005 16:30
Client ID: SSTD050
Sample Info: SSTD050
Volume Injected (uL): 1.0
Column phase:

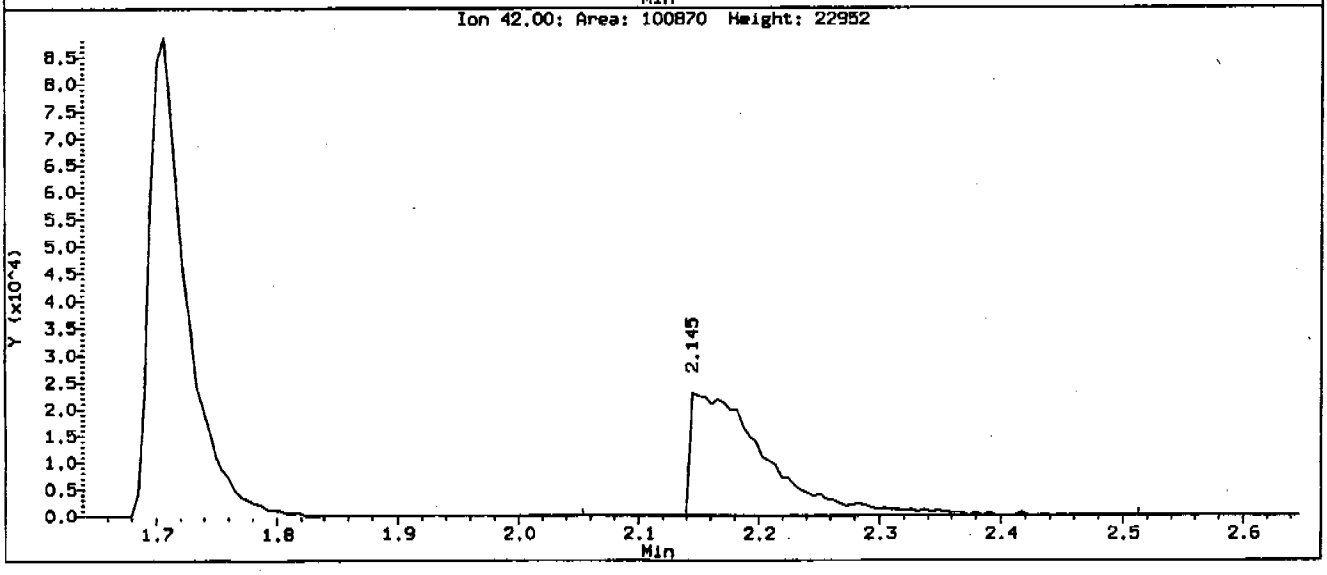
Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slavr01\BNA_LAB\MSK.i\K050509C.B\KCAL3003.D
Injection Date: 09-MAY-2005 16:30
Instrument: MSK.i
Client Sample ID: SSTD050

Compound: Dimethylformamide
CAS Number: 68-12-2







STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i
Lab File ID: KCAL3004.D
Analysis Type: WATER
Lab Sample ID: SSTD050APPIX
Method: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX\8270K.m

Injection Date: 09-MAY-2005 17:02
Init. Cal. Date(s): 28-APR-2005 28-APR-2005
Init. Cal. Times: 11:41 19:44
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
7	2-Picoline	1.26430	1.25278	0.010	0.91105	60.00000	Averaged
8	N-Nitrosomethylethylamine	0.56748	0.59613	0.010	-5.04741	60.00000	Averaged
9	Methyl methanesulfonate	0.42950	0.43359	0.010	-0.95166	60.00000	Averaged
12	N-Nitrosodiethylamine	0.66218	0.65186	0.010	1.55915	60.00000	Averaged
13	Ethyl Methanesulfonate	1.12443	1.16495	0.010	-3.60436	60.00000	Averaged
18	Pentachloroethane	0.53108	0.53142	0.010	-0.06525	60.00000	Averaged
30	Acetophenone	0.57919	0.59435	0.010	-2.61825	60.00000	Averaged
31	N-Nitrosopyrrolidine	0.19155	0.19842	0.010	-3.58405	60.00000	Averaged
33	N-Nitrosomorpholine	0.08447	0.08079	0.010	4.35597	60.00000	Averaged
34	O-Toluidine	0.61359	0.62153	0.010	-1.29307	60.00000	Averaged
38	N-Nitrosopiperidine	0.17733	0.18320	0.010	-3.30667	60.00000	Averaged
43	o,o,o-Triethyl-Phosphorothi	0.24317	0.22688	0.010	6.69931	60.00000	Averaged
46	a,a-Dimethyl-phenethylamine	0.76363	0.85988	0.010	-12.60496	60.00000	Averaged
52	2,6-Dichlorophenol	0.28659	0.30934	0.010	-7.93915	60.00000	Averaged
53	Hexachloropropene	0.35073	0.33545	0.010	4.35656	60.00000	Averaged
55	Benzothiazole	0.51808	0.50766	0.010	2.01143	60.00000	Averaged
58	p-Phenylenediamine	0.29308	0.32257	0.010	-10.06313	60.00000	Averaged
57	n-Nitrosodi-n-butylamine	0.31860	0.33118	0.010	-3.94866	60.00000	Averaged
61	Safrole	0.30061	0.29464	0.010	1.98482	60.00000	Averaged
65	1,2,4,5-Tetrachlorobenzene	1.44175	1.35812	0.010	5.80097	60.00000	Averaged
64	cis-Isosafrole	0.05589	0.05601	0.010	-0.21525	60.00000	Averaged
70	trans-Isosafrole	0.60356	0.58249	0.010	3.49017	60.00000	Averaged
74	1,4-Naphthoquinone	0.26634	0.34721	0.010	-30.36314	60.00000	Averaged
75	1,4-Dinitrobenzene	0.12214	0.12855	0.010	-5.24526	60.00000	Averaged
77	1,3-Dinitrobenzene	0.23098	0.24173	0.010	-4.65728	60.00000	Averaged
87	Pentachlorobenzene	0.70131	0.63686	0.050	9.18921	60.00000	Averaged
89	1-Naphthylamine	1.09037	1.08682	0.050	0.32606	60.00000	Averaged
90	2-Naphthylamine	0.98820	0.94361	0.010	4.51234	60.00000	Averaged
92	2,3,4,6-Tetrachlorophenol	0.36178	0.35716	0.010	1.27856	60.00000	Averaged
96	Thionazin	0.26781	0.28534	0.010	-6.54852	60.00000	Averaged
97	5-Nitro-o-toluidine	0.20399	0.21709	0.010	-6.42346	60.00000	Averaged
101	tri-n-butylphosphate	1.74692	1.88792	0.010	-8.07138	60.00000	Averaged
105	Sulfotepp	0.15272	0.16893	0.010	-10.61648	60.00000	Averaged
106	Diallate (peak 1)	0.30299	0.33021	0.010	-8.98295	60.00000	Averaged
108	Phorate	0.54614	0.59768	0.010	-9.43802	60.00000	Averaged
111	Diallate (peak 2)	0.06457	0.07243	0.010	-12.18188	60.00000	Averaged
107	1,3,5-Trinitrobenzene	0.09449	0.10096	0.010	-6.84396	60.00000	Averaged
110	Phenacetin	0.42015	0.45938	0.010	-9.33687	60.00000	Averaged
113	Dimethoate	0.24940	0.29402	0.010	-17.88836	60.00000	Averaged
116	4-Aminobiphenyl	0.76111	0.79024	0.010	-3.82713	60.00000	Averaged
115	tris(2-chloroethyl)phosphat	0.22190	0.24742	0.010	-11.50121	60.00000	Averaged
119	Pentachloronitrobenzene	0.13044	0.12779	0.010	2.03077	60.00000	Averaged

05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX\KCAL3004.D Page 5
Report Date: 09-May-2005 18:52

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i Injection Date: 09-MAY-2005 17:02
Lab File ID: KCAL3004.D Init. Cal. Date(s): 28-APR-2005 28-APR-2005
Analysis Type: WATER Init. Cal. Times: 11:41 19:44
Lab Sample ID: SSTD050APPIX Quant Type: ISTD
Method: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX\8270K.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
118 Pronamide	0.37771	0.38546	0.010	-2.05086	60.00000	Averaged	
123 Disulfoton	0.38466	0.41321	0.010	-7.42009	60.00000	Averaged	
125 Dinoseb	0.23315	0.24275	0.010	-4.11665	60.00000	Averaged	
128 Methyl Parathion	0.22194	0.25576	0.010	-15.24128	60.00000	Averaged	
131 4-Nitroquinoline-1-oxide	0.08479	0.09277	0.010	-9.41121	60.00000	Averaged	
130 Parathion	0.17785	0.20199	0.010	-13.57219	60.00000	Averaged	
132 Methapyrilene	0.27156	0.32754	0.010	-20.61413	60.00000	Averaged	
133 Isodrin	0.13865	0.13306	0.010	4.03141	60.00000	Averaged	
141 Kepone	0.00617	0.00621	0.010	-0.62094	100	Averaged	<-
140 Aramite (peak 1)	0.07053	0.08044	0.010	-14.05726	60.00000	Averaged	
142 Aramite (peak 2)	0.10750	0.11975	0.010	-11.39577	60.00000	Averaged	
143 p-(Dimethylamino)azobenzene	0.33286	0.38033	0.010	-14.26081	60.00000	Averaged	
144 Chlorobenzilate	0.46484	0.44559	0.010	4.14259	60.00000	Averaged	
148 2-Acetylaminofluorene	0.52432	0.58243	0.010	-11.08395	60.00000	Averaged	
149 Famphur	0.02497	0.04577	0.010	-83.31413	100	Averaged	
151 4,4'-Methylenebis(2-Chloroa	0.11611	0.12194	0.010	-5.01579	60.00000	Averaged	
162 7,12-Dimethylbenz(a)anthrac	0.73914	0.74614	0.010	-0.94645	60.00000	Averaged	
163 Hexachlorophene	0.02366	0.00546	0.010	76.90311	100	Averaged	<-
169 3-methylcholanthrene	0.75045	0.73444	0.010	2.13362	60.00000	Averaged	

STL ST. LOUIS

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX/KCAL3004.D
Report Date: 05/09/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3004.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 17:02
Lab Sample ID: SSTD050APPIX
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPI

COMPOUND	%D
2-Picoline	0.9
N-Nitrosomethylethylamine	5.0
Methyl methanesulfonate	1.0
N-Nitrosodiethylamine	1.6
Methyl methacrylate	100.0
Ethyl methacrylate	100.0
Ethyl Methanesulfonate	3.6
Pentachloroethane	0.1
Acetophenone	2.6
N-Nitrosopyrrolidine	3.6
N-Nitrosomorpholine	4.4
O-Toluidine	1.3
N-Nitrosopiperidine	3.3
o,o,o-Triethyl-Phosphorothioa	6.7
a,a-Dimethyl-phenethylamine	12.6
Hexachloropropene	4.4
2,6-Dichlorophenol	7.9
Benzothiazole	2.0
p-Phenylenediamine	10.1
n-Nitrosodi-n-butylamine	3.9
Safrole	2.0
1,2,4,5-Tetrachlorobenzene	5.8
cis-Isosafrole	0.2
trans-Isosafrole	3.5
1,4-Naphthoquinone	30.4
1,4-Dinitrobenzene	5.2
1,3-Dinitrobenzene	4.7
Pentachlorobenzene	9.2
1-Naphthylamine	0.3
2-Naphthylamine	4.5
2,3,4,6-Tetrachlorophenol	1.3
Thionazin	6.5
5-Nitro-o-toluidine	6.4
tri-n-butylphosphate	8.1
Sulfotepp	10.6
Diallate (peak 1)	9.0
Phorate	9.4
1,3,5-Trinitrobenzene	6.8
Diallate (peak 2)	12.2

STL ST. LOUIS

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX/KCAL3004.D
Report Date: 05/09/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3004.D
Analysis Type: WATER

Injection Date: 09-MAY-2005 17:02
Lab Sample ID: SSTD050APPIX
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C

COMPOUND	%D
Phenacetin	9.3
Dimethoate	17.9
4-Aminobiphenyl	3.8
tris(2-chloroethyl)phosphate	11.5
Pentachloronitrobenzene	2.0
Pronamide	2.1
Disulfoton	7.4
Dinoseb	4.1
Methyl Parathion	15.2
4-Nitroquinoline-1-oxide	9.4
Parathion	13.6
Methapyrilene	20.6
Isodrin	4.0
Kepone	0.6
Aramite (peak 1)	14.1
Aramite (peak 2)	11.4
p-(Dimethylamino)azobenzene	14.3
Chlorobenzilate	4.1
2-Acetylaminofluorene	11.1
Famphur	83.3
4,4'-Methylenebis(2-Chloroani	5.0
7,12-Dimethylbenz(a)anthracen	0.9
Hexachlorophene	76.9
3-methylcholanthrene	2.1

The average of %D's in the continuing calibration is 12.0

05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX\KCAL3004.D Page 1
Report Date: 09-May-2005 18:52

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX\KCAL3004.D
Lab Smp Id: SSTD050APPIX Client Smp ID: SSTD050APPIX
Inj Date : 09-MAY-2005 17:02
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD050APPIX
Misc Info : SV0190-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX\8270K.m
Meth Date : 09-May-2005 18:52 hongs Quant Type: ISTD
Cal Date : 28-APR-2005 16:52 Cal File: KCAL2588.D
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIX.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
7	2-Picoline	93	2.467	2.467	(0.543)	279384	50.0000	49.54
8	N-Nitrosomethylethylamine	88	2.670	2.670	(0.587)	132943	50.0000	52.52(M)
9	Methyl methanesulfonate	80	3.028	3.028	(0.666)	96695	50.0000	50.48
12	N-Nitrosodiethylamine	102	3.418	3.418	(0.752)	145371	50.0000	49.22
13	Ethyl Methanesulfonate	79	3.797	3.797	(0.835)	259798	50.0000	51.80
18	Pentachloroethane	117	4.203	4.203	(0.925)	118513	50.0000	50.03
* 22	1,4-Dichlorobenzene-d4	152	4.545	4.545	(1.000)	178409	40.0000	
30	Acetophenone	105	5.084	5.084	(0.831)	466345	50.0000	51.31
31	N-Nitrosopyrrolidine	100	5.106	5.106	(0.834)	155683	50.0000	51.79
33	N-Nitrosomorpholine	116	5.132	5.132	(0.839)	63392	50.0000	47.82
34	O-Toluidine	106	5.154	5.154	(0.842)	487668	50.0000	50.65
38	N-Nitrosopiperidine	114	5.485	5.485	(0.896)	143743	50.0000	51.65
43	o,o,o-Triethyl-Phosphorothioa	198	5.907	5.907	(0.965)	178019	50.0000	46.65
* 48	Naphthalene-d8	136	6.121	6.121	(1.000)	627703	40.0000	
46	a,a-Dimethyl-phenethylamine	58	6.035	6.035	(0.986)	674689	50.0000	56.30(M)
52	2,6-Dichlorophenol	162	6.308	6.308	(1.031)	242720	50.0000	53.97
53	Hexachloropropene	213	6.302	6.302	(1.030)	263205	50.0000	47.82(M)
55	Benzothiazole	135	6.511	6.511	(1.064)	398325	50.0000	48.99
58	p-Phenylenediamine	108	6.794	6.794	(1.110)	253099	50.0000	55.03
57	n-Nitrosodi-n-butylamine	84	6.799	6.799	(1.111)	259852	50.0000	51.97
61	Safrole	162	7.034	7.034	(1.149)	231182	50.0000	49.01

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
65	1,2,4,5-Tetrachlorobenzene	216	7.435	7.435	(0.844)	610247	50.0000	47.10
64	cis-Isosafrole	162	7.478	7.478	(0.849)	25166	50.0000	50.11(M)
70	trans-Isosafrole	162	7.825	7.825	(0.888)	261733	50.0000	48.25(M)
74	1,4-Naphthoquinone	158	8.188	8.188	(0.930)	156011	50.0000	65.18
75	1,4-Dinitrobenzene	168	8.354	8.354	(1.365)	100864	50.0000	52.62
77	1,3-Dinitrobenzene	168	8.546	8.546	(0.970)	108619	50.0000	52.33
* 82	Acenaphthene-d10	164	8.808	8.808	(1.000)	359467	40.0000	
87	Pentachlorobenzene	250	9.187	9.187	(1.043)	286163	50.0000	45.40
89	1-Naphthylamine	143	9.321	9.321	(1.058)	488343	50.0000	49.84
90	2-Naphthylamine	143	9.459	9.459	(1.074)	423996	50.0000	47.74
92	2,3,4,6-Tetrachlorophenol	232	9.502	9.502	(1.079)	160483	50.0000	49.36
96	Thionazin	107	9.919	9.919	(1.126)	128214	50.0000	53.27
97	5-Nitro-o-toluidine	152	9.930	9.930	(0.865)	179164	50.0000	53.21
101	tri-n-butylphosphate	99	10.202	10.202	(1.158)	848304	50.0000	54.04
105	Sulfotepp	97	10.608	10.608	(0.925)	139420	50.0000	55.31
106	Diallate (peak 1)	86	10.677	10.677	(0.931)	272521	50.0000	54.49
108	Phorate	75	10.688	10.688	(0.932)	493259	50.0000	54.72
111	Diallate (peak 2)	86	10.811	10.811	(0.942)	59777	50.0000	56.09
107	1,3,5-Trinitrobenzene	213	10.795	10.795	(0.941)	83318	50.0000	53.42(M)
110	Phenacetin	108	10.832	10.832	(0.944)	379125	50.0000	54.67
113	Dimethoate	87	11.051	11.051	(0.963)	242651	50.0000	58.94
116	4-Aminobiphenyl	169	11.228	11.228	(0.979)	652177	50.0000	51.91
115	tris(2-chloroethyl)phosphate	63	11.292	11.292	(0.984)	204193	50.0000	55.75
119	Pentachloronitrobenzene	237	11.441	11.441	(0.997)	105461	50.0000	48.98
118	Pronamide	173	11.495	11.495	(1.002)	318114	50.0000	51.02
* 121	Phenanthrene-d10	188	11.473	11.473	(1.000)	660232	40.0000	
123	Disulfoton	88	11.682	11.682	(1.018)	341015	50.0000	53.71
125	Dinoseb	211	11.730	11.730	(1.022)	200340	50.0000	52.06
128	Methyl Parathion	109	12.403	12.403	(1.081)	211077	50.0000	57.62
131	4-Nitroquinoline-1-oxide	190	13.135	13.135	(1.145)	76559	50.0000	54.70
130	Parathion	97	13.194	13.194	(1.150)	166701	50.0000	56.79
132	Methapyrilene	97	13.381	13.381	(1.166)	270318	50.0000	60.31(M)
133	Isodrin	193	13.525	13.525	(1.179)	109814	50.0000	47.98
141	Kepone	272	14.679	14.679	(0.883)	4550	50.0000	50.31
140	Aramite (peak 1)	185	14.770	14.770	(0.888)	58945	50.0000	57.03
142	Aramite (peak 2)	185	14.930	14.930	(0.898)	87751	50.0000	55.70
143	p-(Dimethylamino)azobenzene	120	14.999	14.999	(0.902)	278694	50.0000	57.13
144	Chlorobenzilate	251	15.138	15.138	(0.910)	326509	50.0000	47.93
148	2-Acetylaminofluorene	181	16.207	16.207	(0.975)	426784	50.0000	55.54
149	Famphur	218	16.591	16.591	(0.998)	33537	50.0000	91.66(M)
* 153	Chrysene-d12	240	16.629	16.629	(1.000)	586209	40.0000	
151	4,4'-Methylenebis(2-Chloroani	266	16.709	16.709	(1.005)	89352	50.0000	52.51
162	7,12-Dimethylbenz(a)anthracen	256	18.648	18.648	(0.969)	461918	50.0000	50.47
163	Hexachlorophene	196	18.947	18.947	(0.985)	3383	50.0000	11.55
* 166	Perylene-d12	264	19.241	19.241	(1.000)	495262	40.0000	
169	3-methylcholanthrene	268	19.791	19.791	(1.029)	454673	50.0000	48.93

QC Flag Legend

M - Compound response manually integrated.

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

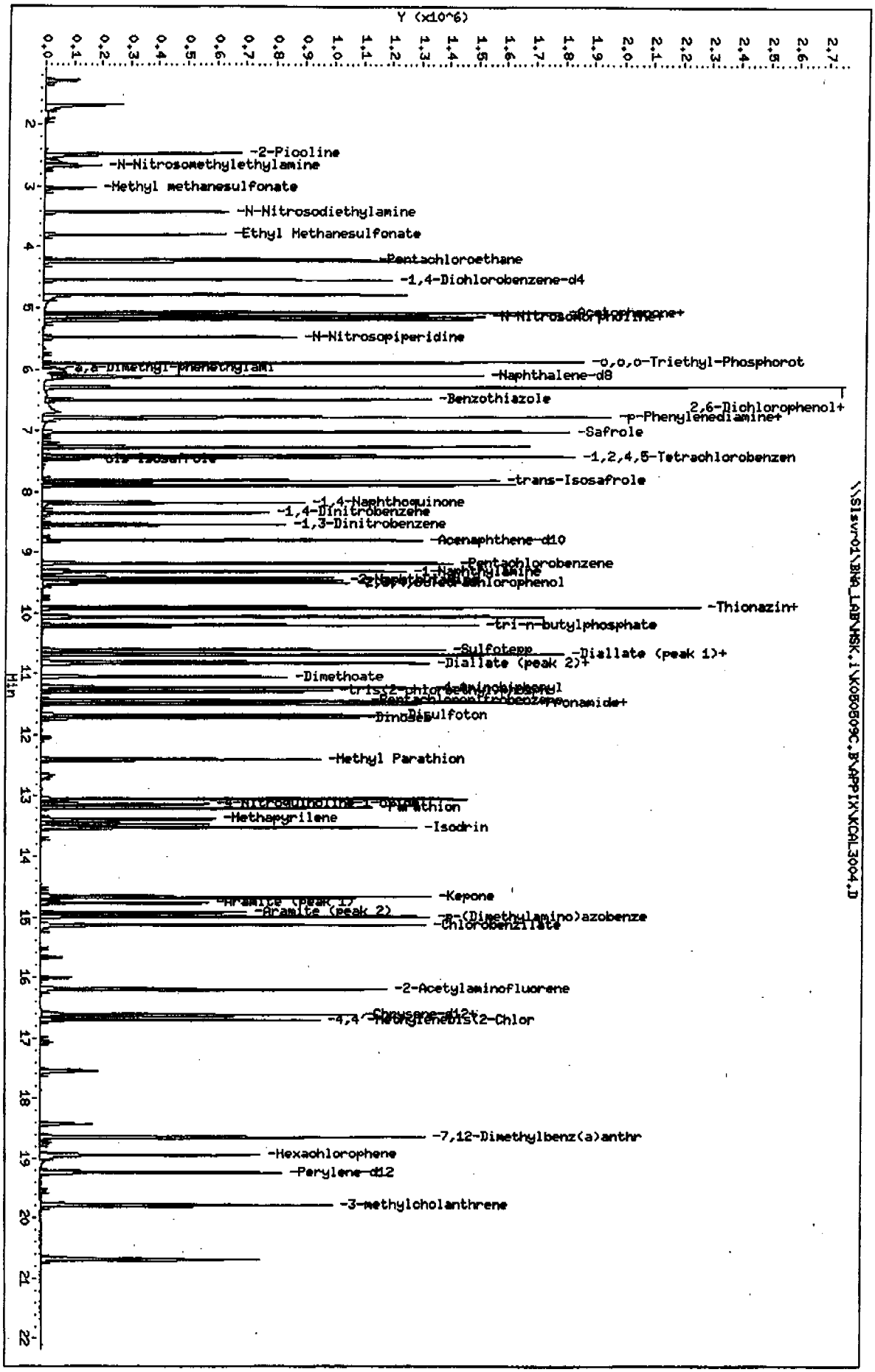
Instrument ID: MSK.i
Lab File ID: KCAL3004.D
Lab Smp Id: SSTD050APPIX
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\APPIX\8270K.m
Misc Info: SV0190-05

Calibration Date: 28-APR-2005
Calibration Time: 11:41
Client Smp ID: SSTD050APPIX
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	162145	81073	324290	178409	10.03
48 Naphthalene-d8	535939	267970	1071878	627703	17.12
82 Acenaphthene-d10	307602	153801	615204	359467	16.86
121 Phenanthrene-d10	574409	287205	1148818	660232	14.94
153 Chrysene-d12	519397	259699	1038794	586209	12.86
166 Perylene-d12	440492	220246	880984	495262	12.43

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.62	4.12	5.12	4.55	-1.61
48 Naphthalene-d8	6.21	5.71	6.71	6.12	-1.37
82 Acenaphthene-d10	8.91	8.41	9.41	8.81	-1.13
121 Phenanthrene-d10	11.58	11.08	12.08	11.47	-0.92
153 Chrysene-d12	16.74	16.24	17.24	16.63	-0.64
166 Perylene-d12	19.35	18.85	19.85	19.24	-0.55

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

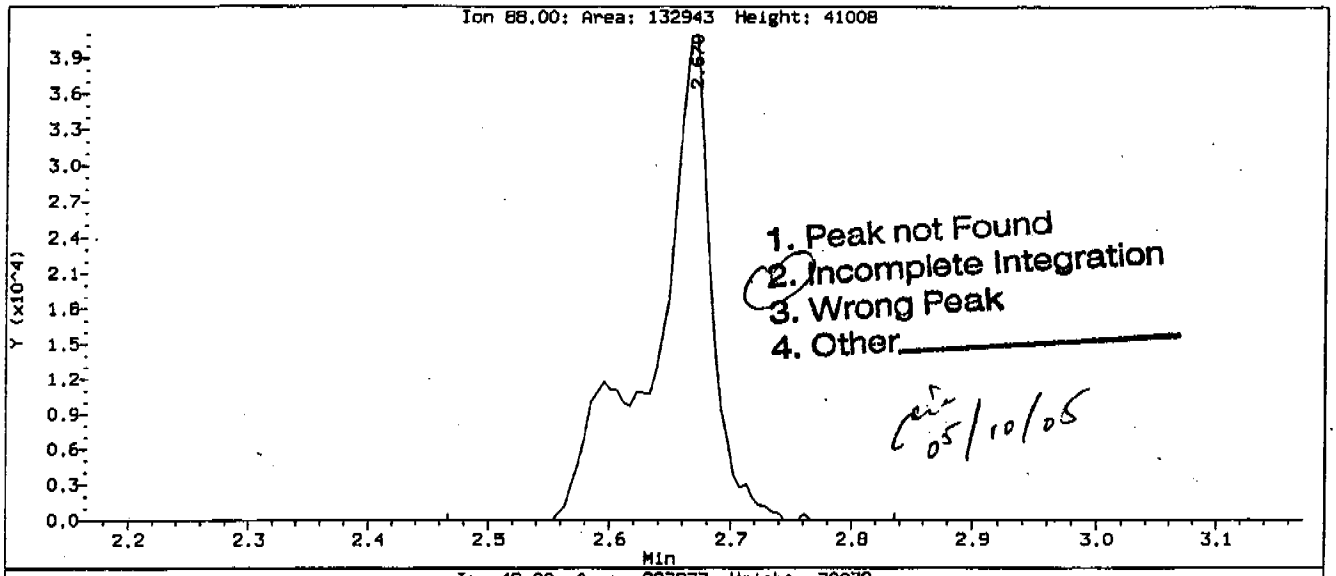


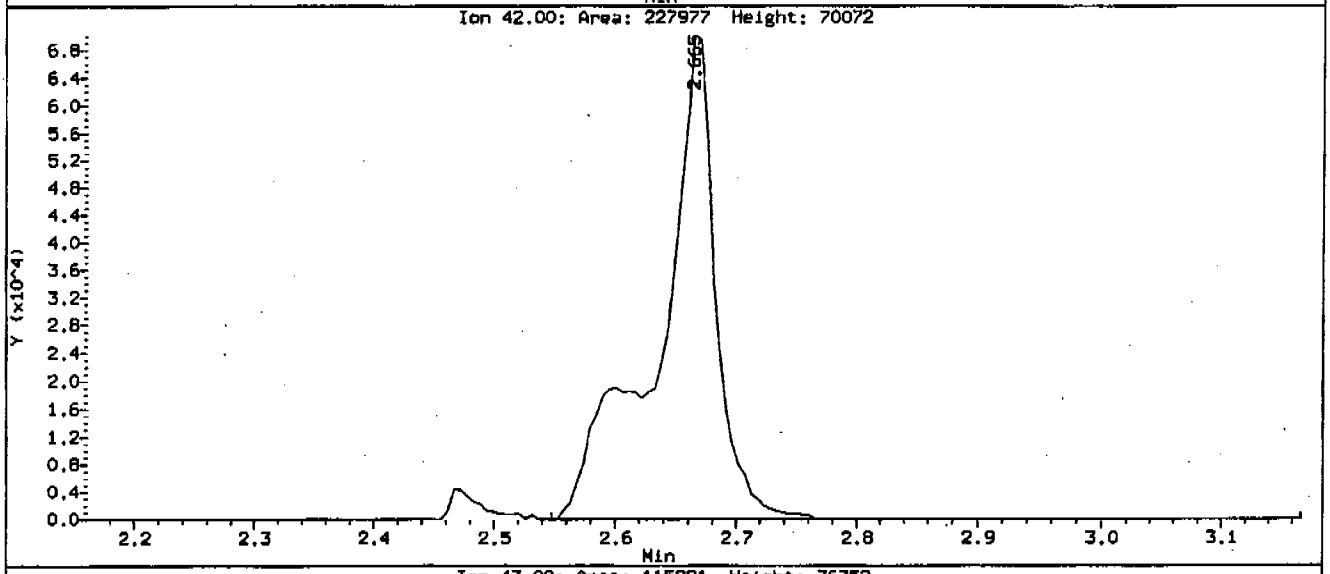
Data File: \\Slsvr01\BNA_LAB\HSK.i\K050509C.B\APPIX\KCAL3004.D
Date : 09-MAY-2005 17:02
Client ID: SSTD050APPIX
Sample Info: SSTD050APPIX
Volume Injected (uL): 1.0
Column phase:

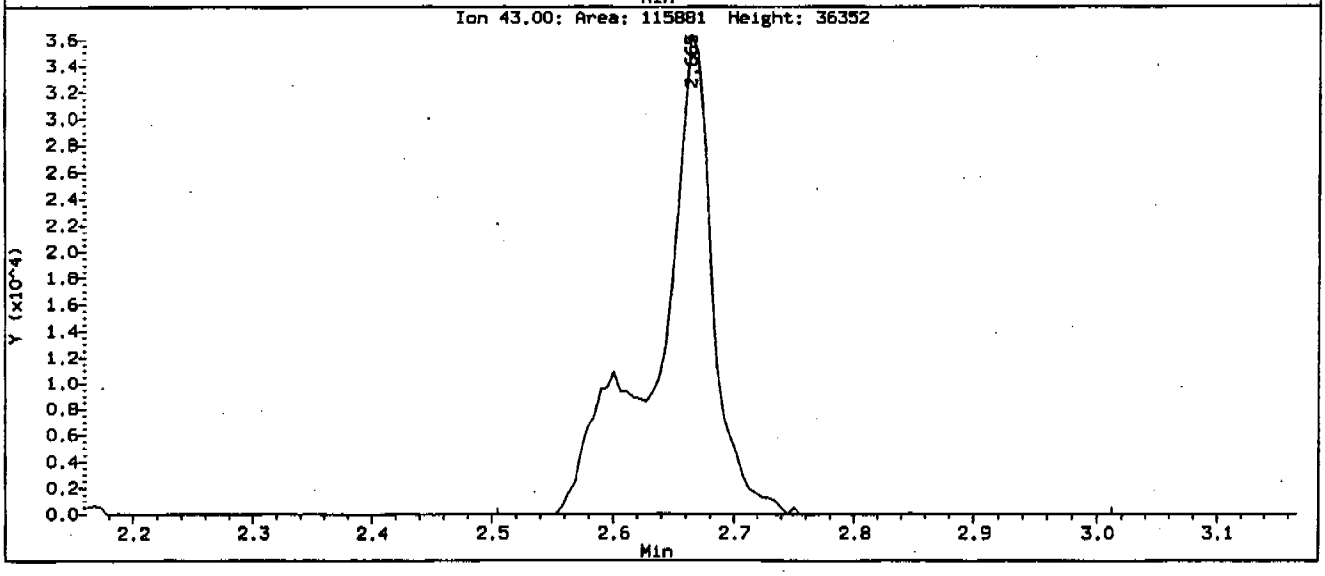
Instrument: HSK.i
Operator: KIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3004.D
Injection Date: 09-MAY-2005 17:02
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

Compound: N-Nitrosomethylethylamine
CAS Number: 10595-95-6

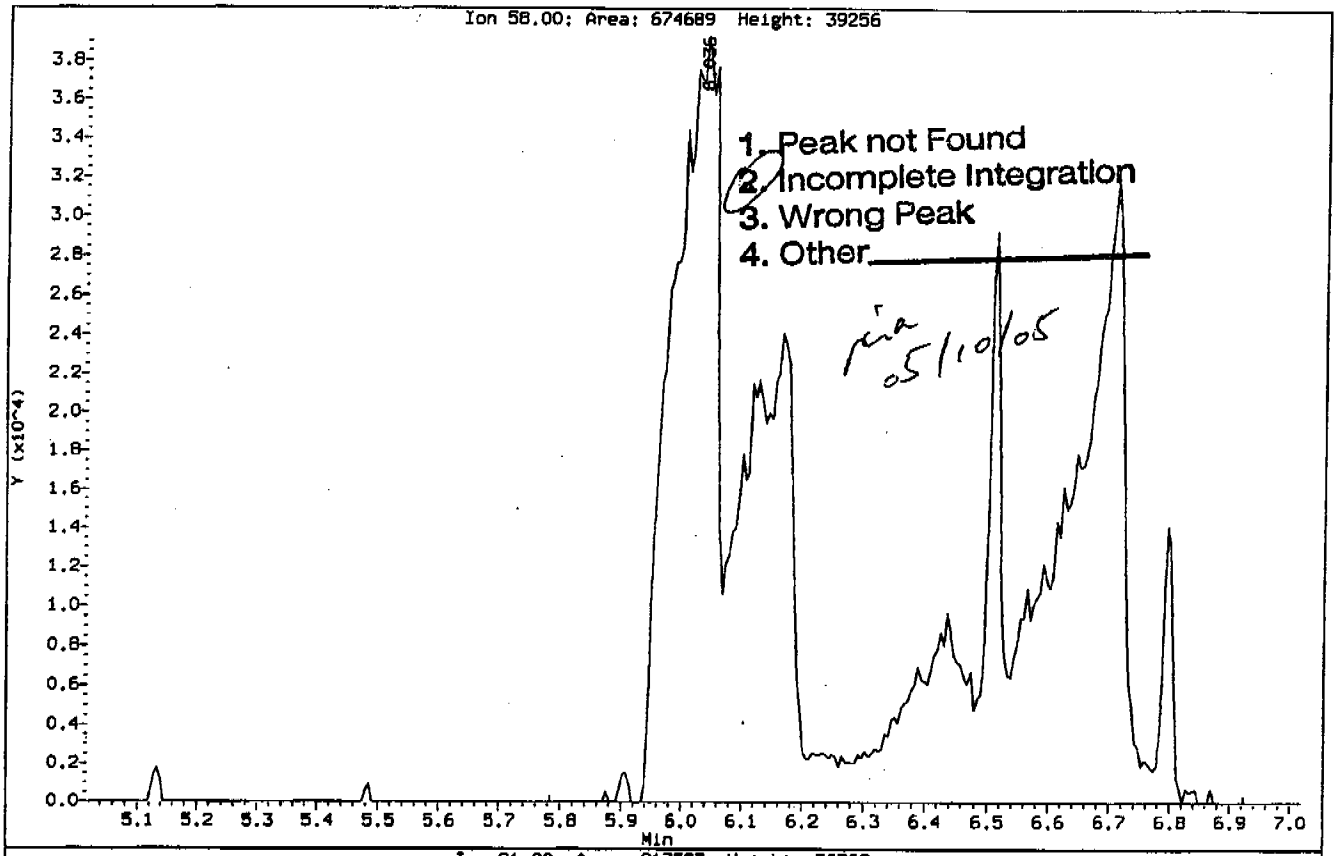


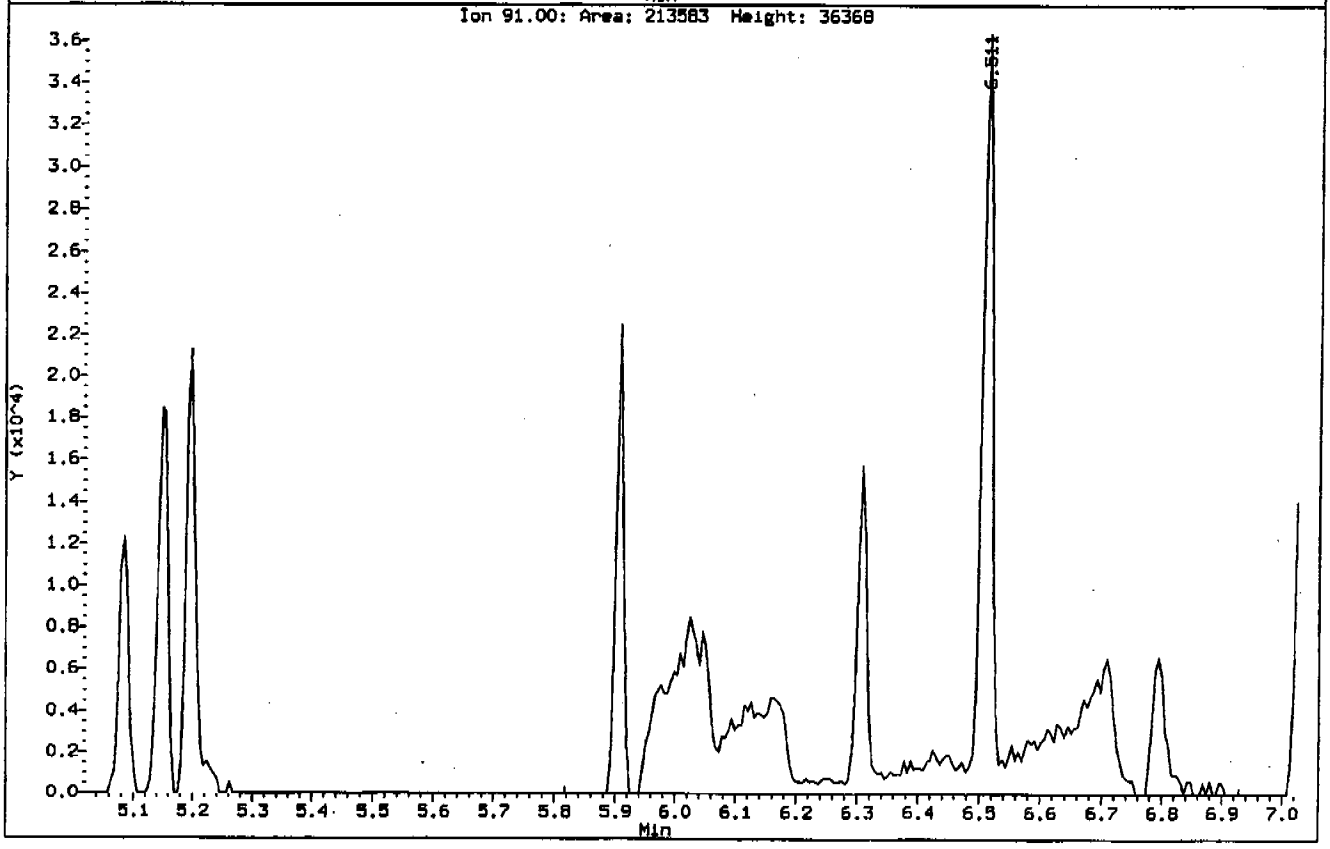




Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3004.D
Injection Date: 09-MAY-2005 17:02
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

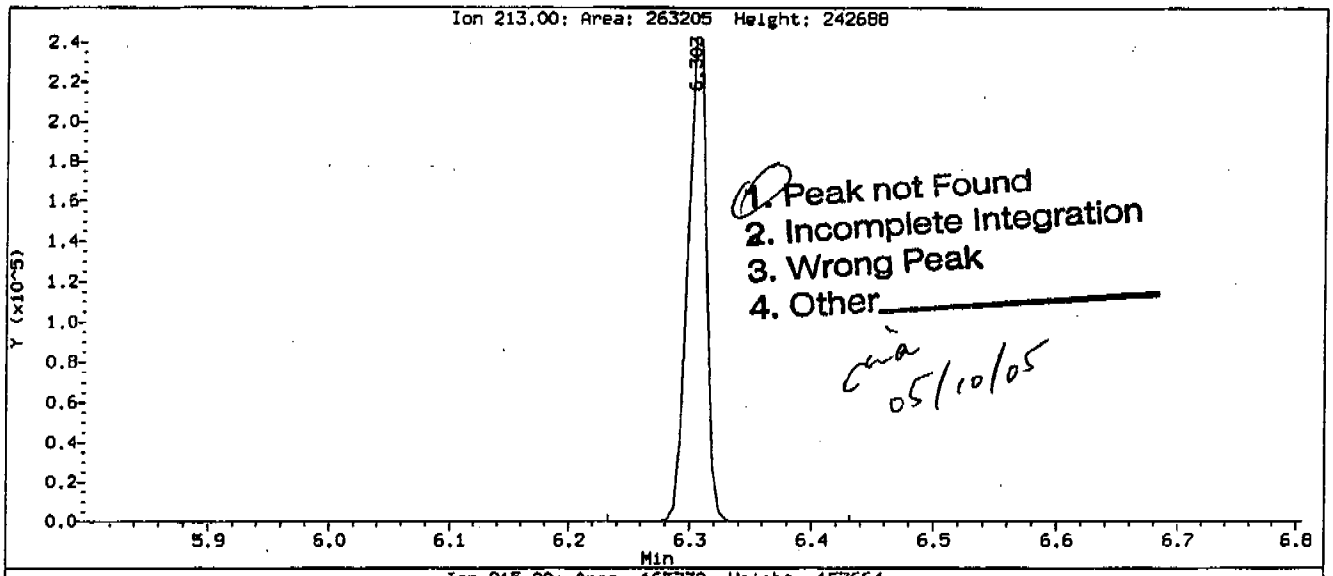
Compound: a,a-Dimethyl-phenethylamine
CAS Number: 122-09-8

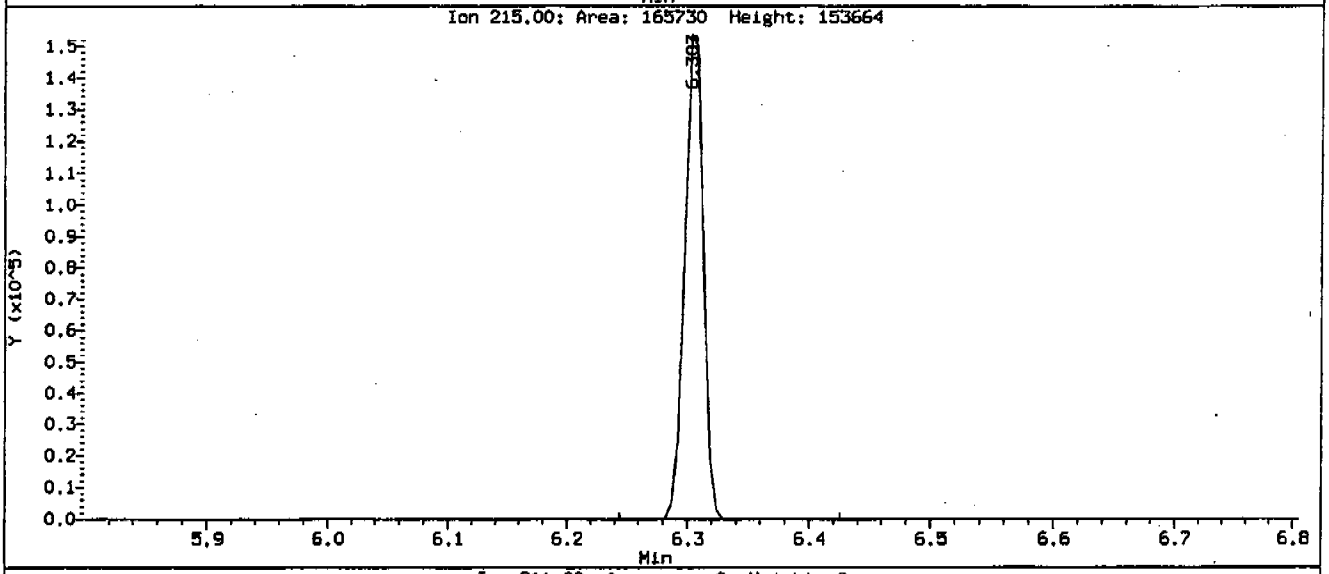


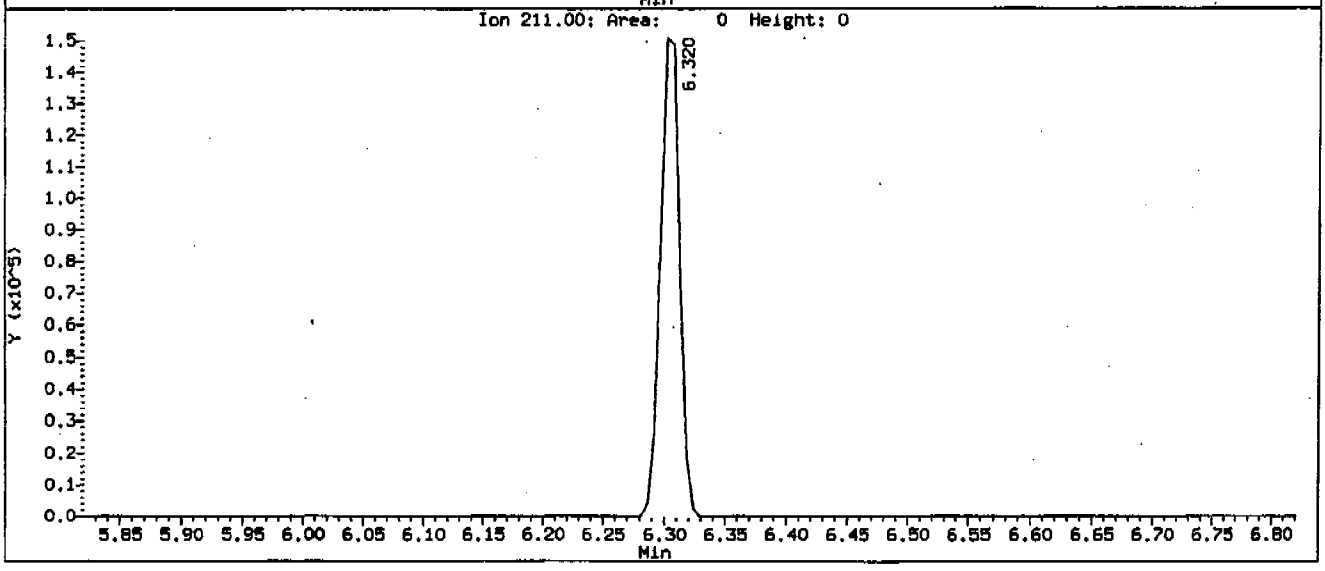


Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3004.D
Injection Date: 09-MAY-2005 17:02
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

Compound: Hexachloropropene
CAS Number: 1888-71-7

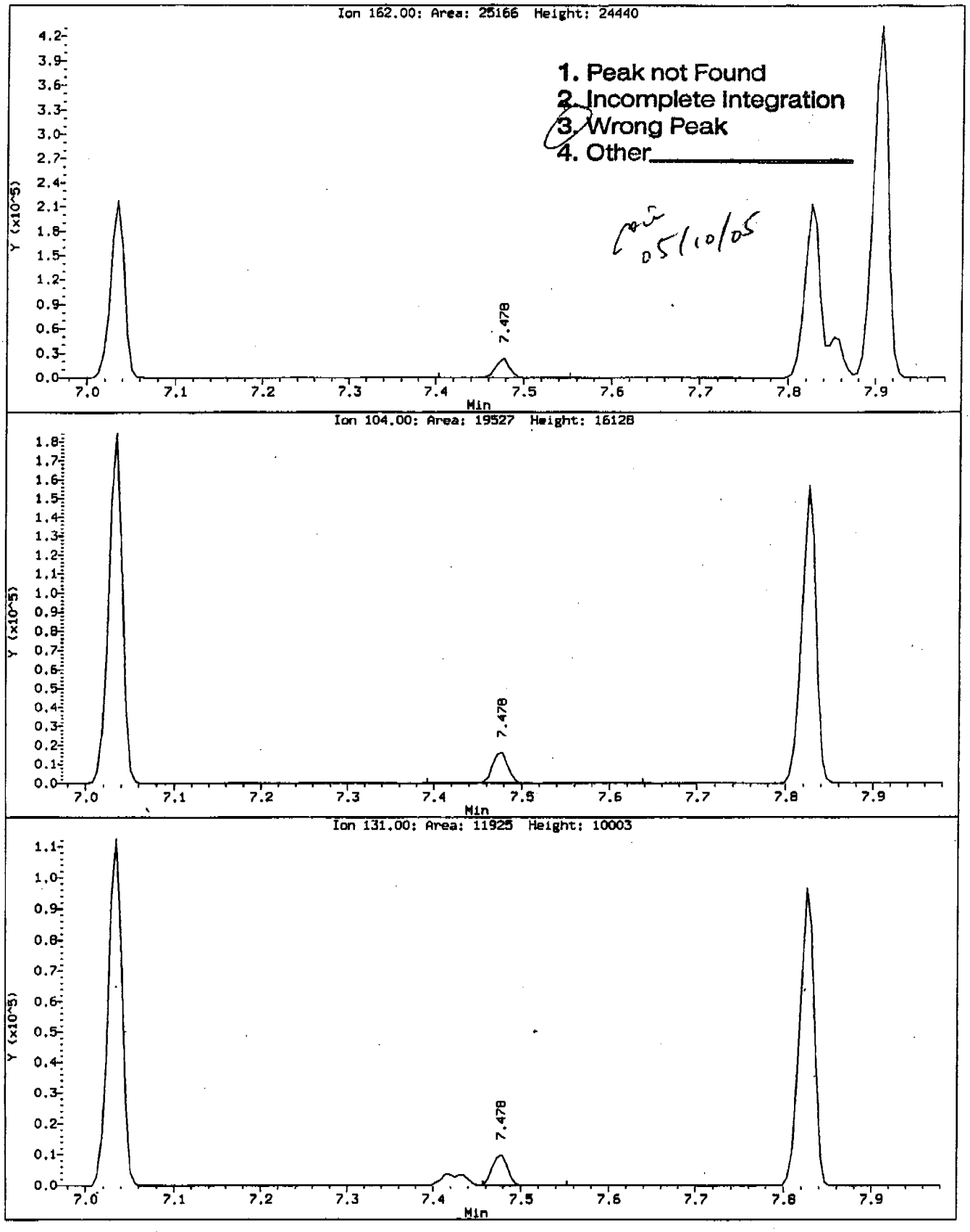






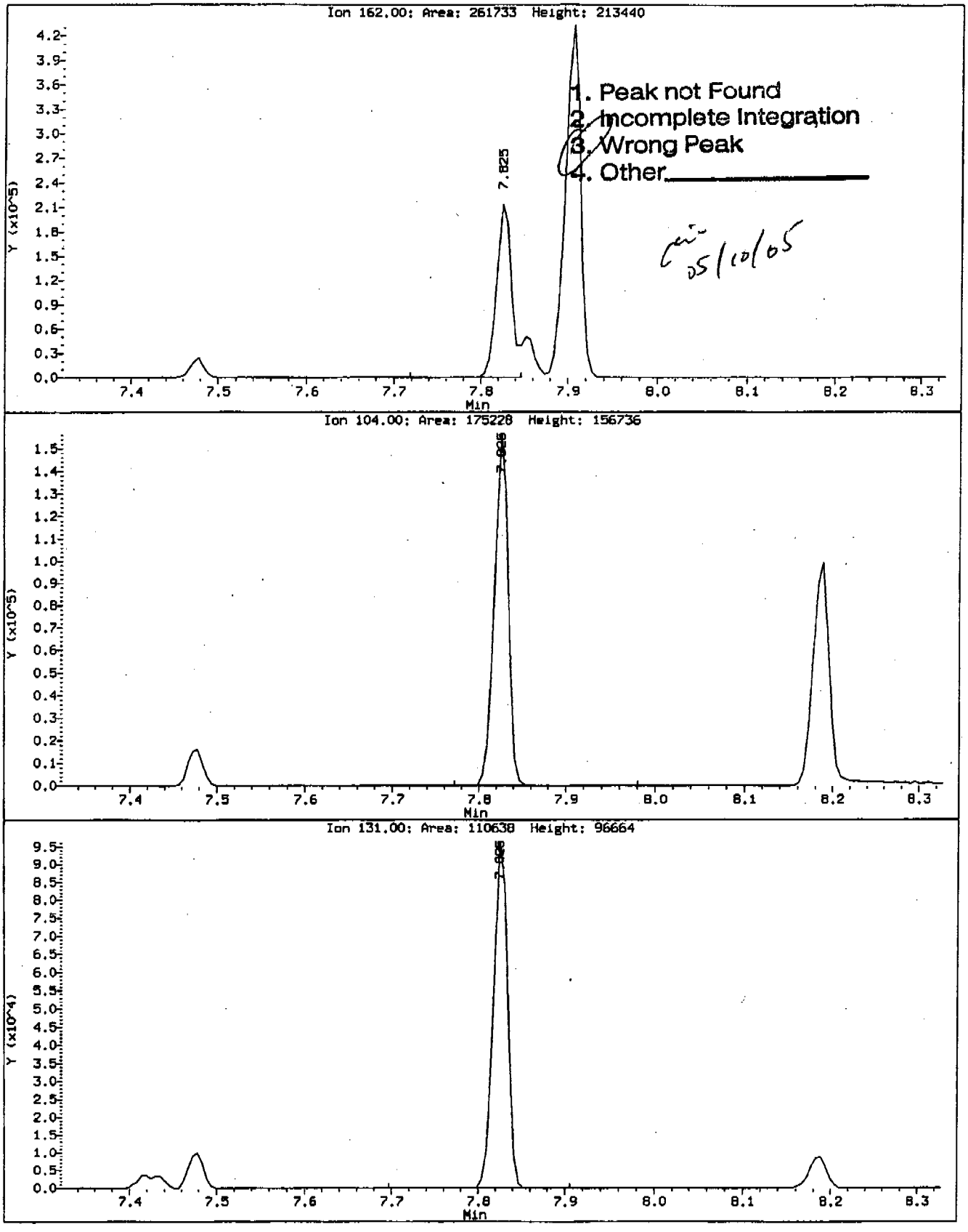
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3004.D
Injection Date: 09-MAY-2005 17:02
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

Compound: cis-Isosafrole
CAS Number: 120-58-1



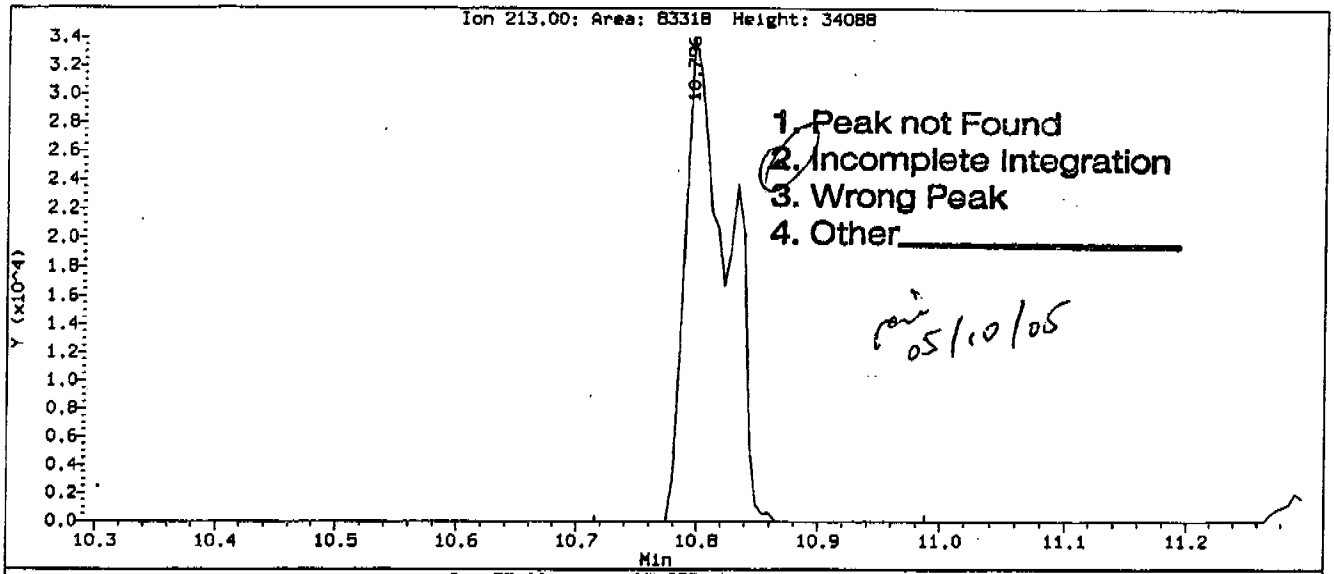
Data File: \\Slsvr01\BNA_LAB\MSK,i\K050509C.B\KCAL3004.D
Injection Date: 09-MAY-2005 17:02
Instrument: MSK,i
Client Sample ID: SSTD050APPIX

Compound: trans-Isosafrole
CAS Number: 120-58-1



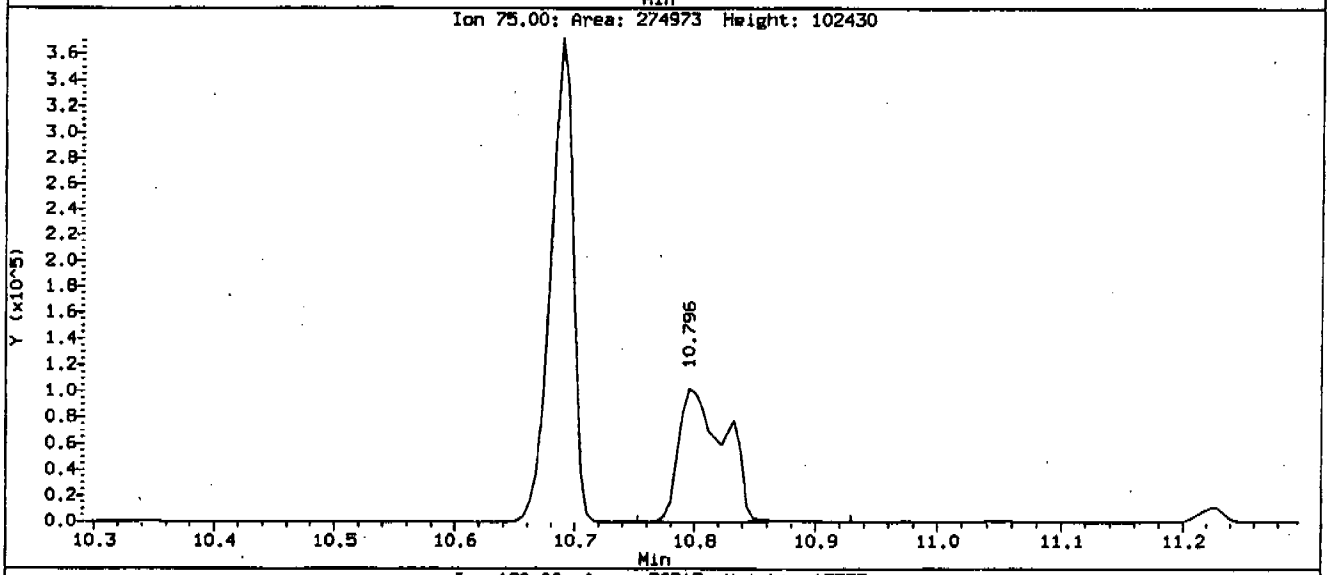
Data File: \\Slavr01\BNA_LAB\MSK.i\K050509C.B\KCAL3004.D
Injection Date: 09-MAY-2005 17:02
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

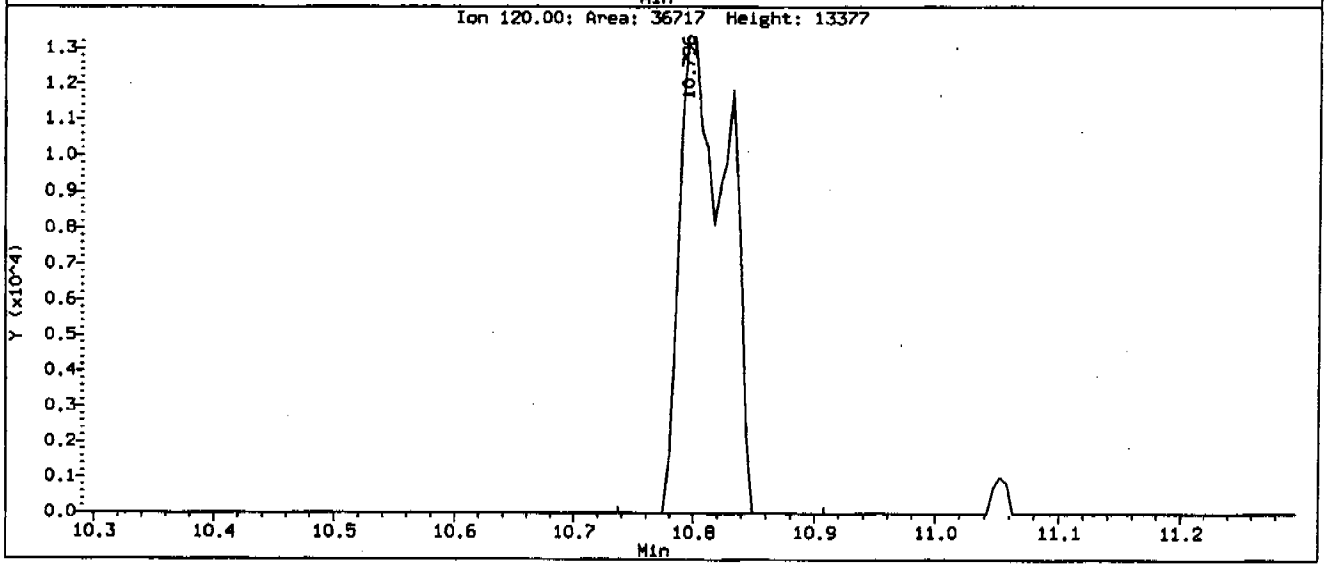
Compound: 1,3,5-Trinitrobenzene
CAS Number: 99-35-4



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

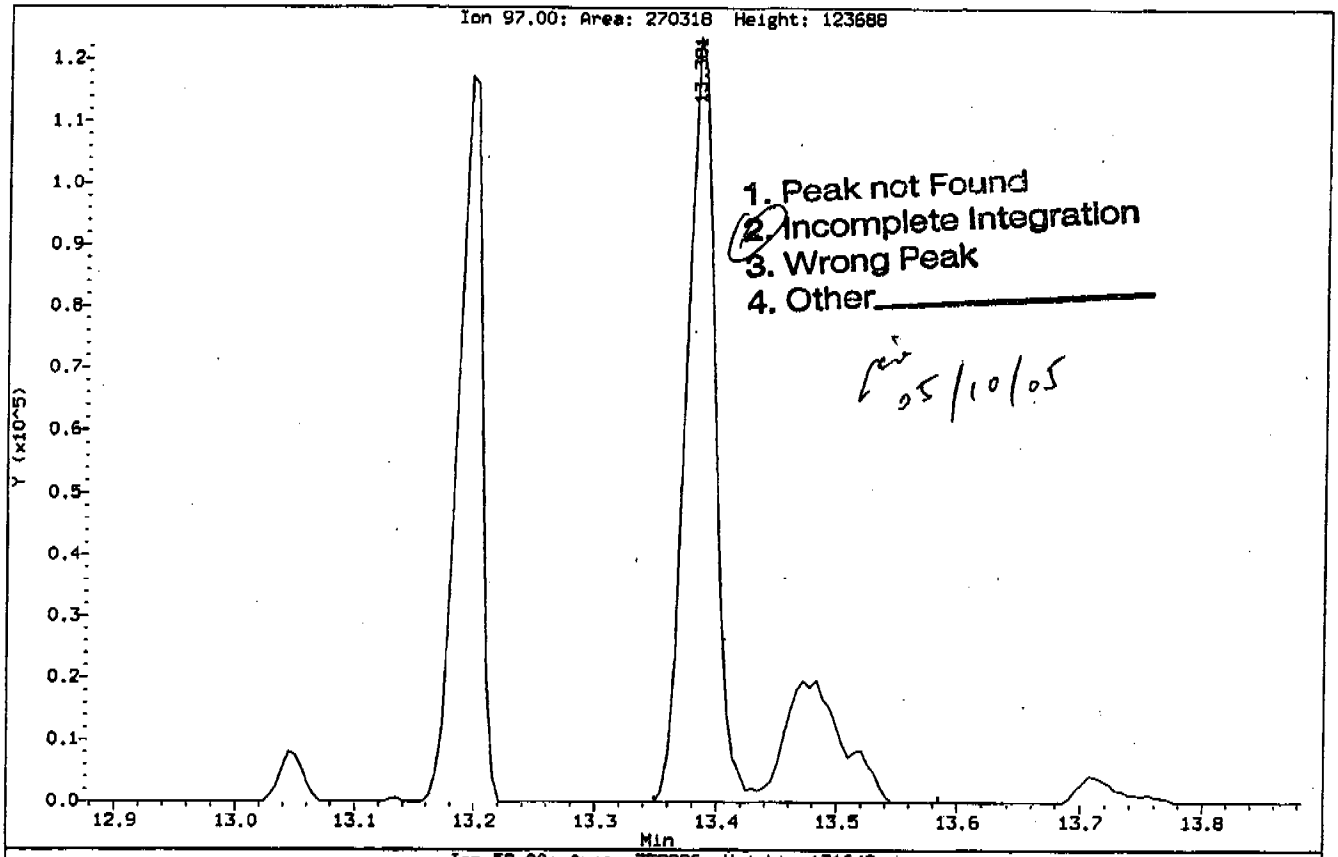
pm 05/10/05

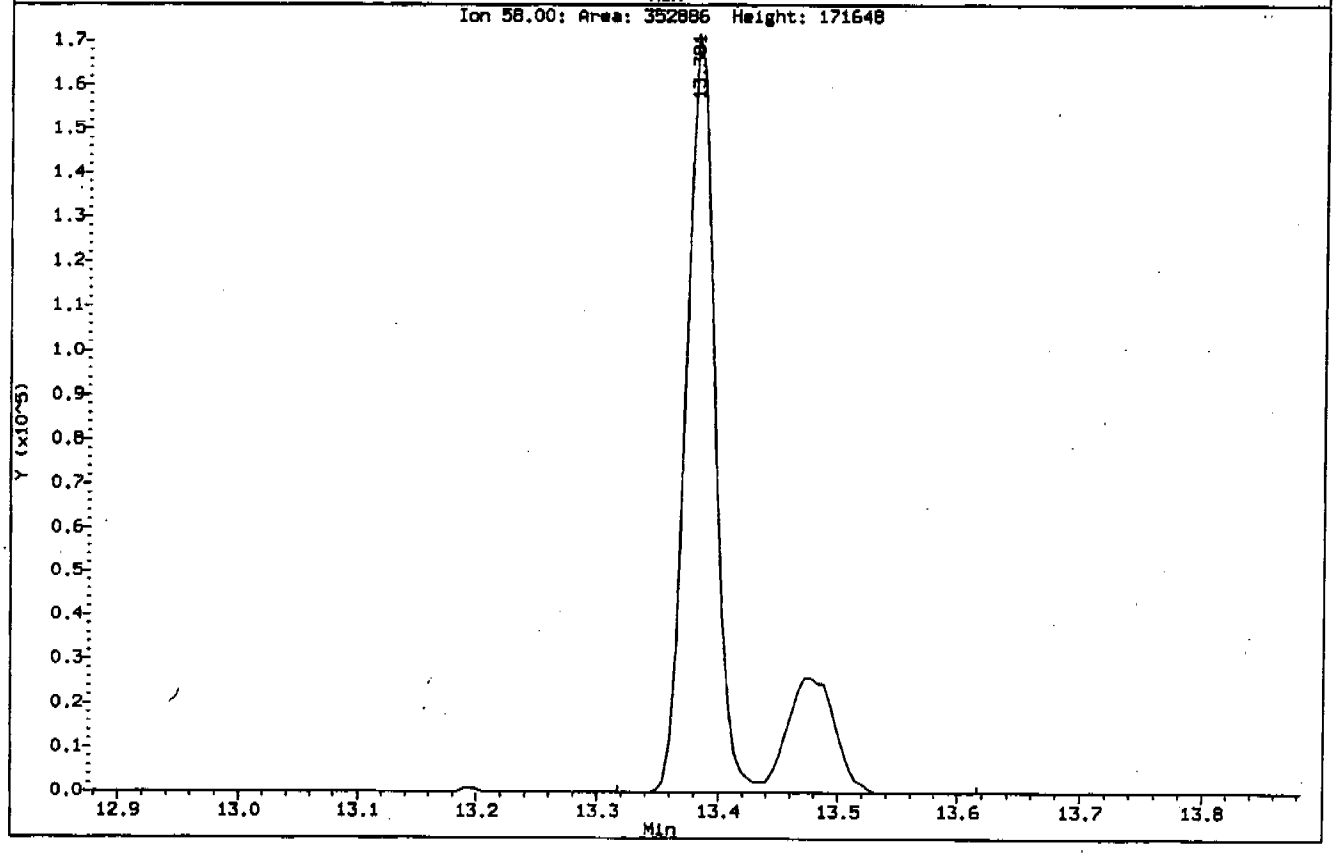




Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3004.D
Injection Date: 09-MAY-2005 17:02
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

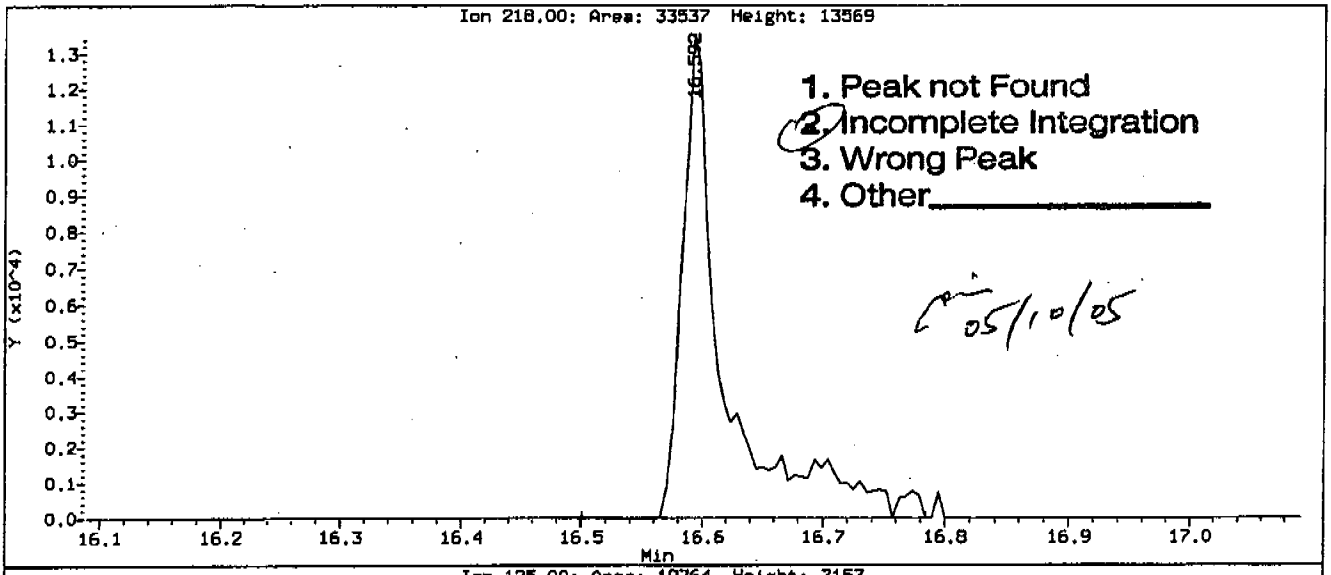
Compound: Methapyrilene
CAS Number: 91-80-5

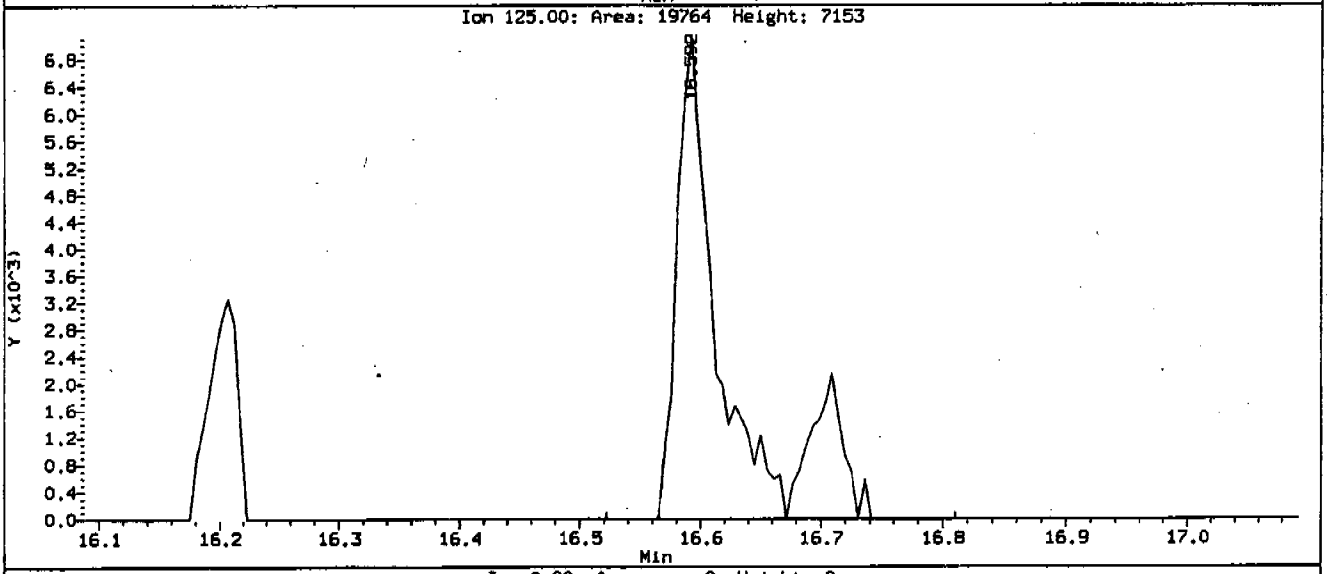


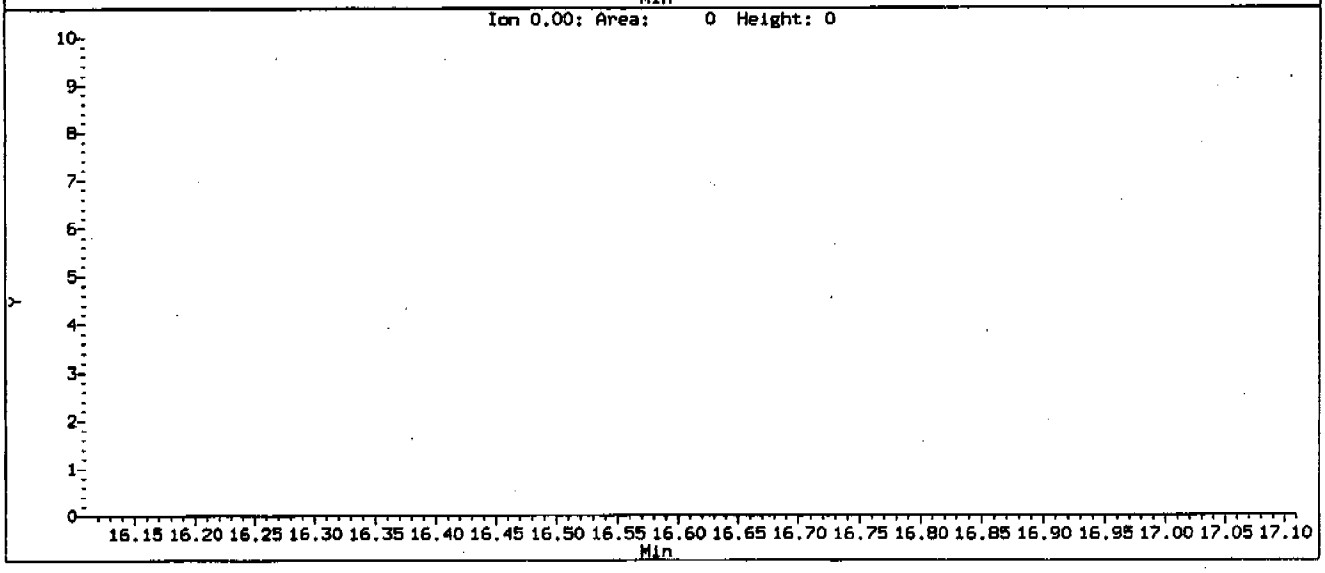


Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KCAL3004.D
Injection Date: 09-MAY-2005 17:02
Instrument: MSK.i
Client Sample ID: SSTD050APPIX

Compound: Famphur
CAS Number: 52-85-7







STL ST. LOUIS

DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	47.49		PASS
68	Less than 2% of mass 69	0.47	(0.86)	PASS
69	Mass 69 relative abundance	54.92		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	49.11		PASS
197	0 - 1% of mass 198	0.32		PASS
199	5 - 9% of mass 198	7.02		PASS
275	10 - 30% of mass 198	26.65		PASS
365	Greater than 1% of mass 198	3.49		PASS
441	Present, but less than mass 443	9.43	(79.94)	PASS
442	Greater than 40% of mass 198	65.81		PASS
443	17 - 23% of mass 442	11.80	(17.93)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.0417029	5.000	PASS
Benzidine	0.9857955	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	267935			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	882	0.3	15.0	PASS
4,4-DDD + DDE	882	0.3	15.0	PASS

********** Tuning Sample, //Slsvr01/BNA_LAB/MSK.i/K050510B.B/KDFT3031.D/KDFT3031.D,*** PASSED **********

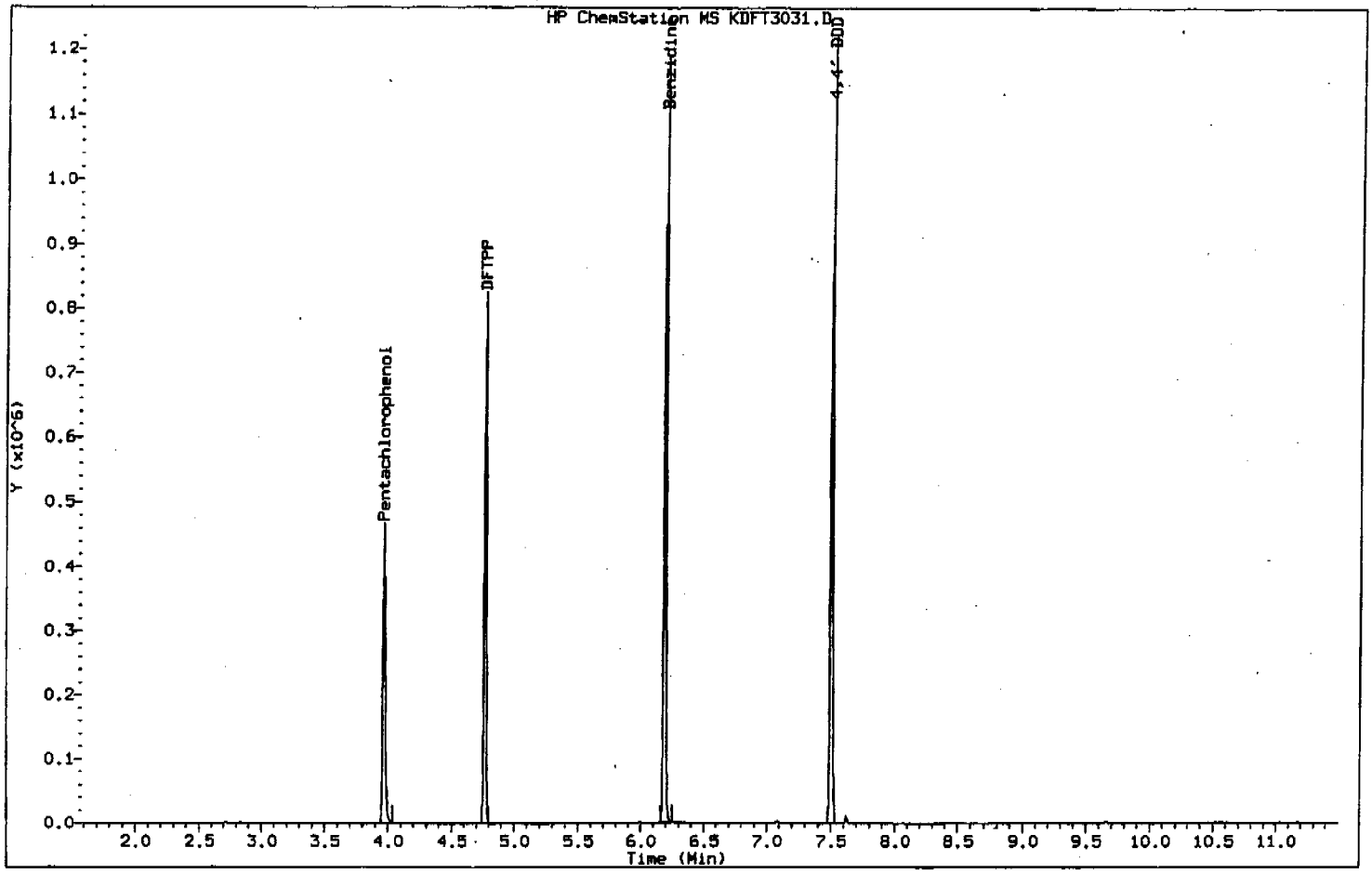
05/11/05

STL ST. LOUIS

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 05/11/2005 08:51

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050510B.B/KDFT3031.D/KDFT3031.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050510B.B\sw846tun.m Inst: MSK
Injection Date: 10-MAY-2005 11:59 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0232-05 (50NG)

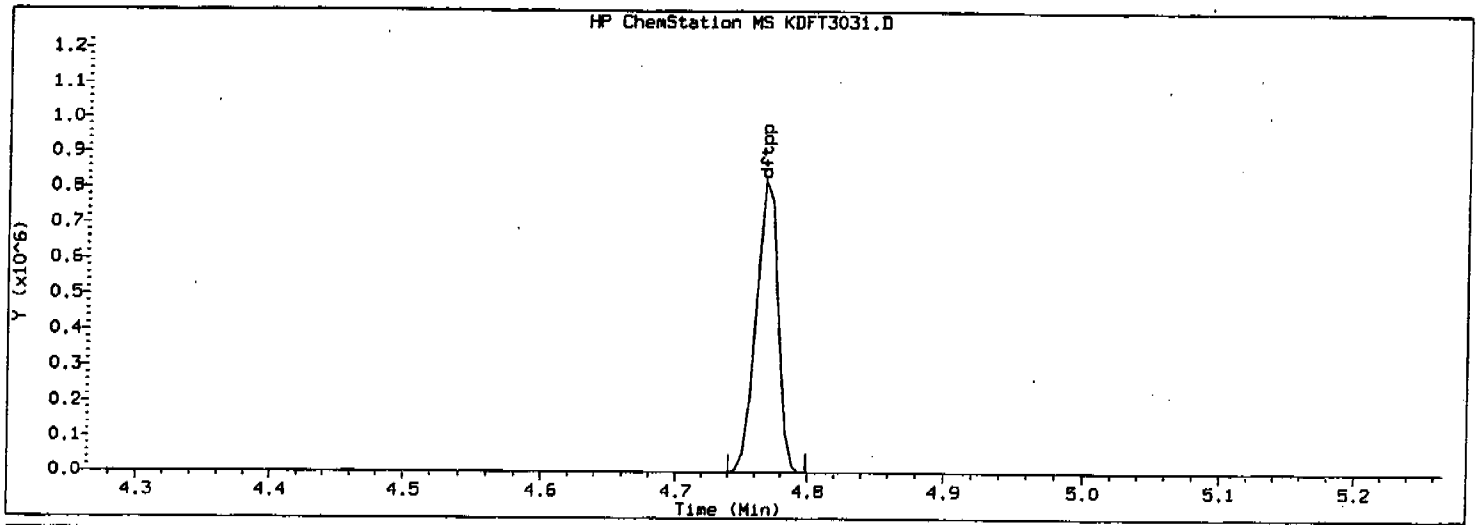


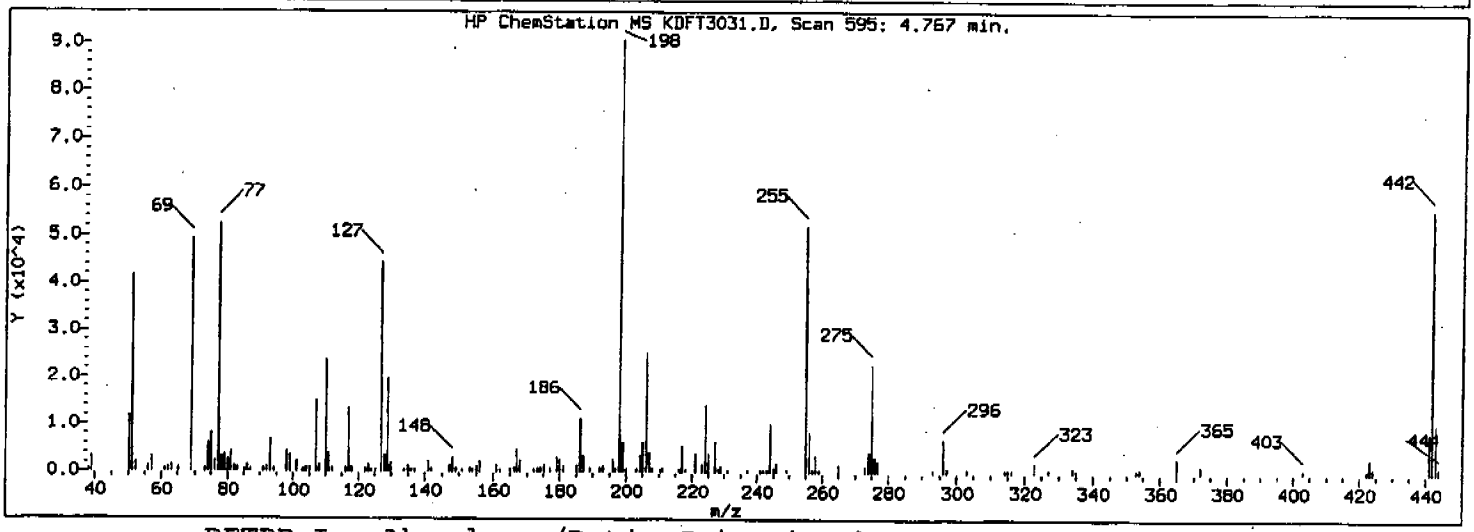
LOT# F5D210380

STL ST. LOUIS

Report Date: 05/11/2005 08:51

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050510B.B/KDFT3031.D/KDFT3031.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050510B.B\sw846tun.m Inst: MSK
Injection Date: 10-MAY-2005 11:59 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0232-05 (50NG)





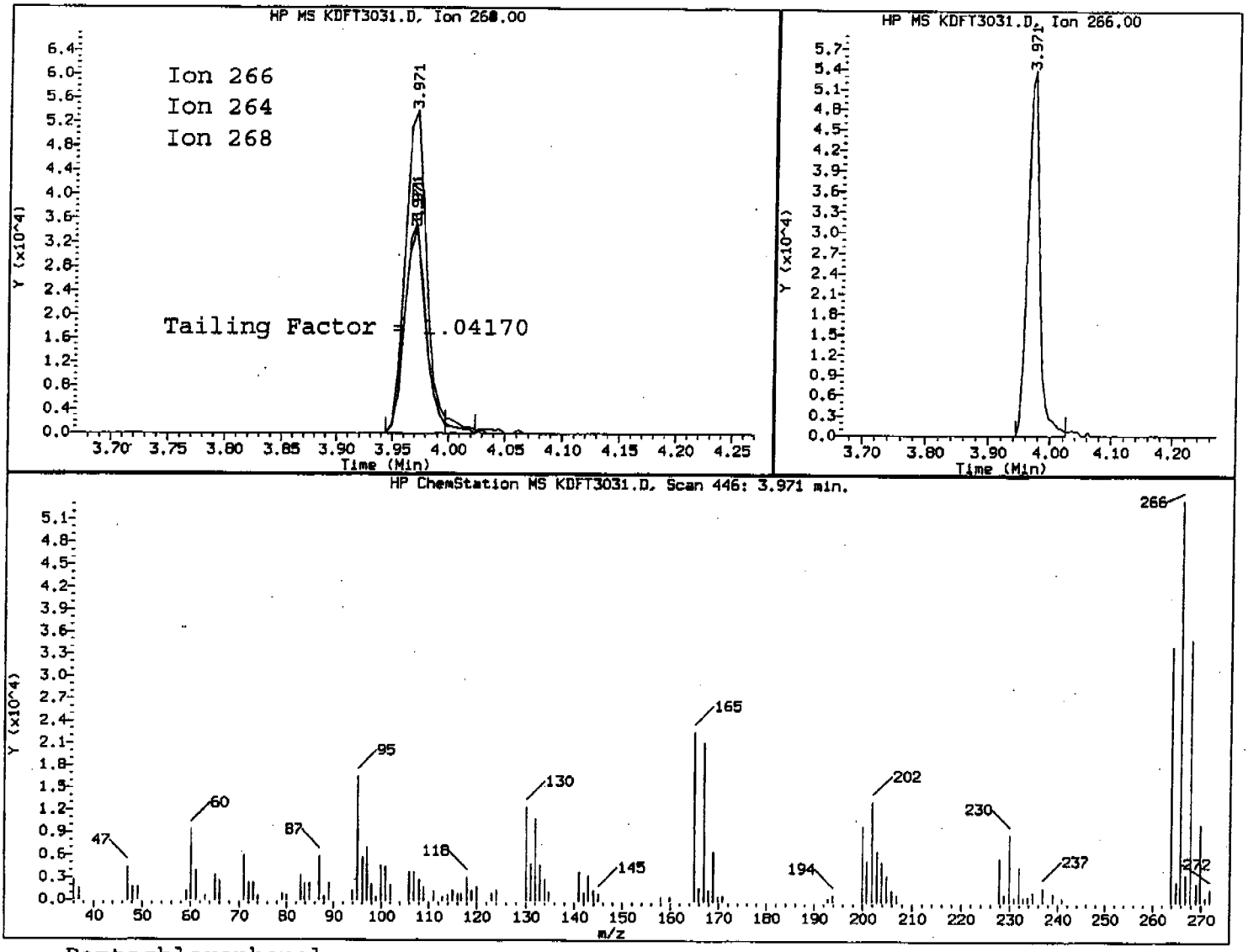
DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	47.49		PASS
68	Less than 2% of mass 69	0.47	(0.86)	PASS
69	Mass 69 relative abundance	54.92		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	49.11		PASS
197	0 - 1% of mass 198	0.32		PASS
199	5 - 9% of mass 198	7.02		PASS
275	10 - 30% of mass 198	26.65		PASS
365	Greater than 1% of mass 198	3.49		PASS
441	Present, but less than mass 443	9.43	(79.94)	PASS
442	Greater than 40% of mass 198	65.81		PASS
443	17 - 23% of mass 442	11.80	(17.93)	PASS

LOT# F5D210380

Report Date: 05/11/2005 08:51

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050510B.B/KDFT3031.D/KDFT3031.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050510B.B\sw846tun.m\resolut.m Inst:
Injection Date: 10-MAY-2005 11:59 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



Pentachlorophenol

Exp. RT = 3.965
Found RT = 3.971

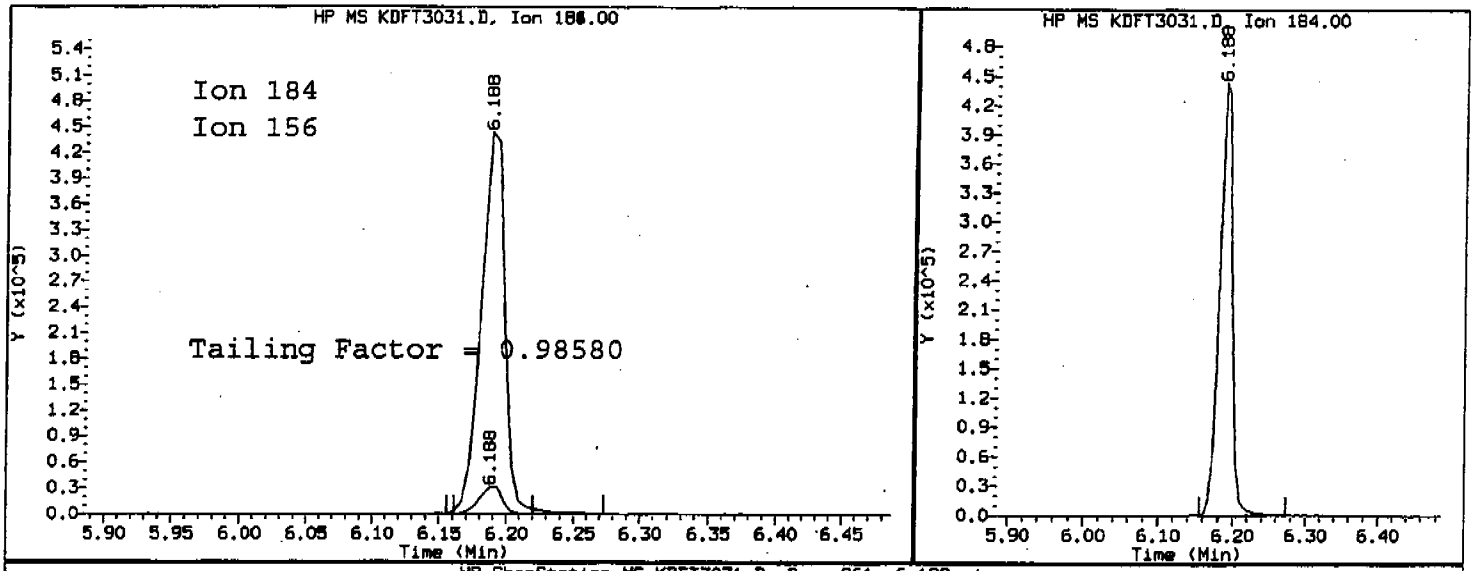
Mass	Area	Ratio
266	73899	100.00
264	46343	62.71
268	46939	63.52

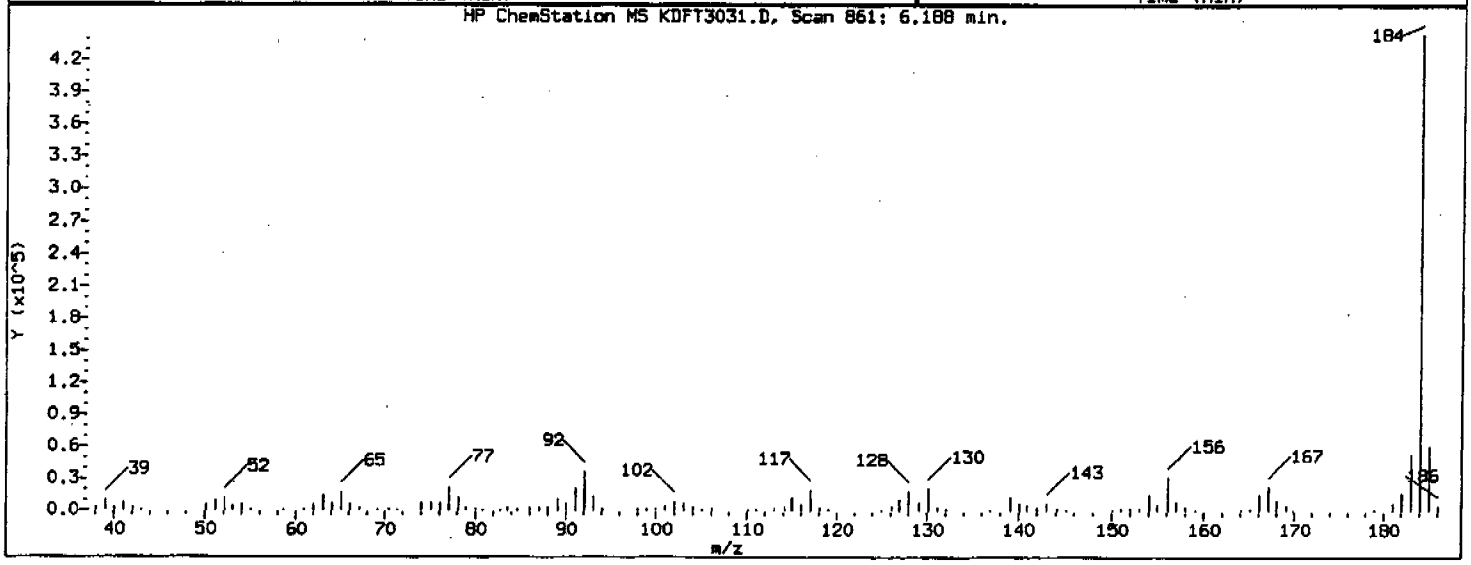
Tailing factor for Pentachlorophenol OK

Tail Factor = 1.042 Maximum Allowed = 5.0

Report Date: 05/11/2005 08:51

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050510B.B/KDFT3031.D/KDFT3031.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050510B.B\sw846tun.m\resolut.m Inst:
Injection Date: 10-MAY-2005 11:59 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)





Benzidine
=========
Exp. RT = 6.188
Found RT = 6.188

Mass	Area	Ratio
184	549382	100.00
156	39208	7.14

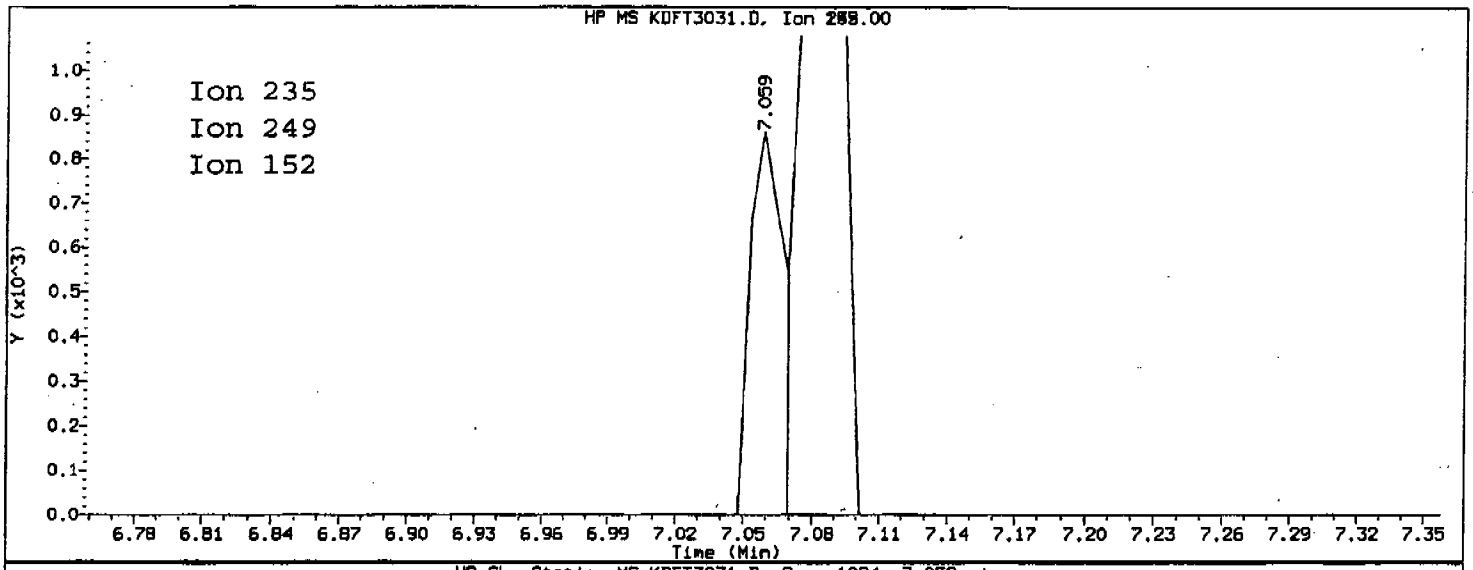
Tailing factor for Benzidine OK

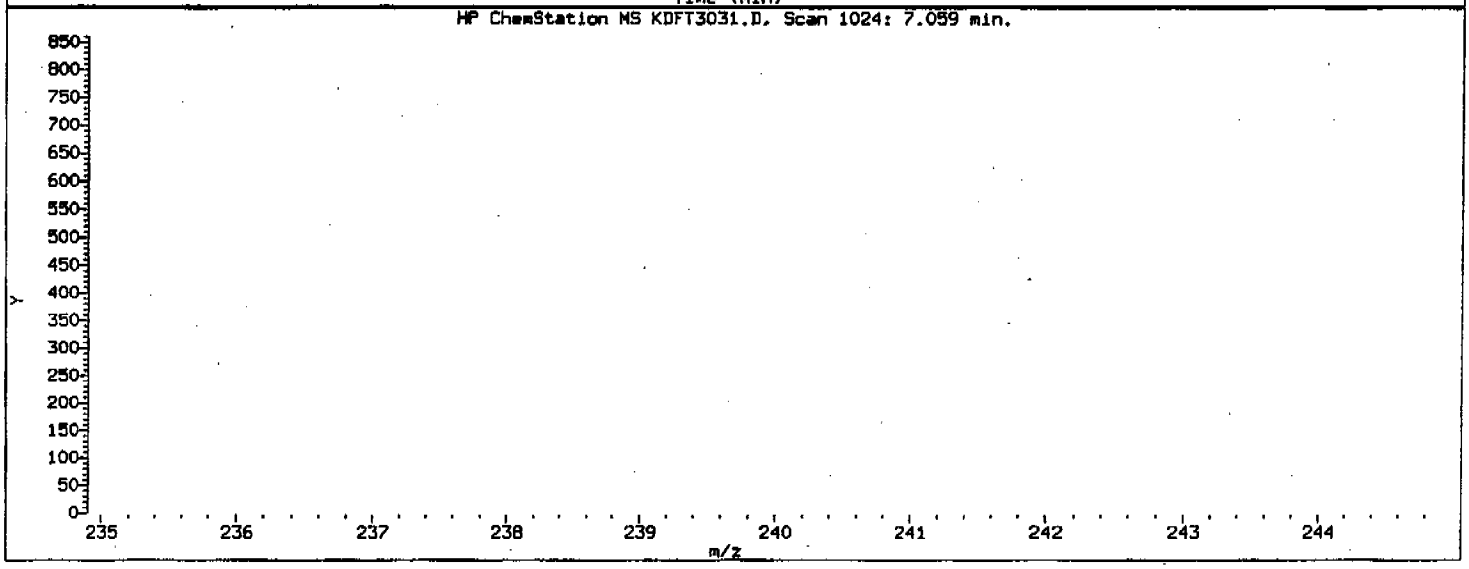
Tail Factor = 0.986 Maximum Allowed = 3.0

STL ST. LOUIS

Report Date: 05/11/2005 08:51

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050510B.B/KDFT3031.D/KDFT3031.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050510B.B\sw846tun.m\resolut.m Inst:
Injection Date: 10-MAY-2005 11:59 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)





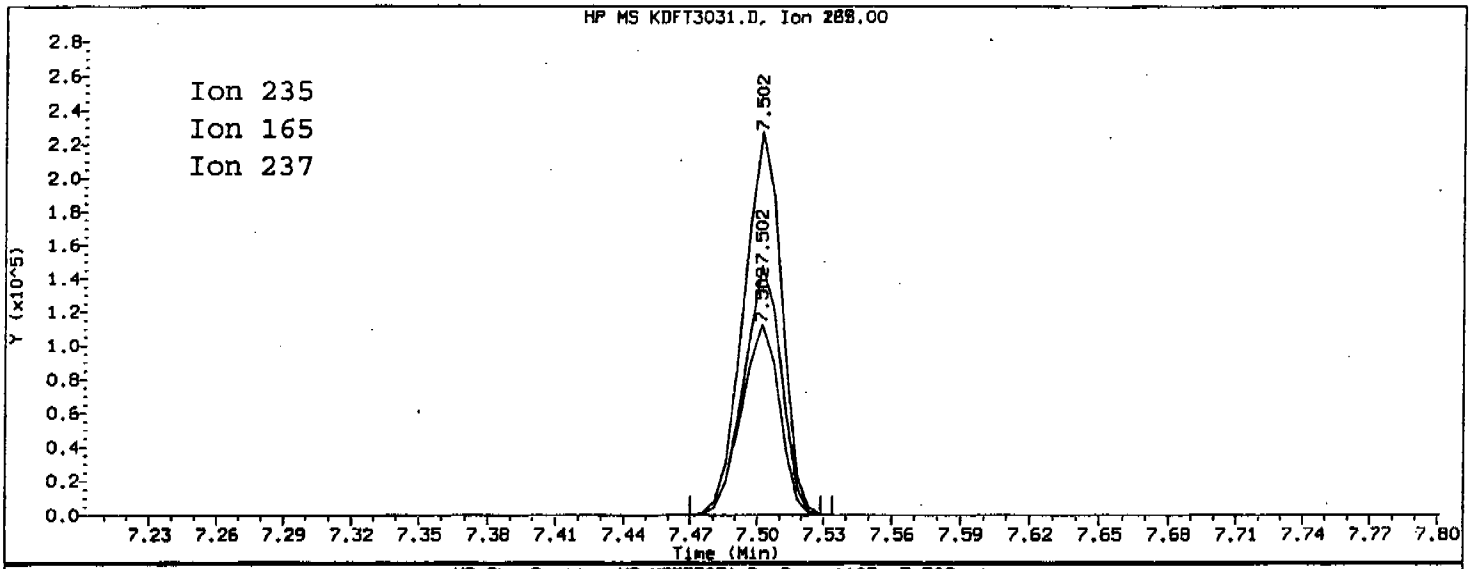
4,4'-DDD
========
Exp. RT = 7.074
Found RT = 7.059

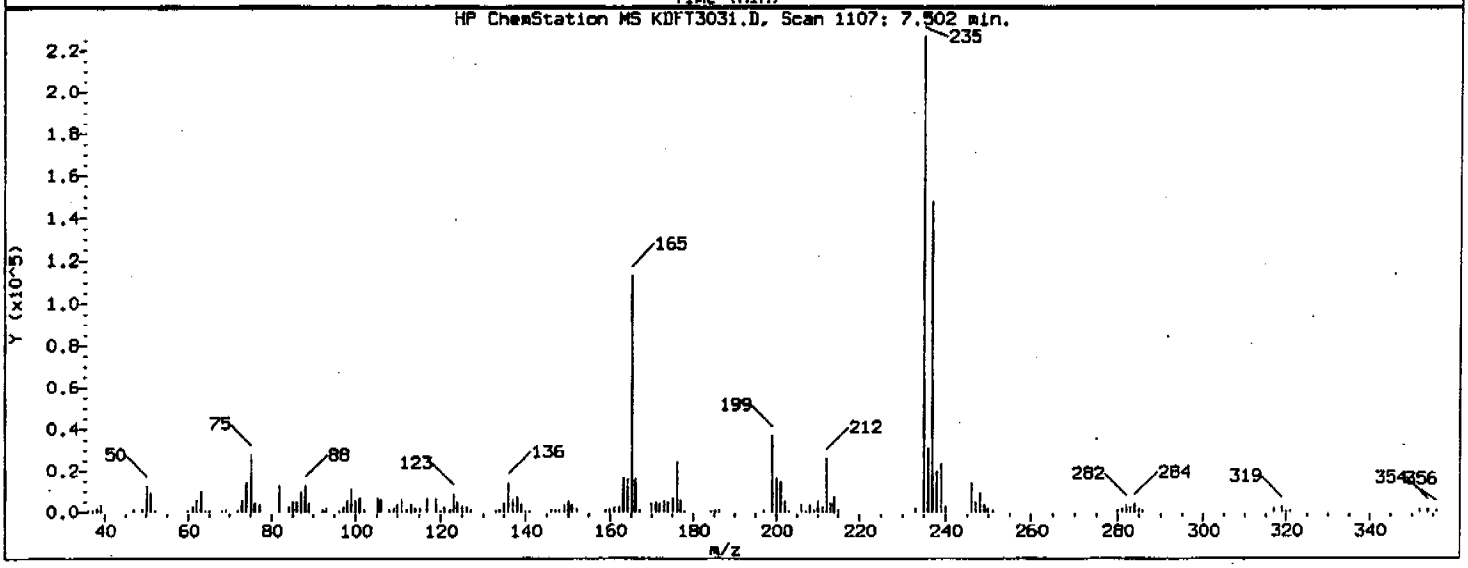
Mass	Area	Ratio
235	882	100.00
249	3544	401.66
152	1511	171.36

STL ST. LOUIS

Report Date: 05/11/2005 08:51

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050510B.B/KDFT3031.D/KDFT3031.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050510B.B\sw846tun.m\resolut.m Inst:
Injection Date: 10-MAY-2005 11:59 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



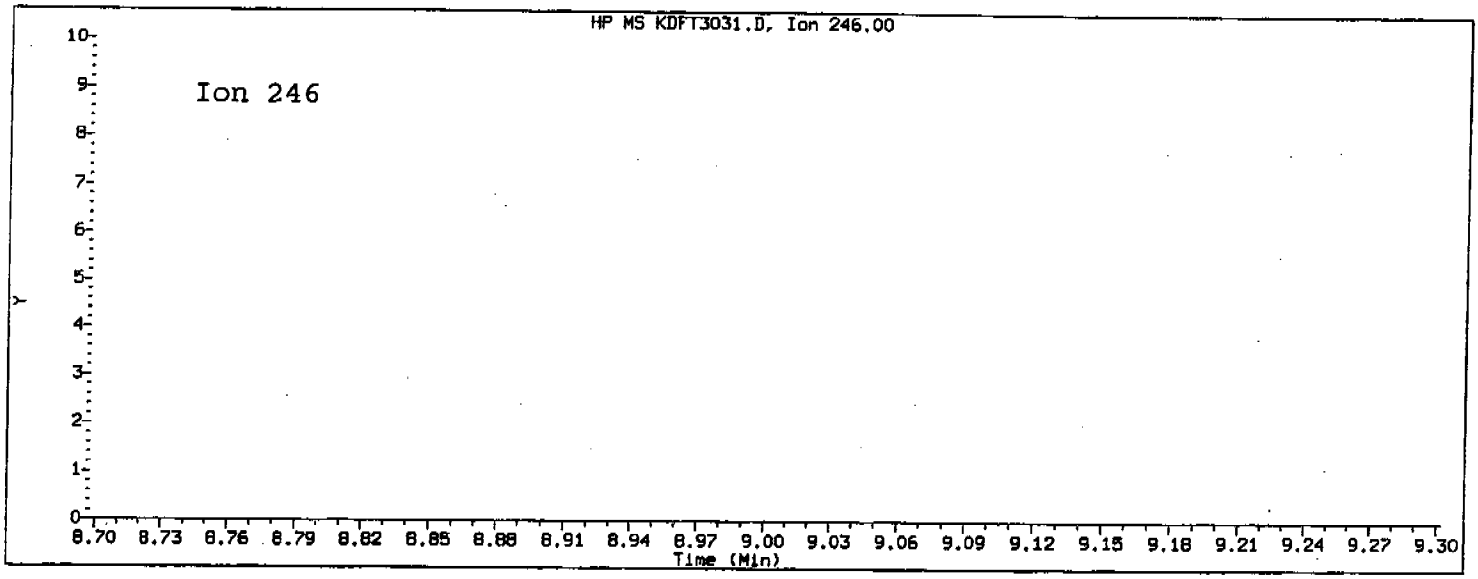


4,4'-DDT
========
Exp. RT = 7.502
Found RT = 7.502

Mass	Area	Ratio
235	267935	100.00
165	133704	49.90
237	171867	64.14

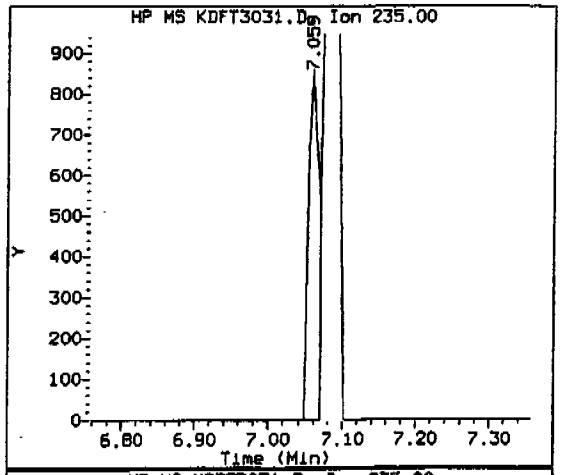
Report Date: 05/11/2005 08:51

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050510B.B/KDFT3031.D/KDFT3031.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050510B.B\sw846tun.m\resolut.m Inst:
Injection Date: 10-MAY-2005 11:59 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)

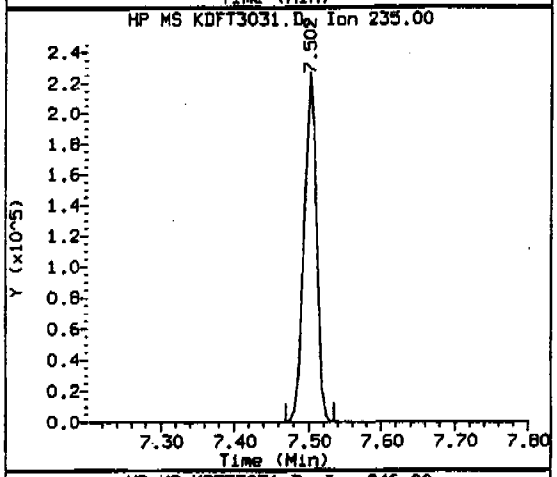


4,4'-DDE
========
Exp. RT = 9.000
Found RT = 0.000

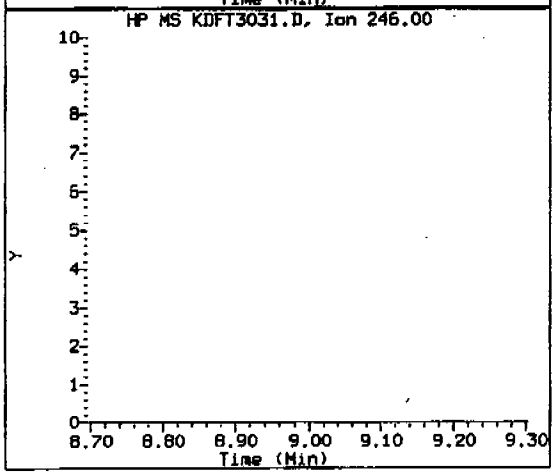
Mass	Area	Ratio
246	0	0.00



Compound: 4,4'-DDD
Quant Mass: 235
RT: 7.059
Area: 882



Compound: 4,4'-DDT
Quant Mass: 235
RT: 7.502
Area: 267935



Compound: 4,4'-DDE
Quant Mass: 246
RT: 0.000
Area: 0

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	267935			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	882	0.3	15.0	PASS
4,4-DDD + DDE	882	0.3	15.0	PASS

****
TUNE SAMPLE *** PASSED *** DDT BREAKDOWN TEST
****

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B\KCAL3033.D
Report Date: 11-May-2005 08:56

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i
Lab File ID: KCAL3033.D
Analysis Type: WATER
Lab Sample ID: SSTD050
Method: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B\8270K.m

Injection Date: 10-MAY-2005 12:53
Init. Cal. Date(s): 28-APR-2005 09-MAY-2005
Init. Cal. Times: 11:41 15:12
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	1 1,4-Dioxane	0.36386	0.28094	0.010	22.78746	60.00000	Averaged
	4 N-Nitrosodimethylamine	0.67099	0.62495	0.010	6.86204	60.00000	Averaged
	3 Pyridine	1.18405	1.14608	0.010	3.20705	60.00000	Averaged
	5 Dimethylformamide	0.88716	0.90618	0.010	-2.14303	60.00000	Averaged
$	10 2-Fluorophenol	1.20834	1.15760	0.010	4.19965	40.00000	Averaged
	11 Cyclohexanol	1.38218	1.47823	0.010	-6.94882	60.00000	Averaged
	17 Aniline	2.19527	2.14688	0.010	2.20419	60.00000	Averaged
	19 Bis(2-chloroethyl)ether	1.55372	1.49797	0.010	3.58822	60.00000	Averaged
$	15 Phenol-d5	1.69125	1.68281	0.010	0.49895	40.00000	Averaged
	16 Phenol	1.87215	1.80058	0.010	3.82282	20.00000	Averaged
	20 2-Chlorophenol	1.35363	1.30490	0.010	3.60031	60.00000	Averaged
	21 1,3-Dichlorobenzene	1.54804	1.47778	0.010	4.53892	60.00000	Averaged
	23 1,4-Dichlorobenzene	1.64398	1.56471	0.010	4.82189	20.00000	Averaged
	26 1,2-Dichlorobenzene	1.52039	1.43807	0.010	5.41430	60.00000	Averaged
	25 Benzyl Alcohol	0.66523	0.87163	0.010	-31.02749	60.00000	Averaged
	28 2,2-oxybis(1-Chloropropane)	1.60673	1.53944	0.010	4.18834	60.00000	Averaged
	27 2-Methylphenol	1.19876	1.20117	0.010	-0.20065	60.00000	Averaged
	35 Hexachloroethane	0.71883	0.71140	0.010	1.03243	60.00000	Averaged
	32 N-Nitrosodinpropylamine	1.25943	1.30699	0.010	-3.77663	60.00000	Averaged
	29 3 and 4-Methylphenol	1.27839	1.28424	0.010	-0.45746	60.00000	Averaged
$	36 Nitrobenzene-d5	0.54909	0.56288	0.010	-2.51095	40.00000	Averaged
	37 Nitrobenzene	0.58194	0.57207	0.010	1.69648	60.00000	Averaged
	39 Isophorone	0.75864	0.78862	0.010	-3.95272	60.00000	Averaged
	40 2-Nitrophenol	0.20162	0.20767	0.010	-3.00132	20.00000	Averaged
	41 2,4-Dimethylphenol	0.42786	0.45022	0.010	-5.22614	60.00000	Averaged
	42 Bis(2-chloroethoxy)methane	0.48359	0.48611	0.010	-0.51990	60.00000	Averaged
	45 2,4-Dichlorophenol	0.31460	0.32473	0.010	-3.22051	20.00000	Averaged
	47 1,2,4-Trichlorobenzene	0.37479	0.38330	0.010	-2.26902	60.00000	Averaged
	44 Benzoic Acid	0.19951	0.21762	0.010	-9.07802	60.00000	Averaged
	50 Naphthalene	1.13252	1.09647	0.010	3.18333	60.00000	Averaged
	51 4-Chloroaniline	0.45857	0.47106	0.010	-2.72460	60.00000	Averaged
	54 Hexachlorobutadiene	0.26032	0.26236	0.010	-0.78161	20.00000	Averaged
	62 2-Methylnaphthalene	0.81010	0.78785	0.010	2.74617	60.00000	Averaged
	59 4-Chloro-3-Methylphenol	0.36550	0.39667	0.010	-8.52720	20.00000	Averaged
	66 Hexachlorocyclopentadiene	0.42770	0.40038	0.010	6.38824	60.00000	Averaged
	67 2,4,6-Trichlorophenol	0.46165	0.45901	0.010	0.57219	20.00000	Averaged
	68 2,4,5-Trichlorophenol	0.48790	0.51533	0.010	-5.62117	60.00000	Averaged
$	69 2-Fluorobiphenyl	1.61063	1.53274	0.010	4.83631	40.00000	Averaged
	72 2-Chloronaphthalene	1.34666	1.26773	0.010	5.86102	60.00000	Averaged
	73 2-Nitroaniline	0.58010	0.59843	0.010	-3.15977	60.00000	Averaged
	76 Dimethylphthalate	1.54223	1.53315	0.010	0.58858	60.00000	Averaged
	79 Acenaphthylene	1.98537	1.93584	0.010	2.49456	60.00000	Averaged

ok 05/11/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B\KCAL3033.D
Report Date: 11-May-2005 08:56

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i
Lab File ID: KCAL3033.D
Analysis Type: WATER
Lab Sample ID: SSTD050
Method: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B\8270K.m

Injection Date: 10-MAY-2005 12:53
Init. Cal. Date(s): 28-APR-2005 09-MAY-2005
Init. Cal. Times: 11:41 15:12
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
80	2,6-Dinitrotoluene	0.32954	0.33880	0.010	-2.81018	60.00000	Averaged
83	Acenaphthene	1.25374	1.21728	0.010	2.90804	20.00000	Averaged
81	3-Nitroaniline	0.32374	0.34464	0.010	-6.45641	60.00000	Averaged
84	2,4-Dinitrophenol	0.19685	0.19975	0.010	-1.47298	60.00000	Averaged
86	Dibenzofuran	1.85230	1.81514	0.010	2.00608	60.00000	Averaged
88	2,4-Dinitrotoluene	0.42378	0.45956	0.010	-8.44386	60.00000	Averaged
85	4-Nitrophenol	0.27026	0.32391	0.010	-19.85402	60.00000	Averaged
93	Diethylphthalate	1.54363	1.55913	0.010	-1.00419	60.00000	Averaged
94	Fluorene	1.48246	1.50926	0.010	-1.80764	60.00000	Averaged
95	4-Chlorophenyl-phenylether	0.79978	0.79657	0.010	0.40176	60.00000	Averaged
98	4-Nitroaniline	0.31560	0.35107	0.010	-11.24058	60.00000	Averaged
99	4,6-Dinitro-2-methylphenol	0.16574	0.17497	0.010	-5.56909	60.00000	Averaged
100	N-Nitrosodiphenylamine	0.60901	0.57993	0.010	4.77456	20.00000	Averaged
102	Azobenzene	1.36611	1.24768	0.010	8.66951	60.00000	Averaged
$ 104	2,4,6-Tribromophenol	0.22361	0.25430	0.010	-13.72702	40.00000	Averaged
109	4-Bromophenyl-phenylether	0.27978	0.26846	0.010	4.04575	60.00000	Averaged
112	Hexachlorobenzene	0.28563	0.28274	0.010	1.01370	60.00000	Averaged
117	Pentachlorophenol	0.15930	0.15853	0.010	0.48677	20.00000	Averaged
122	Phenanthrene	1.23548	1.20623	0.010	2.36792	60.00000	Averaged
124	Anthracene	1.19438	1.17076	0.010	1.97811	60.00000	Averaged
126	Carbazole	1.02046	1.04262	0.010	-2.17158	60.00000	Averaged
129	Di-n-Butylphthalate	1.33705	1.33123	0.010	0.43487	60.00000	Averaged
134	Fluoranthene	1.27688	1.32964	0.010	-4.13187	20.00000	Averaged
135	Benzidine	0.60665	0.62073	0.010	-2.32171	100	Averaged
137	Pyrene	1.62596	1.55891	0.010	4.12380	60.00000	Averaged
$ 139	Terphenyl-d14	1.26353	1.21536	0.010	3.81220	40.00000	Averaged
145	3,3-Dimethylbenzidine	0.64501	0.67833	0.010	-5.16607	60.00000	Averaged
146	Butylbenzylphthalate	0.67238	0.65540	0.010	2.52514	60.00000	Averaged
150	Benzo(a)Anthracene	1.40066	1.38522	0.010	1.10242	60.00000	Averaged
152	3,3'-Dichlorobenzidine	0.53933	0.55337	0.010	-2.60432	60.00000	Averaged
154	Chrysene	1.33287	1.28262	0.010	3.77005	60.00000	Averaged
155	bis(2-ethylhexyl)Phthalate	0.84173	0.80900	0.010	3.88807	60.00000	Averaged
158	Di-n-octylphthalate	1.70444	1.64068	0.010	3.74059	20.00000	Averaged
160	Benzo(b)fluoranthene	1.55320	1.48709	0.010	4.25624	60.00000	Averaged
161	Benzo(k)fluoranthene	1.54269	1.57780	0.010	-2.27613	60.00000	Averaged
165	Benzo(a)pyrene	1.40180	1.39746	0.010	0.31022	20.00000	Averaged
173	Indeno(1,2,3-cd)pyrene	1.29945	1.17286	0.010	9.74196	60.00000	Averaged
174	Dibenzo(a,h)anthracene	1.26094	1.20392	0.010	4.52251	60.00000	Averaged
177	Benzo(g,h,i)perylene	1.16013	1.06566	0.010	8.14299	60.00000	Averaged

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B/KCAL3033.D
Report Date: 05/11/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3033.D
Analysis Type: WATER

Injection Date: 10-MAY-2005 12:53
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B\8270

COMPOUND	%D
1,4-Dioxane	22.8
Pyridine	3.2
N-Nitrosodimethylamine	6.9
Dimethylformamide	2.1
2-Fluorophenol	4.2
Cyclohexanol	6.9
Aniline	2.2
Phenol-d5	0.5
Bis(2-chloroethyl)ether	3.6
Phenol	3.8
2-Chlorophenol	3.6
1,3-Dichlorobenzene	4.5
1,4-Dichlorobenzene	4.8
1,2-Dichlorobenzene	5.4
Benzyl Alcohol	31.0
2,2-oxybis(1-Chloropropane)	4.2
2-Methylphenol	0.2
N-Nitrosodinpropylamine	3.8
Hexachloroethane	1.0
3 and 4-Methylphenol	0.5
Nitrobenzene-d5	2.5
Nitrobenzene	1.7
Isophorone	4.0
2-Nitrophenol	3.0
2,4-Dimethylphenol	5.2
Bis(2-chloroethoxy)methane	0.5
2,4-Dichlorophenol	3.2
1,2,4-Trichlorobenzene	2.3
Benzoic Acid	9.1
Naphthalene	3.2
4-Chloroaniline	2.7
Hexachlorobutadiene	0.8
4-Chloro-3-Methylphenol	8.5
2-Methylnaphthalene	2.7
Hexachlorocyclopentadiene	6.4
2,4,6-Trichlorophenol	0.6
2,4,5-Trichlorophenol	5.6
2-Fluorobiphenyl	4.8
2-Chloronaphthalene	5.9

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B/KCAL3033.D
Report Date: 05/11/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3033.D
Analysis Type: WATER

Injection Date: 10-MAY-2005 12:53
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050510A

COMPOUND	%D
2-Nitroaniline	3.2
Dimethylphthalate	0.6
Acenaphthylene	2.5
2,6-Dinitrotoluene	2.8
Acenaphthene	2.9
3-Nitroaniline	6.5
2,4-Dinitrophenol	1.5
Dibenzofuran	2.0
2,4-Dinitrotoluene	8.4
4-Nitrophenol	19.9
Fluorene	1.8
Diethylphthalate	1.0
4-Chlorophenyl-phenylether	0.4
4-Nitroaniline	11.2
4,6-Dinitro-2-methylphenol	5.6
N-Nitrosodiphenylamine	4.8
Azobenzene	8.7
2,4,6-Tribromophenol	13.7
4-Bromophenyl-phenylether	4.0
Hexachlorobenzene	1.0
Pentachlorophenol	0.5
Phenanthrene	2.4
Anthracene	2.0
Carbazole	2.2
Di-n-Butylphthalate	0.4
Fluoranthene	4.1
Benzidine	2.3
Pyrene	4.1
Terphenyl-d14	3.8
3,3-Dimethylbenzidine	5.2
Butylbenzylphthalate	2.5
Benzo(a)Anthracene	1.1
Chrysene	3.8
3,3'-Dichlorobenzidine	2.6
bis(2-ethylhexyl)Phthalate	3.9
Di-n-octylphthalate	3.7
Benzo(b)fluoranthene	4.3
Benzo(k)fluoranthene	2.3
Benzo(a)pyrene	0.3

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B/KCAL3033.D
Report Date: 05/11/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3033.D
Analysis Type: WATER

Injection Date: 10-MAY-2005 12:53
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050510A

COMPOUND	%D
Indeno(1,2,3-cd)pyrene	9.7
Dibenzo(a,h)anthracene	4.5
Benzo(g,h,i)perylene	8.1
Dibenz(e,a) Pyrene	100.0

The average of %D's in the continuing calibration is 5.7

05/11/05

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GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050510A.B\KCAL3033.D
Lab Smp Id: SSTD050 Client Smp ID: SSTD050
Inj Date : 10-MAY-2005 12:53
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD050
Misc Info : SV0220-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050510A.B\8270K.m
Meth Date : 11-May-2005 08:55 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12 Cal File: KCAL3000.D
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	1.259	1.259	(0.278)	42784	50.0000	38.61
4	N-Nitrosodimethylamine	74	1.681	1.681	(0.371)	95171	50.0000	46.57
3	Pyridine	79	1.670	1.670	(0.368)	174532	50.0000	48.40 (M)
5	Dimethylformamide	44	2.124	2.124	(0.469)	137998	50.0000	51.07 (M)
$ 10	2-Fluorophenol	112	3.219	3.219	(0.710)	176286	50.0000	47.90
11	Cyclohexanol	57	3.235	3.235	(0.714)	225114	50.0000	53.47
17	Aniline	93	4.229	4.229	(0.933)	326940	50.0000	48.90
19	Bis(2-chloroethyl)ether	93	4.304	4.304	(0.949)	228120	50.0000	48.20
$ 15	Phenol-d5	99	4.298	4.298	(0.948)	256269	50.0000	49.75
16	Phenol	94	4.314	4.314	(0.952)	274204	50.0000	48.09
20	2-Chlorophenol	128	4.362	4.362	(0.962)	198718	50.0000	48.20
21	1,3-Dichlorobenzene	146	4.485	4.485	(0.989)	225045	50.0000	47.73
* 22	1,4-Dichlorobenzene-d4	152	4.533	4.533	(1.000)	121829	40.0000	
23	1,4-Dichlorobenzene	146	4.555	4.555	(1.005)	238284	50.0000	47.59
26	1,2-Dichlorobenzene	146	4.774	4.774	(1.053)	218999	50.0000	47.29
25	Benzyl Alcohol	108	4.784	4.784	(1.055)	132738	50.0000	65.51
28	2,2-oxybis(1-Chloropropane)	45	4.945	4.945	(1.091)	234435	50.0000	47.90
27	2-Methylphenol	108	4.993	4.993	(1.101)	182921	50.0000	50.10
35	Hexachloroethane	117	5.132	5.132	(1.132)	108337	50.0000	49.48
32	N-Nitrosodinpropylamine	70	5.132	5.132	(1.132)	199037	50.0000	51.89
29	3 and 4-Methylphenol	108	5.180	5.180	(1.143)	391144	100.000	100.4

05/11/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B\KCAL3033.D
Report Date: 11-May-2005 08:56

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.260	5.260	(0.860)	300985	50.0000	51.26
	37 Nitrobenzene	77	5.281	5.281	(0.864)	305900	50.0000	49.15
	39 Isophorone	82	5.575	5.575	(0.912)	421698	50.0000	51.98
	40 2-Nitrophenol	139	5.682	5.682	(0.929)	111045	50.0000	51.50
	41 2,4-Dimethylphenol	107	5.805	5.805	(0.949)	240746	50.0000	52.61
	42 Bis(2-chloroethoxy)methane	93	5.890	5.890	(0.963)	259934	50.0000	50.26
	45 2,4-Dichlorophenol	162	6.013	6.013	(0.983)	173641	50.0000	51.61
	47 1,2,4-Trichlorobenzene	180	6.072	6.072	(0.993)	204960	50.0000	51.13
*	48 Naphthalene-d8	136	6.115	6.115	(1.000)	427782	40.0000	
	44 Benzoic Acid	122	6.072	6.072	(0.993)	116366	50.0000	54.54
	50 Naphthalene	128	6.141	6.141	(1.004)	586314	50.0000	48.41
	51 4-Chloroaniline	127	6.296	6.296	(1.030)	251889	50.0000	51.36
	54 Hexachlorobutadiene	225	6.392	6.392	(1.045)	140289	50.0000	50.39
	62 2-Methylnaphthalene	142	7.103	7.103	(1.162)	421287	50.0000	48.63
	59 4-Chloro-3-Methylphenol	107	7.055	7.055	(1.154)	212111	50.0000	54.26
	66 Hexachlorocyclopentadiene	237	7.445	7.445	(0.847)	125802	50.0000	46.80
	67 2,4,6-Trichlorophenol	196	7.632	7.632	(0.868)	144224	50.0000	49.71
	68 2,4,5-Trichlorophenol	196	7.717	7.717	(0.878)	161920	50.0000	52.81
$	69 2-Fluorobiphenyl	172	7.723	7.723	(0.878)	481596	50.0000	47.58
	72 2-Chloronaphthalene	162	7.846	7.846	(0.892)	398329	50.0000	47.07
	73 2-Nitroaniline	65	8.139	8.139	(0.926)	188031	50.0000	51.58
	76 Dimethylphthalate	163	8.508	8.508	(0.968)	481725	50.0000	49.70
	79 Acenaphthylene	152	8.529	8.529	(0.970)	608253	50.0000	48.75
	80 2,6-Dinitrotoluene	165	8.620	8.620	(0.981)	106453	50.0000	51.40
*	82 Acenaphthene-d10	164	8.791	8.791	(1.000)	251365	40.0000	
	83 Acenaphthene	153	8.850	8.850	(1.007)	382477	50.0000	48.54
	81 3-Nitroaniline	138	8.855	8.855	(1.007)	108288	50.0000	53.23
	84 2,4-Dinitrophenol	184	9.037	9.037	(1.028)	62763	50.0000	50.74
	86 Dibenzofuran	168	9.128	9.128	(1.038)	570329	50.0000	49.00
	88 2,4-Dinitrotoluene	165	9.299	9.299	(1.058)	144396	50.0000	54.22
	85 4-Nitrophenol	109	9.347	9.347	(1.063)	101776	50.0000	59.93
	93 Diethylphthalate	149	9.769	9.769	(1.111)	489889	50.0000	50.50
	94 Fluorene	166	9.737	9.737	(1.108)	474218	50.0000	50.90
	95 4-Chlorophenyl-phenylether	204	9.790	9.790	(1.114)	250286	50.0000	49.80
	98 4-Nitroaniline	138	9.972	9.972	(1.134)	110309	50.0000	55.62
	99 4,6-Dinitro-2-methylphenol	198	10.025	10.025	(0.875)	102064	50.0000	52.78
	100 N-Nitrosodiphenylamine	169	10.057	10.057	(0.878)	338294	50.0000	47.61
	102 Azobenzene	77	10.068	10.068	(0.879)	727811	50.0000	45.66
$	104 2,4,6-Tribromophenol	330	10.239	10.239	(1.165)	79903	50.0000	56.86
	109 4-Bromophenyl-phenylether	248	10.672	10.672	(0.932)	156601	50.0000	47.98
	112 Hexachlorobenzene	284	10.896	10.896	(0.951)	164930	50.0000	49.49
	117 Pentachlorophenol	266	11.307	11.307	(0.987)	92473	50.0000	49.76
*	121 Phenanthrene-d10	188	11.451	11.451	(1.000)	466667	40.0000	
	122 Phenanthrene	178	11.494	11.494	(1.004)	703634	50.0000	48.82
	124 Anthracene	178	11.580	11.580	(1.011)	682943	50.0000	49.01
	126 Carbazole	167	11.980	11.980	(1.046)	608197	50.0000	51.08
	129 Di-n-Butylphthalate	149	12.867	12.867	(1.124)	776552	50.0000	49.78
	134 Fluoranthene	202	13.786	13.786	(1.204)	775621	50.0000	52.06
	135 Benzidine	184	14.187	14.187	(0.854)	315143	50.0000	51.16
	137 Pyrene	202	14.203	14.203	(0.855)	791452	50.0000	47.94
$	139 Terphenyl-d14	244	14.651	14.651	(0.882)	617033	50.0000	48.09
	145 3,3-Dimethylbenzidine	212	15.650	15.650	(0.942)	344385	50.0000	52.58
	146 Butylbenzylphthalate	149	15.773	15.773	(0.949)	332746	50.0000	48.74
	150 Benzo(a)Anthracene	228	16.585	16.585	(0.998)	703269	50.0000	49.45

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.617	16.617	(1.000)	406157	40.0000	
152 3,3'-Dichlorobenzidine	252	16.681	16.681	(1.004)	280946	50.0000	51.30
154 Chrysene	228	16.665	16.665	(1.003)	651180	50.0000	48.11
155 bis(2-ethylhexyl)Phthalate	149	16.997	16.997	(1.023)	410726	50.0000	48.06
158 Di-n-octylphthalate	149	18.145	18.145	(0.944)	696624	50.0000	48.13
160 Benzo(b)fluoranthene	252	18.589	18.589	(0.967)	631409	50.0000	47.87
161 Benzo(k)fluoranthene	252	18.631	18.631	(0.969)	669924	50.0000	51.14
165 Benzo(a)pyrene	252	19.123	19.123	(0.995)	593351	50.0000	49.84
* 166 Perylene-d12	264	19.224	19.224	(1.000)	339675	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.934	20.934	(1.089)	497988	50.0000	45.13
174 Dibenzo(a,h)anthracene	278	20.982	20.982	(1.091)	511175	50.0000	47.74
177 Benzo(g,h,i)perylene	276	21.383	21.383	(1.112)	452472	50.0000	45.93

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B\KCAL3033.D Page 4
Report Date: 11-May-2005 08:56

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

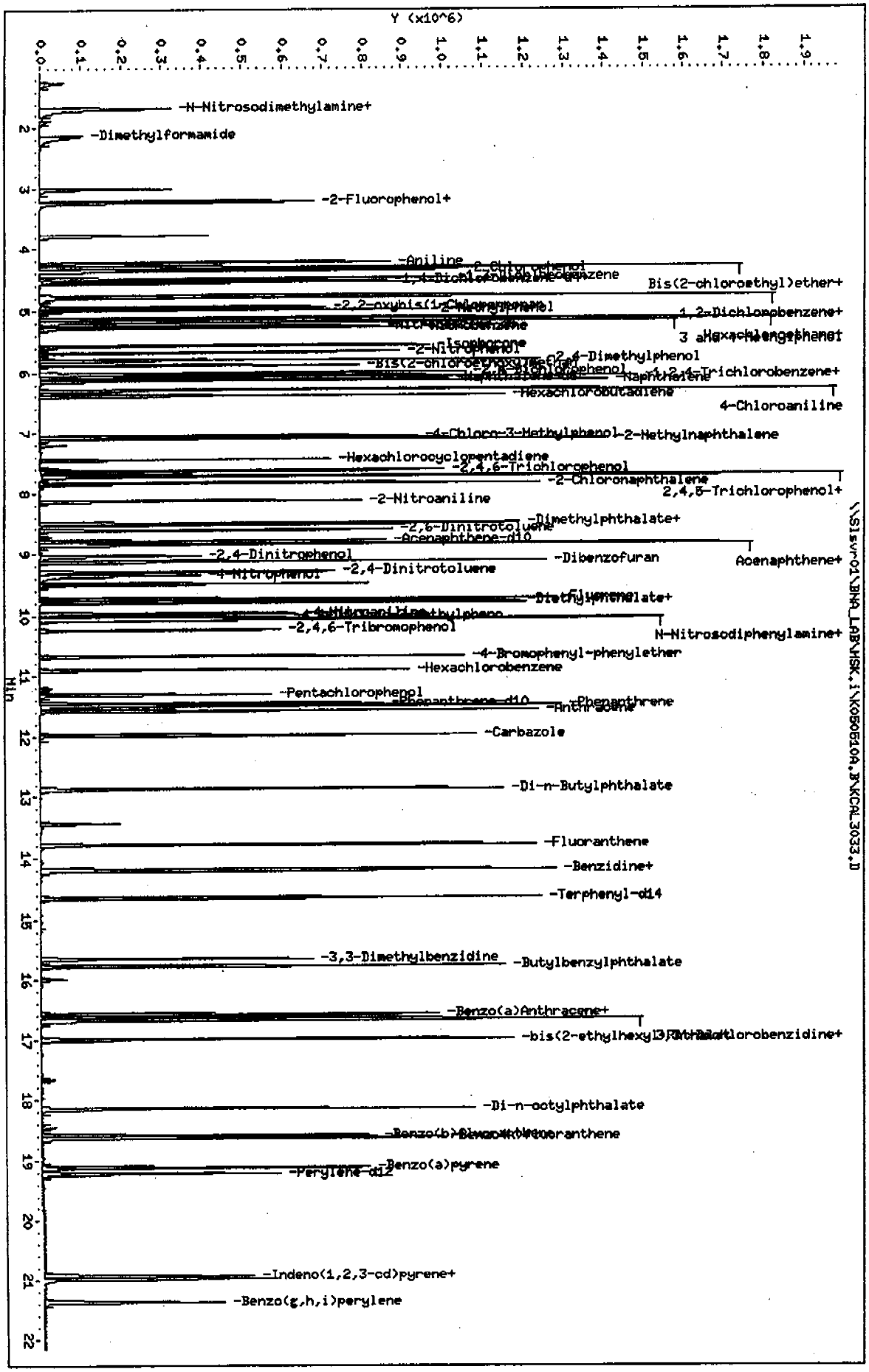
Instrument ID: MSK.i
Lab File ID: KCAL3033.D
Lab Smp Id: SSTD050
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B\8270K.m
Misc Info: SV0220-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD050
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	121829	-36.97
48 Naphthalene-d8	657267	328634	1314534	427782	-34.92
82 Acenaphthene-d10	351374	175687	702748	251365	-28.46
121 Phenanthrene-d10	612492	306246	1224984	466667	-23.81
153 Chrysene-d12	494718	247359	989436	406157	-17.90
166 Perylene-d12	409117	204559	818234	339675	-16.97

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.53	-0.50
48 Naphthalene-d8	6.14	5.64	6.64	6.12	-0.46
82 Acenaphthene-d10	8.83	8.33	9.33	8.79	-0.38
121 Phenanthrene-d10	11.49	10.99	11.99	11.45	-0.34
153 Chrysene-d12	16.66	16.16	17.16	16.62	-0.23
166 Perylene-d12	19.27	18.77	19.77	19.22	-0.23

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

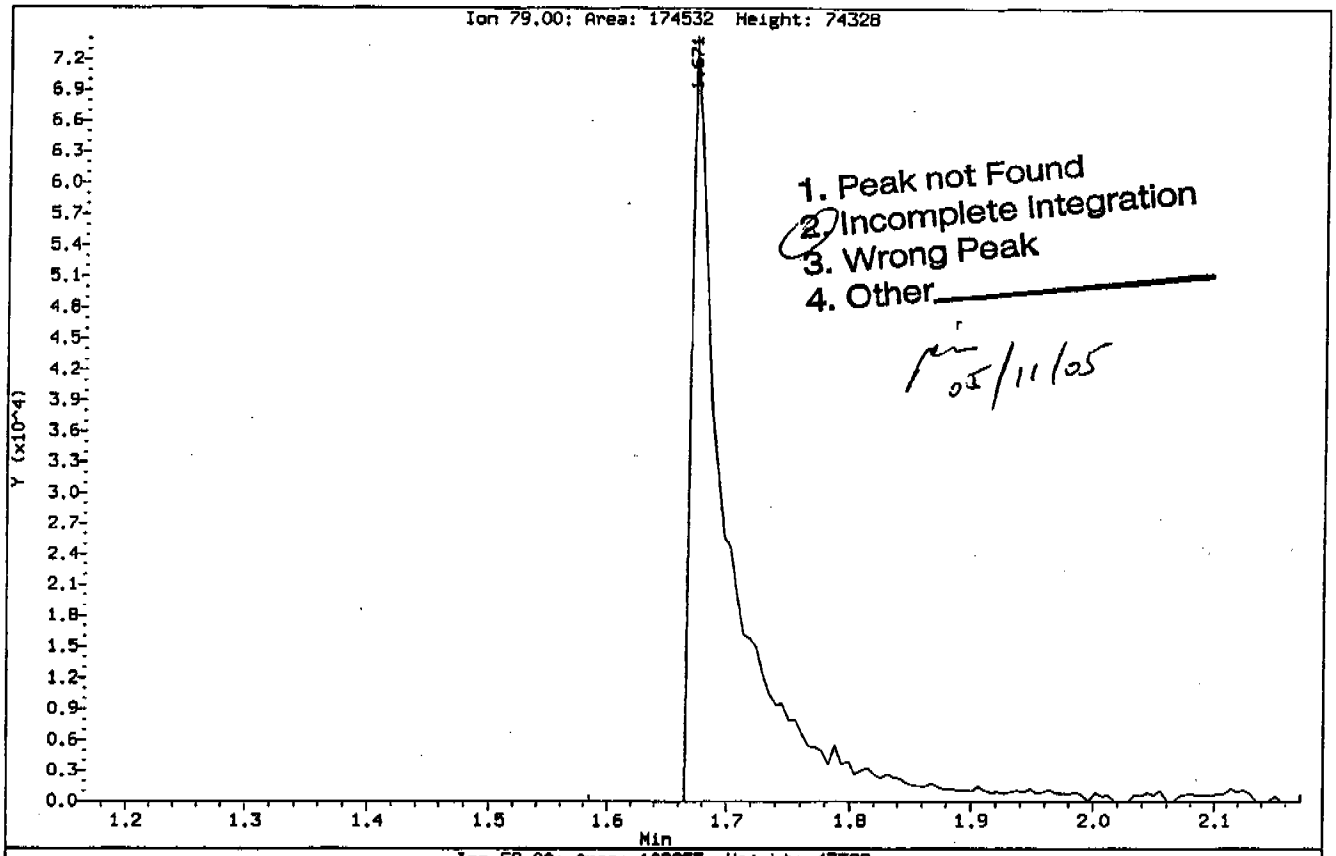


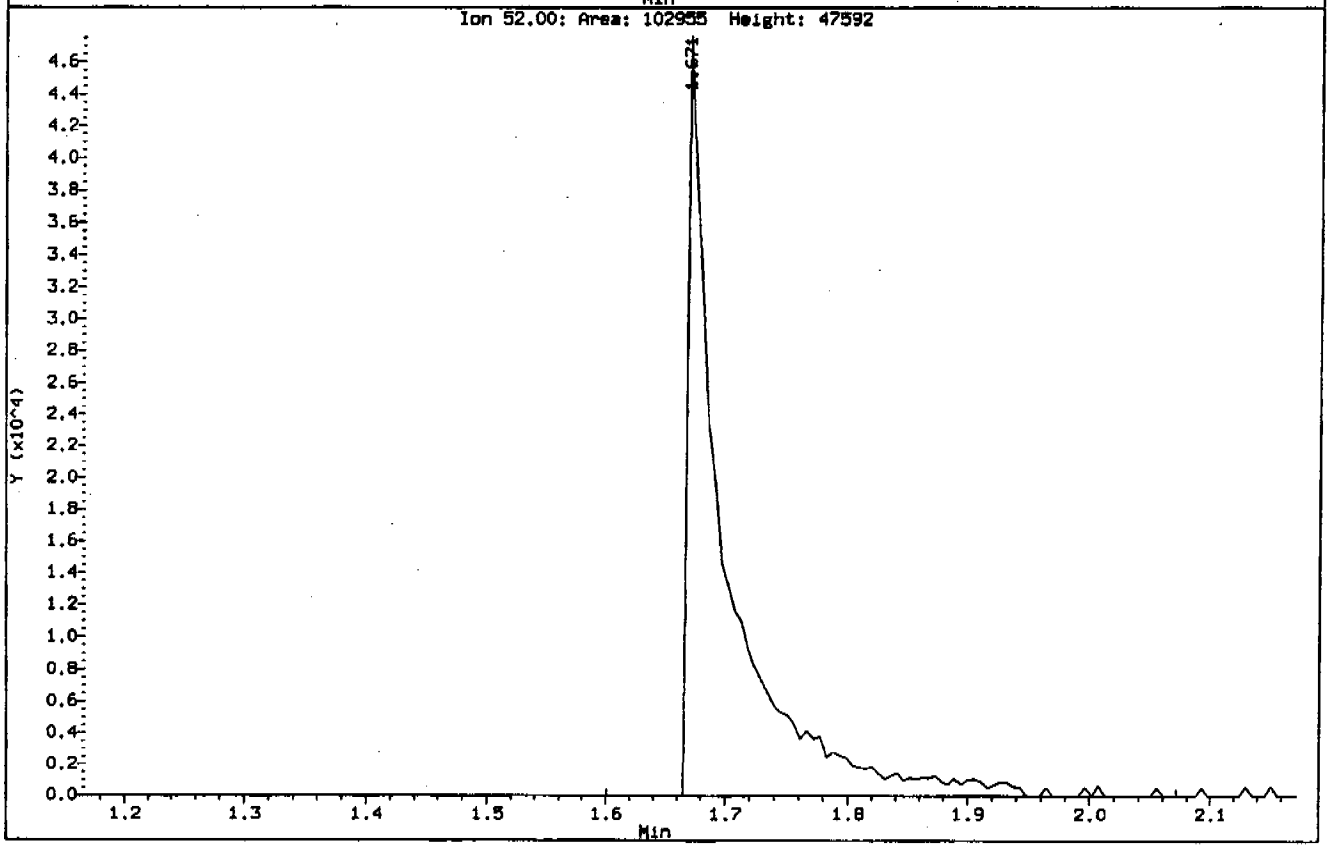
Data File: \\Slsvr01\BNA_LAB\HSK.i\K050510A.B\KCAL3033.D
Date : 10-MAY-2005 12:53
Client ID: SSTD050
Sample Info: SSTD050
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B\KCAL3033.D
Injection Date: 10-MAY-2005 12:53
Instrument: MSK.i
Client Sample ID: SSTD050

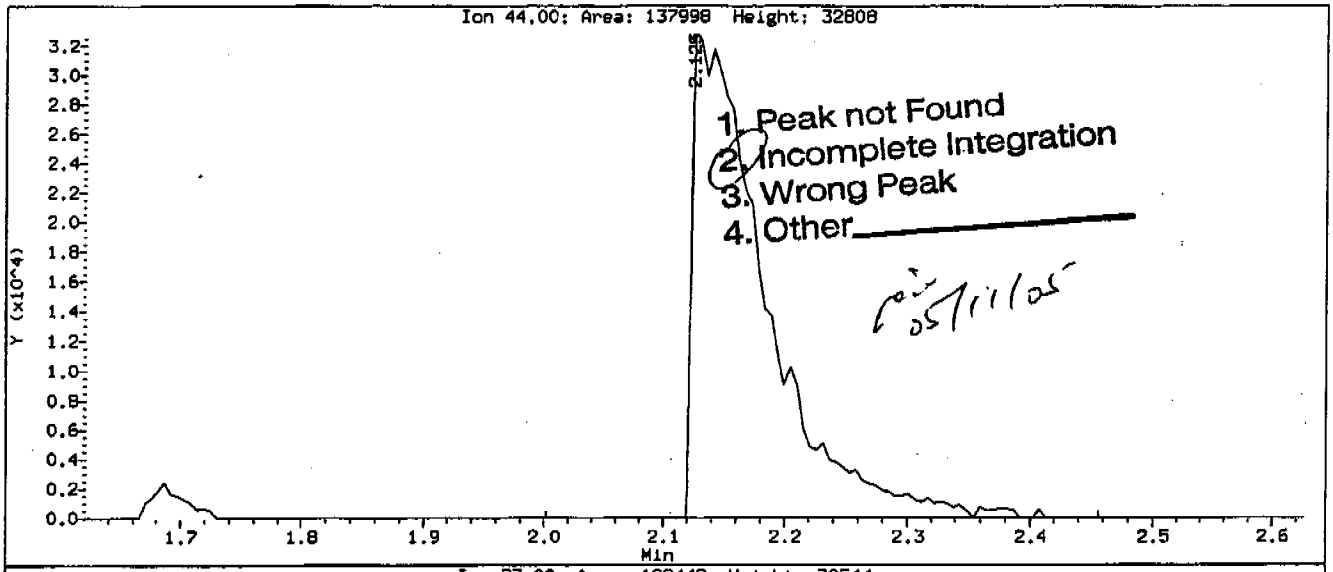
Compound: Pyridine
CAS Number: 110-86-1

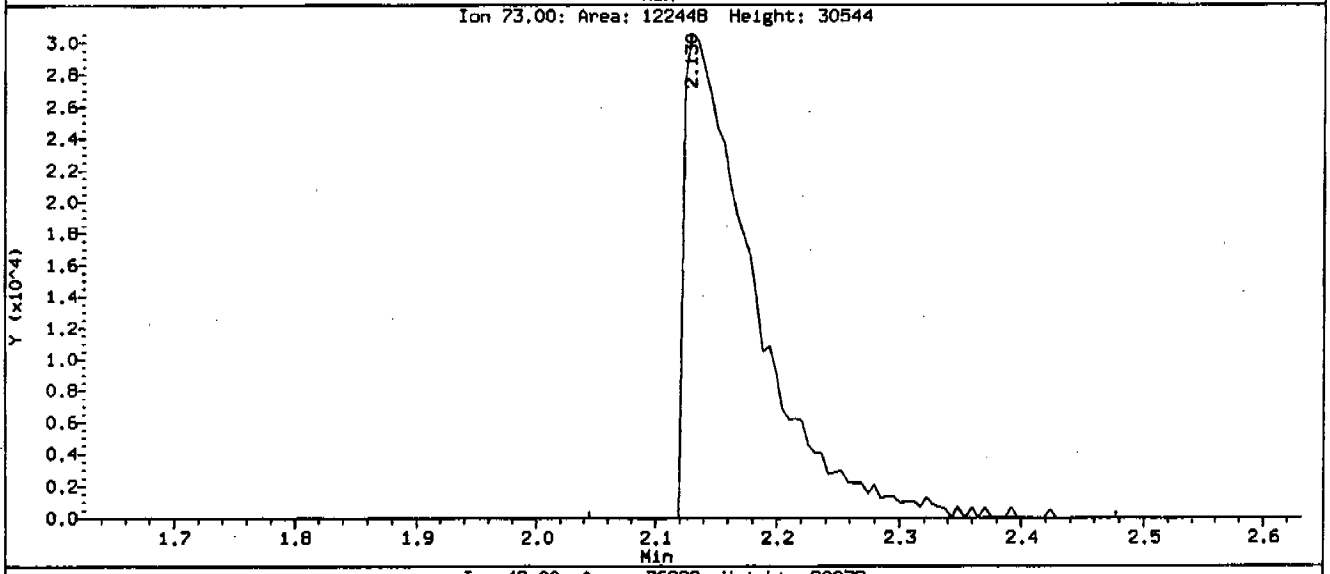


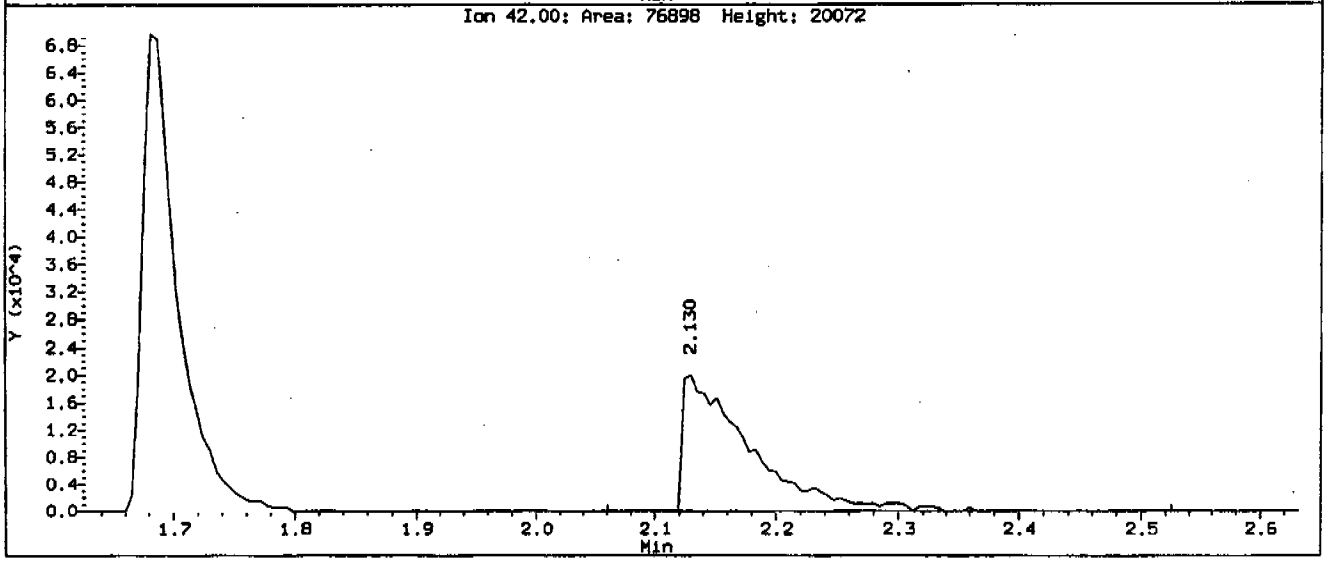


Data File: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B\KCAL3033.D
Injection Date: 10-MAY-2005 12:53
Instrument: MSK.i
Client Sample ID: SSTD050

Compound: Dimethylformamide
CAS Number: 68-12-2







DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	44.69		PASS
68	Less than 2% of mass 69	0.84	(1.55)	PASS
69	Mass 69 relative abundance	54.00		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	49.04		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	7.01		PASS
275	10 - 30% of mass 198	26.22		PASS
365	Greater than 1% of mass 198	3.09		PASS
441	Present, but less than mass 443	10.34	(84.00)	PASS
442	Greater than 40% of mass 198	67.11		PASS
443	17 - 23% of mass 442	12.31	(18.34)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.6408297	5.000	PASS
Benzidine	0.7773038	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	288111			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	2430	0.8	15.0	PASS
4,4-DDD + DDE	2430	0.8	15.0	PASS

****

Tuning Sample, //Slsvr01/BNA_LAB/MSK.i/K050512B.B/KDFT3092.D/KDFT3092.D,*** PASSED

****

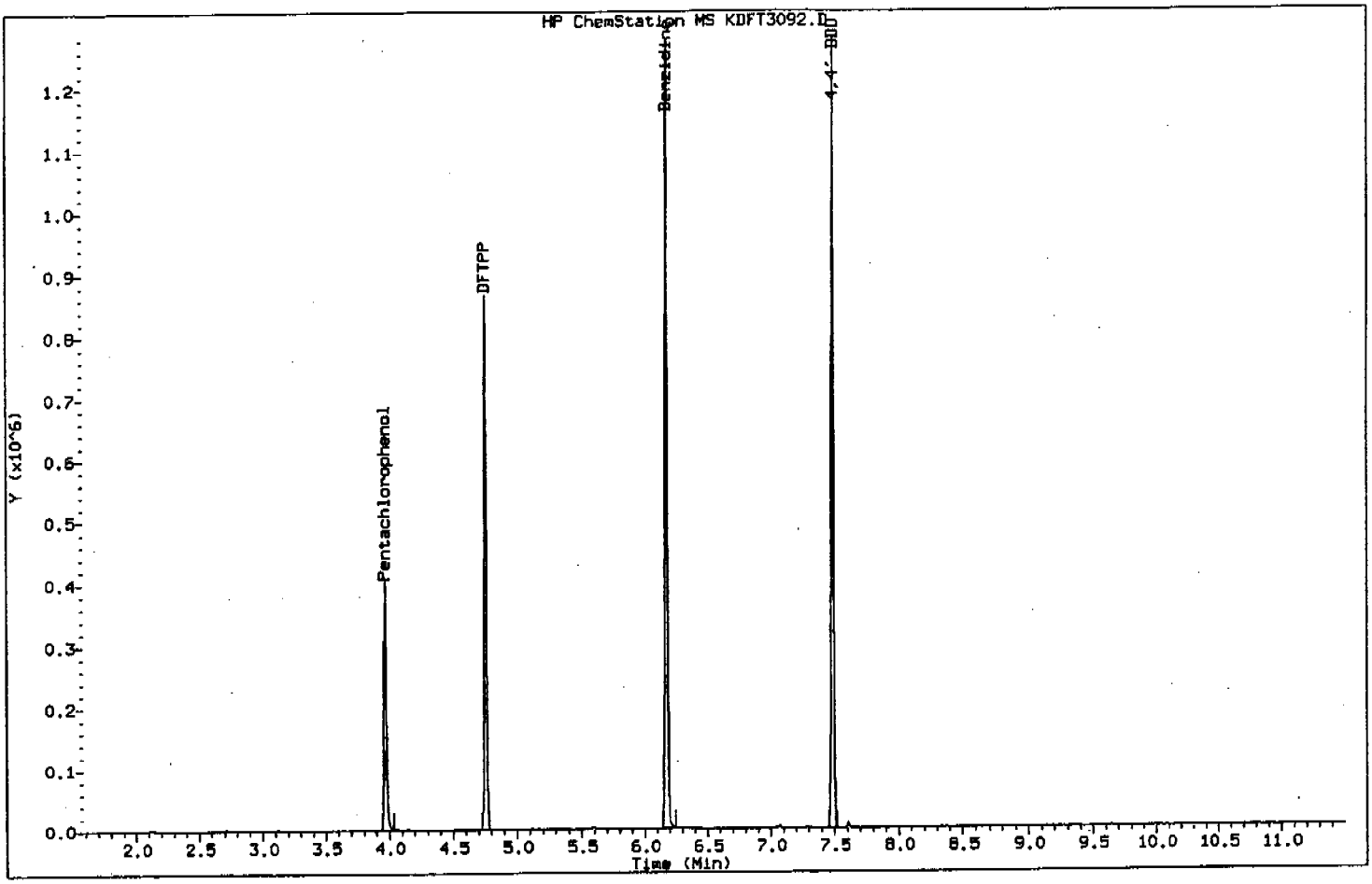
05/12/05

STL ST. LOUIS

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

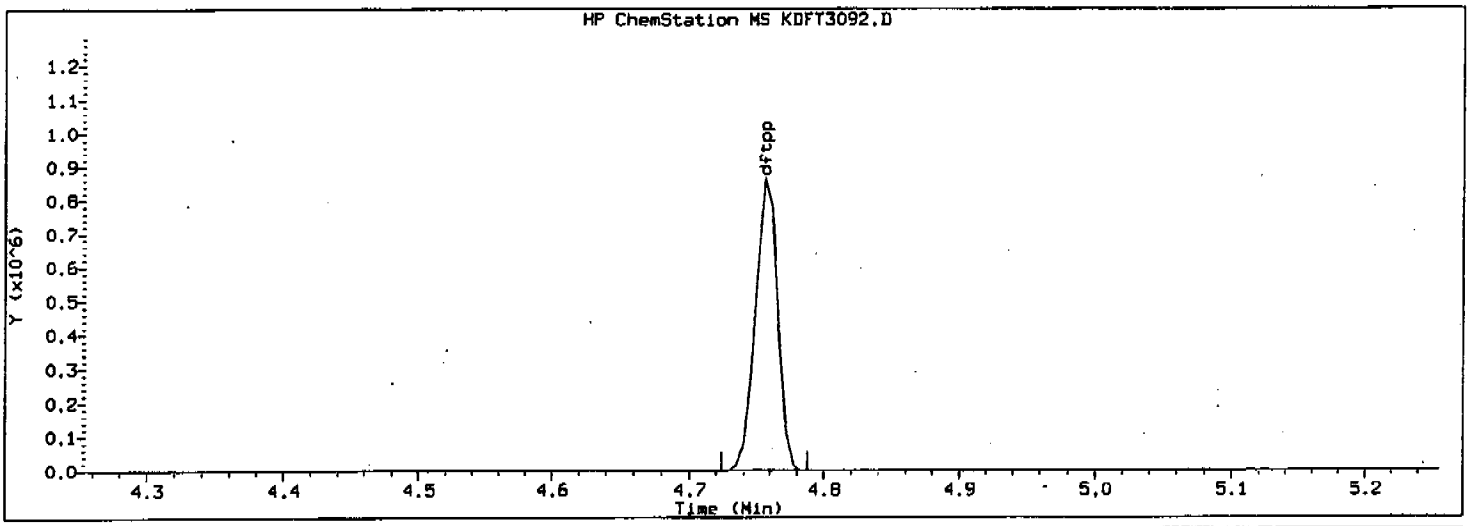
Report Date: 05/12/2005 15:06

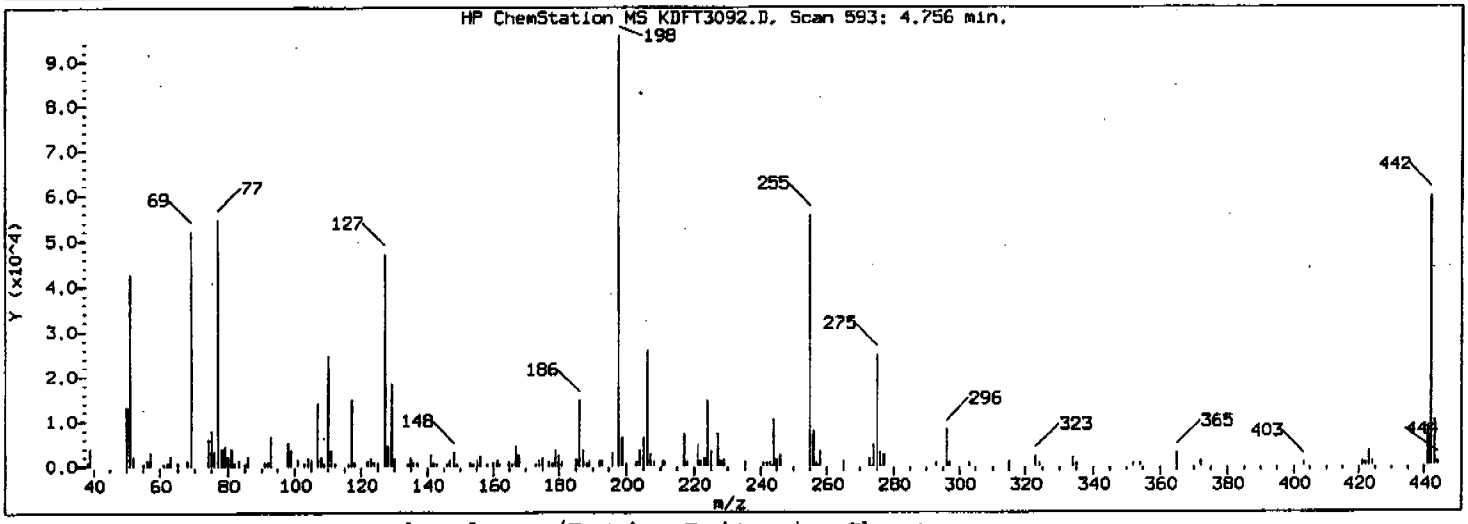
Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050512B.B/KDFT3092.D/KDFT3092.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050512B.B\sw846tun.m Inst: MSK
Injection Date: 12-MAY-2005 11:48 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0232-05 (50NG)



Report Date: 05/12/2005 15:06

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050512B.B/KDFT3092.D/KDFT3092.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050512B.B\sw846tun.m Inst: MSK
Injection Date: 12-MAY-2005 11:48 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0232-05 (50NG)



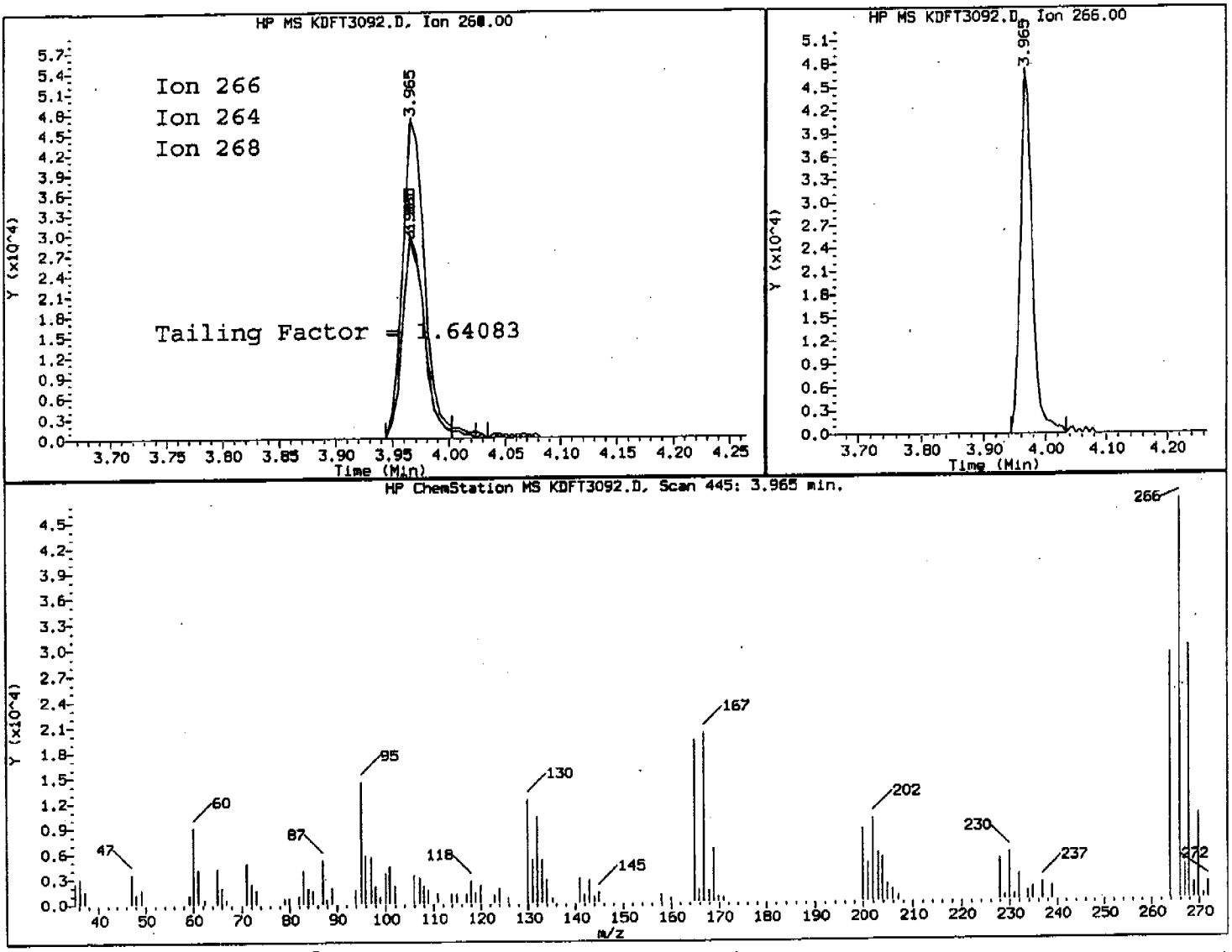


DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	44.69		PASS
68	Less than 2% of mass 69	0.84	(1.55)	PASS
69	Mass 69 relative abundance	54.00		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	49.04		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	7.01		PASS
275	10 - 30% of mass 198	26.22		PASS
365	Greater than 1% of mass 198	3.09		PASS
441	Present, but less than mass 443	10.34	(84.00)	PASS
442	Greater than 40% of mass 198	67.11		PASS
443	17 - 23% of mass 442	12.31	(18.34)	PASS

Report Date: 05/12/2005 15:06

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050512B.B/KDFT3092.D/KDFT3092.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050512B.B\sw846tun.m\resolut.m Inst:
Injection Date: 12-MAY-2005 11:48 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



Pentachlorophenol

Exp. RT = 3.965
Found RT = 3.965

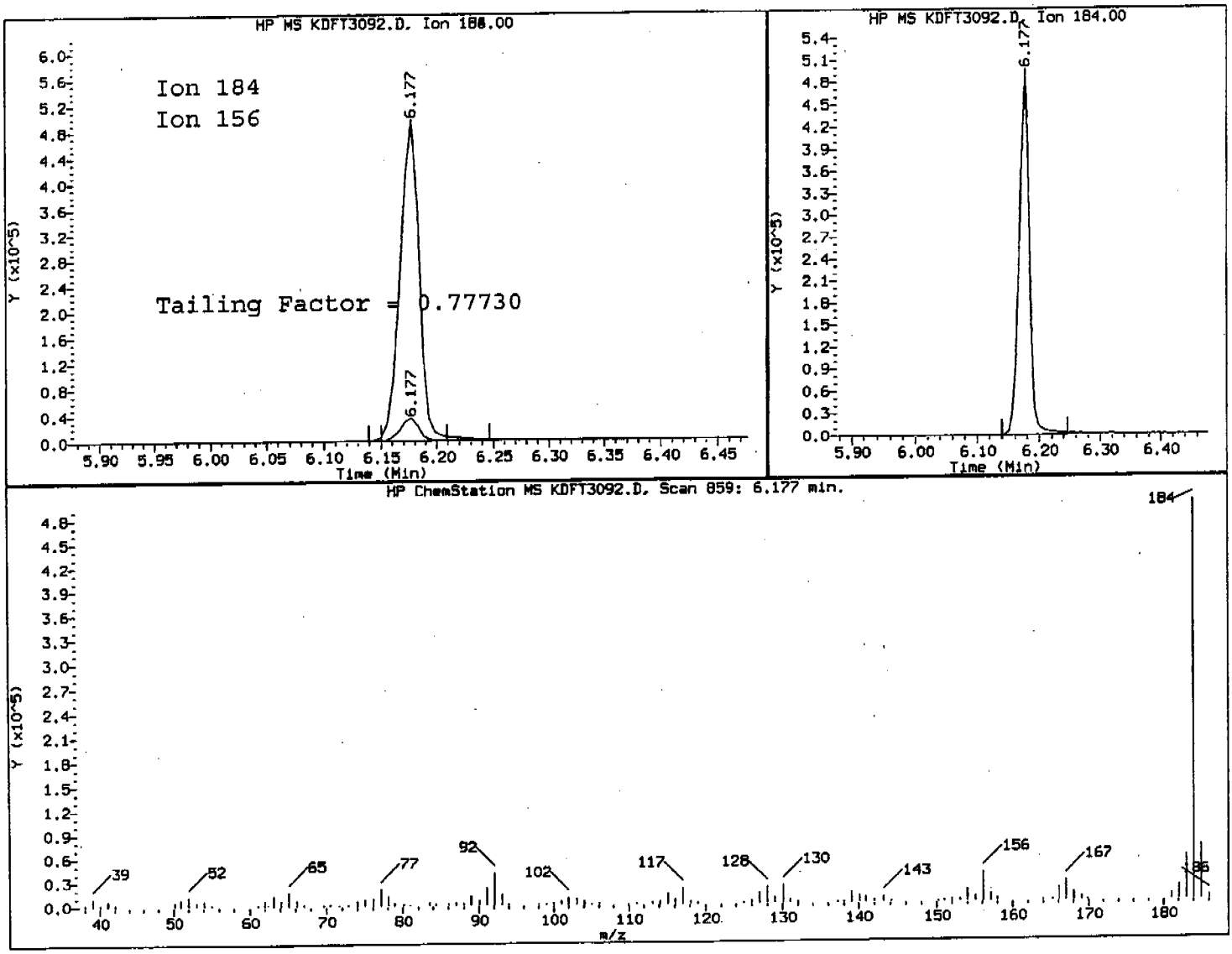
Mass	Area	Ratio
266	64801	100.00
264	38872	59.99
268	41352	63.81

Tailing factor for Pentachlorophenol OK

Tail Factor = 1.641 Maximum Allowed = 5.0

Report Date: 05/12/2005 15:06

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050512B.B/KDFT3092.D/KDFT3092.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050512B.B\sw846tun.m\resolut.m Inst:
Injection Date: 12-MAY-2005 11:48 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



Benzidine
=========
Exp. RT = 6.188
Found RT = 6.177

Mass	Area	Ratio
184	588964	100.00
156	40738	6.92

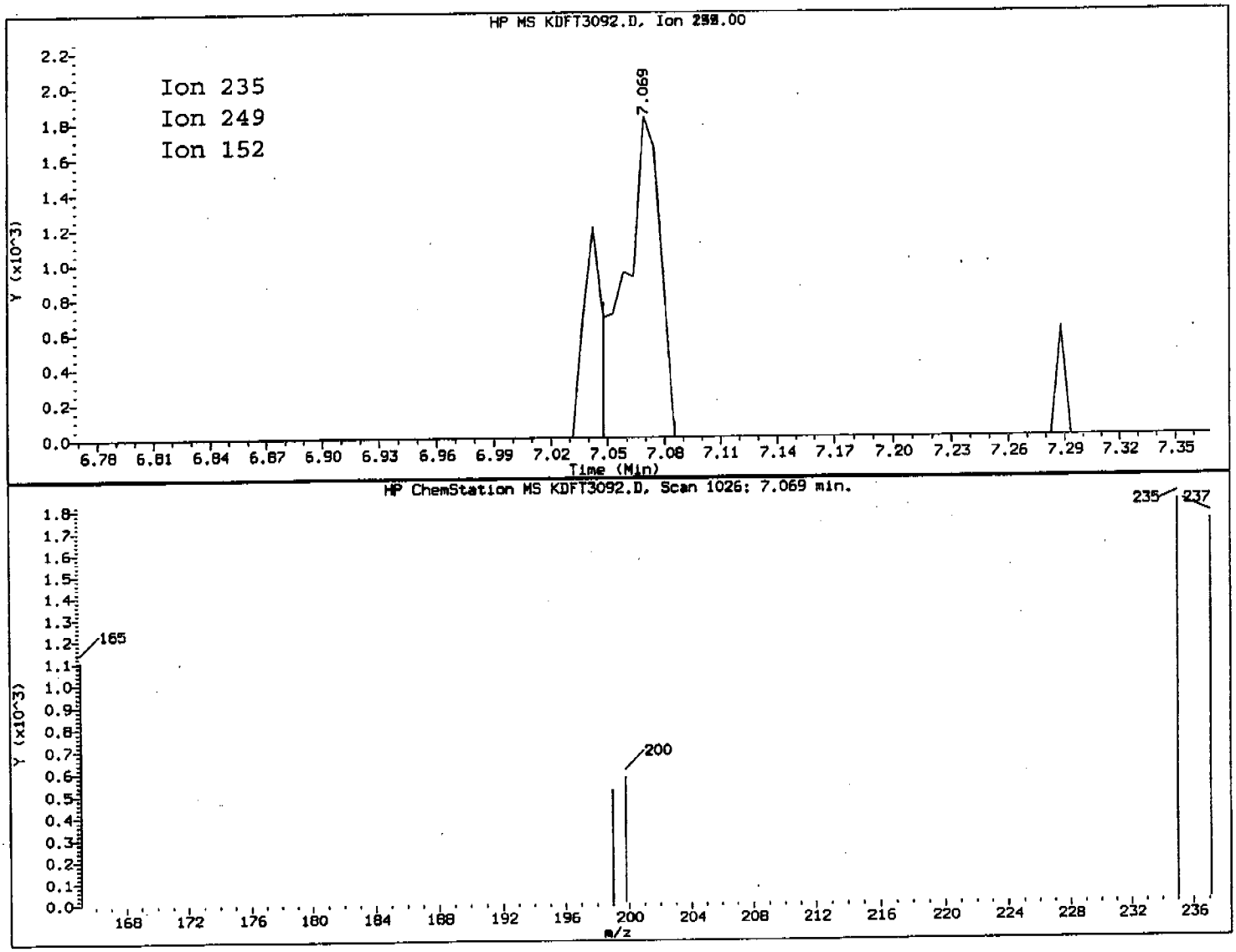
Tailing factor for Benzidine OK

Tail Factor = 0.777 Maximum Allowed = 3.0

STL ST. LOUIS

Report Date: 05/12/2005 15:06

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050512B.B/KDFT3092.D/KDFT3092.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050512B.B\sw846tun.m\resolut.m Inst:
Injection Date: 12-MAY-2005 11:48 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)

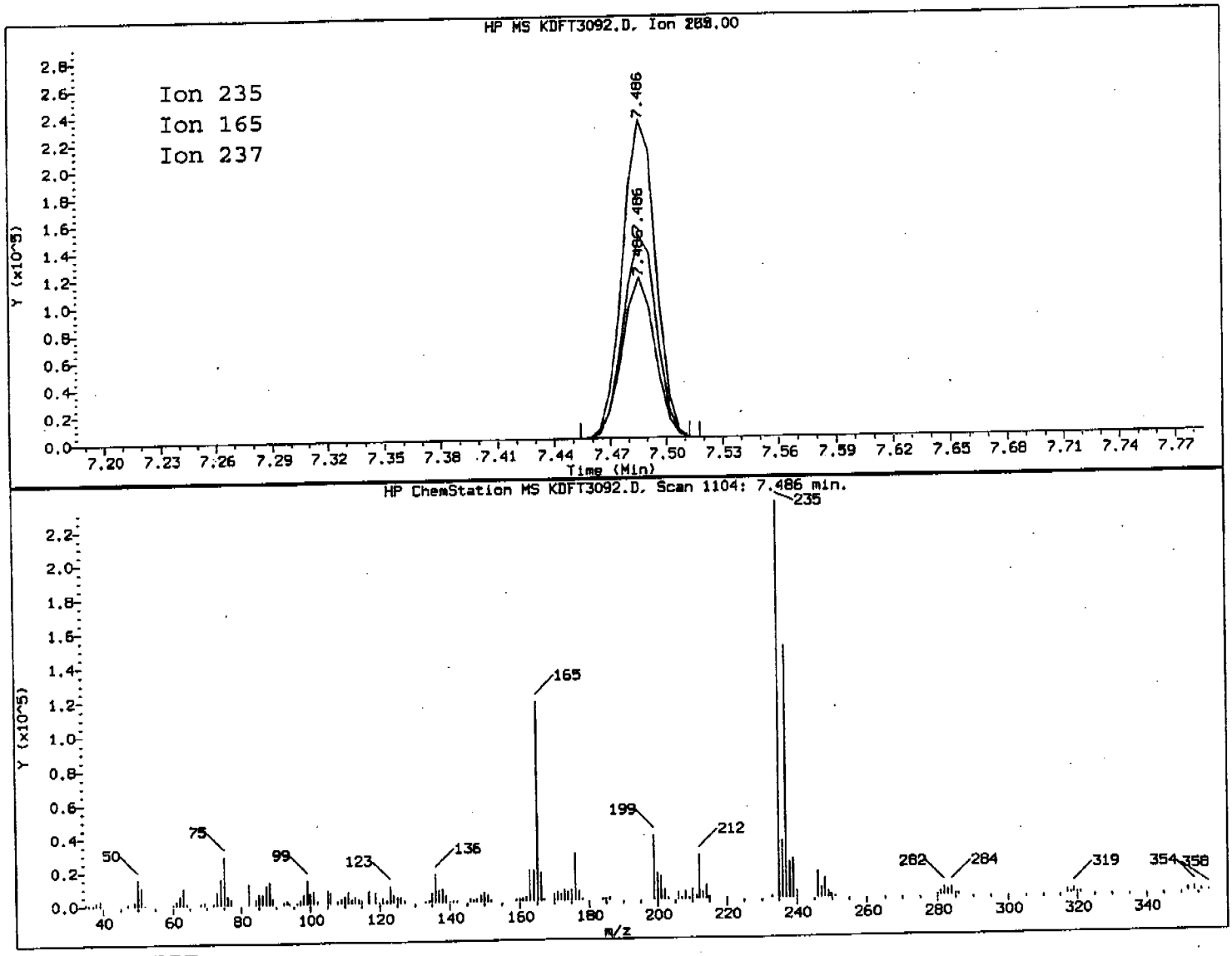


4,4'-DDD
========
Exp. RT = 7.074
Found RT = 7.069

Mass	Area	Ratio
235	2430	100.00
249	4545	187.04
152	1669	68.68

Report Date: 05/12/2005 15:06

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050512B.B/KDFT3092.D/KDFT3092.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050512B.B\sw846tun.m\resolut.m Inst:
Injection Date: 12-MAY-2005 11:48 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)

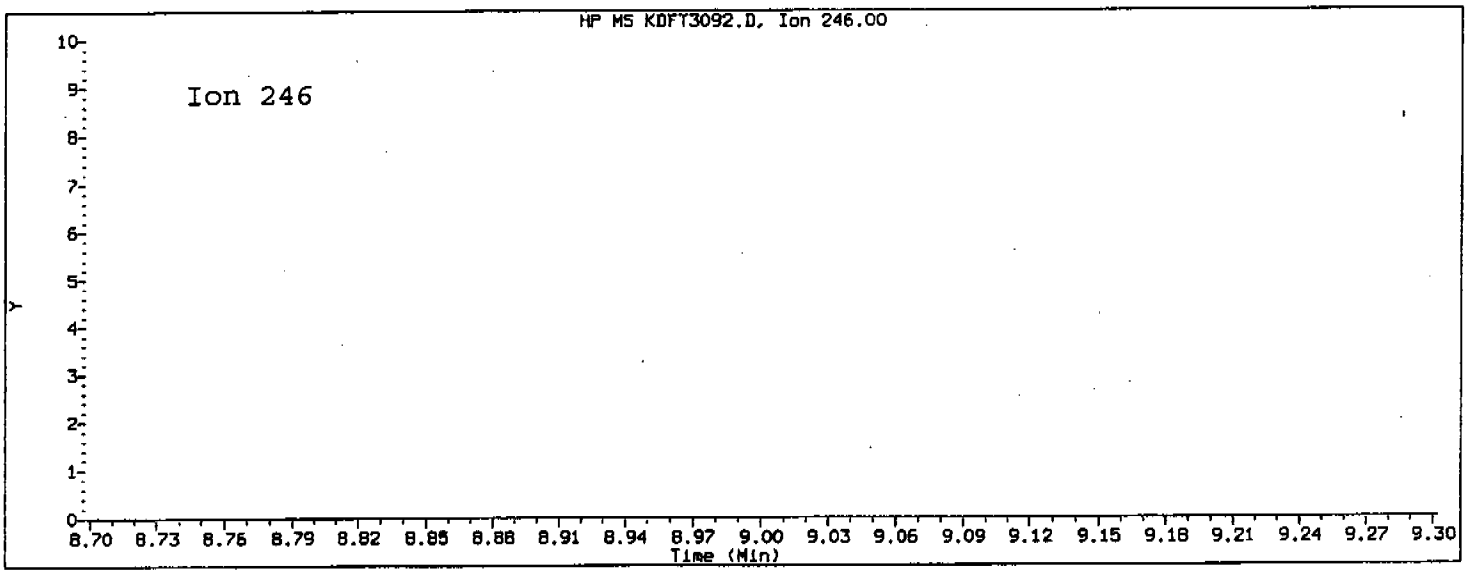


4,4'-DDT
========
Exp. RT = 7.502
Found RT = 7.486

Mass	Area	Ratio
235	288111	100.00
165	143760	49.90
237	183452	63.67

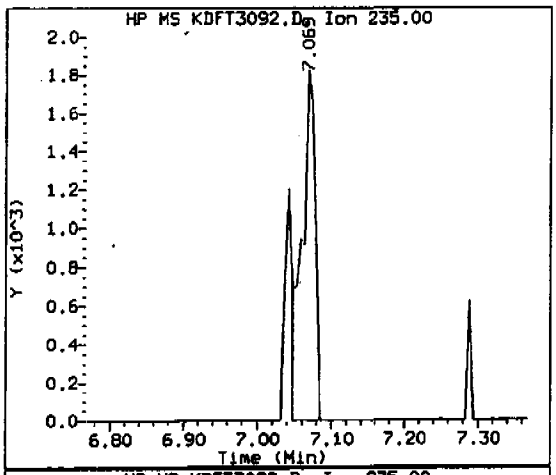
Report Date: 05/12/2005 15:06

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050512B.B/KDFT3092.D/KDFT3092.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050512B.B\sw846tun.m\resolut.m Inst:
Injection Date: 12-MAY-2005 11:48 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)

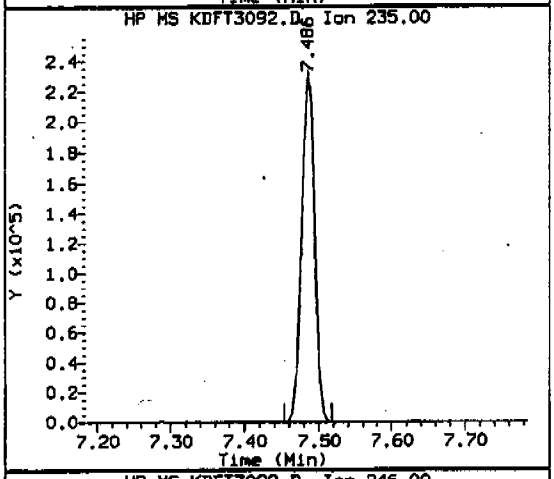


4,4'-DDE
========
Exp. RT = 9.000
Found RT = 0.000

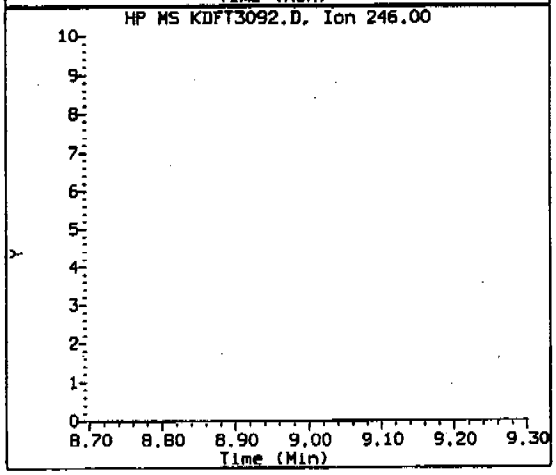
Mass	Area	Ratio
246	0	0.00



Compound: 4,4'-DDD
Quant Mass: 235
RT: 7.069
Area: 2430



Compound: 4,4'-DDT
Quant Mass: 235
RT: 7.486
Area: 288111



Compound: 4,4'-DDE
Quant Mass: 246
RT: 0.000
Area: 0

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	288111			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	2430	0.8	15.0	PASS
4,4-DDD + DDE	2430	0.8	15.0	PASS

****
TUNE SAMPLE *** PASSED *** DDT BREAKDOWN TEST
****

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i
Lab File ID: KCAL3094.D
Analysis Type: WATER
Lab Sample ID: SSTD050
Method: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m

Injection Date: 12-MAY-2005 12:41
Init. Cal. Date(s): 28-APR-2005 09-MAY-2005
Init. Cal. Times: 11:41 15:12
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	1 1,4-Dioxane	0.36386	0.37463	0.010	-2.96081	60.00000	Averaged
	4 N-Nitrosodimethylamine	0.67099	0.66935	0.010	0.24409	60.00000	Averaged
	3 Pyridine	1.18405	1.16304	0.010	1.77451	60.00000	Averaged
	5 Dimethylformamide	0.88716	0.87049	0.010	1.87913	60.00000	Averaged
$	10 2-Fluorophenol	1.20834	1.19131	0.010	1.40966	40.00000	Averaged
	11 Cyclohexanol	1.38218	1.43741	0.010	-3.99530	60.00000	Averaged
	17 Aniline	2.19527	2.08709	0.010	4.92746	60.00000	Averaged
	19 Bis(2-chloroethyl)ether	1.55372	1.34853	0.010	13.20656	60.00000	Averaged
$	15 Phenol-d5	1.69125	1.68726	0.010	0.23593	40.00000	Averaged
	16 Phenol	1.87215	1.68060	0.010	10.23184	20.00000	Averaged
	20 2-Chlorophenol	1.35363	1.30045	0.010	3.92856	60.00000	Averaged
	21 1,3-Dichlorobenzene	1.54804	1.50121	0.010	3.02508	60.00000	Averaged
	23 1,4-Dichlorobenzene	1.64398	1.57960	0.010	3.91619	20.00000	Averaged
	26 1,2-Dichlorobenzene	1.52039	1.46484	0.010	3.65385	60.00000	Averaged
	25 Benzyl Alcohol	0.66523	0.78805	0.010	-18.46287	60.00000	Averaged
	28 2,2-oxybis(1-Chloropropane)	1.60673	1.45390	0.010	9.51184	60.00000	Averaged
	27 2-Methylphenol	1.19876	1.14486	0.010	4.49654	60.00000	Averaged
	35 Hexachloroethane	0.71883	0.69290	0.010	3.60673	60.00000	Averaged
	32 N-Nitrosodinpropylamine	1.25943	1.20233	0.050	4.53383	60.00000	Averaged
	29 3 and 4-Methylphenol	1.27839	1.19966	0.010	6.15850	60.00000	Averaged
$	36 Nitrobenzene-d5	0.54909	0.53617	0.010	2.35271	40.00000	Averaged
	37 Nitrobenzene	0.58194	0.54893	0.010	5.67224	60.00000	Averaged
	39 Isophorone	0.75864	0.76092	0.010	-0.30179	60.00000	Averaged
	40 2-Nitrophenol	0.20162	0.20259	0.010	-0.48112	20.00000	Averaged
	41 2,4-Dimethylphenol	0.42786	0.44048	0.010	-2.94960	60.00000	Averaged
	42 Bis(2-chloroethoxy)methane	0.48359	0.46164	0.010	4.53873	60.00000	Averaged
	45 2,4-Dichlorophenol	0.31460	0.32134	0.010	-2.14251	20.00000	Averaged
	47 1,2,4-Trichlorobenzene	0.37479	0.38182	0.010	-1.87589	60.00000	Averaged
	44 Benzoic Acid	0.19951	0.20517	0.010	-2.83932	60.00000	Averaged
	50 Naphthalene	1.13252	1.07681	0.010	4.91922	60.00000	Averaged
	51 4-Chloroaniline	0.45857	0.44947	0.010	1.98342	60.00000	Averaged
	54 Hexachlorobutadiene	0.26032	0.26843	0.050	-3.11302	20.00000	Averaged
	62 2-Methylnaphthalene	0.81010	1.04954	0.010	-29.55701	60.00000	Averaged
	59 4-Chloro-3-Methylphenol	0.36550	0.38474	0.010	-5.26275	20.00000	Averaged
	66 Hexachlorocyclopentadiene	0.42770	0.42441	0.010	0.76996	60.00000	Averaged
	67 2,4,6-Trichlorophenol	0.46165	0.46739	0.010	-1.24205	20.00000	Averaged
	68 2,4,5-Trichlorophenol	0.48790	0.50015	0.010	-2.50979	60.00000	Averaged
$	69 2-Fluorobiphenyl	1.61063	1.50387	0.010	6.62892	40.00000	Averaged
	72 2-Chloronaphthalene	1.34666	1.28086	0.010	4.88588	60.00000	Averaged
	73 2-Nitroaniline	0.58010	0.57106	0.010	1.55907	60.00000	Averaged
	76 Dimethylphthalate	1.54223	1.53012	0.010	0.78480	60.00000	Averaged
	79 Acenaphthylene	1.98537	1.92755	0.010	2.91232	60.00000	Averaged

05/12/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KCAL3094.D
Report Date: 12-May-2005 14:58

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i
Lab File ID: KCAL3094.D
Analysis Type: WATER
Lab Sample ID: SSTD050
Method: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m

Injection Date: 12-MAY-2005 12:41
Init. Cal. Date(s): 28-APR-2005 09-MAY-2005
Init. Cal. Times: 11:41 15:12
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
80	2,6-Dinitrotoluene	0.32954	0.34154	0.010	-3.64038	60.00000	Averaged
83	Acenaphthene	1.25374	1.19290	0.010	4.85271	20.00000	Averaged
81	3-Nitroaniline	0.32374	0.32974	0.010	-1.85503	60.00000	Averaged
84	2,4-Dinitrophenol	0.19685	0.15362	0.050	21.96142	60.00000	Averaged
86	Dibenzofuran	1.85230	1.82454	0.010	1.49846	60.00000	Averaged
88	2,4-Dinitrotoluene	0.42378	0.45052	0.010	-6.31138	60.00000	Averaged
85	4-Nitrophenol	0.27026	0.34804	0.050	-28.78086	60.00000	Averaged
93	Diethylphthalate	1.54363	1.55730	0.010	-0.88555	60.00000	Averaged
94	Fluorene	1.48246	1.49348	0.010	-0.74319	60.00000	Averaged
95	4-Chlorophenyl-phenylether	0.79978	0.80545	0.010	-0.70874	60.00000	Averaged
98	4-Nitroaniline	0.31560	0.34779	0.010	-10.20204	60.00000	Averaged
99	4,6-Dinitro-2-methylphenol	0.16574	0.15962	0.010	3.69271	60.00000	Averaged
100	N-Nitrosodiphenylamine	0.60901	0.57843	0.010	5.02197	20.00000	Averaged
102	Azobenzene	1.36611	1.21662	0.010	10.94304	60.00000	Averaged
$ 104	2,4,6-Tribromophenol	0.22361	0.24973	0.010	-11.68385	40.00000	Averaged
109	4-Bromophenyl-phenylether	0.27978	0.27583	0.010	1.41235	60.00000	Averaged
112	Hexachlorobenzene	0.28563	0.29242	0.010	-2.37484	60.00000	Averaged
117	Pentachlorophenol	0.15930	0.12903	0.010	18.99922	20.00000	Averaged
122	Phenanthrene	1.23548	1.21702	0.010	1.49487	60.00000	Averaged
124	Anthracene	1.19438	1.17218	0.010	1.85915	60.00000	Averaged
126	Carbazole	1.02046	1.01042	0.010	0.98388	60.00000	Averaged
129	Di-n-Butylphthalate	1.33705	1.32815	0.010	0.66503	60.00000	Averaged
134	Fluoranthene	1.27688	1.32403	0.010	-3.69317	20.00000	Averaged
135	Benzidine	0.60665	0.54515	0.010	10.13758	100	Averaged
137	Pyrene	1.62596	1.54028	0.010	5.26929	60.00000	Averaged
$ 139	Terphenyl-d14	1.26353	1.22952	0.010	2.69177	40.00000	Averaged
145	3,3-Dimethylbenzidine	0.64501	0.59326	0.010	8.02211	60.00000	Averaged
146	Butylbenzylphthalate	0.67238	0.61739	0.010	8.17859	60.00000	Averaged
150	Benzo(a)Anthracene	1.40066	1.37782	0.010	1.63016	60.00000	Averaged
152	3,3'-Dichlorobenzidine	0.53933	0.50733	0.010	5.93218	60.00000	Averaged
154	Chrysene	1.33287	1.27898	0.010	4.04262	60.00000	Averaged
155	bis(2-ethylhexyl)Phthalate	0.84173	0.78303	0.010	6.97316	60.00000	Averaged
158	Di-n-octylphthalate	1.70444	1.55790	0.010	8.59731	20.00000	Averaged
160	Benzo(b)fluoranthene	1.55320	1.51139	0.010	2.69165	60.00000	Averaged
161	Benzo(k)fluoranthene	1.54269	1.52553	0.010	1.11202	60.00000	Averaged
165	Benzo(a)pyrene	1.40180	1.39964	0.010	0.15474	20.00000	Averaged
173	Indeno(1,2,3-cd)pyrene	1.29945	1.33110	0.010	-2.43577	60.00000	Averaged
174	Dibenzo(a,h)anthracene	1.26094	1.32113	0.010	-4.77307	60.00000	Averaged
177	Benzo(g,h,i)perylene	1.16013	1.17368	0.010	-1.16795	60.00000	Averaged

STL ST. LOUIS

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B/KCAL3094.D
Report Date: 05/12/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3094.D
Analysis Type: WATER

Injection Date: 12-MAY-2005 12:41
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270

COMPOUND	%D
1,4-Dioxane	3.0
Pyridine	1.8
N-Nitrosodimethylamine	0.2
Dimethylformamide	1.9
Cyclohexanol	4.0
2-Fluorophenol	1.4
Aniline	4.9
Bis(2-chloroethyl)ether	13.2
Phenol-d5	0.2
Phenol	10.2
2-Chlorophenol	3.9
1,3-Dichlorobenzene	3.0
1,4-Dichlorobenzene	3.9
1,2-Dichlorobenzene	3.7
Benzyl Alcohol	18.5
2,2-oxybis(1-Chloropropane)	9.5
2-Methylphenol	4.5
N-Nitrosodinpropylamine	4.5
Hexachloroethane	3.6
3 and 4-Methylphenol	6.2
Nitrobenzene-d5	2.4
Nitrobenzene	5.7
Isophorone	0.3
2-Nitrophenol	0.5
2,4-Dimethylphenol	2.9
Bis(2-chloroethoxy)methane	4.5
2,4-Dichlorophenol	2.1
1,2,4-Trichlorobenzene	1.9
Benzoic Acid	2.8
Naphthalene	4.9
4-Chloroaniline	2.0
Hexachlorobutadiene	3.1
4-Chloro-3-Methylphenol	5.3
2-Methylnaphthalene	29.6
Hexachlorocyclopentadiene	0.8
2,4,6-Trichlorophenol	1.2
2-Fluorobiphenyl	6.6
2,4,5-Trichlorophenol	2.5
2-Chloronaphthalene	4.9

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B/KCAL3094.D
Report Date: 05/12/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3094.D
Analysis Type: WATER

Injection Date: 12-MAY-2005 12:41
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050512A

COMPOUND	%D
2-Nitroaniline	1.6
Dimethylphthalate	0.8
Acenaphthylene	2.9
2,6-Dinitrotoluene	3.6
Acenaphthene	4.9
3-Nitroaniline	1.9
2,4-Dinitrophenol	22.0
Dibenzofuran	1.5
2,4-Dinitrotoluene	6.3
4-Nitrophenol	28.8
Fluorene	0.7
Diethylphthalate	0.9
4-Chlorophenyl-phenylether	0.7
4-Nitroaniline	10.2
4,6-Dinitro-2-methylphenol	3.7
N-Nitrosodiphenylamine	5.0
Azobenzene	10.9
2,4,6-Tribromophenol	11.7
4-Bromophenyl-phenylether	1.4
Hexachlorobenzene	2.4
Pentachlorophenol	19.0
Phenanthrene	1.5
Anthracene	1.9
Carbazole	1.0
Di-n-Butylphthalate	0.7
Fluoranthene	3.7
Benzidine	10.1
Pyrene	5.3
Terphenyl-d14	2.7
3,3-Dimethylbenzidine	8.0
Butylbenzylphthalate	8.2
Benzo(a)Anthracene	1.6
Chrysene	4.0
3,3'-Dichlorobenzidine	5.9
bis(2-ethylhexyl)Phthalate	7.0
Di-n-octylphthalate	8.6
Benzo(b)fluoranthene	2.7
Benzo(k)fluoranthene	1.1
Benzo(a)pyrene	0.2

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B/KCAL3094.D
Report Date: 05/12/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3094.D
Analysis Type: WATER

Injection Date: 12-MAY-2005 12:41
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050512A

COMPOUND	%D
Indeno(1,2,3-cd)pyrene	2.4
Dibenzo(a,h)anthracene	4.8
Benzo(g,h,i)perylene	1.2
Dibenz(e,a) Pyrene	100.0

The average of %D's in the continuing calibration is 6.2

05/12/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KCAL3094.D
Report Date: 12-May-2005 14:58

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KCAL3094.D
Lab Smp Id: SSTD050 Client Smp ID: SSTD050
Inj Date : 12-MAY-2005 12:41
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD050
Misc Info : SV0221-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m
Meth Date : 12-May-2005 14:58 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 12:01 Cal File: KCAL2994.D
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	1.251	1.251	(0.276)	78602	50.0000	51.48
4	N-Nitrosodimethylamine	74	1.678	1.678	(0.370)	140438	50.0000	49.88
3	Pyridine	79	1.662	1.662	(0.366)	244019	50.0000	49.11(M)
5	Dimethylformamide	44	2.121	2.121	(0.468)	182639	50.0000	49.06(M)
$ 10	2-Fluorophenol	112	3.254	3.254	(0.717)	249950	50.0000	49.30
11	Cyclohexanol	57	3.243	3.243	(0.715)	301584	50.0000	52.00
17	Aniline	93	4.232	4.232	(0.933)	437896	50.0000	47.54
19	Bis(2-chloroethyl)ether	93	4.306	4.306	(0.949)	282936	50.0000	43.40
$ 15	Phenol-d5	99	4.333	4.333	(0.955)	354006	50.0000	49.88
16	Phenol	94	4.349	4.349	(0.959)	352608	50.0000	44.88
20	2-Chlorophenol	128	4.381	4.381	(0.966)	272850	50.0000	48.04
21	1,3-Dichlorobenzene	146	4.488	4.488	(0.989)	314971	50.0000	48.49
* 22	1,4-Dichlorobenzene-d4	152	4.536	4.536	(1.000)	167849	40.0000	
23	1,4-Dichlorobenzene	146	4.557	4.557	(1.005)	331418	50.0000	48.04
26	1,2-Dichlorobenzene	146	4.777	4.777	(1.053)	307340	50.0000	48.17
25	Benzyl Alcohol	108	4.793	4.793	(1.057)	165342	50.0000	59.23
28	2,2-oxybis(1-Chloropropane)	45	4.947	4.947	(1.091)	305045	50.0000	45.24
27	2-Methylphenol	108	5.017	5.017	(1.106)	240204	50.0000	47.75
35	Hexachloroethane	117	5.134	5.134	(1.132)	145378	50.0000	48.20
32	N-Nitrosodinpropylamine	70	5.129	5.129	(1.131)	252262	50.0000	47.73
29	3 and 4-Methylphenol	108	5.204	5.204	(1.147)	503405	100.000	93.84

5/11/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KCAL3094.D
Report Date: 12-May-2005 14:58

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.263	5.263	(0.860)	393822	50.0000	48.82
	37 Nitrobenzene	77	5.284	5.284	(0.864)	403195	50.0000	47.16
	39 Isophorone	82	5.583	5.583	(0.913)	558907	50.0000	50.15
	40 2-Nitrophenol	139	5.685	5.685	(0.929)	148801	50.0000	50.24
	41 2,4-Dimethylphenol	107	5.824	5.824	(0.952)	323538	50.0000	51.47
	42 Bis(2-chloroethoxy)methane	93	5.888	5.888	(0.962)	339081	50.0000	47.73
	45 2,4-Dichlorophenol	162	6.043	6.043	(0.988)	236025	50.0000	51.07
	47 1,2,4-Trichlorobenzene	180	6.075	6.075	(0.993)	280454	50.0000	50.94
*	48 Naphthalene-d8	136	6.117	6.117	(1.000)	587608	40.0000	
	44 Benzoic Acid	122	6.112	6.112	(0.999)	150700	50.0000	51.42(M)
	50 Naphthalene	128	6.139	6.139	(1.003)	790930	50.0000	47.54
	51 4-Chloroaniline	127	6.299	6.299	(1.030)	330141	50.0000	49.01
	54 Hexachlorobutadiene	225	6.390	6.390	(1.045)	197161	50.0000	51.56
	62 2-Methylnaphthalene	142	7.100	7.100	(1.161)	770899	50.0000	64.78
	59 4-Chloro-3-Methylphenol	107	7.095	7.095	(1.160)	282595	50.0000	52.63
	66 Hexachlorocyclopentadiene	237	7.448	7.448	(0.846)	177867	50.0000	49.62
	67 2,4,6-Trichlorophenol	196	7.645	7.645	(0.869)	195878	50.0000	50.62
	68 2,4,5-Trichlorophenol	196	7.779	7.779	(0.884)	209609	50.0000	51.25
$	69 2-Fluorobiphenyl	172	7.725	7.725	(0.878)	630259	50.0000	46.68
	72 2-Chloronaphthalene	162	7.848	7.848	(0.892)	536800	50.0000	47.56
	73 2-Nitroaniline	65	8.147	8.147	(0.926)	239326	50.0000	49.22
	76 Dimethylphthalate	163	8.516	8.516	(0.968)	641263	50.0000	49.61
	79 Acenaphthylene	152	8.532	8.532	(0.970)	807820	50.0000	48.54
	80 2,6-Dinitrotoluene	165	8.628	8.628	(0.981)	143135	50.0000	51.82
*	82 Acenaphthene-d10	164	8.799	8.799	(1.000)	335274	40.0000	
	83 Acenaphthene	153	8.853	8.853	(1.006)	499935	50.0000	47.57
	81 3-Nitroaniline	138	8.869	8.869	(1.008)	138193	50.0000	50.93
	84 2,4-Dinitrophenol	184	9.050	9.050	(1.029)	64381	50.0000	39.02
	86 Dibenzofuran	168	9.130	9.130	(1.038)	764653	50.0000	49.25
	88 2,4-Dinitrotoluene	165	9.307	9.307	(1.058)	188810	50.0000	53.16
	85 4-Nitrophenol	109	9.462	9.462	(1.075)	145861	50.0000	64.39(M)
	93 Diethylphthalate	149	9.771	9.771	(1.110)	652653	50.0000	50.44
	94 Fluorene	166	9.745	9.745	(1.107)	625905	50.0000	50.37
	95 4-Chlorophenyl-phenylether	204	9.793	9.793	(1.113)	337557	50.0000	50.35
	98 4-Nitroaniline	138	9.990	9.990	(1.135)	145758	50.0000	55.10
	99 4,6-Dinitro-2-methylphenol	198	10.033	10.033	(0.876)	125206	50.0000	48.15
	100 N-Nitrosodiphenylamine	169	10.065	10.065	(0.878)	453727	50.0000	47.49
	102 Azobenzene	77	10.076	10.076	(0.879)	954335	50.0000	44.53
$	104 2,4,6-Tribromophenol	330	10.252	10.252	(1.165)	104661	50.0000	55.84
	109 4-Bromophenyl-phenylether	248	10.680	10.680	(0.932)	216363	50.0000	49.29
	112 Hexachlorobenzene	284	10.904	10.904	(0.952)	229376	50.0000	51.19
	117 Pentachlorophenol	266	11.326	11.326	(0.988)	101217	50.0000	40.50
*	121 Phenanthrene-d10	188	11.460	11.460	(1.000)	627534	40.0000	
	122 Phenanthrene	178	11.502	11.502	(1.004)	954648	50.0000	49.25
	124 Anthracene	178	11.588	11.588	(1.011)	919478	50.0000	49.07
	126 Carbazole	167	11.994	11.994	(1.047)	792593	50.0000	49.51
	129 Di-n-Butylphthalate	149	12.881	12.881	(1.124)	1041827	50.0000	49.67
	134 Fluoranthene	202	13.799	13.799	(1.204)	1038595	50.0000	51.85
	135 Benzidine	184	14.195	14.195	(0.854)	373700	50.0000	44.93
	137 Pyrene	202	14.211	14.211	(0.855)	1055868	50.0000	47.36
$	139 Terphenyl-d14	244	14.659	14.659	(0.882)	842836	50.0000	48.65
	145 3,3-Dimethylbenzidine	212	15.664	15.664	(0.942)	406684	50.0000	45.99
	146 Butylbenzylphthalate	149	15.781	15.781	(0.949)	423223	50.0000	45.91
	150 Benzo(a)Anthracene	228	16.593	16.593	(0.998)	944502	50.0000	49.18

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KCAL3094.D
Report Date: 12-May-2005 14:58

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.625	16.625	(1.000)	548402	40.0000	
152 3,3'-Dichlorobenzidine	252	16.689	16.689	(1.004)	347779	50.0000	47.03
154 Chrysene	228	16.679	16.679	(1.003)	876747	50.0000	47.98
155 bis(2-ethylhexyl)Phthalate	149	17.005	17.005	(1.023)	536770	50.0000	46.51
158 Di-n-octylphthalate	149	18.159	18.159	(0.944)	929091	50.0000	45.70
160 Benzo(b)fluoranthene	252	18.597	18.597	(0.967)	901352	50.0000	48.65
161 Benzo(k)fluoranthene	252	18.645	18.645	(0.969)	909785	50.0000	49.44
165 Benzo(a)pyrene	252	19.136	19.136	(0.995)	834704	50.0000	49.92
* 166 Perylene-d12	264	19.232	19.232	(1.000)	477098	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.947	20.947	(1.089)	793832	50.0000	51.22
174 Dibenzo(a,h)anthracene	278	20.995	20.995	(1.092)	787884	50.0000	52.39
177 Benzo(g,h,i)perylene	276	21.401	21.401	(1.113)	699949	50.0000	50.58

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KCAL3094.D
Report Date: 12-May-2005 14:58

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

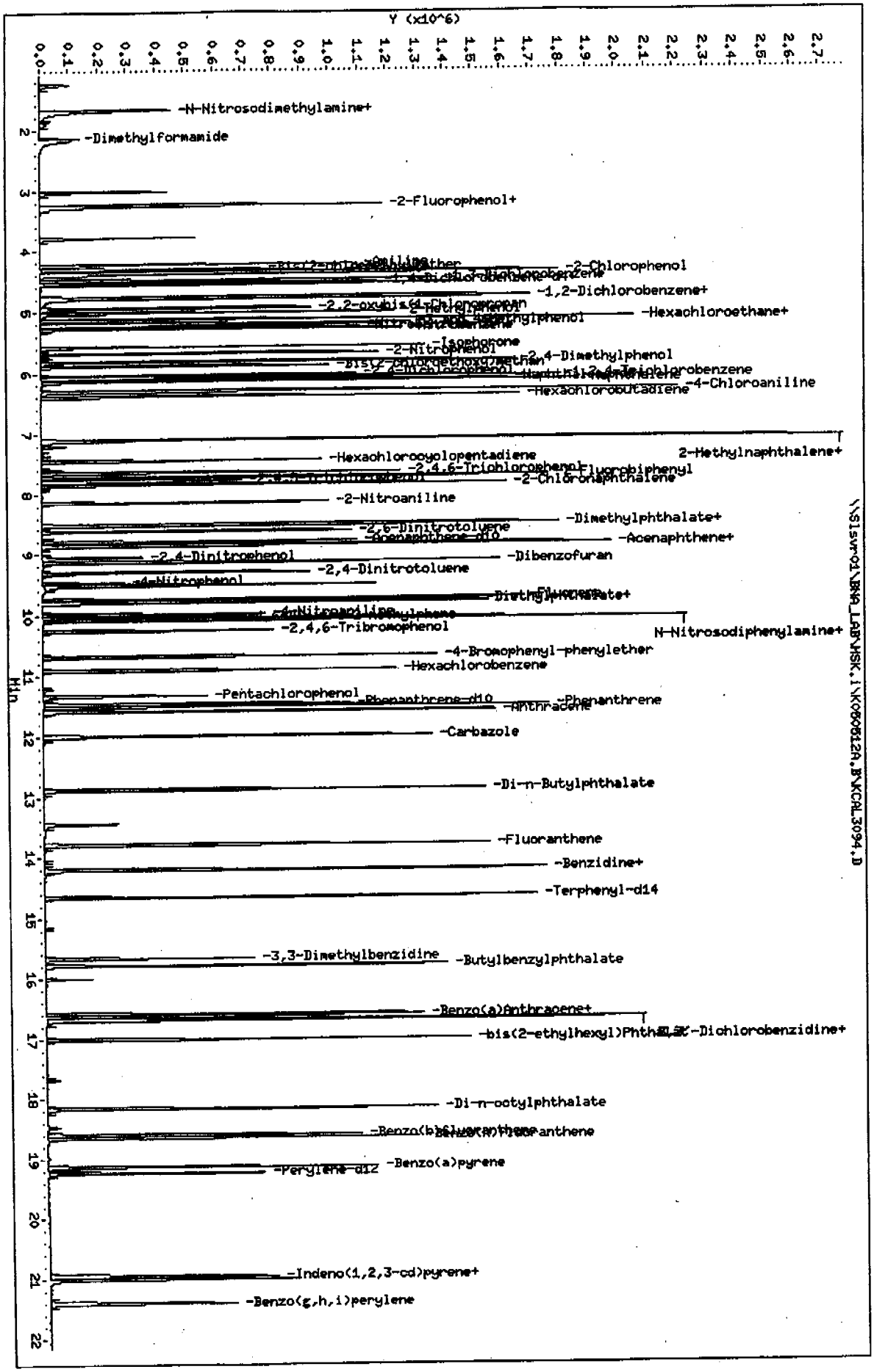
Instrument ID: MSK.i
Lab File ID: KCAL3094.D
Lab Smp Id: SSTD050
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m
Misc Info: SV0221-05

Calibration Date: 09-MAY-2005
Calibration Time: 12:01
Client Smp ID: SSTD050
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	193286	96643	386572	167849	-13.16
48 Naphthalene-d8	657267	328634	1314534	587608	-10.60
82 Acenaphthene-d10	351374	175687	702748	335274	-4.58
121 Phenanthrene-d10	612492	306246	1224984	627534	2.46
153 Chrysene-d12	494718	247359	989436	548402	10.85
166 Perylene-d12	409117	204559	818234	477098	16.62

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.54	-0.44
48 Naphthalene-d8	6.14	5.64	6.64	6.12	-0.42
82 Acenaphthene-d10	8.83	8.33	9.33	8.80	-0.29
121 Phenanthrene-d10	11.49	10.99	11.99	11.46	-0.27
153 Chrysene-d12	16.66	16.16	17.16	16.63	-0.19
166 Perylene-d12	19.27	18.77	19.77	19.23	-0.19

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



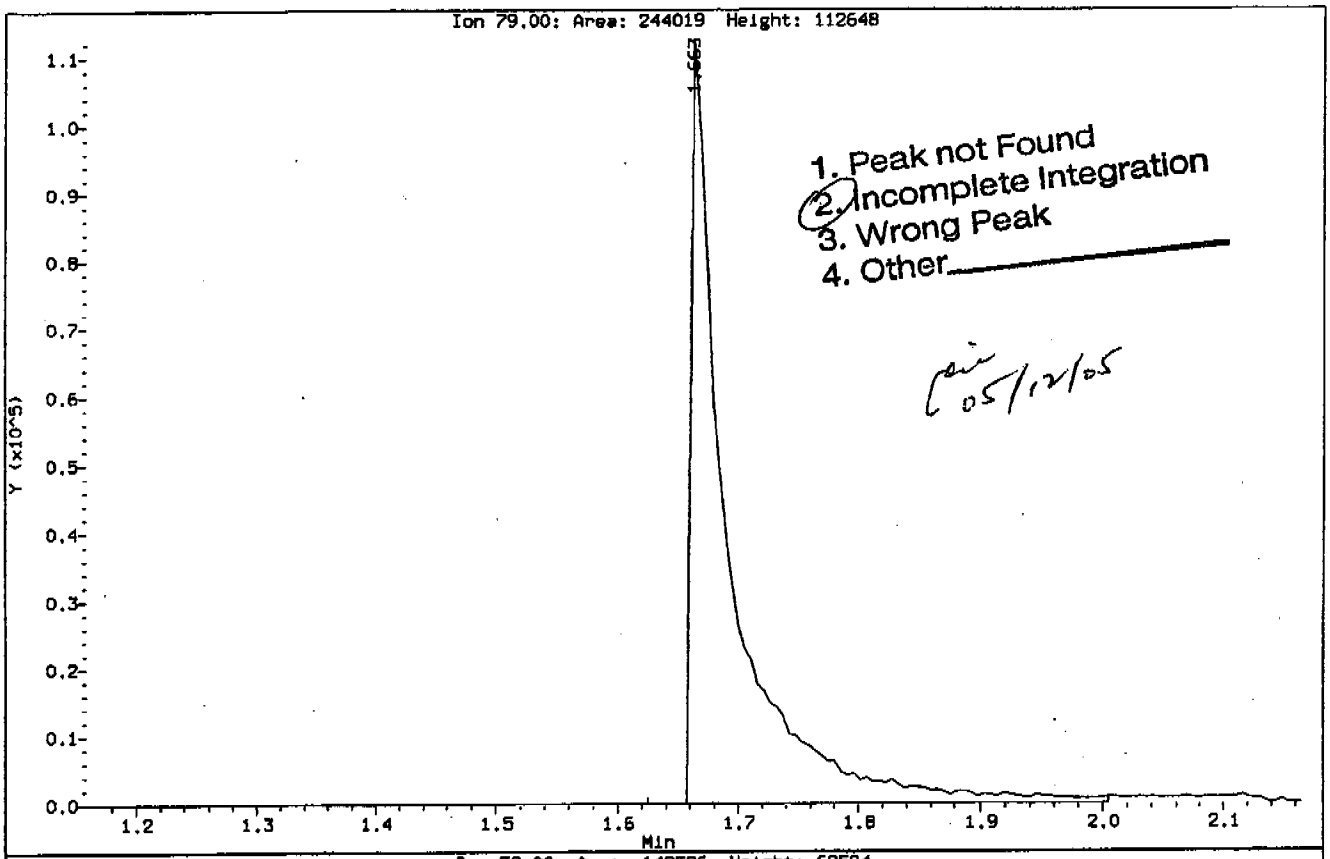
Data File: \\Slsvr01\BNA_LAB\HSK.i\K060512A.B\KCAL3094.D
Date : 12-MAY-2005 12:41
Client ID: SSTD050
Sample Info: SSTD050
Volume Injected (uL): 1.0
Column phase:

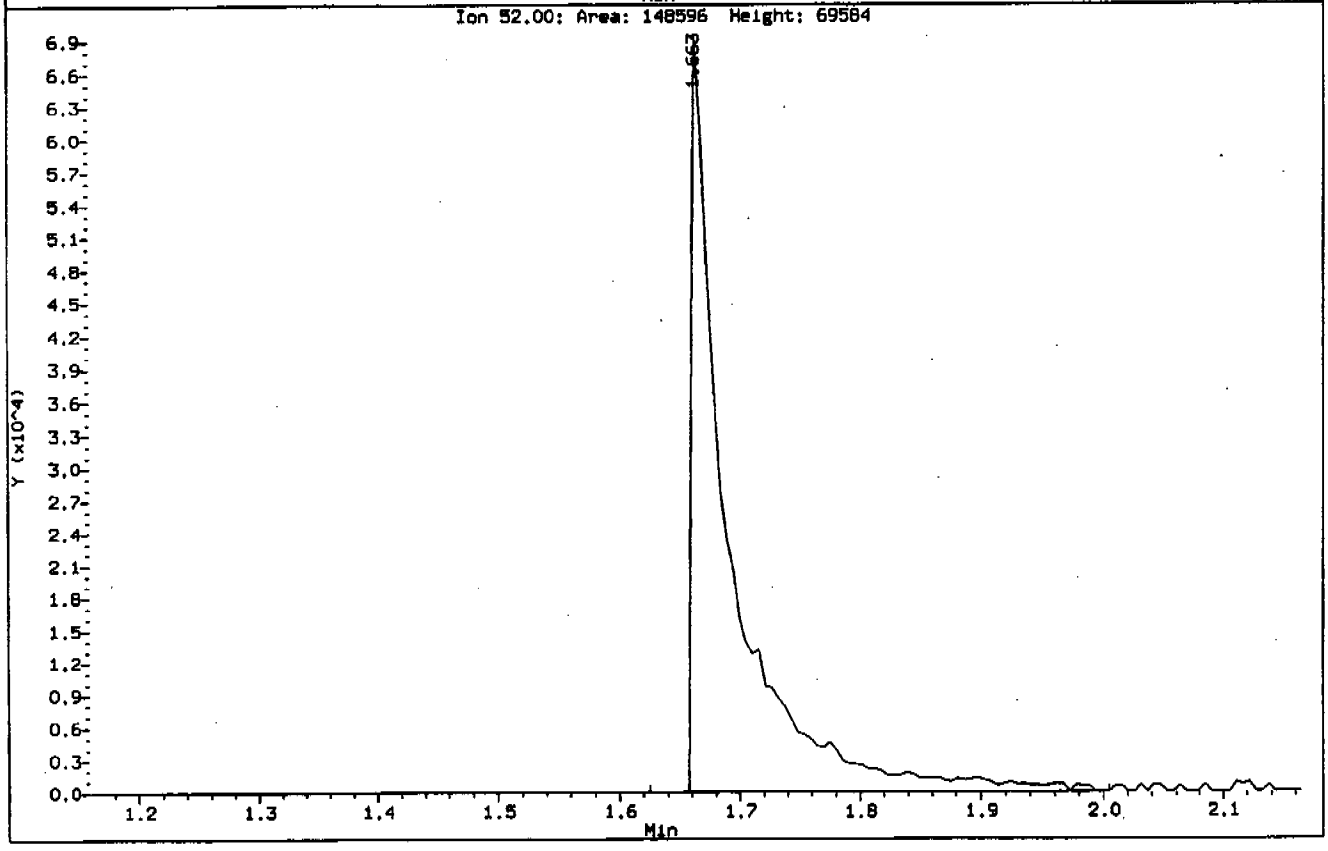
Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

\\Slsvr01\BNA_LAB\HSK.i\K060512A.B\KCAL3094.D

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KCAL3094.D
Injection Date: 12-MAY-2005 12:41
Instrument: MSK.i
Client Sample ID: SSTD050

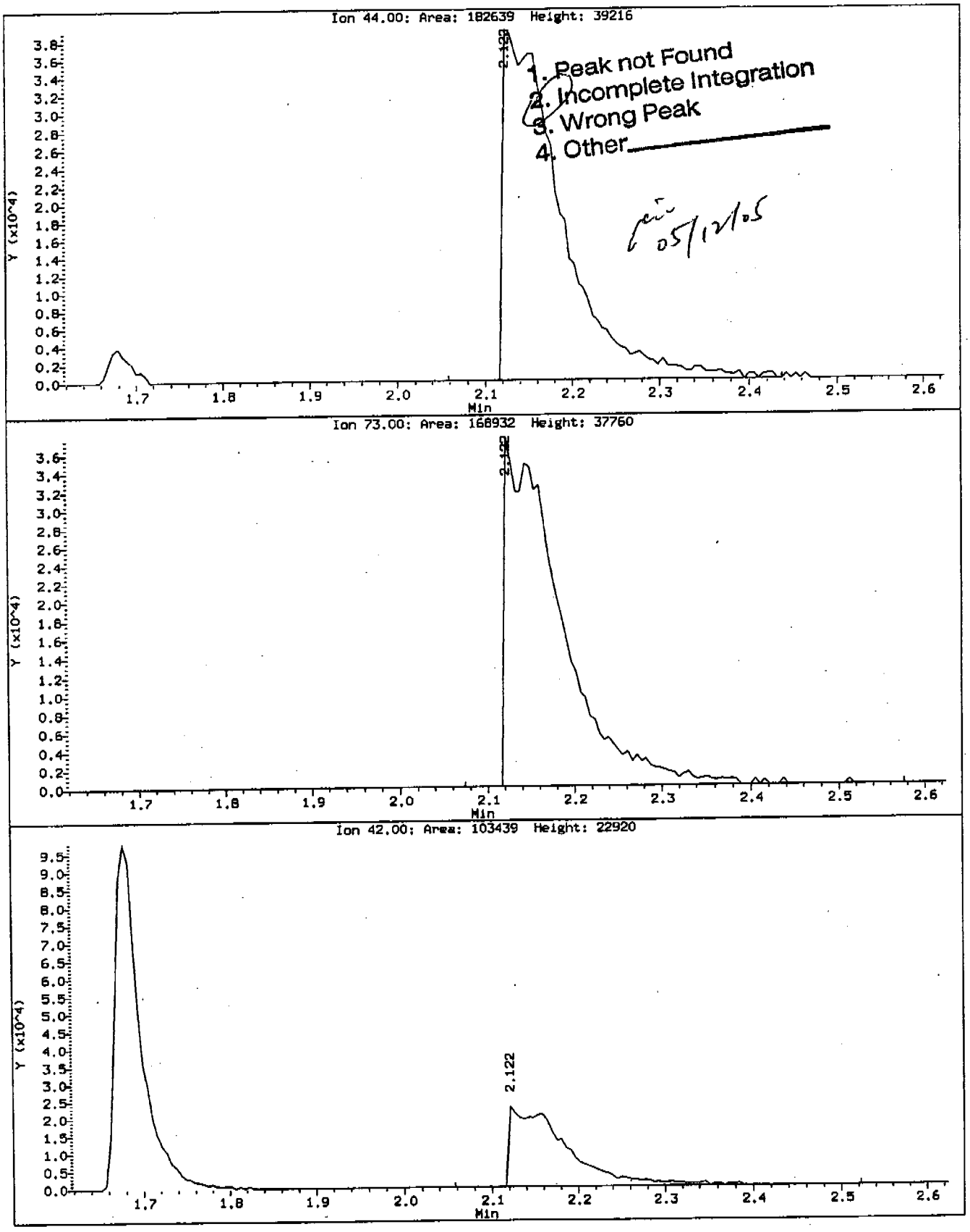
Compound: Pyridine
CAS Number: 110-86-1





Data File: \\SlsvrO1\BNA_LAB\MSK.i\K050512A.B\KCAL3094.D
Injection Date: 12-MAY-2005 12:41
Instrument: MSK.i
Client Sample ID: SSTD050

Compound: Dimethylformamide
CAS Number: 68-12-2



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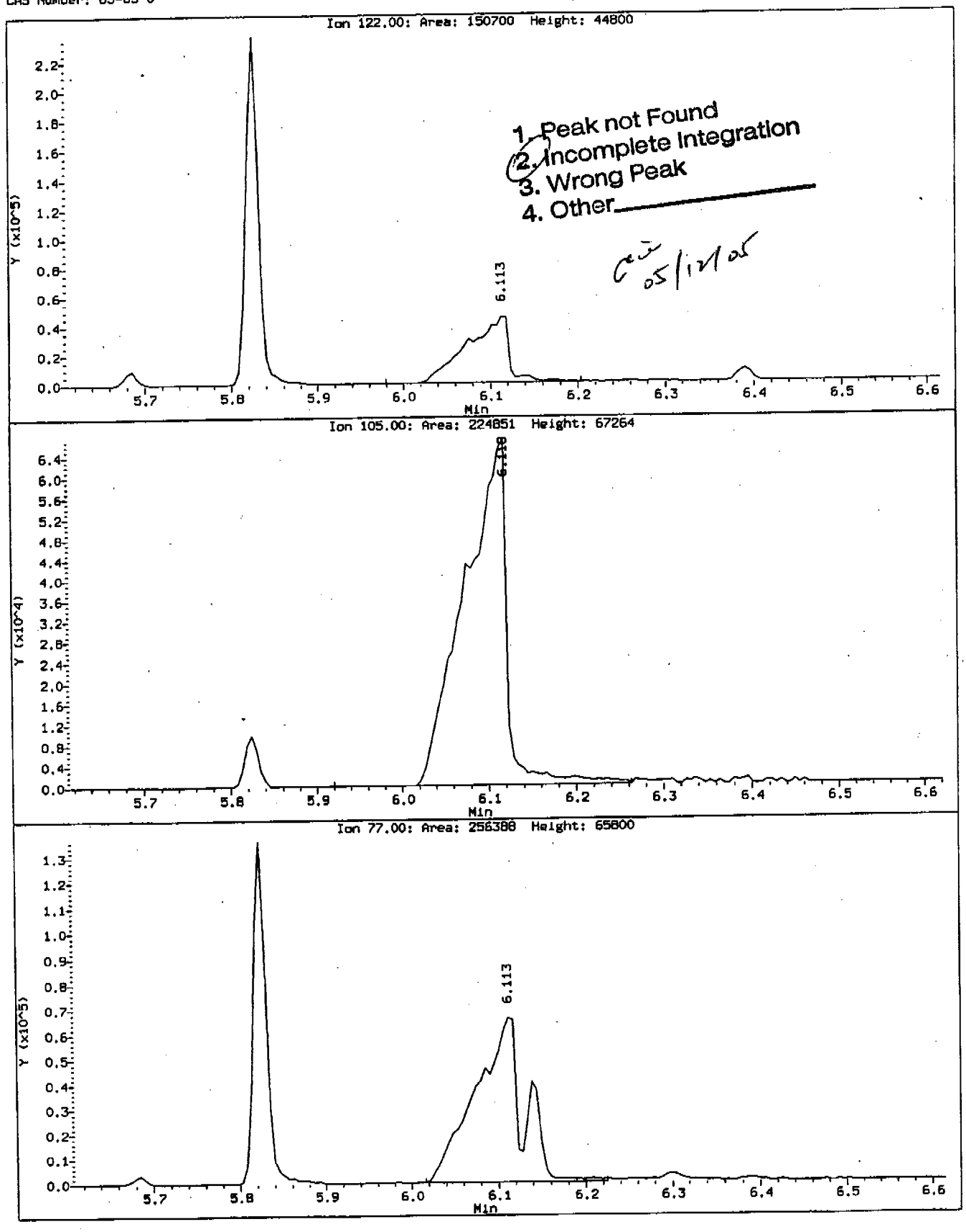
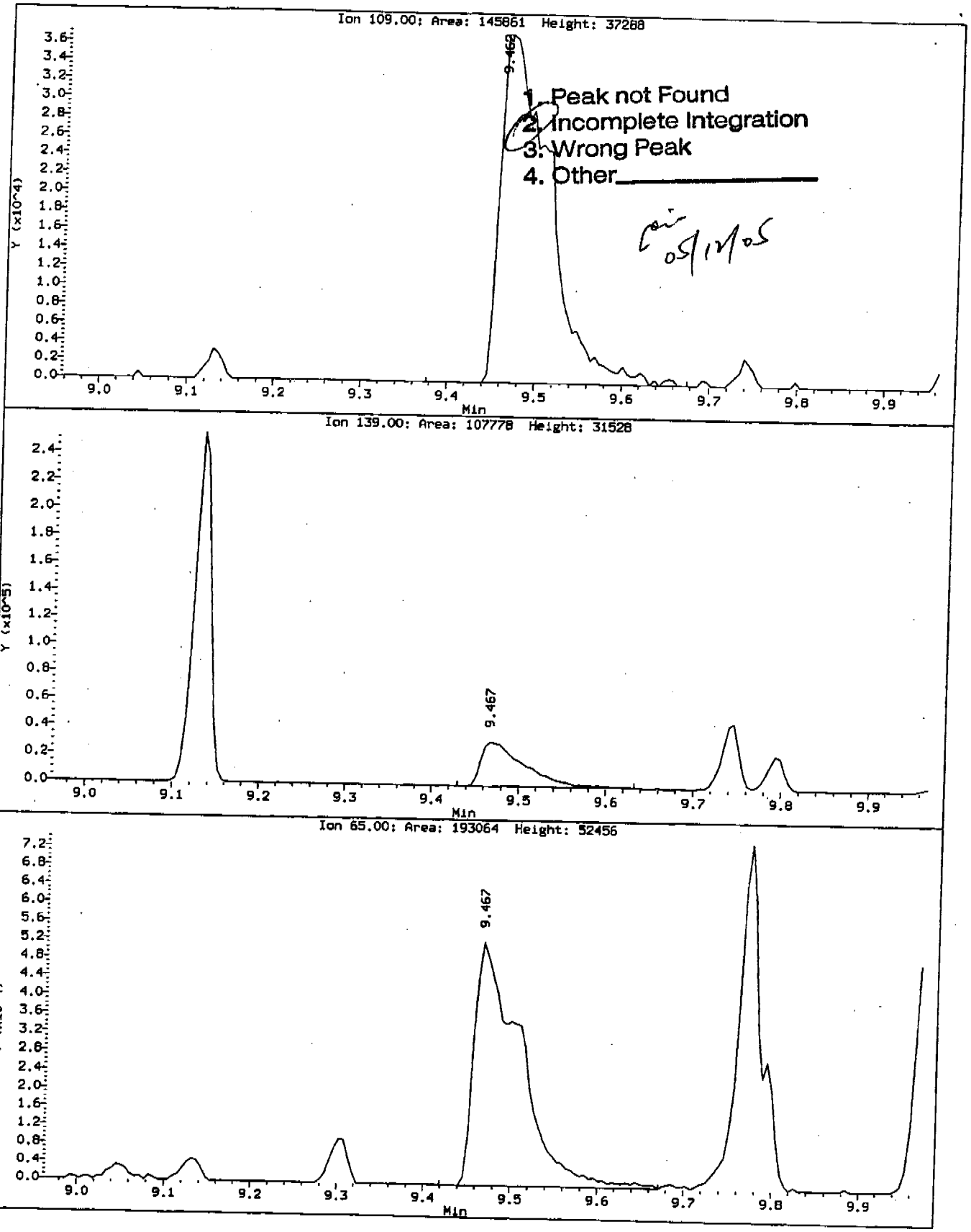
Injection Date: 12-MAY-2005 12:41
Instrument: MSK.i
Client Sample ID: S5TD050

Compound: Benzoic Acid
CAS Number: 65-85-0



Data File: \\Slavr01\BNA_LAB\MSK.i\K050512A.B\KCAL3094.D
Injection Date: 12-MAY-2005 12:41
Instrument: MSK.i
Client Sample ID: SSTD050

Compound: 4-Nitrophenol
CAS Number: 100-02-7



LOT# F5D210380

DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	38.17		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	46.07		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	45.94		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.23		PASS
275	10 - 30% of mass 198	28.64		PASS
365	Greater than 1% of mass 198	3.96		PASS
441	Present, but less than mass 443	13.47	(86.95)	PASS
442	Greater than 40% of mass 198	81.79		PASS
443	17 - 23% of mass 442	15.49	(18.94)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.8965885	5.000	PASS
Benzidine	0.8384548	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	394051			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	3048	0.8	15.0	PASS
4,4-DDD + DDE	3048	0.8	15.0	PASS

********** Tuning Sample, //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D,*** PASSED **********

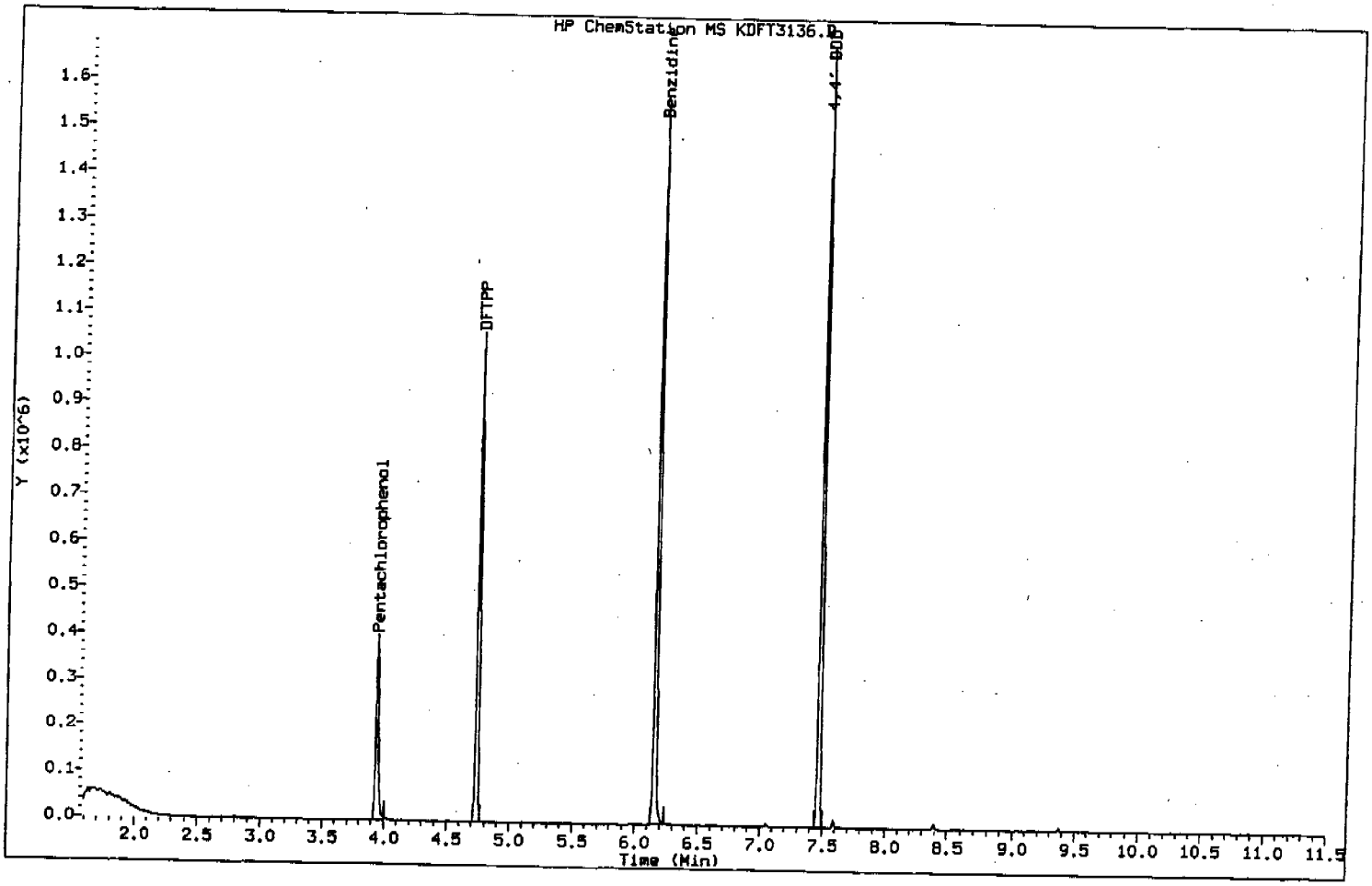
ria 05/16/05

STL ST. LOUIS

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 05/16/2005 10:10

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m Inst: MSK
Injection Date: 14-MAY-2005 08:36 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0232-05 (50NG)

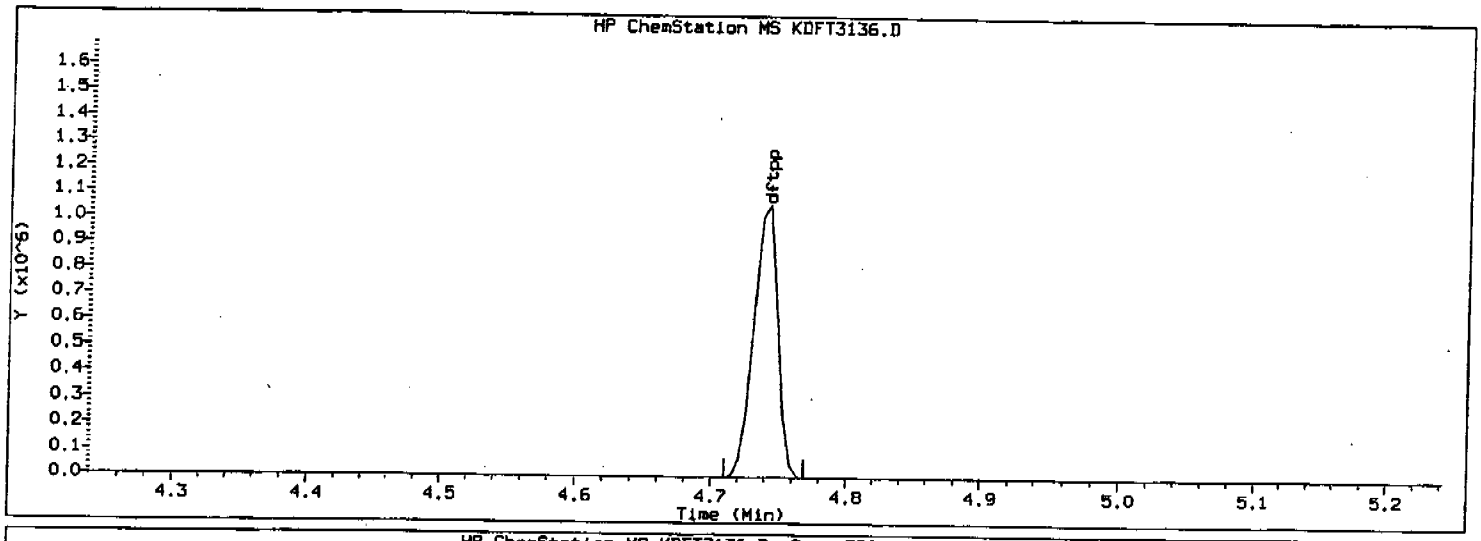


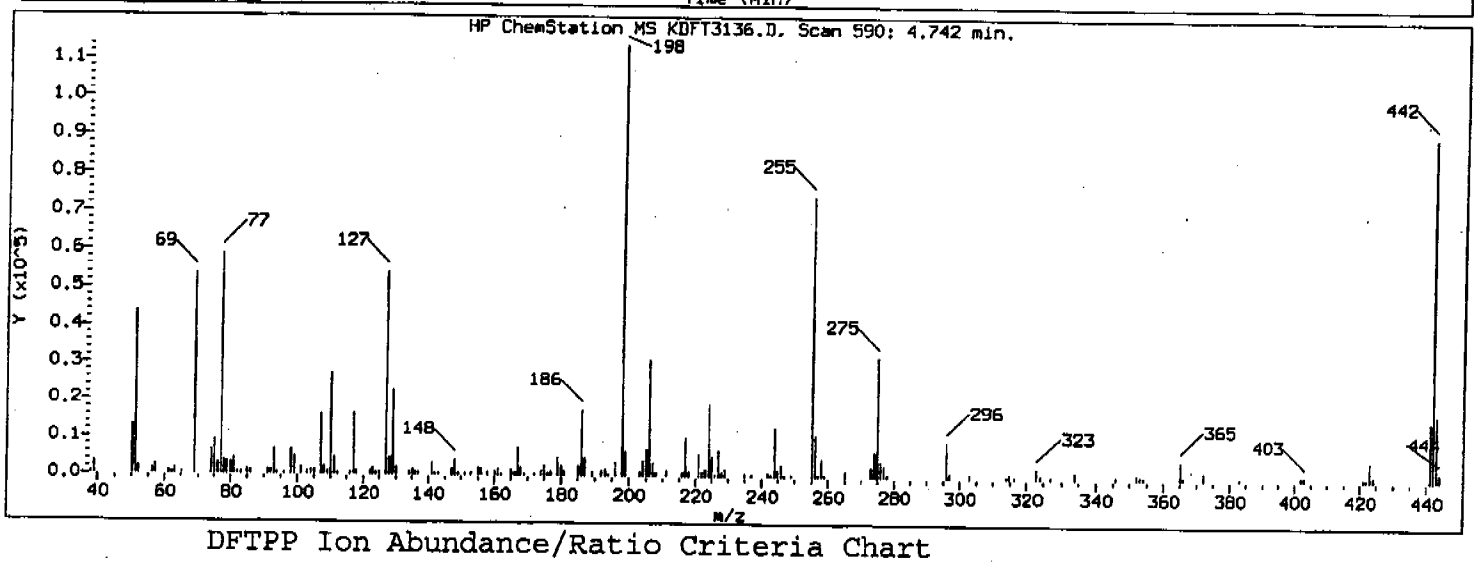
LOT# F5D210380

STL ST. LOUIS

Report Date: 05/16/2005 10:10

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m Inst: MSK
Injection Date: 14-MAY-2005 08:36 Operator: XIA
Sample Info: DFTPP DFTPP
Misc Info: SV0232-05 (50NG)



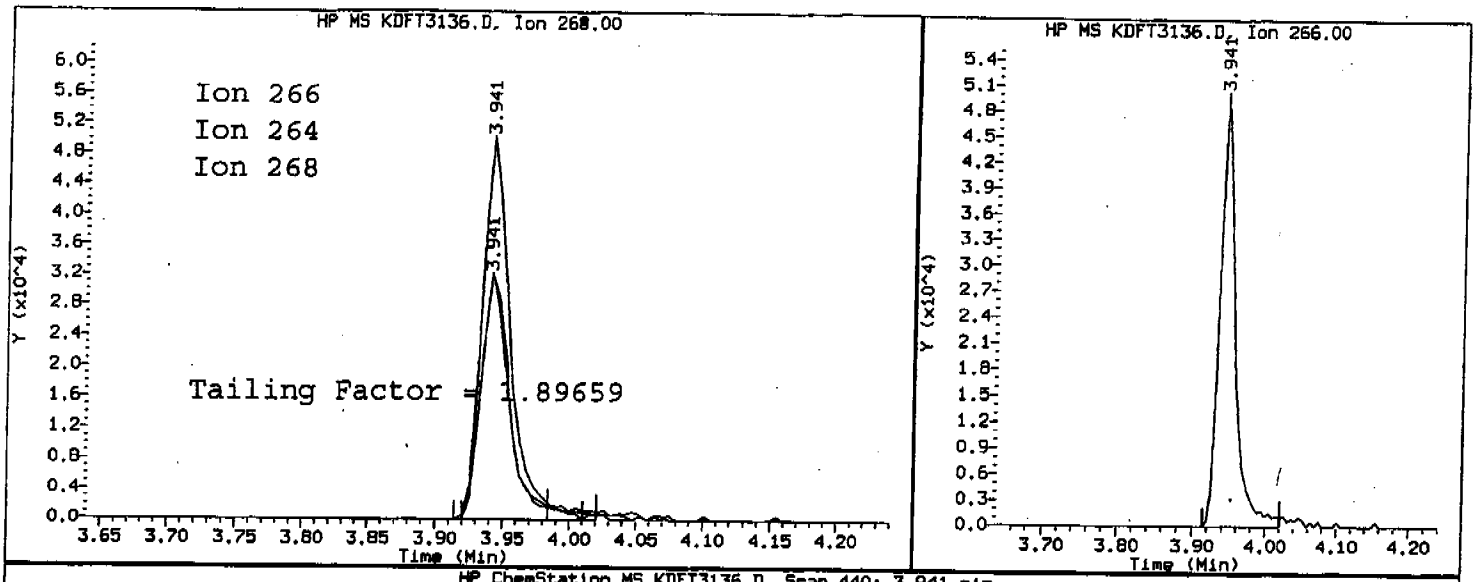


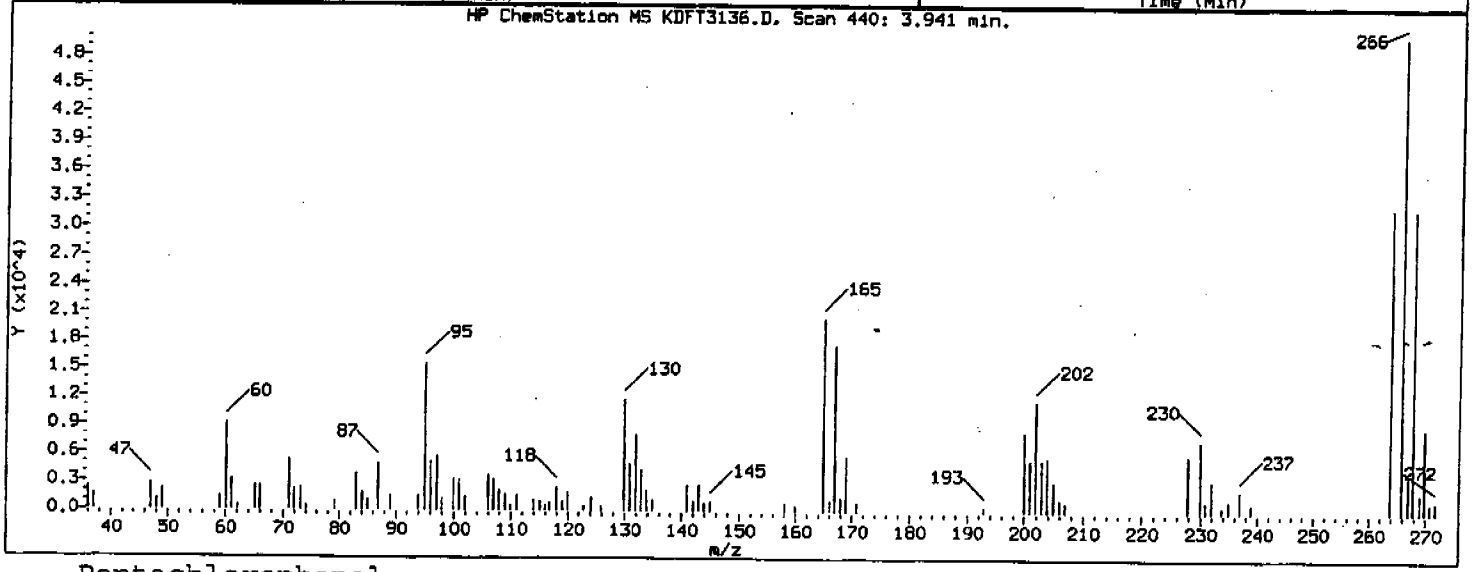
DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	38.17		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	46.07		PASS
70	Less than 2% of mass 69	0.00	(0.00)	PASS
127	40 - 60% of mass 198	45.94		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.23		PASS
275	10 - 30% of mass 198	28.64		PASS
365	Greater than 1% of mass 198	3.96		PASS
441	Present, but less than mass 443	13.47	(86.95)	PASS
442	Greater than 40% of mass 198	81.79		PASS
443	17 - 23% of mass 442	15.49	(18.94)	PASS

Report Date: 05/16/2005 10:10

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m\resolut.m Inst:
Injection Date: 14-MAY-2005 08:36 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)





Pentachlorophenol
==========
Exp. RT = 3.952
Found RT = 3.941

Mass	Area	Ratio
266	75398	100.00
264	47882	63.51
268	47165	62.56

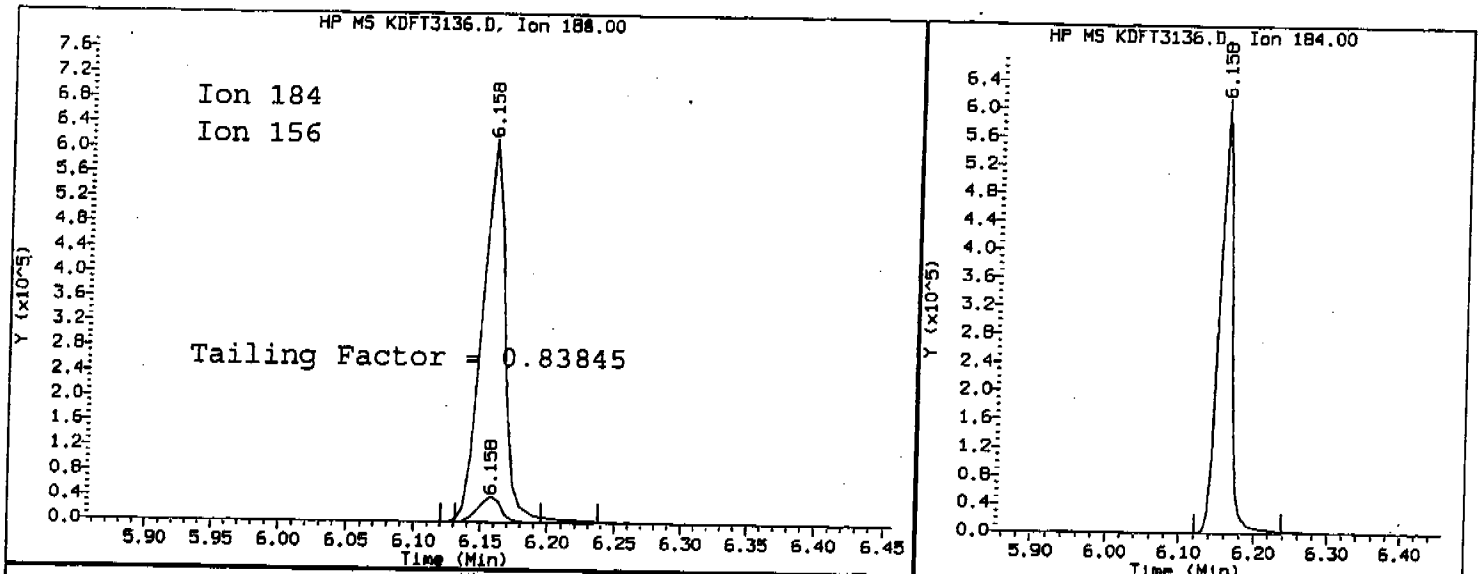
Tailing factor for Pentachlorophenol OK

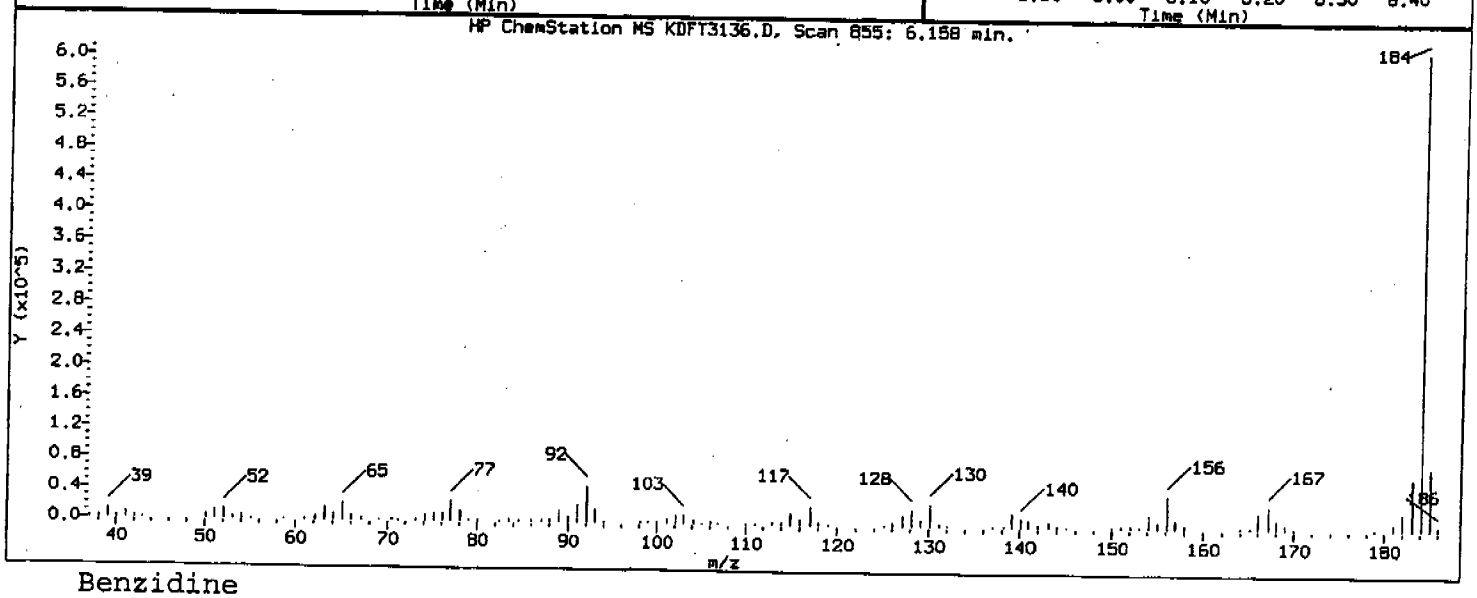
Tail Factor = 1.897 Maximum Allowed = 5.0

STL ST. LOUIS

Report Date: 05/16/2005 10:10

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m\resolut.m Inst:
Injection Date: 14-MAY-2005 08:36 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)





Benzidine
=========
Exp. RT = 6.169
Found RT = 6.158

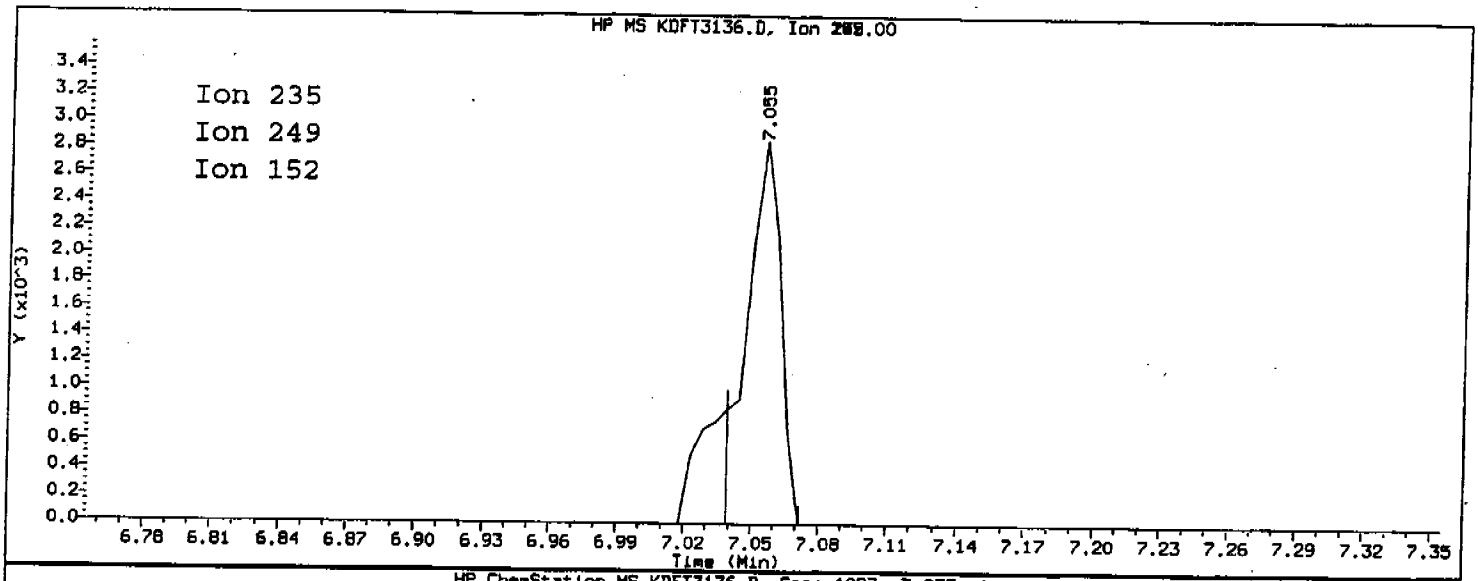
Mass	Area	Ratio
184	742279	100.00
156	50775	6.84

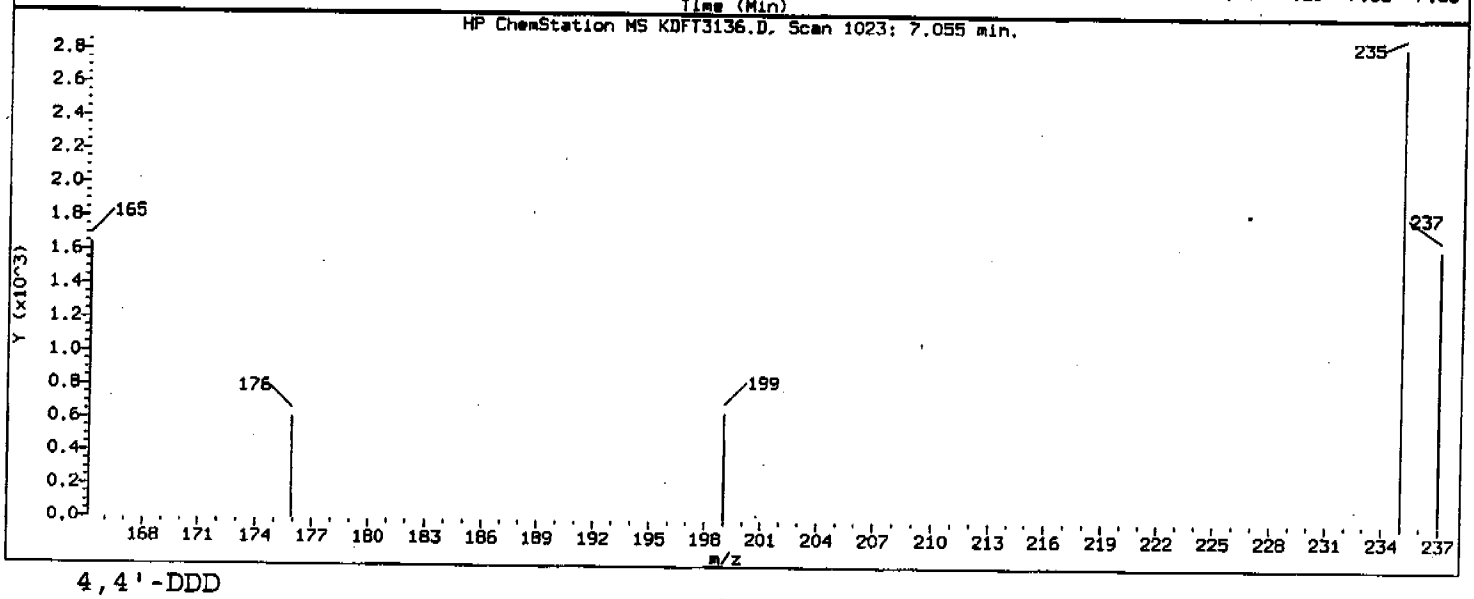
Tailing factor for Benzidine OK

Tail Factor = 0.838 Maximum Allowed = 3.0

Report Date: 05/16/2005 10:10

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m\resolut.m Inst:
Injection Date: 14-MAY-2005 08:36 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



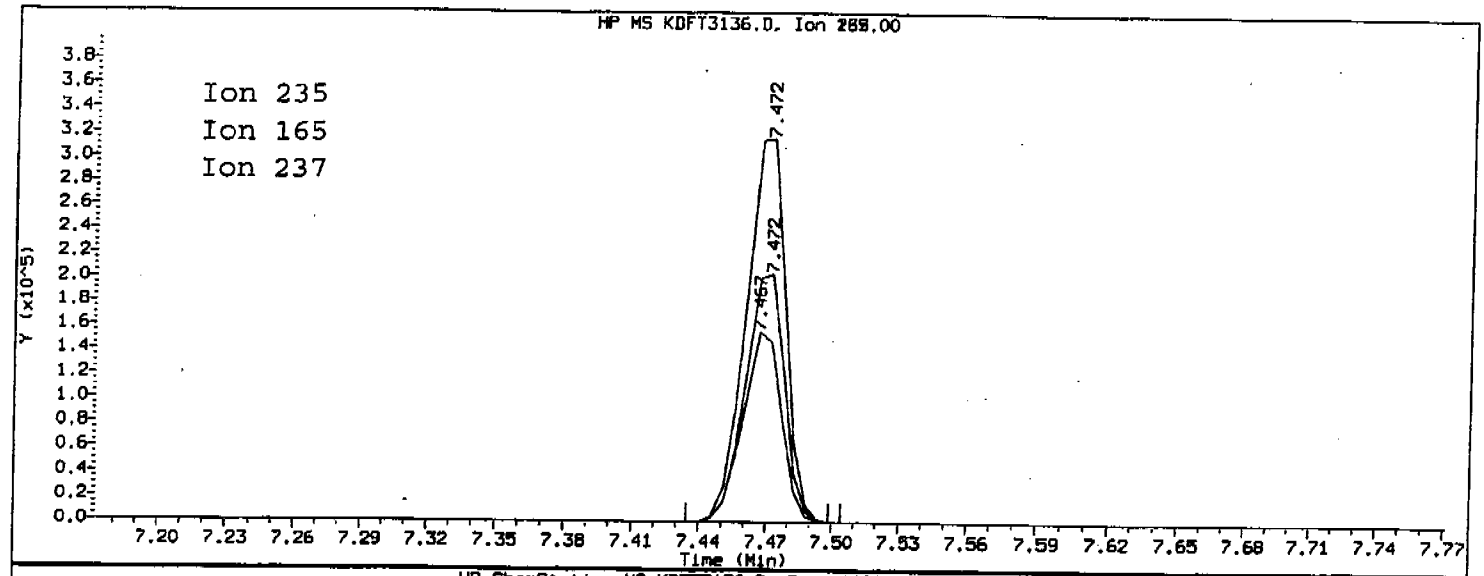


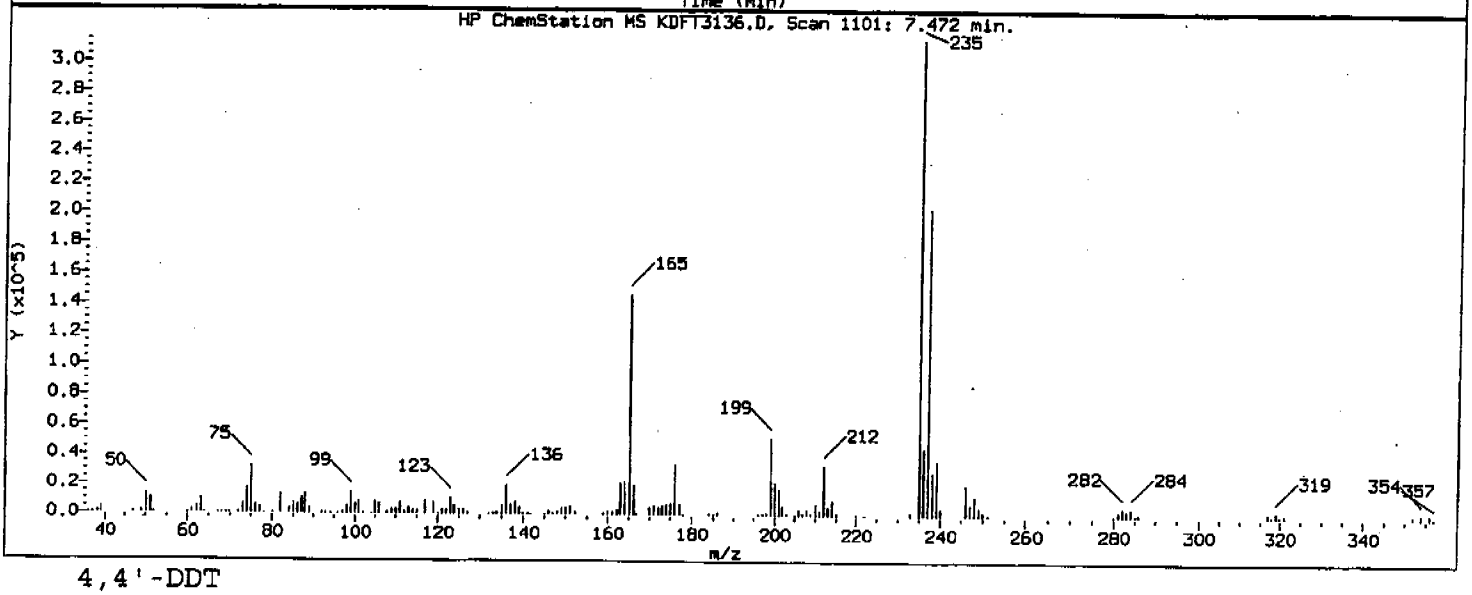
4,4'-DDD
========
Exp. RT = 7.074
Found RT = 7.055

Mass	Area	Ratio
235	3048	100.00
249	6148	201.72
152	2277	74.71

Report Date: 05/16/2005 10:10

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m\resolut.m Inst:
Injection Date: 14-MAY-2005 08:36 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



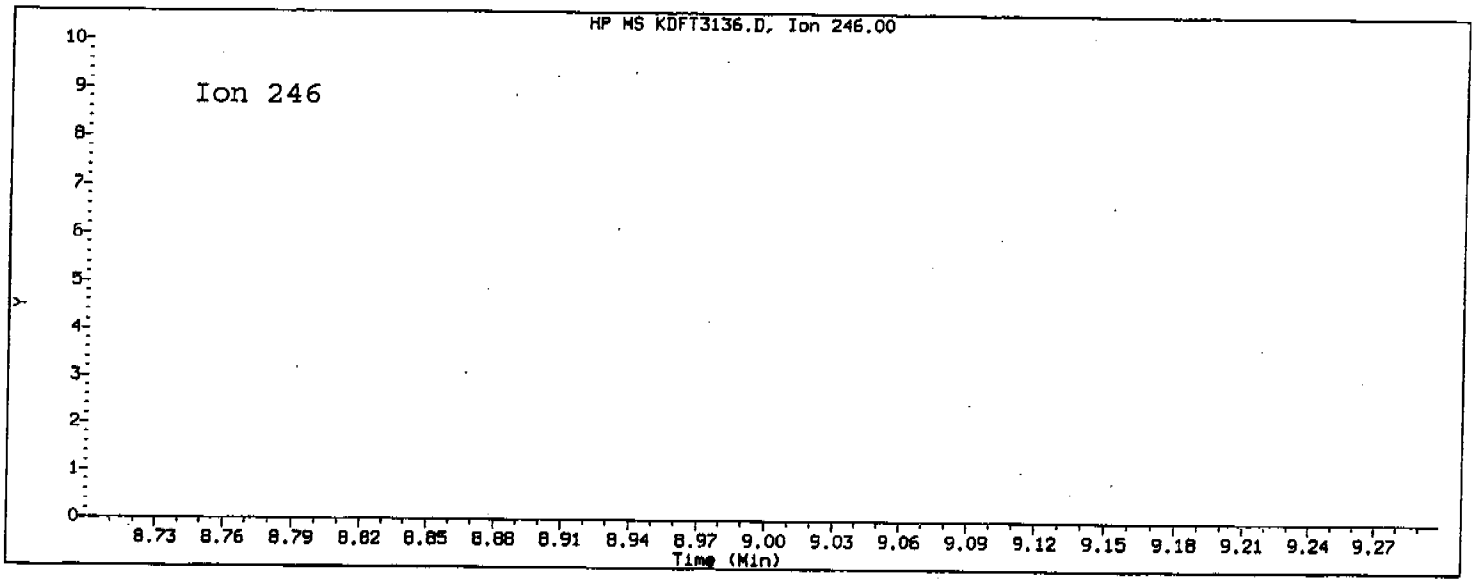


4,4'-DDT
========
Exp. RT = 7.478
Found RT = 7.472

Mass	Area	Ratio
235	394051	100.00
165	189423	48.07
237	252444	64.06

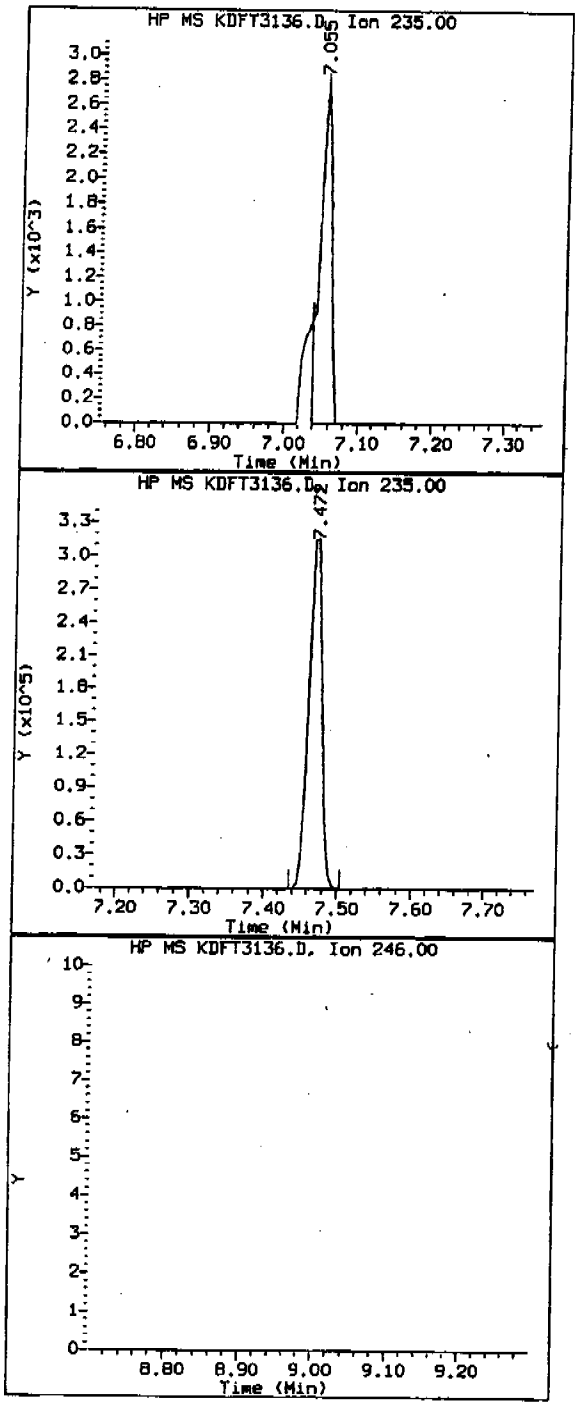
Report Date: 05/16/2005 10:10

Datafile Analyzed: //Slsvr01/BNA_LAB/MSK.i/K050514B.B/KDFT3136.D/KDFT3136.D
Method Used: \\Slsvr01\BNA_LAB\MSK.i\K050514B.B\sw846tun.m\resolut.m Inst:
Injection Date: 14-MAY-2005 08:36 Operator: Tim Matthews
Sample Info: SW846-T1 DFTPP
Misc Info: SV0232-05 (50NG)



4,4'-DDE
========
Exp. RT = 9.000
Found RT = 0.000

Mass	Area	Ratio
246	0	0.00



Compound: 4,4'-DDD
Quant Mass: 235
RT: 7.055
Area: 3048

Compound: 4,4'-DDT
Quant Mass: 235
RT: 7.472
Area: 394051

Compound: 4,4'-DDE
Quant Mass: 246
RT: 0.000
Area: 0

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	394051			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	3048	0.8	15.0	PASS
4,4-DDD + DDE	3048	0.8	15.0	PASS

****

TUNE SAMPLE *** PASSED *** DDT BREAKDOWN TEST

****

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3140.D
Report Date: 16-May-2005 10:12

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i
Lab File ID: KCAL3140.D
Analysis Type: WATER
Lab Sample ID: SSTD050
Method: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270K.m

Injection Date: 14-MAY-2005 10:32
Init. Cal. Date(s): 28-APR-2005 13-MAY-2005
Init. Cal. Times: 11:41 15:58
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	1 1,4-Dioxane	0.37014	0.47431	0.010	-28.14277	60.00000	Averaged
	4 N-Nitrosodimethylamine	0.63867	0.73464	0.010	-15.02669	60.00000	Averaged
	3 Pyridine	1.16029	1.33882	0.010	-15.38599	60.00000	Averaged
	5 Dimethylformamide	0.86294	1.01555	0.010	-17.68537	60.00000	Averaged
$	10 2-Fluorophenol	1.19646	1.24422	0.010	-3.99162	40.00000	Averaged
	11 Cyclohexanol	1.28189	1.53863	0.010	-20.02783	60.00000	Averaged
	17 Aniline	2.04739	2.21057	0.010	-7.97004	60.00000	Averaged
	19 Bis(2-chloroethyl)ether	1.40863	1.52719	0.010	-8.41652	60.00000	Averaged
$	15 Phenol-d5	1.56014	1.64849	0.010	-5.66295	40.00000	Averaged
	16 Phenol	1.66627	1.78165	0.010	-6.92449	20.00000	Averaged
	20 2-Chlorophenol	1.33233	1.31660	0.010	1.18068	60.00000	Averaged
	21 1,3-Dichlorobenzene	1.54444	1.52921	0.010	0.98633	60.00000	Averaged
	23 1,4-Dichlorobenzene	1.63455	1.61795	0.010	1.01565	20.00000	Averaged
	26 1,2-Dichlorobenzene	1.50782	1.47848	0.010	1.94589	60.00000	Averaged
	25 Benzyl Alcohol	0.62129	0.80156	0.010	-29.01588	60.00000	Averaged
	28 2,2-oxybis(1-Chloropropane)	1.47745	1.58282	0.010	-7.13209	60.00000	Averaged
	27 2-Methylphenol	1.08964	1.11733	0.010	-2.54142	60.00000	Averaged
	35 Hexachloroethane	0.70584	0.73022	0.010	-3.45494	60.00000	Averaged
	32 N-Nitrosodinpropylamine	1.13856	1.31600	0.050	-15.58463	60.00000	Averaged
	29 3 and 4-Methylphenol	1.21703	1.22237	0.010	-0.43806	60.00000	Averaged
$	36 Nitrobenzene-d5	0.53824	0.56739	0.010	-5.41596	40.00000	Averaged
	37 Nitrobenzene	0.55999	0.58826	0.010	-5.04911	60.00000	Averaged
	39 Isophorone	0.72789	0.78922	0.010	-8.42520	60.00000	Averaged
	40 2-Nitrophenol	0.20075	0.20186	0.010	-0.55513	20.00000	Averaged
	41 2,4-Dimethylphenol	0.41875	0.43649	0.010	-4.23482	60.00000	Averaged
	42 Bis(2-chloroethoxy)methane	0.46523	0.48858	0.010	-5.01868	60.00000	Averaged
	45 2,4-Dichlorophenol	0.31257	0.30419	0.010	2.68170	20.00000	Averaged
	47 1,2,4-Trichlorobenzene	0.38873	0.37407	0.010	3.77007	60.00000	Averaged
	44 Benzoic Acid	0.18452	0.19918	0.010	-7.94669	60.00000	Averaged
	50 Naphthalene	1.11608	1.07804	0.010	3.40884	60.00000	Averaged
	51 4-Chloroaniline	0.44972	0.45799	0.010	-1.84043	60.00000	Averaged
	54 Hexachlorobutadiene	0.28112	0.26416	0.050	6.03144	20.00000	Averaged
	62 2-Methylnaphthalene	0.97836	0.84959	0.010	13.16139	60.00000	Averaged
	59 4-Chloro-3-Methylphenol	0.35947	0.38212	0.010	-6.30204	20.00000	Averaged
	66 Hexachlorocyclopentadiene	0.42077	0.41471	0.010	1.44008	60.00000	Averaged
	67 2,4,6-Trichlorophenol	0.46738	0.47120	0.010	-0.81753	20.00000	Averaged
	68 2,4,5-Trichlorophenol	0.48773	0.48870	0.010	-0.19767	60.00000	Averaged
$	69 2-Fluorobiphenyl	1.61676	1.55226	0.010	3.98913	40.00000	Averaged
	72 2-Chloronaphthalene	1.34443	1.31353	0.010	2.29839	60.00000	Averaged
	73 2-Nitroaniline	0.54166	0.60928	0.010	-12.48356	60.00000	Averaged
	76 Dimethylphthalate	1.52720	1.55552	0.010	-1.85413	60.00000	Averaged
	79 Acenaphthylene	2.01986	1.95778	0.010	3.07368	60.00000	Averaged

05/16/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3140.D
Report Date: 16-May-2005 10:12

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSK.i
Lab File ID: KCAL3140.D
Analysis Type: WATER
Lab Sample ID: SSTD050
Method: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270K.m

Injection Date: 14-MAY-2005 10:32
Init. Cal. Date(s): 28-APR-2005 13-MAY-2005
Init. Cal. Times: 11:41 15:58
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	80 2,6-Dinitrotoluene	0.32003	0.33349	0.010	-4.20518	60.00000	Averaged
	83 Acenaphthene	1.23225	1.23335	0.010	-0.08867	20.00000	Averaged
	81 3-Nitroaniline	0.31774	0.33393	0.010	-5.09633	60.00000	Averaged
	84 2,4-Dinitrophenol	0.14071	0.16007	0.050	-13.75750	60.00000	Averaged
	86 Dibenzofuran	1.84955	1.83643	0.010	0.70932	60.00000	Averaged
	88 2,4-Dinitrotoluene	0.40331	0.44284	0.010	-9.80059	60.00000	Averaged
	85 4-Nitrophenol	0.28633	0.27592	0.050	3.63545	60.00000	Averaged
	93 Diethylphthalate	1.52853	1.55402	0.010	-1.66707	60.00000	Averaged
	94 Fluorene	1.48498	1.49290	0.010	-0.53283	60.00000	Averaged
	95 4-Chlorophenyl-phenylether	0.83775	0.81637	0.010	2.55186	60.00000	Averaged
	98 4-Nitroaniline	0.29218	0.33125	0.010	-13.37153	60.00000	Averaged
	99 4,6-Dinitro-2-methylphenol	0.14652	0.16667	0.010	-13.74595	60.00000	Averaged
	100 N-Nitrosodiphenylamine	0.60943	0.59872	0.010	1.75835	20.00000	Averaged
	102 Azobenzene	1.32489	1.35536	0.010	-2.29993	60.00000	Averaged
$	104 2,4,6-Tribromophenol	0.23322	0.24194	0.010	-3.73616	40.00000	Averaged
	109 4-Bromophenyl-phenylether	0.29091	0.28470	0.010	2.13457	60.00000	Averaged
	112 Hexachlorobenzene	0.30387	0.28754	0.010	5.37376	60.00000	Averaged
	117 Pentachlorophenol	0.13627	0.13223	0.010	2.96502	20.00000	Averaged
	122 Phenanthrene	1.22846	1.22335	0.010	0.41550	60.00000	Averaged
	124 Anthracene	1.18214	1.17646	0.010	0.48060	60.00000	Averaged
	126 Carbazole	0.97957	1.00437	0.010	-2.53150	60.00000	Averaged
	129 Di-n-Butylphthalate	1.29964	1.34633	0.010	-3.59193	60.00000	Averaged
	134 Fluoranthene	1.26119	1.28805	0.010	-2.12950	20.00000	Averaged
	135 Benzidine	0.55071	0.59000	0.010	-7.13418	100	Averaged
	137 Pyrene	1.63816	1.56273	0.010	4.60445	60.00000	Averaged
$	139 Terphenyl-d14	1.28656	1.22493	0.010	4.79027	40.00000	Averaged
	145 3,3-Dimethylbenzidine	0.62358	0.66493	0.010	-6.63162	60.00000	Averaged
	146 Butylbenzylphthalate	0.64258	0.64648	0.010	-0.60838	60.00000	Averaged
	150 Benzo(a)Anthracene	1.38086	1.37996	0.010	0.06530	60.00000	Averaged
	152 3,3'-Dichlorobenzidine	0.52188	0.53793	0.010	-3.07502	60.00000	Averaged
	154 Chrysene	1.30690	1.27995	0.010	2.06226	60.00000	Averaged
	155 bis(2-ethylhexyl)Phthalate	0.79653	0.80701	0.010	-1.31563	60.00000	Averaged
	158 Di-n-octylphthalate	1.65005	1.66989	0.010	-1.20280	20.00000	Averaged
	160 Benzo(b)fluoranthene	1.58452	1.56005	0.010	1.54427	60.00000	Averaged
	161 Benzo(k)fluoranthene	1.55910	1.51423	0.010	2.87785	60.00000	Averaged
	165 Benzo(a)pyrene	1.40867	1.40488	0.010	0.26883	20.00000	Averaged
	173 Indeno(1,2,3-cd)pyrene	1.32604	1.34270	0.010	-1.25616	60.00000	Averaged
	174 Dibenzo(a,h)anthracene	1.28029	1.37615	0.010	-7.48734	60.00000	Averaged
	177 Benzo(g,h,i)perylene	1.16434	1.23130	0.010	-5.75079	60.00000	Averaged

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B/KCAL3140.D
Report Date: 05/16/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3140.D
Analysis Type: WATER

Injection Date: 14-MAY-2005 10:32
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270

COMPOUND	%D
1,4-Dioxane	28.1
Pyridine	15.4
N-Nitrosodimethylamine	15.0
Dimethylformamide	17.7
2-Fluorophenol	4.0
Cyclohexanol	20.0
Aniline	8.0
Bis(2-chloroethyl)ether	8.4
Phenol-d5	5.7
Phenol	6.9
2-Chlorophenol	1.2
1,3-Dichlorobenzene	1.0
1,4-Dichlorobenzene	1.0
1,2-Dichlorobenzene	1.9
Benzyl Alcohol	29.0
2,2-oxybis(1-Chloropropane)	7.1
2-Methylphenol	2.5
Hexachloroethane	3.5
N-Nitrosodinpropylamine	15.6
3 and 4-Methylphenol	0.4
Nitrobenzene-d5	5.4
Nitrobenzene	5.0
Isophorone	8.4
2-Nitrophenol	0.6
2,4-Dimethylphenol	4.2
Bis(2-chloroethoxy)methane	5.0
2,4-Dichlorophenol	2.7
1,2,4-Trichlorobenzene	3.8
Benzoic Acid	7.9
Naphthalene	3.4
4-Chloroaniline	1.8
Hexachlorobutadiene	6.0
4-Chloro-3-Methylphenol	6.3
2-Methylnaphthalene	13.2
Hexachlorocyclopentadiene	1.4
2,4,6-Trichlorophenol	0.8
2-Fluorobiphenyl	4.0
2,4,5-Trichlorophenol	0.2
2-Chloronaphthalene	2.3

STL ST. LOUIS

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B/KCAL3140.D
Report Date: 05/16/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3140.D
Analysis Type: WATER

Injection Date: 14-MAY-2005 10:32
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050514A

COMPOUND	%D
2-Nitroaniline	12.5
Dimethylphthalate	1.9
Acenaphthylene	3.1
2,6-Dinitrotoluene	4.2
Acenaphthene	0.1
3-Nitroaniline	5.1
2,4-Dinitrophenol	13.8
Dibenzofuran	0.7
2,4-Dinitrotoluene	9.8
4-Nitrophenol	3.6
Fluorene	0.5
Diethylphthalate	1.7
4-Chlorophenyl-phenylether	2.6
4-Nitroaniline	13.4
4,6-Dinitro-2-methylphenol	13.7
N-Nitrosodiphenylamine	1.8
Azobenzene	2.3
2,4,6-Tribromophenol	3.7
4-Bromophenyl-phenylether	2.1
Hexachlorobenzene	5.4
Pentachlorophenol	3.0
Phenanthrene	0.4
Anthracene	0.5
Carbazole	2.5
Di-n-Butylphthalate	3.6
Fluoranthene	2.1
Benzidine	7.1
Pyrene	4.6
Terphenyl-d14	4.8
3,3-Dimethylbenzidine	6.6
Butylbenzylphthalate	0.6
Benzo(a)Anthracene	0.1
Chrysene	2.1
3,3'-Dichlorobenzidine	3.1
bis(2-ethylhexyl)Phthalate	1.3
Di-n-octylphthalate	1.2
Benzo(b)fluoranthene	1.5
Benzo(k)fluoranthene	2.9
Benzo(a)pyrene	0.3

LOT# F5D210380

STL ST. LOUIS

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B/KCAL3140.D
Report Date: 05/16/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSK.i
Lab File ID: KCAL3140.D
Analysis Type: WATER

Injection Date: 14-MAY-2005 10:32
Lab Sample ID: SSTD050
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050514A

COMPOUND	%D
Indeno(1,2,3-cd)pyrene	1.3
Dibenzo(a,h)anthracene	7.5
Benzo(g,h,i)perylene	5.8
Dibenz(e,a) Pyrene	100.0

The average of %D's in the continuing calibration is 6.6

05/16/05

LOT# F5D210380

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3140.D
Report Date: 16-May-2005 10:12

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3140.D
Lab Smp Id: SSTD050 Client Smp ID: SSTD050
Inj Date : 14-MAY-2005 10:32
Operator : XIA Inst ID: MSK.i
Smp Info : SSTD050
Misc Info : SV0220-05
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270K.m
Meth Date : 16-May-2005 10:11 hongs Quant Type: ISTD
Cal Date : 13-MAY-2005 15:58 Cal File: KCAL3134.D
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Vt/(Vo* Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 1,4-Dioxane	88	1.227	1.227	(0.272)	104076	50.0000	64.07
	4 N-Nitrosodimethylamine	74	1.654	1.654	(0.367)	161200	50.0000	57.51
	3 Pyridine	79	1.627	1.627	(0.361)	293773	50.0000	57.69
$	10 2-Fluorophenol	112	3.203	3.203	(0.473)	222840	50.0000	58.84(M)
	11 Cyclohexanol	57	3.214	3.214	(0.713)	273016	50.0000	52.00
	17 Aniline	93	4.202	4.202	(0.932)	337617	50.0000	60.01
	19 Bis(2-chloroethyl)ether	93	4.282	4.282	(0.950)	485060	50.0000	53.98
$	15 Phenol-d5	99	4.282	4.282	(0.950)	335108	50.0000	54.21
	16 Phenol	94	4.298	4.298	(0.954)	361724	50.0000	52.83
	20 2-Chlorophenol	128	4.347	4.347	(0.964)	390944	50.0000	53.46
	21 1,3-Dichlorobenzene	146	4.464	4.464	(0.991)	288898	50.0000	49.41
*	22 1,4-Dichlorobenzene-d4	152	4.507	4.507	(1.000)	335550	50.0000	49.51
	23 1,4-Dichlorobenzene	146	4.528	4.528	(1.005)	175542	40.0000	
	26 1,2-Dichlorobenzene	146	4.747	4.747	(1.053)	355022	50.0000	49.49
	25 Benzyl Alcohol	108	4.763	4.763	(1.057)	324419	50.0000	49.03
	28 2,2-oxybis(1-Chloropropane)	45	4.918	4.918	(1.091)	175885	50.0000	64.51
	27 2-Methylphenol	108	4.977	4.977	(1.104)	347315	50.0000	53.57
	35 Hexachloroethane	117	5.105	5.105	(1.133)	245173	50.0000	51.27
	32 N-Nitrosodinpropylamine	70	5.110	5.110	(1.134)	160231	50.0000	51.73
	29 3 and 4-Methylphenol	108	5.164	5.164	(1.146)	288766	50.0000	57.79
						536441	100.000	100.4

5/16/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3140.D
Report Date: 16-May-2005 10:12

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	36 Nitrobenzene-d5	82	5.239	5.239	(0.860)	435869	50.0000	52.71
	37 Nitrobenzene	77	5.260	5.260	(0.864)	451903	50.0000	52.52
	39 Isophorone	82	5.549	5.549	(0.911)	606280	50.0000	54.21
	40 2-Nitrophenol	139	5.655	5.655	(0.929)	155072	50.0000	50.28
	41 2,4-Dimethylphenol	107	5.789	5.789	(0.951)	335309	50.0000	52.12
	42 Bis(2-chloroethoxy)methane	93	5.864	5.864	(0.963)	375328	50.0000	52.51
	45 2,4-Dichlorophenol	162	6.003	6.003	(0.986)	233678	50.0000	48.66
	47 1,2,4-Trichlorobenzene	180	6.045	6.045	(0.993)	287363	50.0000	48.11
*	48 Naphthalene-d8	136	6.088	6.088	(1.000)	614562	40.0000	
	44 Benzoic Acid	122	6.077	6.077	(0.998)	153009	50.0000	53.97(M)
	50 Naphthalene	128	6.115	6.115	(1.004)	828151	50.0000	48.30
	51 4-Chloroaniline	127	6.270	6.270	(1.030)	351831	50.0000	50.92
	54 Hexachlorobutadiene	225	6.361	6.361	(1.045)	202932	50.0000	46.98
	62 2-Methylnaphthalene	142	7.071	7.071	(1.161)	652660	50.0000	43.42
	59 4-Chloro-3-Methylphenol	107	7.039	7.039	(1.156)	293546	50.0000	53.15
	66 Hexachlorocyclopentadiene	237	7.413	7.413	(0.847)	177416	50.0000	49.28
	67 2,4,6-Trichlorophenol	196	7.600	7.600	(0.868)	201580	50.0000	50.41
	68 2,4,5-Trichlorophenol	196	7.707	7.707	(0.880)	209066	50.0000	50.10
$	69 2-Fluorobiphenyl	172	7.691	7.691	(0.879)	664064	50.0000	48.00
	72 2-Chloronaphthalene	162	7.808	7.808	(0.892)	561932	50.0000	48.85
	73 2-Nitroaniline	65	8.107	8.107	(0.926)	260654	50.0000	56.24
	76 Dimethylphthalate	163	8.476	8.476	(0.968)	665456	50.0000	50.93
	79 Acenaphthylene	152	8.492	8.492	(0.970)	837544	50.0000	48.46
	80 2,6-Dinitrotoluene	165	8.588	8.588	(0.981)	142669	50.0000	52.10
*	82 Acenaphthene-d10	164	8.754	8.754	(1.000)	342243	40.0000	
	83 Acenaphthene	153	8.813	8.813	(1.007)	527630	50.0000	50.04
	81 3-Nitroaniline	138	8.823	8.823	(1.008)	142856	50.0000	52.55
	84 2,4-Dinitrophenol	184	9.005	9.005	(1.029)	68479	50.0000	56.88
	86 Dibenzofuran	168	9.090	9.090	(1.038)	785631	50.0000	49.64
	88 2,4-Dinitrotoluene	165	9.261	9.261	(1.058)	189447	50.0000	54.90
	85 4-Nitrophenol	109	9.363	9.363	(1.070)	118040	50.0000	48.18
	93 Diethylphthalate	149	9.731	9.731	(1.112)	664814	50.0000	50.83
	94 Fluorene	166	9.699	9.699	(1.108)	638667	50.0000	50.27
	95 4-Chlorophenyl-phenylether	204	9.753	9.753	(1.114)	349246	50.0000	48.72
	98 4-Nitroaniline	138	9.940	9.940	(1.135)	141708	50.0000	56.68
	99 4,6-Dinitro-2-methylphenol	198	9.993	9.993	(0.876)	128064	50.0000	56.87
	100 N-Nitrosodiphenylamine	169	10.020	10.020	(0.878)	460045	50.0000	49.12
	102 Azobenzene	77	10.031	10.031	(0.879)	1041438	50.0000	51.15
$	104 2,4,6-Tribromophenol	330	10.202	10.202	(1.165)	103502	50.0000	51.87
	109 4-Bromophenyl-phenylether	248	10.629	10.629	(0.932)	218758	50.0000	48.93
	112 Hexachlorobenzene	284	10.859	10.859	(0.952)	220942	50.0000	47.31
	117 Pentachlorophenol	266	11.270	11.270	(0.988)	101605	50.0000	48.52
*	121 Phenanthrene-d10	188	11.409	11.409	(1.000)	614709	40.0000	
	122 Phenanthrene	178	11.452	11.452	(1.004)	940009	50.0000	49.79
	124 Anthracene	178	11.537	11.537	(1.011)	903978	50.0000	49.76
	126 Carbazole	167	11.938	11.938	(1.046)	771746	50.0000	51.26
	129 Di-n-Butylphthalate	149	12.830	12.830	(1.125)	1034499	50.0000	51.80
	134 Fluoranthene	202	13.743	13.743	(1.205)	989720	50.0000	51.06
	135 Benzidine	184	14.139	14.139	(0.854)	379988	50.0000	53.57
	137 Pyrene	202	14.155	14.155	(0.855)	1006481	50.0000	47.70
$	139 Terphenyl-d14	244	14.603	14.603	(0.882)	788917	50.0000	47.60
	145 3,3-Dimethylbenzidine	212	15.602	15.602	(0.942)	428250	50.0000	53.32
	146 Butylbenzylphthalate	149	15.731	15.731	(0.950)	416370	50.0000	50.30
	150 Benzo(a)Anthracene	228	16.532	16.532	(0.998)	888768	50.0000	49.97

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 153 Chrysene-d12	240	16.564	16.564	(1.000)	515242	40.0000	
152 3,3'-Dichlorobenzidine	252	16.633	16.633	(1.004)	346455	50.0000	51.54
154 Chrysene	228	16.617	16.617	(1.003)	824356	50.0000	48.97
155 bis(2-ethylhexyl)Phthalate	149	16.954	16.954	(1.024)	519755	50.0000	50.66
158 Di-n-octylphthalate	149	18.097	18.097	(0.944)	895717	50.0000	50.60
160 Benzo(b)fluoranthene	252	18.535	18.535	(0.967)	836796	50.0000	49.23
161 Benzo(k)fluoranthene	252	18.578	18.578	(0.969)	812222	50.0000	48.56
165 Benzo(a)pyrene	252	19.069	19.069	(0.995)	753565	50.0000	49.86
* 166 Perylene-d12	264	19.171	19.171	(1.000)	429113	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.870	20.870	(1.089)	720210	50.0000	50.63
174 Dibenzo(a,h)anthracene	278	20.913	20.913	(1.091)	738156	50.0000	53.74
177 Benzo(g,h,i)perylene	276	21.313	21.313	(1.112)	660459	50.0000	52.88

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3140.D
Report Date: 16-May-2005 10:12

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

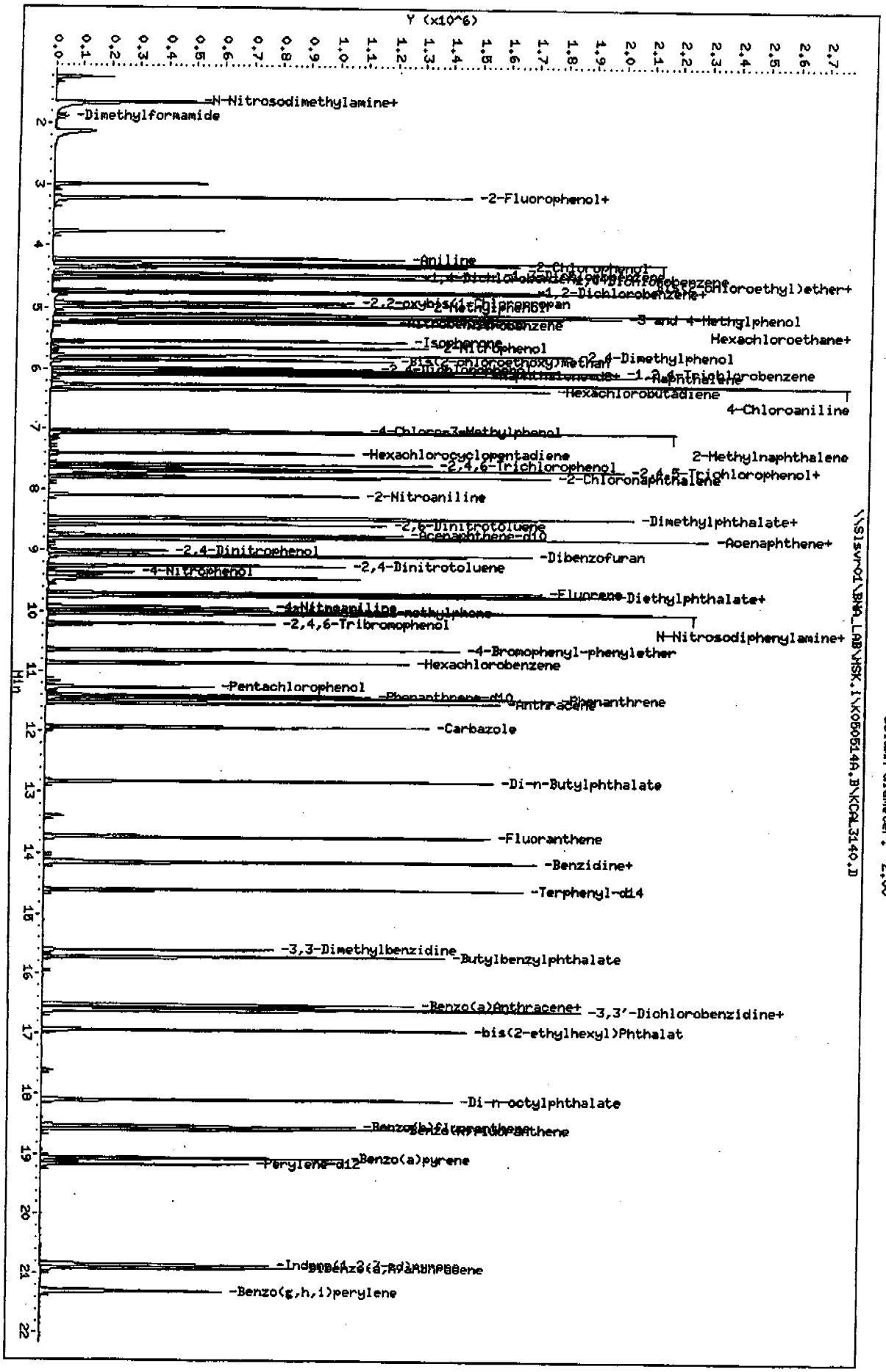
Instrument ID: MSK.i
Lab File ID: KCAL3140.D
Lab Smp Id: SSTD050
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270K.m
Misc Info: SV0220-05

Calibration Date: 13-MAY-2005
Calibration Time: 12:14
Client Smp ID: SSTD050
Level: LOW
Sample Type: WATER

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	181066	90533	362132	175542	-3.05
48 Naphthalene-d8	627500	313750	1255000	614562	-2.06
82 Acenaphthene-d10	358476	179238	716952	342243	-4.53
121 Phenanthrene-d10	655247	327624	1310494	614709	-6.19
153 Chrysene-d12	535207	267604	1070414	515242	-3.73
166 Perylene-d12	427031	213516	854062	429113	0.49

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.52	4.02	5.02	4.51	-0.37
48 Naphthalene-d8	6.11	5.61	6.61	6.09	-0.28
82 Acenaphthene-d10	8.78	8.28	9.28	8.75	-0.25
121 Phenanthrene-d10	11.43	10.93	11.93	11.41	-0.19
153 Chrysene-d12	16.59	16.09	17.09	16.56	-0.17
166 Perylene-d12	19.20	18.70	19.70	19.17	-0.14

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

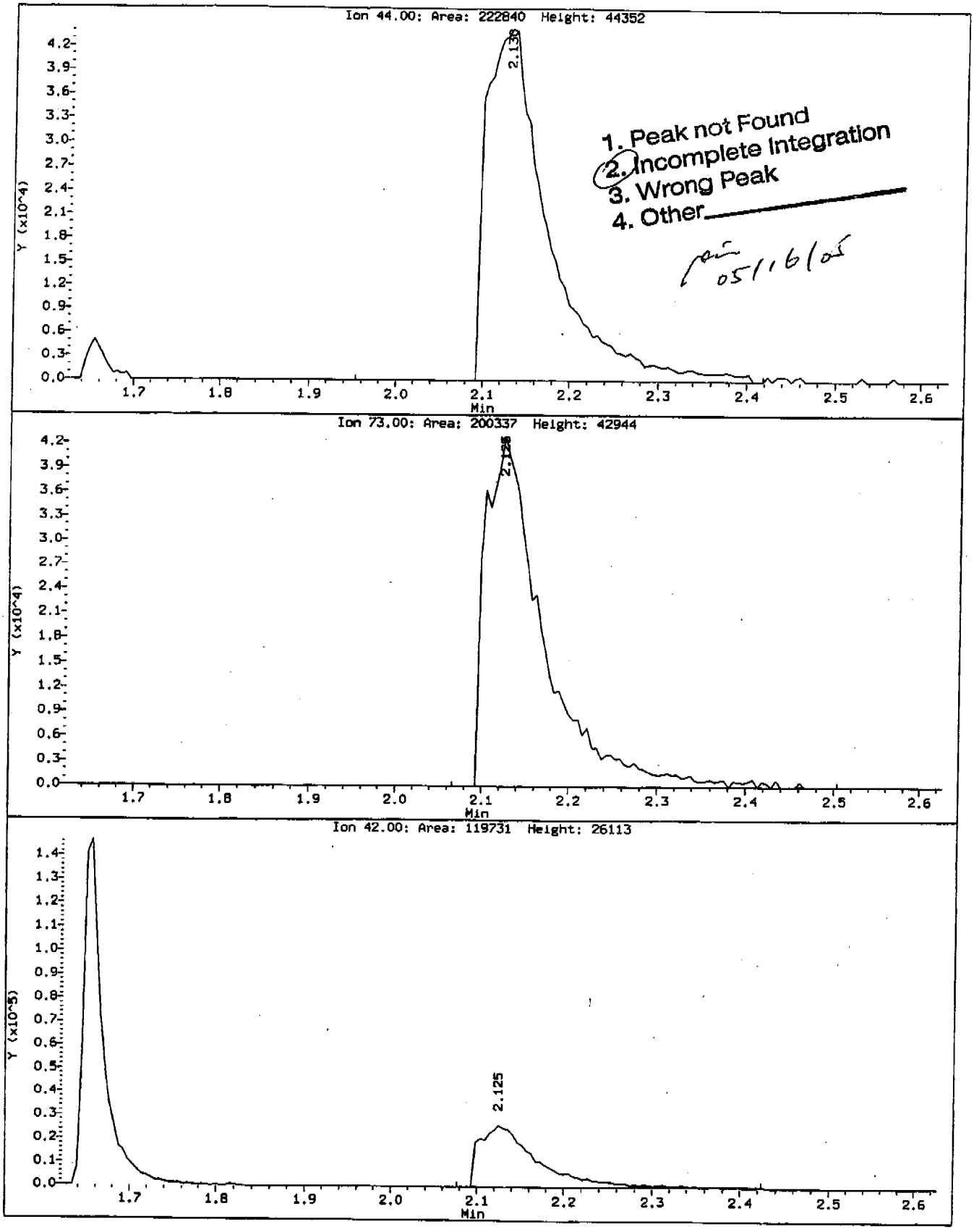


Data File: \\Slsvr01\BNA_LAB\HSK.i\K050514A.B\KCAL3140.D
Date : 14-MAY-2005 10:32
Client ID: SSTD050
Sample Info: SSTD050
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

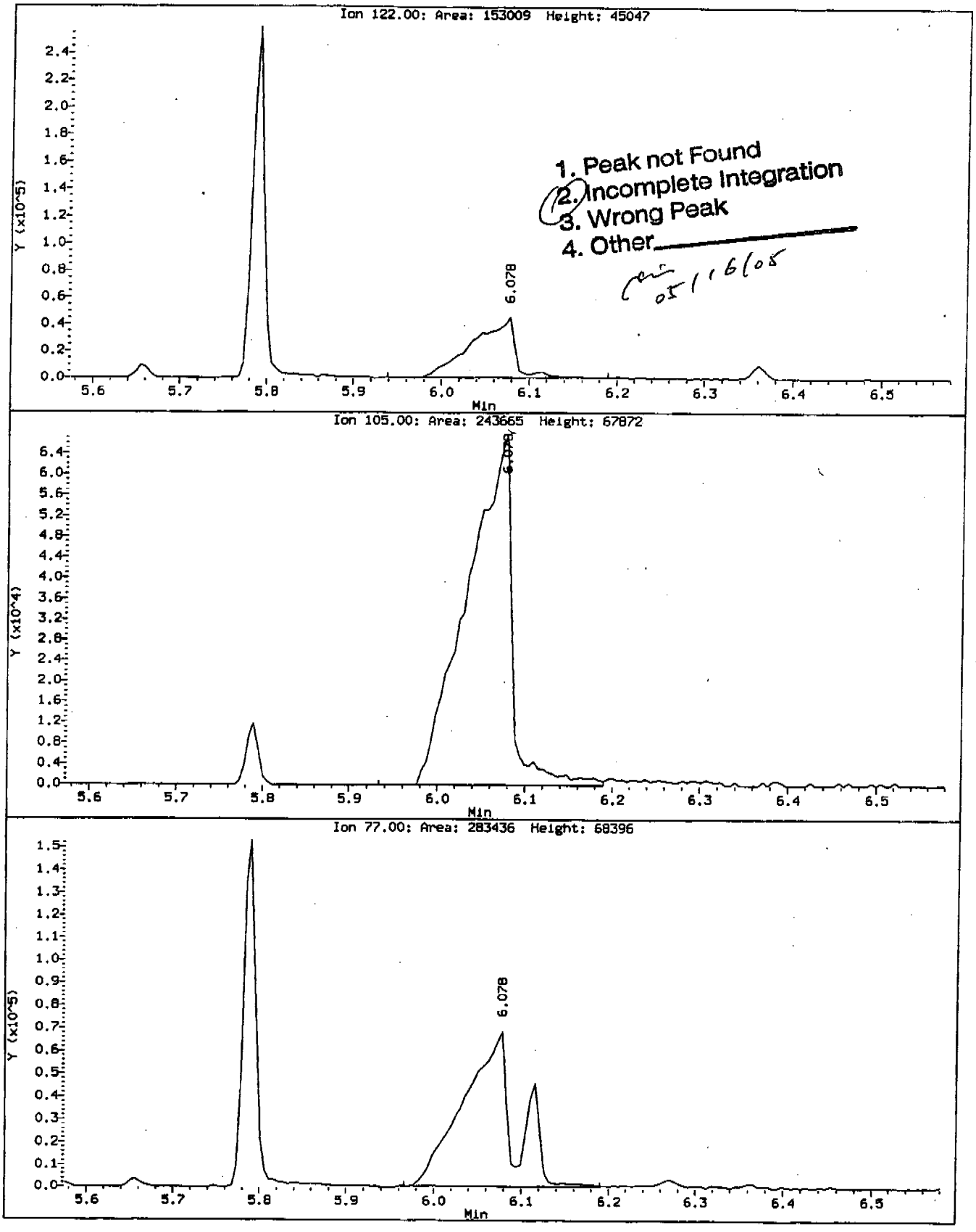
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KCAL3140.D
Injection Date: 14-MAY-2005 10:32
Instrument: MSK.i
Client Sample ID: 55TD050

Compound: Dimethylformamide
CAS Number: 68-12-2



Data File: \\Slsvr01\BHA_LAB\MSK.i\K050514A.B\KCAL3140.D
Injection Date: 14-MAY-2005 10:32
Instrument: MSK.i
Client Sample ID: SSTD050

Compound: Benzoic Acid
CAS Number: 65-85-0



GC/MS RAW SAMPLE DATA

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D
Lab Smp Id: G8WXJ1AD
Client Smp ID: RE73-05-58829
Inj Date : 10-MAY-2005 17:46
Operator : XIA
Inst ID: MSK.i
Smp Info : G8WXJ1AD
Misc Info : F5D210380-001 (5119285) SON
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\050510A.B\8270K.m
Meth Date : 11-May-2005 10:34 hongs
Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12
Cal File: KCAL3000.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: SONMS04.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Uf*Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume Injected
Ws	30.805	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
$	10 2-Fluorophenol	112	3.214	3.219	(0.709)	313970	102.149	3316
$	15 Phenol-d5	99	4.304	4.298	(0.949)	460918	107.140	3478
	21 1,3-Dichlorobenzene	146	4.486	4.485	(0.989)	15267	3.87709	125.8(a)
*	22 1,4-Dichlorobenzene-d4	152	4.534	4.533	(1.000)	101748	40.0000	
	23 1,4-Dichlorobenzene	146	4.550	4.555	(1.004)	17510	4.18719	135.9(a)
	26 1,2-Dichlorobenzene	146	4.774	4.774	(1.053)	14575	3.76866	122.3(a)
$	36 Nitrobenzene-d5	82	5.255	5.260	(0.860)	410995	81.0101	2630
	37 Nitrobenzene	77	5.276	5.281	(0.864)	28333	5.26938	171.0(a)
	40 2-Nitrophenol	139	5.677	5.682	(0.929)	8466	4.54464	147.5(a)
	47 1,2,4-Trichlorobenzene	180	6.067	6.072	(0.993)	15109	4.36302	141.6(a)
*	48 Naphthalene-d8	136	6.110	6.115	(1.000)	369586	40.0000	
	44 Benzoic Acid	122	6.035	6.072	(0.988)	37682	20.4419	663.6
	50 Naphthalene	128	6.131	6.141	(1.003)	32723	3.12716	101.5(a)
	54 Hexachlorobutadiene	225	6.388	6.392	(1.045)	8182	3.40169	110.4(a)
	62 2-Methylnaphthalene	142	7.093	7.103	(1.161)	22849	3.05262	99.09
	67 2,4,6-Trichlorophenol	196	7.632	7.632	(0.869)	7159	3.20234	104.0(a)
$	69 2-Fluorobiphenyl	172	7.718	7.723	(0.878)	589446	75.5749	2453
	72 2-Chloronaphthalene	162	7.835	7.846	(0.892)	22506	3.45121	112.0(a)
	79 Acenaphthylene	152	8.519	8.529	(0.970)	34642	3.60324	117.0(a)
*	82 Acenaphthene-d10	164	8.786	8.791	(1.000)	193700	40.0000	

05/11/05

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
83 Acenaphthene	153	8.834	8.850	(1.005)	19829	3.26606	106.0(a)
86 Dibenzofuran	168	9.117	9.128	(1.038)	30727	3.42562	111.2(a)
94 Fluorene	166	9.726	9.737	(1.107)	26680	3.71649	120.6(a)
95 4-Chlorophenyl-phenylether	204	9.780	9.790	(1.113)	18323	4.73104	153.6(a)
100 N-Nitrosodiphenylamine	169	10.036	10.057	(0.877)	23514	4.75656	154.4(a)
$ 104 2,4,6-Tribromophenol	330	10.234	10.239	(1.165)	109757	101.363	3290
109 4-Bromophenyl-phenylether	248	10.661	10.672	(0.932)	10698	4.71065	152.9(a)
112 Hexachlorobenzene	284	10.886	10.896	(0.951)	25510	11.0026	357.2
117 Pentachlorophenol	266	11.302	11.307	(0.988)	5645	4.36554	141.7(a)
* 121 Phenanthrene-d10	188	11.441	11.451	(1.000)	324690	40.0000	
122 Phenanthrene	178	11.479	11.494	(1.003)	37007	3.69010	119.8(a)
124 Anthracene	178	11.564	11.580	(1.011)	33514	3.45679	112.2(a)
126 Carbazole	167	11.970	11.980	(1.046)	53451	6.45282	209.5(a)
134 Fluoranthene	202	13.770	13.786	(1.204)	36096	3.48258	113.0(a)
~~137 Pyrene~~	~~202~~	~~14.187~~	~~14.203~~	~~(0.855)~~	~~91380~~	~~11.5234~~	~~374.1~~
$ 139 Terphenyl-d14	244	14.646	14.651	(0.882)	477534	77.4926	2516
150 Benzo(a)Anthracene	228	16.570	16.585	(0.998)	25373	3.71433	120.6(a)
* 153 Chrysene-d12	240	16.602	16.617	(1.000)	195083	40.0000	
154 Chrysene	228	16.650	16.665	(1.003)	26003	4.00016	129.8(a)
155 bis(2-ethylhexyl)Phthalate	149	16.986	16.997	(1.023)	8898	2.16751	70.36(a)
160 Benzo(b)fluoranthene	252	18.573	18.589	(0.967)	28449	4.36729	141.8(a)
161 Benzo(k)fluoranthene	252	18.610	18.631	(0.969)	24337	3.76150	122.1(a)
165 Benzo(a)pyrene	252	19.107	19.123	(0.994)	78734	13.3920	434.7
* 166 Perylene-d12	264	19.214	19.224	(1.000)	167760	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.918	20.934	(1.089)	71684	13.1533	427.0
174 Dibenzo(a,h)anthracene	278	20.961	20.982	(1.091)	22337	4.22378	137.1(a)
177 Benzo(g,h,i)perylene	276	21.362	21.383	(1.112)	15817	3.25080	105.5(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
83 Acenaphthene	153	8.834	8.850	(1.005)	19829	3.26606	106.0(a)
86 Dibenzofuran	168	9.117	9.128	(1.038)	30727	3.42562	111.2(a)
94 Fluorene	166	9.726	9.737	(1.107)	26680	3.71649	120.6(a)
95 4-Chlorophenyl-phenylether	204	9.780	9.790	(1.113)	18323	4.73104	153.6(a)
100 N-Nitrosodiphenylamine	169	10.036	10.057	(0.877)	23514	4.75656	154.4(a)
$ 104 2,4,6-Tribromophenol	330	10.234	10.239	(1.165)	109757	101.363	3290(R)
109 4-Bromophenyl-phenylether	248	10.661	10.672	(0.932)	10698	4.71065	152.9(a)
112 Hexachlorobenzene	284	10.886	10.896	(0.951)	25510	11.0026	357.2
117 Pentachlorophenol	266	11.302	11.307	(0.988)	5645	4.36554	141.7(a)
* 121 Phenanthrene-d10	188	11.441	11.451	(1.000)	324690	40.0000	
122 Phenanthrene	178	11.479	11.494	(1.003)	37007	3.69010	119.8(a)
124 Anthracene	178	11.564	11.580	(1.011)	33514	3.45679	112.2(a)
126 Carbazole	167	11.970	11.980	(1.046)	53451	6.45282	209.5(a)
134 Fluoranthene	202	13.770	13.786	(1.204)	36096	3.48258	113.0(a)
137 Pyrene	202	14.187	14.203	(0.855)	91380	11.5234	374.1
$ 139 Terphenyl-d14	244	14.646	14.651	(0.882)	477534	77.4926	2516(R)
150 Benzo(a)Anthracene	228	16.570	16.585	(0.998)	25373	3.71433	120.6(a)
* 153 Chrysene-d12	240	16.602	16.617	(1.000)	195083	40.0000	
154 Chrysene	228	16.650	16.665	(1.003)	26003	4.00016	129.8(a)
155 bis(2-ethylhexyl)Phthalate	149	16.986	16.997	(1.023)	8898	2.16751	70.36(a)
160 Benzo(b)fluoranthene	252	18.573	18.589	(0.967)	28449	4.36729	141.8(a)
161 Benzo(k)fluoranthene	252	18.610	18.631	(0.969)	24337	3.76150	122.1(a)
165 Benzo(a)pyrene	252	19.107	19.123	(0.994)	78734	13.3920	434.7
* 166 Perylene-d12	264	19.214	19.224	(1.000)	167760	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.918	20.934	(1.089)	71684	13.1533	427.0
174 Dibenzo(a,h)anthracene	278	20.961	20.982	(1.091)	22337	4.22378	137.1(a)
177 Benzo(g,h,i)perylene	276	21.362	21.383	(1.112)	15817	3.25080	105.5(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.

Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D
Report Date: 11-May-2005 13:03

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSK.i
Lab File ID: KSMP3042.D
Lab Smp Id: G8WXJ1AD
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\8270K.m
Misc Info: F5D210380-001 (5119285) SON

Calibration Date: 10-MAY-2005
Calibration Time: 12:53
Client Smp ID: RE73-05-58829
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
22 1,4-Dichlorobenze	121829	60915	243658	101748	-16.48	
48 Naphthalene-d8	427782	213891	855564	369586	-13.60	
82 Acenaphthene-d10	251365	125683	502730	193700	-22.94	
121 Phenanthrene-d10	466667	233334	933334	324690	-30.42	
153 Chrysene-d12	406157	203079	812314	195083	-51.97	<
166 Perylene-d12	339675	169838	679350	167760	-50.61	<

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.53	4.03	5.03	4.53	0.01
48 Naphthalene-d8	6.12	5.62	6.62	6.11	-0.08
82 Acenaphthene-d10	8.79	8.29	9.29	8.79	-0.06
121 Phenanthrene-d10	11.45	10.95	11.95	11.44	-0.09
153 Chrysene-d12	16.62	16.12	17.12	16.60	-0.09
166 Perylene-d12	19.22	18.72	19.72	19.21	-0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

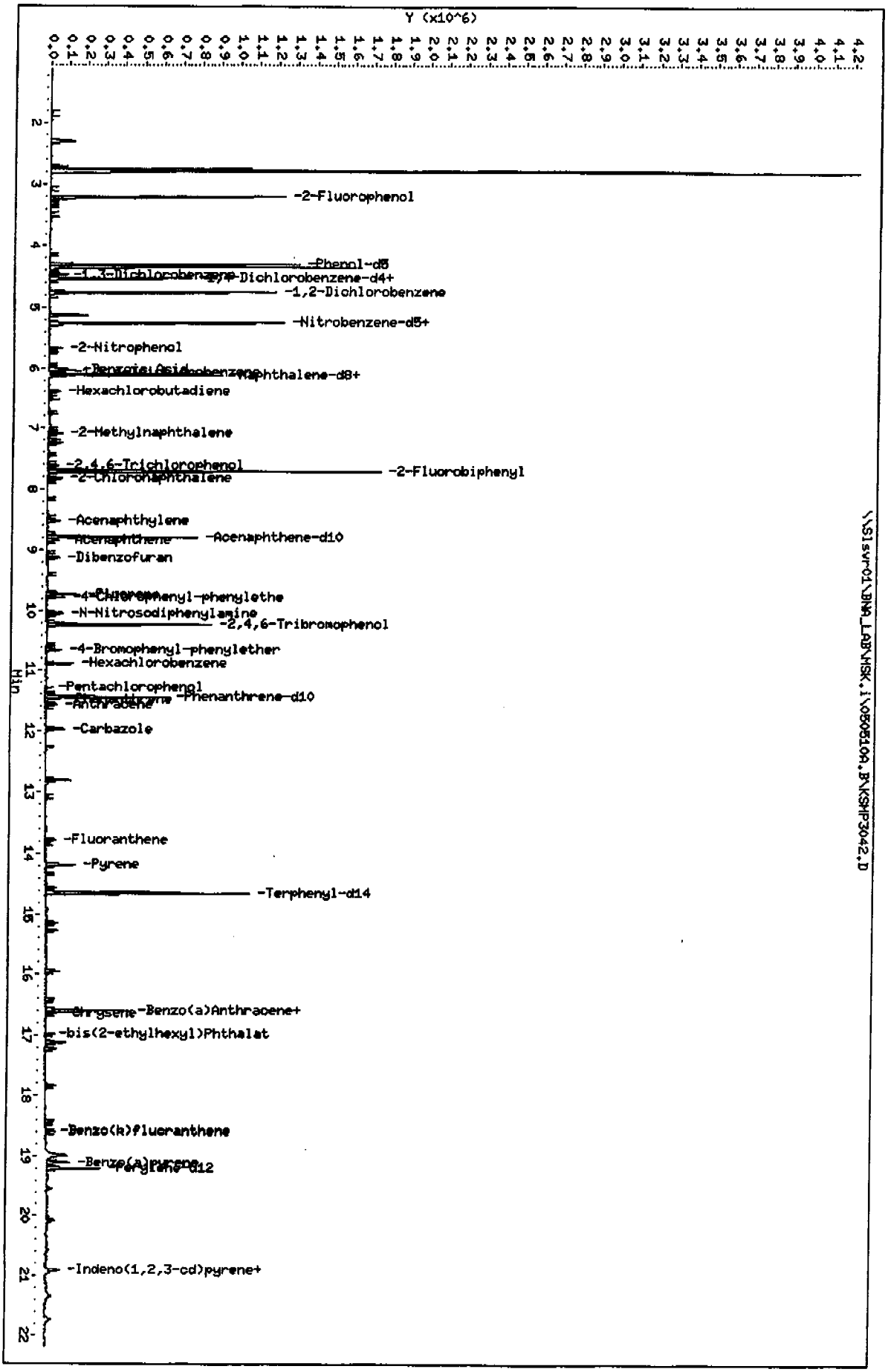
Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D Page 1
Report Date: 11-May-2005 13:05

STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 21-APR-2005 00:00 Client SDG: F5D2103
Sample Matrix: SOLID Fraction: SV
Lab Smp Id: G8WXJ1AD Client Smp ID: RE73-05-58829
Level: LOW Operator: XIA
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: Quant Type: ISTD
Sublist File: SONMS04.sub
Method File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\8270K.m
Misc Info: F5D210380-001 (5119285) SON

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 10 2-Fluorophenol	4869	3316	68.10	40-103
$ 15 Phenol-d5	4869	3478	71.43	36-105
$ 36 Nitrobenzene-d5	3246	2630	81.01	45-114
$ 69 2-Fluorobiphenyl	3246	2453	75.57	49-120
$ 104 2,4,6-Tribromophen	4869	3290	67.58	39-114
$ 139 Terphenyl-d14	3246	2516	77.49	42-108



Data File: \\Slsvr01\BNA_LAB\HSK.i\050510A.B\KSHP3042.D
Date : 10-MAY-2005 17:46
Client ID: RE73-05-58829
Sample Info: C8WKJ1AD
Volume Injected (uL): 1.0
Column phase:

\\Slsvr01\BNA_LAB\HSK.i\050510A.B\KSHP3042.D

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-88829

Instrument: MSK.i

Sample Info: C8MXJ1AD

Volume Injected (uL): 1.0

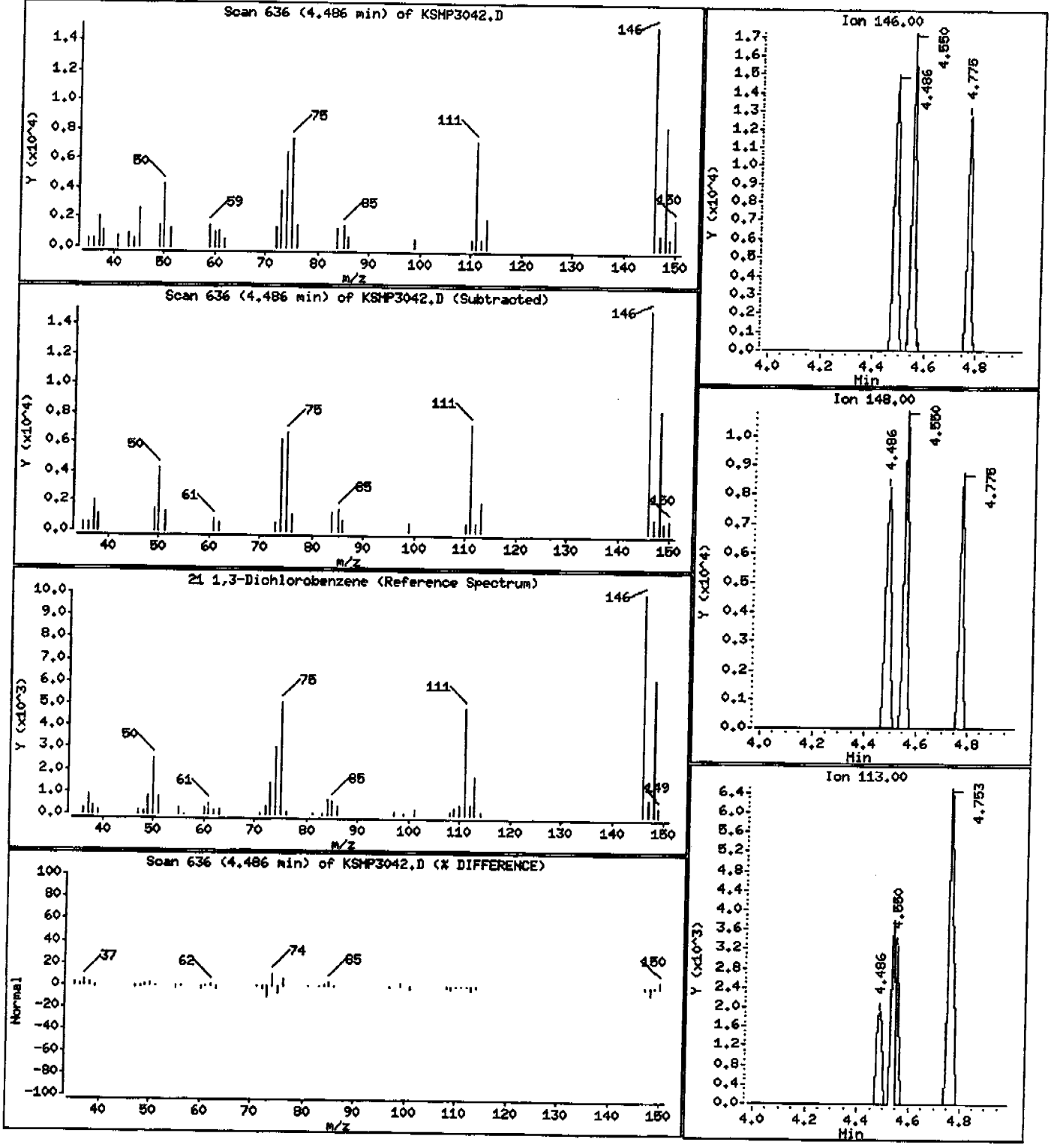
Operator: XIA

Column phase:

Column diameter: 2.00

21 1,3-Dichlorobenzene

Concentration: 125.8 ug/Kg



Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: G8WXJ1AD

Volume Injected (uL): 1.0

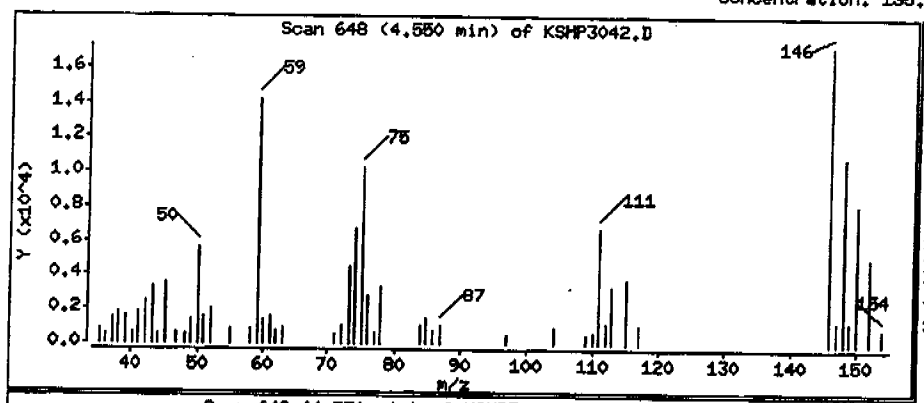
Operator: XIA

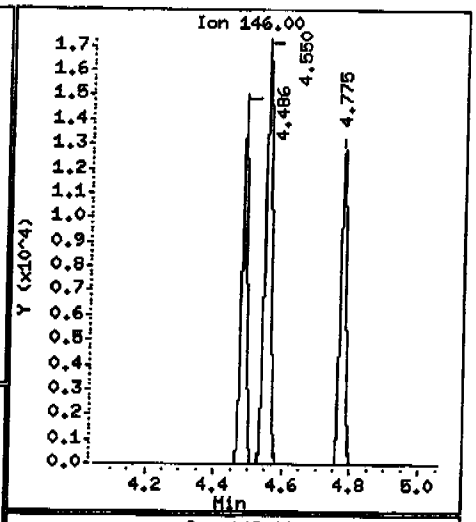
Column phase:

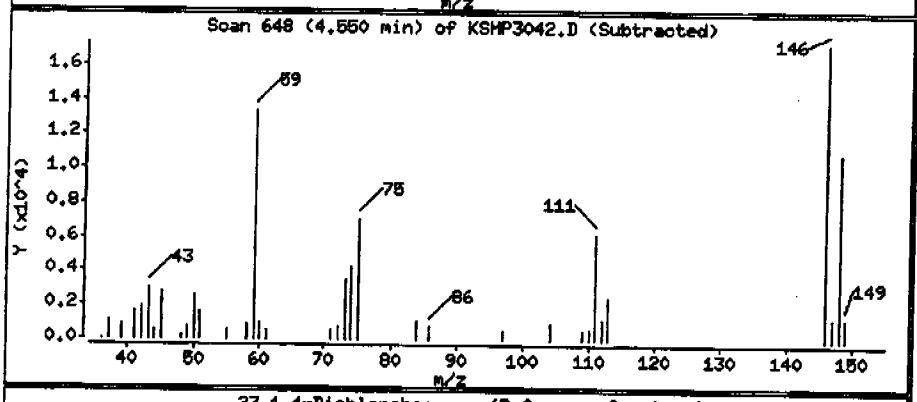
Column diameter: 2.00

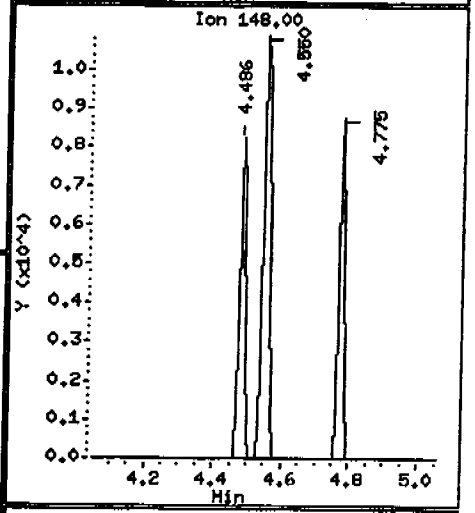
23 1,4-Dichlorobenzene

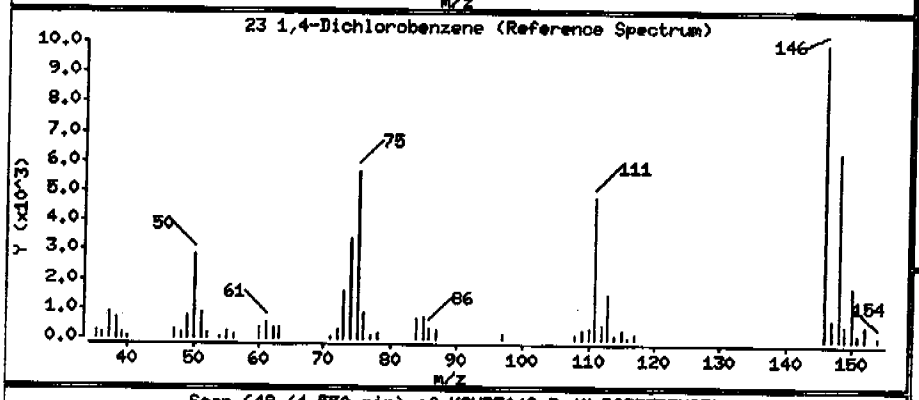
Concentration: 135.9 ug/Kg

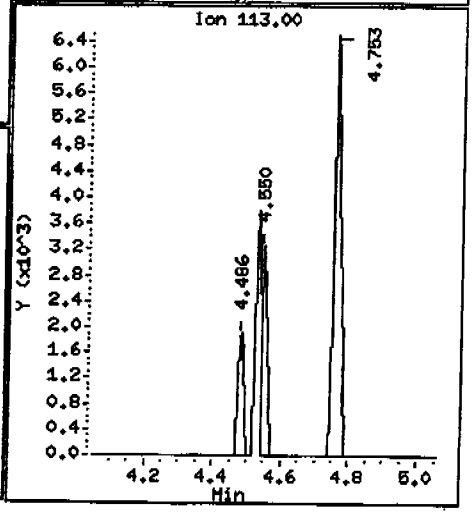


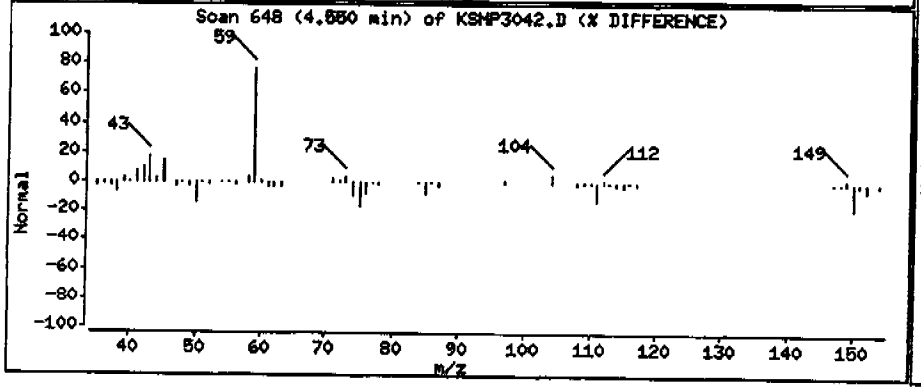












Data File: \\Slsvr01\BHA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: C8WXJ1AD

Volume Injected (uL): 1.0

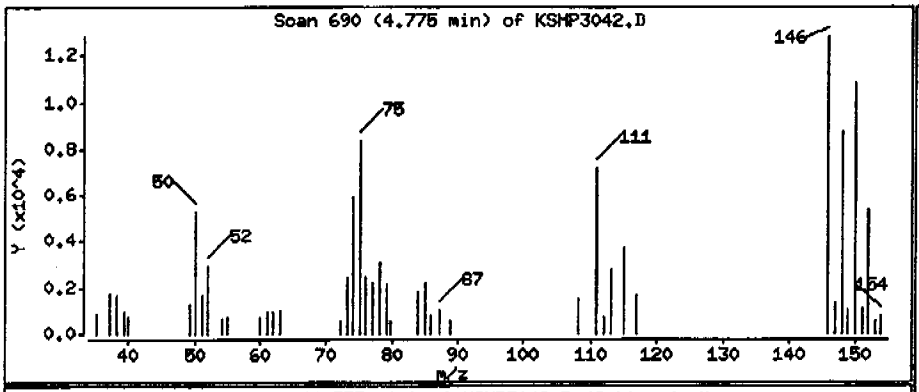
Operator: XIA

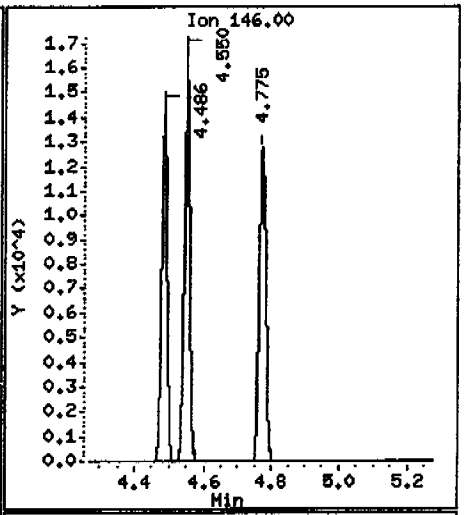
Column phase:

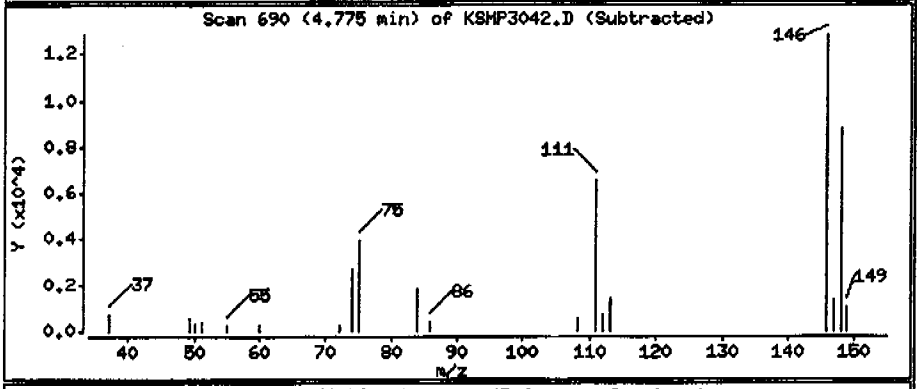
Column diameter: 2.00

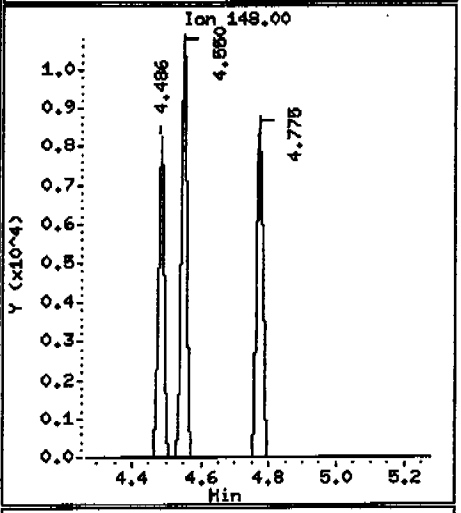
26 1,2-Dichlorobenzene

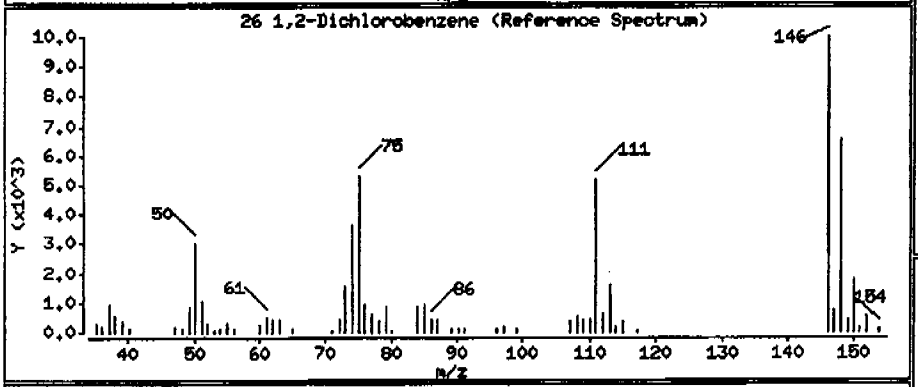
Concentration: 122.3 ug/Kg

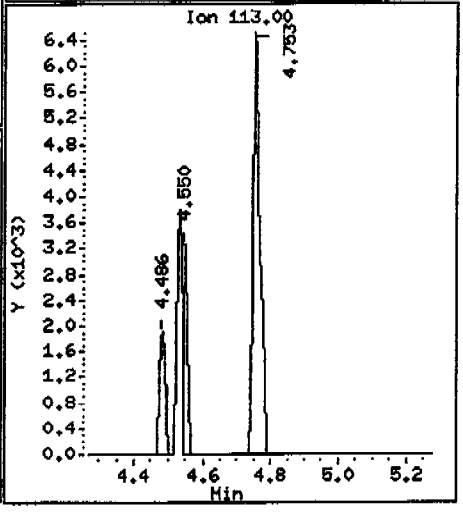


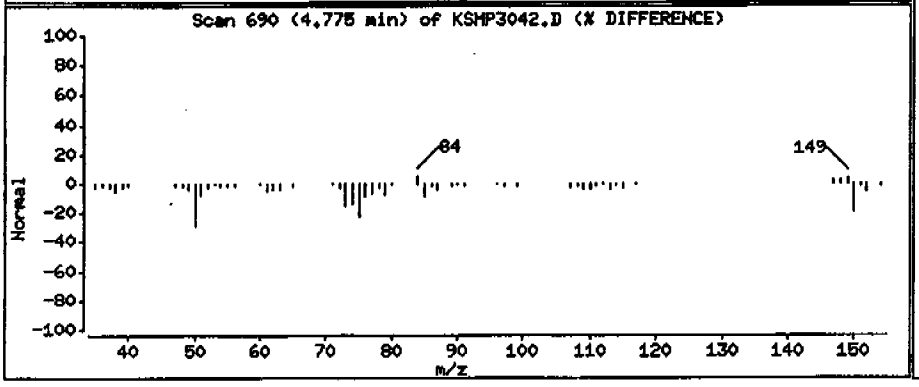












Data File: \\Slsvr01\BNA_LAB\HSK.i\050510A.B\KSHP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: HSK.i

Sample Info: G8WXJ1AD

Volume Injected (uL): 1.0

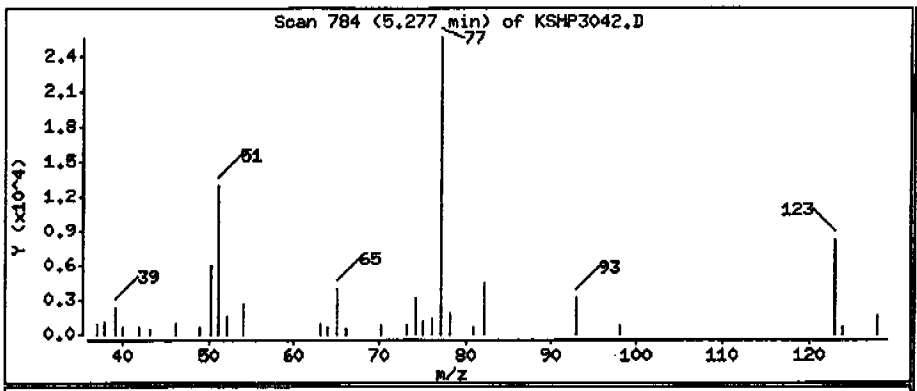
Operator: XIA

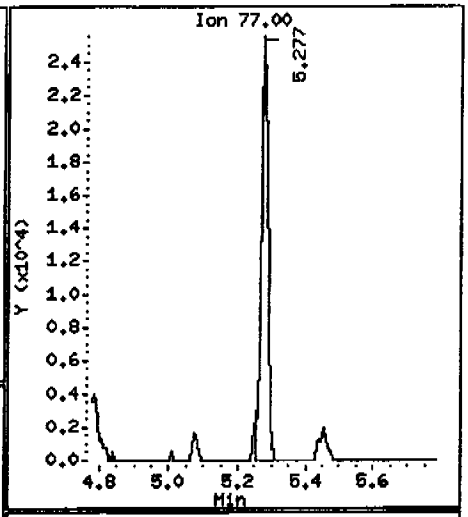
Column phase:

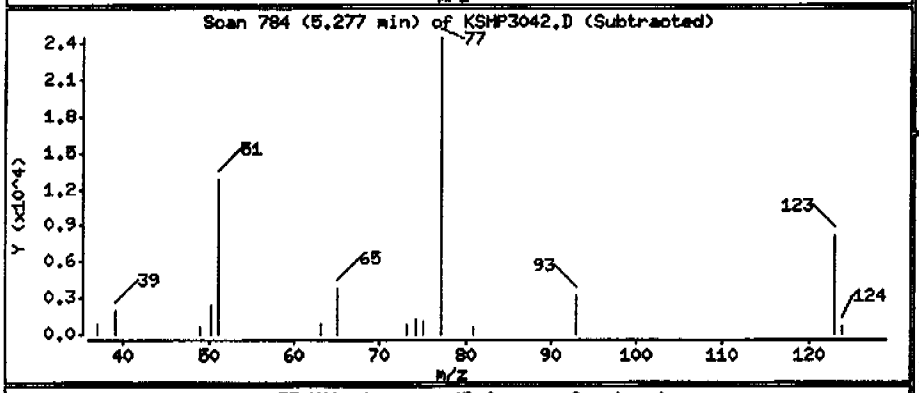
Column diameter: 2.00

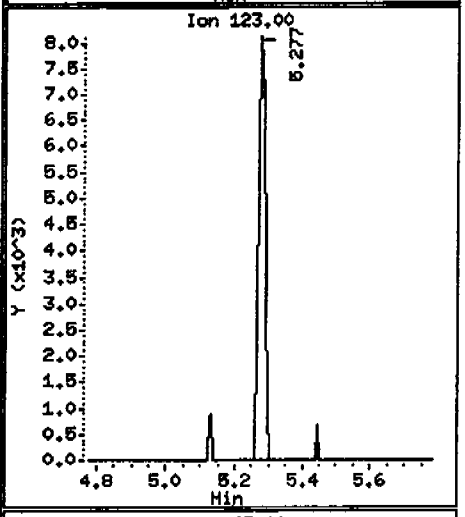
37 Nitrobenzene

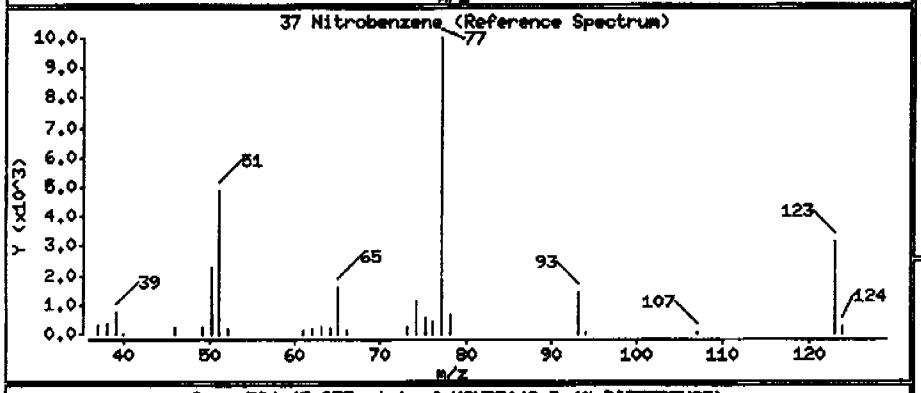
Concentration: 171.0 ug/Kg

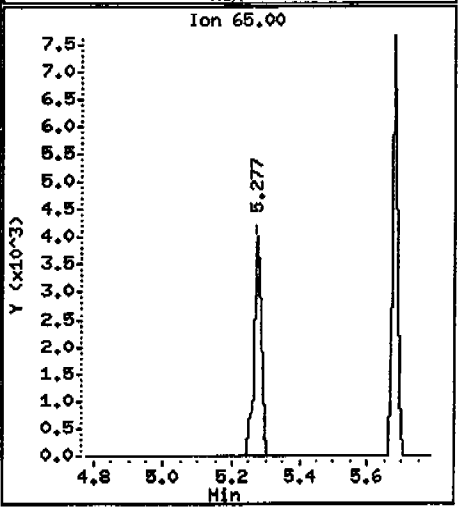


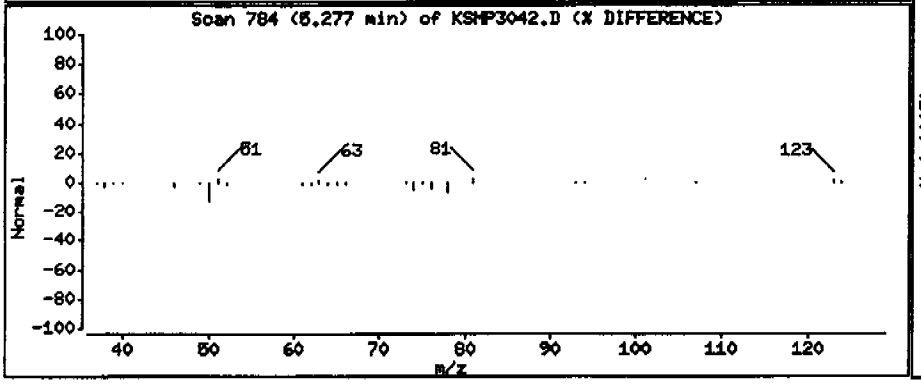












Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: G8WXJ1AD

Volume Injected (uL): 1.0

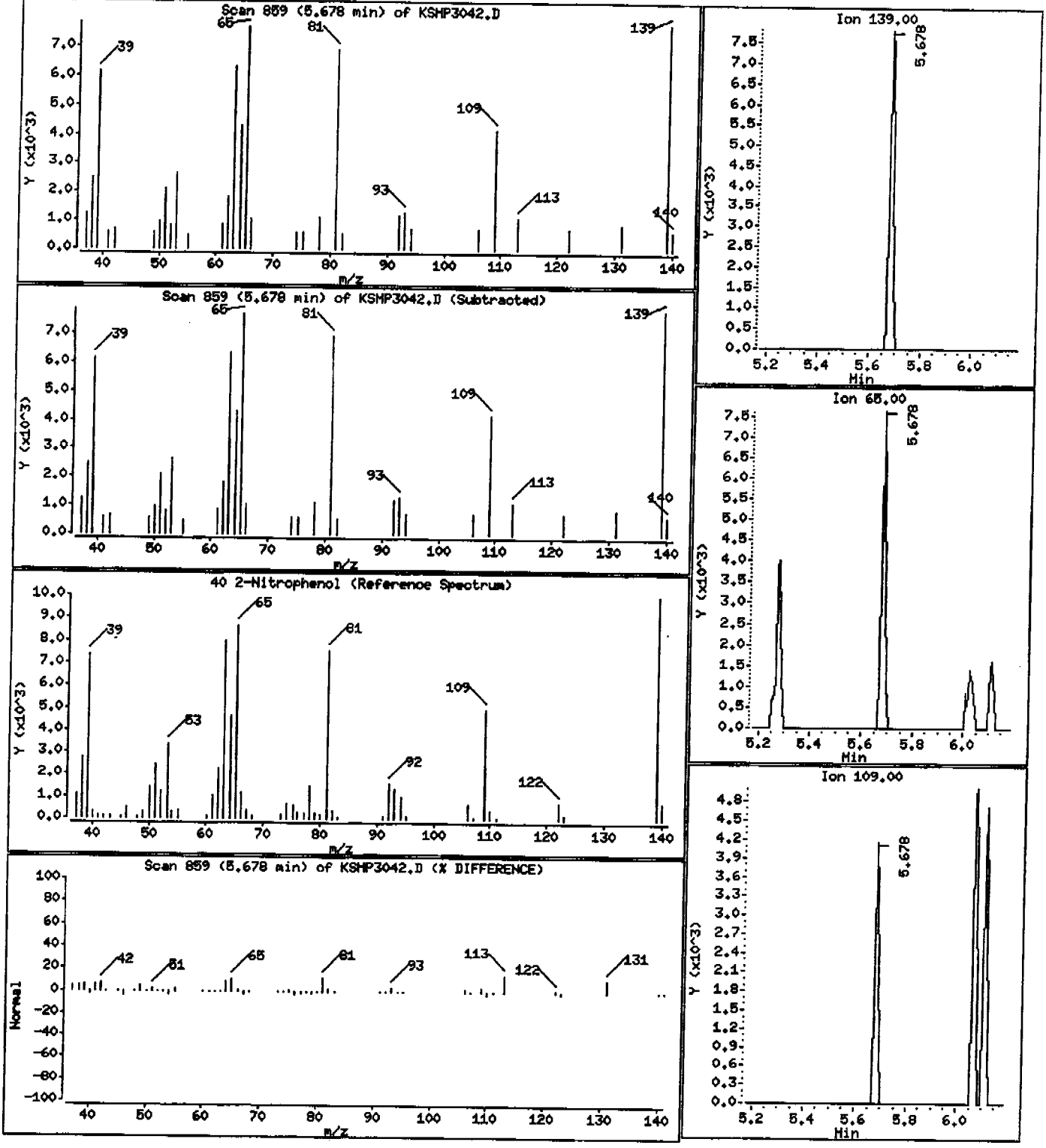
Operator: XIA

Column phase:

Column diameter: 2.00

40 2-Nitrophenol

Concentration: 147.5 ug/Kg



Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: C8WXJ1AD

Volume Injected (uL): 1.0

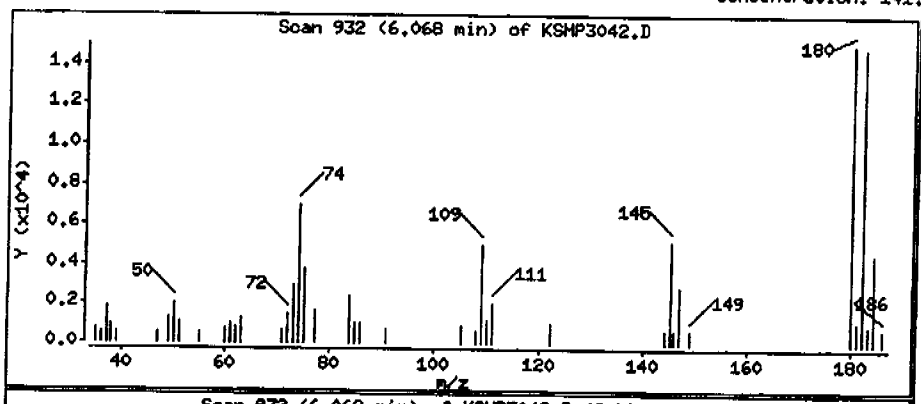
Operator: XIA

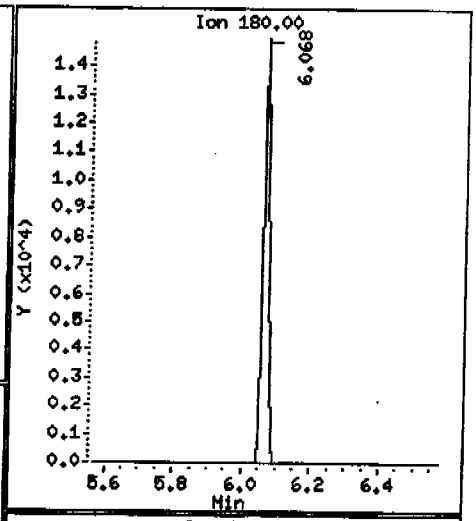
Column phase:

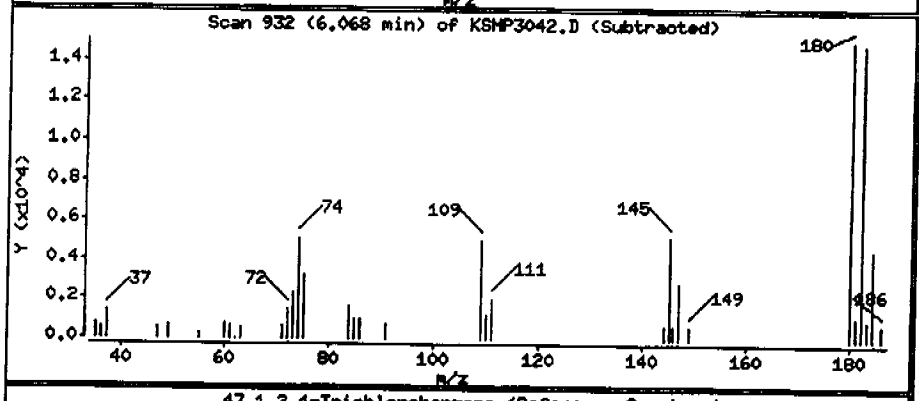
Column diameter: 2.00

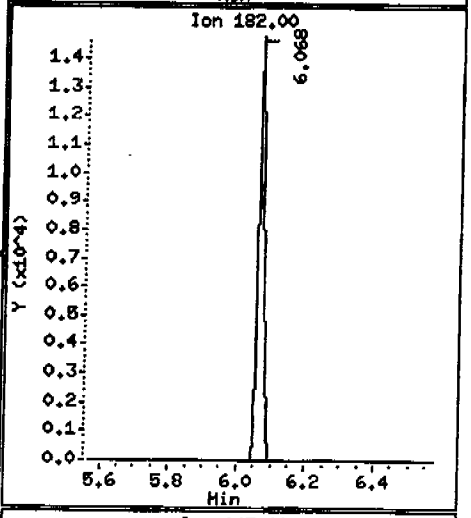
47 1,2,4-Trichlorobenzene

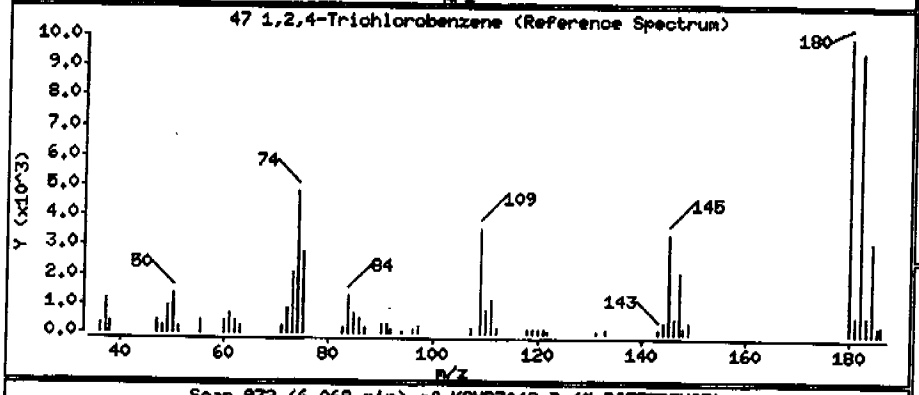
Concentration: 141.6 ug/Kg

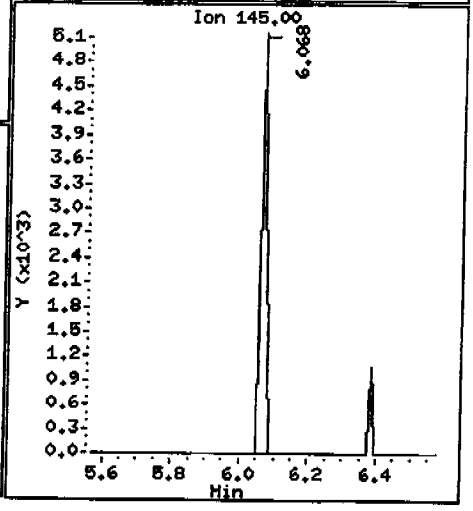


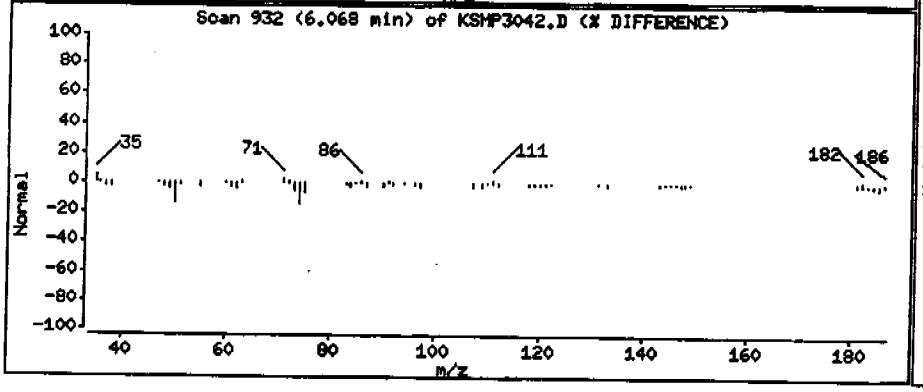












Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: C8WXJ1AD

Volume Injected (uL): 1.0

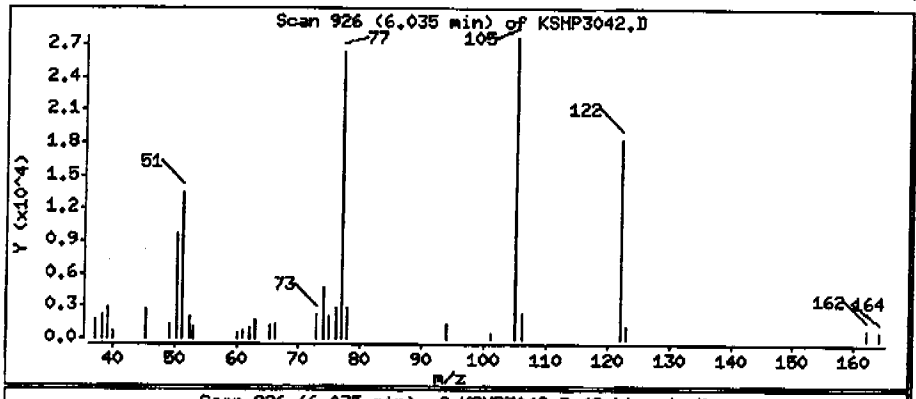
Operator: XIA

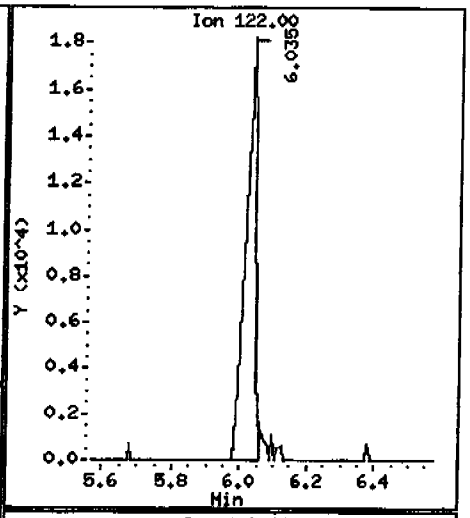
Column phase:

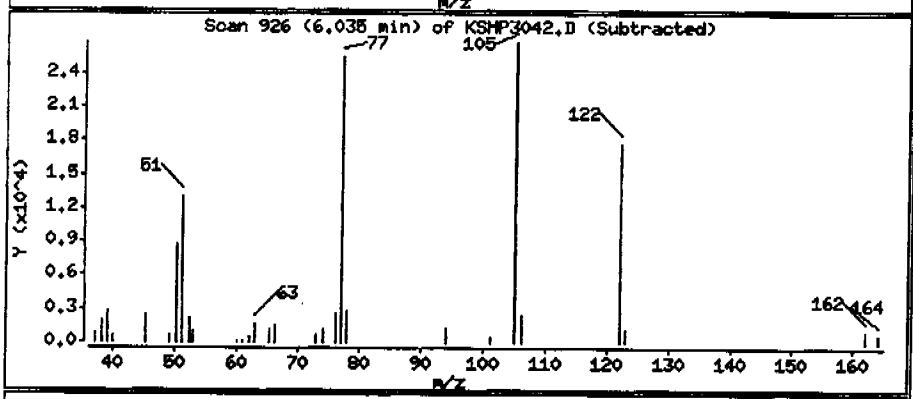
Column diameter: 2.00

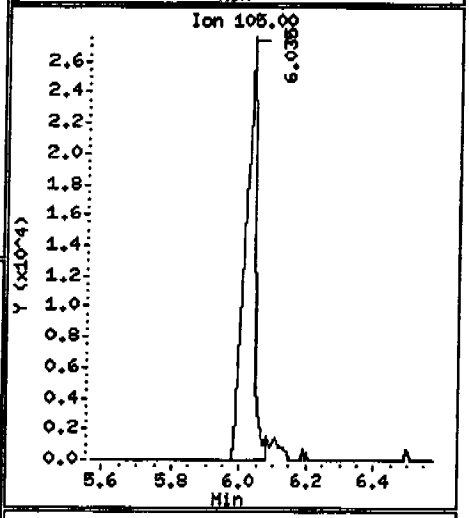
44 Benzoic Acid

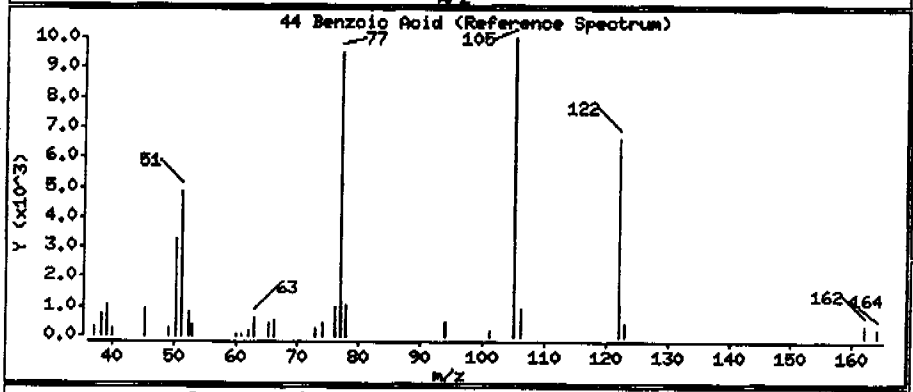
Concentration: 663.6 ug/Kg

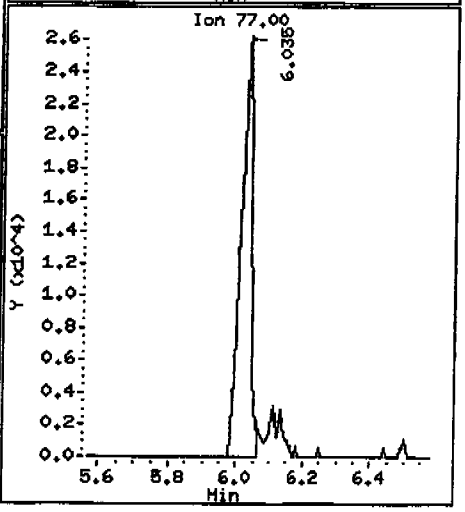


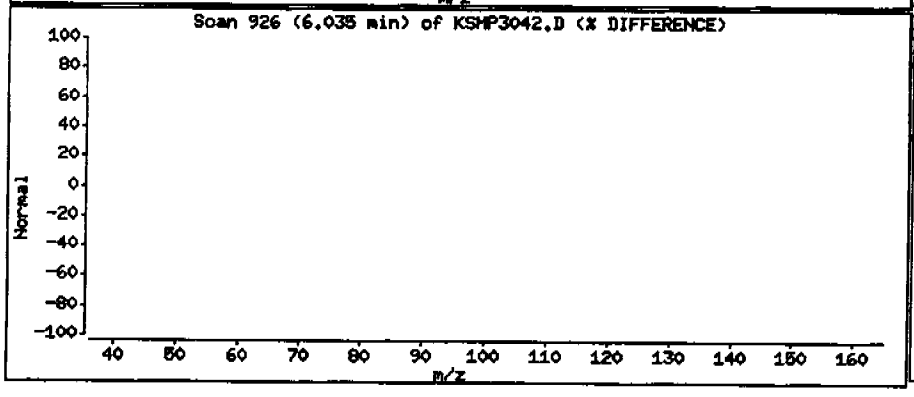












Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: G8WXJ1AD

Volume Injected (uL): 1.0

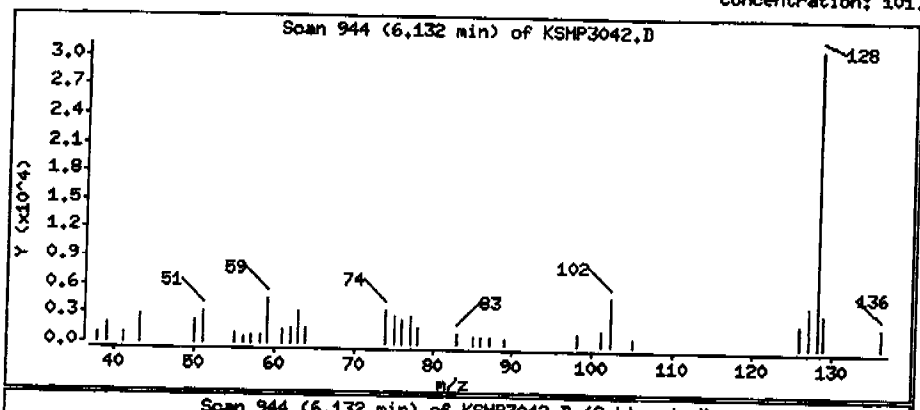
Operator: XIA

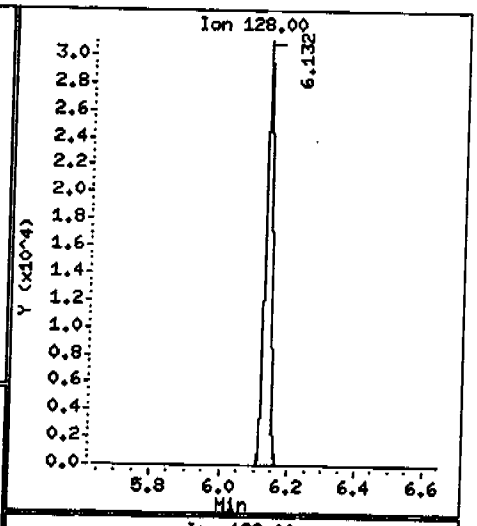
Column phase:

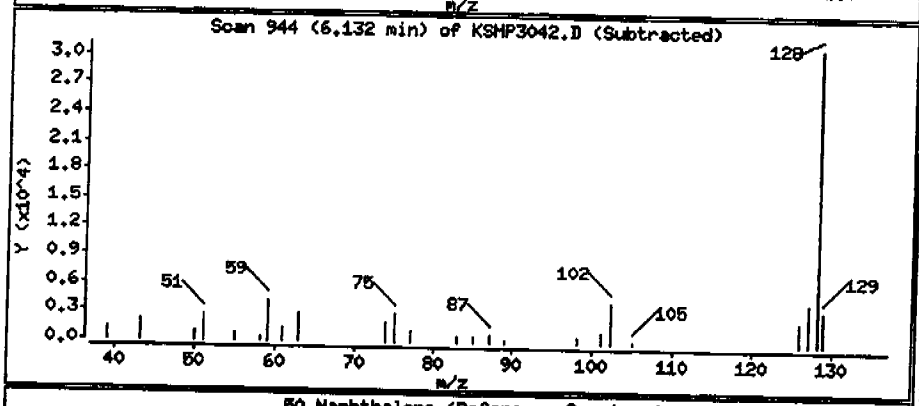
Column diameter: 2.00

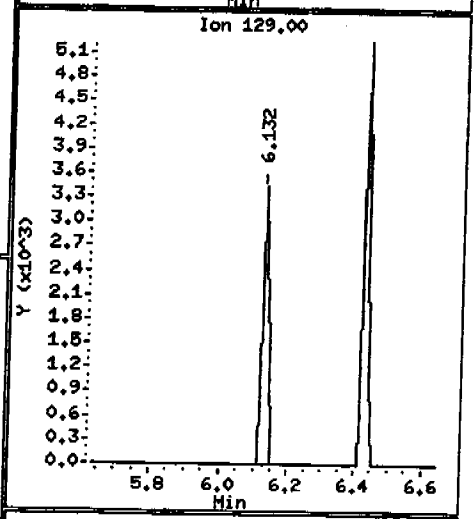
50 Naphthalene

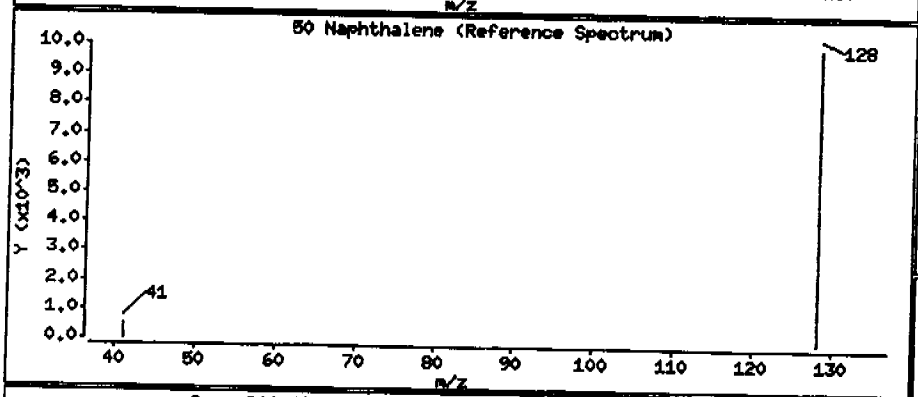
Concentration: 101.5 ug/Kg

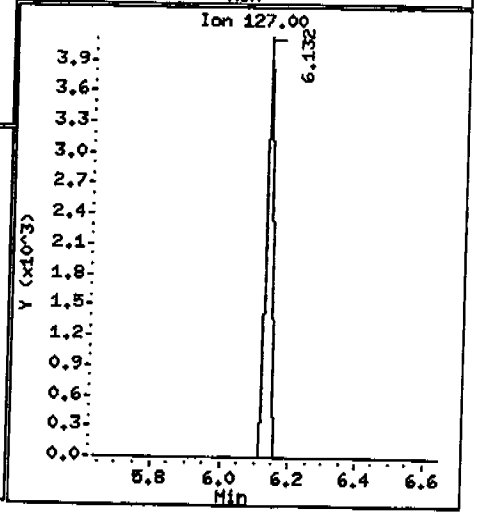


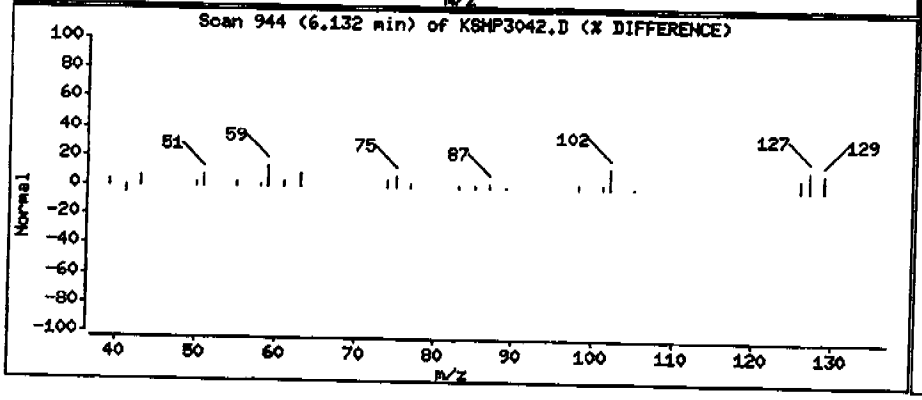












LOT# F5D210380

Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: G8WXJ1AD

Volume Injected (uL): 1.0

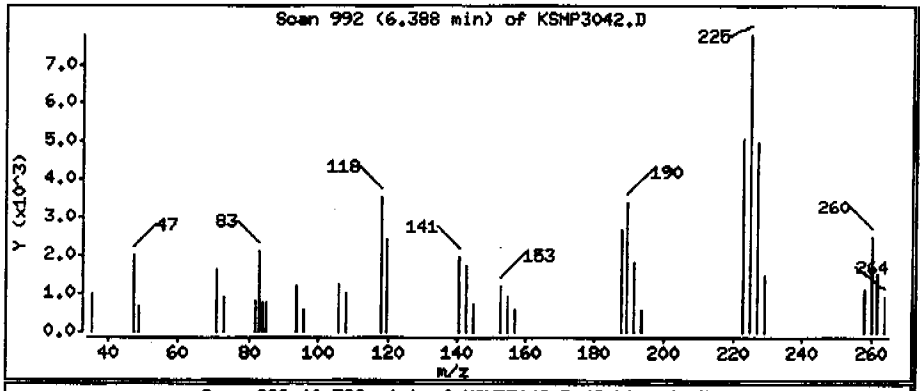
Operator: XIA

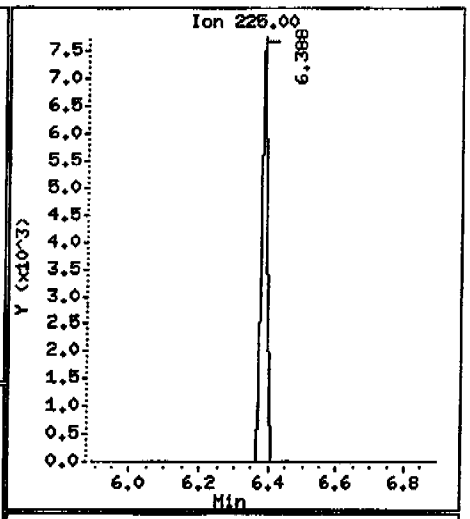
Column phase:

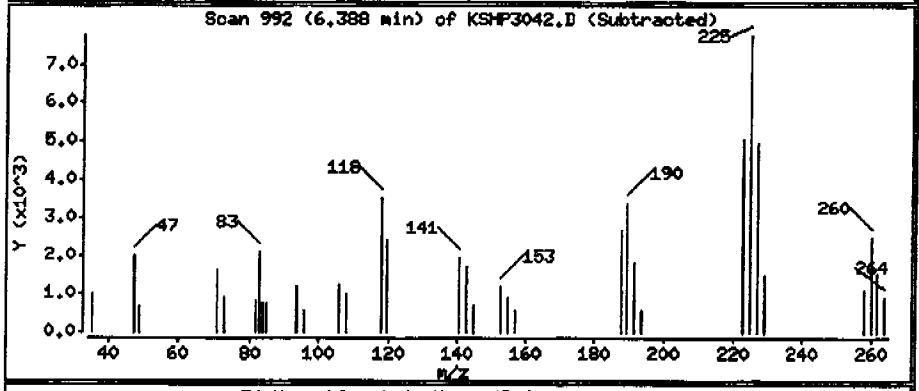
Column diameter: 2.00

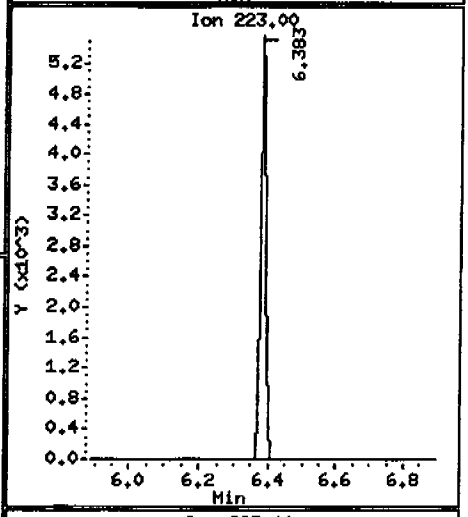
54 Hexachlorobutadiene

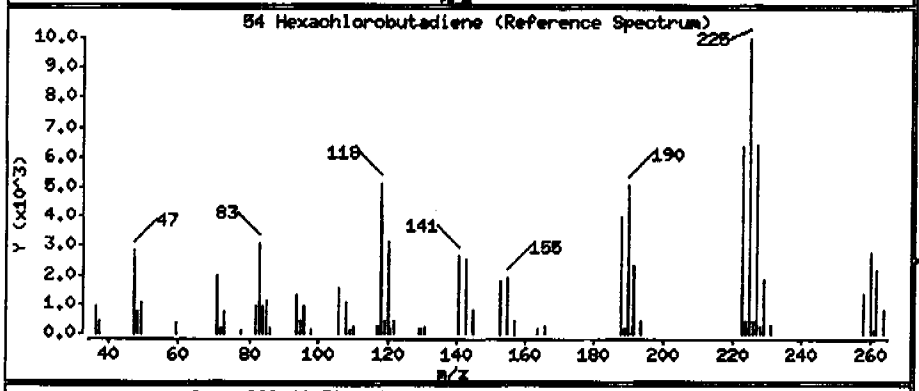
Concentration: 110.4 ug/Kg

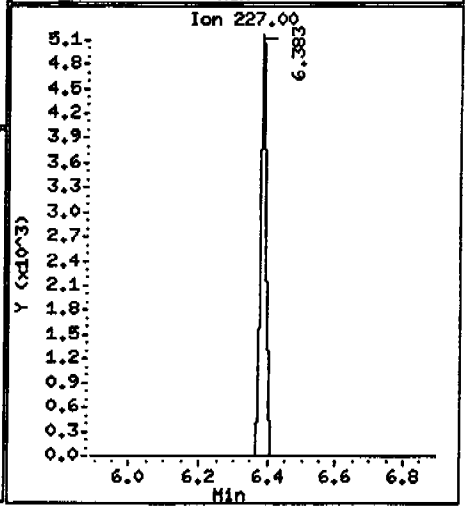


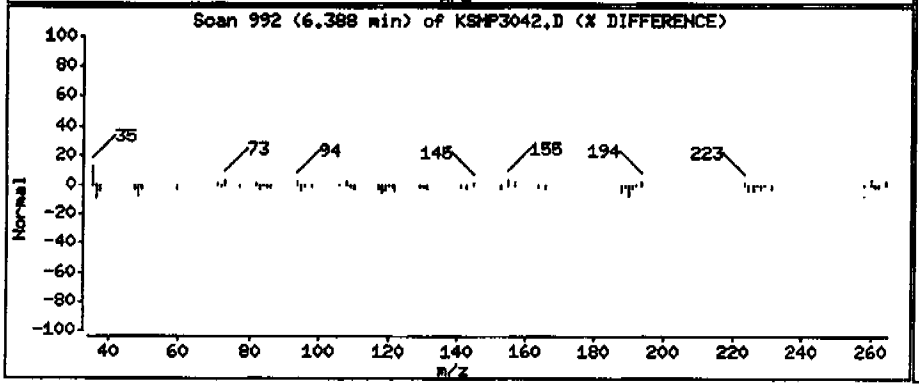












Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: C8WXJ1AD

Volume Injected (uL): 1.0

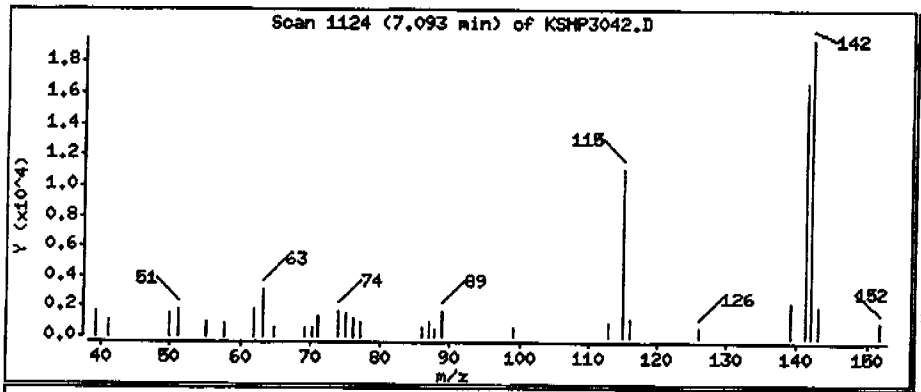
Operator: XIA

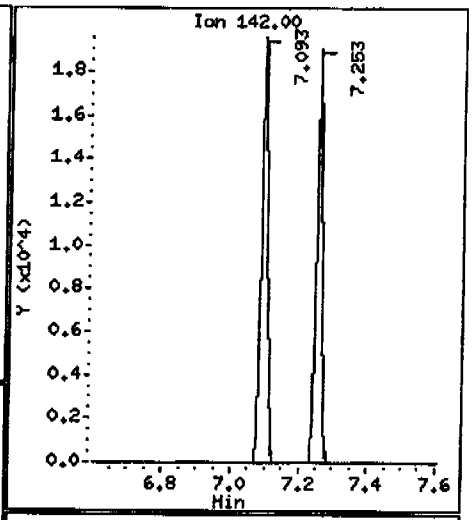
Column phase:

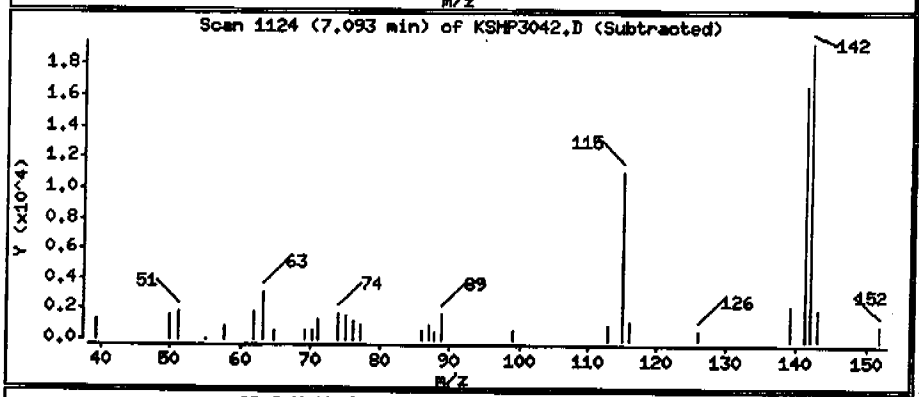
Column diameter: 2.00

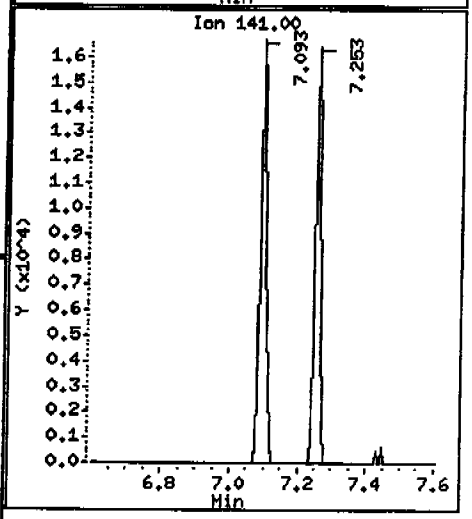
62 2-Methylnaphthalene

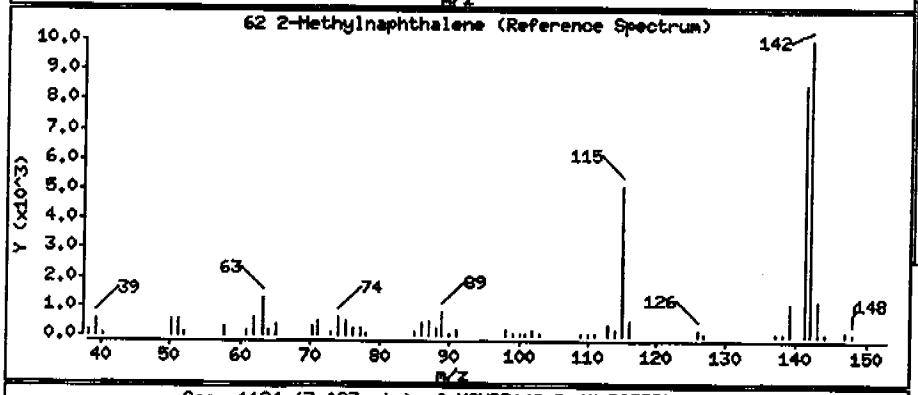
Concentration: 99.09 ug/Kg

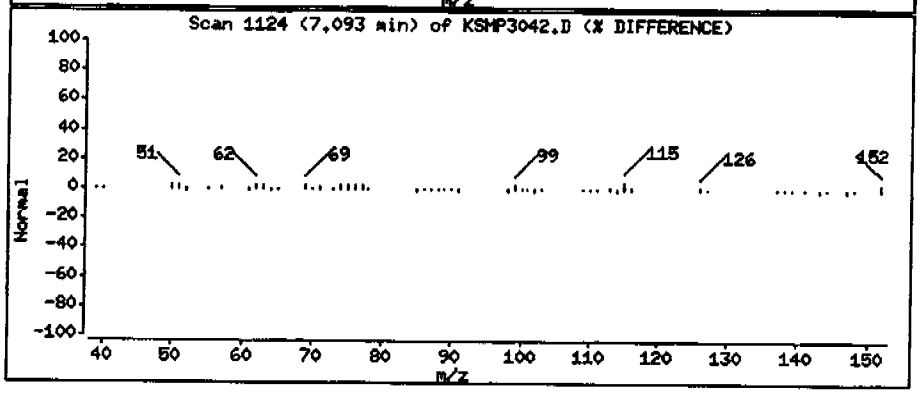












Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: G8WXJ1AD

Volume Injected (uL): 1.0

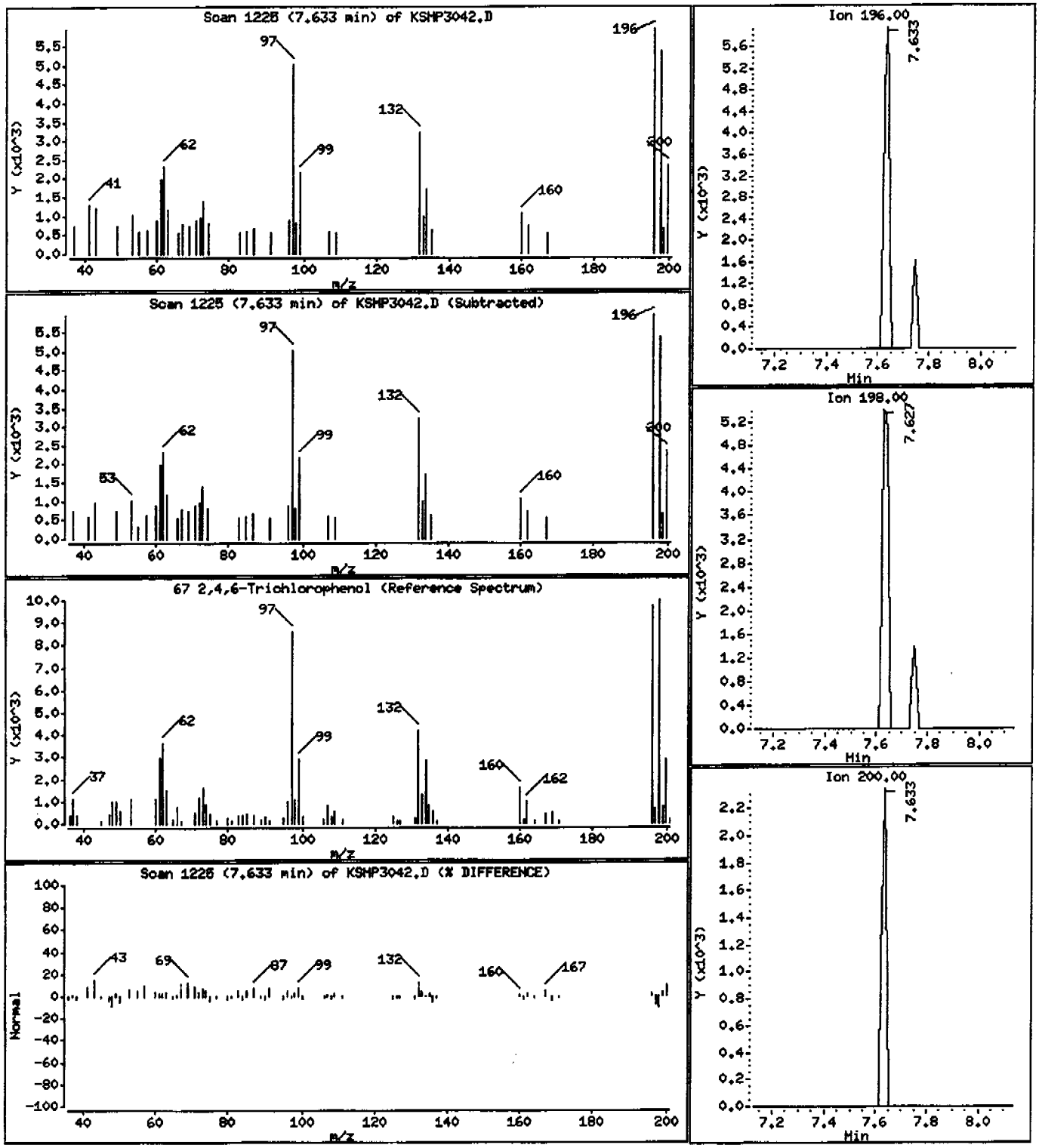
Operator: XIA

Column phase:

Column diameter: 2.00

67 2,4,6-Trichlorophenol

Concentration: 104.0 ug/Kg



Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: G8WXJ1AD

Volume Injected (uL): 1.0

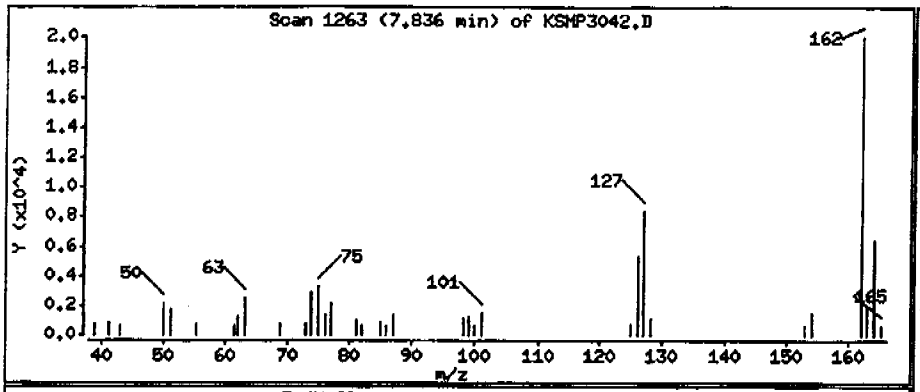
Operator: XIA

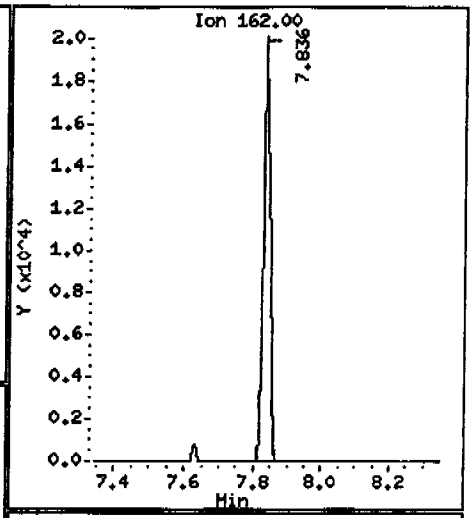
Column phase:

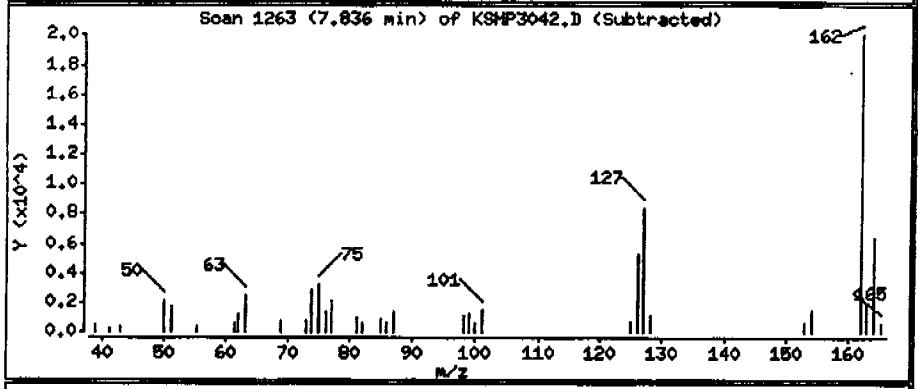
Column diameter: 2.00

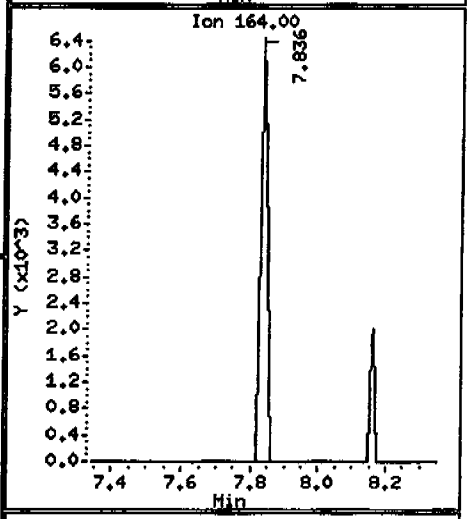
72 2-Chloronaphthalene

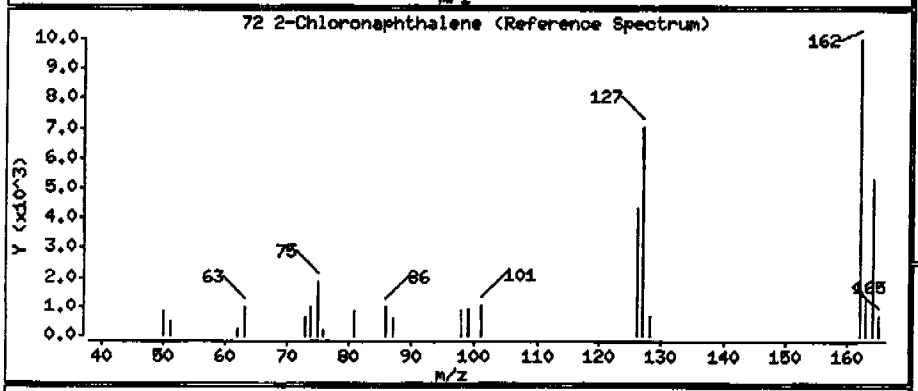
Concentration: 112.0 ug/Kg

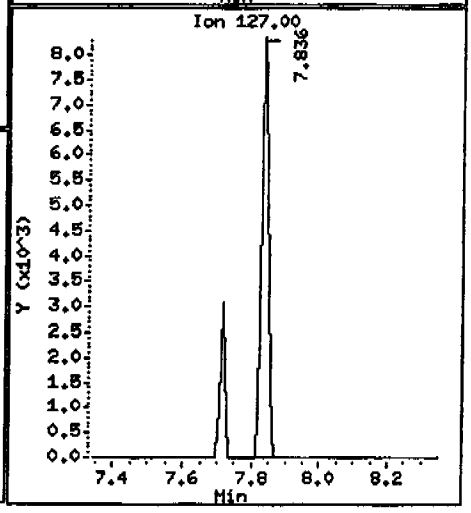


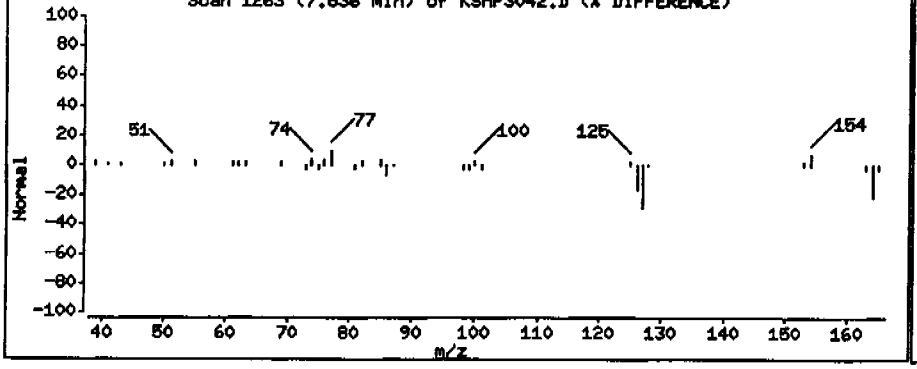












Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-88829

Instrument: MSK.i

Sample Info: G8WXJ1AD

Volume Injected (uL): 1.0

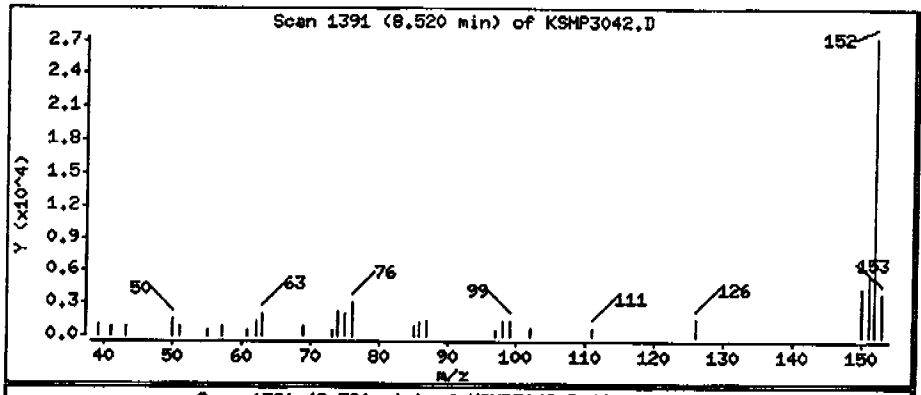
Operator: XIA

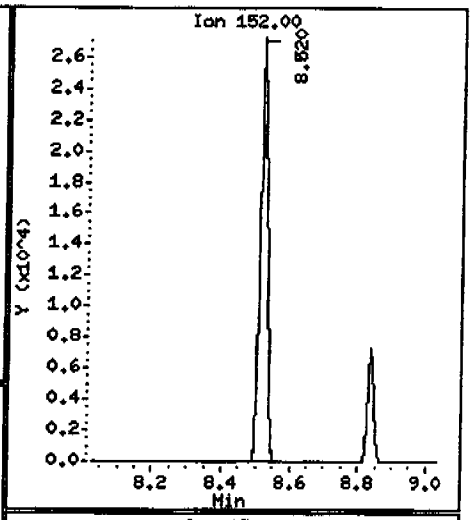
Column phase:

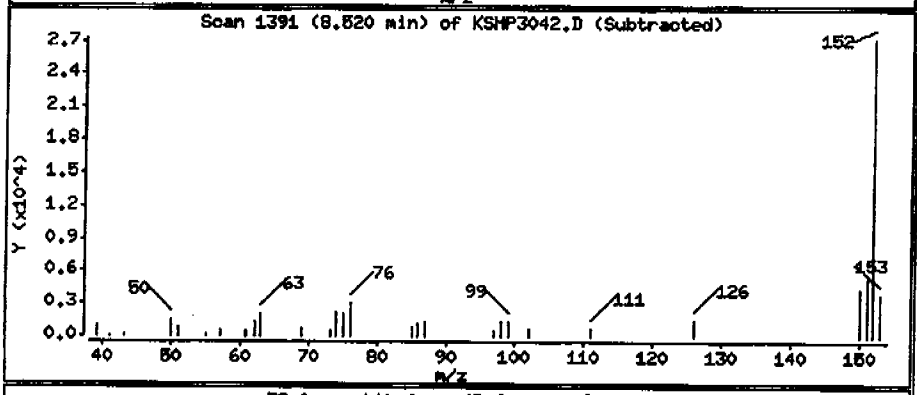
Column diameter: 2.00

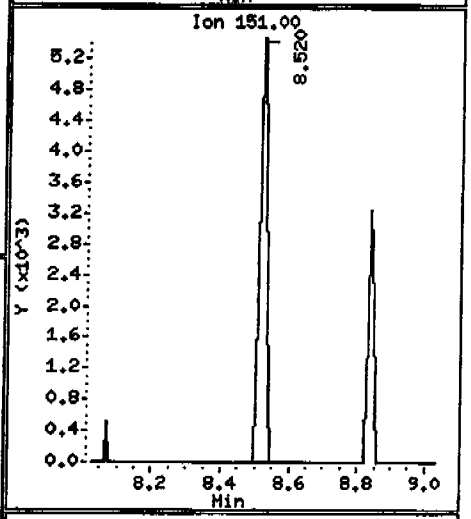
79 Acenaphthylene

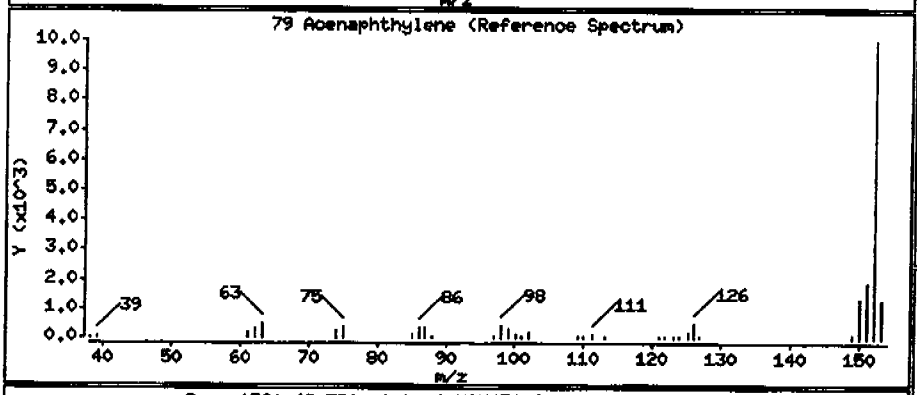
Concentration: 117.0 ug/Kg

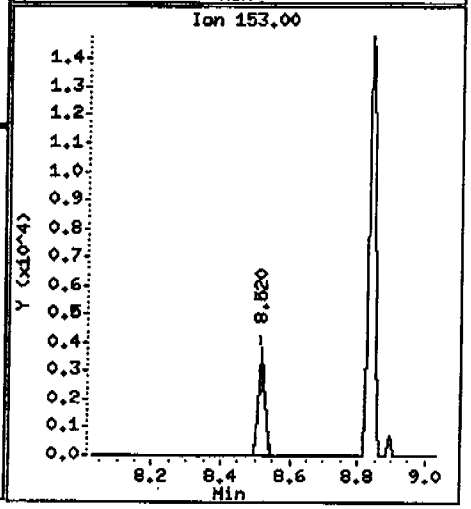


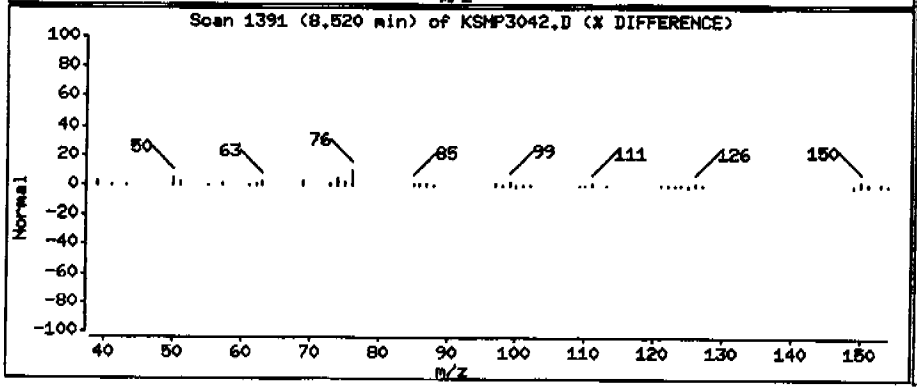












Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: G8WXJ1AD

Volume Injected (uL): 1.0

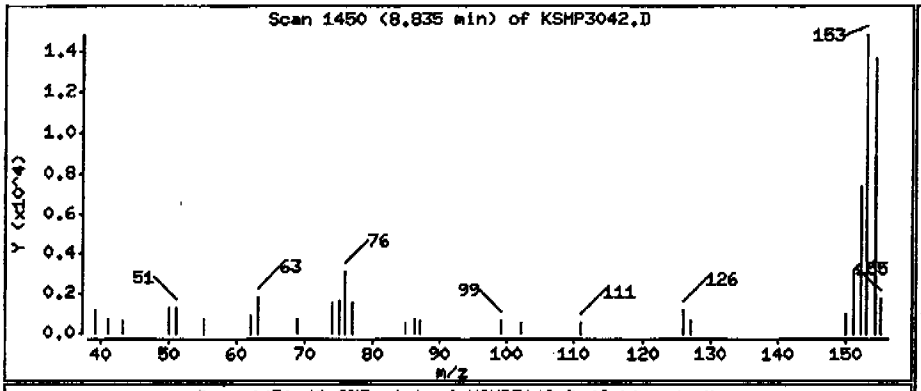
Operator: XIA

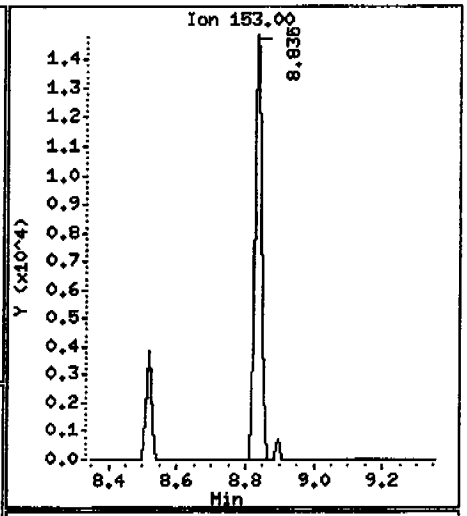
Column phase:

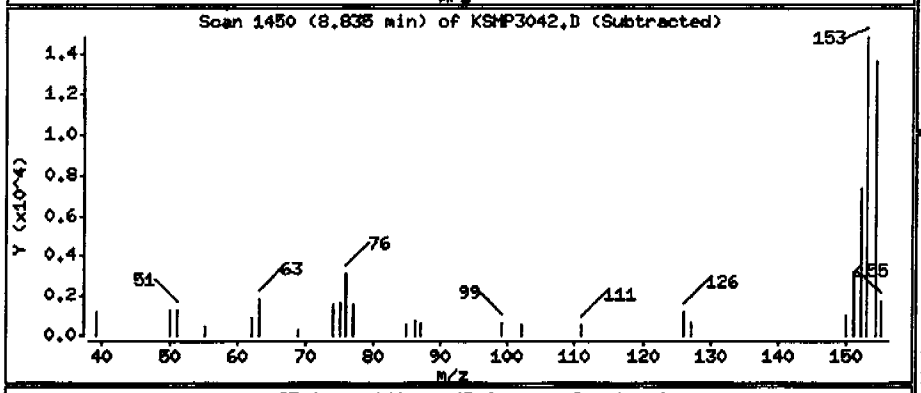
Column diameter: 2.00

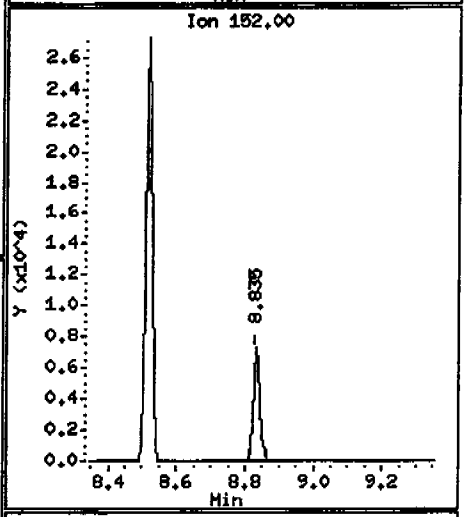
83 Acenaphthene

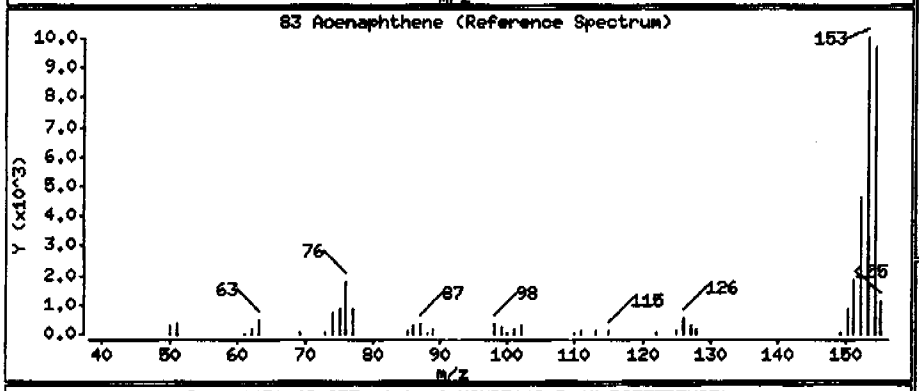
Concentration: 106.0 ug/Kg

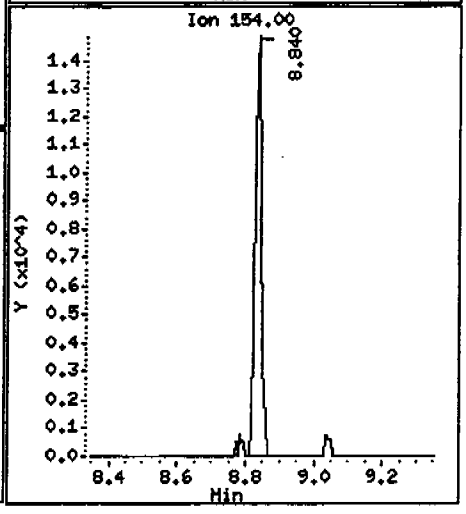


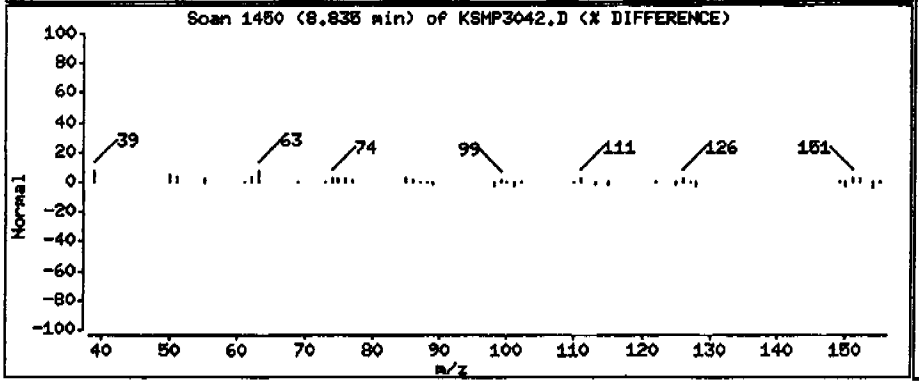












Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: G8WXJ1AD

Volume Injected (uL): 1.0

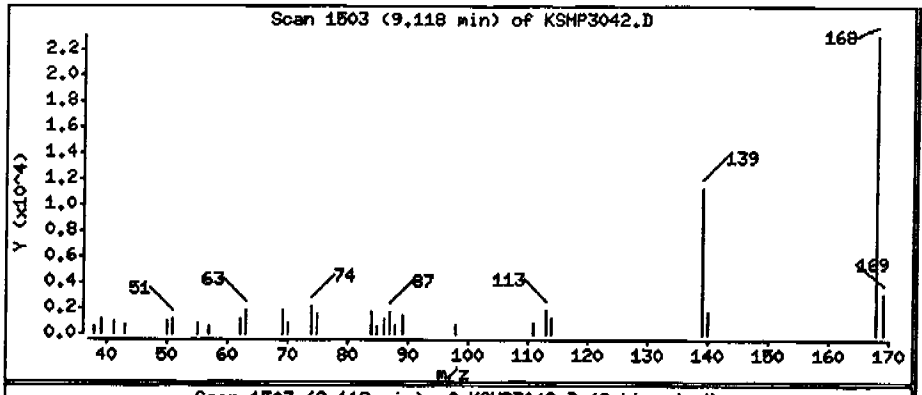
Operator: XIA

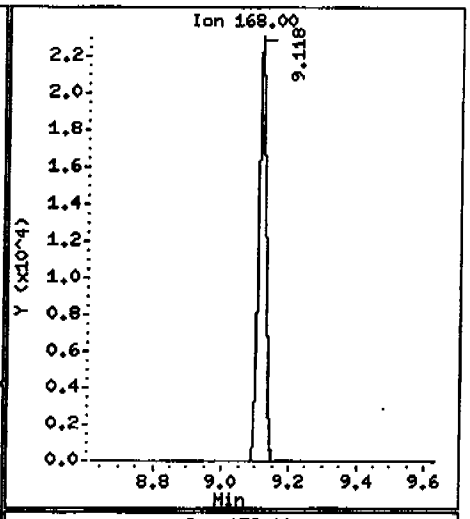
Column phase:

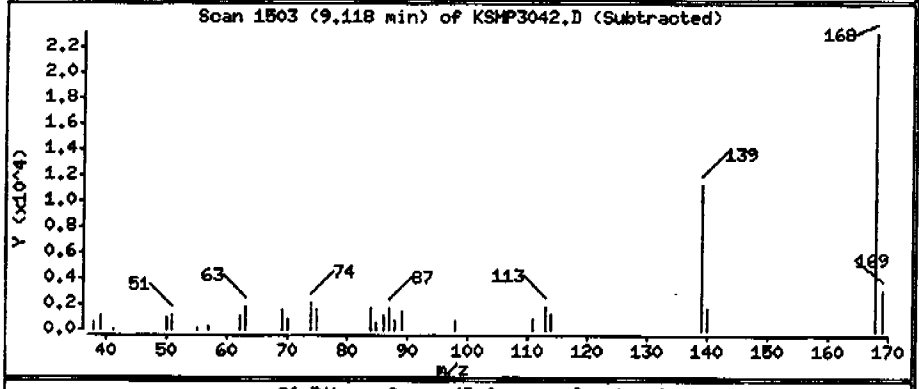
Column diameter: 2.00

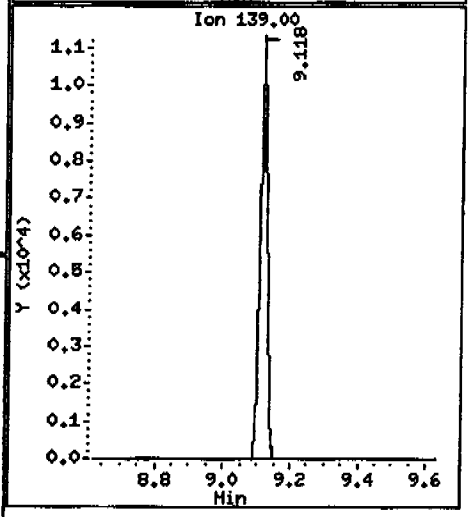
86 Dibenzofuran

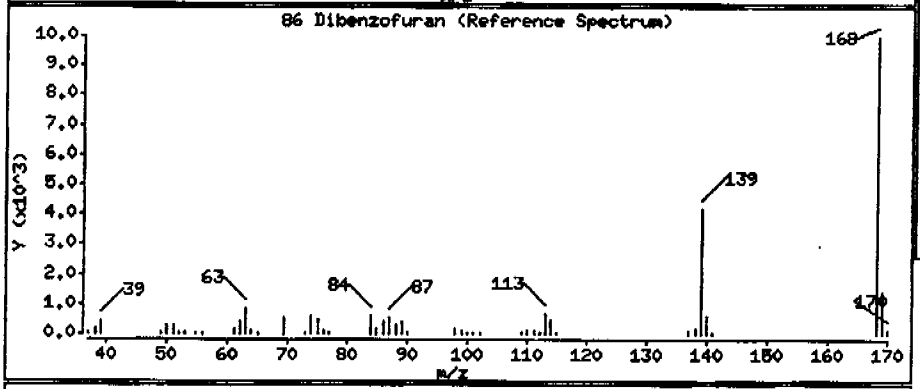
Concentration: 111.2 ug/Kg

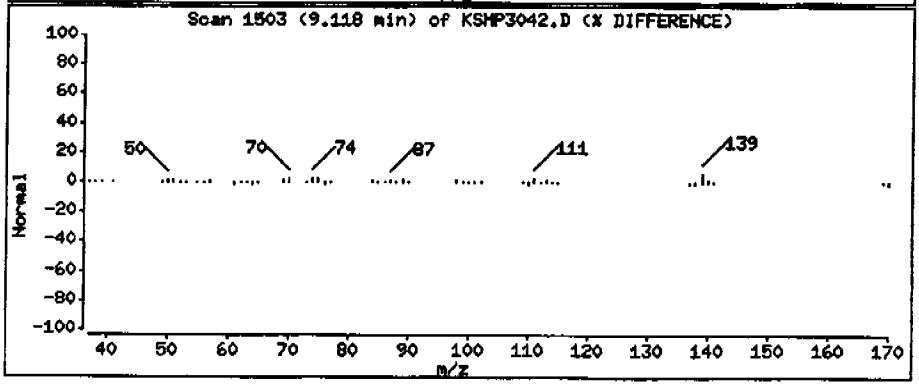












Data File: \\Slsvr01\BNA_LAB\MSK.i\060510A.B\KSMP3042.D

Date : 10-MAY-2006 17:46

Client ID: RE73-06-58829

Instrument: MSK.i

Sample Info: G8WXJ1AD

Volume Injected (uL): 1.0

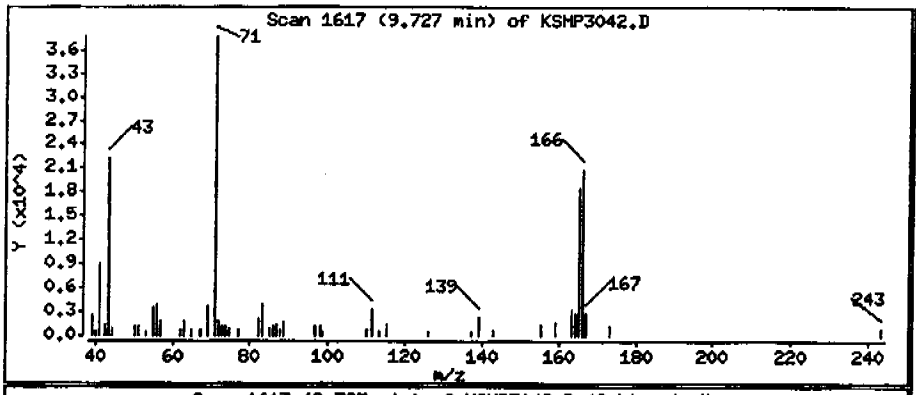
Operator: XIA

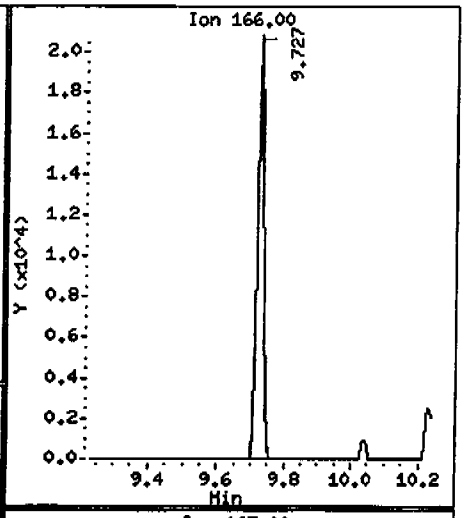
Column phase:

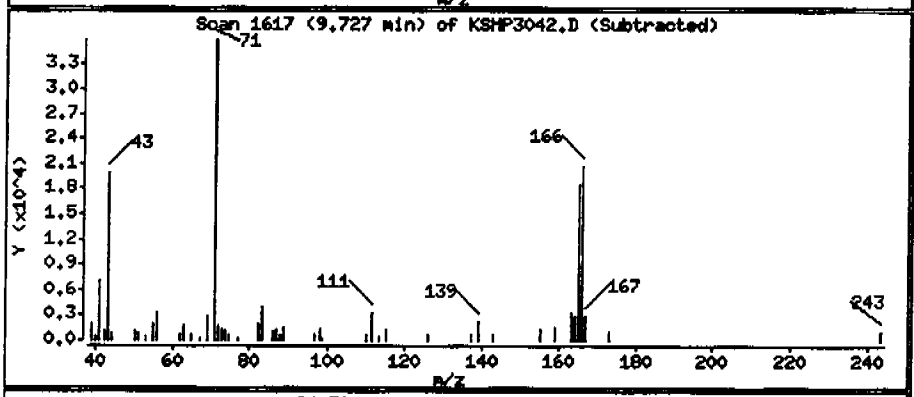
Column diameter: 2.00

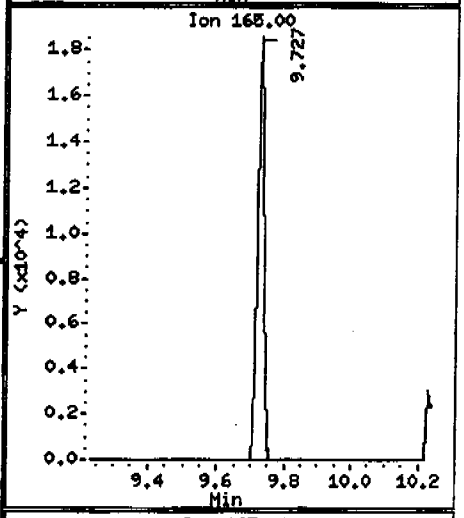
94 Fluorene

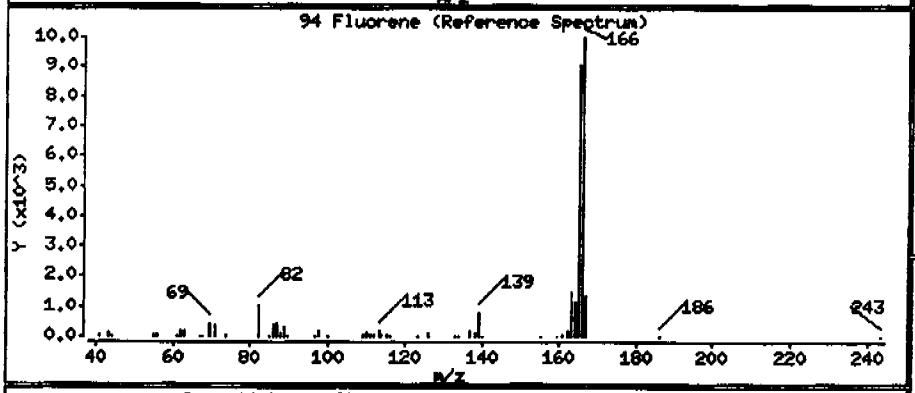
Concentration: 120.6 ug/Kg

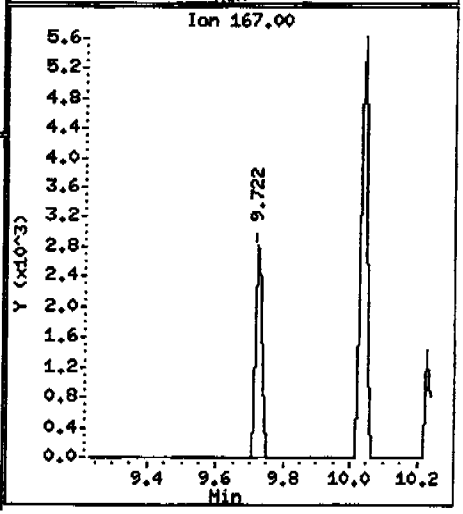


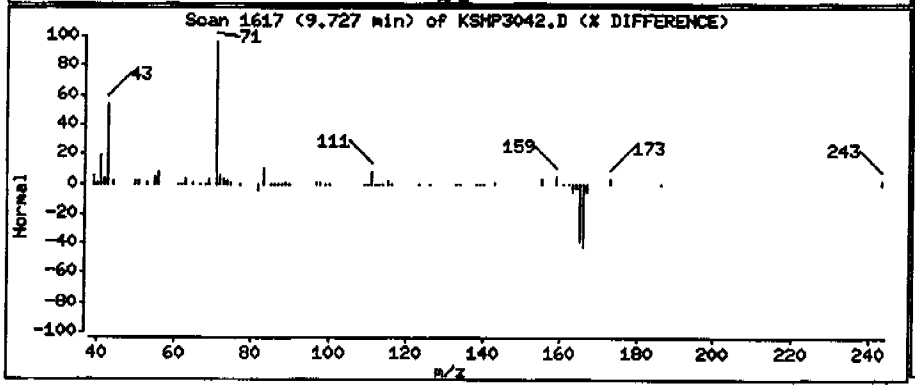












Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: C8WXJ1AD

Volume Injected (uL): 1.0

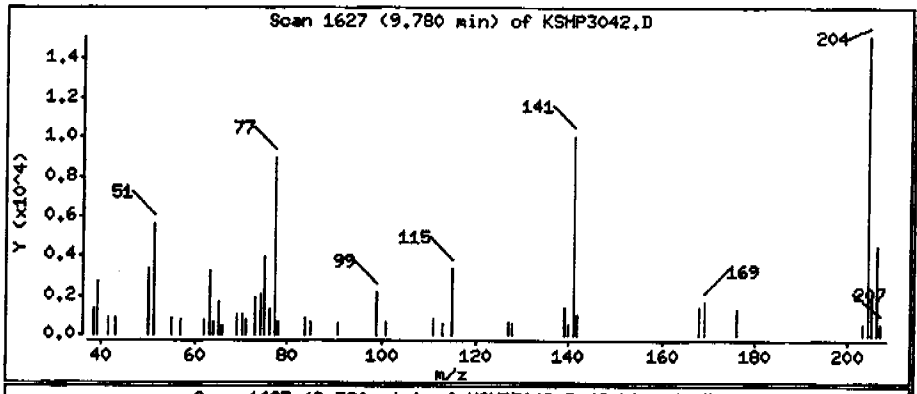
Operator: XIA

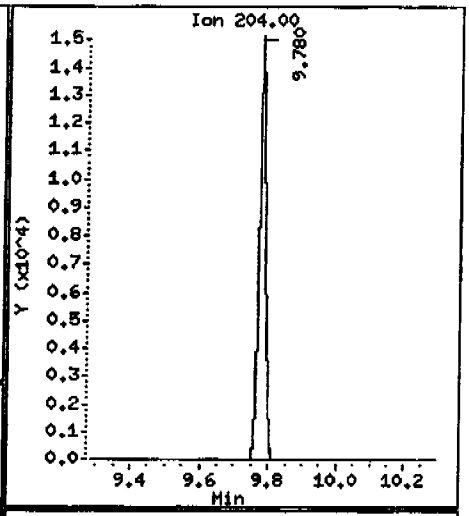
Column phase:

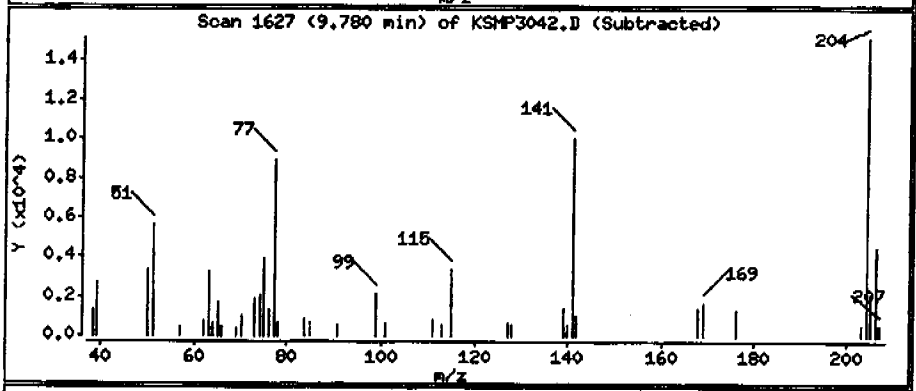
Column diameter: 2.00

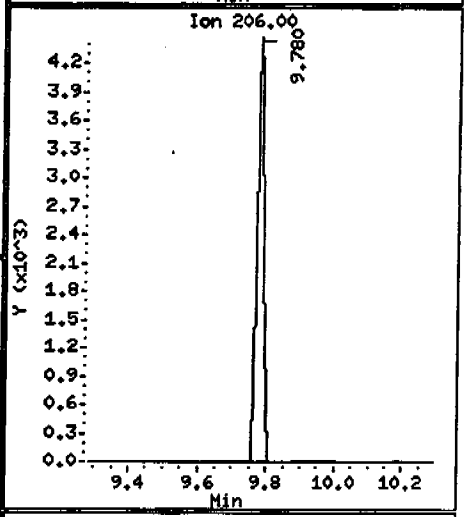
95 4-Chlorophenyl-phenylether

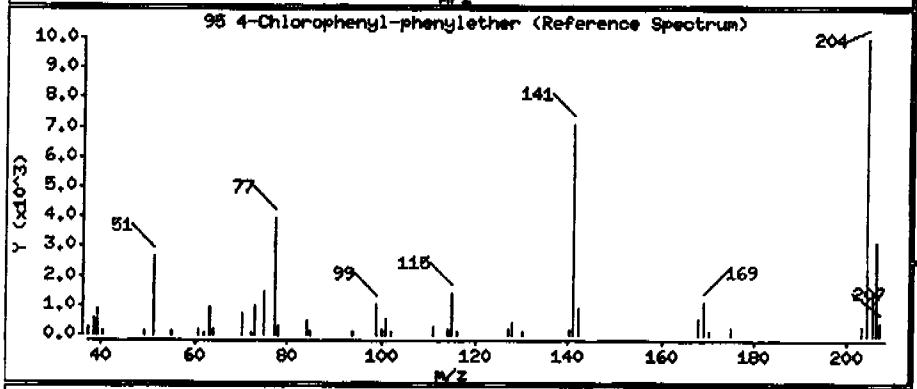
Concentration: 153.6 ug/Kg

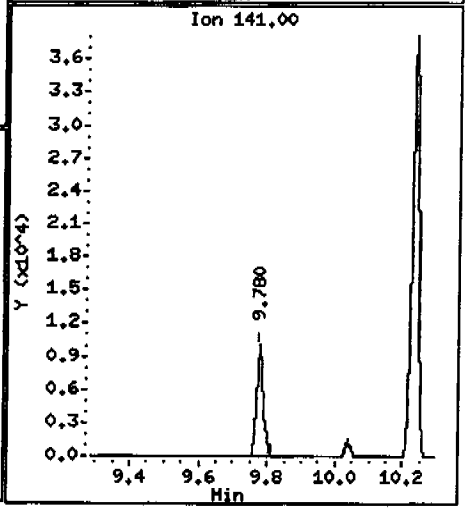


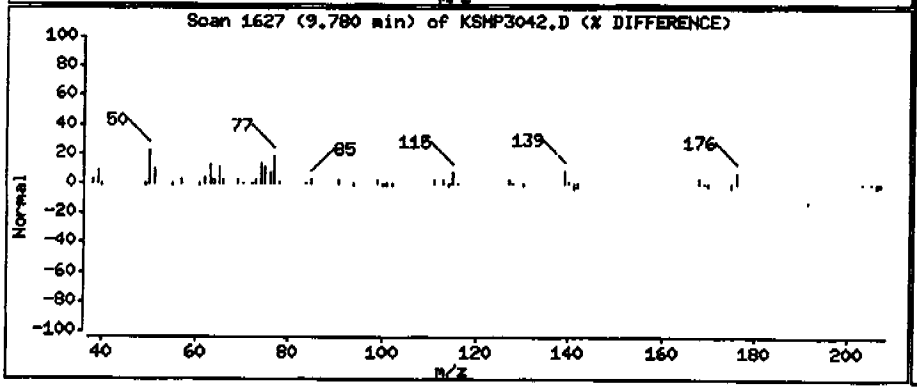












Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: G8WXJ1AD

Volume Injected (uL): 1.0

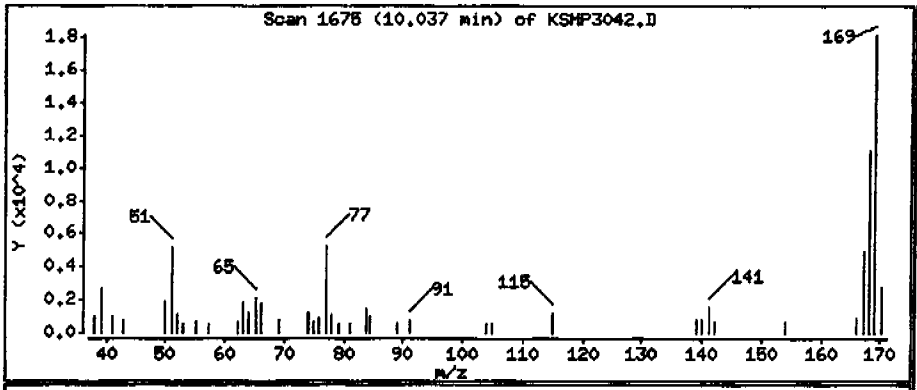
Operator: XIA

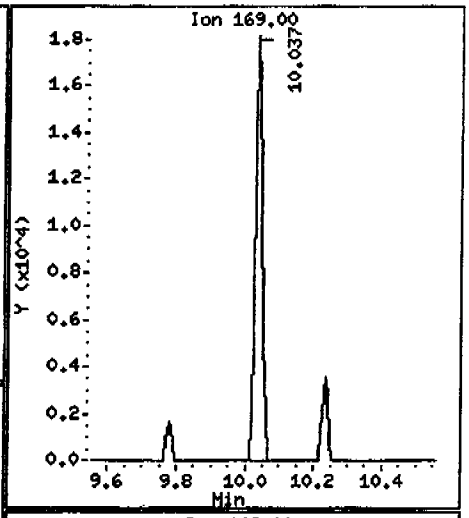
Column phase:

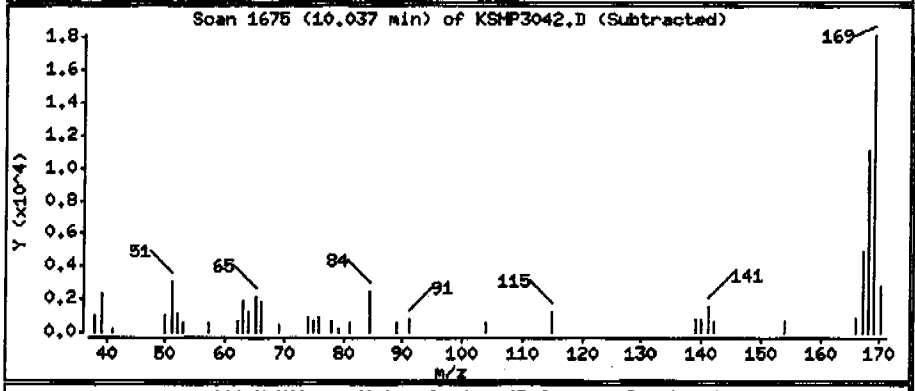
Column diameter: 2.00

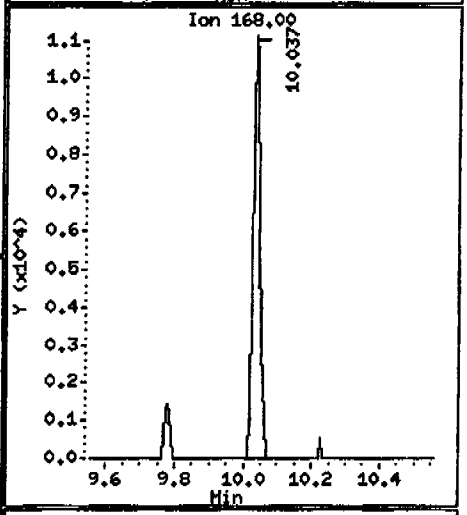
100 N-Nitrosodiphenylamine

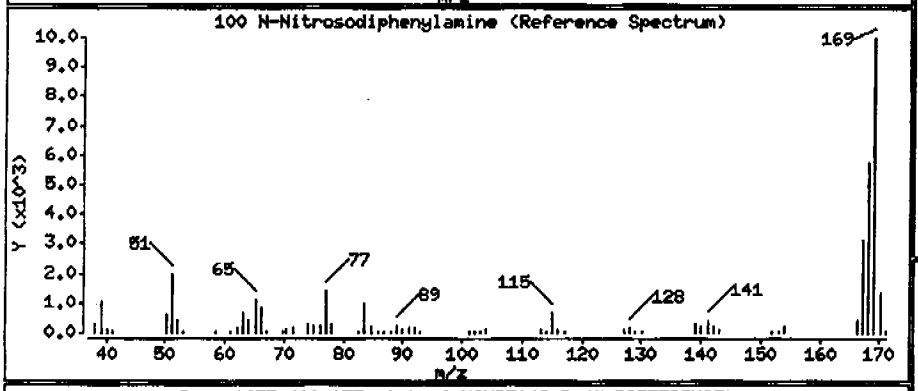
Concentration: 154.4 ug/Kg

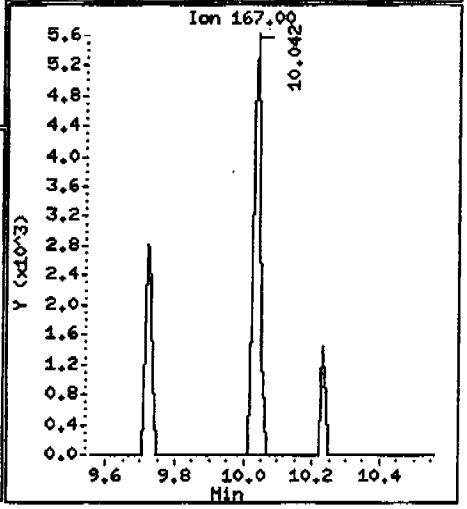


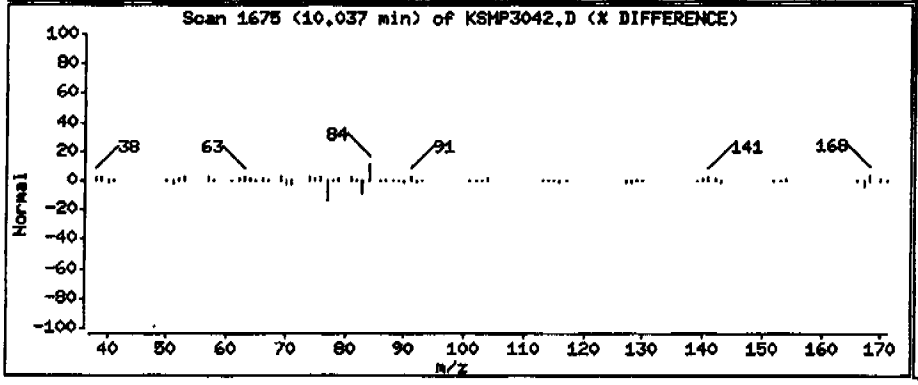












Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: G8WXJ1AD

Volume Injected (uL): 1.0

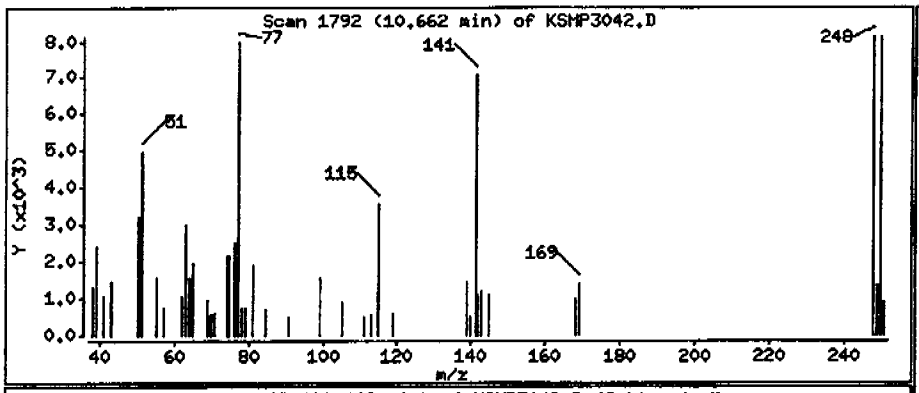
Operator: XIA

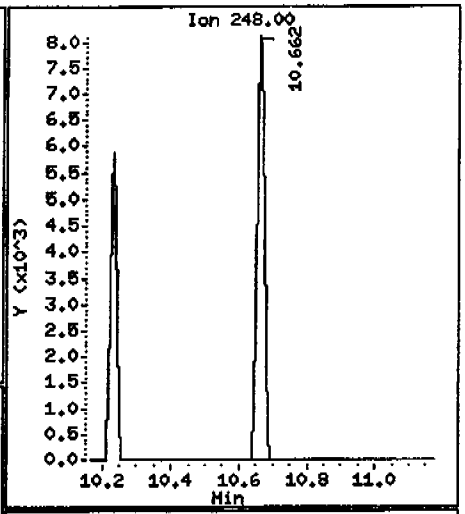
Column phase:

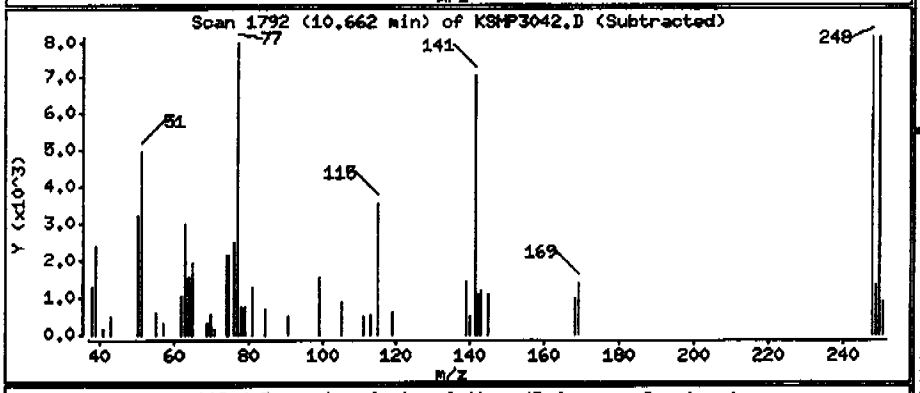
Column diameter: 2.00

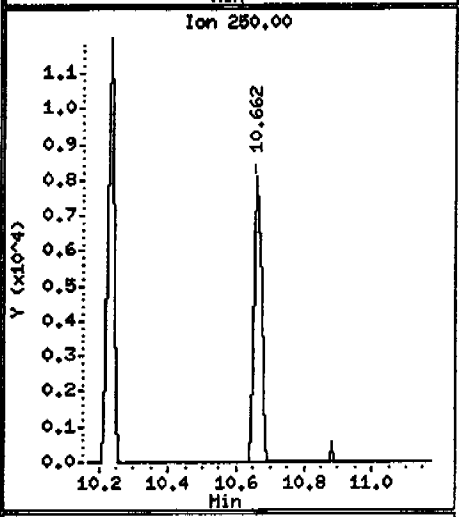
109 4-Bromophenyl-phenylether

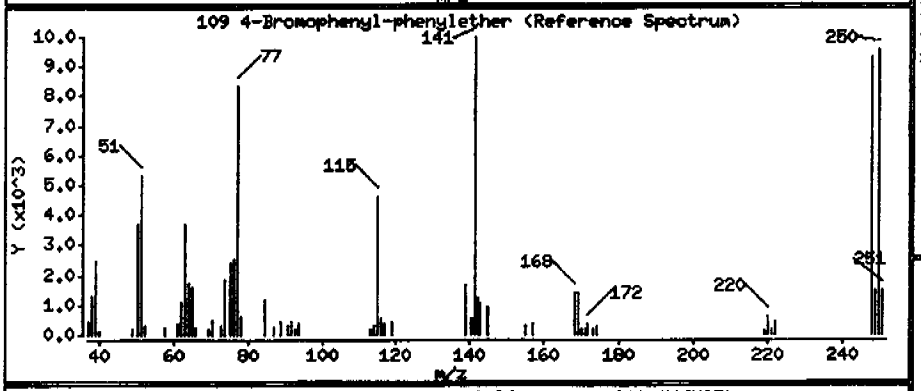
Concentration: 152.9 ug/Kg

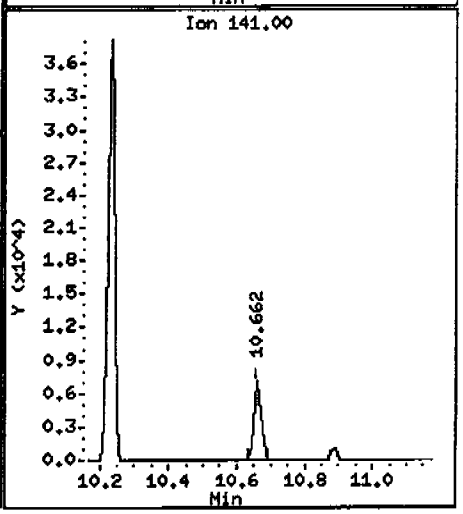


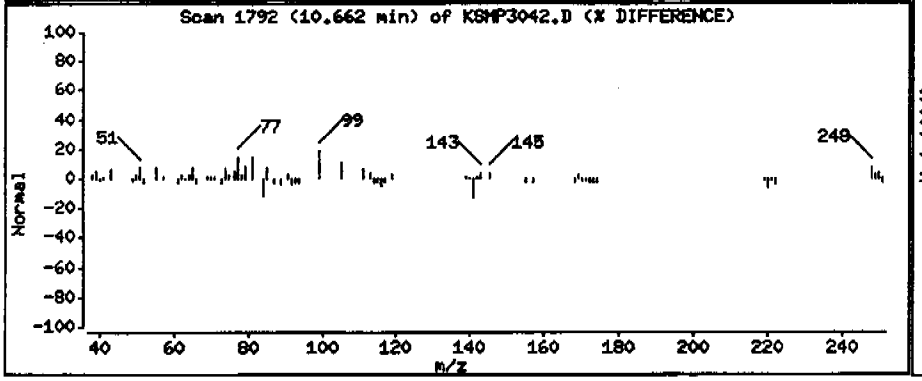












Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: G8WXJ1AD

Volume Injected (uL): 1.0

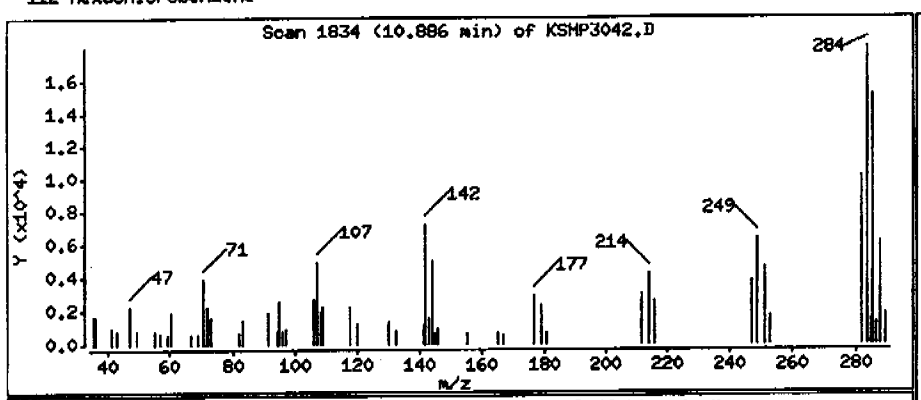
Operator: XIA

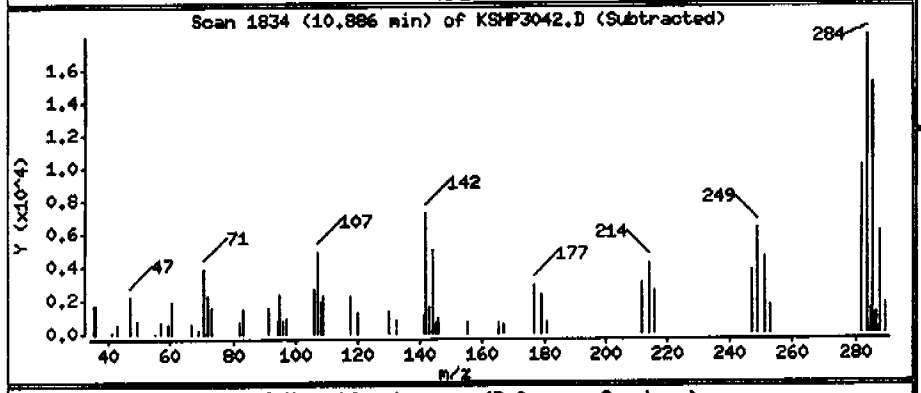
Column phase:

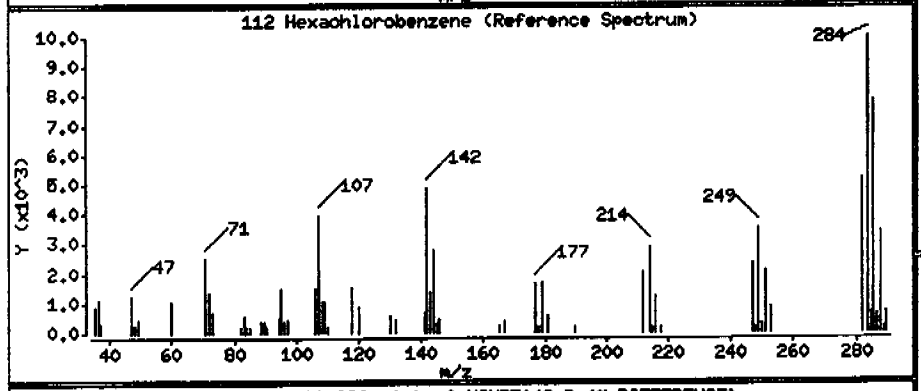
Column diameter: 2.00

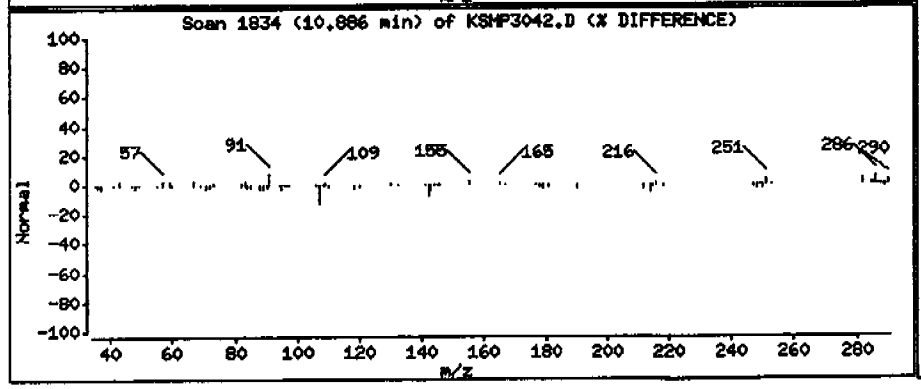
112 Hexachlorobenzene

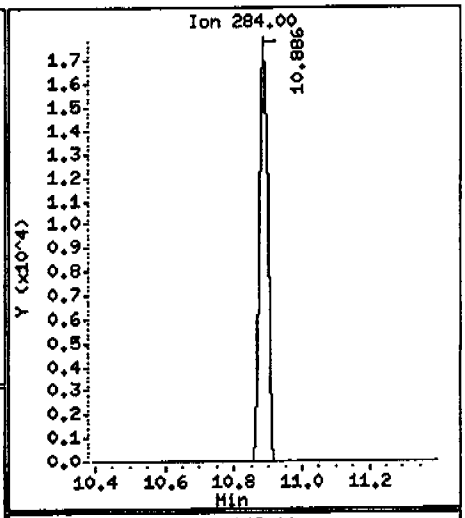
Concentration: 357.2 ug/Kg

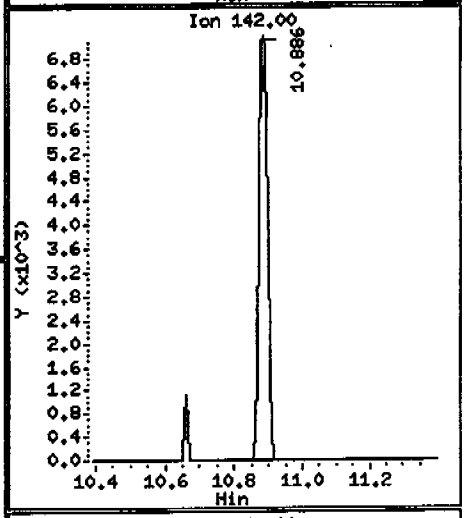


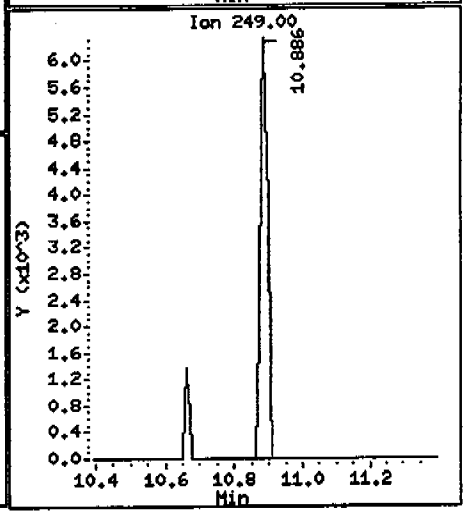












Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: G8WXJ1AD

Volume Injected (uL): 1.0

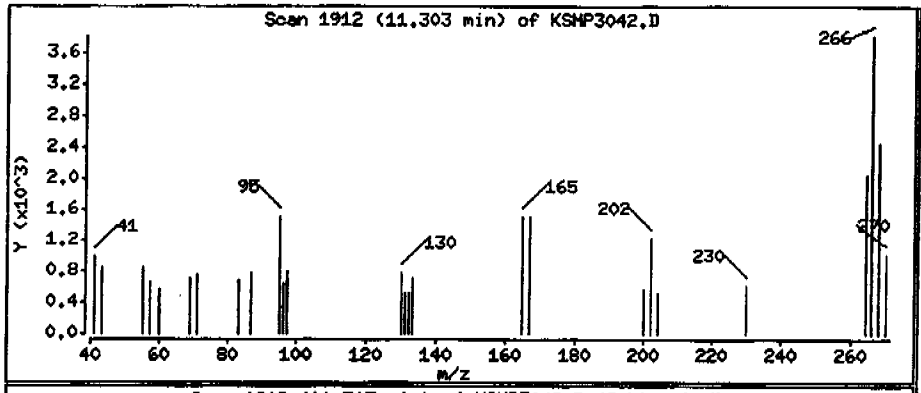
Operator: XIA

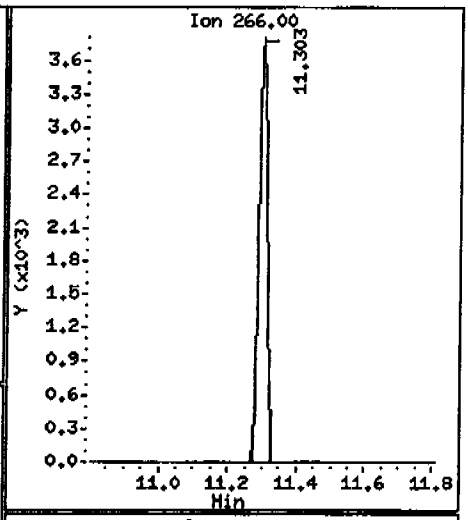
Column phase:

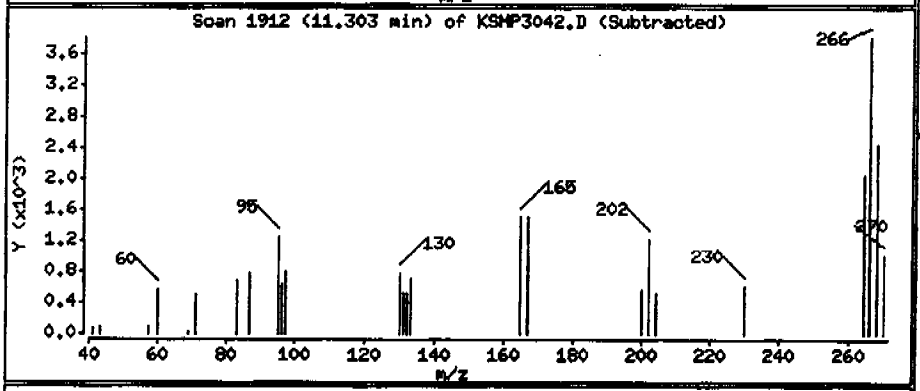
Column diameter: 2.00

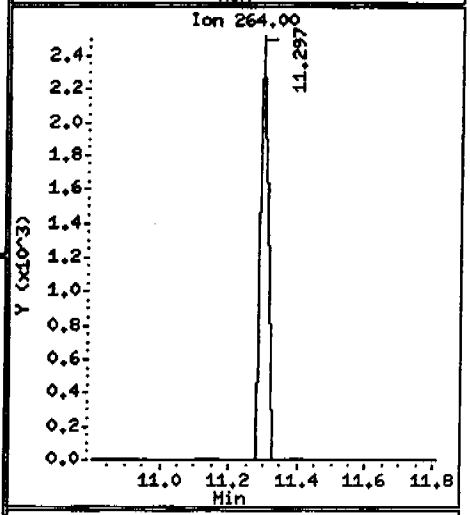
117 Pentachlorophenol

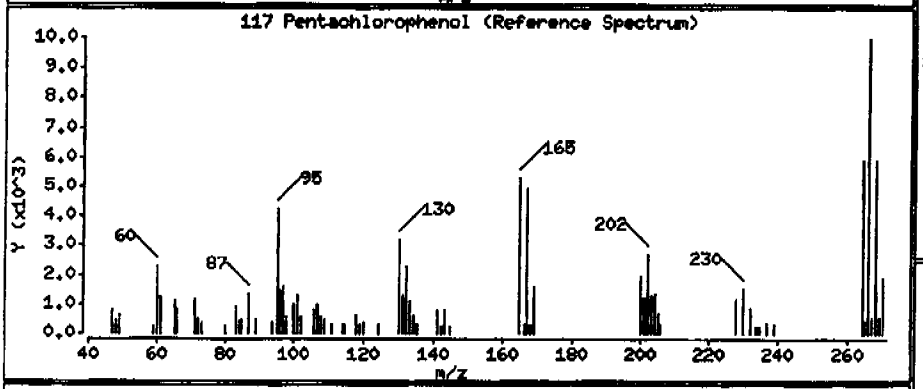
Concentration: 141.7 ug/Kg

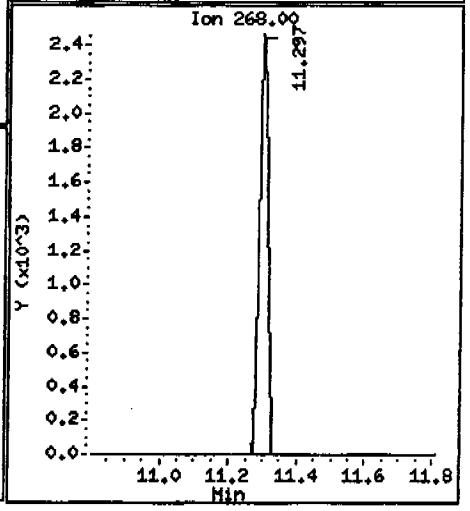


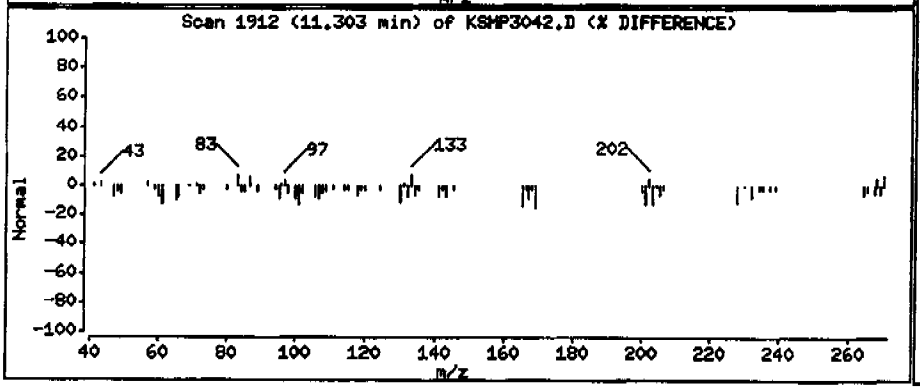












Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSHP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: G8WXJ1AD

Volume Injected (uL): 1.0

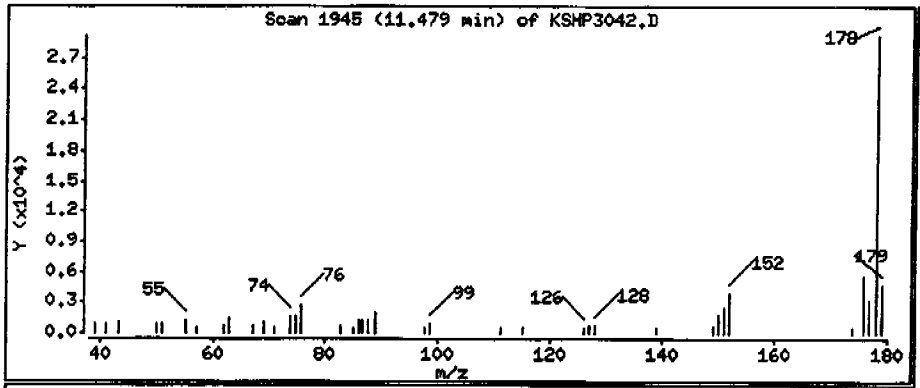
Operator: XIA

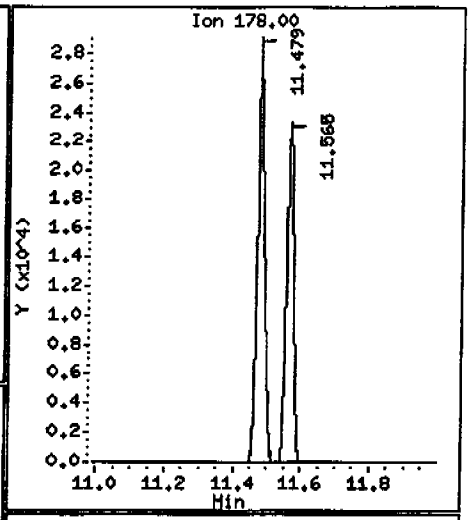
Column phase:

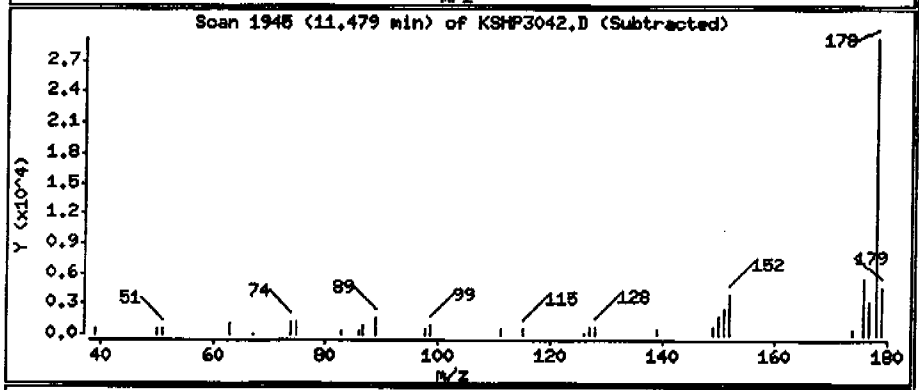
Column diameter: 2.00

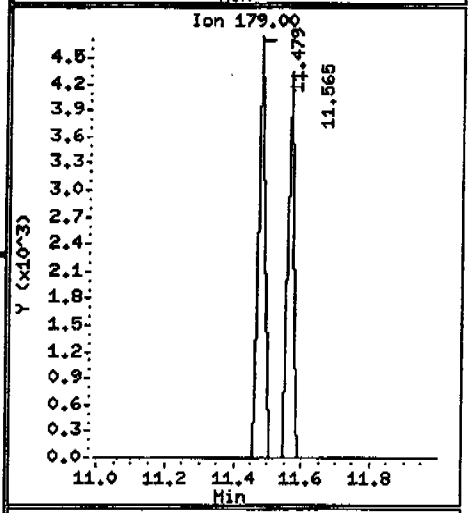
122 Phenanthrene

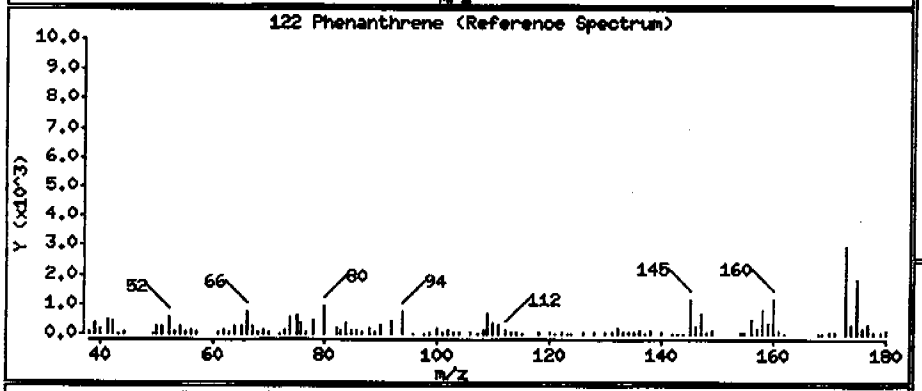
Concentration: 119.8 ug/Kg

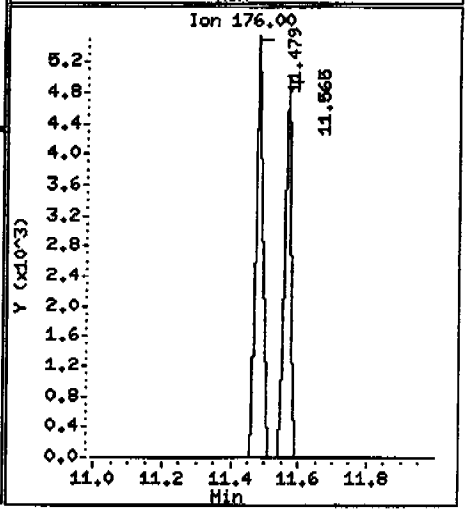


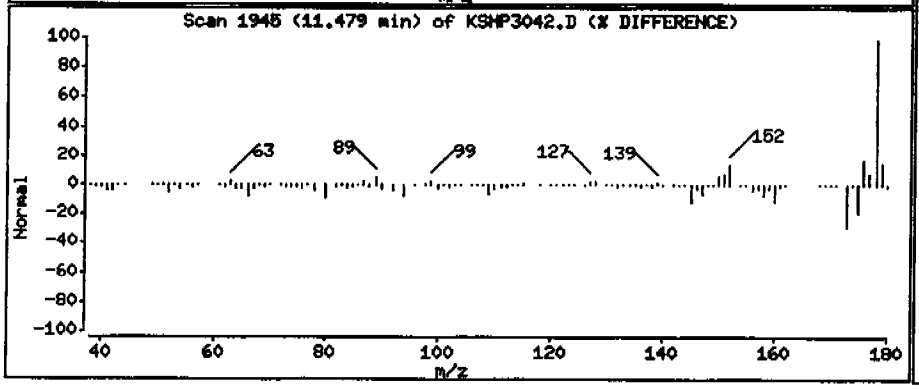












Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: G8WDXJ1AD

Volume Injected (uL): 1.0

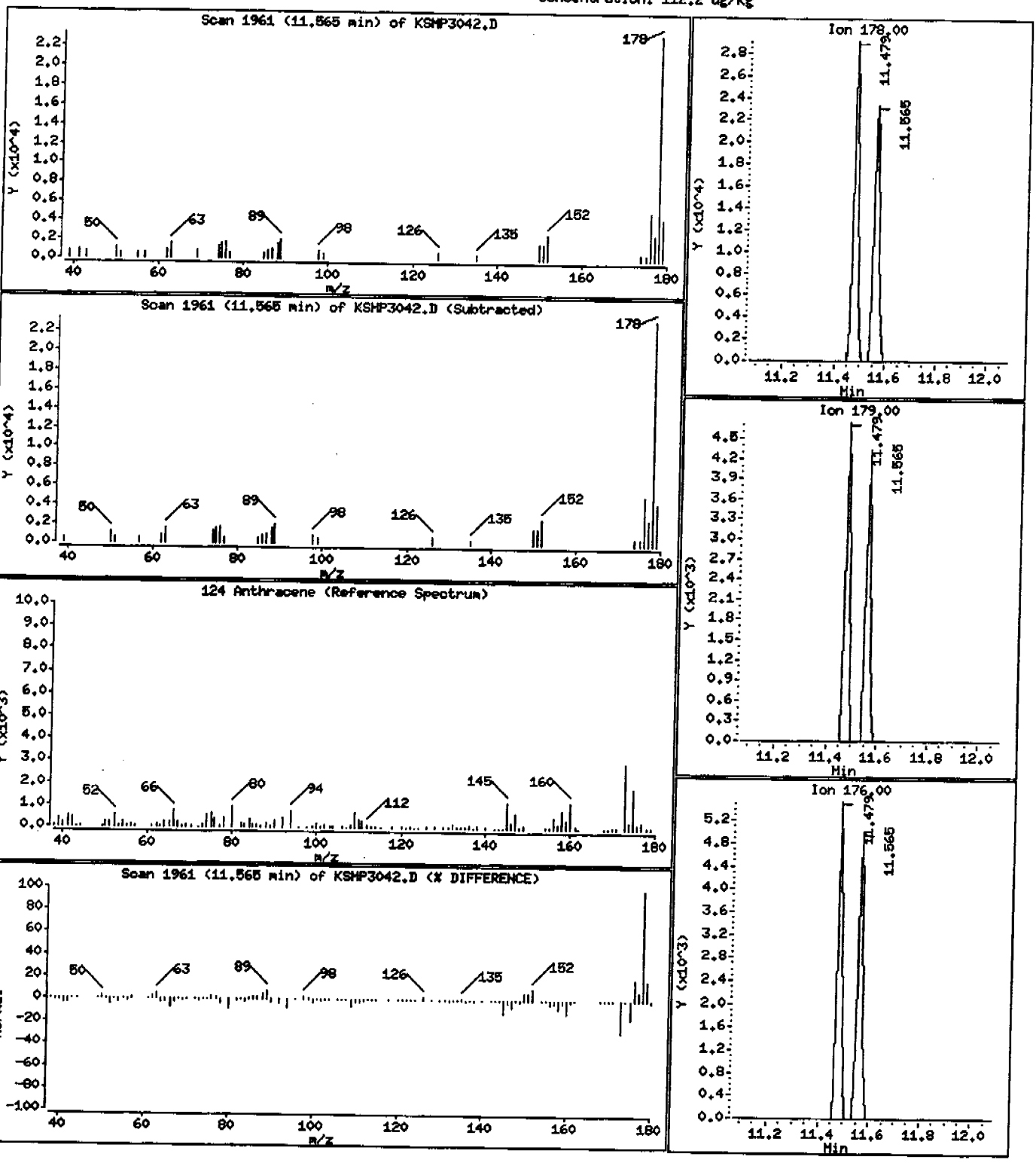
Operator: XIA

Column phase:

Column diameter: 2.00

124 Anthracene

Concentration: 112.2 ug/Kg



Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: G8WXJ1AD

Volume Injected (uL): 1.0

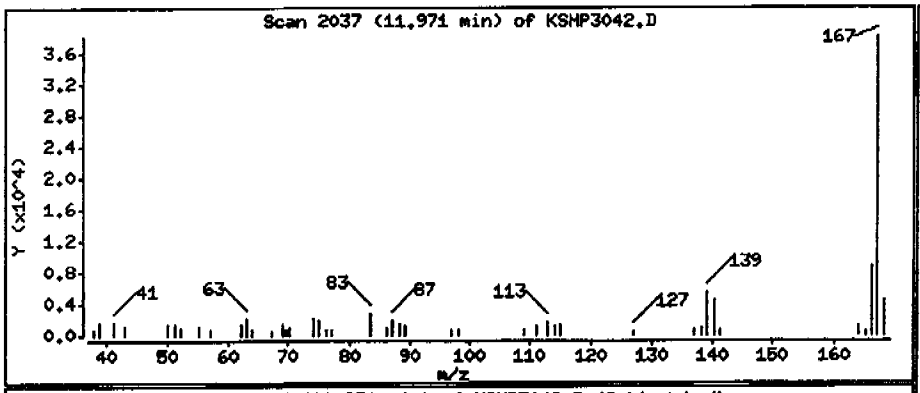
Operator: XIA

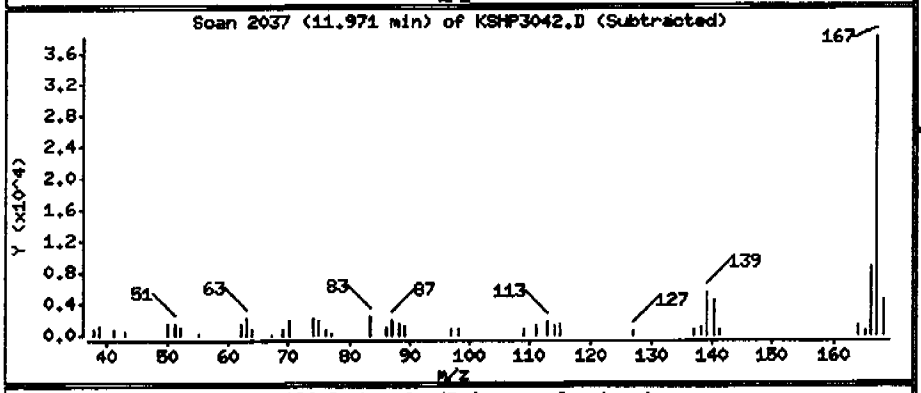
Column phase:

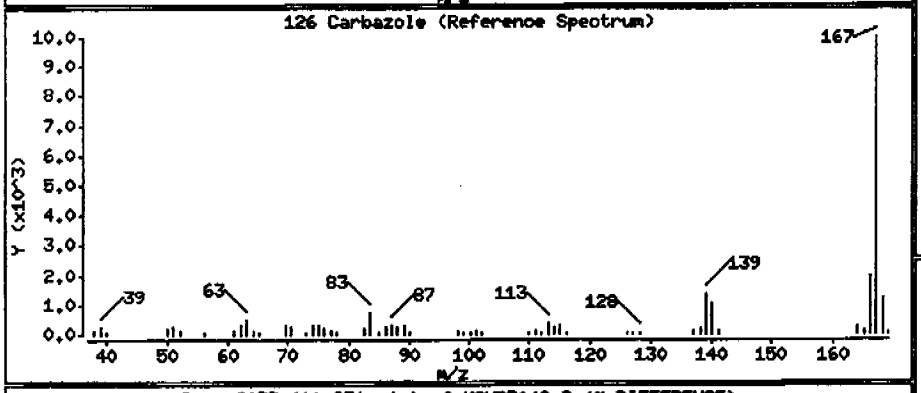
Column diameter: 2.00

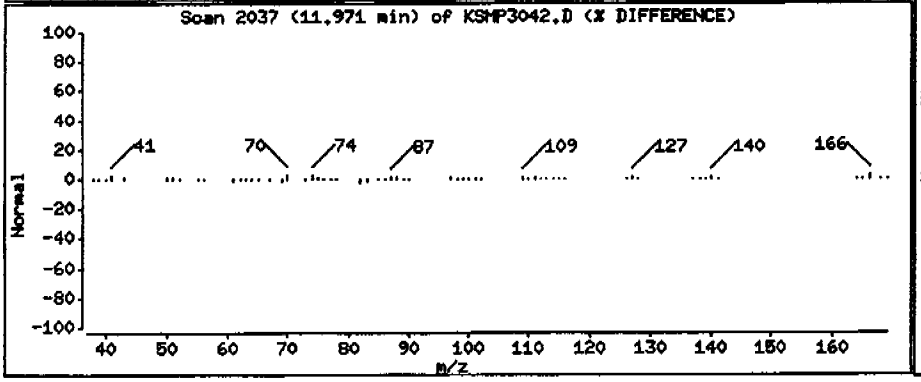
126 Carbazole

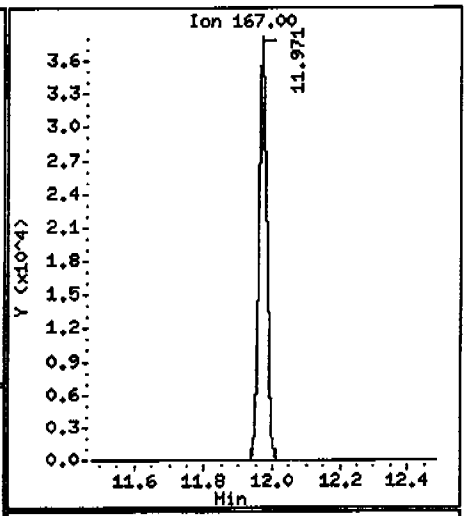
Concentration: 209.5 ug/Kg

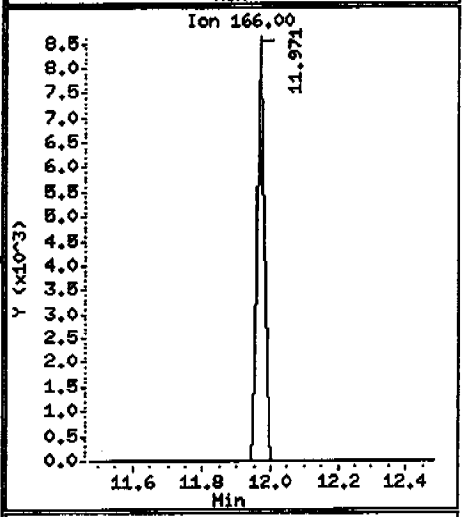


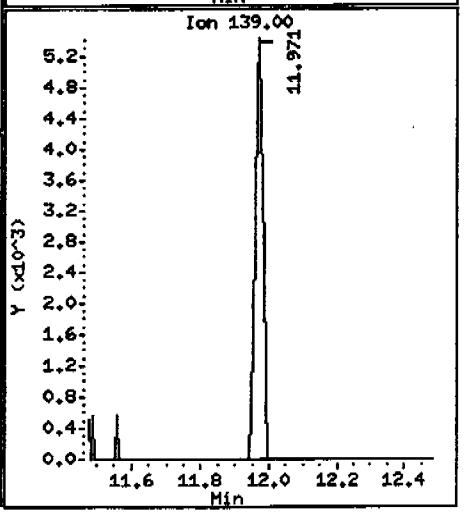












Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: G8WXJ1AD

Volume Injected (uL): 1.0

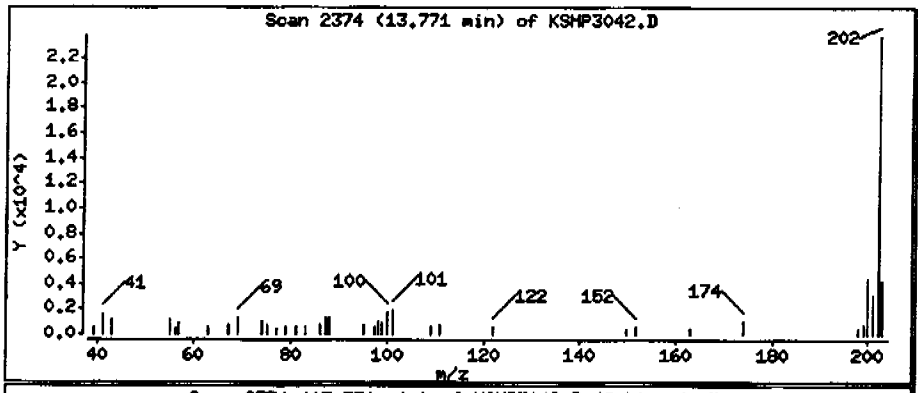
Operator: XIA

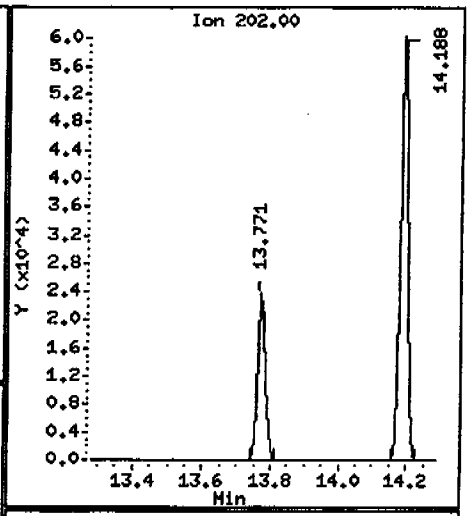
Column phase:

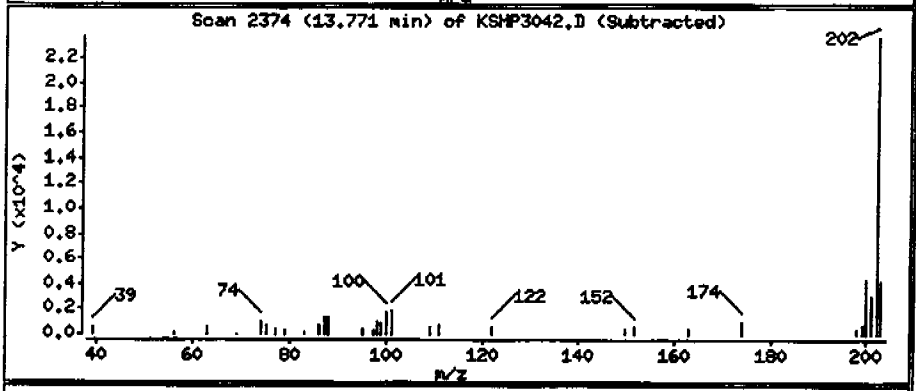
Column diameter: 2.00

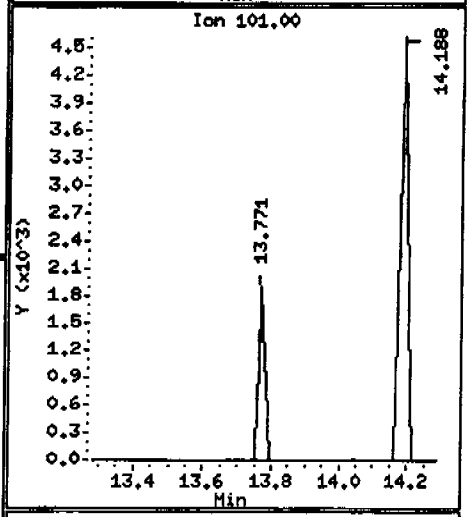
134 Fluoranthene

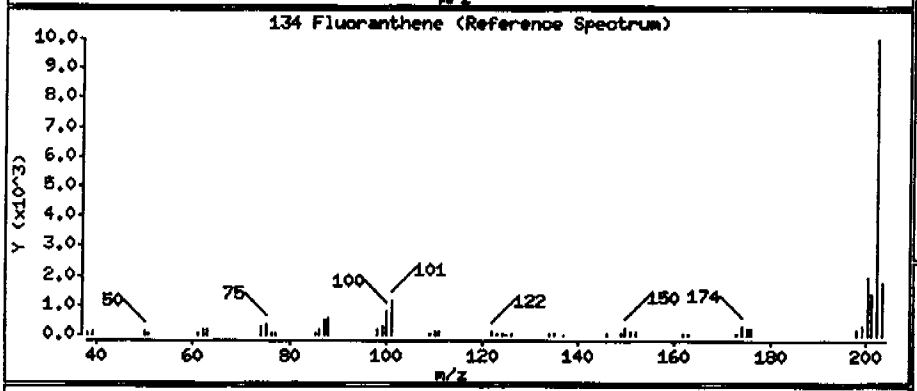
Concentration: 113.0 ug/Kg

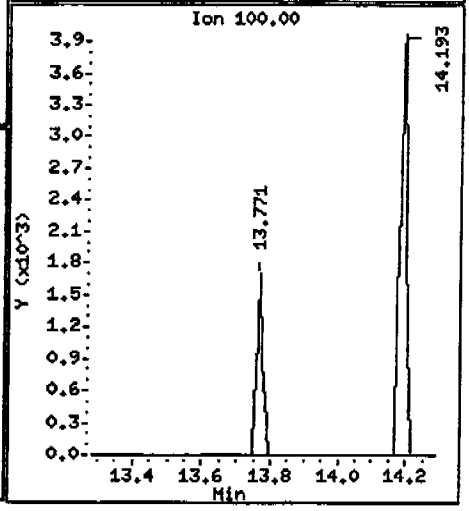


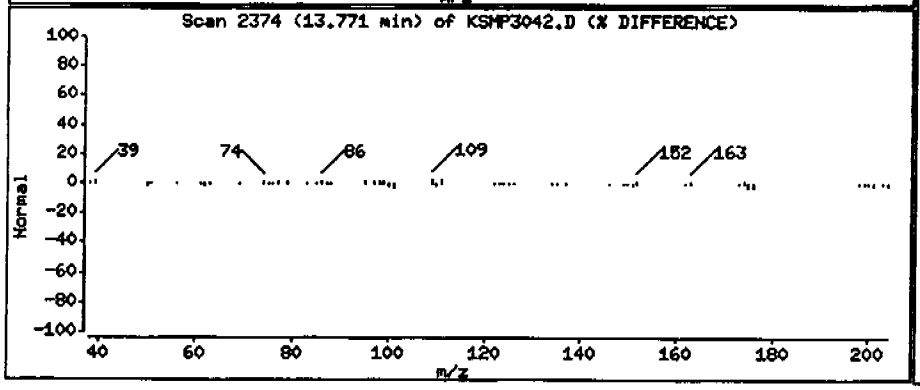












Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: G8WXJ1AD

Volume Injected (uL): 1.0

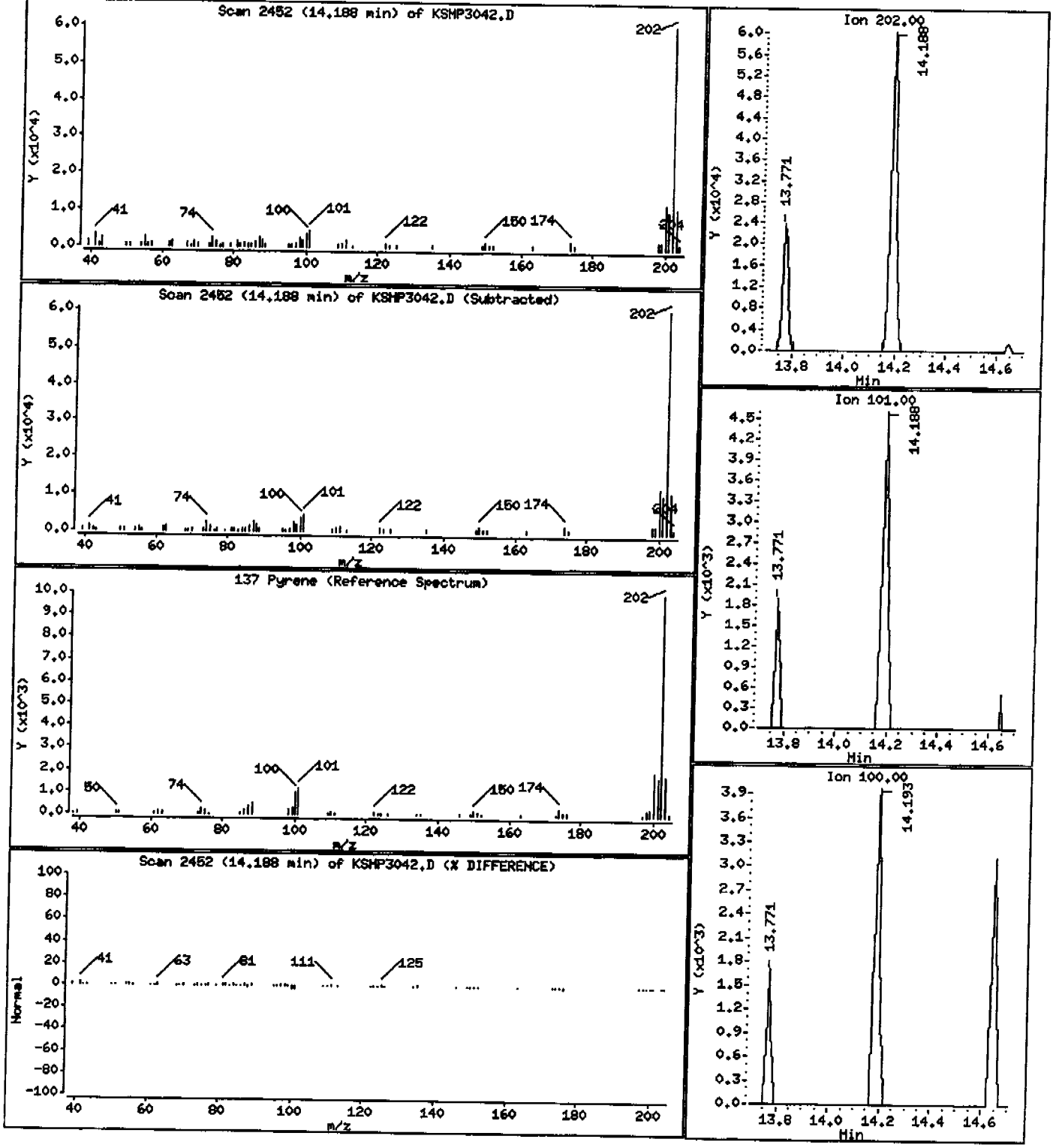
Operator: XIA

Column phase:

Column diameter: 2.00

137 Pyrene

Concentration: 374.1 ug/Kg



Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: C8WXJ1AD

Volume Injected (uL): 1.0

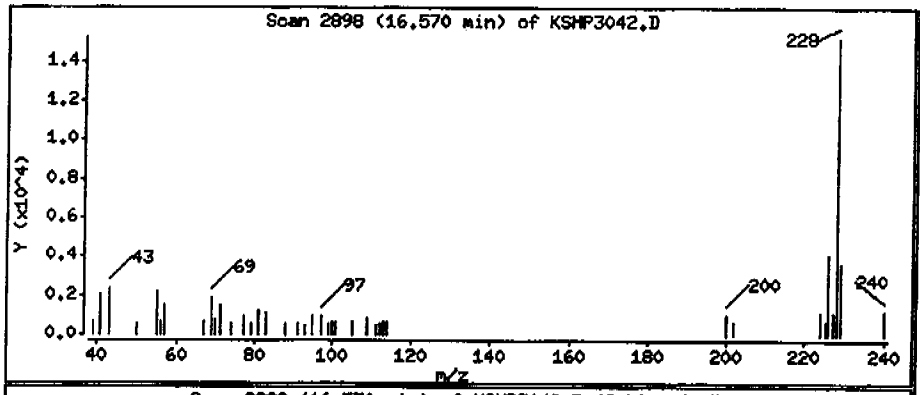
Operator: XIA

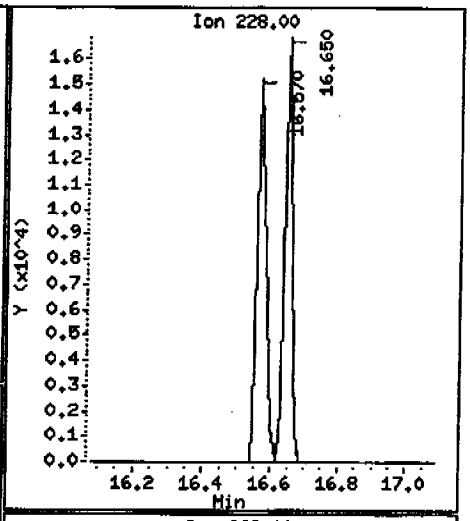
Column phase:

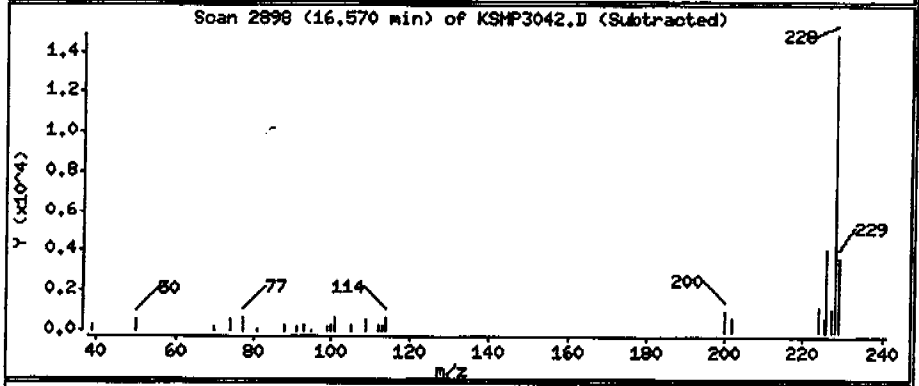
Column diameter: 2.00

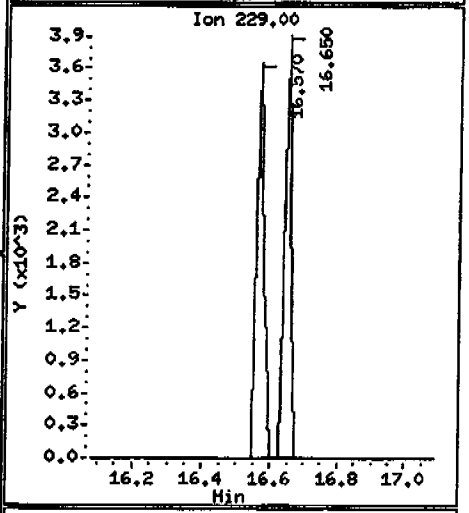
150 Benzo(a)Anthracene

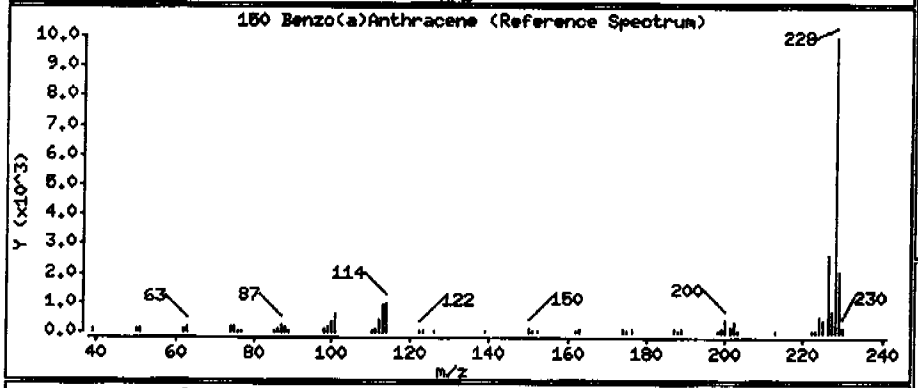
Concentration: 120.6 ug/Kg

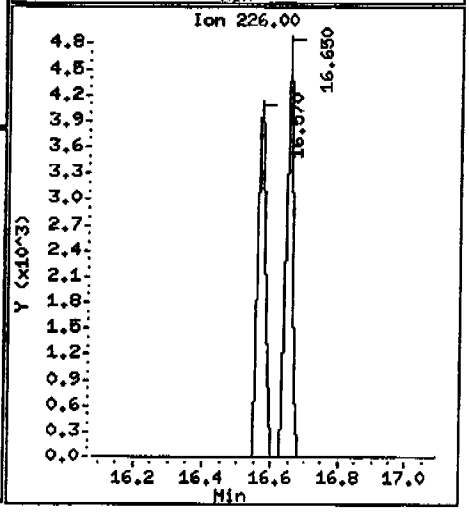


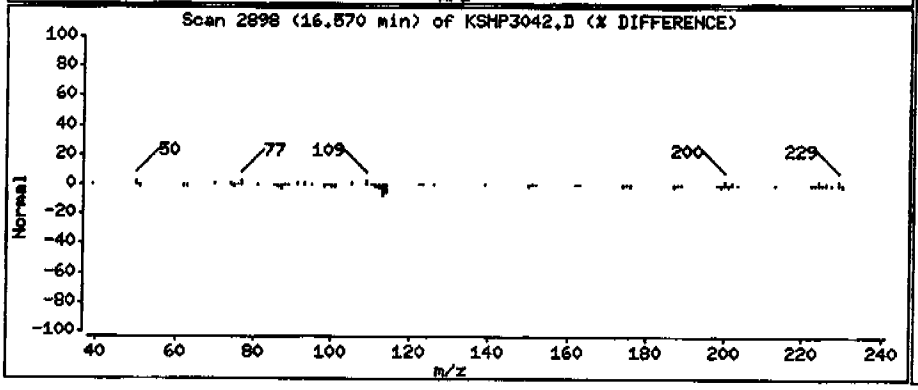












Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: C8WXJ1AD

Volume Injected (uL): 1.0

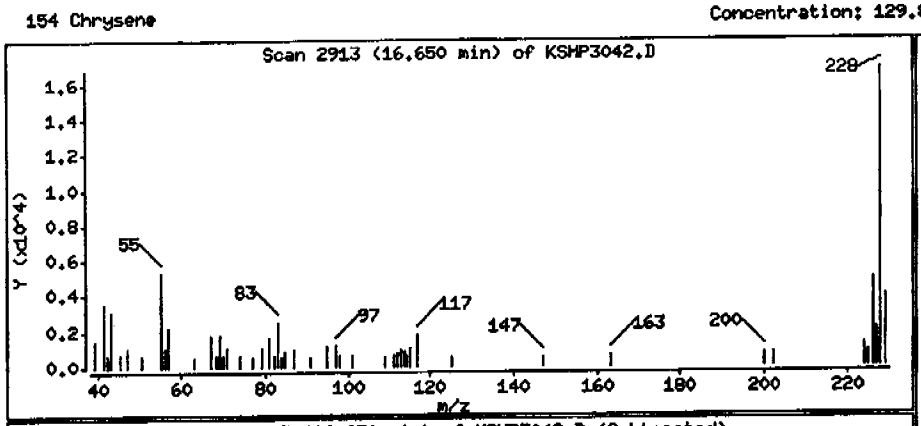
Operator: XIA

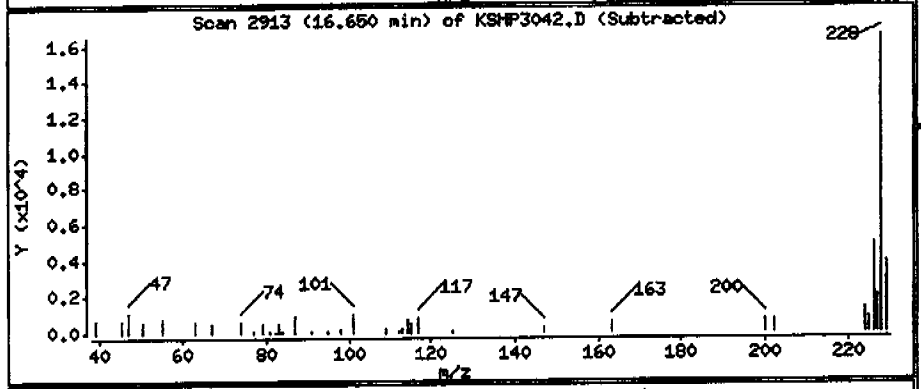
Column phase:

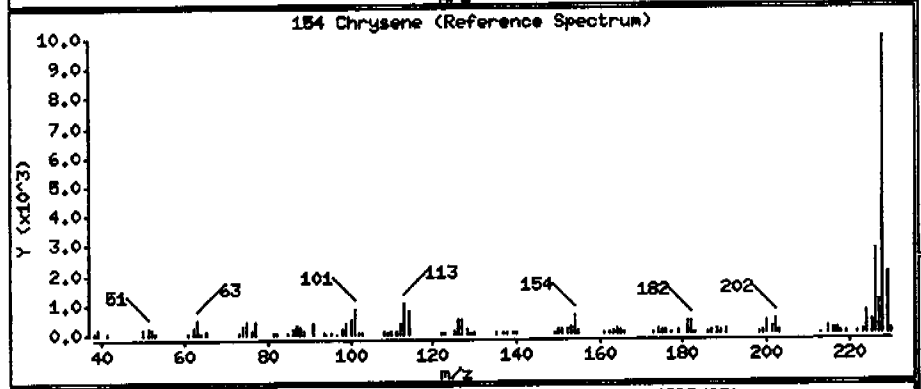
Column diameter: 2.00

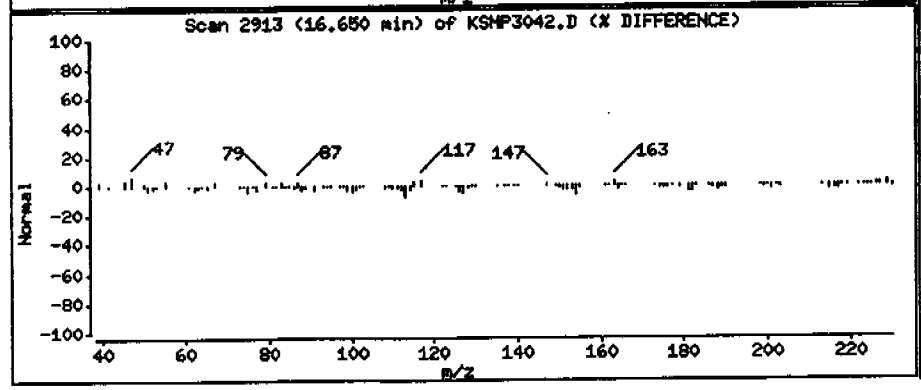
154 Chrysene

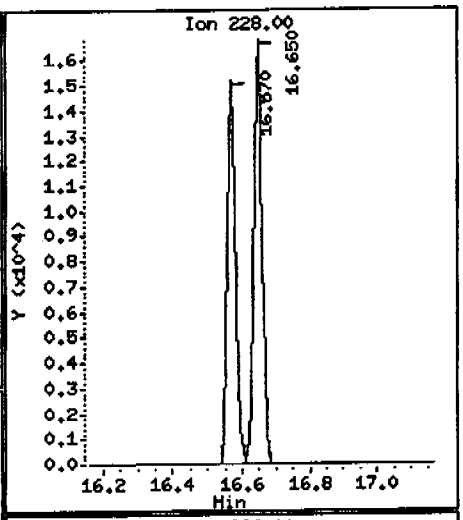
Concentration: 129.8 ug/Kg

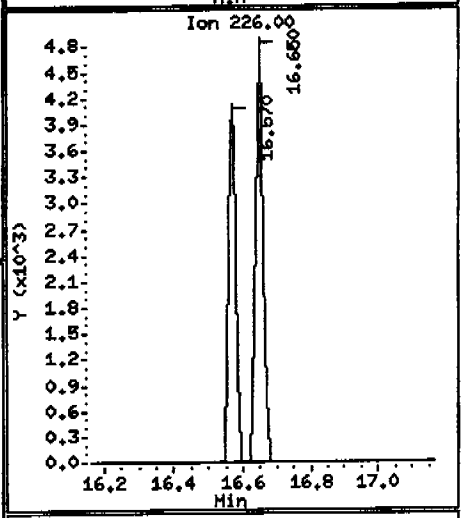


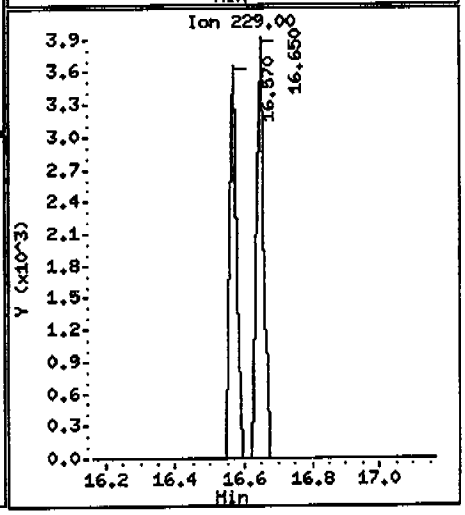












Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: C8WXJ1AD

Volume Injected (uL): 1.0

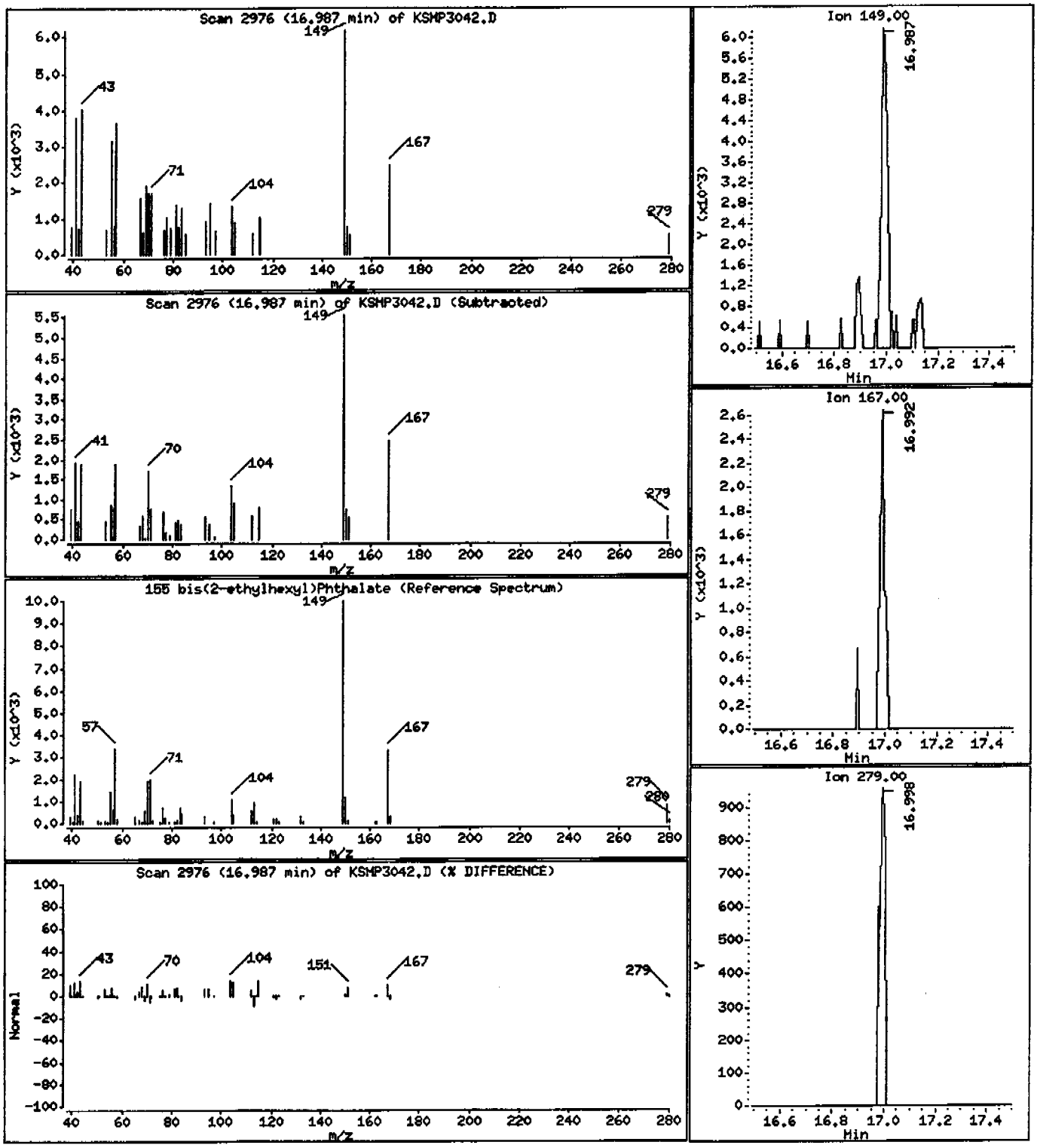
Operator: XIA

Column phase:

Column diameter: 2.00

155 bis(2-ethylhexyl)Phthalate

Concentration: 70.36 ug/Kg



Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: G8WXJ1AD

Volume Injected (uL): 1.0

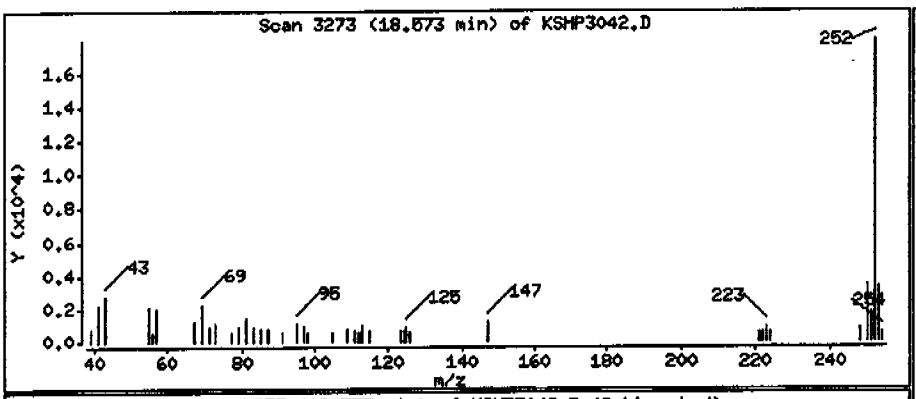
Operator: XIA

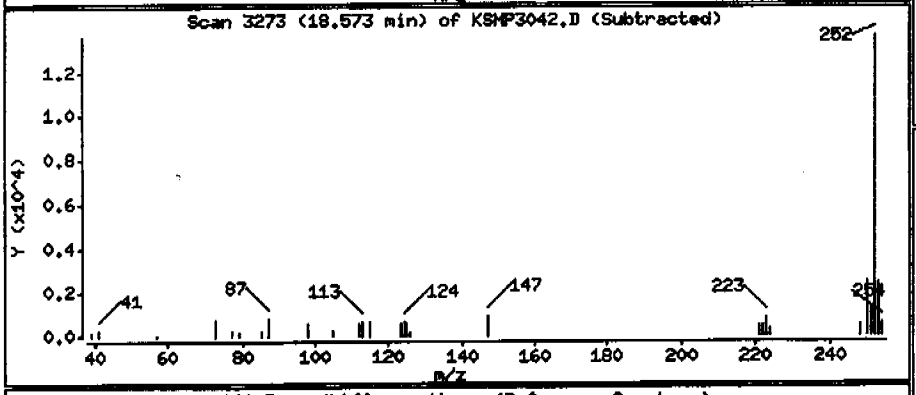
Column phase:

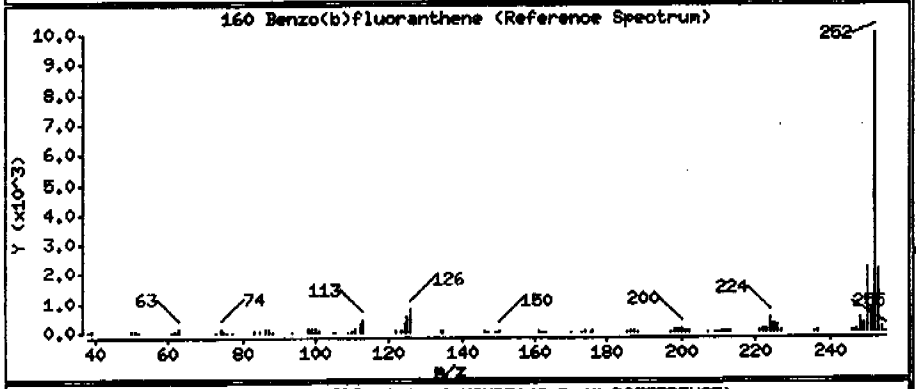
Column diameter: 2.00

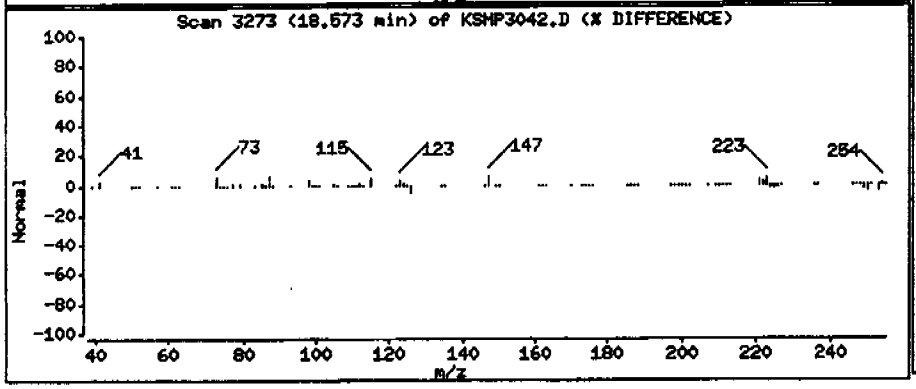
160 Benzo(b)fluoranthene

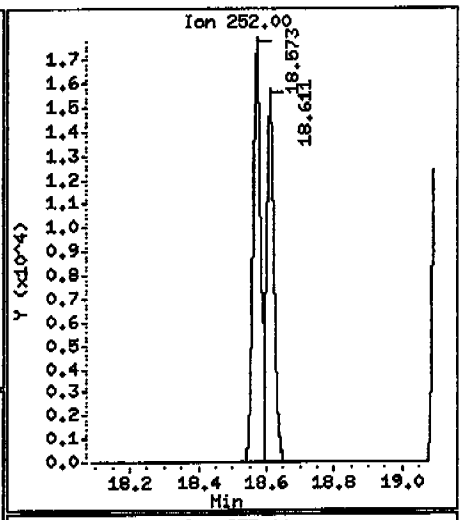
Concentration: 141.8 ug/Kg

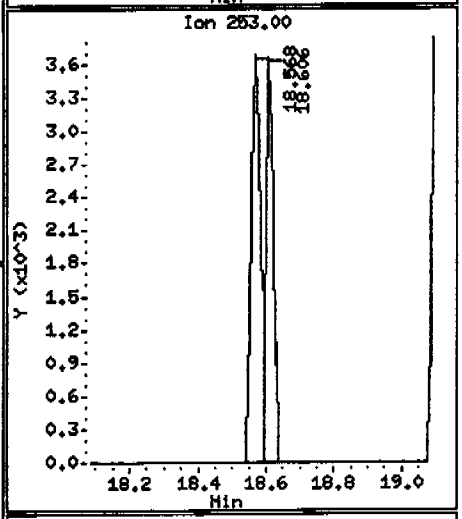


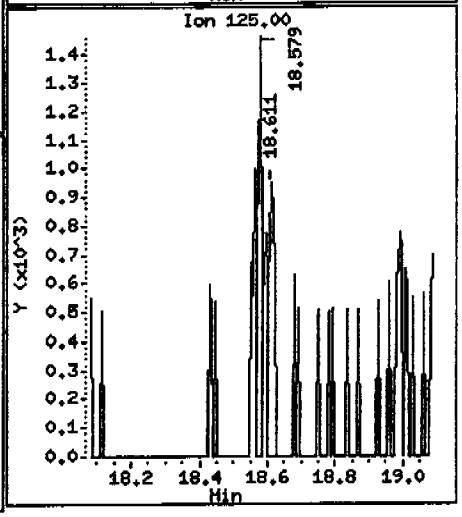












Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: G8WXJ1AD

Volume Injected (uL): 1.0

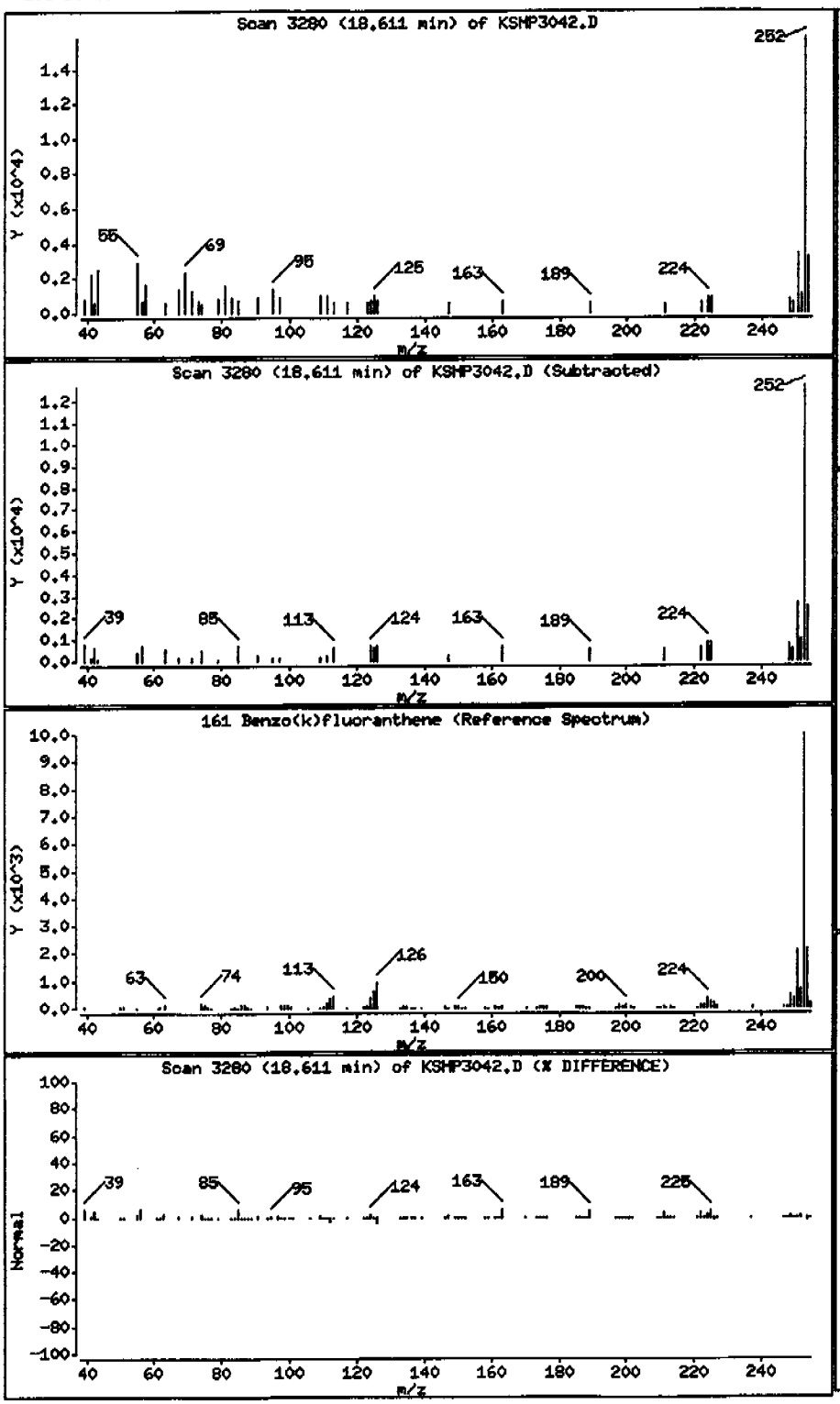
Operator: XIA

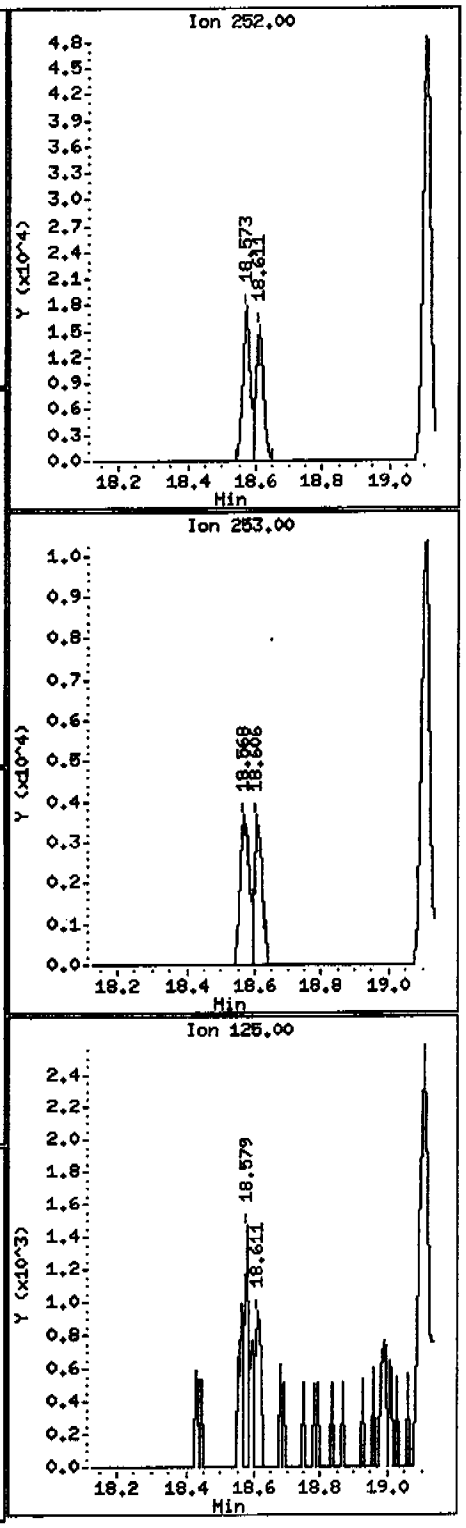
Column phase:

Column diameter: 2.00

161 Benzo(k)fluoranthene

Concentration: 122.1 ug/Kg





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Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: G8WXJ1AD

Volume Injected (uL): 1.0

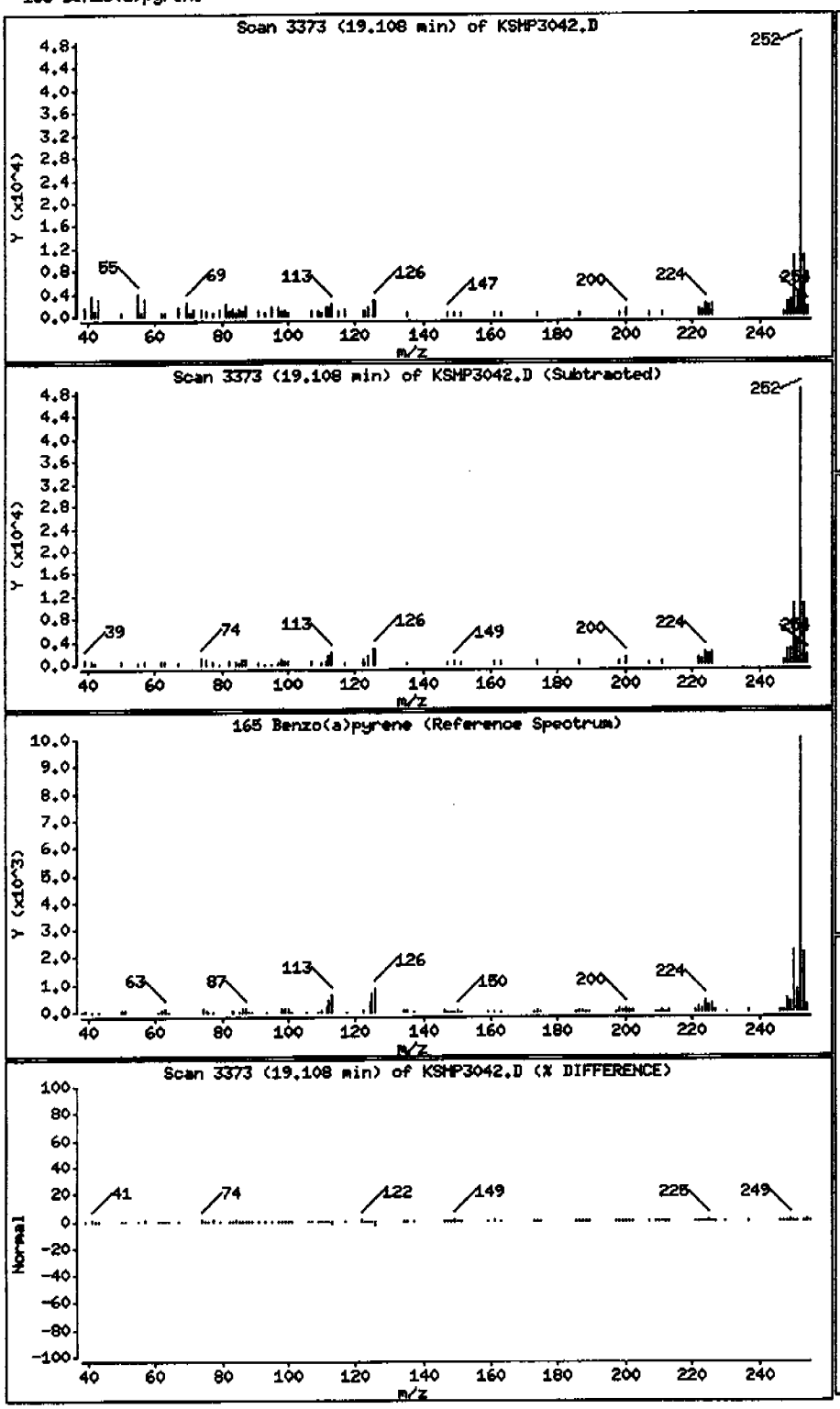
Operator: XIA

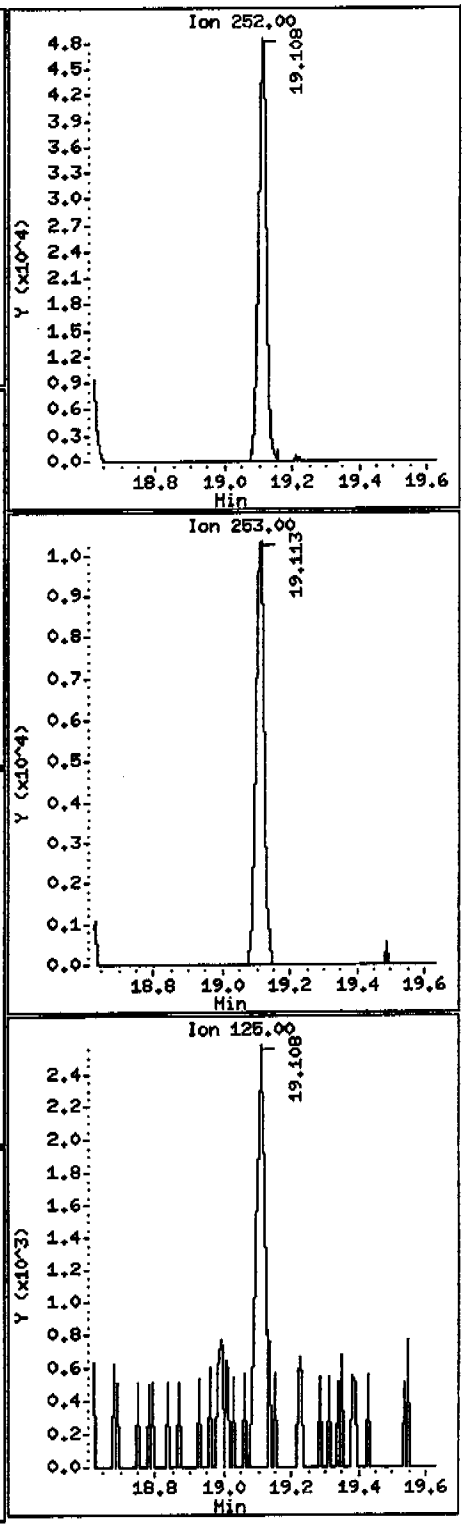
Column phase:

Column diameter: 2.00

165 Benzo(a)pyrene

Concentration: 434.7 ug/Kg





Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: C8WXJ1AD

Volume Injected (uL): 1.0

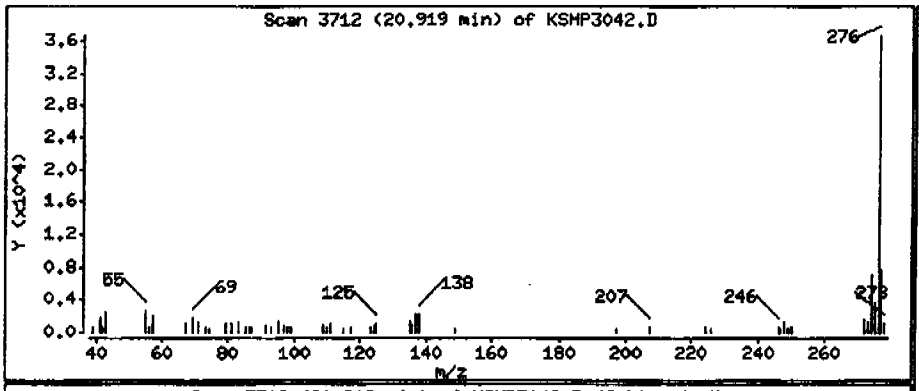
Operator: XIA

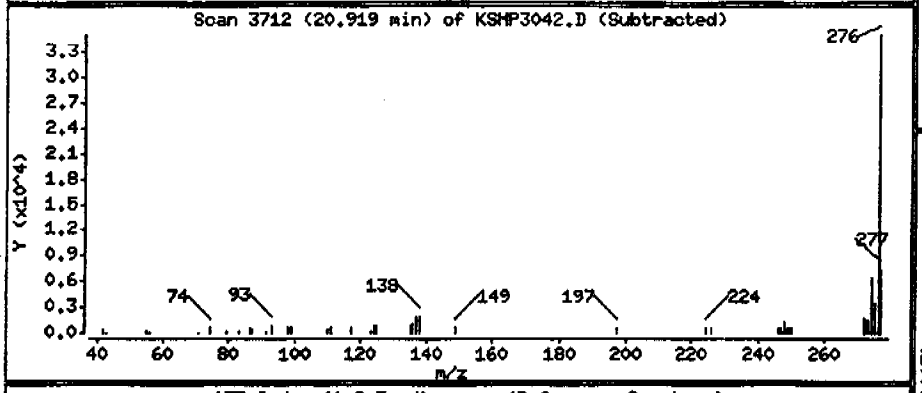
Column phase:

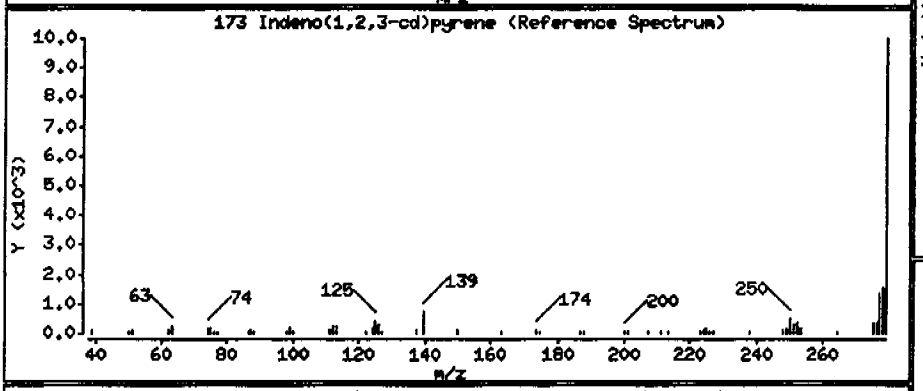
Column diameter: 2.00

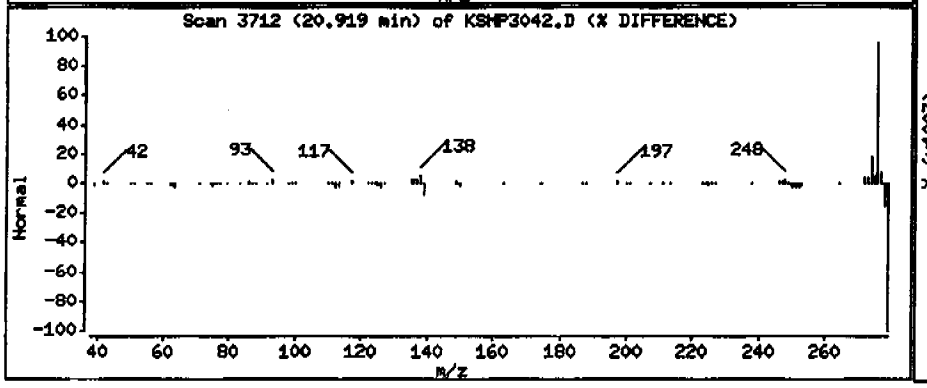
173 Indeno(1,2,3-cd)pyrene

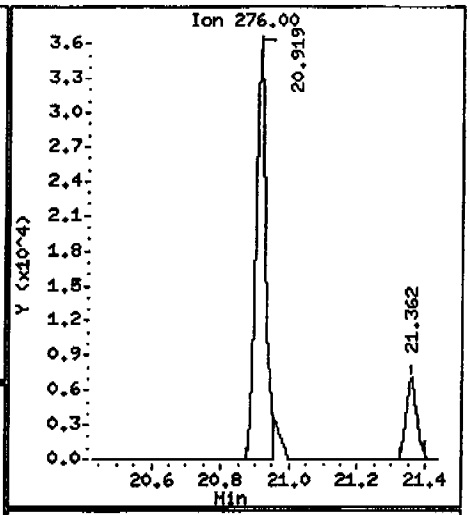
Concentration: 427.0 ug/Kg

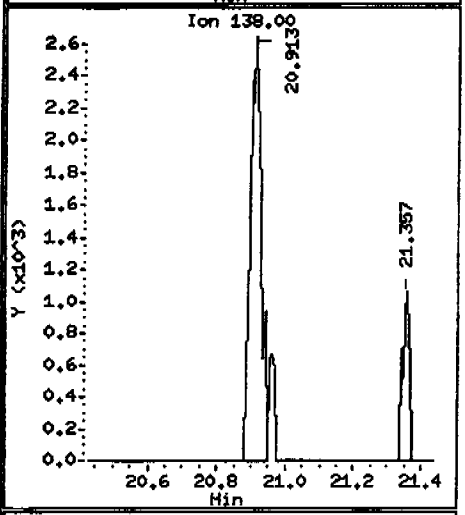


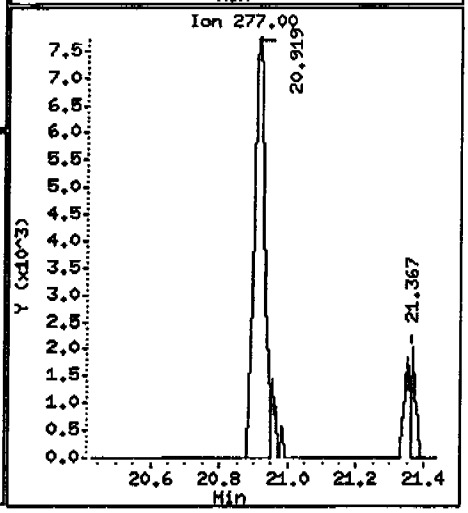












Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: C8WXJ1AD

Volume Injected (uL): 1.0

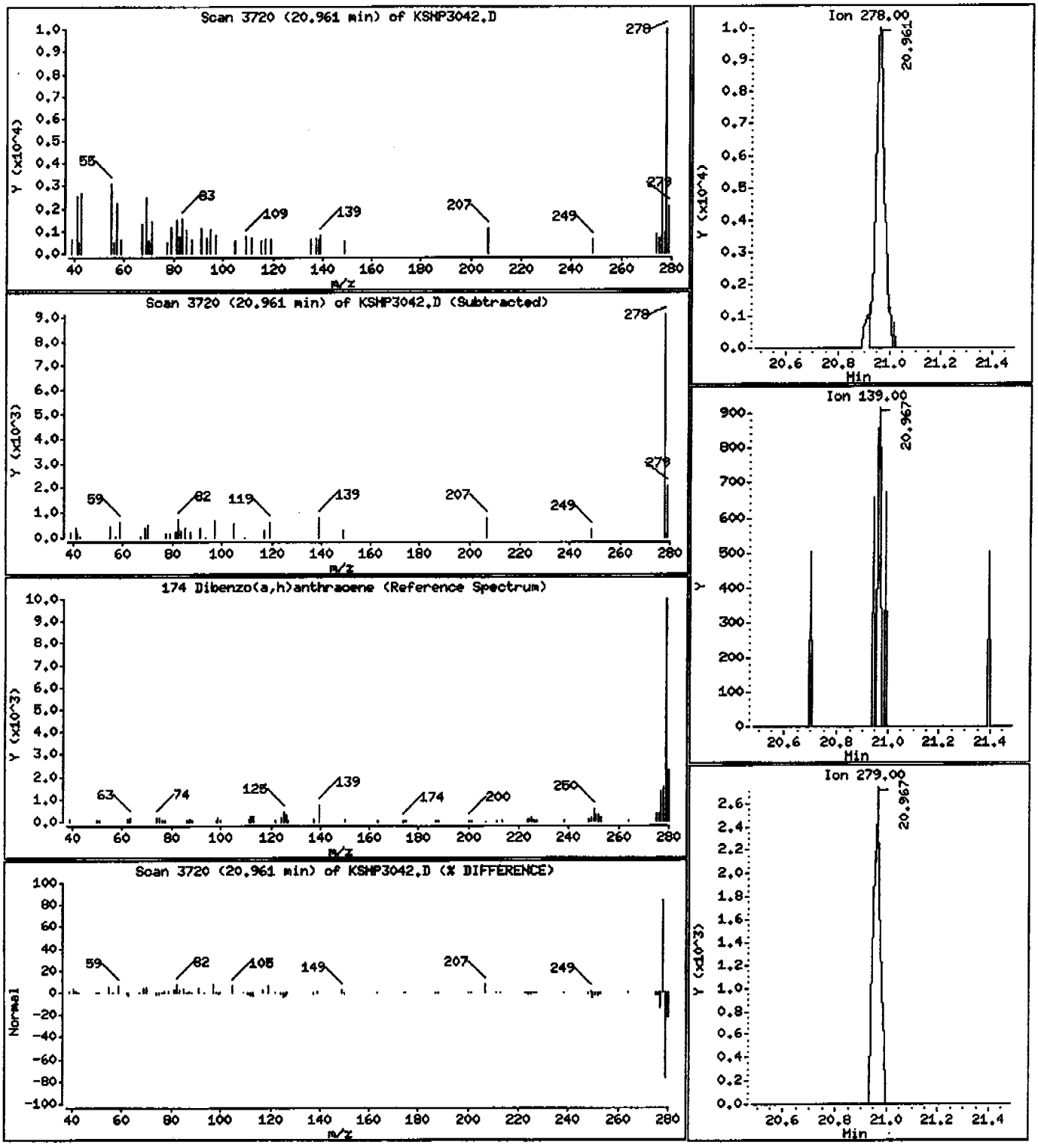
Operator: XIA

Column phase:

Column diameter: 2.00

174 Dibenzo(a,h)anthracene

Concentration: 137.1 ug/Kg



Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3042.D

Date : 10-MAY-2005 17:46

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: GBWXJ1AD

Volume Injected (uL): 1.0

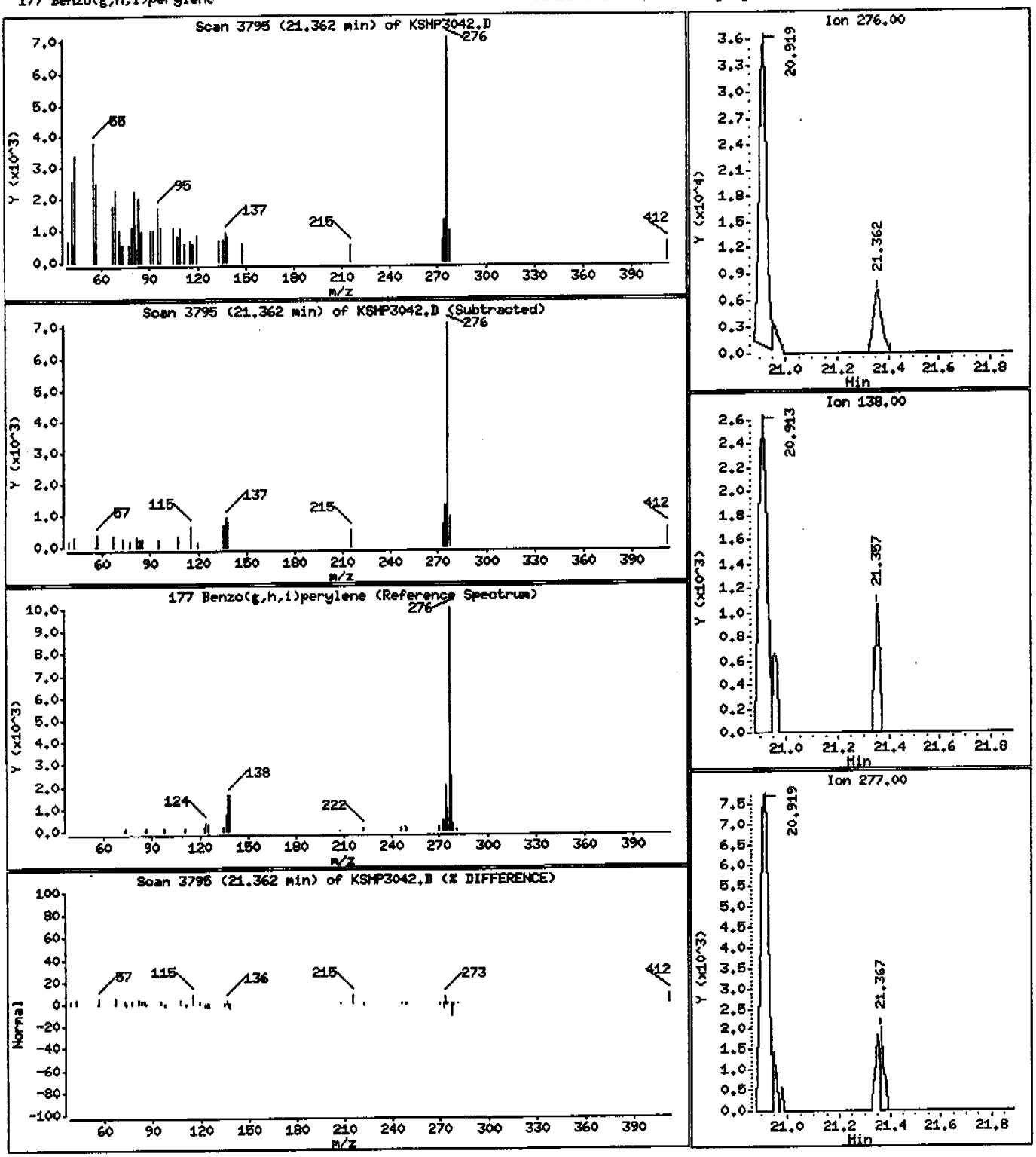
Operator: XIA

Column phase:

Column diameter: 2.00

177 Benzo(g,h,i)perylene

Concentration: 105.5 ug/Kg



STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KSMP3112.D
Lab Smp Id: G8WXJ2AD Client Smp ID: RE73-05-58829
Inj Date : 12-MAY-2005 22:14
Operator : XIA Inst ID: MSK.i
Smp Info : G8WXJ2AD
Misc Info : F5D210380-001RE (5131374) SON GPC
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m
Meth Date : 12-May-2005 16:05 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 12:01 Cal File: KCAL2994.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SONMS04.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Uf*Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Factor
Vt	2000.000	Volume of final extract (uL)
Vi	1.000	Volume Injected
Ws	30.134	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
$	10 2-Fluorophenol	112	3.242	3.254	(0.716)	330241	58.3845	3875
$	15 Phenol-d5	99	4.332	4.333	(0.956)	469429	59.2951	3935
*	22 1,4-Dichlorobenzene-d4	152	4.529	4.536	(1.000)	187242	40.0000	
$	36 Nitrobenzene-d5	82	5.250	5.263	(0.860)	414804	45.1315	2995
*	48 Naphthalene-d8	136	6.105	6.117	(1.000)	669547	40.0000	
$	69 2-Fluorobiphenyl	172	7.713	7.725	(0.878)	609688	44.3491	2943
*	82 Acenaphthene-d10	164	8.782	8.799	(1.000)	341418	40.0000	
$	104 2,4,6-Tribromophenol	330	10.240	10.252	(1.166)	107689	56.4235	3745
*	121 Phenanthrene-d10	188	11.442	11.460	(1.000)	503303	40.0000	
	129 Di-n-Butylphthalate	149	12.863	12.881	(1.124)	101407	6.02771	400.1
$	139 Terphenyl-d14	244	14.642	14.659	(0.882)	361986	44.4732	2952
*	153 Chrysene-d12	240	16.603	16.625	(1.000)	257673	40.0000	
*	166 Perylene-d12	264	19.215	19.232	(1.000)	226147	40.0000	
	177 Benzo(g,h,i)perylene	276	21.362	21.401	(1.112)	33293	5.07594	336.9(M)

05/13/05

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KSMP3112.D
Report Date: 13-May-2005 10:15

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSK.i
Lab File ID: KSMP3112.D
Lab Smp Id: G8WXJ2AD
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m
Misc Info: F5D210380-001RE (5131374) SON GPC

Calibration Date: 12-MAY-2005
Calibration Time: 12:41
Client Smp ID: RE73-05-58829
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
22 1,4-Dichlorobenze	167849	83925	335698	187242	11.55	
48 Naphthalene-d8	587608	293804	1175216	669547	13.94	
82 Acenaphthene-d10	335274	167637	670548	341418	1.83	
121 Phenanthrene-d10	627534	313767	1255068	503303	-19.80	
153 Chrysene-d12	548402	274201	1096804	257673	-53.01	<
166 Perylene-d12	477098	238549	954196	226147	-52.60	<

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.54	4.04	5.04	4.53	-0.15
48 Naphthalene-d8	6.12	5.62	6.62	6.11	-0.20
82 Acenaphthene-d10	8.80	8.30	9.30	8.78	-0.20
121 Phenanthrene-d10	11.46	10.96	11.96	11.44	-0.15
153 Chrysene-d12	16.63	16.13	17.13	16.60	-0.14
166 Perylene-d12	19.23	18.73	19.73	19.22	-0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

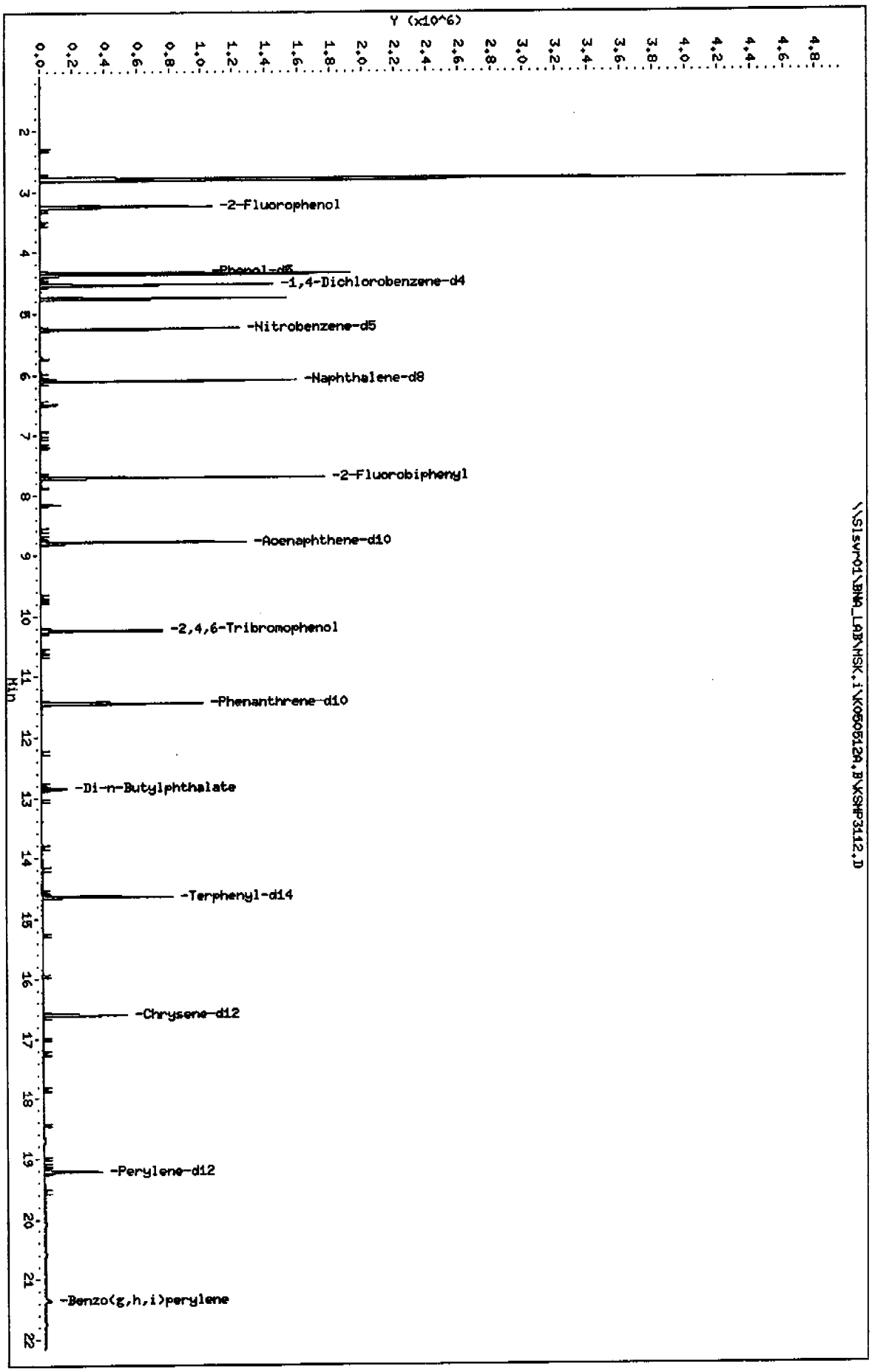
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KSMP3112.D Page 1
Report Date: 13-May-2005 11:07

STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 21-APR-2005 00:00 Client SDG: F5D2103
Sample Matrix: SOLID Fraction: SV
Lab Smp Id: G8WXJ2AD Client Smp ID: RE73-05-58829
Level: LOW Operator: XIA
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: Quant Type: ISTD
Sublist File: SONMS04.sub
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m
Misc Info: F5D210380-001RE (5131374) SON GPC

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 10 2-Fluorophenol	4978	3875	77.85	40-103
$ 15 Phenol-d5	4978	3935	79.06	36-105
$ 36 Nitrobenzene-d5	3318	2995	90.26	45-114
$ 69 2-Fluorobiphenyl	3318	2943	88.70	49-120
$ 104 2,4,6-Tribromophen	4978	3745	75.23	39-114
$ 139 Terphenyl-d14	3318	2952	88.95	42-108



Data File: \\Slsvr01\BNA_LAB\HSK.i\K060512A.B\KSHP3112.D
Date : 12-MAY-2006 22:14
Client ID: RE73-06-58829
Sample Info: CBAKJ2AD
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KSMP3112.D

Date : 12-MAY-2005 22:14

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: G8WXJ2AD

Volume Injected (uL): 1.0

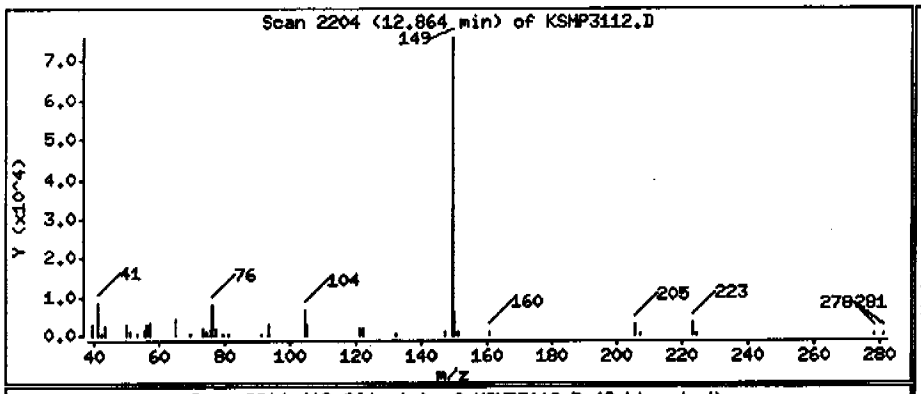
Operator: XIA

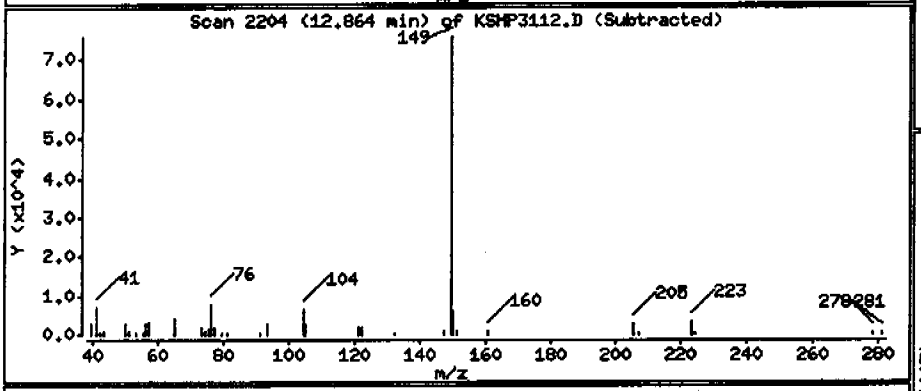
Column phase:

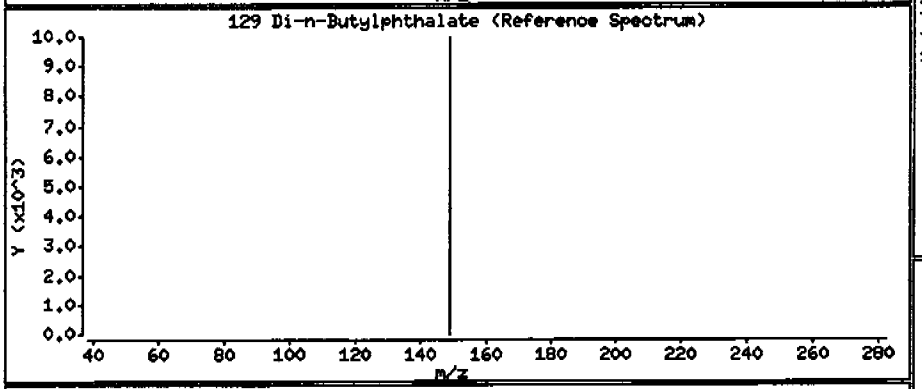
Column diameter: 2.00

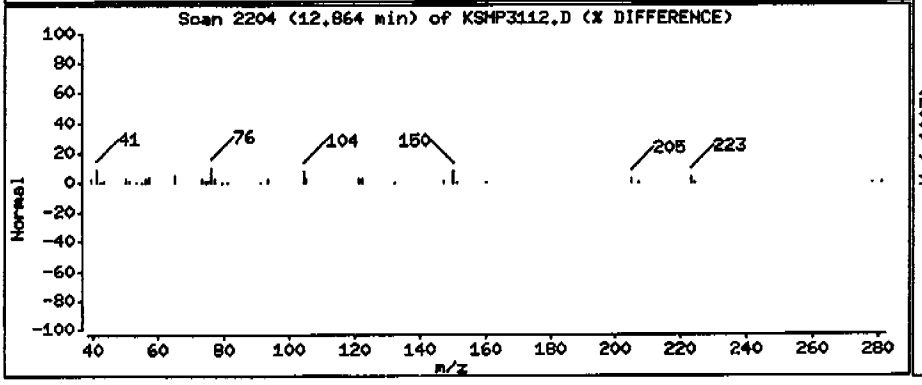
129 Di-n-Butylphthalate

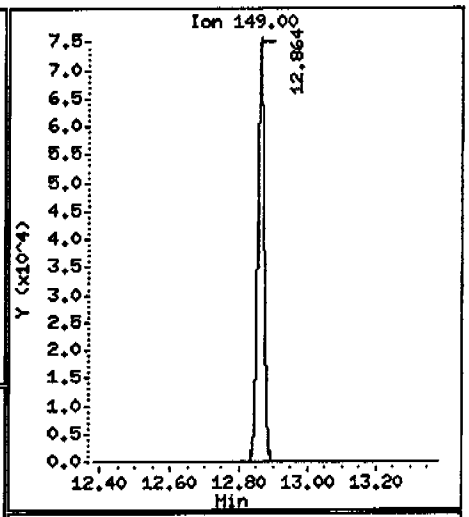
Concentration: 400.1 ug/Kg

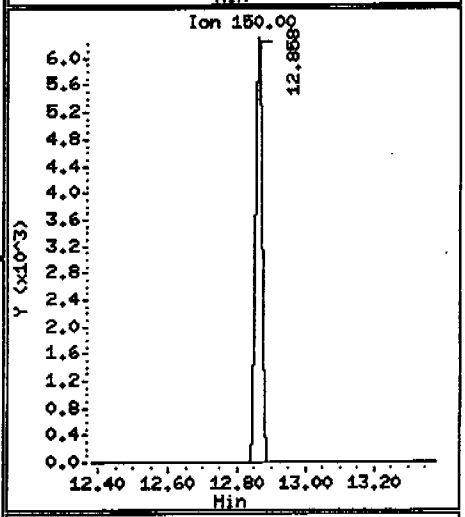


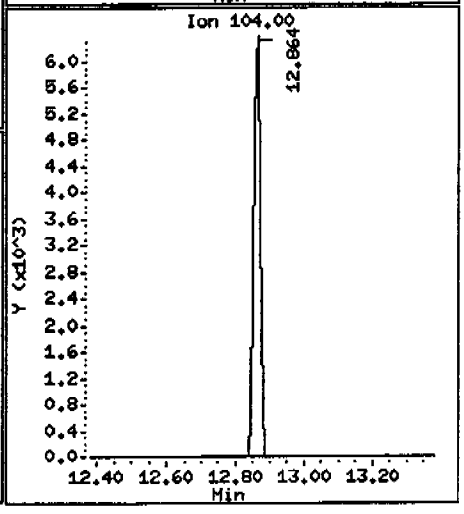












Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KSMP3112.D

Date : 12-MAY-2005 22:14

Client ID: RE73-05-58829

Instrument: MSK.i

Sample Info: G8WXJ2AD

Volume Injected (uL): 1.0

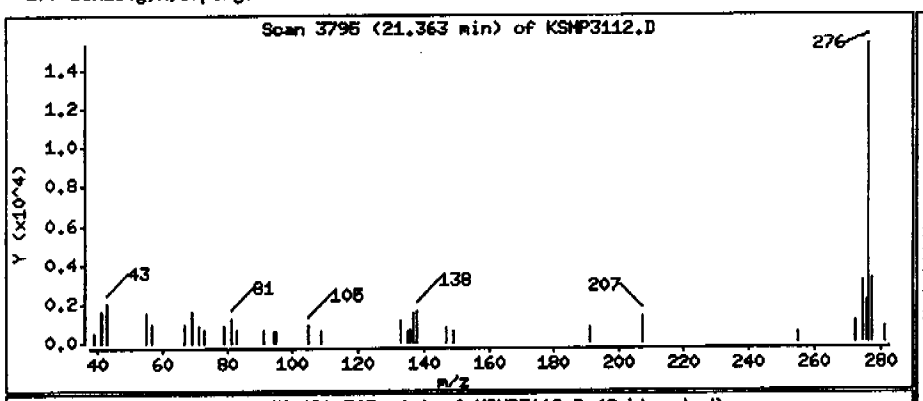
Operator: XIA

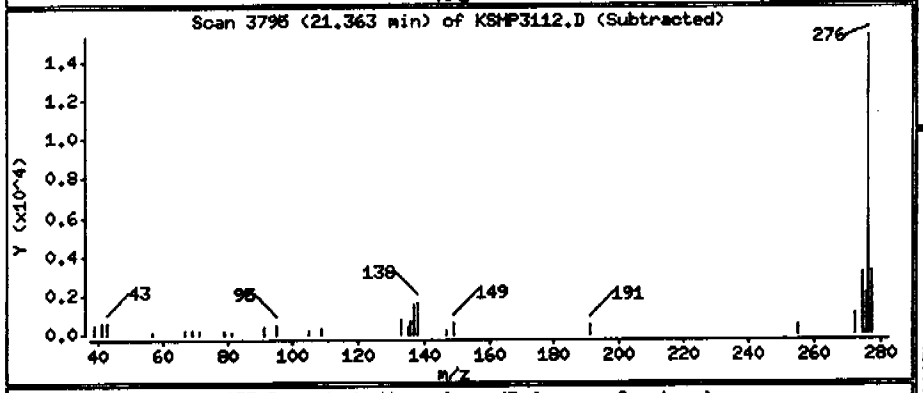
Column phase:

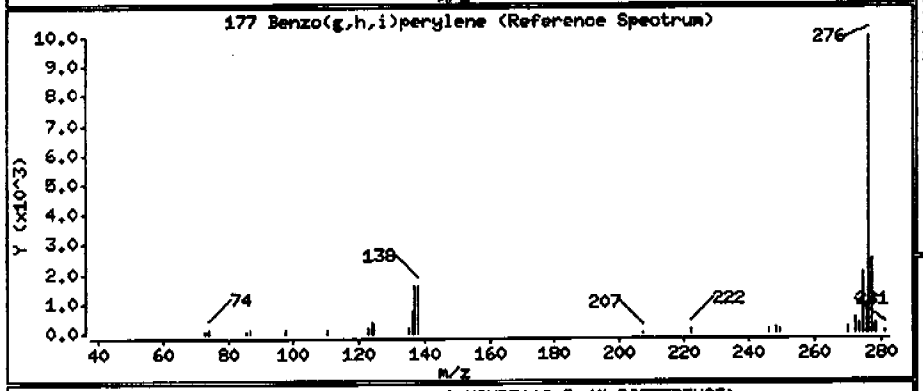
Column diameter: 2.00

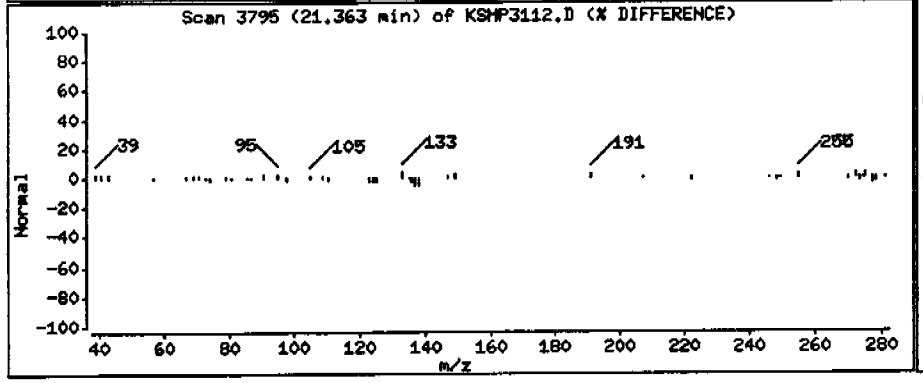
177 Benzo(g,h,i)perylene

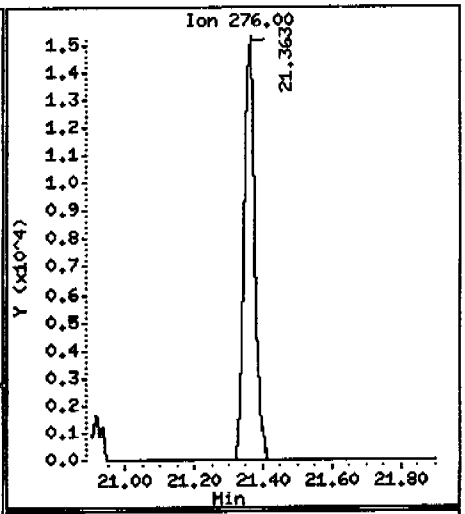
Concentration: 336.9 ug/Kg

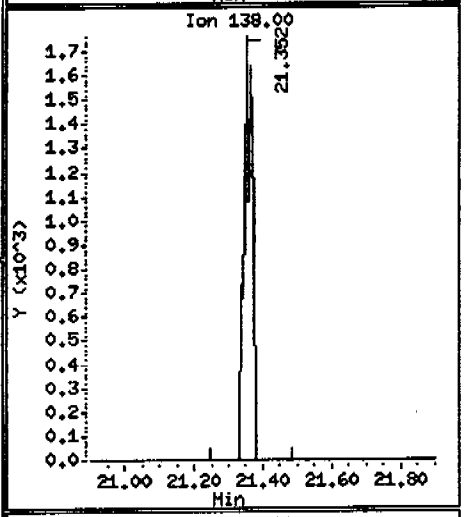


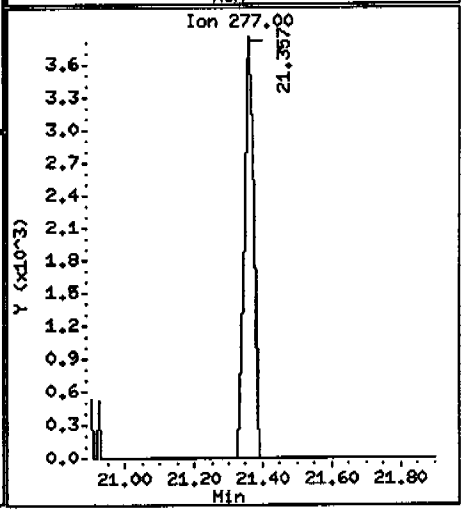






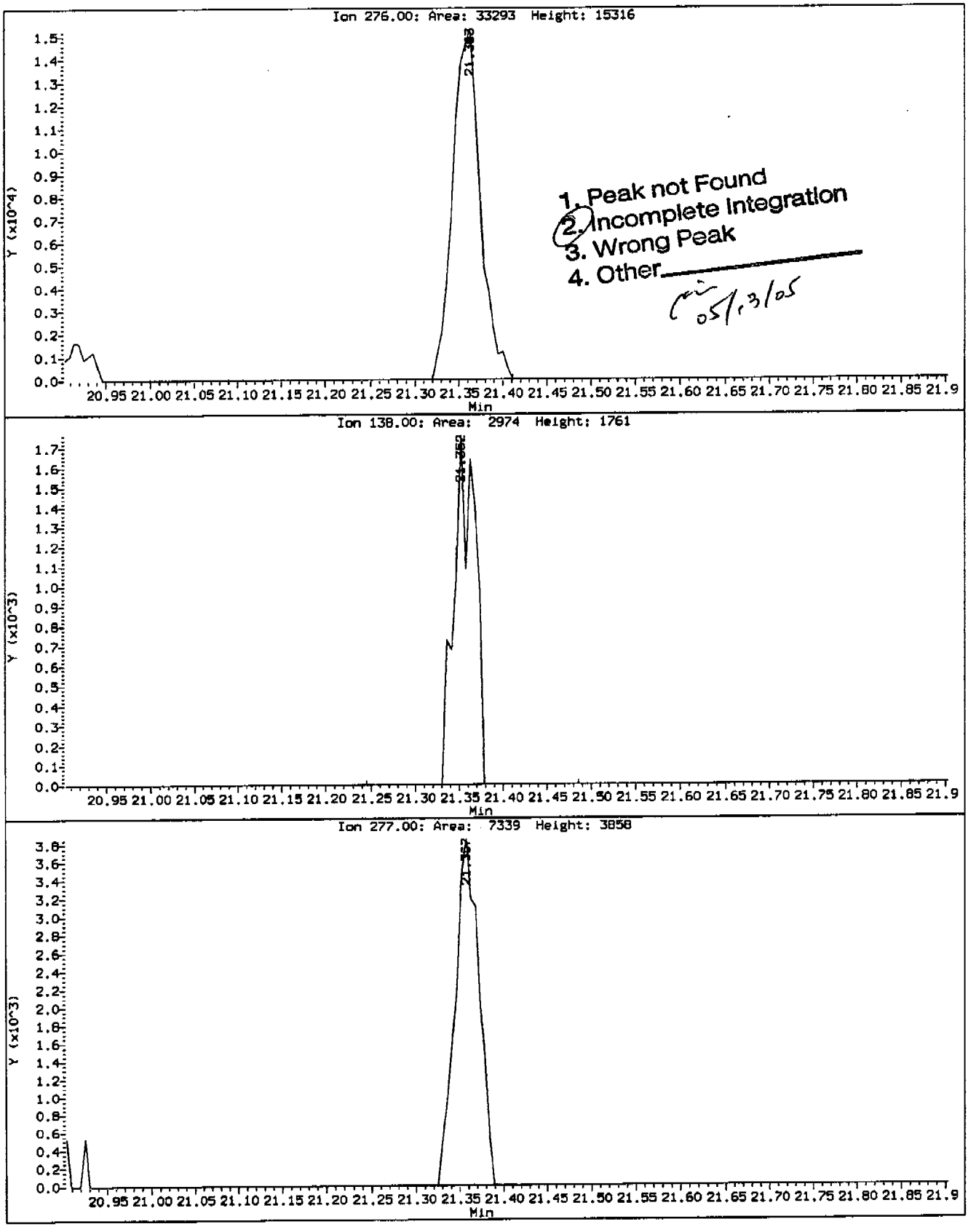






Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KSMP3112.D
Injection Date: 12-MAY-2005 22:14
Instrument: MSK.i
Client Sample ID: RE73-05-58829

Compound: Benzo(g,h,i)perylene
CAS Number: 191-24-2



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3024.D Page 1
Report Date: 10-May-2005 17:29

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3024.D
Lab Smp Id: G8WXV1AD Client Smp ID: RE73-05-58835
Inj Date : 10-MAY-2005 03:38
Operator : XIA Inst ID: MSK.i
Smp Info : G8WXV1AD
Misc Info : F5D210380-002 (5119285) SON
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Meth Date : 10-May-2005 11:13 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12 Cal File: KCAL3000.D
Als bottle: 33
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIXSONMS04.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Uf*Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume Injected
Ws	30.108	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
$ 10	2-Fluorophenol	112	3.229	3.245	(0.710)	395827	99.7286	3312
$ 15	Phenol-d5	99	4.313	4.324	(0.948)	558776	100.585	3341
* 22	1,4-Dichlorobenzene-d4	152	4.548	4.559	(1.000)	131388	40.0000	
$ 36	Nitrobenzene-d5	82	5.270	5.285	(0.860)	472406	73.6819	2447
* 48	Naphthalene-d8	136	6.124	6.140	(1.000)	467060	40.0000	
44	Benzoic Acid	122	6.033	6.097	(0.985)	27526	11.8161	392.4(M)
$ 69	2-Fluorobiphenyl	172	7.738	7.753	(0.879)	718788	71.9224	2389
* 82	Acenaphthene-d10	164	8.806	8.827	(1.000)	248199	40.0000	
$ 104	2,4,6-Tribromophenol	330	10.259	10.275	(1.165)	150979	108.816	3614
112	Hexachlorobenzene	284	10.905	10.932	(0.951)	7894	2.78110	92.37
* 121	Phenanthrene-d10	188	11.466	11.487	(1.000)	397496	40.0000	
137	Pyrene	202	14.212	14.244	(0.855)	25943	2.67730	88.92
$ 139	Terphenyl-d14	244	14.672	14.687	(0.882)	510931	67.8523	2254
* 153	Chrysene-d12	240	16.632	16.653	(1.000)	238382	40.0000	
155	bis(2-ethylhexyl)Phthalate	149	17.017	17.038	(1.023)	11837	2.35970	78.37(a)
* 166	Perylene-d12	264	19.245	19.266	(1.000)	204813	40.0000	
177	Benzo(g,h,i)perylene	276	21.392	21.440	(1.112)	48478	8.16096	271.0(a)

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3024.D
Report Date: 10-May-2005 17:29

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3024.D Page 3
Report Date: 10-May-2005 17:29

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSK.i
Lab File ID: KSMP3024.D
Lab Smp Id: G8WXV1AD
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Misc Info: F5D210380-002 (5119285) SON

Calibration Date: 09-MAY-2005
Calibration Time: 16:30
Client Smp ID: RE73-05-58835
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	138615	69308	277230	131388	-5.21
48 Naphthalene-d8	492644	246322	985288	467060	-5.19
82 Acenaphthene-d10	276841	138421	553682	248199	-10.35
121 Phenanthrene-d10	505686	252843	1011372	397496	-21.39
153 Chrysene-d12	445673	222837	891346	238382	-46.51
166 Perylene-d12	381519	190760	763038	204813	-46.32

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.55	-0.23
48 Naphthalene-d8	6.14	5.64	6.64	6.12	-0.26
82 Acenaphthene-d10	8.83	8.33	9.33	8.81	-0.24
121 Phenanthrene-d10	11.49	10.99	11.99	11.47	-0.18
153 Chrysene-d12	16.65	16.15	17.15	16.63	-0.13
166 Perylene-d12	19.27	18.77	19.77	19.25	-0.11

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

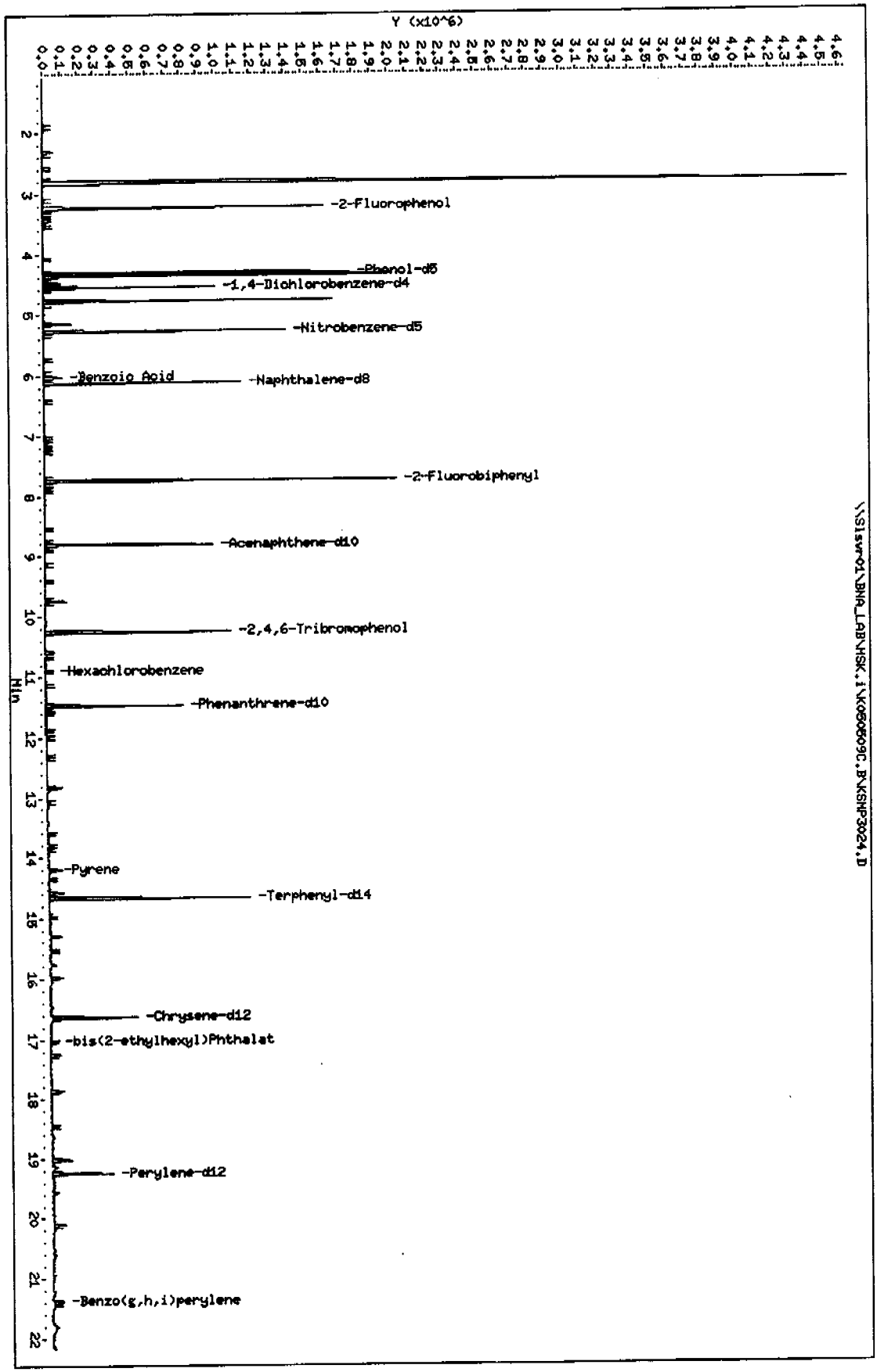
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3024.D Page 4
Report Date: 10-May-2005 17:29

STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 21-APR-2005 00:00 Client SDG: F5D2103
Sample Matrix: SOLID Fraction: SV
Lab Smp Id: G8WXV1AD Client Smp ID: RE73-05-58835
Level: LOW Operator: XIA
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: Quant Type: ISTD
Sublist File: APPIXSONMS04.sub
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Misc Info: F5D210380-002 (5119285) SON

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 10 2-Fluorophenol	4982	3312	66.49	40-103
$ 15 Phenol-d5	4982	3341	67.06	36-105
$ 36 Nitrobenzene-d5	3321	2447	73.68	45-114
$ 69 2-Fluorobiphenyl	3321	2389	71.92	49-120
$ 104 2,4,6-Tribromophen	4982	3614	72.54	39-114
$ 139 Terphenyl-d14	3321	2254	67.85	42-108



Data File: \\Slsvr01\BNA_LAB\HSK.i\KO60609C.B\KSHP3024.D
Date : 10-MAY-2006 03:38
Client ID: RE73-08-88835
Sample Info: GBNXM1AD
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

\\Slsvr01\BNA_LAB\HSK.i\KO60609C.B\KSHP3024.D

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3024.D

Date : 10-MAY-2005 03:38

Client ID: RE73-05-58835

Instrument: MSK.i

Sample Info: C8WXV1AD

Volume Injected (uL): 1.0

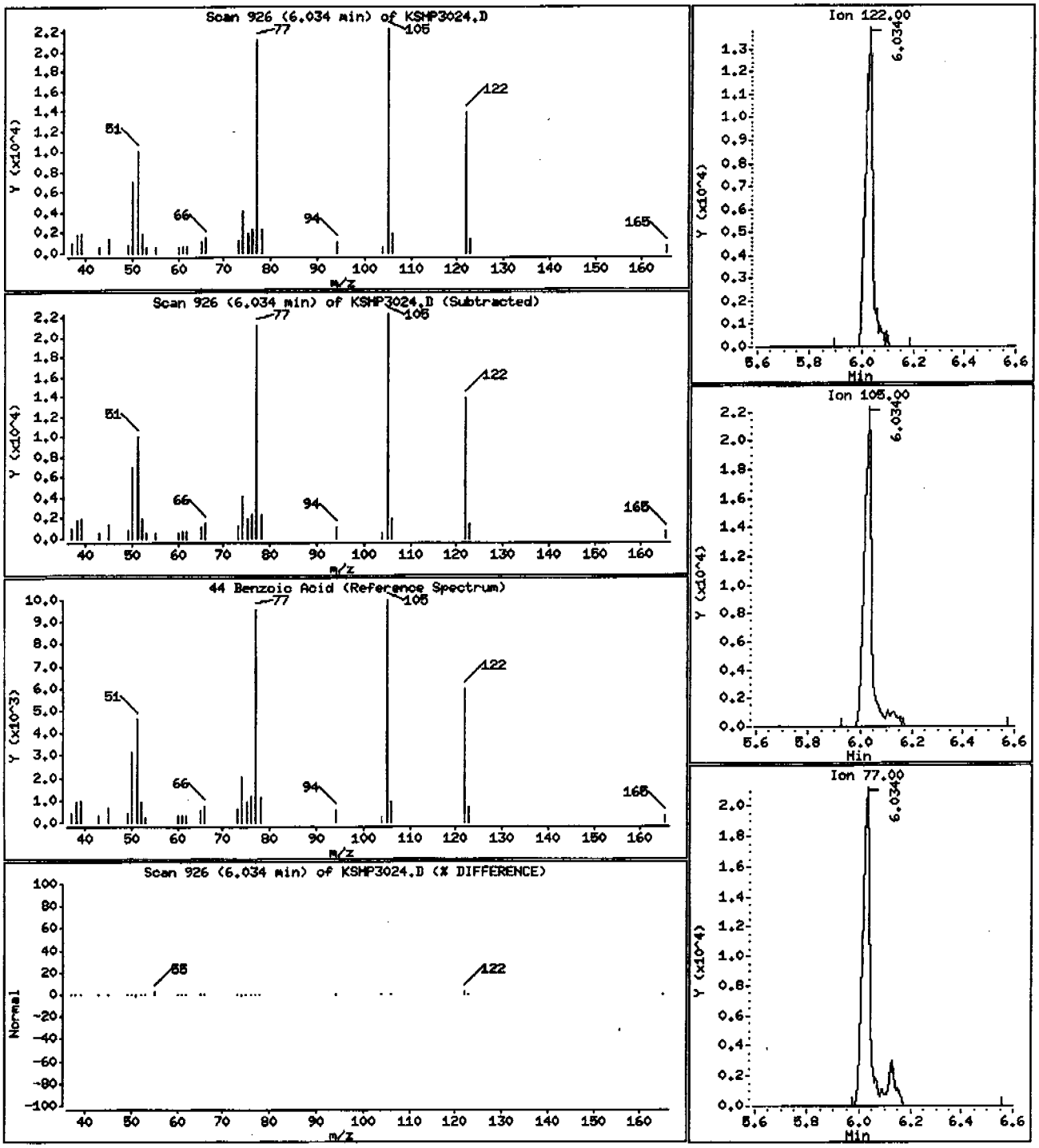
Operator: XIA

Column phase:

Column diameter: 2.00

44 Benzoic Acid

Concentration: 392.4 ug/Kg



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3024.D

Date : 10-MAY-2005 03:38

Client ID: RE73-05-58835

Instrument: MSK.i

Sample Info: C84XV1AD

Volume Injected (uL): 1.0

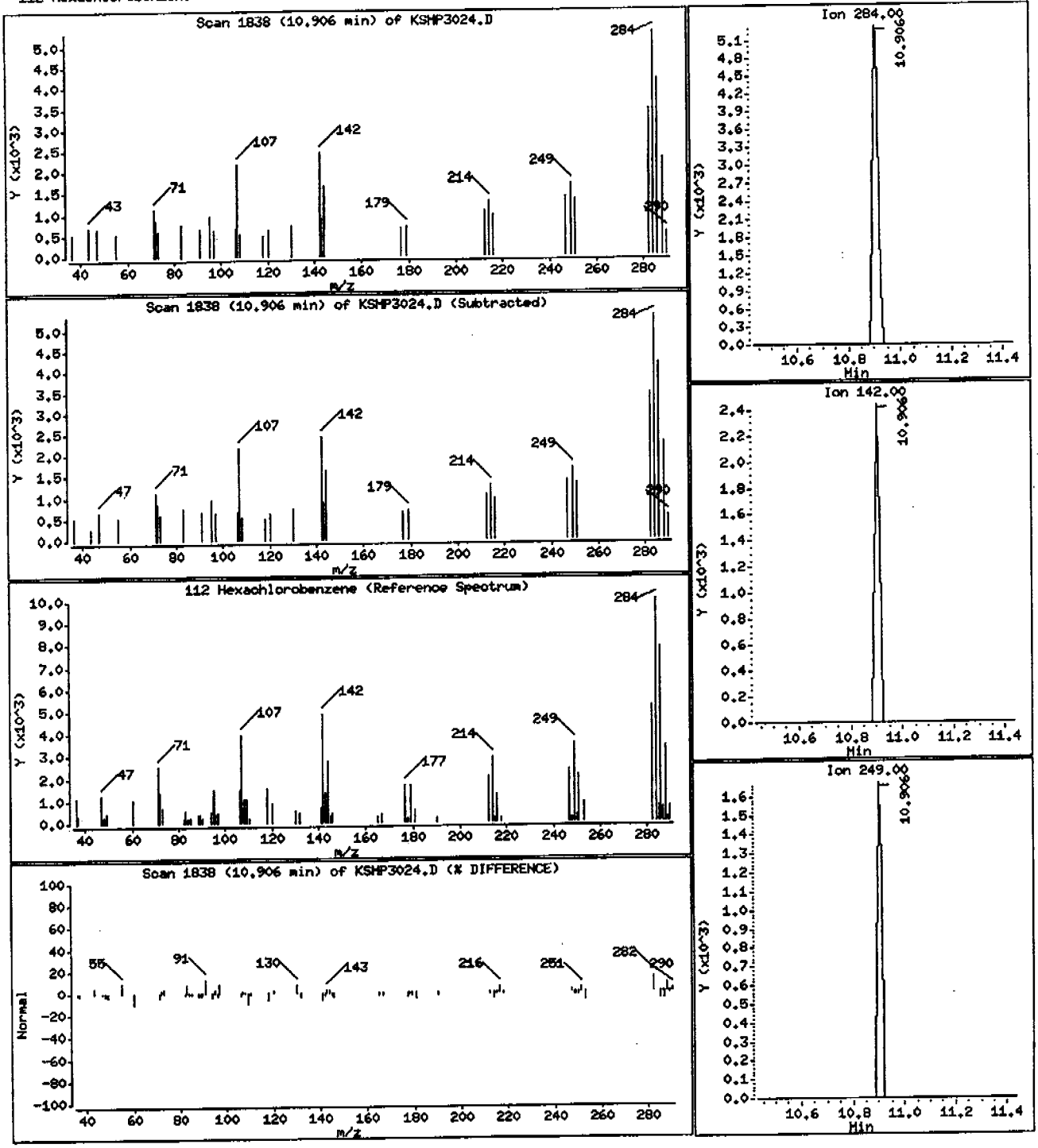
Operator: XIA

Column phase:

Column diameter: 2.00

112 Hexachlorobenzene

Concentration: 92.37 ug/Kg



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3024.D

Date : 10-MAY-2005 03:38

Client ID: RE73-05-58835

Instrument: MSK.i

Sample Info: C8WXV1AD

Volume Injected (uL): 1.0

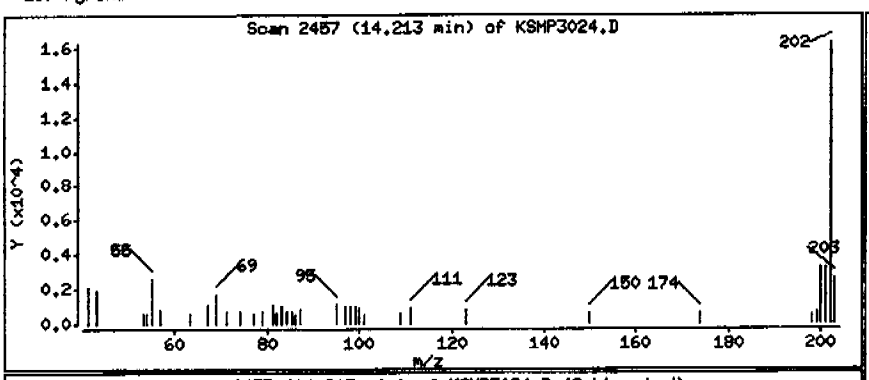
Operator: XIA

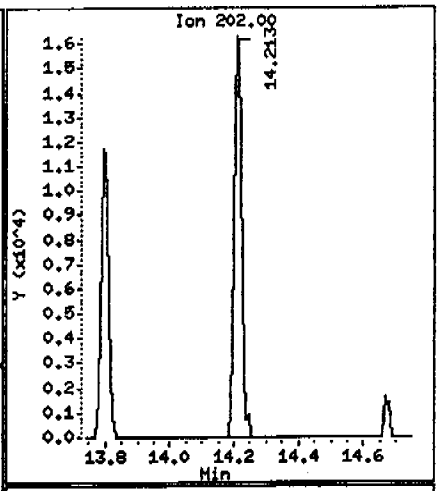
Column phase:

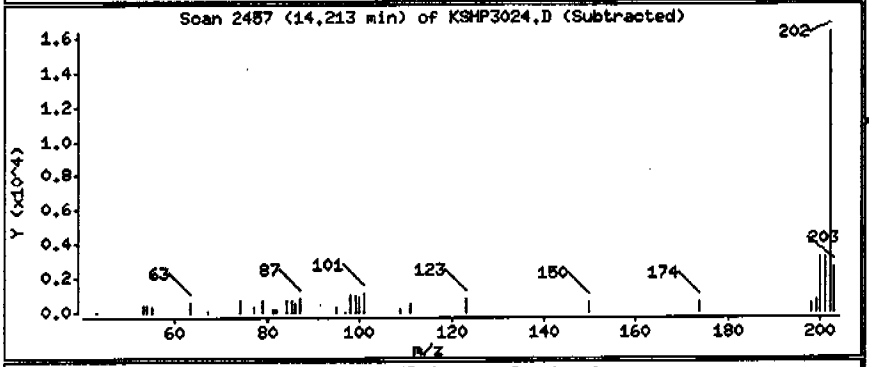
Column diameter: 2.00

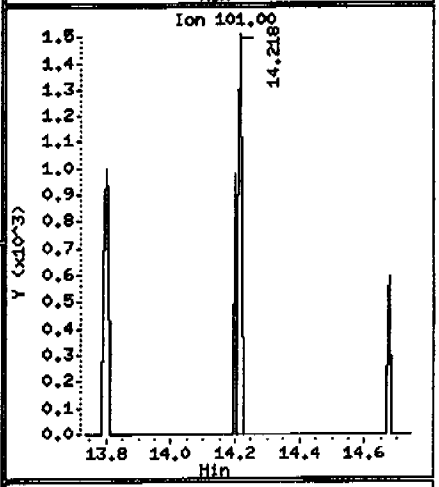
137 Pyrene

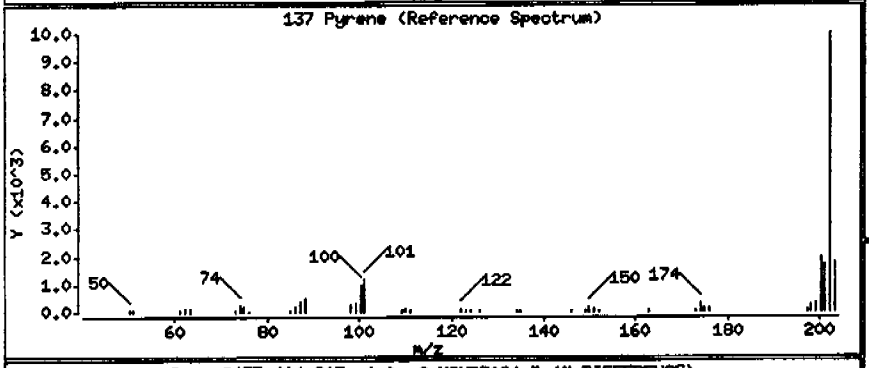
Concentration: 88.92 ug/Kg

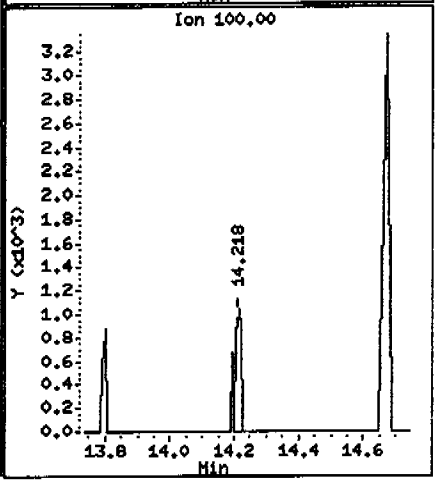


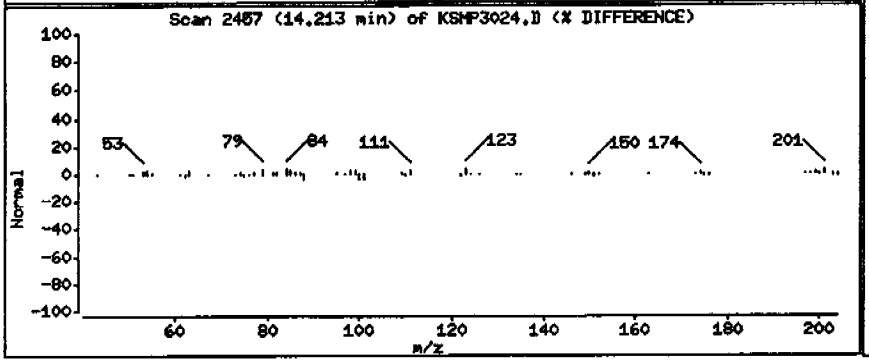












Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSHP3024.D

Date : 10-MAY-2005 03:38

Client ID: RE73-05-68835

Instrument: MSK.i

Sample Info: G8WXV1AD

Volume Injected (uL): 1.0

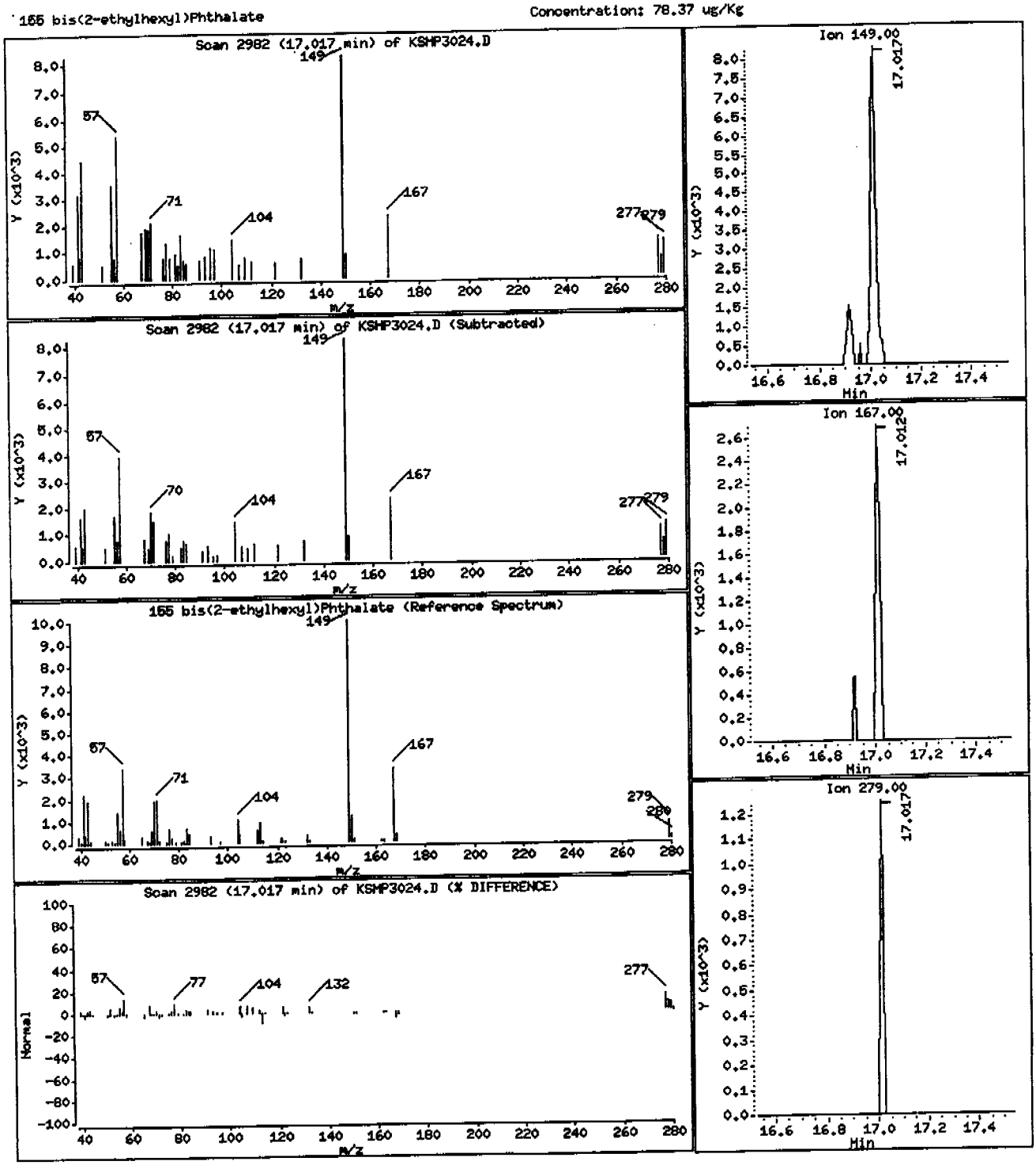
Operator: XIA

Column phase:

Column diameter: 2.00

155 bis(2-ethylhexyl)Phthalate

Concentration: 78.37 ug/Kg



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KSMP3024.D

Date : 10-MAY-2005 03:38

Client ID: RE73-05-68838

Sample Info: G8WXV1AD

Volume Injected (uL): 1.0

Column phase:

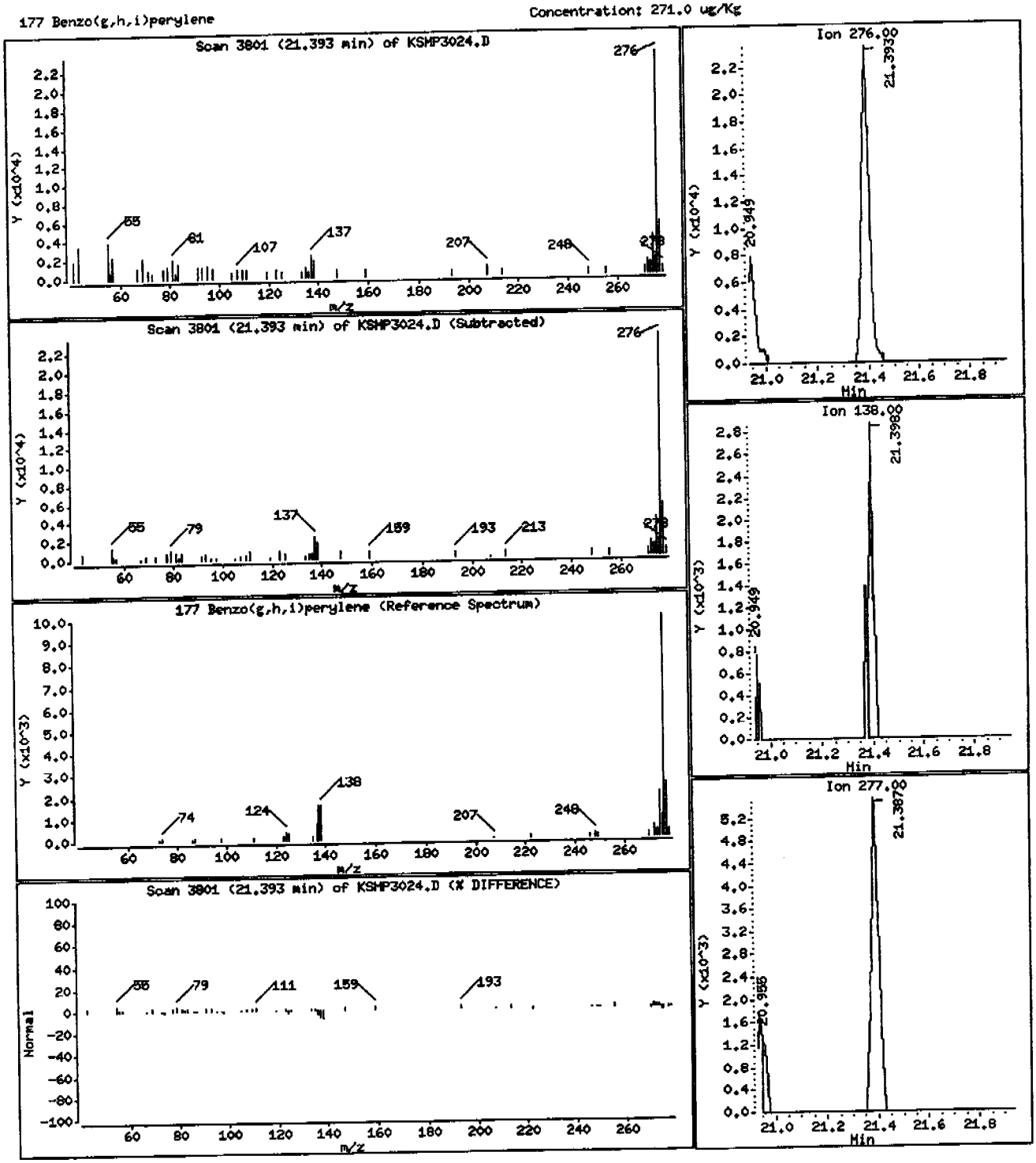
Instrument: MSK.i

Operator: XIA

Column diameter: 2.00

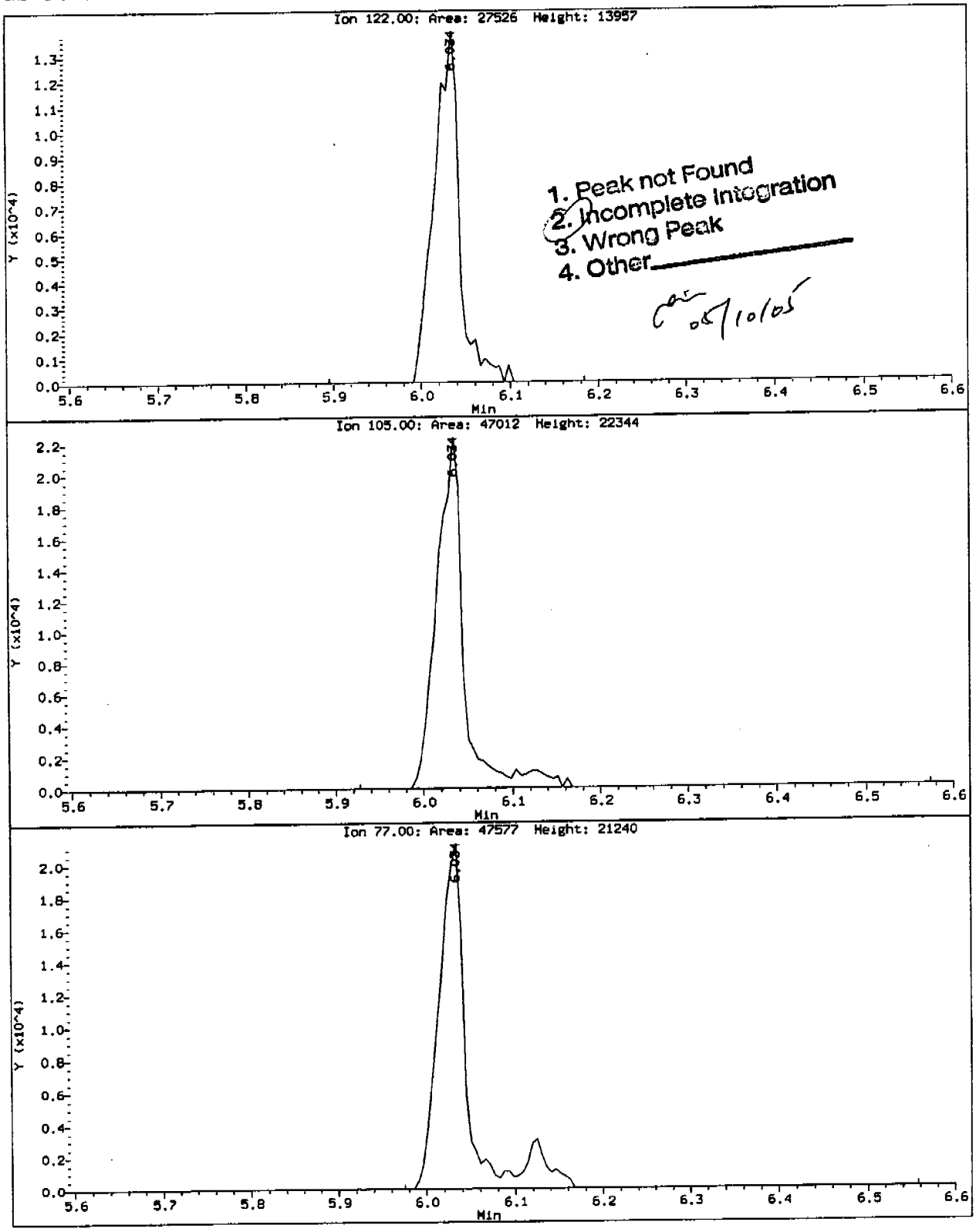
Concentration: 271.0 ug/Kg

177 Benzo(g,h,i)perylene



Data File: \\Slsvr01\BNA_LAB\M5K.i\K050509C.B\K5MP3024.D
Injection Date: 10-MAY-2005 03:38
Instrument: M5K.i
Client Sample ID: RE73-05-58835

Compound: Benzoic Acid
CAS Number: 65-85-0



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KSMP3147.D Page 1
Report Date: 16-May-2005 10:50

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KSMP3147.D
Lab Smp Id: G8WXV2AD Client Smp ID: RE73-05-58835
Inj Date : 14-MAY-2005 14:45
Operator : XIA Inst ID: MSK.i
Smp Info : G8WXV2AD
Misc Info : F5D210380-002RE (5131374) SON GPC
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270K.m
Meth Date : 16-May-2005 10:26 hongs Quant Type: ISTD
Cal Date : 13-MAY-2005 15:58 Cal File: KCAL3134.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SONMS04.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Uf*Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Factor
Vt	2000.000	Volume of final extract (uL)
Vi	1.000	Volume Injected
Ws	30.210	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
$ 10 2-Fluorophenol	112	3.219	3.203	(0.713)	243653	54.2221	3590
$ 15 Phenol-d5	99	4.298	4.282	(0.952)	349888	59.7130	3953
* 22 1,4-Dichlorobenzene-d4	152	4.517	4.507	(1.000)	150230	40.0000	
$ 36 Nitrobenzene-d5	82	5.238	5.239	(0.860)	308359	41.7689	2765
* 48 Naphthalene-d8	136	6.093	6.088	(1.000)	548643	40.0000	
$ 69 2-Fluorobiphenyl	172	7.696	7.691	(0.879)	472147	38.2037	2529
* 82 Acenaphthene-d10	164	8.759	8.754	(1.000)	305764	40.0000	
$ 104 2,4,6-Tribromophenol	330	10.207	10.202	(1.165)	90482	50.7530	3360
* 121 Phenanthrene-d10	188	11.414	11.409	(1.000)	513022	40.0000	
$ 139 Terphenyl-d14	244	14.609	14.603	(0.882)	421103	36.2185	2398
* 153 Chrysene-d12	240	16.569	16.564	(1.000)	361484	40.0000	
* 166 Perylene-d12	264	19.176	19.171	(1.000)	276852	40.0000	

05/16/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KSMP3147.D
Report Date: 16-May-2005 10:50

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSK.i
Lab File ID: KSMP3147.D
Lab Smp Id: G8WXV2AD
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270K.m
Misc Info: F5D210380-002RE (5131374) SON GPC

Calibration Date: 14-MAY-2005
Calibration Time: 10:32
Client Smp ID: RE73-05-58835
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	175542	87771	351084	150230	-14.42
48 Naphthalene-d8	614562	307281	1229124	548643	-10.73
82 Acenaphthene-d10	342243	171122	684486	305764	-10.66
121 Phenanthrene-d10	614709	307355	1229418	513022	-16.54
153 Chrysene-d12	515242	257621	1030484	361484	-29.84
166 Perylene-d12	429113	214557	858226	276852	-35.48

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.51	4.01	5.01	4.52	0.23
48 Naphthalene-d8	6.09	5.59	6.59	6.09	0.08
82 Acenaphthene-d10	8.75	8.25	9.25	8.76	0.06
121 Phenanthrene-d10	11.41	10.91	11.91	11.41	0.04
153 Chrysene-d12	16.56	16.06	17.06	16.57	0.03
166 Perylene-d12	19.17	18.67	19.67	19.18	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

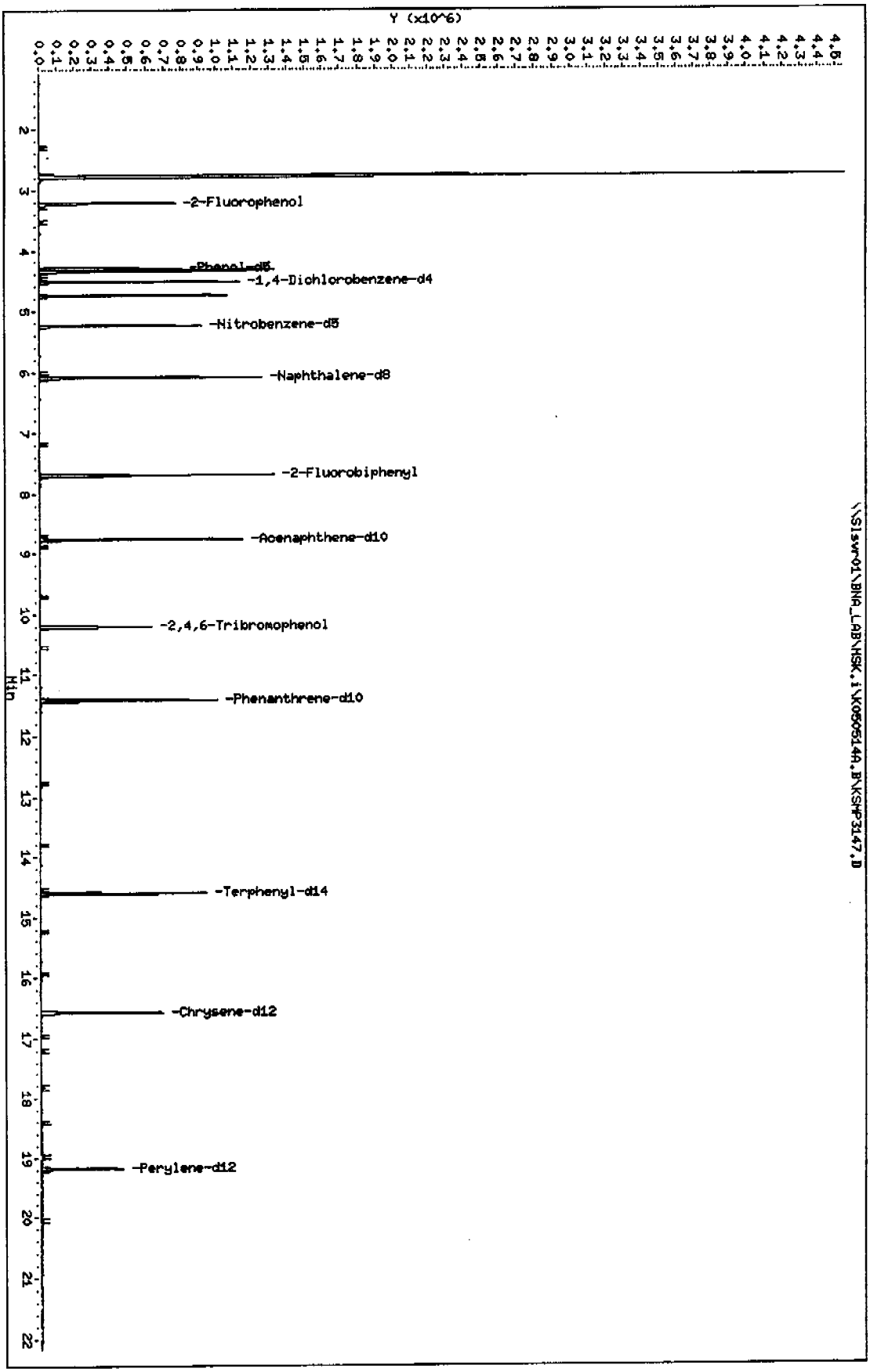
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KSMP3147.D Page 3
Report Date: 16-May-2005 10:50

STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 21-APR-2005 00:00 Client SDG: F5D2103
Sample Matrix: SOLID Fraction: SV
Lab Smp Id: G8WXV2AD Client Smp ID: RE73-05-58835
Level: LOW Operator: XIA
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: Quant Type: ISTD
Sublist File: SONMS04.sub
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270K.m
Misc Info: F5D210380-002RE (5131374) SON GPC

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 10 2-Fluorophenol	4965	3590	72.30	40-103
$ 15 Phenol-d5	4965	3953	79.62	36-105
$ 36 Nitrobenzene-d5	3310	2765	83.54	45-114
$ 69 2-Fluorobiphenyl	3310	2529	76.41	49-120
$ 104 2,4,6-Tribromophen	4965	3360	67.67	39-114
$ 139 Terphenyl-d14	3310	2398	72.44	42-108



Data File: \\Slsvr01\BNA_LAB\HSK.i\K060514A.B\KSHP3147.D
Date : 14-MAY-2005 14:45
Client ID: RE73-05-58835
Sample Info: C8HKV2AB
Volume Injected (uL): 1.0
Column phase:
Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3045.D Page 1
Report Date: 11-May-2005 13:06

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3045.D
Lab Smp Id: G8WXX1AD Client Smp ID: RE73-05-58841
Inj Date : 10-MAY-2005 19:23
Operator : XIA Inst ID: MSK.i
Smp Info : G8WXX1AD
Misc Info : F5D210380-003 (5119285) SON
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\050510A.B\8270K.m
Meth Date : 11-May-2005 10:34 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12 Cal File: KCAL3000.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SONMS04.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Uf*Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume Injected
Ws	30.500	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
$ 10 2-Fluorophenol	112	3.229	3.219	(0.711)	347353	96.3088	3158
$ 15 Phenol-d5	99	4.314	4.298	(0.949)	502669	99.5770	3265
* 22 1,4-Dichlorobenzene-d4	152	4.544	4.533	(1.000)	119392	40.0000	
$ 36 Nitrobenzene-d5	82	5.270	5.260	(0.861)	448114	76.0897	2495
* 48 Naphthalene-d8	136	6.120	6.115	(1.000)	429023	40.0000	
$ 69 2-Fluorobiphenyl	172	7.733	7.723	(0.879)	664625	70.2712	2304
* 82 Acenaphthene-d10	164	8.801	8.791	(1.000)	234889	40.0000	
$ 104 2,4,6-Tribromophenol	330	10.254	10.239	(1.165)	142129	108.242	3549
* 121 Phenanthrene-d10	188	11.462	11.451	(1.000)	388802	40.0000	
122 Phenanthrene	178	11.499	11.494	(1.003)	57618	4.79791	157.3(a)
134 Fluoranthene	202	13.796	13.786	(1.204)	91186	7.34701	240.9(a)
137 Pyrene	202	14.208	14.203	(0.854)	69665	7.83689	256.9(a)
$ 139 Terphenyl-d14	244	14.667	14.651	(0.882)	511142	73.9939	2426
150 Benzo(a)Anthracene	228	16.595	16.585	(0.998)	27382	3.57579	117.2(a)
* 153 Chrysene-d12	240	16.628	16.617	(1.000)	218686	40.0000	
154 Chrysene	228	16.670	16.665	(1.003)	26084	3.57953	117.4(a)
155 bis(2-ethylhexyl)Phthalate	149	17.012	16.997	(1.023)	10937	2.37666	77.92(a)
160 Benzo(b)fluoranthene	252	18.593	18.589	(0.966)	20893	2.83465	92.94(a)
161 Benzo(k)fluoranthene	252	18.625	18.631	(0.968)	20667	2.82309	92.56(a)
165 Benzo(a)pyrene	252	19.128	19.123	(0.994)	18446	2.77293	90.92(a)

Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3045.D
Report Date: 11-May-2005 13:06

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
* 166 Perylene-d12	264	19.240	19.224	(1.000)	189817	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3045.D
Report Date: 11-May-2005 13:06

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSK.i
Lab File ID: KSMP3045.D
Lab Smp Id: G8WXX1AD
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\8270K.m
Misc Info: F5D210380-003 (5119285) SON

Calibration Date: 10-MAY-2005
Calibration Time: 12:53
Client Smp ID: RE73-05-58841
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	121829	60915	243658	119392	-2.00
48 Naphthalene-d8	427782	213891	855564	429023	0.29
82 Acenaphthene-d10	251365	125683	502730	234889	-6.55
121 Phenanthrene-d10	466667	233334	933334	388802	-16.69
153 Chrysene-d12	406157	203079	812314	218686	-46.16
166 Perylene-d12	339675	169838	679350	189817	-44.12

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.53	4.03	5.03	4.54	0.22
48 Naphthalene-d8	6.12	5.62	6.62	6.12	0.08
82 Acenaphthene-d10	8.79	8.29	9.29	8.80	0.12
121 Phenanthrene-d10	11.45	10.95	11.95	11.46	0.09
153 Chrysene-d12	16.62	16.12	17.12	16.63	0.06
166 Perylene-d12	19.22	18.72	19.72	19.24	0.08

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

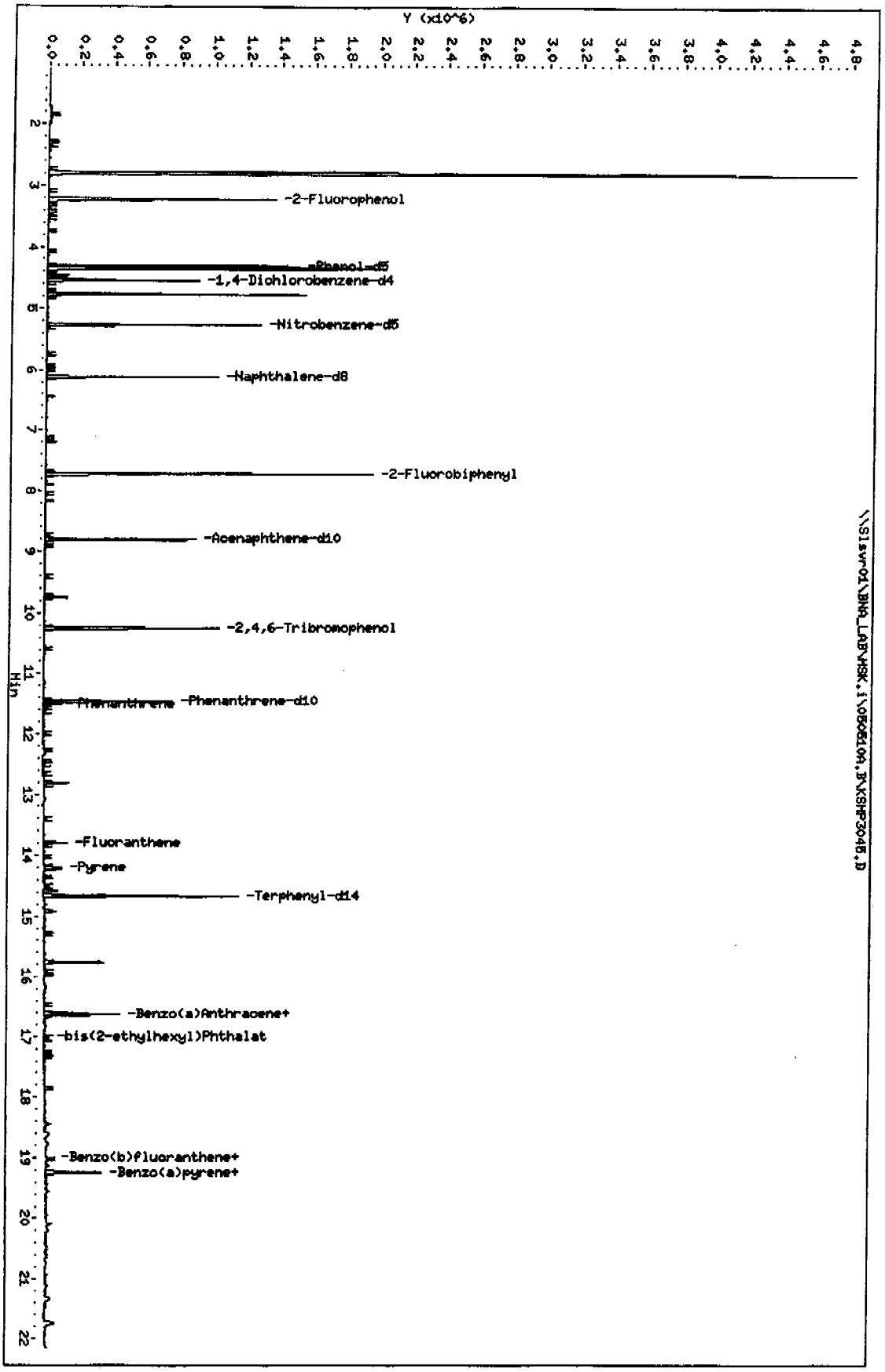
Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3045.D Page 4
Report Date: 11-May-2005 13:07

STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 21-APR-2005 00:00 Client SDG: F5D2103
Sample Matrix: SOLID Fraction: SV
Lab Smp Id: G8WXX1AD Client Smp ID: RE73-05-58841
Level: LOW Operator: XIA
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: Quant Type: ISTD
Sublist File: SONMS04.sub
Method File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\8270K.m
Misc Info: F5D210380-003 (5119285) SON

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 10 2-Fluorophenol	4918	3158	64.21	40-103
$ 15 Phenol-d5	4918	3265	66.38	36-105
$ 36 Nitrobenzene-d5	3279	2495	76.09	45-114
$ 69 2-Fluorobiphenyl	3279	2304	70.27	49-120
$ 104 2,4,6-Tribromophen	4918	3549	72.16	39-114
$ 139 Terphenyl-d14	3279	2426	73.99	42-108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Data File: \\Slsvr01\BNA_LAB\HSK.i\060610A.B\KSHP3045.D
Date : 10-MAY-2006 19:23
Client ID: RE73-05-88041
Sample Info: CBMXXLAD
Volume Injected (uL): 1.0
Column phase:
Instrument: HSK.i
Operator: XIA
Column diameter: 2.00
\\Slsvr01\BNA_LAB\HSK.i\060610A.B\KSHP3045.D
-2-Fluorophenol
-Phenol-d5
-1,4-Dichlorobenzene-d4
-Nitrobenzene-d5
-Naphthalene-d8
-2-Fluorobiphenyl
-Acenaphthene-d10
-2,4,6-Tribromophenol
-Phenanthrene-d10
-Fluoranthene
-Pyrene
-Terphenyl-d14
-Benzo(a)Anthracene+
-bis(2-ethylhexyl)Phthalat
-Benzo(b)fluoranthene+
-Benzo(a)pyrene+

Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3045.D

Date : 10-MAY-2005 19:23

Client ID: RE73-05-88841

Instrument: MSK.i

Sample Info: GB400X1AD

Volume Injected (uL): 1.0

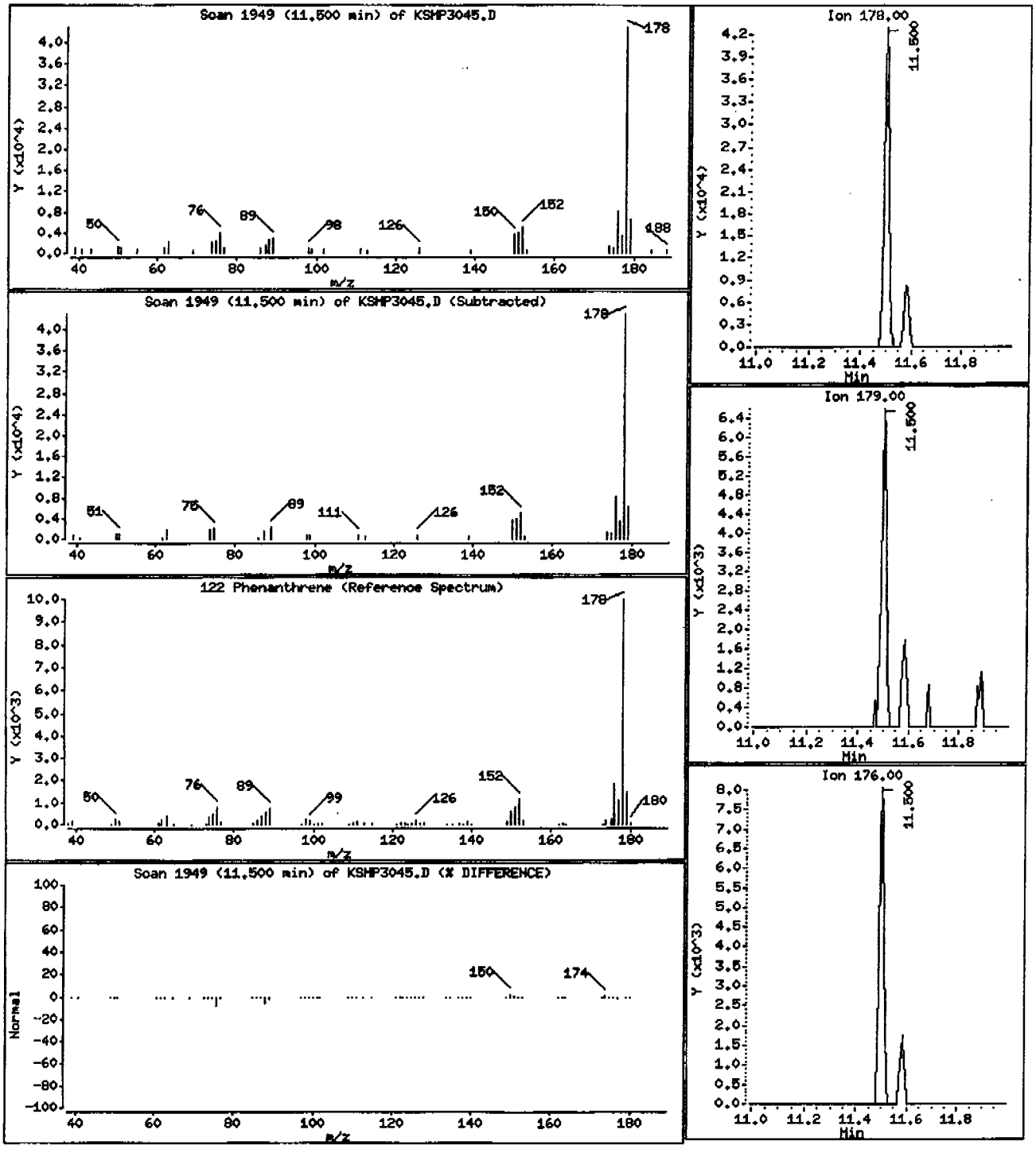
Operator: XIA

Column phase:

Column diameter: 2.00

122 Phenanthrene

Concentration: 157.3 ug/Kg



Data File: \\Slsvr01\BNA_LAB\HSK.i\050510A.B\KSMP3045.D

Date : 10-MAY-2005 19:23

Client ID: RE73-05-58841

Instrument: HSK.i

Sample Info: GSWXX1AD

Volume Injected (uL): 1.0

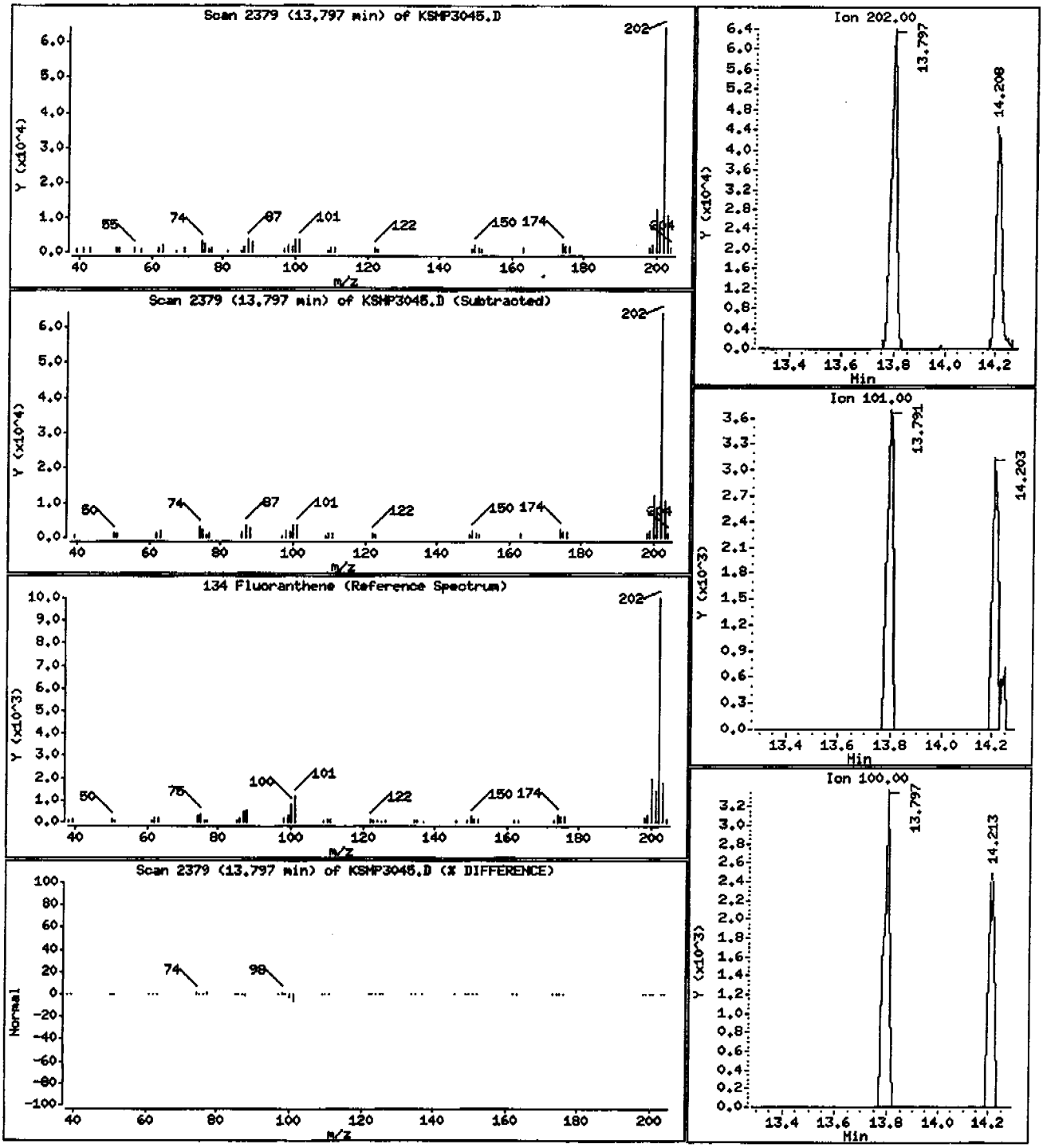
Operator: XIA

Column phase:

Column diameter: 2.00

134 Fluoranthene

Concentration: 240.9 ug/Kg



Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3045.D

Date : 10-MAY-2005 19:23

Client ID: RE73-05-58841

Instrument: MSK.i

Sample Info: C8WXX1AD

Volume Injected (uL): 1.0

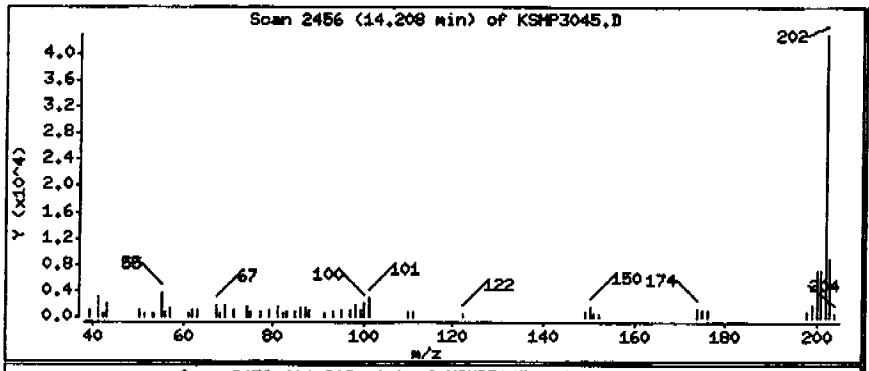
Operator: XIA

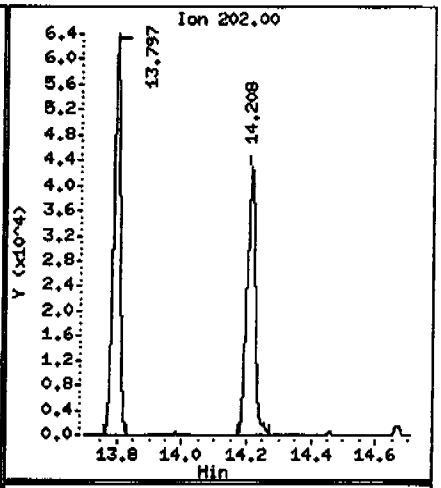
Column phase:

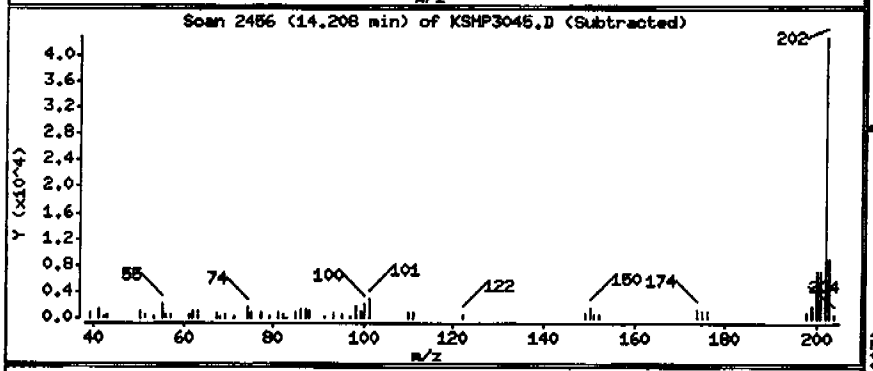
Column diameter: 2.00

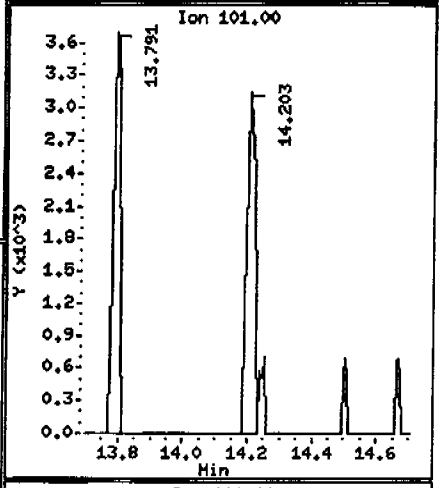
137 Pyrene

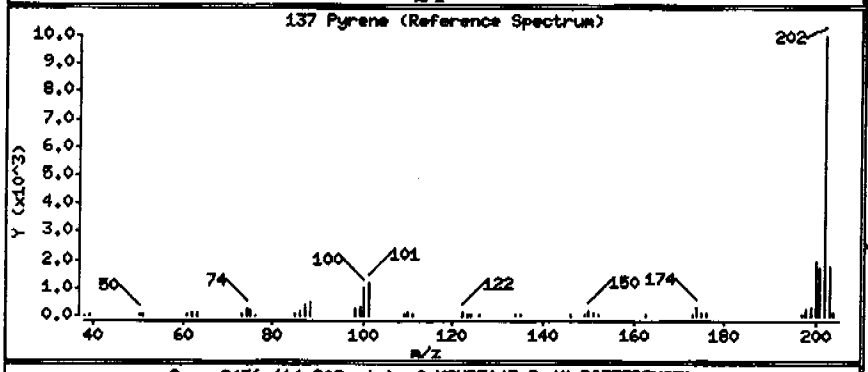
Concentration: 256.9 ug/Kg

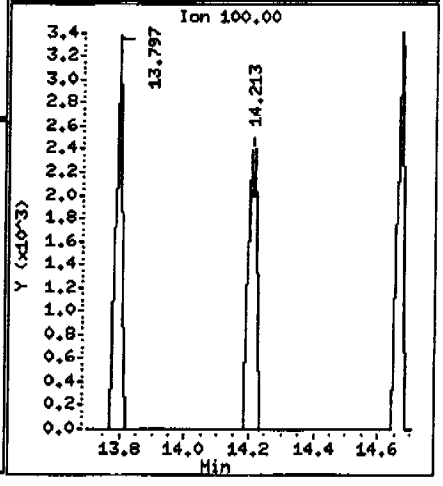


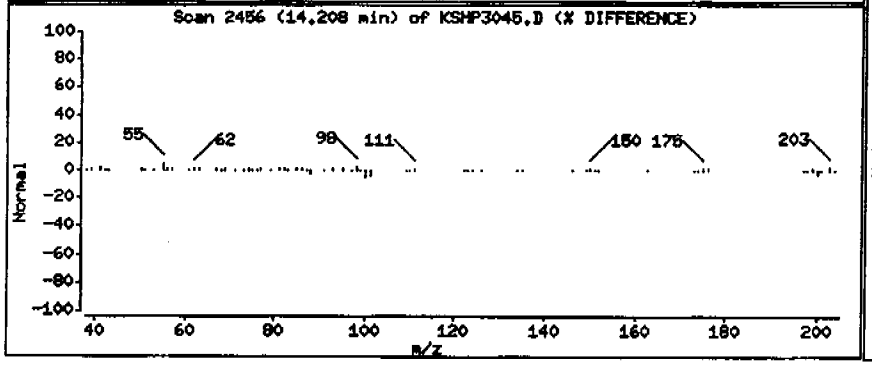












Data File: \\Slsvr01\BNA_LAB\MSK.i\060510A.B\KSMP3045.D

Date : 10-MAY-2006 19:23

Client ID: RE73-05-58841

Instrument: MSK.i

Sample Info: G8W0X1AD

Volume Injected (uL): 1.0

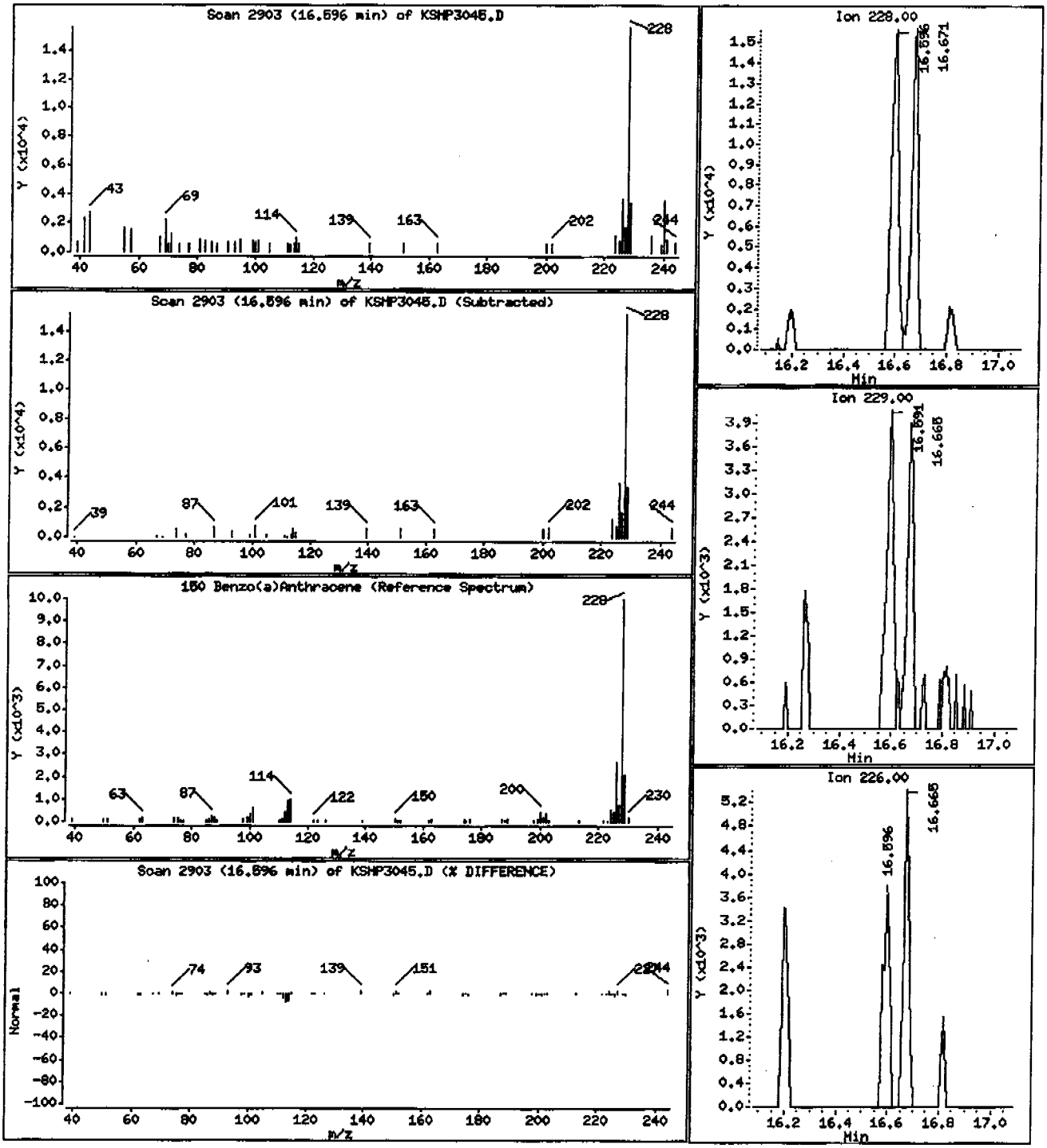
Operator: XIA

Column phase:

Column diameter: 2.00

150 Benzo(a)Anthracene

Concentration: 117.2 ug/Kg



Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3045.D

Date : 10-MAY-2005 19:23

Client ID: RE73-05-58841

Instrument: MSK.i

Sample Info: G8WXX1AD

Volume Injected (uL): 1.0

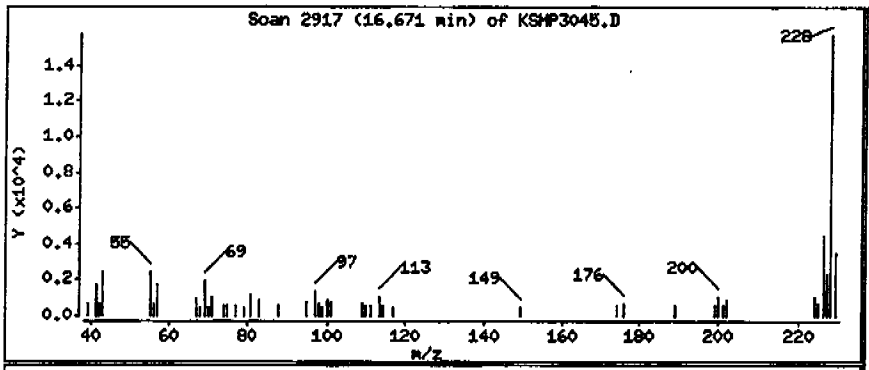
Operator: XIA

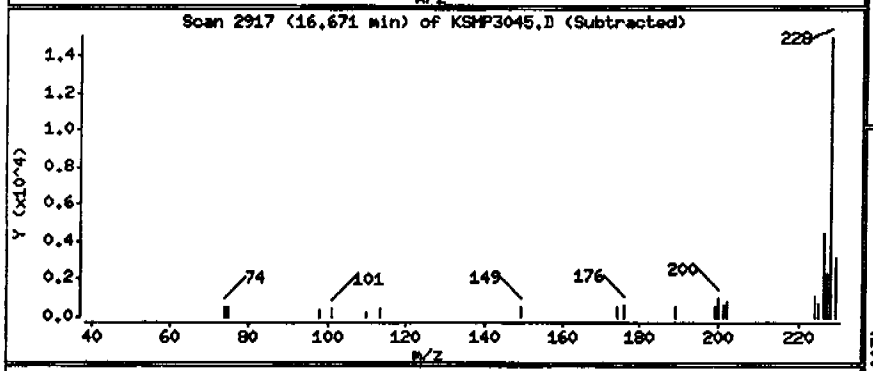
Column phase:

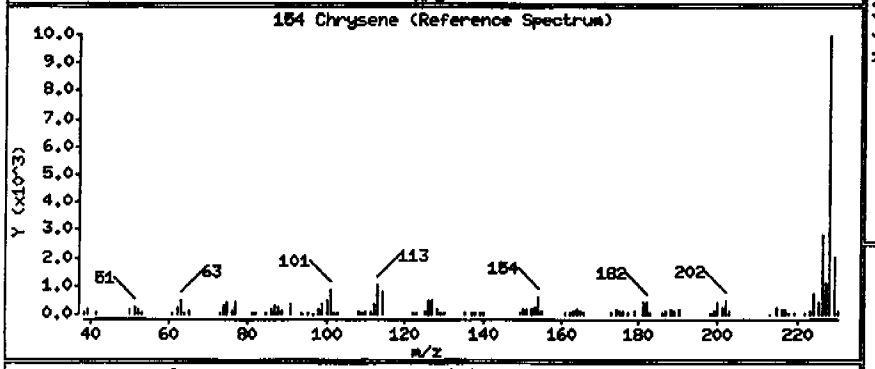
Column diameter: 2.00

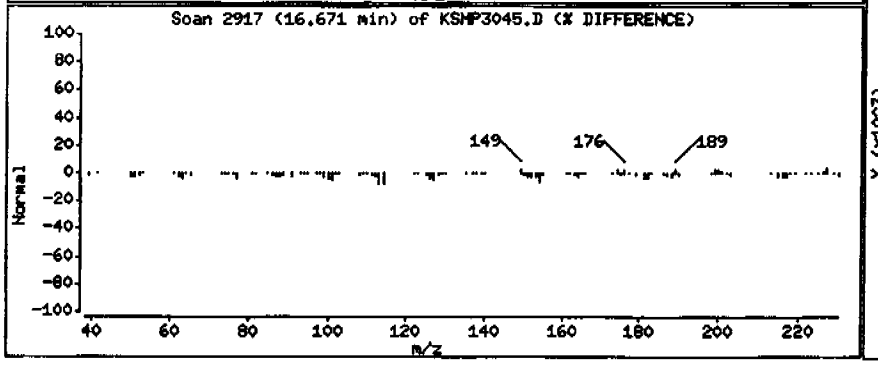
154 Chrysene

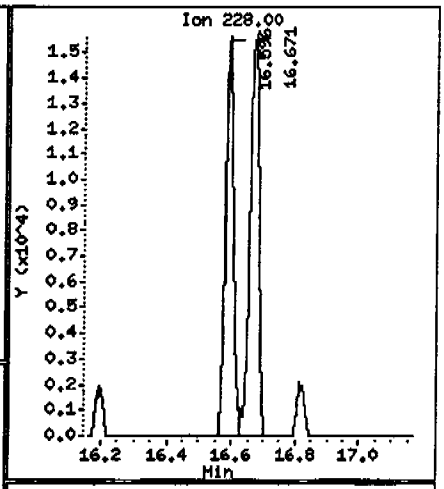
Concentration: 117.4 ug/Kg

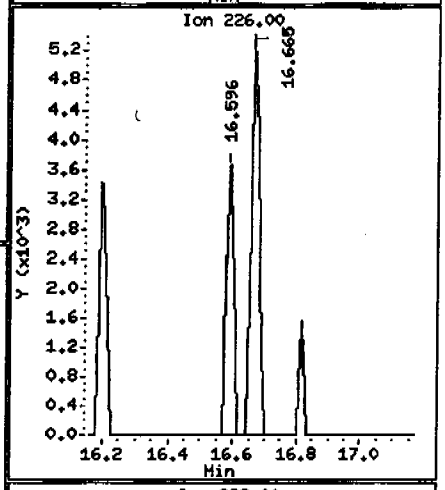


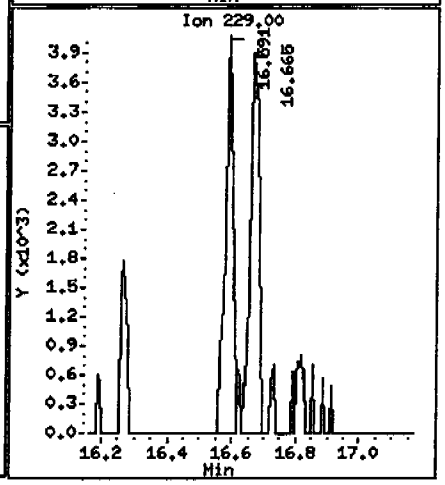












Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3045.D

Date : 10-MAY-2005 19:23

Client ID: RE73-05-58841

Instrument: MSK.i

Sample Info: CBWXX1AD

Volume Injected (uL): 1.0

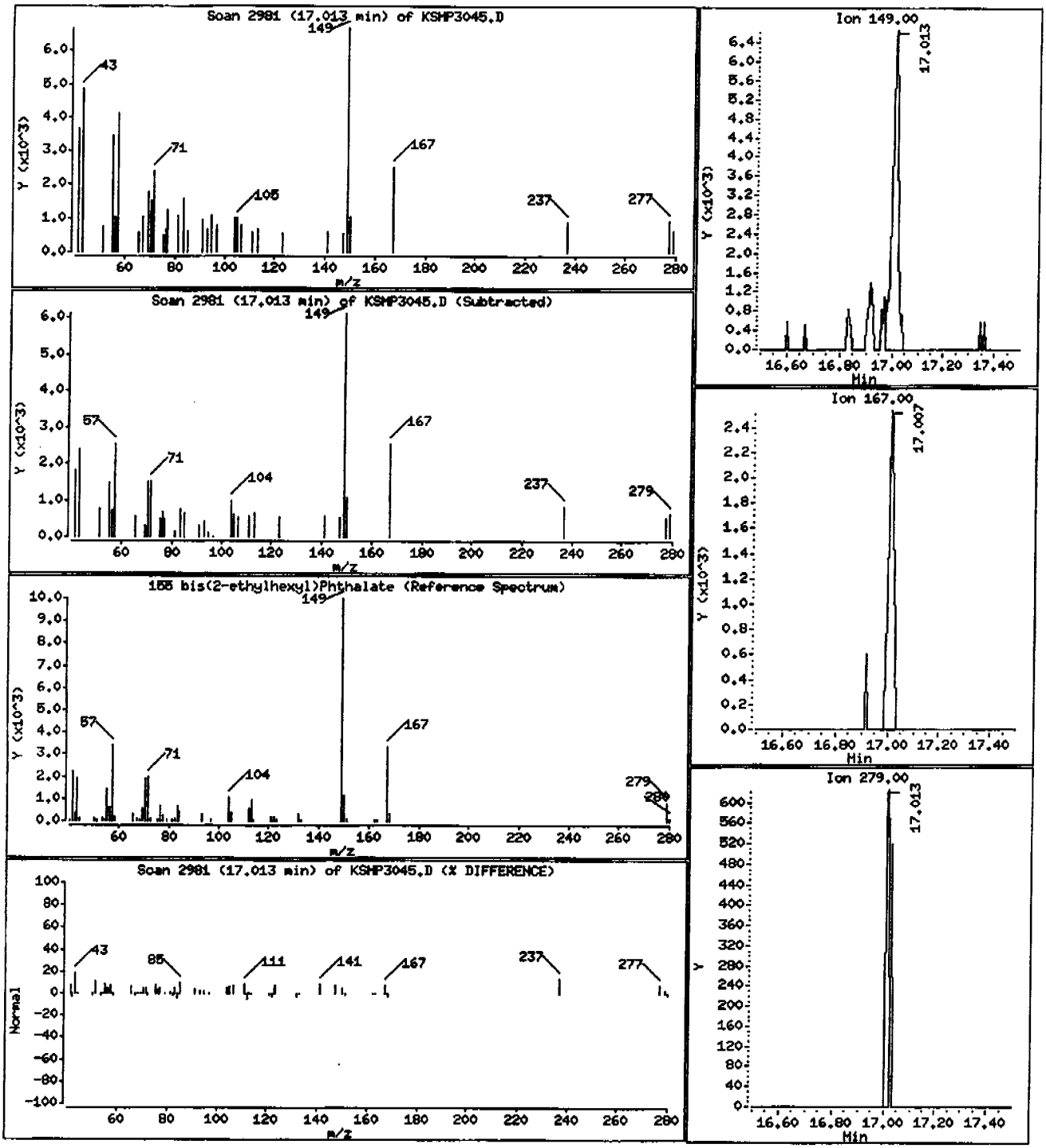
Operator: XIA

Column phase:

Column diameter: 2.00

155 bis(2-ethylhexyl)Phthalate

Concentration: 77.92 ug/Kg



Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3045.D

Date : 10-MAY-2005 19:23

Client ID: RE73-05-58841

Instrument: MSK.i

Sample Info: GSWXX1AD

Volume Injected (uL): 1.0

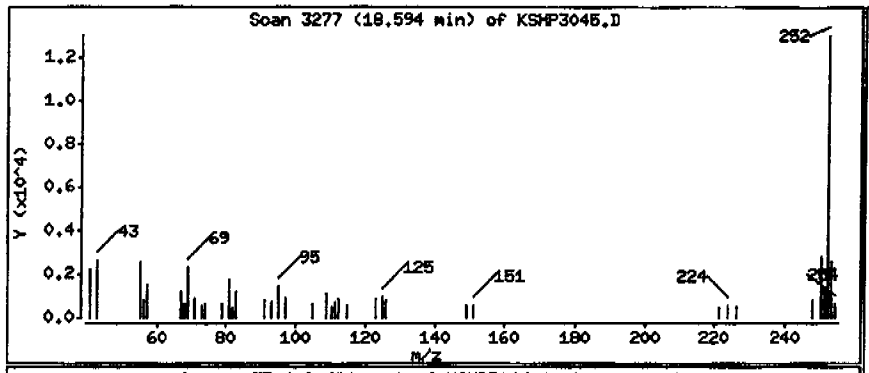
Operator: XIA

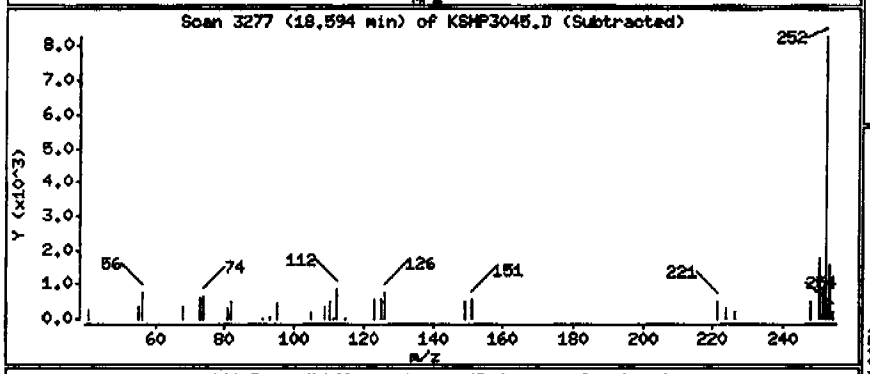
Column phase:

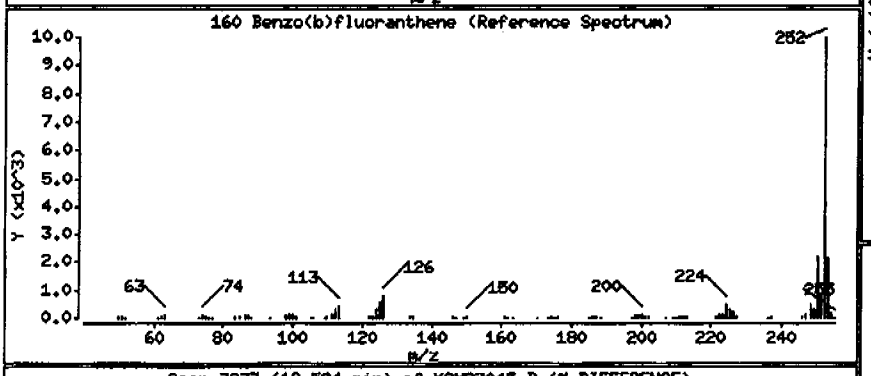
Column diameter: 2.00

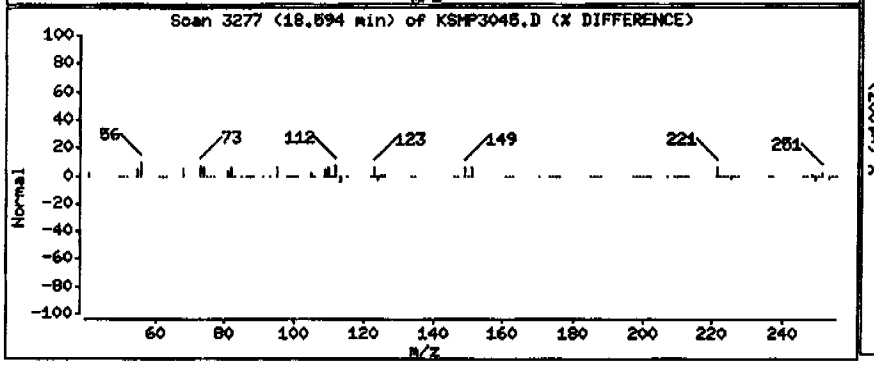
160 Benzo(b)fluoranthene

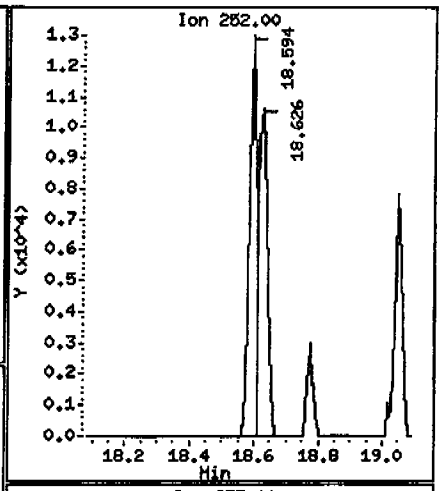
Concentration: 92.94 ug/Kg

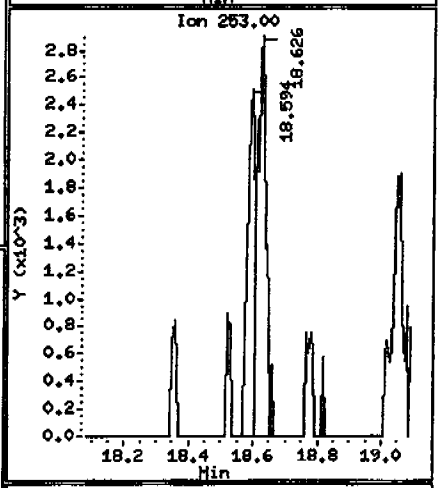


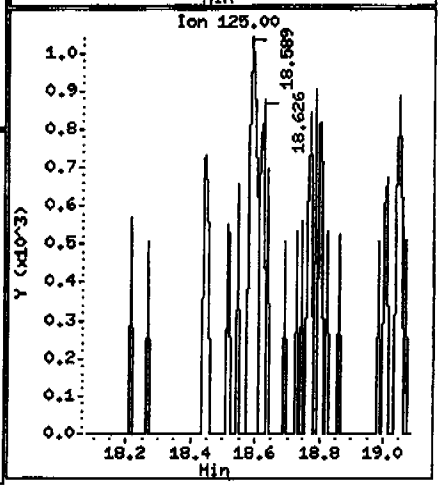












Data File: \\Slsvr01\BHA_LAB\MSK,i\050510A,B\KSMP3045.D

Date : 10-MAY-2005 19:23

Client ID: RE73-05-58841

Instrument: MSK,i

Sample Info: G8WXX1AD

Volume Injected (uL): 1.0

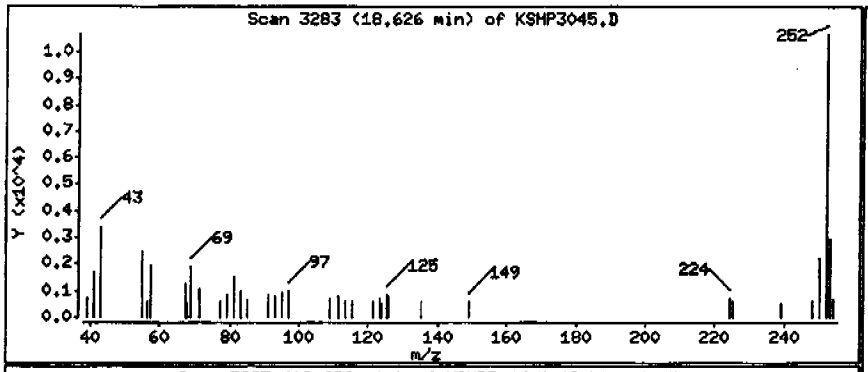
Operator: XIA

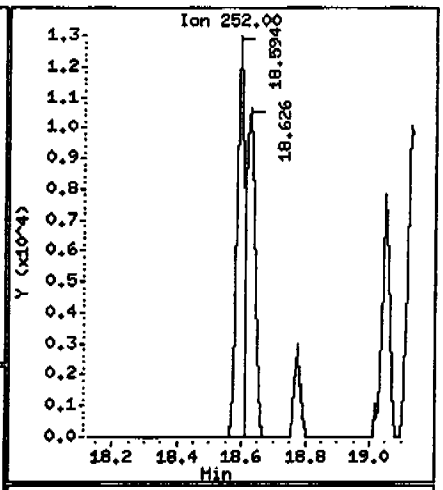
Column phase:

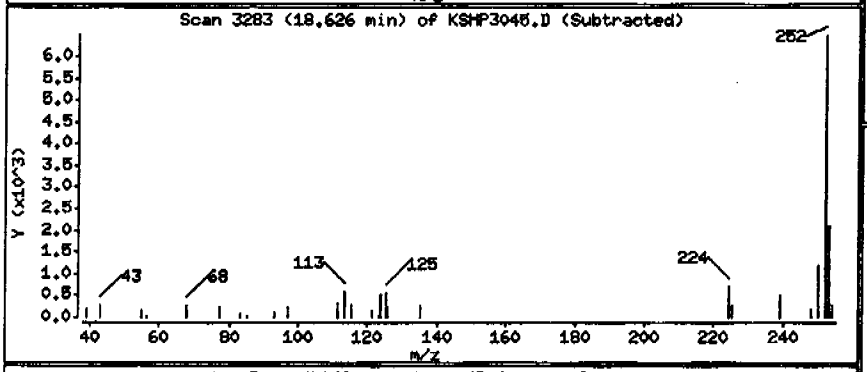
Column diameter: 2.00

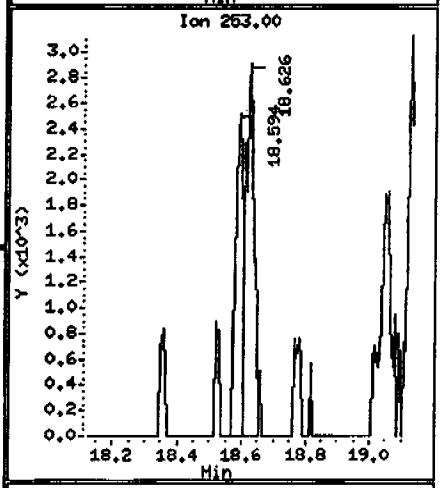
161 Benzo(k)fluoranthene

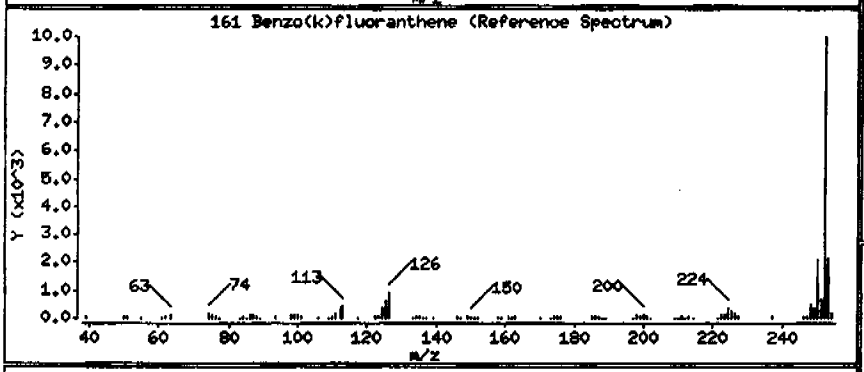
Concentration: 92.56 ug/Kg

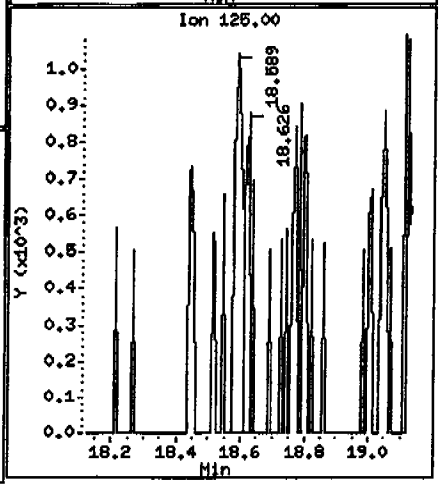


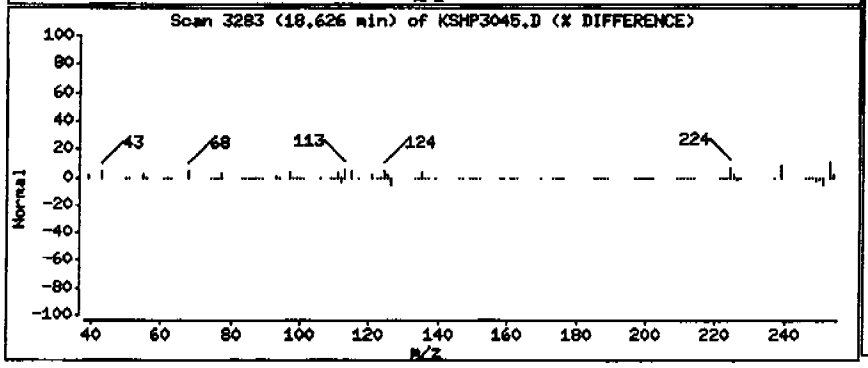












Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSHP3045.D

Page 10

Date : 10-MAY-2005 19:23

Client ID: RE73-06-58841

Instrument: MSK.i

Sample Info: C8WXX1AD

Volume Injected (uL): 1.0

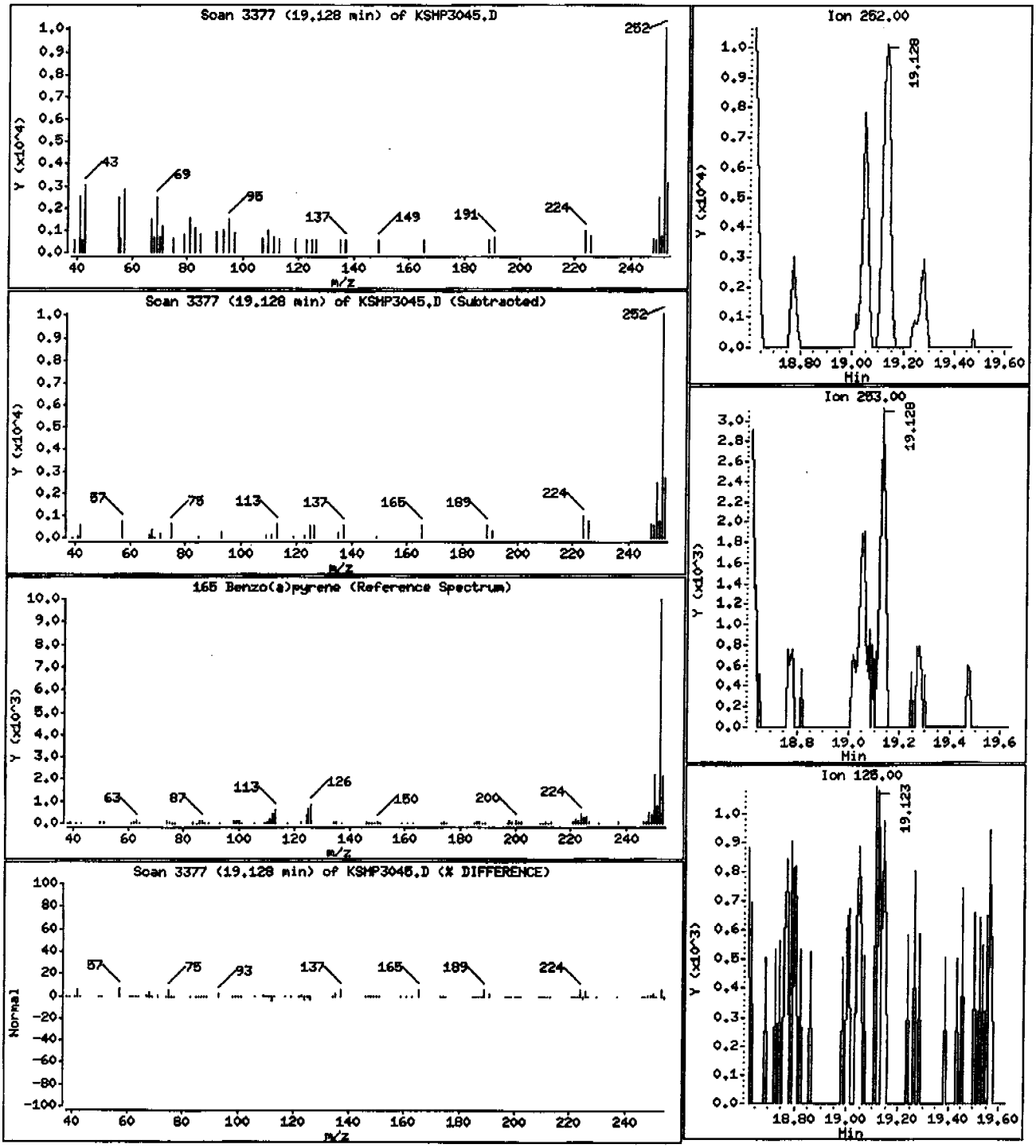
Operator: XIA

Column phase:

Column diameter: 2.00

165 Benzo(a)pyrene

Concentration: 90.92 ug/Kg



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KSMP3148.D Page 1
Report Date: 16-May-2005 10:50

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GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KSMP3148.D
Lab Smp Id: G8WXX2AD Client Smp ID: RE73-05-58841
Inj Date : 14-MAY-2005 15:17
Operator : XIA Inst ID: MSK.i
Smp Info : G8WXX2AD
Misc Info : F5D210380-003RE (5131374) SON GPC
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270K.m
Meth Date : 16-May-2005 10:26 hongs Quant Type: ISTD
Cal Date : 13-MAY-2005 15:58 Cal File: KCAL3134.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SONMS04.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Uf*Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Factor
Vt	2000.000	Volume of final extract (uL)
Vi	1.000	Volume Injected
Ws	30.200	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
$ 10 2-Fluorophenol	112	3.208	3.203	(0.711)	299735	57.3228	3796
$ 15 Phenol-d5	99	4.287	4.282	(0.950)	417620	61.2501	4056
* 22 1,4-Dichlorobenzene-d4	152	4.511	4.507	(1.000)	174812	40.0000	
$ 36 Nitrobenzene-d5	82	5.233	5.239	(0.860)	359729	42.1136	2789
* 48 Naphthalene-d8	136	6.082	6.088	(1.000)	634803	40.0000	
$ 69 2-Fluorobiphenyl	172	7.685	7.691	(0.878)	563462	40.6283	2691
* 82 Acenaphthene-d10	164	8.753	8.754	(1.000)	343124	40.0000	
$ 104 2,4,6-Tribromophenol	330	10.195	10.202	(1.165)	119454	59.7084	3954
* 121 Phenanthrene-d10	188	11.403	11.409	(1.000)	576002	40.0000	
$ 139 Terphenyl-d14	244	14.603	14.603	(0.882)	427870	36.5254	2419
* 153 Chrysene-d12	240	16.558	16.564	(1.000)	364207	40.0000	
* 166 Perylene-d12	264	19.165	19.171	(1.000)	293381	40.0000	

CES 05/16/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KSMP3148.D Page 2
Report Date: 16-May-2005 10:50

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSK.i
Lab File ID: KSMP3148.D
Lab Smp Id: G8WXX2AD
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Calibration Date: 14-MAY-2005
Calibration Time: 10:32
Client Smp ID: RE73-05-58841
Level: LOW
Sample Type: SOIL
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270K.m
Misc Info: F5D210380-003RE (5131374) SON GPC

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	175542	87771	351084	174812	-0.42
48 Naphthalene-d8	614562	307281	1229124	634803	3.29
82 Acenaphthene-d10	342243	171122	684486	343124	0.26
121 Phenanthrene-d10	614709	307355	1229418	576002	-6.30
153 Chrysene-d12	515242	257621	1030484	364207	-29.31
166 Perylene-d12	429113	214557	858226	293381	-31.63

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.51	4.01	5.01	4.51	0.10
48 Naphthalene-d8	6.09	5.59	6.59	6.08	-0.10
82 Acenaphthene-d10	8.75	8.25	9.25	8.75	-0.01
121 Phenanthrene-d10	11.41	10.91	11.91	11.40	-0.05
153 Chrysene-d12	16.56	16.06	17.06	16.56	-0.04
166 Perylene-d12	19.17	18.67	19.67	19.17	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KSMP3148.D Page 3
Report Date: 16-May-2005 10:50

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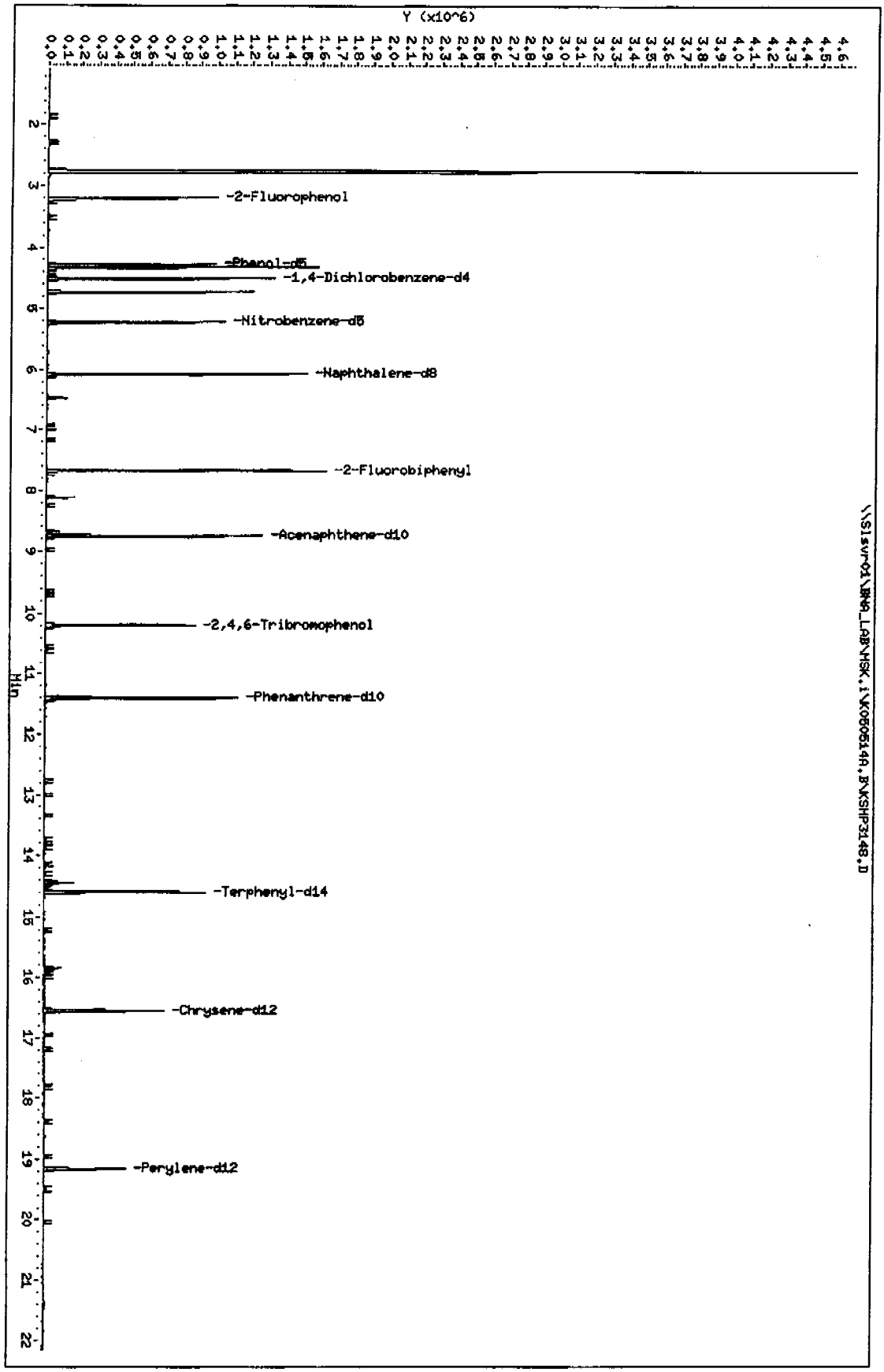
RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 21-APR-2005 00:00 Client SDG: F5D2103
Sample Matrix: SOLID Fraction: SV
Lab Smp Id: G8WXX2AD Client Smp ID: RE73-05-58841
Level: LOW Operator: XIA
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: Quant Type: ISTD
Sublist File: SONMS04.sub
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\8270K.m
Misc Info: F5D210380-003RE (5131374) SON GPC

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 10 2-Fluorophenol	4967	3796	76.43	40-103
$ 15 Phenol-d5	4967	4056	81.67	36-105
$ 36 Nitrobenzene-d5	3311	2789	84.23	45-114
$ 69 2-Fluorobiphenyl	3311	2691	81.26	49-120
$ 104 2,4,6-Tribromophen	4967	3954	79.61	39-114
$ 139 Terphenyl-d14	3311	2419	73.05	42-108



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050514A.B\KSHP3148.D
Date : 14-MAY-2005 15:17
Client ID: RE73-05-58841
Sample Info: G8WXX2AD
Volume Injected (uL): 1.0
Column phase:

Instrument: MSK.i
Operator: XIA
Column diameter: 2.00

GC/MS RAW QC DATA

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KBLK3007.D
Report Date: 10-May-2005 16:47

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KBLK3007.D
Lab Smp Id: G9HAL1AA Client Smp ID: SVBLKK129A
Inj Date : 09-MAY-2005 18:37
Operator : XIA Inst ID: MSK.i
Smp Info : G9HAL1AA
Misc Info : F5D290000-285B (5119285) APPIX SON
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Meth Date : 10-May-2005 11:13 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12 Cal File: KCAL3000.D
Als bottle: 16 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIXSONLCS04.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Uf*Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume Injected
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
$ 10 2-Fluorophenol	112	3.234	3.245	(0.710)	419034	121.124	4037
$ 15 Phenol-d5	99	4.318	4.324	(0.948)	583769	120.560	4019
* 22 1,4-Dichlorobenzene-d4	152	4.553	4.559	(1.000)	114522	40.0000	
$ 36 Nitrobenzene-d5	82	5.274	5.285	(0.861)	404978	72.0218	2401
* 48 Naphthalene-d8	136	6.129	6.140	(1.000)	409624	40.0000	
$ 69 2-Fluorobiphenyl	172	7.742	7.753	(0.878)	576892	62.3269	2078
* 82 Acenaphthene-d10	164	8.816	8.827	(1.000)	229870	40.0000	
$ 104 2,4,6-Tribromophenol	330	10.264	10.275	(1.164)	89074	69.3177	2310(R)
* 121 Phenanthrene-d10	188	11.476	11.487	(1.000)	374225	40.0000	
$ 139 Terphenyl-d14	244	14.682	14.687	(0.882)	600000	59.9523	1998
* 153 Chrysene-d12	240	16.637	16.653	(1.000)	316826	40.0000	
* 166 Perylene-d12	264	19.249	19.266	(1.000)	277586	40.0000	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KBLK3007.D Page 2
Report Date: 10-May-2005 16:11

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

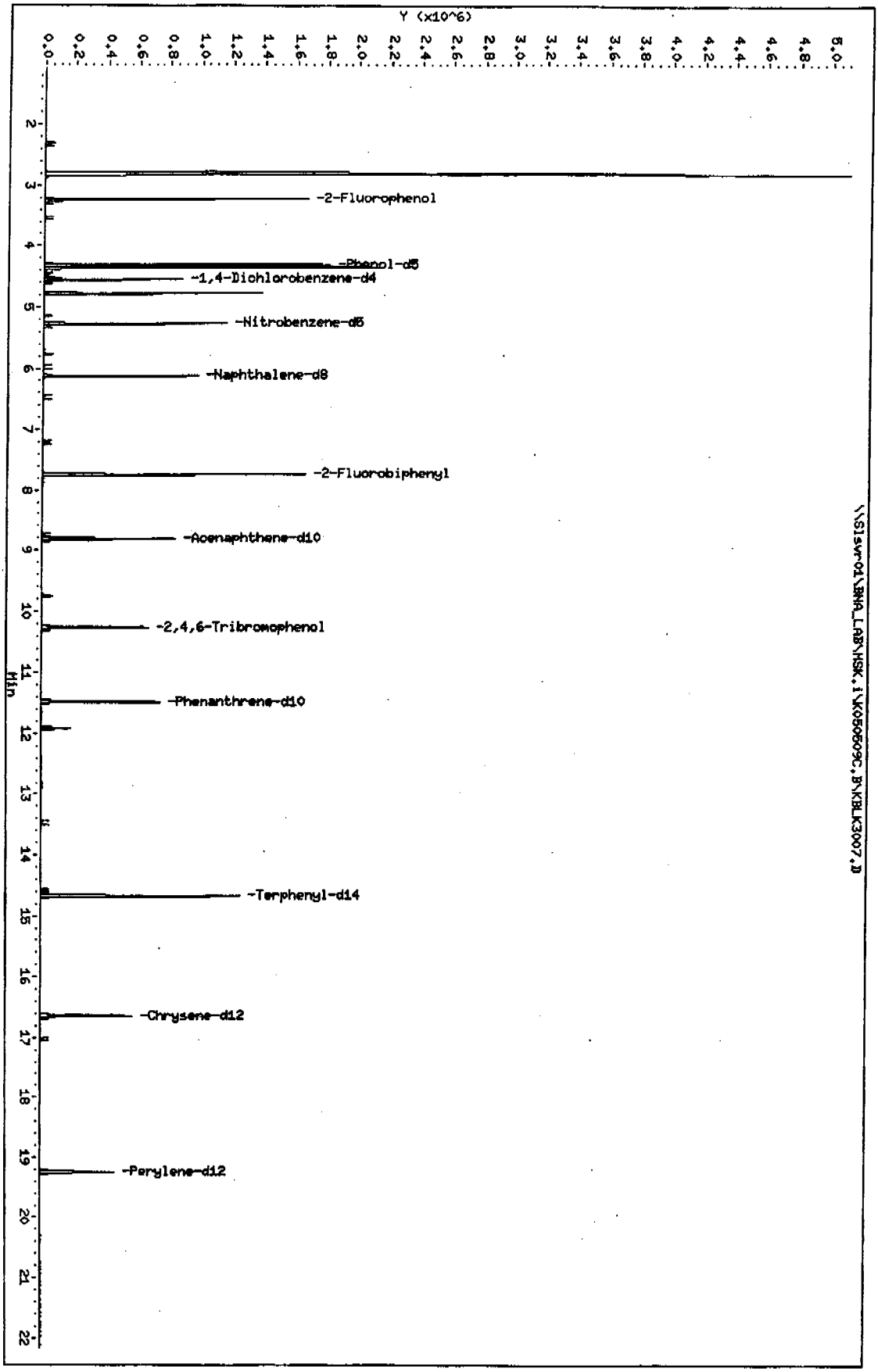
Instrument ID: MSK.i
Lab File ID: KBLK3007.D
Lab Smp Id: G9HAL1AA
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Misc Info: F5D290000-285B (5119285) APPIX SON

Calibration Date: 09-MAY-2005
Calibration Time: 16:30
Client Smp ID: SVBLKK129A
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	138615	69308	277230	114522	-17.38
48 Naphthalene-d8	492644	246322	985288	409624	-16.85
82 Acenaphthene-d10	276841	138421	553682	229870	-16.97
121 Phenanthrene-d10	505686	252843	1011372	374225	-26.00
153 Chrysene-d12	445673	222837	891346	316826	-28.91
166 Perylene-d12	381519	190760	763038	277586	-27.24

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.55	-0.12
48 Naphthalene-d8	6.14	5.64	6.64	6.13	-0.18
82 Acenaphthene-d10	8.83	8.33	9.33	8.82	-0.12
121 Phenanthrene-d10	11.49	10.99	11.99	11.48	-0.10
153 Chrysene-d12	16.65	16.15	17.15	16.64	-0.10
166 Perylene-d12	19.27	18.77	19.77	19.25	-0.08

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KBLK3007.D
Date : 09-MAY-2005 18:37
Client ID: SVBLKK129A
Sample Info: C9HAL1AA
Volume Injected (uL): 1.0
Column phase:

Instrument: MSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KBLK3007.D Page 1
Report Date: 10-May-2005 16:47

STL St. Louis

RECOVERY REPORT

Client Name:
Client SDG: F5D290000
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: G9HAL1AA
Client Smp ID: SVBLKK129A
Level: LOW
Operator: XIA
Data Type: MS DATA
SampleType: BLANK
SpikeList File:
Quant Type: ISTD
Sublist File: APPIXSONLCS04.sub
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Misc Info: F5D290000-285B (5119285) APPIX SON

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 10 2-Fluorophenol	5000	4037	80.75	50-98
$ 15 Phenol-d5	5000	4019	80.37	51-95
$ 36 Nitrobenzene-d5	3333	2401	72.02	50-111
$ 69 2-Fluorobiphenyl	3333	2078	62.33	57-117
$ 104 2,4,6-Tribromophen	5000	2310	46.21*	53-108
$ 139 Terphenyl-d14	3333	1998	59.95	49-107

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KBLK3007.D Page 1
Report Date: 10-May-2005 16:47

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KBLK3007.D
Lab Smp Id: G9HAL1AA Client Smp ID: SVBLKK129A
Inj Date : 09-MAY-2005 18:37
Operator : XIA Inst ID: MSK.i
Smp Info : G9HAL1AA
Misc Info : F5D290000-285B (5119285) APPIX SON
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Meth Date : 10-May-2005 11:13 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12 Cal File: KCAL3000.D
Als bottle: 16 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIXSONLCS04.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Uf*Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume Injected
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 22 1,4-Dichlorobenzene-d4	4.554	889394	40.000
* 121 Phenanthrene-d10	11.477	1039426	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/mL)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.828	9874350	444.092949	14800	0		0	22
Unknown				CAS #:			
11.915	234504	9.02435097	300.8	0		0	121

5/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KBLK3007.D

Date : 09-MAY-2005 18:37

Client ID: SVBLKK129A

Instrument: MSK.i

Sample Info: C9HAL1AA

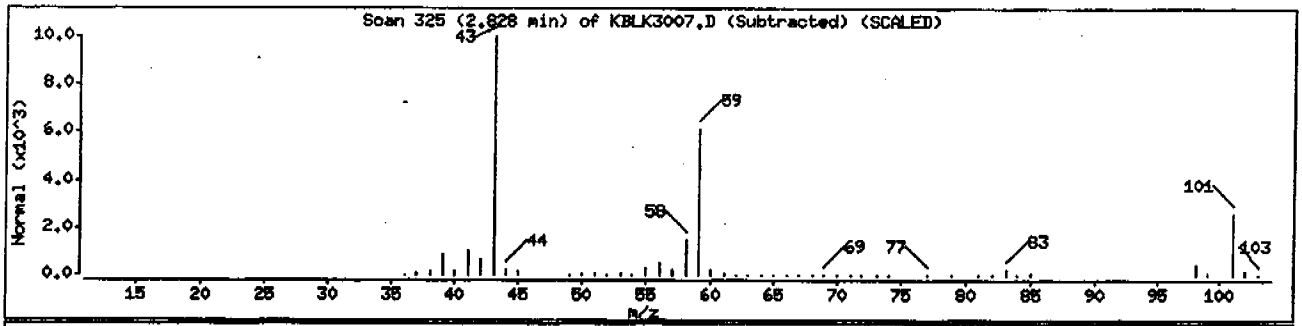
Volume Injected (uL): 1.0

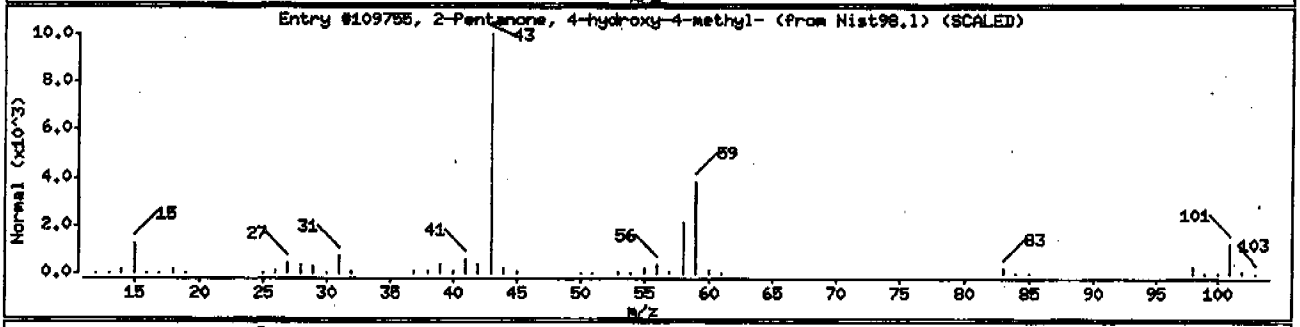
Operator: XIA

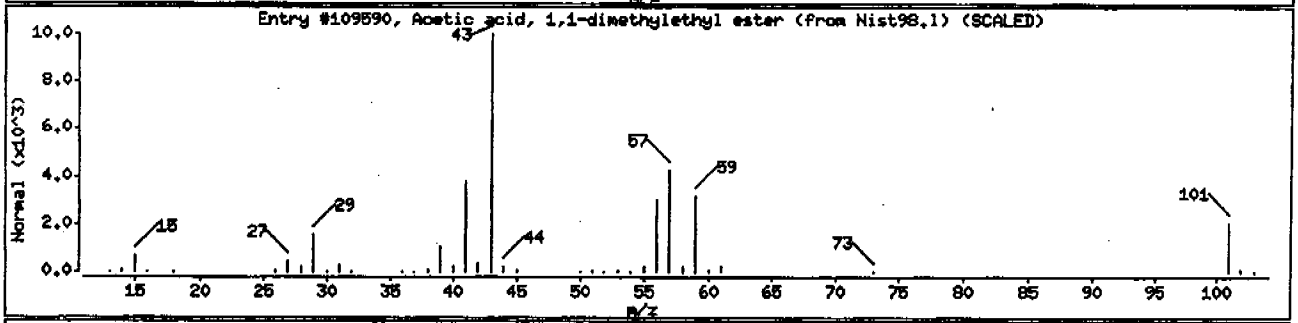
Column phase:

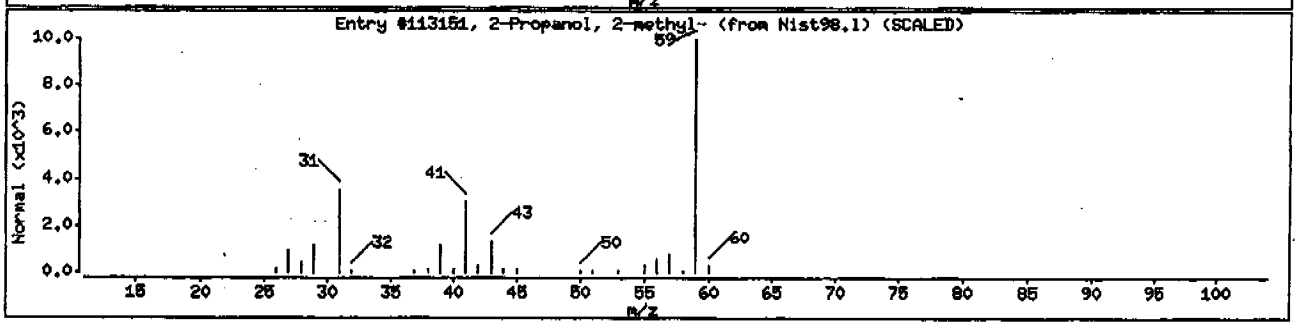
Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	Nist98.l	109755	50	C6H1202	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	Nist98.l	109590	33	C6H1202	116
2-Propanol, 2-methyl-	75-65-0	Nist98.l	113151	17	C4H100	74









Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KBLK3007.D

Date : 09-MAY-2005 18:37

Client ID: SVBLKK129A

Instrument: MSK.i

Sample Info: G9HAL1AA

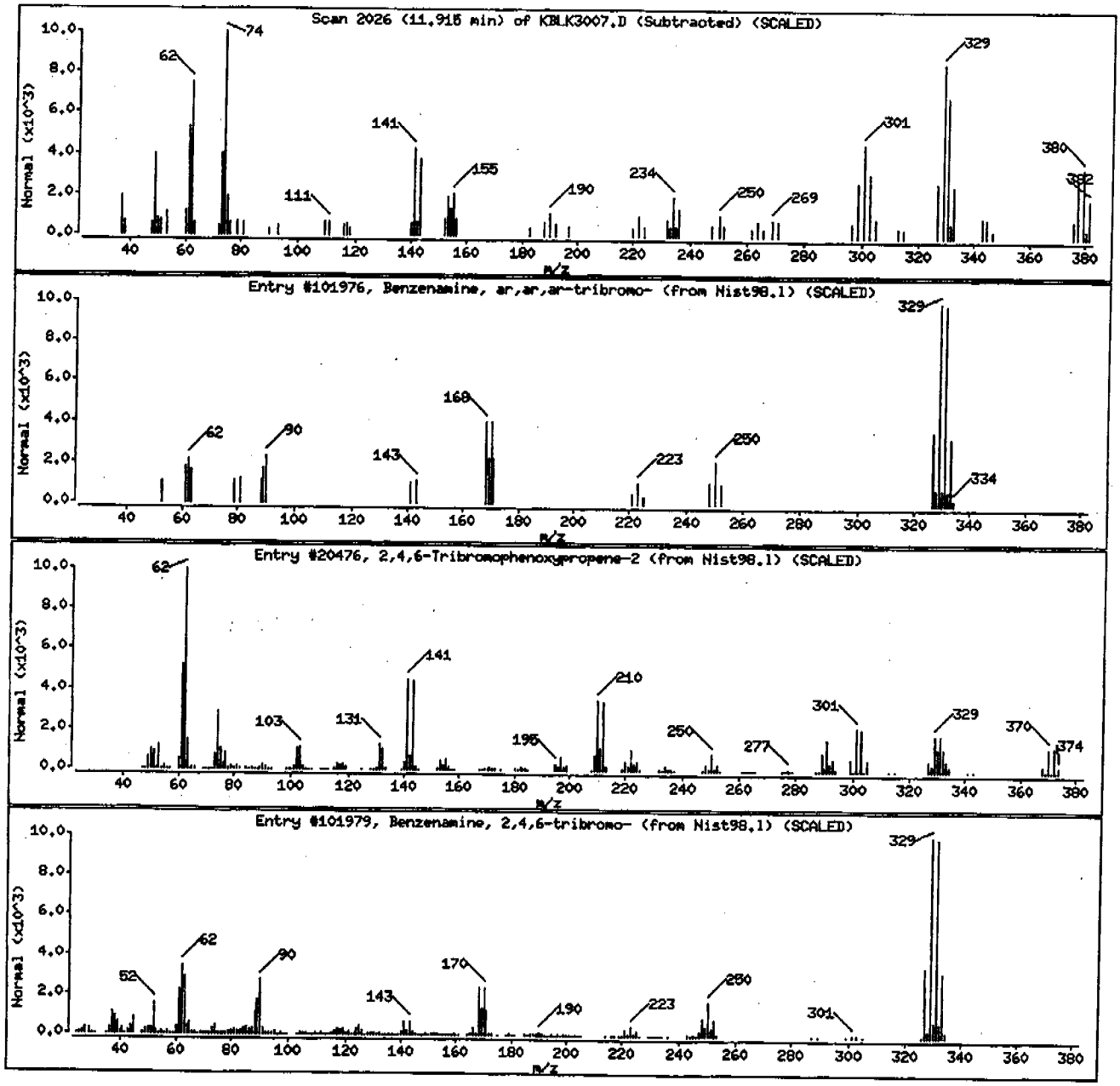
Volume Injected (uL): 1.0

Operator: XIA

Column phase:

Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzenamine, ar,ar,ar-tribromo-	62628-37-2	Nist98.l	101976	43	C6H4Br3N	327
2,4,6-Tribromophenoxypropene-2	1000077-77-8	Nist98.l	20476	38	C9H7Br3O	368
Benzenamine, 2,4,6-tribromo-	147-82-0	Nist98.l	101979	38	C6H4Br3N	327



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KBLK3104.D Page 1
Report Date: 13-May-2005 10:53

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GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KBLK3104.D
Lab Smp Id: HAAT21AA Client Smp ID: SVBLKK132D
Inj Date : 12-MAY-2005 18:00
Operator : XIA Inst ID: MSK.i
Smp Info : HAAT21AA
Misc Info : F5E110000-374B (5131374) SON GPC
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m
Meth Date : 12-May-2005 16:05 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 12:01 Cal File: KCAL2994.D
Als bottle: 12 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SONLCS04.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Uf*Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Factor
Vt	2000.000	Volume of final extract (uL)
Vi	1.000	Volume Injected
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
$ 10 2-Fluorophenol	112	3.246	3.254	(0.717)	276862	63.4850	4232
$ 15 Phenol-d5	99	4.336	4.333	(0.958)	375460	61.5112	4101
* 22 1,4-Dichlorobenzene-d4	152	4.528	4.536	(1.000)	144365	40.0000	
$ 36 Nitrobenzene-d5	82	5.249	5.263	(0.860)	326014	45.8817	3059
* 48 Naphthalene-d8	136	6.104	6.117	(1.000)	517624	40.0000	
$ 69 2-Fluorobiphenyl	172	7.712	7.725	(0.878)	471004	42.4713	2831
* 82 Acenaphthene-d10	164	8.780	8.799	(1.000)	275418	40.0000	
$ 104 2,4,6-Tribromophenol	330	10.239	10.252	(1.166)	85328	55.4210	3695
* 121 Phenanthrene-d10	188	11.441	11.460	(1.000)	467610	40.0000	
$ 139 Terphenyl-d14	244	14.646	14.659	(0.882)	450552	36.8849	2459
* 153 Chrysene-d12	240	16.601	16.625	(1.000)	386698	40.0000	
* 166 Perylene-d12	264	19.219	19.232	(1.000)	329928	40.0000	

05/13/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KBLK3104.D Page 2
Report Date: 13-May-2005 09:43

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSK.i
Lab File ID: KBLK3104.D
Lab Smp Id: HAAT21AA
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m
Misc Info: F5E110000-374B (5131374) SON GPC

Calibration Date: 12-MAY-2005
Calibration Time: 12:41
Client Smp ID: SVBLKK132D
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	167849	83925	335698	144365	-13.99
48 Naphthalene-d8	587608	293804	1175216	517624	-11.91
82 Acenaphthene-d10	335274	167637	670548	275418	-17.85
121 Phenanthrene-d10	627534	313767	1255068	467610	-25.48
153 Chrysene-d12	548402	274201	1096804	386698	-29.49
166 Perylene-d12	477098	238549	954196	329928	-30.85

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.54	4.04	5.04	4.53	-0.18
48 Naphthalene-d8	6.12	5.62	6.62	6.10	-0.22
82 Acenaphthene-d10	8.80	8.30	9.30	8.78	-0.21
121 Phenanthrene-d10	11.46	10.96	11.96	11.44	-0.17
153 Chrysene-d12	16.63	16.13	17.13	16.60	-0.15
166 Perylene-d12	19.23	18.73	19.73	19.22	-0.07

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KBLK3104.D Page 1
Report Date: 13-May-2005 10:53

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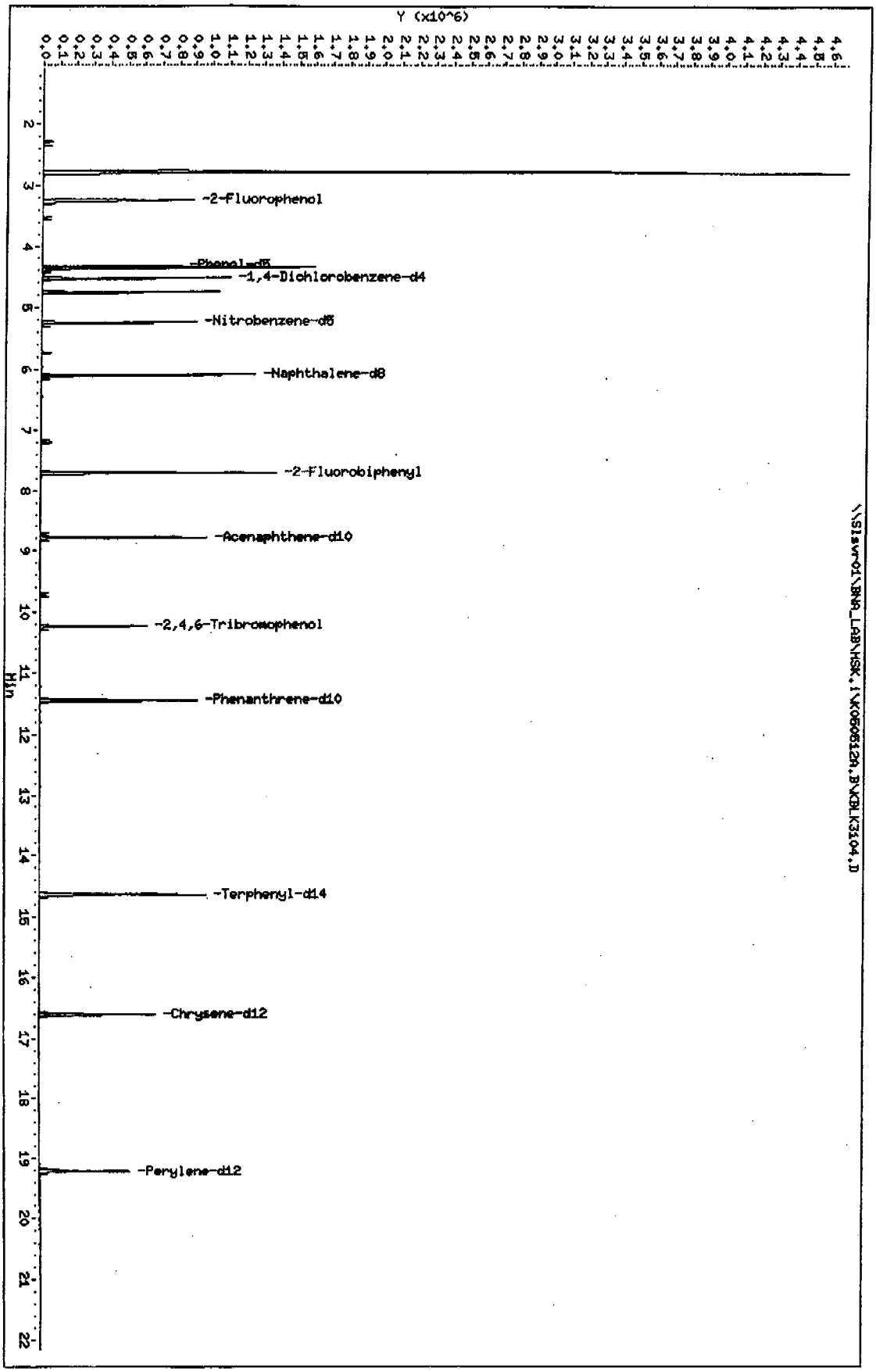
RECOVERY REPORT

Client Name:
Client SDG: F5E110000
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: HAAT21AA
Client Smp ID: SVBLKK132D
Level: LOW
Operator: XIA
Data Type: MS DATA
SampleType: BLANK
SpikeList File:
Quant Type: ISTD
Sublist File: SONLCS04.sub
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m
Misc Info: F5E110000-374B (5131374) SON GPC

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 10 2-Fluorophenol	5000	4232	84.65	50-98
$ 15 Phenol-d5	5000	4101	82.01	51-95
$ 36 Nitrobenzene-d5	3333	3059	91.76	50-111
$ 69 2-Fluorobiphenyl	3333	2831	84.94	57-117
$ 104 2,4,6-Tribromophen	5000	3695	73.89	53-108
$ 139 Terphenyl-d14	3333	2459	73.77	49-107



Data File: \\Slsvr01\BNA_LAB\HSK.i\K060512A.B\KBLK3104.D
Date : 12-MAY-2005 18:00
Client ID: SVBLKK132D
Sample Info: HAAT21AA
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KBLK3104.D Page 1
Report Date: 13-May-2005 10:53

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GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KBLK3104.D
Lab Smp Id: HAAT21AA Client Smp ID: SVBLKK132D
Inj Date : 12-MAY-2005 18:00
Operator : XIA Inst ID: MSK.i
Smp Info : HAAT21AA
Misc Info : F5E110000-374B (5131374) SON GPC
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m
Meth Date : 12-May-2005 16:05 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 12:01 Cal File: KCAL2994.D
Als bottle: 12 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SONLCS04.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Uf*Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Factor
Vt	2000.000	Volume of final extract (uL)
Vi	1.000	Volume Injected
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 22 1,4-Dichlorobenzene-d4	4.528	1107823	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ug/mL)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate				CAS #:			
2.798	8294957	299.504697	19970	0		0	22

05/13/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KBLK3104.D

Date : 12-MAY-2005 18:00

Client ID: SVBLKK132D

Instrument: MSK.i

Sample Info: HAAT21AA

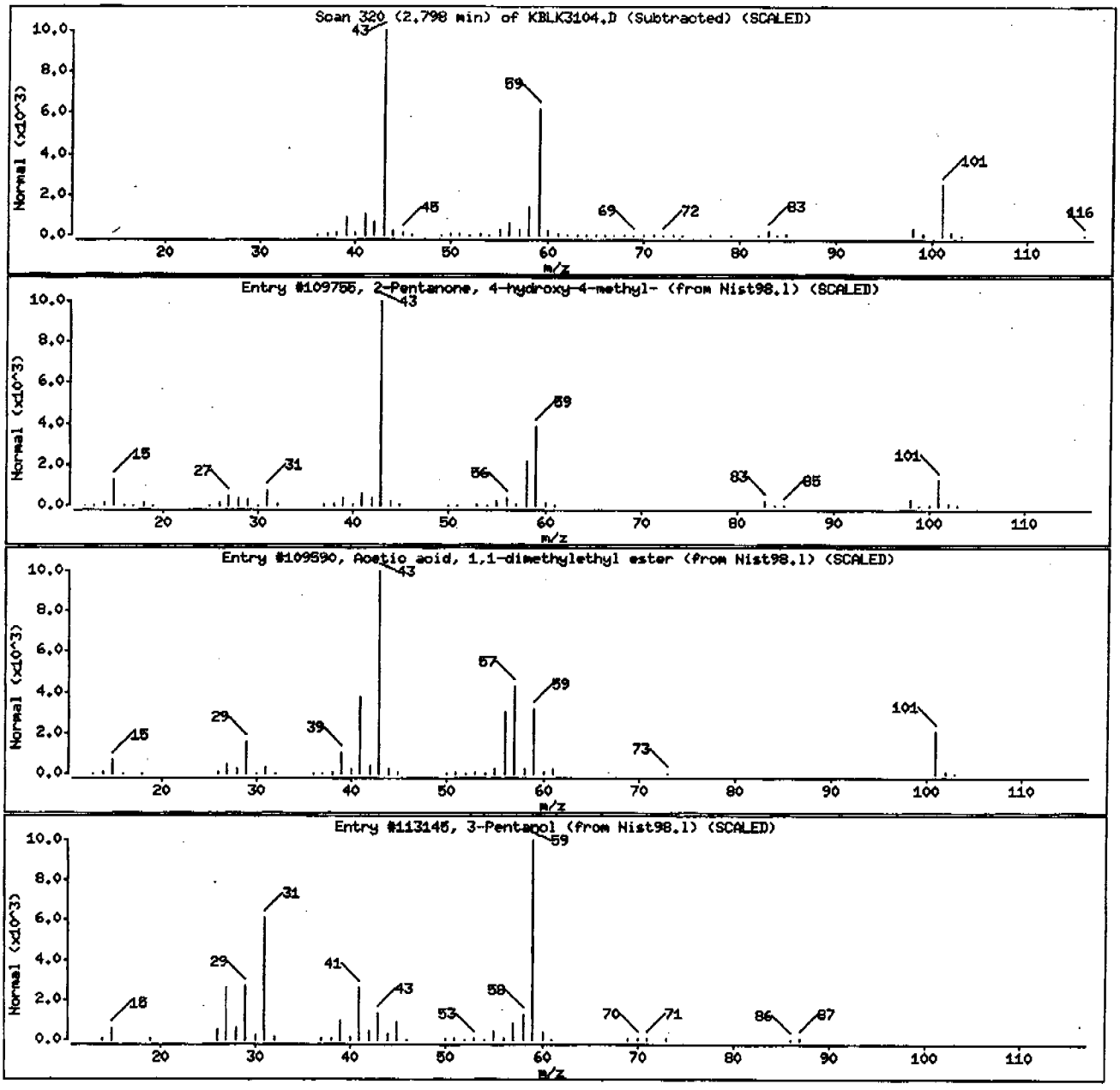
Volume Injected (uL): 1.0

Operator: XIA

Column phase:

Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	Nist98.l	109755	50	C6H1202	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	Nist98.l	109590	33	C6H1202	116
3-Pentanol	584-02-1	Nist98.l	113145	17	C5H120	88



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KLCS3008.D Page 1
Report Date: 10-May-2005 16:16

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KLCS3008.D
Lab Smp Id: G9HAL1AC Client Smp ID: SVLCSK129A
Inj Date : 09-MAY-2005 19:09
Operator : XIA Inst ID: MSK.i
Smp Info : G9HAL1AC
Misc Info : F5D290000-285C (5119285) APPIX SON
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Meth Date : 10-May-2005 11:13 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12 Cal File: KCAL3000.D
Als bottle: 17 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: APPIXSONLCS04.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Uf*Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume Injected
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	4 N-Nitrosodimethylamine	74	1.753	1.706	(0.385)	460154	159.965	5332
	3 Pyridine	79	1.710	1.690	(0.375)	463827	91.3743	3046
$	10 2-Fluorophenol	112	3.238	3.245	(0.710)	600371	115.896	3863
	17 Aniline	93	4.258	4.254	(0.934)	1005239	106.812	3560
	19 Bis(2-chloroethyl)ether	93	4.338	4.324	(0.952)	1037610	155.776	5192
$	15 Phenol-d5	99	4.328	4.324	(0.950)	876283	120.858	4029
	16 Phenol	94	4.338	4.334	(0.952)	1297882	161.709	5390(A)
	20 2-Chlorophenol	128	4.392	4.388	(0.964)	892683	153.828	5128
	21 1,3-Dichlorobenzene	146	4.515	4.511	(0.991)	727758	109.659	3655
*	22 1,4-Dichlorobenzene-d4	152	4.557	4.559	(1.000)	171483	40.0000	
	23 1,4-Dichlorobenzene	146	4.579	4.575	(1.005)	767807	108.942	3631
	26 1,2-Dichlorobenzene	146	4.798	4.799	(1.053)	735220	112.798	3760
	25 Benzyl Alcohol	108	4.819	4.804	(1.057)	517771	181.553	6052(A)
	28 2,2-oxybis(1-Chloropropane)	45	4.969	4.965	(1.090)	994464	144.373	4812
	27 2-Methylphenol	108	5.011	5.013	(1.100)	705391	137.258	4575
	35 Hexachloroethane	117	5.150	5.157	(1.130)	289836	94.0520	3135
	32 N-Nitrosodinpropylamine	70	5.172	5.152	(1.135)	843532	156.231	5208
	29 3 and 4-Methylphenol	108	5.204	5.205	(1.142)	779718	142.270	4742
$	36 Nitrobenzene-d5	82	5.284	5.285	(0.861)	534334	68.8130	2294
	37 Nitrobenzene	77	5.311	5.307	(0.865)	1036428	125.939	4198

05/10/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KLCS3008.D
Report Date: 10-May-2005 16:16

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	39 Isophorone	82	5.610	5.595	(0.914)	1759336	163.989	5466(A)
	40 2-Nitrophenol	139	5.706	5.702	(0.930)	368720	129.322	4311
	41 2,4-Dimethylphenol	107	5.839	5.830	(0.951)	933959	154.356	5145
	42 Bis(2-chloroethoxy)methane	93	5.920	5.910	(0.964)	1068042	156.174	5206
	45 2,4-Dichlorophenol	162	6.037	6.038	(0.983)	679548	152.745	5091
	47 1,2,4-Trichlorobenzene	180	6.096	6.097	(0.993)	607363	114.592	3820
*	48 Naphthalene-d8	136	6.139	6.140	(1.000)	565666	40.0000	
	44 Benzoic Acid	122	6.096	6.097	(0.993)	165996	58.8357	1961
	50 Naphthalene	128	6.165	6.167	(1.004)	1886189	117.771	3926
	51 4-Chloroaniline	127	6.315	6.316	(1.029)	260361	40.1489	1338(R)
	54 Hexachlorobutadiene	225	6.411	6.412	(1.044)	443688	120.522	4017
	62 2-Methylnaphthalene	142	7.127	7.128	(1.161)	1357588	118.503	3950
	59 4-Chloro-3-Methylphenol	107	7.090	7.080	(1.155)	787947	152.442	5081
	66 Hexachlorocyclopentadiene	237	7.469	7.475	(0.847)	455604	146.849	4895
	67 2,4,6-Trichlorophenol	196	7.661	7.662	(0.869)	456941	136.450	4548
$	69 2-Fluorobiphenyl	172	7.752	7.753	(0.879)	805422	68.9372	2298
	68 2,4,5-Trichlorophenol	196	7.741	7.748	(0.878)	563853	159.316	5310
	72 2-Chloronaphthalene	162	7.875	7.876	(0.893)	1194590	122.289	4076
	73 2-Nitroaniline	65	8.179	8.170	(0.927)	596980	141.867	4729
	76 Dimethylphthalate	163	8.548	8.539	(0.969)	1762393	157.537	5251
	79 Acenaphthylene	152	8.559	8.560	(0.970)	1847019	128.250	4275
	80 2,6-Dinitrotoluene	165	8.665	8.651	(0.982)	365199	152.774	5092
*	82 Acenaphthene-d10	164	8.820	8.827	(1.000)	290157	40.0000	
	83 Acenaphthene	153	8.879	8.880	(1.007)	1077865	118.518	3950
	81 3-Nitroaniline	138	8.890	8.886	(1.008)	175414	74.6960	2490
	84 2,4-Dinitrophenol	184	9.077	9.067	(1.029)	186397	130.535	4351
	86 Dibenzofuran	168	9.162	9.158	(1.039)	1629822	121.299	4043
	88 2,4-Dinitrotoluene	165	9.339	9.329	(1.059)	489695	159.301	5310
	85 4-Nitrophenol	109	9.376	9.377	(1.063)	329695	168.175	5606(A)
	94 Fluorene	166	9.777	9.773	(1.108)	1321424	122.881	4096
	93 Diethylphthalate	149	9.814	9.799	(1.113)	1792505	160.082	5336(A)
	95 4-Chlorophenyl-phenylether	204	9.819	9.821	(1.113)	742900	128.052	4268
	98 4-Nitroaniline	138	10.049	10.008	(1.139)	318910	139.304	4643
	99 4,6-Dinitro-2-methylphenol	198	10.086	10.061	(0.879)	357921	189.793	6326(AQM)
	100 N-Nitrosodiphenylamine	169	10.102	10.088	(0.880)	1088839	157.127	5238
	102 Azobenzene	77	10.108	10.104	(0.880)	2284109	146.941	4898
$	104 2,4,6-Tribromophenol	330	10.279	10.275	(1.165)	143471	88.4518	2948
	109 4-Bromophenyl-phenylether	248	10.706	10.707	(0.933)	414904	130.331	4344
	112 Hexachlorobenzene	284	10.931	10.932	(0.952)	304726	93.7593	3125(R)
	117 Pentachlorophenol	266	11.337	11.338	(0.987)	163457	90.1776	3006
*	121 Phenanthrene-d10	188	11.481	11.487	(1.000)	455143	40.0000	
	122 Phenanthrene	178	11.534	11.530	(1.005)	1624926	115.587	3853
	124 Anthracene	178	11.620	11.616	(1.012)	1590918	117.062	3902
	126 Carbazole	167	12.015	12.016	(1.047)	1042150	89.7522	2992(R)
	129 Di-n-Butylphthalate	149	12.907	12.903	(1.124)	2300283	151.198	5040
	134 Fluoranthene	202	13.826	13.827	(1.204)	1499583	103.213	3440(R)
	135 Benzidine	184	14.211	14.223	(0.854)	210206	41.4056	1380
	137 Pyrene	202	14.237	14.244	(0.855)	1089477	80.0678	2669(R)
$	139 Terphenyl-d14	244	14.675	14.687	(0.882)	637496	60.2897	2010
	146 Butylbenzylphthalate	149	15.808	15.809	(0.950)	895247	159.102	5303
	150 Benzo(a)Anthracene	228	16.620	16.621	(0.998)	1370106	116.889	3896
*	153 Chrysene-d12	240	16.647	16.653	(1.000)	334742	40.0000	
	154 Chrysene	228	16.705	16.707	(1.004)	1286473	115.336	3844
	152 3,3'-Dichlorobenzidine	252	16.711	16.717	(1.004)	383882	85.0539	2835

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KLCS3008.D Page 3
Report Date: 10-May-2005 16:16

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
155 bis(2-ethylhexyl)Phthalate	149	17.037	17.038	(1.023)	1089793	154.712	5157
158 Di-n-octylphthalate	149	18.180	18.181	(0.944)	1726365	159.906	5330
160 Benzo(b)fluoranthene	252	18.629	18.630	(0.968)	1165280	118.445	3948
161 Benzo(k)fluoranthene	252	18.629	18.630	(0.968)	1165280	119.252	3975(R)
165 Benzo(a)pyrene	252	19.152	19.164	(0.995)	444778	50.0921	1670(R)
* 166 Perylene-d12	264	19.254	19.266	(1.000)	253365	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.968	20.986	(1.089)	500531	60.8114	2027(R)
174 Dibenzo(a,h)anthracene	278	21.032	21.034	(1.092)	969051	121.329	4044
177 Benzo(g,h,i)perylene	276	21.401	21.440	(1.112)	39041	5.31286	177.1(aRH)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KLCS3008.D Page 4
Report Date: 10-May-2005 16:16

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSK.i
Lab File ID: KLCS3008.D
Lab Smp Id: G9HAL1AC
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Misc Info: F5D290000-285C (5119285) APPIX SON

Calibration Date: 09-MAY-2005
Calibration Time: 16:30
Client Smp ID: SVLCSK129A
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	138615	69308	277230	171483	23.71
48 Naphthalene-d8	492644	246322	985288	565666	14.82
82 Acenaphthene-d10	276841	138421	553682	290157	4.81
121 Phenanthrene-d10	505686	252843	1011372	455143	-9.99
153 Chrysene-d12	445673	222837	891346	334742	-24.89
166 Perylene-d12	381519	190760	763038	253365	-33.59

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.56	4.06	5.06	4.56	-0.03
48 Naphthalene-d8	6.14	5.64	6.64	6.14	-0.02
82 Acenaphthene-d10	8.83	8.33	9.33	8.82	-0.08
121 Phenanthrene-d10	11.49	10.99	11.99	11.48	-0.06
153 Chrysene-d12	16.65	16.15	17.15	16.65	-0.04
166 Perylene-d12	19.27	18.77	19.77	19.25	-0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KLCS3008.D Page 5
Report Date: 10-May-2005 16:16

STL St. Louis

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: G9HAL1AC
Level: LOW
Data Type: MS DATA
SpikeList File: SONLCS04.spk
Sublist File: APPIXSONLCS04.sub
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\8270K.m
Misc Info: F5D290000-285C (5119285) APPIX SON

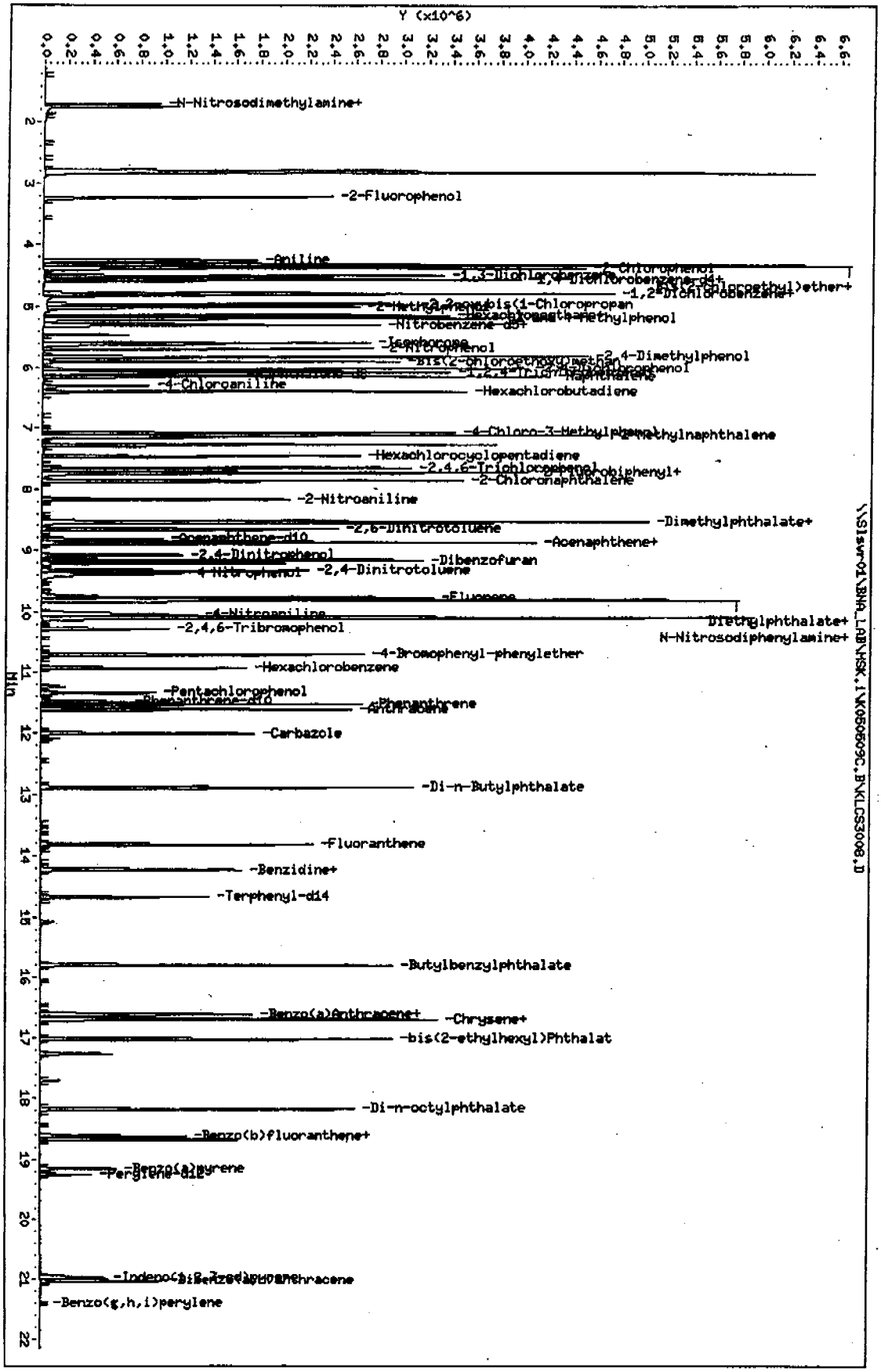
Client SDG: F5D290000
Fraction: SV
Client Smp ID: SVLCSK129A
Operator: XIA
SampleType: LCS
Quant Type: ISTD

SPIKE	COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
83	Acenaphthene	6667	3950	59.26	56-107
79	Acenaphthylene	6667	4275	64.13	56-107
124	Anthracene	6667	3902	58.53	55-107
150	Benzo(a)Anthracene	6667	3896	58.44	56-112
160	Benzo(b)fluoranthe	6667	3948	59.22	53-112
161	Benzo(k)fluoranthe	6667	3975	59.63*	60-126
177	Benzo(g,h,i)peryle	6667	177.1	2.66*	37-139
165	Benzo(a)pyrene	6667	1670	25.05*	54-109
42	Bis(2-chloroethoxy	6667	5206	78.09	53-103
19	Bis(2-chloroethyl)	6667	5192	77.89	43-94
155	bis(2-ethylhexyl)P	6667	5157	77.36	53-112
109	4-Bromophenyl-phen	6667	4344	65.17	54-106
146	Butylbenzylphthala	6667	5303	79.55	55-115
126	Carbazole	6667	2992	44.88*	45-112
51	4-Chloroaniline	6667	1338	20.07*	21-96
59	4-Chloro-3-Methylp	6667	5081	76.22	52-100
20	2-Chlorophenol	6667	5128	76.91	49-92
95	4-Chlorophenyl-phe	6667	4268	64.03	56-105
154	Chrysene	6667	3844	57.67	55-112
174	Dibenzo(a,h)anthra	6667	4044	60.66	42-133
86	Dibenzofuran	6667	4043	60.65	46-108
129	Di-n-Butylphthalat	6667	5040	75.60	55-109
152	3,3'-Dichlorobenzi	6667	2835	42.53	32-95
45	2,4-Dichlorophenol	6667	5091	76.37	51-98
93	Diethylphthalate	6667	5336	80.04	56-111
41	2,4-Dimethylphenol	6667	5145	77.18	48-97
76	Dimethylphthalate	6667	5251	78.77	55-105
99	4,6-Dinitro-2-meth	6667	6326	94.90	27-100
84	2,4-Dinitrophenol	6667	4351	65.27	10-91
88	2,4-Dinitrotoluene	6667	5310	79.65	56-117
80	2,6-Dinitrotoluene	6667	5092	76.39	55-108
158	Di-n-octylphthalat	6667	5330	79.95	49-112
134	Fluoranthene	6667	3440	51.61*	56-106
94	Fluorene	6667	4096	61.44	56-105
112	Hexachlorobenzene	6667	3125	46.88*	57-111
54	Hexachlorobutadien	6667	4017	60.26	50-102
66	Hexachlorocyclopen	6667	4895	73.42	41-117
35	Hexachloroethane	6667	3135	47.03	43-100
173	Indeno(1,2,3-cd)py	6667	2027	30.41*	42-129
39	Isophorone	6667	5466	81.99	57-110

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KLCS3008.D Page 6
Report Date: 10-May-2005 16:16

	SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
62	2-Methylnaphthalen	6667	3950	59.25	38-112
27	2-Methylphenol	6667	4575	68.63	48-92
29	3 and 4-Methylphen	6667	4742	71.13	47-100
50	Naphthalene	6667	3926	58.89	52-102
73	2-Nitroaniline	6667	4729	70.93	45-114
81	3-Nitroaniline	6667	2490	37.35	30-94
98	4-Nitroaniline	6667	4643	69.65	42-109
37	Nitrobenzene	6667	4198	62.97	50-102
40	2-Nitrophenol	6667	4311	64.66	50-99
85	4-Nitrophenol	6667	5606	84.09	44-109
100	N-Nitrosodiphenyla	6667	5238	78.56	58-114
32	N-Nitrosodinpropyl	6667	5208	78.12	55-108
28	2,2-oxybis(1-Chlor	6667	4812	72.19	44-102
117	Pentachlorophenol	6667	3006	45.09	37-102
122	Phenanthrene	6667	3853	57.79	57-108
16	Phenol	6667	5390	80.85	49-92
137	Pyrene	6667	2669	40.03*	54-114
47	1,2,4-Trichloroben	6667	3820	57.30	50-101
68	2,4,5-Trichlorophe	6667	5310	79.66	53-101
67	2,4,6-Trichlorophe	6667	4548	68.22	52-100

	SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 10	2-Fluorophenol	5000	3863	77.26	50-98
$ 15	Phenol-d5	5000	4029	80.57	51-95
$ 36	Nitrobenzene-d5	3333	2294	68.81	50-111
$ 69	2-Fluorobiphenyl	3333	2298	68.94	57-117
$ 104	2,4,6-Tribromophen	5000	2948	58.97	53-108
$ 139	Terphenyl-d14	3333	2010	60.29	49-107



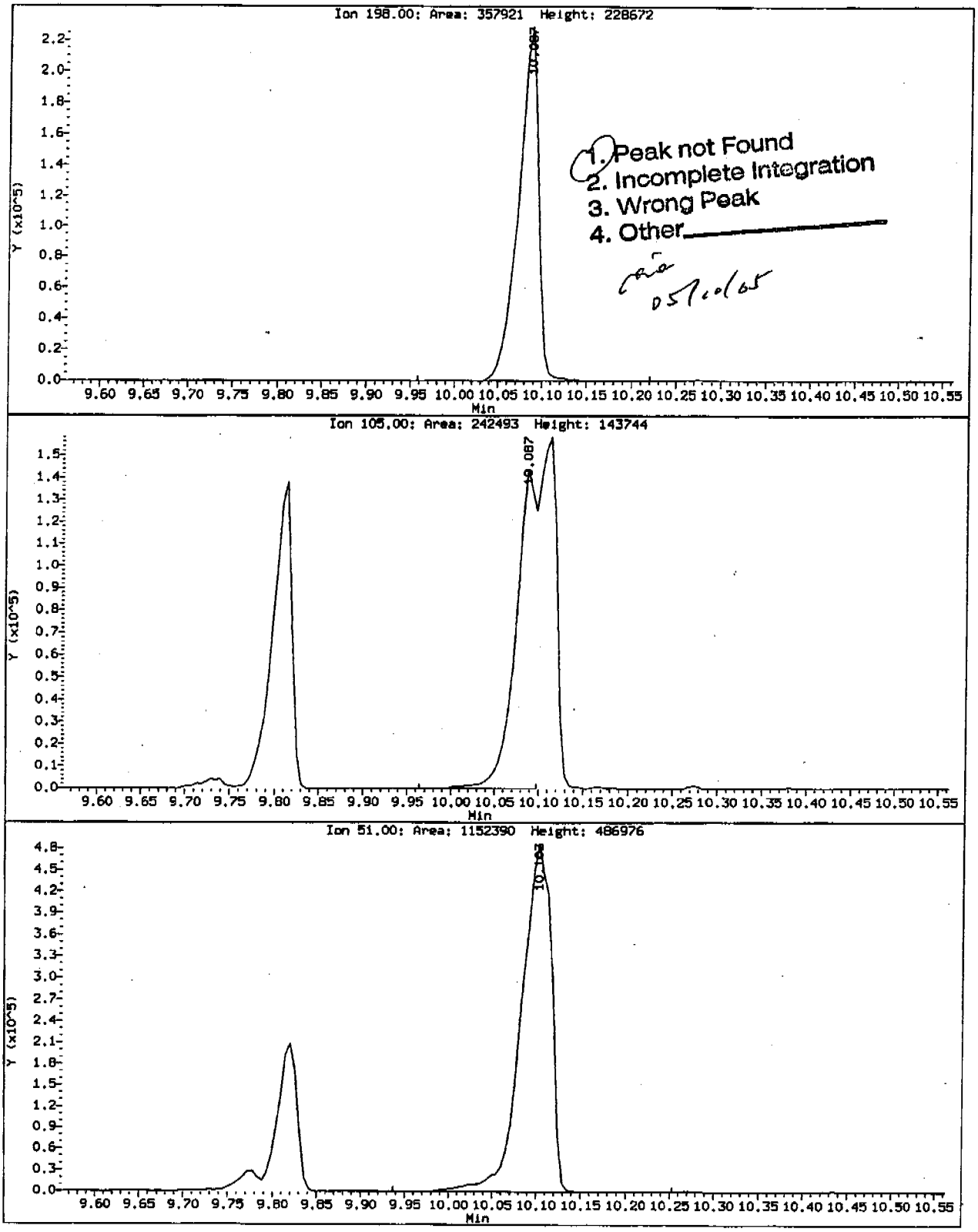
Data File: \\Sisvr01\BNA_LAB\HSK.i\K050609C.B\KLCS3008.D
Date : 09-MAY-2005 19:09
Client ID: SVLCSK1290
Sample Info: G9HAL4C
Volume Injected (uL): 1.0
Column phase:

\\Sisvr01\BNA_LAB\HSK.i\K050609C.B\KLCS3008.D

Instrument: HSK.i
Operator: KIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050509C.B\KLCS3008.D
Injection Date: 09-MAY-2005 19:09
Instrument: MSK.i
Client Sample ID: SVLCSK129A

Compound: 4,6-Dinitro-2-methylphenol
CAS Number: 534-52-1



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KLCS3105.D Page 1
Report Date: 13-May-2005 10:27

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KLCS3105.D
Lab Smp Id: HAAT21AC Client Smp ID: SVLCSK132E
Inj Date : 12-MAY-2005 18:32
Operator : XIA Inst ID: MSK.i
Smp Info : HAAT21AC
Misc Info : F5E110000-374C (5131374) SON GPC
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m
Meth Date : 12-May-2005 16:05 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 12:01 Cal File: KCAL2994.D
Als bottle: 13 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SONLCS04.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Uf*Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Factor
Vt	2000.000	Volume of final extract (uL)
Vi	1.000	Volume Injected
Ws	30.000	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	4 N-Nitrosodimethylamine	74	1.729	1.678	(0.381)	324406	92.4364	6162
	3 Pyridine	79	1.697	1.662	(0.374)	433821	70.0505	4670
$	10 2-Fluorophenol	112	3.246	3.254	(0.716)	409956	64.8662	4324
	17 Aniline	93	4.235	4.232	(0.934)	740515	64.4938	4300
	19 Bis(2-chloroethyl)ether	93	4.304	4.306	(0.949)	615023	75.6816	5045
$	15 Phenol-d5	99	4.326	4.333	(0.954)	551759	62.3754	4158
	16 Phenol	94	4.336	4.349	(0.956)	759752	77.5893	5173
	20 2-Chlorophenol	128	4.379	4.381	(0.966)	609674	86.1129	5741
	21 1,3-Dichlorobenzene	146	4.491	4.488	(0.991)	698387	86.2552	5750
*	22 1,4-Dichlorobenzene-d4	152	4.534	4.536	(1.000)	209213	40.0000	
	23 1,4-Dichlorobenzene	146	4.555	4.557	(1.005)	746514	86.8185	5788
	25 Benzyl Alcohol	108	4.796	4.793	(1.058)	400479	115.101	7673
	26 1,2-Dichlorobenzene	146	4.774	4.777	(1.053)	702849	88.3848	5892
	28 2,2-oxybis(1-Chloropropane)	45	4.945	4.947	(1.091)	698483	83.1158	5541
	27 2-Methylphenol	108	5.015	5.017	(1.106)	509477	81.2575	5417
	35 Hexachloroethane	117	5.127	5.134	(1.131)	328053	87.2554	5817
	32 N-Nitrosodinpropylamine	70	5.143	5.129	(1.134)	610237	92.6395	6176
	29 3 and 4-Methylphenol	108	5.196	5.204	(1.146)	525878	78.6489	5243
$	36 Nitrobenzene-d5	82	5.260	5.263	(0.861)	438652	44.6930	2980
	37 Nitrobenzene	77	5.287	5.284	(0.865)	887472	85.3175	5688

05/13/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KLCS3105.D Page 2
Report Date: 13-May-2005 10:27

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
39	Isophorone	82	5.581	5.583	(0.913)	1220874	90.0324	6002
40	2-Nitrophenol	139	5.682	5.685	(0.930)	306134	84.9472	5663
41	2,4-Dimethylphenol	107	5.821	5.824	(0.953)	684374	89.4853	5966
42	Bis(2-chloroethoxy)methane	93	5.891	5.888	(0.964)	743758	86.0428	5736
45	2,4-Dichlorophenol	162	6.030	6.043	(0.987)	480880	85.5154	5701
47	1,2,4-Trichlorobenzene	180	6.067	6.075	(0.993)	593359	88.5699	5905
* 48	Naphthalene-d8	136	6.110	6.117	(1.000)	714988	40.0000	
44	Benzoic Acid	122	6.126	6.112	(1.003)	214681	60.2003	4013(M)
50	Naphthalene	128	6.142	6.139	(1.005)	1763366	87.1076	5807
51	4-Chloroaniline	127	6.291	6.299	(1.030)	407805	49.7521	3317
54	Hexachlorobutadiene	225	6.382	6.390	(1.045)	421702	90.6269	6042
62	2-Methylnaphthalene	142	7.098	7.100	(1.162)	1668826	115.248	7683(R)
59	4-Chloro-3-Methylphenol	107	7.087	7.095	(1.160)	593726	90.8773	6058
66	Hexachlorocyclopentadiene	237	7.440	7.448	(0.846)	424684	105.693	7046
67	2,4,6-Trichlorophenol	196	7.643	7.645	(0.869)	386284	89.0663	5938
$ 69	2-Fluorobiphenyl	172	7.718	7.725	(0.878)	683033	45.1405	3009
68	2,4,5-Trichlorophenol	196	7.761	7.779	(0.883)	391678	85.4508	5697
72	2-Chloronaphthalene	162	7.846	7.848	(0.892)	1109949	87.7338	5849
73	2-Nitroaniline	65	8.150	8.147	(0.927)	445783	81.7977	5453
76	Dimethylphthalate	163	8.514	8.516	(0.968)	1280900	88.4074	5894
79	Acenaphthylene	152	8.530	8.532	(0.970)	1776413	95.2412	6349
80	2,6-Dinitrotoluene	165	8.631	8.628	(0.982)	266328	86.0264	5735
* 82	Acenaphthene-d10	164	8.792	8.799	(1.000)	375784	40.0000	
83	Acenaphthene	153	8.850	8.853	(1.007)	1027210	87.2115	5814
81	3-Nitroaniline	138	8.866	8.869	(1.009)	156164	51.3463	3423
84	2,4-Dinitrophenol	184	9.048	9.050	(1.029)	74409	40.2354	2682
86	Dibenzofuran	168	9.128	9.130	(1.038)	1490631	85.6605	5711
88	2,4-Dinitrotoluene	165	9.304	9.307	(1.058)	345255	86.7214	5781
85	4-Nitrophenol	109	9.449	9.462	(1.075)	217947	85.8410	5723
94	Fluorene	166	9.742	9.745	(1.108)	1260403	90.4999	6033
93	Diethylphthalate	149	9.775	9.771	(1.112)	1289977	88.9529	5930
95	4-Chlorophenyl-phenylether	204	9.791	9.793	(1.114)	680280	90.5398	6036
98	4-Nitroaniline	138	10.004	9.990	(1.138)	238238	80.3526	5357
99	4,6-Dinitro-2-methylphenol	198	10.047	10.033	(0.877)	214143	80.4086	5360(QM)
100	N-Nitrosodiphenylamine	169	10.063	10.065	(0.879)	957590	97.8527	6524
102	Azobenzene	77	10.074	10.076	(0.880)	1934892	88.1431	5876
$ 104	2,4,6-Tribromophenol	330	10.250	10.252	(1.166)	156798	74.6410	4976
109	4-Bromophenyl-phenylether	248	10.672	10.680	(0.932)	402407	89.5096	5967
112	Hexachlorobenzene	284	10.902	10.904	(0.952)	424717	92.5357	6169
117	Pentachlorophenol	266	11.324	11.326	(0.989)	136865	53.4678	3564
* 121	Phenanthrene-d10	188	11.452	11.460	(1.000)	642751	40.0000	
122	Phenanthrene	178	11.500	11.502	(1.004)	1680998	84.6735	5645
124	Anthracene	178	11.585	11.588	(1.012)	1639963	85.4490	5697
126	Carbazole	167	11.997	11.994	(1.048)	1322395	80.6457	5376
129	Di-n-Butylphthalate	149	12.878	12.881	(1.125)	1838077	85.5529	5704
134	Fluoranthene	202	13.797	13.799	(1.205)	1630354	79.4603	5297
135	Benzidine	184	14.187	14.195	(0.854)	135938	19.0044	1267
137	Pyrene	202	14.208	14.211	(0.855)	1641825	85.6380	5709
$ 139	Terphenyl-d14	244	14.647	14.659	(0.881)	582829	39.1207	2608
146	Butylbenzylphthalate	149	15.779	15.781	(0.950)	704007	88.7994	5920
150	Benzo(a)Anthracene	228	16.586	16.593	(0.998)	1398421	84.6750	5645
* 153	Chrysene-d12	240	16.618	16.625	(1.000)	471640	40.0000	
152	3,3'-Dichlorobenzidine	252	16.682	16.689	(1.004)	389349	61.2259	4082
154	Chrysene	228	16.671	16.679	(1.003)	1345368	85.6059	5707

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KLCS3105.D Page 3
Report Date: 13-May-2005 10:27

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
155	bis(2-ethylhexyl)Phthalate	149	17.002	17.005	(1.023)	851863	85.8318	5722
158	Di-n-octylphthalate	149	18.151	18.159	(0.944)	1352681	90.9022	6060
160	Benzo(b)fluoranthene	252	18.594	18.597	(0.967)	1245981	91.8852	6126
161	Benzo(k)fluoranthene	252	18.642	18.645	(0.970)	1203772	89.3773	5958
165	Benzo(a)pyrene	252	19.134	19.136	(0.995)	1057750	86.4284	5762
* 166	Perylene-d12	264	19.225	19.232	(1.000)	349220	40.0000	
173	Indeno(1,2,3-cd)pyrene	276	20.940	20.947	(1.089)	915635	80.7094	5381
174	Dibenzo(a,h)anthracene	278	20.993	20.995	(1.092)	926157	84.1299	5609
177	Benzo(g,h,i)perylene	276	21.394	21.401	(1.113)	663710	65.5290	4368

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KLCS3105.D Page 4
Report Date: 13-May-2005 10:27

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSK.i
Lab File ID: KLCS3105.D
Lab Smp Id: HAAT21AC
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m
Misc Info: F5E110000-374C (5131374) SON GPC

Calibration Date: 12-MAY-2005
Calibration Time: 12:41
Client Smp ID: SVLCSK132E
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	167849	83925	335698	209213	24.64
48 Naphthalene-d8	587608	293804	1175216	714988	21.68
82 Acenaphthene-d10	335274	167637	670548	375784	12.08
121 Phenanthrene-d10	627534	313767	1255068	642751	2.42
153 Chrysene-d12	548402	274201	1096804	471640	-14.00
166 Perylene-d12	477098	238549	954196	349220	-26.80

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.54	4.04	5.04	4.53	-0.05
48 Naphthalene-d8	6.12	5.62	6.62	6.11	-0.12
82 Acenaphthene-d10	8.80	8.30	9.30	8.79	-0.09
121 Phenanthrene-d10	11.46	10.96	11.96	11.45	-0.07
153 Chrysene-d12	16.63	16.13	17.13	16.62	-0.05
166 Perylene-d12	19.23	18.73	19.73	19.23	-0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KLCS3105.D Page 5
Report Date: 13-May-2005 10:27

STL St. Louis

RECOVERY REPORT

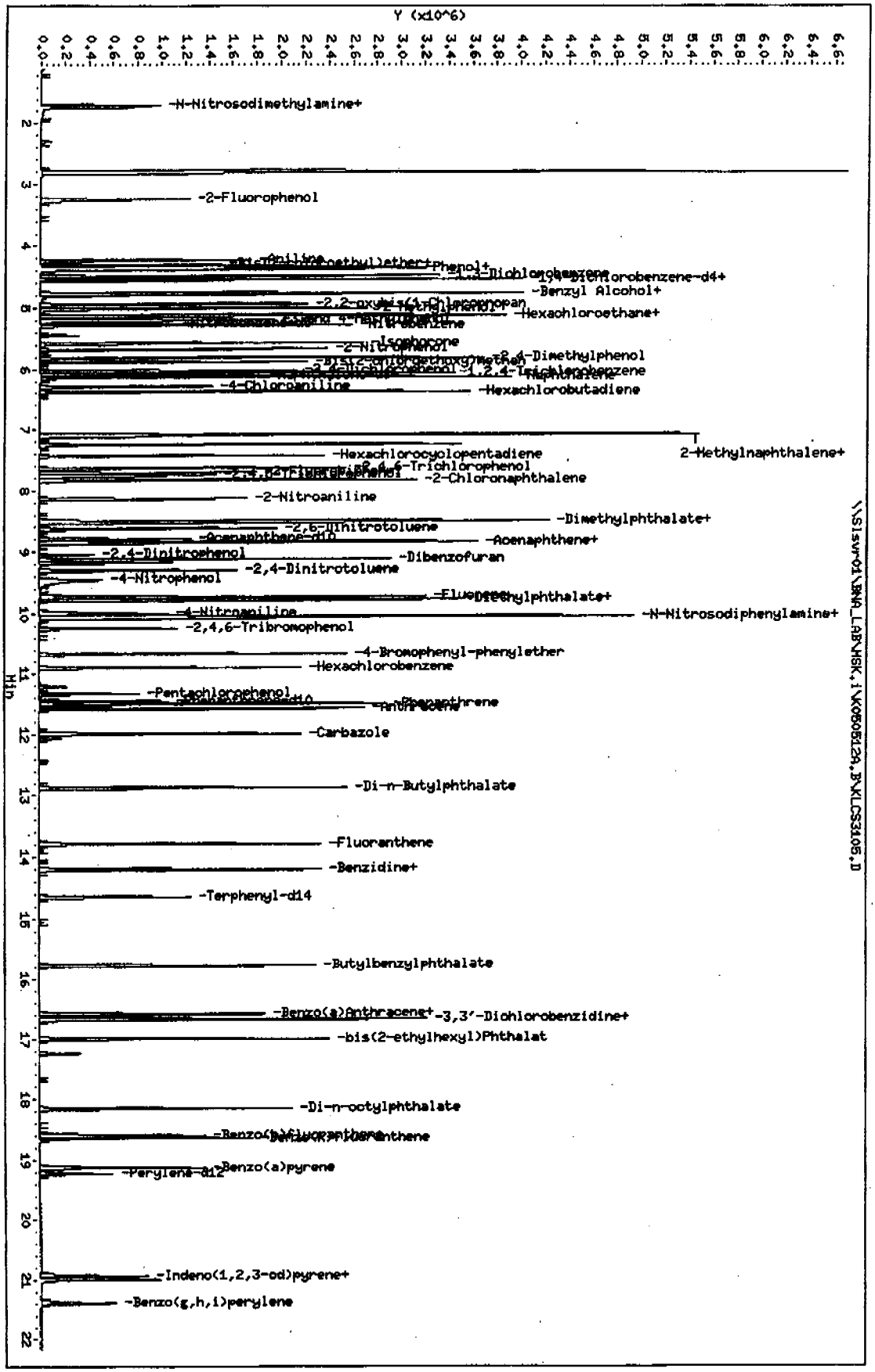
Client Name:
Sample Matrix: SOLID
Lab Smp Id: HAAT21AC
Level: LOW
Data Type: MS DATA
SpikeList File: SONLCS04.spk
Sublist File: SONLCS04.sub
Client SDG: F5E110000
Fraction: SV
Client Smp ID: SVLCSK132E
Operator: XIA
SampleType: LCS
Quant Type: ISTD
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m
Misc Info: F5E110000-374C (5131374) SON GPC

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
83 Acenaphthene	6667	5814	87.21	56-107
79 Acenaphthylene	6667	6349	95.24	56-107
124 Anthracene	6667	5697	85.45	55-107
150 Benzo(a)Anthracene	6667	5645	84.68	56-112
160 Benzo(b)fluoranthe	6667	6126	91.89	53-112
161 Benzo(k)fluoranthe	6667	5958	89.38	60-126
177 Benzo(g,h,i)peryle	6667	4368	65.53	37-139
165 Benzo(a)pyrene	6667	5762	86.43	54-109
42 Bis(2-chloroethoxy	6667	5736	86.04	53-103
19 Bis(2-chloroethyl)	6667	5045	75.68	43-94
155 bis(2-ethylhexyl)P	6667	5722	85.83	53-112
109 4-Bromophenyl-phen	6667	5967	89.51	54-106
146 Butylbenzylphthala	6667	5920	88.80	55-115
126 Carbazole	6667	5376	80.65	45-112
51 4-Chloroaniline	6667	3317	49.75	21-96
59 4-Chloro-3-Methylp	6667	6058	90.88	52-100
20 2-Chlorophenol	6667	5741	86.11	49-92
95 4-Chlorophenyl-phe	6667	6036	90.54	56-105
154 Chrysene	6667	5707	85.61	55-112
174 Dibenzo(a,h)anthra	6667	5609	84.13	42-133
86 Dibenzofuran	6667	5711	85.66	46-108
129 Di-n-Butylphthalat	6667	5704	85.55	55-109
152 3,3'-Dichlorobenzi	6667	4082	61.23	32-95
45 2,4-Dichlorophenol	6667	5701	85.52	51-98
93 Diethylphthalate	6667	5930	88.95	56-111
41 2,4-Dimethylphenol	6667	5966	89.49	48-97
76 Dimethylphthalate	6667	5894	88.41	55-105
99 4,6-Dinitro-2-meth	6667	5360	80.41	27-100
84 2,4-Dinitrophenol	6667	2682	40.24	10-91
88 2,4-Dinitrotoluene	6667	5781	86.72	56-117
80 2,6-Dinitrotoluene	6667	5735	86.03	55-108
158 Di-n-octylphthalat	6667	6060	90.90	49-112
134 Fluoranthene	6667	5297	79.46	56-106
94 Fluorene	6667	6033	90.50	56-105
112 Hexachlorobenzene	6667	6169	92.54	57-111
54 Hexachlorobutadien	6667	6042	90.63	50-102
66 Hexachlorocyclopen	6667	7046	105.69	41-117
35 Hexachloroethane	6667	5817	87.26	43-100
173 Indeno(1,2,3-cd)py	6667	5381	80.71	42-129
39 Isophorone	6667	6002	90.03	57-110

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KLCS3105.D Page 6
Report Date: 13-May-2005 10:27

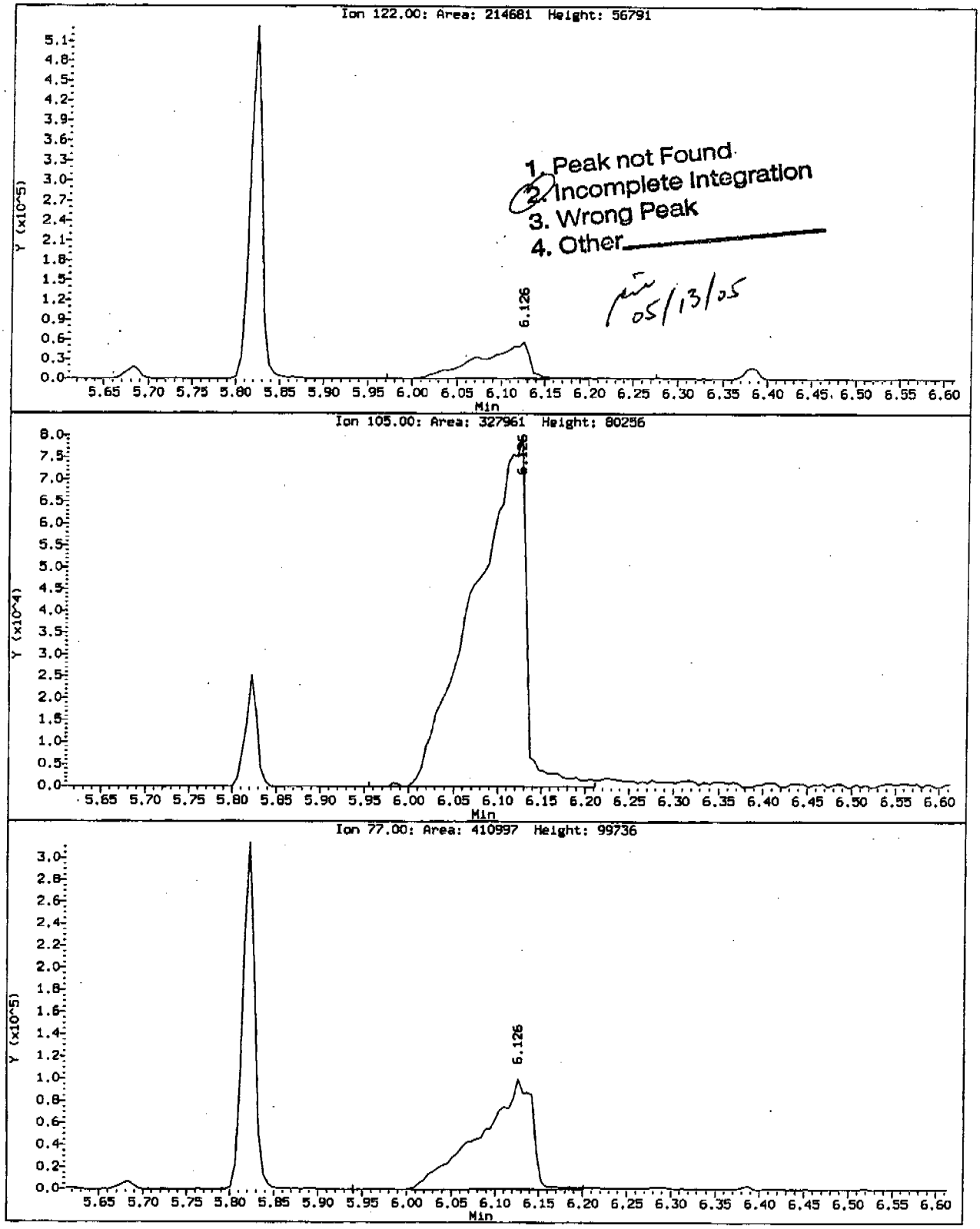
	SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
62	2-Methylnaphthalen	6667	7683	115.25*	38-112
27	2-Methylphenol	6667	5417	81.26	48-92
29	3 and 4-Methylphen	6667	5243	78.65	47-100
50	Naphthalene	6667	5807	87.11	52-102
73	2-Nitroaniline	6667	5453	81.80	45-114
81	3-Nitroaniline	6667	3423	51.35	30-94
98	4-Nitroaniline	6667	5357	80.35	42-109
37	Nitrobenzene	6667	5688	85.32	50-102
40	2-Nitrophenol	6667	5663	84.95	50-99
85	4-Nitrophenol	6667	5723	85.84	44-109
100	N-Nitrosodiphenyla	6667	6524	97.85	58-114
32	N-Nitrosodinpropyl	6667	6176	92.64	55-108
28	2,2-oxybis(1-Chlor	6667	5541	83.12	44-102
117	Pentachlorophenol	6667	3564	53.47	37-102
122	Phenanthrene	6667	5645	84.67	57-108
16	Phenol	6667	5173	77.59	49-92
137	Pyrene	6667	5709	85.64	54-114
47	1,2,4-Trichloroben	6667	5905	88.57	50-101
68	2,4,5-Trichlorophe	6667	5697	85.45	53-101
67	2,4,6-Trichlorophe	6667	5938	89.07	52-100

	SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 10	2-Fluorophenol	5000	4324	86.49	50-98
$ 15	Phenol-d5	5000	4158	83.17	51-95
$ 36	Nitrobenzene-d5	3333	2980	89.39	50-111
$ 69	2-Fluorobiphenyl	3333	3009	90.28	57-117
$ 104	2,4,6-Tribromophen	5000	4976	99.52	53-108
$ 139	Terphenyl-d14	3333	2608	78.24	49-107


Y (x10^6)
Min
-N-Nitrosodimethylamine+
-2-Fluorophenol
-Benzyl Alcohol+
-Hexachloroethane+
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-Hexachlorobutadiene
-4-Chloroaniline
2-Methylnaphthalene+
-Hexachlorocyclopentadiene
-2-Chloronaphthalene
-2-Nitroaniline
-Dimethylphthalate+
-2,6-Dinitrotoluene
-Acenaphthene+
-2,4-Dinitrophenol
-Dibenzofuran
-2,4-Dinitrotoluene
-4-Nitrophenol
-Diethylphthalate+
-N-Nitrosodiphenylamine+
-4-Nitroaniline
-2,4,6-Tribromophenol
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Pentachlorophenol
-Carbazole
-Di-n-Butylphthalate
-Fluoranthene
-Benzidine+
-Terphenyl-d14
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-bis(2-ethylhexyl)Phthalat
-Di-n-octylphthalate
-Perylene-d12
-Benzo(a)pyrene
-Indeno(1,2,3-cd)pyrene+
-Benzo(g,h,i)perylene
\\Slsvr01\RNA_LAB\HSK.i\K050512A.B\KLCS3105.D
Data File: \\Slsvr01\RNA_LAB\HSK.i\K050512A.B\KLCS3105.D
Date : 12-MAY-2005 18:32
Client ID: SVLCSK132E
Sample Info: HAAT21AC
Volume Injected (uL): 1.0
Column phase:
Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

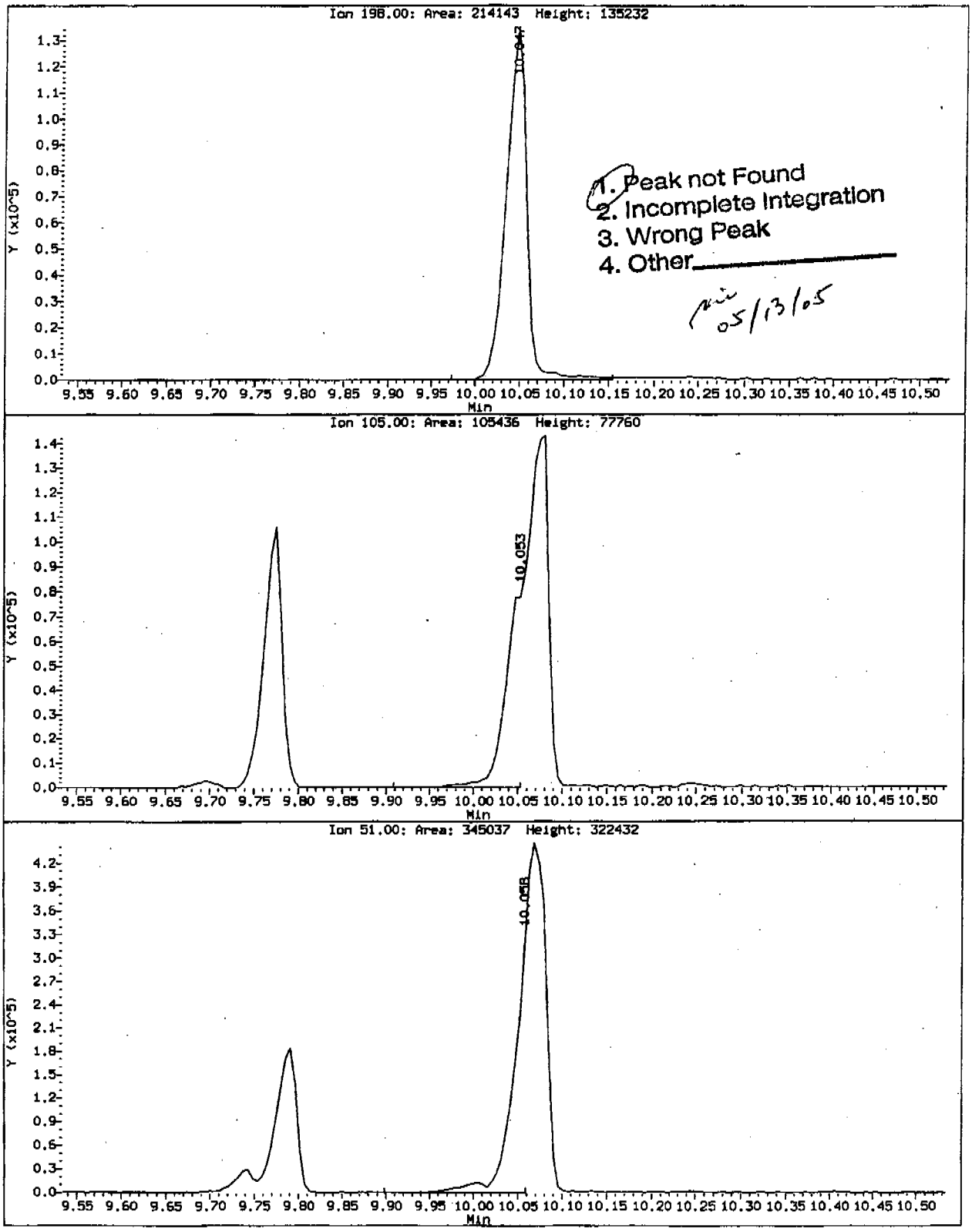
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KLCS3105.D
Injection Date: 12-MAY-2005 18:32
Instrument: MSK.i
Client Sample ID: SVLCSK132E

Compound: Benzoic Acid
CAS Number: 65-85-0



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KLC53105.D
Injection Date: 12-MAY-2005 18:32
Instrument: MSK.i
Client Sample ID: SVLCSK132E

Compound: 4,6-Dinitro-2-methylphenol
CAS Number: 534-52-1



Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3043.D Page 1
Report Date: 11-May-2005 13:05

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3043.D
Lab Smp Id: G8WXJ1AH Client Smp ID: RE73-05-58829
Inj Date : 10-MAY-2005 18:19
Operator : XIA Inst ID: MSK.i
Smp Info : G8WXJ1AH
Misc Info : F5D210380-001S (5119285) SON
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\050510A.B\8270K.m
Meth Date : 11-May-2005 10:34 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12 Cal File: KCAL3000.D
Als bottle: 15 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SONMS04.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Uf*Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume Injected
Ws	30.060	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	4 N-Nitrosodimethylamine	74	1.693	1.681	(0.373)	241853	125.139	4163
	3 Pyridine	79	1.661	1.670	(0.366)	228470	66.9911	2228(M)
$	10 2-Fluorophenol	112	3.216	3.219	(0.709)	381034	109.479	3642
	17 Aniline	93	4.236	4.229	(0.934)	417148	65.9723	2195
	19 Bis(2-chloroethyl)ether	93	4.311	4.304	(0.951)	706671	157.908	5253
$	15 Phenol-d5	99	4.305	4.298	(0.949)	610465	125.317	4169
	16 Phenol	94	4.322	4.314	(0.953)	837163	155.249	5165
	20 2-Chlorophenol	128	4.370	4.362	(0.963)	582002	149.273	4966
	21 1,3-Dichlorobenzene	146	4.492	4.485	(0.991)	527819	118.375	3938
*	22 1,4-Dichlorobenzene-d4	152	4.535	4.533	(1.000)	115213	40.0000	
	23 1,4-Dichlorobenzene	146	4.557	4.555	(1.005)	554102	117.018	3893
	25 Benzyl Alcohol	108	4.797	4.784	(1.058)	428701	223.739	7443(A)
	26 1,2-Dichlorobenzene	146	4.776	4.774	(1.053)	537912	122.833	4086
	28 2,2-oxybis(1-Chloropropane)	45	4.947	4.945	(1.091)	680854	147.119	4894
	27 2-Methylphenol	108	5.005	4.993	(1.104)	416109	120.513	4009
	35 Hexachloroethane	117	5.134	5.132	(1.132)	236864	114.402	3806
	32 N-Nitrosodinpropylamine	70	5.144	5.132	(1.134)	642641	177.155	5893(A)
	29 3 and 4-Methylphenol	108	5.182	5.180	(1.143)	455948	123.825	4119
$	36 Nitrobenzene-d5	82	5.262	5.260	(0.860)	389741	68.2763	2271
	37 Nitrobenzene	77	5.288	5.281	(0.865)	787835	130.225	4332

05/11/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3043.D
Report Date: 11-May-2005 13:05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	39 Isophorone	82	5.582	5.575	(0.913)	1417688	179.756	5980(A)
	40 2-Nitrophenol	139	5.684	5.682	(0.929)	288509	137.649	4579
	41 2,4-Dimethylphenol	107	5.812	5.805	(0.950)	280685	63.1033	2099(R)
	42 Bis(2-chloroethoxy)methane	93	5.892	5.890	(0.963)	815070	162.126	5393(A)
	45 2,4-Dichlorophenol	162	6.020	6.013	(0.984)	504403	154.227	5131
	47 1,2,4-Trichlorobenzene	180	6.074	6.072	(0.993)	491631	126.178	4198
*	48 Naphthalene-d8	136	6.116	6.115	(1.000)	415838	40.0000	
	44 Benzoic Acid	122	6.074	6.072	(0.993)	114368	55.1422	1834
	50 Naphthalene	128	6.143	6.141	(1.004)	1425845	121.105	4029
	51 4-Chloroaniline	127	6.293	6.296	(1.029)	196329	41.1830	1370
	54 Hexachlorobutadiene	225	6.389	6.392	(1.045)	347197	128.293	4268
	62 2-Methylnaphthalene	142	7.105	7.103	(1.162)	1010471	119.983	3991
	59 4-Chloro-3-Methylphenol	107	7.067	7.055	(1.155)	609855	160.498	5339(A)
	66 Hexachlorocyclopentadiene	237	7.447	7.445	(0.847)	332768	133.717	4448
	67 2,4,6-Trichlorophenol	196	7.639	7.632	(0.869)	387779	144.363	4802
$	69 2-Fluorobiphenyl	172	7.724	7.723	(0.878)	617566	65.8982	2192
	68 2,4,5-Trichlorophenol	196	7.719	7.717	(0.878)	475455	167.480	5572(A)
	72 2-Chloronaphthalene	162	7.847	7.846	(0.892)	995317	127.025	4226
	73 2-Nitroaniline	65	8.152	8.139	(0.927)	495824	146.896	4887
	76 Dimethylphthalate	163	8.520	8.508	(0.969)	1578901	175.952	5853(A)
	79 Acenaphthylene	152	8.531	8.529	(0.970)	1581480	136.902	4554
	80 2,6-Dinitrotoluene	165	8.638	8.620	(0.982)	331141	172.700	5745(A)
*	82 Acenaphthene-d10	164	8.793	8.791	(1.000)	232741	40.0000	
	83 Acenaphthene	153	8.852	8.850	(1.007)	961136	131.754	4383
	81 3-Nitroaniline	138	8.868	8.855	(1.009)	218495	115.994	3859
	84 2,4-Dinitrophenol	184	9.044	9.037	(1.029)	95505	83.3825	2774
	86 Dibenzofuran	168	9.135	9.128	(1.039)	1382856	128.308	4268
	88 2,4-Dinitrotoluene	165	9.311	9.299	(1.059)	464454	188.363	6266(A)
	85 4-Nitrophenol	109	9.354	9.347	(1.064)	318224	202.368	6732(A)
	94 Fluorene	166	9.744	9.737	(1.108)	1159365	134.408	4471
	93 Diethylphthalate	149	9.781	9.769	(1.112)	1673939	186.373	6200(A)
	95 4-Chlorophenyl-phenylether	204	9.797	9.790	(1.114)	661444	142.138	4728
	98 4-Nitroaniline	138	10.006	9.972	(1.138)	270146	147.114	4894
	99 4,6-Dinitro-2-methylphenol	198	10.048	10.025	(0.877)	232790	139.838	4652(M)
	100 N-Nitrosodiphenylamine	169	10.070	10.057	(0.879)	917049	149.916	4987
	102 Azobenzene	77	10.080	10.068	(0.880)	1845328	134.483	4474
$	104 2,4,6-Tribromophenol	330	10.246	10.239	(1.165)	134798	103.606	3447
	109 4-Bromophenyl-phenylether	248	10.679	10.672	(0.932)	392132	139.540	4642
	112 Hexachlorobenzene	284	10.903	10.896	(0.952)	397406	138.518	4608
	117 Pentachlorophenol	266	11.309	11.307	(0.987)	139900	87.4341	2909
*	121 Phenanthrene-d10	188	11.453	11.451	(1.000)	401772	40.0000	
	122 Phenanthrene	178	11.501	11.494	(1.004)	1600385	128.964	4290
	124 Anthracene	178	11.587	11.580	(1.012)	1555213	129.636	4312
	126 Carbazole	167	11.993	11.980	(1.047)	1095097	106.840	3554
	129 Di-n-Butylphthalate	149	12.880	12.867	(1.125)	2159039	160.766	5348(A)
	134 Fluoranthene	202	13.798	13.786	(1.205)	1399761	109.140	3631
	137 Pyrene	202	14.210	14.203	(0.855)	1158570	122.706	4082
$	139 Terphenyl-d14	244	14.648	14.651	(0.881)	500626	68.2312	2270
	146 Butylbenzylphthalate	149	15.786	15.773	(0.950)	731790	187.423	6235(A)
	150 Benzo(a)Anthracene	228	16.598	16.585	(0.999)	1018131	125.177	4164
*	153 Chrysene-d12	240	16.619	16.617	(1.000)	232277	40.0000	
	152 3,3'-Dichlorobenzidine	252	16.683	16.681	(1.004)	180049	57.4899	1912
	154 Chrysene	228	16.678	16.665	(1.004)	954538	123.328	4103
	155 bis(2-ethylhexyl)Phthalate	149	17.009	16.997	(1.023)	868887	177.765	5914(A)

Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3043.D Page 3
Report Date: 11-May-2005 13:05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
158	Di-n-octylphthalate	149	18.158	18.145	(0.944)	1357608	149.851	4985
160	Benzo(b)fluoranthene	252	18.606	18.589	(0.968)	909345	110.146	3664
161	Benzo(k)fluoranthene	252	18.649	18.631	(0.970)	1002955	122.312	4069
165	Benzo(a)pyrene	252	19.135	19.123	(0.995)	545194	73.1694	2434(R)
* 166	Perylene-d12	264	19.226	19.224	(1.000)	212615	40.0000	
173	Indeno(1,2,3-cd)pyrene	276	20.946	20.934	(1.089)	511369	74.0357	2463
174	Dibenzo(a,h)anthracene	278	21.000	20.982	(1.092)	793666	118.416	3939
177	Benzo(g,h,i)perylene	276	21.379	21.383	(1.112)	138672	22.4879	748.1(R)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3043.D
Report Date: 11-May-2005 13:05

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSK.i
Lab File ID: KSMP3043.D
Lab Smp Id: G8WXJ1AH
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\8270K.m
Misc Info: F5D210380-001S (5119285) SON

Calibration Date: 10-MAY-2005
Calibration Time: 12:53
Client Smp ID: RE73-05-58829
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	121829	60915	243658	115213	-5.43
48 Naphthalene-d8	427782	213891	855564	415838	-2.79
82 Acenaphthene-d10	251365	125683	502730	232741	-7.41
121 Phenanthrene-d10	466667	233334	933334	401772	-13.91
153 Chrysene-d12	406157	203079	812314	232277	-42.81
166 Perylene-d12	339675	169838	679350	212615	-37.41

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.53	4.03	5.03	4.54	0.04
48 Naphthalene-d8	6.12	5.62	6.62	6.12	0.03
82 Acenaphthene-d10	8.79	8.29	9.29	8.79	0.02
121 Phenanthrene-d10	11.45	10.95	11.95	11.45	0.02
153 Chrysene-d12	16.62	16.12	17.12	16.62	0.01
166 Perylene-d12	19.22	18.72	19.72	19.23	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3043.D Page 5
Report Date: 11-May-2005 13:05

STL St. Louis

RECOVERY REPORT

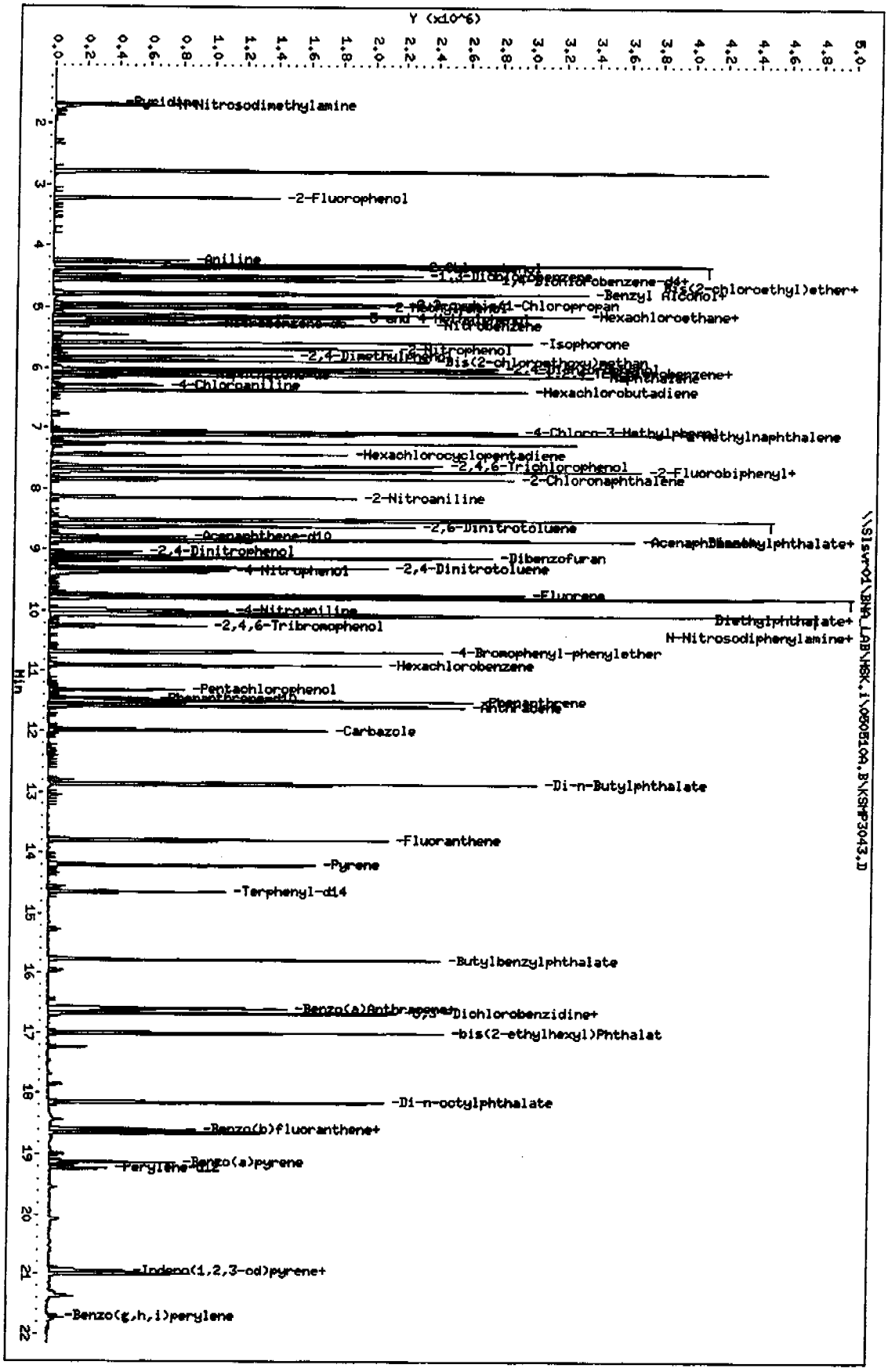
Client Name: LOS ALAMOS NATIONAL 21-APR-2005 00:00 Client SDG: F5D2103
Sample Matrix: SOLID Fraction: SV
Lab Smp Id: G8WXJ1AH Client Smp ID: RE73-05-58829
Level: LOW Operator: XIA
Data Type: MS DATA SampleType: MS
SpikeList File: SONMS04.spk Quant Type: ISTD
Sublist File: SONMS04.sub
Method File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\8270K.m
Misc Info: F5D210380-001S (5119285) SON

SPIKE	COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
83	Acenaphthene	6653	4383	65.88	48-112
79	Acenaphthylene	6653	4554	68.45	48-110
124	Anthracene	6653	4312	64.82	46-111
150	Benzo(a)Anthracene	6653	4164	62.59	46-117
160	Benzo(b)fluoranthe	6653	3664	55.07	39-124
161	Benzo(k)fluoranthe	6653	4069	61.16	43-131
177	Benzo(g,h,i)peryle	6653	748.1	11.24*	26-140
165	Benzo(a)pyrene	6653	2434	36.58*	43-114
42	Bis(2-chloroethoxy	6653	5393	81.06	46-107
19	Bis(2-chloroethyl)	6653	5253	78.95	38-98
155	bis(2-ethylhexyl)P	6653	5914	88.88	43-118
109	4-Bromophenyl-phen	6653	4642	69.77	46-110
146	Butylbenzylphthala	6653	6235	93.71	44-121
126	Carbazole	6653	3554	53.42	41-112
51	4-Chloroaniline	6653	1370	20.59	11-99
59	4-Chloro-3-Methylp	6653	5339	80.25	41-107
20	2-Chlorophenol	6653	4966	74.64	41-96
95	4-Chlorophenyl-phe	6653	4728	71.07	47-109
154	Chrysene	6653	4103	61.66	43-119
174	Dibenzo(a,h)anthra	6653	3939	59.21	33-131
86	Dibenzofuran	6653	4268	64.15	46-107
129	Di-n-Butylphthalat	6653	5348	80.38	45-114
152	3,3'-Dichlorobenzi	6653	1912	28.74	10-116
45	2,4-Dichlorophenol	6653	5131	77.11	40-105
93	Diethylphthalate	6653	6200	93.19	46-115
41	2,4-Dimethylphenol	6653	2099	31.55*	36-105
76	Dimethylphthalate	6653	5853	87.98	46-110
99	4,6-Dinitro-2-meth	6653	4652	69.92	10-108
84	2,4-Dinitrophenol	6653	2774	41.69	10-109
88	2,4-Dinitrotoluene	6653	6266	94.18	47-120
80	2,6-Dinitrotoluene	6653	5745	86.35	47-111
158	Di-n-octylphthalat	6653	4985	74.93	35-120
134	Fluoranthene	6653	3631	54.57	39-116
94	Fluorene	6653	4471	67.20	47-109
112	Hexachlorobenzene	6653	4608	69.26	48-115
54	Hexachlorobutadien	6653	4268	64.15	40-105
66	Hexachlorocyclopen	6653	4448	66.86	10-120
35	Hexachloroethane	6653	3806	57.20	36-99
173	Indeno(1,2,3-cd)py	6653	2463	37.02	31-129
39	Isophorone	6653	5980	89.88	47-117

Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3043.D Page 6
Report Date: 11-May-2005 13:05

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
62 2-Methylnaphthalen	6653	3991	59.99	35-118
27 2-Methylphenol	6653	4009	60.26	43-95
29 3 and 4-Methylphen	6653	4119	61.91	41-103
50 Naphthalene	6653	4029	60.55	10-150
73 2-Nitroaniline	6653	4887	73.45	42-114
81 3-Nitroaniline	6653	3859	58.00	23-102
98 4-Nitroaniline	6653	4894	73.56	21-116
37 Nitrobenzene	6653	4332	65.11	45-105
40 2-Nitrophenol	6653	4579	68.82	36-108
85 4-Nitrophenol	6653	6732	101.18	33-114
100 N-Nitrosodiphenyla	6653	4987	74.96	47-120
32 N-Nitrosodinpropyl	6653	5893	88.58	51-109
28 2,2-oxybis(1-Chlor	6653	4894	73.56	41-102
117 Pentachlorophenol	6653	2909	43.72	11-110
122 Phenanthrene	6653	4290	64.48	39-122
16 Phenol	6653	5165	77.62	41-97
137 Pyrene	6653	4082	61.35	41-121
47 1,2,4-Trichloroben	6653	4198	63.09	44-102
68 2,4,5-Trichlorophe	6653	5572	83.74	39-108
67 2,4,6-Trichlorophe	6653	4802	72.18	40-105

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 10 2-Fluorophenol	4990	3642	72.99	40-103
$ 15 Phenol-d5	4990	4169	83.54	36-105
$ 36 Nitrobenzene-d5	3327	2271	68.28	45-114
$ 69 2-Fluorobiphenyl	3327	2192	65.90	49-120
$ 104 2,4,6-Tribromophen	4990	3447	69.07	39-114
$ 139 Terphenyl-d14	3327	2270	68.23	42-108

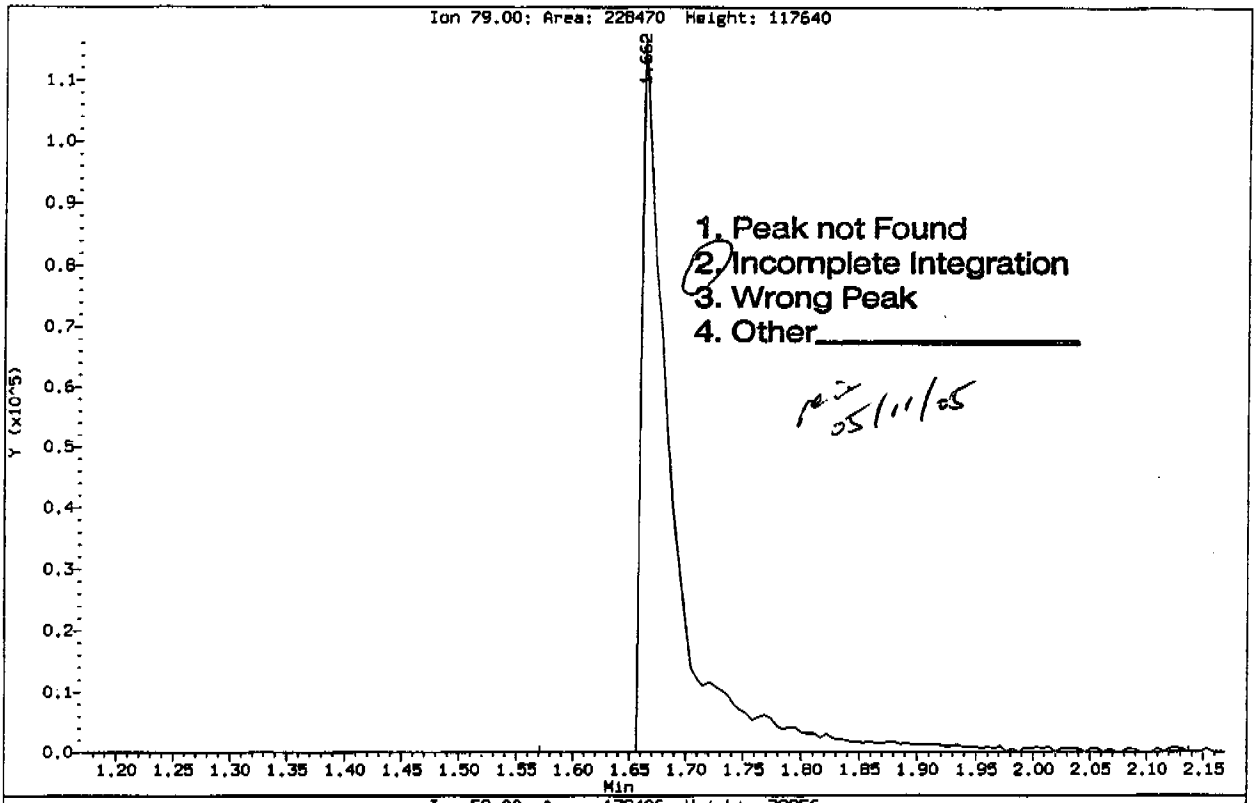


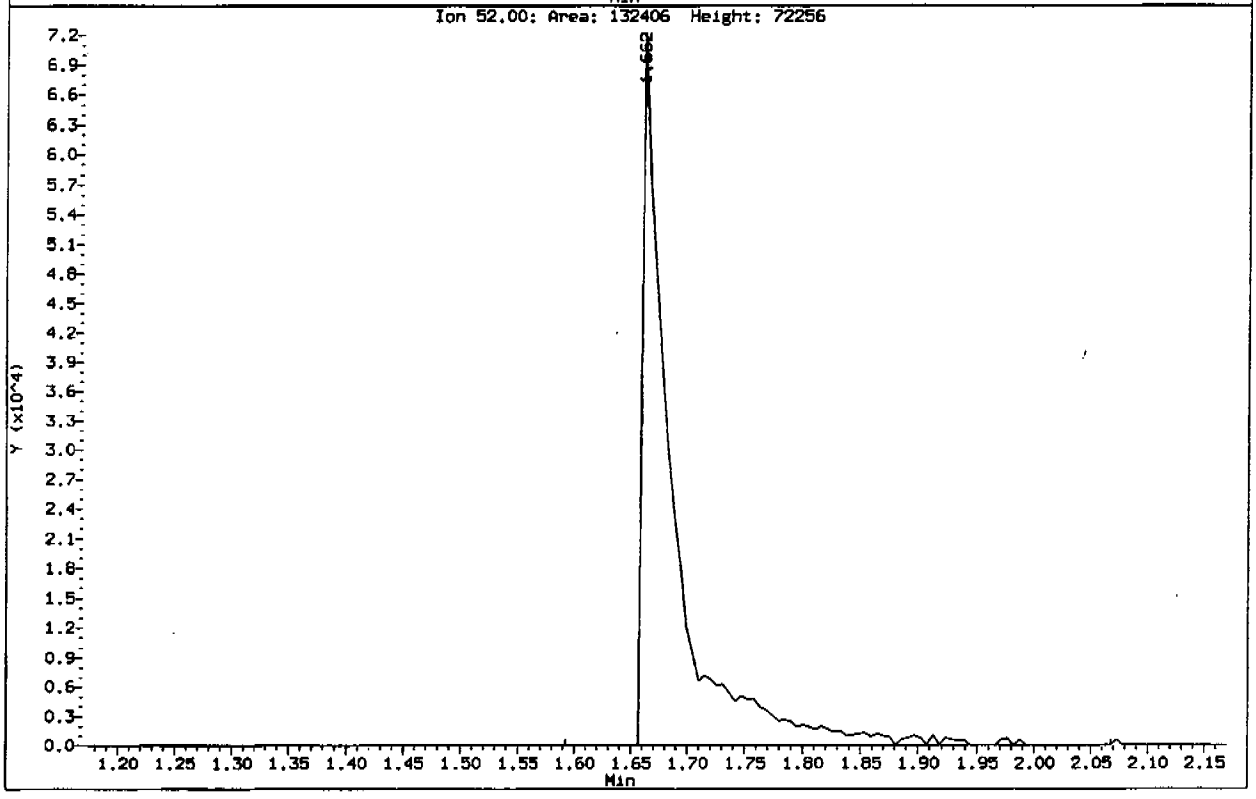
Data File: \\Slsvr01\BNA_LAB\HSK.i\050510A.B\KSHP3043.D
Date : 10-MAY-2005 18:19
Client ID: RE73-05-58829
Sample Info: CBMXJ1AH
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B\KSMP3043.D
Injection Date: 10-MAY-2005 18:19
Instrument: MSK.i
Client Sample ID: RE73-05-58829

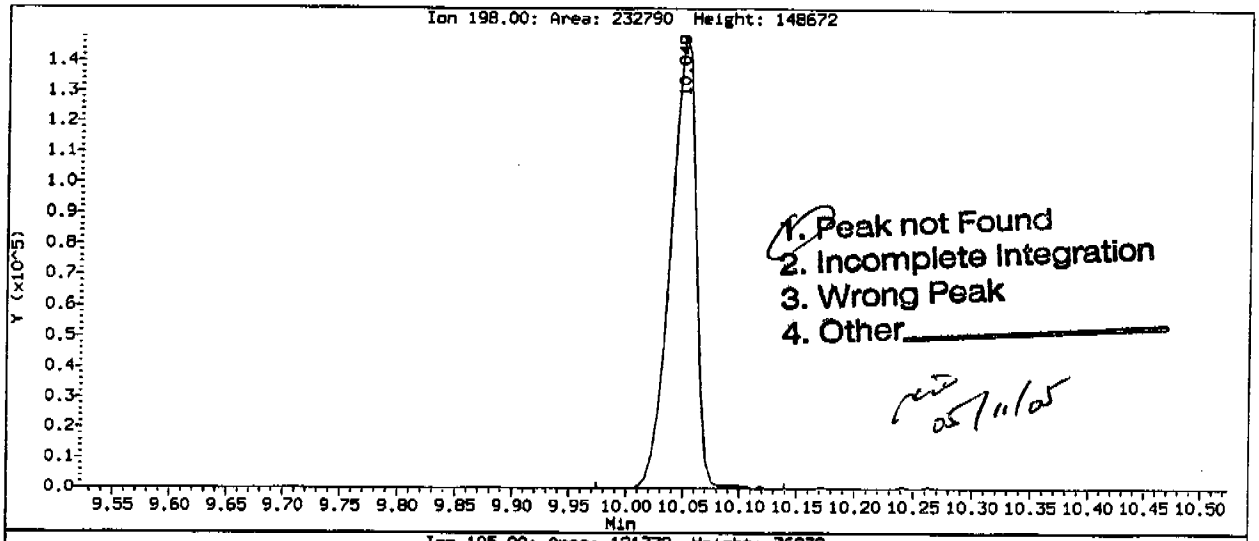
Compound: Pyridine
CAS Number: 110-86-1





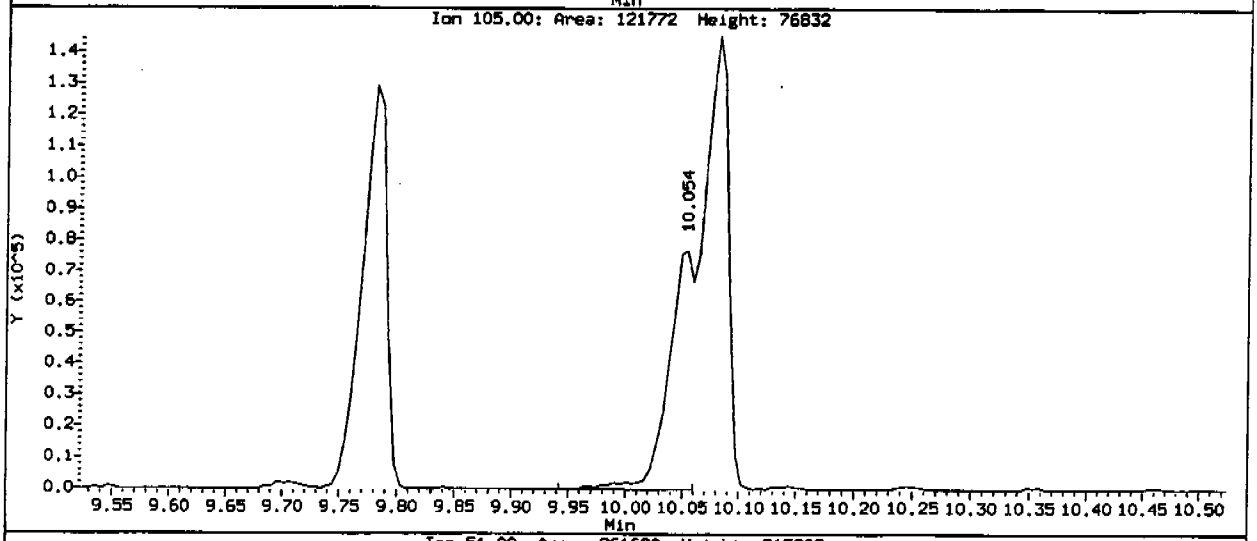
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B\K5MP3043.D
Injection Date: 10-MAY-2005 18:19
Instrument: MSK.i
Client Sample ID: RE73-05-58829

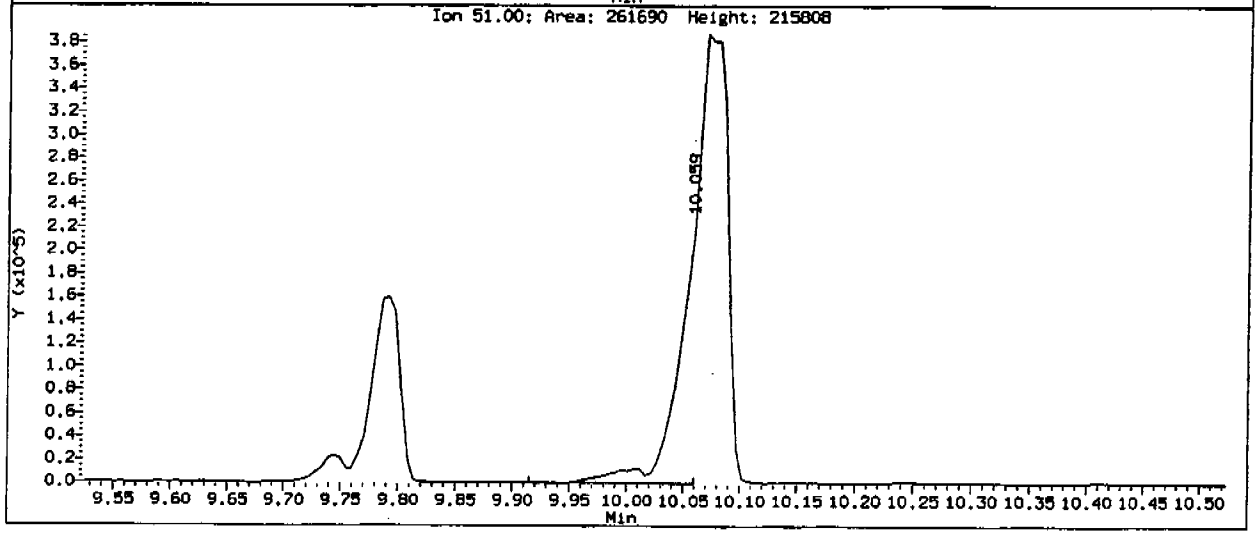
Compound: 4,6-Dinitro-2-methylphenol
CAS Number: 534-52-1



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

05/11/05





Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3044.D
Report Date: 11-May-2005 13:05

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3044.D
Lab Smp Id: G8WXJ1AJ — Client Smp ID: RE73-05-58829
Inj Date : 10-MAY-2005 18:51
Operator : XIA — Inst ID: MSK.i
Smp Info : G8WXJ1AJ
Misc Info : F5D210380-001D (5119285) SON
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\050510A.B\8270K.m
Meth Date : 11-May-2005 10:34 hongs — Quant Type: ISTD
Cal Date : 09-MAY-2005 15:12 — Cal File: KCAL3000.D
Als bottle: 16 — QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE — Compound Sublist: SONMS04.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Uf*Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume Injected
Ws	30.421	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	4 N-Nitrosodimethylamine	74	1.698	1.681	(0.374)	214335	125.497	4125
	3 Pyridine	79	1.660	1.670	(0.366)	252408	83.7508	2753(M)
$	10 2-Fluorophenol	112	3.220	3.219	(0.709)	311376	101.240	3328
	17 Aniline	93	4.240	4.229	(0.934)	407160	72.8676	2395
	19 Bis(2-chloroethyl)ether	93	4.315	4.304	(0.951)	598763	151.405	4977
$	15 Phenol-d5	99	4.310	4.298	(0.949)	507833	117.970	3878
	16 Phenol	94	4.326	4.314	(0.953)	731227	153.450	5044
	20 2-Chlorophenol	128	4.374	4.362	(0.964)	499805	145.063	4768
	21 1,3-Dichlorobenzene	146	4.497	4.485	(0.991)	560790	142.323	4678
*	22 1,4-Dichlorobenzene-d4	152	4.540	4.533	(1.000)	101813	40.0000	
	23 1,4-Dichlorobenzene	146	4.561	4.555	(1.005)	589126	140.789	4628
	25 Benzyl Alcohol	108	4.801	4.784	(1.058)	366778	216.615	7120(A)
	26 1,2-Dichlorobenzene	146	4.780	4.774	(1.053)	565109	146.027	4800
	28 2,2-oxybis(1-Chloropropane)	45	4.951	4.945	(1.091)	626625	153.222	5037
	27 2-Methylphenol	108	5.010	4.993	(1.104)	368570	120.794	3971
	35 Hexachloroethane	117	5.138	5.132	(1.132)	258159	141.098	4638
	32 N-Nitrosodinpropylamine	70	5.149	5.132	(1.134)	579348	180.727	5941(A)
	29 3 and 4-Methylphenol	108	5.186	5.180	(1.142)	405164	124.516	4093
$	36 Nitrobenzene-d5	82	5.266	5.260	(0.860)	374819	76.6251	2519
	37 Nitrobenzene	77	5.293	5.281	(0.865)	818650	157.911	5191

05/11/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3044.D
Report Date: 11-May-2005 13:05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	39 Isophorone	82	5.592	5.575	(0.914)	1243612	184.011	6049(A)
	40 2-Nitrophenol	139	5.693	5.682	(0.930)	279231	155.465	5110
	41 2,4-Dimethylphenol	107	5.816	5.805	(0.950)	265608	69.6835	2291(R)
	42 Bis(2-chloroethoxy)methane	93	5.902	5.890	(0.964)	704875	163.616	5378(A)
	45 2,4-Dichlorophenol	162	6.025	6.013	(0.984)	430804	153.716	5053
	47 1,2,4-Trichlorobenzene	180	6.078	6.072	(0.993)	502185	150.405	4944
*	48 Naphthalene-d8	136	6.121	6.115	(1.000)	356343	40.0000	
	44 Benzoic Acid	122	6.078	6.072	(0.993)	98126	55.2102	1815
	50 Naphthalene	128	6.153	6.141	(1.005)	1483226	147.012	4832
	51 4-Chloroaniline	127	6.297	6.296	(1.029)	178573	43.7125	1437
	54 Hexachlorobutadiene	225	6.393	6.392	(1.045)	356720	153.819	5056
	62 2-Methylnaphthalene	142	7.114	7.103	(1.162)	1079873	149.632	4919
	59 4-Chloro-3-Methylphenol	107	7.072	7.055	(1.155)	540043	165.855	5452(A)
	66 Hexachlorocyclopentadiene	237	7.451	7.445	(0.846)	346440	162.732	5349(A)
	67 2,4,6-Trichlorophenol	196	7.643	7.632	(0.868)	345494	150.353	4942
$	69 2-Fluorobiphenyl	172	7.734	7.723	(0.879)	648938	80.9455	2661
	68 2,4,5-Trichlorophenol	196	7.724	7.717	(0.877)	401699	165.407	5437(A)
	72 2-Chloronaphthalene	162	7.857	7.846	(0.893)	1002076	149.496	4914
	73 2-Nitroaniline	65	8.156	8.139	(0.927)	456944	158.251	5202
	76 Dimethylphthalate	163	8.525	8.508	(0.968)	1341928	174.811	5746(A)
	79 Acenaphthylene	152	8.541	8.529	(0.970)	1587472	160.639	5280(A)
	80 2,6-Dinitrotoluene	165	8.642	8.620	(0.982)	275319	167.848	5517(A)
*	82 Acenaphthene-d10	164	8.803	8.791	(1.000)	199101	40.0000	
	83 Acenaphthene	153	8.861	8.850	(1.007)	951476	152.467	5012
	81 3-Nitroaniline	138	8.872	8.855	(1.008)	182092	113.001	3714
	84 2,4-Dinitrophenol	184	9.054	9.037	(1.029)	79313	80.9455	2661
	86 Dibenzofuran	168	9.145	9.128	(1.039)	1437555	155.919	5125
	88 2,4-Dinitrotoluene	165	9.321	9.299	(1.059)	387595	183.751	6040(A)
	85 4-Nitrophenol	109	9.364	9.347	(1.064)	275953	205.137	6743(A)
	94 Fluorene	166	9.754	9.737	(1.108)	1210377	164.030	5392(A)
	93 Diethylphthalate	149	9.791	9.769	(1.112)	1415635	184.244	6056(A)
	95 4-Chlorophenyl-phenylether	204	9.807	9.790	(1.114)	707583	177.744	5843(A)
	98 4-Nitroaniline	138	10.015	9.972	(1.138)	238736	151.975	4996
	99 4,6-Dinitro-2-methylphenol	198	10.063	10.025	(0.878)	195894	139.726	4593(QM)
	100 N-Nitrosodiphenylamine	169	10.079	10.057	(0.880)	933231	181.151	5955(A)
	102 Azobenzene	77	10.090	10.068	(0.881)	2090739	180.921	5947(A)
$	104 2,4,6-Tribromophenol	330	10.256	10.239	(1.165)	140677	126.394	4155
	109 4-Bromophenyl-phenylether	248	10.688	10.672	(0.933)	406615	171.809	5648(A)
	112 Hexachlorobenzene	284	10.913	10.896	(0.952)	396905	164.269	5400(A)
	117 Pentachlorophenol	266	11.319	11.307	(0.988)	121711	90.3210	2969
*	121 Phenanthrene-d10	188	11.458	11.451	(1.000)	338364	40.0000	
	122 Phenanthrene	178	11.511	11.494	(1.005)	1576374	150.834	4958
	124 Anthracene	178	11.597	11.580	(1.012)	1525099	150.949	4962
	126 Carbazole	167	12.003	11.980	(1.048)	1287063	149.100	4901
	129 Di-n-Butylphthalate	149	12.889	12.867	(1.125)	1828513	161.669	5314(A)
	134 Fluoranthene	202	13.808	13.786	(1.205)	1371054	126.935	4173
	137 Pyrene	202	14.225	14.203	(0.855)	1213418	155.573	5114
$	139 Terphenyl-d14	244	14.658	14.651	(0.881)	478112	78.8824	2593
	146 Butylbenzylphthalate	149	15.790	15.773	(0.950)	615879	190.947	6277(A)
	150 Benzo(a)Anthracene	228	16.607	16.585	(0.999)	974186	144.992	4766
*	153 Chrysene-d12	240	16.629	16.617	(1.000)	191878	40.0000	
	152 3,3'-Dichlorobenzidine	252	16.688	16.681	(1.004)	184880	71.4614	2349
	154 Chrysene	228	16.693	16.665	(1.004)	915118	143.128	4705
	155 bis(2-ethylhexyl)Phthalate	149	17.019	16.997	(1.023)	724586	179.454	5899(A)

Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3044.D
Report Date: 11-May-2005 13:05

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
158 Di-n-octylphthalate	149	18.167	18.145	(0.944)	1130056	160.860	5288(A)
160 Benzo(b)fluoranthene	252	18.616	18.589	(0.968)	891185	139.210	4576
161 Benzo(k)fluoranthene	252	18.664	18.631	(0.970)	858792	135.064	4440
165 Benzo(a)pyrene	252	19.150	19.123	(0.996)	630378	109.104	3586
* 166 Perylene-d12	264	19.236	19.224	(1.000)	164866	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.961	20.934	(1.090)	559667	104.496	3435
174 Dibenzo(a,h)anthracene	278	21.020	20.982	(1.093)	727816	140.041	4603
177 Benzo(g,h,i)perylene	276	21.410	21.383	(1.113)	290045	60.6581	1994

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3044.D
Report Date: 11-May-2005 13:05

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSK.i
Lab File ID: KSMP3044.D
Lab Smp Id: G8WXJ1AJ
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\8270K.m
Misc Info: F5D210380-001D (5119285) SON

Calibration Date: 10-MAY-2005
Calibration Time: 12:53
Client Smp ID: RE73-05-58829
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
22 1,4-Dichlorobenze	121829	60915	243658	101813	-16.43	
48 Naphthalene-d8	427782	213891	855564	356343	-16.70	
82 Acenaphthene-d10	251365	125683	502730	199101	-20.79	
121 Phenanthrene-d10	466667	233334	933334	338364	-27.49	
153 Chrysene-d12	406157	203079	812314	191878	-52.76	<
166 Perylene-d12	339675	169838	679350	164866	-51.46	<

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.53	4.03	5.03	4.54	0.14
48 Naphthalene-d8	6.12	5.62	6.62	6.12	0.10
82 Acenaphthene-d10	8.79	8.29	9.29	8.80	0.13
121 Phenanthrene-d10	11.45	10.95	11.95	11.46	0.05
153 Chrysene-d12	16.62	16.12	17.12	16.63	0.07
166 Perylene-d12	19.22	18.72	19.72	19.24	0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3044.D Page 5
Report Date: 11-May-2005 13:05

STL St. Louis

RECOVERY REPORT

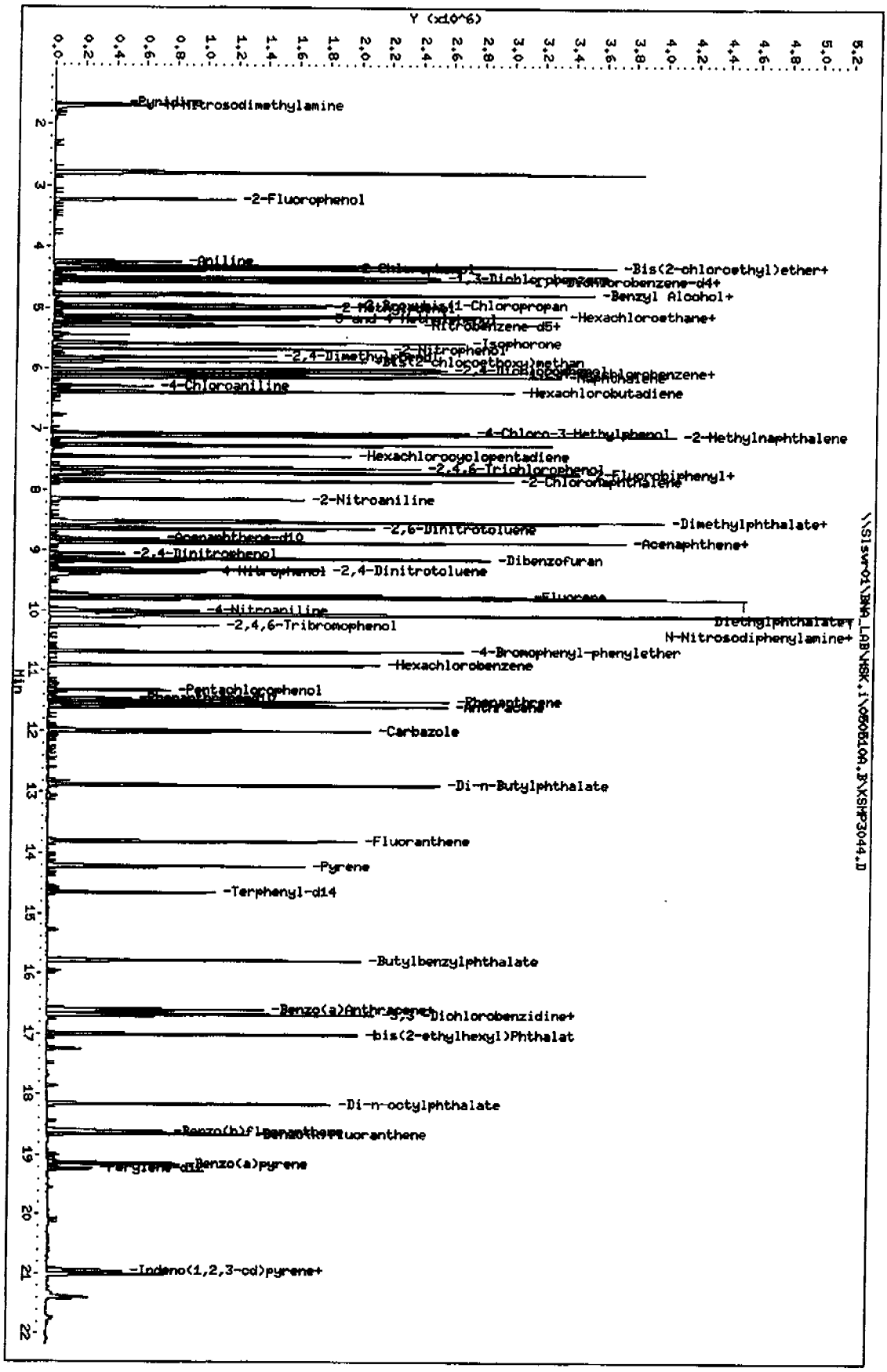
Client Name: LOS ALAMOS NATIONAL 21-APR-2005 00:00 Client SDG: F5D2103
Sample Matrix: SOLID Fraction: SV
Lab Smp Id: G8WXJ1AJ Client Smp ID: RE73-05-58829
Level: LOW Operator: XIA
Data Type: MS DATA SampleType: MSD
SpikeList File: SONMS04.spk Quant Type: ISTD
Sublist File: SONMS04.sub
Method File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\8270K.m
Misc Info: F5D210380-001D (5119285) SON

SPIKE	COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
83	Acenaphthene	6574	5012	76.23	48-112
79	Acenaphthylene	6574	5280	80.32	48-110
124	Anthracene	6574	4962	75.47	46-111
150	Benzo(a)Anthracene	6574	4766	72.50	46-117
160	Benzo(b)fluoranthe	6574	4576	69.60	39-124
161	Benzo(k)fluoranthe	6574	4440	67.53	43-131
177	Benzo(g,h,i)peryle	6574	1994	30.33	26-140
165	Benzo(a)pyrene	6574	3586	54.55	43-114
42	Bis(2-chloroethoxy	6574	5378	81.81	46-107
19	Bis(2-chloroethyl)	6574	4977	75.70	38-98
155	bis(2-ethylhexyl)P	6574	5899	89.73	43-118
109	4-Bromophenyl-phen	6574	5648	85.90	46-110
146	Butylbenzylphthala	6574	6277	95.47	44-121
126	Carbazole	6574	4901	74.55	41-112
51	4-Chloroaniline	6574	1437	21.86	11-99
59	4-Chloro-3-Methylp	6574	5452	82.93	41-107
20	2-Chlorophenol	6574	4768	72.53	41-96
95	4-Chlorophenyl-phe	6574	5843	88.87	47-109
154	Chrysene	6574	4705	71.56	43-119
174	Dibenzo(a,h)anthra	6574	4603	70.02	33-131
86	Dibenzofuran	6574	5125	77.96	46-107
129	Di-n-Butylphthalat	6574	5314	80.83	45-114
152	3,3'-Dichlorobenzi	6574	2349	35.73	10-116
45	2,4-Dichlorophenol	6574	5053	76.86	40-105
93	Diethylphthalate	6574	6056	92.12	46-115
41	2,4-Dimethylphenol	6574	2291	34.84*	36-105
76	Dimethylphthalate	6574	5746	87.41	46-110
99	4,6-Dinitro-2-meth	6574	4593	69.86	10-108
84	2,4-Dinitrophenol	6574	2661	40.47	10-109
88	2,4-Dinitrotoluene	6574	6040	91.88	47-120
80	2,6-Dinitrotoluene	6574	5517	83.92	47-111
158	Di-n-octylphthalat	6574	5288	80.43	35-120
134	Fluoranthene	6574	4173	63.47	39-116
94	Fluorene	6574	5392	82.02	47-109
112	Hexachlorobenzene	6574	5400	82.13	48-115
54	Hexachlorobutadien	6574	5056	76.91	40-105
66	Hexachlorocyclopen	6574	5349	81.37	10-120
35	Hexachloroethane	6574	4638	70.55	36-99
173	Indeno(1,2,3-cd)py	6574	3435	52.25	31-129
39	Isophorone	6574	6049	92.01	47-117

Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSMP3044.D
Report Date: 11-May-2005 13:05

	SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
62	2-Methylnaphthalen	6574	4919	74.82	35-118
27	2-Methylphenol	6574	3971	60.40	43-95
29	3 and 4-Methylphen	6574	4093	62.26	41-103
50	Naphthalene	6574	4832	73.51	10-150
73	2-Nitroaniline	6574	5202	79.13	42-114
81	3-Nitroaniline	6574	3714	56.50	23-102
98	4-Nitroaniline	6574	4996	75.99	21-116
37	Nitrobenzene	6574	5191	78.96	45-105
40	2-Nitrophenol	6574	5110	77.73	36-108
85	4-Nitrophenol	6574	6743	102.57	33-114
100	N-Nitrosodiphenyla	6574	5955	90.58	47-120
32	N-Nitrosodinpropyl	6574	5941	90.36	51-109
28	2,2-oxybis(1-Chlor	6574	5037	76.61	41-102
117	Pentachlorophenol	6574	2969	45.16	11-110
122	Phenanthrene	6574	4958	75.42	39-122
16	Phenol	6574	5044	76.73	41-97
137	Pyrene	6574	5114	77.79	41-121
47	1,2,4-Trichloroben	6574	4944	75.20	44-102
68	2,4,5-Trichlorophe	6574	5437	82.70	39-108
67	2,4,6-Trichlorophe	6574	4942	75.18	40-105

	SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 10	2-Fluorophenol	4931	3328	67.49	40-103
$ 15	Phenol-d5	4931	3878	78.65	36-105
$ 36	Nitrobenzene-d5	3287	2519	76.63	45-114
$ 69	2-Fluorobiphenyl	3287	2661	80.95	49-120
$ 104	2,4,6-Tribromophen	4931	4155	84.26	39-114
$ 139	Terphenyl-d14	3287	2593	78.88	42-108



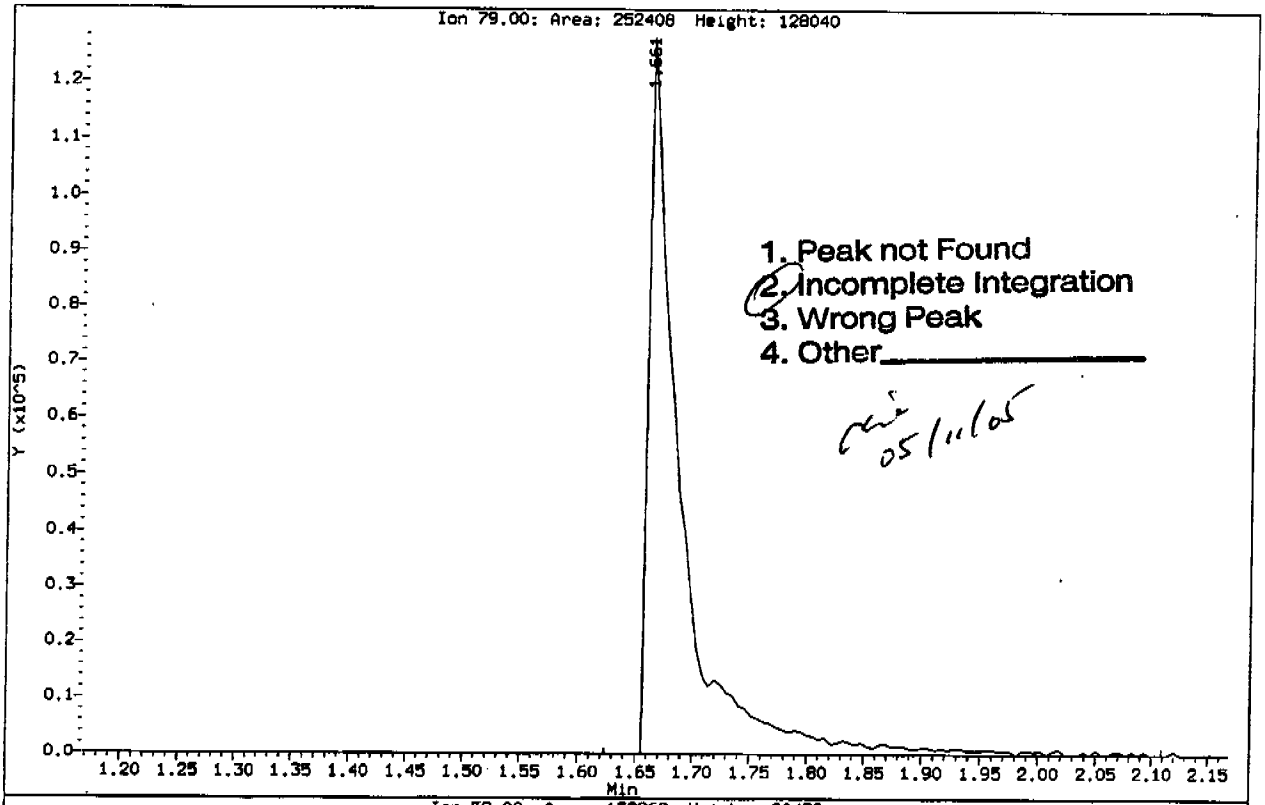
Data File: \\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSHP3044.D
Date : 10-MAY-2005 18:51
Client ID: RE73-05-58829
Sample Info: GBWKJ1AJ
Volume Injected (ul): 1.0
Column phase:

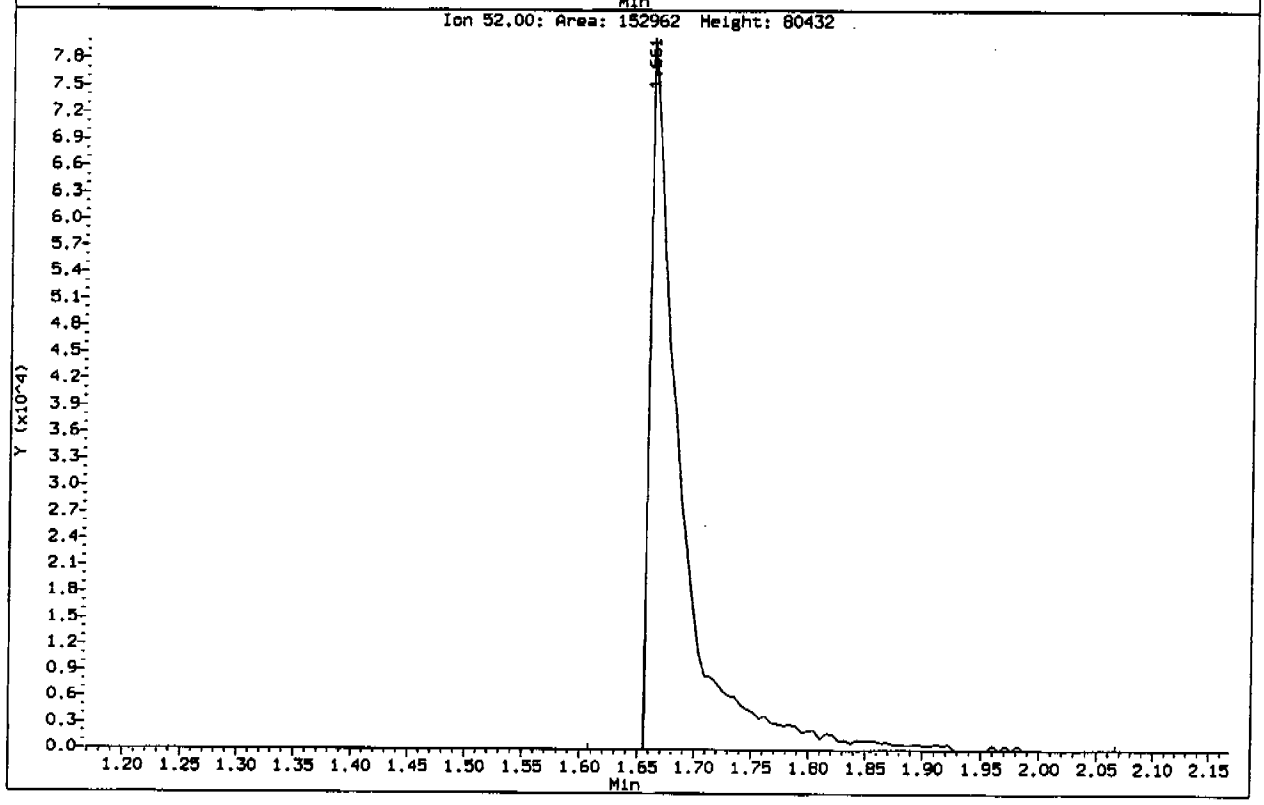
\\Slsvr01\BNA_LAB\MSK.i\050510A.B\KSHP3044.D

Instrument: MSK.i
Operator: XIA
Column diameter: 2.00

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050510A.B\KSMP3044.D
Injection Date: 10-MAY-2005 18:51
Instrument: MSK.i
Client Sample ID: RE73-05-58829

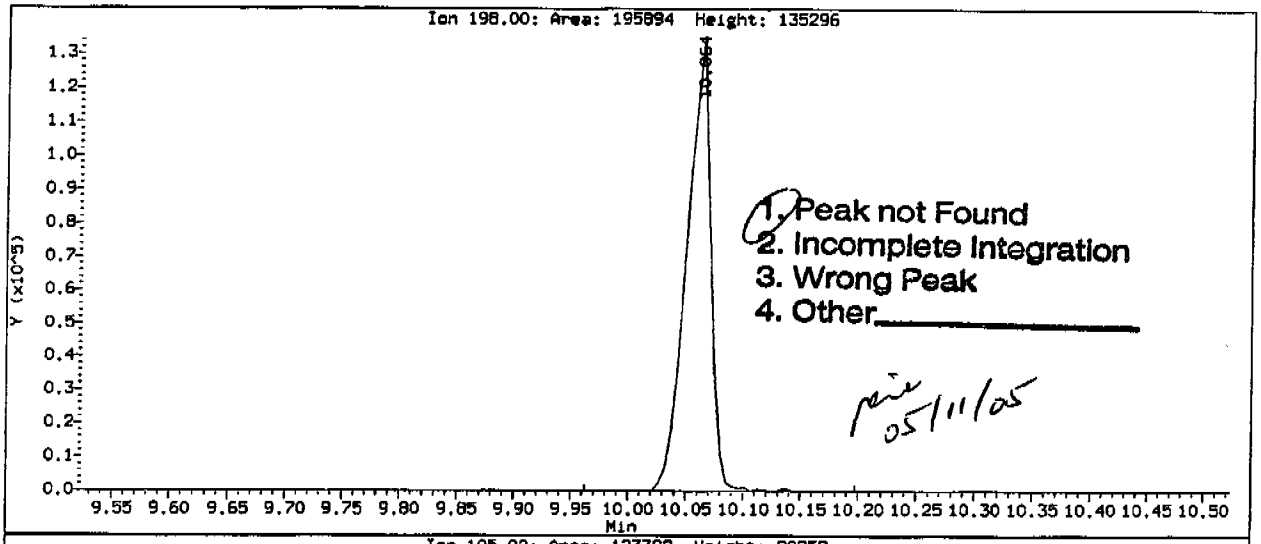
Compound: Pyridine
CAS Number: 110-86-1





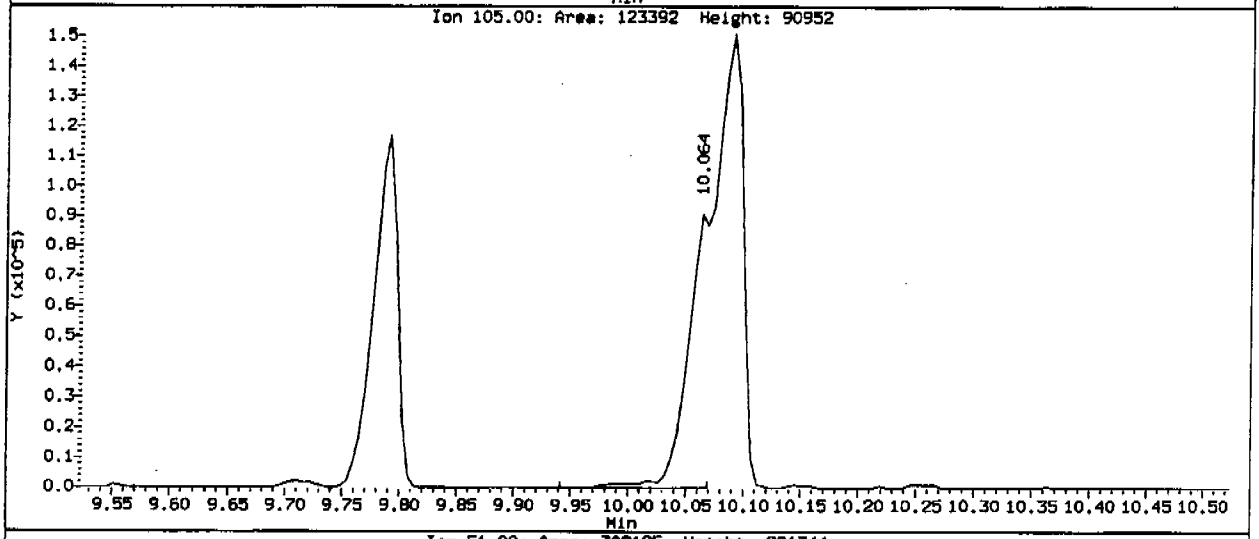
Data File: \\Slavr01\BNA_LAB\MSK.i\K050510A.B\KSMP3044.D
Injection Date: 10-MAY-2005 18:51
Instrument: MSK.i
Client Sample ID: RE73-05-58829

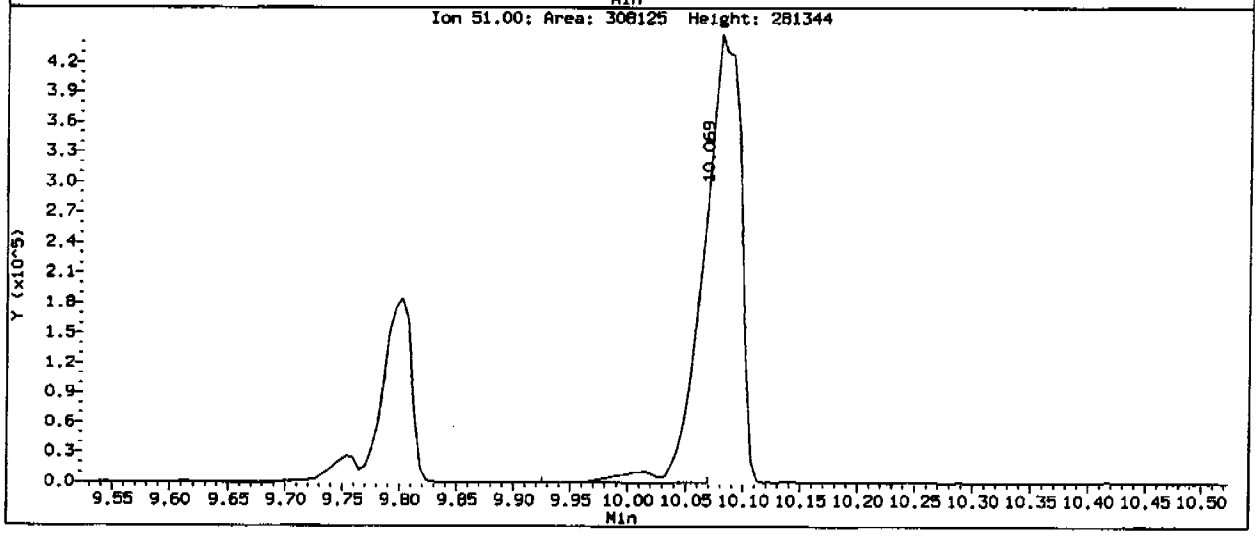
Compound: 4,6-Dinitro-2-methylphenol
CAS Number: 534-52-1



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

mir 05/11/05





Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KSMP3113.D
Report Date: 13-May-2005 11:09

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KSMP3113.D
Lab Smp Id: G8WXJ1AK Client Smp ID: RE73-05-58829
Inj Date : 12-MAY-2005 22:46
Operator : XIA Inst ID: MSK.i
Smp Info : G8WXJ1AK
Misc Info : F5D210380-001S (5131374) SON GPC
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m
Meth Date : 12-May-2005 16:05 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 12:01 Cal File: KCAL2994.D
Als bottle: 21 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SONMS04.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Uf*Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Factor
Vt	2000.000	Volume of final extract (uL)
Vi	1.000	Volume Injected
Ws	30.648	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
4	N-Nitrosodimethylamine	74	1.757	1.678	(0.387)	383792	86.4445	5641
3	Pyridine	79	1.719	1.662	(0.379)	496577	63.3832	4136
$ 10	2-Fluorophenol	112	3.252	3.254	(0.716)	499106	62.4254	4074
17	Aniline	93	4.235	4.232	(0.933)	670834	46.1835	3014
19	Bis(2-chloroethyl)ether	93	4.305	4.306	(0.948)	879904	85.5897	5585
$ 15	Phenol-d5	99	4.326	4.333	(0.953)	728600	65.1088	4249
16	Phenol	94	4.337	4.349	(0.955)	1014932	81.9322	5347
20	2-Chlorophenol	128	4.380	4.381	(0.965)	795778	88.8484	5798
21	1,3-Dichlorobenzene	146	4.492	4.488	(0.989)	950750	92.8202	6057
* 22	1,4-Dichlorobenzene-d4	152	4.540	4.536	(1.000)	264668	40.0000	
23	1,4-Dichlorobenzene	146	4.561	4.557	(1.005)	1023057	94.0505	6137
25	Benzyl Alcohol	108	4.802	4.793	(1.058)	546240	124.099	8098
26	1,2-Dichlorobenzene	146	4.780	4.777	(1.053)	964609	95.8857	6257
28	2,2-oxybis(1-Chloropropane)	45	4.946	4.947	(1.089)	947966	89.1678	5819
27	2-Methylphenol	108	5.015	5.017	(1.105)	570897	71.9754	4697
35	Hexachloroethane	117	5.128	5.134	(1.129)	446671	93.9124	6128
32	N-Nitrosodinpropylamine	70	5.144	5.129	(1.133)	832511	99.9022	6519
29	3 and 4-Methylphenol	108	5.202	5.204	(1.146)	601417	71.1001	4640
$ 36	Nitrobenzene-d5	82	5.261	5.263	(0.860)	564001	45.2906	2956
37	Nitrobenzene	77	5.288	5.284	(0.865)	1177261	89.2001	5821

05/13/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KSMP3113.D
Report Date: 13-May-2005 11:09

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	39 Isophorone	82	5.587	5.583	(0.914)	1675519	97.3838	6355
	40 2-Nitrophenol	139	5.683	5.685	(0.929)	408078	89.2462	5824
	41 2,4-Dimethylphenol	107	5.822	5.824	(0.952)	483638	49.8411	3252
	42 Bis(2-chloroethoxy)methane	93	5.891	5.888	(0.963)	1022734	93.2512	6085
	45 2,4-Dichlorophenol	162	6.030	6.043	(0.986)	615837	86.3142	5633
	47 1,2,4-Trichlorobenzene	180	6.073	6.075	(0.993)	808428	95.1085	6206
*	48 Naphthalene-d8	136	6.116	6.117	(1.000)	907172	40.0000	
	44 Benzoic Acid	122	6.116	6.112	(1.000)	200067	44.2170	2885(M)
	50 Naphthalene	128	6.143	6.139	(1.004)	2422865	94.3305	6156
	51 4-Chloroaniline	127	6.287	6.299	(1.028)	383336	36.8594	2405
	54 Hexachlorobutadiene	225	6.383	6.390	(1.044)	572072	96.8972	6323
	62 2-Methylnaphthalene	142	7.099	7.100	(1.161)	2145882	116.799	7622
	59 4-Chloro-3-Methylphenol	107	7.088	7.095	(1.159)	753600	90.9116	5933
	66 Hexachlorocyclopentadiene	237	7.441	7.448	(0.846)	535396	117.782	7686
	67 2,4,6-Trichlorophenol	196	7.644	7.645	(0.869)	443935	90.4797	5904
$	69 2-Fluorobiphenyl	172	7.724	7.725	(0.878)	830269	48.5030	3165
	68 2,4,5-Trichlorophenol	196	7.756	7.779	(0.882)	463345	89.3545	5831
	72 2-Chloronaphthalene	162	7.847	7.848	(0.892)	1406137	98.2463	6411
	73 2-Nitroaniline	65	8.151	8.147	(0.927)	531300	86.1751	5624
	76 Dimethylphthalate	163	8.520	8.516	(0.969)	1606265	97.9976	6395
	79 Acenaphthylene	152	8.530	8.532	(0.970)	2176010	103.126	6730
	80 2,6-Dinitrotoluene	165	8.637	8.628	(0.982)	327449	93.4939	6101
*	82 Acenaphthene-d10	164	8.792	8.799	(1.000)	425122	40.0000	
	83 Acenaphthene	153	8.856	8.853	(1.007)	1250099	93.8174	6122
	81 3-Nitroaniline	138	8.867	8.869	(1.009)	170597	49.5820	3236
	84 2,4-Dinitrophenol	184	9.054	9.050	(1.030)	67552	32.2884	2107(M)
	86 Dibenzofuran	168	9.134	9.130	(1.039)	1745022	88.6412	5784
	88 2,4-Dinitrotoluene	165	9.310	9.307	(1.059)	401922	89.2386	5823
	85 4-Nitrophenol	109	9.444	9.462	(1.074)	251920	87.7064	5723
	94 Fluorene	166	9.743	9.745	(1.108)	1455474	92.3779	6028
	93 Diethylphthalate	149	9.781	9.771	(1.112)	1560356	95.1101	6207
	95 4-Chlorophenyl-phenylether	204	9.797	9.793	(1.114)	830666	97.7243	6377
	98 4-Nitroaniline	138	10.005	9.990	(1.138)	237887	70.9225	4628
	99 4,6-Dinitro-2-methylphenol	198	10.053	10.033	(0.878)	199797	76.2220	4974(QM)
	100 N-Nitrosodiphenylamine	169	10.069	10.065	(0.879)	1030742	107.013	6983
	102 Azobenzene	77	10.080	10.076	(0.880)	2236956	103.534	6756
$	104 2,4,6-Tribromophenol	330	10.251	10.252	(1.166)	155927	65.6120	4282
	109 4-Bromophenyl-phenylether	248	10.678	10.680	(0.932)	455060	102.841	6711
	112 Hexachlorobenzene	284	10.908	10.904	(0.952)	465178	102.973	6720
	117 Pentachlorophenol	266	11.324	11.326	(0.989)	105252	41.7757	2726
*	121 Phenanthrene-d10	188	11.453	11.460	(1.000)	632630	40.0000	
	122 Phenanthrene	178	11.501	11.502	(1.004)	1724471	88.2529	5759
	124 Anthracene	178	11.586	11.588	(1.012)	1671342	88.4772	5774
	126 Carbazole	167	11.997	11.994	(1.048)	1274455	78.9655	5153
	129 Di-n-Butylphthalate	149	12.879	12.881	(1.125)	1723617	81.5089	5319
	134 Fluoranthene	202	13.798	13.799	(1.205)	1330441	65.8805	4299
	137 Pyrene	202	14.209	14.211	(0.855)	1246181	105.260	6869
$	139 Terphenyl-d14	244	14.647	14.659	(0.881)	415449	45.1569	2947
	146 Butylbenzylphthalate	149	15.780	15.781	(0.950)	481130	98.2737	6413
	150 Benzo(a)Anthracene	228	16.592	16.593	(0.998)	888970	87.1658	5688
*	153 Chrysene-d12	240	16.618	16.625	(1.000)	291252	40.0000	
	152 3,3'-Dichlorobenzidine	252	16.683	16.689	(1.004)	162513	41.3834	2700
	154 Chrysene	228	16.672	16.679	(1.003)	826803	85.1935	5559
	155 bis(2-ethylhexyl)Phthalate	149	17.003	17.005	(1.023)	596360	97.3035	6350

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KSMP3113.D
Report Date: 13-May-2005 11:09

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
158 Di-n-octylphthalate	149	18.152	18.159	(0.944)	866285	87.3957	5703
160 Benzo(b)fluoranthene	252	18.595	18.597	(0.967)	758932	84.0209	5483
161 Benzo(k)fluoranthene	252	18.643	18.645	(0.970)	802901	89.4943	5840
165 Benzo(a)pyrene	252	19.135	19.136	(0.995)	633452	77.7029	5071
* 166 Perylene-d12	264	19.225	19.232	(1.000)	232621	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	20.946	20.947	(1.089)	638681	84.5154	5515
174 Dibenzo(a,h)anthracene	278	20.999	20.995	(1.092)	717514	97.8468	6385
177 Benzo(g,h,i)perylene	276	21.405	21.401	(1.113)	583990	86.5587	5648

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KSMP3113.D Page 4
Report Date: 13-May-2005 11:09

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSK.i
Lab File ID: KSMP3113.D
Lab Smp Id: G8WXJ1AK
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Calibration Date: 12-MAY-2005
Calibration Time: 12:41
Client Smp ID: RE73-05-58829
Level: LOW
Sample Type: SOIL
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m
Misc Info: F5D210380-001S (5131374) SON GPC

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
22 1,4-Dichlorobenze	167849	83925	335698	264668	57.68	
48 Naphthalene-d8	587608	293804	1175216	907172	54.38	
82 Acenaphthene-d10	335274	167637	670548	425122	26.80	
121 Phenanthrene-d10	627534	313767	1255068	632630	0.81	
153 Chrysene-d12	548402	274201	1096804	291252	-46.89	
166 Perylene-d12	477098	238549	954196	232621	-51.24	<

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.54	4.04	5.04	4.54	0.08
48 Naphthalene-d8	6.12	5.62	6.62	6.12	-0.03
82 Acenaphthene-d10	8.80	8.30	9.30	8.79	-0.08
121 Phenanthrene-d10	11.46	10.96	11.96	11.45	-0.06
153 Chrysene-d12	16.63	16.13	17.13	16.62	-0.04
166 Perylene-d12	19.23	18.73	19.73	19.23	-0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KSMP3113.D Page 5
Report Date: 13-May-2005 11:09

STL St. Louis

RECOVERY REPORT

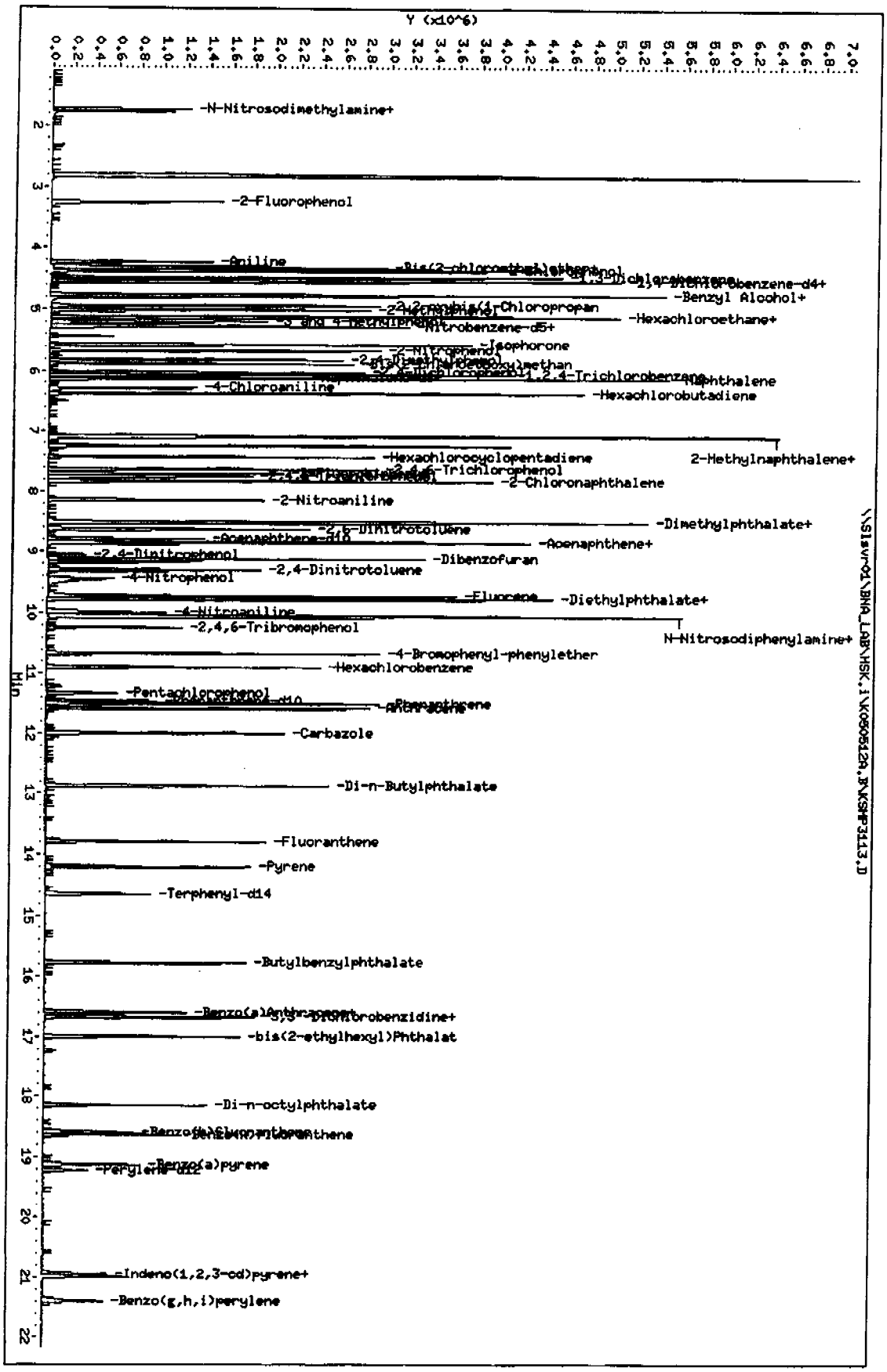
Client Name: LOS ALAMOS NATIONAL 21-APR-2005 00:00 Client SDG: F5D2103
Sample Matrix: SOLID Fraction: SV
Lab Smp Id: G8WXJ1AK Client Smp ID: RE73-05-58829
Level: LOW Operator: XIA
Data Type: MS DATA SampleType: MS
SpikeList File: SONMS04.spk Quant Type: ISTD
Sublist File: SONMS04.sub
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m
Misc Info: F5D210380-001S (5131374) SON GPC

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
83 Acenaphthene	6526	6122	93.82	48-112
79 Acenaphthylene	6526	6730	103.13	48-110
124 Anthracene	6526	5774	88.48	46-111
150 Benzo(a)Anthracene	6526	5688	87.17	46-117
160 Benzo(b)fluoranthe	6526	5483	84.02	39-124
161 Benzo(k)fluoranthe	6526	5840	89.49	43-131
177 Benzo(g,h,i)peryle	6526	5648	86.56	26-140
165 Benzo(a)pyrene	6526	5071	77.70	43-114
42 Bis(2-chloroethoxy	6526	6085	93.25	46-107
19 Bis(2-chloroethyl)	6526	5585	85.59	38-98
155 bis(2-ethylhexyl)P	6526	6350	97.30	43-118
109 4-Bromophenyl-phen	6526	6711	102.84	46-110
146 Butylbenzylphthala	6526	6413	98.27	44-121
126 Carbazole	6526	5153	78.97	41-112
51 4-Chloroaniline	6526	2405	36.86	11-99
59 4-Chloro-3-Methylp	6526	5933	90.91	41-107
20 2-Chlorophenol	6526	5798	88.85	41-96
95 4-Chlorophenyl-phe	6526	6377	97.72	47-109
154 Chrysene	6526	5559	85.19	43-119
174 Dibenzo(a,h)anthra	6526	6385	97.85	33-131
86 Dibenzofuran	6526	5784	88.64	46-107
129 Di-n-Butylphthalat	6526	5319	81.51	45-114
152 3,3'-Dichlorobenzi	6526	2700	41.38	10-116
45 2,4-Dichlorophenol	6526	5633	86.31	40-105
93 Diethylphthalate	6526	6207	95.11	46-115
41 2,4-Dimethylphenol	6526	3252	49.84	36-105
76 Dimethylphthalate	6526	6395	98.00	46-110
99 4,6-Dinitro-2-meth	6526	4974	76.22	10-108
84 2,4-Dinitrophenol	6526	2107	32.29	10-109
88 2,4-Dinitrotoluene	6526	5823	89.24	47-120
80 2,6-Dinitrotoluene	6526	6101	93.49	47-111
158 Di-n-octylphthalat	6526	5703	87.40	35-120
134 Fluoranthene	6526	4299	65.88	39-116
94 Fluorene	6526	6028	92.38	47-109
112 Hexachlorobenzene	6526	6720	102.97	48-115
54 Hexachlorobutadien	6526	6323	96.90	40-105
66 Hexachlorocyclopen	6526	7686	117.78	10-120
35 Hexachloroethane	6526	6128	93.91	36-99
173 Indeno(1,2,3-cd)py	6526	5515	84.52	31-129
39 Isophorone	6526	6355	97.38	47-117

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KSMP3113.D
Report Date: 13-May-2005 11:09

	SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
62	2-Methylnaphthalen	6526	7622	116.80	35-118
27	2-Methylphenol	6526	4697	71.98	43-95
29	3 and 4-Methylphen	6526	4640	71.10	41-103
50	Naphthalene	6526	6156	94.33	10-150
73	2-Nitroaniline	6526	5624	86.18	42-114
81	3-Nitroaniline	6526	3236	49.58	23-102
98	4-Nitroaniline	6526	4628	70.92	21-116
37	Nitrobenzene	6526	5821	89.20	45-105
40	2-Nitrophenol	6526	5824	89.25	36-108
85	4-Nitrophenol	6526	5723	87.71	33-114
100	N-Nitrosodiphenyla	6526	6983	107.01	47-120
32	N-Nitrosodinpropyl	6526	6519	99.90	51-109
28	2,2-oxybis(1-Chlor	6526	5819	89.17	41-102
117	Pentachlorophenol	6526	2726	41.78	11-110
122	Phenanthrene	6526	5759	88.25	39-122
16	Phenol	6526	5347	81.93	41-97
137	Pyrene	6526	6869	105.26	41-121
47	1,2,4-Trichloroben	6526	6206	95.11	44-102
68	2,4,5-Trichlorophe	6526	5831	89.35	39-108
67	2,4,6-Trichlorophe	6526	5904	90.48	40-105

	SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 10	2-Fluorophenol	4894	4074	83.23	40-103
$ 15	Phenol-d5	4894	4249	86.81	36-105
$ 36	Nitrobenzene-d5	3263	2956	90.58	45-114
$ 69	2-Fluorobiphenyl	3263	3165	97.01	49-120
$ 104	2,4,6-Tribromophen	4894	4282	87.48	39-114
$ 139	Terphenyl-d14	3263	2947	90.31	42-108

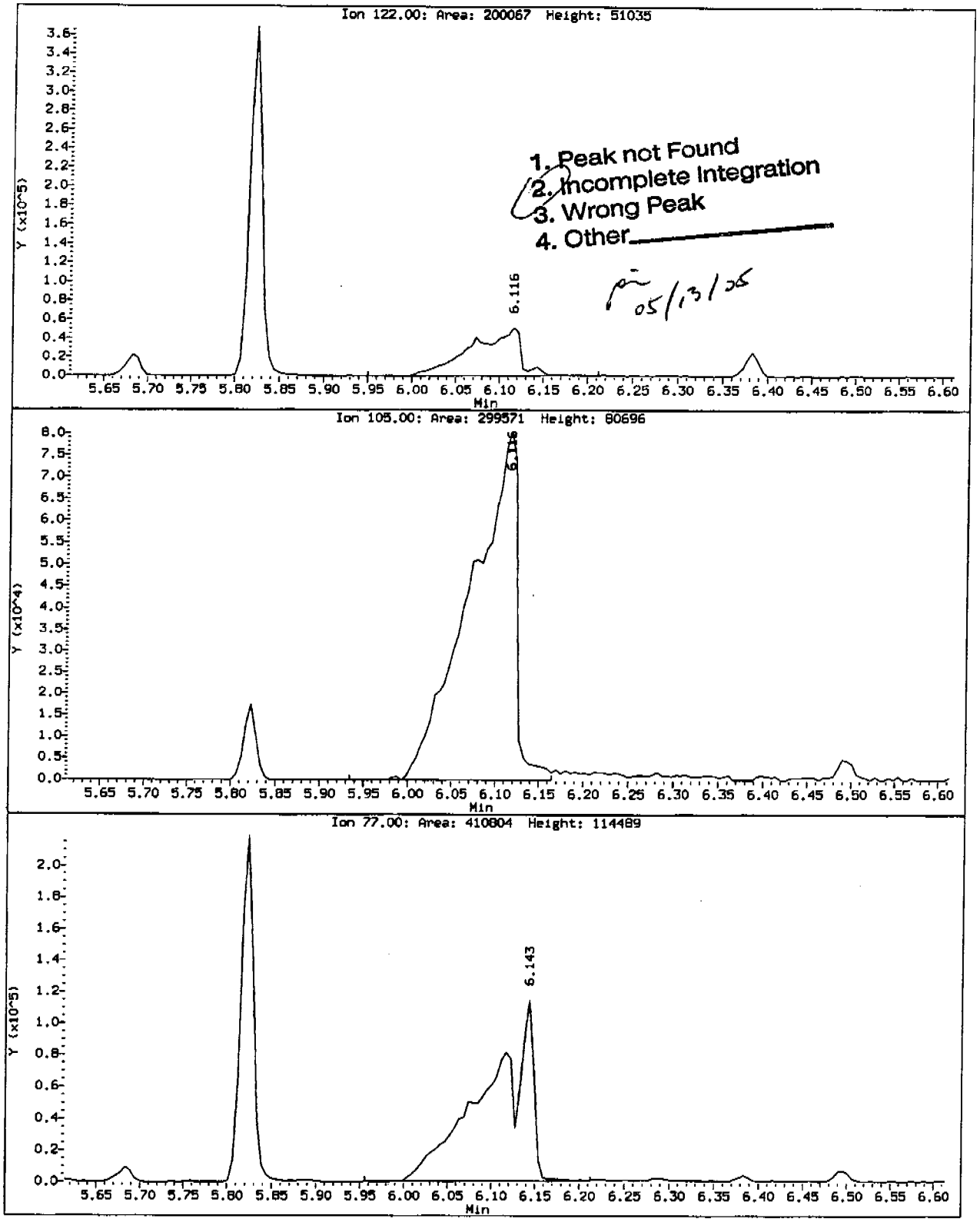


Data File: \\Slsvr01\BNA_LAB\HSK.i\K0505120.B\KSHP3113.D
Date : 12-MAY-2005 22:46
Client ID: RE73-05-58829
Sample Info: G8HXJ1AK
Volume Injected (uL): 1.0
Column phase:

Instrument: HSK.i
Operator: XIA
Column diameter: 2.00

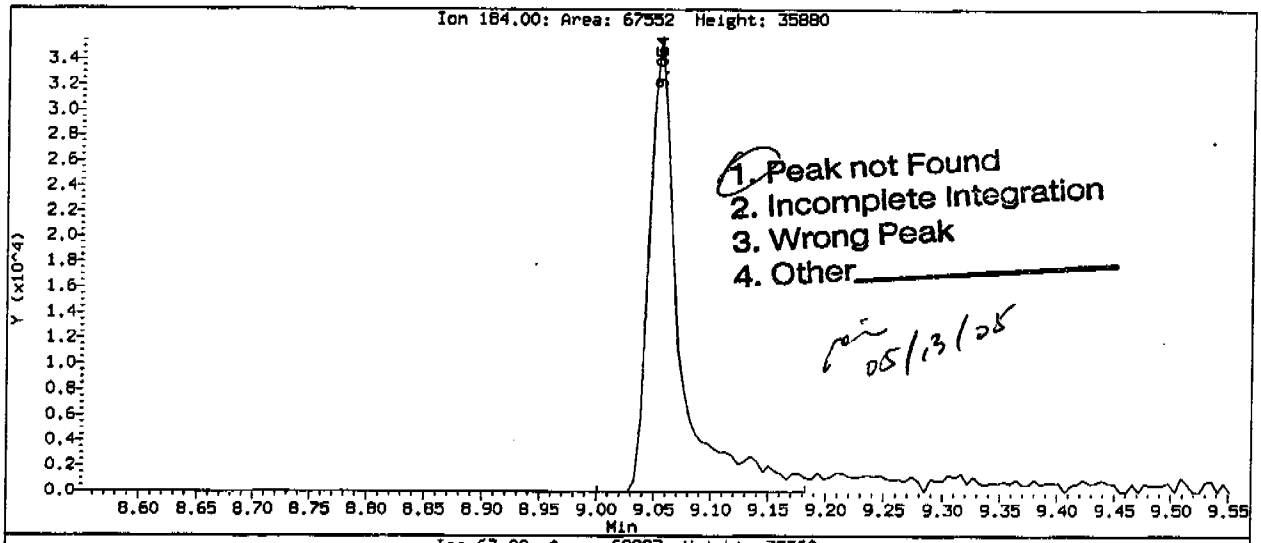
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\K5MP3113.D
Injection Date: 12-MAY-2005 22:46
Instrument: MSK.i
Client Sample ID: RE73-05-58829

Compound: Benzoic Acid
CAS Number: 65-85-0



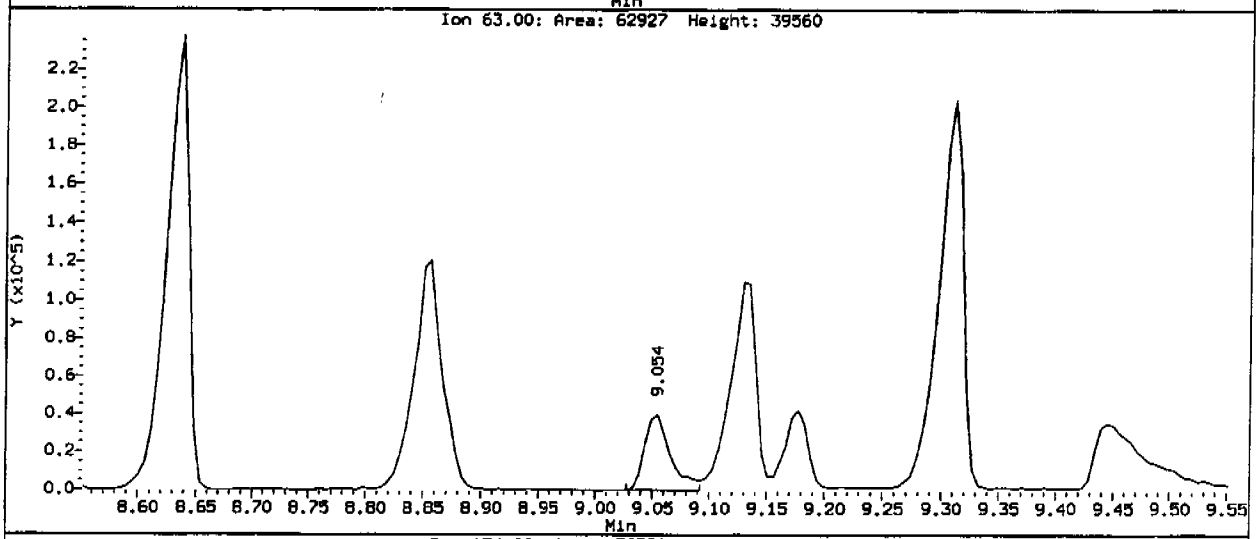
Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KSMP3113.D
Injection Date: 12-MAY-2005 22:46
Instrument: MSK.i
Client Sample ID: RE73-05-58829

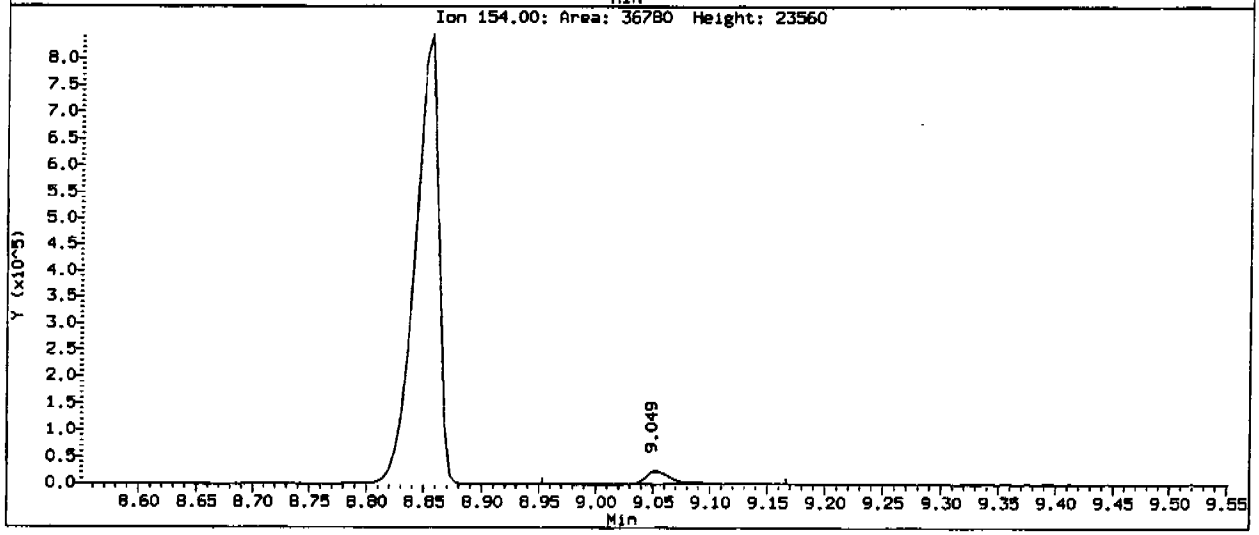
Compound: 2,4-Dinitrophenol
CAS Number: 51-28-5



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

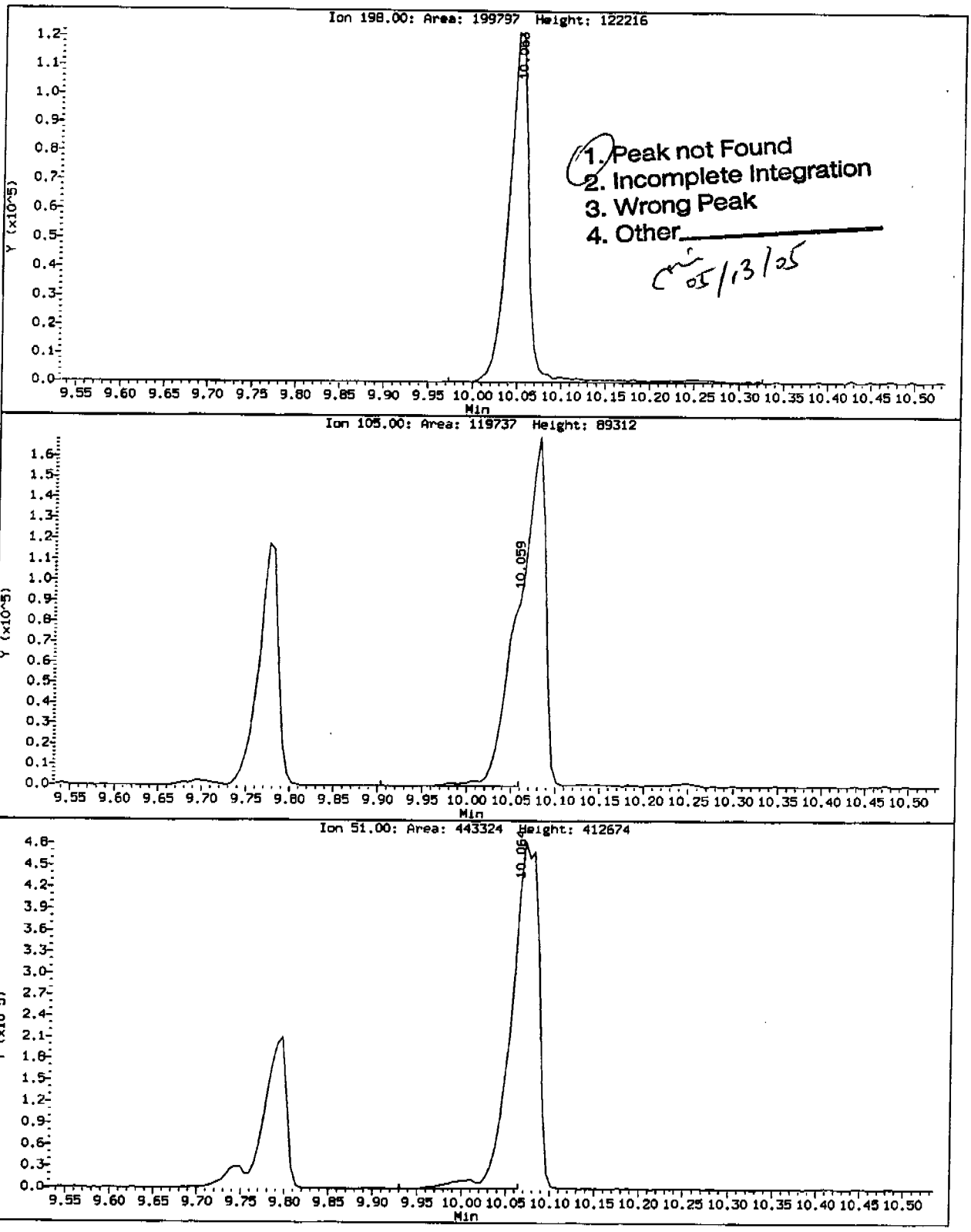
05/13/05





Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KSMP3113.D
Injection Date: 12-MAY-2005 22:46
Instrument: MSK.i
Client Sample ID: RE73-05-58829

Compound: 4,6-Dinitro-2-methylphenol
CAS Number: 534-52-1



Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KSMP3114.D
Report Date: 13-May-2005 11:09

STL St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KSMP3114.D
Lab Smp Id: G8WXJ1AL Client Smp ID: RE73-05-58829
Inj Date : 12-MAY-2005 23:18
Operator : XIA Inst ID: MSK.i
Smp Info : G8WXJ1AL
Misc Info : F5D210380-001D (5131374) SON GPC
Comment :
Method : \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m
Meth Date : 12-May-2005 16:05 hongs Quant Type: ISTD
Cal Date : 09-MAY-2005 12:01 Cal File: KCAL2994.D
Als bottle: 22 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SONMS04.sub
Target Version: 4.10
Processing Host: SLSVOA02

Concentration Formula: Amt * DF * Uf*Vt/(Vi*Ws) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Factor
Vt	2000.000	Volume of final extract (uL)
Vi	1.000	Volume Injected
Ws	30.085	Weight of sample extracted (g)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	4 N-Nitrosodimethylamine	74	1.708	1.678	(0.377)	263689	84.6574	5628
	3 Pyridine	79	1.676	1.662	(0.370)	305442	55.5710	3694
$	10 2-Fluorophenol	112	3.242	3.254	(0.716)	347419	61.9375	4118
	17 Aniline	93	4.225	4.232	(0.933)	480081	47.1105	3132
	19 Bis(2-chloroethyl)ether	93	4.294	4.306	(0.948)	575523	79.7959	5305
$	15 Phenol-d5	99	4.315	4.333	(0.953)	485262	61.8100	4109
	16 Phenol	94	4.331	4.349	(0.956)	685956	78.9306	5247
	20 2-Chlorophenol	128	4.369	4.381	(0.965)	524326	83.4431	5547
	21 1,3-Dichlorobenzene	146	4.481	4.488	(0.989)	634954	88.3589	5874
*	22 1,4-Dichlorobenzene-d4	152	4.529	4.536	(1.000)	185682	40.0000	
	23 1,4-Dichlorobenzene	146	4.545	4.557	(1.004)	675367	88.4979	5883
	25 Benzyl Alcohol	108	4.785	4.793	(1.057)	379380	122.855	8167
	26 1,2-Dichlorobenzene	146	4.769	4.777	(1.053)	630448	89.3272	5938
	28 2,2-oxybis(1-Chloropropane)	45	4.935	4.947	(1.090)	653969	87.6807	5829
	27 2-Methylphenol	108	5.010	5.017	(1.106)	392487	70.5315	4689
	35 Hexachloroethane	117	5.122	5.134	(1.131)	305279	91.4879	6082
	32 N-Nitrosodinpropylamine	70	5.122	5.129	(1.131)	588869	100.725	6696
	29 3 and 4-Methylphenol	108	5.197	5.204	(1.147)	409300	68.9713	4585
$	36 Nitrobenzene-d5	82	5.250	5.263	(0.860)	404122	46.1936	3071
	37 Nitrobenzene	77	5.277	5.284	(0.864)	811615	87.5354	5819

05/13/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KSMP3114.D
Report Date: 13-May-2005 11:09

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	39 Isophorone	82	5.576	5.583	(0.913)	1167772	96.6131	6423
	40 2-Nitrophenol	139	5.672	5.685	(0.929)	286003	89.0345	5919
	41 2,4-Dimethylphenol	107	5.811	5.824	(0.952)	296924	43.5566	2896
	42 Bis(2-chloroethoxy)methane	93	5.881	5.888	(0.963)	714359	92.7148	6164
	45 2,4-Dichlorophenol	162	6.025	6.043	(0.987)	417105	83.2152	5532
	47 1,2,4-Trichlorobenzene	180	6.062	6.075	(0.993)	552400	92.5065	6150
*	48 Naphthalene-d8	136	6.105	6.117	(1.000)	637307	40.0000	
	44 Benzoic Acid	122	6.089	6.112	(0.997)	118778	37.3672	2484(M)
	50 Naphthalene	128	6.132	6.139	(1.004)	1626888	90.1615	5994
	51 4-Chloroaniline	127	6.281	6.299	(1.029)	256876	35.1587	2337
	54 Hexachlorobutadiene	225	6.377	6.390	(1.045)	392014	94.5155	6283
	62 2-Methylnaphthalene	142	7.088	7.100	(1.161)	1481938	114.816	7633
	59 4-Chloro-3-Methylphenol	107	7.077	7.095	(1.159)	516610	88.7119	5897
	66 Hexachlorocyclopentadiene	237	7.430	7.448	(0.846)	359220	108.155	7190
	67 2,4,6-Trichlorophenol	196	7.633	7.645	(0.869)	309161	86.2378	5733
$	69 2-Fluorobiphenyl	172	7.713	7.725	(0.878)	601629	48.1016	3198
	68 2,4,5-Trichlorophenol	196	7.750	7.779	(0.883)	325632	85.9449	5713
	72 2-Chloronaphthalene	162	7.836	7.848	(0.892)	982269	93.9292	6244
	73 2-Nitroaniline	65	8.140	8.147	(0.927)	387038	85.9166	5712
	76 Dimethylphthalate	163	8.504	8.516	(0.968)	1141500	95.3138	6336
	79 Acenaphthylene	152	8.520	8.532	(0.970)	1526597	99.0174	6582
	80 2,6-Dinitrotoluene	165	8.621	8.628	(0.982)	237704	92.8875	6175
*	82 Acenaphthene-d10	164	8.781	8.799	(1.000)	310622	40.0000	
	83 Acenaphthene	153	8.840	8.853	(1.007)	883464	90.7422	6032
	81 3-Nitroaniline	138	8.856	8.869	(1.009)	135465	53.8842	3582
	84 2,4-Dinitrophenol	184	9.038	9.050	(1.029)	42001	27.4757	1826(M)
	86 Dibenzofuran	168	9.118	9.130	(1.038)	1244744	86.5359	5753
	88 2,4-Dinitrotoluene	165	9.294	9.307	(1.058)	291725	88.6474	5893
	85 4-Nitrophenol	109	9.444	9.462	(1.075)	179031	85.3057	5671
	94 Fluorene	166	9.732	9.745	(1.108)	1045280	90.7983	6036
	93 Diethylphthalate	149	9.759	9.771	(1.111)	1111186	92.6981	6162
	95 4-Chlorophenyl-phenylether	204	9.780	9.793	(1.114)	578793	93.1925	6195
	98 4-Nitroaniline	138	9.983	9.990	(1.137)	177090	72.2585	4804
	99 4,6-Dinitro-2-methylphenol	198	10.026	10.033	(0.877)	127101	62.1976	4135(QM)
	100 N-Nitrosodiphenylamine	169	10.053	10.065	(0.879)	707128	94.1709	6260
	102 Azobenzene	77	10.063	10.076	(0.880)	1572136	93.3356	6205
$	104 2,4,6-Tribromophenol	330	10.240	10.252	(1.166)	111329	64.1138	4262
	109 4-Bromophenyl-phenylether	248	10.662	10.680	(0.932)	327026	94.8008	6302
	112 Hexachlorobenzene	284	10.891	10.904	(0.952)	341537	96.9780	6447
	117 Pentachlorophenol	266	11.308	11.326	(0.989)	65762	33.4812	2226
*	121 Phenanthrene-d10	188	11.436	11.460	(1.000)	493193	40.0000	
	122 Phenanthrene	178	11.484	11.502	(1.004)	1270724	83.4175	5545
	124 Anthracene	178	11.570	11.588	(1.012)	1244380	84.4991	5617
	126 Carbazole	167	11.981	11.994	(1.048)	967360	76.8837	5111
	129 Di-n-Butylphthalate	149	12.863	12.881	(1.125)	1375175	83.4171	5545
	134 Fluoranthene	202	13.782	13.799	(1.205)	1062017	67.4568	4484
	137 Pyrene	202	14.193	14.211	(0.855)	1000094	109.600	7286
$	139 Terphenyl-d14	244	14.636	14.659	(0.882)	327728	46.2178	3072
	146 Butylbenzylphthalate	149	15.764	15.781	(0.949)	367806	97.4727	6480
	150 Benzo(a)Anthracene	228	16.576	16.593	(0.998)	670144	85.2544	5668
*	153 Chrysene-d12	240	16.602	16.625	(1.000)	224481	40.0000	
	152 3,3'-Dichlorobenzidine	252	16.666	16.689	(1.004)	120364	39.7671	2644
	154 Chrysene	228	16.656	16.679	(1.003)	592569	79.2196	5266
	155 bis(2-ethylhexyl)Phthalate	149	16.992	17.005	(1.023)	442113	93.5929	6222

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KSMP3114.D
Report Date: 13-May-2005 11:09

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
158	Di-n-octylphthalate	149	18.135	18.159	(0.944)	657531	79.9323	5314
160	Benzo(b)fluoranthene	252	18.579	18.597	(0.967)	579875	77.3563	5142
161	Benzo(k)fluoranthene	252	18.627	18.645	(0.970)	606389	81.4445	5414
165	Benzo(a)pyrene	252	19.118	19.136	(0.995)	483988	71.5377	4756
* 166	Perylene-d12	264	19.209	19.232	(1.000)	193051	40.0000	
173	Indeno(1,2,3-cd)pyrene	276	20.929	20.947	(1.090)	493499	78.6891	5231
174	Dibenzo(a,h)anthracene	278	20.977	20.995	(1.092)	565007	92.8425	6172
177	Benzo(g,h,i)perylene	276	21.383	21.401	(1.113)	475555	84.9343	5646

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KSMP3114.D
Report Date: 13-May-2005 11:09

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSK.i
Lab File ID: KSMP3114.D
Lab Smp Id: G8WXJ1AL
Analysis Type: SV
Quant Type: ISTD
Operator: XIA
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m
Misc Info: F5D210380-001D (5131374) SON GPC

Calibration Date: 12-MAY-2005
Calibration Time: 12:41
Client Smp ID: RE73-05-58829
Level: LOW
Sample Type: SOIL

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	167849	83925	335698	185682	10.62
48 Naphthalene-d8	587608	293804	1175216	637307	8.46
82 Acenaphthene-d10	335274	167637	670548	310622	-7.35
121 Phenanthrene-d10	627534	313767	1255068	493193	-21.41
153 Chrysene-d12	548402	274201	1096804	224481	-59.07 <
166 Perylene-d12	477098	238549	954196	193051	-59.54 <

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	4.54	4.04	5.04	4.53	-0.16
48 Naphthalene-d8	6.12	5.62	6.62	6.11	-0.20
82 Acenaphthene-d10	8.80	8.30	9.30	8.78	-0.20
121 Phenanthrene-d10	11.46	10.96	11.96	11.44	-0.20
153 Chrysene-d12	16.63	16.13	17.13	16.60	-0.14
166 Perylene-d12	19.23	18.73	19.73	19.21	-0.12

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KSMP3114.D Page 1
Report Date: 13-May-2005 11:57

STL St. Louis

RECOVERY REPORT

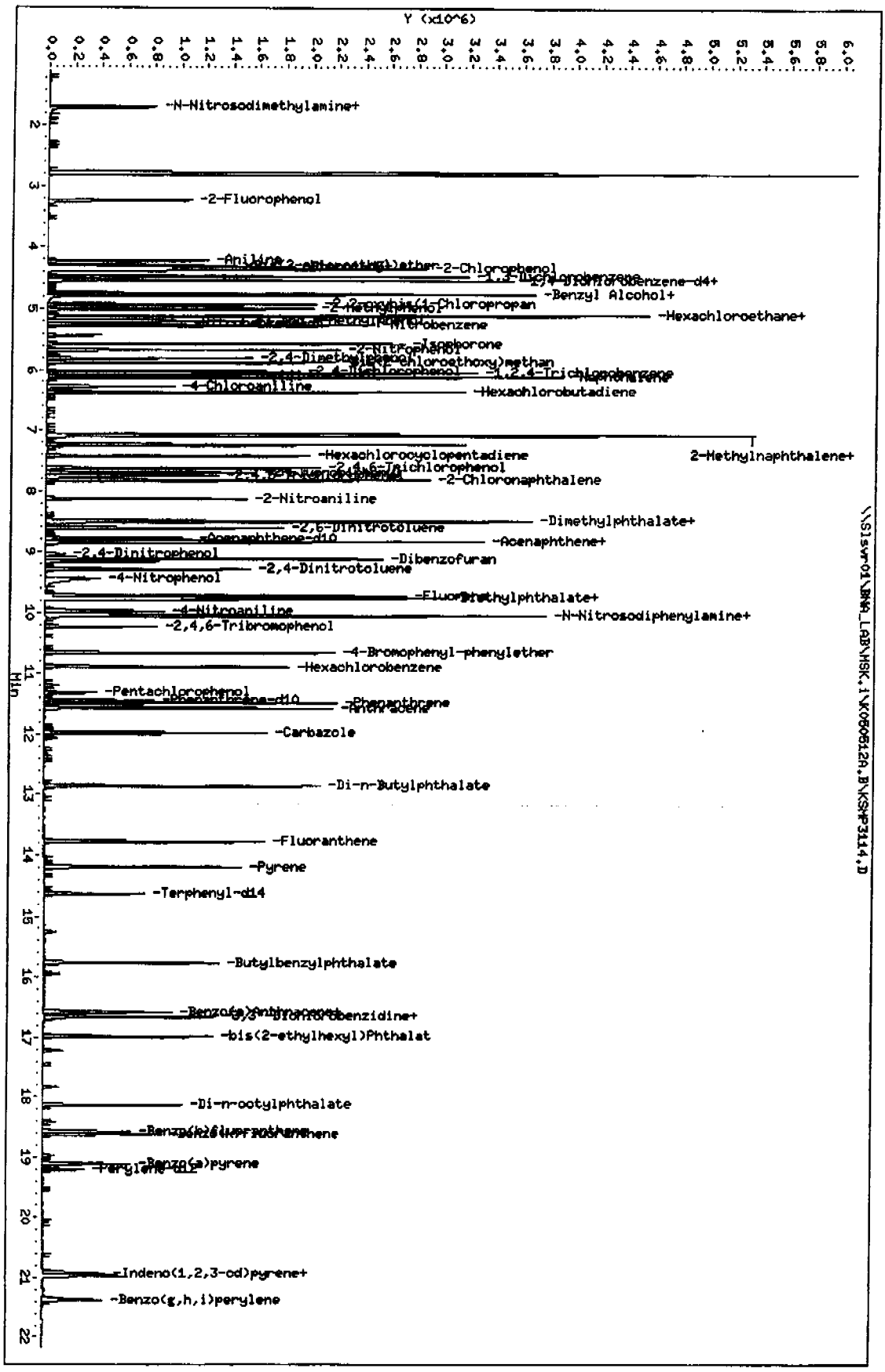
Client Name: LOS ALAMOS NATIONAL 21-APR-2005 00:00 Client SDG: F5D2103
Sample Matrix: SOLID Fraction: SV
Lab Smp Id: G8WXJ1AL Client Smp ID: RE73-05-58829
Level: LOW Operator: XIA
Data Type: MS DATA SampleType: MSD
SpikeList File: SONMS04.spk Quant Type: ISTD
Sublist File: SONMS04.sub
Method File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\8270K.m
Misc Info: F5D210380-001D (5131374) SON GPC

	SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
83	Acenaphthene	6648	6032	90.74	48-112
79	Acenaphthylene	6648	6582	99.02	48-110
124	Anthracene	6648	5617	84.50	46-111
150	Benzo(a)Anthracene	6648	5668	85.25	46-117
160	Benzo(b)fluoranthe	6648	5142	77.36	39-124
161	Benzo(k)fluoranthe	6648	5414	81.44	43-131
177	Benzo(g,h,i)peryle	6648	5646	84.93	26-140
165	Benzo(a)pyrene	6648	4756	71.54	43-114
42	Bis(2-chloroethoxy	6648	6164	92.71	46-107
19	Bis(2-chloroethyl)	6648	5305	79.80	38-98
155	bis(2-ethylhexyl)P	6648	6222	93.59	43-118
109	4-Bromophenyl-phen	6648	6302	94.80	46-110
146	Butylbenzylphthala	6648	6480	97.47	44-121
126	Carbazole	6648	5111	76.88	41-112
51	4-Chloroaniline	6648	2337	35.16	11-99
59	4-Chloro-3-Methylp	6648	5897	88.71	41-107
20	2-Chlorophenol	6648	5547	83.44	41-96
95	4-Chlorophenyl-phe	6648	6195	93.19	47-109
154	Chrysene	6648	5266	79.22	43-119
174	Dibenzo(a,h)anthra	6648	6172	92.84	33-131
86	Dibenzofuran	6648	5753	86.54	46-107
129	Di-n-Butylphthalat	6648	5545	83.42	45-114
152	3,3'-Dichlorobenzi	6648	2644	39.77	10-116
45	2,4-Dichlorophenol	6648	5532	83.22	40-105
93	Diethylphthalate	6648	6162	92.70	46-115
41	2,4-Dimethylphenol	6648	2896	43.56	36-105
76	Dimethylphthalate	6648	6336	95.31	46-110
99	4,6-Dinitro-2-meth	6648	4135	62.20	10-108
84	2,4-Dinitrophenol	6648	1826	27.48	10-109
88	2,4-Dinitrotoluene	6648	5893	88.65	47-120
80	2,6-Dinitrotoluene	6648	6175	92.89	47-111
158	Di-n-octylphthalat	6648	5314	79.93	35-120
134	Fluoranthene	6648	4484	67.46	39-116
94	Fluorene	6648	6036	90.80	47-109
112	Hexachlorobenzene	6648	6447	96.98	48-115
54	Hexachlorobutadien	6648	6283	94.52	40-105
66	Hexachlorocyclopen	6648	7190	108.15	10-120
35	Hexachloroethane	6648	6082	91.49	36-99
173	Indeno(1,2,3-cd)py	6648	5231	78.69	31-129
39	Isophorone	6648	6423	96.61	47-117

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KSMP3114.D Page 2
Report Date: 13-May-2005 11:57

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
62 2-Methylnaphthalen	6648	7633	114.82	35-118
27 2-Methylphenol	6648	4689	70.53	43-95
29 3 and 4-Methylphen	6648	4585	68.97	41-103
50 Naphthalene	6648	5994	90.16	10-150
73 2-Nitroaniline	6648	5712	85.92	42-114
81 3-Nitroaniline	6648	3582	53.88	23-102
98 4-Nitroaniline	6648	4804	72.26	21-116
37 Nitrobenzene	6648	5819	87.54	45-105
40 2-Nitrophenol	6648	5919	89.03	36-108
85 4-Nitrophenol	6648	5671	85.31	33-114
100 N-Nitrosodiphenyla	6648	6260	94.17	47-120
32 N-Nitrosodinpropyl	6648	6696	100.72	51-109
28 2,2-oxybis(1-Chlor	6648	5829	87.68	41-102
117 Pentachlorophenol	6648	2226	33.48	11-110
122 Phenanthrene	6648	5545	83.42	39-122
16 Phenol	6648	5247	78.93	41-97
137 Pyrene	6648	7286	109.60	41-121
47 1,2,4-Trichloroben	6648	6150	92.51	44-102
68 2,4,5-Trichlorophe	6648	5713	85.94	39-108
67 2,4,6-Trichlorophe	6648	5733	86.24	40-105

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 10 2-Fluorophenol	4986	4118	82.58	40-103
$ 15 Phenol-d5	4986	4109	82.41	36-105
$ 36 Nitrobenzene-d5	3324	3071	92.39	45-114
$ 69 2-Fluorobiphenyl	3324	3198	96.20	49-120
$ 104 2,4,6-Tribromophen	4986	4262	85.49	39-114
$ 139 Terphenyl-d14	3324	3072	92.44	42-108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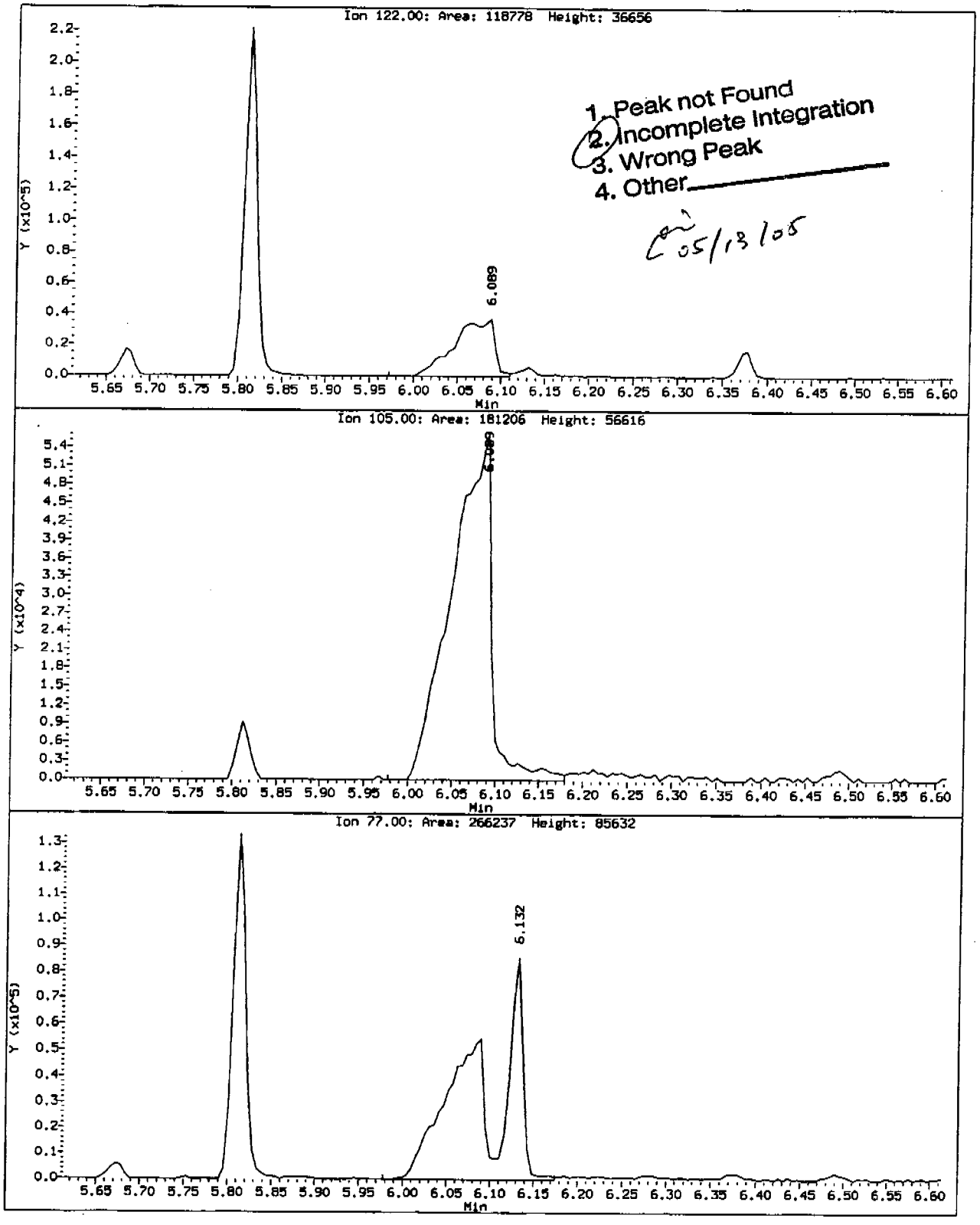
0.0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0 3.2 3.4 3.6 3.8 4.0 4.2 4.4 4.6 4.8 5.0 5.2 5.4 5.6 5.8 6.0
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
Min
-N-Nitrosodimethylamine+
-2-Fluorophenol
-Aniline
-2-Chlorophenol
-Benzyl Alcohol+
-Hexachloroethane+
-Isophorone
-4-Chloroaniline
-Hexachlorobutadiene
-Hexachlorocyclopentadiene
2-Methylnaphthalene+
-2,4,6-Trichlorophenol
-2-Chloronaphthalene
-2-Nitroaniline
-Dimethylphthalate+
-2,6-Dinitrotoluene
-Acenaphthene+
-Dibenzofuran
-2,4-Dinitrophenol
-2,4-Dinitrotoluene
-4-Nitrophenol
-4-Nitroaniline
-N-Nitrosodiphenylamine+
-2,4,6-Tribromophenol
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Pentachlorophenol
-Carbazole
-Di-n-Butylphthalate
-Fluoranthene
-Pyrene
-Terphenyl-d14
-Butylbenzylphthalate
-bis(2-ethylhexyl)Phthalat
-Di-n-ootylphthalate
-Benzo(a)pyrene
-Indeno(1,2,3-cd)pyrene+
-Benzo(g,h,i)perylene
\\Sisvr01\BNA_LAB\HSK.i\K060512A.B\KSHP3114.D
Data File: \\Sisvr01\BNA_LAB\HSK.i\K060512A.B\KSHP3114.D
Date : 12-MAY-2006 23:18
Client ID: RE73-05-58829
Sample Info: GBAXJ14L
Volume Injected (ul): 1.0
Column phase:
Instrument: HSK.i
Operator: XIA
Column diameter: 2.00
Page 6

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KSMP3114.D
Injection Date: 12-MAY-2005 23:18
Instrument: MSK.i
Client Sample ID: RE73-05-58829

Compound: Benzoic Acid
CAS Number: 65-85-0

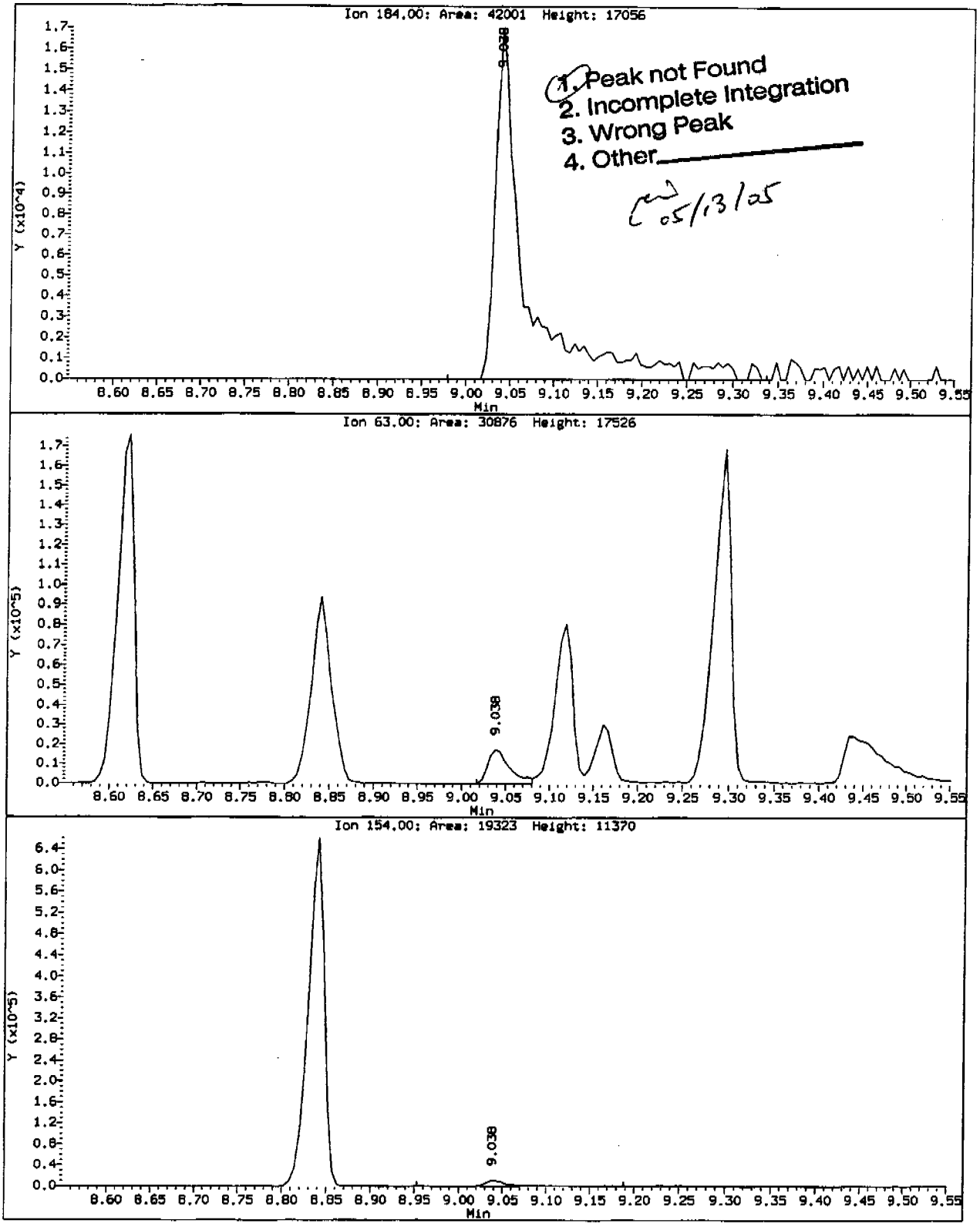


1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other

05/13/05

Data File: \\Slsvr01\BNA_LAB\MSK.i\K050512A.B\KSMP3114.D
Injection Date: 12-MAY-2005 23:18
Instrument: MSK.i
Client Sample ID: RE73-05-58829

Compound: 2,4-Dinitrophenol
CAS Number: 51-28-5

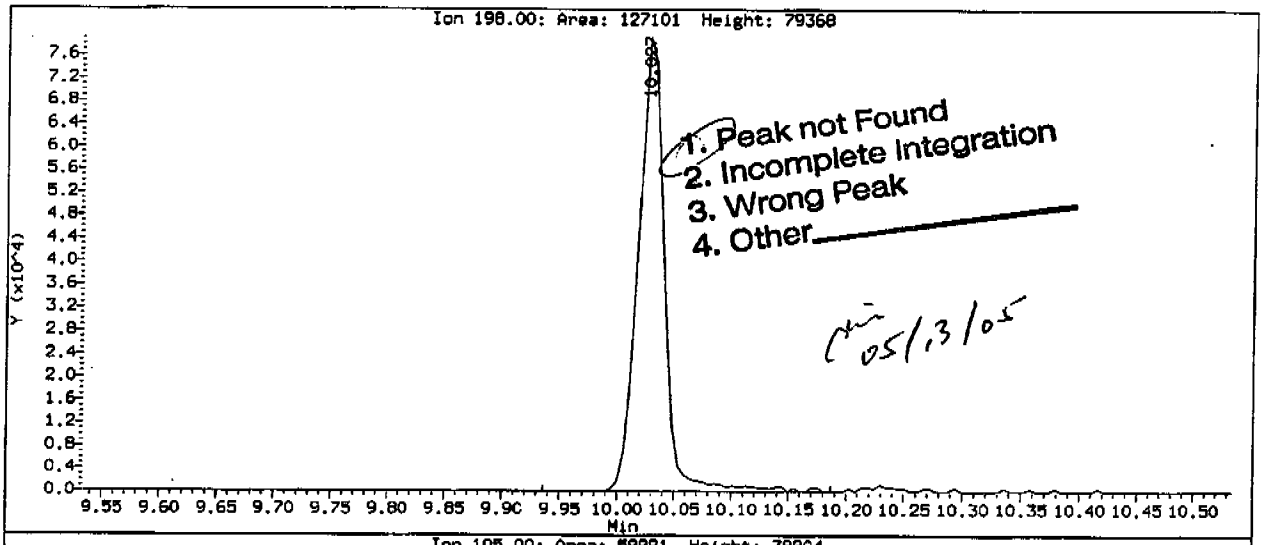


1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other _____

05/13/05

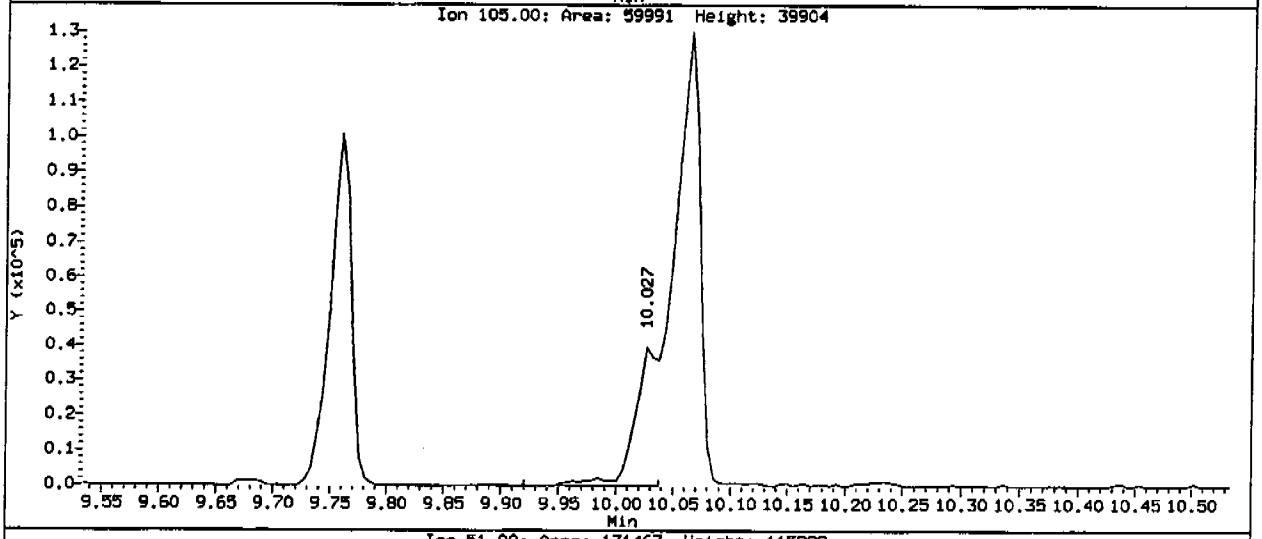
Data File: \\Slavr01\BNA_LAB\MSK.i\K050512A.B\KSMP3114.D
Injection Date: 12-MAY-2005 23:18
Instrument: MSK.i
Client Sample ID: RE73-05-58829

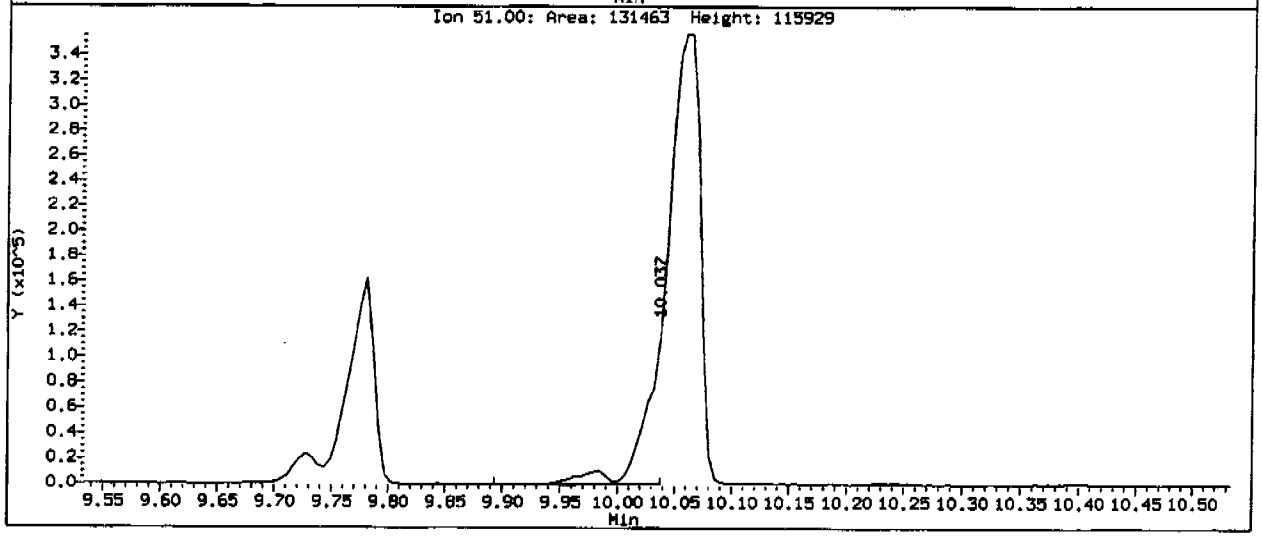
Compound: 4,6-Dinitro-2-methylphenol
CAS Number: 534-52-1



1. Peak not Found
2. Incomplete Integration
3. Wrong Peak
4. Other _____

05/13/05





GC/MS MISCELLANEOUS DATA

LOT# F5D210380

STL ST. LOUIS

Organic Prep Report for Batch #5119285

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Prep Method: SW846 3550B

Prep Description: SONICATION - Low Level

SOP Number: STL-OP-0002, Rev 4

Matrix: SOLID

Extraction Date: 4/29/2005

Lot Number	WorkOrder No	Initials: JW Wt/Vol	pH 1	pH 2	Extr Unit	Initials: SL Concentration I Volume	Date	Initials: JW Cleanup I Method	Date	Initials: Cleanup 2 Method	Date
F5D200213-001	G8QE31A9	30.415 g				0.5 mL SL	5/4/05	3640A JW 05-03-05		Appik/tbs/CAST	
F5D200213-001D	G8QE31CX	30.659 g				0.5 mL SL					
F5D200213-001S	G8QE31CW	30.079 g				0.5 mL SL					
F5D210380-001	G8WXJ1AD	30.805 g				0.5 mL		3640A	05-03-05	8270C/notes/LAM	
F5D210380-001D	G8WXJ1AJ	30.421 g				0.5 mL					
F5D210380-001S	G8WXJ1AH	30.06 g				0.5 mL					
F5D210380-002	G8WXV1AD	30.108 g				0.5 mL					
F5D210380-003	G8WXX1AD	30.5 g				0.5 mL					
F5D220273-002	G81GA1AC	30.613 g				0.5 mL					
F5D290000-285B	G9HAL1AA	30 g				0.5 mL					
F5D290000-285C	G9HAL1AC	30 g				0.5 mL					

Spike Information

Name	Standard ID	Exp Date	Vol Added
BNA SPIKE	OP0242-05	10/22/2005	2000 uL
BNA SURR	OP0241-05	10/22/2005	1000 uL

Spiking verified by: JW

Miscellaneous Information

Start: Stop:

Extr 1:

Extr 2:

Conc Method: steam bath Tray #1 3/8

Conc Temp C: 89.9

Chemical Lot Information

Chemical	Lot Number
Acetone	B08E10
Methylene Chloride	B08E10
Methylene Chloride	B12E02
Sodium Sulfate	A51621

Comments: For samples processed through GPC, final concentration is equivalent to 1ml due to 1/2 sample extract being lost during cleanup. JW 05-05-05

Custody Information

Relinquished By: SL **Review/Received By:** MAH **Date of Transfer:** 5/4/05

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.15, updated 10/20/2004

LOT# F5D210380

STL ST. LOUIS

SEVERN TRENT STL

Organic Prep Report for Batch #5131374

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

CleanupMethod: GPC **Method No:** SW846 3640A

SOP Number: STL-OP-0002, Rev 4

Matrix: SOLID

Prep Method: SW846 3550B

Prep Description: SONICATION - Low Level

Extraction Date: 5/11/2005

		Initials: jw				Initials: jk/bh		Initials: JK/BH		Initials:	
						Concentration 1		Cleanup 1		Cleanup 2	
Lot Number	WorkOrder No	Wt/Vol	pH 1	pH 2	Extr Unit	Volume	Date	Method	Date	Method	Date
F5D210380-001	G8WXJ2AD	30.134 g				1 mL	5/12/2005	GPC	5/11/2005	8270	
F5D210380-001D	G8WXJ1AL	30.085 g				1 mL	5/12/2005				
F5D210380-001S	G8WXJ1AK	30.648 g				1 mL	5/12/2005				
F5D210380-002	G8WXV2AD	30.21 g				1 mL	5/12/2005				
F5D210380-003	G8WXX2AD	30.2 g				1 mL	5/12/2005				
F5D220273-002	G81GA2AC	30.118 g				1 mL	5/12/2005				
F5E110000-374B	HAAT21AA	30 g				1 mL	5/12/2005				
F5E110000-374C	HAAT21AC	30 g				1 mL	5/12/2005				

Spike Information

Name	Standard ID	Exp Date	Vol Added
BNA Full Mix Spike	gc0200-05	11/10/2005	2000 uL
BNA Surr.	op0241-05	10/22/2005	1000 uL

Spiking verified by: JW

Miscellaneous Information

Start: Stop:

Extr 1:

Extr 2:

Conc Method: steam bath

Conc Temp C: 89.9

Chemical Lot Information

Chemical	Lot Number
Methylene Chloride	b14e37
Sodium Hydroxide	5032-08
Sodium Sulfate	a51621
Sulfuric Acid	5557a50h02

Comments: Samples should be processed as 2ml final concentration. #4 US
JMM 05-12-05

Custody Information

Relinquished By: [signature] **Review/Received By:** [signature] **Date of Transfer:** 5/12/05

QC Suffix: B=reagent blank, C=lab control sample, L=lab control sample duplicate, X=sample duplicate, S=matrix spike, D=matrix spike duplicate

PrepSheet Generator 1.15, updated 10/20/2004

Logbook No.: 2660 STL St. Louis Laboratory Instrument ID No.: MSK

GCMS-Semivolatile Runlog

#	Data File	Clock	Lab I.D.	Dil.	STD#	Date	Oper	Matrix
1	KDFT 2578	11:20	DFTPP		SV193-05	04-28-05	XIA	
2	KCAL 2579	K0428A	SSTD050 APPIXA		SV185-05			
3	2580		SSTD200		SV117-05			
4	2581		SSTD160		SV188-05			
5	2582		SSTD120		SV187-05			
6	2583		SSTD080		SV186-05			
7	2584		SSTD020		SV184-05			
8	2585		SSTD010		SV183-05			
9	2586		SSTD002		SV182-05			
10	2587		SSTD050 CCP		SV029-05			
11	2588		SSTD160		SV0032-05			
12	2589		SSTD120		SV0031-05			
13	2590		SSTD080		SV0030-05			
14	2591		SSTD020		SV0028-05			
15	2592		SSTD010		SV0027-05			
16	2593		SSTD002		SV0026-05			
17	KDFT 2594	20:12	DFTPP		SV0193-05			
18	KCAL 2595	K0428C	SSTD050		SV219-05			
19	2596		SSTD160		SV218-05			
20	2597		SSTD120		SV217-05			
21	2598		SSTD080		SV216-05			
22	2599		SSTD020		SV214-05			
23	2600		SSTD010		SV213-05			
24	2601		SSTD002		SV212-05			
25	2602		SSTD050 APPIX ICV	2X	OP052-05			
26	2603		SSTD050 CCP APPIX		SV185-05			
27	2604		SSTD050 CCP		SV029-05			
28	KBLK 2605		G7TXR1AA	1X				leach
29	KLCS 2606		G7TXR1AC					
30	KBLK 2607		G7MBU1AD					water
31	KSMP 2608		G7FCW1AC					
32	2609		G7FCW1AK					
33	2610		G7FCW1A1					
34	2611		G7FDD1AL					
35	2612		G7FD91AC					

Review documented on next page.

Form: SL-ORG-0006, Rev. 5/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Contol Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

5

Logbook No.: 2660 STL St. Louis Laboratory Instrument ID No.: MSK

GCMS-Semivolatile Runlog

Batch No.	Comments		#
		ok	1
		ok	2
		ok	3
		ok	4
		ok	5
		ok	6
		ok	7
		ok	8
		ok	9
		ok	10
		ok	11
		ok	12
		ok	13
		ok	14
		ok	15
		ok	16
		ok	17
		ok	18
		ok	19
		ok	20
		ok	21
		ok	22
		ok	23
		ok	24
		ok	25
		ok	26
	IS ↑ not needed.	04/29/05 ok	27
5096495	F5D06wwo-495B	ok	28
	495C	ok	29
5095187	F5D05wwo-187B	ok	30
	F5C310312-002	ok	31
	002S NCm06-52573	ok	32
	002D	ok	33
	003 2 acid surr ... NCm06-52574	ok	34
	001	ok	35

Reviewed By: [signature] 04-29-05

Form: SL-ORG-0006, Rev. 5/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Contol Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

6

Logbook No.: 2660 — STL St. Louis Laboratory — Instrument ID No.: MSK

GCMS-Semivolatile Runlog

#	Data File	Clock	Lab I.D.	Dil.	STD#	Date	Oper	Matrix
1	KCAL 2961	K0507A	SSTD 050	—	SV220-05	05-07-25	K/A	
2	2962		SSTD 050 ICV	2X	SV205-05			
3	2963		SSTD 050 APPIX B		SV198-05			
4	2964		SSTD 160		SV181-05			
5	2965		SSTD 120		SV190-05			
6	2966		SSTD 080		SV149-05			
7	2967		SSTD 020		SV167-05			
8	2968		SSTD 010		SV146-05			
9	2969	✓	SSTD 005		SV145-05			
10	KDFT 2970	11:52	DFTPP		SV222-05			
11	KCAL 2971	K0507C	SSTD 050		SV223-05			
12	2972		SSTD 050 APPIX		SV196-05			
13	✓ 2973		SSTD 050 CCP		SV20032-05			
14	KBLK 2974		GBLK1AA	1X				water
15	KLCS 2975		GBLK1KIAC					✓
16	KCSLP 2976		G783X1CD					soil
17	2977		GB1W1AF					
18	2978		GB1I1AF					
19	2979		GB13R1AF ~5/9/05					
20	2980		GB13S1AF ~5/09/05					
21	2981		GB13N1AF					
22	2982		GB13P1AF					
23	2983		GB13A1AF					✓
24	2984		GBHBS1A3					water
25	2985		GBRTD1H7					
26	2986		GRTA81A9					
27	2987		GRTCC1A7					
28	2988		GBTCG1AL					✓
29	2989		GBJDL1A9	✓				soil
30	2990		GRJD21AL	10X				
31	✓ 2991	(12:45)	GBJZZ1AL	1X		✓	✓	✓
32	(SCP) 2992	—	SSTD 160 SCP	—		05-07-25	K/A	
33	KDFT 2993	(11:40)	DFTPP		SV222-05			
34	KCAL 2994	K0508A	SSTD 050		SV220-05			
35	✓ 2995	✓	SSTD 160		SVPB-05	✓	✓	

Review documented on next page.

Form: SL-ORG-0005, Rev. 5/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Contol Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

Logbook No.: 2660 — STL St. Louis Laboratory — Instrument ID No.: MSK

GCMS-Semivolatile Runlog

Batch No.	Comments	#
		OK 1
		OK 2
		OK 3
		OK 4
		OK 5
		OK 6
		OK 7
		OK 8
		OK 9
		OK 10
		OK 11
		OK 12
	3 IS ↑. rust need. not	OK 13
	F5D220000-0445 report 2933	OK 14
	F5D220000-0776	OK 15
	F5D130145-0041D IS #153 #166 ↓ see K2914→report	OK 16
	F5D220333-002 IS #153 #166 ↓ report K2957	OK 17
	003 IS #166 ↓ 2918	OK 18
	005	OK 19
	006 IS #153 #166 ↓ report K2980	OK 20
	007 IS #153 #166 ↓ 2941	OK 21
	008 IS #153 #166 ↓ 2942	OK 22
	004 IS #153 ↓ ✓ 2943	OK 23
	F5D160137-001 see K2947	OK 24
	F5D220221-005	OK 25
	006	OK 26
	007	OK 27
	008	OK 28
	F5D160154-001	OK 29
	002 VCM=0.53+L	OK 30
	005	OK 31
	Corrolit running wedge	32
		OK 33
		OK 34
		OK 35

Reviewed By: Nina Vlasak 5/9/05

Form: SL-ORG-0005, Rev. 5/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Contol Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

Logbook No.: 2660 | STL St. Louis Laboratory | Instrument ID No.: MSK

GCMS-Semivolatile Runlog

#	Data File	Clock	Lab I.D.	Dil.	STD#	Date	Oper	Matrix
1	KCAL 2996	K0504A	SST0120		SU217-05	05-09-05	KM	
2	2997		SST0080		SU216-05			
3	2998		SST0020		SU214-05			
4	2999		SST0010		SU212-05			
5	3000		SST0002		SU211-05			
6	3001		SST0050 IW	2x	G0052-05			
7	3002	(10:49)	DFTPP		SU032-05			
8	3003	K0506C	SST0050		SU220-05			
9	3004		SST0050 APPIX A		SU190-05			
10	3005		SST0050 LLP		SU033-05			
11	3006		SST0050 APPIX B		SU148-05			
12	KBIK 3007		G9HAL1AA	1x				soil
13	KLCS 3008		G9HAL1AC					
14	KBIK 3009		G9DL01AA					water
15	KLCS 3010		G9DL01AC					
16	KBIK 3011		G9MA61AD					
17	KSMP 3012		G8784?4C					
18	3013		G8788IAC					
19	3014		G8V3P1AA					
20	3015		G8V4L1AA					
21	3016		G8V0L1AA					
22	3017	~5/10/05	G8V0L1AL					
23	3018		G8V0L1AM					
24	3019	~5/10/05	G8V091AC					
25	3020	~5/10/05	G8175IAA					
26	3021	~5/10/05	G8QE31A9					soil
27	3022	~5/10/05	G8QE31CW					
28	3023	~5/10/05	G8QE31CX					
29	3024		G8WXV1AD					
30	3025	(04:10)	G8WXX1AD					
31	3026		SST0160 Sluf					
32	KOFT 3027	(5:07)	DFTPP		SU232-05			
33	KCAL 3028		SST0050		SU220-05			
34	3029		SST0050 APPIX		SU013-05			
35	3030		SST0160 Sluf	—	—	05-10-05	KM	

Review documented on next page.

Form: SL-ORG-0008, Rev. 5/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate
SOP Reference: STL-MS-0001, current revision

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Logbook No.: 2660 | STL St. Louis Laboratory | Instrument ID No.: MSK

GCMS-Semivolatile Runlog

Batch No.	Comments	#
	ok	1
	ok	2
	ok	3
	ok	4
	ok	5
	ok	6
	ok	7
	ok	8
	ok	9
	~~[illegible]~~ ~5/10/05 ok	10
	ok	11
5119285	F5D290000-~~[illegible]~~ 38B ~NCM06-53749 5/10/05	ok	12
5119285	-385C (9h) <10% NCM06-53744 see extd re-inj	13
5117669	F5D270000-669B ok	14
	669C NCM06-53745 ok	15
5119211	F5D290000-211B ok	16
	F5D260337-001 ok	17
	002 ok	18
5117669	F5D210281-001 ok	19
	002 2-Flu <10% NCM06-53746 Re-ex	20
	F5D220218-001 ok	21
	001S NCM06-53747 ok	22
	001D ok	23
	002 ok	24
	F5D270349-001 IS #1,6&1, 2 acid surr <10% NCM06-53748 insuf ok	25
5119285	F5D200213-001 ok	26
	001S ok	27
	001D ok	28
	F5D210380-002 ok	29
	003 00G Re-inj	30
		31
	DDT break down = 19.8% failed	32
		33
	Instrument stopped	34
	conditioning	35

Reviewed By: [signature] 5/10/05

Form: SL-ORG-0008, Rev. 5/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate
SOP Reference: STL-MS-0001, current revision

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Logbook No.: 2660 — STL St. Louis Laboratory — Instrument ID No.: MSK

GCMS-Semivolatile Runlog

#	Data File	Clock	Lab I.D.	Dil.	STD#	Date	Oper	Matrix
1	KBT5sim3031	(11:59)	DFTPP	—	SV232-05	05/10-05	K/A	—
2	KCAL 3032	—	SSTV050 8:70+ APP1&3	/	—			
3	KCAL 3033	KAC10A	SSTV05D	—	SV220-05			/
4	KBLK 3034		GBRJK1HA	1X	—			Water
5	KLCS 3035		GBRJK1HC	|	|		|
6	| 3036		GBRJK1AD	|	|		|
7	KBLK 3037		G947D1AA	|	|		|
8	KLCS 3038		G947J1AC	|	|		|
9	| 3039		G947D1AD	|	|		✓
10	✓ 3040		G9MAL1AC	|	|		Soil
11	KSIMP 3041		G8C94 1AA	|	|		water
12	| 3042		G8WXJ1AD	|	|		soil
13	| 3043		GBWXJ1AH	|	|		|
14	| 3044		G8WXJ1AT	|	|		|
15	| 3045		G8WXX1AD	|	|		|
16	| 3046		GB1GA1AC	|	|		✓
17	| 3047		GB137JAC	|	|		Water
18	| 3048		GB17K1AA	|	|		|
19	| 3049		G9WAA1AM	|	|		|
20	| 3050		G9WJAP1AM	|	|		|
21	| 3051		GGWAW1BM	|	|		|
22	| 3052	✓	G9WJA51AM	|	|		|
23	| 3053	(15:38)	G9WJCA1AM	|	|		|
24	✓ 3054	(20:10)	G9WCF1AM	✓	—			✓
25	KSIMP 3055	—	SSTD160 SIMS	/	—			/
26	KDFT 3056	(11:06)	DFTPP	|	SV232-05			|
27	KCAL 3057	KAC10A	SSTV05D	—	SV220-05			—
28	KBLK 3058		G947P1AA	1X	—			Water
29	KSIMP 3059		G9V96 1AAM	|	|		|
30	| 3060		G9WJGG1AM	|	|		|
31	| 3061		G9WJCR1AM	|	|		|
32	| 3062		G9WJCV1AM	✓	|			|
33	| 3063		G9WJJ91AC	10X	|			|
34	| 3064		G9WJCT1AM	1X	|			|
35	✓ 3065	✓	GGWJAL1AM	1X	—	✓	✓	✓

Review documented on next page.

Form: SL-ORG-0006, Rev. 5/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

Logbook No.: 2660 — STL St. Louis Laboratory — Instrument ID No.: MSK

GCMS-Semivolatile Runlog

Batch No.	Comments	#
/		
	Test not used.	OK 2
		OK 3
5114077	F5D1220000-4773	OK 4
|	4773	OK 5
✓	4774	OK 6
5129285	F5E090000-2551 No Surr spiked NCM06-53278	OK 7
|	255C	OK 8
✓	2556	OK 9
5119285	F5D1290000-2856	OK 10
5110477	F5D1140184-001	OK 11
5119285	F5D1210384-001 TS#103.166↓ NCM06-53285	OK 12
|	1015 NCM06-53283, 284	OK 13
|	1016 TS#153.166↓ ↓ ↓285	OK 14
|	1023	OK 15
|	F5D1220273-001 TS#153.166↓	Re-inj 16
5129285	F5D1220333-010RE NCM06-53291	OK 17
5117669	F5D1230349-001 2nd of Surr 100% NCM06-53278	OK 18
5129285	F5E050138-003	OK 19
|	1024	OK 20
|	1025	OK 21
|	1026	OK 22
|	1027	OK 23
✓	1028 1026	Re-inj 24
—	Cumulative	25
	Tune DFTPP is ok DDT break down 10%	26
5129285	F5E0501[illegible]-2553 No Surr see K3037	27
	F5E050138-010	28
|	1029 IRC 01C	29
|	1030	30
|	1031	31
✓	1032	32
	F5E050113-001 Tune diluted.	33
	F5E050138-009	34
✓	1022	35

Reviewed By: [signature] 05-11-05 Form: SL-ORG-0006, Rev. 5/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

Logbook No.: 2660 | STL St. Louis Laboratory | Instrument ID No.: MSK

GCMS-Semivolatile Runlog

#	Data File	Clock	Lab I.D.	Dil.	STD#	Date	Oper	Matrix
1	KSmp3091	——	SS7D160 5ing	—	——	05-12-05	K IA	—
2	KIDFT3092	11:48	IDF701³		SV237-05			
3	KCAL3093	KDSCIA	SS7D050		SV221-05			
4	3094		SS7D050		SV221-05			
5	3095		SS7D050 Appix A		SV190-05			
6	KBLK3096		G99R31AA	IX				leach
7	KLCS 3097		G99R31AC					
8	3098		G99R31AD					
9	KSmp 3099		G9P3M1AA					
10	KBlk 3100		G97V11AA					Soil
11	KLCS 3101		G97V11AC					
12	KBlk 3102		G97V11AA					
13	KLCS 3103		G97V11AC					
14	KBlk 3104		HAAT21AA					
15	KLCS 3105		HAAT21AC					
16	KSmp3106		G9HF71CA					
17	3107		G9KRP1AD					
18	3108		G9K0D1AZ					
19	3109		G9K0D1AF					
20	3110		G92G71CA					
21	3111		G92XN1AN					
22	3112		G8WX71AD					
23	3113		G8WX71AK					
24	3114		G8WX71AL					
25	3115	23:50	G8WXV2AD					
26	3116	00:22	G8WXX2AD					
27	3117	00:54	G81GA2AC					
28	KBlk 3118		HACKJ1AA					water
29	KLCS 3119		HACKJ1AC					
30	KSmp3120		G9WM11AH					
31	3121		G9WM11AH					
32	3122	(3:34)	G9WM11AJ					
33	KSmp3123		SS7D160 5ing			05-13-05	K IA	
34	3124							
35	KIDFT3125	(10:49)	IDF7DP		SV237-05			

Review documented on next page.

Form: SL-ORG-0006, Rev. 5/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Contol Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

Logbook No.: 2660 | STL St. Louis Laboratory | Instrument ID No.: MSK

GCMS-Semivolatile Runlog

Batch No.	Comments	#
	Conditioning only	1
		2
	IDP 72080	3
		4
		5
5130608	FSF1[illegible]-6081³	6
	6081C	7
	6081 [illegible]	8
	FSF030734-004² TS#153.166.121 ↓ see K3187	9
5130884	FSF1[illegible]-3841³ TS out	10
	3841C ↓	11
	3841³	12
	2841C	13
5131374	FSF1[illegible]-3741³ GPC clean	14
	3741C ↓	15
3130884	FSD290749-001 TS#153.166 ↓ see K3156. CF	16
	FSD300140-001 TS#166 ↓	17
	0015 TS#166 ↓	18
	0010	19
	FSF060282-001 TS#166 ↓ see K3157. CF OK re-inj	20
	FSF060337-001	21
5131374	FSD210380-0010RZ TS#153.166 ↓ GPC clean	22
	0015 TS#166 ↓	23
	0010 TS#153.166 ↓	24
	002RZ IRE OK OOC	25
	003RZ TS#166 ↓ SMCC OK	26
	FSD220273-002 IRE OK	27
5131473	FSF1[illegible]-4731³ 625	28
	4731C	29
	FSZ010169-001	30
	0015	31
	0010	32
	Conditioning only	33
		34
		35

Reviewed By: [signature] 05-13-05

Form: SL-ORG-0006, Rev. 5/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Contol Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

STL ST. LOUIS

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LOT# F5D210380

STL ST. LOUIS

Logbook No.: 2660 | STL St. Louis Laboratory | Instrument ID No.: MSK

GCMS-Semivolatile Runlog

#	Data File	Clock	Lab I.D.	Dil.	STD#	Date	Oper	Matrix
1	K0A13126	K0513A	SSTD050		SV220-05	05-13-05	X/A	
2	3127		SSTD050 Appix		SV190-05			
3	3128		SSTD050		SV220-05			
4	3129		SSTD160		SV218-05			
5	3130		SSTD120		SV217-05			
6	3131		SSTD080		SV216-05			
7	3132		SSTD020		SV215-05	5/17/05		
8	3133		SSTD010		SV214-05	5/17/05		
9	3134		SSTD002		SV213-05	5/17/05		
10	3135		SSTD050 ICV		opb82-05			
11	KDFT 3136	18:36	DFTPP		SV232-05	05-14-05	X/A	
12	K0AL 3137	K0514A	SSTD010		SV215-05			
13	3138		SSTD050 ICV		opb82-05			
14	3139/A		SSTD050 ICV		↓			
15	3140		SSTD050		SV220-05			
16	3141		SSTD050 ICV		opb82-05			
17	3141		SSTD120 Appix		SV190-05			
18	3142		SSTD050 Appix B		SV148-05			
19	KBIK 3143		HACKN1AA	1X				
20	KLCS 3144		HACKN1AC					
21	KBIK 3145		HADW81AA					
22	KLCS 3146		HADW81AC					
23	KSLP 3147		G8WXV2AD					
24	3148		G8WXX2AD					
25	3149		G8JGA2AC					
26	3150		G8J8E2JA9					
27	3151		G92G42CA					
28	3152		G9HVV1AA					
29	3153		G99P11CA					
30	3154		G99P11D7					
31	3155		G99P11D8					
32	3156		G9HF71CA					
33	3157	✓	G92GT1CA					
34	3158	20233	G9V4L2AA					
35	3159	—	SLGSSTD160	✓	—	✓	✓	

Review documented on next page.

Form: SL-ORG-0006, Rev. 5/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Contol Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

Logbook No.: 2660 | STL St. Louis Laboratory | Instrument ID No.: MSK

GCMS-Semivolatile Runlog

Batch No.	Comments	#
	PCP >200%. failed.	1
	not used.	2
		3
		4
		5
		6
		7
		8
		9
	PCP >200% not used.	10
		11
		12
	PCP <200% 375 ↑ not used RR	13
	PCP >200% ↓	14
		15
		16
		17
		18
5131476	FSZ110000-476B	19
✓	↓ 476C NCM06-53498	20
5132384	FSZ120000-284B	21
↓	↓ 284C	22
5131374	FSD210380-002RZ GPC clean	23
↓	↓ 002RZ ↓	24
✓	FSD220273-002RZ	25
5132384	FSD220213-001RE	26
	FSZ060282-002	27
	FSZ090104-001	28
	FSZ110160-001 75 #166 ↓	29
	↓ 0015 75 #153, 166 ↓	30
✓	↓ 0011 75 #166 ↓	31
5130384	FSD290249-001 75 #153, 166 ↓ see K3:06 reported	32
✓	FSZ060282-001 " see K3:10 ↓	33
5131476	FSD210281-002RE	34
—	↓ ~ 05/16/05	35

Reviewed By: [redacted] 05-16-05

Form: SL-ORG-0006, Rev. 5/8/03

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Contol Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate.
SOP Reference: STL-MS-0001, current revision

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GC/MS SAMPLE AND QC DATA SUMMARY-FORM 1

VOLATILES

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 4.95 / g Date Received: 04/21/05
Work Order: G8WXJ1AC Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 04/27/05
Moisture %:20

QC Batch: 5117629

Client Sample Id: RE73-05-58829

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	13	U
74-87-3	Chloromethane	13	U
74-83-9	**Bromomethane**	**3.5**	**J B**
75-00-3	Chloroethane	13	U
75-69-4	Trichlorofluoromethane	13	U
76-13-1	Trichlorotrifluoroethane	6.3	U
67-64-1	Acetone	25	U
75-35-4	1,1-Dichloroethene	6.3	U
74-88-4	Iodomethane	6.3	U
75-09-2	**Methylene chloride**	**11**	**B**
75-15-0	Carbon disulfide	6.3	U
75-34-3	1,1-Dichloroethane	6.3	U
78-93-3	2-Butanone (MEK)	25	U
594-20-7	2,2-Dichloropropane	6.3	U
540-59-0	1,2-Dichloroethene (total)	6.3	U
67-66-3	Chloroform	6.3	U
74-97-5	Bromochloromethane	6.3	U
71-55-6	1,1,1-Trichloroethane	6.3	U
563-58-6	1,1-Dichloropropene	6.3	U
56-23-5	Carbon tetrachloride	6.3	U
107-06-2	1,2-Dichloroethane	6.3	U
71-43-2	Benzene	6.3	U
79-01-6	**Trichloroethene**	**0.71**	**J**
78-87-5	1,2-Dichloropropane	6.3	U
75-27-4	Bromodichloromethane	6.3	U
74-95-3	Dibromomethane	6.3	U
108-10-1	4-Methyl-2-pentanone	25	U
10061-01-5	cis-1,3-Dichloropropene	6.3	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 4.95 / g Date Received: 04/21/05
Work Order: G8WXJ1AC Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 04/27/05
Moisture %:20

QC Batch: 5117629

Client Sample Id: RE73-05-58829

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-88-3	Toluene	6.3	U
10061-02-6	trans-1,3-Dichloropropene	6.3	U
79-00-5	1,1,2-Trichloroethane	6.3	U
591-78-6	2-Hexanone	25	U
142-28-9	1,3-Dichloropropane	6.3	U
127-18-4	Tetrachloroethene	6.3	U
124-48-1	Chlorodibromomethane	6.3	U
106-93-4	1,2-Dibromoethane	6.3	U
108-90-7	Chlorobenzene	6.3	U
630-20-6	1,1,1,2-Tetrachloroethane	6.3	U
100-41-4	Ethylbenzene	6.3	U
75-01-4	Vinyl chloride	6.3	U
1330-20-7	Xylenes (total)	6.3	U
100-42-5	Styrene	6.3	U
75-25-2	Bromoform	6.3	U
98-82-8	Isopropylbenzene	6.3	U
79-34-5	1,1,2,2-Tetrachloroethane	6.3	U
96-18-4	1,2,3-Trichloropropane	6.3	U
103-65-1	n-Propylbenzene	6.3	U
108-86-1	Bromobenzene	6.3	U
95-49-8	2-Chlorotoluene	6.3	U
108-67-8	1,3,5-Trimethylbenzene	6.3	U
106-43-4	4-Chlorotoluene	6.3	U
98-06-6	tert-Butylbenzene	6.3	U
95-63-6	**1,2,4-Trimethylbenzene**	**0.79**	**J**
135-98-8	sec-Butylbenzene	6.3	U
99-87-6	**p-Isopropyltoluene**	**17**	
541-73-1	1,3-Dichlorobenzene	6.3	U

FORM I

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 4.95 / g Date Received: 04/21/05
Work Order: G8WXJ1AC Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 04/27/05
Moisture %:20

QC Batch: 5117629

Client Sample Id: RE73-05-58829

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
106-46-7	1,4-Dichlorobenzene	6.3	U
104-51-8	n-Butylbenzene	6.3	U
95-50-1	1,2-Dichlorobenzene	6.3	U
96-12-8	1,2-Dibromo-3-chloropropane	13	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Toluene-d8	160	(60 - 148)
Dibromofluoromethane	115	(61 - 140)
1,2-Dichloroethane-d4	111	(56 - 149)
4-Bromofluorobenzene	133	(56 - 150)

FORM I

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 002
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 4.97 / g Date Received: 04/21/05
Work Order: G8WXV1AC Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 04/27/05
Moisture %:19

QC Batch: 5117629

Client Sample Id: RE73-05-58835

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	12	U
74-87-3	Chloromethane	12	U
74-83-9	**Bromomethane**	**4.7**	**J B**
75-00-3	Chloroethane	12	U
75-69-4	Trichlorofluoromethane	12	U
76-13-1	Trichlorotrifluoroethane	6.2	U
67-64-1	Acetone	25	U
75-35-4	1,1-Dichloroethene	6.2	U
74-88-4	Iodomethane	6.2	U
75-09-2	**Methylene chloride**	**12**	**B**
75-15-0	Carbon disulfide	6.2	U
75-34-3	1,1-Dichloroethane	6.2	U
78-93-3	2-Butanone (MEK)	25	U
594-20-7	2,2-Dichloropropane	6.2	U
540-59-0	1,2-Dichloroethene (total)	6.2	U
67-66-3	Chloroform	6.2	U
74-97-5	Bromochloromethane	6.2	U
71-55-6	1,1,1-Trichloroethane	6.2	U
563-58-6	1,1-Dichloropropene	6.2	U
56-23-5	Carbon tetrachloride	6.2	U
107-06-2	1,2-Dichloroethane	6.2	U
71-43-2	Benzene	6.2	U
79-01-6	Trichloroethene	6.2	U
78-87-5	1,2-Dichloropropane	6.2	U
75-27-4	Bromodichloromethane	6.2	U
74-95-3	Dibromomethane	6.2	U
108-10-1	4-Methyl-2-pentanone	25	U
10061-01-5	cis-1,3-Dichloropropene	6.2	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 002
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 4.97 / g Date Received: 04/21/05
Work Order: G8WXV1AC Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 04/27/05
Moisture %:19

QC Batch: 5117629

Client Sample Id: RE73-05-58835

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-88-3	**Toluene**	**0.99**	**J**
10061-02-6	trans-1,3-Dichloropropene	6.2	U
79-00-5	1,1,2-Trichloroethane	6.2	U
591-78-6	2-Hexanone	25	U
142-28-9	1,3-Dichloropropane	6.2	U
127-18-4	Tetrachloroethene	6.2	U
124-48-1	Chlorodibromomethane	6.2	U
106-93-4	1,2-Dibromoethane	6.2	U
108-90-7	Chlorobenzene	6.2	U
630-20-6	1,1,1,2-Tetrachloroethane	6.2	U
100-41-4	Ethylbenzene	6.2	U
75-01-4	Vinyl chloride	6.2	U
1330-20-7	Xylenes (total)	6.2	U
100-42-5	Styrene	6.2	U
75-25-2	Bromoform	6.2	U
98-82-8	Isopropylbenzene	6.2	U
79-34-5	1,1,2,2-Tetrachloroethane	6.2	U
96-18-4	1,2,3-Trichloropropane	6.2	U
103-65-1	n-Propylbenzene	6.2	U
108-86-1	Bromobenzene	6.2	U
95-49-8	2-Chlorotoluene	6.2	U
108-67-8	1,3,5-Trimethylbenzene	6.2	U
106-43-4	4-Chlorotoluene	6.2	U
98-06-6	tert-Butylbenzene	6.2	U
95-63-6	1,2,4-Trimethylbenzene	6.2	U
135-98-8	sec-Butylbenzene	6.2	U
99-87-6	p-Isopropyltoluene	6.2	U
541-73-1	**1,3-Dichlorobenzene**	**2.1**	**J**

FORM I

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 002
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 4.97 / g Date Received: 04/21/05
Work Order: G8WXV1AC Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 04/27/05
Moisture %:19

QC Batch: 5117629

Client Sample Id: RE73-05-58835

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
106-46-7	1,4-Dichlorobenzene	6.2	U
104-51-8	n-Butylbenzene	6.2	U
95-50-1	**1,2-Dichlorobenzene**	**2.6**	**J**
96-12-8	1,2-Dibromo-3-chloropropane	12	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Toluene-d8	174	(60 - 148)
Dibromofluoromethane	137	(61 - 140)
1,2-Dichloroethane-d4	122	(56 - 149)
4-Bromofluorobenzene	182	(56 - 150)

FORM I

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 003
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 4.96 / g Date Received: 04/21/05
Work Order: G8WXX1AC Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 04/27/05
Moisture %:20

QC Batch: 5117629

Client Sample Id: RE73-05-58841

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	13	U
74-87-3	Chloromethane	13	U
74-83-9	**Bromomethane**	**2.4**	**J B**
75-00-3	Chloroethane	13	U
75-69-4	Trichlorofluoromethane	13	U
76-13-1	Trichlorotrifluoroethane	6.3	U
67-64-1	Acetone	25	U
75-35-4	1,1-Dichloroethene	6.3	U
74-88-4	Iodomethane	6.3	U
75-09-2	**Methylene chloride**	**6.6**	**B**
75-15-0	Carbon disulfide	6.3	U
75-34-3	1,1-Dichloroethane	6.3	U
78-93-3	2-Butanone (MEK)	25	U
594-20-7	2,2-Dichloropropane	6.3	U
540-59-0	1,2-Dichloroethene (total)	6.3	U
67-66-3	Chloroform	6.3	U
74-97-5	Bromochloromethane	6.3	U
71-55-6	1,1,1-Trichloroethane	6.3	U
563-58-6	1,1-Dichloropropene	6.3	U
56-23-5	Carbon tetrachloride	6.3	U
107-06-2	1,2-Dichloroethane	6.3	U
71-43-2	Benzene	6.3	U
79-01-6	Trichloroethene	6.3	U
78-87-5	1,2-Dichloropropane	6.3	U
75-27-4	Bromodichloromethane	6.3	U
74-95-3	Dibromomethane	6.3	U
108-10-1	4-Methyl-2-pentanone	25	U
10061-01-5	cis-1,3-Dichloropropene	6.3	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 003
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 4.96 / g Date Received: 04/21/05
Work Order: G8WXX1AC Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 04/27/05
Moisture %:20

QC Batch: 5117629

Client Sample Id: RE73-05-58841

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-88-3	Toluene	6.3	U
10061-02-6	trans-1,3-Dichloropropene	6.3	U
79-00-5	1,1,2-Trichloroethane	6.3	U
591-78-6	2-Hexanone	25	U
142-28-9	1,3-Dichloropropane	6.3	U
127-18-4	Tetrachloroethene	6.3	U
124-48-1	Chlorodibromomethane	6.3	U
106-93-4	1,2-Dibromoethane	6.3	U
108-90-7	Chlorobenzene	6.3	U
630-20-6	1,1,1,2-Tetrachloroethane	6.3	U
100-41-4	Ethylbenzene	6.3	U
75-01-4	Vinyl chloride	6.3	U
1330-20-7	Xylenes (total)	6.3	U
100-42-5	Styrene	6.3	U
75-25-2	Bromoform	6.3	U
98-82-8	Isopropylbenzene	6.3	U
79-34-5	1,1,2,2-Tetrachloroethane	6.3	U
96-18-4	1,2,3-Trichloropropane	6.3	U
103-65-1	n-Propylbenzene	6.3	U
108-86-1	Bromobenzene	6.3	U
95-49-8	2-Chlorotoluene	6.3	U
108-67-8	1,3,5-Trimethylbenzene	6.3	U
106-43-4	4-Chlorotoluene	6.3	U
98-06-6	tert-Butylbenzene	6.3	U
95-63-6	1,2,4-Trimethylbenzene	6.3	U
135-98-8	sec-Butylbenzene	6.3	U
99-87-6	**p-Isopropyltoluene**	**1.3**	**J**
541-73-1	1,3-Dichlorobenzene	6.3	U

LOS ALAMOS NATIONAL LABORATORY

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 003
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 4.96 / g Date Received: 04/21/05
Work Order: G8WXX1AC Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 04/27/05
Moisture %:20

QC Batch: 5117629

Client Sample Id: RE73-05-58841

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
106-46-7	1,4-Dichlorobenzene	6.3	U
104-51-8	n-Butylbenzene	6.3	U
95-50-1	1,2-Dichlorobenzene	6.3	U
96-12-8	1,2-Dibromo-3-chloropropane	13	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Toluene-d8	126	(60 - 148)
Dibromofluoromethane	110	(61 - 140)
1,2-Dichloroethane-d4	112	(56 - 149)
4-Bromofluorobenzene	85	(56 - 150)

FORM I

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D270000 629
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / g
Work Order: G9CJP1AA
Dilution factor: 1
Moisture %:NA

Date Received: 04/21/05
Date Extracted:04/27/05
Date Analyzed: 04/27/05

QC Batch: 5117629

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	1.8	J
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
76-13-1	Trichlorotrifluoroethane	5.0	U
67-64-1	Acetone	20	U
75-35-4	1,1-Dichloroethene	5.0	U
74-88-4	Iodomethane	5.0	U
75-09-2	Methylene chloride	5.2	
75-15-0	Carbon disulfide	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
78-93-3	2-Butanone (MEK)	20	U
594-20-7	2,2-Dichloropropane	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
67-66-3	Chloroform	5.0	U
74-97-5	Bromochloromethane	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
74-95-3	Dibromomethane	5.0	U
108-10-1	4-Methyl-2-pentanone	20	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D270000 629
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / g
Work Order: G9CJP1AA
Dilution factor: 1
Moisture %:NA

Date Received: 04/21/05
Date Extracted:04/27/05
Date Analyzed: 04/27/05

QC Batch: 5117629

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
591-78-6	2-Hexanone	20	U
142-28-9	1,3-Dichloropropane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
124-48-1	Chlorodibromomethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Xylenes (total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
108-86-1	Bromobenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	p-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U

LOS ALAMOS NATIONAL LABORATORY
METHOD BLANK COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D270000 629
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / g
Work Order: G9CJP1AA
Dilution factor: 1
Moisture %:NA

Date Received: 04/21/05
Date Extracted:04/27/05
Date Analyzed: 04/27/05

QC Batch: 5117629

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	10	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Toluene-d8	99	(60 - 148)
Dibromofluoromethane	102	(61 - 140)
1,2-Dichloroethane-d4	97	(56 - 149)
4-Bromofluorobenzene	108	(56 - 150)

FORM I

LOS ALAMOS NATIONAL LABORATORY
CHECK SAMPLE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D270000 629
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / g
Work Order: G9CJP1AC
Dilution factor: 1
Moisture %:NA

Date Received: 04/21/05
Date Extracted:04/27/05
Date Analyzed: 04/27/05

QC Batch: 5117629

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	46.6	
74-87-3	Chloromethane	49.6	
74-83-9	Bromomethane	33.5	
75-00-3	Chloroethane	53.2	
75-69-4	Trichlorofluoromethane	51.6	
76-13-1	Trichlorotrifluoroethane	52.1	
67-64-1	Acetone	39.4	
75-35-4	1,1-Dichloroethene	46.9	
75-09-2	Methylene chloride	46.4	
75-15-0	Carbon disulfide	50.1	
75-34-3	1,1-Dichloroethane	51.3	
78-93-3	2-Butanone (MEK)	55.8	
594-20-7	2,2-Dichloropropane	49.7	
540-59-0	1,2-Dichloroethene (total)	104	
67-66-3	Chloroform	48.9	
74-97-5	Bromochloromethane	52.5	
71-55-6	1,1,1-Trichloroethane	49.8	
563-58-6	1,1-Dichloropropene	52.2	
56-23-5	Carbon tetrachloride	48.8	
107-06-2	1,2-Dichloroethane	47.3	
71-43-2	Benzene	51.7	
79-01-6	Trichloroethene	50.8	
78-87-5	1,2-Dichloropropane	52.4	
75-27-4	Bromodichloromethane	47.2	
108-10-1	4-Methyl-2-pentanone	53.6	
10061-01-5	cis-1,3-Dichloropropene	47.9	
108-88-3	Toluene	52.1	
10061-02-6	trans-1,3-Dichloropropene	55.5	

FORM I

LOS ALAMOS NATIONAL LABORATORY
CHECK SAMPLE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D270000 629
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / g Date Received: 04/21/05
Work Order: G9CJP1AC Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 04/27/05
Moisture %:NA

QC Batch: 5117629

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
79-00-5	1,1,2-Trichloroethane	51.2	
591-78-6	2-Hexanone	63.4	
142-28-9	1,3-Dichloropropane	52.0	
127-18-4	Tetrachloroethene	47.7	
124-48-1	Chlorodibromomethane	50.1	
106-93-4	1,2-Dibromoethane	52.1	
108-90-7	Chlorobenzene	49.9	
630-20-6	1,1,1,2-Tetrachloroethane	48.9	
100-41-4	Ethylbenzene	53.2	
75-01-4	Vinyl chloride	54.5	
100-42-5	Styrene	54.9	
75-25-2	Bromoform	50.0	
98-82-8	Isopropylbenzene	59.4	
79-34-5	1,1,2,2-Tetrachloroethane	52.5	
103-65-1	n-Propylbenzene	50.4	
108-86-1	Bromobenzene	48.6	
95-49-8	2-Chlorotoluene	65.9	a
108-67-8	1,3,5-Trimethylbenzene	48.9	
106-43-4	4-Chlorotoluene	40.4	
98-06-6	tert-Butylbenzene	34.8	
135-98-8	sec-Butylbenzene	46.3	
99-87-6	p-Isopropyltoluene	50.9	
541-73-1	1,3-Dichlorobenzene	51.2	
106-46-7	1,4-Dichlorobenzene	49.8	
104-51-8	n-Butylbenzene	54.7	
95-50-1	1,2-Dichlorobenzene	56.4	
96-12-8	1,2-Dibromo-3-chloropropane	53.2	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Toluene-d8	98	(72 - 131)
Dibromofluoromethane	97	(74 - 128)
1,2-Dichloroethane-d4	99	(69 - 134)
4-Bromofluorobenzene	98	(70 - 131)

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5.01 / g Date Received: 04/21/05
Work Order: G8WXJ1AG Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 04/27/05
Moisture %:20

QC Batch: 5117629

Client Sample Id: RE73-05-58829

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	80.5	
74-87-3	Chloromethane	85.2	
74-83-9	Bromomethane	59.3	
75-00-3	Chloroethane	88.7	
75-69-4	Trichlorofluoromethane	91.4	a
76-13-1	Trichlorotrifluoroethane	89.8	a
67-64-1	Acetone	61.9	
75-35-4	1,1-Dichloroethene	71.5	
75-09-2	Methylene chloride	74.3	
75-15-0	Carbon disulfide	59.3	
75-34-3	1,1-Dichloroethane	82.8	
78-93-3	2-Butanone (MEK)	75.9	
594-20-7	2,2-Dichloropropane	88.7	
540-59-0	1,2-Dichloroethene (total)	138	
67-66-3	Chloroform	76.1	
74-97-5	Bromochloromethane	78.7	
71-55-6	1,1,1-Trichloroethane	84.4	
563-58-6	1,1-Dichloropropene	70.8	
56-23-5	Carbon tetrachloride	82.7	
107-06-2	1,2-Dichloroethane	71.9	
71-43-2	Benzene	71.5	
79-01-6	Trichloroethene	67.1	
78-87-5	1,2-Dichloropropane	82.0	
75-27-4	Bromodichloromethane	68.3	
108-10-1	4-Methyl-2-pentanone	85.3	
10061-01-5	cis-1,3-Dichloropropene	57.0	
108-88-3	Toluene	96.9	a
10061-02-6	trans-1,3-Dichloropropene	85.7	

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5.01 / g Date Received: 04/21/05
Work Order: G8WXJ1AG Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 04/27/05
Moisture %:20

QC Batch: 5117629

Client Sample Id: RE73-05-58829

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
79-00-5	1,1,2-Trichloroethane	112	a
591-78-6	2-Hexanone	121	a
142-28-9	1,3-Dichloropropane	106	a
127-18-4	Tetrachloroethene	95.7	a
124-48-1	Chlorodibromomethane	102	a
106-93-4	1,2-Dibromoethane	94.0	a
108-90-7	Chlorobenzene	63.8	
630-20-6	1,1,1,2-Tetrachloroethane	113	a
100-41-4	Ethylbenzene	91.2	a
75-01-4	Vinyl chloride	90.9	
100-42-5	Styrene	52.0	
75-25-2	Bromoform	89.7	
98-82-8	Isopropylbenzene	119	a
79-34-5	1,1,2,2-Tetrachloroethane	98.5	
103-65-1	n-Propylbenzene	157	a
108-86-1	Bromobenzene	91.2	
95-49-8	2-Chlorotoluene	116	a
108-67-8	1,3,5-Trimethylbenzene	163	a
106-43-4	4-Chlorotoluene	104	a
98-06-6	tert-Butylbenzene	137	a
135-98-8	sec-Butylbenzene	164	a
99-87-6	p-Isopropyltoluene	195	a
541-73-1	1,3-Dichlorobenzene	73.3	
106-46-7	1,4-Dichlorobenzene	60.9	
104-51-8	n-Butylbenzene	128	a
95-50-1	1,2-Dichlorobenzene	71.1	
96-12-8	1,2-Dibromo-3-chloropropane	152	a

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Toluene-d8	147	(60 - 148)
Dibromofluoromethane	118	(61 - 140)
1,2-Dichloroethane-d4	115	(56 - 149)
4-Bromofluorobenzene	132	(56 - 150)

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5.01 / g Date Received: 04/21/05
Work Order: G8WXJ1AF Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 04/27/05
Moisture %:20

QC Batch: 5117629

Client Sample Id: RE73-05-58829

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	81.0	
74-87-3	Chloromethane	86.2	
74-83-9	Bromomethane	62.6	
75-00-3	Chloroethane	88.4	
75-69-4	Trichlorofluoromethane	92.5	a
76-13-1	Trichlorotrifluoroethane	92.0	a
67-64-1	Acetone	67.2	
75-35-4	1,1-Dichloroethene	74.6	
75-09-2	Methylene chloride	80.1	
75-15-0	Carbon disulfide	60.9	
75-34-3	1,1-Dichloroethane	83.7	
78-93-3	2-Butanone (MEK)	74.3	
594-20-7	2,2-Dichloropropane	86.0	
540-59-0	1,2-Dichloroethene (total)	141	
67-66-3	Chloroform	76.8	
74-97-5	Bromochloromethane	80.1	
71-55-6	1,1,1-Trichloroethane	85.3	
563-58-6	1,1-Dichloropropene	72.2	
56-23-5	Carbon tetrachloride	84.5	
107-06-2	1,2-Dichloroethane	73.9	
71-43-2	Benzene	73.0	
79-01-6	Trichloroethene	67.0	
78-87-5	1,2-Dichloropropane	78.5	
75-27-4	Bromodichloromethane	70.1	
108-10-1	4-Methyl-2-pentanone	88.5	
10061-01-5	cis-1,3-Dichloropropene	60.6	
108-88-3	Toluene	98.5	a
10061-02-6	trans-1,3-Dichloropropene	84.8	

FORM I

LOS ALAMOS NATIONAL LABORATORY
MATRIX SPIKE COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:F5D210380

Matrix: (soil/water) SOLID Lab Sample ID:F5D210380 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5.01 / g Date Received: 04/21/05
Work Order: G8WXJ1AF Date Extracted:04/27/05
Dilution factor: 1 Date Analyzed: 04/27/05
Moisture %:20

QC Batch: 5117629

Client Sample Id: RE73-05-58829

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
79-00-5	1,1,2-Trichloroethane	112	a
591-78-6	2-Hexanone	124	a
142-28-9	1,3-Dichloropropane	104	a
127-18-4	Tetrachloroethene	91.5	a
124-48-1	Chlorodibromomethane	97.6	a
106-93-4	1,2-Dibromoethane	93.6	
108-90-7	Chlorobenzene	64.2	
630-20-6	1,1,1,2-Tetrachloroethane	118	a
100-41-4	Ethylbenzene	98.0	a
75-01-4	Vinyl chloride	89.4	
100-42-5	Styrene	48.0	
75-25-2	Bromoform	86.2	
98-82-8	Isopropylbenzene	113	a
79-34-5	1,1,2,2-Tetrachloroethane	98.1	
103-65-1	n-Propylbenzene	175	a
108-86-1	Bromobenzene	102	a
95-49-8	2-Chlorotoluene	149	a
108-67-8	1,3,5-Trimethylbenzene	192	a
106-43-4	4-Chlorotoluene	102	a
98-06-6	tert-Butylbenzene	168	a
135-98-8	sec-Butylbenzene	196	a
99-87-6	p-Isopropyltoluene	224	a
541-73-1	1,3-Dichlorobenzene	75.3	
106-46-7	1,4-Dichlorobenzene	60.9	
104-51-8	n-Butylbenzene	136	a
95-50-1	1,2-Dichlorobenzene	80.2	
96-12-8	1,2-Dibromo-3-chloropropane	172	a

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Toluene-d8	151	(60 - 148)
Dibromofluoromethane	119	(61 - 140)
1,2-Dichloroethane-d4	121	(56 - 149)
4-Bromofluorobenzene	171	(56 - 150)

GC/MS ADDITIONAL QC SUMMARY DATA
FORMS 2 THROUGH 4

SW846 8260B SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Lot #: F5D210380

Extraction: XXA15QK01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
01	RE73-05-58829	160*	115	111	133	01
02	RE73-05-58835	174*	137	122	182*	02
03	RE73-05-58841	126	110	112	85	00
04	METHOD BLK. G9CJP1AA	99	102	97	108	00
05	LCS G9CJP1AC	98	97	99	98	00
06	RE73-05-58829 D	147	118	115	132	00
07	RE73-05-58829 S	151*	119	121	171*	02

SURROGATES		QC LIMITS
SRG01	= Toluene-d8	(60-148)
SRG02	= Dibromofluoromethane	(61-140)
SRG03	= 1,2-Dichloroethane-d4	(56-149)
SRG04	= 4-Bromofluorobenzene	(56-150)

\# Column to be used to flag recovery values
* Values outside of required QC Limits
D System monitoring Compound diluted out

FORM II

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Matrix Spike ID: RE73-05-58829 Level:(low/med) LOW

Lot #: F5D210380 WO #: G8WXJ1AF
BATCH: 5117629

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
cis-1,3-Dichloropropene	62.5	ND	60.6	97	56 - 141	
Chloromethane	62.5	ND	86.2	138	30 - 150	
Vinyl chloride	62.5	ND	89.4	143	37 - 150	
Bromomethane	62.5	3.5	62.6	95	30 - 150	
Chloroethane	62.5	ND	88.4	142	42 - 150	
Acetone	62.5	ND	67.2	108	30 - 150	
1,1-Dichloroethene	62.5	ND	74.6	119	39 - 144	
Methylene chloride	62.5	11	80.1	111	30 - 143	
Carbon disulfide	62.5	ND	60.9	97	30 - 150	
1,1-Dichloroethane	62.5	ND	83.7	134	52 - 141	
1,2-Dichloroethene (total	125	ND	141	113	41 - 150	
Chloroform	62.5	ND	76.8	123	57 - 140	
1,1,1-Trichloroethane	62.5	ND	85.3	137	55 - 145	
Carbon tetrachloride	62.5	ND	84.5	135	52 - 147	
1,2-Dichloroethane	62.5	ND	73.9	118	55 - 150	
Benzene	62.5	ND	73.0	117	59 - 135	
Trichloroethene	62.5	0.71	67.0	106	30 - 150	
1,2-Dichloropropane	62.5	ND	78.5	126	55 - 143	
Bromodichloromethane	62.5	ND	70.1	112	51 - 145	
1,1,2-Trichloroethane	62.5	ND	112	180*	41 - 150	a
trans-1,3-Dichloropropene	62.5	ND	84.8	136	51 - 150	
Toluene	62.5	ND	98.5	158*	53 - 146	a
1,3-Dichlorobenzene	62.5	ND	75.3	121	57 - 136	
1,4-Dichlorobenzene	62.5	ND	60.9	98	51 - 133	
1,2-Dichlorobenzene	62.5	ND	80.2	128	53 - 141	
2-Hexanone	62.5	ND	124	198*	30 - 150	a
4-Methyl-2-pentanone	62.5	ND	88.5	142	30 - 150	
Chlorobenzene	62.5	ND	64.2	103	60 - 136	

(Continued on next page)

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Matrix Spike ID: RE73-05-58829 Level: (low/med) LOW

Lot #: F5D210380 WO #: G8WXJ1AF
BATCH: 5117629

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Bromoform	62.5	ND	86.2	138	51 - 150	
Ethylbenzene	62.5	ND	98.0	157*	60 - 134	a
Styrene	62.5	ND	48.0	77	58 - 138	
1,1,2,2-Tetrachloroethane	62.5	ND	98.1	157	40 - 163	
Tetrachloroethene	62.5	ND	91.5	146*	30 - 136	a
2-Butanone (MEK)	62.5	ND	74.3	119	30 - 150	
Chlorodibromomethane	62.5	ND	97.6	156*	51 - 150	a
Bromobenzene	62.5	ND	102	164*	30 - 150	a
Bromochloromethane	62.5	ND	80.1	128	57 - 147	
n-Butylbenzene	62.5	ND	136	217*	34 - 150	a
sec-Butylbenzene	62.5	ND	196	314*	42 - 150	a
tert-Butylbenzene	62.5	ND	168	269*	32 - 148	a
2-Chlorotoluene	62.5	ND	149	238*	30 - 150	a
4-Chlorotoluene	62.5	ND	102	164*	45 - 150	a
1,2-Dibromo-3-chloropropa	62.5	ND	172	275*	30 - 150	a
1,2-Dibromoethane	62.5	ND	93.6	150	50 - 150	
Dichlorodifluoromethane	62.5	ND	81.0	130	30 - 150	
1,3-Dichloropropane	62.5	ND	104	167*	41 - 150	a
2,2-Dichloropropane	62.5	ND	86.0	138	51 - 148	
1,1-Dichloropropene	62.5	ND	72.2	116	61 - 139	
Trichlorotrifluoroethane	62.5	ND	92.0	147*	54 - 136	a
Isopropylbenzene	62.5	ND	113	181*	61 - 150	a
p-Isopropyltoluene	62.5	17	224	358*	49 - 150	a
n-Propylbenzene	62.5	ND	175	280*	35 - 150	a
1,1,1,2-Tetrachloroethane	62.5	ND	118	189*	55 - 148	a
Trichlorofluoromethane	62.5	ND	92.5	148*	48 - 145	a
1,3,5-Trimethylbenzene	62.5	ND	192	307*	30 - 150	a

NOTES(S):

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 21 out of 55 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Matrix Spike ID: RE73-05-58829 Level:(low/med) LOW

Lot #: F5D210380 WO #: G8WXJ1AG
BATCH: 5117629

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
cis-1,3-Dichloropropene	62.5	57.0	91	6.1	30	56- 141	
Chloromethane	62.5	85.2	136	1.2	30	30- 150	
Vinyl chloride	62.5	90.9	145	1.6	30	37- 150	
Bromomethane	62.5	59.3	89	5.3	30	30- 150	
Chloroethane	62.5	88.7	142	0.25	30	42- 150	
Acetone	62.5	61.9	99	8.2	30	30- 150	
1,1-Dichloroethene	62.5	71.5	115	4.2	30	39- 144	
Methylene chloride	62.5	74.3	101	7.5	30	30- 143	
Carbon disulfide	62.5	59.3	95	2.5	30	30- 150	
1,1-Dichloroethane	62.5	82.8	133	1.1	30	52- 141	
1,2-Dichloroethene (total	125	138	110	2.1	30	41- 150	
Chloroform	62.5	76.1	122	0.96	30	57- 140	
1,1,1-Trichloroethane	62.5	84.4	135	1.0	30	55- 145	
Carbon tetrachloride	62.5	82.7	132	2.2	30	52- 147	
1,2-Dichloroethane	62.5	71.9	115	2.8	30	55- 150	
Benzene	62.5	71.5	115	2.1	30	59- 135	
Trichloroethene	62.5	67.1	106	0.050	30	30- 150	
1,2-Dichloropropane	62.5	82.0	131	4.4	30	55- 143	
Bromodichloromethane	62.5	68.3	109	2.6	30	51- 145	
1,1,2-Trichloroethane	62.5	112	179*	0.76	30	41- 150	a
trans-1,3-Dichloropropene	62.5	85.7	137	1.1	30	51- 150	
Toluene	62.5	96.9	155*	1.7	30	53- 146	a
1,3-Dichlorobenzene	62.5	73.3	117	2.7	30	57- 136	
1,4-Dichlorobenzene	62.5	60.9	97	0.060	30	51- 133	
1,2-Dichlorobenzene	62.5	71.1	114	12	30	53- 141	
2-Hexanone	62.5	121	194*	2.3	30	30- 150	a
4-Methyl-2-pentanone	62.5	85.3	137	3.6	30	30- 150	
Chlorobenzene	62.5	63.8	102	0.66	30	60- 136	

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SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Matrix Spike ID: RE73-05-58829 Level:(low/med) LOW

Lot #: F5D210380 WO #: G8WXJ1AG
BATCH: 5117629

COMPOUND	SPIKE ADDED	MSD CONCENT.	MSD % REC	% RPD		QC LIMITS RPD	QC LIMITS REC	QUAL
Bromoform	62.5	89.7	144	4.0		30	51- 150	
Ethylbenzene	62.5	91.2	146*	7.2		30	60- 134	a
Styrene	62.5	52.0	83	7.8		30	58- 138	
1,1,2,2-Tetrachloroethane	62.5	98.5	158	0.44		30	40- 163	
Tetrachloroethene	62.5	95.7	153*	4.6		30	30- 136	a
2-Butanone (MEK)	62.5	75.9	121	2.2		30	30- 150	
Chlorodibromomethane	62.5	102	163*	4.5		30	51- 150	a
Bromobenzene	62.5	91.2	146	11		30	30- 150	
Bromochloromethane	62.5	78.7	126	1.8		30	57- 147	
n-Butylbenzene	62.5	128	205*	5.8		30	34- 150	a
sec-Butylbenzene	62.5	164	263*	18		30	42- 150	a
tert-Butylbenzene	62.5	137	219*	20		30	32- 148	a
2-Chlorotoluene	62.5	116	186*	25		30	30- 150	a
4-Chlorotoluene	62.5	104	166*	1.3		30	45- 150	a
1,2-Dibromo-3-chloropropa	62.5	152	244*	12		30	30- 150	a
1,2-Dibromoethane	62.5	94.0	151*	0.44		30	50- 150	a
Dichlorodifluoromethane	62.5	80.5	129	0.58		30	30- 150	
1,3-Dichloropropane	62.5	106	170*	2.1		30	41- 150	a
2,2-Dichloropropane	62.5	88.7	142	3.2		30	51- 148	
1,1-Dichloropropene	62.5	70.8	113	1.9		30	61- 139	
Trichlorotrifluoroethane	62.5	89.8	144*	2.4		30	54- 136	a
Isopropylbenzene	62.5	119	191*	5.3		30	61- 150	a
p-Isopropyltoluene	62.5	195	312*	14		30	49- 150	a
n-Propylbenzene	62.5	157	252*	11		30	35- 150	a
1,1,1,2-Tetrachloroethane	62.5	113	181*	4.2		30	55- 148	a
Trichlorofluoromethane	62.5	91.4	146*	1.2		30	48- 145	a
1,3,5-Trimethylbenzene	62.5	163	261*	17		30	30- 150	a

NOTES(S):

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 55 outside limits
Spike Recovery: 21 out of 55 outside limits

COMMENTS:

FORM III

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Lot #: F5D270000 WO #: G9CJP1AC

BATCH: 5117629

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
cis-1,3-Dichloropropene	50.0	47.9	96	77 - 125	
Chlorodibromomethane	50.0	50.1	100	73 - 125	
Chloromethane	50.0	49.6	99	30 - 150	
Vinyl chloride	50.0	54.5	109	48 - 148	
Bromomethane	50.0	33.5	67	30 - 142	
Chloroethane	50.0	53.2	106	57 - 145	
Acetone	50.0	39.4	79	30 - 150	
1,1-Dichloroethene	50.0	46.9	94	56 - 130	
Methylene chloride	50.0	46.4	93	31 - 148	
Carbon disulfide	50.0	50.1	100	45 - 150	
1,1-Dichloroethane	50.0	51.3	103	68 - 126	
2-Butanone (MEK)	50.0	55.8	112	31 - 150	
1,2-Dichloroethene (total	100	104	104	72 - 125	
Chloroform	50.0	48.9	98	72 - 125	
1,1,1-Trichloroethane	50.0	49.8	100	68 - 133	
Carbon tetrachloride	50.0	48.8	98	65 - 136	
1,2-Dichloroethane	50.0	47.3	95	66 - 132	
Benzene	50.0	51.7	103	77 - 115	
Trichloroethene	50.0	50.8	102	74 - 120	
1,2-Dichloropropane	50.0	52.4	105	75 - 122	
Bromodichloromethane	50.0	47.2	94	72 - 124	
1,1,2-Trichloroethane	50.0	51.2	102	75 - 117	
trans-1,3-Dichloropropene	50.0	55.5	111	81 - 137	
Toluene	50.0	52.1	104	73 - 122	
1,3-Dichlorobenzene	50.0	51.2	102	82 - 114	
1,4-Dichlorobenzene	50.0	49.8	100	79 - 109	
2-Hexanone	50.0	63.4	127	54 - 143	
4-Methyl-2-pentanone	50.0	53.6	107	30 - 144	
Chlorobenzene	50.0	49.9	100	81 - 116	
Bromoform	50.0	50.0	100	69 - 133	
Ethylbenzene	50.0	53.2	106	81 - 116	

(Continued on next page)

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: LOS ALAMOS NATIONAL LABORATORY

Lab Code: STLSTL SDG No: F5D210380

Lot #: F5D270000 WO #: G9CJP1AC
BATCH: 5117629

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
Styrene	50.0	54.9	110	76 - 125	
1,1,2,2-Tetrachloroethane	50.0	52.5	105	64 - 134	
Tetrachloroethene	50.0	47.7	95	48 - 125	
1,2-Dichlorobenzene	50.0	56.4	113	82 - 115	
Bromobenzene	50.0	48.6	97	75 - 125	
Bromochloromethane	50.0	52.5	105	77 - 122	
n-Butylbenzene	50.0	54.7	109	77 - 128	
sec-Butylbenzene	50.0	46.3	93	76 - 115	
tert-Butylbenzene	50.0	34.8	70	53 - 123	
2-Chlorotoluene	50.0	65.9	132*	65 - 127	a
4-Chlorotoluene	50.0	40.4	81	67 - 130	
1,2-Dibromo-3-chloropropa	50.0	53.2	106	72 - 133	
1,2-Dibromoethane	50.0	52.1	104	79 - 121	
Dichlorodifluoromethane	50.0	46.6	93	30 - 150	
1,3-Dichloropropane	50.0	52.0	104	74 - 122	
2,2-Dichloropropane	50.0	49.7	99	64 - 141	
1,1-Dichloropropene	50.0	52.2	104	77 - 126	
Trichlorotrifluoroethane	50.0	52.1	104	60 - 139	
Isopropylbenzene	50.0	59.4	119	80 - 143	
p-Isopropyltoluene	50.0	50.9	102	80 - 127	
n-Propylbenzene	50.0	50.4	101	69 - 129	
1,1,1,2-Tetrachloroethane	50.0	48.9	98	80 - 119	
Trichlorofluoromethane	50.0	51.6	103	57 - 142	
1,3,5-Trimethylbenzene	50.0	48.9	98	70 - 126	

NOTES(S):

a Spiked analyte recovery is outside stated control limits.

* Values outside of QC limits

Spike Recovery: 1 out of 55 outside limits

COMMENTS:

FORM III

SW846 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.: G9CJP1AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: STLSTL — SDG Number: F5D210380

Lab File ID: EBLK8034 — Lot Number: F5D210380

Date Analyzed: 04/27/05 — Time Analyzed: 12:04

Matrix: SOLID — Date Extracted: 04/27/05

GC Column: RTX-502.2 ID: .53 — Extraction Method: 5030B/8260B

Instrument ID: MSE — Level: (low/med) LOW

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS, LCSD, MS , MSD:

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	RE73-05-58829	G8WXJ1AC	ESMP8035	04/27/05	14:43
02	RE73-05-58829	G8WXJ1AF S	ESMP8037	04/27/05	15:57
03	RE73-05-58829	G8WXJ1AG D	ESMP8036	04/27/05	15:20
04	RE73-05-58835	G8WXV1AC	ESMP8038	04/27/05	16:33
05	RE73-05-58841	G8WXX1AC	ESMP8039	04/27/05	17:10
06	CHECK SAMPLE	G9CJP1AC C	ELCS8032	04/27/05	10:51
07					
08					
09					
10					
11					
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30					

COMMENTS:

FORM IV

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D210380

Lab File ID: EBFB7964 BFB Injection Date: 04/24/05

Instrument ID: MSE BFB Injection Time: 1952

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	30.6
75	30.0 - 60.0% of mass 95	58.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.6 (0.9)1
174	Greater than 50.0% of mass 95	72.0
175	5.0 - 9.0% of mass 174	5.4 (7.4)1
176	Greater than 95.0%, but less than 101.0% of mass 174	72.3 (100.4)1
177	5.0 - 9.0% of mass 176	4.5 (6.3)2

1-Value is % of mass 174 2-Value is % of mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	ECAL7965	04/24/05	2006
02	VSTD020	VSTD020	ECAL7966	04/24/05	2149
03	VSTD010	VSTD010	ECAL7967	04/24/05	2224
04	VSTD005	VSTD005	ECAL7968	04/24/05	2300
05	VSTD002.5	VSTD002.5	ECAL7969	04/24/05	2336
06	VSTD200	VSTD200	ECAL7970	04/25/05	0012
07	VSTD100	VSTD100	ECAL7971	04/25/05	0048
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22					

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D210380

Lab File ID: EBFB7975 BFB Injection Date: 04/25/05

Instrument ID: MSE BFB Injection Time: 0946

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	29.4
75	30.0 - 60.0% of mass 95	56.0
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.3
173	Less than 2.0% of mass 174	0.5 (0.7)1
174	Greater than 50.0% of mass 95	67.6
175	5.0 - 9.0% of mass 174	5.2 (7.6)1
176	Greater than 95.0%, but less than 101.0% of mass 174	64.8 (95.8)1
177	5.0 - 9.0% of mass 176	5.1 (7.9)2

1-Value is % of mass 174 2-Value is % of mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	ECAL7976	04/25/05	1008
02	VSTDICV	VSTDICV	ECAL7977	04/25/05	1114
03					
04					
05					
06					
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22					

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D210380

Lab File ID: EBFB8029 BFB Injection Date: 04/27/05

Instrument ID: MSE BFB Injection Time: 0904

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	31.7
75	30.0 - 60.0% of mass 95	58.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.4 (0.5)1
174	Greater than 50.0% of mass 95	72.4
175	5.0 - 9.0% of mass 174	5.6 (7.8)1
176	Greater than 95.0%, but less than 101.0% of mass 174	72.0 (99.4)1
177	5.0 - 9.0% of mass 176	4.8 (6.7)2

1-Value is % of mass 174 2-Value is % of mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	ECAL8031	04/27/05	1005
02	VLCSE117A	G9CJP1AC	ELCS8032	04/27/05	1051
03	VBLKE117A	G9CJP1AA	EBLK8034	04/27/05	1204
04	58829	G8WXJ1AC	ESMP8035	04/27/05	1443
05	58829MS	G8WXJ1AG	ESMP8036	04/27/05	1520
06	58829MSD	G8WXJ1AF	ESMP8037	04/27/05	1557
07	58835	G8WXV1AC	ESMP8038	04/27/05	1633
08	58841	G8WXX1AC	ESMP8039	04/27/05	1710
09					
10					
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17					
18					
19					
20					
21					
22					

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F5D210380

Lab File ID (Standard): ECAL8031 Date Analyzed: 04/27/05

Instrument ID: MSE Time Analyzed: 1005

Matrix: (soil/water) SOIL Level: (low/med) LOW Column: (pack/cap) CAP

		IS1 AREA #	RT	IS2(CBZ) AREA #	RT	IS3 AREA #	RT
	12 HOUR STD	1801629	10.04	1382848	17.56	743020	22.97
	UPPER LIMIT	3603258	10.54	2765696	18.06	1486040	23.47
	LOWER LIMIT	900815	9.54	691424	17.06	371510	22.47
	EPA SAMPLE NO.						
01	VLCSE117A	1905130	10.02	1430297	17.54	771120	22.98
02	VBLKE117A	1789842	10.00	1422238	17.56	597475	22.97
03	58829	1350910	10.04	595596*	17.57	127298*	22.97
04	58829MS	1201749	10.04	588747*	17.58	157769*	22.97
05	58829MSD	1090724	10.04	548969*	17.56	126418*	22.97
06	58835	907597	10.02	350245*	17.57	45857*	23.01
07	58841	1363427	10.04	817767	17.58	224231*	22.99
08							
09							
10							
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12							
13							
14							
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16							
17							
18							
19							
20							
21							
22							

IS1 = Fluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 = 1,4 Dichlorobenzene-d4

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk.

FORM VIII VOA 1/87 Rev.

GC/MS STANDARDS DATA

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\EBFB7964.D

Date : 24-APR-2005 19:52

Client ID: VBFB

Instrument: MSE.i

Sample Info: 50ng BFB;E050424A.b;

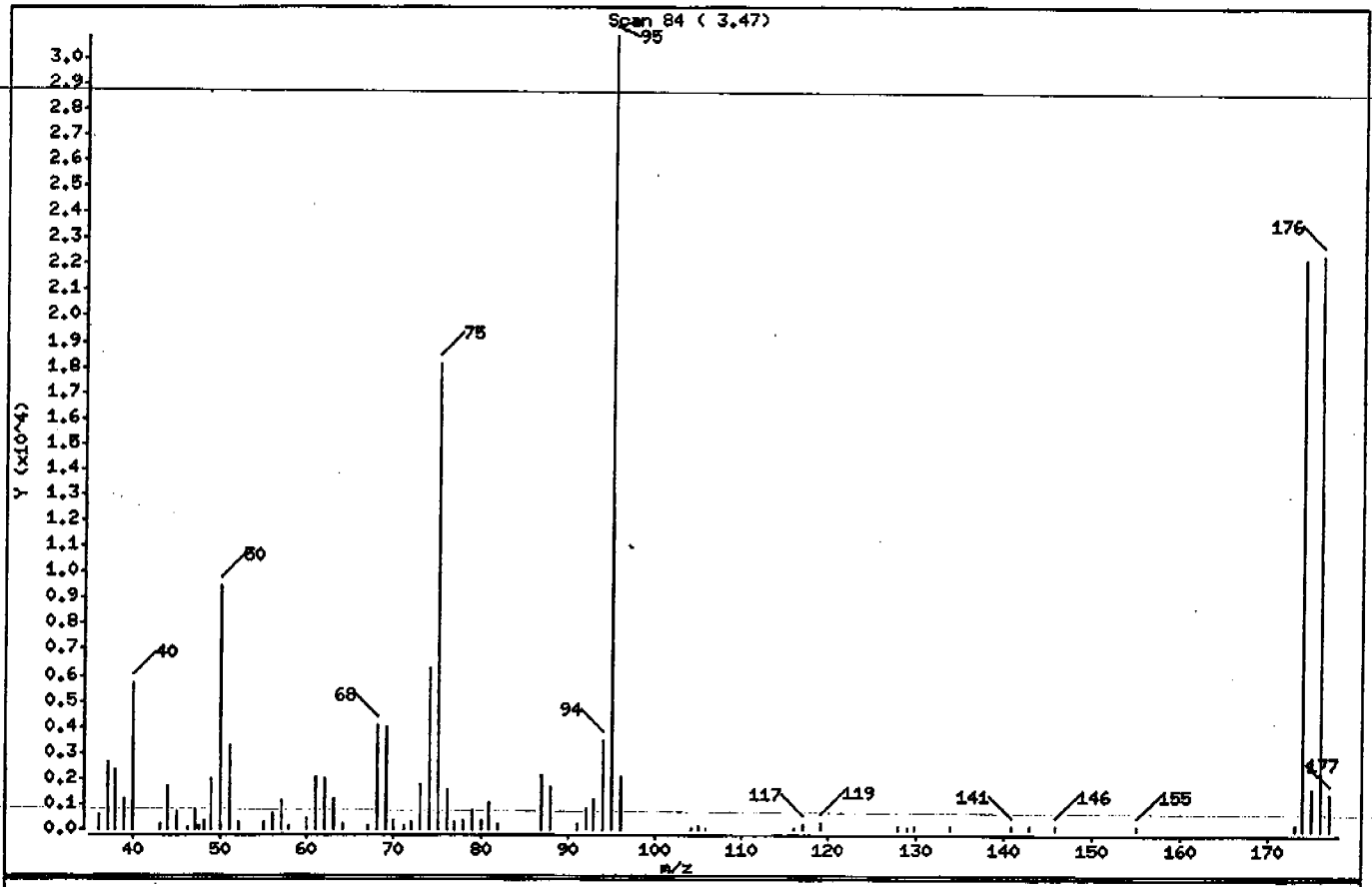
Volume Injected (uL): 2.0

Operator: JDH

Column phase: RTX-502.2

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	30.59
75	30.00 - 60.00% of mass 95	58.67
96	5.00 - 9.00% of mass 95	6.57
173	Less than 2.00% of mass 174	0.64 (0.89)
174	Greater than 50.00% of mass 95	72.00
175	5.00 - 9.00% of mass 174	5.37 (7.46)
176	95.00 - 101.00% of mass 174	72.29 (100.40)
177	5.00 - 9.00% of mass 176	4.54 (6.28)

Data File: \\Slsvr01\Chem\HSE.i\E050424A.b\EBFB7964.D

Date : 24-APR-2005 19:52

Client ID: VBFB

Instrument: HSE.i

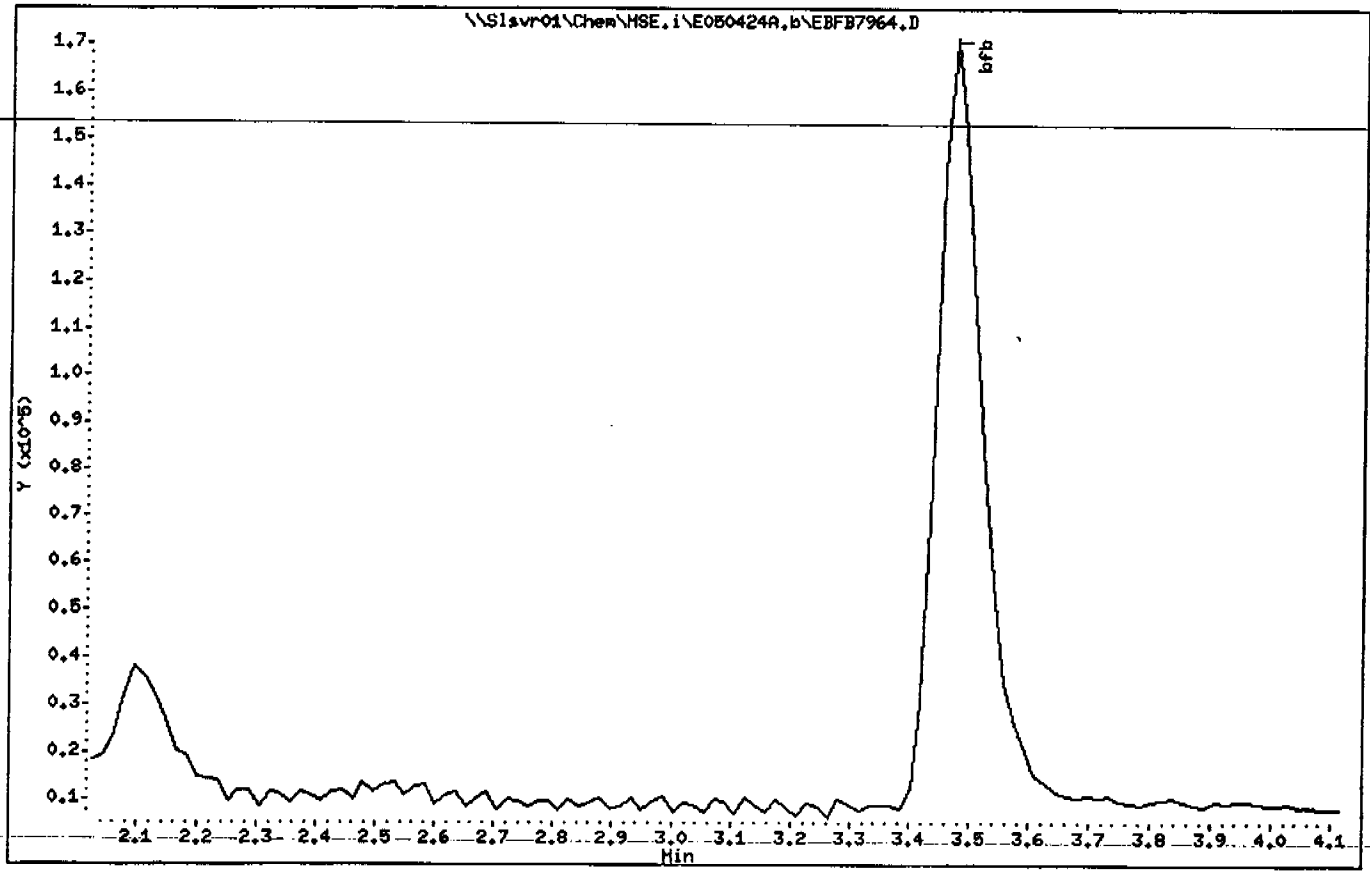
Sample Info: 50ng BFB;E050424A.b;

Volume Injected (uL): 2.0

Operator: JDH

Column phase: RTX-502.2

Column diameter: 0.53



Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\EBFB7964.D

Date : 24-APR-2005 19:52

Client ID: VBFB

Instrument: MSE.i

Sample Info: 50ng BFB;E050424A.b;

Volume Injected (uL): 2.0

Operator: JDH

Column phase: RTX-502.2

Column diameter: 0.53

Data File: EBFB7964.D
Spectrum: Scan 84 (3.47)
Location of Maximum: 95.00
Number of points: 68

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.05	594	57.10	1109	78.05	360	119.00	292
37.05	2622	57.90	147	78.95	808	127.95	131
38.05	2367	60.00	441	80.00	373	129.05	105
39.05	1179	61.05	2044	80.90	1060	129.95	107
40.05	5679	62.05	2020	81.90	229	134.10	107
43.10	212	63.05	1198	86.95	2127	140.85	112
44.00	1698	64.05	200	88.05	1727	142.85	123
45.10	687	67.10	137	91.05	218	145.90	142
46.30	105	68.00	4060	92.05	834	154.95	126
47.10	770	69.00	3982	93.00	1220	173.00	198
47.55	164	70.00	330	94.00	3809	173.90	22200
48.15	356	71.10	116	95.00	30832	174.90	1656
49.05	2014	72.00	316	96.00	2027	176.00	22288
50.05	9430	73.00	1762	104.05	104	177.00	1399
51.05	3270	74.05	6250	104.95	132		
52.05	255	75.05	18088	105.90	103		
54.90	261	76.05	1531	115.95	102		
56.00	654	76.95	252	116.95	181		

Report Date : 06-May-2005 11:02

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 24-APR-2005 20:06
End Cal Date : 25-APR-2005 00:48
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\Chem\MSE.i\E050424A.b\8260B-5mL.m
Cal Date : 06-May-2005 11:00 stitess
Curve Type : Average

Calibration File Names:
Level 2: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7969.D
Level 3: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7968.D
Level 4: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7967.D
Level 5: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7966.D
Level 6: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7965.D
Level 7: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7971.D
Level 8: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7970.D

Compound	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD	
1 Dichlorodifluoromethane	0.66688	0.64323	0.59115	0.59743	0.48943	0.56388	0.61296	0.59500	9.691	
2 Freon-114	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
3 Chloromethane	0.34453	0.30819	0.26861	0.23990	0.21939	0.22246	0.25917	0.26603	17.327	
4 Vinyl Chloride	0.30742	0.29885	0.26836	0.23537	0.19527	0.18384	0.20312	0.24175	20.908	
5 Bromomethane	0.68585	0.61254	0.50692	0.43474	0.38443	0.36228	0.15794	0.44924	38.854	
6 Chloroethane	0.21464	0.19372	0.18404	0.17561	0.16385	0.15391	0.13836	0.17487	14.608	
7 Trichlorofluoromethane	0.69735	0.66615	0.62856	0.59675	0.55741	0.57616	0.58824	0.61580	8.241	
8 Diethyl ether	0.12262	0.11825	0.10735	0.10369	0.11345	0.10080	0.09870	0.10927	8.307	
9 1,1,2-Trichlorofluoroethane	0.51496	0.47367	0.46125	0.46690	0.43095	0.45120	0.45060	0.46422	5.659	
10 Acrolein	0.01433	0.01467	0.01224	0.01122	0.01227	0.01193	0.01191	0.01265	10.373	

Report Date : 06-May-2005 11:02

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 24-APR-2005 20:06
End Cal Date : 25-APR-2005 00:48
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\Chem\MSE.i\E050424A.b\8260B-5mL.m
Cal Date : 06-May-2005 11:00 stitess
Curve Type : Average

	Compound	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
	11 Acetone	0.02901	0.02533	0.01846	0.01508	0.01605	0.01422	0.01275	0.01870	32.822
	12 1,1-Dichloroethene	0.35685	0.36246	0.33084	0.34025	0.31114	0.31464	0.32094	0.33387	6.051
	13 Acetonitrile	0.01381	0.01535	0.01105	0.01121	0.01271	0.01050	0.01044	0.01215	15.400
M	14 1,2-Dichloroethene (total)	0.41334	0.39591	0.37605	0.37781	0.39682	0.36359	0.37336	0.38527	4.480
	15 Iodomethane	0.34775	0.49727	0.47723	0.50784	0.52690	0.60730	0.69987	0.52345	20.942
	16 Allyl chloride	0.25877	0.23219	0.21231	0.20083	0.18367	0.17090	0.17620	0.20498	15.618
	17 Methyl Acetate	0.03001	0.03406	0.03260	0.03068	0.03787	0.03284	0.03271	0.03297	7.780
	18 Carbon Disulfide	1.18446	1.20733	1.14703	1.12904	1.07964	1.07926	1.10958	1.13376	4.361
	19 Methylene Chloride	0.59661	0.49345	0.40599	0.38851	0.40746	0.35037	0.35673	0.42845	20.499
	20 Acrylonitrile	0.04717	0.04740	0.03939	0.04191	0.05159	0.04154	0.04163	0.04438	9.887
	21 MTBE	0.42655	0.47096	0.45542	0.44660	0.51224	0.43301	0.43735	0.45459	6.479
	22 trans-1,2-Dichloroethene	0.41025	0.37658	0.36937	0.36765	0.37042	0.34603	0.36721	0.37250	5.150
	23 n-Hexane	0.30344	0.36168	0.35251	0.33749	0.32299	0.30609	0.34286	0.33244	6.744

Report Date : 06-May-2005 11:02

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 24-APR-2005 20:06
End Cal Date : 25-APR-2005 00:48
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\Chem\MSE.i\E050424A.b\8260B-5mL.m
Cal Date : 06-May-2005 11:00 stitess
Curve Type : Average

Compound	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	RRF	% RSD	
	200.000 Level 8								
24 Vinyl acetate	0.27594	0.24640	0.24752	0.25287	0.23279	0.21548			
	0.23955						0.24436	7.610	
25 1,1-Dichloroethane	0.74630	0.74086	0.68537	0.67909	0.68811	0.61245			
	0.64704						0.68560	6.951	
26 2-Chloro-1,3-butadiene	0.38977	0.38069	0.36948	0.35947	0.32400	0.31484			
	0.32782						0.35230	8.484	
27 2-Butoxyethanol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
28 2-Butanone	+++++	0.01604	0.01911	0.01812	0.02031	0.01691			
	0.01723						0.01795	8.704	<-
29 Propionitrile	0.01735	0.01955	0.01789	0.01665	0.01924	0.01569			
	0.01508						0.01735	9.733	
30 2,2-Dichloropropane	0.43346	0.43867	0.43186	0.45036	0.45445	0.39836			
	0.41927						0.43235	4.409	
31 cis-1,2-Dichloroethene	0.41644	0.41523	0.38274	0.38797	0.42322	0.38116			
	0.37951						0.39804	4.845	
32 Ethyl acetate	0.00683	0.01050	0.00998	0.01099	0.01308	0.01015			
	0.01003						0.01022	18.061	
33 Methacrylonitrile	0.08802	0.11880	0.11073	0.11086	0.13648	0.10517			
	0.08086						0.10728	17.371	
34 Chloroform	0.88376	0.83879	0.77936	0.77586	0.83953	0.75495			
	0.75776						0.80429	6.170	
35 Bromochloromethane	0.26722	0.28387	0.25930	0.26662	0.29925	0.26495			
	0.25204						0.27046	5.900	
36 Tetrahydrofuran	0.01859	0.02029	0.01819	0.01983	0.02309	0.01888			
	0.01802						0.01956	9.035	

Report Date : 06-May-2005 11:02

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 24-APR-2005 20:06
End Cal Date : 25-APR-2005 00:48
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\Chem\MSE.i\E050424A.b\8260B-5mL.m
Cal Date : 06-May-2005 11:00 stitess
Curve Type : Average

Compound	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	RRF	% RSD	
	200.000 Level 8								
38 1,1,1-Trichloroethane	0.53763	0.54517	0.52703	0.53864	0.54305	0.52456			
	0.54842						0.53778	1.675	
39 Isobutanol	0.00139	0.00063	0.00169	0.00207	0.00179	0.00150			
	0.00160						0.00153	29.576	
40 Cyclohexane	0.18296	0.21548	0.19678	0.21639	0.18687	0.19388			
	0.19483						0.19817	6.585	
41 1,1-Dichloropropene	0.54516	0.54125	0.51991	0.52388	0.51205	0.49174			
	0.51735						0.52162	3.456	
42 Carbon Tetrachloride	0.52190	0.52254	0.52710	0.52660	0.52276	0.52839			
	0.55673						0.52943	2.324	
44 Heptane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
45 n-Butanol	+++++	+++++	0.00373	0.00434	0.00534	0.00414			
	0.00424						0.00436	13.700	<-
46 Benzene	0.88587	0.83979	0.81688	0.82821	0.85487	0.78013			
	0.79509						0.82869	4.325	
47 1,2-Dichloroethane	0.43200	0.42374	0.38016	0.38287	0.44488	0.37343			
	0.38612						0.40332	7.237	
49 Trichloroethene	0.51851	0.49990	0.46152	0.49021	0.47650	0.46710			
	0.49468						0.48692	4.094	
50 Methylcyclohexane	0.34332	0.31575	0.33181	0.32901	0.28524	0.29283			
	0.30048						0.31406	6.956	
51 1,2-Dichloropropane	0.45362	0.45170	0.40914	0.40253	0.43826	0.38399			
	0.39875						0.41971	6.625	
52 Methyl methacrylate	0.13163	0.16497	0.15699	0.15921	0.19819	0.17061			
	0.16563						0.16389	12.041	

Report Date : 06-May-2005 11:02

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 24-APR-2005 20:06
End Cal Date : 25-APR-2005 00:48
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\Chem\MSE.i\E050424A.b\8260B-5mL.m
Cal Date : 06-May-2005 11:00 stitess
Curve Type : Average

Compound	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	RRF	% RSD	
	200.000 Level 8								
53 Bromodichloromethane	0.93302	0.92998	0.86361	0.86470	0.99155	0.87408			
	0.87995						0.90527	5.302	
54 Dibromomethane	0.50852	0.52286	0.48204	0.46511	0.56027	0.48755			
	0.47958						0.50085	6.487	
55 1,4-Dioxane	0.00119	0.00162	0.00191	0.00188	0.00271	0.00224			
	0.00214						0.00196	24.624	
56 2-Nitropropane	0.15202	0.14595	0.12542	0.11774	0.16217	0.13375			
	0.13459						0.13881	11.153	
57 2-chloroethyl vinyl ether	0.09473	0.07165	0.10131	0.11571	0.14921	0.14160			
	0.13735						0.11594	24.519	
58 4-Methyl-2-pentanone	+++++	0.00614	0.01528	0.02280	0.03008	0.02660			
	0.02468						0.02093	41.879	<-
59 cis-1,3-Dichloropropene	0.54366	0.55652	0.51884	0.53811	0.61861	0.54840			
	0.56449						0.55552	5.645	
60 Dimethyl disulfide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	<-
62 Toluene	0.68822	0.62308	0.63436	0.68621	0.65520	0.61618			
	0.63570						0.64842	4.496	
63 trans-1,3-Dichloropropene	0.45369	0.43346	0.46692	0.48454	0.55218	0.48412			
	0.51531						0.48432	8.169	
64 Ethyl methacrylate	0.39297	0.40322	0.44781	0.45475	0.50512	0.45332			
	0.45880						0.44514	8.420	
65 1,1,2-Trichloroethane	0.45911	0.42510	0.40417	0.44211	0.44670	0.39812			
	0.40623						0.42594	5.613	
66 2-Hexanone	0.01874	0.11466	0.15313	0.16767	0.20569	0.17660			
	0.18717						0.14624	43.151	

Report Date : 06-May-2005 11:02

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 24-APR-2005 20:06
End Cal Date : 25-APR-2005 00:48
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\Chem\MSE.i\E050424A.b\8260B-5mL.m
Cal Date : 06-May-2005 11:00 stitess
Curve Type : Average

Compound	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
67 1,3-Dichloropropane	0.69427	0.66451	0.60515	0.63303	0.69924	0.59692	0.62496	0.64544	6.386
68 Tetrachloroethene	0.65451	0.57456	0.56546	0.59141	0.53273	0.59230	0.64765	0.59409	7.368
M 69 Xylenes (total)	0.28034	0.43564	0.45812	0.47222	0.46814	0.46252	0.49118	0.43831	16.340
70 Chlorodibromomethane	0.97025	0.96024	0.89394	0.88912	1.03210	0.93253	0.96194	0.94859	5.189
71 1,2-Dibromoethane	0.72985	0.72919	0.69145	0.68368	0.80004	0.71805	0.71650	0.72411	5.234
73 Chlorobenzene	0.97406	0.96088	0.96317	0.98374	0.98947	0.93619	0.98682	0.97062	1.945
74 1,1,1,2-Tetrachloroethane	0.56890	0.56985	0.56337	0.58791	0.61503	0.57961	0.61174	0.58520	3.565
75 Ethylbenzene	1.22749	1.25545	1.25576	1.29807	1.27747	1.29150	1.38347	1.28417	3.893
76 m,p-Xylenes	0.19926	0.44479	0.47694	0.48333	0.48178	0.47219	0.50010	0.43691	24.285
77 o-Xylene	0.44250	0.41733	0.42048	0.44999	0.44086	0.44319	0.47334	0.44110	4.257
78 Styrene	0.74736	0.67772	0.68428	0.78239	0.78819	0.76282	0.83015	0.75327	7.386
79 Bromoform	0.67835	0.69008	0.63457	0.65049	0.77674	0.69951	0.74176	0.69593	7.140
80 Isopropylbenzene	1.20816	1.09714	1.12736	1.13300	1.17060	1.12289	1.24172	1.15727	4.487

Report Date : 06-May-2005 11:02

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 24-APR-2005 20:06
End Cal Date : 25-APR-2005 00:48
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\Chem\MSE.i\E050424A.b\8260B-5mL.m
Cal Date : 06-May-2005 11:00 stitess
Curve Type : Average

Compound	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	RRF	% RSD
	200.000 Level 8							
81 Cyclohexanone	0.02207	0.02249	0.02283	0.02489	0.02863	0.02205		
	0.02231						0.02361	10.257
82 1,1,2,2-Tetrachloroethane	0.84498	0.84329	0.75797	0.73609	0.87820	0.76317		
	0.74667						0.79577	7.244
84 1,2,3-Trichloropropane	1.06133	1.07809	0.85438	0.85124	0.93374	0.76648		
	0.73445						0.89710	14.991
85 Bromobenzene	1.21913	1.32973	1.18318	1.17912	1.18715	1.08481		
	1.04963						1.17611	7.759
86 n-Propylbenzene	3.48166	3.66852	3.33961	3.27503	3.08901	2.89162		
	2.88586						3.23304	9.127
87 2-Chlorotoluene	1.93309	2.50892	2.36999	2.13345	2.09853	1.91344		
	1.93499						2.12749	10.954
88 trans-1,4-dichloro-2-butene	0.08411	0.13535	0.10825	0.10628	0.09768	0.07825		
	0.07671						0.09809	21.244
89 1,3,5-Trimethylbenzene	1.85817	2.00165	1.80215	1.79150	1.74142	1.68375		
	1.73941						1.80258	5.761
90 4-Chlorotoluene	2.51030	3.14067	2.58839	2.71561	2.48143	2.29253		
	2.32703						2.57942	11.124
91 t-Butylbenzene	2.36756	2.78599	2.52752	2.64359	2.50411	2.37958		
	2.42199						2.51862	6.041
92 Pentachloroethane	0.70232	0.88310	0.81182	0.86722	0.84702	0.74490		
	0.74000						0.79948	8.837
93 1,2,4-Trimethylbenzene	1.51435	1.72724	1.55168	1.66361	1.63667	1.58345		
	1.65214						1.61845	4.502
94 sec-Butylbenzene	2.87586	2.71170	2.71030	2.75929	2.57200	2.56754		
	2.61221						2.68699	4.165

Report Date : 06-May-2005 11:02

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 24-APR-2005 20:06
End Cal Date : 25-APR-2005 00:48
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\Chem\MSE.i\E050424A.b\8260B-5mL.m
Cal Date : 06-May-2005 11:00 stitess
Curve Type : Average

Compound	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD	
95 4-Isopropyltoluene	1.79533	1.71209	1.69224	1.74688	1.69468	1.71484	1.79805	1.73630	2.589	
96 1,3-Dichlorobenzene	1.40318	1.45884	1.32676	1.36136	1.39572	1.34461	1.38830	1.38268	3.160	
98 1,4-Dichlorobenzene	1.89527	1.65312	1.68354	1.64034	1.66978	1.60217	1.61137	1.67937	5.931	
99 n-Butylbenzene	1.70525	1.63377	1.65744	1.74394	1.68506	1.71750	1.82706	1.71000	3.709	
100 1,2-Dichlorobenzene	1.23863	1.15731	1.08609	1.21027	1.18479	1.30319	1.31920	1.21421	6.730	
101 1,2-Dibromo-3-chloropropane	0.21844	0.23587	0.17543	0.16464	0.18629	0.19228	0.19010	0.19472	12.634	
102 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
103 1,2,4-Trichlorobenzene	0.20375	0.26269	0.23407	0.20914	0.39142	0.61290	0.51406	0.34686	47.075	
104 Hexachlorobutadiene	0.19219	0.26051	0.25562	0.26246	0.43360	0.68066	0.71566	0.40010	54.180	
105 Naphthalene	0.24072	0.31956	0.25835	0.23027	0.33287	0.54530	0.44174	0.33840	34.443	
106 1,2,3-Trichlorobenzene	0.16140	0.19279	0.17605	0.18123	0.26548	0.46723	0.43560	0.26854	48.264	
107 4-Chlorophenyl methyl sulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
$ 37 Dibromofluoromethane	0.83210	0.79726	0.75828	0.76582	0.84555	0.79991	0.77232	0.79589	4.189	

Report Date : 06-May-2005 11:02

STL St. Louis

INITIAL CALIBRATION DATA

Start Cal Date : 24-APR-2005 20:06
End Cal Date : 25-APR-2005 00:48
Quant Method : ISTD
Origin : Disabled
Target Version : 4.10
Integrator : HP RTE
Method file : \\Slsvr01\Chem\MSE.i\E050424A.b\8260B-5mL.m
Cal Date : 06-May-2005 11:00 stitess
Curve Type : Average

Compound	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	RRF	% RSD
	200.000 Level 8							
$ 43 1,2-Dichloroethane-d4	0.06942	0.07931	0.07999	0.08160	0.09369	0.08109		
	0.07956						0.08067	8.773
$ 61 Toluene-d8	0.99769	0.93554	0.96465	1.00546	0.99480	0.96872		
	0.96857						0.97649	2.496
$ 83 4-Bromofluorobenzene	1.74900	1.93388	1.70314	1.58625	1.69013	1.59376		
	1.47614						1.67604	8.699

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b/ECAL7965.D Pa
Report Date: 05/06/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSE.i
Lab File ID: ECAL7965.D
Analysis Type: WATER

Injection Date: 24-APR-2005 20:06
Lab Sample ID: VSTD050
Method File: \\Slsvr01\Chem\MSE.i\E050424A.b\8260B-5

COMPOUND	%D
Dichlorodifluoromethane	17.7
Chloromethane	17.5
Vinyl Chloride	19.2
Bromomethane	14.4
Chloroethane	6.3
Trichlorofluoromethane	9.5
Diethyl ether	3.8
Acrolein	3.1
1,1,2-Trichlorofluoroethane	7.2
Acetone	14.2
1,1-Dichloroethene	6.8
Acetonitrile	4.6
1,2-Dichloroethene (total)	2.9
Iodomethane	0.7
Methyl Acetate	14.9
Allyl chloride	10.4
Carbon Disulfide	4.8
Methylene Chloride	4.9
Acrylonitrile	16.3
MTBE	12.7
trans-1,2-Dichloroethene	0.6
Vinyl acetate	4.7
n-Hexane	2.8
1,1-Dichloroethane	0.4
2-Chloro-1,3-butadiene	8.0
2-Butanone	13.1
Propionitrile	10.9
2,2-Dichloropropane	5.1
cis-1,2-Dichloroethene	6.3
Ethyl acetate	28.0
Methacrylonitrile	27.2
Chloroform	4.4
Bromochloromethane	10.6
Tetrahydrofuran	18.1
Dibromofluoromethane	6.2
Isobutanol	17.4
1,1,1-Trichloroethane	1.0
Cyclohexane	5.7
1,1-Dichloropropene	1.8

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b/ECAL7965.D
Report Date: 05/06/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSE.i
Lab File ID: ECAL7965.D
Analysis Type: WATER

Injection Date: 24-APR-2005 20:06
Lab Sample ID: VSTD050
Method File: \\Slsvr01\Chem\MSE.i\E050424A.b\

COMPOUND	%D
Carbon Tetrachloride	1.3
1,2-Dichloroethane-d4	16.1
n-Butanol	22.6
1,2-Dichloroethane	10.3
Benzene	3.2
Trichloroethene	2.1
Methylcyclohexane	9.2
1,2-Dichloropropane	4.4
Methyl methacrylate	20.9
Bromodichloromethane	9.5
Dibromomethane	11.9
1,4-Dioxane	38.7
2-Nitropropane	16.8
2-chloroethyl vinyl ether	28.7
4-Methyl-2-pentanone	43.7
cis-1,3-Dichloropropene	11.4
Toluene-d8	1.9
Toluene	1.0
trans-1,3-Dichloropropene	14.0
Ethyl methacrylate	13.5
1,1,2-Trichloroethane	4.9
2-Hexanone	40.7
1,3-Dichloropropane	8.3
Tetrachloroethene	10.3
Xylenes (total)	6.8
Chlorodibromomethane	8.8
1,2-Dibromoethane	10.5
Chlorobenzene	1.9
1,1,1,2-Tetrachloroethane	5.1
Ethylbenzene	0.5
m,p-Xylenes	10.3
o-Xylene	0.1
Styrene	4.6
Bromoform	11.6
Isopropylbenzene	1.2
Cyclohexanone	21.3
1,1,2,2-Tetrachloroethane	10.4
4-Bromofluorobenzene	0.8
1,2,3-Trichloropropane	4.1

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b/ECAL7965.D
Report Date: 05/06/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSE.i
Lab File ID: ECAL7965.D
Analysis Type: WATER

Injection Date: 24-APR-2005 20:06
Lab Sample ID: VSTD050
Method File: \\Slsvr01\Chem\MSE.i\E050424A.b\

COMPOUND	%D
Bromobenzene	0.9
n-Propylbenzene	4.5
2-Chlorotoluene	1.4
trans-1,4-dichloro-2-butene	0.4
1,3,5-Trimethylbenzene	3.4
4-Chlorotoluene	3.8
t-Butylbenzene	0.6
Pentachloroethane	5.9
1,2,4-Trimethylbenzene	1.1
sec-Butylbenzene	4.3
4-Isopropyltoluene	2.4
1,3-Dichlorobenzene	0.9
1,4-Dichlorobenzene	0.6
n-Butylbenzene	1.5
1,2-Dichlorobenzene	2.4
1,2-Dibromo-3-chloropropane	4.3
1,2,4-Trichlorobenzene	12.8
Hexachlorobutadiene	8.4
Naphthalene	1.6
1,2,3-Trichlorobenzene	1.1

The average of %D's in the continuing calibration is 8.9

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7965.D
Report Date: 06-May-2005 10:23

STL St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7965.D
Lab Smp Id: VSTD050 Client Smp ID: VSTD050
Inj Date : 24-APR-2005 20:06
Operator : JDH Inst ID: MSE.i
Smp Info : VSTD050,E050424A.b,
Misc Info : VBLKE114A;
Comment : NONE
Method : \\Slsvr01\Chem\MSE.i\E050424A.b\8260B-5mL.m
Meth Date : 06-May-2005 10:23 stitess Quant Type: ISTD
Cal Date : 24-APR-2005 20:06 Cal File: ECAL7965.D
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.10
Processing Host: SLVOA03

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume
Vo	5.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

5/6/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	1 Dichlorodifluoromethane	85	1.960	1.960	(0.196)	675590	50.0000	41.13
	3 Chloromethane	50	2.274	2.274	(0.227)	302836	50.0000	41.23
	4 Vinyl Chloride	62	2.309	2.309	(0.230)	269547	50.0000	40.39
	5 Bromomethane	94	2.813	2.813	(0.281)	530645	50.0000	42.79
	6 Chloroethane	64	2.918	2.918	(0.291)	226166	50.0000	46.85
	7 Trichlorofluoromethane	101	3.249	3.249	(0.324)	769416	50.0000	45.26
	8 Diethyl ether	74	3.684	3.684	(0.368)	313205	100.000	103.8
	9 1,1,2-Trichlorofluoroethane	151	3.893	3.893	(0.389)	594865	50.0000	46.42
	10 Acrolein	56	3.875	3.875	(0.387)	84662	250.000	242.4
	11 Acetone	58	3.980	3.980	(0.397)	22149	50.0000	42.90
	12 1,1-Dichloroethene	96	4.137	4.137	(0.413)	429485	50.0000	46.60
M	14 1,2-Dichloroethene (total)	96				1095500	100.000	102.9
	17 Methyl Acetate	74	4.763	4.763	(0.475)	52274	50.0000	57.44
	13 Acetonitrile	41	4.415	4.415	(0.441)	87718	250.000	261.4
	15 Iodomethane	142	4.624	4.624	(0.461)	727307	50.0000	50.33
	16 Allyl chloride	39	4.763	4.763	(0.475)	253526	50.0000	44.80
	18 Carbon Disulfide	76	4.902	4.902	(0.489)	1490282	50.0000	47.61
	19 Methylene Chloride	84	4.955	4.955	(0.494)	562441	50.0000	47.55
	20 Acrylonitrile	53	5.216	5.216	(0.521)	356042	250.000	290.6
	21 MTBE	73	5.268	5.268	(0.526)	707065	50.0000	56.34
	22 trans-1,2-Dichloroethene	96	5.477	5.477	(0.547)	511310	50.0000	49.72
	23 n-Hexane	57	5.651	5.651	(0.564)	445833	50.0000	48.58

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7965.D
Report Date: 06-May-2005 10:23

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 Vinyl acetate	43	5.634	5.634	(0.562)	321326	50.0000	47.63
	25 1,1-Dichloroethane	63	6.278	6.278	(0.627)	949831	50.0000	50.18
	26 2-Chloro-1,3-butadiene	53	6.452	6.452	(0.644)	447238	50.0000	45.98
	28 2-Butanone	72	7.218	7.218	(0.720)	28035	50.0000	56.57
	29 Propionitrile	54	7.340	7.340	(0.732)	132783	250.000	277.2
	30 2,2-Dichloropropane	77	7.392	7.392	(0.738)	627303	50.0000	52.56
	31 cis-1,2-Dichloroethene	96	7.479	7.479	(0.746)	584190	50.0000	53.16
	32 Ethyl acetate	88	7.566	7.566	(0.755)	36123	100.000	128.0
	33 Methacrylonitrile	41	7.705	7.705	(0.769)	941970	250.000	318.1
	34 Chloroform	83	7.792	7.792	(0.778)	1158839	50.0000	52.19
	35 Bromochloromethane	128	8.123	8.123	(0.811)	413072	50.0000	55.32
	36 Tetrahydrofuran	71	8.227	8.227	(0.821)	159378	250.000	295.2
$	37 Dibromofluoromethane	113	8.245	8.245	(0.823)	1167148	50.0000	53.12
	39 Isobutanol	43	8.593	8.593	(0.858)	49434	1000.00	1174
	38 1,1,1-Trichloroethane	97	8.610	8.610	(0.859)	749601	50.0000	50.49
	40 Cyclohexane	84	8.610	8.610	(0.859)	257949	50.0000	47.15
	41 1,1-Dichloropropene	75	8.959	8.959	(0.894)	706808	50.0000	49.08
	42 Carbon Tetrachloride	117	9.133	9.133	(0.911)	721585	50.0000	49.37
$	43 1,2-Dichloroethane-d4	102	9.307	9.307	(0.929)	129318	50.0000	58.07
	45 n-Butanol	56	9.446	9.446	(0.943)	73722	500.000	612.8
	46 Benzene	78	9.516	9.516	(0.950)	1180023	50.0000	51.58
	47 1,2-Dichloroethane	62	9.498	9.498	(0.948)	614096	50.0000	55.15
*	48 Fluorobenzene	96	10.021	10.021	(1.000)	1380349	50.0000	
	49 Trichloroethene	95	10.891	10.891	(1.087)	657733	50.0000	48.93
	50 Methylcyclohexane	55	10.995	10.995	(1.097)	393729	50.0000	45.41 (M)
	51 1,2-Dichloropropane	63	11.309	11.309	(1.129)	604947	50.0000	52.21
	52 Methyl methacrylate	69	11.605	11.605	(1.158)	273577	50.0000	60.46
	53 Bromodichloromethane	83	11.831	11.831	(1.181)	1368691	50.0000	54.76
	54 Dibromomethane	93	11.918	11.918	(1.189)	773367	50.0000	55.93
	55 1,4-Dioxane	88	11.988	11.988	(1.196)	74888	1000.00	1387
	56 2-Nitropropane	43	12.092	12.092	(1.207)	223852	50.0000	58.42
	57 2-chloroethyl vinyl ether	63	12.719	12.719	(1.269)	205960	50.0000	64.35
	58 4-Methyl-2-pentanone	100	12.806	12.806	(1.278)	41519	50.0000	71.86
	59 cis-1,3-Dichloropropene	75	13.189	13.189	(1.316)	853897	50.0000	55.68
$	61 Toluene-d8	98	13.746	13.746	(0.784)	1090289	50.0000	50.94
	62 Toluene	92	13.937	13.937	(0.795)	718096	50.0000	50.52
	63 trans-1,3-Dichloropropene	75	14.460	14.460	(0.824)	605180	50.0000	57.00
	64 Ethyl methacrylate	69	14.582	14.582	(0.831)	553605	50.0000	56.74
	65 1,1,2-Trichloroethane	83	14.808	14.808	(0.844)	489579	50.0000	52.44
	66 2-Hexanone	43	15.017	15.017	(0.856)	225430	50.0000	70.33
	67 1,3-Dichloropropane	76	15.469	15.469	(0.882)	766356	50.0000	54.17
	68 Tetrachloroethene	164	15.522	15.522	(0.885)	583863	50.0000	44.84 (M)
M	69 Xylenes (total)	106				1539226	150.000	160.2
	70 Chlorodibromomethane	129	16.009	16.009	(0.913)	1131166	50.0000	54.40
	71 1,2-Dibromoethane	107	16.514	16.514	(0.941)	876833	50.0000	55.24
*	72 Chlorobenzene-d5	117	17.541	17.541	(1.000)	1095989	50.0000	
	73 Chlorobenzene	112	17.645	17.645	(1.006)	1084444	50.0000	50.97
	74 1,1,1,2-Tetrachloroethane	131	17.802	17.802	(1.015)	674066	50.0000	52.55
	75 Ethylbenzene	91	17.872	17.872	(1.019)	1400090	50.0000	49.74
	76 m,p-Xylenes	106	18.081	18.081	(1.031)	1056048	100.000	110.3
	77 o-Xylene	106	19.247	19.247	(1.097)	483178	50.0000	49.97
	78 Styrene	104	19.334	19.334	(1.102)	863851	50.0000	52.32
	79 Bromoform	173	20.083	20.083	(1.145)	851297	50.0000	55.80
	80 Isopropylbenzene	105	20.239	20.239	(1.154)	1282963	50.0000	50.58

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7965.D
Report Date: 06-May-2005 10:23

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
81	Cyclohexanone	55	20.344	20.344	(1.160)	313760	500.000	606.3
82	1,1,2,2-Tetrachloroethane	83	20.727	20.727	(1.182)	962493	50.0000	55.18
$ 83	4-Bromofluorobenzene	95	20.883	20.883	(0.909)	1014660	50.0000	50.42
84	1,2,3-Trichloropropane	75	21.110	21.110	(0.919)	560568	50.0000	52.04(M)
85	Bromobenzene	156	21.301	21.301	(0.927)	712699	50.0000	50.47
86	n-Propylbenzene	91	21.353	21.353	(0.930)	1854470	50.0000	47.77
87	2-Chlorotoluene	91	21.667	21.667	(0.943)	1259842	50.0000	49.32
88	trans-1,4-dichloro-2-butene	53	21.702	21.702	(0.945)	58644	50.0000	49.79
89	1,3,5-Trimethylbenzene	105	21.702	21.702	(0.945)	1045451	50.0000	48.30
90	4-Chlorotoluene	91	21.771	21.771	(0.948)	1489713	50.0000	48.10
91	t-Butylbenzene	119	22.328	22.328	(0.972)	1503326	50.0000	49.71
92	Pentachloroethane	167	22.346	22.346	(0.973)	508501	50.0000	52.97
93	1,2,4-Trimethylbenzene	105	22.363	22.363	(0.973)	982567	50.0000	50.56
94	sec-Butylbenzene	105	22.624	22.624	(0.985)	1544087	50.0000	47.86
95	4-Isopropyltoluene	119	22.816	22.816	(0.993)	1017390	50.0000	48.80
96	1,3-Dichlorobenzene	146	22.868	22.868	(0.995)	837912	50.0000	50.47
* 97	1,4 Dichlorobenzene-d4	152	22.972	22.972	(1.000)	600344	50.0000	
98	1,4-Dichlorobenzene	146	23.007	23.007	(1.002)	1002441	50.0000	49.71
99	n-Butylbenzene	91	23.286	23.286	(1.014)	1011618	50.0000	49.27
100	1,2-Dichlorobenzene	146	23.408	23.408	(1.019)	711282	50.0000	48.79
101	1,2-Dibromo-3-chloropropane	75	24.174	24.174	(1.052)	111841	50.0000	47.84
103	1,2,4-Trichlorobenzene	180	24.905	24.905	(1.084)	234987	50.0000	56.42
104	Hexachlorobutadiene	225	25.027	25.027	(1.089)	260311	50.0000	54.19
105	Naphthalene	128	25.114	25.114	(1.093)	199838	50.0000	49.18
106	1,2,3-Trichlorobenzene	180	25.323	25.323	(1.102)	159380	50.0000	49.43

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7965.D
Report Date: 06-May-2005 10:23

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

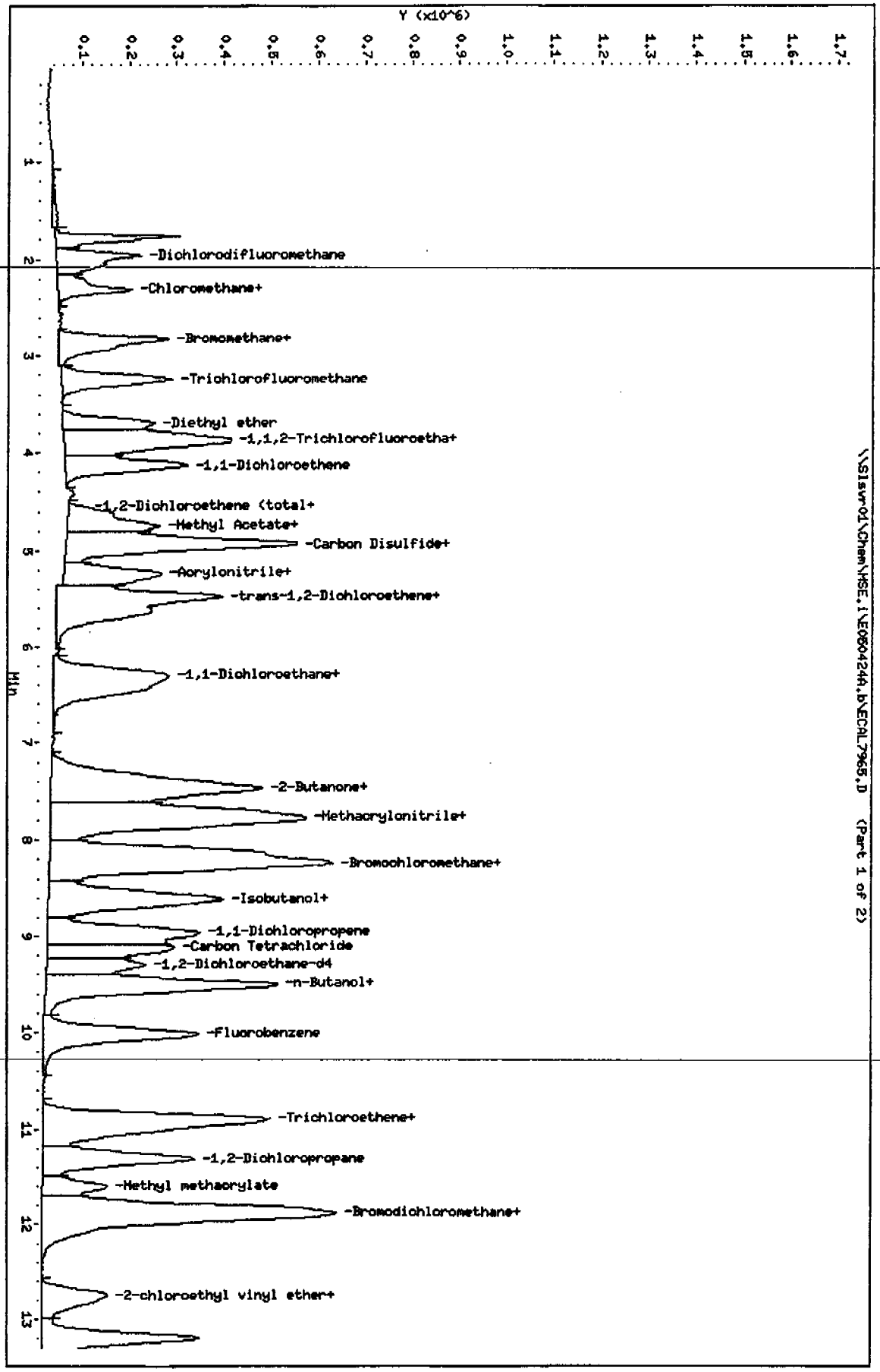
Instrument ID: MSE.i
Lab File ID: ECAL7965.D
Lab Smp Id: VSTD050
Analysis Type: VOA
Quant Type: ISTD
Operator: JDH
Method File: \\Slsvr01\Chem\MSE.i\E050424A.b\8260B-5mL.m
Misc Info: VBLKE114A;

Calibration Date: 24-APR-2005
Calibration Time: 20:06
Client Smp ID: VSTD050
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	1380349	690175	2760698	1380349	0.00
72 Chlorobenzene-d5	1095989	547995	2191978	1095989	0.00
97 1,4 Dichlorobenze	600344	300172	1200688	600344	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	10.02	9.52	10.52	10.02	0.00
72 Chlorobenzene-d5	17.54	17.04	18.04	17.54	0.00
97 1,4 Dichlorobenze	22.97	22.47	23.47	22.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^6)
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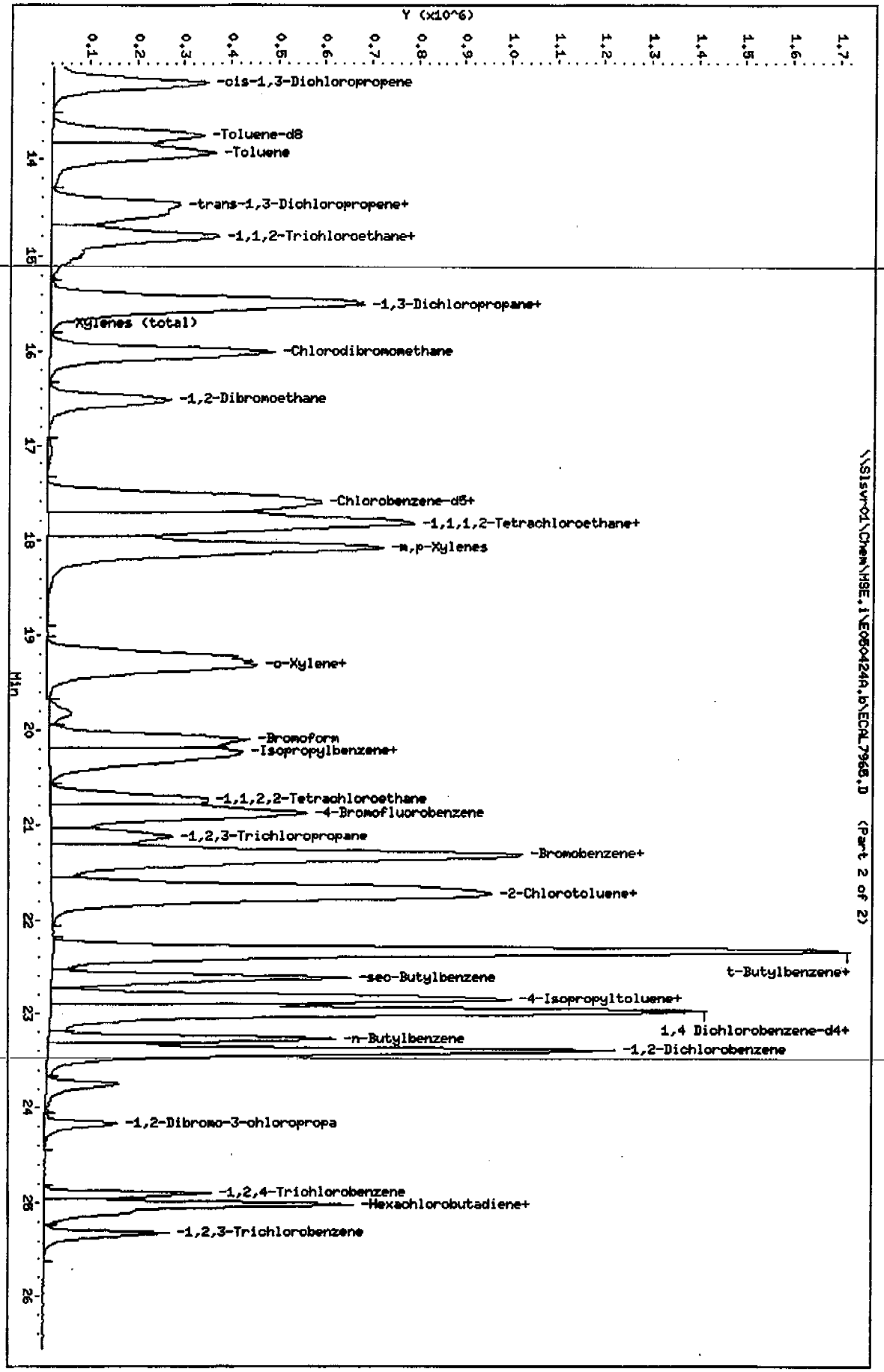
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
Min
1
2
3
4
5
6
7
8
9
10
11
12
13
Data File: \\Slsvr01\Chem\MSE.i\E0604240.b\ECAL7965.D
Date : 24-APR-2005 20:06
Client ID: VSTD050
Sample Info: VSTD050;E0604240.b;
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: MSE.i
Operator: JDH
Column diameter: 0.53
\\Slsvr01\Chem\MSE.i\E0604240.b\ECAL7965.D (Part 1 of 2)
-Dichlorodifluoromethane
-Chloromethane+
-Bromomethane+
-Trichlorofluoromethane
-Diethyl ether
-1,1,2-Trichlorofluoroetha+
-1,1-Dichloroethene
-1,2-Dichloroethene (total+
-Methyl Acetate+
-Carbon Disulfide+
-Acrylonitrile+
-trans-1,2-Dichloroethene+
-1,1-Dichloroethane+
-2-Butanone+
-Methacrylonitrile+
-Bromochloromethane+
-Isobutanol+
-1,1-Dichloropropene
-Carbon Tetrachloride
-1,2-Dichloroethane-d4
-n-Butanol+
-Fluorobenzene
-Trichloroethene+
-1,2-Dichloropropane
-Methyl methacrylate
-Bromodichloromethane+
-2-chloroethyl vinyl ether+


Y (x10^6)
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0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
-cis-1,3-Dichloropropene
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane+
-1,3-Dichloropropane+
Xylenes (total)
-Chlorodibromomethane
-1,2-Dibromoethane
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
-o-Xylene+
-Bromoform
-Isopropylbenzene+
-1,1,2,2-Tetrachloroethane
-4-Bromofluorobenzene
-1,2,3-Trichloropropane
-Bromobenzene+
-2-Chlorotoluene+
t-Butylbenzene+
-sec-Butylbenzene
-4-Isopropyltoluene+
1,4 Dichlorobenzene-d4+
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene+
-1,2,3-Trichlorobenzene
Min
14
15
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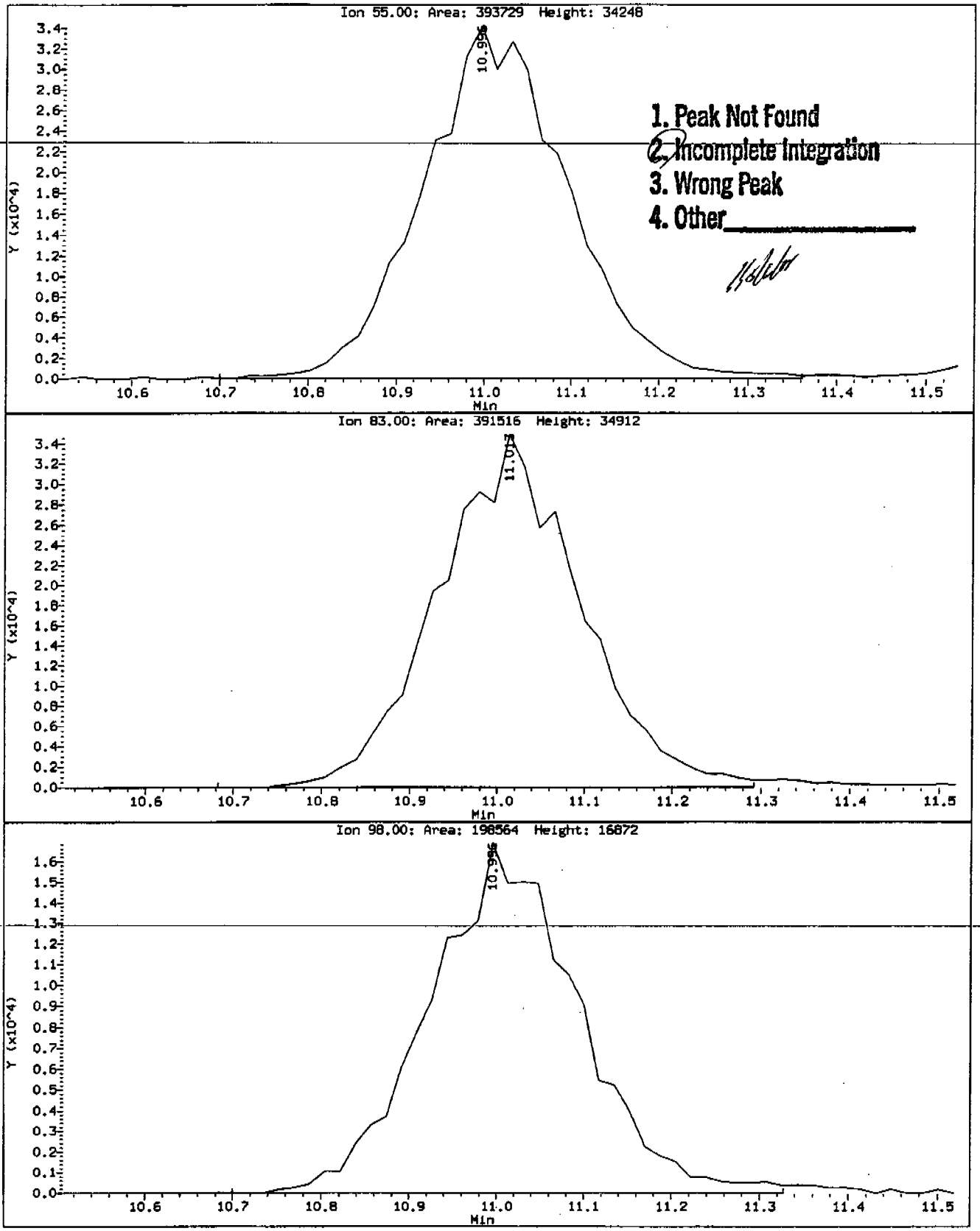
26
Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7965.D
Date : 24-APR-2005 20:06
Client ID: VSTD050
Sample Info: VSTD050;E050424A.b;
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: MSE.i
Operator: JDH
Column diameter: 0.53
\\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7965.D (Part 2 of 2)

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7965.D
Injection Date: 24-APR-2005 20:06
Instrument: MSE.i
Client Sample ID: VSTD050

Compound: Methylcyclohexane
CAS Number:



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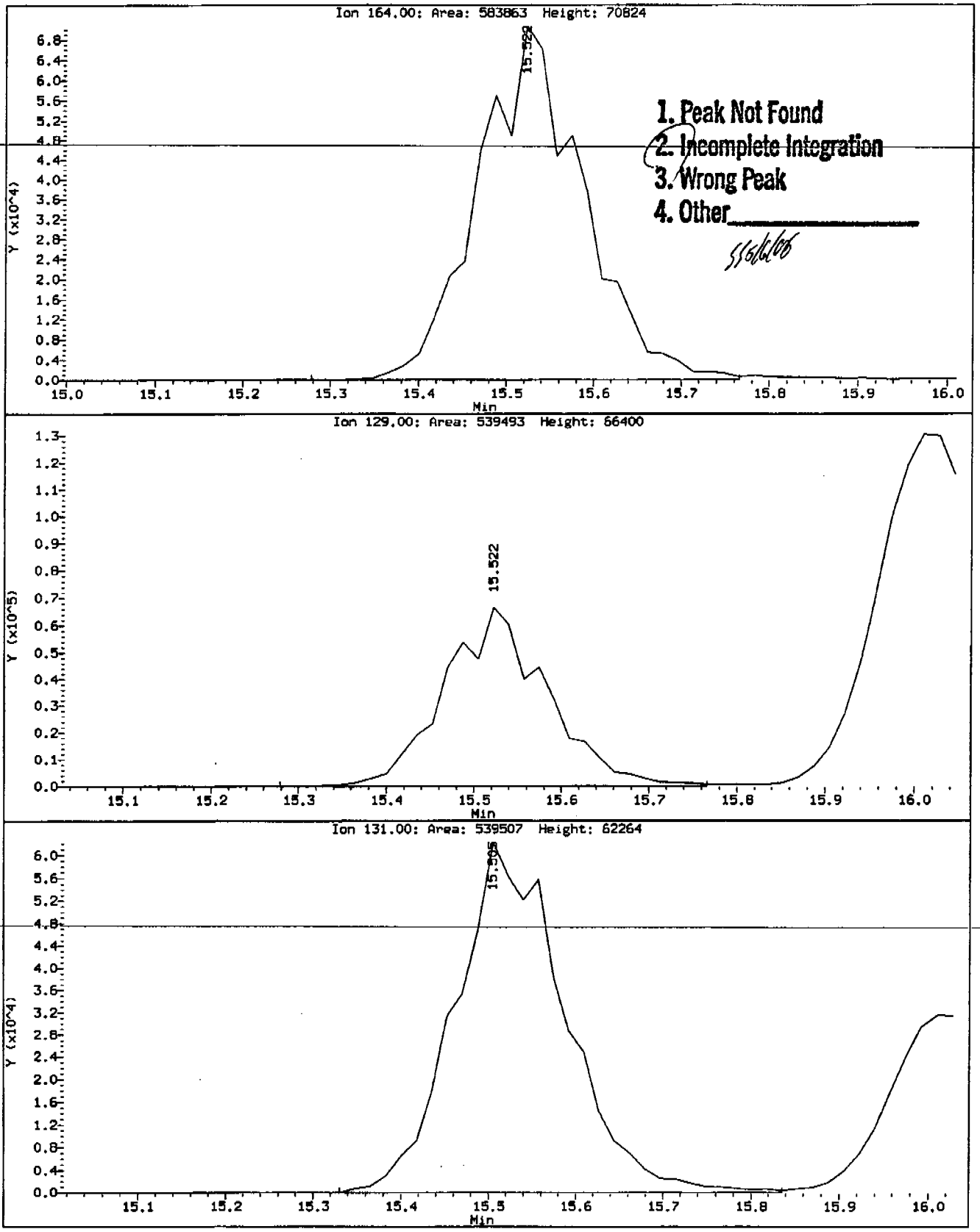
Injection Date: 24-APR-2005 20:06
Instrument: MSE.i
Client Sample ID: VSTD050

Compound: Tetrachloroethene
CAS Number: 127-18-4



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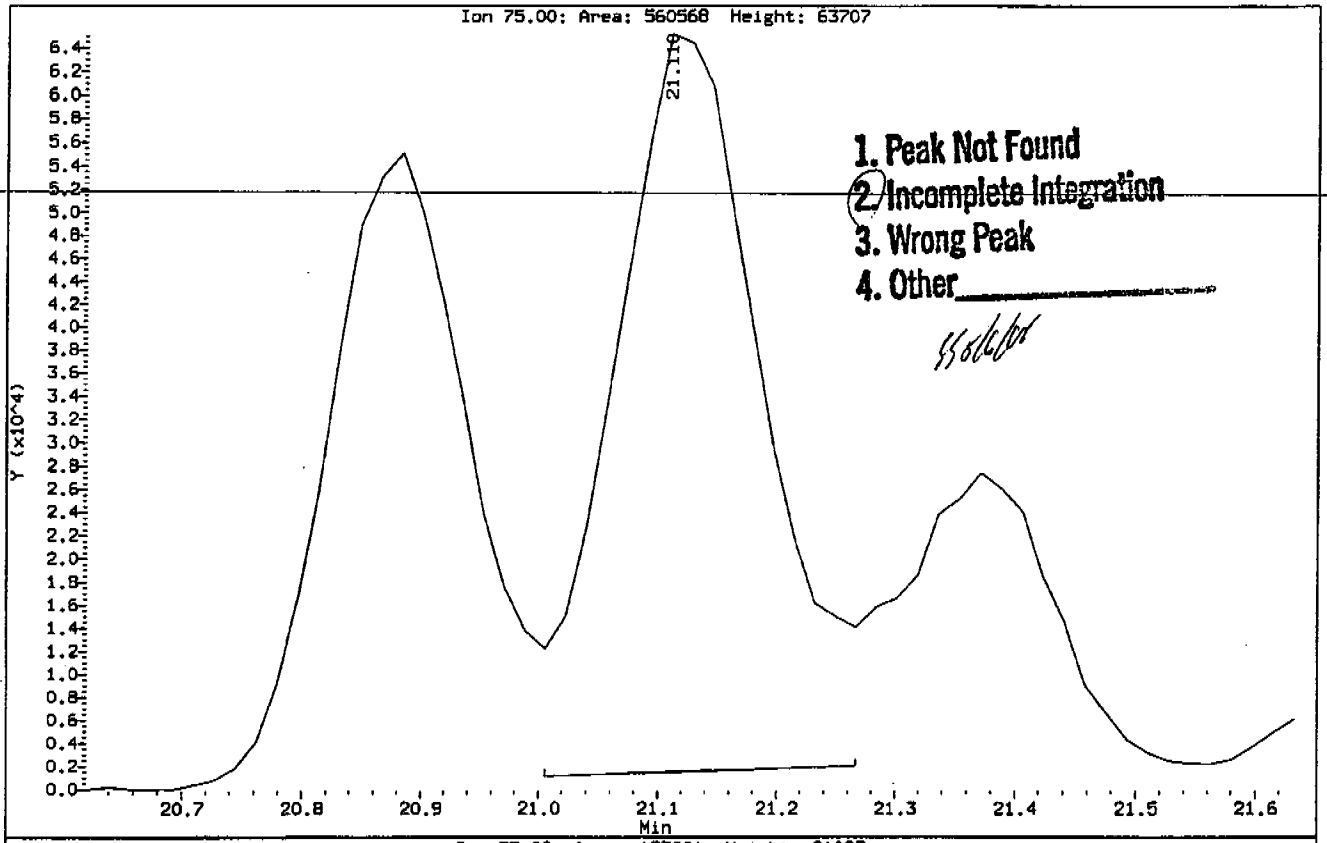
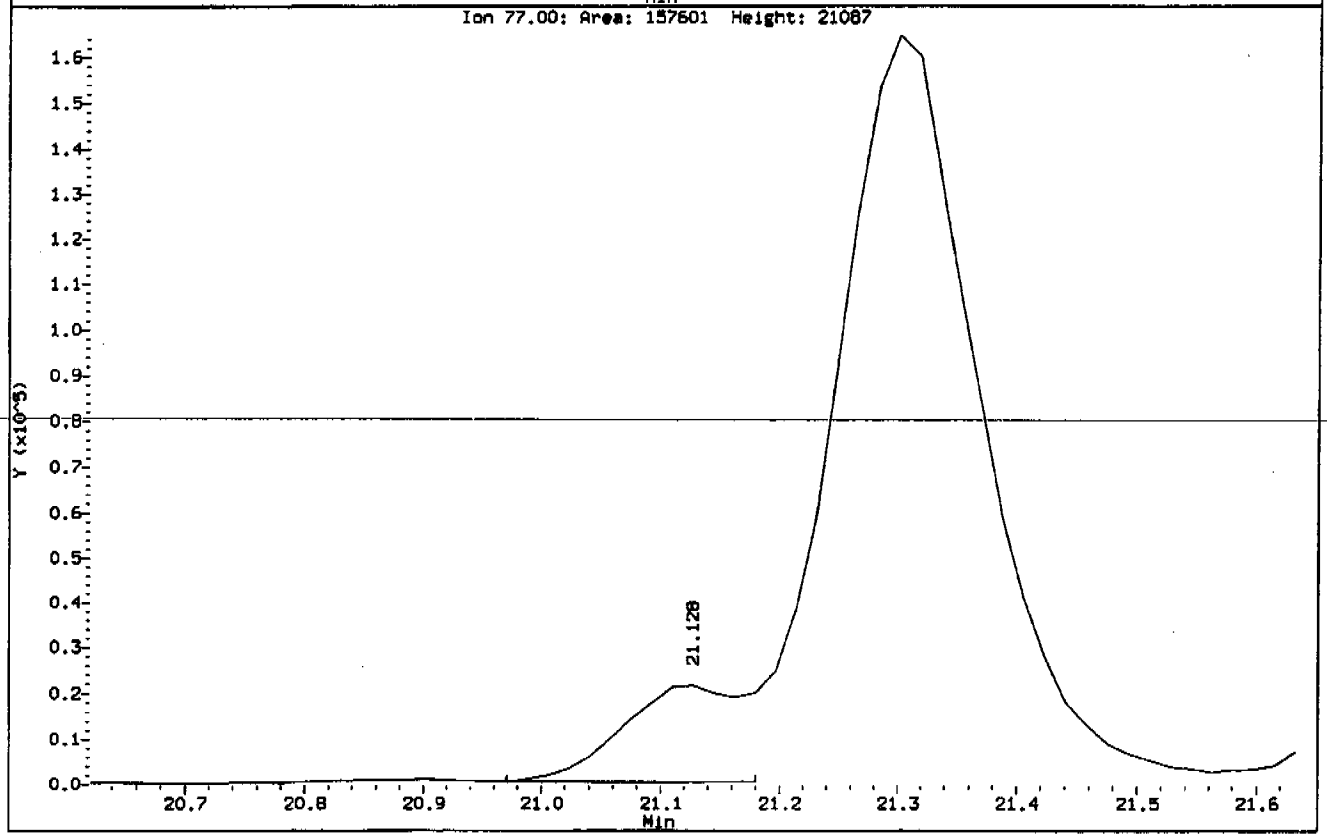
Injection Date: 24-APR-2005 20:06
Instrument: MSE.i
Client Sample ID: VSTD050

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7966.D
Report Date: 06-May-2005 10:23

STL St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7966.D
Lab Smp Id: VSTD020 Client Smp ID: VSTD020
Inj Date : 24-APR-2005 21:49
Operator : JDH Inst ID: MSE.i
Smp Info : VSTD020;E050424A.b;
Misc Info : VBLKE114A;
Comment : NONE
Method : \\Slsvr01\Chem\MSE.i\E050424A.b\8260B-5mL.m
Meth Date : 06-May-2005 10:23 stitess Quant Type: ISTD
Cal Date : 24-APR-2005 21:49 Cal File: ECAL7966.D
Als bottle: 2 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.10
Processing Host: SLVOA03

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume
Vo	5.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.940	1.940	(0.194)	418102	20.0000	20.08
3	Chloromethane	50	2.270	2.270	(0.227)	167888	20.0000	18.04
4	Vinyl Chloride	62	2.305	2.305	(0.230)	164717	20.0000	19.47
5	Bromomethane	94	2.810	2.810	(0.281)	304247	20.0000	19.35
6	Chloroethane	64	2.915	2.915	(0.291)	122894	20.0000	20.08
7	Trichlorofluoromethane	101	3.245	3.245	(0.324)	417623	20.0000	19.38
8	Diethyl ether	74	3.681	3.681	(0.367)	145129	40.0000	37.96
9	1,1,2-Trichlorofluoroethane	151	3.889	3.889	(0.388)	326755	20.0000	20.12
10	Acrolein	56	3.855	3.855	(0.385)	39271	100.000	88.69(a)
11	Acetone	58	3.976	3.976	(0.397)	10550	20.0000	16.12
12	1,1-Dichloroethene	96	4.116	4.116	(0.411)	238121	20.0000	20.38
M 14	1,2-Dichloroethene (total)	96				528801	40.0000	39.23
17	Methyl Acetate	74	4.760	4.760	(0.475)	21468	20.0000	18.61(a)
13	Acetonitrile	41	4.394	4.394	(0.439)	39232	100.000	92.26(a)
15	Iodomethane	142	4.603	4.603	(0.460)	355406	20.0000	19.40
16	Allyl chloride	39	4.742	4.742	(0.473)	140545	20.0000	19.59
18	Carbon Disulfide	76	4.882	4.882	(0.487)	790136	20.0000	19.92
19	Methylene Chloride	84	4.934	4.934	(0.493)	271890	20.0000	18.14
20	Acrylonitrile	53	5.195	5.195	(0.519)	146667	100.000	94.45(a)
21	MTBE	73	5.282	5.282	(0.527)	312543	20.0000	19.65
22	trans-1,2-Dichloroethene	96	5.456	5.456	(0.545)	257290	20.0000	19.74
23	n-Hexane	57	5.613	5.613	(0.560)	236187	20.0000	20.30

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7966.D
Report Date: 06-May-2005 10:23

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	24 Vinyl acetate	43	5.630	5.630	(0.562)	176964	20.0000	20.70
	25 1,1-Dichloroethane	63	6.274	6.274	(0.626)	475250	20.0000	19.81
	26 2-Chloro-1,3-butadiene	53	6.448	6.448	(0.644)	251572	20.0000	20.41
	28 2-Butanone	72	7.232	7.232	(0.722)	12680	20.0000	20.18
	29 Propionitrile	54	7.319	7.319	(0.731)	58262	100.000	95.97(a)
	30 2,2-Dichloropropane	77	7.354	7.354	(0.734)	315178	20.0000	20.83
	31 cis-1,2-Dichloroethene	96	7.458	7.458	(0.745)	271511	20.0000	19.49
	32 Ethyl acetate	88	7.597	7.597	(0.758)	15384	40.0000	43.00(M)
	33 Methacrylonitrile	41	7.702	7.702	(0.769)	387910	100.000	103.3
	34 Chloroform	83	7.772	7.772	(0.776)	542974	20.0000	19.29
	35 Bromochloromethane	128	8.102	8.102	(0.809)	186586	20.0000	19.72
	36 Tetrahydrofuran	71	8.224	8.224	(0.821)	69386	100.000	101.4
$	37 Dibromofluoromethane	113	8.242	8.242	(0.823)	535942	20.0000	19.24
	39 Isobutanol	43	8.607	8.607	(0.859)	29039	400.000	544.2(M)
	38 1,1,1-Trichloroethane	97	8.607	8.607	(0.859)	376955	20.0000	20.03
	40 Cyclohexane	84	8.607	8.607	(0.859)	151434	20.0000	21.84
	41 1,1-Dichloropropene	75	8.938	8.938	(0.892)	366626	20.0000	20.09
	42 Carbon Tetrachloride	117	9.129	9.129	(0.911)	368535	20.0000	19.89
$	43 1,2-Dichloroethane-d4	102	9.303	9.303	(0.929)	57107	20.0000	20.23
	45 n-Butanol	56	9.460	9.460	(0.944)	30390	200.000	199.3(a)
	46 Benzene	78	9.495	9.495	(0.948)	579608	20.0000	19.99
	47 1,2-Dichloroethane	62	9.495	9.495	(0.948)	267944	20.0000	18.99
*	48 Fluorobenzene	96	10.017	10.017	(1.000)	1749580	50.0000	
	49 Trichloroethene	95	10.870	10.870	(1.085)	343066	20.0000	20.14
	50 Methylcyclohexane	55	11.009	11.009	(1.099)	230252	20.0000	20.95
	51 1,2-Dichloropropane	63	11.288	11.288	(1.127)	281706	20.0000	19.18
	52 Methyl methacrylate	69	11.601	11.601	(1.158)	111420	20.0000	19.43
	53 Bromodichloromethane	83	11.828	11.828	(1.181)	605142	20.0000	19.10
	54 Dibromomethane	93	11.897	11.897	(1.188)	325499	20.0000	18.57
	55 1,4-Dioxane	88	12.002	12.002	(1.198)	26260	400.000	383.7(a)
	56 2-Nitropropane	43	12.106	12.106	(1.209)	82398	20.0000	16.96
	57 2-chloroethyl vinyl ether	63	12.716	12.716	(1.269)	80975	20.0000	19.96(a)
	58 4-Methyl-2-pentanone	100	12.820	12.820	(1.280)	15953	20.0000	21.78
	59 cis-1,3-Dichloropropene	75	13.186	13.186	(1.316)	376588	20.0000	19.37
$	61 Toluene-d8	98	13.743	13.743	(0.784)	519376	20.0000	20.59
	62 Toluene	92	13.917	13.917	(0.794)	354463	20.0000	21.16
	63 trans-1,3-Dichloropropene	75	14.456	14.456	(0.824)	250292	20.0000	20.01
	64 Ethyl methacrylate	69	14.578	14.578	(0.831)	234903	20.0000	20.43
	65 1,1,2-Trichloroethane	83	14.787	14.787	(0.843)	228373	20.0000	20.76
	66 2-Hexanone	43	15.013	15.013	(0.856)	86612	20.0000	22.93
	67 1,3-Dichloropropane	76	15.449	15.449	(0.881)	326992	20.0000	19.62
	68 Tetrachloroethene	164	15.518	15.518	(0.885)	305493	20.0000	19.91
M	69 Xylenes (total)	106				731777	60.0000	64.65
	70 Chlorodibromomethane	129	16.006	16.006	(0.913)	459279	20.0000	18.75
	71 1,2-Dibromoethane	107	16.528	16.528	(0.942)	353159	20.0000	18.88
*	72 Chlorobenzene-d5	117	17.538	17.538	(1.000)	1291384	50.0000	(M)
	73 Chlorobenzene	112	17.642	17.642	(1.006)	508153	20.0000	20.27
	74 1,1,1,2-Tetrachloroethane	131	17.799	17.799	(1.015)	303688	20.0000	20.09
	75 Ethylbenzene	91	17.851	17.851	(1.018)	670523	20.0000	20.22
	76 m,p-Xylenes	106	18.077	18.077	(1.031)	499331	40.0000	44.25
	77 o-Xylene	106	19.209	19.209	(1.095)	232446	20.0000	20.40
	78 Styrene	104	19.331	19.331	(1.102)	404148	20.0000	20.77
	79 Bromoform	173	20.114	20.114	(1.147)	336015	20.0000	18.69
	80 Isopropylbenzene	105	20.253	20.253	(1.155)	585253	20.0000	19.58

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7966.D
Report Date: 06-May-2005 10:23

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
81	Cyclohexanone	55	20.340	20.340	(1.160)	128562	200.000	210.8
82	1,1,2,2-Tetrachloroethane	83	20.723	20.723	(1.182)	380228	20.0000	18.50
$ 83	4-Bromofluorobenzene	95	20.863	20.863	(0.908)	423466	20.0000	18.93
84	1,2,3-Trichloropropane	75	21.106	21.106	(0.919)	227248	20.0000	18.98(M)
85	Bromobenzene	156	21.298	21.298	(0.927)	314779	20.0000	20.05
86	n-Propylbenzene	91	21.333	21.333	(0.929)	874302	20.0000	20.26
87	2-Chlorotoluene	91	21.663	21.663	(0.943)	569548	20.0000	20.06
88	trans-1,4-dichloro-2-butene	53	21.716	21.716	(0.945)	28372	20.0000	21.67
89	1,3,5-Trimethylbenzene	105	21.698	21.698	(0.945)	478260	20.0000	19.88
90	4-Chlorotoluene	91	21.750	21.750	(0.947)	724959	20.0000	21.06
91	t-Butylbenzene	119	22.325	22.325	(0.972)	705734	20.0000	20.99
92	Pentachloroethane	167	22.342	22.342	(0.973)	231514	20.0000	21.69
93	1,2,4-Trimethylbenzene	105	22.360	22.360	(0.973)	444117	20.0000	20.56
94	sec-Butylbenzene	105	22.621	22.621	(0.985)	736622	20.0000	20.54
95	4-Isopropyltoluene	119	22.812	22.812	(0.993)	466347	20.0000	20.12
96	1,3-Dichlorobenzene	146	22.865	22.865	(0.995)	363428	20.0000	19.69
* 97	1,4 Dichlorobenzene-d4	152	22.969	22.969	(1.000)	667401	50.0000	
98	1,4-Dichlorobenzene	146	23.004	23.004	(1.002)	437907	20.0000	19.54
99	n-Butylbenzene	91	23.282	23.282	(1.014)	465562	20.0000	20.40
100	1,2-Dichlorobenzene	146	23.387	23.387	(1.018)	323094	20.0000	19.94
101	1,2-Dibromo-3-chloropropane	75	24.153	24.153	(1.052)	43953	20.0000	16.91
103	1,2,4-Trichlorobenzene	180	24.901	24.901	(1.084)	55833	20.0000	12.06
104	Hexachlorobutadiene	225	25.006	25.006	(1.089)	70066	20.0000	13.12
105	Naphthalene	128	25.110	25.110	(1.093)	61472	20.0000	13.61
106	1,2,3-Trichlorobenzene	180	25.337	25.337	(1.103)	48380	20.0000	13.50

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7966.D
Report Date: 06-May-2005 10:23

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

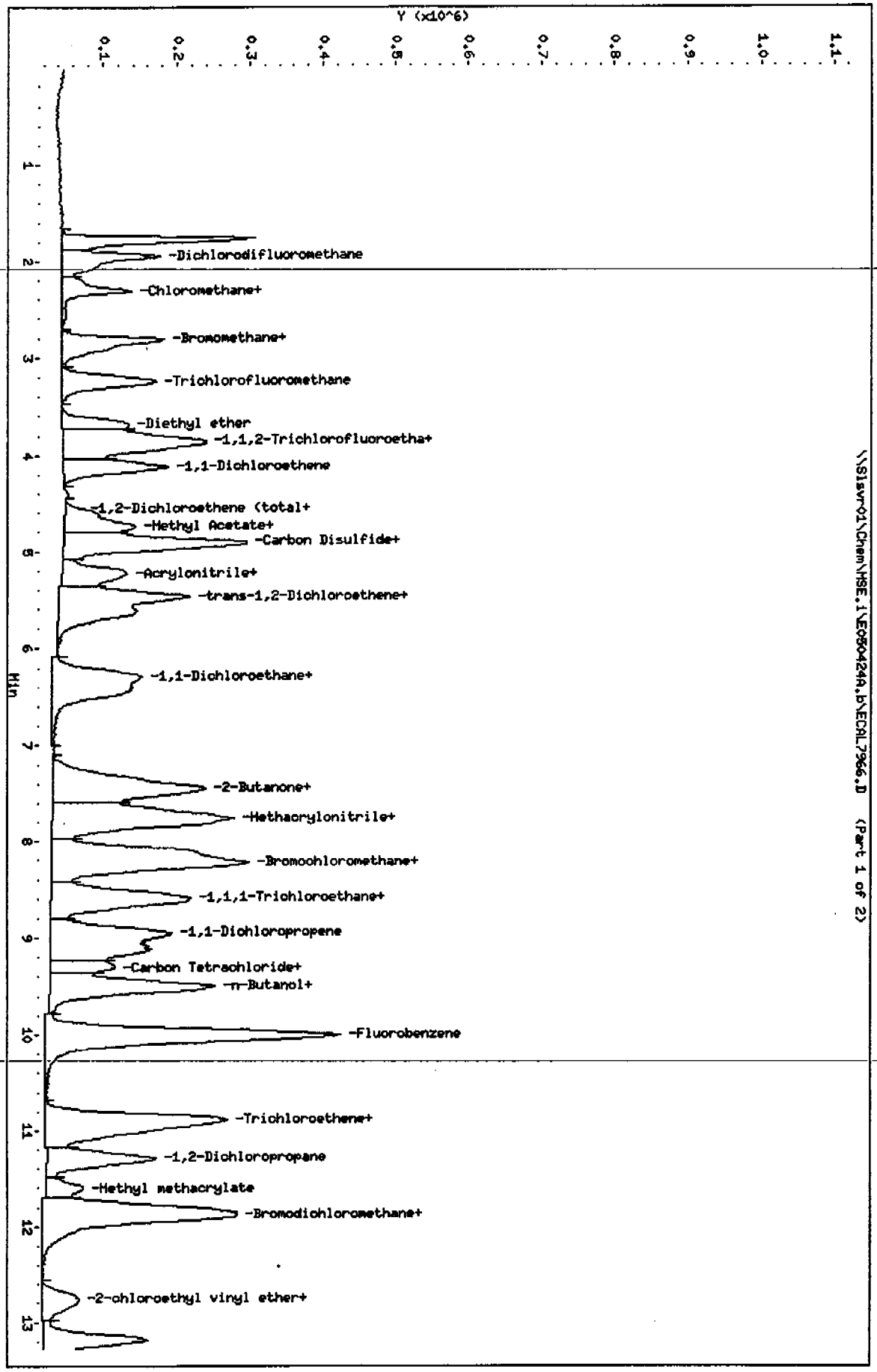
Instrument ID: MSE.i
Lab File ID: ECAL7966.D
Lab Smp Id: VSTD020
Analysis Type: VOA
Quant Type: ISTD
Operator: JDH
Method File: \\Slsvr01\Chem\MSE.i\E050424A.b\8260B-5mL.m
Misc Info: VBLKE114A;

Calibration Date: 24-APR-2005
Calibration Time: 20:06
Client Smp ID: VSTD020
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	1380349	690175	2760698	1749580	26.75
72 Chlorobenzene-d5	1095989	547995	2191978	1291384	17.83
97 1,4 Dichlorobenze	600344	300172	1200688	667401	11.17

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	10.02	9.52	10.52	10.02	-0.03
72 Chlorobenzene-d5	17.54	17.04	18.04	17.54	-0.02
97 1,4 Dichlorobenze	22.97	22.47	23.47	22.97	-0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.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0.4
0.5
0.6
0.7
0.8
0.9
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1.1
Min
1
2
3
4
5
6
7
8
9
10
11
12
13
-Dichlorodifluoromethane
-Chloromethane+
-Bromomethane+
-Trichlorofluoromethane
-Diethyl ether
-1,1,2-Trichlorofluoroetha+
-1,1-Dichloroethene
-1,2-Dichloroethene (total+
-Methyl Acetate+
-Carbon Disulfide+
-Acrylonitrile+
-trans-1,2-Dichloroethene+
-1,1-Dichloroethane+
-2-Butanone+
-Methacrylonitrile+
-Bromochloromethane+
-1,1,1-Trichloroethane+
-1,1-Dichloropropene
-Carbon Tetrachloride+
-n-Butanol+
-Fluorobenzene
-Trichloroethene+
-1,2-Dichloropropane
-Methyl methacrylate
-Bromodichloromethane+
-2-chloroethyl vinyl ether+
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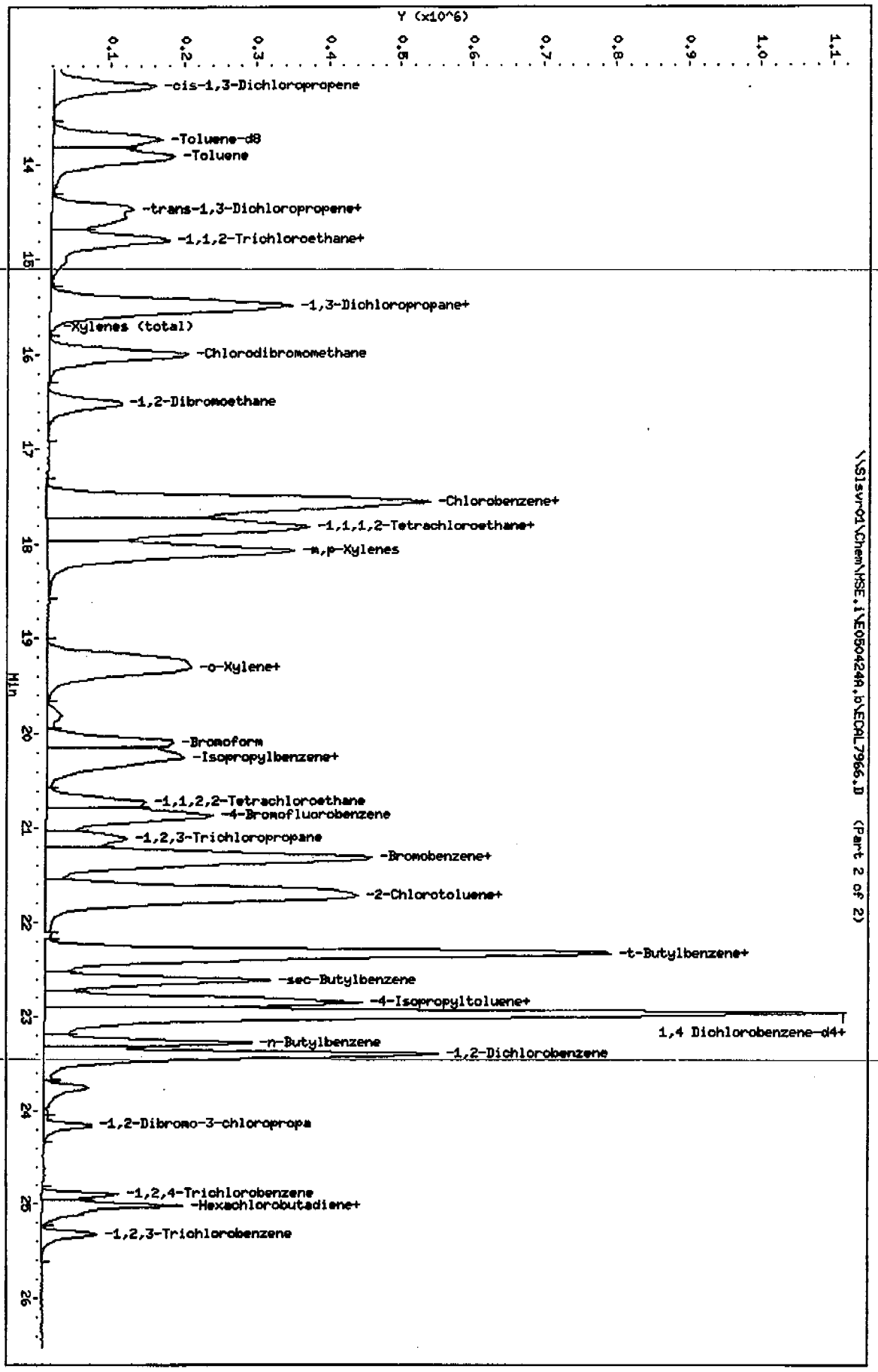
Data File: \\Slsvr01\Chem\HSE.i\E0504244.b\ECAL7966.D
Date : 24-APR-2005 21:49
Client ID: VSTD020
Sample Info: VSTD020;E0504244.b;
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: HSE.i
Operator: JDH
Column diameter: 0.53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0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
Min
14
15
16
17
18
19
20
21
22
23
24
25
26
-cis-1,3-Dichloropropene
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane+
-1,3-Dichloropropane+
-Xylenes (total)
-Chlorodibromomethane
-1,2-Dibromoethane
-Chlorobenzene+
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
-o-Xylene+
-Bromoform
-Isopropylbenzene+
-1,1,2,2-Tetrachloroethane
-4-Bromofluorobenzene
-1,2,3-Trichloropropane
-Bromobenzene+
-2-Chlorotoluene+
-t-Butylbenzene+
-sec-Butylbenzene
-4-Isopropyltoluene+
1,4 Dichlorobenzene-d4+
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene+
-1,2,3-Trichlorobenzene
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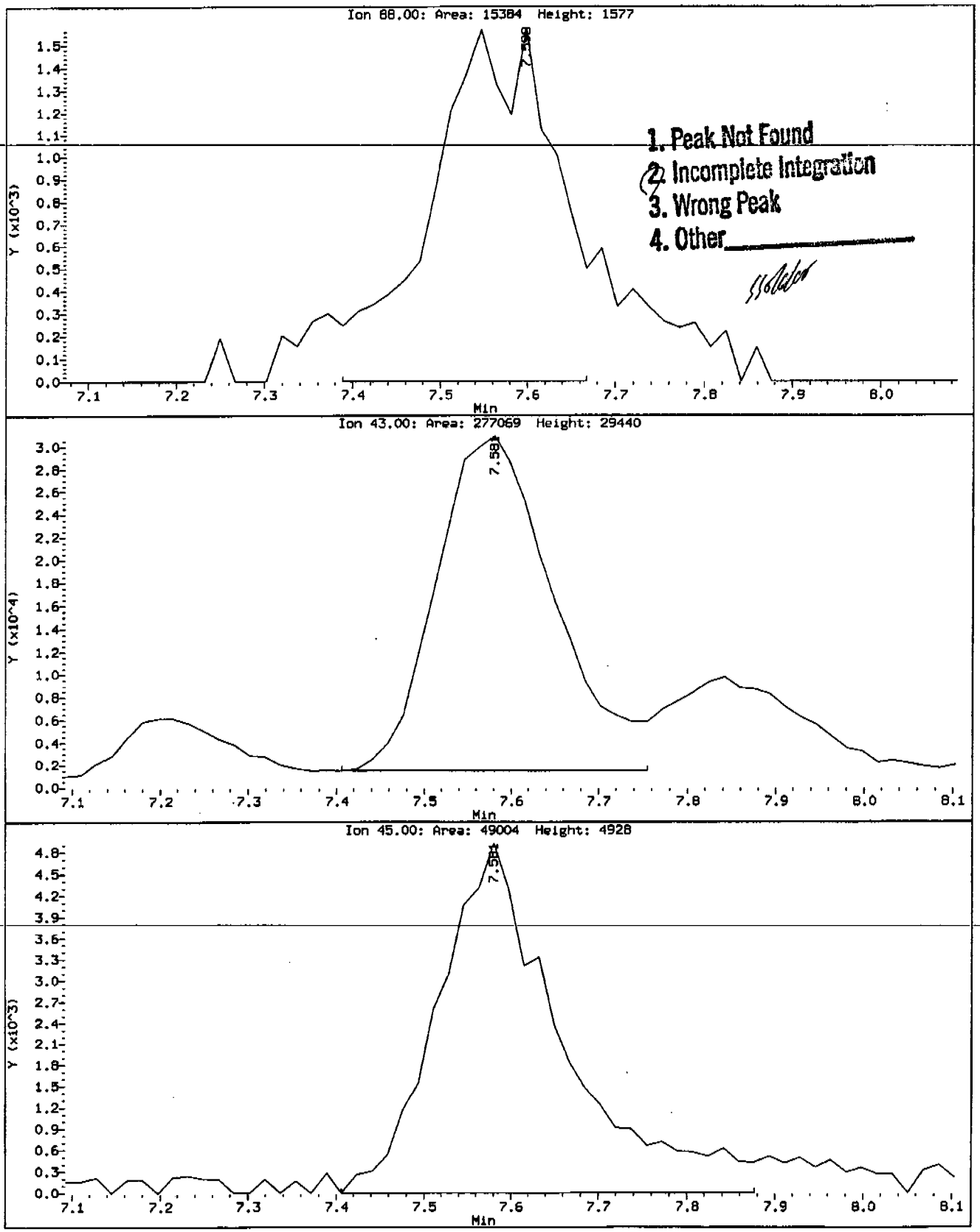
Data File: \\Slsvr01\Chem\MSE.i\E0504240.b\EOAL7966.D
Date : 24-APR-2005 21:49
Client ID: VSTD020
Sample Info: VSTD020;E0504240.b;
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: MSE.i
Operator: JDH
Column diameter: 0.53

Data File: \\Slavr01\Chem\MSE.1\E050424A.b\ECAL7966.D
Injection Date: 24-APR-2005 21:49
Instrument: MSE.1
Client Sample ID: VSTD020

Compound: Ethyl acetate
CAS Number: 141-78-6



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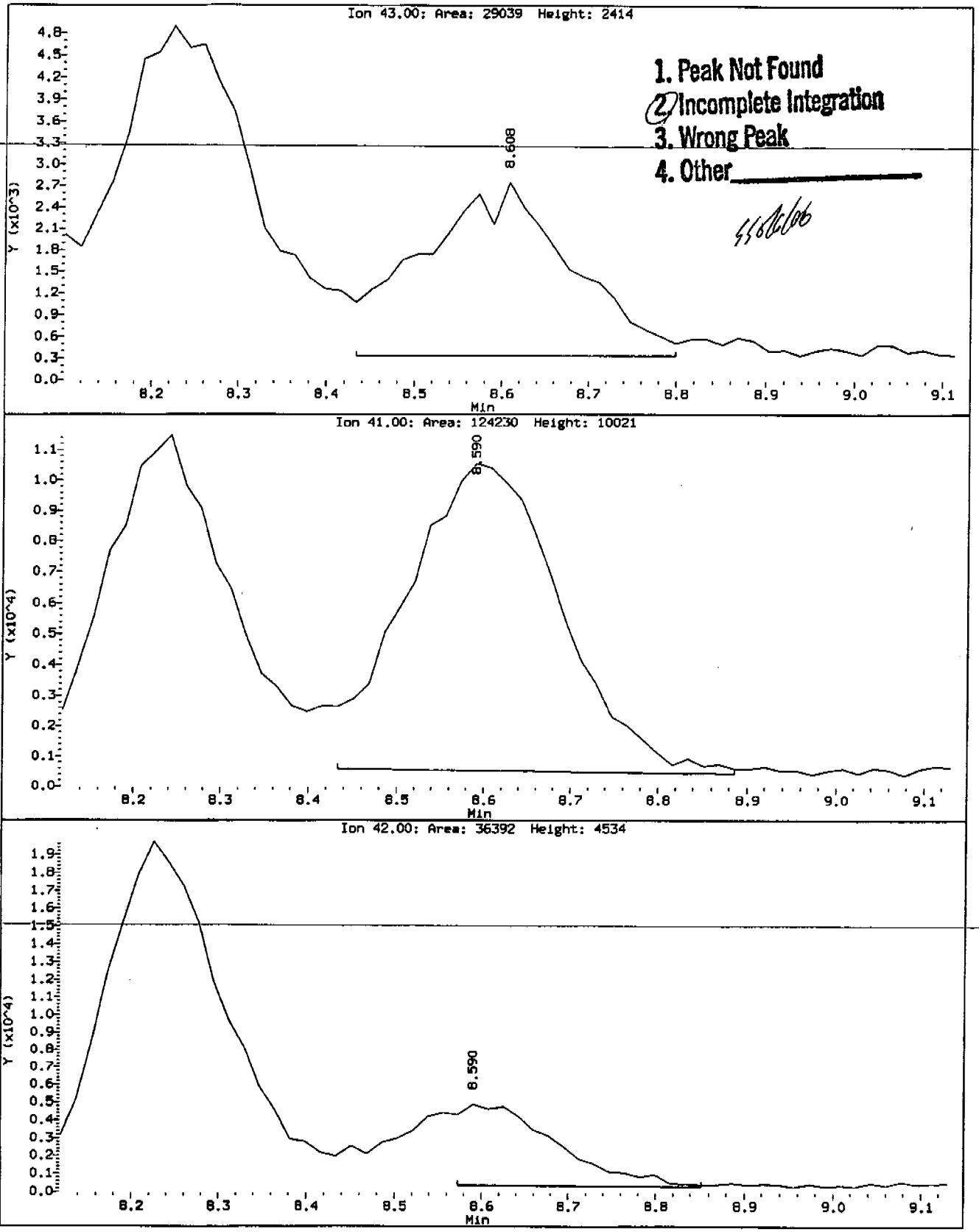
Injection Date: 24-APR-2005 21:49
Instrument: MSE.i
Client Sample ID: VSTD020

Compound: Isobutanol
CAS Number: 78-83-1



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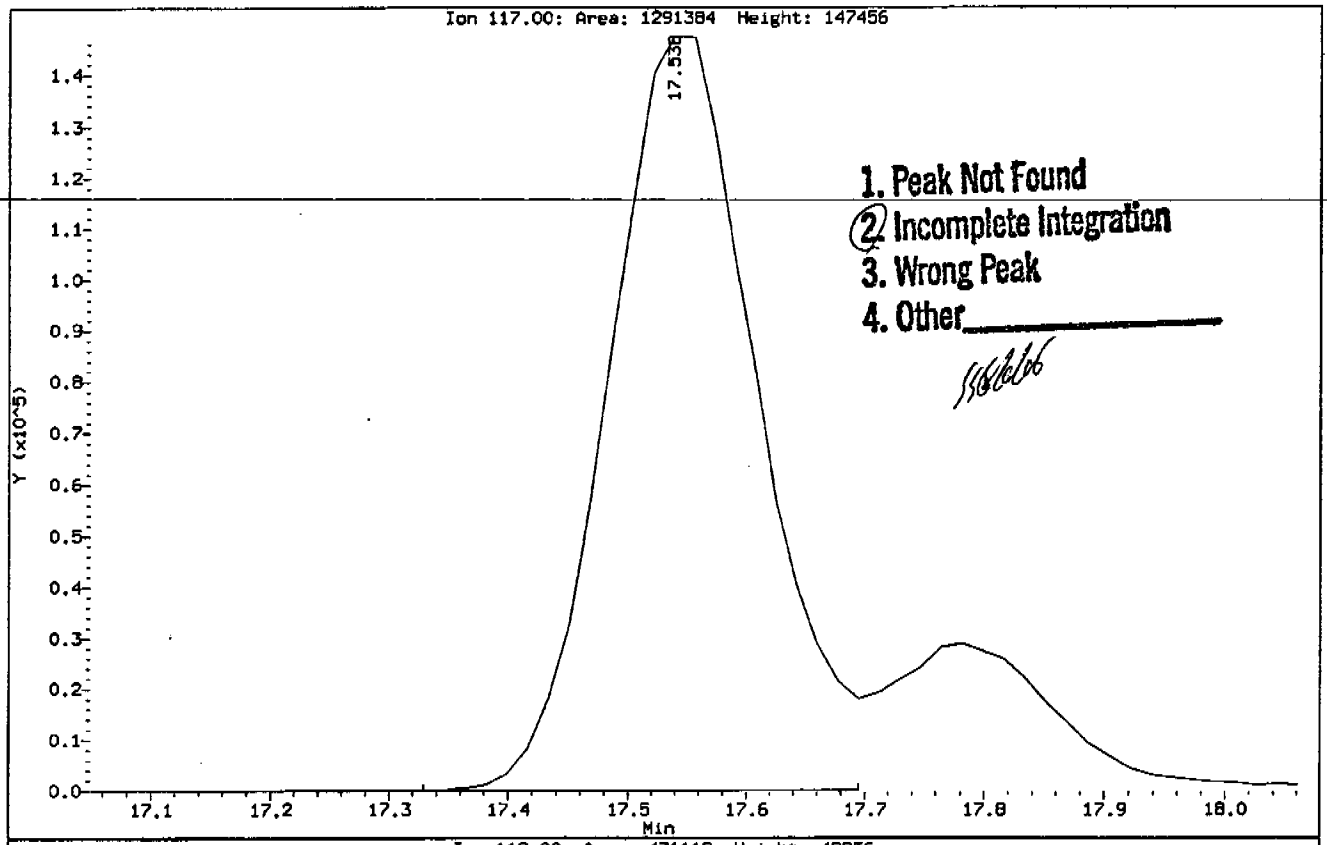
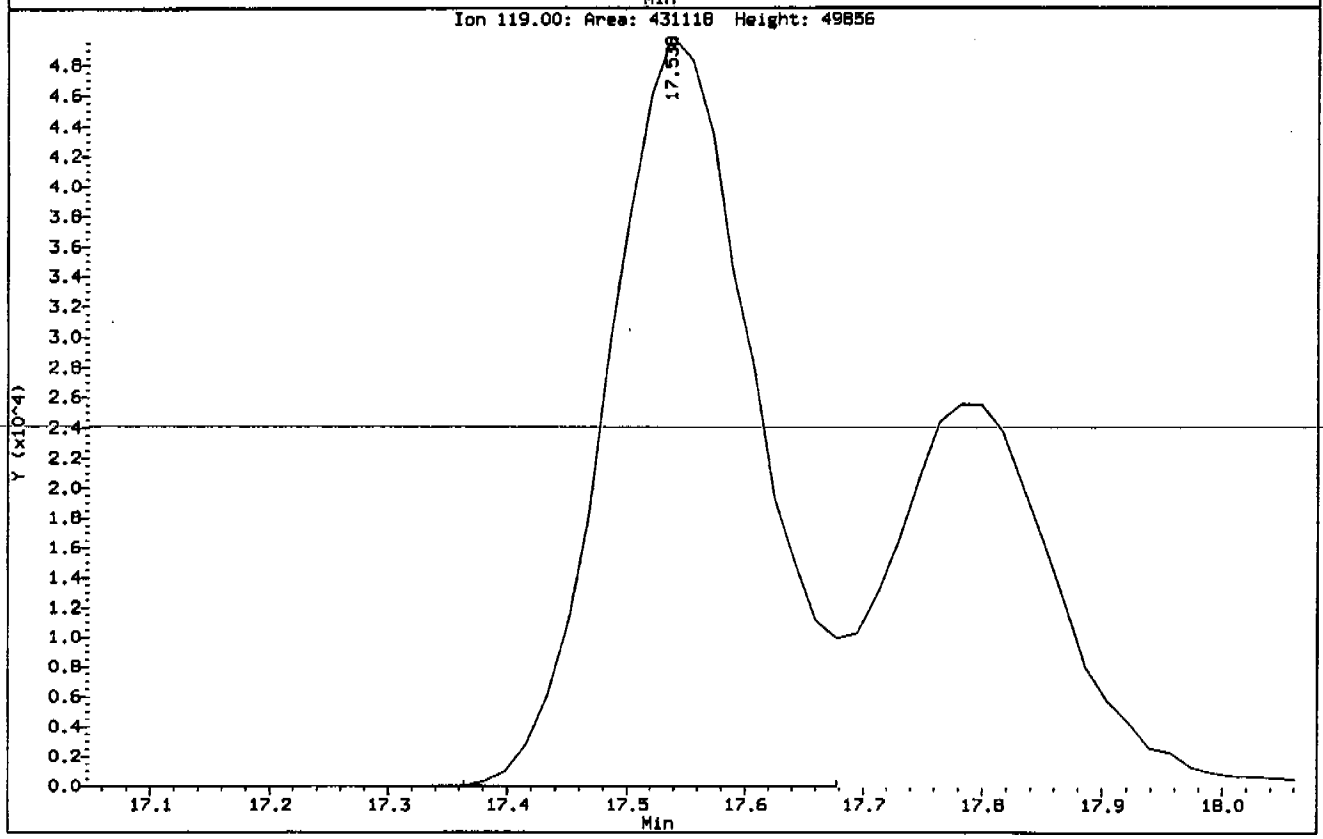
Injection Date: 24-APR-2005 21:49
Instrument: MSE.i
Client Sample ID: VSTD020

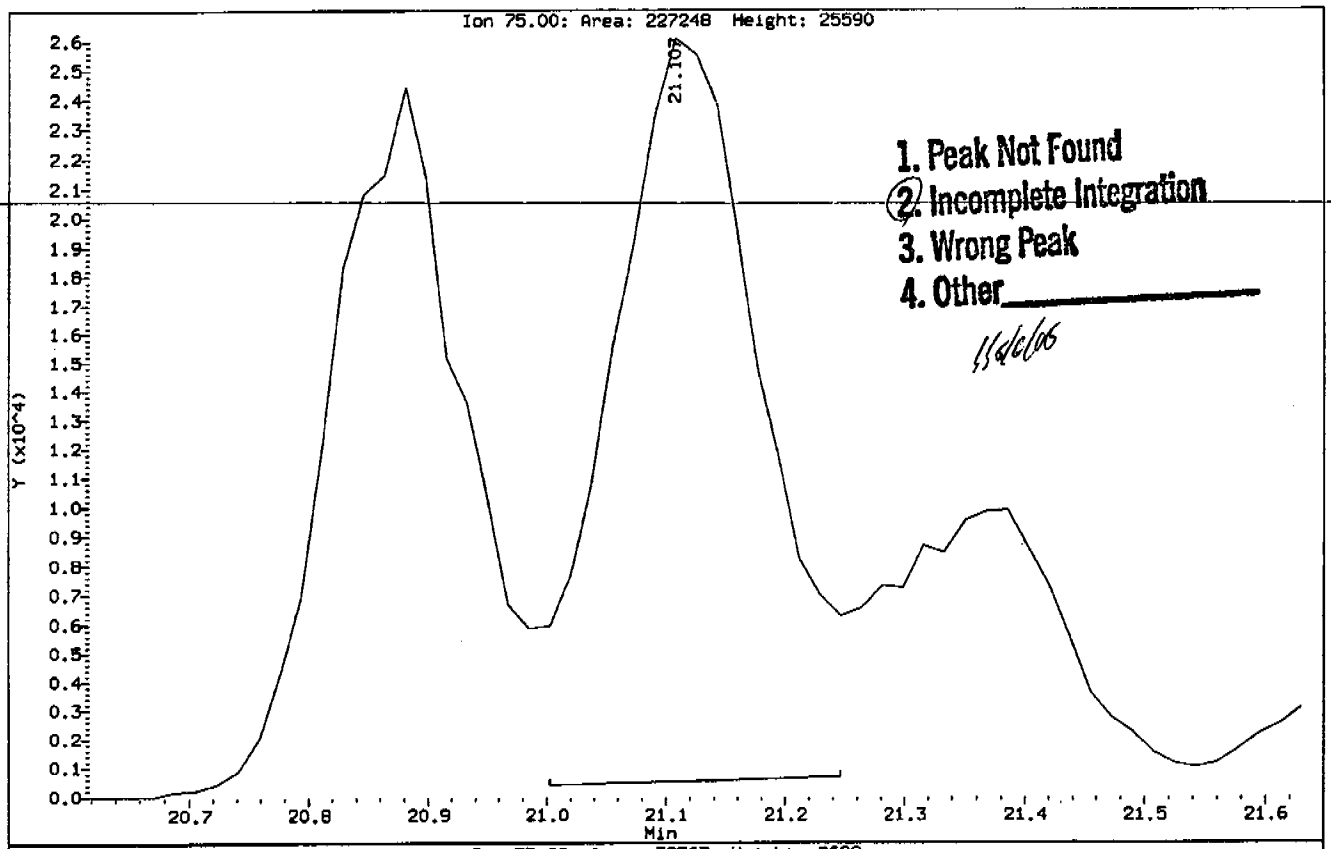
Compound: Chlorobenzene-d5
CAS Number: 3114-55-4

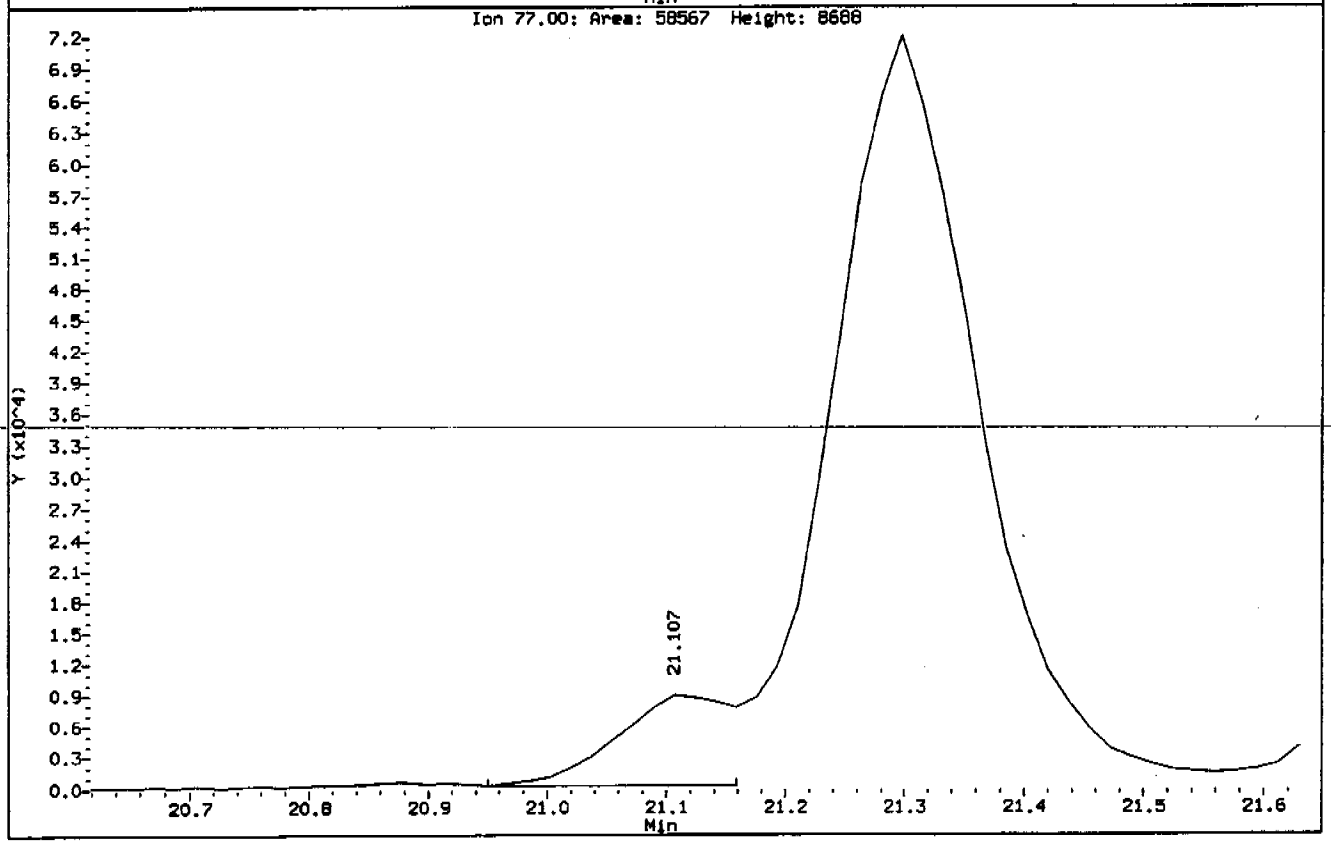




Data File: \\Slavr01\Chem\MSE.i\E050424A.b\ECAL7966.D
Injection Date: 24-APR-2005 21:49
Instrument: MSE.i
Client Sample ID: VSTD020

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7967.D
Report Date: 06-May-2005 10:23

STL St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7967.D
Lab Smp Id: VSTD010 Client Smp ID: VSTD010
Inj Date : 24-APR-2005 22:24
Operator : JDH Inst ID: MSE.i
Smp Info : VSTD010;E050424A.b;
Misc Info : VBLKE114A;
Comment : NONE
Method : \\Slsvr01\Chem\MSE.i\E050424A.b\8260B-5mL.m
Meth Date : 06-May-2005 10:23 stitess Quant Type: ISTD
Cal Date : 24-APR-2005 22:24 Cal File: ECAL7967.D
Als bottle: 3 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.10
Processing Host: SLVOA03

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume
Vo	5.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.942	1.942	(0.194)	196059	10.0000	9.935
3	Chloromethane	50	2.291	2.291	(0.228)	89084	10.0000	10.10
4	Vinyl Chloride	62	2.325	2.325	(0.232)	89004	10.0000	11.10
5	Bromomethane	94	2.830	2.830	(0.282)	168122	10.0000	11.28
6	Chloroethane	64	2.935	2.935	(0.292)	61036	10.0000	10.52
7	Trichlorofluoromethane	101	3.248	3.248	(0.324)	208463	10.0000	10.21
8	Diethyl ether	74	3.701	3.701	(0.369)	71206	20.0000	19.65
9	1,1,2-Trichlorofluoroethane	151	3.875	3.875	(0.386)	152974	10.0000	9.936
10	Acrolein	56	3.875	3.875	(0.386)	20304	50.0000	48.38(a)
11	Acetone	58	3.997	3.997	(0.398)	6122	10.0000	9.872
12	1,1-Dichloroethene	96	4.119	4.119	(0.410)	109726	10.0000	9.909
M 14	1,2-Dichloroethene (total)	96				249440	20.0000	19.53
17	Methyl Acetate	74	4.763	4.763	(0.475)	10811	10.0000	9.888(a)
13	Acetonitrile	41	4.432	4.432	(0.442)	18318	50.0000	45.45(aM)
15	Iodomethane	142	4.623	4.623	(0.461)	158275	10.0000	9.117
16	Allyl chloride	39	4.780	4.780	(0.476)	70413	10.0000	10.36
18	Carbon Disulfide	76	4.902	4.902	(0.488)	380416	10.0000	10.12
19	Methylene Chloride	84	4.954	4.954	(0.494)	134647	10.0000	9.476
20	Acrylonitrile	53	5.233	5.233	(0.521)	65312	50.0000	44.38(a)
21	MTBE	73	5.285	5.285	(0.527)	151043	10.0000	10.02
22	trans-1,2-Dichloroethene	96	5.476	5.476	(0.546)	122502	10.0000	9.916
23	n-Hexane	57	5.650	5.650	(0.563)	116911	10.0000	10.60

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7967.D
Report Date: 06-May-2005 10:23

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24	Vinyl acetate	43	5.616	5.616	(0.559)	82090	10.0000	10.13
	25	1,1-Dichloroethane	63	6.295	6.295	(0.627)	227307	10.0000	9.997
	26	2-Chloro-1,3-butadiene	53	6.451	6.451	(0.643)	122539	10.0000	10.49
	28	2-Butanone	72	7.252	7.252	(0.723)	6338	10.0000	10.64
	29	Propionitrile	54	7.339	7.339	(0.731)	29660	50.0000	51.54(a)
	30	2,2-Dichloropropane	77	7.391	7.391	(0.736)	143229	10.0000	9.989
	31	cis-1,2-Dichloroethene	96	7.496	7.496	(0.747)	126938	10.0000	9.616
	32	Ethyl acetate	88	7.600	7.600	(0.757)	6617	20.0000	19.52(a)
	33	Methacrylonitrile	41	7.739	7.739	(0.771)	183626	50.0000	51.61(a)
	34	Chloroform	83	7.809	7.809	(0.778)	258478	10.0000	9.690
	35	Bromochloromethane	128	8.122	8.122	(0.809)	85999	10.0000	9.587
	36	Tetrahydrofuran	71	8.262	8.262	(0.823)	30166	50.0000	46.51
$	37	Dibromofluoromethane	113	8.244	8.244	(0.821)	251488	10.0000	9.527
	39	Isobutanol	43	8.627	8.627	(0.860)	11218	200.000	221.8(M)
	38	1,1,1-Trichloroethane	97	8.627	8.627	(0.860)	174791	10.0000	9.800
	40	Cyclohexane	84	8.645	8.645	(0.861)	65264	10.0000	9.930
	41	1,1-Dichloropropene	75	8.958	8.958	(0.892)	172431	10.0000	9.967
	42	Carbon Tetrachloride	117	9.132	9.132	(0.910)	174814	10.0000	9.956
$	43	1,2-Dichloroethane-d4	102	9.324	9.324	(0.929)	26529	10.0000	9.916
	45	n-Butanol	56	9.550	9.550	(0.951)	12365	100.000	85.56(a)
	46	Benzene	78	9.515	9.515	(0.948)	270923	10.0000	9.858
	47	1,2-Dichloroethane	62	9.515	9.515	(0.948)	126082	10.0000	9.426
*	48	Fluorobenzene	96	10.037	10.037	(1.000)	1658271	50.0000	
	49	Trichloroethene	95	10.908	10.908	(1.087)	153066	10.0000	9.478
	50	Methylcyclohexane	55	10.995	10.995	(1.095)	110047	10.0000	10.56(M)
	51	1,2-Dichloropropane	63	11.326	11.326	(1.128)	135693	10.0000	9.748
	52	Methyl methacrylate	69	11.622	11.622	(1.158)	52068	10.0000	9.579
	53	Bromodichloromethane	83	11.830	11.830	(1.179)	286419	10.0000	9.540
	54	Dibromomethane	93	11.917	11.917	(1.187)	159869	10.0000	9.624
	55	1,4-Dioxane	88	12.005	12.005	(1.196)	12657	200.000	195.1(a)
	56	2-Nitropropane	43	12.109	12.109	(1.206)	41596	10.0000	9.036(M)
	57	2-chloroethyl vinyl ether	63	12.753	12.753	(1.271)	33600	10.0000	8.738(a)
	58	4-Methyl-2-pentanone	100	12.840	12.840	(1.279)	5068	10.0000	7.302
	59	cis-1,3-Dichloropropene	75	13.206	13.206	(1.316)	172077	10.0000	9.340
$	61	Toluene-d8	98	13.763	13.763	(0.784)	247829	10.0000	9.879
	62	Toluene	92	13.954	13.954	(0.795)	162974	10.0000	9.783
	63	trans-1,3-Dichloropropene	75	14.477	14.477	(0.825)	119956	10.0000	9.641
	64	Ethyl methacrylate	69	14.598	14.598	(0.831)	115046	10.0000	10.06
	65	1,1,2-Trichloroethane	83	14.807	14.807	(0.843)	103834	10.0000	9.489
	66	2-Hexanone	43	15.086	15.086	(0.859)	39340	10.0000	10.47
	67	1,3-Dichloropropane	76	15.451	15.451	(0.880)	155470	10.0000	9.376
	68	Tetrachloroethene	164	15.521	15.521	(0.884)	145271	10.0000	9.518
M	69	Xylenes (total)	106				353085	30.0000	31.36
	70	Chlorodibromomethane	129	16.026	16.026	(0.913)	229663	10.0000	9.424
	71	1,2-Dibromoethane	107	16.531	16.531	(0.942)	177639	10.0000	9.549
*	72	Chlorobenzene-d5	117	17.558	17.558	(1.000)	1284549	50.0000	(M)
	73	Chlorobenzene	112	17.645	17.645	(1.005)	247448	10.0000	9.923
	74	1,1,1,2-Tetrachloroethane	131	17.802	17.802	(1.014)	144734	10.0000	9.627
	75	Ethylbenzene	91	17.871	17.871	(1.018)	322618	10.0000	9.779
	76	m,p-Xylenes	106	18.080	18.080	(1.030)	245060	20.0000	21.83
	77	o-Xylene	106	19.229	19.229	(1.095)	108025	10.0000	9.532
	78	Styrene	104	19.351	19.351	(1.102)	175799	10.0000	9.084
	79	Bromoform	173	20.099	20.099	(1.145)	163028	10.0000	9.118
	80	Isopropylbenzene	105	20.256	20.256	(1.154)	289629	10.0000	9.742

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7967.D
Report Date: 06-May-2005 10:23

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	81 Cyclohexanone	55	20.361	20.361	(1.160)	58665	100.000	96.72
	82 1,1,2,2-Tetrachloroethane	83	20.744	20.744	(1.181)	194731	10.0000	9.525
$	83 4-Bromofluorobenzene	95	20.883	20.883	(0.909)	212653	10.0000	10.16
	84 1,2,3-Trichloropropane	75	21.127	21.127	(0.920)	106678	10.0000	9.524(M)
	85 Bromobenzene	156	21.318	21.318	(0.928)	147731	10.0000	10.06
	86 n-Propylbenzene	91	21.353	21.353	(0.930)	416982	10.0000	10.33
	87 2-Chlorotoluene	91	21.666	21.666	(0.943)	295916	10.0000	11.14
	88 trans-1,4-dichloro-2-butene	53	21.718	21.718	(0.945)	13516	10.0000	11.04
	89 1,3,5-Trimethylbenzene	105	21.718	21.718	(0.945)	225016	10.0000	9.998
	90 4-Chlorotoluene	91	21.771	21.771	(0.948)	323185	10.0000	10.03
	91 t-Butylbenzene	119	22.328	22.328	(0.972)	315585	10.0000	10.04
	92 Pentachloroethane	167	22.345	22.345	(0.973)	101364	10.0000	10.15
	93 1,2,4-Trimethylbenzene	105	22.363	22.363	(0.973)	193742	10.0000	9.587
	94 sec-Butylbenzene	105	22.624	22.624	(0.985)	338407	10.0000	10.09
	95 4-Isopropyltoluene	119	22.815	22.815	(0.993)	211293	10.0000	9.746
	96 1,3-Dichlorobenzene	146	22.867	22.867	(0.995)	165659	10.0000	9.596
*	97 1,4 Dichlorobenzene-d4	152	22.972	22.972	(1.000)	624298	50.0000	
	98 1,4-Dichlorobenzene	146	23.007	23.007	(1.002)	210206	10.0000	10.02
	99 n-Butylbenzene	91	23.285	23.285	(1.014)	206947	10.0000	9.692(M)
	100 1,2-Dichlorobenzene	146	23.407	23.407	(1.019)	135609	10.0000	8.945
	101 1,2-Dibromo-3-chloropropane	75	24.173	24.173	(1.052)	21904	10.0000	9.009
	103 1,2,4-Trichlorobenzene	180	24.904	24.904	(1.084)	29226	10.0000	6.748
	104 Hexachlorobutadiene	225	25.026	25.026	(1.089)	31917	10.0000	6.389
	105 Naphthalene	128	25.130	25.130	(1.094)	32258	10.0000	7.634
	106 1,2,3-Trichlorobenzene	180	25.322	25.322	(1.102)	21982	10.0000	6.556

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7967.D
Report Date: 06-May-2005 10:23

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

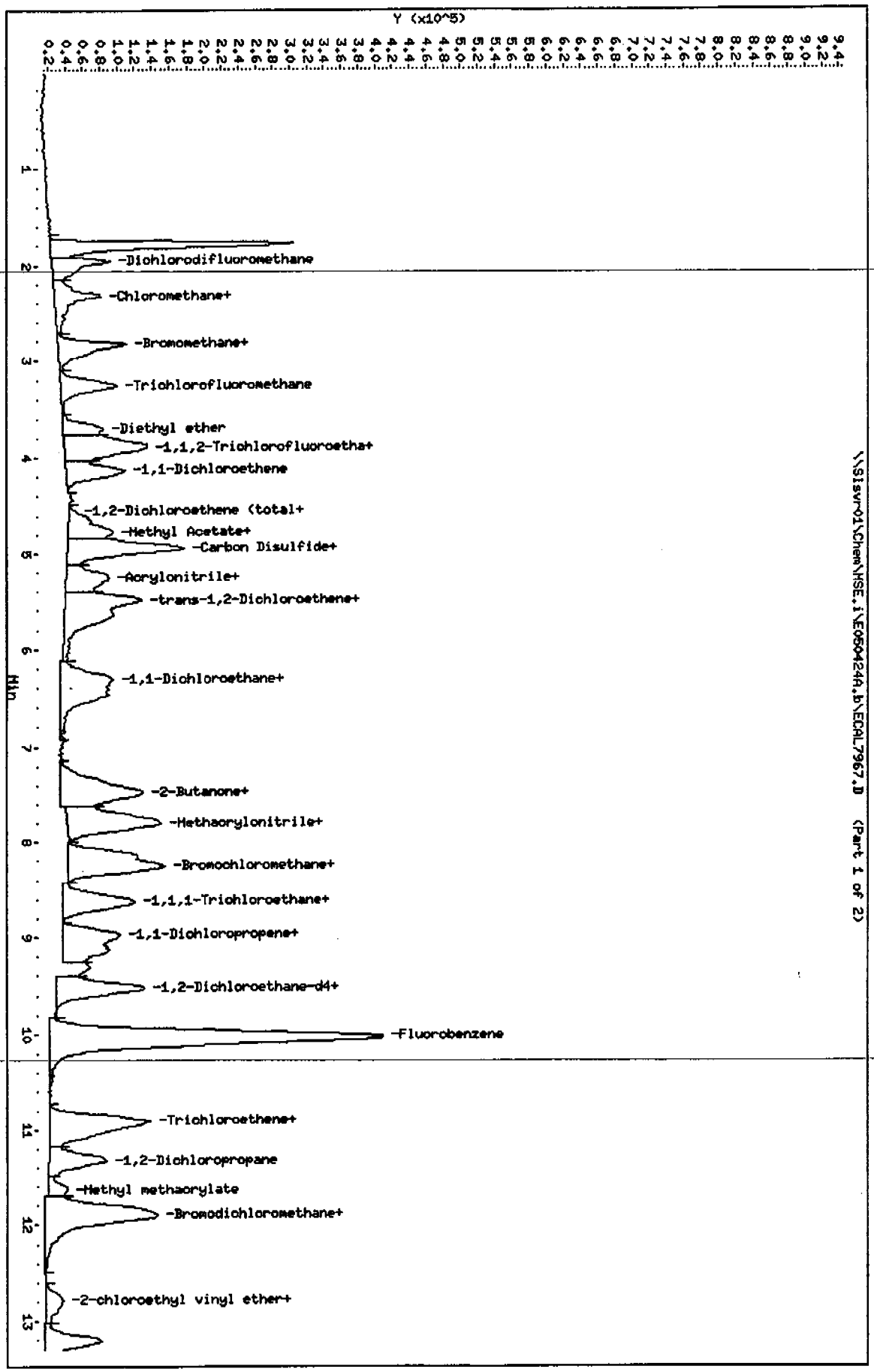
Instrument ID: MSE.i
Lab File ID: ECAL7967.D
Lab Smp Id: VSTD010
Analysis Type: VOA
Quant Type: ISTD
Operator: JDH
Method File: \\Slsvr01\Chem\MSE.i\E050424A.b\8260B-5mL.m
Misc Info: VBLKE114A;

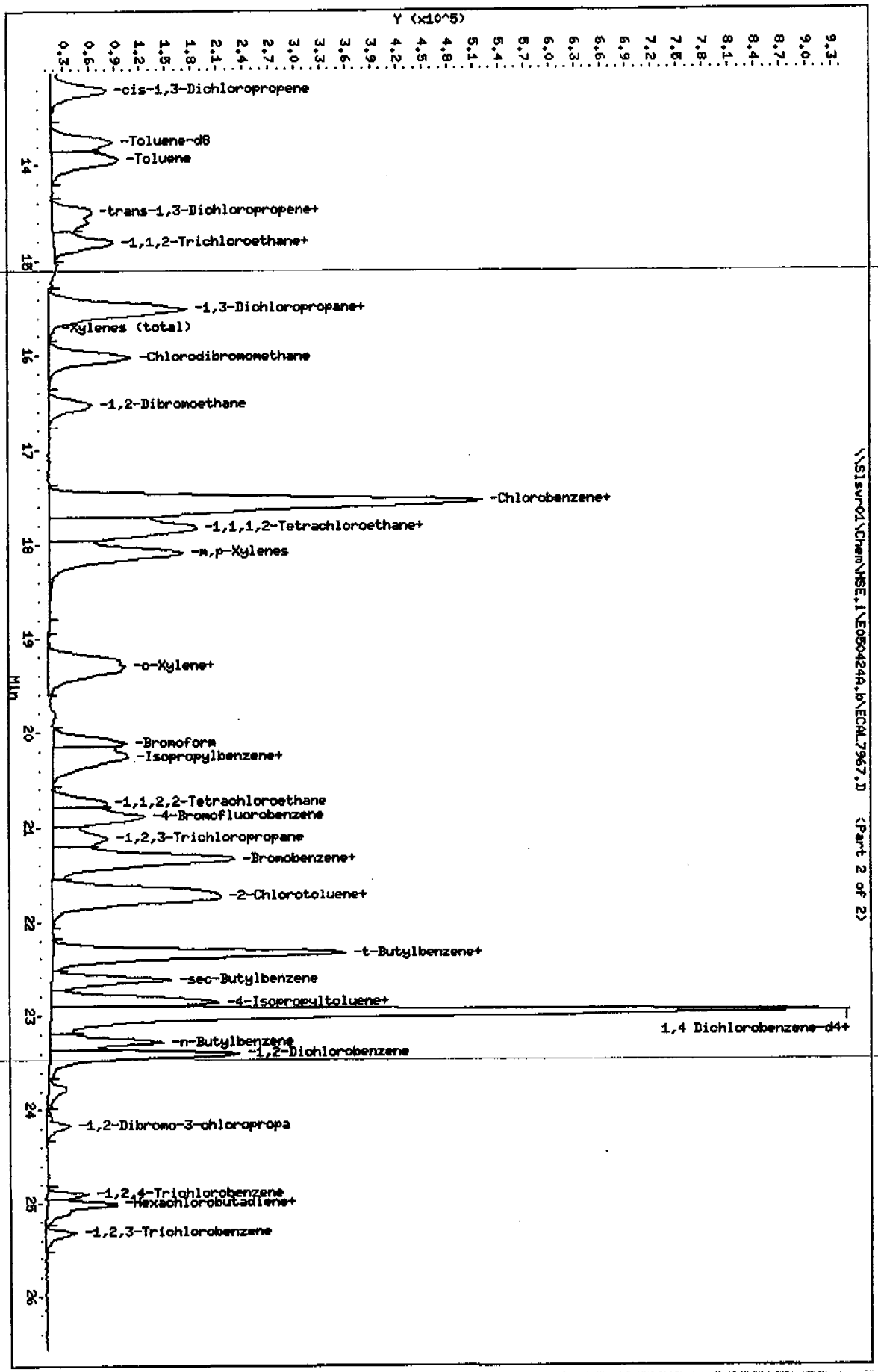
Calibration Date: 24-APR-2005
Calibration Time: 20:06
Client Smp ID: VSTD010
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	1380349	690175	2760698	1658271	20.13
72 Chlorobenzene-d5	1095989	547995	2191978	1284549	17.20
97 1,4 Dichlorobenze	600344	300172	1200688	624298	3.99

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	10.02	9.52	10.52	10.04	0.17
72 Chlorobenzene-d5	17.54	17.04	18.04	17.56	0.10
97 1,4 Dichlorobenze	22.97	22.47	23.47	22.97	-0.00

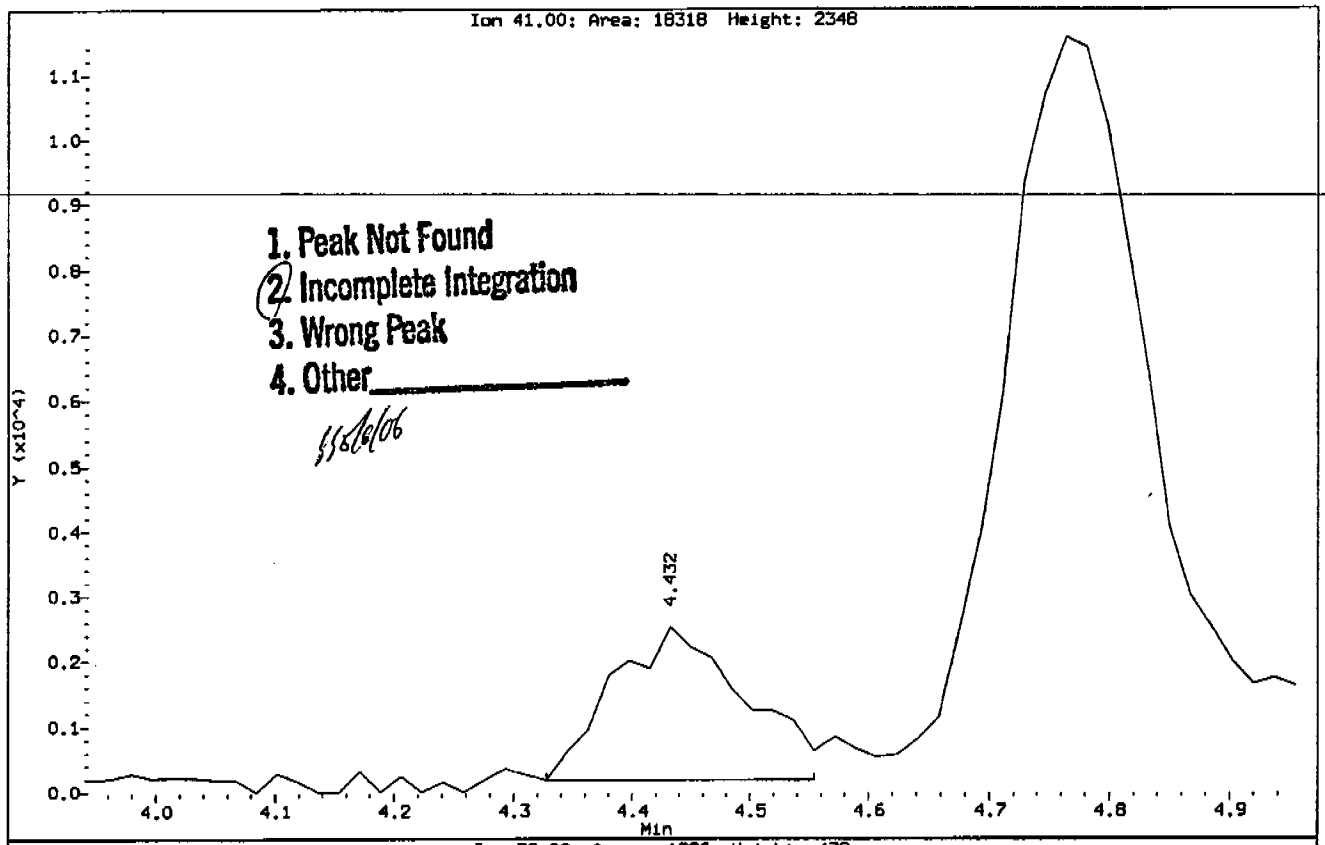
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^5)
Min
-Dichlorodifluoromethane
-Chloromethane+
-Bromomethane+
-Trichlorofluoromethane
-Diethyl ether
-1,1,2-Trichlorofluoroetha+
-1,1-Dichloroethene
-1,2-Dichloroethene (total+
-Methyl Acetate+
-Carbon Disulfide+
-Acrylonitrile+
-trans-1,2-Dichloroethene+
-1,1-Dichloroethane+
-2-Butanone+
-Methacrylonitrile+
-Bromochloromethane+
-1,1,1-Trichloroethane+
-1,1-Dichloropropene+
-1,2-Dichloroethane-d4+
-Fluorobenzene
-Trichloroethene+
-1,2-Dichloropropane
-Methyl methacrylate
-Bromodichloromethane+
-2-chloroethyl vinyl ether+
Data File: \\Slsvr01\Chem\HSE.i\E0504240.b\ECAL7967.D
Date : 24-APR-2005 22:24
Client ID: VSTD010
Sample Info: VSTD010;E050424A.b;
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: HSE.i
Operator: JDH
Column diameter: 0.53
\\Slsvr01\Chem\HSE.i\E0504240.b\ECAL7967.D (Part 1 of 2)


Y (x10^5)
Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7967.D
Date : 24-APR-2005 22:24
Client ID: VSTD010
Sample Info: VSTD010;E050424A.b
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: MSE.i
Operator: JDH
Column diameter: 0.53
\\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7967.D (Part 2 of 2)
-cis-1,3-Dichloropropene
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane+
-1,3-Dichloropropane+
-Xylenes (total)
-Chlorodibromomethane
-1,2-Dibromoethane
-Chlorobenzene+
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
-o-Xylene+
-Bromoform
-Isopropylbenzene+
-1,1,2,2-Tetrachloroethane
-4-Bromofluorobenzene
-1,2,3-Trichloropropane
-Bromobenzene+
-2-Chlorotoluene+
-t-Butylbenzene+
-sec-Butylbenzene
-4-Isopropyltoluene+
1,4 Dichlorobenzene-d4+
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene+
-1,2,3-Trichlorobenzene
Min

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7967.D
Injection Date: 24-APR-2005 22:24
Instrument: MSE.i
Client Sample ID: VSTD010

Compound: Acetonitrile
CAS Number: 75-05-8



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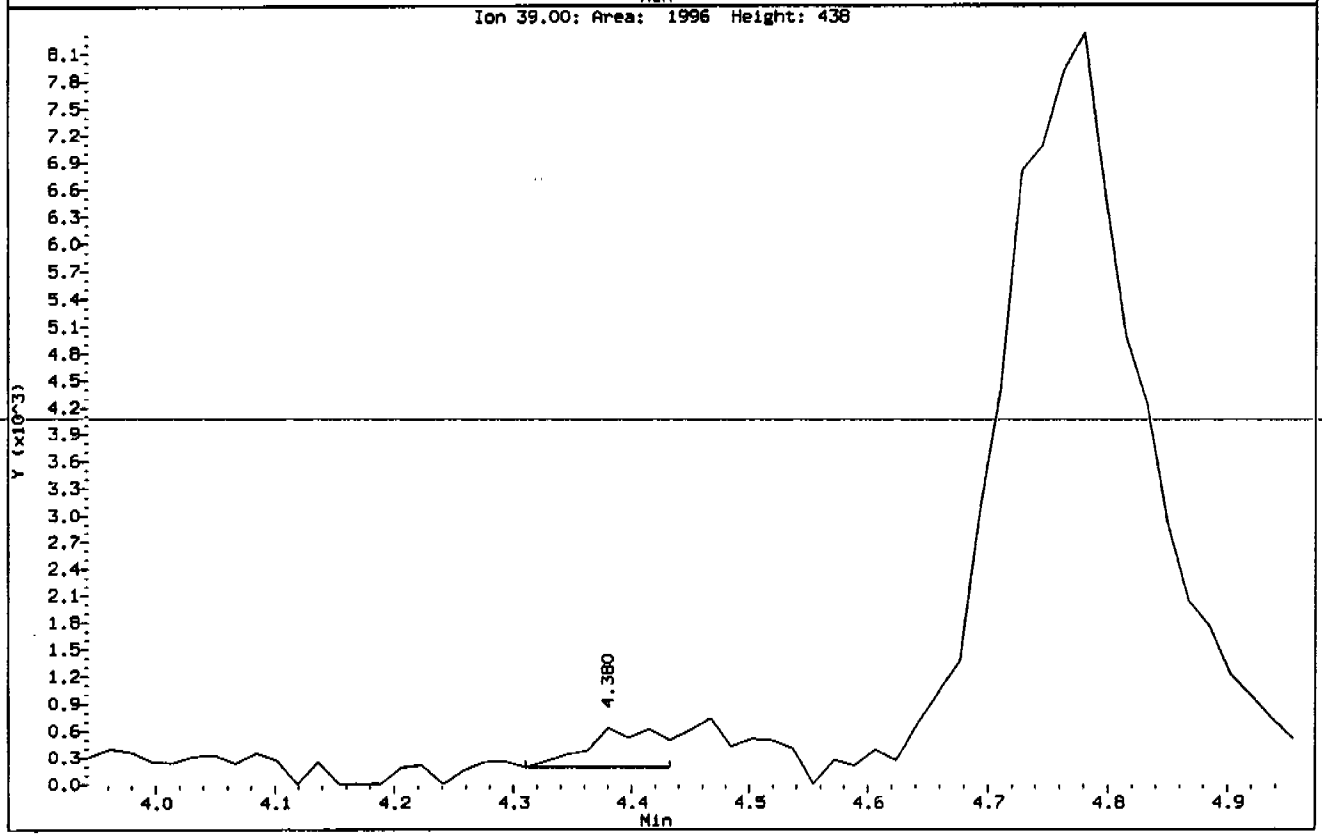
2. Incomplete Integration
3. Wrong Peak
4. Other_____

5/26/06



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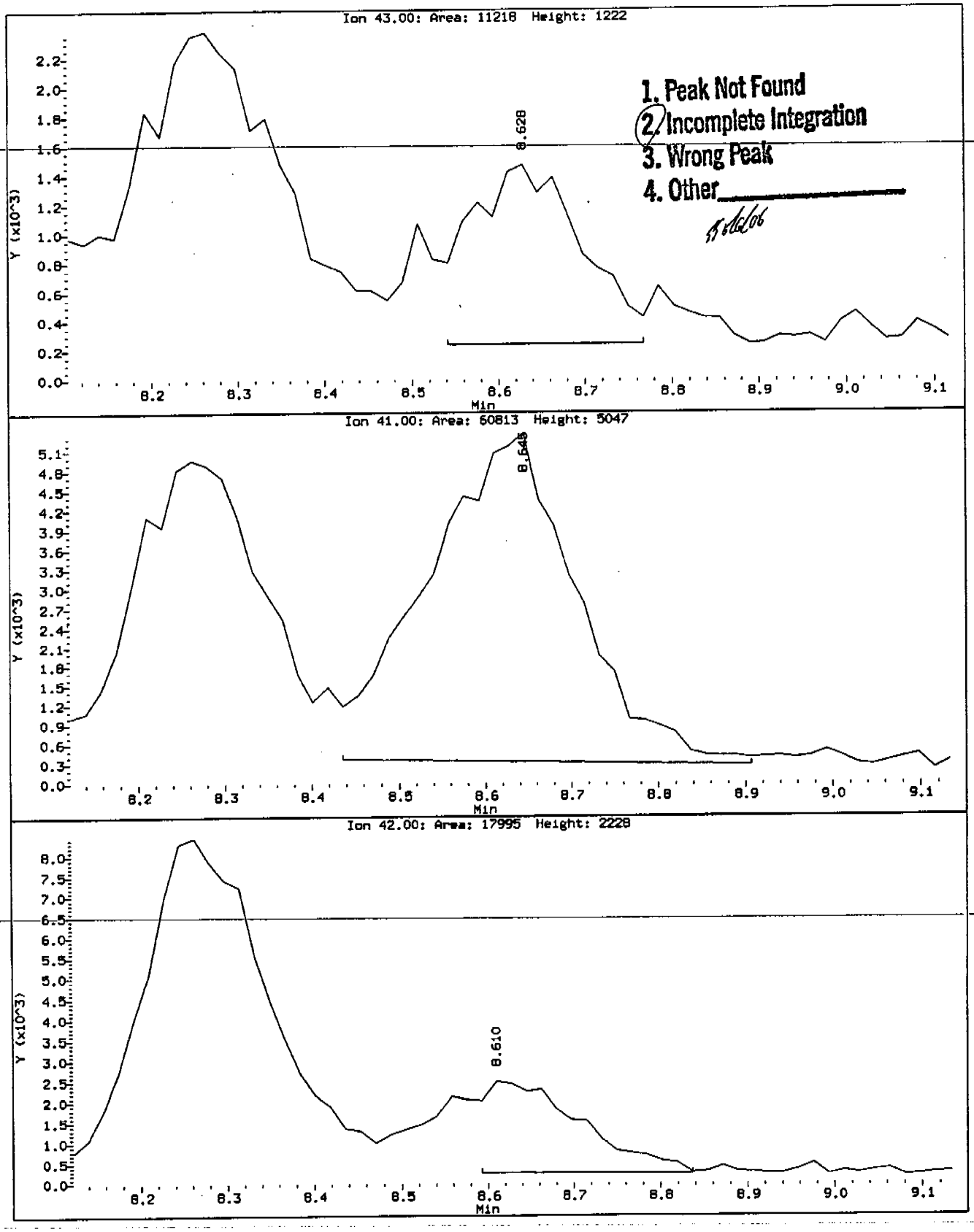
Injection Date: 24-APR-2005 22:24
Instrument: MSE.i
Client Sample ID: VSTD010

Compound: Isobutanol
CAS Number: 78-83-1



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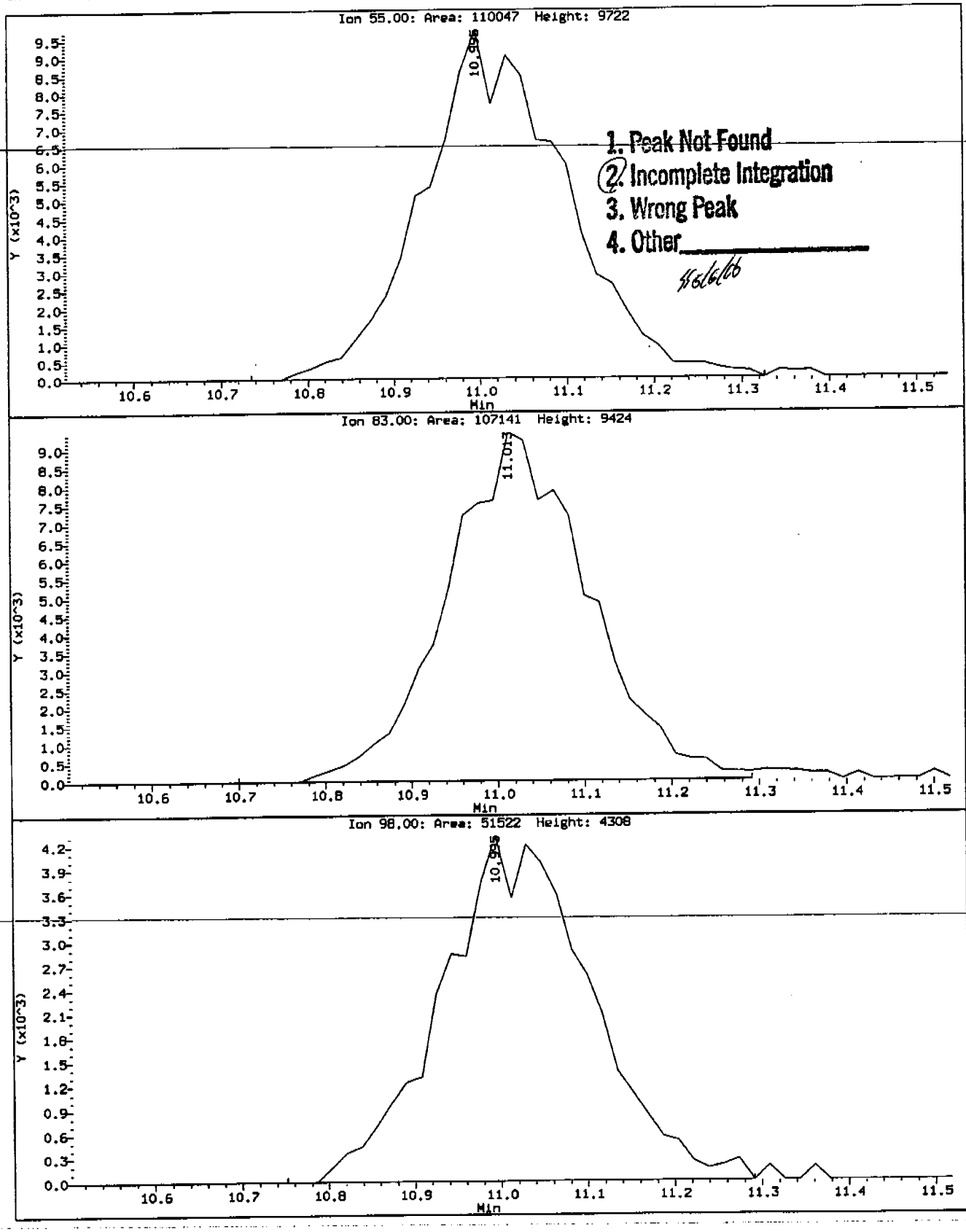
Injection Date: 24-APR-2005 22:24
Instrument: MSE.i
Client Sample ID: VSTD010

Compound: Methylcyclohexane
CAS Number:



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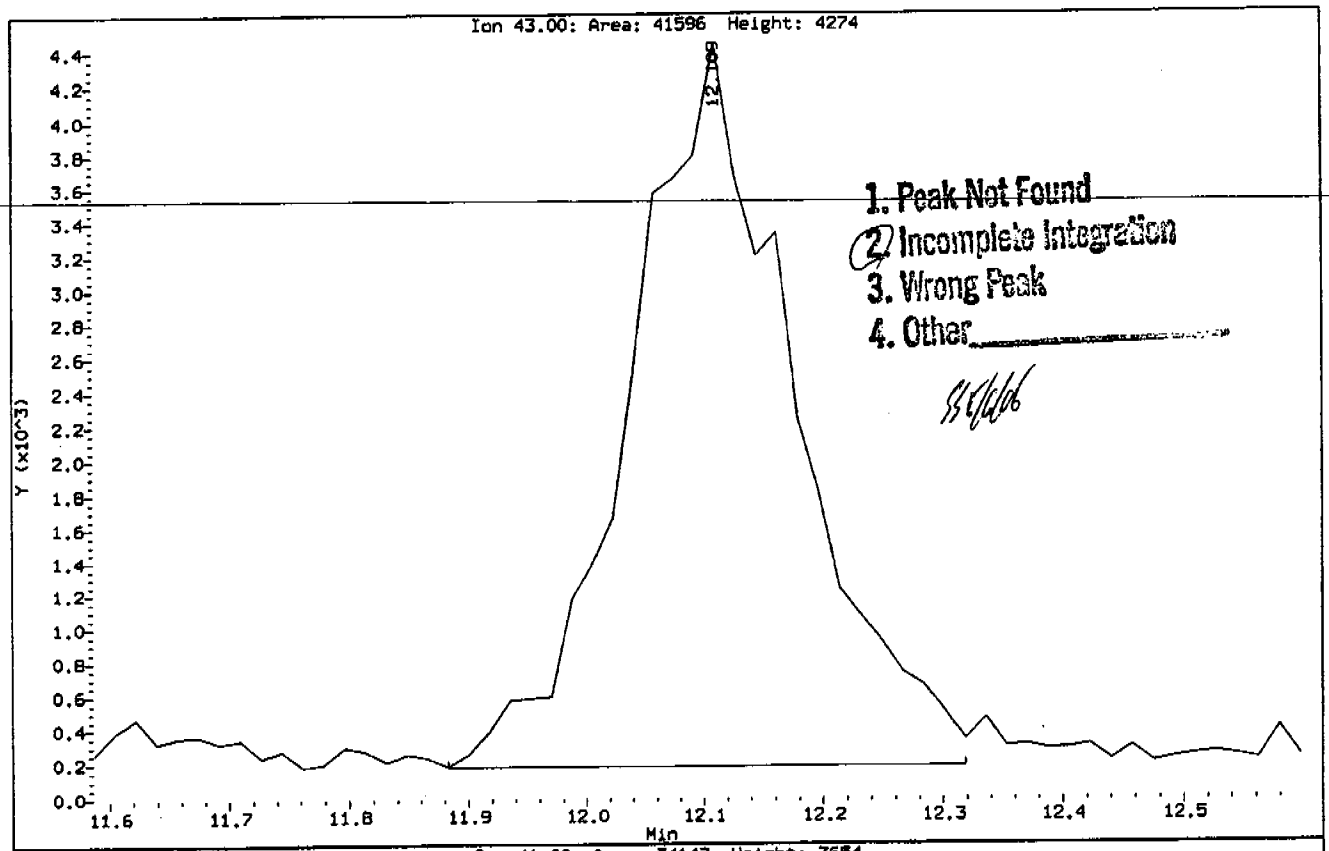
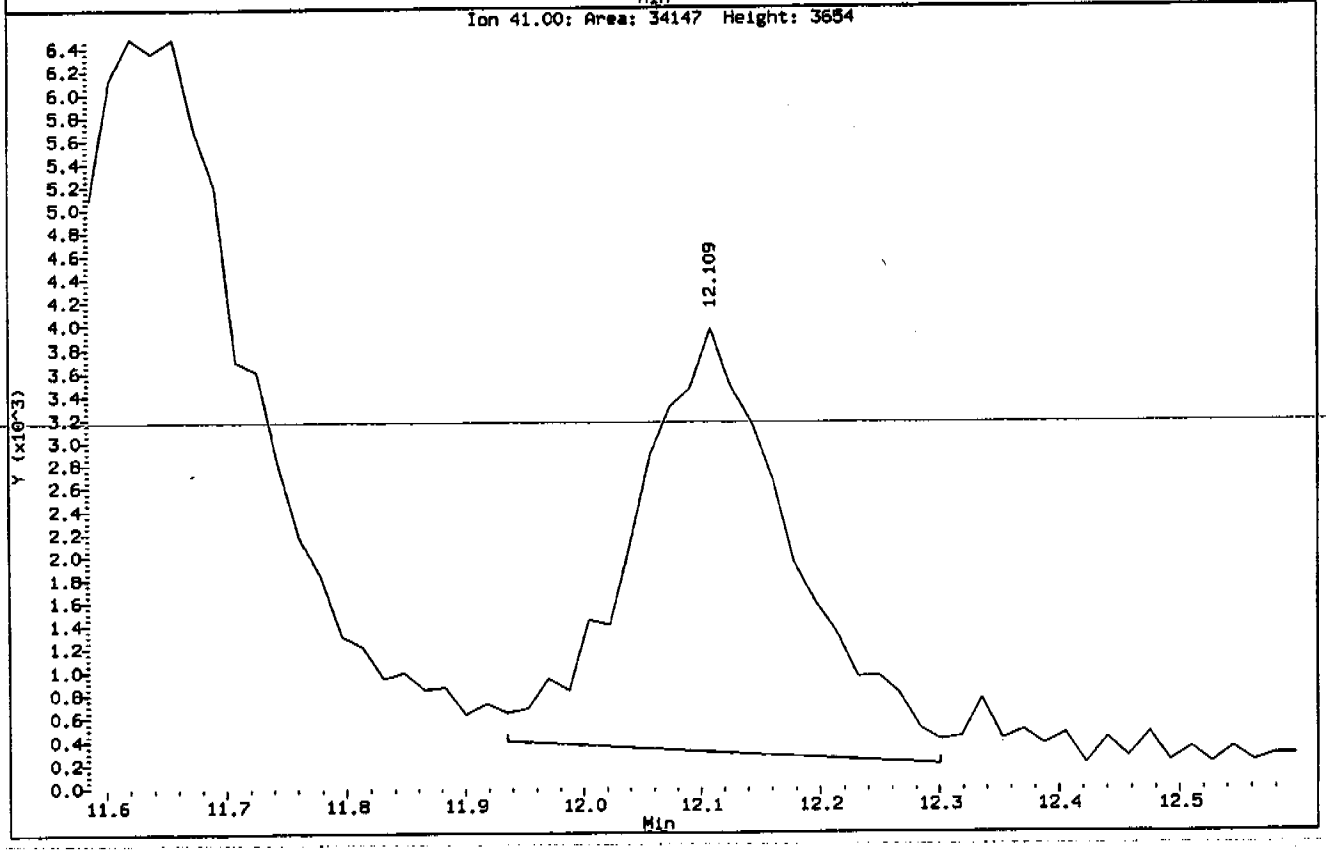
Injection Date: 24-APR-2005 22:24
Instrument: MSE.i
Client Sample ID: VSTD010

Compound: 2-Nitropropane
CAS Number: 79-46-9





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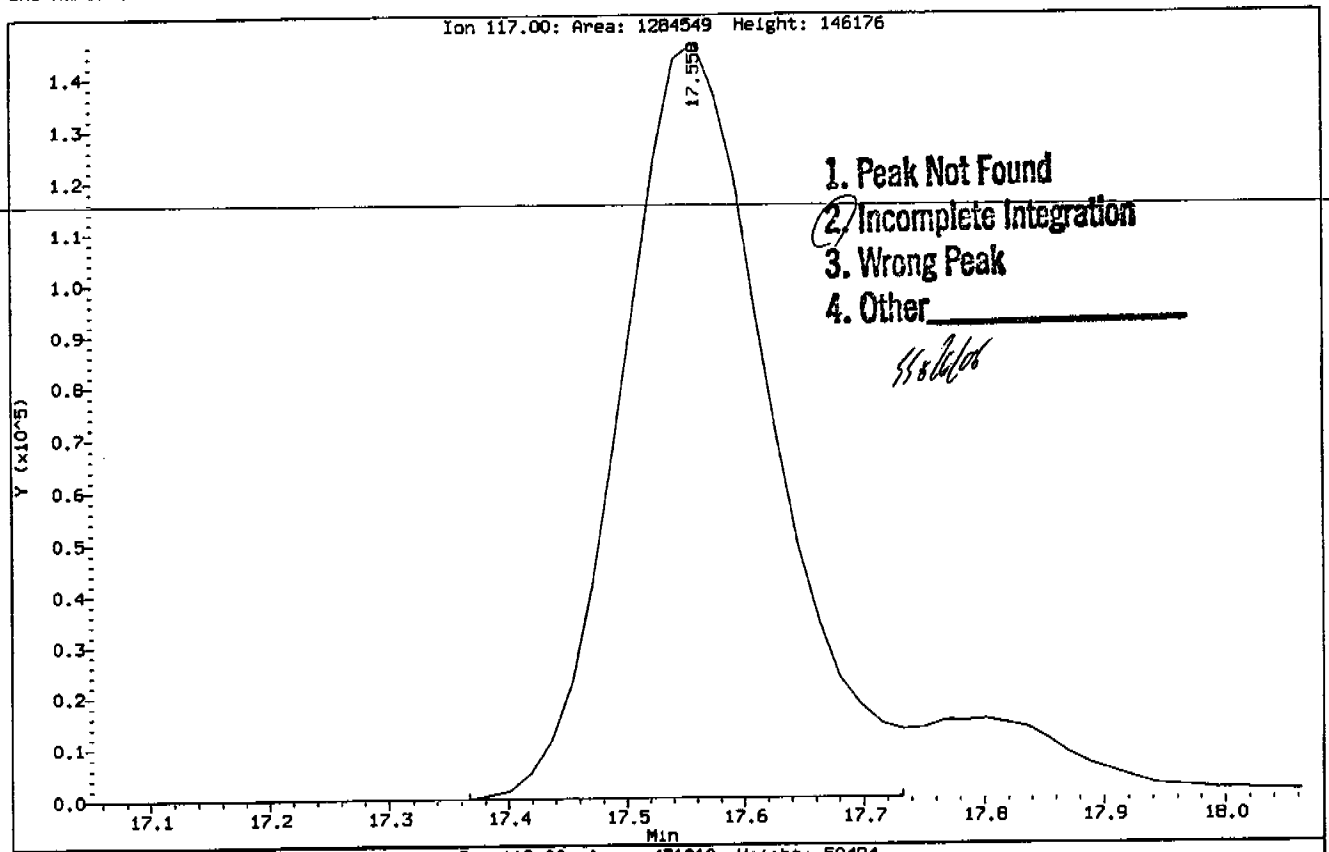
Injection Date: 24-APR-2005 22:24
Instrument: MSE.i
Client Sample ID: VSTD010

Compound: Chlorobenzene-d5
CAS Number: 3114-55-4



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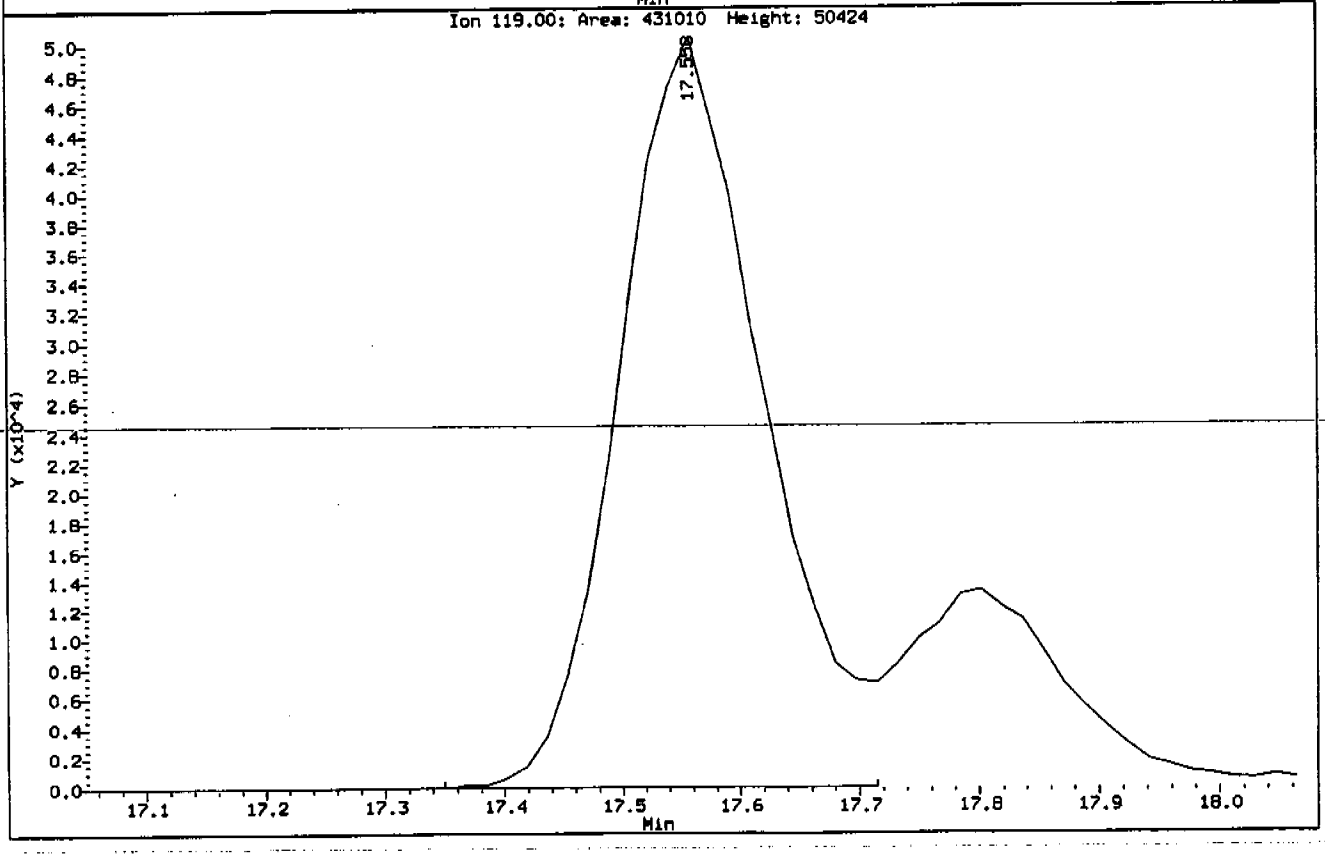

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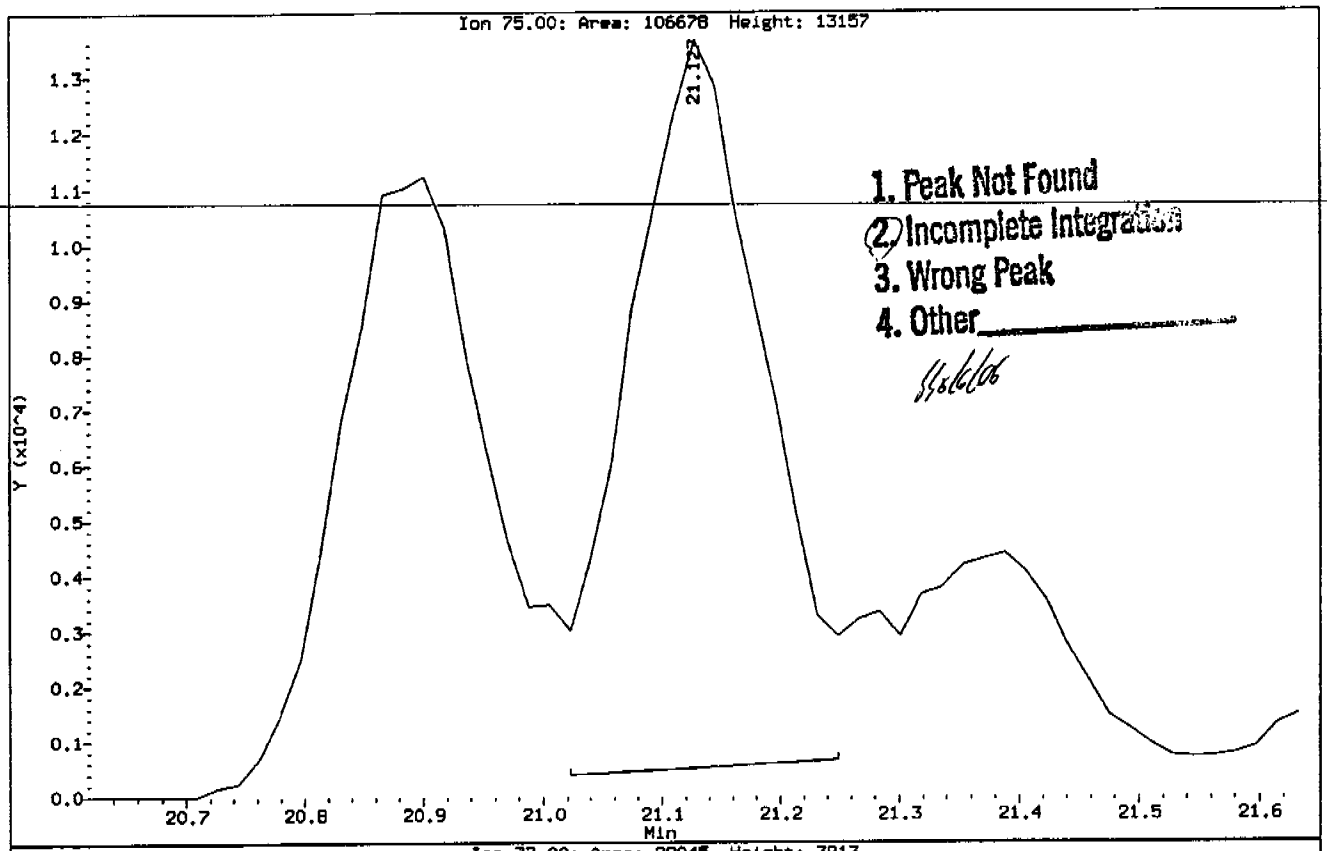
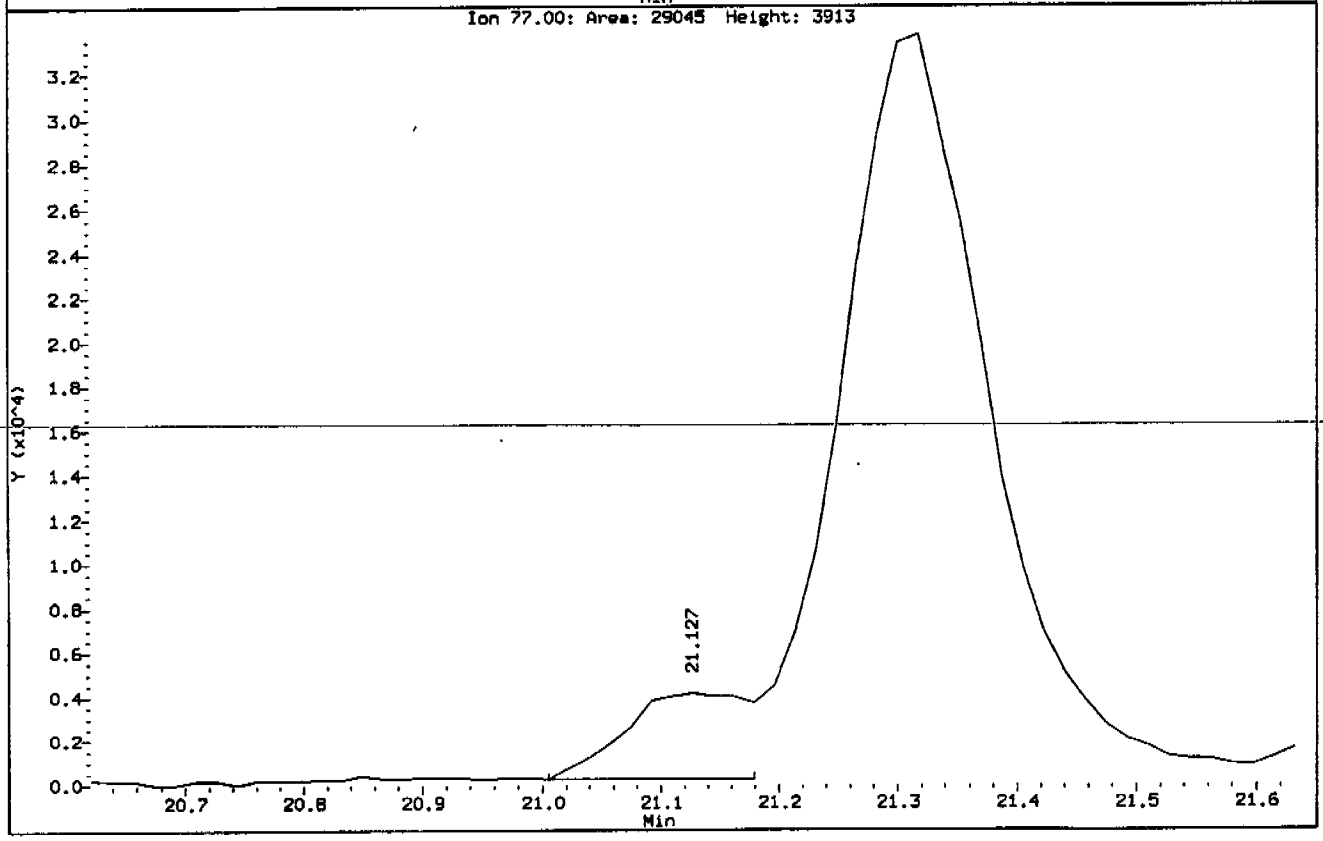
Injection Date: 24-APR-2005 22:24
Instrument: MSE.i
Client Sample ID: VSTD010

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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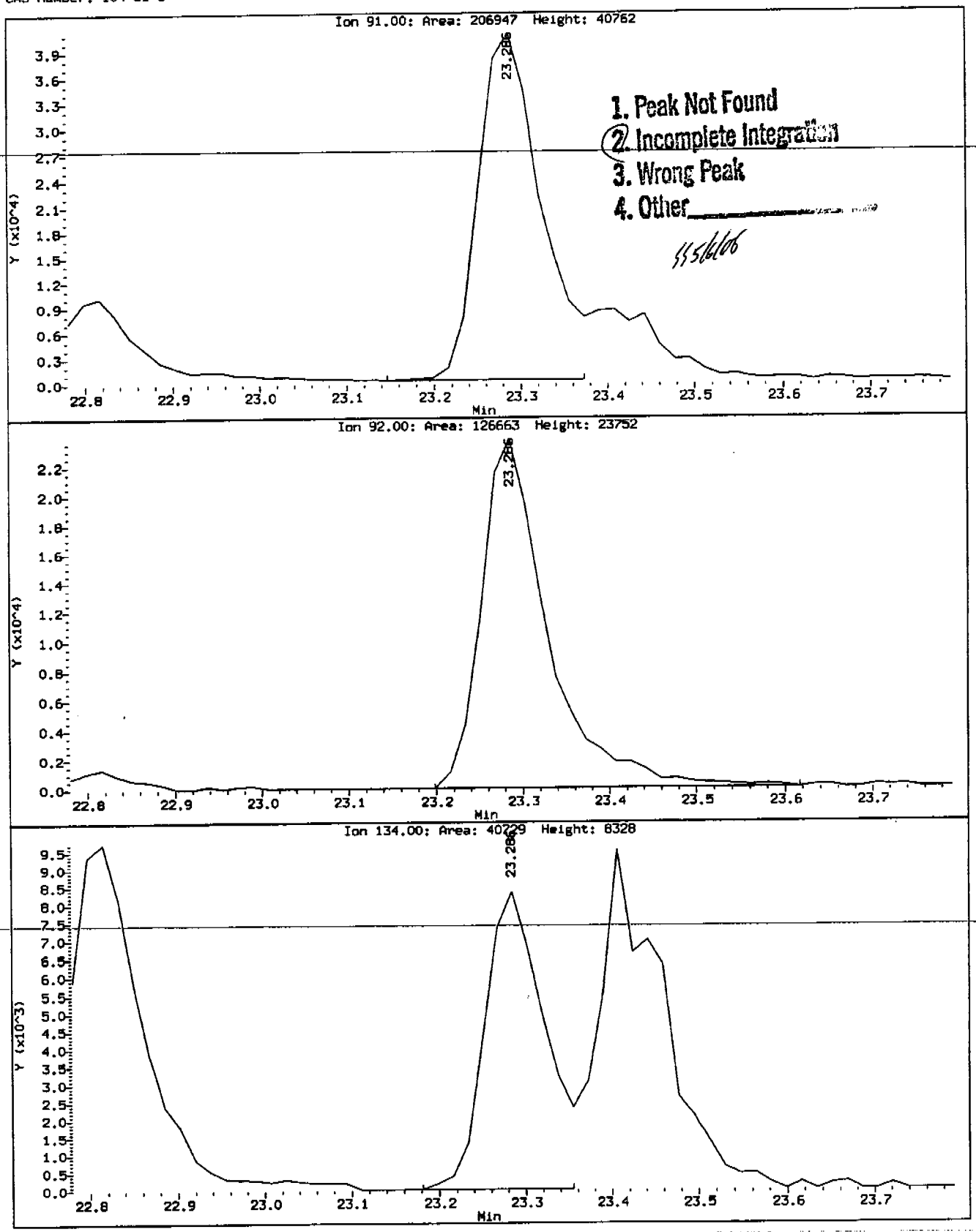
Injection Date: 24-APR-2005 22:24
Instrument: MSE.i
Client Sample ID: VSTD010

Compound: n-Butylbenzene
CAS Number: 104-51-8



Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7968.D
Report Date: 06-May-2005 10:23

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GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7968.D
Lab Smp Id: VSTD005 Client Smp ID: VSTD005
Inj Date : 24-APR-2005 23:00
Operator : JDH Inst ID: MSE.i
Smp Info : VSTD005;E050424A.b;
Misc Info : VBLKE114A;
Comment : NONE
Method : \\Slsvr01\Chem\MSE.i\E050424A.b\8260B-5mL.m
Meth Date : 06-May-2005 10:23 stitess Quant Type: ISTD
Cal Date : 24-APR-2005 23:00 Cal File: ECAL7968.D
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.10
Processing Host: SLVOA03

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume
Vo	5.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.961	1.961	(0.196)	101664	5.00000	5.405
3	Chloromethane	50	2.309	2.309	(0.230)	48710	5.00000	5.792
4	Vinyl Chloride	62	2.327	2.327	(0.232)	47234	5.00000	6.181
5	Bromomethane	94	2.831	2.831	(0.283)	96813	5.00000	6.817
6	Chloroethane	64	2.936	2.936	(0.293)	30618	5.00000	5.539
7	Trichlorofluoromethane	101	3.249	3.249	(0.324)	105286	5.00000	5.409
8	Diethyl ether	74	3.684	3.684	(0.368)	37378	10.0000	10.82
9	1,1,2-Trichlorofluoroethane	151	3.893	3.893	(0.389)	74865	5.00000	5.102
10	Acrolein	56	3.859	3.859	(0.385)	11597	25.0000	28.99(a)
11	Acetone	58	3.998	3.998	(0.399)	4004	5.00000	6.774
12	1,1-Dichloroethene	96	4.137	4.137	(0.413)	57287	5.00000	5.428
M 14	1,2-Dichloroethene (total)	96				125148	10.0000	10.27
17	Methyl Acetate	74	4.781	4.781	(0.477)	5384	5.00000	5.166(a)
13	Acetonitrile	41	4.416	4.416	(0.441)	12129	25.0000	31.57(a)
15	Iodomethane	142	4.642	4.642	(0.463)	78595	5.00000	4.750(a)
16	Allyl chloride	39	4.781	4.781	(0.477)	36698	5.00000	5.664
18	Carbon Disulfide	76	4.920	4.920	(0.491)	190821	5.00000	5.324
19	Methylene Chloride	84	4.955	4.955	(0.495)	77991	5.00000	5.759
20	Acrylonitrile	53	5.234	5.234	(0.522)	37461	25.0000	26.70(a)
21	MTBE	73	5.303	5.303	(0.529)	74437	5.00000	5.180(M)
22	trans-1,2-Dichloroethene	96	5.495	5.495	(0.548)	59520	5.00000	5.055
23	n-Hexane	57	5.652	5.652	(0.564)	57165	5.00000	5.440

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7968.D
Report Date: 06-May-2005 10:23

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	24 Vinyl acetate	43	5.652	5.652	(0.564)	38944	5.00000	5.042(a)
	25 1,1-Dichloroethane	63	6.296	6.296	(0.628)	117094	5.00000	5.403
	26 2-Chloro-1,3-butadiene	53	6.452	6.452	(0.644)	60169	5.00000	5.403
	28 2-Butanone	72	7.253	7.253	(0.724)	2535	5.00000	4.467
	29 Propionitrile	54	7.392	7.392	(0.738)	15453	25.0000	28.18(a)
	30 2,2-Dichloropropane	77	7.375	7.375	(0.736)	69333	5.00000	5.073
	31 cis-1,2-Dichloroethene	96	7.480	7.480	(0.746)	65628	5.00000	5.216
	32 Ethyl acetate	88	7.636	7.636	(0.762)	3319	10.0000	10.27(a)
	33 Methacrylonitrile	41	7.723	7.723	(0.771)	93886	25.0000	27.69(a)
	34 Chloroform	83	7.810	7.810	(0.779)	132573	5.00000	5.214
	35 Bromochloromethane	128	8.141	8.141	(0.812)	44866	5.00000	5.248
	36 Tetrahydrofuran	71	8.298	8.298	(0.828)	16033	25.0000	25.94
$	37 Dibromofluoromethane	113	8.245	8.245	(0.823)	126009	5.00000	5.009
	39 Isobutanol	43	8.611	8.611	(0.859)	2003	100.000	41.55(a)
	38 1,1,1-Trichloroethane	97	8.646	8.646	(0.863)	86165	5.00000	5.069
	40 Cyclohexane	84	8.646	8.646	(0.863)	34057	5.00000	5.437
	41 1,1-Dichloropropene	75	8.959	8.959	(0.894)	85546	5.00000	5.188
	42 Carbon Tetrachloride	117	9.151	9.151	(0.913)	82588	5.00000	4.935
$	43 1,2-Dichloroethane-d4	102	9.325	9.325	(0.931)	12535	5.00000	4.916
	46 Benzene	78	9.516	9.516	(0.950)	132730	5.00000	5.067
	47 1,2-Dichloroethane	62	9.534	9.534	(0.951)	66973	5.00000	5.253
*	48 Fluorobenzene	96	10.021	10.021	(1.000)	1580523	50.0000	
	49 Trichloroethene	95	10.909	10.909	(1.089)	79010	5.00000	5.133
	50 Methylcyclohexane	55	11.031	11.031	(1.101)	49905	5.00000	5.027
	51 1,2-Dichloropropane	63	11.344	11.344	(1.132)	71392	5.00000	5.381
	52 Methyl methacrylate	69	11.640	11.640	(1.162)	26074	5.00000	5.033
	53 Bromodichloromethane	83	11.849	11.849	(1.182)	146986	5.00000	5.136
	54 Dibromomethane	93	11.936	11.936	(1.191)	82639	5.00000	5.220
	55 1,4-Dioxane	88	12.006	12.006	(1.198)	5123	100.000	82.87(aM)
	56 2-Nitropropane	43	12.110	12.110	(1.208)	23068	5.00000	5.257
	57 2-chloroethyl vinyl ether	63	12.737	12.737	(1.271)	11325	5.00000	3.090(a)
	58 4-Methyl-2-pentanone	100	12.824	12.824	(1.280)	970	5.00000	1.466
	59 cis-1,3-Dichloropropene	75	13.207	13.207	(1.318)	87959	5.00000	5.009
$	61 Toluene-d8	98	13.747	13.747	(0.783)	119660	5.00000	4.790
	62 Toluene	92	13.938	13.938	(0.794)	79695	5.00000	4.804
	63 trans-1,3-Dichloropropene	75	14.478	14.478	(0.825)	55442	5.00000	4.475
	64 Ethyl methacrylate	69	14.617	14.617	(0.832)	51574	5.00000	4.529
	65 1,1,2-Trichloroethane	83	14.843	14.843	(0.845)	54373	5.00000	4.990
	66 2-Hexanone	43	15.104	15.104	(0.860)	14666	5.00000	3.920
	67 1,3-Dichloropropane	76	15.487	15.487	(0.882)	84994	5.00000	5.148
	68 Tetrachloroethene	164	15.540	15.540	(0.885)	73489	5.00000	4.836
M	69 Xylenes (total)	106				167160	15.0000	14.91
	70 Chlorodibromomethane	129	16.027	16.027	(0.913)	122820	5.00000	5.061
	71 1,2-Dibromoethane	107	16.532	16.532	(0.942)	93267	5.00000	5.035
*	72 Chlorobenzene-d5	117	17.559	17.559	(1.000)	1279051	50.0000	(M)
	73 Chlorobenzene	112	17.646	17.646	(1.005)	122901	5.00000	4.950
	74 1,1,1,2-Tetrachloroethane	131	17.803	17.803	(1.014)	72887	5.00000	4.869
	75 Ethylbenzene	91	17.872	17.872	(1.018)	160579	5.00000	4.888
	76 m,p-Xylenes	106	18.099	18.099	(1.031)	113782	10.0000	10.18
	77 o-Xylene	106	19.230	19.230	(1.095)	53378	5.00000	4.730
	78 Styrene	104	19.369	19.369	(1.103)	86684	5.00000	4.498
	79 Bromoform	173	20.101	20.101	(1.145)	88265	5.00000	4.958
	80 Isopropylbenzene	105	20.275	20.275	(1.155)	140330	5.00000	4.740
	81 Cyclohexanone	55	20.414	20.414	(1.163)	28761	50.0000	47.62

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7968.D
Report Date: 06-May-2005 10:23

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
82	1,1,2,2-Tetrachloroethane	83	20.745	20.745	(1.181)	107861	5.00000	5.299
$ 83	4-Bromofluorobenzene	95	20.901	20.901	(0.910)	105585	5.00000	5.769
84	1,2,3-Trichloropropane	75	21.128	21.128	(0.920)	58861	5.00000	6.009(M)
85	Bromobenzene	156	21.319	21.319	(0.928)	72600	5.00000	5.653
86	n-Propylbenzene	91	21.354	21.354	(0.930)	200292	5.00000	5.673
87	2-Chlorotoluene	91	21.667	21.667	(0.943)	136981	5.00000	5.896
88	trans-1,4-dichloro-2-butene	53	21.720	21.720	(0.945)	7390	5.00000	6.899
89	1,3,5-Trimethylbenzene	105	21.720	21.720	(0.945)	109285	5.00000	5.552
90	4-Chlorotoluene	91	21.772	21.772	(0.948)	171473	5.00000	6.088
91	t-Butylbenzene	119	22.329	22.329	(0.972)	152108	5.00000	5.531
92	Pentachloroethane	167	22.346	22.346	(0.973)	48215	5.00000	5.523
93	1,2,4-Trimethylbenzene	105	22.381	22.381	(0.974)	94303	5.00000	5.336
94	sec-Butylbenzene	105	22.625	22.625	(0.985)	148052	5.00000	5.046
95	4-Isopropyltoluene	119	22.816	22.816	(0.993)	93476	5.00000	4.930
96	1,3-Dichlorobenzene	146	22.869	22.869	(0.995)	79649	5.00000	5.275
* 97	1,4 Dichlorobenzene-d4	152	22.973	22.973	(1.000)	545975	50.0000	
98	1,4-Dichlorobenzene	146	22.990	22.990	(1.001)	90256	5.00000	4.922
99	n-Butylbenzene	91	23.286	23.286	(1.014)	89200	5.00000	4.777
100	1,2-Dichlorobenzene	146	23.426	23.426	(1.020)	63186	5.00000	4.766
101	1,2-Dibromo-3-chloropropane	75	24.157	24.157	(1.052)	12878	5.00000	6.057
103	1,2,4-Trichlorobenzene	180	24.923	24.923	(1.085)	14342	5.00000	3.787
104	Hexachlorobutadiene	225	25.027	25.027	(1.089)	14223	5.00000	3.256
105	Naphthalene	128	25.132	25.132	(1.094)	17447	5.00000	4.722
106	1,2,3-Trichlorobenzene	180	25.323	25.323	(1.102)	10526	5.00000	3.590

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7968.D
Report Date: 06-May-2005 10:23

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

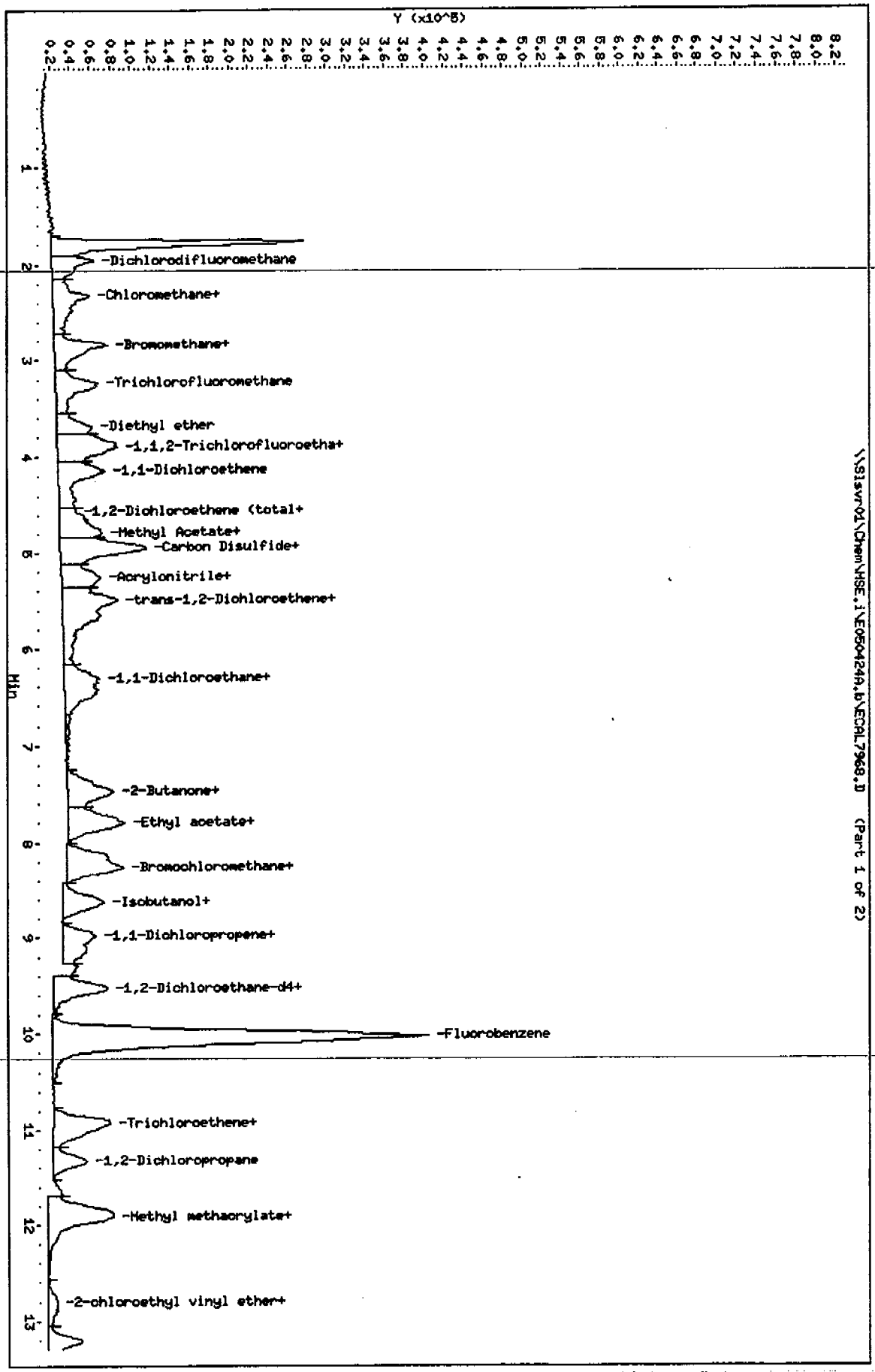
Instrument ID: MSE.i
Lab File ID: ECAL7968.D
Lab Smp Id: VSTD005
Analysis Type: VOA
Quant Type: ISTD
Operator: JDH
Method File: \\Slsvr01\Chem\MSE.i\E050424A.b\8260B-5mL.m
Misc Info: VBLKE114A;

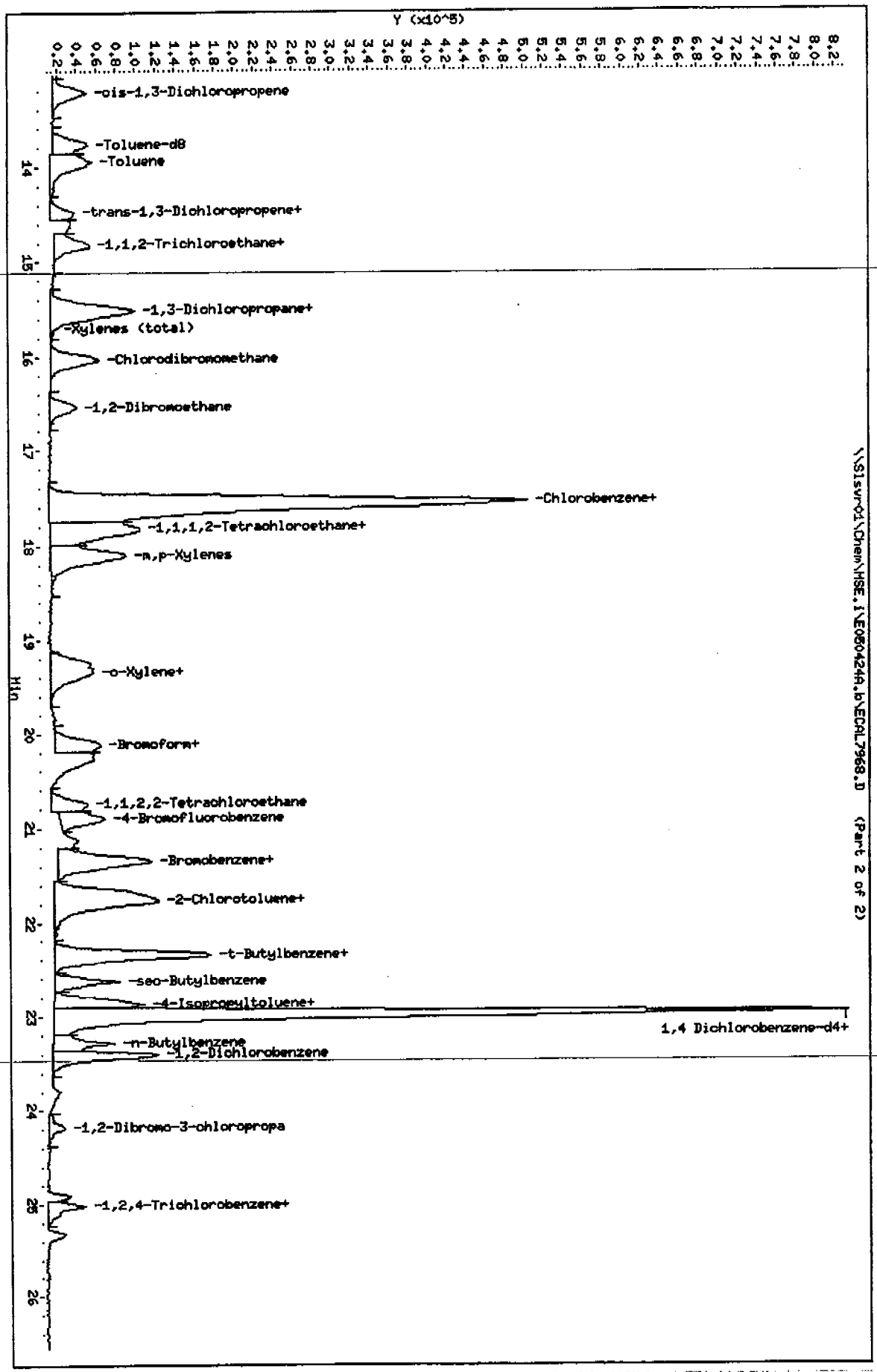
Calibration Date: 24-APR-2005
Calibration Time: 20:06
Client Smp ID: VSTD005
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	1380349	690175	2760698	1580523	14.50
72 Chlorobenzene-d5	1095989	547995	2191978	1279051	16.70
97 1,4 Dichlorobenze	600344	300172	1200688	545975	-9.06

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	10.02	9.52	10.52	10.02	0.01
72 Chlorobenzene-d5	17.54	17.04	18.04	17.56	0.10
97 1,4 Dichlorobenze	22.97	22.47	23.47	22.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^5)
Min
-Dichlorodifluoromethane
-Chloromethane+
-Bromomethane+
-Trichlorofluoromethane
-Diethyl ether
-1,1,2-Trichlorofluoroetha+
-1,1-Dichloroethene
-1,2-Dichloroethene (total+
-Methyl Acetate+
-Carbon Disulfide+
-Acrylonitrile+
-trans-1,2-Dichloroethene+
-1,1-Dichloroethane+
-2-Butanone+
-Ethyl acetate+
-Bromochloromethane+
-Isobutanol+
-1,1-Dichloropropene+
-1,2-Dichloroethane-d4+
-Fluorobenzene
-Trichloroethene+
-1,2-Dichloropropane
-Methyl methacrylate+
-2-chloroethyl vinyl ether+
Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7968.D
Date : 24-APR-2005 23:00
Client ID: VSTD005
Sample Info: VSTD005;E050424A.b;
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: MSE.i
Operator: JDH
Column diameter: 0.53
\\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7968.D (Part 1 of 2)


Y (x10^5)
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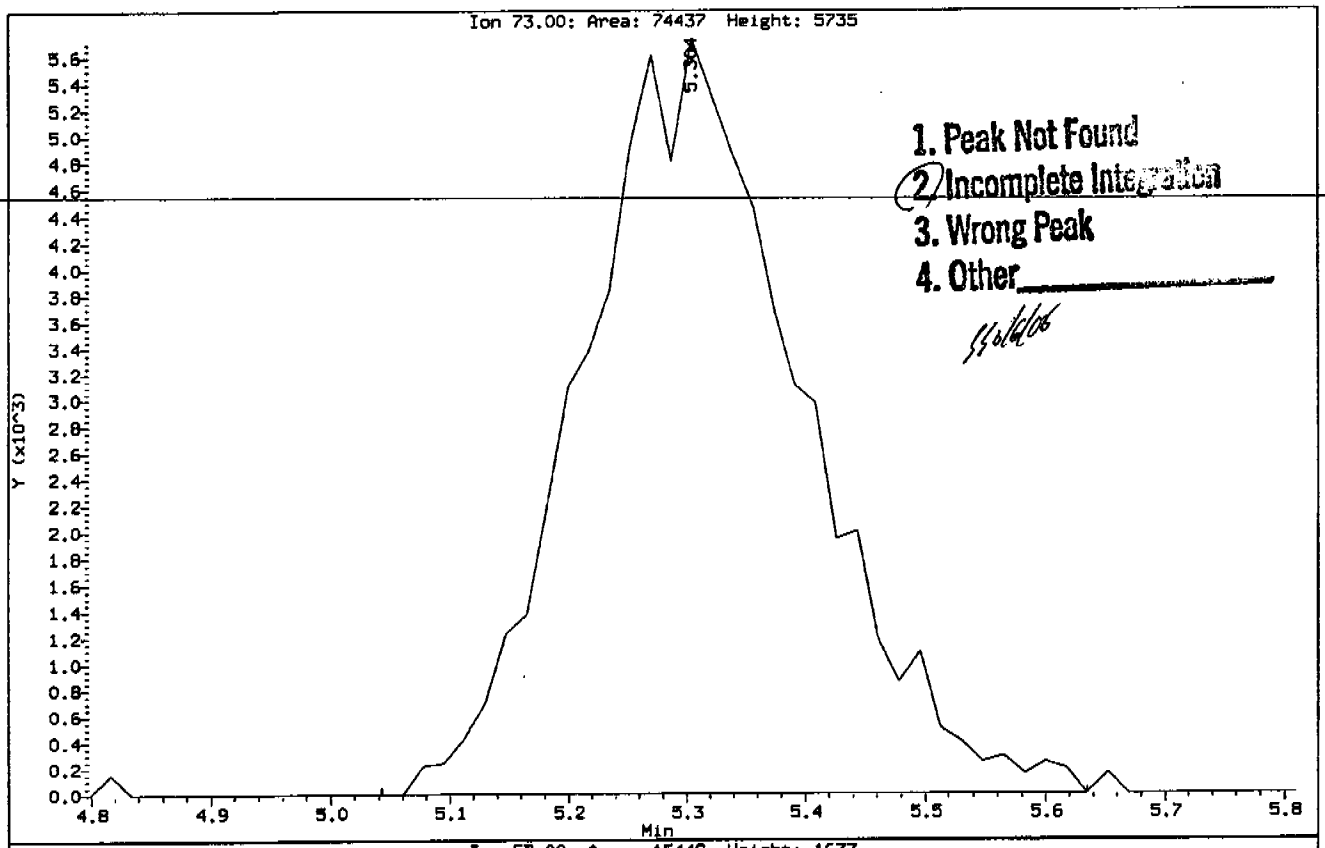
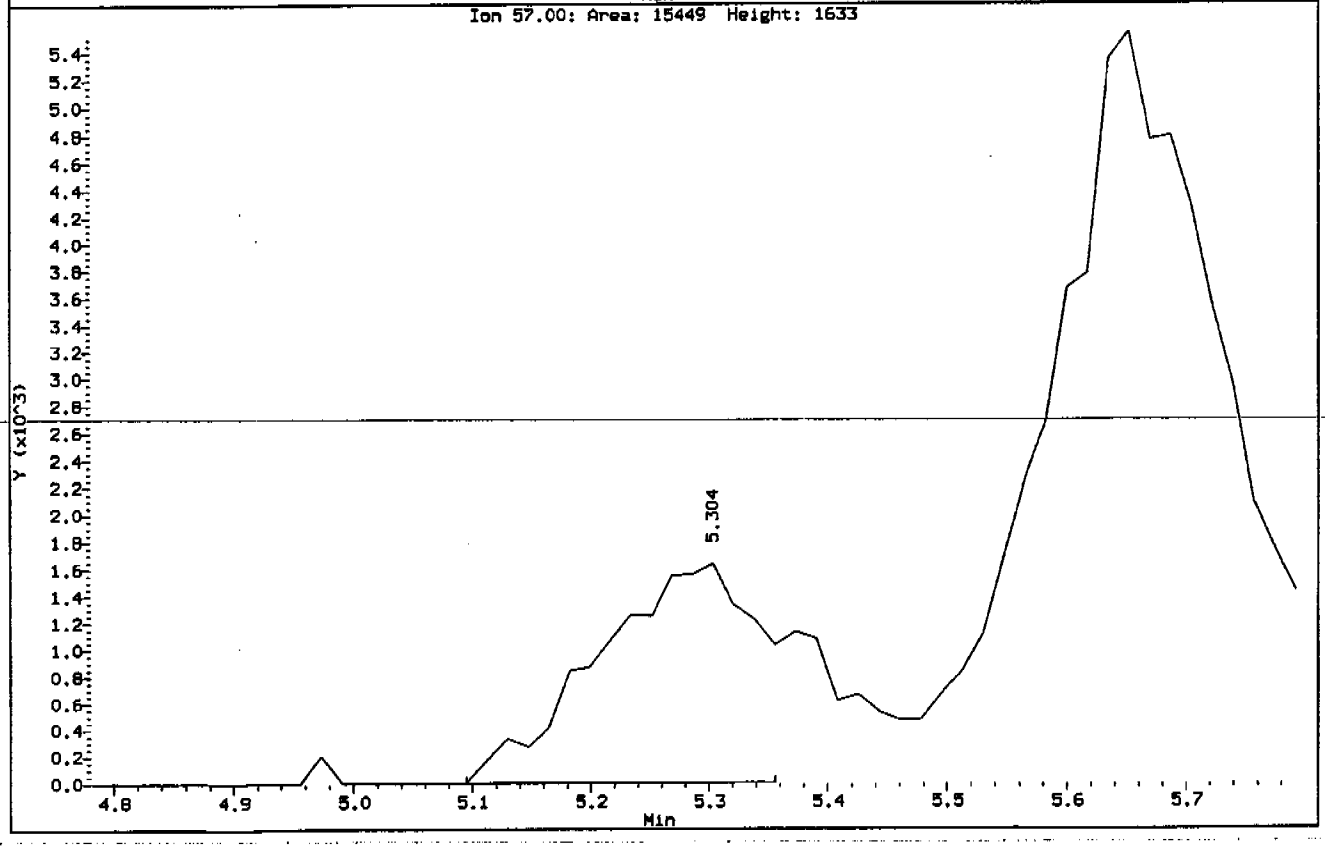
Date : 24-APR-2005 23:00
Client ID: VSTD005
Sample Info: VSTD005,E050424A.b
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: HSE.i
Operator: JDH
Column diameter: 0.53
\\Slsvr01\Chem\HSE.i\E050424A.b\ECAL7968.D (Part 2 of 2)
-cis-1,3-Dichloropropene
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane+
-1,3-Dichloropropane+
-Xylenes (total)
-Chlorodibromomethane
-1,2-Dibromoethane
-Chlorobenzene+
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
-o-Xylene+
-Bromoform+
-1,1,2,2-Tetrachloroethane
-4-Bromofluorobenzene
-Bromobenzene+
-2-Chlorotoluene+
-t-Butylbenzene+
-sec-Butylbenzene
-4-Isopropyltoluene+
1,4 Dichlorobenzene-d4+
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene+
Min

Data File: \\Slavr01\Chem\MSE.i\E050424A.b\ECAL7968.D
Injection Date: 24-APR-2005 23:00
Instrument: MSE.i
Client Sample ID: VSTD005

Compound: MTBE
CAS Number: 1634-04-4





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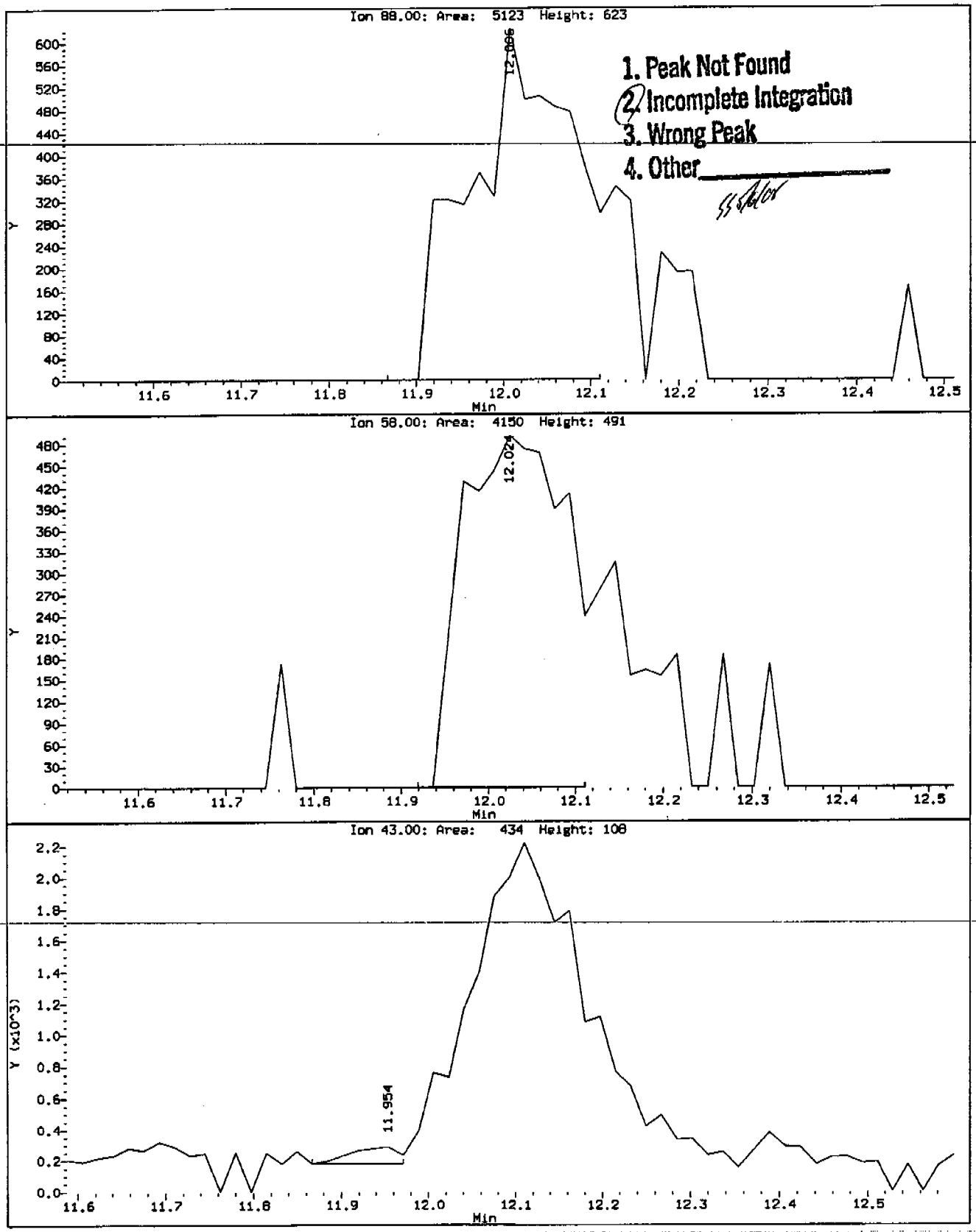
Injection Date: 24-APR-2005 23:00
Instrument: MSE.i
Client Sample ID: VSTD005

Compound: 1,4-Dioxane
CAS Number: 123-91-1



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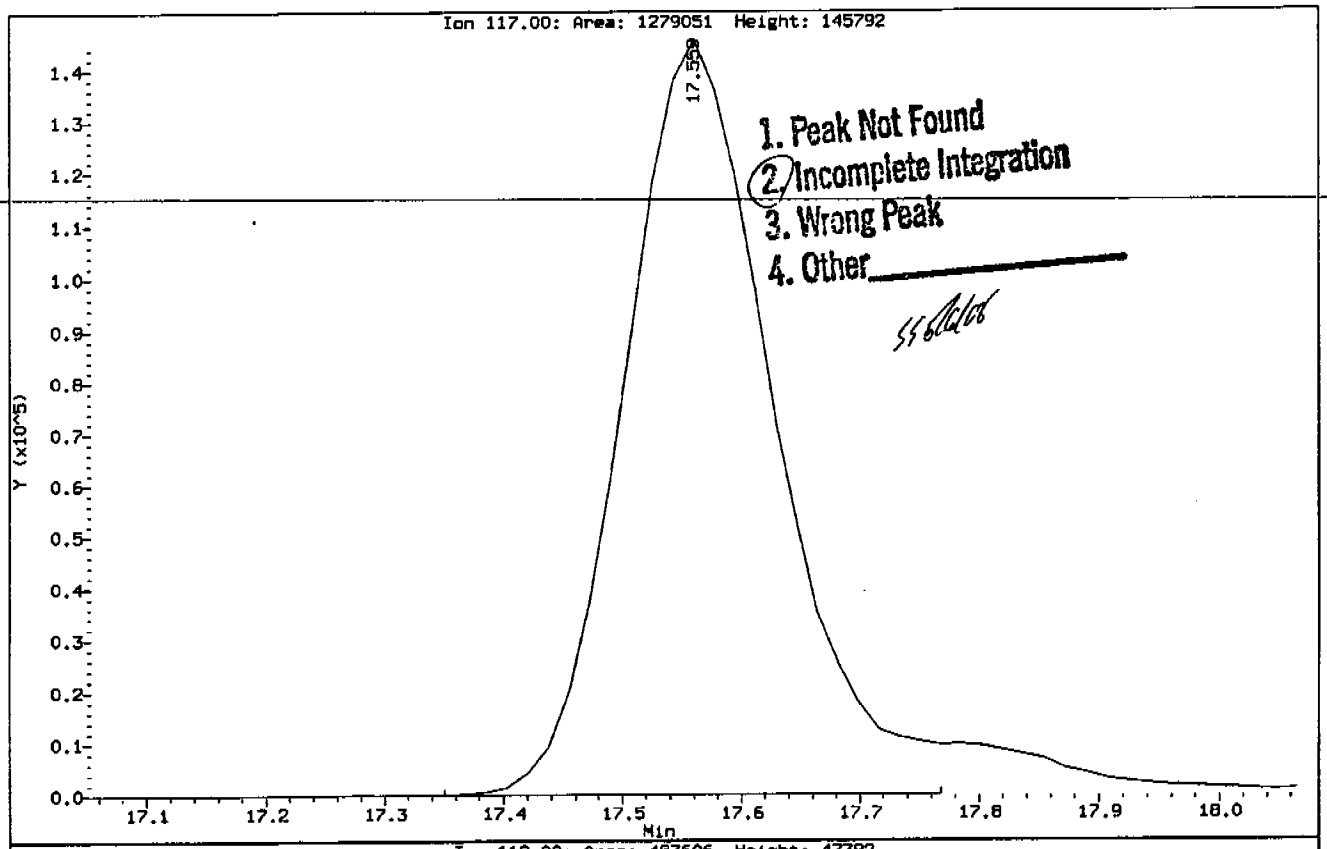
Injection Date: 24-APR-2005 23:00
Instrument: MSE.i
Client Sample ID: VSTD005

Compound: Chlorobenzene-d5
CAS Number: 3114-55-4



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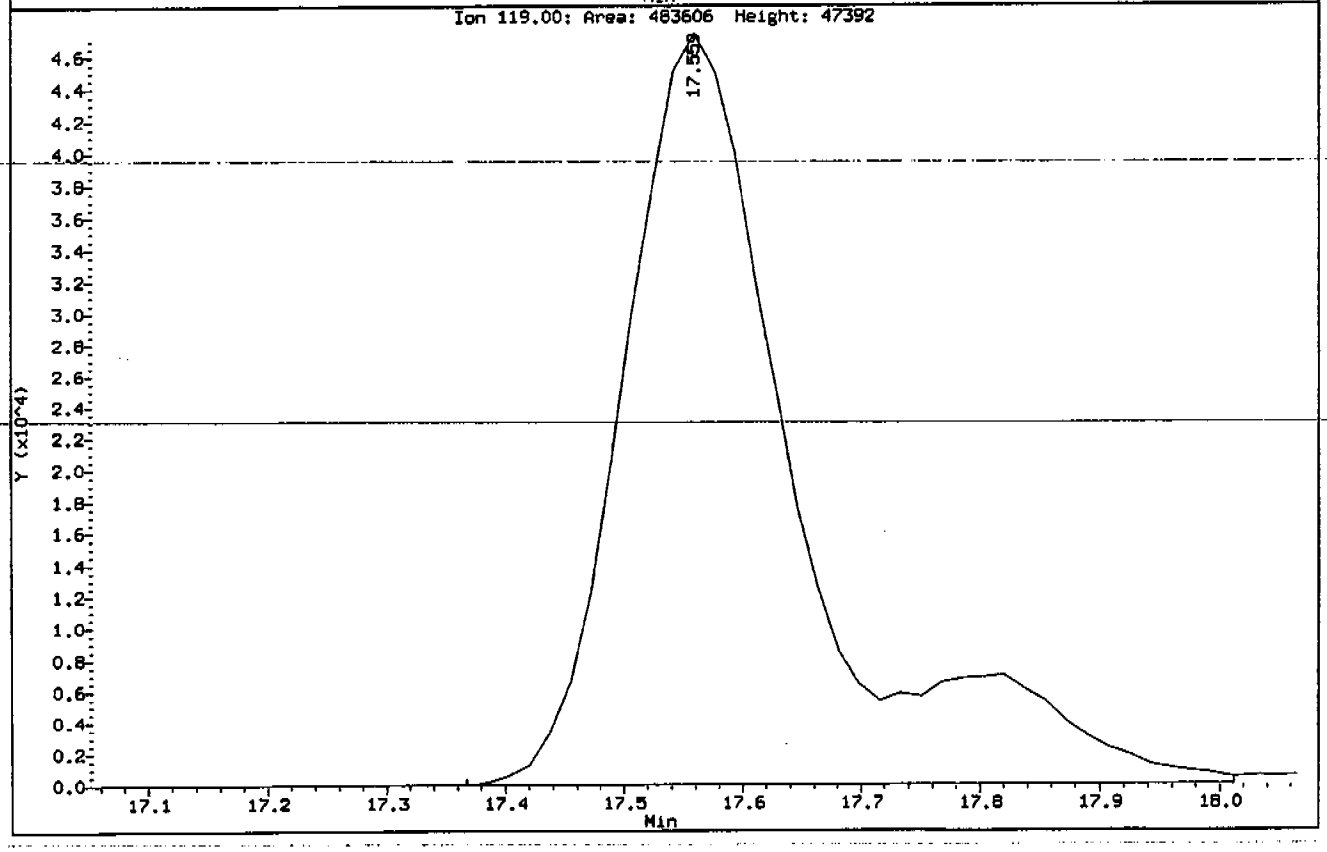
2. Incomplete Integration
3. Wrong Peak
4. Other _____

5/6/05



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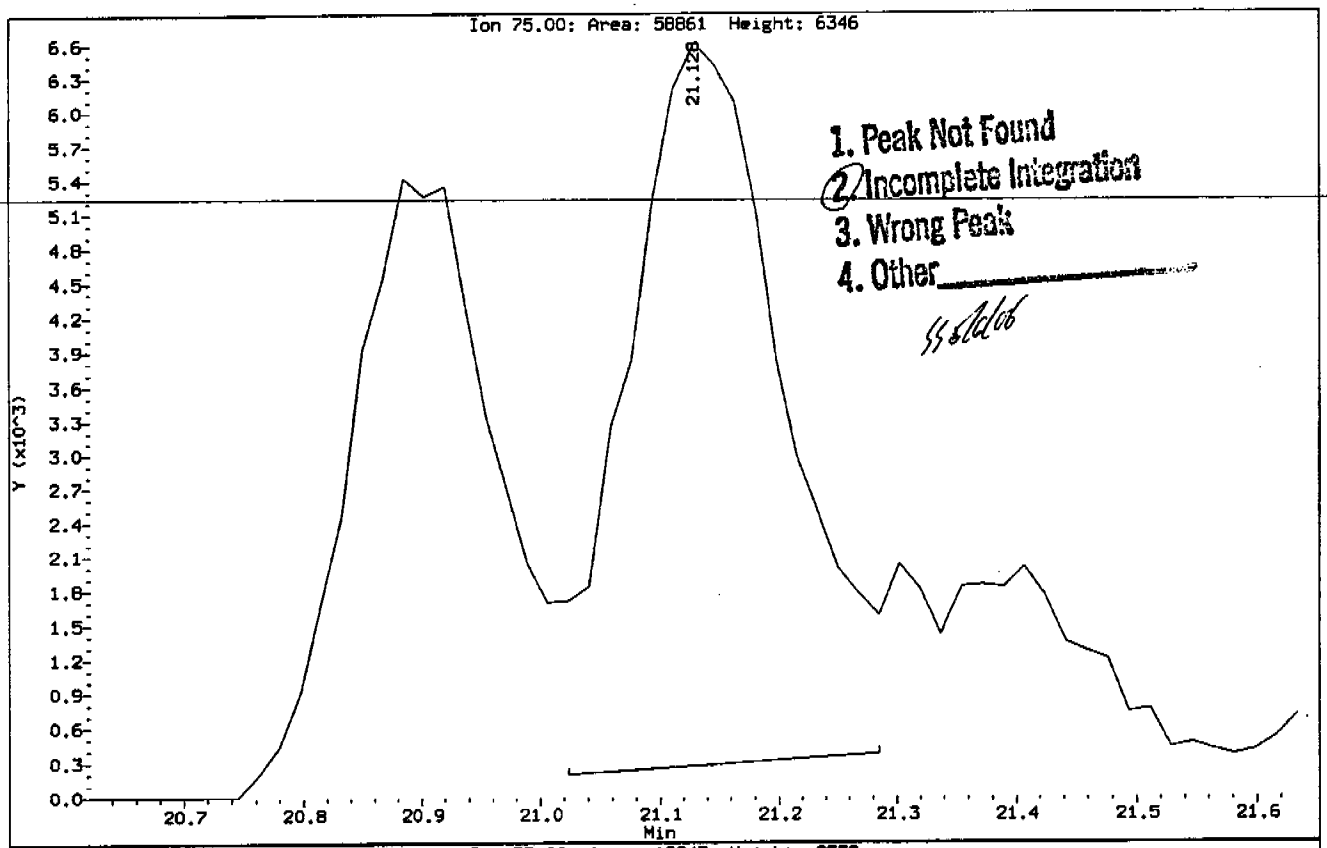
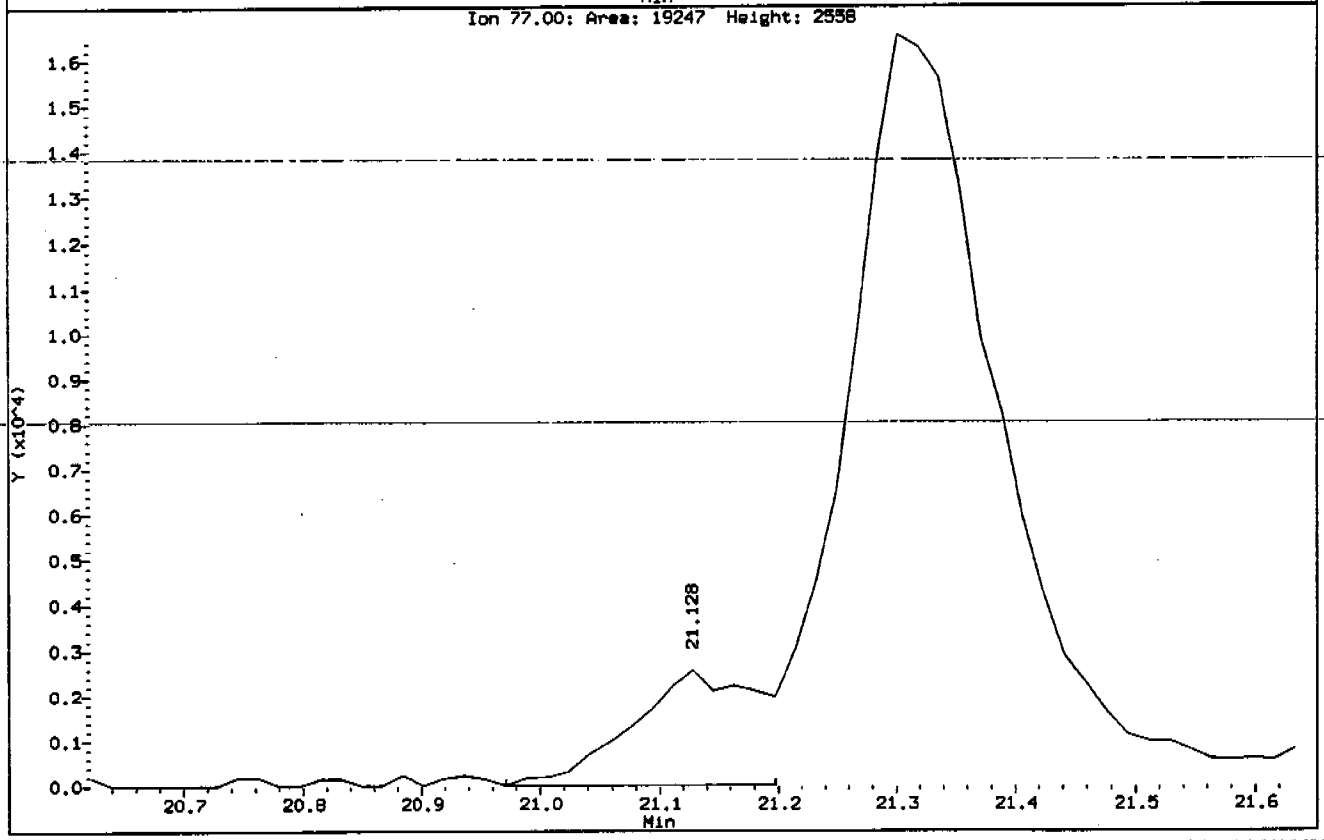
Injection Date: 24-APR-2005 23:00
Instrument: MSE.i
Client Sample ID: VSTD005

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7969.D
Report Date: 06-May-2005 10:23

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GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7969.D
Lab Smp Id: VSTD002.5 Client Smp ID: VSTD002.5
Inj Date : 24-APR-2005 23:36
Operator : JDH Inst ID: MSE.i
Smp Info : VSTD002.5;E050424A.b;
Misc Info : VBLKE114A;
Comment : NONE
Method : \\Slsvr01\Chem\MSE.i\E050424A.b\8260B-5mL.m
Meth Date : 06-May-2005 10:23 stitess Quant Type: ISTD
Cal Date : 24-APR-2005 23:36 Cal File: ECAL7969.D
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.10
Processing Host: SLVOA03

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume
Vo	5.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	1 Dichlorodifluoromethane	85	1.947	1.947	(0.194)	54804	2.50000	2.802
	3 Chloromethane	50	2.278	2.278	(0.227)	28313	2.50000	3.238
	4 Vinyl Chloride	62	2.330	2.330	(0.232)	25264	2.50000	3.179
	5 Bromomethane	94	2.835	2.835	(0.283)	56363	2.50000	3.817
	6 Chloroethane	64	2.922	2.922	(0.292)	17639	2.50000	3.068
	7 Trichlorofluoromethane	101	3.253	3.253	(0.325)	57308	2.50000	2.831
	8 Diethyl ether	74	3.688	3.688	(0.368)	20153	5.00000	5.611
	9 1,1,2-Trichlorofluoroethane	151	3.862	3.862	(0.385)	42319	2.50000	2.773
	10 Acrolein	56	3.914	3.914	(0.391)	5888	12.5000	14.16(a)
	11 Acetone	58	4.001	4.001	(0.399)	2384	2.50000	3.878
	12 1,1-Dichloroethene	96	4.141	4.141	(0.413)	29326	2.50000	2.672
M	14 1,2-Dichloroethene (total)	96				67937	5.00000	5.369
	17 Methyl Acetate	74	4.785	4.785	(0.477)	2466	2.50000	2.276(aM)
	13 Acetonitrile	41	4.437	4.437	(0.443)	5674	12.5000	14.20(a)
	15 Iodomethane	142	4.646	4.646	(0.463)	28578	2.50000	1.661(aM)
	16 Allyl chloride	39	4.733	4.733	(0.472)	21266	2.50000	3.156
	18 Carbon Disulfide	76	4.907	4.907	(0.489)	97339	2.50000	2.612
	19 Methylene Chloride	84	4.959	4.959	(0.495)	49029	2.50000	3.481
	20 Acrylonitrile	53	5.237	5.237	(0.522)	19381	12.5000	13.29(a)
	21 MTBE	73	5.290	5.290	(0.528)	35054	2.50000	2.346
	22 trans-1,2-Dichloroethene	96	5.499	5.499	(0.549)	33714	2.50000	2.753
	23 n-Hexane	57	5.690	5.690	(0.568)	24937	2.50000	2.282(M)

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7969.D
Report Date: 06-May-2005 10:23

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 Vinyl acetate	43	5.638	5.638	(0.562)	22677	2.50000	2.823(a)
	25 1,1-Dichloroethane	63	6.299	6.299	(0.628)	61331	2.50000	2.721
	26 2-Chloro-1,3-butadiene	53	6.473	6.473	(0.646)	32031	2.50000	2.766(a)
	29 Propionitrile	54	7.379	7.379	(0.736)	7129	12.5000	12.50(a)
	30 2,2-Dichloropropane	77	7.413	7.413	(0.740)	35622	2.50000	2.506
	31 cis-1,2-Dichloroethene	96	7.518	7.518	(0.750)	34223	2.50000	2.616
	32 Ethyl acetate	88	7.622	7.622	(0.760)	1123	5.00000	3.342(aM)
	33 Methacrylonitrile	41	7.779	7.779	(0.776)	36169	12.5000	10.26(a)
	34 Chloroform	83	7.814	7.814	(0.779)	72627	2.50000	2.747
	35 Bromochloromethane	128	8.127	8.127	(0.811)	21960	2.50000	2.470
	36 Tetrahydrofuran	71	8.284	8.284	(0.826)	7640	12.5000	11.88
$	37 Dibromofluoromethane	113	8.267	8.267	(0.825)	68382	2.50000	2.614
	39 Isobutanol	43	8.615	8.615	(0.859)	2277	50.0000	45.42(a)
	38 1,1,1-Trichloroethane	97	8.615	8.615	(0.859)	44182	2.50000	2.499
	40 Cyclohexane	84	8.615	8.615	(0.859)	15036	2.50000	2.308(aM)
	41 1,1-Dichloropropene	75	8.963	8.963	(0.894)	44801	2.50000	2.613
	42 Carbon Tetrachloride	117	9.137	9.137	(0.911)	42890	2.50000	2.464
$	43 1,2-Dichloroethane-d4	102	9.311	9.311	(0.929)	5705	2.50000	2.151
	46 Benzene	78	9.520	9.520	(0.950)	72801	2.50000	2.672
	47 1,2-Dichloroethane	62	9.520	9.520	(0.950)	35502	2.50000	2.678
*	48 Fluorobenzene	96	10.025	10.025	(1.000)	1643596	50.0000	
	49 Trichloroethene	95	10.930	10.930	(1.090)	42611	2.50000	2.662
	50 Methylcyclohexane	55	11.034	11.034	(1.101)	28214	2.50000	2.733(aM)
	51 1,2-Dichloropropane	63	11.348	11.348	(1.132)	37278	2.50000	2.702(M)
	52 Methyl methacrylate	69	11.696	11.696	(1.167)	10817	2.50000	2.008(M)
	53 Bromodichloromethane	83	11.853	11.853	(1.182)	76675	2.50000	2.577
	54 Dibromomethane	93	11.940	11.940	(1.191)	41790	2.50000	2.538
	55 1,4-Dioxane	88	12.079	12.079	(1.205)	1959	50.0000	30.47(aM)
	56 2-Nitropropane	43	12.149	12.149	(1.212)	12493	2.50000	2.738(aM)
	57 2-chloroethyl vinyl ether	63	12.810	12.810	(1.278)	7785	2.50000	2.043(a)
	59 cis-1,3-Dichloropropene	75	13.193	13.193	(1.316)	44678	2.50000	2.447
$	61 Toluene-d8	98	13.785	13.785	(0.785)	62504	2.50000	2.554
	62 Toluene	92	13.959	13.959	(0.795)	43116	2.50000	2.653
	63 trans-1,3-Dichloropropene	75	14.499	14.499	(0.826)	28423	2.50000	2.342
	64 Ethyl methacrylate	69	14.690	14.690	(0.836)	24619	2.50000	2.207
	65 1,1,2-Trichloroethane	83	14.847	14.847	(0.845)	28763	2.50000	2.695
	66 2-Hexanone	43	15.021	15.021	(0.855)	1174	2.50000	0.3204(a)
	67 1,3-Dichloropropane	76	15.474	15.474	(0.881)	43495	2.50000	2.689
	68 Tetrachloroethene	164	15.543	15.543	(0.885)	41004	2.50000	2.754
M	69 Xylenes (total)	106				52689	7.50000	4.788
	70 Chlorodibromomethane	129	16.013	16.013	(0.912)	60785	2.50000	2.557
	71 1,2-Dibromoethane	107	16.553	16.553	(0.943)	45724	2.50000	2.520
*	72 Chlorobenzene-d5	117	17.563	17.563	(1.000)	1252976	50.0000	
	73 Chlorobenzene	112	17.667	17.667	(1.006)	61024	2.50000	2.509
	74 1,1,1,2-Tetrachloroethane	131	17.806	17.806	(1.014)	35641	2.50000	2.430
	75 Ethylbenzene	91	17.859	17.859	(1.017)	76901	2.50000	2.390
	76 m,p-Xylenes	106	18.085	18.085	(1.030)	24967	5.00000	2.280
	77 o-Xylene	106	19.269	19.269	(1.097)	27722	2.50000	2.508
	78 Styrene	104	19.390	19.390	(1.104)	46821	2.50000	2.480
	79 Bromoform	173	20.104	20.104	(1.145)	42498	2.50000	2.437
	80 Isopropylbenzene	105	20.278	20.278	(1.155)	75690	2.50000	2.610
	81 Cyclohexanone	55	20.418	20.418	(1.163)	13825	25.0000	23.37
	82 1,1,2,2-Tetrachloroethane	83	20.766	20.766	(1.182)	52937	2.50000	2.655
$	83 4-Bromofluorobenzene	95	20.922	20.922	(0.911)	51572	2.50000	2.609

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7969.D
Report Date: 06-May-2005 10:23

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
84	1,2,3-Trichloropropane	75	21.149	21.149	(0.920)	31295	2.50000	2.958
85	Bromobenzene	156	21.340	21.340	(0.929)	35948	2.50000	2.591
86	n-Propylbenzene	91	21.375	21.375	(0.930)	102662	2.50000	2.692
87	2-Chlorotoluene	91	21.671	21.671	(0.943)	57000	2.50000	2.272
88	trans-1,4-dichloro-2-butene	53	21.706	21.706	(0.945)	2480	2.50000	2.144
89	1,3,5-Trimethylbenzene	105	21.723	21.723	(0.945)	54791	2.50000	2.577
90	4-Chlorotoluene	91	21.775	21.775	(0.948)	74020	2.50000	2.433
91	t-Butylbenzene	119	22.315	22.315	(0.971)	69811	2.50000	2.350
92	Pentachloroethane	167	22.367	22.367	(0.973)	20709	2.50000	2.196(a)
93	1,2,4-Trimethylbenzene	105	22.385	22.385	(0.974)	44653	2.50000	2.339
94	sec-Butylbenzene	105	22.628	22.628	(0.985)	84799	2.50000	2.676
95	4-Isopropyltoluene	119	22.820	22.820	(0.993)	52938	2.50000	2.585
96	1,3-Dichlorobenzene	146	22.872	22.872	(0.995)	41375	2.50000	2.537
* 97	1,4 Dichlorobenzene-d4	152	22.977	22.977	(1.000)	589730	50.0000	
98	1,4-Dichlorobenzene	146	23.011	23.011	(1.002)	55885	2.50000	2.821
99	n-Butylbenzene	91	23.290	23.290	(1.014)	50282	2.50000	2.493(M)
100	1,2-Dichlorobenzene	146	23.412	23.412	(1.019)	36523	2.50000	2.550
101	1,2-Dibromo-3-chloropropane	75	24.160	24.160	(1.052)	6441	2.50000	2.804
103	1,2,4-Trichlorobenzene	180	24.909	24.909	(1.084)	6008	2.50000	1.468
104	Hexachlorobutadiene	225	24.996	24.996	(1.088)	5667	2.50000	1.201
105	Naphthalene	128	25.118	25.118	(1.093)	7098	2.50000	1.778
106	1,2,3-Trichlorobenzene	180	25.309	25.309	(1.102)	4759	2.50000	1.502

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7969.D
Report Date: 06-May-2005 10:23

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

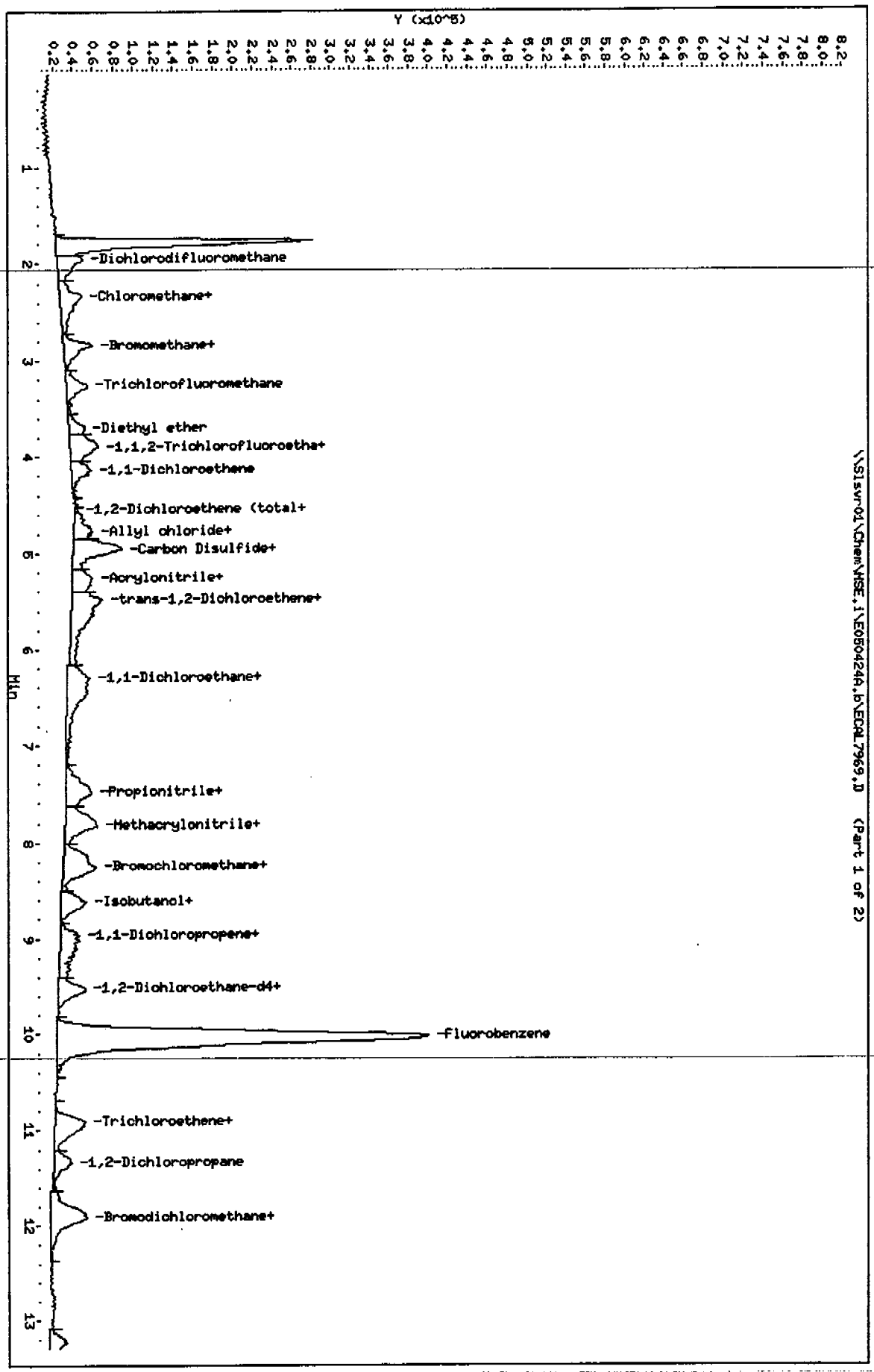
Instrument ID: MSE.i
Lab File ID: ECAL7969.D
Lab Smp Id: VSTD002.5
Analysis Type: VOA
Quant Type: ISTD
Operator: JDH
Method File: \\Slsvr01\Chem\MSE.i\E050424A.b\8260B-5mL.m
Misc Info: VBLKE114A;

Calibration Date: 24-APR-2005
Calibration Time: 20:06
Client Smp ID: VSTD002.5
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	1380349	690175	2760698	1643596	19.07
72 Chlorobenzene-d5	1095989	547995	2191978	1252976	14.32
97 1,4 Dichlorobenze	600344	300172	1200688	589730	-1.77

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	10.02	9.52	10.52	10.03	0.04
72 Chlorobenzene-d5	17.54	17.04	18.04	17.56	0.12
97 1,4 Dichlorobenze	22.97	22.47	23.47	22.98	0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^6)
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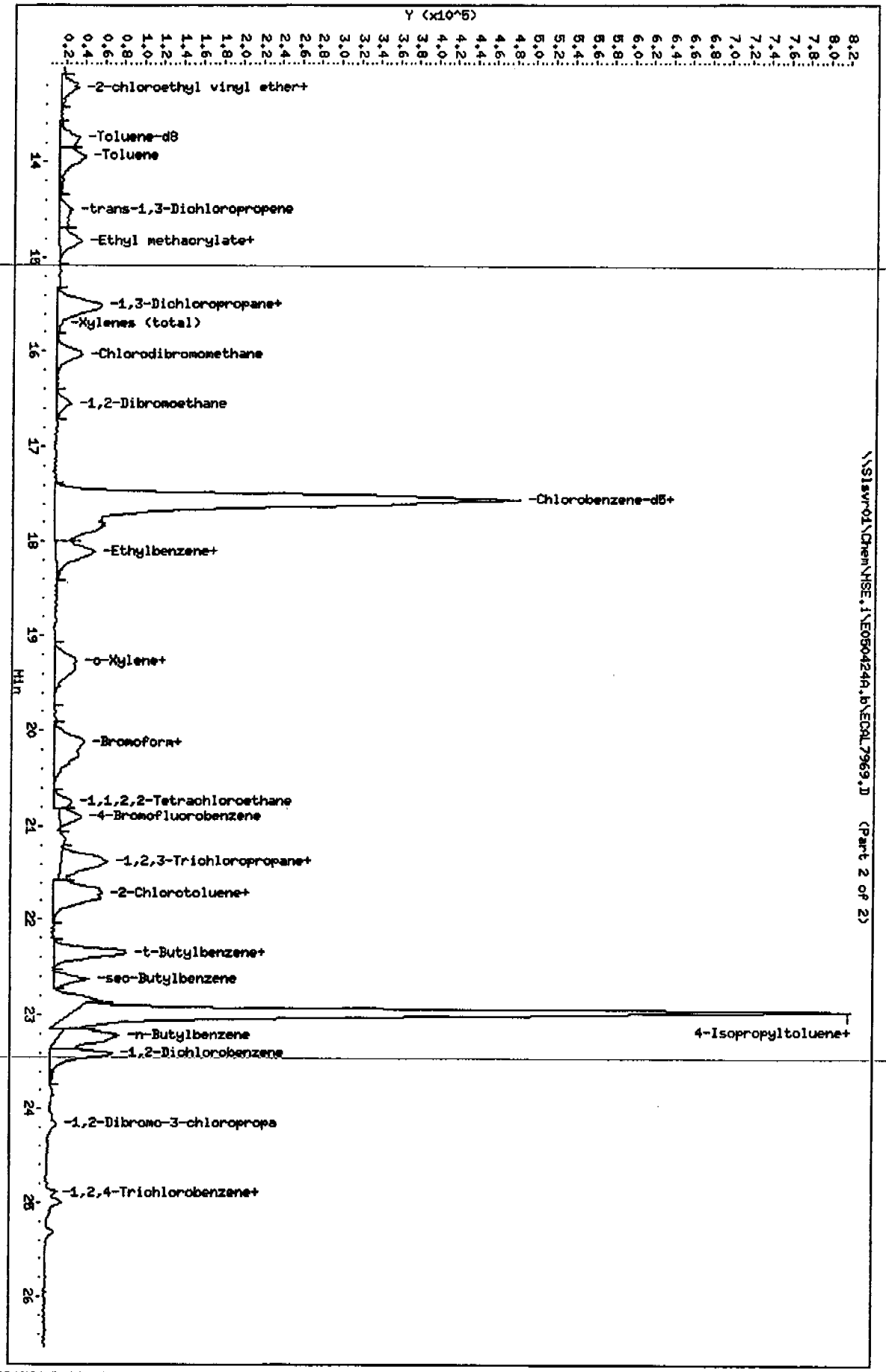
Date : 24-APR-2005 23:36
Client ID: WSTD002.5
Sample Info: WSTD002.5;E050424A.b;
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: HSE.i
Operator: JDH
Column diameter: 0.53
\\Slsvr01\Chem\HSE.i\E050424A.b\ECAL7969.D (Part 1 of 2)
Min
-Dichlorodifluoromethane
-Chloromethane+
-Bromomethane+
-Trichlorofluoromethane
-Diethyl ether
-1,1,2-Trichlorofluoretha+
-1,1-Dichloroethene
-1,2-Dichloroethene (total+
-Allyl chloride+
-Carbon Disulfide+
-Acrylonitrile+
-trans-1,2-Dichloroethene+
-1,1-Dichloroethane+
-Propionitrile+
-Methacrylonitrile+
-Bromochloromethane+
-Isobutanol+
-1,1-Dichloropropene+
-1,2-Dichloroethane-d4+
-Fluorobenzene
-Trichloroethene+
-1,2-Dichloropropane
-Bromodichloromethane+



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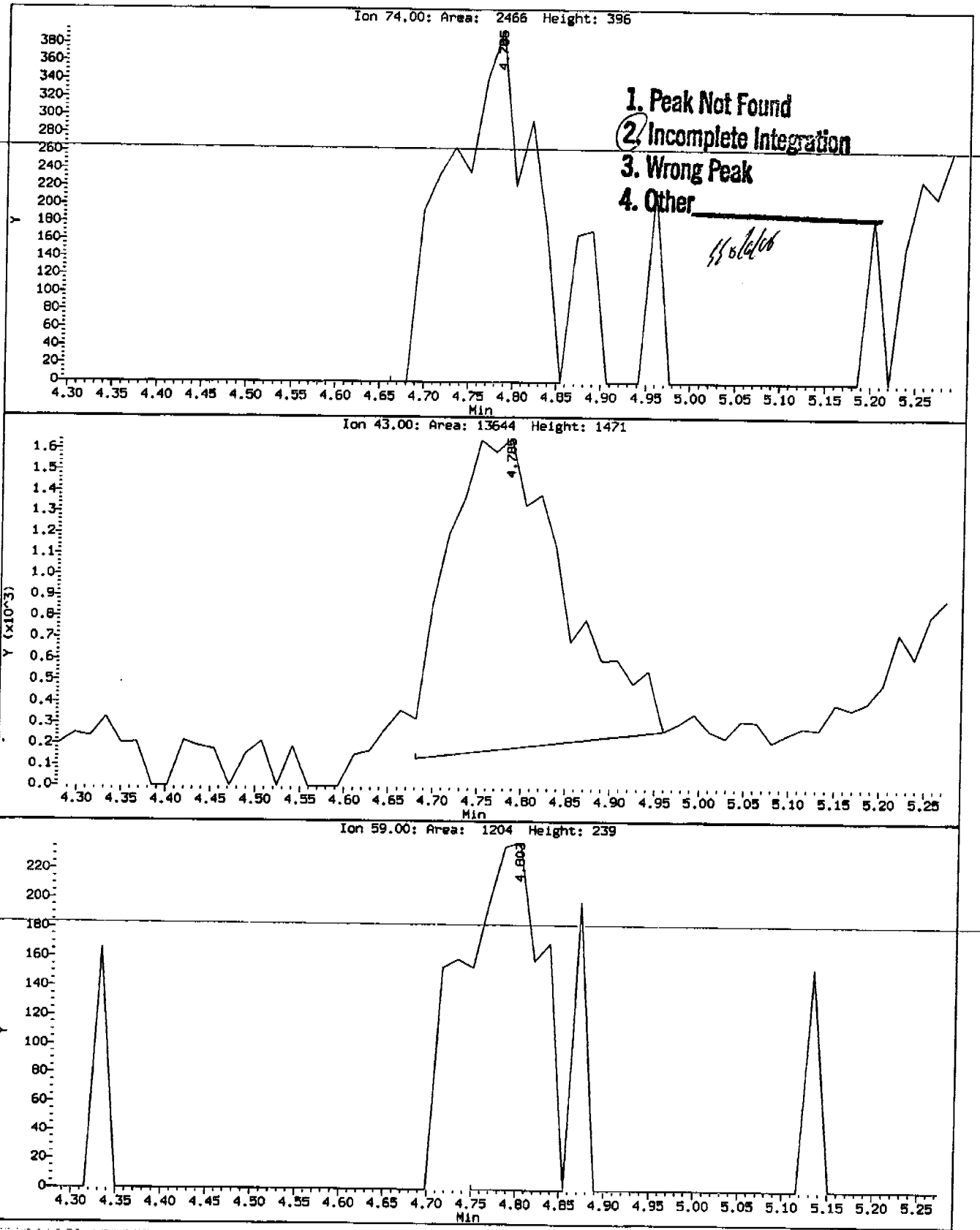
Date : 24-APR-2005 23:36
Client ID: VSTD002.5
Sample Info: VSTD002.5;E050424A.b;
Purge Volume: 5.0
Column phase: RTX-502.2

Instrument: MSE.i
Operator: JDH
Column diameter: 0.53

STL ST. LOUIS

Data File: \\Slavr01\Chem\MSE.i\E050424A.b\ECAL7969.D
Injection Date: 24-APR-2005 23:36
Instrument: MSE.i
Client Sample ID: VSTD002.5

Compound: Methyl Acetate
CAS Number:



LOT# F5D210380

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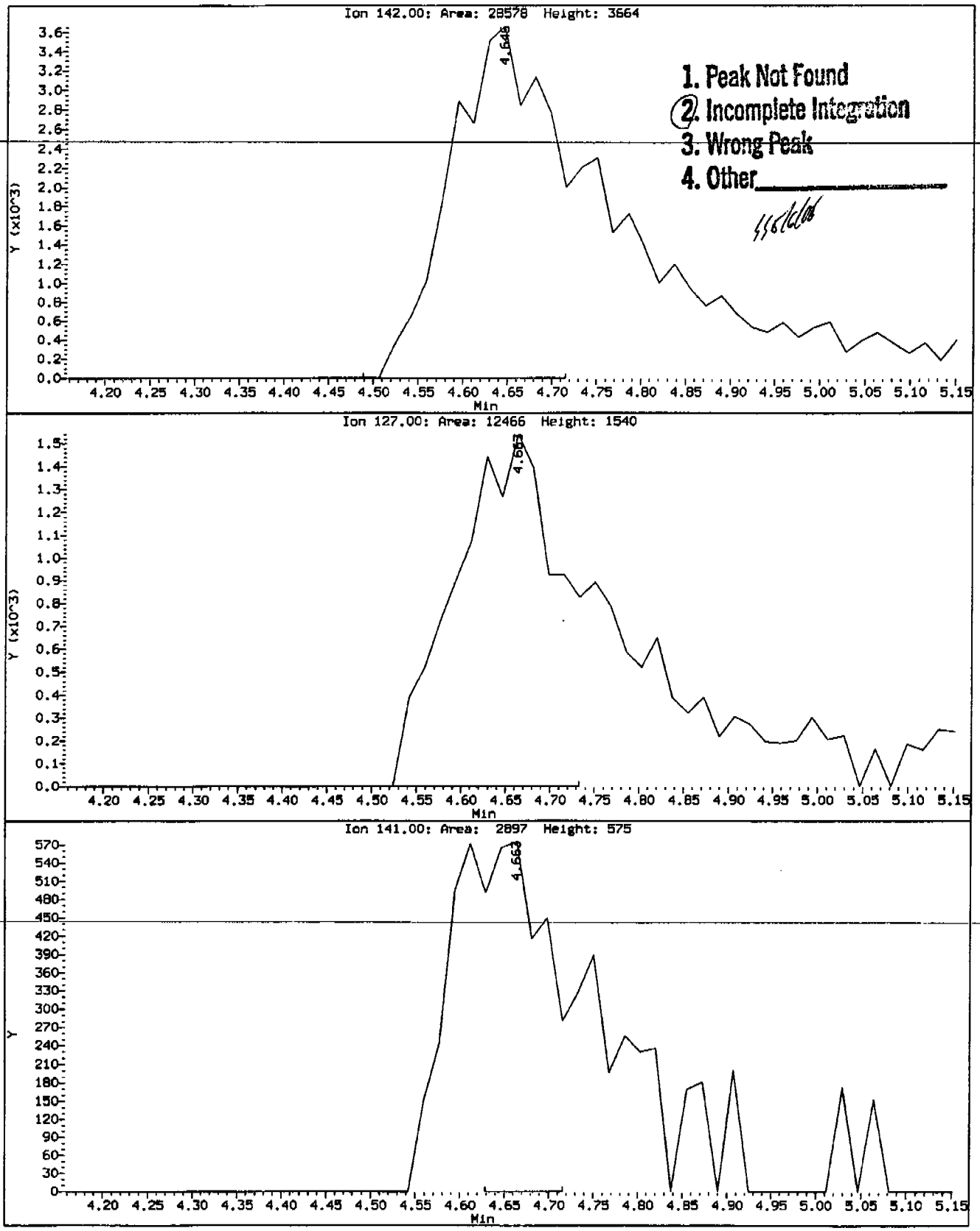
Injection Date: 24-APR-2005 23:36
Instrument: MSE.i
Client Sample ID: VSTD002.5

Compound: Iodomethane
CAS Number: 74-88-4



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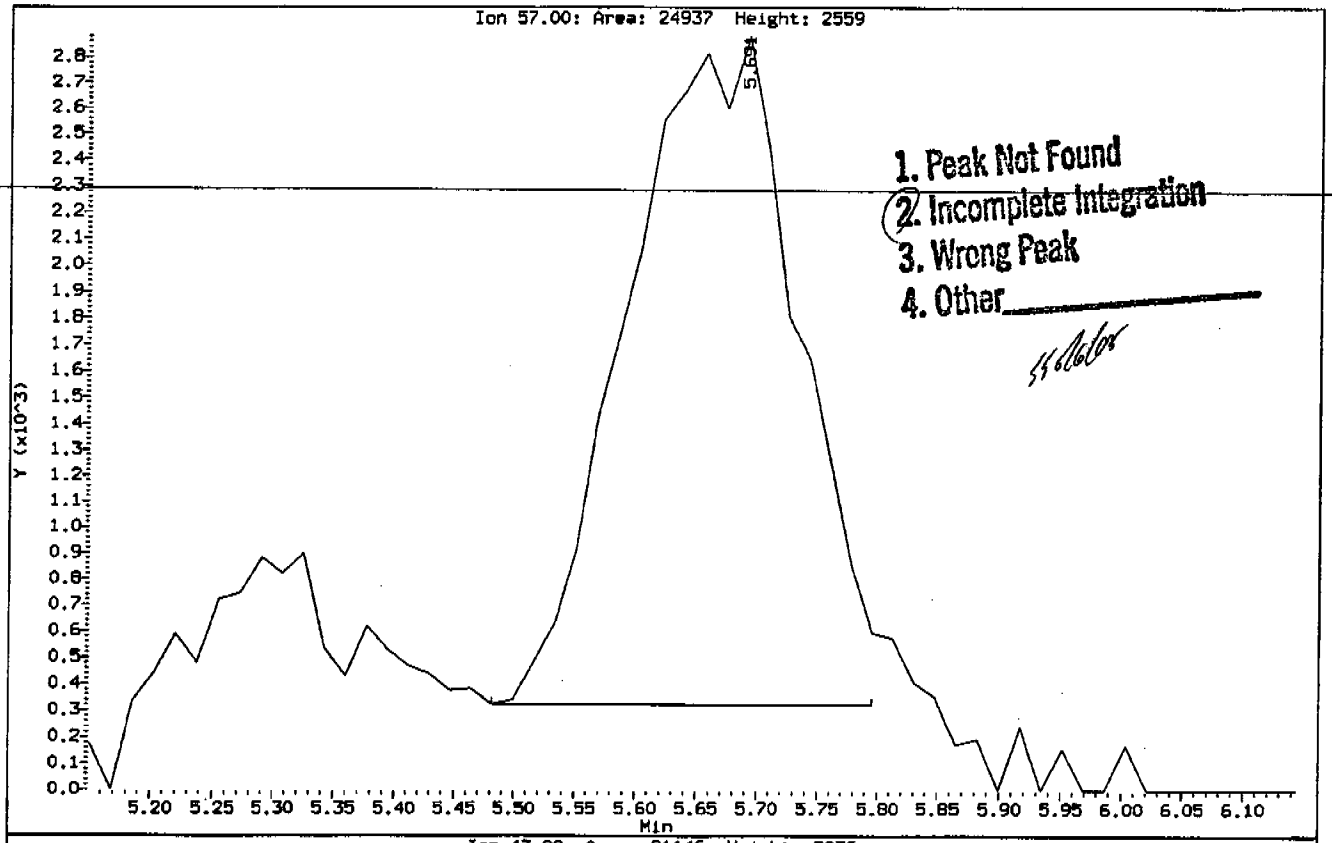
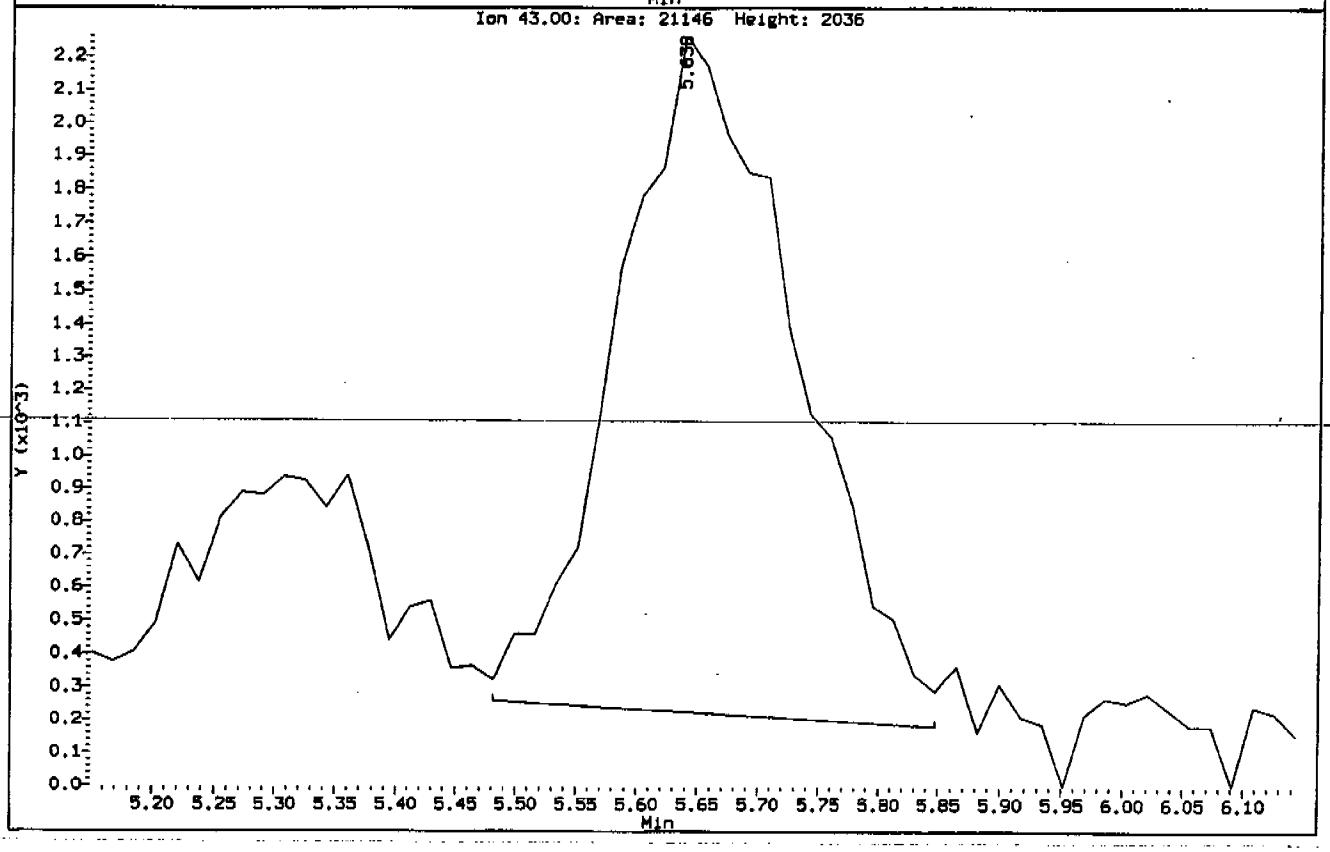
Injection Date: 24-APR-2005 23:36
Instrument: MSE.i
Client Sample ID: VSTD002.5

Compound: n-Hexane
CAS Number:





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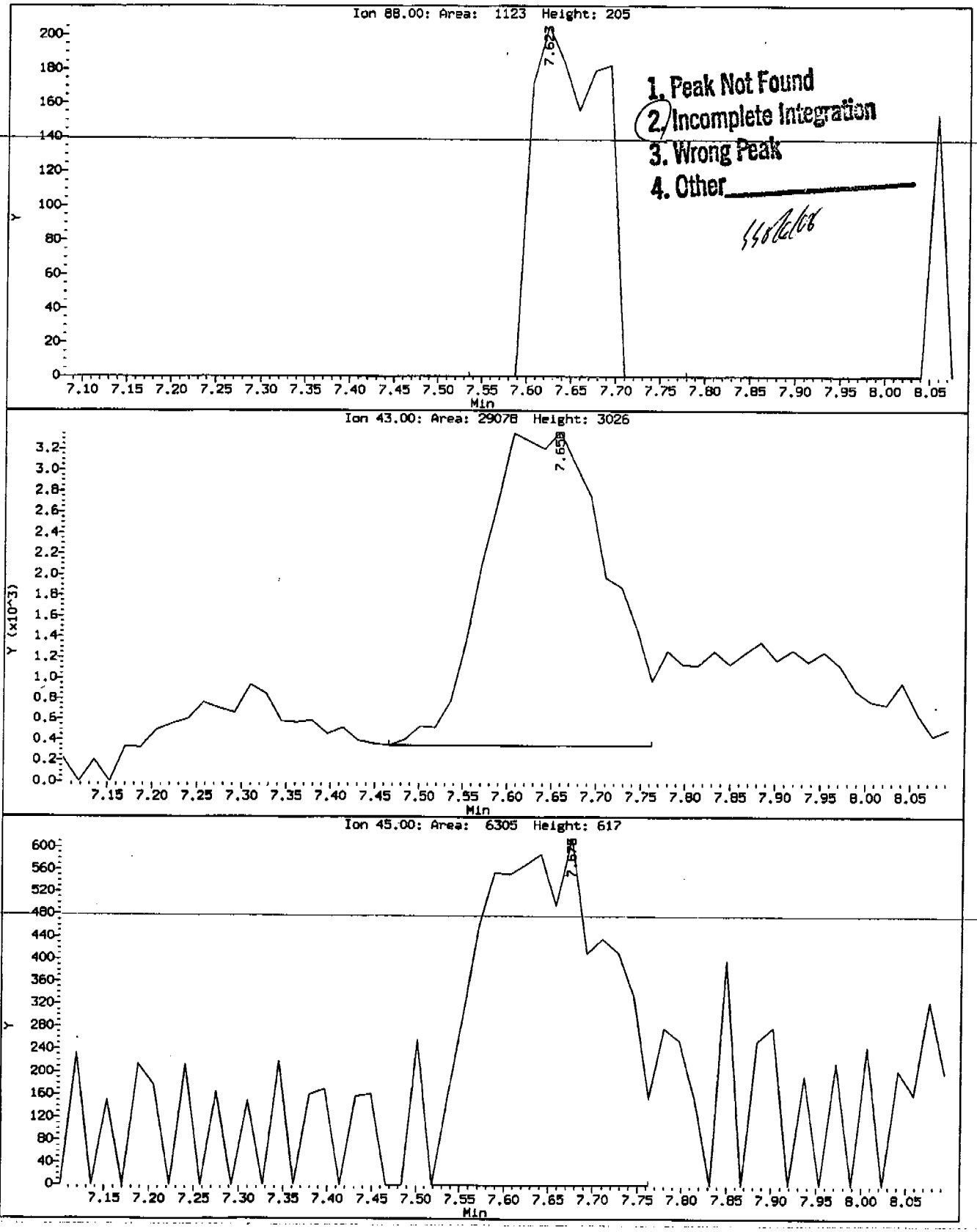
Injection Date: 24-APR-2005 23:36
Instrument: MSE.i
Client Sample ID: VSTD002.5

Compound: Ethyl acetate
CAS Number: 141-78-6



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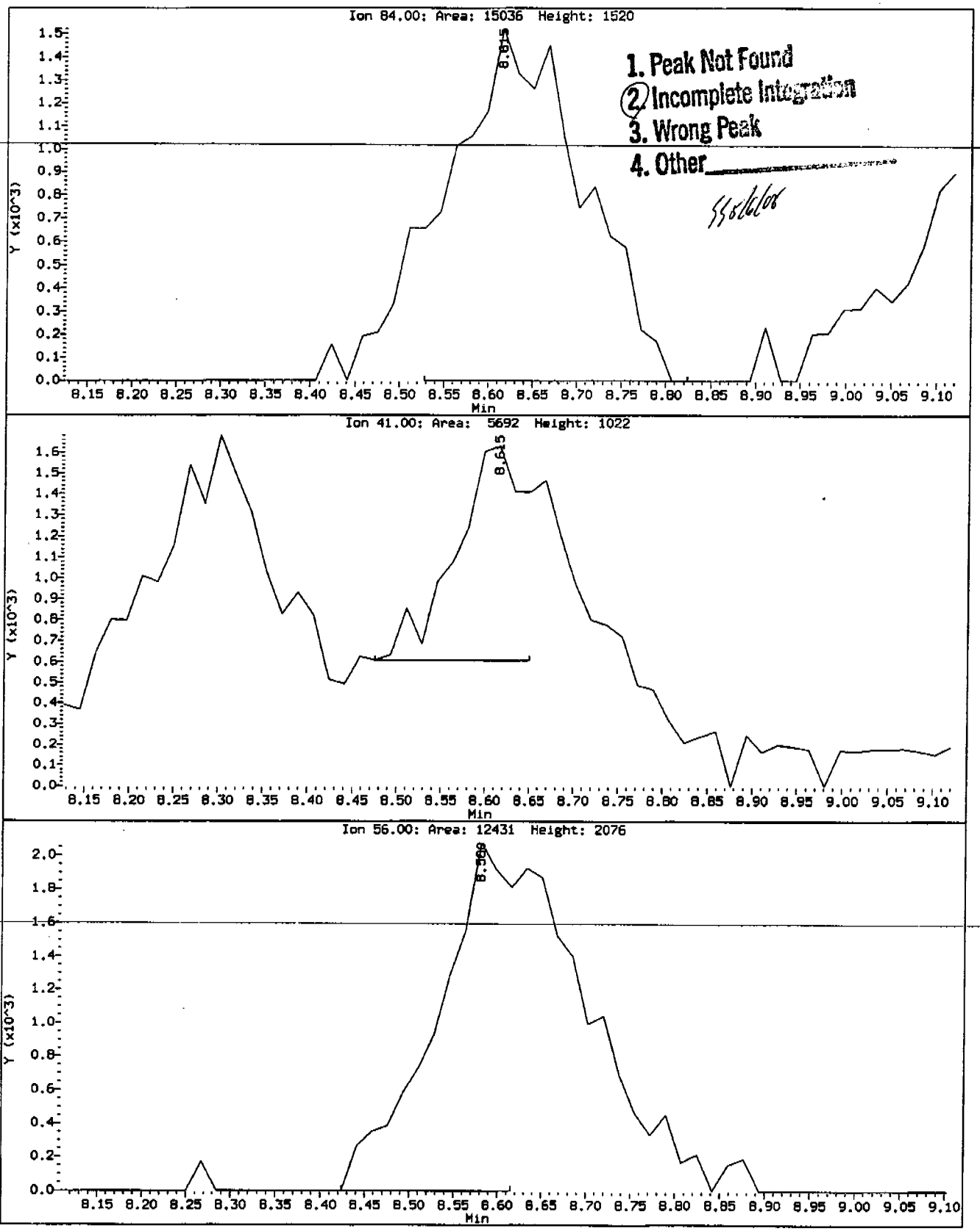
Instrument: MSE.i
Client Sample ID: VSTD002.5

Compound: Cyclohexane
CAS Number:



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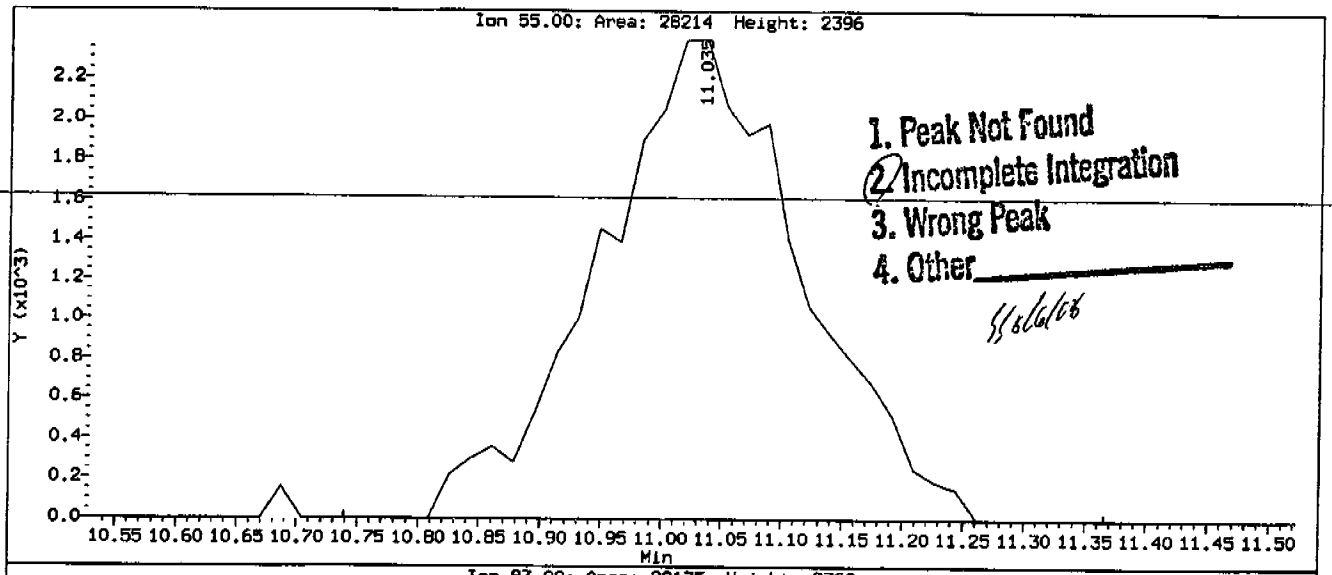
Instrument: MSE.i
Client Sample ID: VSTD002.5

Compound: Methylcyclohexane
CAS Number:



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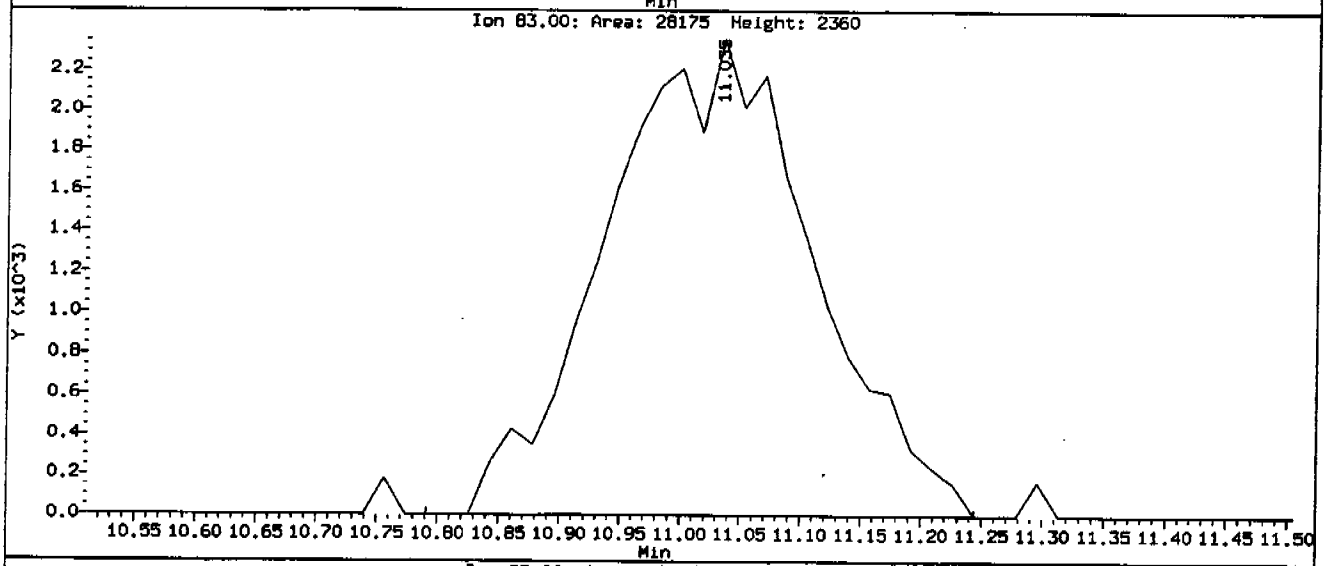
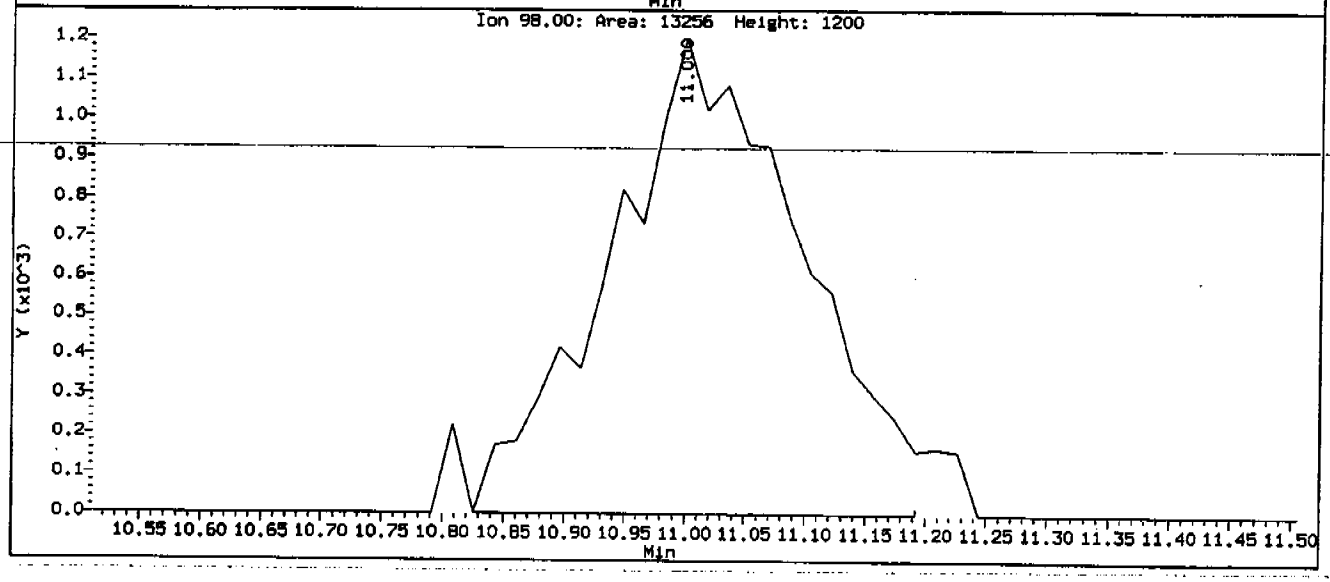
2. Incomplete Integration
3. Wrong Peak
4. Other_____

5/6/6/05





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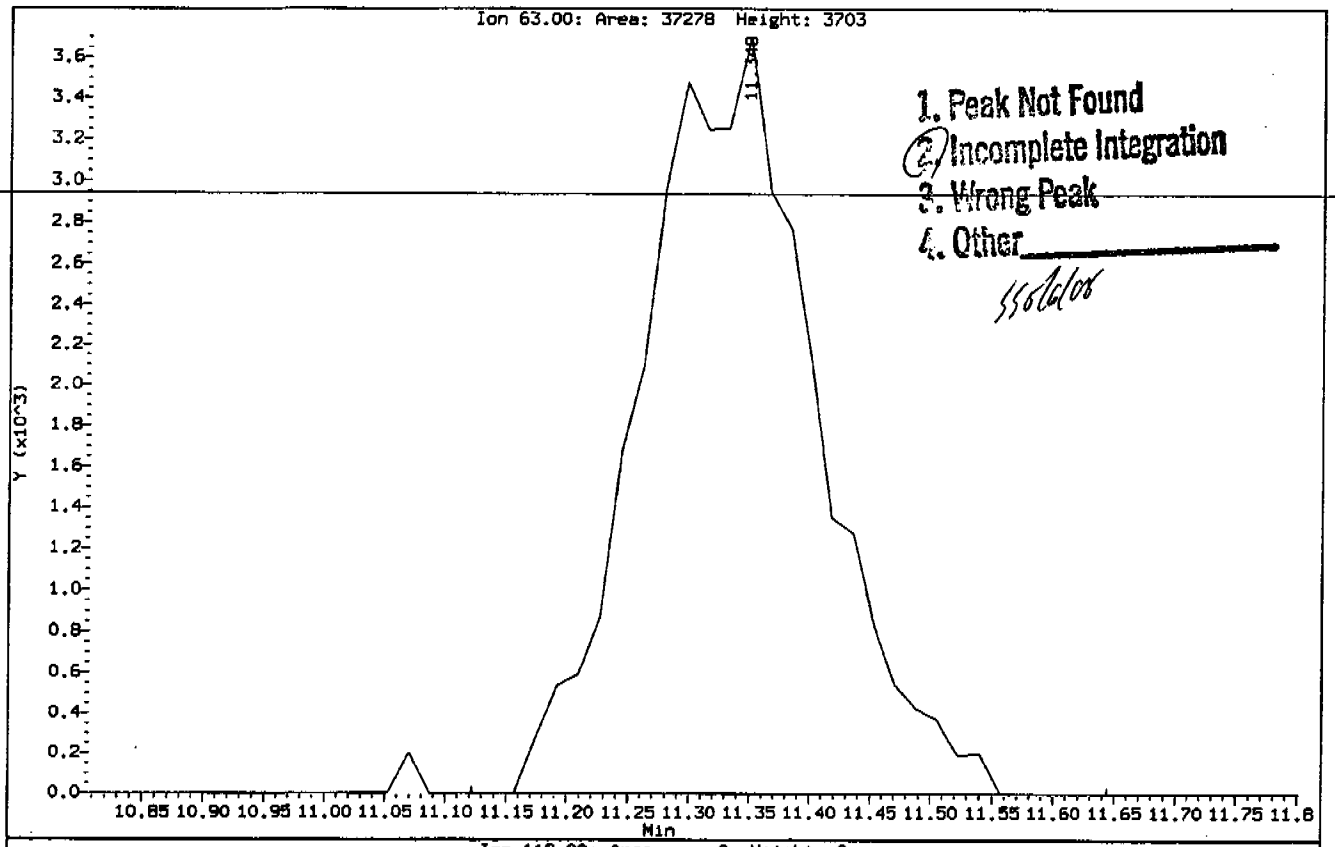
Injection Date: 24-APR-2005 23:36
Instrument: MSE.i
Client Sample ID: VSTD002.5

Compound: 1,2-Dichloropropane
CAS Number: 78-87-5



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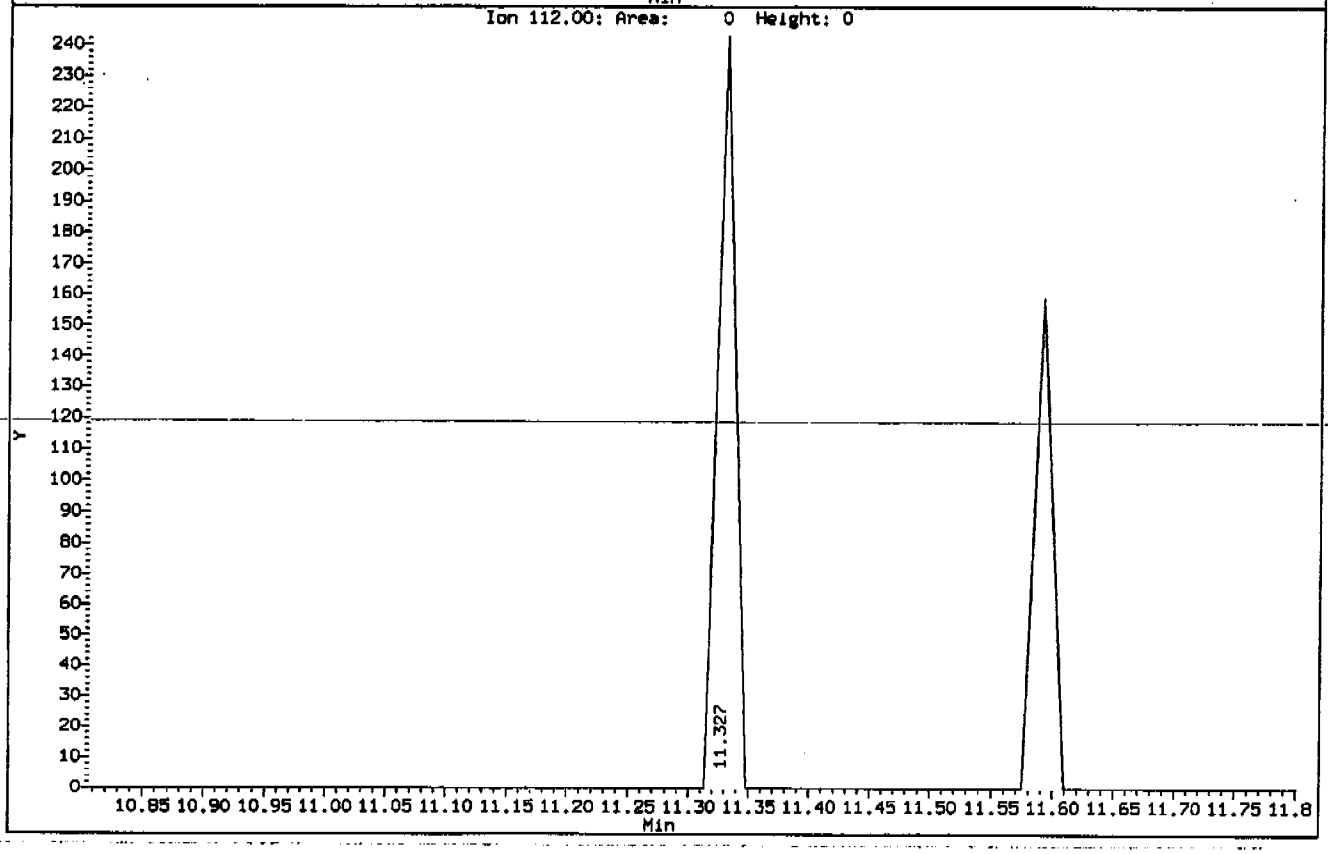
5/6/06



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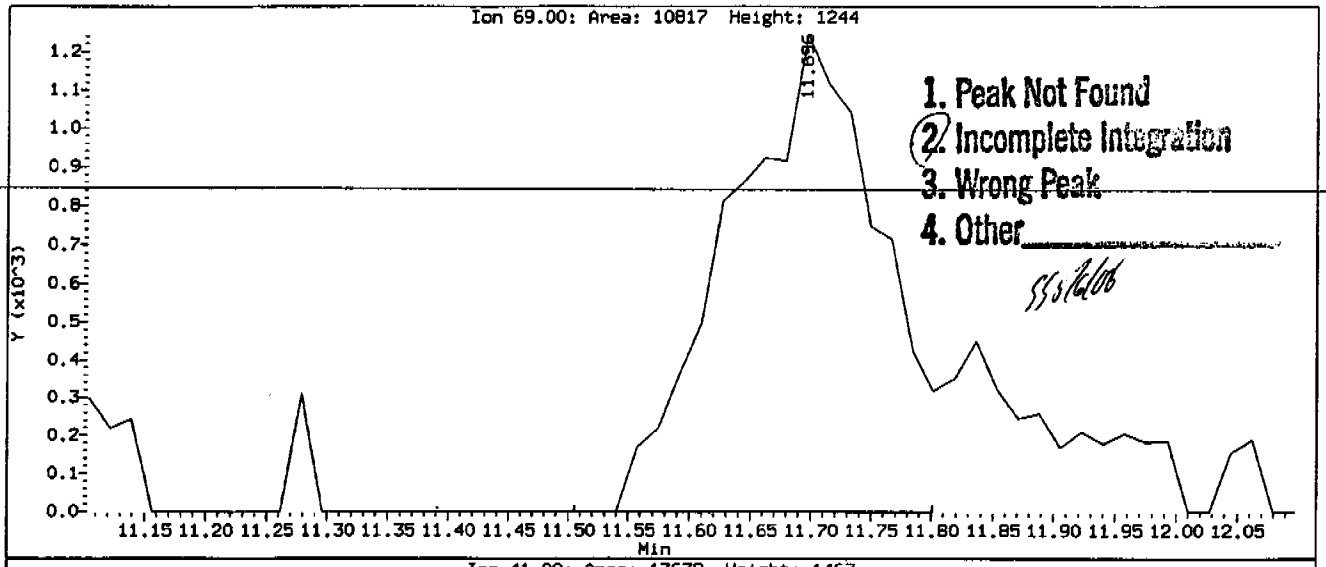
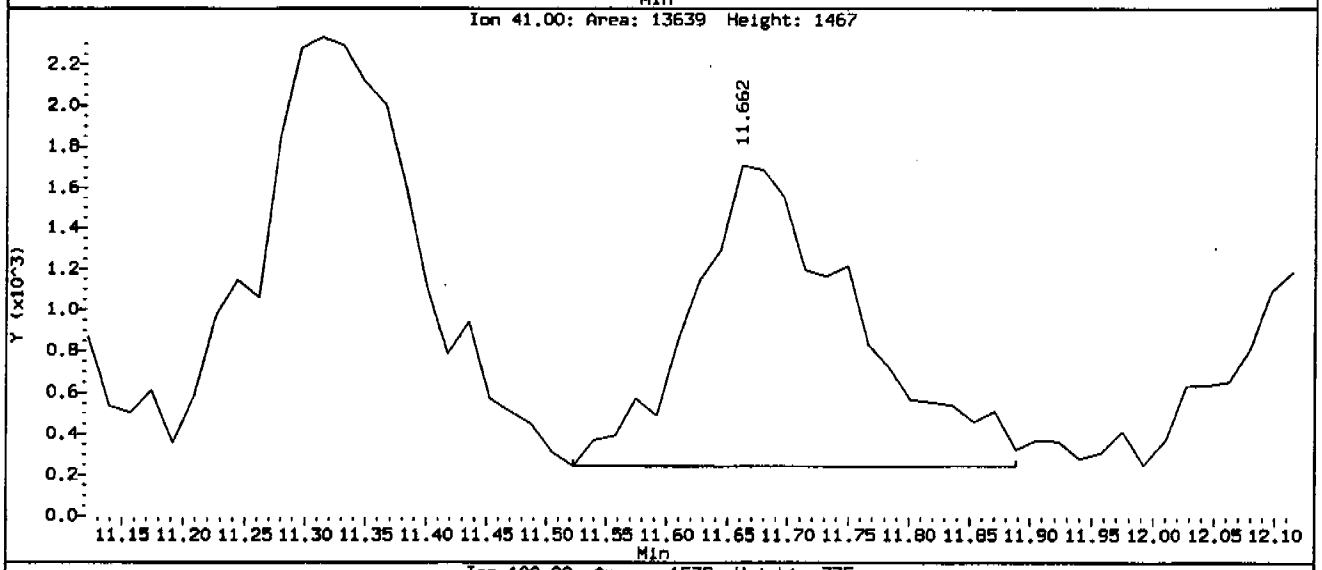
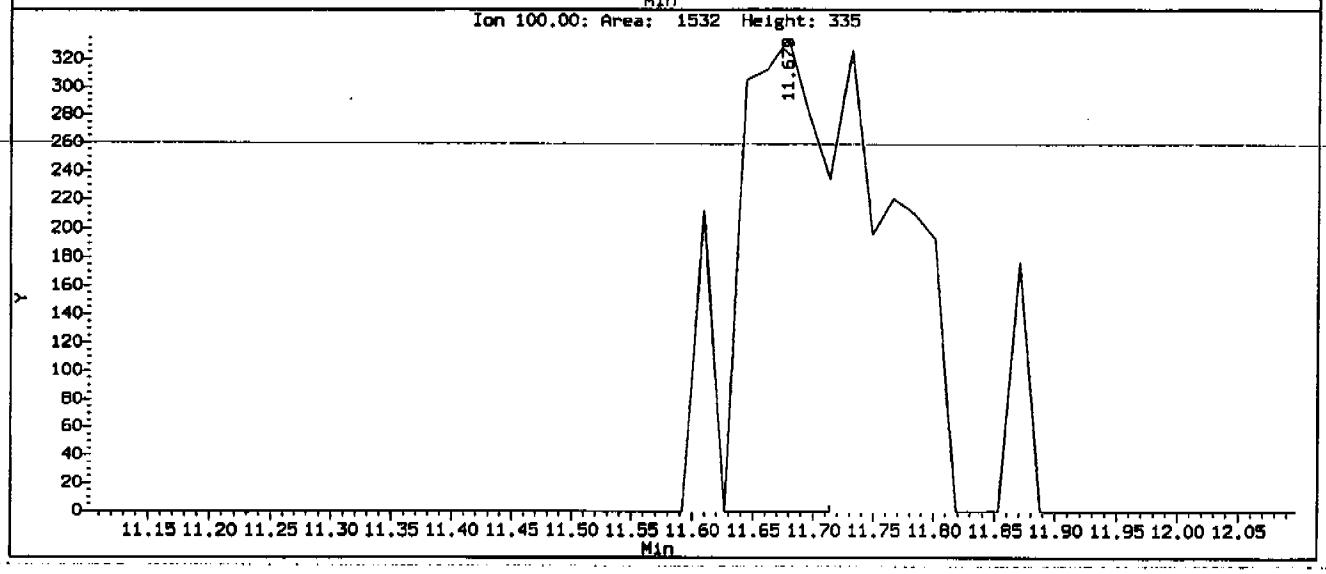
Injection Date: 24-APR-2005 23:36
Instrument: MSE.i
Client Sample ID: VSTD002.5

Compound: Methyl methacrylate
CAS Number: 80-62-6







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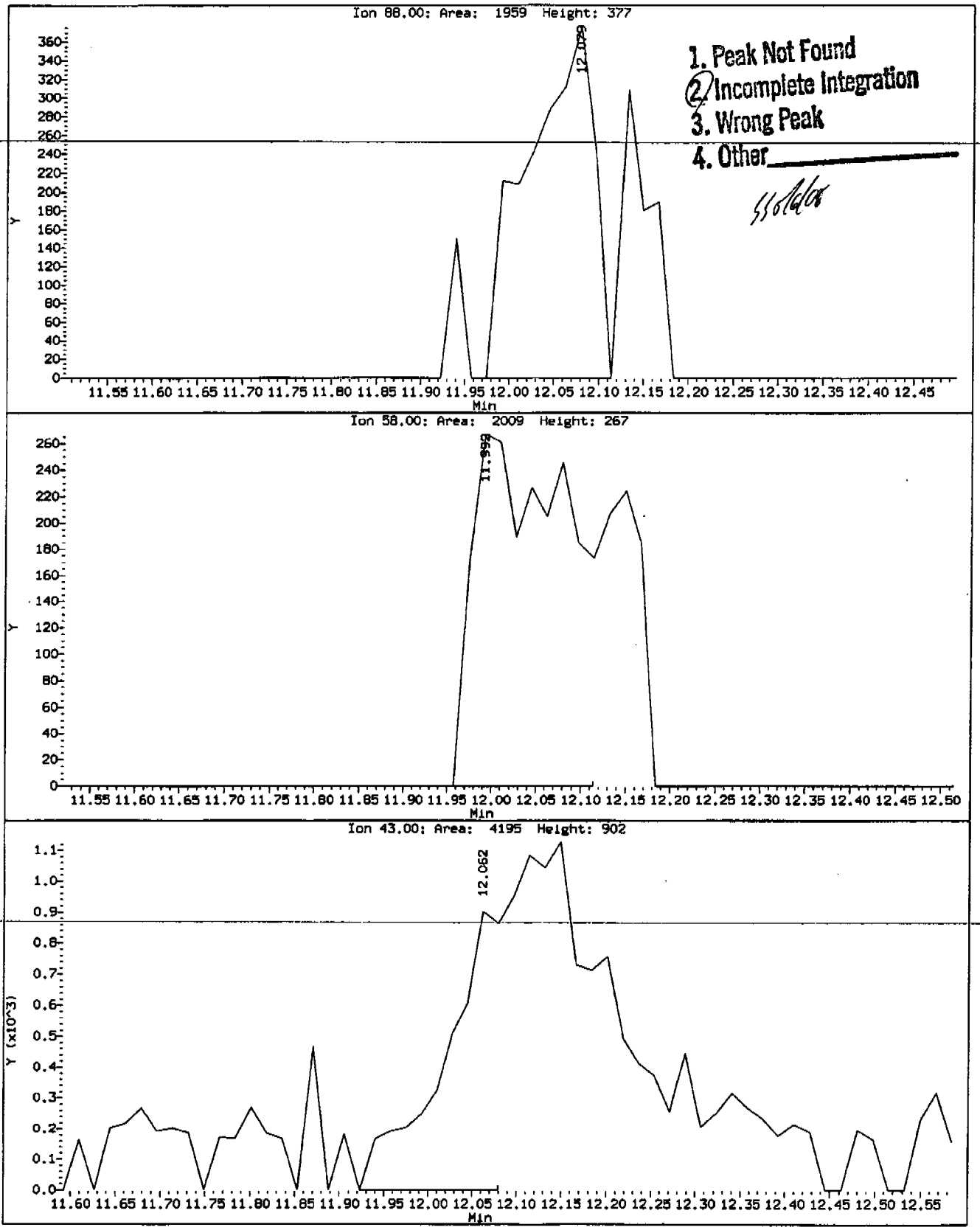
Injection Date: 24-APR-2005 23:36
Instrument: MSE.i
Client Sample ID: VSTD002.5

Compound: 1,4-Dioxane
CAS Number: 123-91-1



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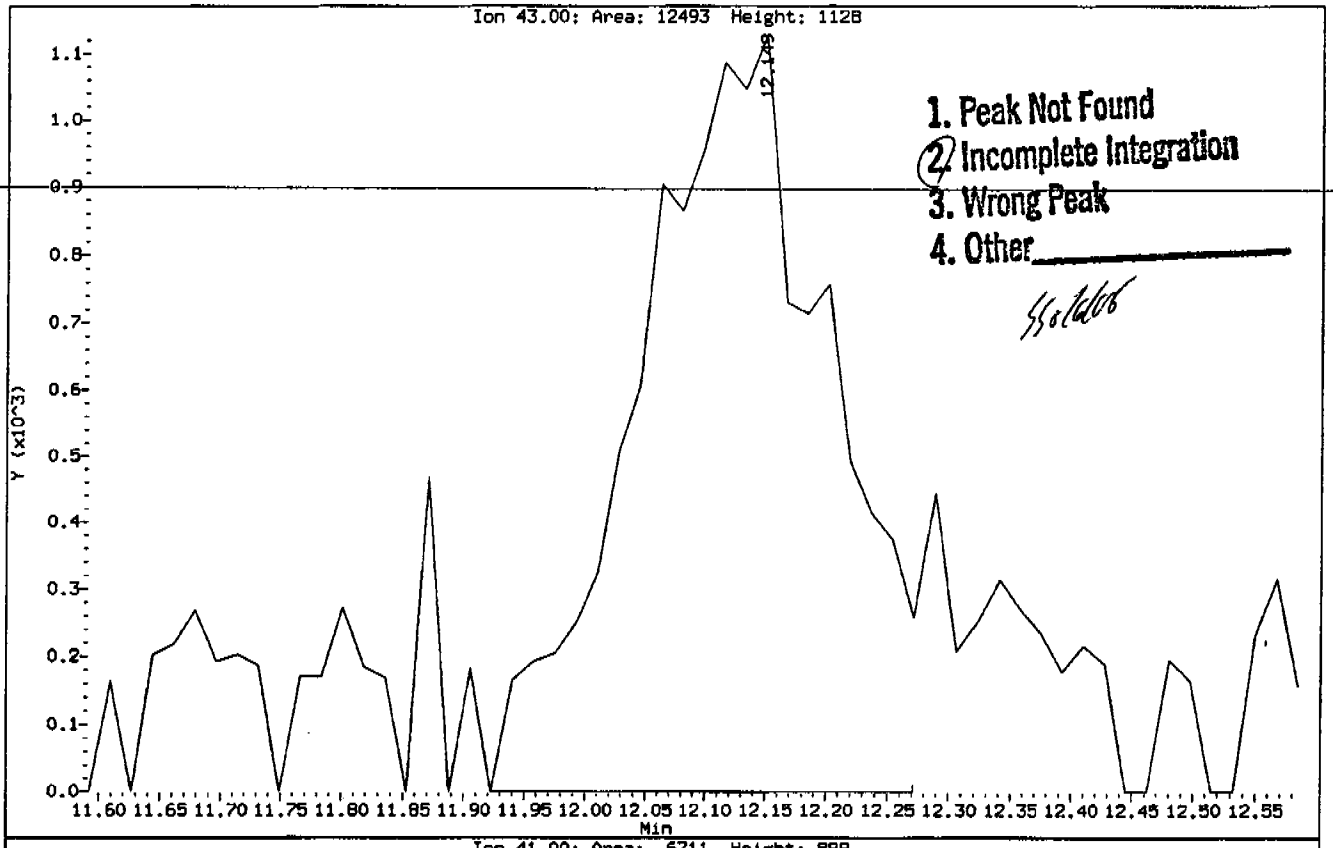
Injection Date: 24-APR-2005 23:36
Instrument: MSE.i
Client Sample ID: VSTD002.5

Compound: 2-Nitropropane
CAS Number: 79-46-9



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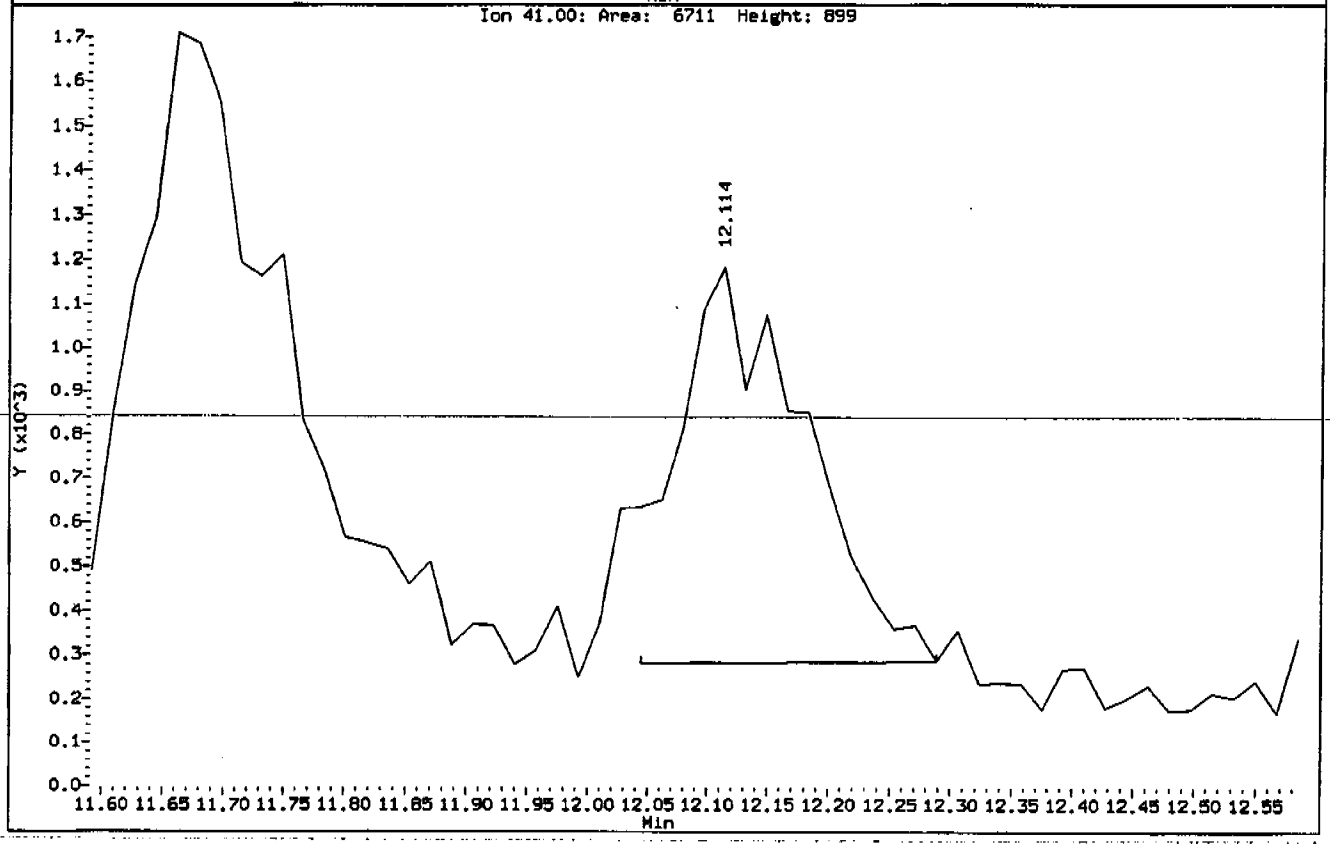

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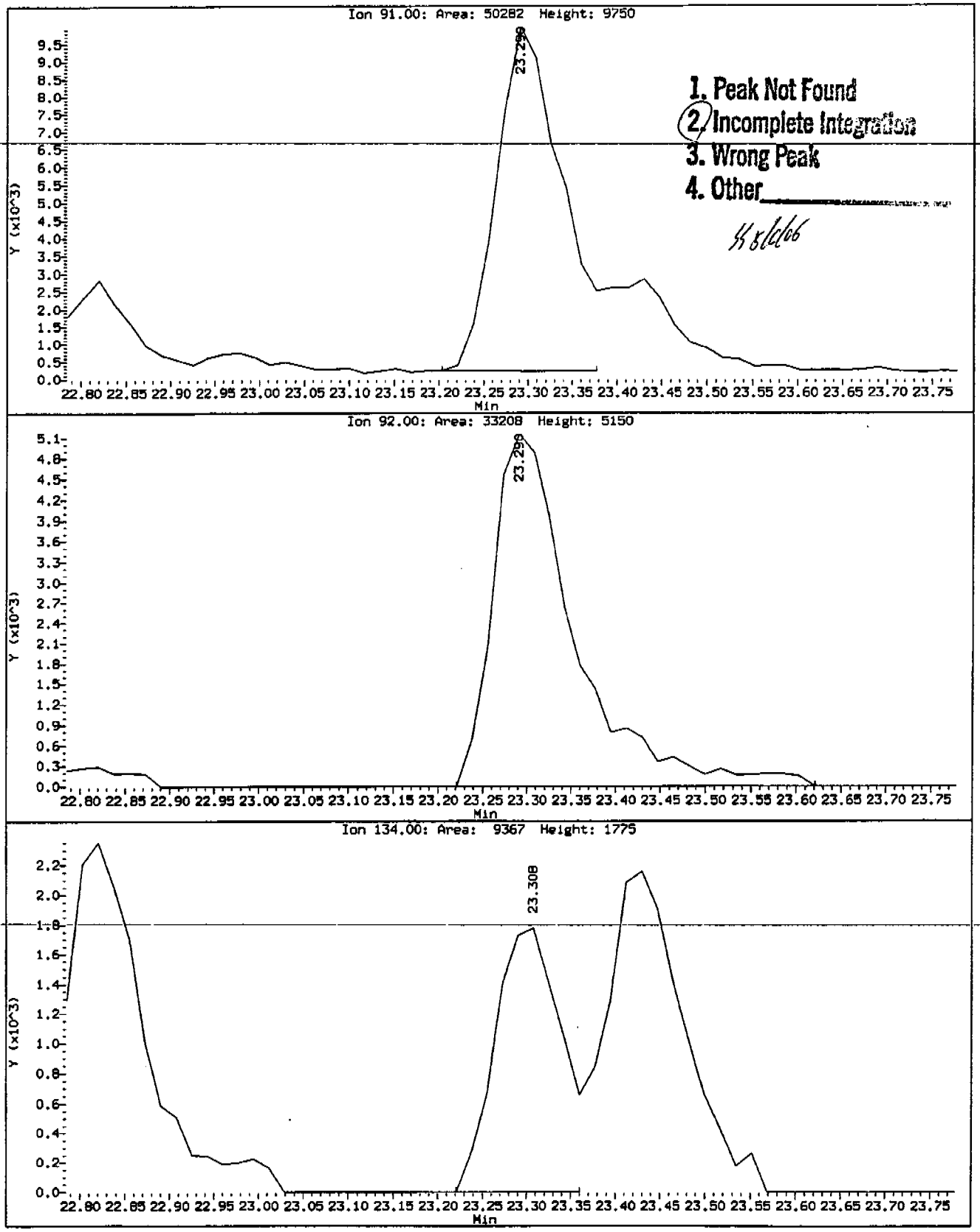
Injection Date: 24-APR-2005 23:36
Instrument: MSE.i
Client Sample ID: VSTD002.5

Compound: n-Butylbenzene
CAS Number: 104-51-8



Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7970.D
Report Date: 06-May-2005 10:23

STL St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7970.D
Lab Smp Id: VSTD200 Client Smp ID: VSTD200
Inj Date : 25-APR-2005 00:12
Operator : JDH Inst ID: MSE.i
Smp Info : VSTD200;E050424A.b;
Misc Info : VBLKE114A;
Comment : NONE
Method : \\Slsvr01\Chem\MSE.i\E050424A.b\8260B-5mL.m
Meth Date : 06-May-2005 10:23 stitess Quant Type: ISTD
Cal Date : 25-APR-2005 00:12 Cal File: ECAL7970.D
Als bottle: 6 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.10
Processing Host: SLVOA03

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume
Vo	5.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

5/6/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.958	1.958	(0.196)	3797629	200.000	206.0(A)
3	Chloromethane	50	2.289	2.289	(0.229)	1605698	200.000	194.8
4	Vinyl Chloride	62	2.324	2.324	(0.232)	1258429	200.000	168.0
5	Bromomethane	94	2.863	2.863	(0.286)	978547	200.000	70.32
6	Chloroethane	64	2.933	2.933	(0.293)	857206	200.000	158.2
7	Trichlorofluoromethane	101	3.246	3.246	(0.324)	3644484	200.000	191.0
8	Diethyl ether	74	3.716	3.716	(0.371)	1223057	400.000	361.3
9	1,1,2-Trichlorofluoroethane	151	3.891	3.891	(0.388)	2791709	200.000	194.1
10	Acrolein	56	3.925	3.925	(0.392)	368870	1000.00	941.0
11	Acetone	58	4.065	4.065	(0.406)	78980	200.000	136.3
12	1,1-Dichloroethene	96	4.134	4.134	(0.413)	1988378	200.000	192.2
M 14	1,2-Dichloroethene (total)	96				4626314	400.000	387.8
17	Methyl Acetate	74	4.796	4.796	(0.479)	202656	200.000	198.4
13	Acetonitrile	41	4.465	4.465	(0.446)	323484	1000.00	859.2
15	Iodomethane	142	4.657	4.657	(0.465)	4336053	200.000	267.4(A)
16	Allyl chloride	39	4.778	4.778	(0.477)	1091677	200.000	171.9
18	Carbon Disulfide	76	4.900	4.900	(0.489)	6874413	200.000	195.7
19	Methylene Chloride	84	4.970	4.970	(0.496)	2210140	200.000	166.5
20	Acrylonitrile	53	5.248	5.248	(0.524)	1289515	1000.00	938.1
21	MTBE	73	5.318	5.318	(0.531)	2709639	200.000	192.4
22	trans-1,2-Dichloroethene	96	5.492	5.492	(0.548)	2275055	200.000	197.2
23	n-Hexane	57	5.631	5.631	(0.562)	2124195	200.000	206.3(A)

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7970.D
Report Date: 06-May-2005 10:23

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	24 Vinyl acetate	43	5.631	5.631	(0.562)	1484115	200.000	196.0
	25 1,1-Dichloroethane	63	6.293	6.293	(0.628)	4008787	200.000	188.8
	26 2-Chloro-1,3-butadiene	53	6.467	6.467	(0.646)	2031013	200.000	186.1
	28 2-Butanone	72	7.268	7.268	(0.725)	106744	200.000	191.9
	29 Propionitrile	54	7.372	7.372	(0.736)	467069	1000.00	869.0
	30 2,2-Dichloropropane	77	7.407	7.407	(0.739)	2597608	200.000	194.0
	31 cis-1,2-Dichloroethene	96	7.494	7.494	(0.748)	2351259	200.000	190.7
	32 Ethyl acetate	88	7.599	7.599	(0.758)	124253	400.000	392.3
	33 Methacrylonitrile	41	7.738	7.738	(0.772)	2504915	1000.00	753.8
	34 Chloroform	83	7.807	7.807	(0.779)	4694722	200.000	188.4
	35 Bromochloromethane	128	8.156	8.156	(0.814)	1561548	200.000	186.4
	36 Tetrahydrofuran	71	8.260	8.260	(0.825)	558184	1000.00	921.4
$	37 Dibromofluoromethane	113	8.277	8.277	(0.826)	4784904	200.000	194.1
	39 Isobutanol	43	8.626	8.626	(0.861)	198309	4000.00	4198(A)
	38 1,1,1-Trichloroethane	97	8.626	8.626	(0.861)	3397758	200.000	204.0(A)
	40 Cyclohexane	84	8.626	8.626	(0.861)	1207099	200.000	196.6
	41 1,1-Dichloropropene	75	8.956	8.956	(0.894)	3205238	200.000	198.4
	42 Carbon Tetrachloride	117	9.130	9.130	(0.911)	3449234	200.000	210.3(A)
$	43 1,2-Dichloroethane-d4	102	9.322	9.322	(0.930)	492925	200.000	197.3
	45 n-Butanol	56	9.531	9.531	(0.951)	262527	2000.00	1945
	46 Benzene	78	9.513	9.513	(0.950)	4925996	200.000	191.9
	47 1,2-Dichloroethane	62	9.513	9.513	(0.950)	2392210	200.000	191.5
*	48 Fluorobenzene	96	10.018	10.018	(1.000)	1548883	50.0000	
	49 Trichloroethene	95	10.889	10.889	(1.087)	3064779	200.000	203.2(A)
	50 Methylcyclohexane	55	11.011	11.011	(1.099)	1861641	200.000	191.4
	51 1,2-Dichloropropane	63	11.307	11.307	(1.129)	2470445	200.000	190.0
	52 Methyl methacrylate	69	11.620	11.620	(1.160)	1026177	200.000	202.1(A)
	53 Bromodichloromethane	83	11.846	11.846	(1.182)	5451769	200.000	194.4
	54 Dibromomethane	93	11.933	11.933	(1.191)	2971272	200.000	191.5
	55 1,4-Dioxane	88	12.003	12.003	(1.198)	265535	4000.00	4383(A)
	56 2-Nitropropane	43	12.090	12.090	(1.207)	833837	200.000	193.9
	57 2-chloroethyl vinyl ether	63	12.734	12.734	(1.271)	850936	200.000	236.9(A)
	58 4-Methyl-2-pentanone	100	12.821	12.821	(1.280)	152915	200.000	235.9(A)
	59 cis-1,3-Dichloropropene	75	13.187	13.187	(1.316)	3497339	200.000	203.2(A)
$	61 Toluene-d8	98	13.744	13.744	(0.783)	4861926	200.000	198.4
	62 Toluene	92	13.935	13.935	(0.794)	3191000	200.000	196.1
	63 trans-1,3-Dichloropropene	75	14.457	14.457	(0.824)	2586704	200.000	212.8(A)
	64 Ethyl methacrylate	69	14.579	14.579	(0.830)	2303027	200.000	206.1(A)
	65 1,1,2-Trichloroethane	83	14.806	14.806	(0.843)	2039141	200.000	190.7
	66 2-Hexanone	43	14.997	14.997	(0.854)	939558	200.000	256.0(A)
	67 1,3-Dichloropropane	76	15.450	15.450	(0.880)	3137097	200.000	193.6
	68 Tetrachloroethene	164	15.519	15.519	(0.884)	3250978	200.000	218.0(A)
M	69 Xylenes (total)	106				7396724	600.000	672.5
	70 Chlorodibromomethane	129	16.024	16.024	(0.913)	4828631	200.000	202.8(A)
	71 1,2-Dibromoethane	107	16.512	16.512	(0.941)	3596606	200.000	197.9
*	72 Chlorobenzene-d5	117	17.556	17.556	(1.000)	1254921	50.0000	
	73 Chlorobenzene	112	17.643	17.643	(1.005)	4953540	200.000	203.3(A)
	74 1,1,1,2-Tetrachloroethane	131	17.800	17.800	(1.014)	3070757	200.000	209.1(A)
	75 Ethylbenzene	91	17.870	17.870	(1.018)	6944586	200.000	215.5(A)
	76 m,p-Xylenes	106	18.078	18.078	(1.030)	5020727	400.000	457.8(A)
	77 o-Xylene	106	19.227	19.227	(1.095)	2375997	200.000	214.6(A)
	78 Styrene	104	19.332	19.332	(1.101)	4167083	200.000	220.4(A)
	79 Bromoform	173	20.115	20.115	(1.146)	3723409	200.000	213.2(A)
	80 Isopropylbenzene	105	20.254	20.254	(1.154)	6233043	200.000	214.6(A)

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7970.D
Report Date: 06-May-2005 10:23

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
81	Cyclohexanone	55	20.341	20.341	(1.159)	1119949	2000.00	1890
82	1,1,2,2-Tetrachloroethane	83	20.759	20.759	(1.182)	3748033	200.000	187.7
$ 83	4-Bromofluorobenzene	95	20.881	20.881	(0.909)	4450937	200.000	176.1
84	1,2,3-Trichloropropane	75	21.107	21.107	(0.919)	2214564	200.000	163.7
85	Bromobenzene	156	21.282	21.282	(0.926)	3164903	200.000	178.5
86	n-Propylbenzene	91	21.334	21.334	(0.929)	8701609	200.000	178.5
87	2-Chlorotoluene	91	21.665	21.665	(0.943)	5834488	200.000	181.9
88	trans-1,4-dichloro-2-butene	53	21.699	21.699	(0.945)	231293	200.000	156.4
89	1,3,5-Trimethylbenzene	105	21.717	21.717	(0.945)	5244764	200.000	193.0
90	4-Chlorotoluene	91	21.769	21.769	(0.948)	7016590	200.000	180.4
91	t-Butylbenzene	119	22.326	22.326	(0.972)	7302913	200.000	192.3
92	Pentachloroethane	167	22.343	22.343	(0.973)	2231283	200.000	185.1
93	1,2,4-Trimethylbenzene	105	22.361	22.361	(0.973)	4981609	200.000	204.2(A)
94	sec-Butylbenzene	105	22.622	22.622	(0.985)	7876483	200.000	194.4
95	4-Isopropyltoluene	119	22.813	22.813	(0.993)	5421573	200.000	207.1(A)
96	1,3-Dichlorobenzene	146	22.866	22.866	(0.995)	4186067	200.000	200.8(A)
* 97	1,4 Dichlorobenzene-d4	152	22.970	22.970	(1.000)	753813	50.0000	
98	1,4-Dichlorobenzene	146	23.005	23.005	(1.002)	4858690	200.000	191.9
99	n-Butylbenzene	91	23.284	23.284	(1.014)	5509061	200.000	213.7(A)
100	1,2-Dichlorobenzene	146	23.388	23.388	(1.018)	3977715	200.000	217.3(A)
101	1,2-Dibromo-3-chloropropane	75	24.154	24.154	(1.052)	573185	200.000	195.2
103	1,2,4-Trichlorobenzene	180	24.868	24.868	(1.083)	1550015	200.000	296.4(A)
104	Hexachlorobutadiene	225	25.007	25.007	(1.089)	2157897	200.000	357.7(A)
105	Naphthalene	128	25.111	25.111	(1.093)	1331967	200.000	261.1(A)
106	1,2,3-Trichlorobenzene	180	25.285	25.285	(1.101)	1313436	200.000	324.4(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7970.D
Report Date: 06-May-2005 10:23

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

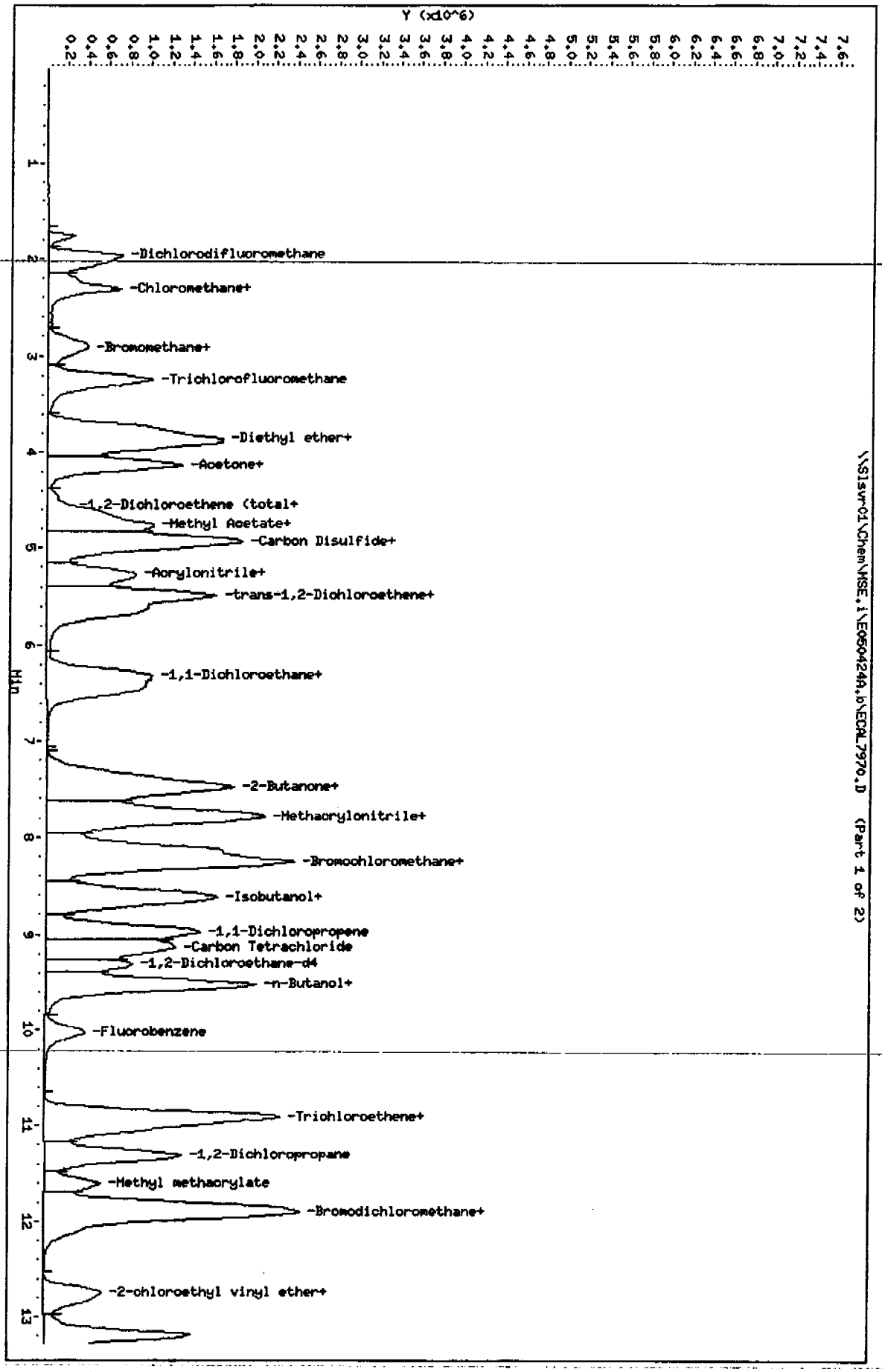
Instrument ID: MSE.i
Lab File ID: ECAL7970.D
Lab Smp Id: VSTD200
Analysis Type: VOA
Quant Type: ISTD
Operator: JDH
Method File: \\Slsvr01\Chem\MSE.i\E050424A.b\8260B-5mL.m
Misc Info: VBLKE114A;

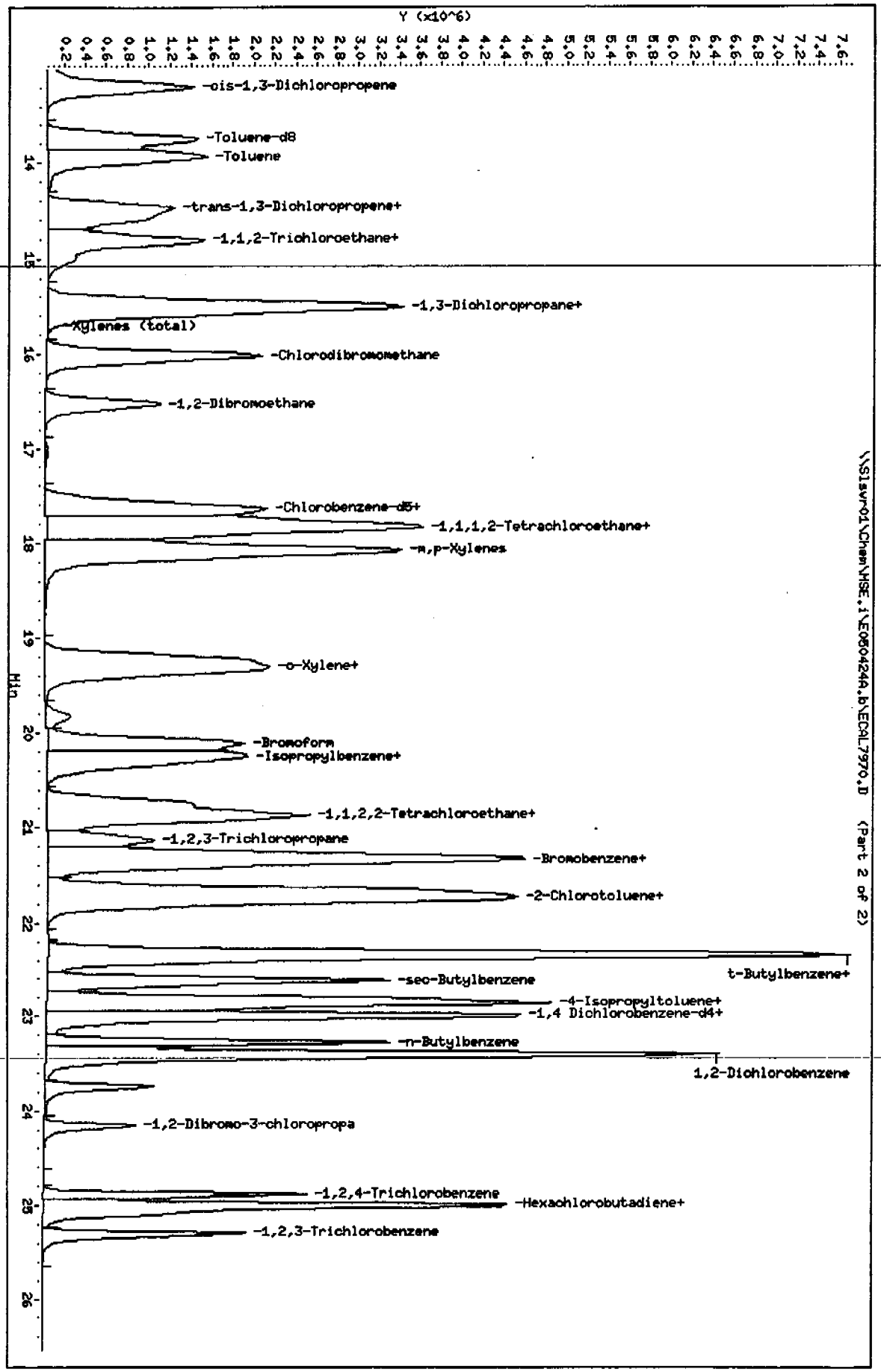
Calibration Date: 24-APR-2005
Calibration Time: 20:06
Client Smp ID: VSTD200
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	1380349	690175	2760698	1548883	12.21
72 Chlorobenzene-d5	1095989	547995	2191978	1254921	14.50
97 1,4 Dichlorobenze	600344	300172	1200688	753813	25.56

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	10.02	9.52	10.52	10.02	-0.02
72 Chlorobenzene-d5	17.54	17.04	18.04	17.56	0.09
97 1,4 Dichlorobenze	22.97	22.47	23.47	22.97	-0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^6)
0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0 3.2 3.4 3.6 3.8 4.0 4.2 4.4 4.6 4.8 5.0 5.2 5.4 5.6 5.8 6.0 6.2 6.4 6.6 6.8 7.0 7.2 7.4 7.6
Min
1 2 3 4 5 6 7 8 9 10 11 12 13
-Dichlorodifluoromethane
-Chloromethane+
-Bromomethane+
-Trichlorofluoromethane
-Diethyl ether+
-Acetone+
-1,2-Dichloroethene (total+
-Methyl Acetate+
-Carbon Disulfide+
-Acrylonitrile+
-trans-1,2-Dichloroethene+
-1,1-Dichloroethane+
-2-Butanone+
-Methacrylonitrile+
-Bromochloromethane+
-Isobutanol+
-1,1-Dichloropropene
-Carbon Tetrachloride
-1,2-Dichloroethane-d4
-n-Butanol+
-Fluorobenzene
-Trichloroethene+
-1,2-Dichloropropane
-Methyl methacrylate
-Bromodichloromethane+
-2-chloroethyl vinyl ether+
Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7970.D
Date : 25-APR-2005 00:12
Client ID: VSTD200
Sample Info: VSTD200;E050424A.bs
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: MSE.i
Operator: JDH
Column diameter: 0.53
\\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7970.D (Part 1 of 2)


Y (x10^6)
Min
-cis-1,3-Dichloropropene
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane+
-1,3-Dichloropropane+
Xylenes (total)
-Chlorodibromomethane
-1,2-Dibromoethane
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
-o-Xylene+
-Bromoform
-Isopropylbenzene+
-1,1,2,2-Tetrachloroethane+
-1,2,3-Trichloropropane
-Bromobenzene+
-2-Chlorotoluene+
t-Butylbenzene+
-sec-Butylbenzene
-4-Isopropyltoluene+
-1,4 Dichlorobenzene-d4+
-n-Butylbenzene
1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene+
-1,2,3-Trichlorobenzene
Data File: \\Slsvr01\Chem\MSE.i\E060424A.b\ECAL7970.D
Date : 25-APR-2006 00:12
Client ID: VSTD200
Sample Info: VSTD200;E060424A.b;
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: MSE.i
Operator: JDH
Column diameter: 0.53
\\Slsvr01\Chem\MSE.i\E060424A.b\ECAL7970.D (Part 2 of 2)

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7971.D
Report Date: 06-May-2005 10:24

STL St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7971.D
Lab Smp Id: VSTD100 Client Smp ID: VSTD100
Inj Date : 25-APR-2005 00:48
Operator : JDH Inst ID: MSE.i
Smp Info : VSTD100;E050424A.b;
Misc Info : VBLKE114A;
Comment : NONE
Method : \\Slsvr01\Chem\MSE.i\E050424A.b\8260B-5mL.m
Meth Date : 06-May-2005 10:23 stitess Quant Type: ISTD
Cal Date : 25-APR-2005 00:48 Cal File: ECAL7971.D
Als bottle: 7 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.10
Processing Host: SLVOA03

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume
Vo	5.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

5/6/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	1 Dichlorodifluoromethane	85	1.976	1.976	(0.197)	1866778	100.000	94.77
	3 Chloromethane	50	2.289	2.289	(0.229)	736464	100.000	83.62
	4 Vinyl Chloride	62	2.324	2.324	(0.232)	608627	100.000	76.05
	5 Bromomethane	94	2.829	2.829	(0.282)	1199357	100.000	80.64
	6 Chloroethane	64	2.933	2.933	(0.293)	509539	100.000	88.01
	7 Trichlorofluoromethane	101	3.246	3.246	(0.324)	1907429	100.000	93.56
	8 Diethyl ether	74	3.716	3.716	(0.371)	667433	200.000	184.5
	9 1,1,2-Trichlorofluoroethane	151	3.891	3.891	(0.388)	1493766	100.000	97.20
	10 Acrolein	56	3.891	3.891	(0.388)	197486	500.000	471.4
	11 Acetone	58	4.030	4.030	(0.402)	47087	100.000	76.06
	12 1,1-Dichloroethene	96	4.134	4.134	(0.413)	1041636	100.000	94.24
M	14 1,2-Dichloroethene (total)	96				2407433	200.000	188.6
	17 Methyl Acetate	74	4.796	4.796	(0.479)	108735	100.000	99.63
	13 Acetonitrile	41	4.448	4.448	(0.444)	173872	500.000	432.2
	15 Iodomethane	142	4.657	4.657	(0.465)	2010533	100.000	116.0
	16 Allyl chloride	39	4.761	4.761	(0.475)	565769	100.000	83.37
	18 Carbon Disulfide	76	4.900	4.900	(0.489)	3573028	100.000	95.19
	19 Methylene Chloride	84	4.970	4.970	(0.496)	1159952	100.000	81.78
	20 Acrylonitrile	53	5.231	5.231	(0.522)	687670	500.000	468.1
	21 MTBE	73	5.301	5.301	(0.529)	1433514	100.000	95.25
	22 trans-1,2-Dichloroethene	96	5.492	5.492	(0.548)	1145558	100.000	92.89
	23 n-Hexane	57	5.649	5.649	(0.564)	1013363	100.000	92.08

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7971.D
Report Date: 06-May-2005 10:24

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	24 Vinyl acetate	43	5.649	5.649	(0.564)	713376	100.000	88.18
	25 1,1-Dichloroethane	63	6.293	6.293	(0.628)	2027573	100.000	89.33
	26 2-Chloro-1,3-butadiene	53	6.467	6.467	(0.646)	1042310	100.000	89.37
	28 2-Butanone	72	7.233	7.233	(0.722)	55966	100.000	94.17
	29 Propionitrile	54	7.337	7.337	(0.732)	259781	500.000	452.3
	30 2,2-Dichloropropane	77	7.407	7.407	(0.739)	1318822	100.000	92.14
	31 cis-1,2-Dichloroethene	96	7.494	7.494	(0.748)	1261875	100.000	95.76
	32 Ethyl acetate	88	7.581	7.581	(0.757)	67218	200.000	198.6
	33 Methacrylonitrile	41	7.720	7.720	(0.771)	1740858	500.000	490.2
	34 Chloroform	83	7.807	7.807	(0.779)	2499360	100.000	93.87
	35 Bromochloromethane	128	8.138	8.138	(0.812)	877147	100.000	97.96
	36 Tetrahydrofuran	71	8.243	8.243	(0.823)	312450	500.000	482.6
$	37 Dibromofluoromethane	113	8.260	8.260	(0.825)	2648195	100.000	100.5
	39 Isobutanol	43	8.608	8.608	(0.859)	99292	2000.00	1966
	38 1,1,1-Trichloroethane	97	8.626	8.626	(0.861)	1736613	100.000	97.54
	40 Cyclohexane	84	8.626	8.626	(0.861)	641864	100.000	97.83
	41 1,1-Dichloropropene	75	8.974	8.974	(0.896)	1627971	100.000	94.27
	42 Carbon Tetrachloride	117	9.130	9.130	(0.911)	1749290	100.000	99.80
$	43 1,2-Dichloroethane-d4	102	9.322	9.322	(0.930)	268470	100.000	100.5
	45 n-Butanol	56	9.479	9.479	(0.946)	137012	1000.00	949.8
	46 Benzene	78	9.531	9.531	(0.951)	2582705	100.000	94.14
	47 1,2-Dichloroethane	62	9.513	9.513	(0.950)	1236283	100.000	92.59
*	48 Fluorobenzene	96	10.018	10.018	(1.000)	1655308	50.0000	
	49 Trichloroethene	95	10.889	10.889	(1.087)	1546386	100.000	95.93
	50 Methylcyclohexane	55	11.028	11.028	(1.101)	969438	100.000	93.24(M)
	51 1,2-Dichloropropane	63	11.307	11.307	(1.129)	1271248	100.000	91.49
	52 Methyl methacrylate	69	11.602	11.602	(1.158)	564835	100.000	104.1
	53 Bromodichloromethane	83	11.846	11.846	(1.182)	2893756	100.000	96.56
	54 Dibromomethane	93	11.933	11.933	(1.191)	1614087	100.000	97.34
	55 1,4-Dioxane	88	12.003	12.003	(1.198)	148109	2000.00	2288
	56 2-Nitropropane	43	12.090	12.090	(1.207)	442792	100.000	96.36
	57 2-chloroethyl vinyl ether	63	12.734	12.734	(1.271)	468776	100.000	122.1
	58 4-Methyl-2-pentanone	100	12.821	12.821	(1.280)	88050	100.000	127.1
	59 cis-1,3-Dichloropropene	75	13.204	13.204	(1.318)	1815541	100.000	98.72
$	61 Toluene-d8	98	13.744	13.744	(0.783)	2630351	100.000	99.20
	62 Toluene	92	13.935	13.935	(0.794)	1673084	100.000	95.03
	63 trans-1,3-Dichloropropene	75	14.475	14.475	(0.824)	1314510	100.000	99.96
	64 Ethyl methacrylate	69	14.579	14.579	(0.830)	1230887	100.000	101.8
	65 1,1,2-Trichloroethane	83	14.806	14.806	(0.843)	1081016	100.000	93.47
	66 2-Hexanone	43	14.997	14.997	(0.854)	479504	100.000	120.8
	67 1,3-Dichloropropane	76	15.450	15.450	(0.880)	1620791	100.000	92.48
	68 Tetrachloroethene	164	15.502	15.502	(0.883)	1608262	100.000	99.70
M	69 Xylenes (total)	106				3767617	300.000	316.6
	70 Chlorodibromomethane	129	16.024	16.024	(0.913)	2532060	100.000	98.31
	71 1,2-Dibromoethane	107	16.529	16.529	(0.941)	1949702	100.000	99.16
*	72 Chlorobenzene-d5	117	17.556	17.556	(1.000)	1357636	50.0000	
	73 Chlorobenzene	112	17.643	17.643	(1.005)	2542018	100.000	96.45
	74 1,1,1,2-Tetrachloroethane	131	17.800	17.800	(1.014)	1573810	100.000	99.04
	75 Ethylbenzene	91	17.870	17.870	(1.018)	3506778	100.000	100.6
	76 m,p-Xylenes	106	18.078	18.078	(1.030)	2564239	200.000	216.1
	77 o-Xylene	106	19.210	19.210	(1.094)	1203378	100.000	100.5
	78 Styrene	104	19.332	19.332	(1.101)	2071273	100.000	101.3
	79 Bromoform	173	20.115	20.115	(1.146)	1899356	100.000	100.5
	80 Isopropylbenzene	105	20.237	20.237	(1.153)	3048944	100.000	97.03

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7971.D
Report Date: 06-May-2005 10:24

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	81 Cyclohexanone	55	20.342	20.342	(1.159)	598642	1000.00	933.8
	82 1,1,2,2-Tetrachloroethane	83	20.724	20.724	(1.180)	2072203	100.000	95.90
$	83 4-Bromofluorobenzene	95	20.881	20.881	(0.909)	2457519	100.000	95.09
	84 1,2,3-Trichloropropane	75	21.125	21.125	(0.920)	1181885	100.000	85.44
	85 Bromobenzene	156	21.299	21.299	(0.927)	1672731	100.000	92.24
	86 n-Propylbenzene	91	21.351	21.351	(0.930)	4458774	100.000	89.44
	87 2-Chlorotoluene	91	21.665	21.665	(0.943)	2950448	100.000	89.94
	88 trans-1,4-dichloro-2-butene	53	21.699	21.699	(0.945)	120661	100.000	79.78
	89 1,3,5-Trimethylbenzene	105	21.717	21.717	(0.945)	2596277	100.000	93.41
	90 4-Chlorotoluene	91	21.752	21.752	(0.947)	3535002	100.000	88.88
	91 t-Butylbenzene	119	22.326	22.326	(0.972)	3669220	100.000	94.48
	92 Pentachloroethane	167	22.343	22.343	(0.973)	1148603	100.000	93.17
	93 1,2,4-Trimethylbenzene	105	22.361	22.361	(0.973)	2441625	100.000	97.84
	94 sec-Butylbenzene	105	22.622	22.622	(0.985)	3959047	100.000	95.55
	95 4-Isopropyltoluene	119	22.814	22.814	(0.993)	2644227	100.000	98.76
	96 1,3-Dichlorobenzene	146	22.866	22.866	(0.995)	2073345	100.000	97.25
*	97 1,4 Dichlorobenzene-d4	152	22.970	22.970	(1.000)	770982	50.0000	
	98 1,4-Dichlorobenzene	146	23.005	23.005	(1.002)	2470488	100.000	95.40
	99 n-Butylbenzene	91	23.284	23.284	(1.014)	2648326	100.000	100.4
	100 1,2-Dichlorobenzene	146	23.388	23.388	(1.018)	2009479	100.000	107.3
	101 1,2-Dibromo-3-chloropropane	75	24.171	24.171	(1.052)	296491	100.000	98.75
	103 1,2,4-Trichlorobenzene	180	24.885	24.885	(1.083)	945068	100.000	176.7
	104 Hexachlorobutadiene	225	25.007	25.007	(1.089)	1049554	100.000	170.1
	105 Naphthalene	128	25.094	25.094	(1.092)	840827	100.000	161.1
	106 1,2,3-Trichlorobenzene	180	25.303	25.303	(1.102)	720452	100.000	174.0

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7971.D
Report Date: 06-May-2005 10:24

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

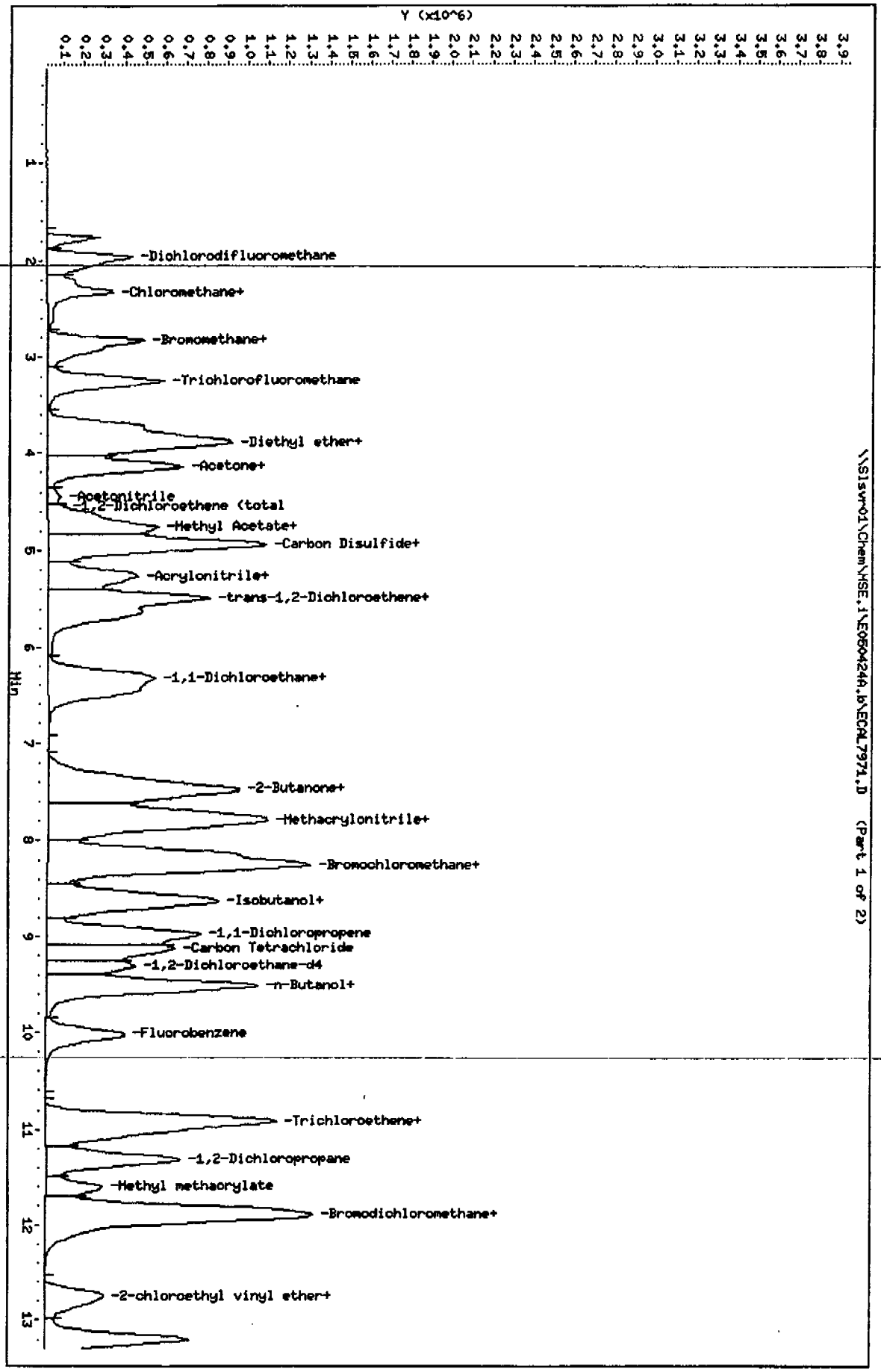
Instrument ID: MSE.i
Lab File ID: ECAL7971.D
Lab Smp Id: VSTD100
Analysis Type: VOA
Quant Type: ISTD
Operator: JDH
Method File: \\Slsvr01\Chem\MSE.i\E050424A.b\8260B-5mL.m
Misc Info: VBLKE114A;

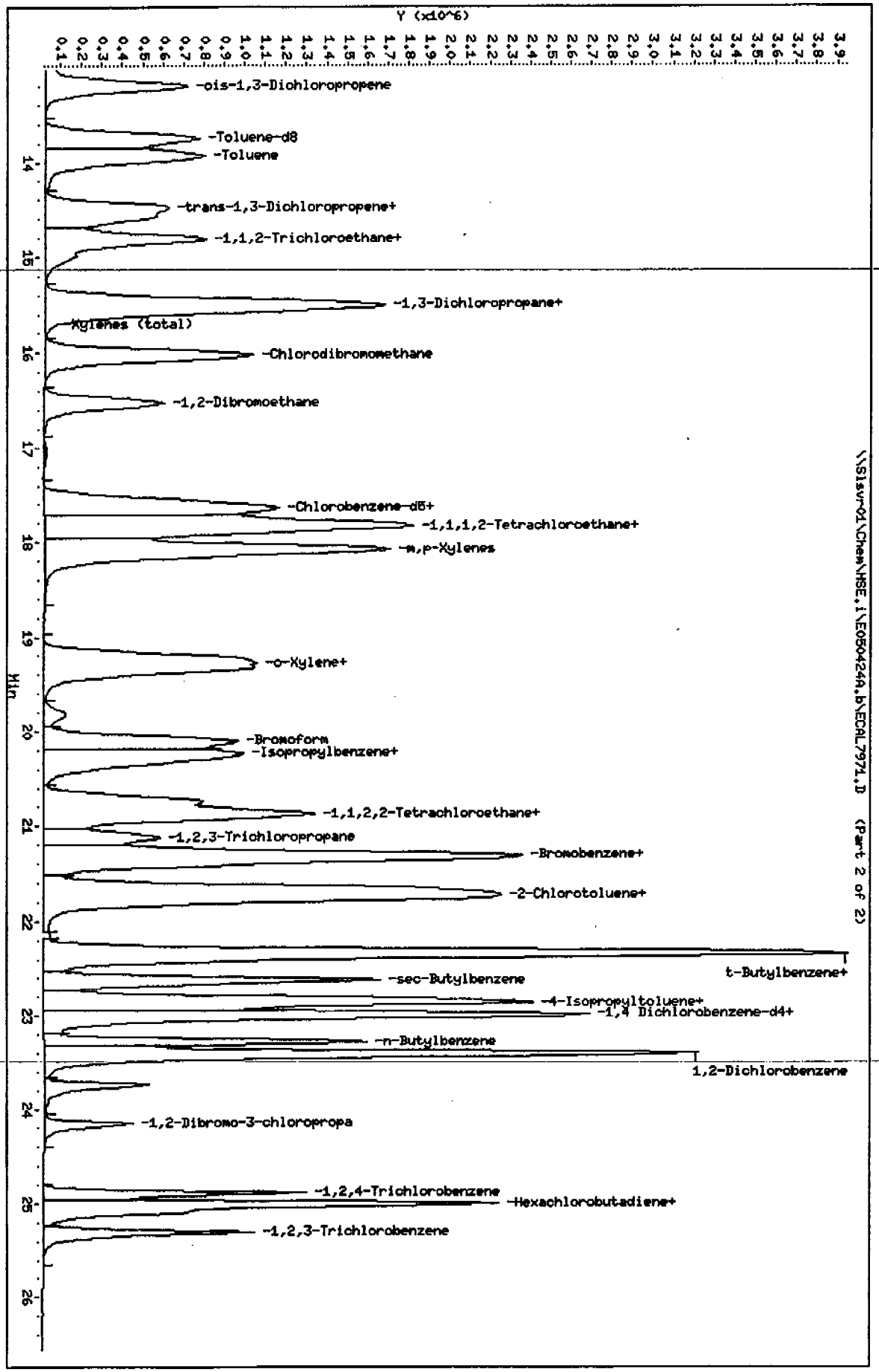
Calibration Date: 24-APR-2005
Calibration Time: 20:06
Client Smp ID: VSTD100
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	1380349	690175	2760698	1655308	19.92
72 Chlorobenzene-d5	1095989	547995	2191978	1357636	23.87
97 1,4 Dichlorobenze	600344	300172	1200688	770982	28.42

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	10.02	9.52	10.52	10.02	-0.02
72 Chlorobenzene-d5	17.54	17.04	18.04	17.56	0.09
97 1,4 Dichlorobenze	22.97	22.47	23.47	22.97	-0.01

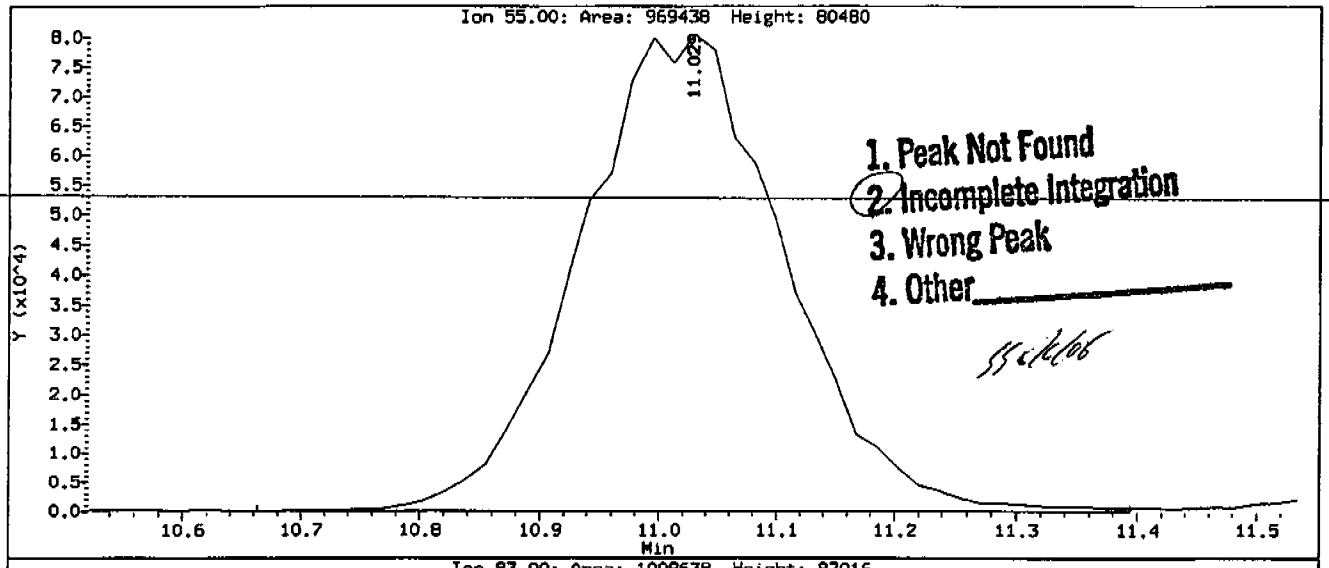
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^6)
Min
-Dichlorodifluoromethane
-Chloromethane+
-Bromomethane+
-Trichlorofluoromethane
-Diethyl ether+
-Acetone+
-Acetonitrile
-1,2-Dichloroethene (total
-Methyl Acetate+
-Carbon Disulfide+
-Acrylonitrile+
-trans-1,2-Dichloroethene+
-1,1-Dichloroethane+
-2-Butanone+
-Methacrylonitrile+
-Bromochloromethane+
-Isobutanol+
-1,1-Dichloropropene
-Carbon Tetrachloride
-1,2-Dichloroethane-d4
-n-Butanol+
-Fluorobenzene
-Trichloroethene+
-1,2-Dichloropropane
-Methyl methacrylate
-Bromodichloromethane+
-2-chloroethyl vinyl ether+
\\Slsvr01\Chem\HSE.i\E0504240.b\ECAL7971.D (Part 1 of 2)
Data File: \\Slsvr01\Chem\HSE.i\E0504240.b\ECAL7971.D
Date : 25-APR-2005 00:48
Client ID: VSTD100
Sample Info: VSTD100;E0504240.b;
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: HSE.i
Operator: JDH
Column diameter: 0.53


Y (x10^6)
Min
-cis-1,3-Dichloropropene
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane+
-1,3-Dichloropropane+
Xylenes (total)
-Chlorodibromomethane
-1,2-Dibromoethane
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
-o-Xylene+
-Bromoform
-Isopropylbenzene+
-1,1,2,2-Tetrachloroethane+
-1,2,3-Trichloropropane
-Bromobenzene+
-2-Chlorotoluene+
t-Butylbenzene+
-sec-Butylbenzene
-4-Isopropyltoluene+
-1,4 Dichlorobenzene-d4+
-n-Butylbenzene
1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene+
-1,2,3-Trichlorobenzene
\\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7971.D (Part 2 of 2)
Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7971.D
Date : 25-APR-2005 00:48
Client ID: VSTD100
Sample Info: VSTD100;E050424A.b;
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: MSE.i
Operator: JDH
Column diameter: 0.53

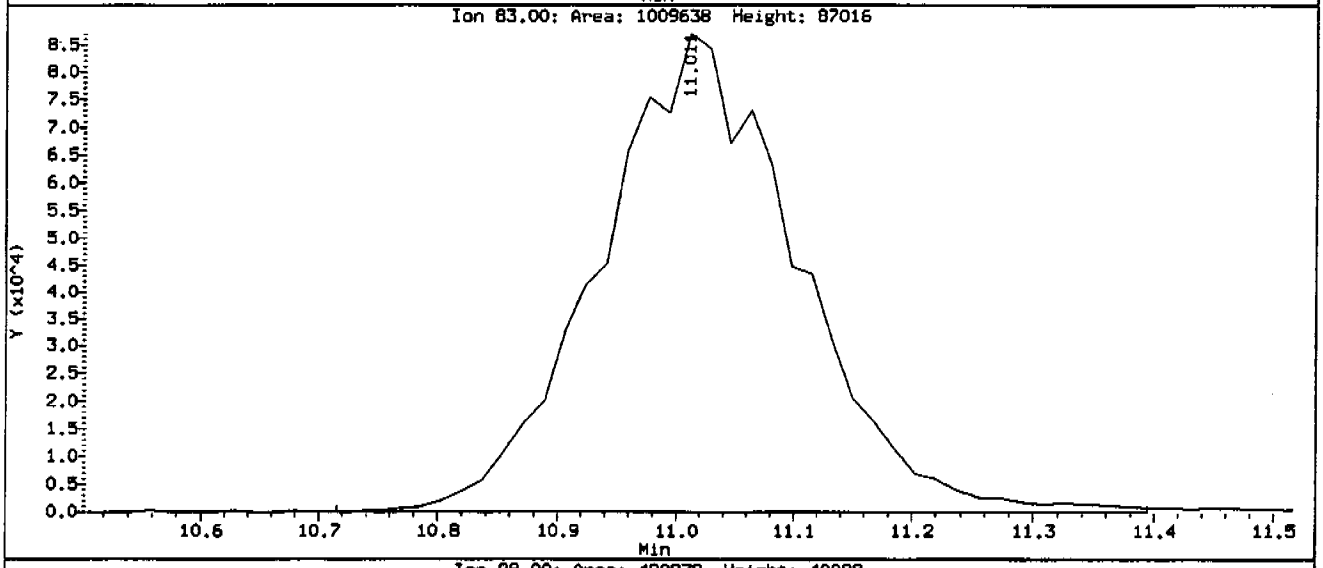
Data File: \\Slsvr01\Chem\MSE.i\E050424A.b\ECAL7971.D
Injection Date: 25-APR-2005 00:48
Instrument: MSE.i
Client Sample ID: VSTD100

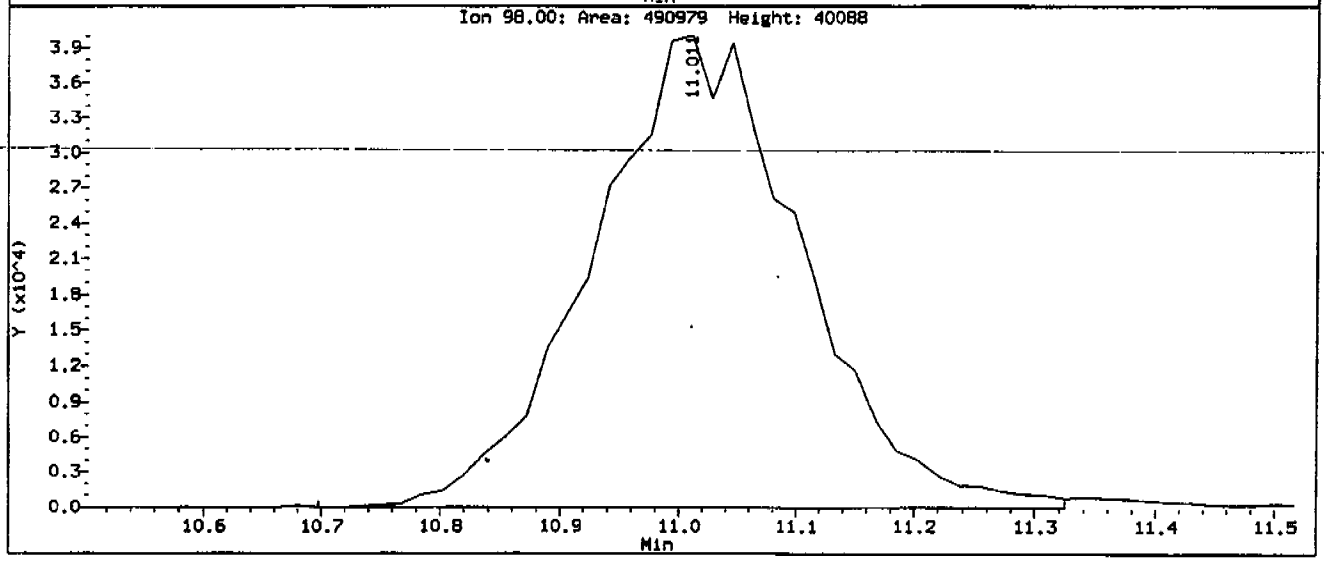
Compound: Methylcyclohexane
CAS Number:



1. Peak Not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

5/16/06





Data File: \\Slsvr01\Chem\MSE.i\E050425A.b\EBFB7976.D

Date : 25-APR-2005 09:46

Client ID: VBFB

Instrument: MSE.i

Sample Info: 50ng BFB;E050425A.b;

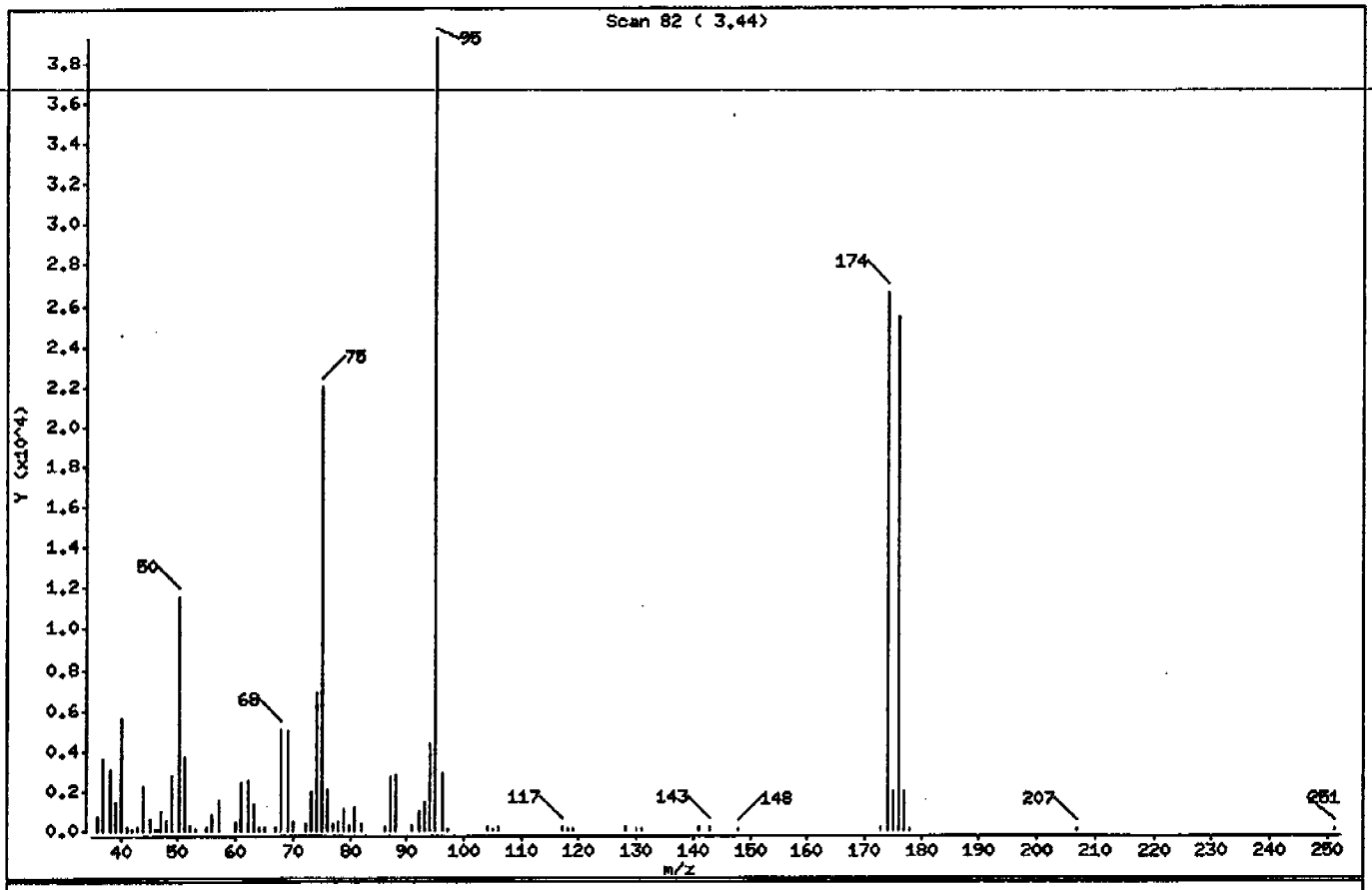
Volume Injected (uL): 2.0

Operator: SS

Column phase: RTX-502.2

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	29.45
75	30.00 - 60.00% of mass 95	56.00
96	5.00 - 9.00% of mass 95	7.29
173	Less than 2.00% of mass 174	0.46 (< 0.68)
174	Greater than 50.00% of mass 95	67.66
175	5.00 - 9.00% of mass 174	5.17 (7.64)
176	95.00 - 101.00% of mass 174	64.83 (95.81)
177	5.00 - 9.00% of mass 176	5.12 (7.89)

Data File: \\Slsvr01\Chem\MSE.i\E050425A.b\EBFB7975.D

Date : 25-APR-2005 09:46

Client ID: VBFB

Instrument: MSE.i

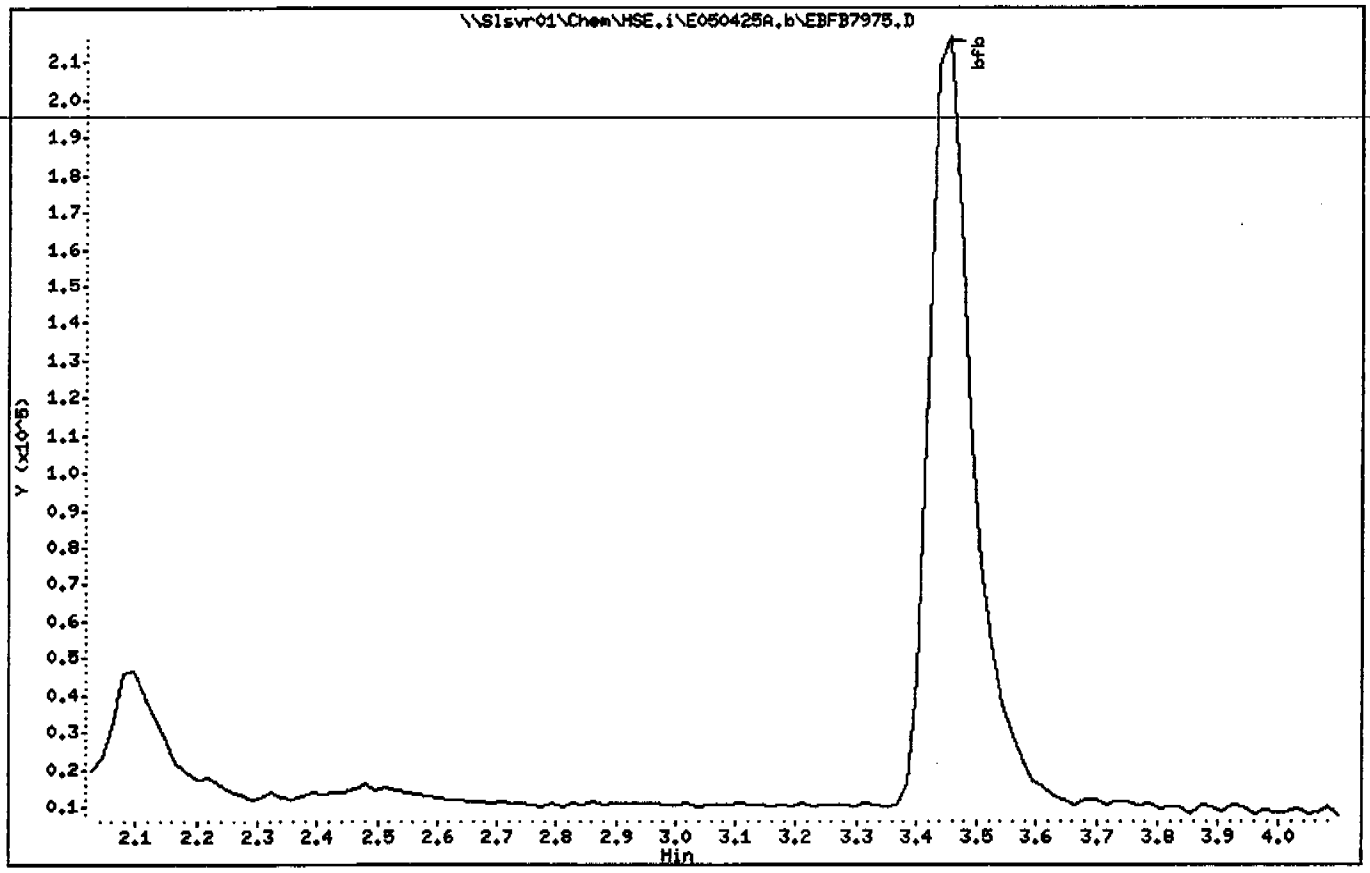
Sample Info: 50ng BFB;E050425A.b;

Volume Injected (uL): 2.0

Operator: SS

Column phase: RTX-502.2

Column diameter: 0.53



Data File: \\Slsvr01\Chem\MSE.i\E050425A.b\EBFB7975.D

Date : 25-APR-2005 09:46

Client ID: VBFB

Instrument: MSE.i

Sample Info: 50ng BFB;E050425A.b;

Volume Injected (uL): 2.0

Operator: SS

Column phase: RTX-502.2

Column diameter: 0.53

Data File: EBFB7975.D
Spectrum: Scan 82 (3.44)
Location of Maximum: 95.10
Number of points: 73

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.05	756	55.00	216	78.05	489	117.95	121
37.05	3605	56.00	845	78.95	1099	118.90	114
38.05	3063	57.10	1496	79.90	294	127.95	186
39.05	1462	60.10	423	80.90	1211	129.95	114
40.05	5603	61.05	2476	81.90	318	130.85	100
41.10	141	62.05	2540	86.00	140	140.85	145
42.10	122	63.05	1326	87.05	2710	142.95	210
43.00	155	64.15	158	87.95	2771	147.90	104
44.00	2296	65.05	152	90.95	275	172.90	181
45.10	627	66.90	193	92.05	1017	174.00	26560
46.10	116	68.00	5026	93.00	1485	175.00	2028
46.40	115	69.00	5009	94.00	4341	176.00	25448
47.00	986	70.00	481	95.10	39256	176.90	2009
48.05	536	72.10	324	96.10	2861	177.95	101
49.05	2794	73.10	1992	97.20	108	206.95	105
50.05	11559	74.05	6905	103.95	160	251.30	102
51.05	3701	75.05	21984	104.95	118		
52.15	297	76.05	2052	105.90	164		
53.05	113	77.05	338	116.95	148		

Data File: \\Slsvr01\Chem\MSE.i\E050425A.b\ECAL7976.D
Report Date: 06-May-2005 11:10

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSE.i
Lab File ID: ECAL7976.D
Analysis Type: WATER
Lab Sample ID: VSTD050
Method: \\Slsvr01\Chem\MSE.i\E050425A.b\8260B-5mL.m

Injection Date: 25-APR-2005 10:08
Init. Cal. Date(s): 24-APR-2005 25-APR-2005
Init. Cal. Times: 20:06 00:48
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	1 Dichlorodifluoromethane	0.59500	0.60706	0.000	-2.02795	60.00000	Averaged
	3 Chloromethane	0.26603	0.29597	0.100	-11.25247	60.00000	Averaged
	4 Vinyl Chloride	0.24175	0.26830	0.000	-10.98341	20.00000	Averaged
	5 Bromomethane	0.44924	0.51120	0.000	-13.79238	60.00000	Averaged
	6 Chloroethane	0.17487	0.19713	0.000	-12.72633	60.00000	Averaged
	7 Trichlorofluoromethane	0.61580	0.66438	0.000	-7.88923	60.00000	Averaged
	8 Diethyl ether	0.10927	0.11294	0.000	-3.36716	60.00000	Averaged
	9 1,1,2-Trichlorofluoroethane	0.46422	0.49016	0.000	-5.58878	60.00000	Averaged
	11 Acetone	0.01870	0.01654	0.000	11.52859	60.00000	Averaged
	12 1,1-Dichloroethene	0.33387	0.36071	0.000	-8.03894	20.00000	Averaged
M	14 1,2-Dichloroethene (total)	0.38527	0.40969	0.000	-6.33748	120	Averaged
	17 Methyl Acetate	0.03297	0.03388	0.000	-2.76131	60.00000	Averaged
	13 Acetonitrile	0.01215	0.01217	0.000	-0.10429	60.00000	Averaged
	16 Allyl chloride	0.20498	0.19057	0.000	7.03018	60.00000	Averaged
	18 Carbon Disulfide	1.13376	1.32098	0.000	-16.51320	60.00000	Averaged
	19 Methylene Chloride	0.42845	0.40144	0.000	6.30230	60.00000	Averaged
	20 Acrylonitrile	0.04438	0.04672	0.000	-5.28906	60.00000	Averaged
	21 MTBE	0.45459	0.46495	0.000	-2.27814	60.00000	Averaged
	22 trans-1,2-Dichloroethene	0.37250	0.41014	0.000	-10.10548	60.00000	Averaged
	23 n-Hexane	0.33244	0.39070	0.000	-17.52498	60.00000	Averaged
	24 Vinyl acetate	0.24436	0.28232	0.000	-15.53267	60.00000	Averaged
	25 1,1-Dichloroethane	0.68560	0.71052	0.100	-3.63354	60.00000	Averaged
	26 2-Chloro-1,3-butadiene	0.35230	0.33754	0.000	4.18896	60.00000	Averaged
	28 2-Butanone	0.01795	0.02000	0.000	-11.42671	60.00000	Averaged
	29 Propionitrile	0.01735	0.01738	0.000	-0.15364	60.00000	Averaged
	30 2,2-Dichloropropane	0.43235	0.45530	0.000	-5.30895	60.00000	Averaged
	31 cis-1,2-Dichloroethene	0.39804	0.40923	0.000	-2.81123	60.00000	Averaged
	32 Ethyl acetate	0.01022	0.00990	0.000	3.14155	60.00000	Averaged
	33 Methacrylonitrile	0.10728	0.12180	0.000	-13.53809	60.00000	Averaged
	34 Chloroform	0.80429	0.78363	0.000	2.56807	20.00000	Averaged
	35 Bromochloromethane	0.27046	0.27559	0.000	-1.89692	60.00000	Averaged
	36 Tetrahydrofuran	0.01956	0.02108	0.000	-7.81346	60.00000	Averaged
$	37 Dibromofluoromethane	0.79589	0.77680	0.000	2.39918	60.00000	Averaged
	39 Isobutanol	0.00153	0.00181	0.000	-18.56773	100	Averaged
	38 1,1,1-Trichloroethane	0.53778	0.54994	0.000	-2.26015	60.00000	Averaged
	40 Cyclohexane	0.19817	0.20313	0.000	-2.50230	60.00000	Averaged
	41 1,1-Dichloropropene	0.52162	0.54586	0.000	-4.64658	60.00000	Averaged
	42 Carbon Tetrachloride	0.52943	0.54780	0.000	-3.46941	60.00000	Averaged
$	43 1,2-Dichloroethane-d4	0.08067	0.08393	0.000	-4.04169	60.00000	Averaged
	45 n-Butanol	0.00436	0.00509	0.000	-16.84258	100	Averaged
	46 Benzene	0.82869	0.86226	0.000	-4.05025	60.00000	Averaged
	47 1,2-Dichloroethane	0.40332	0.39664	0.000	1.65390	60.00000	Averaged

Data File: \\Slsvr01\Chem\MSE.i\E050425A.b\ECAL7976.D
Report Date: 06-May-2005 11:10

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSE.i
Lab File ID: ECAL7976.D
Analysis Type: WATER
Lab Sample ID: VSTD050
Method: \\Slsvr01\Chem\MSE.i\E050425A.b\8260B-5mL.m

Injection Date: 25-APR-2005 10:08
Init. Cal. Date(s): 24-APR-2005 25-APR-2005
Init. Cal. Times: 20:06 00:48
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	49 Trichloroethene	0.48692	0.51008	0.000	-4.75793	60.00000	Averaged
	50 Methylcyclohexane	0.31406	0.32032	0.000	-1.99244	60.00000	Averaged
	51 1,2-Dichloropropane	0.41971	0.42688	0.000	-1.70856	20.00000	Averaged
	52 Methyl methacrylate	0.16389	0.17966	0.000	-9.62197	60.00000	Averaged
	53 Bromodichloromethane	0.90527	0.88296	0.000	2.46416	60.00000	Averaged
	54 Dibromomethane	0.50085	0.48889	0.000	2.38680	60.00000	Averaged
	55 1,4-Dioxane	0.00196	0.00158	0.000	19.22194	100	Averaged
	56 2-Nitropropane	0.13881	0.13557	0.000	2.32983	60.00000	Averaged
	57 2-chloroethyl vinyl ether	0.11594	0.14745	0.000	-27.18314	100	Averaged
	58 4-Methyl-2-pentanone	0.02093	0.01917	0.000	8.38903	60.00000	Averaged
	59 cis-1,3-Dichloropropene	0.55552	0.57157	0.000	-2.88901	60.00000	Averaged
$	61 Toluene-d8	0.97649	0.98780	0.000	-1.15798	60.00000	Averaged
	62 Toluene	0.64842	0.67428	0.000	-3.98752	20.00000	Averaged
	63 trans-1,3-Dichloropropene	0.48432	0.51773	0.000	-6.89845	60.00000	Averaged
	64 Ethyl methacrylate	0.44514	0.49109	0.000	-10.32185	60.00000	Averaged
	65 1,1,2-Trichloroethane	0.42594	0.43206	0.000	-1.43835	60.00000	Averaged
	66 2-Hexanone	0.14624	0.20409	0.000	-39.55779	60.00000	Averaged
	67 1,3-Dichloropropane	0.64544	0.66964	0.000	-3.74954	60.00000	Averaged
	68 Tetrachloroethene	0.59409	0.61770	0.000	-3.97568	60.00000	Averaged
M	69 Xylenes (total)	0.43831	0.48706	0.000	-11.12262	180	Averaged
	70 Chlorodibromomethane	0.94859	0.94418	0.000	0.46523	60.00000	Averaged
	71 1,2-Dibromoethane	0.72411	0.71388	0.000	1.41224	60.00000	Averaged
	73 Chlorobenzene	0.97062	0.98969	0.300	-1.96487	60.00000	Averaged
	74 1,1,1,2-Tetrachloroethane	0.58520	0.58577	0.000	-0.09713	60.00000	Averaged
	75 Ethylbenzene	1.28417	1.35933	0.000	-5.85243	20.00000	Averaged
	76 m,p-Xylenes	0.43691	0.49685	0.000	-13.71942	60.00000	Averaged
	77 o-Xylene	0.44110	0.46747	0.000	-5.97828	60.00000	Averaged
	78 Styrene	0.75327	0.79947	0.000	-6.13237	60.00000	Averaged
	79 Bromoform	0.69593	0.71651	0.100	-2.95777	60.00000	Averaged
	80 Isopropylbenzene	1.15727	1.20354	0.000	-3.99838	60.00000	Averaged
	81 Cyclohexanone	0.02361	0.02516	0.000	-6.57373	100	Averaged
	82 1,1,2,2-Tetrachloroethane	0.79577	0.79163	0.300	0.52024	60.00000	Averaged
$	83 4-Bromofluorobenzene	1.67604	1.57385	0.000	6.09734	60.00000	Averaged
	84 1,2,3-Trichloropropane	0.89710	0.83504	0.000	6.91808	60.00000	Averaged
	85 Bromobenzene	1.17611	1.06087	0.000	9.79804	60.00000	Averaged
	86 n-Propylbenzene	3.23304	3.11349	0.000	3.69783	60.00000	Averaged
	87 2-Chlorotoluene	2.12749	2.27557	0.000	-6.96063	60.00000	Averaged
	88 trans-1,4-dichloro-2-butene	0.09809	0.09619	0.000	1.93523	60.00000	Averaged
	89 1,3,5-Trimethylbenzene	1.80258	1.77044	0.000	1.78278	60.00000	Averaged
	90 4-Chlorotoluene	2.57942	2.51545	0.000	2.48013	60.00000	Averaged
	91 t-Butylbenzene	2.51862	2.51822	0.000	0.01571	60.00000	Averaged
	92 Pentachloroethane	0.79948	0.80303	0.000	-0.44423	60.00000	Averaged
	93 1,2,4-Trimethylbenzene	1.61845	1.64898	0.000	-1.88632	60.00000	Averaged

Data File: \\Slsvr01\Chem\MSE.i\E050425A.b\ECAL7976.D
Report Date: 06-May-2005 11:10

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSE.i — Injection Date: 25-APR-2005 10:08
Lab File ID: ECAL7976.D — Init. Cal. Date(s): 24-APR-2005 25-APR-2005
Analysis Type: WATER — Init. Cal. Times: 20:06 00:48
Lab Sample ID: VSTD050 — Quant Type: ISTD
Method: \\Slsvr01\Chem\MSE.i\E050425A.b\8260B-5mL.m

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94	sec-Butylbenzene	2.68699	2.69843	0.000	-0.42596	60.00000	Averaged
95	4-Isopropyltoluene	1.73630	1.73260	0.000	0.21331	60.00000	Averaged
96	1,3-Dichlorobenzene	1.38268	1.35117	0.000	2.27872	60.00000	Averaged
98	1,4-Dichlorobenzene	1.67937	1.61350	0.000	3.92223	60.00000	Averaged
99	n-Butylbenzene	1.71000	1.74842	0.000	-2.24666	60.00000	Averaged
100	1,2-Dichlorobenzene	1.21421	1.29032	0.000	-6.26790	60.00000	Averaged
101	1,2-Dibromo-3-chloropropane	0.19472	0.19382	0.000	0.46316	60.00000	Averaged
103	1,2,4-Trichlorobenzene	0.34686	0.24737	0.000	28.68464	60.00000	Averaged
104	Hexachlorobutadiene	0.40010	0.40178	0.000	-0.42015	60.00000	Averaged
105	Naphthalene	0.33840	0.29034	0.000	14.20195	60.00000	Averaged
106	1,2,3-Trichlorobenzene	0.26854	0.23550	0.000	12.30257	60.00000	Averaged

Data File: \\Slsvr01\Chem\MSE.i\E050425A.b/ECAL7976.D Pa
Report Date: 05/06/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSE.i
Lab File ID: ECAL7976.D
Analysis Type: WATER

Injection Date: 25-APR-2005 10:08
Lab Sample ID: VSTD050
Method File: \\Slsvr01\Chem\MSE.i\E050425A.b\8260B-5

COMPOUND	%D
Dichlorodifluoromethane	2.0
Chloromethane	11.3
Vinyl Chloride	11.0
Bromomethane	13.8
Chloroethane	12.7
Trichlorofluoromethane	7.9
Diethyl ether	3.4
1,1,2-Trichlorofluoroethane	5.6
Acetone	11.5
1,1-Dichloroethene	8.0
Acetonitrile	0.1
1,2-Dichloroethene (total)	6.5
Methyl Acetate	2.8
Allyl chloride	7.0
Carbon Disulfide	16.5
Methylene Chloride	6.3
Acrylonitrile	5.3
MTBE	2.3
trans-1,2-Dichloroethene	10.1
n-Hexane	17.5
Vinyl acetate	15.5
1,1-Dichloroethane	3.6
2-Chloro-1,3-butadiene	4.2
2-Butanone	11.4
Propionitrile	0.2
2,2-Dichloropropane	5.3
cis-1,2-Dichloroethene	2.8
Ethyl acetate	3.1
Methacrylonitrile	13.5
Chloroform	2.6
Bromochloromethane	1.9
Tetrahydrofuran	7.8
Dibromofluoromethane	2.4
Isobutanol	18.6
Cyclohexane	2.5
1,1,1-Trichloroethane	2.3
1,1-Dichloropropene	4.6
Carbon Tetrachloride	3.5
1,2-Dichloroethane-d4	4.0

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Data File: \\Slsvr01\Chem\MSE.i\E050425A.b/ECAL7976.D
Report Date: 05/06/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSE.i
Lab File ID: ECAL7976.D
Analysis Type: WATER

Injection Date: 25-APR-2005 10:08
Lab Sample ID: VSTD050
Method File: \\Slsvr01\Chem\MSE.i\E050425A.b\

COMPOUND	%D
n-Butanol	16.8
1,2-Dichloroethane	1.7
Benzene	4.1
Trichloroethene	4.8
Methylcyclohexane	2.0
1,2-Dichloropropane	1.7
Methyl methacrylate	9.6
Bromodichloromethane	2.5
Dibromomethane	2.4
1,4-Dioxane	19.2
2-Nitropropane	2.3
2-chloroethyl vinyl ether	27.2
4-Methyl-2-pentanone	8.4
cis-1,3-Dichloropropene	2.9
Toluene-d8	1.2
Toluene	4.0
trans-1,3-Dichloropropene	6.9
Ethyl methacrylate	10.3
1,1,2-Trichloroethane	1.4
2-Hexanone	39.6
1,3-Dichloropropane	3.7
Tetrachloroethene	4.0
Xylenes (total)	11.1
Chlorodibromomethane	0.5
1,2-Dibromoethane	1.4
Chlorobenzene	2.0
1,1,1,2-Tetrachloroethane	0.1
Ethylbenzene	5.9
m,p-Xylenes	13.7
o-Xylene	6.0
Styrene	6.1
Bromoform	3.0
Isopropylbenzene	4.0
Cyclohexanone	6.6
1,1,2,2-Tetrachloroethane	0.5
4-Bromofluorobenzene	6.1
1,2,3-Trichloropropane	6.9
Bromobenzene	9.8
n-Propylbenzene	3.7

Data File: \\Slsvr01\Chem\MSE.i\E050425A.b/ECAL7976.D
Report Date: 05/06/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSE.i
Lab File ID: ECAL7976.D
Analysis Type: WATER

Injection Date: 25-APR-2005 10:08
Lab Sample ID: VSTD050
Method File: \\Slsvr01\Chem\MSE.i\E050425A.b\

COMPOUND	%D
2-Chlorotoluene	7.0
trans-1,4-dichloro-2-butene	1.9
1,3,5-Trimethylbenzene	1.8
4-Chlorotoluene	2.5
t-Butylbenzene	0.0
Pentachloroethane	0.4
1,2,4-Trimethylbenzene	1.9
sec-Butylbenzene	0.4
4-Isopropyltoluene	0.2
1,3-Dichlorobenzene	2.3
1,4-Dichlorobenzene	3.9
n-Butylbenzene	2.2
1,2-Dichlorobenzene	6.3
1,2-Dibromo-3-chloropropane	0.5
1,2,4-Trichlorobenzene	28.7
Hexachlorobutadiene	0.4
Naphthalene	14.2
1,2,3-Trichlorobenzene	12.3

The average of %D's in the continuing calibration is 6.5

Data File: \\Slsvr01\Chem\MSE.i\E050425A.b\ECAL7976.D
Report Date: 06-May-2005 11:10

STL St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSE.i\E050425A.b\ECAL7976.D
Lab Smp Id: VSTD050 Client Smp ID: VSTD050
Inj Date : 25-APR-2005 10:08
Operator : SS Inst ID: MSE.i
Smp Info : VSTD050;E050425A.b;
Misc Info : VBLKE115A;
Comment : NONE
Method : \\Slsvr01\Chem\MSE.i\E050425A.b\8260B-5mL.m
Meth Date : 06-May-2005 11:10 stitess Quant Type: ISTD
Cal Date : 25-APR-2005 00:48 Cal File: ECAL7971.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.10
Processing Host: SLVOA03

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume
Vo	5.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.976	1.976	(0.197)	1031134	50.0000	51.01
3	Chloromethane	50	2.290	2.290	(0.228)	502722	50.0000	55.63
4	Vinyl Chloride	62	2.324	2.324	(0.232)	455726	50.0000	55.49
5	Bromomethane	94	2.847	2.847	(0.284)	868313	50.0000	56.90
6	Chloroethane	64	2.951	2.951	(0.294)	334836	50.0000	56.36
7	Trichlorofluoromethane	101	3.282	3.282	(0.327)	1128497	50.0000	53.94
8	Diethyl ether	74	3.700	3.700	(0.369)	383687	100.000	103.4
9	1,1,2-Trichlorofluoroethane	151	3.926	3.926	(0.391)	832575	50.0000	52.79
11	Acetone	58	3.996	3.996	(0.398)	28100	50.0000	44.24
12	1,1-Dichloroethene	96	4.170	4.170	(0.415)	612697	50.0000	54.02
M 14	1,2-Dichloroethene (total)	96				1391754	100.000	106.4
17	Methyl Acetate	74	4.762	4.762	(0.474)	57543	50.0000	51.38
13	Acetonitrile	41	4.431	4.431	(0.442)	103321	250.000	250.3
16	Allyl chloride	39	4.779	4.779	(0.476)	323696	50.0000	46.48
18	Carbon Disulfide	76	4.918	4.918	(0.490)	2243775	50.0000	58.26
19	Methylene Chloride	84	4.971	4.971	(0.495)	681878	50.0000	46.85
20	Acrylonitrile	53	5.232	5.232	(0.521)	396807	250.000	263.2
21	MTBE	73	5.301	5.301	(0.528)	789742	50.0000	51.14
22	trans-1,2-Dichloroethene	96	5.510	5.510	(0.549)	696654	50.0000	55.05
23	n-Hexane	57	5.649	5.649	(0.563)	663626	50.0000	58.76
24	Vinyl acetate	43	5.667	5.667	(0.565)	479537	50.0000	57.77
25	1,1-Dichloroethane	63	6.311	6.311	(0.629)	1206856	50.0000	51.82

Data File: \\Slsvr01\Chem\MSE.i\E050425A.b\ECAL7976.D
Report Date: 06-May-2005 11:10

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	26 2-Chloro-1,3-butadiene	53	6.468	6.468	(0.644)	573331	50.0000	47.90
	28 2-Butanone	72	7.234	7.234	(0.721)	33977	50.0000	55.71
	29 Propionitrile	54	7.338	7.338	(0.731)	147578	250.000	250.4
	30 2,2-Dichloropropane	77	7.408	7.408	(0.738)	773361	50.0000	52.65
	31 cis-1,2-Dichloroethene	96	7.512	7.512	(0.749)	695100	50.0000	51.40
	32 Ethyl acetate	88	7.617	7.617	(0.759)	33639	100.000	96.86
	33 Methacrylonitrile	41	7.721	7.721	(0.769)	1034419	250.000	283.8
	34 Chloroform	83	7.826	7.826	(0.780)	1331051	50.0000	48.72
	35 Bromochloromethane	128	8.139	8.139	(0.811)	468116	50.0000	50.95
	36 Tetrahydrofuran	71	8.243	8.243	(0.821)	179059	250.000	269.5
$	37 Dibromofluoromethane	113	8.261	8.261	(0.823)	1319438	50.0000	48.80
	39 Isobutanol	43	8.609	8.609	(0.858)	61429	1000.00	1186
	38 1,1,1-Trichloroethane	97	8.626	8.626	(0.860)	934107	50.0000	51.13
	40 Cyclohexane	84	8.626	8.626	(0.860)	345030	50.0000	51.25
	41 1,1-Dichloropropene	75	8.974	8.974	(0.894)	927174	50.0000	52.32
	42 Carbon Tetrachloride	117	9.166	9.166	(0.913)	930472	50.0000	51.73
$	43 1,2-Dichloroethane-d4	102	9.323	9.323	(0.929)	142554	50.0000	52.02
	45 n-Butanol	56	9.479	9.479	(0.944)	86481	500.000	584.2
	46 Benzene	78	9.532	9.532	(0.950)	1464598	50.0000	52.02
	47 1,2-Dichloroethane	62	9.514	9.514	(0.948)	673727	50.0000	49.17
*	48 Fluorobenzene	96	10.036	10.036	(1.000)	1698565	50.0000	
	49 Trichloroethene	95	10.907	10.907	(1.087)	866410	50.0000	52.38
	50 Methylcyclohexane	55	11.029	11.029	(1.099)	544085	50.0000	51.00
	51 1,2-Dichloropropane	63	11.325	11.325	(1.128)	725088	50.0000	50.85
	52 Methyl methacrylate	69	11.621	11.621	(1.158)	305166	50.0000	54.81
	53 Bromodichloromethane	83	11.847	11.847	(1.180)	1499770	50.0000	48.77
	54 Dibromomethane	93	11.951	11.951	(1.191)	830415	50.0000	48.81
	55 1,4-Dioxane	88	12.004	12.004	(1.196)	53665	1000.00	807.8
	56 2-Nitropropane	43	12.108	12.108	(1.206)	230277	50.0000	48.84
	57 2-chloroethyl vinyl ether	63	12.735	12.735	(1.269)	250456	50.0000	63.59
	58 4-Methyl-2-pentanone	100	12.839	12.839	(1.279)	32566	50.0000	45.80
	59 cis-1,3-Dichloropropene	75	13.205	13.205	(1.316)	970847	50.0000	51.44
$	61 Toluene-d8	98	13.762	13.762	(0.783)	1300064	50.0000	50.58
	62 Toluene	92	13.953	13.953	(0.794)	887430	50.0000	51.99
	63 trans-1,3-Dichloropropene	75	14.476	14.476	(0.824)	681392	50.0000	53.45
	64 Ethyl methacrylate	69	14.597	14.597	(0.831)	646331	50.0000	55.16
	65 1,1,2-Trichloroethane	83	14.824	14.824	(0.843)	568646	50.0000	50.72
	66 2-Hexanone	43	15.015	15.015	(0.854)	268601	50.0000	69.78
	67 1,3-Dichloropropane	76	15.485	15.485	(0.881)	881327	50.0000	51.87
	68 Tetrachloroethene	164	15.555	15.555	(0.885)	812975	50.0000	51.99
M	69 Xylenes (total)	106				1923087	150.000	166.7
	70 Chlorodibromomethane	129	16.042	16.042	(0.913)	1242650	50.0000	49.77
	71 1,2-Dibromoethane	107	16.530	16.530	(0.941)	939555	50.0000	49.29
*	72 Chlorobenzene-d5	117	17.574	17.574	(1.000)	1316122	50.0000	
	73 Chlorobenzene	112	17.679	17.679	(1.006)	1302553	50.0000	50.98
	74 1,1,1,2-Tetrachloroethane	131	17.835	17.835	(1.015)	770946	50.0000	50.05
	75 Ethylbenzene	91	17.888	17.888	(1.018)	1789044	50.0000	52.93
	76 m,p-Xylenes	106	18.096	18.096	(1.030)	1307843	100.000	113.7
	77 o-Xylene	106	19.245	19.245	(1.095)	615244	50.0000	52.99
	78 Styrene	104	19.367	19.367	(1.102)	1052197	50.0000	53.07
	79 Bromoform	173	20.133	20.133	(1.146)	943020	50.0000	51.48
	80 Isopropylbenzene	105	20.273	20.273	(1.154)	1584003	50.0000	52.00
	81 Cyclohexanone	55	20.360	20.360	(1.158)	331150	500.000	532.9
	82 1,1,2,2-Tetrachloroethane	83	20.760	20.760	(1.181)	1041876	50.0000	49.74

Data File: \\Slsvr01\Chem\MSE.i\E050425A.b\ECAL7976.D
Report Date: 06-May-2005 11:10

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	83	4-Bromofluorobenzene	95	20.917	20.917	(0.910)	1116627	50.0000	46.95
	84	1,2,3-Trichloropropane	75	21.160	21.160	(0.920)	592452	50.0000	46.54
	85	Bromobenzene	156	21.334	21.334	(0.928)	752676	50.0000	45.10
	86	n-Propylbenzene	91	21.369	21.369	(0.930)	2208985	50.0000	48.15
	87	2-Chlorotoluene	91	21.683	21.683	(0.943)	1614493	50.0000	53.48
	88	trans-1,4-dichloro-2-butene	53	21.717	21.717	(0.945)	68247	50.0000	49.03
	89	1,3,5-Trimethylbenzene	105	21.735	21.735	(0.945)	1256108	50.0000	49.11
	90	4-Chlorotoluene	91	21.770	21.770	(0.947)	1784682	50.0000	48.76
	91	t-Butylbenzene	119	22.344	22.344	(0.972)	1786649	50.0000	49.99
	92	Pentachloroethane	167	22.362	22.362	(0.973)	569743	50.0000	50.22
	93	1,2,4-Trimethylbenzene	105	22.379	22.379	(0.973)	1169930	50.0000	50.94
	94	sec-Butylbenzene	105	22.640	22.640	(0.985)	1914505	50.0000	50.21
	95	4-Isopropyltoluene	119	22.832	22.832	(0.993)	1229258	50.0000	49.89
	96	1,3-Dichlorobenzene	146	22.884	22.884	(0.995)	958642	50.0000	48.86
*	97	1,4 Dichlorobenzene-d4	152	22.988	22.988	(1.000)	709488	50.0000	
	98	1,4-Dichlorobenzene	146	23.023	23.023	(1.002)	1144760	50.0000	48.04
	99	n-Butylbenzene	91	23.302	23.302	(1.014)	1240485	50.0000	51.12
	100	1,2-Dichlorobenzene	146	23.406	23.406	(1.018)	915465	50.0000	53.13
	101	1,2-Dibromo-3-chloropropane	75	24.172	24.172	(1.051)	137513	50.0000	49.77
	103	1,2,4-Trichlorobenzene	180	24.921	24.921	(1.084)	175503	50.0000	35.66
	104	Hexachlorobutadiene	225	25.025	25.025	(1.089)	285059	50.0000	50.21
	105	Naphthalene	128	25.129	25.129	(1.093)	205994	50.0000	42.90
	106	1,2,3-Trichlorobenzene	180	25.338	25.338	(1.102)	167086	50.0000	43.85

Data File: \\Slsvr01\Chem\MSE.i\E050425A.b\ECAL7976.D
Report Date: 06-May-2005 11:10

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

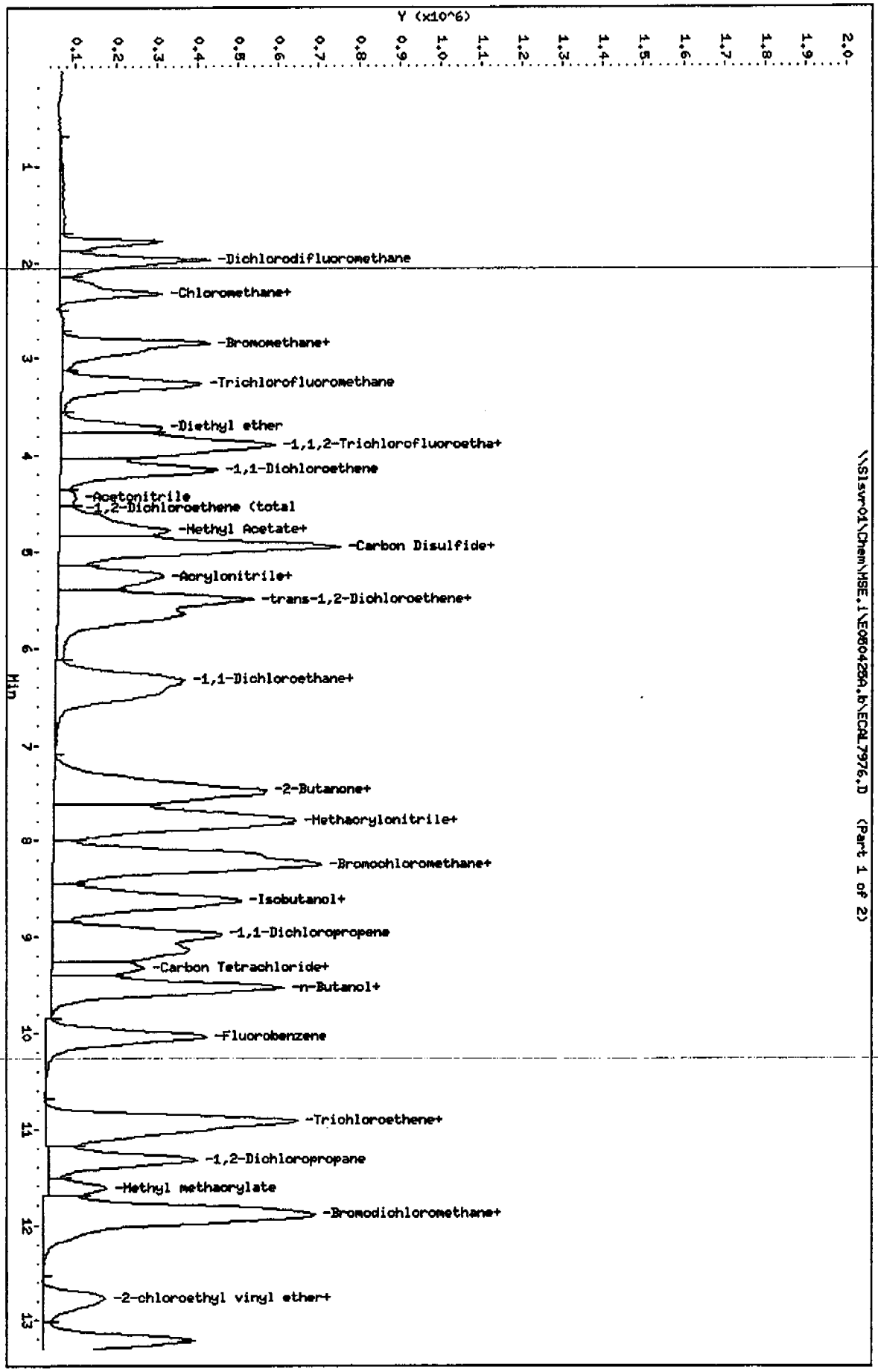
Instrument ID: MSE.i
Lab File ID: ECAL7976.D
Lab Smp Id: VSTD050
Analysis Type: VOA
Quant Type: ISTD
Operator: SS
Method File: \\Slsvr01\Chem\MSE.i\E050425A.b\8260B-5mL.m
Misc Info: VBLKE115A;

Calibration Date: 24-APR-2005
Calibration Time: 20:06
Client Smp ID: VSTD050
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	1380349	690175	2760698	1698565	23.05
72 Chlorobenzene-d5	1095989	547995	2191978	1316122	20.09
97 1,4 Dichlorobenze	600344	300172	1200688	709488	18.18

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	10.02	9.52	10.52	10.04	0.16
72 Chlorobenzene-d5	17.54	17.04	18.04	17.57	0.19
97 1,4 Dichlorobenze	22.97	22.47	23.47	22.99	0.07

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^6)
0.1
0.2
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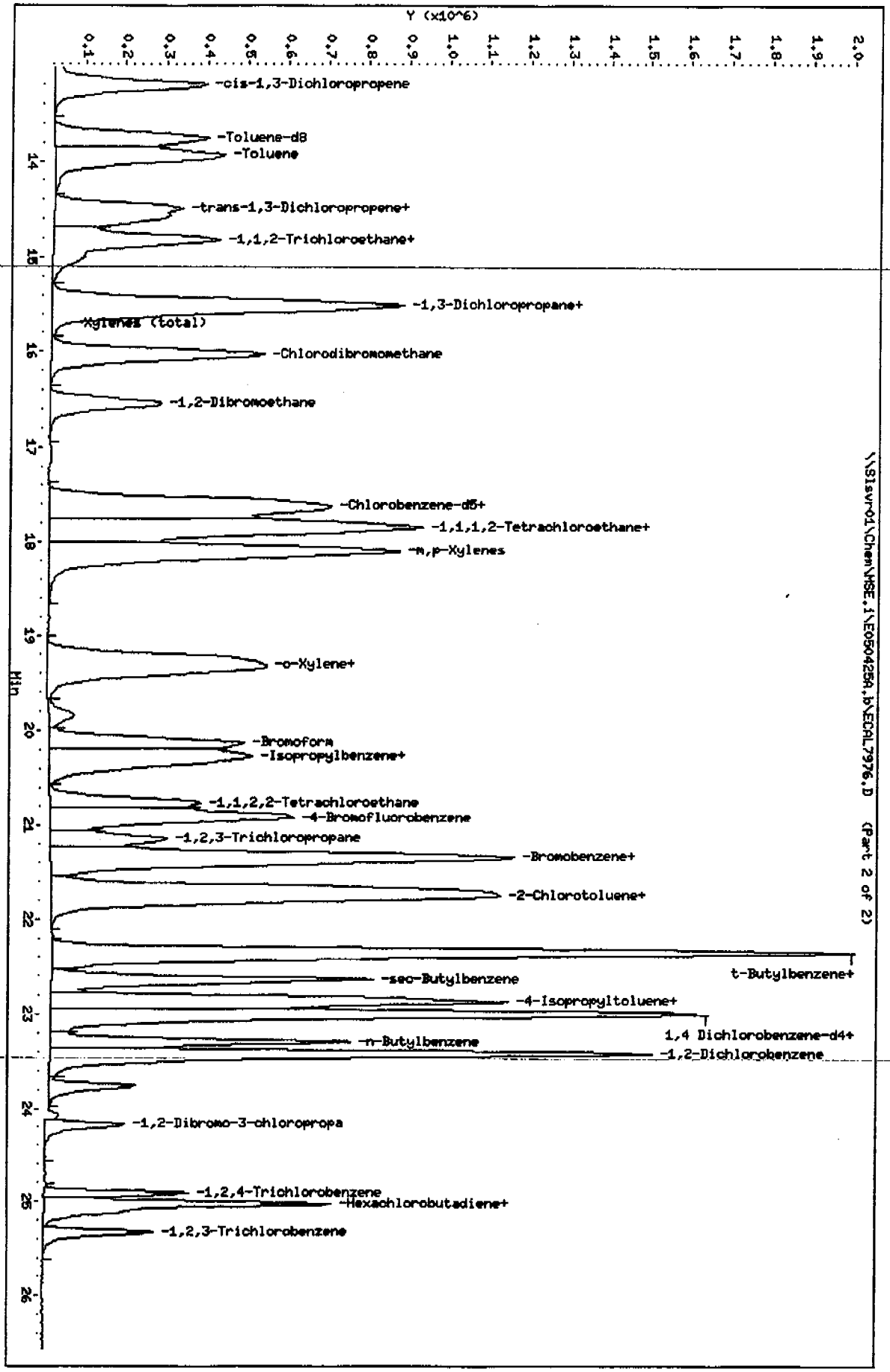
13
-Dichlorodifluoromethane
-Chloromethane+
-Bromomethane+
-Trichlorofluoromethane
-Diethyl ether
-1,1,2-Trichlorofluoroetha+
-1,1-Dichloroethene
-Acetonitrile
-1,2-Dichloroethene (total
-Methyl Acetate+
-Carbon Disulfide+
-Acrylonitrile+
-trans-1,2-Dichloroethene+
-1,1-Dichloroethane+
-2-Butanone+
-Methacrylonitrile+
-Bromochloromethane+
-Isobutanol+
-1,1-Dichloropropene
-Carbon Tetrachloride+
-n-Butanol+
-Fluorobenzene
-Trichloroethene+
-1,2-Dichloropropane
-Methyl methacrylate
-Bromodichloromethane+
-2-chloroethyl vinyl ether+
\\Slsvr01\Chem\MSE.i\E080428A.b\ECAL7976.D (Part 1 of 2)
Data File: \\Slsvr01\Chem\MSE.i\E080428A.b\ECAL7976.D
Date : 28-APR-2008 10:08
Client ID: VSTD050
Sample Info: VSTD050:E080428A.b;
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: MSE.i
Operator: SS
Column diameter: 0.53


Y (x10^6)
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1.5
1.6
1.7
1.8
1.9
2.0
-cis-1,3-Dichloropropene
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane+
-1,3-Dichloropropane+
Xylenes (total)
-Chlorodibromomethane
-1,2-Dibromoethane
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
-o-Xylene+
-Bromoform
-Isopropylbenzene+
-1,1,2,2-Tetrachloroethane
-4-Bromofluorobenzene
-1,2,3-Trichloropropane
-Bromobenzene+
-2-Chlorotoluene+
t-Butylbenzene+
-sec-Butylbenzene
-4-Isopropyltoluene+
1,4 Dichlorobenzene-d4+
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene+
-1,2,3-Trichlorobenzene
Min
14
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Data File: \\Slsvr01\Chem\MSE.i\E050425A.b\ECAL7976.D
Date : 25-APR-2005 10:08
Client ID: VSTD050
Sample Info: VSTD050;E050425A,b;
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: MSE.i
Operator: SS
Column diameter: 0.53
\\Slsvr01\Chem\MSE.i\E050425A.b\ECAL7976.D (Part 2 of 2)

Data File: \\Slsvr01\Chem\MSE.i\E050425A.b\ECAL7977.D
Report Date: 06-May-2005 11:12

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSE.i
Lab File ID: ECAL7977.D
Analysis Type: WATER
Lab Sample ID: VSTDICV
Method: \\Slsvr01\Chem\MSE.i\E050425A.b\8260B-5mL.m

Injection Date: 25-APR-2005 11:14
Init. Cal. Date(s): 24-APR-2005 25-APR-2005
Init. Cal. Times: 20:06 00:48
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	1 Dichlorodifluoromethane	0.59500	0.40452	0.000	32.01239	60.00000	Averaged	
	3 Chloromethane	0.26603	0.22827	0.100	14.19441	60.00000	Averaged	
	4 Vinyl Chloride	0.24175	0.23475	0.000	2.89686	20.00000	Averaged	
	5 Bromomethane	0.44924	0.27726	0.000	38.28347	60.00000	Averaged	
	6 Chloroethane	0.17487	0.17784	0.000	-1.69832	60.00000	Averaged	
	7 Trichlorofluoromethane	0.61580	0.61694	0.000	-0.18570	60.00000	Averaged	
	8 Diethyl ether	0.10927	.12132 0.08008	0.000	11.0 ~~34.48850~~	60.00000	Averaged	
	9 1,1,2-Trichlorofluoroethane	0.46422	0.49986	0.000	-7.67786	60.00000	Averaged	
	11 Acetone	0.01870	0.01541	0.000	17.56467	60.00000	Averaged	
	12 1,1-Dichloroethene	0.33387	0.32354	0.000	3.09672	20.00000	Averaged	
M	14 1,2-Dichloroethene (total)	0.38527	0.41583	0.000	-7.93356	120	Averaged	
	16 Allyl chloride	0.20498	0.28460	0.000	-38.84268	60.00000	Averaged	
	18 Carbon Disulfide	1.13376	1.23984	0.000	-9.35664	60.00000	Averaged	
	19 Methylene Chloride	0.42845	0.39059	0.000	8.83650	60.00000	Averaged	
	21 MTBE	0.45459	0.52967	0.000	-16.51658	60.00000	Averaged	
	22 trans-1,2-Dichloroethene	0.37250	0.40813	0.000	-9.56523	60.00000	Averaged	
	23 n-Hexane	0.33244	0.35846	0.000	-7.82606	60.00000	Averaged	
	25 1,1-Dichloroethane	0.68560	0.72782	0.100	-6.15797	60.00000	Averaged	
	28 2-Butanone	0.01795	0.01865	0.000	-3.90640	60.00000	Averaged	
	30 2,2-Dichloropropane	0.43235	0.45019	0.000	-4.12591	60.00000	Averaged	
	31 cis-1,2-Dichloroethene	0.39804	0.42354	0.000	-6.40657	60.00000	Averaged	
	34 Chloroform	0.80429	0.77655	0.000	3.44927	20.00000	Averaged	
	35 Bromochloromethane	0.27046	0.28810	0.000	-6.52091	60.00000	Averaged	
	36 Tetrahydrofuran	0.01956	.02125 0.00425	0.000	8.6 ~~78.25269~~	60.00000	Averaged	<-
$	37 Dibromofluoromethane	0.79589	0.79965	0.000	-0.47270	60.00000	Averaged	
	38 1,1,1-Trichloroethane	0.53778	0.55730	0.000	-3.62840	60.00000	Averaged	
	41 1,1-Dichloropropene	0.52162	0.55392	0.000	-6.19184	60.00000	Averaged	
	42 Carbon Tetrachloride	0.52943	0.54283	0.000	-2.53118	60.00000	Averaged	
$	43 1,2-Dichloroethane-d4	0.08067	0.08831	0.000	-9.47354	60.00000	Averaged	
	47 1,2-Dichloroethane	0.40332	0.40145	0.000	0.46256	60.00000	Averaged	
	46 Benzene	0.82869	0.87496	0.000	-5.58362	60.00000	Averaged	
	49 Trichloroethene	0.48692	0.49306	0.000	-1.26120	60.00000	Averaged	
	51 1,2-Dichloropropane	0.41971	0.43250	0.000	-3.04587	20.00000	Averaged	
	52 Methyl methacrylate	0.16389	0.18070	0.000	-10.25498	60.00000	Averaged	
	53 Bromodichloromethane	0.90527	0.85392	0.000	5.67250	60.00000	Averaged	
	54 Dibromomethane	0.50085	0.49503	0.000	1.16208	60.00000	Averaged	
	56 2-Nitropropane	0.13881	0.06259	0.000	54.90968	60.00000	Averaged	
	58 4-Methyl-2-pentanone	0.02093	0.02675	0.000	-27.79459	60.00000	Averaged	
	59 cis-1,3-Dichloropropene	0.55552	0.56672	0.000	-2.01620	60.00000	Averaged	
$	61 Toluene-d8	0.97649	0.99310	0.000	-1.70107	60.00000	Averaged	
	62 Toluene	0.64842	0.68925	0.000	-6.29605	20.00000	Averaged	
	63 trans-1,3-Dichloropropene	0.48432	0.56380	0.000	-16.41072	60.00000	Averaged	

Data File: \\Slsvr01\Chem\MSE.i\E050425A.b\ECAL7977.D
Report Date: 06-May-2005 11:12

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSE.i
Lab File ID: ECAL7977.D
Analysis Type: WATER
Lab Sample ID: VSTDICV
Method: \\Slsvr01\Chem\MSE.i\E050425A.b\8260B-5mL.m

Injection Date: 25-APR-2005 11:14
Init. Cal. Date(s): 24-APR-2005 25-APR-2005
Init. Cal. Times: 20:06 00:48
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	64 Ethyl methacrylate	0.44514	0.47988	0.000	-7.80392	60.00000	Averaged
	65 1,1,2-Trichloroethane	0.42594	0.44366	0.000	-4.16179	60.00000	Averaged
	66 2-Hexanone	0.14624	0.21203	0.000	-44.98833	60.00000	Averaged
M	69 Xylenes (total)	0.43831	0.49253	0.000	-12.37052	180	Averaged
	67 1,3-Dichloropropane	0.64544	0.69136	0.000	-7.11550	60.00000	Averaged
	68 Tetrachloroethene	0.59409	0.56813	0.000	4.36941	60.00000	Averaged
	70 Chlorodibromomethane	0.94859	0.93746	0.000	1.17345	60.00000	Averaged
	71 1,2-Dibromoethane	0.72411	0.75012	0.000	-3.59239	60.00000	Averaged
	73 Chlorobenzene	0.97062	0.99259	0.300	-2.26408	60.00000	Averaged
	74 1,1,1,2-Tetrachloroethane	0.58520	0.59796	0.000	-2.18069	60.00000	Averaged
	75 Ethylbenzene	1.28417	1.37160	0.000	-6.80754	20.00000	Averaged
	76 m,p-Xylenes	0.43691	0.50538	0.000	-15.67065	60.00000	Averaged
	77 o-Xylene	0.44110	0.46683	0.000	-5.83286	60.00000	Averaged
	78 Styrene	0.75327	0.80981	0.000	-7.50581	60.00000	Averaged
	79 Bromoform	0.69593	0.68141	0.100	2.08598	60.00000	Averaged
	80 Isopropylbenzene	1.15727	1.29119	0.000	-11.57242	60.00000	Averaged
	81 Cyclohexanone	0.02361	0.01179	0.000	50.05102	100	Averaged
	82 1,1,2,2-Tetrachloroethane	0.79577	0.83077	0.300	-4.39899	60.00000	Averaged
$	83 4-Bromofluorobenzene	1.67604	1.67720	0.000	-0.06910	60.00000	Averaged
	84 1,2,3-Trichloropropane	0.89710	0.96383	0.000	-7.43778	60.00000	Averaged
	85 Bromobenzene	1.17611	1.20665	0.000	-2.59721	60.00000	Averaged
	86 n-Propylbenzene	3.23304	3.38338	0.000	-4.65004	60.00000	Averaged
	88 trans-1,4-dichloro-2-butene	0.09809	0.09111	0.000	7.11472	60.00000	Averaged
	87 2-Chlorotoluene	2.12749	2.20085	0.000	-3.44838	60.00000	Averaged
	89 1,3,5-Trimethylbenzene	1.80258	1.88114	0.000	-4.35833	60.00000	Averaged
	90 4-Chlorotoluene	2.57942	2.54888	0.000	1.18421	60.00000	Averaged
	91 t-Butylbenzene	2.51862	1.90459	0.000	24.37951	60.00000	Averaged
	93 1,2,4-Trimethylbenzene	1.61845	1.65358	0.000	-2.17093	60.00000	Averaged
	94 sec-Butylbenzene	2.68699	2.77447	0.000	-3.25598	60.00000	Averaged
	95 4-Isopropyltoluene	1.73630	1.92348	0.000	-10.78051	60.00000	Averaged
	96 1,3-Dichlorobenzene	1.38268	1.46772	0.000	-6.15025	60.00000	Averaged
	98 1,4-Dichlorobenzene	1.67937	1.68862	0.000	-0.55103	60.00000	Averaged
	99 n-Butylbenzene	1.71000	1.98885	0.000	-16.30656	60.00000	Averaged
	100 1,2-Dichlorobenzene	1.21421	1.37442	0.000	-13.19421	60.00000	Averaged
	101 1,2-Dibromo-3-chloropropane	0.19472	0.22299	0.000	-14.51770	60.00000	Averaged
	103 1,2,4-Trichlorobenzene	0.34686	0.26439	0.000	23.77773	60.00000	Averaged
	104 Hexachlorobutadiene	0.40010	0.39282	0.000	1.82023	60.00000	Averaged
	105 Naphthalene	0.33840	0.28244	0.000	16.53780	60.00000	Averaged
	106 1,2,3-Trichlorobenzene	0.26854	0.22987	0.000	14.40112	60.00000	Averaged

Data File: \\Slsvr01\Chem\MSE.i\E050425A.b/ECAL7977.D Pa
Report Date: 05/06/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSE.i
Lab File ID: ECAL7977.D
Analysis Type: WATER

Injection Date: 25-APR-2005 11:14
Lab Sample ID: VSTDICV
Method File: \\Slsvr01\Chem\MSE.i\E050425A.b\8260B-5

COMPOUND	%D	
Dichlorodifluoromethane	32.0	
Chloromethane	14.2	
Vinyl Chloride	2.9	
Bromomethane	38.3	
Chloroethane	1.7	
Trichlorofluoromethane	0.2	
Diethyl ether	~~44.3~~	11.8 55 5/6/05
1,1,2-Trichlorofluoroethane	7.7	
Acetone	17.6	
1,1-Dichloroethene	3.1	
1,2-Dichloroethene (total)	8.0	
Allyl chloride	38.8	
Carbon Disulfide	9.4	
Methylene Chloride	8.8	
MTBE	16.5	
trans-1,2-Dichloroethene	9.6	
n-Hexane	7.8	
1,1-Dichloroethane	6.2	
2-Butanone	3.9	
2,2-Dichloropropane	4.1	
cis-1,2-Dichloroethene	6.4	
Chloroform	3.4	
Bromochloromethane	6.5	
Dibromofluoromethane	0.5	
Tetrahydrofuran	~~78.3~~	8.6 55 5/6/05
1,1,1-Trichloroethane	3.6	
1,1-Dichloropropene	6.2	
Carbon Tetrachloride	2.5	
1,2-Dichloroethane-d4	9.5	
1,2-Dichloroethane	0.5	
Benzene	5.6	
Trichloroethene	1.3	
1,2-Dichloropropane	3.0	
Methyl methacrylate	10.3	
Bromodichloromethane	5.7	
Dibromomethane	1.2	
2-Nitropropane	54.9	
4-Methyl-2-pentanone	27.8	
cis-1,3-Dichloropropene	2.0	

Data File: \\Slsvr01\Chem\MSE.i\E050425A.b/ECAL7977.D
Report Date: 05/06/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSE.i
Lab File ID: ECAL7977.D
Analysis Type: WATER

Injection Date: 25-APR-2005 11:14
Lab Sample ID: VSTDICV
Method File: \\Slsvr01\Chem\MSE.i\E050425A.b\

COMPOUND	%D
Toluene-d8	1.7
Toluene	6.3
trans-1,3-Dichloropropene	16.4
Ethyl methacrylate	7.8
1,1,2-Trichloroethane	4.2
2-Hexanone	45.0
1,3-Dichloropropane	7.1
Tetrachloroethene	4.4
Xylenes (total)	12.4
Chlorodibromomethane	1.2
1,2-Dibromoethane	3.6
Chlorobenzene	2.3
1,1,1,2-Tetrachloroethane	2.2
Ethylbenzene	6.8
m,p-Xylenes	15.7
o-Xylene	5.8
Styrene	7.5
Bromoform	2.1
Isopropylbenzene	11.6
Cyclohexanone	50.1
1,1,2,2-Tetrachloroethane	4.4
4-Bromofluorobenzene	0.1
1,2,3-Trichloropropane	7.4
Bromobenzene	2.6
n-Propylbenzene	4.7
2-Chlorotoluene	3.4
1,3,5-Trimethylbenzene	4.4
trans-1,4-dichloro-2-butene	7.1
4-Chlorotoluene	1.2
t-Butylbenzene	24.4
1,2,4-Trimethylbenzene	2.2
sec-Butylbenzene	3.3
4-Isopropyltoluene	10.8
1,3-Dichlorobenzene	6.2
1,4-Dichlorobenzene	0.6
n-Butylbenzene	16.3
1,2-Dichlorobenzene	13.2
1,2-Dibromo-3-chloropropane	14.5
1,2,4-Trichlorobenzene	23.8

STL ST. LOUIS

Data File: \\Slsvr01\Chem\MSE.i\E050425A.b/ECAL7977.D
Report Date: 05/06/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSE.i
Lab File ID: ECAL7977.D
Analysis Type: WATER

Injection Date: 25-APR-2005 11:14
Lab Sample ID: VSTDICV
Method File: \\Slsvr01\Chem\MSE.i\E050425A.b\

COMPOUND	%D
Hexachlorobutadiene	1.8
Naphthalene	16.5
1,2,3-Trichlorobenzene	14.4

The average of %D's in the continuing calibration is ~~11.1~~ 9.8 5/5/05

Data File: \\Slsvr01\Chem\MSE.i\E050425A.b\ECAL7977.D
Report Date: 06-May-2005 11:12

STL St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSE.i\E050425A.b\ECAL7977.D
Lab Smp Id: VSTDICV Client Smp ID: VSTDICV
Inj Date : 25-APR-2005 11:14
Operator : SS Inst ID: MSE.i
Smp Info : VSTDICV;E050425A.b;
Misc Info : VBLKE115A;
Comment : NONE
Method : \\Slsvr01\Chem\MSE.i\E050425A.b\8260B-5mL.m
Meth Date : 06-May-2005 11:12 stitess Quant Type: ISTD
Cal Date : 25-APR-2005 00:48 Cal File: ECAL7971.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICV.sub
Target Version: 4.10
Processing Host: SLVOA03

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume
Vo	5.000	Volume of Sample Purged (ml)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	1 Dichlorodifluoromethane	85	1.959	1.959	(0.195)	706218	50.0000	33.99
	3 Chloromethane	50	2.290	2.290	(0.228)	398517	50.0000	42.90
	4 Vinyl Chloride	62	2.324	2.324	(0.232)	409819	50.0000	48.55
	5 Bromomethane	94	2.847	2.847	(0.284)	484036	50.0000	30.86
	6 Chloroethane	64	2.934	2.934	(0.292)	310480	50.0000	50.85
	7 Trichlorofluoromethane	101	3.265	3.265	(0.325)	1077063	50.0000	50.09
	8 Diethyl ether	74	3.700	3.700	(0.369)	211798	100.000	55.52
	9 1,1,2-Trichlorofluoroethane	151	3.891	3.891	(0.388)	872660	50.0000	53.84
	11 Acetone	58	3.996	3.996	(0.398)	26911	50.0000	41.22
	12 1,1-Dichloroethene	96	4.152	4.152	(0.414)	564829	50.0000	48.45
M	14 1,2-Dichloroethene (total)	96				1451930	100.000	108.0
	16 Allyl chloride	39	4.779	4.779	(0.476)	496857	50.0000	69.42
	18 Carbon Disulfide	76	4.918	4.918	(0.490)	2164524	50.0000	54.68
	19 Methylene Chloride	84	4.971	4.971	(0.495)	681886	50.0000	45.58
	21 MTBE	73	5.319	5.319	(0.530)	924705	50.0000	58.26
	22 trans-1,2-Dichloroethene	96	5.493	5.493	(0.547)	712515	50.0000	54.78
	23 n-Hexane	57	5.667	5.667	(0.565)	625792	50.0000	53.91
	25 1,1-Dichloroethane	63	6.311	6.311	(0.629)	1270635	50.0000	53.08
	28 2-Butanone	72	7.251	7.251	(0.722)	32565	50.0000	51.95
	30 2,2-Dichloropropane	77	7.408	7.408	(0.738)	785939	50.0000	52.06
	31 cis-1,2-Dichloroethene	96	7.495	7.495	(0.747)	739415	50.0000	53.20
	34 Chloroform	83	7.808	7.808	(0.778)	1355695	50.0000	48.28

Data File: \\Slsvr01\Chem\MSE.i\E050425A.b\ECAL7977.D
Report Date: 06-May-2005 11:12

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	35	Bromochloromethane	128	8.139	8.139	(0.811)	502968	50.0000	53.26
	36	Tetrahydrofuran	71	8.296	8.296	(0.827)	37123	250.000	54.37
$	37	Dibromofluoromethane	113	8.261	8.261	(0.823)	1396036	50.0000	50.24
	38	1,1,1-Trichloroethane	97	8.626	8.626	(0.860)	972931	50.0000	51.81
	41	1,1-Dichloropropene	75	8.975	8.975	(0.894)	967031	50.0000	53.10
	42	Carbon Tetrachloride	117	9.149	9.149	(0.912)	947677	50.0000	51.26
$	43	1,2-Dichloroethane-d4	102	9.323	9.323	(0.929)	154168	50.0000	54.74
	47	1,2-Dichloroethane	62	9.532	9.532	(0.950)	700852	50.0000	49.77
	46	Benzene	78	9.532	9.532	(0.950)	1527513	50.0000	52.79
*	48	Fluorobenzene	96	10.036	10.036	(1.000)	1745803	50.0000	
	49	Trichloroethene	95	10.907	10.907	(1.087)	860781	50.0000	50.63
	51	1,2-Dichloropropane	63	11.325	11.325	(1.128)	755052	50.0000	51.52
	52	Methyl methacrylate	69	11.638	11.638	(1.160)	315464	50.0000	55.13
	53	Bromodichloromethane	83	11.847	11.847	(1.180)	1490774	50.0000	47.16
	54	Dibromomethane	93	11.951	11.951	(1.191)	864218	50.0000	49.42
	56	2-Nitropropane	43	12.108	12.108	(1.206)	109266	50.0000	22.54
	58	4-Methyl-2-pentanone	100	12.839	12.839	(1.279)	46692	50.0000	63.90
	59	cis-1,3-Dichloropropene	75	13.205	13.205	(1.316)	989382	50.0000	51.01
$	61	Toluene-d8	98	13.762	13.762	(0.783)	1333770	50.0000	50.85
	62	Toluene	92	13.953	13.953	(0.794)	925680	50.0000	53.15
	63	trans-1,3-Dichloropropene	75	14.476	14.476	(0.824)	757198	50.0000	58.20
	64	Ethyl methacrylate	69	14.615	14.615	(0.832)	644494	50.0000	53.90
	65	1,1,2-Trichloroethane	83	14.824	14.824	(0.843)	595853	50.0000	52.08
	66	2-Hexanone	43	15.015	15.015	(0.854)	284759	50.0000	72.49
M	69	Xylenes (total)	106				1984448	150.000	168.6
	67	1,3-Dichloropropane	76	15.485	15.485	(0.881)	928526	50.0000	53.56
	68	Tetrachloroethene	164	15.537	15.537	(0.884)	763015	50.0000	47.82
	70	Chlorodibromomethane	129	16.025	16.025	(0.912)	1259037	50.0000	49.41
	71	1,2-Dibromoethane	107	16.547	16.547	(0.942)	1007437	50.0000	51.80
*	72	Chlorobenzene-d5	117	17.574	17.574	(1.000)	1343034	50.0000	
	73	Chlorobenzene	112	17.661	17.661	(1.005)	1333088	50.0000	51.13
	74	1,1,1,2-Tetrachloroethane	131	17.818	17.818	(1.014)	803086	50.0000	51.09
	75	Ethylbenzene	91	17.888	17.888	(1.018)	1842099	50.0000	53.40
	76	m,p-Xylenes	106	18.096	18.096	(1.030)	1357485	100.000	115.7
	77	o-Xylene	106	19.245	19.245	(1.095)	626963	50.0000	52.92
	78	Styrene	104	19.367	19.367	(1.102)	1087607	50.0000	53.75
	79	Bromoform	173	20.133	20.133	(1.146)	915161	50.0000	48.96
	80	Isopropylbenzene	105	20.273	20.273	(1.154)	1734112	50.0000	55.79
	81	Cyclohexanone	55	20.377	20.377	(1.159)	158377	500.000	249.7
	82	1,1,2,2-Tetrachloroethane	83	20.760	20.760	(1.181)	1115754	50.0000	52.20
$	83	4-Bromofluorobenzene	95	20.882	20.882	(0.909)	1145988	50.0000	50.03
	84	1,2,3-Trichloropropane	75	21.143	21.143	(0.920)	658559	50.0000	53.72 (M)
	85	Bromobenzene	156	21.317	21.317	(0.928)	824475	50.0000	51.30
	86	n-Propylbenzene	91	21.369	21.369	(0.930)	2311777	50.0000	52.32
	88	trans-1,4-dichloro-2-butene	53	21.735	21.735	(0.946)	62254	50.0000	46.44
	87	2-Chlorotoluene	91	21.683	21.683	(0.944)	1503785	50.0000	51.72
	89	1,3,5-Trimethylbenzene	105	21.735	21.735	(0.946)	1285335	50.0000	52.18
	90	4-Chlorotoluene	91	21.770	21.770	(0.948)	1741582	50.0000	49.41
	91	t-Butylbenzene	119	22.327	22.327	(0.972)	1301358	50.0000	37.81
	93	1,2,4-Trimethylbenzene	105	22.379	22.379	(0.974)	1129851	50.0000	51.08
	94	sec-Butylbenzene	105	22.623	22.623	(0.985)	1895726	50.0000	51.63
	95	4-Isopropyltoluene	119	22.814	22.814	(0.993)	1314267	50.0000	55.39
	96	1,3-Dichlorobenzene	146	22.884	22.884	(0.996)	1002855	50.0000	53.08
*	97	1,4 Dichlorobenzene-d4	152	22.971	22.971	(1.000)	683274	50.0000	

Data File: \\Slsvr01\Chem\MSE.i\E050425A.b\ECAL7977.D
Report Date: 06-May-2005 11:12

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
98 1,4-Dichlorobenzene	146	23.006	23.006	(1.002)	1153793	50.0000	50.28
99 n-Butylbenzene	91	23.284	23.284	(1.014)	1358928	50.0000	58.15
100 1,2-Dichlorobenzene	146	23.406	23.406	(1.019)	939104	50.0000	56.60
101 1,2-Dibromo-3-chloropropane	75	24.172	24.172	(1.052)	152364	50.0000	57.26
103 1,2,4-Trichlorobenzene	180	24.938	24.938	(1.086)	180648	50.0000	38.11
104 Hexachlorobutadiene	225	25.042	25.042	(1.090)	268402	50.0000	49.09
105 Naphthalene	128	25.112	25.112	(1.093)	192982	50.0000	41.73
106 1,2,3-Trichlorobenzene	180	25.321	25.321	(1.102)	157062	50.0000	42.80

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Slsvr01\Chem\MSE.i\E050425A.b\ECAL7977.D
Report Date: 06-May-2005 11:12

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

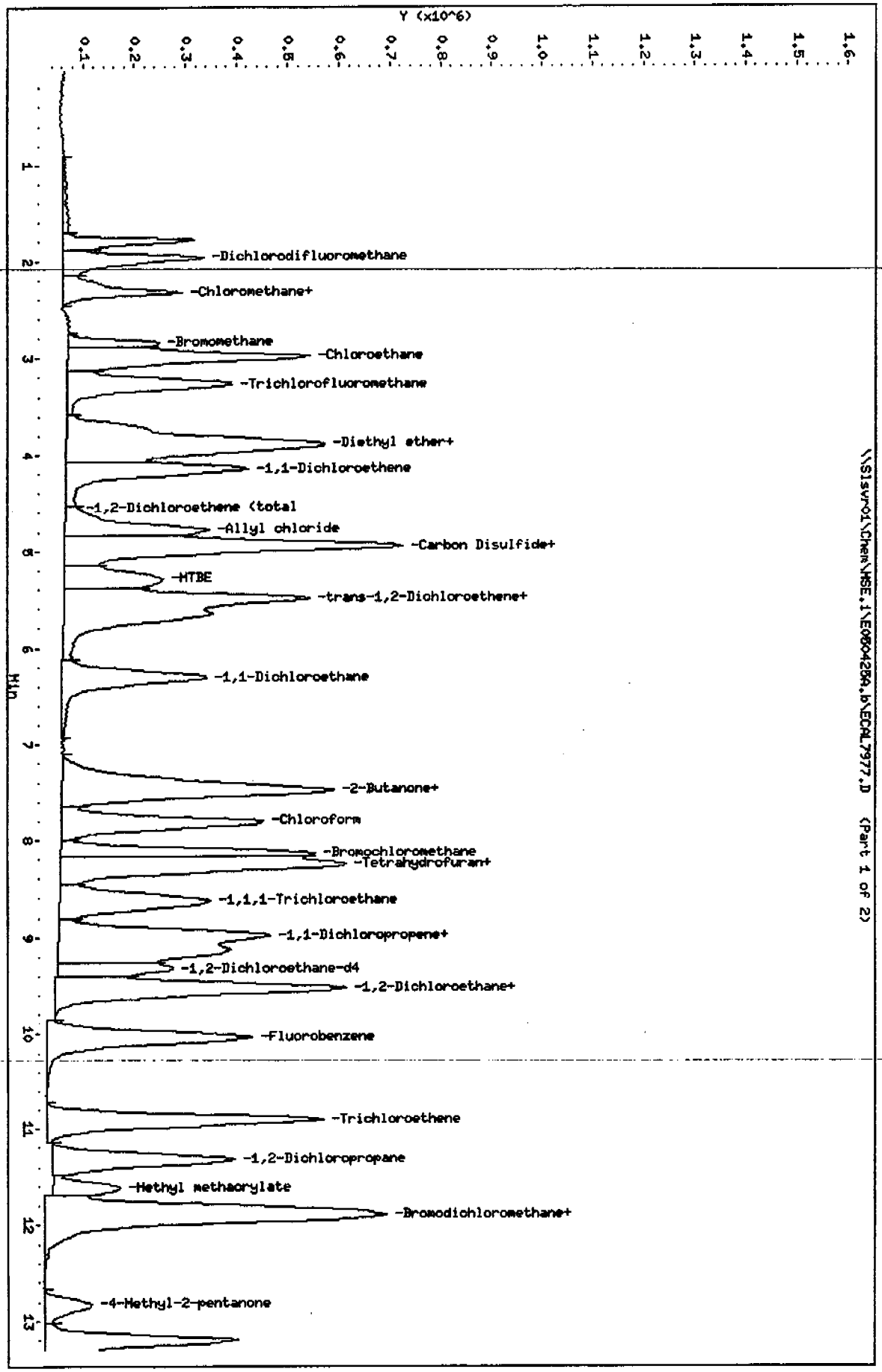
Instrument ID: MSE.i
Lab File ID: ECAL7977.D
Lab Smp Id: VSTDICV
Analysis Type: VOA
Quant Type: ISTD
Operator: SS
Method File: \\Slsvr01\Chem\MSE.i\E050425A.b\8260B-5mL.m
Misc Info: VBLKE115A;

Calibration Date: 25-APR-2005
Calibration Time: 10:08
Client Smp ID: VSTDICV
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	1698565	849283	3397130	1745803	2.78
72 Chlorobenzene-d5	1316122	658061	2632244	1343034	2.04
97 1,4 Dichlorobenze	709488	354744	1418976	683274	-3.69

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	10.04	9.54	10.54	10.04	0.00
72 Chlorobenzene-d5	17.57	17.07	18.07	17.57	0.00
97 1,4 Dichlorobenze	22.99	22.49	23.49	22.97	-0.08

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^6)
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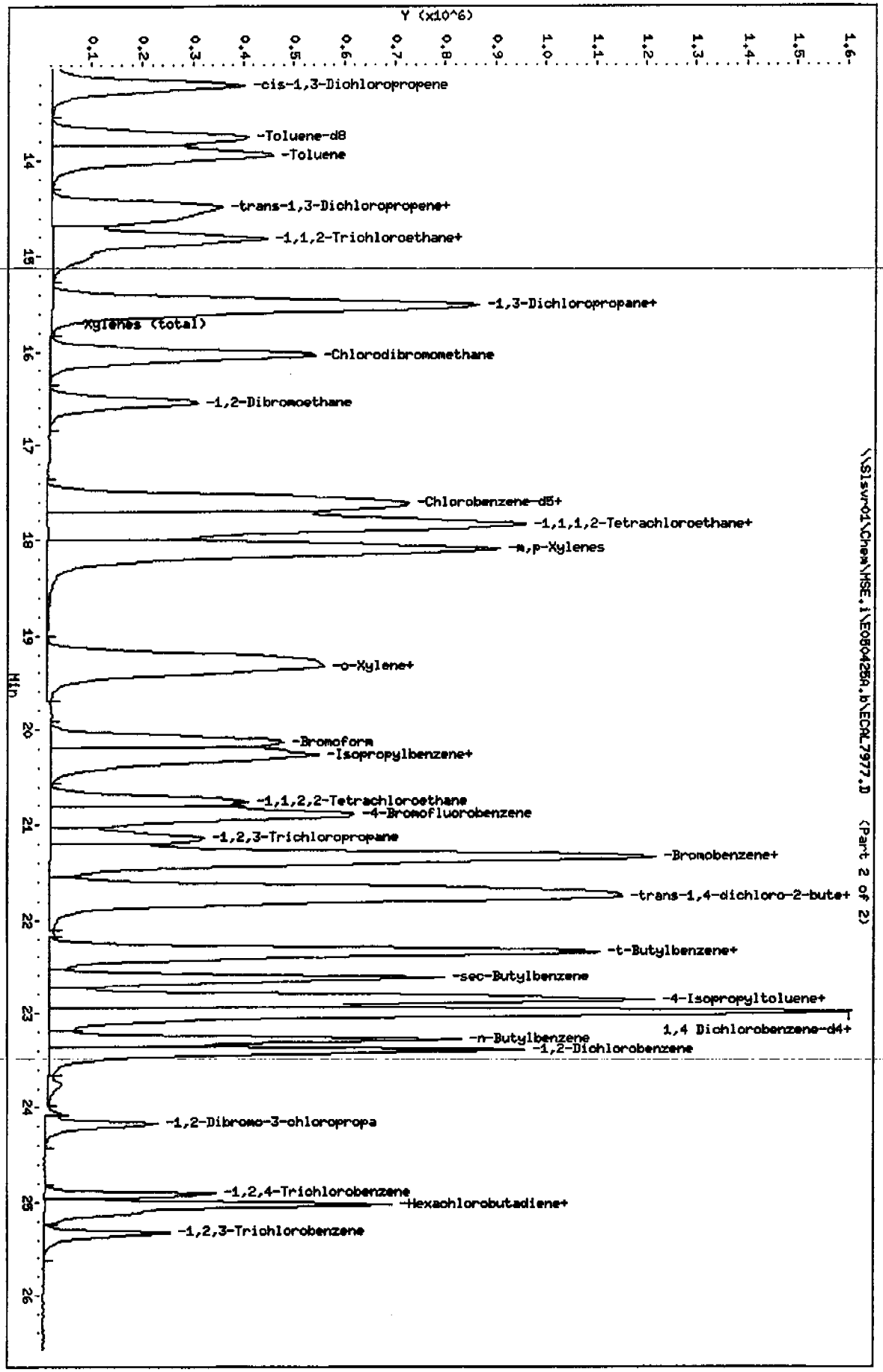
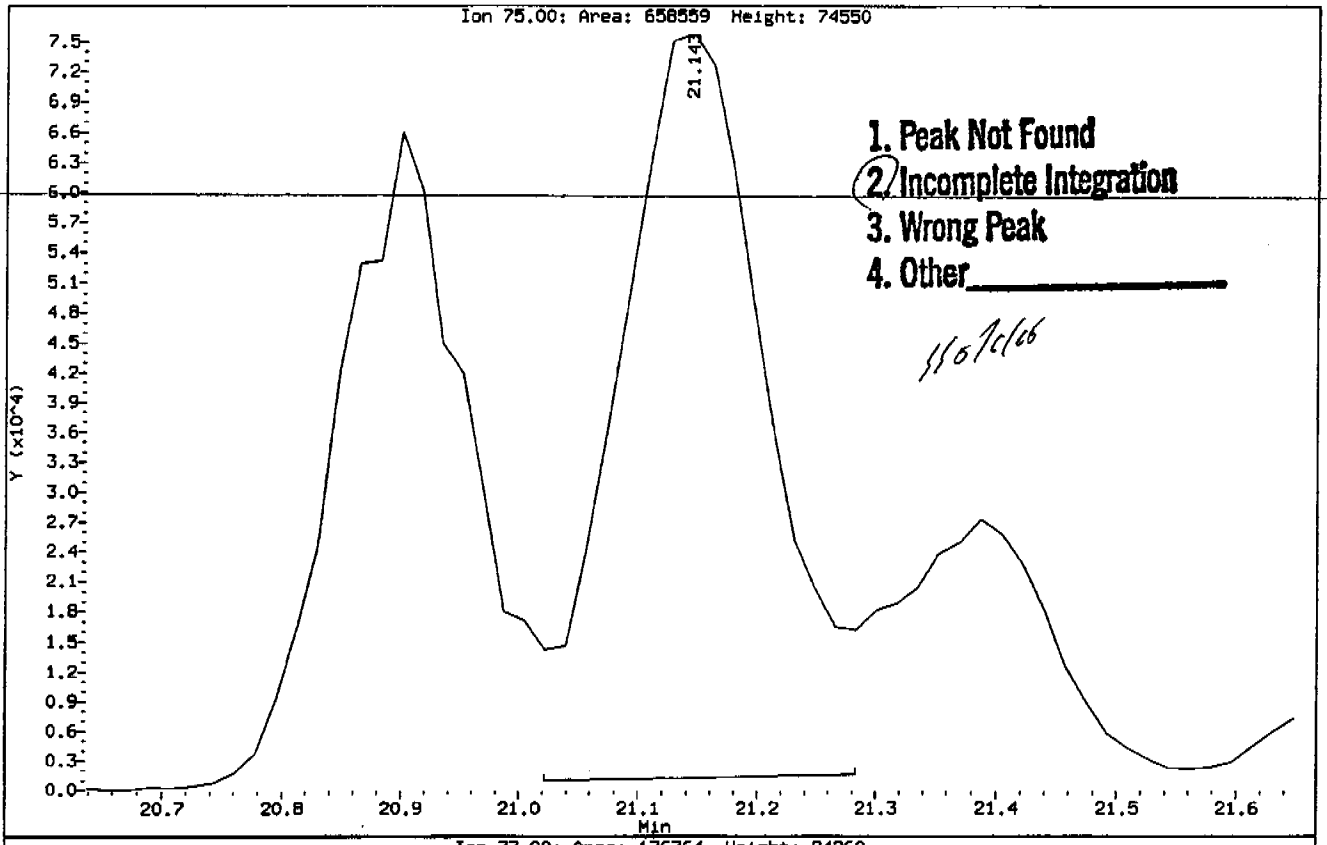
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
Min
1
2
3
4
5
6
7
8
9
10
11
12
13
-Dichlorodifluoromethane
-Chloromethane+
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-Diethyl ether+
-1,1-Dichloroethene
-1,2-Dichloroethene (total
-Allyl chloride
-Carbon Disulfide+
-MTBE
-trans-1,2-Dichloroethene+
-1,1-Dichloroethane
-2-Butanone+
-Chloroform
-Bromochloromethane
-Tetrahydrofuran+
-1,1,1-Trichloroethane
-1,1-Dichloropropene+
-1,2-Dichloroethane-d4
-1,2-Dichloroethane+
-Fluorobenzene
-Trichloroethene
-1,2-Dichloropropane
-Methyl methacrylate
-Bromodichloromethane+
-4-Methyl-2-pentanone
Data File: \\Slsvr01\Chem\MSE.i\E050425A.b\ECAL7977.D
Date : 25-APR-2005 11:14
Client ID: VSTDICV
Sample Info: VSTDICV;E050425A.b;
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: MSE.i
Operator: SS
Column diameter: 0.53
\\Slsvr01\Chem\MSE.i\E050425A.b\ECAL7977.D (Part 1 of 2)

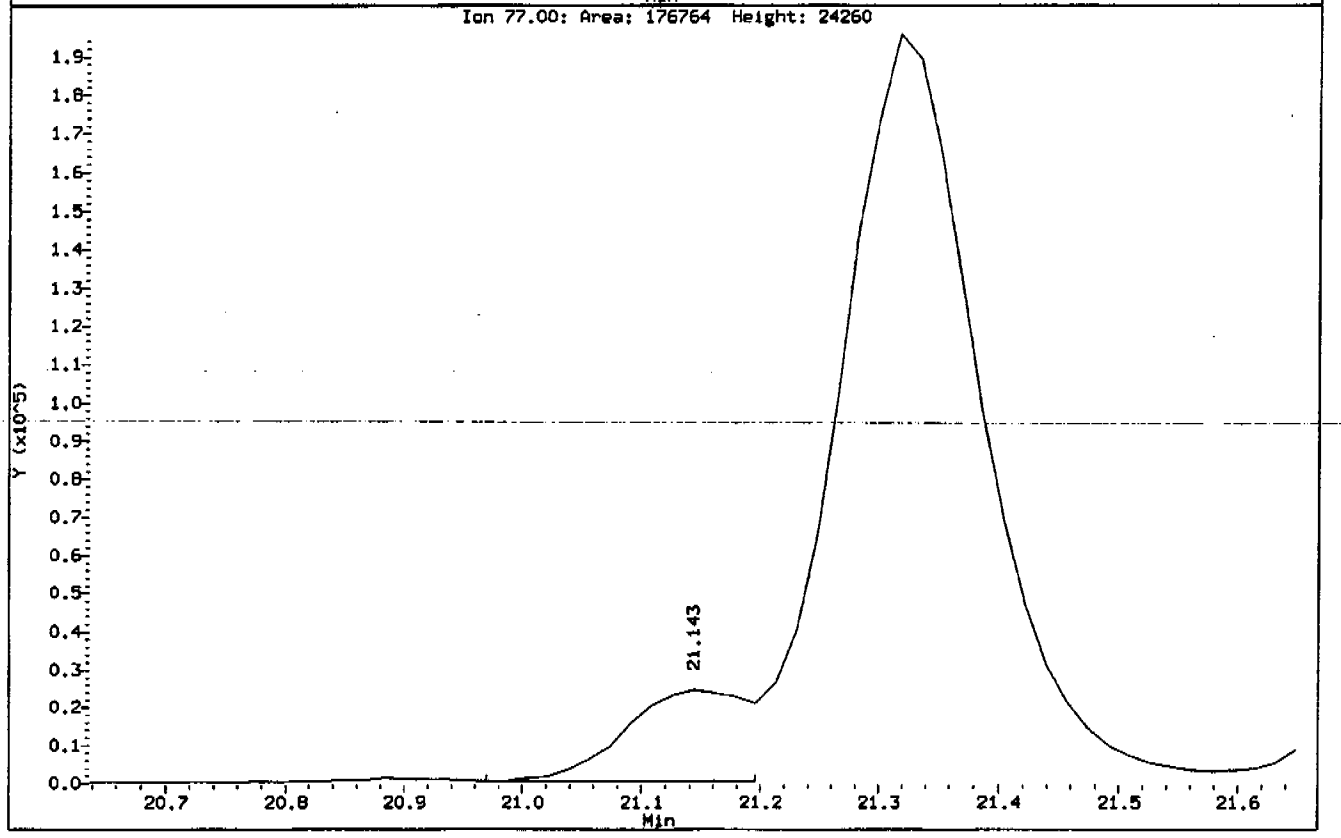

Y (x10^6)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
Min
14
15
16
17
18
19
20
21
22
23
24
25
26
-cis-1,3-Dichloropropene
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane+
-1,3-Dichloropropane+
Xylenes (total)
-Chlorodibromomethane
-1,2-Dibromoethane
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
-o-Xylene+
-Bromoform
-Isopropylbenzene+
-1,1,2,2-Tetrachloroethane
-4-Bromofluorobenzene
-1,2,3-Trichloropropane
-Bromobenzene+
-trans-1,4-dichloro-2-bute+
-t-Butylbenzene+
-sec-Butylbenzene
-4-Isopropyltoluene+
1,4 Dichlorobenzene-d4+
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene+
-1,2,3-Trichlorobenzene
Data File: \\Slsvr01\Chem\HSE.i\E080425A.b\ECAL7977.D
Date : 25-APR-2008 11:14
Client ID: VSTD1CV
Sample Info: VSTD1CV,E080425A.b
Purge Volume: 5.0
Column phase: RTX-502.2
Instrument: HSE.i
Operator: SS
Column diameter: 0.53
\\Slsvr01\Chem\HSE.i\E080425A.b\ECAL7977.D (Part 2 of 2)

Data File: \\Slsvr01\Chem\MSE.i\E050425A.b\ECAL7977.D
Injection Date: 25-APR-2005 11:14
Instrument: MSE.i
Client Sample ID: VSTDICV

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4



4/26/05



Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\EBFB8029.D

Date : 27-APR-2005 09:04

Client ID: VBFB

Instrument: MSE.i

Sample Info: 50ng BFB;E050427A.b;

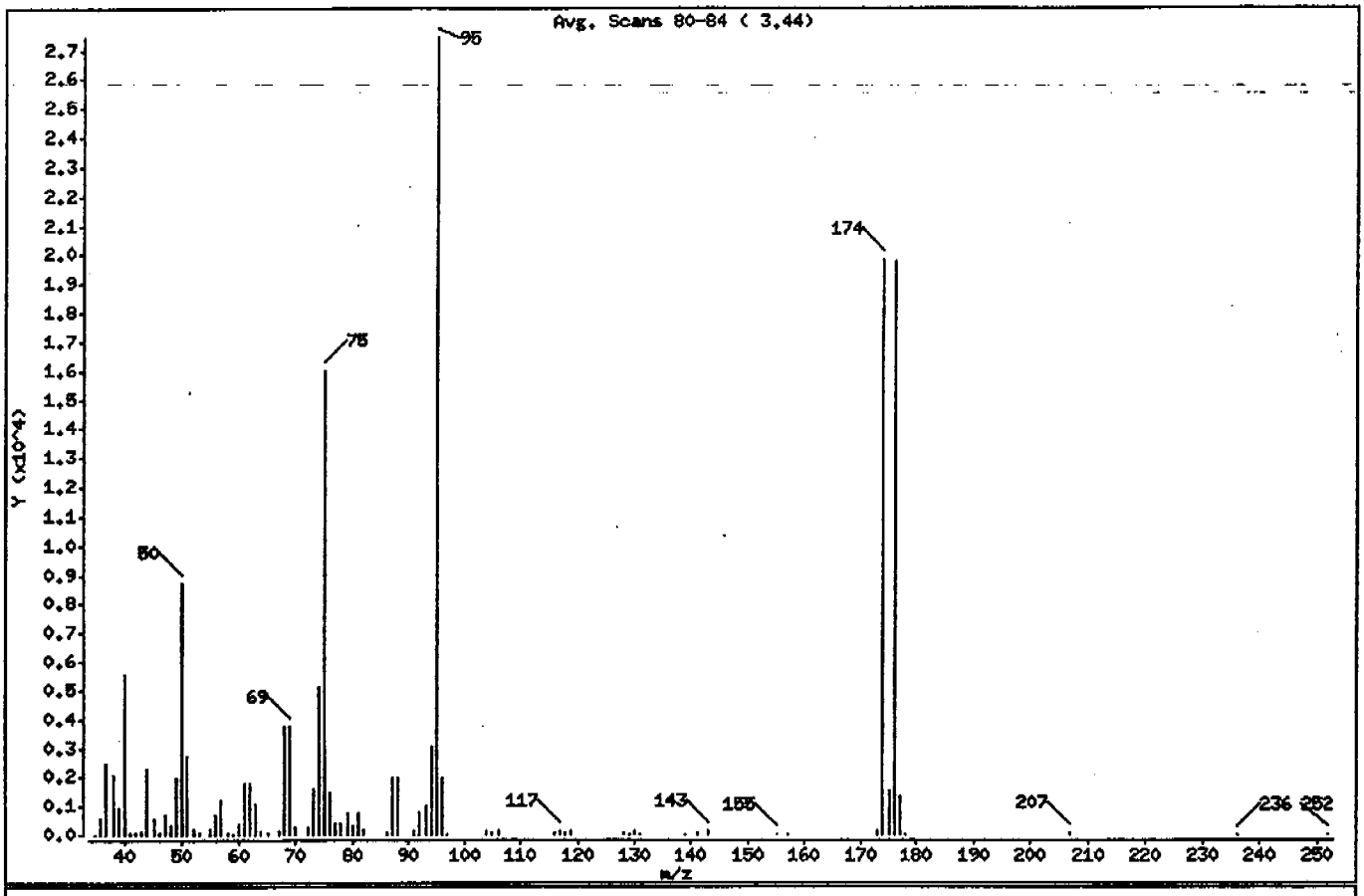
Volume Injected (uL): 2.0

Operator: SS

Column phase: RTX-502.2

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	31.70
75	30.00 - 60.00% of mass 95	58.18
96	5.00 - 9.00% of mass 95	7.06
173	Less than 2.00% of mass 174	0.37 (0.51)
174	Greater than 50.00% of mass 95	72.46
175	5.00 - 9.00% of mass 174	5.64 (7.78)
176	95.00 - 101.00% of mass 174	72.02 (99.40)
177	5.00 - 9.00% of mass 176	4.84 (6.73)

SS 4/27/05

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\EBFB8029.D

Date : 27-APR-2005 09:04

Client ID: VBFB

Instrument: MSE.i

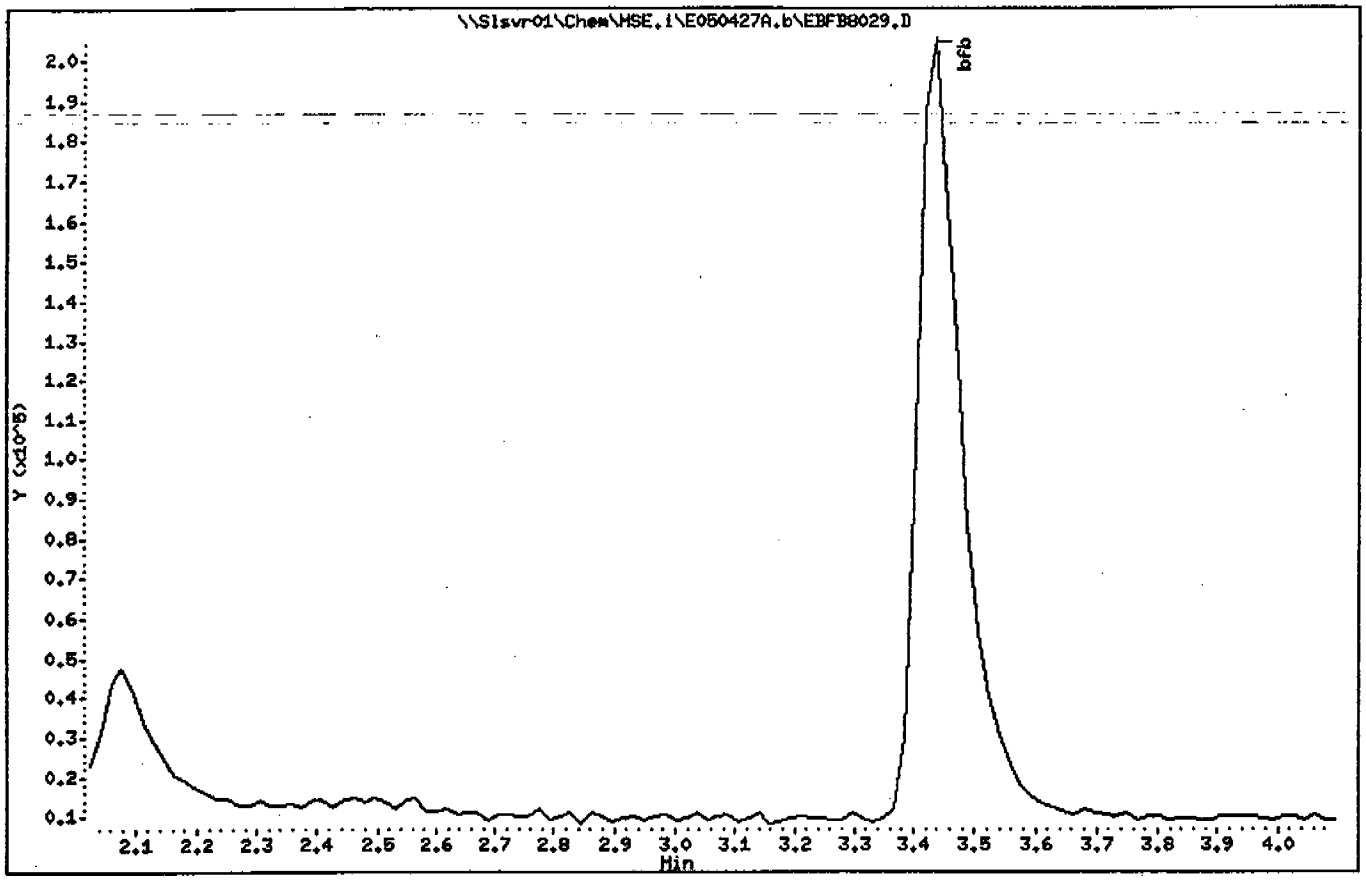
Sample Info: 50ng BFB;E050427A.b;

Volume Injected (uL): 2.0

Operator: SS

Column phase: RTX-502.2

Column diameter: 0.53



Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\EBFB8029.D

Date : 27-APR-2005 09:04

Client ID: VBFB

Instrument: MSE.i

Sample Info: 50ng BFB;E050427A.b;

Volume Injected (uL): 2.0

Operator: SS

Column phase: RTX-502.2

Column diameter: 0.53

Data File: EBFB8029.D
Spectrum: Avg. Scans 80-84 (3.44)
Location of Maximum: 95.00
Number of points: 80

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	21	57.00	1187	80.00	293	129.00	23
36.00	561	58.00	68	81.00	748	130.00	99
37.00	2456	59.00	21	82.00	217	131.00	22
38.00	2062	60.00	375	86.00	47	139.00	21
39.00	954	61.00	1780	87.00	1946	141.00	91
40.00	5555	62.00	1744	88.00	1951	143.00	103
41.00	56	63.00	1059	91.00	122	155.00	27
42.00	54	64.00	151	92.00	745	157.00	20
43.00	143	65.00	55	93.00	1039	173.00	101
44.00	2252	67.00	142	94.00	3053	174.00	19864
45.00	566	68.00	3725	95.00	27416	175.00	1545
46.00	50	69.00	3742	96.00	1935	176.00	19744
47.00	716	70.00	268	97.00	24	177.00	1328
48.00	337	72.00	258	104.00	153	178.00	25
49.00	1977	73.00	1548	105.00	52	207.00	82
50.00	8691	74.00	5113	106.00	152	236.00	20
51.00	2722	75.00	15961	116.00	52	252.00	21
52.00	198	76.00	1448	117.00	126		
53.00	41	77.00	369	118.00	63		
55.00	188	78.00	354	119.00	95		
56.00	673	79.00	750	128.00	68		

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ECAL8031.D
Report Date: 28-Apr-2005 14:15

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSE.i
Lab File ID: ECAL8031.D
Analysis Type: SOIL
Lab Sample ID: VSTD050
Method: \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5mL.m

Injection Date: 27-APR-2005 10:05
Init. Cal. Date(s): 24-APR-2005 25-APR-2005
Init. Cal. Times: 20:06 00:48
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	1 Dichlorodifluoromethane	0.59492	0.50207	0.000	15.60795	60.00000	Averaged
	3 Chloromethane	0.26603	0.28444	0.100	-6.92053	60.00000	Averaged
	4 Vinyl Chloride	0.24175	0.26521	0.000	-9.70405	20.00000	Averaged
	5 Bromomethane	0.44924	0.49461	0.000	-10.09880	60.00000	Averaged
	6 Chloroethane	0.17487	0.18361	0.000	-4.99508	60.00000	Averaged
	7 Trichlorofluoromethane	0.61580	0.62121	0.000	-0.87852	60.00000	Averaged
	8 Diethyl ether	0.10927	0.10541	0.000	3.53054	60.00000	Averaged
	9 1,1,2-Trichlorofluoroethane	0.46422	0.46085	0.000	0.72546	60.00000	Averaged
	11 Acetone	0.01870	0.01306	0.000	30.17280	60.00000	Averaged
	12 1,1-Dichloroethene	0.33387	0.33947	0.000	-1.67576	20.00000	Averaged
M	14 1,2-Dichloroethene (total)	0.38527	0.38715	0.000	-0.48888	120	Averaged
	17 Methyl Acetate	0.03297	0.03196	0.000	3.05160	60.00000	Averaged
	13 Acetonitrile	0.01215	0.01092	0.000	10.18309	60.00000	Averaged
	16 Allyl chloride	0.20532	0.29231	0.000	-42.37032	60.00000	Averaged
	18 Carbon Disulfide	1.13376	1.23125	0.000	-8.59818	60.00000	Averaged
	19 Methylene Chloride	0.42845	0.39671	0.000	7.40793	60.00000	Averaged
	20 Acrylonitrile	0.04438	0.04302	0.000	3.04785	60.00000	Averaged
	21 MTBE	0.41756	0.47505	0.000	-13.76761	60.00000	Averaged
	22 trans-1,2-Dichloroethene	0.37250	0.37853	0.000	-1.61980	60.00000	Averaged
	23 n-Hexane	0.33244	0.36446	0.000	-9.63376	60.00000	Averaged
	24 Vinyl acetate	0.24436	0.26929	0.000	-10.20005	60.00000	Averaged
	25 1,1-Dichloroethane	0.68560	0.69590	0.100	-1.50243	60.00000	Averaged
	26 2-Chloro-1,3-butadiene	0.35230	0.45227	0.000	-28.37835	60.00000	Averaged
	28 2-Butanone	0.01801	0.01675	0.000	7.02982	60.00000	Averaged
	29 Propionitrile	0.01737	0.01607	0.000	7.46740	60.00000	Averaged
	30 2,2-Dichloropropane	0.43235	0.44197	0.000	-2.22585	60.00000	Averaged
	31 cis-1,2-Dichloroethene	0.39804	0.39577	0.000	0.56948	60.00000	Averaged
	32 Ethyl acetate	0.01022	0.00817	0.000	20.10562	60.00000	Averaged
	33 Methacrylonitrile	0.10728	0.11851	0.000	-10.47626	60.00000	Averaged
	34 Chloroform	0.80429	0.75757	0.000	5.80868	20.00000	Averaged
	35 Bromochloromethane	0.27046	0.27094	0.000	-0.17676	60.00000	Averaged
	36 Tetrahydrofuran	0.01956	0.01966	0.000	-0.53156	60.00000	Averaged
$	37 Dibromofluoromethane	0.79589	0.78327	0.000	1.58543	60.00000	Averaged
	39 Isobutanol	0.00153	0.00281	0.000	-84.56371	100	Averaged
	38 1,1,1-Trichloroethane	0.53775	0.53796	0.000	-0.03919	60.00000	Averaged
	40 Cyclohexane	0.19817	0.31683	0.000	-59.87557	60.00000	Averaged
	41 1,1-Dichloropropene	0.52162	0.52394	0.000	-0.44434	60.00000	Averaged
	42 Carbon Tetrachloride	0.52943	0.52686	0.000	0.48591	60.00000	Averaged
$	43 1,2-Dichloroethane-d4	0.08067	0.07985	0.000	1.01217	60.00000	Averaged
	45 n-Butanol	0.00436	0.00369	0.000	15.43065	100	Averaged
	46 Benzene	0.82859	0.82950	0.000	-0.10946	60.00000	Averaged
	47 1,2-Dichloroethane	0.40332	0.37091	0.000	8.03447	60.00000	Averaged

4/29/05

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ECAL8031.D
Report Date: 28-Apr-2005 14:15

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSE.i
Lab File ID: ECAL8031.D
Analysis Type: SOIL
Lab Sample ID: VSTD050
Method: \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5mL.m

Injection Date: 27-APR-2005 10:05
Init. Cal. Date(s): 24-APR-2005 25-APR-2005
Init. Cal. Times: 20:06 00:48
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RPSO	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	49 Trichloroethene	0.48692	0.49081	0.000	-0.80005	60.00000	Averaged
	50 Methylcyclohexane	0.31406	0.40694	0.000	-29.57385	60.00000	Averaged
	51 1,2-Dichloropropane	0.41972	0.40485	0.000	3.54171	20.00000	Averaged
	52 Methyl methacrylate	0.16389	0.15967	0.000	2.57378	60.00000	Averaged
	53 Bromodichloromethane	0.90527	0.83491	0.000	7.77199	60.00000	Averaged
	54 Dibromomethane	0.50085	0.45588	0.000	8.97758	60.00000	Averaged
	55 1,4-Dioxane	0.00196	0.00177	0.000	9.71843	100	Averaged
	56 2-Nitropropane	0.13881	0.11641	0.000	16.13214	60.00000	Averaged
	57 2-chloroethyl vinyl ether	0.11597	0.11980	0.000	-3.30342	100	Averaged
	58 4-Methyl-2-pentanone	0.02093	0.02364	0.000	-12.95553	60.00000	Averaged
	59 cis-1,3-Dichloropropene	0.55552	0.54943	0.000	1.09666	60.00000	Averaged
$	61 Toluene-d8	0.97669	0.99498	0.000	-1.87316	60.00000	Averaged
	62 Toluene	0.64849	0.67100	0.000	-3.47220	20.00000	Averaged
	63 trans-1,3-Dichloropropene	0.48436	0.48763	0.000	-0.67375	60.00000	Averaged
	64 Ethyl methacrylate	0.44528	0.44611	0.000	-0.18513	60.00000	Averaged
	65 1,1,2-Trichloroethane	0.42601	0.41876	0.000	1.70063	60.00000	Averaged
	66 2-Hexanone	0.14624	0.18199	0.000	-24.44690	60.00000	Averaged
	67 1,3-Dichloropropane	0.64550	0.62512	0.000	3.15611	60.00000	Averaged
	68 Tetrachloroethene	0.59409	0.55403	0.000	6.74260	60.00000	Averaged
M	69 Xylenes (total)	0.43832	0.48757	0.000	-11.23694	180	Averaged
	70 Chlorodibromomethane	0.94859	0.87532	0.000	7.72437	60.00000	Averaged
	71 1,2-Dibromoethane	0.72429	0.69454	0.000	4.10679	60.00000	Averaged
	73 Chlorobenzene	0.97062	0.97018	0.300	0.04472	60.00000	Averaged
	74 1,1,1,2-Tetrachloroethane	0.58520	0.57421	0.000	1.87868	60.00000	Averaged
	75 Ethylbenzene	1.28417	1.35545	0.000	-5.55011	20.00000	Averaged
	76 m,p-Xylenes	0.43691	0.49983	0.000	-14.40064	60.00000	Averaged
	77 o-Xylene	0.44113	0.46305	0.000	-4.97001	60.00000	Averaged
	78 Styrene	0.75348	0.80015	0.000	-6.19367	60.00000	Averaged
	79 Bromoform	0.69589	0.41949	0.100	39.71909	60.00000	Averaged
	80 Isopropylbenzene	1.15745	1.16648	0.000	-0.78023	60.00000	Averaged
	81 Cyclohexanone	0.02361	0.02502	0.000	-5.97768	100	Averaged
	82 1,1,2,2-Tetrachloroethane	0.79577	0.73617	0.300	7.48874	60.00000	Averaged
$	83 4-Bromofluorobenzene	1.67668	1.62509	0.000	3.07688	60.00000	Averaged
	84 1,2,3-Trichloropropane	0.89710	0.79282	0.000	11.62499	60.00000	Averaged
	85 Bromobenzene	1.17611	1.09471	0.000	6.92086	60.00000	Averaged
	86 n-Propylbenzene	3.23304	3.19604	0.000	1.14459	60.00000	Averaged
	87 2-Chlorotoluene	2.12749	2.30838	0.000	-8.50282	60.00000	Averaged
	88 trans-1,4-dichloro-2-butene	0.09809	0.08935	0.000	8.90874	60.00000	Averaged
	89 1,3,5-Trimethylbenzene	1.80258	1.76453	0.000	2.11081	60.00000	Averaged
	90 4-Chlorotoluene	2.57942	2.51899	0.000	2.34307	60.00000	Averaged
	91 t-Butylbenzene	2.51862	2.51764	0.000	0.03869	60.00000	Averaged
	92 Pentachloroethane	0.79948	0.79904	0.000	0.05479	60.00000	Averaged
	93 1,2,4-Trimethylbenzene	1.61845	1.62103	0.000	-0.15918	60.00000	Averaged

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ECAL8031.D
Report Date: 28-Apr-2005 14:15

STL St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSE.i
Lab File ID: ECAL8031.D
Analysis Type: SOIL
Lab Sample ID: VSTD050
Method: \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5mL.m

Injection Date: 27-APR-2005 10:05
Init. Cal. Date(s): 24-APR-2005 25-APR-2005
Init. Cal. Times: 20:06 00:48
Quant Type: ISTD

	COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94	sec-Butylbenzene	2.68699	2.71181	0.000	-0.92375	60.00000	Averaged
95	4-Isopropyltoluene	1.73630	1.71116	0.000	1.44789	60.00000	Averaged
96	1,3-Dichlorobenzene	1.38268	1.33930	0.000	3.13787	60.00000	Averaged
98	1,4-Dichlorobenzene	1.67937	1.65012	0.000	1.74183	60.00000	Averaged
99	n-Butylbenzene	1.71000	1.79092	0.000	-4.73191	60.00000	Averaged
100	1,2-Dichlorobenzene	1.21421	1.26062	0.000	-3.82210	60.00000	Averaged
101	1,2-Dibromo-3-chloropropane	0.19456	0.17435	0.000	10.38892	60.00000	Averaged
103	1,2,4-Trichlorobenzene	0.34686	0.31645	0.000	8.76756	60.00000	Averaged
104	Hexachlorobutadiene	0.40010	0.43019	0.000	-7.51962	60.00000	Averaged
105	Naphthalene	0.33840	0.31260	0.000	7.62331	60.00000	Averaged
106	1,2,3-Trichlorobenzene	0.26854	0.30568	0.000	-13.82988	60.00000	Averaged

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b/ECAL8031.D Pa
Report Date: 04/28/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSE.i
Lab File ID: ECAL8031.D
Analysis Type: SOIL

Injection Date: 27-APR-2005 10:05
Lab Sample ID: VSTD050
Method File: \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5m

COMPOUND	%D
Dichlorodifluoromethane	15.6
Chloromethane	6.9
Vinyl Chloride	9.7
Bromomethane	10.1
Chloroethane	5.0
Trichlorofluoromethane	0.9
Diethyl ether	3.5
1,1,2-Trichlorofluoroethane	0.7
Acetone	30.2
1,1-Dichloroethene	1.7
Acetonitrile	10.2
1,2-Dichloroethane (total)	0.5
Methyl Acetate	3.1
Allyl chloride	42.4
Carbon Disulfide	8.6
Methylene Chloride	7.4
Acrylonitrile	3.0
MTBE	13.8
trans-1,2-Dichloroethene	1.6
n-Hexane	9.6
Vinyl acetate	10.2
1,1-Dichloroethane	1.5
2-Chloro-1,3-butadiene	28.4
2-Butanone	7.0
Propionitrile	7.5
2,2-Dichloropropane	2.2
cis-1,2-Dichloroethene	0.6
Ethyl acetate	20.1
Methacrylonitrile	10.5
Chloroform	5.8
Bromochloromethane	0.2
Tetrahydrofuran	0.5
Dibromofluoromethane	1.6
Cyclohexane	59.9
1,1,1-Trichloroethane	0.0
Isobutanol	84.6
1,1-Dichloropropene	0.4
Carbon Tetrachloride	0.5
1,2-Dichloroethane-d4	1.0

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b/ECAL8031.D
Report Date: 04/28/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSE.i
Lab File ID: ECAL8031.D
Analysis Type: SOIL

Injection Date: 27-APR-2005 10:05
Lab Sample ID: VSTD050
Method File: \\Slsvr01\Chem\MSE.i\E050427A.b\8

COMPOUND	%D
n-Butanol	15.4
1,2-Dichloroethane	8.0
Benzene	0.1
Trichloroethene	0.8
Methylcyclohexane	29.6
1,2-Dichloropropane	3.5
Methyl methacrylate	2.6
Bromodichloromethane	7.8
Dibromomethane	9.0
1,4-Dioxane	9.7
2-Nitropropane	16.1
2-chloroethyl vinyl ether	3.3
4-Methyl-2-pentanone	13.0
cis-1,3-Dichloropropene	1.1
Toluene-d8	1.9
Toluene	3.5
trans-1,3-Dichloropropene	0.7
Ethyl methacrylate	0.2
1,1,2-Trichloroethane	1.7
2-Hexanone	24.4
1,3-Dichloropropane	3.2
Tetrachloroethene	6.7
Xylenes (total)	11.3
Chlorodibromomethane	7.7
1,2-Dibromoethane	4.1
Chlorobenzene	0.0
1,1,1,2-Tetrachloroethane	1.9
Ethylbenzene	5.6
m,p-Xylenes	14.4
o-Xylene	5.0
Styrene	6.2
Bromoform	39.7
Isopropylbenzene	0.8
Cyclohexanone	6.0
1,1,2,2-Tetrachloroethane	7.5
4-Bromofluorobenzene	3.1
1,2,3-Trichloropropane	11.6
Bromobenzene	6.9
n-Propylbenzene	1.1

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b/ECAL8031.D
Report Date: 04/28/2005

CONTINUING CALIBRATION REPORT

Instrument ID: MSE.i
Lab File ID: ECAL8031.D
Analysis Type: SOIL

Injection Date: 27-APR-2005 10:05
Lab Sample ID: VSTD050
Method File: \\Slsvr01\Chem\MSE.i\E050427A.b\8

COMPOUND	%D
2-Chlorotoluene	8.5
1,3,5-Trimethylbenzene	2.1
trans-1,4-dichloro-2-butene	8.9
4-Chlorotoluene	2.3
t-Butylbenzene	0.0
Pentachloroethane	0.1
1,2,4-Trimethylbenzene	0.2
sec-Butylbenzene	0.9
4-Isopropyltoluene	1.4
1,3-Dichlorobenzene	3.1
1,4-Dichlorobenzene	1.7
n-Butylbenzene	4.7
1,2-Dichlorobenzene	3.8
1,2-Dibromo-3-chloropropane	10.4
1,2,4-Trichlorobenzene	8.8
Hexachlorobutadiene	7.5
Naphthalene	7.6
1,2,3-Trichlorobenzene	13.8

The average of %D's in the continuing calibration is 8.4

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ECAL8031.D
Report Date: 28-Apr-2005 14:15

STL St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSE.i\E050427A.b\ECAL8031.D
Lab Smp Id: VSTD050 Client Smp ID: VSTD050
Inj Date : 27-APR-2005 10:05
Operator : SS Inst ID: MSE.i
Smp Info : VSTD050,E050427A.b;
Misc Info : VBLKE117A;
Comment : NONE
Method : \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5mL.m
Meth Date : 27-Apr-2005 10:45 stitess Quant Type: ISTD
Cal Date : 24-APR-2005 23:36 Cal File: ECAL7969.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.10
Processing Host: SLVOA03

Concentration Formula: Amt * DF * Wsd/Ws* * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Wsd	5.000	DefSampleWeight
Ws	5.000	SampleWeight
Va	100.000	AliquotVolume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.957	1.957	(0.195)	904542	50.0000	42.20
3	Chloromethane	50	2.288	2.288	(0.228)	512463	50.0000	53.46
4	Vinyl Chloride	62	2.323	2.323	(0.232)	477806	50.0000	54.85
5	Bromomethane	94	2.827	2.827	(0.282)	891105	50.0000	55.05
6	Chloroethane	64	2.932	2.932	(0.292)	330795	50.0000	52.50
7	Trichlorofluoromethane	101	3.245	3.245	(0.323)	1119191	50.0000	50.44
8	Diethyl ether	74	3.698	3.698	(0.369)	379811	100.000	96.47
9	1,1,2-Trichlorofluoroethane	151	3.889	3.889	(0.388)	830284	50.0000	49.64
11	Acetone	58	3.994	3.994	(0.398)	23524	50.0000	34.91
12	1,1-Dichloroethene	96	4.133	4.133	(0.412)	611598	50.0000	50.84
M 14	1,2-Dichloroethene (total)	96				1395010	100.000	100.5
17	Methyl Acetate	74	4.777	4.777	(0.476)	57582	50.0000	48.47
13	Acetonitrile	41	4.412	4.412	(0.440)	98328	250.000	224.5
16	Allyl chloride	39	4.777	4.777	(0.476)	526641	50.0000	71.18
18	Carbon Disulfide	76	4.916	4.916	(0.490)	2218247	50.0000	54.30
19	Methylene Chloride	84	4.969	4.969	(0.495)	714718	50.0000	46.30
20	Acrylonitrile	53	5.230	5.230	(0.521)	387558	250.000	242.4
21	MTBE	73	5.299	5.299	(0.528)	855868	50.0000	56.88
22	trans-1,2-Dichloroethene	96	5.491	5.491	(0.547)	681977	50.0000	50.81
23	n-Hexane	57	5.648	5.648	(0.563)	656630	50.0000	54.82
24	Vinyl acetate	43	5.648	5.648	(0.563)	485157	50.0000	55.10

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ECAL8031.D
Report Date: 28-Apr-2005 14:15

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
25	1,1-Dichloroethane	63	6.292	6.292	(0.627)	1253761	50.0000	50.75
26	2-Chloro-1,3-butadiene	53	6.466	6.466	(0.644)	814826	50.0000	64.19
28	2-Butanone	72	7.214	7.214	(0.719)	30173	50.0000	46.48
29	Propionitrile	54	7.354	7.354	(0.733)	144759	250.000	231.3
30	2,2-Dichloropropane	77	7.406	7.406	(0.738)	796271	50.0000	51.11
31	cis-1,2-Dichloroethene	96	7.493	7.493	(0.747)	713033	50.0000	49.72
32	Ethyl acetate	88	7.580	7.580	(0.755)	29431	100.000	79.89
33	Methacrylonitrile	41	7.719	7.719	(0.769)	1067593	250.000	276.2
34	Chloroform	83	7.806	7.806	(0.778)	1364858	50.0000	47.10
35	Bromochloromethane	128	8.120	8.120	(0.809)	488138	50.0000	50.09
36	Tetrahydrofuran	71	8.241	8.241	(0.821)	177096	250.000	251.3
$ 37	Dibromofluoromethane	113	8.259	8.259	(0.823)	1411166	50.0000	49.21
39	Isobutanol	43	8.642	8.642	(0.861)	101423	1000.00	1846
38	1,1,1-Trichloroethane	97	8.624	8.624	(0.859)	969213	50.0000	50.02
40	Cyclohexane	84	8.624	8.624	(0.859)	570806	50.0000	79.94
41	1,1-Dichloropropene	75	8.973	8.973	(0.894)	943941	50.0000	50.22
42	Carbon Tetrachloride	117	9.147	9.147	(0.912)	949203	50.0000	49.76
$ 43	1,2-Dichloroethane-d4	102	9.321	9.321	(0.929)	143859	50.0000	49.49
45	n-Butanol	56	9.443	9.443	(0.941)	66392	500.000	422.8
46	Benzene	78	9.530	9.530	(0.950)	1494453	50.0000	50.05
47	1,2-Dichloroethane	62	9.530	9.530	(0.950)	668244	50.0000	45.98
* 48	Fluorobenzene	96	10.035	10.035	(1.000)	1801629	50.0000	
49	Trichloroethene	95	10.905	10.905	(1.087)	884261	50.0000	50.40
50	Methylcyclohexane	55	11.027	11.027	(1.099)	733161	50.0000	64.79
51	1,2-Dichloropropane	63	11.305	11.305	(1.127)	729390	50.0000	48.23
52	Methyl methacrylate	69	11.601	11.601	(1.156)	287672	50.0000	48.71
53	Bromodichloromethane	83	11.845	11.845	(1.180)	1504203	50.0000	46.11
54	Dibromomethane	93	11.932	11.932	(1.189)	821331	50.0000	45.51
55	1,4-Dioxane	88	12.002	12.002	(1.196)	63618	1000.00	902.8
56	2-Nitropropane	43	12.106	12.106	(1.206)	209734	50.0000	41.93
57	2-chloroethyl vinyl ether	63	12.733	12.733	(1.269)	215830	50.0000	51.65
58	4-Methyl-2-pentanone	100	12.820	12.820	(1.278)	42590	50.0000	56.48
59	cis-1,3-Dichloropropene	75	13.203	13.203	(1.316)	989865	50.0000	49.45
$ 61	Toluene-d8	98	13.743	13.743	(0.783)	1375911	50.0000	50.94
62	Toluene	92	13.951	13.951	(0.795)	927896	50.0000	51.74
63	trans-1,3-Dichloropropene	75	14.474	14.474	(0.824)	674315	50.0000	50.34
64	Ethyl methacrylate	69	14.596	14.596	(0.831)	616898	50.0000	50.09
65	1,1,2-Trichloroethane	83	14.804	14.804	(0.843)	579087	50.0000	49.15
66	2-Hexanone	43	14.996	14.996	(0.854)	251661	50.0000	62.22
67	1,3-Dichloropropane	76	15.466	15.466	(0.881)	864451	50.0000	48.42
68	Tetrachloroethene	164	15.518	15.518	(0.884)	766138	50.0000	46.63
M 69	Xylenes (total)	106				2022714	150.000	166.9
70	Chlorodibromomethane	129	16.023	16.023	(0.913)	1210429	50.0000	46.14
71	1,2-Dibromoethane	107	16.528	16.528	(0.941)	960447	50.0000	47.95
* 72	Chlorobenzene-d5	117	17.555	17.555	(1.000)	1382848	50.0000	
73	Chlorobenzene	112	17.659	17.659	(1.006)	1341618	50.0000	49.98
74	1,1,1,2-Tetrachloroethane	131	17.799	17.799	(1.014)	794043	50.0000	49.06
75	Ethylbenzene	91	17.868	17.868	(1.018)	1874378	50.0000	52.78
76	m,p-Xylenes	106	18.095	18.095	(1.031)	1382381	100.000	114.4
77	o-Xylene	106	19.226	19.226	(1.095)	640333	50.0000	52.48
78	Styrene	104	19.331	19.331	(1.101)	1106484	50.0000	53.10
79	Bromoform	173	20.114	20.114	(1.146)	580088	50.0000	30.14
80	Isopropylbenzene	105	20.253	20.253	(1.154)	1613071	50.0000	50.39
81	Cyclohexanone	55	20.340	20.340	(1.159)	345993	500.000	529.9

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ECAL8031.D
Report Date: 28-Apr-2005 14:15

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
82	1,1,2,2-Tetrachloroethane	83	20.741	20.741	(1.181)	1018015	50.0000	46.26
$ 83	4-Bromofluorobenzene	95	20.880	20.880	(0.909)	1207474	50.0000	48.46
84	1,2,3-Trichloropropane	75	21.124	21.124	(0.920)	589077	50.0000	44.19(M)
85	Bromobenzene	156	21.315	21.315	(0.928)	813392	50.0000	46.54
86	n-Propylbenzene	91	21.350	21.350	(0.929)	2374721	50.0000	49.43
87	2-Chlorotoluene	91	21.663	21.663	(0.943)	1715176	50.0000	54.25
88	trans-1,4-dichloro-2-butene	53	21.716	21.716	(0.945)	66390	50.0000	45.54
89	1,3,5-Trimethylbenzene	105	21.716	21.716	(0.945)	1311081	50.0000	48.94
90	4-Chlorotoluene	91	21.750	21.750	(0.947)	1871657	50.0000	48.83
91	t-Butylbenzene	119	22.325	22.325	(0.972)	1870660	50.0000	49.98
92	Pentachloroethane	167	22.342	22.342	(0.973)	593706	50.0000	49.97
93	1,2,4-Trimethylbenzene	105	22.360	22.360	(0.973)	1204454	50.0000	50.08
94	sec-Butylbenzene	105	22.621	22.621	(0.985)	2014927	50.0000	50.46
95	4-Isopropyltoluene	119	22.812	22.812	(0.993)	1271428	50.0000	49.28
96	1,3-Dichlorobenzene	146	22.865	22.865	(0.995)	995123	50.0000	48.43
* 97	1,4 Dichlorobenzene-d4	152	22.969	22.969	(1.000)	743020	50.0000	
98	1,4-Dichlorobenzene	146	23.004	23.004	(1.002)	1226071	50.0000	49.13
99	n-Butylbenzene	91	23.282	23.282	(1.014)	1330690	50.0000	52.36
100	1,2-Dichlorobenzene	146	23.404	23.404	(1.019)	936665	50.0000	51.91
101	1,2-Dibromo-3-chloropropane	75	24.170	24.170	(1.052)	129546	50.0000	44.80
103	1,2,4-Trichlorobenzene	180	24.884	24.884	(1.083)	235129	50.0000	45.62
104	Hexachlorobutadiene	225	25.023	25.023	(1.089)	319637	50.0000	53.76
105	Naphthalene	128	25.093	25.093	(1.092)	232271	50.0000	46.19
106	1,2,3-Trichlorobenzene	180	25.302	25.302	(1.102)	227125	50.0000	56.91

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ECAL8031.D
Report Date: 28-Apr-2005 14:15

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

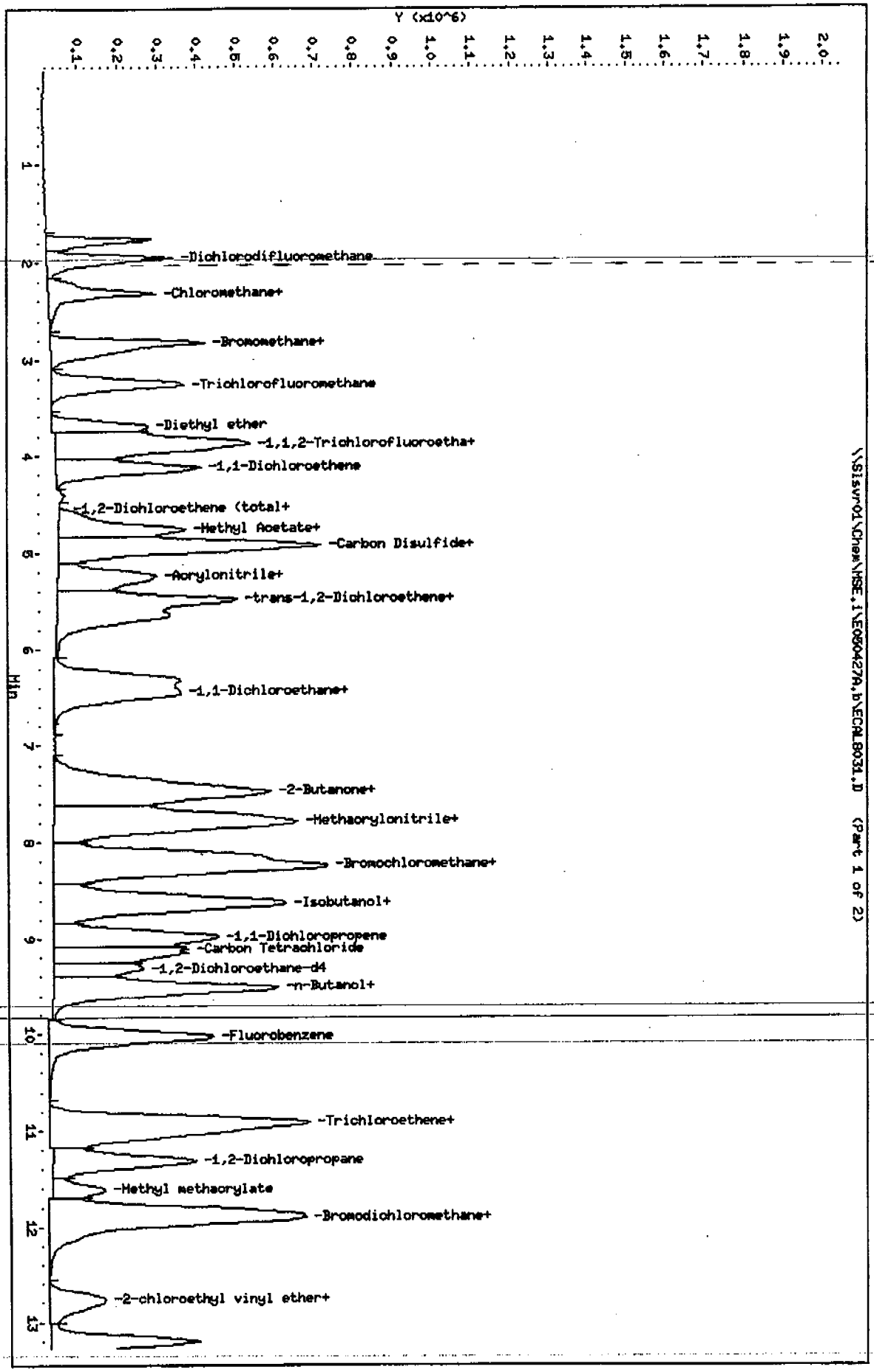
Instrument ID: MSE.i
Lab File ID: ECAL8031.D
Lab Smp Id: VSTD050
Analysis Type: VOA
Quant Type: ISTD
Operator: SS
Method File: \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5mL.m
Misc Info: VBLKE117A;

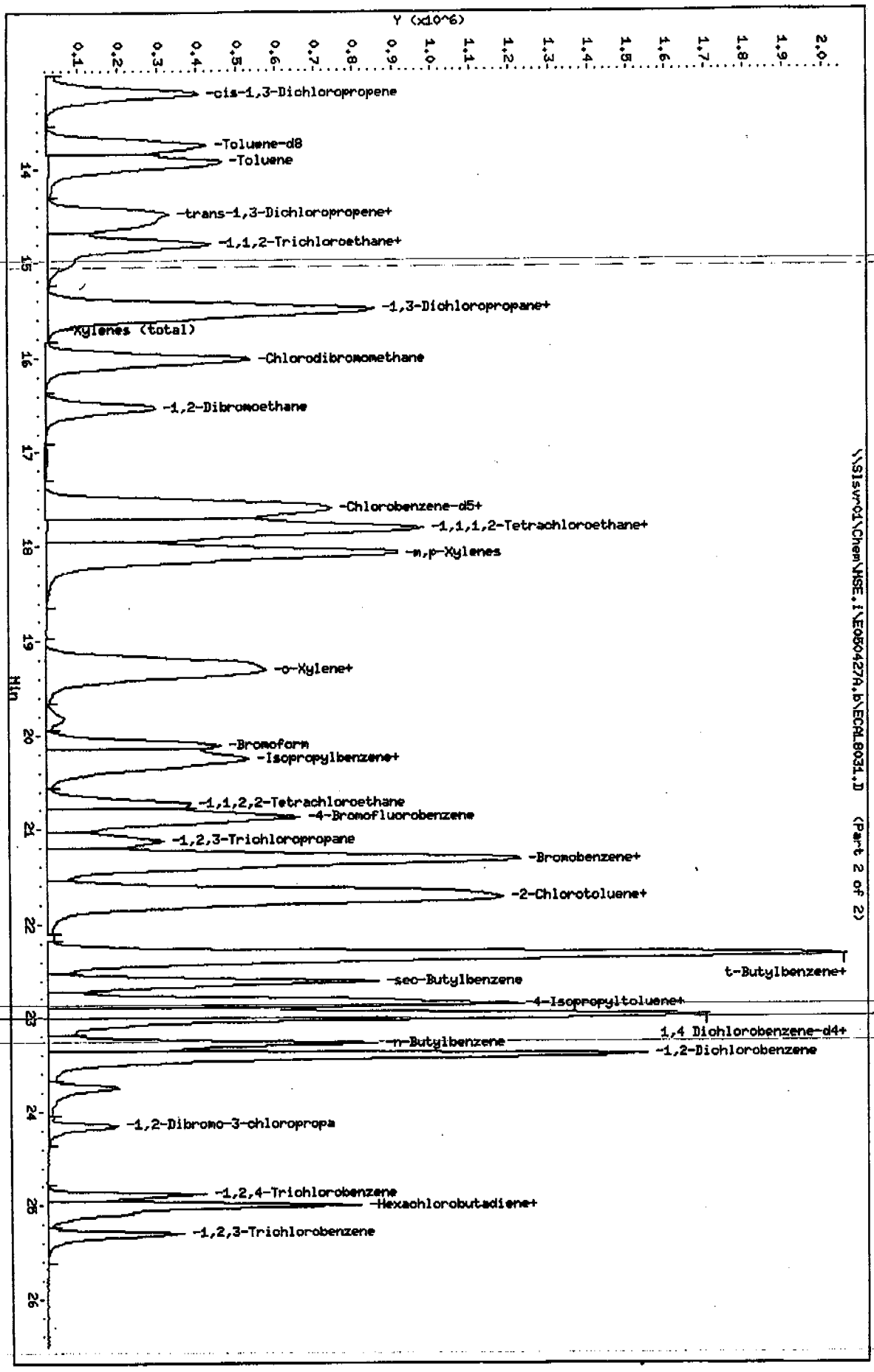
Calibration Date: 24-APR-2005
Calibration Time: 20:06
Client Smp ID: VSTD050
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	1380349	690175	2760698	1801629	30.52
72 Chlorobenzene-d5	1095989	547995	2191978	1382848	26.17
97 1,4 Dichlorobenze	600344	300172	1200688	743020	23.77

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	10.02	9.52	10.52	10.04	0.14
72 Chlorobenzene-d5	17.54	17.04	18.04	17.56	0.08
97 1,4 Dichlorobenze	22.97	22.47	23.47	22.97	-0.01

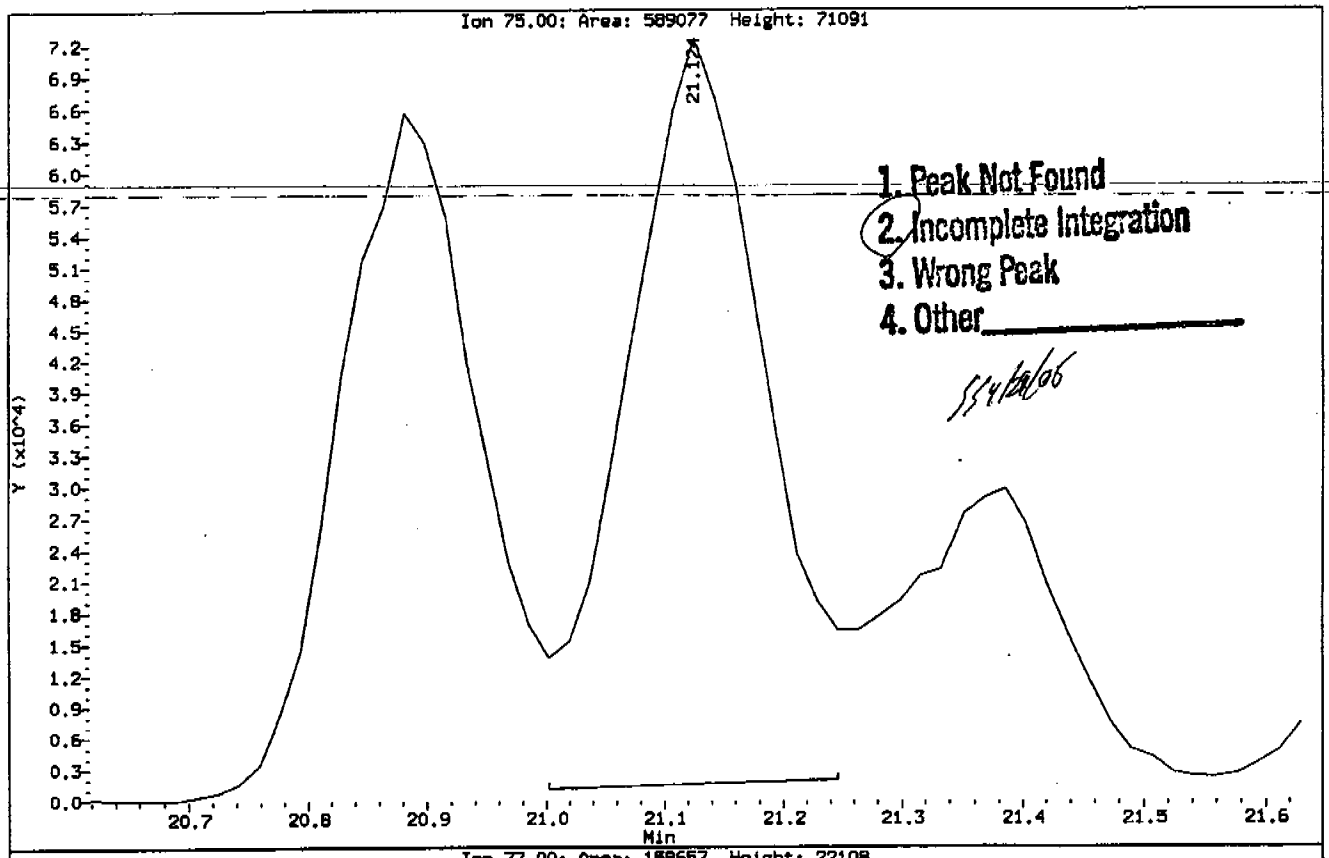
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Y (x10^6)
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2.0
Min
1 2 3 4 5 6 7 8 9 10 11 12 13
-Dichlorodifluoromethane
-Chloromethane+
-Bromomethane+
-Trichlorofluoromethane
-Diethyl ether
-1,1,2-Trichlorofluoroetha+
-1,1-Dichloroethene
-1,2-Dichloroethene (total+
-Methyl Acetate+
-Carbon Disulfide+
-Acrylonitrile+
-trans-1,2-Dichloroethene+
-1,1-Dichloroethane+
-2-Butanone+
-Methacrylonitrile+
-Bromochloromethane+
-Isobutanol+
-1,1-Dichloropropene
-Carbon Tetrachloride
-1,2-Dichloroethane-d4
-n-Butanol+
-Fluorobenzene
-Trichloroethene+
-1,2-Dichloropropane
-Methyl methacrylate
-Bromodichloromethane+
-2-chloroethyl vinyl ether+
\\Sisvr01\Chem\MSE.i\E050427A.b\ECAL8031.D (Part 1 of 2)
Data File: \\Sisvr01\Chem\MSE.i\E050427A.b\ECAL8031.D
Date : 27-APR-2005 10:05
Client ID: VSTD050
Sample Info: VSTD050;E050427A.b;
Column phase: RTX-502.2
Instrument: MSE.i
Operator: SS
Column diameter: 0.53

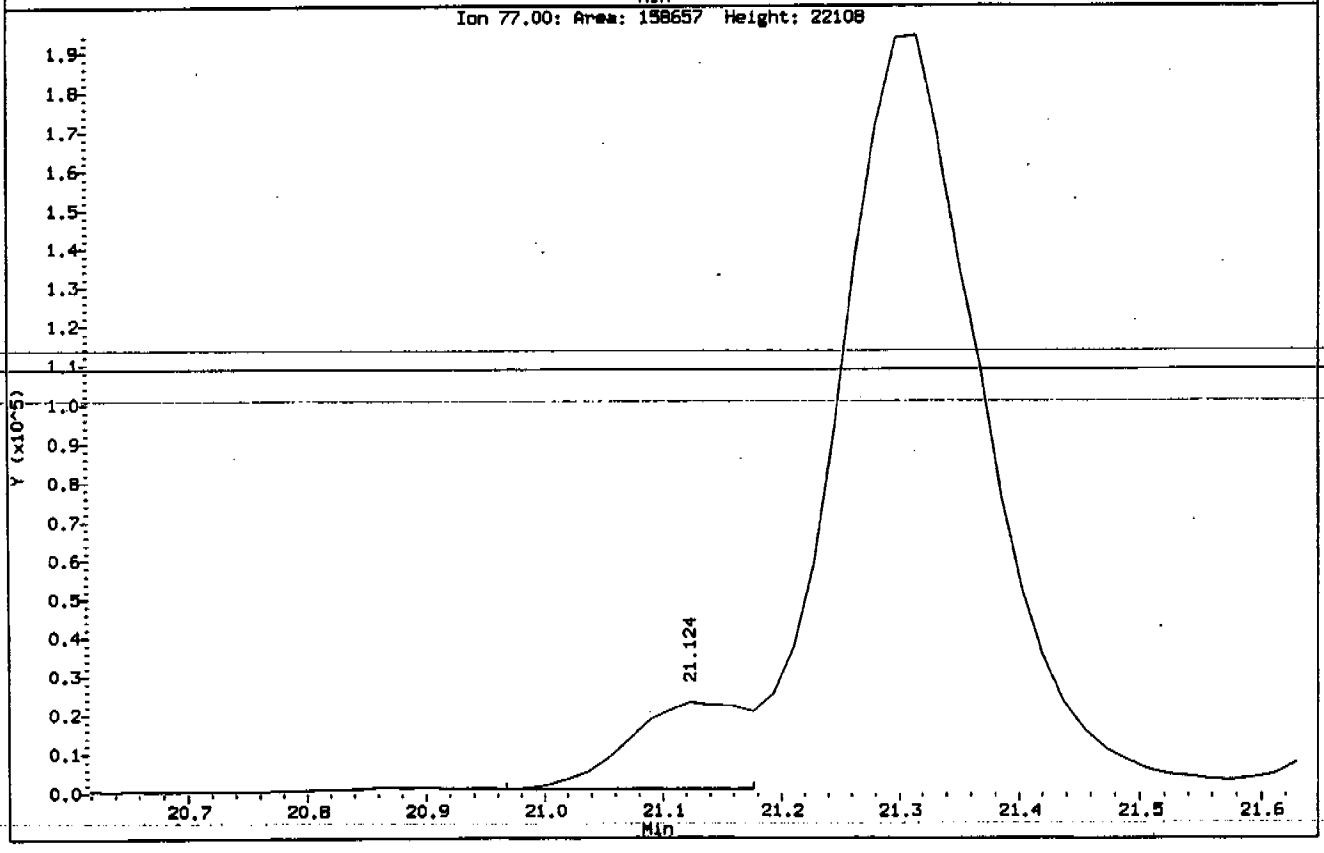

Y (x10^6)
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2.0
Min
14 15 16 17 18 19 20 21 22 23 24 25 26
-cis-1,3-Dichloropropene
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane+
-1,3-Dichloropropane+
Xylenes (total)
-Chlorodibromomethane
-1,2-Dibromoethane
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
-o-Xylene+
-Bromoform
-Isopropylbenzene+
-1,1,2,2-Tetrachloroethane
-4-Bromofluorobenzene
-1,2,3-Trichloropropane
-Bromobenzene+
-2-Chlorotoluene+
t-Butylbenzene+
-sec-Butylbenzene
-4-Isopropyltoluene+
1,4 Dichlorobenzene-d4+
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene+
-1,2,3-Trichlorobenzene
Data File: \\Slsvr01\Chem\HSE.i\E050427A.b\ECAL0031.D
Date : 27-APR-2005 10:08
Client ID: VSTD050
Sample Info: VSTD050;E050427A.b;
Column phase: RTX-502.2
\\Slsvr01\Chem\HSE.i\E050427A.b\ECAL0031.D (Part 2 of 2)
Instrument: HSE.1
Operator: SS
Column diameter: 0.53

Data File: \\Slavr01\Chem\MSE.i\E050427A.b\ECAL8031.D
Injection Date: 27-APR-2005 10:05
Instrument: MSE.i
Client Sample ID: VSTD050

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4



5/4/06



GC/MS RAW SAMPLE DATA

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8035.D
Report Date: 28-Apr-2005 14:34

STL St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8035.D
Lab Smp Id: G8WXJ1AC Client Smp ID: RE73-05-58829
Inj Date : 27-APR-2005 14:43
Operator : SS Inst ID: MSE.i
Smp Info : G8WXJ1AC;E050427A.b;
Misc Info : VBLKE117A;F5D210380-001;4.95G;5117629
Comment : NONE
Method : \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5mL.m
Meth Date : 27-Apr-2005 10:45 stitess Quant Type: ISTD
Cal Date : 24-APR-2005 23:36 Cal File: ECAL7969.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOIL.sub
Target Version: 4.10
Processing Host: SLVOA03

Concentration Formula: Amt * DF * Wsd/Ws* * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Wsd	5.000	DefSampleWeight
Ws	4.950	SampleWeight
Va	100.000	AliquotVolume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	5 Bromomethane	94	2.847	2.827	(0.284)	33465	2.75711	2.785(a)
	8 Diethyl ether	74	3.700	3.698	(0.369)	8519	2.88569	2.915(a)
	19 Methylene Chloride	84	4.953	4.969	(0.494)	100052	8.64318	8.730
$	37 Dibromofluoromethane	113	8.261	8.259	(0.823)	1237466	57.5471	58.13
$	43 1,2-Dichloroethane-d4	102	9.323	9.321	(0.929)	120777	55.4164	55.98
*	48 Fluorobenzene	96	10.037	10.035	(1.000)	1350910	50.0000	
	49 Trichloroethene	95	10.872	10.905	(1.083)	7368	0.56007	0.5657(a)
$	61 Toluene-d8	98	13.745	13.743	(0.782)	929057	79.8554	80.66(R)
*	72 Chlorobenzene-d5	117	17.574	17.555	(1.000)	595596	50.0000	
$	83 4-Bromofluorobenzene	95	20.899	20.880	(0.910)	284306	66.6016	67.27
	93 1,2,4-Trimethylbenzene	105	22.397	22.360	(0.975)	2581	0.62638	0.6327(a)
	95 4-Isopropyltoluene	119	22.832	22.812	(0.994)	58352	13.2001	13.33
*	97 1,4 Dichlorobenzene-d4	152	22.971	22.969	(1.000)	127298	50.0000	

5/4/2/06

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8035.D
Report Date: 28-Apr-2005 14:34

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSE.i
Lab File ID: ESMP8035.D
Lab Smp Id: G8WXJ1AC
Analysis Type: VOA
Quant Type: ISTD
Operator: SS
Method File: \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5mL.m
Misc Info: VBLKE117A;F5D210380-001;4.95G;5117629

Calibration Date: 27-APR-2005
Calibration Time: 10:05
Client Smp ID: RE73-05-58829
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
48 Fluorobenzene	1801629	900815	3603258	1350910	-25.02	
72 Chlorobenzene-d5	1382848	691424	2765696	595596	-56.93	<
97 1,4 Dichlorobenze	743020	371510	1486040	127298	-82.87	<

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	10.04	9.54	10.54	10.04	0.02
72 Chlorobenzene-d5	17.56	17.06	18.06	17.57	0.11
97 1,4 Dichlorobenze	22.97	22.47	23.47	22.97	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

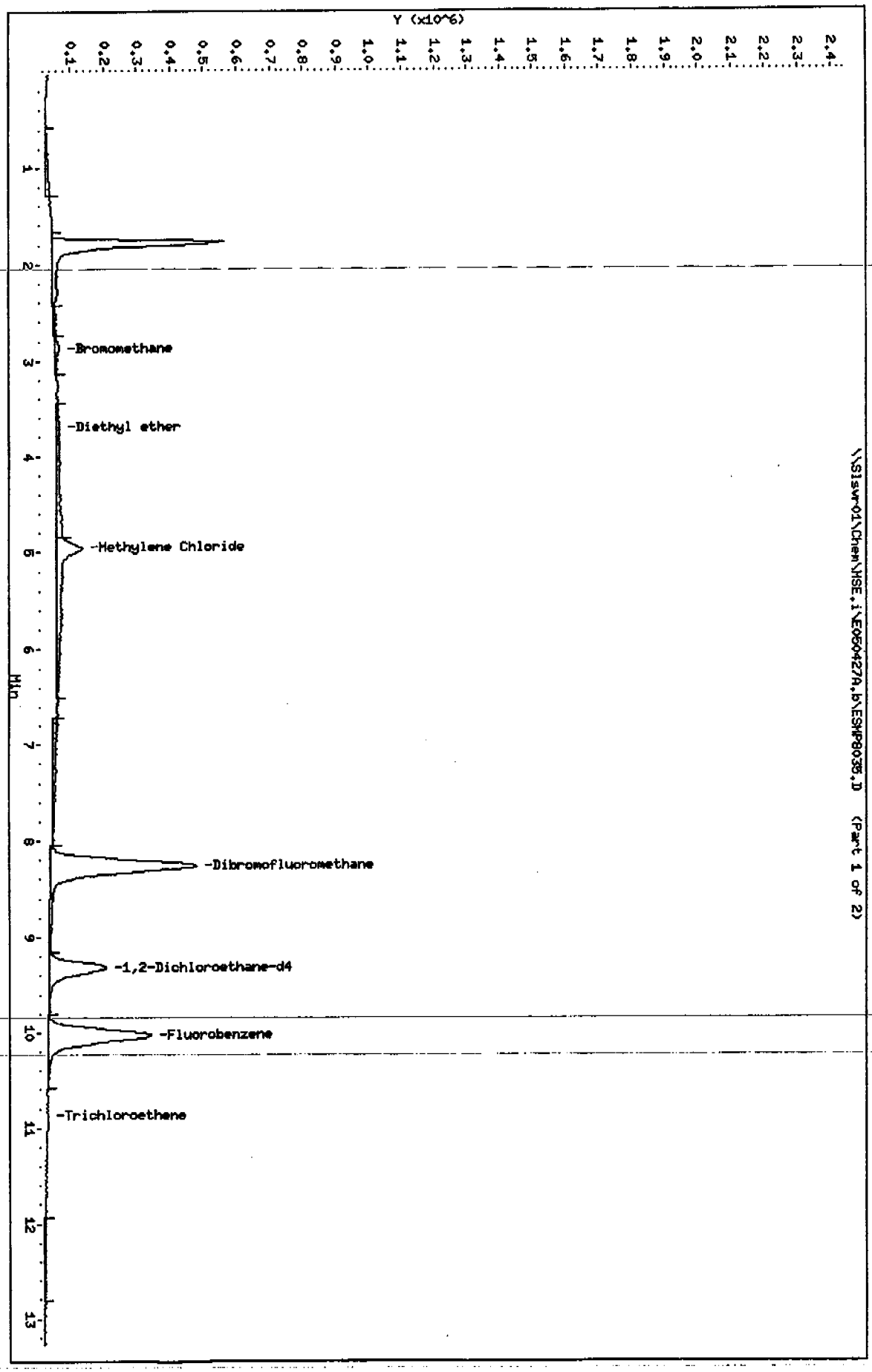
Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8035.D
Report Date: 28-Apr-2005 14:34

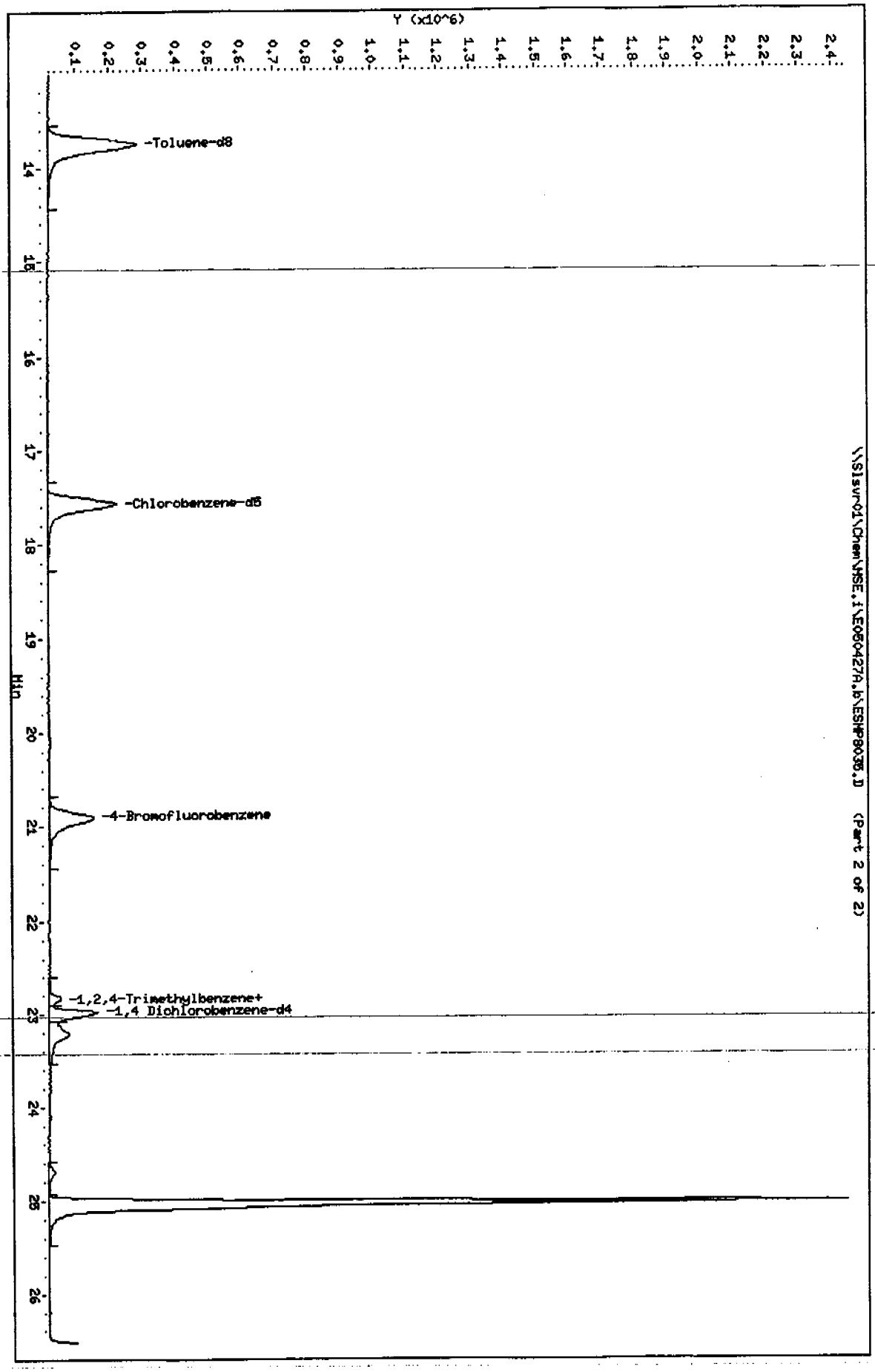
STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 21-APR-2005 00:00 Client SDG: F5D2103
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: G8WXJ1AC Client Smp ID: RE73-05-58829
Level: LOW Operator: SS
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: soilms.spk Quant Type: ISTD
Sublist File: SOIL.sub
Method File: \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5mL.m
Misc Info: VBLKE117A;F5D210380-001;4.95G;5117629

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 37 Dibromofluorometha	50.50	58.13	115.09	61-140
$ 43 1,2-Dichloroethane	50.50	55.98	110.83	78-122
$ 61 Toluene-d8	50.50	80.66	159.71*	60-148
$ 83 4-Bromofluorobenze	50.50	67.27	133.20	56-150


Data File: \\Slsvr01\Chem\HSE.i\E050427A.b\ESHP8035.D
Date : 27-APR-2005 14:43
Client ID: RE73-05-88829
Sample Info: CBWX1AC;E050427A.b;
Column phase: RTX-502.2
Instrument: HSE.i
Operator: SS
Column diameter: 0.53
\\Slsvr01\Chem\HSE.i\E050427A.b\ESHP8035.D (Part 1 of 2)
Y (x10^6)
Min
-Bromomethane
-Diethyl ether
-Methylene Chloride
-Dibromofluoromethane
-1,2-Dichloroethane-d4
-Fluorobenzene
-Trichloroethene


Y (x10^6)
Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESHP8035.D
Date : 27-APR-2005 14:43
Client ID: RE73-05-58829
Sample Info: GBMXJ1AC;E050427A.bs
Column phase: RTX-502.2
Instrument: MSE.i
Operator: SS
Column diameter: 0.53
\\Slsvr01\Chem\MSE.i\E050427A.b\ESHP8035.D (Part 2 of 2)
-Toluene-d8
-Chlorobenzene-d5
-4-Bromofluorobenzene
-1,2,4-Trimethylbenzene+
-1,4 Dichlorobenzene-d4
Min

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8036.D

Date : 27-APR-2005 14:43

Client ID: RE73-05-58829

Instrument: MSE.i

Sample Info: G8WXJ1AC;E050427A.b;

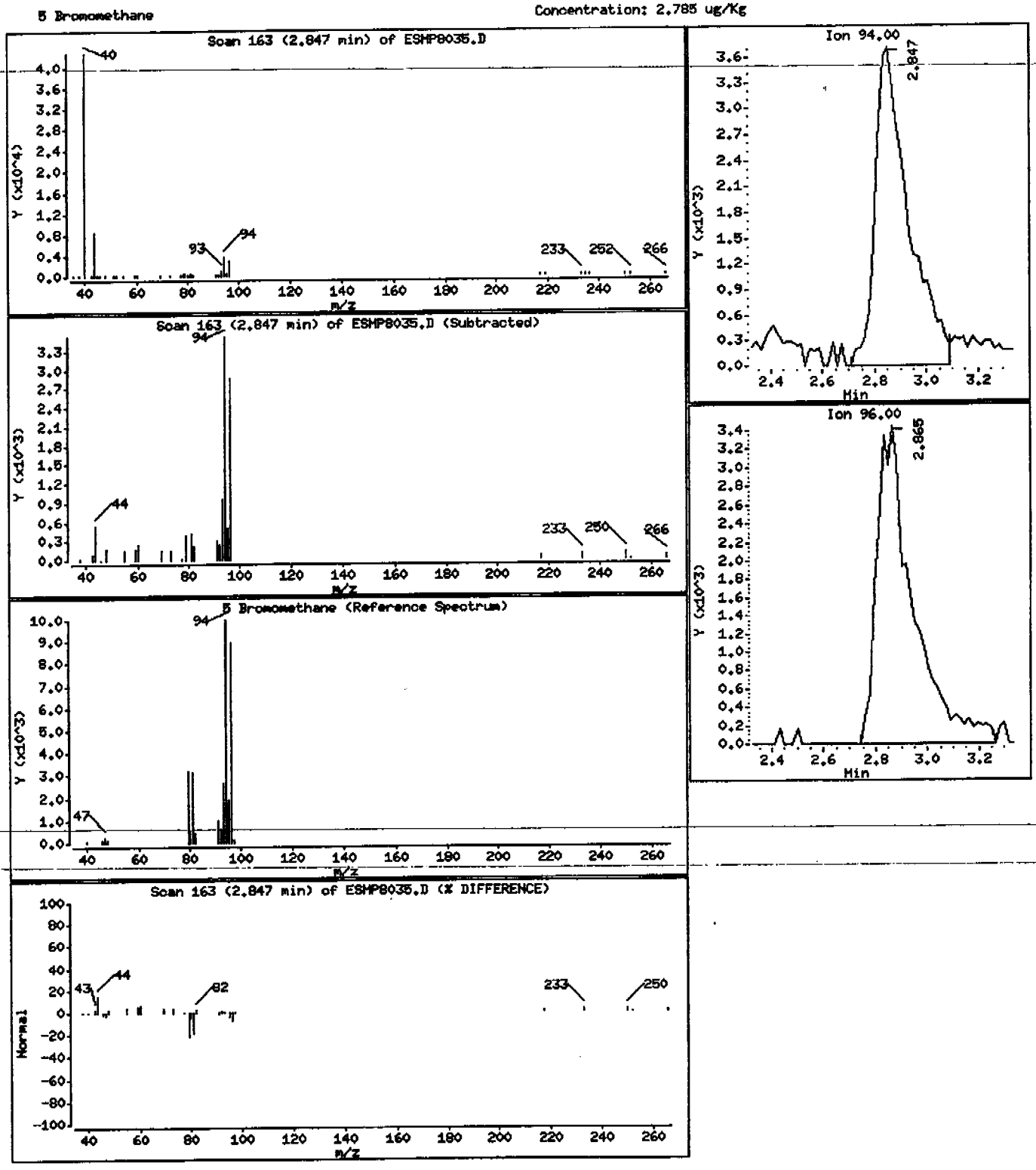
Operator: SS

Column phase: RTX-502.2

Column diameter: 0.53

5 Bromomethane

Concentration: 2.785 ug/Kg



Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8035.D

Date : 27-APR-2005 14:43

Client ID: RE73-05-58829

Instrument: MSE.i

Sample Info: G8WXJ1AC;E050427A.b;

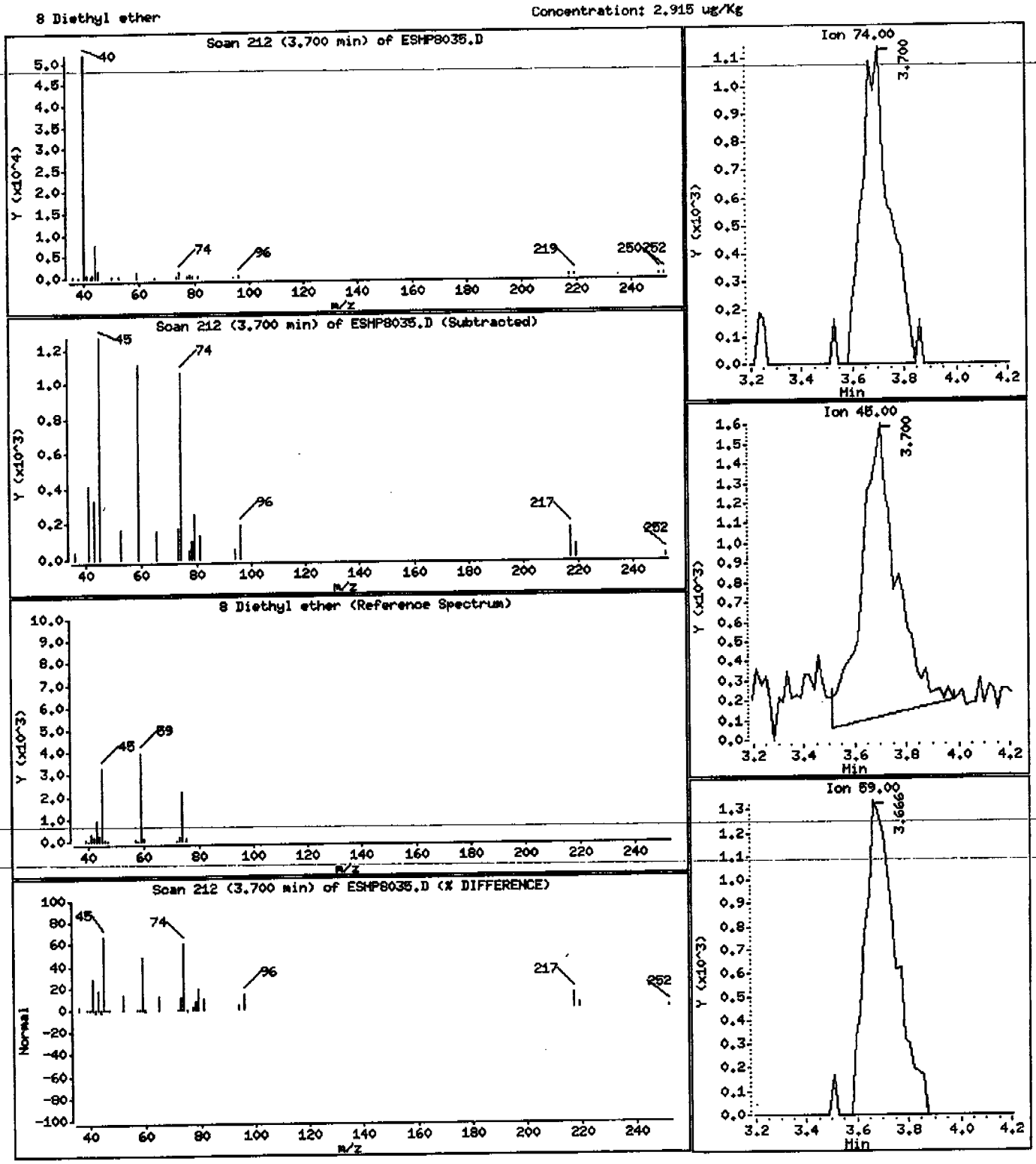
Operator: SS

Column phase: RTX-502.2

Column diameter: 0.53

8 Diethyl ether

Concentration: 2.915 ug/Kg



Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8035.D

Date : 27-APR-2005 14:43

Client ID: RE73-05-58829

Instrument: MSE.i

Sample Info: G8WXJ1AC;E050427A.b;

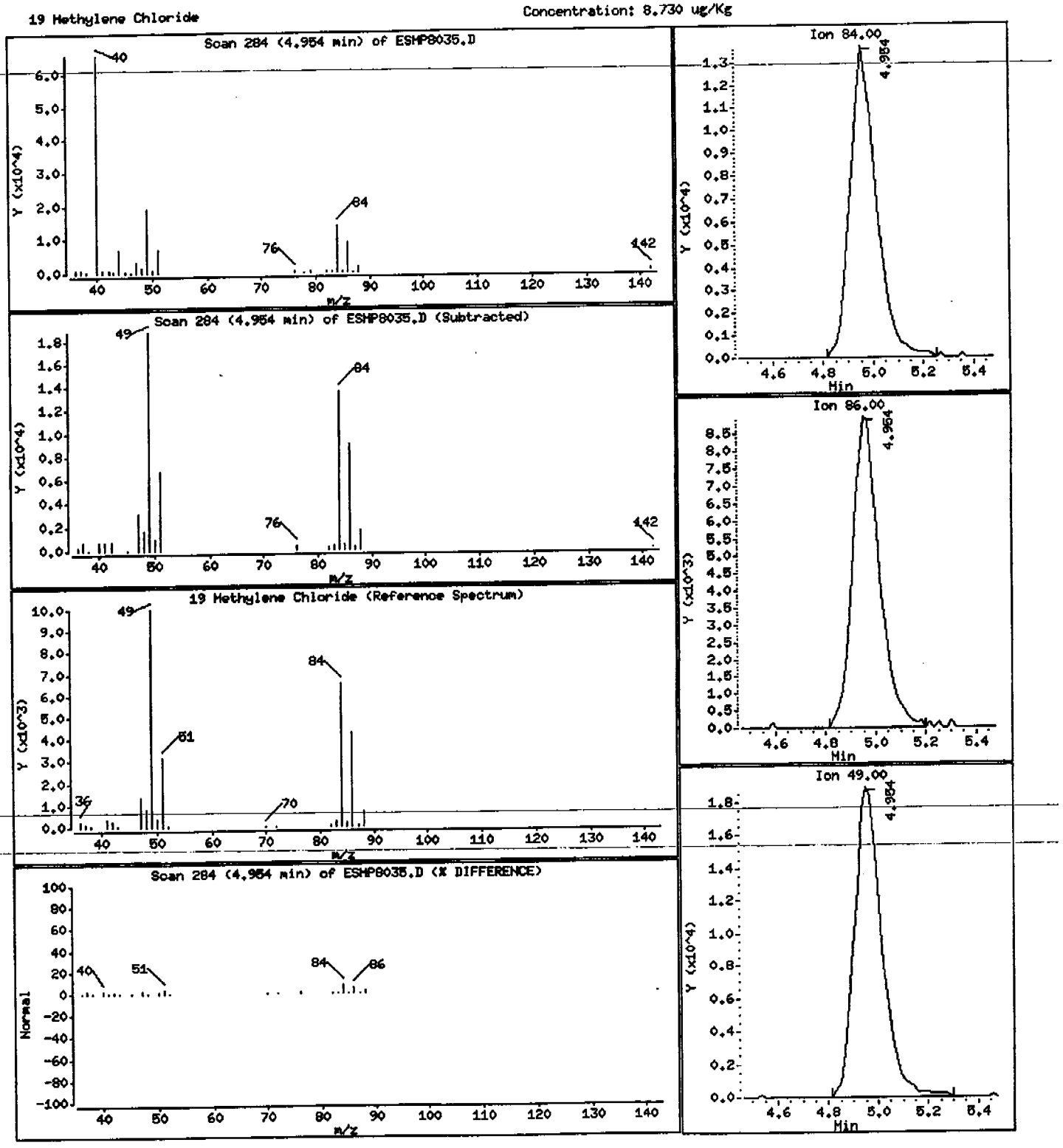
Operator: SS

Column phase: RTX-502.2

Column diameter: 0.53

19 Methylene Chloride

Concentration: 8.730 ug/Kg



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Date : 27-APR-2005 14:43

Client ID: RE73-05-58829

Instrument: MSE.i

Sample Info: G8WXJ1AC;E050427A.b;

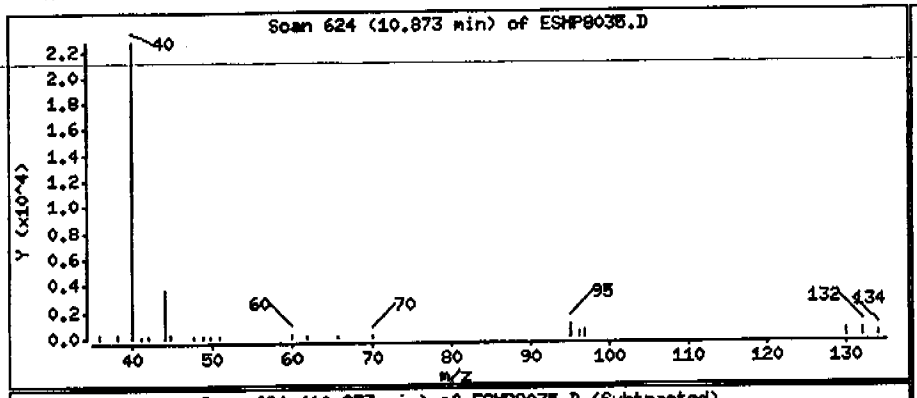
Operator: SS

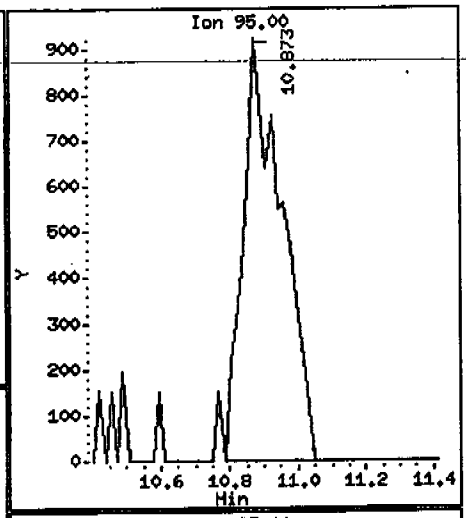
Column phase: RTX-502.2

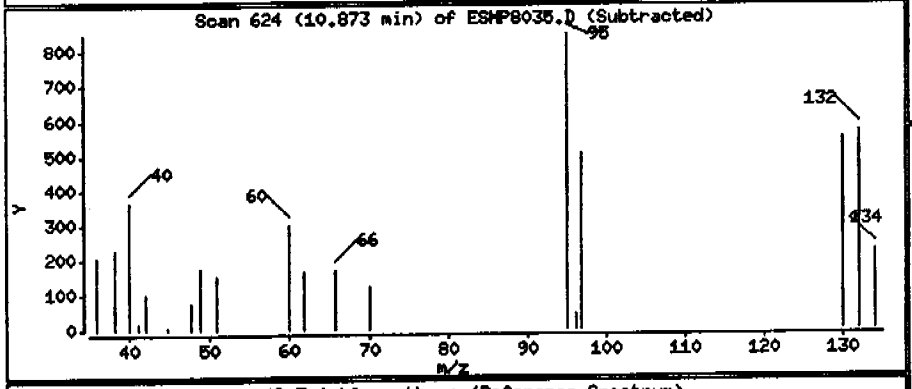
Column diameter: 0.53

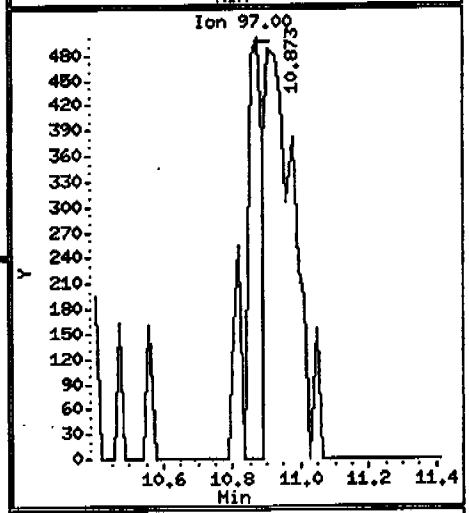
49 Trichloroethene

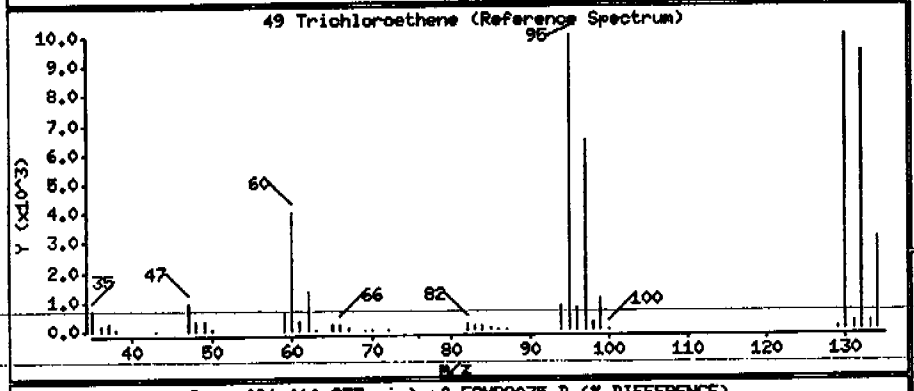
Concentration: 0.5657 ug/Kg

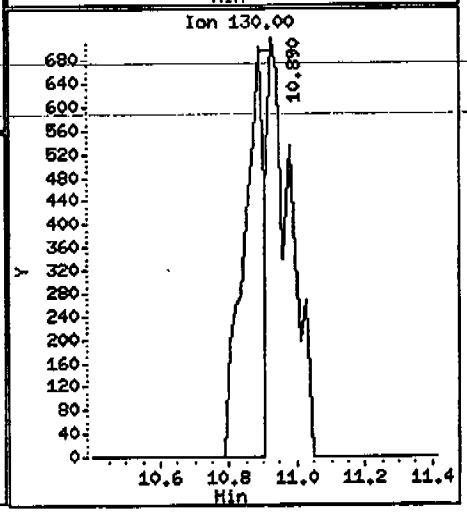


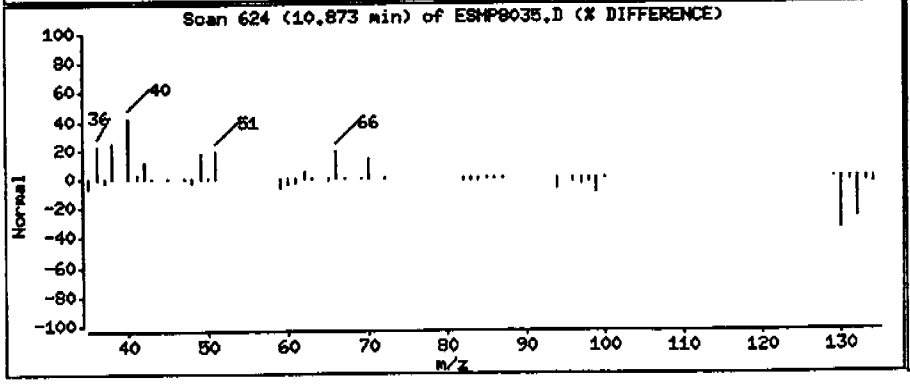












Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8035.D

Date : 27-APR-2005 14:43

Client ID: RE73-05-58829

Instrument: MSE.i

Sample Info: G8WXJ1AC;E050427A.b;

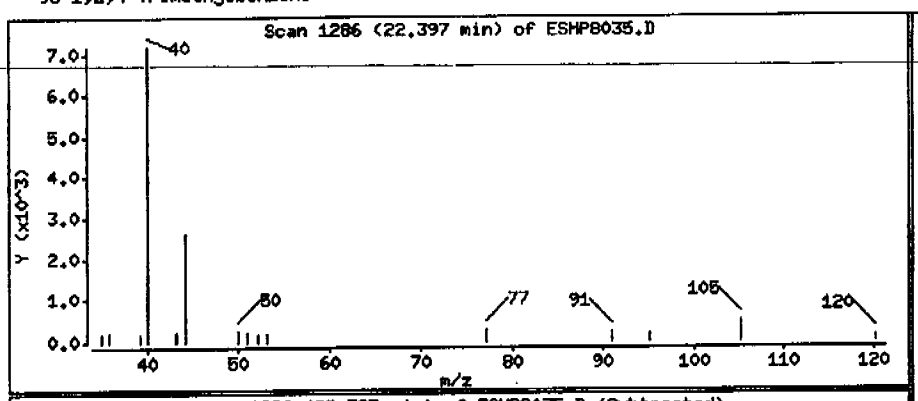
Operator: SS

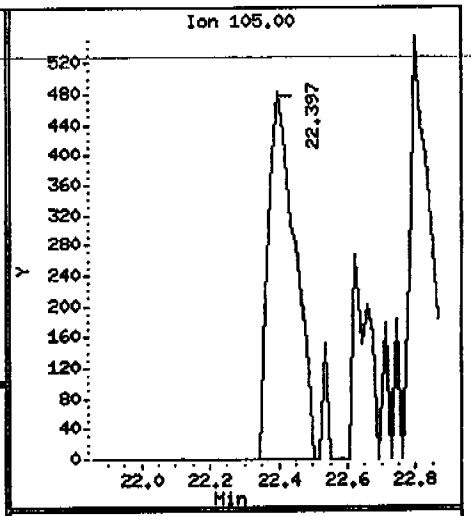
Column phase: RTX-502.2

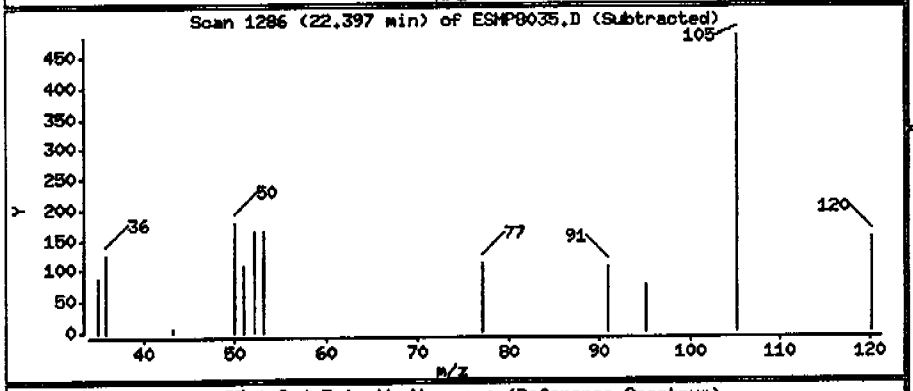
Column diameter: 0.53

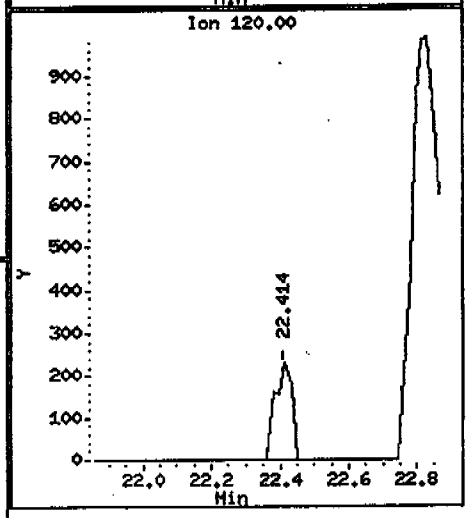
93 1,2,4-Trimethylbenzene

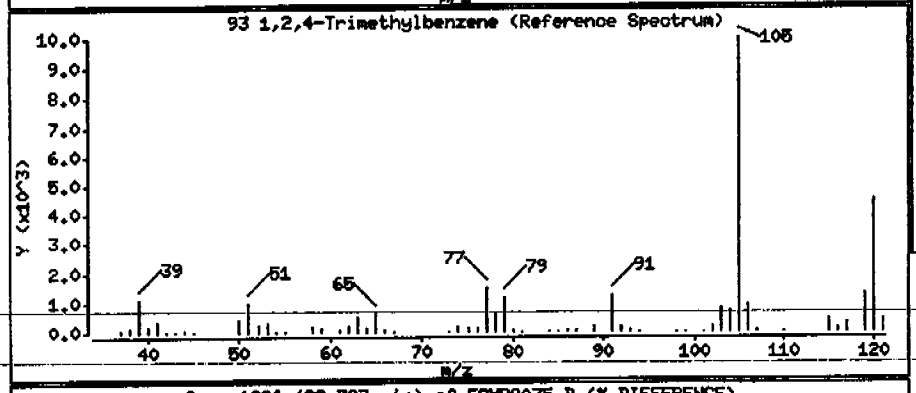
Concentration: 0.6327 ug/Kg

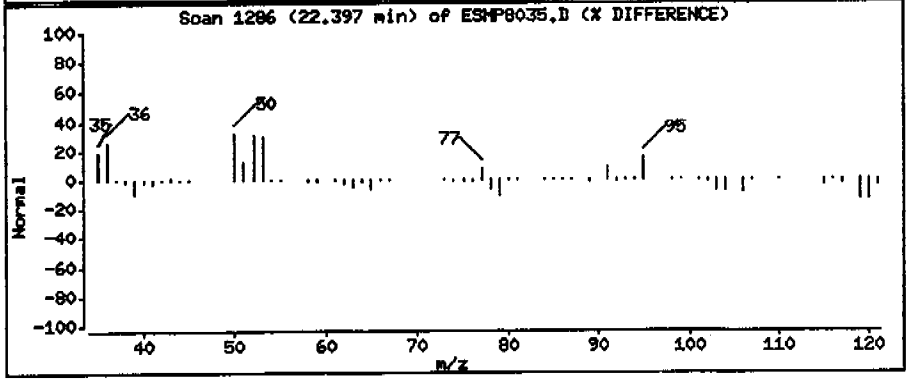












Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8035.D

Date : 27-APR-2005 14:43

Client ID: RE73-05-58829

Instrument: MSE.i

Sample Info: GBWXJ1AC;E050427A.b;

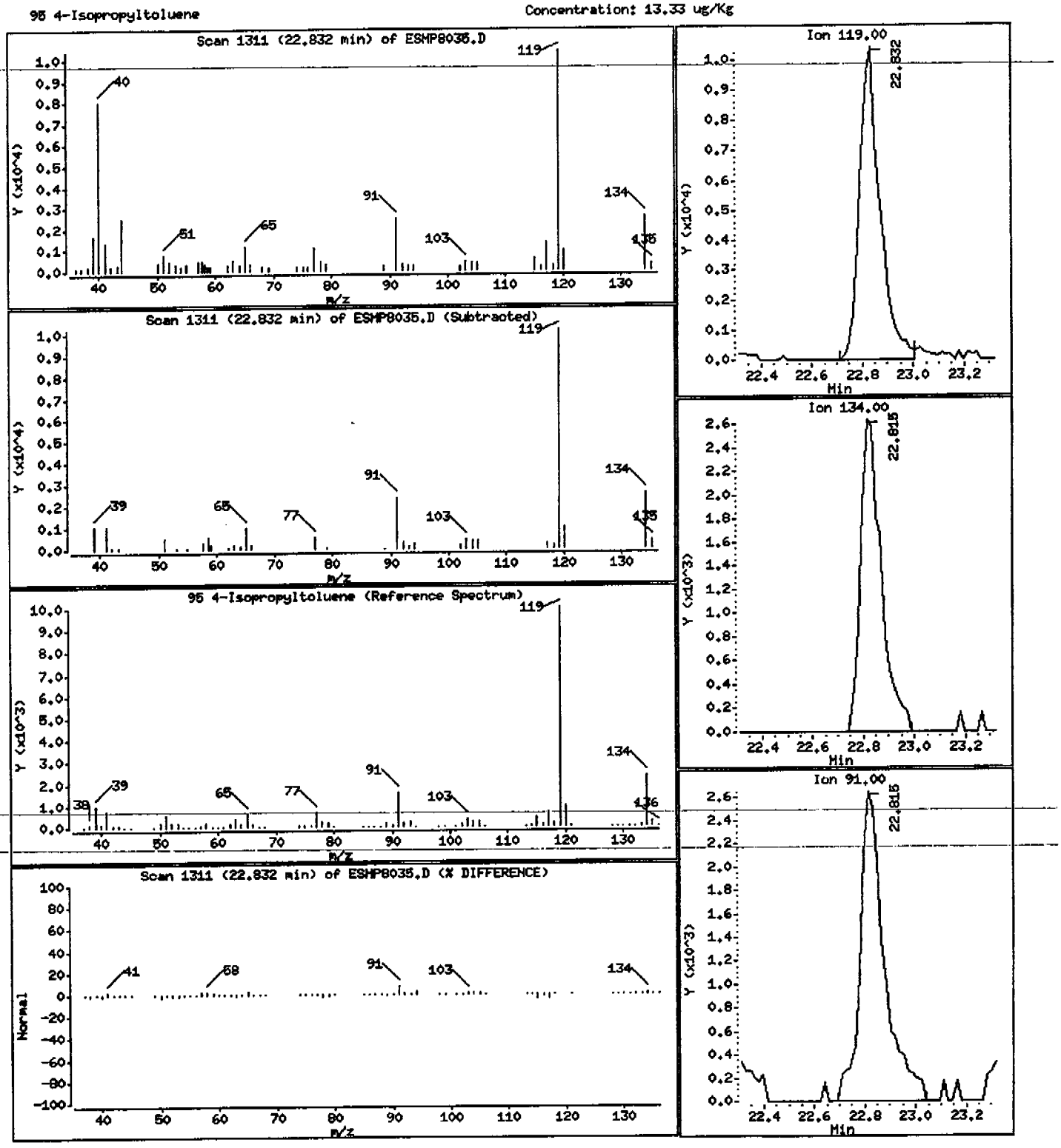
Operator: SS

Column phase: RTX-502.2

Column diameter: 0.53

95 4-Isopropyltoluene

Concentration: 13.33 ug/Kg



Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8038.D
Report Date: 28-Apr-2005 14:49

STL St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8038.D
Lab Smp Id: G8WXV1AC Client Smp ID: RE73-05-58835
Inj Date : 27-APR-2005 16:33
Operator : SS Inst ID: MSE.i
Smp Info : G8WXV1AC;E050427A.b;
Misc Info : VBLKE117A;F5D210380-002;4.97G;5117629
Comment : NONE
Method : \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5mL.m
Meth Date : 27-Apr-2005 10:45 stitess Quant Type: ISTD
Cal Date : 24-APR-2005 23:36 Cal File: ECAL7969.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOIL.sub
Target Version: 4.10
Processing Host: SLVOA03

Concentration Formula: Amt * DF * Wsd/Ws* * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Wsd	5.000	DefSampleWeight
Ws	4.970	SampleWeight
Va	100.000	AliquotVolume
Cpnd Variable		Local Compound Variable

5/4/2005

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
5 Bromomethane	94	2.846	2.827	(0.284)	30957	3.79625	3.819(a)
19 Methylene Chloride	84	4.970	4.969	(0.496)	74359	9.56126	9.619
34 Chloroform	83	7.825	7.806	(0.781)	2596	0.17782	0.1789(a)
$ 37 Dibromofluoromethane	113	8.260	8.259	(0.825)	987436	68.3491	68.76
$ 43 1,2-Dichloroethane-d4	102	9.322	9.321	(0.930)	89663	61.2351	61.60(R)
* 48 Fluorobenzene	96	10.018	10.035	(1.000)	907597	50.0000	
$ 61 Toluene-d8	98	13.744	13.743	(0.782)	595041	86.9739	87.50(R)
62 Toluene	92	13.935	13.951	(0.793)	3628	0.79866	0.8035(a)
* 72 Chlorobenzene-d5	117	17.574	17.555	(1.000)	350245	50.0000	
$ 83 4-Bromofluorobenzene	95	20.916	20.880	(0.909)	140245	91.2015	91.75(R)
96 1,3-Dichlorobenzene	146	22.918	22.865	(0.996)	2180	1.71909	1.729(a)
* 97 1,4 Dichlorobenzene-d4	152	23.005	22.969	(1.000)	45857	50.0000	
100 1,2-Dichlorobenzene	146	23.458	23.404	(1.020)	2283	2.05011	2.062(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8038.D
Report Date: 28-Apr-2005 14:49

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSE.i
Lab File ID: ESMP8038.D
Lab Smp Id: G8WXV1AC
Analysis Type: VOA
Quant Type: ISTD
Operator: SS
Method File: \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5mL.m
Misc Info: VBLKE117A;F5D210380-002;4.97G;5117629

Calibration Date: 27-APR-2005
Calibration Time: 10:05
Client Smp ID: RE73-05-58835
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
48 Fluorobenzene	1801629	900815	3603258	907597	-49.62	
72 Chlorobenzene-d5	1382848	691424	2765696	350245	-74.67	<
97 1,4 Dichlorobenze	743020	371510	1486040	45857	-93.83	<

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	10.04	9.54	10.54	10.02	-0.16
72 Chlorobenzene-d5	17.56	17.06	18.06	17.57	0.11
97 1,4 Dichlorobenze	22.97	22.47	23.47	23.01	0.16

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

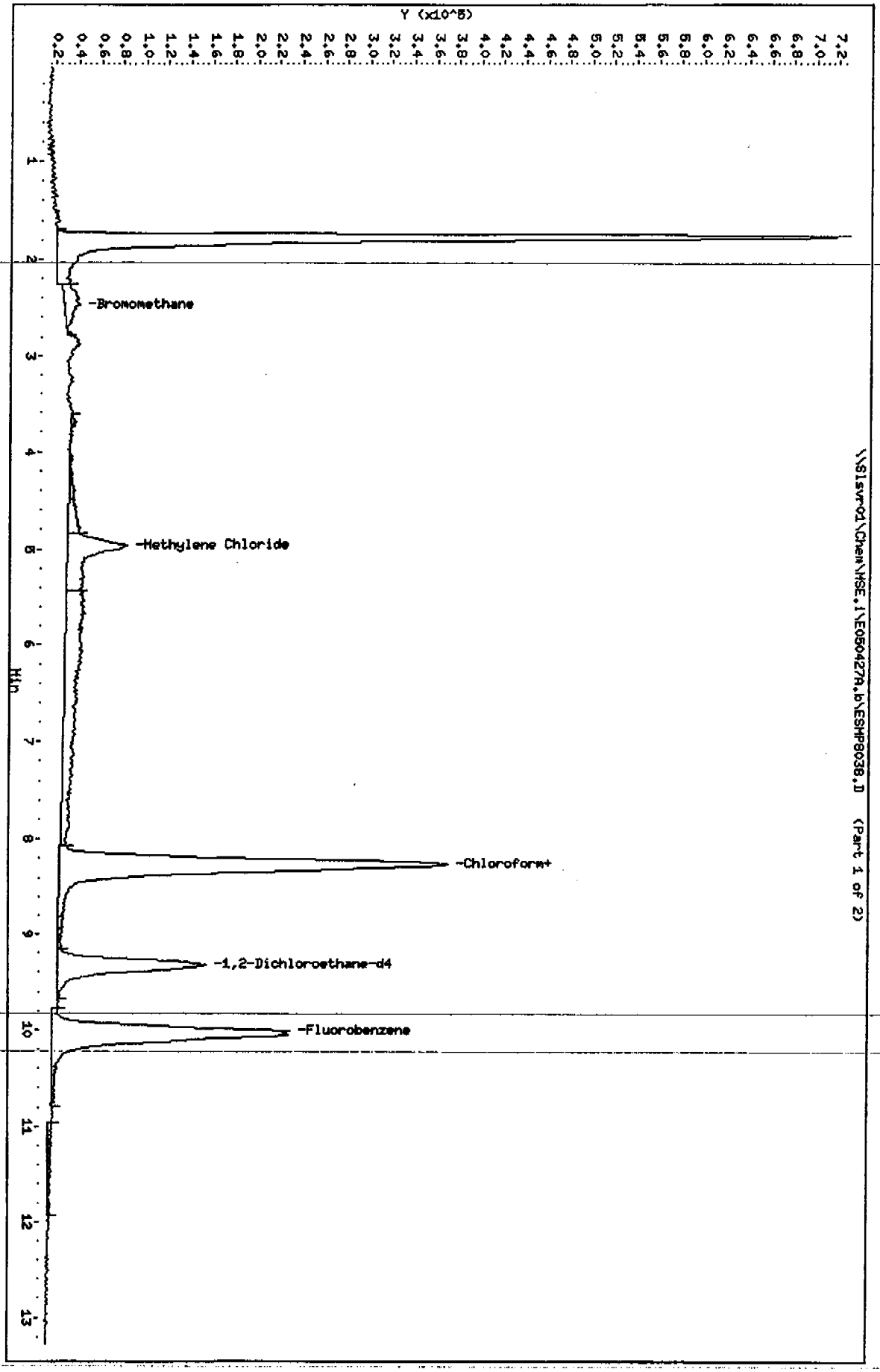
Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8038.D
Report Date: 28-Apr-2005 14:49

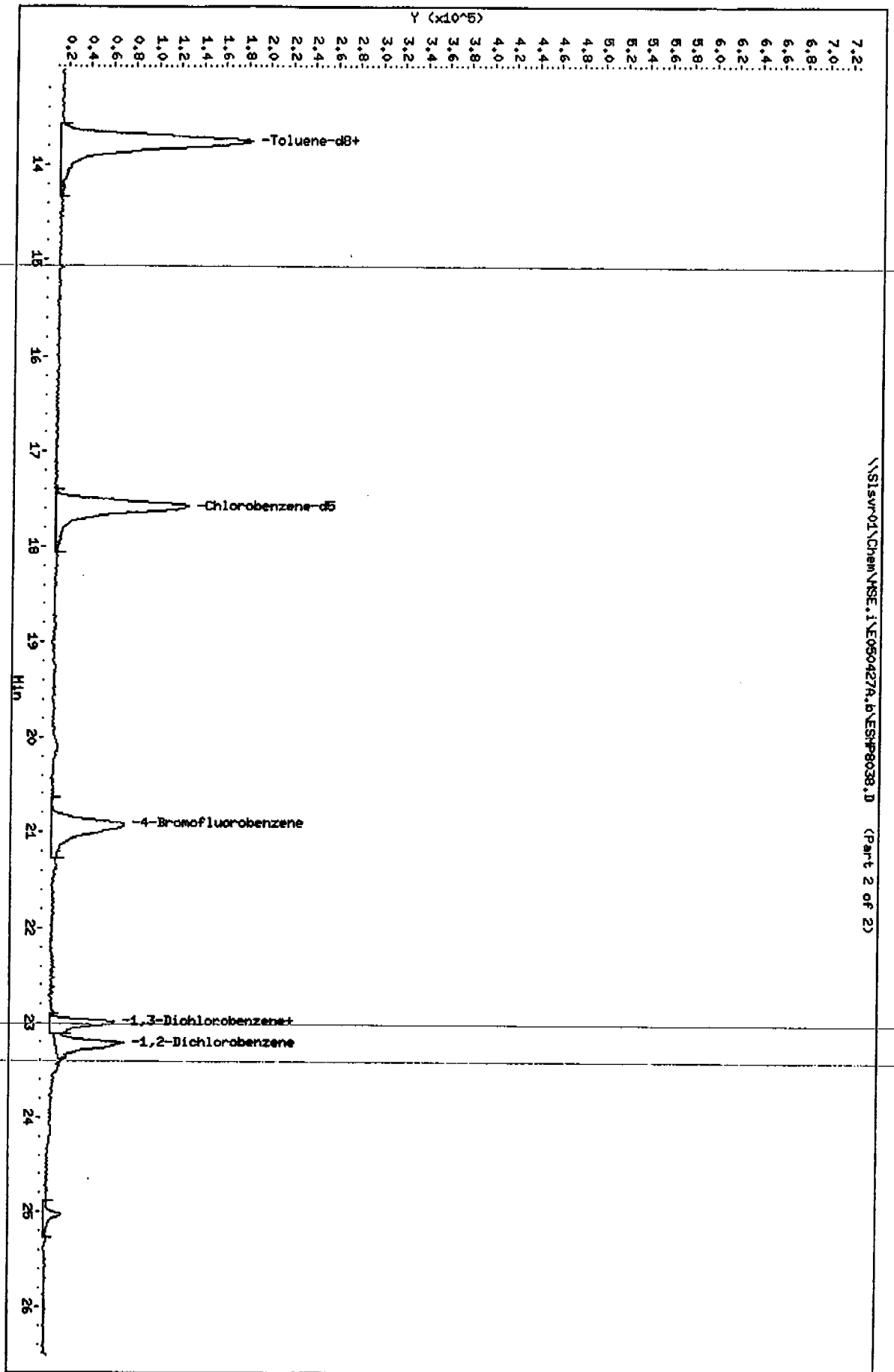
STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 21-APR-2005 00:00 Client SDG: F5D2103
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: G8WXV1AC Client Smp ID: RE73-05-58835
Level: LOW Operator: SS
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: soil1ms.spk Quant Type: ISTD
Sublist File: SOIL.sub
Method File: \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5mL.m
Misc Info: VBLKE117A;F5D210380-002;4.97G;5117629

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 37 Dibromofluorometha	50.30	68.76	136.70	61-140
$ 43 1,2-Dichloroethane	50.30	61.60	122.47*	78-122
$ 61 Toluene-d8	50.30	87.50	173.95*	60-148
$ 83 4-Bromofluorobenze	50.30	91.75	182.40*	56-150


Y (x10^5)
Min
-Bromomethane
-Methylene Chloride
-Chloroform+
-1,2-Dichloroethane-d4
-Fluorobenzene
Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESHP8038.D
Date : 27-APR-2005 16:33
Client ID: RE73-05-58835
Sample Info: GSMXV1AC;E050427A.b;
Column phase: RTX-502.2
Instrument: MSE.i
Operator: SS
Column diameter: 0.53
\\Slsvr01\Chem\MSE.i\E050427A.b\ESHP8038.D (Part 1 of 2)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Date : 27-APR-2005 16:33
Client ID: RE73-05-68838
Sample Info: GSMKV1AC;E0504027A.b;
Column phase: RTX-502.2
Instrument: HSE.i
Operator: SS
Column diameter: 0.53
\\Slsvr01\Chem\HSE.i\E0504027A.b\ESHP8038.D (Part 2 of 2)
Y (x10^5)
Min
-Toluene-d8+
-Chlorobenzene-d5
-4-Bromofluorobenzene
-1,3-Dichlorobenzene+
-1,2-Dichlorobenzene

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8038.D

Date : 27-APR-2005 16:33

Client ID: RE73-05-58835

Instrument: MSE.i

Sample Info: G8WXV1AC;E050427A.b;

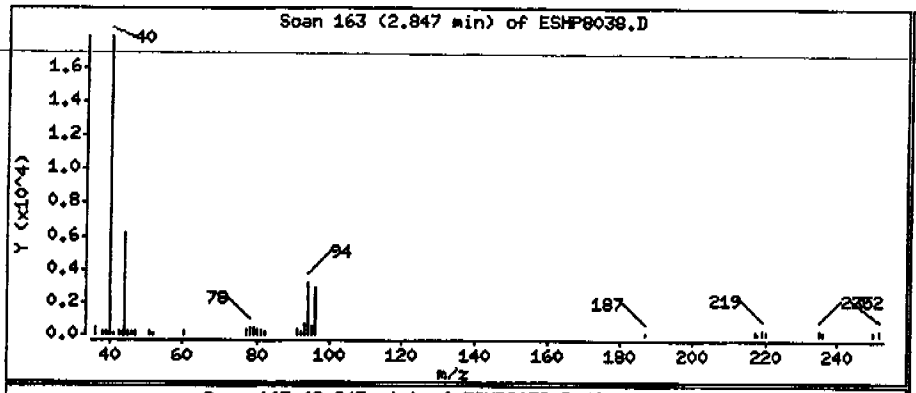
Operator: SS

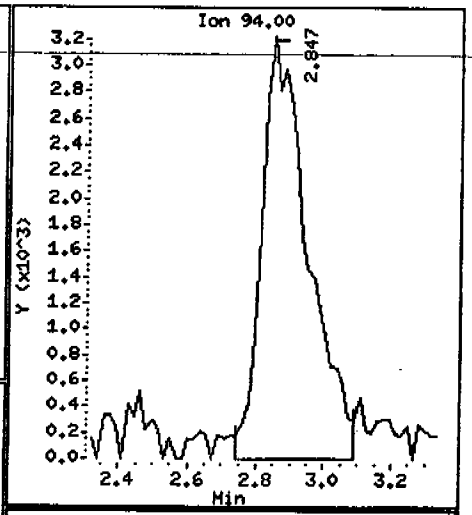
Column phase: RTX-502.2

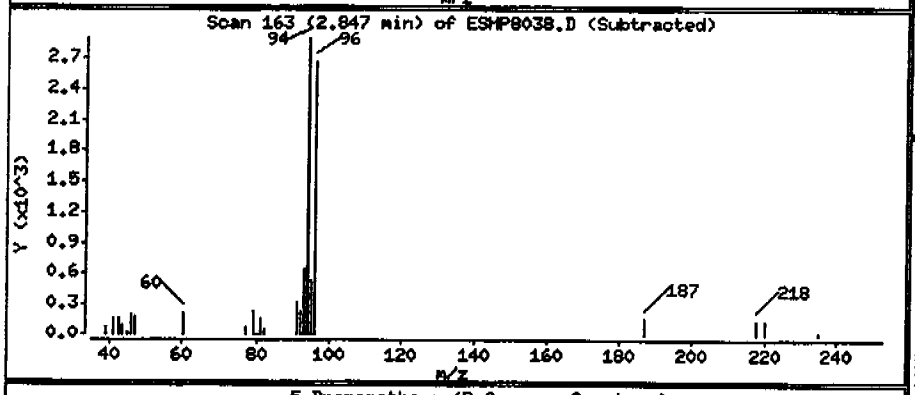
Column diameter: 0.53

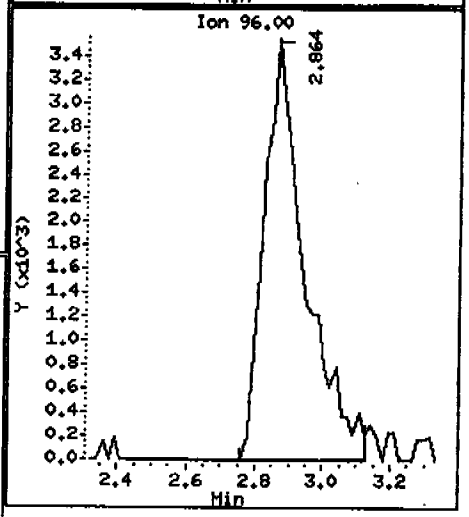
5 Bromomethane

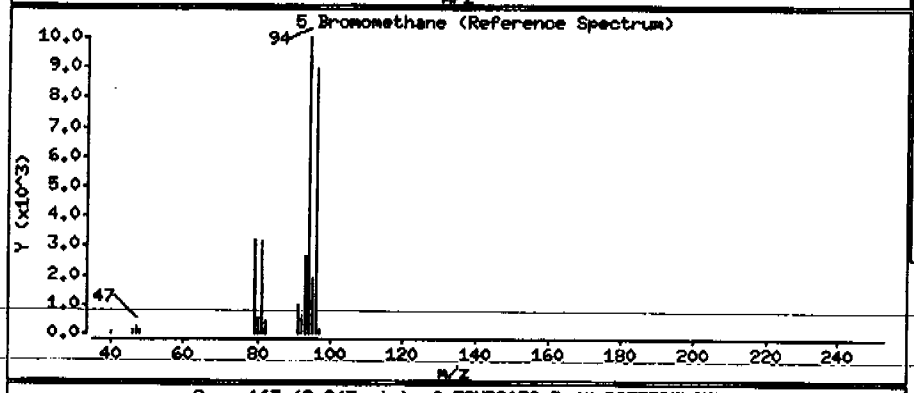
Concentration: 3.819 ug/Kg

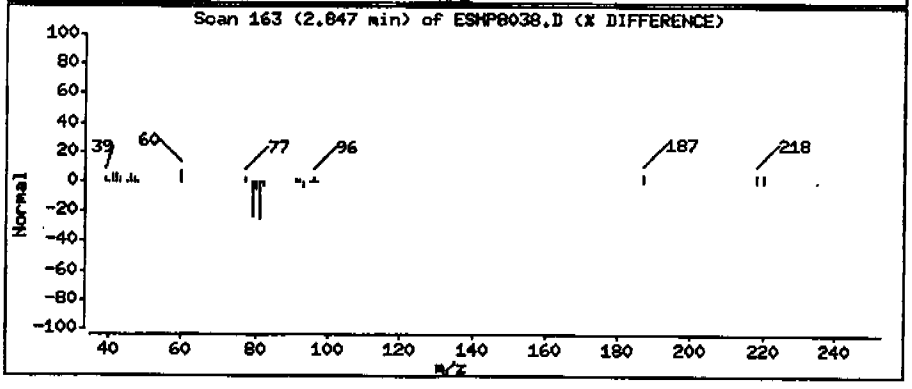












Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8038.D

Date : 27-APR-2005 16:33

Client ID: RE73-05-68835

Instrument: MSE.i

Sample Info: G8WXV1AC;E050427A.b;

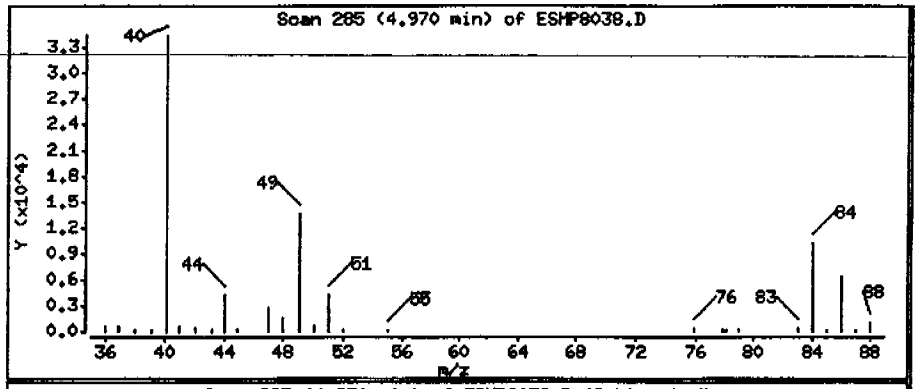
Operator: SS

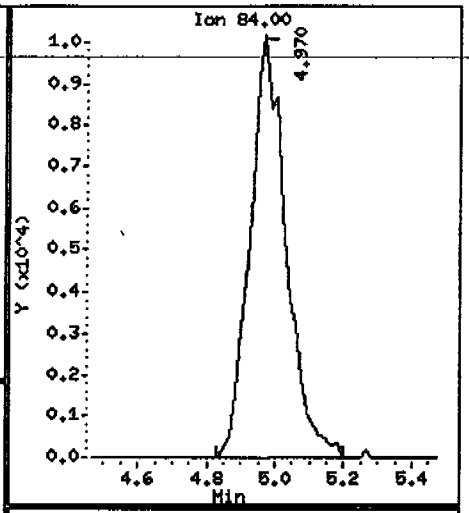
Column phase: RTX-502.2

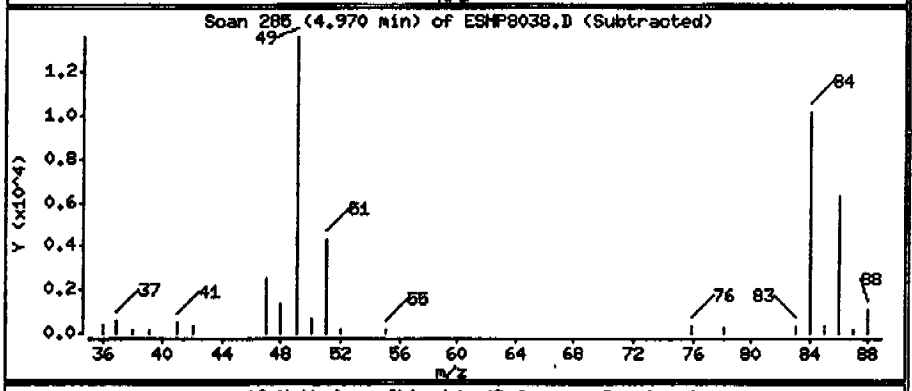
Column diameter: 0.53

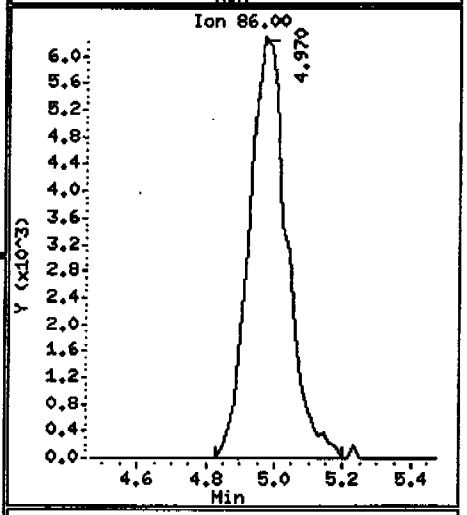
19 Methylene Chloride

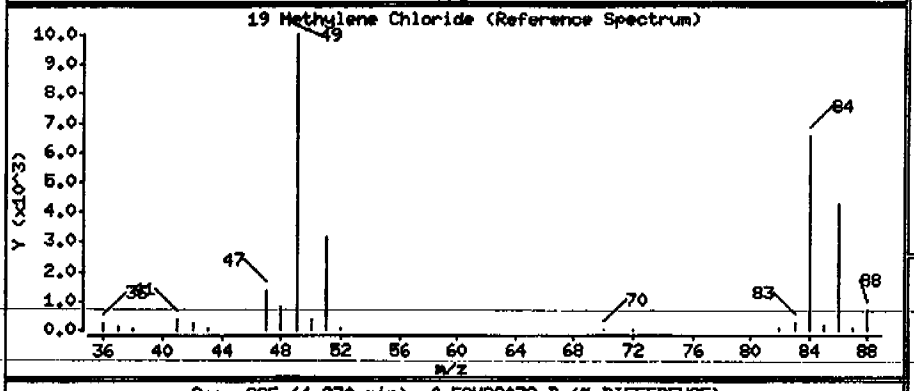
Concentration: 9.619 ug/Kg

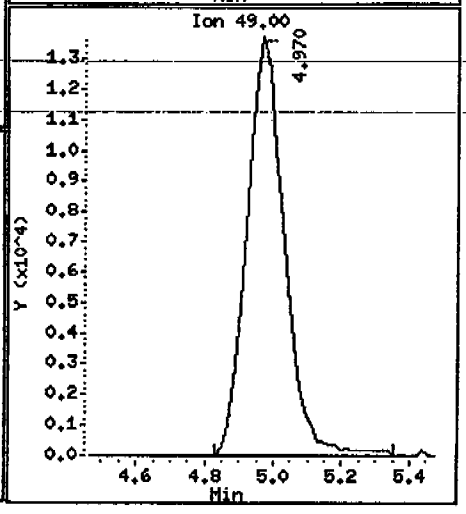


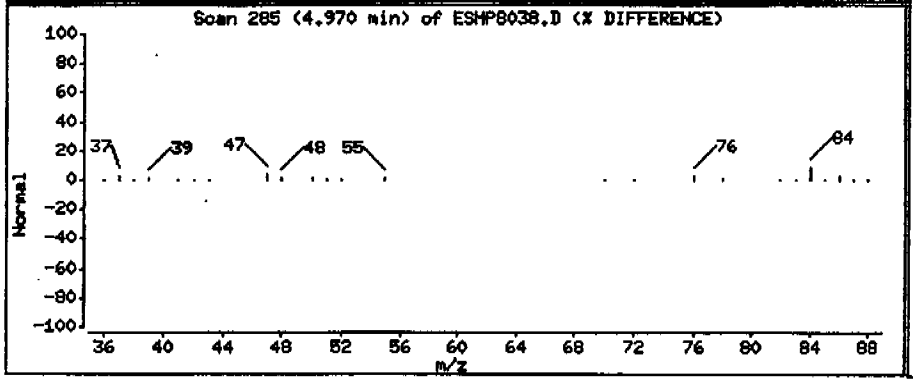












Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8038.D

Date : 27-APR-2005 16:33

Client ID: RE73-05-58835

Instrument: MSE.i

Sample Info: C8WXV1AC;E050427A.b;

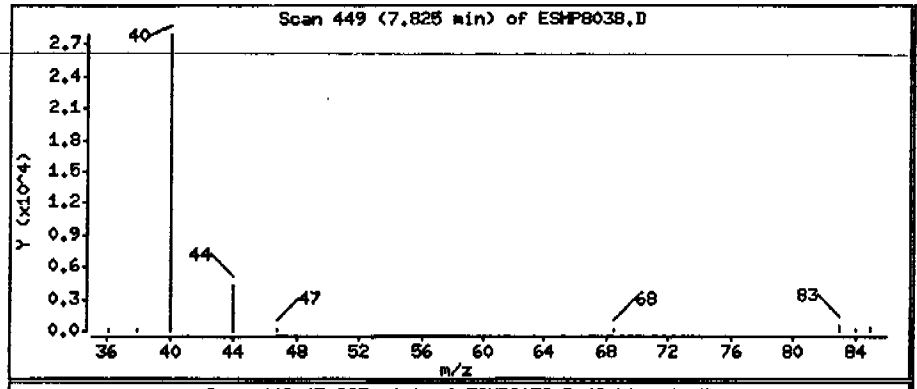
Operator: SS

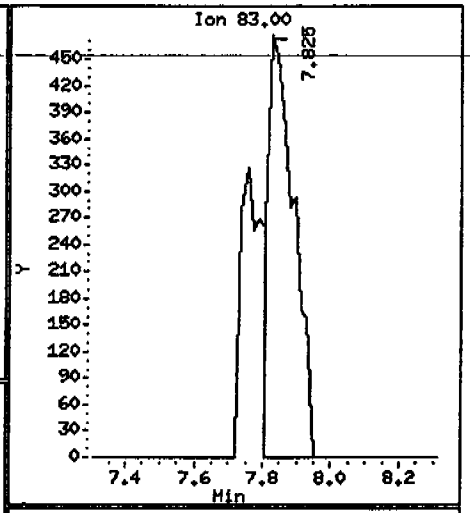
Column phase: RTX-502.2

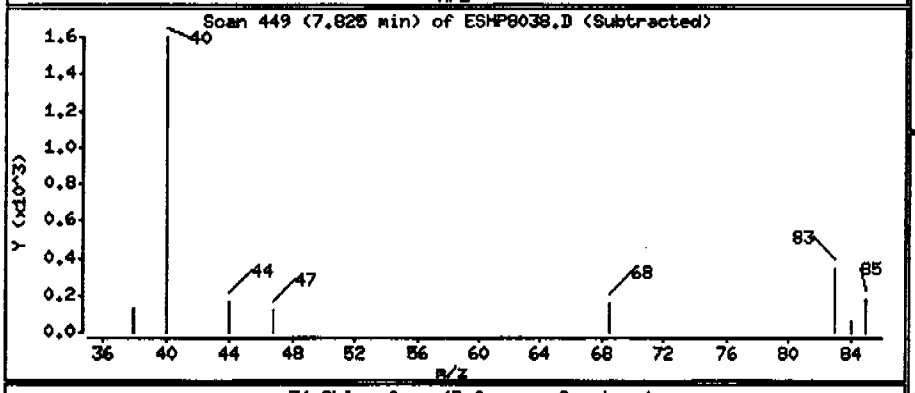
Column diameter: 0.53

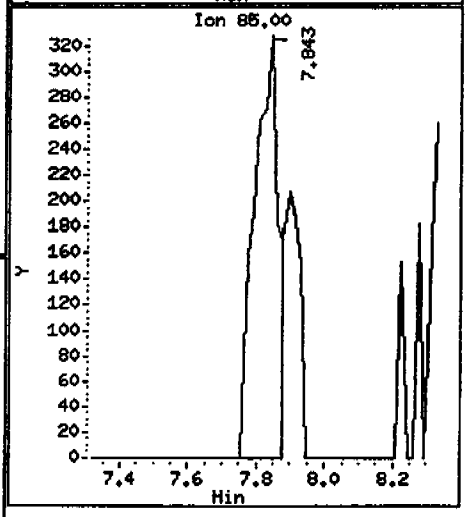
34 Chloroform

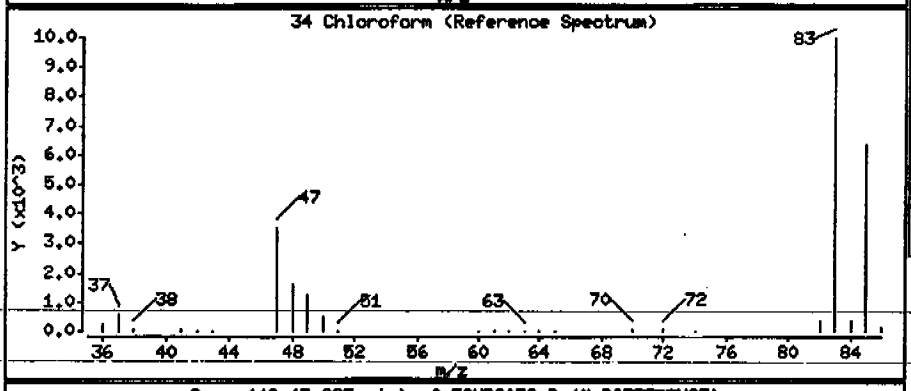
Concentration: 0.1789 ug/Kg

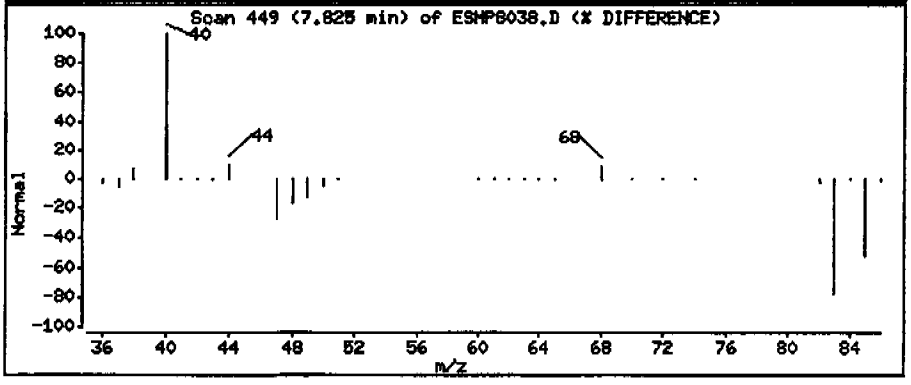












Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8038.D

Date : 27-APR-2005 16:33

Client ID: RE73-05-58835

Instrument: MSE.i

Sample Info: C8WXV1AC;E050427A.b;

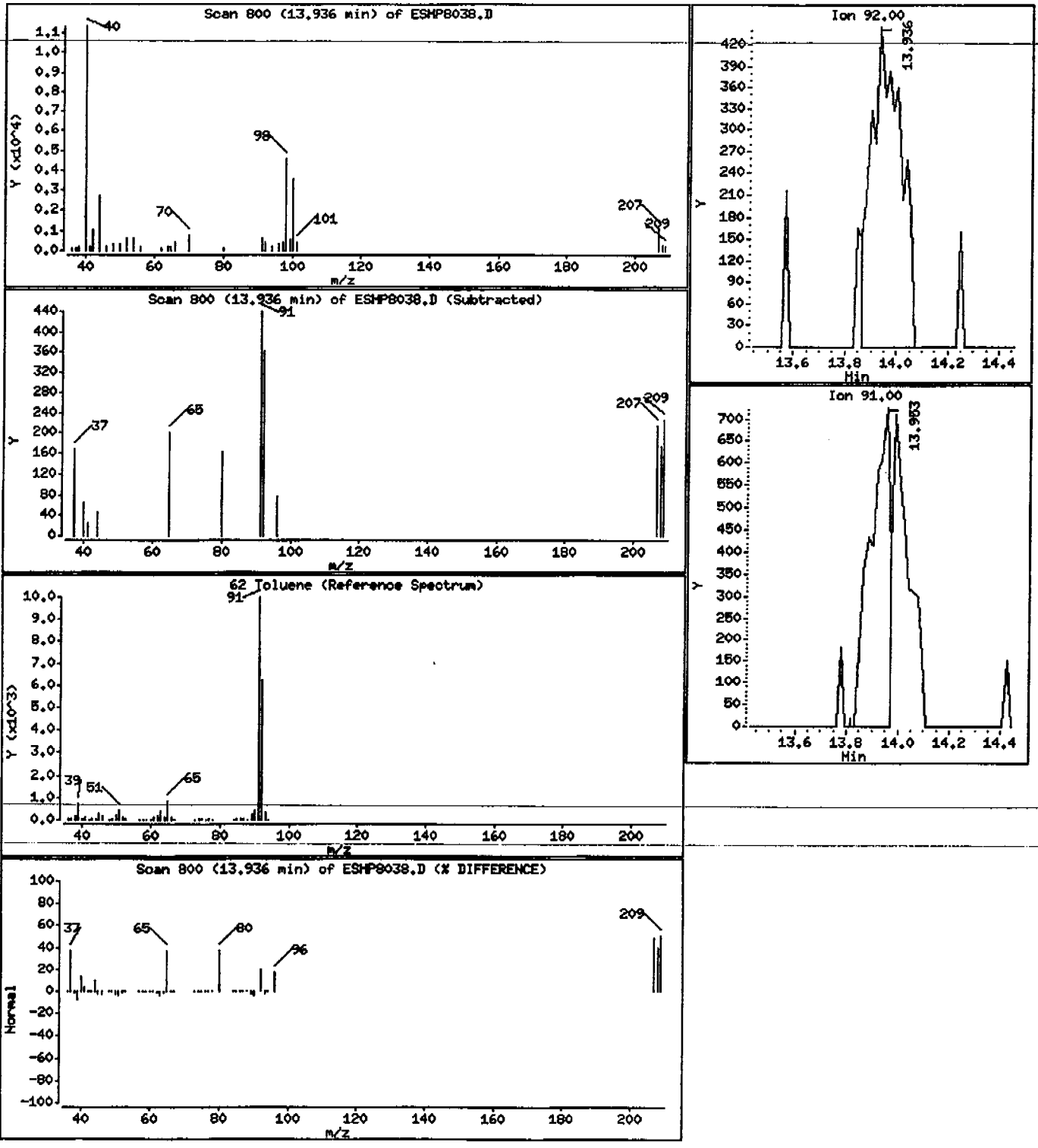
Operator: SS

Column phase: RTX-502.2

Column diameter: 0.53

62 Toluene

Concentration: 0.8035 ug/Kg



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Date : 27-APR-2005 16:33

Client ID: RE73-05-58835

Instrument: MSE.i

Sample Info: G8WXV1AC;E050427A.b;

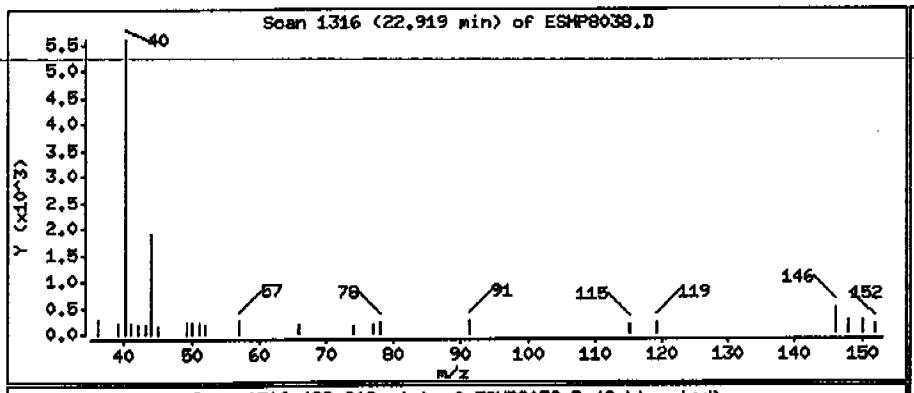
Operator: SS

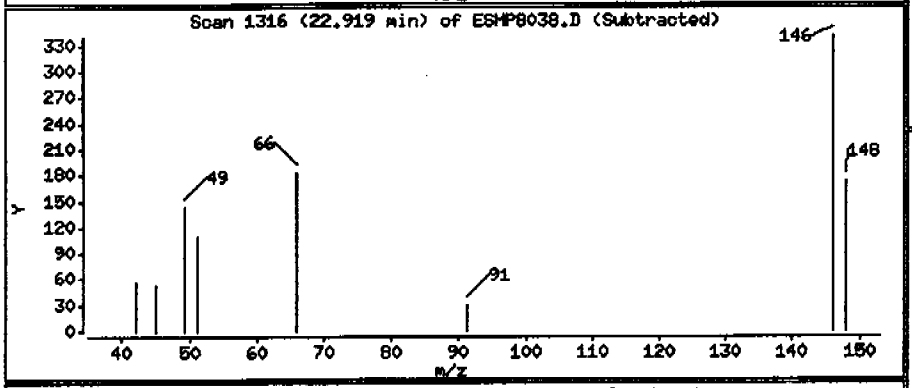
Column phase: RTX-502.2

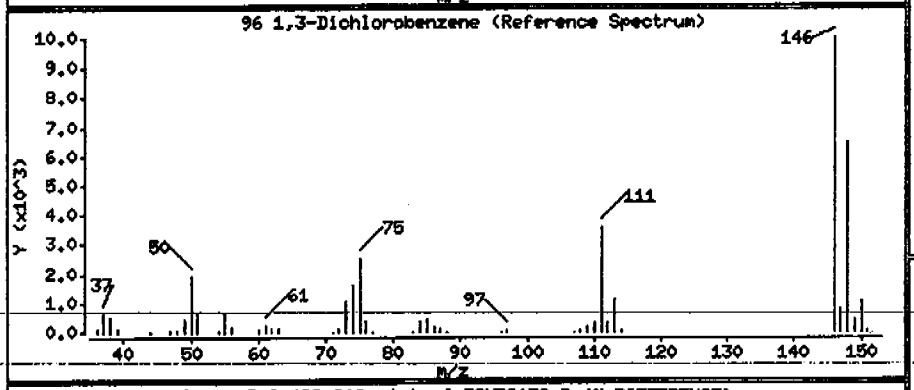
Column diameter: 0.53

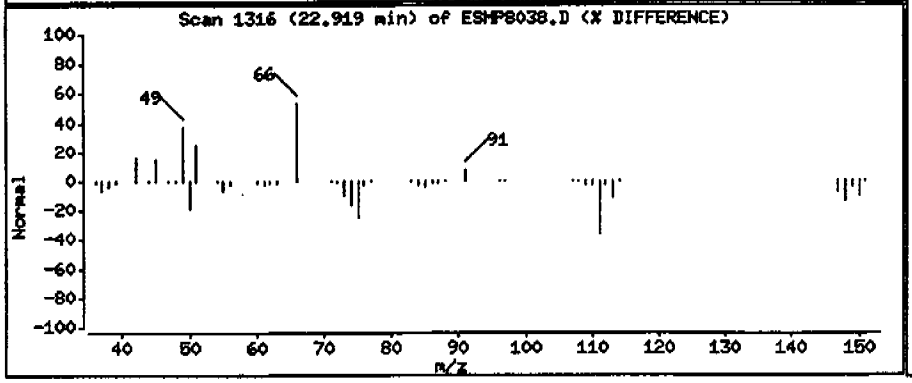
96 1,3-Dichlorobenzene

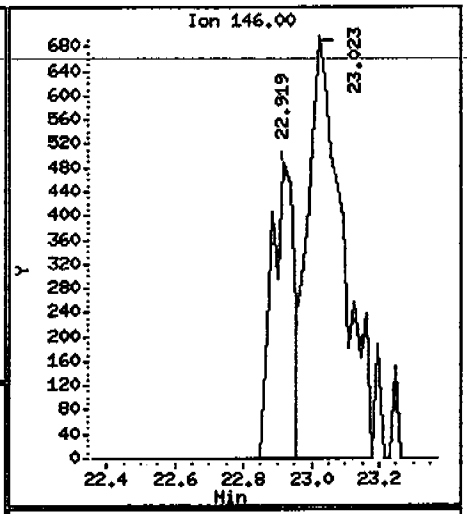
Concentration: 1.729 ug/Kg

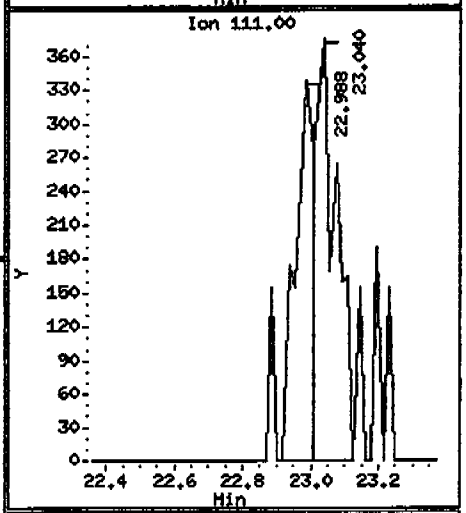


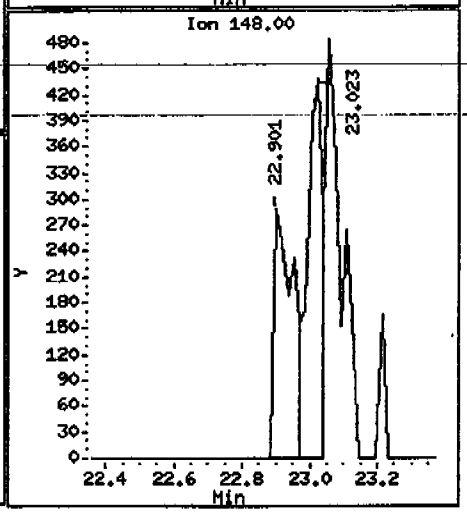












Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8038.D

Date : 27-APR-2005 16:33

Client ID: RE73-05-58836

Instrument: MSE.i

Sample Info: G8WXV1AC;E050427A.b;

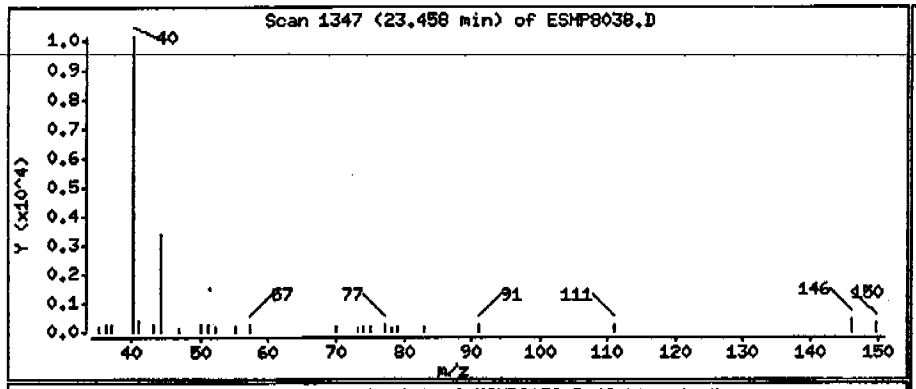
Operator: SS

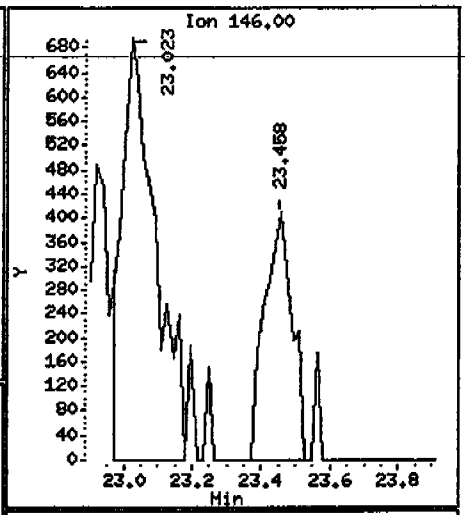
Column phase: RTX-502.2

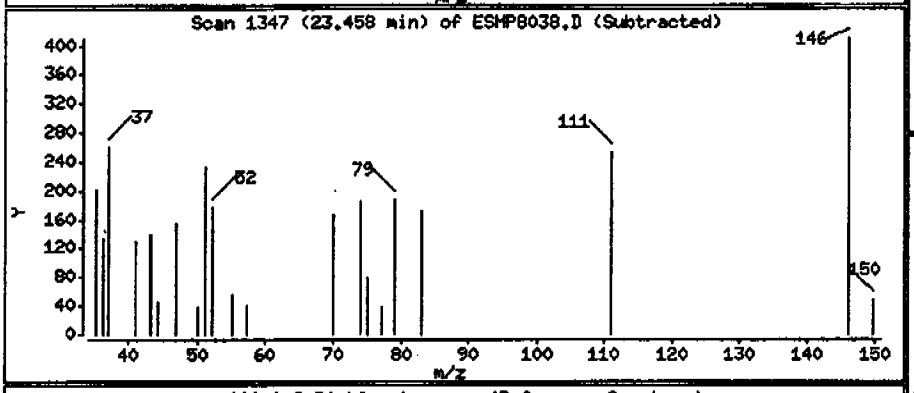
Column diameter: 0.53

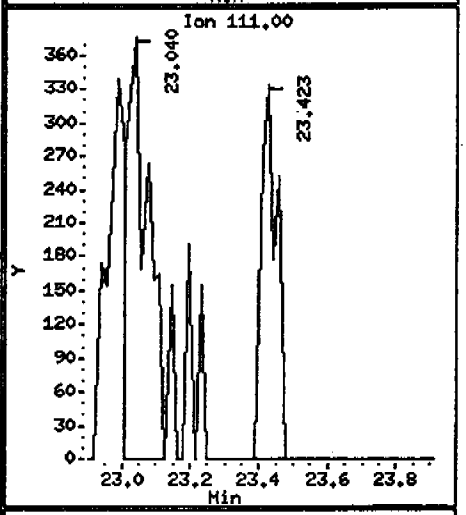
100 1,2-Dichlorobenzene

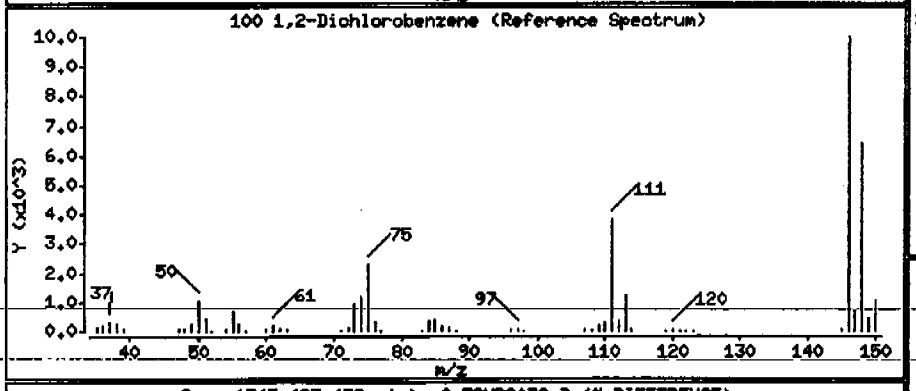
Concentration: 2.062 ug/Kg

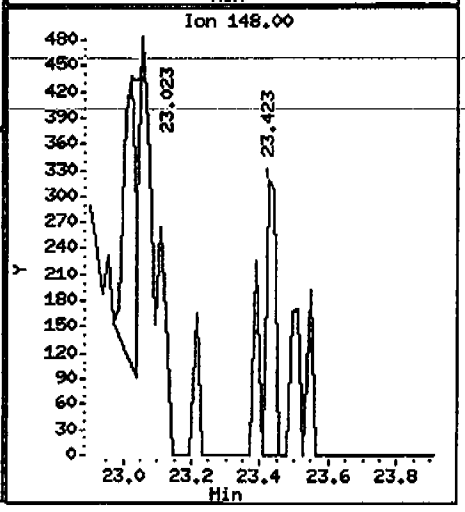


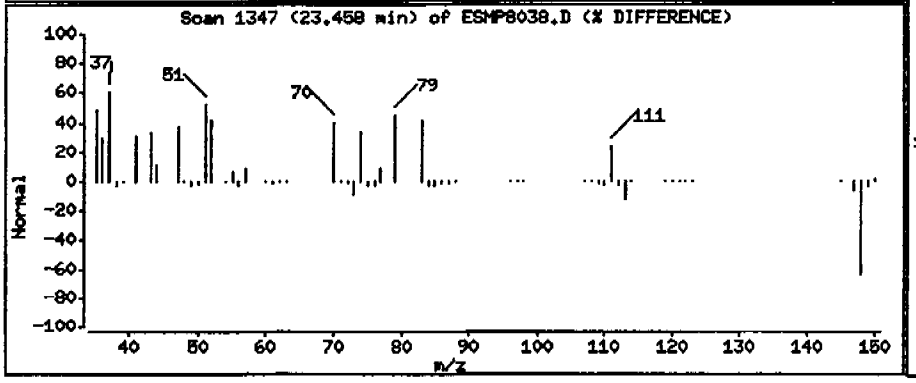












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Report Date: 28-Apr-2005 14:50

STL St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8039.D
Lab Smp Id: G8WXX1AC Client Smp ID: RE73-05-58841
Inj Date : 27-APR-2005 17:10
Operator : SS Inst ID: MSE.i
Smp Info : G8WXX1AC;E050427A.b;
Misc Info : VBLKE117A;F5D210380-003;4.96G;5117629
Comment : NONE
Method : \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5mL.m
Meth Date : 27-Apr-2005 10:45 stitess Quant Type: ISTD
Cal Date : 24-APR-2005 23:36 Cal File: ECAL7969.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOIL.sub
Target Version: 4.10
Processing Host: SLVOA03

Concentration Formula: Amt * DF * Wsd/Ws* * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Wsd	5.000	DefSampleWeight
Ws	4.960	SampleWeight
Va	100.000	AliquotVolume
Cpnd Variable		Local Compound Variable

5/4/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	5 Bromomethane	94	2.868	2.827	(0.286)	22784	1.85989	1.875(a)
	19 Methylene Chloride	84	4.975	4.969	(0.495)	61246	5.24228	5.284
$	37 Dibromofluoromethane	113	8.265	8.259	(0.823)	1191142	54.8843	55.33
$	43 1,2-Dichloroethane-d4	102	9.327	9.321	(0.929)	122752	55.8055	56.26
*	48 Fluorobenzene	96	10.040	10.035	(1.000)	1363427	50.0000	
	49 Trichloroethene	95	10.911	10.905	(1.087)	3302	0.24869	0.2507(a)
$	61 Toluene-d8	98	13.766	13.743	(0.783)	1005834	62.9667	63.47
*	72 Chlorobenzene-d5	117	17.578	17.555	(1.000)	817767	50.0000	
$	83 4-Bromofluorobenzene	95	20.921	20.880	(0.910)	317737	42.2564	42.60
	95 4-Isopropyltoluene	119	22.853	22.812	(0.994)	7760	0.99658	1.005(a)
*	97 1,4 Dichlorobenzene-d4	152	22.992	22.969	(1.000)	224231	50.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8039.D
Report Date: 28-Apr-2005 14:50

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSE.i
Lab File ID: ESMP8039.D
Lab Smp Id: G8WXX1AC
Analysis Type: VOA
Quant Type: ISTD
Operator: SS
Method File: \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5mL.m
Misc Info: VBLKE117A;F5D210380-003;4.96G;5117629

Calibration Date: 27-APR-2005
Calibration Time: 10:05
Client Smp ID: RE73-05-58841
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
48 Fluorobenzene	1801629	900815	3603258	1363427	-24.32	
72 Chlorobenzene-d5	1382848	691424	2765696	817767	-40.86	
97 1,4 Dichlorobenze	743020	371510	1486040	224231	-69.82	<

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	10.04	9.54	10.54	10.04	0.06
72 Chlorobenzene-d5	17.56	17.06	18.06	17.58	0.13
97 1,4 Dichlorobenze	22.97	22.47	23.47	22.99	0.10

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

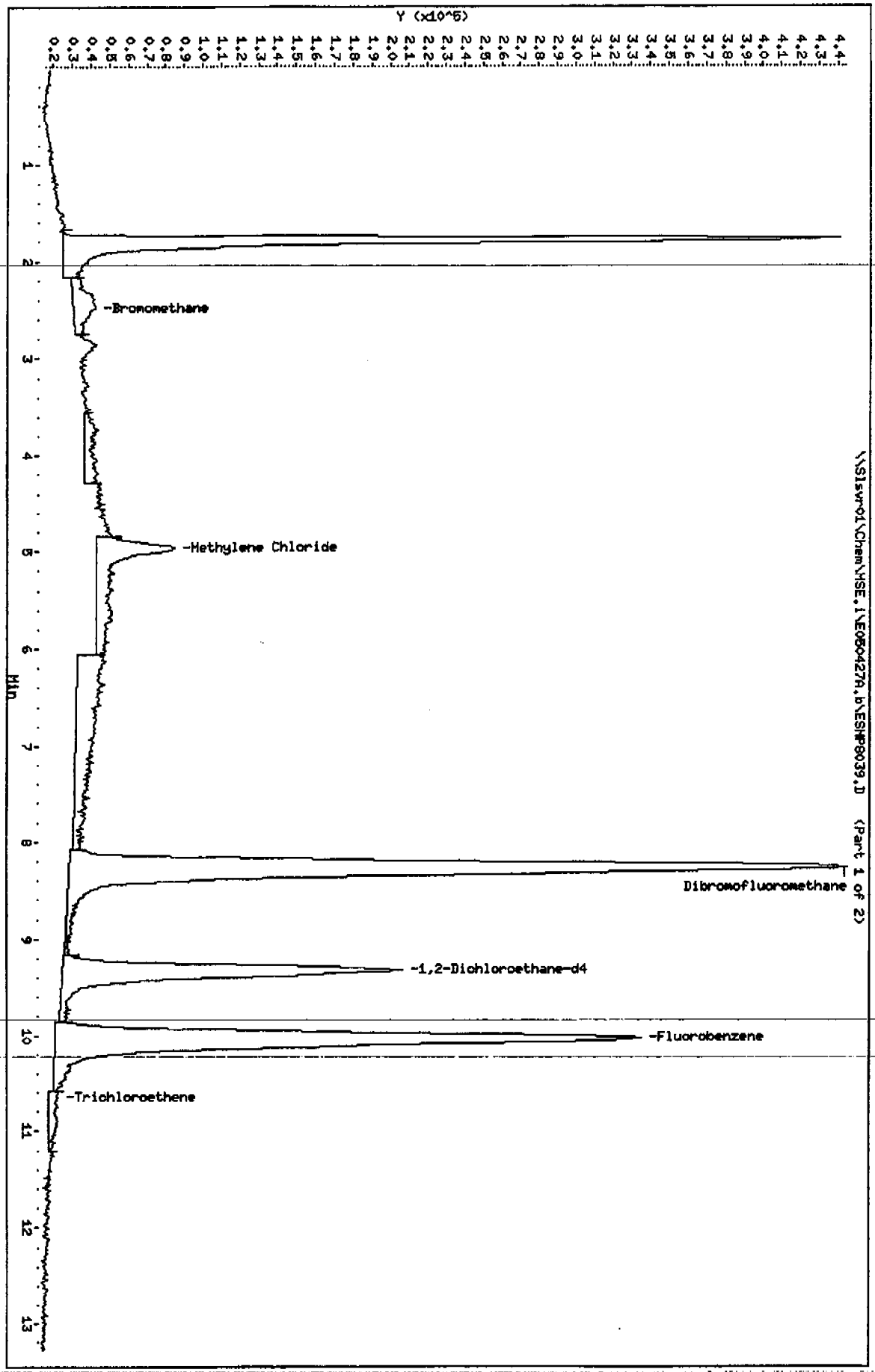
Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8039.D
Report Date: 28-Apr-2005 14:50

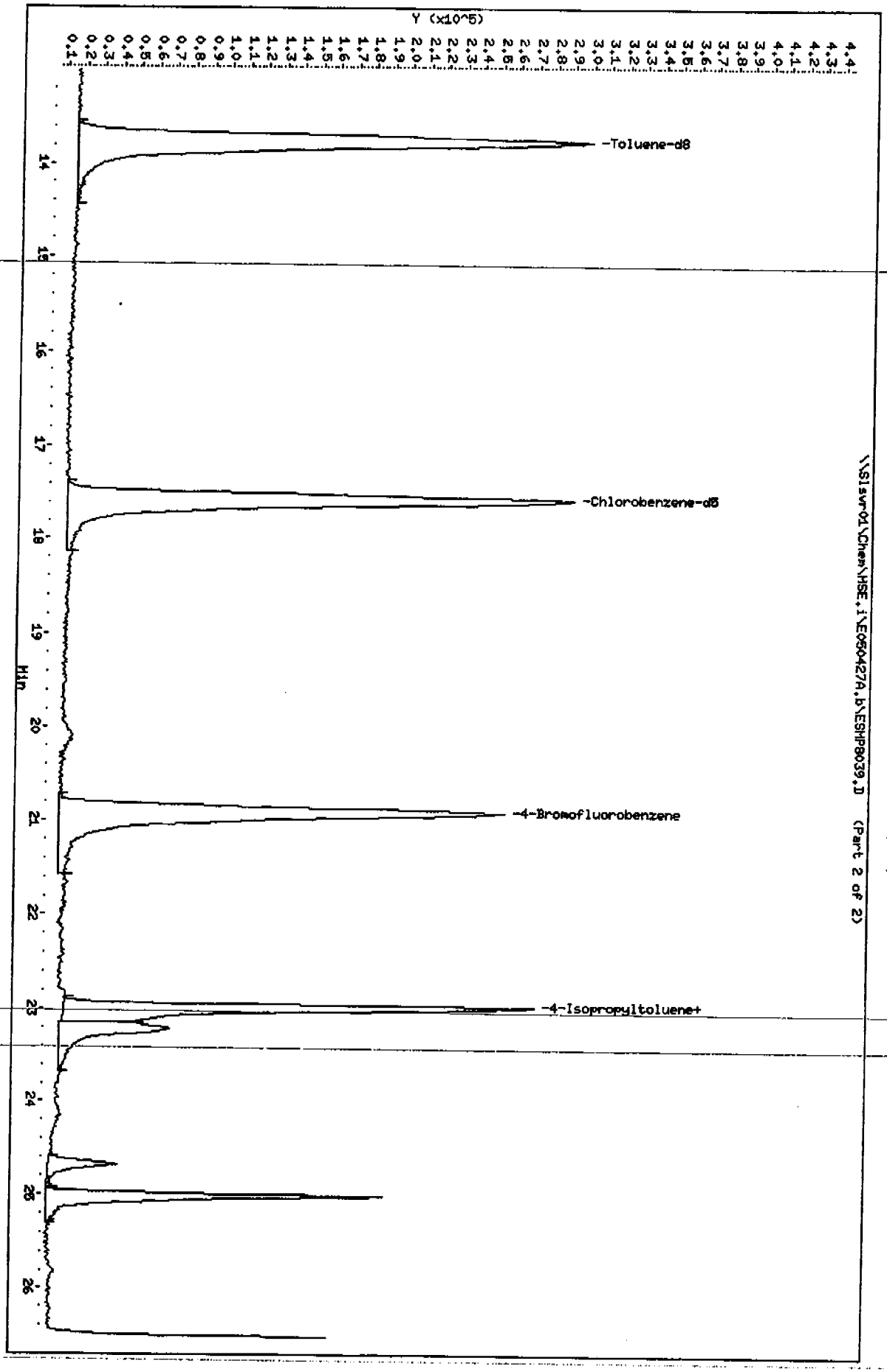
STL St. Louis

RECOVERY REPORT

Client Name: LOS ALAMOS NATIONAL 21-APR-2005 00:00 Client SDG: F5D2103
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: G8WXX1AC Client Smp ID: RE73-05-58841
Level: LOW Operator: SS
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: soilms.spk Quant Type: ISTD
Sublist File: SOIL.sub
Method File: \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5mL.m
Misc Info: VBLKE117A;F5D210380-003;4.96G;5117629

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 37 Dibromofluorometha	50.40	55.33	109.77	61-140
$ 43 1,2-Dichloroethane	50.40	56.26	111.61	78-122
$ 61 Toluene-d8	50.40	63.47	125.93	60-148
$ 83 4-Bromofluorobenze	50.40	42.60	84.51	56-150


Y (x10^6)
Min
-Bromomethane
-Methylene Chloride
Dibromofluoromethane
-1,2-Dichloroethane-d4
-Fluorobenzene
-Trichloroethene
\\Slsvr01\Chem\MSE.i\E050427A.b\ES#P8039.D (Part 1 of 2)
Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ES#P8039.D
Date : 27-APR-2005 17:10
Client ID: RE73-05-88841
Sample Info: C8HXX1AC;E050427A.b;
Column phase: RTX-502.2
Instrument: MSE.i
Operator: SS
Column diameter: 0.53


Data File: \\Slsvr01\Chem\HSE.i\E0504270.b\ESHP8039.D
Date : 27-APR-2005 17:10
Client ID: RE73-05-8841
Sample Info: G8KRXX1AC;E0504270.b;
Column phase: RTX-502.2
Instrument: HSE.i
Operator: SS
Column diameter: 0.53
\\Slsvr01\Chem\HSE.i\E0504270.b\ESHP8039.D (Part 2 of 2)
Y (x10^5)
Min
-Toluene-d8
-Chlorobenzene-d5
-4-Bromofluorobenzene
-4-Isopropyltoluene+

Data File: \\Slavr01\Chem\MSE.i\E050427A.b\ESMP8039.D

Date : 27-APR-2005 17:10

Client ID: RE73-05-58841

Instrument: MSE.i

Sample Info: G8WXX1AC;E050427A.b;

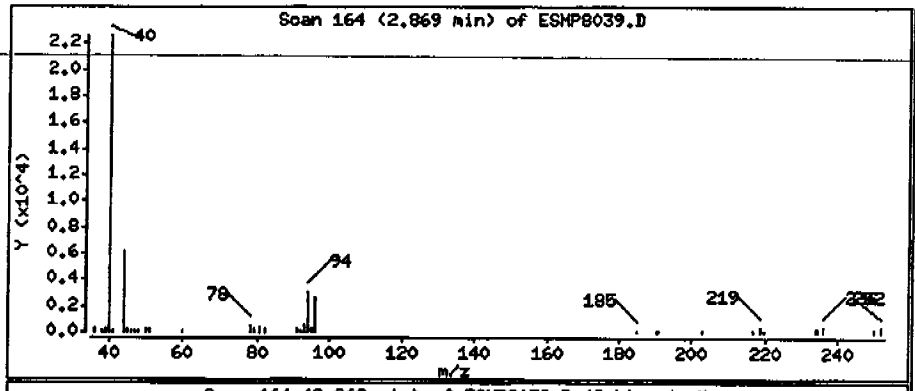
Operator: SS

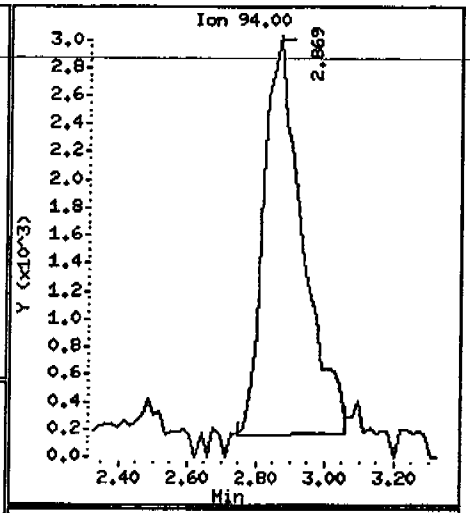
Column phase: RTX-502.2

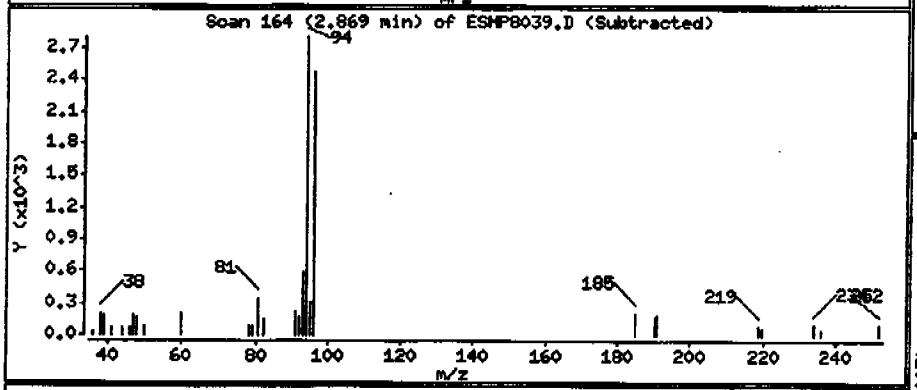
Column diameter: 0.53

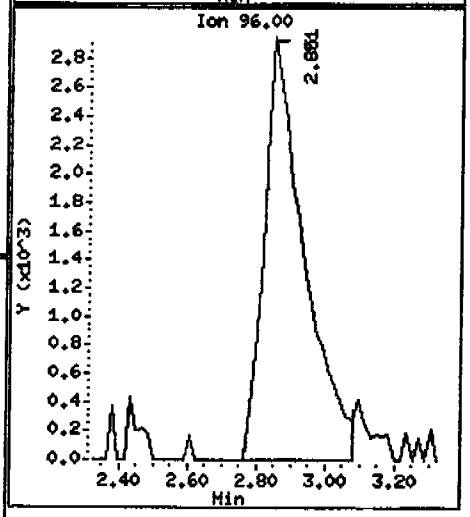
5 Bromomethane

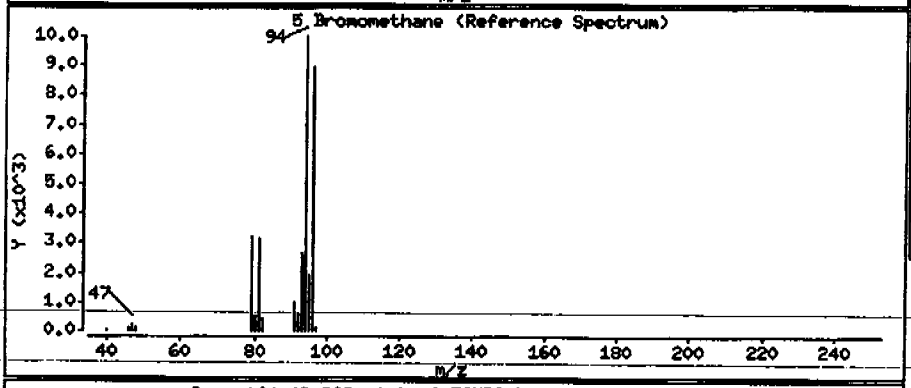
Concentration: 1.875 ug/Kg

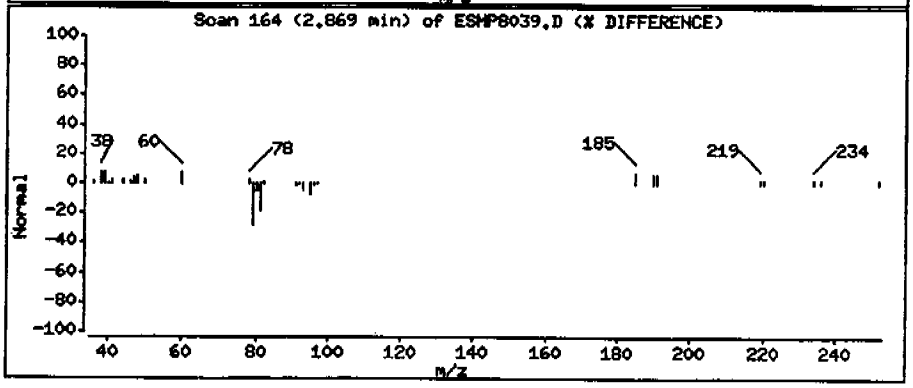












Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8039.D

Date : 27-APR-2005 17:10

Client ID: RE73-05-58841

Instrument: MSE.i

Sample Info: G8WXX1AC;E050427A.b;

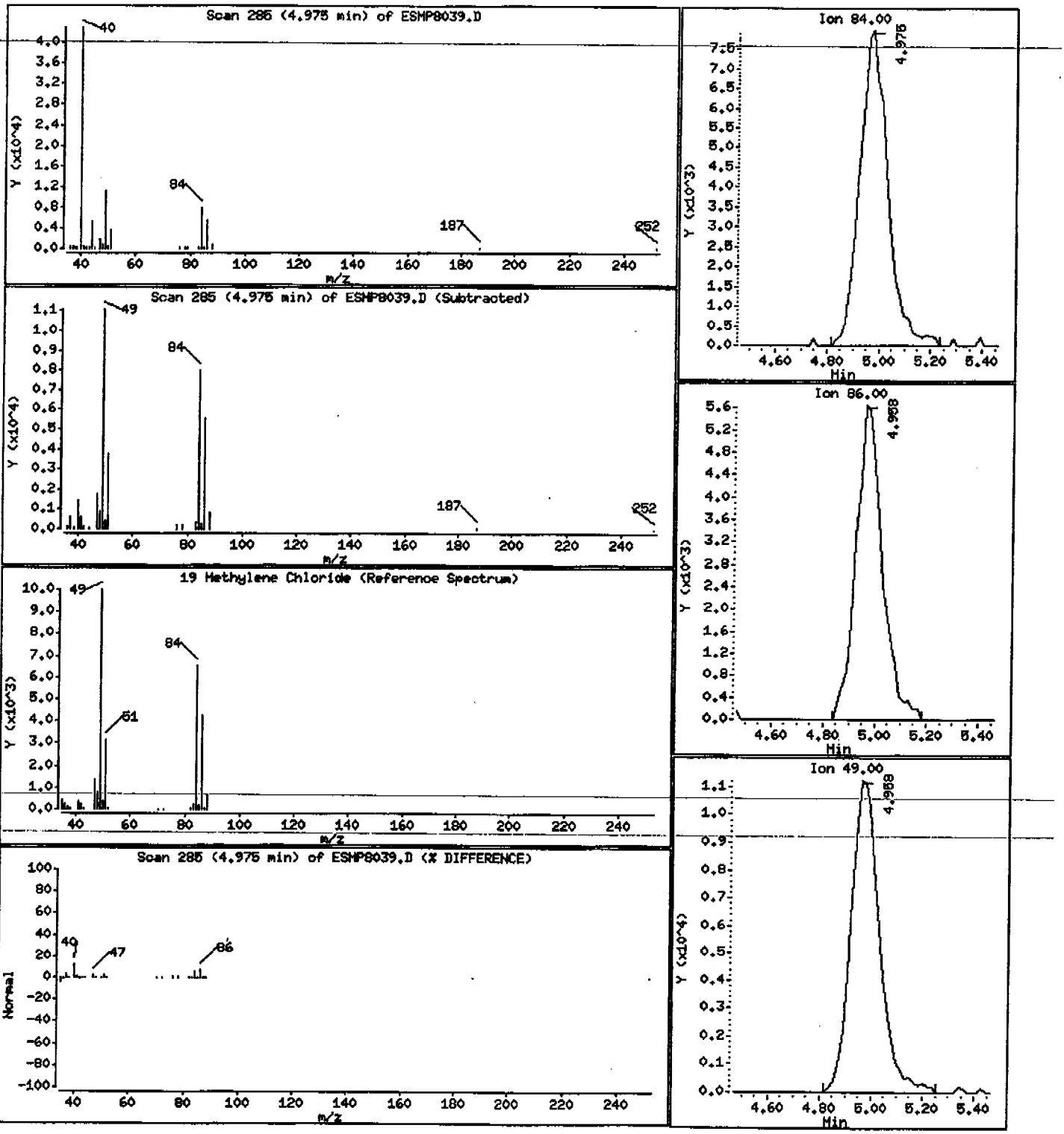
Operator: SS

Column phase: RTX-502.2

Column diameter: 0.53

19 Methylene Chloride

Concentration: 5.284 ug/Kg



Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8039.D

Date : 27-APR-2005 17:10

Client ID: RE73-05-58841

Instrument: MSE.i

Sample Info: GBWXX1AC;E050427A.b;

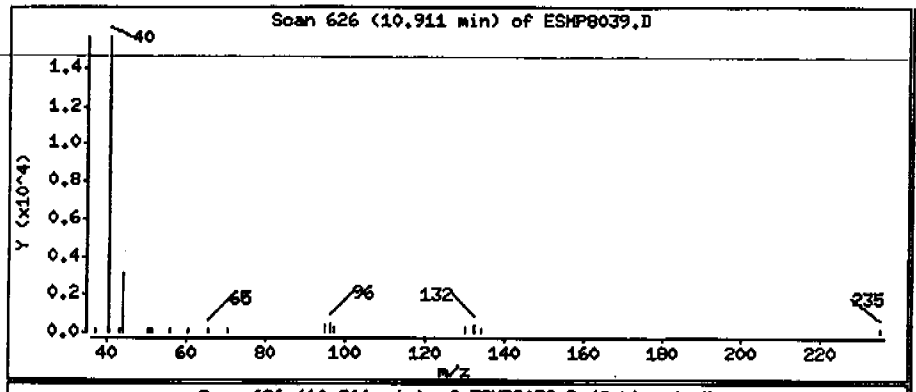
Operator: SS

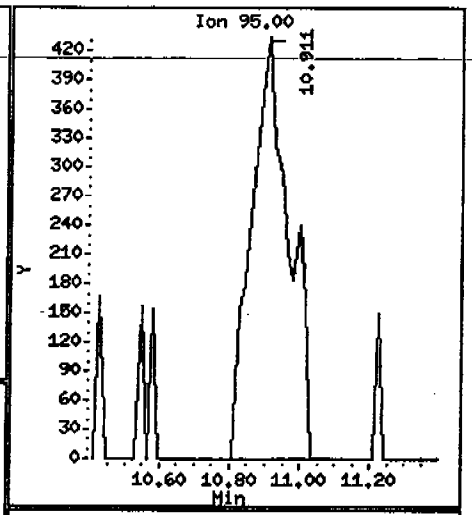
Column phase: RTX-502.2

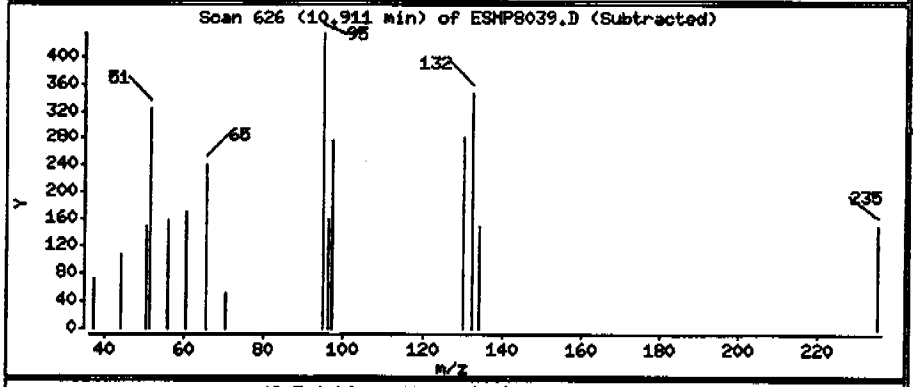
Column diameter: 0.53

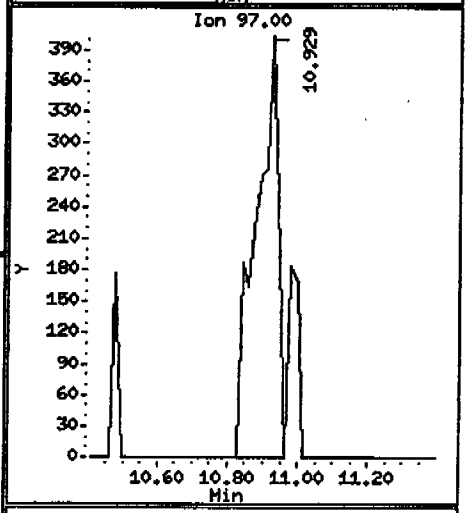
49 Trichloroethene

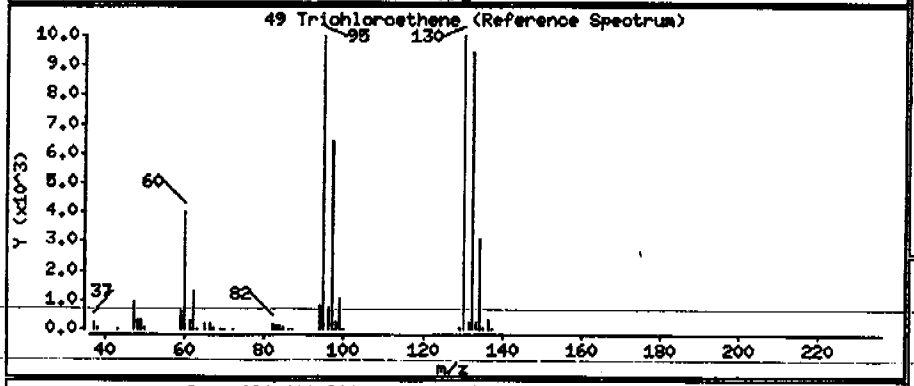
Concentration: 0.2507 ug/Kg

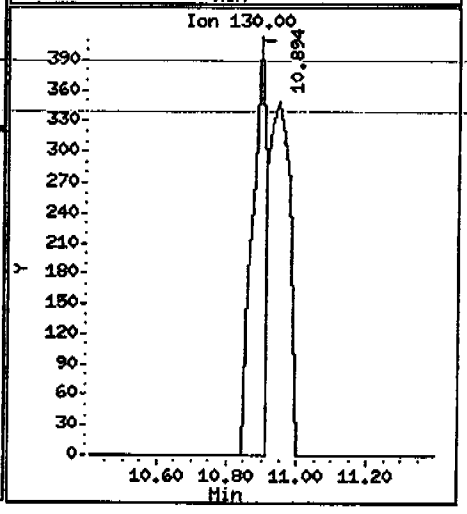


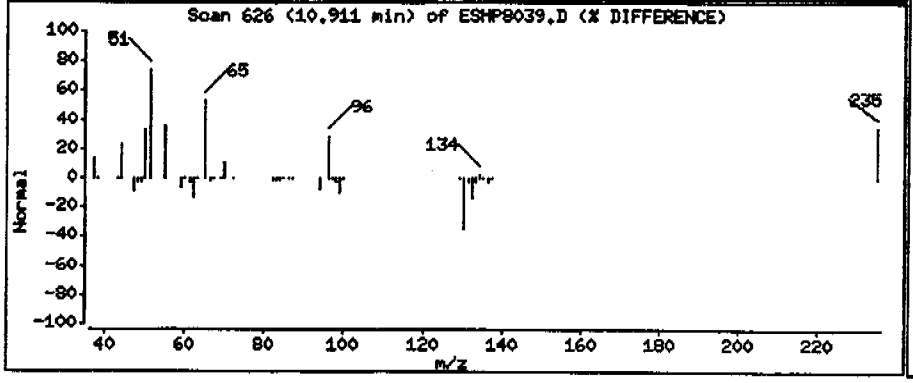












Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8039.D

Date : 27-APR-2005 17:10

Client ID: RE73-05-58841

Instrument: MSE.i

Sample Info: C8WXX1AC;E050427A.b;

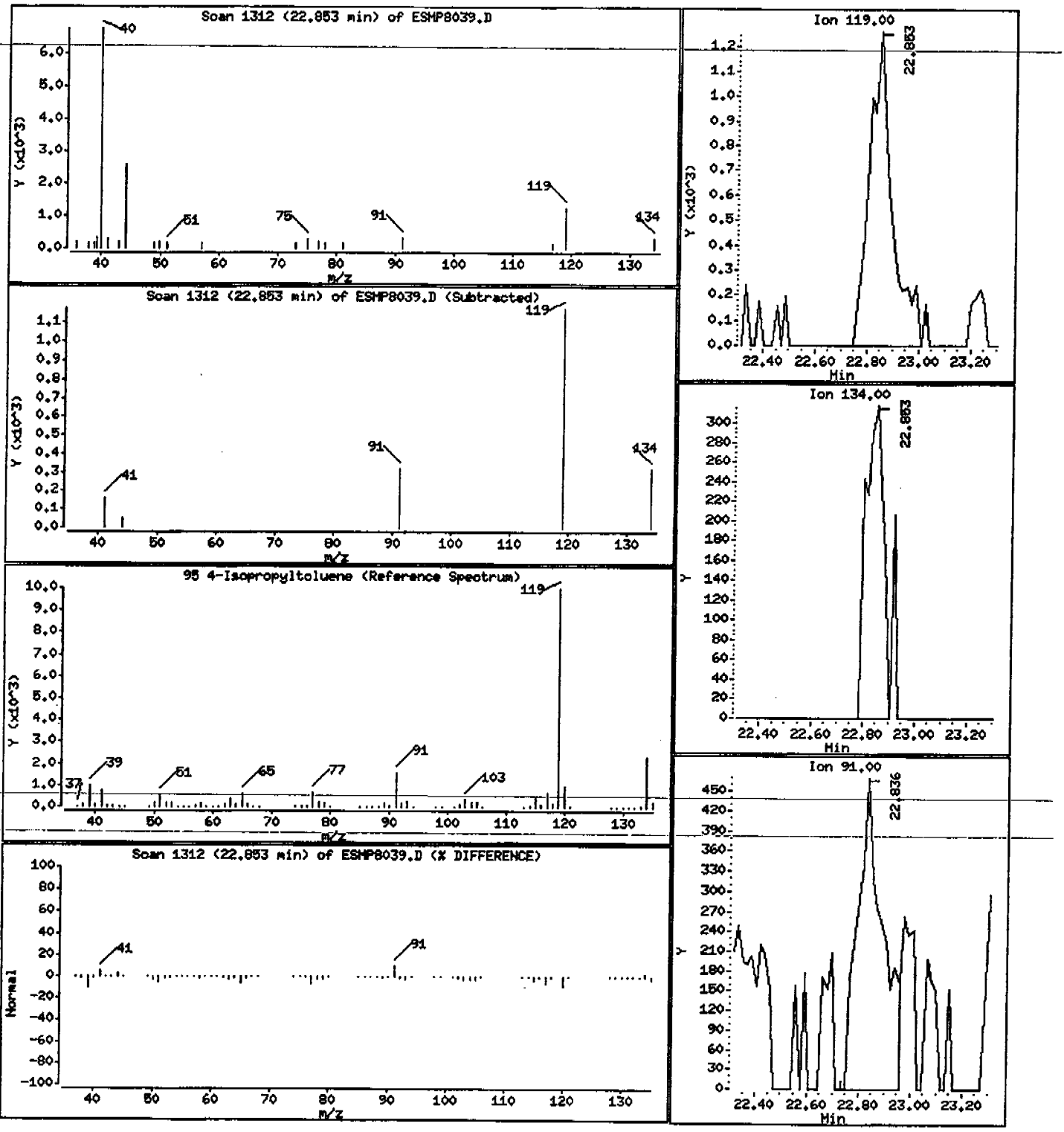
Operator: SS

Column phase: RTX-502.2

Column diameter: 0.53

95 4-Isopropyltoluene

Concentration: 1.005 ug/Kg



GC/MS RAW QC DATA

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\EBLK8034.D
Report Date: 28-Apr-2005 14:23

STL St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSE.i\E050427A.b\EBLK8034.D
Lab Smp Id: G9CJP1AA Client Smp ID: VBLKE117A
Inj Date : 27-APR-2005 12:04
Operator : SS Inst ID: MSE.i
Smp Info : G9CJP1AA,E050427A.b,
Misc Info : VBLKE117A;F5D270000-629B;5117629
Comment : NONE
Method : \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5mL.m
Meth Date : 27-Apr-2005 10:45 stitess Quant Type: ISTD
Cal Date : 24-APR-2005 23:36 Cal File: ECAL7969.D
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: QC-SOIL.sub
Target Version: 4.10
Processing Host: SLVOA03

Concentration Formula: Amt * DF * Wsd/Ws* * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Wsd	5.000	DefSampleWeight
Ws	5.000	SampleWeight
Va	100.000	AliquotVolume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
5 Bromomethane	94	2.846	2.827	(0.285)	28405	1.76632	1.766(a)
19 Methylene Chloride	84	4.952	4.969	(0.495)	79933	5.21178	5.212
$ 37 Dibromofluoromethane	113	8.260	8.259	(0.826)	1450505	50.9121	50.91
$ 43 1,2-Dichloroethane-d4	102	9.305	9.321	(0.930)	140529	48.6666	48.67
* 48 Fluorobenzene	96	10.001	10.035	(1.000)	1789842	50.0000	
$ 61 Toluene-d8	98	13.761	13.743	(0.784)	1371110	49.3530	49.35
* 72 Chlorobenzene-d5	117	17.556	17.555	(1.000)	1422238	50.0000	
$ 83 4-Bromofluorobenzene	95	20.899	20.880	(0.910)	1083336	54.0709	54.07
* 97 1,4 Dichlorobenzene-d4	152	22.970	22.969	(1.000)	597475	50.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\EBLK8034.D
Report Date: 28-Apr-2005 14:23

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSE.i
Lab File ID: EBLK8034.D
Lab Smp Id: G9CJP1AA
Analysis Type: VOA
Quant Type: ISTD
Operator: SS
Method File: \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5mL.m
Misc Info: VBLKE117A;F5D270000-629B;5117629

Calibration Date: 27-APR-2005
Calibration Time: 10:05
Client Smp ID: VBLKE117A
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	1801629	900815	3603258	1789842	-0.65
72 Chlorobenzene-d5	1382848	691424	2765696	1422238	2.85
97 1,4 Dichlorobenze	743020	371510	1486040	597475	-19.59

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	10.04	9.54	10.54	10.00	-0.34
72 Chlorobenzene-d5	17.56	17.06	18.06	17.56	0.01
97 1,4 Dichlorobenze	22.97	22.47	23.47	22.97	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

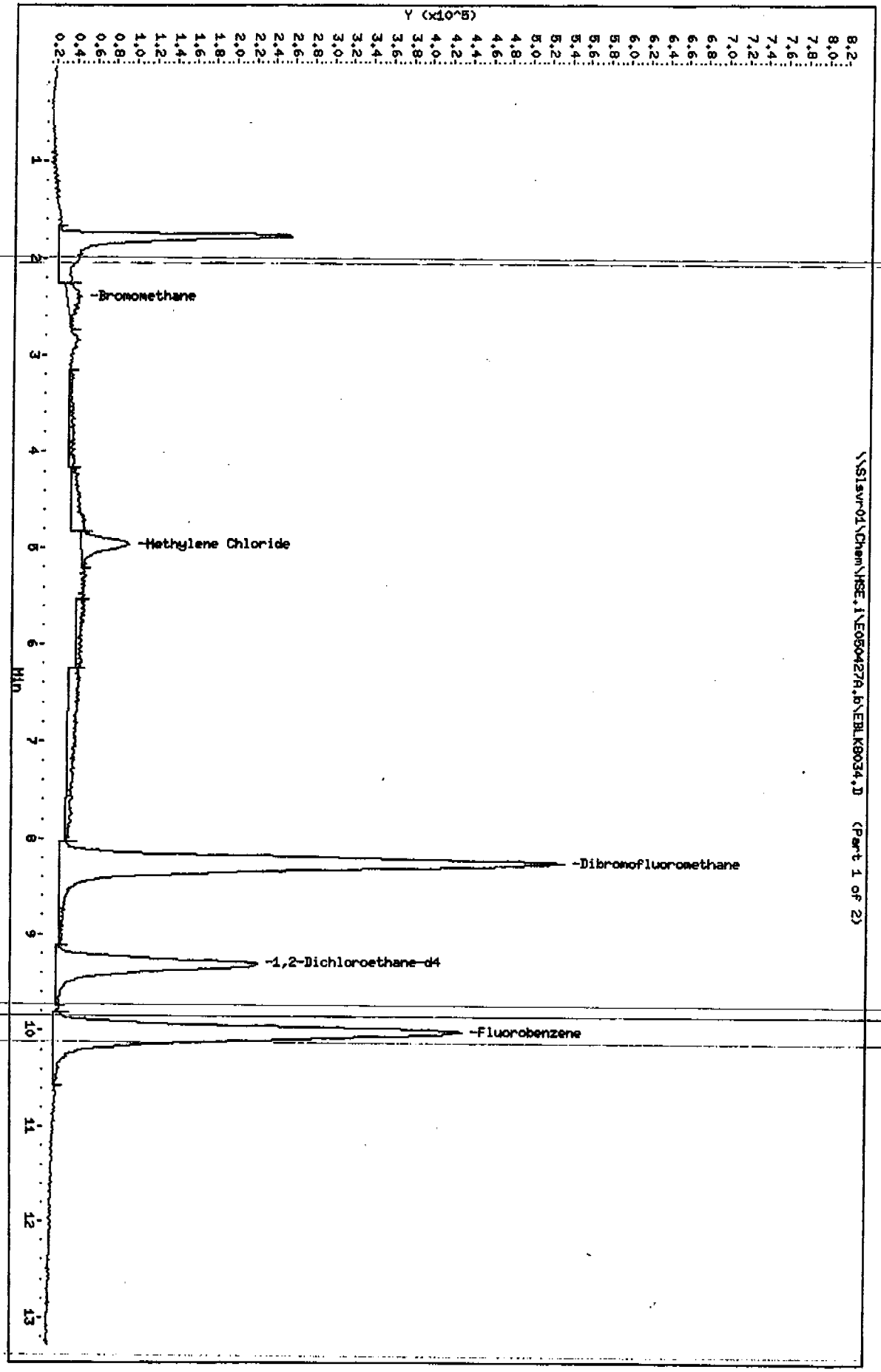
Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\EBLK8034.D
Report Date: 28-Apr-2005 14:23

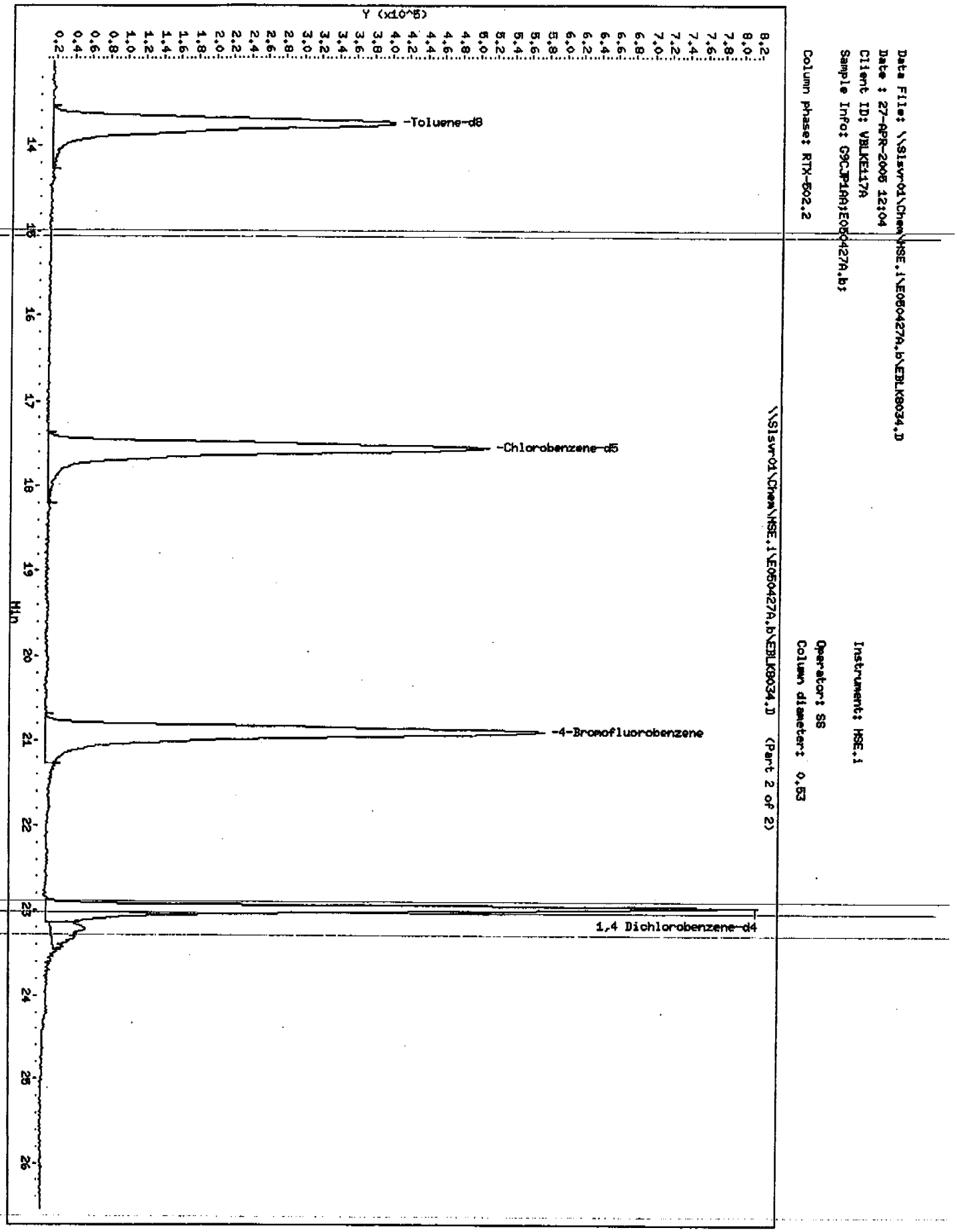
STL St. Louis

RECOVERY REPORT

Client Name:
Client SDG: SDGa00861
Sample Matrix: SOLID
Fraction: VOA
Lab Smp Id: G9CJP1AA
Client Smp ID: VBLKE117A
Level: LOW
Operator: SS
Data Type: MS DATA
SampleType: BLANK
SpikeList File: soilms.spk
Quant Type: ISTD
Sublist File: QC-SOIL.sub
Method File: \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5mL.m
Misc Info: VBLKE117A;F5D270000-629B;5117629

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 37 Dibromofluorometha	50.00	50.91	101.82	74-128
$ 43 1,2-Dichloroethane	50.00	48.67	97.33	69-134
$ 61 Toluene-d8	50.00	49.35	98.71	72-131
$ 83 4-Bromofluorobenze	50.00	54.07	108.14	70-131


Y (x10^5)
Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\EBLK8034.D
Date : 27-APR-2005 12:04
Client ID: VBLKE117A
Sample Info: C9CJP1A4;E050427A.b;
Column phase: RTX-502.2
Instrument: MSE.i
Operator: SS
Column diameter: 0.53
\\Slsvr01\Chem\MSE.i\E050427A.b\EBLK8034.D (Part 1 of 2)
-Bromomethane
-Methylene Chloride
-Dibromofluoromethane
-1,2-Dichloroethane-d4
-Fluorobenzene
Min


Y (x10^5)
Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\EBLK8034.D
Date : 27-APR-2005 12:04
Client ID: VBLKE117A
Sample Info: G9CJF1AA;E050427A.b;
Column phase: RTX-502.2
Instrument: MSE.i
Operator: SS
Column diameter: 0.53
\\Slsvr01\Chem\MSE.i\E050427A.b\EBLK8034.D (Part 2 of 2)
-Toluene-d8
-Chlorobenzene-d5
-4-Bromofluorobenzene
1,4 Dichlorobenzene-d4
Min

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\EBLK8034.D

Date : 27-APR-2005 12:04

Client ID: VBLKE117A

Instrument: MSE.i

Sample Info: G9CJP1AA;E050427A.b;

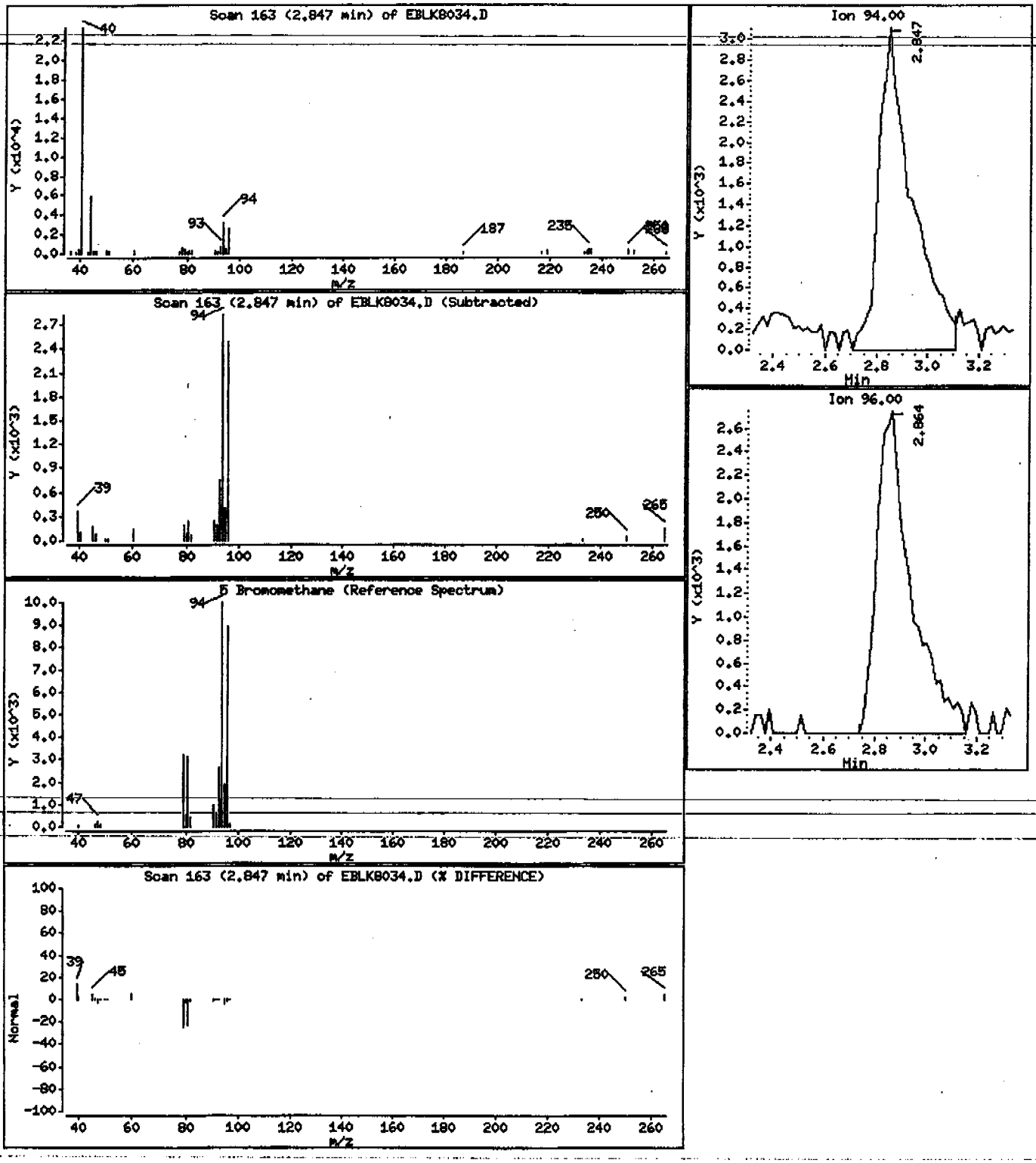
Operator: SS

Column phase: RTX-502.2

Column diameter: 0.53

5 Bromomethane

Concentration: 1.766 ug/Kg



Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\EBLK8034.D

Date : 27-APR-2005 12:04

Client ID: VBLKE117A

Instrument: MSE.i

Sample Info: G9CJP1AA;E050427A.b;

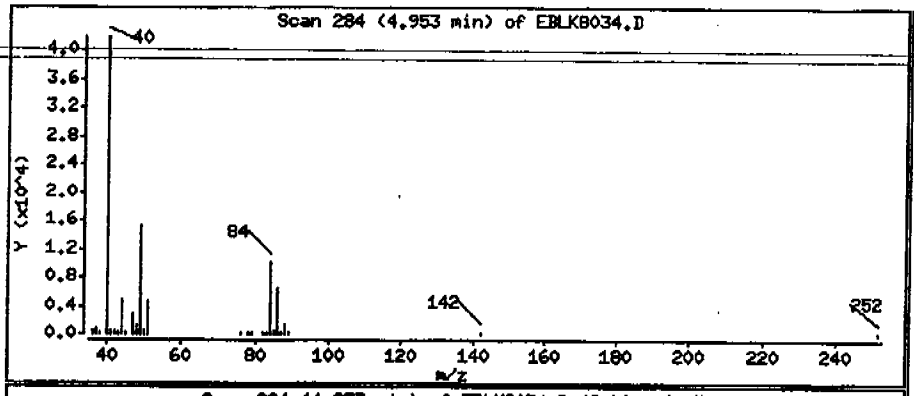
Operator: SS

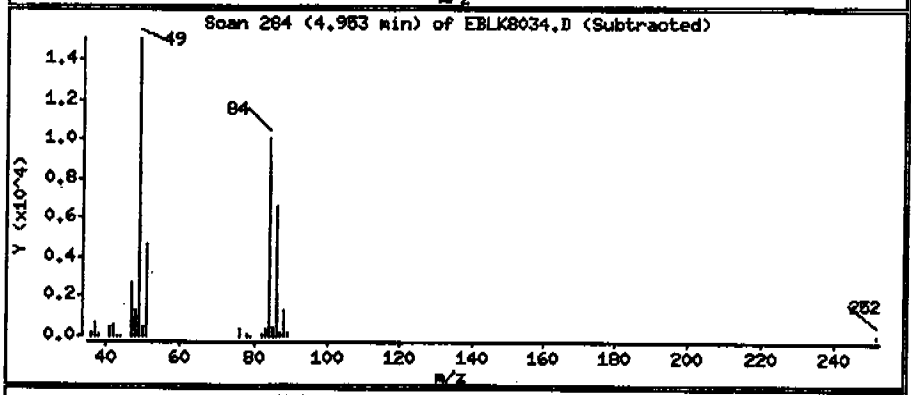
Column phase: RTX-502.2

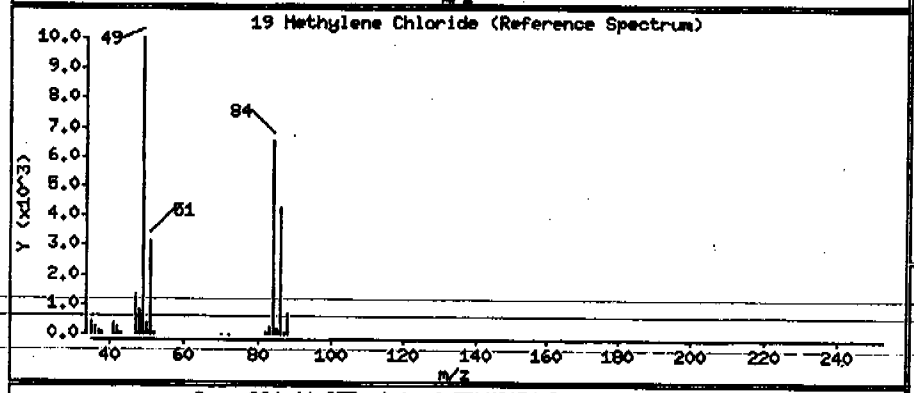
Column diameter: 0.53

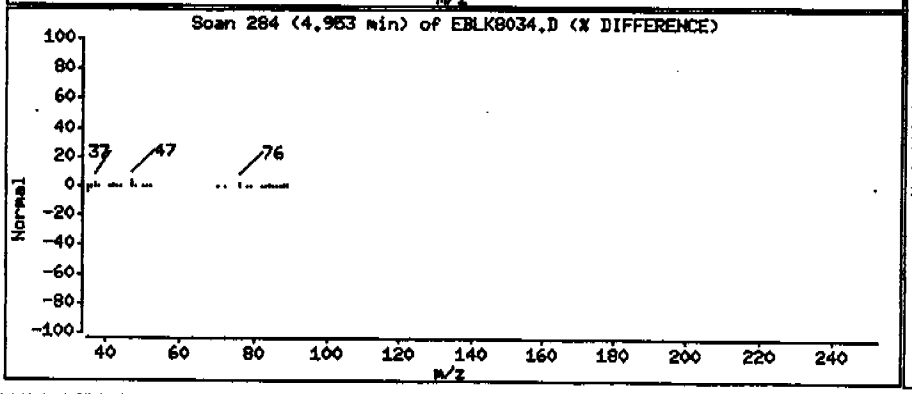
19 Methylene Chloride

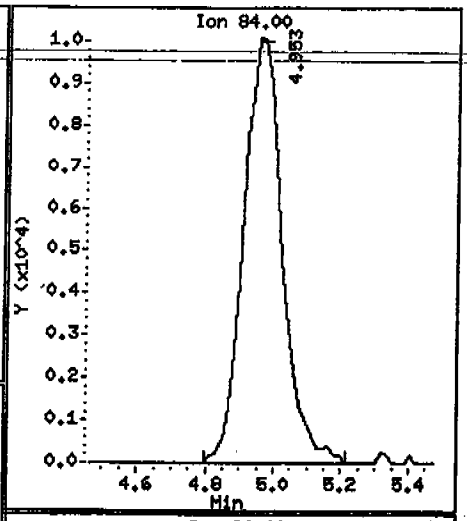
Concentration: 5.212 ug/Kg

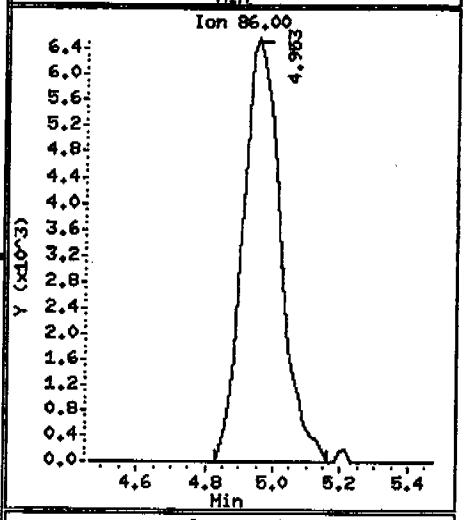


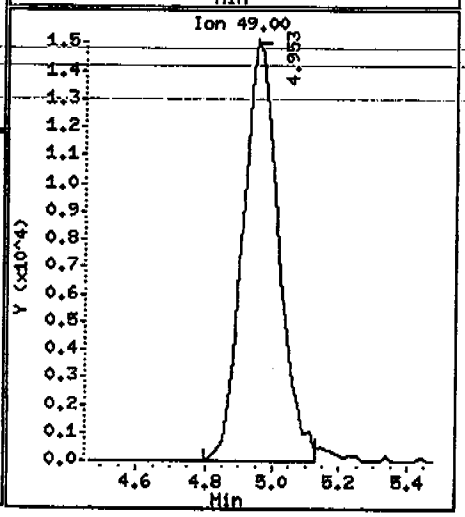












Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\EBLK8034.D
Report Date: 28-Apr-2005 14:23

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GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSE.i\E050427A.b\EBLK8034.D
Lab Smp Id: G9CJP1AA Client Smp ID: VBLKE117A
Inj Date : 27-APR-2005 12:04
Operator : SS Inst ID: MSE.i
Smp Info : G9CJP1AA;E050427A.b;
Misc Info : VBLKE117A;F5D270000-629B;5117629
Comment : NONE
Method : \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5mL.m
Meth Date : 27-Apr-2005 10:45 stitess Quant Type: ISTD
Cal Date : 24-APR-2005 23:36 Cal File: ECAL7969.D
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: QC-SOIL.sub
Target Version: 4.10
Processing Host: SLVOA03

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ELCS8032.D
Report Date: 28-Apr-2005 14:32

STL St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSE.i\E050427A.b\ELCS8032.D
Lab Smp Id: G9CJP1AC Client Smp ID: VLCSE117A
Inj Date : 27-APR-2005 10:51
Operator : SS Inst ID: MSE.i
Smp Info : G9CJP1AC;E050427A.b;
Misc Info : VBLKE117A;F5D270000-629C;5117629
Comment : NONE
Method : \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5mL.m
Meth Date : 27-Apr-2005 10:45 stitess Quant Type: ISTD
Cal Date : 24-APR-2005 23:36 Cal File: ECAL7969.D
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: QC-SOIL.sub
Target Version: 4.10
Processing Host: SLVOA03

Concentration Formula: Amt * DF * Wsd/Ws* * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Wsd	5.000	DefSampleWeight
Ws	5.000	SampleWeight
Va	100.000	AliquotVolume
Cpnd Variable		Local Compound Variable

5/4/2005

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	1 Dichlorodifluoromethane	85	1.964	1.957	(0.196)	1057373	46.6457	46.64
	3 Chloromethane	50	2.277	2.288	(0.227)	503303	49.6522	49.65
	4 Vinyl Chloride	62	2.312	2.323	(0.231)	502201	54.5204	54.52
	5 Bromomethane	94	2.834	2.827	(0.283)	572661	33.4551	33.46
	6 Chloroethane	64	2.921	2.932	(0.291)	354330	53.1776	53.18
	7 Trichlorofluoromethane	101	3.252	3.245	(0.324)	1210625	51.5959	51.60
	8 Diethyl ether	74	3.687	3.698	(0.368)	218626	52.5128	52.51
	9 1,1,2-Trichlorofluoroethane	151	3.879	3.889	(0.387)	921246	52.0832	52.08
	11 Acetone	58	3.983	3.994	(0.397)	28055	39.3763	39.38
	12 1,1-Dichloroethene	96	4.122	4.133	(0.411)	596738	46.9079	46.91
	15 Iodomethane	142	4.627	4.624	(0.462)	80413	4.03365	4.034(a)
	16 Allyl chloride	39	4.749	4.777	(0.474)	522193	66.7493	66.75(M)
	18 Carbon Disulfide	76	4.906	4.916	(0.489)	2165830	50.1358	50.14
	19 Methylene Chloride	84	4.940	4.969	(0.493)	757493	46.4011	46.40
M	14 1,2-Dichloroethene (total)	96				1529635	104.175	104.2
	21 MTBE	73	5.271	5.299	(0.526)	909078	57.1378	57.14(M)
	22 trans-1,2-Dichloroethene	96	5.480	5.491	(0.547)	733873	51.7059	51.70
	23 n-Hexane	57	5.637	5.648	(0.562)	677251	53.4668	53.47
	25 1,1-Dichloroethane	63	6.298	6.292	(0.628)	1339914	51.2920	51.29
	24 Vinyl acetate	43	5.637	5.648	(0.562)	497227	53.4029	53.40
	28 2-Butanone	72	7.221	7.214	(0.720)	38318	55.8263	55.83

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ELCS8032.D
Report Date: 28-Apr-2005 14:32

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	30 2,2-Dichloropropane	77	7.378	7.406	(0.736)	818175	49.6657	49.66
	31 cis-1,2-Dichloroethene	96	7.482	7.493	(0.746)	795762	52.4691	52.47
	34 Chloroform	83	7.813	7.806	(0.779)	1497298	48.8588	48.86
	35 Bromochloromethane	128	8.126	8.120	(0.811)	541394	52.5350	52.53
	36 Tetrahydrofuran	71	8.283	8.241	(0.826)	36626	49.1546	49.15
$	37 Dibromofluoromethane	113	8.248	8.259	(0.823)	1468085	48.4109	48.41
	38 1,1,1-Trichloroethane	97	8.614	8.624	(0.859)	1019836	49.7728	49.77
	41 1,1-Dichloropropene	75	8.962	8.973	(0.894)	1037906	52.2215	52.22
	42 Carbon Tetrachloride	117	9.136	9.147	(0.911)	985181	48.8374	48.84(M)
$	43 1,2-Dichloroethane-d4	102	9.327	9.321	(0.931)	152475	49.6083	49.61
	46 Benzene	78	9.501	9.530	(0.948)	1632024	51.6928	51.69
	47 1,2-Dichloroethane	62	9.501	9.530	(0.948)	727428	47.3359	47.34
*	48 Fluorobenzene	96	10.024	10.035	(1.000)	1905130	50.0000	
	49 Trichloroethene	95	10.894	10.905	(1.087)	942921	50.8237	50.82
	51 1,2-Dichloropropane	63	11.312	11.305	(1.129)	838241	52.4155	52.42
	52 Methyl methacrylate	69	11.608	11.601	(1.158)	332458	53.2385	53.24
	53 Bromodichloromethane	83	11.834	11.845	(1.181)	1628081	47.2001	47.20
	54 Dibromomethane	93	11.921	11.932	(1.189)	925196	48.4813	48.48
	56 2-Nitropropane	43	12.095	12.106	(1.207)	103896	19.6443	19.64
	58 4-Methyl-2-pentanone	100	12.826	12.820	(1.280)	42754	53.6151	53.62(M)
	59 cis-1,3-Dichloropropene	75	13.209	13.203	(1.318)	1013834	47.8975	47.90
$	61 Toluene-d8	98	13.767	13.743	(0.785)	1368238	48.9722	48.97
	62 Toluene	92	13.941	13.951	(0.795)	966322	52.0912	52.09
	63 trans-1,3-Dichloropropene	75	14.463	14.474	(0.824)	768489	55.4638	55.46
	64 Ethyl methacrylate	69	14.585	14.596	(0.831)	650225	51.0472	51.05
	65 1,1,2-Trichloroethane	83	14.811	14.804	(0.844)	624377	51.2356	51.24
	66 2-Hexanone	43	14.985	14.996	(0.854)	265114	63.3752	63.38
	67 1,3-Dichloropropane	76	15.455	15.466	(0.881)	960688	52.0274	52.03
	68 Tetrachloroethene	164	15.525	15.518	(0.885)	810732	47.7059	47.70
	70 Chlorodibromomethane	129	16.012	16.023	(0.913)	1360148	50.1247	50.12
M	69 Xylenes (total)	106				2074993	165.497	165.5
	71 1,2-Dibromoethane	107	16.534	16.528	(0.942)	1079711	52.1123	52.11
*	72 Chlorobenzene-d5	117	17.544	17.555	(1.000)	1430297	50.0000	
	73 Chlorobenzene	112	17.649	17.659	(1.006)	1384689	49.8709	49.87
	74 1,1,1,2-Tetrachloroethane	131	17.788	17.799	(1.014)	819105	48.9302	48.93
	75 Ethylbenzene	91	17.858	17.868	(1.018)	1953141	53.1684	53.17
	76 m,p-Xylenes	106	18.101	18.095	(1.032)	1388970	111.133	111.1
	77 o-Xylene	106	19.215	19.226	(1.095)	686023	54.3646	54.36
	78 Styrene	104	19.337	19.331	(1.102)	1183397	54.9038	54.90
	79 Bromoform	173	20.103	20.114	(1.146)	994519	49.9594	49.96
	80 Isopropylbenzene	105	20.242	20.253	(1.154)	1966307	59.3870	59.39
	81 Cyclohexanone	55	20.364	20.340	(1.161)	139193	206.102	206.1
	82 1,1,2,2-Tetrachloroethane	83	20.747	20.741	(1.183)	1194889	52.4912	52.49
$	83 4-Bromofluorobenzene	95	20.887	20.880	(0.909)	1271192	49.1597	49.16
	84 1,2,3-Trichloropropane	75	21.113	21.124	(0.919)	664433	48.0238	48.02(M)
	85 Bromobenzene	156	21.304	21.315	(0.927)	881203	48.5822	48.58
	86 n-Propylbenzene	91	21.357	21.350	(0.930)	2515703	50.4540	50.45
	88 trans-1,4-dichloro-2-butene	53	21.705	21.716	(0.945)	68926	45.5623	45.56
	87 2-Chlorotoluene	91	21.653	21.663	(0.942)	2162270	65.9008	65.90(R)
	89 1,3,5-Trimethylbenzene	105	21.705	21.716	(0.945)	1360631	48.9434	48.94
	90 4-Chlorotoluene	91	21.757	21.750	(0.947)	1608846	40.4427	40.44
	91 t-Butylbenzene	119	22.314	22.325	(0.971)	1351362	34.7902	34.79
	92 Pentachloroethane	167	22.331	22.342	(0.972)	16884	1.36935	1.369(a)
	93 1,2,4-Trimethylbenzene	105	22.384	22.360	(0.974)	1184584	47.4586	47.46

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ELCS8032.D
Report Date: 28-Apr-2005 14:32

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
94	sec-Butylbenzene	105	22.610	22.621	(0.984)	1918657	46.2999	46.30
95	4-Isopropyltoluene	119	22.802	22.812	(0.992)	1363988	50.9370	50.94
96	1,3-Dichlorobenzene	146	22.871	22.865	(0.995)	1092165	51.2170	51.22
* 97	1,4-Dichlorobenzene-d4	152	22.976	22.969	(1.000)	771120	50.0000	
98	1,4-Dichlorobenzene	146	23.010	23.004	(1.002)	1289320	49.7808	49.78
99	n-Butylbenzene	91	23.289	23.282	(1.014)	1443729	54.7440	54.74
100	1,2-Dichlorobenzene	146	23.393	23.404	(1.018)	1055903	56.3869	56.39
101	1,2-Dibromo-3-chloropropane	75	24.159	24.170	(1.052)	159567	53.1777	53.18
103	1,2,4-Trichlorobenzene	180	24.891	24.884	(1.083)	360759	67.4386	67.44(R)
104	Hexachlorobutadiene	225	25.012	25.023	(1.089)	417890	67.7238	67.72
105	Naphthalene	128	25.099	25.093	(1.092)	333567	63.9144	63.91
106	1,2,3-Trichlorobenzene	180	25.308	25.302	(1.102)	261285	63.0891	63.09(R)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ELCS8032.D
Report Date: 28-Apr-2005 14:32

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSE.i
Lab File ID: ELCS8032.D
Lab Smp Id: G9CJP1AC
Analysis Type: VOA
Quant Type: ISTD
Operator: SS
Method File: \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5mL.m
Misc Info: VBLKE117A;F5D270000-629C;5117629

Calibration Date: 27-APR-2005
Calibration Time: 10:05
Client Smp ID: VLCSE117A
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	1801629	900815	3603258	1905130	5.74
72 Chlorobenzene-d5	1382848	691424	2765696	1430297	3.43
97 1,4 Dichlorobenze	743020	371510	1486040	771120	3.78

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	10.04	9.54	10.54	10.02	-0.11
72 Chlorobenzene-d5	17.56	17.06	18.06	17.54	-0.06
97 1,4 Dichlorobenze	22.97	22.47	23.47	22.98	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ELCS8032.D
Report Date: 28-Apr-2005 14:32

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RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: G9CJP1AC
Level: LOW
Data Type: MS DATA
SpikeList File: H201cs.spk
Sublist File: QC-SOIL.sub
Method File: \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5mL.m
Misc Info: VBLKE117A;F5D270000-629C;5117629

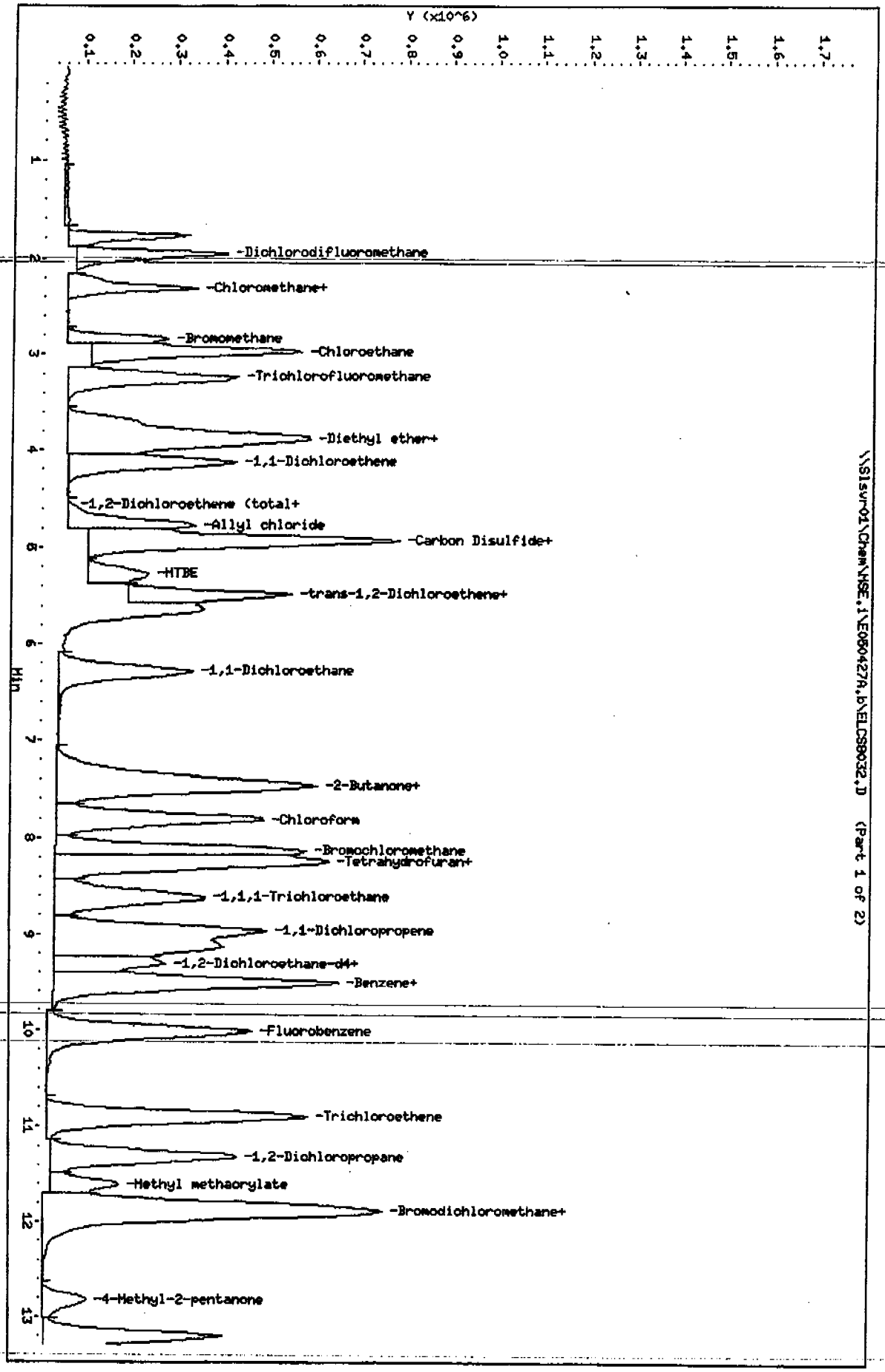
Client SDG: SDGa00861
Fraction: VOA
Client Smp ID: VLCSE117A
Operator: SS
SampleType: LCS
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
	1 Dichlorodifluorome	50.00	46.64	93.29	30-150
	3 Chloromethane	50.00	49.65	99.30	10-150
	4 Vinyl Chloride	50.00	54.52	109.04	60-134
	5 Bromomethane	50.00	33.46	66.91	30-150
	6 Chloroethane	50.00	53.18	106.36	63-136
	7 Trichlorofluoromet	50.00	51.60	103.19	57-142
	8 Diethyl ether	50.00	52.51	105.03	61-138
	9 1,1,2-Trichloroflu	50.00	52.08	104.17	60-139
	11 Acetone	50.00	39.38	78.75	30-150
	12 1,1-Dichloroethene	50.00	46.91	93.82	62-124
	16 Allyl chloride	50.00	66.75	133.50	54-147
	18 Carbon Disulfide	50.00	50.14	100.27	51-150
	19 Methylene Chloride	50.00	46.40	92.80	38-144
M	14 1,2-Dichloroethene	100.0	104.2	104.18	76-121
	21 MTBE	50.00	57.14	114.28	61-133
	22 trans-1,2-Dichloro	50.00	51.70	103.41	68-130
	23 n-Hexane	50.00	53.47	106.93	53-125
	25 1,1-Dichloroethane	50.00	51.29	102.58	65-127
	28 2-Butanone	50.00	55.83	111.65	48-150
	30 2,2-Dichloropropan	50.00	49.66	99.33	64-141
	31 cis-1,2-Dichloroet	50.00	52.47	104.94	73-125
	34 Chloroform	50.00	48.86	97.72	30-150
	35 Bromochloromethane	50.00	52.53	105.07	77-122
	36 Tetrahydrofuran	50.00	49.15	98.31	42-134
	38 1,1,1-Trichloroeth	50.00	49.77	99.55	71-127
	41 1,1-Dichloropropen	50.00	52.22	104.44	77-126
	42 Carbon Tetrachlori	50.00	48.84	97.67	70-126
	46 Benzene	50.00	51.69	103.39	76-112
	47 1,2-Dichloroethane	50.00	47.34	94.67	71-122
	49 Trichloroethene	50.00	50.82	101.65	77-115
	51 1,2-Dichloropropan	50.00	52.42	104.83	72-120
	52 Methyl methacrylat	50.00	53.24	106.48	68-136
	53 Bromodichlorometha	50.00	47.20	94.40	73-119
	54 Dibromomethane	50.00	48.48	96.96	50-150
	56 2-Nitropropane	25.00	19.64	78.58	30-143
	58 4-Methyl-2-pentano	50.00	53.62	107.23	30-150
	59 cis-1,3-Dichloropr	50.00	47.90	95.79	73-125
	62 Toluene	50.00	52.09	104.18	72-115
	63 trans-1,3-Dichloro	50.00	55.46	110.93	84-134
	64 Ethyl methacrylate	50.00	51.05	102.09	70-123

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ELCS8032.D
Report Date: 28-Apr-2005 14:32

	SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
65	1,1,2-Trichloroeth	50.00	51.24	102.47	79-112
66	2-Hexanone	50.00	63.38	126.75	60-143
67	1,3-Dichloropropan	50.00	52.03	104.05	74-122
68	Tetrachloroethene	50.00	47.70	95.41	58-106
70	Chlorodibromometha	50.00	50.12	100.25	80-118
71	1,2-Dibromoethane	50.00	52.11	104.22	79-120
73	Chlorobenzene	50.00	49.87	99.74	83-112
74	1,1,1,2-Tetrachlor	50.00	48.93	97.86	80-119
75	Ethylbenzene	50.00	53.17	106.34	79-115
76	m,p-Xylenes	100.0	111.1	111.13	81-114
77	o-Xylene	50.00	54.36	108.73	78-121
78	Styrene	50.00	54.90	109.81	78-121
79	Bromoform	50.00	49.96	99.92	76-130
80	Isopropylbenzene	50.00	59.39	118.77	80-143
81	Cyclohexanone	500.0	206.1	41.22	30-150
82	1,1,2,2-Tetrachlor	50.00	52.49	104.98	63-133
85	Bromobenzene	50.00	48.58	97.16	75-125
86	n-Propylbenzene	50.00	50.45	100.91	59-129
88	trans-1,4-dichloro	50.00	45.56	91.12	43-133
87	2-Chlorotoluene	50.00	65.90	131.80*	65-127
89	1,3,5-Trimethylben	50.00	48.94	97.89	70-126
90	4-Chlorotoluene	50.00	40.44	80.89	67-130
91	t-Butylbenzene	50.00	34.79	69.58	53-123
94	sec-Butylbenzene	50.00	46.30	92.60	76-115
95	4-Isopropyltoluene	50.00	50.94	101.87	80-127
96	1,3-Dichlorobenzen	50.00	51.22	102.43	79-115
98	1,4-Dichlorobenzen	50.00	49.78	99.56	77-108
99	n-Butylbenzene	50.00	54.74	109.49	77-128
100	1,2-Dichlorobenzen	50.00	56.39	112.77	83-113
103	1,2,4-Trichloroben	50.00	67.44	134.88*	70-127
101	1,2-Dibromo-3-chlo	50.00	53.18	106.36	72-133
104	Hexachlorobutadien	50.00	67.72	135.45	56-140
105	Naphthalene	50.00	63.91	127.83	61-131
106	1,2,3-Trichloroben	50.00	63.09	126.18*	65-126

	SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 37	Dibromofluorometha	50.00	48.41	96.82	74-128
$ 43	1,2-Dichloroethane	50.00	49.61	99.22	69-134
$ 61	Toluene-d8	50.00	48.97	97.94	72-131
$ 83	4-Bromofluorobenze	50.00	49.16	98.32	70-131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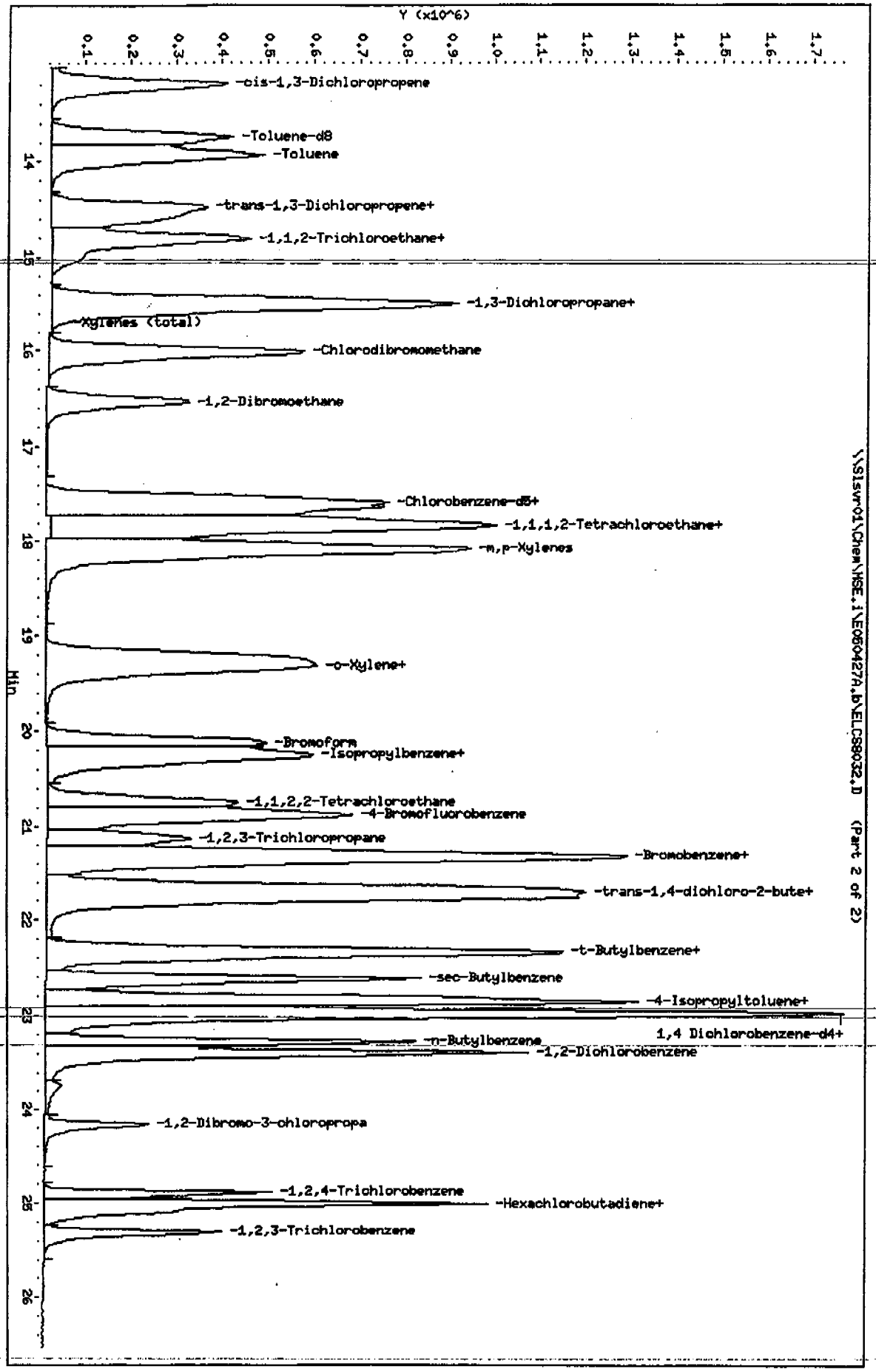
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
Min
1
2
3
4
5
6
7
8
9
10
11
12
13
-Dichlorodifluoromethane
-Chloromethane+
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-Diethyl ether+
-1,1-Dichloroethene
-1,2-Dichloroethene (total+
-Allyl chloride
-Carbon Disulfide+
-MTBE
-trans-1,2-Dichloroethene+
-1,1-Dichloroethane
-2-Butanone+
-Chloroform
-Bromochloromethane
-Tetrahydrofuran+
-1,1,1-Trichloroethane
-1,1-Dichloropropene
-1,2-Dichloroethane-d4+
-Benzene+
-Fluorobenzene
-Trichloroethene
-1,2-Dichloropropane
-Methyl methacrylate
-Bromodichloromethane+
-4-Methyl-2-pentanone
Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ELCS8032.D
Date : 27-APR-2005 10:51
Client ID: VLCSE417A
Sample Info: G9CJP1AC;E050427A.b;
Column phase: RTX-502.2
\\Slsvr01\Chem\MSE.i\E050427A.b\ELCS8032.D (Part 1 of 2)
Instrument: MSE.i
Operator: SS
Column diameter: 0.53


Y (x10^6)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
Min
14
15
16
17
18
19
20
21
22
23
24
25
26
-cis-1,3-Dichloropropene
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane+
-1,3-Dichloropropane+
Xylenes (total)
-Chlorodibromomethane
-1,2-Dibromoethane
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
-o-Xylene+
-Bromoform
-Isopropylbenzene+
-1,1,2,2-Tetrachloroethane
-4-Bromofluorobenzene
-1,2,3-Trichloropropane
-Bromobenzene+
-trans-1,4-dichloro-2-bute+
-t-Butylbenzene+
-sec-Butylbenzene
-4-Isopropyltoluene+
1,4 Dichlorobenzene-d4+
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene+
-1,2,3-Trichlorobenzene
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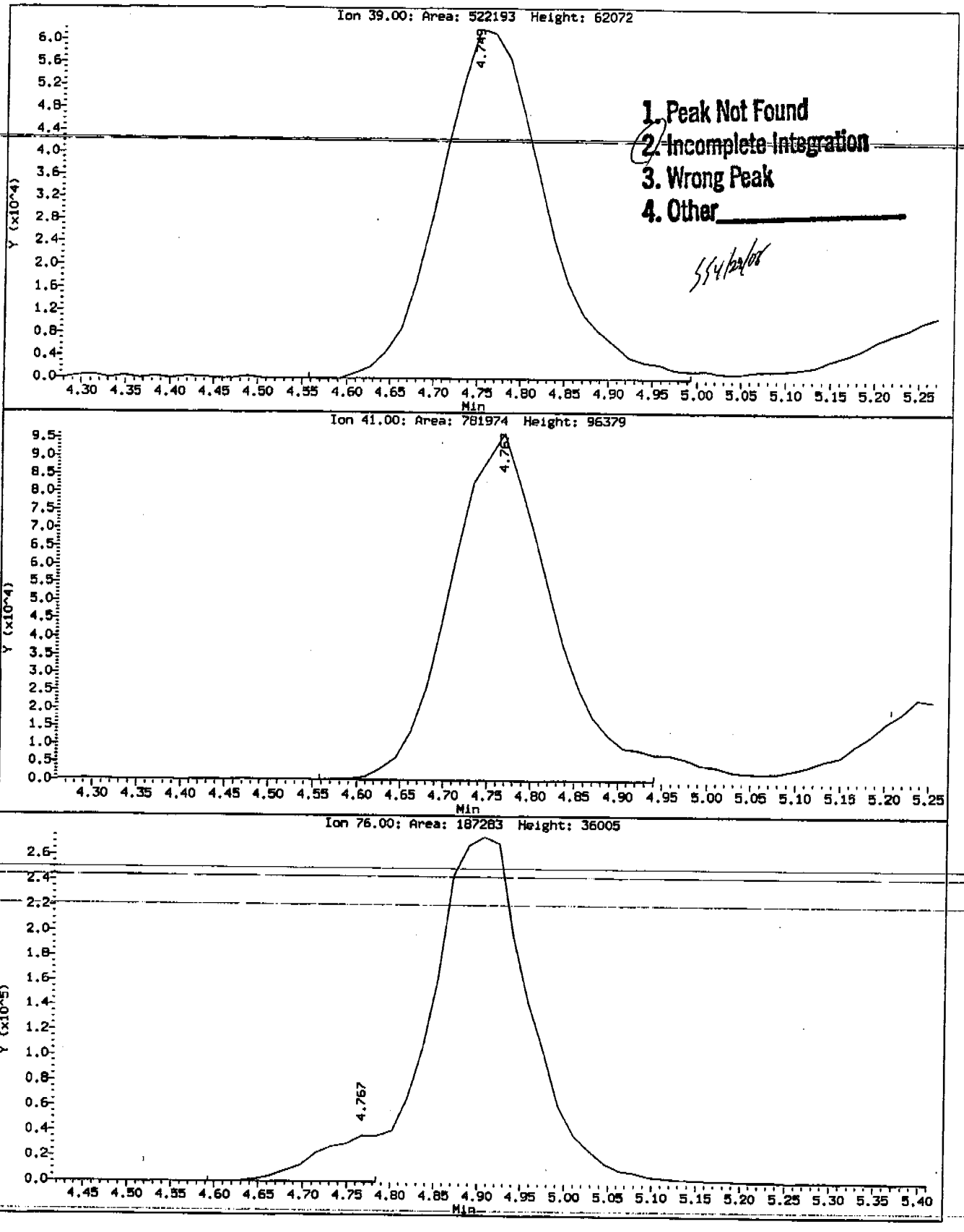
Data File: \\Slsvr01\Chem\MSE.i\E060427A.b\ELCS8032.D
Date : 27-APR-2006 10:51
Client ID: WLCSE117A
Sample Info: G9CJPAC;E060427A,b;
Column phase: RTX-502.2
Instrument: MSE.i
Operator: SS
Column diameter: 0.53

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ELCS8032.D
Injection Date: 27-APR-2005 10:51
Instrument: MSE.i
Client Sample ID: VLCSE117A

Compound: Allyl chloride
CAS Number: 107-05-1



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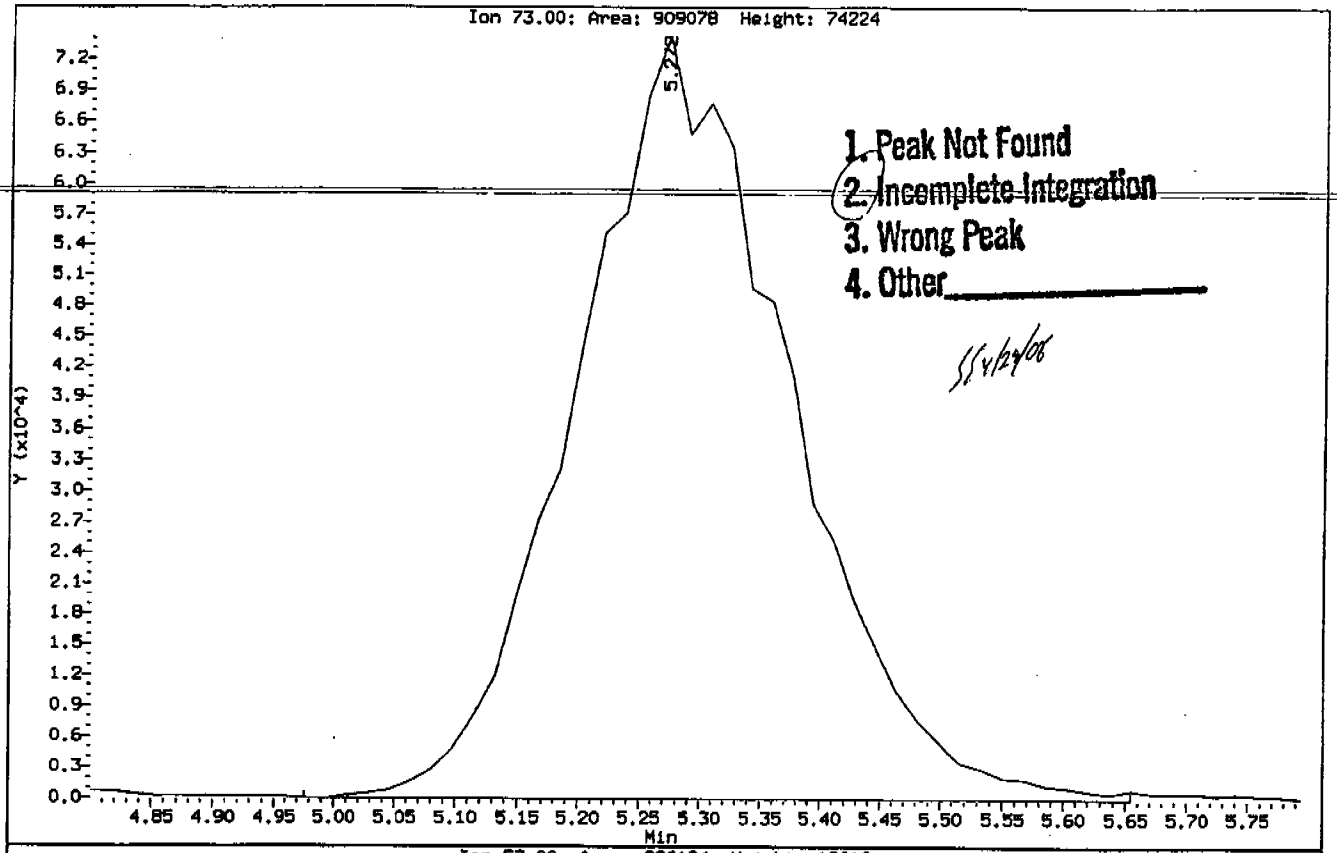
Injection Date: 27-APR-2005 10:51
Instrument: MSE.i
Client Sample ID: VLCSE117A

Compound: MTBE
CAS Number: 1634-04-4



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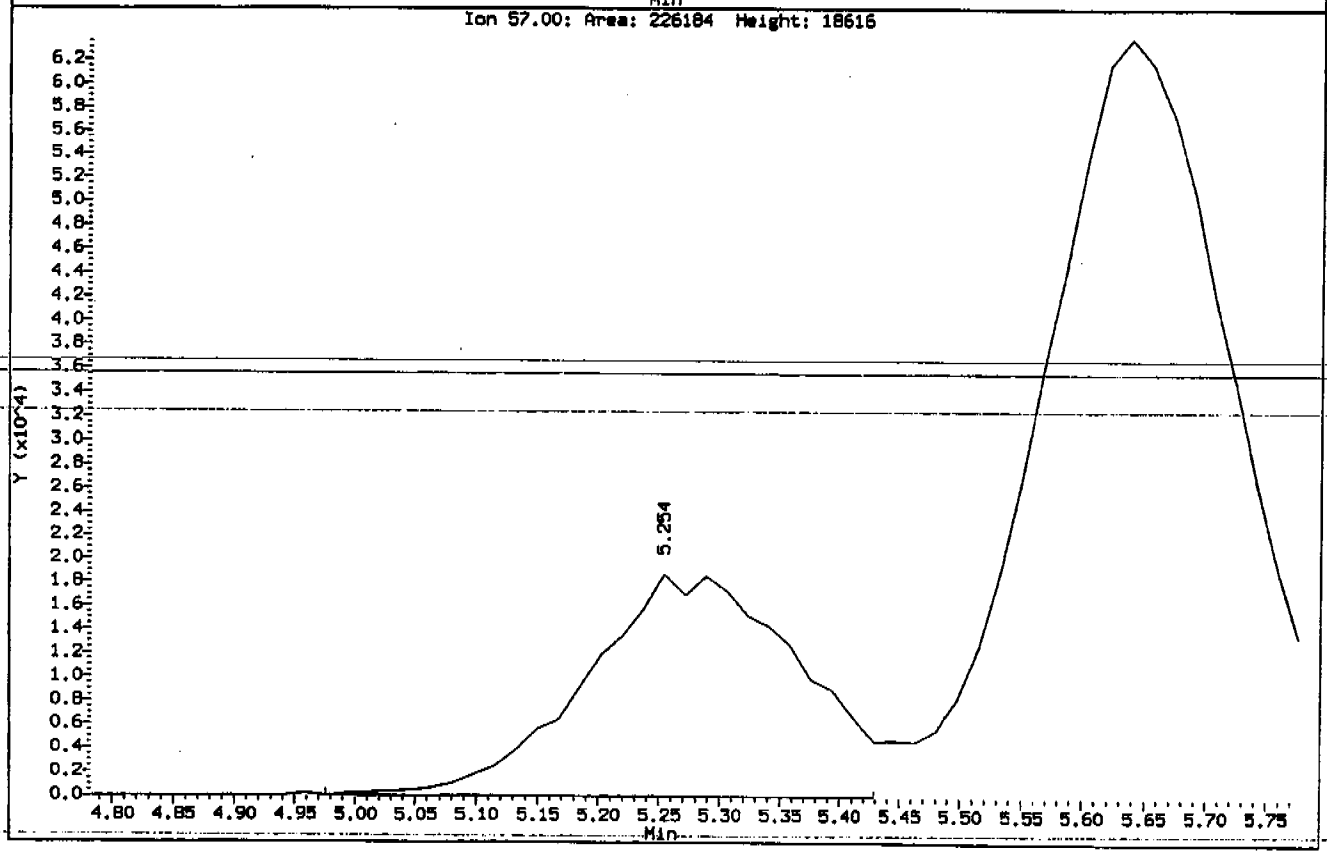
4. Other_____

SS 4/24/08



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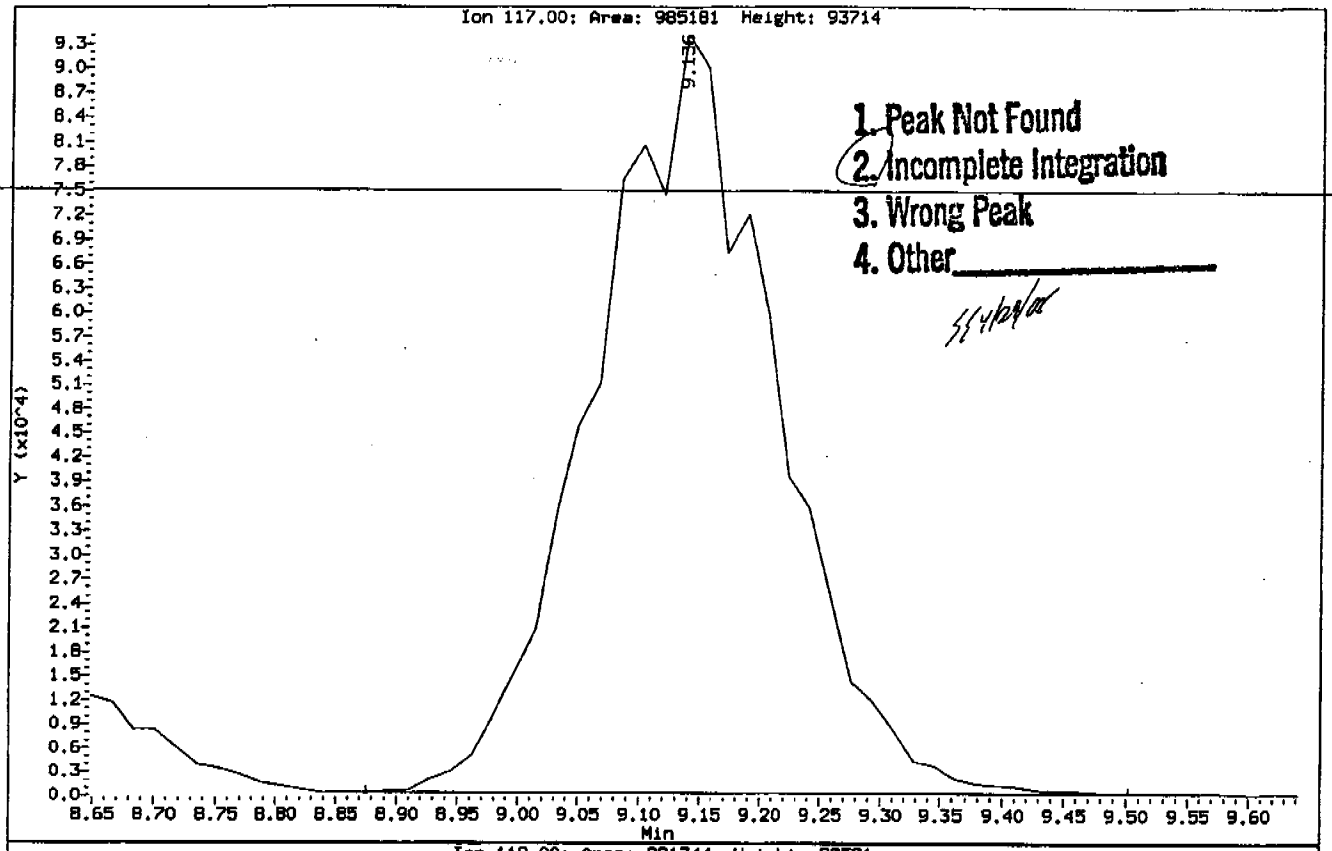
Injection Date: 27-APR-2005 10:51
Instrument: MSE.i
Client Sample ID: VLCSE117A

Compound: Carbon Tetrachloride
CAS Number: 56-23-5



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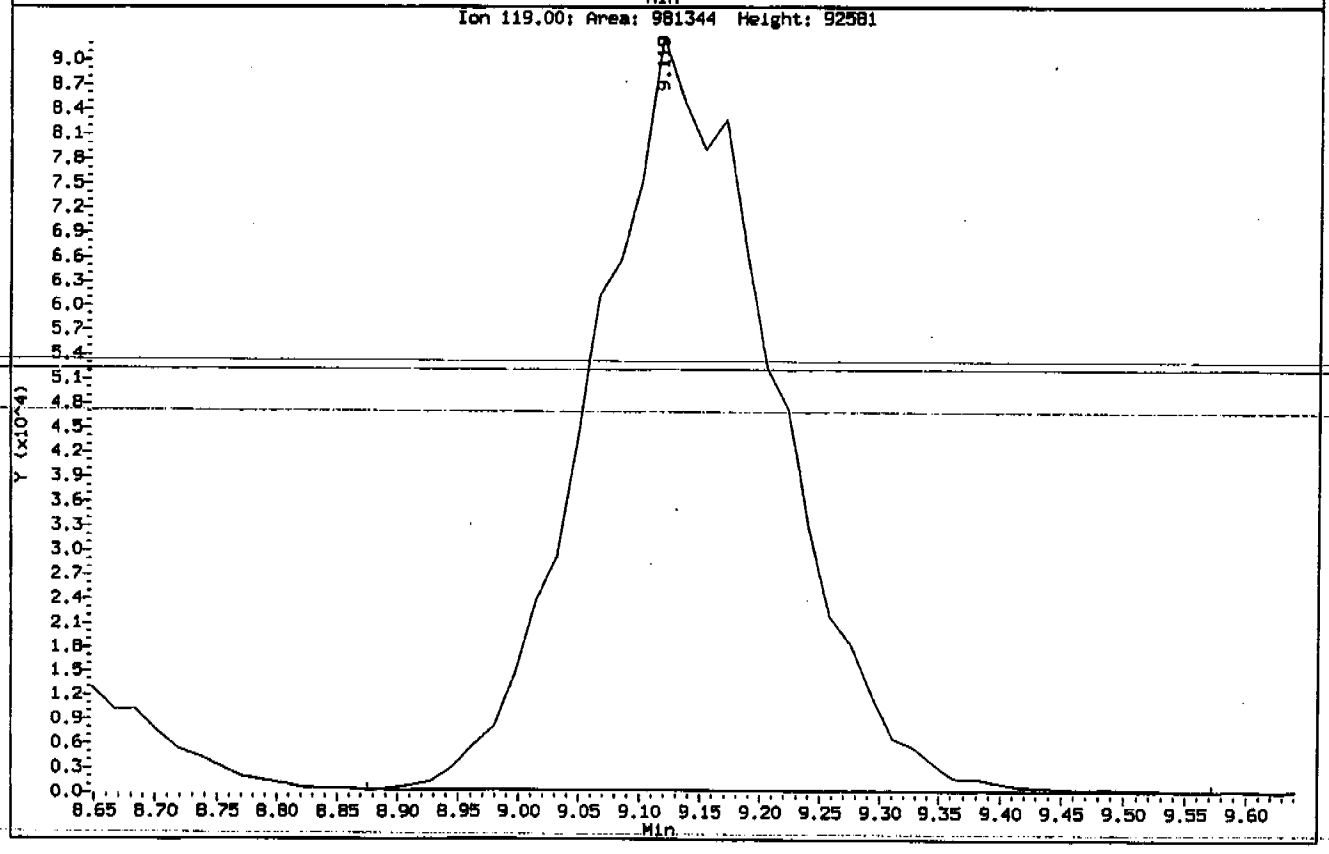
5/4/05



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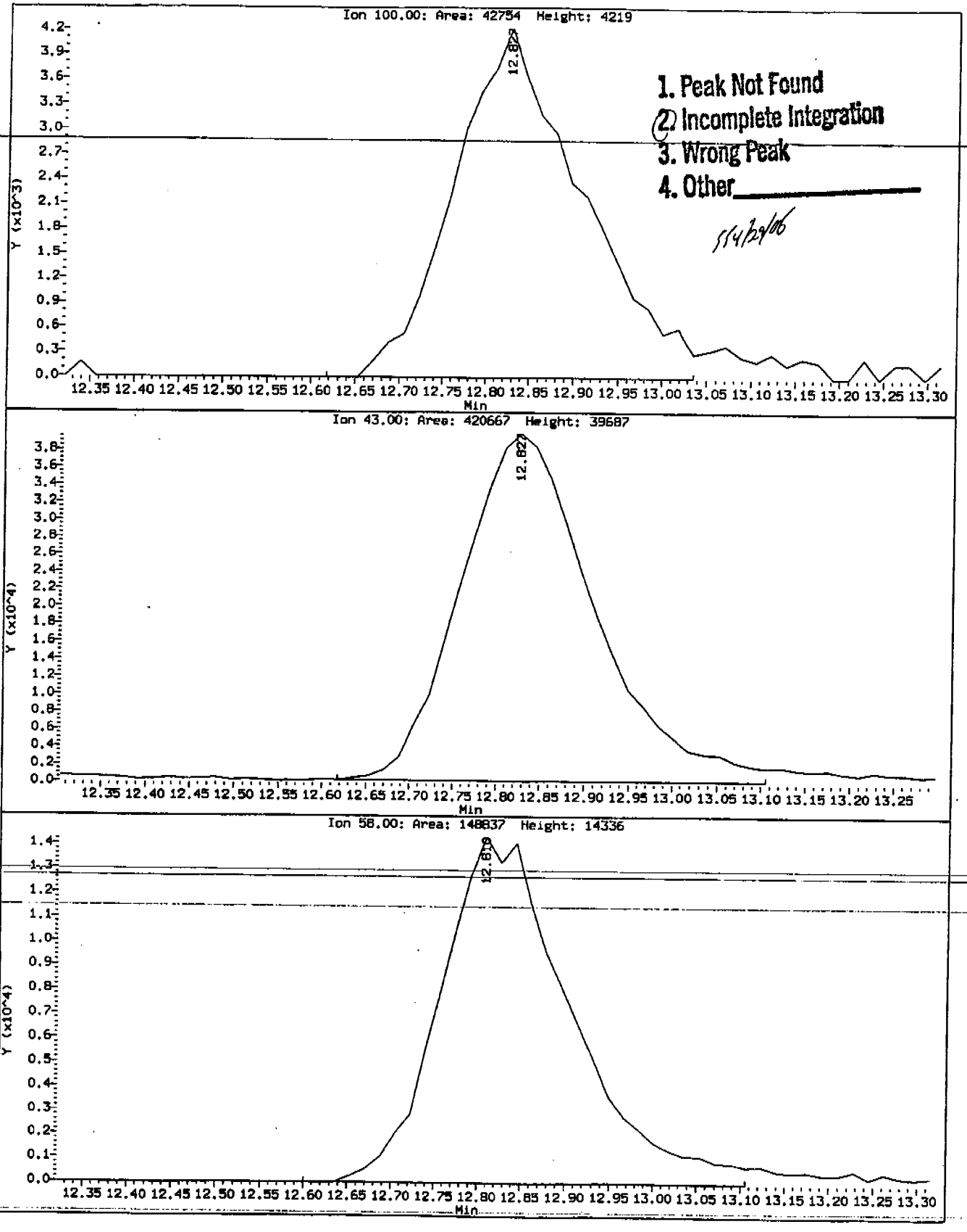
Injection Date: 27-APR-2005 10:51
Instrument: MSE.i
Client Sample ID: VLCSE117A

Compound: 4-Methyl-2-pentanone
CAS Number: 108-10-1



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5/4/06

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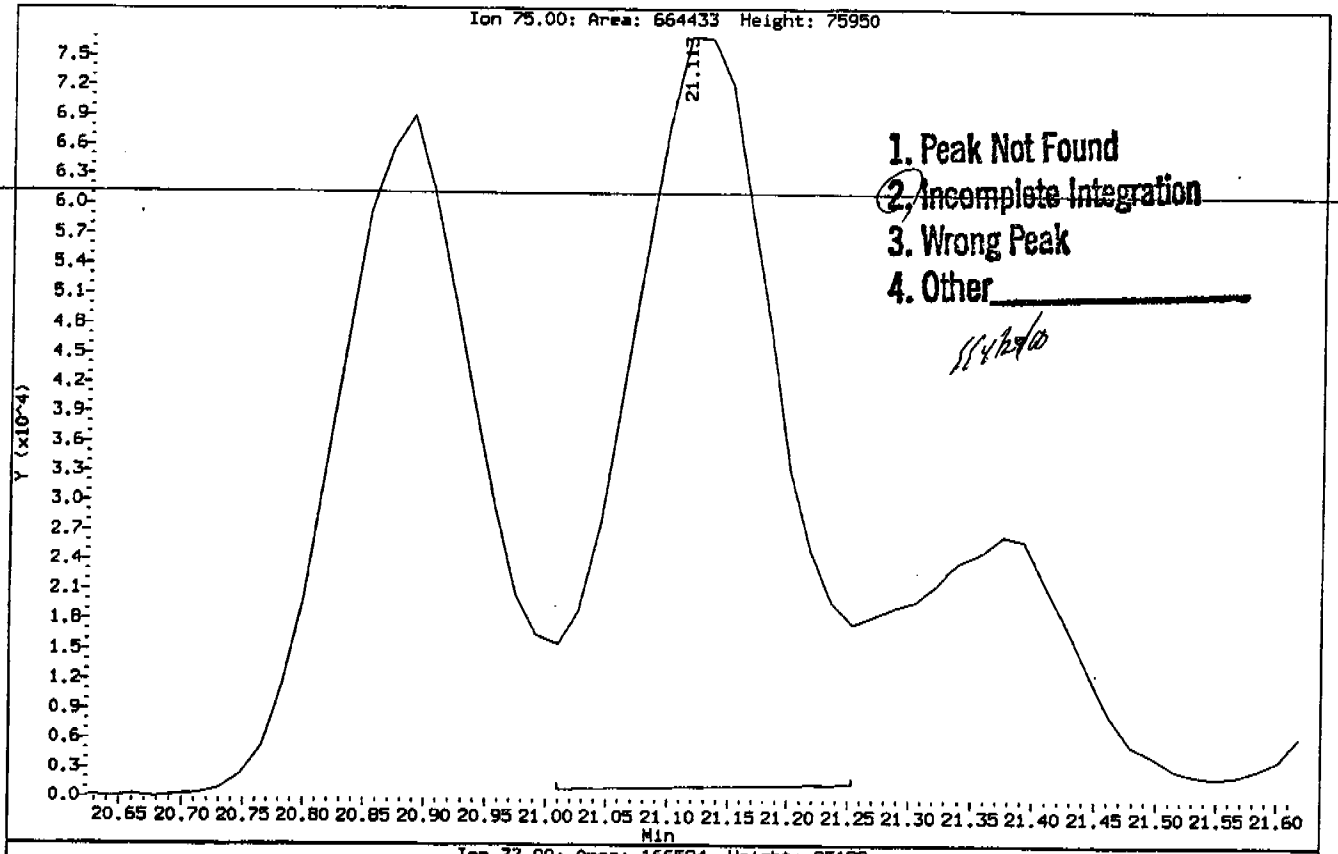
Injection Date: 27-APR-2005 10:51
Instrument: MSE.i
Client Sample ID: VLCSE117A

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4



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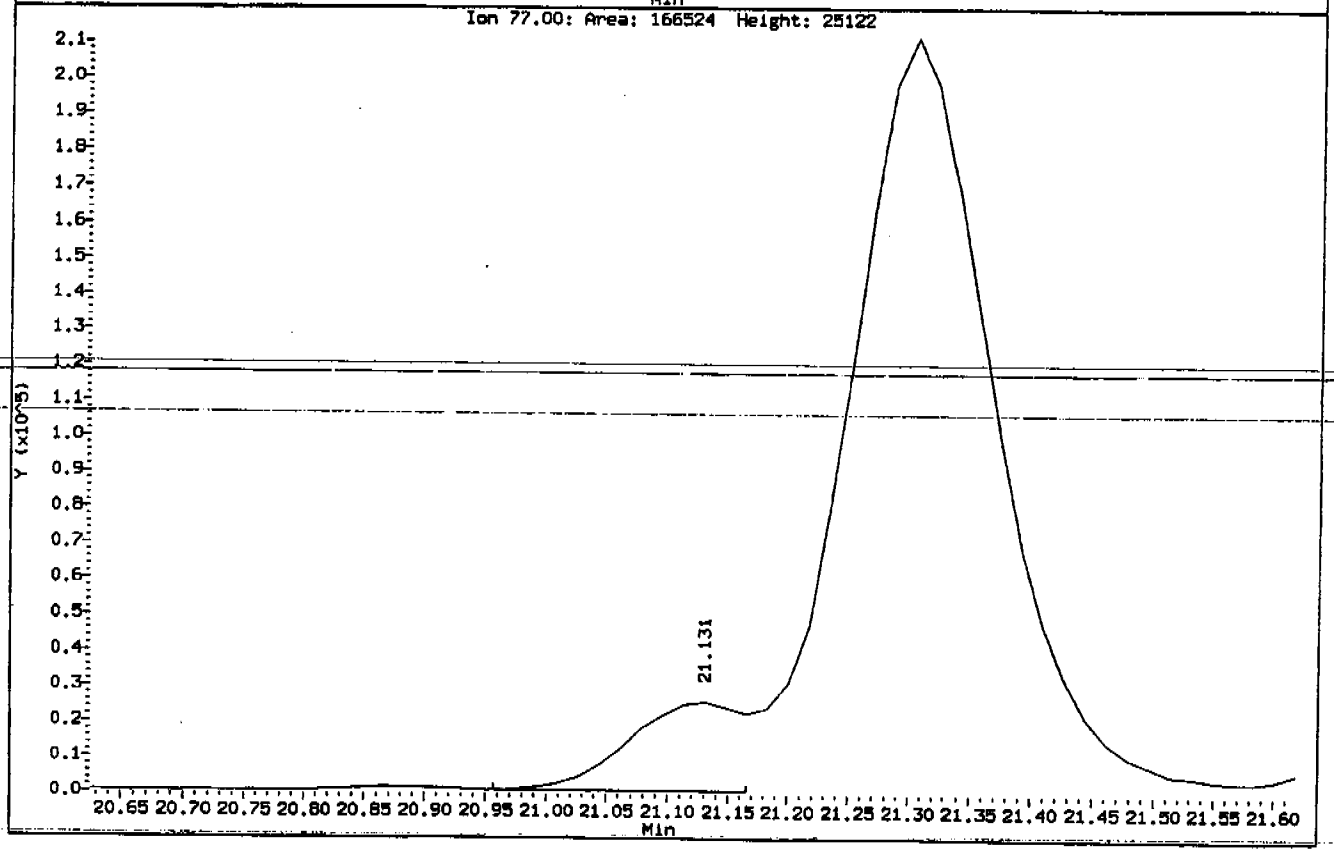
2. ~~Incomplete Integration~~
3. Wrong Peak
4. Other_____

11/29/10



Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8036.D
Report Date: 28-Apr-2005 14:42

STL St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8036.D
Lab Smp Id: G8WXJ1AG Client Smp ID: RE73-05-58829
Inj Date : 27-APR-2005 15:20
Operator : SS Inst ID: MSE.i
Smp Info : G8WXJ1AG;E050427A.b;
Misc Info : VBLKE117A;F5D210380-001MS;5.01G;5117629
Comment : NONE
Method : \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5mL.m
Meth Date : 27-Apr-2005 10:45 stitess Quant Type: ISTD
Cal Date : 24-APR-2005 23:36 Cal File: ECAL7969.D
Als bottle: 6 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOIL.sub
Target Version: 4.10
Processing Host: SLVOA03

Concentration Formula: Amt * DF * Wsd/Ws* * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Wsd	5.000	DefSampleWeight
Ws	5.010	SampleWeight
Va	100.000	AliquotVolume
Cpnd Variable		Local Compound Variable

5/4/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	1 Dichlorodifluoromethane	85	1.961	1.957	(0.195)	921938	64.4757	64.35
	3 Chloromethane	50	2.292	2.288	(0.228)	435929	68.1767	68.04
	4 Vinyl Chloride	62	2.327	2.323	(0.232)	422631	72.7368	72.59
	5 Bromomethane	94	2.832	2.827	(0.282)	512973	47.5083	47.41
	6 Chloroethane	64	2.936	2.932	(0.293)	298343	70.9819	70.84
	7 Trichlorofluoromethane	101	3.267	3.245	(0.325)	1083128	73.1806	73.03(R)
	8 Diethyl ether	74	3.685	3.698	(0.367)	182312	69.4207	69.28
	9 1,1,2-Trichlorofluoroethane	151	3.911	3.889	(0.390)	802546	71.9288	71.78(R)
	11 Acetone	58	3.998	3.994	(0.398)	22283	49.5802	49.48
	12 1,1-Dichloroethene	96	4.137	4.133	(0.412)	459472	57.2575	57.14
	15 Iodomethane	142	4.642	4.624	(0.462)	91400	7.26823	7.254
	16 Allyl chloride	39	4.781	4.777	(0.476)	405564	82.1837	82.02(RM)
	18 Carbon Disulfide	76	4.903	4.916	(0.488)	1294207	47.4939	47.40
	19 Methylene Chloride	84	4.955	4.969	(0.494)	612583	59.4875	59.37
M	14 1,2-Dichloroethene (total)	96				1021468	110.236	110.0
	21 MTBE	73	5.286	5.299	(0.527)	772732	76.9950	76.84(R)
	22 trans-1,2-Dichloroethene	96	5.495	5.491	(0.547)	483373	53.9899	53.88
	23 n-Hexane	57	5.669	5.648	(0.565)	415971	52.0605	51.96
	25 1,1-Dichloroethane	63	6.296	6.292	(0.627)	1091701	66.2502	66.12
	24 Vinyl acetate	43	5.652	5.648	(0.563)	302459	51.4977	51.39
	28 2-Butanone	72	7.218	7.214	(0.719)	26300	60.7439	60.62

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8036.D
Report Date: 28-Apr-2005 14:42

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	30 2,2-Dichloropropane	77	7.410	7.406	(0.738)	738174	71.0363	70.89
	31 cis-1,2-Dichloroethene	96	7.497	7.493	(0.747)	538095	56.2459	56.13
	34 Chloroform	83	7.810	7.806	(0.778)	1177465	60.9106	60.79
	35 Bromochloromethane	128	8.124	8.120	(0.809)	409480	62.9910	62.86
	36 Tetrahydrofuran	71	8.263	8.241	(0.823)	29001	61.7019	61.58
$	37 Dibromofluoromethane	113	8.263	8.259	(0.823)	1127969	58.9658	58.85
	38 1,1,1-Trichloroethane	97	8.629	8.624	(0.860)	873526	67.5847	67.45
	41 1,1-Dichloropropene	75	8.959	8.973	(0.892)	710980	56.7100	56.60
	42 Carbon Tetrachloride	117	9.133	9.147	(0.910)	842468	66.2065	66.07
$	43 1,2-Dichloroethane-d4	102	9.307	9.321	(0.927)	111847	57.6887	57.57
	46 Benzene	78	9.534	9.530	(0.950)	1140502	57.2678	57.15
	47 1,2-Dichloroethane	62	9.534	9.530	(0.950)	557759	57.5385	57.42
*	48 Fluorobenzene	96	10.039	10.035	(1.000)	1201749	50.0000	
	49 Trichloroethene	95	10.909	10.905	(1.087)	628293	53.6864	53.58
	51 1,2-Dichloropropane	63	11.309	11.305	(1.127)	662384	65.6616	65.53
	52 Methyl methacrylate	69	11.623	11.601	(1.158)	243930	61.9249	61.80
	53 Bromodichloromethane	83	11.832	11.845	(1.179)	1189029	54.6475	54.54
	54 Dibromomethane	93	11.919	11.932	(1.187)	642244	53.3521	53.24
	56 2-Nitropropane	43	12.110	12.106	(1.206)	86858	26.0350	25.98
	58 4-Methyl-2-pentanone	100	12.859	12.820	(1.281)	34369	68.3264	68.19(M)
	59 cis-1,3-Dichloropropene	75	13.190	13.203	(1.314)	609269	45.6316	45.54
$	61 Toluene-d8	98	13.764	13.743	(0.783)	847882	73.7260	73.58
	62 Toluene	92	13.938	13.951	(0.793)	592157	77.5491	77.39(R)
	63 trans-1,3-Dichloropropene	75	14.478	14.474	(0.824)	391476	68.6395	68.50
	64 Ethyl methacrylate	69	14.617	14.596	(0.832)	314301	59.9448	59.82
	65 1,1,2-Trichloroethane	83	14.826	14.804	(0.844)	448169	89.3438	89.16(R)
	66 2-Hexanone	43	15.017	14.996	(0.854)	166947	96.9533	96.76(R)
	67 1,3-Dichloropropane	76	15.470	15.466	(0.880)	647478	85.1869	85.02(R)
	68 Tetrachloroethene	164	15.540	15.518	(0.884)	536232	76.6558	76.50(R)
	70 Chlorodibromomethane	129	16.027	16.023	(0.912)	912872	81.7285	81.56(R)
M	69 Xylenes (total)	106				1152570	223.316	222.9
	71 1,2-Dibromoethane	107	16.532	16.528	(0.941)	642056	75.2841	75.13(R)
*	72 Chlorobenzene-d5	117	17.576	17.555	(1.000)	588747	50.0000	
	73 Chlorobenzene	112	17.646	17.659	(1.004)	583763	51.0774	50.98
	74 1,1,1,2-Tetrachloroethane	131	17.838	17.799	(1.015)	624219	90.5883	90.41(R)
	75 Ethylbenzene	91	17.890	17.868	(1.018)	1103415	72.9720	72.83(R)
	76 m,p-Xylenes	106	18.081	18.095	(1.029)	766333	148.958	148.7(R)
	77 o-Xylene	106	19.230	19.226	(1.094)	386237	74.3582	74.21
	78 Styrene	104	19.352	19.331	(1.101)	369232	41.6168	41.53
	79 Bromoform	173	20.118	20.114	(1.145)	588600	71.8327	71.69
	80 Isopropylbenzene	105	20.257	20.253	(1.153)	1298279	95.2589	95.07(R)
	81 Cyclohexanone	55	20.362	20.340	(1.158)	123847	445.501	444.6
	82 1,1,2,2-Tetrachloroethane	83	20.745	20.741	(1.180)	739163	78.8854	78.73
$	83 4-Bromofluorobenzene	95	20.901	20.880	(0.910)	349619	66.0836	65.95
	84 1,2,3-Trichloropropane	75	21.128	21.124	(0.920)	428798	151.481	151.2(M)
	85 Bromobenzene	156	21.319	21.315	(0.928)	271052	73.0388	72.89
	86 n-Propylbenzene	91	21.354	21.350	(0.930)	1283471	125.812	125.6(R)
	88 trans-1,4-dichloro-2-butene	53	21.720	21.716	(0.945)	40430	130.625	130.4(R)
	87 2-Chlorotoluene	91	21.685	21.663	(0.944)	623102	92.8197	92.63(R)
	89 1,3,5-Trimethylbenzene	105	21.720	21.716	(0.945)	740777	130.239	130.0(R)
	90 4-Chlorotoluene	91	21.789	21.750	(0.948)	676804	83.1550	82.99(RMH)
	91 t-Butylbenzene	119	22.312	22.325	(0.971)	869555	109.417	109.2(R)
	92 Pentachloroethane	167	22.364	22.342	(0.973)	5236	2.07558	2.071(a)
	93 1,2,4-Trimethylbenzene	105	22.381	22.360	(0.974)	544095	106.543	106.3

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8036.D
Report Date: 28-Apr-2005 14:42

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
94	sec-Butylbenzene	105	22.642	22.621	(0.986)	1114822	131.489	131.2(R)
95	4-Isopropyltoluene	119	22.816	22.812	(0.993)	854876	156.036	155.7(R)
96	1,3-Dichlorobenzene	146	22.869	22.865	(0.995)	256112	58.7024	58.58
* 97	1,4 Dichlorobenzene-d4	152	22.973	22.969	(1.000)	157769	50.0000	
98	1,4-Dichlorobenzene	146	23.008	23.004	(1.002)	258311	48.7466	48.65
99	n-Butylbenzene	91	23.286	23.282	(1.014)	552899	102.470	102.3(R)
100	1,2-Dichlorobenzene	146	23.408	23.404	(1.019)	217956	56.8883	56.77
101	1,2-Dibromo-3-chloropropane	75	24.174	24.170	(1.052)	74781	121.809	121.6(R)
103	1,2,4-Trichlorobenzene	180	24.905	24.884	(1.084)	26213	23.9502	23.90
104	Hexachlorobutadiene	225	25.010	25.023	(1.089)	167008	132.287	132.0(R)
105	Naphthalene	128	25.114	25.093	(1.093)	16749	15.6857	15.65
106	1,2,3-Trichlorobenzene	180	25.306	25.302	(1.102)	17281	20.3943	20.35

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8036.D
Report Date: 28-Apr-2005 14:42

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSE.i
Lab File ID: ESMP8036.D
Lab Smp Id: G8WXJ1AG
Analysis Type: VOA
Quant Type: ISTD
Operator: SS
Method File: \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5mL.m
Misc Info: VBLKE117A;F5D210380-001MS;5.01G;5117629

Calibration Date: 27-APR-2005
Calibration Time: 10:05
Client Smp ID: RE73-05-58829
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
48 Fluorobenzene	1801629	900815	3603258	1201749	-33.30	
72 Chlorobenzene-d5	1382848	691424	2765696	588747	-57.43	<
97 1,4 Dichlorobenze	743020	371510	1486040	157769	-78.77	<

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	10.04	9.54	10.54	10.04	0.04
72 Chlorobenzene-d5	17.56	17.06	18.06	17.58	0.12
97 1,4 Dichlorobenze	22.97	22.47	23.47	22.97	0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8036.D
Report Date: 28-Apr-2005 14:42

STL St. Louis

RECOVERY REPORT

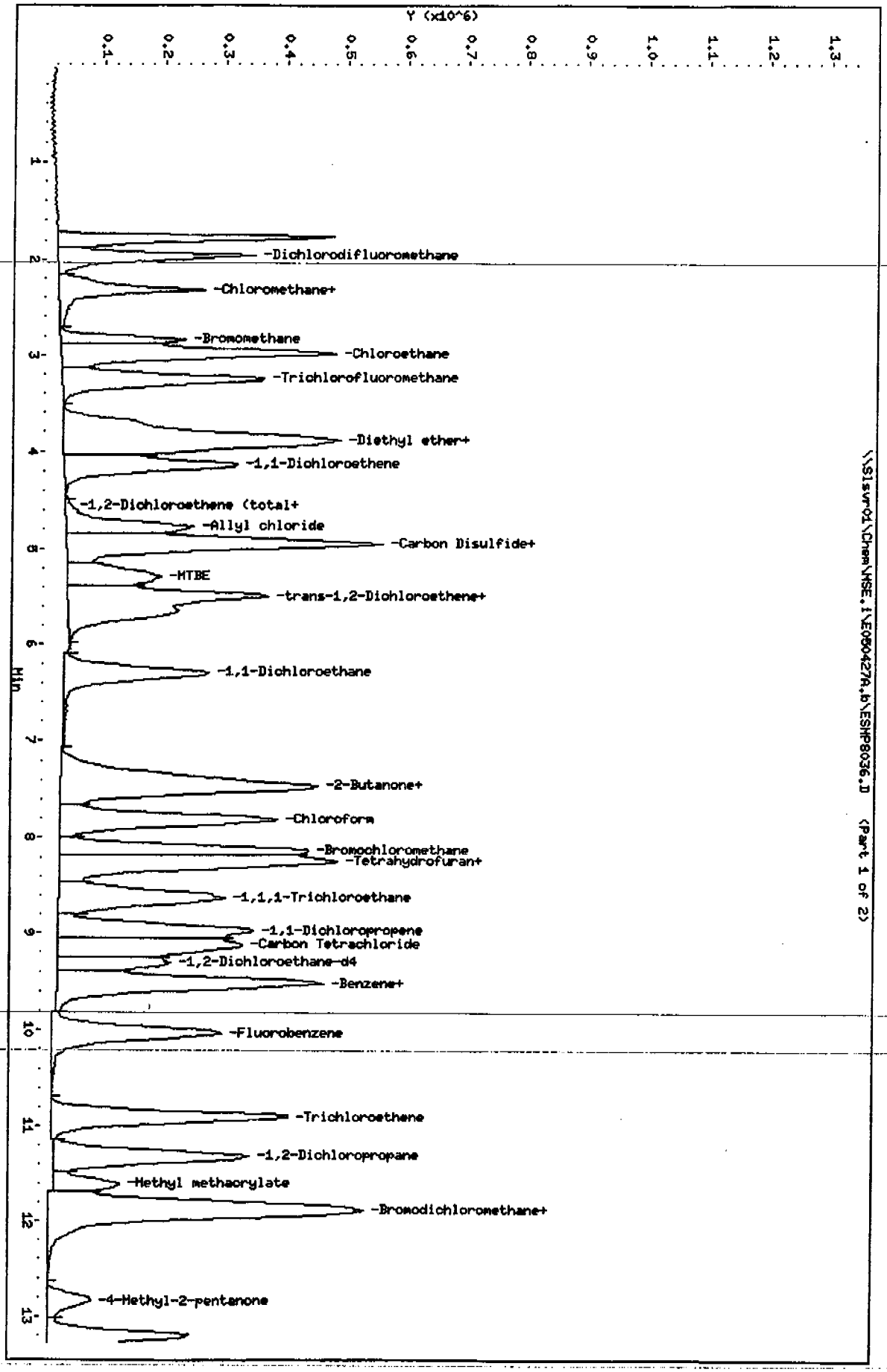
Client Name: LOS ALAMOS NATIONAL 21-APR-2005 00:00 Client SDG: F5D2103
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: G8WXJ1AG Client Smp ID: RE73-05-58829
Level: LOW Operator: SS
Data Type: MS DATA SampleType: MSD
SpikeList File: SOILMS-MSD.spk Quant Type: ISTD
Sublist File: SOIL.sub
Method File: \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5mL.m
Misc Info: VBLKE117A;F5D210380-001MS;5.01G;5117629

	SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
	1 Dichlorodifluorome	49.90	64.35	128.95	30-150
	3 Chloromethane	49.90	68.04	136.35	10-150
	4 Vinyl Chloride	49.90	72.59	145.47	37-150
	5 Bromomethane	49.90	47.41	95.02	30-150
	6 Chloroethane	49.90	70.84	141.96	42-150
	7 Trichlorofluoromet	49.90	73.03	146.36*	48-145
	8 Diethyl ether	49.90	69.28	138.84	51-150
	9 1,1,2-Trichloroflu	49.90	71.78	143.86*	54-136
	11 Acetone	49.90	49.48	99.16	30-150
	12 1,1-Dichloroethene	49.90	57.14	114.51	39-144
	16 Allyl chloride	49.90	82.02	164.37*	40-150
	18 Carbon Disulfide	49.90	47.40	94.99	30-150
	19 Methylene Chloride	49.90	59.37	118.97	30-143
M	14 1,2-Dichloroethene	99.80	110.0	110.24	41-150
	21 MTBE	49.90	76.84	153.99*	52-143
	22 trans-1,2-Dichloro	49.90	53.88	107.98	48-142
	23 n-Hexane	49.90	51.96	104.12	30-130
	25 1,1-Dichloroethane	49.90	66.12	132.50	52-141
	28 2-Butanone	49.90	60.62	121.49	30-150
	30 2,2-Dichloropropan	49.90	70.89	142.07	51-148
	31 cis-1,2-Dichloroet	49.90	56.13	112.49	45-150
	34 Chloroform	49.90	60.79	121.82	57-140
	35 Bromochloromethane	49.90	62.86	125.98	57-147
	36 Tetrahydrofuran	49.90	61.58	123.40	34-150
	38 1,1,1-Trichloroeth	49.90	67.45	135.17	55-145
	41 1,1-Dichloropropen	49.90	56.60	113.42	61-139
	42 Carbon Tetrachlori	49.90	66.07	132.41	52-147
	46 Benzene	49.90	57.15	114.54	59-135
	47 1,2-Dichloroethane	49.90	57.42	115.08	55-150
	49 Trichloroethene	49.90	53.58	107.37	30-150
	51 1,2-Dichloropropan	49.90	65.53	131.32	55-143
	52 Methyl methacrylat	49.90	61.80	123.85	47-150
	53 Bromodichlorometha	49.90	54.54	109.30	51-145
	54 Dibromomethane	49.90	53.24	106.70	50-150
	56 2-Nitropropane	24.95	25.98	104.14	30-150
	58 4-Methyl-2-pentano	49.90	68.19	136.65	30-150
	59 cis-1,3-Dichloropr	49.90	45.54	91.26	56-141
	62 Toluene	49.90	77.39	155.10*	53-146
	63 trans-1,3-Dichloro	49.90	68.50	137.28	51-150
	64 Ethyl methacrylate	49.90	59.82	119.89	30-150

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8036.D
Report Date: 28-Apr-2005 14:42

SPIKE	COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
65	1,1,2-Trichloroeth	49.90	89.16	178.69*	41-150
66	2-Hexanone	49.90	96.76	193.91*	30-150
67	1,3-Dichloropropan	49.90	85.02	170.37*	41-150
68	Tetrachloroethene	49.90	76.50	153.31*	30-136
70	Chlorodibromometha	49.90	81.56	163.46*	51-150
71	1,2-Dibromoethane	49.90	75.13	150.57*	50-150
73	Chlorobenzene	49.90	50.98	102.15	60-136
74	1,1,1,2-Tetrachlor	49.90	90.41	181.18*	55-148
75	Ethylbenzene	49.90	72.83	145.94*	61-134
76	m,p-Xylenes	99.80	148.7	148.96*	65-131
77	o-Xylene	49.90	74.21	148.72	44-150
78	Styrene	49.90	41.53	83.23	58-138
79	Bromoform	49.90	71.69	143.67	51-150
80	Isopropylbenzene	49.90	95.07	190.52*	61-150
81	Cyclohexanone	499.0	444.6	89.10	30-150
82	1,1,2,2-Tetrachlor	49.90	78.73	157.77	40-163
85	Bromobenzene	49.90	72.89	146.08	30-150
86	n-Propylbenzene	49.90	125.6	251.62*	35-150
88	trans-1,4-dichloro	49.90	130.4	261.25*	30-150
87	2-Chlorotoluene	49.90	92.63	185.64*	30-150
89	1,3,5-Trimethylben	49.90	130.0	260.48*	30-150
90	4-Chlorotoluene	49.90	82.99	166.31*	45-150
91	t-Butylbenzene	49.90	109.2	218.83*	32-148
94	sec-Butylbenzene	49.90	131.2	262.98*	42-150
95	4-Isopropyltoluene	49.90	155.7	312.07*	49-150
96	1,3-Dichlorobenzen	49.90	58.58	117.40	57-136
98	1,4-Dichlorobenzen	49.90	48.65	97.49	51-133
99	n-Butylbenzene	49.90	102.3	204.94*	34-150
100	1,2-Dichlorobenzen	49.90	56.77	113.78	53-141
103	1,2,4-Trichloroben	49.90	23.90	47.90	30-150
101	1,2-Dibromo-3-chlo	49.90	121.6	243.62*	30-150
104	Hexachlorobutadien	49.90	132.0	264.57*	30-150
105	Naphthalene	49.90	15.65	31.37	30-150
106	1,2,3-Trichloroben	49.90	20.35	40.79	30-150

SURROGATE	COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 37	Dibromofluorometha	49.90	58.85	117.93	61-140
$ 43	1,2-Dichloroethane	49.90	57.57	115.38	78-122
$ 61	Toluene-d8	49.90	73.58	147.45	60-148
$ 83	4-Bromofluorobenze	49.90	65.95	132.17	56-150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1.1
1.2
1.3
Min
1
2
3
4
5
6
7
8
9
10
11
12
13
-Dichlorodifluoromethane
-Chloromethane+
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-Diethyl ether+
-1,1-Dichloroethene
-1,2-Dichloroethene (total+
-Allyl chloride
-Carbon Disulfide+
-MTBE
-trans-1,2-Dichloroethene+
-1,1-Dichloroethane
-2-Butanone+
-Chloroform
-Bromochloromethane
-Tetrahydrofuran+
-1,1,1-Trichloroethane
-1,1-Dichloropropene
-Carbon Tetrachloride
-1,2-Dichloroethane-d4
-Benzene+
-Fluorobenzene
-Trichloroethene
-1,2-Dichloropropane
-Methyl methacrylate
-Bromodichloromethane+
-4-Methyl-2-pentanone
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Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESHP8036.D
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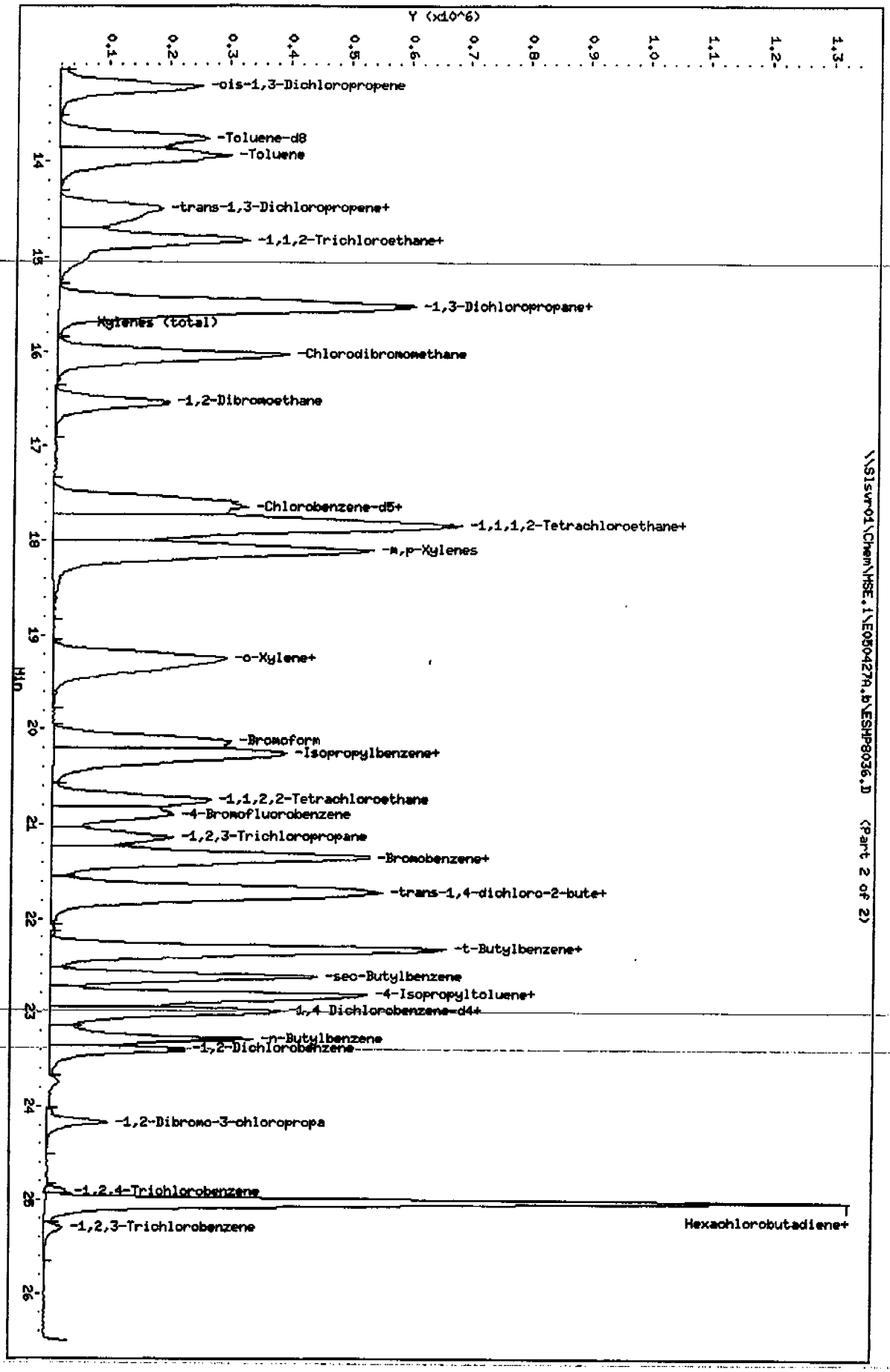
Client ID: RE73-05-8822
Sample Info: GBWXJ1AC;E050427A.b;
Column phase: RTX-502.2
Instrument: MSE.i
Operator: SS
Column diameter: 0.53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0.6
0.7
0.8
0.9
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1.2
1.3
Min
14
15
16
17
18
19
20
21
22
23
24
25
26
-cis-1,3-Dichloropropene
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane+
-1,3-Dichloropropane+
Xylenes (total)
-Chlorodibromomethane
-1,2-Dibromoethane
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
-o-Xylene+
-Bromoform
-Isopropylbenzene+
-1,1,2,2-Tetrachloroethane
-4-Bromofluorobenzene
-1,2,3-Trichloropropane
-Bromobenzene+
-trans-1,4-dichloro-2-bute+
-t-Butylbenzene+
-sec-Butylbenzene
-4-Isopropyltoluene+
-1,4-Dichlorobenzene-d4+
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-1,2,3-Trichlorobenzene
Hexachlorobutadiene+
\\Slsvr01\Chem\MSE.i\E050427A.b\ESHP8036.D (Part 2 of 2)
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Date : 27-APR-2005 15:20
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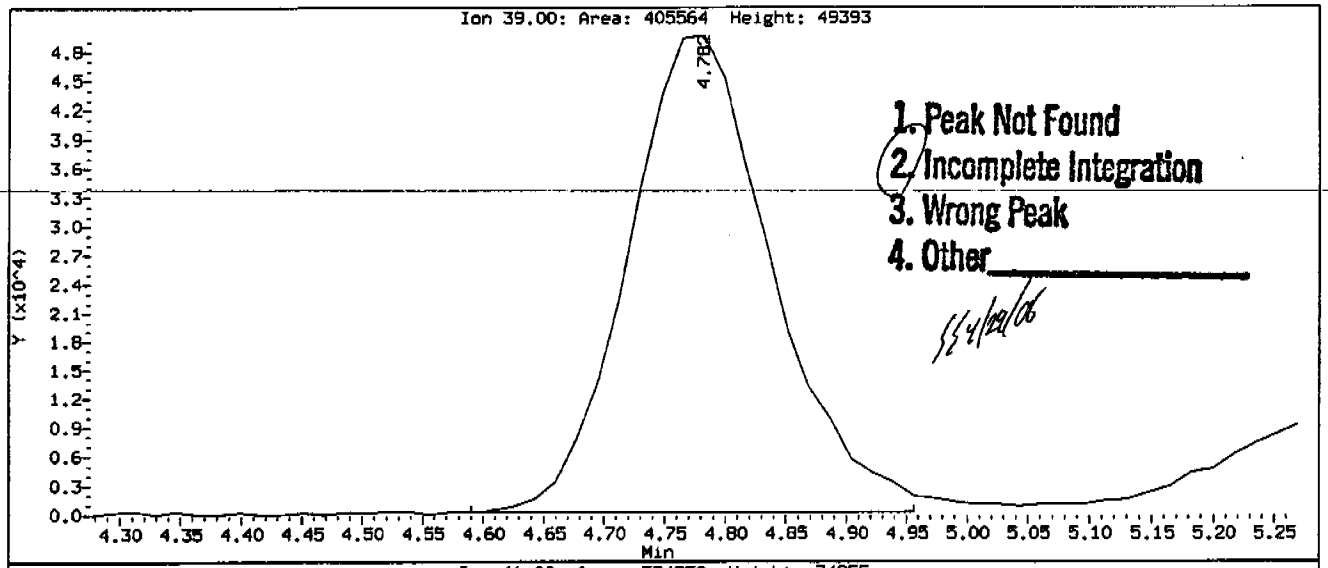
Sample Info: G8MX31AC;E050427A.b;
Column phase: RTX-502.2
Instrument: MSE.i
Operator: SS
Column diameter: 0.53

Data File: \\Slavr01\Chem\MSE.i\E050427A.b\ESMP8036.D
Injection Date: 27-APR-2005 15:20
Instrument: MSE.i
Client Sample ID: RE73-05-58829

Compound: Allyl chloride
CAS Number: 107-05-1



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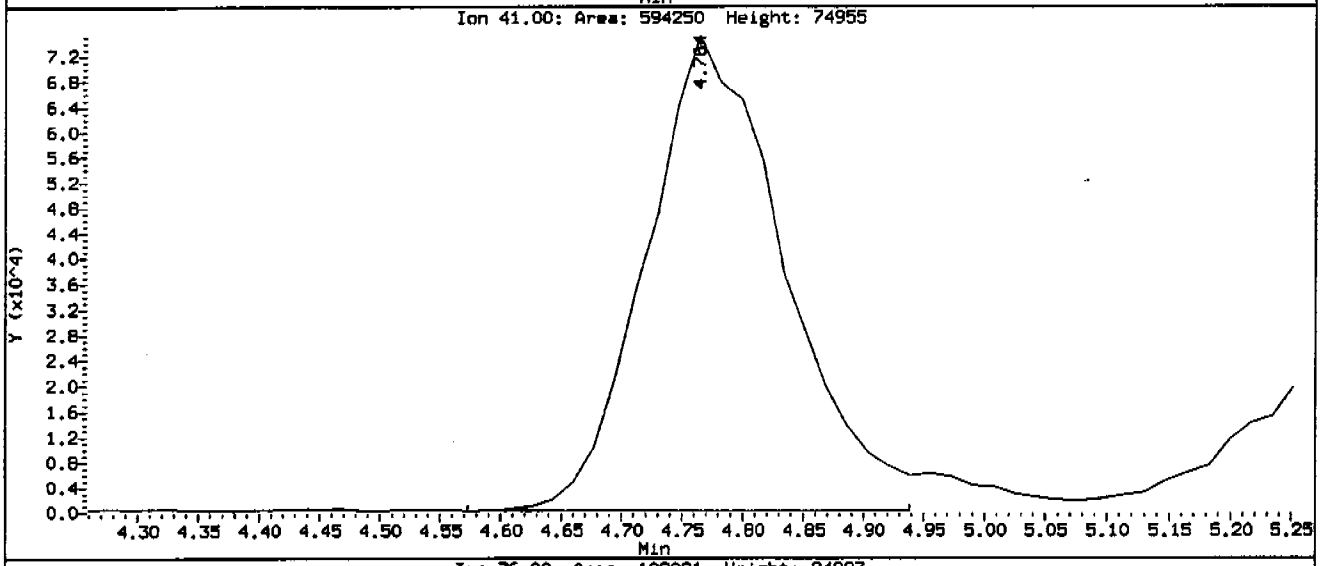
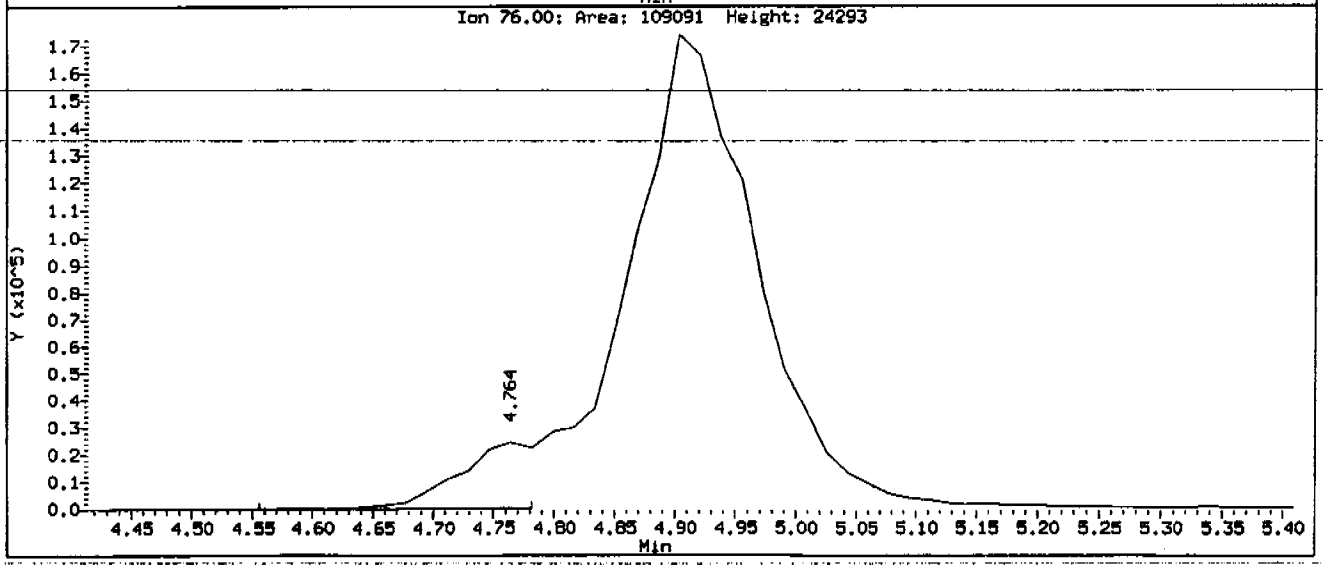
3. Wrong Peak
4. Other_____

5/4/05/06





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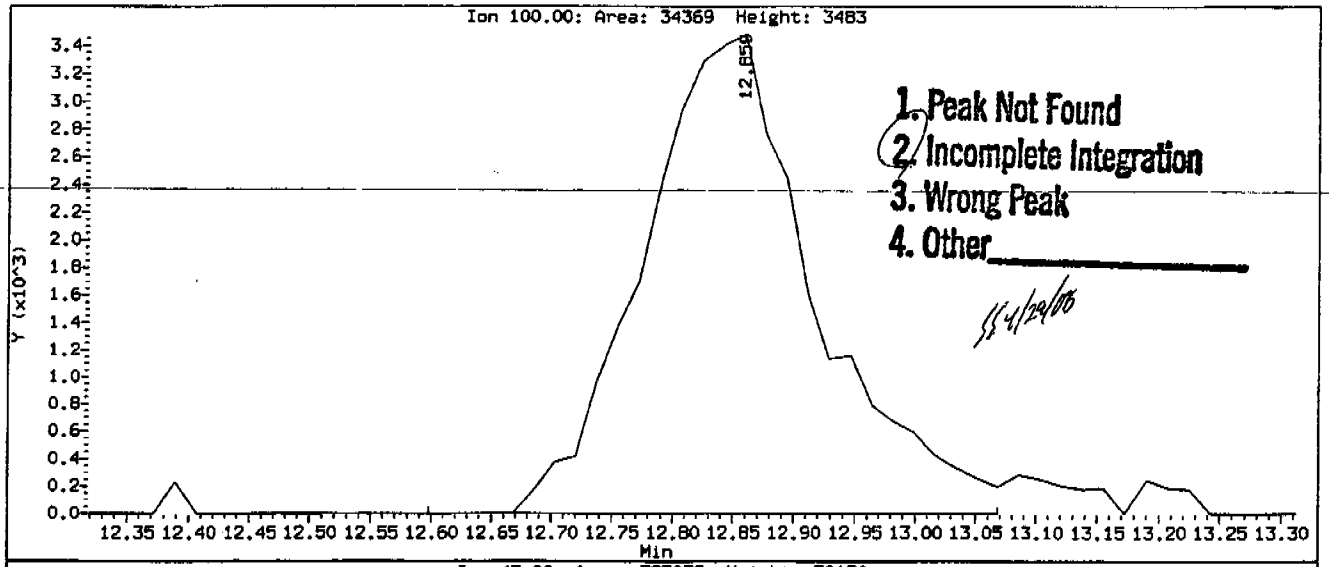
Injection Date: 27-APR-2005 15:20
Instrument: MSE.i
Client Sample ID: RE73-05-58829

Compound: 4-Methyl-2-pentanone
CAS Number: 108-10-1



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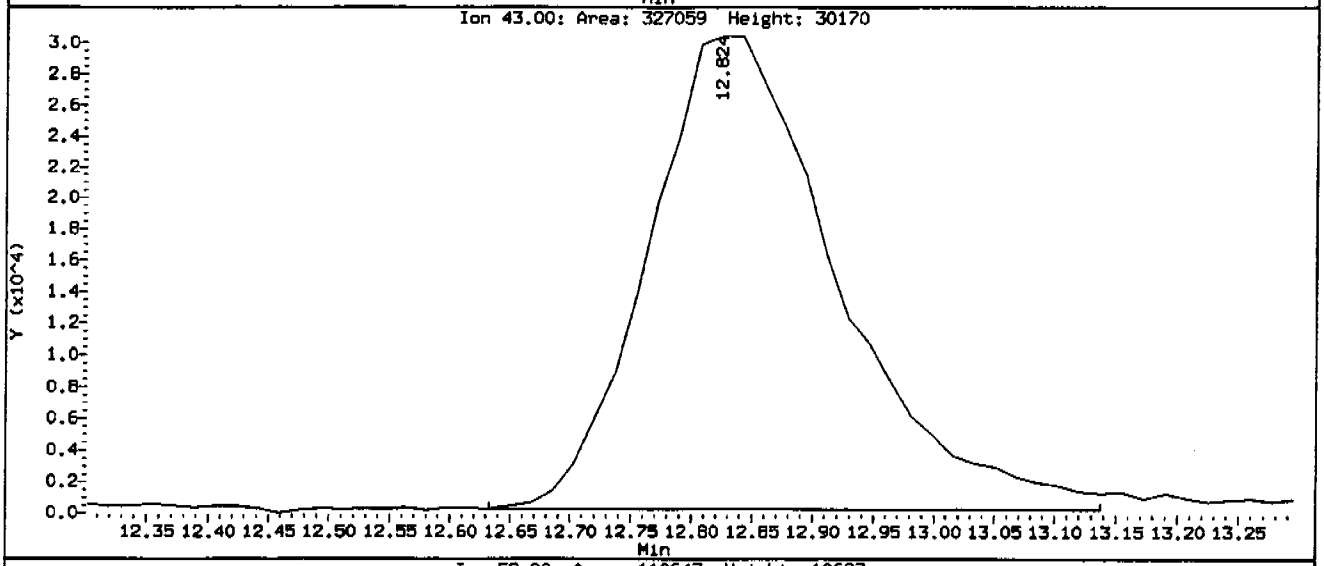
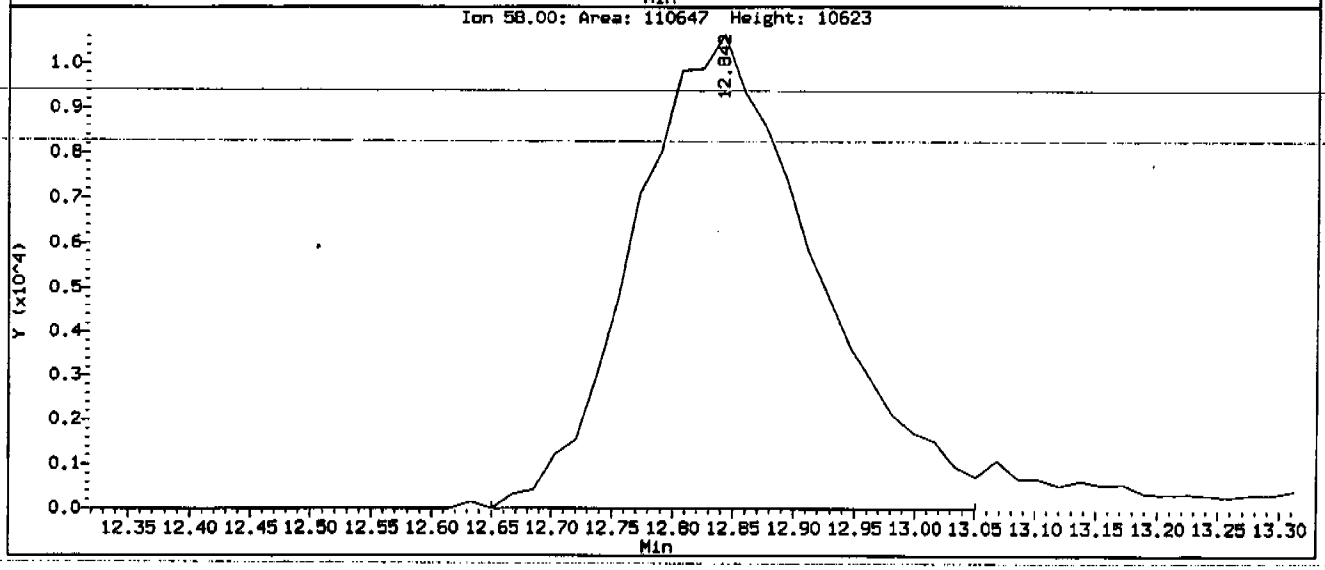
SS 4/29/05





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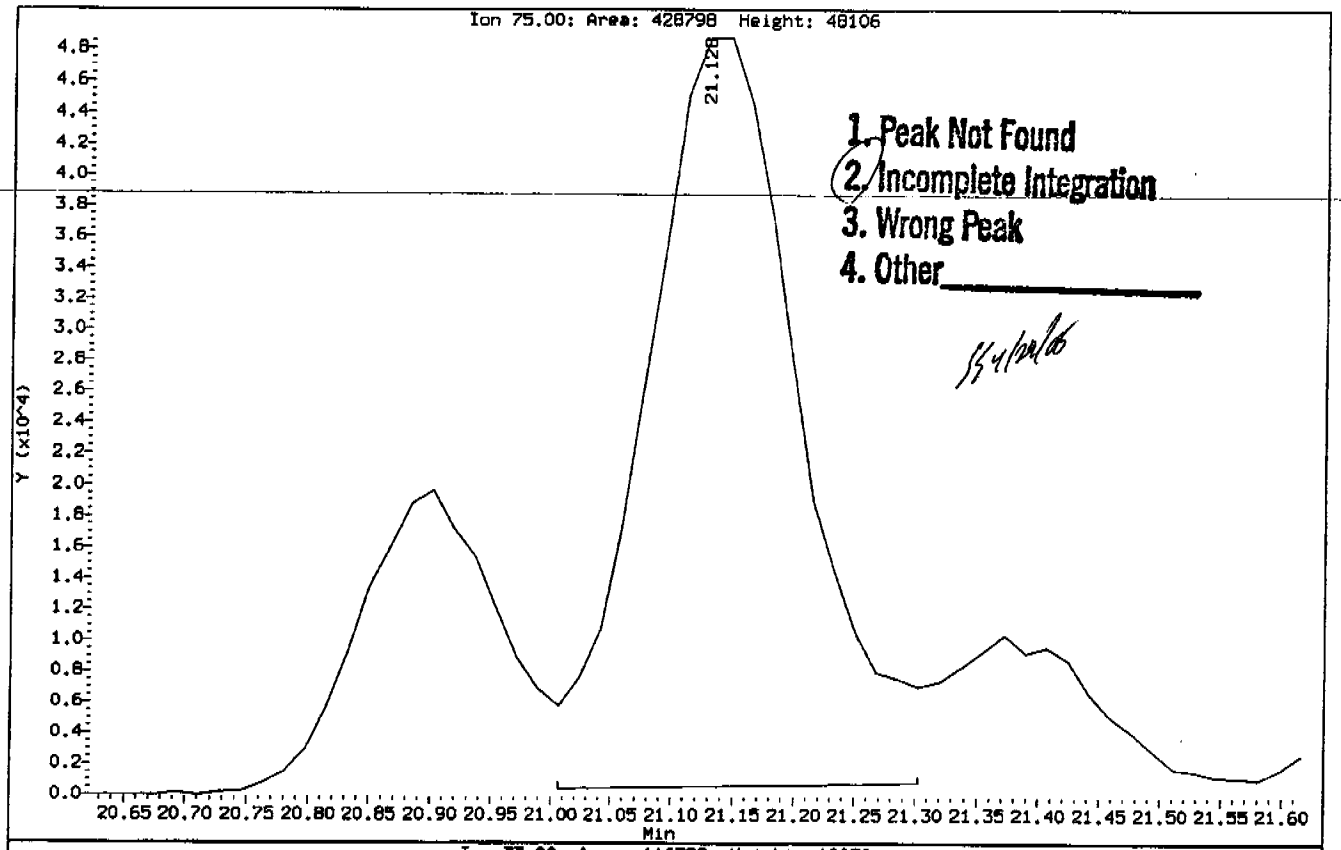
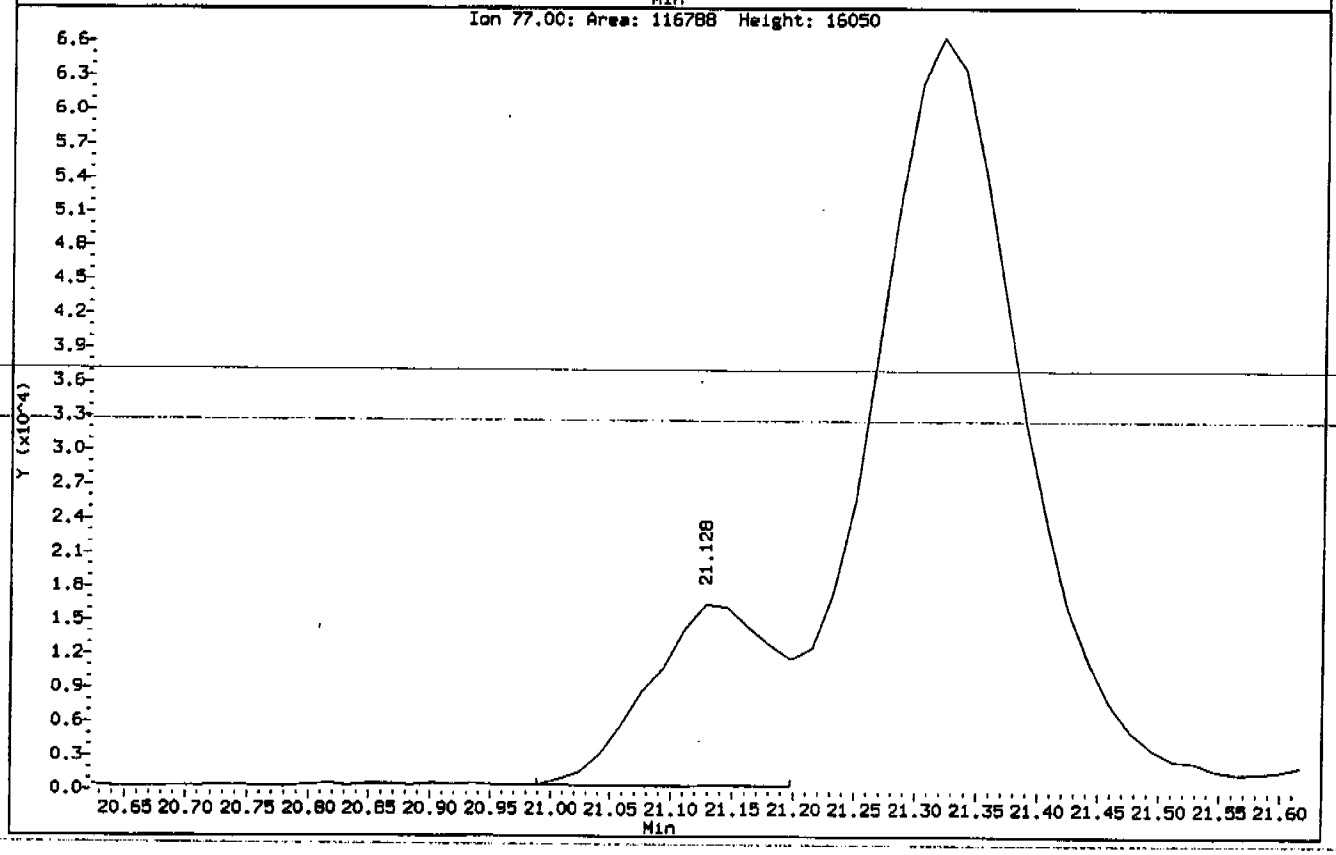
Injection Date: 27-APR-2005 15:20
Instrument: MSE.i
Client Sample ID: RE73-05-58829

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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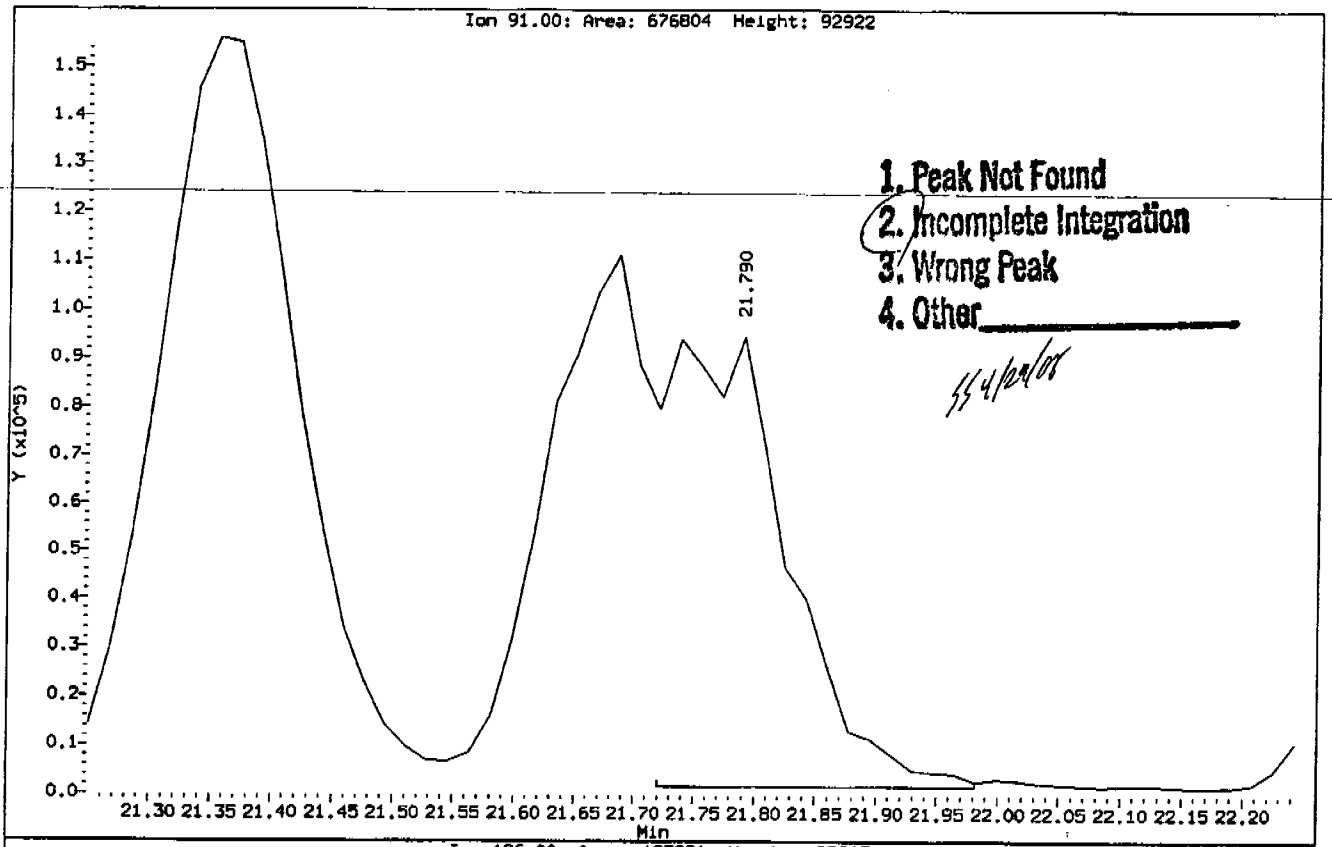
Injection Date: 27-APR-2005 15:20
Instrument: MSE.i
Client Sample ID: RE73-05-58629

Compound: 4-Chlorotoluene
CAS Number: 106-43-4



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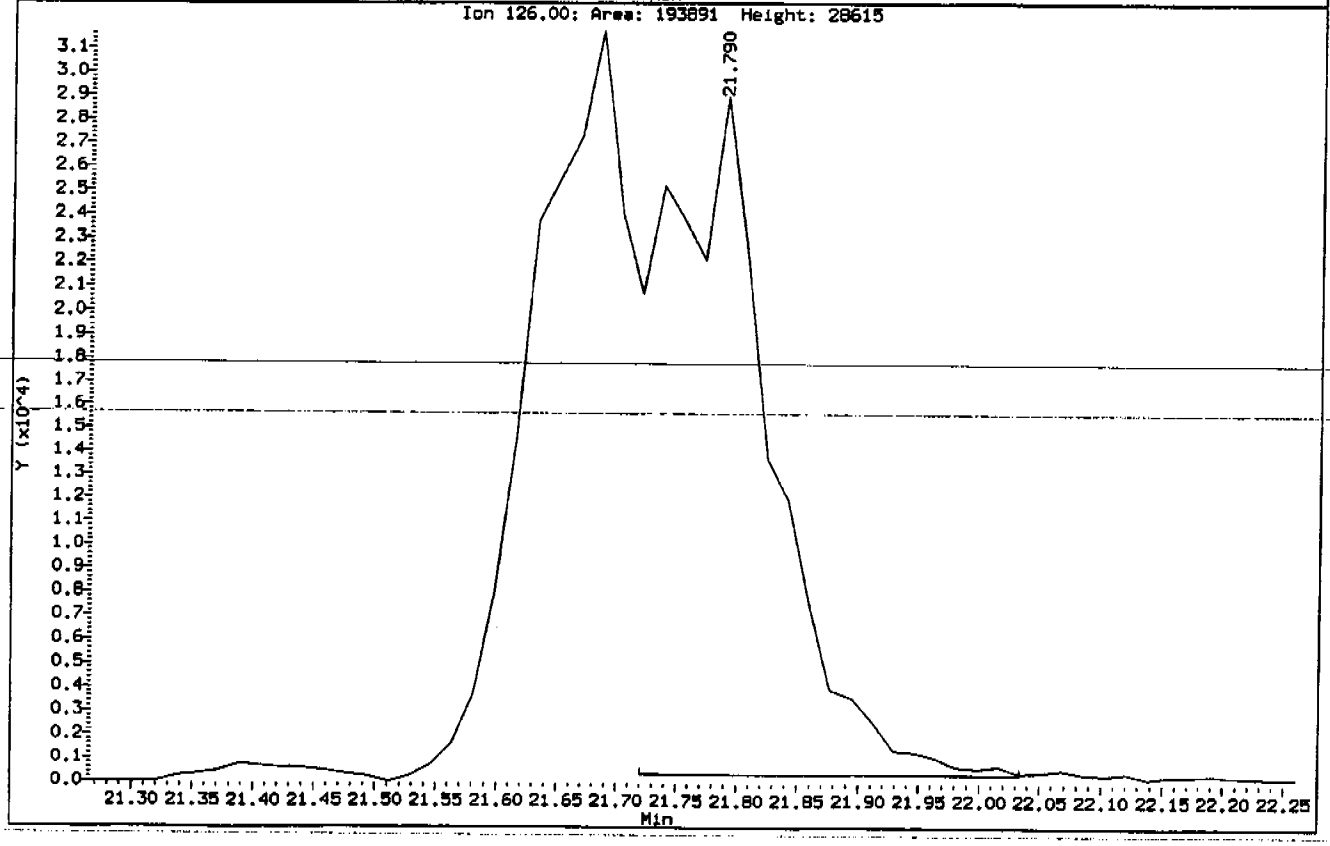
SS 4/28/08



Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8037.D
Report Date: 28-Apr-2005 14:47

STL St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8037.D
Lab Smp Id: G8WXJ1AF Client Smp ID: RE73-05-58829
Inj Date : 27-APR-2005 15:57
Operator : SS Inst ID: MSE.i
Smp Info : G8WXJ1AF;E050427A.b;
Misc Info : VBLKE117A;F5D210380-001MSD;5.01G;5117629
Comment : NONE
Method : \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5mL.m
Meth Date : 27-Apr-2005 10:45 stitess Quant Type: ISTD
Cal Date : 24-APR-2005 23:36 Cal File: ECAL7969.D
Als bottle: 7 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOIL.sub
Target Version: 4.10
Processing Host: SLVOA03

Concentration Formula: Amt * DF * Wsd/Ws* * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Wsd	5.000	DefSampleWeight
Ws	5.010	SampleWeight
Va	100.000	AliquotVolume
Cpnd Variable		Local Compound Variable

5/4/29/05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	1 Dichlorodifluoromethane	85	1.957	1.957	(0.195)	841749	64.8598	64.73
	3 Chloromethane	50	2.288	2.288	(0.228)	400565	69.0227	68.88
	4 Vinyl Chloride	62	2.323	2.323	(0.231)	377676	71.6161	71.47
	5 Bromomethane	94	2.845	2.827	(0.284)	490770	50.0786	49.98
	6 Chloroethane	64	2.949	2.932	(0.294)	270108	70.8057	70.66
	7 Trichlorofluoromethane	101	3.263	3.245	(0.325)	994561	74.0366	73.89(R)
	8 Diethyl ether	74	3.698	3.698	(0.369)	180286	75.6371	75.49(R)
	9 1,1,2-Trichlorofluoroethane	151	3.889	3.889	(0.388)	746250	73.6913	73.54(R)
	11 Acetone	58	4.011	3.994	(0.400)	21943	53.7935	53.69
	12 1,1-Dichloroethene	96	4.133	4.133	(0.412)	434831	59.7025	59.58
	15 Iodomethane	142	4.655	4.624	(0.464)	81110	7.10650	7.092
	16 Allyl chloride	39	4.760	4.777	(0.474)	387254	86.4612	86.29(RM)
	18 Carbon Disulfide	76	4.916	4.916	(0.490)	1204777	48.7124	48.62
	19 Methylene Chloride	84	4.969	4.969	(0.495)	599546	64.1478	64.02
M	14 1,2-Dichloroethene (total)	96				946033	112.521	112.3
	21 MTBE	73	5.299	5.299	(0.528)	756486	83.0488	82.88(R)
	22 trans-1,2-Dichloroethene	96	5.491	5.491	(0.547)	452023	55.6275	55.52
	23 n-Hexane	57	5.648	5.648	(0.563)	379534	52.3353	52.23
	25 1,1-Dichloroethane	63	6.309	6.292	(0.629)	1001630	66.9714	66.84
	24 Vinyl acetate	43	5.665	5.648	(0.565)	275213	51.6284	51.52
	28 2-Butanone	72	7.232	7.214	(0.721)	23360	59.4454	59.33

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8037.D
Report Date: 28-Apr-2005 14:47

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
30	2,2-Dichloropropane	77	7.388	7.406	(0.736)	649157	68.8288	68.69
31	cis-1,2-Dichloroethene	96	7.493	7.493	(0.747)	494010	56.8940	56.78
34	Chloroform	83	7.824	7.806	(0.780)	1079036	61.5007	61.38
35	Bromochloromethane	128	8.120	8.120	(0.809)	378487	64.1499	64.02
36	Tetrahydrofuran	71	8.276	8.241	(0.825)	28289	66.3135	66.18
$ 37	Dibromofluoromethane	113	8.259	8.259	(0.823)	1032580	59.4738	59.36
38	1,1,1-Trichloroethane	97	8.624	8.624	(0.859)	801000	68.2816	68.14
41	1,1-Dichloropropene	75	8.955	8.973	(0.892)	657985	57.8252	57.71
42	Carbon Tetrachloride	117	9.147	9.147	(0.912)	781231	67.6434	67.51
$ 43	1,2-Dichloroethane-d4	102	9.321	9.321	(0.929)	106582	60.5688	60.45
46	Benzene	78	9.512	9.530	(0.948)	1056889	58.4713	58.35
47	1,2-Dichloroethane	62	9.530	9.530	(0.950)	520846	59.1997	59.08
* 48	Fluorobenzene	96	10.035	10.035	(1.000)	1090724	50.0000	
49	Trichloroethene	95	10.888	10.905	(1.085)	569904	53.6540	53.55
51	1,2-Dichloropropane	63	11.323	11.305	(1.128)	575096	62.8117	62.69
52	Methyl methacrylate	69	11.619	11.601	(1.158)	252736	70.6913	70.55
53	Bromodichloromethane	83	11.845	11.845	(1.180)	1107912	56.1025	55.99
54	Dibromomethane	93	11.915	11.932	(1.187)	612947	56.1014	55.99
56	2-Nitropropane	43	12.106	12.106	(1.206)	83730	27.6521	27.60
58	4-Methyl-2-pentanone	100	12.802	12.820	(1.276)	32341	70.8392	70.70(M)
59	cis-1,3-Dichloropropene	75	13.203	13.203	(1.316)	587822	48.5067	48.41
$ 61	Toluene-d8	98	13.743	13.743	(0.783)	808117	75.3599	75.21(R)
62	Toluene	92	13.934	13.951	(0.794)	561487	78.8607	78.70(R)
63	trans-1,3-Dichloropropene	75	14.474	14.474	(0.824)	360855	67.8551	67.72
64	Ethyl methacrylate	69	14.613	14.596	(0.832)	235227	48.1142	48.02
65	1,1,2-Trichloroethane	83	14.804	14.804	(0.843)	421049	90.0194	89.84(R)
66	2-Hexanone	43	15.031	14.996	(0.856)	159257	99.1890	98.99(R)
67	1,3-Dichloropropane	76	15.466	15.466	(0.881)	591207	83.4196	83.25(R)
68	Tetrachloroethene	164	15.518	15.518	(0.884)	477692	73.2354	73.09(R)
70	Chlorodibromomethane	129	16.040	16.023	(0.914)	813944	78.1518	78.00(R)
M 69	Xylenes (total)	106				1088812	226.281	225.8
71	1,2-Dibromoethane	107	16.545	16.528	(0.942)	596060	74.9551	74.80
* 72	Chlorobenzene-d5	117	17.555	17.555	(1.000)	548969	50.0000	
73	Chlorobenzene	112	17.659	17.659	(1.006)	548023	51.4248	51.32
74	1,1,1,2-Tetrachloroethane	131	17.816	17.799	(1.015)	607287	94.5170	94.33(R)
75	Ethylbenzene	91	17.868	17.868	(1.018)	1106318	78.4654	78.31(R)
76	m,p-Xylenes	106	18.112	18.095	(1.032)	740039	154.270	154.0(R)
77	o-Xylene	106	19.226	19.226	(1.095)	348773	72.0110	71.87
78	Styrene	104	19.365	19.331	(1.103)	318250	38.4697	38.39
79	Bromoform	173	20.114	20.114	(1.146)	527209	69.0026	68.86
80	Isopropylbenzene	105	20.288	20.253	(1.156)	1148343	90.3629	90.18(R)
81	Cyclohexanone	55	20.358	20.340	(1.160)	116112	447.941	447.0
82	1,1,2,2-Tetrachloroethane	83	20.741	20.741	(1.181)	686145	78.5331	78.38
$ 83	4-Bromofluorobenzene	95	20.897	20.880	(0.910)	362011	85.3951	85.22(R)
84	1,2,3-Trichloropropane	75	21.124	21.124	(0.920)	404298	178.246	177.9(M)
85	Bromobenzene	156	21.315	21.315	(0.928)	243678	81.9465	81.78(R)
86	n-Propylbenzene	91	21.350	21.350	(0.929)	1143050	139.835	139.6(R)
88	trans-1,4-dichloro-2-butene	53	21.716	21.716	(0.945)	33563	135.331	135.1(R)
87	2-Chlorotoluene	91	21.663	21.663	(0.943)	641523	119.263	119.0(R)
89	1,3,5-Trimethylbenzene	105	21.716	21.716	(0.945)	700599	153.722	153.4(R)
90	4-Chlorotoluene	91	21.768	21.750	(0.948)	535038	82.0395	81.88(RM)
91	t-Butylbenzene	119	22.325	22.325	(0.972)	855696	134.375	134.1(R)
92	Pentachloroethane	167	22.360	22.342	(0.973)	3266	1.61573	1.612(a)
93	1,2,4-Trimethylbenzene	105	22.377	22.360	(0.974)	502415	122.779	122.5

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8037.D
Report Date: 28-Apr-2005 14:47

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
94	sec-Butylbenzene	105	22.621	22.621	(0.985)	1066405	156.970	156.6(R)
95	4-Isopropyltoluene	119	22.812	22.812	(0.993)	786370	179.128	178.8(R)
96	1,3-Dichlorobenzene	146	22.882	22.865	(0.996)	210877	60.3209	60.20
* 97	1,4 Dichlorobenzene-d4	152	22.969	22.969	(1.000)	126418	50.0000	
98	1,4-Dichlorobenzene	146	23.004	23.004	(1.002)	207117	48.7787	48.68
99	n-Butylbenzene	91	23.282	23.282	(1.014)	469777	108.656	108.4(R)
100	1,2-Dichlorobenzene	146	23.404	23.404	(1.019)	197209	64.2383	64.11
101	1,2-Dibromo-3-chloropropane	75	24.170	24.170	(1.052)	67617	137.453	137.2(R)
103	1,2,4-Trichlorobenzene	180	24.901	24.884	(1.084)	19261	21.9626	21.92
104	Hexachlorobutadiene	225	25.006	25.023	(1.089)	152181	150.436	150.1(R)
105	Naphthalene	128	25.110	25.093	(1.093)	14570	17.0290	16.99
106	1,2,3-Trichlorobenzene	180	25.302	25.302	(1.102)	14063	20.7124	20.67

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8037.D
Report Date: 28-Apr-2005 14:47

STL St. Louis

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSE.i
Lab File ID: ESMP8037.D
Lab Smp Id: G8WXJ1AF
Analysis Type: VOA
Quant Type: ISTD
Operator: SS
Method File: \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5mL.m
Misc Info: VBLKE117A;F5D210380-001MSD;5.01G;5117629

Calibration Date: 27-APR-2005
Calibration Time: 10:05
Client Smp ID: RE73-05-58829
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
48 Fluorobenzene	1801629	900815	3603258	1090724	-39.46	
72 Chlorobenzene-d5	1382848	691424	2765696	548969	-60.30	<
97 1,4 Dichlorobenze	743020	371510	1486040	126418	-82.99	<

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
48 Fluorobenzene	10.04	9.54	10.54	10.04	-0.00
72 Chlorobenzene-d5	17.56	17.06	18.06	17.56	-0.00
97 1,4 Dichlorobenze	22.97	22.47	23.47	22.97	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8037.D
Report Date: 28-Apr-2005 14:47

STL St. Louis

RECOVERY REPORT

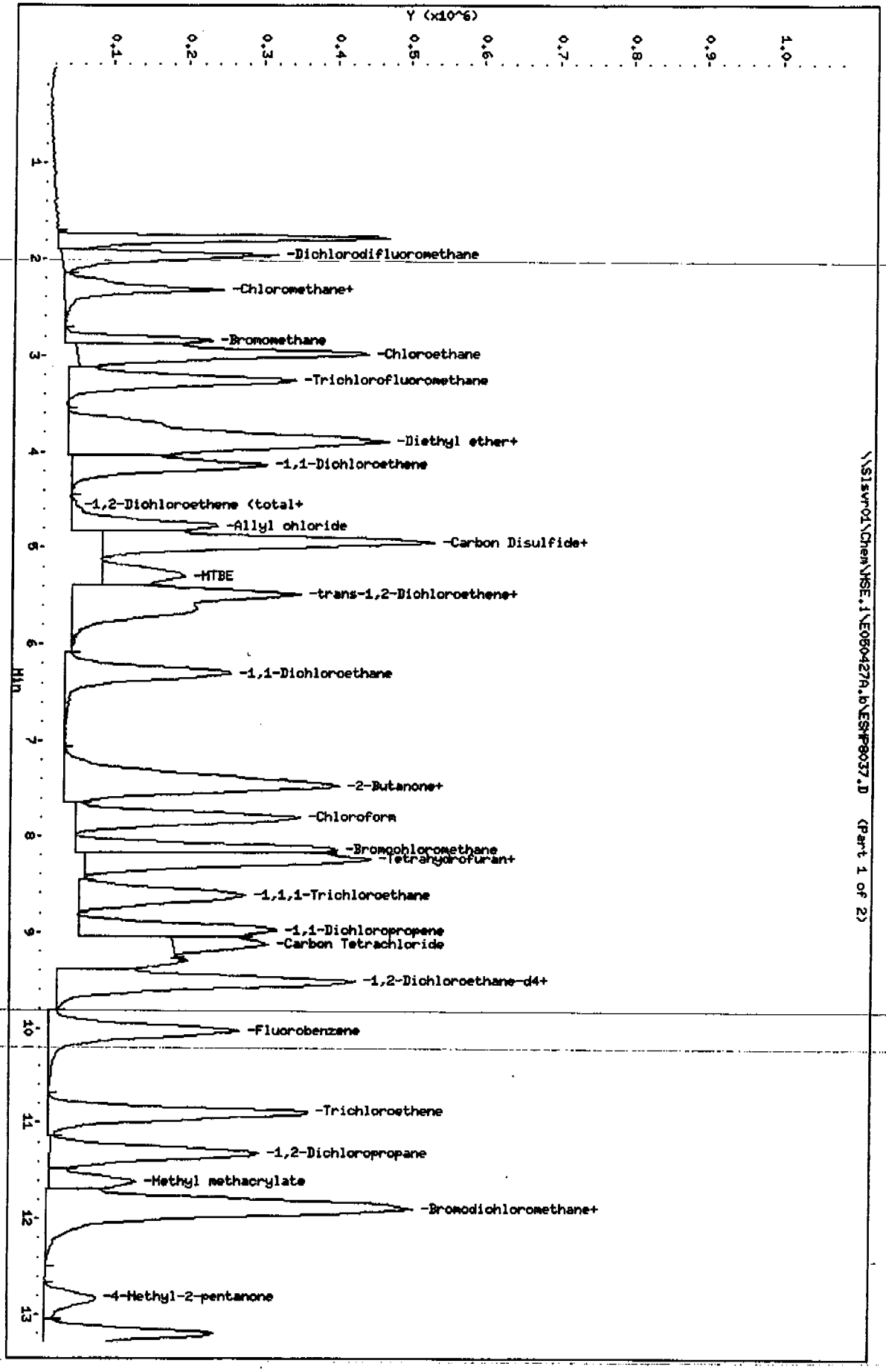
Client Name: LOS ALAMOS NATIONAL 21-APR-2005 00:00 Client SDG: F5D2103
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: G8WXJ1AF Client Smp ID: RE73-05-58829
Level: LOW Operator: SS
Data Type: MS DATA SampleType: MS
SpikeList File: SOILMS-MSD.spk Quant Type: ISTD
Sublist File: SOIL.sub
Method File: \\Slsvr01\Chem\MSE.i\E050427A.b\8260B-5mL.m
Misc Info: VBLKE117A;F5D210380-001MSD;5.01G;5117629

	SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
	1 Dichlorodifluorome	49.90	64.73	129.72	30-150
	3 Chloromethane	49.90	68.88	138.05	10-150
	4 Vinyl Chloride	49.90	71.47	143.23	37-150
	5 Bromomethane	49.90	49.98	100.16	30-150
	6 Chloroethane	49.90	70.66	141.61	42-150
	7 Trichlorofluoromet	49.90	73.89	148.07*	48-145
	8 Diethyl ether	49.90	75.49	151.27*	51-150
	9 1,1,2-Trichloroflu	49.90	73.54	147.38*	54-136
	11 Acetone	49.90	53.69	107.59	30-150
	12 1,1-Dichloroethene	49.90	59.58	119.40	39-144
	16 Allyl chloride	49.90	86.29	172.92*	40-150
	18 Carbon Disulfide	49.90	48.62	97.42	30-150
	19 Methylene Chloride	49.90	64.02	128.30	30-143
M	14 1,2-Dichloroethene	99.80	112.3	112.52	41-150
	21 MTBE	49.90	82.88	166.10*	52-143
	22 trans-1,2-Dichloro	49.90	55.52	111.26	48-142
	23 n-Hexane	49.90	52.23	104.67	30-130
	25 1,1-Dichloroethane	49.90	66.84	133.94	52-141
	28 2-Butanone	49.90	59.33	118.89	30-150
	30 2,2-Dichloropropan	49.90	68.69	137.66	51-148
	31 cis-1,2-Dichloroet	49.90	56.78	113.79	45-150
	34 Chloroform	49.90	61.38	123.00	57-140
	35 Bromochloromethane	49.90	64.02	128.30	57-147
	36 Tetrahydrofuran	49.90	66.18	132.63	34-150
	38 1,1,1-Trichloroeth	49.90	68.14	136.56	55-145
	41 1,1-Dichloropropen	49.90	57.71	115.65	61-139
	42 Carbon Tetrachlori	49.90	67.51	135.29	52-147
	46 Benzene	49.90	58.35	116.94	59-135
	47 1,2-Dichloroethane	49.90	59.08	118.40	55-150
	49 Trichloroethene	49.90	53.55	107.31	30-150
	51 1,2-Dichloropropan	49.90	62.69	125.62	55-143
	52 Methyl methacrylat	49.90	70.55	141.38	47-150
	53 Bromodichlorometha	49.90	55.99	112.20	51-145
	54 Dibromomethane	49.90	55.99	112.20	50-150
	56 2-Nitropropane	24.95	27.60	110.61	30-150
	58 4-Methyl-2-pentano	49.90	70.70	141.68	30-150
	59 cis-1,3-Dichloropr	49.90	48.41	97.01	56-141
	62 Toluene	49.90	78.70	157.72*	53-146
	63 trans-1,3-Dichloro	49.90	67.72	135.71	51-150
	64 Ethyl methacrylate	49.90	48.02	96.23	30-150

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8037.D
Report Date: 28-Apr-2005 14:47

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
65 1,1,2-Trichloroeth	49.90	89.84	180.04*	41-150
66 2-Hexanone	49.90	98.99	198.38*	30-150
67 1,3-Dichloropropan	49.90	83.25	166.84*	41-150
68 Tetrachloroethene	49.90	73.09	146.47*	30-136
70 Chlorodibromometha	49.90	78.00	156.30*	51-150
71 1,2-Dibromoethane	49.90	74.80	149.91	50-150
73 Chlorobenzene	49.90	51.32	102.85	60-136
74 1,1,1,2-Tetrachlor	49.90	94.33	189.03*	55-148
75 Ethylbenzene	49.90	78.31	156.93*	61-134
76 m,p-Xylenes	99.80	154.0	154.27*	65-131
77 o-Xylene	49.90	71.87	144.02	44-150
78 Styrene	49.90	38.39	76.94	58-138
79 Bromoform	49.90	68.86	138.01	51-150
80 Isopropylbenzene	49.90	90.18	180.73*	61-150
81 Cyclohexanone	499.0	447.0	89.59	30-150
82 1,1,2,2-Tetrachlor	49.90	78.38	157.07	40-163
85 Bromobenzene	49.90	81.78	163.89*	30-150
86 n-Propylbenzene	49.90	139.6	279.67*	35-150
88 trans-1,4-dichloro	49.90	135.1	270.66*	30-150
87 2-Chlorotoluene	49.90	119.0	238.53*	30-150
89 1,3,5-Trimethylben	49.90	153.4	307.44*	30-150
90 4-Chlorotoluene	49.90	81.88	164.08*	45-150
91 t-Butylbenzene	49.90	134.1	268.75*	32-148
94 sec-Butylbenzene	49.90	156.6	313.94*	42-150
95 4-Isopropyltoluene	49.90	178.8	358.26*	49-150
96 1,3-Dichlorobenzen	49.90	60.20	120.64	57-136
98 1,4-Dichlorobenzen	49.90	48.68	97.56	51-133
99 n-Butylbenzene	49.90	108.4	217.31*	34-150
100 1,2-Dichlorobenzen	49.90	64.11	128.48	53-141
103 1,2,4-Trichloroben	49.90	21.92	43.93	30-150
101 1,2-Dibromo-3-chlo	49.90	137.2	274.91*	30-150
104 Hexachlorobutadien	49.90	150.1	300.87*	30-150
105 Naphthalene	49.90	16.99	34.06	30-150
106 1,2,3-Trichloroben	49.90	20.67	41.42	30-150

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 37 Dibromofluorometha	49.90	59.36	118.95	61-140
$ 43 1,2-Dichloroethane	49.90	60.45	121.14	78-122
$ 61 Toluene-d8	49.90	75.21	150.72*	60-148
$ 83 4-Bromofluorobenze	49.90	85.22	170.79*	56-150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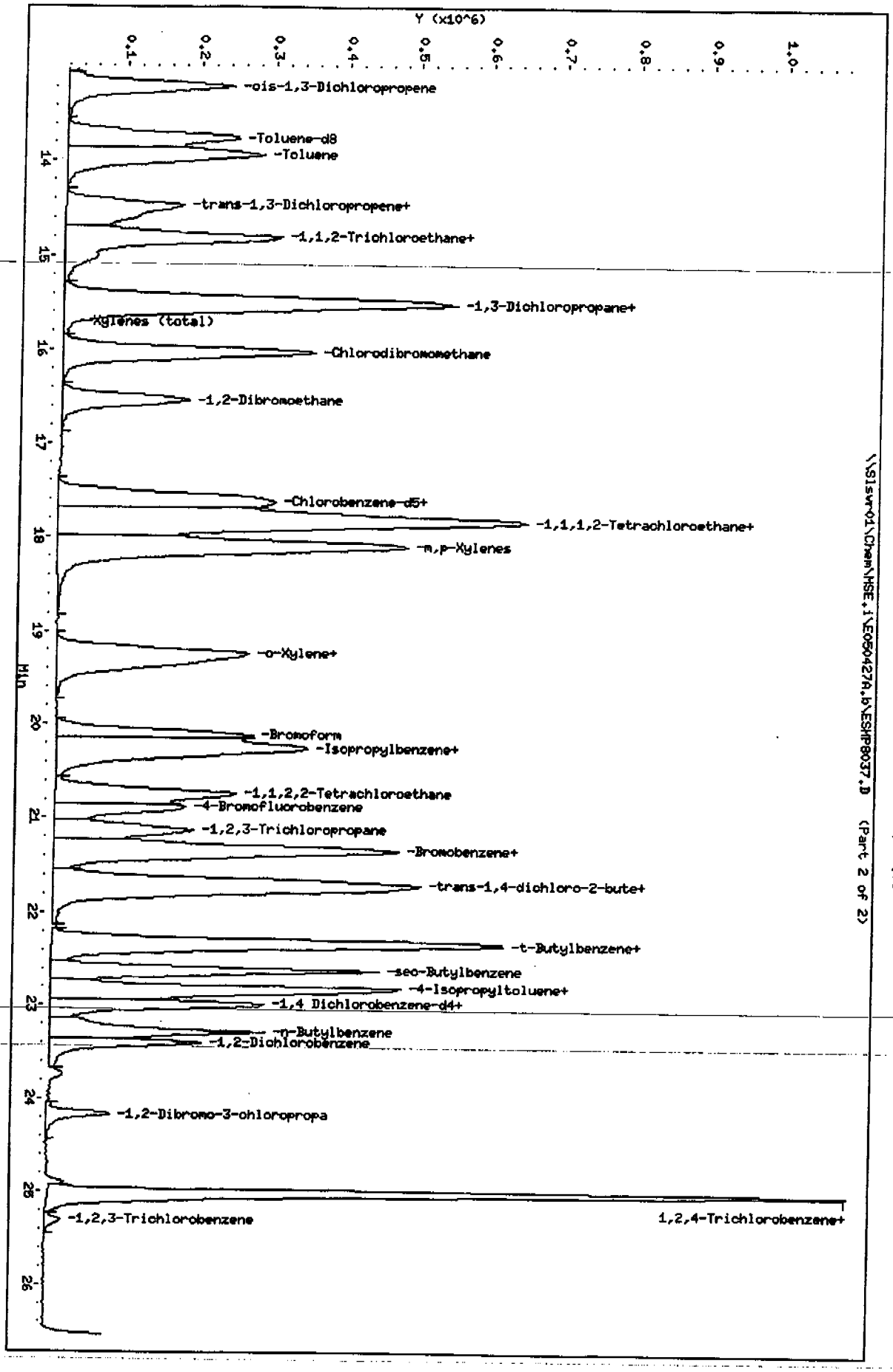
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESNP8037.D
Date : 27-APR-2005 15:57
Client ID: RE73-05-58829
Sample Info: G8MXJ1AF;E050427A.b;
Column phase: RTX-502.2
Instrument: MSE.i
Operator: SS
Column diameter: 0.53
\\Slsvr01\Chem\MSE.i\E050427A.b\ESNP8037.D (Part 1 of 2)
Min
-Dichlorodifluoromethane
-Chloromethane+
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-Diethyl ether+
-1,1-Dichloroethene
-1,2-Dichloroethene (total+
-Allyl chloride
-Carbon Disulfide+
-MTBE
-trans-1,2-Dichloroethene+
-1,1-Dichloroethane
-2-Butanone+
-Chloroform
-Bromochloromethane
-Tetrahydrofuran+
-1,1,1-Trichloroethane
-1,1-Dichloropropene
-Carbon Tetrachloride
-1,2-Dichloroethane-d4+
-Fluorobenzene
-Trichloroethene
-1,2-Dichloropropane
-Methyl methacrylate
-Bromodichloromethane+
-4-Methyl-2-pentanone


Y (x10^6)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Min
14
15
16
17
18
19
20
21
22
23
24
25
26
-cis-1,3-Dichloropropene
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane+
-1,3-Dichloropropane+
Xylenes (total)
-Chlorodibromomethane
-1,2-Dibromoethane
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
-o-Xylene+
-Bromoform
-Isopropylbenzene+
-1,1,2,2-Tetrachloroethane
-4-Bromofluorobenzene
-1,2,3-Trichloropropane
-Bromobenzene+
-trans-1,4-dichloro-2-bute+
-t-Butylbenzene+
-sec-Butylbenzene
-4-Isopropyltoluene+
-1,4 Dichlorobenzene-d4+
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,3-Trichlorobenzene
1,2,4-Trichlorobenzene+
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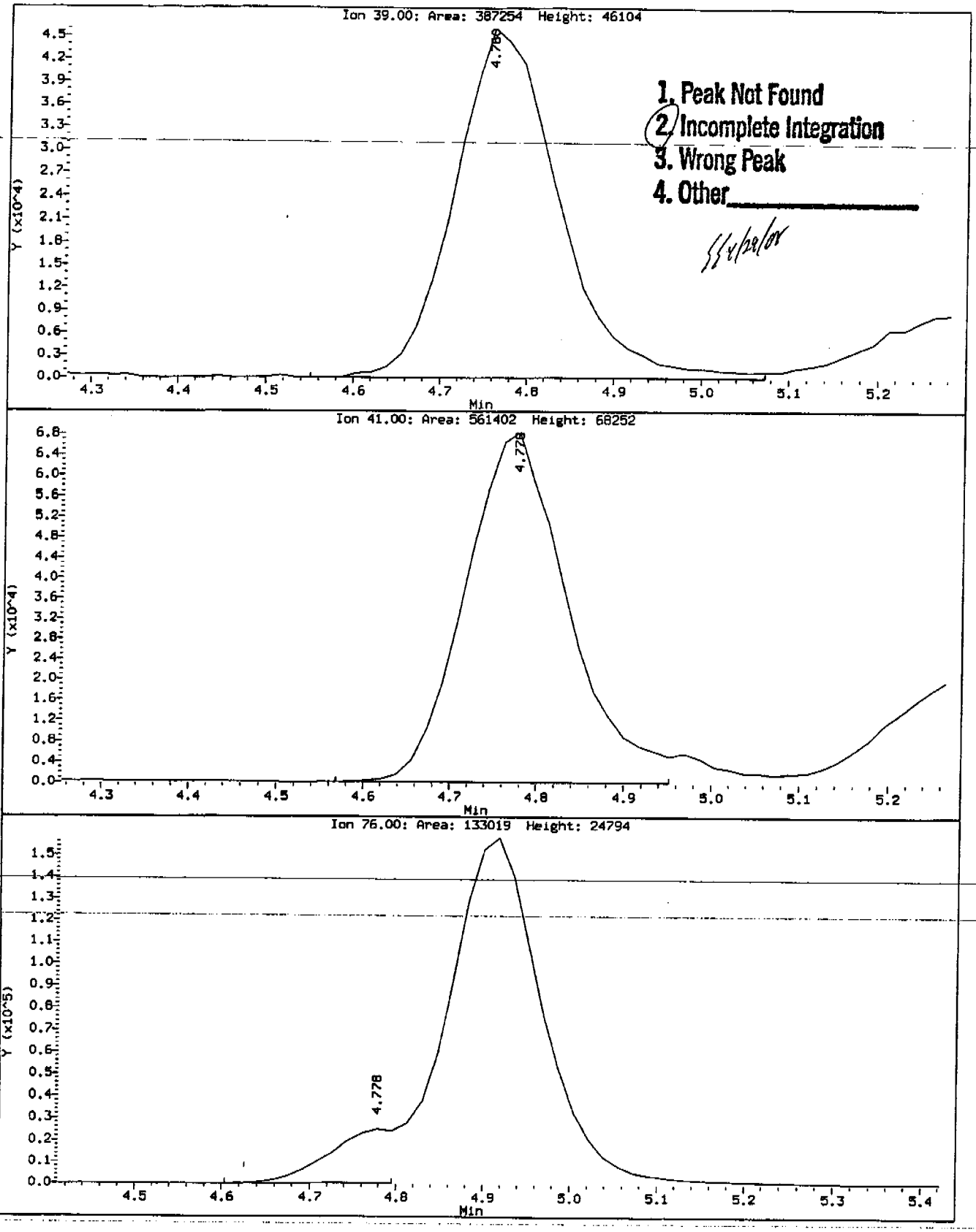
Date : 27-APR-2005 15:57
Client ID: RE73-05-58829
Sample Info: GBMK1AF;E050427A.b;
Column phase: RTX-502.2
\\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8037.D (Part 2 of 2)
Instrument: MSE.i
Operator: SS
Column diameter: 0.53

Data File: \\Slsvr01\Chem\MSE.i\E050427A.b\ESMP8037.D
Injection Date: 27-APR-2005 15:57
Instrument: MSE.i
Client Sample ID: RE73-05-58829

Compound: Allyl chloride
CAS Number: 107-05-1



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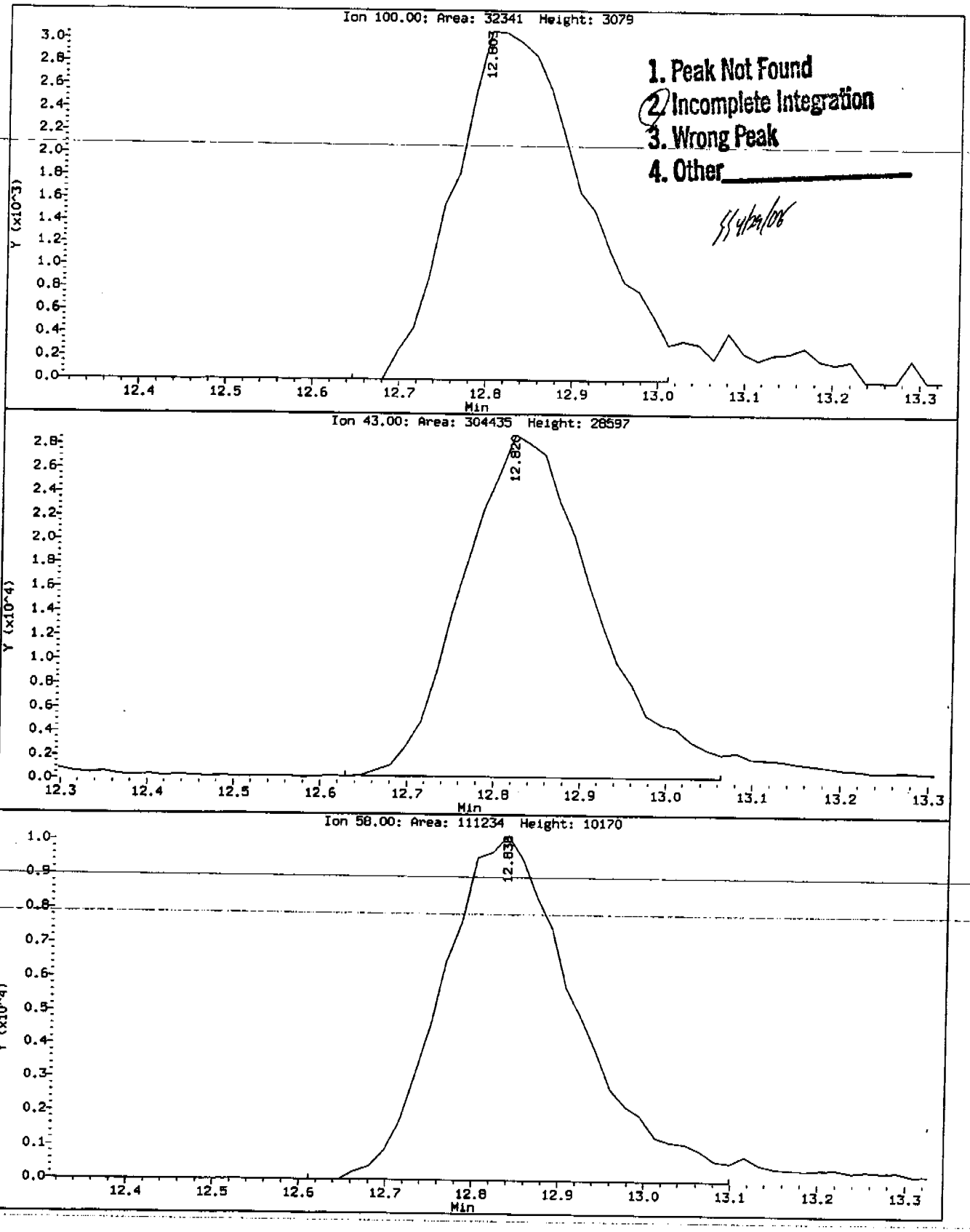
Injection Date: 27-APR-2005 15:57
Instrument: MSE.i
Client Sample ID: RE73-05-58829

Compound: 4-Methyl-2-pentanone
CAS Number: 108-10-1



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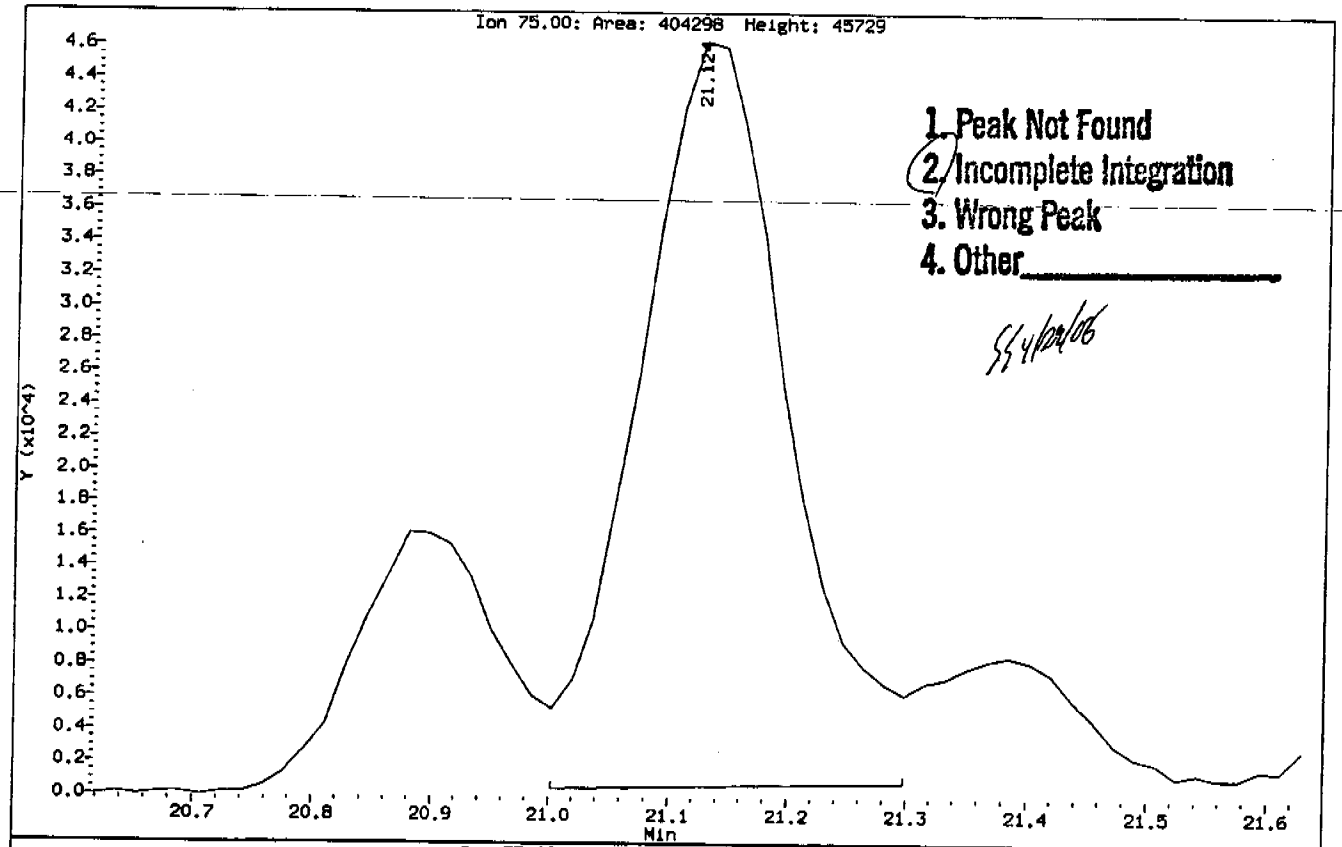
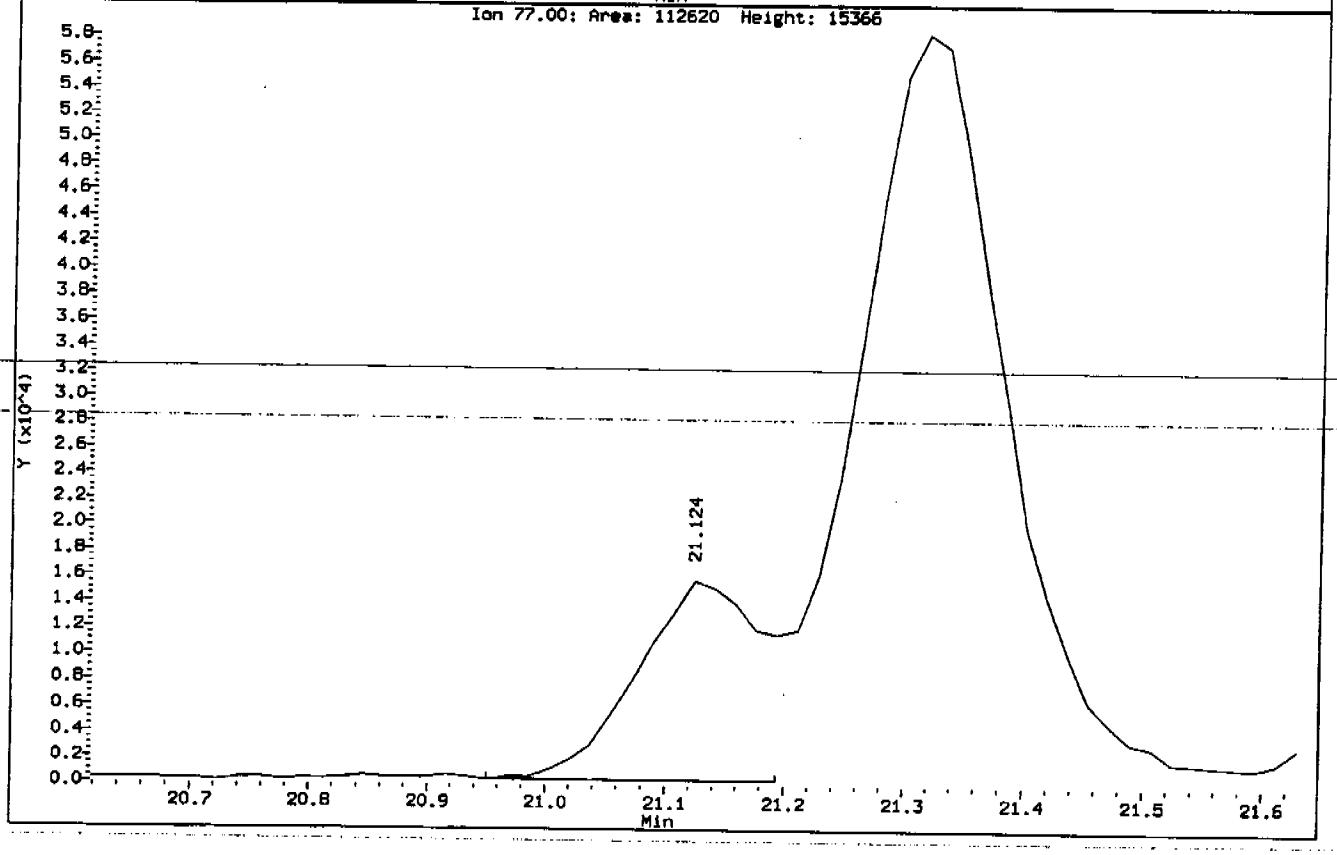
Injection Date: 27-APR-2005 15:57
Instrument: MSE.i
Client Sample ID: RE73-05-58829

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4



SS 4/28/06



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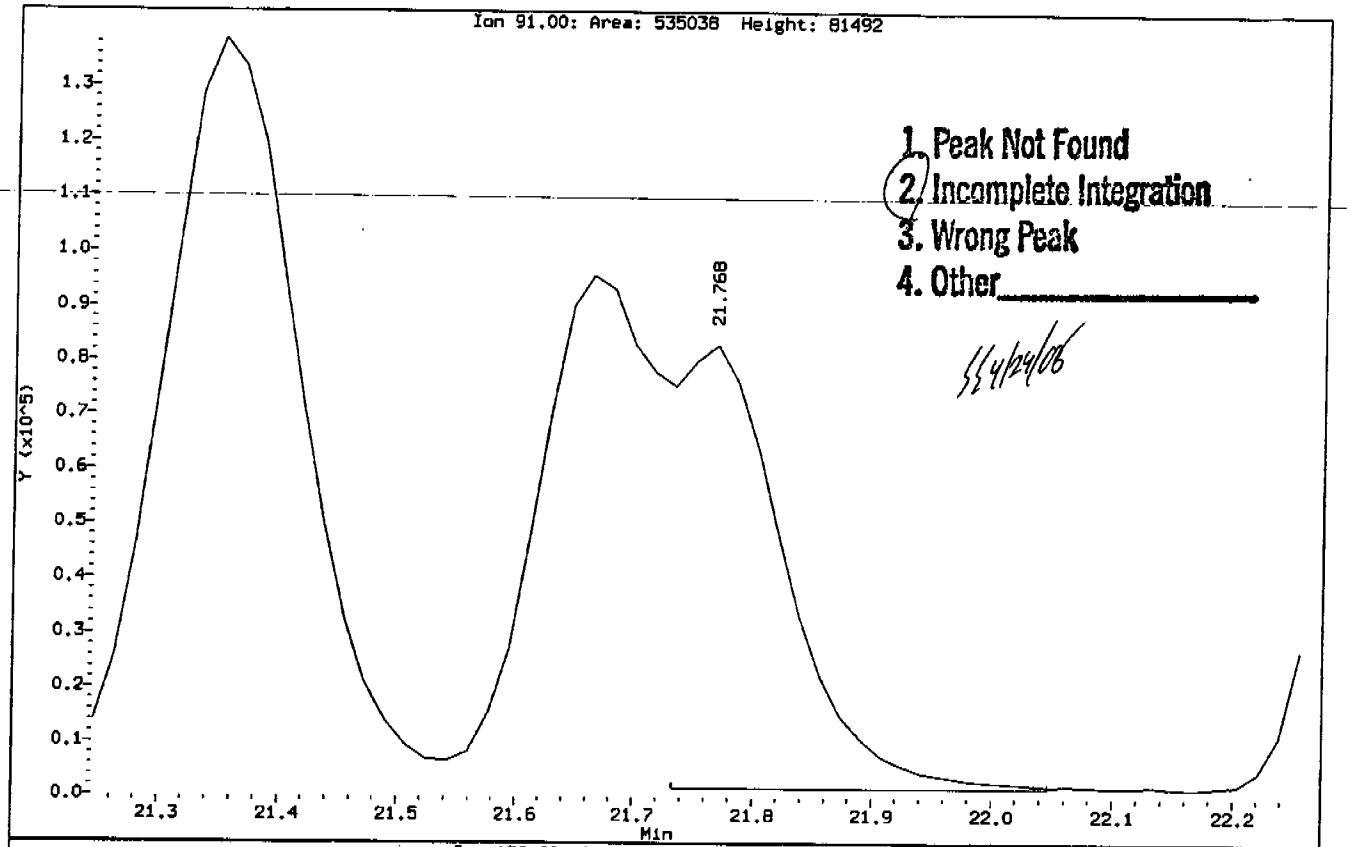
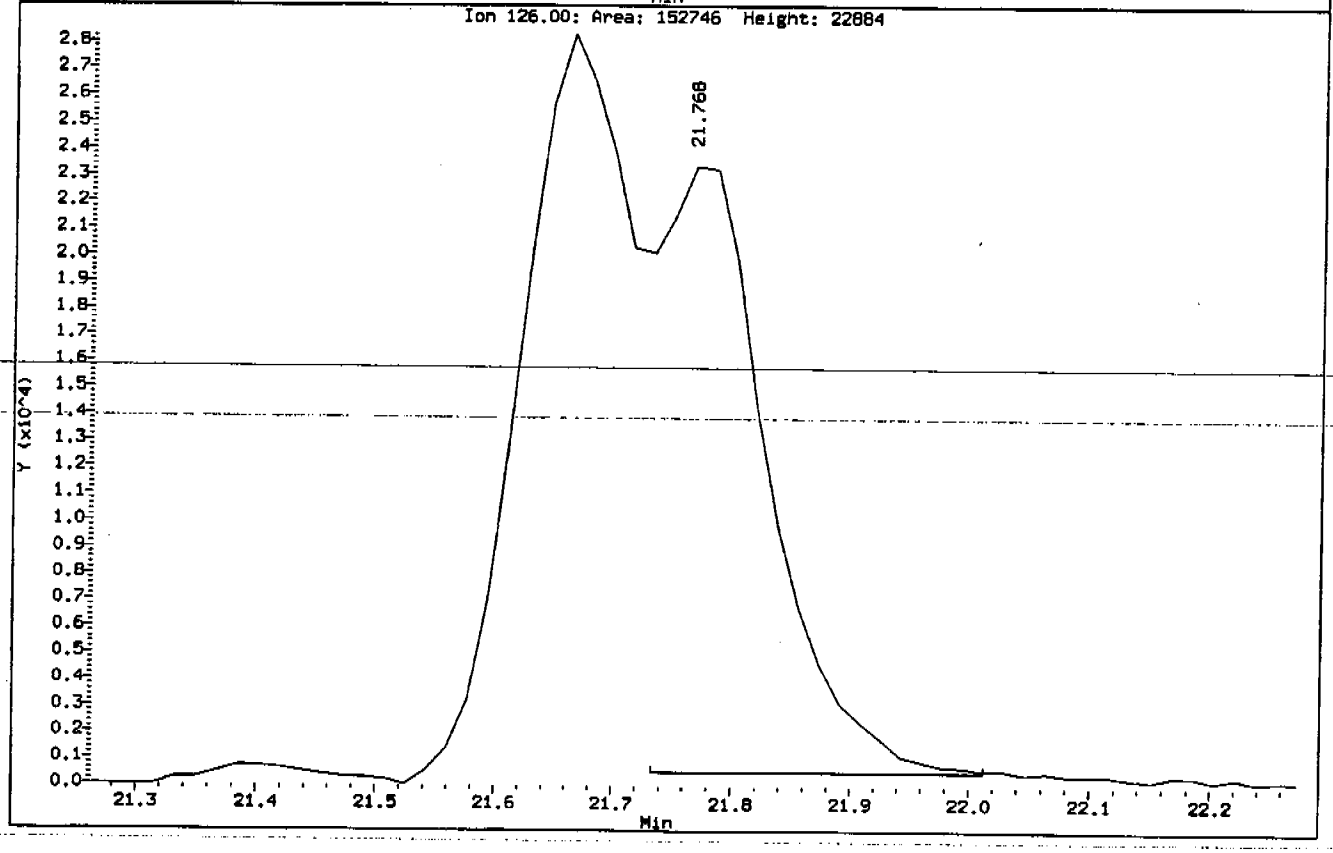
Injection Date: 27-APR-2005 15:57
Instrument: MSE.i
Client Sample ID: RE73-05-58829

Compound: 4-Chlorotoluene
CAS Number: 106-43-4



1. Peak Not Found
2. Incomplete Integration
3. Wrong Peak
4. Other_____

5/4/06



GC/MS MISCELLANEOUS DATA

LOT# F5D210380

STL ST. LOUIS

STL St. Louis GC/MS Volatiles Runlog

Instrument: MSE Date: 4-24-05 Operator: JOH Batch #: Logbook No.: 2637

Data File	Time	Pos.	Lot Number	Method	Lab ID	Matrix	pH	Wt/Vol g/ml	MeOH Vol.	Dil. Factor	Comments
EBFB 7961					50ngBFB						2/88 OK
ECAL 7962				8260B	VSTD050						RR
↓ 7963				↓	VSTD050						RR
EBFB 7964	19:52				50ngBFB						2/88 & 3/80 OK
ECAL 7965	cont'd	1		8260B	VSTD050	H_2O					OK
7966		2			VSTD020						OK
7967		3			VSTD010						OK
7968		4			VSTD005						OK
7969		5			VSTD002.5						OK
7970		6			VSTD200						OK
7971		7			VSTD100						OK
ESMP 7972		8			SYS.BLANK						
ELCS 7973	2:06	9			ICV050						BE Compound ↑

8 4/26/05

IS VA0261-05 BFB VA0281-05

Custom VA0272-05 CAL VA0284-05

LCS/MS/MSD/QC Check VA0279-05 SURR VA0291-05

Other NA Other NA

Note: Concentrations for standards can be found in the standards log.

Form: SL-ORG-0021, Rev. 3/7/05; SOP Reference: STL-MS-0002, current revision

Definitions: QCLCS or LCS – Laboratory Control Sample; QCBLK or BLK – Method Blank;

MeOH Lot#:

QC Reviewed By/Date: 55 4/25/05 Spiking Verified By: 8 Clock Review Assigned To: 55

LOT# FSD210380

[redacted]

STL St. Louis GC/MS Volatiles Runlog

Instrument: MSE Date: 4/25/05 A Operator: SS Batch #: 5116110 5116119 * Logbook No.: 2637

Data File	Time	Pos.	Lot Number	Method	Lab ID	Matrix	pH	Wt/Vol g/ml	MeOH Vol.	Dil. Factor	Comments
EBLK7974					SBLK						
EBD7975	9:46				50ng BFB						OK
ECAL7976	cont	1		82600	VSTD050	H2O					OK
ECAL7977		2			VSTD ICV						OK
ELCS7978		3	F5D260000-110C F5D260000-118C		QCLCS G8583IAC G8597IAC *						OK
EBLK7979		4			SBLK						—
EBLK7980		5	F5D260000-110B F5D260000-119B		QCBLK G8583IAA G8597AA *						OK
ESMP7981		6	F6D210233-1		G8VP01AA		<2	5mL	NA	1x	RE cis120CE=7300 RE 100X
7982		7	F5D210233-2		G8VPN1AD						Possible carryover cis120CE=10 RE 1x
7983		8	F5D210383-15		G8V3V1AA						OK
7984		9	F6D210220-1		G8VJ21AØ						OK
7985		10	F6D210223-1		G8VL01AØ						OK
7986		11	1 -3		G8VLM1AA						OK
7987		12	F5D220325-3		G81XJ1AA						OK
7988		13	1 -4		G81XM1AA						Trichloroethene=282 RE 2x
7989		14	F5D220114-1		G8XVG1AØ						OK
7990		15	1 -2		G8XXE1AA						OK
7991		16	F5D220115-1		G8XXP1AØ						OK
7992		17	1 -2		G8X2M1AA						OK
7993	21:33	18	-2MD		G8X2M1AC						out of 12 hour cbcl OK
7994	22:09	19	-2MSD		G8X2M1AD						use ICVLCS & method OK
EBLK7995	cont	20			SBLK						same MeOH SS vials —
ELCS7996		21	F5D260000-119C		QCLCS G8597IAD*						OK
ESMP7997		22	F5D250189-1		G85GK1AA *		<2	250 ul		20X	Chloroform <AL matrix RE 1x
7998		23	-3		G85GX1AA *			10 ul		500X	Chloroform=81 OK

IS	VA0261-5	BFB	VA0281-5
Custom	VA0272-5	CAL	VA0284-5
LCS/MS/MSD/QC Check	VA0279-5	SURR	VA0281-5
Other	NA	Other	NA

Note: Concentrations for standards can be found in the standards log.
Form: SL-ORG-0021, Rev. 3/7/05; SOP Reference: STL-MS-0002, current revision
Definitions: QCLCS or LCS – Laboratory Control Sample; QCBLK or BLK – Method Blank;
MeOH Lot#:

QC Reviewed By/Date: VM 4-27-05 Spiking Verified By: VM Clock Review Assigned To: SS

1237 of 1247

STL St. Louis GC/MS Volatiles Runlog

Instrument: MSE Date: 4/27/05A Operator: SS Batch #: 5117629 Logbook No.: 2637

Data File	Time	Pos.	Lot Number	Method	Lab ID	Matrix	pH	Wt/Vol g/ml	MeOH Vol.	Dil. Factor	Comments	
EBLK8023					SBLK							
EDFB8024	9:04				50ng DFB							OK
ECAL8030	cont	1		8260D	VST0050	Soil					Vial broke, no sample purged	
ECAL8031		1			VST0050							OK
ELCS8032		2	FSD270000-629C		QCLCS G9CJP1AC							OK
EBLK8033		3			SBLK							—
EBLK8034		4	FSD270000-629B		QCBLK G9CJP1AA							OK
ESMP8035		5	FSD210380-1		G8UXJ1AC		NA	4.95g	NA	1x	IS↓ matrix interference	OK
8036		6	-1MSD		G8UXJ1AG			5.01g			IS↓	OK
8037		7	-1MS		G8UXJ1AF			5.01g			IS↓	OK
8038		8	-2		G8UXV1AC			4.97g			IS↓	OK
8039		9	-3		G8UXX1AC			4.96g			IS↓	OK
8040		10	FSD220104-6		G8XP91AC			4.97g				OK
8041		11	-7		G8XQA1AC			5.05g				OK
8042		12	-17		G8XQQ1AC			4.96g				OK
8043		13	FSD220161-1		G80C12AC			4.97g			Surr↓ confirms original run	OK
8044	20:28	14	1 -5		G80D1AC			5.04g				OK

SS 4/28/05

IS	VA0299-5	BFB	VA0217-5
Custom	VA0292-5	CAL	VA0297-5
LCS/MS/MSD/QC Check	VA0296-5	SURR	VA0291-5
Other	NA	Other	NA

Note: Concentrations for standards can be found in the standards log.
Form: SL-ORG-0021, Rev. 3/7/05; SOP Reference: STL-MS-0002, current revision
Definitions: QCLCS or LCS – Laboratory Control Sample; QCBLK or BLK – Method Blank;
MeOH Lot#:

QC Reviewed By/Date: WM/4-28-05 Spiking Verified By: WM Clock Review Assigned To: SS

Sheet1

Severn Trent St. Louis

Percent Total Solid/Percent Moisture Logsheet

STL-WC-0005, current revision

Analysis: %Moisture Time In: 11:30 Batch: 5112220

Prep Date: 04/22/05 Time Out: _____ Analyst: sdb

Anal Date: 4/23/05 Balance 1 SN: L22450 Reviewed By: SW 4/25/05

Balance 2 SN: L22450

Pan Number	Sample Id	Pan wt	Wet Sam + Pan g	Dry Sam + Pan wt	Results Total Solids %	Results MS %	Comments
1	G8wx1	0.9797	6.9244	6.7081	96.36	3.64	
2	G8W0H-001	0.9780	7.7209	7.4646	96.20	3.80	
3	G8W0M-001	0.9756	10.4882	10.1371	96.31	3.69	
4	G8W0W-00	0.9758	8.8036	8.3764	94.54	5.46	
5	G8W03-001	0.9742	7.7690	7.4551	95.38	4.62	
6	G8W08-001	0.9793	11.5855	11.2054	96.42	3.58	
7	G8W1F-001	0.9805	6.7391	6.3977	94.07	5.93	
8	G8W1H-001	0.9810	9.5895	9.0853	94.14	5.86	
9	G8W1L-001	0.9834	7.4082	7.0971	95.16	4.84	
10	G8W1N-001	0.9800	8.9650	8.4889	94.04	5.96	
11	G8W1T-001	0.9809	8.5747	8.4673	98.59	1.41	
12	G8W10-001	0.9851	13.1860	12.9226	97.84	2.16	
13	G8W2M-001	0.9809	8.9854	8.4528	93.35	6.65	
14	G8W2N-001	0.9845	10.4734	9.9676	94.67	5.33	
15	G8WXJ-002	0.9849	6.6674	5.5255	79.90	20.10	
16	G8WXV-002	0.9864	4.3455	3.6999	80.78	19.22	
17	G8WXX-002	0.9880	5.0333	4.2137	79.74	20.26	
18	G8QE3-001	0.9898	9.0613	7.4207	79.67	20.33	
19	G8X0D-001	0.9859	9.1245	7.3670	78.41	21.59	
20	G8X0F-002	0.9782	8.6093	6.9511	78.27	21.73	
21	G8XDFX	0.9838	6.6033	5.3978	78.55	21.45	
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Sheet1

Severn Trent St. Louis

Percent Total Solid/Percent Moisture Logsheet

STL-WC-0005, current revision

Analysis: %Moisture Time In: 11:11 Batch: 5112218

Prep Date: 04/22/04 Time Out: _____ Analyst: sdb

Anal Date: 4/23/05 Balance 1 SN: L22450 Reviewed By: SW 4/25/05

Balance 2 SN: L22450

Pan Number	Sample Id	Pan wt	Wet Sam + Pan g	Dry Sam + Pan wt	Results Total Solids %	Results MS %	Comments
1	G8WP7-001	0.9760	6.0660	4.8695	76.49	23.51	
2	G8WQL-001	0.9775	7.9281	6.2083	75.26	24.74	
3	G8WQN-001	0.9726	8.2996	6.4907	75.31	24.69	
4	G8WQR-001	0.9749	14.4596	12.1770	83.07	16.93	
5	G8WQT-001	0.9777	7.0813	6.0029	82.33	17.67	
6	G8WQV-001	0.9719	6.9060	5.5139	76.54	23.46	
7	G8WR6-001	0.9711	8.2611	6.7406	79.14	20.86	
8	G8WTA-001	0.9705	4.9547	3.9791	75.51	24.49	
9	G8WTE-001	0.9666	5.4834	4.3642	75.22	24.78	
10	G8WTG-001	0.9706	7.0689	6.0600	83.46	16.54	
11	G8WTR-001	0.9724	5.5964	4.4540	75.29	24.71	
12	G8WTT-001	0.9796	6.9622	5.5408	76.24	23.76	
13	G8WTV-001	0.9758	6.6919	6.1054	89.74	10.26	
14	G8WTW-00	0.9711	5.5073	4.8404	85.30	14.70	
15	G8WTX-001	0.9771	5.5045	4.3601	74.72	25.28	
16	G8WT0-001	0.9722	9.0340	7.0219	75.04	24.96	
17	G8WT1-001	0.9799	8.2743	7.2057	85.35	14.65	
18	G8WT3-001	0.9679	7.9510	6.5786	80.35	19.65	
19	G8Q9X-001	0.9730	11.7118	10.5129	88.84	11.16	
20	G8Q90-001	0.9726	13.5459	12.6425	92.81	7.19	
21	G8Q90X	0.9776	13.1800	12.3839	93.48	6.52	
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Sheet1

Severn Trent St. Louis

Percent Total Solid/Percent Moisture Logsheet

STL-WC-0005, current revision

Analysis: %Moisture Time In: 8:00 Batch: 5115117/5115116

Prep Date: 04/22/05 Time Out: 0800 Analyst: KS

Anal Date: 4-23-5 Balance 1 SN: L22450 Reviewed By: SW 4/25/05

Balance 2 SN: L22450

Pan Number	Sample Id	Pan wt	Wet Sam + Pan g	Dry Sam + Pan wt	Results Total Solids %	Results MS %	Comments
1	G8XMR	0.9798	12.1225	11.8511	97.56	2.44	
2	G8XMR X	0.9802	11.5783	11.3928	98.25	1.75	
3	G8XMW	0.9802	10.8492	10.6847	98.33	1.67	
4	G8XMX	0.9791	12.5085	12.0480	96.01	3.99	
5	G8XM1	0.9772	12.2401	11.7949	96.05	3.95	
6	G8XM3	0.9716	12.5713	12.3612	98.19	1.81	
7	G8XM5	0.9697	10.2338	9.8933	96.32	3.68	
8	G8XM7	0.9677	8.8904	8.5012	95.09	4.91	
9	G8XM9	0.9683	9.8265	9.5748	97.16	2.84	
10	G8XNC	0.9702	9.2203	8.8232	95.19	4.81	
11	G8XNE	0.9668	11.2181	11.1260	99.10	0.90	
12	G8XNH	0.9683	11.0178	10.7857	97.69	2.31	
13	G8XN2	0.9698	9.4370	9.1698	96.84	3.16	
14	G8XP2	0.9690	10.0272	9.1469	90.28	9.72	
15	G8XP3	0.9695	9.5622	9.3931	98.03	1.97	
16	G8XP4	0.9692	10.7197	10.6132	98.91	1.09	
17	G8XP5	0.9786	11.8584	11.7905	99.38	0.62	
18	G8XP8	0.9754	11.6116	11.4435	98.42	1.58	
19	G8XP9	0.9736	12.7258	12.5610	98.60	1.40	
20	G8XQA	0.9739	11.7461	11.6720	99.31	0.69	
21	G8XQD	0.9759	10.1446	9.7267	95.44	4.56	
22	G8XPF	0.9788	8.2016	8.1669	99.52	0.48	
23	G8XPF X	0.9799	9.3055	9.2631	99.49	0.51	
24	G8XPH	0.9818	10.4148	10.3529	99.34	0.66	
25	G8XPK	0.9845	8.6550	7.7723	88.49	11.51	
26	G8XPM	0.9850	10.3005	10.2405	99.36	0.64	
27	G8XPV	0.9869	11.2003	11.0604	98.63	1.37	
28	G8XPX	0.9861	9.4540	9.3947	99.30	0.70	
29	G8XQF	0.9824	11.1469	11.0734	99.28	0.72	
30	G8XQH	0.9764	12.1628	12.0887	99.34	0.66	
31	G8XQJ	0.9750	10.1906	10.1269	99.31	0.69	
32	G8XQN	0.9773	9.8643	9.8213	99.52	0.48	
33	G8XQP (G8XQP)	0.9791	10.8098	10.6606	98.48	1.52	
34	G8XQQ	0.9824	11.6603	11.5815	99.26	0.74	
35	G8XQX	0.9839	10.3656	10.1855	98.08	1.92	
36	G8XQ0	0.9864	9.3773	9.1841	97.70	2.30	
37	G8XQ2	0.9853	13.9400	13.8493	99.30	0.70	

Sheet1

38	G8XQ3	0.9861	8.3903	8.2682	98.35	1.65	
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F5D210380

CLIENT ANALYSIS SUMMARY

Storage Loc: A44

Project Manager: EK | Quote #: 44975 | SDG: F5D210380 | Date Received: 2005-04-21

Project: 3158S | Los Alamos Non-Rad | Analytical Due Date: 2005-05-12

PO#: 126310021 | Report to: Joylene Valdez or Keith | Report Due Date: 2005-05-16

Client: 108581 LOS ALAMOS NATIONAL LABORATORY | #SMPS in LOT: 3 | Report Type: D Expanded Deliverable | EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER on sample sample header in the COC Field SDG = "Lot Number"

Project Name = "Request number" ******** METALS AND WETCHEMISTRY **********

Can batch multiple Lots together and report Client specific Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level

Sb spike at 100 ppb Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with

	SAMPLE #				CLIENT SAMPLE ID		Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
	1				RE73-05-58829				2005-04-19 / 0	G8WXJ	SOLID
	SAMPLE COMMENTS:										
	XX	QH	SW846	8082	PCBs (8082)	71	SONICATION w/ACID STRIP (PCB)	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	XX	QL	SW846	8270C	Base/Neutrals and Acids (8270C)	13	SONICATION - Low Level	01	STANDARD TEST SET	PROT: A	WRK LOC 06 TIC: N
	XX	QK	SW846	8260B	Volatile Organics, GC/MS (8260B)	15	PURGE AND TRAP - 5 mL purge	01	STANDARD TEST SET	PROT: A	WRK LOC 06 TIC: N
	XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC 06
D	XX	QK	SW846	8260B	Volatile Organics, GC/MS (8260B)	15	PURGE AND TRAP - 5 mL purge	01	STANDARD TEST SET	PROT: A	WRK LOC 06 TIC: N
S	XX	QK	SW846	8260B	Volatile Organics, GC/MS (8260B)	15	PURGE AND TRAP - 5 mL purge	01	STANDARD TEST SET	PROT: A	WRK LOC 06 TIC: N

	SAMPLE #				CLIENT SAMPLE ID		Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
	2				RE73-05-58835				2005-04-19 / 0	G8WXV	SOLID
	SAMPLE COMMENTS:										
	XX	QH	SW846	8082	PCBs (8082)	71	SONICATION w/ACID STRIP (PCB)	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	XX	QL	SW846	8270C	Base/Neutrals and Acids (8270C)	13	SONICATION - Low Level	01	STANDARD TEST SET	PROT: A	WRK LOC 06 TIC: N
	XX	QK	SW846	8260B	Volatile Organics, GC/MS (8260B)	15	PURGE AND TRAP - 5 mL purge	01	STANDARD TEST SET	PROT: A	WRK LOC 06 TIC: N
	XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC 06
D	XX	QL	SW846	8270C	Base/Neutrals and Acids (8270C)	13	SONICATION - Low Level	01	STANDARD TEST SET	PROT: A	WRK LOC 06 TIC: N
S	XX	QL	SW846	8270C	Base/Neutrals and Acids (8270C)	13	SONICATION - Low Level	01	STANDARD TEST SET	PROT: A	WRK LOC 06 TIC: N

	SAMPLE #				CLIENT SAMPLE ID		Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
	3				RE73-05-58841				2005-04-19 / 0	G8WXX	SOLID
	SAMPLE COMMENTS:										
	XX	QH	SW846	8082	PCBs (8082)	71	SONICATION w/ACID STRIP (PCB)	01	STANDARD TEST SET	PROT: A	WRK LOC 06
	XX	QL	SW846	8270C	Base/Neutrals and Acids (8270C)	13	SONICATION - Low Level	01	STANDARD TEST SET	PROT: A	WRK LOC 06 TIC: N
	XX	QK	SW846	8260B	Volatile Organics, GC/MS (8260B)	15	PURGE AND TRAP - 5 mL purge	01	STANDARD TEST SET	PROT: A	WRK LOC 06 TIC: N
	XX	WM	MCAW W	160.3 MOD	Moisture, Percent (160.3)	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01	STANDARD TEST SET	PROT: A	WRK LOC 06
D	XX	QH	SW846	8082	PCBs (8082)	71	SONICATION w/ACID STRIP (PCB)	01	STANDARD TEST SET	PROT: A	WRK LOC 06
S	XX	QH	SW846	8082	PCBs (8082)	71	SONICATION w/ACID STRIP (PCB)	01	STANDARD TEST SET	PROT: A	WRK LOC 06

F5D210380

CLIENT COMMENTS SUMMARY

Storage Loc: A44

Project Manager: EK Quote #: 44975 SDG: F5D210380

Project: 3158S Los Alamos Non-Rad

PO#: 126310021 Report to: Joylene Valdez or Keith

Client: 108581 LOS ALAMOS NATIONAL LABORATORY

#SMPS in LOT: 3

Date Received: 2005-04-21

Analytical Due Date: 2005-05-12

Report Due Date: 2005-05-16

Report Type: D Expanded Deliverable

EDD Code: 99

Sample Receiving: LOS ALAMOS CLIENT REQUIREMEN
Enter COC NUMBER on sample sample header in the COC Fi
SDG = "Lot Number"
Project Name = "Request number"

********** METALS AND WETCHEMISTRY **********
Can batch multiple Lots together and report Client specific
Batch QC: Matrix Spike and Sample Duplicate
Met Prep: GFAA Spike Level and Standard Spike Level
Sb spike at 100 ppb
Pb - Spike Solids at 100 ppb, spike Waters at 20
- Perform analytical spike when matrix spike is swamped with
indigenous analyte.
********** GC/MS ORGANICS **********
Can batch multiple Lots together and report Client specific
Batch QC MS and MSD
Clouseau observations for:
- Dilutions and elevated detection limits
- Unknown aldol condensate in TIC report
USE GPC for sample extracts as required.
Put client ID on all raw data
Client requires qualifiers
********** GC/HPLC **********
Can batch multiple Lots together and report Client specific
Batch QC
USE GPC for sample extracts as required.
Client requires Qualifiers for both GC and HPLC
- No averaging of CCV compounds
- Include Form Xs in data packages
********** Radiochemistry **********
Rad Chem with no tracers require MS (spk <= 100 pCi/L or g)
and sample duplicate ..... Gamma does not require MS.
Radium 228 requires MS and Sample Duplicate
Radiological: "Do not include control chart, standard certif
certificates, or calibration data as part of data package"
- Tracers need to be added at a level to yield at least 400
- Report 1 sigma uncertainty
Gross Alpha/Beta requires a total digestion.

CHAIN OF CUSTODY DOCUMENT NUMBER: 3158SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3158S

ANALYSIS TYPE: ORGANIC

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58829	1	250 ML AMBER GLASS	8270C+8082	ICE	S
RE73-05-58829	2	125 SEPTUM AMBER GLASS	8260B	ICE	S
RE73-05-58835	1	250 ML AMBER GLASS	8270C+8082	ICE	S
RE73-05-58835	2	125 SEPTUM AMBER GLASS	8260B	ICE	S
RE73-05-58841	1	250 ML AMBER GLASS	8270C+8082	ICE	S
RE73-05-58841	2	125 SEPTUM AMBER GLASS	8260B	ICE	S
RE73-05-58877	1	125 SEPTUM AMBER GLASS	8260B	ICE	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3158S

+ 8 oz liner, not 125 glass. SW
4.21.05
did not recv. 58877

Relinquished By: PRINTED NAME	SIGNATURE	Date	Time	Received By: PRINTED NAME	SIGNATURE	Date	Time
Aladilla Rodes		4/20/05	1400	Sue Wilson-Sue Wilson		4.21.05	0900
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

PRINTED NAME SIGNATURE

LOT# F5D210380

STL ST. LOUIS
Wednesday, April 20, 2005

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3158S
ANALYSIS TYPE: ORGANIC

ATTN: Mark Loeb
Severn Trent Laboratories, Inc., St. Louis
13715 Rider Trail N.
Earth City, MO 63045

Please analyze the enclosed samples according to the schedule indicated:

SHIP DATE: 04/20/2005
REPORT DUE: 05/05/2005
TURN AROUND REQ'D: 15

These samples are on:

LANL Request Number: 3158S
Per Agreement Number: 126310021
Project Cost Code: MT3R0223KGT0

RAD SCREENING: NOT REQ
COMMENTS: NOTE: Please do the GPC for all 8270 + 8082.

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:8082	RE73-05-58829	1	S	04/19/2005	
SW-846:8270C	RE73-05-58829	1	S	04/19/2005	
SW-846:8260B	RE73-05-58829	2	S	04/19/2005	
SW-846:8082	RE73-05-58835	1	S	04/19/2005	
SW-846:8270C	RE73-05-58835	1	S	04/19/2005	
SW-846:8260B	RE73-05-58835	2	S	04/19/2005	
SW-846:8082	RE73-05-58841	1	S	04/19/2005	
SW-846:8270C	RE73-05-58841	1	S	04/19/2005	
SW-846:8260B	RE73-05-58841	2	S	04/19/2005	
SW-846:8260B	RE73-05-58877	1	S	04/20/2005	

Final Page of REQUEST NUMBER 3158S

LOT# F5D210380

SEVERN TRENT **STL**

Lot No: F5D210380

Condition Upon Receipt Form
St. Louis Laboratory

Client: LANL Date: 4.21.05 Time: 0900

Quote No: 44975 Initiated by: SW

Shipper/No: FedX 6954778927442733 COC/RFA Numbers: 31605C, 31595C, 31585C

Condition/Variance (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	(Y) N	Sample received in undamaged condition?	7.	(Y) N	Sample received with Chain of Custody?
2.	(Y) N	Sample received within 4-C ± 2-C* ?	8.	Y (N)	Chain of Custody matches sample IDs on containers?
		Record 4°	9.	(Y) N N/A	Custody seal received intact on cooler.?
3.	Y N (N/A)	Sample received with proper pH [1]?	10.	(Y) N N/A	Custody seal tamper evident on cooler.?
4.	Y N	If N/A - Was pH taken by original STL lab?	11.	(Y) N N/A	Custody seal on bottles received intact?
5.	(Y) N	Sample received in proper containers?	12.	(Y) N N/A	Custody seal tamper evident on bottles?
6.	(Y) N	Sample volume sufficient for analysis?	13.	Y N	Was CUR (equivalent) rec' d from original STL lab?

* Temperature Variance Does Not Affect the Following Analyses: Red cooler is ambient.

[1]For DOE-AL (Pantex, LANL, Sandia) sites, verify pH all containers received, except for VOA, TOX, and soils.

Notes: ~~Did not receive any samples for COC 31595~~ SW 4.21.05

and on 31585C, missing RE73-05-58877

Corrective Action:

- ☐ Client's Name: _____ Informed by: _____ By: _____
- ☐ Sample(s) processed "as is". _____
- ☐ Sample(s) on hold until: _____ If released, notify: _____

Project Management Review: _____ Date: _____

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED
IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIALS AND THE DATE NEXT TO THAT ITEM

ADMIN-0004, Revised 2/17/04
\\Slsvr01\QA\FORMS\ST-LOUIS\ADMIN\Admin004 rev7.doc

Wednesday, April 20, 2005

REQUEST NUMBER: 3156S

ANALYSIS TYPE: ORGANIC

Los Alamos
NATIONAL LABORATORY

ATTN: Shelly Weagraff
Alta Analytical Lab Incorporated
5070 Robert J. Mathews Parkway
El Dorado Hills, CA 95762

Please analyze the enclosed samples according to the schedule indicated:

SHIP DATE: 04/20/2005
REPORT DUE: 05/05/2005
TURN AROUND REQ'D: 15

RAD SCREENING: NOT REQ
COMMENTS:

These samples are on:

LANL Request Number: 3156S
Per Agreement Number: 176450010
Project Cost Code: MT3R0223KGT0

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:8290	RE73-05-58829	3	S	04/19/2005	
SW-846:8290	RE73-05-58829	4	S	04/19/2005	
SW-846:8290	RE73-05-58835	3	S	04/19/2005	
SW-846:8290	RE73-05-58835	4	S	04/19/2005	
SW-846:8290	RE73-05-58841	3	S	04/19/2005	
SW-846:8290	RE73-05-58841	4	S	04/19/2005	

Final Page of REQUEST NUMBER 3156S

Wednesday, April 20, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3156SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3156S

ANALYSIS TYPE: ORGANIC

ATTN: Shelly Weagraff
Alta Analytical Lab Incorporated
5070 Robert J. Mathews Parkway
El Dorado Hills, CA 95762

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58829	3	125 ML GLASS	8290	ICE	S
RE73-05-58829	4	125 ML GLASS	8290	ICE	S
RE73-05-58835	3	125 ML GLASS	8290	ICE	S
RE73-05-58835	4	125 ML GLASS	8290	ICE	S
RE73-05-58841	3	125 ML GLASS	8290	ICE	S
RE73-05-58841	4	125 ML GLASS	8290	ICE	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3156S

Relinquished By:		Date	Time	Received By:		Date	Time
A Padilla		4/20/05	1400				
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		
PRINTED NAME	SIGNATURE			PRINTED NAME	SIGNATURE		

Received for DISPOSAL By:		Date	Time	Remarks:
PRINTED NAME	SIGNATURE			

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 219142 **Event ID:**4802

SAMPLE ID: RE73-05-58829 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	8260B	~~125 SEPTUM AMBER GLASS~~ 2"x6" SS TUBE	Ice	Y		
1	8270C+8082	250 ML AMBER GLASS	Ice	Y		
3	8290	125 ML GLASS	Ice	Y		
4	8290	125 ML GLASS	Ice	Y		
5	PSDA+PROP-DBS	~~PROTECORE BAG~~ 2"x6" SS TUBE	Ice	Y		
6	RC+RS+ph+PF+I	500 ML POLY	Ice	Y		

RELINQUISHED BY (printed name): (signature):	Date/Time:	RELINQUISHED BY (printed name): (signature):	Date/Time:
K Wood	4.19.05 1705		
RECEIVED BY (printed name): (signature): Jeylene Jay	**Date/Time:** 4-19-05 1705	**RECEIVED BY (printed name): (signature):**	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 219152 Event ID:4802

SAMPLE ID: RE73-05-58835
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	8260B	~~125 SEPTUM AMBER GLASS~~ 2"x6" SS TUBE	Ice	Y		
1	8270C+8082	250 ML AMBER GLASS	Ice	Y		
3	8290	125 ML GLASS	Ice	Y		
4	8290	125 ML GLASS	Ice	Y		
5	PSDA+PROP-DBS	~~PROTECORE BAG~~ 2"x6" SS TUBE	Ice	Y		
6	RC+RS+ph+PF+I	500 ML POLY	Ice	Y		

RELINQUISHED BY (printed name): K Rhoads (signature):	Date/Time: 4.19.05 17:05	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4-19-05 1705	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

EVENT NAME: TA-73 Ash Pile

FIELD CHAIN OF CUSTODY

COC ID: 219162 Event ID:4802

SAMPLE ID: RE73-05-58841
ER TEAM LEADER: Terry Rust
DESTINATION: SMO

SAMPLE ORDER MATRIX: Soil
FIELD TEAM LEADER: John Tymkowych
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	8260B	~~125 SEPTUM AMBER GLASS~~ 2"x6" SS TUBE	Ice	Y		
1	8270C+8082	250 ML AMBER GLASS	Ice	Y		
3	8290	125 ML GLASS	Ice	Y		
4	8290	125 ML GLASS	Ice	Y		
5	PSDA+PROP-DBS	~~PROTECORE BAG~~ 2"x6" SS TUBE	Ice	Y		
6	RC+RS+ph+PF+I	500 ML POLY	Ice	Y		

RELINQUISHED BY (printed name): K Leonard (signature):	Date/Time: 4-19-05 1655	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4-19-05 1656	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218712 Event ID:4802

SAMPLE ID: RE73-05-58826

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): K Rheoms (signature):	Date/Time: 4.1.05 17:10	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/1/05 17:10	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218692 **Event ID:**4802

SAMPLE ID: RE73-05-58824
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): K R Leonard **(signature):**	**Date/Time:** 4.19.05 1710	**RELINQUISHED BY (printed name):** **(signature):**	**Date/Time:**
RECEIVED BY (printed name): **(signature):** Jaylee Vos	**Date/Time:** 4-19-05 1710	**RECEIVED BY (printed name):** **(signature):**	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218722 Event ID:4802

SAMPLE ID: RE73-05-58827 ER TEAM LEADER: Terry Rust DESTINATION: SMO

SAMPLE ORDER MATRIX: Soil FIELD TEAM LEADER: John Tymkowych DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature): K Kleoner	Date/Time: 4.19.06 1705	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature): Joyce Cy.	Date/Time: 4/19/06 1705	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218702 **Event ID:**4802

SAMPLE ID: RE73-05-58825 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 9.19.05 17:05	**RELINQUISHED BY** (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 9/19/05 17:05	**RECEIVED BY** (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218672 **Event ID:**4802

SAMPLE ID: RE73-05-58877 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
1	8260B	125 SEPTUM AMBER GLASS	Ice	Y		

RELINQUISHED BY (printed name): (signature):	**Date/Time:** 4.19.05 1705	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4/19/05 1705	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218732 **Event ID:**4802

SAMPLE ID: RE73-05-58828
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	**Date/Time:** 4.19.05 1705	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4/19/05 1705	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218812 **Event ID:**4802

SAMPLE ID: RE73-05-58838 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y 1		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y 1		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): [illegible] **(signature):** [illegible]	**Date/Time:** 4.19.05 1655	**RELINQUISHED BY (printed name):** **(signature):**	**Date/Time:**
RECEIVED BY (printed name): **(signature):** [illegible]	**Date/Time:** 4/19/05 16:55	**RECEIVED BY (printed name):** **(signature):**	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218822 **Event ID:**4802

SAMPLE ID: RE73-05-58839 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	**Date/Time:** 4.19.05 1655	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4-19-05 1655	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218742 **Event ID:**4802

SAMPLE ID: RE73-05-58830 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	**Date/Time:** 4.19.05 1655	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4-19-05 1655	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218782 Event ID:4802

SAMPLE ID: RE73-05-58834 ER TEAM LEADER: Terry Rust DESTINATION: SMO

SAMPLE ORDER MATRIX: Soil FIELD TEAM LEADER: John Tymkowych DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 16:55	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 1655	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218832 Event ID:4802

SAMPLE ID: RE73-05-58840 ER TEAM LEADER: Terry Rust DESTINATION: SMO

SAMPLE ORDER MATRIX: Soil FIELD TEAM LEADER: John Tymkowych DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4/19.05 1655	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 1655	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218762 **Event ID:**4802

SAMPLE ID: RE73-05-58832 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): **(signature):**	**Date/Time:** 4.19.05 1655	**RELINQUISHED BY (printed name):** **(signature):**	**Date/Time:**
RECEIVED BY (printed name): **(signature):**	**Date/Time:** 4/19/05 1655	**RECEIVED BY (printed name):** **(signature):**	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218752 Event ID:4802

SAMPLE ID: RE73-05-58831

SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust

FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO

DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	Date/Time: 4.19.05 1655	RELINQUISHED BY (printed name): (signature):	Date/Time:
RECEIVED BY (printed name): (signature):	Date/Time: 4/19/05 1655	RECEIVED BY (printed name): (signature):	Date/Time:

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218772 **Event ID:**4802

SAMPLE ID: RE73-05-58833 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): [illegible] **(signature):** [illegible]	**Date/Time:** 4.19.05 1655	**RELINQUISHED BY (printed name):** **(signature):**	**Date/Time:**
RECEIVED BY (printed name): [illegible] **(signature):** [illegible]	**Date/Time:** 4/19/05 1655	**RECEIVED BY (printed name):** **(signature):**	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218802 **Event ID:**4802

SAMPLE ID: RE73-05-58837 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): KR Leonard (signature):	**Date/Time:** 4.19.05 1655	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4-19-05 1655	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218792 **Event ID:**4802

SAMPLE ID: RE73-05-58836 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	**Date/Time:** 4.19.05 1655	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4/19/05 1655	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Rad Screening Data Release Form

The Following samples were received at the Field Support Facility (FSF) without screening data (list sample number):

These samples will not be shipped until radiological screening data documentation arrives at the FSF. I understand that it is my responsibility to ensure this information arrives at the FSF in a timely manner. If holding times are missed because screening data does not arrive, I will pick up the samples.

The following samples do not require rad screening data for the reasons stated (list sample numbers):

RE73-05-58824,
" " -58825
" " -58826
-58827
-58828
-58829
-58830
-58831
-58832
-58833
-58834
-58835

RE73-05-58836
" " -58837
" " -58838
-58839
-58840
-58841
-58877

Reason: SCREENED IN THE FIELD BY RCT

Print Last Name Kenneth R. LEONARD Signature [signature] Date 4/19/05

ALTA

4/21/2005

Alta Project ID: 26076

Ms. Joylene Valdez
Los Alamos National Laboratory
ER Sample Management Office
TA-3, Building 271, DP O1-U
Los Alamos, NM 87545

Dear Ms. Valdez,

The samples listed in the sample inventory were received by Alta Analytical Laboratory on 4/21/2005.

Please find attached:

- Terms and Conditions (reverse side of letter)
- Sample Inventory Report
- Chain-of-Custody
- Additional sample documentation (if applicable).
- Sample Log-In Checklist

Analytical results are scheduled to be reported to you on: 5/12/2005. All sample containers and their contents will be disposed of 90 days subsequent to issuance of a final report.

If you have any questions regarding the status of the work associated with these samples, please contact me at (916) 933-1640.

Sincerely,

Martha Maier

Martha M. Maier
Alta Analytical Laboratory

Alta Analytical Laboratory Inc.
1104 Windfield Way
El Dorado Hills, CA 95762
FAX (916) 673-0106
(916) 933-1640

TERMS AND CONDITIONS

ACCEPTANCE

These terms and conditions are incorporated into, and made a part of, every agreement for services between **ALTA ANALYTICAL LABORATORY, INC.** ("ALTA") and its client ("CLIENT"). The CLIENT accepts these terms and conditions by agreeing to purchase services from ALTA or by sending samples to ALTA.

PAYMENT

The CLIENT shall pay in full within 30 days after the date that ALTA invoices it for services rendered. No payment terms or conditions of purchase orders different from the terms of ALTA will become part of any sales agreement, purchase order, or other document unless specifically approved in writing by ALTA. Should suit be instituted to collect any debts of the undersigned, the client is responsible to pay all actual costs of collection and attorney's fees and interests on the past due amount at the highest rate legally available.

TURNAROUND TIME

Standard turnaround time is 21 days unless a shorter turnaround time is expressly agreed to by ALTA. Turnaround time is defined as the number of calendar days between the first business day after ALTA receives a sample or is authorized by the CLIENT to perform an analysis on a sample, whichever occurs last, and the date that ALTA transmits the final report for that sample to the CLIENT. Rush orders, i.e., those that the CLIENT requests to have analyzed in less than the standard turnaround time, will be subject to the additional charges set forth in the applicable quotation. Delays caused by acts of God, natural disasters, governmental actions, fires, floods and accidents, and other circumstances for which ALTA is not responsible, shall not be counted in determining turnaround time.

SHIPPING

The CLIENT is responsible for delivering its samples to ALTA in good condition and the CLIENT shall bear the risk of any loss of or damage to its samples during shipping. ALTA reserves the right to refuse to accept delivery of, to refuse to analyze and/or to return any sample to the CLIENT that is not delivered to ALTA in good condition or that poses a health or safety risk. The CLIENT shall pay the cost of returning such samples to it.

LIMITATION OF LIABILITY

ALTA makes no representations, guarantees or warranties, express or implied, regarding the fitness of its reports for any particular use or purpose and ALTA shall not be liable for consequential damages under any circumstance. The client's sole remedy is a refund of the amount that is paid ALTA to analyze the sample in question. If ALTA loses or damages a sample, after accepting it for analysis, ALTA's liability shall not exceed the lessor of $50 or the amount that the CLIENT expended to obtain the sample.

INDEMNITY

The CLIENT agrees to indemnify and defend ALTA, and to hold ALTA harmless, against any and all claims, actions, lawsuits, arbitration awards, judgements, damages, liabilities, expenses and costs, including attorneys' fees and court costs, arising out of, or related in any way to, the use to ALTA's reports by the CLIENT or by any third party who obtains ALTA's reports from the CLIENT.

ALTA

Section I: Sample Inventory Report

Date Received: **4/21/2005**

Alta Lab. ID	Client Sample ID
26076-001	RE73-05-58829
26076-002	RE73-05-58835
26076-003	RE73-05-58841

Wednesday, April 20, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3156SC

Los Alamos
NATIONAL LABORATORY

EXACT COPY OF ORIGINAL
Init BCB 04/21/05

REQUEST NUMBER: 3156S
ANALYSIS TYPE: ORGANIC

ATTN: Shelly Weagraff
Alta Analytical Lab Incorporated
5070 Robert J. Mathews Parkway
El Dorado Hills, CA 95762

26076
1.6°C

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58829	3	125 ML GLASS	8290	ICE	S
RE73-05-58829	4	125 ML GLASS	8290	ICE	S
RE73-05-58835	3	125 ML GLASS	8290	ICE	S
RE73-05-58835	4	125 ML GLASS	8290	ICE	S
RE73-05-58841	3	125 ML GLASS	8290	ICE	S
RE73-05-58841	4	125 ML GLASS	8290	ICE	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3156S

Relinquished By:	Date	Time	Received By:	Date	Time
Padilla Padilla	4/20/05	1400	B. Benedict Bettina L. Benedict	4/21/05	0840
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		

Received for DISPOSAL By: **Date** **Time** **Remarks:**

PRINTED NAME SIGNATURE

EXACT COPY OF ORIGINAL
Init BB 04/21/05

STANDARD OPERATING PROCEDURE

Attachment 10.B.1

SAMPLE LOG-IN CHECKLIST

ALTA Project No.: 26076

1. Date Samples Arrived: 4/21/05 0840 Initials: BB Location: WR-2			
2. Time / Date logged in: 1355 4/21/05 Initials: BB Location: WR-2			
3. Samples Arrived By: (circle) (FedEx) UPS World Courier Other:			
4. Shipping Preservation: (circle) Ice (Blue Ice) Dry Ice / None Temp °C 1.6°C			
	YES	**NO**	**NA**
5. Shipping Container(s) Intact"? If not, describe condition in comment section.	✓		
6. Shipping Container(s) Custody Seals Present?	✓		
Intact? If not intact, describe condition in comment section.	✓		
7. Shipping Documentation Present? (circle) Shipping Label Airbill	✓		
Tracking Number 6954 7789 2722			
8. Sample Custody Seal(s) Present? No. of Seals_____ or Seal No.	✓		
Intact? If not intact, describe condition in comment section.	✓		
9. Sample Container Intact? If no, indicate sample condition in comment section.	✓		
10. Chain of Custody (COC) or other Sample Documentation Present?	✓		
11. COC/Documentation Acceptable? If no, complete COC Anomaly Form.	✓		
12. Shipping Container (circle): ALTA (Client) Retain or (Return) or Disposed			
13. Container(s) and/or Bottle(s) Requested?		✓	
14. Drinking Water Sample? (HRMS Only) If yes, Acceptable Preservation? Y or N			✓
Preservation Info From? (circle) COC or Sample Container or None Noted			

Comments: RE73-05-58841 date/time 4/19/05 ; 1530
RE73-05-58835 ↓ ↓ ↓ 1130
RE73-05-58829 0930

samplers initials founds on sampler labels

Data Validation Cover Sheet

Section I. Data Record Package Identification

Request Number: 3156S Validation Date: 08-Jun-05 Lab Code: ATLC

Contract Laboratory Name: ALTA Analytical

Validator: Keith Greene Organization: ENV-ECR

Analytical Suite(s): (check all that apply)

- ☐ Volatile Organics
- ☐ Semivolatile Organics
- ☐ Organochlorine Pesticides/Polychlorinated Biphenyls
- ☒ Other: 8290 (describe)
- ☐ High Explosives
- ☐ Inorganics
- ☐ Radiochemistry

Section II. Completeness Check

Yes	No	n/a	(check one)	Yes	No	n/a	(check one)
☒	☐	☐	1. Chain-of-custody form(s)	☒	☐	☐	6. Raw/BSS data
☒	☐	☐	2. Case narrative	☒	☐	☐	7. Quality control forms
☒	☐	☐	3. Sample result forms	☒	☐	☐	8. Quantitation reports
☒	☐	☐	4. Sample chromatograms	☐	☐	☒	9. TICs forms
☒	☐	☐	5. Standard chromatograms	☐	☐	☒	10. TICs mass spectra

Identify any samples in the assigned Request Number that are missing:

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed upon date of resolution and contract laboratory point of contact): No qualification needed.

(Attach additional comment sheets as necessary)

Validator's signature: _____ Date: 6/8/05

ALTA

Sample ID: RE73-05-58829 — **EPA Method 8290**

Client Data		Sample Data		Laboratory Data			
Name:	Los Alamos National Laboratory	Matrix:	Soil	Lab Sample:	26076-001	Date Received:	21-Apr-05
Project:	3156S	Sample Size:	11.94 g	QC Batch No.:	6749	Date Extracted:	29-Apr-05
Date Collected:	19-Apr-05	%Solids:	83.8	Date Analyzed DB-5:	2-May-05	Date Analyzed DB-225:	7-May-05
Time Collected:	0930						

Analyte	Conc. (pg/g)	DL [a]	EMPC [b]	Qualifiers
2,3,7,8-TCDD	5.93			
1,2,3,7,8-PeCDD	10.7			
1,2,3,4,7,8-HxCDD	8.15			
1,2,3,6,7,8-HxCDD	29.9			
1,2,3,7,8,9-HxCDD	23.9			
1,2,3,4,6,7,8-HpCDD	488			
OCDD	1860			
2,3,7,8-TCDF	61.0			
1,2,3,7,8-PeCDF	28.3			
2,3,4,7,8-PeCDF	42.6			
1,2,3,4,7,8-HxCDF	22.0			B
1,2,3,6,7,8-HxCDF	19.3			
2,3,4,6,7,8-HxCDF	24.7			
1,2,3,7,8,9-HxCDF	5.00			
1,2,3,4,6,7,8-HpCDF	93.5			B
1,2,3,4,7,8,9-HpCDF	5.81			
OCDF	53.6			

	Labeled Standard	%R	LCL-UCL [d]	Qualifiers
IS	13C-2,3,7,8-TCDD	89.5	40 - 135	
	13C-1,2,3,7,8-PeCDD	91.3	40 - 135	
	13C-1,2,3,4,7,8-HxCDD	90.5	40 - 135	
	13C-1,2,3,6,7,8-HxCDD	95.6	40 - 135	
	13C-1,2,3,4,6,7,8-HpCDD	104	40 - 135	
	13C-OCDD	77.8	40 - 135	
	13C-2,3,7,8-TCDF	90.8	40 - 135	
	13C-1,2,3,7,8-PeCDF	93.2	40 - 135	
	13C-2,3,4,7,8-PeCDF	91.5	40 - 135	
	13C-1,2,3,4,7,8-HxCDF	97.7	40 - 135	
	13C-1,2,3,6,7,8-HxCDF	99.8	40 - 135	
	13C-2,3,4,6,7,8-HxCDF	102	40 - 135	
	13C-1,2,3,7,8,9-HxCDF	99.8	40 - 135	
	13C-1,2,3,4,6,7,8-HpCDF	102	40 - 135	
	13C-1,2,3,4,7,8,9-HpCDF	115	40 - 135	
	13C-OCDF	94.9	40 - 135	
CRS	37Cl-2,3,7,8-TCDD	90.4	40 - 135	

Totals		
Total TCDD	132	
Total PeCDD	139	
Total HxCDD	297	
Total HpCDD	849	
Total TCDF	1160	D
Total PeCDF	459	D
Total HxCDF	221	B,D
Total HpCDF	155	B

Toxic Equivalent Quotient (TEQ) Data [e]

TEQ (Min): 61.2

a. Sample specific estimated detection limit.

b. Estimated maximum possible concentration.

c. Method detection limit.

d. Lower control limit - upper control limit.

e. Toxic Equivalent Quotient (TEQ) based on International Toxic Equivalent Factors (ITEF).

Analyst: JMH

Approved By: William J. Luksemburg 08-May-2005 07:43

ALTA

Sample ID: RE73-05-58835 **EPA Method 8290**

Client Data		Sample Data		Laboratory Data			
Name:	Los Alamos National Laboratory	Matrix:	Soil	Lab Sample:	26076-002	Date Received:	21-Apr-05
Project:	3156S	Sample Size:	12.88 g	QC Batch No.:	6749	Date Extracted:	29-Apr-05
Date Collected:	19-Apr-05	%Solids:	77.8	Date Analyzed DB-5:	2-May-05	Date Analyzed DB-225:	7-May-05
Time Collected:	1130						

Analyte	Conc. (pg/g)	DL [a]	EMPC[b]	Qualifiers
2,3,7,8-TCDD	7.20			
1,2,3,7,8-PeCDD	16.9			
1,2,3,4,7,8-HxCDD	14.2			
1,2,3,6,7,8-HxCDD	57.8			
1,2,3,7,8,9-HxCDD	40.3			
1,2,3,4,6,7,8-HpCDD	895			
OCDD	3260			
2,3,7,8-TCDF	45.8			
1,2,3,7,8-PeCDF	24.2			
2,3,4,7,8-PeCDF	37.5			
1,2,3,4,7,8-HxCDF	25.0			B
1,2,3,6,7,8-HxCDF	23.0			
2,3,4,6,7,8-HxCDF	29.2			
1,2,3,7,8,9-HxCDF	6.11			
1,2,3,4,6,7,8-HpCDF	197			B
1,2,3,4,7,8,9-HpCDF	9.38			
OCDF	136			

	Labeled Standard	%R	LCL-UCL[d]	Qualifiers
IS	13C-2,3,7,8-TCDD	85.7	40 - 135	
	13C-1,2,3,7,8-PeCDD	90.0	40 - 135	
	13C-1,2,3,4,7,8-HxCDD	89.8	40 - 135	
	13C-1,2,3,6,7,8-HxCDD	90.8	40 - 135	
	13C-1,2,3,4,6,7,8-HpCDD	108	40 - 135	
	13C-OCDD	89.3	40 - 135	
	13C-2,3,7,8-TCDF	87.0	40 - 135	
	13C-1,2,3,7,8-PeCDF	89.3	40 - 135	
	13C-2,3,4,7,8-PeCDF	89.1	40 - 135	
	13C-1,2,3,4,7,8-HxCDF	100	40 - 135	
	13C-1,2,3,6,7,8-HxCDF	97.5	40 - 135	
	13C-2,3,4,6,7,8-HxCDF	96.5	40 - 135	
	13C-1,2,3,7,8,9-HxCDF	95.6	40 - 135	
	13C-1,2,3,4,6,7,8-HpCDF	103	40 - 135	
	13C-1,2,3,4,7,8,9-HpCDF	118	40 - 135	
	13C-OCDF	101	40 - 135	
CRS	37Cl-2,3,7,8-TCDD	89.9	40 - 135	

Totals	
Total TCDD	197
Total PeCDD	236
Total HxCDD	630
Total HpCDD	1780
Total TCDF	874 D
Total PeCDF	418 D
Total HxCDF	297 B,D
Total HpCDF	347 B

Toxic Equivalent Quotient (TEQ) Data [e]

TEQ (Min): 74.2

a. Sample specific estimated detection limit.

b. Estimated maximum possible concentration.

c. Method detection limit.

d. Lower control limit - upper control limit.

e. Toxic Equivalent Quotient (TEQ) based on International Toxic Equivalent Factors (ITEF).

Analyst: JMH

Approved By: William J. Luksemburg 08-May-2005 07:43

ALTA

Sample ID: RE73-05-58841 **EPA Method 8290**

Client Data		Sample Data		Laboratory Data			
Name:	Los Alamos National Laboratory	Matrix:	Soil	Lab Sample:	26076-003	Date Received:	21-Apr-05
Project:	3156S	Sample Size:	12.88 g	QC Batch No.:	6749	Date Extracted:	29-Apr-05
Date Collected:	19-Apr-05	%Solids:	77.7	Date Analyzed DB-5:	2-May-05	Date Analyzed DB-225:	7-May-05
Time Collected:	1530						

Analyte	Conc. (pg/g)	DL [a]	EMPC [b]	Qualifiers
2,3,7,8-TCDD	5.67			
1,2,3,7,8-PeCDD	18.6			
1,2,3,4,7,8-HxCDD	16.2			
1,2,3,6,7,8-HxCDD	42.9			
1,2,3,7,8,9-HxCDD	33.8			
1,2,3,4,6,7,8-HpCDD	549			
OCDD	2300			
2,3,7,8-TCDF	37.7			
1,2,3,7,8-PeCDF	28.9			
2,3,4,7,8-PeCDF	49.8			
1,2,3,4,7,8-HxCDF	39.1			B
1,2,3,6,7,8-HxCDF	35.6			
2,3,4,6,7,8-HxCDF	43.7			
1,2,3,7,8,9-HxCDF	9.02			
1,2,3,4,6,7,8-HpCDF	168			B
1,2,3,4,7,8,9-HpCDF	11.0			
OCDF	86.7			

	Labeled Standard	%R	LCL-UCL [d]	Qualifiers
IS	13C-2,3,7,8-TCDD	81.6	40 - 135	
	13C-1,2,3,7,8-PeCDD	85.7	40 - 135	
	13C-1,2,3,4,7,8-HxCDD	88.3	40 - 135	
	13C-1,2,3,6,7,8-HxCDD	87.7	40 - 135	
	13C-1,2,3,4,6,7,8-HpCDD	101	40 - 135	
	13C-OCDD	85.3	40 - 135	
	13C-2,3,7,8-TCDF	83.4	40 - 135	
	13C-1,2,3,7,8-PeCDF	85.1	40 - 135	
	13C-2,3,4,7,8-PeCDF	84.2	40 - 135	
	13C-1,2,3,4,7,8-HxCDF	95.5	40 - 135	
	13C-1,2,3,6,7,8-HxCDF	92.6	40 - 135	
	13C-2,3,4,6,7,8-HxCDF	93.7	40 - 135	
	13C-1,2,3,7,8,9-HxCDF	92.1	40 - 135	
	13C-1,2,3,4,6,7,8-HpCDF	94.1	40 - 135	
	13C-1,2,3,4,7,8,9-HpCDF	108	40 - 135	
	13C-OCDF	94.7	40 - 135	
CRS	37Cl-2,3,7,8-TCDD	82.3	40 - 135	

Totals		
Total TCDD	223	
Total PeCDD	281	
Total HxCDD	461	
Total HpCDD	969	
Total TCDF	788	D
Total PeCDF	532	D
Total HxCDF	381	B
Total HpCDF	270	B

Toxic Equivalent Quotient (TEQ) Data [e]

TEQ (Min): 76.8

a. Sample specific estimated detection limit.

b. Estimated maximum possible concentration.

c. Method detection limit.

d. Lower control limit - upper control limit.

e. Toxic Equivalent Quotient (TEQ) based on International Toxic Equivalent Factors (ITEF).

Analyst: JMH

Approved By: William J. Luksemburg 08-May-2005 07:43

Wednesday, April 20, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3156SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3156S

ANALYSIS TYPE: ORGANIC

ATTN: Shelly Weagraff
Alta Analytical Lab Incorporated
5070 Robert J. Mathews Parkway
El Dorado Hills, CA 95762

26076
1.6°C

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58829	3	125 ML GLASS	8290	ICE	S
RE73-05-58829	4	125 ML GLASS	8290	ICE	S
RE73-05-58835	3	125 ML GLASS	8290	ICE	S
RE73-05-58835	4	125 ML GLASS	8290	ICE	S
RE73-05-58841	3	125 ML GLASS	8290	ICE	S
RE73-05-58841	4	125 ML GLASS	8290	ICE	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3156S Page 1

Relinquished By: PRINTED NAME / SIGNATURE	Date	Time	Received By: PRINTED NAME / SIGNATURE	Date	Time
Rodilla Rael	4/20/05	1400	B. Benedict Bettina J. Benedict	4/21/05	0840

Received for DISPOSAL By: PRINTED NAME / SIGNATURE — Date — Time

Remarks:

Wednesday, April 20, 2005

REQUEST NUMBER: 3156S

ANALYSIS TYPE: ORGANIC

26076

1.6°C

Los Alamos
NATIONAL LABORATORY

ATTN: Shelly Weagraff
Alta Analytical Lab Incorporated
5070 Robert J. Mathews Parkway
El Dorado Hills, CA 95762

Please analyze the enclosed samples according to the schedule indicated:

SHIP DATE: 04/20/2005
REPORT DUE: 05/05/2005
TURN AROUND REQ'D: 15

RAD SCREENING: NOT REQ
COMMENTS:

These samples are on:

LANL Request Number: 3156S
Per Agreement Number: 176450010
Project Cost Code: MT3R0223KGT0

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:8290	RE73-05-58829	3	S	04/19/2005	
SW-846:8290	RE73-05-58829	4	S	04/19/2005	
SW-846:8290	RE73-05-58835	3	S	04/19/2005	
SW-846:8290	RE73-05-58835	4	S	04/19/2005	
SW-846:8290	RE73-05-58841	3	S	04/19/2005	
SW-846:8290	RE73-05-58841	4	S	04/19/2005	

Final Page of REQUEST NUMBER 3156S

DATA VALIDATION COVER SHEET (Example)

SECTION I.

REQUEST NUMBER: 31565 COST CODE: _____

VALIDATION DATE: _____

LAB NAME: ATFA LAB CODE: _____

VALIDATOR: _____ ORGANIZATION: _____

ANALYTICAL SUITE: ___ VOLATILES ___ HIGH EXPLOSIVES

___ SEMIVOLATILES ___ INORGANICS

___ PESTICIDES/AROCLORS ___ RADIOCHEMISTRY

OTHER (describe) _____

SECTION II. COMPLETENESS CHECKLIST

Item	Present? (Y/N/NA)	Item	Present? (Y/N/NA)
1. COC form(s)		2. Case Narrative	
3. Sample Results		4. Sample Chromatograms	
5. Standard Chromatograms		6. Quantitation Reports	
7. QC Forms			

Identify any samples in the assigned Request Number that are missing:

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

Comments: include information about requests to the laboratory and agreed upon date of resolution and lab contact: (Attach additional comment sheets as necessary)

_____

_____

_____

Signature/1st validation: _____ Date/1st validation: _____

Signature/2nd validation: _____ Date/2nd validation: _____

ALTA

May 09, 2005

Alta Project I.D.: 26076

Ms. Joylene Valdez
Los Alamos National Laboratory
ER Sample Management Office
TA-3, Building 271, DP O1-U
Los Alamos, NM 87545

REC'D MAY 12 2005

Dear Ms. Valdez,

Enclosed are the results for the three soil samples received at Alta Analytical Laboratory on April 21, 2005 under your Project Name "3156S". These samples were extracted and analyzed using EPA Method 8290 for tetra-through-octa chlorinated dioxins and furans. A standard turnaround time was provided for this work.

The following report consists of a Sample Inventory (Section I), Analytical Results (Section II) and the Appendix, which contains the chain-of-custody, a list of data qualifiers and abbreviations, Alta's current certifications, and copies of the raw data (if requested).

Alta Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-933-1640 or by email at mmaier@altalab.com. Thank you for choosing Alta as part of your analytical support team.

Sincerely,

Martha Maier

Martha M. Maier
Director of HRMS Services

ACCREDITED IN ACCORDANCE WITH NELAC

Alta Analytical Laboratory certifies that the report herein meets all the requirements set forth by NELAC for those applicable test methods. This report should not be reproduced except in full without the written approval of ALTA.

Alta Analytical Laboratory Inc.
1104 Windfield Way
El Dorado Hills, CA 95762
FAX (916) 673-0106
(916) 933-1640

Section I: Sample Inventory Report

Date Received: **4/21/2005**

Alta Lab. ID	Client Sample ID
26076-001	RE73-05-58829
26076-002	RE73-05-58835
26076-003	RE73-05-58841

SECTION II

ALTA

Method Blank — EPA Method 8290

Matrix:	Soil	QC Batch No.:	6749	Lab Sample:	0-MB001
Sample Size:	10 g	Date Extracted:	29-Apr-05	Date Analyzed DB-5:	1-May-05
				Date Analyzed DB-225:	NA

Analyte	Conc. (pg/g)	DL [a]	EMPC [b]	Qualifiers
2,3,7,8-TCDD	ND	0.152		
1,2,3,7,8-PeCDD	ND	0.148		
1,2,3,4,7,8-HxCDD	ND	0.237		
1,2,3,6,7,8-HxCDD	ND	0.231		
1,2,3,7,8,9-HxCDD	ND	0.221		
1,2,3,4,6,7,8-HpCDD	ND	0.255		
OCDD	ND	0.715		
2,3,7,8-TCDF	ND	0.163		
1,2,3,7,8-PeCDF	ND	0.320		
2,3,4,7,8-PeCDF	ND	0.299		
1,2,3,4,7,8-HxCDF	0.188			J
1,2,3,6,7,8-HxCDF	ND	0.0633		
2,3,4,6,7,8-HxCDF	ND	0.0794		
1,2,3,7,8,9-HxCDF	ND	0.155		
1,2,3,4,6,7,8-HpCDF	0.305			J
1,2,3,4,7,8,9-HpCDF	ND	0.208		
OCDF	ND	0.854		

	Labeled Standard	%R	LCL-UCL [d]	Qualifiers
IS	13C-2,3,7,8-TCDD	76.5	40 - 135	
	13C-1,2,3,7,8-PeCDD	89.4	40 - 135	
	13C-1,2,3,4,7,8-HxCDD	85.1	40 - 135	
	13C-1,2,3,6,7,8-HxCDD	91.7	40 - 135	
	13C-1,2,3,4,6,7,8-HpCDD	88.9	40 - 135	
	13C-OCDD	65.2	40 - 135	
	13C-2,3,7,8-TCDF	73.2	40 - 135	
	13C-1,2,3,7,8-PeCDF	79.4	40 - 135	
	13C-2,3,4,7,8-PeCDF	79.1	40 - 135	
	13C-1,2,3,4,7,8-HxCDF	102	40 - 135	
	13C-1,2,3,6,7,8-HxCDF	99.8	40 - 135	
	13C-2,3,4,6,7,8-HxCDF	96.1	40 - 135	
	13C-1,2,3,7,8,9-HxCDF	84.9	40 - 135	
	13C-1,2,3,4,6,7,8-HpCDF	86.0	40 - 135	
	13C-1,2,3,4,7,8,9-HpCDF	95.1	40 - 135	
	13C-OCDF	76.1	40 - 135	
CRS	37Cl-2,3,7,8-TCDD	82.0	40 - 135	

Totals		
Total TCDD	ND	0.152
Total PeCDD	ND	0.148
Total HxCDD	ND	0.229
Total HpCDD	ND	0.255
Total TCDF	ND	0.163
Total PeCDF	ND	0.309
Total HxCDF	0.347	
Total HpCDF	0.305	

Toxic Equivalent Quotient (TEQ) Data [e]

TEQ (Min): 0.0218

a. Sample specific estimated detection limit.

b. Estimated maximum possible concentration.

c. Method detection limit.

d. Lower control limit - upper control limit.

e. Toxic Equivalent Quotient (TEQ) based on International Toxic Equivalent Factors (ITEF).

Analyst: JMH

Approved By: William J. Luksemburg 08-May-2005 07:43

ALTA

OPR Results **EPA Method 8290**

Matrix:	Soil	QC Batch No.:	6749	Lab Sample:	0-OPR001
Sample Size:	10 g	Date Extracted:	29-Apr-05	Date Analyzed DB-5:	1-May-05
				Date Analyzed DB-225:	NA

Analyte	Spike Conc.	Conc. (ng/mL)	OPR Limits
2,3,7,8-TCDD	10.0	10.2	7 - 13
1,2,3,7,8-PeCDD	50.0	50.6	35 - 65
1,2,3,4,7,8-HxCDD	50.0	49.6	35 - 65
1,2,3,6,7,8-HxCDD	50.0	51.2	35 - 65
1,2,3,7,8,9-HxCDD	50.0	47.3	35 - 65
1,2,3,4,6,7,8-HpCDD	50.0	50.3	35 - 65
OCDD	100	101	70 - 130
2,3,7,8-TCDF	10.0	10.1	7 - 13
1,2,3,7,8-PeCDF	50.0	51.1	35 - 65
2,3,4,7,8-PeCDF	50.0	50.6	35 - 65
1,2,3,4,7,8-HxCDF	50.0	49.2	35 - 65
1,2,3,6,7,8-HxCDF	50.0	51.5	35 - 65
2,3,4,6,7,8-HxCDF	50.0	51.7	35 - 65
1,2,3,7,8,9-HxCDF	50.0	52.3	35 - 65
1,2,3,4,6,7,8-HpCDF	50.0	52.2	35 - 65
1,2,3,4,7,8,9-HpCDF	50.0	52.6	35 - 65
OCDF	100	101	70 - 130

	Labeled Standard	%R	LCL-UCL
IS	13C-2,3,7,8-TCDD	72.0	40 - 135
	13C-1,2,3,7,8-PeCDD	78.1	40 - 135
	13C-1,2,3,4,7,8-HxCDD	87.6	40 - 135
	13C-1,2,3,6,7,8-HxCDD	89.1	40 - 135
	13C-1,2,3,4,6,7,8-HpCDD	86.7	40 - 135
	13C-OCDD	61.1	40 - 135
	13C-2,3,7,8-TCDF	70.3	40 - 135
	13C-1,2,3,7,8-PeCDF	74.9	40 - 135
	13C-2,3,4,7,8-PeCDF	76.2	40 - 135
	13C-1,2,3,4,7,8-HxCDF	98.6	40 - 135
	13C-1,2,3,6,7,8-HxCDF	99.7	40 - 135
	13C-2,3,4,6,7,8-HxCDF	95.2	40 - 135
	13C-1,2,3,7,8,9-HxCDF	83.2	40 - 135
	13C-1,2,3,4,6,7,8-HpCDF	85.4	40 - 135
	13C-1,2,3,4,7,8,9-HpCDF	89.8	40 - 135
	13C-OCDF	74.0	40 - 135
CRS	37Cl-2,3,7,8-TCDD	71.6	40 - 135

Analyst: JMH

Approved By: William J. Luksemburg 08-May-2005 07:43

ALTA

Sample ID: RE73-05-58829 **EPA Method 8290**

Client Data		Sample Data		Laboratory Data			
Name:	Los Alamos National Laboratory	Matrix:	Soil	Lab Sample:	26076-001	Date Received:	21-Apr-05
Project:	3156S	Sample Size:	11.94 g	QC Batch No.:	6749	Date Extracted:	29-Apr-05
Date Collected:	19-Apr-05	%Solids:	83.8	Date Analyzed DB-5:	2-May-05	Date Analyzed DB-225:	7-May-05
Time Collected:	0930						

Analyte	Conc. (pg/g)	DL [a]	EMPC[b]	Qualifiers
2,3,7,8-TCDD	5.93			
1,2,3,7,8-PeCDD	10.7			
1,2,3,4,7,8-HxCDD	8.15			
1,2,3,6,7,8-HxCDD	29.9			
1,2,3,7,8,9-HxCDD	23.9			
1,2,3,4,6,7,8-HpCDD	488			
OCDD	1860			
2,3,7,8-TCDF	61.0			
1,2,3,7,8-PeCDF	28.3			
2,3,4,7,8-PeCDF	42.6			
1,2,3,4,7,8-HxCDF	22.0			B
1,2,3,6,7,8-HxCDF	19.3			
2,3,4,6,7,8-HxCDF	24.7			
1,2,3,7,8,9-HxCDF	5.00			
1,2,3,4,6,7,8-HpCDF	93.5			B
1,2,3,4,7,8,9-HpCDF	5.81			
OCDF	53.6			

	Labeled Standard	%R	LCL-UCL[d]	Qualifiers
IS	13C-2,3,7,8-TCDD	89.5	40 - 135	
	13C-1,2,3,7,8-PeCDD	91.3	40 - 135	
	13C-1,2,3,4,7,8-HxCDD	90.5	40 - 135	
	13C-1,2,3,6,7,8-HxCDD	95.6	40 - 135	
	13C-1,2,3,4,6,7,8-HpCDD	104	40 - 135	
	13C-OCDD	77.8	40 - 135	
	13C-2,3,7,8-TCDF	90.8	40 - 135	
	13C-1,2,3,7,8-PeCDF	93.2	40 - 135	
	13C-2,3,4,7,8-PeCDF	91.5	40 - 135	
	13C-1,2,3,4,7,8-HxCDF	97.7	40 - 135	
	13C-1,2,3,6,7,8-HxCDF	99.8	40 - 135	
	13C-2,3,4,6,7,8-HxCDF	102	40 - 135	
	13C-1,2,3,7,8,9-HxCDF	99.8	40 - 135	
	13C-1,2,3,4,6,7,8-HpCDF	102	40 - 135	
	13C-1,2,3,4,7,8,9-HpCDF	115	40 - 135	
	13C-OCDF	94.9	40 - 135	
CRS	37Cl-2,3,7,8-TCDD	90.4	40 - 135	

Totals		
Total TCDD	132	
Total PeCDD	139	
Total HxCDD	297	
Total HpCDD	849	
Total TCDF	1160	D
Total PeCDF	459	D
Total HxCDF	221	B,D
Total HpCDF	155	B

Toxic Equivalent Quotient (TEQ) Data [e]

TEQ (Min): 61.2

a. Sample specific estimated detection limit.

b. Estimated maximum possible concentration.

c. Method detection limit.

d. Lower control limit - upper control limit.

e. Toxic Equivalent Quotient (TEQ) based on International Toxic Equivalent Factors (ITEF).

Analyst: JMH

Approved By: William J. Luksemburg 08-May-2005 07:43

ALTA

Sample ID: RE73-05-58835 **EPA Method 8290**

Client Data		Sample Data		Laboratory Data			
Name:	Los Alamos National Laboratory	Matrix:	Soil	Lab Sample:	26076-002	Date Received:	21-Apr-05
Project:	3156S	Sample Size:	12.88 g	QC Batch No.:	6749	Date Extracted:	29-Apr-05
Date Collected:	19-Apr-05	%Solids:	77.8	Date Analyzed DB-5:	2-May-05	Date Analyzed DB-225:	7-May-05
Time Collected:	1130						

Analyte	Conc. (pg/g)	DL [a]	EMPC [b]	Qualifiers
2,3,7,8-TCDD	7.20			
1,2,3,7,8-PeCDD	16.9			
1,2,3,4,7,8-HxCDD	14.2			
1,2,3,6,7,8-HxCDD	57.8			
1,2,3,7,8,9-HxCDD	40.3			
1,2,3,4,6,7,8-HpCDD	895			
OCDD	3260			
2,3,7,8-TCDF	45.8			
1,2,3,7,8-PeCDF	24.2			
2,3,4,7,8-PeCDF	37.5			
1,2,3,4,7,8-HxCDF	25.0			B
1,2,3,6,7,8-HxCDF	23.0			
2,3,4,6,7,8-HxCDF	29.2			
1,2,3,7,8,9-HxCDF	6.11			
1,2,3,4,6,7,8-HpCDF	197			B
1,2,3,4,7,8,9-HpCDF	9.38			
OCDF	136			

Labeled Standard		%R	LCL-UCL [d]	Qualifiers
IS	13C-2,3,7,8-TCDD	85.7	40 - 135	
	13C-1,2,3,7,8-PeCDD	90.0	40 - 135	
	13C-1,2,3,4,7,8-HxCDD	89.8	40 - 135	
	13C-1,2,3,6,7,8-HxCDD	90.8	40 - 135	
	13C-1,2,3,4,6,7,8-HpCDD	108	40 - 135	
	13C-OCDD	89.3	40 - 135	
	13C-2,3,7,8-TCDF	87.0	40 - 135	
	13C-1,2,3,7,8-PeCDF	89.3	40 - 135	
	13C-2,3,4,7,8-PeCDF	89.1	40 - 135	
	13C-1,2,3,4,7,8-HxCDF	100	40 - 135	
	13C-1,2,3,6,7,8-HxCDF	97.5	40 - 135	
	13C-2,3,4,6,7,8-HxCDF	96.5	40 - 135	
	13C-1,2,3,7,8,9-HxCDF	95.6	40 - 135	
	13C-1,2,3,4,6,7,8-HpCDF	103	40 - 135	
	13C-1,2,3,4,7,8,9-HpCDF	118	40 - 135	
	13C-OCDF	101	40 - 135	
CRS	37Cl-2,3,7,8-TCDD	89.9	40 - 135	

Totals		
Total TCDD	197	
Total PeCDD	236	
Total HxCDD	630	
Total HpCDD	1780	
Total TCDF	874	D
Total PeCDF	418	D
Total HxCDF	297	B,D
Total HpCDF	347	B

Toxic Equivalent Quotient (TEQ) Data [e]

TEQ (Min): 74.2

a. Sample specific estimated detection limit.

b. Estimated maximum possible concentration.

c. Method detection limit.

d. Lower control limit - upper control limit.

e. Toxic Equivalent Quotient (TEQ) based on International Toxic Equivalent Factors (ITEF).

Analyst: JMH

Approved By: William J. Luksemburg 08-May-2005 07:43

ALTA

Sample ID: RE73-05-58841 **EPA Method 8290**

Client Data		Sample Data		Laboratory Data			
Name:	Los Alamos National Laboratory	Matrix:	Soil	Lab Sample:	26076-003	Date Received:	21-Apr-05
Project:	3156S	Sample Size:	12.88 g	QC Batch No.:	6749	Date Extracted:	29-Apr-05
Date Collected:	19-Apr-05	%Solids:	77.7	Date Analyzed DB-5:	2-May-05	Date Analyzed DB-225:	7-May-05
Time Collected:	1530						

Analyte	Conc. (pg/g)	DL [a]	EMPC[b]	Qualifiers
2,3,7,8-TCDD	5.67			
1,2,3,7,8-PeCDD	18.6			
1,2,3,4,7,8-HxCDD	16.2			
1,2,3,6,7,8-HxCDD	42.9			
1,2,3,7,8,9-HxCDD	33.8			
1,2,3,4,6,7,8-HpCDD	549			
OCDD	2300			
2,3,7,8-TCDF	37.7			
1,2,3,7,8-PeCDF	28.9			
2,3,4,7,8-PeCDF	49.8			
1,2,3,4,7,8-HxCDF	39.1			B
1,2,3,6,7,8-HxCDF	35.6			
2,3,4,6,7,8-HxCDF	43.7			
1,2,3,7,8,9-HxCDF	9.02			
1,2,3,4,6,7,8-HpCDF	168			B
1,2,3,4,7,8,9-HpCDF	11.0			
OCDF	86.7			

	Labeled Standard	%R	LCL-UCL[d]	Qualifiers
IS	13C-2,3,7,8-TCDD	81.6	40 - 135	
	13C-1,2,3,7,8-PeCDD	85.7	40 - 135	
	13C-1,2,3,4,7,8-HxCDD	88.3	40 - 135	
	13C-1,2,3,6,7,8-HxCDD	87.7	40 - 135	
	13C-1,2,3,4,6,7,8-HpCDD	101	40 - 135	
	13C-OCDD	85.3	40 - 135	
	13C-2,3,7,8-TCDF	83.4	40 - 135	
	13C-1,2,3,7,8-PeCDF	85.1	40 - 135	
	13C-2,3,4,7,8-PeCDF	84.2	40 - 135	
	13C-1,2,3,4,7,8-HxCDF	95.5	40 - 135	
	13C-1,2,3,6,7,8-HxCDF	92.6	40 - 135	
	13C-2,3,4,6,7,8-HxCDF	93.7	40 - 135	
	13C-1,2,3,7,8,9-HxCDF	92.1	40 - 135	
	13C-1,2,3,4,6,7,8-HpCDF	94.1	40 - 135	
	13C-1,2,3,4,7,8,9-HpCDF	108	40 - 135	
	13C-OCDF	94.7	40 - 135	
CRS	37Cl-2,3,7,8-TCDD	82.3	40 - 135	

Totals		
Total TCDD	223	
Total PeCDD	281	
Total HxCDD	461	
Total HpCDD	969	
Total TCDF	788	D
Total PeCDF	532	D
Total HxCDF	381	B
Total HpCDF	270	B

Toxic Equivalent Quotient (TEQ) Data [e]

TEQ (Min): 76.8

a. Sample specific estimated detection limit.

b. Estimated maximum possible concentration.

c. Method detection limit.

d. Lower control limit - upper control limit.

e. Toxic Equivalent Quotient (TEQ) based on International Toxic Equivalent Factors (ITEF).

Analyst: JMH

Approved By: William J. Luksemburg 08-May-2005 07:43

APPENDIX

DATA QUALIFIERS & ABBREVIATIONS

B	This compound was also detected in the method blank.
D	The amount reported is the maximum possible concentration due to possible chlorinated diphenylether interference.
H	The signal-to-noise ratio is greater than 10:1.
I	Chemical Interference
J	The amount detected is below the Lower Calibration Limit of the instrument.
P	Homologue totals include any coplanar PCBs detected at concentrations less than the reporting limit.
*	See Cover Letter
Conc.	Concentration
DL	Sample-specific estimated detection limit
MDL	The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero in the matrix tested.
EMPC	Estimated Maximum Possible Concentration
NA	Not applicable
RL	Reporting Limit – concentrations that correspond to low calibration point
ND	Not Detected
TEQ	Toxic Equivalency

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

The control limits are "interim limits only" until in-house limits are utilized.

NELAP — (Primary AA: California, Certificate No. 02102CA)

Department of the Navy

U.S. Army Corps of Engineers

U.S. EPA Region 5

Bureau of Reclamation — Mid-Pacific Region — (MP-470, Res-1.10)

Commonwealth of Kentucky — (Certificate No. 90063)

Commonwealth of Virginia — (Certificate No. 00013)

State of Alaska, Department of Environmental Conservation — (Certificate No. OS-00197)

State of Arizona — (Certificate No. AZ0639)

State of Arkansas, Department of Health — (Approval granted through CA certification)

State of Arkansas, Department of Environmental Quality

State of California — (Certificate No. 1640)

State of Colorado

State of Connecticut — (Certificate No. PH-0182)

State of Florida — (Certificate No. 87456)

State of Louisiana, Department of Health and Hospitals — (Certificate No. LA000014)

State of Louisiana, Department of Environmental Quality

State of Maine

State of Michigan (Certificate No. 81178087)

State of Mississippi — (Approval granted through CA certification)

State of Nevada — (Certificate No. CA413)

State of New Jersey — (Certificate No. CA003)

State of New York, Department of Health — (Certificate No. 11411)

State of North Carolina — (Certification No. 06700)

State of North Dakota, Department of Health — (Certificate No. R-078)

State of New Mexico

State of Oklahoma – (D9919)

State of Oregon – (Certificate No. CA413)

State of Pennsylvania — (Certificate No. 68-490)

State of South Carolina — (Certificate No. 87002001)

State of Tennessee — (Certificate No. 02996)

State of Texas — (Certificate No. TX247-1000A

State of Utah — (Certificate No. E-201)

State of Washington – (Certification No. C091)

State of Wisconsin — (Certificate No. 998036160)

State of Wyoming — (USEPA Region 8 Ref: 8TMS-Q)

Wednesday, April 20, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3156SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3156S

ANALYSIS TYPE: ORGANIC

ATTN: Shelly Weagraff
Alta Analytical Lab Incorporated
5070 Robert J. Mathews Parkway
El Dorado Hills, CA 95762

26076
1.6°C

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58829	3	125 ML GLASS	8290	ICE	S
RE73-05-58829	4	125 ML GLASS	8290	ICE	S
RE73-05-58835	3	125 ML GLASS	8290	ICE	S
RE73-05-58835	4	125 ML GLASS	8290	ICE	S
RE73-05-58841	3	125 ML GLASS	8290	ICE	S
RE73-05-58841	4	125 ML GLASS	8290	ICE	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3156S

Relinquished By:	Date	Time	Received By:	Date	Time
Padilla Padilla	4/20/05	1400	B. Benedict Bettina J. Benedict	4/21/05	0840
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		
Received for DISPOSAL By:	**Date**	**Time**	**Remarks:**		
PRINTED NAME SIGNATURE					

Wednesday, April 20, 2005

REQUEST NUMBER: 3156S

ANALYSIS TYPE: ORGANIC

26076

1.6°C

Los Alamos
NATIONAL LABORATORY

ATTN: Shelly Weagraff
Alta Analytical Lab Incorporated
5070 Robert J. Mathews Parkway
El Dorado Hills, CA 95762

Please analyze the enclosed samples according to the schedule indicated:

SHIP DATE: 04/20/2005
REPORT DUE: 05/05/2005
TURN AROUND REQ'D: 15

RAD SCREENING: NOT REQ
COMMENTS:

These samples are on:

LANL Request Number: 3156S
Per Agreement Number: 176450010
Project Cost Code: MT3R0223KGT0

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
SW-846:8290	RE73-05-58829	3	S	04/19/2005	
SW-846:8290	RE73-05-58829	4	S	04/19/2005	
SW-846:8290	RE73-05-58835	3	S	04/19/2005	
SW-846:8290	RE73-05-58835	4	S	04/19/2005	
SW-846:8290	RE73-05-58841	3	S	04/19/2005	
SW-846:8290	RE73-05-58841	4	S	04/19/2005	

Final Page of REQUEST NUMBER 3156S

Attachment 10.B.1

SAMPLE LOG-IN CHECKLIST

ALTA Project No.: 26076

1. Date Samples Arrived: 4/21/05 0840 Initials: [illegible] Location: WR-2			
2. Time / Date logged in: 1355 4/21/05 Initials: [illegible] Location: WR-2			
3. Samples Arrived By: (circle) (FedEx) UPS World Courier Other:			
4. Shipping Preservation: (circle) Ice (Blue Ice) Dry Ice / None Temp °C 1.6°C			
	YES	**NO**	**NA**
5. Shipping Container(s) Intact? If not, describe condition in comment section.	✓		
6. Shipping Container(s) Custody Seals Present?	✓		
Intact? If not intact, describe condition in comment section.	✓		
7. Shipping Documentation Present? (circle) Shipping Label Airbill	✓		
Tracking Number 6954 7789 2722			
8. Sample Custody Seal(s) Present? No. of Seals_____ or Seal No.	✓		
Intact? If not intact, describe condition in comment section.	✓		
9. Sample Container Intact? If no, indicate sample condition in comment section.	✓		
10. Chain of Custody (COC) or other Sample Documentation Present?	✓		
11. COC/Documentation Acceptable? If no, complete COC Anomaly Form.	✓		
12. Shipping Container (circle): ALTA (Client) Retain or (Return) or Disposed			
13. Container(s) and/or Bottle(s) Requested?		✓	
14. Drinking Water Sample? (HRMS Only) If yes, Acceptable Preservation? Y or N			✓
Preservation Info From? (circle) COC or Sample Container or None Noted			

Comments: RE73-05-58841 date/time 4/19/05 ; 1530
RE73-05-58835 ↓ ↓ ↓ 1130
RE73-05-58829 0930

sampler's initials founds on sampler labels

ALTA Analytical Laboratory
El Dorado Hills, CA 95762

EXTRACTION INFORMATION

PROCESS SHEET

Project No.-AR: 26076-1 of 1

Prep Due: 5/1/2005 **Project Due:** 5/12/2005

Hold Due: 5/1/2005 **TAT:** 21

Client: Los Alamos National Laboratory(LOANM01A

Client Manager: Martha M. Maier

Method: EPA Method 8290 | PCDD/F (Tetra - Octa)

Split Type:

6749

Matrix: Soil

LabID	Recon	Client-ID	Description	Date Received	SLoc
001	☑	RE73-05-58829		4/21/2005	WR-2
002	☑	RE73-05-58835		4/21/2005	WR-2
003	☑	RE73-05-58841		4/21/2005	WR-2

% Solid EM 4-22-05

Instructions:

Report Options

Report Level:

EDD Type:

Report Group: Dioxins NoMDL

Vial Box ID: Porpoise

TEQ Type: EPA(Default) : Min

Samples Reconciled By: EM 4/22/05

Date Requested 5/1/2005

% Solids

Procedures:

- Tare Balance.
- Add boat and weigh. Record "Boat Wt".
- Add the sample (2-10 g) to the boat and , record "Wet Wt. + Boat Wt." (total).
- Dry in oven overnight @ 107 C.
- Tare Balance.
- Return dish to toploader, record "Residue + Boat Wt.".

Project: 26076-1

ALTA Sample ID	Boat Wt.	Wet Wt. + Boat Wt.	CHEM/DATE	Residue + Boat Wt.	CHEM/DATE	COMMENTS
26076-001	1.24	6.75	EM 4-22-05	5.86	AKK 4/23/05	
002	1.23	4.34	↓	3.65	↓	
003	1.25	6.04	↓	4.97	↓	

NOTES:

HRMSGenSolids.rpt

Project: 26076

Extraction Set: 6749

Chemist: Christina Vreeland 4/29/05

Method(s): EPA Method 8290 | PCDD/F (Tetra - Octa)

C	ALTA Sample ID	G Eqv	Sample Amt. (g)	IS/NS CHEM/ WIT DATE	CRS CHEM/WIT DATE	AP CHEM/Date	ABSG CHEM/Date	AA CHEM/Date	Florisil CHEM/Date	RS CHEM/WIT DATE
☐	0_6749_MB001	(10.00)	(10.00)	CW MDH 4/29/05	MCF 4/30/05	N/A	MCF	4/30/05	MCF 4/30/05	MCF 4/30/05
☐	0_6749_OPR001	↓	↓							
☐	26076_6749_001	11.93	11.94							
☐	26076_6749_002	12.85	12.88							
☐	26076_6749_003	12.88	12.88							

IS Name	NS Name	CRS Name	RS Name	Cycle Time	APP.: SEFUN SOX SDS	Check Out:
PCDD/F OSD420A 10µL (V12)	PCDD/F OSD420B 10µL (V6)	PCDD/F OSD420C 10µL (V12)	PCDD/F OSD420D 10µL (V12)	4/29 Start: 1750	SOLV: Toluene	Chemist: CW 4/29/05
PCB	PCB	PCB	PCB	4/30 Stop: 0930	Other: N/A	Check-In:
PAH	PAH	PAH	PAH		Final Volume(s): 10µL	Chemist: CW 4/29/05

Comments:

CALIBRATION DATA

FORM 6A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.: CCAL ID: ST050430D2-1

Contract No.: SAS No.:

Initial Calibration Date: 4-23-05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050430D2 S#1 Analysis Date: 1-MAY-05 Time: 00:53:24

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	y	10.5	7.8 - 12.9 8.2 - 12.3 (4)
1,2,3,7,8-PeCDD	M+2/M+4	0.62	0.54-0.72	y	48.2	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	47.8	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	49.0	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.29	1.05-1.43	y	47.7	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	48.9	43.0 - 58.0
OCDD	M+2/M+4	0.92	0.76-1.02	y	100.0	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	10.2	8.4 - 12.0 8.6 - 11.6 (4)
1,2,3,7,8-PeCDF	M+2/M+4	1.55	1.32-1.78	y	51.4	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	49.9	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.28	1.05-1.43	y	49.5	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	49.4	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.27	1.05-1.43	y	50.4	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.21	1.05-1.43	y	50.4	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.06	0.88-1.20	y	49.1	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88-1.20	y	49.9	43.0 - 58.0
OCDF	M+2/M+4	0.91	0.76-1.02	y	100	63.0 - 159.0

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) Contract-required concentration range as specified in Table 6a, Method 1613, for tetras only.

Analyst: _____

Date: 5/1/05

FORM 4B

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4-23-05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050430D2 S#1 Analysis Date: 1-MAY-05 Time: 00:53:24

LABELED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	y	103	82.0 - 121.0 85.0 - 117.0 (5)
13C-1,2,3,7,8-PeCDD	M+2/M+4	0.62	0.54-0.72	y	112	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y	101	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	111	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	95.6	72.0 - 138.0
13C-OCDD	M+2/M+4	0.93	0.76-1.02	y	174	96.0 - 415.0
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65-0.89	y	96.9	71.0 - 140.0 76.0 - 131.0 (5)
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	111	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	103	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	124	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	122	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.55	0.43-0.59	y	111	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.53	0.43-0.59	y	105	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	y	97.3	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.45	0.37-0.51	y	99.1	77.0 - 129.0
13C-OCDF	M+2/M+4	0.91	0.76-1.02	y	178	96.0 - 415.0
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					9.64	7.9 - 12.7 8.3 - 12.1 (5)

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range, as specified in Table 6, Method 1613.

(4) No ion abundance ratio; report concentration found.

(5) Contract-required concentration range, as specified in Table 6a, Method 1613, for tetras only.

Analyst: [signature]

Date: 5/1/05

EPA METHOD 8290

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.: CCAL ID: ST050430D2-1

Contract No.: SAS No.:

Initial Calibration Date: 4-23-05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050430D2 S#1 Analysis Date: 1-MAY-05 Time: 00:53:24

	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	y	10.5	8.00 - 12.0
1,2,3,7,8-PeCDD	M+2/M+4	0.62	0.54-0.72	y	48.2	40.0 - 60.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	47.8	40.0 - 60.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	49.0	40.0 - 60.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.29	1.05-1.43	y	47.7	40.0 - 60.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	48.9	40.0 - 60.0
OCDD	M+2/M+4	0.92	0.76-1.02	y	100.0	80.0 - 120
2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	10.2	8.00 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.55	1.32-1.78	y	51.4	40.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	49.9	40.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.28	1.05-1.43	y	49.5	40.0 - 60.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	49.4	40.0 - 60.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.27	1.05-1.43	y	50.4	40.0 - 60.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.21	1.05-1.43	y	50.4	40.0 - 60.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.06	0.88-1.20	y	49.1	40.0 - 60.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88-1.20	y	49.9	40.0 - 60.0
OCDF	M+2/M+4	0.91	0.76-1.02	y	100	80.0 - 120

Analyst: [signature]

Date: 5/1/05

EPA METHOD 8290

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4-23-05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050430D2 S#1 Analysis Date: 1-MAY-05 Time: 00:53:24

LABELED COMPOUNDS	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	y	103	70.0 - 130
13C-1,2,3,7,8-PeCDD	M+2/M+4	0.62	0.54-0.72	y	112	70.0 - 130
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y	101	70.0 - 130
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	111	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	95.6	70.0 - 130
13C-OCDD	M+2/M+4	0.93	0.76-1.02	y	174	140 - 260
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65-0.89	y	96.9	70.0 - 130
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	111	70.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	103	70.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	124	70.0 - 130
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	122	70.0 - 130
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.55	0.43-0.59	y	111	70.0 - 130
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.53	0.43-0.59	y	105	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	y	97.3	70.0 - 130
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.45	0.37-0.51	y	99.1	70.0 - 130
13C-OCDF	M+2/M+4	0.91	0.76-1.02	y	178	140 - 260
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD					9.64	7.00 - 13.0

Analyst: [signature]

Date: 5/1/05

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: VG-7 Initial Calibration Date: 4-23-05

RT Window Data Filename: 050430D2 S#1 Analysis Date: 1-MAY-05 Time: 00:53:24

DB-5 IS Data Filename: 050430D2 S#1 Analysis Date: 1-MAY-05 Time: 00:53:24

DB_225 IS Data Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:23	1,3,6,8-TCDF (F)	21:09
1,2,8,9-TCDD (L)	27:57	1,2,8,9-TCDF (L)	28:07
1,2,4,7,9-PeCDD (F)	29:36	1,3,4,6,8-PeCDF (F)	28:02
1,2,3,8,9-PeCDD (L)	32:06	1,2,3,8,9-PeCDF (L)	32:21
1,2,4,6,7,9-HxCDD (F)	33:31	1,2,3,4,6,8-HxCDF (F)	32:58
1,2,3,7,8,9-HxCDD (L)	35:30	1,2,3,7,8,9-HxCDF (L)	35:54
1,2,3,4,6,7,9-HpCDD (F)	38:06	1,2,3,4,6,7,8-HpCDF (F)	37:43
1,2,3,4,6,7,8-HpCDD (L)	39:00	1,2,3,4,7,8,9-HpCDF (L)	39:34

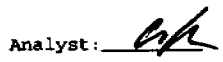
(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5).

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

COMPARED PEAKS (1)	% VALLEY HEIGHT BETWEEN
	<25%

(1) To meet contract requirements, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: 

Date: 5/4/05

FORM 6A

PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4-23-05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050430D2 S#1 Analysis Date: 1-MAY-05 Time: 00:53:24

Compounds Using 13C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.001	0.999-1.002
LABELED COMPOUNDS			
13C-2,3,7,8-TCDF	13C-1,2,3,4-TCDD	0.993	0.923-1.103
13C-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.024	0.976-1.043
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.025	0.989-1.052
13C-1,2,3,7,8-PeCDF	13C-1,2,3,4-TCDD	1.155	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.190	1.011-1.526
13C-1,2,3,7,8-PeCDD	13C-1,2,3,4-TCDD	1.201	1.000-1.567

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613. 10/94

Analyst: [signature]

Date: 5/1/05

FORM 6B

PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4-23-05

Instrument ID: VG-7 GC Column ID: DB-5

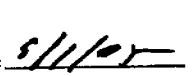
VER Data Filename: 050430D2 S#1 Analysis Date: 1-MAY-05 Time: 00:53:24

Compounds Using 13C-123789-HxCDD as Internal Standard

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.000	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.000	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.000	0.999-1.001
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.001	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.000	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.000	0.999-1.001
OCDD	13C-OCDD	1.000	0.999-1.001
OCDF	13C-OCDD	1.005	0.999-1.008
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDF	13C-1,2,3,7,8,9-HxCDD	0.962	0.944-0.970
13C-1,2,3,6,7,8-HxCDF	13C-1,2,3,7,8,9-HxCDD	0.966	0.949-0.975
13C-2,3,4,6,7,8-HxCDF	13C-1,2,3,7,8,9-HxCDD	0.984	0.959-1.021
13C-1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDD	1.011	0.977-1.047
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.991	0.981-1.003
13C-1,2,3,4,6,7,8-HpCDF	13C-1,2,3,7,8,9-HxCDD	1.062	1.043-1.085
13C-1,2,3,4,6,7,8-HpCDD	13C-1,2,3,7,8,9-HxCDD	1.099	1.086-1.110
13C-1,2,3,4,7,8,9-HpCDF	13C-1,2,3,7,8,9-HxCDD	1.115	1.057-1.151
13C-OCDD	13C-1,2,3,7,8,9-HxCDD	1.192	1.032-1.311
13C-OCDF	13C-1,2,3,7,8,9-HxCDD	1.198	1.032-1.311

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613. 10/94

Analyst:

Date: 

Client ID: 1613 CS3 050420H Filename: 050430D2 S:1 Acq: 1-MAY-05 00:53:24 ConCal: ST050430D2-1

Lab ID: ST050430D2-1 GC Column ID: db-5 ICal: 1613VG7-4-23-05 wt/vol: 1.000 EndCAL: ST050430D2-2

	Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL
	2,3,7,8-TCDD	7.03e+06	0.78 y	1.06	27:03	10.5			* 2.5	*
	1,2,3,7,8-PeCDD	2.60e+07	0.62 y	0.99	31:44	48.2			* 2.5	*
	1,2,3,4,7,8-HxCDD	1.82e+07	1.26 y	1.11	35:03	47.8			* 2.5	*
	1,2,3,6,7,8-HxCDD	2.35e+07	1.28 y	1.07	35:10	49.0			* 2.5	*
	1,2,3,7,8,9-HxCDD	2.17e+07	1.29 y	1.15	35:30	47.7			* 2.5	*
	1,2,3,4,6,7,8-HpCDD	1.64e+07	1.04 y	1.05	39:00	48.9			* 2.5	*
	OCDD	2.73e+07	0.92 y	1.04	42:19	100.0			* 2.5	*
	2,3,7,8-TCDF	9.44e+06	0.78 y	1.05	26:14	10.2			* 2.5	*
	1,2,3,7,8-PeCDF	4.35e+07	1.55 y	0.95	30:31	51.4			* 2.5	*
	2,3,4,7,8-PeCDF	4.30e+07	1.56 y	1.08	31:27	49.9			* 2.5	*
	1,2,3,4,7,8-HxCDF	3.73e+07	1.28 y	1.19	34:10	49.5			* 2.5	*
	1,2,3,6,7,8-HxCDF	4.19e+07	1.24 y	1.22	34:18	49.4			* 2.5	*
	2,3,4,6,7,8-HxCDF	3.53e+07	1.27 y	1.20	34:55	50.4			* 2.5	*
	1,2,3,7,8,9-HxCDF	2.70e+07	1.21 y	1.13	35:54	50.4			* 2.5	*
	1,2,3,4,6,7,8-HpCDF	2.70e+07	1.06 y	1.38	37:43	49.1			* 2.5	*
	1,2,3,4,7,8,9-HpCDF	2.17e+07	1.03 y	1.23	39:34	49.9			* 2.5	*
	OCDF	3.46e+07	0.91 y	1.02	42:32	100			* 2.5	*
IS	13C-2,3,7,8-TCDD	6.32e+07	0.78 y	1.12	27:02	103				
IS	13C-1,2,3,7,8-PeCDD	5.45e+07	0.62 y	0.89	31:43	112				
IS	13C-1,2,3,4,7,8-HxCDD	3.42e+07	1.29 y	0.83	35:02	101				
IS	13C-1,2,3,6,7,8-HxCDD	4.48e+07	1.27 y	1.00	35:10	111				
IS	13C-1,2,3,4,6,7,8-HpCDD	3.20e+07	1.06 y	0.82	38:60	95.6				
IS	13C-OCDD	5.26e+07	0.93 y	0.74	42:18	174				
IS	13C-2,3,7,8-TCDF	8.75e+07	0.80 y	1.02	26:13	96.9				
IS	13C-1,2,3,7,8-PeCDF	8.89e+07	1.59 y	0.90	30:30	111				
IS	13C-2,3,4,7,8-PeCDF	8.00e+07	1.59 y	0.87	31:26	103				
IS	13C-1,2,3,4,7,8-HxCDF	6.36e+07	0.53 y	1.27	34:09	124				
IS	13C-1,2,3,6,7,8-HxCDF	6.97e+07	0.53 y	1.40	34:17	122				
IS	13C-2,3,4,6,7,8-HxCDF	5.83e+07	0.55 y	1.29	34:54	111				
IS	13C-1,2,3,7,8,9-HxCDF	4.75e+07	0.53 y	1.12	35:53	105				
IS	13C-1,2,3,4,6,7,8-HpCDF	3.99e+07	0.44 y	1.01	37:41	97.3				
IS	13C-1,2,3,4,7,8,9-HpCDF	3.54e+07	0.45 y	0.88	39:33	99.1				
IS	13C-OCDF	6.76e+07	0.91 y	0.94	42:32	178				
C/Up	37Cl-2,3,7,8-TCDD	3.28e+06		0.62	27:03	9.64				
RS/RT	13C-1,2,3,4-TCDD	5.47e+07	0.80 y	1.00	26:24	100				
RS	13C-1,2,3,4-TCDF	8.86e+07	0.79 y	1.00	24:52	100				
RS/RT	13C-1,2,3,7,8,9-HxCDD	4.06e+07	1.27 y	1.00	35:29	100				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	49.0	49.7		*	*
Total Penta-Dioxins	141	142		*	*
Total Hexa-Dioxins	202	204		*	*
Total Hepta-Dioxins	96.0	98.7		*	*
Total Tetra-Furans	31.3	31.8		*	*
Total Penta-Furans	183	185		*	*
Total Hexa-Furans	250	252		*	*
Total Hepta-Furans	99.3	101		*	*

Rec	Qual
103	
112	
101	
111	
95.6	
87.1	
96.9	
111	
103	
124	
122	
111	
105	
97.3	
99.1	
88.8	
1930	

Intergrations by Analyst: CA/C

Date: 5/11/05

Alta Analytical Laboratory - Injection Log Run file: 050430d2 Instrument ID: VG-7 GC Column ID: db-5

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
050430D2	1	ST050430D2-1 1613 CS3 050420H	dms	1-MAY-05	00:53:24	ST050430D2-1	ST050430D2-2
050430D2	2	0_6749_OPR001	dms	1-MAY-05	01:42:30	ST050430D2-1	ST050430D2-2
050430D2	3	SOLVENT BLANK	dms	1-MAY-05	02:31:35	ST050430D2-1	ST050430D2-2
050430D2	4	0_6749_MB001	dms	1-MAY-05	03:20:41	ST050430D2-1	ST050430D2-2
050430D2	5	26057_6739_001 2005-210-1 11.68g	dms	1-MAY-05	04:09:48	ST050430D2-1	ST050430D2-2
050430D2	6	26057_6739_002 2005-210-2 10g	dms	1-MAY-05	04:58:54	ST050430D2-1	ST050430D2-2
050430D2	7	26057_6739_003 2005-210-3 10.01g	dms	1-MAY-05	05:48:01	ST050430D2-1	ST050430D2-2
050430D2	8	26057_6739_004 2005-210-4 10.02g	dms	1-MAY-05	06:37:07	ST050430D2-1	ST050430D2-2
050430D2	9	26063_6739_001 IOD1197-01 1:20	dms	1-MAY-05	07:26:13	ST050430D2-1	ST050430D2-2
050430D2	10	26063_6739_002 IOD1197-02 1:20	dms	1-MAY-05	08:15:20	ST050430D2-1	ST050430D2-2
050430D2	11	26063_6739_003 IOD1197-03 1:20	dms	1-MAY-05	09:04:25	ST050430D2-1	ST050430D2-2
050430D2	12	26063_6739_004 IOD1197-04 1:20	dms	1-MAY-05	09:53:31	ST050430D2-1	ST050430D2-2
050430D2	13	26072_6739_003 FLY ASH 1:50	dms	1-MAY-05	10:42:36	ST050430D2-1	ST050430D2-2
050430D2	14	26041_6738_001 FILTER CAKE 1:50	dms	1-MAY-05	11:31:42	ST050430D2-1	ST050430D2-2
050430D2	15	26041_6738_001 FILTER CAKE 1:100	dms	1-MAY-05	12:20:47	ST050430D2-1	ST050430D2-2
050430D2	16	SOLVENT BLANK	dms	1-MAY-05	13:09:51	ST050430D2-1	ST050430D2-2
050430D2	17	SOLVENT BLANK	dms	1-MAY-05	13:58:56	ST050430D2-1	ST050430D2-2
050430D2	18	ST050430D2-2 1613 CS3 050420H	dms	1-MAY-05	14:48:01	ST050430D2-1	ST050430D2-2

Attachment 7.F.2

HRMS STANDARDS REVIEW CHECKLIST

Beginning Calibration ID: ST050430D2-1 Ending Calibration ID: ST050430D2-2

	Beg.CAL	End. CAL	COMMENTS
Calibration Verification/Form 4A/B: Ion abundance within QC limits?	✓	✓	
Calibration Verification/Form 4A/B: Conc within Conc. range?	✓	✓	
Form 5: First and last eluters present? (N/A for DB225)	✓	✓	
Form 6A/6B: Relative Retention Times within limits? (N/A for M23, TO9, 1668, DB225)	✓	✓	
Cal. Ver. Named correctly? (Ex. ST-Year-Month-Day-VG ID)	✓	✓	
Cal. Verification forms signed and dated for review?	✓	✓	
Appropriate ICAL referenced?	✓	✓	
Run log: Standards named correctly? Correct Instrument listed?		✓	
Run log: Samples within 12-hour shift?	✓	✓	
Mass resolution > 10,000	✓	✓	
2378-TCDD/TCDF valley < 25% (N/A for 1668)	✓	✓	
All appropriate peaks integrated correctly?	✓	✓	
Manual integrations included?			
8280: Ratios within limits?			
8280: S/N > 2.5:1			
8280: CS1 within 12 hrs?			

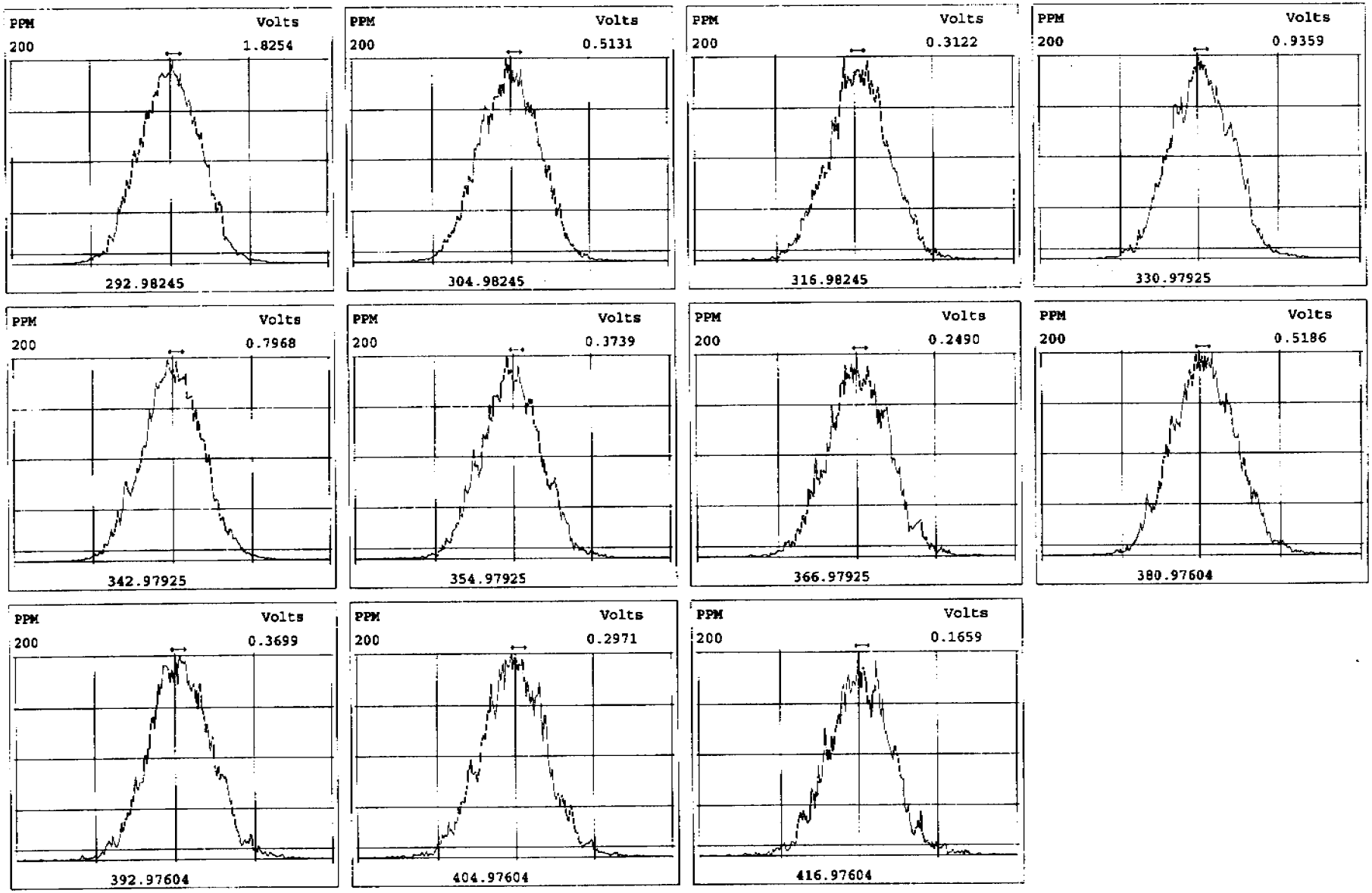
QA* (Random 5% Check) Initial/Date: K. Overholt 5/2/05

Reviewer Initial/Date: _____

Alta Analytical Laboratory
El Dorado Hills, CA 95762

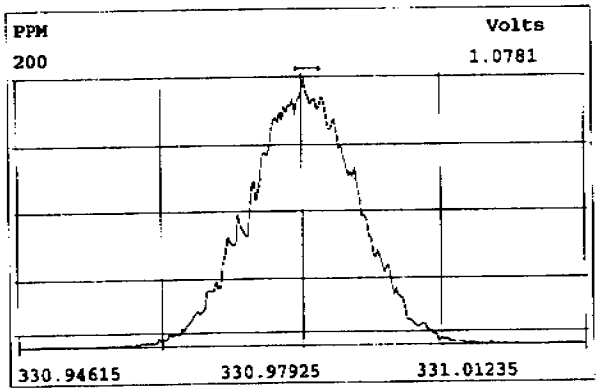
Peak Locate Examination: 1-MAY-2005:00:48 File:RES_CHECK

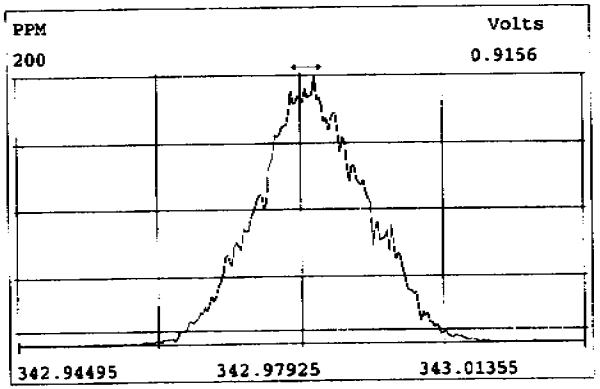
Experiment:OCDD_DB5 Function:1 Reference:PFK

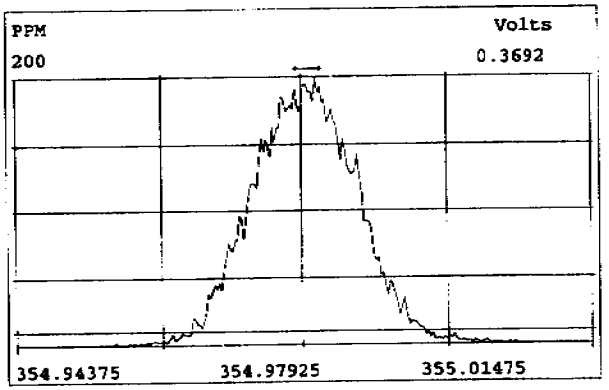


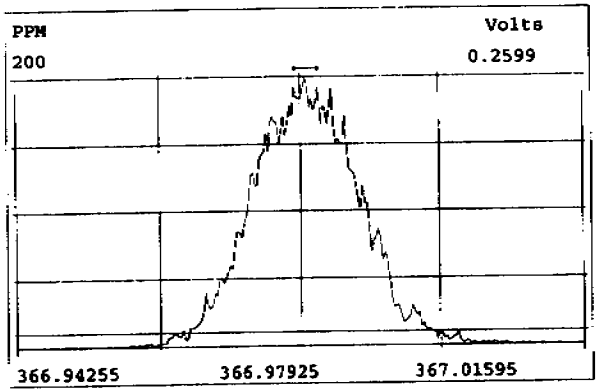
Peak Locate Examination: 1-MAY-2005:00:49 File:RES_CHECK

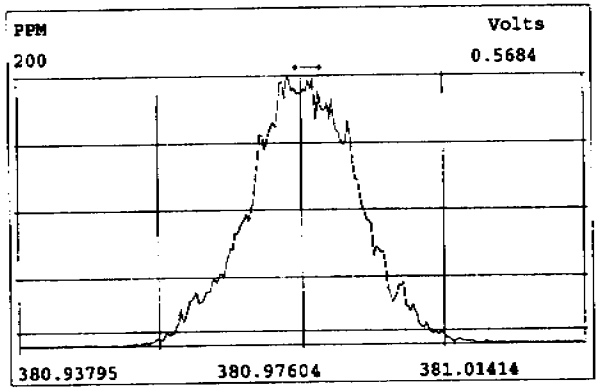
Experiment:OCDD_DB5 Function:2 Reference:PFK

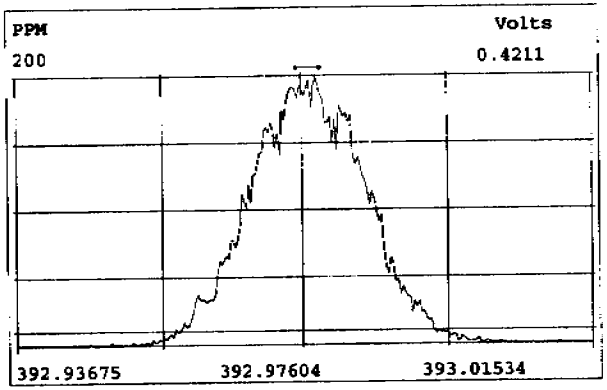


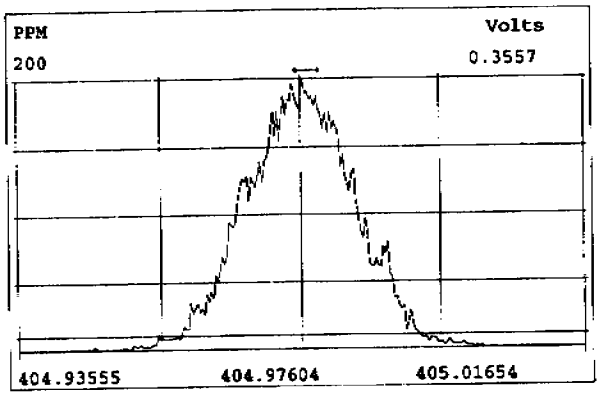


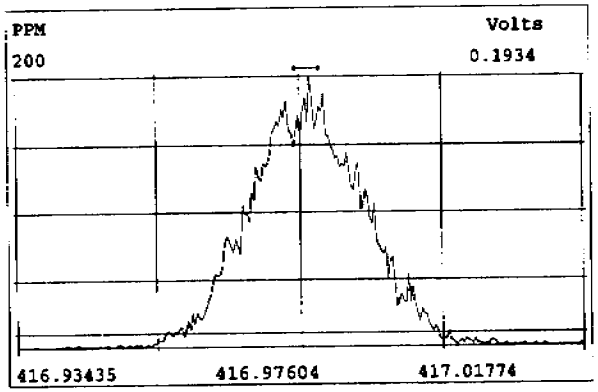






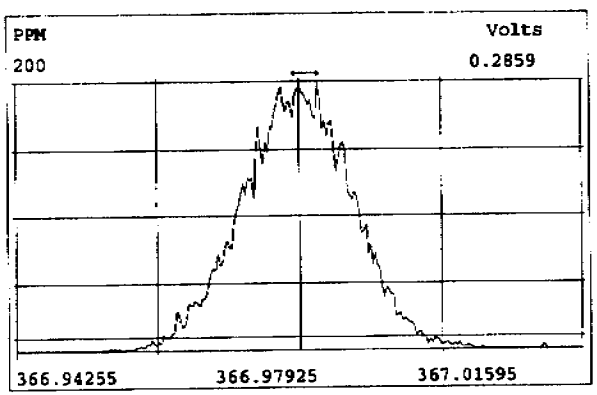


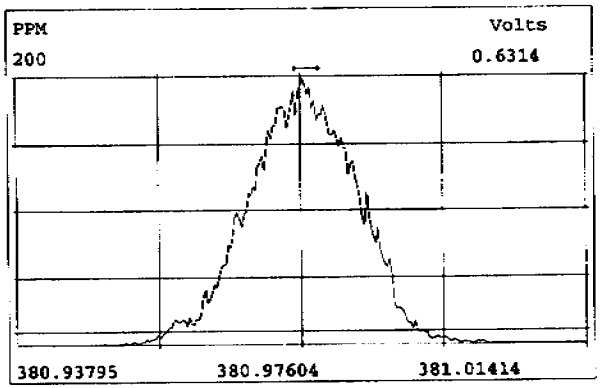


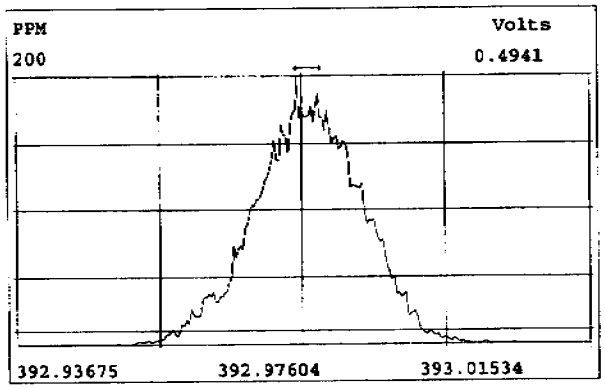


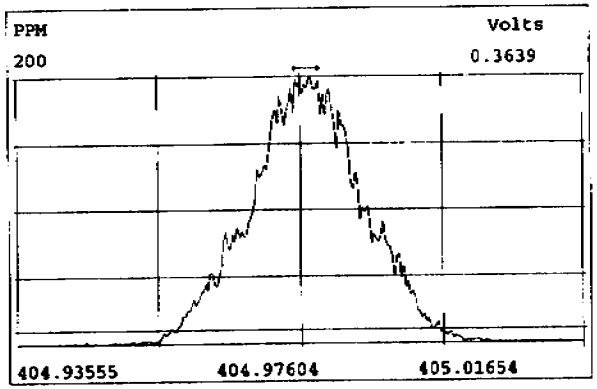
Peak Locate Examination: 1-MAY-2005:00:50 File:RES_CHECK

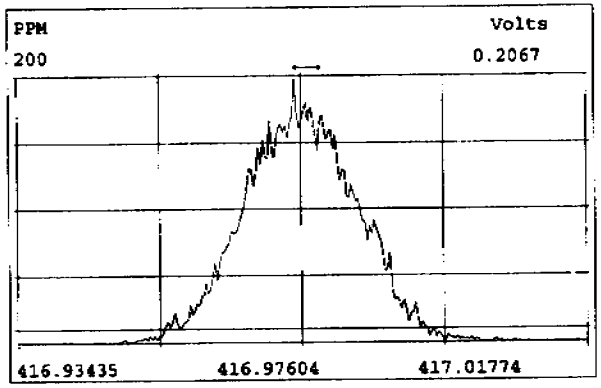
Experiment:OCDD_DB5 Function:3 Reference:PFK

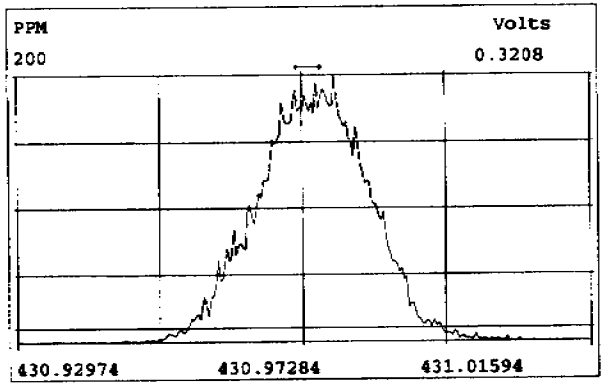


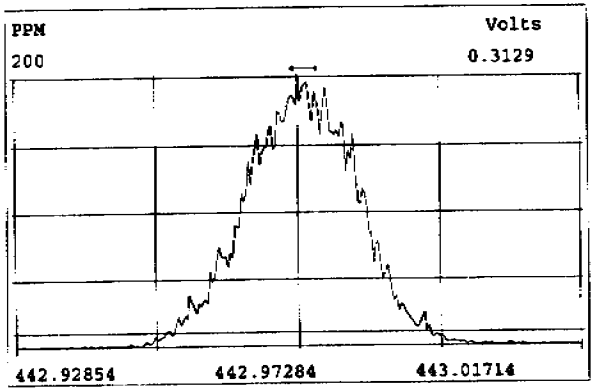


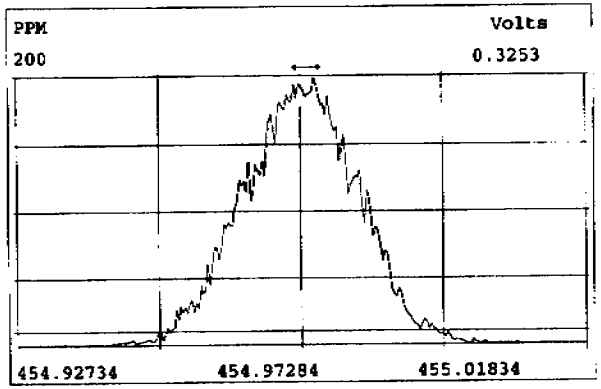






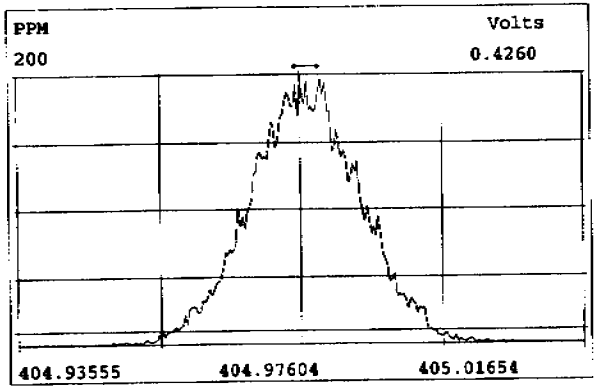


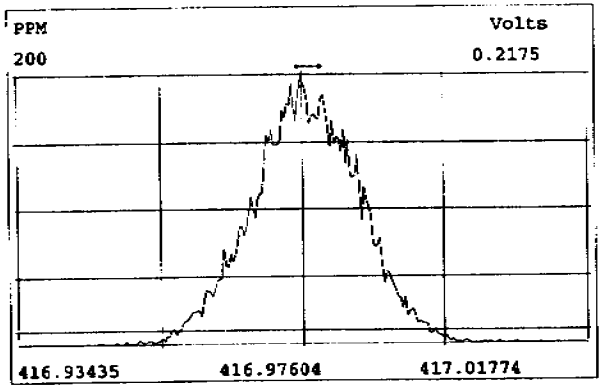


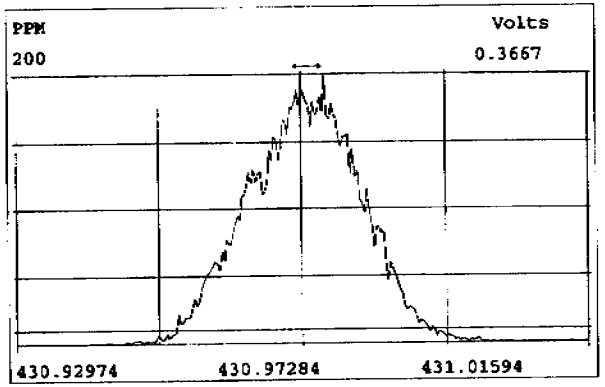


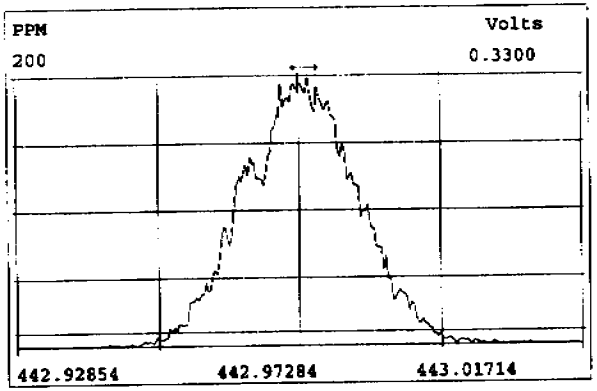
Peak Locate Examination: 1-MAY-2005:00:51 File:RES_CHECK

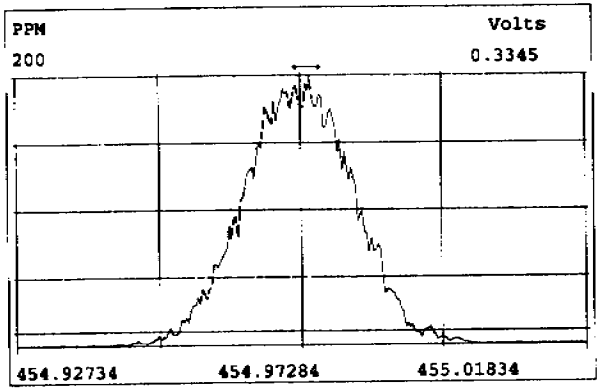
Experiment:OCDD_DB5 Function:4 Reference:PFK

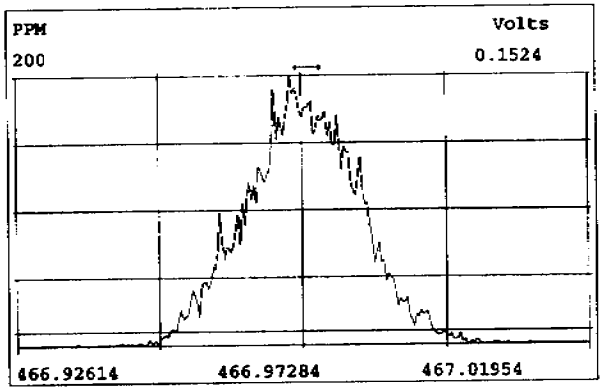


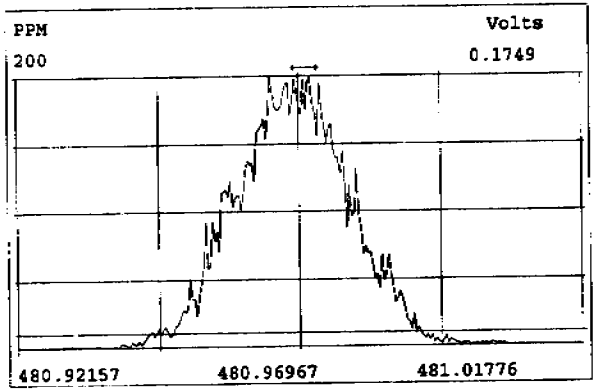






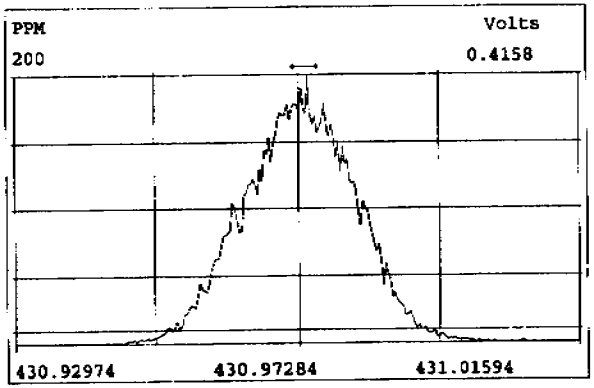


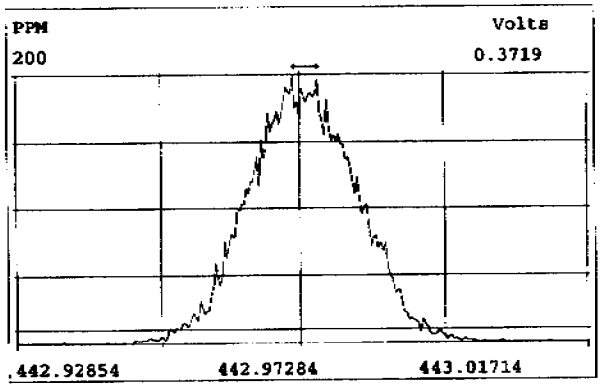


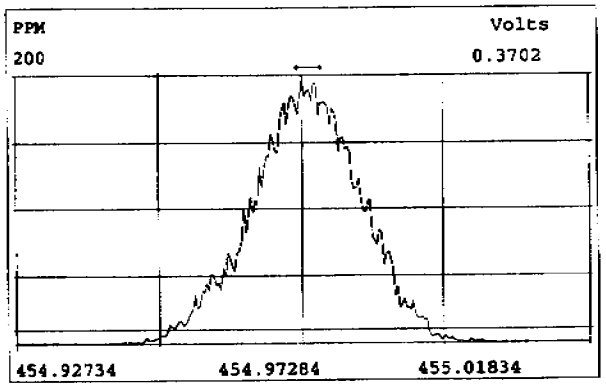


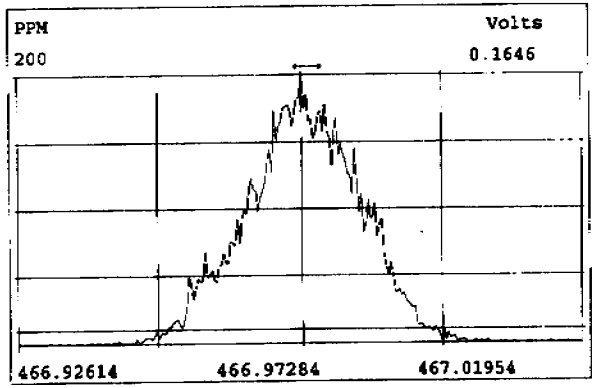
Peak Locate Examination: 1-MAY-2005:00:52 File:RES_CHECK

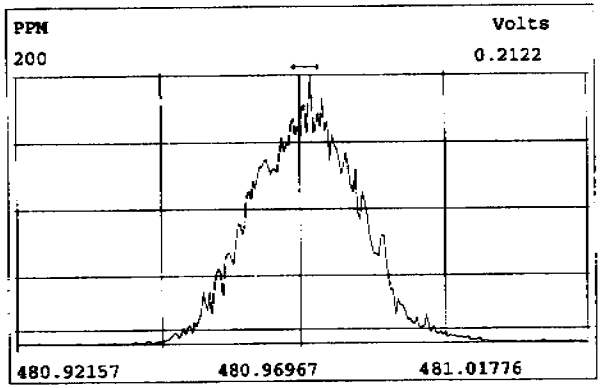
Experiment:OCDD_DB5 Function:5 Reference:PFK

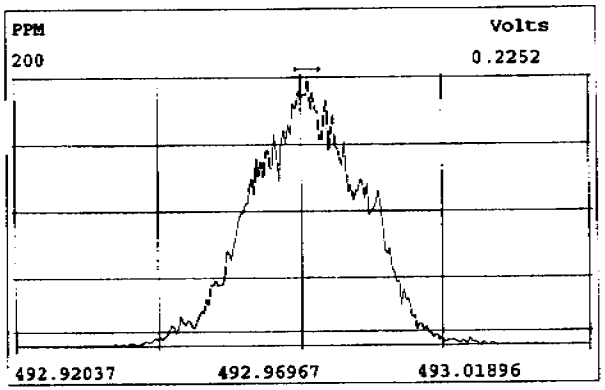


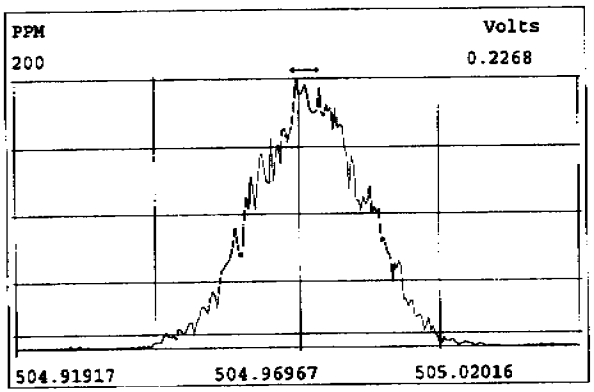


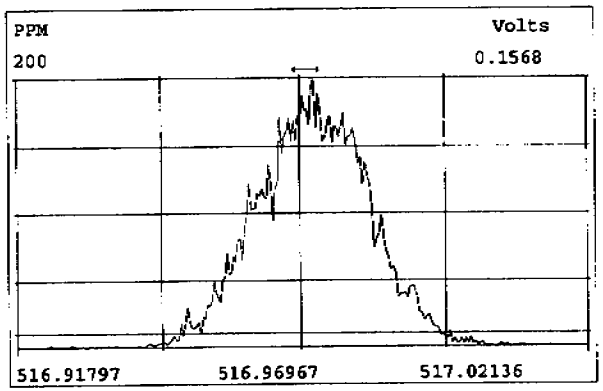




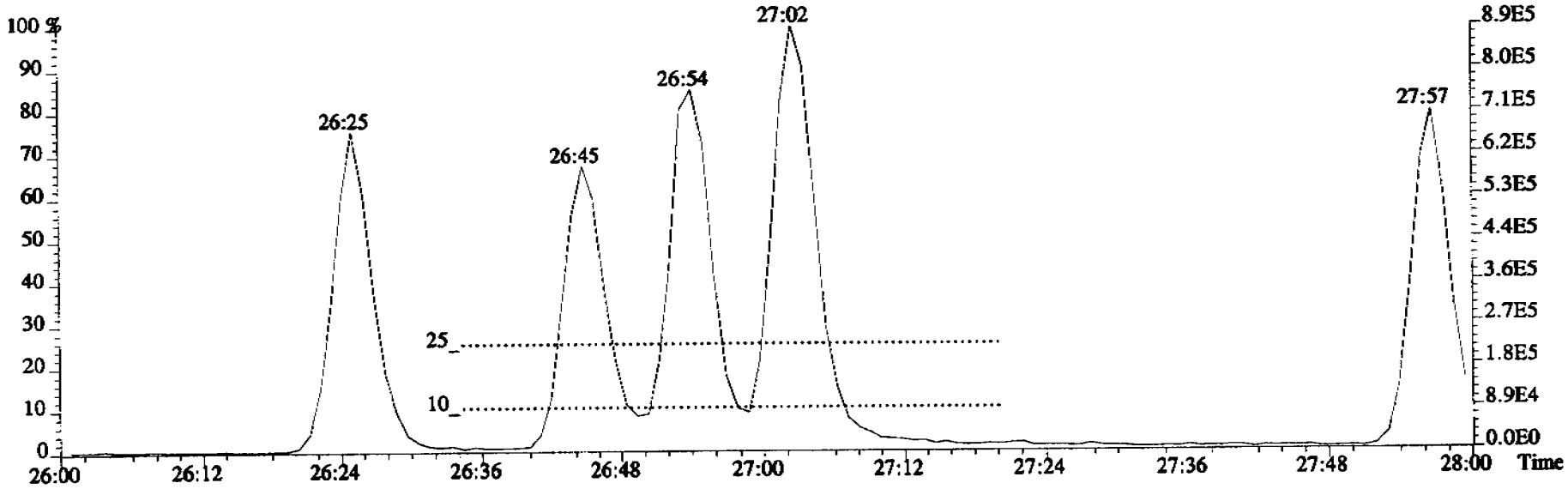




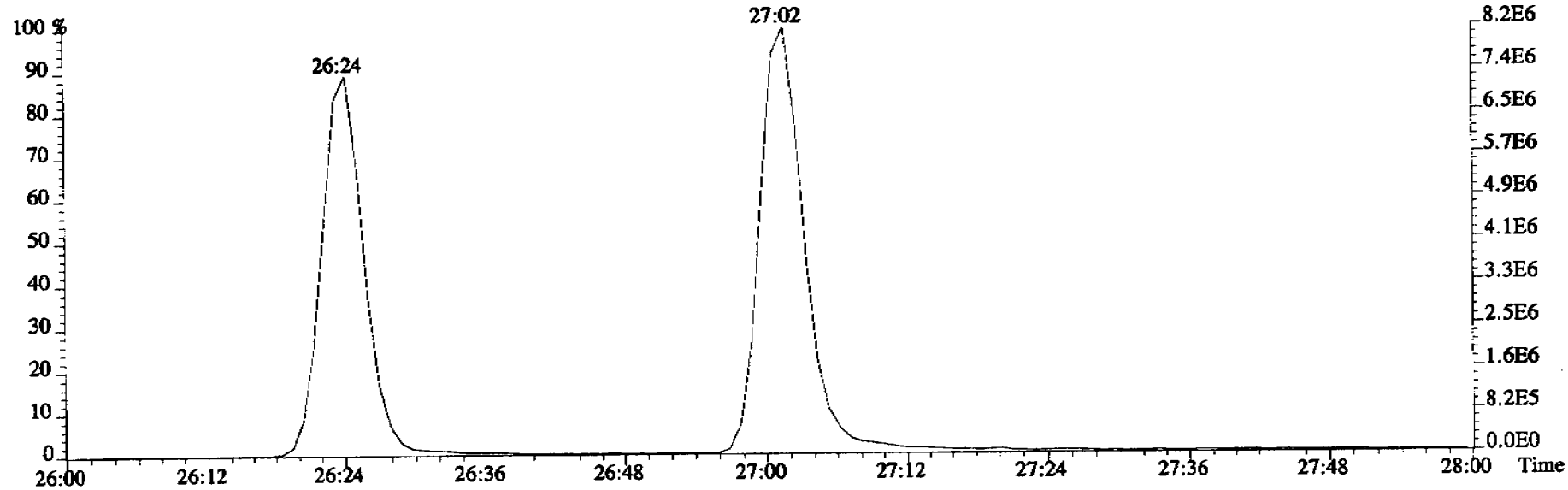




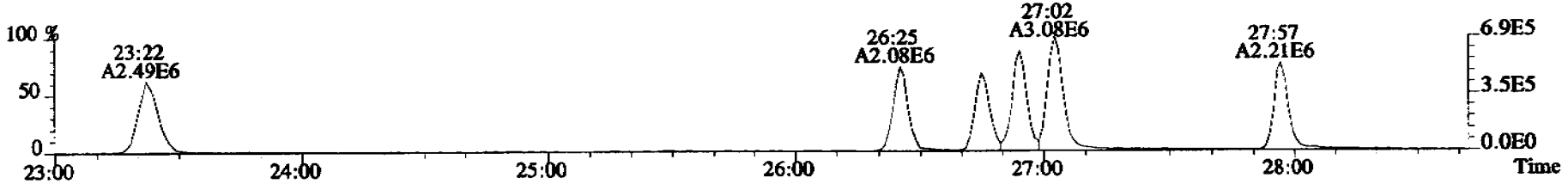
File:050430D2 #1-558 Acq: 1-MAY-2005 00:53:24 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050430D2-1 1613 CS3 050420H Exp:OCDD_DB5
321.8936



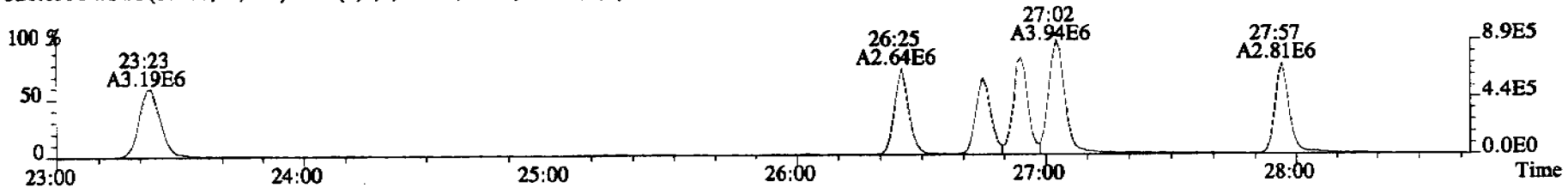
333.9339



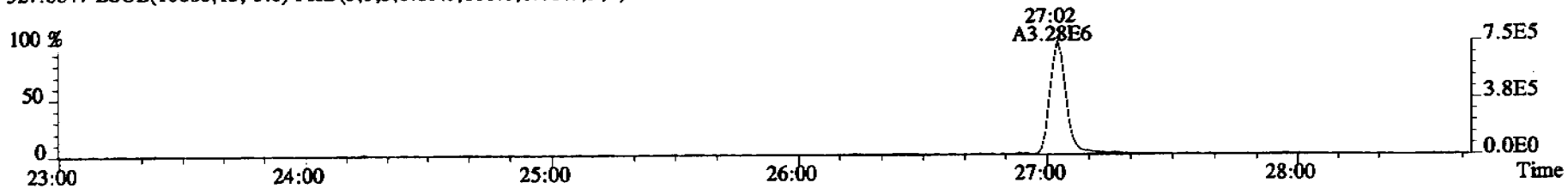
File:050430D2 #1-558 Acq: 1-MAY-2005 00:53:24 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050430D2-1 1613 CS3 050420H Exp:OCDD_DB5
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



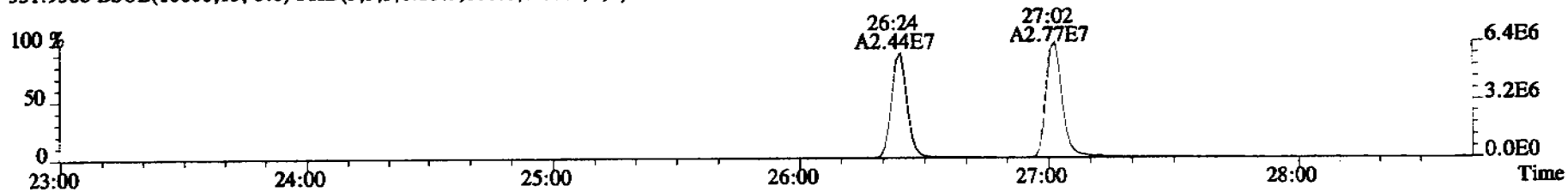
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



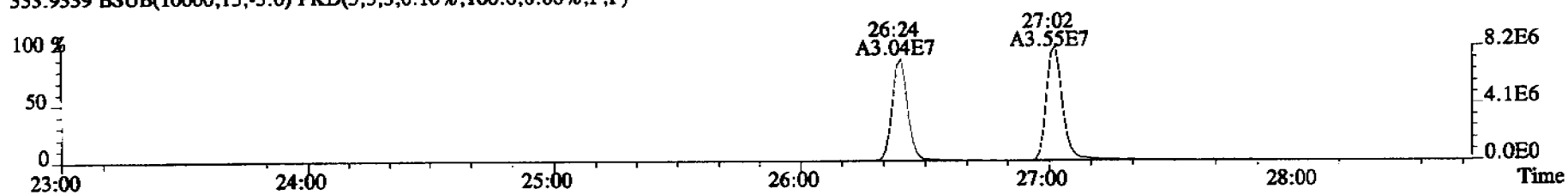
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



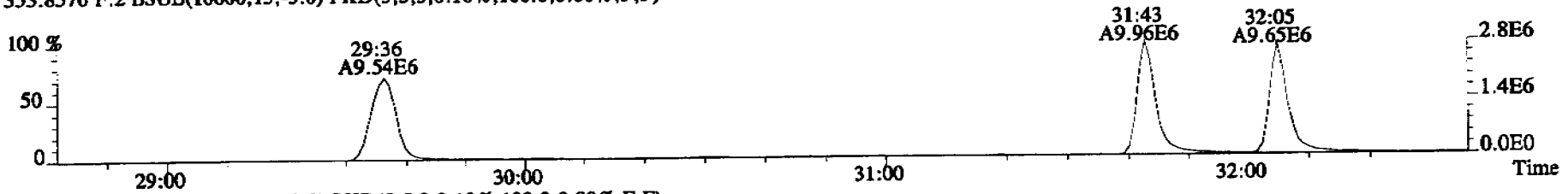
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



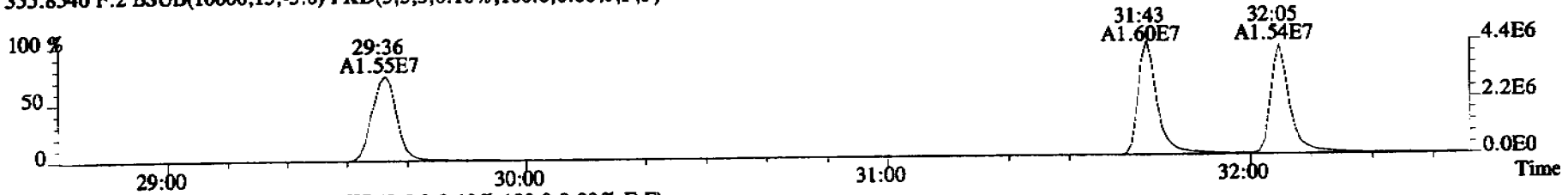
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



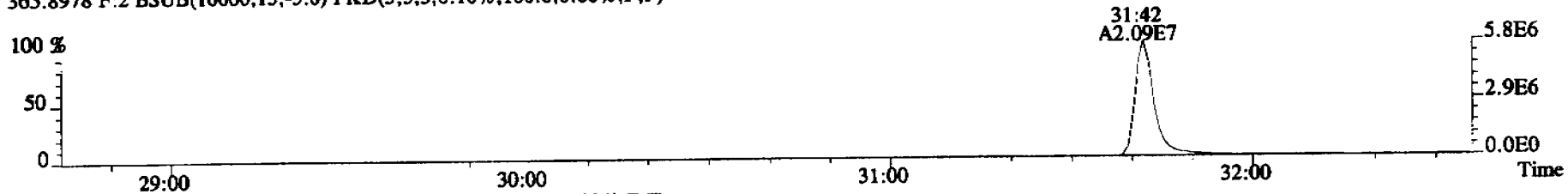
File:050430D2 #1-273 Acq: 1-MAY-2005 00:53:24 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050430D2-1 1613 CS3 050420H Exp:OCDD_DB5
353.8576 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



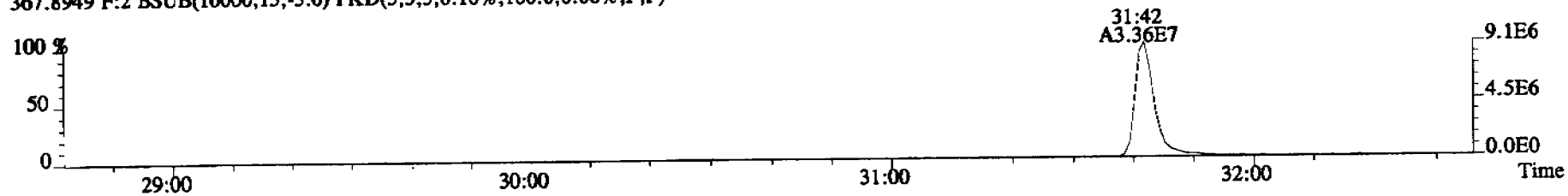
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



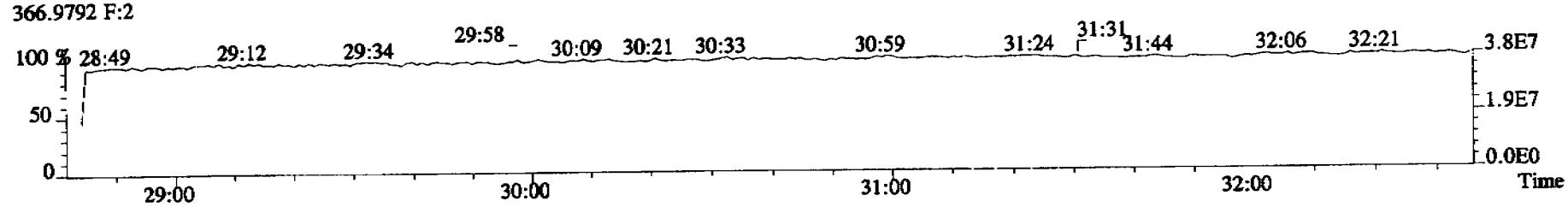
365.8978 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



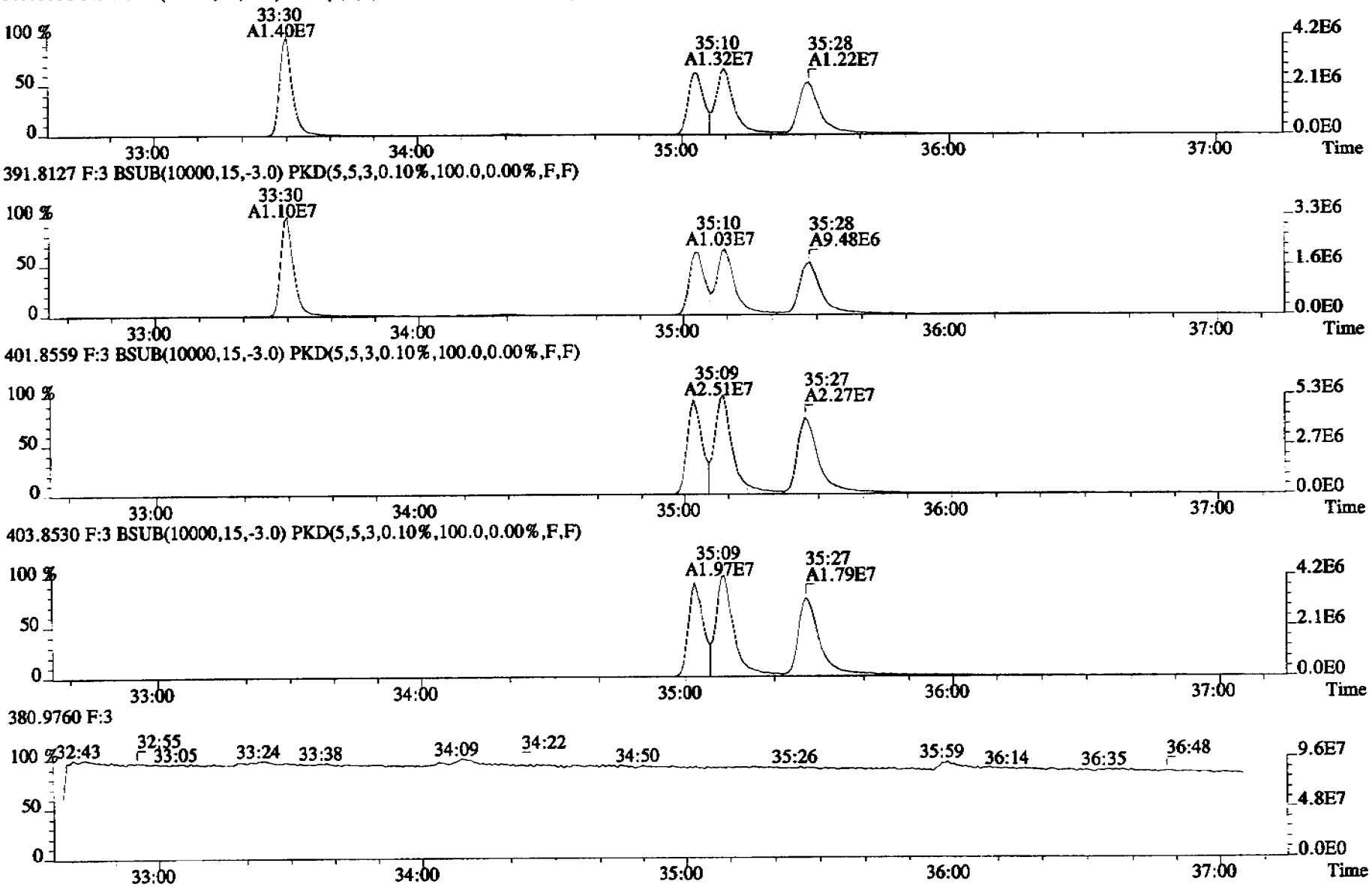
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



366.9792 F:2

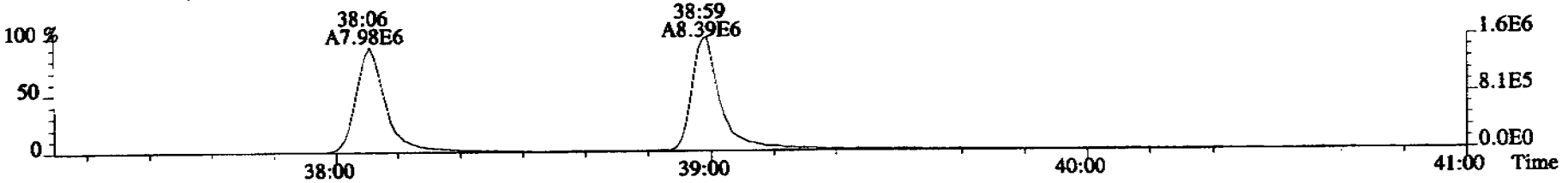


File:050430D2 #1-398 Acq: 1-MAY-2005 00:53:24 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050430D2-1 1613 CS3 050420H Exp:OCDD_DB5

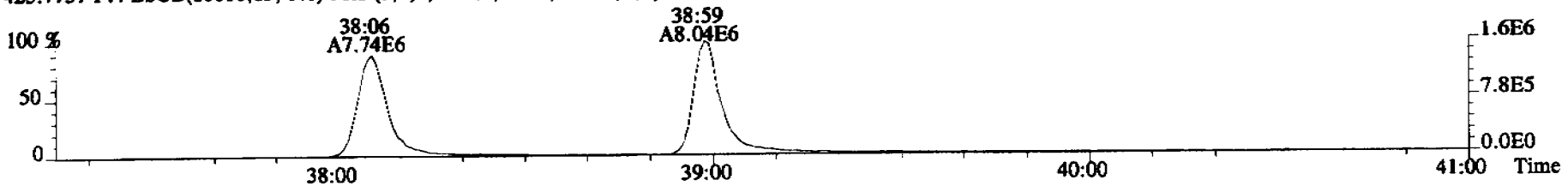


File:050430D2 #1-348 Acq: 1-MAY-2005 00:53:24 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050430D2-1 1613 CS3 050420H Exp:OCDD_DB5

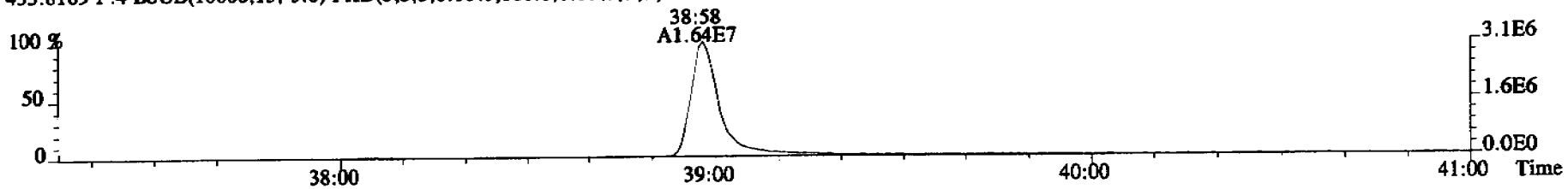
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



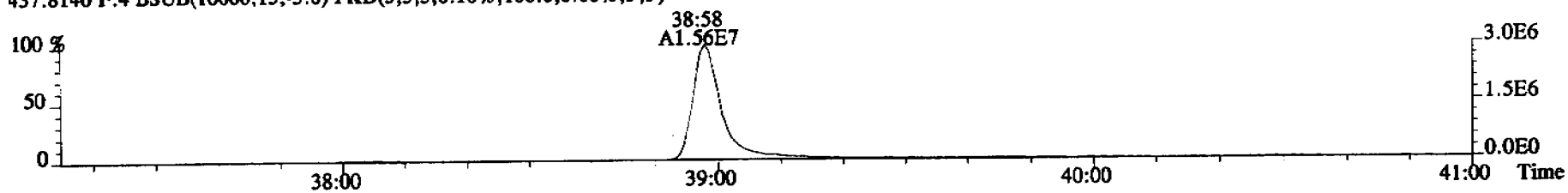
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



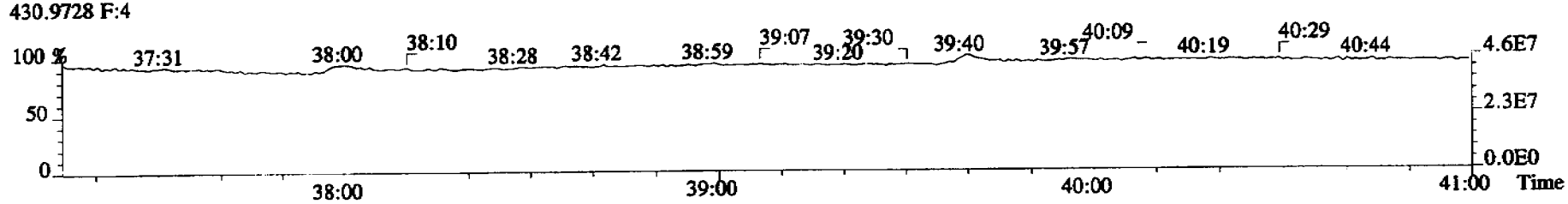
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



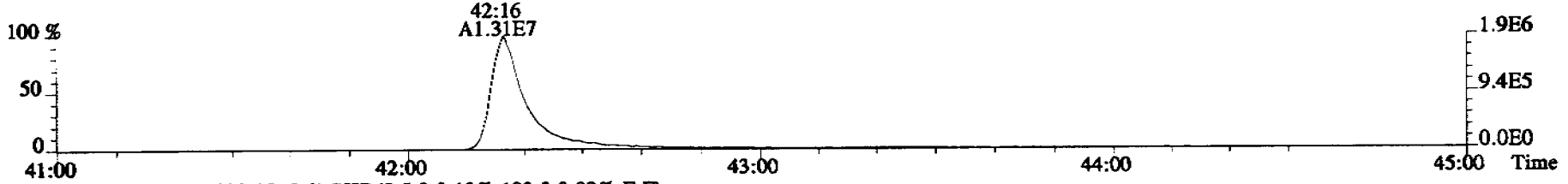
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



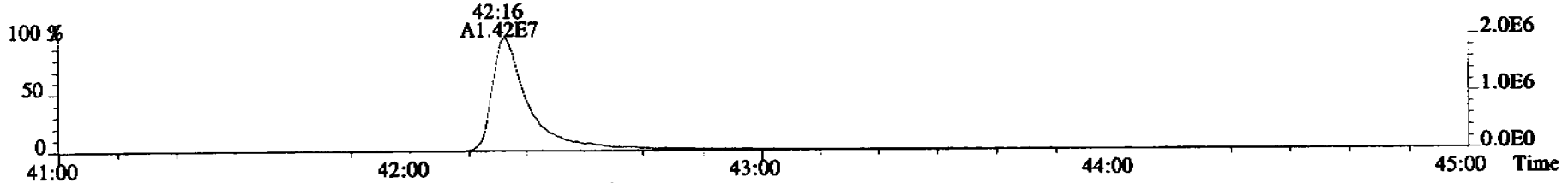
430.9728 F:4



File:050430D2 #1-345 Acq: 1-MAY-2005 00:53:24 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050430D2-1 1613 CS3 050420H Exp:OCDD_DB5
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

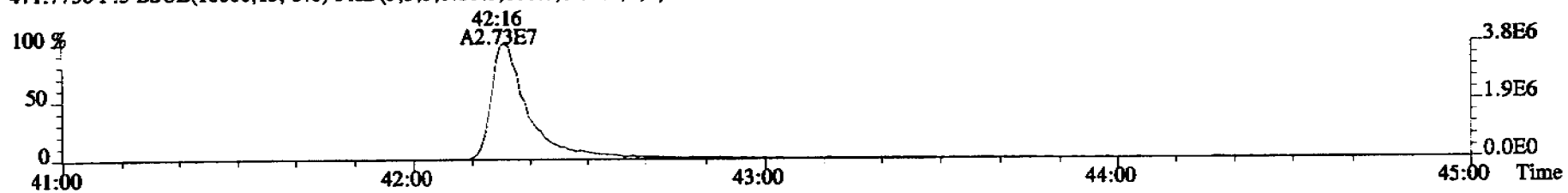


459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

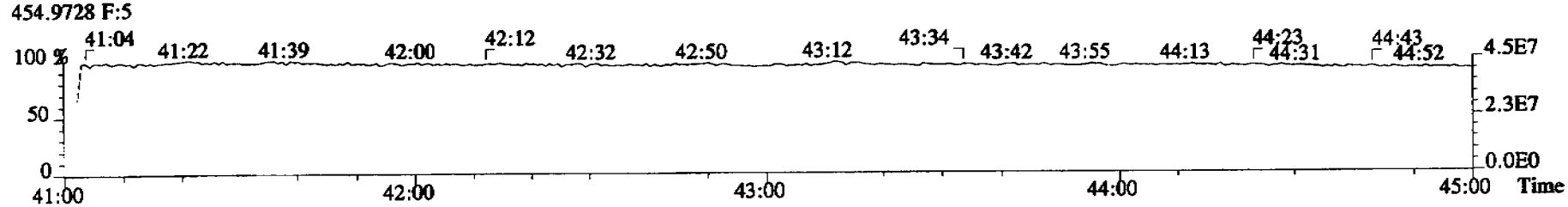


469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

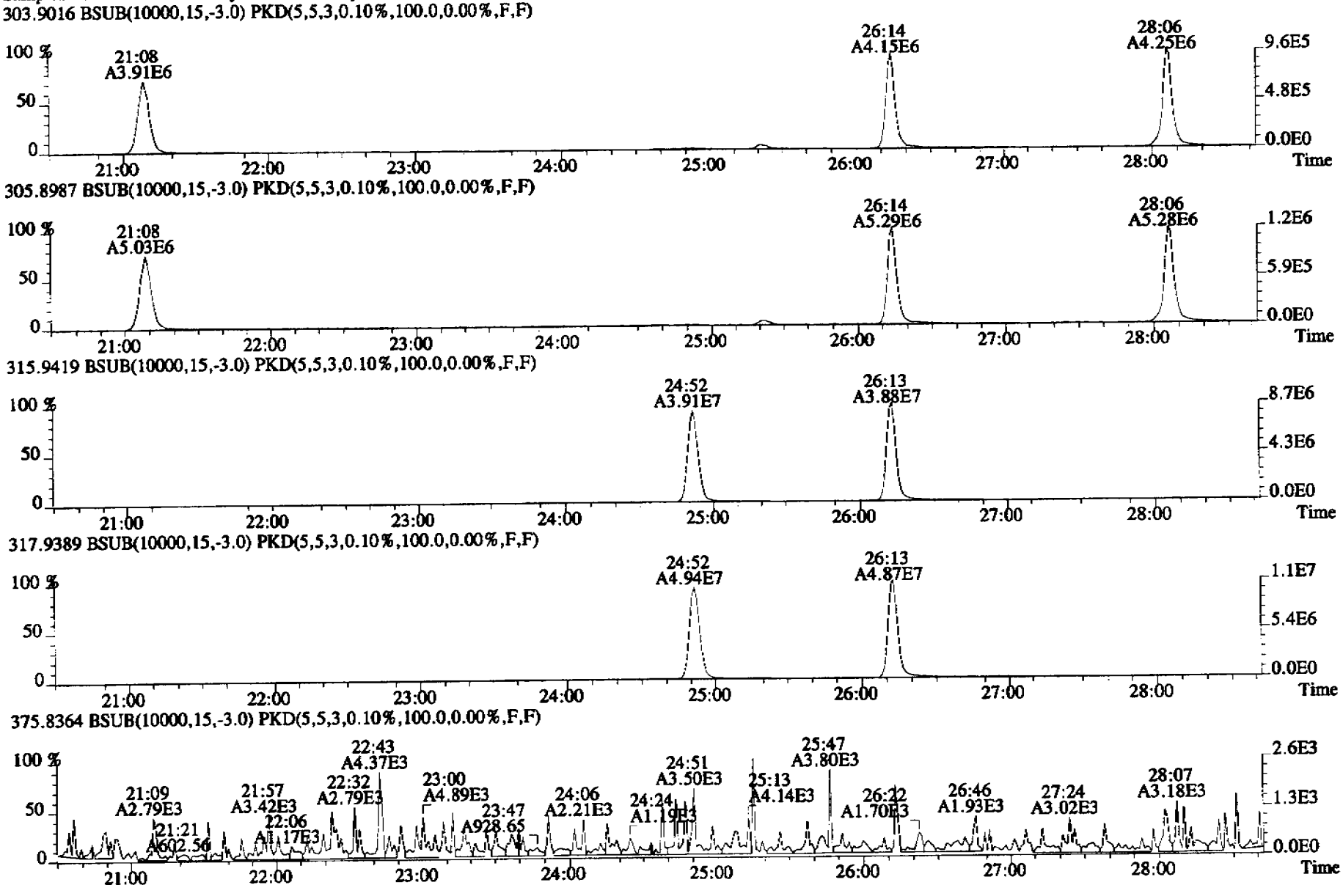
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



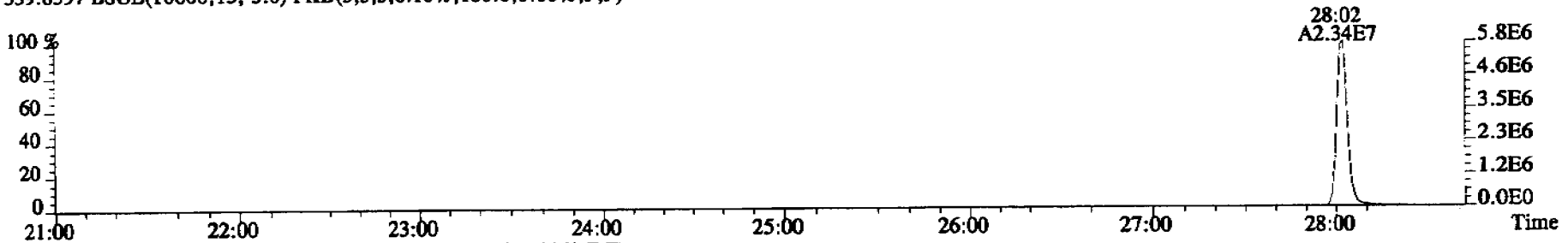
454.9728 F:5



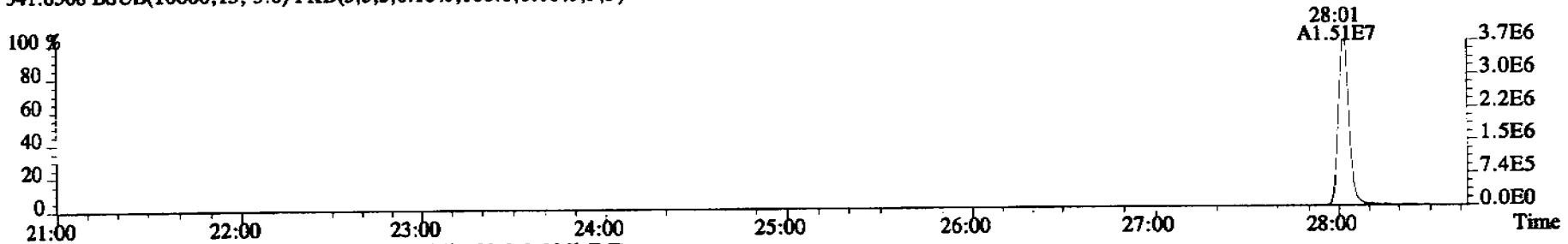
File:050430D2 #1-558 Acq: 1-MAY-2005 00:53:24 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050430D2-1 1613 CS3 050420H Exp:OCDD_DB5



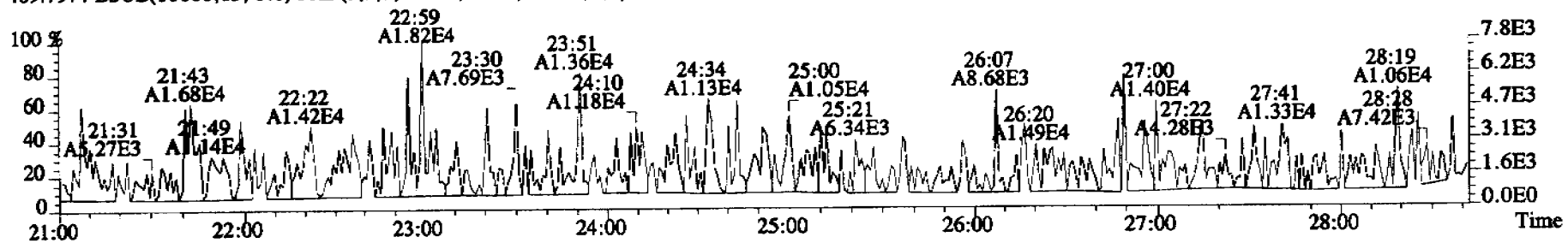
File:050430D2 #1-558 Acq: 1-MAY-2005 00:53:24 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050430D2-1 1613 CS3 050420H Exp:OCDD_DB5
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



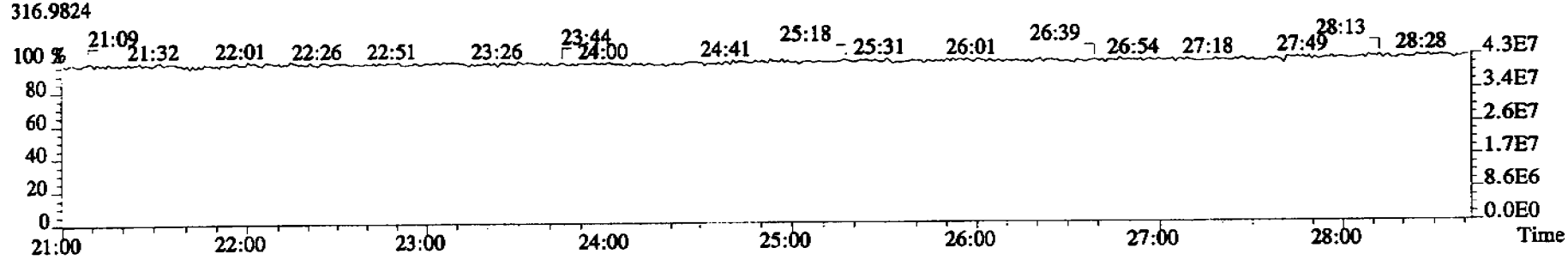
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

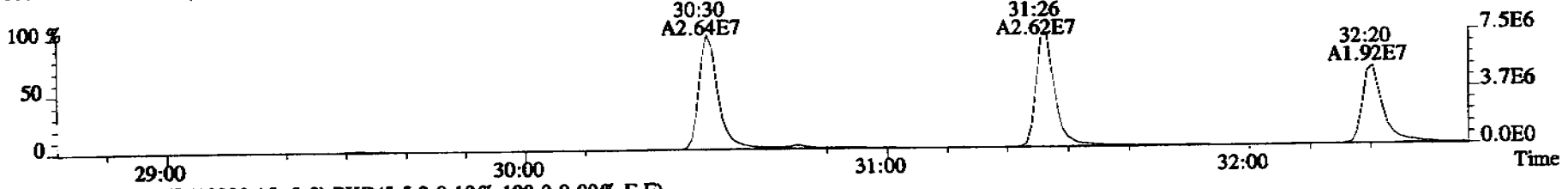


316.9824

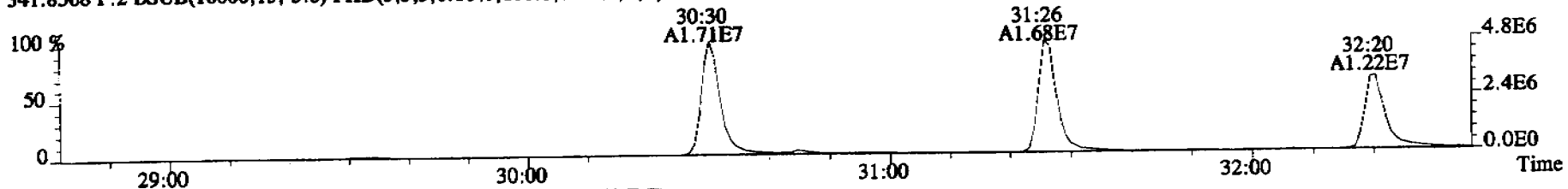


File:050430D2 #1-273 Acq: 1-MAY-2005 00:53:24 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050430D2-1 1613 CS3 050420H Exp:OCDD_DB5

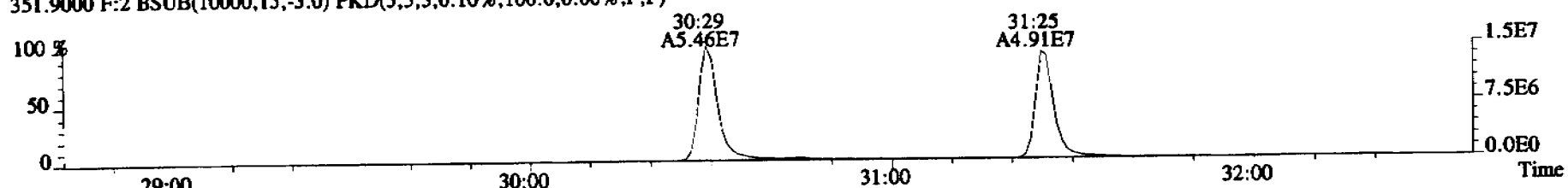
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



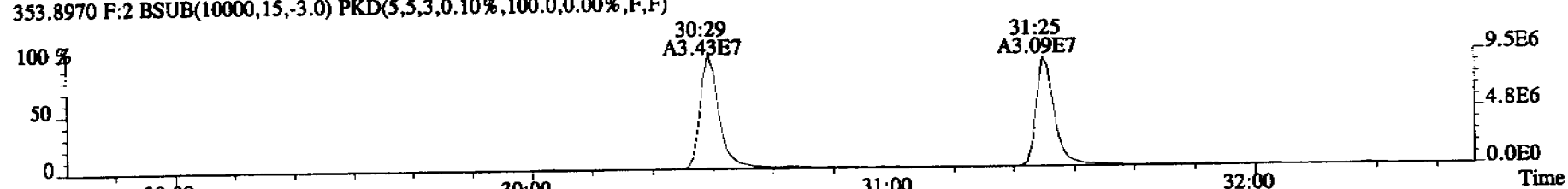
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



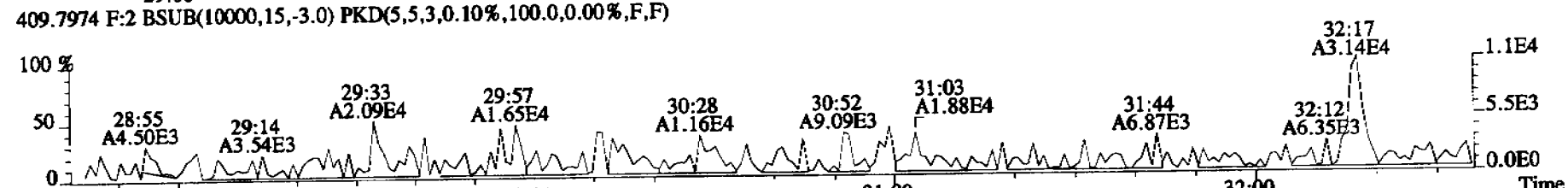
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



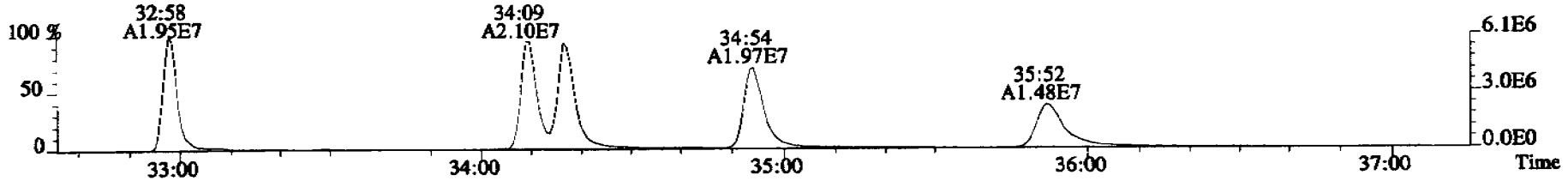
353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



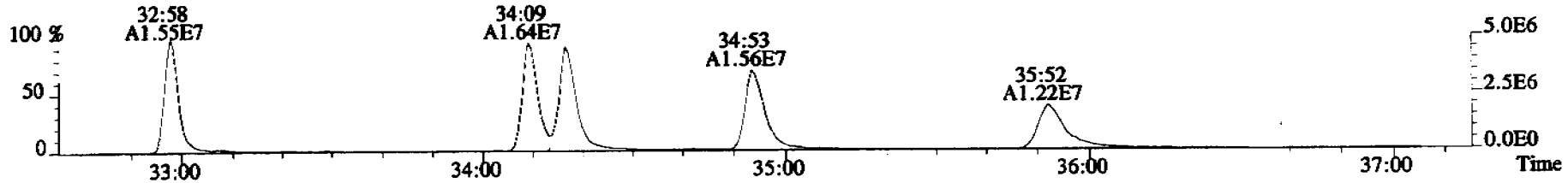
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



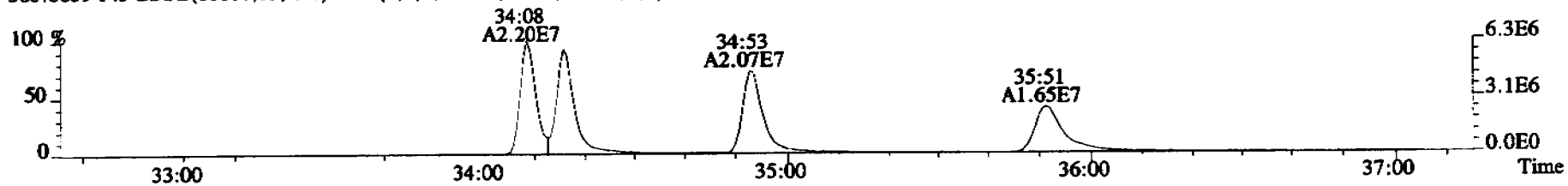
File:050430D2 #1-398 Acq: 1-MAY-2005 00:53:24 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050430D2-1 1613 CS3 050420H Exp:OCDD_DB5
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



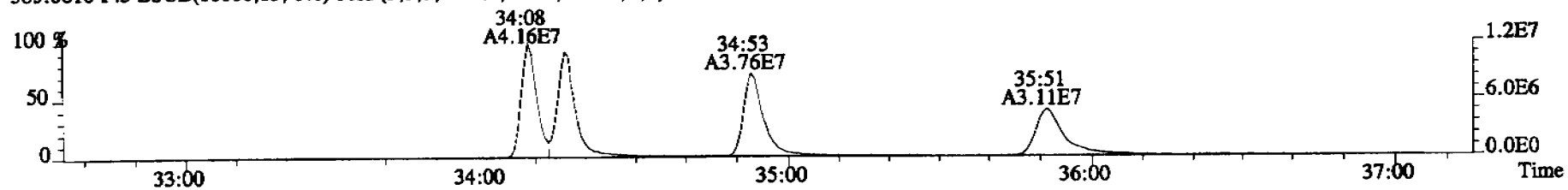
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



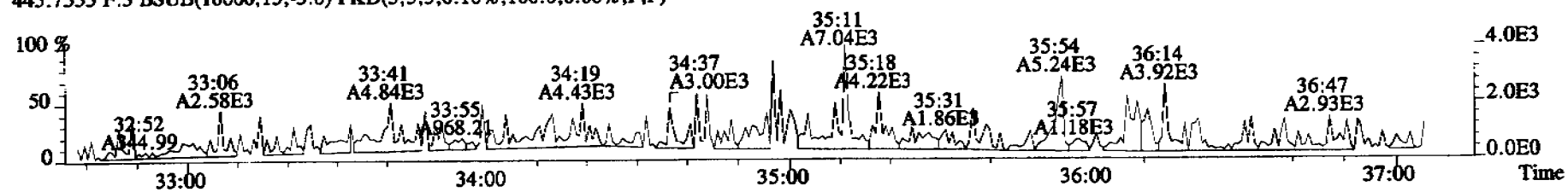
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

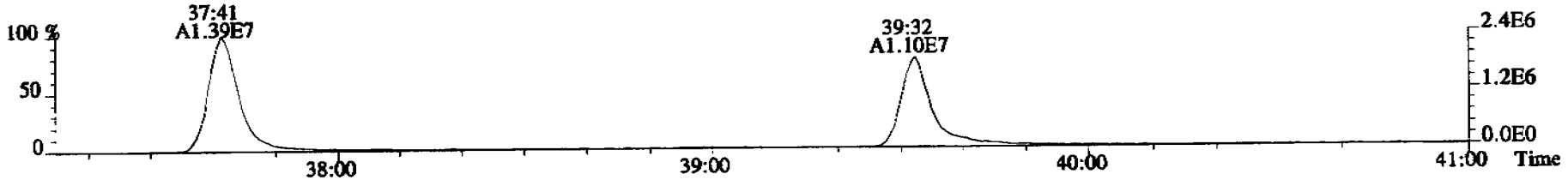


445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

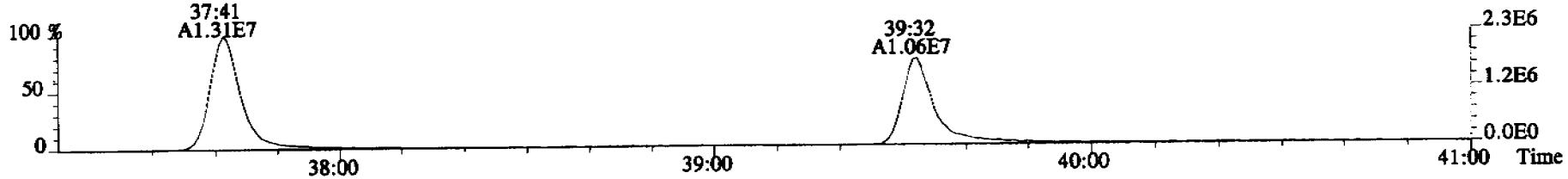


File:050430D2 #1-348 Acq: 1-MAY-2005 00:53:24 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050430D2-1 1613 CS3 050420H Exp:OCDD_DB5

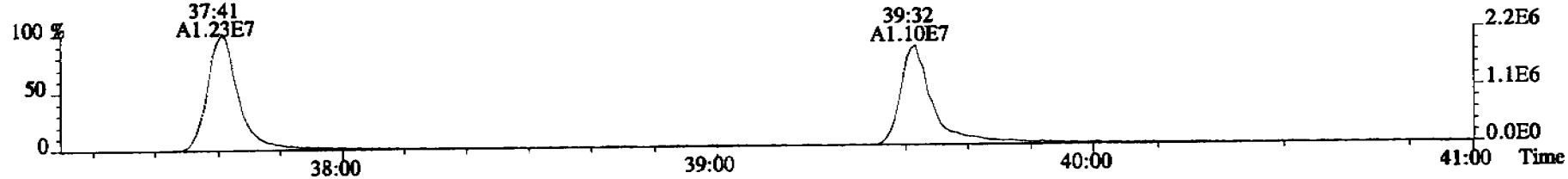
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



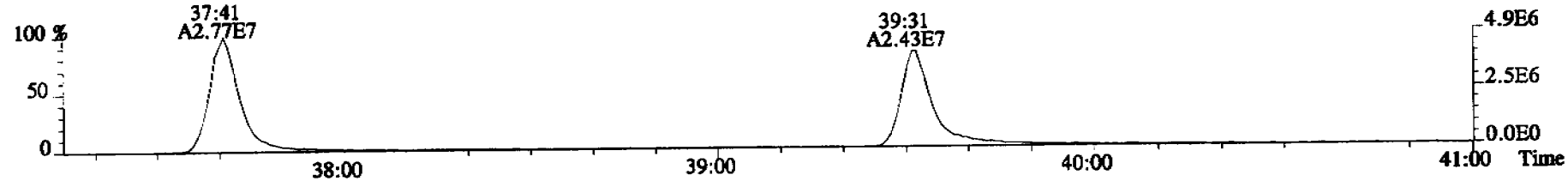
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



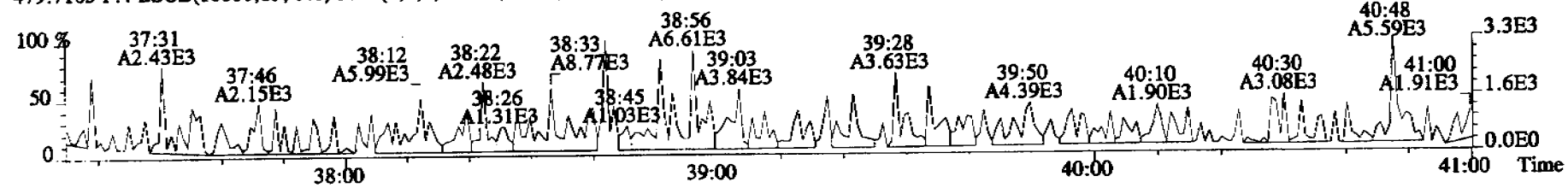
417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

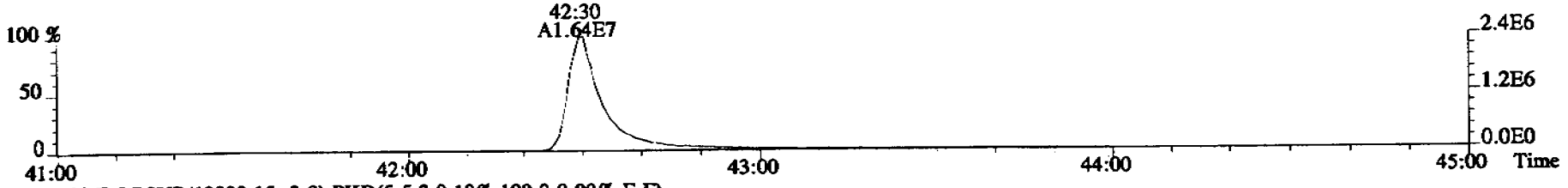


479.7165 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

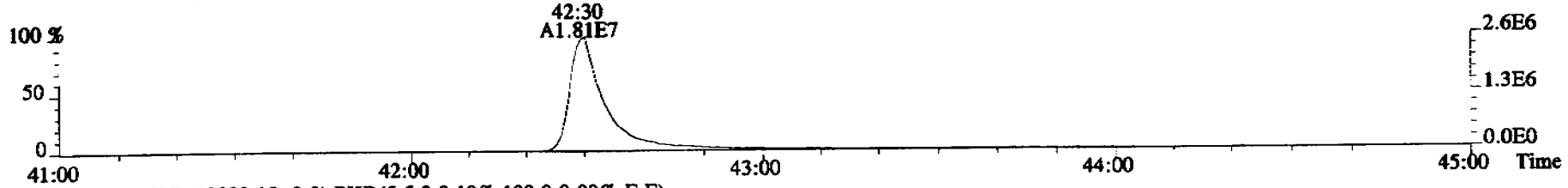


File:050430D2 #1-345 Acq: 1-MAY-2005 00:53:24 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050430D2-1 1613 CS3 050420H Exp:OCDD_DB5

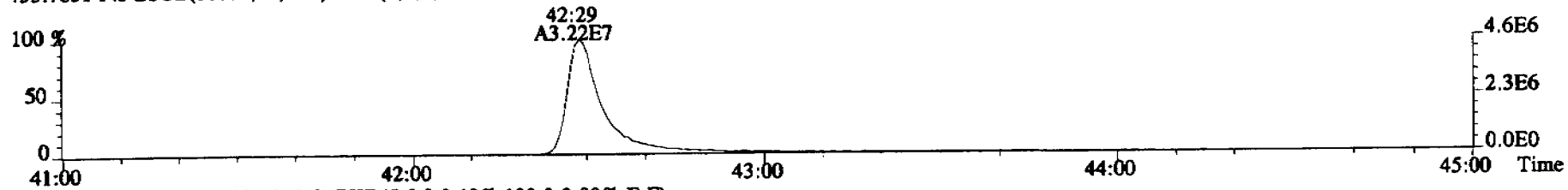
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

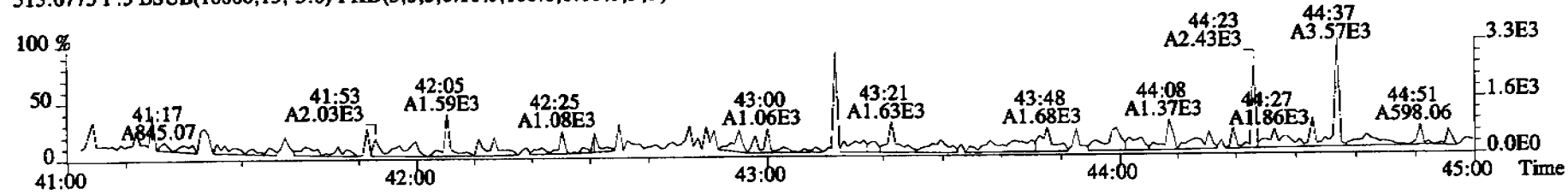


453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.: CCAL ID: ST050430D2-2

Contract No.: SAS No.:

Initial Calibration Date: 4/23/05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050430D2 S#18 Analysis Date: 1-MAY-05 Time: 14:48:01

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.80	0.65-0.89	y	10.5	7.8 - 12.9 8.2 - 12.3 (4)
1,2,3,7,8-PeCDD	M+2/M+4	0.63	0.54-0.72	y	47.8	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	47.9	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.31	1.05-1.43	y	49.2	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.28	1.05-1.43	y	44.7	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.03	0.88-1.20	y	49.9	43.0 - 58.0
OCDD	M+2/M+4	0.89	0.76-1.02	y	98.7	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	9.93	8.4 - 12.0 8.6 - 11.6 (4)
1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	51.2	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.55	1.32-1.78	y	50.0	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	48.0	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.26	1.05-1.43	y	48.5	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.26	1.05-1.43	y	48.6	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.28	1.05-1.43	y	51.0	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.04	0.88-1.20	y	49.3	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.04	0.88-1.20	y	50.3	43.0 - 58.0
OCDF	M+2/M+4	0.93	0.76-1.02	y	98.9	63.0 - 159.0

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) Contract-required concentration range as specified in Table 6a, Method 1613, for tetras only.

Analyst: _____

Date: 5/2/05

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4/23/05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050430D2 S#18 Analysis Date: 1-MAY-05 Time: 14:48:01

LABELED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	100	82.0 - 121.0 85.0 - 117.0 (5)
13C-1,2,3,7,8-PeCDD	M+2/M+4	0.63	0.54-0.72	y	106	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	102	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y	108	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	103	72.0 - 138.0
13C-OCDD	M+2/M+4	0.92	0.76-1.02	y	188	96.0 - 415.0
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65-0.89	y	97.4	71.0 - 140.0 76.0 - 131.0 (5)
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.60	1.32-1.78	y	110	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	99.7	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	129	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	128	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	114	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.54	0.43-0.59	y	96.4	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	y	106	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.46	0.37-0.51	y	106	77.0 - 129.0
13C-OCDF	M+2/M+4	0.89	0.76-1.02	y	194	96.0 - 415.0
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					8.92	7.9 - 12.7 8.3 - 12.1 (5)

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range, as specified in Table 6, Method 1613.

(4) No ion abundance ratio; report concentration found.

(5) Contract-required concentration range, as specified in Table 6a, Method 1613, for tetras only.

Analyst: _____

Date: 5/2/05

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: VG-7 Initial Calibration Date: 4/23/05

RT Window Data Filename: 050430D2 S#15 Analysis Date: 1-MAY-05 Time: 12:20:47

DB-5 IS Data Filename: 050430D2 S#15 Analysis Date: 1-MAY-05 Time: 12:20:47

DB_225 IS Data Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:22	1,3,6,8-TCDF (F)	21:06
1,2,8,9-TCDD (L)	NotFnd	1,2,8,9-TCDF (L)	28:07
1,2,4,7,9-PeCDD (F)	29:35	1,3,4,6,8-PeCDF (F)	28:04
1,2,3,8,9-PeCDD (L)	32:04	1,2,3,8,9-PeCDF (L)	32:20
1,2,4,6,7,9-HxCDD (F)	33:30	1,2,3,4,6,8-HxCDF (F)	32:58
1,2,3,7,8,9-HxCDD (L)	35:29	1,2,3,7,8,9-HxCDF (L)	35:53
1,2,3,4,6,7,9-HpCDD (F)	38:05	1,2,3,4,6,7,8-HpCDF (F)	37:40
1,2,3,4,6,7,8-HpCDD (L)	38:59	1,2,3,4,7,8,9-HpCDF (L)	39:33

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5).

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

COMPARED PEAKS (1)	% VALLEY HEIGHT BETWEEN
	<25%

(1) To meet contract requirements, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: _____

Date: 5/2/05

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4/23/05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050430D2 S#18 Analysis Date: 1-MAY-05 Time: 14:48:01

Compounds Using 13C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.001	0.999-1.002
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.001	0.999-1.002
LABELED COMPOUNDS			
13C-2,3,7,8-TCDF	13C-1,2,3,4-TCDD	0.993	0.923-1.103
13C-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.024	0.976-1.043
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.025	0.989-1.052
13C-1,2,3,7,8-PeCDF	13C-1,2,3,4-TCDD	1.155	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.191	1.011-1.526
13C-1,2,3,7,8-PeCDD	13C-1,2,3,4-TCDD	1.202	1.000-1.567

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613. 10/94

Analyst: [signature]

Date: 5/2/05

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4/23/05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050430D2 S#18 Analysis Date: 1-MAY-05 Time: 14:48:01

Compounds Using 13C-123789-HxCDD as Internal Standard

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.000	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.000	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.000	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.000	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.001	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.000	0.999-1.001
OCDD	13C-OCDD	1.000	0.999-1.001
OCDF	13C-OCDD	1.005	0.999-1.008
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDF	13C-1,2,3,7,8,9-HxCDD	0.962	0.944-0.970
13C-1,2,3,6,7,8-HxCDF	13C-1,2,3,7,8,9-HxCDD	0.966	0.949-0.975
13C-2,3,4,6,7,8-HxCDF	13C-1,2,3,7,8,9-HxCDD	0.983	0.959-1.021
13C-1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDD	1.011	0.977-1.047
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HpCDF	13C-1,2,3,7,8,9-HxCDD	1.062	1.043-1.085
13C-1,2,3,4,6,7,8-HpCDD	13C-1,2,3,7,8,9-HxCDD	1.098	1.086-1.110
13C-1,2,3,4,7,8,9-HpCDF	13C-1,2,3,7,8,9-HxCDD	1.114	1.057-1.151
13C-OCDD	13C-1,2,3,7,8,9-HxCDD	1.192	1.032-1.311
13C-OCDF	13C-1,2,3,7,8,9-HxCDD	1.198	1.032-1.311

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613. 10/94

Analyst: _____

Date: 5/2/05

EPA METHOD 8290

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.: CCAL ID: ST050430D2-2

Contract No.: SAS No.:

Initial Calibration Date: 4/23/05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050430D2 S#18 Analysis Date: 1-MAY-05 Time: 14:48:01

	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.80	0.65-0.89	y	10.5	8.00 - 12.0
1,2,3,7,8-PeCDD	M+2/M+4	0.63	0.54-0.72	y	47.8	40.0 - 60.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	47.9	40.0 - 60.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.31	1.05-1.43	y	49.2	40.0 - 60.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.28	1.05-1.43	y	44.7	40.0 - 60.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.03	0.88-1.20	y	49.9	40.0 - 60.0
OCDD	M+2/M+4	0.89	0.76-1.02	y	98.7	80.0 - 120
2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	9.93	8.00 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	51.2	40.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.55	1.32-1.78	y	50.0	40.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	48.0	40.0 - 60.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.26	1.05-1.43	y	48.5	40.0 - 60.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.26	1.05-1.43	y	48.6	40.0 - 60.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.28	1.05-1.43	y	51.0	40.0 - 60.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.04	0.88-1.20	y	49.3	40.0 - 60.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.04	0.88-1.20	y	50.3	40.0 - 60.0
OCDF	M+2/M+4	0.93	0.76-1.02	y	98.9	80.0 - 120

Analyst: [signature]

Date: 5/2/05

EPA METHOD 8290

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4/23/05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050430D2 S#18 Analysis Date: 1-MAY-05 Time: 14:48:01

LABELED COMPOUNDS	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	100	70.0 - 130
13C-1,2,3,7,8-PeCDD	M+2/M+4	0.63	0.54-0.72	y	106	70.0 - 130
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	102	70.0 - 130
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y	108	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	103	70.0 - 130
13C-OCDD	M+2/M+4	0.92	0.76-1.02	y	188	140 - 260
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65-0.89	y	97.4	70.0 - 130
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.60	1.32-1.78	y	110	70.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	99.7	70.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	129	70.0 - 130
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	128	70.0 - 130
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	114	70.0 - 130
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.54	0.43-0.59	y	96.4	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	y	106	70.0 - 130
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.46	0.37-0.51	y	106	70.0 - 130
13C-OCDF	M+2/M+4	0.89	0.76-1.02	y	194	140 - 260
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD					8.92	7.00 - 13.0

Analyst: [signature]

Date: 5/2/05

Client ID: 1613 CS3 050420H Filename: 050430D2 S:18 Acq: 1-MAY-05 14:48:01 ConCal: ST050430D2-1
Lab ID: ST050430D2-2 GC Column ID: db-5 ICal: 1613VG7-4-23-05 wt/vol: 1.000 EndCAL: ST050430D2-2

	Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL	Rec	Qual
	2,3,7,8-TCDD	6.17e+06	0.80 y	1.06	27:02	10.5			* 2.5	*	100	
	1,2,3,7,8-PeCDD	2.20e+07	0.63 y	0.99	31:43	47.8			* 2.5	*	106	
	1,2,3,4,7,8-HxCDD	1.48e+07	1.26 y	1.11	35:03	47.9			* 2.5	*	102	
	1,2,3,6,7,8-HxCDD	1.84e+07	1.31 y	1.07	35:10	49.2			* 2.5	*	108	
	1,2,3,7,8,9-HxCDD	1.62e+07	1.28 y	1.15	35:29	44.7			* 2.5	*	103	
	1,2,3,4,6,7,8-HpCDD	1.46e+07	1.03 y	1.05	38:60	49.9			* 2.5	*	94.1	
	OCDD	2.34e+07	0.89 y	1.04	42:19	98.7			* 2.5	*	97.4	
	2,3,7,8-TCDF	8.12e+06	0.78 y	1.05	26:14	9.93			* 2.5	*	110	
	1,2,3,7,8-PeCDF	3.78e+07	1.57 y	0.95	30:30	51.2			* 2.5	*	99.7	
	2,3,4,7,8-PeCDF	3.67e+07	1.55 y	1.08	31:26	50.0			* 2.5	*	129	
	1,2,3,4,7,8-HxCDF	3.03e+07	1.25 y	1.19	34:09	48.0			* 2.5	*	128	-UO
	1,2,3,6,7,8-HxCDF	3.45e+07	1.26 y	1.22	34:17	48.5			* 2.5	*	114	
	2,3,4,6,7,8-HxCDF	2.82e+07	1.26 y	1.20	34:55	48.6			* 2.5	*	96.4	
	1,2,3,7,8,9-HxCDF	2.02e+07	1.28 y	1.13	35:54	51.0			* 2.5	*	106	
	1,2,3,4,6,7,8-HpCDF	2.37e+07	1.04 y	1.38	37:42	49.3			* 2.5	*	106	
	1,2,3,4,7,8,9-HpCDF	1.88e+07	1.04 y	1.23	39:33	50.3			* 2.5	*	97.0	
	OCDF	3.00e+07	0.93 y	1.02	42:32	98.9			* 2.5	*		
IS	13C-2,3,7,8-TCDD	5.57e+07	0.79 y	1.12	27:01	100					1780	
IS	13C-1,2,3,7,8-PeCDD	4.65e+07	0.63 y	0.89	31:42	106						
IS	13C-1,2,3,4,7,8-HxCDD	2.78e+07	1.25 y	0.83	35:02	102						
IS	13C-1,2,3,6,7,8-HxCDD	3.50e+07	1.29 y	1.00	35:09	108						
IS	13C-1,2,3,4,6,7,8-HpCDD	2.78e+07	1.06 y	0.82	38:59	103						
IS	13C-OCDD	4.57e+07	0.92 y	0.74	42:18	188						
IS	13C-2,3,7,8-TCDF	7.76e+07	0.80 y	1.02	26:13	97.4						
IS	13C-1,2,3,7,8-PeCDF	7.76e+07	1.60 y	0.90	30:29	110						
IS	13C-2,3,4,7,8-PeCDF	6.82e+07	1.57 y	0.87	31:25	99.7						
IS	13C-1,2,3,4,7,8-HxCDF	5.33e+07	0.52 y	1.27	34:08	129						
IS	13C-1,2,3,6,7,8-HxCDF	5.84e+07	0.53 y	1.40	34:17	128						
IS	13C-2,3,4,6,7,8-HxCDF	4.82e+07	0.53 y	1.29	34:54	114						
IS	13C-1,2,3,7,8,9-HxCDF	3.52e+07	0.54 y	1.12	35:53	96.4						
IS	13C-1,2,3,4,6,7,8-HpCDF	3.49e+07	0.44 y	1.01	37:41	106						
IS	13C-1,2,3,4,7,8,9-HpCDF	3.05e+07	0.46 y	0.88	39:33	106						
IS	13C-OCDF	5.94e+07	0.89 y	0.94	42:31	194						
C/Up	37Cl-2,3,7,8-TCDD	2.74e+06		0.62	27:02	8.92						
RS/RT	13C-1,2,3,4-TCDD	4.95e+07	0.80 y	1.00	26:23	100						
RS	13C-1,2,3,4-TCDF	7.82e+07	0.78 y	1.00	24:51	100						
RS/RT	13C-1,2,3,7,8,9-HxCDD	3.26e+07	1.26 y	1.00	35:30	100						

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	48.2	49.1		*	*
Total Penta-Dioxins	143	144		*	*
Total Hexa-Dioxins	204	206		*	*
Total Hepta-Dioxins	98.5	101		*	*
Total Tetra-Furans	31.0	31.6		*	*
Total Penta-Furans	184	186		*	*
Total Hexa-Furans	251	252		*	*
Total Hepta-Furans	99.9	103		*	*

Intergrations by Analyst: [signature]

Date: 5/2/05

Alta Analytical Laboratory - Injection Log Run file: 050430d2 Instrument ID: VG-7 GC Column ID: db-5

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
050430D2	1	ST050430D2-1 1613 CS3 050420H	dms	1-MAY-05	00:53:24	ST050430D2-1	ST050430D2-2
050430D2	2	0_6749_OPR001	dms	1-MAY-05	01:42:30	ST050430D2-1	ST050430D2-2
050430D2	3	SOLVENT BLANK	dms	1-MAY-05	02:31:35	ST050430D2-1	ST050430D2-2
050430D2	4	0_6749_MB001	dms	1-MAY-05	03:20:41	ST050430D2-1	ST050430D2-2
050430D2	5	26057_6739_001 2005-210-1 11.68g	dms	1-MAY-05	04:09:48	ST050430D2-1	ST050430D2-2
050430D2	6	26057_6739_002 2005-210-2 10g	dms	1-MAY-05	04:58:54	ST050430D2-1	ST050430D2-2
050430D2	7	26057_6739_003 2005-210-3 10.01g	dms	1-MAY-05	05:48:01	ST050430D2-1	ST050430D2-2
050430D2	8	26057_6739_004 2005-210-4 10.02g	dms	1-MAY-05	06:37:07	ST050430D2-1	ST050430D2-2
050430D2	9	26063_6739_001 IOD1197-01 1:20	dms	1-MAY-05	07:26:13	ST050430D2-1	ST050430D2-2
050430D2	10	26063_6739_002 IOD1197-02 1:20	dms	1-MAY-05	08:15:20	ST050430D2-1	ST050430D2-2
050430D2	11	26063_6739_003 IOD1197-03 1:20	dms	1-MAY-05	09:04:25	ST050430D2-1	ST050430D2-2
050430D2	12	26063_6739_004 IOD1197-04 1:20	dms	1-MAY-05	09:53:31	ST050430D2-1	ST050430D2-2
050430D2	13	26072_6739_003 FLY ASH 1:50	dms	1-MAY-05	10:42:36	ST050430D2-1	ST050430D2-2
050430D2	14	26041_6738_001 FILTER CAKE 1:50	dms	1-MAY-05	11:31:42	ST050430D2-1	ST050430D2-2
050430D2	15	26041_6738_001 FILTER CAKE 1:100	dms	1-MAY-05	12:20:47	ST050430D2-1	ST050430D2-2
050430D2	16	SOLVENT BLANK	dms	1-MAY-05	13:09:51	ST050430D2-1	ST050430D2-2
050430D2	17	SOLVENT BLANK	dms	1-MAY-05	13:58:56	ST050430D2-1	ST050430D2-2
050430D2	18	ST050430D2-2 1613 CS3 050420H	dms	1-MAY-05	14:48:01	ST050430D2-1	ST050430D2-2

Attachment 7.F.2

HRMS STANDARDS REVIEW CHECKLIST

Beginning Calibration ID: ST050430D2-1 Ending Calibration ID: ST050430D2-2

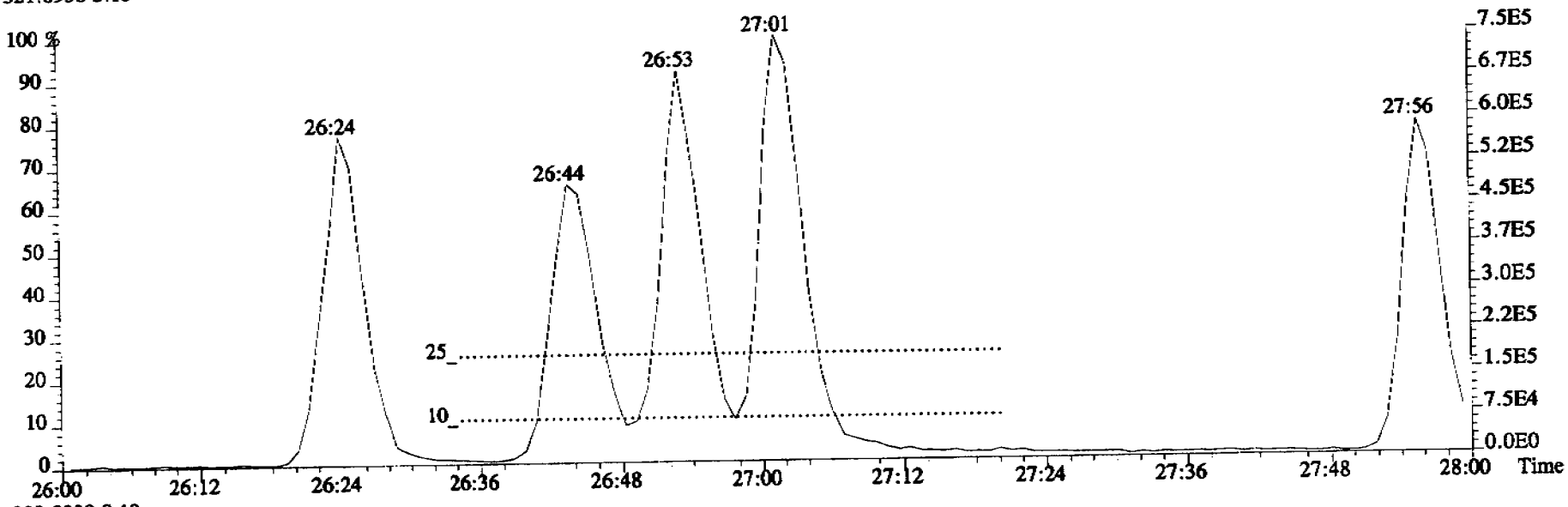
	Beg.CAL	End. CAL	COMMENTS
Calibration Verification/Form 4A/B: Ion abundance within QC limits?	✓	✓	
Calibration Verification/Form 4A/B: Conc within Conc. range?	✓	✓	
Form 5: First and last eluters present? (N/A for DB225)	✓	✓	
Form 6A/6B: Relative Retention Times within limits? (N/A for M23, TO9, 1668, DB225)	✓	✓	
Cal. Ver. Named correctly? (Ex. ST-Year-Month-Day-VG ID)	✓	✓	
Cal. Verification forms signed and dated for review?	✓	✓	
Appropriate ICAL referenced?	✓	✓	
Run log: Standards named correctly? Correct Instrument listed?		✓	
Run log: Samples within 12-hour shift?	✓	✓	
Mass resolution > 10,000	✓	✓	
2378-TCDD/TCDF valley < 25% (N/A for 1668)	✓	✓	
All appropriate peaks integrated correctly?	✓	✓	
Manual integrations included?			
8280: Ratios within limits?			
8280: S/N > 2.5:1			
8280: CS1 within 12 hrs?			

QA* (Random 5% Check) Initial/Date: K. Dewhurst 5/2/05

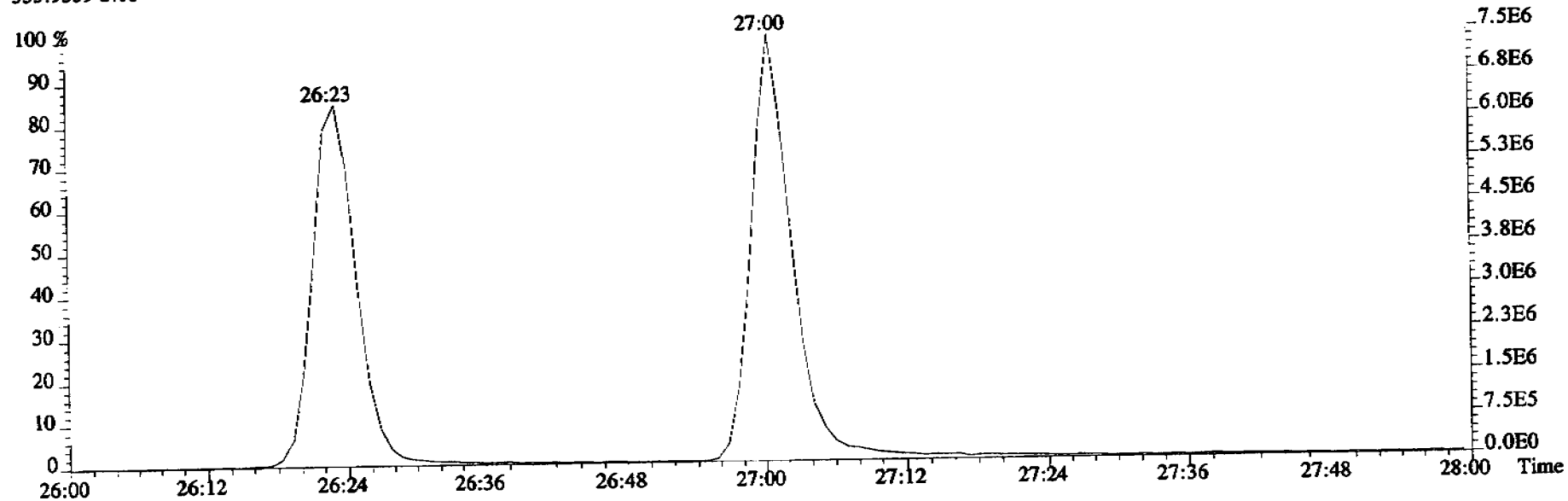
Reviewer Initial/Date: _____

Alta Analytical Laboratory
El Dorado Hills, CA 95762

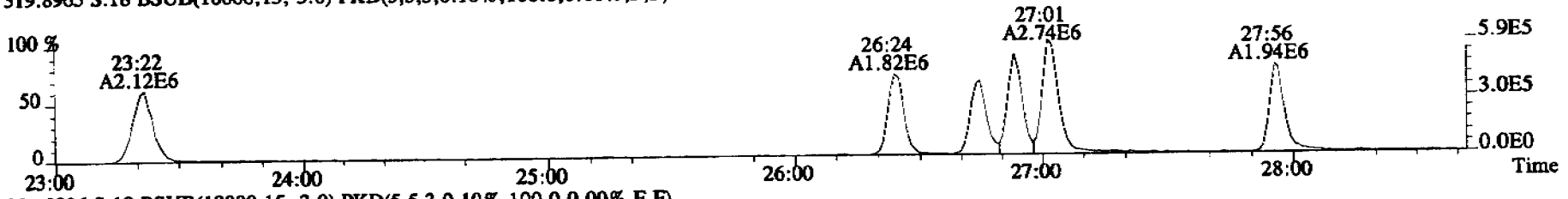
File:050430D2 #1-558 Acq: 1-MAY-2005 14:48:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#18 File Text:Alta Analytical Laboratory VG-7 Text:ST050430D2-2 1613 CS3 050420H Exp:OCDD_DB5
321.8936 S:18



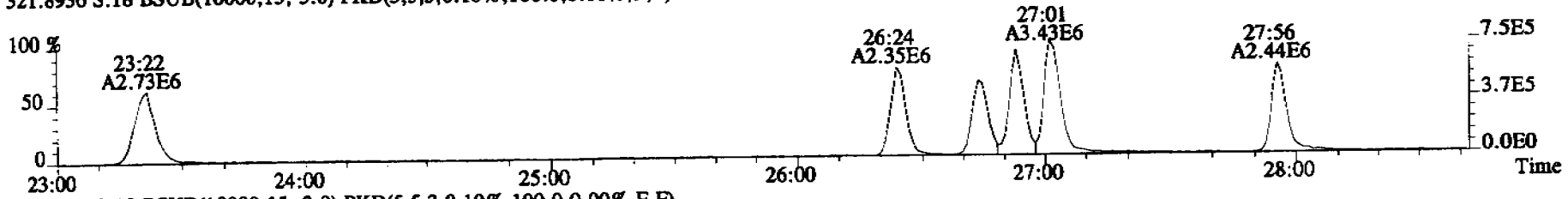
333.9339 S:18



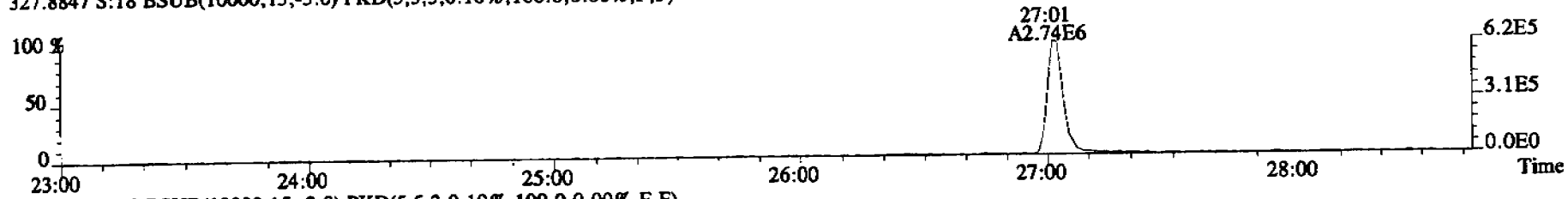
File:050430D2 #1-558 Acq: 1-MAY-2005 14:48:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#18 File Text:Alta Analytical Laboratory VG-7 Text:ST050430D2-2 1613 CS3 050420H Exp:OCDD_DB5
319.8965 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



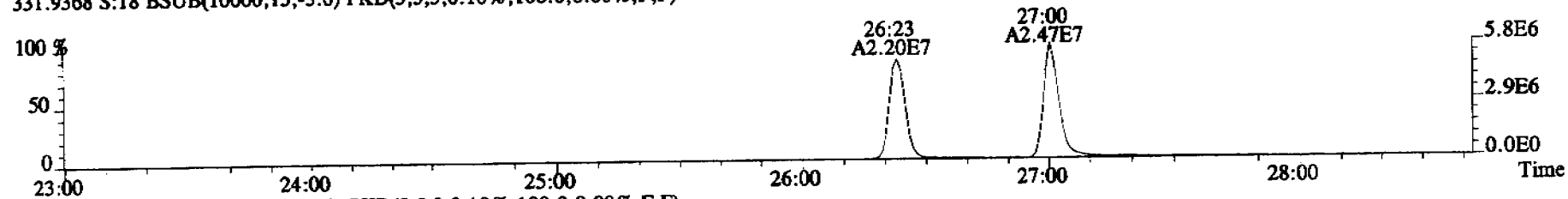
321.8936 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



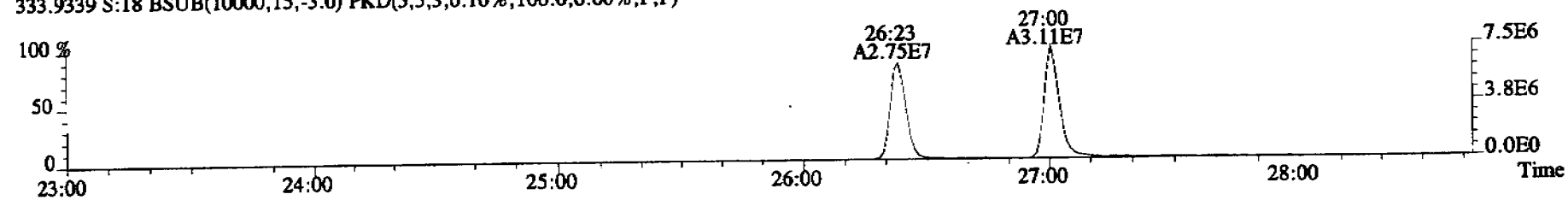
327.8847 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



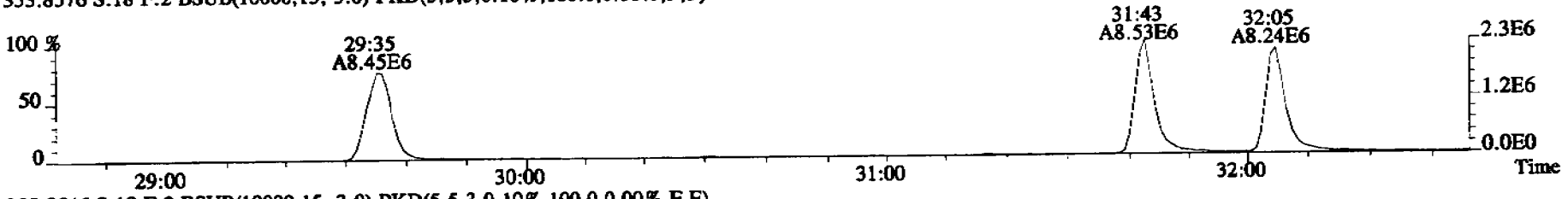
331.9368 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



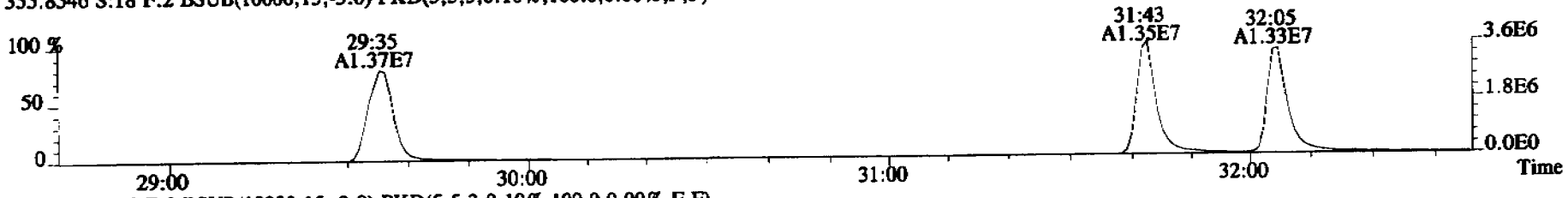
333.9339 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



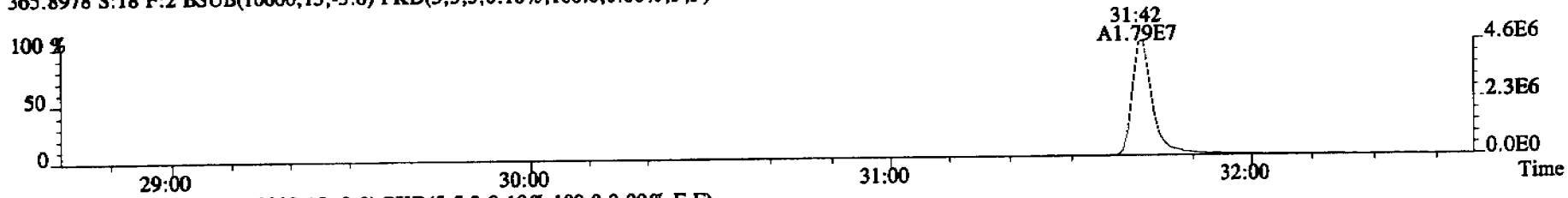
File:050430D2 #1-273 Acq: 1-MAY-2005 14:48:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#18 File Text:Alta Analytical Laboratory VG-7 Text:ST050430D2-2 1613 CS3 050420H Exp:OCDD_DB5
353.8576 S:18 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



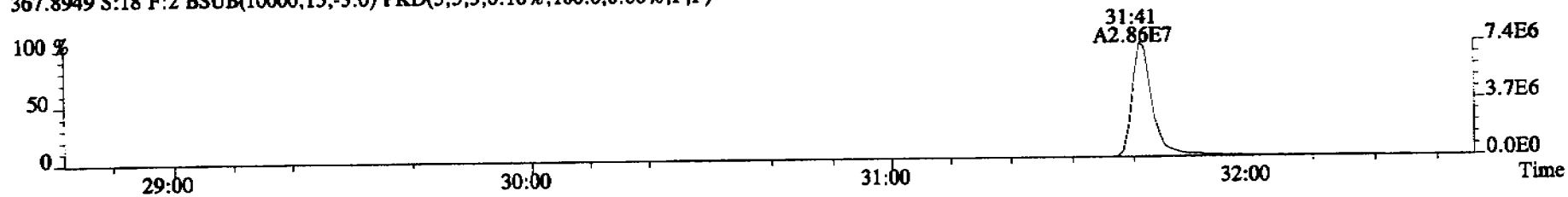
355.8546 S:18 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



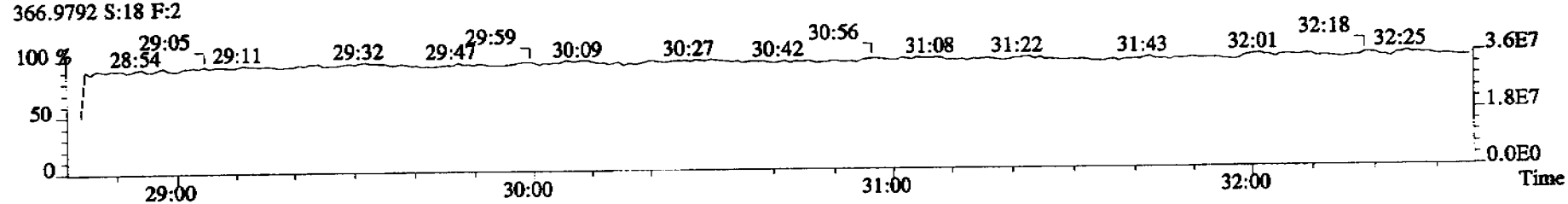
365.8978 S:18 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



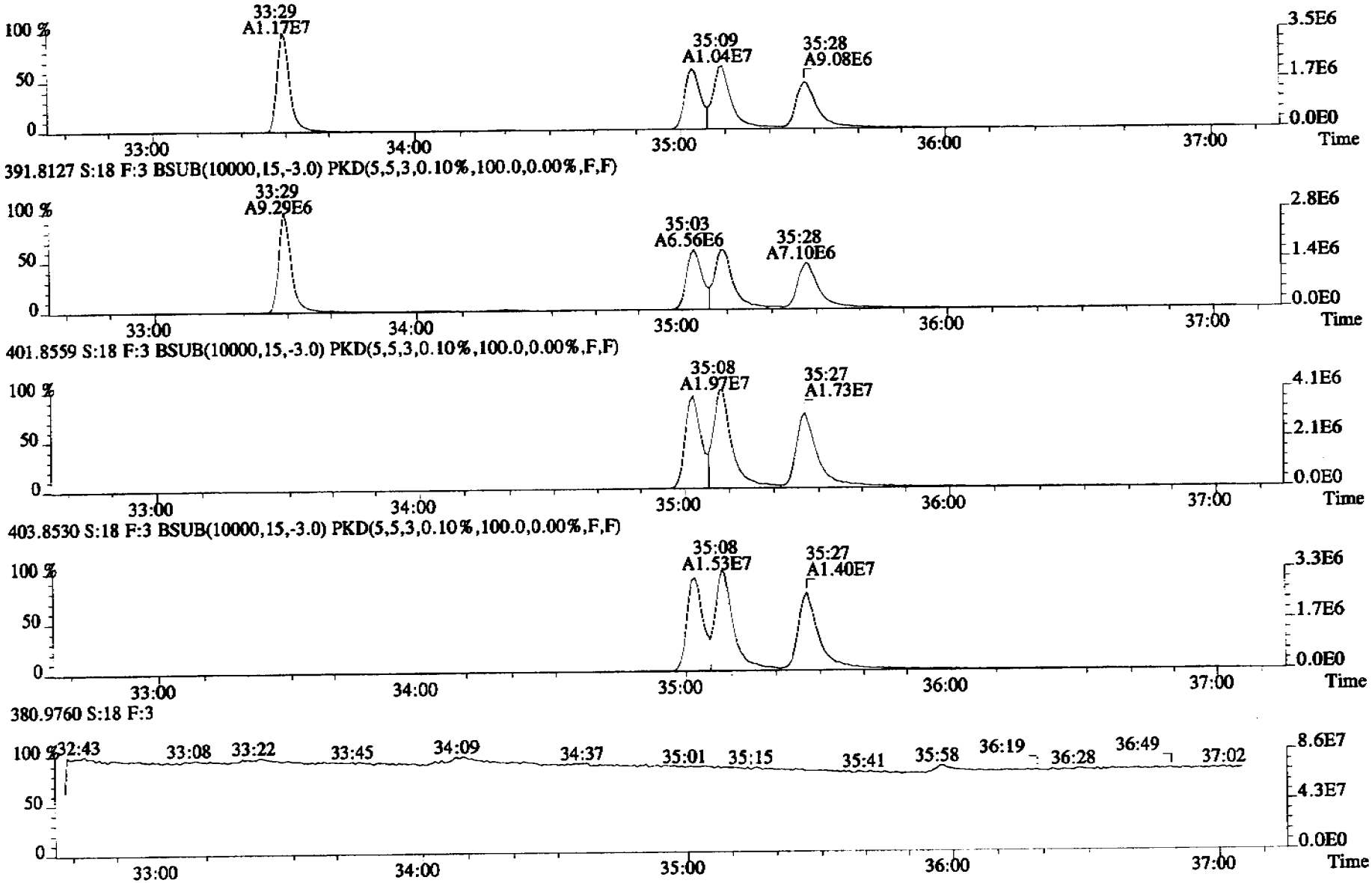
367.8949 S:18 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



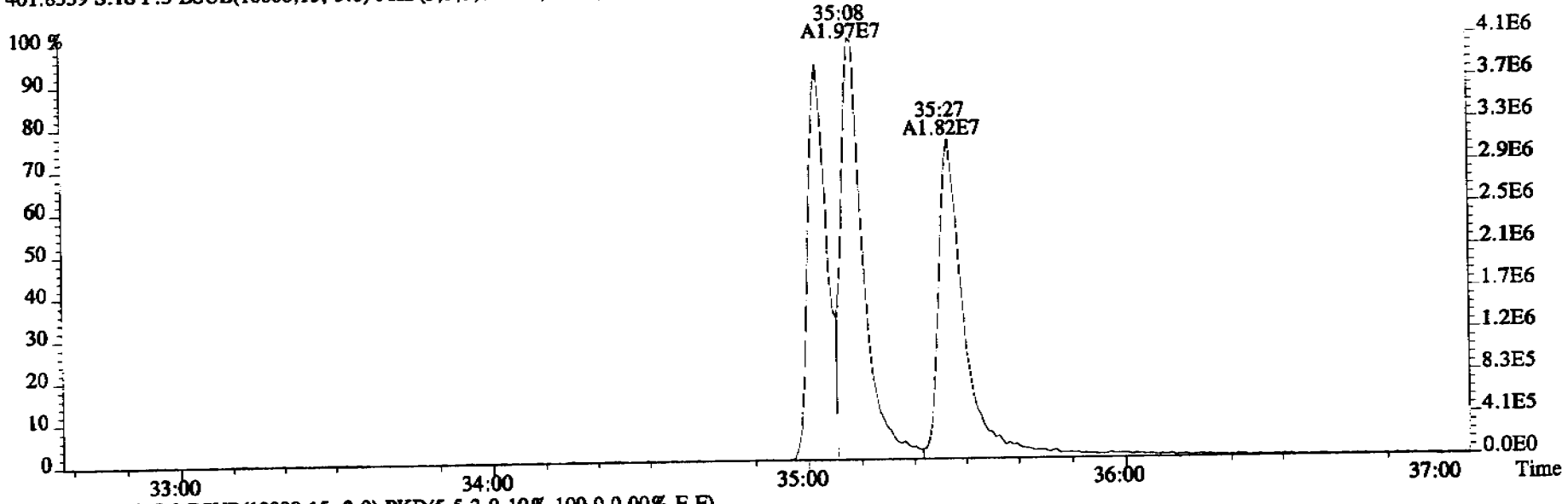
366.9792 S:18 F:2



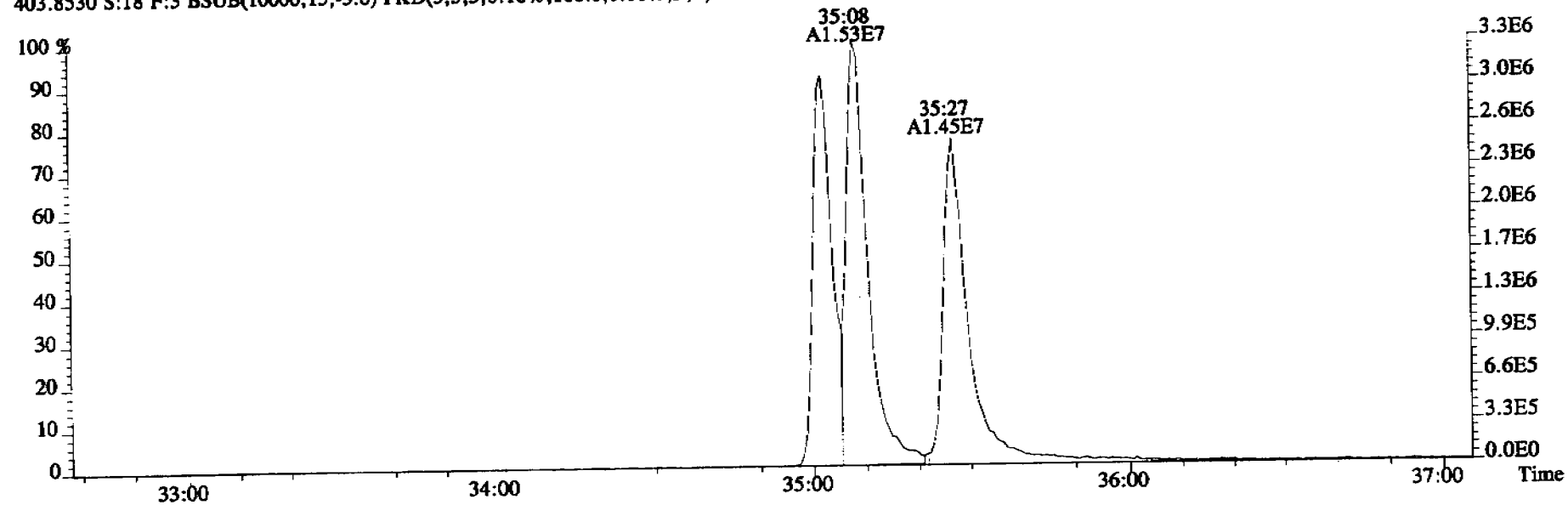
File:050430D2 #1-398 Acq: 1-MAY-2005 14:48:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#18 File Text:Alta Analytical Laboratory VG-7 Text:ST050430D2-2 1613 CS3 050420H Exp:OCDD_DB5



File:050430D2 #1-398 Acq: 1-MAY-2005 14:48:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#18 File Text:Alta Analytical Laboratory VG-7 Text:ST050430D2-2 1613 CS3 050420H Exp:OCDD_DB5
401.8559 S:18 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

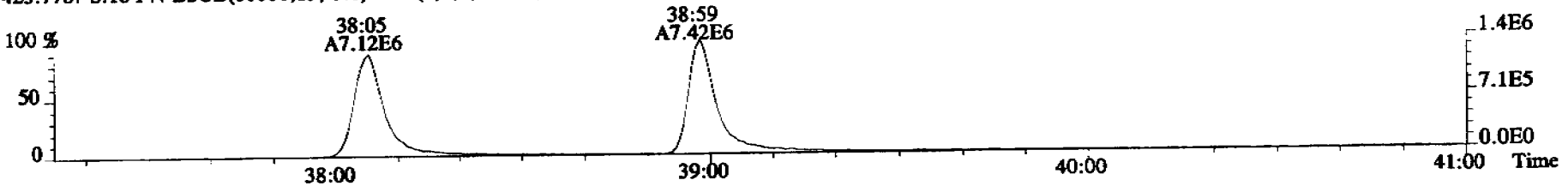


403.8530 S:18 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

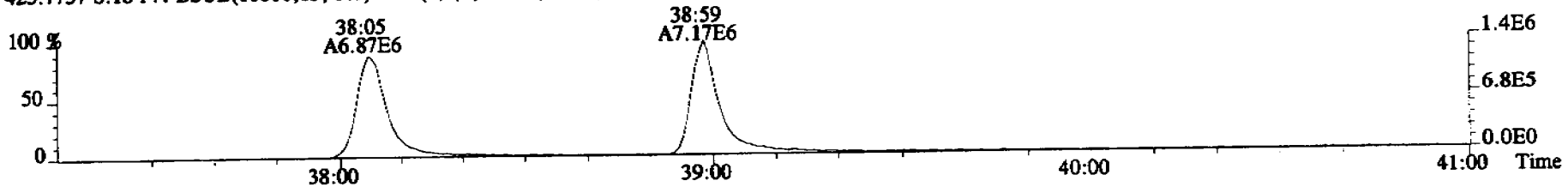


File:050430D2 #1-348 Acq: 1-MAY-2005 14:48:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#18 File Text:Alta Analytical Laboratory VG-7 Text:ST050430D2-2 1613 CS3 050420H Exp:OCDD_DB5

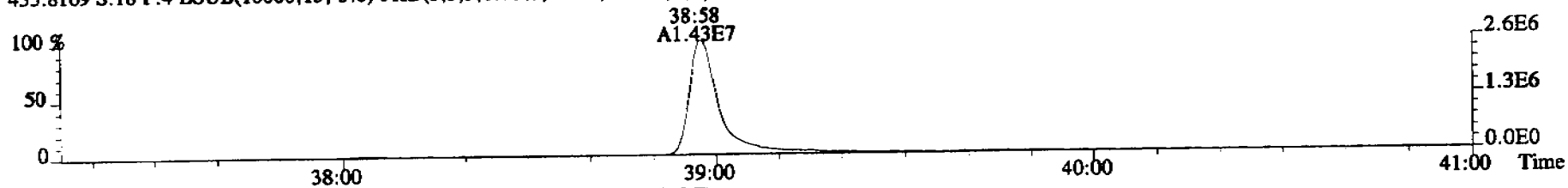
423.7767 S:18 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



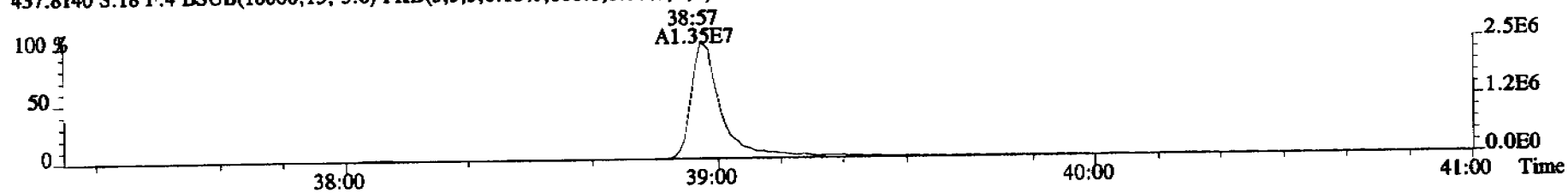
425.7737 S:18 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



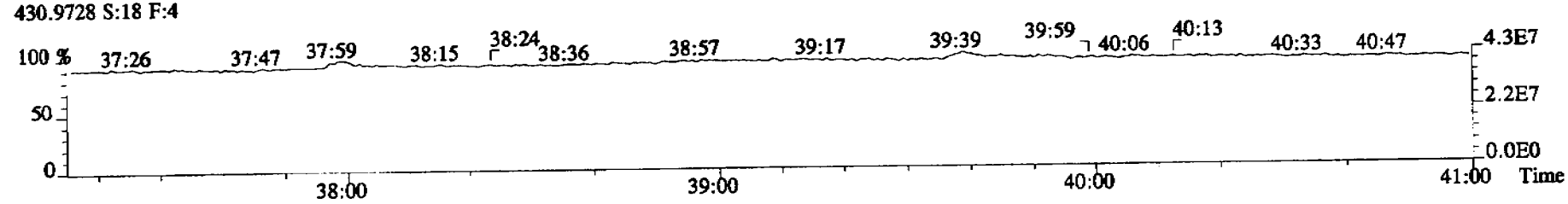
435.8169 S:18 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



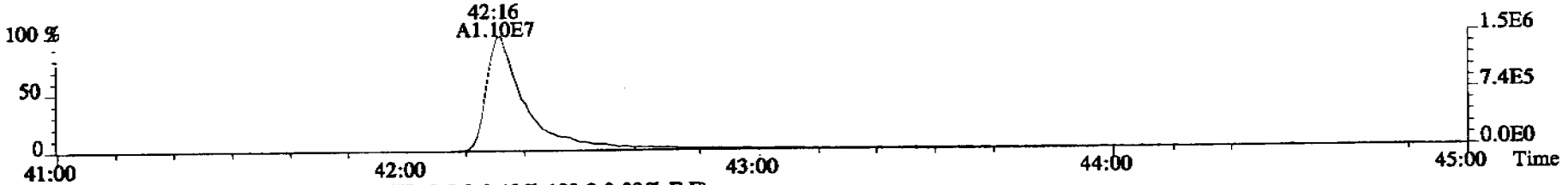
437.8140 S:18 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



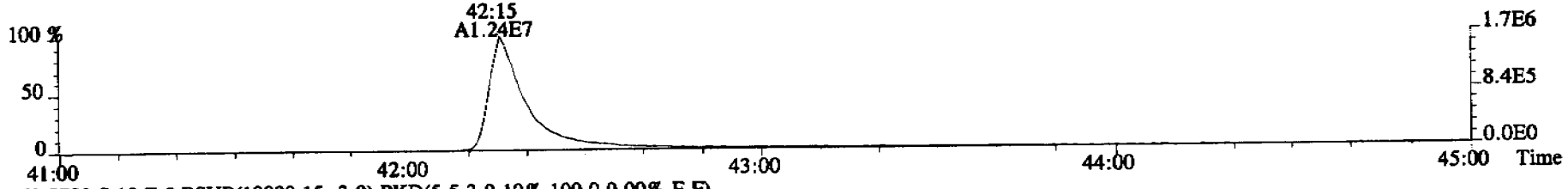
430.9728 S:18 F:4



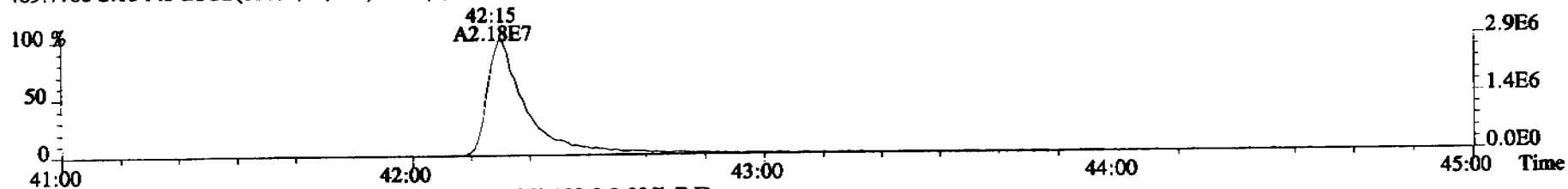
File:050430D2 #1-345 Acq: 1-MAY-2005 14:48:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#18 File Text:Alta Analytical Laboratory VG-7 Text:ST050430D2-2 1613 CS3 050420H Exp:OCDD_DB5
457.7377 S:18 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



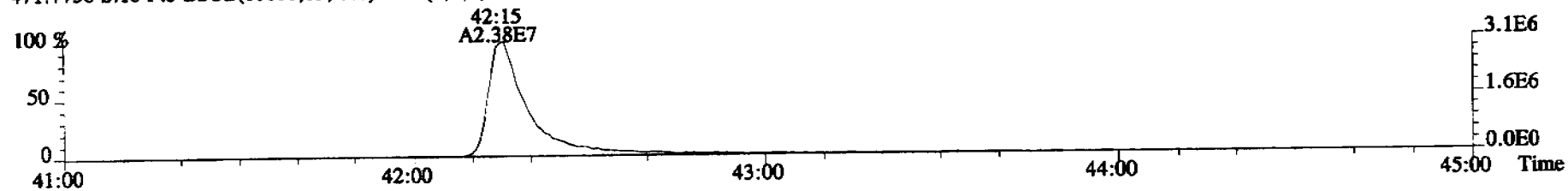
459.7348 S:18 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



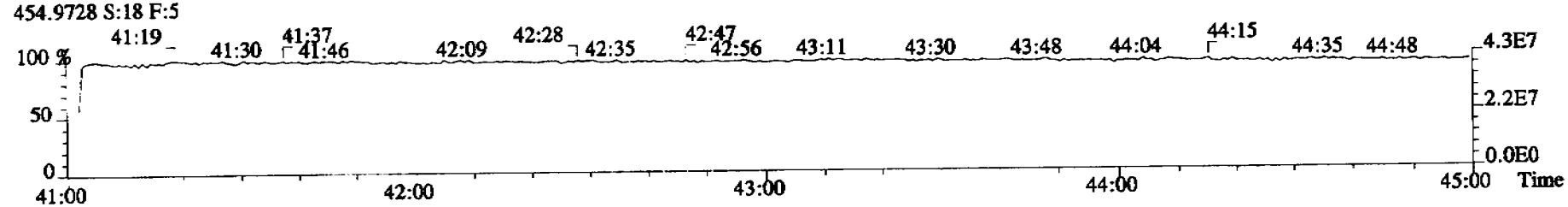
469.7780 S:18 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

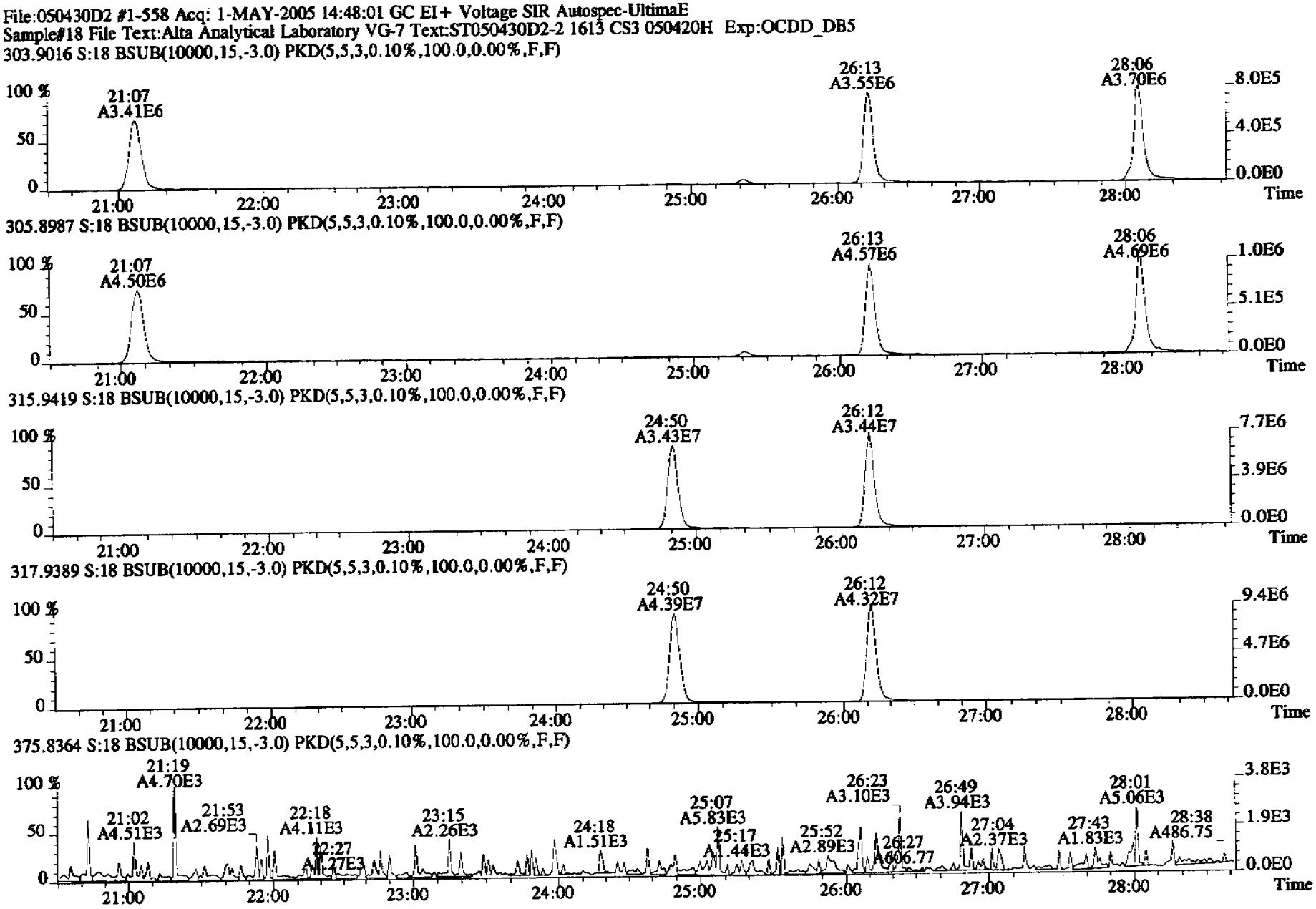


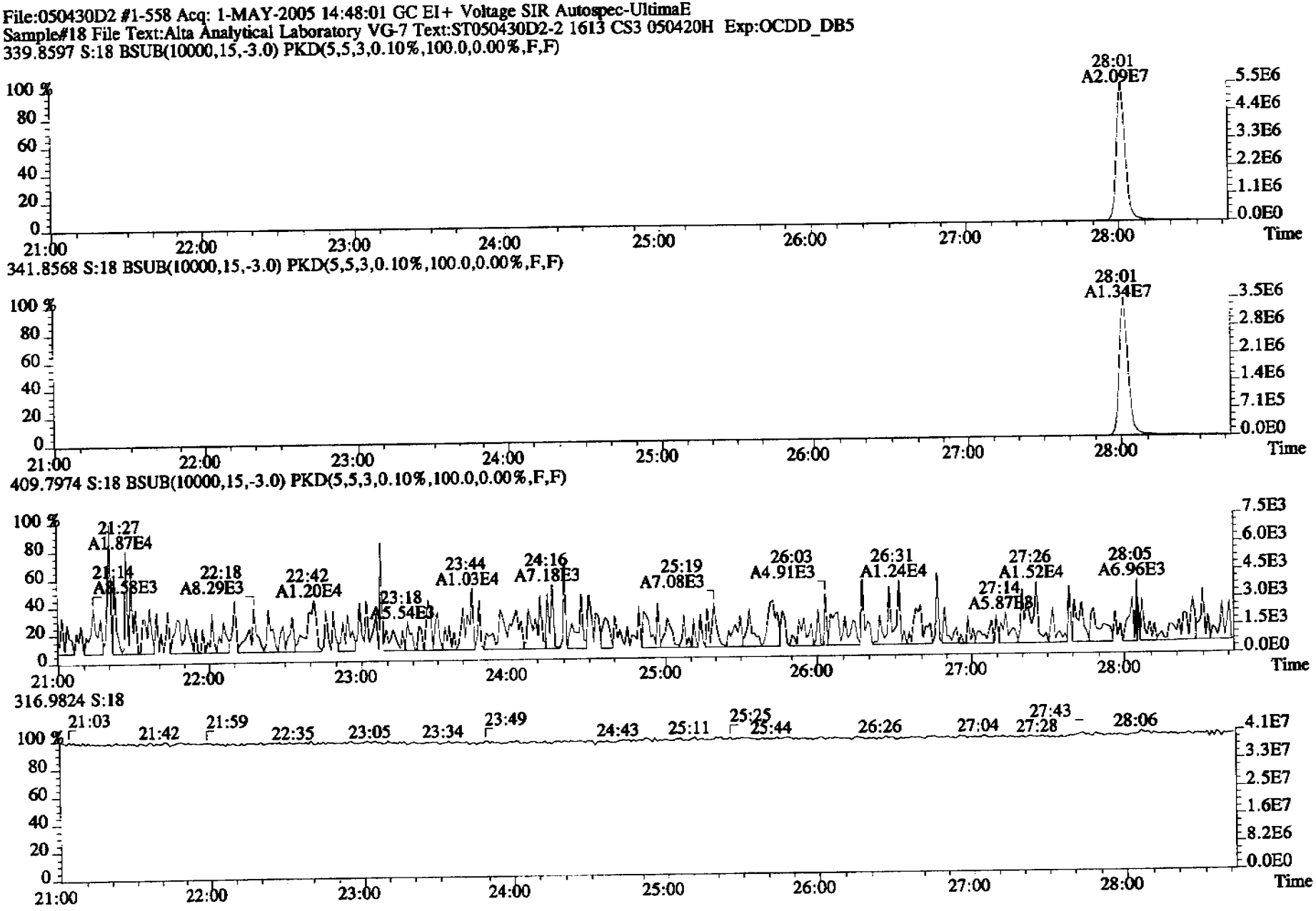
471.7750 S:18 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



454.9728 S:18 F:5

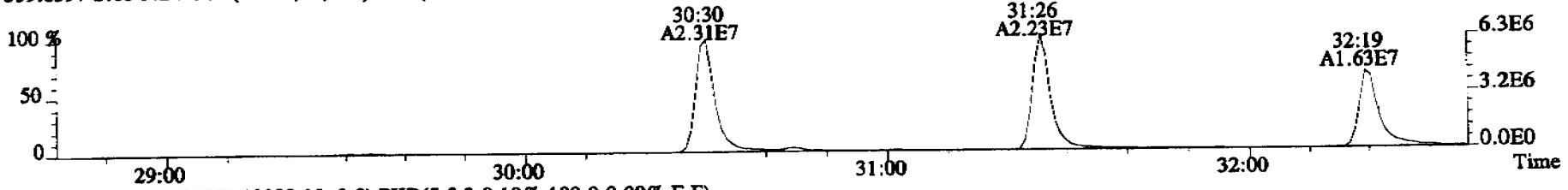



File:050430D2 #1-558 Acq: 1-MAY-2005 14:48:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#18 File Text:Alta Analytical Laboratory VG-7 Text:ST050430D2-2 1613 CS3 050420H Exp:OCDD_DB5
303.9016 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:07 A3.41E6
26:13 A3.55E6
28:06 A3.70E6
305.8987 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:07 A4.50E6
26:13 A4.57E6
28:06 A4.69E6
315.9419 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
24:50 A3.43E7
26:12 A3.44E7
317.9389 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
24:50 A4.39E7
26:12 A4.32E7
375.8364 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:19 A4.70E3
21:02 A4.51E3
21:53 A2.69E3
22:18 A4.11E3
22:27 A1.27E3
23:15 A2.26E3
24:18 A1.51E3
25:07 A5.83E3
25:17 A1.44E3
25:52 A2.89E3
26:23 A3.10E3
26:27 A606.77
26:49 A3.94E3
27:04 A2.37E3
27:43 A1.83E3
28:01 A5.06E3
28:38 A486.75
Time

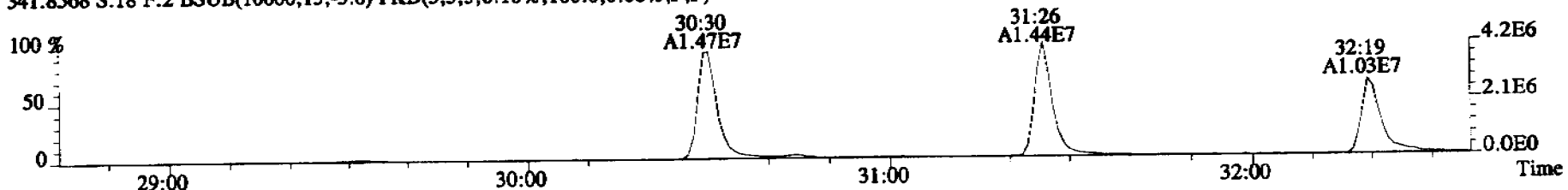

File:050430D2 #1-558 Acq: 1-MAY-2005 14:48:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#18 File Text:Alta Analytical Laboratory VG-7 Text:ST050430D2-2 1613 CS3 050420H Exp:OCDD_DB5
339.8597 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
28:01
A2.09E7
341.8568 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
28:01
A1.34E7
409.7974 S:18 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:27
A1.87E4
22:18
A8.29E3
22:42
A1.20E4
23:18
23:44
A1.03E4
24:16
A7.18E3
25:19
A7.08E3
26:03
A4.91E3
26:31
A1.24E4
27:14
27:26
A1.52E4
28:05
A6.96E3
316.9824 S:18
21:03
21:42
21:59
22:35
23:05
23:34
23:49
24:43
25:11
25:25
25:44
26:26
27:04
27:28
27:43
28:06
Time

File:050430D2 #1-273 Acq: 1-MAY-2005 14:48:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#18 File Text:Alta Analytical Laboratory VG-7 Text:ST050430D2-2 1613 CS3 050420H Exp:OCDD_DB5

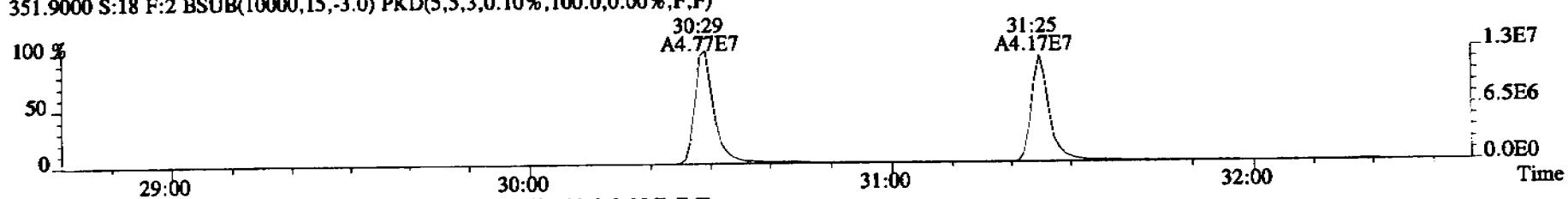
339.8597 S:18 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



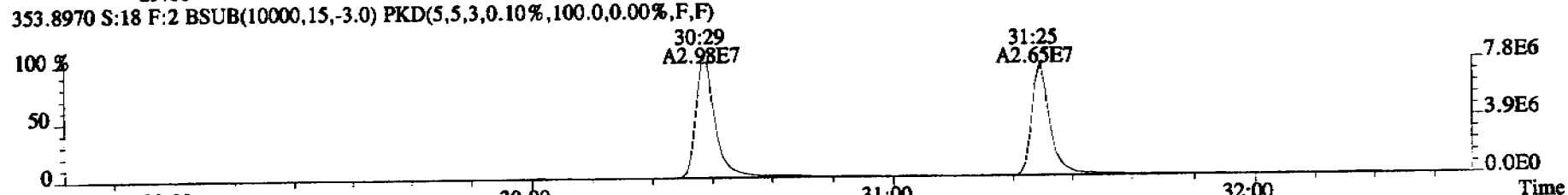
341.8568 S:18 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



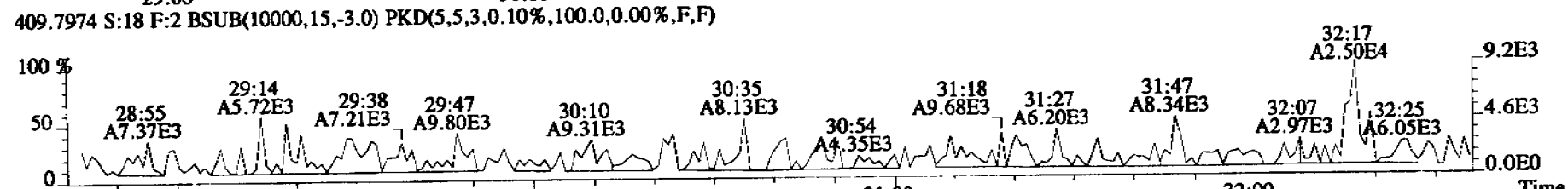
351.9000 S:18 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



353.8970 S:18 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

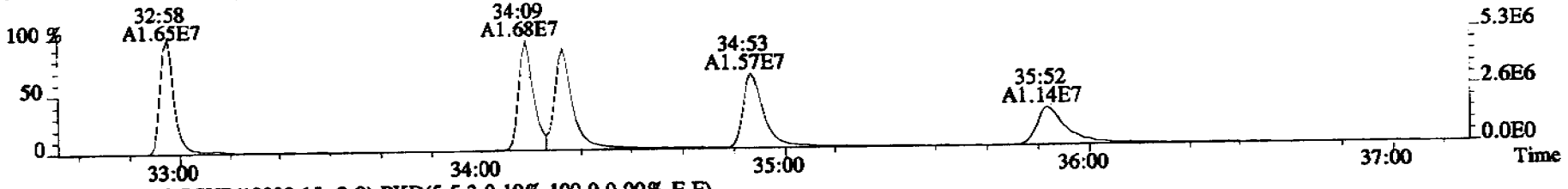


409.7974 S:18 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

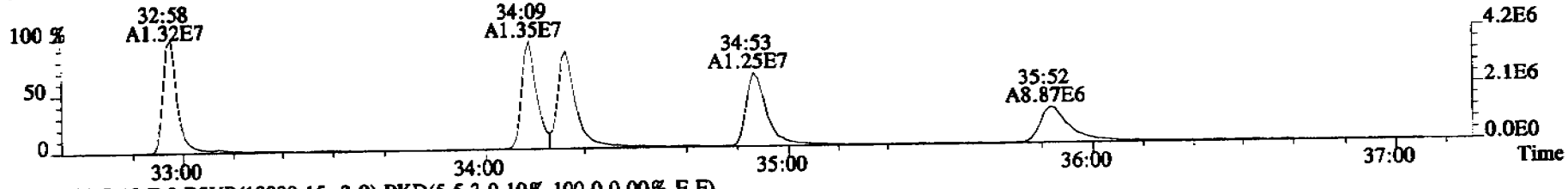


File:050430D2 #1-398 Acq: 1-MAY-2005 14:48:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#18 File Text:Alta Analytical Laboratory VG-7 Text:ST050430D2-2 1613 CS3 050420H Exp:OCDD_DB5

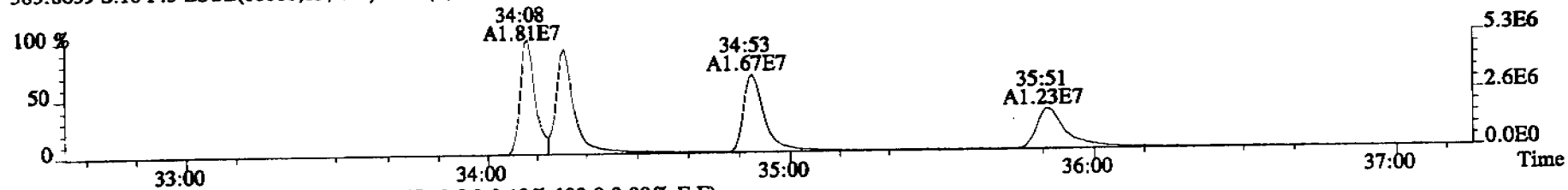
373.8207 S:18 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



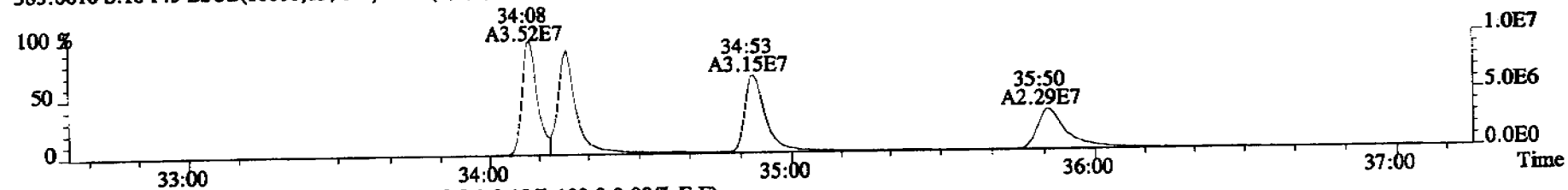
375.8178 S:18 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



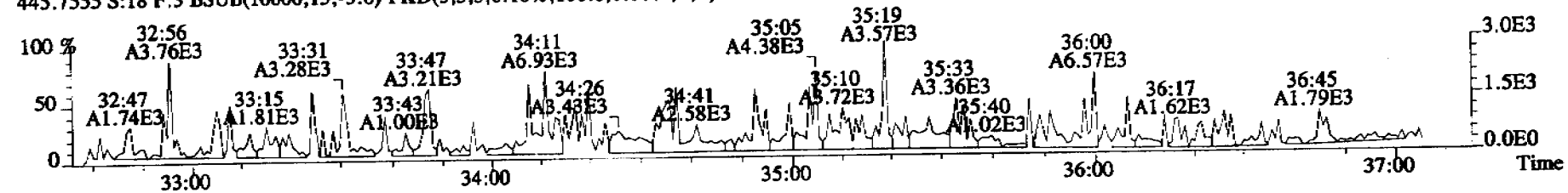
383.8639 S:18 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



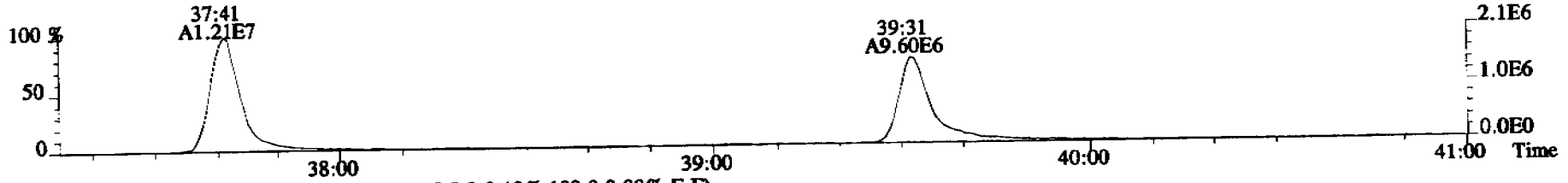
385.8610 S:18 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



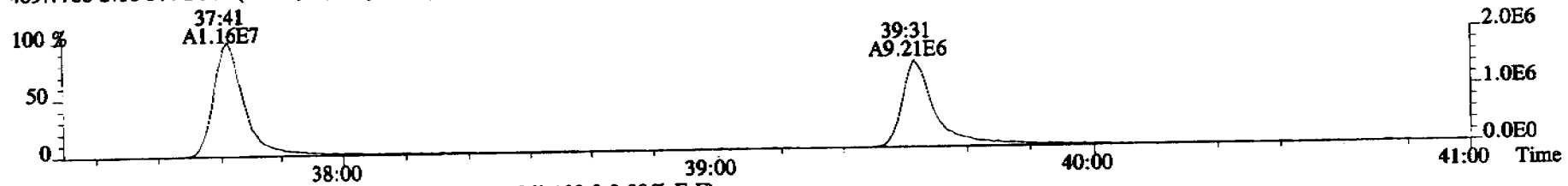
445.7555 S:18 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



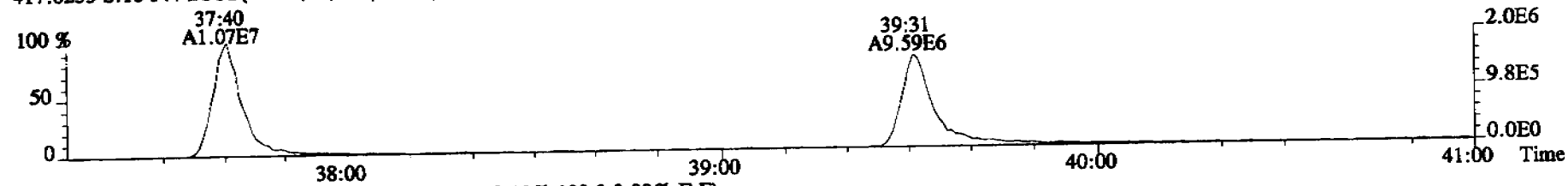
File:050430D2 #1-348 Acq: 1-MAY-2005 14:48:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#18 File Text:Alta Analytical Laboratory VG-7 Text:ST050430D2-2 1613 CS3 050420H Exp:OCDD_DB5
407.7818 S:18 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



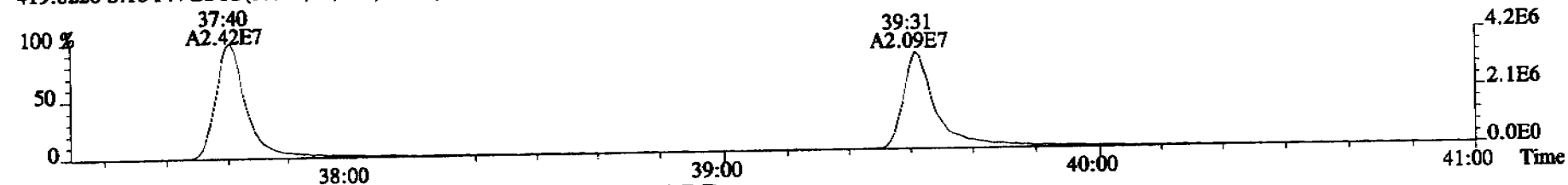
409.7788 S:18 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



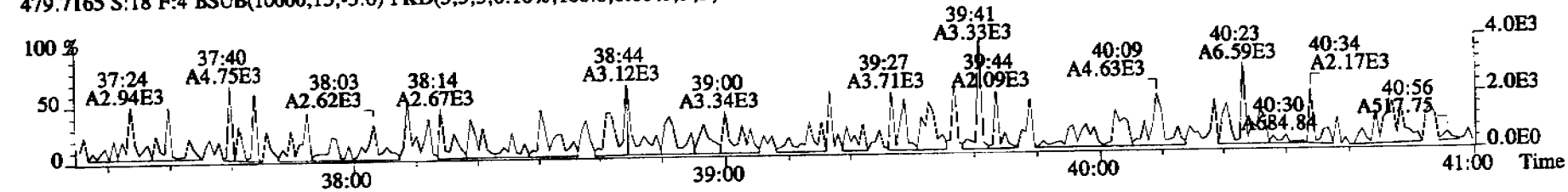
417.8253 S:18 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



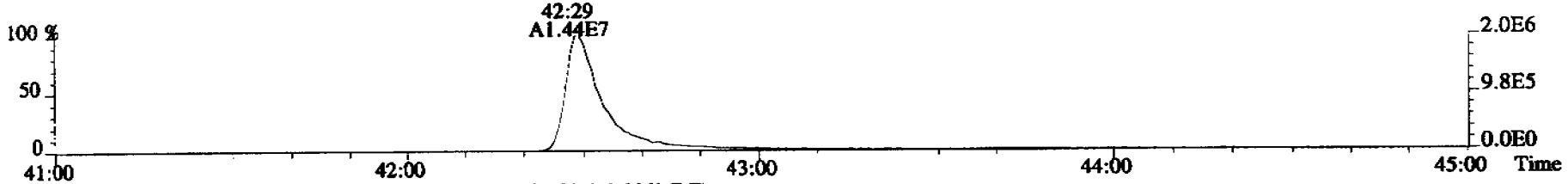
419.8220 S:18 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



479.7165 S:18 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

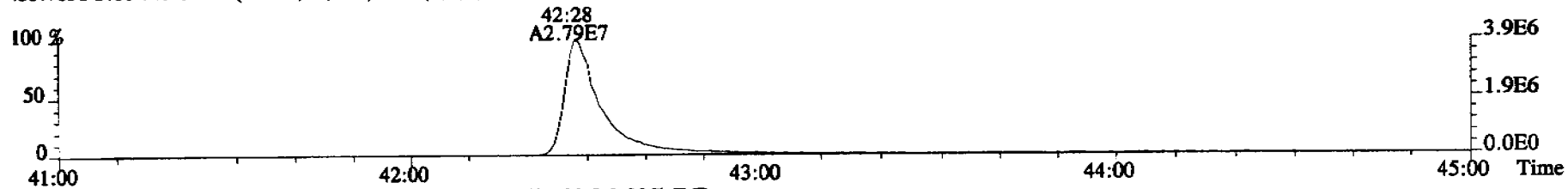


File:050430D2 #1-345 Acq: 1-MAY-2005 14:48:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#18 File Text:Alta Analytical Laboratory VG-7 Text:ST050430D2-2 1613 CS3 050420H Exp:OCDD_DB5
441.7428 S:18 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

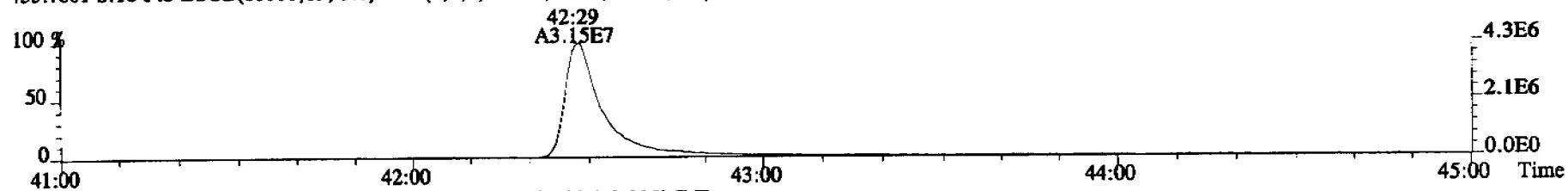


443.7398 S:18 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

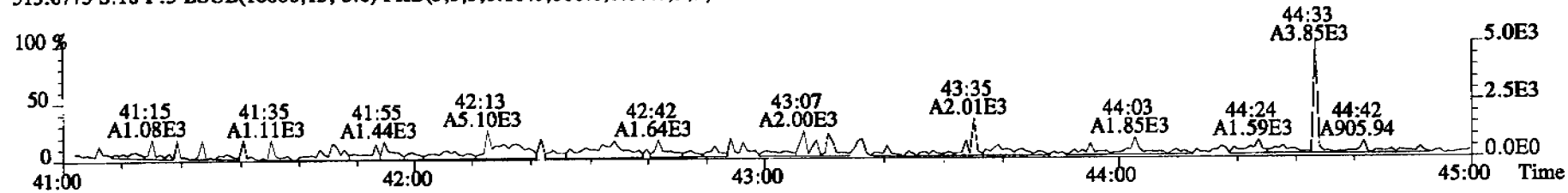
453.7831 S:18 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:18 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

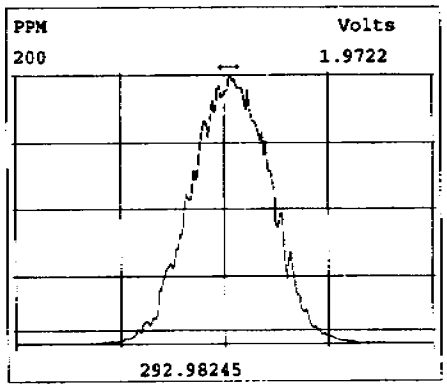


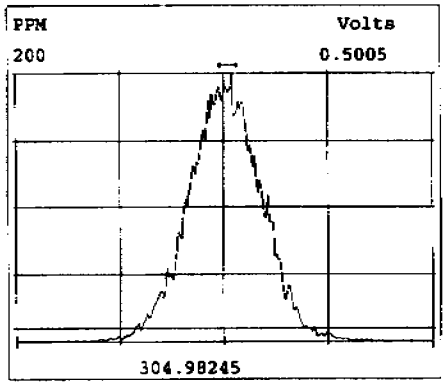
513.6775 S:18 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

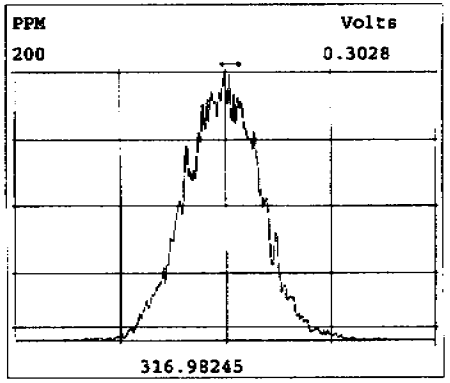


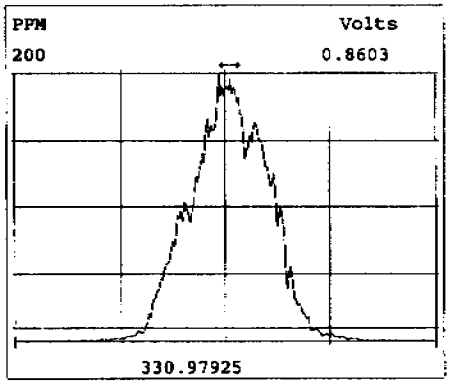
Peak Locate Examination: 1-MAY-2005:15:46 File:RES_CHECK

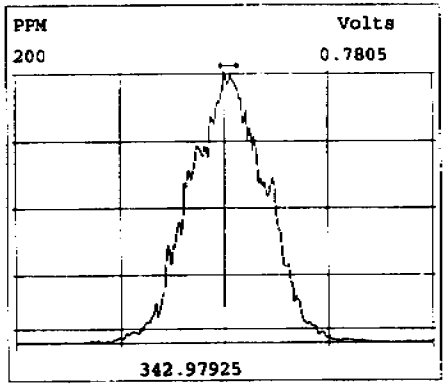
Experiment:OCDD_DB5 Function:1 Reference:PFK

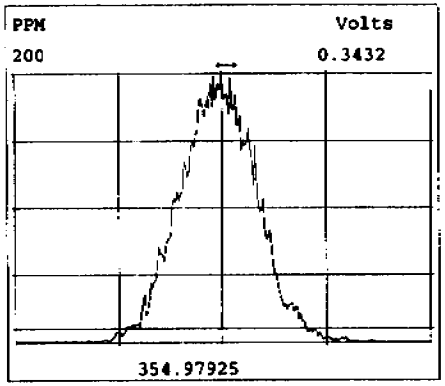


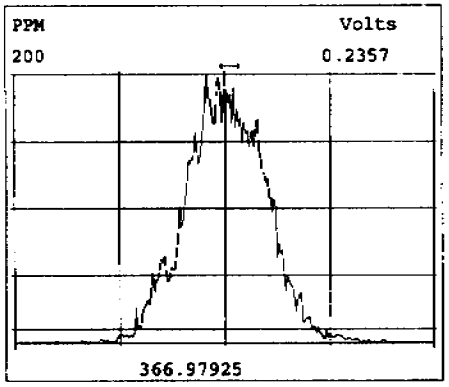


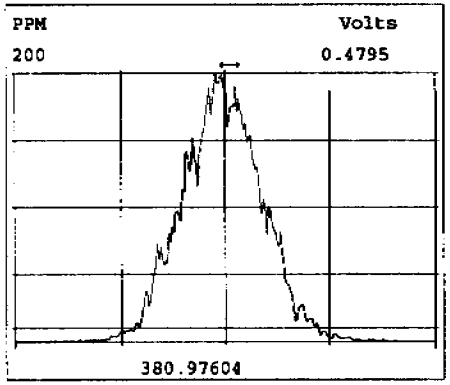


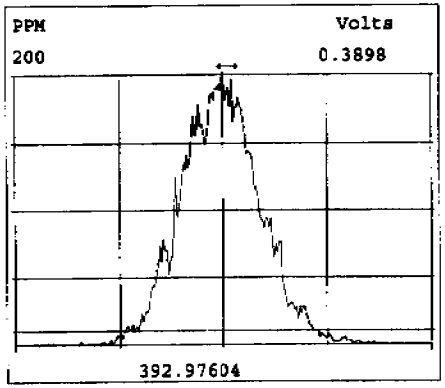


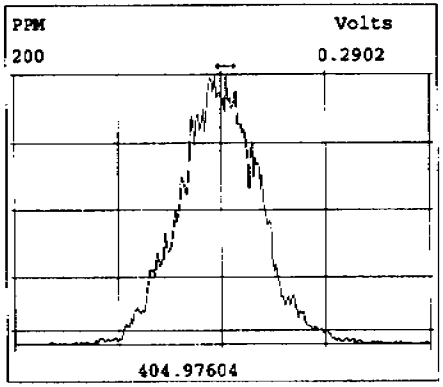


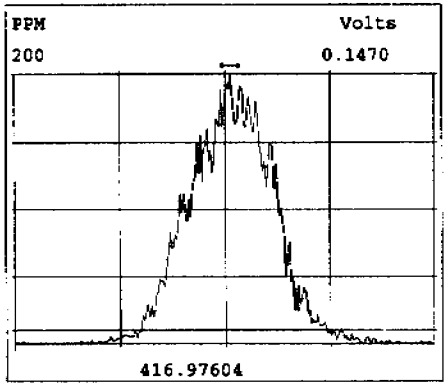






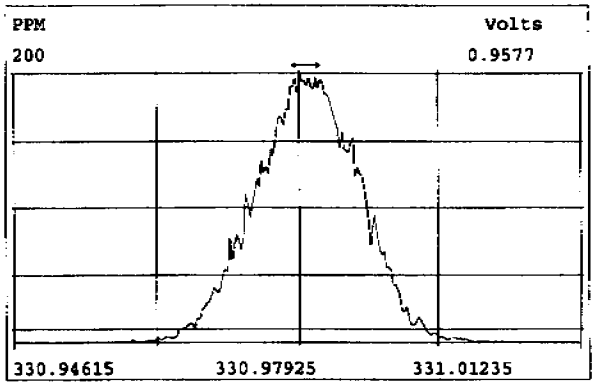


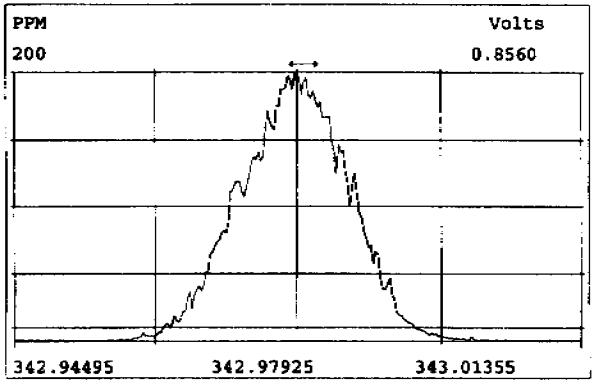


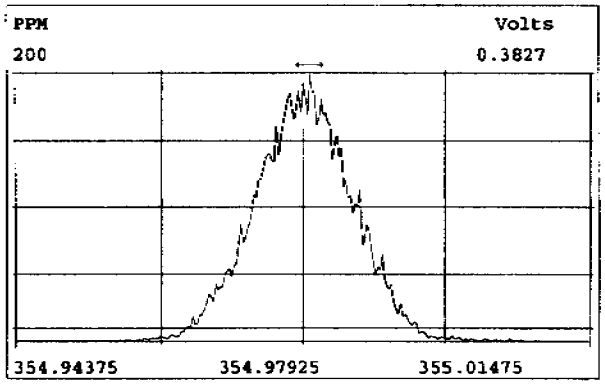


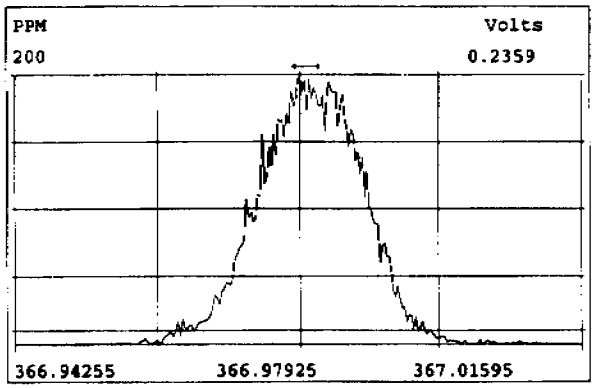
Peak Locate Examination: 1-MAY-2005:15:47 File:RES_CHECK

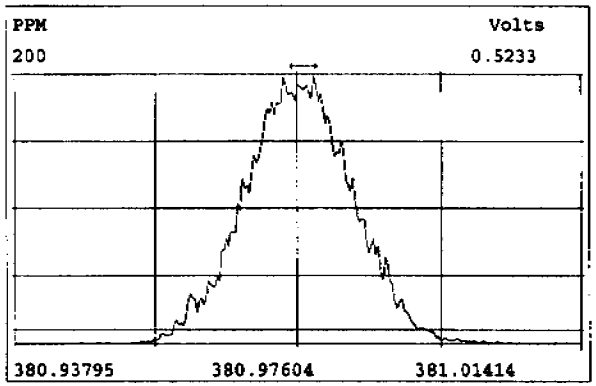
Experiment:OCDD_DB5 Function:2 Reference:PFK

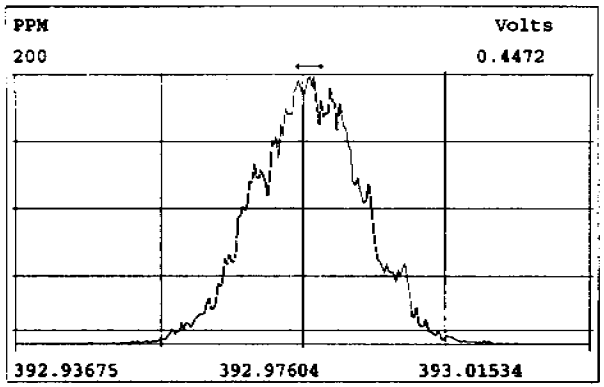


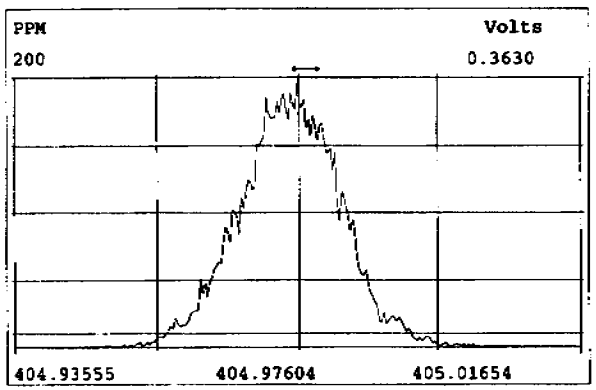


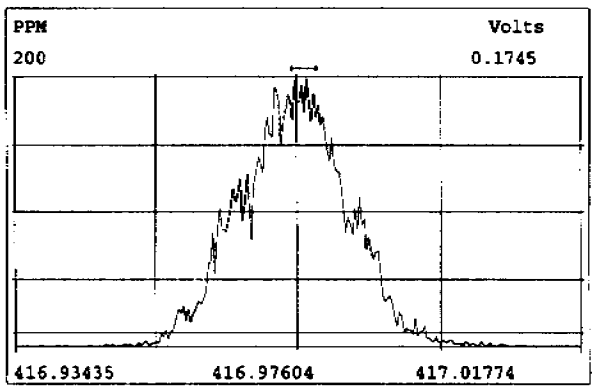






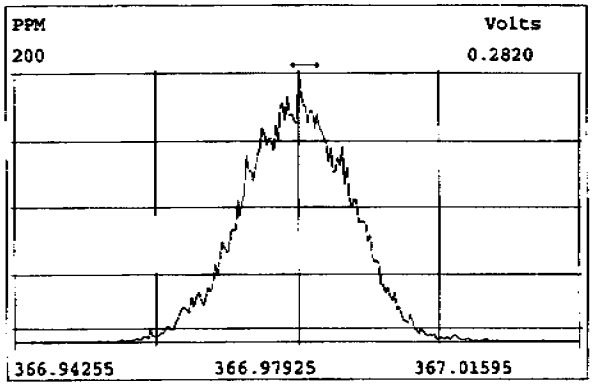


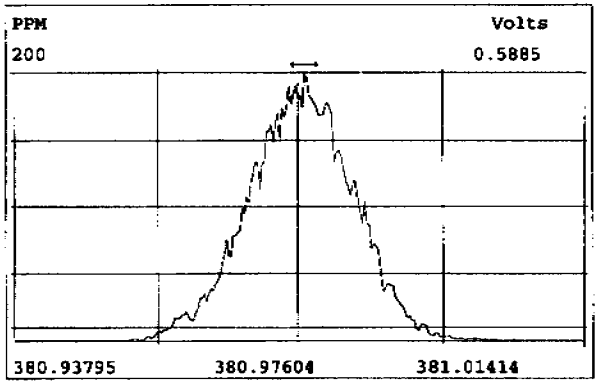


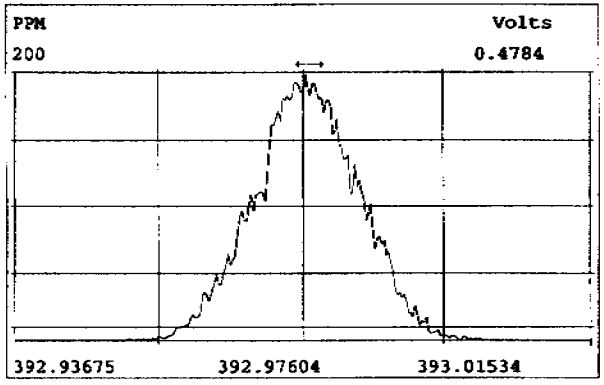


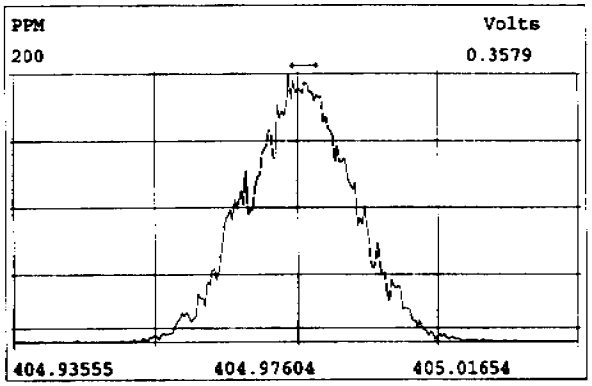
Peak Locate Examination: 1-MAY-2005:15:48 File:RES_CHECK

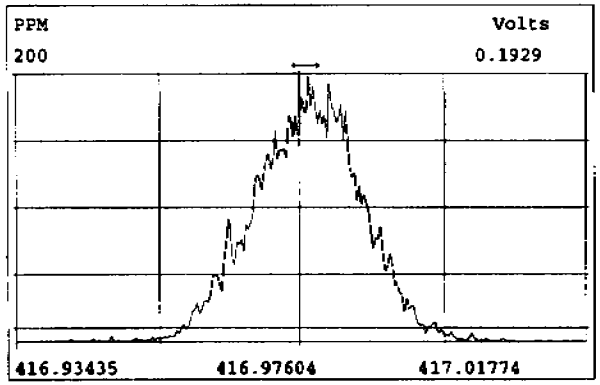
Experiment:OCDD_DB5 Function:3 Reference:PFK

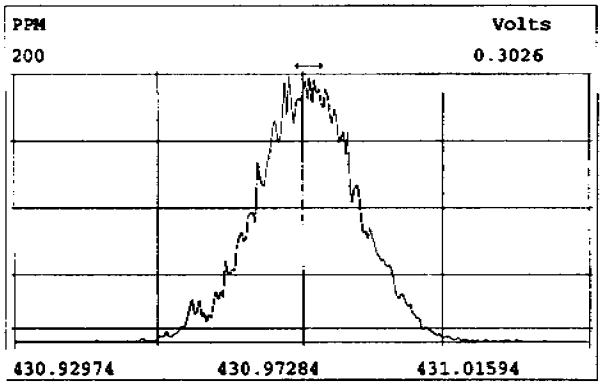


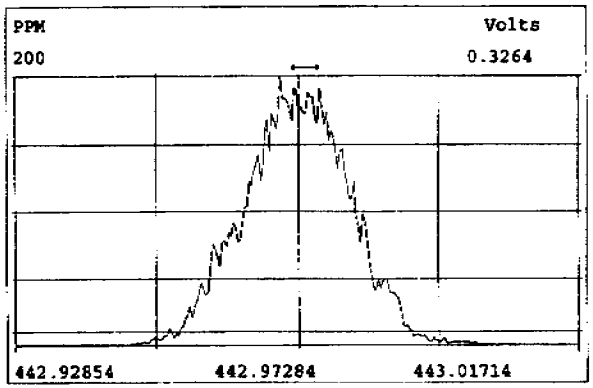


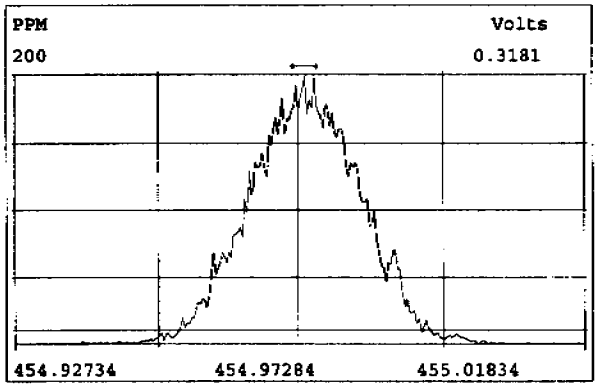






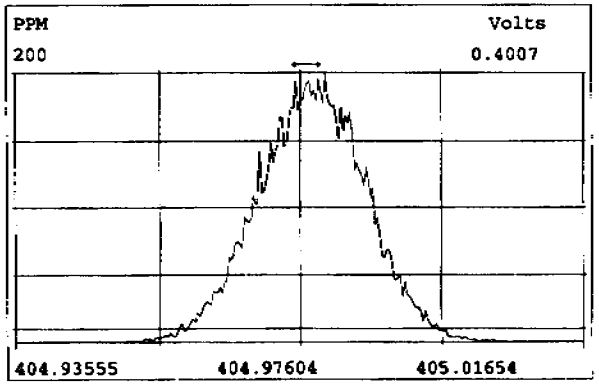


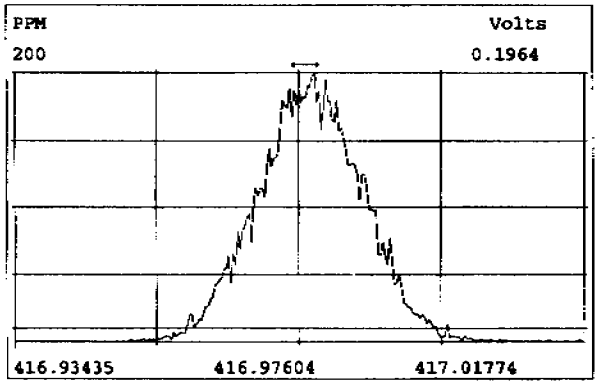


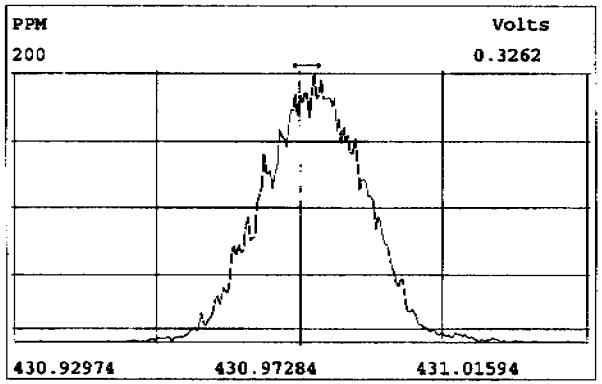


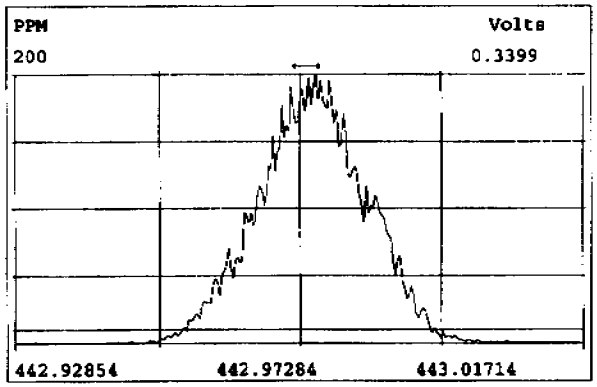
Peak Locate Examination: 1-MAY-2005:15:49 File:RES_CHECK

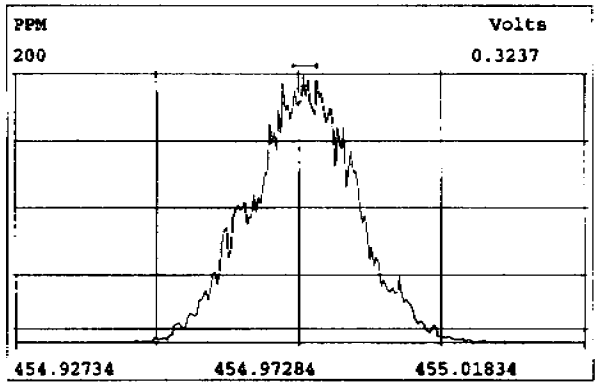
Experiment:OCDD_DB5 Function:4 Reference:PFK

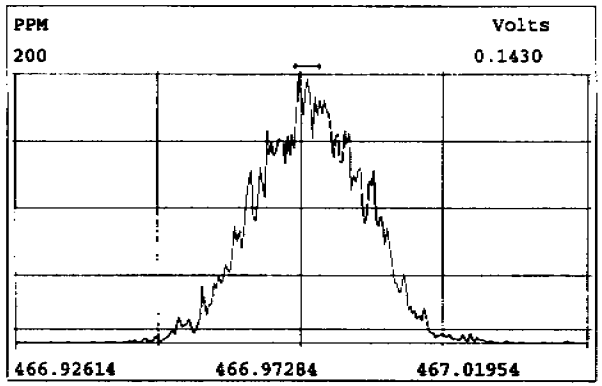


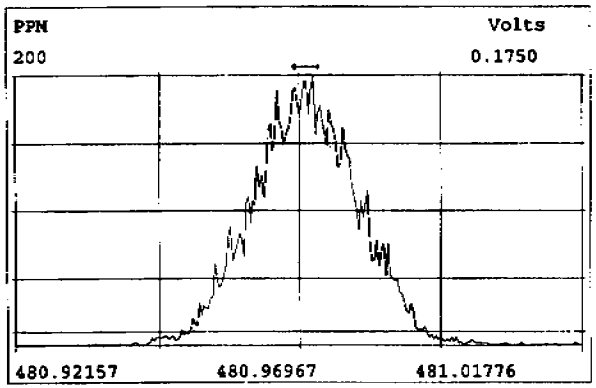






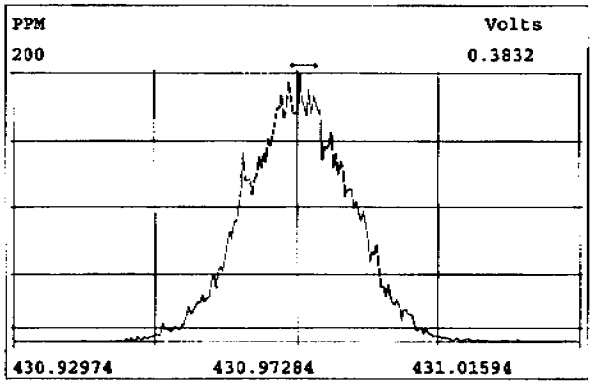


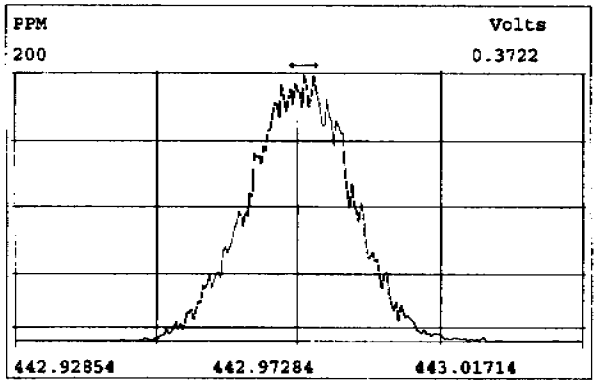


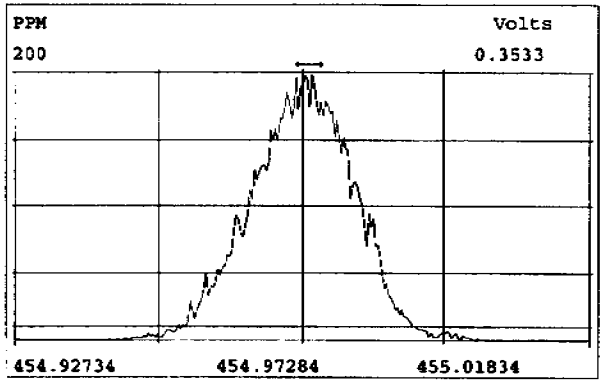


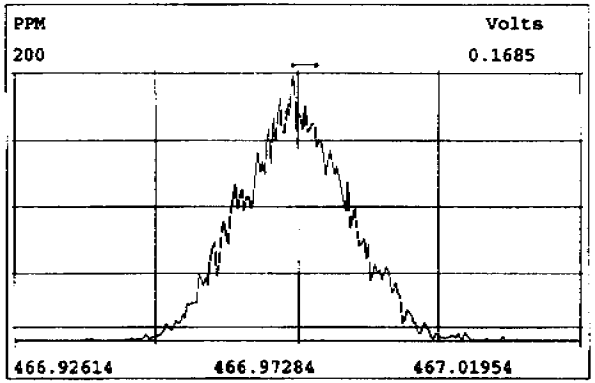
Peak Locate Examination: 1-MAY-2005:15:50 File:RES_CHECK

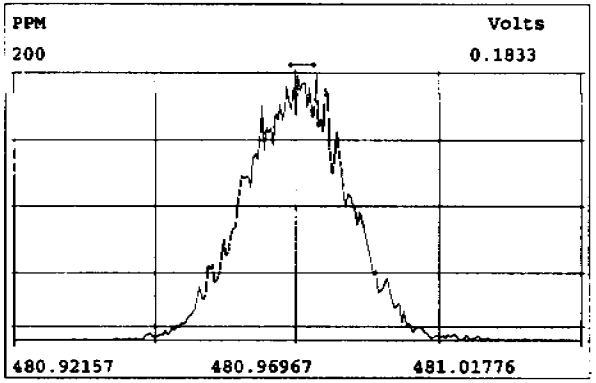
Experiment:OCDD_DB5 Function:5 Reference:PFK

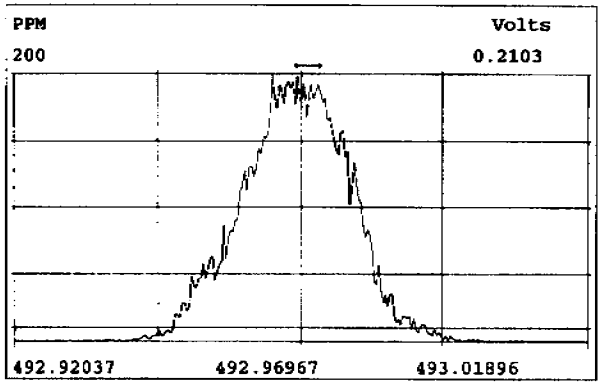


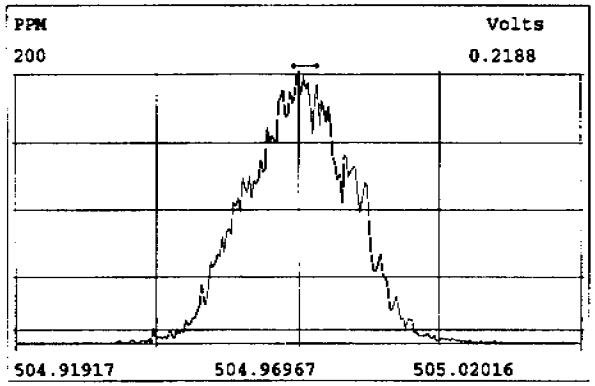


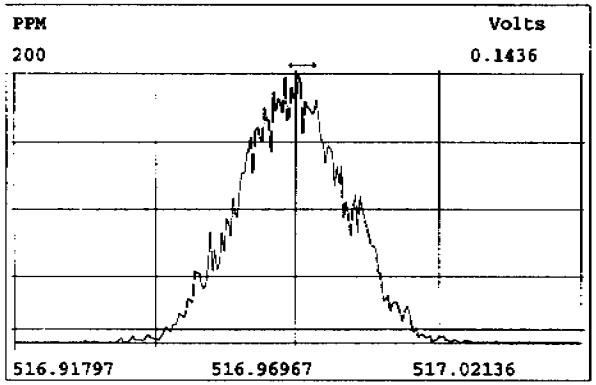












FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.: CCAL ID: ST050502D1-1

Contract No.: SAS No.:

Initial Calibration Date: 4/23/05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050502D1 S#1 Analysis Date: 2-MAY-05 Time: 08:00:22

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.76	0.65-0.89	y	10.8	7.8 - 12.9
						8.2 - 12.3 (4)
1,2,3,7,8-PeCDD	M+2/M+4	0.62	0.54-0.72	y	49.4	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	47.7	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	49.7	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05-1.43	y	48.6	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.02	0.88-1.20	y	50.3	43.0 - 58.0
OCDD	M+2/M+4	0.87	0.76-1.02	y	102	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.80	0.65-0.89	y	10.3	8.4 - 12.0
						8.6 - 11.6 (4)
1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	48.5	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	49.2	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	48.7	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.27	1.05-1.43	y	51.1	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	49.8	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.29	1.05-1.43	y	49.7	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.03	0.88-1.20	y	50.4	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88-1.20	y	50.5	43.0 - 58.0
OCDF	M+2/M+4	0.92	0.76-1.02	y	97.2	63.0 - 159.0

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) Contract-required concentration range as specified in Table 6a, Method 1613, for tetras only.

Analyst: [signature]

Date: 5/2/05

FORM 4B

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4/23/05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050502D1 S#1 Analysis Date: 2-MAY-05 Time: 08:00:22

LABELED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.81	0.65-0.89	y	103	82.0 - 121.0
						85.0 - 117.0 (5)
13C-1,2,3,7,8-PeCDD	M+2/M+4	0.65	0.54-0.72	y	113	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	91.1	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	113	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.08	0.88-1.20	y	101	72.0 - 138.0
13C-OCDD	M+2/M+4	0.85	0.76-1.02	y	180	96.0 - 415.0
13C-2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	96.5	71.0 - 140.0
						76.0 - 131.0 (5)
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	113	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	106	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	109	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	126	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	113	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	104	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.46	0.37-0.51	y	109	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.43	0.37-0.51	y	107	77.0 - 129.0
13C-OCDF	M+2/M+4	0.90	0.76-1.02	y	199	96.0 - 415.0
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					9.03	7.9 - 12.7
						8.3 - 12.1 (5)

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range, as specified in Table 6, Method 1613.

(4) No ion abundance ratio; report concentration found.

(5) Contract-required concentration range, as specified in Table 6a, Method 1613, for tetras only.

Analyst: [signature]

Date: 5/2/05

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: VG-7 Initial Calibration Date: 4/23/05

RT Window Data Filename: 050502D1 S#1 Analysis Date: 2-MAY-05 Time: 08:00:22

DB-5 IS Data Filename: 050502D1 S#1 Analysis Date: 2-MAY-05 Time: 08:00:22

DB_225 IS Data Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:20	1,3,6,8-TCDF (F)	21:06
1,2,8,9-TCDD (L)	27:57	1,2,8,9-TCDF (L)	28:06
1,2,4,7,9-PeCDD (F)	29:36	1,3,4,6,8-PeCDF (F)	28:02
1,2,3,8,9-PeCDD (L)	32:06	1,2,3,8,9-PeCDF (L)	32:21
1,2,4,6,7,9-HxCDD (F)	33:31	1,2,3,4,6,8-HxCDF (F)	32:59
1,2,3,7,8,9-HxCDD (L)	35:31	1,2,3,7,8,9-HxCDF (L)	35:55
1,2,3,4,6,7,9-HpCDD (F)	38:07	1,2,3,4,6,7,8-HpCDF (F)	37:43
1,2,3,4,6,7,8-HpCDD (L)	39:01	1,2,3,4,7,8,9-HpCDF (L)	39:35

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5).

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

COMPARED PEAKS (1)	% VALLEY HEIGHT BETWEEN
	<25%

(1) To meet contract requirements, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: [signature]

Date: 5/2/05

FORM 6A

PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4/23/05

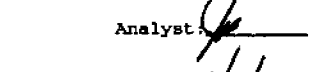
Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050502D1 S#1 Analysis Date: 2-MAY-05 Time: 08:00:22

Compounds Using 13C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.000	0.999-1.002
LABELED COMPOUNDS			
13C-2,3,7,8-TCDF	13C-1,2,3,4-TCDD	0.993	0.923-1.103
13C-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.024	0.976-1.043
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.025	0.989-1.052
13C-1,2,3,7,8-PeCDF	13C-1,2,3,4-TCDD	1.156	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.192	1.011-1.526
13C-1,2,3,7,8-PeCDD	13C-1,2,3,4-TCDD	1.202	1.000-1.567

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613. 10/94

Analyst: 

Date: 5/2/05

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4/23/05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050502D1 S#1 Analysis Date: 2-MAY-05 Time: 08:00:22

Compounds Using 13C-123789-HxCDD as Internal Standard

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.001	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.001	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.000	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.000	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.001	0.999-1.001
OCDD	13C-OCDD	1.001	0.999-1.001
OCDF	13C-OCDD	1.006	0.999-1.008
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDF	13C-1,2,3,7,8,9-HxCDD	0.962	0.944-0.970
13C-1,2,3,6,7,8-HxCDF	13C-1,2,3,7,8,9-HxCDD	0.966	0.949-0.975
13C-2,3,4,6,7,8-HxCDF	13C-1,2,3,7,8,9-HxCDD	0.983	0.959-1.021
13C-1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDD	1.011	0.977-1.047
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.991	0.981-1.003
13C-1,2,3,4,6,7,8-HpCDF	13C-1,2,3,7,8,9-HxCDD	1.062	1.043-1.085
13C-1,2,3,4,6,7,8-HpCDD	13C-1,2,3,7,8,9-HxCDD	1.099	1.086-1.110
13C-1,2,3,4,7,8,9-HpCDF	13C-1,2,3,7,8,9-HxCDD	1.115	1.057-1.151
13C-OCDD	13C-1,2,3,7,8,9-HxCDD	1.192	1.032-1.311
13C-OCDF	13C-1,2,3,7,8,9-HxCDD	1.199	1.032-1.311

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613. 10/94

Analyst: [signature]

Date: 5/2/05

EPA METHOD 8290

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.: CCAL ID: ST050502D1-1

Contract No.: SAS No.:

Initial Calibration Date: 4/23/05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050502D1 S#1 Analysis Date: 2-MAY-05 Time: 08:00:22

	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.76	0.65-0.89	y	10.8	8.00 - 12.0
1,2,3,7,8-PeCDD	M+2/M+4	0.62	0.54-0.72	y	49.4	40.0 - 60.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	47.7	40.0 - 60.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	49.7	40.0 - 60.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05-1.43	y	48.6	40.0 - 60.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.02	0.88-1.20	y	50.3	40.0 - 60.0
OCDD	M+2/M+4	0.87	0.76-1.02	y	102	80.0 - 120
2,3,7,8-TCDF	M/M+2	0.80	0.65-0.89	y	10.3	8.00 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	48.5	40.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	49.2	40.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	48.7	40.0 - 60.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.27	1.05-1.43	y	51.1	40.0 - 60.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	49.8	40.0 - 60.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.29	1.05-1.43	y	49.7	40.0 - 60.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.03	0.88-1.20	y	50.4	40.0 - 60.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88-1.20	y	50.5	40.0 - 60.0
OCDF	M+2/M+4	0.92	0.76-1.02	y	97.2	80.0 - 120

Analyst: [signature]

Date: 5/2/05

EPA METHOD 8290

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4/23/05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050502D1 S#1 Analysis Date: 2-MAY-05 Time: 08:00:22

LABELED COMPOUNDS	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.81	0.65-0.89	y	103	70.0 - 130
13C-1,2,3,7,8-PeCDD	M+2/M+4	0.65	0.54-0.72	y	113	70.0 - 130
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	91.1	70.0 - 130
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	113	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.08	0.88-1.20	y	101	70.0 - 130
13C-OCDD	M+2/M+4	0.85	0.76-1.02	y	180	140 - 260
13C-2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	96.5	70.0 - 130
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	113	70.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	106	70.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	109	70.0 - 130
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	126	70.0 - 130
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	113	70.0 - 130
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	104	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.46	0.37-0.51	y	109	70.0 - 130
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.43	0.37-0.51	y	107	70.0 - 130
13C-OCDF	M+2/M+4	0.90	0.76-1.02	y	199	140 - 260
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD					9.03	7.00 - 13.0

Analyst: _____

Date: 5/2/05

Client ID: 1613 CB3 050420H Filename: 050502D1 S:1 Acq: 2-MAY-05 08:00:22 ConCal: ST050502D1-1

Lab ID: ST050502D1-1 GC Column ID: db-5 ICal: 1613vg7-4-23-05 wt/vol: 1.000 EndCAL: ST050502D1-2

	Name	Resp	RA	RRP	RT	Conc	Qual	noise	Fac	DL
	2,3,7,8-TCDD	8.02e+06	0.76 y	1.06	27:02	10.8		*	2.5	*
	1,2,3,7,8-PeCDD	2.98e+07	0.62 y	0.99	31:44	49.4		*	2.5	*
	1,2,3,4,7,8-HxCDD	1.85e+07	1.27 y	1.11	35:03	47.7		*	2.5	*
	1,2,3,6,7,8-HxCDD	2.74e+07	1.27 y	1.07	35:11	49.7		*	2.5	*
	1,2,3,7,8,9-HxCDD	2.42e+07	1.27 y	1.15	35:31	48.6		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	2.02e+07	1.02 y	1.05	39:01	50.3		*	2.5	*
	OCDD	3.25e+07	0.87 y	1.04	42:20	102		*	2.5	*
	2,3,7,8-TCDF	1.06e+07	0.80 y	1.05	26:13	10.3		*	2.5	*
	1,2,3,7,8-PeCDF	4.67e+07	1.58 y	0.95	30:31	48.5		*	2.5	*
	2,3,4,7,8-PeCDF	4.90e+07	1.59 y	1.08	31:27	49.2		*	2.5	*
	1,2,3,4,7,8-HxCDF	3.64e+07	1.25 y	1.19	34:09	48.7		*	2.5	*
	1,2,3,6,7,8-HxCDF	5.03e+07	1.27 y	1.22	34:18	51.1		*	2.5	*
	2,3,4,6,7,8-HxCDF	4.02e+07	1.23 y	1.20	34:55	49.8		*	2.5	*
	1,2,3,7,8,9-HxCDF	2.99e+07	1.29 y	1.13	35:55	49.7		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	3.50e+07	1.03 y	1.38	37:43	50.4		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	2.67e+07	1.03 y	1.23	39:35	50.5		*	2.5	*
	OCDF	4.23e+07	0.92 y	1.02	42:33	97.2		*	2.5	*
IS	13C-2,3,7,8-TCDD	7.00e+07	0.81 y	1.12	27:01	103				
IS	13C-1,2,3,7,8-PeCDD	6.10e+07	0.65 y	0.89	31:43	113				
IS	13C-1,2,3,4,7,8-HxCDD	3.48e+07	1.28 y	0.83	35:02	91.1				
IS	13C-1,2,3,6,7,8-HxCDD	5.15e+07	1.28 y	1.00	35:10	113				
IS	13C-1,2,3,4,6,7,8-HpCDD	3.82e+07	1.08 y	0.82	39:01	101				
IS	13C-OCDD	6.14e+07	0.85 y	0.74	42:18	180				
IS	13C-2,3,7,8-TCDF	9.78e+07	0.78 y	1.02	26:12	96.5				
IS	13C-1,2,3,7,8-PeCDF	1.01e+08	1.58 y	0.90	30:31	113				
IS	13C-2,3,4,7,8-PeCDF	9.24e+07	1.56 y	0.87	31:26	106				
IS	13C-1,2,3,4,7,8-HxCDF	6.31e+07	0.52 y	1.27	34:08	109				
IS	13C-1,2,3,6,7,8-HxCDF	8.08e+07	0.52 y	1.40	34:16	126				
IS	13C-2,3,4,6,7,8-HxCDF	6.72e+07	0.53 y	1.29	34:54	113				
IS	13C-1,2,3,7,8,9-HxCDF	5.34e+07	0.51 y	1.12	35:53	104				
IS	13C-1,2,3,4,6,7,8-HpCDF	5.05e+07	0.46 y	1.01	37:42	109				
IS	13C-1,2,3,4,7,8,9-HpCDF	4.31e+07	0.43 y	0.88	39:33	107				
IS	13C-OCDF	8.54e+07	0.90 y	0.94	42:33	199				
C/Up	37Cl-2,3,7,8-TCDD	3.41e+06		0.62	27:02	9.03				
RS/RT	13C-1,2,3,4-TCDD	6.08e+07	0.79 y	1.00	26:23	100				
RS	13C-1,2,3,4-TCDF	9.94e+07	0.79 y	1.00	24:50	100				
RS/RT	13C-1,2,3,7,8,9-HxCDD	4.58e+07	1.21 y	1.00	35:29	100				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	48.9	49.4		*	*
Total Penta-Dioxins	146	147		*	*
Total Hexa-Dioxins	206	208		*	*
Total Hepta-Dioxins	103	106		*	*
Total Tetra-Furans	31.0	31.5		*	*
Total Penta-Furans	177	177		*	*
Total Hexa-Furans	255	258		*	*
Total Hepta-Furans	102	104		*	*

	Rec	Qual
IS	103	
IS	113	
IS	91.1	
IS	113	
IS	101	
IS	90.1	
IS	96.5	
IS	113	
IS	106	
IS	109	
IS	126	
IS	113	
IS	104	
IS	109	
IS	107	
IS	99.3	
C/Up	22.6	

Intergrations by Analyst: [signature]

Date: 5/2/05

Alta Analytical Laboratory - Injection Log Run file: 050502d1 Instrument ID: VG-7 GC Column ID: db-5

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
050502D1	1	ST050502D1-1 1613 CS3 050420H	jmh	2-MAY-05	08:00:22	ST050502D1-1	ST050502D1-2
050502D1	2	solvent blank	jmh	2-MAY-05	08:49:25	ST050502D1-1	ST050502D1-2
050502D1	3	26035_6749_001 C1 9.578g	jmh	2-MAY-05	09:38:30	ST050502D1-1	ST050502D1-2
050502D1	4	26035_6749_002 C2 9.585g	jmh	2-MAY-05	10:27:34	ST050502D1-1	ST050502D1-2
050502D1	5	26035_6749_003 C3 9.674g	jmh	2-MAY-05	11:16:39	ST050502D1-1	ST050502D1-2
050502D1	6	26035_6749_004 R1 9.392g	jmh	2-MAY-05	12:05:43	ST050502D1-1	ST050502D1-2
050502D1	7	26035_6749_005 T1 1.89g	jmh	2-MAY-05	12:54:48	ST050502D1-1	ST050502D1-2
050502D1	8	26035_6749_006 T2 1.61g	jmh	2-MAY-05	13:43:52	ST050502D1-1	ST050502D1-2
050502D1	9	26074_6749_001 MD54-05-57981 9.999g	jmh	2-MAY-05	14:32:56	ST050502D1-1	ST050502D1-2
050502D1	10	26074_6749_002 MD54-05-57988 10.01g	jmh	2-MAY-05	15:22:01	ST050502D1-1	ST050502D1-2
050502D1	11	26075_6749_001 MD54-05-58193 10.02g	jmh	2-MAY-05	16:11:05	ST050502D1-1	ST050502D1-2
050502D1	12	26075_6749_002 MD54-05-58200 10.01g	jmh	2-MAY-05	17:00:10	ST050502D1-1	ST050502D1-2
050502D1	13	26076_6749_001 RE73-05-58829 10.01g	jmh	2-MAY-05	17:49:14	ST050502D1-1	ST050502D1-2
050502D1	14	26076_6749_002 RE73-05-58835 10.02g	jmh	2-MAY-05	18:38:17	ST050502D1-1	ST050502D1-2
050502D1	15	26076_6749_003 RE73-05-58841 10.00g	jmh	2-MAY-05	19:27:21	ST050502D1-1	ST050502D1-2
050502D1	16	solvent blank	jmh	2-MAY-05	20:16:24	ST050502D1-1	ST050502D1-2
050502D1	17	ST050502D1-2 1613 CS3 050420H	jmh	2-MAY-05	21:05:30	ST050502D1-1	ST050502D1-2

Attachment 7.F.2

HRMS STANDARDS REVIEW CHECKLIST

Beginning Calibration ID: ST050502D1-1 Ending Calibration ID: ST050502D1-2

	Beg.CAL	End. CAL	COMMENTS
Calibration Verification/Form 4A/B: Ion abundance within QC limits?	✓	✓	
Calibration Verification/Form 4A/B: Conc within Conc. range?	✓	✓	
Form 5: First and last eluters present? (N/A for DB225)	✓	✓	
Form 6A/6B: Relative Retention Times within limits? (N/A for M23, TO9, 1668, DB225)	✓	✓	
Cal. Ver. Named correctly? (Ex. ST-Year-Month-Day-VG ID)	✓	✓	
Cal. Verification forms signed and dated for review?	✓		
Appropriate ICAL referenced?	✓	✓	
Run log: Standards named correctly? Correct Instrument listed?	✓	✓	
Run log: Samples within 12-hour shift?	✓	✓	
Mass resolution > 10,000	✓	✓	
2378-TCDD/TCDF valley < 25% (N/A for 1668)	✓	✓	
All appropriate peaks integrated correctly?	✓	✓	
Manual integrations included?	✓	NA	
8280: Ratios within limits?	✓	NA	
8280: S/N > 2.5:1	✓	NA	
8280: CS1 within 12 hrs?			

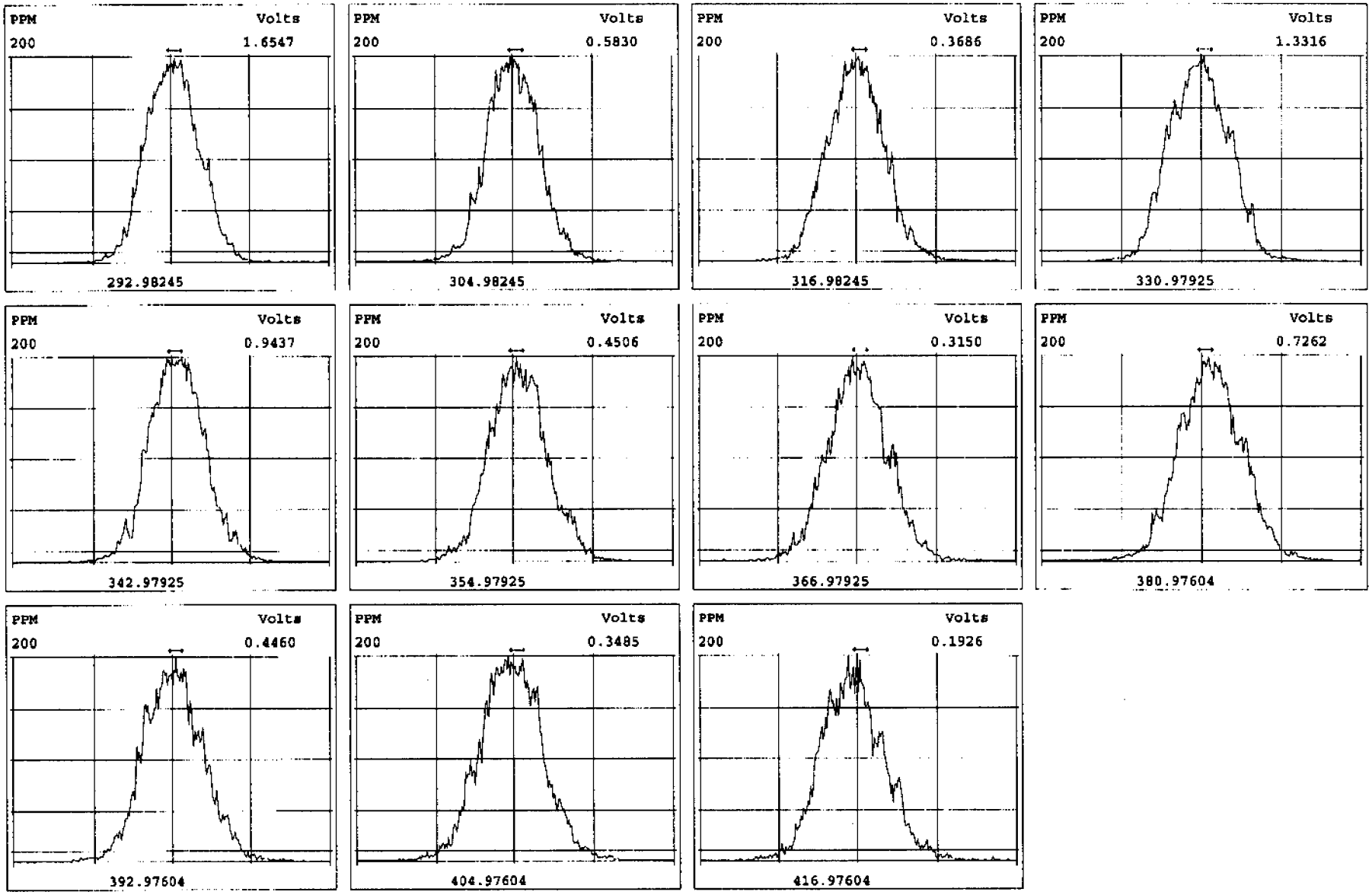
Reviewer Initial/Date: 5-3-05

QA* (Random 5% Check) Initial/Date: _____

Alta Analytical Laboratory
El Dorado Hills, CA 95762

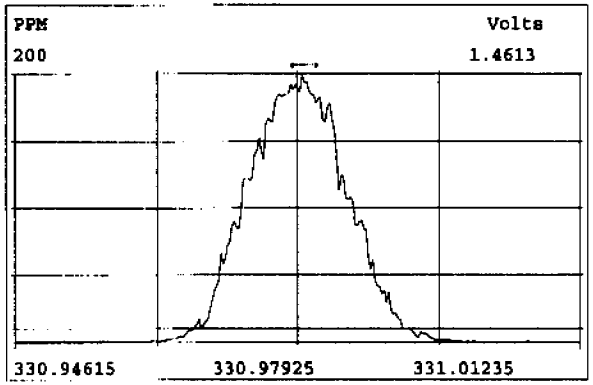
Peak Locate Examination: 2-MAY-2005:07:58 File:050502D1

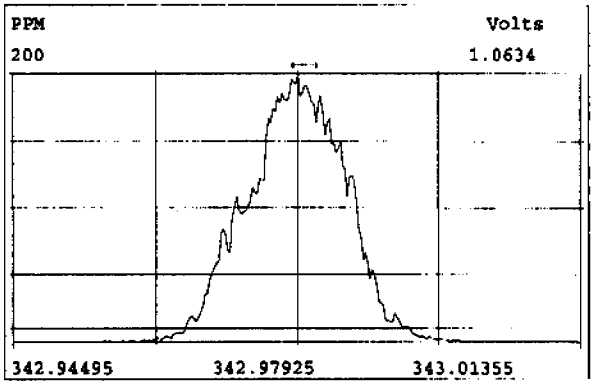
Experiment:OCDD_DB5 Function:1 Reference:PFK

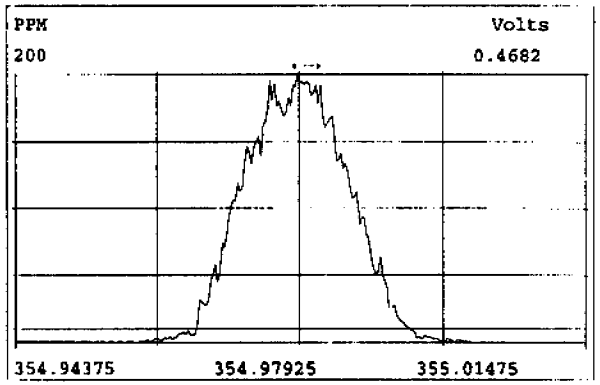


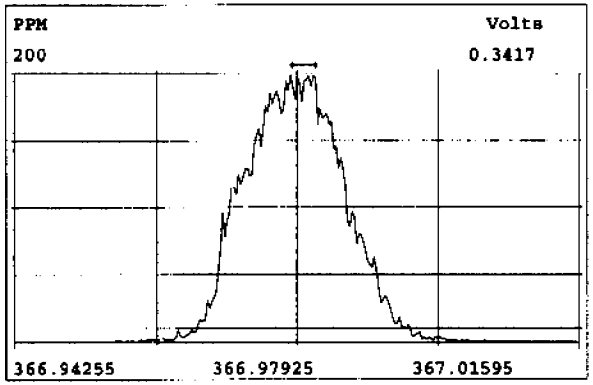
Peak Locate Examination: 2-MAY-2005:07:59 File:050502D1

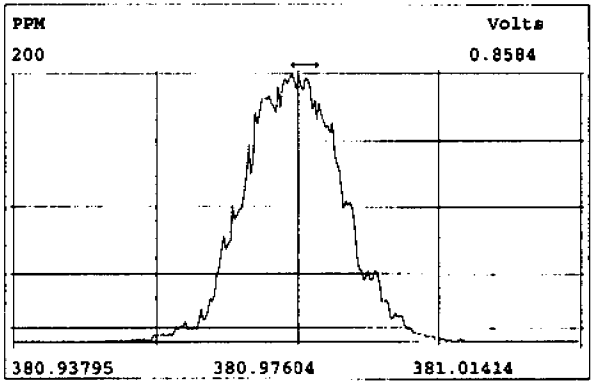
Experiment:OCDD_DB5 Function:2 Reference:PFK

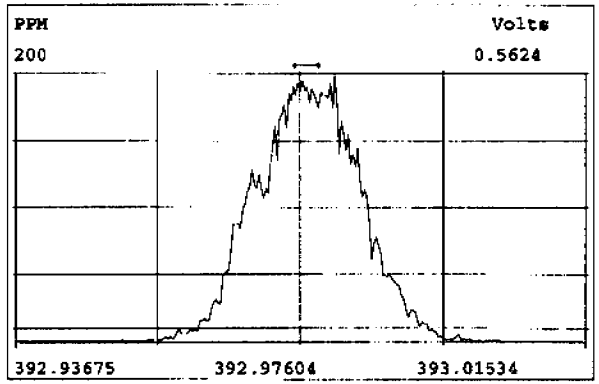


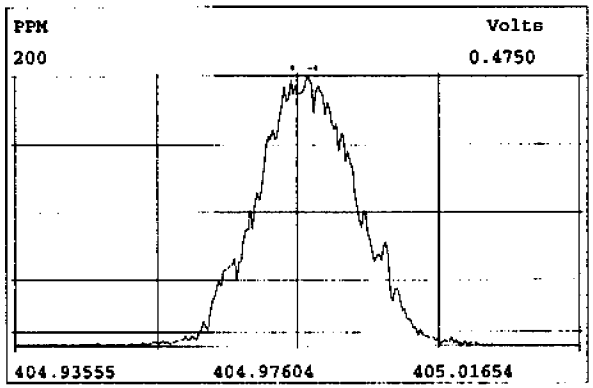


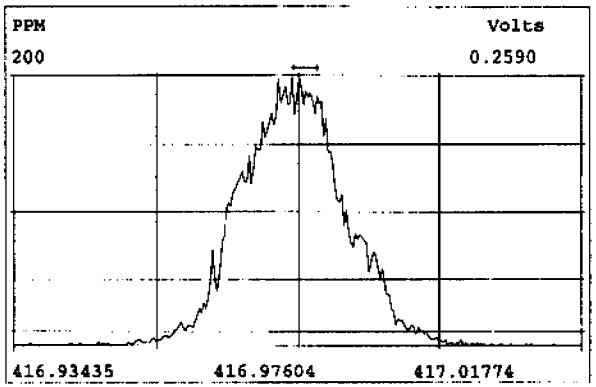






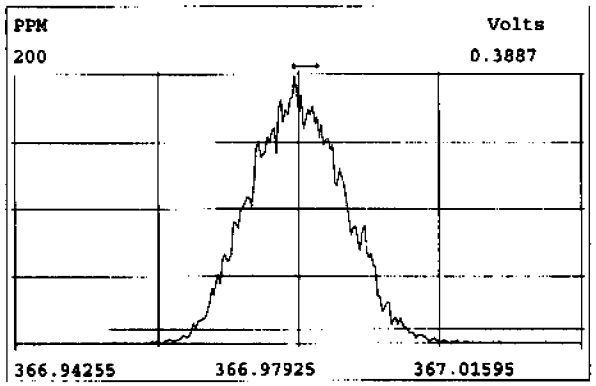


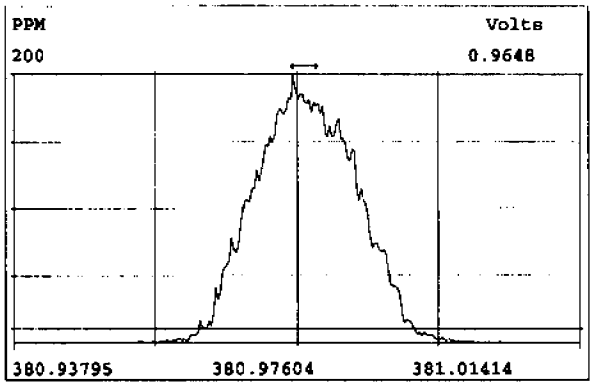


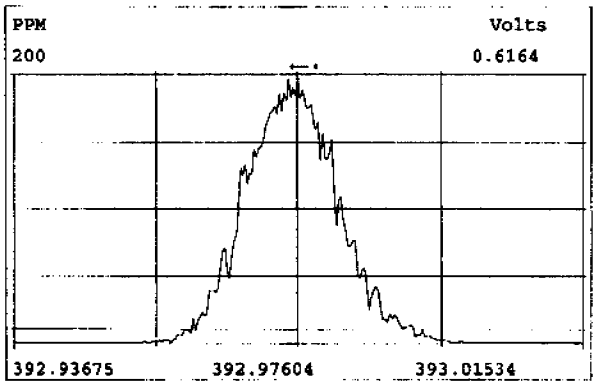


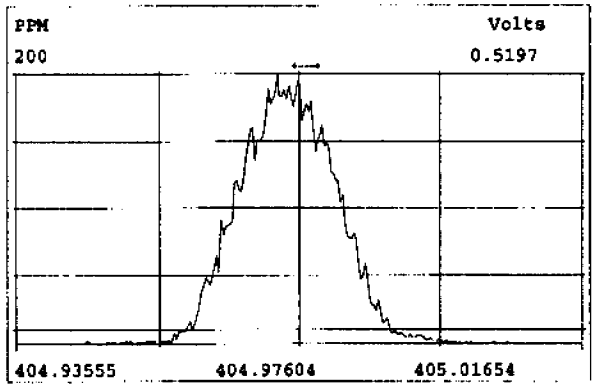
Peak Locate Examination: 2-MAY-2005:07:59 File:050502D1

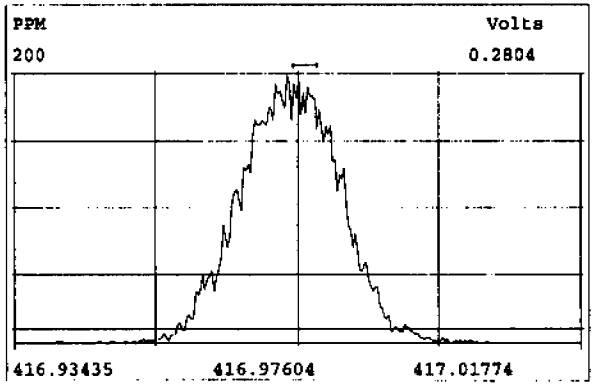
Experiment:OCDD_DB5 Function:3 Reference:PFK

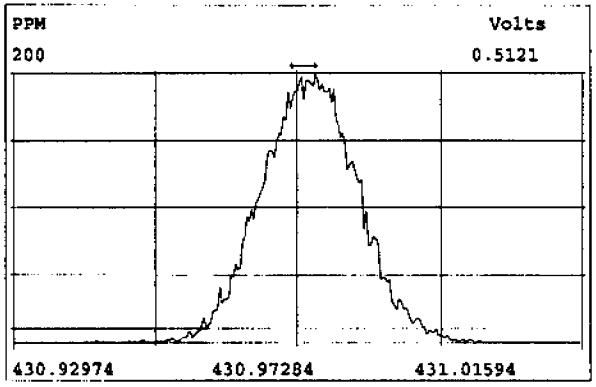


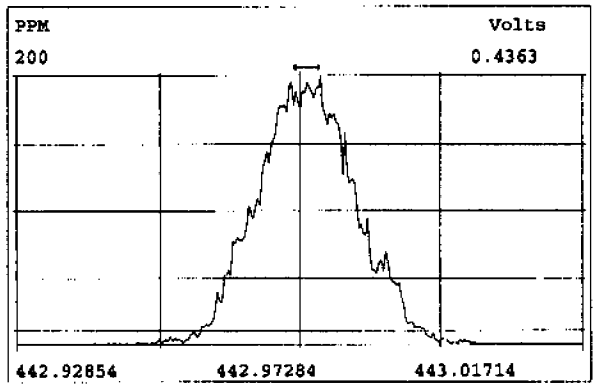


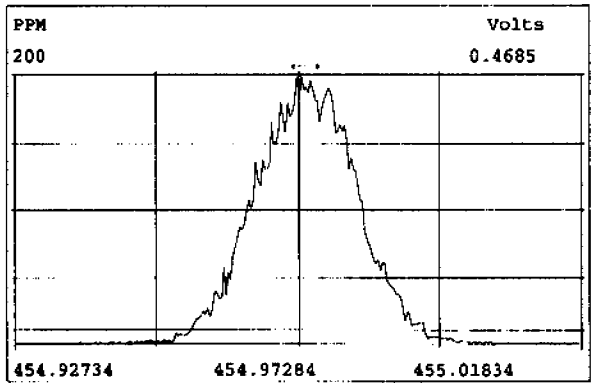






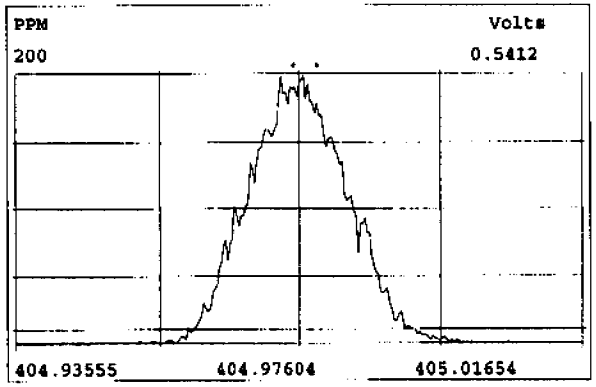


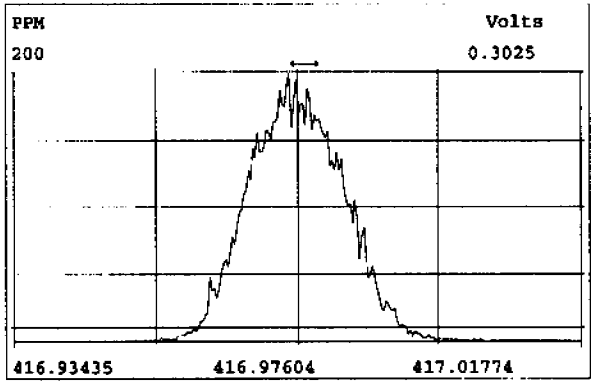


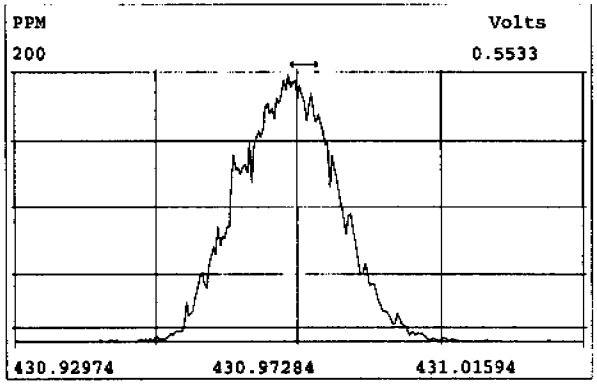


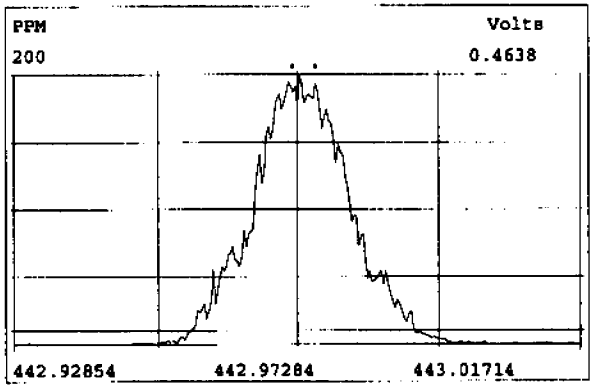
Peak Locate Examination: 2-MAY-2005:07:59 File:050502D1

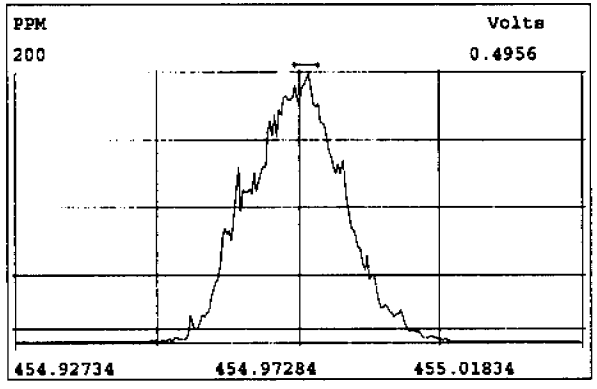
Experiment:OCDD_DB5 Function:4 Reference:PFK

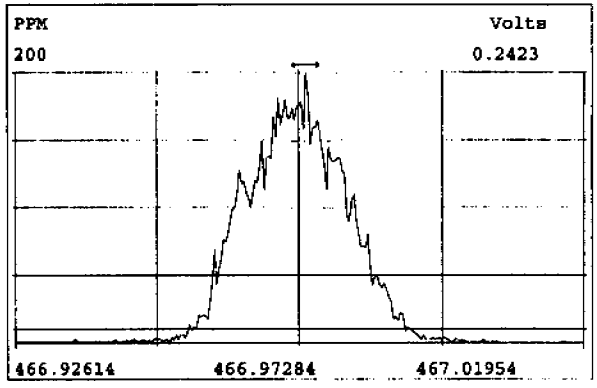


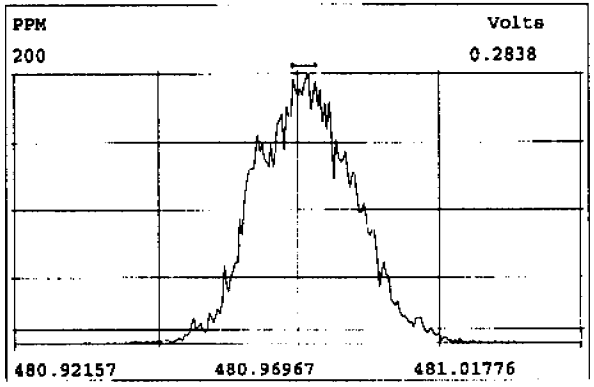






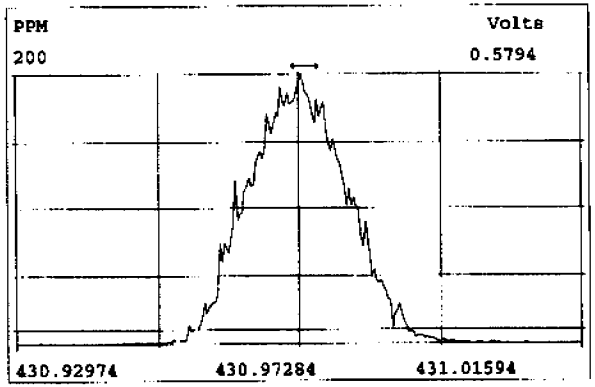


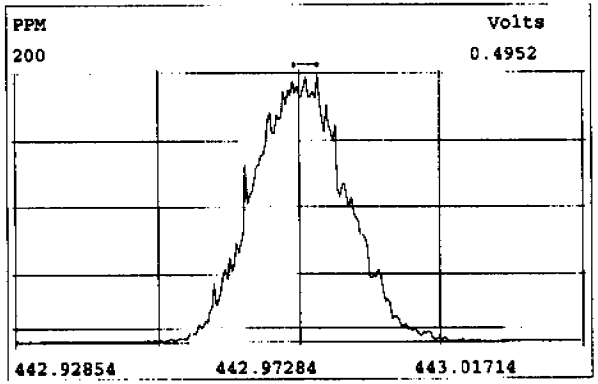


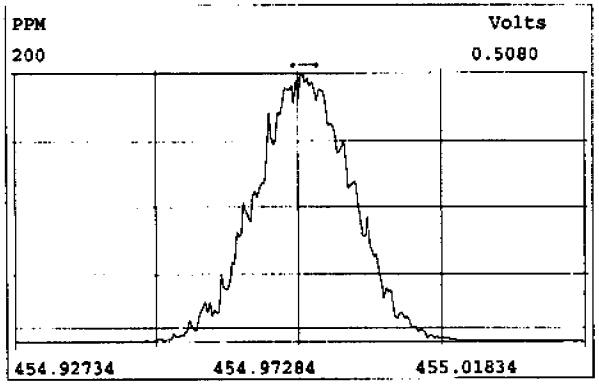


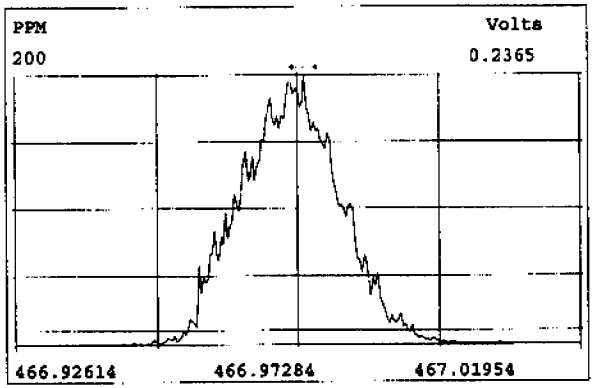
Peak Locate Examination: 2-MAY-2005:07:59 File:050502D1

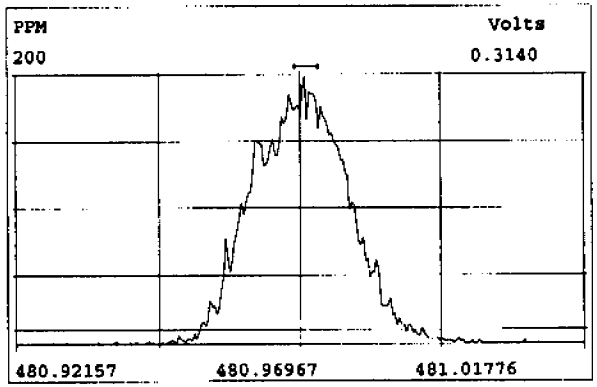
Experiment:OCDD_DB5 Function:5 Reference:PFK

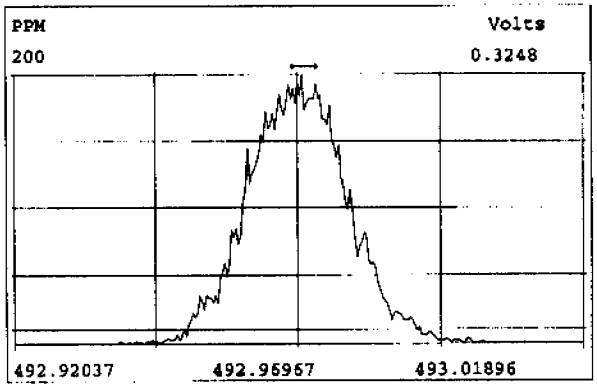


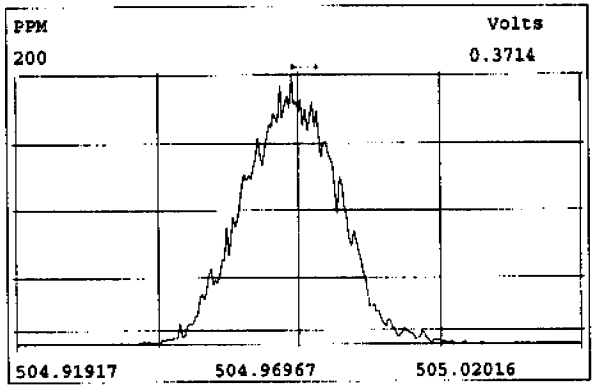


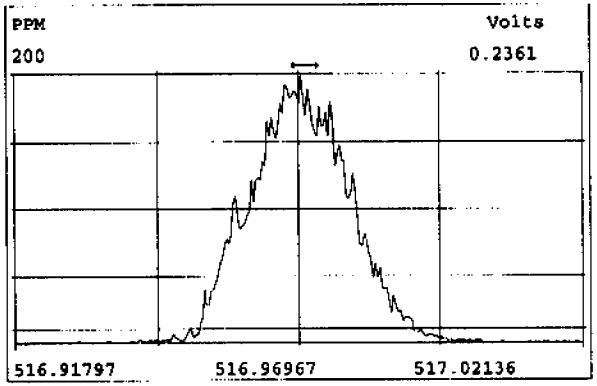




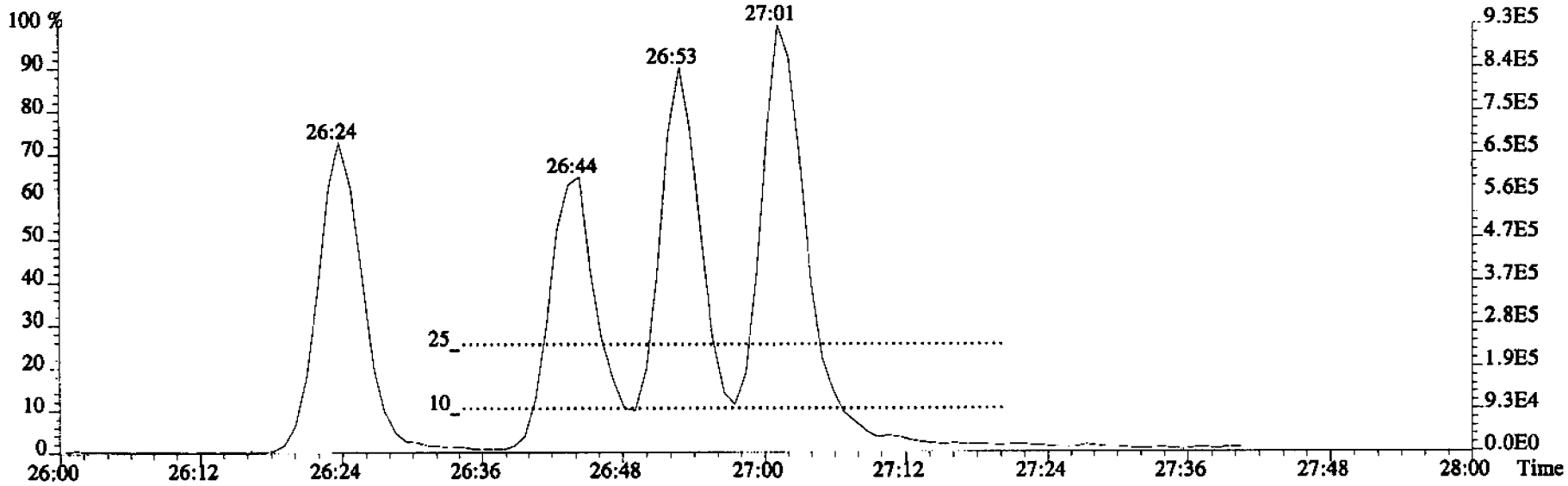




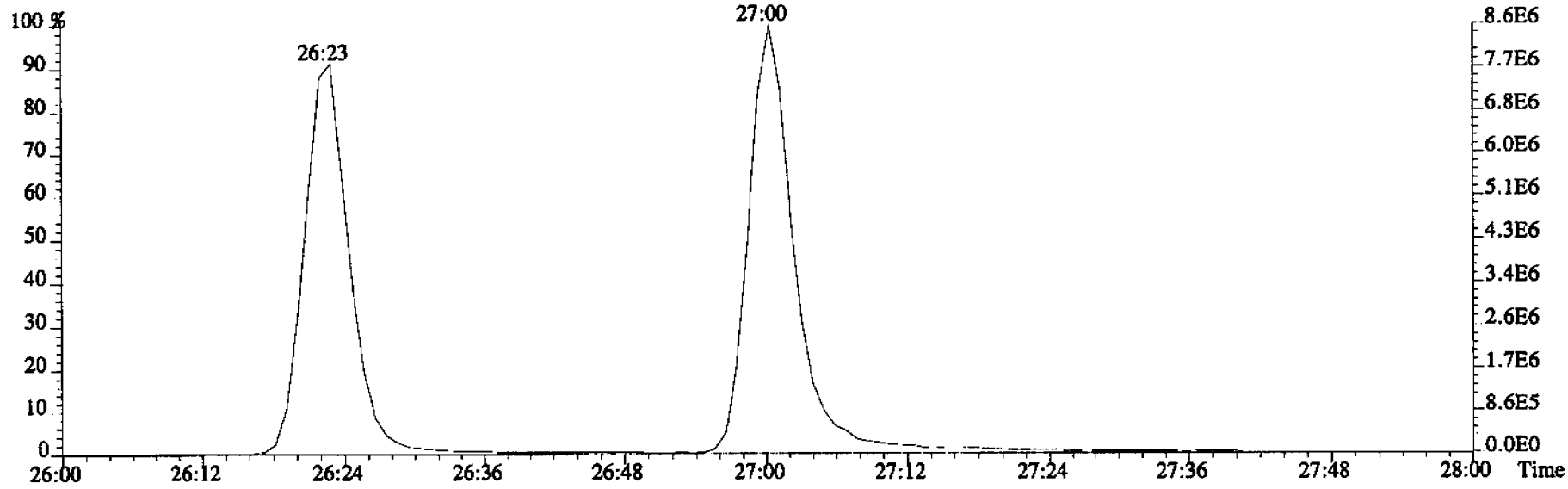




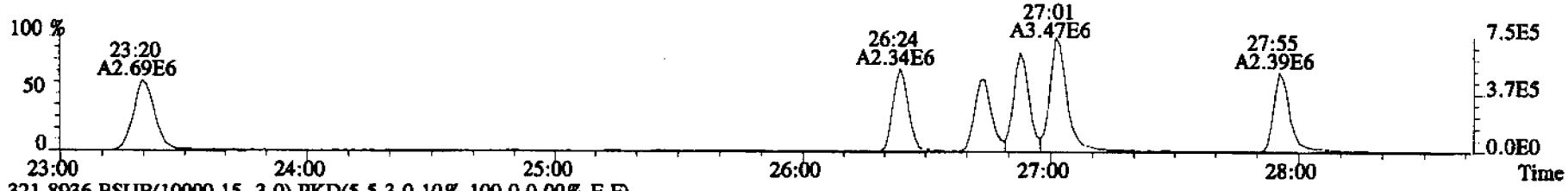
File:050502D1 #1-492 Acq: 2-MAY-2005 08:00:22 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050502D1-1 1613 CS3 050420H Exp:OCDD_DB5
321.8936



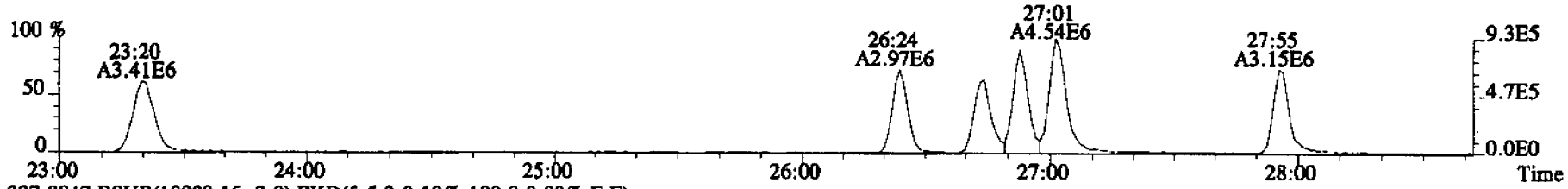
333.9339



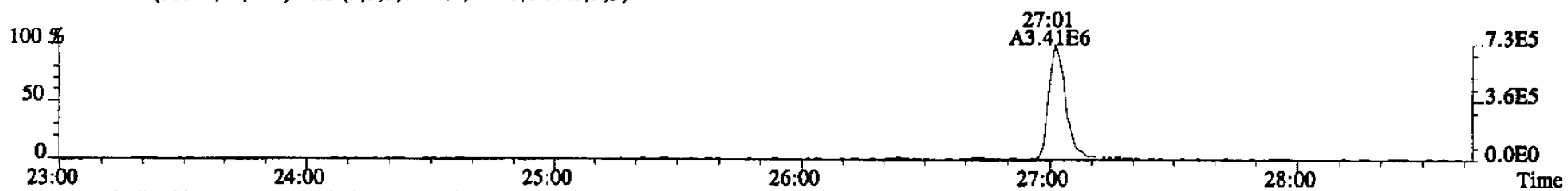
File:050502D1 #1-558 Acq: 2-MAY-2005 08:00:22 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050502D1-1 1613 CS3 050420H Exp:OCDD_DB5
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



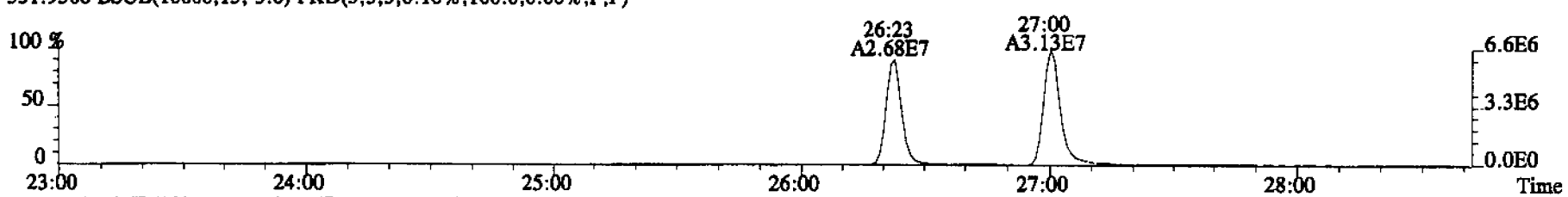
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



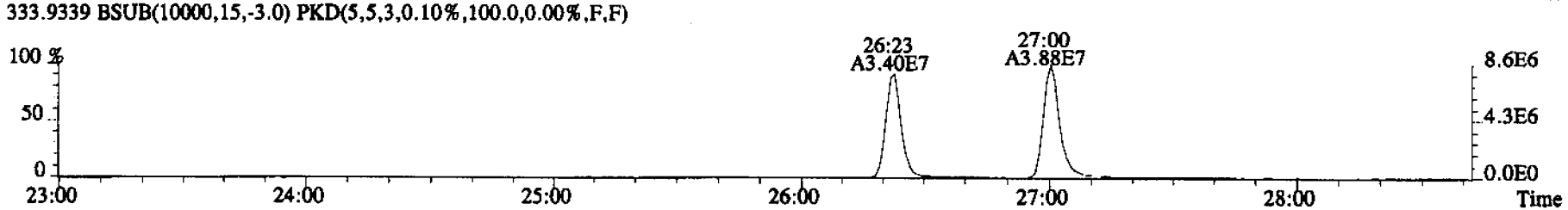
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



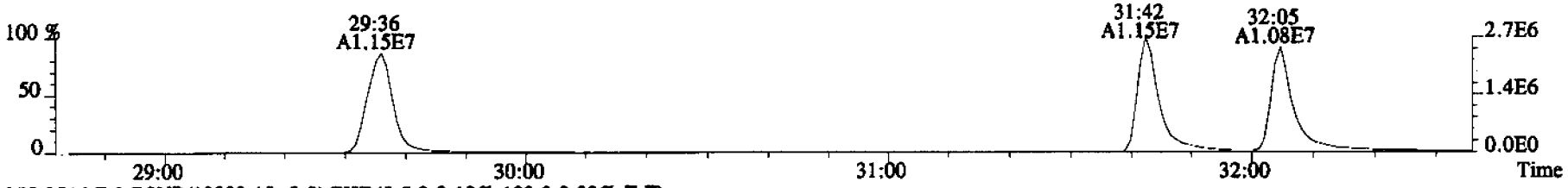
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



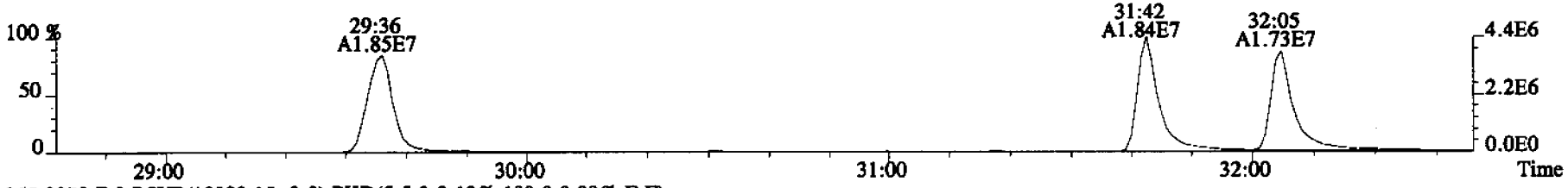
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:050502D1 #1-273 Acq: 2-MAY-2005 08:00:22 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050502D1-1 1613 CS3 050420H Exp:OCDD_DB5
353.8576 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

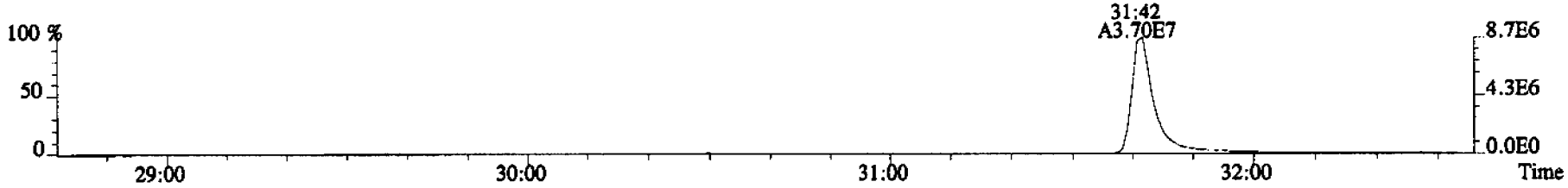


355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

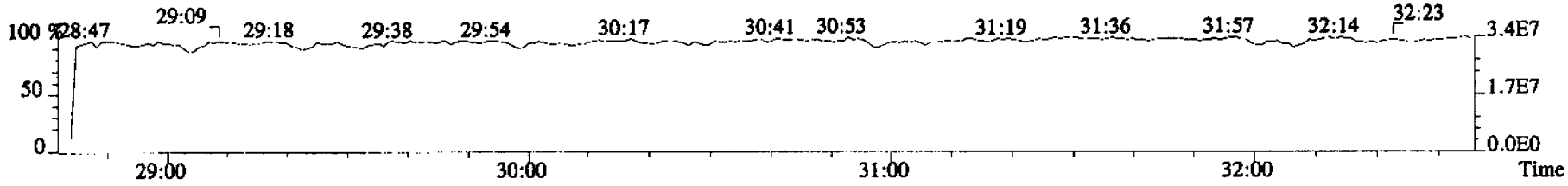


365.8978 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

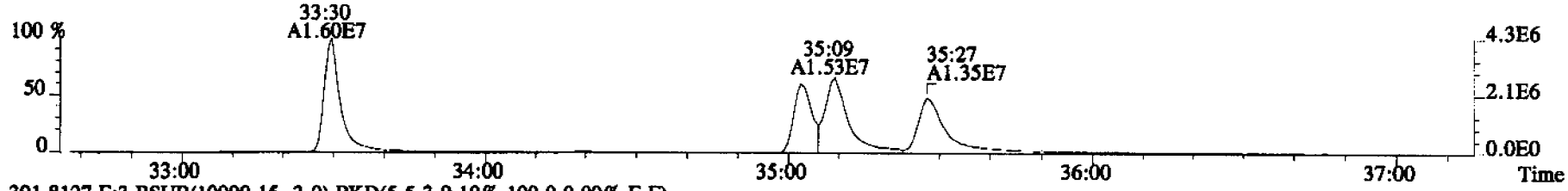
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



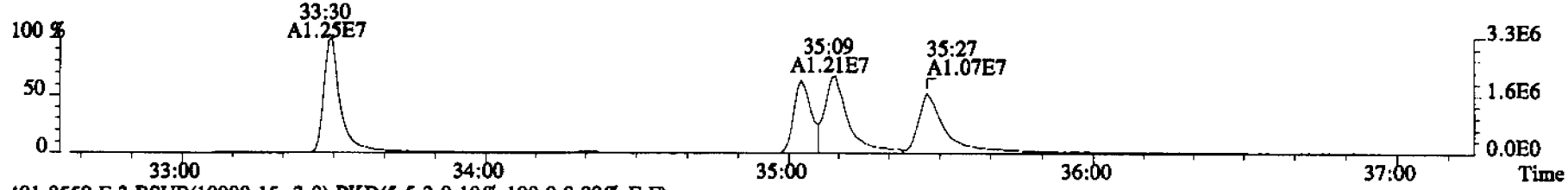
366.9792 F:2



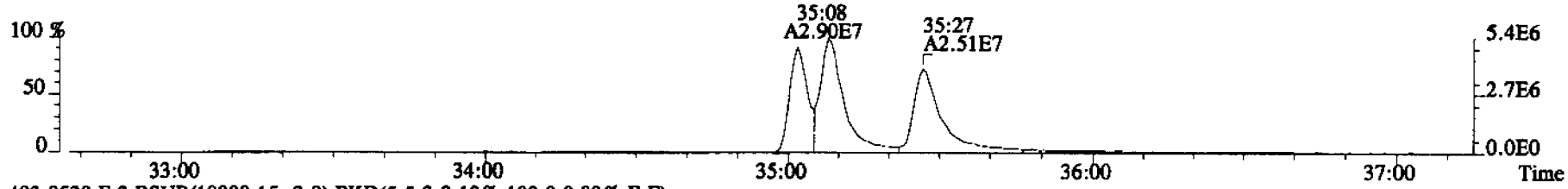
File:050502D1 #1-399 Acq: 2-MAY-2005 08:00:22 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050502D1-1 1613 CS3 050420H Exp:OCDD_DB5
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



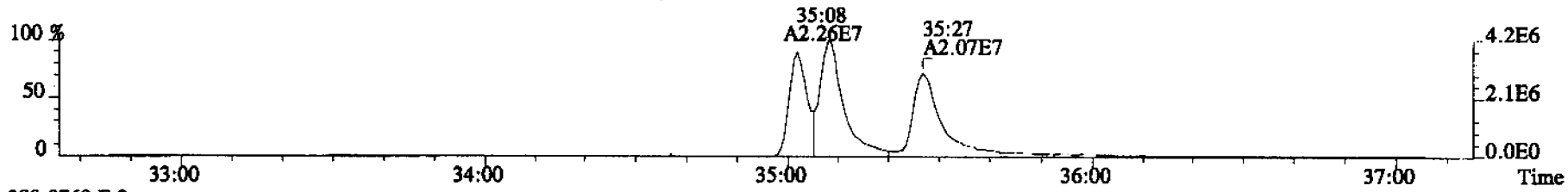
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



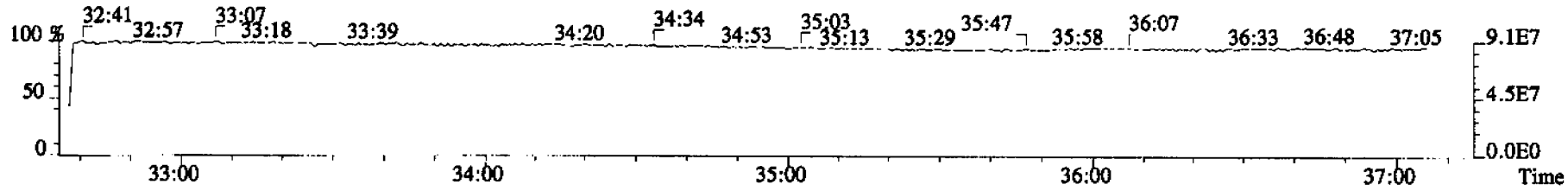
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



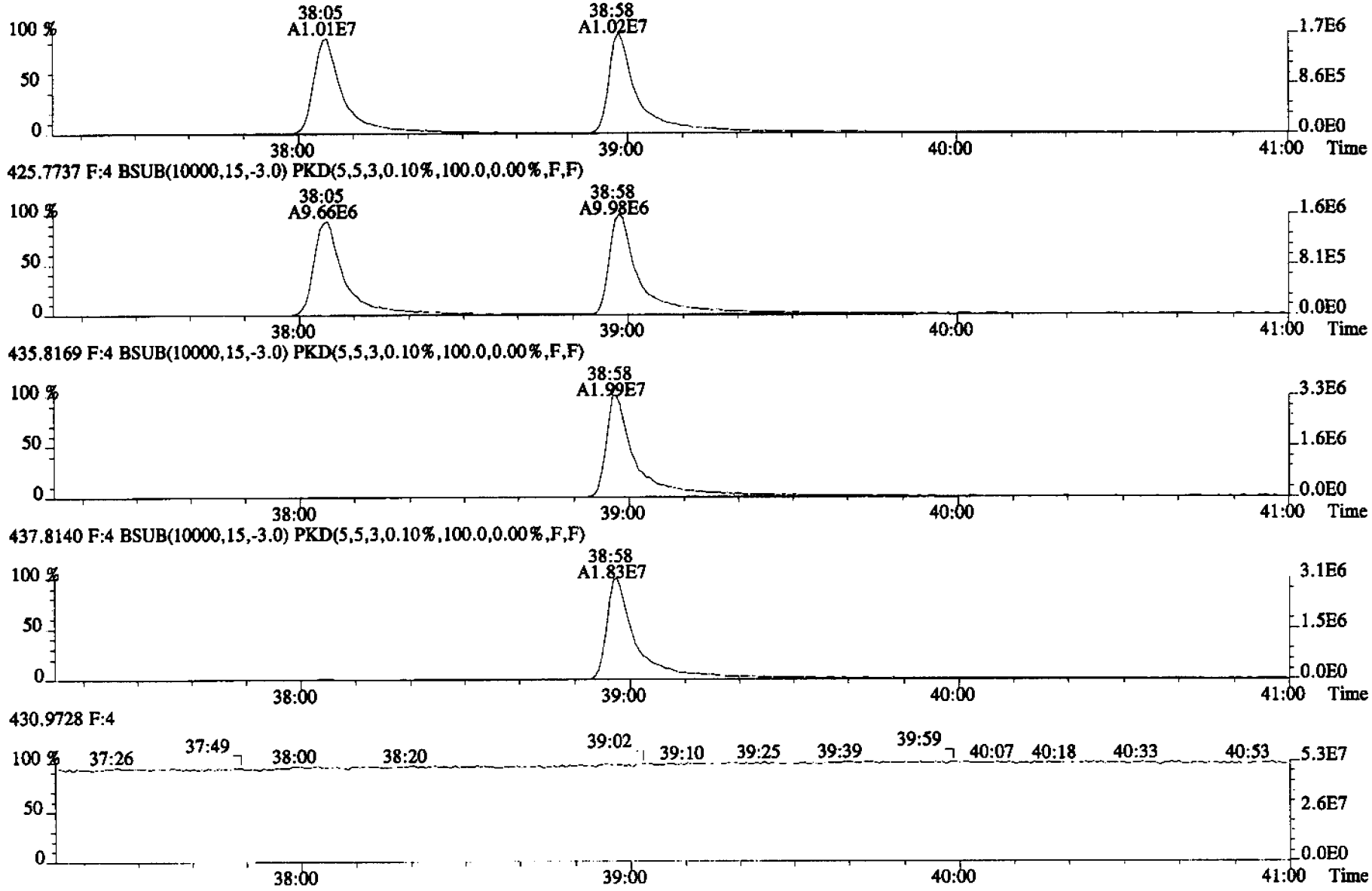
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



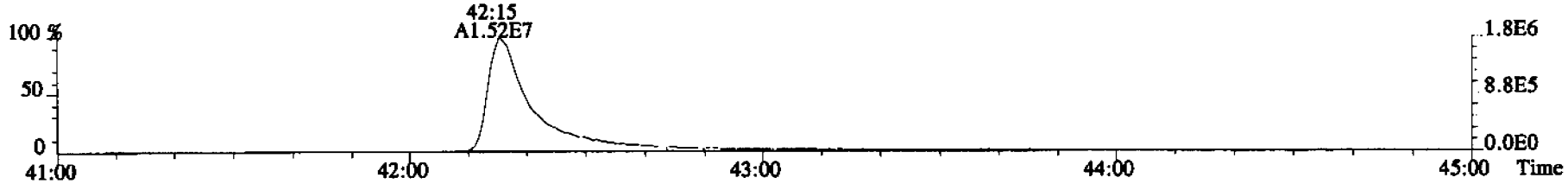
380.9760 F:3



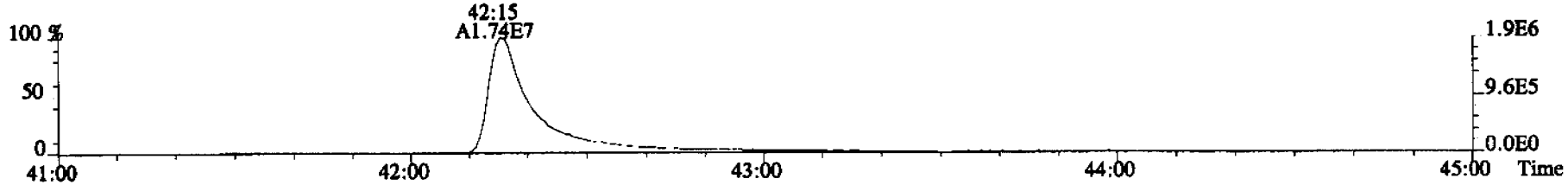
File:050502D1 #1-347 Acq: 2-MAY-2005 08:00:22 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050502D1-1 1613 CS3 050420H Exp:OCDD_DB5



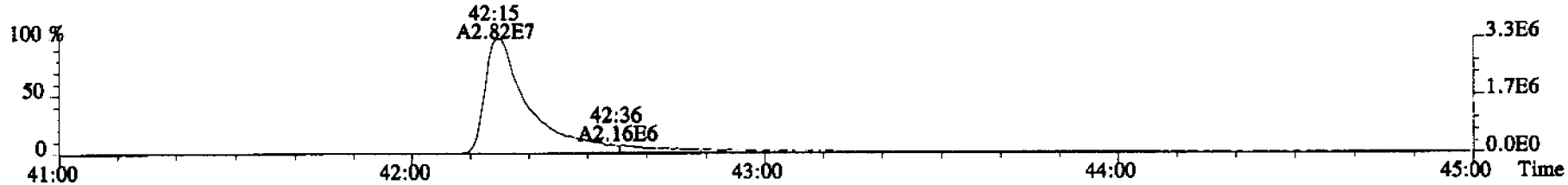
File:050502D1 #1-345 Acq: 2-MAY-2005 08:00:22 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050502D1-1 1613 CS3 050420H Exp:OCDD_DB5
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



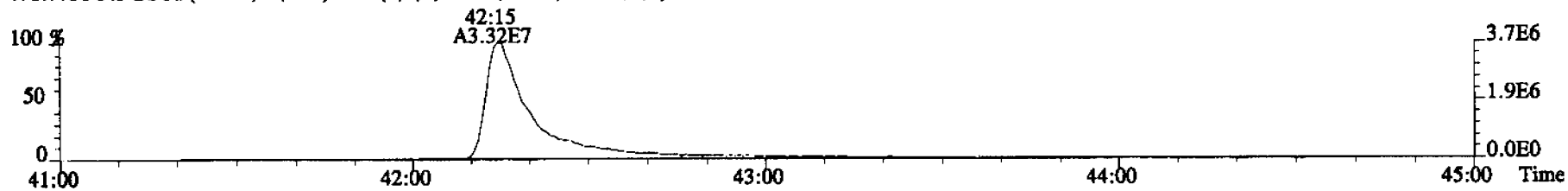
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



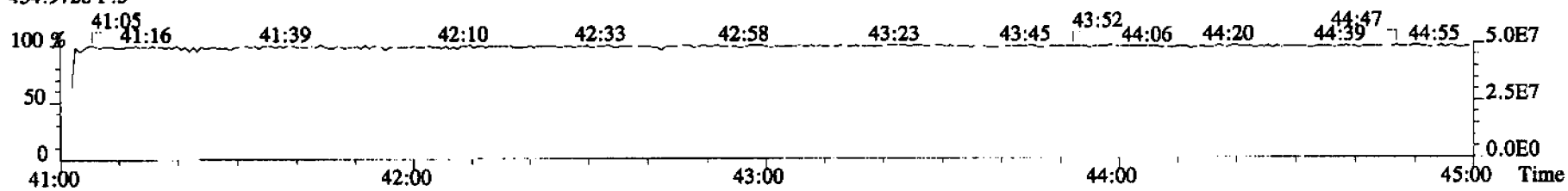
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

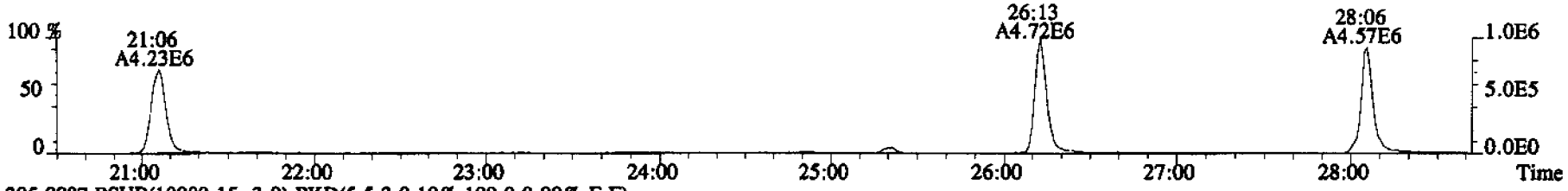


454.9728 F:5

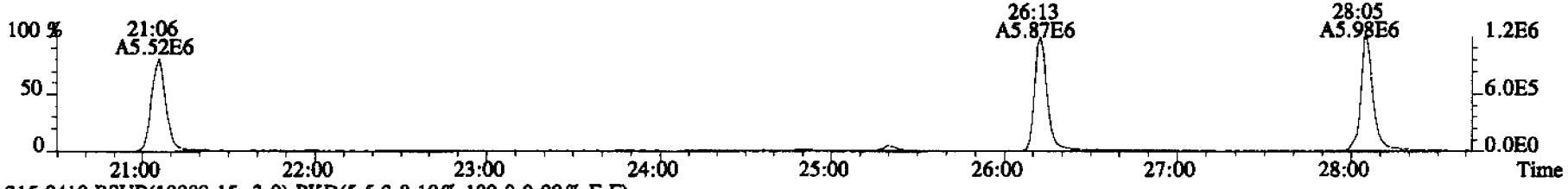


File:050502D1 #1-558 Acq: 2-MAY-2005 08:00:22 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050502D1-1 1613 CS3 050420H Exp:OCDD_DB5

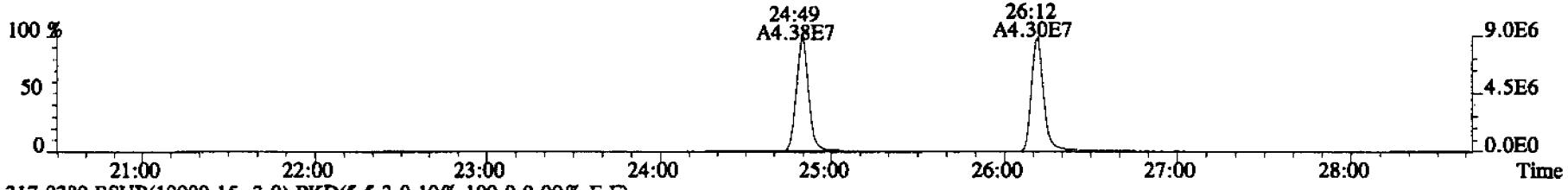
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



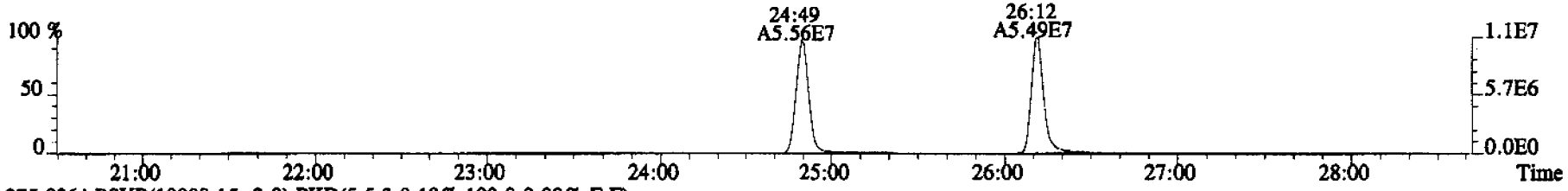
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



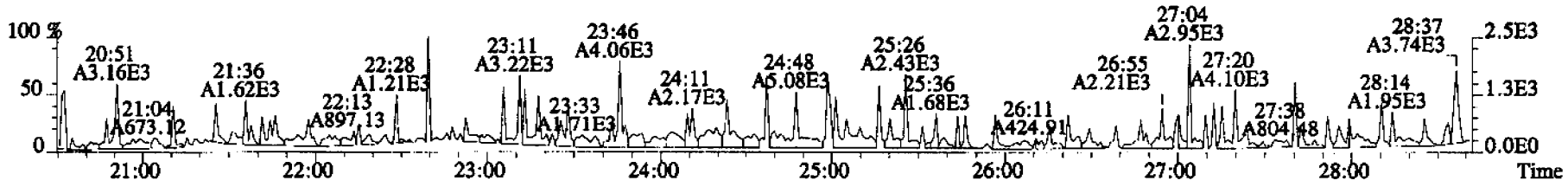
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



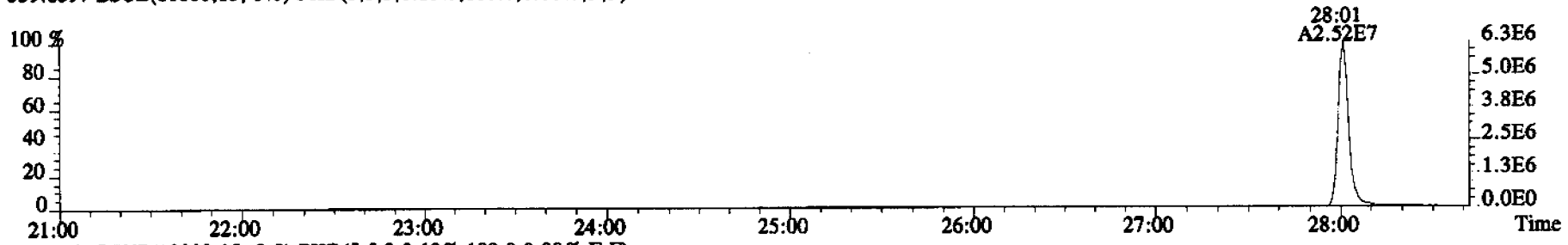
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



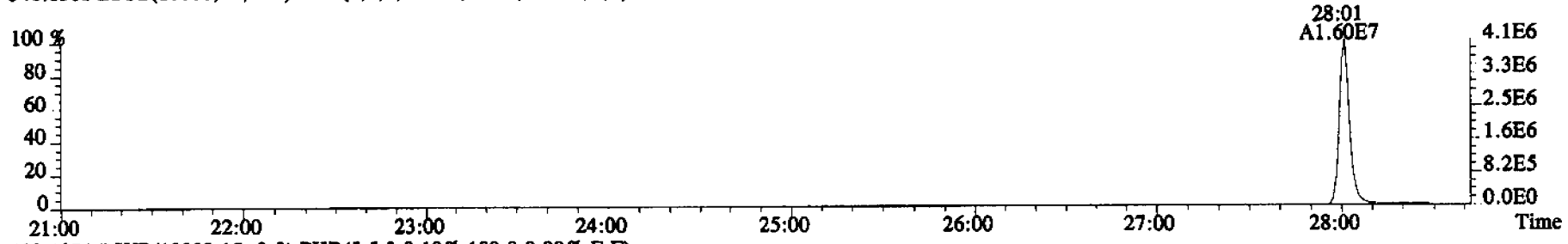
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



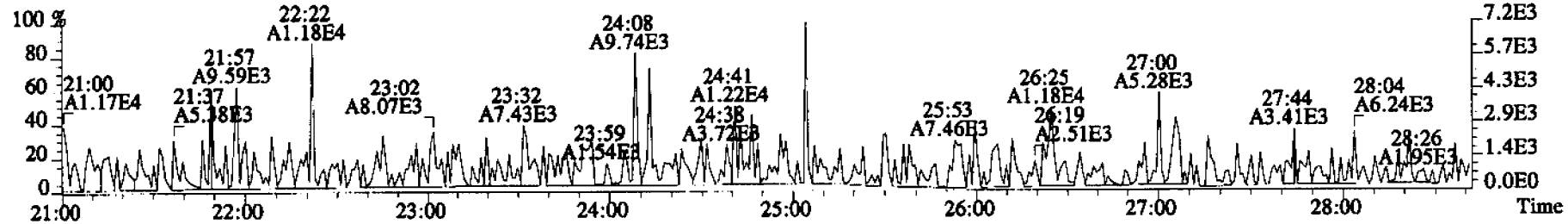
File:050502D1 #1-558 Acq: 2-MAY-2005 08:00:22 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050502D1-1 1613 CS3 050420H Exp:OCDD_DB5
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



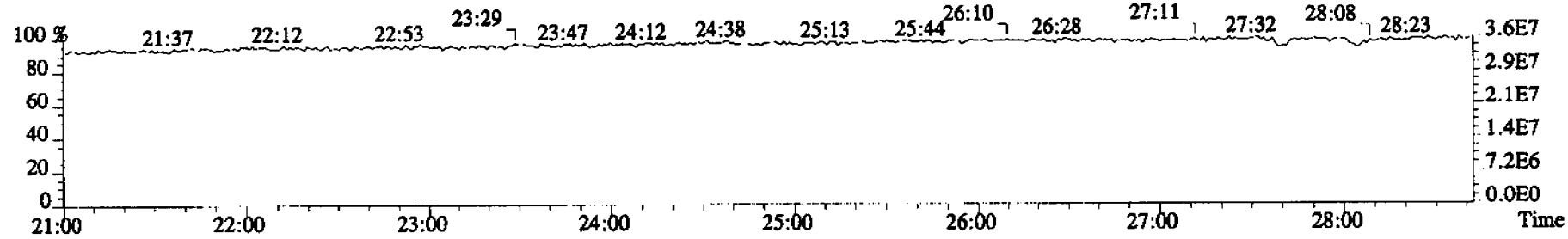
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



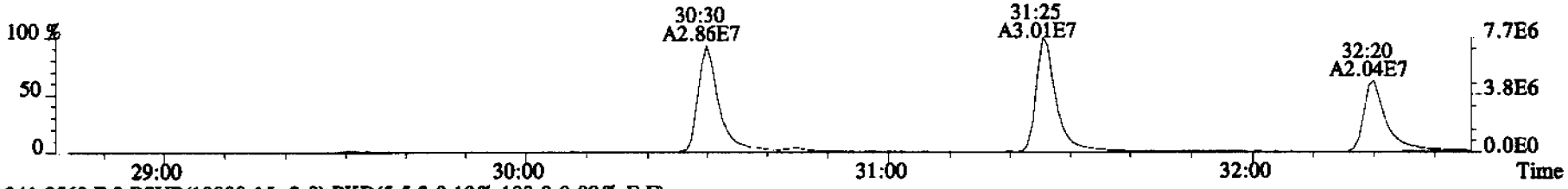
409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



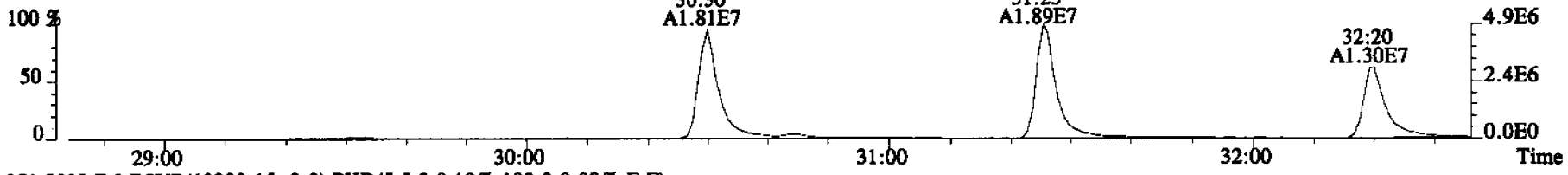
316.9824



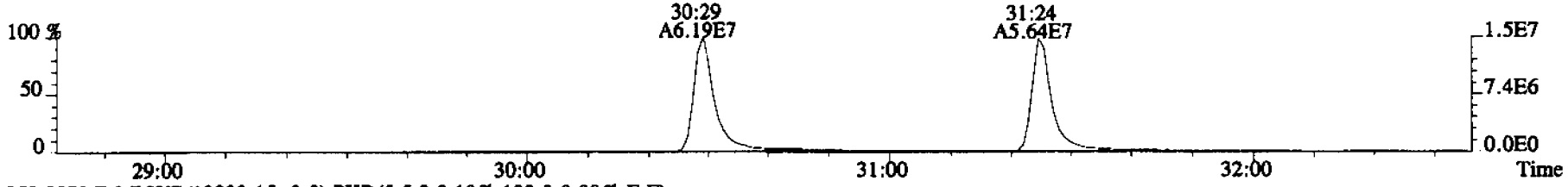
File:050502D1 #1-273 Acq: 2-MAY-2005 08:00:22 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050502D1-1 1613 CS3 050420H Exp:OCDD_DB5
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



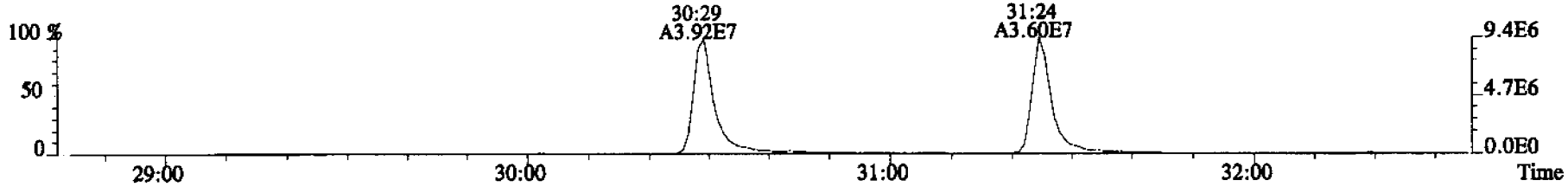
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



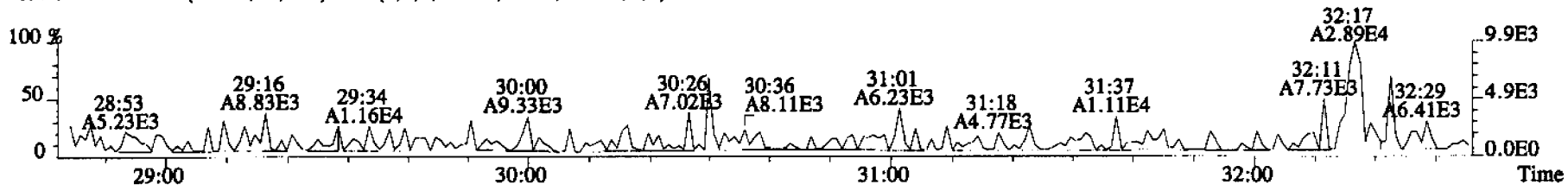
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

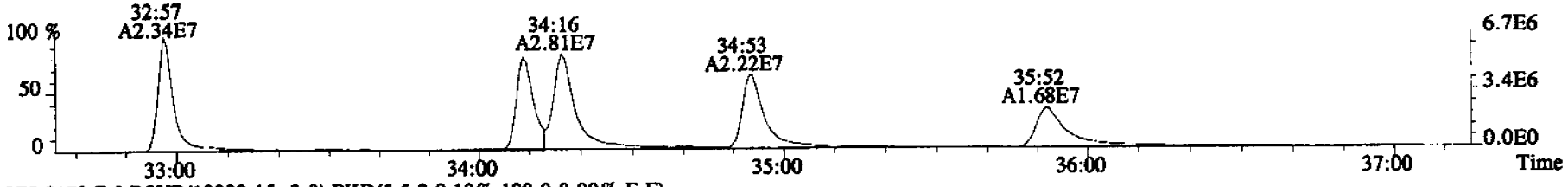


409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

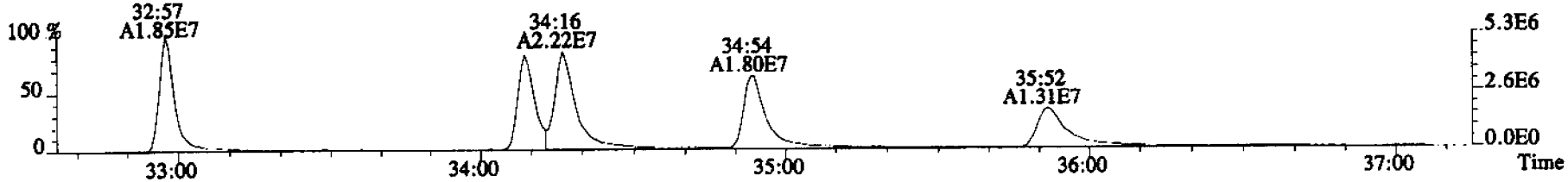


File:050502D1 #1-399 Acq: 2-MAY-2005 08:00:22 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050502D1-1 1613 CS3 050420H Exp:OCDD_DB5

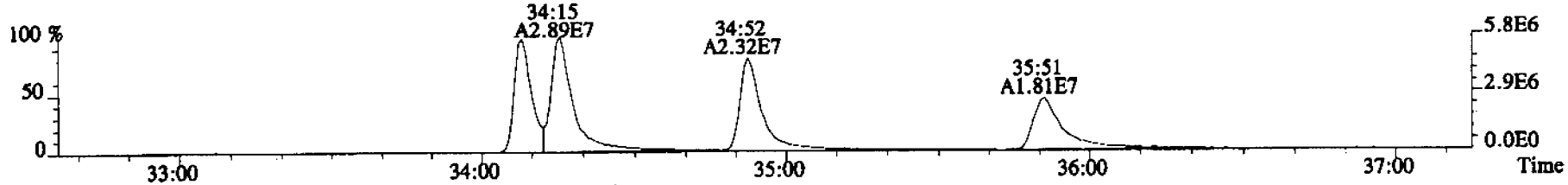
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



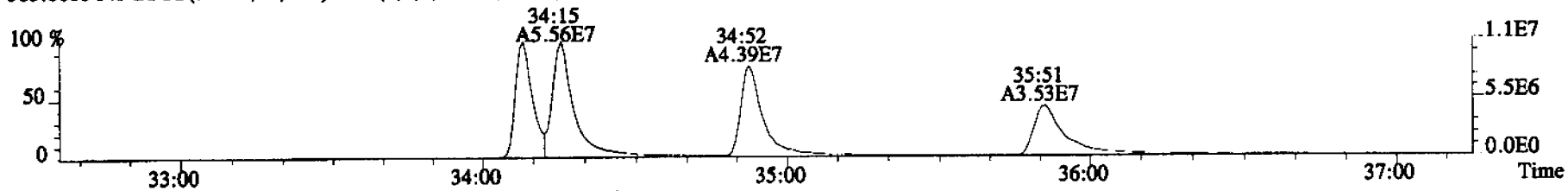
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



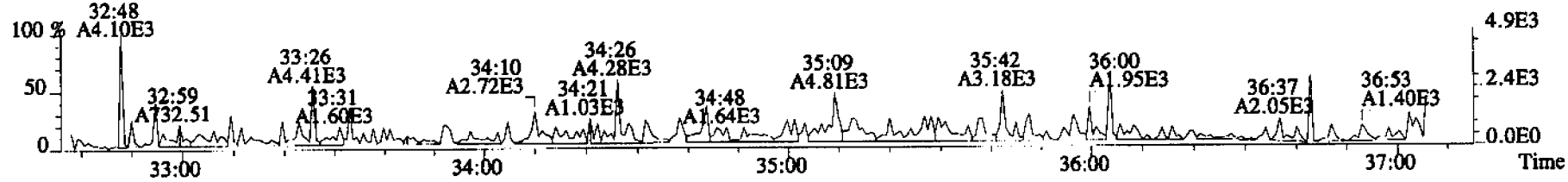
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



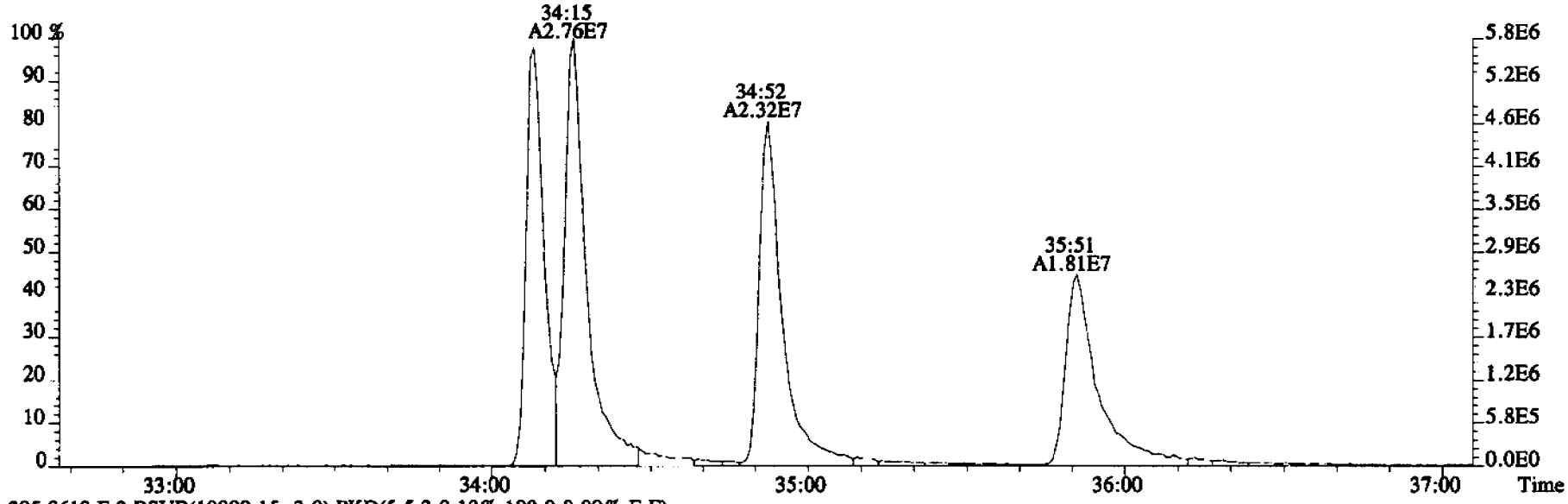
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



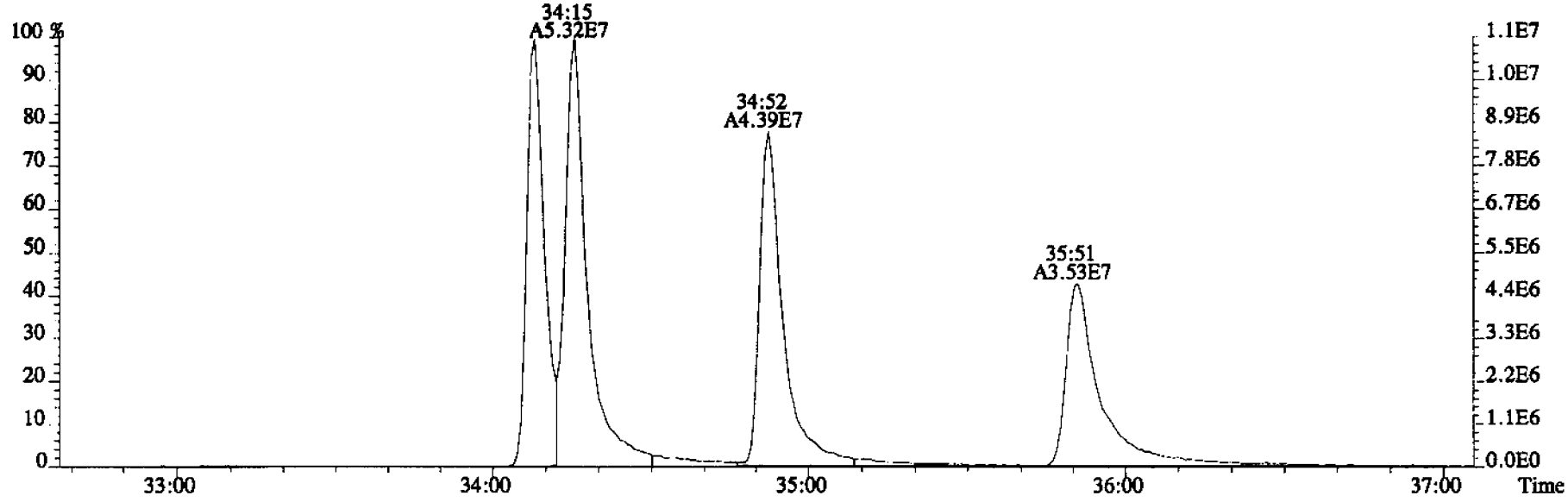
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



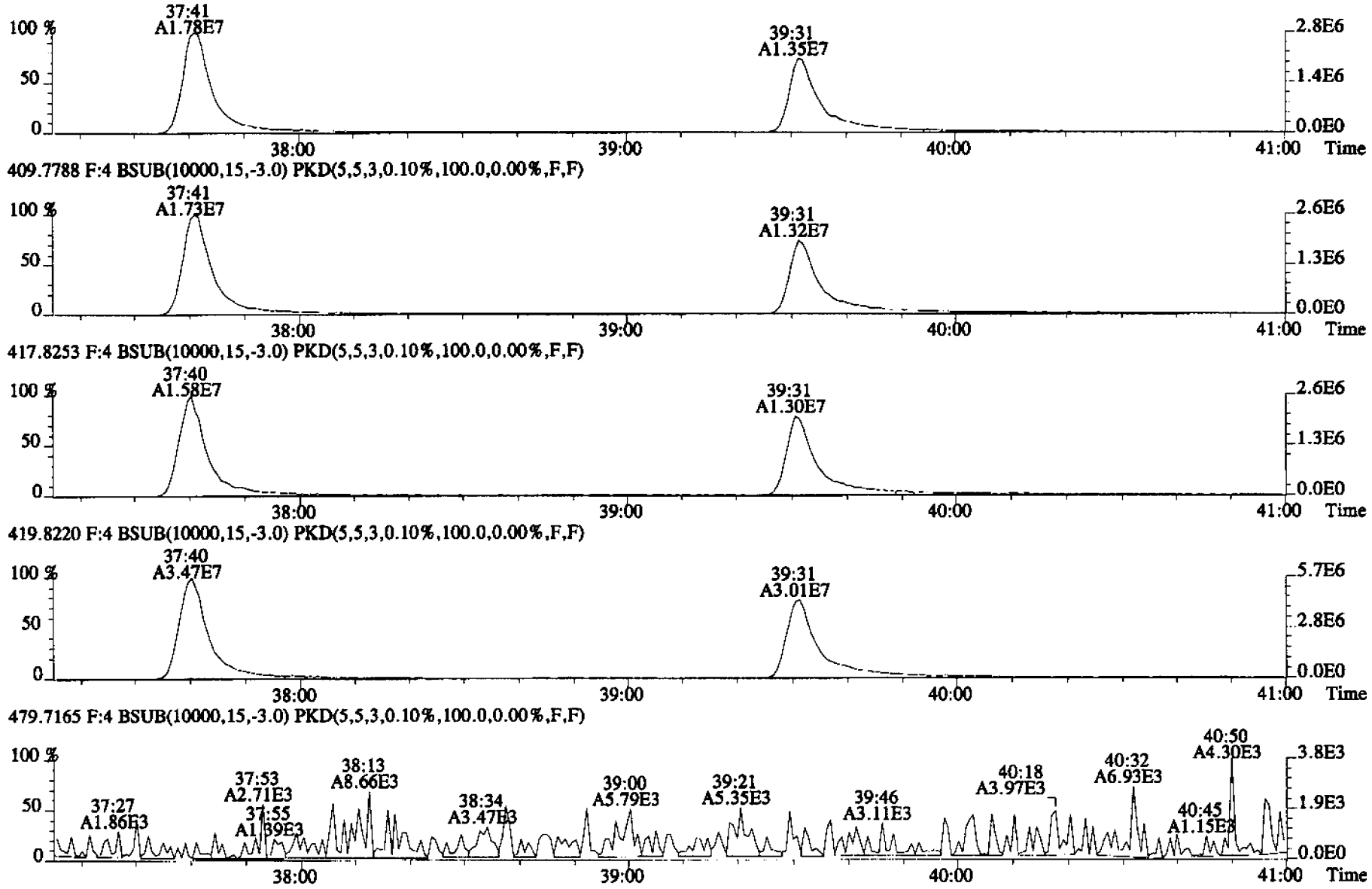
File:050502D1 #1-399 Acq: 2-MAY-2005 08:00:22 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050502D1-1 1613 CS3 050420H Exp:OCDD_DB5
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

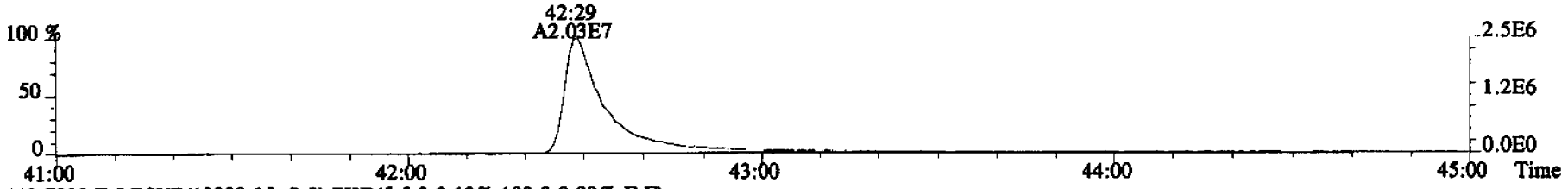


File:050502D1 #1-347 Acq: 2-MAY-2005 08:00:22 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050502D1-1 1613 CS3 050420H Exp:OCDD_DB5

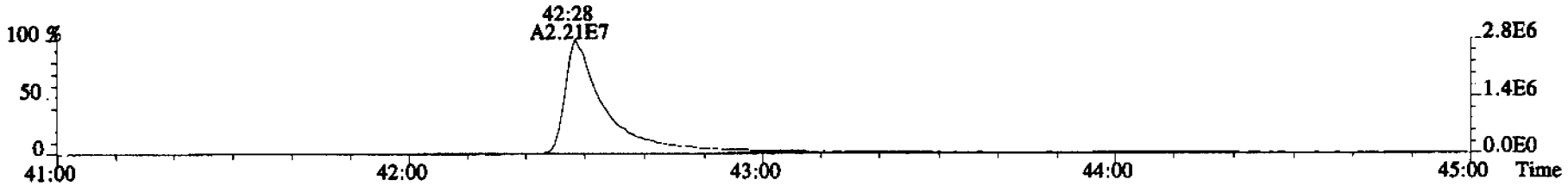


File:050502D1 #1-345 Acq: 2-MAY-2005 08:00:22 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050502D1-1 1613 CS3 050420H Exp:OCDD_DB5

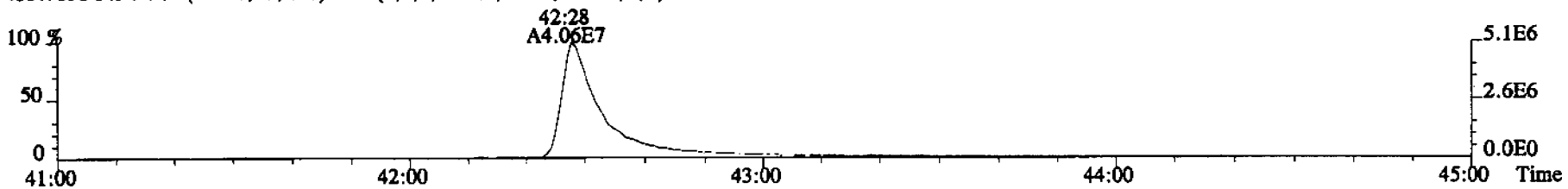
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



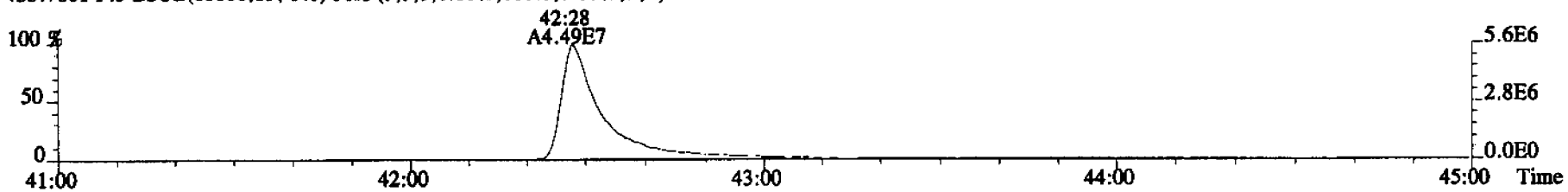
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



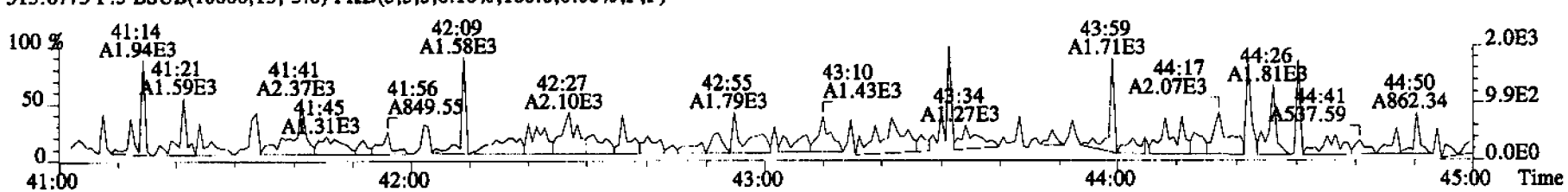
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.: CCAL ID: ST050502D1-2

Contract No.: SAS No.:

Initial Calibration Date: 4/23/05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050502D1 S#17 Analysis Date: 2-MAY-05 Time: 21:05:30

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	y	10.6	7.8 - 12.9 8.2 - 12.3 (4)
1,2,3,7,8-PeCDD	M+2/M+4	0.62	0.54-0.72	y	49.8	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	48.2	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	49.7	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05-1.43	y	48.4	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	50.0	43.0 - 58.0
OCDD	M+2/M+4	0.89	0.76-1.02	y	99.8	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	10.0	8.4 - 12.0 8.6 - 11.6 (4)
1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	50.7	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	49.8	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	49.6	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.27	1.05-1.43	y	49.0	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.28	1.05-1.43	y	49.0	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.27	1.05-1.43	y	50.0	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.05	0.88-1.20	y	49.7	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88-1.20	y	50.8	43.0 - 58.0
OCDF	M+2/M+4	0.92	0.76-1.02	y	100	63.0 - 159.0

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) Contract-required concentration range as specified in Table 6a, Method 1613, for tetras only.

Analyst: _____

Date: 5/3/05

FORM 4B

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4/23/05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050502D1 S#17 Analysis Date: 2-MAY-05 Time: 21:05:30

LABELED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.80	0.65-0.89	y	103	82.0 - 121.0 85.0 - 117.0 (5)
13C-1,2,3,7,8-PeCDD	M+2/M+4	0.63	0.54-0.72	y	109	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	102	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	108	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88-1.20	y	119	72.0 - 138.0
13C-OCDD	M+2/M+4	0.90	0.76-1.02	y	235	96.0 - 415.0
13C-2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	101	71.0 - 140.0 76.0 - 131.0 (5)
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	109	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	104	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.54	0.43-0.59	y	122	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	121	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	116	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	107	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	y	116	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37-0.51	y	122	77.0 - 129.0
13C-OCDF	M+2/M+4	0.91	0.76-1.02	y	242	96.0 - 415.0
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					9.30	7.9 - 12.7 8.3 - 12.1 (5)

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range, as specified in Table 6, Method 1613.

(4) No ion abundance ratio; report concentration found.

(5) Contract-required concentration range, as specified in Table 6a, Method 1613, for tetras only.

Analyst: _____

Date: 5/3/05

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: VG-7 Initial Calibration Date: 4/23/05

RT Window Data Filename: 050502D1 S#17 Analysis Date: 2-MAY-05 Time: 21:05:30

DB-5 IS Data Filename: 050502D1 S#17 Analysis Date: 2-MAY-05 Time: 21:05:30

DB_225 IS Data Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:20	1,3,6,8-TCDF (F)	21:06
1,2,8,9-TCDD (L)	27:56	1,2,8,9-TCDF (L)	28:05
1,2,4,7,9-PeCDD (F)	29:35	1,3,4,6,8-PeCDF (F)	28:01
1,2,3,8,9-PeCDD (L)	32:04	1,2,3,8,9-PeCDF (L)	32:19
1,2,4,6,7,9-HxCDD (F)	33:29	1,2,3,4,6,8-HxCDF (F)	32:57
1,2,3,7,8,9-HxCDD (L)	35:28	1,2,3,7,8,9-HxCDF (L)	35:52
1,2,3,4,6,7,9-HpCDD (F)	38:05	1,2,3,4,6,7,8-HpCDF (F)	37:40
1,2,3,4,6,7,8-HpCDD (L)	38:59	1,2,3,4,7,8,9-HpCDF (L)	39:32

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5).

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

COMPARED PEAKS (1)	% VALLEY HEIGHT BETWEEN
	<25%

(1) To meet contract requirements, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: [signature]

Date: 5/3/05

FORM 6A

PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4/23/05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050502D1 S#17 Analysis Date: 2-MAY-05 Time: 21:05:30

Compounds Using 13C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.001	0.999-1.002
LABELED COMPOUNDS			
13C-2,3,7,8-TCDF	13C-1,2,3,4-TCDD	0.993	0.923-1.103
13C-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.024	0.976-1.043
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.025	0.989-1.052
13C-1,2,3,7,8-PeCDF	13C-1,2,3,4-TCDD	1.156	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.191	1.011-1.526
13C-1,2,3,7,8-PeCDD	13C-1,2,3,4-TCDD	1.201	1.000-1.567

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613. 10/94

Analyst: [signature]

Date: 5/5/05

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4/23/05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050502D1 S#17 Analysis Date: 2-MAY-05 Time: 21:05:30

Compounds Using 13C-123789-HxCDD as Internal Standard

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.000	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.000	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.001	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.000	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.009	1.000-1.019
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.000	0.999-1.001
OCDD	13C-OCDD	1.000	0.999-1.001
OCDF	13C-OCDD	1.005	0.999-1.008
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDF	13C-1,2,3,7,8,9-HxCDD	0.963	0.944-0.970
13C-1,2,3,6,7,8-HxCDF	13C-1,2,3,7,8,9-HxCDD	0.966	0.949-0.975
13C-2,3,4,6,7,8-HxCDF	13C-1,2,3,7,8,9-HxCDD	0.984	0.959-1.021
13C-1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDD	1.011	0.977-1.047
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.988	0.977-1.000
13C-1,2,3,6,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.991	0.981-1.003
13C-1,2,3,4,6,7,8-HpCDF	13C-1,2,3,7,8,9-HxCDD	1.062	1.043-1.085
13C-1,2,3,4,6,7,8-HpCDD	13C-1,2,3,7,8,9-HxCDD	1.099	1.086-1.110
13C-1,2,3,4,7,8,9-HpCDF	13C-1,2,3,7,8,9-HxCDD	1.115	1.057-1.151
13C-OCDD	13C-1,2,3,7,8,9-HxCDD	1.192	1.032-1.311
13C-OCDF	13C-1,2,3,7,8,9-HxCDD	1.198	1.032-1.311

(1) Contract-required limits for
Relative Retention Times (RRT)
as specified in Table 2, Method 1613. 10/94

Analyst: _____

Date: 5/3/05

EPA METHOD 8290

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.: CCAL ID: ST050502D1-2

Contract No.: SAS No.:

Initial Calibration Date: 4/23/05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050502D1 S#17 Analysis Date: 2-MAY-05 Time: 21:05:30

NATIVE ANALYTES	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	y	10.6	8.00 - 12.0
1,2,3,7,8-PeCDD	M+2/M+4	0.62	0.54-0.72	y	49.8	40.0 - 60.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	48.2	40.0 - 60.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	49.7	40.0 - 60.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05-1.43	y	48.4	40.0 - 60.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	50.0	40.0 - 60.0
OCDD	M+2/M+4	0.89	0.76-1.02	y	99.8	80.0 - 120
2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	10.0	8.00 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	50.7	40.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	49.8	40.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	49.6	40.0 - 60.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.27	1.05-1.43	y	49.0	40.0 - 60.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.28	1.05-1.43	y	49.0	40.0 - 60.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.27	1.05-1.43	y	50.0	40.0 - 60.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.05	0.88-1.20	y	49.7	40.0 - 60.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88-1.20	y	50.8	40.0 - 60.0
OCDF	M+2/M+4	0.92	0.76-1.02	y	100	80.0 - 120

Analyst: _____

Date: 5/2/05

EPA METHOD 8290

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4/23/05

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050502D1 S#17 Analysis Date: 2-MAY-05 Time: 21:05:30

LABELED COMPOUNDS	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.80	0.65-0.89	y	103	70.0 - 130
13C-1,2,3,7,8-PeCDD	M+2/M+4	0.63	0.54-0.72	y	109	70.0 - 130
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	102	70.0 - 130
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	108	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88-1.20	y	119	70.0 - 130
13C-OCDD	M+2/M+4	0.90	0.76-1.02	y	235	140 - 260
13C-2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	101	70.0 - 130
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	109	70.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	104	70.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.54	0.43-0.59	y	122	70.0 - 130
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	121	70.0 - 130
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	116	70.0 - 130
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	107	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	y	116	70.0 - 130
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37-0.51	y	122	70.0 - 130
13C-OCDF	M+2/M+4	0.91	0.76-1.02	y	242	140 - 260
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD					9.30	7.00 - 13.0

Analyst: [signature]

Date: 5/3/05

Client ID: 1613 CS3 050420H Filename: 050502D1 S:17 Acq: 2-MAY-05 21:05:30 ConCal: ST050502D1-1
Lab ID: ST050502D1-2 GC Column ID: db-5 ICal: 1613vg7-4-23-05 wt/vol: 1.000 EndCAL: ST050502D1-2

	Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL
	2,3,7,8-TCDD	7.04e+06	0.78 y	1.06	27:01	10.6			* 2.5	*
	1,2,3,7,8-PeCDD	2.57e+07	0.62 y	0.99	31:42	49.8			* 2.5	*
	1,2,3,4,7,8-HxCDD	1.77e+07	1.28 y	1.11	35:02	48.2			* 2.5	*
	1,2,3,6,7,8-HxCDD	2.21e+07	1.28 y	1.07	35:09	49.7			* 2.5	*
	1,2,3,7,8,9-HxCDD	2.08e+07	1.25 y	1.15	35:28	48.4			* 2.5	*
	1,2,3,4,6,7,8-HpCDD	1.99e+07	1.04 y	1.05	38:59	50.0			* 2.5	*
	OCDD	3.49e+07	0.89 y	1.04	42:17	99.8			* 2.5	*
	2,3,7,8-TCDF	9.31e+06	0.78 y	1.05	26:13	10.0			* 2.5	*
	1,2,3,7,8-PeCDF	4.10e+07	1.57 y	0.95	30:29	50.7			* 2.5	*
	2,3,4,7,8-PeCDF	4.17e+07	1.56 y	1.08	31:25	49.8			* 2.5	*
	1,2,3,4,7,8-HxCDF	3.51e+07	1.25 y	1.19	34:08	49.6			* 2.5	*
	1,2,3,6,7,8-HxCDF	3.93e+07	1.27 y	1.22	34:16	49.0			* 2.5	*
	2,3,4,6,7,8-HxCDF	3.39e+07	1.28 y	1.20	34:54	49.0			* 2.5	*
	1,2,3,7,8,9-HxCDF	2.61e+07	1.27 y	1.13	35:52	50.0			* 2.5	*
	1,2,3,4,6,7,8-HpCDF	3.10e+07	1.05 y	1.38	37:40	49.7			* 2.5	*
	1,2,3,4,7,8,9-HpCDF	2.58e+07	1.03 y	1.23	39:32	50.8			* 2.5	*
	OCDF	4.47e+07	0.92 y	1.02	42:30	100			* 2.5	*
IS	13C-2,3,7,8-TCDD	6.27e+07	0.80 y	1.12	27:00	103				
IS	13C-1,2,3,7,8-PeCDD	5.22e+07	0.63 y	0.89	31:41	109				
IS	13C-1,2,3,4,7,8-HxCDD	3.29e+07	1.27 y	0.83	35:01	102				
IS	13C-1,2,3,6,7,8-HxCDD	4.16e+07	1.26 y	1.00	35:08	108				
IS	13C-1,2,3,4,6,7,8-HpCDD	3.78e+07	1.07 y	0.82	38:58	119				
IS	13C-OCDD	6.74e+07	0.90 y	0.74	42:16	235				
IS	13C-2,3,7,8-TCDF	8.81e+07	0.78 y	1.02	26:11	101				
IS	13C-1,2,3,7,8-PeCDF	8.48e+07	1.59 y	0.90	30:28	109				
IS	13C-2,3,4,7,8-PeCDF	7.78e+07	1.59 y	0.87	31:25	104				
IS	13C-1,2,3,4,7,8-HxCDF	5.96e+07	0.54 y	1.27	34:07	122				
IS	13C-1,2,3,6,7,8-HxCDF	6.58e+07	0.52 y	1.40	34:16	121				
IS	13C-2,3,4,6,7,8-HxCDF	5.75e+07	0.52 y	1.29	34:52	116				
IS	13C-1,2,3,7,8,9-HxCDF	4.63e+07	0.51 y	1.12	35:51	107				
IS	13C-1,2,3,4,6,7,8-HpCDF	4.53e+07	0.44 y	1.01	37:40	116				
IS	13C-1,2,3,4,7,8,9-HpCDF	4.14e+07	0.44 y	0.88	39:31	122				
IS	13C-OCDF	8.75e+07	0.91 y	0.94	42:29	242				
C/Up	37Cl-2,3,7,8-TCDD	3.13e+06		0.62	27:01	9.30				
RS/RT	13C-1,2,3,4-TCDD	5.42e+07	0.81 y	1.00	26:22	100				
RS	13C-1,2,3,4-TCDF	8.58e+07	0.78 y	1.00	24:50	100				
RS/RT	13C-1,2,3,7,8,9-HxCDD	3.86e+07	1.25 y	1.00	35:27	100				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	48.5	49.1		*	*
Total Penta-Dioxins	145	146		*	*
Total Hexa-Dioxins	202	203		*	*
Total Hepta-Dioxins	95.6	97.9		*	*
Total Tetra-Furans	29.9	30.5		*	*
Total Penta-Furans	185	185		*	*
Total Hexa-Furans	249	251		*	*
Total Hepta-Furans	101	103		*	*

Rec	Qual
103	
109	
102	
108	
119	
118	
101	
109	
104	
122	
121	
116	
107	
116	
122	
121	
23.2	

Intergrations by Analyst: [signature]

Date: 5/3/05

Alta Analytical Laboratory - Injection Log Run file: 050502d1 Instrument ID: VG-7 GC Column ID: db-5

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
050502D1	1	ST050502D1-1 1613 CS3 050420H	jmh	2-MAY-05	08:00:22	ST050502D1-1	ST050502D1-2
050502D1	2	solvent blank	jmh	2-MAY-05	08:49:25	ST050502D1-1	ST050502D1-2
050502D1	3	26035_6749_001 C1 9.578g	jmh	2-MAY-05	09:38:30	ST050502D1-1	ST050502D1-2
050502D1	4	26035_6749_002 C2 9.585g	jmh	2-MAY-05	10:27:34	ST050502D1-1	ST050502D1-2
050502D1	5	26035_6749_003 C3 9.674g	jmh	2-MAY-05	11:16:39	ST050502D1-1	ST050502D1-2
050502D1	6	26035_6749_004 R1 9.392g	jmh	2-MAY-05	12:05:43	ST050502D1-1	ST050502D1-2
050502D1	7	26035_6749_005 T1 1.89g	jmh	2-MAY-05	12:54:48	ST050502D1-1	ST050502D1-2
050502D1	8	26035_6749_006 T2 1.61g	jmh	2-MAY-05	13:43:52	ST050502D1-1	ST050502D1-2
050502D1	9	26074_6749_001 MD54-05-57981 9.999g	jmh	2-MAY-05	14:32:56	ST050502D1-1	ST050502D1-2
050502D1	10	26074_6749_002 MD54-05-57988 10.01g	jmh	2-MAY-05	15:22:01	ST050502D1-1	ST050502D1-2
050502D1	11	26075_6749_001 MD54-05-58193 10.02g	jmh	2-MAY-05	16:11:05	ST050502D1-1	ST050502D1-2
050502D1	12	26075_6749_002 MD54-05-58200 10.01g	jmh	2-MAY-05	17:00:10	ST050502D1-1	ST050502D1-2
050502D1	13	26076_6749_001 RE73-05-58829 10.01g	jmh	2-MAY-05	17:49:14	ST050502D1-1	ST050502D1-2
050502D1	14	26076_6749_002 RE73-05-58835 10.02g	jmh	2-MAY-05	18:38:17	ST050502D1-1	ST050502D1-2
050502D1	15	26076_6749_003 RE73-05-58841 10.00g	jmh	2-MAY-05	19:27:21	ST050502D1-1	ST050502D1-2
050502D1	16	solvent blank	jmh	2-MAY-05	20:16:24	ST050502D1-1	ST050502D1-2
050502D1	17	ST050502D1-2 1613 CS3 050420H	jmh	2-MAY-05	21:05:30	ST050502D1-1	ST050502D1-2

Attachment 7.F.2

HRMS STANDARDS REVIEW CHECKLIST

Beginning Calibration ID: ST050502D1-1 Ending Calibration ID: ST050502D1-2

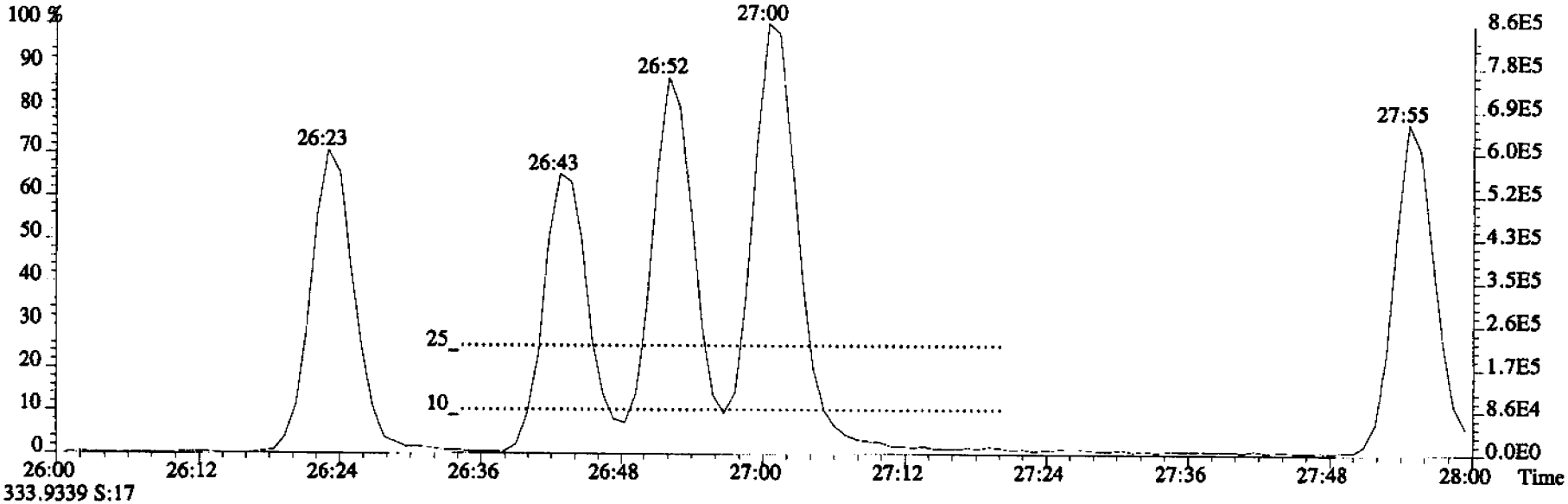
	Beg.CAL	End. CAL	COMMENTS
Calibration Verification/Form 4A/B: Ion abundance within QC limits?	✓	✓	
Calibration Verification/Form 4A/B: Conc within Conc. range?	✓	✓	
Form 5: First and last eluters present? (N/A for DB225)	✓	✓	
Form 6A/6B: Relative Retention Times within limits? (N/A for M23, TO9, 1668, DB225)	✓	✓	
Cal. Ver. Named correctly? (Ex. ST-Year-Month-Day-VG ID)	✓	✓	
Cal. Verification forms signed and dated for review?	✓	✓	
Appropriate ICAL referenced?	✓	✓	
Run log: Standards named correctly? Correct Instrument listed?	✓	✓	
Run log: Samples within 12-hour shift?	✓	✓	
Mass resolution > 10,000	✓	✓	
2378-TCDD/TCDF valley < 25% (N/A for 1668)	✓	✓	
All appropriate peaks integrated correctly?	✓	✓	
Manual integrations included?	✓	✓	
8280: Ratios within limits?	N/A	NA	
8280: S/N > 2.5:1	N/A	NA	
8280: CS1 within 12 hrs?	N/A	NA	

Reviewer Initial/Date: 5-3-05

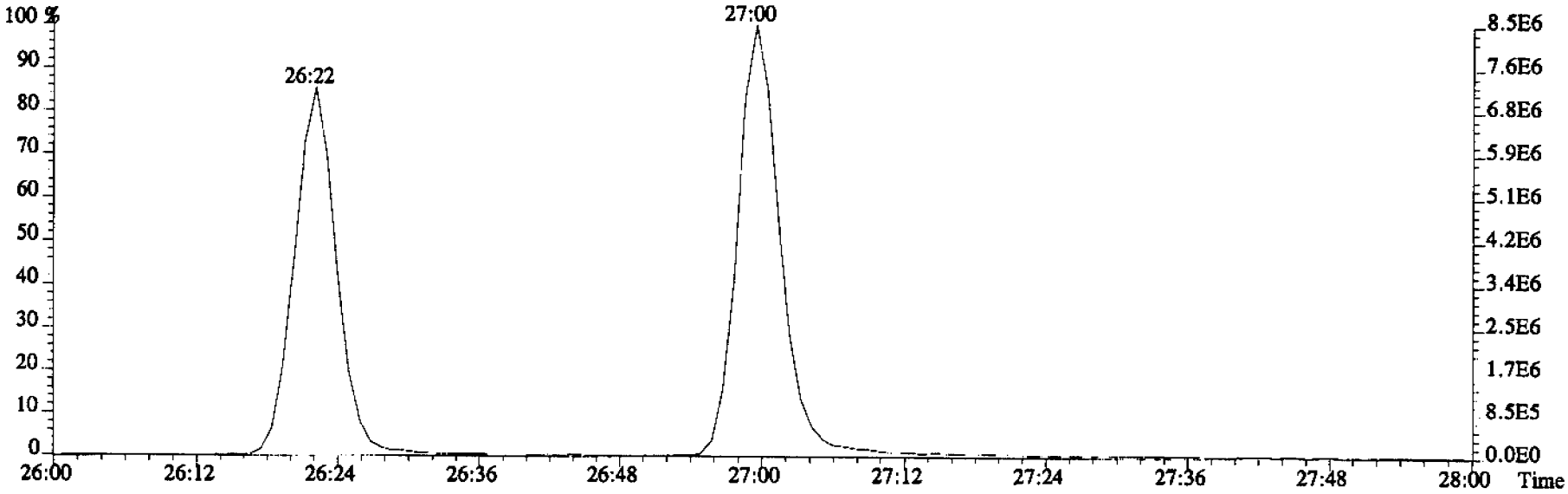
QA* (Random 5% Check) Initial/Date: _____

Alta Analytical Laboratory
El Dorado Hills, CA 95762

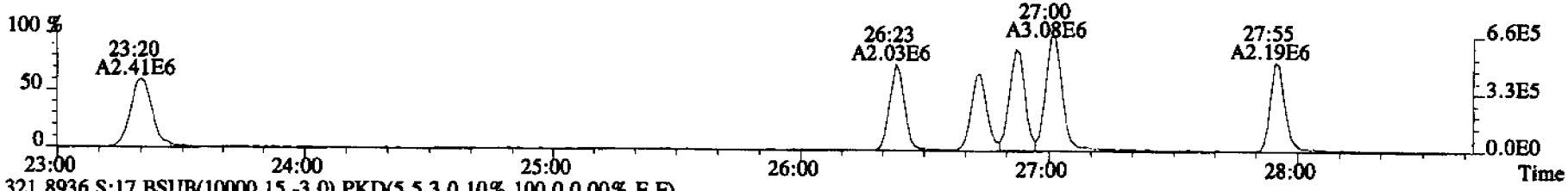
File:050502D1 #1-558 Acq: 2-MAY-2005 21:05:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#17 File Text:Alta Analytical Laboratory VG-7 Text:ST050502D1-2 1613 CS3 050420H Exp:OCDD_DB5
321.8936 S:17



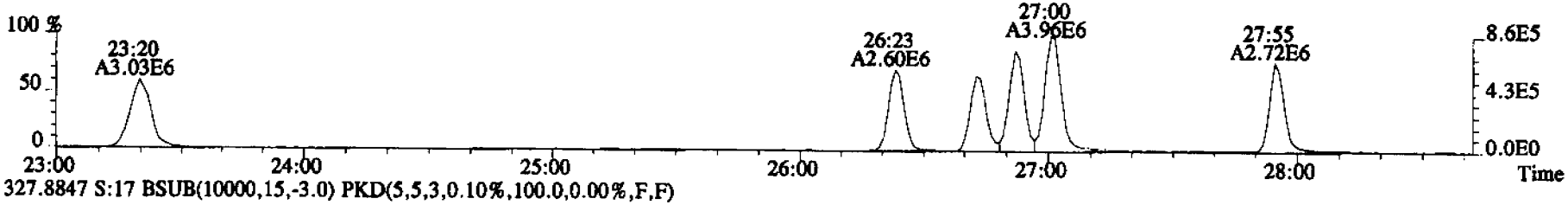
333.9339 S:17



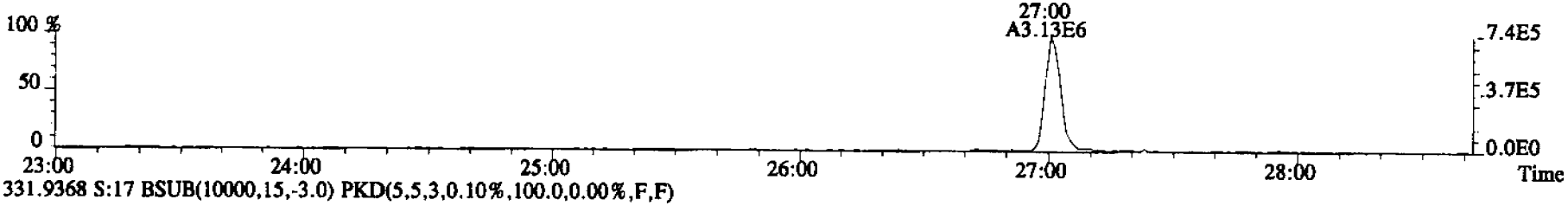
File:050502D1 #1-558 Acq: 2-MAY-2005 21:05:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#17 File Text:Alta Analytical Laboratory VG-7 Text:ST050502D1-2 1613 CS3 050420H Exp:OCDD_DB5
319.8965 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



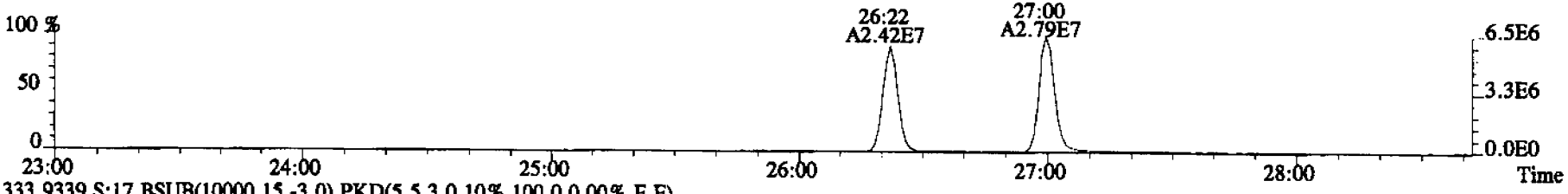
321.8936 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



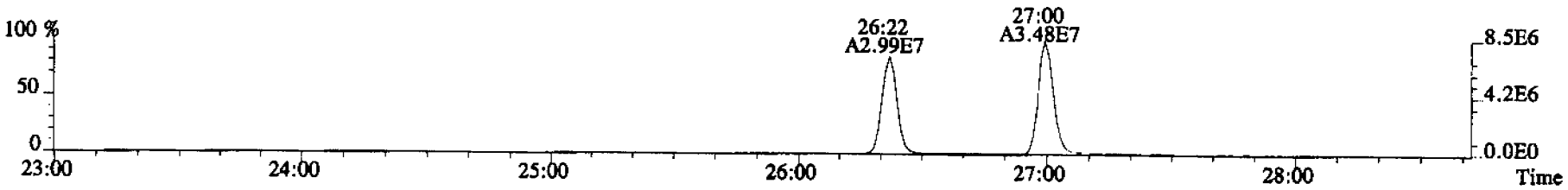
327.8847 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



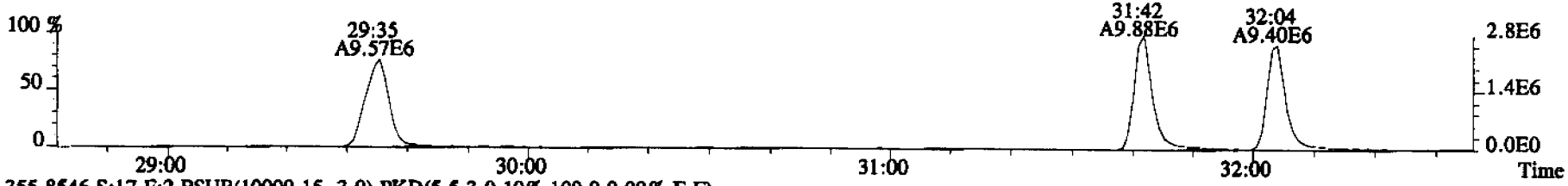
331.9368 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



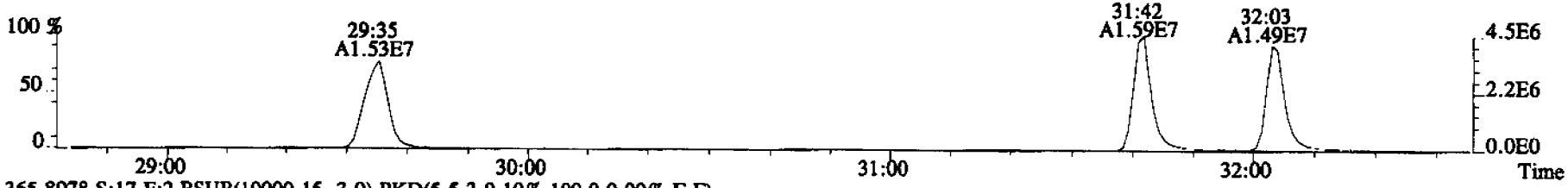
333.9339 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



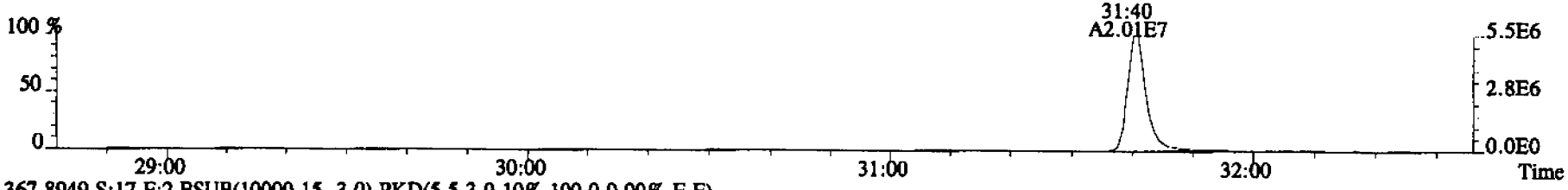
File:050502D1 #1-273 Acq: 2-MAY-2005 21:05:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#17 File Text:Alta Analytical Laboratory VG-7 Text:ST050502D1-2 1613 CS3 050420H Exp:OCDD_DB5
353.8576 S:17 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



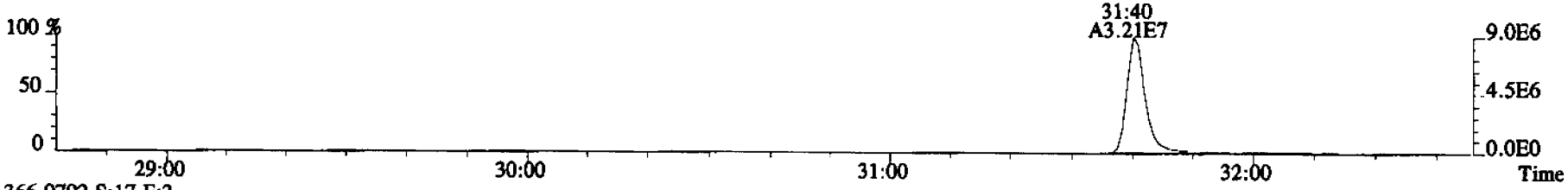
355.8546 S:17 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



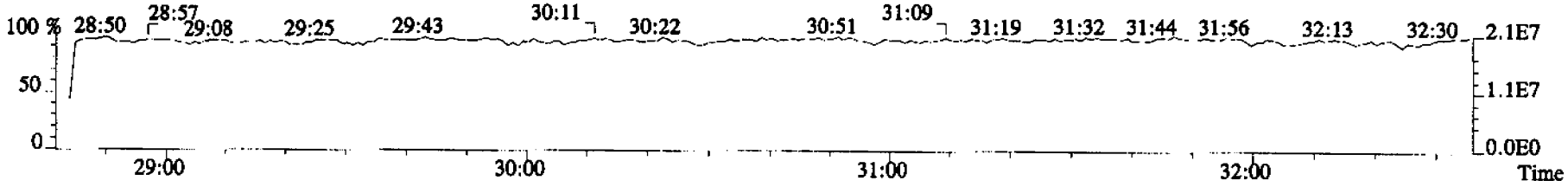
365.8978 S:17 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



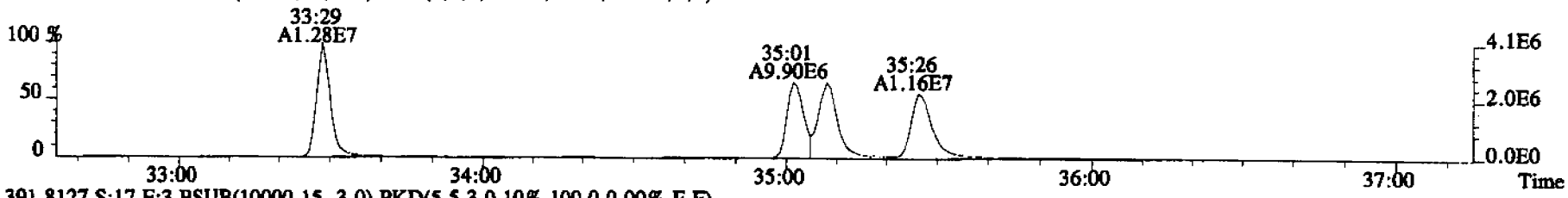
367.8949 S:17 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



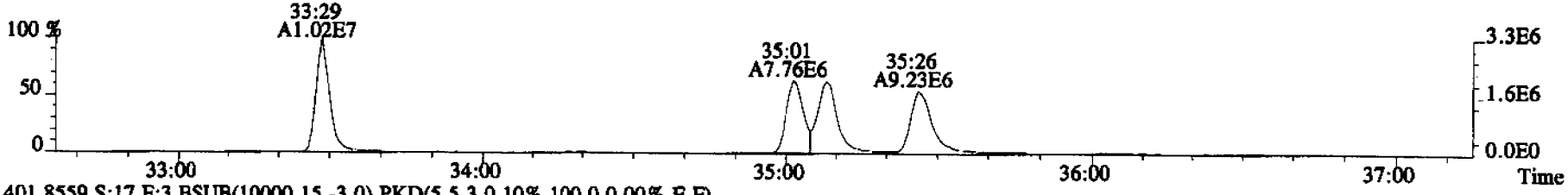
366.9792 S:17 F:2



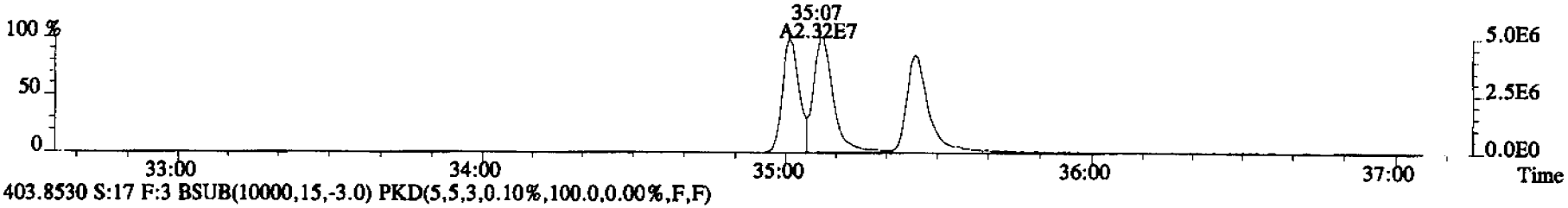
File:050502D1 #1-398 Acq: 2-MAY-2005 21:05:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#17 File Text:Alta Analytical Laboratory VG-7 Text:ST050502D1-2 1613 CS3 050420H Exp:OCDD_DB5
389.8156 S:17 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



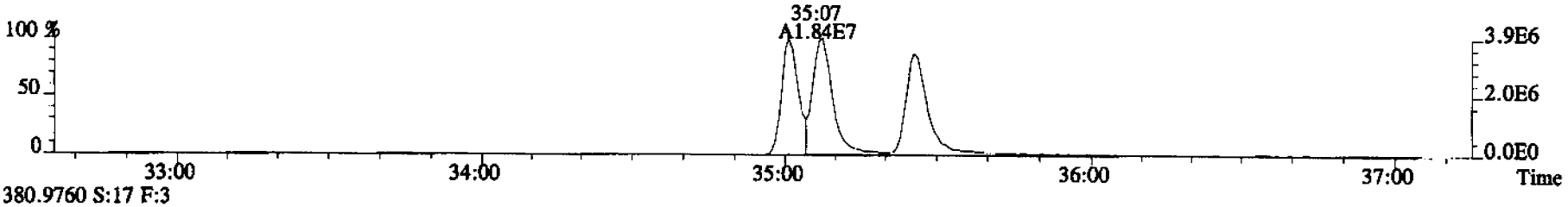
391.8127 S:17 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



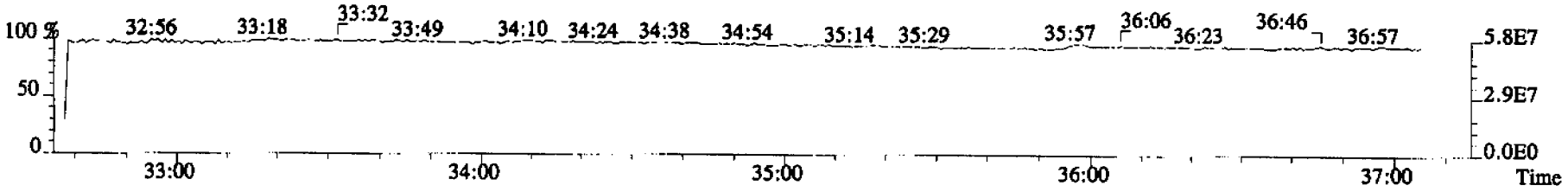
401.8559 S:17 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



403.8530 S:17 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

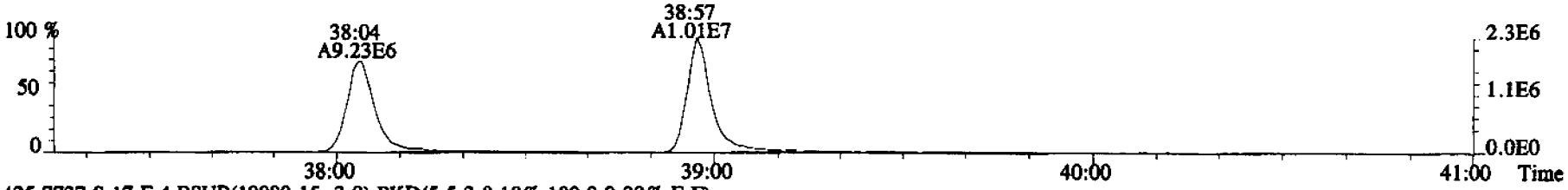


380.9760 S:17 F:3

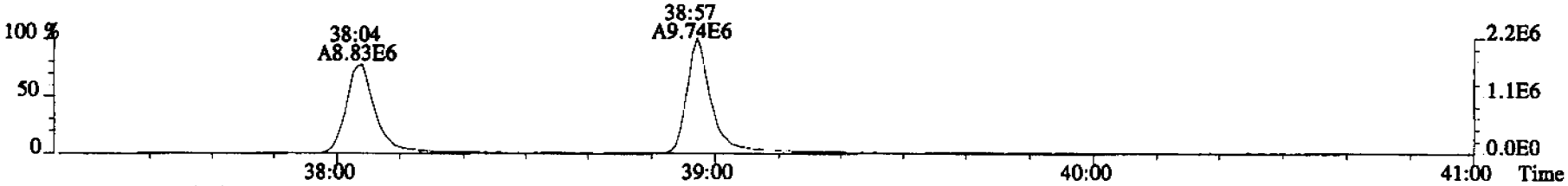


File:050502D1 #1-348 Acq: 2-MAY-2005 21:05:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#17 File Text:Alta Analytical Laboratory VG-7 Text:ST050502D1-2 1613 CS3 050420H Exp:OCDD_DB5

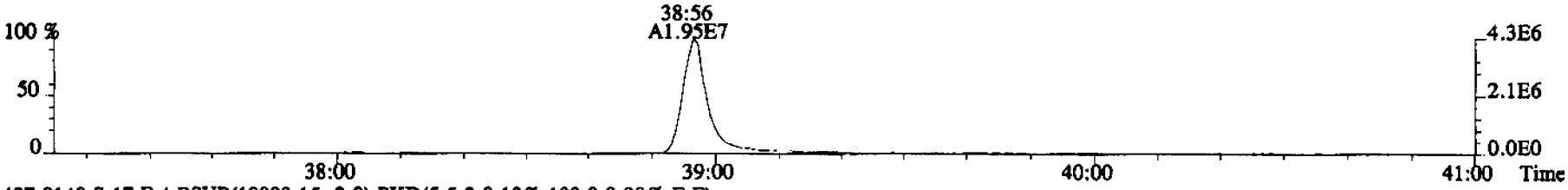
423.7767 S:17 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



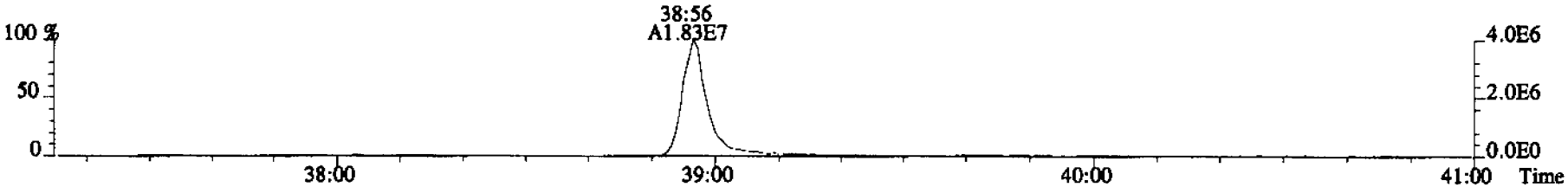
425.7737 S:17 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



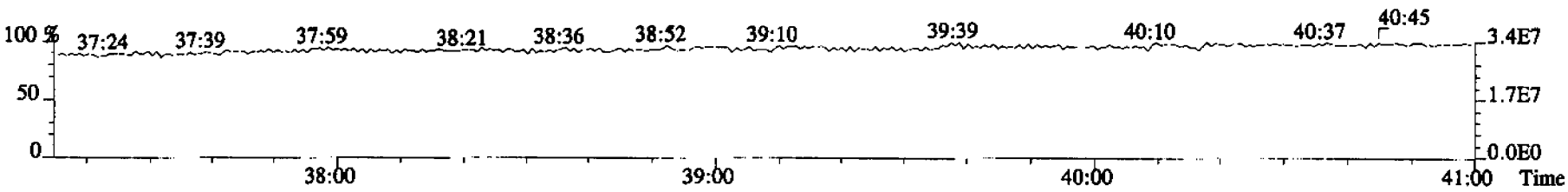
435.8169 S:17 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



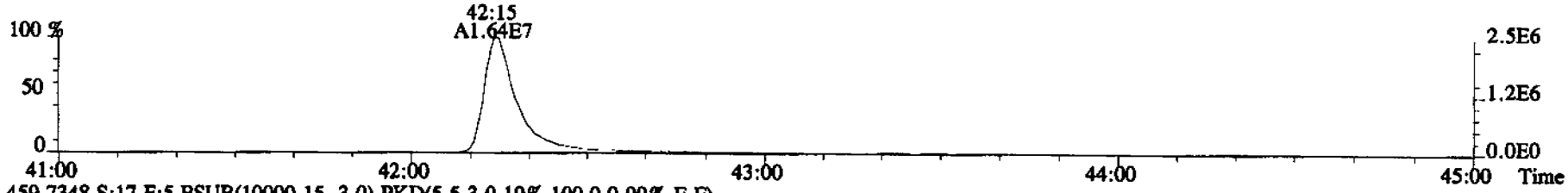
437.8140 S:17 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



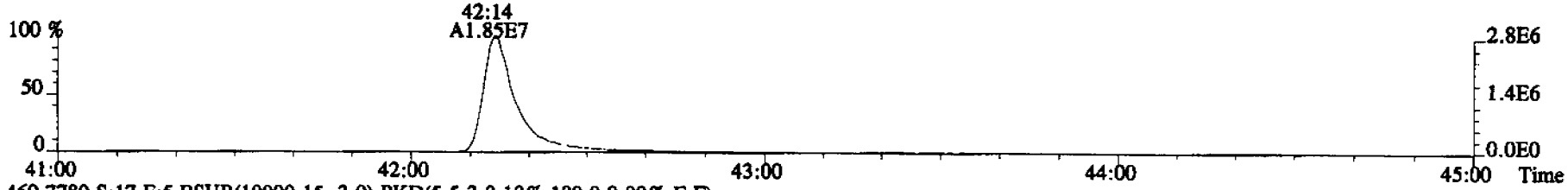
430.9728 S:17 F:4



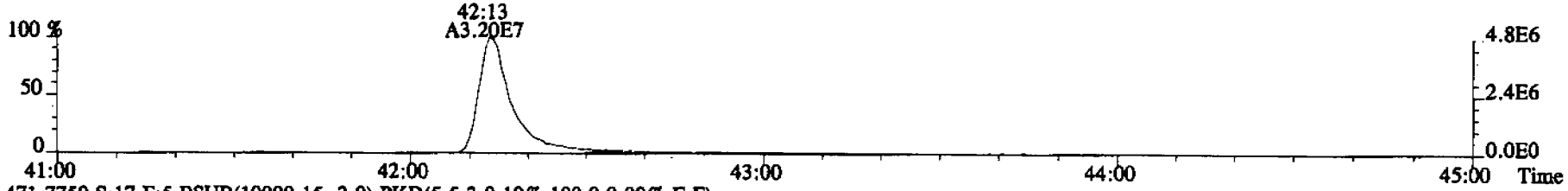
File:050502D1 #1-345 Acq: 2-MAY-2005 21:05:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#17 File Text:Alta Analytical Laboratory VG-7 Text:ST050502D1-2 1613 CS3 050420H Exp:OCDD_DB5
457.7377 S:17 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



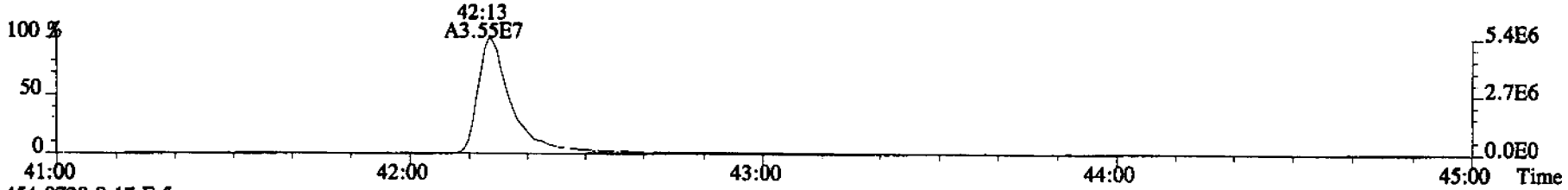
459.7348 S:17 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



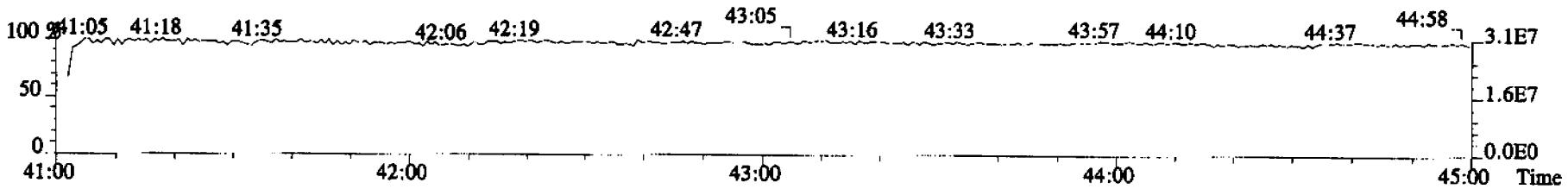
469.7780 S:17 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



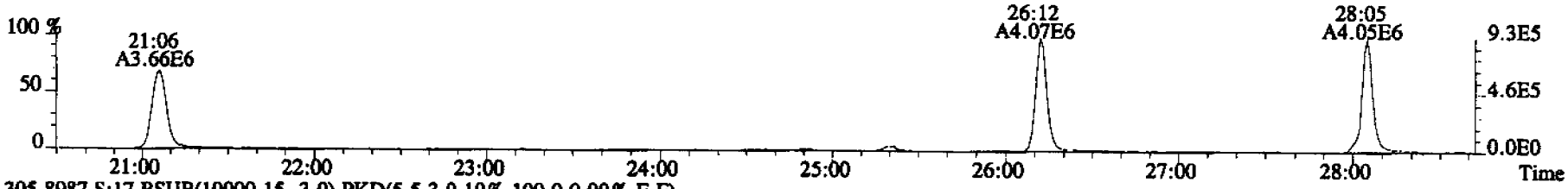
471.7750 S:17 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



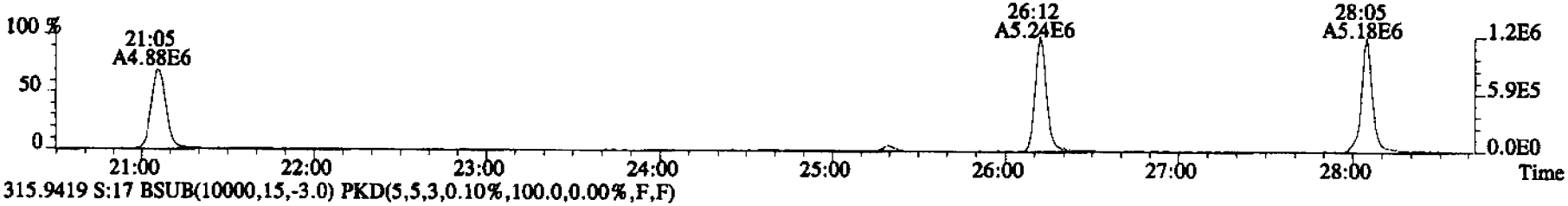
454.9728 S:17 F:5



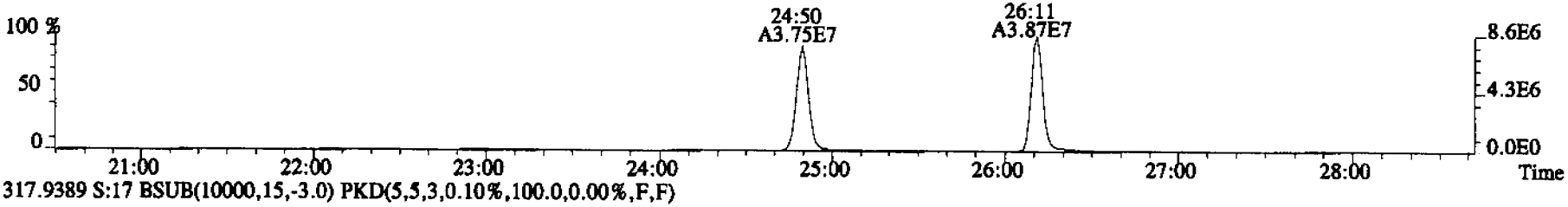
File:050502D1 #1-558 Acq: 2-MAY-2005 21:05:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#17 File Text:Alta Analytical Laboratory VG-7 Text:ST050502D1-2 1613 CS3 050420H Exp:OCDD_DB5
303.9016 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



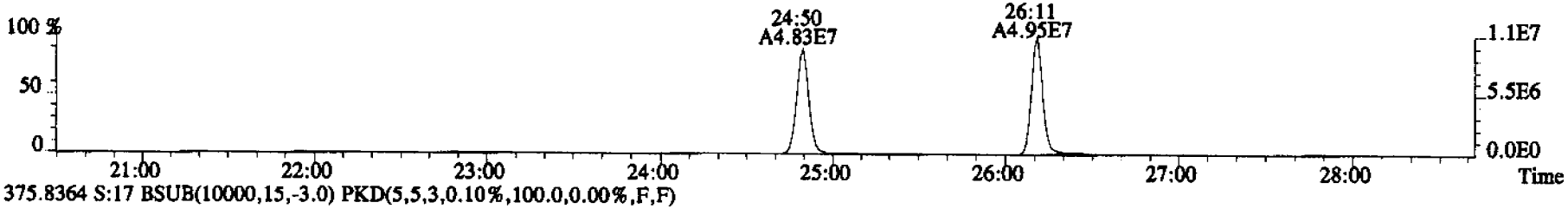
305.8987 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



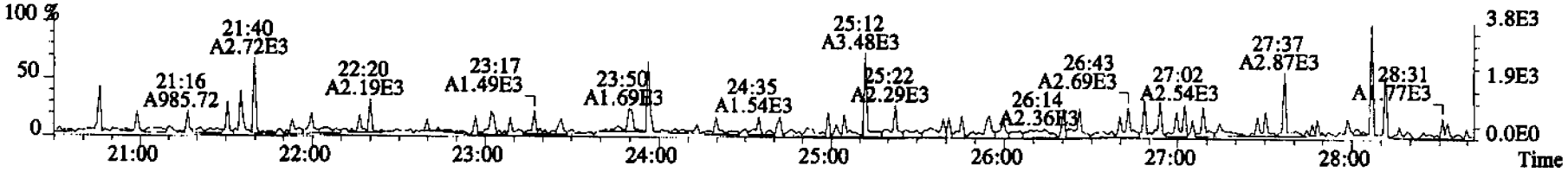
315.9419 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



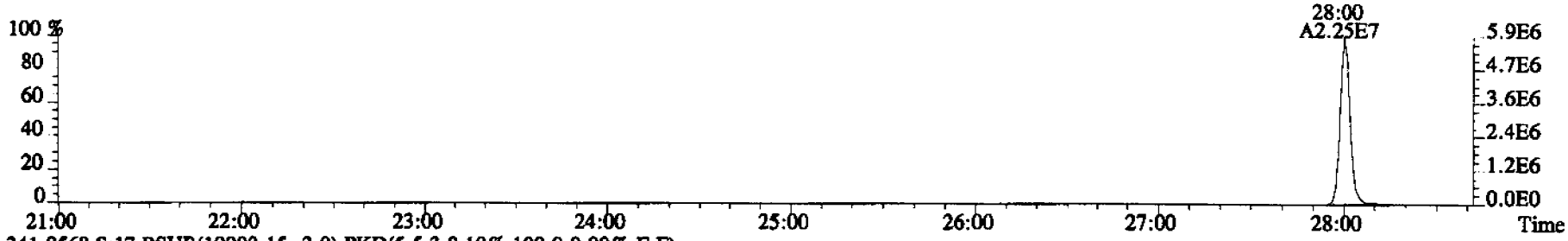
317.9389 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



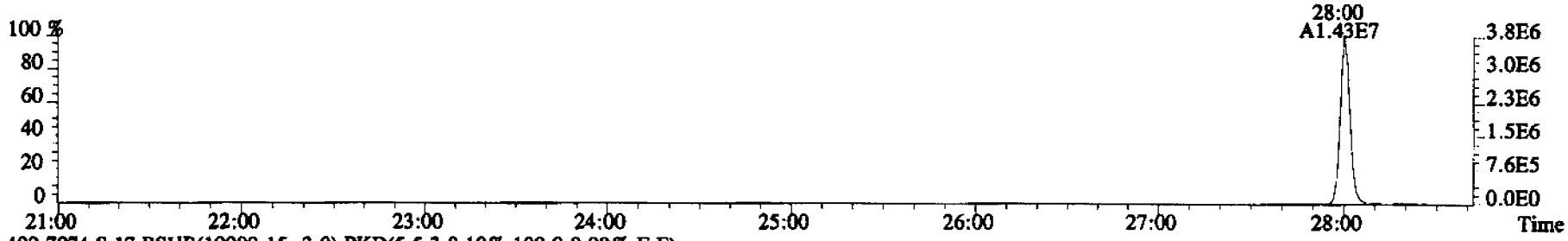
375.8364 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



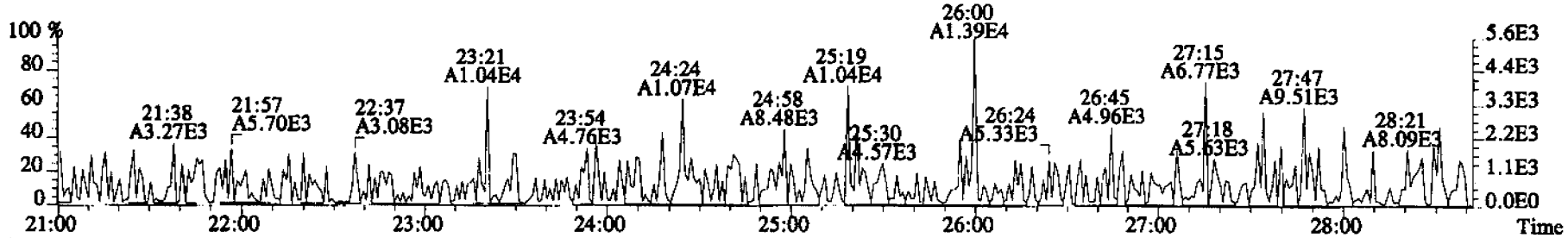
File:050502D1 #1-558 Acq: 2-MAY-2005 21:05:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#17 File Text:Alta Analytical Laboratory VG-7 Text:ST050502D1-2 1613 CS3 050420H Exp:OCDD_DB5
339.8597 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



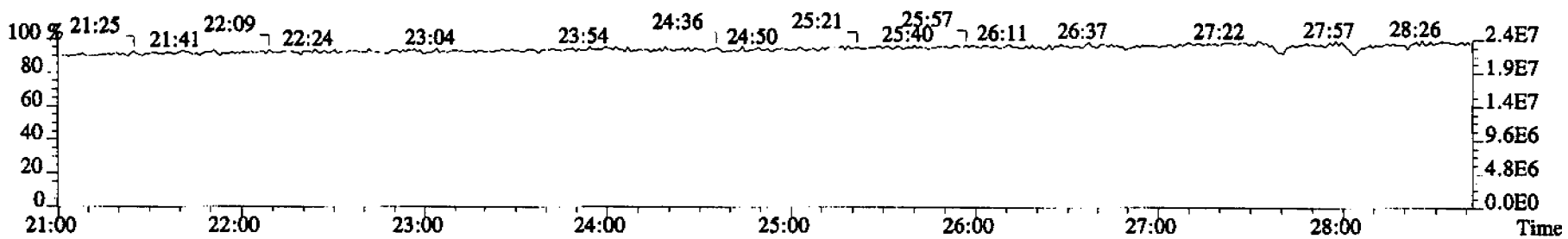
341.8568 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



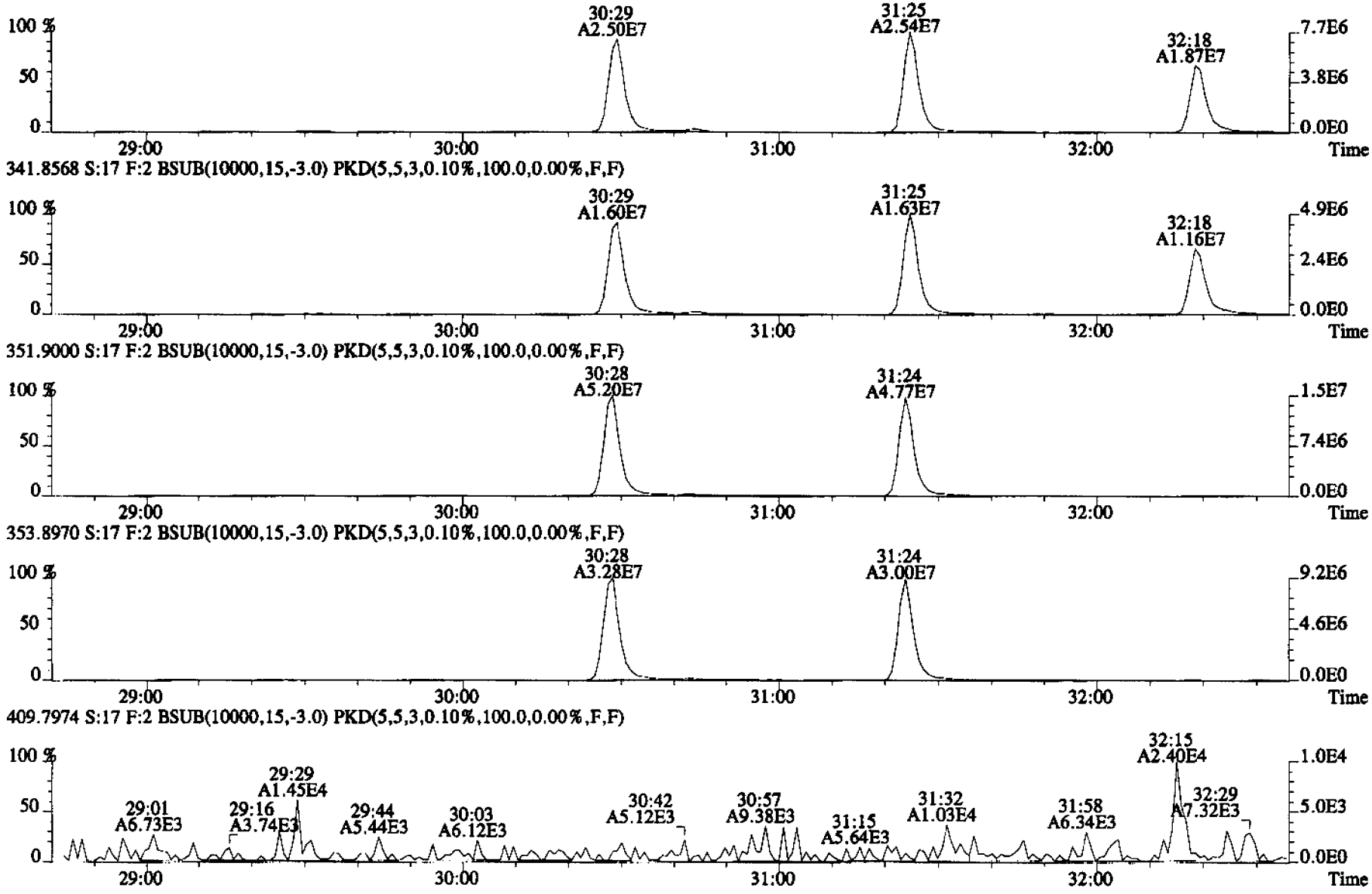
409.7974 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



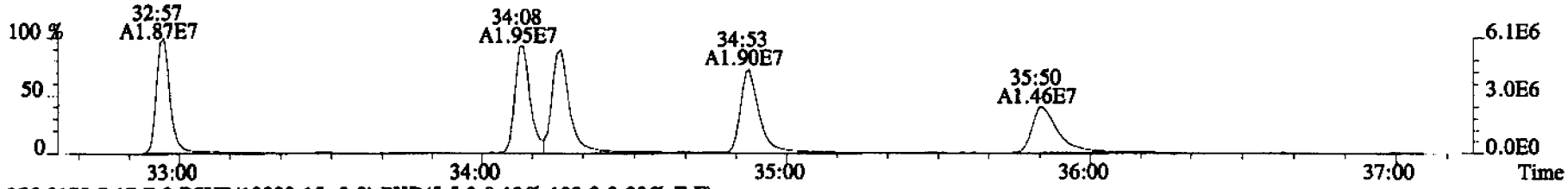
316.9824 S:17



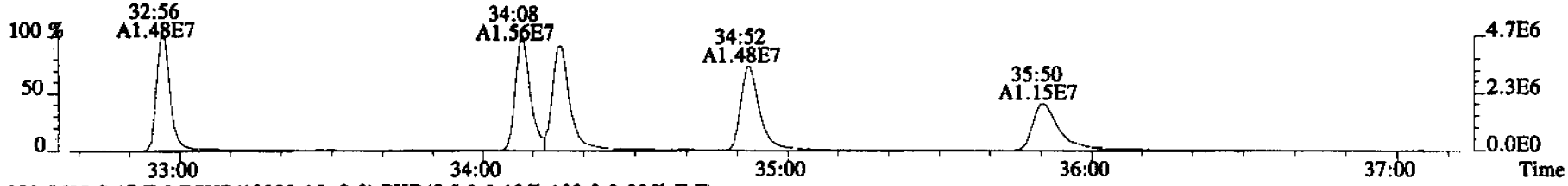
File:050502D1 #1-273 Acq: 2-MAY-2005 21:05:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#17 File Text:Alta Analytical Laboratory VG-7 Text:ST050502D1-2 1613 CS3 050420H Exp:OCDD_DB5



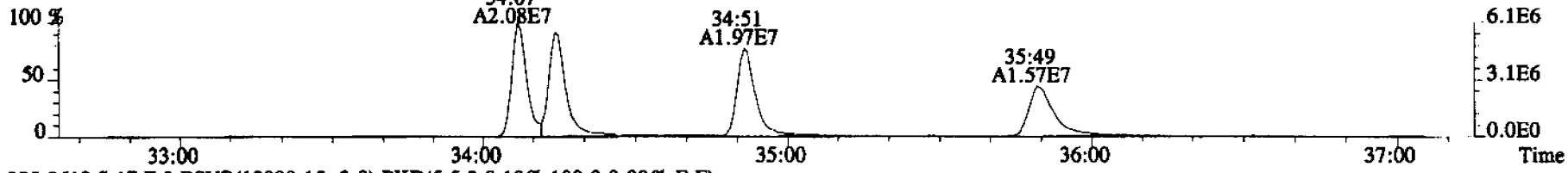
File:050502D1 #1-398 Acq: 2-MAY-2005 21:05:30 GC El+ Voltage SIR Autospec-UltimaE
Sample#17 File Text:Alta Analytical Laboratory VG-7 Text:ST050502D1-2 1613 CS3 050420H Exp:OCDD_DB5
373.8207 S:17 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



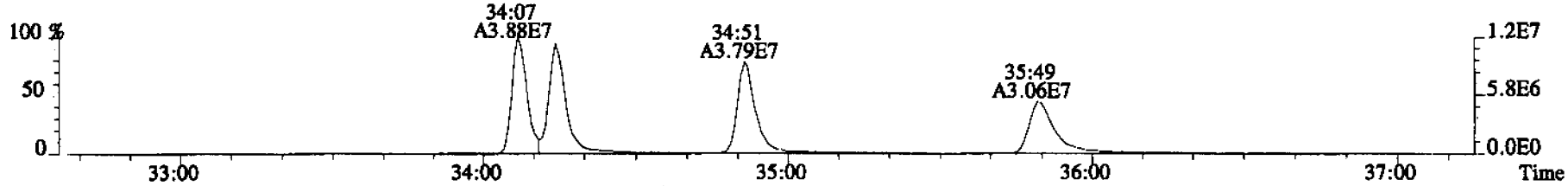
375.8178 S:17 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



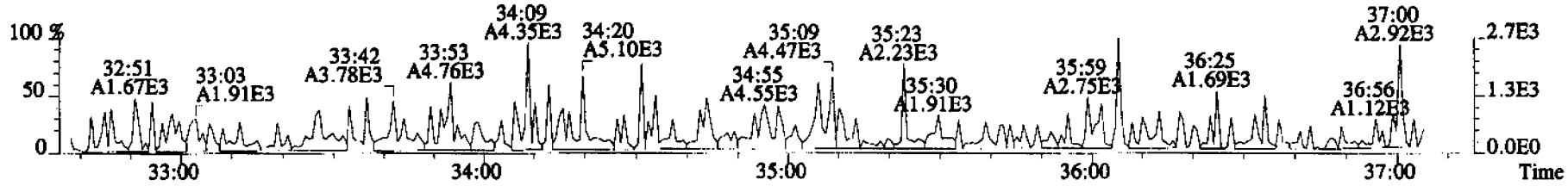
383.8639 S:17 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



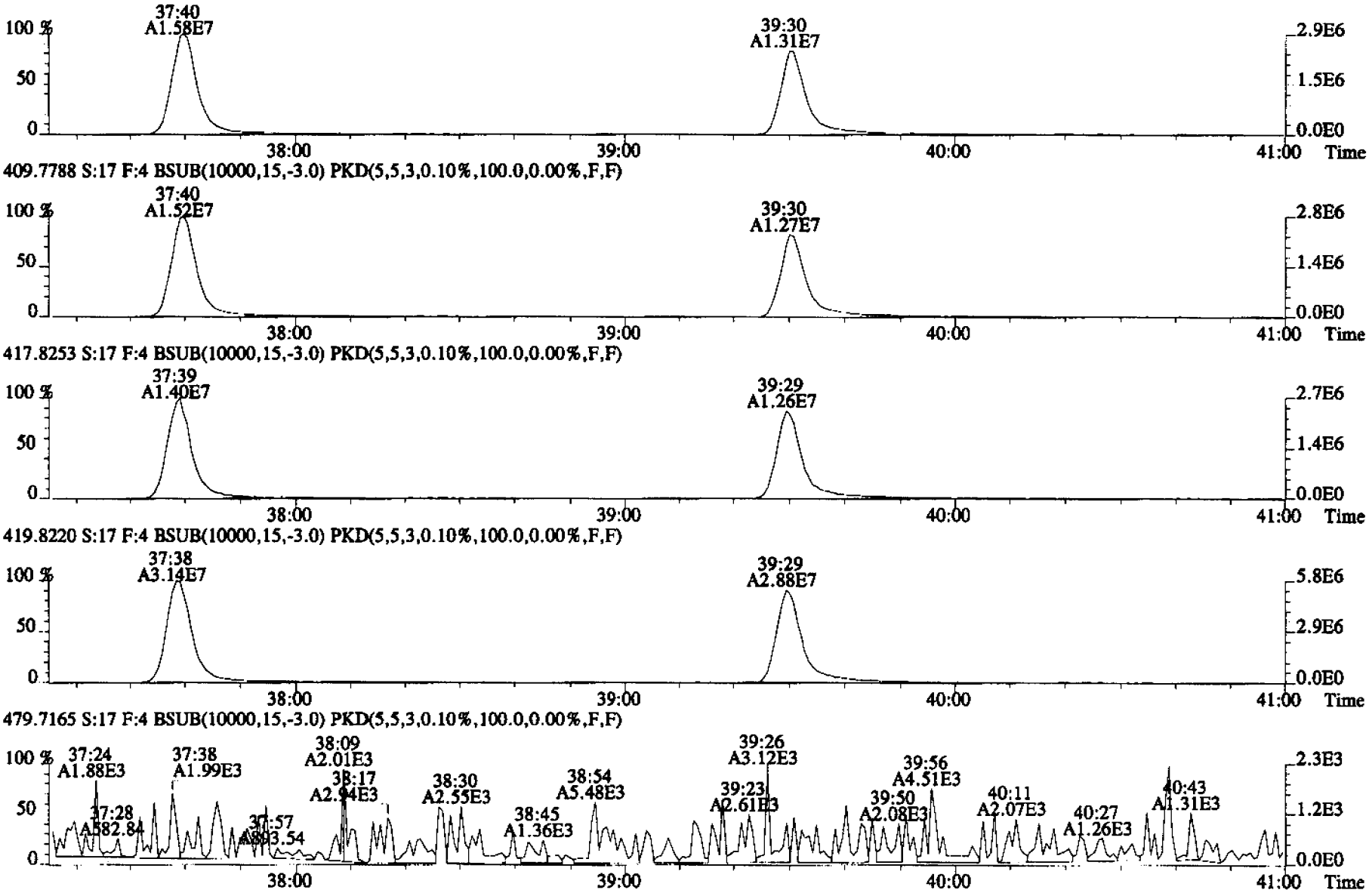
385.8610 S:17 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



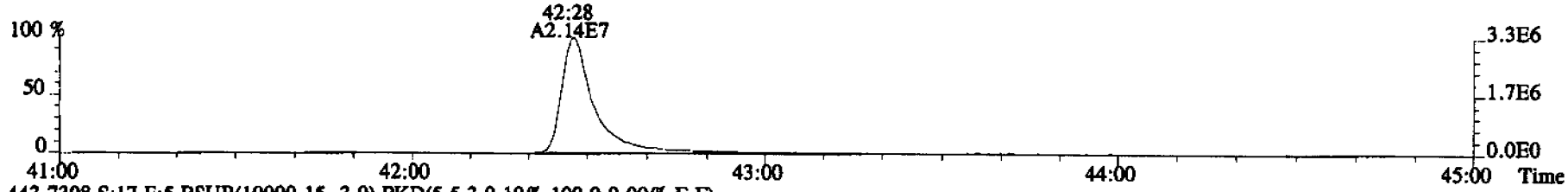
445.7555 S:17 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



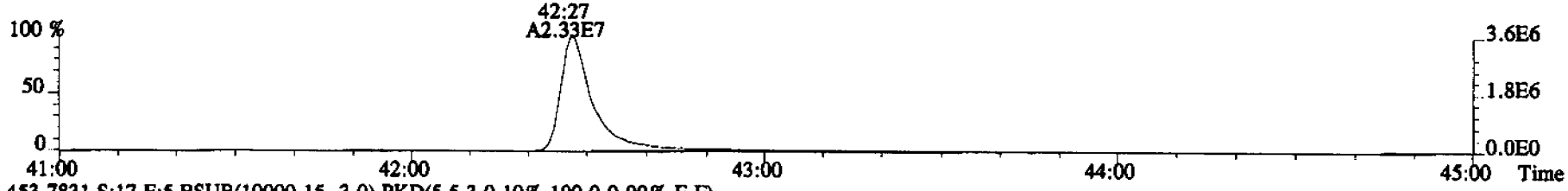
File:050502D1 #1-348 Acq: 2-MAY-2005 21:05:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#17 File Text:Alta Analytical Laboratory VG-7 Text:ST050502D1-2 1613 CS3 050420H Exp:OCDD_DB5



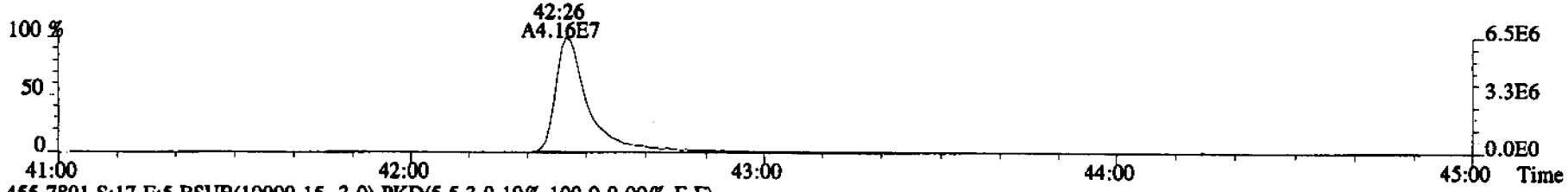
File:050502D1 #1-345 Acq: 2-MAY-2005 21:05:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#17 File Text:Alta Analytical Laboratory VG-7 Text:ST050502D1-2 1613 CS3 050420H Exp:OCDD_DB5
441.7428 S:17 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



443.7398 S:17 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



453.7831 S:17 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



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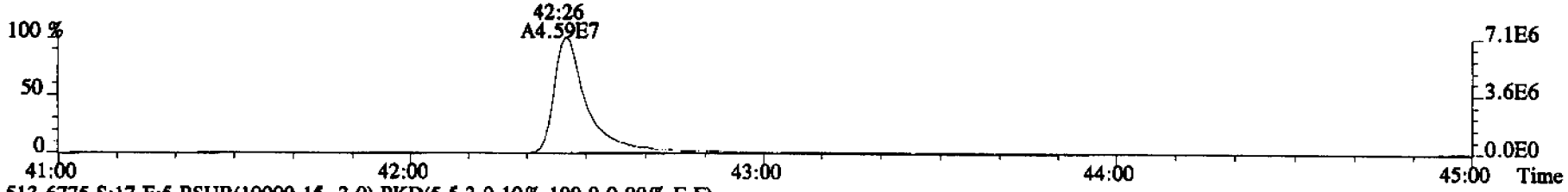
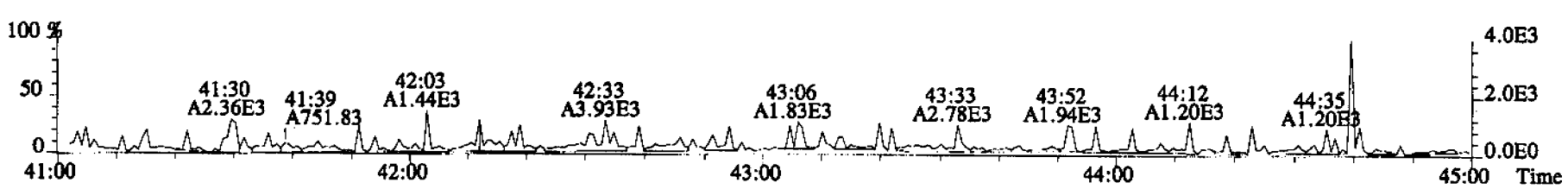
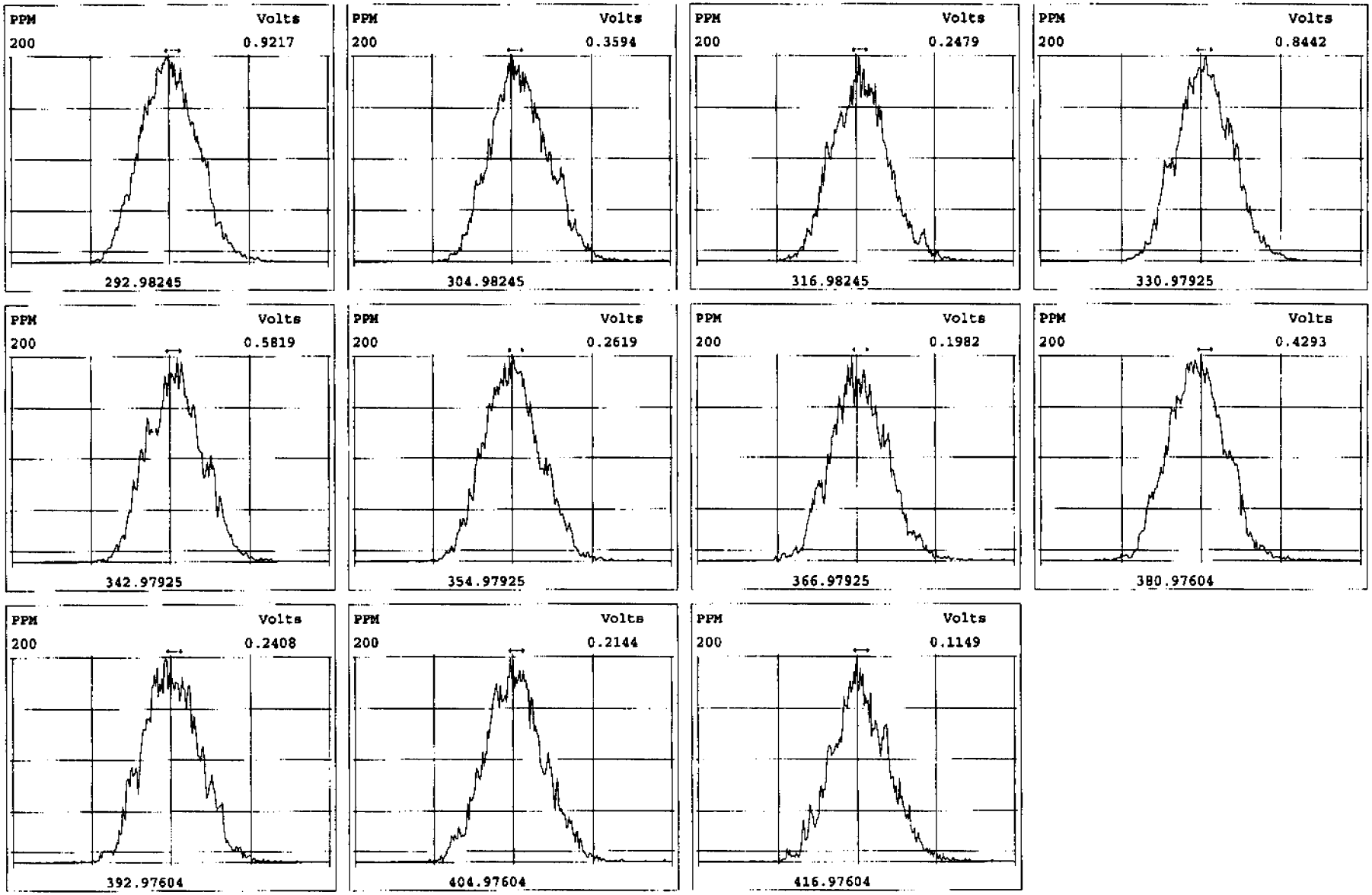


513.6775 S:17 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



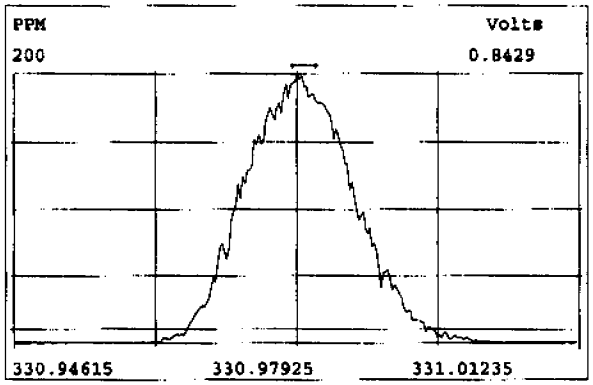
Peak Locate Examination: 2-MAY-2005:22:04 File:RES_CHECK

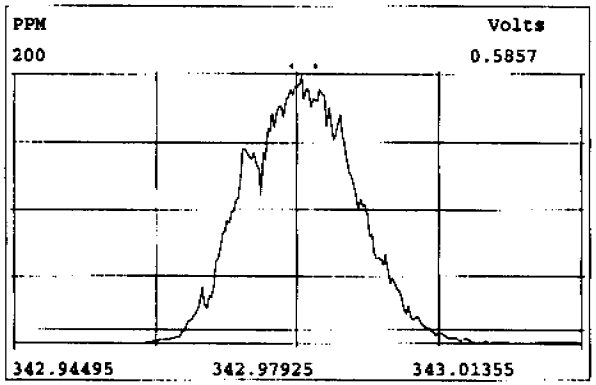
Experiment:OCDD_DB5 Function:1 Reference:PFK

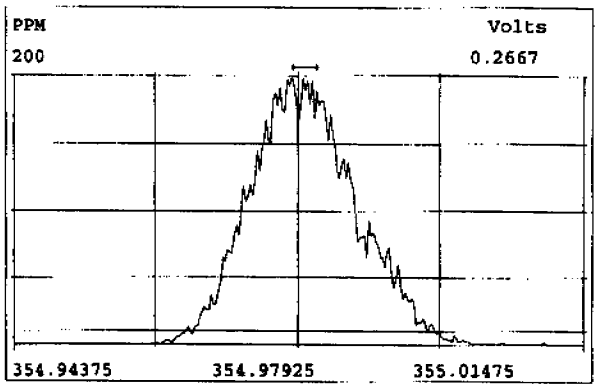


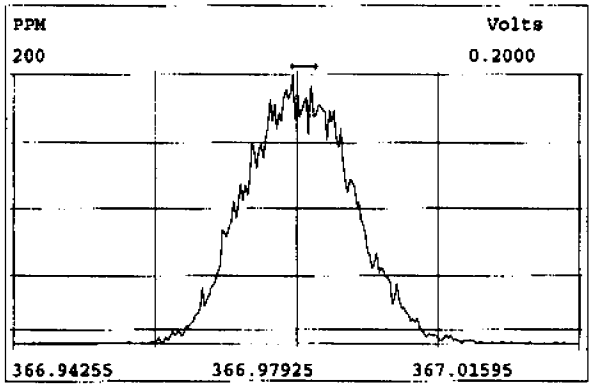
Peak Locate Examination: 2-MAY-2005:22:05 File:RES_CHECK

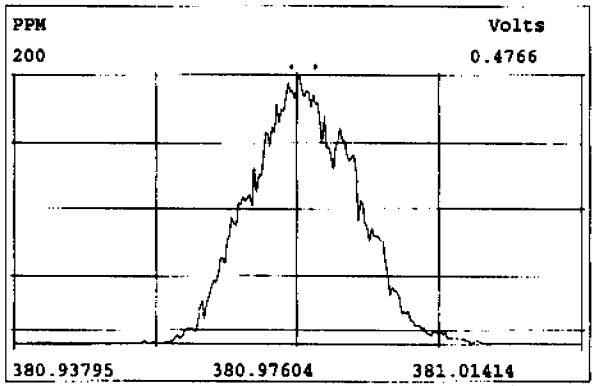
Experiment:OCDD_DB5 Function:2 Reference:PFK

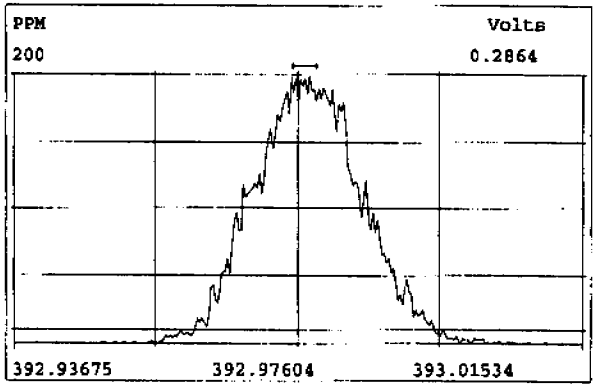


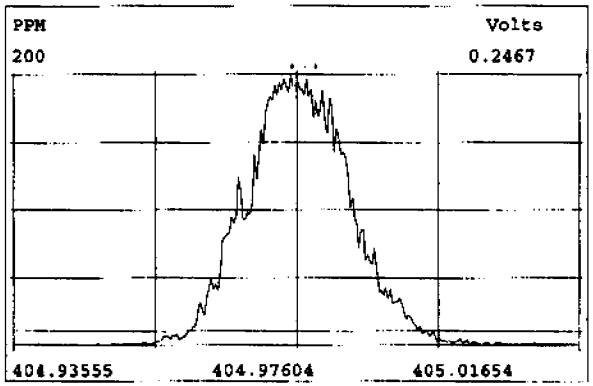


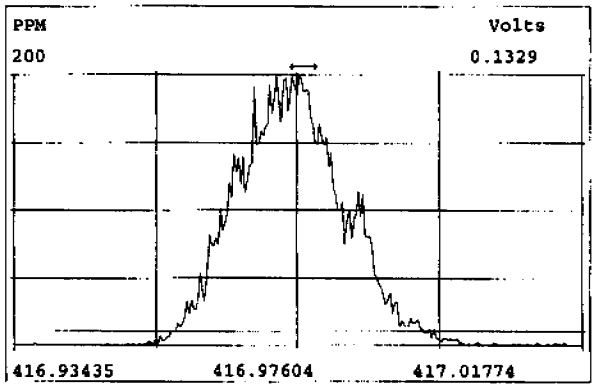






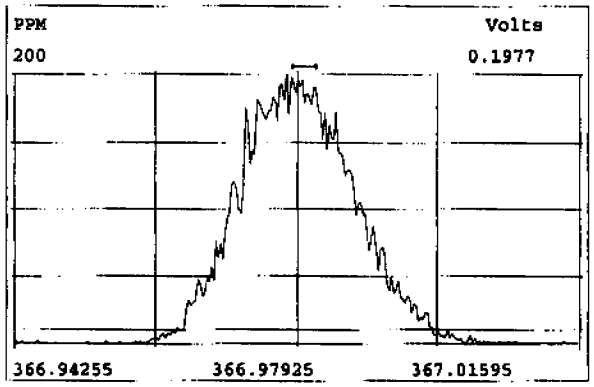


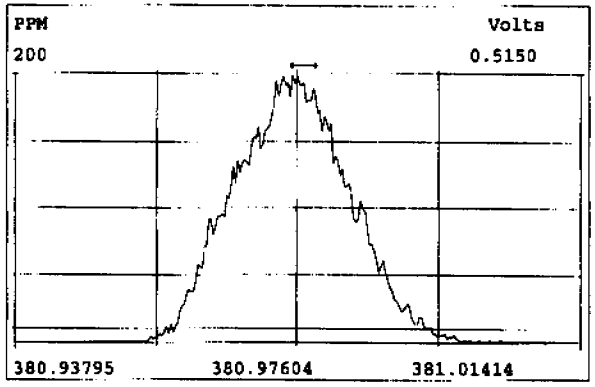


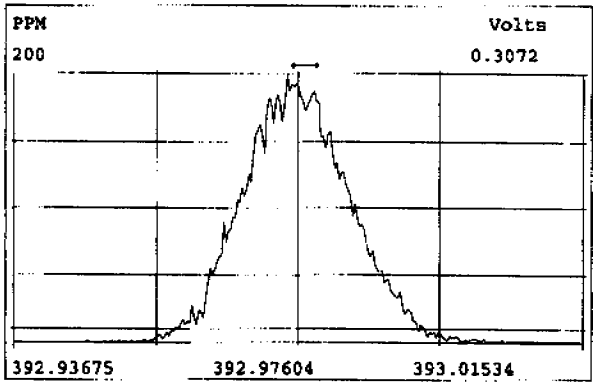


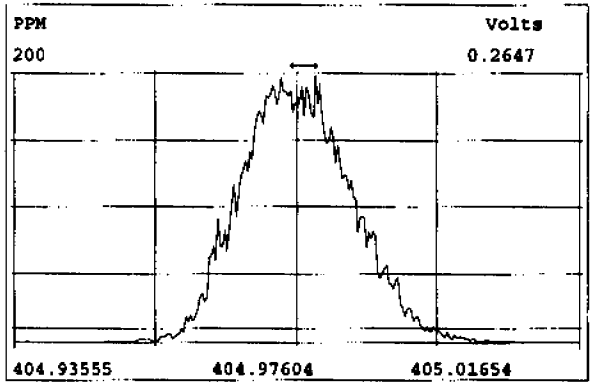
Peak Locate Examination: 2-MAY-2005:22:06 File:RES_CHECK

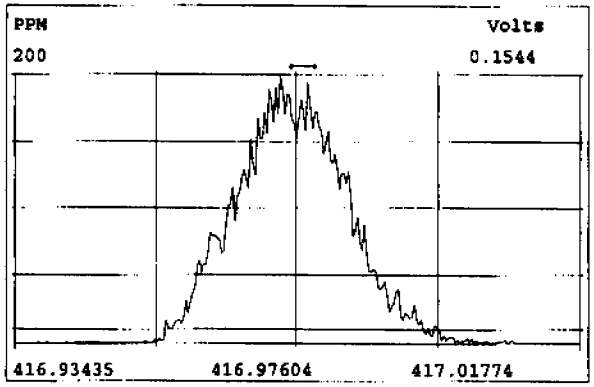
Experiment:OCDD_DB5 Function:3 Reference:PFK

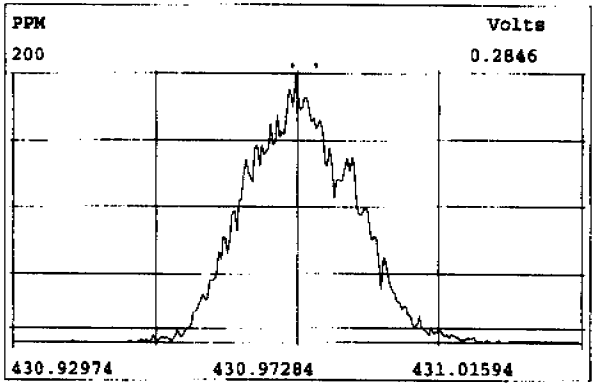


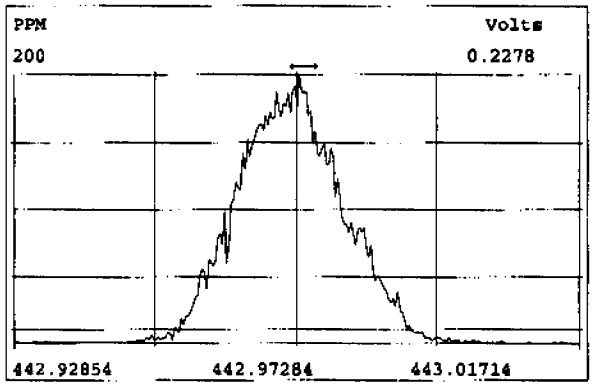


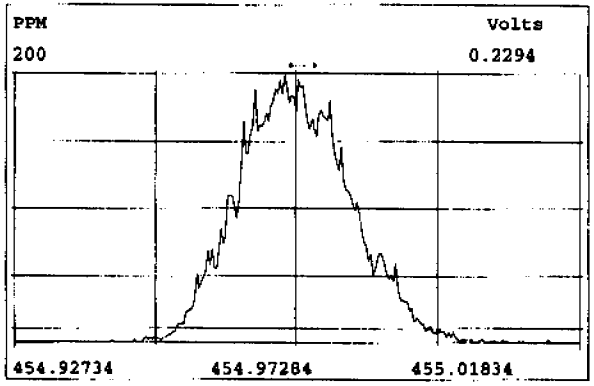






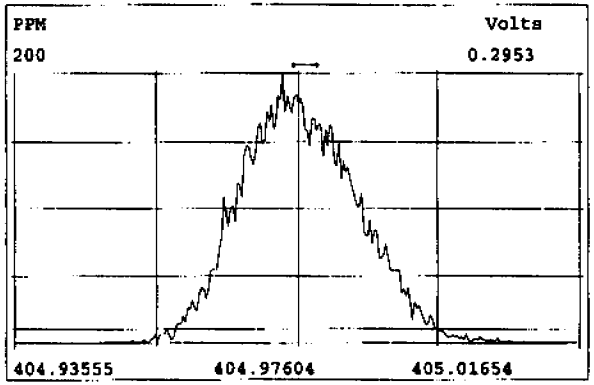


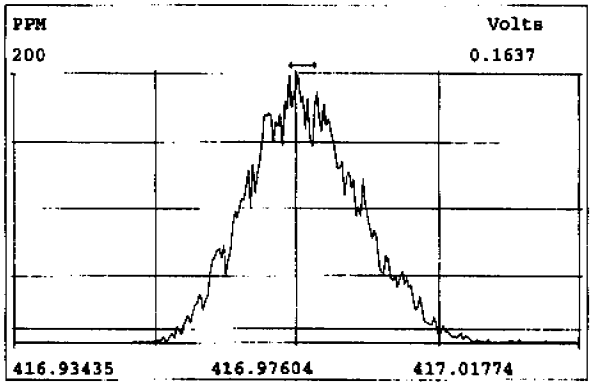


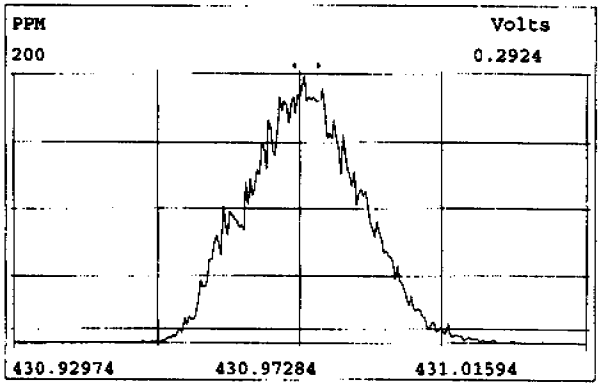


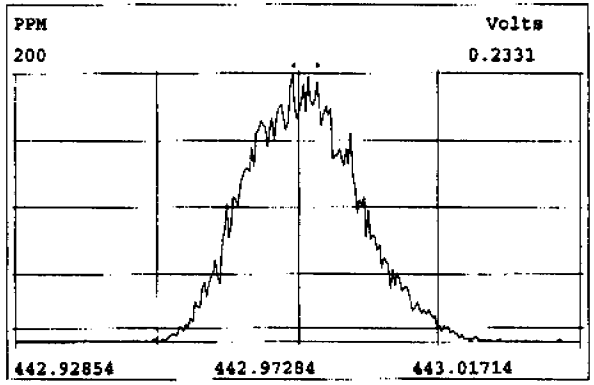
Peak Locate Examination: 2-MAY-2005:22:07 File:RES_CHECK

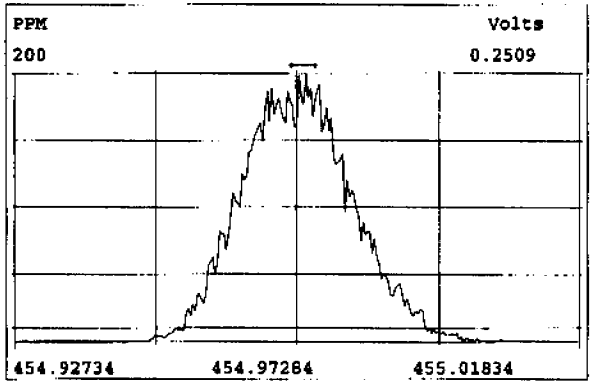
Experiment:OCDD_DB5 Function:4 Reference:PFK

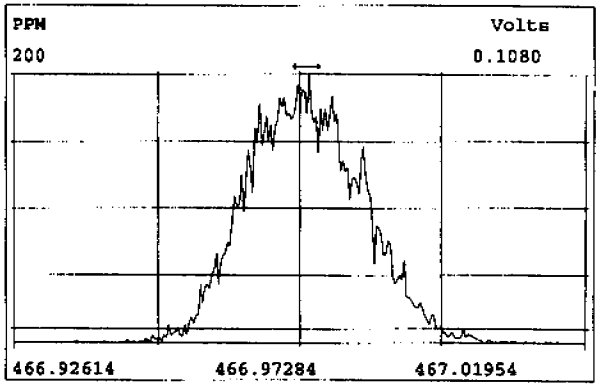


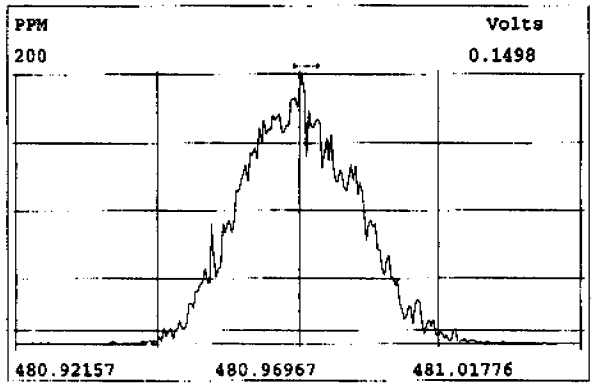






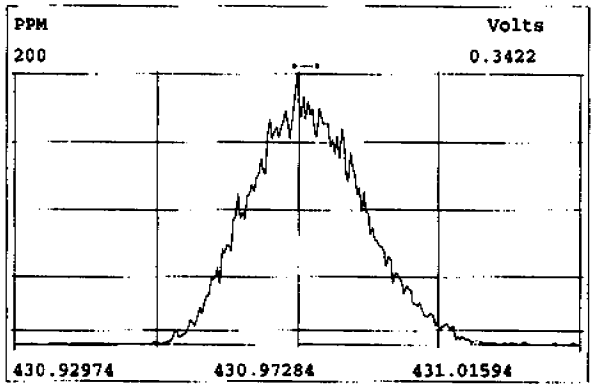


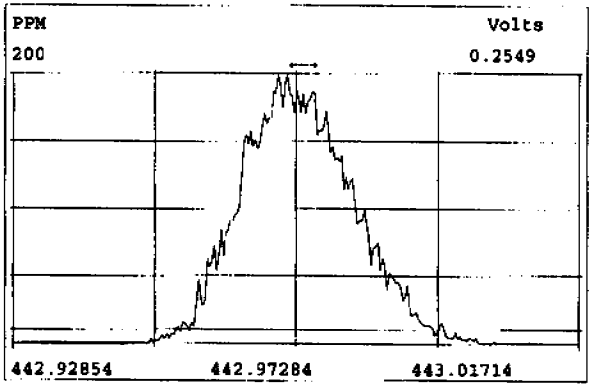


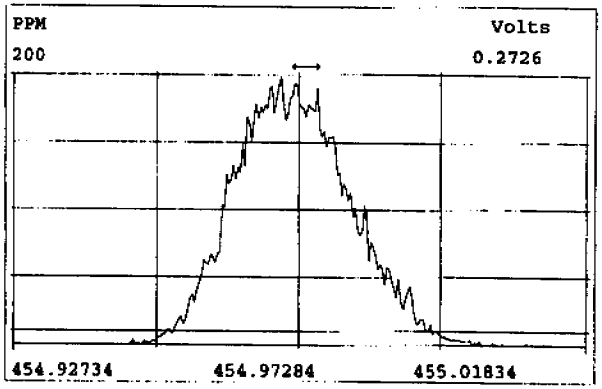


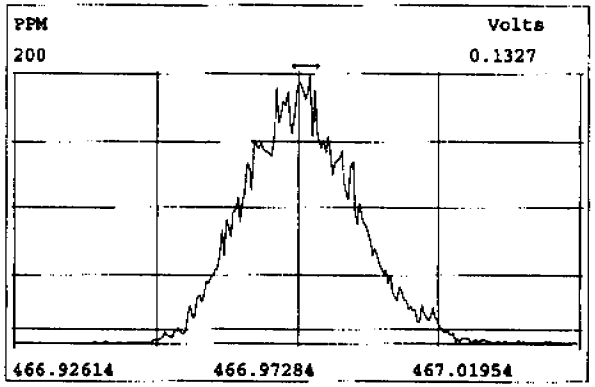
Peak Locate Examination: 2-MAY-2005:22:08 File:RES_CHECK

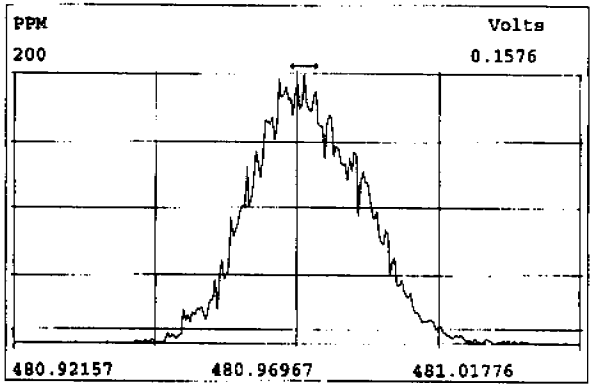
Experiment:OCDD_DB5 Function:5 Reference:PFK

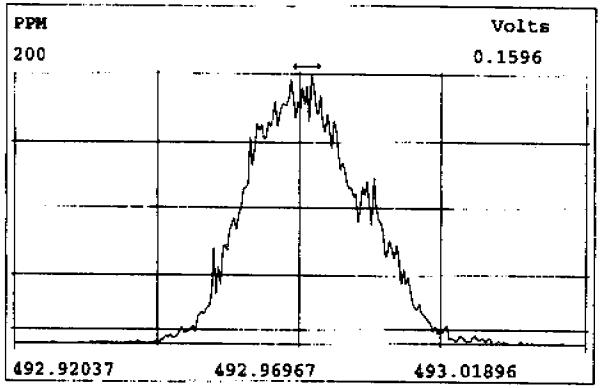


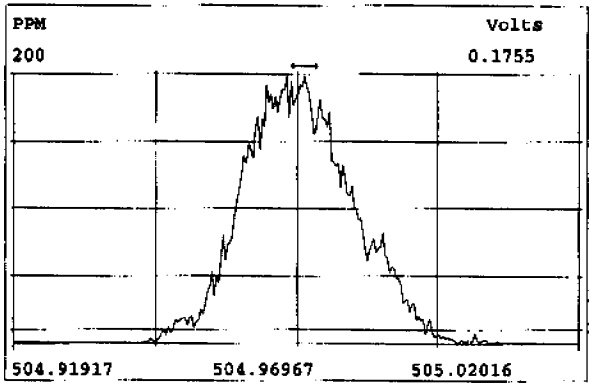


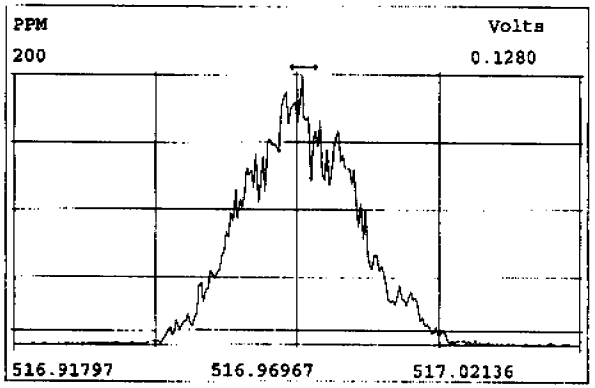












FORM 4A/4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory

CCAL ID: ST050507A1-2

Initial Calibration Date: 4-29-05

Instrument ID: VG-6

GC Column ID: DB-225

VER Data Filename: 050507A1 S#3 Analysis Date: 7-MAY-05 Time: 14:44:45

ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CONC. FOUND	CONC. RANGE (3) (ng/mL)
2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	10.4	8.6 - 11.6 8.0 - 12.0 (8290)
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65-0.89	103.1	76.0 - 131.0 70.0 - 130 (8290)

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6a, Method 1613, under VER.

10/94

Analyst: ams

Date: 5/7/05

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: VG-6 Initial Calibration Date: 4-29-05

DB-225 IS Data Filename: 050507A1 S#1 Analysis Date: 7-MAY-05 Time: 13:22:51

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

ISOMERS	% VALLEY HEIGHT BETWEEN COMPARED PEAKS (1)
2347-TCDF 2378-TCDF	<25%
2378-TCDF 1239-TCDF	<25%

(1) To meet contract requirements, %Valley Height Between Compared Peaks shall not exceed 25% (section 14.4.2.2, Method 1613.

Analyst: DMS

Date: 5/7/05

Client ID: 1613 CS3 050420H Filename: 050507A1 S:3 Acq: 7-MAY-05 14:44:45 ConCal: ST050507A1-2
Lab ID: ST050507A1-2 GC Column ID: DB-225 ICal: 1613TCDFVG6-4-29-05 wt/vol: 1.000 EndCAL: ST050507A1-4

Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	4.75e+07	0.76 y	19:44	1.00	100.0	-
13C-2,3,7,8-TCDF	5.09e+07	0.80 y	23:11	1.04	103.1	103.1
2,3,7,8-TCDF	5.66e+06	0.79 y	23:12	1.07	10.40	

Analyst: AMS

Date: 5/7/05

Alta Analytical Laboratory - Injection Log Run file: 050507A1 Instrument ID: VG-6 GC Column ID: DB-225

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
050507A1	1	CP050507A1-1 DB-225 CPSM	WJL	7-MAY-05	13:22:51	NA	NA
050507A1	2	ST050507A1-1 WHO 29 CS3 050203A	WJL	7-MAY-05	14:03:48	ST050507A1-1	ST050507A1-3
050507A1	3	ST050507A1-2 1613 CS3 050420H	WJL	7-MAY-05	14:44:45	ST050507A1-2	ST050507A1-4
050507A1	4	SOLVENT BLANK	WJL	7-MAY-05	15:25:43	NA	NA
050507A1	5	25868_6743_004 200004082831 7.555g	WJL	7-MAY-05	16:06:40	ST050507A1-1	ST050507A1-3
050507A1	6	25868_6743_005 200004636831 5.280g	WJL	7-MAY-05	16:47:38	ST050507A1-1	ST050507A1-3
050507A1	7	25868_6743_006 200004636731 3.82g	WJL	7-MAY-05	17:28:29	ST050507A1-1	ST050507A1-3
050507A1	8	25868_6743_018 200004003731 4.72g	WJL	7-MAY-05	18:09:24	ST050507A1-1	ST050507A1-3
050507A1	9	25868_6743_019 200004003831 6.138g	WJL	7-MAY-05	18:50:20	ST050507A1-1	ST050507A1-3
050507A1	10	25868_6743_020 200004784831 5.414g	WJL	7-MAY-05	19:31:15	ST050507A1-1	ST050507A1-3
050507A1	11	26076_6749_001 RE73-05-58829 10.01g	WJL	7-MAY-05	20:12:10	ST050507A1-2	ST050507A1-4
050507A1	12	26076_6749_002 RE73-05-58835 10.02g	WJL	7-MAY-05	20:53:05	ST050507A1-2	ST050507A1-4
050507A1	13	26076_6749_003 RE73-05-58841 10.00	WJL	7-MAY-05	21:34:01	ST050507A1-2	ST050507A1-4
050507A1	14	26060_6749_002 WA093-SL- 1:10	WJL	7-MAY-05	22:14:56	ST050507A1-2	ST050507A1-4
050507A1	15	SOLVENT BLANK	WJL	7-MAY-05	22:55:53	NA	NA
050507A1	16	ST050507A1-3 WHO 29 CS3 050203A	WJL	7-MAY-05	23:36:50	ST050507A1-1	ST050507A1-3
050507A1	17	ST050507A1-4 1613 CS3 050420H	WJL	8-MAY-05	00:17:46	ST050507A1-2	ST050507A1-4

HRMS STANDARDS REVIEW CHECKLIST

Attachment 7.F.2

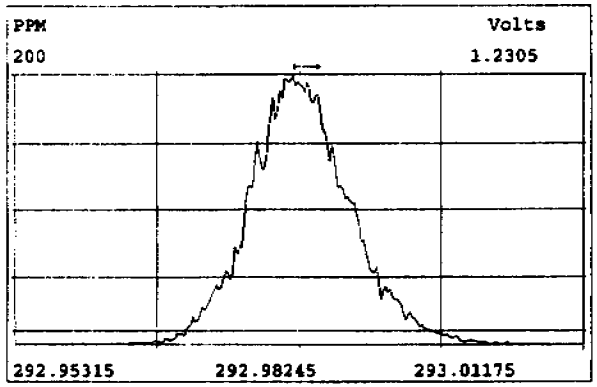
Beginning Calibration ID: ST050507A1-2 Ending Calibration ID: ST050507A1-4

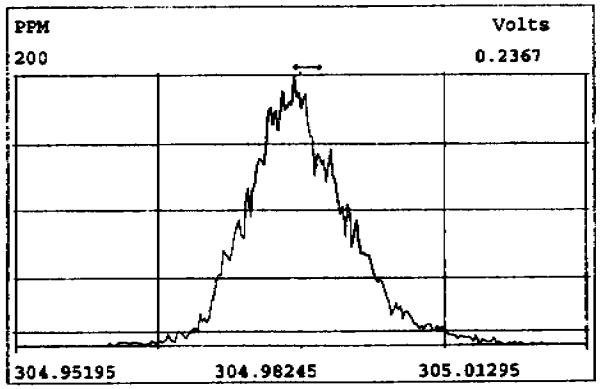
	Beg.CAL	End. CAL	COMMENTS
Calibration Verification/Form 4A/B: Ion abundance within QC limits?	✓	✓	
Calibration Verification/Form 4A/B: Conc within Conc. range?	✓	✓	
Form 5: First and last eluters present? (N/A for DB225)	N/A	N/A	
Form 6A/6B: Relative Retention Times within limits? (N/A for M23, TO9, 1668, DB225)	N/A	N/A	
Cal. Ver. Named correctly? (Ex. ST-Year-Month-Day-VG ID)	✓	✓	
Cal. Verification forms signed and dated for review?	✓	✓	
Appropriate ICAL referenced?	✓	✓	
Run log: Standards named correctly? Correct Instrument listed?	✓	✓	
Run log: Samples within 12-hour shift?		✓	
Mass resolution > 10,000	✓	✓	
2378-TCDD/TCDF valley < 25% (N/A for 1668)	✓	N/A	
All appropriate peaks integrated correctly?	✓	✓	
Manual integrations included?	✓	✓	
8280: Ratios within limits?		N/A	
8280: S/N > 2.5:1		N/A	
8280: CS1 within 12 hrs?		N/A	

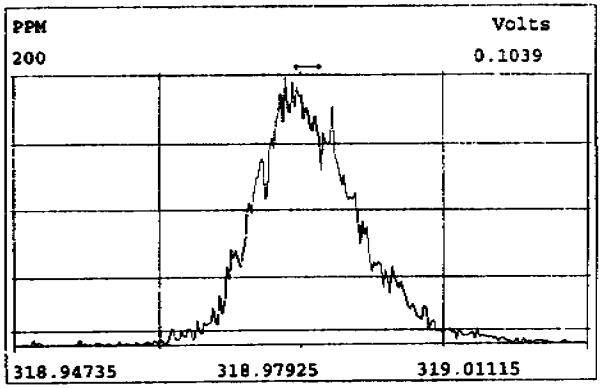
Reviewer Initial/Date: _____ QA* (Random 5% Check) Initial/Date: _____

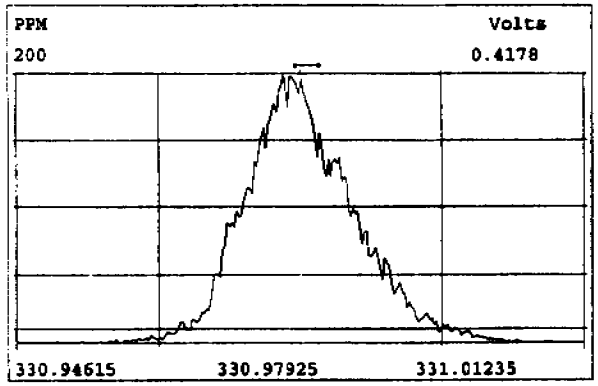
Peak Locate Examination: 7-MAY-2005:13:21 File:050507A1

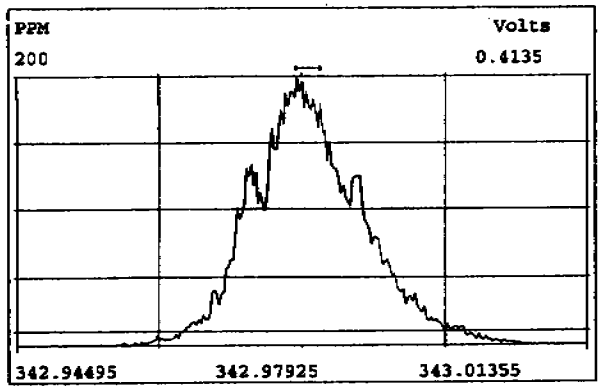
Experiment:TCDF_DB225 Function:1 Reference:PFK

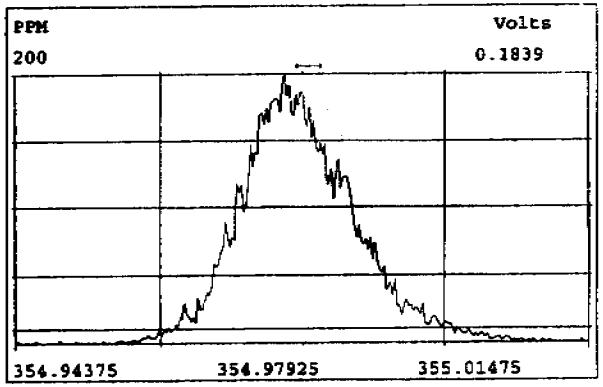


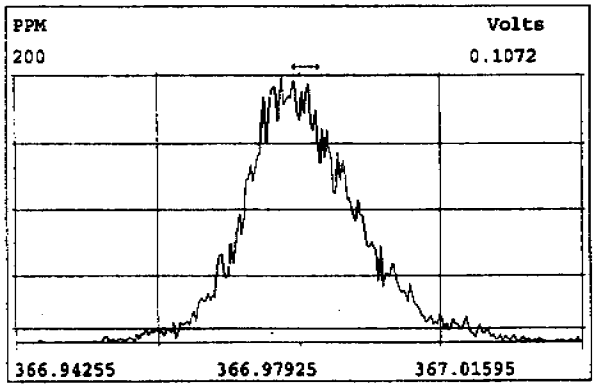


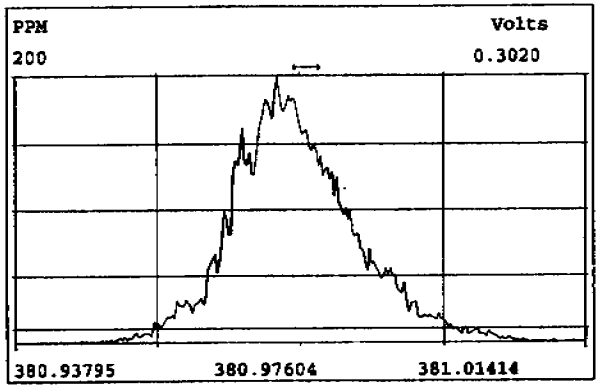




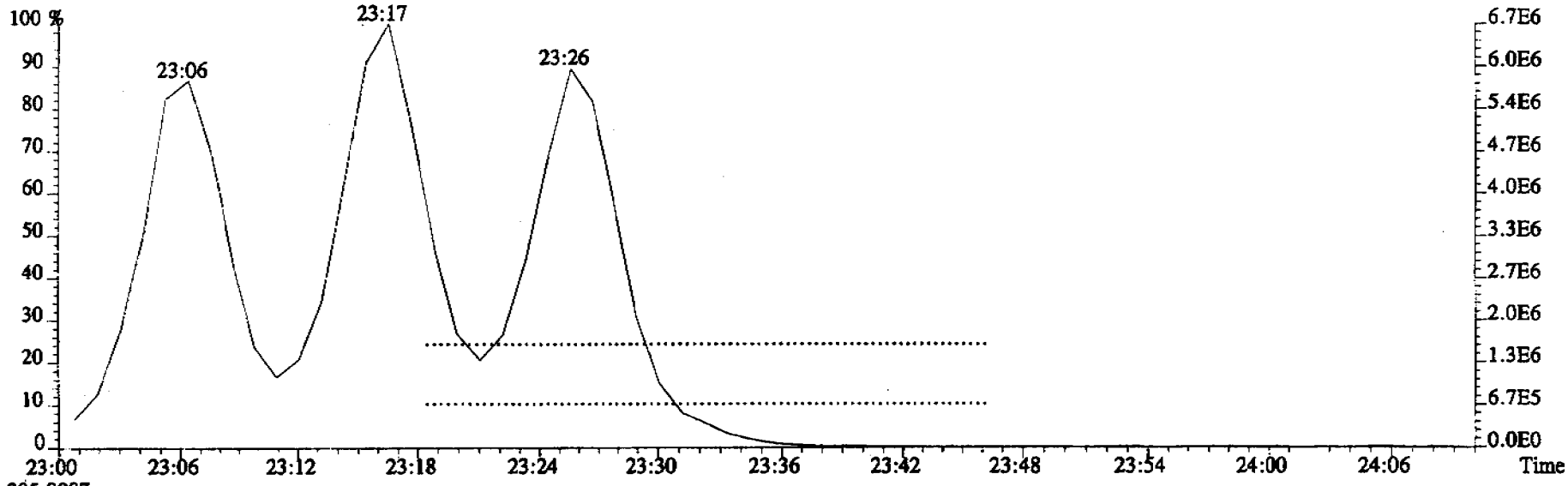




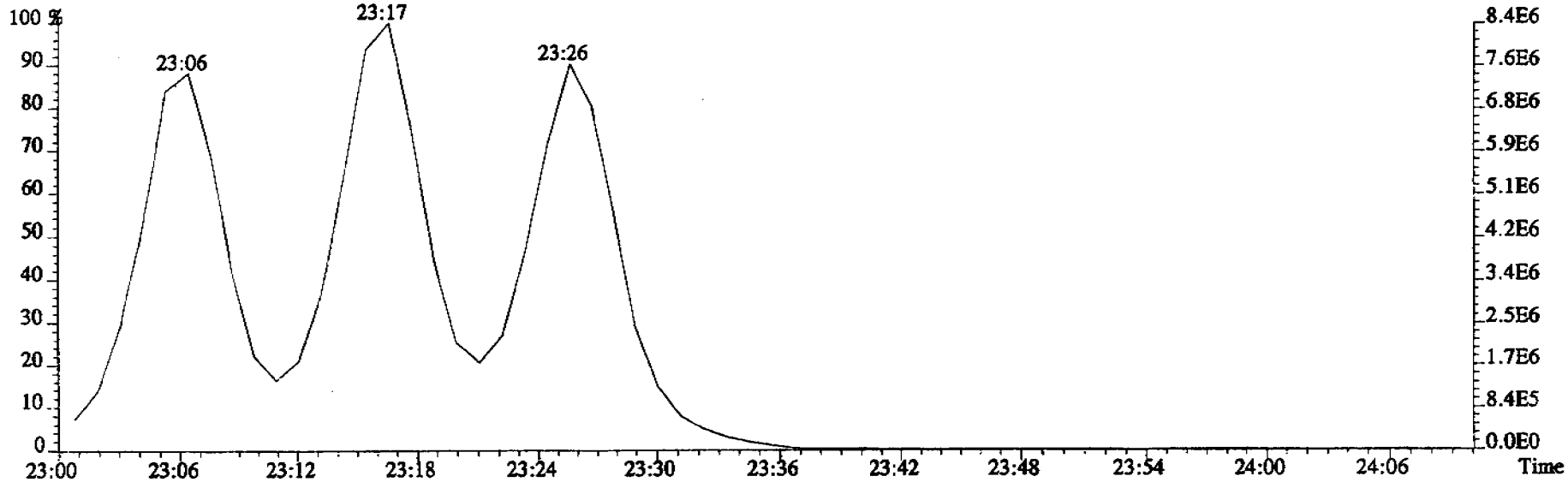




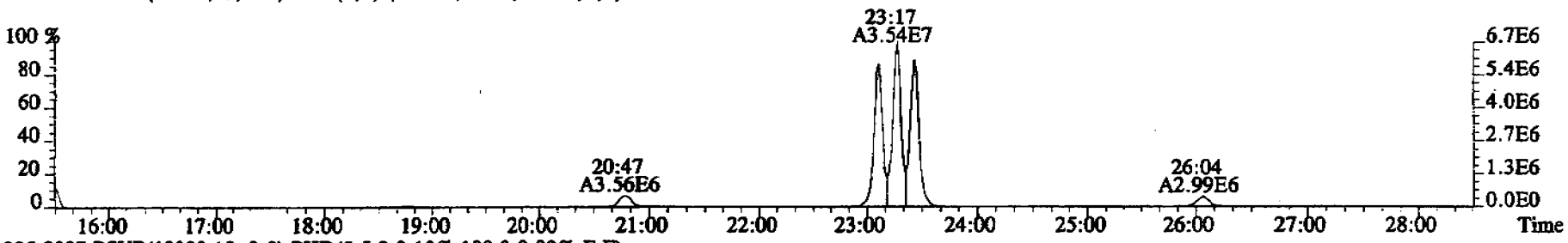
File:050507A1 #1-1173 Acq: 7-MAY-2005 13:22:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory Text:CP050507A1-1 DB-225 CPSM Exp:TCDF_DB225
303.9016



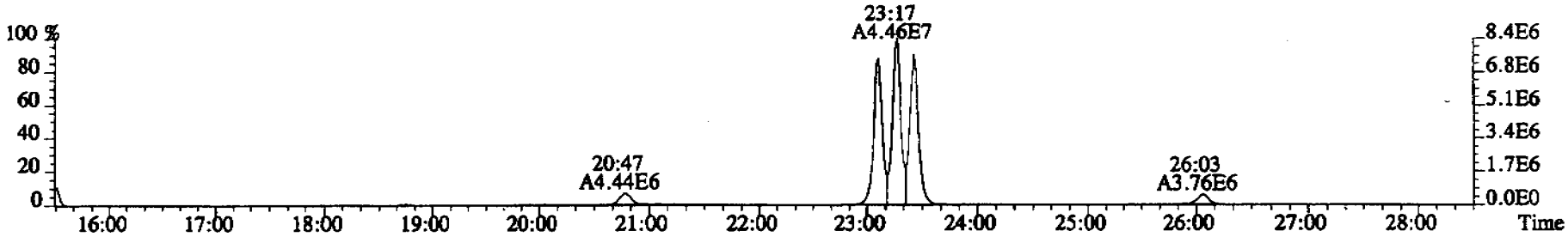
305.8987



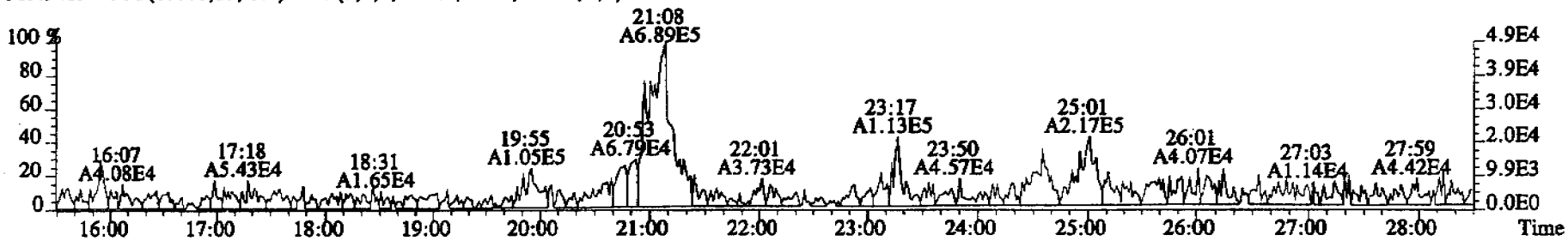
File:050507A1 #1-1173 Acq: 7-MAY-2005 13:22:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory Text:CP050507A1-1 DB-225 CPSM Exp:TCDF_DB225
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



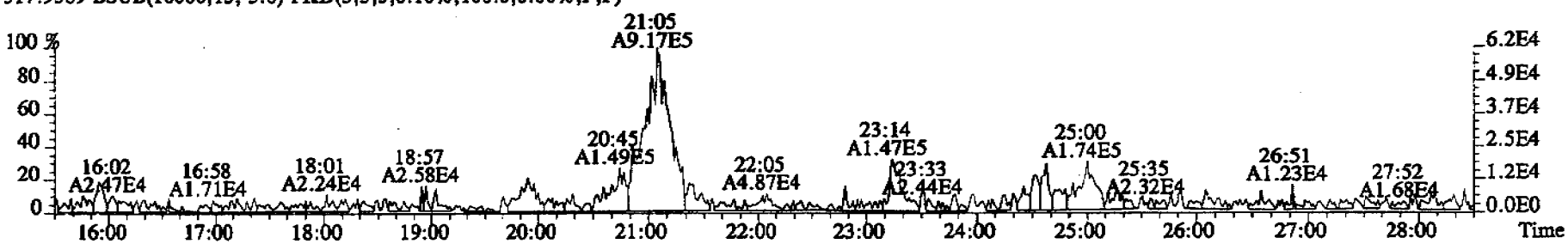
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



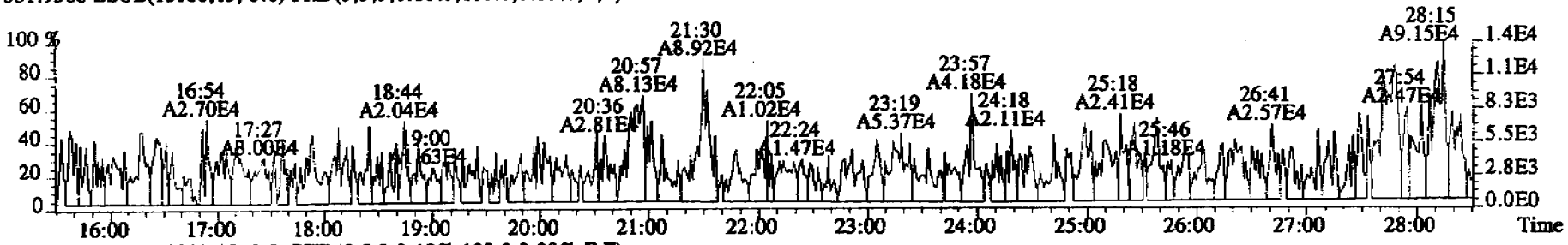
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



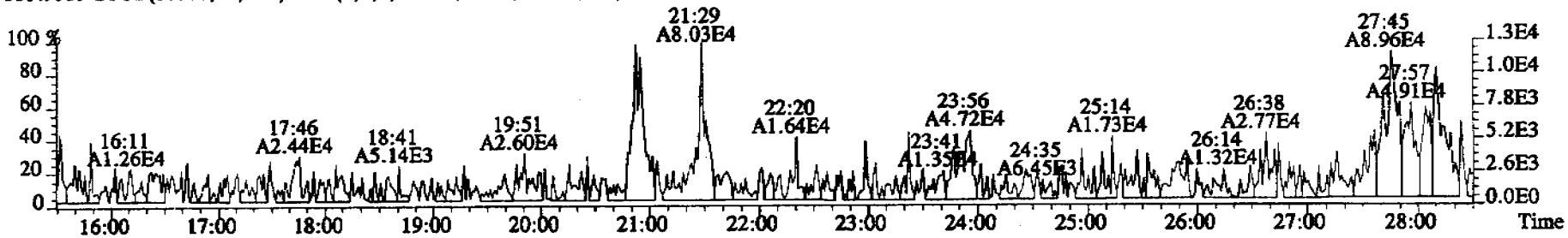
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



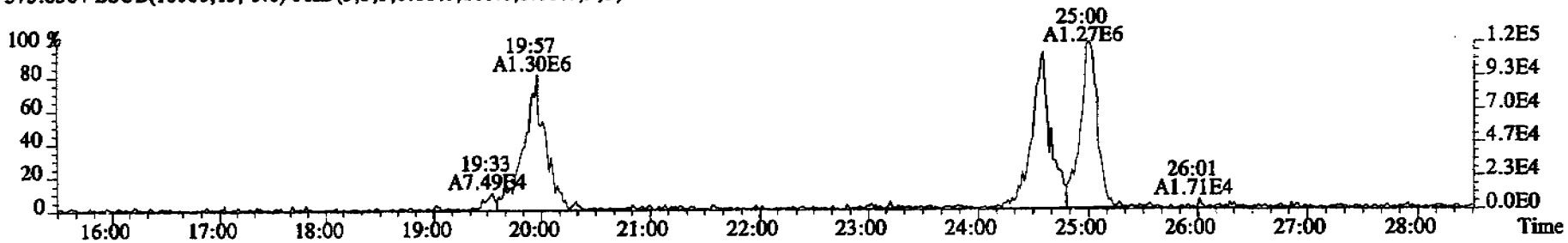
File:050507A1 #1-1173 Acq: 7-MAY-2005 13:22:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory Text:CP050507A1-1 DB-225 CPSM Exp:TCDF_DB225
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



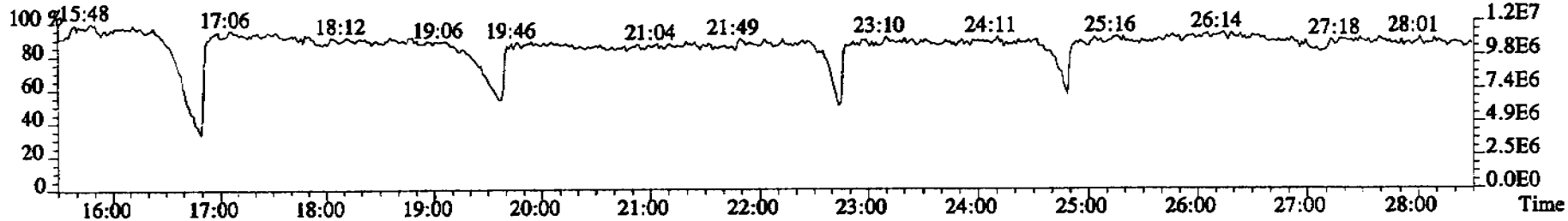
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



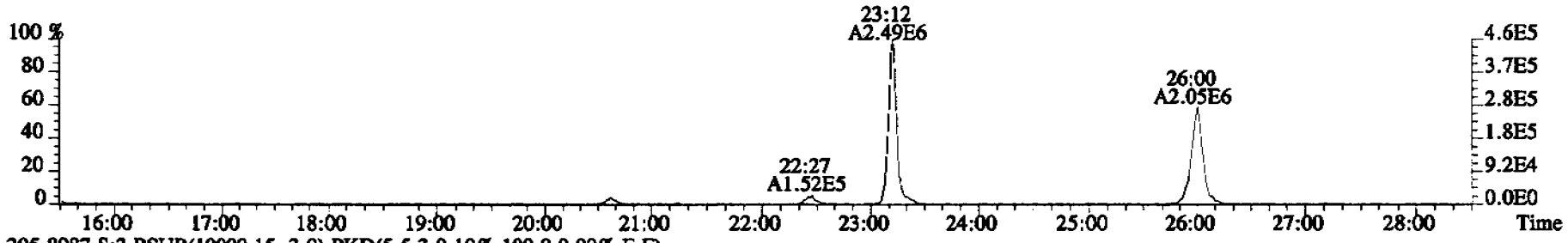
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



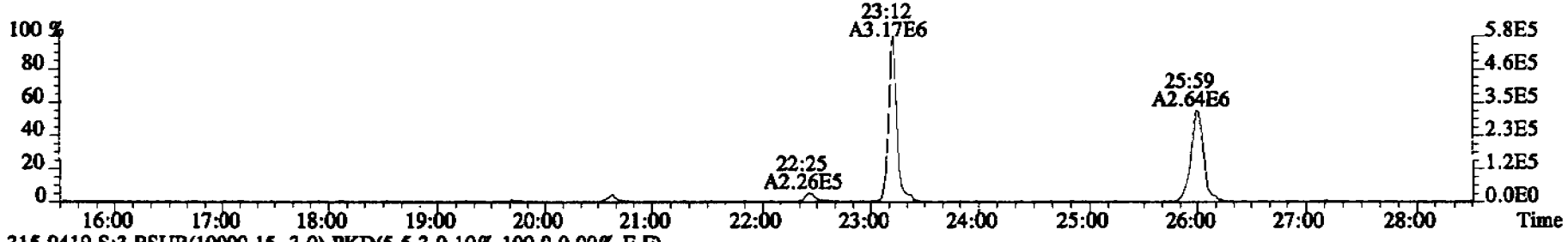
318.9792



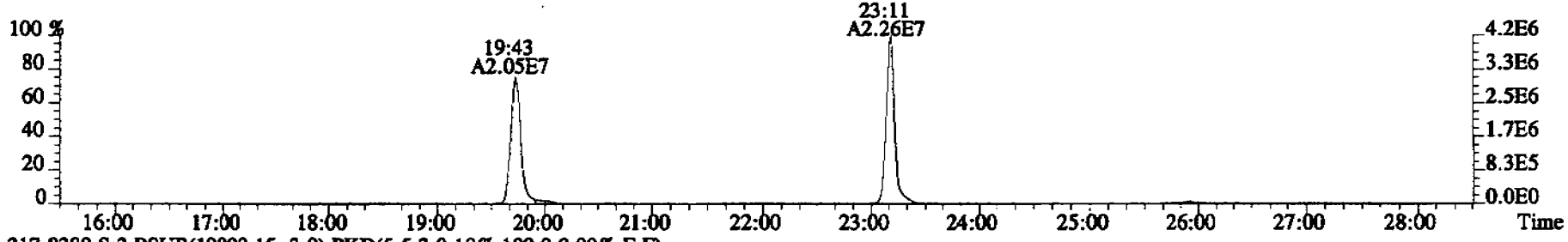
File:050507A1 #1-1173 Acq: 7-MAY-2005 14:44:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory Text:ST050507A1-2 1613 CS3 050420H Exp:TCDF_DB225
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



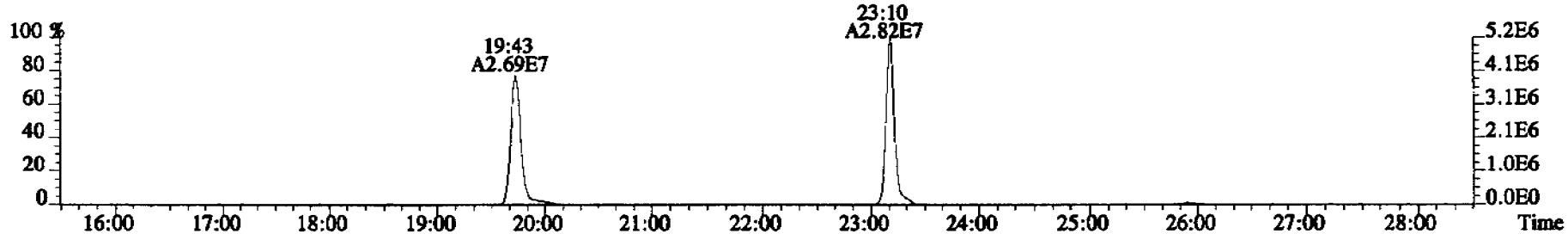
305.8987 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



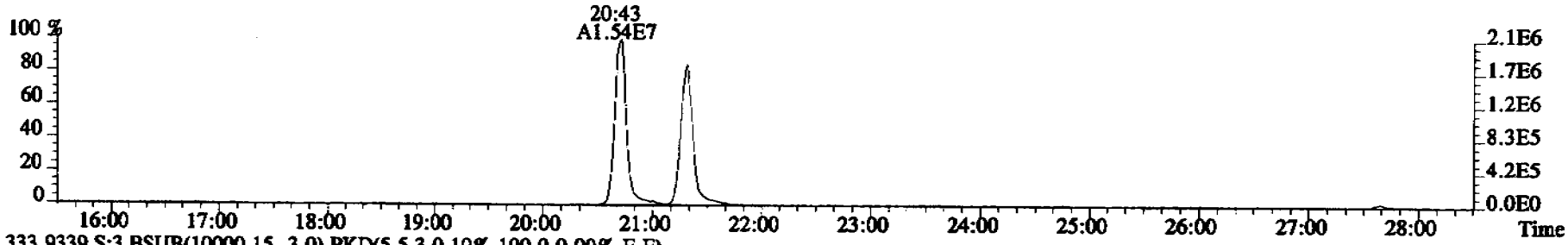
315.9419 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



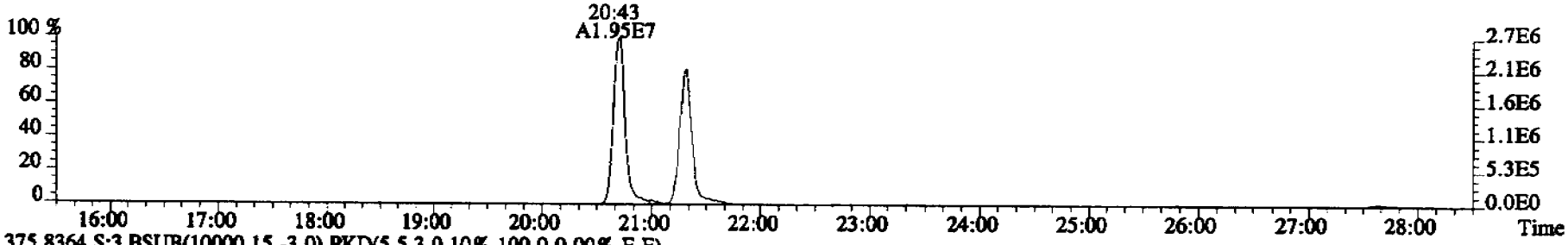
317.9389 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



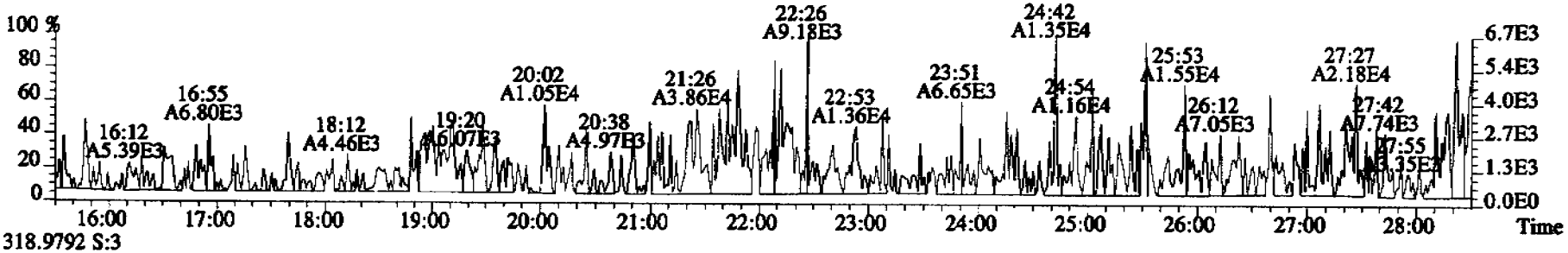
File:050507A1 #1-1173 Acq: 7-MAY-2005 14:44:45 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory Text:ST050507A1-2 1613 CS3 050420H Exp:TCDF_DB225
331.9368 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



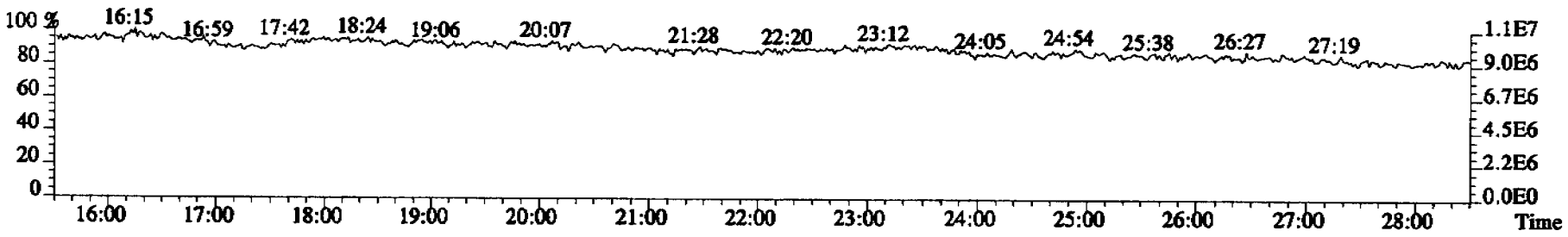
333.9339 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



375.8364 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



318.9792 S:3



FORM 4A/4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory

CCAL ID: ST050507A1-4

Initial Calibration Date: 4-29-05

Instrument ID: VG-6 GC Column ID: DB-225

VER Data Filename: 050507A1 S#17 Analysis Date: 8-MAY-05 Time: 00:17:46

ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CONC. FOUND	CONC. RANGE (3) (ng/mL)
2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	10.4	8.6 - 11.6 8.0 - 12.0 (8290)
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	94.3	76.0 - 131.0 70.0 - 130 (8290)

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6a, Method 1613, under VER.

10/94

Analyst: [signature]

Date: 5/24/05

Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	4.71e+07	0.80 y	19:43	1.00	100.0	-
13C-2,3,7,8-TCDF	4.62e+07	0.79 y	23:11	1.04	94.26	94.3
2,3,7,8-TCDF	5.14e+06	0.79 y	23:12	1.07	10.41	

Analyst: [signature]

Date: 5/7/05

Alta Analytical Laboratory - Injection Log Run file: 050507A1 Instrument ID: VG-6 GC Column ID: DB-225

Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
050507A1	1	CP050507A1-1 DB-225 CPSM	WJL	7-MAY-05	13:22:51	NA	NA
050507A1	2	ST050507A1-1 WHO 29 CS3 050203A	WJL	7-MAY-05	14:03:48	ST050507A1-1	ST050507A1-3
050507A1	3	ST050507A1-2 1613 CS3 050420H	WJL	7-MAY-05	14:44:45	ST050507A1-2	ST050507A1-4
050507A1	4	SOLVENT BLANK	WJL	7-MAY-05	15:25:43	NA	NA
050507A1	5	25868_6743_004 200004082831 7.555g	WJL	7-MAY-05	16:06:40	ST050507A1-1	ST050507A1-3
050507A1	6	25868_6743_005 200004636831 5.280g	WJL	7-MAY-05	16:47:38	ST050507A1-1	ST050507A1-3
050507A1	7	25868_6743_006 200004636731 3.82g	WJL	7-MAY-05	17:28:29	ST050507A1-1	ST050507A1-3
050507A1	8	25868_6743_018 200004003731 4.72g	WJL	7-MAY-05	18:09:24	ST050507A1-1	ST050507A1-3
050507A1	9	25868_6743_019 200004003831 6.138g	WJL	7-MAY-05	18:50:20	ST050507A1-1	ST050507A1-3
050507A1	10	25868_6743_020 200004784831 5.414g	WJL	7-MAY-05	19:31:15	ST050507A1-1	ST050507A1-3
050507A1	11	26076_6749_001 RE73-05-58829 10.01g	WJL	7-MAY-05	20:12:10	ST050507A1-2	ST050507A1-4
050507A1	12	26076_6749_002 RE73-05-58835 10.02g	WJL	7-MAY-05	20:53:05	ST050507A1-2	ST050507A1-4
050507A1	13	26076_6749_003 RE73-05-58841 10.00	WJL	7-MAY-05	21:34:01	ST050507A1-2	ST050507A1-4
050507A1	14	26060_6749_002 WA093-SL- 1:10	WJL	7-MAY-05	22:14:56	ST050507A1-2	ST050507A1-4
050507A1	15	SOLVENT BLANK	WJL	7-MAY-05	22:55:53	NA	NA
050507A1	16	ST050507A1-3 WHO 29 CS3 050203A	WJL	7-MAY-05	23:36:50	ST050507A1-1	ST050507A1-3
050507A1	17	ST050507A1-4 1613 CS3 050420H	WJL	8-MAY-05	00:17:46	ST050507A1-2	ST050507A1-4

HRMS STANDARDS REVIEW CHECKLIST

Attachment 7.F.2

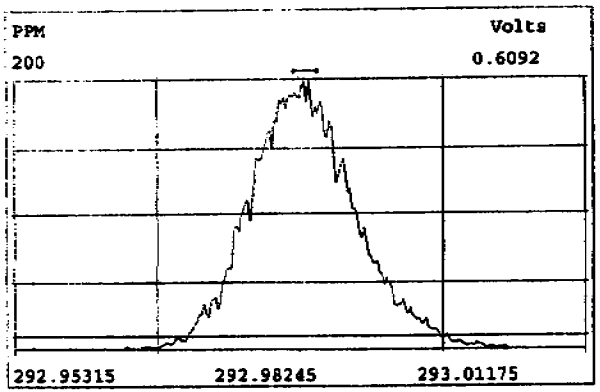
Beginning Calibration ID: ST050507A1-2 Ending Calibration ID: ST050507A1-4

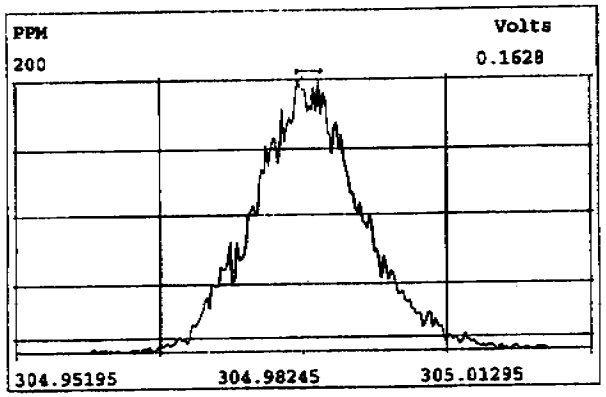
	Beg.CAL	End. CAL	COMMENTS
Calibration Verification/Form 4A/B: Ion abundance within QC limits?	✓	✓	
Calibration Verification/Form 4A/B: Conc within Conc. range?	✓	✓	
Form 5: First and last eluters present? (N/A for DB225)	N/A	N/A	
Form 6A/6B: Relative Retention Times within limits? (N/A for M23, TO9, 1668, DB225)	N/A	N/A	
Cal. Ver. Named correctly? (Ex. ST-Year-Month-Day-VG ID)	✓	✓	
Cal. Verification forms signed and dated for review?	✓	✓	
Appropriate ICAL referenced?	✓	✓	
Run log: Standards named correctly? Correct Instrument listed?	✓	✓	
Run log: Samples within 12-hour shift?		✓	
Mass resolution > 10,000	✓	✓	
2378-TCDD/TCDF valley < 25% (N/A for 1668)	✓	N/A	
All appropriate peaks integrated correctly?	✓	✓	
Manual integrations included?	✓	✓	
8280: Ratios within limits?		N/A	
8280: S/N > 2.5:1		N/A	
8280: CS1 within 12 hrs?		N/A	

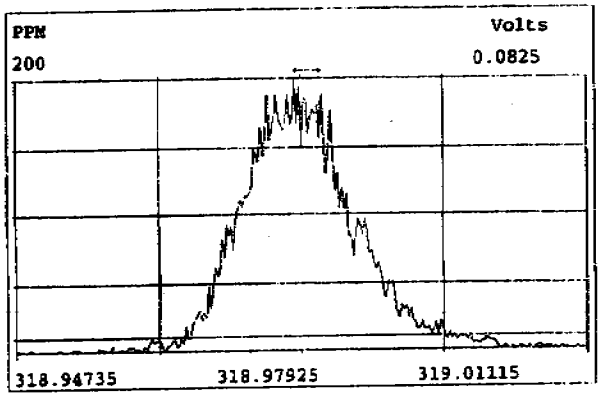
Reviewer Initial/Date: _____ QA* (Random 5% Check) Initial/Date: _____

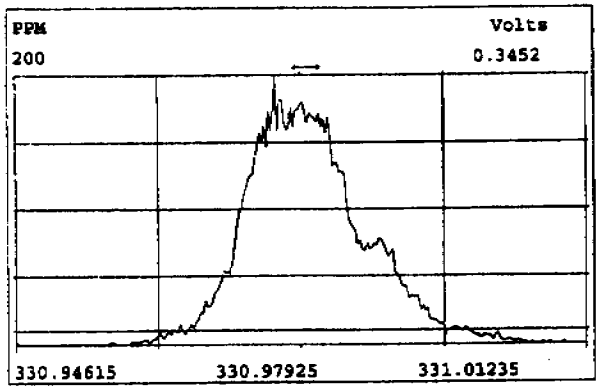
Peak Locate Examination: 8-MAY-2005:01:05 File:RES_CHECK

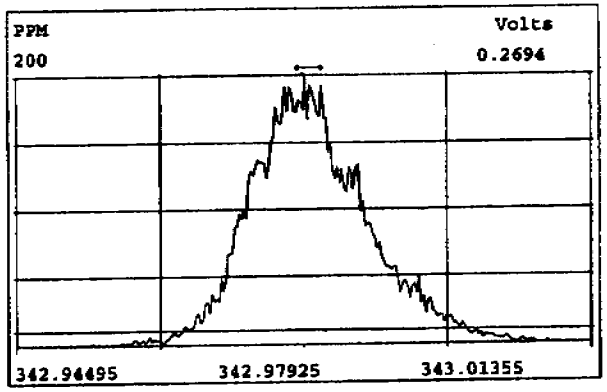
Experiment:TCDF_DB225 Function:1 Reference:PPK

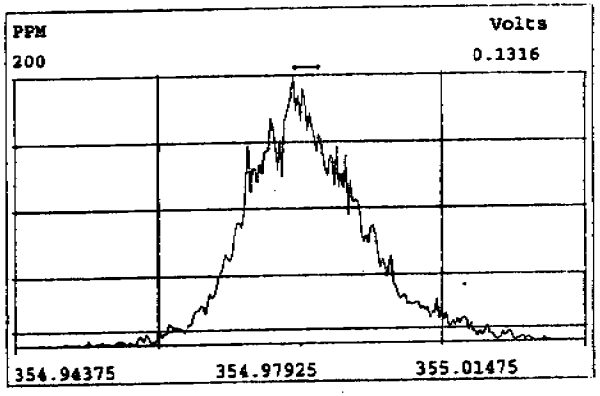


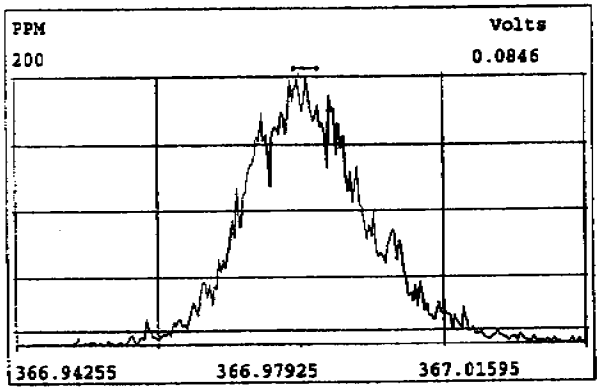


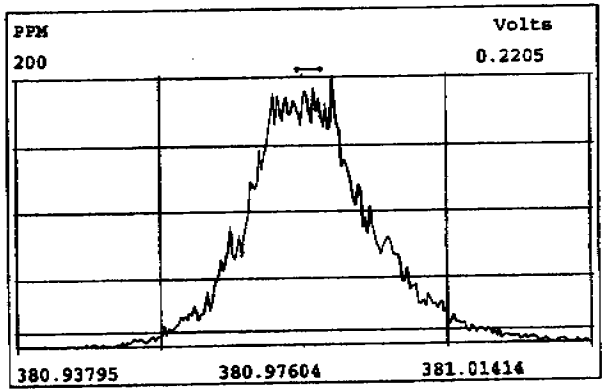




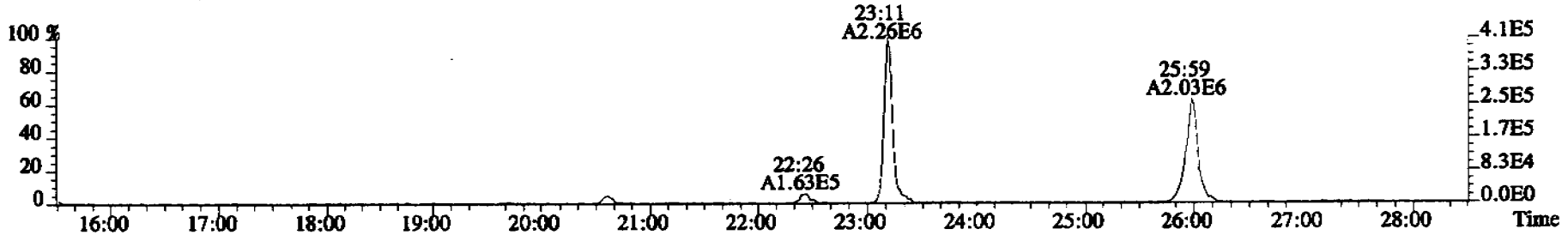




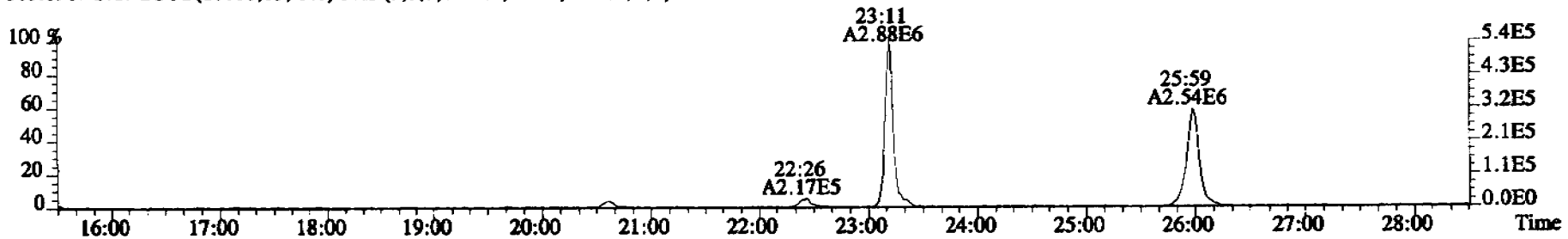




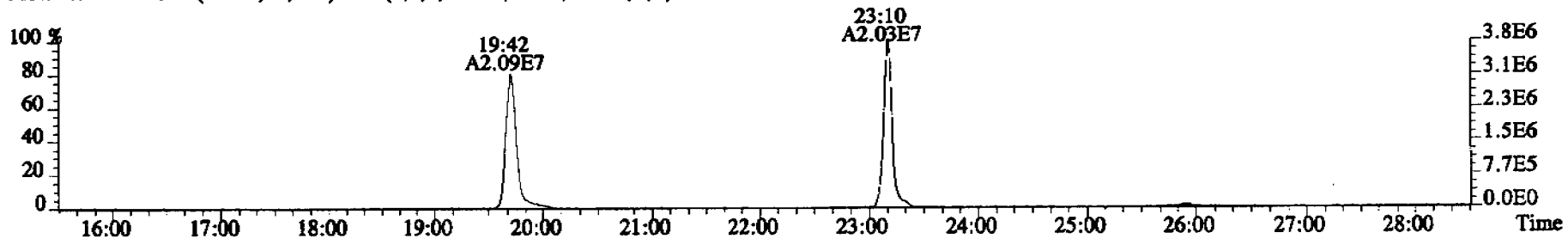
File:050507A1 #1-1173 Acq: 8-MAY-2005 00:17:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#17 File Text:Alta Analytical Laboratory Text:ST050507A1-4 1613 CS3 050420H Exp:TCDF_DB225
303.9016 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



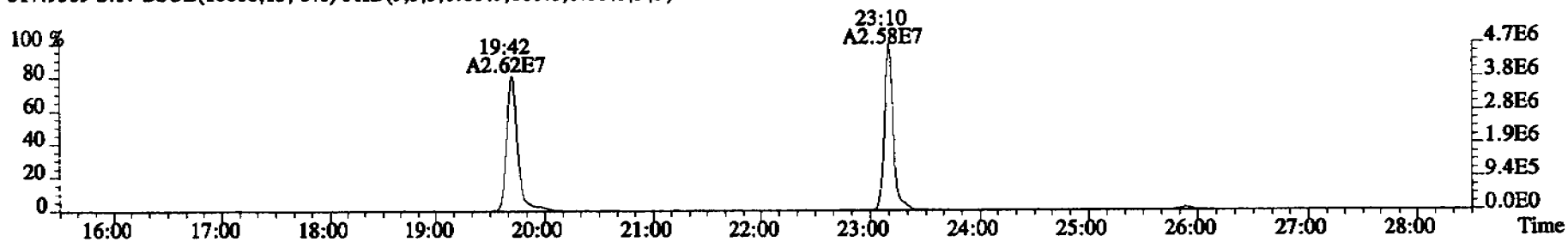
305.8987 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



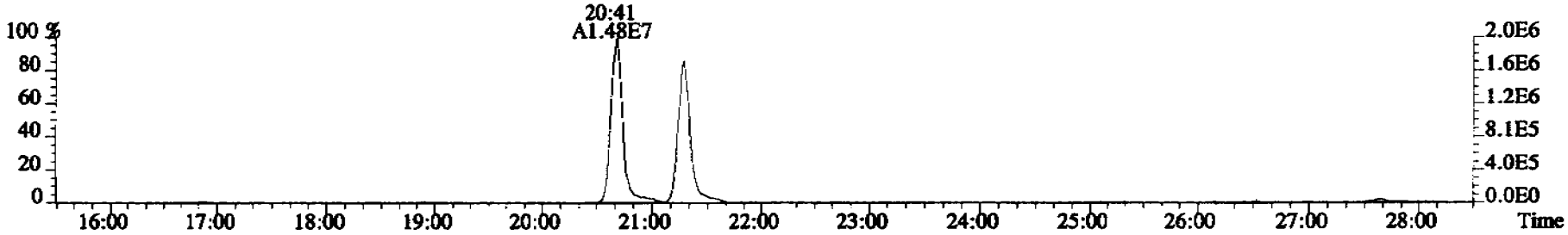
315.9419 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



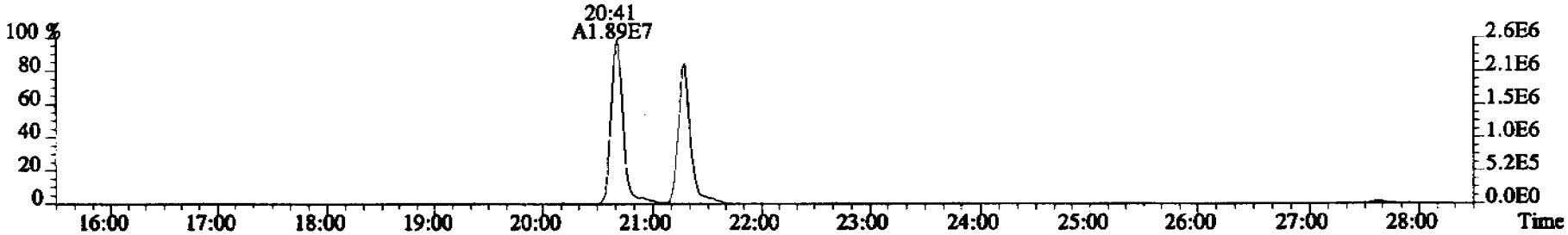
317.9389 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



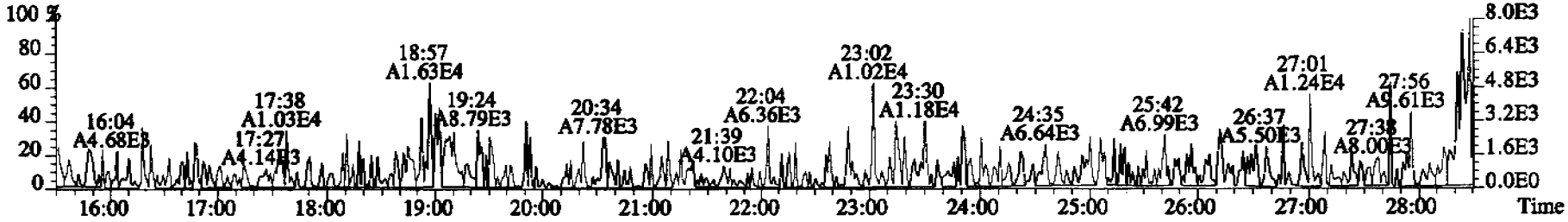
File:050507A1 #1-1173 Acq: 8-MAY-2005 00:17:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#17 File Text:Alta Analytical Laboratory Text:ST050507A1-4 1613 CS3 050420H Exp:TCDF_DB225
331.9368 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



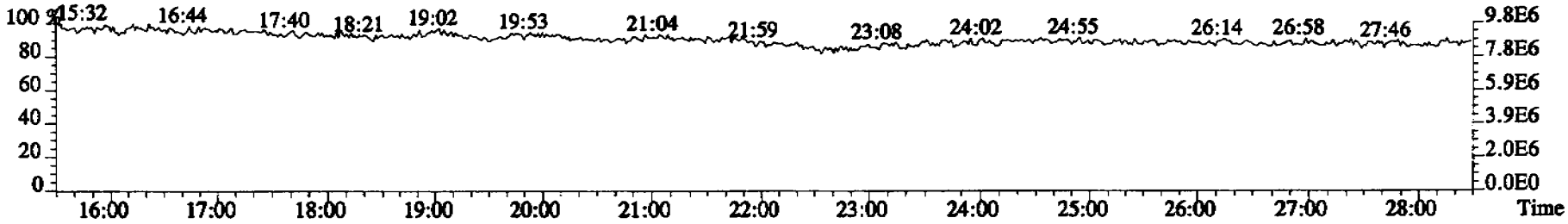
333.9339 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



375.8364 S:17 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



318.9792 S:17



SAMPLE DATA

Client ID: 0_6749_MB001 Filename: 050430D2 S:4 Acq:1-MAY-05 03:20:41 ConCal: ST050430D2-1
Lab ID: 0_6749_MB001 GC Column ID: db-5 ICal: 1613VG7-4-23-05 wt/vol:10.000 EndCAL: ST050430D2-2

	Name	Resp	RA		RRF	RT	Conc	Qual	noise	Pac	DL
	2,3,7,8-TCDD	*	*	n	1.06	NotF	*		1950	2.5	0.152
	1,2,3,7,8-PeCDD	*	*	n	0.99	NotF	*		2160	2.5	0.148
	1,2,3,4,7,8-HxCDD	*	*	n	1.11	NotF	*		1710	2.5	0.237
	1,2,3,6,7,8-HxCDD	*	*	n	1.07	NotF	*		1710	2.5	0.231
	1,2,3,7,8,9-HxCDD	*	*	n	1.15	NotF	*		1710	2.5	0.221
	1,2,3,4,6,7,8-HpCDD	*	*	n	1.05	NotF	*		1660	2.5	0.255
	OCDD	*	*	n	1.04	NotF	*		5740	1.0	0.715
	2,3,7,8-TCDF	*	*	n	1.05	NotF	*		2810	2.5	0.163
	1,2,3,7,8-PeCDF	*	*	n	0.95	NotF	*		4310	2.5	0.320
	2,3,4,7,8-PeCDF	*	*	n	1.08	NotF	*		4310	2.5	0.299
	1,2,3,4,7,8-HxCDF	5.67e+04	1.39	y	1.19	34:10	0.188		*	2.5	*
	1,2,3,6,7,8-HxCDF	*	*	n	1.22	NotF	*		1360	2.5	0.0633
	2,3,4,6,7,8-HxCDF	*	*	n	1.20	NotF	*		1360	2.5	0.0794
	1,2,3,7,8,9-HxCDF	*	*	n	1.13	NotF	*		1360	2.5	0.155
	1,2,3,4,6,7,8-HpCDF	7.15e+04	1.09	y	1.38	37:43	0.305		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	*	*	n	1.23	NotF	*		2040	2.5	0.208
	OCDF	*	*	n	1.02	NotF	*		4170	2.5	0.854

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	*	*		1950	0.152
Total Penta-Dioxins	*	*		2160	0.148
Total Hexa-Dioxins	*	*		1710	0.229
Total Hepta-Dioxins	*	*		1660	0.255
Total Tetra-Furans	*	*		2810	0.163
Total Penta-Furans	0.00	0.00		4310	0.309
Total Hexa-Furans	0.347	0.347		*	*
Total Hepta-Furans	0.305	0.305		*	*

								Rec	Qual
IS	13C-2,3,7,8-TCDD	4.96e+07	0.80	y	1.12	27:02	153	76.5	
IS	13C-1,2,3,7,8-PeCDD	4.57e+07	0.63	y	0.89	31:43	179	89.4	
IS	13C-1,2,3,4,7,8-HxCDD	2.78e+07	1.28	y	0.83	35:03	170	85.1	
IS	13C-1,2,3,6,7,8-HxCDD	3.58e+07	1.26	y	1.00	35:10	183	91.7	
IS	13C-1,2,3,4,6,7,8-HpCDD	2.87e+07	1.07	y	0.82	39:00	178	88.9	
IS	13C-OCDD	3.80e+07	0.90	y	0.74	42:18	261	65.2	
IS	13C-2,3,7,8-TCDF	7.14e+07	0.81	y	1.02	26:13	146	73.2	
IS	13C-1,2,3,7,8-PeCDF	6.86e+07	1.60	y	0.90	30:31	159	79.4	
IS	13C-2,3,4,7,8-PeCDF	6.62e+07	1.59	y	0.87	31:27	158	79.1	
IS	13C-1,2,3,4,7,8-HxCDF	5.08e+07	0.52	y	1.27	34:09	205	102	
IS	13C-1,2,3,6,7,8-HxCDF	5.50e+07	0.51	y	1.40	34:17	200	99.8	
IS	13C-2,3,4,6,7,8-HxCDF	4.87e+07	0.53	y	1.29	34:54	192	96.1	
IS	13C-1,2,3,7,8,9-HxCDF	3.73e+07	0.54	y	1.12	35:54	170	84.9	
IS	13C-1,2,3,4,6,7,8-HpCDF	3.41e+07	0.44	y	1.01	37:42	172	86.0	
IS	13C-1,2,3,4,7,8,9-HpCDF	3.28e+07	0.45	y	0.88	39:33	190	95.1	
IS	13C-OCDF	5.60e+07	0.89	y	0.94	42:31	304	76.1	
C/Up	37Cl-2,3,7,8-TCDD	1.18e+07			0.62	27:04	65.6	82.0	
RS/RT	13C-1,2,3,4-TCDD	5.77e+07	0.81	y	1.00	26:24	200		
RS	13C-1,2,3,4-TCDF	9.57e+07	0.79	y	1.00	24:52	200		
RS/RT	13C-1,2,3,7,8,9-HxCDD	3.92e+07	1.23	y	1.00	35:29	200		

Intergrations by Analyst: _____

Date: 5/3/05

Totals class: HxCDF EMPC Entry #: 33

Run: 10 File: 050430D2 S: 4 I: 1 F: 3
Acquired: 1-MAY-05 03:20:41 Processed: 2-MAY-05 08:17:14

Total Concentration: 0.34707 Unnamed Concentration: 0.159

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
33:09	2.361e+04	2.160e+04	1.09	y	4.521e+04	0.15907	
34:10	3.297e+04	2.371e+04	1.39	y	5.668e+04	0.18801	1,2,3,4,7,8-HxCDF

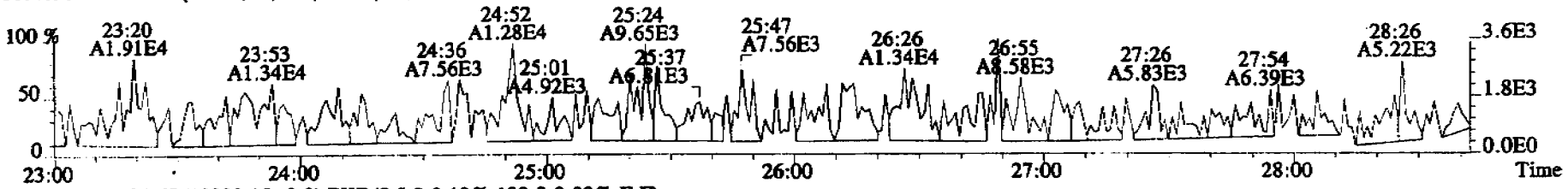
Totals class: HpCDF EMPC Entry #: 35

Run: 10 File: 050430D2 S: 4 I: 1 F: 4
Acquired: 1-MAY-05 03:20:41 Processed: 2-MAY-05 08:17:14

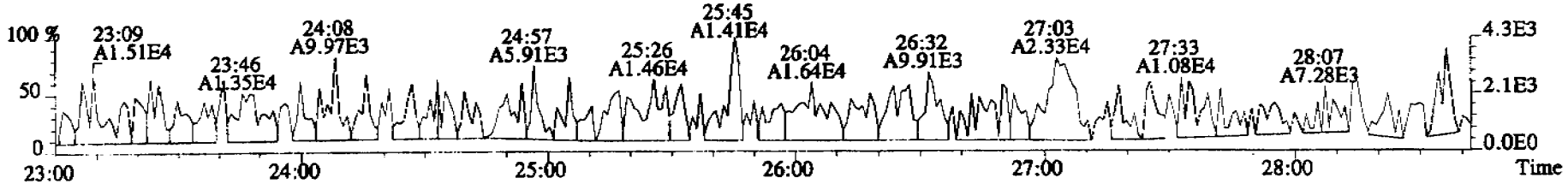
Total Concentration: 0.30484 Unnamed Concentration: *

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
37:43	3.732e+04	3.415e+04	1.09 y	7.147e+04	0.30484	1,2,3,4,6,7,8-HpCDF

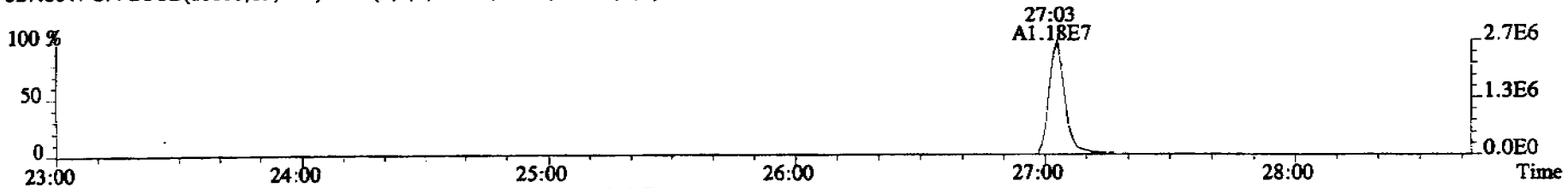
File:050430D2 #1-559 Acq: 1-MAY-2005 03:20:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:0_6749_MB001 Exp:OCDD_DB5
319.8965 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



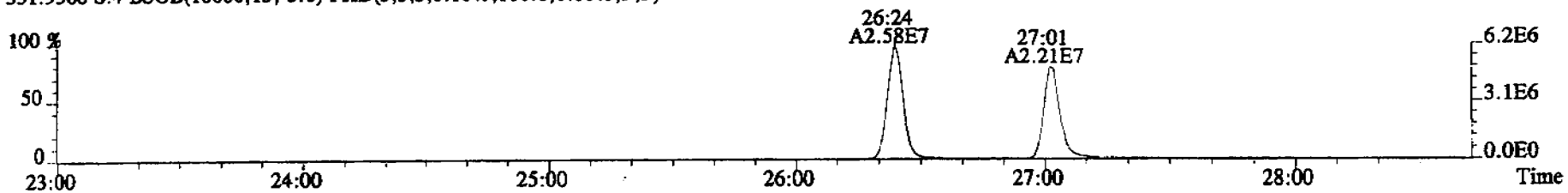
321.8936 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



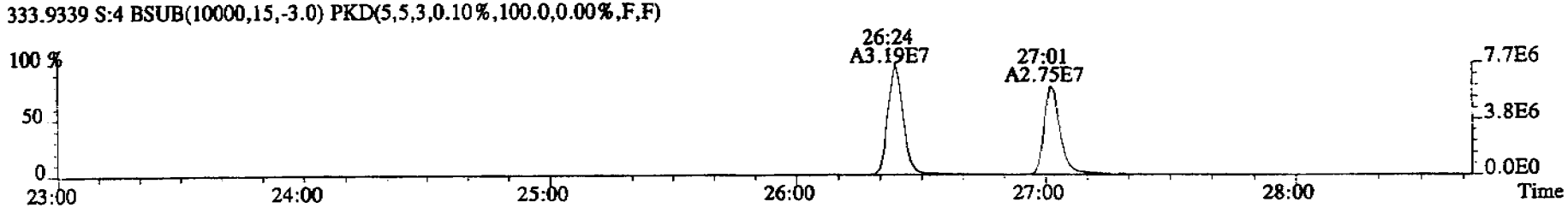
327.8847 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



331.9368 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

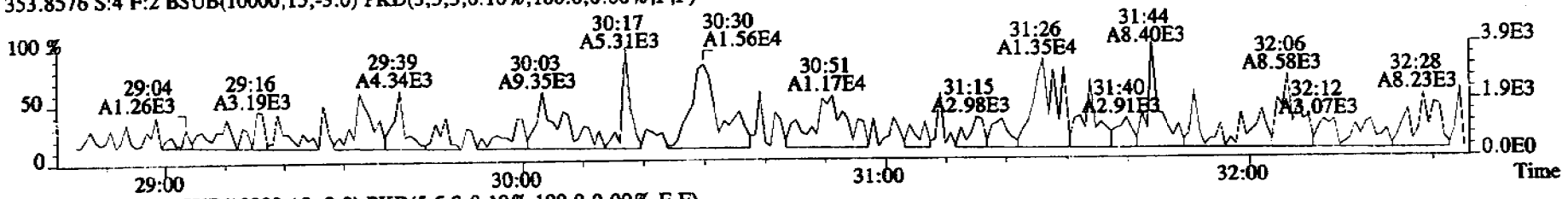


333.9339 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

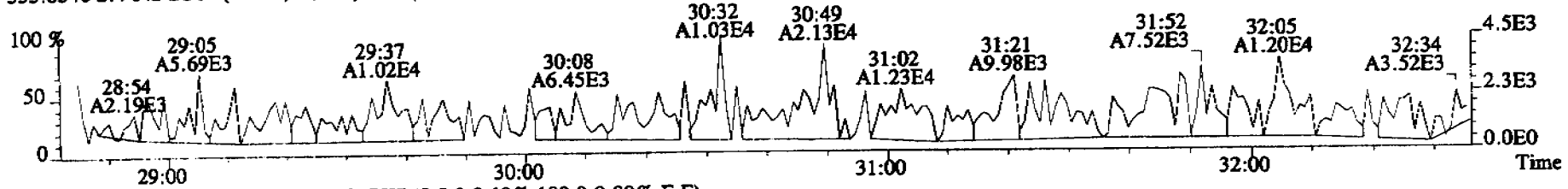


File:050430D2 #1-272 Acq: 1-MAY-2005 03:20:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:0_6749_MB001 Exp:OCDD_DB5

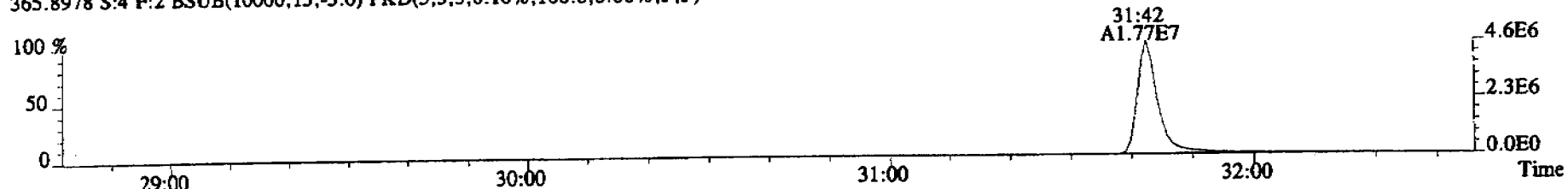
353.8576 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



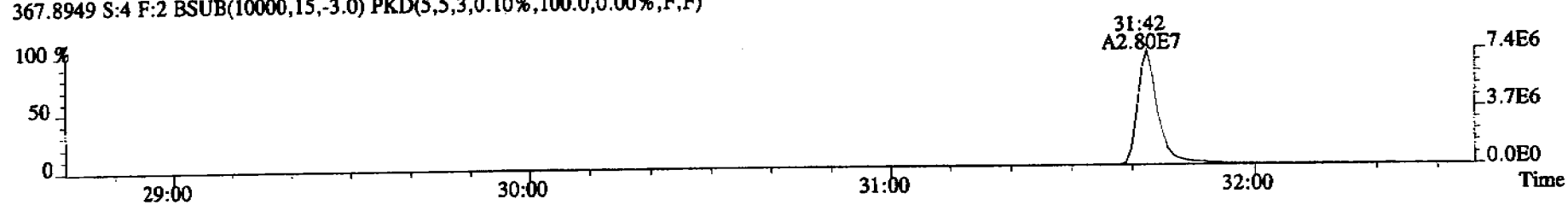
355.8546 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



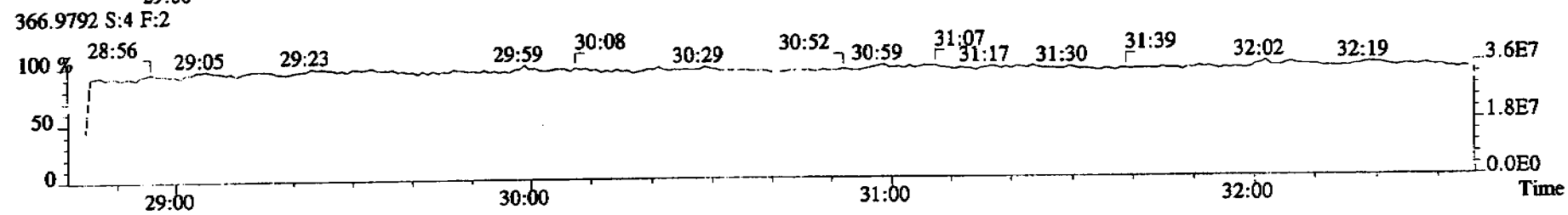
365.8978 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



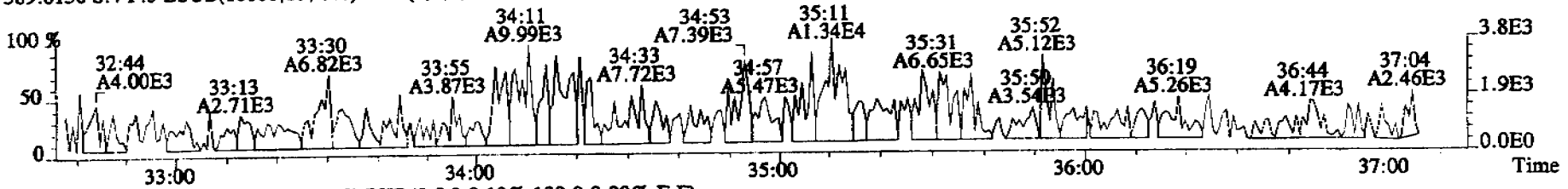
367.8949 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



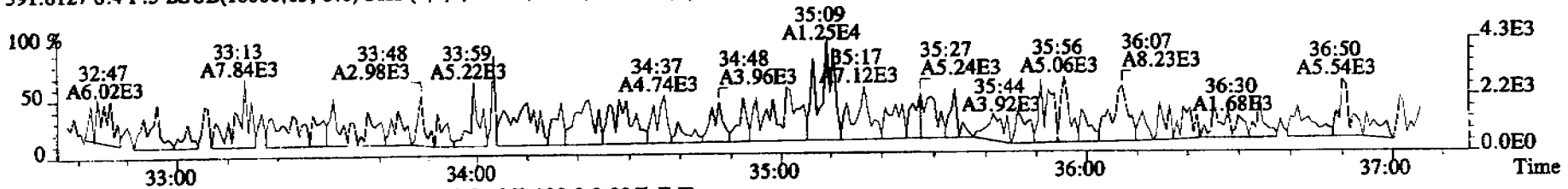
366.9792 S:4 F:2



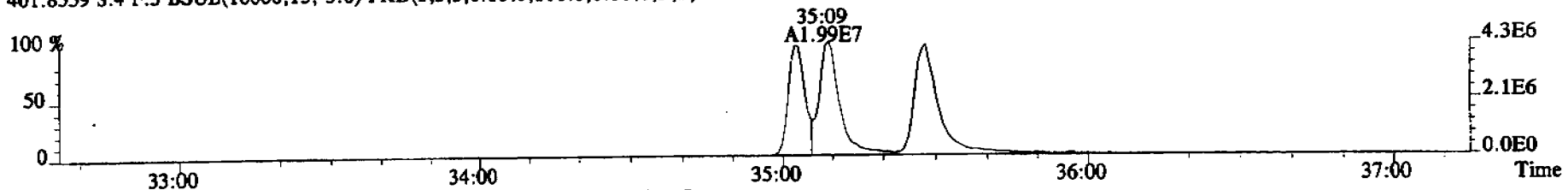
File:050430D2 #1-399 Acq: 1-MAY-2005 03:20:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:0_6749_MB001 Exp:OCDD_DB5
389.8156 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



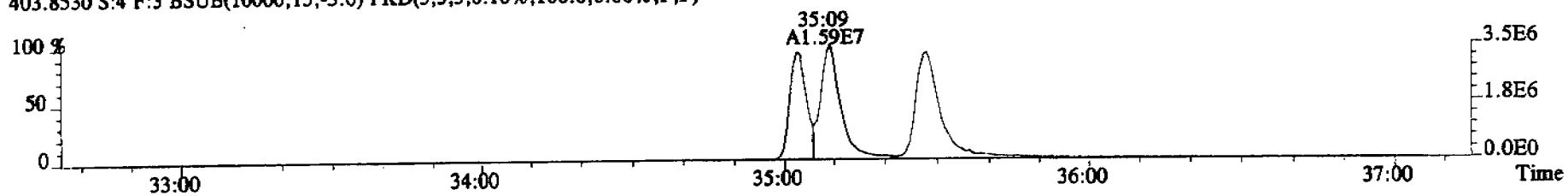
391.8127 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



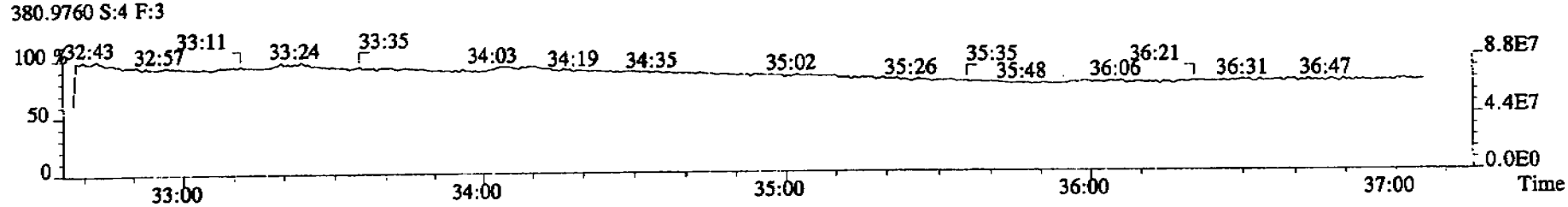
401.8559 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



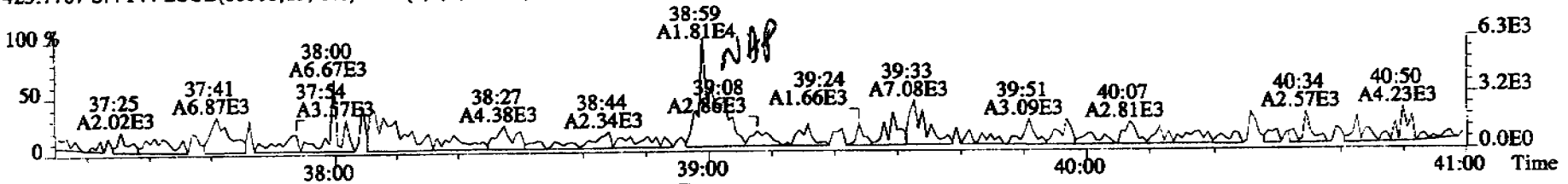
403.8530 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



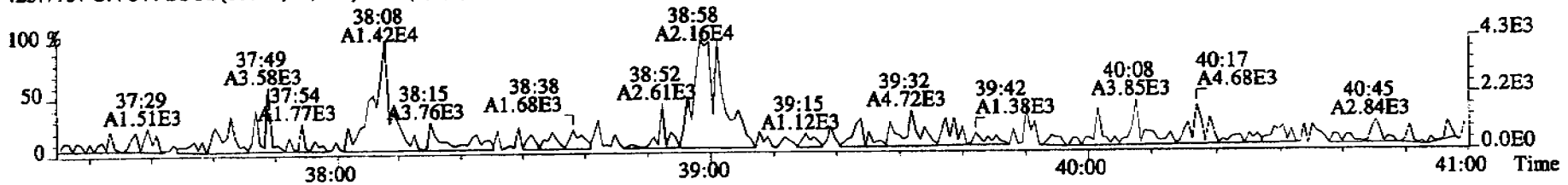
380.9760 S:4 F:3



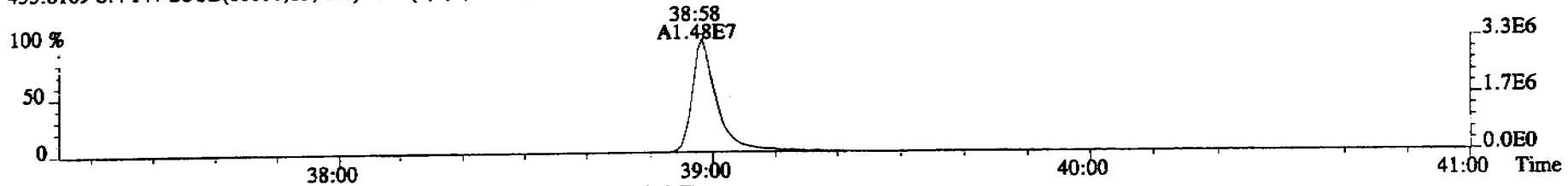
File:050430D2 #1-347 Acq: 1-MAY-2005 03:20:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:0_6749_MB001 Exp:OCDD_DB5
423.7767 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



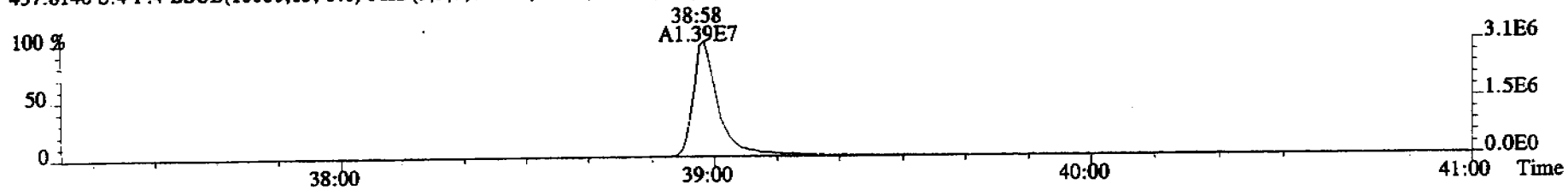
425.7737 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



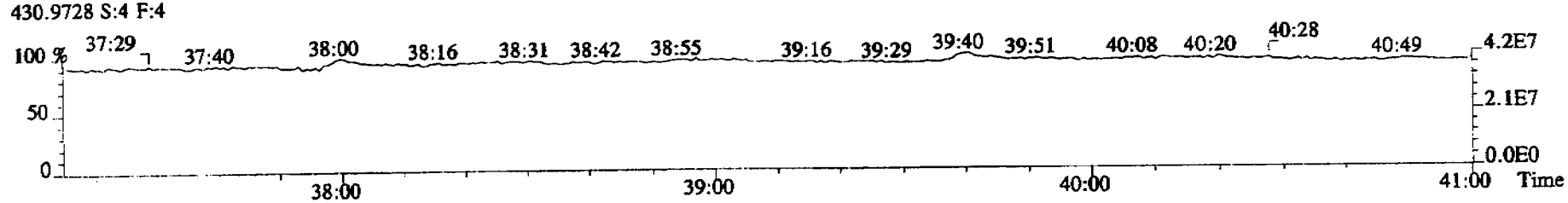
435.8169 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



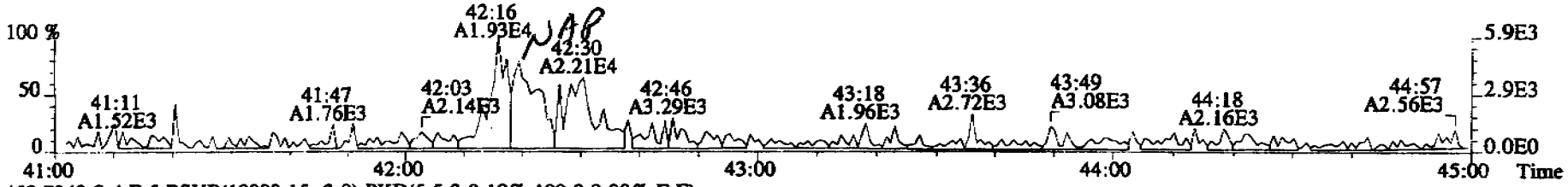
437.8140 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



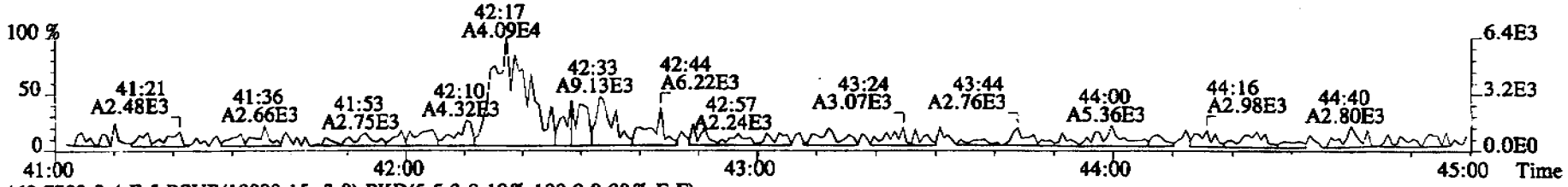
430.9728 S:4 F:4



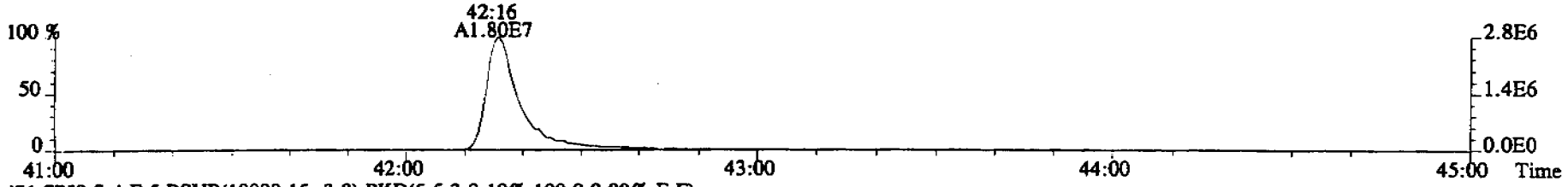
File:050430D2 #1-345 Acq: 1-MAY-2005 03:20:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:0_6749_MB001 Exp:OCDD_DB5
457.7377 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



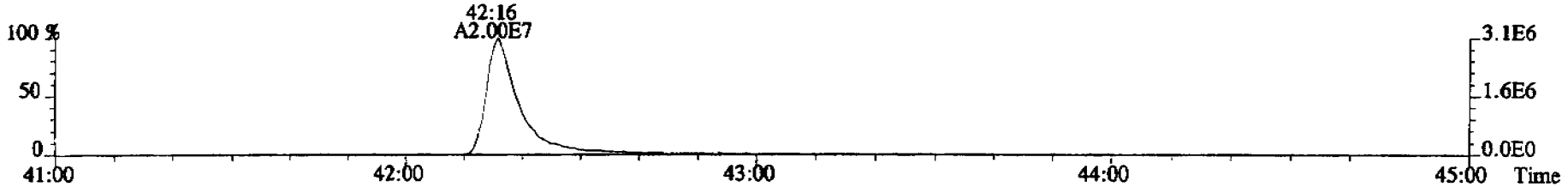
459.7348 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



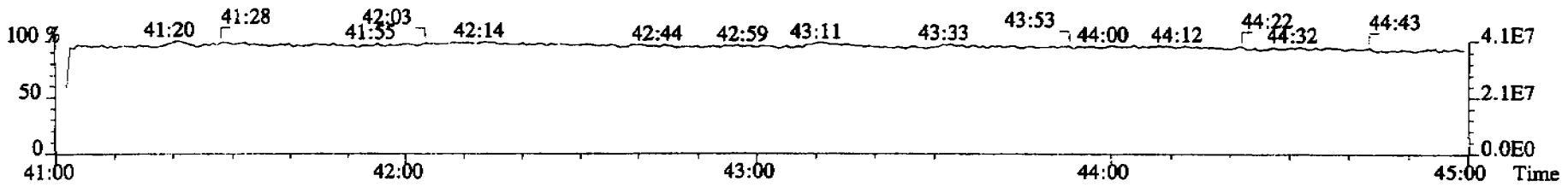
469.7780 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

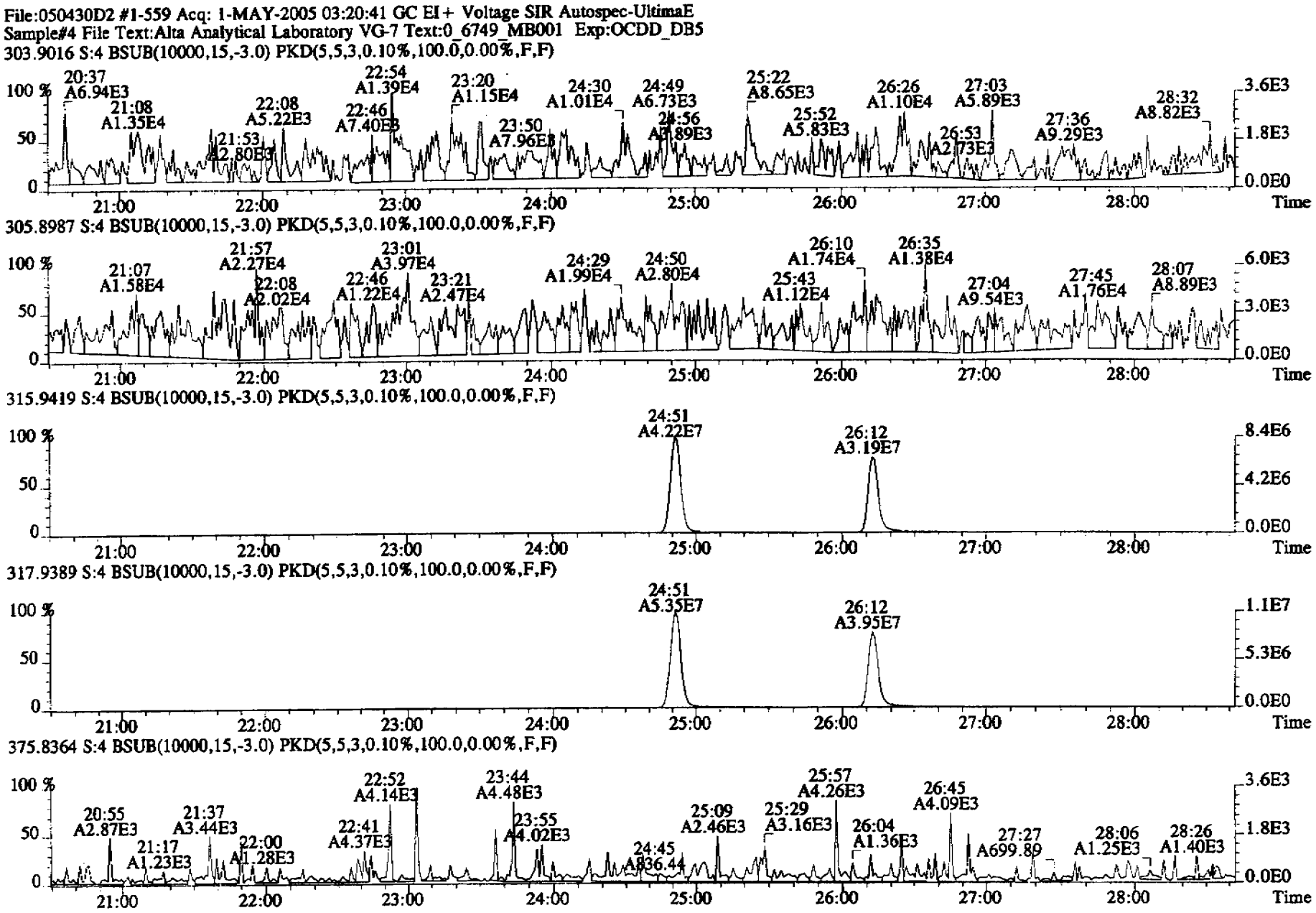


471.7750 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

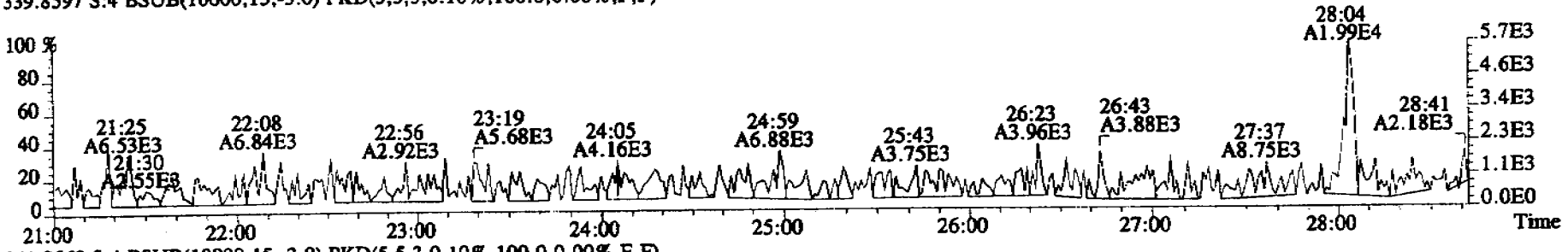


454.9728 S:4 F:5

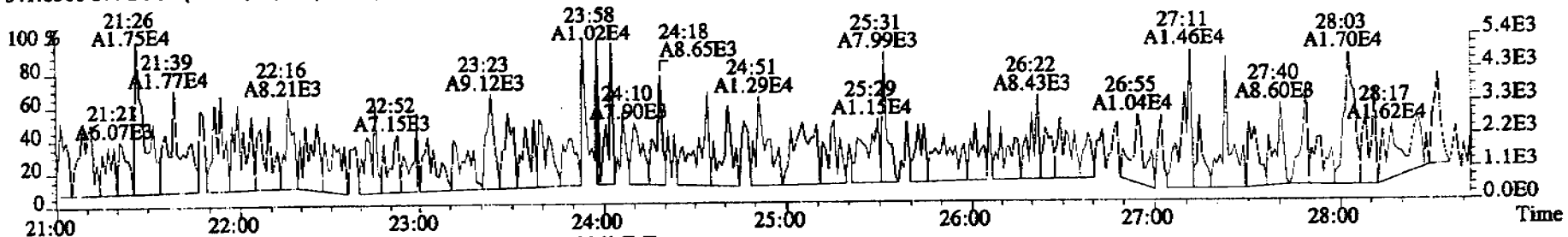



File:050430D2 #1-559 Acq: 1-MAY-2005 03:20:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:0_6749_MB001 Exp:OCDD_DB5
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
305.8987 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
315.9419 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
317.9389 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
375.8364 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
Time

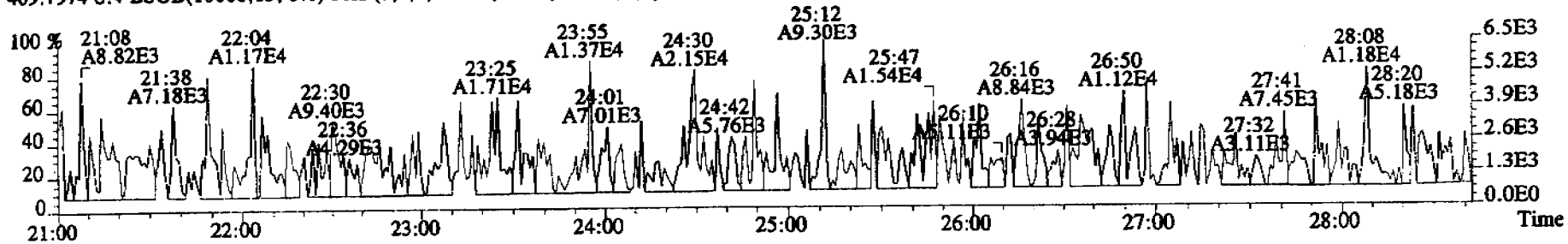
File:050430D2 #1-559 Acq: 1-MAY-2005 03:20:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:0_6749_MB001 Exp:OCDD_DB5
339.8597 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



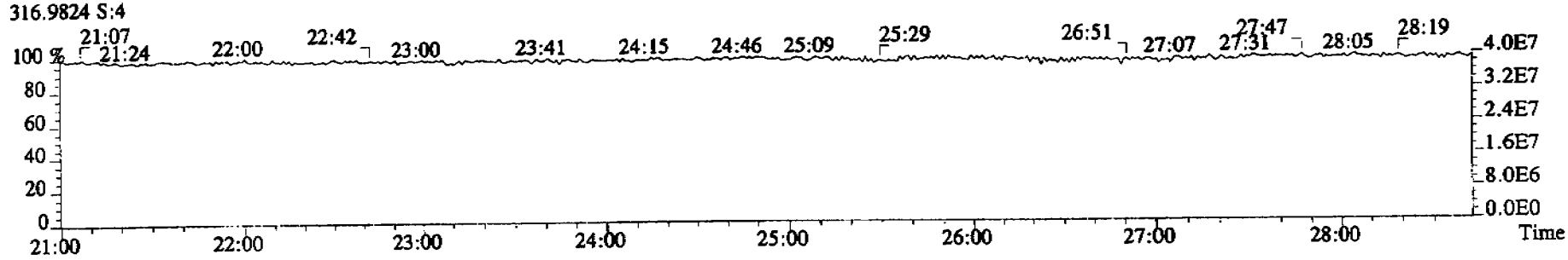
341.8568 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



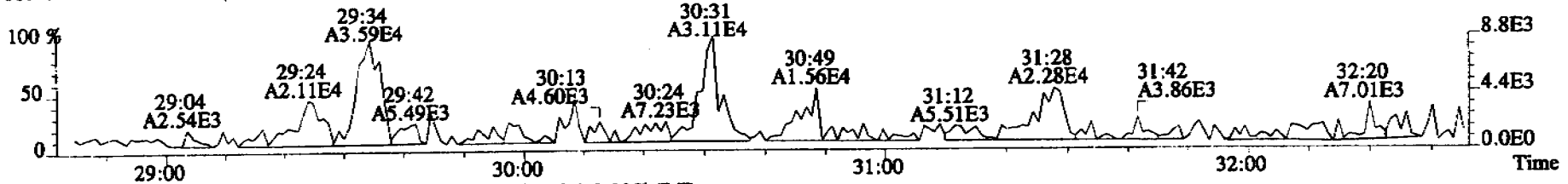
409.7974 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



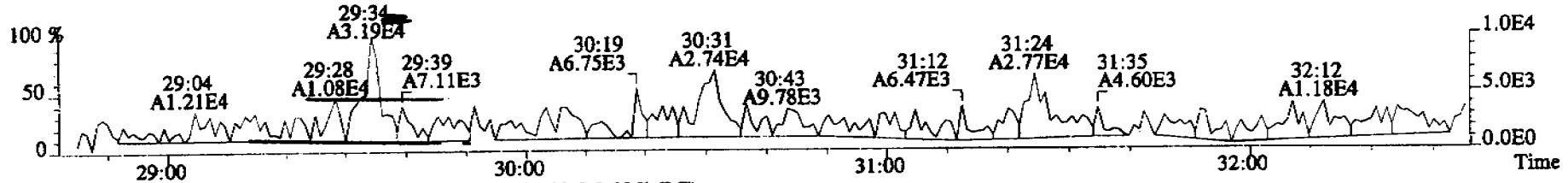
316.9824 S:4



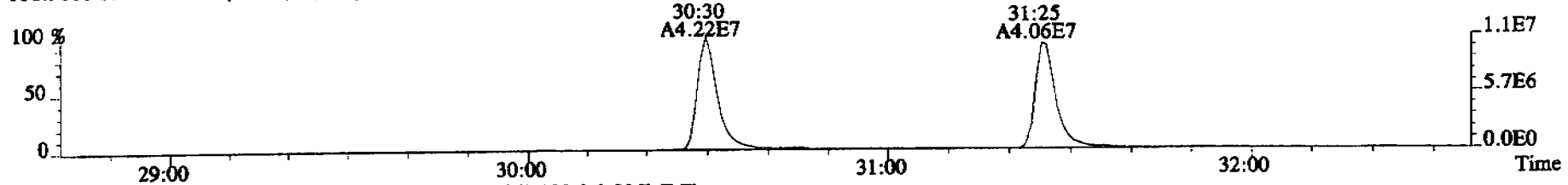
File:050430D2 #1-272 Acq: 1-MAY-2005 03:20:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:0_6749_MB001 Exp:OCDD_DB5
339.8597 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



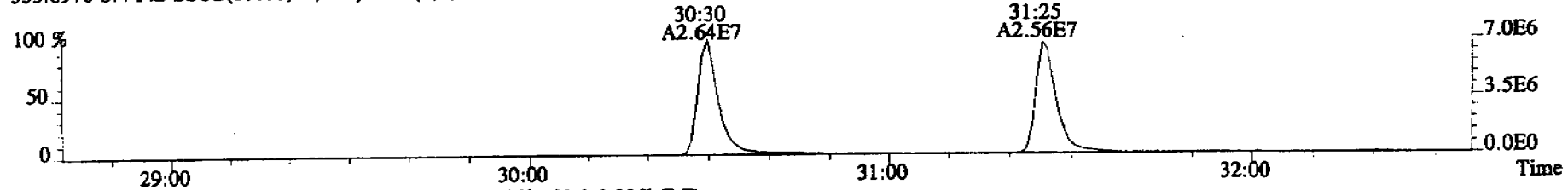
341.8568 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



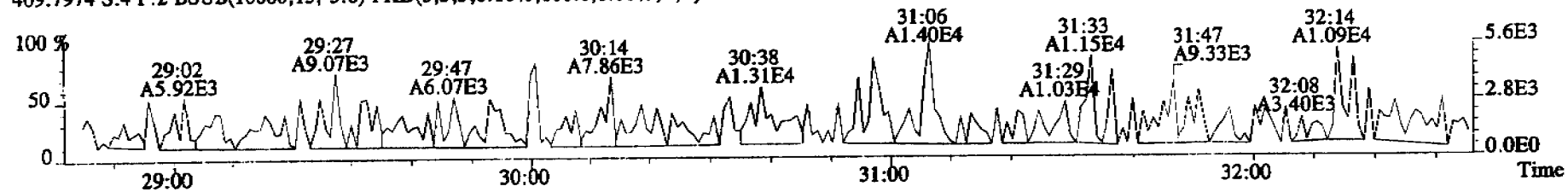
351.9000 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



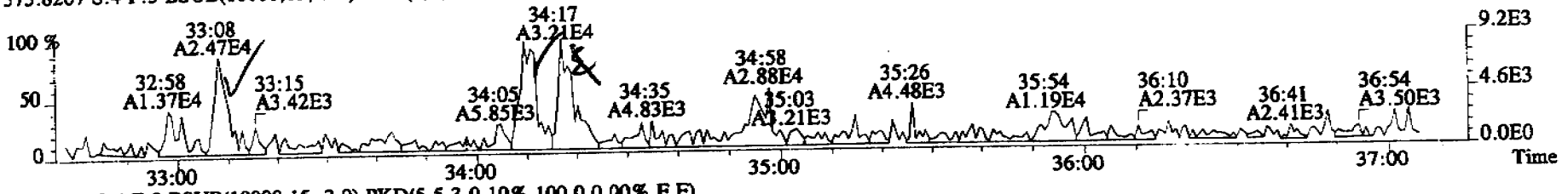
353.8970 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



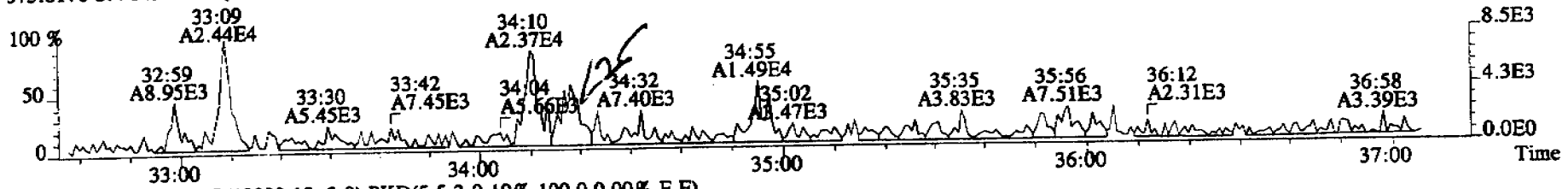
409.7974 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



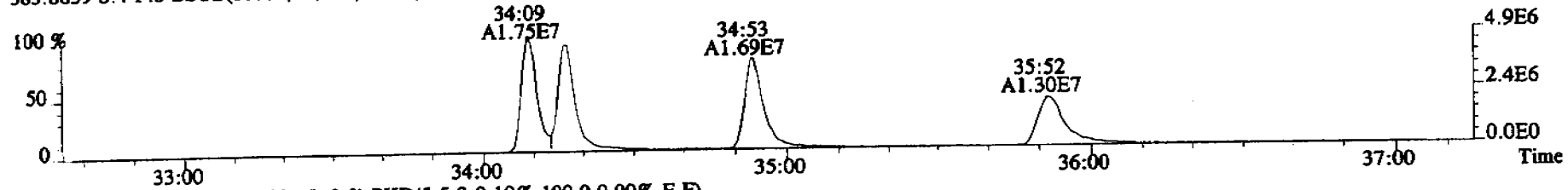
File:050430D2 #1-399 Acq: 1-MAY-2005 03:20:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:0_6749_MB001 Exp:OCDD_DB5
373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



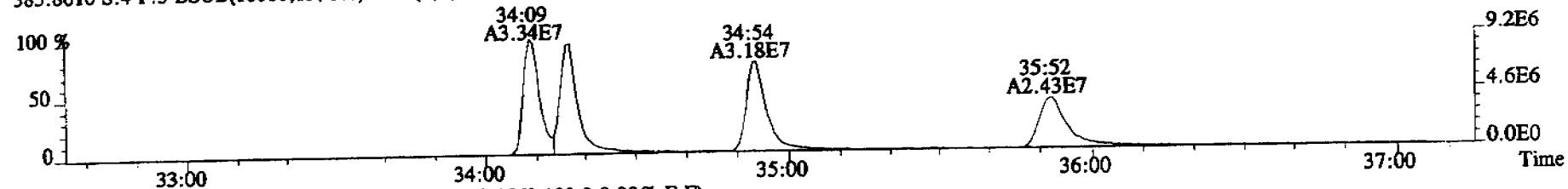
375.8178 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



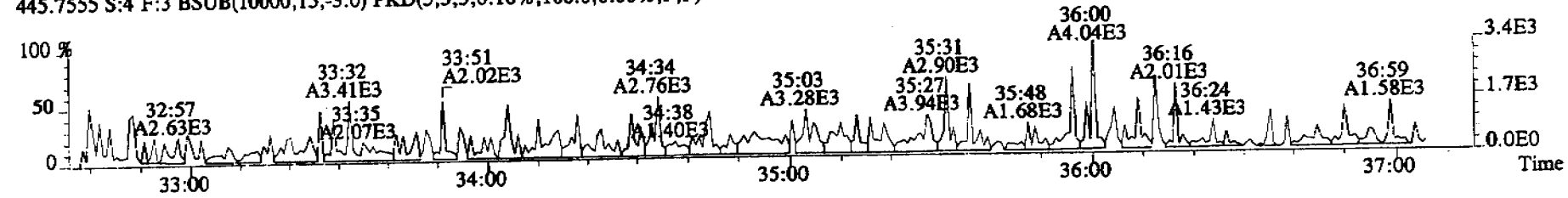
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

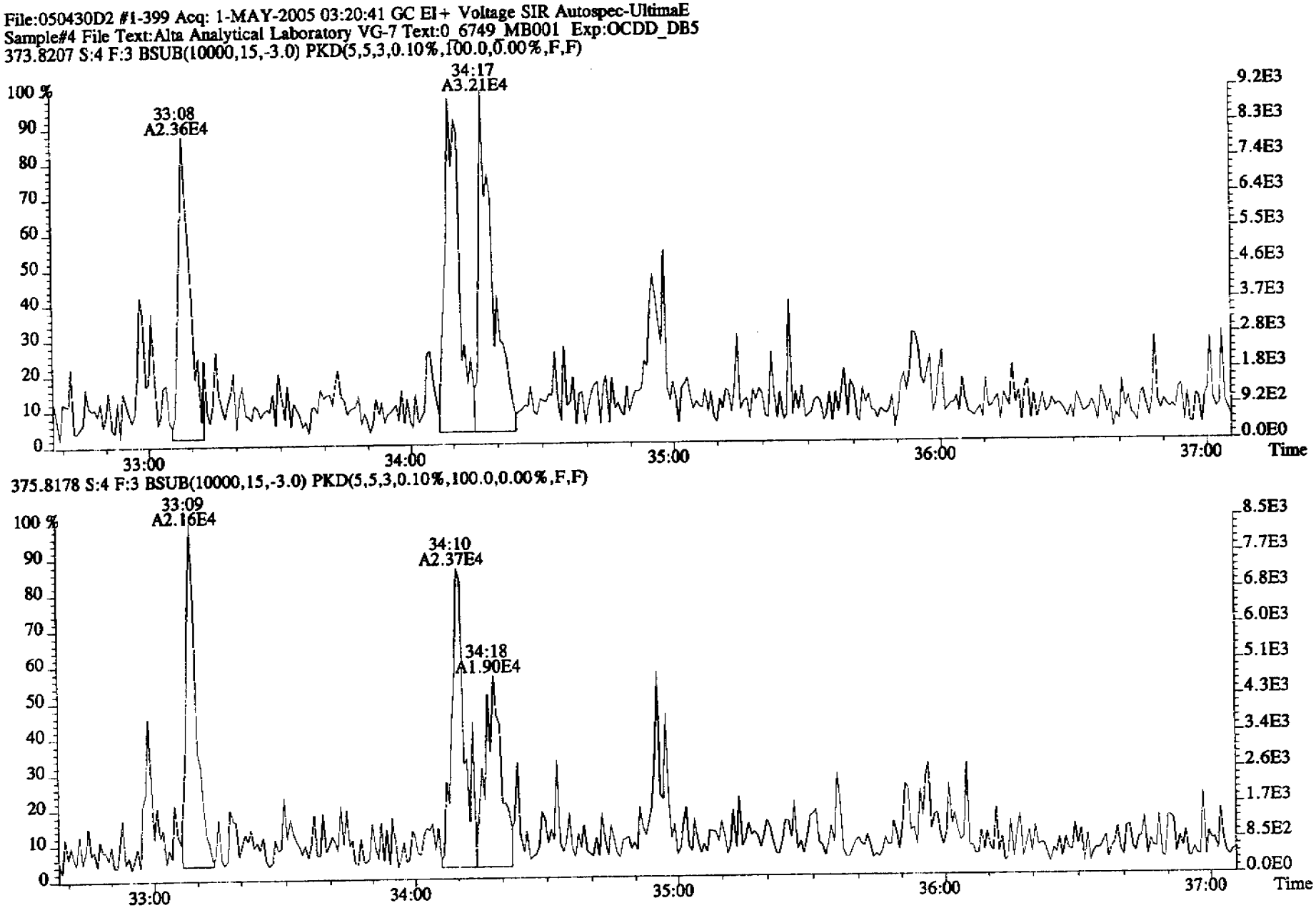


385.8610 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



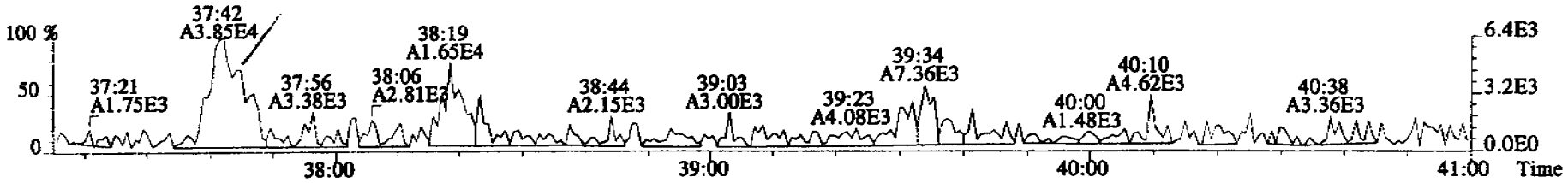
445.7555 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



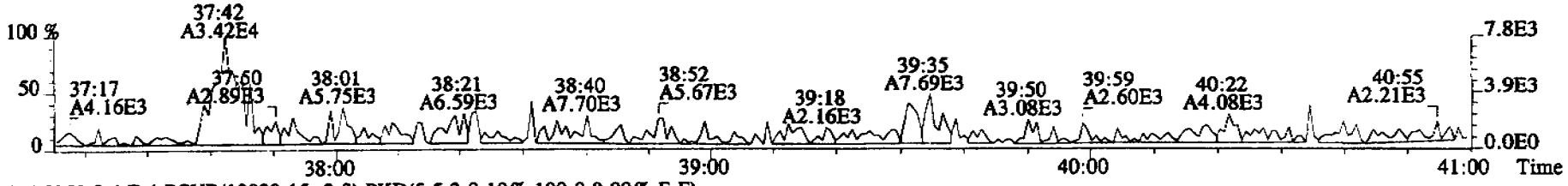

File:050430D2 #1-399 Acq: 1-MAY-2005 03:20:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:0 6749 MB001 Exp:OCDD_DB5
373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:17
A3.21E4
33:08
A2.36E4
100 %
90
80
70
60
50
40
30
20
10
0
9.2E3
8.3E3
7.4E3
6.4E3
5.5E3
4.6E3
3.7E3
2.8E3
1.8E3
9.2E2
0.0E0
33:00
34:00
35:00
36:00
37:00
Time
375.8178 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
33:09
A2.16E4
34:10
A2.37E4
34:18
A1.90E4
100 %
90
80
70
60
50
40
30
20
10
0
8.5E3
7.7E3
6.8E3
6.0E3
5.1E3
4.3E3
3.4E3
2.6E3
1.7E3
8.5E2
0.0E0
33:00
34:00
35:00
36:00
37:00
Time

File:050430D2 #1-347 Acq: 1-MAY-2005 03:20:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:0_6749_MB001 Exp:OCDD_DB5

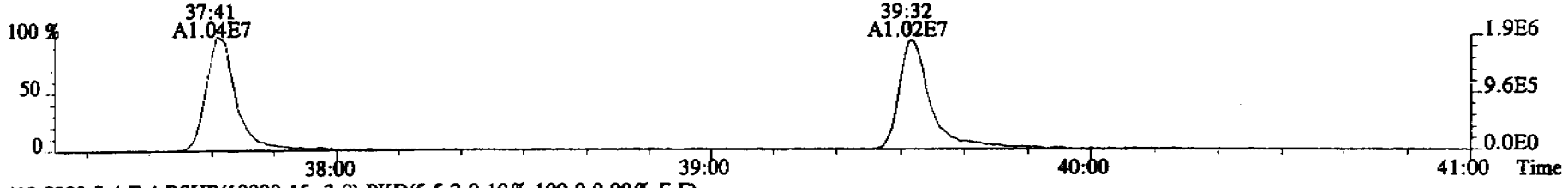
407.7818 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



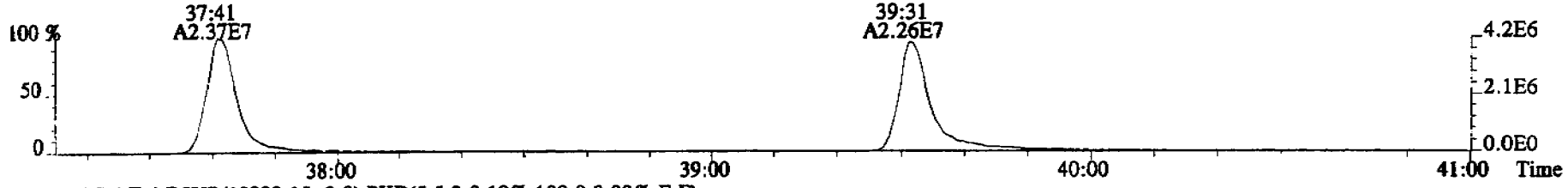
409.7788 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



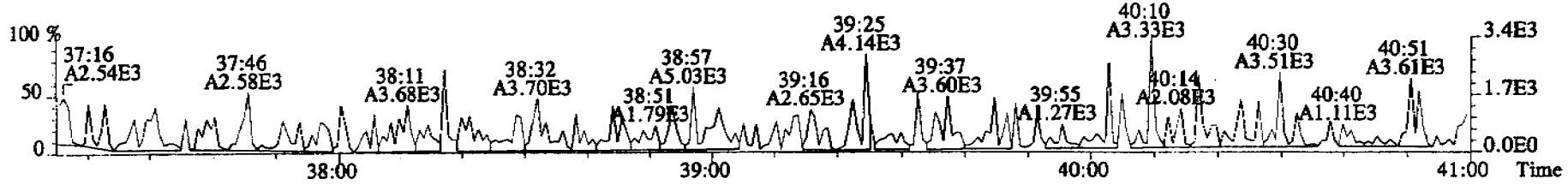
417.8253 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



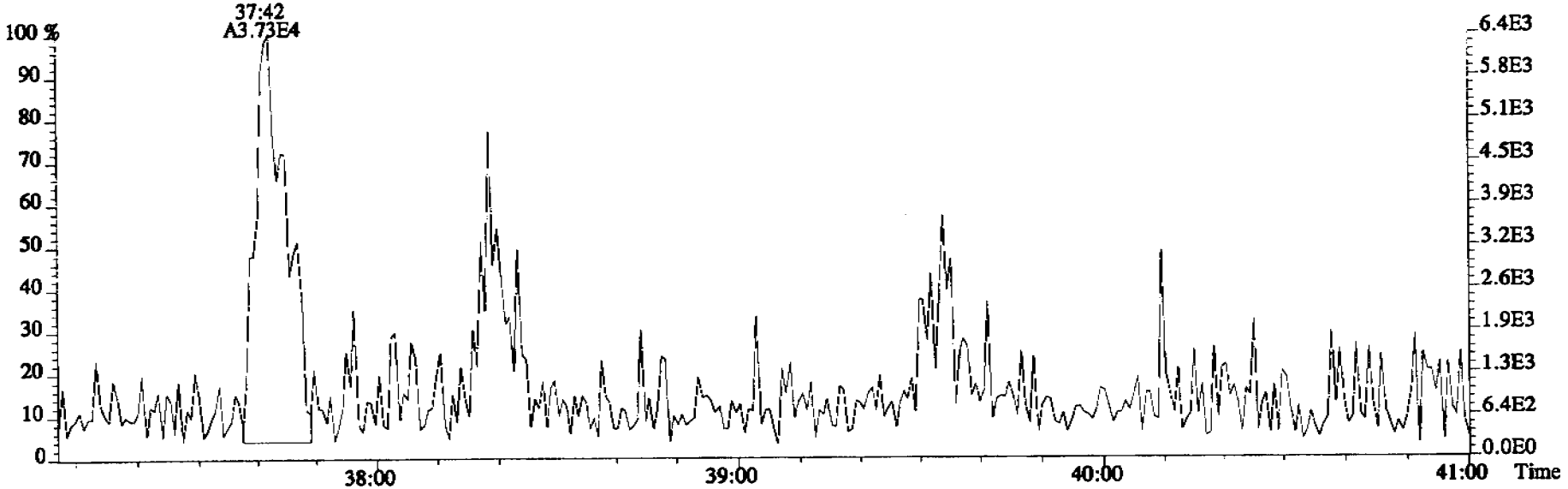
419.8220 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



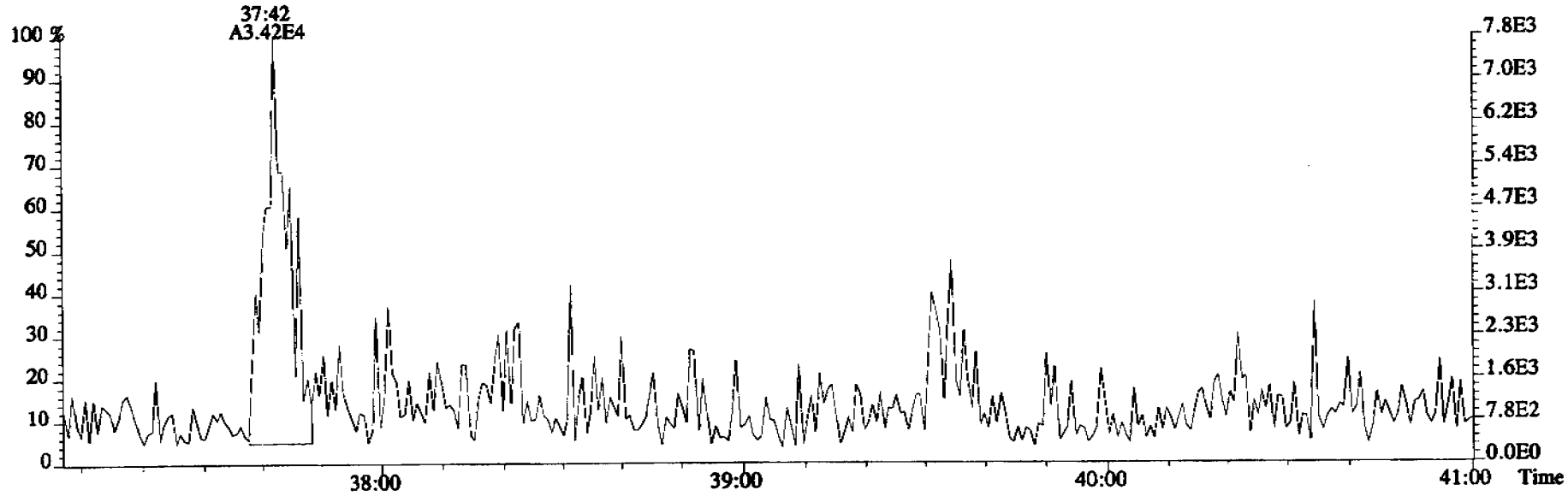
479.7165 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

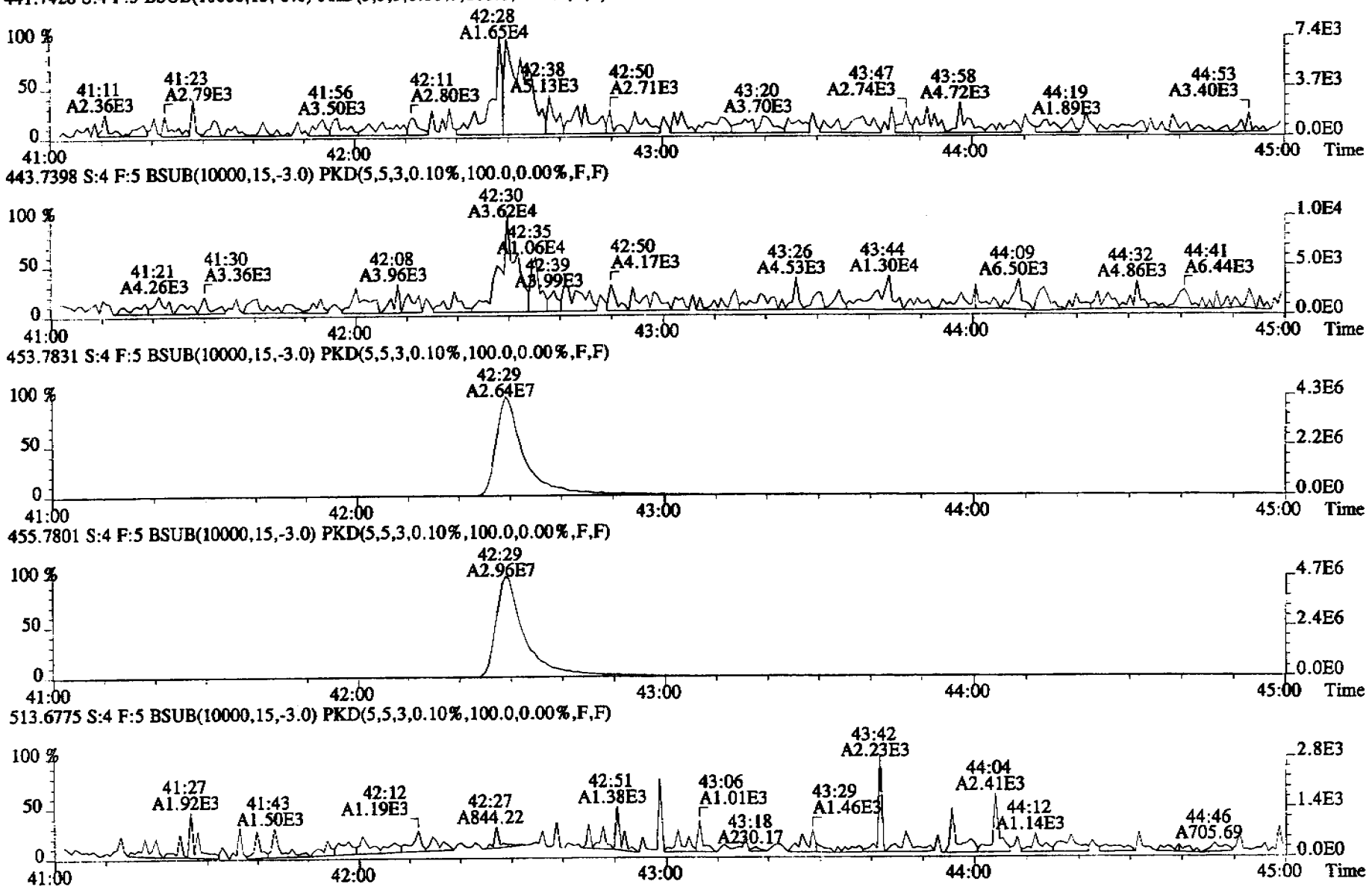


File:050430D2 #1-347 Acq: 1-MAY-2005 03:20:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:0_6749_MB001 Exp:OCDD_DB5
407.7818 S:4 F:4 BSUB(10000,15,-3.0)



409.7788 S:4 F:4 BSUB(10000,15,-3.0)




File:050430D2 #1-345 Acq: 1-MAY-2005 03:20:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:0_6749_MB001 Exp:OCDD_DB5
441.7428 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
42:28 A1.65E4
41:11 A2.36E3
41:23 A2.79E3
41:56 A3.50E3
42:11 A2.80E3
42:38 A5.13E3
42:50 A2.71E3
43:20 A3.70E3
43:47 A2.74E3
43:58 A4.72E3
44:19 A1.89E3
44:53 A3.40E3
443.7398 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
42:30 A3.62E4
42:35 A1.06E4
41:21 A4.26E3
41:30 A3.36E3
42:08 A3.96E3
42:39 A3.99E3
42:50 A4.17E3
43:26 A4.53E3
43:44 A1.30E4
44:09 A6.50E3
44:32 A4.86E3
44:41 A6.44E3
453.7831 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
42:29 A2.64E7
455.7801 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
42:29 A2.96E7
513.6775 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
43:42 A2.23E3
41:27 A1.92E3
41:43 A1.50E3
42:12 A1.19E3
42:27 A844.22
42:51 A1.38E3
43:06 A1.01E3
43:18 A230.17
43:29 A1.46E3
44:04 A2.41E3
44:12 A1.14E3
44:46 A705.69
100 %
50
0
41:00
42:00
43:00
44:00
45:00
Time
7.4E3
3.7E3
0.0E0
1.0E4
5.0E3
4.3E6
2.2E6
4.7E6
2.4E6
2.8E3
1.4E3

FORM 8A

PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

Lab Name: Alta Analytical Laboratory Extraction Batch: 0_6749_OPR001

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): Solid OPR Data Filename: 050430D2-2

Ext. Date: 4/29/05 Shift: Day Analysis Date: 1-MAY-05 Time: 01:42:30

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT.

NATIVE ANALYTES	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (1) (ng/mL)
2,3,7,8-TCDD	10	10.2	6.7 - 15.8 7.3 - 14.6 (2)
1,2,3,7,8-PeCDD	50	50.6	35.0 - 71.0
1,2,3,4,7,8-HxCDD	50	49.6	35.0 - 82.0
1,2,3,6,7,8-HxCDD	50	51.2	38.0 - 67.0
1,2,3,7,8,9-HxCDD	50	47.3	32.0 - 81.0
1,2,3,4,6,7,8-HpCDD	50	50.3	35.0 - 70.0
OCDD	100	101	78.0 - 144.0
2,3,7,8-TCDF	10	10.1	7.5 - 15.8 8.0 - 14.7 (2)
1,2,3,7,8-PeCDF	50	51.1	40.0 - 67.0
2,3,4,7,8-PeCDF	50	50.6	34.0 - 80.0
1,2,3,4,7,8-HxCDF	50	49.2	36.0 - 67.0
1,2,3,6,7,8-HxCDF	50	51.5	42.0 - 65.0
2,3,4,6,7,8-HxCDF	50	51.7	35.0 - 78.0
1,2,3,7,8,9-HxCDF	50	52.3	39.0 - 65.0
1,2,3,4,6,7,8-HpCDF	50	52.2	41.0 - 61.0
1,2,3,4,7,8,9-HpCDF	50	52.6	39.0 - 69.0
OCDF	100	101	63.0 - 170.0

(1) Contract-required concentration limits for OPR as specified in Table 6, Method 1613. 10/94

(2) Contract-required concentration limits for OPR as specified in Table 6a, Method 1613. 10/94

Analyst: [signature]

Date: 5/2/05

FORM 8B

PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

Lab Name: Alta Analytical Laboratory Extraction Batch: 0_6749_OPR001

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): Solid OPR Data Filename: 050430D2-2

Ext. Date: 4/29/05 Shift: Day Analysis Date: 1-MAY-05 Time: 01:42:30

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT.

LABELED COMPOUNDS	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (1) (ng/mL)
13C-2,3,7,8-TCDD	100	72.0	20.0 - 175.0
			25.0 - 141.0 (2)
13C-1,2,3,7,8-PeCDD	100	78.1	21.0 - 227.0
13C-1,2,3,4,7,8-HxCDD	100	87.6	21.0 - 193.0
13C-1,2,3,6,7,8-HxCDD	100	89.1	25.0 - 163.0
13C-1,2,3,4,6,7,8-HpCDD	100	86.7	26.0 - 166.0
13C-OCDD	200	122	26.0 - 397.0
13C-2,3,7,8-TCDF	100	70.3	22.0 - 152.0
			26.0 - 126.0 (2)
13C-1,2,3,7,8-PeCDF	100	74.9	21.0 - 192.0
13C-2,3,4,7,8-PeCDF	100	76.2	13.0 - 328.0
13C-1,2,3,4,7,8-HxCDF	100	98.6	19.0 - 202.0
13C-1,2,3,6,7,8-HxCDF	100	99.7	21.0 - 159.0
13C-2,3,4,6,7,8-HxCDF	100	95.2	22.0 - 176.0
13C-1,2,3,7,8,9-HxCDF	100	83.2	17.0 - 205.0
13C-1,2,3,4,6,7,8-HpCDF	100	85.4	21.0 - 158.0
13C-1,2,3,4,7,8,9-HpCDF	100	89.8	20.0 - 186.0
13C-OCDF	200	148	26.0 - 397.0
CLEANUP STANDARD			
37Cl-2,3,7,8-TCDD	40	28.6	12.4 - 76.4

(1) Contract-required concentration limits for OPR as specified in Table 6, Method 1613. 10/94

(2) Contract-required concentration limits for OPR as specified in Table 6a, Method 1613. 10/94

Analyst: [signature]

Date: 5/2/05

Client ID: 0_6749_OPR001 Filename: 050430D2 S:2 Acq: 1-MAY-05 01:42:30 ConCal: ST050430D2-1
Lab ID: 0_6749_OPR001 GC Column ID: db-5 ICal: 1613VG7-4-23-05 wt/vol: 1.000 EndCAL: ST050430D2-2

Name	Resp	RA	RRF	RT	Conc	Method QC Limits	Alta Historical Limits Aqueous Limits	Solid Limits
2,3,7,8-TCDD	5.21e+06	0.77 y	1.06	27:04	10.2	7.0 - 13	7.73 - 12.4	7.53 - 12.5
1,2,3,7,8-PeCDD	2.07e+07	0.63 y	0.99	31:45	50.6	35 - 65	37.8 - 57.5	40.4 - 65.1
1,2,3,4,7,8-HxCDD	1.42e+07	1.26 y	1.11	35:04	49.6	35 - 65	38.3 - 58.0	41.2 - 63.2
1,2,3,6,7,8-HxCDD	1.72e+07	1.28 y	1.07	35:11	51.2	35 - 65	38.7 - 57.0	40.8 - 65.2
1,2,3,7,8,9-HxCDD	1.56e+07	1.27 y	1.15	35:30	47.3	35 - 65	37.0 - 57.5	41.7 - 65.4
1,2,3,4,6,7,8-HpCDD	1.33e+07	1.03 y	1.05	39:01	50.3	35 - 65	39.0 - 58.5	21.3 - 87.7
OCDD	1.69e+07	0.92 y	1.04	42:20	101	70 - 130	83.2 - 126	0 - 400
2,3,7,8-TCDF	7.10e+06	0.78 y	1.05	26:15	10.1	7.0 - 13	7.65 - 12.4	7.82 - 12.0
1,2,3,7,8-PeCDF	3.06e+07	1.56 y	0.95	30:31	51.1	35 - 65	41.4 - 64.9	39.6 - 65.6
2,3,4,7,8-PeCDF	3.38e+07	1.56 y	1.08	31:28	50.6	35 - 65	36.9 - 56.0	40.2 - 66.5
1,2,3,4,7,8-HxCDF	2.58e+07	1.25 y	1.19	34:10	49.2	35 - 65	33.4 - 59.4	39.4 - 63.9
1,2,3,6,7,8-HxCDF	3.10e+07	1.26 y	1.22	34:19	51.5	35 - 65	38.7 - 59.0	41.1 - 62.9
2,3,4,6,7,8-HxCDF	2.70e+07	1.27 y	1.20	34:56	51.7	35 - 65	39.3 - 58.0	40.9 - 63.3
1,2,3,7,8,9-HxCDF	1.94e+07	1.25 y	1.13	35:55	52.3	35 - 65	38.8 - 58.0	39.5 - 64.9
1,2,3,4,6,7,8-HpCDF	2.19e+07	1.07 y	1.38	37:43	52.2	35 - 65	40.2 - 63.1	31.9 - 74.7
1,2,3,4,7,8,9-HpCDF	1.80e+07	1.05 y	1.23	39:34	52.6	35 - 65	40.5 - 62.2	39.8 - 63.8
OCDF	2.53e+07	0.93 y	1.02	42:33	101	70 - 130	80.0 - 120	69.8 - 136

Name	Resp	RA	RRF	RT	Conc	% Rec	Method QC Limits	Aqueous Limits	Solid Limits
13C-2,3,7,8-TCDD	4.83e+07	0.80 y	1.12	27:03	72.0	72.0	40 - 135	48.8 - 105	53.0 - 115
13C-1,2,3,7,8-PeCDD	4.13e+07	0.62 y	0.89	31:43	78.1	78.1	40 - 135	49.8 - 109	61.4 - 117
13C-1,2,3,4,7,8-HxCDD	2.58e+07	1.29 y	0.83	35:03	87.6	87.6	40 - 135	51.9 - 102	63.1 - 116
13C-1,2,3,6,7,8-HxCDD	3.13e+07	1.25 y	1.00	35:10	89.1	89.1	40 - 135	50.4 - 99.1	54.6 - 121
13C-1,2,3,4,6,7,8-HpCDD	2.53e+07	1.08 y	0.82	39:00	86.7	86.7	40 - 135	51.2 - 106	67.6 - 117
13C-OCDD	3.21e+07	0.91 y	0.74	42:19	122	61.1	40 - 135	30.8 - 113	14.0 - 147
13C-2,3,7,8-TCDF	6.67e+07	0.81 y	1.02	26:14	70.3	70.3	40 - 135	50.3 - 103	56.0 - 112
13C-1,2,3,7,8-PeCDF	6.29e+07	1.61 y	0.90	30:31	74.9	74.9	40 - 135	49.3 - 105	58.6 - 116
13C-2,3,4,7,8-PeCDF	6.20e+07	1.60 y	0.87	31:27	76.2	76.2	40 - 135	53.3 - 109	62.9 - 118
13C-1,2,3,4,7,8-HxCDF	4.42e+07	0.53 y	1.27	34:09	98.6	98.6	40 - 135	44.5 - 110	55.9 - 118
13C-1,2,3,6,7,8-HxCDF	4.95e+07	0.53 y	1.40	34:17	99.7	99.7	40 - 135	45.8 - 111	58.6 - 118
13C-2,3,4,6,7,8-HxCDF	4.35e+07	0.55 y	1.29	34:54	95.2	95.2	40 - 135	50.8 - 110	63.7 - 115
13C-1,2,3,7,8,9-HxCDF	3.29e+07	0.53 y	1.12	35:54	83.2	83.2	40 - 135	48.6 - 108	63.3 - 112
13C-1,2,3,4,6,7,8-HpCDF	3.05e+07	0.44 y	1.01	37:42	85.4	85.4	40 - 135	45.9 - 104	55.0 - 117
13C-1,2,3,4,7,8,9-HpCDF	2.79e+07	0.44 y	0.88	39:33	89.8	89.8	40 - 135	41.1 - 114	53.2 - 122
13C-OCDF	4.91e+07	0.90 y	0.94	42:32	148	74.0	40 - 135	36.8 - 109	48.3 - 109
37Cl-2,3,7,8-TCDD	1.06e+07		0.62	27:04	28.6	71.6	40 - 135	51.1 - 117	49.6 - 106
13C-1,2,3,4-TCDD	5.97e+07	0.82 y	1.00	26:24	100				
13C-1,2,3,4-TCDF	9.30e+07	0.78 y	1.00	24:52	100				
13C-1,2,3,7,8,9-HxCDD	3.53e+07	1.28 y	1.00	35:29	100				

Analyst: _____

Date: 5/2/05

Client ID: 0_6749_OPR001 Filename: 050430D2 S:2 Acq: 1-MAY-05 01:42:30 ConCal: ST050430D2-1
Lab ID: 0_6749_OPR001 GC Column ID: db-5 ICal: 1613VG7-4-23-05 wt/vol: 1.000 EndCAL: ST050430D2-2

	Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL
	2,3,7,8-TCDD	5.21e+06	0.77 y	1.06	27:04	10.2			* 2.5	*
	1,2,3,7,8-PeCDD	2.07e+07	0.63 y	0.99	31:45	50.6			* 2.5	*
	1,2,3,4,7,8-HxCDD	1.42e+07	1.26 y	1.11	35:04	49.6			* 2.5	*
	1,2,3,6,7,8-HxCDD	1.72e+07	1.28 y	1.07	35:11	51.2			* 2.5	*
	1,2,3,7,8,9-HxCDD	1.56e+07	1.27 y	1.15	35:30	47.3			* 2.5	*
	1,2,3,4,6,7,8-HpCDD	1.33e+07	1.03 y	1.05	39:01	50.3			* 2.5	*
	OCDD	1.69e+07	0.92 y	1.04	42:20	101			* 2.5	*
	2,3,7,8-TCDF	7.10e+06	0.78 y	1.05	26:15	10.1			* 2.5	*
	1,2,3,7,8-PeCDF	3.06e+07	1.56 y	0.95	30:31	51.1			* 2.5	*
	2,3,4,7,8-PeCDF	3.38e+07	1.56 y	1.08	31:28	50.6			* 2.5	*
	1,2,3,4,7,8-HxCDF	2.58e+07	1.25 y	1.19	34:10	49.2			* 2.5	*
	1,2,3,6,7,8-HxCDF	3.10e+07	1.26 y	1.22	34:19	51.5			* 2.5	*
	2,3,4,6,7,8-HxCDF	2.70e+07	1.27 y	1.20	34:56	51.7			* 2.5	*
	1,2,3,7,8,9-HxCDF	1.94e+07	1.25 y	1.13	35:55	52.3			* 2.5	*
	1,2,3,4,6,7,8-HpCDF	2.19e+07	1.07 y	1.38	37:43	52.2			* 2.5	*
	1,2,3,4,7,8,9-HpCDF	1.80e+07	1.05 y	1.23	39:34	52.6			* 2.5	*
	OCDF	2.53e+07	0.93 y	1.02	42:33	101			* 2.5	*
IS	13C-2,3,7,8-TCDD	4.83e+07	0.80 y	1.12	27:03	72.0				
IS	13C-1,2,3,7,8-PeCDD	4.13e+07	0.62 y	0.89	31:43	78.1				
IS	13C-1,2,3,4,7,8-HxCDD	2.58e+07	1.29 y	0.83	35:03	87.6				
IS	13C-1,2,3,6,7,8-HxCDD	3.13e+07	1.25 y	1.00	35:10	89.1				
IS	13C-1,2,3,4,6,7,8-HpCDD	2.53e+07	1.08 y	0.82	39:00	86.7				
IS	13C-OCDD	3.21e+07	0.91 y	0.74	42:19	122				
IS	13C-2,3,7,8-TCDF	6.67e+07	0.81 y	1.02	26:14	70.3				
IS	13C-1,2,3,7,8-PeCDF	6.29e+07	1.61 y	0.90	30:31	74.9				
IS	13C-2,3,4,7,8-PeCDF	6.20e+07	1.60 y	0.87	31:27	76.2				
IS	13C-1,2,3,4,7,8-HxCDF	4.42e+07	0.53 y	1.27	34:09	98.6				
IS	13C-1,2,3,6,7,8-HxCDF	4.95e+07	0.53 y	1.40	34:17	99.7				
IS	13C-2,3,4,6,7,8-HxCDF	4.35e+07	0.55 y	1.29	34:54	95.2				
IS	13C-1,2,3,7,8,9-HxCDF	3.29e+07	0.53 y	1.12	35:54	83.2				
IS	13C-1,2,3,4,6,7,8-HpCDF	3.05e+07	0.44 y	1.01	37:42	85.4				
IS	13C-1,2,3,4,7,8,9-HpCDF	2.79e+07	0.44 y	0.88	39:33	89.8				
IS	13C-OCDF	4.91e+07	0.90 y	0.94	42:32	148				
C/Up	37Cl-2,3,7,8-TCDD	1.06e+07		0.62	27:04	28.6				
RS/RT	13C-1,2,3,4-TCDD	5.97e+07	0.82 y	1.00	26:24	100				
RS	13C-1,2,3,4-TCDF	9.30e+07	0.78 y	1.00	24:52	100				
RS/RT	13C-1,2,3,7,8,9-HxCDD	3.53e+07	1.28 y	1.00	35:29	100				

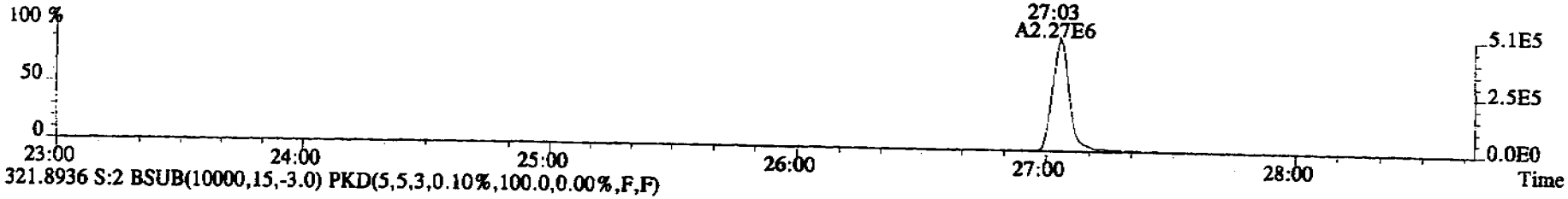
Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	10.4	11.2		*	*
Total Penta-Dioxins	51.5	51.8		*	*
Total Hexa-Dioxins	149	152		*	*
Total Hepta-Dioxins	50.7	52.2		*	*
Total Tetra-Furans	10.5	11.5		*	*
Total Penta-Furans	105	106		*	*
Total Hexa-Furans	207	207		*	*
Total Hepta-Furans	105	107		*	*

	Rec	Qual
	72.0	
	78.1	
	87.6	
	89.1	
	86.7	
	61.1	
	70.3	
	74.9	
	76.2	
	98.6	
	99.7	
	95.2	
	83.2	
	85.4	
	89.8	
	74.0	
	71.6	

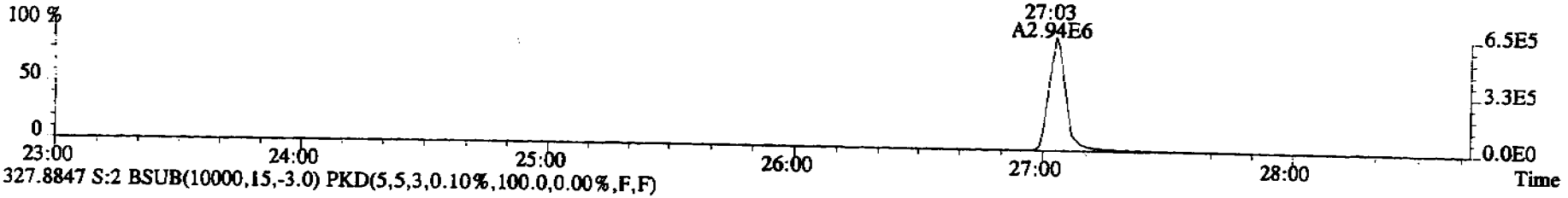
Intergrations by Analyst: _____

Date: 5/2/05

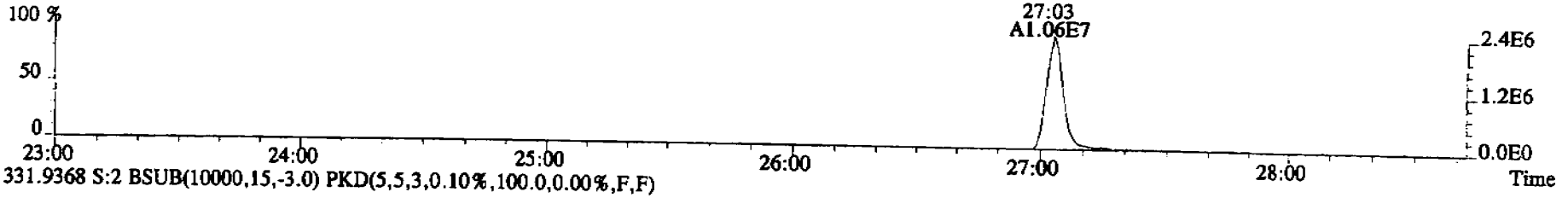
File:050430D2 #1-559 Acq: 1-MAY-2005 01:42:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory VG-7 Text:0_6749_OPR001 Exp:OCDD_DB5
319.8965 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



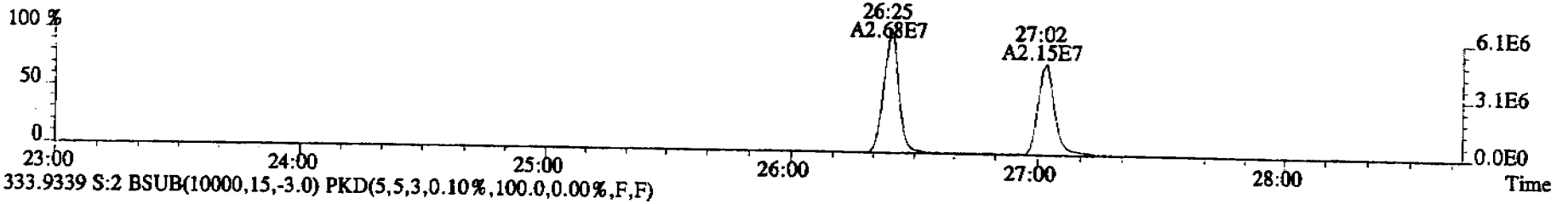
321.8936 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



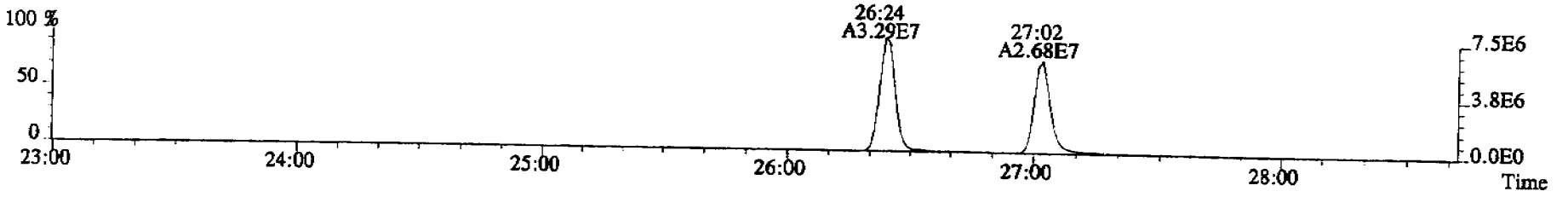
327.8847 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



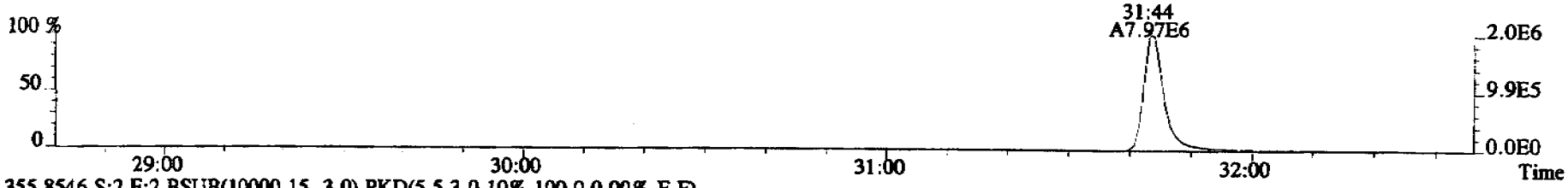
331.9368 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



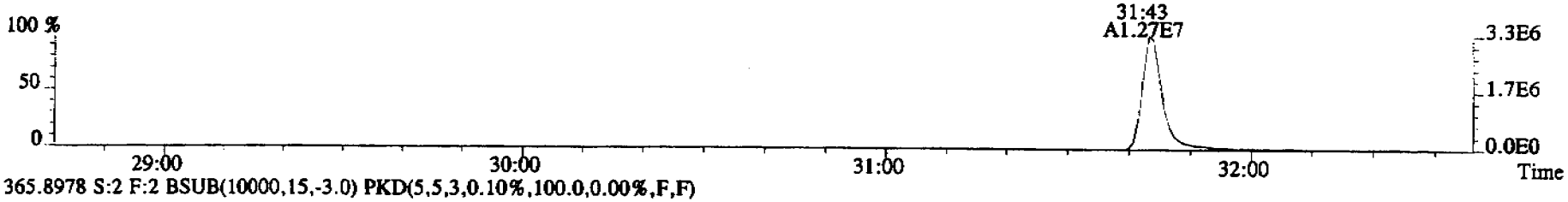
333.9339 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



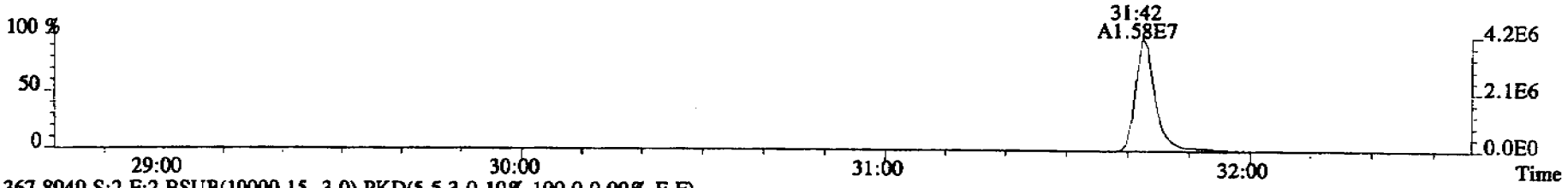
File:050430D2 #1-272 Acq: 1-MAY-2005 01:42:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory VG-7 Text:0_6749_OPR001 Exp:OCDD_DB5
353.8576 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



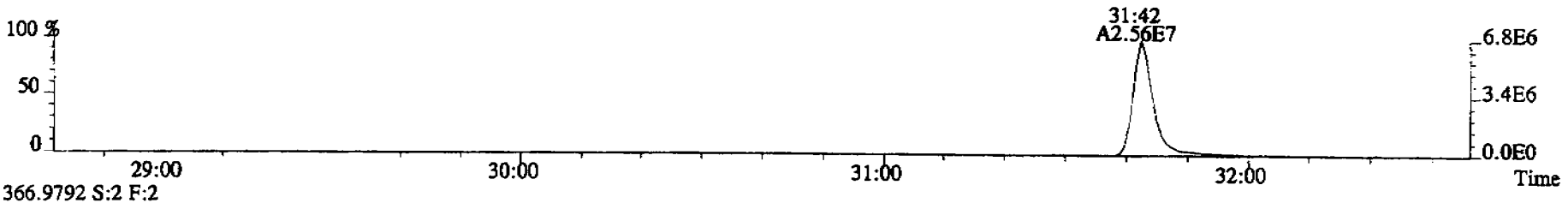
355.8546 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



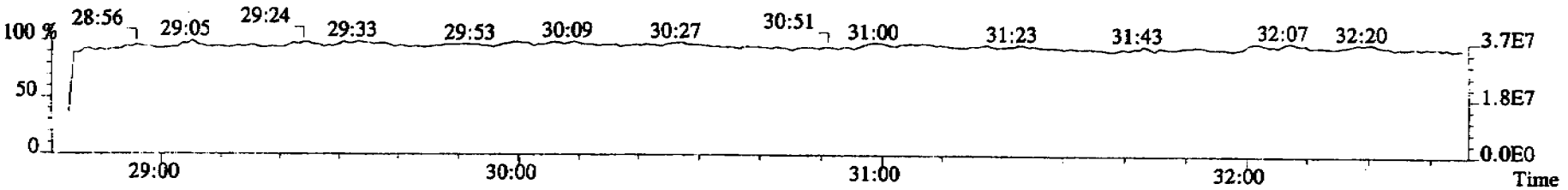
365.8978 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



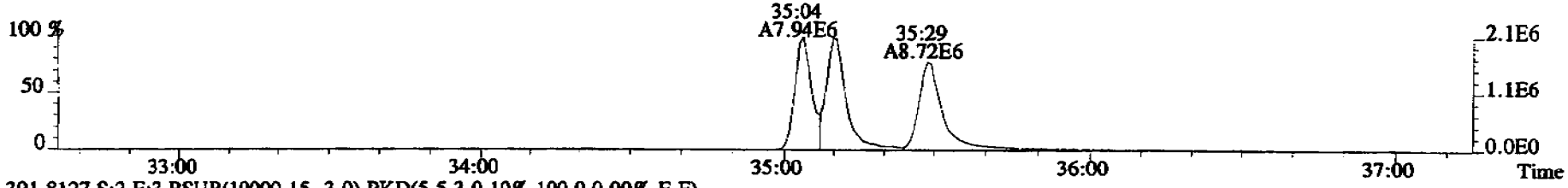
367.8949 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



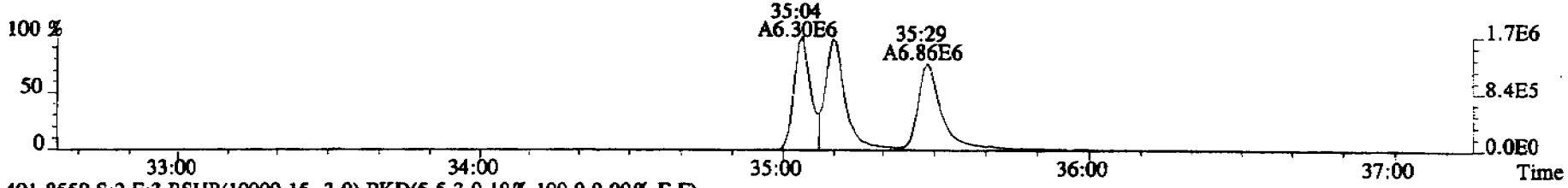
366.9792 S:2 F:2



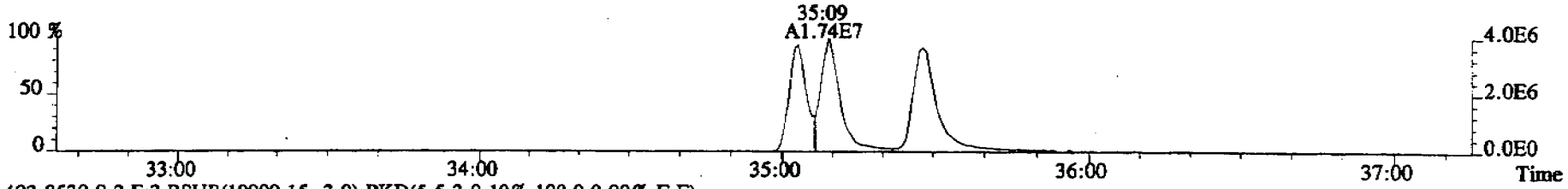
File:050430D2 #1-399 Acq: 1-MAY-2005 01:42:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory VG-7 Text:0_6749_OPR001 Exp:OCDD_DB5
389.8156 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



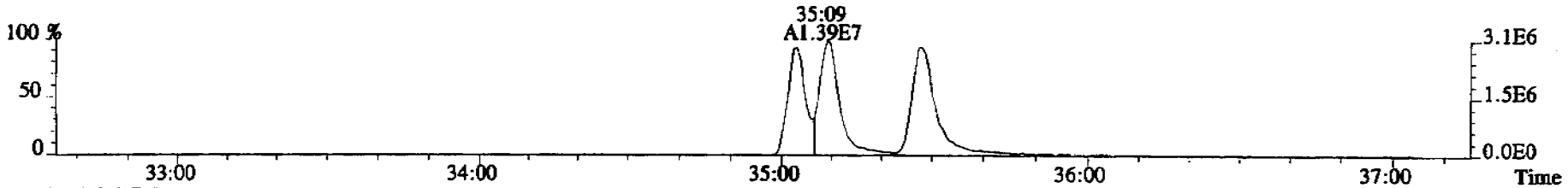
391.8127 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



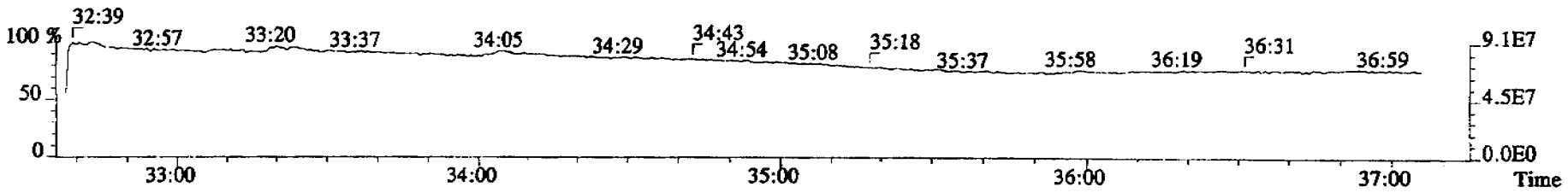
401.8559 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



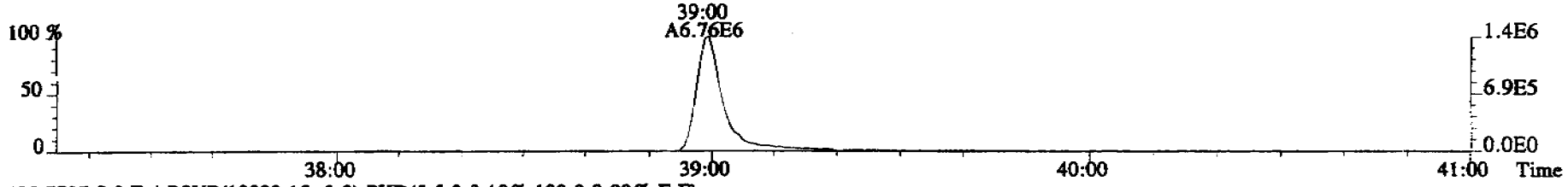
403.8530 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



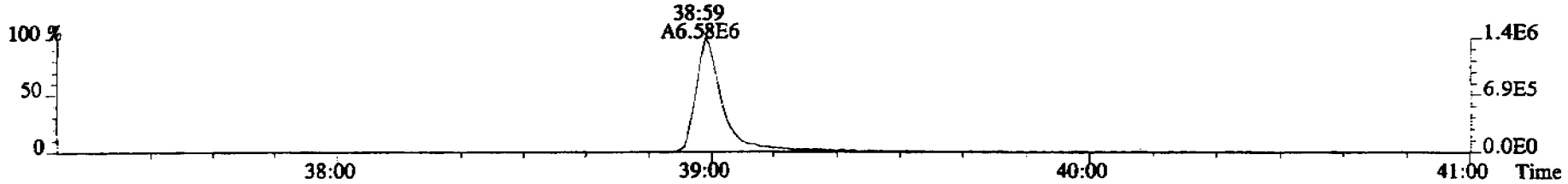
380.9760 S:2 F:3



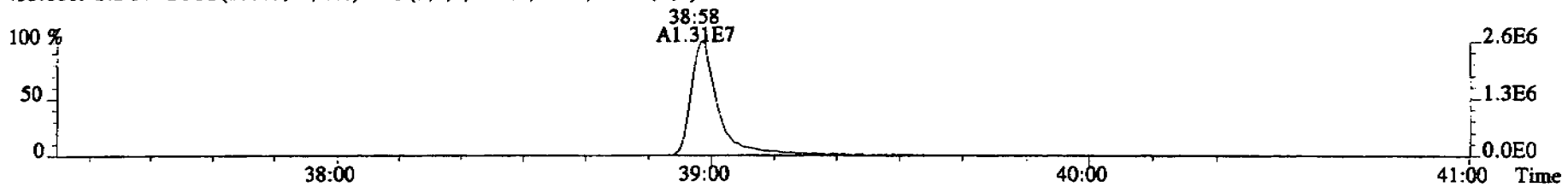
File:050430D2 #1-348 Acq: 1-MAY-2005 01:42:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory VG-7 Text:0_6749_OPR001 Exp:OCDD_DB5
423.7767 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



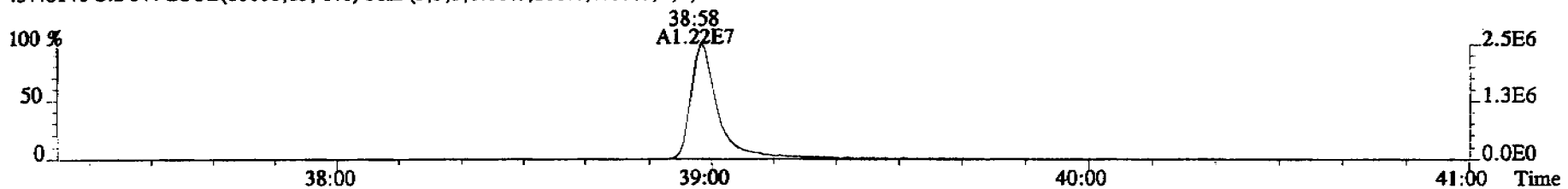
425.7737 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



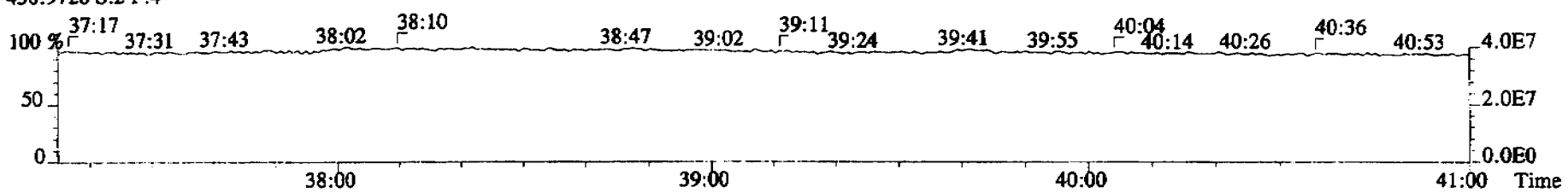
435.8169 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



437.8140 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

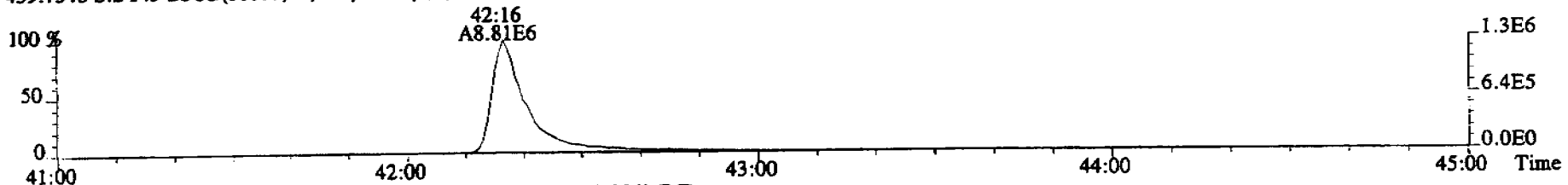


430.9728 S:2 F:4

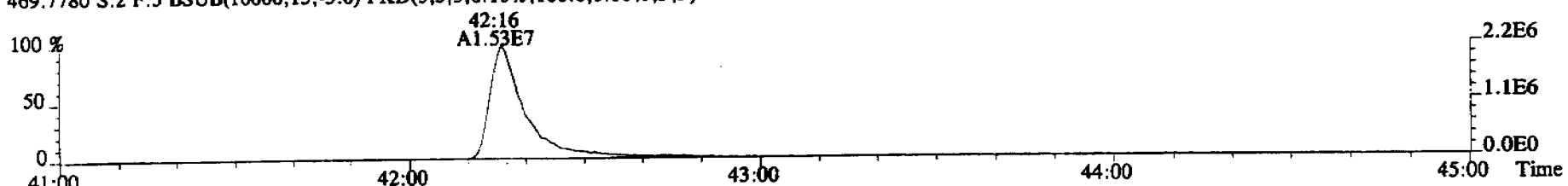


File:050430D2 #1-345 Acq: 1-MAY-2005 01:42:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory VG-7 Text:0_6749_OPR001 Exp:OCDD_DB5
457.7377 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

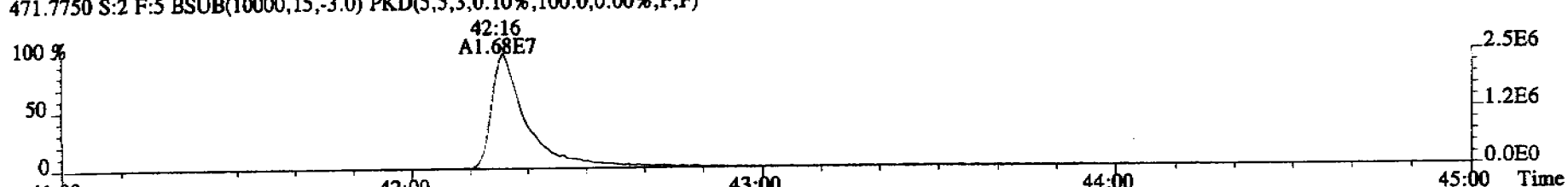
459.7348 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



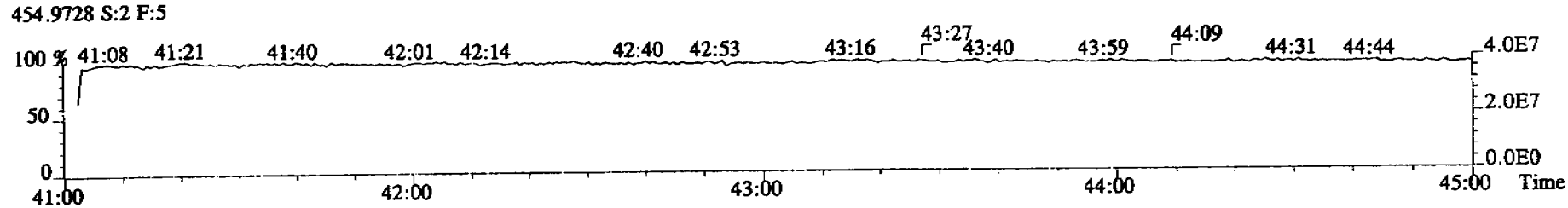
469.7780 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



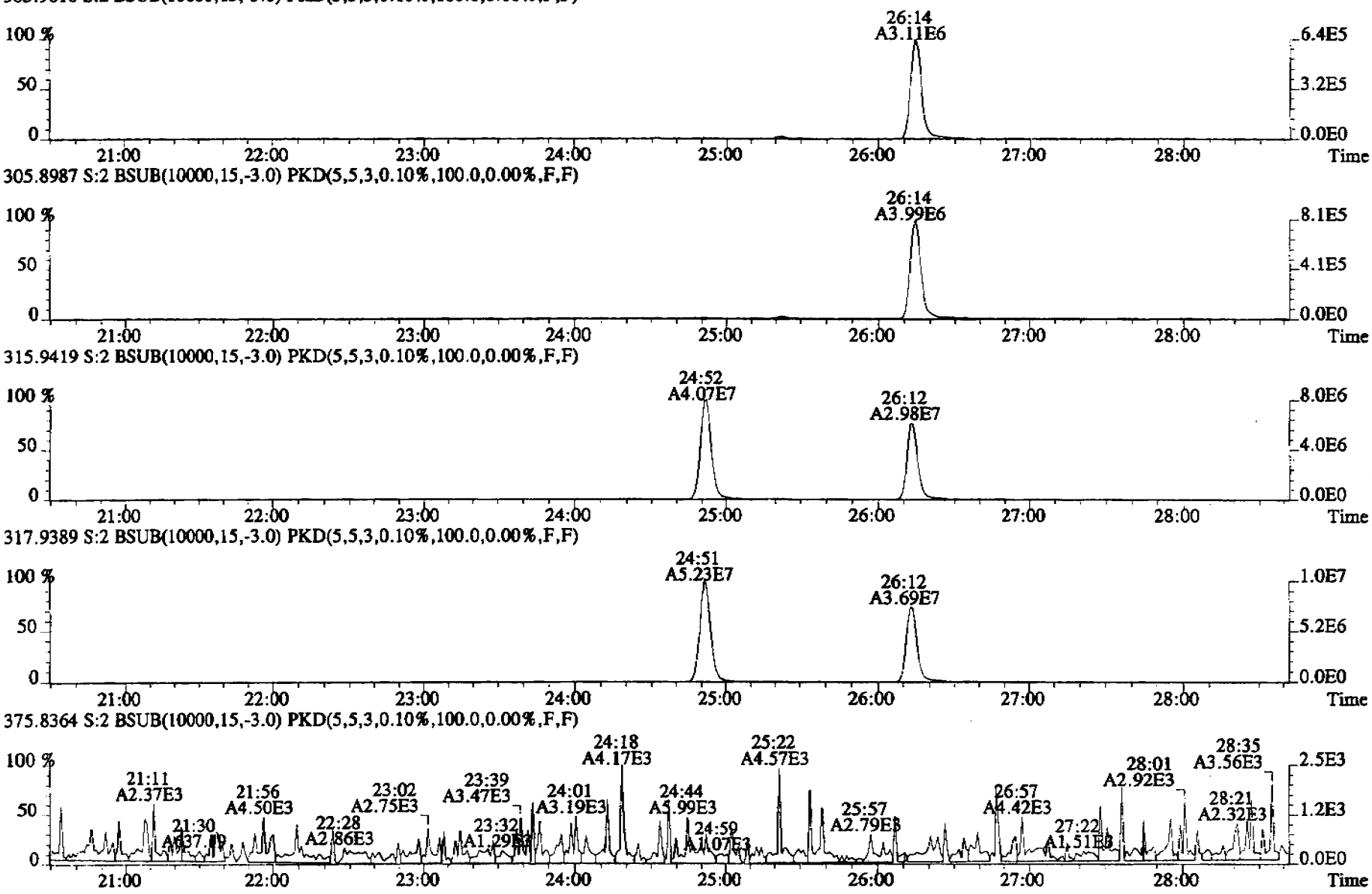
471.7750 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

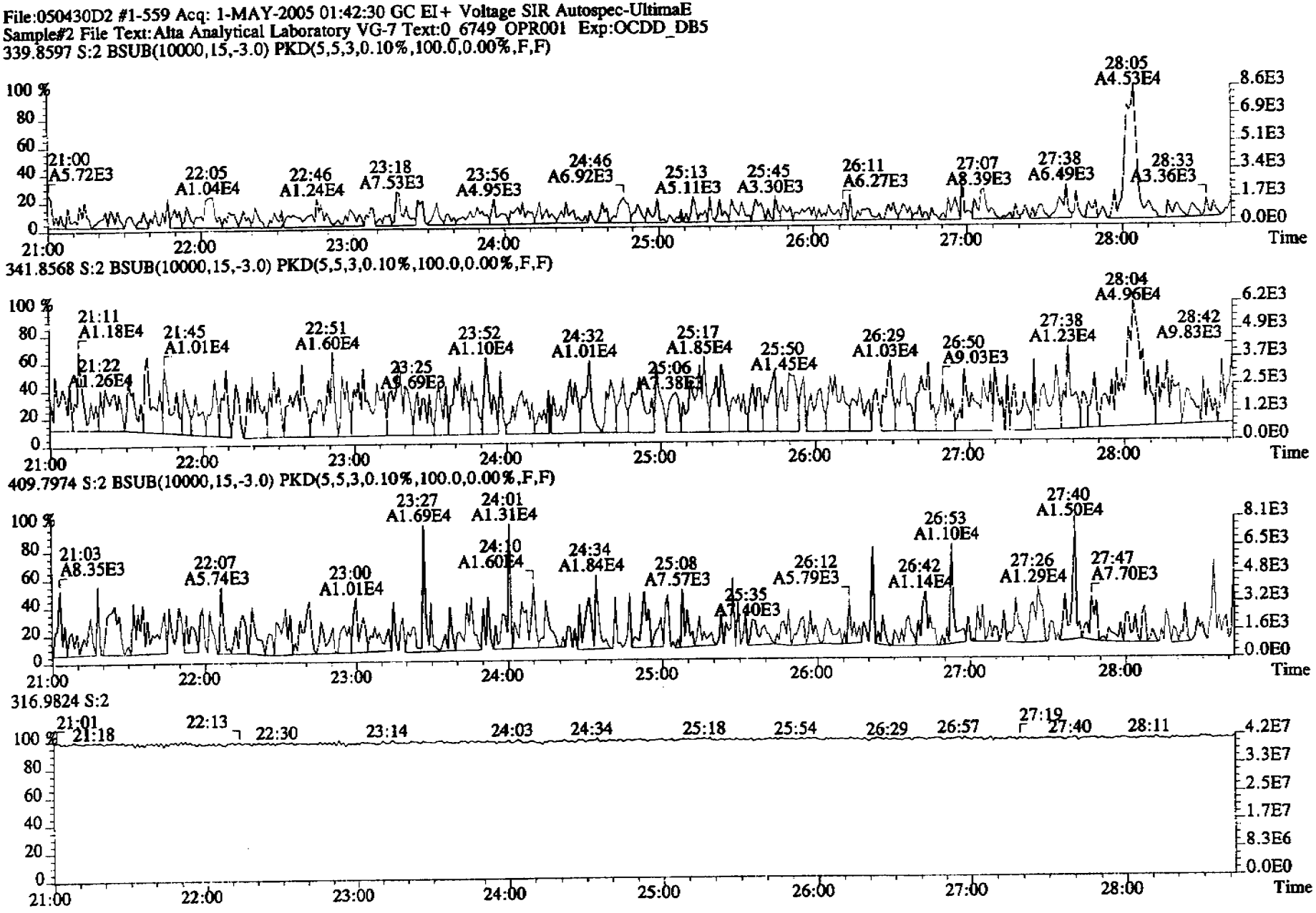


454.9728 S:2 F:5



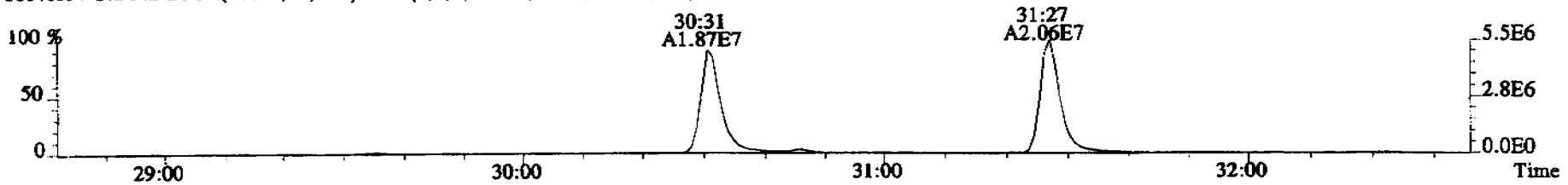
File:050430D2 #1-559 Acq: 1-MAY-2005 01:42:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory VG-7 Text:0_6749_OPR001 Exp:OCDD_DB5



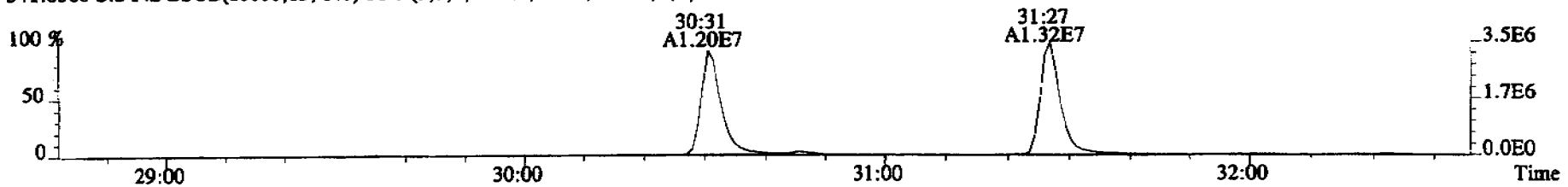

File:050430D2 #1-559 Acq: 1-MAY-2005 01:42:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory VG-7 Text:0_6749_OPR001 Exp:OCDD_DB5
339.8597 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
28:05 A4.53E4
21:00 A5.72E3
22:05 A1.04E4
22:46 A1.24E4
23:18 A7.53E3
23:56 A4.95E3
24:46 A6.92E3
25:13 A5.11E3
25:45 A3.30E3
26:11 A6.27E3
27:07 A8.39E3
27:38 A6.49E3
28:33 A3.36E3
8.6E3
6.9E3
5.1E3
3.4E3
1.7E3
0.0E0
Time
341.8568 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
28:04 A4.96E4
21:11 A1.18E4
21:22 A1.26E4
21:45 A1.01E4
22:51 A1.60E4
23:25 A9.69E3
23:52 A1.10E4
24:32 A1.01E4
25:06 A7.38E3
25:17 A1.85E4
25:50 A1.45E4
26:29 A1.03E4
26:50 A9.03E3
27:38 A1.23E4
28:42 A9.83E3
6.2E3
4.9E3
3.7E3
2.5E3
1.2E3
0.0E0
Time
409.7974 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
27:40 A1.50E4
23:27 A1.69E4
24:01 A1.31E4
21:03 A8.35E3
22:07 A5.74E3
23:00 A1.01E4
24:10 A1.60E4
24:34 A1.84E4
25:08 A7.57E3
25:35 A7.40E3
26:12 A5.79E3
26:53 A1.10E4
26:42 A1.14E4
27:26 A1.29E4
27:47 A7.70E3
8.1E3
6.5E3
4.8E3
3.2E3
1.6E3
0.0E0
Time
316.9824 S:2
21:01
21:18
22:13
22:30
23:14
24:03
24:34
25:18
25:54
26:29
26:57
27:19
27:40
28:11
4.2E7
3.3E7
2.5E7
1.7E7
8.3E6
0.0E0
Time

File:050430D2 #1-272 Acq: 1-MAY-2005 01:42:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory VG-7 Text:0_6749_OPR001 Exp:OCDD_DB5

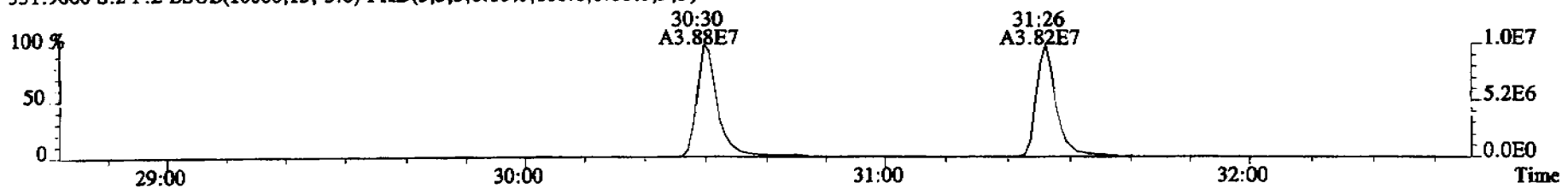
339.8597 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



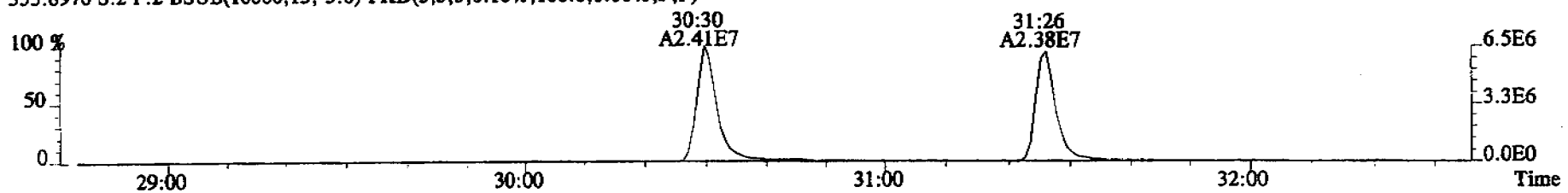
341.8568 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



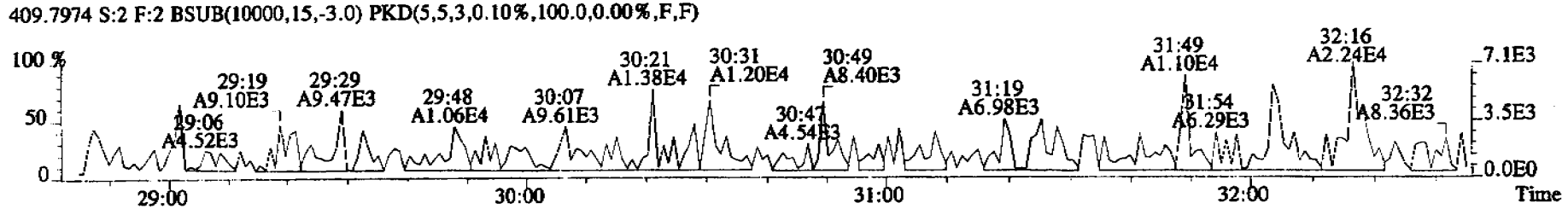
351.9000 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



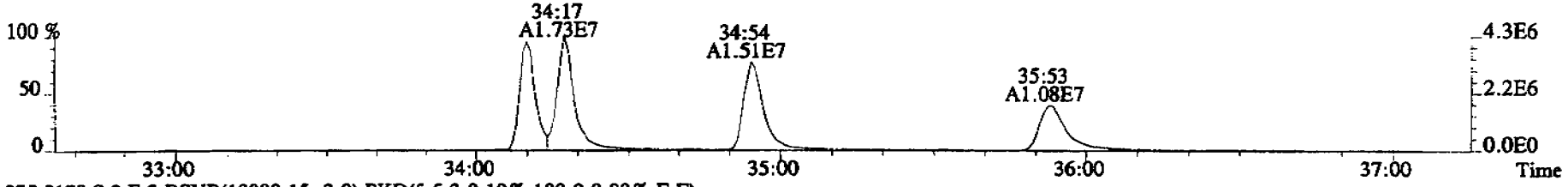
353.8970 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



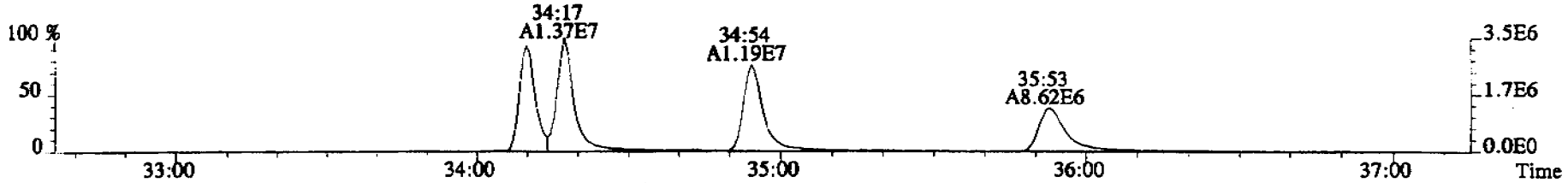
409.7974 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



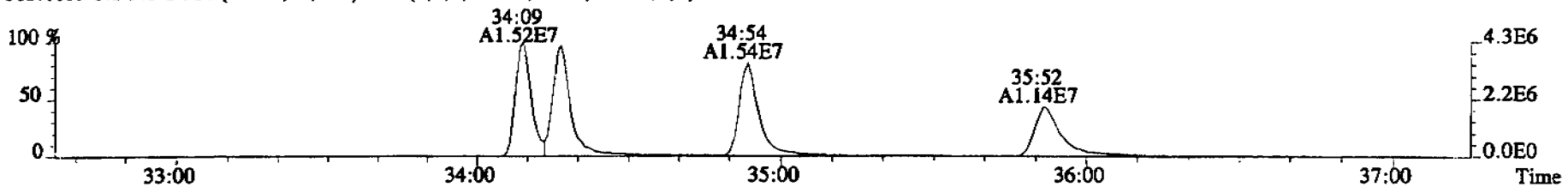
File:050430D2 #1-399 Acq: 1-MAY-2005 01:42:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory VG-7 Text:0_6749_OPR001 Exp:OCDD_DB5
373.8207 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



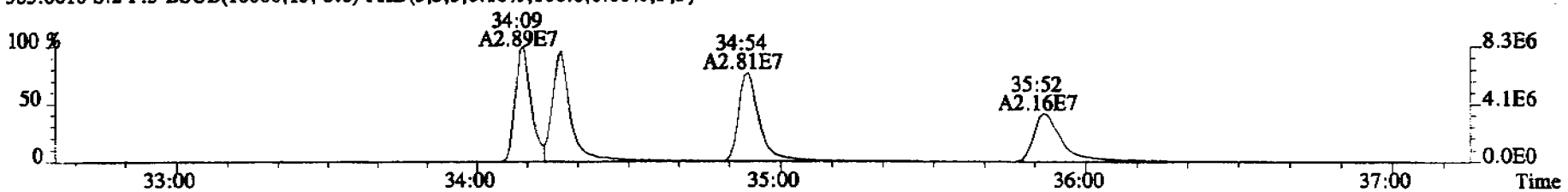
375.8178 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



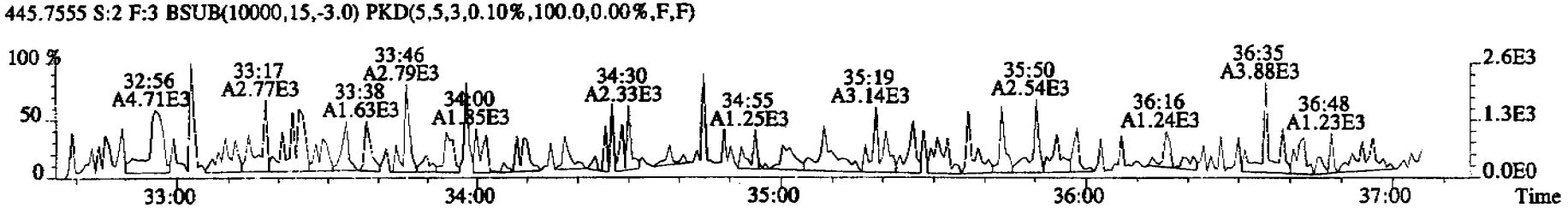
383.8639 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



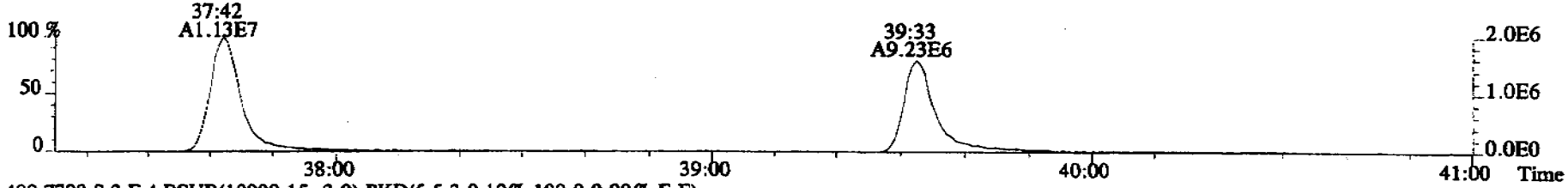
385.8610 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



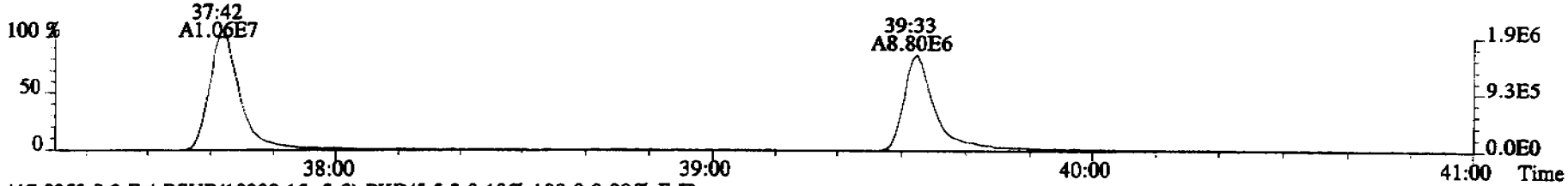
445.7555 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



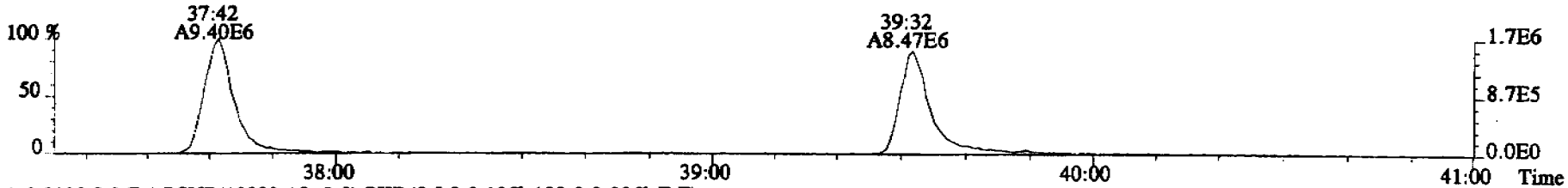
File:050430D2 #1-348 Acq: 1-MAY-2005 01:42:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory VG-7 Text:0_6749_OPR001 Exp:OCDD_DB5
407.7818 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



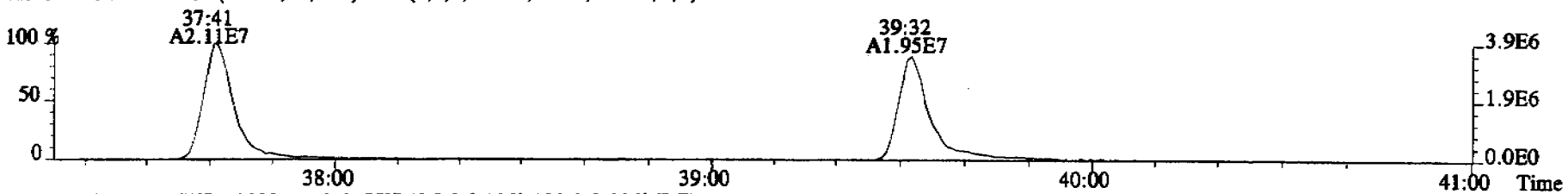
409.7788 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



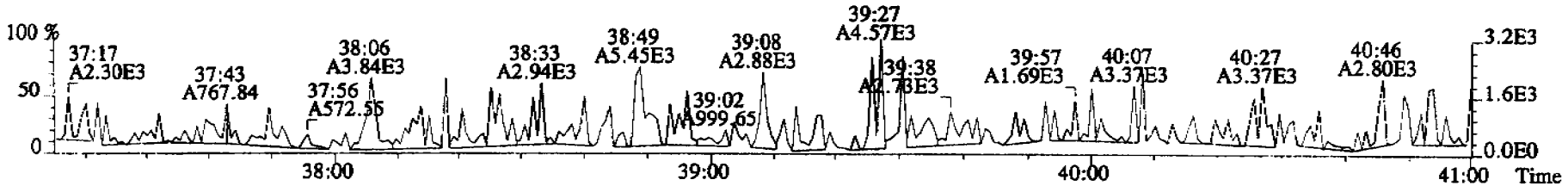
417.8253 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



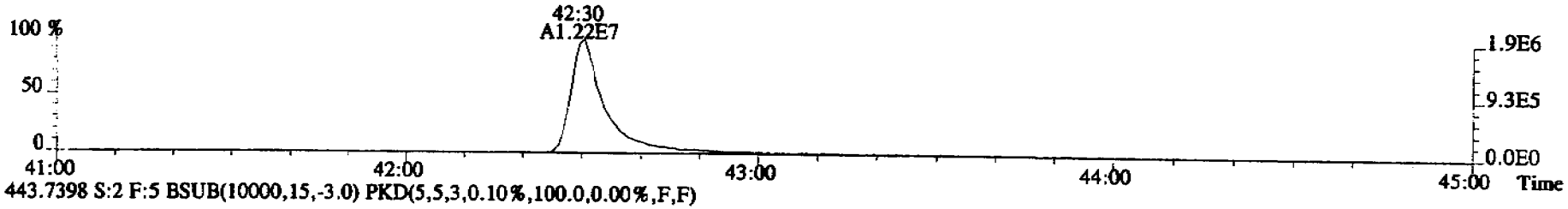
419.8220 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



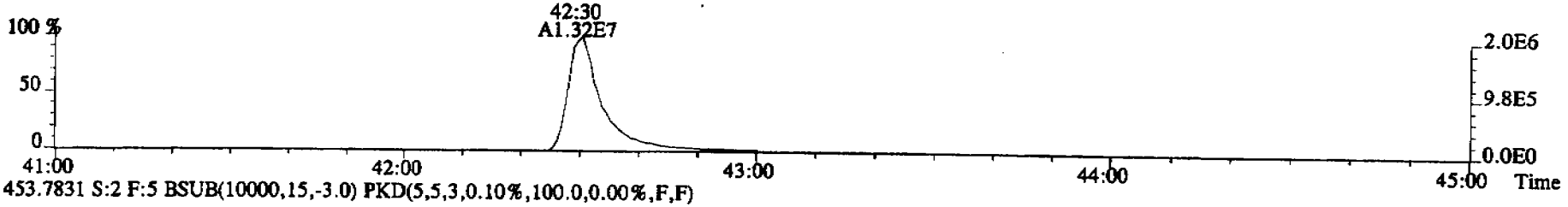
479.7165 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



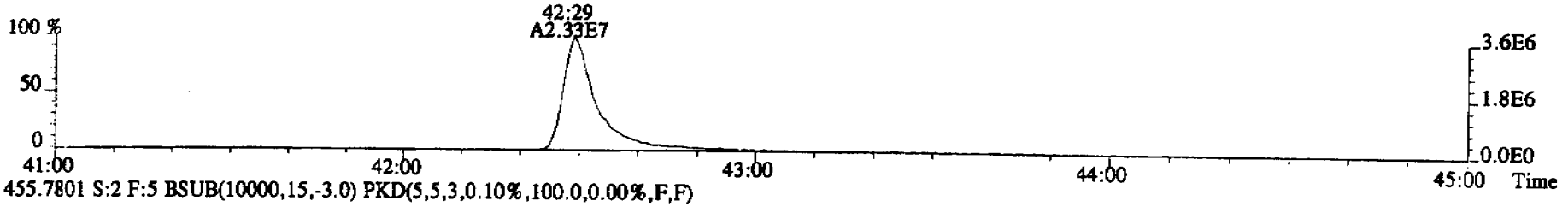
File:050430D2 #1-345 Acq: 1-MAY-2005 01:42:30 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory VG-7 Text:0_6749_OPR001 Exp:OCDD_DB5
441.7428 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



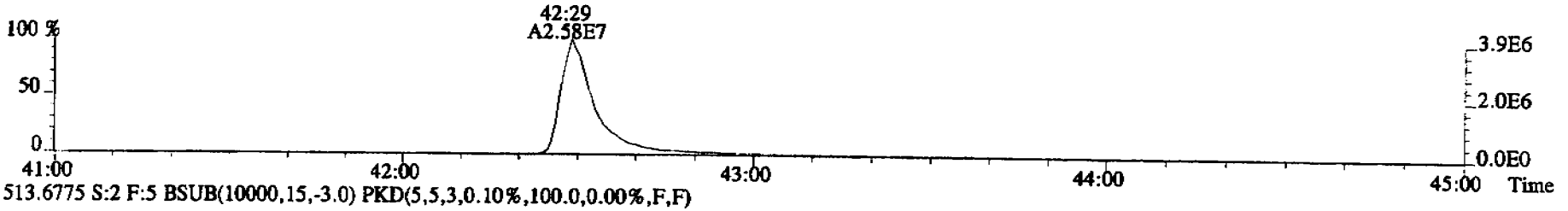
443.7398 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



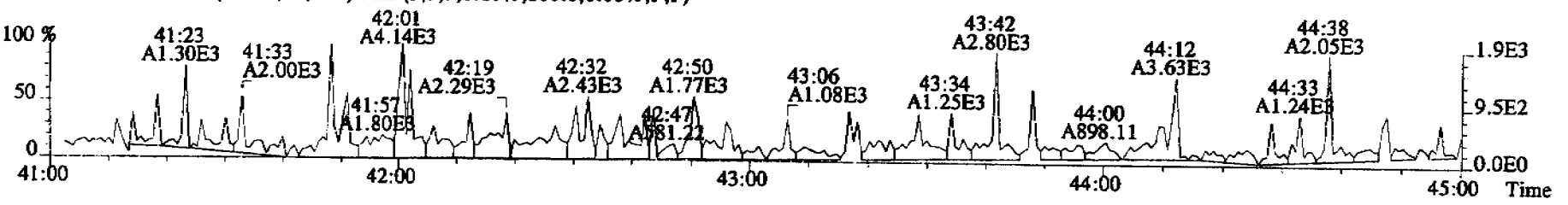
453.7831 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Client ID: RE73-05-58829 Filename: 050502D1 S:13 Acq:2-MAY-05 17:49:14 ConCal: ST050502D1-1
Lab ID: 26076_6749_001 GC Column ID: db-5 ICal: 1613vg7-4-23-05 wt/vol:10.010 EndCAL: ST050502D1-2

	Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL
	2,3,7,8-TCDD	1.88e+06	0.81 y	1.06	27:01	5.93			* 2.5	*
	1,2,3,7,8-PeCDD	2.57e+06	0.61 y	0.99	31:41	10.7			* 2.5	*
	1,2,3,4,7,8-HxCDD	1.42e+06	1.19 y	1.11	35:01	8.15			* 2.5	*
	1,2,3,6,7,8-HxCDD	6.30e+06	1.30 y	1.07	35:08	29.9			* 2.5	*
	1,2,3,7,8,9-HxCDD	4.87e+06	1.29 y	1.15	35:27	23.9			* 2.5	*
	1,2,3,4,6,7,8-HpCDD	9.11e+07	1.04 y	1.05	38:57	488			* 2.5	*
	OCDD	2.31e+08	0.92 y	1.04	42:16	1860			* 2.5	*
	2,3,7,8-TCDF	2.76e+07	0.78 y	1.05	26:11	61.0	ok		* 2.5	*
	1,2,3,7,8-PeCDF	1.05e+07	1.58 y	0.95	30:29	28.3			* 2.5	*
	2,3,4,7,8-PeCDF	1.70e+07	1.60 y	1.08	31:25	42.6			* 2.5	*
	1,2,3,4,7,8-HxCDF	6.69e+06	1.19 y	1.19	34:08	22.0			* 2.5	*
	1,2,3,6,7,8-HxCDF	6.81e+06	1.26 y	1.22	34:15	19.3			* 2.5	*
	2,3,4,6,7,8-HxCDF	8.08e+06	1.27 y	1.20	34:53	24.7			* 2.5	*
	1,2,3,7,8,9-HxCDF	1.30e+06	1.25 y	1.13	35:51	5.00			* 2.5	*
	1,2,3,4,6,7,8-HpCDF	2.74e+07	1.02 y	1.38	37:39	93.5			* 2.5	*
	1,2,3,4,7,8,9-HpCDF	1.50e+06	1.05 y	1.23	39:30	5.81			* 2.5	*
	OCDF	1.01e+07	0.88 y	1.02	42:28	53.6			* 2.5	*
IS	13C-2,3,7,8-TCDD	5.99e+07	0.80 y	1.12	27:00	179				
IS	13C-1,2,3,7,8-PeCDD	4.83e+07	0.64 y	0.89	31:41	182				
IS	13C-1,2,3,4,7,8-HxCDD	3.12e+07	1.27 y	0.83	35:01	181				
IS	13C-1,2,3,6,7,8-HxCDD	3.94e+07	1.27 y	1.00	35:08	191				
IS	13C-1,2,3,4,6,7,8-HpCDD	3.56e+07	1.07 y	0.82	38:57	208				
IS	13C-OCDD	4.79e+07	0.90 y	0.74	42:14	311				
IS	13C-2,3,7,8-TCDF	8.57e+07	0.82 y	1.02	26:11	181				
IS	13C-1,2,3,7,8-PeCDF	7.79e+07	1.58 y	0.90	30:28	186				
IS	13C-2,3,4,7,8-PeCDF	7.41e+07	1.56 y	0.87	31:24	183				
IS	13C-1,2,3,4,7,8-HxCDF	5.12e+07	0.52 y	1.27	34:07	195				
IS	13C-1,2,3,6,7,8-HxCDF	5.81e+07	0.53 y	1.40	34:15	199				
IS	13C-2,3,4,6,7,8-HxCDF	5.44e+07	0.51 y	1.29	34:52	203				
IS	13C-1,2,3,7,8,9-HxCDF	4.63e+07	0.52 y	1.12	35:50	199				
IS	13C-1,2,3,4,6,7,8-HpCDF	4.25e+07	0.45 y	1.01	37:39	203				
IS	13C-1,2,3,4,7,8,9-HpCDF	4.20e+07	0.46 y	0.88	39:30	230				
IS	13C-OCDF	7.38e+07	0.90 y	0.94	42:27	379				
C/Up	37Cl-2,3,7,8-TCDD	1.34e+07		0.62	27:01	72.3				
RS/RT	13C-1,2,3,4-TCDD	5.96e+07	0.81 y	1.00	26:21	200				
RS	13C-1,2,3,4-TCDF	9.25e+07	0.78 y	1.00	24:49	200				
RS/RT	13C-1,2,3,7,8,9-HxCDD	4.14e+07	1.25 y	1.00	35:27	200				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	132	132		*	*
Total Penta-Dioxins	139	139		*	*
Total Hexa-Dioxins	297	297		*	*
Total Hepta-Dioxins	849	849		*	*
Total Tetra-Furans	1160	1160	D	*	*
Total Penta-Furans	459	459	D	*	*
Total Hexa-Furans	221	221	D	*	*
Total Hepta-Furans	155	155		*	*

Rec	Qual
89.5	
91.3	
90.5	
95.6	
104	
77.8	
90.8	
93.2	
91.5	
97.7	
99.8	
102	
99.8	
102	
115	
94.9	
90.4	

Intergrations by Analyst: [signature]

Date: 5/3/05

Totals class: TCDD EMPC Entry #: 19

Run: 18 File: 050502D1 S: 13 I: 1 F: 1
Acquired: 2-MAY-05 17:49:14 Processed: 3-MAY-05 05:29:48

Total Concentration: 131.59 Unnamed Concentration: 125.659

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
23:18	4.620e+06	5.904e+06	0.78	y	1.052e+07	33.141	
23:43	2.556e+06	3.242e+06	0.79	y	5.798e+06	18.260	
24:11	5.202e+05	6.663e+05	0.78	y	1.187e+06	3.7366	
24:58	9.094e+04	1.153e+05	0.79	y	2.062e+05	0.64944	
25:13	1.567e+06	2.010e+06	0.78	y	3.576e+06	11.262	
25:25	1.685e+06	2.152e+06	0.78	y	3.837e+06	12.082	
25:37	7.249e+05	8.839e+05	0.82	y	1.609e+06	5.0664	
25:52	3.746e+05	4.454e+05	0.84	y	8.200e+05	2.5824	
26:01	7.875e+05	1.002e+06	0.79	y	1.790e+06	5.6356	
26:22	8.871e+05	1.134e+06	0.78	y	2.021e+06	6.3635	
26:30	3.070e+05	3.751e+05	0.82	y	6.821e+05	2.1481	
26:44	1.381e+06	1.744e+06	0.79	y	3.126e+06	9.8430	
26:51	3.535e+05	4.623e+05	0.76	y	8.158e+05	2.5691	
27:01	8.444e+05	1.040e+06	0.81	y	1.884e+06	5.9341	2,3,7,8-TCDD
27:18	1.086e+06	1.434e+06	0.76	y	2.520e+06	7.9353	
27:26	3.259e+05	4.448e+05	0.73	y	7.707e+05	2.4272	
27:54	2.744e+05	3.472e+05	0.79	y	6.216e+05	1.9576	

Totals class: PeCDD EMPC Entry #: 21

Run: 18 File: 050502D1 S: 13 I: 1 F: 2
Acquired: 2-MAY-05 17:49:14 Processed: 3-MAY-05 05:29:48

Total Concentration: 138.81 Unnamed Concentration: 128.059

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
29:34	2.728e+06	4.274e+06	0.64	y	7.001e+06	29.299	
30:02	5.556e+05	8.574e+05	0.65	y	1.413e+06	5.9133	
30:29	2.350e+06	3.789e+06	0.62	y	6.138e+06	25.687	
30:39	1.193e+06	1.903e+06	0.63	y	3.096e+06	12.955	
30:45	1.501e+06	2.488e+06	0.60	y	3.989e+06	16.695	
30:58	1.689e+06	2.716e+06	0.62	y	4.406e+06	18.437	
31:16	6.240e+05	9.855e+05	0.63	y	1.609e+06	6.7353	
31:41	9.689e+05	1.599e+06	0.61	y	2.568e+06	10.746	1,2,3,7,8-PeCDD
31:46	5.462e+05	8.660e+05	0.63	y	1.412e+06	5.9100	
32:03	5.886e+05	9.475e+05	0.62	y	1.536e+06	6.4280	

Totals class: HxCDD EMPC Entry #: 23

Run: 18 File: 050502D1 S: 13 I: 1 F: 3
Acquired: 2-MAY-05 17:49:14 Processed: 3-MAY-05 05:29:48

Total Concentration: 297.40 Unnamed Concentration: 235.491

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
33:29	6.420e+06	5.037e+06	1.27	y	1.146e+07	58.386	
34:02	2.606e+06	2.079e+06	1.25	y	4.685e+06	23.875	
34:19	1.573e+07	1.233e+07	1.28	y	2.806e+07	143.00	
35:01	7.692e+05	6.468e+05	1.19	y	1.416e+06	8.1468	1,2,3,4,7,8-HxCDD
35:08	3.559e+06	2.744e+06	1.30	y	6.303e+06	29.880	1,2,3,6,7,8-HxCDD
35:19	1.092e+06	9.145e+05	1.19	y	2.007e+06	10.227	
35:27	2.741e+06	2.125e+06	1.29	y	4.866e+06	23.879	1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC Entry #: 25

Run: 18 File: 050502D1 S: 13 I: 1 F: 4
Acquired: 2-MAY-05 17:49:14 Processed: 3-MAY-05 05:29:48

Total Concentration: 849.48 Unnamed Concentration: 361.831

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
38:04	3.471e+07	3.291e+07	1.05 y	6.762e+07	361.83	
38:57	4.637e+07	4.476e+07	1.04 y	9.113e+07	487.65	1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC Entry #: 27

Run: 18 File: 050502D1 S: 13 I: 1 F: 1
Acquired: 2-MAY-05 17:49:14 Processed: 3-MAY-05 05:29:48

Total Concentration: 1162.6 Unnamed Concentration: 1101.661

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
21:04	4.815e+06	6.216e+06	0.77	y	1.103e+07	24.410	
21:37	4.127e+06	5.260e+06	0.78	y	9.386e+06	20.771	
22:18	2.929e+06	3.760e+06	0.78	y	6.689e+06	14.801	
22:50	3.320e+07	4.247e+07	0.78	y	7.567e+07	167.46	
23:10	4.384e+06	5.765e+06	0.76	y	1.015e+07	22.460	
23:19	1.368e+07	1.744e+07	0.78	y	3.113e+07	68.880	
23:44	6.383e+06	8.238e+06	0.77	y	1.462e+07	32.355	
23:53	4.784e+06	6.172e+06	0.78	y	1.096e+07	24.243	
24:04	7.429e+06	9.613e+06	0.77	y	1.704e+07	37.712	
24:27	7.265e+06	9.448e+06	0.77	y	1.671e+07	36.984	
24:36	9.293e+06	1.191e+07	0.78	y	2.121e+07	46.929	
24:49	3.109e+07	4.032e+07	0.77	y	7.141e+07	158.02	
25:19	1.555e+07	2.069e+07	0.75	y	3.624e+07	80.195	
25:35	9.455e+06	1.242e+07	0.76	y	2.188e+07	48.418	
25:46	1.016e+07	1.314e+07	0.77	y	2.331e+07	51.573	
25:58	9.179e+06	1.200e+07	0.76	y	2.118e+07	46.873	
26:05	5.250e+06	6.824e+06	0.77	y	1.207e+07	26.718	
26:11	1.205e+07	1.551e+07	0.78	y	2.756e+07	60.978	2,3,7,8-TCDF
26:32	3.220e+07	4.151e+07	0.78	y	7.371e+07	163.11	
26:46	1.533e+06	1.886e+06	0.81	y	3.419e+06	7.5665	
27:02	1.203e+06	1.529e+06	0.79	y	2.732e+06	6.0458	
27:34	8.163e+05	1.109e+06	0.74	y	1.925e+06	4.2608	
27:44	1.672e+06	2.171e+06	0.77	y	3.843e+06	8.5031	
28:03	6.422e+05	8.831e+05	0.73	y	1.525e+06	3.3752	

Totals class: 1st Punc. PeCDF EMPC Entry #: 29

Run: 18 File: 050502D1 S: 13 I: 1 F: 1
Acquired: 2-MAY-05 17:49:14 Processed: 3-MAY-05 05:29:48

Total Concentration: 31.291 Unnamed Concentration: 31.291

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
28:01	7.425e+06	4.642e+06	1.60 y	1.207e+07	31.291	

Totals class: PeCDF EMPC Entry #: 31

Run: 18 File: 050502D1 S: 13 I: 1 F: 2
Acquired: 2-MAY-05 17:49:14 Processed: 3-MAY-05 05:29:48

Total Concentration: 428.15 Unnamed Concentration: 357.186

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
29:23	1.578e+07	1.002e+07	1.58	y	2.580e+07	66.899	
29:32	1.997e+07	1.267e+07	1.58	y	3.264e+07	84.650	
29:42	1.564e+06	9.571e+05	1.63	y	2.521e+06	6.5373	
29:54	2.170e+06	1.326e+06	1.64	y	3.496e+06	9.0660	
30:00	3.431e+06	2.188e+06	1.57	y	5.619e+06	14.571	
30:07	9.497e+06	5.949e+06	1.60	y	1.545e+07	40.053	
30:17	2.530e+06	1.510e+06	1.68	y	4.040e+06	10.475	
30:29	6.433e+06	4.081e+06	1.58	y	1.051e+07	28.313	1,2,3,7,8-PeCDF
30:42	1.184e+07	7.385e+06	1.60	y	1.922e+07	49.841	
30:53	1.148e+06	6.897e+05	1.67	y	1.838e+06	4.7666	
31:11	9.601e+05	6.128e+05	1.57	y	1.573e+06	4.0786	
31:18	1.378e+07	8.778e+06	1.57	y	2.256e+07	58.509	
31:25	1.048e+07	6.553e+06	1.60	y	1.704e+07	42.647	2,3,4,7,8-PeCDF
31:41	1.020e+06	5.877e+05	1.74	y	1.607e+06	4.1680	
32:18	8.381e+05	5.389e+05	1.56	y	1.377e+06	3.5709	

Totals class: HxCDF EMPC Entry #: 33

Run: 18 File: 050502D1 S: 13 I: 1 F: 3
Acquired: 2-MAY-05 17:49:14 Processed: 3-MAY-05 05:29:48

Total Concentration: 220.97 Unnamed Concentration: 150.022

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
32:56	2.962e+06	2.434e+06	1.22	y	5.396e+06	17.327	
33:06	1.074e+07	8.599e+06	1.25	y	1.934e+07	62.101	
33:18	9.992e+05	7.108e+05	1.41	y	1.710e+06	5.4907	
33:27	1.030e+06	8.363e+05	1.23	y	1.866e+06	5.9922	
33:39	2.421e+06	1.928e+06	1.26	y	4.349e+06	13.964	
34:01	5.762e+06	4.455e+06	1.29	y	1.022e+07	32.805	
34:08	3.635e+06	3.057e+06	1.19	y	6.692e+06	21.996	1,2,3,4,7,8-HxCDF
34:15	3.795e+06	3.018e+06	1.26	y	6.813e+06	19.261	1,2,3,6,7,8-HxCDF
34:24	5.484e+05	4.379e+05	1.25	y	9.864e+05	3.1673	
34:32	8.012e+05	6.448e+05	1.24	y	1.446e+06	4.6434	
34:39	7.823e+05	6.291e+05	1.24	y	1.411e+06	4.5322	
34:53	4.515e+06	3.563e+06	1.27	y	8.079e+06	24.692	2,3,4,6,7,8-HxCDF
35:51	7.260e+05	5.787e+05	1.25	y	1.305e+06	5.0038	1,2,3,7,8,9-HxCDF

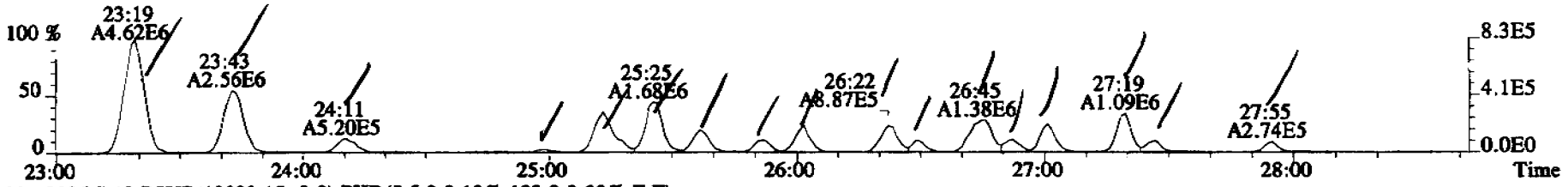
Totals class: HpCDF EMPC Entry #: 35

Run: 18 File: 050502D1 S: 13 I: 1 F: 4
Acquired: 2-MAY-05 17:49:14 Processed: 3-MAY-05 05:29:48

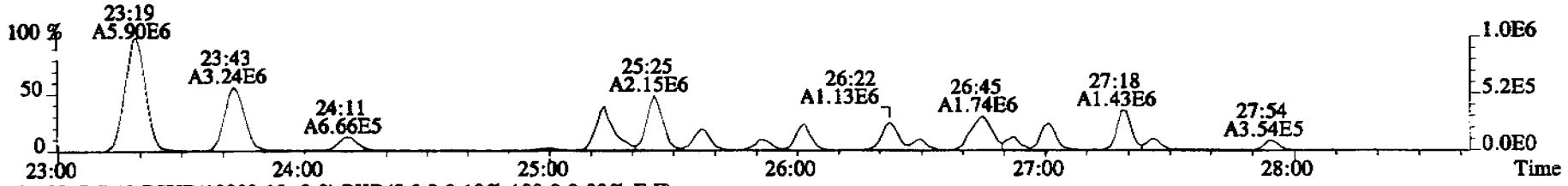
Total Concentration: 154.90 Unnamed Concentration: 55.555

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
37:39	1.384e+07	1.356e+07	1.02	y	2.740e+07	93.543	1,2,3,4,6,7,8-HpCDF
38:04	1.682e+06	1.637e+06	1.03	y	3.320e+06	12.012	
38:16	6.135e+06	5.899e+06	1.04	y	1.203e+07	43.543	
39:30	7.684e+05	7.288e+05	1.05	y	1.497e+06	5.8063	1,2,3,4,7,8,9-HpCDF

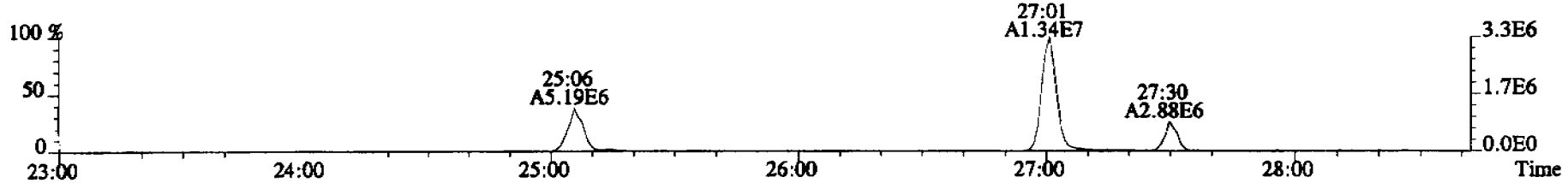
File:050502D1 #1-559 Acq: 2-MAY-2005 17:49:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_001 RE73-05-58829 10.01g Exp:OCDD_DB5
319.8965 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



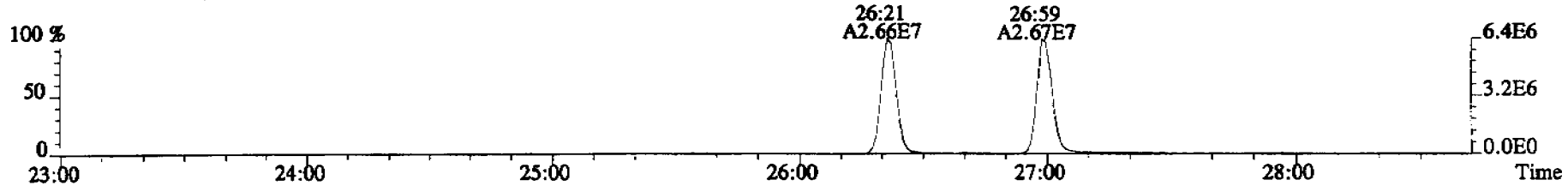
321.8936 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



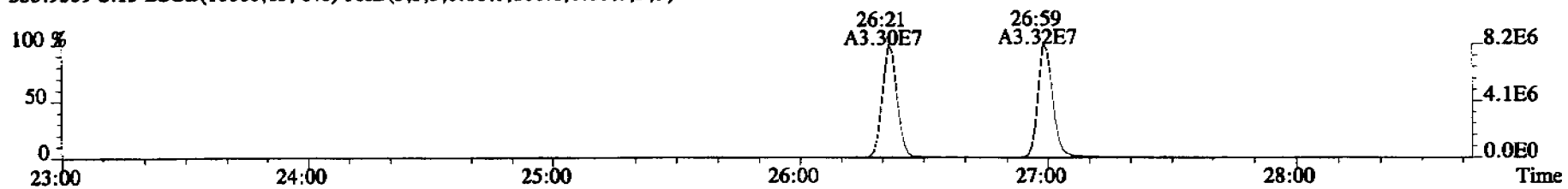
327.8847 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



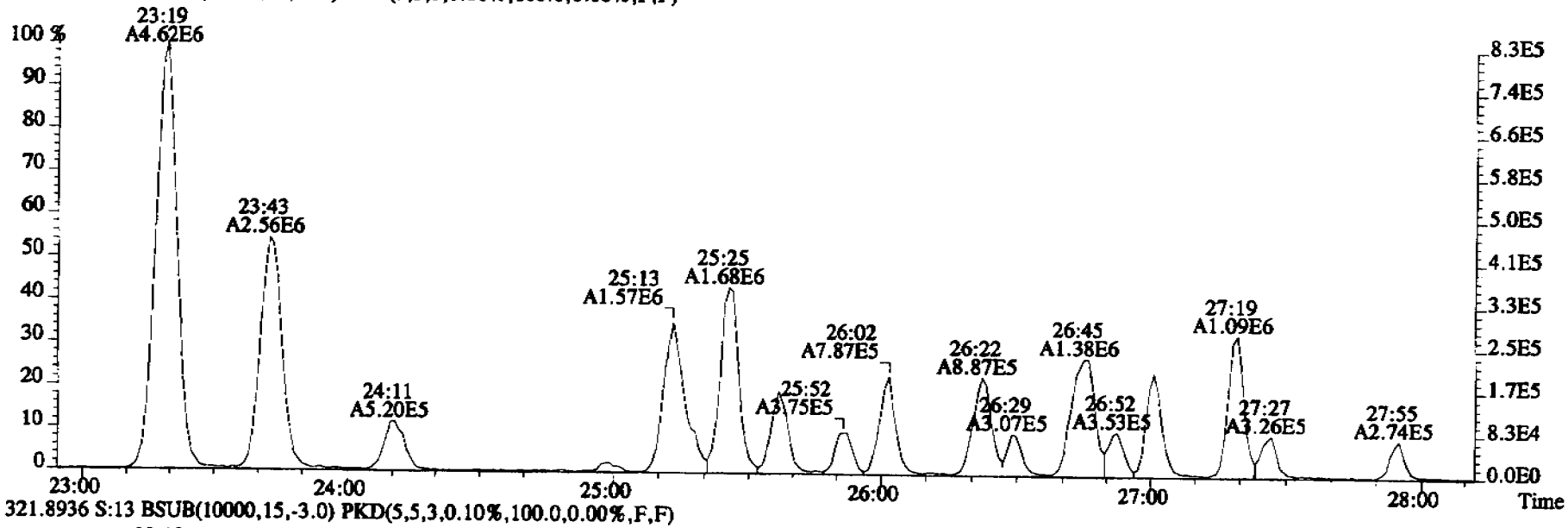
331.9368 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



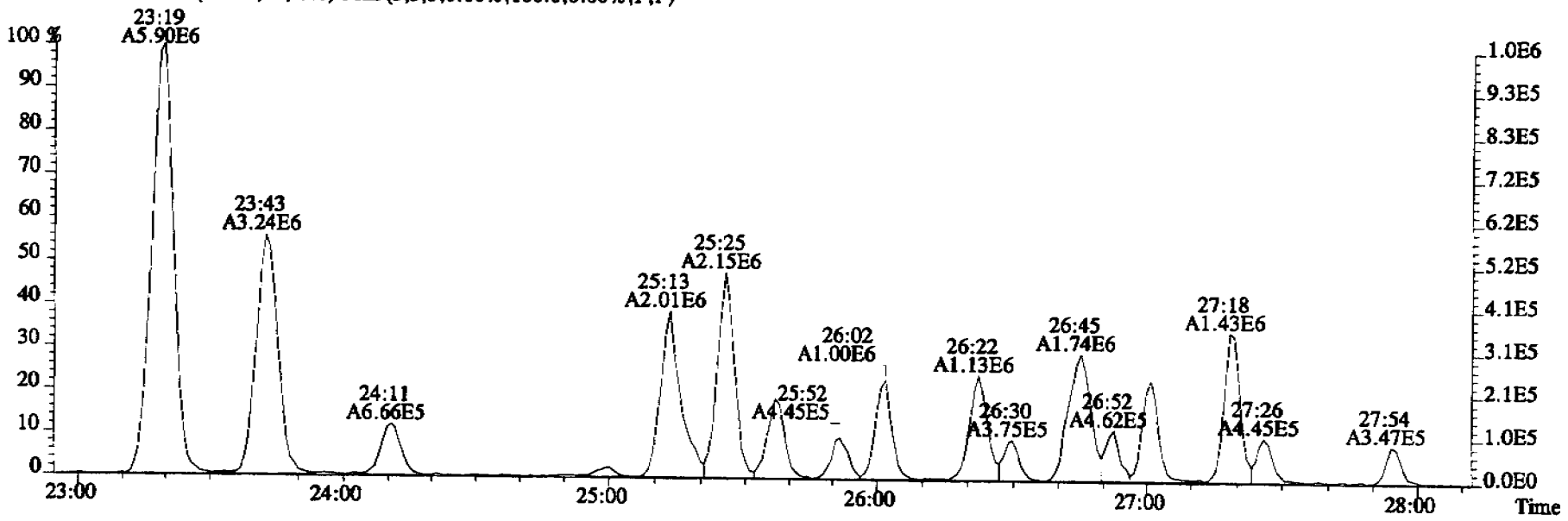
333.9339 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



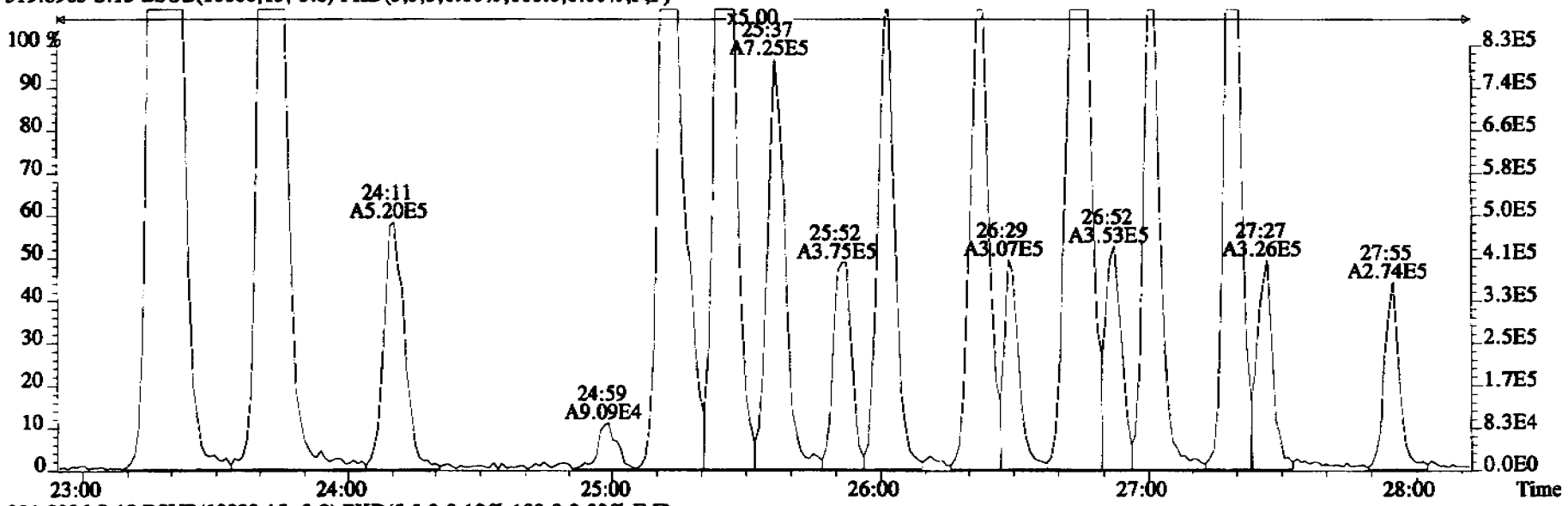
File:050502D1 #1-559 Acq: 2-MAY-2005 17:49:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Alta Analytical Laboratory VG-7 Text:26076 6749_001 RE73-05-58829 10.01g Exp:OCDD_DB5
319.8965 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



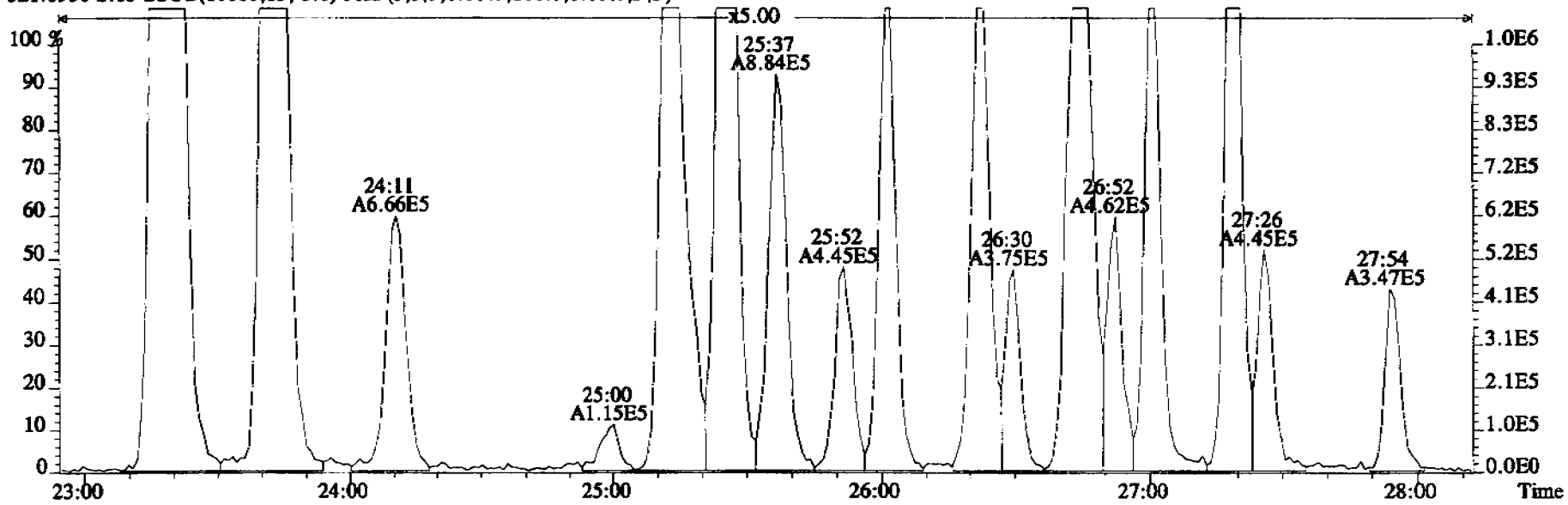
321.8936 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



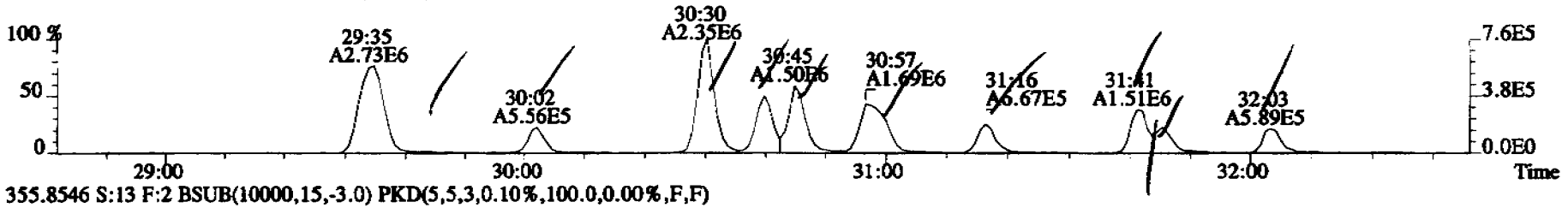
File:050502D1 #1-559 Acq: 2-MAY-2005 17:49:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_001 RE73-05-58829 10.01g Exp:OCDD_DB5
319.8965 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



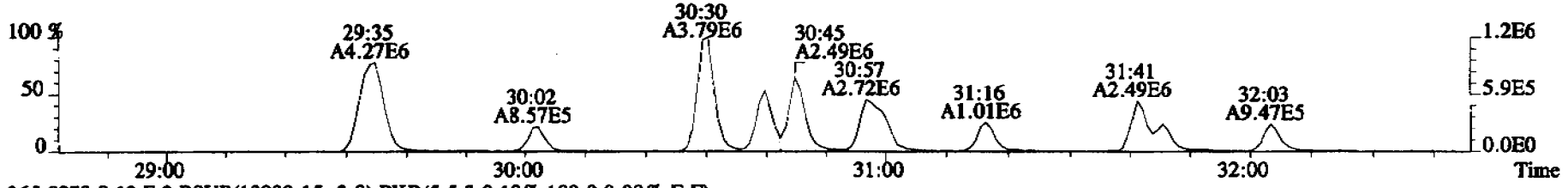
321.8936 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



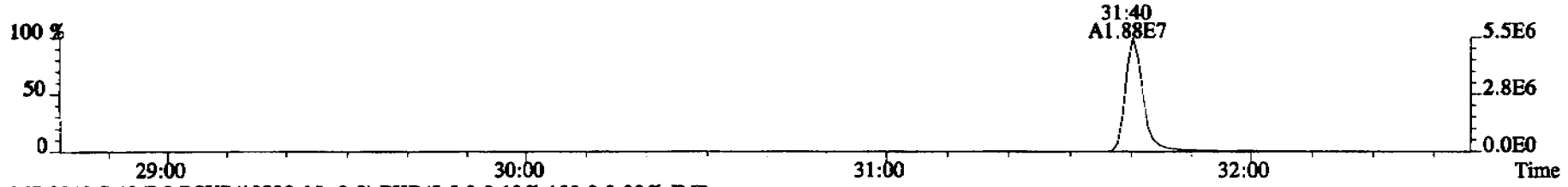
File:050502D1 #1-273 Acq: 2-MAY-2005 17:49:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_001 RE73-05-58829 10.01g Exp:OCDD_DB5
353.8576 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



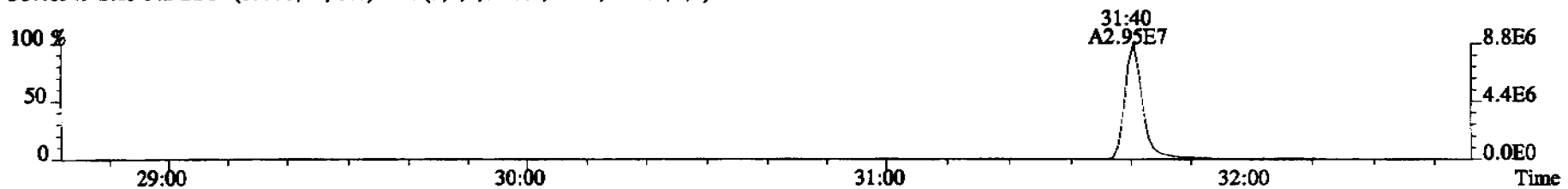
355.8546 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



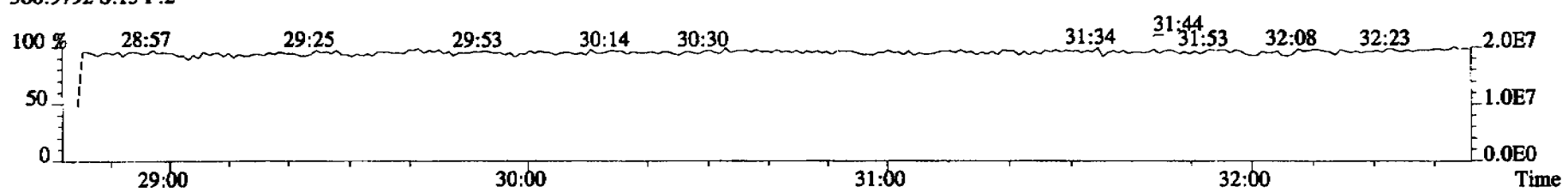
365.8978 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



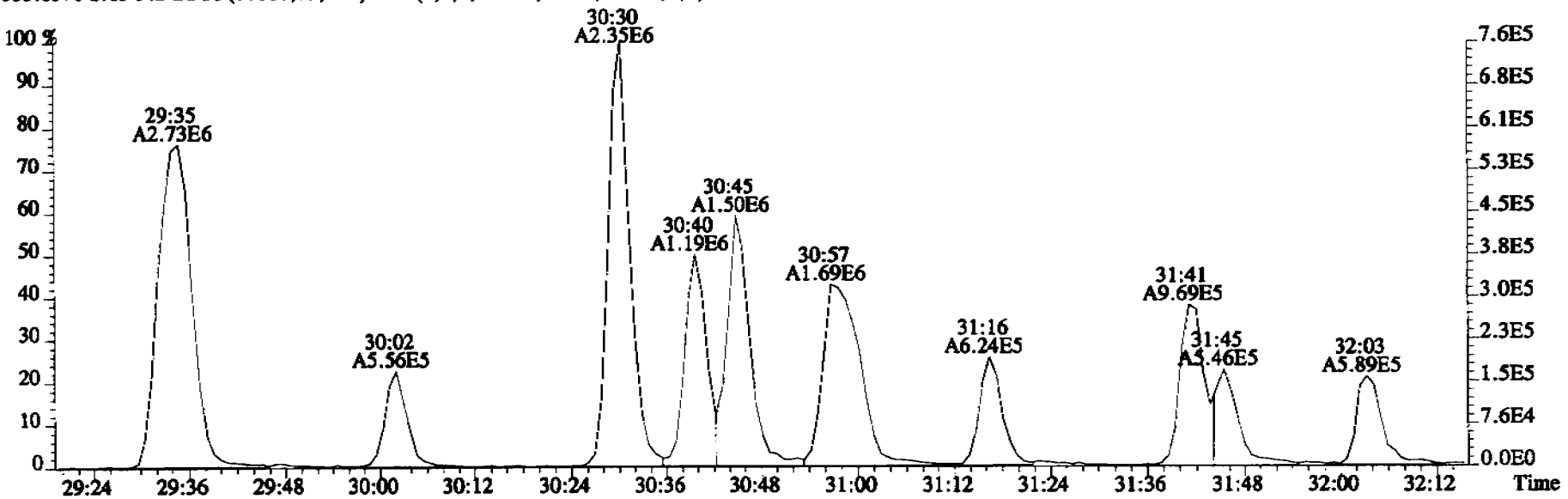
367.8949 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



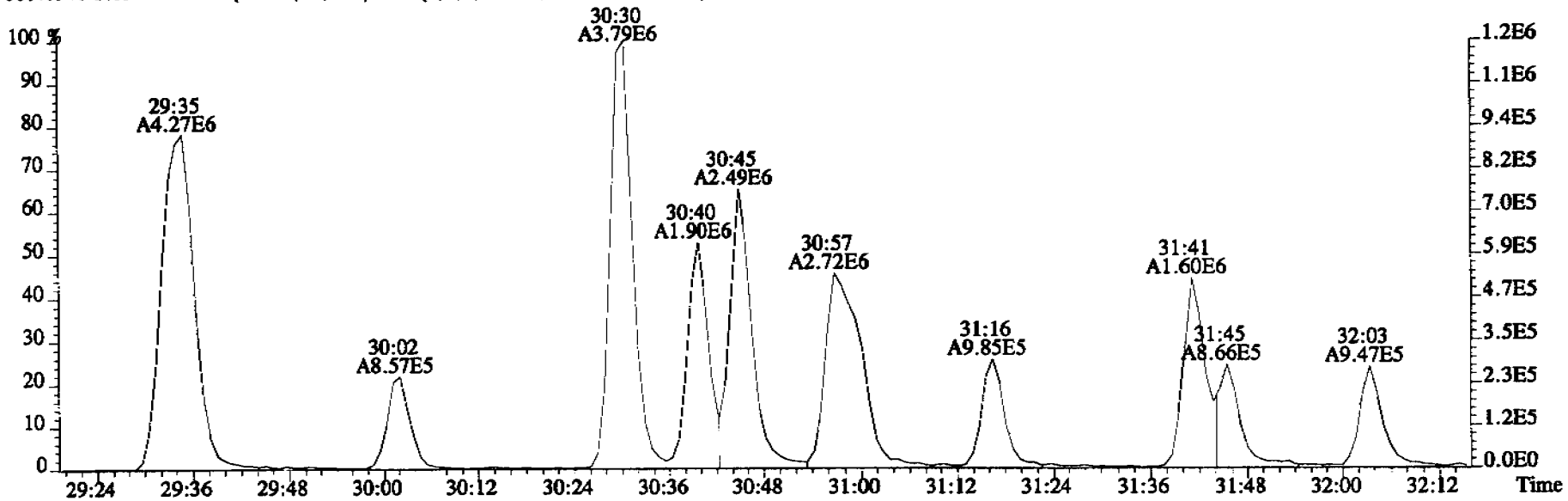
366.9792 S:13 F:2



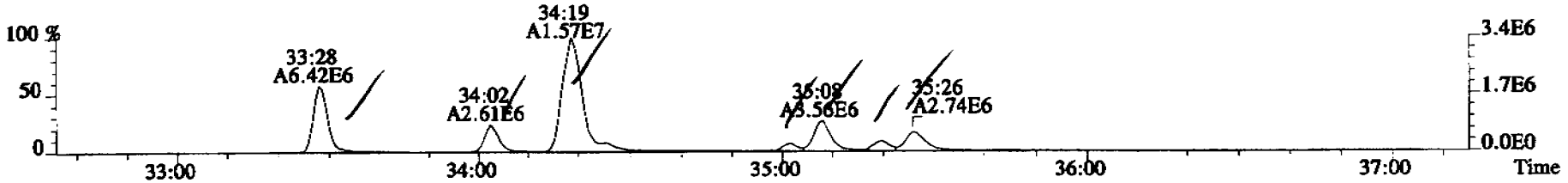
File:050502D1 #1-273 Acq: 2-MAY-2005 17:49:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_001 RE73-05-58829 10.01g Exp:OCDD_DB5
353.8576 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



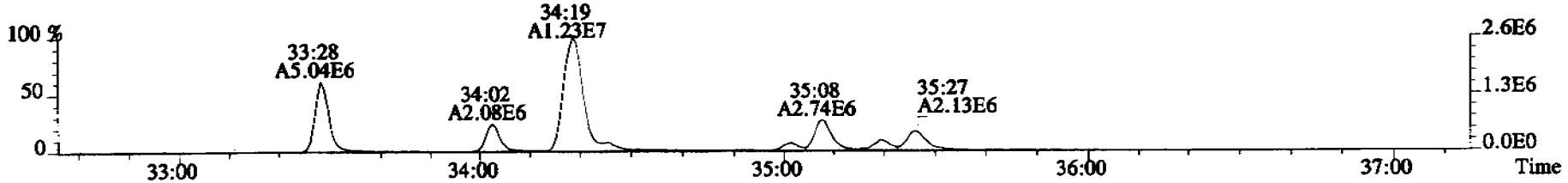
355.8546 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



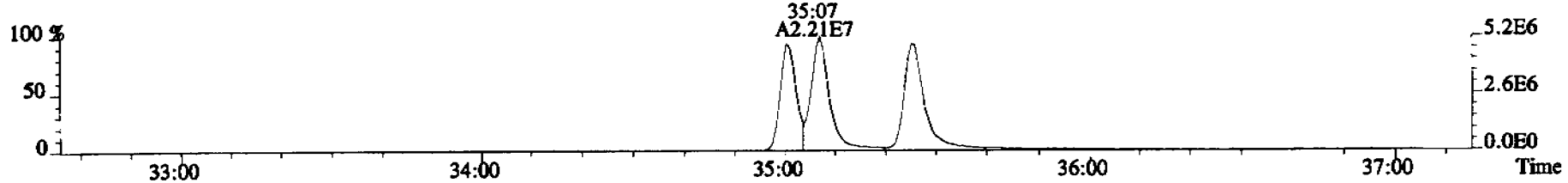
File:050502D1 #1-398 Acq: 2-MAY-2005 17:49:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_001 RE73-05-58829 10.01g Exp:OCDD_DB5
389.8156 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



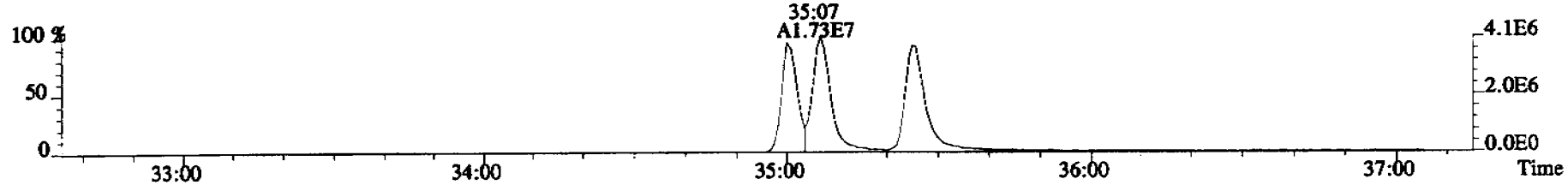
391.8127 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



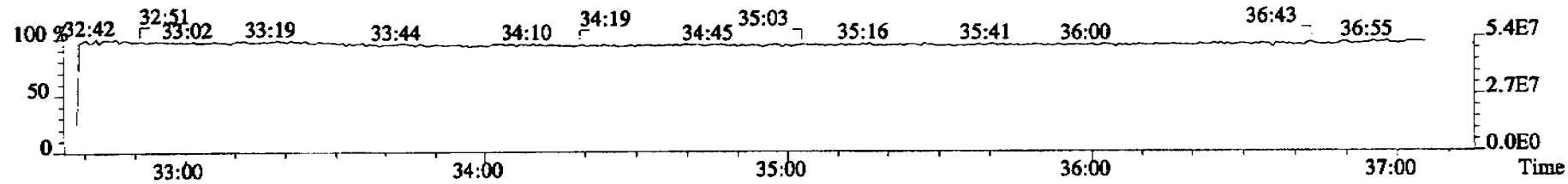
401.8559 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



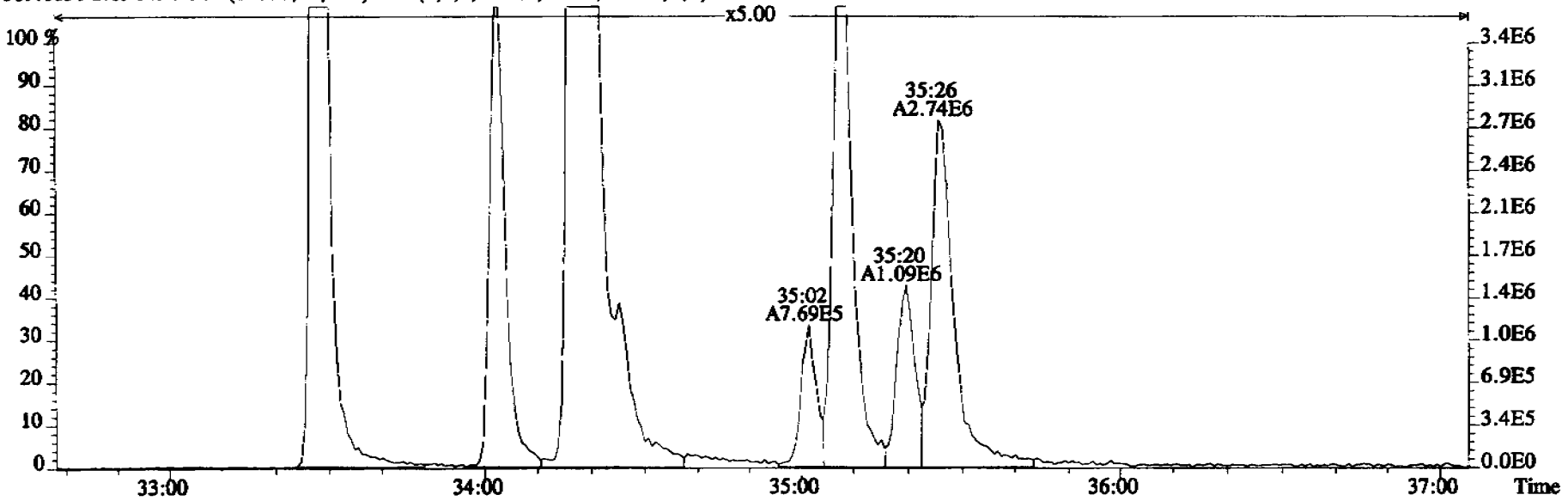
403.8530 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



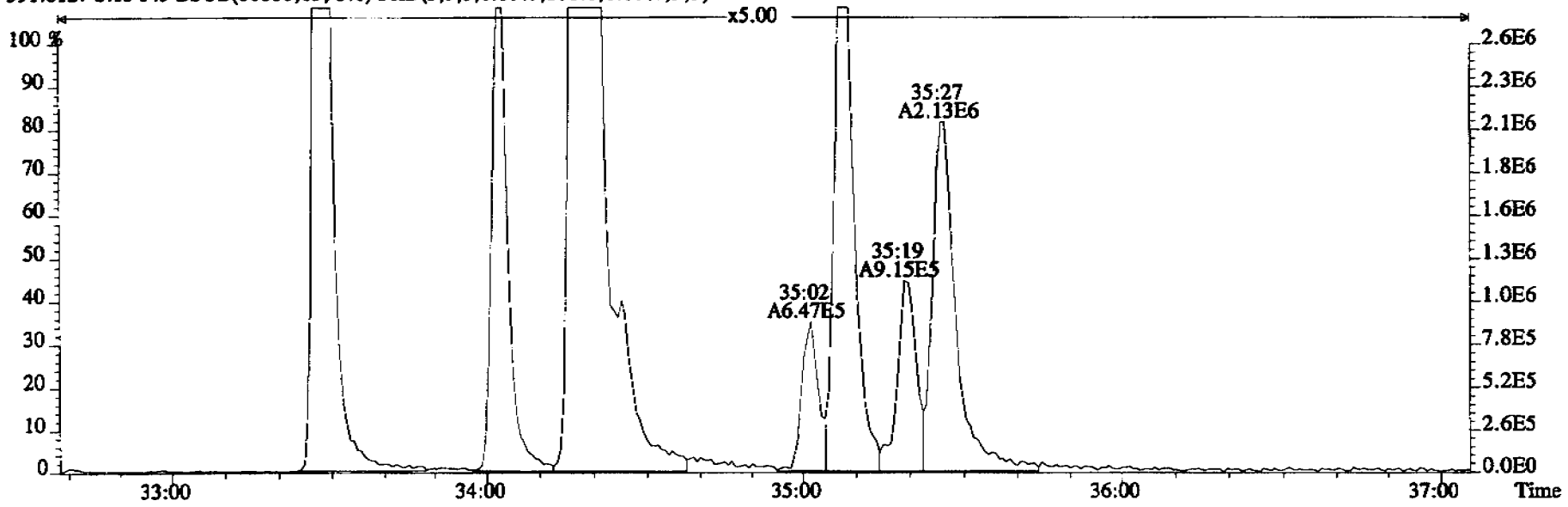
380.9760 S:13 F:3



File:050502D1 #1-398 Acq: 2-MAY-2005 17:49:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_001 RE73-05-58829 10.01g Exp:OCDD_DB5
389.8156 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

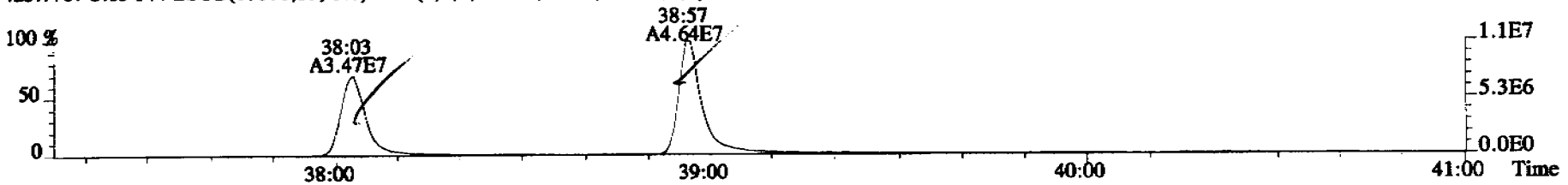


391.8127 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

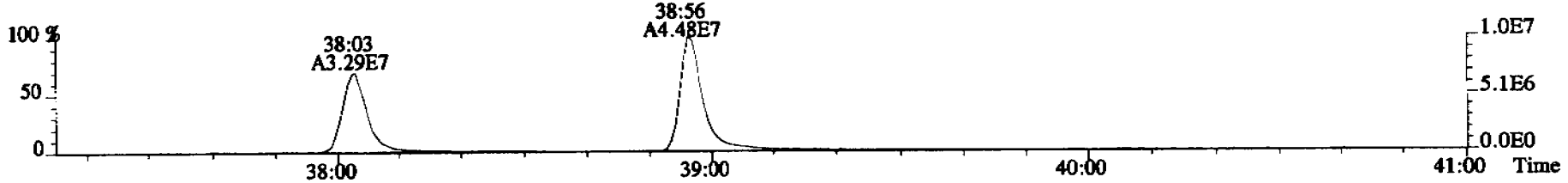


File:050502D1 #1-348 Acq: 2-MAY-2005 17:49:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_001 RE73-05-58829 10.01g Exp:OCDD_DB5

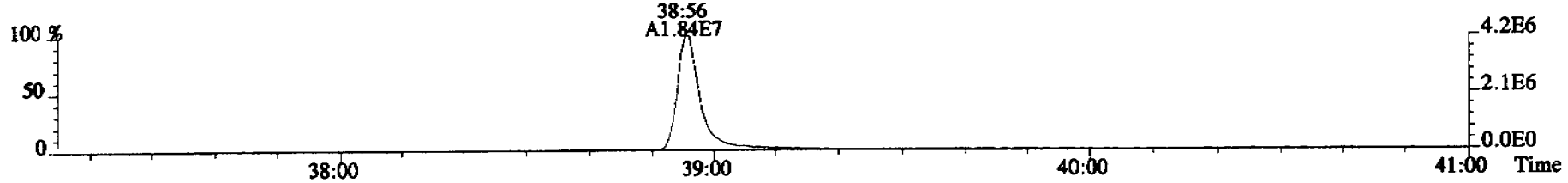
423.7767 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



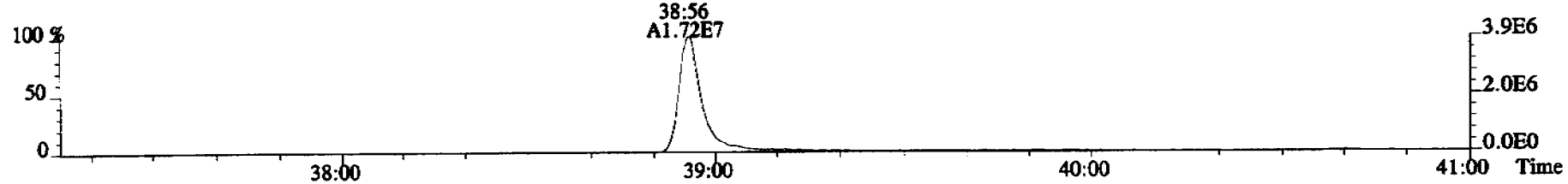
425.7737 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



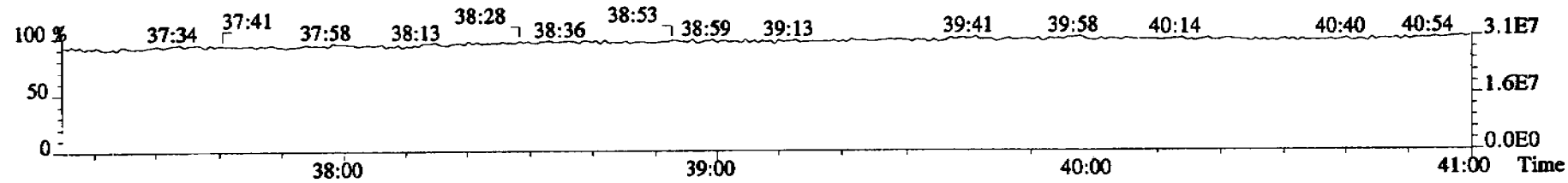
435.8169 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



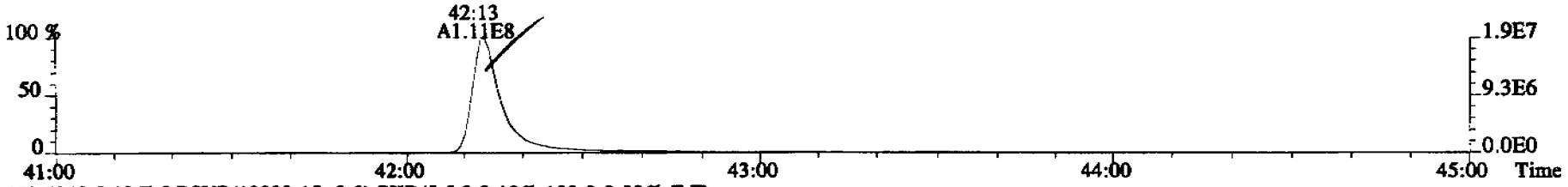
437.8140 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



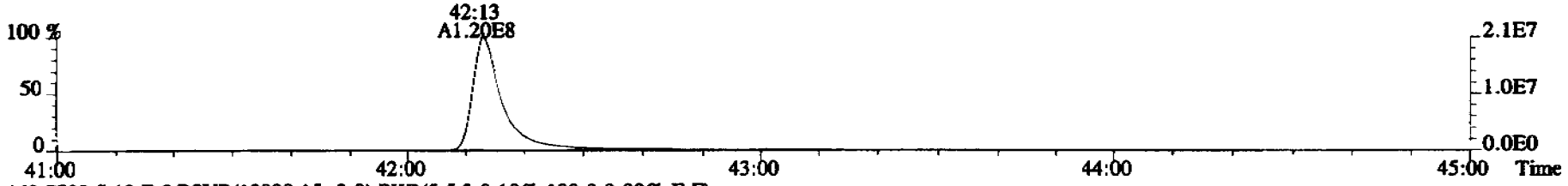
430.9728 S:13 F:4



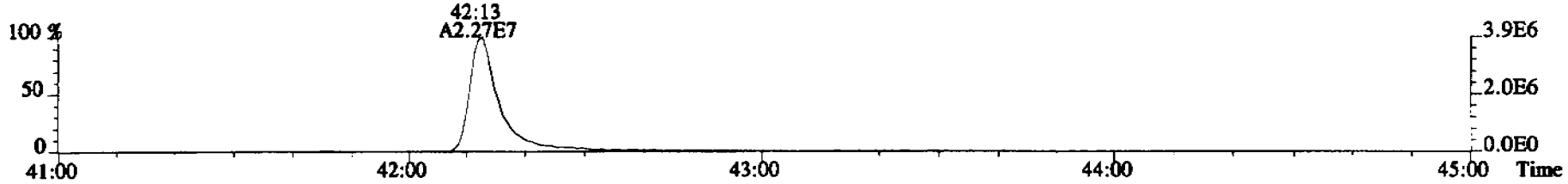
File:050502D1 #1-345 Acq: 2-MAY-2005 17:49:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_001 RE73-05-58829 10.01g Exp:OCDD_DB5
457.7377 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



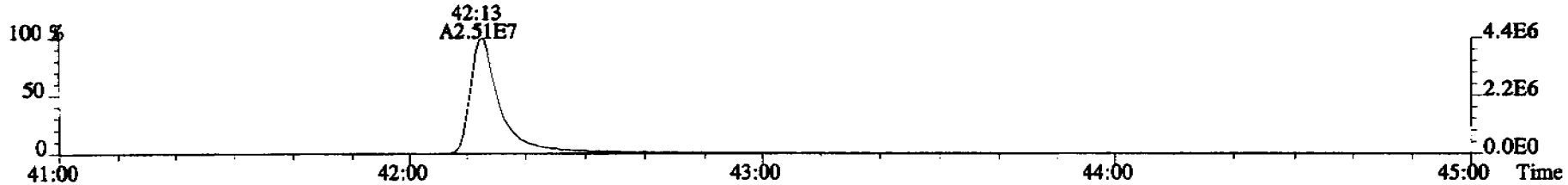
459.7348 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



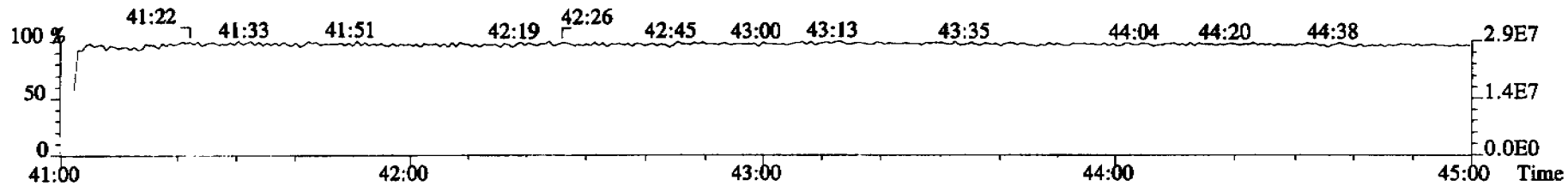
469.7780 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



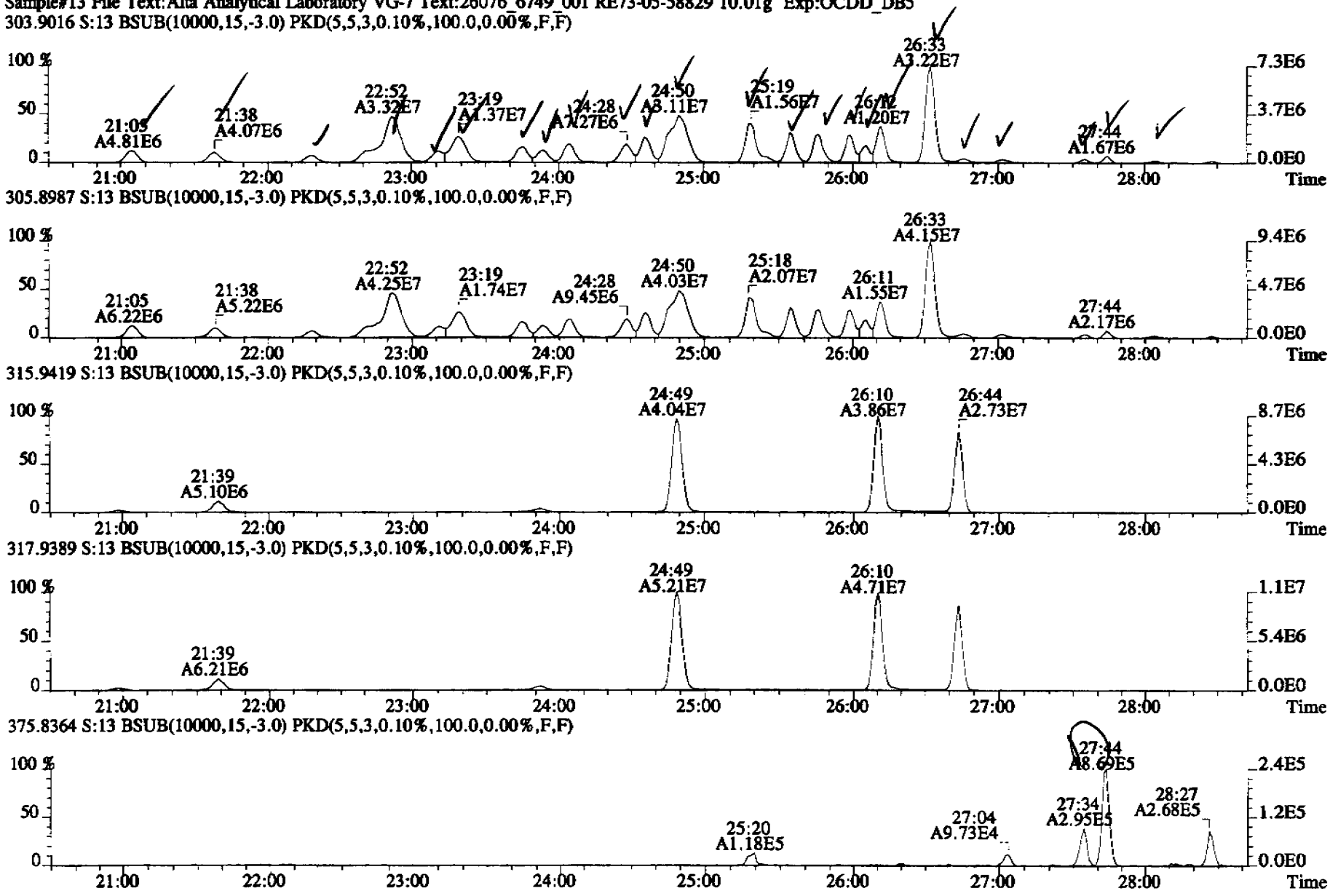
471.7750 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



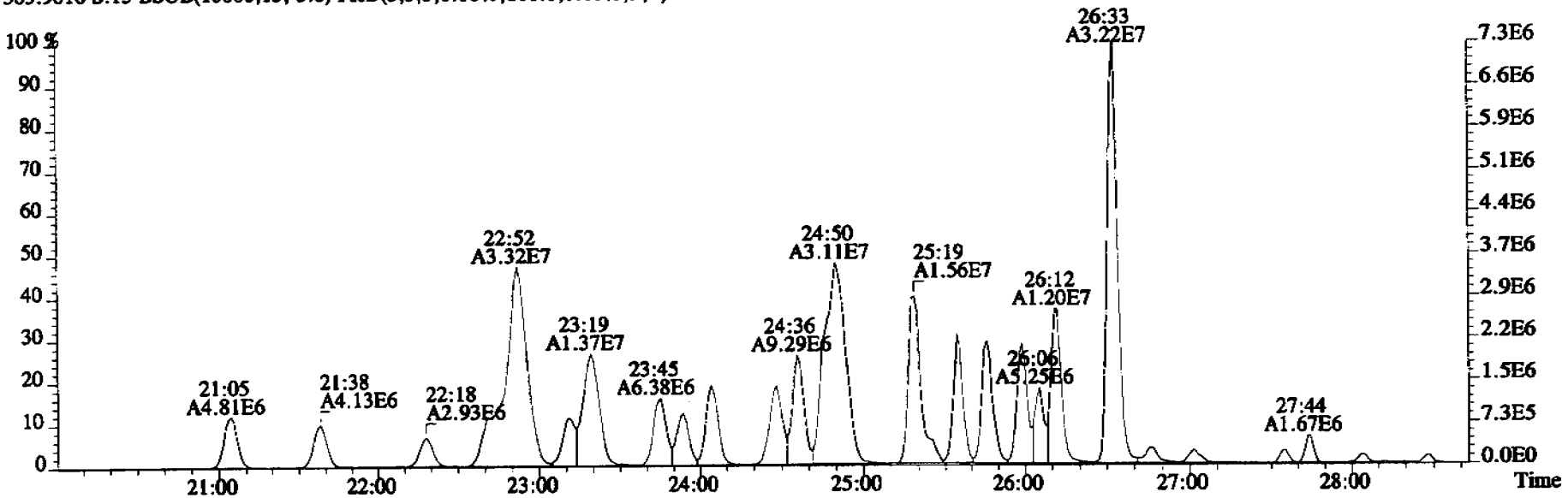
454.9728 S:13 F:5



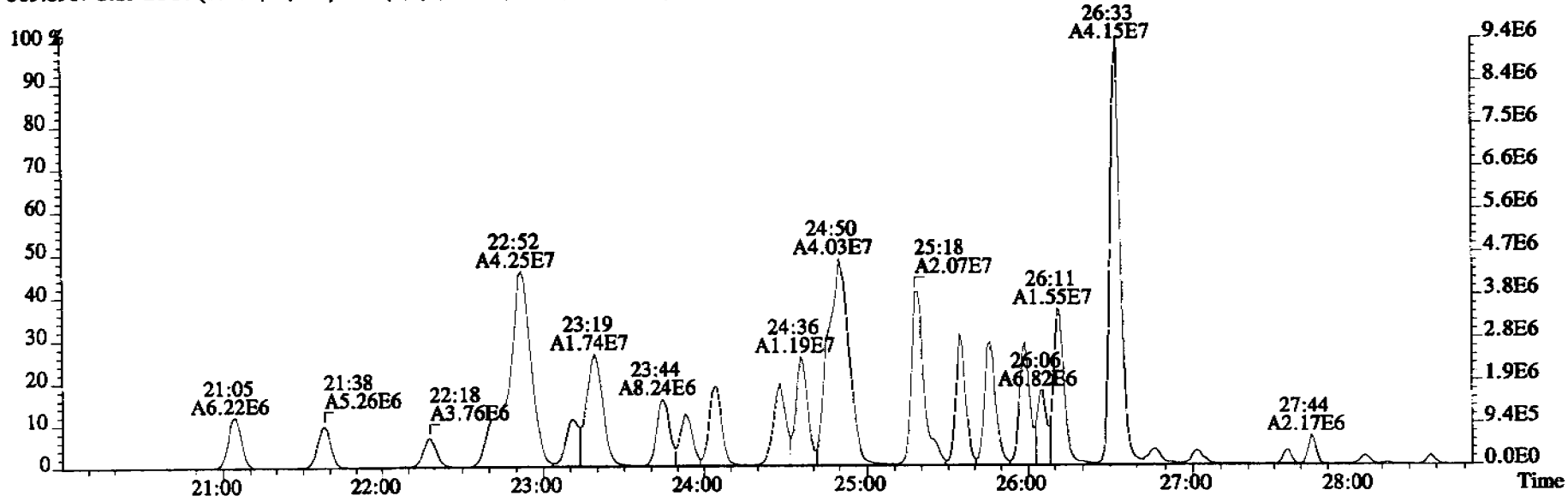
File:050502D1 #1-559 Acq: 2-MAY-2005 17:49:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_001 RE73-05-58829 10.01g Exp:OCDD_DB5



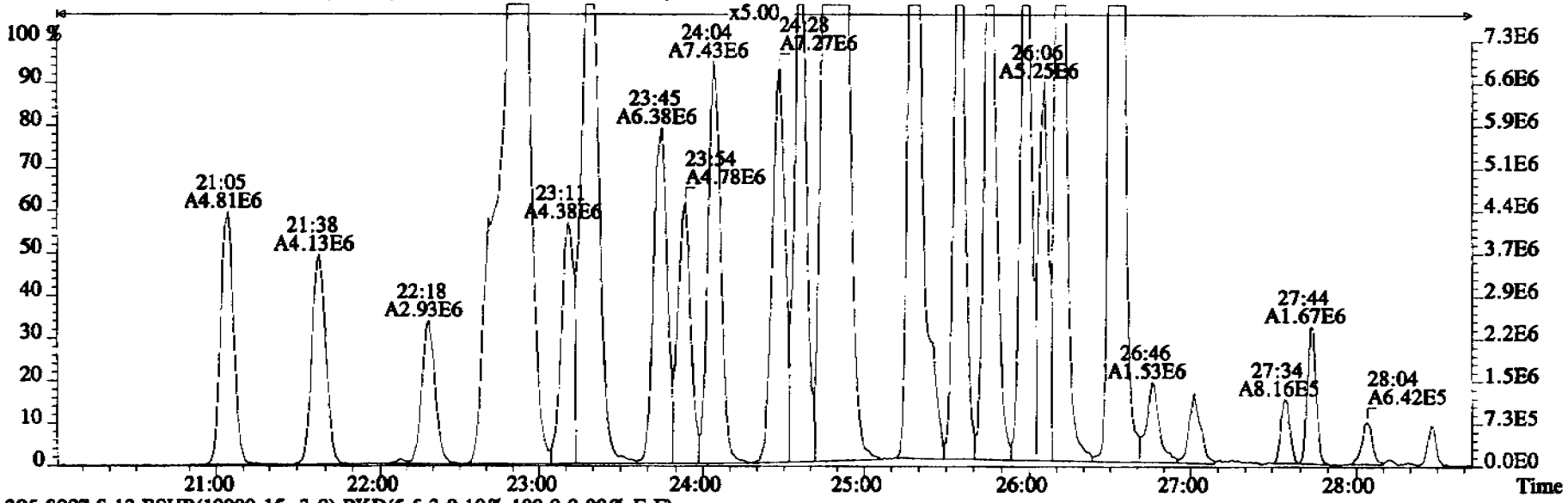
File:050502D1 #1-559 Acq: 2-MAY-2005 17:49:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Alta Analytical Laboratory VG-7 Text:26076 6749_001 RE73-05-58829 10.01g Exp:OCDD_DB5
303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



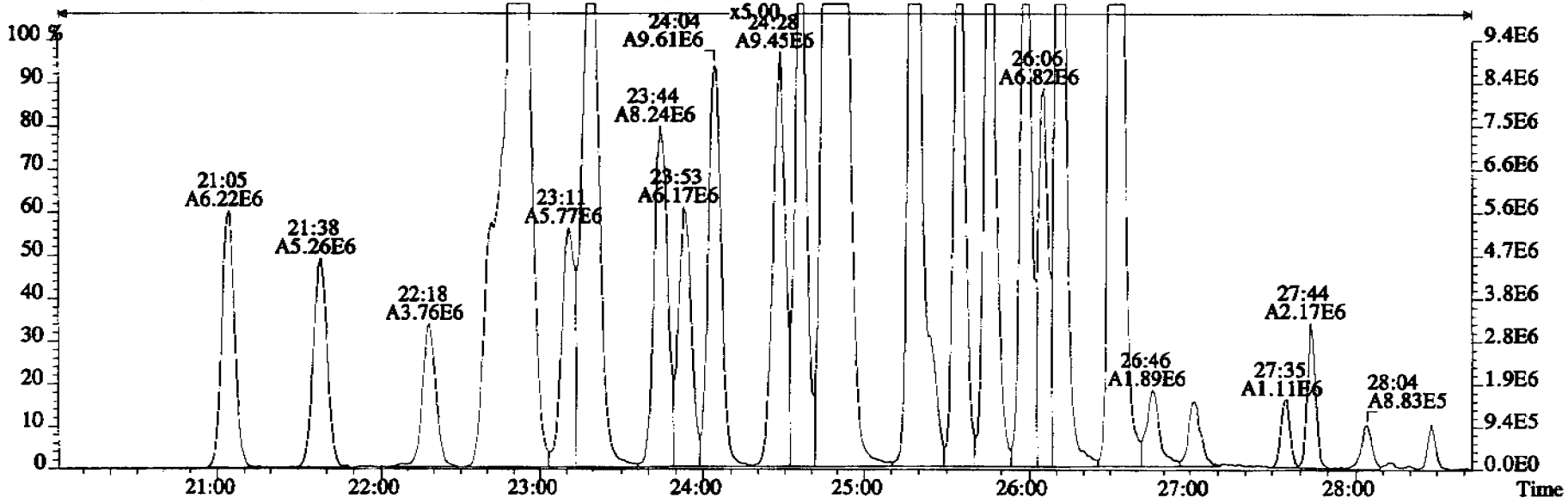
305.8987 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



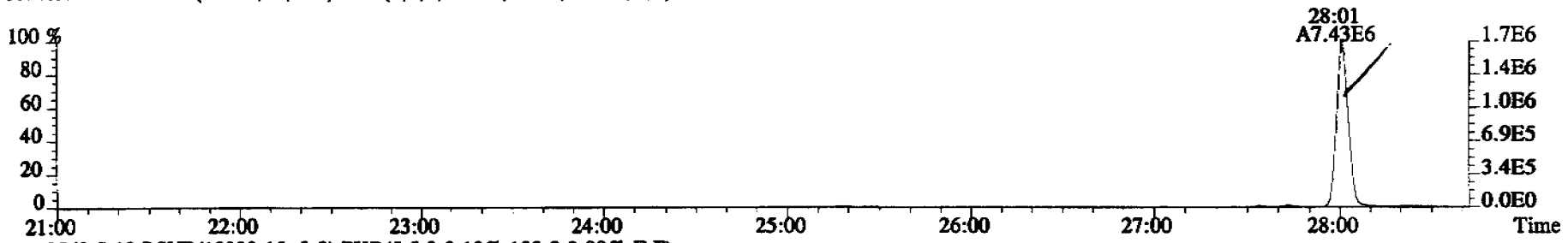
File:050502D1 #1-559 Acq: 2-MAY-2005 17:49:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Alta Analytical Laboratory VG-7 Text:26076 6749 001 RE73-05-58829 10.01g Exp:OCDD_DB5
303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



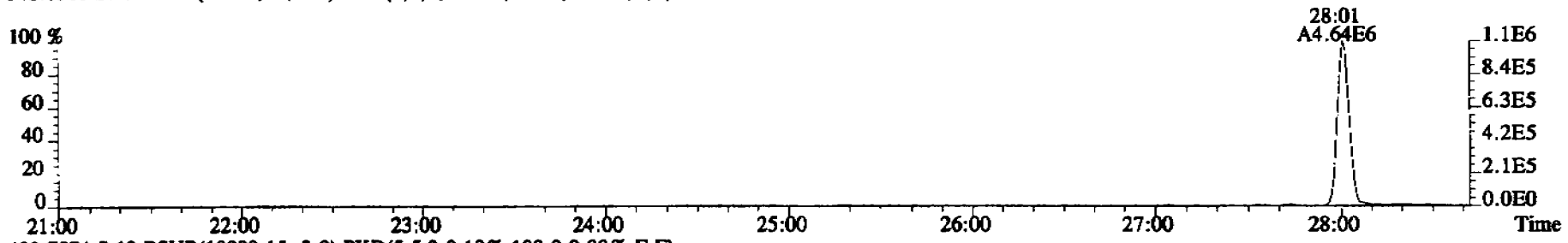
305.8987 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



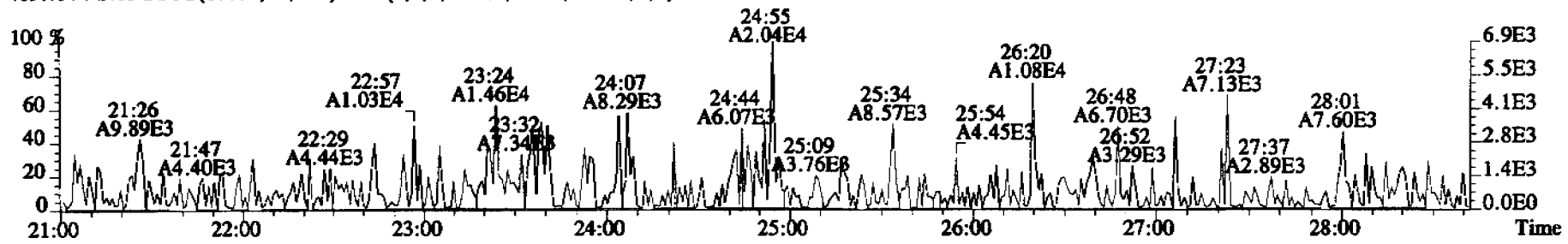
File:050502D1 #1-559 Acq: 2-MAY-2005 17:49:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Alta Analytical Laboratory VG-7 Text:26076 6749_001 RE73-05-58829 10.01g Exp:OCDD_DB5
339.8597 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



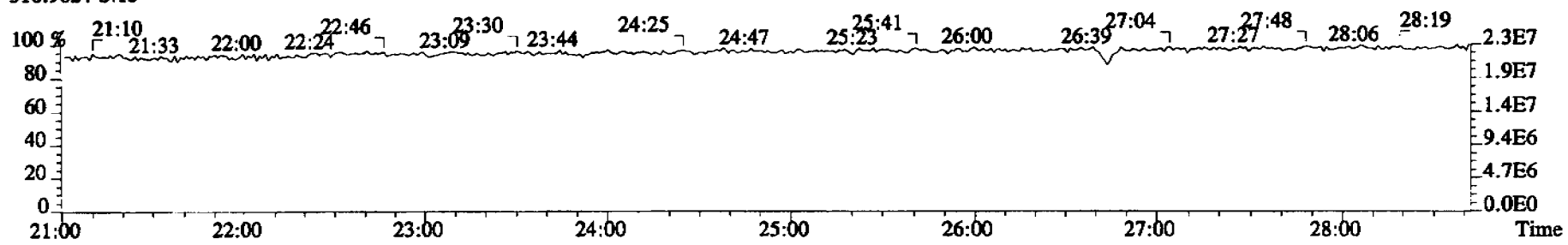
341.8568 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



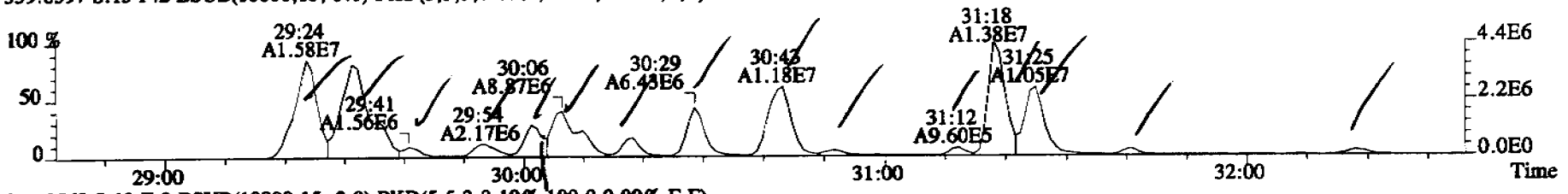
409.7974 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



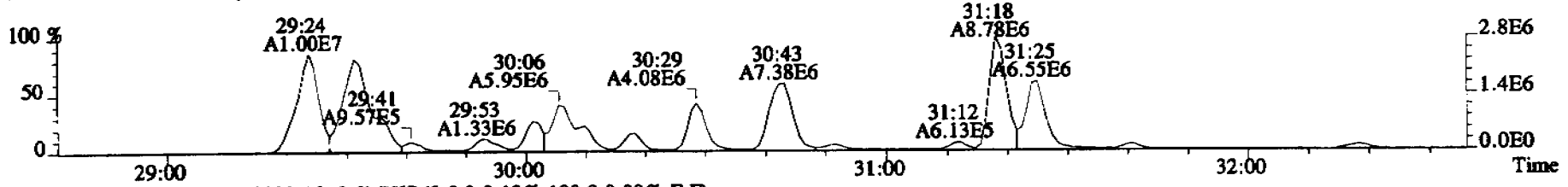
316.9824 S:13



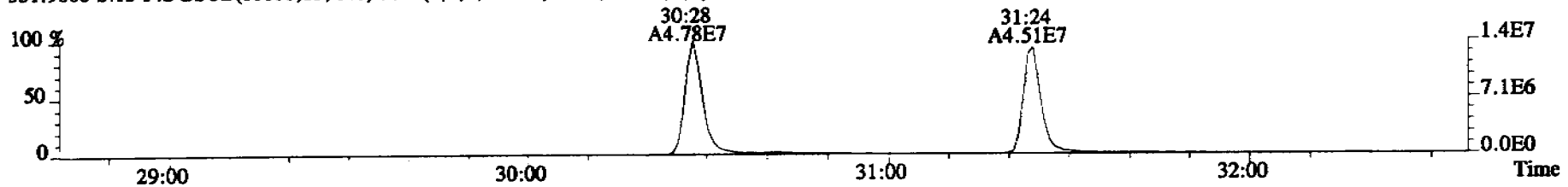
File:050502D1 #1-273 Acq: 2-MAY-2005 17:49:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_001 RE73-05-58829 10.01g Exp:OCDD_DB5
339.8597 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



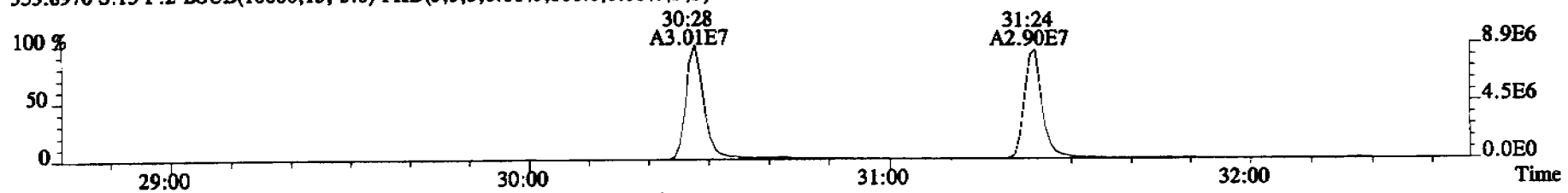
341.8568 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



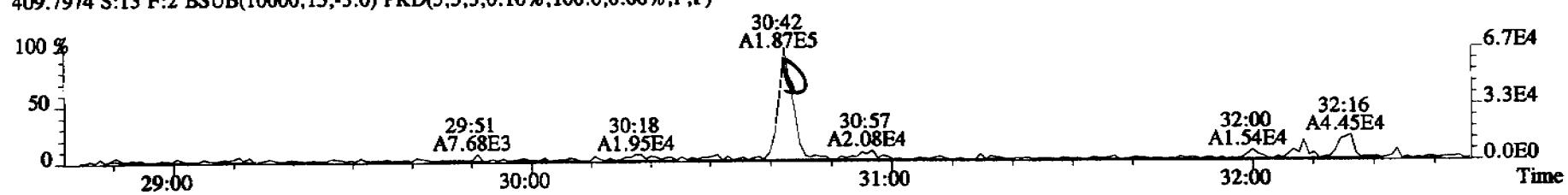
351.9000 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



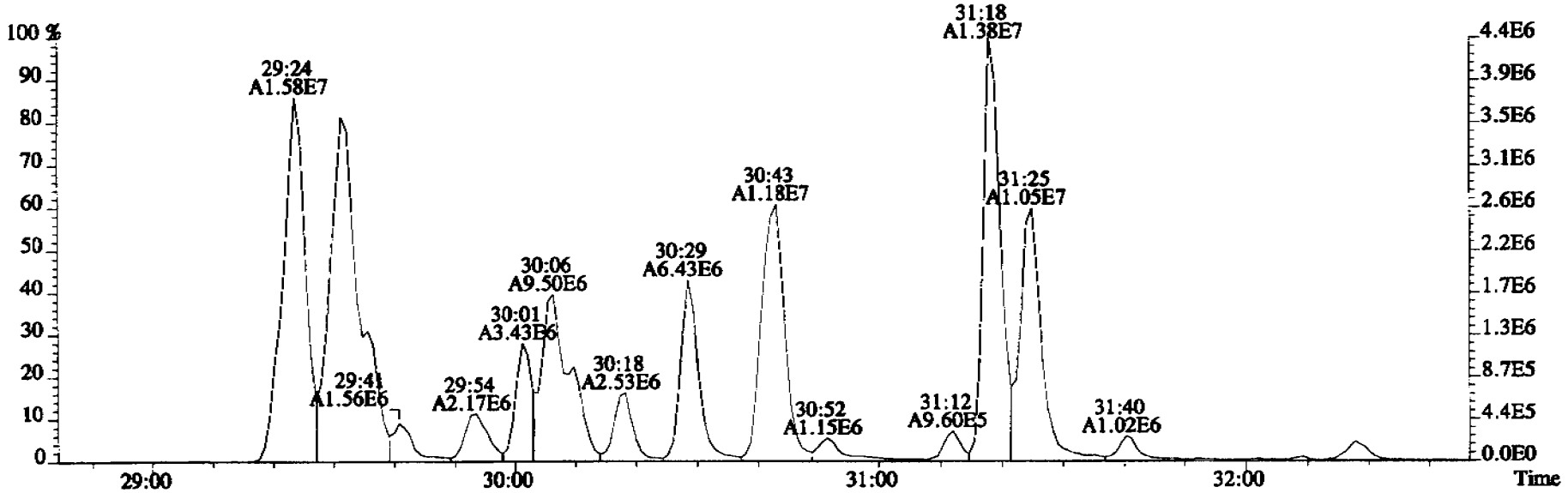
353.8970 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



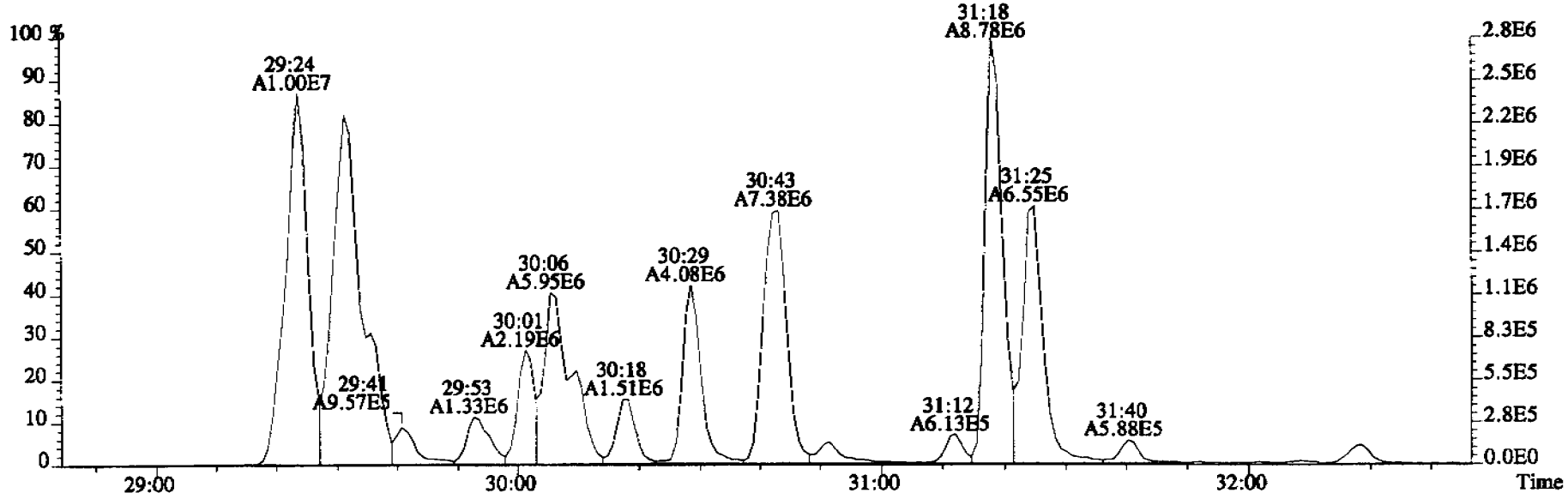
409.7974 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

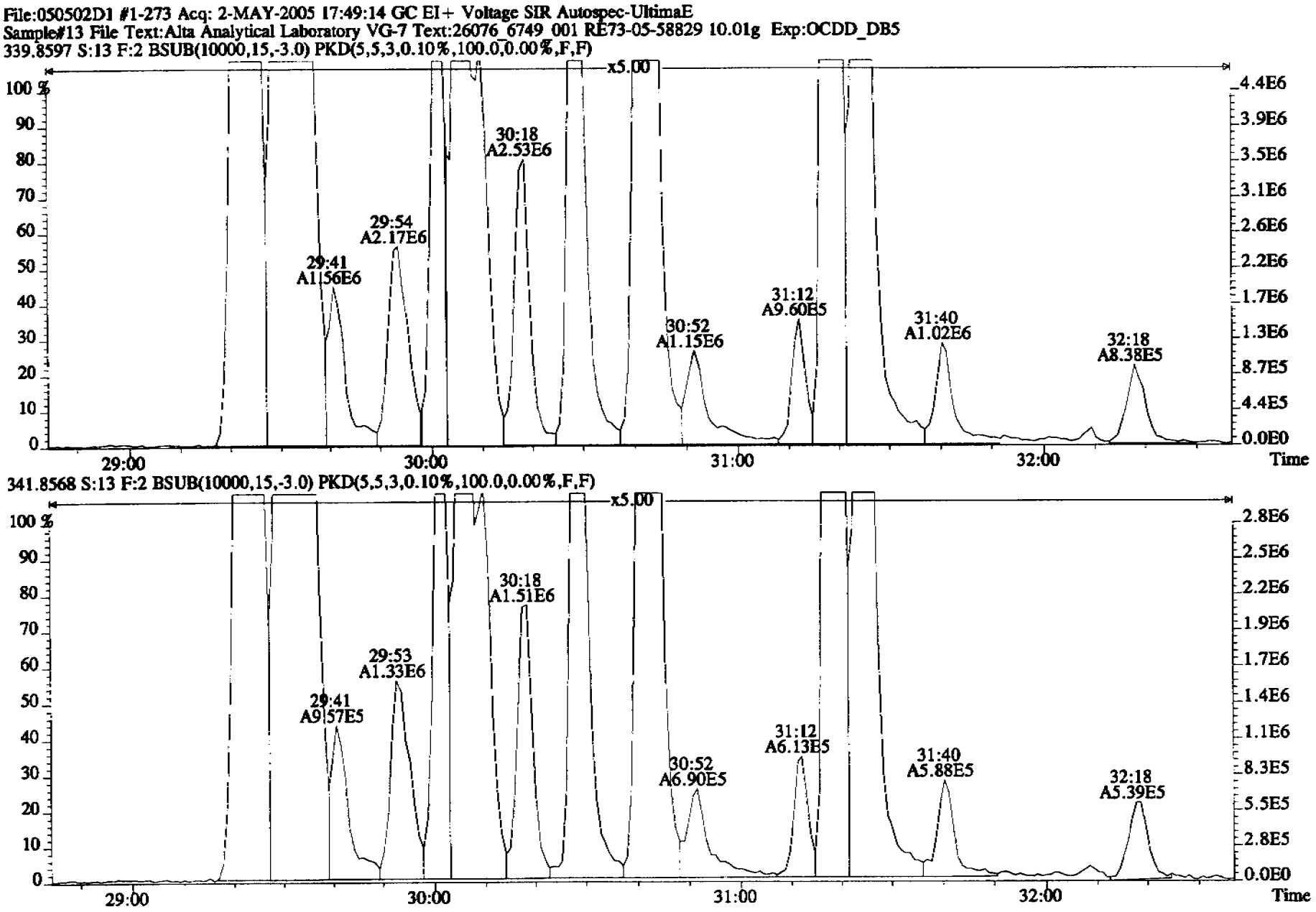


File:050502D1 #1-273 Acq: 2-MAY-2005 17:49:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_001 RE73-05-58829 10.01g Exp:OCDD_DB5
339.8597 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

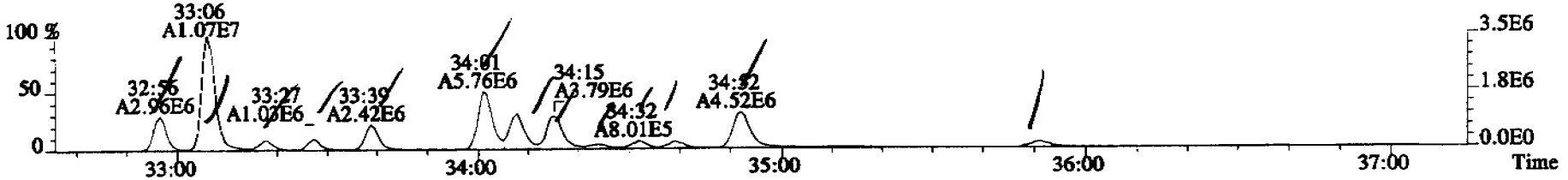


341.8568 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

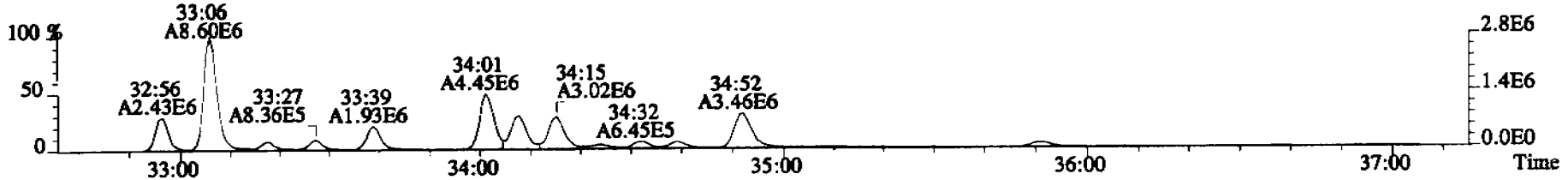



File:050502D1 #1-273 Acq: 2-MAY-2005 17:49:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_001 RE73-05-58829 10.01g Exp:OCDD_DB5
339.8597 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
x5.00
29:41 A1.56E6
29:54 A2.17E6
30:18 A2.53E6
30:52 A1.15E6
31:12 A9.60E5
31:40 A1.02E6
32:18 A8.38E5
341.8568 S:13 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
x5.00
29:41 A9.57E5
29:53 A1.33E6
30:18 A1.51E6
30:52 A6.90E5
31:12 A6.13E5
31:40 A5.88E5
32:18 A5.39E5
29:00
30:00
31:00
32:00
Time

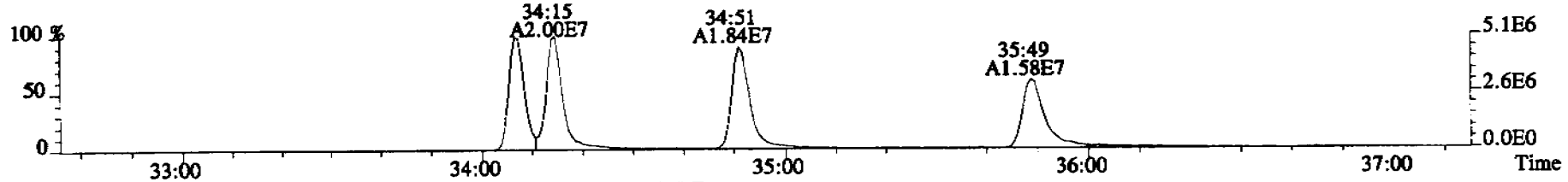
File:050502D1 #1-398 Acq: 2-MAY-2005 17:49:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_001 RE73-05-58829 10.01g Exp:OCDD_DB5
373.8207 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



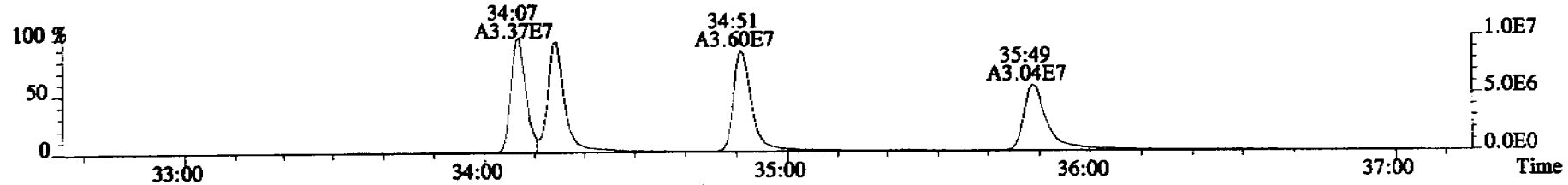
375.8178 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



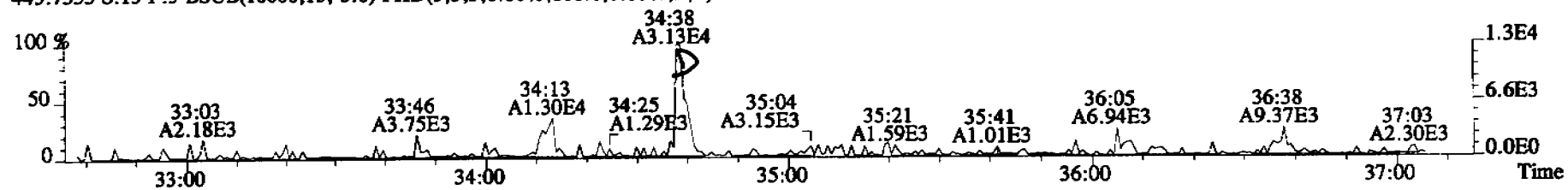
383.8639 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



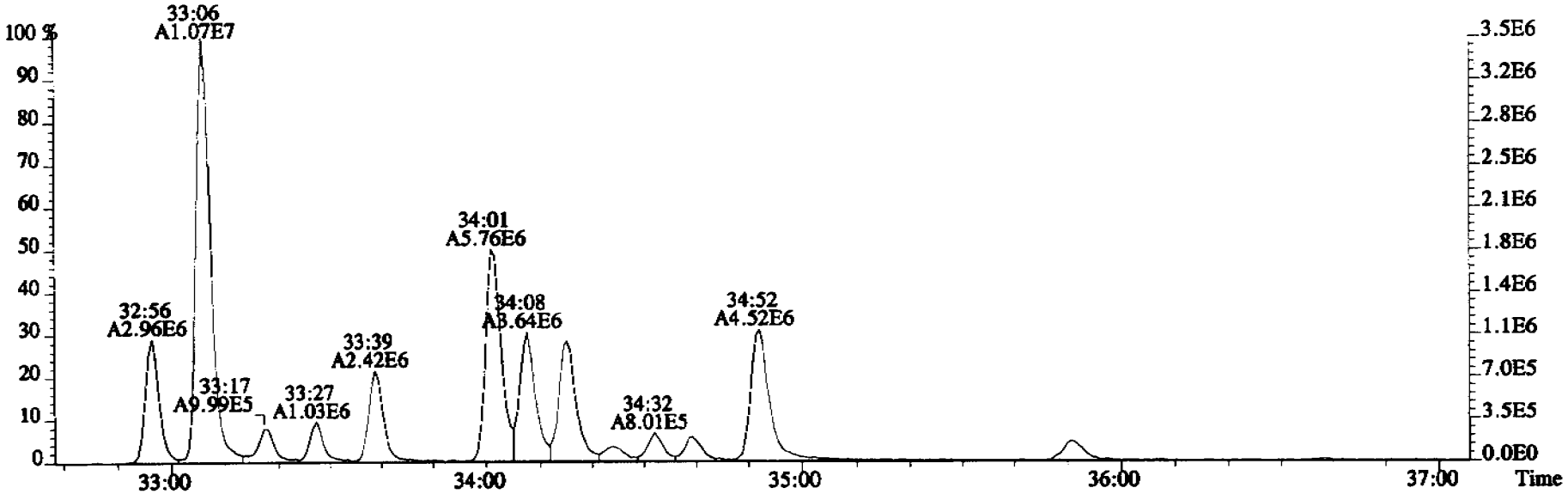
385.8610 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



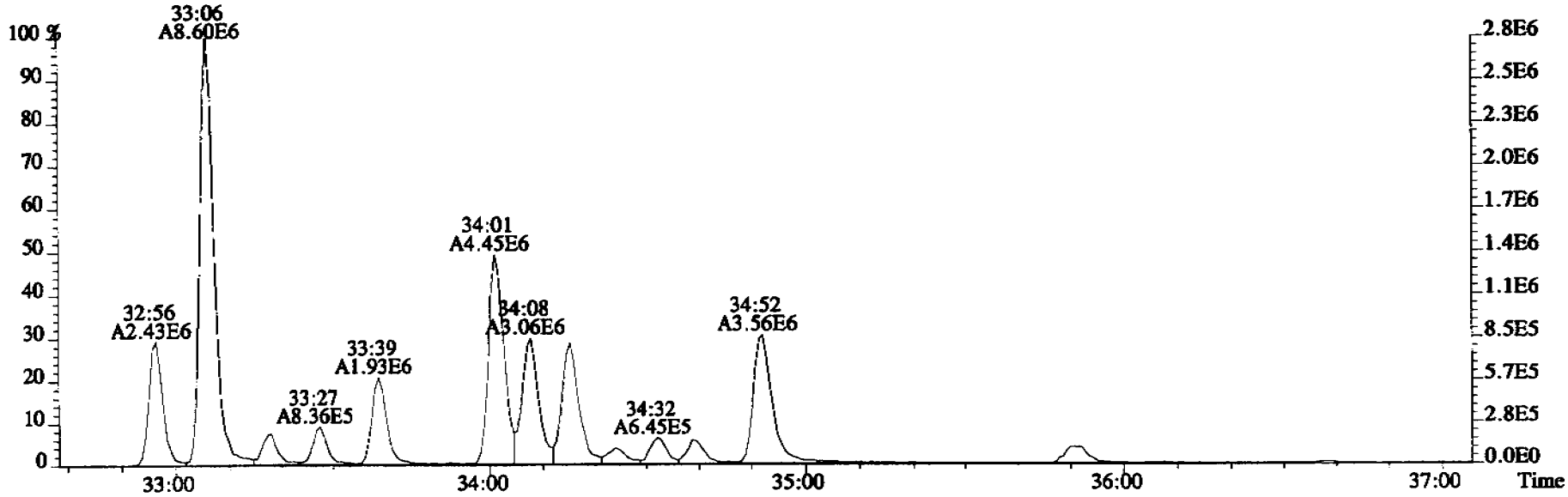
445.7555 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



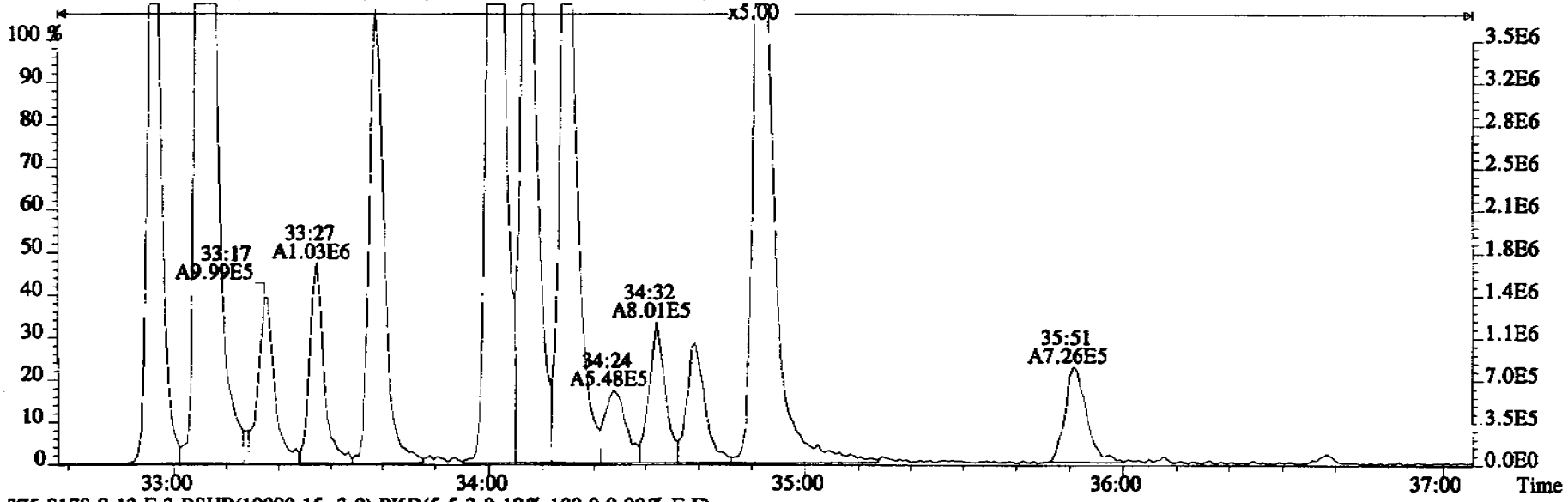
File:050502D1 #1-398 Acq: 2-MAY-2005 17:49:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_001 RE73-05-58829 10.01g Exp:OCDD_DB5
373.8207 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



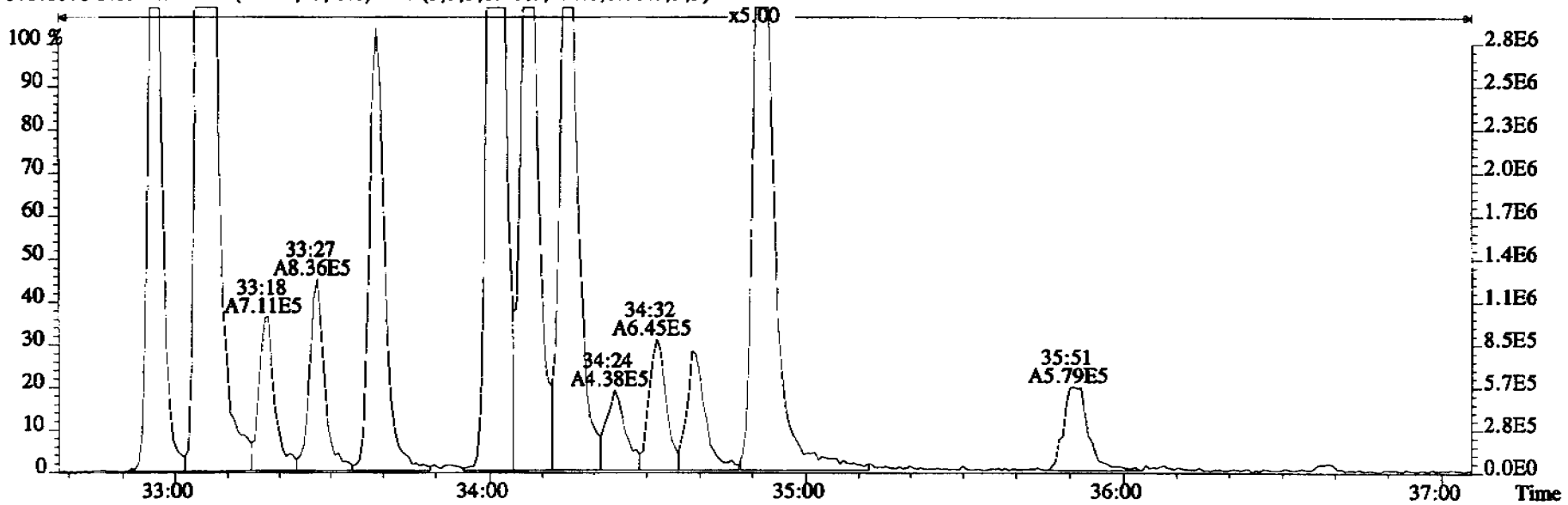
375.8178 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:050502D1 #1-398 Acq: 2-MAY-2005 17:49:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_001 RE73-05-58829 10.01g Exp:OCDD_DB5
373.8207 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

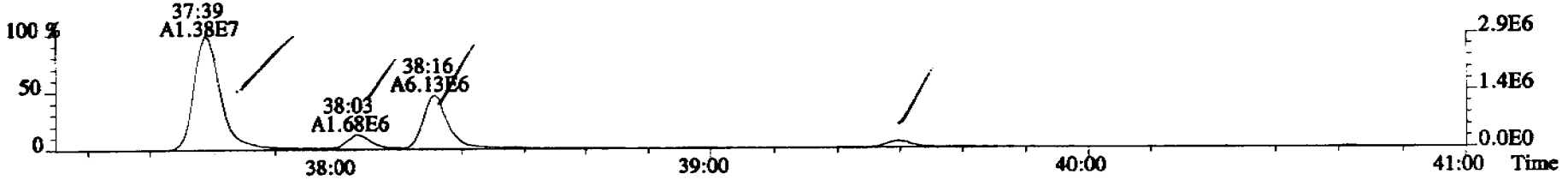


375.8178 S:13 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

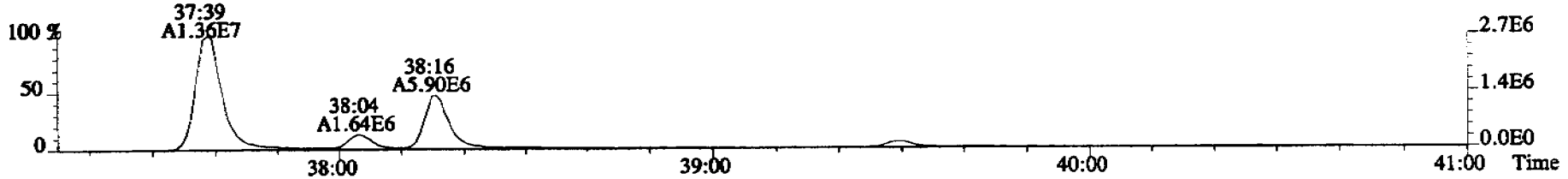


File:050502D1 #1-348 Acq: 2-MAY-2005 17:49:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_001 RE73-05-58829 10.01g Exp:OCDD_DB5

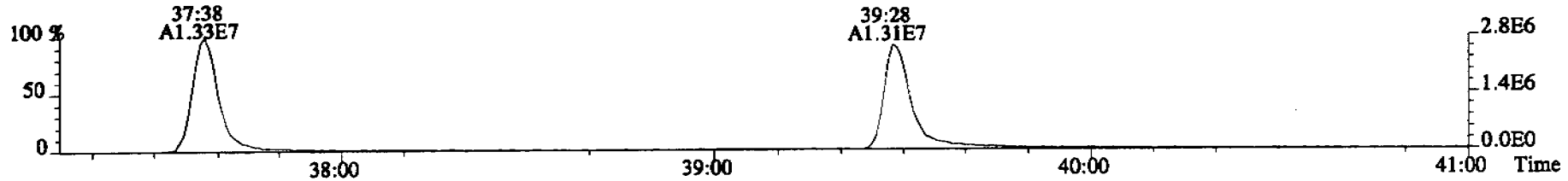
407.7818 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



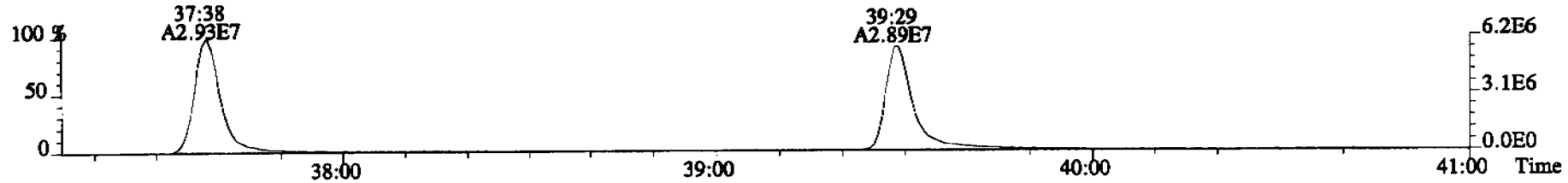
409.7788 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



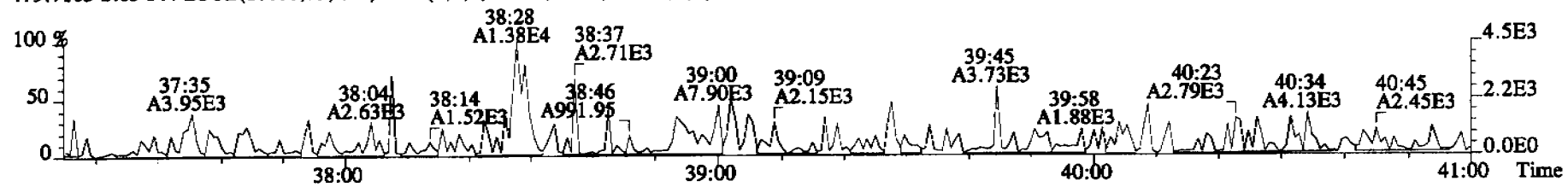
417.8253 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



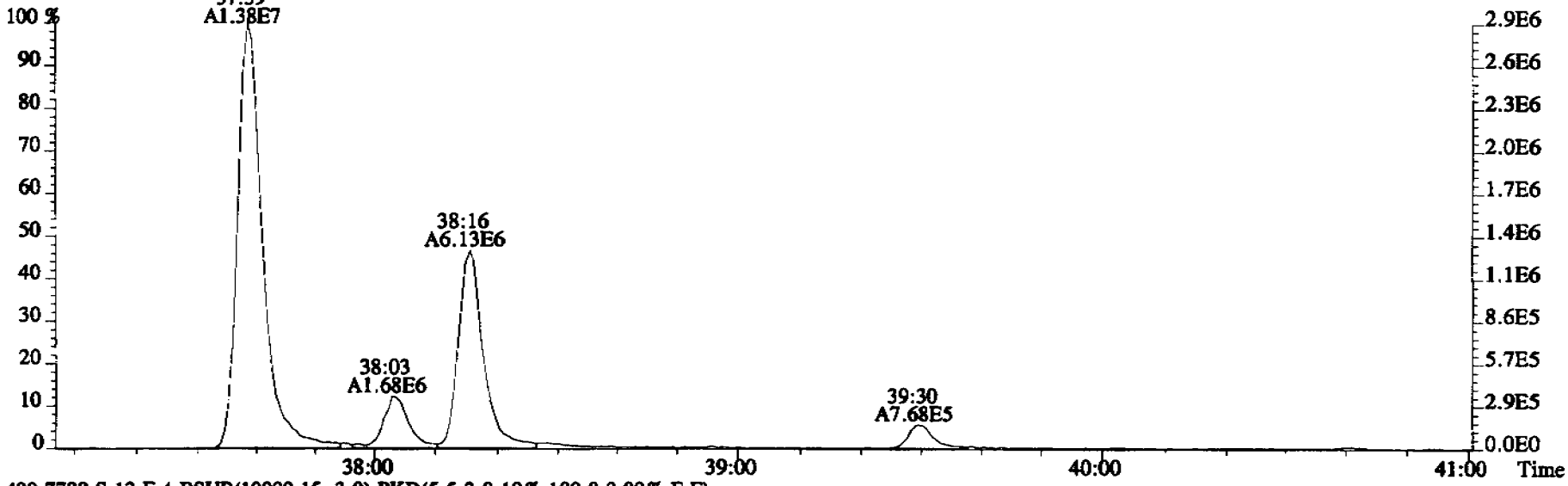
419.8220 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



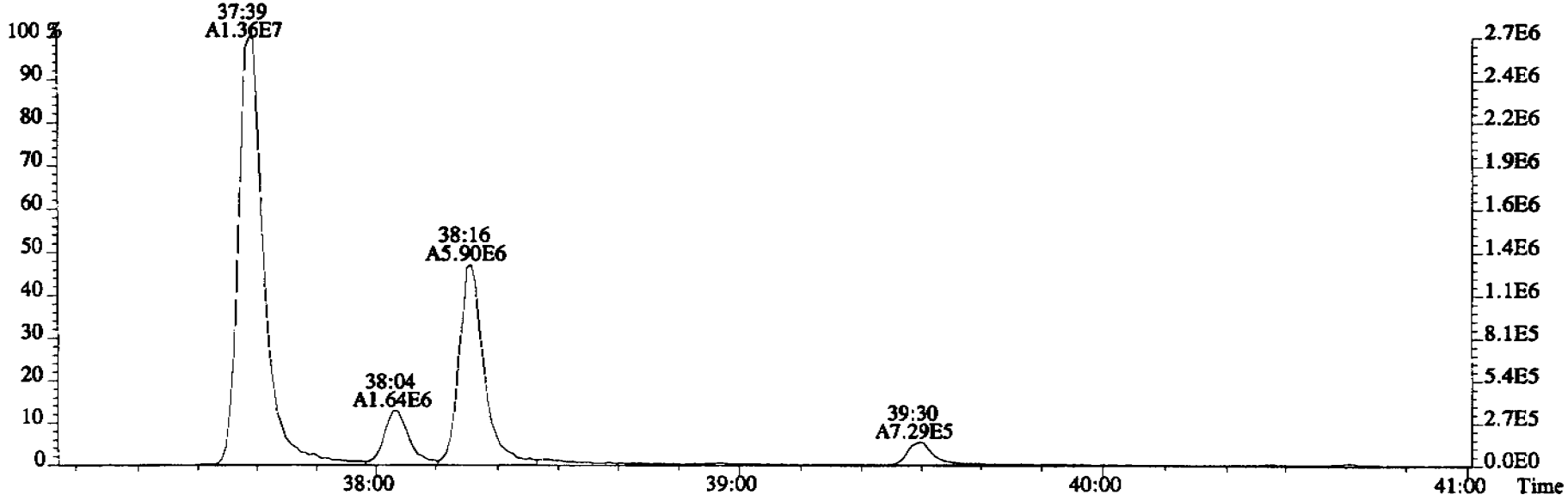
479.7165 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



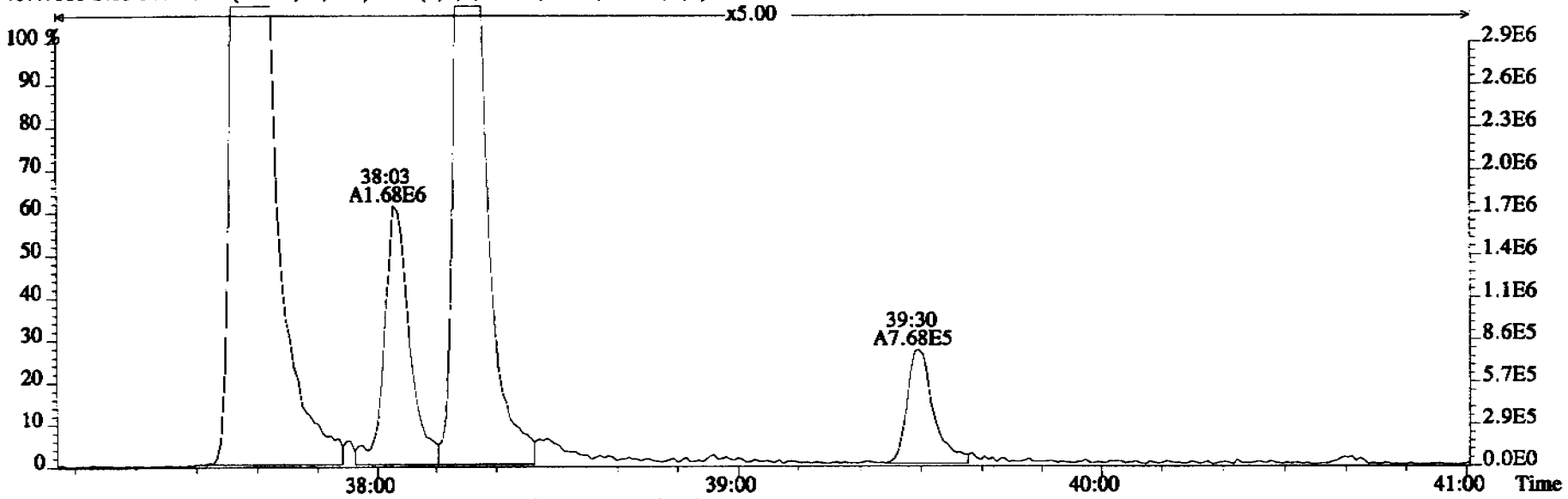
File:050502D1 #1-348 Acq: 2-MAY-2005 17:49:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_001 RE73-05-58829 10.01g Exp:OCDD_DB5
407.7818 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



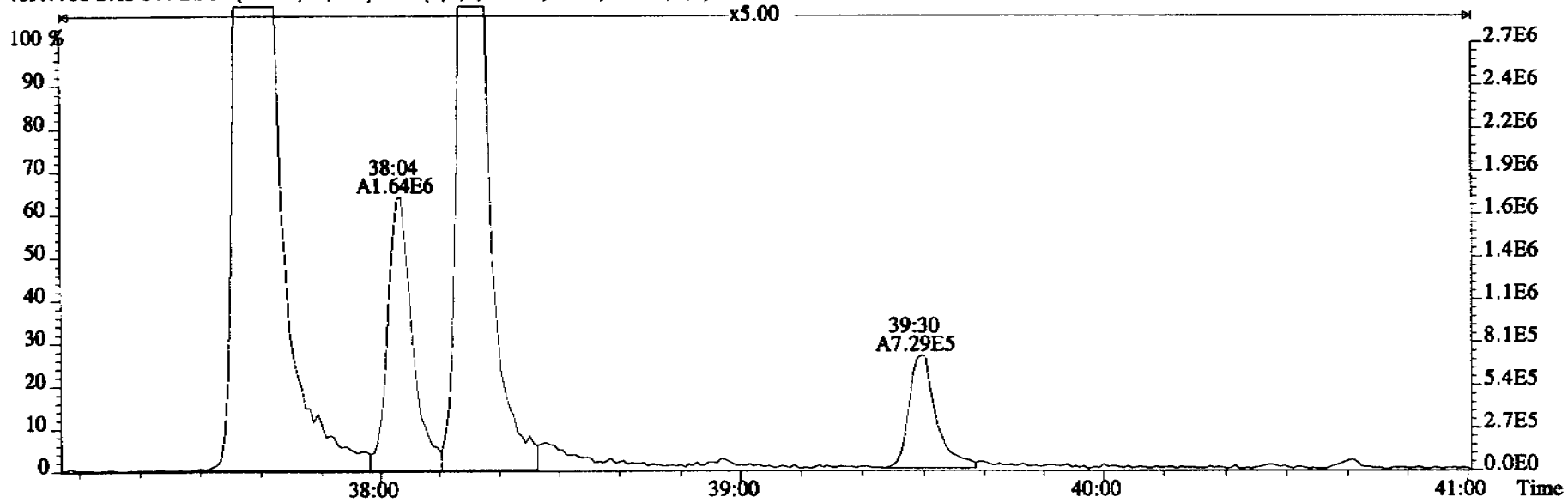
409.7788 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



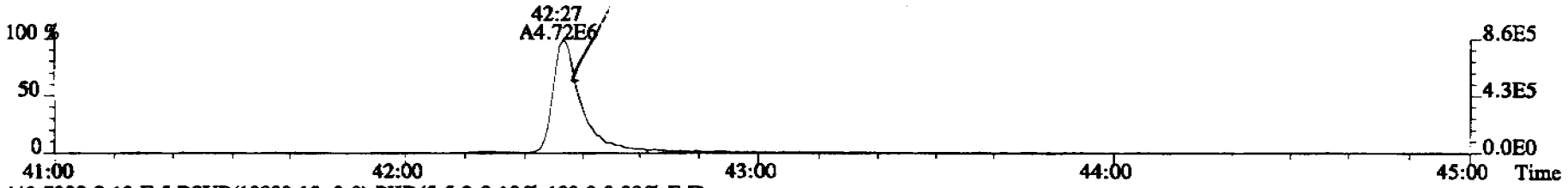
File:050502D1 #1-348 Acq: 2-MAY-2005 17:49:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_001 RE73-05-58829 10.01g Exp:OCDD_DB5
407.7818 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



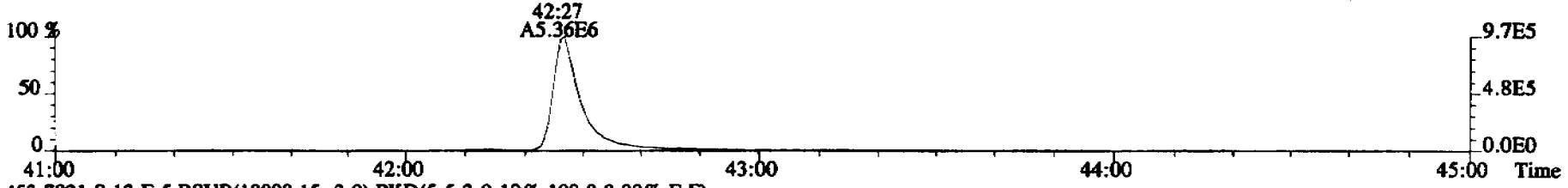
409.7788 S:13 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



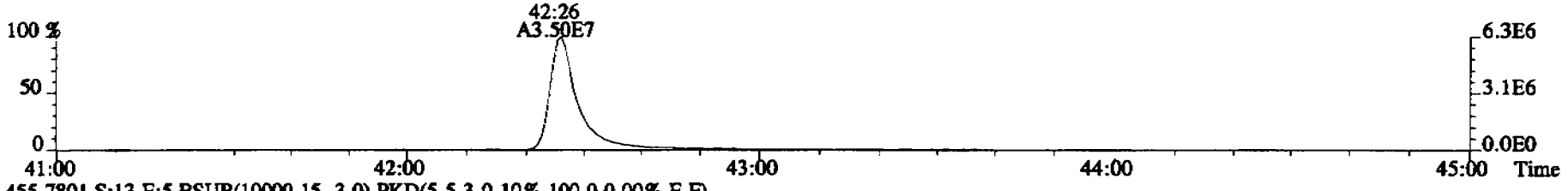
File:050502D1 #1-345 Acq: 2-MAY-2005 17:49:14 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_001 RE73-05-58829 10.01g Exp:OCDD_DB5
441.7428 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



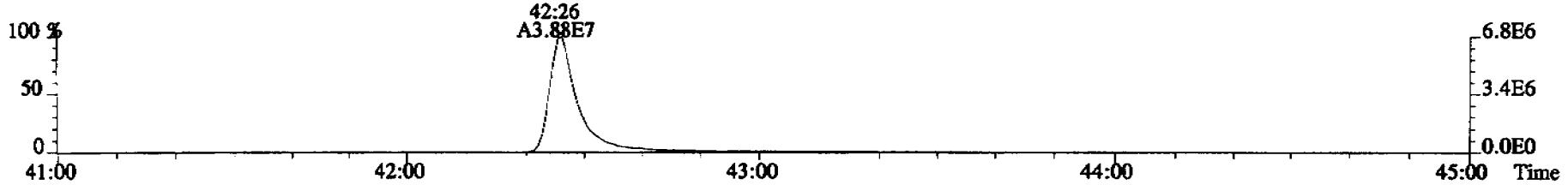
443.7398 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



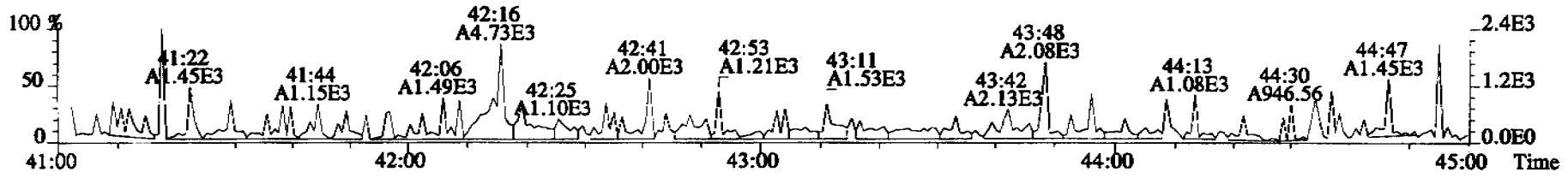
453.7831 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 S:13 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Client ID: RE73-05-58835 Filename: 050502D1 S:14 Acq:2-MAY-05 18:38:17 ConCal: ST050502D1-1
Lab ID: 26076_6749_002 GC Column ID: db-5 ICal: 1613vg7-4-23-05 wt/vol:10.020 EndCAL: ST050502D1-2

	Name	Resp	RA	RRF	RT	Conc	Qual	noise	Pac	DL
	2,3,7,8-TCDD	2.30e+06	0.78 y	1.06	27:02	7.20			* 2.5	*
	1,2,3,7,8-PeCDD	4.18e+06	0.61 y	0.99	31:42	16.9			* 2.5	*
	1,2,3,4,7,8-HxCDD	2.49e+06	1.30 y	1.11	35:02	14.2			* 2.5	*
	1,2,3,6,7,8-HxCDD	1.18e+07	1.26 y	1.07	35:09	57.8			* 2.5	*
	1,2,3,7,8,9-HxCDD	8.10e+06	1.27 y	1.15	35:28	40.3			* 2.5	*
	1,2,3,4,6,7,8-HpCDD	1.77e+08	1.04 y	1.05	38:58	895			* 2.5	*
	OCDD	4.73e+08	0.90 y	1.04	42:16	3260			* 2.5	*
	2,3,7,8-TCDF	2.04e+07	0.78 y	1.05	26:13	45.8	OK		* 2.5	*
	1,2,3,7,8-PeCDF	8.86e+06	1.57 y	0.95	30:30	24.2			* 2.5	*
	2,3,4,7,8-PeCDF	1.50e+07	1.60 y	1.08	31:26	37.5			* 2.5	*
	1,2,3,4,7,8-HxCDF	7.97e+06	1.25 y	1.19	34:09	25.0			* 2.5	*
	1,2,3,6,7,8-HxCDF	8.10e+06	1.30 y	1.22	34:16	23.0			* 2.5	*
	2,3,4,6,7,8-HxCDF	9.22e+06	1.24 y	1.20	34:54	29.2			* 2.5	*
	1,2,3,7,8,9-HxCDF	1.55e+06	1.25 y	1.13	35:52	6.11			* 2.5	*
	1,2,3,4,6,7,8-HpCDF	5.94e+07	1.05 y	1.38	37:40	197			* 2.5	*
	1,2,3,4,7,8,9-HpCDF	2.52e+06	1.09 y	1.23	39:31	9.38			* 2.5	*
	OCDF	2.79e+07	0.89 y	1.02	42:29	136			* 2.5	*
IS	13C-2,3,7,8-TCDD	6.01e+07	0.79 y	1.12	27:01	171				
IS	13C-1,2,3,7,8-PeCDD	4.98e+07	0.63 y	0.89	31:42	180				
IS	13C-1,2,3,4,7,8-HxCDD	3.15e+07	1.28 y	0.83	35:02	179				
IS	13C-1,2,3,6,7,8-HxCDD	3.80e+07	1.26 y	1.00	35:09	181				
IS	13C-1,2,3,4,6,7,8-HpCDD	3.76e+07	1.07 y	0.82	38:58	216				
IS	13C-OCDD	5.59e+07	0.90 y	0.74	42:15	357				
IS	13C-2,3,7,8-TCDF	8.45e+07	0.78 y	1.02	26:12	174				
IS	13C-1,2,3,7,8-PeCDF	7.68e+07	1.60 y	0.90	30:29	178				
IS	13C-2,3,4,7,8-PeCDF	7.43e+07	1.58 y	0.87	31:25	178				
IS	13C-1,2,3,4,7,8-HxCDF	5.36e+07	0.53 y	1.27	34:08	201				
IS	13C-1,2,3,6,7,8-HxCDF	5.76e+07	0.53 y	1.40	34:16	195				
IS	13C-2,3,4,6,7,8-HxCDF	5.25e+07	0.53 y	1.29	34:53	193				
IS	13C-1,2,3,7,8,9-HxCDF	4.51e+07	0.52 y	1.12	35:51	191				
IS	13C-1,2,3,4,6,7,8-HpCDF	4.39e+07	0.45 y	1.01	37:39	206				
IS	13C-1,2,3,4,7,8,9-HpCDF	4.37e+07	0.45 y	0.88	39:31	236				
IS	13C-OCDF	8.01e+07	0.90 y	0.94	42:28	405				
C/Up	37Cl-2,3,7,8-TCDD	1.40e+07		0.62	27:02	71.8				
RS/RT	13C-1,2,3,4-TCDD	6.24e+07	0.81 y	1.00	26:23	200				
RS	13C-1,2,3,4-TCDF	9.53e+07	0.79 y	1.00	24:50	200				
RS/RT	13C-1,2,3,7,8,9-HxCDD	4.21e+07	1.29 y	1.00	35:28	200				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	197	197		*	*
Total Penta-Dioxins	236	236		*	*
Total Hexa-Dioxins	630	630		*	*
Total Hepta-Dioxins	1780	1780		*	*
Total Tetra-Furans	874	874	D	*	*
Total Penta-Furans	418	418	D	*	*
Total Hexa-Furans	297	297	D	*	*
Total Hepta-Furans	347	347		*	*

Rec	Qual
85.7	
90.0	
89.8	
90.8	
108	
89.3	
87.0	
89.3	
89.1	
100	
97.5	
96.5	
95.6	
103	
118	
101	
89.9	

Intergrations by Analyst: _____

Date: 5/3/05

Totals class: TCDD EMPC Entry #: 19

Run: 19 File: 050502D1 S: 14 I: 1 F: 1
Acquired: 2-MAY-05 18:38:17 Processed: 3-MAY-05 05:29:50

Total Concentration: 197.39 Unnamed Concentration: 190.182

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
23:20	8.591e+06	1.083e+07	0.79	y	1.942e+07	60.940	
23:44	4.767e+06	6.208e+06	0.77	y	1.097e+07	34.430	
24:12	8.442e+05	1.094e+06	0.77	y	1.939e+06	6.0816	
25:00	1.461e+05	2.170e+05	0.67	y	3.631e+05	1.1390	
25:14	2.017e+06	2.595e+06	0.78	y	4.611e+06	14.467	
25:27	2.494e+06	3.152e+06	0.79	y	5.646e+06	17.713	
25:38	9.725e+05	1.236e+06	0.79	y	2.209e+06	6.9285	
25:53	5.598e+05	7.108e+05	0.79	y	1.271e+06	3.9861	
26:03	9.659e+05	1.220e+06	0.79	y	2.185e+06	6.8559	
26:24	1.145e+06	1.475e+06	0.78	y	2.620e+06	8.2195	
26:30	3.354e+05	4.000e+05	0.84	y	7.354e+05	2.3071	
26:45	1.697e+06	2.112e+06	0.80	y	3.809e+06	11.949	
26:53	3.838e+05	4.685e+05	0.82	y	8.523e+05	2.6738	
27:02	1.005e+06	1.292e+06	0.78	y	2.297e+06	7.2049	2,3,7,8-TCDD
27:20	1.137e+06	1.483e+06	0.77	y	2.619e+06	8.2166	
27:27	2.872e+05	3.827e+05	0.75	y	6.699e+05	2.1016	
27:55	3.160e+05	3.771e+05	0.84	y	6.930e+05	2.1741	

Totals class: PeCDD EMPC Entry #: 21

Run: 19 File: 050502D1 S: 14 I: 1 F: 2
Acquired: 2-MAY-05 18:38:17 Processed: 3-MAY-05 05:29:50

Total Concentration: 236.41 Unnamed Concentration: 219.467

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
29:35	4.912e+06	7.802e+06	0.63	y	1.271e+07	51.530	
30:03	1.171e+06	1.772e+06	0.66	y	2.943e+06	11.929	
30:31	4.401e+06	7.061e+06	0.62	y	1.146e+07	46.454	
30:41	2.034e+06	3.301e+06	0.62	y	5.335e+06	21.624	
30:46	2.826e+06	4.462e+06	0.63	y	7.288e+06	29.540	
30:59	2.837e+06	4.620e+06	0.61	y	7.457e+06	30.223	
31:18	1.069e+06	1.677e+06	0.64	y	2.746e+06	11.130	
31:42	1.579e+06	2.603e+06	0.61	y	4.181e+06	16.947	1,2,3,7,8-PeCDD
31:47	8.111e+05	1.260e+06	0.64	y	2.071e+06	8.3940	
32:05	7.905e+05	1.342e+06	0.59	y	2.133e+06	8.6435	

Totals class: HxCDD EMPC Entry #: 23

Run: 19 File: 050502D1 S: 14 I: 1 F: 3
Acquired: 2-MAY-05 18:38:17 Processed: 3-MAY-05 05:29:50

Total Concentration: 630.04 Unnamed Concentration: 517.778

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
33:30	1.490e+07	1.187e+07	1.26	y	2.677e+07	138.48	
34:04	6.034e+06	4.772e+06	1.26	y	1.081e+07	55.888	
34:19	2.930e+07	2.313e+07	1.27	y	5.243e+07	271.16	
34:27	3.315e+06	2.726e+06	1.22	y	6.041e+06	31.245	
35:02	1.407e+06	1.079e+06	1.30	y	2.486e+06	14.165	1,2,3,4,7,8-HxCDD
35:09	6.562e+06	5.209e+06	1.26	y	1.177e+07	57.777	1,2,3,6,7,8-HxCDD
35:21	2.268e+06	1.794e+06	1.26	y	4.062e+06	21.008	
35:28	4.536e+06	3.560e+06	1.27	y	8.096e+06	40.321	1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC Entry #: 25

Run: 19 File: 050502D1 S: 14 I: 1 F: 4
Acquired: 2-MAY-05 18:38:17 Processed: 3-MAY-05 05:29:50

Total Concentration: 1782.4 Unnamed Concentration: 887.370

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
38:04	8.916e+07	8.628e+07	1.03	y	1.754e+08	887.37	
38:58	9.003e+07	8.693e+07	1.04	y	1.770e+08	895.04	1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC Entry #: 27

Run: 19 File: 050502D1 S: 14 I: 1 F: 1
Acquired: 2-MAY-05 18:38:17 Processed: 3-MAY-05 05:29:50

Total Concentration: 873.52 Unnamed Concentration: 827.765

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
21:06	2.991e+06	3.857e+06	0.78	y	6.848e+06	15.339	
21:39	3.014e+06	3.949e+06	0.76	y	6.963e+06	15.595	
22:19	2.709e+06	3.406e+06	0.80	y	6.115e+06	13.697	
22:51	2.316e+07	2.974e+07	0.78	y	5.290e+07	118.50	
23:12	3.380e+06	4.279e+06	0.79	y	7.659e+06	17.156	
23:20	9.082e+06	1.143e+07	0.79	y	2.052e+07	45.952	
23:46	4.540e+06	5.853e+06	0.78	y	1.039e+07	23.279	
23:54	3.798e+06	4.844e+06	0.78	y	8.643e+06	19.359	
24:05	5.524e+06	6.809e+06	0.81	y	1.233e+07	27.626	
24:29	4.858e+06	6.235e+06	0.78	y	1.109e+07	24.847	
24:37	7.189e+06	9.235e+06	0.78	y	1.642e+07	36.787	
24:51	2.343e+07	2.959e+07	0.79	y	5.301e+07	118.74	
25:20	1.162e+07	1.493e+07	0.78	y	2.655e+07	59.472	
25:36	7.102e+06	9.105e+06	0.78	y	1.621e+07	36.303	
25:47	8.007e+06	1.015e+07	0.79	y	1.815e+07	40.663	
26:00	6.679e+06	8.582e+06	0.78	y	1.526e+07	34.182	
26:06	3.968e+06	5.049e+06	0.79	y	9.016e+06	20.196	
26:13	8.952e+06	1.147e+07	0.78	y	2.043e+07	45.751	2,3,7,8-TCDF
26:34	2.353e+07	3.027e+07	0.78	y	5.380e+07	120.51	
26:47	1.186e+06	1.381e+06	0.86	y	2.567e+06	5.7505	
27:04	1.301e+06	1.565e+06	0.83	y	2.867e+06	6.4207	
27:36	1.718e+06	2.123e+06	0.81	y	3.842e+06	8.6050	
27:45	3.177e+06	4.000e+06	0.79	y	7.177e+06	16.075	
28:05	5.494e+05	6.653e+05	0.83	y	1.215e+06	2.7207	

Totals class: 1st Func. PeCDF EMPC Entry #: 29

Run: 19 File: 050502D1 S: 14 I: 1 F: 1
Acquired: 2-MAY-05 18:38:17 Processed: 3-MAY-05 05:29:50

Total Concentration: 32.132 Unnamed Concentration: 32.132

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
28:02	7.522e+06	4.811e+06	1.56 y	1.233e+07	32.132	

Totals class: PeCDF EMPC Entry #: 31

Run: 19 File: 050502D1 S: 14 I: 1 P: 2
Acquired: 2-MAY-05 18:38:17 Processed: 3-MAY-05 05:29:50

Total Concentration: 386.15 Unnamed Concentration: 324.481

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
29:24	1.386e+07	8.817e+06	1.57	y	2.268e+07	59.080	
29:33	1.801e+07	1.137e+07	1.58	y	2.938e+07	76.535	
29:43	1.454e+06	8.358e+05	1.74	y	2.289e+06	5.9645	
29:55	1.800e+06	1.202e+06	1.50	y	3.002e+06	7.8208	
30:02	3.715e+06	2.357e+06	1.58	y	6.072e+06	15.819	
30:08	8.501e+06	5.350e+06	1.59	y	1.385e+07	36.085	
30:19	2.283e+06	1.478e+06	1.54	y	3.761e+06	9.7983	
30:30	5.410e+06	3.449e+06	1.57	y	8.859e+06	24.162	1,2,3,7,8-PeCDF
30:43	1.079e+07	6.779e+06	1.59	y	1.757e+07	45.782	
30:52	7.253e+05	4.380e+05	1.66	y	1.163e+06	3.0306	
30:58	3.190e+05	2.302e+05	1.39	y	5.492e+05	1.4307	
31:12	8.332e+05	5.624e+05	1.48	y	1.396e+06	3.6357	
31:19	1.213e+07	7.570e+06	1.60	y	1.970e+07	51.325	
31:26	9.250e+06	5.787e+06	1.60	y	1.504e+07	37.502	2,3,4,7,8-PeCDF
31:41	8.692e+05	5.757e+05	1.51	y	1.445e+06	3.7641	
32:10	1.426e+05	1.187e+05	1.20	n	2.346e+05	0.61123	
32:19	8.619e+05	5.963e+05	1.45	y	1.458e+06	3.7989	

Totals class: HxCDF EMPC Entry #: 33

Run: 19 File: 050502D1 S: 14 I: 1 F: 3
Acquired: 2-MAY-05 18:38:17 Processed: 3-MAY-05 05:29:50

Total Concentration: 297.09 Unnamed Concentration: 213.723

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
32:57	4.334e+06	3.331e+06	1.30	y	7.665e+06	24.730	
33:07	1.433e+07	1.150e+07	1.25	y	2.582e+07	83.314	
33:19	1.010e+06	7.431e+05	1.36	y	1.753e+06	5.6558	
33:28	1.361e+06	1.056e+06	1.29	y	2.417e+06	7.7978	
33:40	6.884e+06	5.460e+06	1.26	y	1.234e+07	39.829	
34:03	6.574e+06	5.166e+06	1.27	y	1.174e+07	37.878	
34:09	4.427e+06	3.544e+06	1.25	y	7.971e+06	25.038	1,2,3,4,7,8-HxCDF
34:16	4.573e+06	3.522e+06	1.30	y	8.095e+06	23.025	1,2,3,6,7,8-HxCDF
34:25	5.741e+05	4.718e+05	1.22	y	1.046e+06	3.3746	
34:33	9.735e+05	7.620e+05	1.28	y	1.735e+06	5.5997	
34:41	9.671e+05	7.511e+05	1.29	y	1.718e+06	5.5439	
34:54	5.112e+06	4.109e+06	1.24	y	9.221e+06	29.198	2,3,4,6,7,8-HxCDF
35:52	8.639e+05	6.896e+05	1.25	y	1.553e+06	6.1090	1,2,3,7,8,9-HxCDF

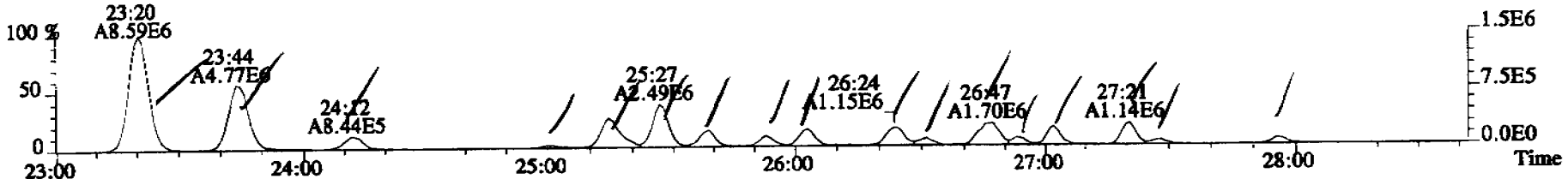
Totals class: HpCDF EMPC Entry #: 35

Run: 19 File: 050502D1 S: 14 I: 1 F: 4
Acquired: 2-MAY-05 18:38:17 Processed: 3-MAY-05 05:29:50

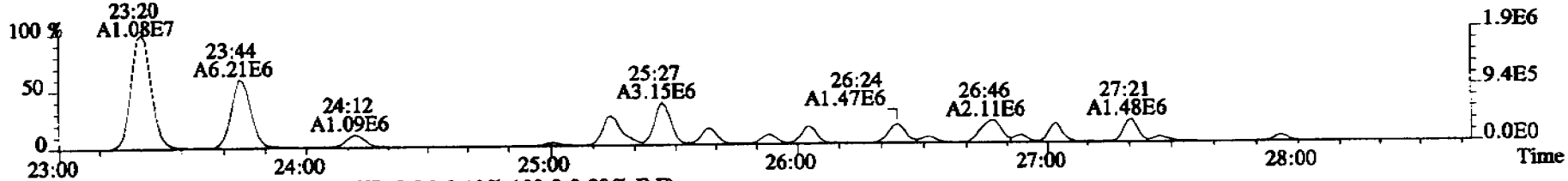
Total Concentration: 347.02 Unnamed Concentration: 141.013

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
37:40	3.047e+07	2.896e+07	1.05 y	5.942e+07	196.63	1,2,3,4,6,7,8-HpCDF
38:04	2.652e+06	2.510e+06	1.06 y	5.162e+06	18.013	
38:16	1.816e+07	1.709e+07	1.06 y	3.525e+07	123.00	
39:31	1.316e+06	1.204e+06	1.09 y	2.520e+06	9.3786	1,2,3,4,7,8,9-HpCDF

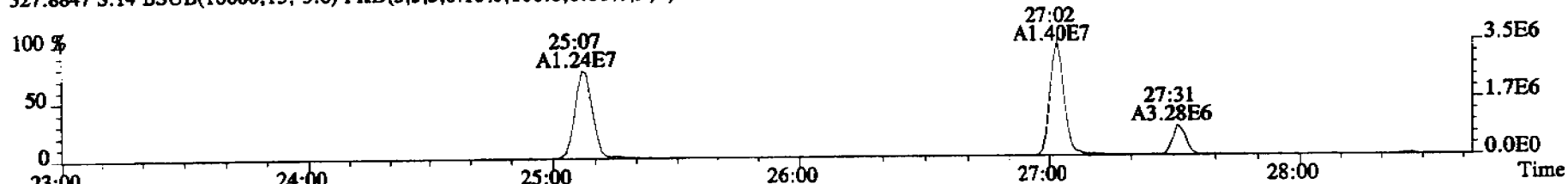
File:050502D1 #1-559 Acq: 2-MAY-2005 18:38:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_002 RE73-05-58835 10.02g Exp:OCDD_DB5
319.8965 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



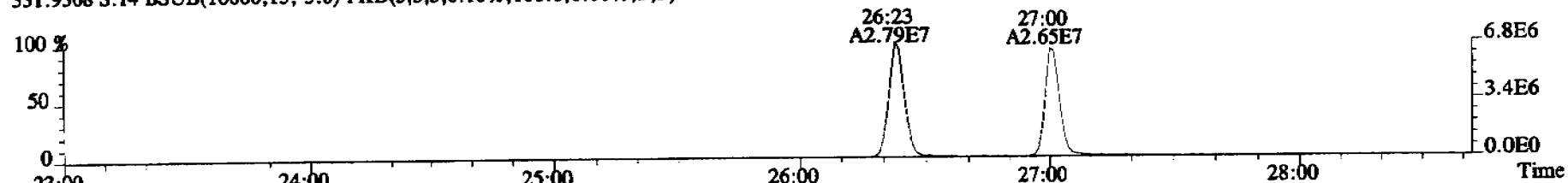
321.8936 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



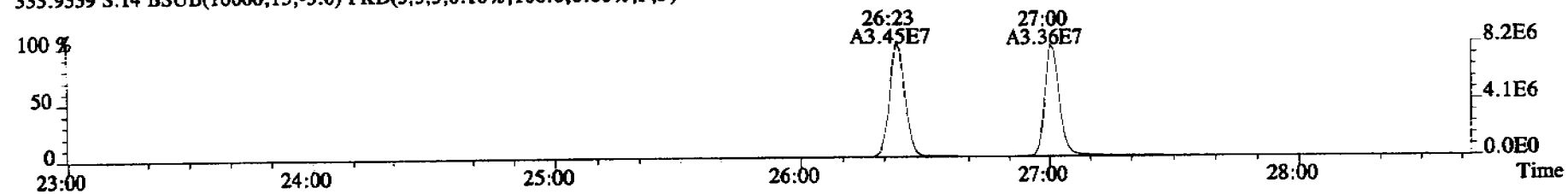
327.8847 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



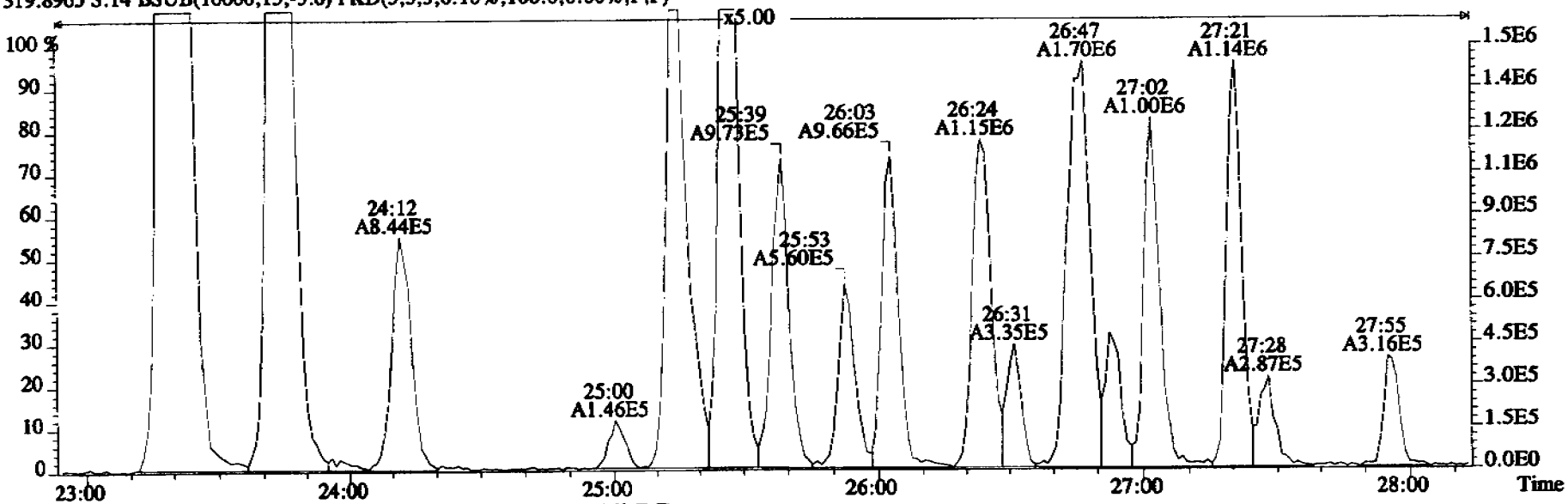
331.9368 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



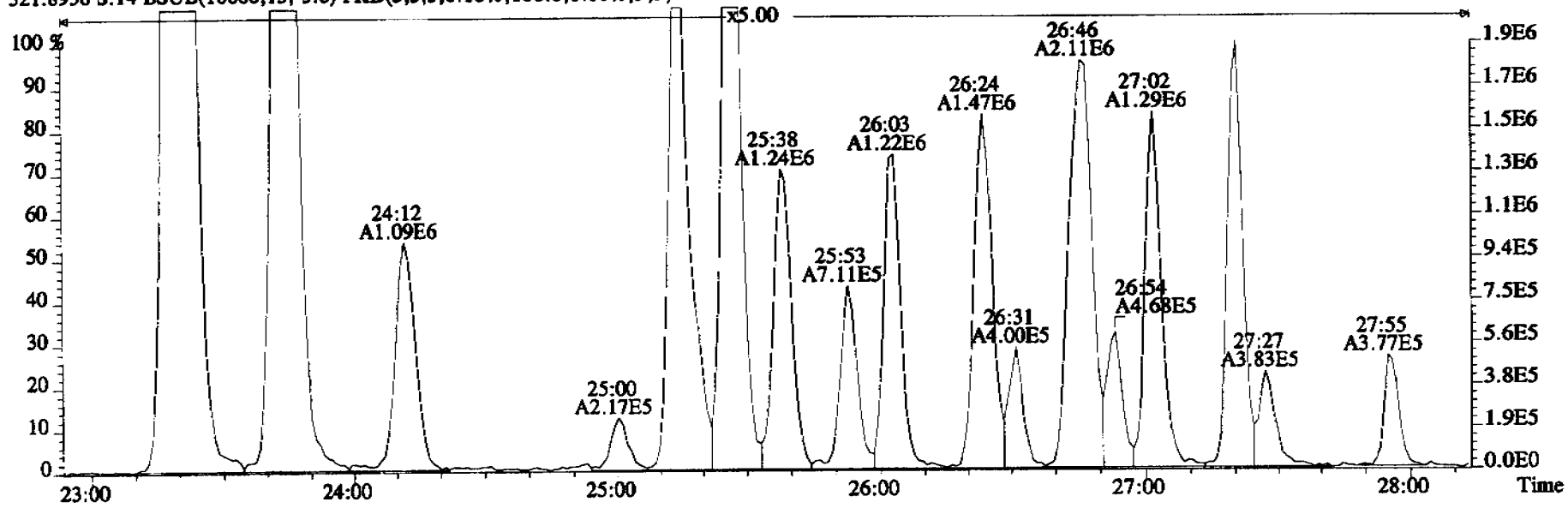
333.9339 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



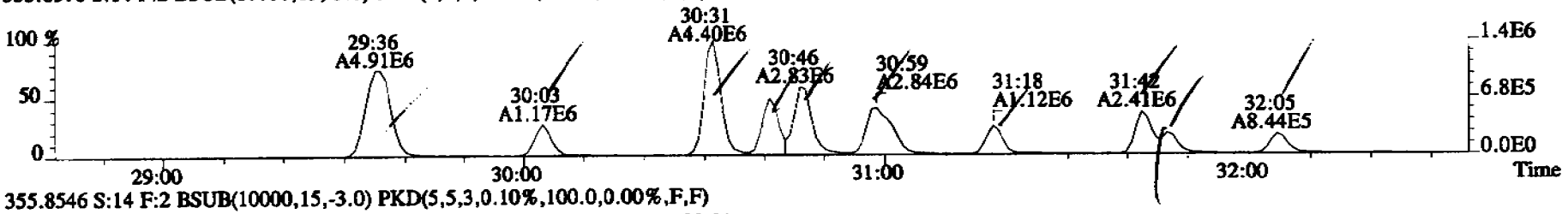
File:050502D1 #1-559 Acq: 2-MAY-2005 18:38:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Alta Analytical Laboratory VG-7 Text:26076 6749_002 RE73-05-58835 10.02g Exp:OCDD_DB5
319.8965 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



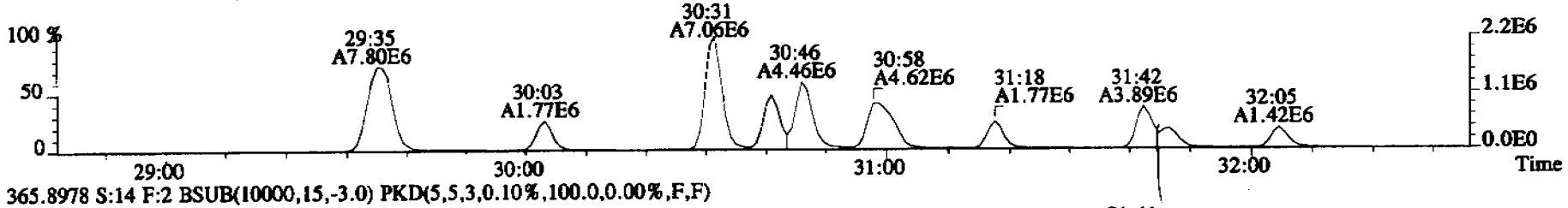
321.8936 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



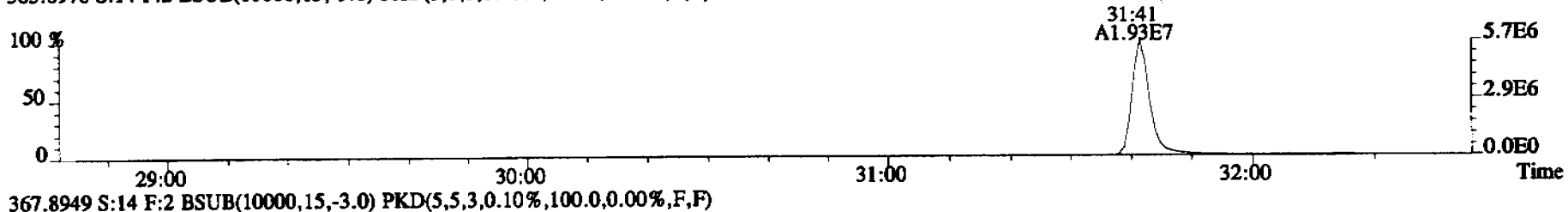
File:050502D1 #1-272 Acq: 2-MAY-2005 18:38:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_002 RE73-05-58835 10.02g Exp:OCDD_DB5
353.8576 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



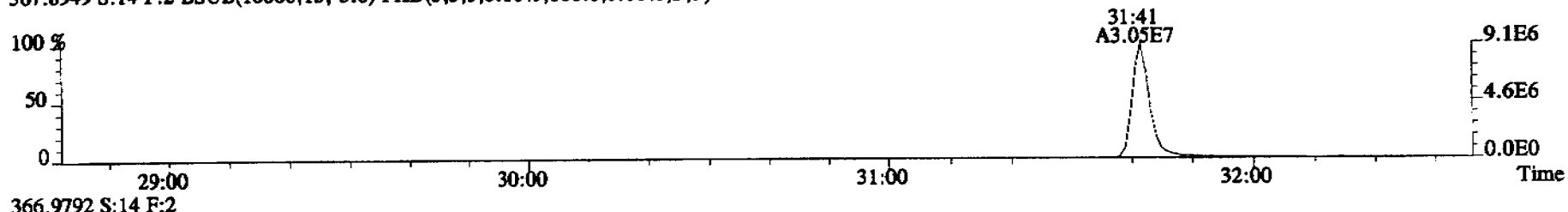
355.8546 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



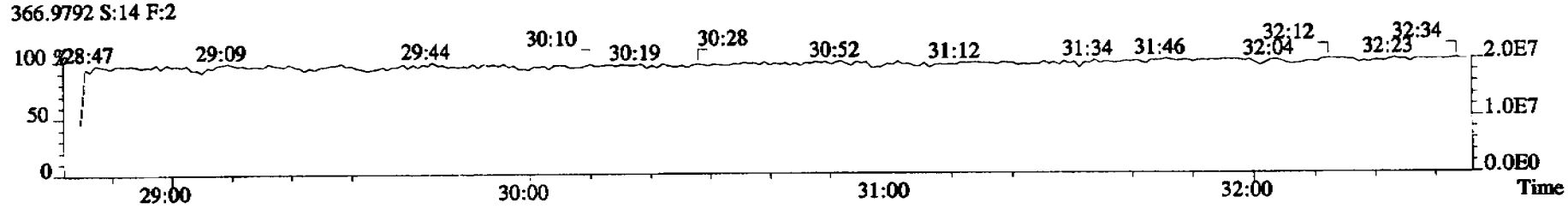
365.8978 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



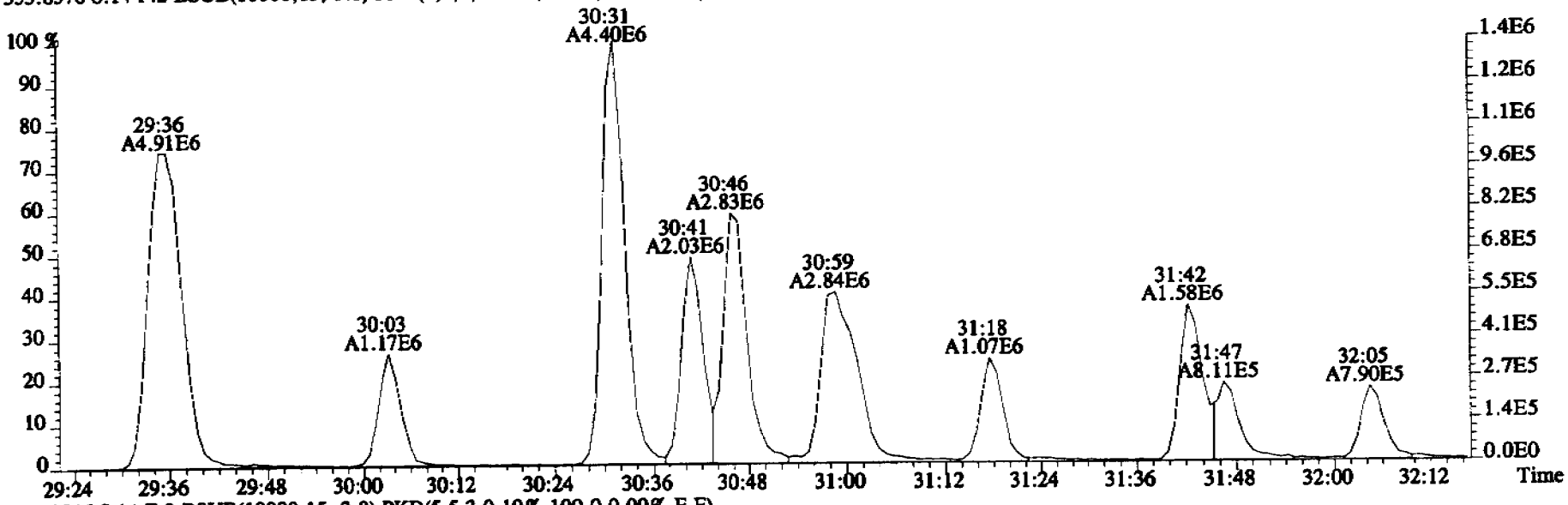
367.8949 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



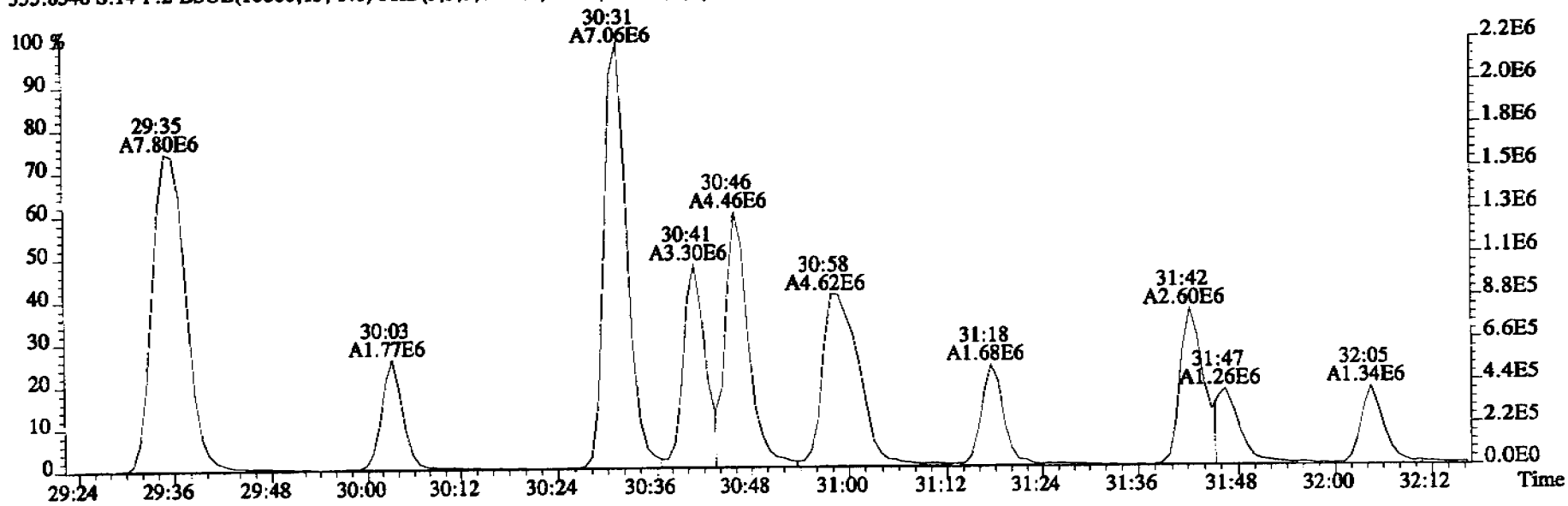
366.9792 S:14 F:2



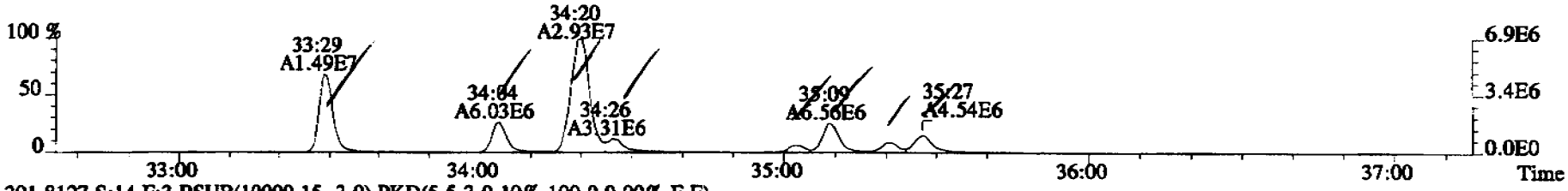
File:050502D1 #1-272 Acq: 2-MAY-2005 18:38:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_002 RE73-05-58835 10.02g Exp:OCDD_DB5
353.8576 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



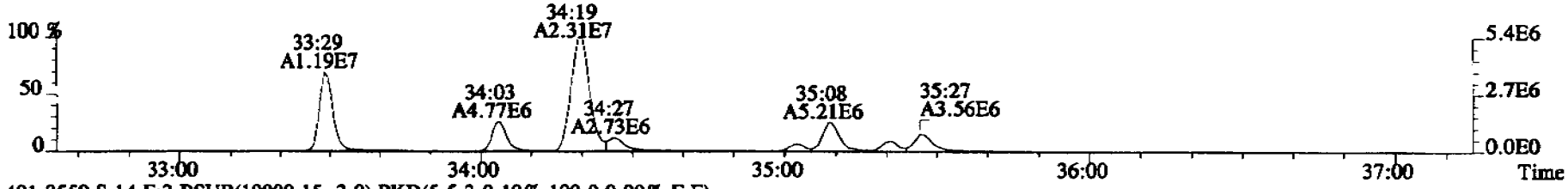
355.8546 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



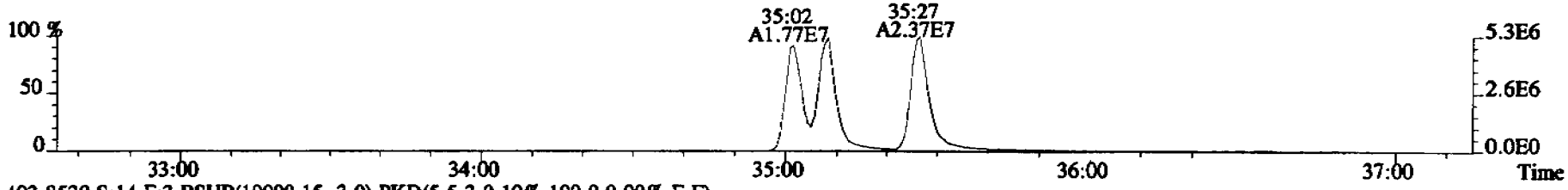
File:050502D1 #1-399 Acq: 2-MAY-2005 18:38:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_002 RE73-05-58835 10.02g Exp:OCDD_DB5
389.8156 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



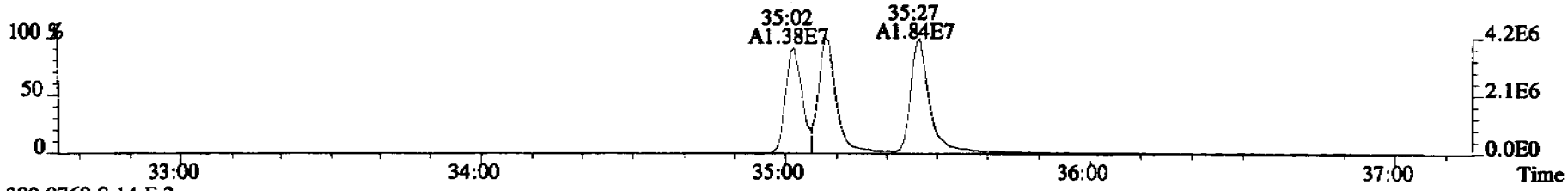
391.8127 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



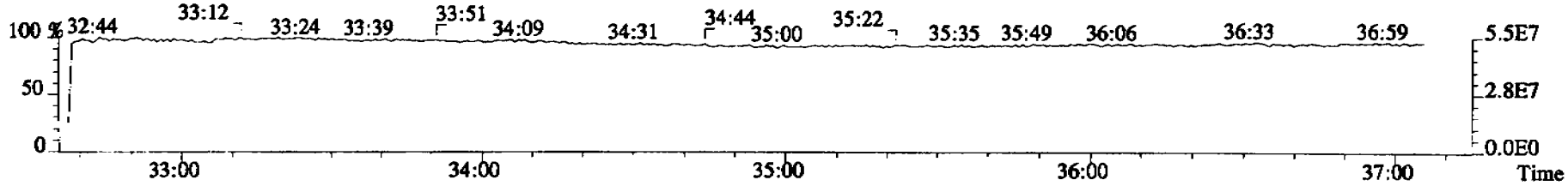
401.8559 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



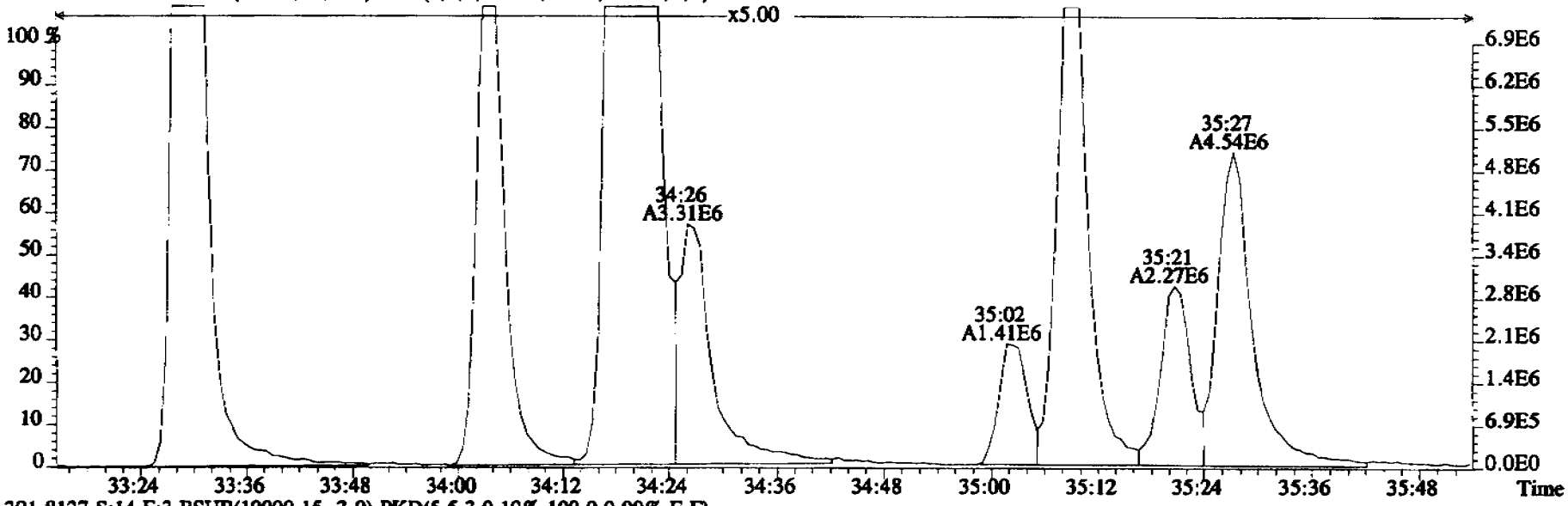
403.8530 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



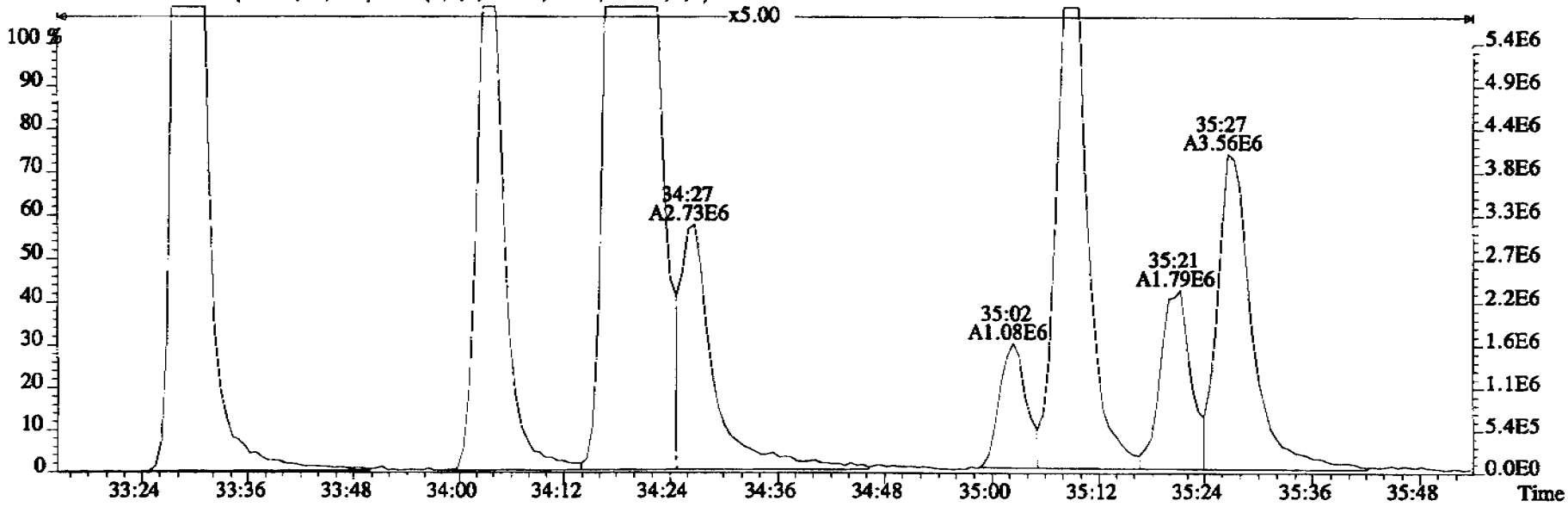
380.9760 S:14 F:3



File:050502D1 #1-399 Acq: 2-MAY-2005 18:38:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_002 RE73-05-58835 10.02g Exp:OCDD_DB5
389.8156 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

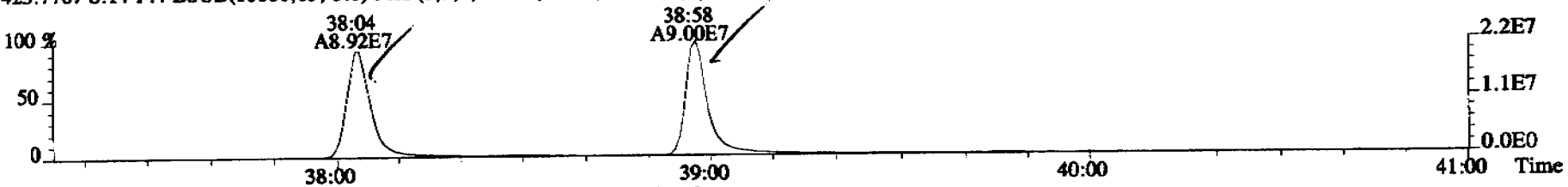


391.8127 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

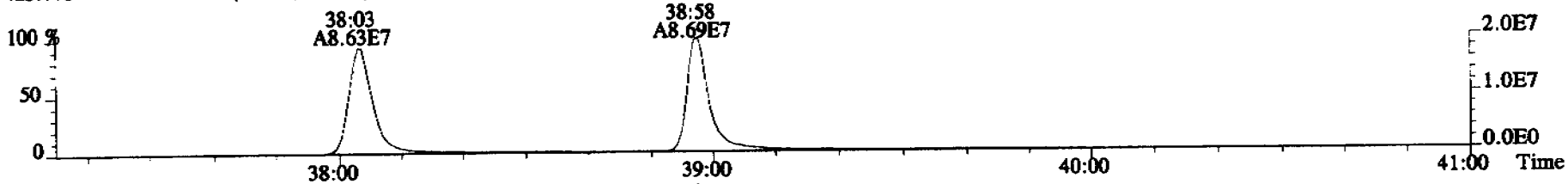


File:050502D1 #1-348 Acq: 2-MAY-2005 18:38:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_002 RE73-05-58835 10.02g Exp:OCDD_DB5

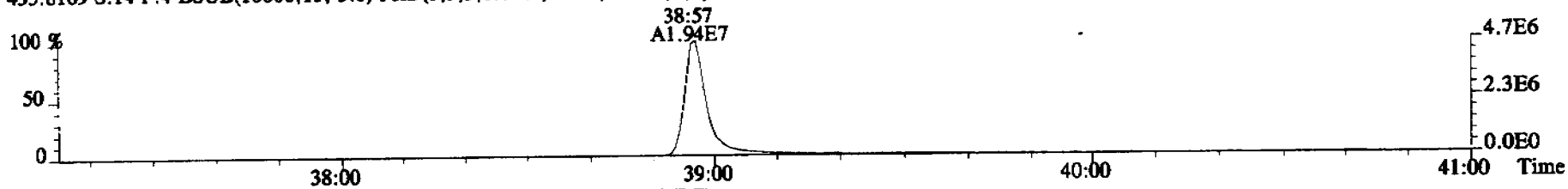
423.7767 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



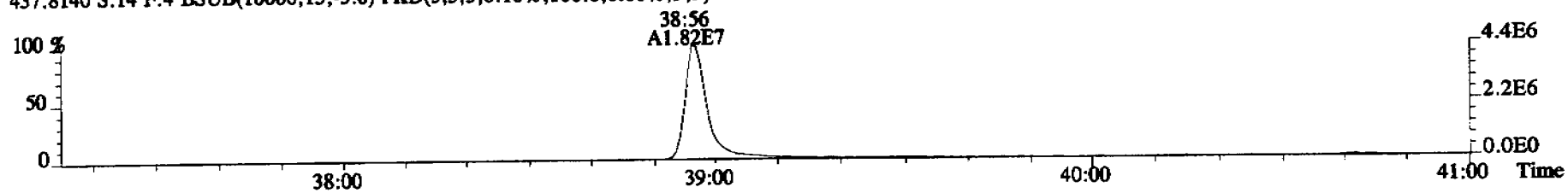
425.7737 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



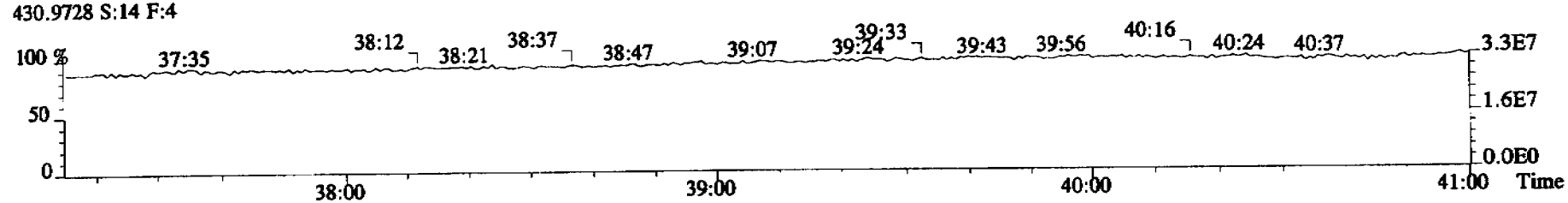
435.8169 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



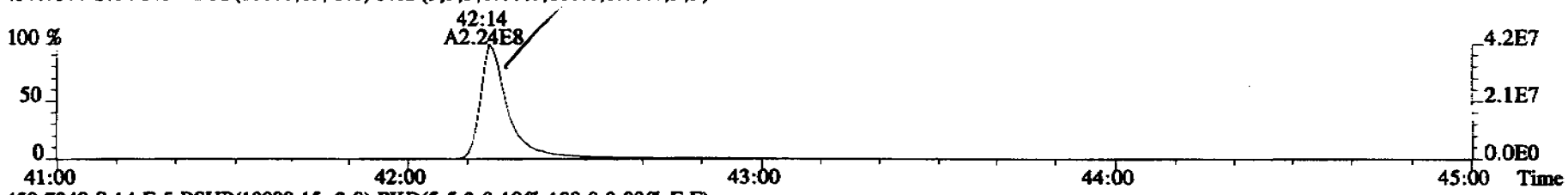
437.8140 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



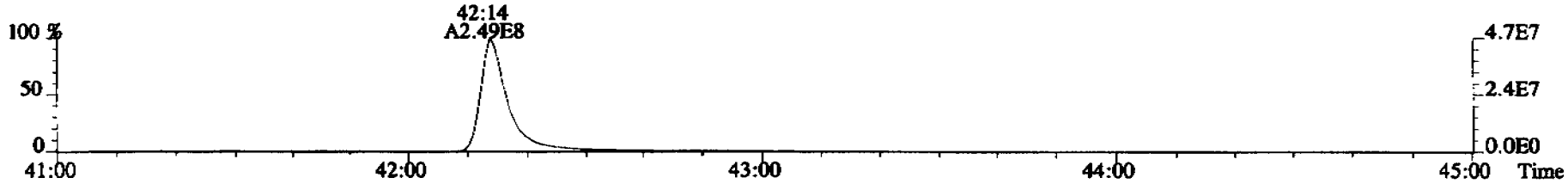
430.9728 S:14 F:4



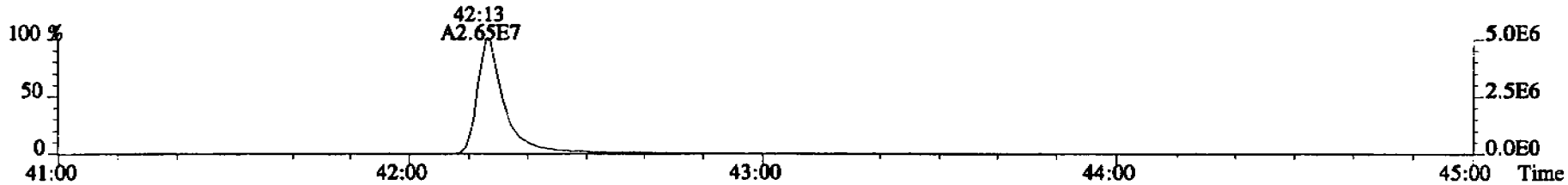
File:050502D1 #1-345 Acq: 2-MAY-2005 18:38:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_002 RE73-05-58835 10.02g Exp:OCDD_DB5
457.7377 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



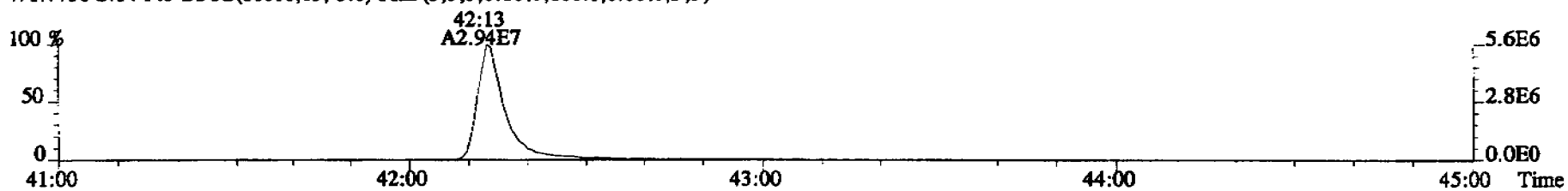
459.7348 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



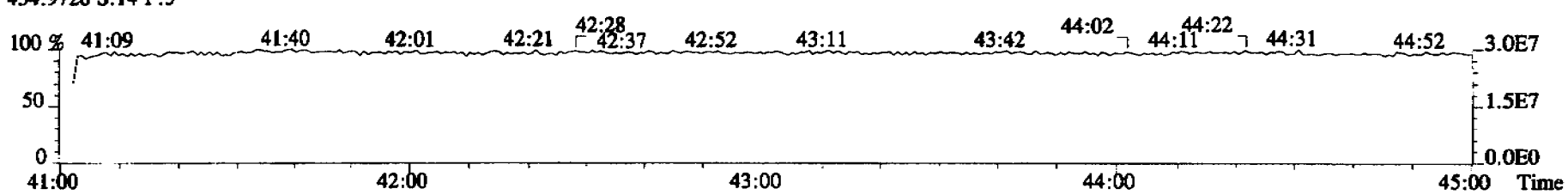
469.7780 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



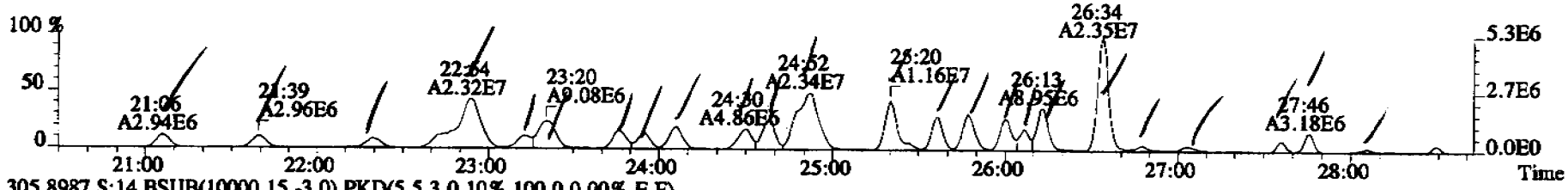
471.7750 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



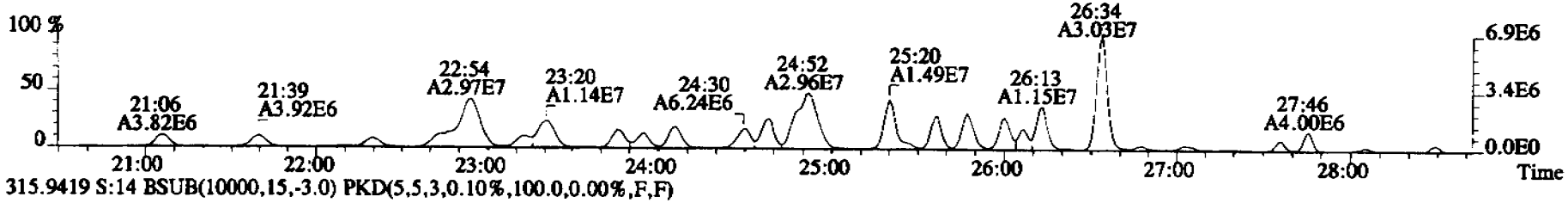
454.9728 S:14 F:5



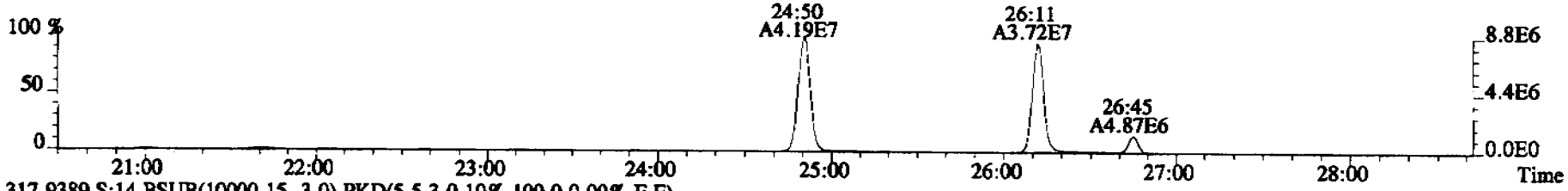
File:050502D1 #1-559 Acq: 2-MAY-2005 18:38:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_002 RE73-05-58835 10.02g Exp:OCDD_DB5
303.9016 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



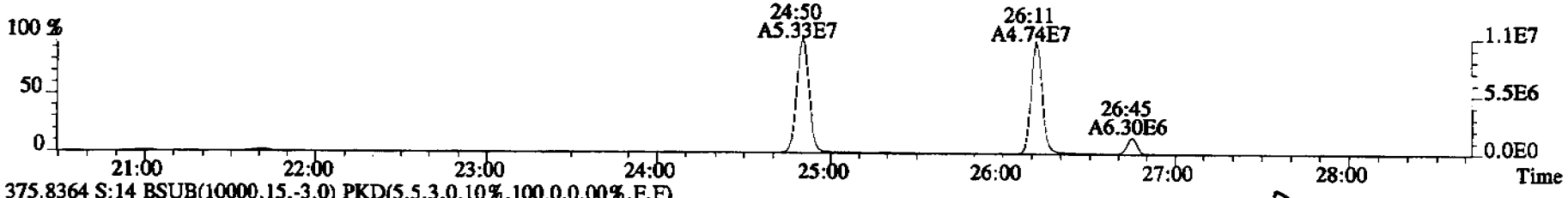
305.8987 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



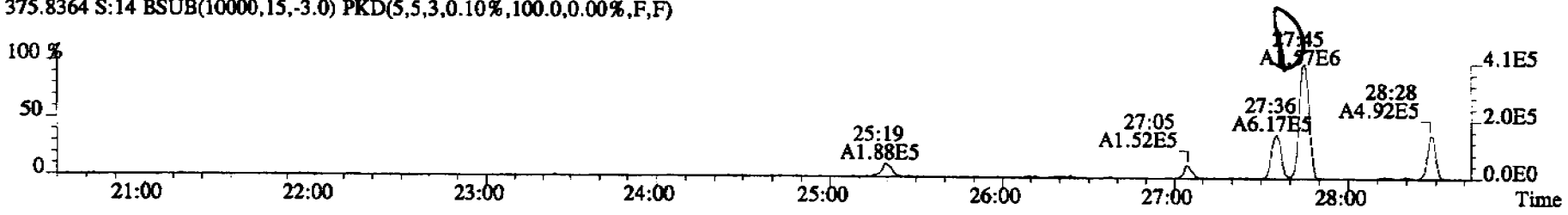
315.9419 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



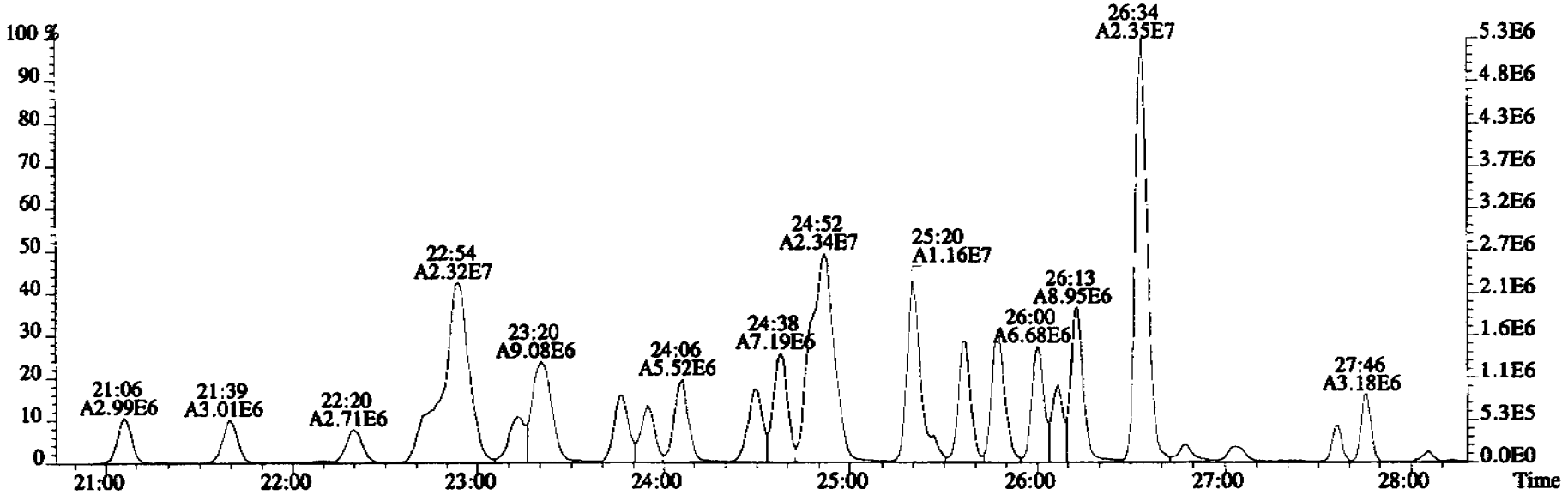
317.9389 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



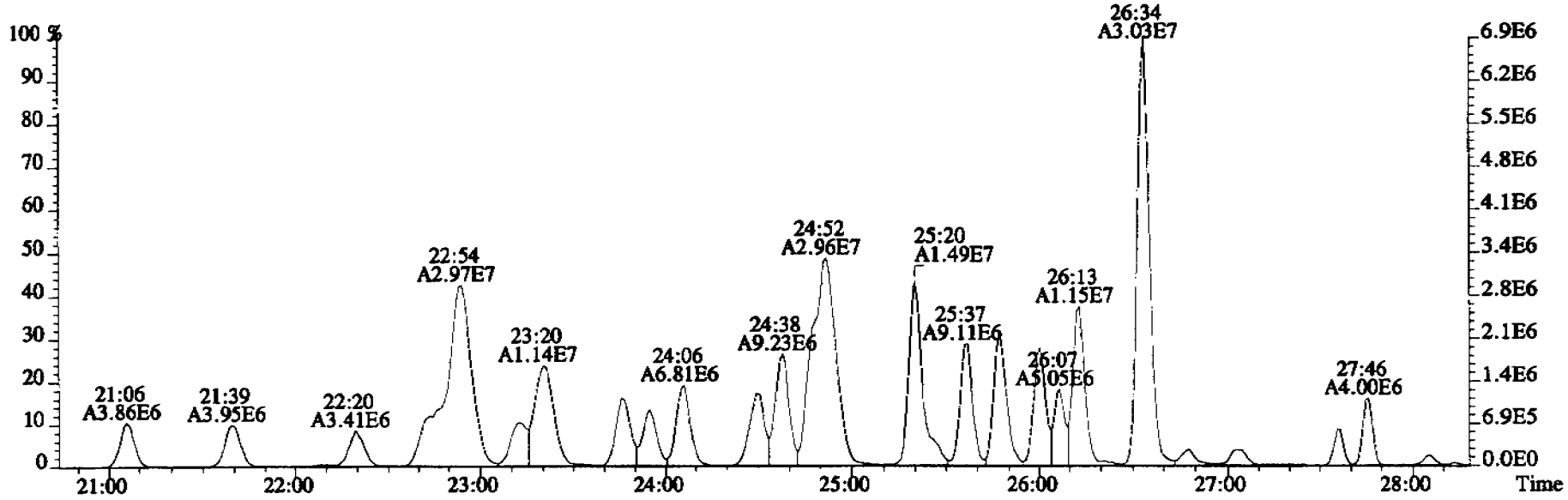
375.8364 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



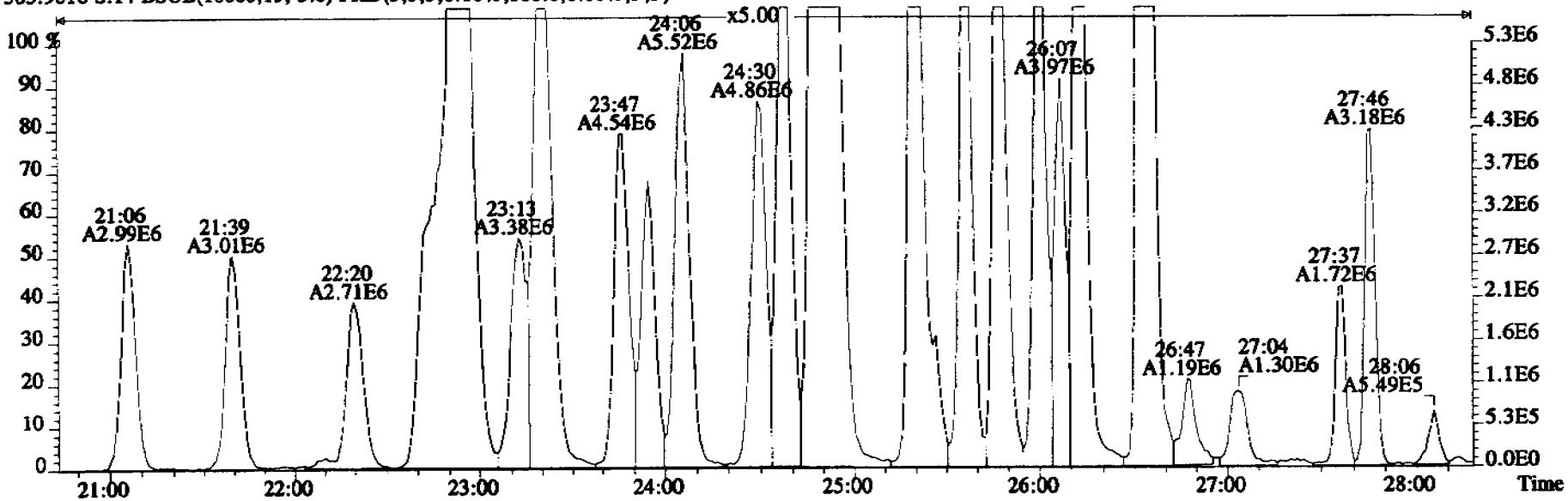
File:050502D1 #1-559 Acq: 2-MAY-2005 18:38:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_002 RE73-05-58835 10.02g Exp:OCDD_DB5
303.9016 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



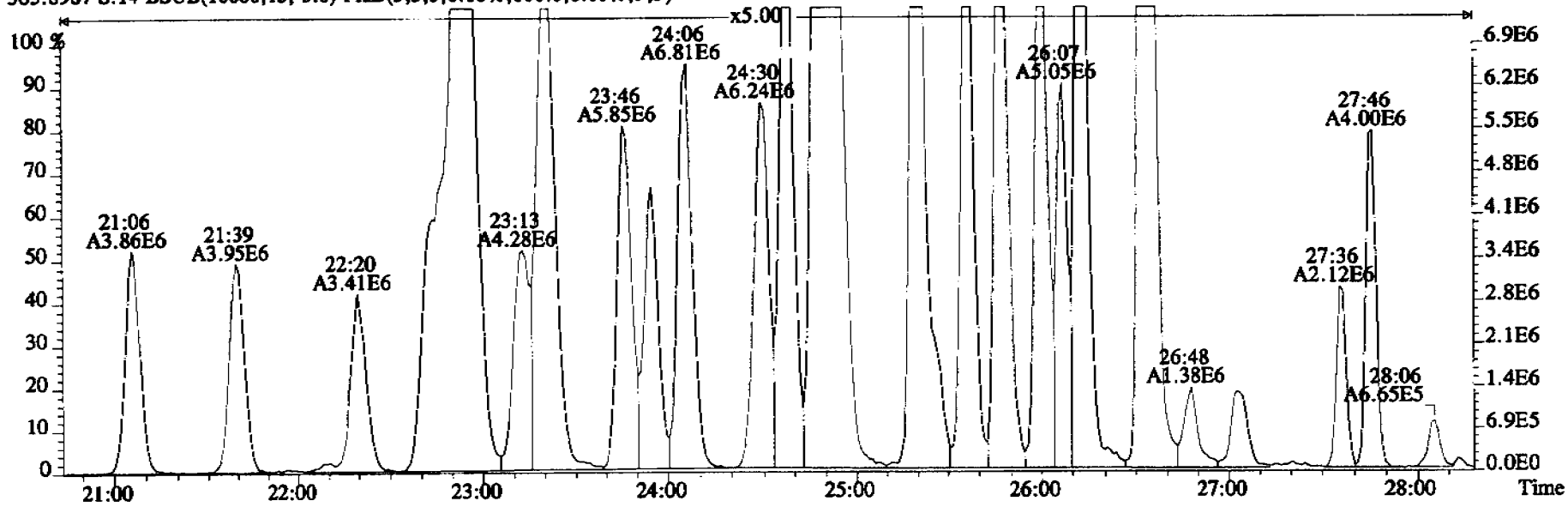
305.8987 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



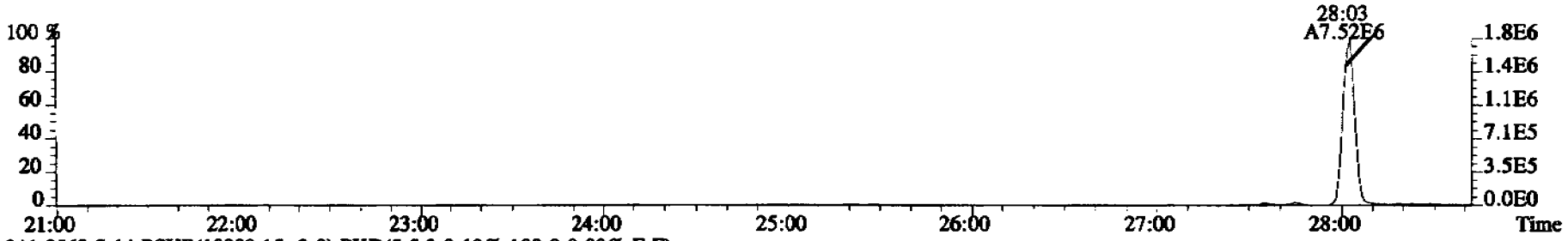
File:050502D1 #1-559 Acq: 2-MAY-2005 18:38:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Alta Analytical Laboratory VG-7 Text:26076 6749_002 RE73-05-58835 10.02g Exp:OCDD_DB5
303.9016 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



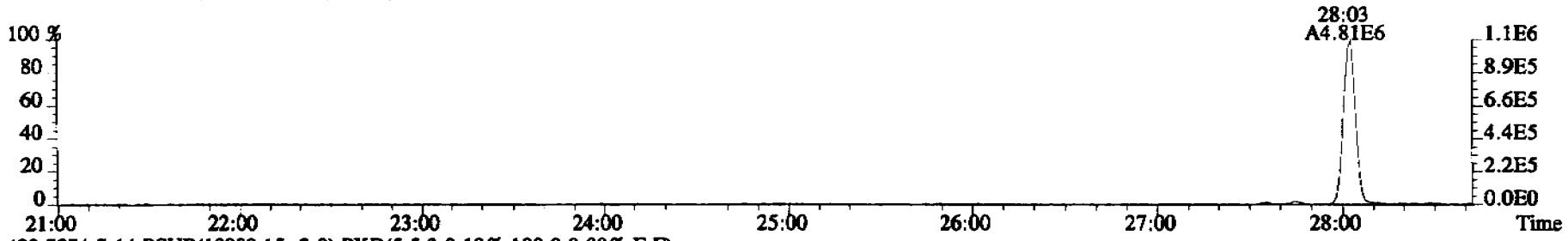
305.8987 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



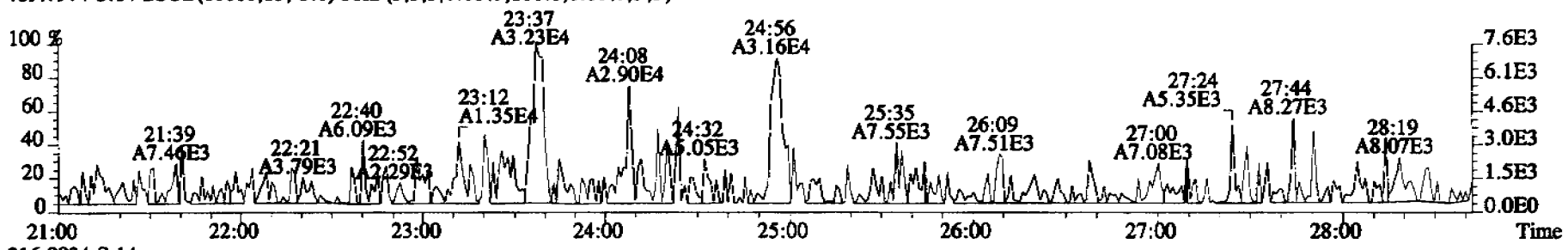
File:050502D1 #1-559 Acq: 2-MAY-2005 18:38:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_002 RE73-05-58835 10.02g Exp:OCDD_DB5
339.8597 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



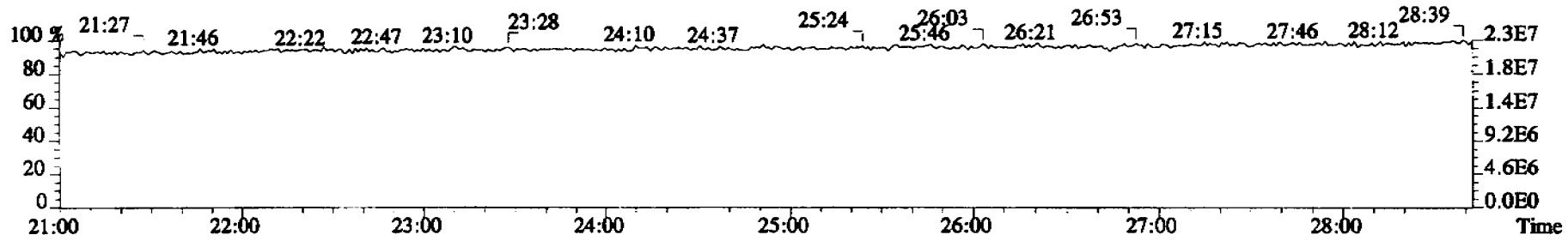
341.8568 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



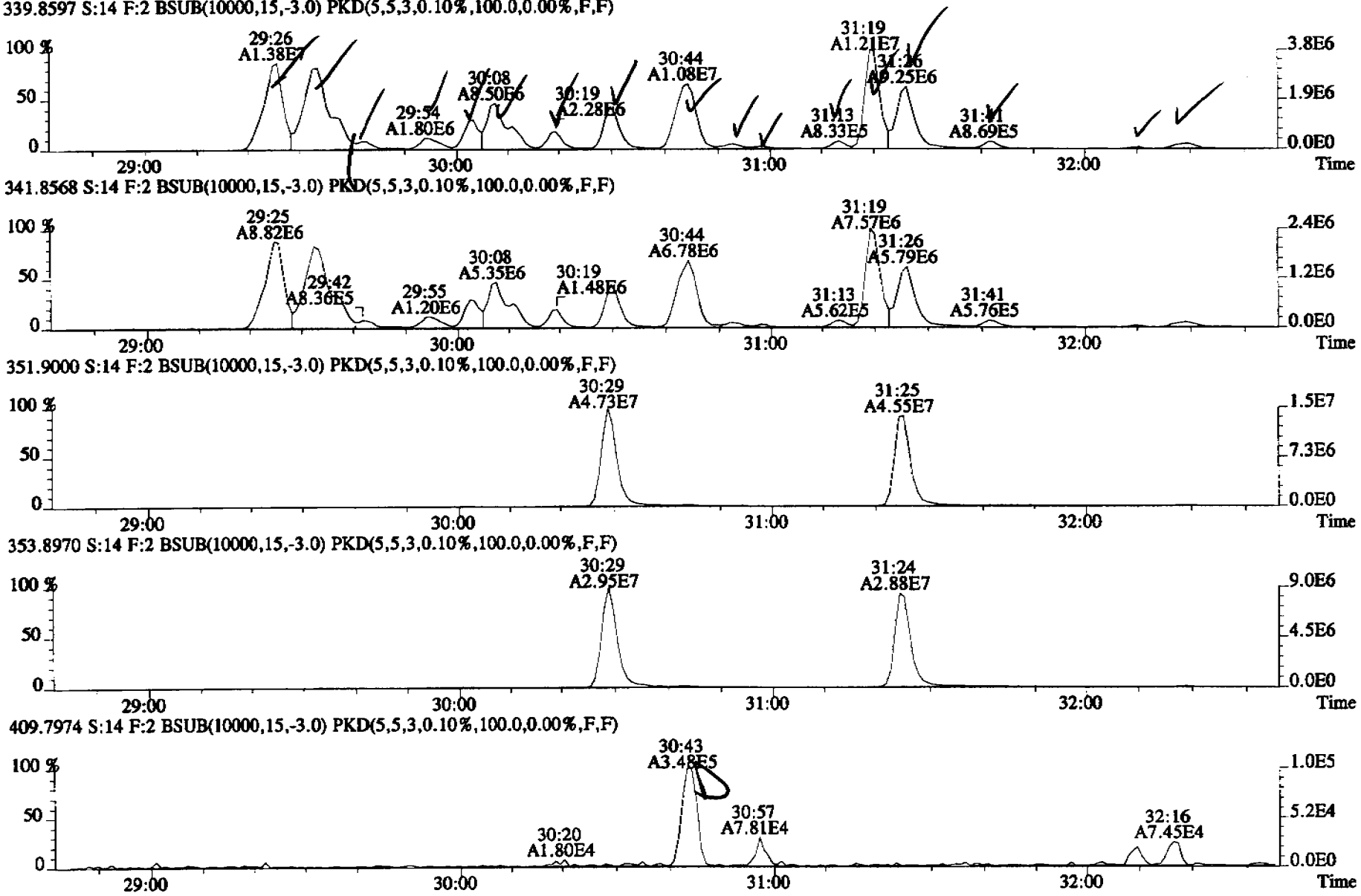
409.7974 S:14 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



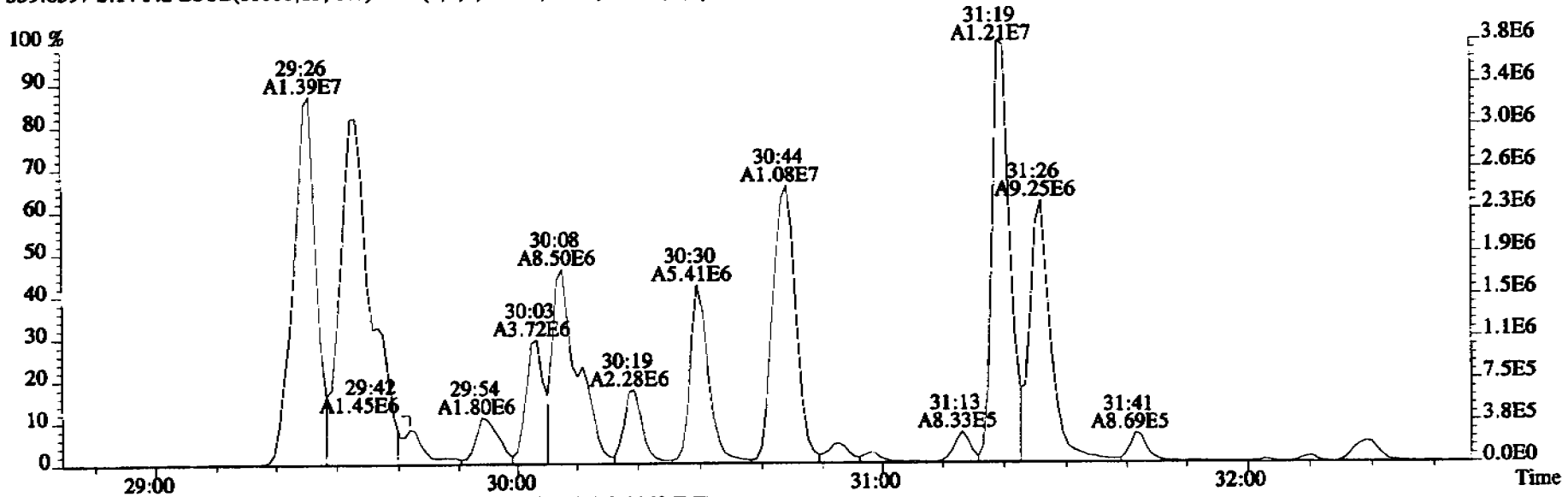
316.9824 S:14



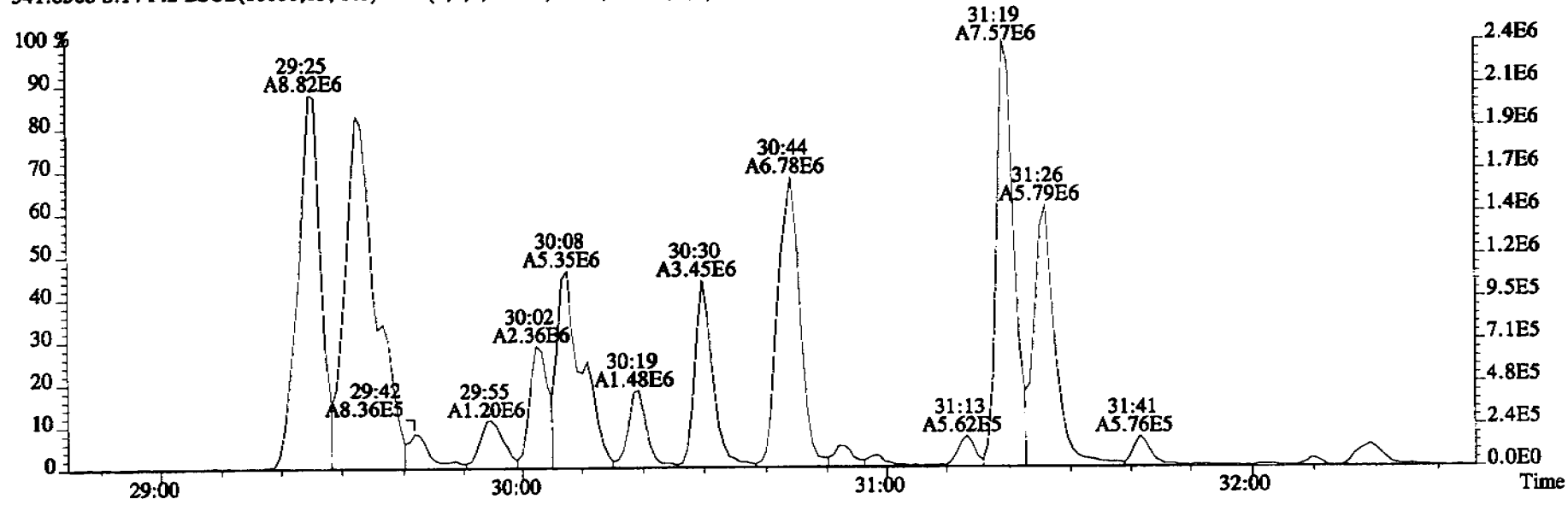
File:050502D1 #1-272 Acq: 2-MAY-2005 18:38:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_002 RE73-05-58835 10.02g Exp:OCDD_DB5



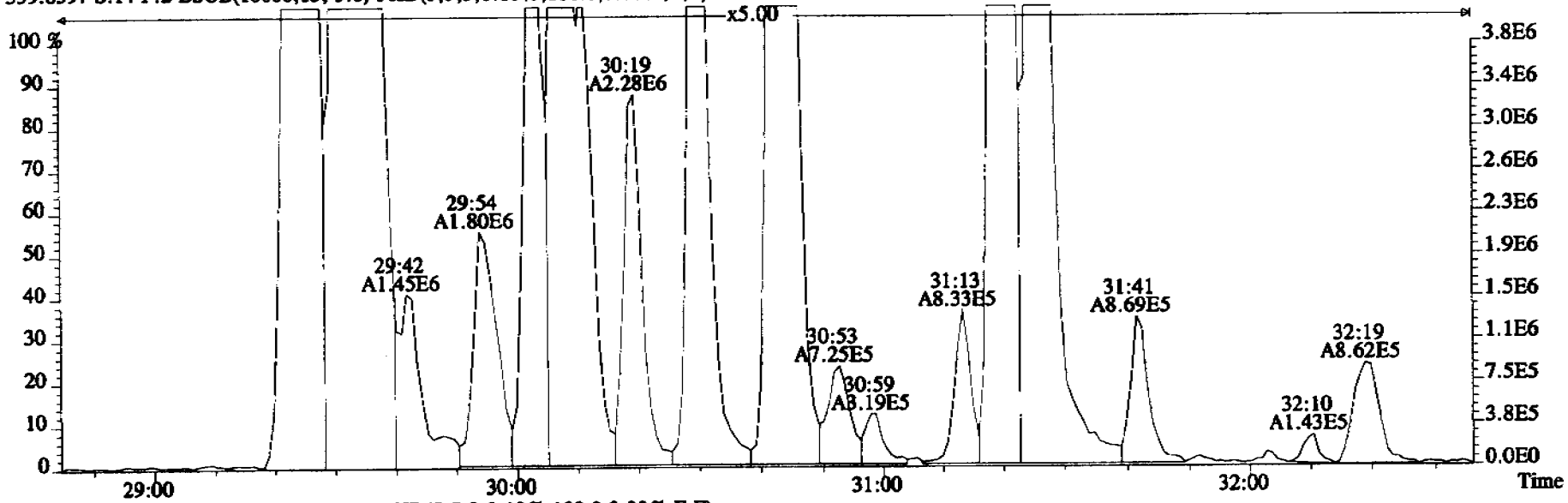
File:050502D1 #1-272 Acq: 2-MAY-2005 18:38:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Alta Analytical Laboratory VG-7 Text:26076 6749_002 RE73-05-58835 10.02g Exp:OCDD_DB5
339.8597 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



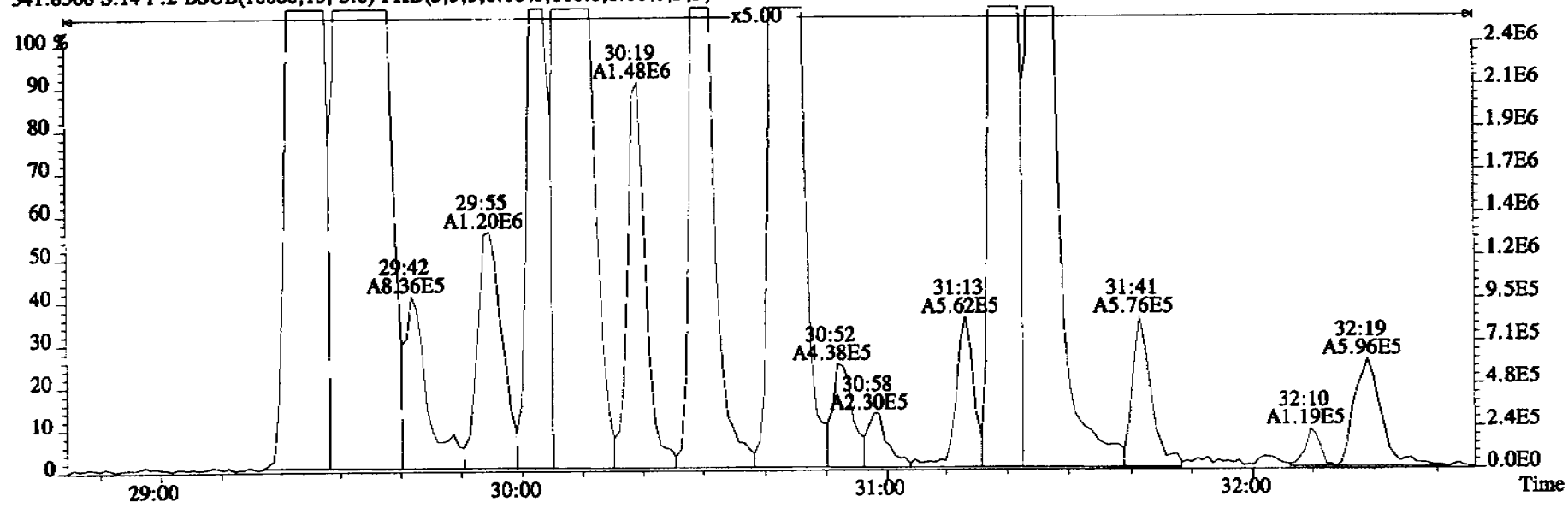
341.8568 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:050502D1 #1-272 Acq: 2-MAY-2005 18:38:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_002 RE73-05-58835 10.02g Exp:OCDD_DB5
339.8597 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

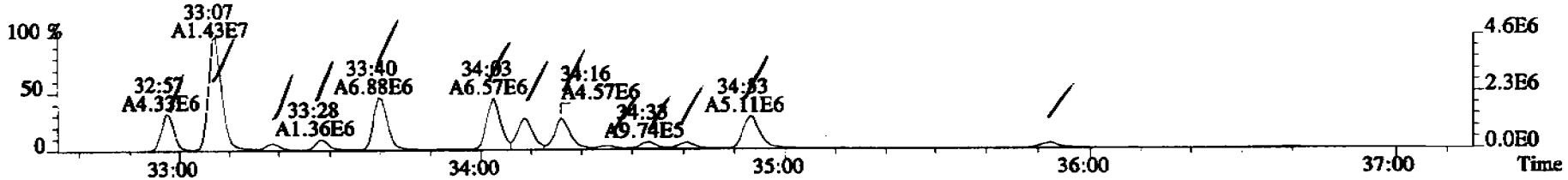


341.8568 S:14 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

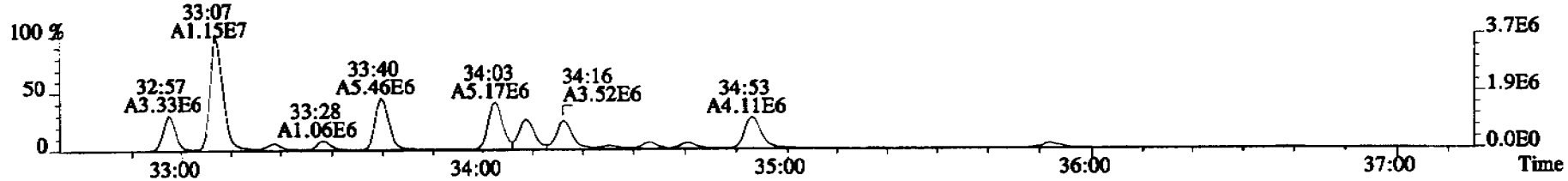


File:050502D1 #1-399 Acq: 2-MAY-2005 18:38:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_002 RE73-05-58835 10.02g Exp:OCDD_DB5

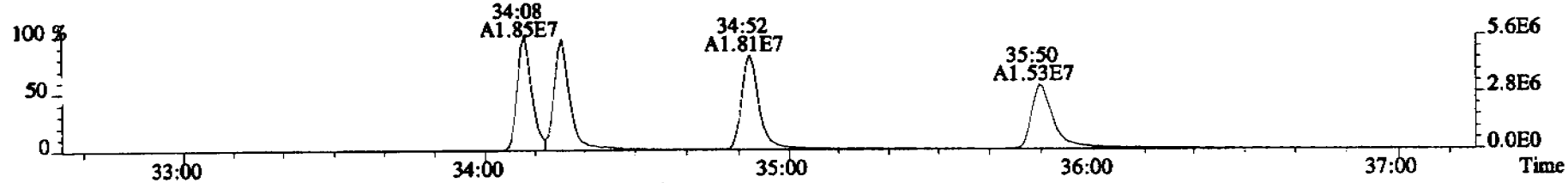
373.8207 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



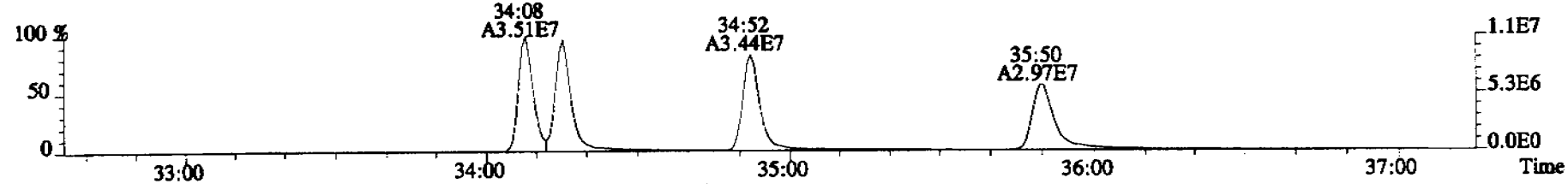
375.8178 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



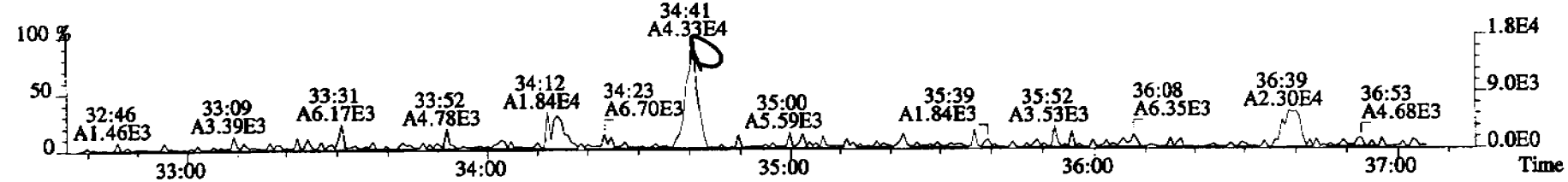
383.8639 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



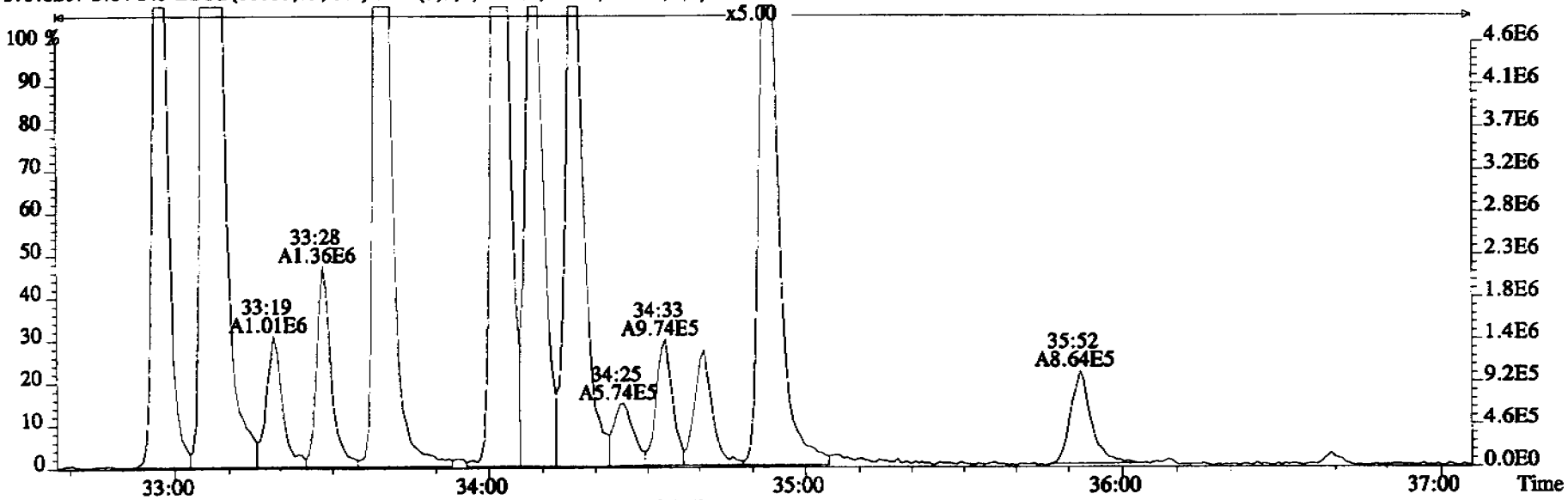
385.8610 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



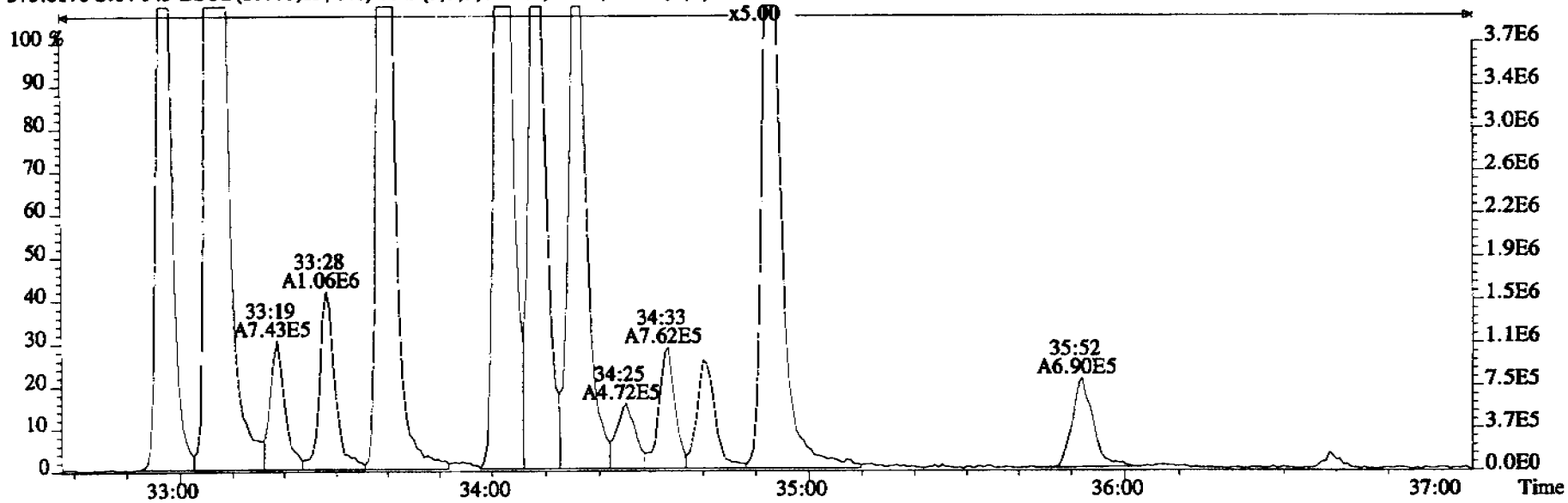
445.7555 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



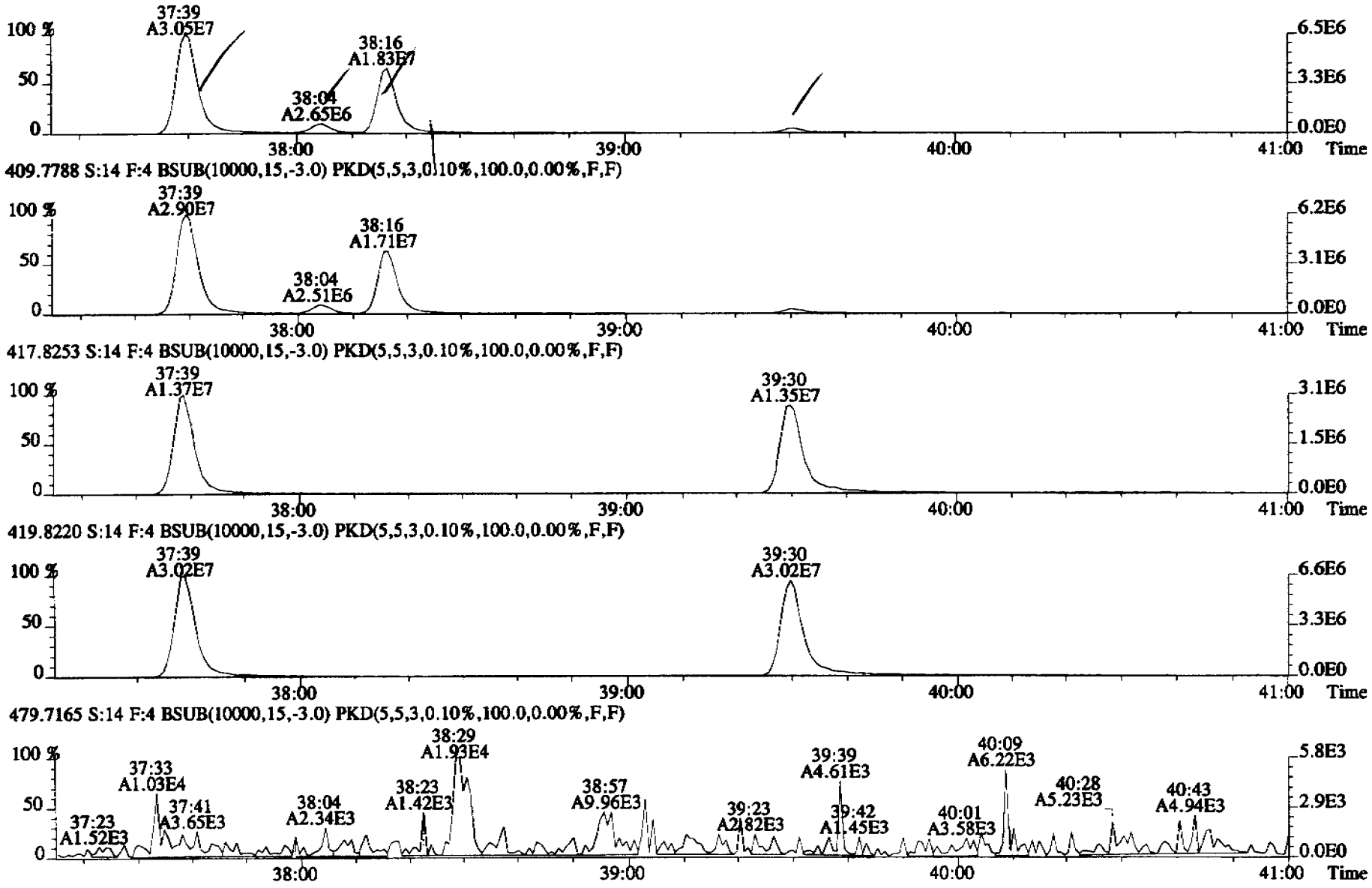
File:050502D1 #1-399 Acq: 2-MAY-2005 18:38:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_002 RE73-05-58835 10.02g Exp:OCDD_DB5
373.8207 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



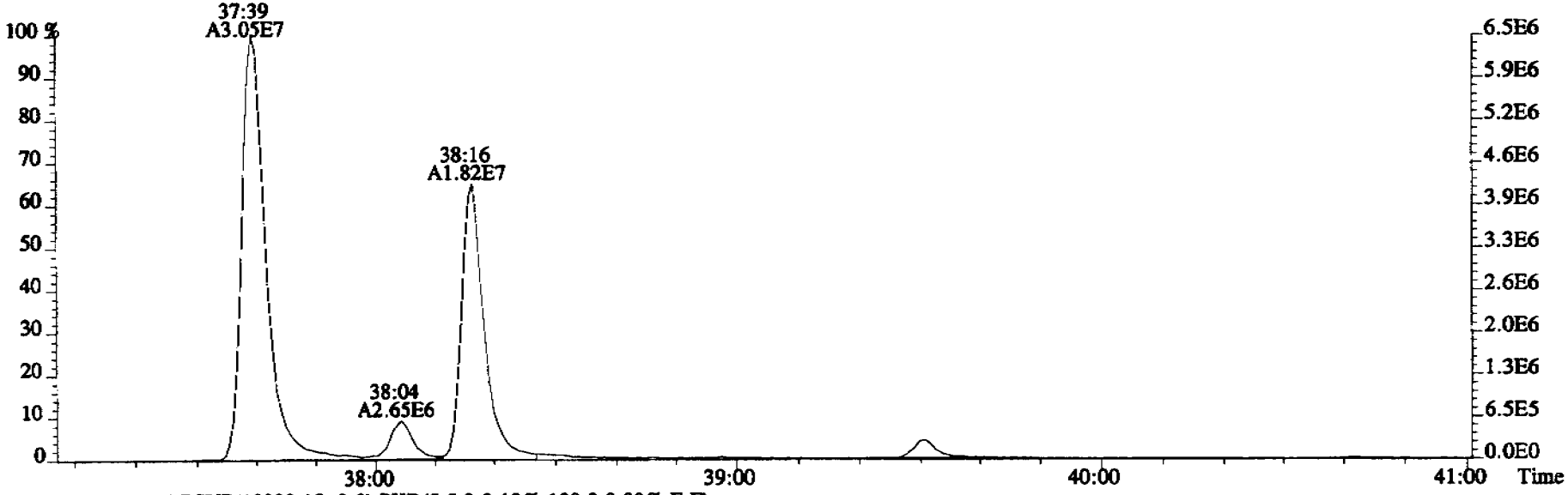
375.8178 S:14 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



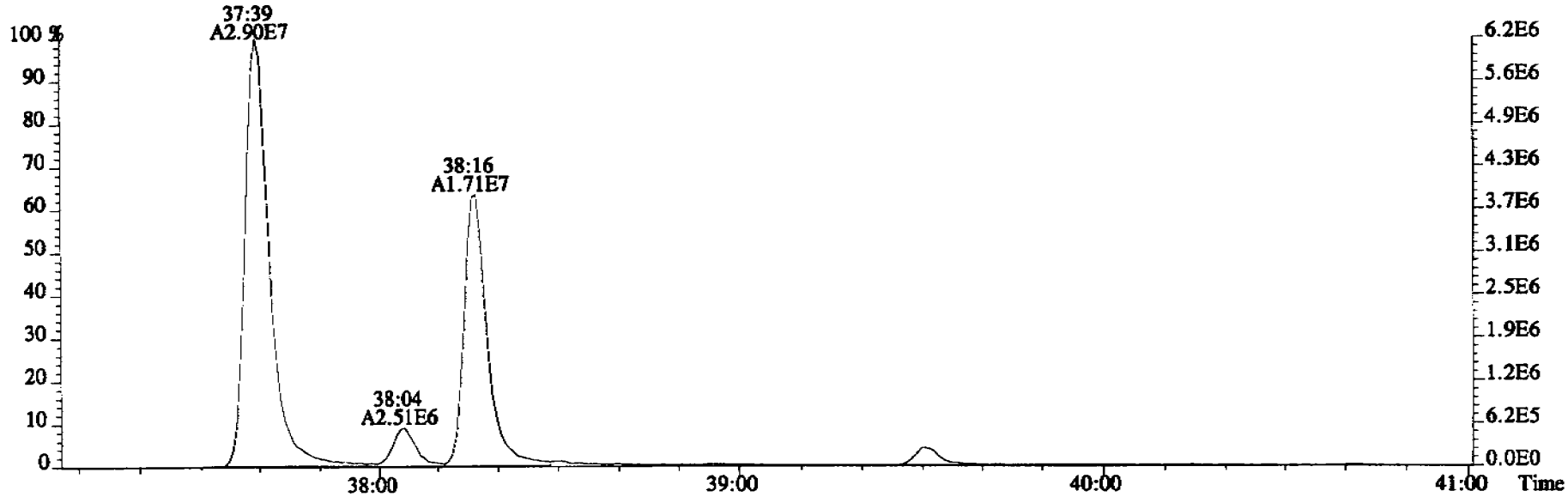
File:050502D1 #1-348 Acq: 2-MAY-2005 18:38:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_002 RE73-05-58835 10.02g Exp:OCDD_DB5

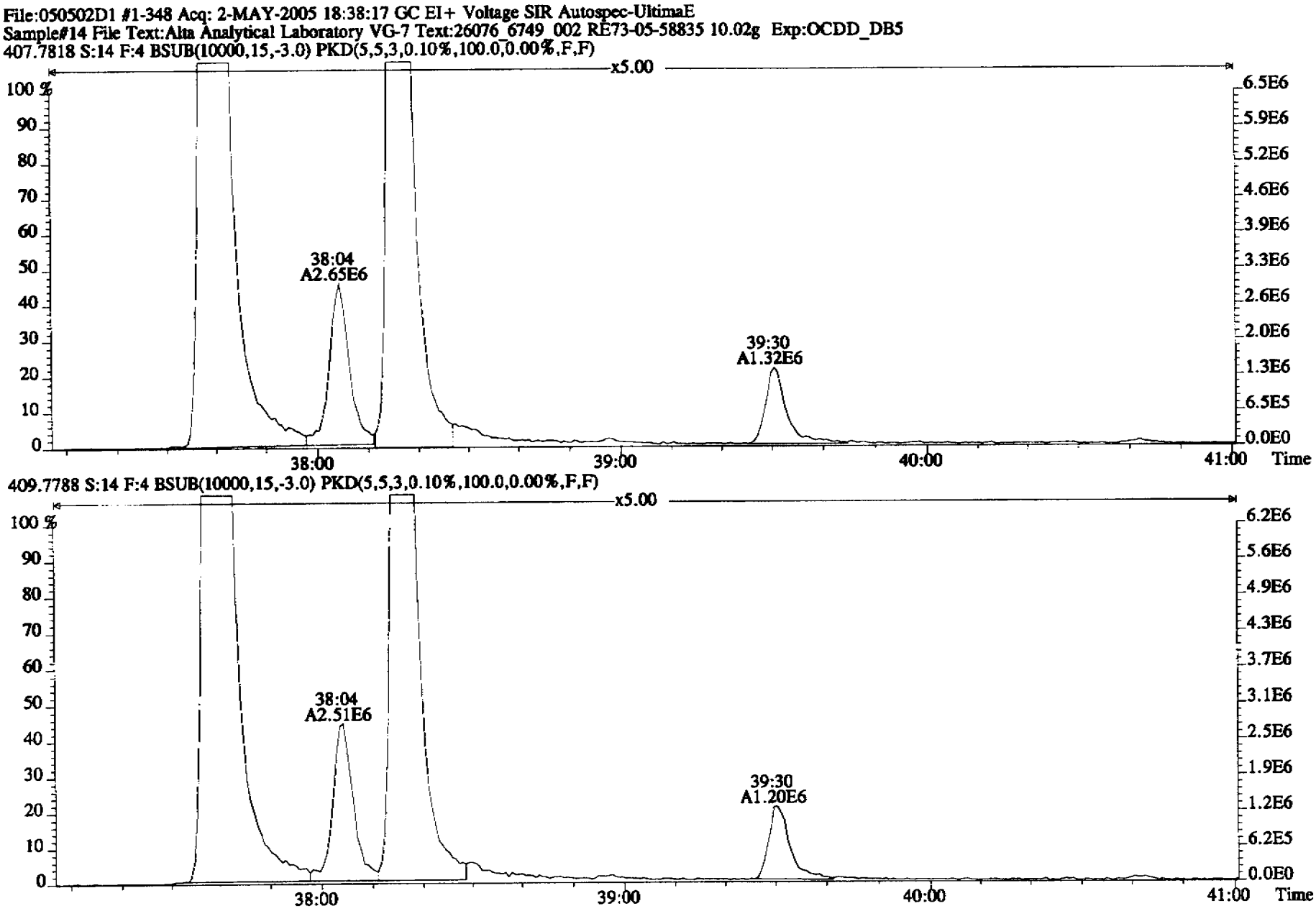


File:050502D1 #1-348 Acq: 2-MAY-2005 18:38:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_002 RE73-05-58835 10.02g Exp:OCDD_DB5
407.7818 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

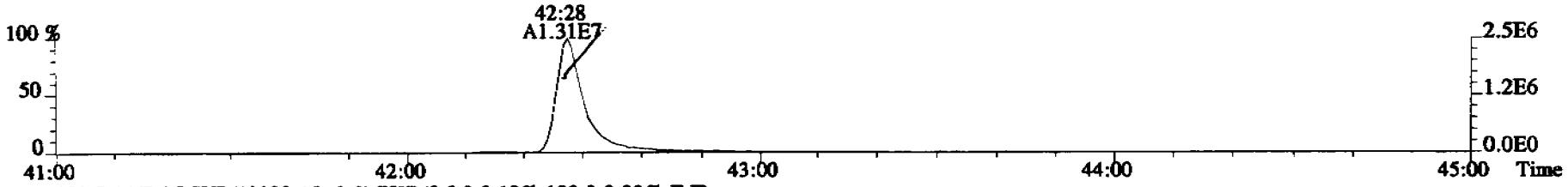


409.7788 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

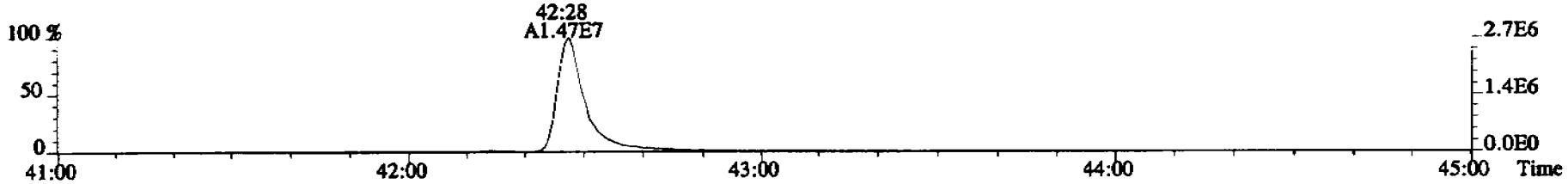



File:050502D1 #1-348 Acq: 2-MAY-2005 18:38:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_002 RE73-05-58835 10.02g Exp:OCDD_DB5
407.7818 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
x5.00
38:04
A2.65E6
39:30
A1.32E6
409.7788 S:14 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
x5.00
38:04
A2.51E6
39:30
A1.20E6
Time

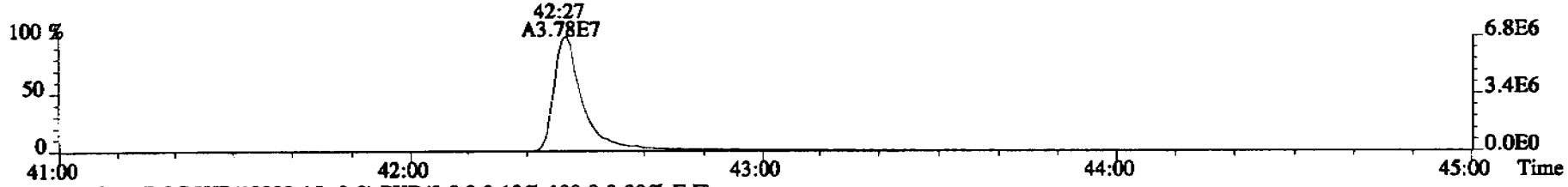
File:050502D1 #1-345 Acq: 2-MAY-2005 18:38:17 GC EI+ Voltage SIR Autospec-UltimaE
Sample#14 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_002 RE73-05-58835 10.02g Exp:OCDD_DB5
441.7428 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



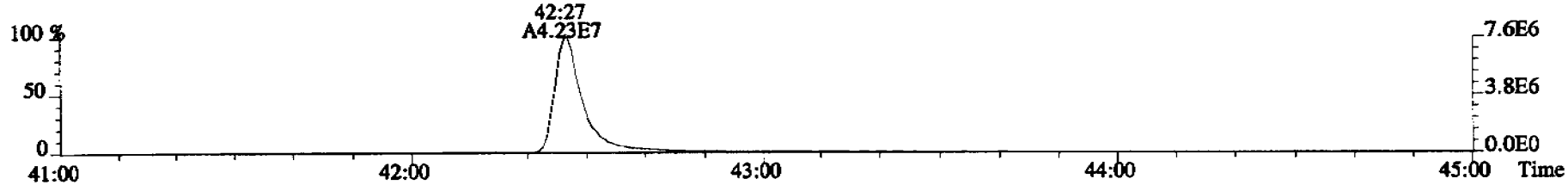
443.7398 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



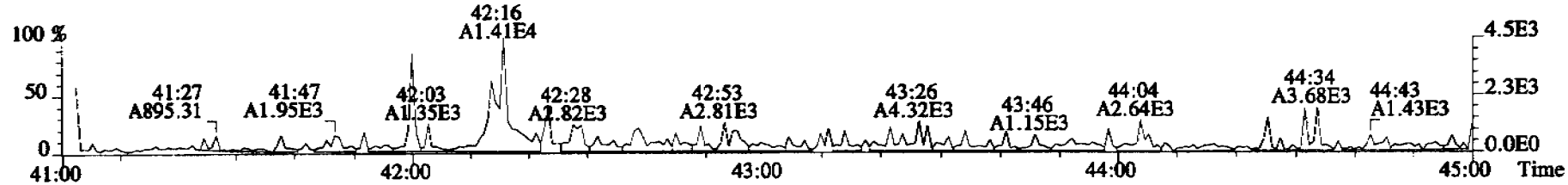
453.7831 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 S:14 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Client ID: RE73-05-58841 Filename: 050502D1 S:15 Acq:2-MAY-05 19:27:21 ConCal: ST050502D1-1
Lab ID: 26076_6749_003 GC Column ID: db-5 ICal: 1613vg7-4-23-05 wt/vol:10.000 EndCAL: ST050502D1-2

	Name	Resp	RA	RRF	RT	Conc	Qual	noise	Fac	DL
	2,3,7,8-TCDD	1.78e+06	0.76 y	1.06	27:02	5.67			* 2.5	*
	1,2,3,7,8-PeCDD	4.52e+06	0.61 y	0.99	31:42	18.6			* 2.5	*
	1,2,3,4,7,8-HxCDD	2.97e+06	1.24 y	1.11	35:02	16.2			* 2.5	*
	1,2,3,6,7,8-HxCDD	8.99e+06	1.29 y	1.07	35:09	42.9			* 2.5	*
	1,2,3,7,8,9-HxCDD	7.02e+06	1.27 y	1.15	35:28	33.8			* 2.5	*
	1,2,3,4,6,7,8-HpCDD	1.08e+08	1.05 y	1.05	38:58	549			* 2.5	*
	OCDD	3.39e+08	0.91 y	1.04	42:16	2300			* 2.5	*
	2,3,7,8-TCDF	1.66e+07	0.77 y	1.05	26:13	37.7	OK		* 2.5	*
	1,2,3,7,8-PeCDF	1.04e+07	1.57 y	0.95	30:30	28.9			* 2.5	*
	2,3,4,7,8-PeCDF	1.94e+07	1.58 y	1.08	31:26	49.8			* 2.5	*
	1,2,3,4,7,8-HxCDF	1.26e+07	1.27 y	1.19	34:09	39.1			* 2.5	*
	1,2,3,6,7,8-HxCDF	1.26e+07	1.28 y	1.22	34:16	35.6			* 2.5	*
	2,3,4,6,7,8-HxCDF	1.42e+07	1.29 y	1.20	34:54	43.7			* 2.5	*
	1,2,3,7,8,9-HxCDF	2.35e+06	1.23 y	1.13	35:52	9.02			* 2.5	*
	1,2,3,4,6,7,8-HpCDF	4.93e+07	1.05 y	1.38	37:40	168			* 2.5	*
	1,2,3,4,7,8,9-HpCDF	2.87e+06	1.05 y	1.23	39:31	11.0			* 2.5	*
	OCDF	1.76e+07	0.88 y	1.02	42:29	86.7			* 2.5	*
IS	13C-2,3,7,8-TCDD	5.95e+07	0.80 y	1.12	27:01	163				81.6
IS	13C-1,2,3,7,8-PeCDD	4.93e+07	0.63 y	0.89	31:42	171				85.7
IS	13C-1,2,3,4,7,8-HxCDD	3.30e+07	1.26 y	0.83	35:02	177				88.3
IS	13C-1,2,3,6,7,8-HxCDD	3.91e+07	1.26 y	1.00	35:09	175				87.7
IS	13C-1,2,3,4,6,7,8-HpCDD	3.75e+07	1.08 y	0.82	38:58	203				101
IS	13C-OCDD	5.69e+07	0.89 y	0.74	42:15	341				85.3
IS	13C-2,3,7,8-TCDF	8.37e+07	0.79 y	1.02	26:12	167				83.4
IS	13C-1,2,3,7,8-PeCDF	7.57e+07	1.60 y	0.90	30:29	170				85.1
IS	13C-2,3,4,7,8-PeCDF	7.25e+07	1.57 y	0.87	31:25	168				84.2
IS	13C-1,2,3,4,7,8-HxCDF	5.43e+07	0.52 y	1.27	34:08	191				95.5
IS	13C-1,2,3,6,7,8-HxCDF	5.83e+07	0.53 y	1.40	34:16	185				92.6
IS	13C-2,3,4,6,7,8-HxCDF	5.43e+07	0.52 y	1.29	34:53	187				93.7
IS	13C-1,2,3,7,8,9-HxCDF	4.63e+07	0.52 y	1.12	35:51	184				92.1
IS	13C-1,2,3,4,6,7,8-HpCDF	4.27e+07	0.45 y	1.01	37:40	188				94.1
IS	13C-1,2,3,4,7,8,9-HpCDF	4.26e+07	0.45 y	0.88	39:31	216				108
IS	13C-OCDF	7.97e+07	0.92 y	0.94	42:29	379				94.7
C/Up	37Cl-2,3,7,8-TCDD	1.33e+07		0.62	27:02	65.8				82.3
RS/RT	13C-1,2,3,4-TCDD	6.48e+07	0.80 y	1.00	26:23	200				
RS	13C-1,2,3,4-TCDF	9.85e+07	0.78 y	1.00	24:50	200				
RS/RT	13C-1,2,3,7,8,9-HxCDD	4.48e+07	1.28 y	1.00	35:27	200				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	223	223		*	*
Total Penta-Dioxins	281	281		*	*
Total Hexa-Dioxins	461	461		*	*
Total Hepta-Dioxins	969	969		*	*
Total Tetra-Furans	788	788	D	*	*
Total Penta-Furans	532	532	D	*	*
Total Hexa-Furans	381	381		*	*
Total Hepta-Furans	270	270		*	*

Intergrations by Analyst: _____

Date: 5/3/05

Totals class: TCDD EMPC Entry #: 19

Run: 20 File: 050502D1 S: 15 I: 1 F: 1
Acquired: 2-MAY-05 19:27:21 Processed: 3-MAY-05 05:29:54

Total Concentration: 222.61 Unnamed Concentration: 216.935

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
23:20	8.388e+06	1.073e+07	0.78	y	1.912e+07	60.756	
23:44	5.045e+06	6.629e+06	0.76	y	1.167e+07	37.091	
24:12	9.187e+05	1.144e+06	0.80	y	2.063e+06	6.5543	
25:01	1.063e+05	1.560e+05	0.68	y	2.622e+05	0.83318	
25:15	2.779e+06	3.575e+06	0.78	y	6.354e+06	20.188	
25:27	2.606e+06	3.233e+06	0.81	y	5.839e+06	18.552	
25:38	1.175e+06	1.547e+06	0.76	y	2.722e+06	8.6484	
25:52	4.292e+05	5.267e+05	0.81	y	9.559e+05	3.0372	
26:02	1.325e+06	1.681e+06	0.79	y	3.006e+06	9.5511	
26:23	1.308e+06	1.745e+06	0.75	y	3.053e+06	9.6987	
26:30	5.170e+05	5.999e+05	0.86	y	1.117e+06	3.5487	
26:45	3.010e+06	3.901e+06	0.77	y	6.911e+06	21.958	
26:53	5.499e+05	7.117e+05	0.77	y	1.262e+06	4.0084	
27:02	7.723e+05	1.013e+06	0.76	y	1.785e+06	5.6713	2,3,7,8-TCDD
27:20	1.078e+06	1.403e+06	0.77	y	2.481e+06	7.8833	
27:27	3.100e+05	4.290e+05	0.72	y	7.390e+05	2.3479	
27:55	3.035e+05	4.134e+05	0.73	y	7.170e+05	2.2781	

Totals class: PeCDD EMPC Entry #: 21

Run: 20 File: 050502D1 S: 15 I: 1 F: 2
Acquired: 2-MAY-05 19:27:21 Processed: 3-MAY-05 05:29:54

Total Concentration: 281.10 Unnamed Concentration: 262.532

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
29:35	6.199e+06	1.006e+07	0.62	y	1.626e+07	66.743	
30:02	7.420e+05	1.143e+06	0.65	y	1.885e+06	7.7353	
30:31	5.096e+06	8.284e+06	0.62	y	1.338e+07	54.916	
30:40	1.668e+06	2.768e+06	0.60	y	4.436e+06	18.206	
30:46	3.396e+06	5.516e+06	0.62	y	8.911e+06	36.574	
30:59	2.792e+06	4.397e+06	0.63	y	7.189e+06	29.505	
31:18	2.421e+06	3.878e+06	0.62	y	6.300e+06	25.856	
31:42	1.707e+06	2.818e+06	0.61	y	4.525e+06	18.571	1,2,3,7,8-PeCDD
31:47	1.066e+06	1.645e+06	0.65	y	2.710e+06	11.124	
32:05	1.125e+06	1.768e+06	0.64	y	2.893e+06	11.873	

Totals class: HxCDD EMPC Entry #: 23

Run: 20 File: 050502D1 S: 15 I: 1 F: 3
Acquired: 2-MAY-05 19:27:21 Processed: 3-MAY-05 05:29:54

Total Concentration: 461.48 Unnamed Concentration: 368.572

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
33:30	8.067e+06	6.399e+06	1.26	y	1.447e+07	72.222	
34:04	1.004e+07	7.927e+06	1.27	y	1.796e+07	89.683	
34:19	1.900e+07	1.509e+07	1.26	y	3.409e+07	170.20	
34:28	1.909e+06	1.474e+06	1.30	y	3.382e+06	16.885	
35:02	1.644e+06	1.331e+06	1.24	y	2.975e+06	16.198	1,2,3,4,7,8-HxCDD
35:09	5.069e+06	3.920e+06	1.29	y	8.988e+06	42.944	1,2,3,6,7,8-HxCDD
35:20	2.165e+06	1.758e+06	1.23	y	3.923e+06	19.585	
35:28	3.930e+06	3.093e+06	1.27	y	7.023e+06	33.763	1,2,3,7,8,9-HxCDD

Totals class: HpCDD EMPC Entry #: 25

Run: 20 File: 050502D1 S: 15 I: 1 F: 4
Acquired: 2-MAY-05 19:27:21 Processed: 3-MAY-05 05:29:54

Total Concentration: 968.95 Unnamed Concentration: 420.119

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
38:04	4.181e+07	4.085e+07	1.02	y	8.265e+07	420.12	
38:58	5.524e+07	5.273e+07	1.05	y	1.080e+08	548.84	1,2,3,4,6,7,8-HpCDD

Totals class: TCDF EMPC Entry #: 27

Run: 20 File: 050502D1 S: 15 I: 1 F: 1
Acquired: 2-MAY-05 19:27:21 Processed: 3-MAY-05 05:29:54

Total Concentration: 787.74 Unnamed Concentration: 750.056

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
21:06	2.854e+06	3.668e+06	0.78	y	6.522e+06	14.784	
21:39	2.740e+06	3.473e+06	0.79	y	6.213e+06	14.083	
22:19	2.131e+06	2.781e+06	0.77	y	4.913e+06	11.136	
22:52	2.022e+07	2.585e+07	0.78	y	4.607e+07	104.43	
23:11	2.941e+06	3.742e+06	0.79	y	6.683e+06	15.148	
23:20	8.373e+06	1.065e+07	0.79	y	1.902e+07	43.115	
23:46	4.185e+06	5.395e+06	0.78	y	9.580e+06	21.715	
23:54	3.678e+06	4.648e+06	0.79	y	8.326e+06	18.874	
24:05	4.731e+06	6.170e+06	0.77	y	1.090e+07	24.710	
24:29	4.533e+06	5.937e+06	0.76	y	1.047e+07	23.732	
24:37	6.696e+06	8.503e+06	0.79	y	1.520e+07	34.453	
24:51	2.111e+07	2.718e+07	0.78	y	4.829e+07	109.47	
25:20	9.383e+06	1.210e+07	0.78	y	2.148e+07	48.687	
25:36	6.556e+06	8.592e+06	0.76	y	1.515e+07	34.338	
25:47	7.501e+06	9.768e+06	0.77	y	1.727e+07	39.143	
25:59	6.687e+06	8.216e+06	0.81	y	1.490e+07	33.782	
26:06	4.126e+06	6.105e+06	0.68	y	1.023e+07	23.192	
26:13	7.212e+06	9.411e+06	0.77	y	1.662e+07	37.680	2,3,7,8-TCDF
26:33	2.099e+07	2.683e+07	0.78	y	4.782e+07	108.39	
26:47	1.078e+06	1.593e+06	0.68	y	2.670e+06	6.0532	
27:03	9.547e+05	1.346e+06	0.71	y	2.300e+06	5.2141	
27:36	8.106e+05	1.027e+06	0.79	y	1.838e+06	4.1664	
27:45	1.682e+06	2.101e+06	0.80	y	3.783e+06	8.5746	
28:05	5.278e+05	7.324e+05	0.72	y	1.260e+06	2.8565	

Totals class: 1st Punc. PeCDF EMPC Entry #: 29

Run: 20 File: 050502D1 S: 15 I: 1 F: 1
Acquired: 2-MAY-05 19:27:21 Processed: 3-MAY-05 05:29:54

Total Concentration: 37.112 Unnamed Concentration: 37.112

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
28:02	8.524e+06	5.423e+06	1.57 y	1.395e+07	37.112	

Totals class: PeCDF EMPC Entry #: 31

Run: 20 File: 050502D1 S: 15 I: 1 F: 2
Acquired: 2-MAY-05 19:27:21 Processed: 3-MAY-05 05:29:54

Total Concentration: 494.90 Unnamed Concentration: 416.247

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
29:24	1.752e+07	1.125e+07	1.56	y	2.876e+07	76.538	
29:33	2.341e+07	1.489e+07	1.57	y	3.830e+07	101.90	
29:55	2.090e+06	1.390e+06	1.50	y	3.480e+06	9.2585	
30:02	4.028e+06	2.618e+06	1.54	y	6.647e+06	17.686	
30:08	1.191e+07	7.478e+06	1.59	y	1.939e+07	51.589	
30:19	3.292e+06	2.203e+06	1.49	y	5.495e+06	14.620	
30:30	6.363e+06	4.055e+06	1.57	y	1.042e+07	28.888	1,2,3,7,8-PeCDF
30:43	1.348e+07	8.614e+06	1.56	y	2.209e+07	58.786	
30:54	1.066e+06	7.693e+05	1.39	y	1.836e+06	4.8840	
31:12	1.106e+06	7.703e+05	1.44	y	1.877e+06	4.9934	
31:19	1.521e+07	9.692e+06	1.57	y	2.490e+07	66.267	
31:26	1.191e+07	7.529e+06	1.58	y	1.944e+07	49.763	2,3,4,7,8-PeCDF
31:42	1.134e+06	8.189e+05	1.38	y	1.953e+06	5.1956	
32:09	8.716e+04	8.806e+04	0.99	n	1.434e+05	0.38153	
32:19	8.951e+05	6.625e+05	1.35	y	1.558e+06	4.1447	

Totals class: HxCDF EMPC Entry #: 33

Run: 20 File: 050502D1 S: 15 I: 1 F: 3
Acquired: 2-MAY-05 19:27:21 Processed: 3-MAY-05 05:29:54

Total Concentration: 380.68 Unnamed Concentration: 253.299

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
32:57	5.456e+06	4.451e+06	1.23	y	9.907e+06	31.358	
33:07	1.919e+07	1.516e+07	1.27	y	3.435e+07	108.73	
33:19	1.393e+06	1.096e+06	1.27	y	2.489e+06	7.8781	
33:28	1.610e+06	1.304e+06	1.23	y	2.914e+06	9.2233	
33:40	3.944e+06	3.171e+06	1.24	y	7.116e+06	22.523	
34:03	9.538e+06	7.569e+06	1.26	y	1.711e+07	54.148	
34:09	7.060e+06	5.538e+06	1.27	y	1.260e+07	39.117	1,2,3,4,7,8-HxCDF
34:16	7.107e+06	5.532e+06	1.28	y	1.264e+07	35.588	1,2,3,6,7,8-HxCDF
34:25	8.531e+05	6.593e+05	1.29	y	1.512e+06	4.7872	
34:33	1.382e+06	1.028e+06	1.34	y	2.411e+06	7.6301	
34:41	1.259e+06	9.578e+05	1.31	y	2.217e+06	7.0167	
34:54	8.023e+06	6.214e+06	1.29	y	1.424e+07	43.659	2,3,4,6,7,8-HxCDF
35:52	1.296e+06	1.054e+06	1.23	y	2.350e+06	9.0179	1,2,3,7,8,9-HxCDF

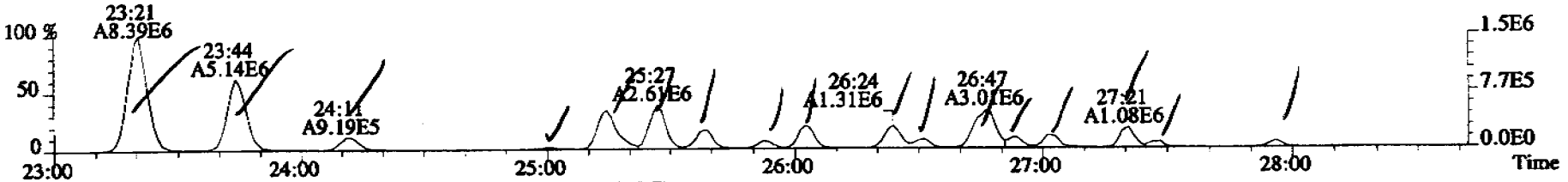
Totals class: HpCDF EMPC Entry #: 35

Run: 20 File: 050502D1 S: 15 I: 1 F: 4
Acquired: 2-MAY-05 19:27:21 Processed: 3-MAY-05 05:29:54

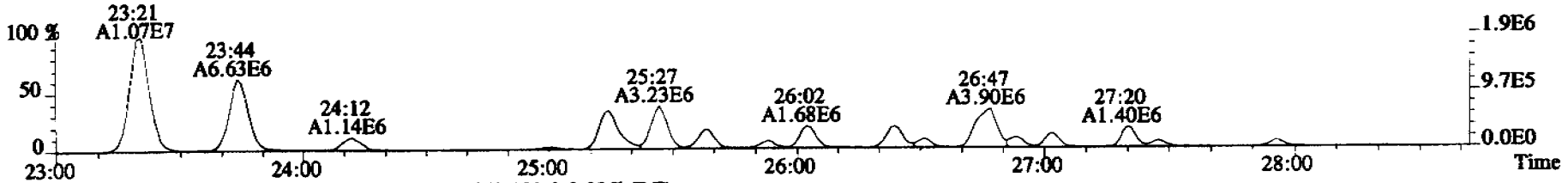
Total Concentration: 270.42 Unnamed Concentration: 91.509

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
37:40	2.520e+07	2.409e+07	1.05	y	4.929e+07	167.93	1,2,3,4,6,7,8-HpCDF
38:04	3.046e+06	2.838e+06	1.07	y	5.884e+06	21.117	
38:17	1.006e+07	9.550e+06	1.05	y	1.961e+07	70.392	
39:31	1.475e+06	1.399e+06	1.05	y	2.874e+06	10.987	1,2,3,4,7,8,9-HpCDF

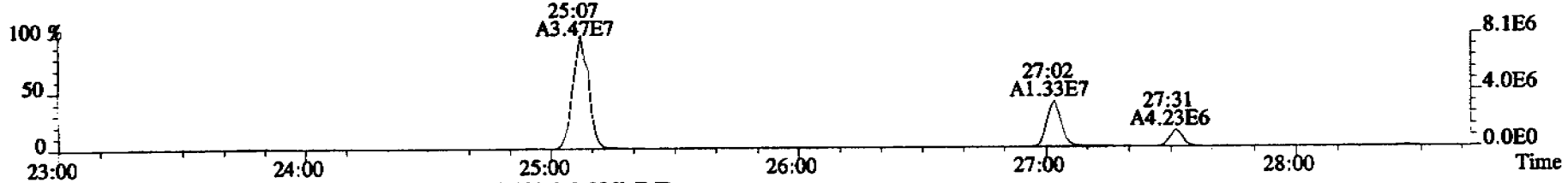
File:050502D1 #1-558 Acq: 2-MAY-2005 19:27:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_003 RE73-05-58841 10.00g Exp:OCDD_DB5
319.8965 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



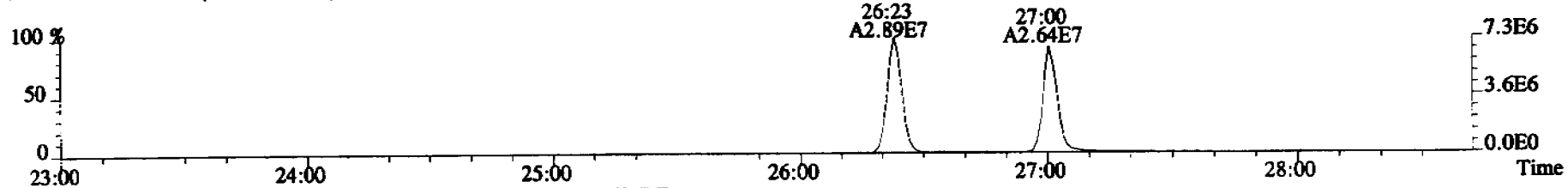
321.8936 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



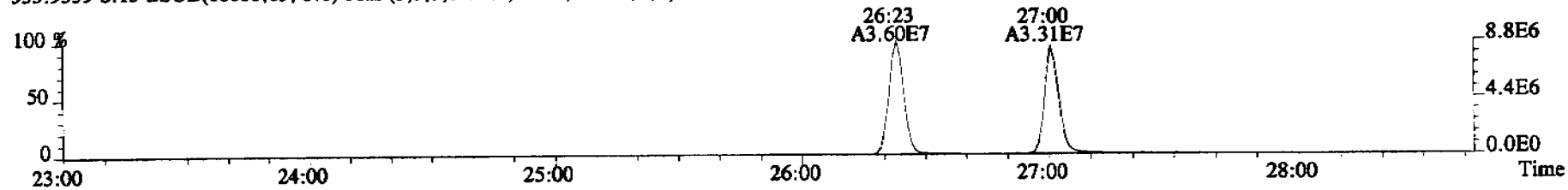
327.8847 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

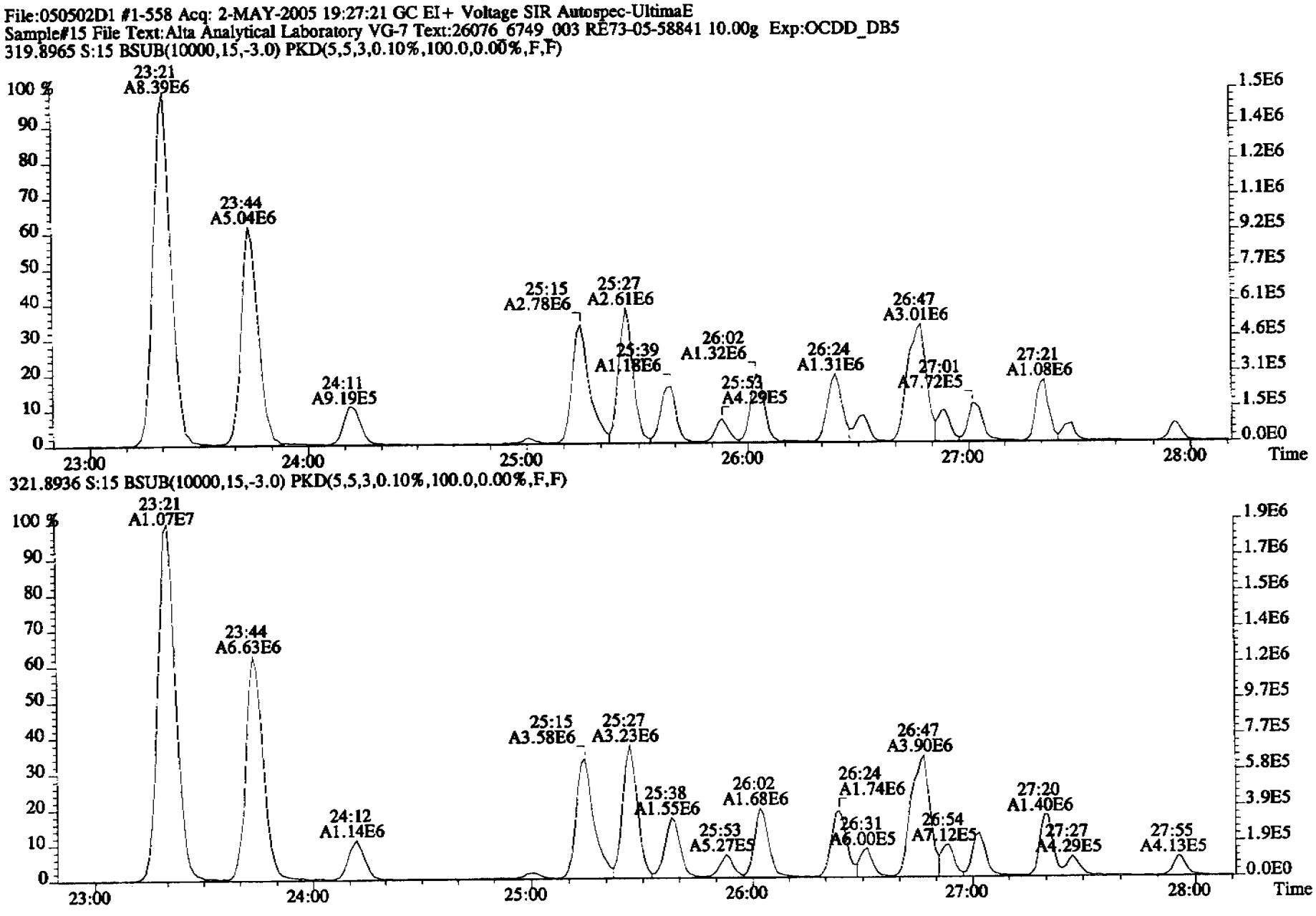


331.9368 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

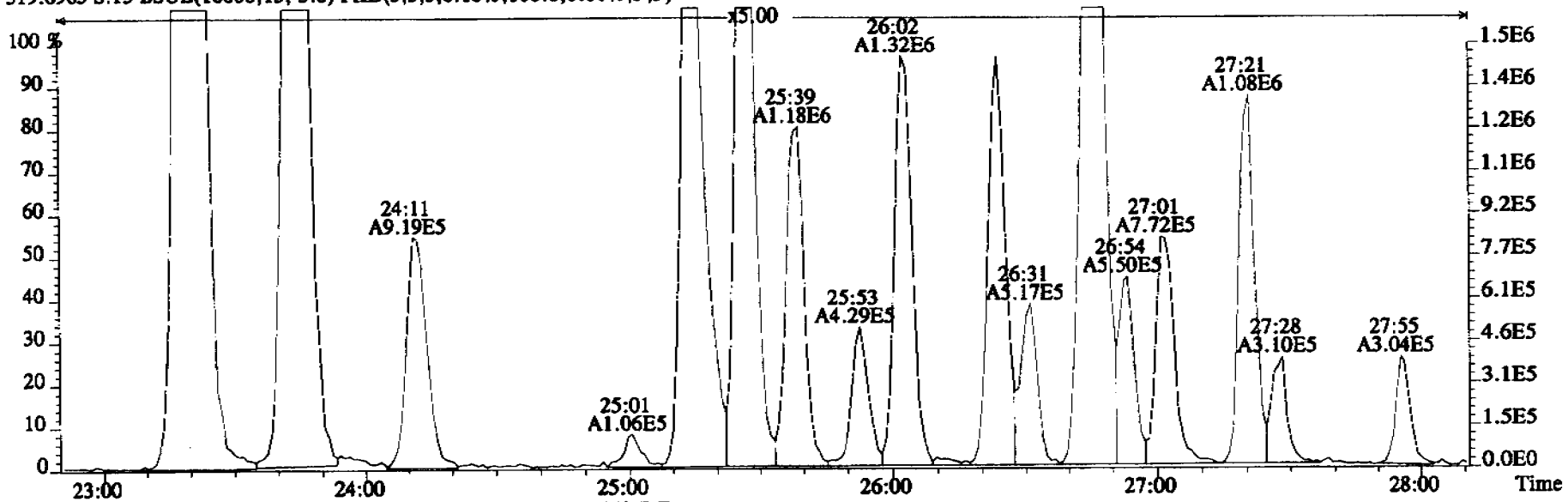


333.9339 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

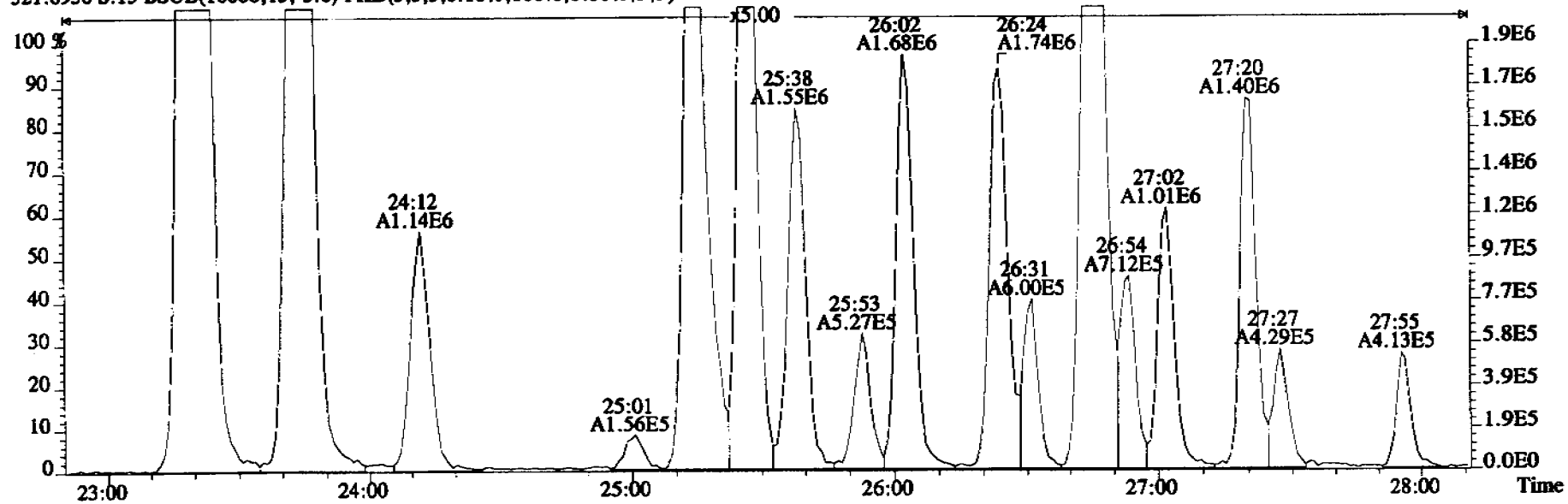


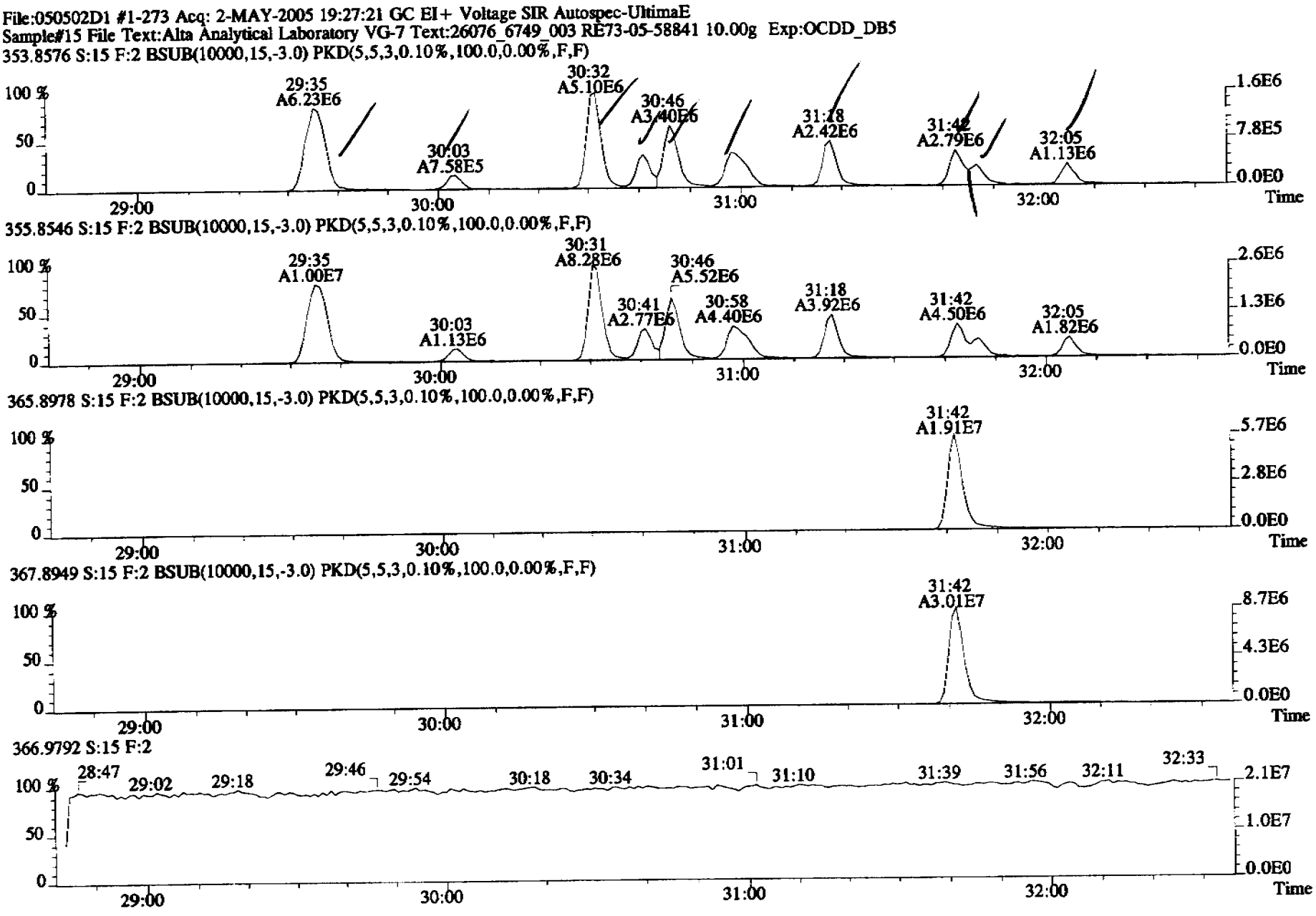

File:050502D1 #1-558 Acq: 2-MAY-2005 19:27:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Alta Analytical Laboratory VG-7 Text:26076 6749_003 RE73-05-58841 10.00g Exp:OCDD_DB5
319.8965 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
23:21 A8.39E6
23:44 A5.04E6
24:11 A9.19E5
25:15 A2.78E6
25:27 A2.61E6
25:39 A1.18E6
26:02 A1.32E6
25:53 A4.29E5
26:24 A1.31E6
26:47 A3.01E6
27:01 A7.72E5
27:21 A1.08E6
Time
321.8936 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
23:21 A1.07E7
23:44 A6.63E6
24:12 A1.14E6
25:15 A3.58E6
25:27 A3.23E6
25:38 A1.55E6
26:02 A1.68E6
25:53 A5.27E5
26:24 A1.74E6
26:31 A6.00E5
26:47 A3.90E6
26:54 A7.12E5
27:20 A1.40E6
27:27 A4.29E5
27:55 A4.13E5
Time

File:050502D1 #1-558 Acq: 2-MAY-2005 19:27:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Alta Analytical Laboratory VG-7 Text:26076 6749 003 RE73-05-58841 10.00g Exp:OCDD_DB5
319.8965 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

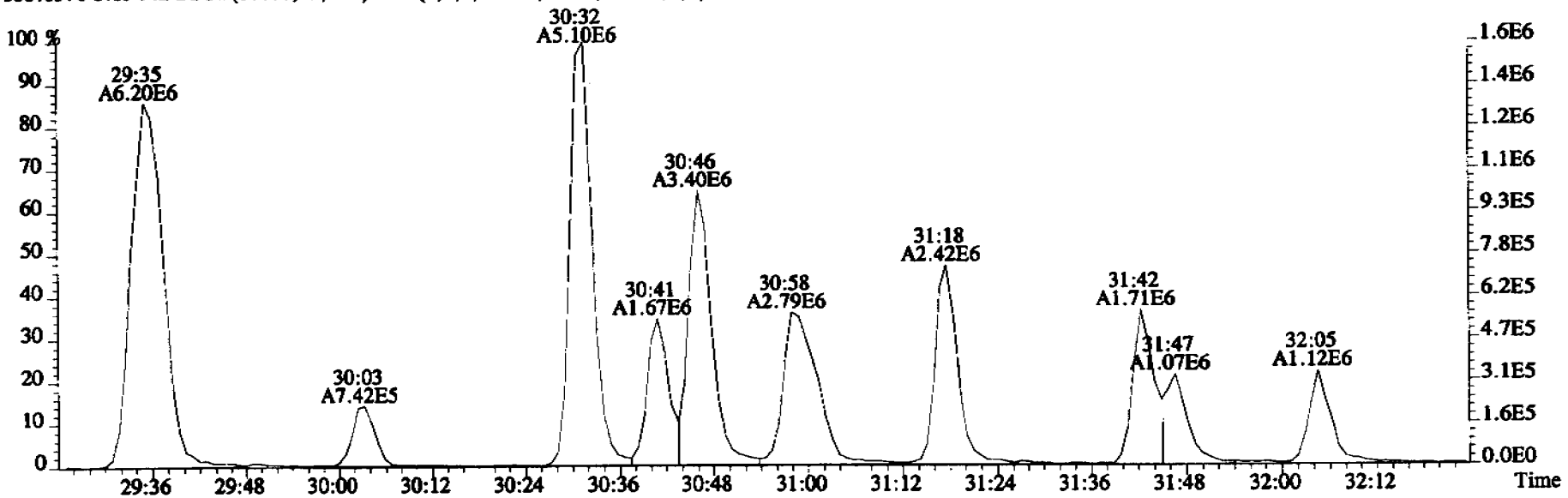


321.8936 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

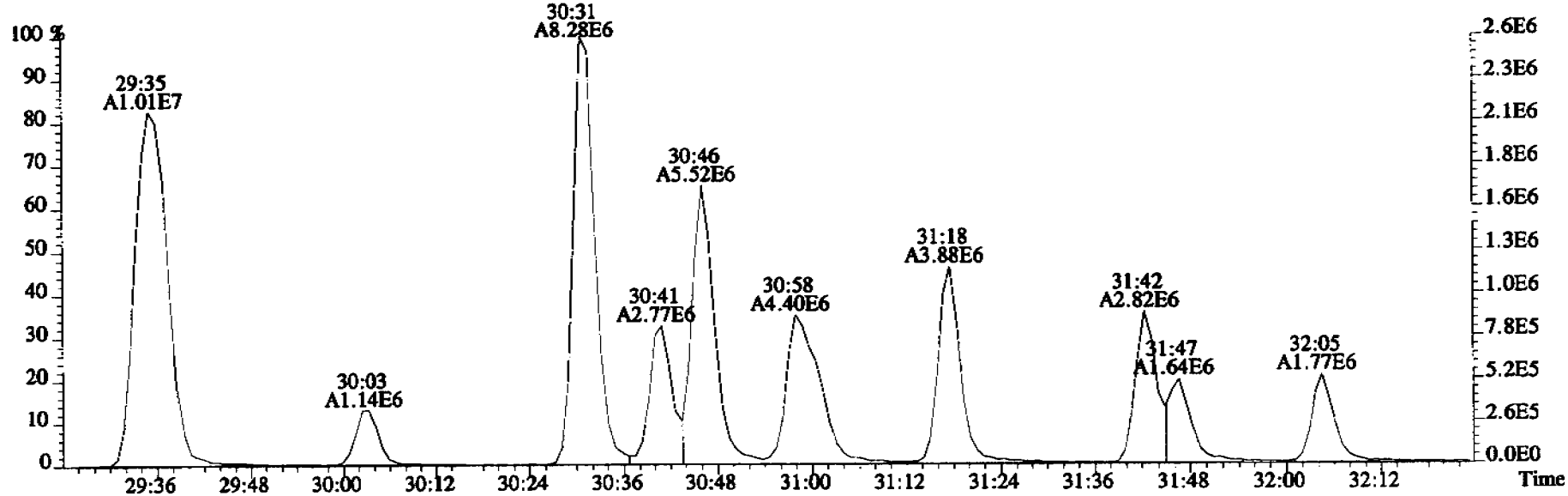



File:050502D1 #1-273 Acq: 2-MAY-2005 19:27:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_003 RE73-05-58841 10.00g Exp:OCDD_DB5
353.8576 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
29:35 A6.23E6
30:03 A7.58E5
30:32 A5.10E6
30:46 A3.40E6
31:18 A2.42E6
31:42 A2.79E6
32:05 A1.13E6
1.6E6
7.8E5
0.0E0
355.8546 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
29:35 A1.00E7
30:03 A1.13E6
30:31 A8.28E6
30:41 A2.77E6
30:46 A5.52E6
30:58 A4.40E6
31:18 A3.92E6
31:42 A4.50E6
32:05 A1.82E6
2.6E6
1.3E6
0.0E0
365.8978 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
31:42 A1.91E7
5.7E6
2.8E6
0.0E0
367.8949 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
31:42 A3.01E7
8.7E6
4.3E6
0.0E0
366.9792 S:15 F:2
28:47
29:02
29:18
29:46
29:54
30:18
30:34
31:01
31:10
31:39
31:56
32:11
32:33
2.1E7
1.0E7
0.0E0
100 %
50
0
29:00
30:00
31:00
32:00
Time

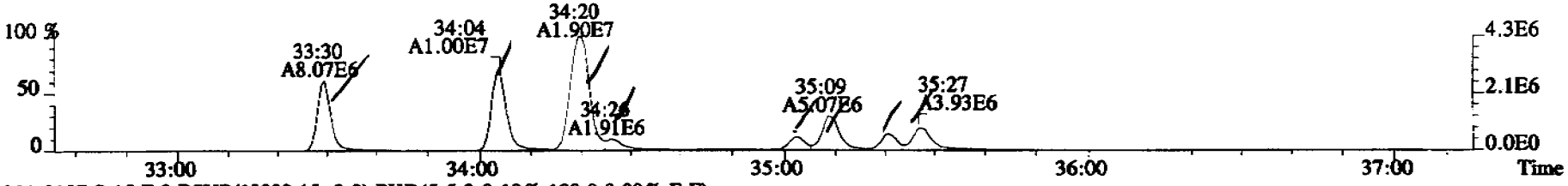
File:050502D1 #1-273 Acq: 2-MAY-2005 19:27:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_003 RE73-05-58841 10.00g Exp:OCDD_DB5
353.8576 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



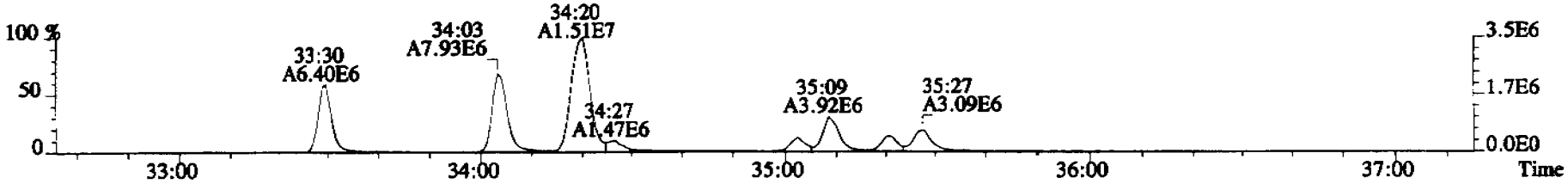
355.8546 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



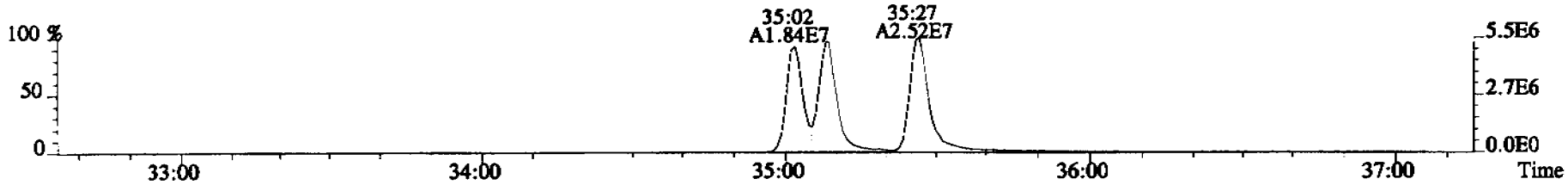
File:050502D1 #1-399 Acq: 2-MAY-2005 19:27:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_003 RE73-05-58841 10.00g Exp:OCDD_DB5
389.8156 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



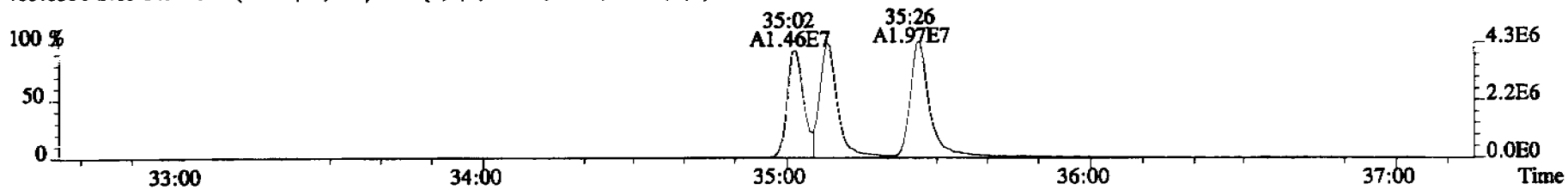
391.8127 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



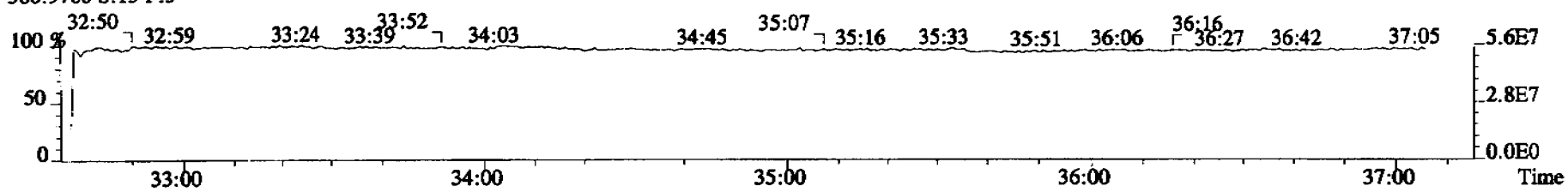
401.8559 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

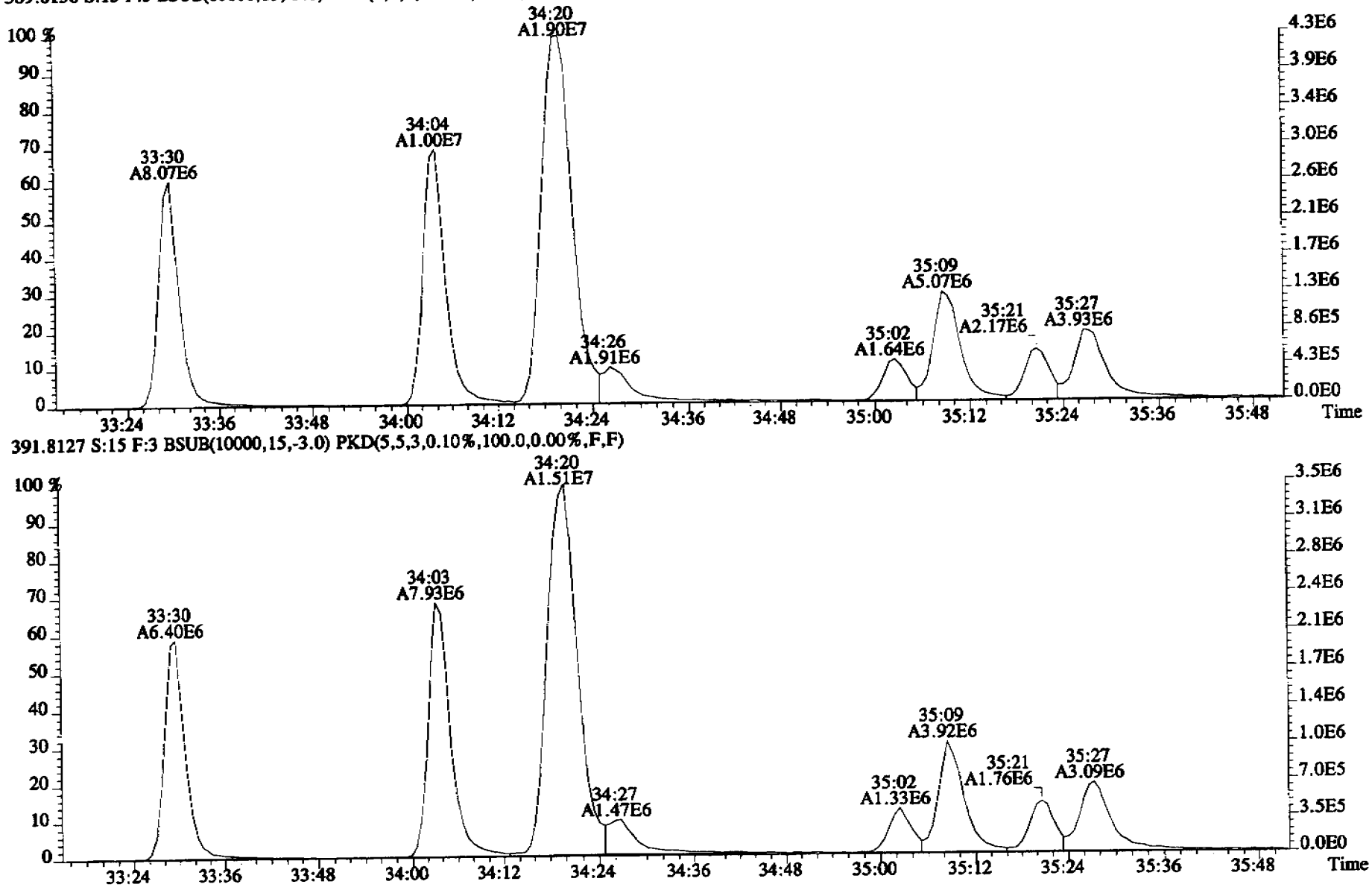


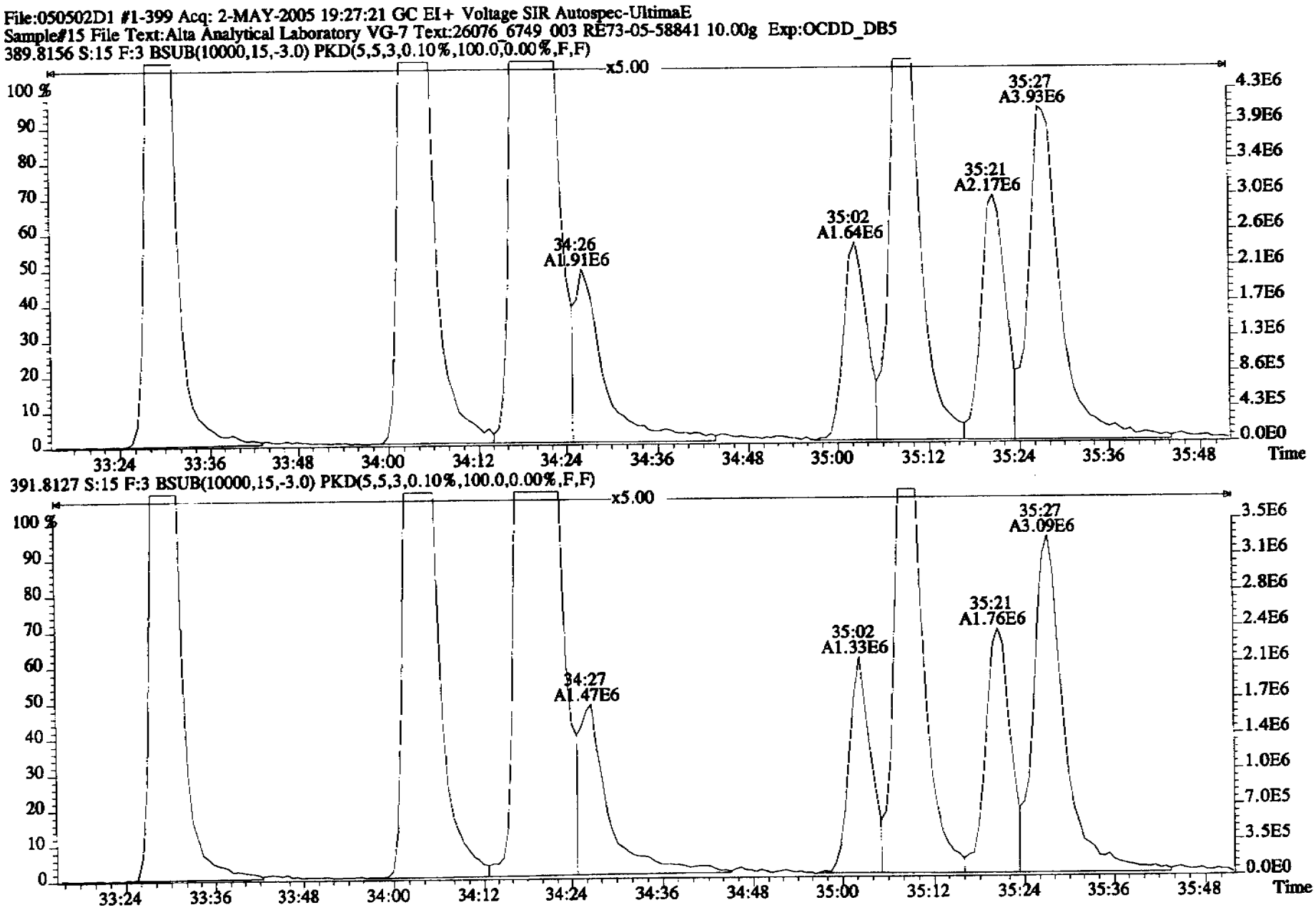
403.8530 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



380.9760 S:15 F:3

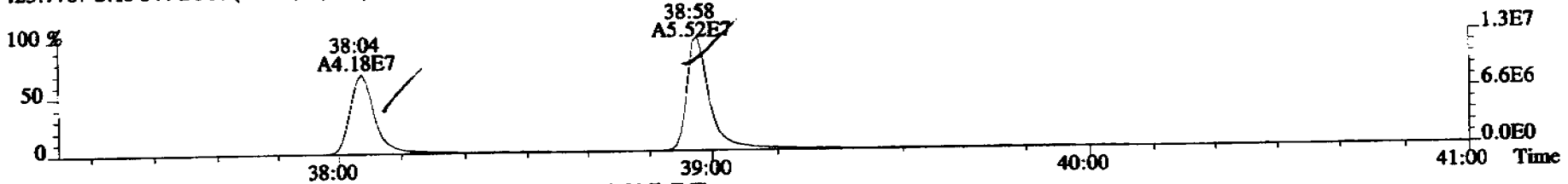



File:050502D1 #1-399 Acq: 2-MAY-2005 19:27:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Alta Analytical Laboratory VG-7 Text:26076 6749 003 RE73-05-58841 10.00g Exp:OCDD_DB5
389.8156 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:20 A1.90E7
34:04 A1.00E7
33:30 A8.07E6
34:26 A1.91E6
35:09 A5.07E6
35:02 A1.64E6
35:21 A2.17E6
35:27 A3.93E6
391.8127 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:20 A1.51E7
34:03 A7.93E6
33:30 A6.40E6
34:27 A1.47E6
35:09 A3.92E6
35:02 A1.33E6
35:21 A1.76E6
35:27 A3.09E6
Time

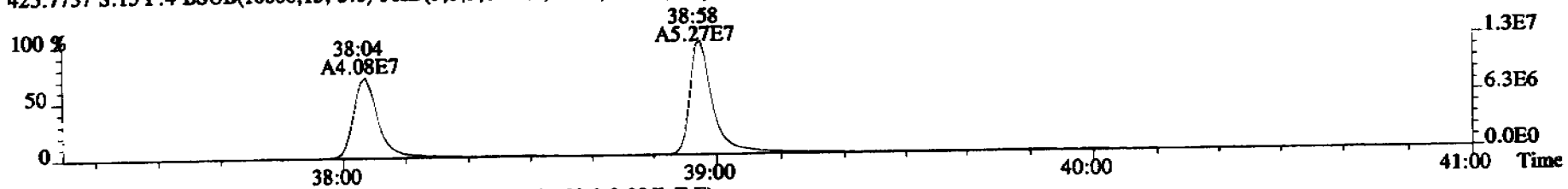

File:050502D1 #1-399 Acq: 2-MAY-2005 19:27:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_003 RE73-05-58841 10.00g Exp:OCDD_DB5
389.8156 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
x5.00
34:26
A1.91E6
35:02
A1.64E6
35:21
A2.17E6
35:27
A3.93E6
Time
391.8127 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
x5.00
34:27
A1.47E6
35:02
A1.33E6
35:21
A1.76E6
35:27
A3.09E6
Time

File:050502D1 #1-347 Acq: 2-MAY-2005 19:27:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_003 RE73-05-58841 10.00g Exp:OCDD_DB5

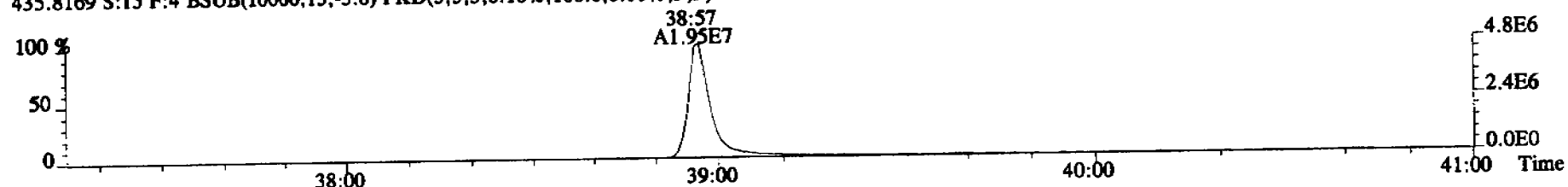
423.7767 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



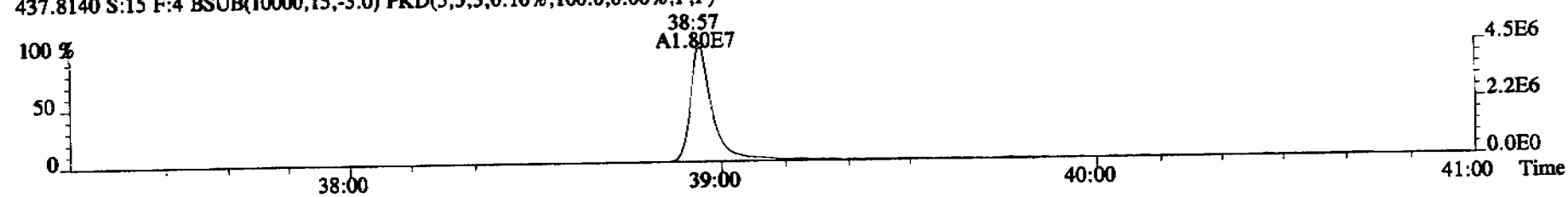
425.7737 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



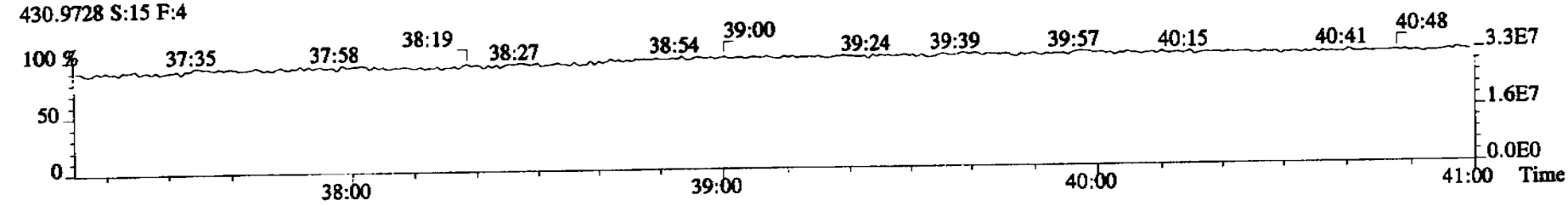
435.8169 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



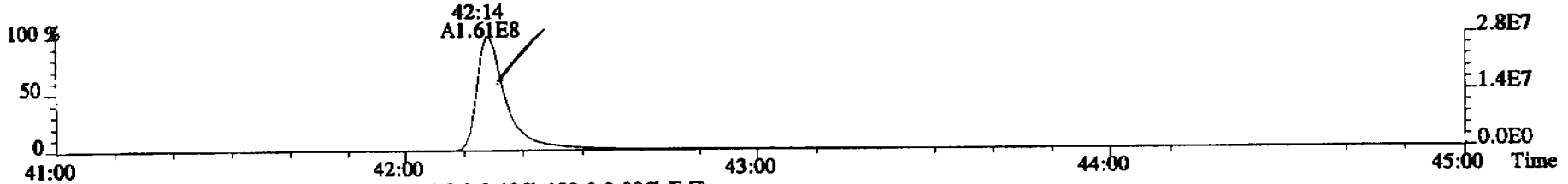
437.8140 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



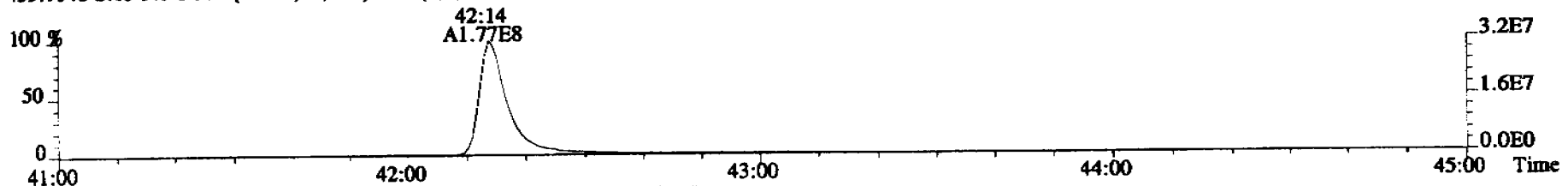
430.9728 S:15 F:4



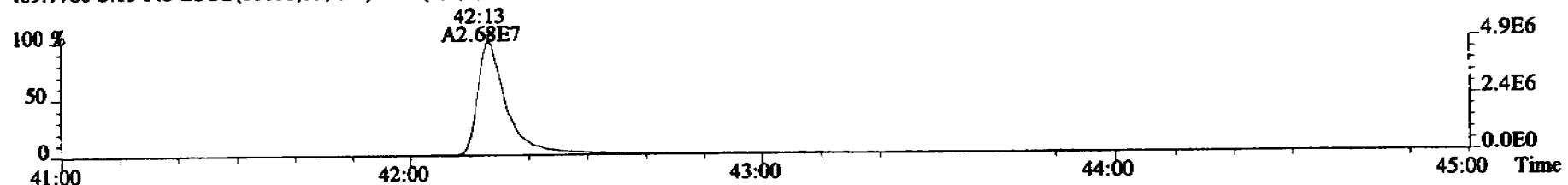
File:050502D1 #1-345 Acq: 2-MAY-2005 19:27:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_003 RE73-05-58841 10.00g Exp:OCDD_DB5
457.7377 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



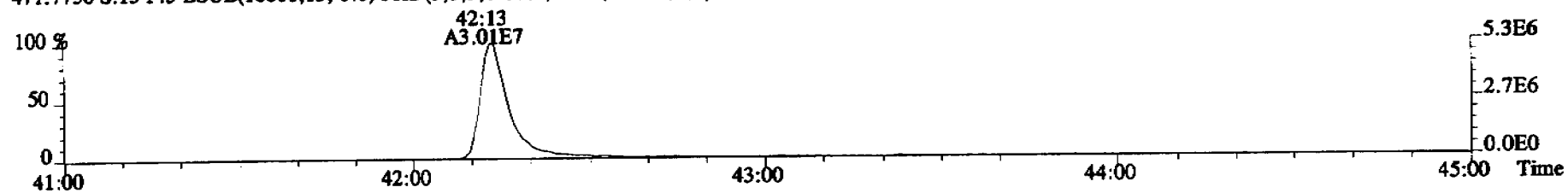
459.7348 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



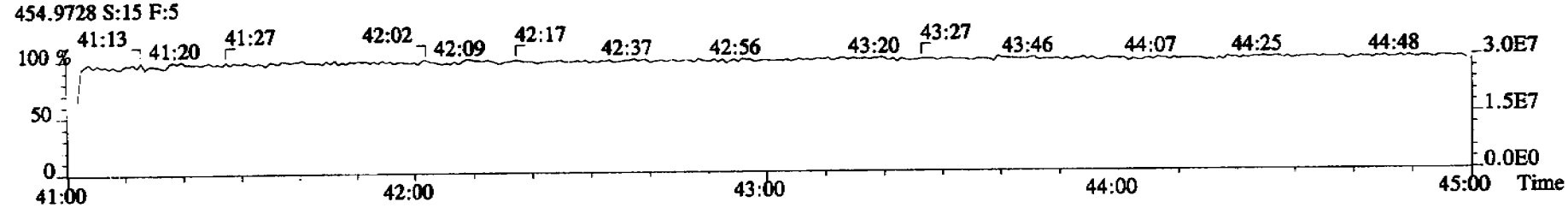
469.7780 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



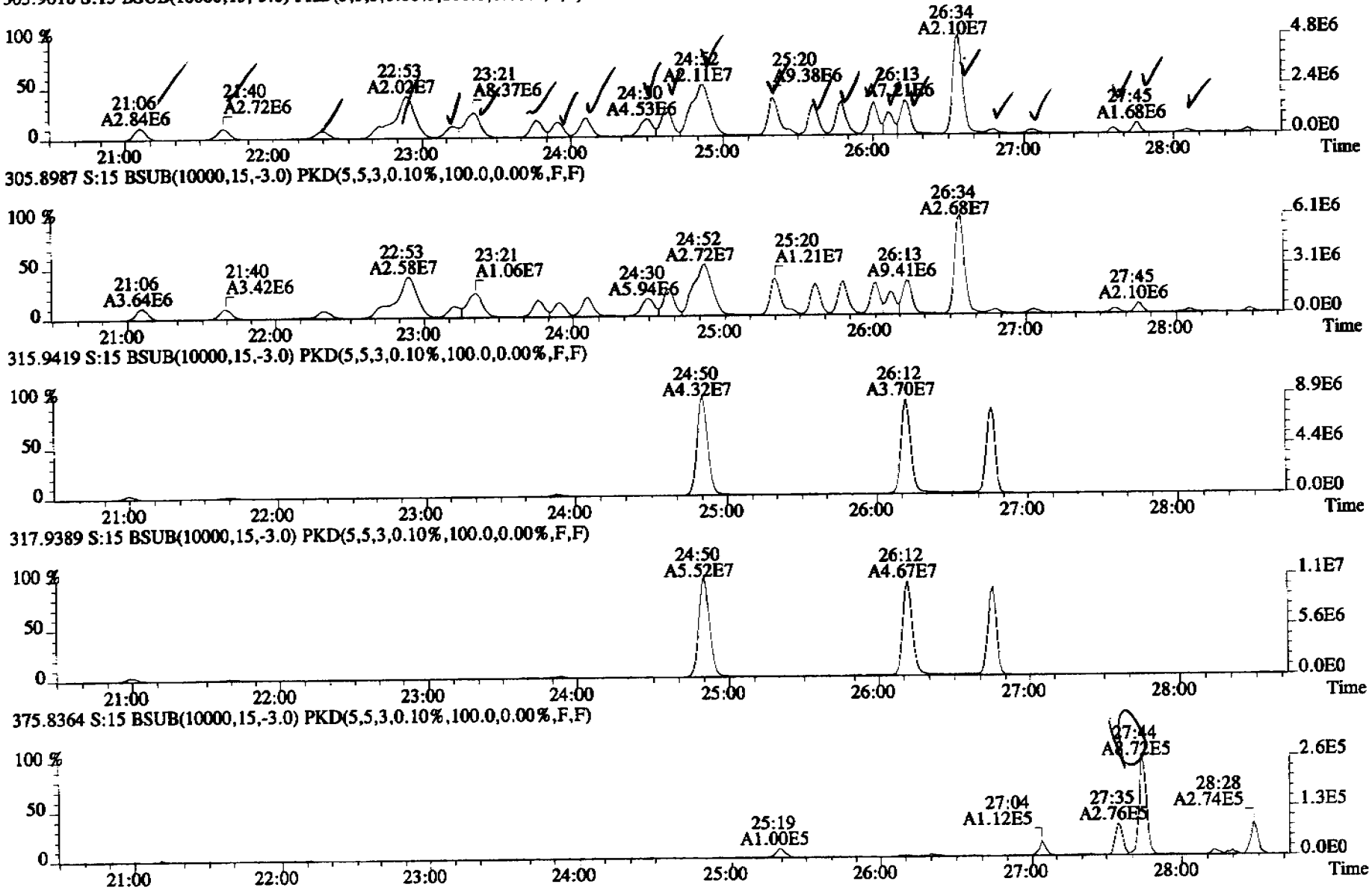
471.7750 S:15 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

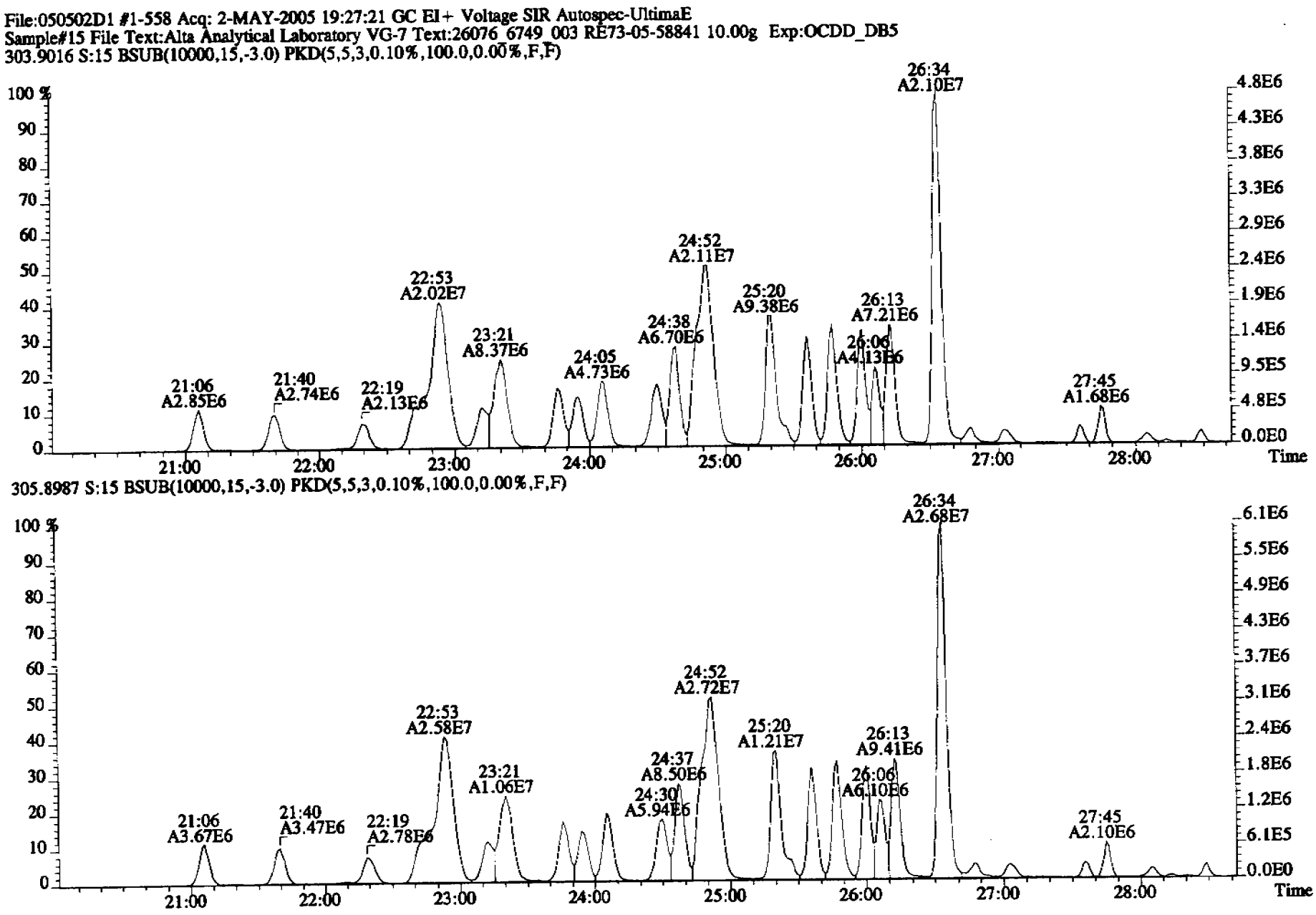


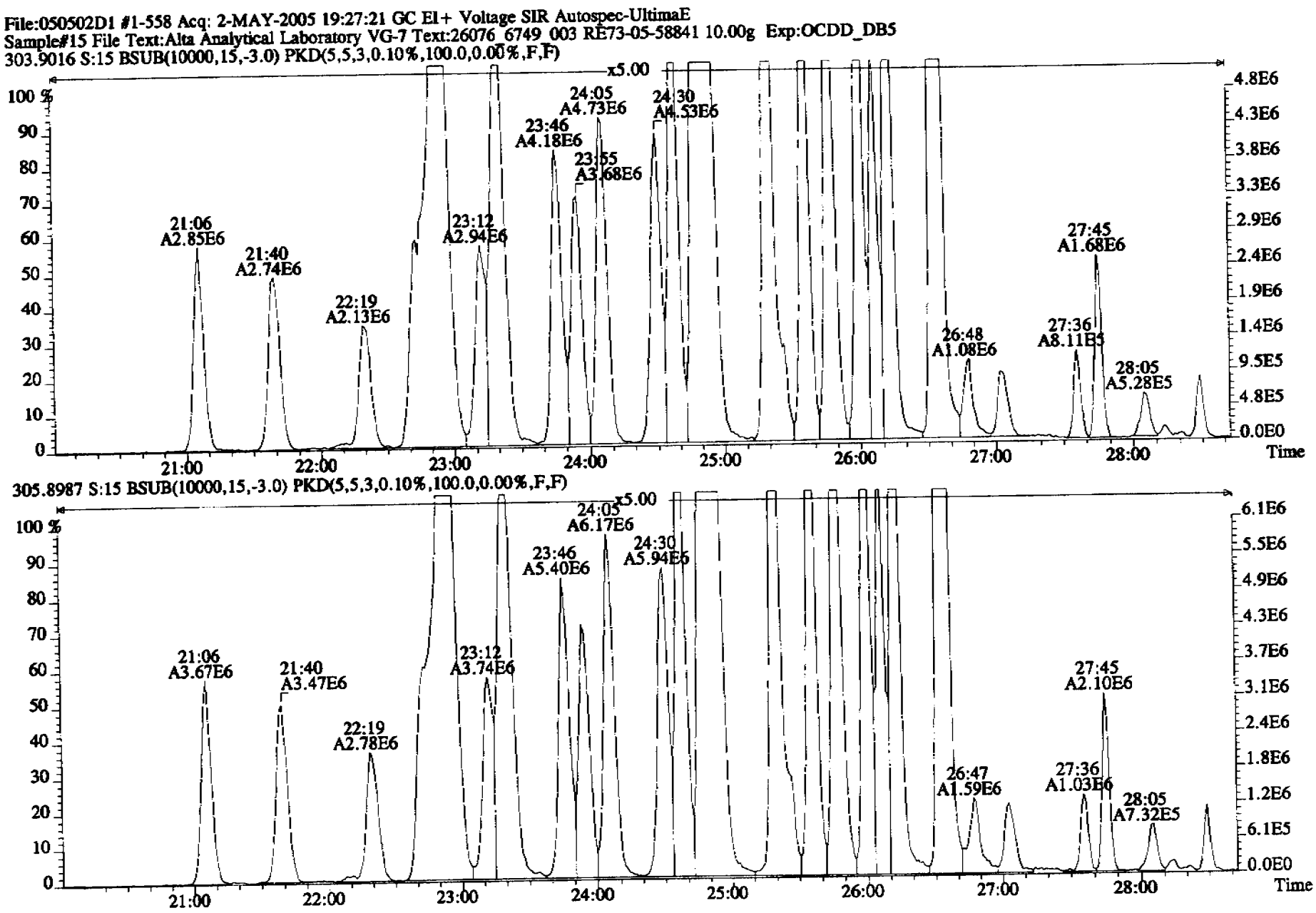
454.9728 S:15 F:5



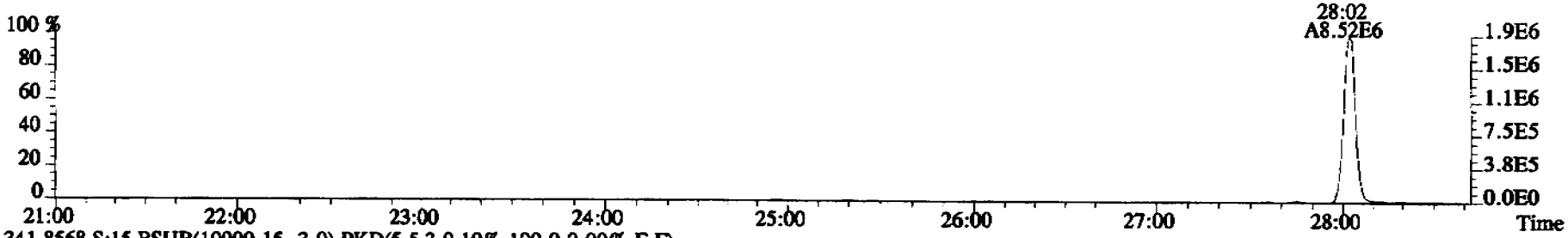
File:050502D1 #1-558 Acq: 2-MAY-2005 19:27:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_003 RE73-05-58841 10.00g Exp:OCDD_DB5



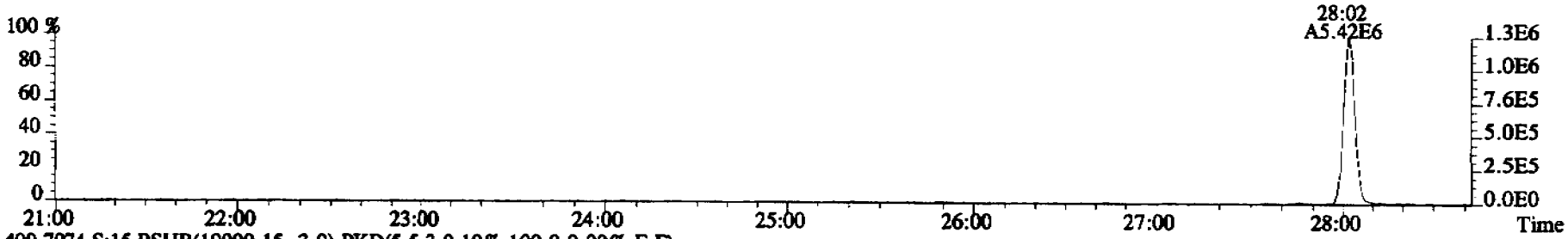

File:050502D1 #1-558 Acq: 2-MAY-2005 19:27:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Alta Analytical Laboratory VG-7 Text:26076 6749 003 RE73-05-58841 10.00g Exp:OCDD_DB5
303.9016 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:06 A2.85E6
21:40 A2.74E6
22:19 A2.13E6
22:53 A2.02E7
23:21 A8.37E6
24:05 A4.73E6
24:38 A6.70E6
24:52 A2.11E7
25:20 A9.38E6
26:06 A4.13E6
26:13 A7.21E6
26:34 A2.10E7
27:45 A1.68E6
305.8987 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:06 A3.67E6
21:40 A3.47E6
22:19 A2.78E6
22:53 A2.58E7
23:21 A1.06E7
24:30 A5.94E6
24:37 A8.50E6
24:52 A2.72E7
25:20 A1.21E7
26:06 A6.10E6
26:13 A9.41E6
26:34 A2.68E7
27:45 A2.10E6
Time


File:050502D1 #1-558 Acq: 2-MAY-2005 19:27:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Alta Analytical Laboratory VG-7 Text:26076 6749 003 RE73-05-58841 10.00g Exp:OCDD_DB5
303.9016 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
x5.00
21:06 A2.85E6
21:40 A2.74E6
22:19 A2.13E6
23:12 A2.94E6
23:46 A4.18E6
24:05 A4.73E6
24:30 A4.53E6
23:55 A3.68E6
26:48 A1.08E6
27:36 A8.11E5
27:45 A1.68E6
28:05 A5.28E5
Time
305.8987 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
x5.00
21:06 A3.67E6
21:40 A3.47E6
22:19 A2.78E6
23:12 A3.74E6
23:46 A5.40E6
24:05 A6.17E6
24:30 A5.94E6
26:47 A1.59E6
27:36 A1.03E6
27:45 A2.10E6
28:05 A7.32E5
Time

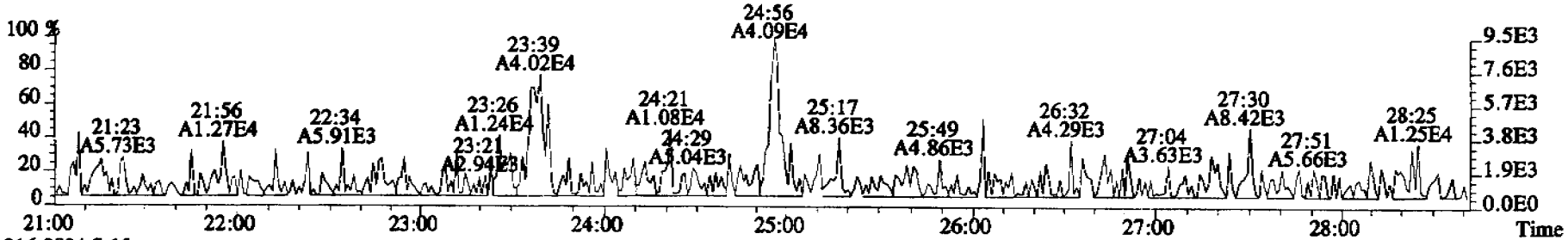
File:050502D1 #1-558 Acq: 2-MAY-2005 19:27:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_003 RE73-05-58841 10.00g Exp:OCDD_DB5
339.8597 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



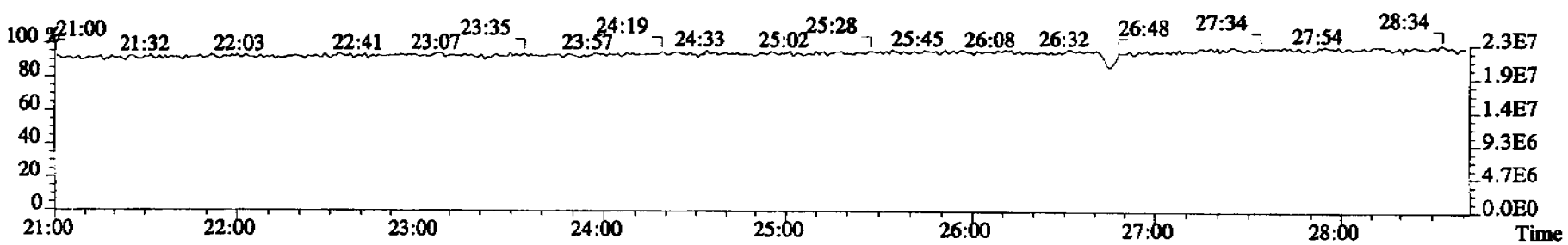
341.8568 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



409.7974 S:15 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

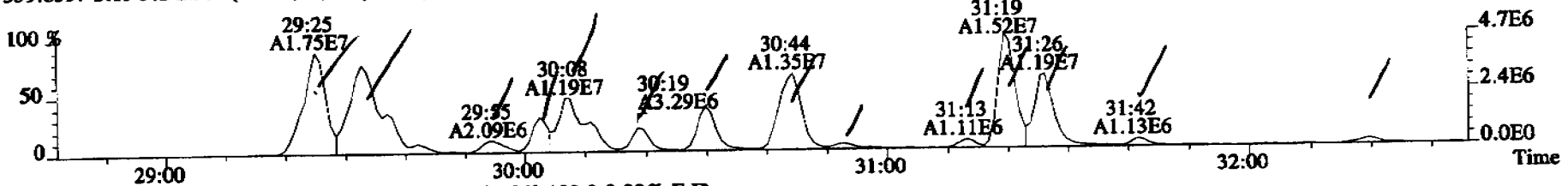


316.9824 S:15

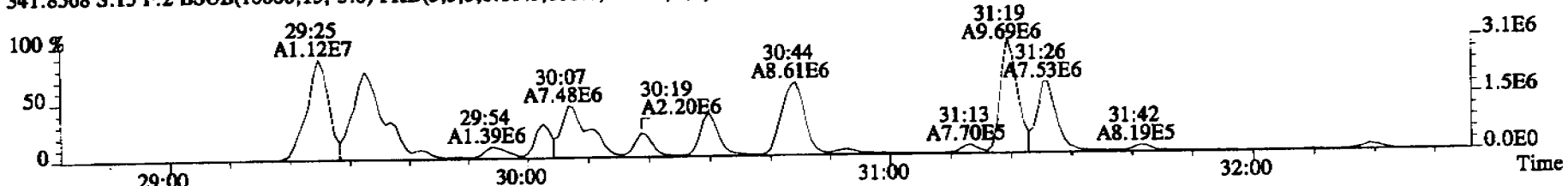


File:050502D1 #1-273 Acq: 2-MAY-2005 19:27:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_003 RE73-05-58841 10.00g Exp:OCDD_DB5

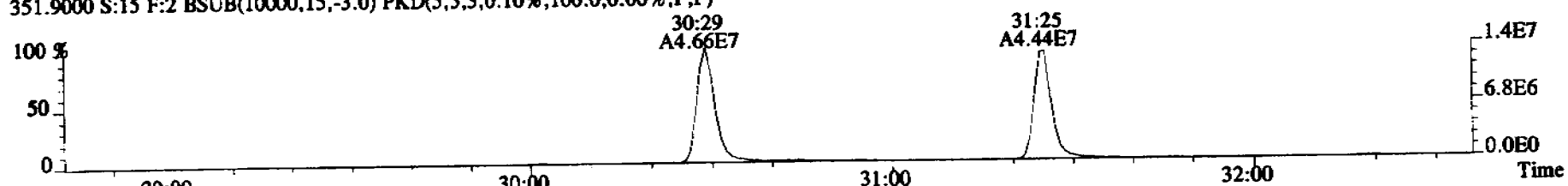
339.8597 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



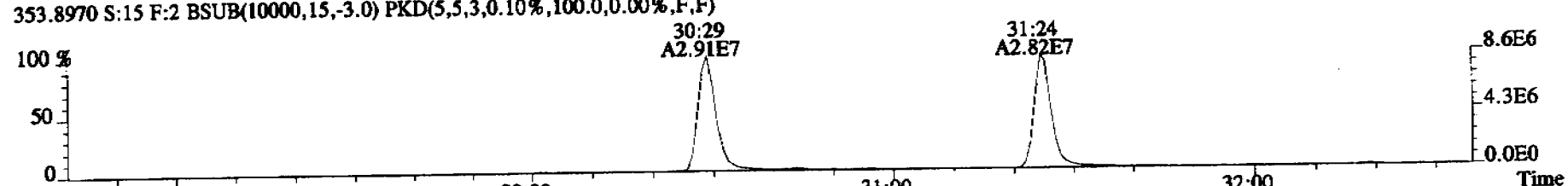
341.8568 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



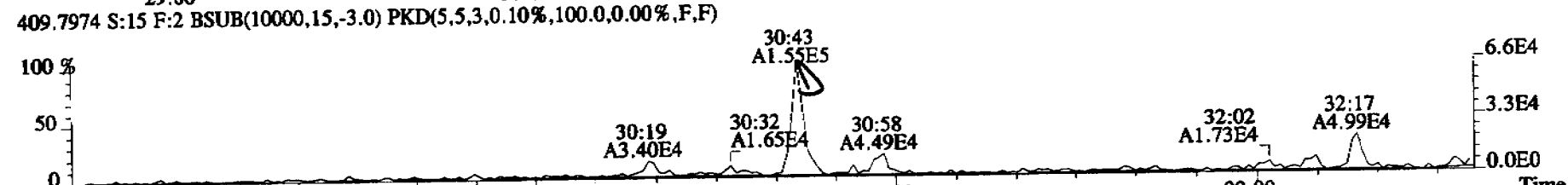
351.9000 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

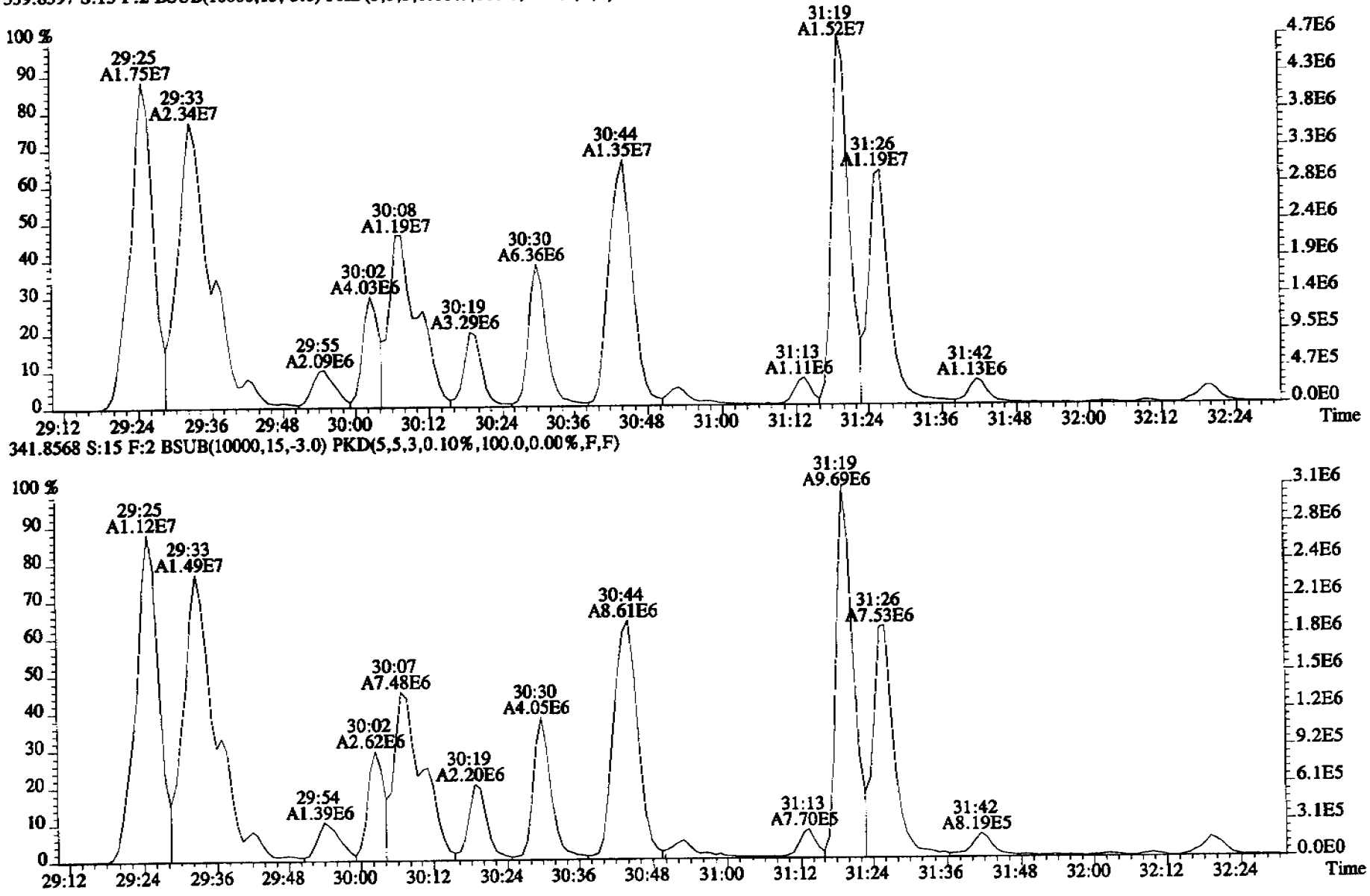


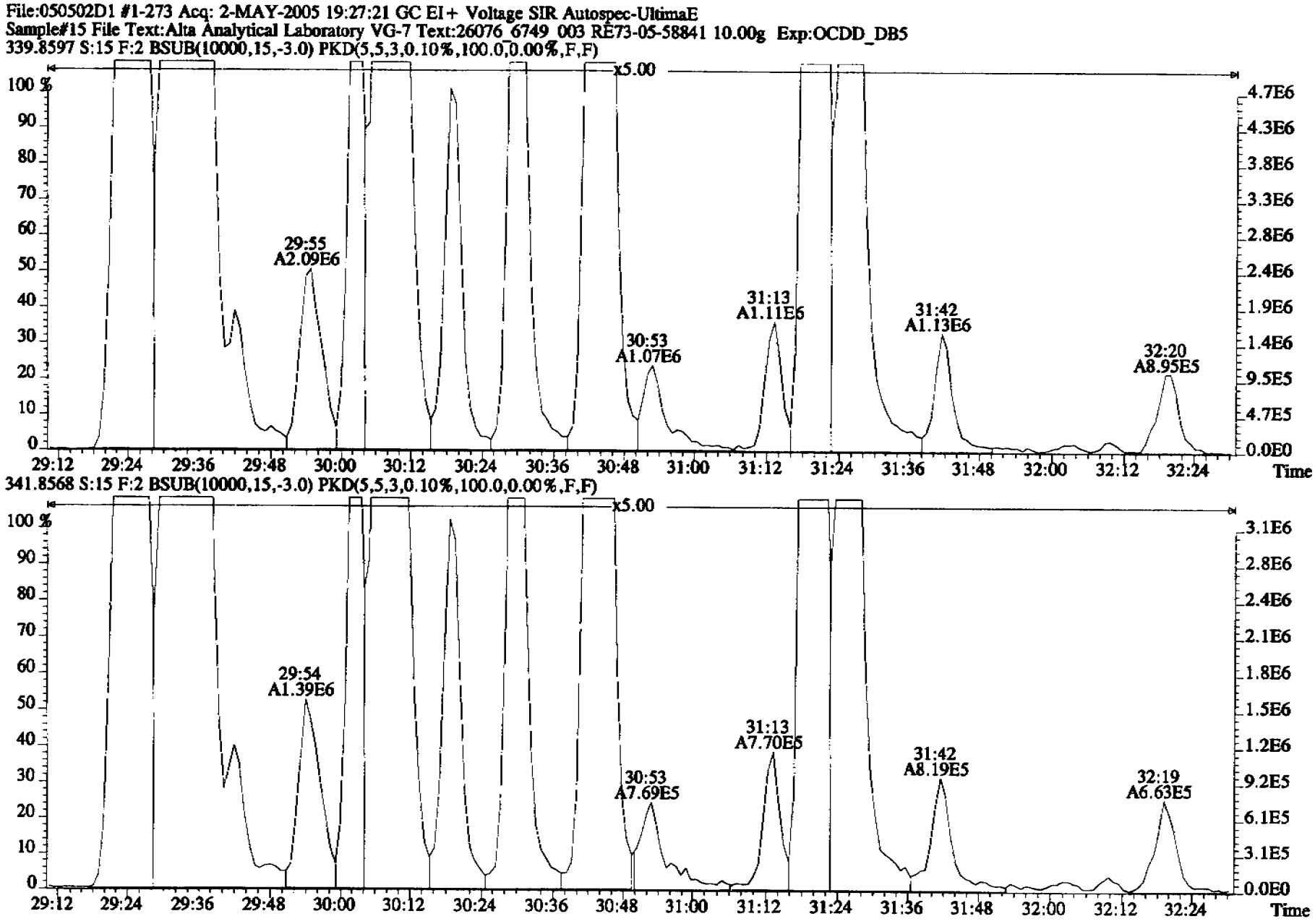
353.8970 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



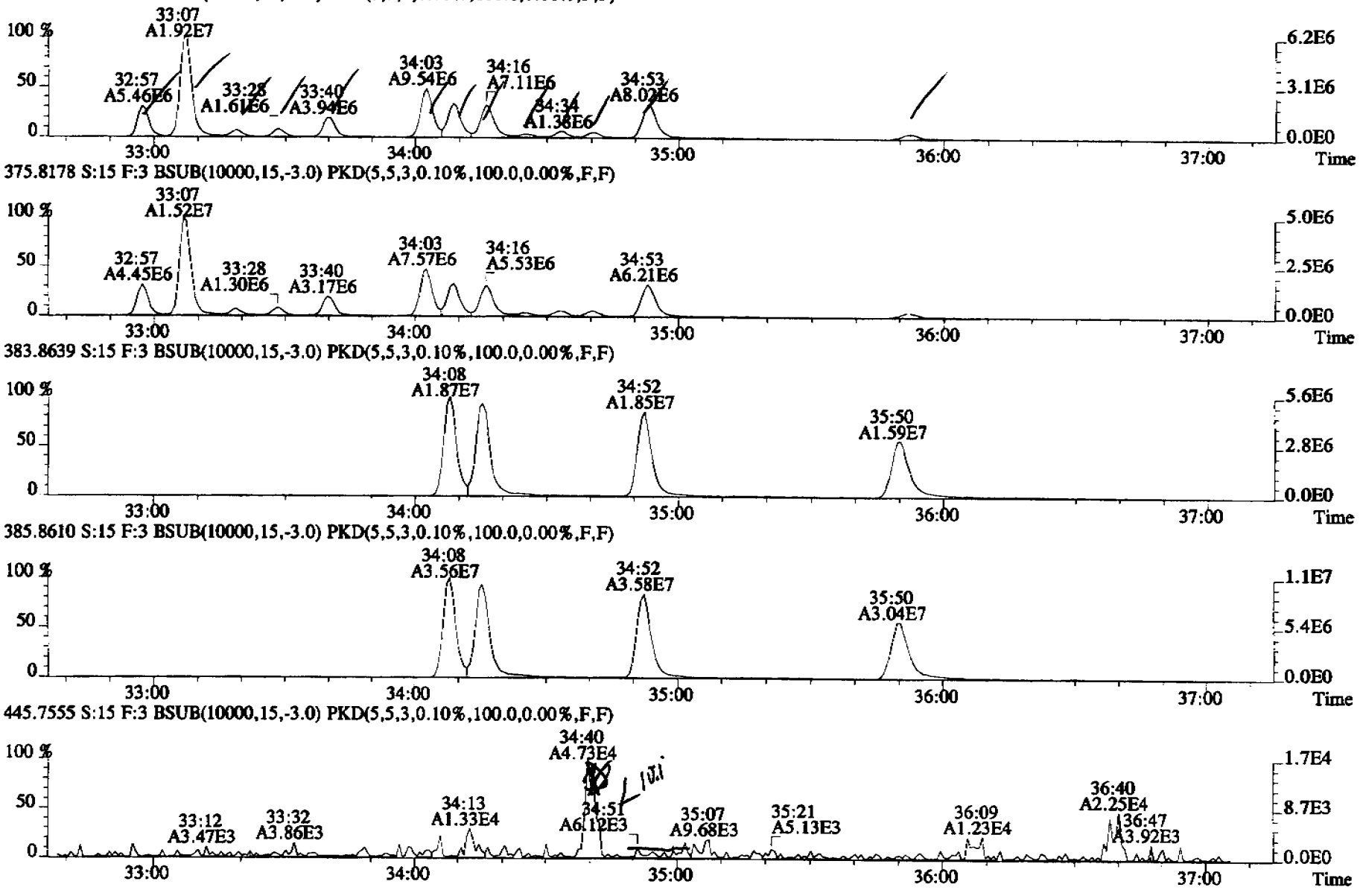
409.7974 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

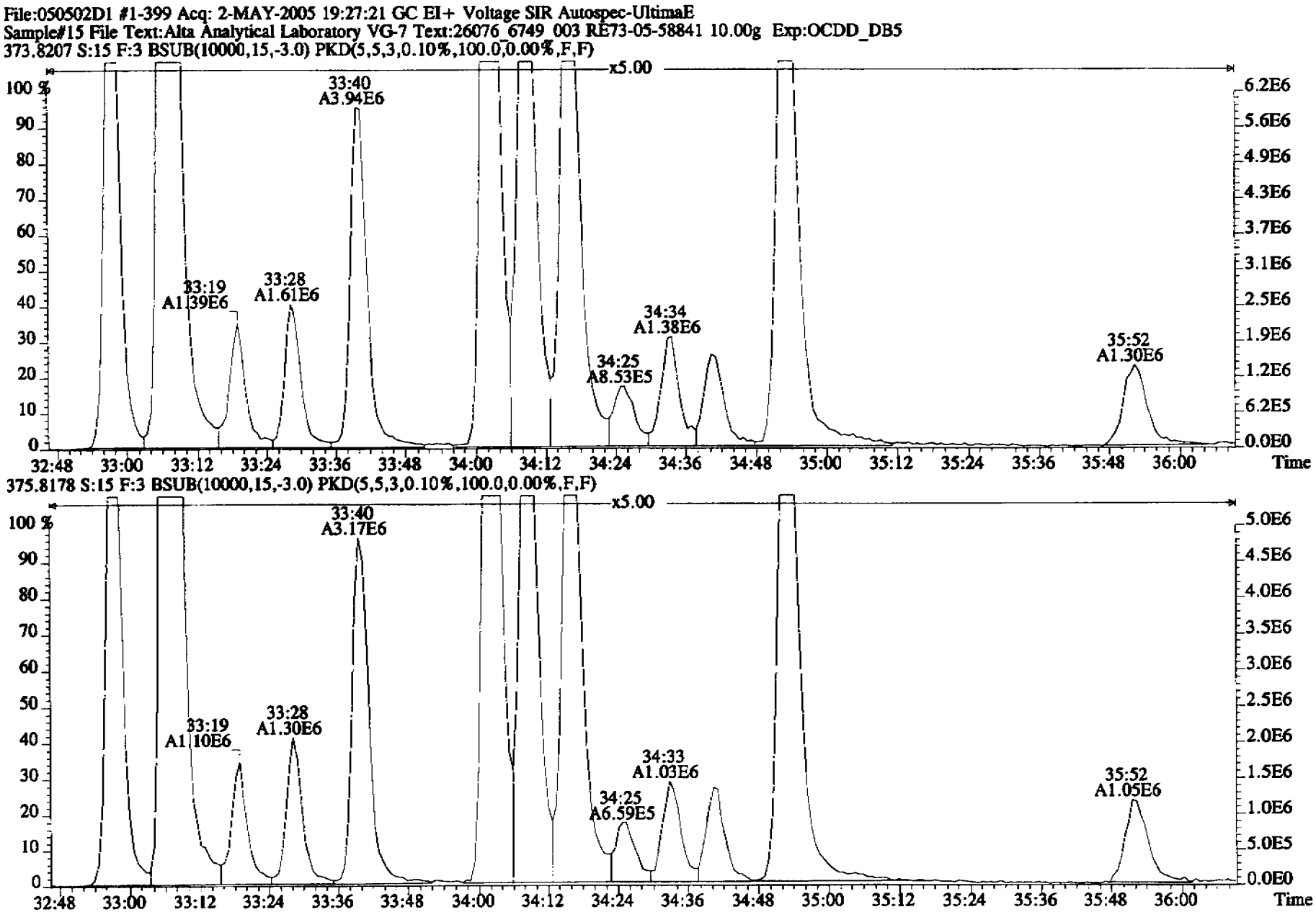



File:050502D1 #1-273 Acq: 2-MAY-2005 19:27:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Alta Analytical Laboratory VG-7 Text:26076 6749 003 RE73-05-58841 10.00g Exp:OCDD_DB5
339.8597 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
29:25 A1.75E7
29:33 A2.34E7
29:55 A2.09E6
30:02 A4.03E6
30:08 A1.19E7
30:19 A3.29E6
30:30 A6.36E6
30:44 A1.35E7
31:13 A1.11E6
31:19 A1.52E7
31:26 A1.19E7
31:42 A1.13E6
Time
341.8568 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
29:25 A1.12E7
29:33 A1.49E7
29:54 A1.39E6
30:02 A2.62E6
30:07 A7.48E6
30:19 A2.20E6
30:30 A4.05E6
30:44 A8.61E6
31:13 A7.70E5
31:19 A9.69E6
31:26 A7.53E6
31:42 A8.19E5
Time


File:050502D1 #1-273 Acq: 2-MAY-2005 19:27:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_003 RE73-05-58841 10.00g Exp:OCDD_DB5
339.8597 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
x5.00
29:55
A2.09E6
30:53
A1.07E6
31:13
A1.11E6
31:42
A1.13E6
32:20
A8.95E5
Time
341.8568 S:15 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
x5.00
29:54
A1.39E6
30:53
A7.69E5
31:13
A7.70E5
31:42
A8.19E5
32:19
A6.63E5
Time

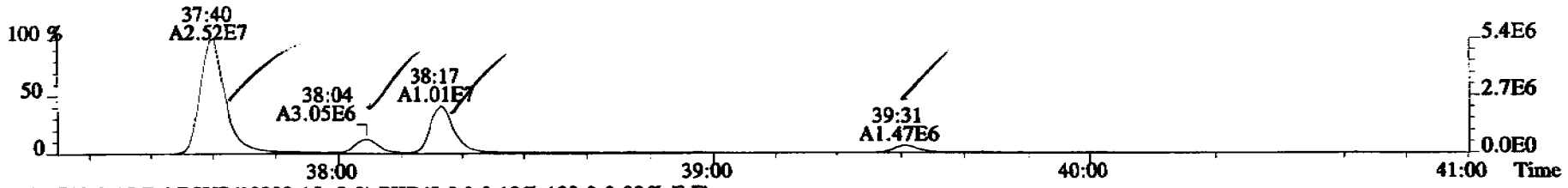
File:050502D1 #1-399 Acq: 2-MAY-2005 19:27:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_003 RE73-05-58841 10.00g Exp:OCDD_DB5



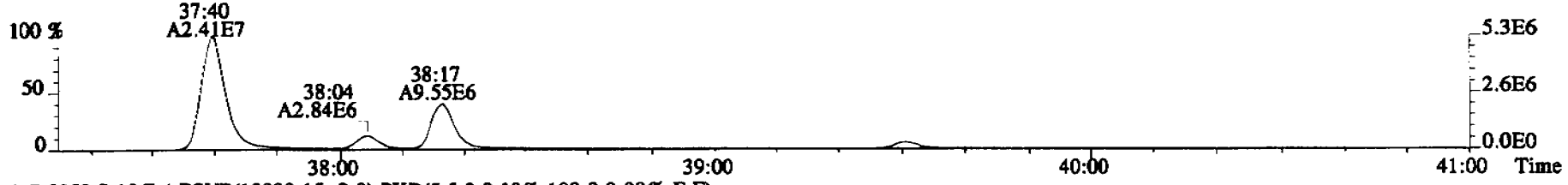

File:050502D1 #1-399 Acq: 2-MAY-2005 19:27:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_003 RE73-05-58841 10.00g Exp:OCDD_DB5
373.8207 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
x5.00
33:40
A3.94E6
33:19
A1.39E6
33:28
A1.61E6
34:34
A1.38E6
34:25
A8.53E5
35:52
A1.30E6
Time
375.8178 S:15 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
x5.00
33:40
A3.17E6
33:19
A1.10E6
33:28
A1.30E6
34:33
A1.03E6
34:25
A6.59E5
35:52
A1.05E6
Time

File:050502D1 #1-347 Acq: 2-MAY-2005 19:27:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_003 RE73-05-58841 10.00g Exp:OCDD_DB5

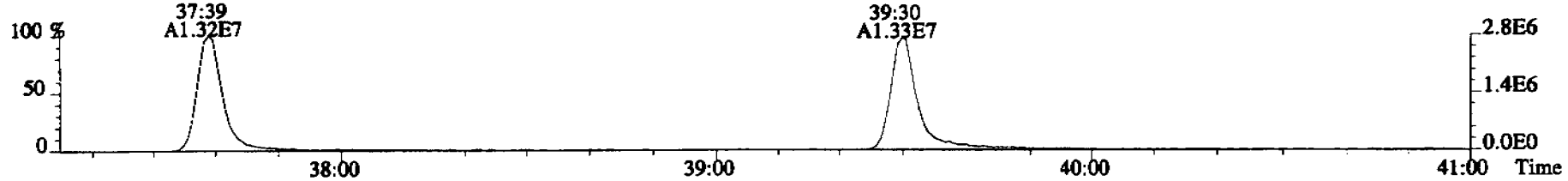
407.7818 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



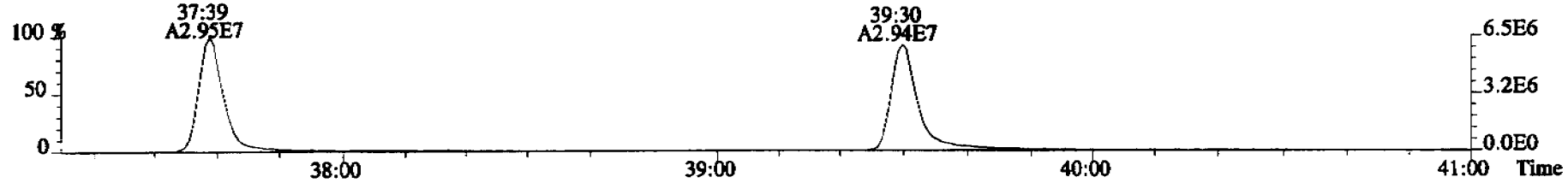
409.7788 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



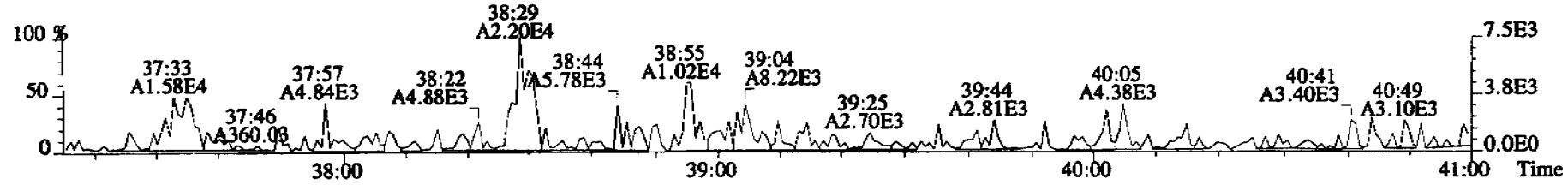
417.8253 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



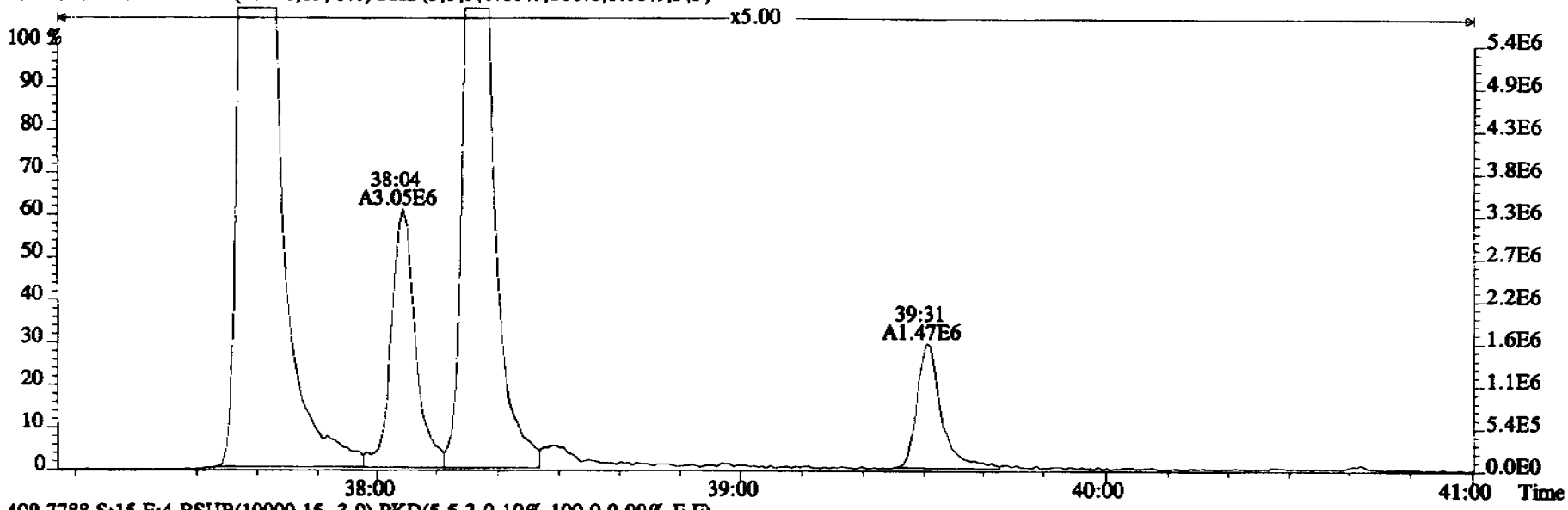
419.8220 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



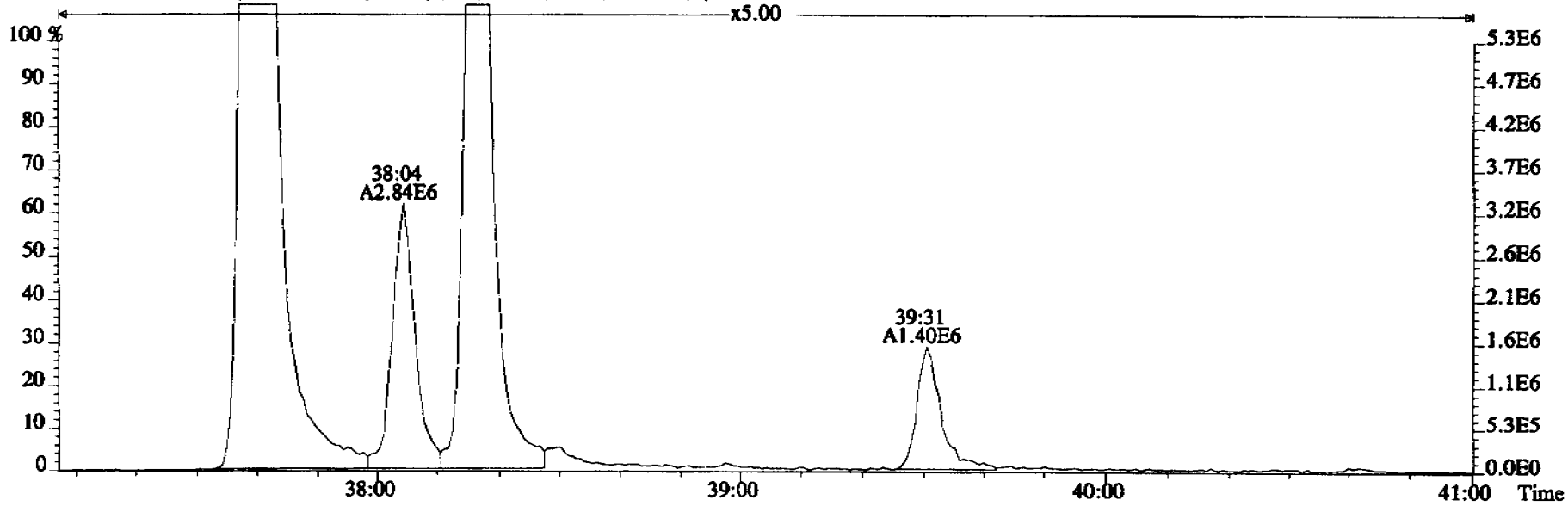
479.7165 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



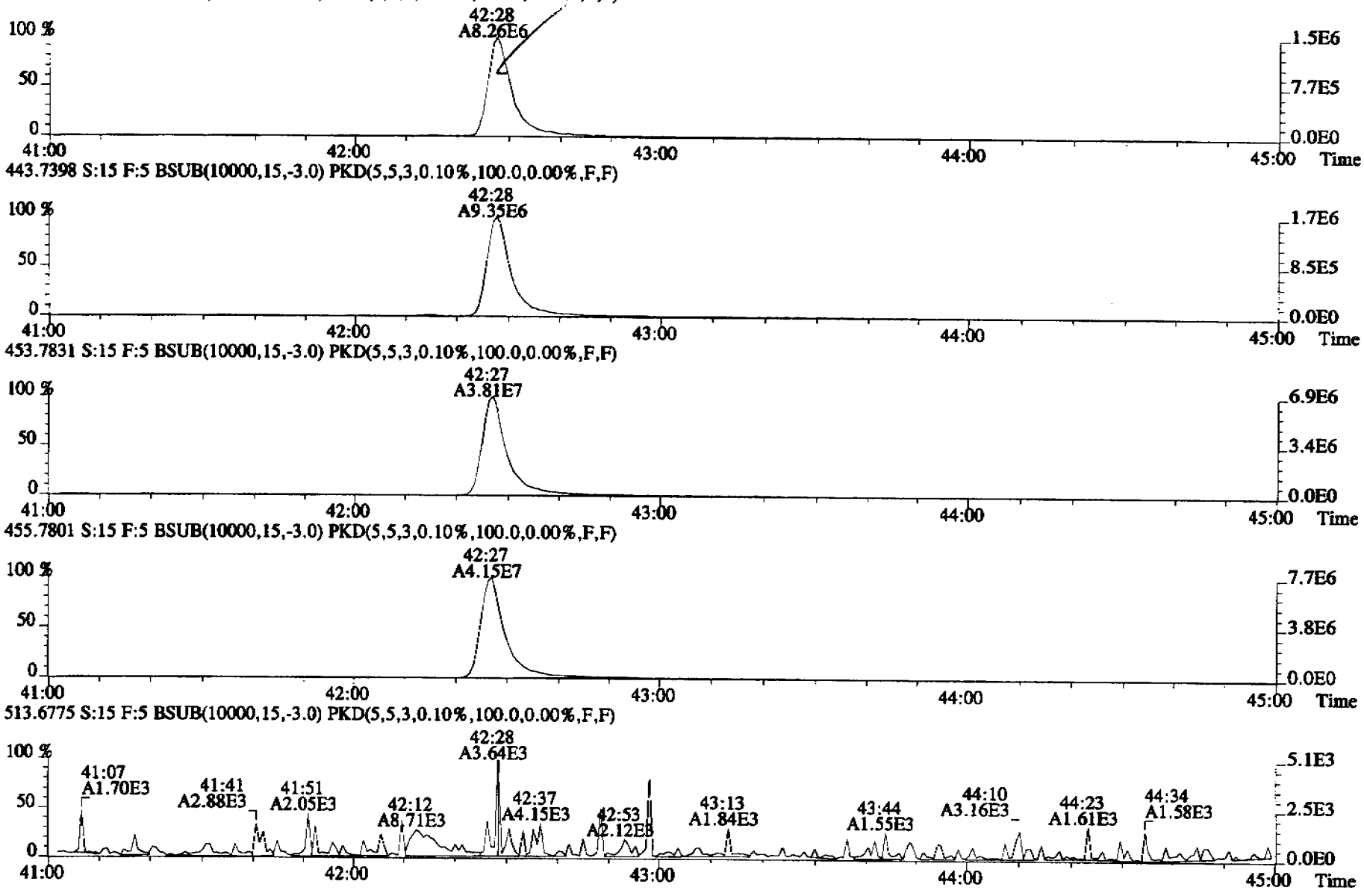
File:050502D1 #1-347 Acq: 2-MAY-2005 19:27:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_003 RE73-05-58841 10.00g Exp:OCDD_DB5
407.7818 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



409.7788 S:15 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:050502D1 #1-345 Acq: 2-MAY-2005 19:27:21 GC EI+ Voltage SIR Autospec-UltimaE
Sample#15 File Text:Alta Analytical Laboratory VG-7 Text:26076_6749_003 RE73-05-58841 10.00g Exp:OCDD_DB5



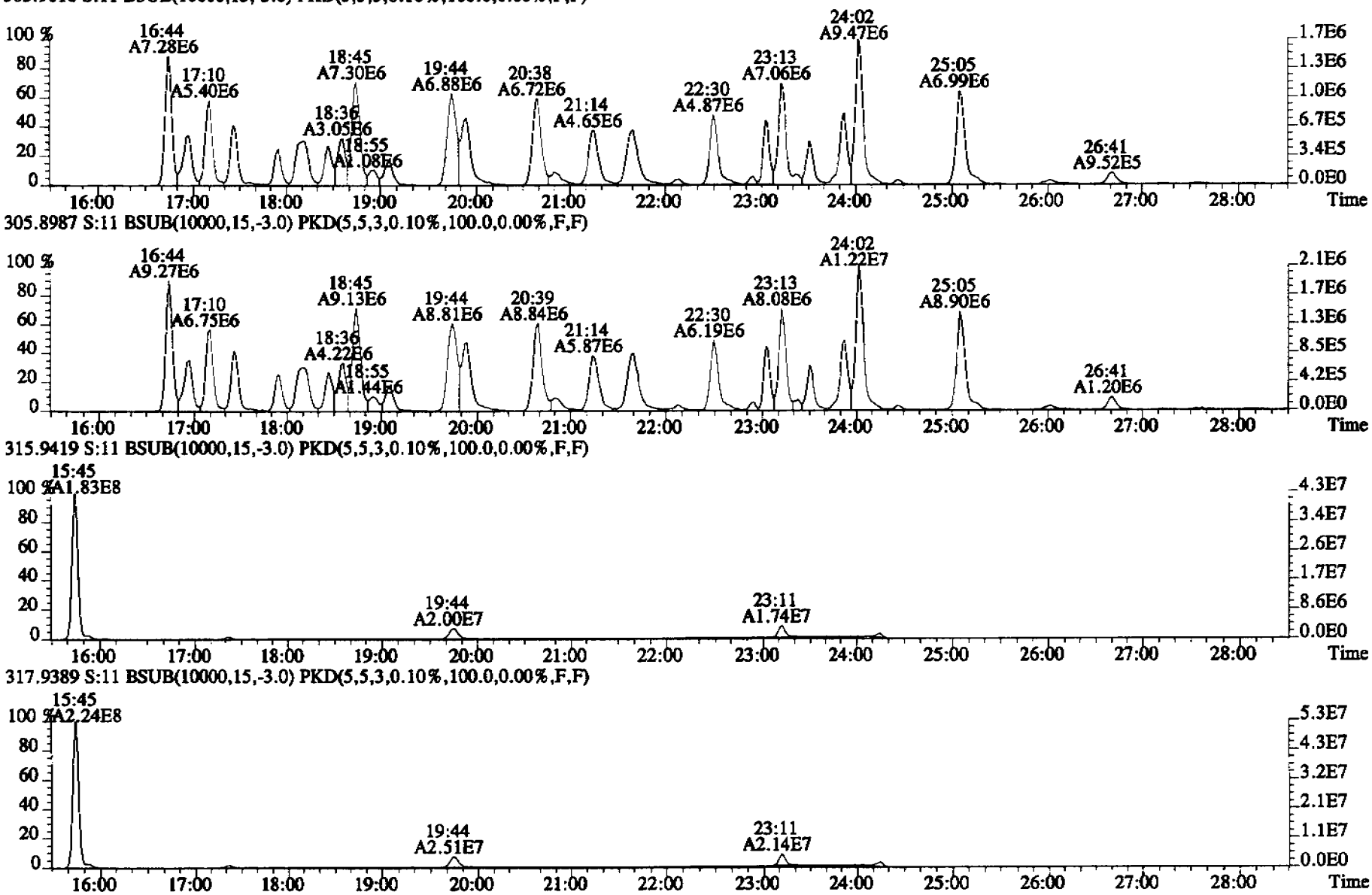
CONFIRMATION

Client ID: RE73-05-58829 Filename: 050507A1 S:11 Acq:7-MAY-05 20:12:10 ConCal: ST050507A1-2
Lab ID: 26076_6749_001 GC Column ID: DB-225 ICal: 1613TCDFVG6-4-29-05 wt/vol:10.010 EndCAL: ST050507A1-4

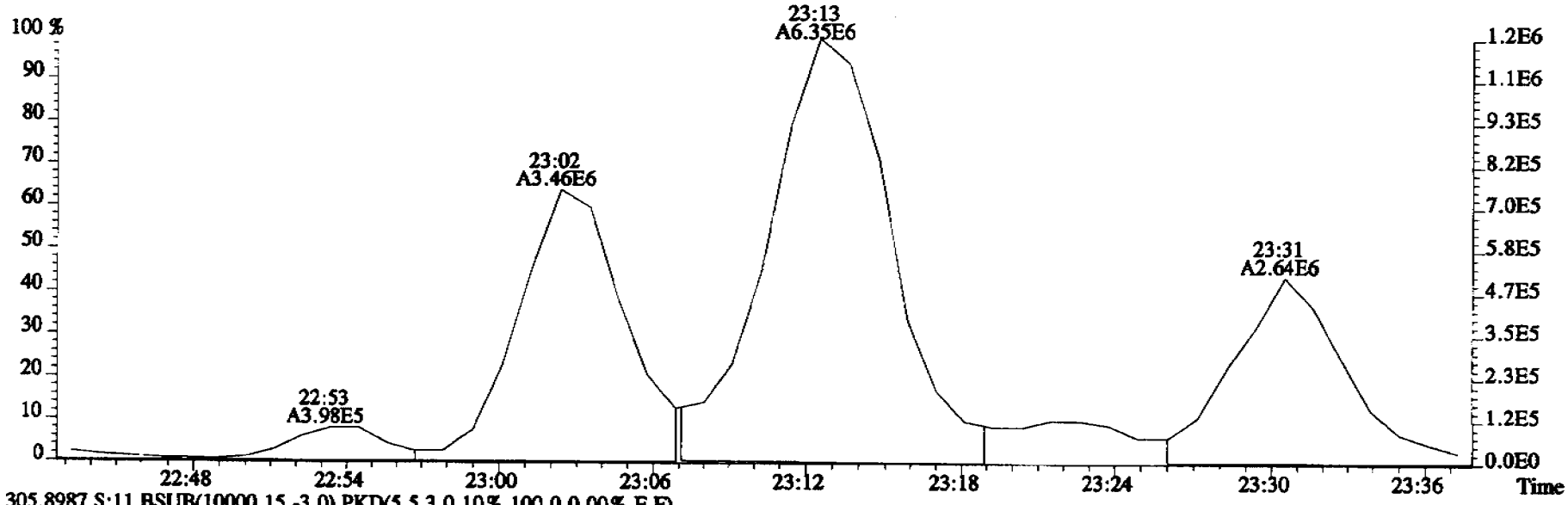
Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	4.51e+07	0.80 y	19:45	1.00	199.8	-
13C-2,3,7,8-TCDF	3.89e+07	0.81 y	23:12	1.04	165.8	83.0
2,3,7,8-TCDF	1.44e+07	0.79 y	23:13	1.07	69.03	

Analyst: [signature]

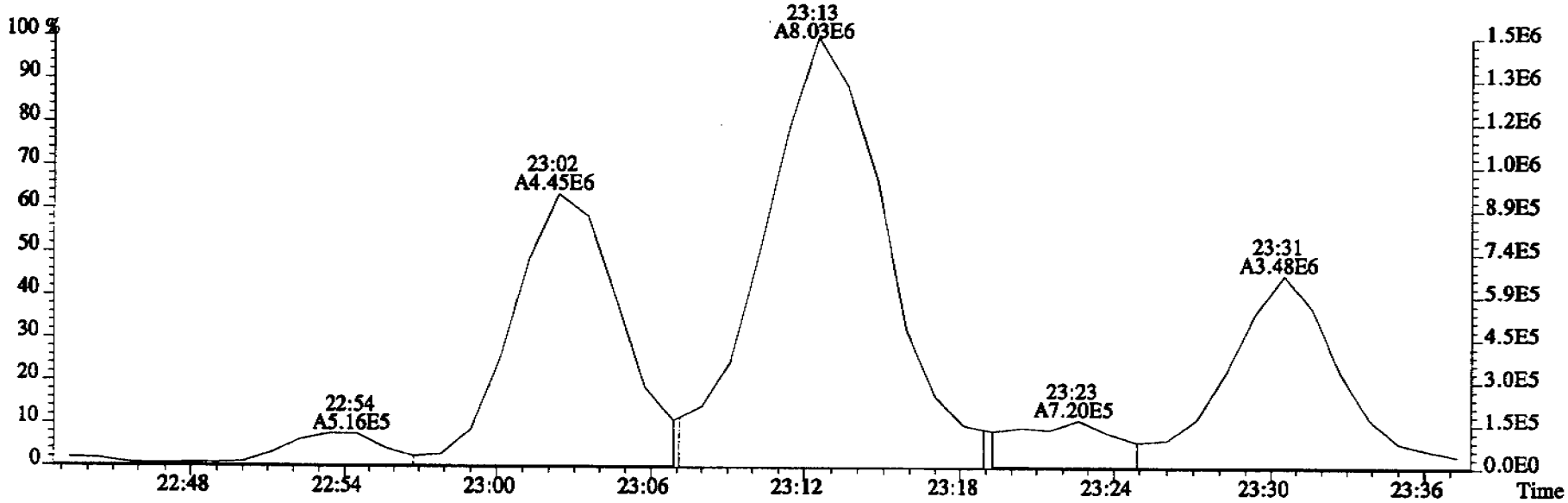
Date: 5/8/05


File:050507A1 #1-1173 Acq: 7-MAY-2005 20:12:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Alta Analytical Laboratory Text:26076_6749_001 RE73-05-58829 10.01g Exp:TCDF_DB225
303.9016 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
16:44 A7.28E6
17:10 A5.40E6
18:45 A7.30E6
18:36 A3.05E6
18:55 A2.08E6
19:44 A6.88E6
20:38 A6.72E6
21:14 A4.65E6
22:30 A4.87E6
23:13 A7.06E6
24:02 A9.47E6
25:05 A6.99E6
26:41 A9.52E5
305.8987 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
16:44 A9.27E6
17:10 A6.75E6
18:45 A9.13E6
18:36 A4.22E6
18:55 A1.44E6
19:44 A8.81E6
20:39 A8.84E6
21:14 A5.87E6
22:30 A6.19E6
23:13 A8.08E6
24:02 A1.22E7
25:05 A8.90E6
26:41 A1.20E6
315.9419 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
15:45 A1.83E8
19:44 A2.00E7
23:11 A1.74E7
317.9389 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
15:45 A2.24E8
19:44 A2.51E7
23:11 A2.14E7
Time

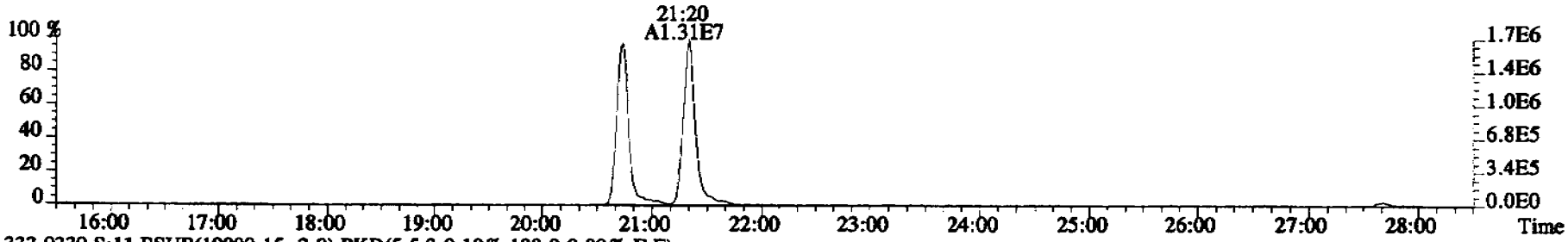
File:050507A1 #1-1173 Acq: 7-MAY-2005 20:12:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Alta Analytical Laboratory Text:26076_6749_001 RE73-05-58 Exp:TCDF_DB225
303.9016 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



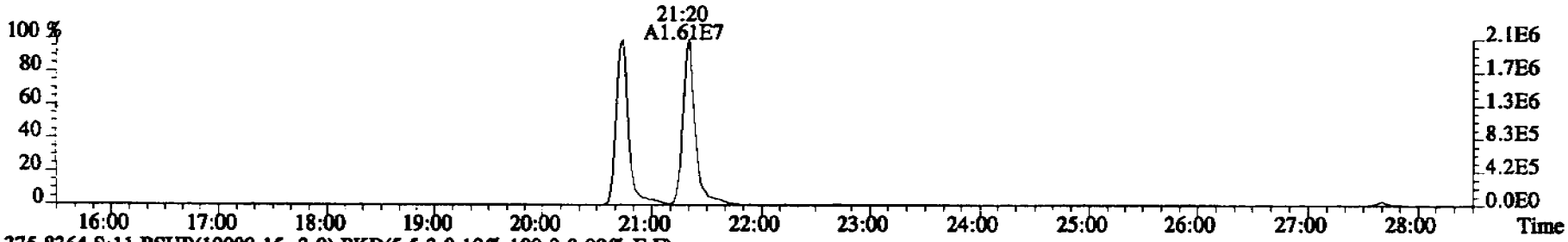
305.8987 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



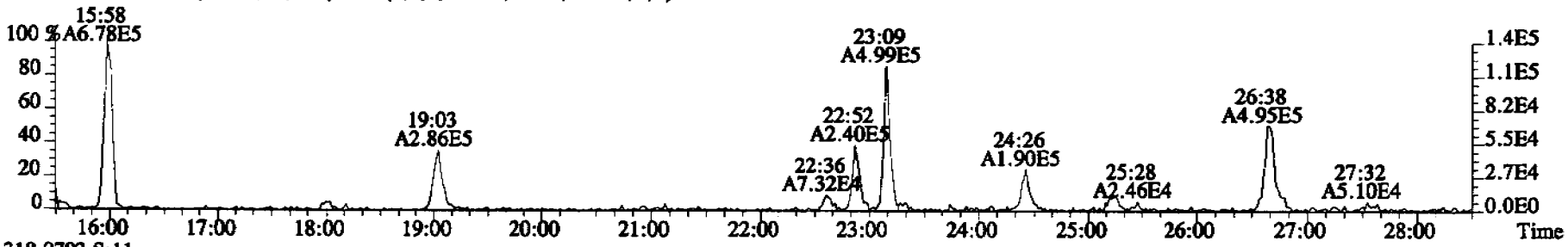
File:050507A1 #1-1173 Acq: 7-MAY-2005 20:12:10 GC EI+ Voltage SIR Autospec-UltimaE
Sample#11 File Text:Alta Analytical Laboratory Text:26076_6749_001 RE73-05-58829 10.01g Exp:TCDF_DB225
331.9368 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



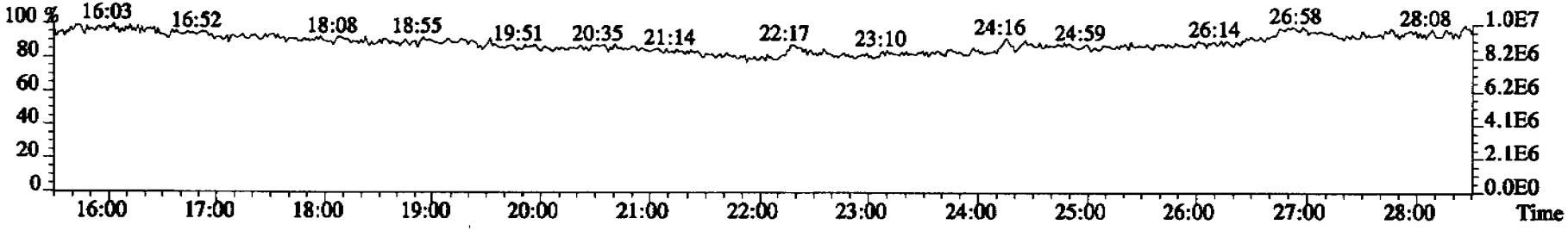
333.9339 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



375.8364 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



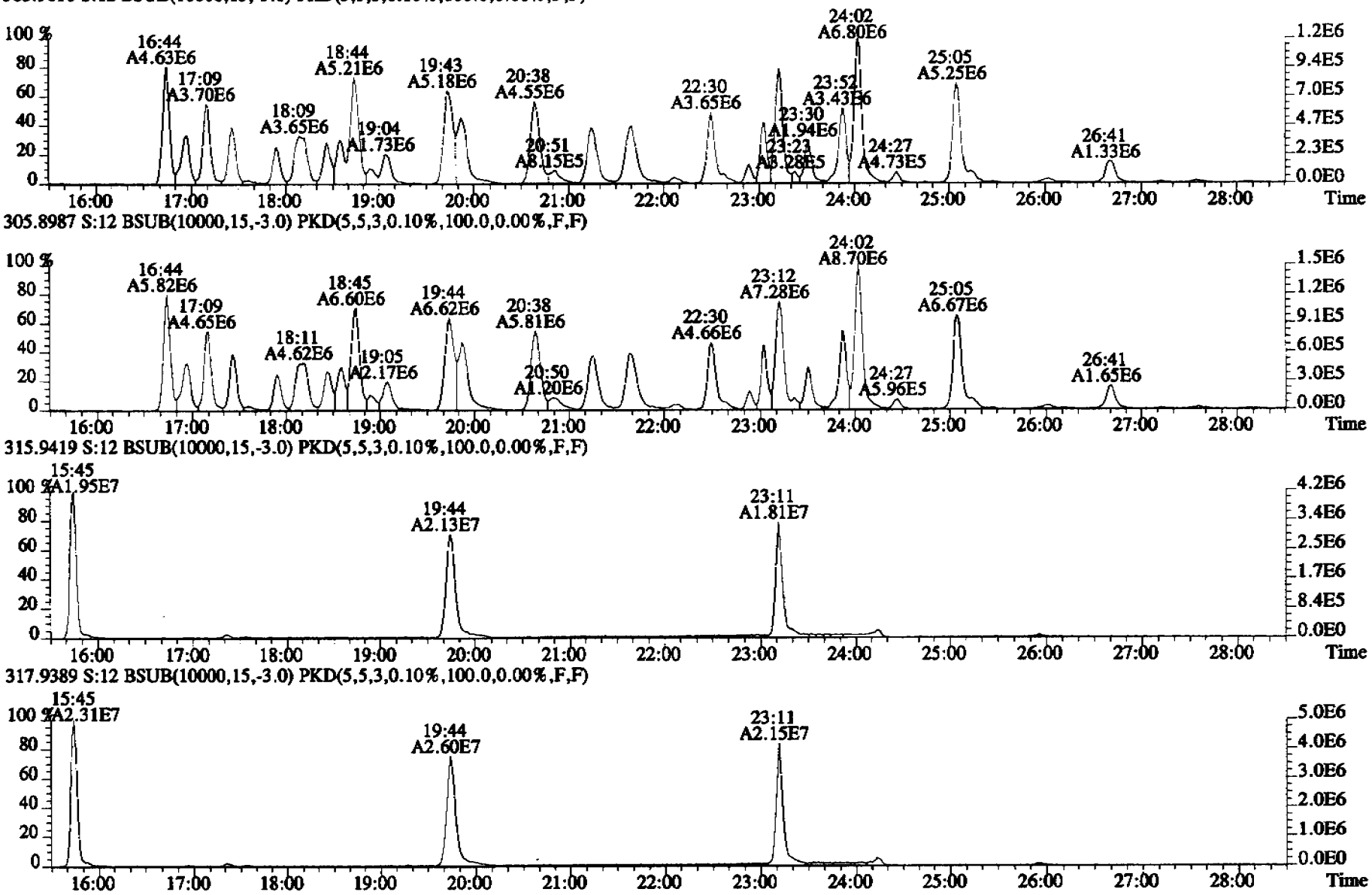
318.9792 S:11



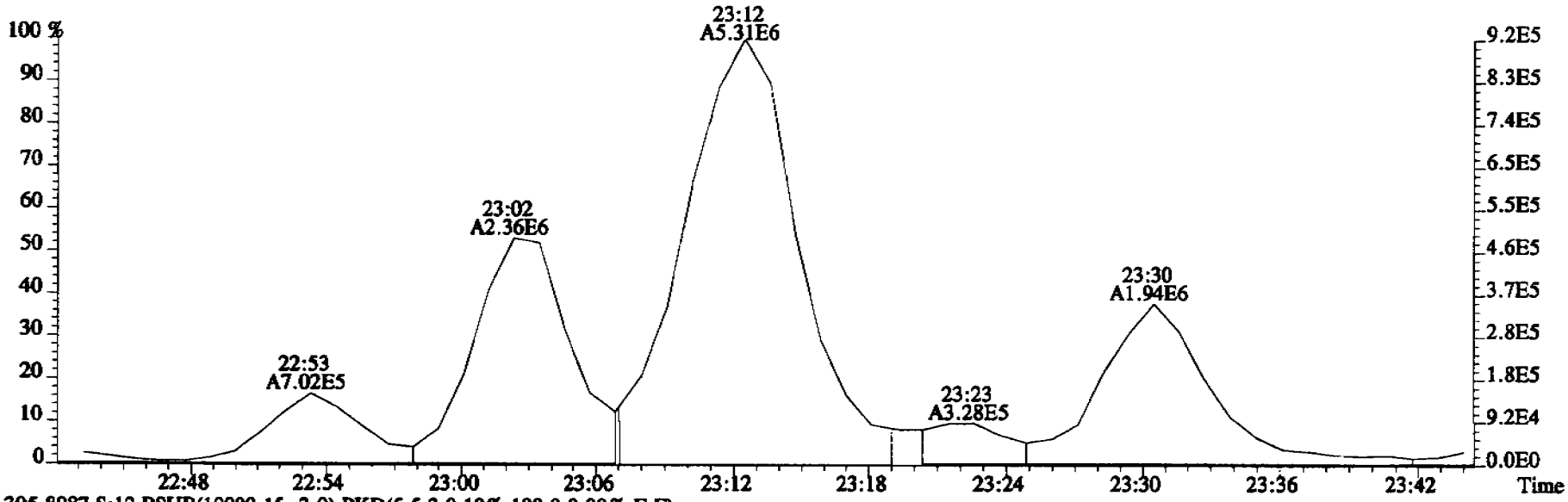
Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	4.47e+07	0.79 y	19:44	1.00	199.6	-
13C-2,3,7,8-TCDF	3.56e+07	0.78 y	23:11	1.04	153.3	76.8
2,3,7,8-TCDF	1.20e+07	0.79 y	23:11	1.07	62.76	

Analyst: MK

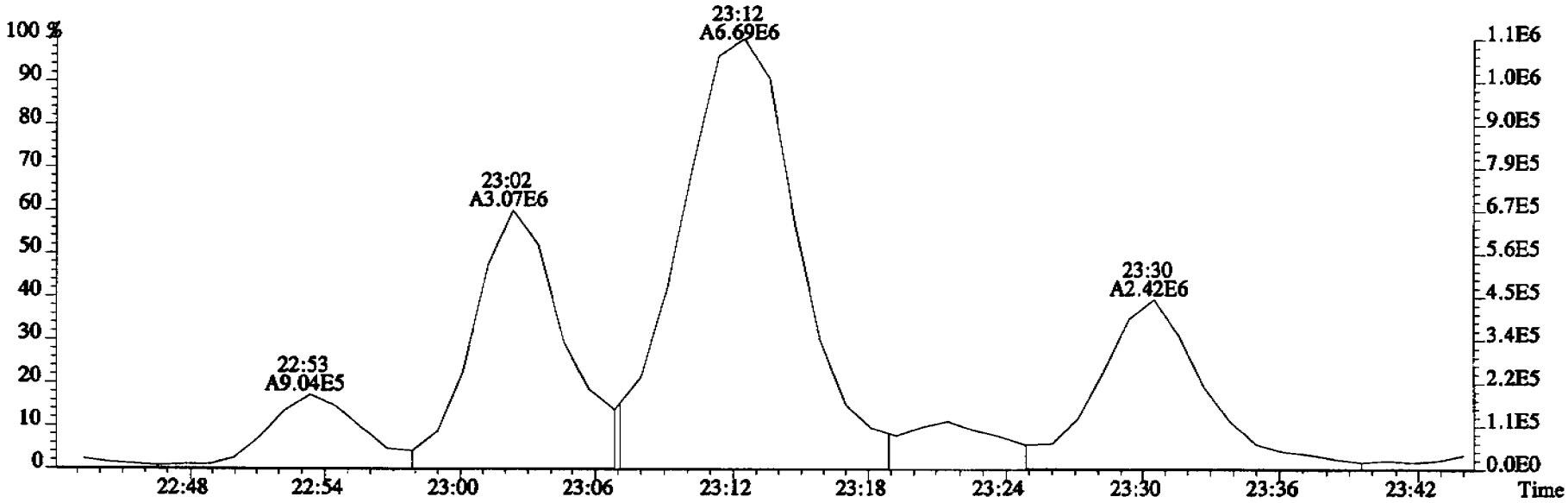
Date: 5/8/05


File:050507A1 #1-1173 Acq: 7-MAY-2005 20:53:05 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Alta Analytical Laboratory Text:26076_6749_002 RE73-05-58835 10.02g Exp:TCDF_DB225
303.9016 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
16:44 A4.63E6
17:09 A3.70E6
18:09 A3.65E6
18:44 A5.21E6
19:04 A1.73E6
19:43 A5.18E6
20:38 A4.55E6
20:51 A8.15E5
22:30 A3.65E6
23:23 A3.28E5
23:30 A1.94E6
23:52 A3.43E6
24:02 A6.80E6
24:27 A4.73E5
25:05 A5.25E6
26:41 A1.33E6
305.8987 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
16:44 A5.82E6
17:09 A4.65E6
18:11 A4.62E6
18:45 A6.60E6
19:05 A2.17E6
19:44 A6.62E6
20:38 A5.81E6
20:50 A1.20E6
22:30 A4.66E6
23:12 A7.28E6
24:02 A8.70E6
24:27 A5.96E5
25:05 A6.67E6
26:41 A1.65E6
315.9419 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
15:45 A1.95E7
19:44 A2.13E7
23:11 A1.81E7
317.9389 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
15:45 A2.31E7
19:44 A2.60E7
23:11 A2.15E7
100 %
Time
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
24:00
25:00
26:00
27:00
28:00

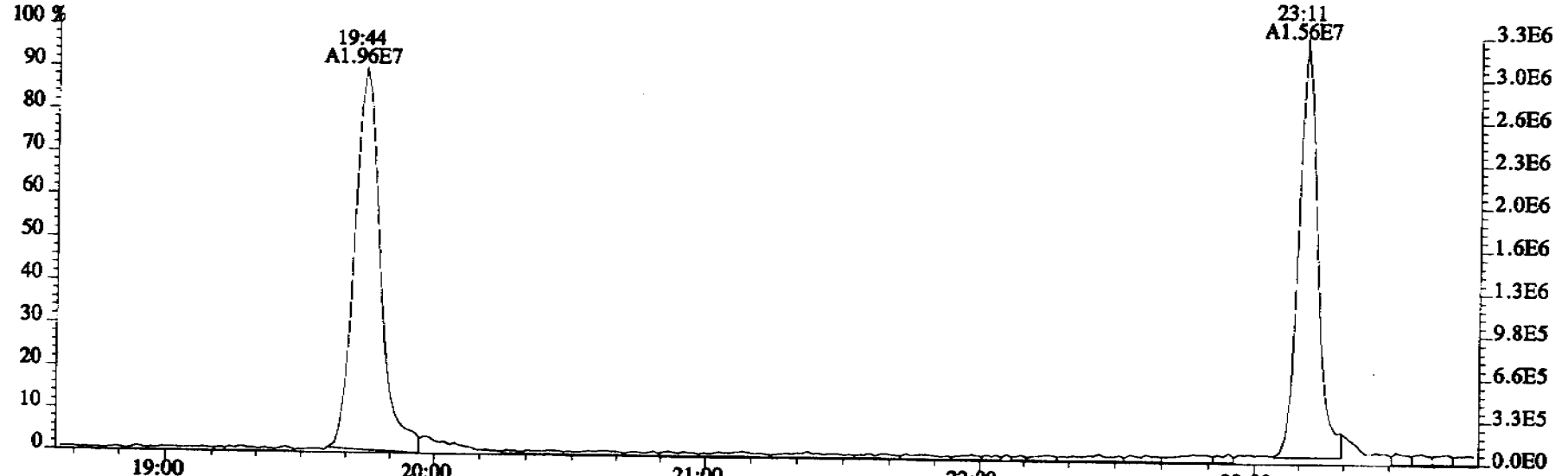
File:050507A1 #1-1173 Acq: 7-MAY-2005 20:53:05 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Alta Analytical Laboratory Text:26076_6749_002 RE73-05-58 Exp:TCDF_DB225
303.9016 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



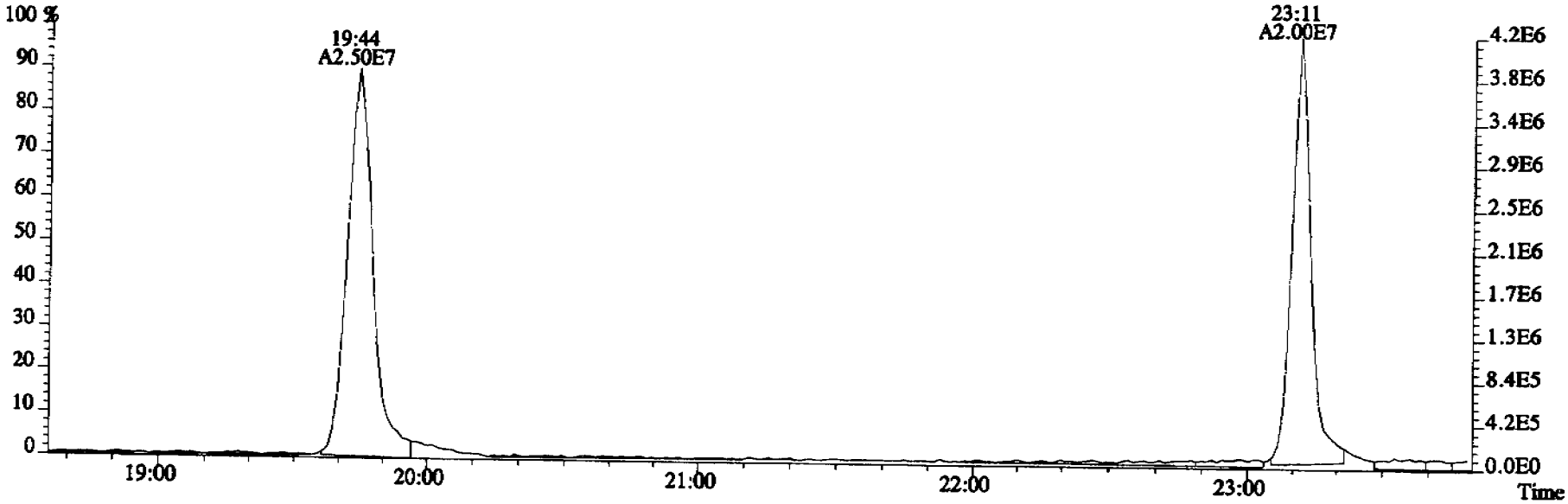
305.8987 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



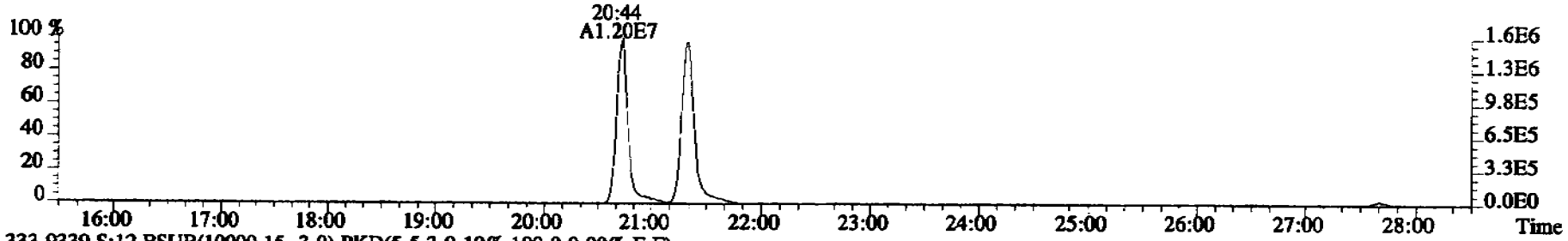
File:050507A1 #1-1173 Acq: 7-MAY-2005 20:53:05 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Alta Analytical Laboratory Text:26076_6749_002 RE73-05-58 Exp:TCDF_DB225
315.9419 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



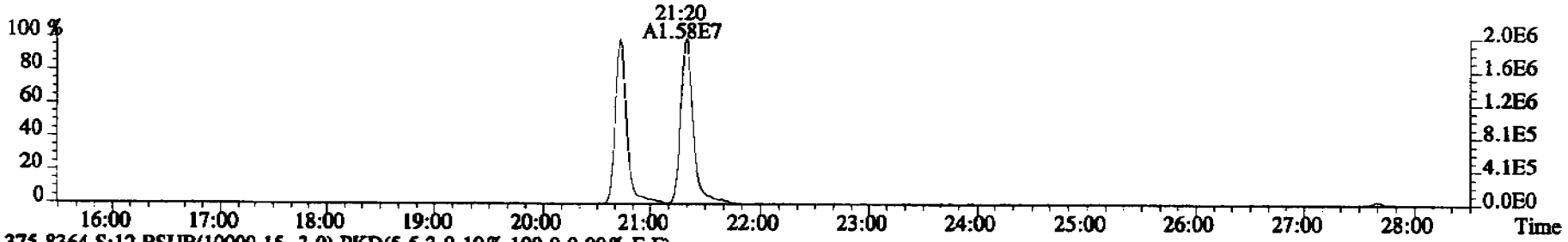
317.9389 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



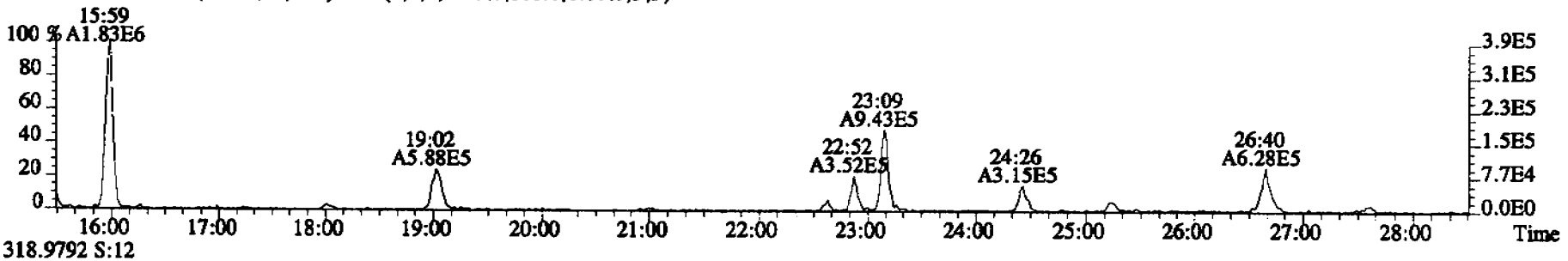
File:050507A1 #1-1173 Acq: 7-MAY-2005 20:53:05 GC EI+ Voltage SIR Autospec-UltimaE
Sample#12 File Text:Alta Analytical Laboratory Text:26076_6749_002 RE73-05-58835 10.02g Exp:TCDF_DB225
331.9368 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



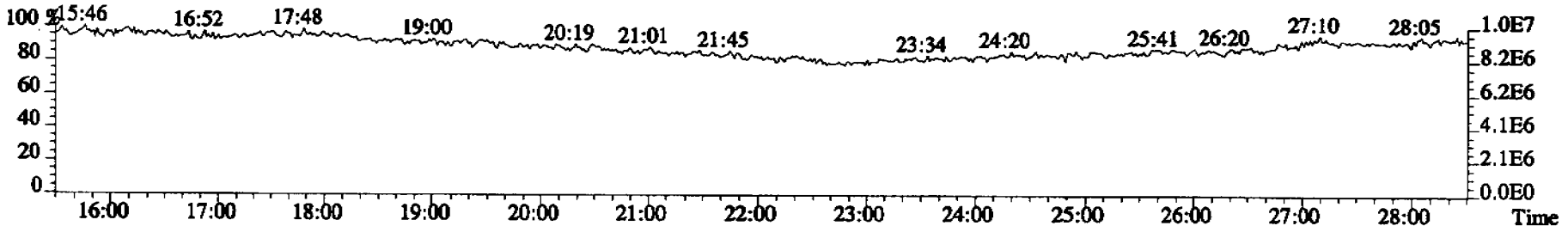
333.9339 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



375.8364 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



318.9792 S:12

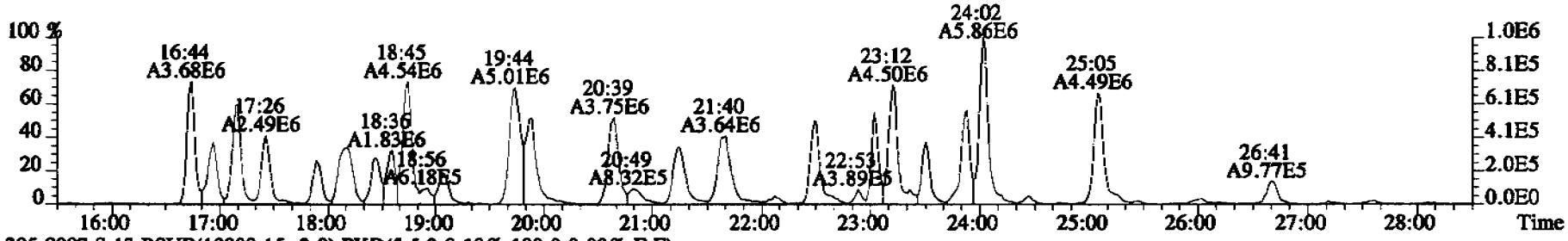


Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	4.59e+07	0.80 y	19:44	1.00	200.0	-
13C-2,3,7,8-TCDF	3.47e+07	0.81 y	23:11	1.04	145.5	72.8
2,3,7,8-TCDF	8.91e+05	0.80 y	23:12	1.07	47.92	

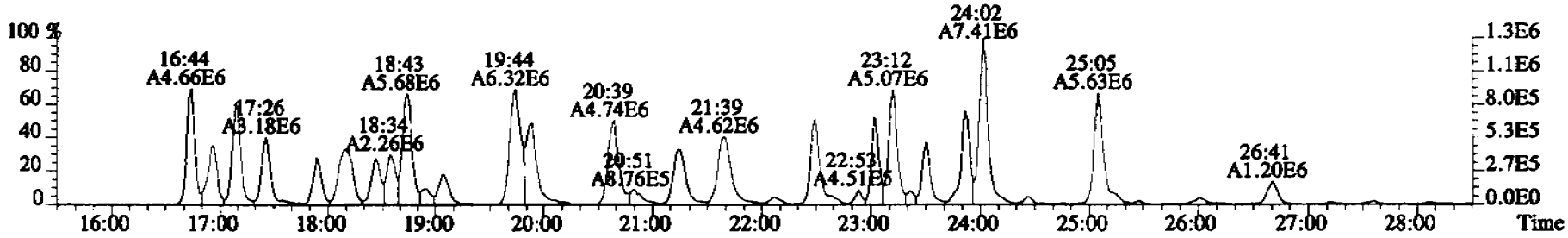
Analyst: [signature]

Date: 5/8/05

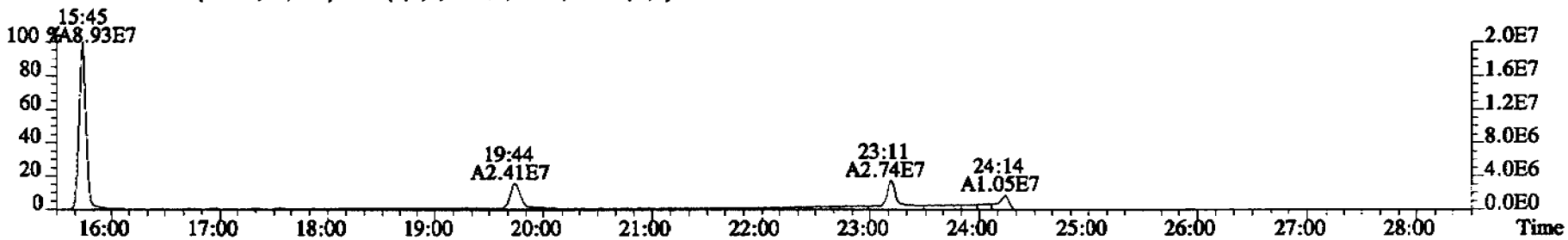
File:050507A1 #1-1173 Acq: 7-MAY-2005 21:34:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Alta Analytical Laboratory Text:26076_6749_003 RE73-05-58841 10.00 Exp:TCDF_DB225
303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



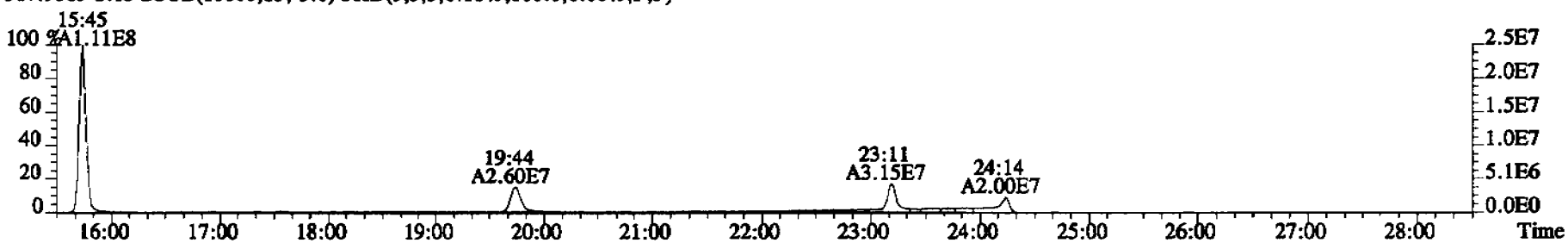
305.8987 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



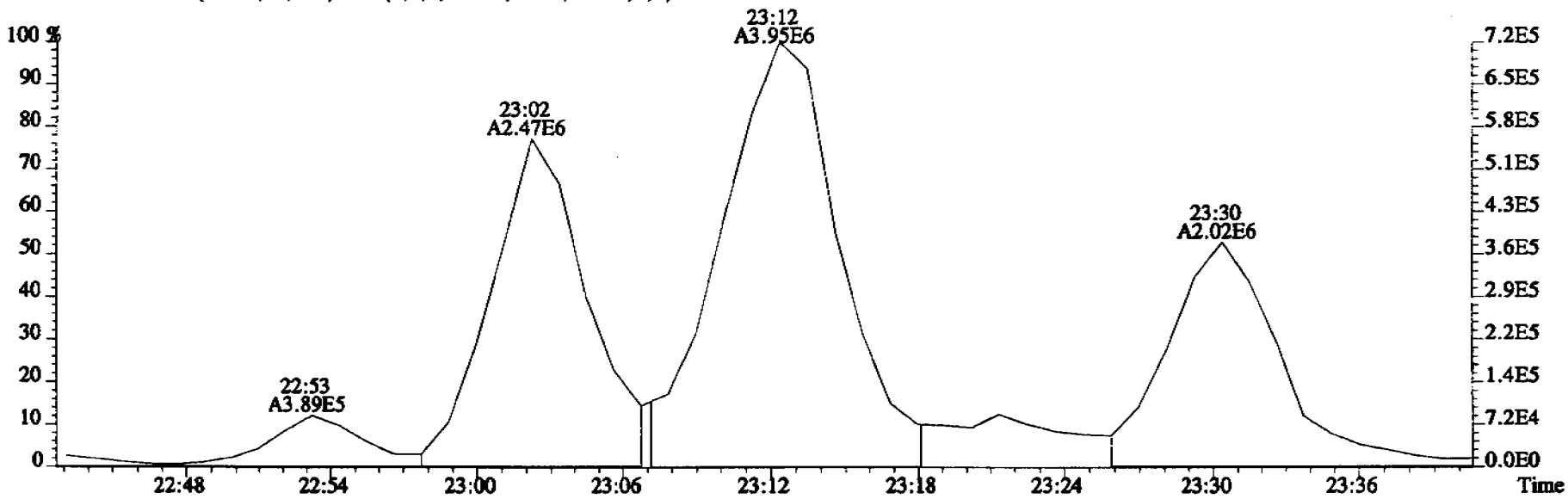
315.9419 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



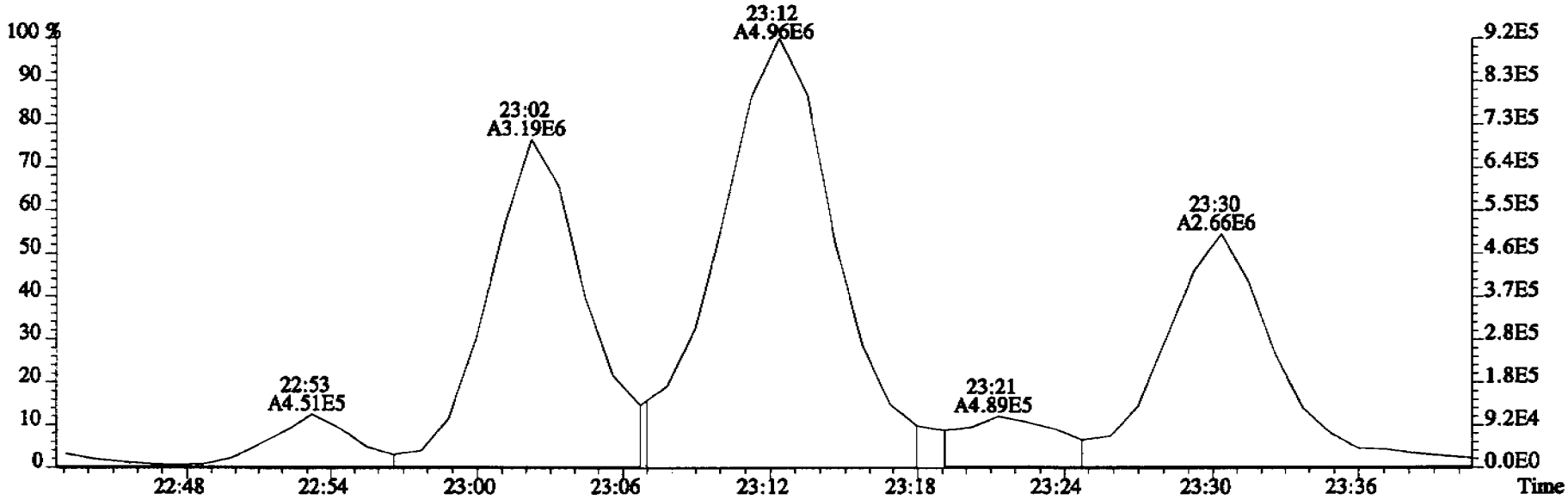
317.9389 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



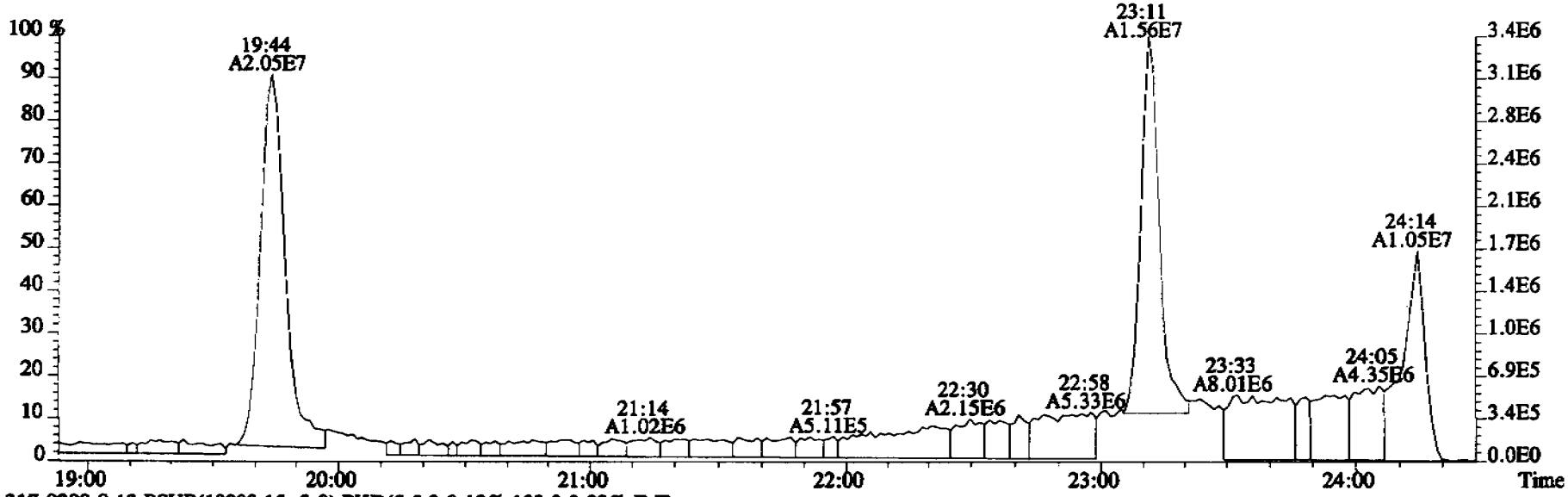
File:050507A1 #1-1173 Acq: 7-MAY-2005 21:34:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Alta Analytical Laboratory Text:26076_6749_003 RE73-05-58 Exp:TCDF_DB225
303.9016 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



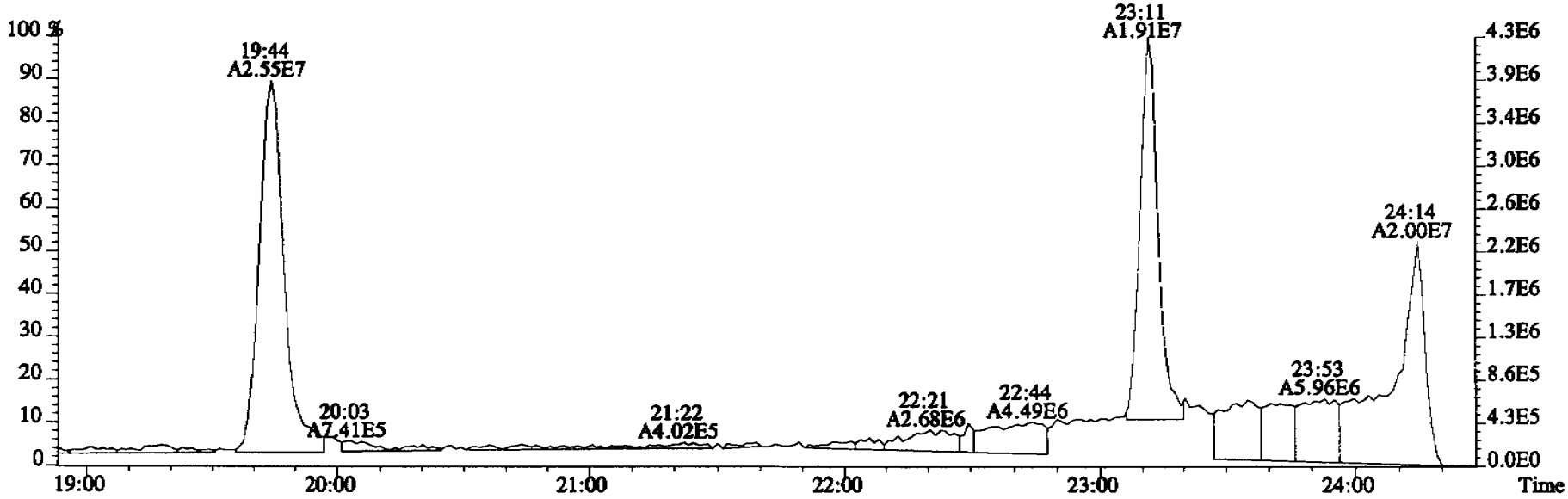
305.8987 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



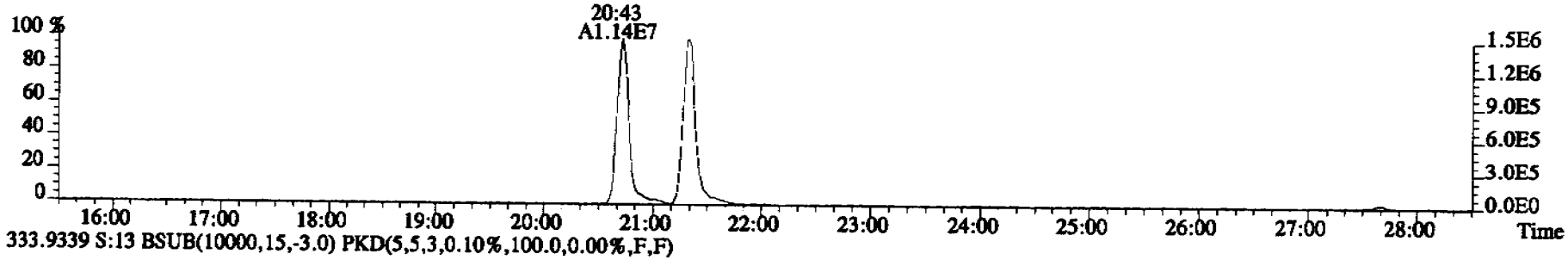
File:050507A1 #1-1173 Acq: 7-MAY-2005 21:34:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Alta Analytical Laboratory Text:26076_6749_003 RE73-05-58 Exp:TCDF_DB225
315.9419 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



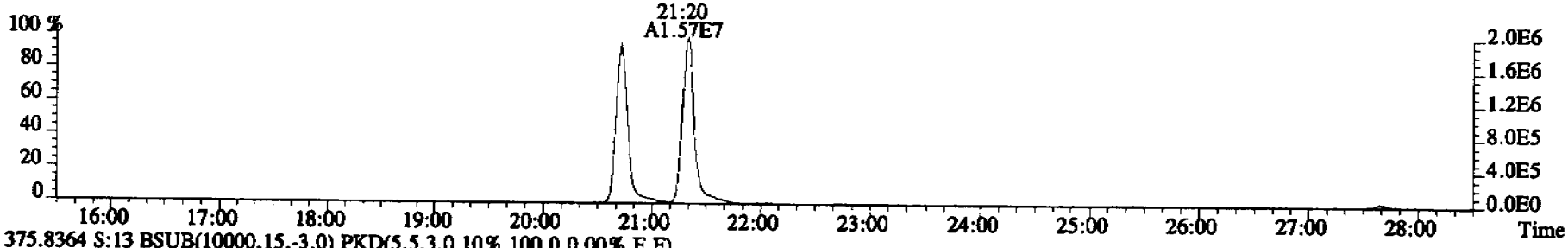
317.9389 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



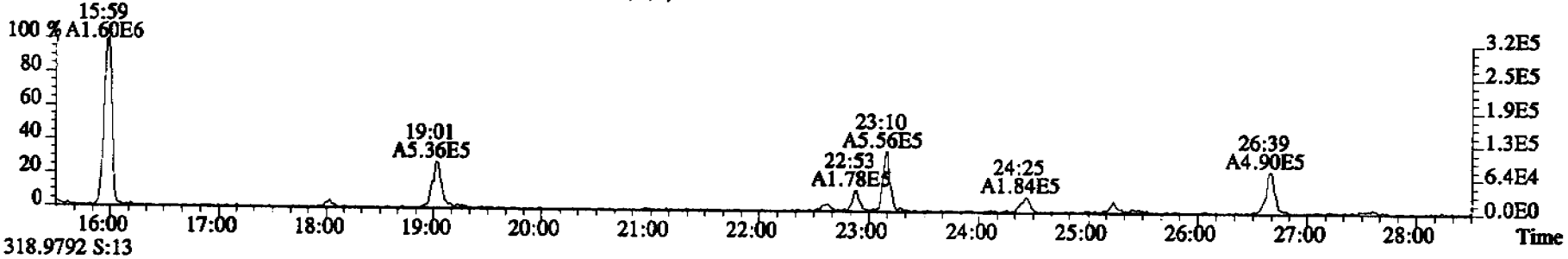
File:050507A1 #1-1173 Acq: 7-MAY-2005 21:34:01 GC EI+ Voltage SIR Autospec-UltimaE
Sample#13 File Text:Alta Analytical Laboratory Text:26076_6749_003 RE73-05-58841 10.00 Exp:TCDF_DB225
331.9368 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



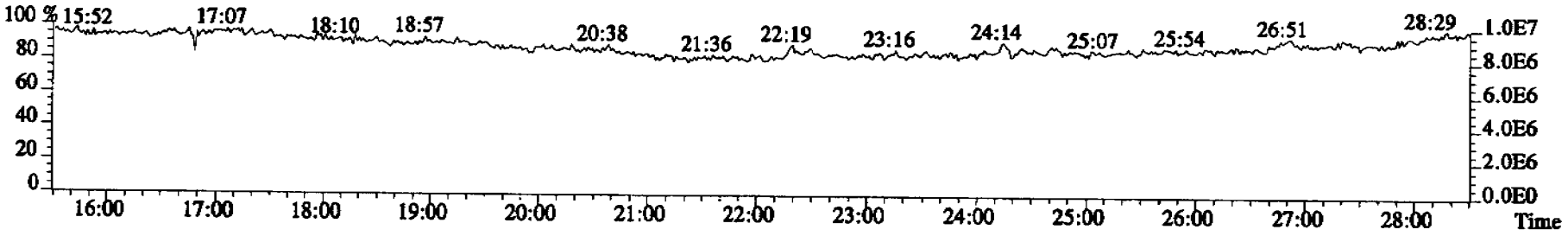
333.9339 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



375.8364 S:13 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



318.9792 S:13



ICAL

Initial Calibration RRF Summary (ICAL) Alta Analytical Laboratory

Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Inst. ID. VG-7

Data filename: 050423D1

			Samp# 1	Samp# 3	Samp# 4	Samp# 5	Samp# 6	Samp# 7
			10	0.25	0.50	2.0	40	200
Name	Mean RRF	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6
2,3,7,8-TCDD	1.06	5.82 %	1.03	1.16	1.02	1.05	1.10	0.98
1,2,3,7,8-PeCDD	0.99	8.04 %	0.92	1.14	0.94	0.97	1.00	0.97
1,2,3,4,7,8-HxCDD	1.11	9.07 %	1.03	1.31	1.03	1.11	1.10	1.10
1,2,3,6,7,8-HxCDD	1.07	9.72 %	0.99	1.27	1.02	1.02	1.09	1.04
1,2,3,7,8,9-HxCDD	1.15	9.12 %	1.06	1.36	1.15	1.11	1.12	1.11
1,2,3,4,6,7,8-HpCDD	1.05	8.74 %	0.97	1.22	0.99	1.00	1.06	1.06
OCDD	1.04	8.59 %	0.97	1.20	0.95	0.99	1.05	1.04
2,3,7,8-TCDF	1.05	6.85 %	1.04	1.19	1.03	1.03	1.07	0.98
1,2,3,7,8-PeCDF	0.95	8.78 %	0.93	1.12	0.90	0.93	0.95	0.89
2,3,4,7,8-PeCDF	1.08	8.28 %	1.03	1.26	1.02	1.06	1.07	1.02
1,2,3,4,7,8-HxCDF	1.19	8.86 %	1.13	1.39	1.11	1.18	1.18	1.13
1,2,3,6,7,8-HxCDF	1.22	8.33 %	1.15	1.41	1.15	1.17	1.24	1.17
2,3,4,6,7,8-HxCDF	1.20	9.45 %	1.12	1.42	1.14	1.18	1.22	1.14
1,2,3,7,8,9-HxCDF	1.13	7.96 %	1.07	1.30	1.06	1.08	1.14	1.10
1,2,3,4,6,7,8-HpCDF	1.38	9.14 %	1.29	1.62	1.28	1.35	1.38	1.33
1,2,3,4,7,8,9-HpCDF	1.23	7.80 %	1.18	1.39	1.12	1.22	1.28	1.17
OCDF	1.02	6.97 %	0.96	1.15	0.96	0.99	1.03	1.01
13C-2,3,7,8-TCDD	1.12	1.62 %	1.14	1.12	1.12	1.11	1.10	1.15
13C-1,2,3,7,8-PeCDD	0.89	2.30 %	0.87	0.88	0.87	0.90	0.88	0.92
13C-1,2,3,4,7,8-HxCDD	0.83	4.20 %	0.87	0.82	0.81	0.78	0.85	0.86
13C-1,2,3,6,7,8-HxCDD	1.00	2.32 %	1.01	0.97	0.98	1.00	1.03	0.98
13C-1,2,3,4,6,7,8-HpCDD	0.82	2.50 %	0.83	0.85	0.84	0.83	0.80	0.80
13C-OCDD	0.74	0.92 %	0.75	0.75	0.74	0.74	0.74	0.75
13C-2,3,7,8-TCDF	1.02	1.96 %	1.06	1.01	1.01	1.01	1.01	1.03
13C-1,2,3,7,8-PeCDF	0.90	2.77 %	0.91	0.89	0.90	0.91	0.87	0.95
13C-2,3,4,7,8-PeCDF	0.87	2.26 %	0.87	0.88	0.87	0.87	0.85	0.91
13C-1,2,3,4,7,8-HxCDF	1.27	3.03 %	1.23	1.21	1.27	1.28	1.29	1.31
13C-1,2,3,6,7,8-HxCDF	1.40	2.89 %	1.39	1.35	1.42	1.46	1.43	1.37
13C-2,3,4,6,7,8-HxCDF	1.29	2.35 %	1.28	1.26	1.30	1.28	1.35	1.30
13C-1,2,3,7,8,9-HxCDF	1.12	2.29 %	1.07	1.14	1.13	1.13	1.11	1.14
13C-1,2,3,4,6,7,8-HpCDF	1.01	1.51 %	0.98	1.02	1.03	1.01	1.01	1.02
13C-1,2,3,4,7,8,9-HpCDF	0.88	2.02 %	0.85	0.89	0.90	0.89	0.86	0.89
13C-OCDF	0.94	2.40 %	0.90	0.96	0.93	0.93	0.93	0.97
37Cl-2,3,7,8-TCDD	0.62	7.99 %	0.55	0.66	0.63	0.58	0.61	0.69
13C-1,2,3,4-TCDD	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-1,2,3,4-TCDF	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00
13C-1,2,3,7,8,9-HxCDD	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00	1.00

4/26/05

4/26/05

Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Inst. ID. VG-7

Data filename: 050423D1

			Samp# 1	Samp# 3	Samp# 4	Samp# 5	Samp# 6	Samp# 7
			10	0.25	0.50	2.0	40	200
Name	Mean RRF	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6
Total Tetra-Dioxins	1.06	5.82 %	1.03	1.16	1.02	1.05	1.10	0.98
TCDD EMPC	1.06	5.82 %	1.03	1.16	1.02	1.05	1.10	0.98
Total Penta-Dioxins	0.99	8.04 %	0.92	1.14	0.94	0.97	1.00	0.97
PeCDD EMPC	0.99	8.04 %	0.92	1.14	0.94	0.97	1.00	0.97
Total Hexa-Dioxins	1.11	9.14 %	1.03	1.31	1.07	1.08	1.10	1.08
HxCDD EMPC	1.11	9.14 %	1.03	1.31	1.07	1.08	1.10	1.08
Total Hepta-Dioxins	1.05	8.74 %	0.97	1.22	0.99	1.00	1.06	1.06
HpCDD EMPC	1.05	8.74 %	0.97	1.22	0.99	1.00	1.06	1.06
Total Tetra-Furans	1.05	6.85 %	1.04	1.19	1.03	1.03	1.07	0.98
TCDF EMPC	1.05	6.85 %	1.04	1.19	1.03	1.03	1.07	0.98
1st Func. Penta-Furans	1.01	8.54 %	0.98	1.19	0.96	0.99	1.01	0.95
1st Func. PeCDF EMPC	1.01	8.54 %	0.98	1.19	0.96	0.99	1.01	0.95
Total Penta-Furans	1.01	8.54 %	0.98	1.19	0.96	0.99	1.01	0.95
PeCDF EMPC	1.01	8.54 %	0.98	1.19	0.96	0.99	1.01	0.95
Total Hexa-Furans	1.19	8.60 %	1.12	1.38	1.12	1.16	1.20	1.14
HxCDF EMPC	1.19	8.60 %	1.12	1.38	1.12	1.16	1.20	1.14
Total Hepta-Furans	1.31	8.46 %	1.24	1.51	1.20	1.29	1.33	1.26
HpCDF EMPC	1.31	8.46 %	1.24	1.51	1.20	1.29	1.33	1.26

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.: CCAL ID: ST050423D1-1

Contract No.: SAS No.:

Initial Calibration Date: 4/23/04

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050423D1 S#1 Analysis Date: 23-APR-05 Time: 11:22:51

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	y	9.78	7.8 - 12.9
						8.2 - 12.3 (4)
1,2,3,7,8-PeCDD	M+2/M+4	0.63	1.32-1.78	y	46.3	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	46.2	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	46.2	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05-1.43	y	46.1	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	y	46.4	43.0 - 58.0
OCDD	M+2/M+4	0.89	0.76-1.02	y	93.9	79.0 - 126.0
2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	9.83	8.4 - 12.0
						8.6 - 11.6 (4)
1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	49.0	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	48.0	41.0 - 61.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.27	1.05-1.43	y	47.5	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	47.2	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	46.5	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.27	1.05-1.43	y	47.6	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.03	0.88-1.20	y	47.1	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.02	0.88-1.20	y	48.1	43.0 - 58.0
OCDF	M+2/M+4	0.91	0.76-1.02	y	94.3	63.0 - 159.0

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) Contract-required concentration range as specified in Table 6a, Method 1613, for tetras only.

Analyst: _____

Date: 4/26/05

FORM 4B

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4/23/04

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050423D1 S#1 Analysis Date: 23-APR-05 Time: 11:22:51

LABELED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	Pass	CONC. FOUND	CONC. RANGE (3) (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	y	101	82.0 - 121.0
						85.0 - 117.0 (5)
13C-1,2,3,7,8-PeCDD	M+2/M+4	0.63	1.32-1.78	y	98.2	62.0 - 160.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.30	1.05-1.43	y	104	85.0 - 117.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.22	1.05-1.43	y	102	85.0 - 118.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	101	72.0 - 138.0
13C-OCDD	M+2/M+4	0.90	0.76-1.02	y	202	96.0 - 415.0
13C-2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	y	104	71.0 - 140.0
						76.0 - 131.0 (5)
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	101	76.0 - 130.0
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	99.4	77.0 - 130.0
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	97.1	76.0 - 131.0
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	98.7	70.0 - 143.0
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	98.7	73.0 - 137.0
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	95.8	74.0 - 135.0
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37-0.51	y	97.3	78.0 - 129.0
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37-0.51	y	97.1	77.0 - 129.0
13C-OCDF	M+2/M+4	0.89	0.76-1.02	y	193	96.0 - 415.0
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					8.93	7.9 - 12.7
						8.3 - 12.1 (5)

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range, as specified in Table 6, Method 1613.

(4) No ion abundance ratio; report concentration found.

(5) Contract-required concentration range, as specified in Table 6a, Method 1613, for tetras only.

Analyst: _____

Date: 4/26/05

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: VG-7 Initial Calibration Date: 4/23/04

RT Window Data Filename: 050423D1 S#1 Analysis Date: 23-APR-05 Time: 11:22:51

DB-5 IS Data Filename: 050423D1 S#1 Analysis Date: 23-APR-05 Time: 11:22:51

DB_225 IS Data Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:23	1,3,6,8-TCDF (F)	21:09
1,2,8,9-TCDD (L)	27:58	1,2,8,9-TCDF (L)	28:07
1,2,4,7,9-PeCDD (F)	29:37	1,3,4,6,8-PeCDF (F)	28:02
1,2,3,8,9-PeCDD (L)	32:06	1,2,3,8,9-PeCDF (L)	32:21
1,2,4,6,7,9-HxCDD (F)	33:31	1,2,3,4,6,8-HxCDF (F)	32:59
1,2,3,7,8,9-HxCDD (L)	35:29	1,2,3,7,8,9-HxCDF (L)	35:52
1,2,3,4,6,7,9-HpCDD (F)	38:06	1,2,3,4,6,7,8-HpCDF (F)	37:42
1,2,3,4,6,7,8-HpCDD (L)	38:60	1,2,3,4,7,8,9-HpCDF (L)	39:33

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5).

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

COMPARED PEAKS (1)	% VALLEY HEIGHT BETWEEN
	<25%

(1) To meet contract requirements, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: [signature]

Date: 4/26/05

FORM 6A

PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4/23/04

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050423D1 S#1 Analysis Date: 23-APR-05 Time: 11:22:51

Compounds Using 13C-1234-TCDD as RT Internal Standard

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.000	0.999-1.002
LABELED COMPOUNDS			
13C-2,3,7,8-TCDF	13C-1,2,3,4-TCDD	0.993	0.923-1.103
13C-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.024	0.976-1.043
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.024	0.989-1.052
13C-1,2,3,7,8-PeCDF	13C-1,2,3,4-TCDD	1.155	1.000-1.425
13C-2,3,4,7,8-PeCDF	13C-1,2,3,4-TCDD	1.190	1.011-1.526
13C-1,2,3,7,8-PeCDD	13C-1,2,3,4-TCDD	1.200	1.000-1.567

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613. 10/94

Analyst: [signature]

Date: 4/26/05

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4/23/04

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050423D1 S#1 Analysis Date: 23-APR-05 Time: 11:22:51

Compounds Using 13C-123789-HxCDD as Internal Standard

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.001	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.001	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.000	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.000	0.999-1.001
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.001	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.000	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.009	1.000-1.019
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.000	0.999-1.001
OCDD	13C-OCDD	1.000	0.999-1.001
OCDF	13C-OCDD	1.006	0.999-1.008
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDF	13C-1,2,3,7,8,9-HxCDD	0.963	0.944-0.970
13C-1,2,3,6,7,8-HxCDF	13C-1,2,3,7,8,9-HxCDD	0.966	0.949-0.975
13C-2,3,4,6,7,8-HxCDF	13C-1,2,3,7,8,9-HxCDD	0.984	0.959-1.021
13C-1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDD	1.011	0.977-1.047
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.988	0.977-1.000
13C-1,2,3,6,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.991	0.981-1.003
13C-1,2,3,4,6,7,8-HpCDF	13C-1,2,3,7,8,9-HxCDD	1.062	1.043-1.085
13C-1,2,3,4,6,7,8-HpCDD	13C-1,2,3,7,8,9-HxCDD	1.099	1.086-1.110
13C-1,2,3,4,7,8,9-HpCDF	13C-1,2,3,7,8,9-HxCDD	1.115	1.057-1.151
13C-OCDD	13C-1,2,3,7,8,9-HxCDD	1.192	1.032-1.311
13C-OCDF	13C-1,2,3,7,8,9-HxCDD	1.198	1.032-1.311

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613. 10/94

Analyst: _____

Date: 4/26/05

EPA METHOD 8290

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.: CCAL ID: ST050423D1-1

Contract No.: SAS No.:

Initial Calibration Date: 4/23/04

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050423D1 S#1 Analysis Date: 23-APR-05 Time: 11:22:51

	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	y	9.78	8.00 - 12.0
1,2,3,7,8-PeCDD	M+2/M+4	0.63	1.32-1.78	y	46.3	40.0 - 60.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	46.2	40.0 - 60.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	46.2	40.0 - 60.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05-1.43	y	46.1	40.0 - 60.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	y	46.4	40.0 - 60.0
OCDD	M+2/M+4	0.89	0.76-1.02	y	93.9	80.0 - 120
2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	9.83	8.00 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	49.0	40.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	48.0	40.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.27	1.05-1.43	y	47.5	40.0 - 60.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	47.2	40.0 - 60.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	46.5	40.0 - 60.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.27	1.05-1.43	y	47.6	40.0 - 60.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.03	0.88-1.20	y	47.1	40.0 - 60.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.02	0.88-1.20	y	48.1	40.0 - 60.0
OCDF	M+2/M+4	0.91	0.76-1.02	y	94.3	80.0 - 120

Analyst: _____

Date: 4/26/05

EPA METHOD 8290

PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 4/23/04

Instrument ID: VG-7 GC Column ID: DB-5

VER Data Filename: 050423D1 S#1 Analysis Date: 23-APR-05 Time: 11:22:51

LABELED COMPOUNDS	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	Pass	CONC. FOUND	CONC. RANGE (ng/mL)
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	y	101	70.0 - 130
13C-1,2,3,7,8-PeCDD	M+2/M+4	0.63	1.32-1.78	y	98.2	70.0 - 130
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.30	1.05-1.43	y	104	70.0 - 130
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.22	1.05-1.43	y	102	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	101	70.0 - 130
13C-OCDD	M+2/M+4	0.90	0.76-1.02	y	202	140 - 260
13C-2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	y	104	70.0 - 130
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	101	70.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	99.4	70.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	97.1	70.0 - 130
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	98.7	70.0 - 130
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	98.7	70.0 - 130
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	95.8	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37-0.51	y	97.3	70.0 - 130
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37-0.51	y	97.1	70.0 - 130
13C-OCDF	M+2/M+4	0.89	0.76-1.02	y	193	140 - 260
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD					8.93	7.00 - 13.0

Analyst: [signature]

Date: 4/26/05

Client ID: 1613 CS3 050420H Filename: 050423D1 S:1 Acq:23-APR-05 11:22:51 ConCal: ST050423D1-1
Lab ID: ST050423D1-1 GC Column ID: DB-5 ICal: 1613vg7-4-23-05 wt/vol: 1.000 EndCAL: ST050423D1-8

	Name	Resp	RA	RRF	RT	Conc	Qual	noise	Pac	DL
	2,3,7,8-TCDD	1.30e+07	0.78 y	1.06	27:04	9.78		*	2.5	*
	1,2,3,7,8-PeCDD	4.42e+07	0.63 y	0.99	31:44	46.3		*	2.5	*
	1,2,3,4,7,8-HxCDD	3.44e+07	1.25 y	1.11	35:04	46.2		*	2.5	*
	1,2,3,6,7,8-HxCDD	3.87e+07	1.25 y	1.07	35:10	46.2		*	2.5	*
	1,2,3,7,8,9-HxCDD	3.86e+07	1.27 y	1.15	35:29	46.1		*	2.5	*
	1,2,3,4,6,7,8-HpCDD	3.11e+07	1.05 y	1.05	38:60	46.4		*	2.5	*
	OCDD	5.66e+07	0.89 y	1.04	42:17	93.9		*	2.5	*
	2,3,7,8-TCDF	1.62e+07	0.78 y	1.05	26:15	9.83		*	2.5	*
	1,2,3,7,8-PeCDF	6.27e+07	1.57 y	0.95	30:31	49.0		*	2.5	*
	2,3,4,7,8-PeCDF	6.64e+07	1.56 y	1.08	31:27	48.0		*	2.5	*
	1,2,3,4,7,8-HxCDF	5.34e+07	1.27 y	1.19	34:11	47.5		*	2.5	*
	1,2,3,6,7,8-HxCDF	6.15e+07	1.23 y	1.22	34:18	47.2		*	2.5	*
	2,3,4,6,7,8-HxCDF	5.49e+07	1.23 y	1.20	34:54	46.5		*	2.5	*
	1,2,3,7,8,9-HxCDF	4.44e+07	1.27 y	1.13	35:52	47.6		*	2.5	*
	1,2,3,4,6,7,8-HpCDF	4.92e+07	1.03 y	1.38	37:42	47.1		*	2.5	*
	1,2,3,4,7,8,9-HpCDF	3.89e+07	1.02 y	1.23	39:33	48.1		*	2.5	*
	OCDF	6.71e+07	0.91 y	1.02	42:31	94.3		*	2.5	*
IS	13C-2,3,7,8-TCDD	1.26e+08	0.78 y	1.12	27:03	101				
IS	13C-1,2,3,7,8-PeCDD	9.64e+07	0.63 y	0.89	31:43	98.2				
IS	13C-1,2,3,4,7,8-HxCDD	6.69e+07	1.30 y	0.83	35:03	104				
IS	13C-1,2,3,6,7,8-HxCDD	7.83e+07	1.22 y	1.00	35:10	102				
IS	13C-1,2,3,4,6,7,8-HpCDD	6.40e+07	1.06 y	0.82	38:59	101				
IS	13C-OCDD	1.16e+08	0.90 y	0.74	42:16	202				
IS	13C-2,3,7,8-TCDF	1.56e+08	0.77 y	1.02	26:14	104				
IS	13C-1,2,3,7,8-PeCDF	1.34e+08	1.57 y	0.90	30:30	101				
IS	13C-2,3,4,7,8-PeCDF	1.28e+08	1.58 y	0.87	31:27	99.4				
IS	13C-1,2,3,4,7,8-HxCDF	9.49e+07	0.52 y	1.27	34:09	97.1				
IS	13C-1,2,3,6,7,8-HxCDF	1.07e+08	0.52 y	1.40	34:17	98.7				
IS	13C-2,3,4,6,7,8-HxCDF	9.84e+07	0.52 y	1.29	34:54	98.7				
IS	13C-1,2,3,7,8,9-HxCDF	8.28e+07	0.51 y	1.12	35:51	95.8				
IS	13C-1,2,3,4,6,7,8-HpCDF	7.60e+07	0.45 y	1.01	37:41	97.3				
IS	13C-1,2,3,4,7,8,9-HpCDF	6.59e+07	0.44 y	0.88	39:32	97.1				
IS	13C-OCDF	1.40e+08	0.89 y	0.94	42:30	193				
C/Up	37Cl-2,3,7,8-TCDD	6.15e+06		0.62	27:04	8.93				
RS/RT	13C-1,2,3,4-TCDD	1.11e+08	0.80 y	1.00	26:25	100				
RS	13C-1,2,3,4-TCDF	1.48e+08	0.78 y	1.00	24:53	100				
RS/RT	13C-1,2,3,7,8,9-HxCDD	7.72e+07	1.25 y	1.00	35:28	100				

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	46.1	46.4		*	*
Total Penta-Dioxins	131	132		*	*
Total Hexa-Dioxins	190	190		*	*
Total Hepta-Dioxins	92.4	93.3		*	*
Total Tetra-Furans	28.1	28.5		*	*
Total Penta-Furans	187	187		*	*
Total Hexa-Furans	238	239		*	*
Total Hepta-Furans	95.5	95.9		*	*

	Rec	Qual
IS	101	
IS	98.2	
IS	104	
IS	102	
IS	101	
IS	101	
IS	104	
IS	101	
IS	99.4	
IS	97.1	
IS	98.7	
IS	98.7	
IS	95.8	
IS	97.3	
IS	97.1	
IS	96.4	
C/Up	22.3	

Intergrations by Analyst: _____

Date: 4/26/05

Filename: 050423D1 S: 1 Acquired: 23-APR-05 11:22:51
Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Results:
Sample text: ST050423D1-1 1613 CS3 050420H

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk	2,3,7,8-TCDD	10.00	1.30e+07	0.78 y	27:04	-	1.03
2	Unk	1,2,3,7,8-PeCDD	50.00	4.42e+07	0.63 y	31:44	-	0.92
3	Unk	1,2,3,4,7,8-HxCDD	50.00	3.44e+07	1.25 y	35:04	-	1.03
4	Unk	1,2,3,6,7,8-HxCDD	50.00	3.87e+07	1.25 y	35:10	-	0.99
5	Unk	1,2,3,7,8,9-HxCDD	50.00	3.86e+07	1.27 y	35:29	-	1.06
6	Unk	1,2,3,4,6,7,8-HpCDD	50.00	3.11e+07	1.05 y	38:60	-	0.97
7	Unk	OCDD	100.00	5.66e+07	0.89 y	42:17	-	0.97
8	Unk	2,3,7,8-TCDF	10.00	1.62e+07	0.78 y	26:15	-	1.04
9	Unk	1,2,3,7,8-PeCDF	50.00	6.27e+07	1.57 y	30:31	-	0.93
10	Unk	2,3,4,7,8-PeCDF	50.00	6.64e+07	1.56 y	31:27	-	1.03
11	Unk	1,2,3,4,7,8-HxCDF	50.00	5.34e+07	1.27 y	34:11	-	1.13
12	Unk	1,2,3,6,7,8-HxCDF	50.00	6.15e+07	1.23 y	34:18	-	1.15
13	Unk	2,3,4,6,7,8-HxCDF	50.00	5.49e+07	1.23 y	34:54	-	1.12
14	Unk	1,2,3,7,8,9-HxCDF	50.00	4.44e+07	1.27 y	35:52	-	1.07
15	Unk	1,2,3,4,6,7,8-HpCDF	50.00	4.92e+07	1.03 y	37:42	-	1.29
16	Unk	1,2,3,4,7,8,9-HpCDF	50.00	3.89e+07	1.02 y	39:33	-	1.18
17	Unk	OCDF	100.00	6.71e+07	0.91 y	42:31	-	0.96
36	IS	13C-2,3,7,8-TCDD	100.00	1.26e+08	0.78 y	27:03	-	1.14
37	IS	13C-1,2,3,7,8-PeCDD	100.00	9.64e+07	0.63 y	31:43	-	0.87
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	6.69e+07	1.30 y	35:03	-	0.87
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	7.83e+07	1.22 y	35:10	-	1.01
40	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	6.40e+07	1.06 y	38:59	-	0.83
41	IS	13C-OCDD	200.00	1.16e+08	0.90 y	42:16	-	0.75
42	IS	13C-2,3,7,8-TCDF	100.00	1.56e+08	0.77 y	26:14	-	1.06
43	IS	13C-1,2,3,7,8-PeCDF	100.00	1.34e+08	1.57 y	30:30	-	0.91
44	IS	13C-2,3,4,7,8-PeCDF	100.00	1.28e+08	1.58 y	31:27	-	0.87
45	IS	13C-1,2,3,4,7,8-HxCDF	100.00	9.49e+07	0.52 y	34:09	-	1.23
46	IS	13C-1,2,3,6,7,8-HxCDF	100.00	1.07e+08	0.52 y	34:17	-	1.39
47	IS	13C-2,3,4,6,7,8-HxCDF	100.00	9.84e+07	0.52 y	34:54	-	1.28
48	IS	13C-1,2,3,7,8,9-HxCDF	100.00	8.28e+07	0.51 y	35:51	-	1.07
49	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	7.60e+07	0.45 y	37:41	-	0.98
50	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	6.59e+07	0.44 y	39:32	-	0.85
51	IS	13C-OCDF	200.00	1.40e+08	0.89 y	42:30	-	0.90
52	C/Up	37Cl-2,3,7,8-TCDD	10.00	6.15e+06		27:04	-	0.55
53	RS/RT	13C-1,2,3,4-TCDD	100.00	1.11e+08	0.80 y	26:25	-	1.00
54	RS	13C-1,2,3,4-TCDF	100.00	1.48e+08	0.78 y	24:53	-	1.00
55	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	7.72e+07	1.25 y	35:28	-	1.00

Filename: 050423D1 S: 1 Acquired: 23-APR-05 11:22:51
Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Results:
Sample text: ST050423D1-1 1613 CS3 050420H

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
18	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.03
19	Tot	TCDD EMPC	0.00	-	- n	-	-	1.03
20	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.92
21	Tot	PeCDD EMPC	0.00	-	- n	-	-	0.92
22	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	1.03
23	Tot	HxCDD EMPC	0.00	-	- n	-	-	1.03
24	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	0.97
25	Tot	HpCDD EMPC	0.00	-	- n	-	-	0.97
26	Tot	Total Tetra-Furans	0.00	-	- n	-	-	1.04
27	Tot	TCDF EMPC	0.00	-	- n	-	-	1.04
28	Tot	1st Func. Penta-Furans	0.00	-	- n	-	-	0.98
29	Tot	1st Func. PeCDF EMPC	0.00	-	- n	-	-	0.98
30	Tot	Total Penta-Furans	0.00	-	- n	-	-	0.98
31	Tot	PeCDF EMPC	0.00	-	- n	-	-	0.98
32	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.12
33	Tot	HxCDF EMPC	0.00	-	- n	-	-	1.12
34	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.24
35	Tot	HpCDF EMPC	0.00	-	- n	-	-	1.24

Filename: 050423D1 S: 3 Acquired: 23-APR-05 13:00:26
Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Results:
Sample text: ST050423D1-2 1613 CS0 050420E

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk	2,3,7,8-TCDD	0.25	4.23e+05	0.79 y	27:04	-	1.16
2	Unk	1,2,3,7,8-PeCDD	1.25	1.63e+06	0.61 y	31:44	-	1.14
3	Unk	1,2,3,4,7,8-HxCDD	1.25	1.33e+06	1.27 y	35:05	-	1.31
4	Unk	1,2,3,6,7,8-HxCDD	1.25	1.53e+06	1.26 y	35:11	-	1.27
5	Unk	1,2,3,7,8,9-HxCDD	1.25	1.51e+06	1.28 y	35:29	-	1.36
6	Unk	1,2,3,4,6,7,8-HpCDD	1.25	1.29e+06	0.99 y	39:00	-	1.22
7	Unk	OCDD	2.50	2.22e+06	0.83 y	42:18	-	1.20
8	Unk	2,3,7,8-TCDF	0.25	5.47e+05	0.77 y	26:15	-	1.19
9	Unk	1,2,3,7,8-PeCDF	1.25	2.26e+06	1.57 y	30:32	-	1.12
10	Unk	2,3,4,7,8-PeCDF	1.25	2.52e+06	1.52 y	31:28	-	1.26
11	Unk	1,2,3,4,7,8-HxCDF	1.25	2.09e+06	1.26 y	34:11	-	1.39
12	Unk	1,2,3,6,7,8-HxCDF	1.25	2.37e+06	1.27 y	34:18	-	1.41
13	Unk	2,3,4,6,7,8-HxCDF	1.25	2.21e+06	1.29 y	34:54	-	1.42
14	Unk	1,2,3,7,8,9-HxCDF	1.25	1.84e+06	1.22 y	35:53	-	1.30
15	Unk	1,2,3,4,6,7,8-HpCDF	1.25	2.05e+06	1.08 y	37:43	-	1.62
16	Unk	1,2,3,4,7,8,9-HpCDF	1.25	1.53e+06	1.08 y	39:33	-	1.39
17	Unk	OCDF	2.50	2.73e+06	0.86 y	42:31	-	1.15
36	IS	13C-2,3,7,8-TCDD	100.00	1.46e+08	0.79 y	27:03	-	1.12
37	IS	13C-1,2,3,7,8-PeCDD	100.00	1.14e+08	0.62 y	31:43	-	0.88
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	8.13e+07	1.27 y	35:04	-	0.82
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	9.61e+07	1.26 y	35:10	-	0.97
40	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	8.44e+07	1.06 y	38:60	-	0.85
41	IS	13C-OCDD	200.00	1.48e+08	0.89 y	42:17	-	0.75
42	IS	13C-2,3,7,8-TCDF	100.00	1.84e+08	0.78 y	26:14	-	1.01
43	IS	13C-1,2,3,7,8-PeCDF	100.00	1.62e+08	1.59 y	30:31	-	0.89
44	IS	13C-2,3,4,7,8-PeCDF	100.00	1.61e+08	1.58 y	31:27	-	0.88
45	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.20e+08	0.51 y	34:09	-	1.21
46	IS	13C-1,2,3,6,7,8-HxCDF	100.00	1.34e+08	0.54 y	34:17	-	1.35
47	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.24e+08	0.53 y	34:54	-	1.26
48	IS	13C-1,2,3,7,8,9-HxCDF	100.00	1.13e+08	0.52 y	35:52	-	1.14
49	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	1.01e+08	0.45 y	37:42	-	1.02
50	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	8.82e+07	0.45 y	39:33	-	0.89
51	IS	13C-OCDF	200.00	1.90e+08	0.89 y	42:30	-	0.96
52	C/Up	37Cl-2,3,7,8-TCDD	0.25	2.16e+05		27:04	-	0.66
53	RS/RT	13C-1,2,3,4-TCDD	100.00	1.31e+08	0.80 y	26:26	-	1.00
54	RS	13C-1,2,3,4-TCDF	100.00	1.83e+08	0.79 y	24:54	-	1.00
55	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	9.90e+07	1.27 y	35:28	-	1.00

Filename: 050423D1 S: 3 Acquired: 23-APR-05 13:00:26
Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Results:
Sample text: ST050423D1-2 1613 CS0 050420E

	Typ	Name	Amount	Resp	RA	RT	RF	RRP
18	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.16
19	Tot	TCDD EMPC	0.00	-	- n	-	-	1.16
20	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	1.14
21	Tot	PeCDD EMPC	0.00	-	- n	-	-	1.14
22	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	1.31
23	Tot	HxCDD EMPC	0.00	-	- n	-	-	1.31
24	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	1.22
25	Tot	HpCDD EMPC	0.00	-	- n	-	-	1.22
26	Tot	Total Tetra-Furans	0.00	-	- n	-	-	1.19
27	Tot	TCDF EMPC	0.00	-	- n	-	-	1.19
28	Tot	1st Func. Penta-Furans	0.00	-	- n	-	-	1.19
29	Tot	1st Func. PeCDF EMPC	0.00	-	- n	-	-	1.19
30	Tot	Total Penta-Furans	0.00	-	- n	-	-	1.19
31	Tot	PeCDF EMPC	0.00	-	- n	-	-	1.19
32	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.38
33	Tot	HxCDF EMPC	0.00	-	- n	-	-	1.38
34	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.51
35	Tot	HpCDF EMPC	0.00	-	- n	-	-	1.51

Filename: 050423D1 S: 4 Acquired: 23-APR-05 13:49:12
Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Results:
Sample text: ST050423D1-3 1613 CS1 050420F

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk	2,3,7,8-TCDD	0.50	7.03e+05	0.84 y	27:04	-	1.02
2	Unk	1,2,3,7,8-PeCDD	2.50	2.53e+06	0.62 y	31:44	-	0.94
3	Unk	1,2,3,4,7,8-HxCDD	2.50	1.84e+06	1.22 y	35:05	-	1.03
4	Unk	1,2,3,6,7,8-HxCDD	2.50	2.20e+06	1.24 y	35:11	-	1.02
5	Unk	1,2,3,7,8,9-HxCDD	2.50	2.27e+06	1.27 y	35:29	-	1.15
6	Unk	1,2,3,4,6,7,8-HpCDD	2.50	1.82e+06	1.00 y	39:00	-	0.99
7	Unk	OCDD	5.00	3.08e+06	0.97 y	42:18	-	0.95
8	Unk	2,3,7,8-TCDF	0.50	9.26e+05	0.80 y	26:15	-	1.03
9	Unk	1,2,3,7,8-PeCDF	2.50	3.61e+06	1.53 y	30:32	-	0.90
10	Unk	2,3,4,7,8-PeCDF	2.50	3.97e+06	1.56 y	31:28	-	1.02
11	Unk	1,2,3,4,7,8-HxCDF	2.50	3.11e+06	1.23 y	34:11	-	1.11
12	Unk	1,2,3,6,7,8-HxCDF	2.50	3.61e+06	1.24 y	34:18	-	1.15
13	Unk	2,3,4,6,7,8-HxCDF	2.50	3.24e+06	1.27 y	34:55	-	1.14
14	Unk	1,2,3,7,8,9-HxCDF	2.50	2.62e+06	1.26 y	35:53	-	1.06
15	Unk	1,2,3,4,6,7,8-HpCDF	2.50	2.88e+06	1.01 y	37:43	-	1.28
16	Unk	1,2,3,4,7,8,9-HpCDF	2.50	2.21e+06	0.99 y	39:33	-	1.12
17	Unk	OCDF	5.00	3.95e+06	0.92 y	42:31	-	0.96
36	IS	13C-2,3,7,8-TCDD	100.00	1.38e+08	0.77 y	27:03	-	1.12
37	IS	13C-1,2,3,7,8-PeCDD	100.00	1.08e+08	0.64 y	31:43	-	0.87
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	7.12e+07	1.26 y	35:04	-	0.81
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	8.65e+07	1.25 y	35:10	-	0.98
40	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	7.35e+07	1.05 y	38:60	-	0.84
41	IS	13C-OCDD	200.00	1.29e+08	0.90 y	42:17	-	0.74
42	IS	13C-2,3,7,8-TCDF	100.00	1.80e+08	0.79 y	26:14	-	1.01
43	IS	13C-1,2,3,7,8-PeCDF	100.00	1.60e+08	1.58 y	30:31	-	0.90
44	IS	13C-2,3,4,7,8-PeCDF	100.00	1.55e+08	1.57 y	31:27	-	0.87
45	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.12e+08	0.52 y	34:10	-	1.27
46	IS	13C-1,2,3,6,7,8-HxCDF	100.00	1.25e+08	0.52 y	34:17	-	1.42
47	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.14e+08	0.53 y	34:55	-	1.30
48	IS	13C-1,2,3,7,8,9-HxCDF	100.00	9.90e+07	0.52 y	35:52	-	1.13
49	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	9.04e+07	0.45 y	37:42	-	1.03
50	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	7.88e+07	0.46 y	39:33	-	0.90
51	IS	13C-OCDF	200.00	1.64e+08	0.89 y	42:31	-	0.93
52	C/Up	37Cl-2,3,7,8-TCDD	0.50	3.88e+05		27:05	-	0.63
53	RS/RT	13C-1,2,3,4-TCDD	100.00	1.23e+08	0.80 y	26:26	-	1.00
54	RS	13C-1,2,3,4-TCDF	100.00	1.79e+08	0.78 y	24:54	-	1.00
55	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	8.78e+07	1.28 y	35:29	-	1.00

Filename: 050423D1 S: 4 Acquired: 23-APR-05 13:49:12
Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Results:
Sample text: ST050423D1-3 1613 CS1 050420F

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
18	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.02
19	Tot	TCDD EMPC	0.00	-	- n	-	-	1.02
20	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.94
21	Tot	PeCDD EMPC	0.00	-	- n	-	-	0.94
22	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	1.07
23	Tot	HxCDD EMPC	0.00	-	- n	-	-	1.07
24	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	0.99
25	Tot	HpCDD EMPC	0.00	-	- n	-	-	0.99
26	Tot	Total Tetra-Furans	0.00	-	- n	-	-	1.03
27	Tot	TCDF EMPC	0.00	-	- n	-	-	1.03
28	Tot	1st Func. Penta-Furans	0.00	-	- n	-	-	0.96
29	Tot	1st Func. PeCDF EMPC	0.00	-	- n	-	-	0.96
30	Tot	Total Penta-Furans	0.00	-	- n	-	-	0.96
31	Tot	PeCDF EMPC	0.00	-	- n	-	-	0.96
32	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.12
33	Tot	HxCDF EMPC	0.00	-	- n	-	-	1.12
34	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.20
35	Tot	HpCDF EMPC	0.00	-	- n	-	-	1.20

Filename: 050423D1 S: 5 Acquired: 23-APR-05 14:37:59
Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Results:
Sample text: ST050423D1-4 1613 CS2 050420G

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk	2,3,7,8-TCDD	2.00	2.83e+06	0.79 y	27:04	-	1.05
2	Unk	1,2,3,7,8-PeCDD	10.00	1.05e+07	0.61 y	31:44	-	0.97
3	Unk	1,2,3,4,7,8-HxCDD	10.00	7.64e+06	1.26 y	35:05	-	1.11
4	Unk	1,2,3,6,7,8-HxCDD	10.00	8.92e+06	1.26 y	35:11	-	1.02
5	Unk	1,2,3,7,8,9-HxCDD	10.00	8.69e+06	1.27 y	35:29	-	1.11
6	Unk	1,2,3,4,6,7,8-HpCDD	10.00	7.28e+06	1.03 y	39:01	-	1.00
7	Unk	OCDD	20.00	1.30e+07	0.88 y	42:18	-	0.99
8	Unk	2,3,7,8-TCDF	2.00	3.66e+06	0.81 y	26:16	-	1.03
9	Unk	1,2,3,7,8-PeCDF	10.00	1.48e+07	1.54 y	30:32	-	0.93
10	Unk	2,3,4,7,8-PeCDF	10.00	1.63e+07	1.55 y	31:27	-	1.06
11	Unk	1,2,3,4,7,8-HxCDF	10.00	1.32e+07	1.28 y	34:11	-	1.18
12	Unk	1,2,3,6,7,8-HxCDF	10.00	1.51e+07	1.23 y	34:18	-	1.17
13	Unk	2,3,4,6,7,8-HxCDF	10.00	1.33e+07	1.28 y	34:55	-	1.18
14	Unk	1,2,3,7,8,9-HxCDF	10.00	1.08e+07	1.27 y	35:52	-	1.08
15	Unk	1,2,3,4,6,7,8-HpCDF	10.00	1.20e+07	1.05 y	37:43	-	1.35
16	Unk	1,2,3,4,7,8,9-HpCDF	10.00	9.49e+06	1.03 y	39:33	-	1.22
17	Unk	OCDF	20.00	1.63e+07	0.89 y	42:32	-	0.99
36	IS	13C-2,3,7,8-TCDD	100.00	1.34e+08	0.79 y	27:03	-	1.11
37	IS	13C-1,2,3,7,8-PeCDD	100.00	1.09e+08	0.63 y	31:43	-	0.90
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	6.86e+07	1.26 y	35:04	-	0.78
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	8.75e+07	1.26 y	35:10	-	1.00
40	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	7.29e+07	1.06 y	38:59	-	0.83
41	IS	13C-OCDD	200.00	1.31e+08	0.90 y	42:17	-	0.74
42	IS	13C-2,3,7,8-TCDF	100.00	1.78e+08	0.79 y	26:15	-	1.01
43	IS	13C-1,2,3,7,8-PeCDF	100.00	1.60e+08	1.59 y	30:31	-	0.91
44	IS	13C-2,3,4,7,8-PeCDF	100.00	1.54e+08	1.58 y	31:26	-	0.87
45	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.13e+08	0.52 y	34:10	-	1.28
46	IS	13C-1,2,3,6,7,8-HxCDF	100.00	1.29e+08	0.52 y	34:17	-	1.46
47	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.13e+08	0.53 y	34:54	-	1.28
48	IS	13C-1,2,3,7,8,9-HxCDF	100.00	9.94e+07	0.53 y	35:52	-	1.13
49	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	8.90e+07	0.45 y	37:42	-	1.01
50	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	7.80e+07	0.44 y	39:33	-	0.89
51	IS	13C-OCDF	200.00	1.64e+08	0.89 y	42:31	-	0.93
52	C/Up	37Cl-2,3,7,8-TCDD	2.00	1.40e+06		27:04	-	0.58
53	RS/RT	13C-1,2,3,4-TCDD	100.00	1.20e+08	0.79 y	26:26	-	1.00
54	RS	13C-1,2,3,4-TCDF	100.00	1.76e+08	0.79 y	24:54	-	1.00
55	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	8.80e+07	1.27 y	35:29	-	1.00

Filename: 050423D1 S: 5 Acquired: 23-APR-05 14:37:59
Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Results:
Sample text: ST050423D1-4 1613 CS2 050420G

	Typ	Name	Amount	Resp	RA		RT	RF	RRF
18	Tot	Total Tetra-Dioxins	0.00	-	-	n	-	-	1.05
19	Tot	TCDD EMPC	0.00	-	-	n	-	-	1.05
20	Tot	Total Penta-Dioxins	0.00	-	-	n	-	-	0.97
21	Tot	PeCDD EMPC	0.00	-	-	n	-	-	0.97
22	Tot	Total Hexa-Dioxins	0.00	-	-	n	-	-	1.08
23	Tot	HxCDD EMPC	0.00	-	-	n	-	-	1.08
24	Tot	Total Hepta-Dioxins	0.00	-	-	n	-	-	1.00
25	Tot	HpCDD EMPC	0.00	-	-	n	-	-	1.00
26	Tot	Total Tetra-Furans	0.00	-	-	n	-	-	1.03
27	Tot	TCDF EMPC	0.00	-	-	n	-	-	1.03
28	Tot	1st Func. Penta-Furans	0.00	-	-	n	-	-	0.99
29	Tot	1st Func. PeCDF EMPC	0.00	-	-	n	-	-	0.99
30	Tot	Total Penta-Furans	0.00	-	-	n	-	-	0.99
31	Tot	PeCDF EMPC	0.00	-	-	n	-	-	0.99
32	Tot	Total Hexa-Furans	0.00	-	-	n	-	-	1.16
33	Tot	HxCDF EMPC	0.00	-	-	n	-	-	1.16
34	Tot	Total Hepta-Furans	0.00	-	-	n	-	-	1.29
35	Tot	HpCDF EMPC	0.00	-	-	n	-	-	1.29

Filename: 050423D1 S: 6 Acquired: 23-APR-05 15:26:46
Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Results:
Sample text: ST050423D1-5 1613 CS4 050420I

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk	2,3,7,8-TCDD	40.00	5.74e+07	0.79 y	27:04	-	1.10
2	Unk	1,2,3,7,8-PeCDD	200.00	2.07e+08	0.62 y	31:44	-	1.00
3	Unk	1,2,3,4,7,8-HxCDD	200.00	1.51e+08	1.25 y	35:04	-	1.10
4	Unk	1,2,3,6,7,8-HxCDD	200.00	1.80e+08	1.26 y	35:11	-	1.09
5	Unk	1,2,3,7,8,9-HxCDD	200.00	1.70e+08	1.21 y	35:29	-	1.12
6	Unk	1,2,3,4,6,7,8-HpCDD	200.00	1.37e+08	1.02 y	38:60	-	1.06
7	Unk	OCDD	400.00	2.49e+08	0.91 y	42:17	-	1.05
8	Unk	2,3,7,8-TCDF	40.00	7.46e+07	0.79 y	26:15	-	1.07
9	Unk	1,2,3,7,8-PeCDF	200.00	2.88e+08	1.56 y	30:32	-	0.95
10	Unk	2,3,4,7,8-PeCDF	200.00	3.15e+08	1.57 y	31:27	-	1.07
11	Unk	1,2,3,4,7,8-HxCDF	200.00	2.46e+08	1.25 y	34:10	-	1.18
12	Unk	1,2,3,6,7,8-HxCDF	200.00	2.84e+08	1.26 y	34:17	-	1.24
13	Unk	2,3,4,6,7,8-HxCDF	200.00	2.63e+08	1.27 y	34:54	-	1.22
14	Unk	1,2,3,7,8,9-HxCDF	200.00	2.04e+08	1.26 y	35:52	-	1.14
15	Unk	1,2,3,4,6,7,8-HpCDF	200.00	2.23e+08	1.04 y	37:42	-	1.38
16	Unk	1,2,3,4,7,8,9-HpCDF	200.00	1.77e+08	1.03 y	39:33	-	1.28
17	Unk	OCDF	400.00	3.10e+08	0.91 y	42:31	-	1.03
36	IS	13C-2,3,7,8-TCDD	100.00	1.31e+08	0.78 y	27:03	-	1.10
37	IS	13C-1,2,3,7,8-PeCDD	100.00	1.04e+08	0.63 y	31:42	-	0.88
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	6.86e+07	1.27 y	35:03	-	0.85
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	8.27e+07	1.25 y	35:10	-	1.03
40	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	6.46e+07	1.06 y	38:59	-	0.80
41	IS	13C-OCDD	200.00	1.19e+08	0.92 y	42:17	-	0.74
42	IS	13C-2,3,7,8-TCDF	100.00	1.75e+08	0.78 y	26:14	-	1.01
43	IS	13C-1,2,3,7,8-PeCDF	100.00	1.52e+08	1.59 y	30:31	-	0.87
44	IS	13C-2,3,4,7,8-PeCDF	100.00	1.47e+08	1.59 y	31:26	-	0.85
45	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.04e+08	0.52 y	34:09	-	1.29
46	IS	13C-1,2,3,6,7,8-HxCDF	100.00	1.15e+08	0.52 y	34:17	-	1.43
47	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.08e+08	0.53 y	34:54	-	1.35
48	IS	13C-1,2,3,7,8,9-HxCDF	100.00	8.92e+07	0.53 y	35:52	-	1.11
49	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	8.08e+07	0.45 y	37:42	-	1.01
50	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	6.91e+07	0.45 y	39:32	-	0.86
51	IS	13C-OCDF	200.00	1.50e+08	0.90 y	42:31	-	0.93
52	C/Up	37Cl-2,3,7,8-TCDD	40.00	2.90e+07		27:04	-	0.61
53	RS/RT	13C-1,2,3,4-TCDD	100.00	1.18e+08	0.80 y	26:26	-	1.00
54	RS	13C-1,2,3,4-TCDF	100.00	1.74e+08	0.77 y	24:53	-	1.00
55	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	8.03e+07	1.28 y	35:28	-	1.00

Filename: 050423D1 S: 6 Acquired: 23-APR-05 15:26:46
Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Results:
Sample text: ST050423D1-5 1613 CS4 050420I

	Typ	Name	Amount	Resp	RA		RT	RF	RRF
18	Tot	Total Tetra-Dioxins	0.00	-	-	n	-	-	1.10
19	Tot	TCDD EMPC	0.00	-	-	n	-	-	1.10
20	Tot	Total Penta-Dioxins	0.00	-	-	n	-	-	1.00
21	Tot	PeCDD EMPC	0.00	-	-	n	-	-	1.00
22	Tot	Total Hexa-Dioxins	0.00	-	-	n	-	-	1.10
23	Tot	HxCDD EMPC	0.00	-	-	n	-	-	1.10
24	Tot	Total Hepta-Dioxins	0.00	-	-	n	-	-	1.06
25	Tot	HpCDD EMPC	0.00	-	-	n	-	-	1.06
26	Tot	Total Tetra-Furans	0.00	-	-	n	-	-	1.07
27	Tot	TCDF EMPC	0.00	-	-	n	-	-	1.07
28	Tot	1st Func. Penta-Furans	0.00	-	-	n	-	-	1.01
29	Tot	1st Func. PeCDF EMPC	0.00	-	-	n	-	-	1.01
30	Tot	Total Penta-Furans	0.00	-	-	n	-	-	1.01
31	Tot	PeCDF EMPC	0.00	-	-	n	-	-	1.01
32	Tot	Total Hexa-Furans	0.00	-	-	n	-	-	1.20
33	Tot	HxCDF EMPC	0.00	-	-	n	-	-	1.20
34	Tot	Total Hepta-Furans	0.00	-	-	n	-	-	1.33
35	Tot	HpCDF EMPC	0.00	-	-	n	-	-	1.33

Filename: 050423D1 S: 7 Acquired: 23-APR-05 16:15:33
Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Results:
Sample text: ST050423D1-6 1613 CS5 050420J

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	Unk	2,3,7,8-TCDD	200.00	2.62e+08	0.78 y	27:04	-	0.98
2	Unk	1,2,3,7,8-PeCDD	1000.00	1.03e+09	0.62 y	31:43	-	0.97
3	Unk	1,2,3,4,7,8-HxCDD	1000.00	8.18e+08	1.25 y	35:03	-	1.10
4	Unk	1,2,3,6,7,8-HxCDD	1000.00	8.75e+08	1.26 y	35:10	-	1.04
5	Unk	1,2,3,7,8,9-HxCDD	1000.00	8.83e+08	1.25 y	35:27	-	1.11
6	Unk	1,2,3,4,6,7,8-HpCDD	1000.00	7.26e+08	1.03 y	38:58	-	1.06
7	Unk	OCDD	2000.00	1.35e+09	0.88 y	42:16	-	1.04
8	Unk	2,3,7,8-TCDF	200.00	3.37e+08	0.78 y	26:15	-	0.98
9	Unk	1,2,3,7,8-PeCDF	1000.00	1.41e+09	1.56 y	30:31	-	0.89
10	Unk	2,3,4,7,8-PeCDF	1000.00	1.56e+09	1.56 y	31:26	-	1.02
11	Unk	1,2,3,4,7,8-HxCDF	1000.00	1.28e+09	1.25 y	34:09	-	1.13
12	Unk	1,2,3,6,7,8-HxCDF	1000.00	1.39e+09	1.25 y	34:17	-	1.17
13	Unk	2,3,4,6,7,8-HxCDF	1000.00	1.28e+09	1.26 y	34:54	-	1.14
14	Unk	1,2,3,7,8,9-HxCDF	1000.00	1.08e+09	1.25 y	35:51	-	1.10
15	Unk	1,2,3,4,6,7,8-HpCDF	1000.00	1.16e+09	1.04 y	37:40	-	1.33
16	Unk	1,2,3,4,7,8,9-HpCDF	1000.00	8.99e+08	1.03 y	39:31	-	1.17
17	Unk	OCDF	2000.00	1.70e+09	0.93 y	42:30	-	1.01
36	IS	13C-2,3,7,8-TCDD	100.00	1.33e+08	0.79 y	27:02	-	1.15
37	IS	13C-1,2,3,7,8-PeCDD	100.00	1.06e+08	0.64 y	31:42	-	0.92
38	IS	13C-1,2,3,4,7,8-HxCDD	100.00	7.46e+07	1.28 y	35:03	-	0.86
39	IS	13C-1,2,3,6,7,8-HxCDD	100.00	8.45e+07	1.26 y	35:09	-	0.98
40	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	6.87e+07	1.04 y	38:58	-	0.80
41	IS	13C-OCDD	200.00	1.29e+08	0.92 y	42:15	-	0.75
42	IS	13C-2,3,7,8-TCDF	100.00	1.72e+08	0.79 y	26:14	-	1.03
43	IS	13C-1,2,3,7,8-PeCDF	100.00	1.59e+08	1.59 y	30:30	-	0.95
44	IS	13C-2,3,4,7,8-PeCDF	100.00	1.53e+08	1.57 y	31:25	-	0.91
45	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.13e+08	0.52 y	34:09	-	1.31
46	IS	13C-1,2,3,6,7,8-HxCDF	100.00	1.19e+08	0.53 y	34:16	-	1.37
47	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.12e+08	0.52 y	34:52	-	1.30
48	IS	13C-1,2,3,7,8,9-HxCDF	100.00	9.83e+07	0.53 y	35:50	-	1.14
49	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	8.76e+07	0.45 y	37:40	-	1.02
50	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	7.67e+07	0.45 y	39:31	-	0.89
51	IS	13C-OCDF	200.00	1.67e+08	0.90 y	42:29	-	0.97
52	C/Up	37Cl-2,3,7,8-TCDD	200.00	1.59e+08		27:03	-	0.69
53	RS/RT	13C-1,2,3,4-TCDD	100.00	1.15e+08	0.80 y	26:26	-	1.00
54	RS	13C-1,2,3,4-TCDF	100.00	1.68e+08	0.78 y	24:53	-	1.00
55	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	8.63e+07	1.27 y	35:27	-	1.00

Filename: 050423D1 S: 7 Acquired: 23-APR-05 16:15:33
Run: 1613a Analyte: 1613a Cal: 1613vg7-4-23-05 Results:
Sample text: ST050423D1-6 1613 CS5 050420J

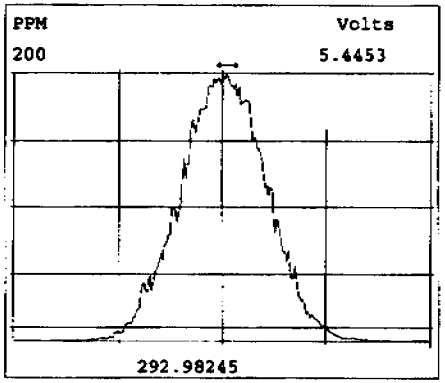
	Typ	Name	Amount	Resp	RA	RT	RF	RRF
18	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	0.98
19	Tot	TCDD EMPC	0.00	-	- n	-	-	0.98
20	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.97
21	Tot	PeCDD EMPC	0.00	-	- n	-	-	0.97
22	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	1.08
23	Tot	HxCDD EMPC	0.00	-	- n	-	-	1.08
24	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	1.06
25	Tot	HpCDD EMPC	0.00	-	- n	-	-	1.06
26	Tot	Total Tetra-Furans	0.00	-	- n	-	-	0.98
27	Tot	TCDF EMPC	0.00	-	- n	-	-	0.98
28	Tot	1st Func. Penta-Furans	0.00	-	- n	-	-	0.95
29	Tot	1st Func. PeCDF EMPC	0.00	-	- n	-	-	0.95
30	Tot	Total Penta-Furans	0.00	-	- n	-	-	0.95
31	Tot	PeCDF EMPC	0.00	-	- n	-	-	0.95
32	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.14
33	Tot	HxCDF EMPC	0.00	-	- n	-	-	1.14
34	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.26
35	Tot	HpCDF EMPC	0.00	-	- n	-	-	1.26

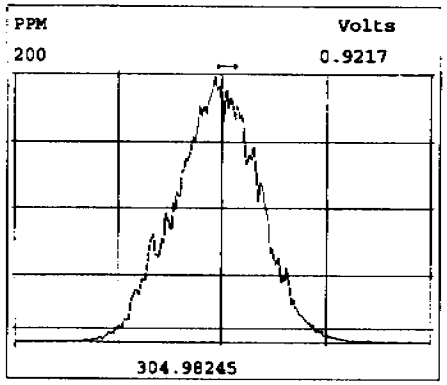
Alta Analytical Laboratory - Injection Log Run file: 050423d1 Instrument ID: VG-7 GC Column ID: DB-5

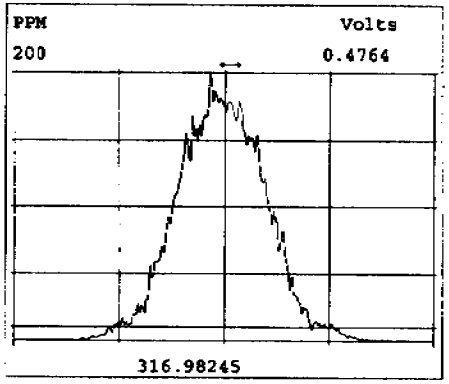
Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
050423D1	1	ST050423D1-1 1613 CS3 050420H	dms	23-APR-05	11:22:51	ST050423D1-1	ST050423D1-8
050423D1	2	SOLVENT BLANK	dms	23-APR-05	12:11:39	ST050423D1-1	ST050423D1-8
050423D1	3	ST050423D1-2 1613 CS0 050420E	dms	23-APR-05	13:00:26	ST050423D1-1	ST050423D1-8
050423D1	4	ST050423D1-3 1613 CS1 050420F	dms	23-APR-05	13:49:12	ST050423D1-1	ST050423D1-8
050423D1	5	ST050423D1-4 1613 CS2 050420G	dms	23-APR-05	14:37:59	ST050423D1-1	ST050423D1-8
050423D1	6	ST050423D1-5 1613 CS4 050420I	dms	23-APR-05	15:26:46	ST050423D1-1	ST050423D1-8
050423D1	7	ST050423D1-6 1613 CS5 050420J	dms	23-APR-05	16:15:33	ST050423D1-1	ST050423D1-8
050423D1	8	SOLVENT BLANK	dms	23-APR-05	17:04:20	ST050423D1-1	ST050423D1-8
050423D1	9	ST050423D1-7 1613 SSS L010608B	dms	23-APR-05	17:53:07	ST050423D1-1	ST050423D1-8

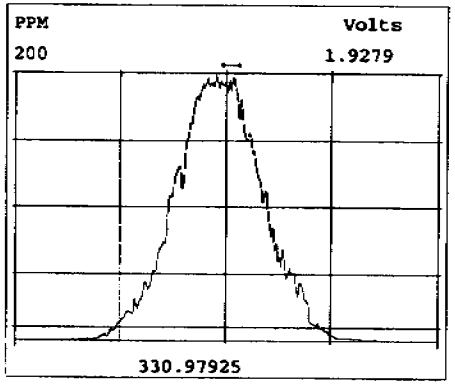
Peak Locate Examination:23-APR-2005:11:20 File:050423D1

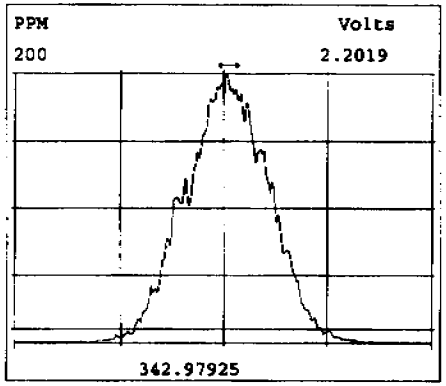
Experiment:OCDD_DB5 Function:1 Reference:PFK

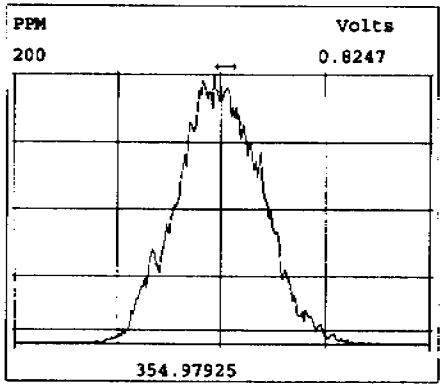


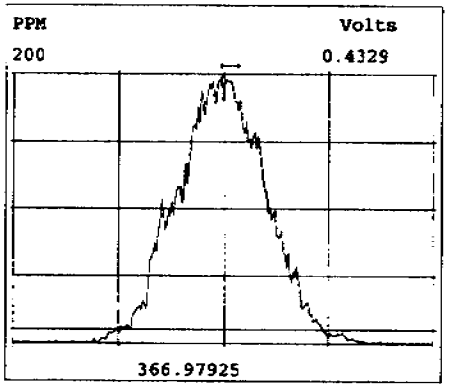


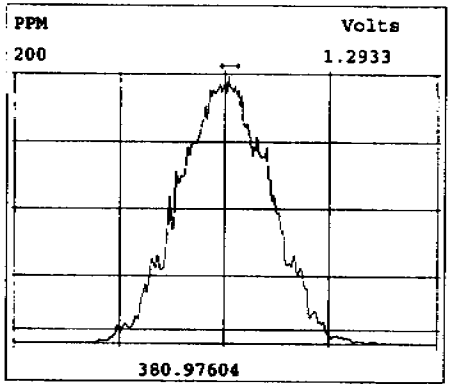


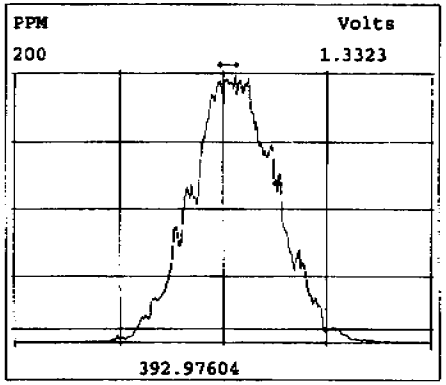


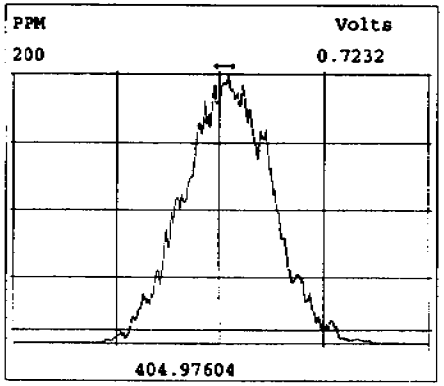


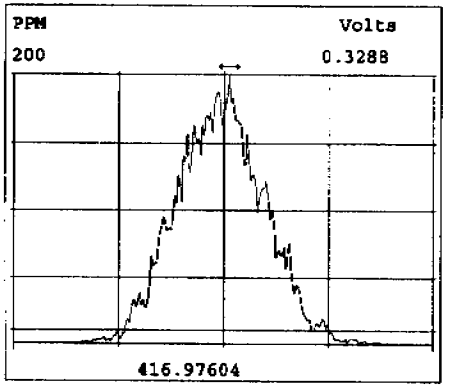






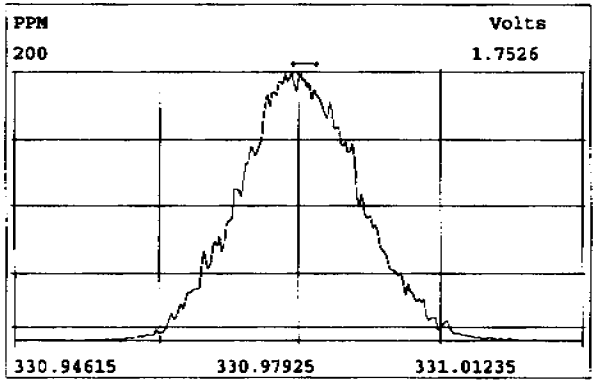


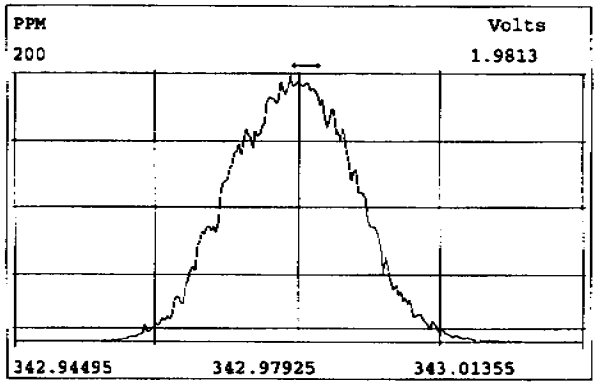


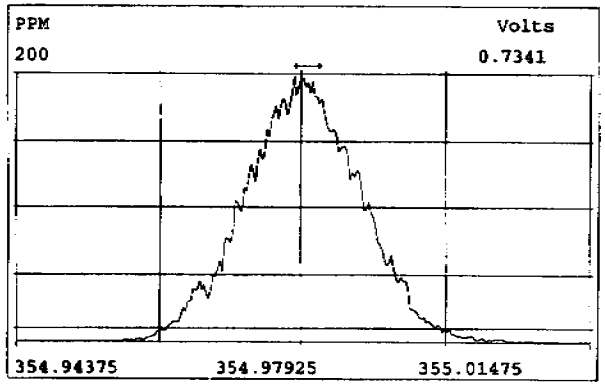


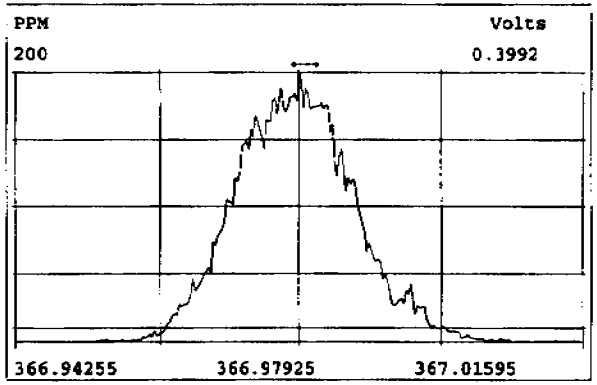
Peak Locate Examination:23-APR-2005:11:20 File:050423D1

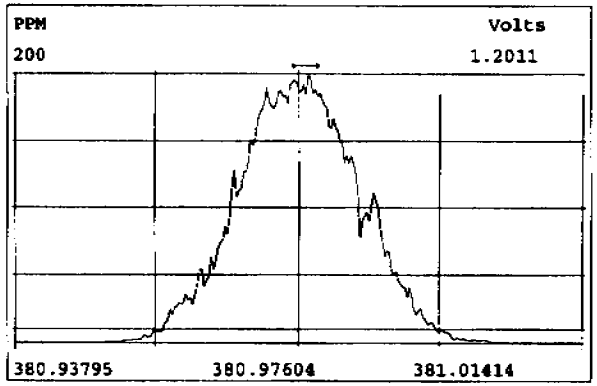
Experiment:OCDD_DB5 Function:2 Reference:PFK

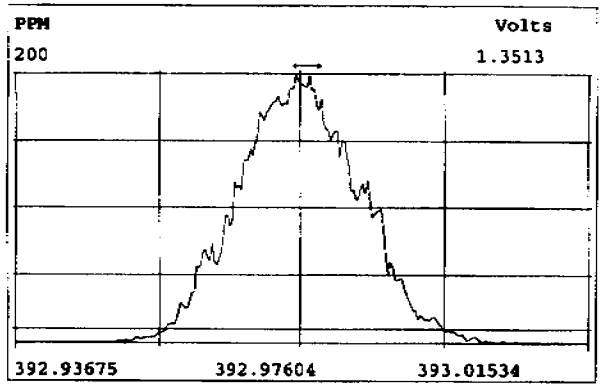


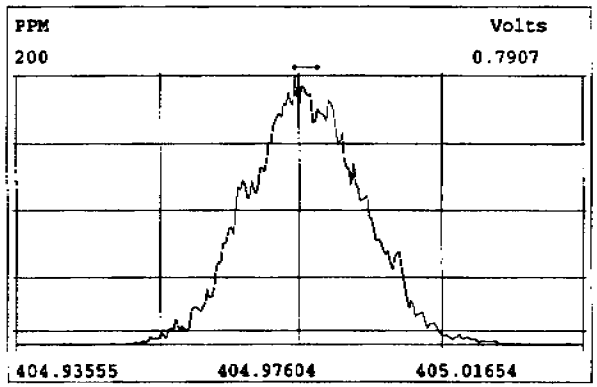


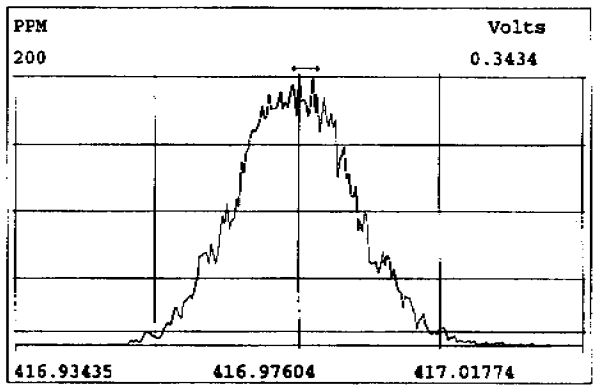






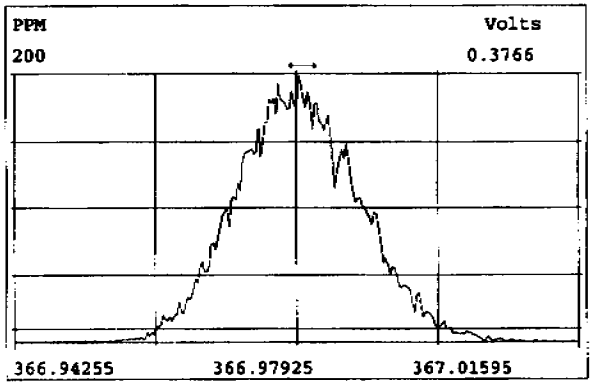


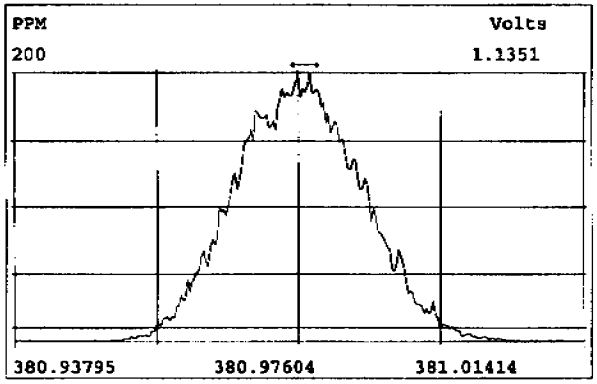


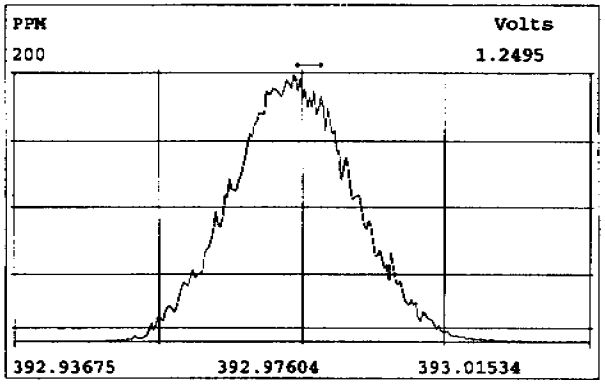


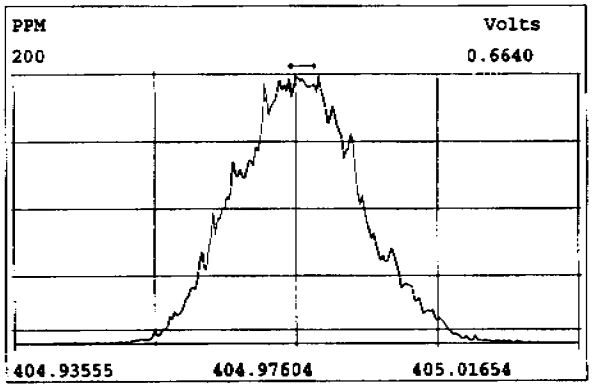
Peak Locate Examination:23-APR-2005:11:20 File:050423D1

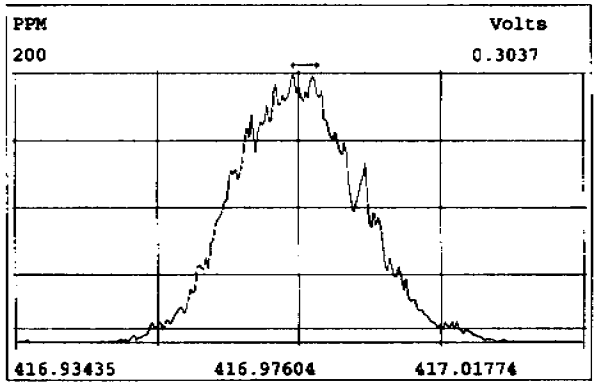
Experiment:OCDD_DB5 Function:3 Reference:PFK

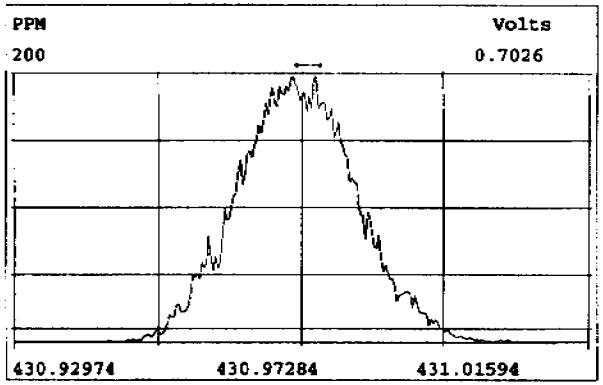


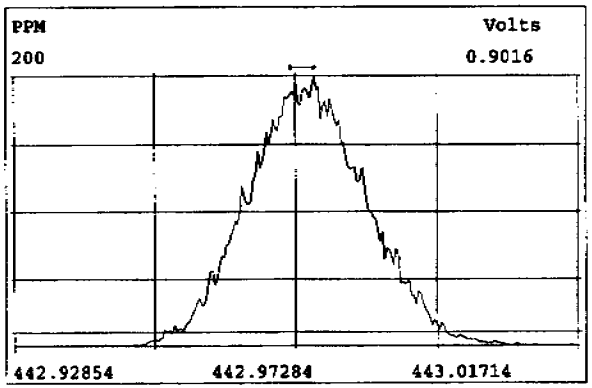


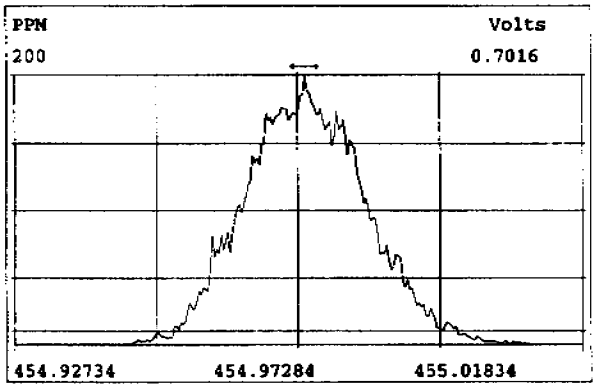






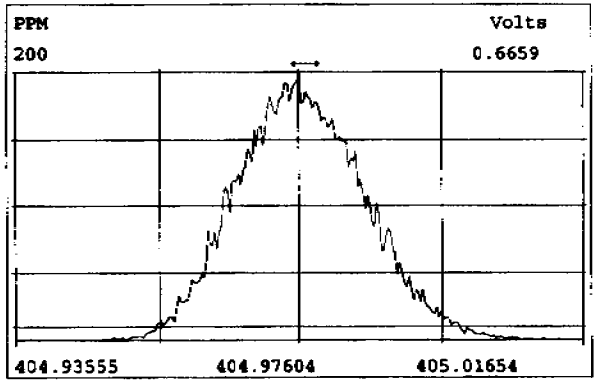


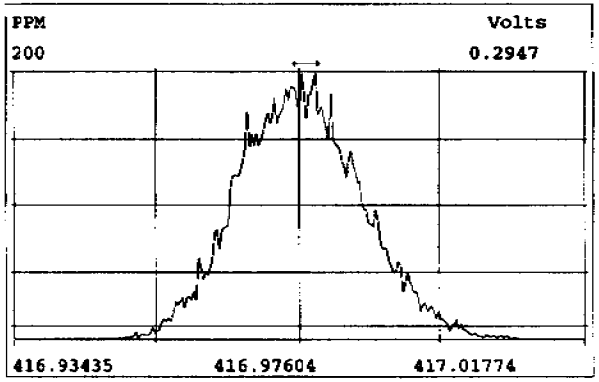


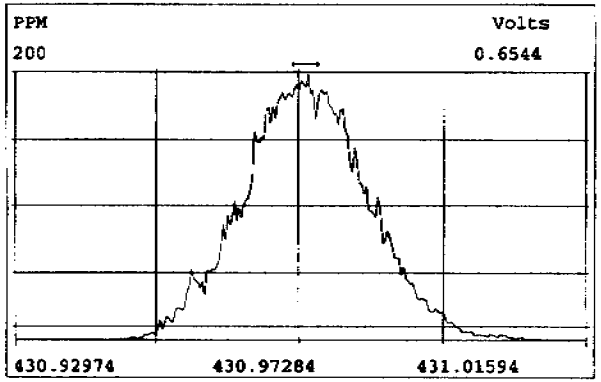


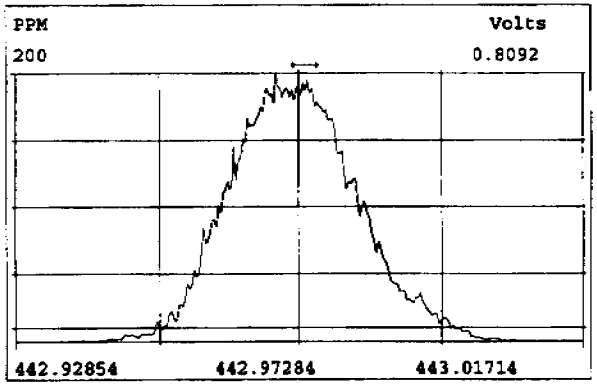
Peak Locate Examination:23-APR-2005:11:21 File:050423D1

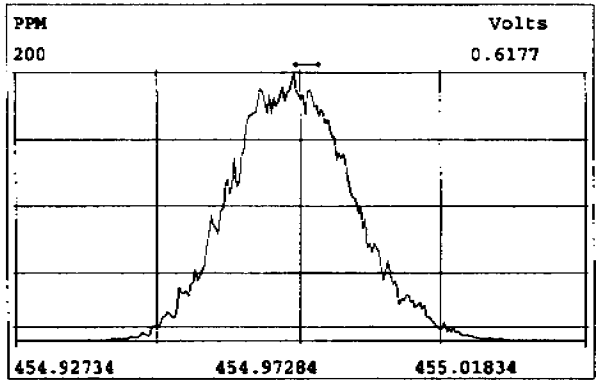
Experiment:OCDD_DB5 Function:4 Reference:PFK

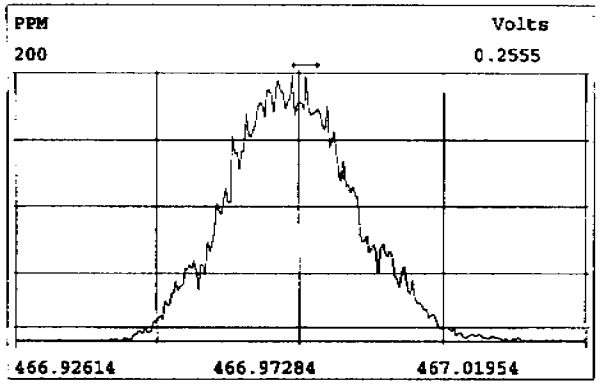


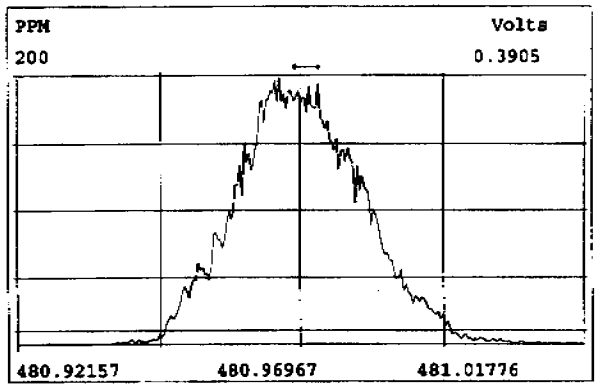






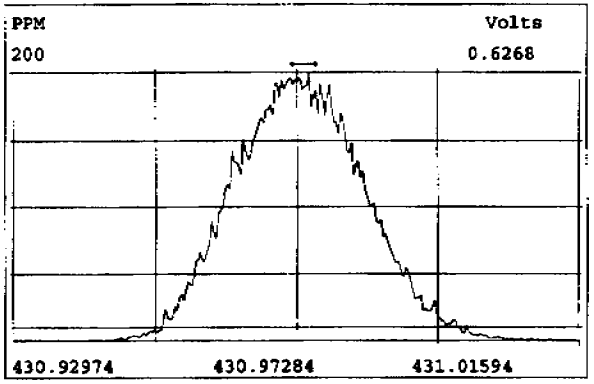


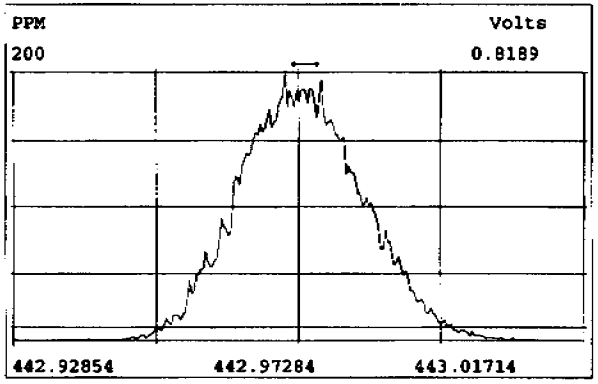


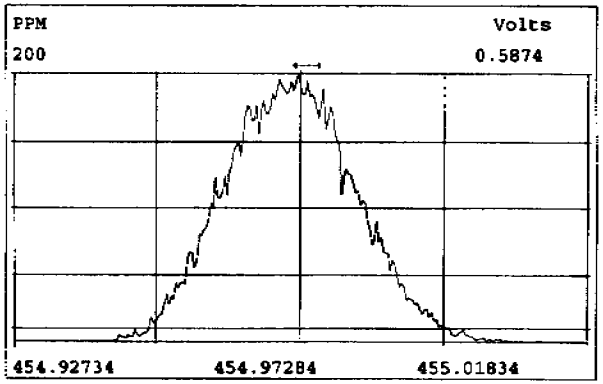


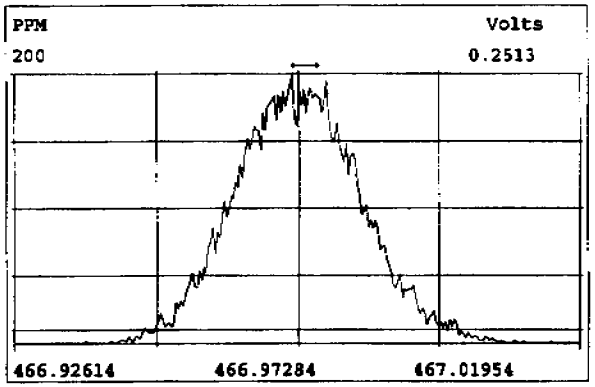
Peak Locate Examination:23-APR-2005:11:21 File:050423D1

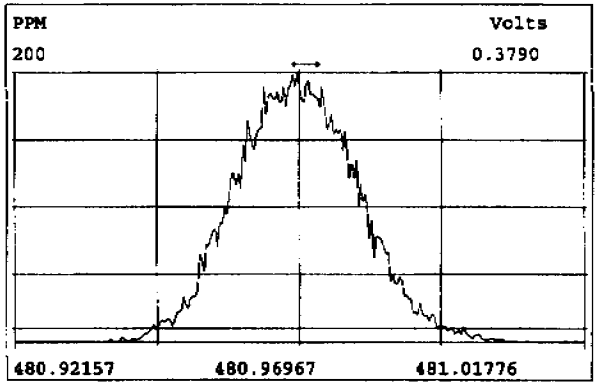
Experiment:OCDD_DB5 Function:5 Reference:PFK

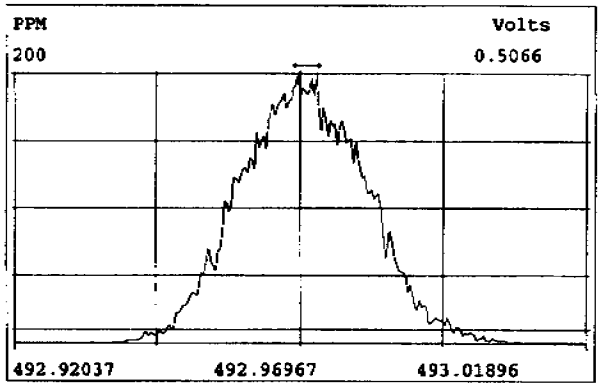


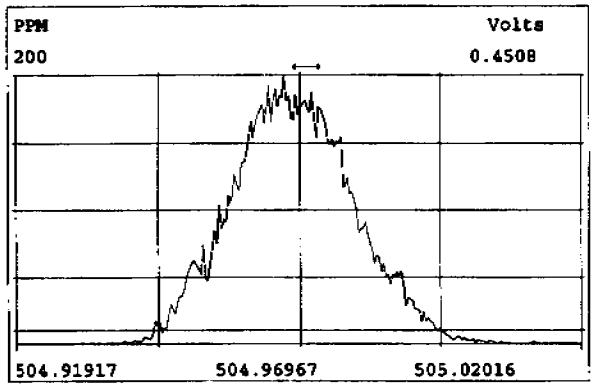


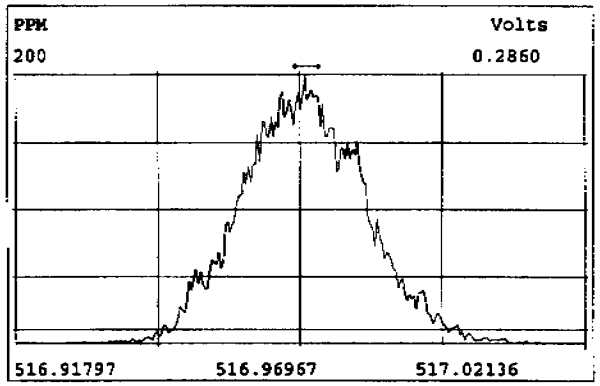




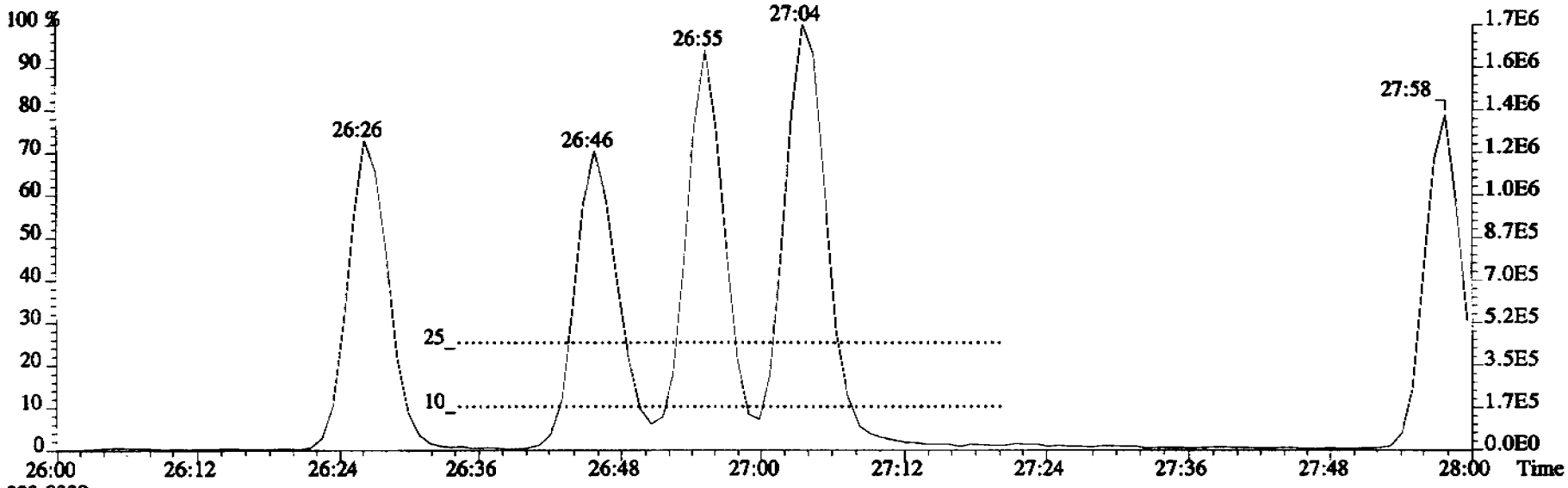




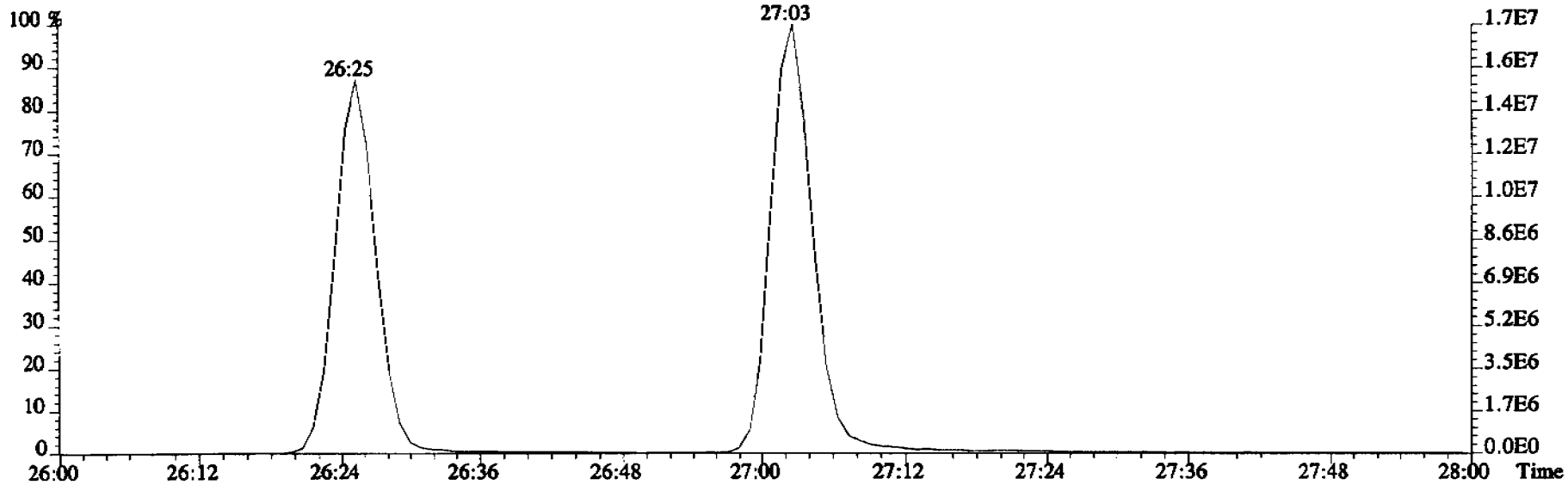




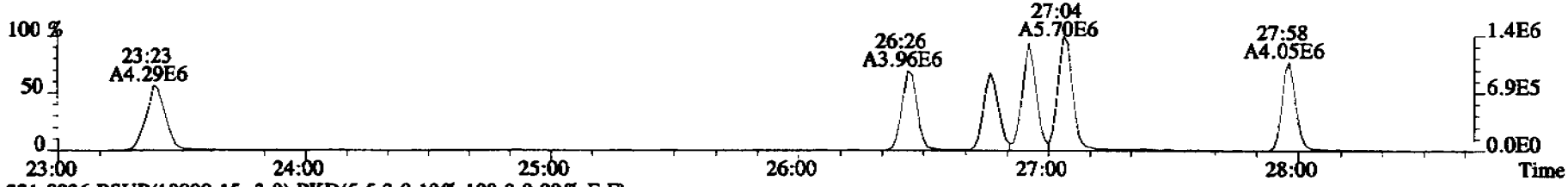
File:050423D1 #1-559 Acq:23-APR-2005 11:22:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-1 1613 CS3 050420H Exp:OCDD_DB5
321.8936



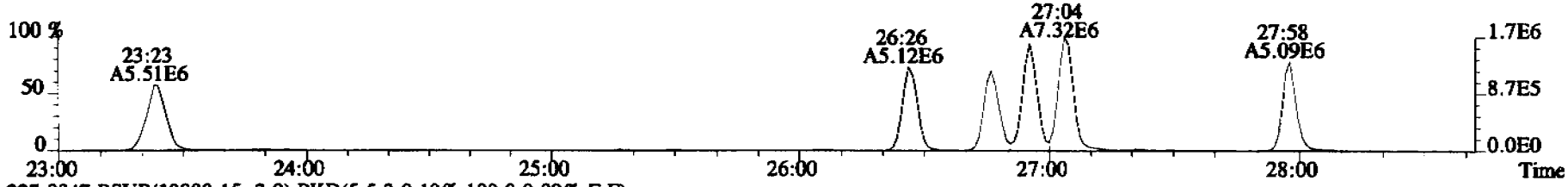
333.9339



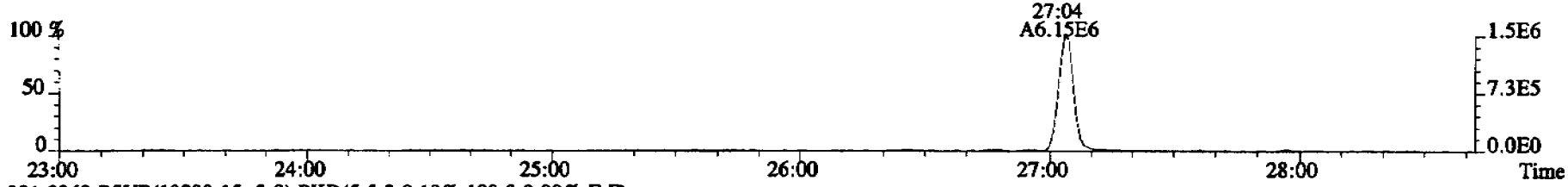
File:050423D1 #1-559 Acq:23-APR-2005 11:22:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-1 1613 CS3 050420H Exp:OCDD_DB5
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



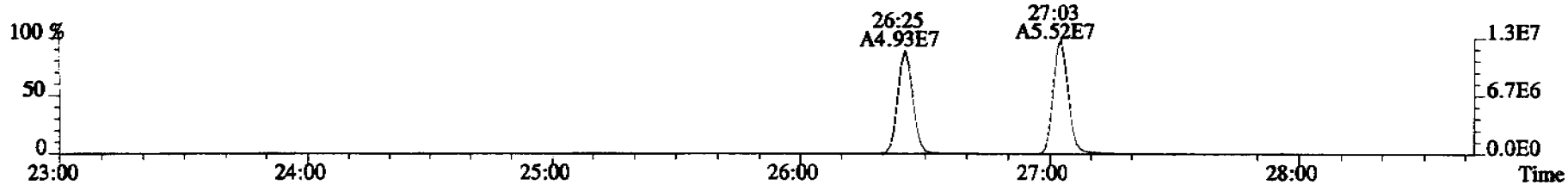
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



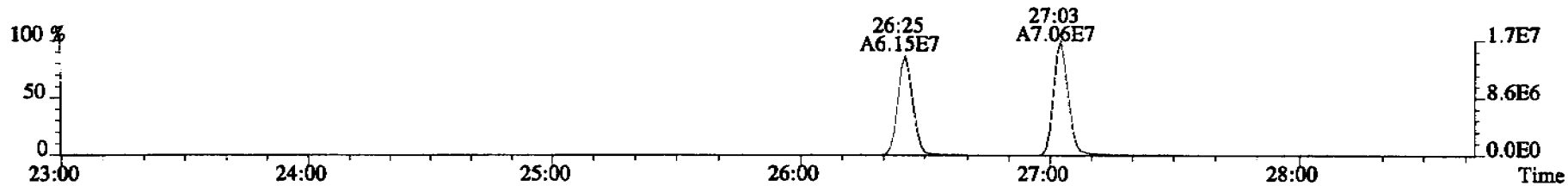
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



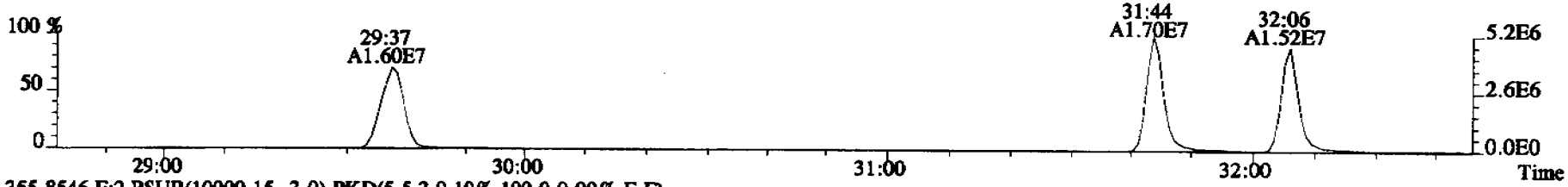
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



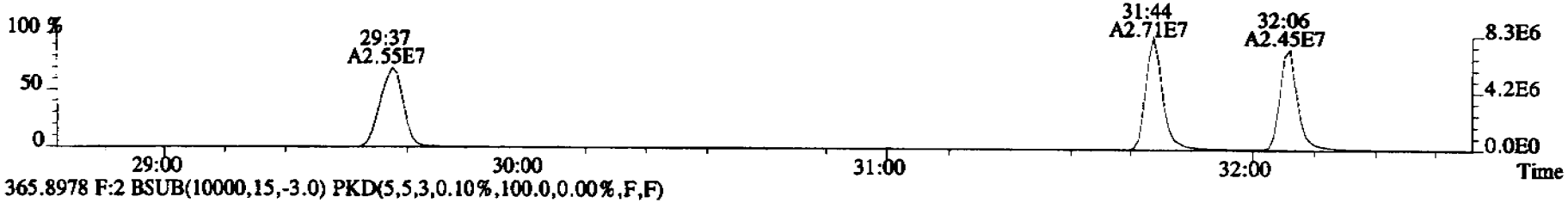
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



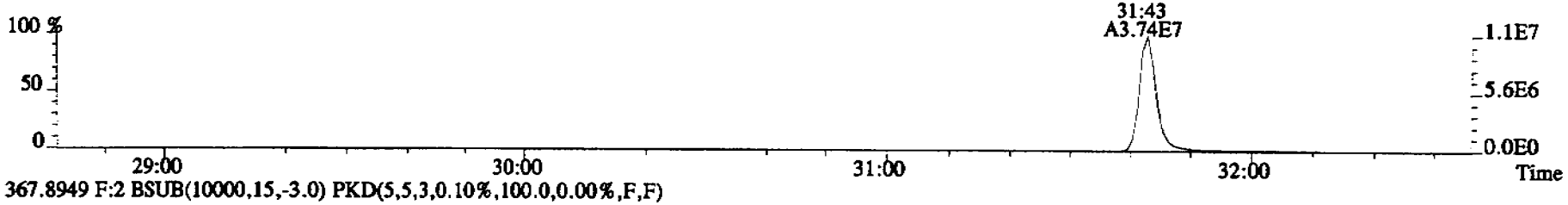
File:050423D1 #1-273 Acq:23-APR-2005 11:22:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-1 1613 CS3 050420H Exp:OCDD_DB5
353.8576 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



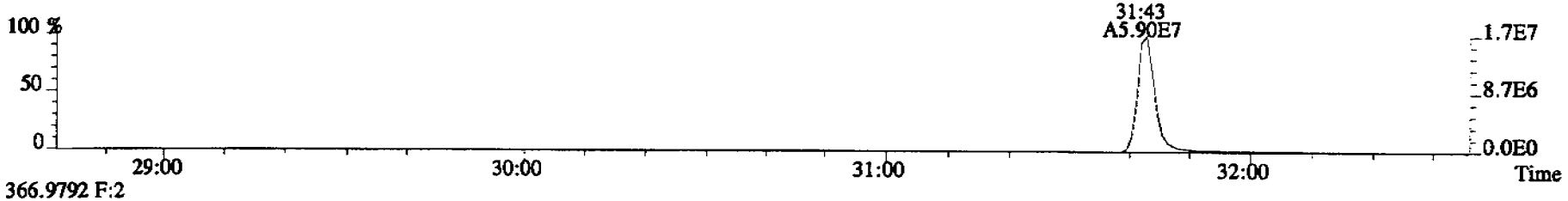
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



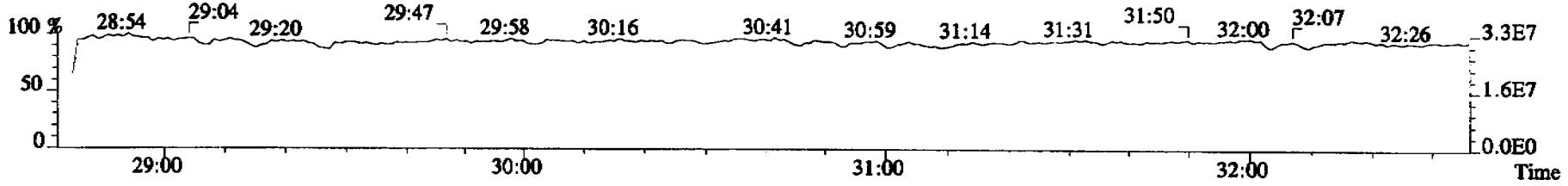
365.8978 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



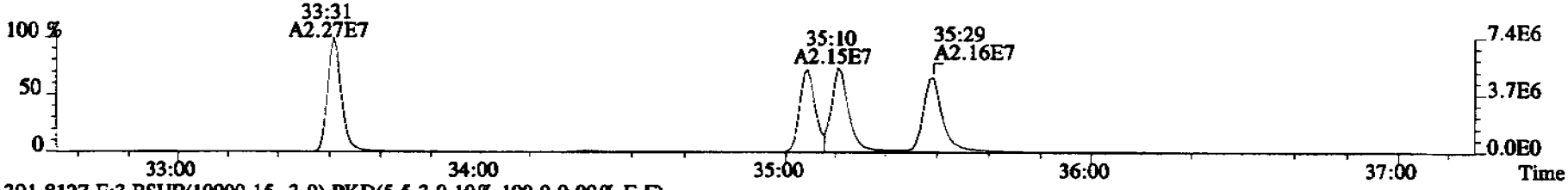
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



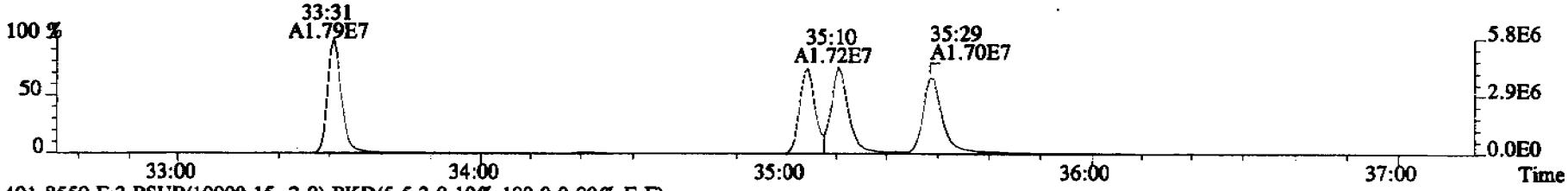
366.9792 F:2



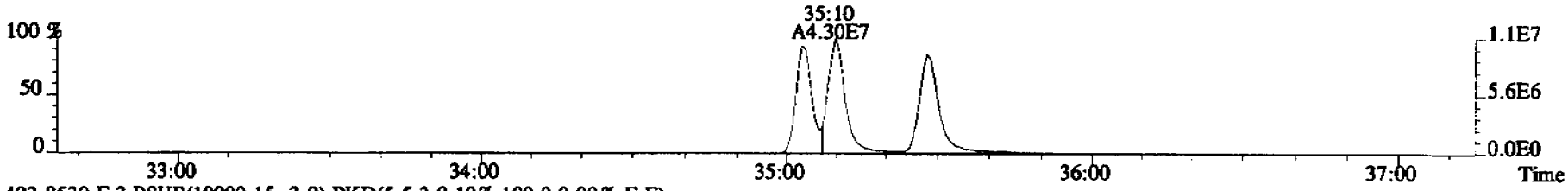
File:050423D1 #1-398 Acq:23-APR-2005 11:22:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-1 1613 CS3 050420H Exp:OCDD_DB5
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



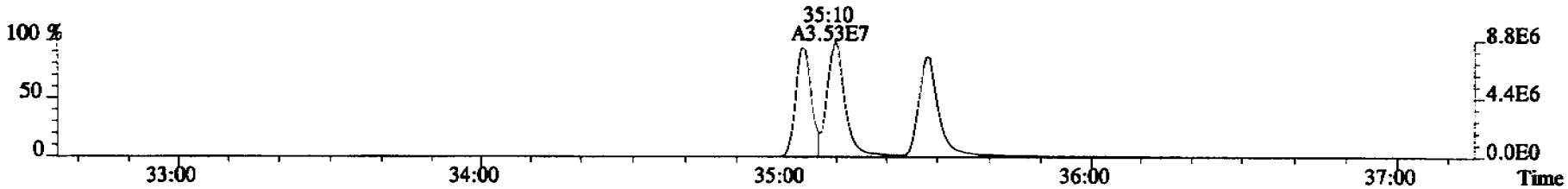
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



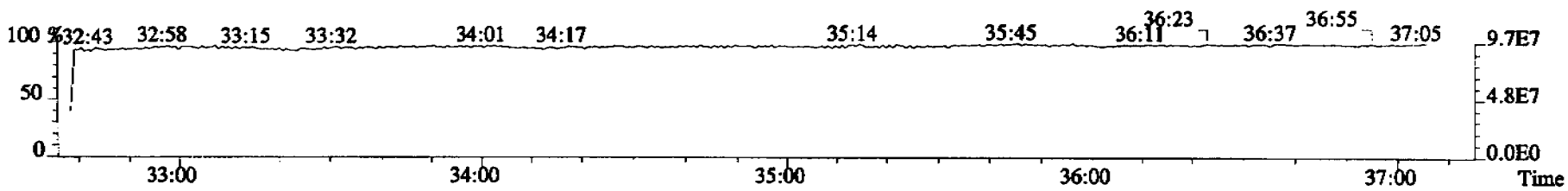
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

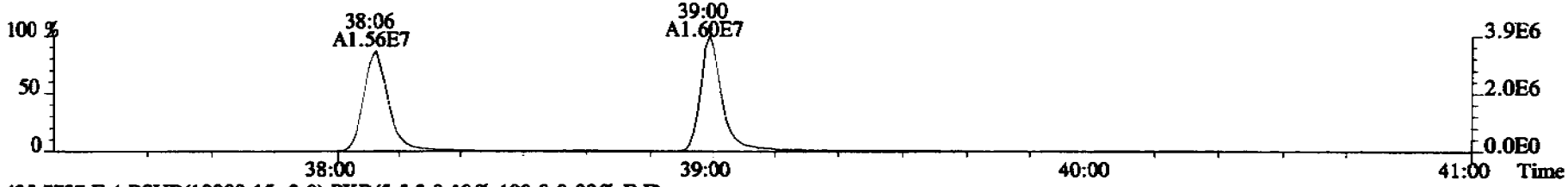


380.9760 F:3

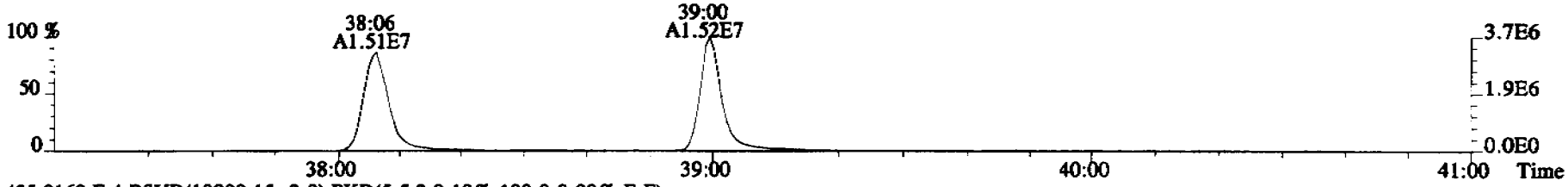


File:050423D1 #1-348 Acq:23-APR-2005 11:22:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-1 1613 CS3 050420H Exp:OCDD_DB5

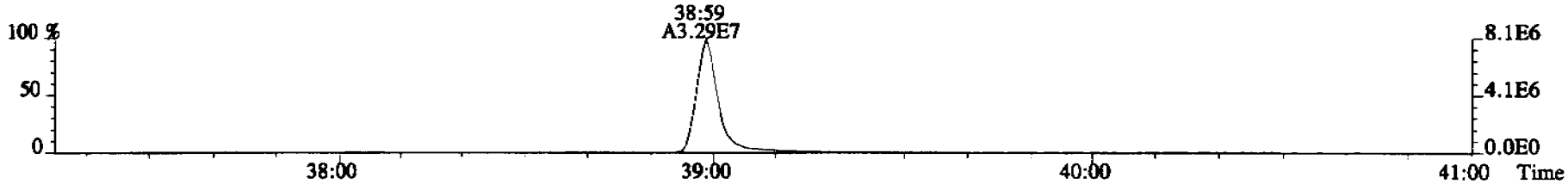
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



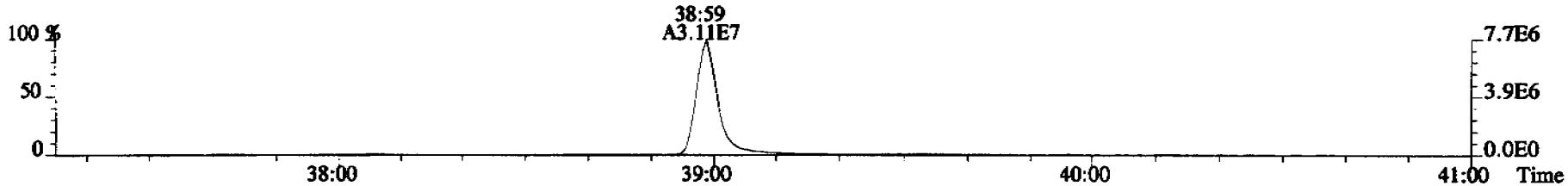
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



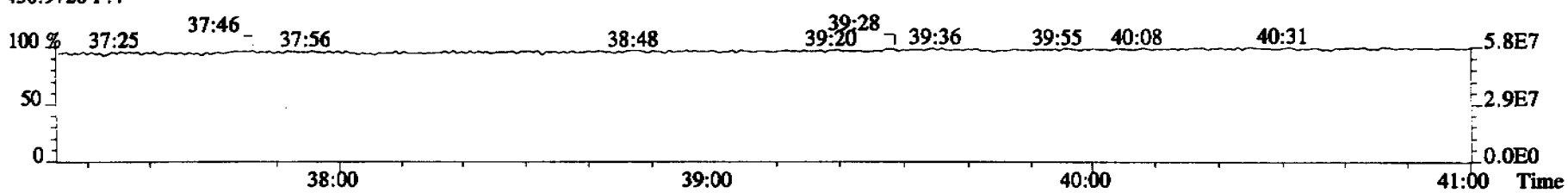
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



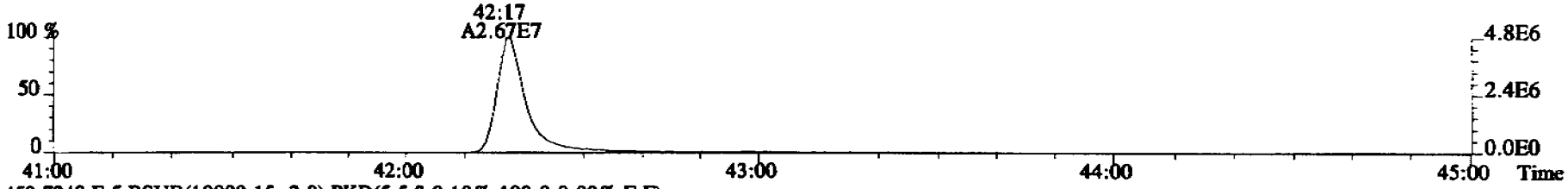
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



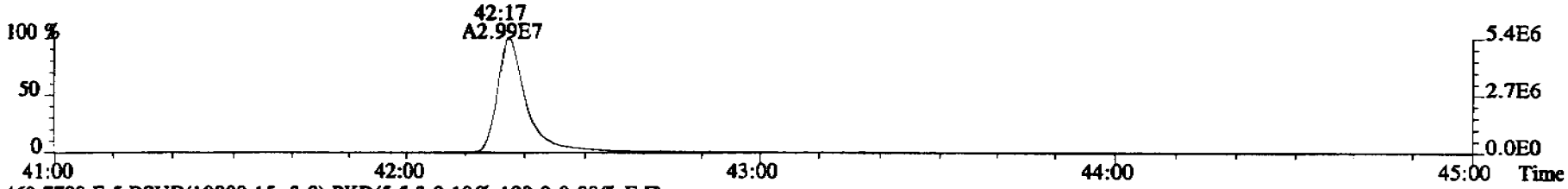
430.9728 F:4



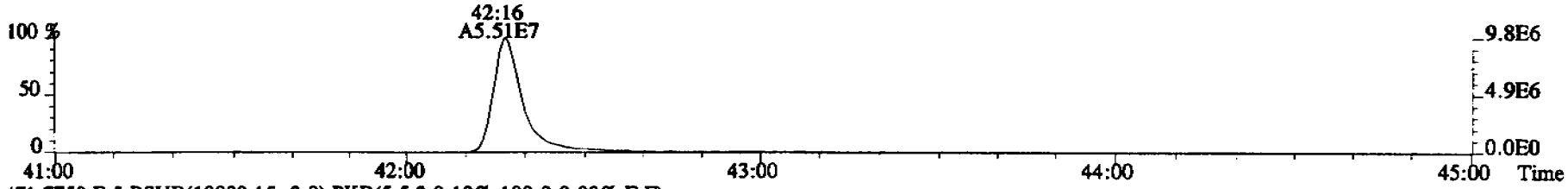
File:050423D1 #1-345 Acq:23-APR-2005 11:22:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-1 1613 CS3 050420H Exp:OCDD_DB5
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



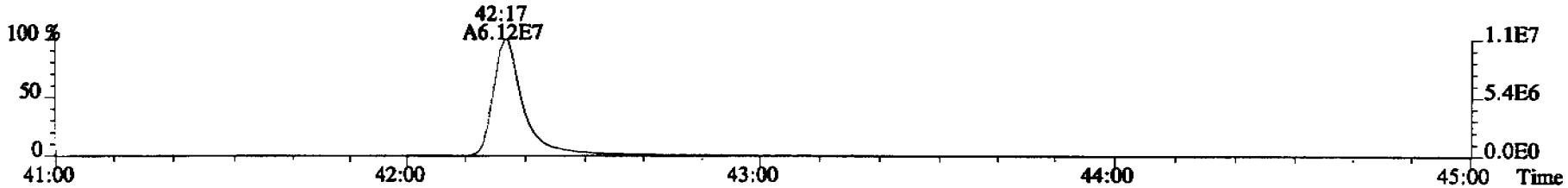
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



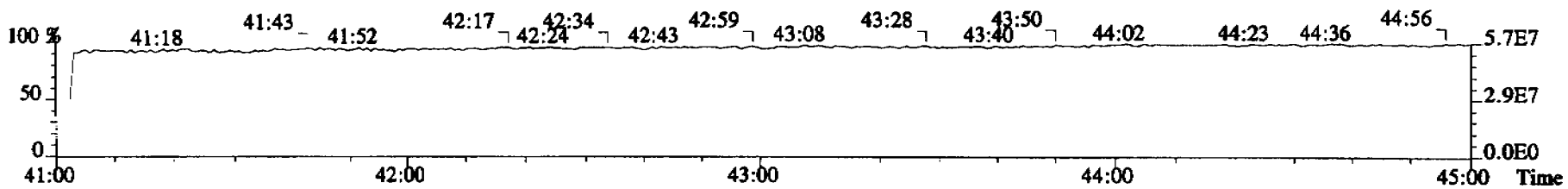
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



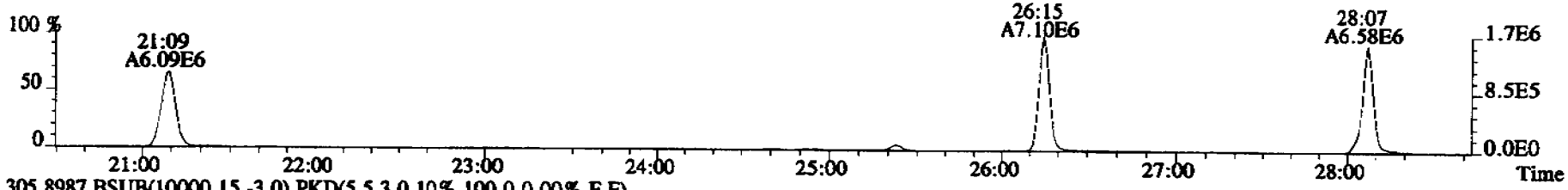
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



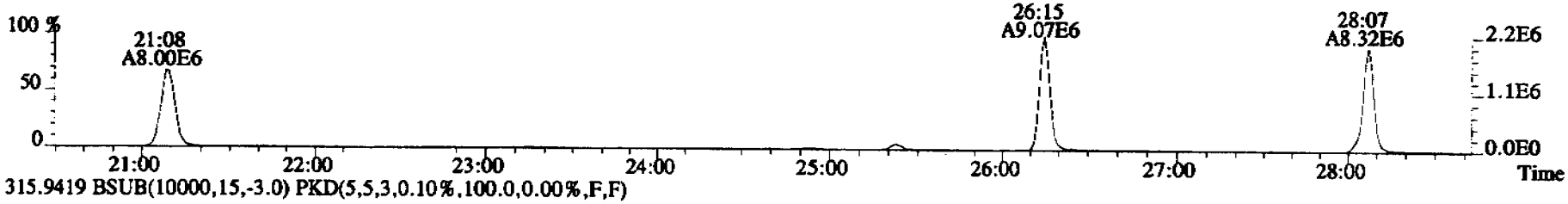
454.9728 F:5



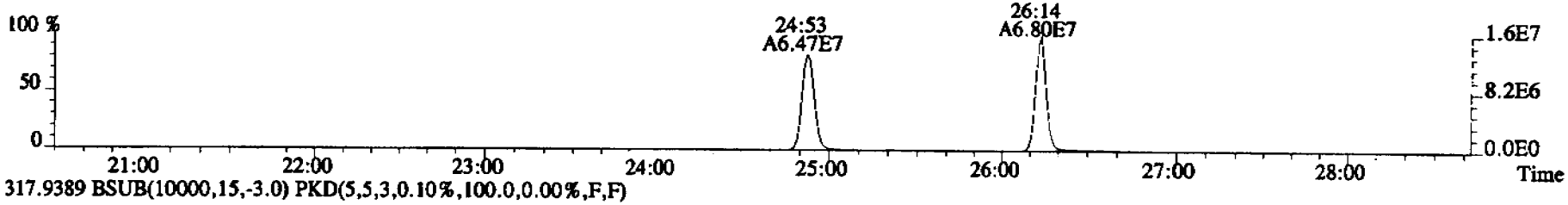
File:050423D1 #1-559 Acq:23-APR-2005 11:22:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-1 1613 CS3 050420H Exp:OCDD_DB5
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



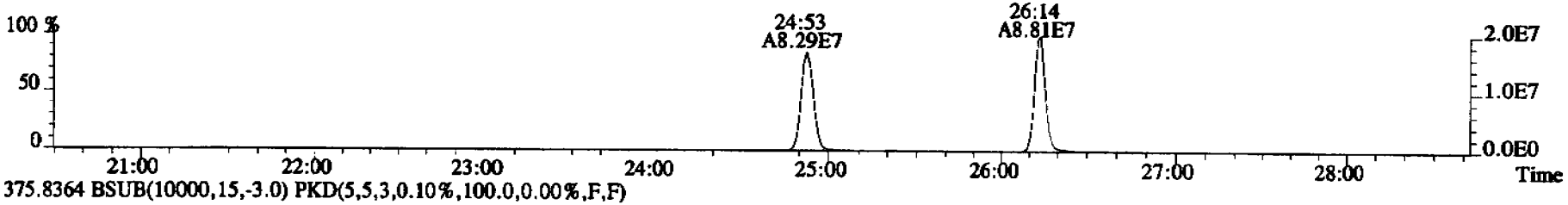
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



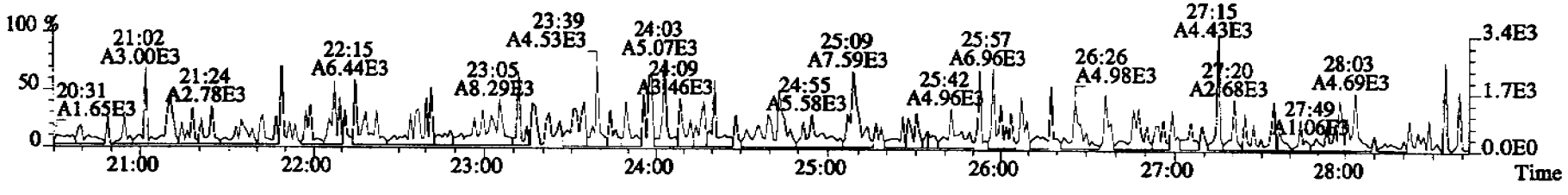
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



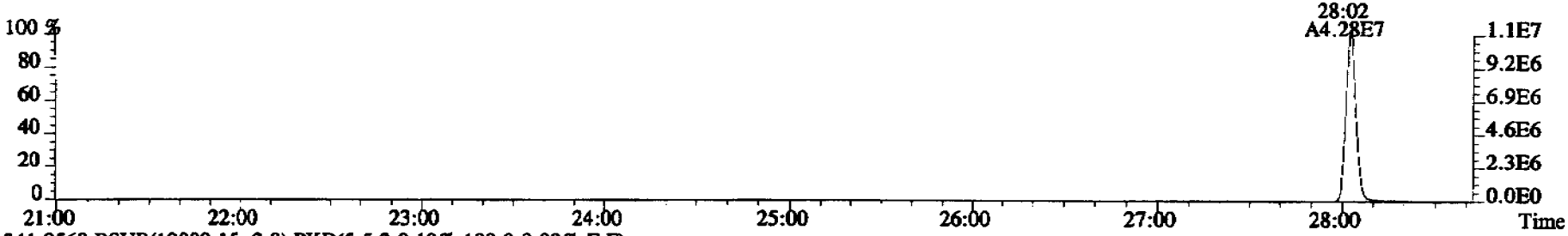
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



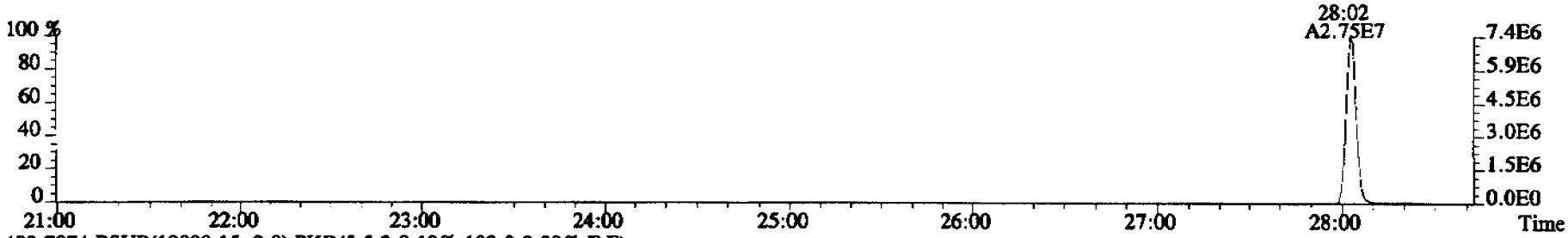
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



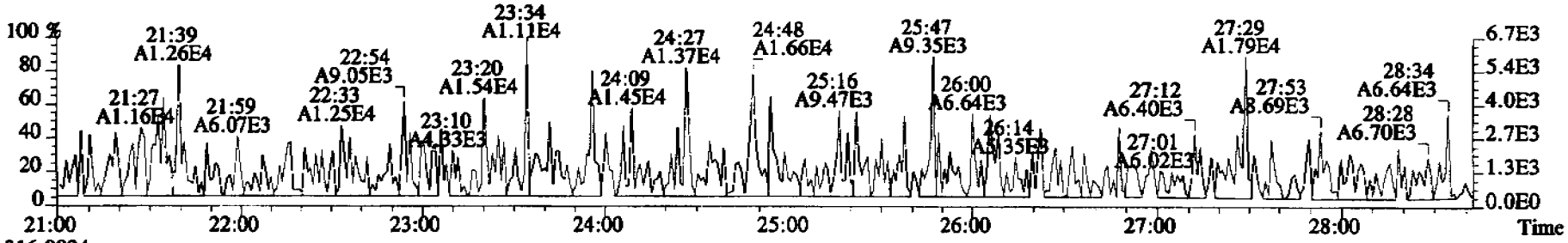
File:050423D1 #1-559 Acq:23-APR-2005 11:22:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-1 1613 CS3 050420H Exp:OCDD_DB5
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



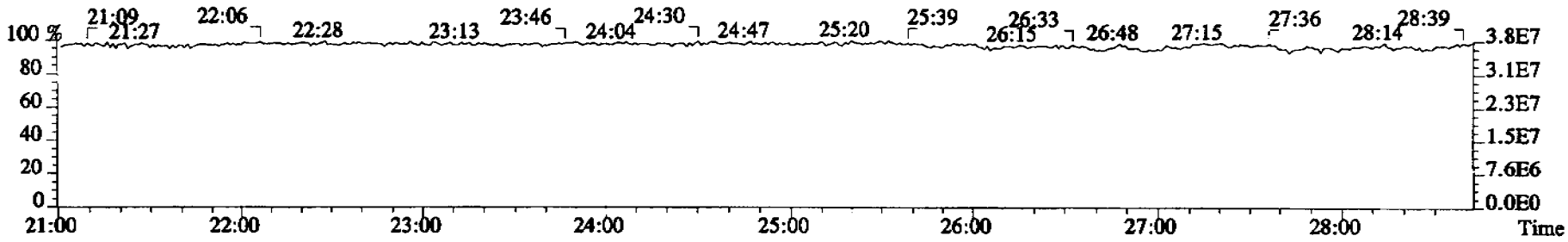
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



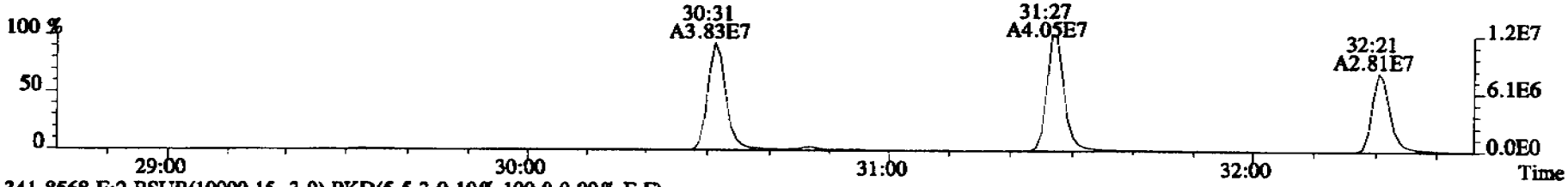
409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



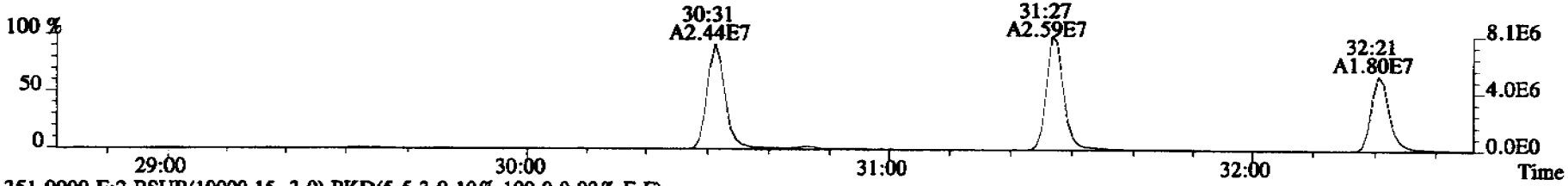
316.9824



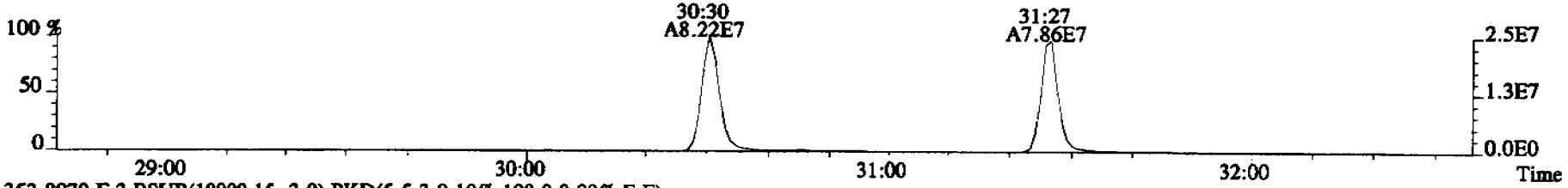
File:050423D1 #1-273 Acq:23-APR-2005 11:22:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-1 1613 CS3 050420H Exp:OCDD_DB5
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



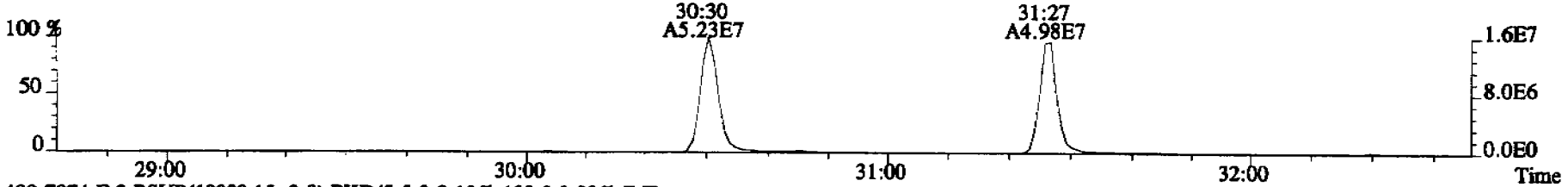
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



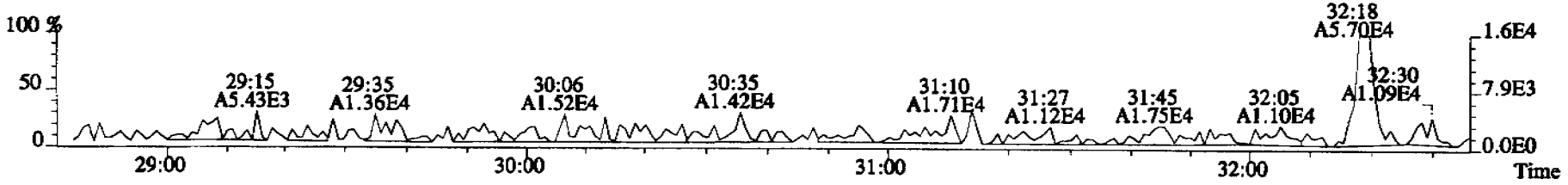
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



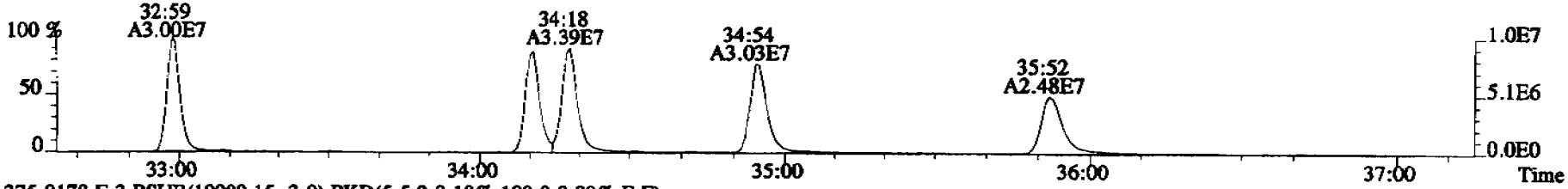
353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



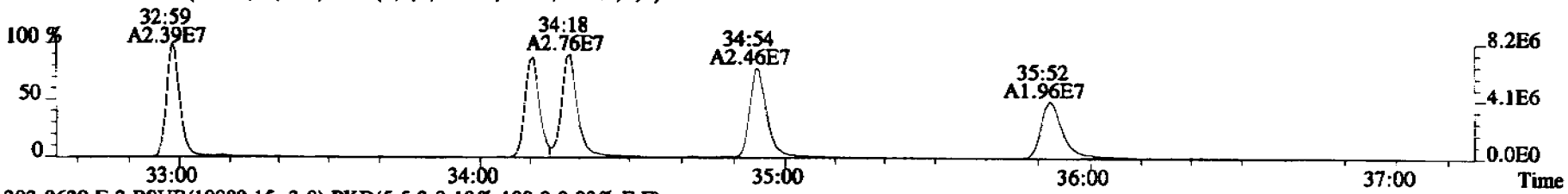
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



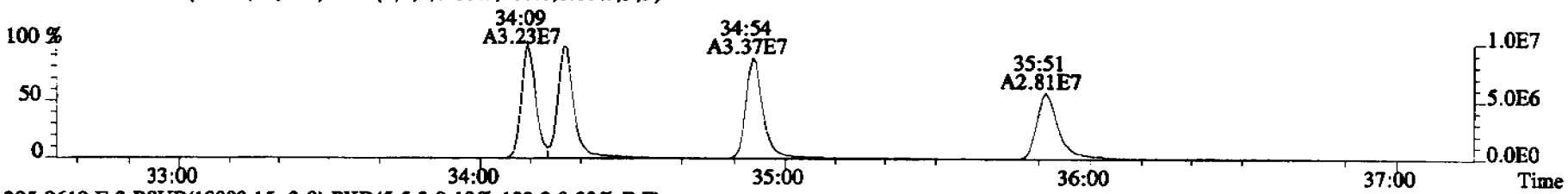
File:050423D1 #1-398 Acq:23-APR-2005 11:22:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-1 1613 CS3 050420H Exp:OCDD_DB5
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



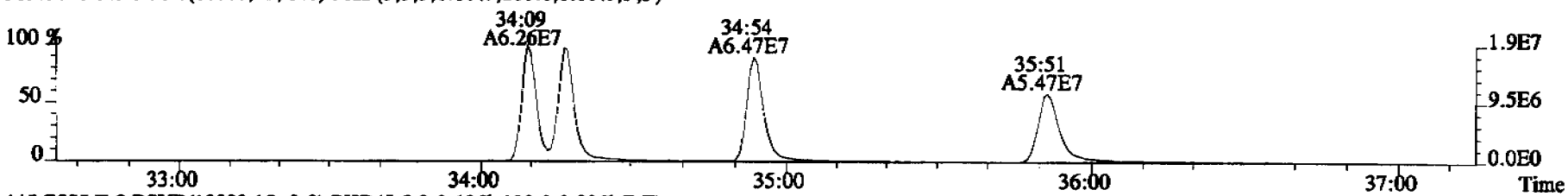
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



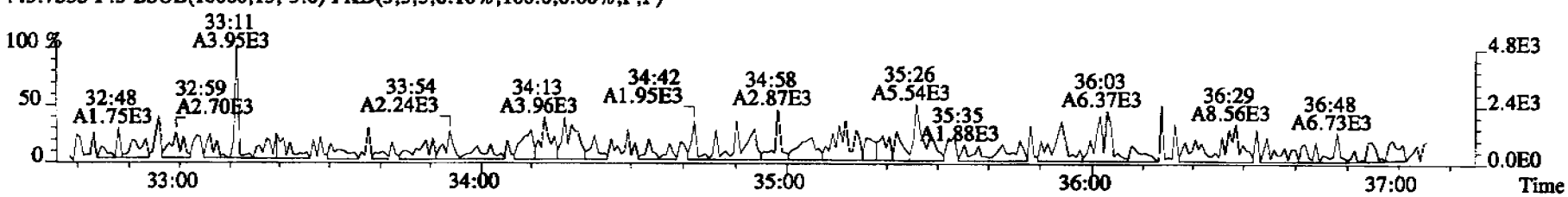
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

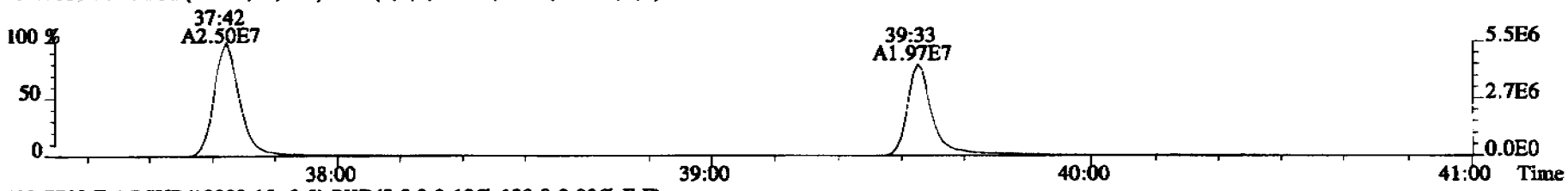


445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

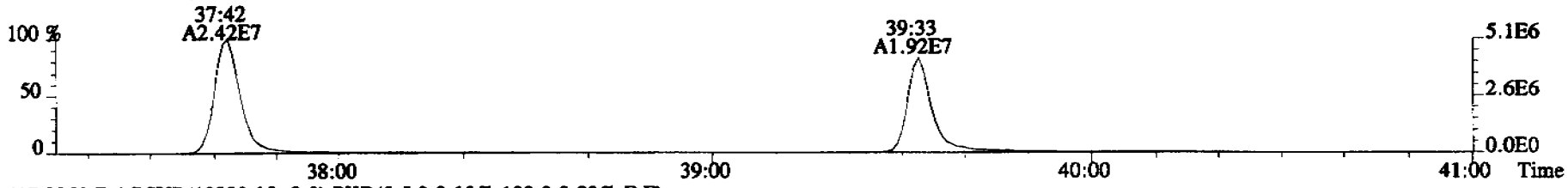


File:050423D1 #1-348 Acq:23-APR-2005 11:22:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-1 1613 CS3 050420H Exp:OCDD_DB5

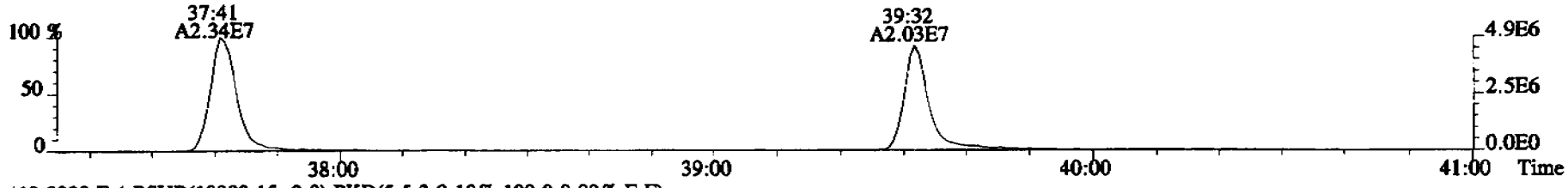
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



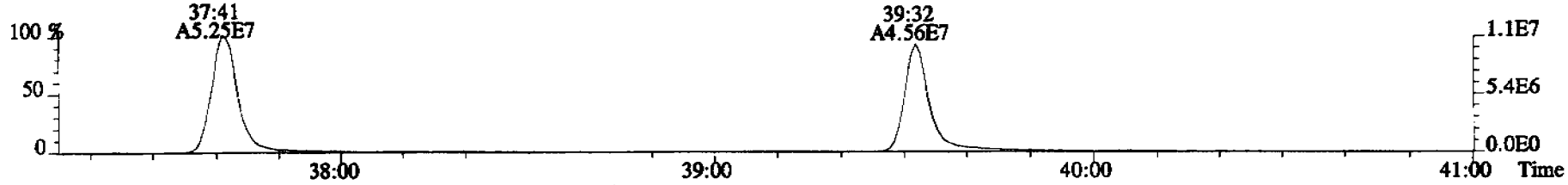
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



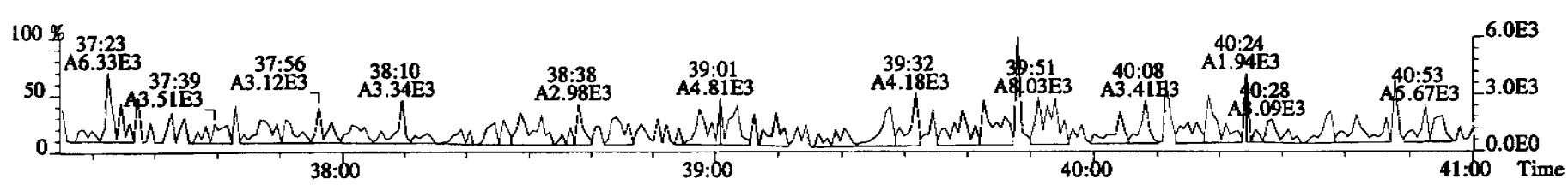
417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



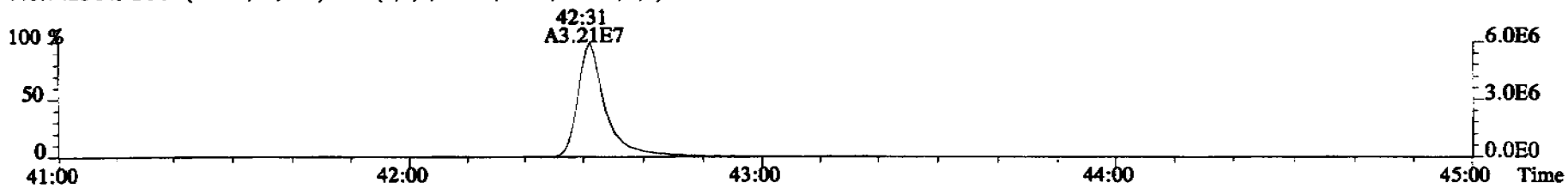
419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



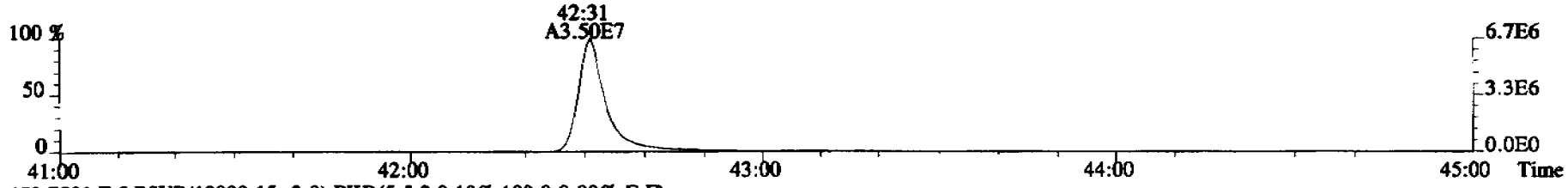
479.7165 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



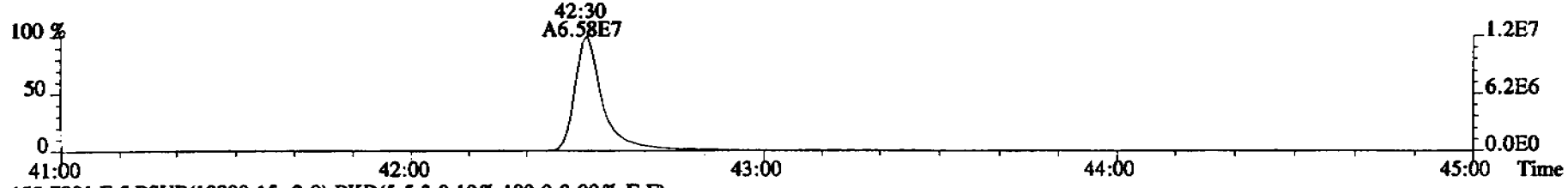
File:050423D1 #1-345 Acq:23-APR-2005 11:22:51 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-1 1613 CS3 050420H Exp:OCDD_DB5
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



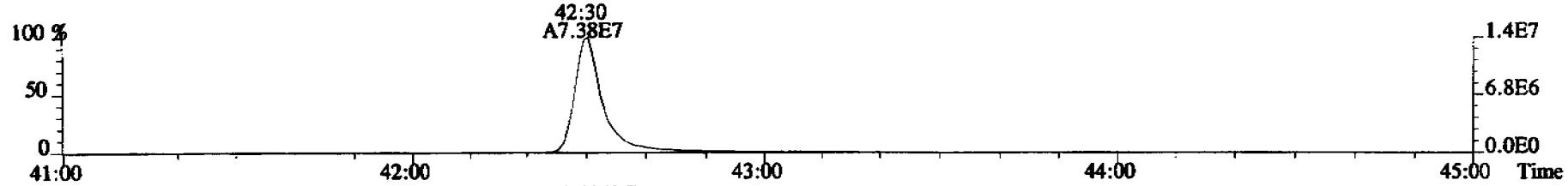
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



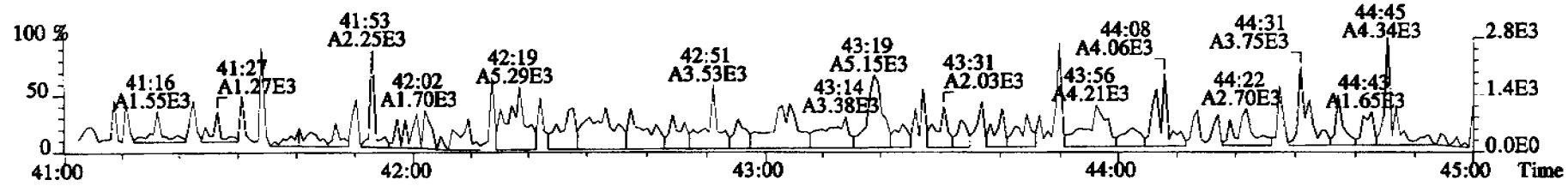
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



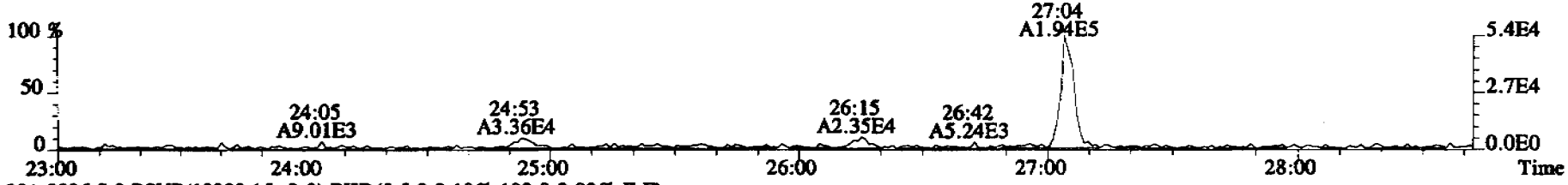
455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



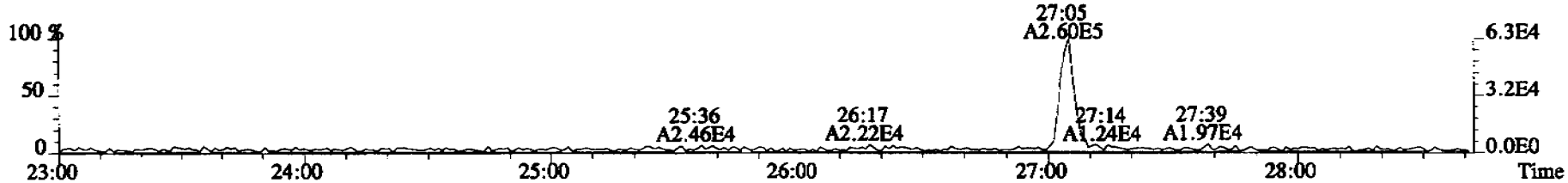
513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



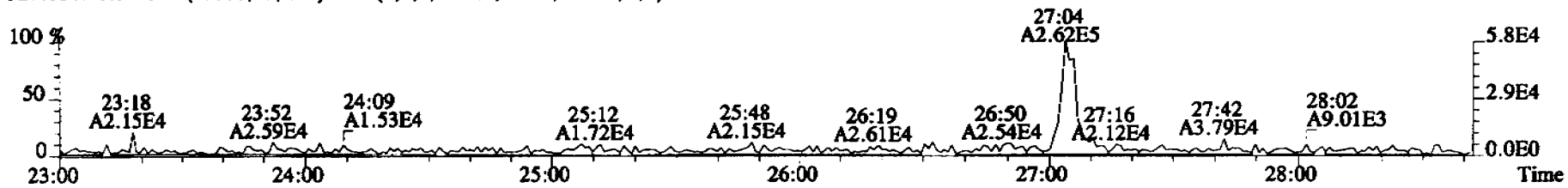
File:050423D1 #1-558 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5
319.8965 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



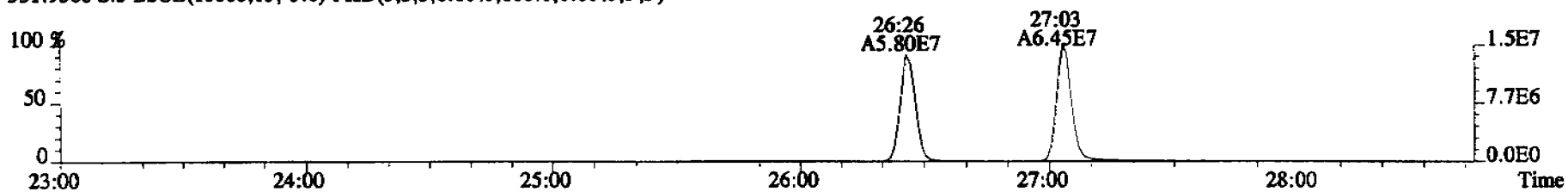
321.8936 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



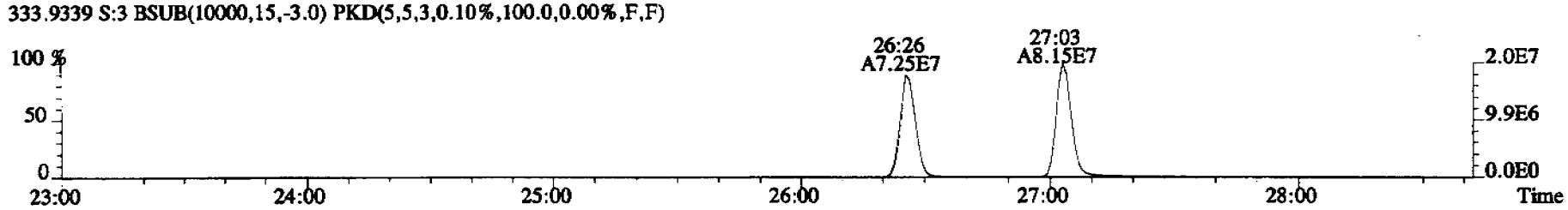
327.8847 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



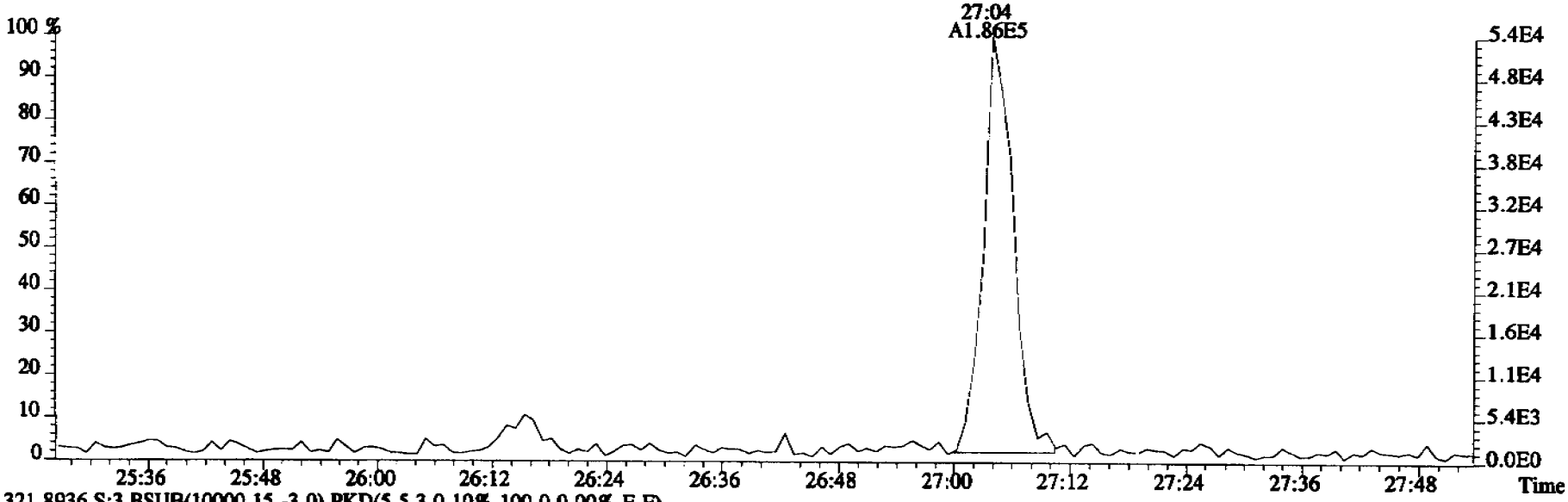
331.9368 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



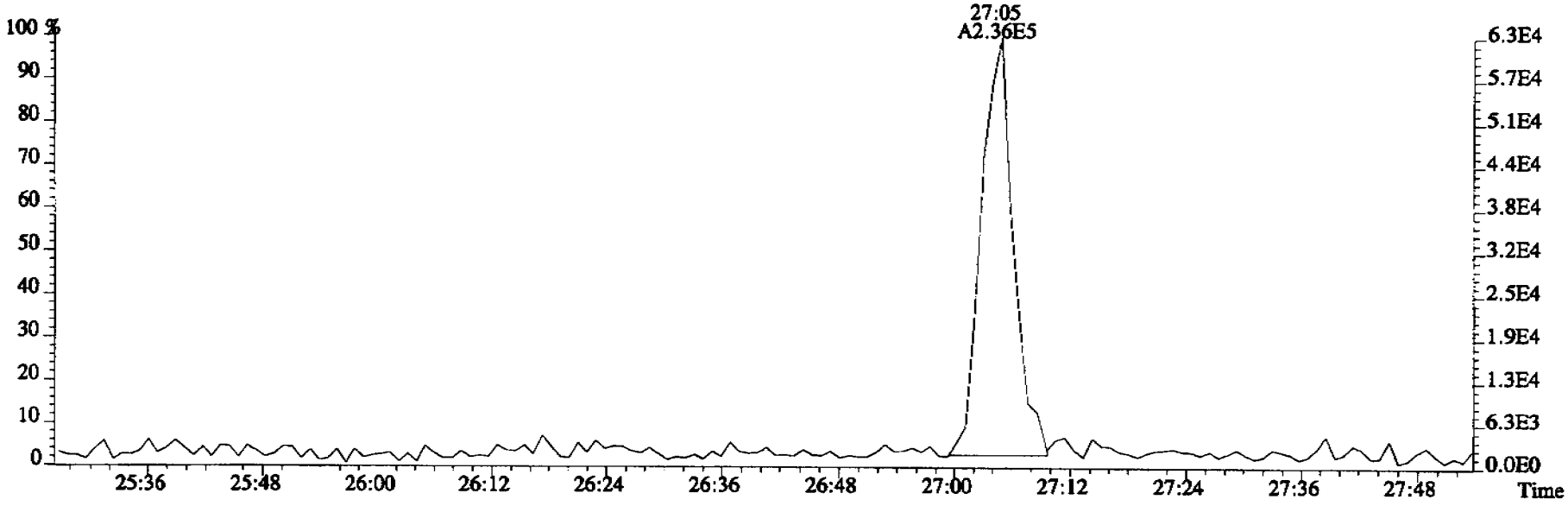
333.9339 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



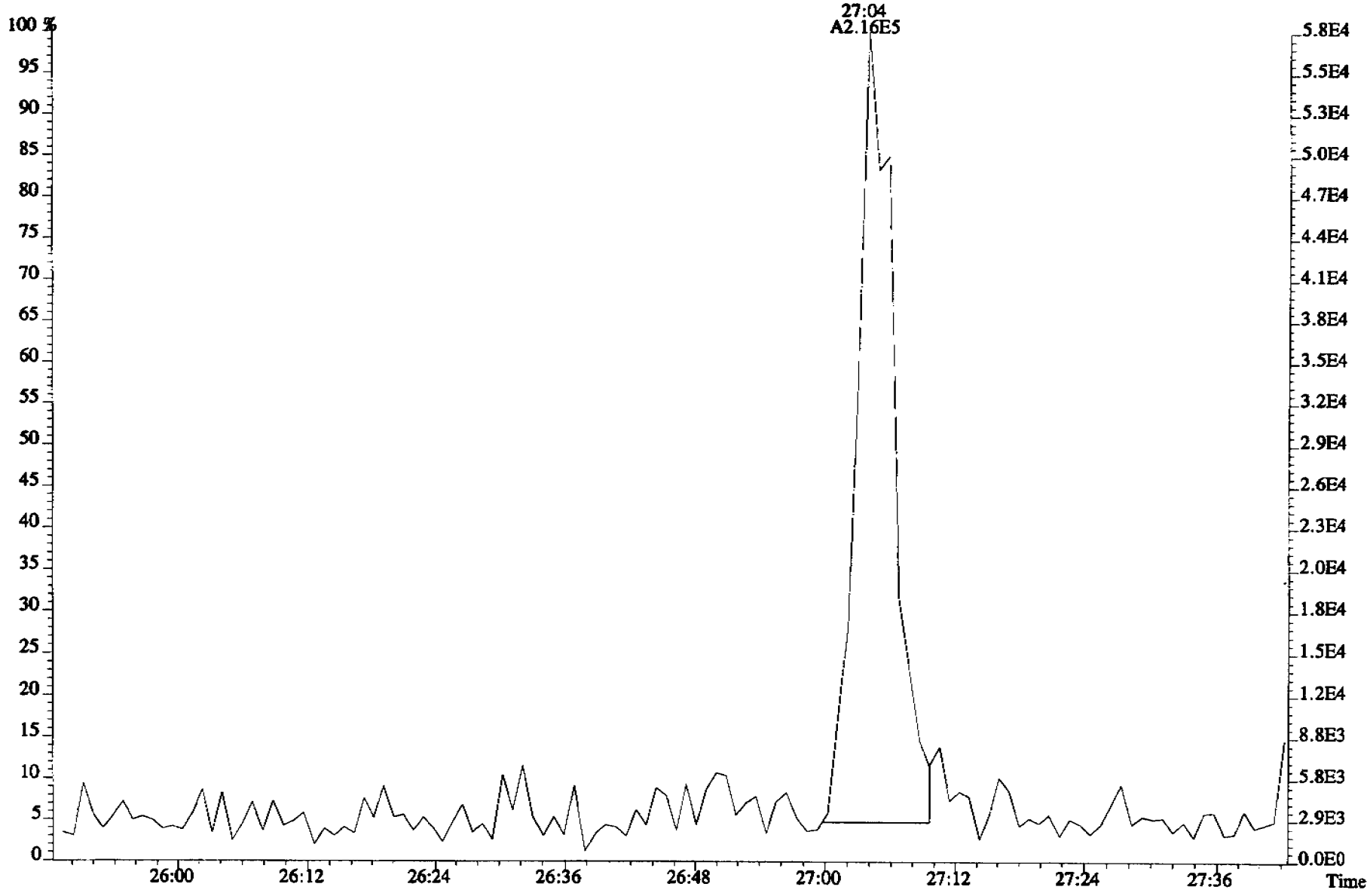
File:050423D1 #1-558 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5
319.8965 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



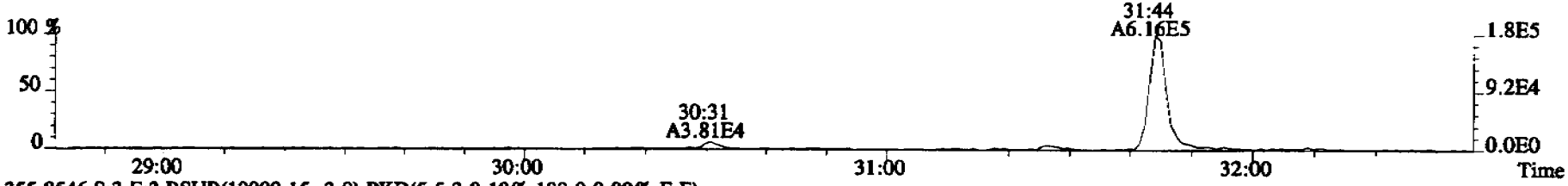
321.8936 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



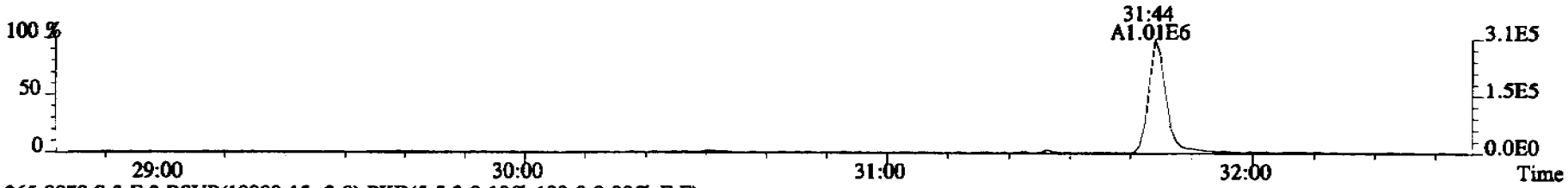
File:050423D1 #1-558 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5
327.8847 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



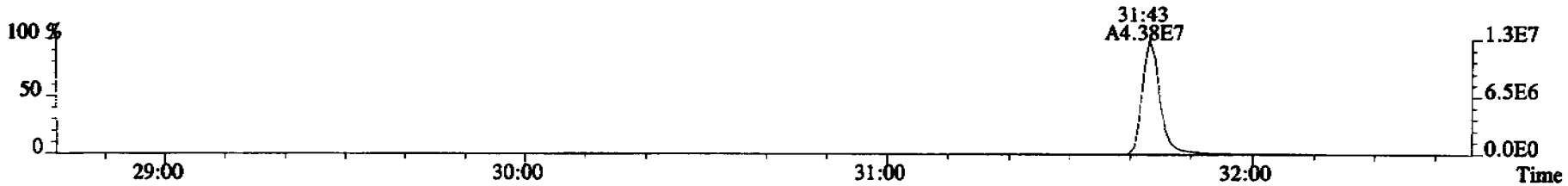
File:050423D1 #1-273 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5
353.8576 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



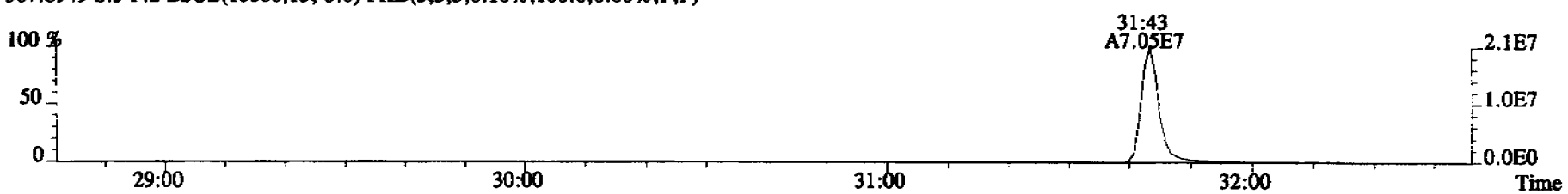
355.8546 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



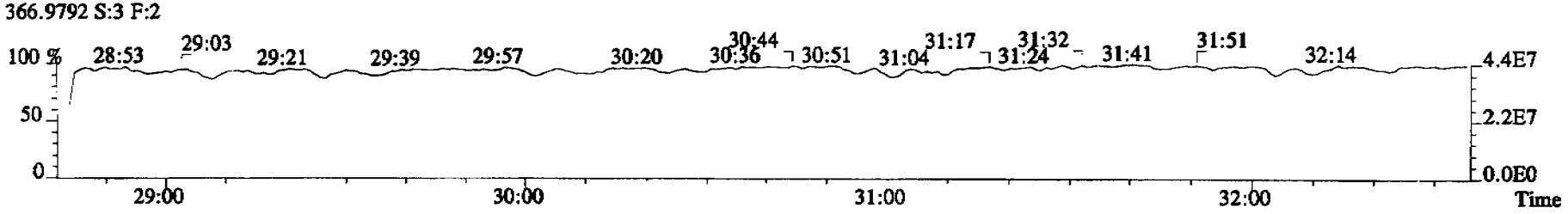
365.8978 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



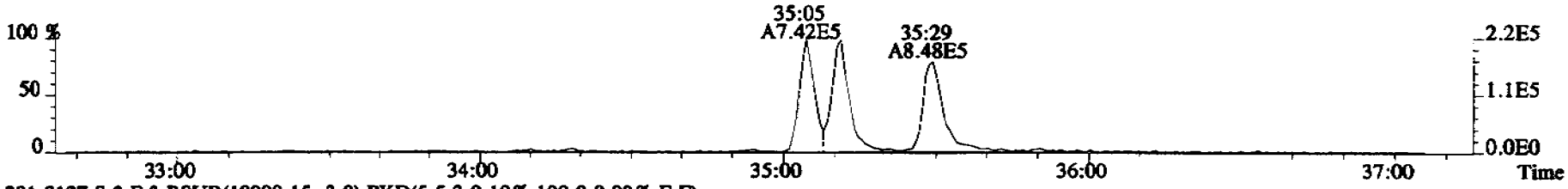
367.8949 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



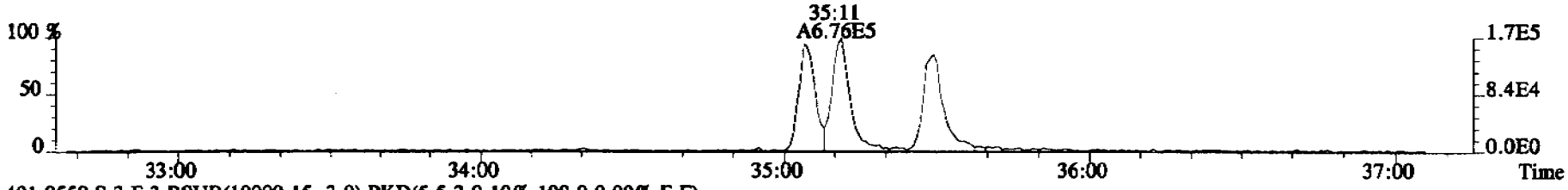
366.9792 S:3 F:2



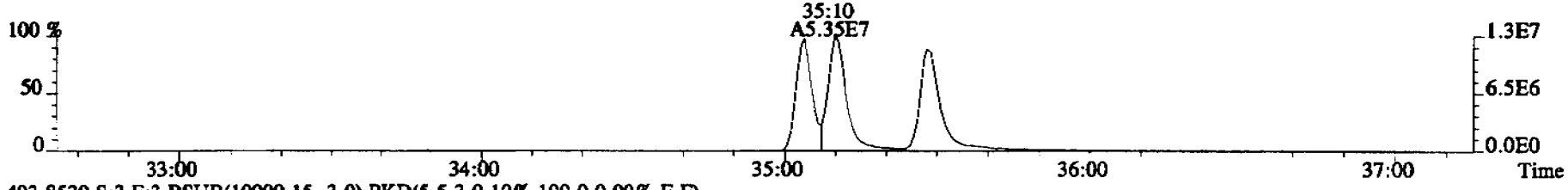
File:050423D1 #1-399 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5
389.8156 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



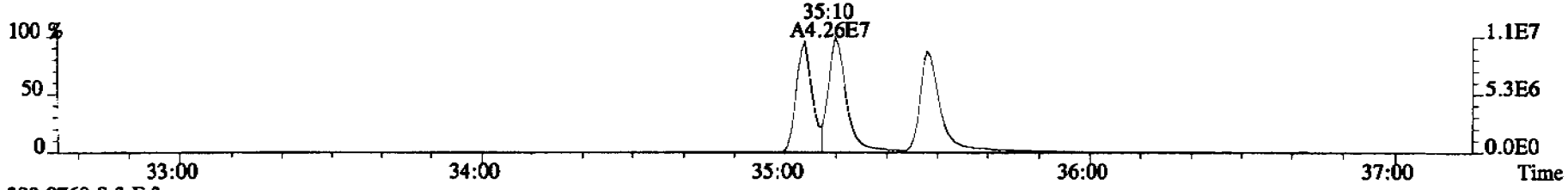
391.8127 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



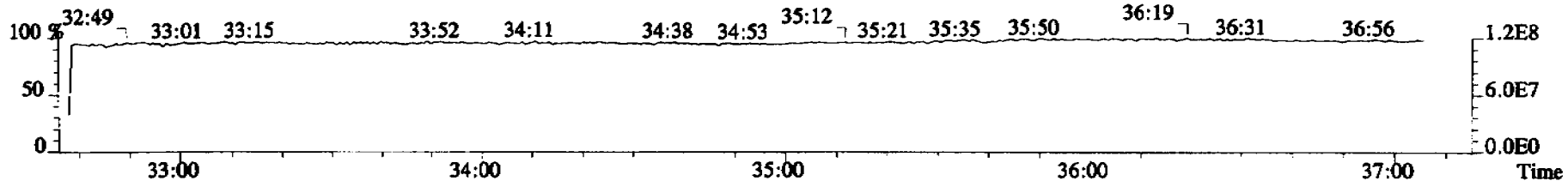
401.8559 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



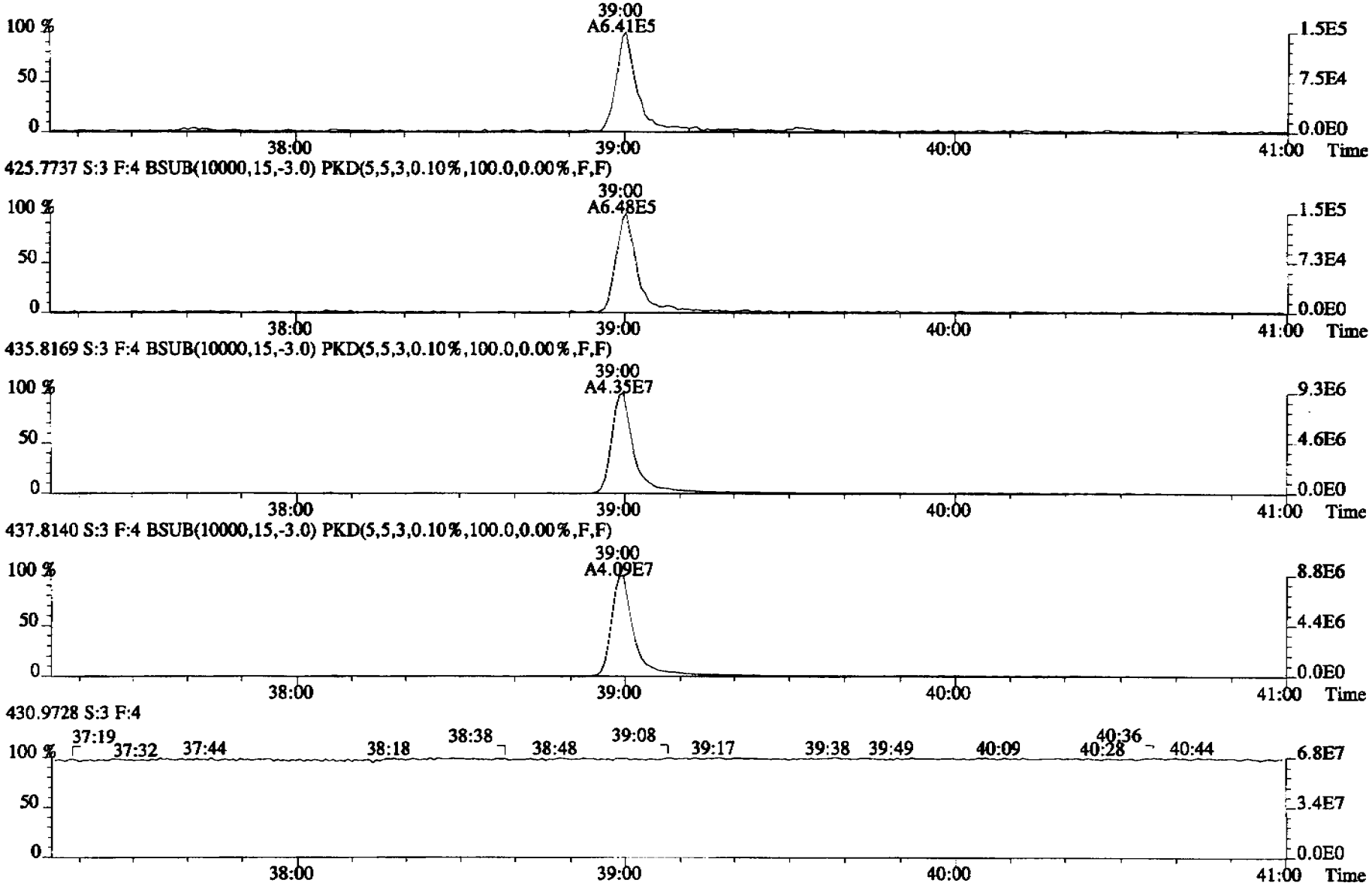
403.8530 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



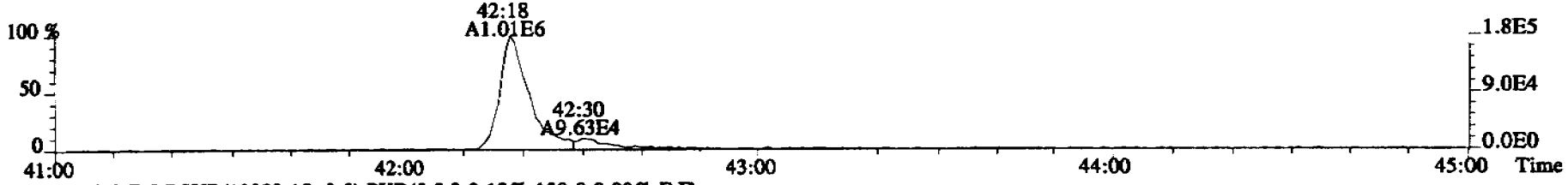
380.9760 S:3 F:3



File:050423D1 #1-347 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5

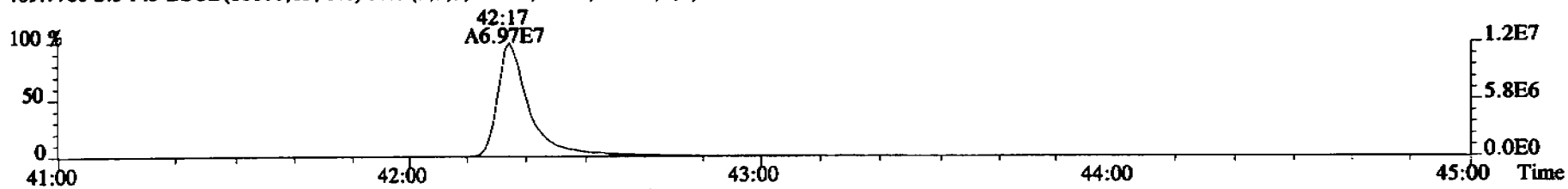


File:050423D1 #1-345 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5
457.7377 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

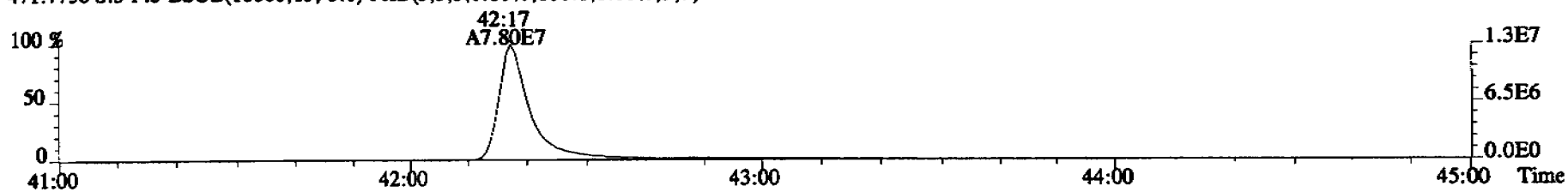


459.7348 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

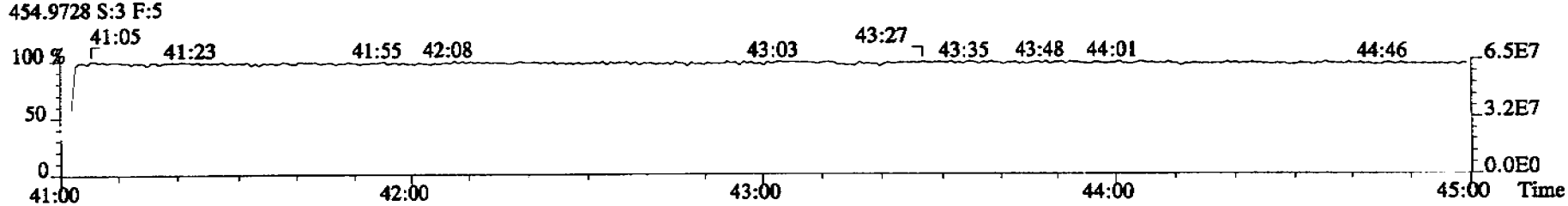
469.7780 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



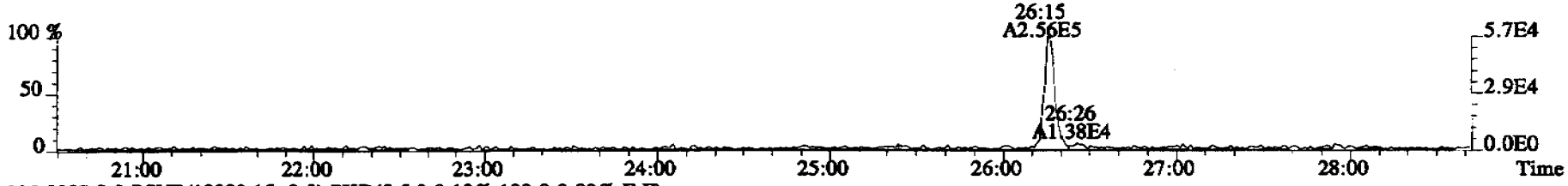
471.7750 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



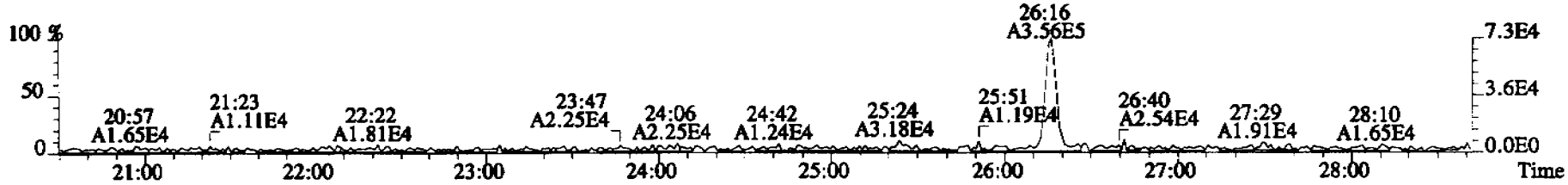
454.9728 S:3 F:5



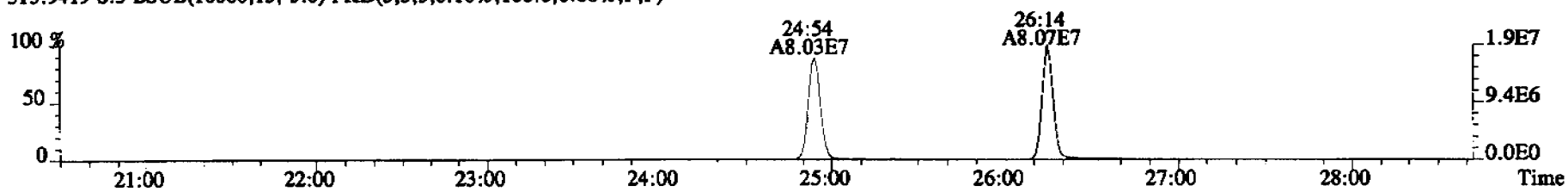
File:050423D1 #1-558 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



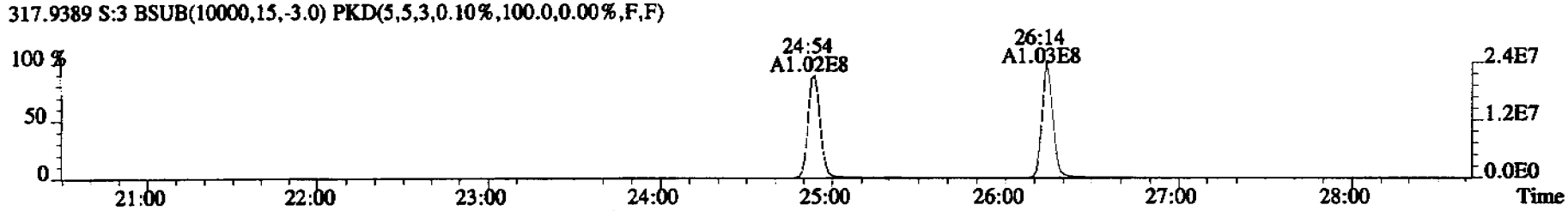
305.8987 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



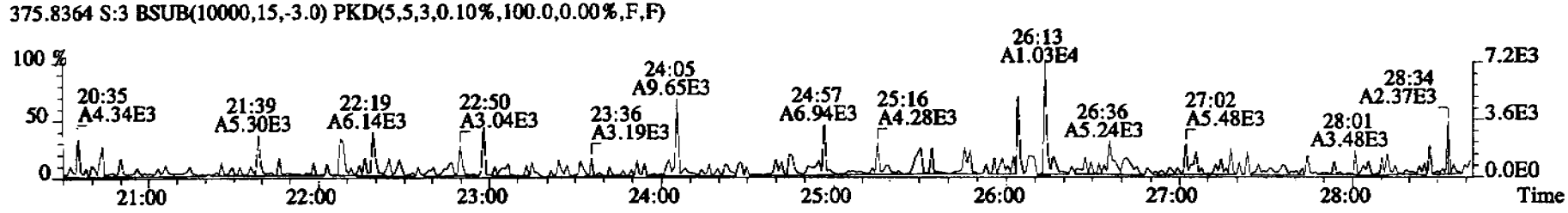
315.9419 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



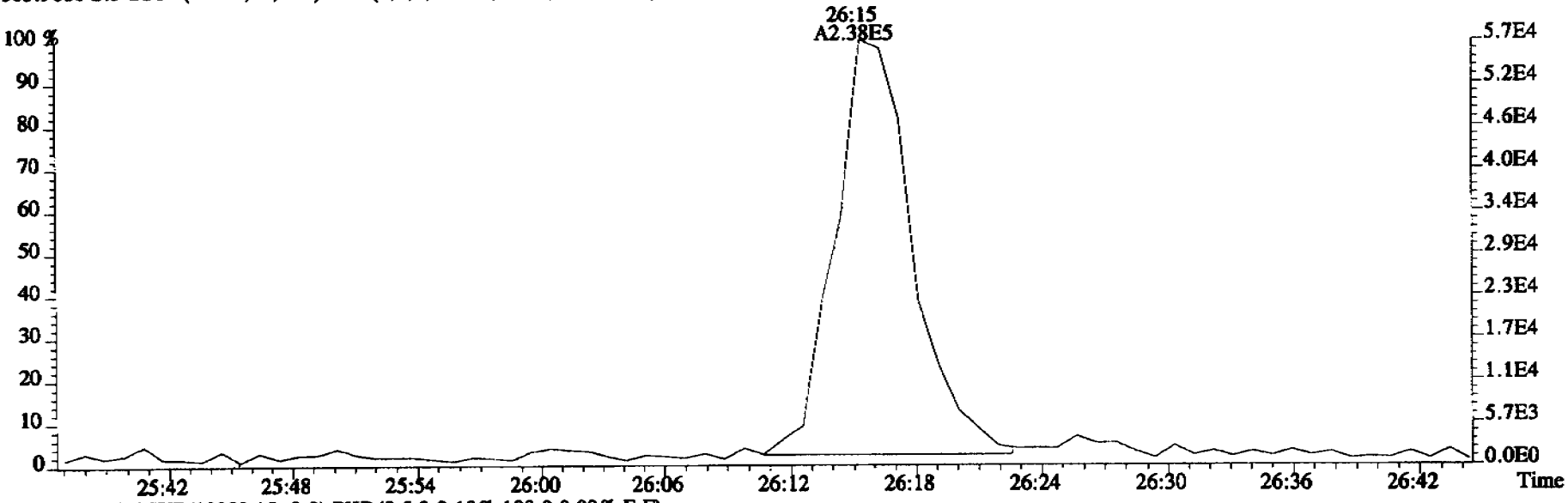
317.9389 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



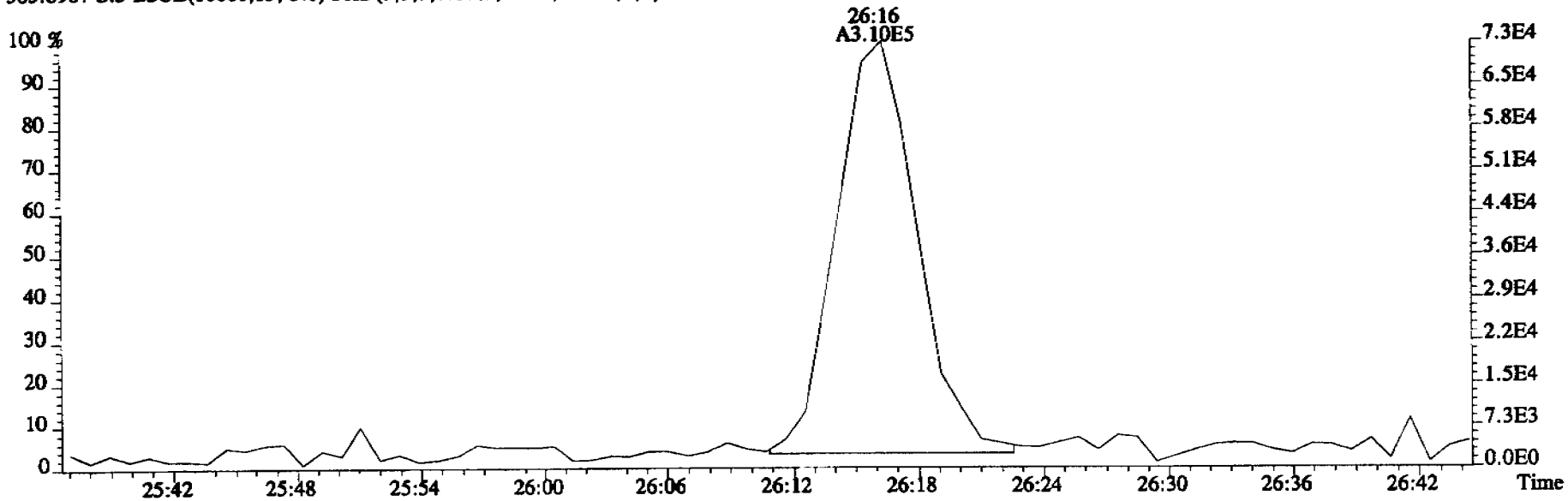
375.8364 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



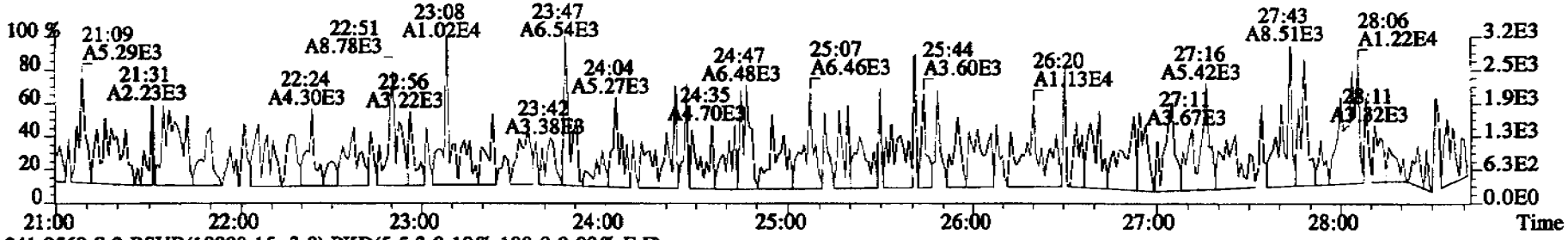
File:050423D1 #1-558 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



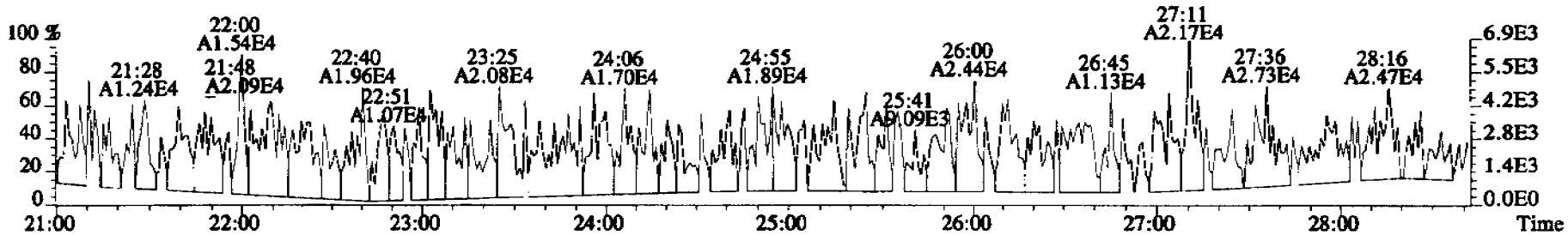
305.8987 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



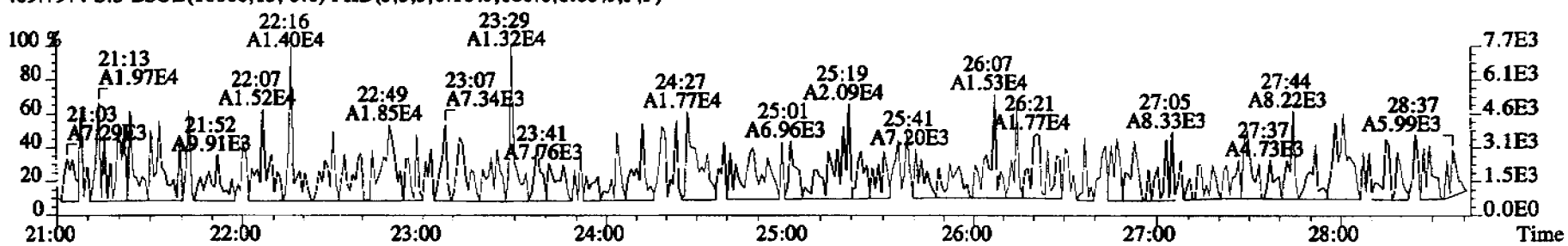
File:050423D1 #1-558 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5
339.8597 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



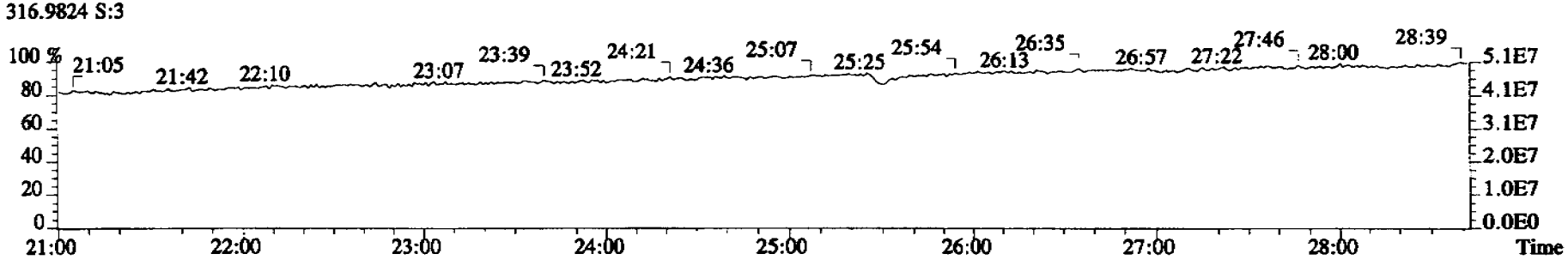
341.8568 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



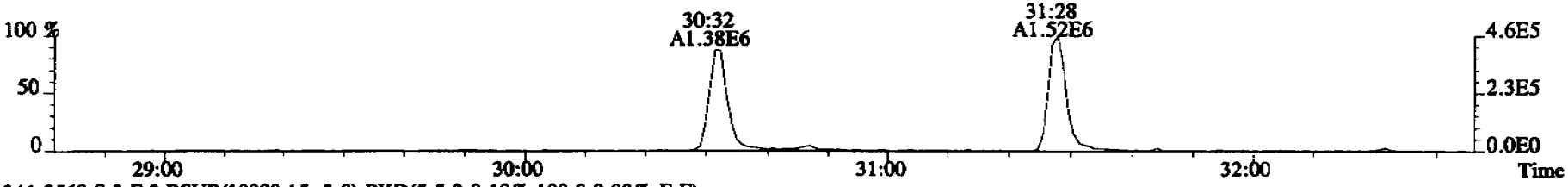
409.7974 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



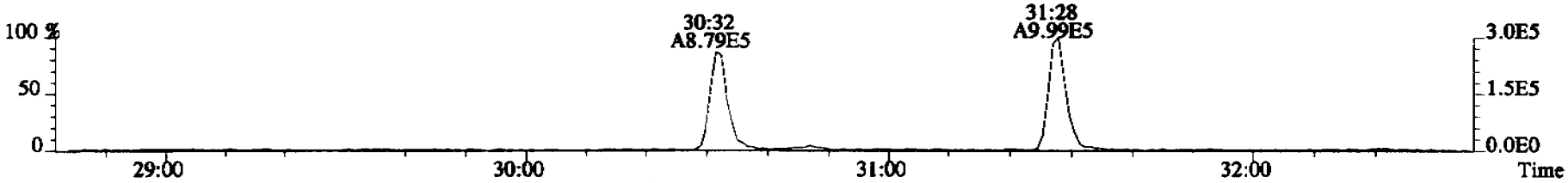
316.9824 S:3



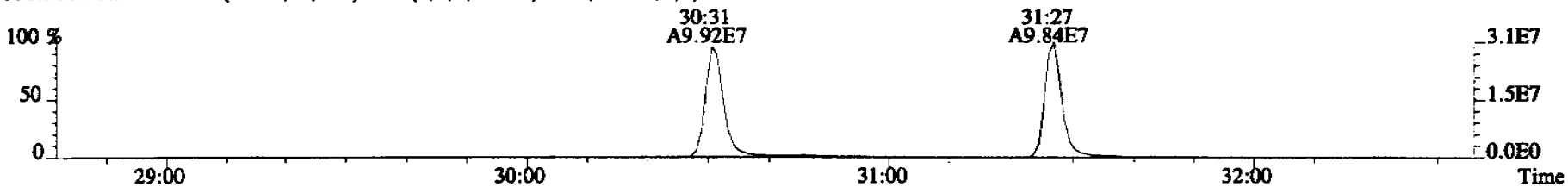
File:050423D1 #1-273 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5
339.8597 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



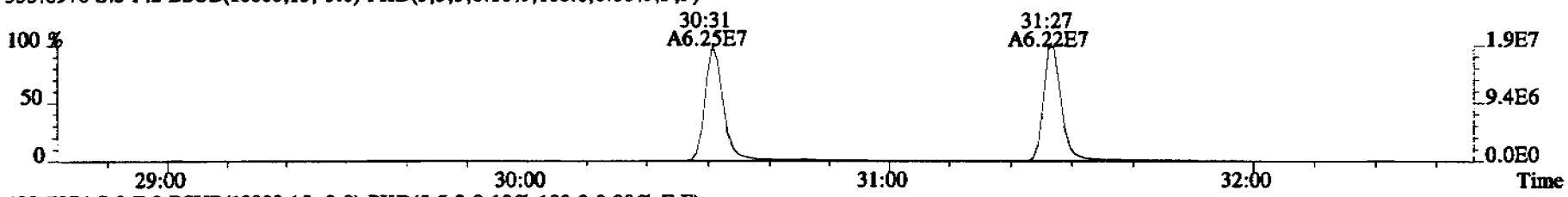
341.8568 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



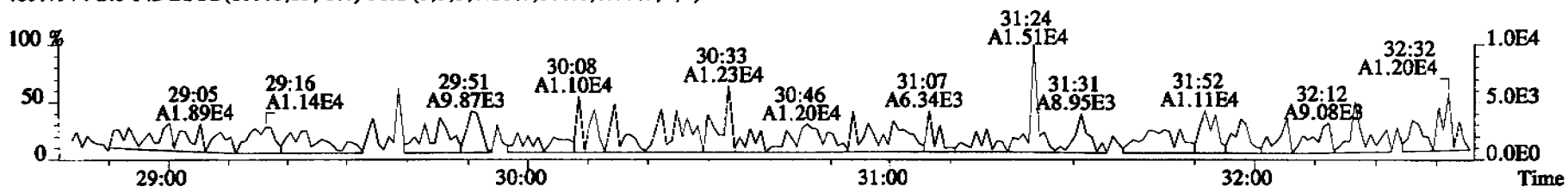
351.9000 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



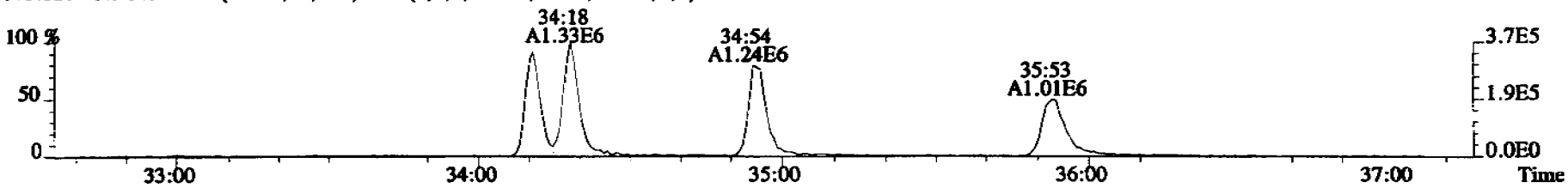
353.8970 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



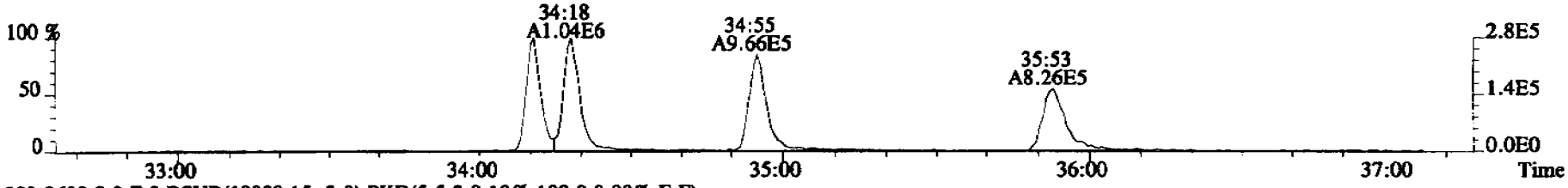
409.7974 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



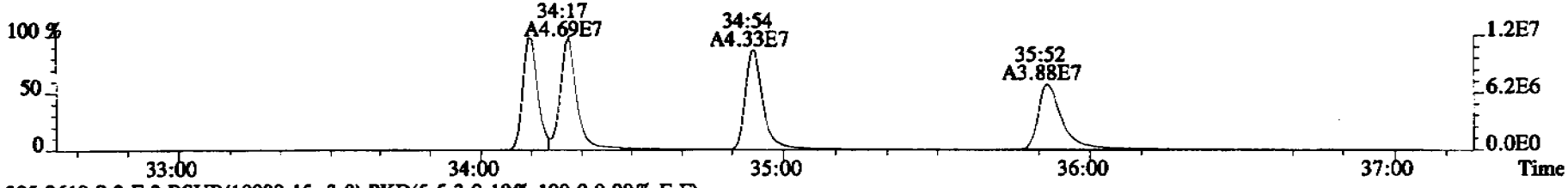
File:050423D1 #1-399 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5
373.8207 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



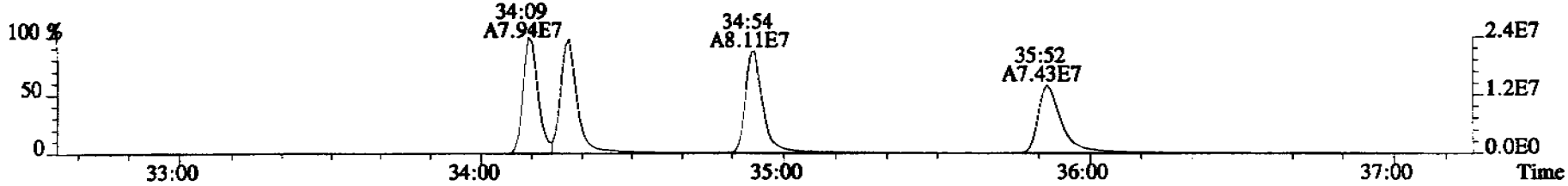
375.8178 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



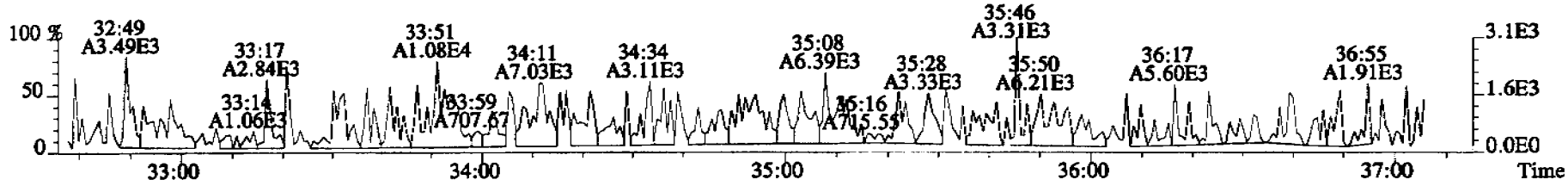
383.8639 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



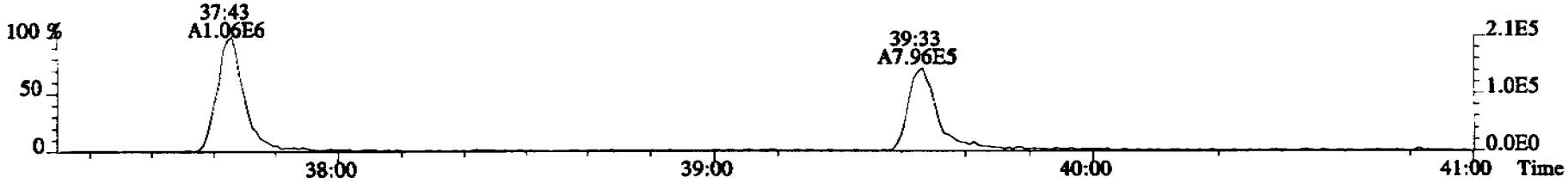
385.8610 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



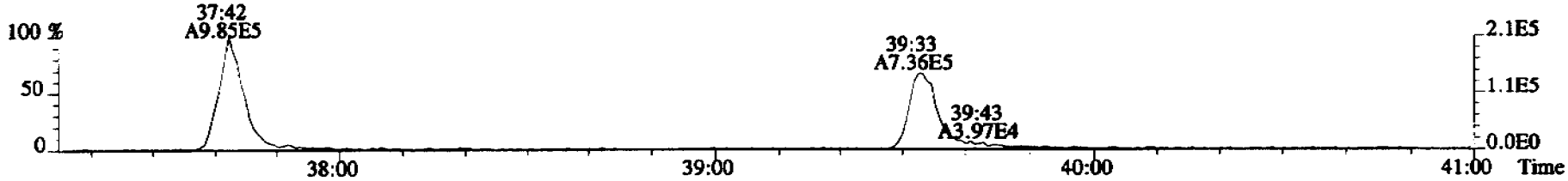
445.7555 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



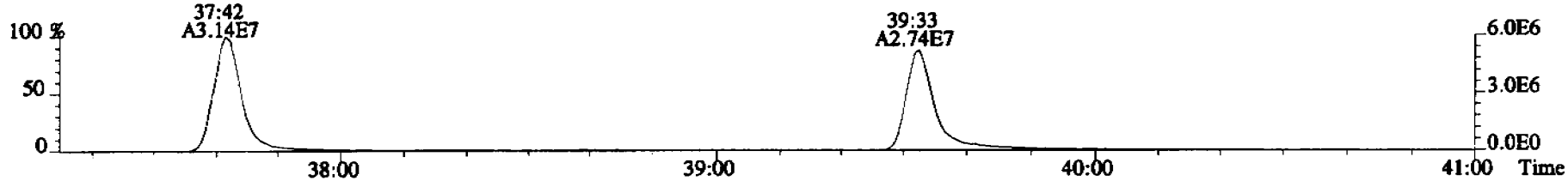
File:050423D1 #1-347 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5
407.7818 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



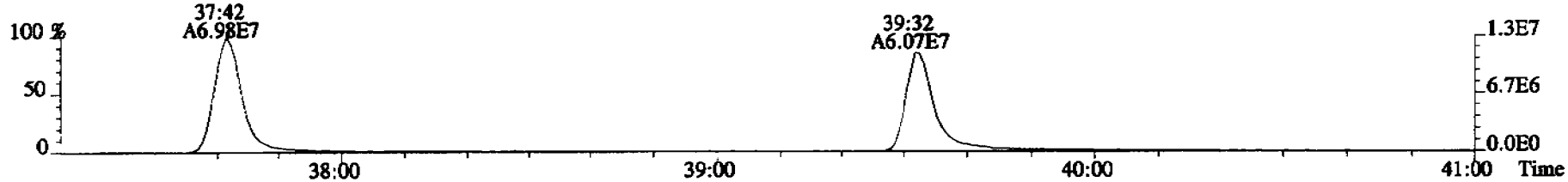
409.7788 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



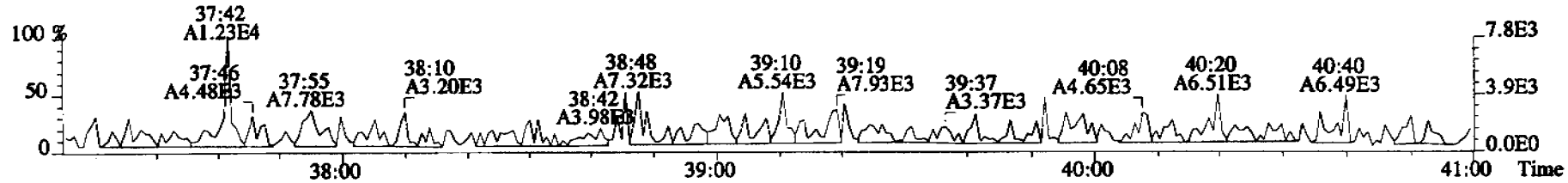
417.8253 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



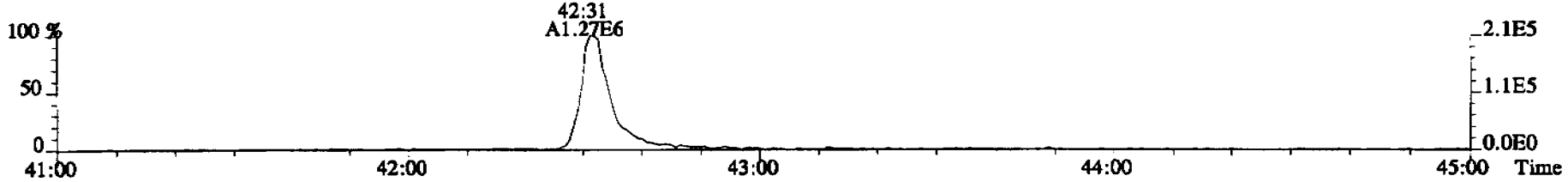
419.8220 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



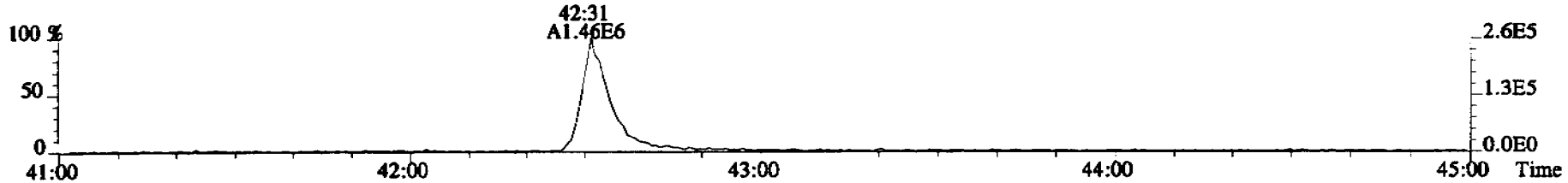
479.7165 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



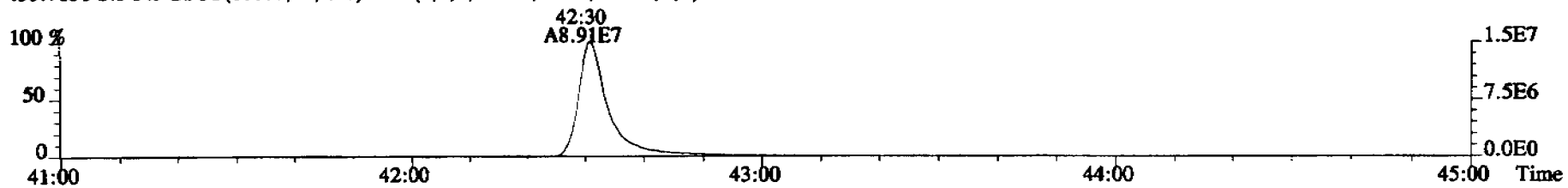
File:050423D1 #1-345 Acq:23-APR-2005 13:00:26 GC EI+ Voltage SIR Autospec-UltimaE
Sample#3 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-2 1613 CS0 050420E Exp:OCDD_DB5
441.7428 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



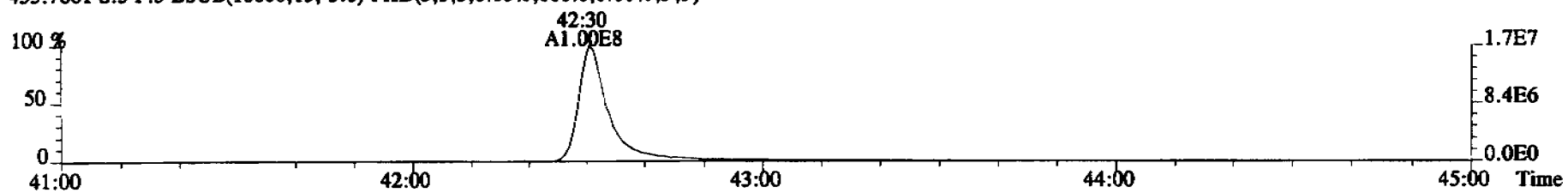
443.7398 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



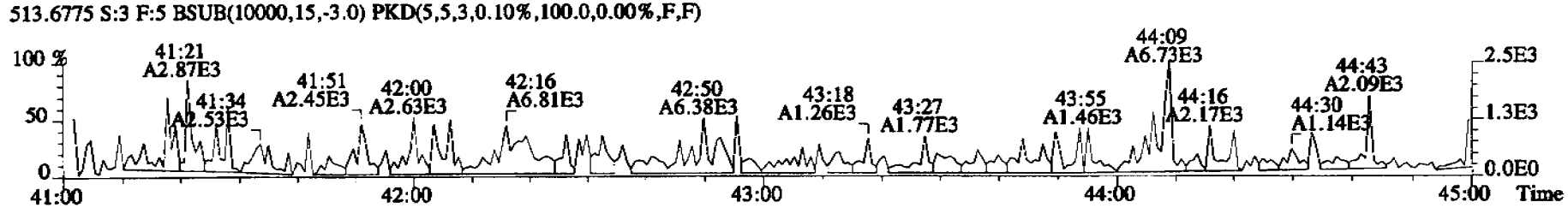
453.7831 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



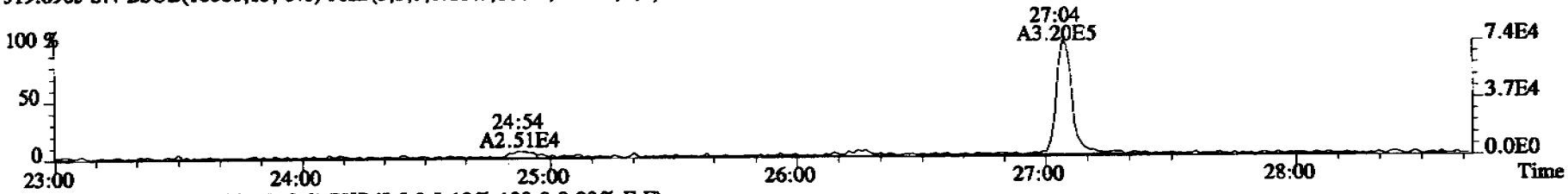
455.7801 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



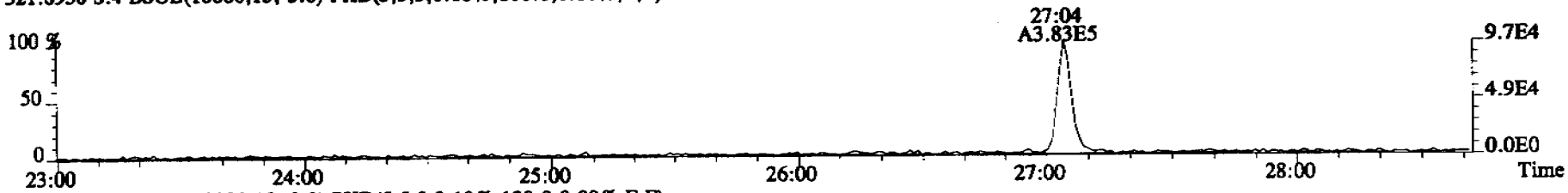
513.6775 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



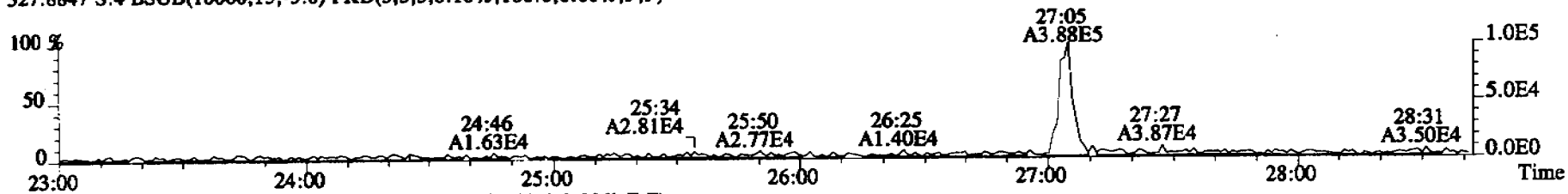
File:050423D1 #1-558 Acq:23-APR-2005 13:49:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-3 1613 CS1 050420F Exp:OCDD_DB5
319.8965 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



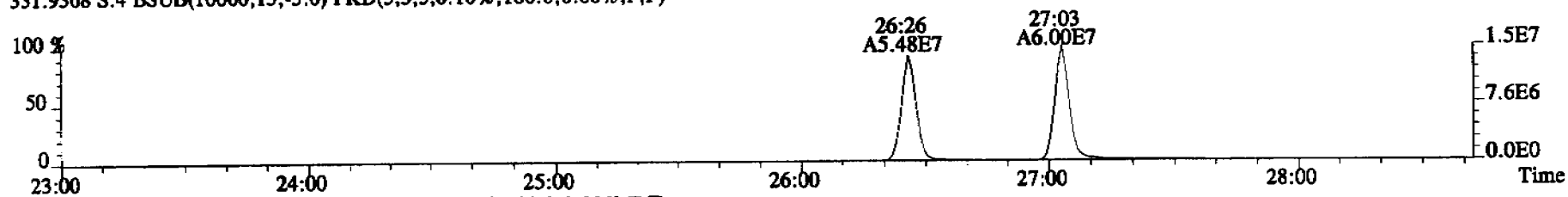
321.8936 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



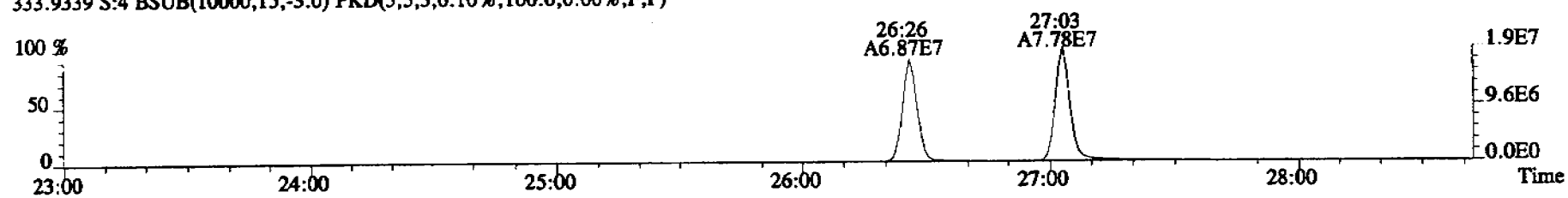
327.8847 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



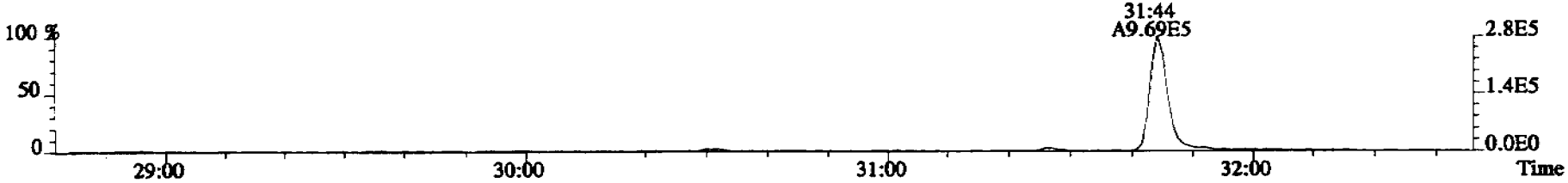
331.9368 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



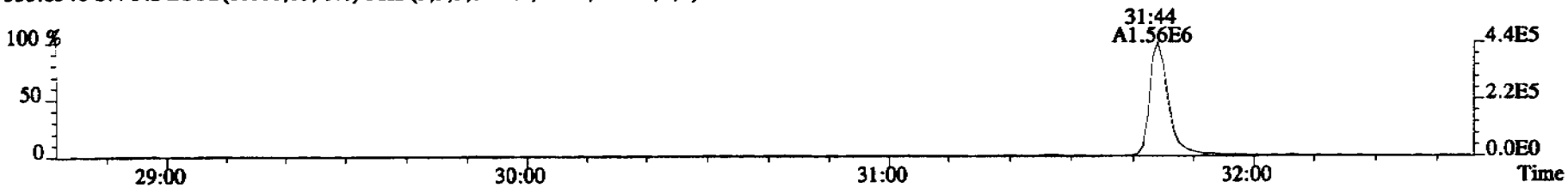
333.9339 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



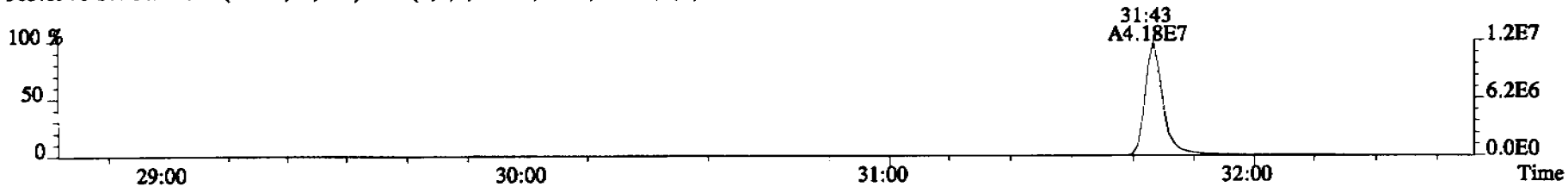
File:050423D1 #1-273 Acq:23-APR-2005 13:49:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-3 1613 CS1 050420F Exp:OCDD_DB5
353.8576 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



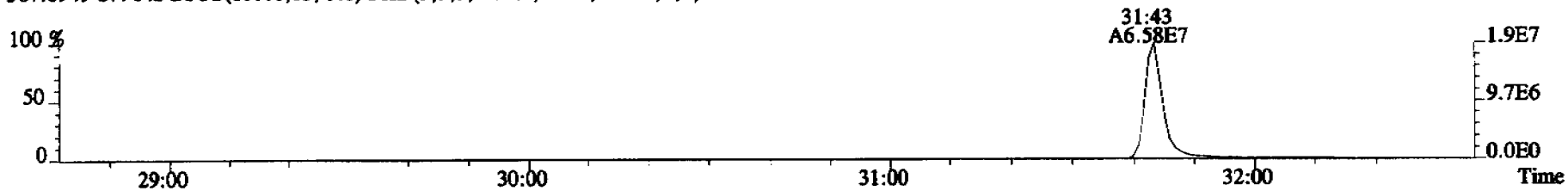
355.8546 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



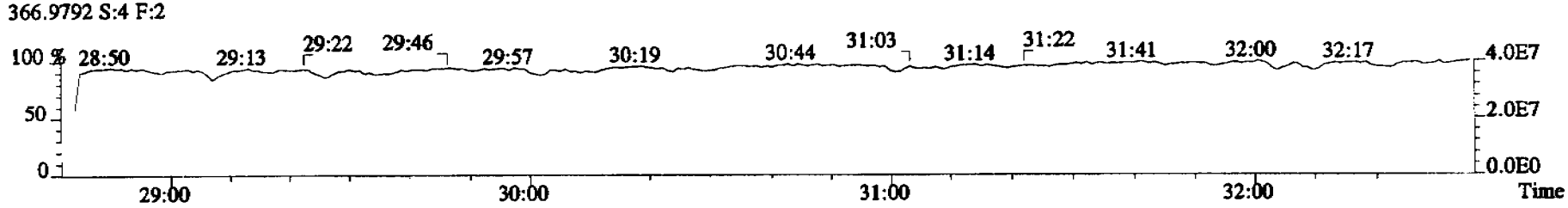
365.8978 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



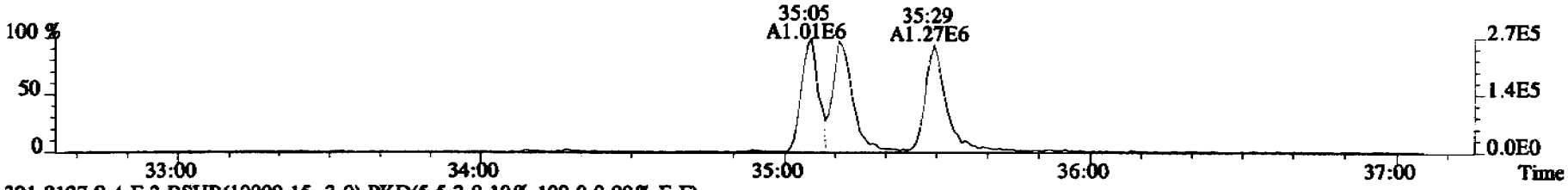
367.8949 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



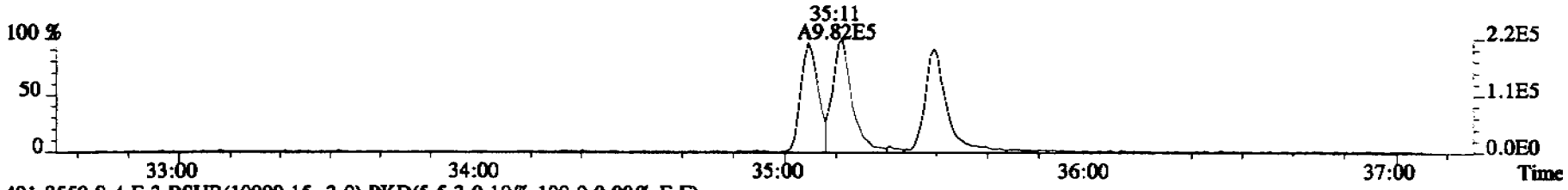
366.9792 S:4 F:2



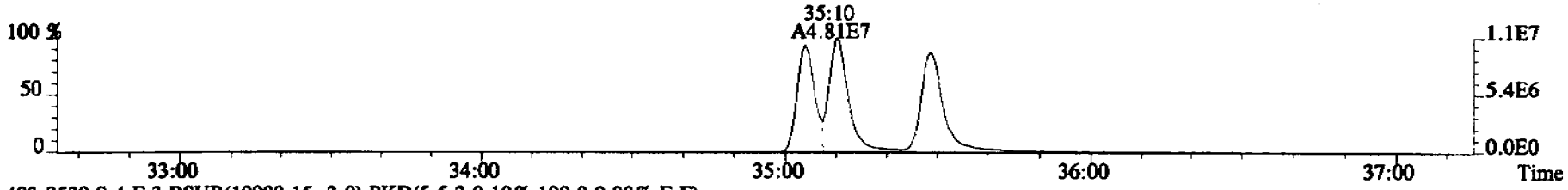
File:050423D1 #1-398 Acq:23-APR-2005 13:49:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-3 1613 CS1 050420F Exp:OCDD_DB5
389.8156 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



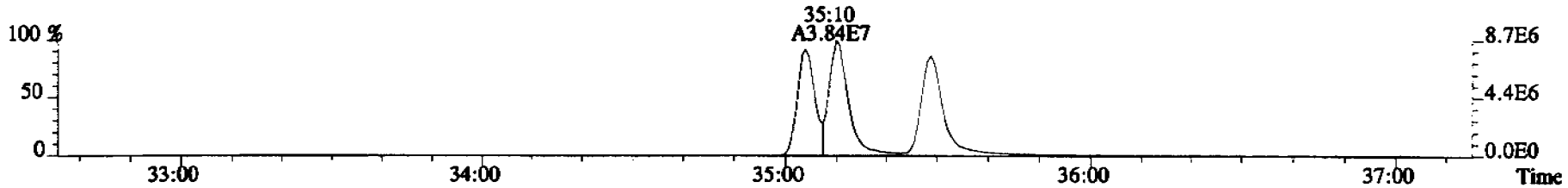
391.8127 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



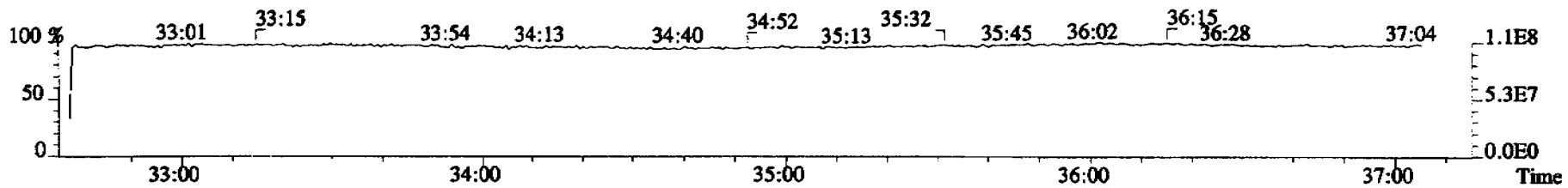
401.8559 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



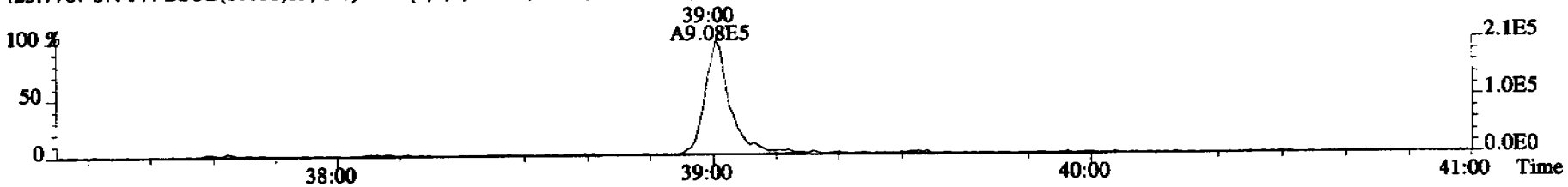
403.8530 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



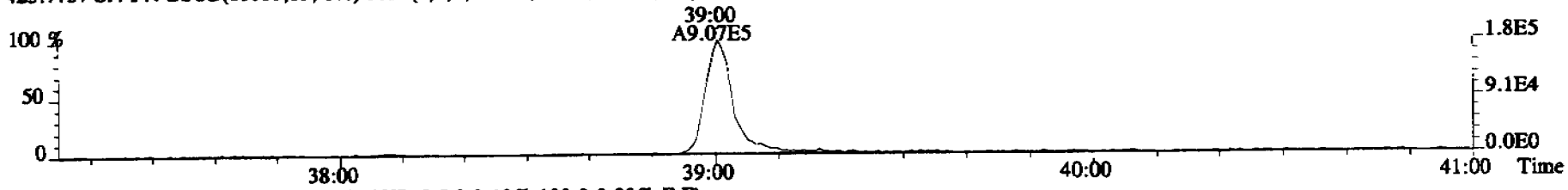
380.9760 S:4 F:3



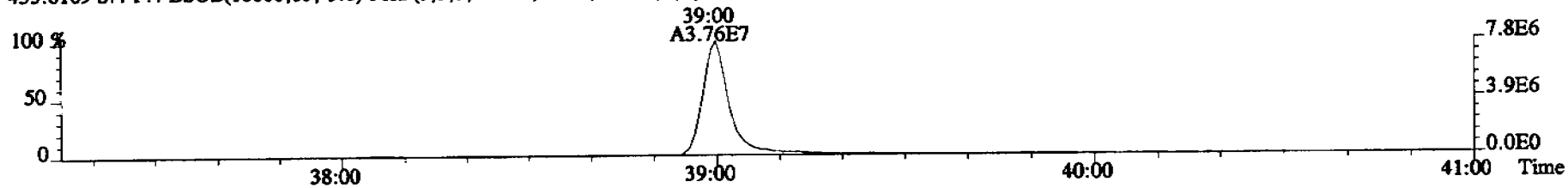
File:050423D1 #1-348 Acq:23-APR-2005 13:49:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-3 1613 CS1 050420F Exp:OCDD_DB5
423.7767 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



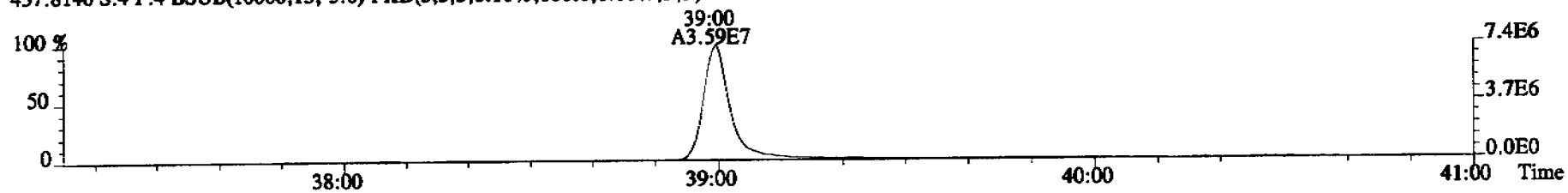
425.7737 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



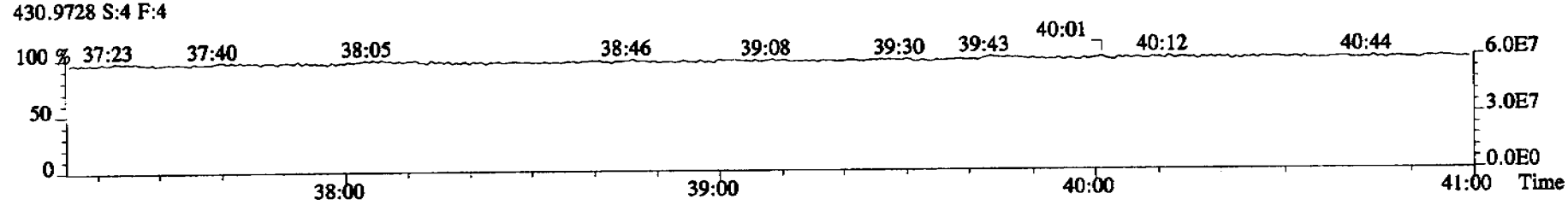
435.8169 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



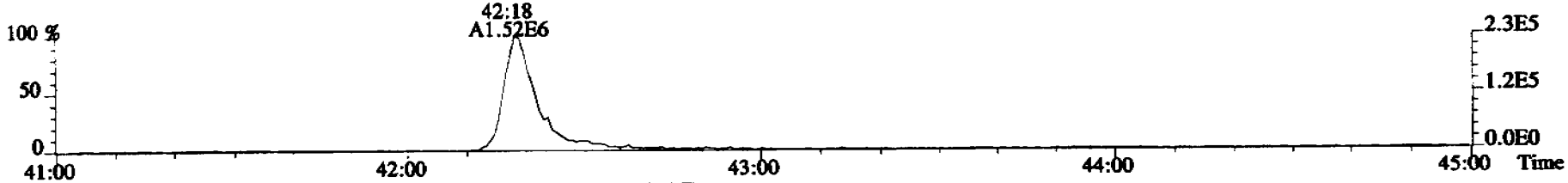
437.8140 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



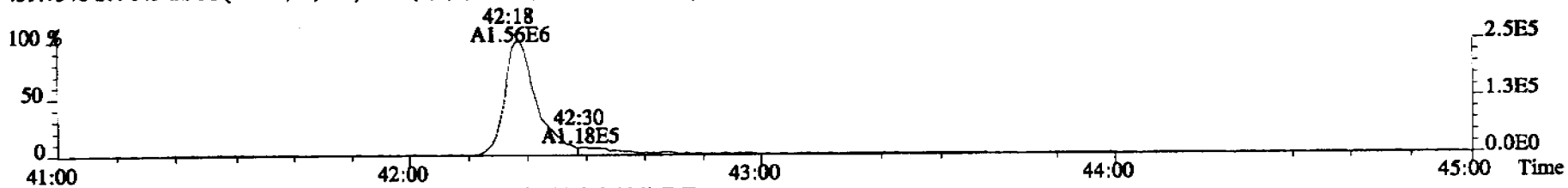
430.9728 S:4 F:4



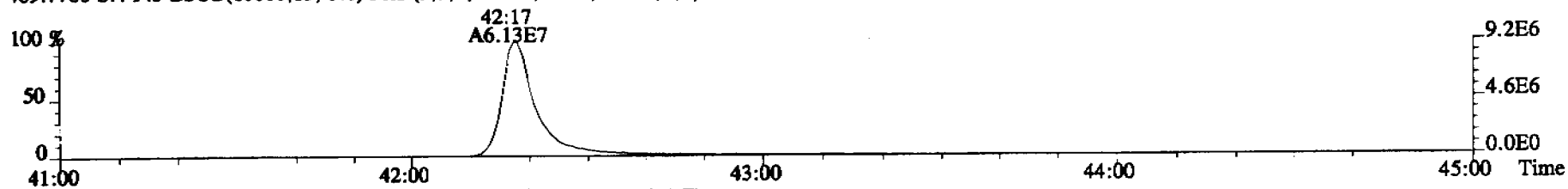
File:050423D1 #1-345 Acq:23-APR-2005 13:49:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-3 1613 CS1 050420F Exp:OCDD_DB5
457.7377 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



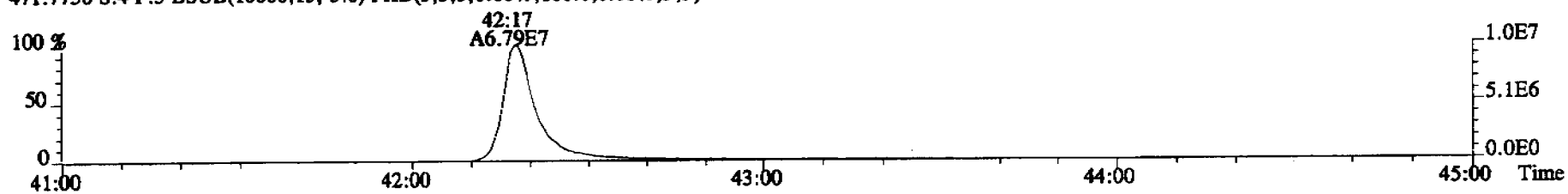
459.7348 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



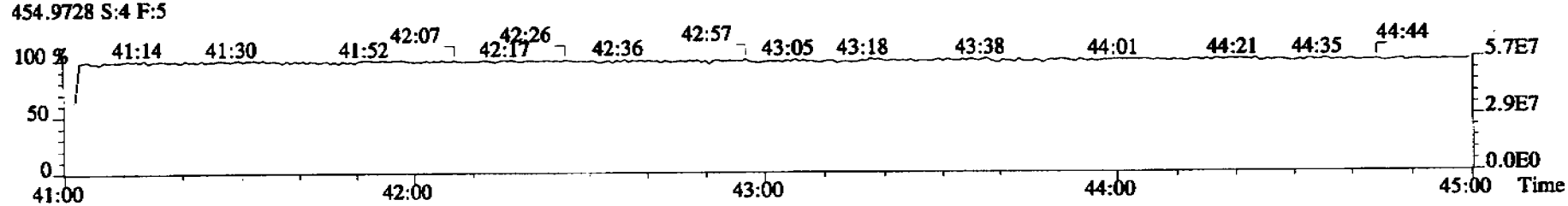
469.7780 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



471.7750 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

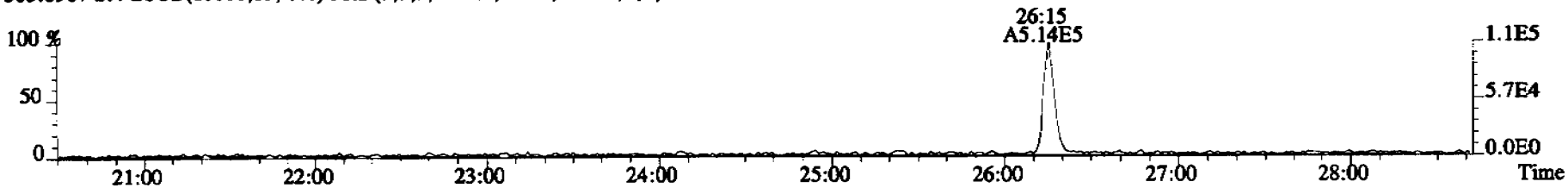


454.9728 S:4 F:5

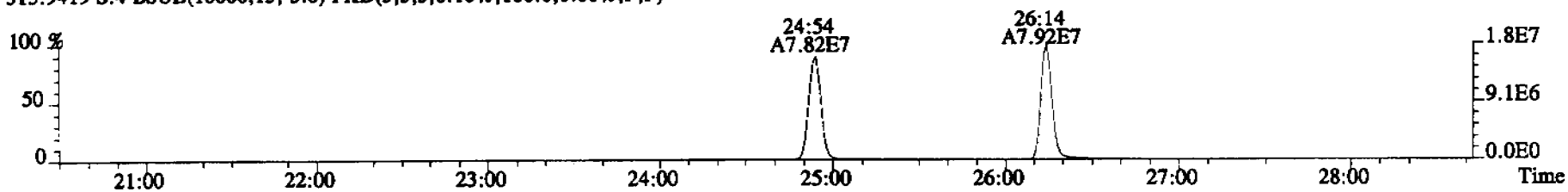


File:050423D1 #1-558 Acq:23-APR-2005 13:49:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-3 1613 CS1 050420F Exp:OCDD_DB5
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

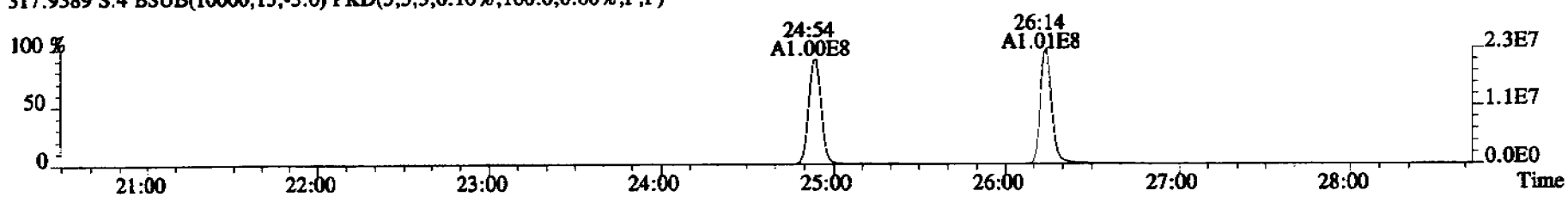
305.8987 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



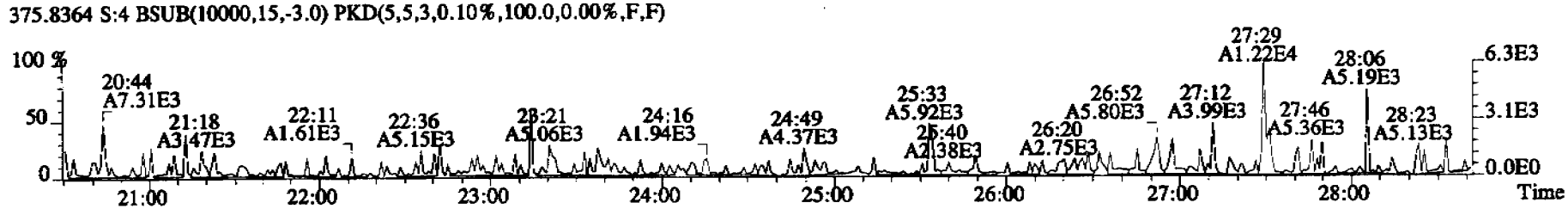
315.9419 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



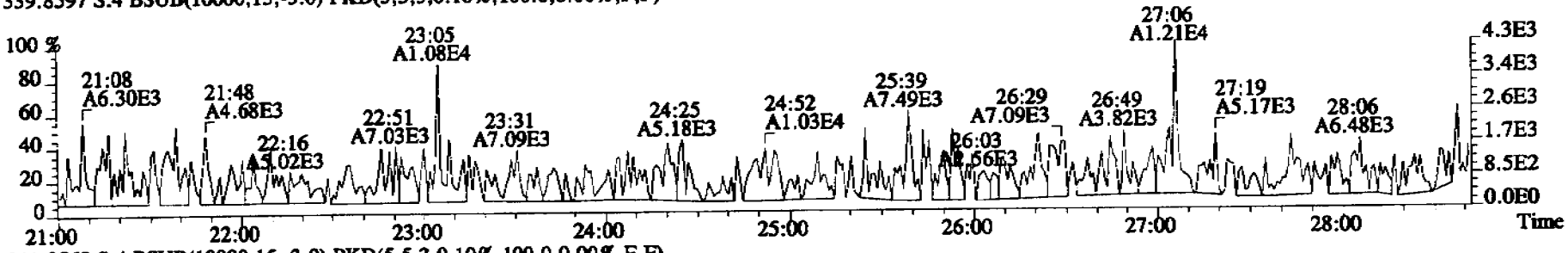
317.9389 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



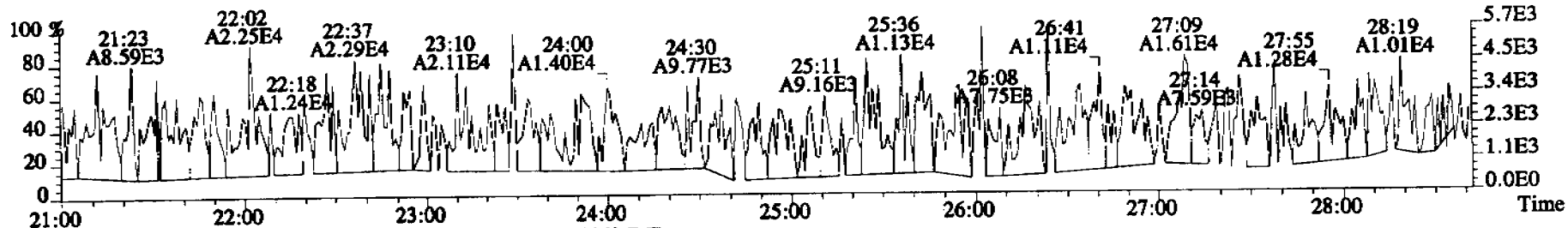
375.8364 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



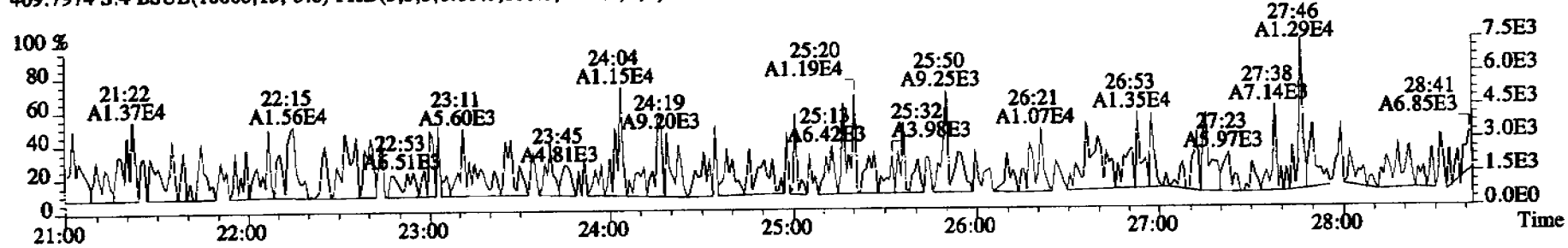
File:050423D1 #1-558 Acq:23-APR-2005 13:49:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-3 1613 CS1 050420F Exp:OCDD_DB5
339.8597 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



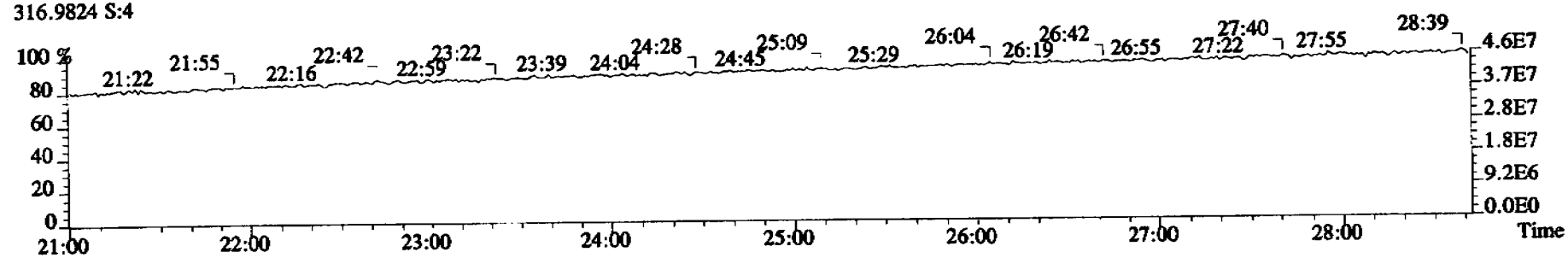
341.8568 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



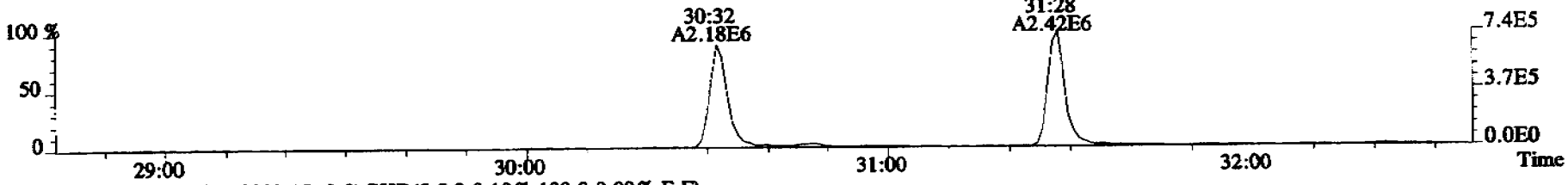
409.7974 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



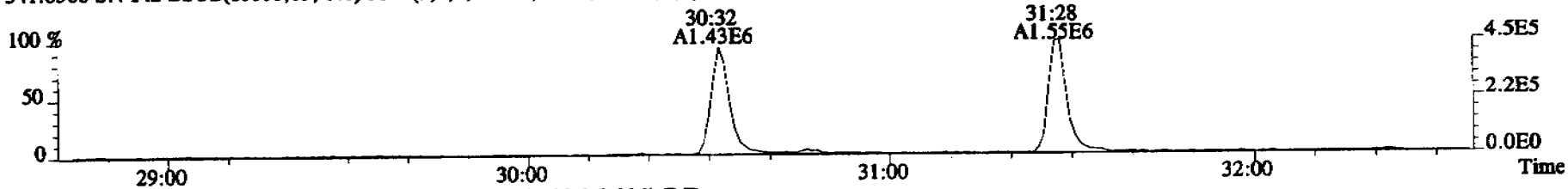
316.9824 S:4



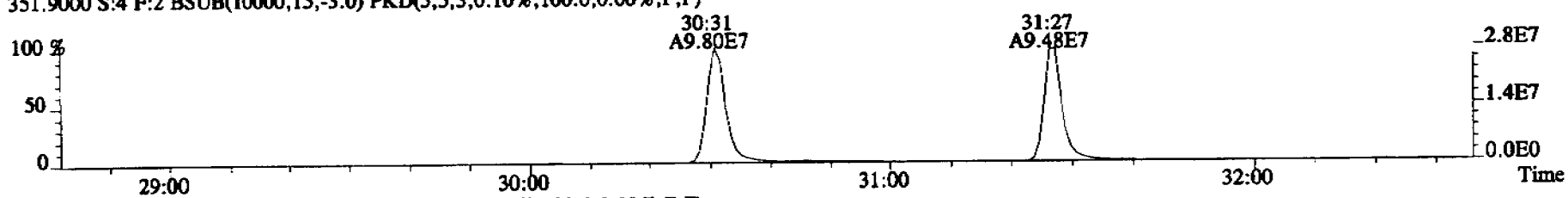
File:050423D1 #1-273 Acq:23-APR-2005 13:49:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-3 1613 CS1 050420F Exp:OCDD_DB5
339.8597 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



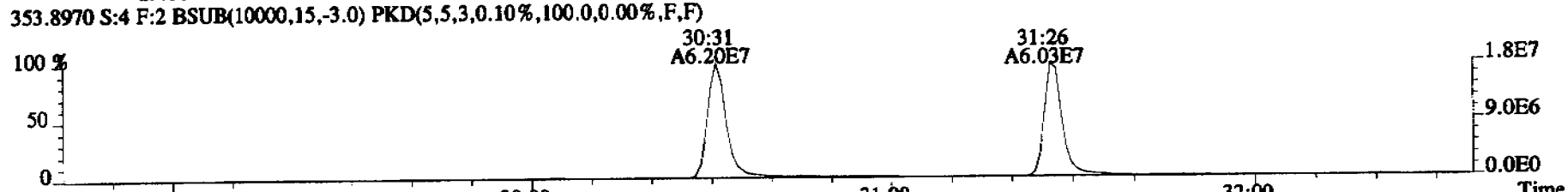
341.8568 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



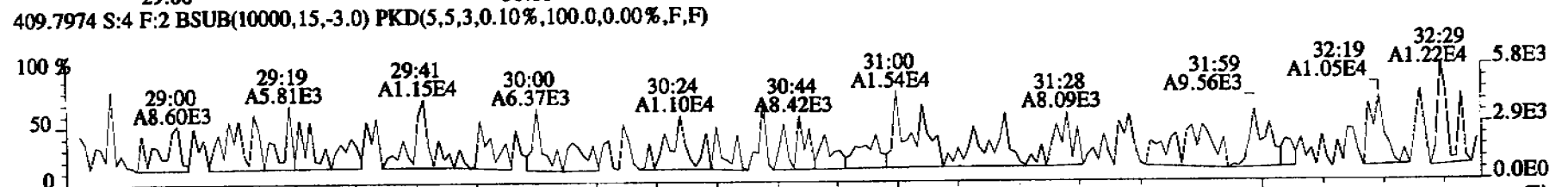
351.9000 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



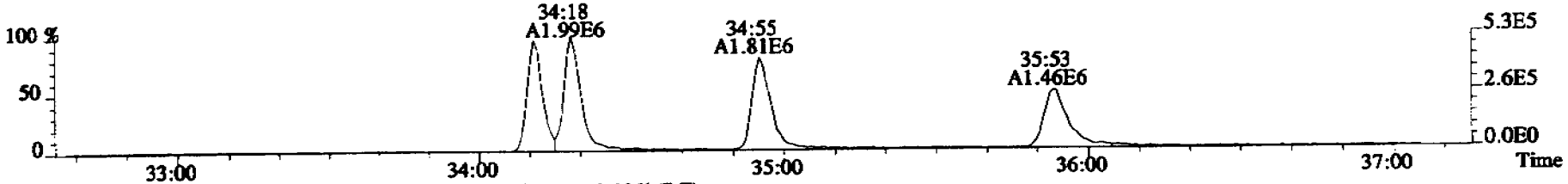
353.8970 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



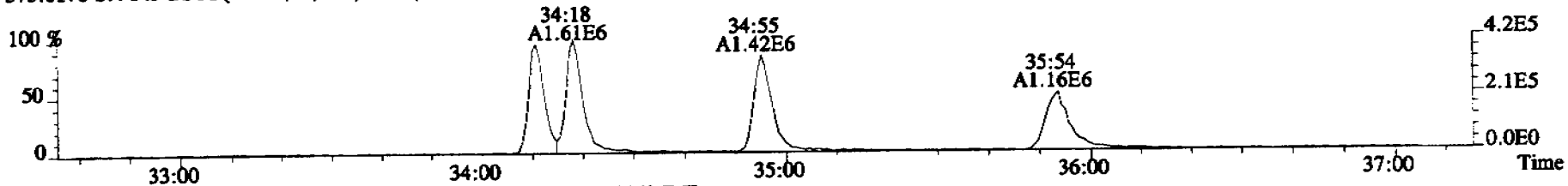
409.7974 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



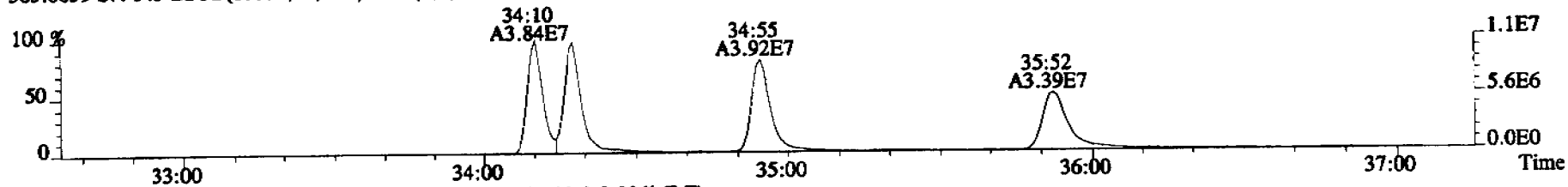
File:050423D1 #1-398 Acq:23-APR-2005 13:49:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-3 1613 CS1 050420F Exp:OCDD_DB5
373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



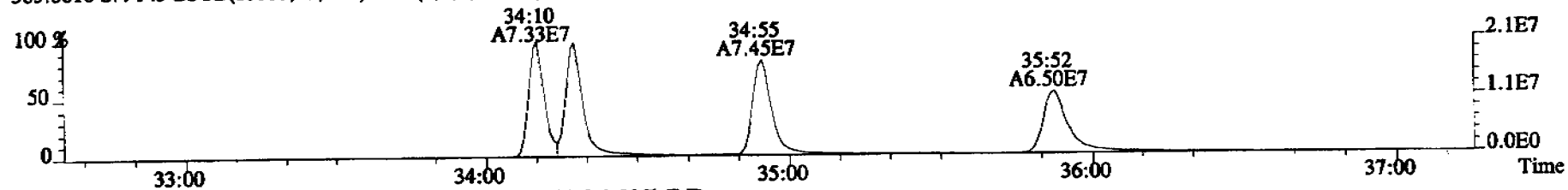
375.8178 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



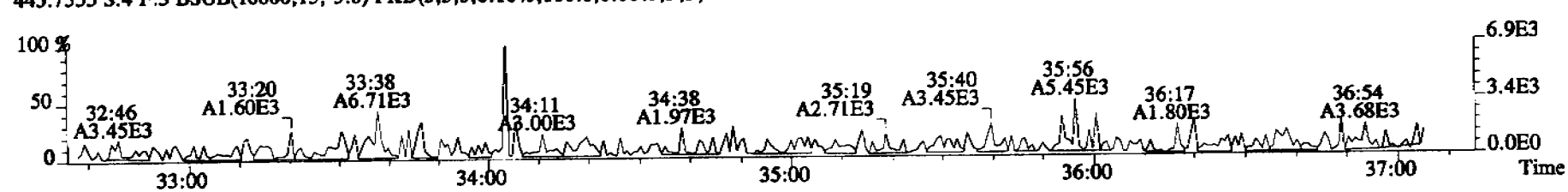
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



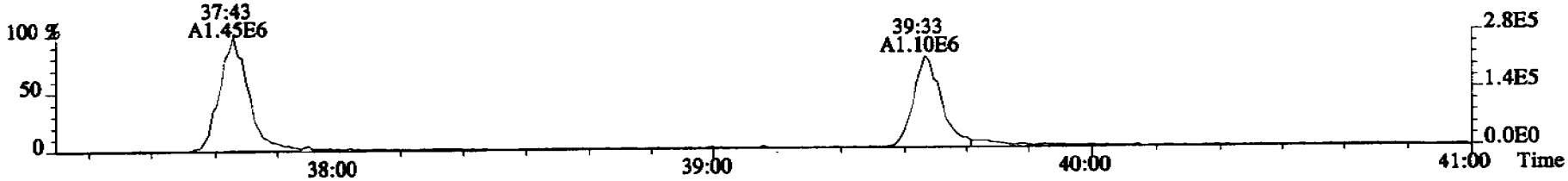
385.8610 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



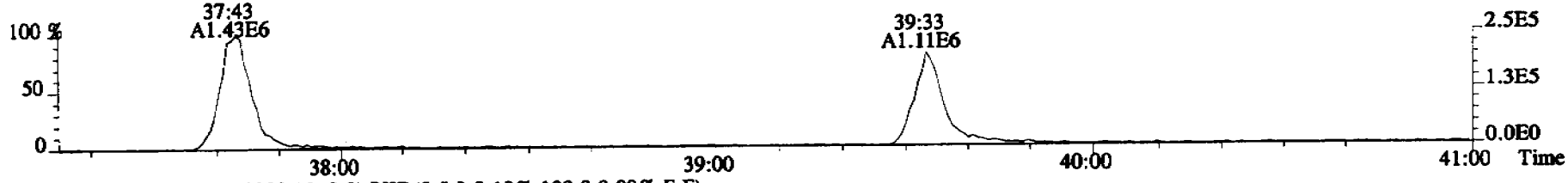
445.7555 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



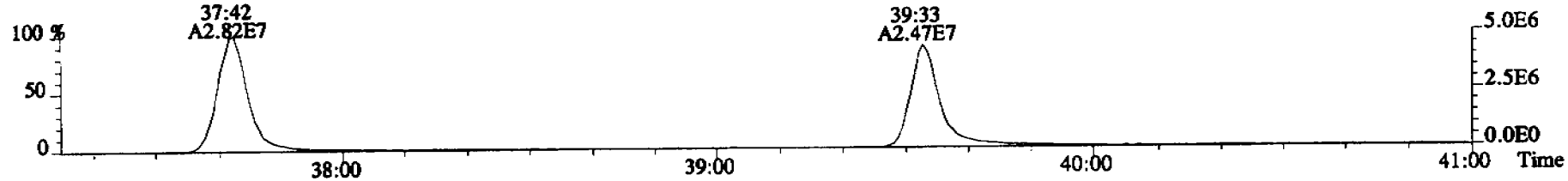
File:050423D1 #1-348 Acq:23-APR-2005 13:49:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-3 1613 CS1 050420F Exp:OCDD_DB5
407.7818 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



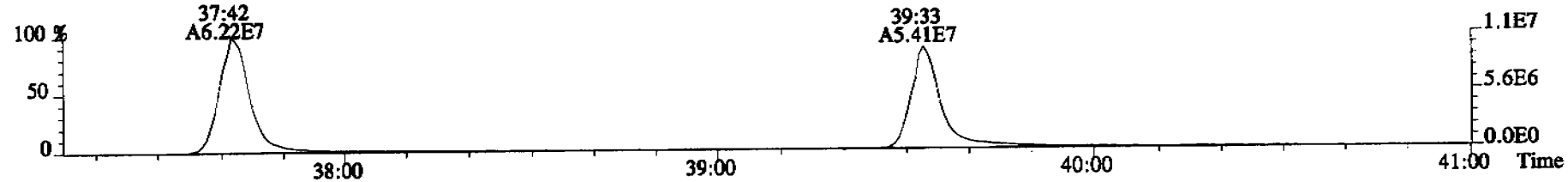
409.7788 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



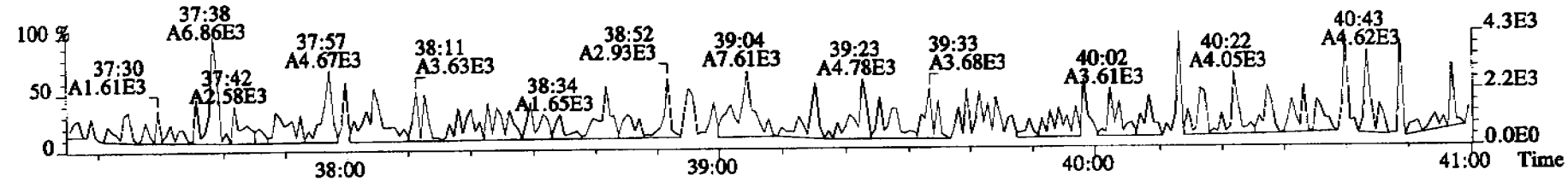
417.8253 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



419.8220 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

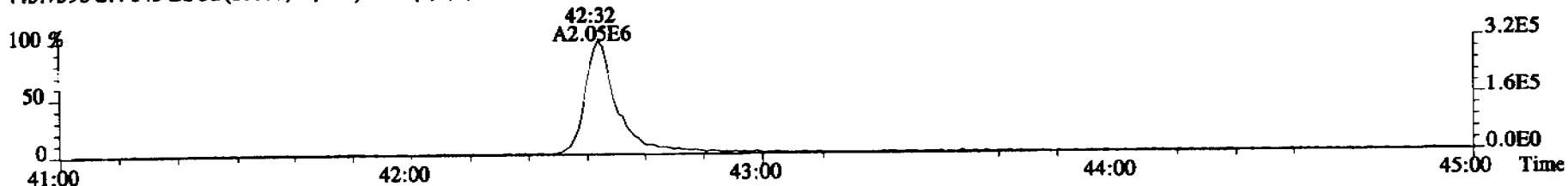


479.7165 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

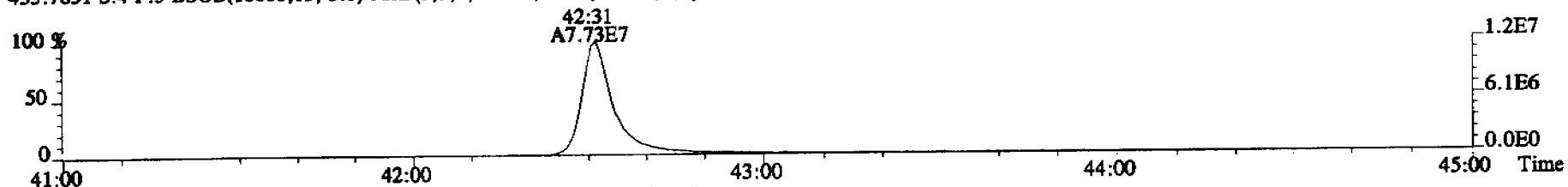


File:050423D1 #1-345 Acq:23-APR-2005 13:49:12 GC EI+ Voltage SIR Autospec-UltimaE
Sample#4 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-3 1613 CS1 050420F Exp:OCDD_DB5
441.7428 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

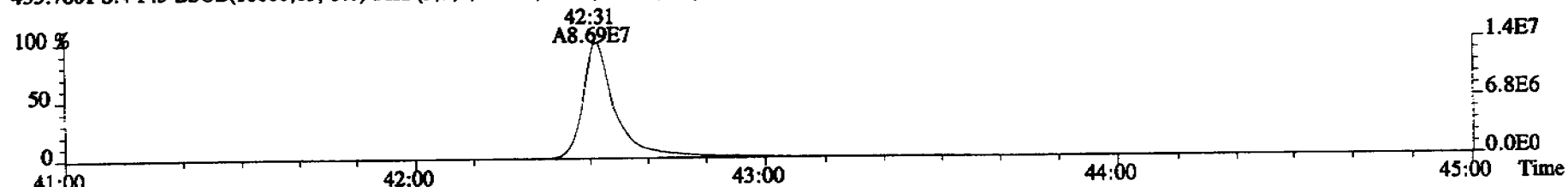
443.7398 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



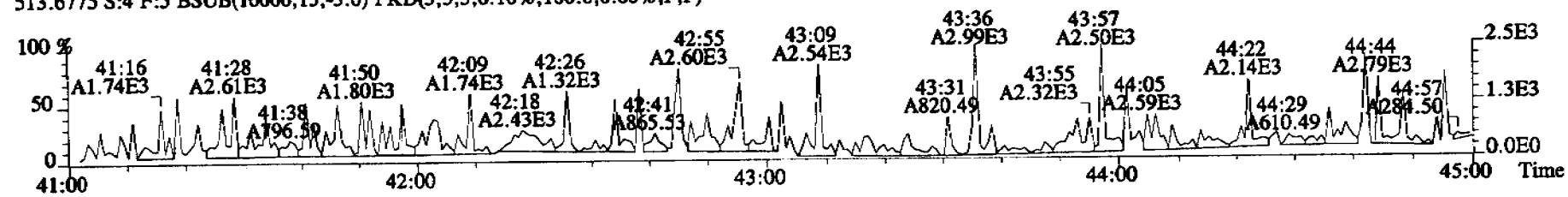
453.7831 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



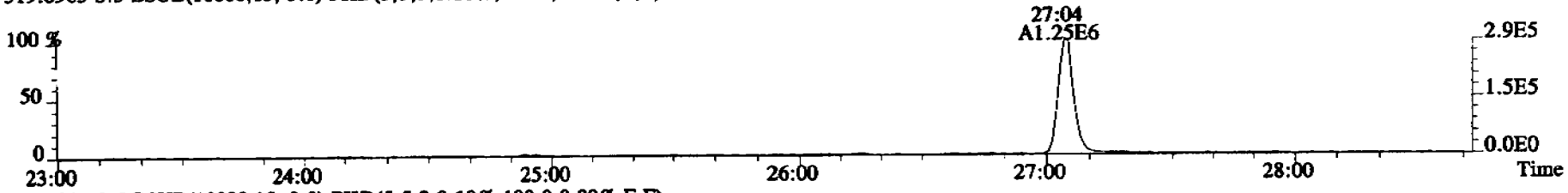
455.7801 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



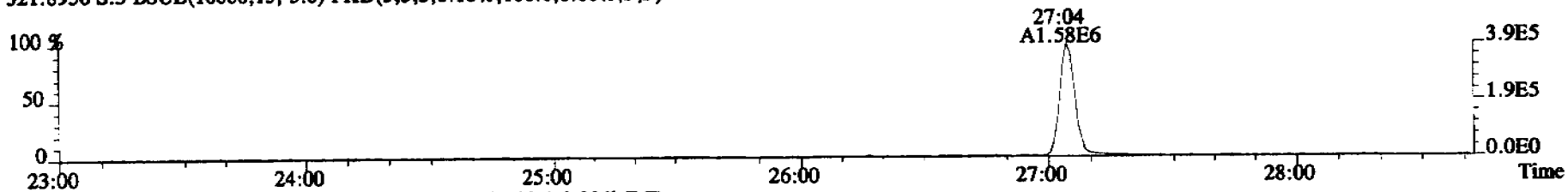
513.6775 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



File:050423D1 #1-558 Acq:23-APR-2005 14:37:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-4 1613 CS2 050420G Exp:OCDD_DB5
319.8965 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

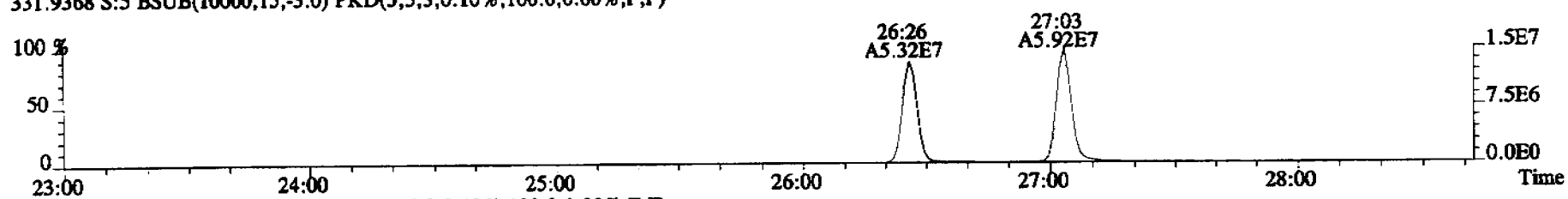


321.8936 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

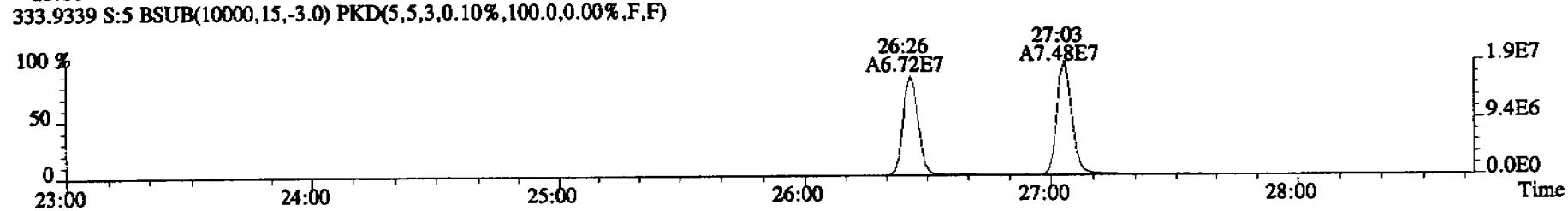


327.8847 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

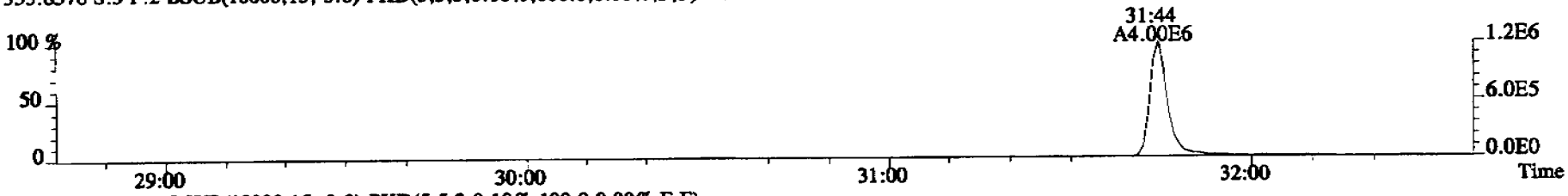
331.9368 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



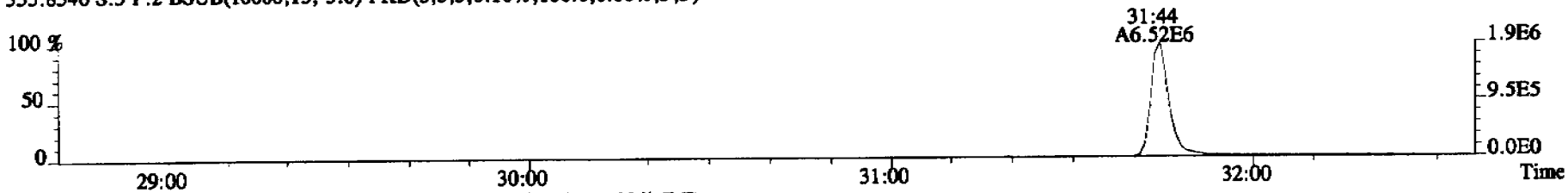
333.9339 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



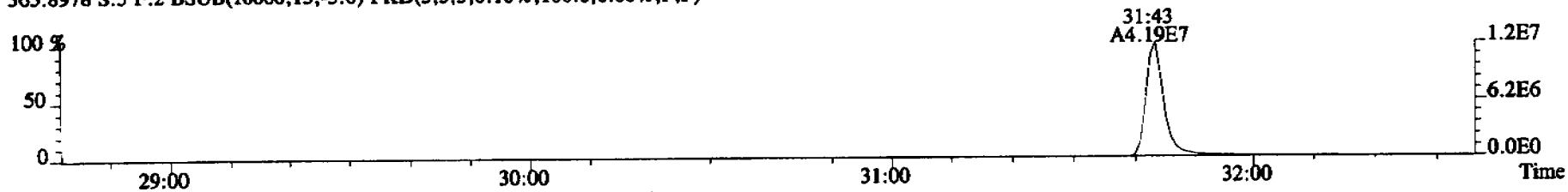
File:050423D1 #1-273 Acq:23-APR-2005 14:37:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-4 1613 CS2 050420G Exp:OCDD_DB5
353.8576 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



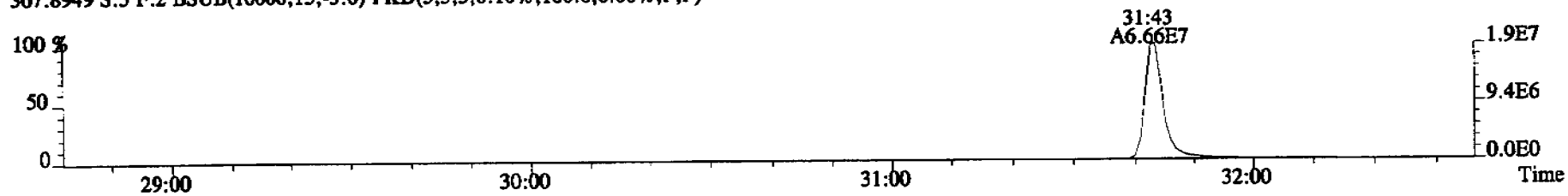
355.8546 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



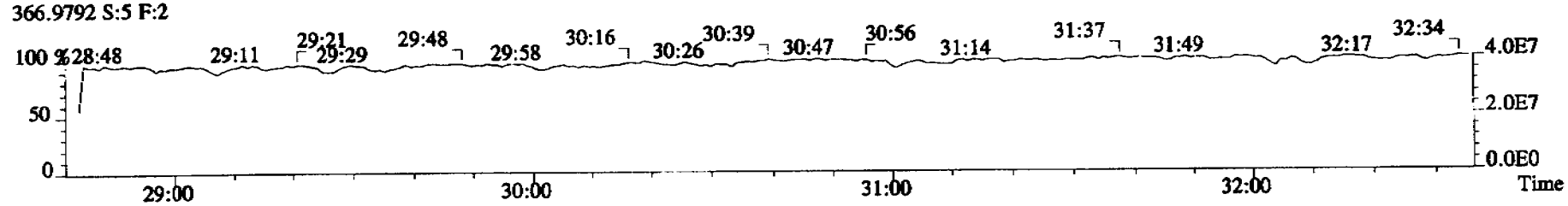
365.8978 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



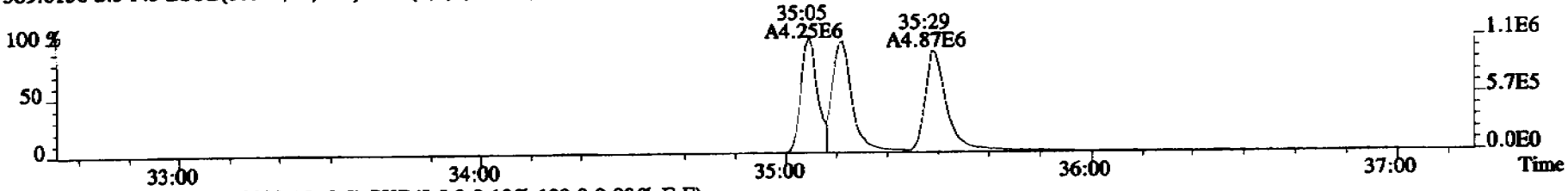
367.8949 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



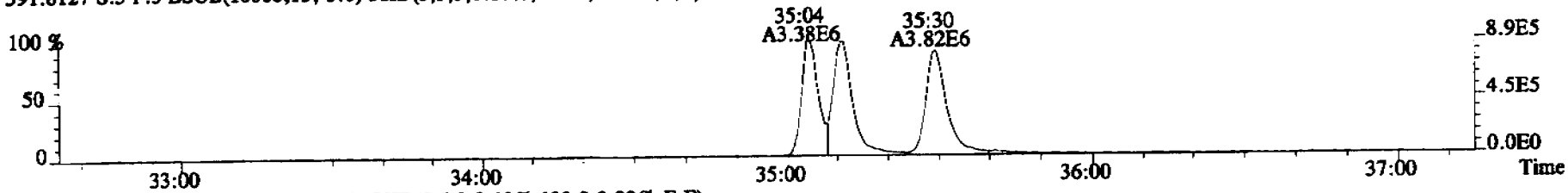
366.9792 S:5 F:2



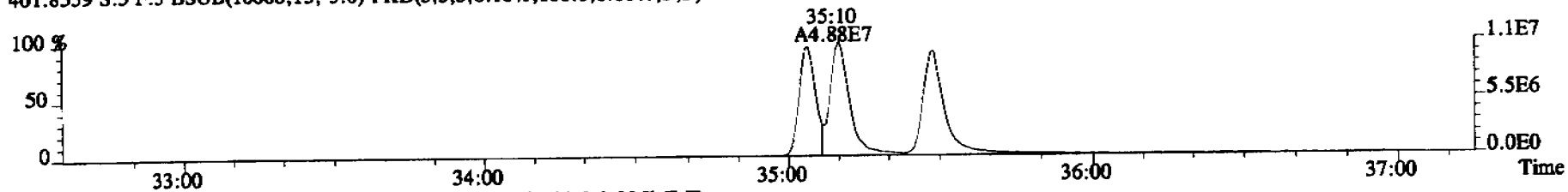
File:050423D1 #1-398 Acq:23-APR-2005 14:37:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-4 1613 CS2 050420G Exp:OCDD_DB5
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



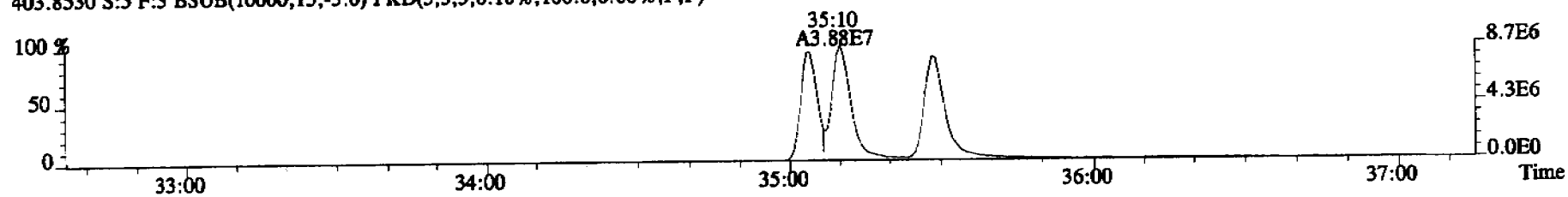
391.8127 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



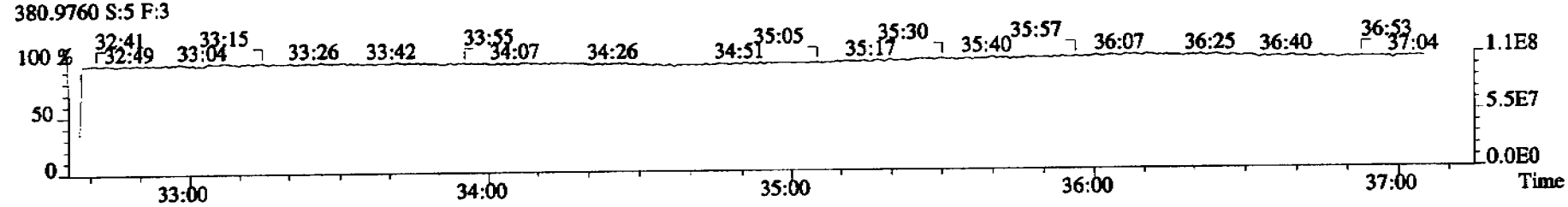
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



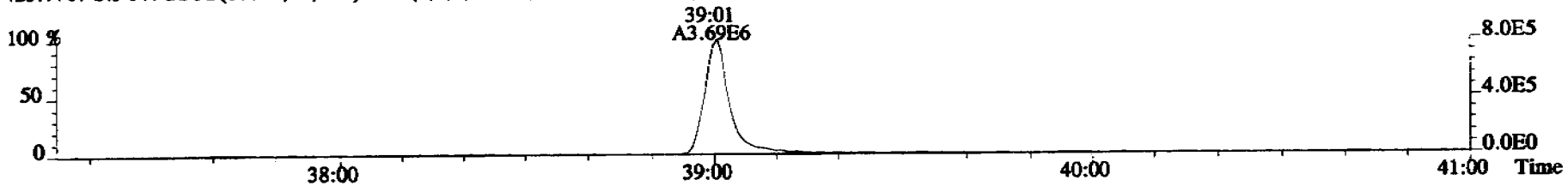
403.8530 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



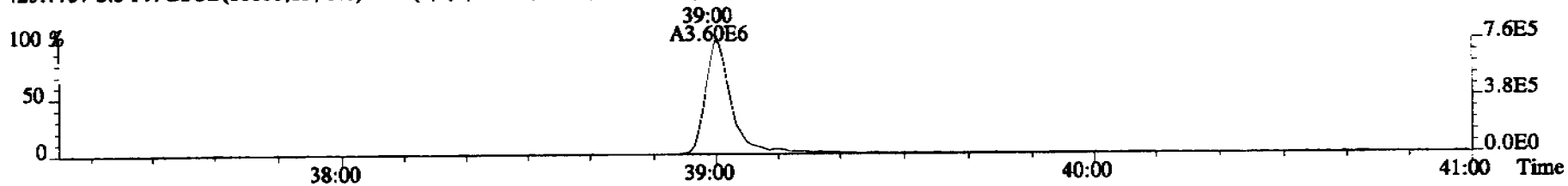
380.9760 S:5 F:3



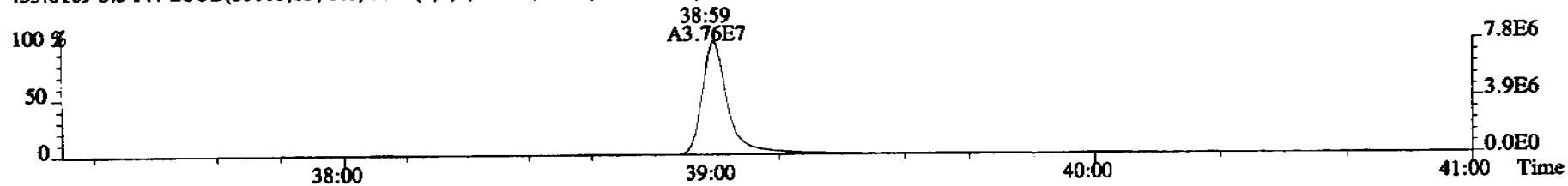
File:050423D1 #1-348 Acq:23-APR-2005 14:37:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-4 1613 CS2 050420G Exp:OCDD_DB5
423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



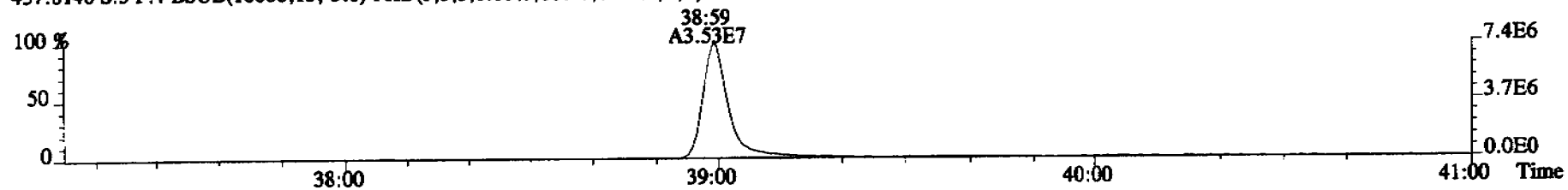
425.7737 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



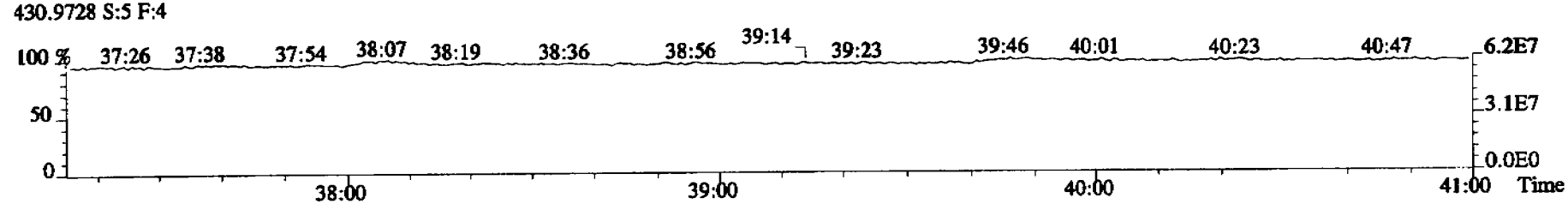
435.8169 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



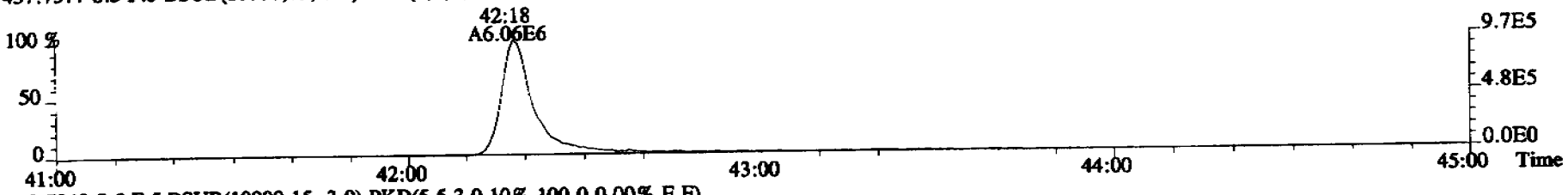
437.8140 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



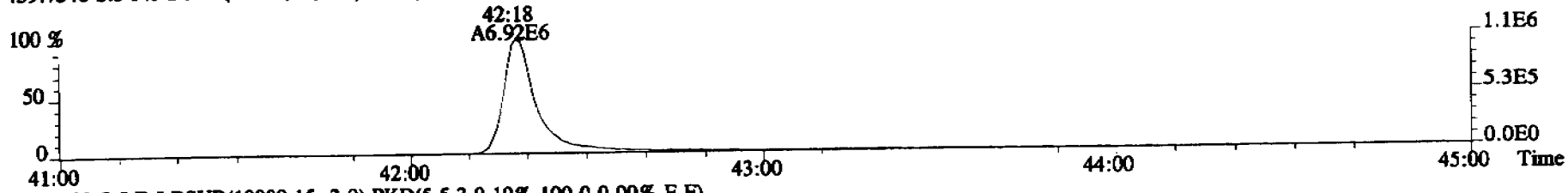
430.9728 S:5 F:4



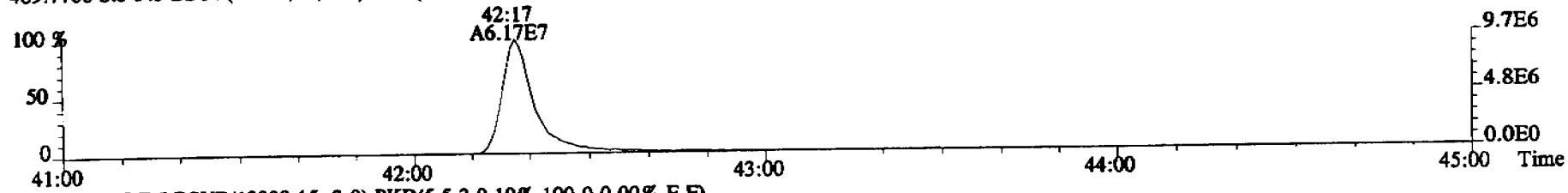
File:050423D1 #1-345 Acq:23-APR-2005 14:37:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-4 1613 CS2 050420G Exp:OCDD_DB5
457.7377 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



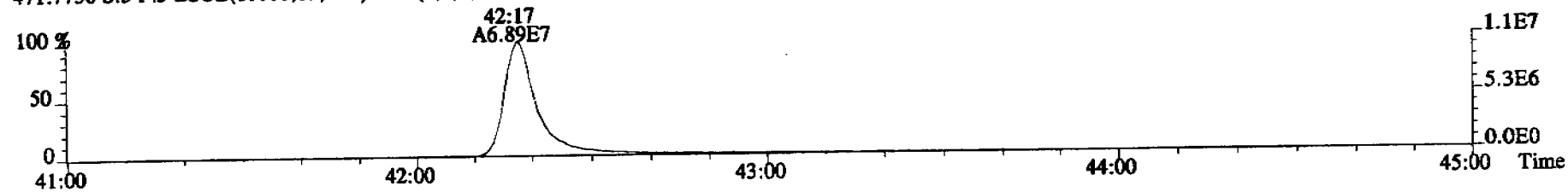
459.7348 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



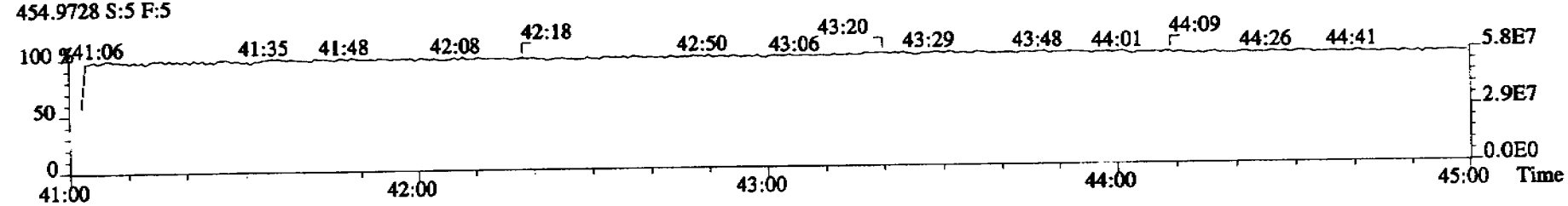
469.7780 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



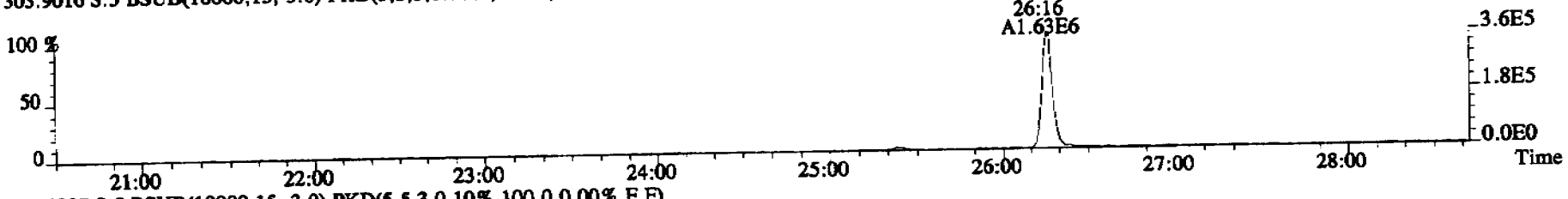
471.7750 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



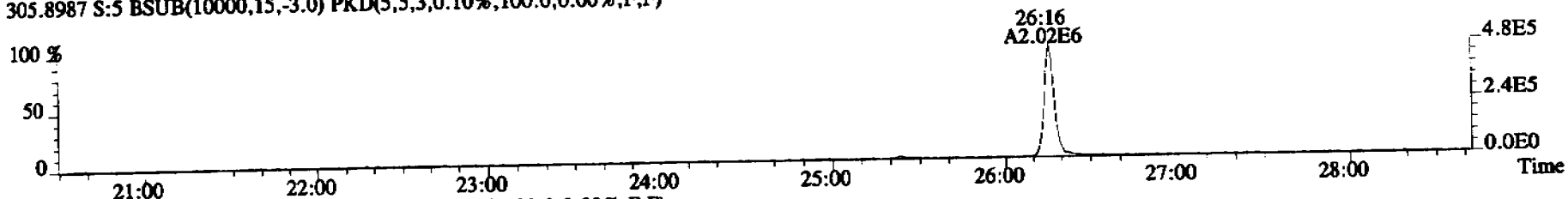
454.9728 S:5 F:5



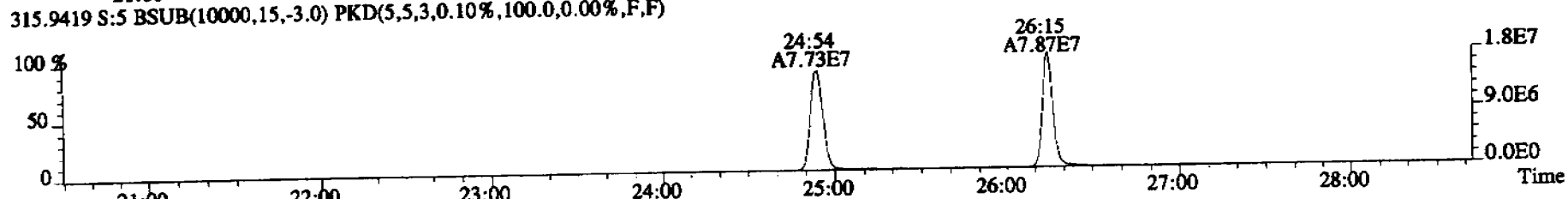
File:050423D1 #1-558 Acq:23-APR-2005 14:37:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-4 1613 CS2 050420G Exp:OCDD_DB5
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



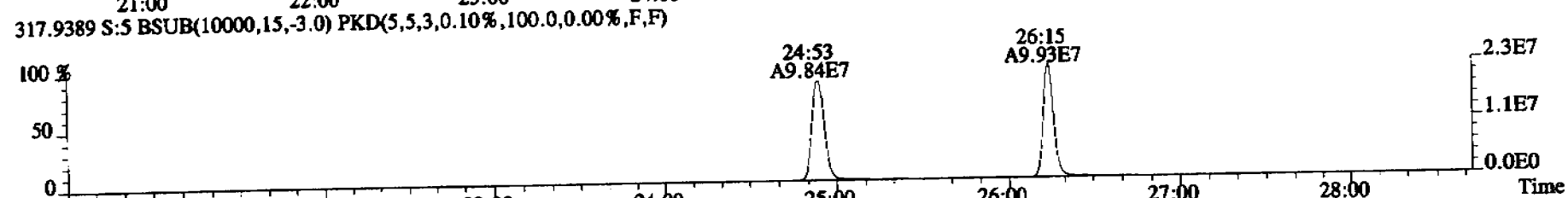
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



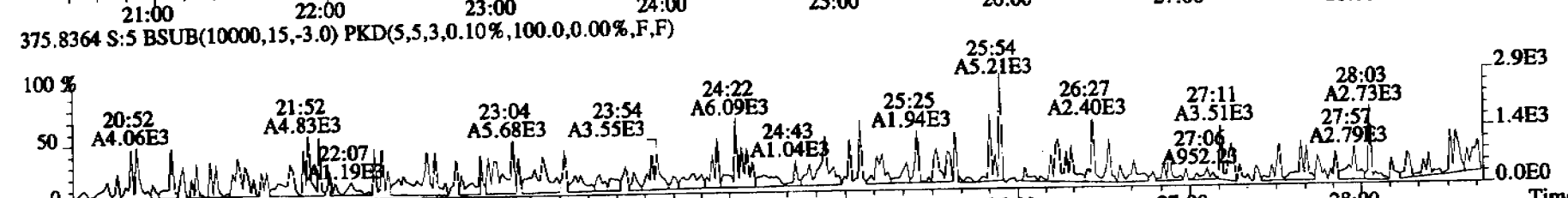
315.9419 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



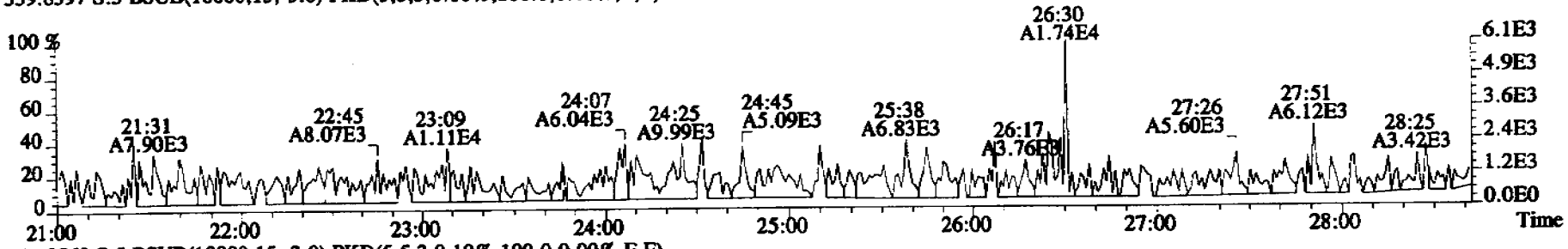
317.9389 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



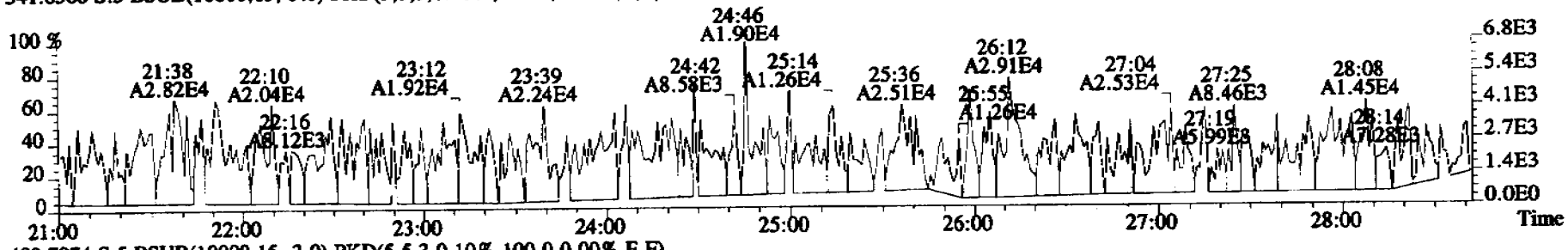
375.8364 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



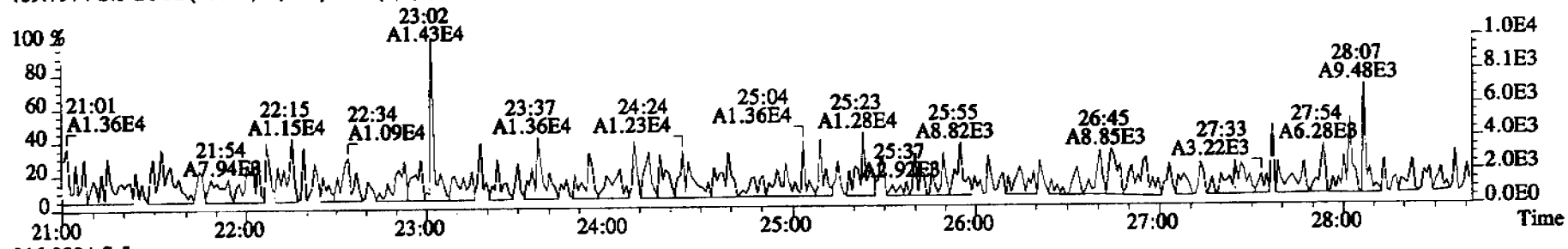
File:050423D1 #1-558 Acq:23-APR-2005 14:37:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-4 1613 CS2 050420G Exp:OCDD_DB5
339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



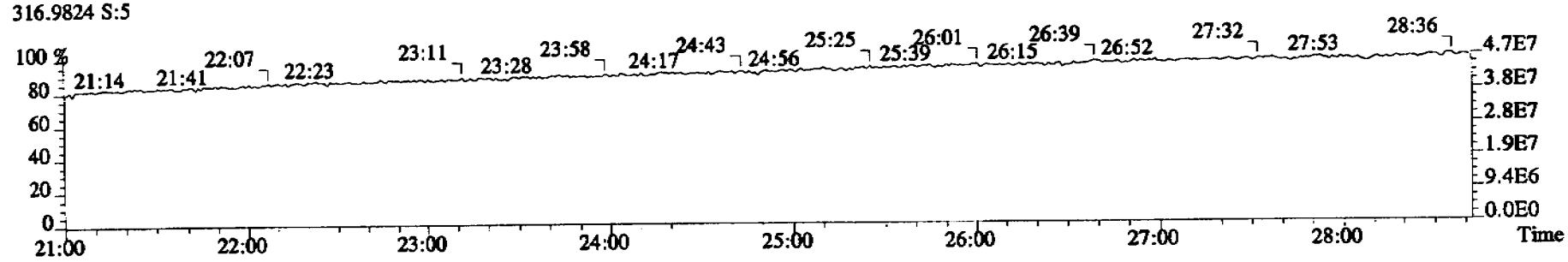
341.8568 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



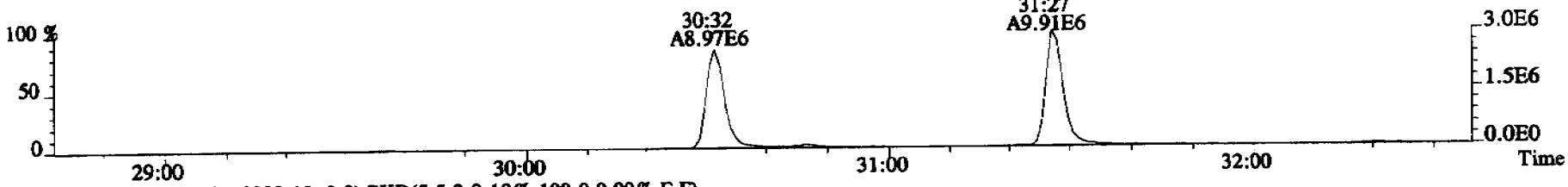
409.7974 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



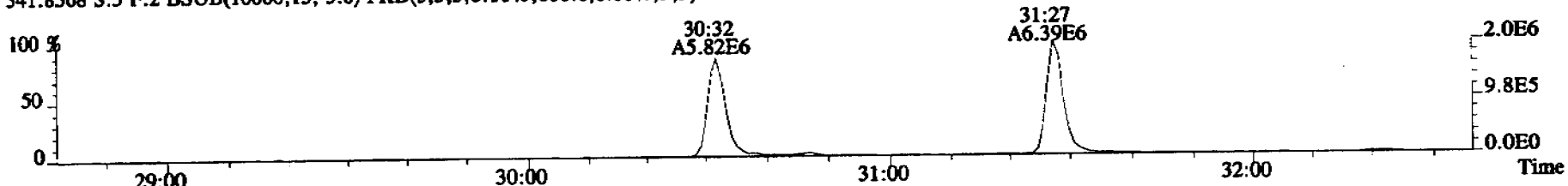
316.9824 S:5



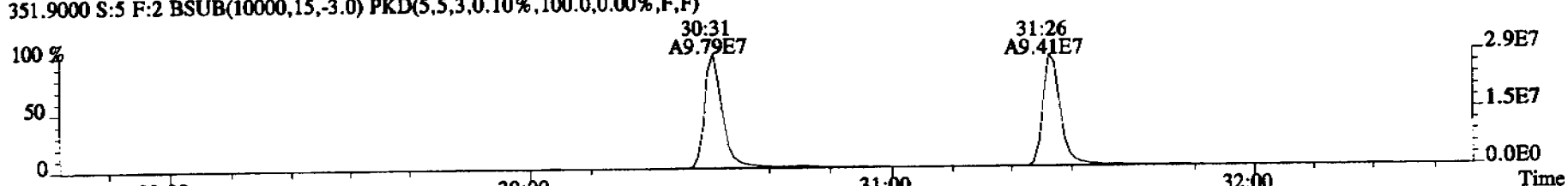
File:050423D1 #1-273 Acq:23-APR-2005 14:37:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-4 1613 CS2 050420G Exp:OCDD_DB5
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



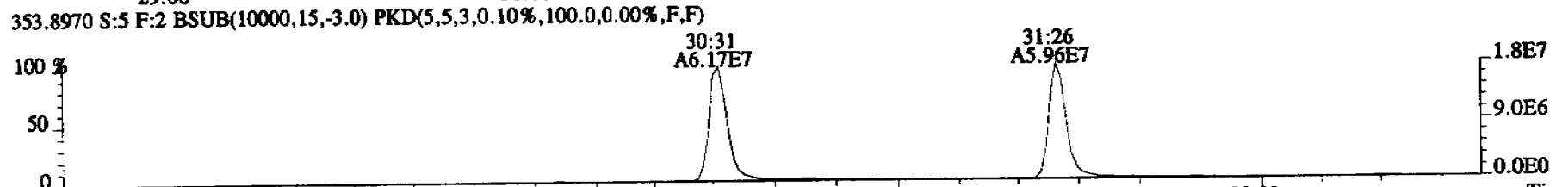
341.8568 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



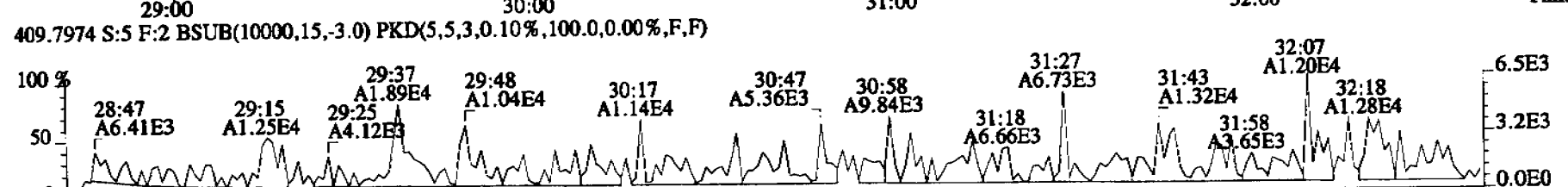
351.9000 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

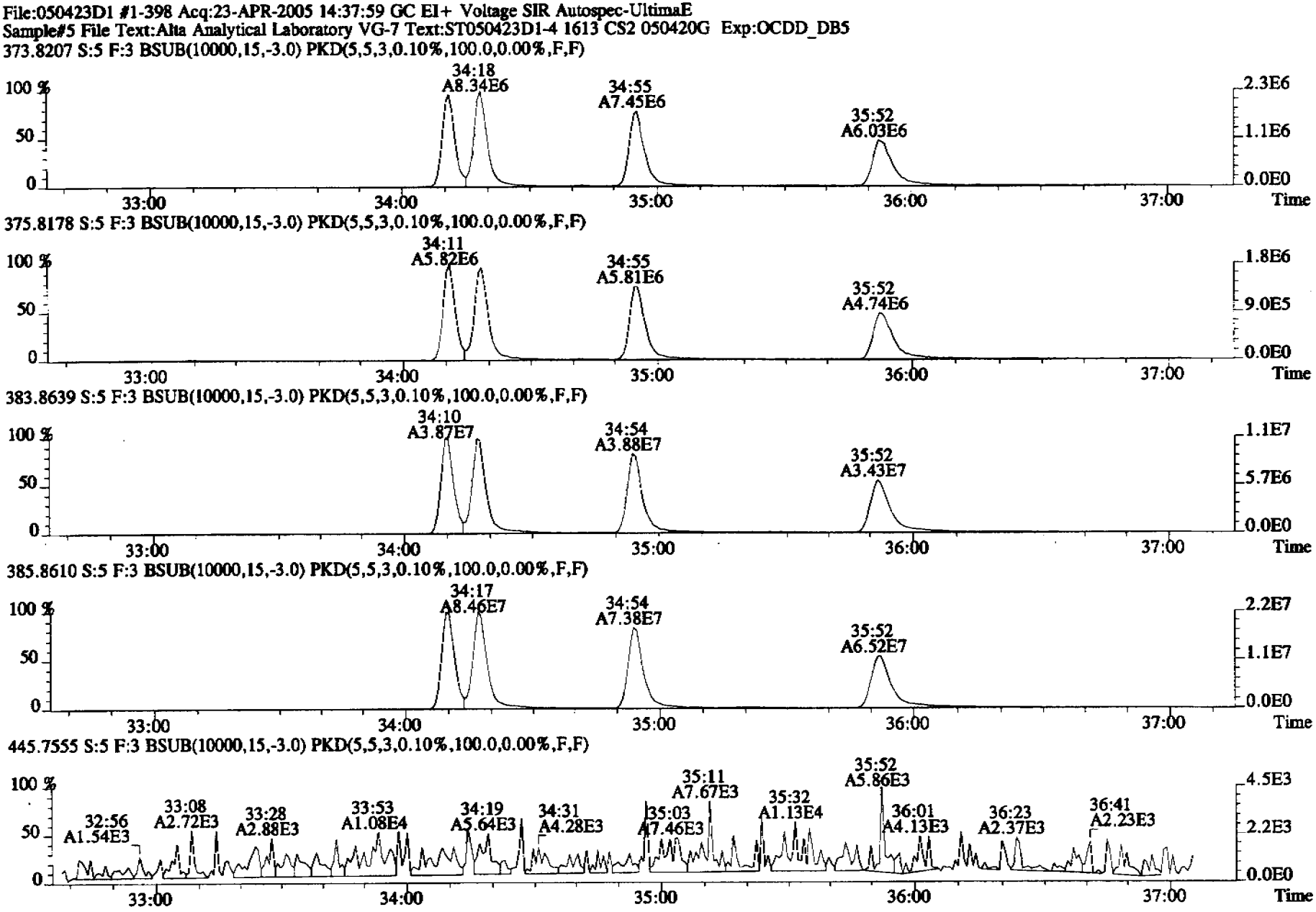


353.8970 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

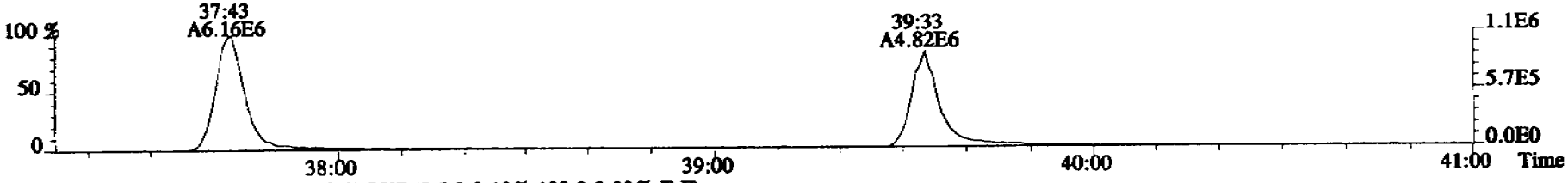


409.7974 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

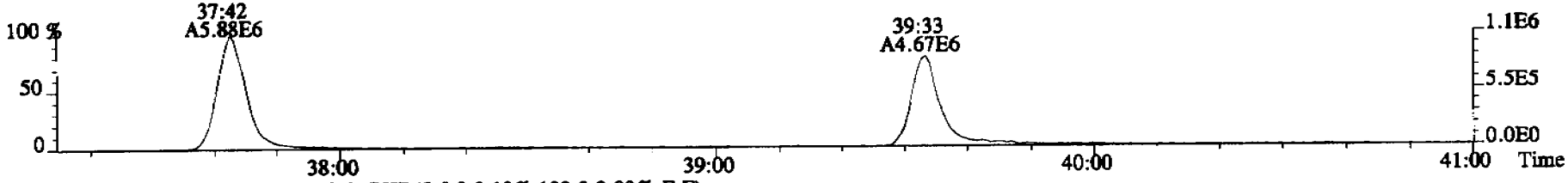



File:050423D1 #1-398 Acq:23-APR-2005 14:37:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-4 1613 CS2 050420G Exp:OCDD_DB5
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:18 A8.34E6
34:55 A7.45E6
35:52 A6.03E6
2.3E6
1.1E6
0.0E0
375.8178 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:11 A5.82E6
34:55 A5.81E6
35:52 A4.74E6
1.8E6
9.0E5
0.0E0
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:10 A3.87E7
34:54 A3.88E7
35:52 A3.43E7
1.1E7
5.7E6
0.0E0
385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
34:17 A8.46E7
34:54 A7.38E7
35:52 A6.52E7
2.2E7
1.1E7
0.0E0
445.7555 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
32:56 A1.54E3
33:08 A2.72E3
33:28 A2.88E3
33:53 A1.08E4
34:19 A5.64E3
34:31 A4.28E3
35:03 A7.46E3
35:11 A7.67E3
35:32 A1.13E4
35:52 A5.86E3
36:01 A4.13E3
36:23 A2.37E3
36:41 A2.23E3
4.5E3
2.2E3
0.0E0
100 %
50
0
33:00
34:00
35:00
36:00
37:00
Time

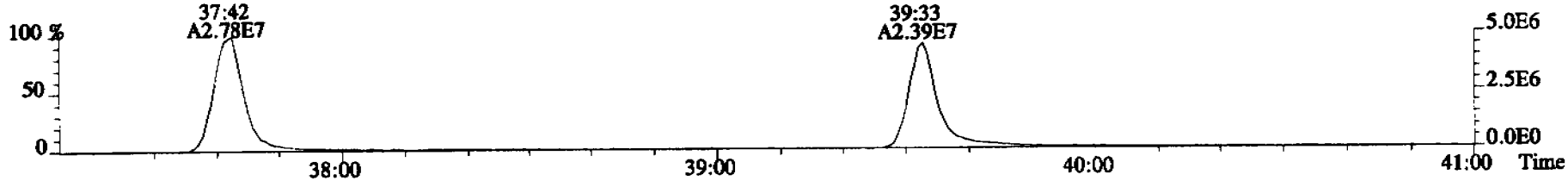
File:050423D1 #1-348 Acq:23-APR-2005 14:37:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-4 1613 CS2 050420G Exp:OCDD_DB5
407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



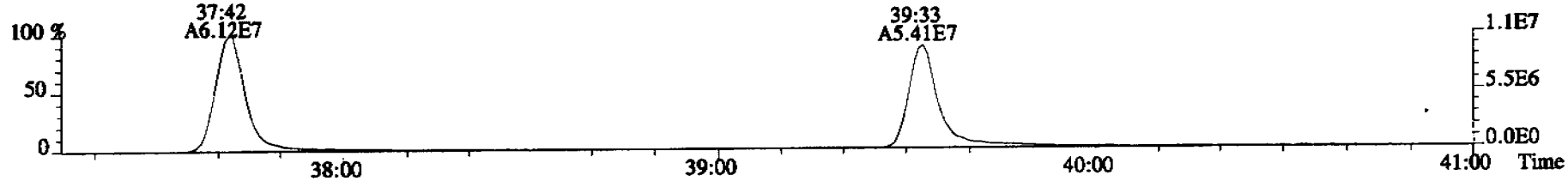
409.7788 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



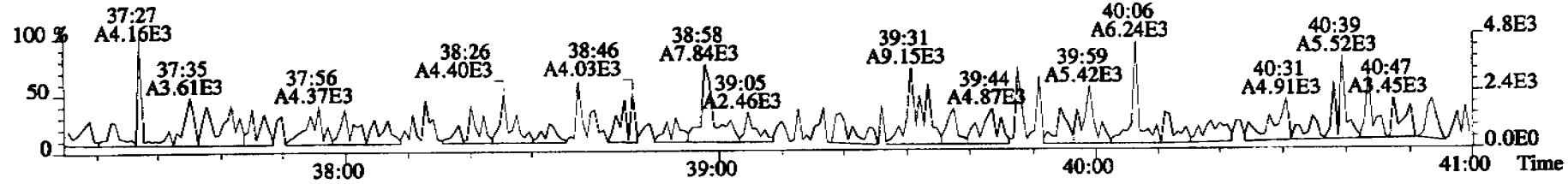
417.8253 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



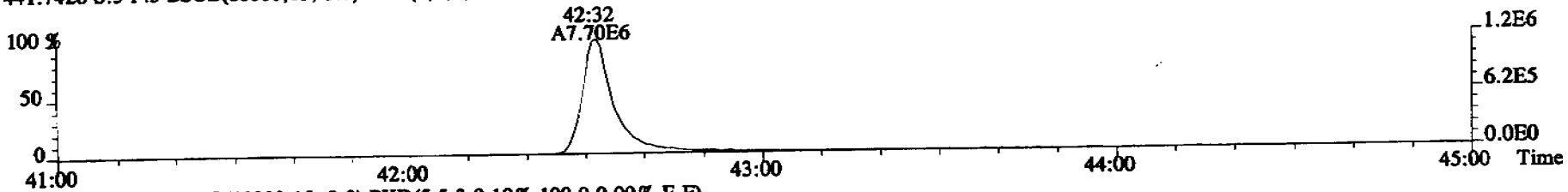
419.8220 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



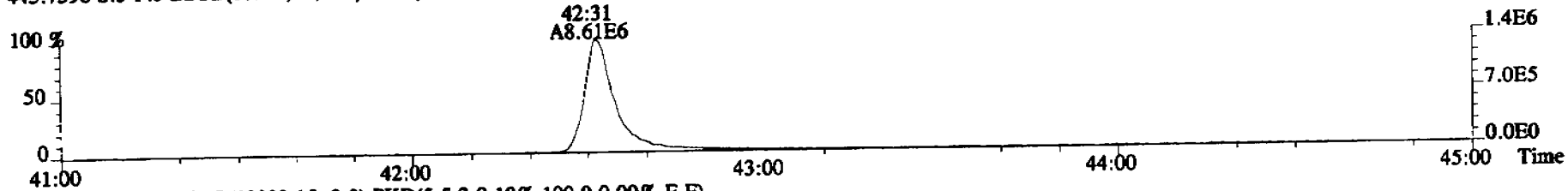
479.7165 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



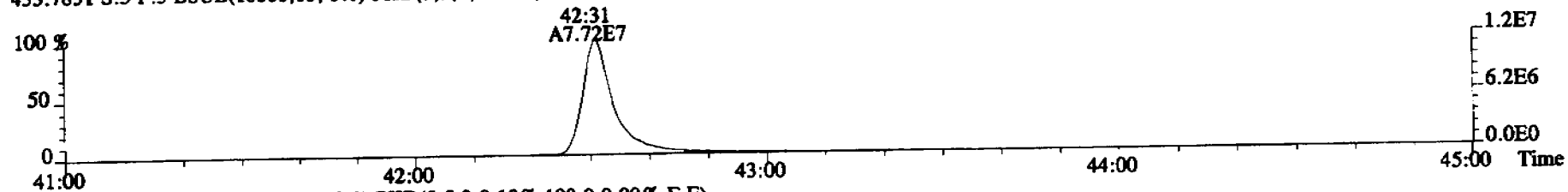
File:050423D1 #1-345 Acq:23-APR-2005 14:37:59 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-4 1613 CS2 050420G Exp:OCDD_DB5
441.7428 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



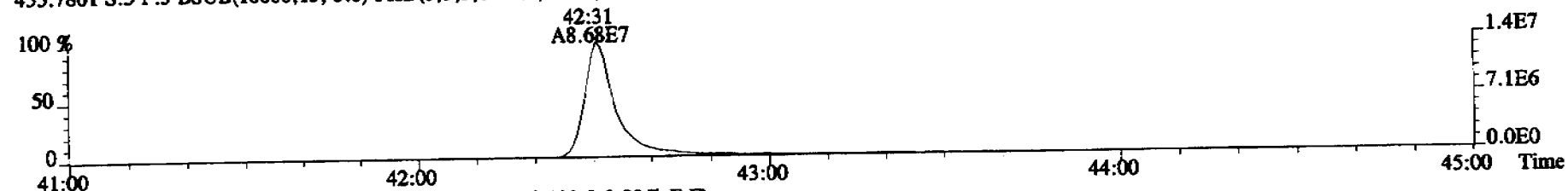
443.7398 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



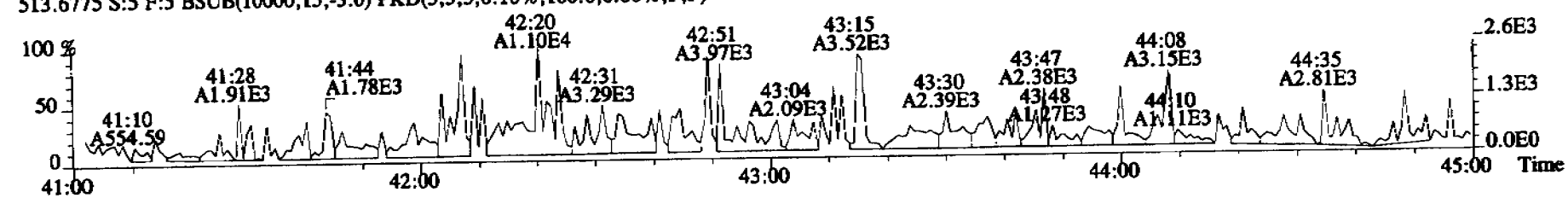
453.7831 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



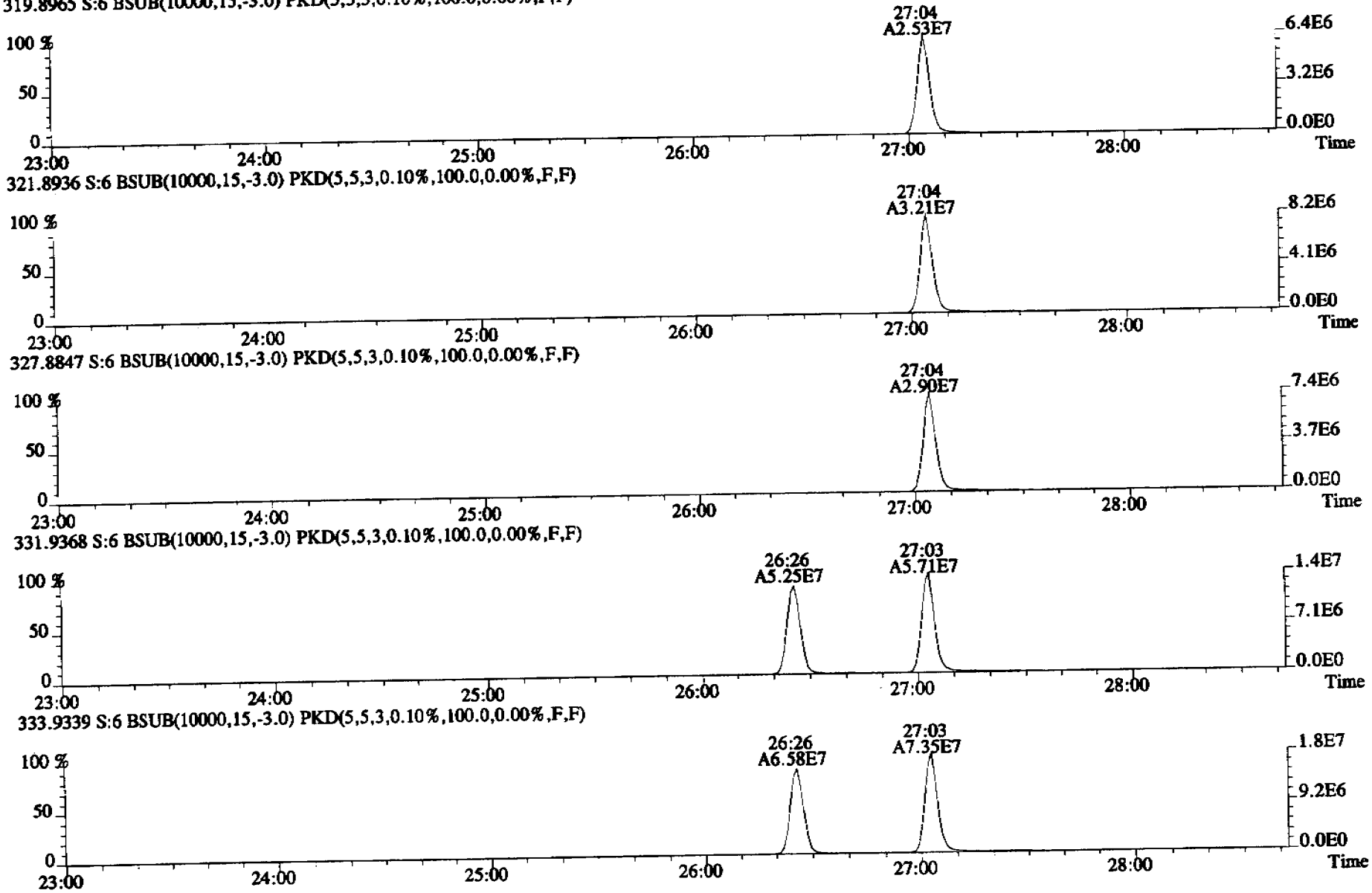
455.7801 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



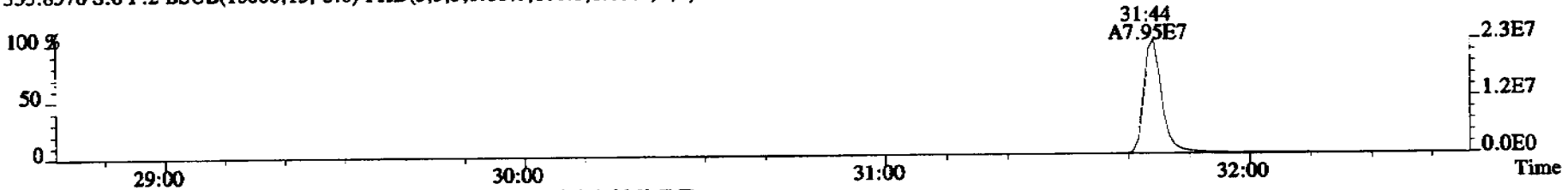
513.6775 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



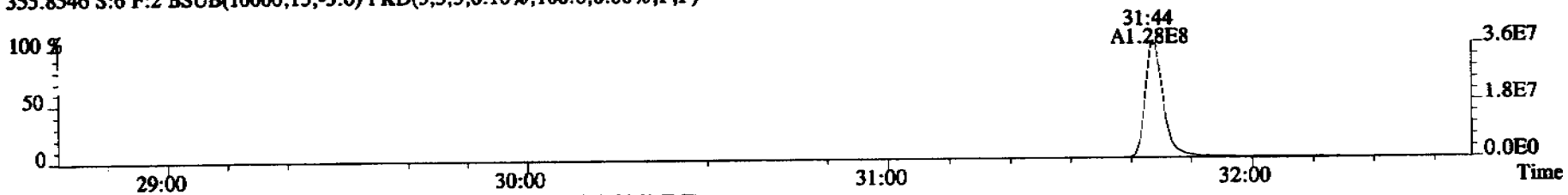
File:050423D1 #1-558 Acq:23-APR-2005 15:26:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-5 1613 CS4 050420I Exp:OCDD_DB5



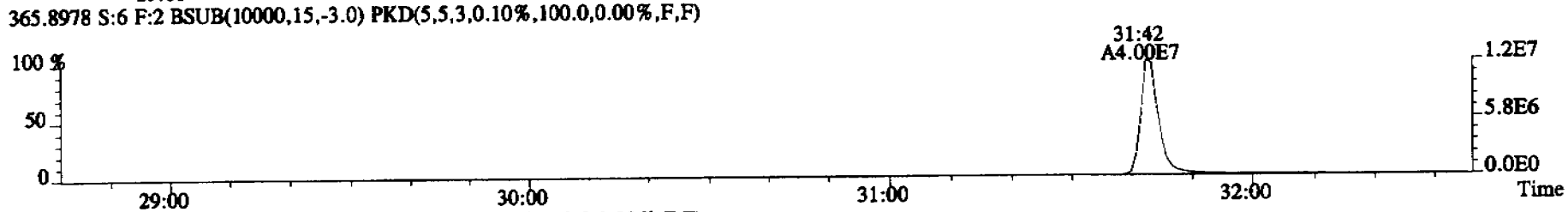
File:050423D1 #1-273 Acq:23-APR-2005 15:26:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-5 1613 CS4 050420I Exp:OCDD_DB5
353.8576 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

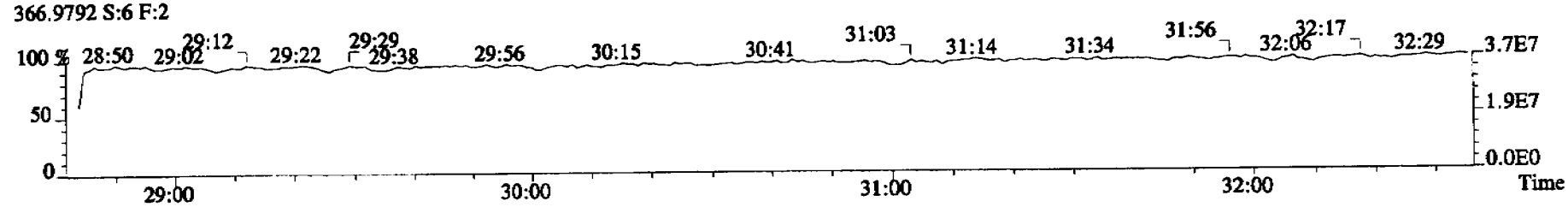


365.8978 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

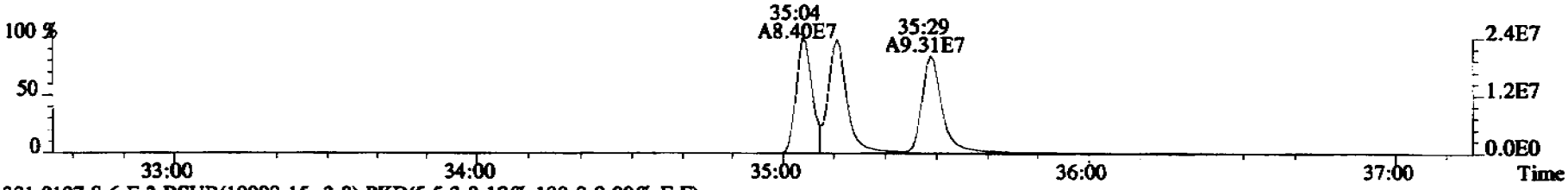


367.8949 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

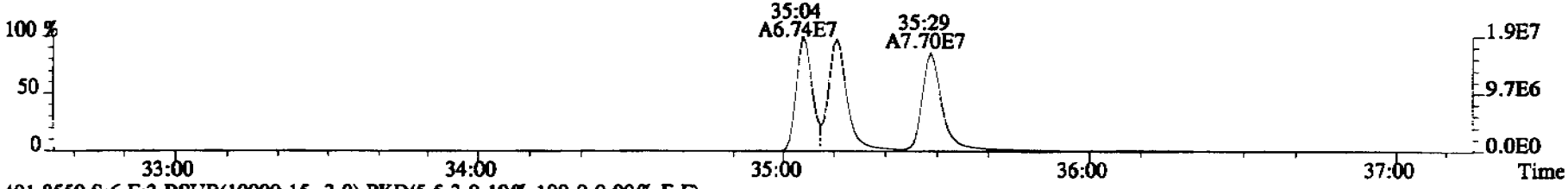
366.9792 S:6 F:2



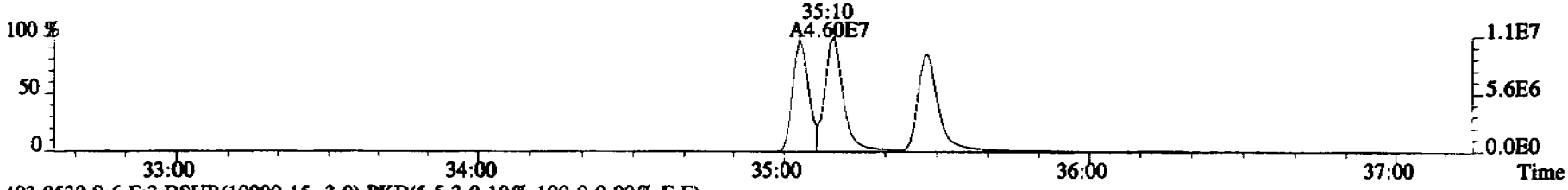
File:050423D1 #1-398 Acq:23-APR-2005 15:26:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-5 1613 CS4 0504201 Exp:OCDD_DB5
389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



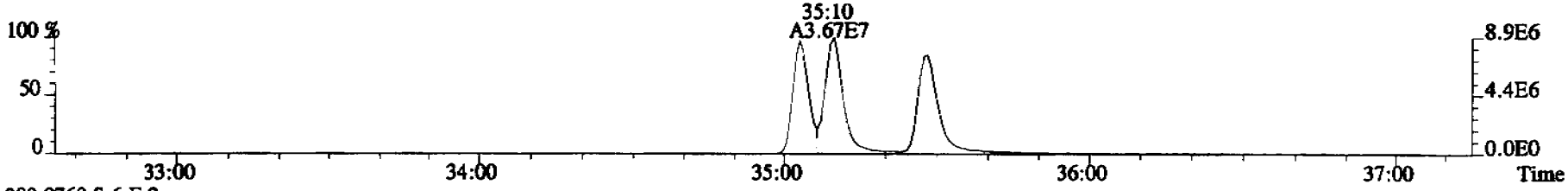
391.8127 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



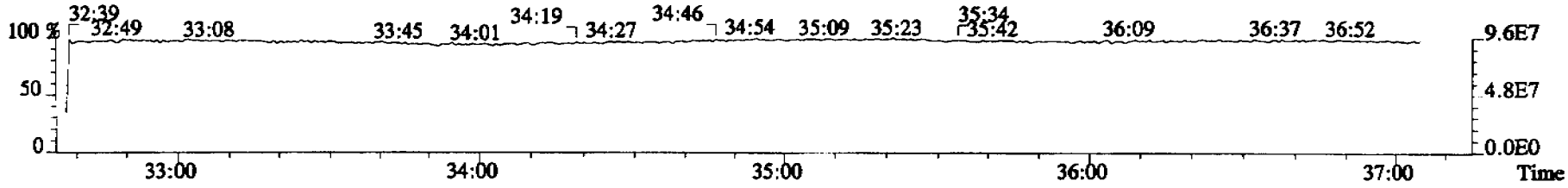
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



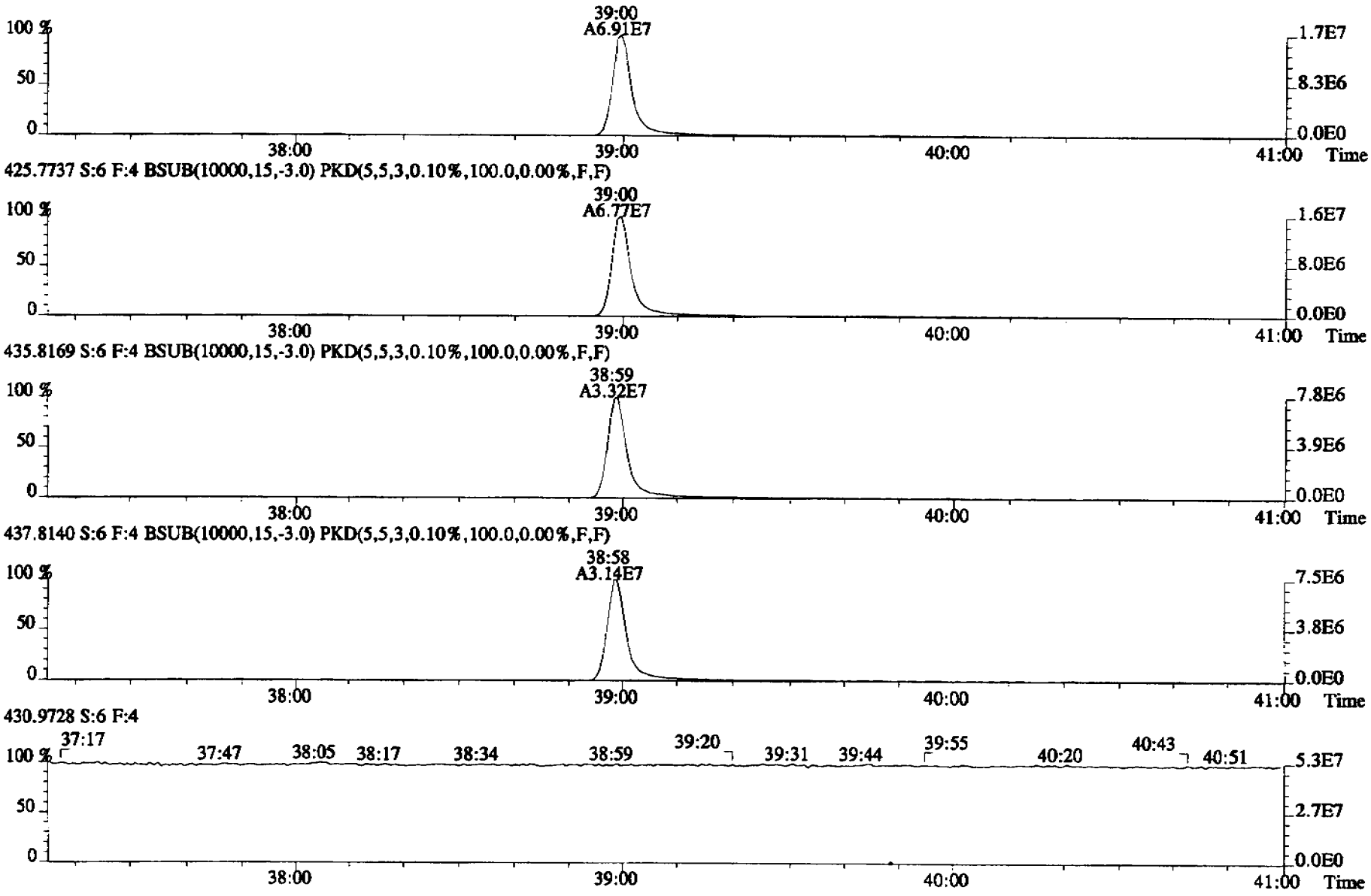
403.8530 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



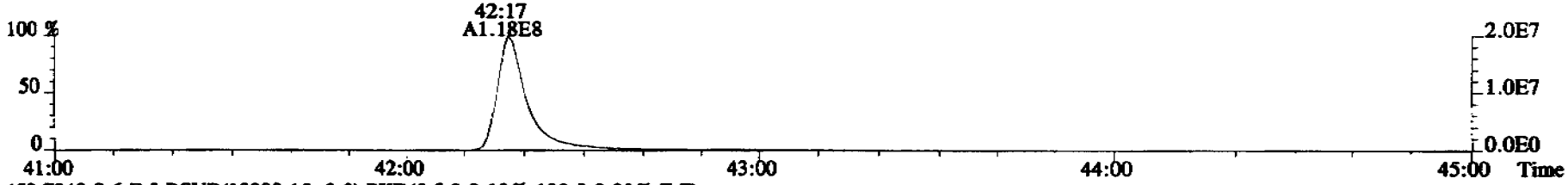
380.9760 S:6 F:3



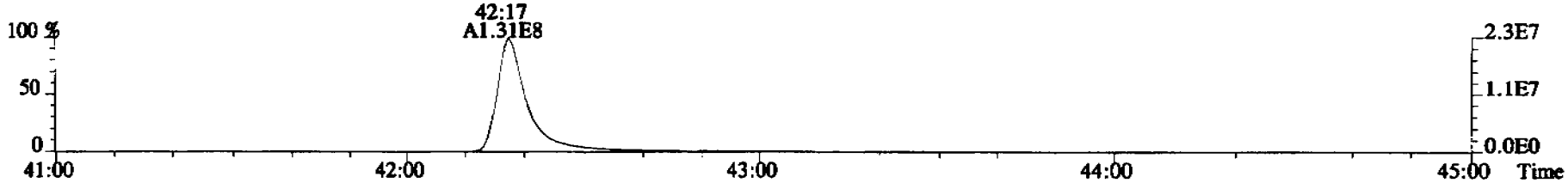
File:050423D1 #1-348 Acq:23-APR-2005 15:26:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-5 1613 CS4 050420I Exp:OCDD_DB5



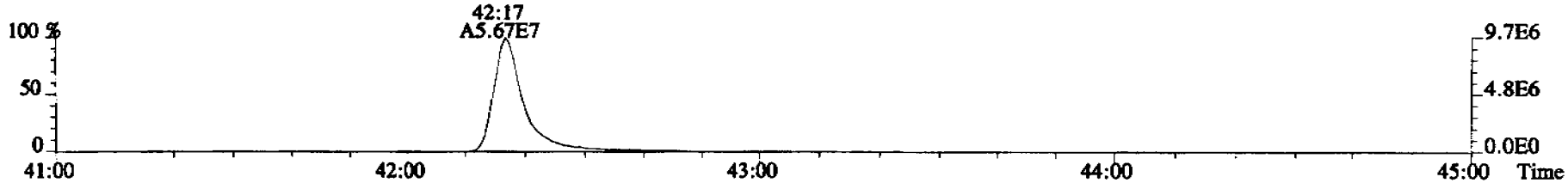
File:050423D1 #1-345 Acq:23-APR-2005 15:26:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-5 1613 CS4 050420I Exp:OCDD_DB5
457.7377 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



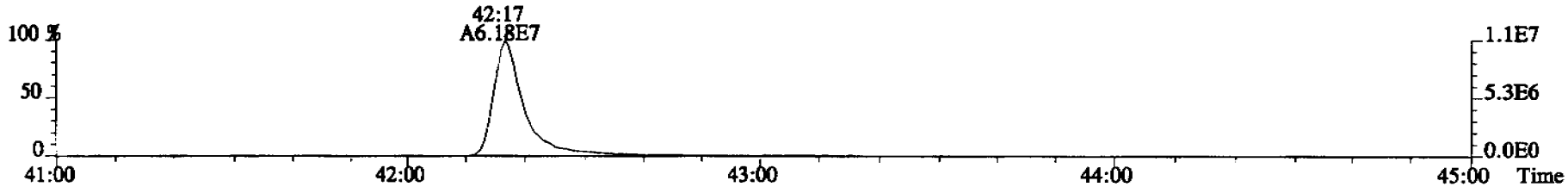
459.7348 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



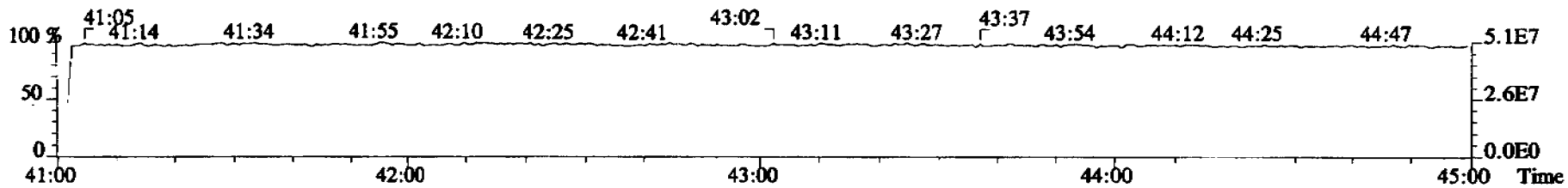
469.7780 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



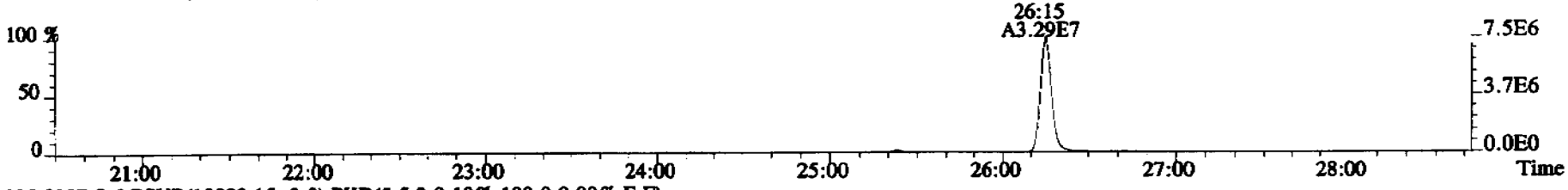
471.7750 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



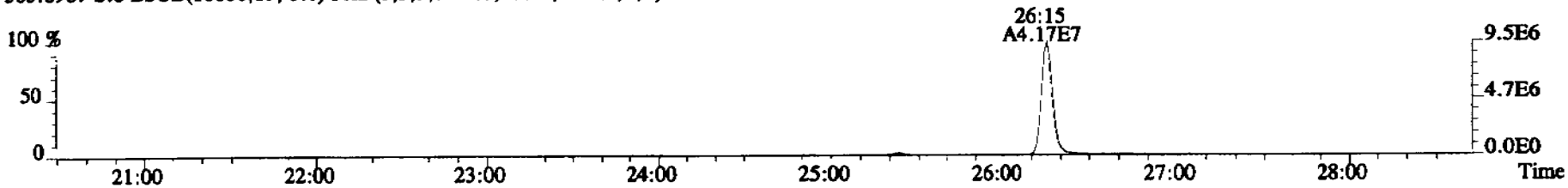
454.9728 S:6 F:5



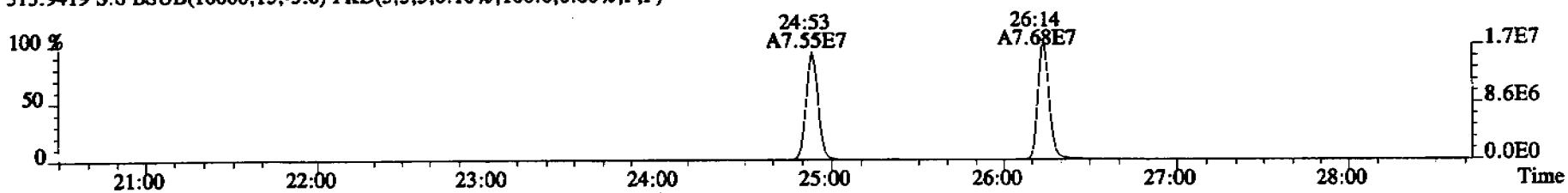
File:050423D1 #1-558 Acq:23-APR-2005 15:26:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-5 1613 CS4 050420I Exp:OCDD_DB5
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



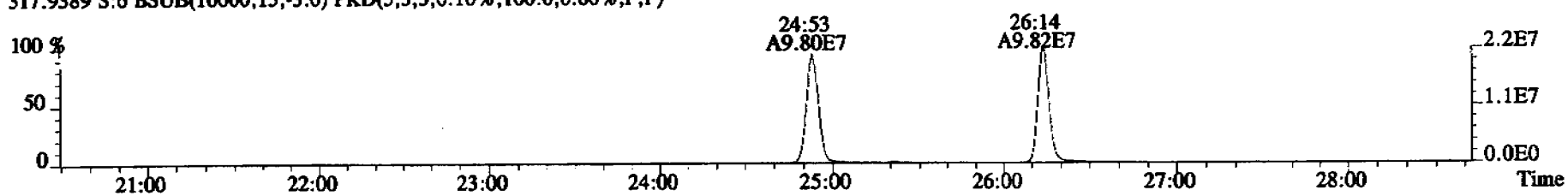
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



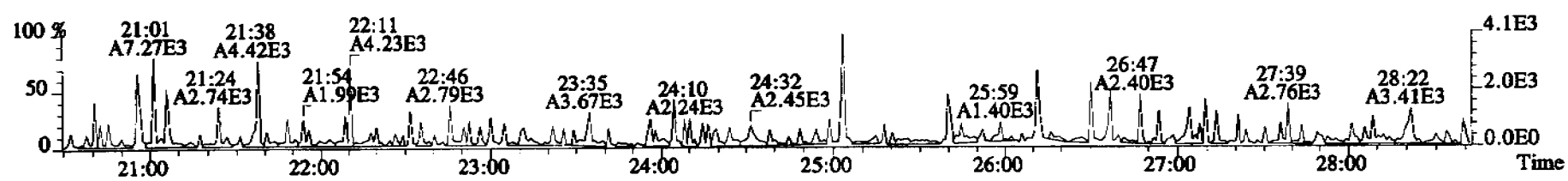
315.9419 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



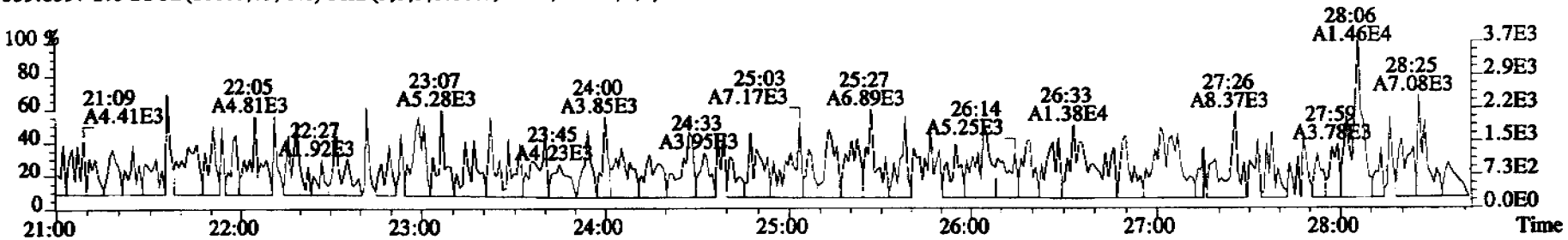
317.9389 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



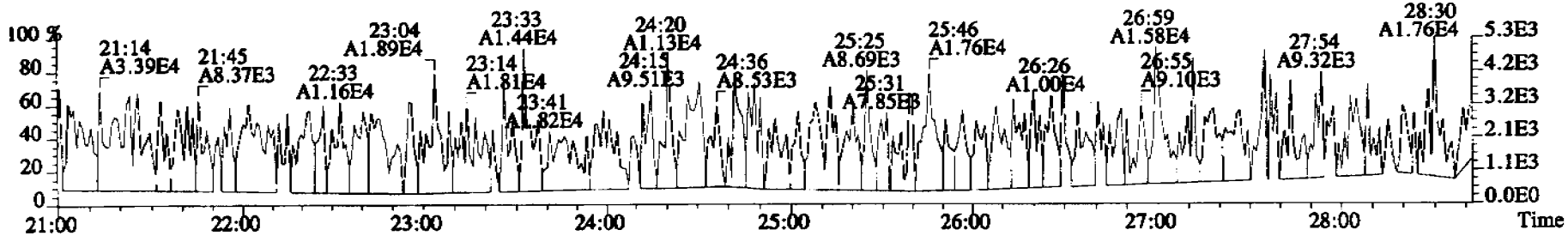
375.8364 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



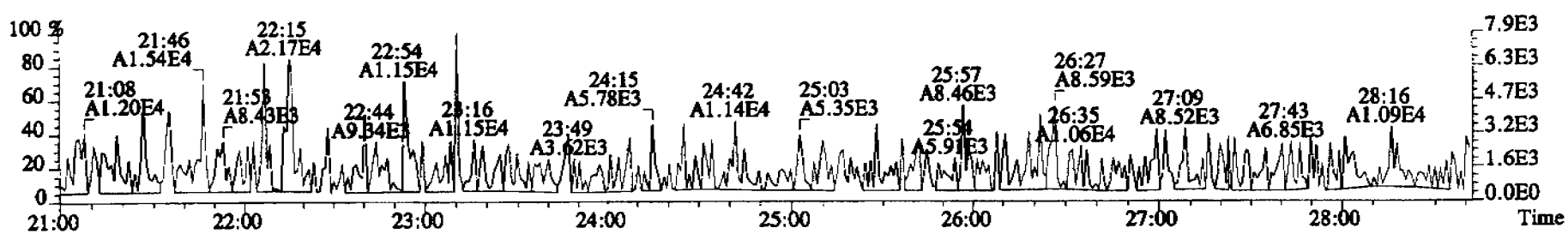
File:050423D1 #1-558 Acq:23-APR-2005 15:26:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-5 1613 CS4 050420I Exp:OCDD_DB5
339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



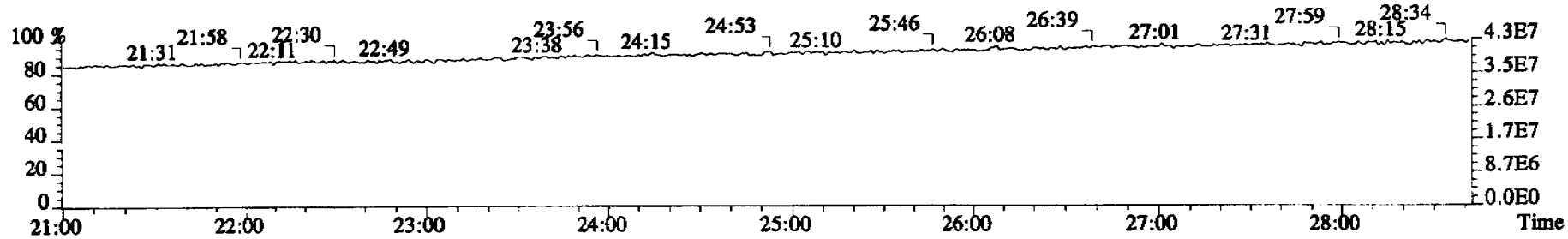
341.8568 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



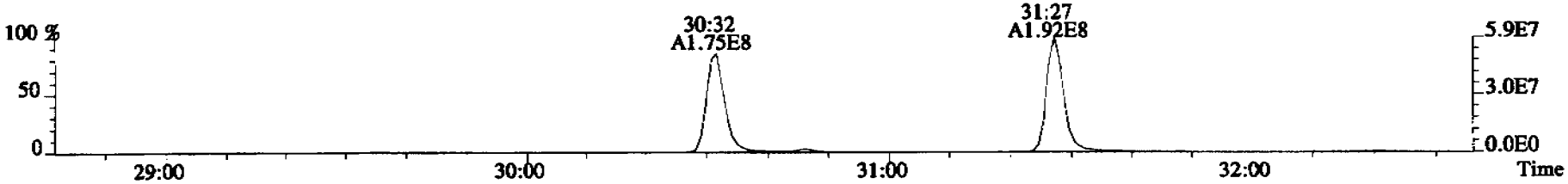
409.7974 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



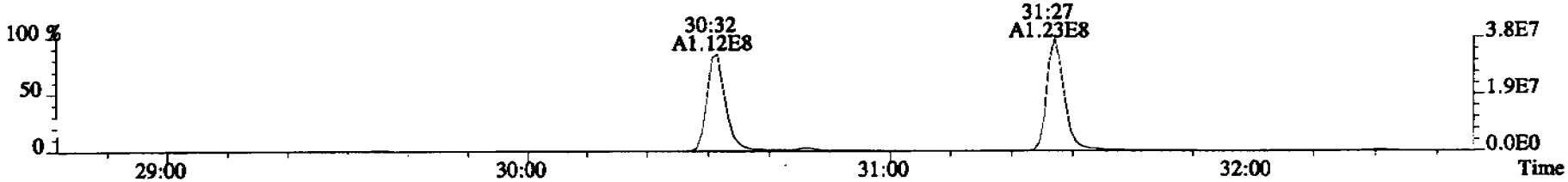
316.9824 S:6



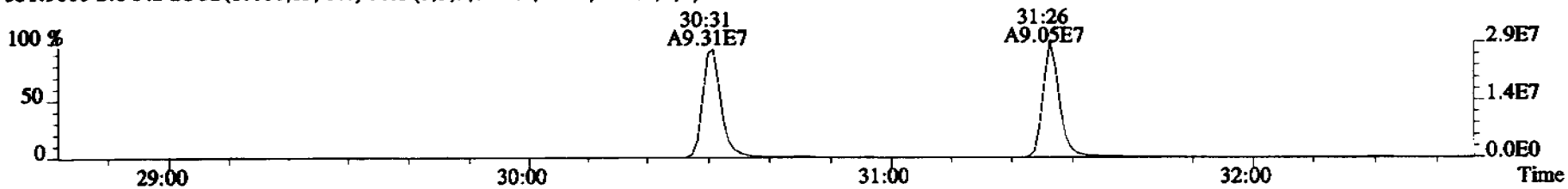
File:050423D1 #1-273 Acq:23-APR-2005 15:26:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-5 1613 CS4 050420I Exp:OCDD_DB5
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



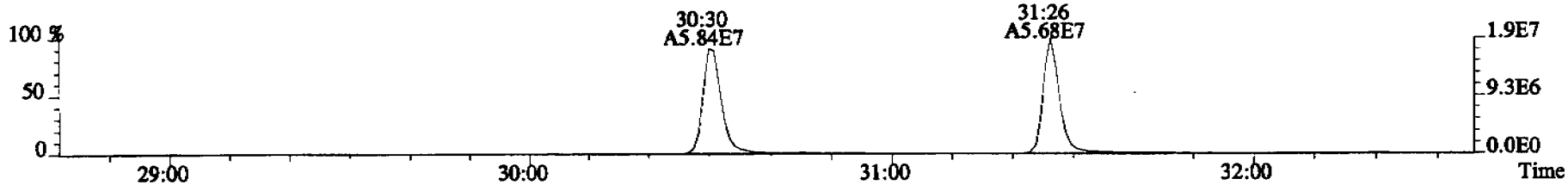
341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



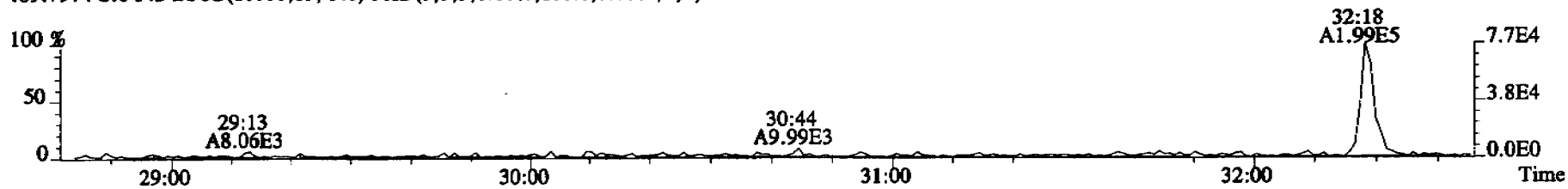
351.9000 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



353.8970 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

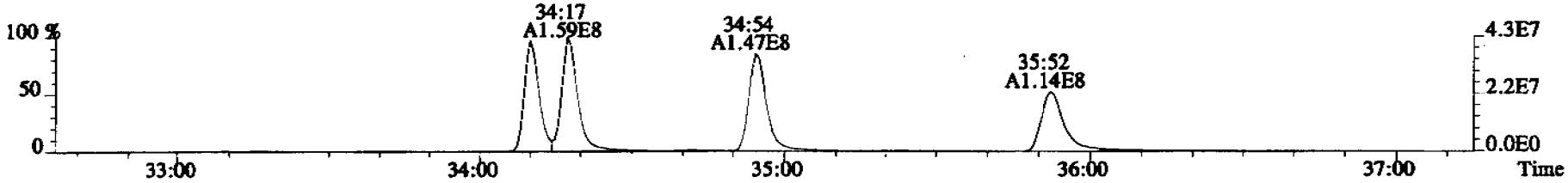


409.7974 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

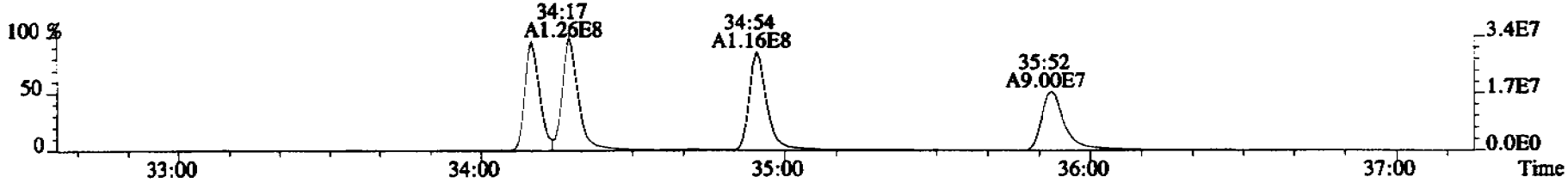


File:050423D1 #1-398 Acq:23-APR-2005 15:26:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-5 1613 CS4 0504201 Exp:OCDD_DB5

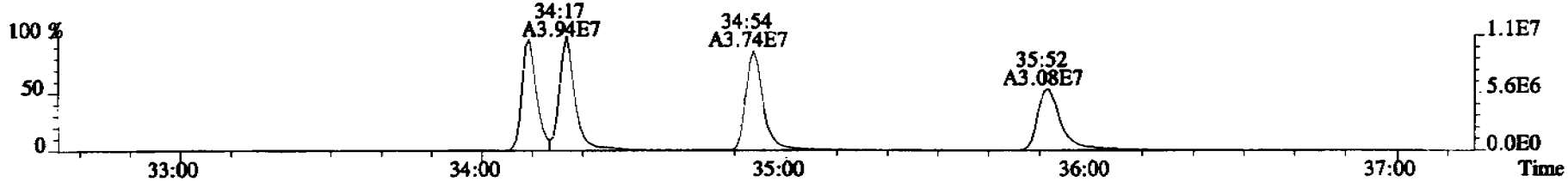
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



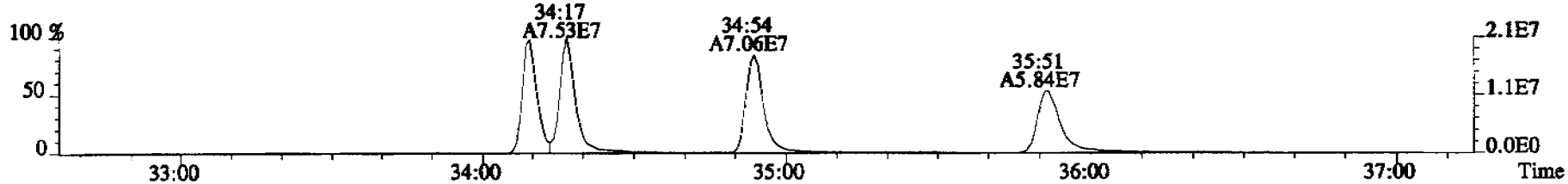
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



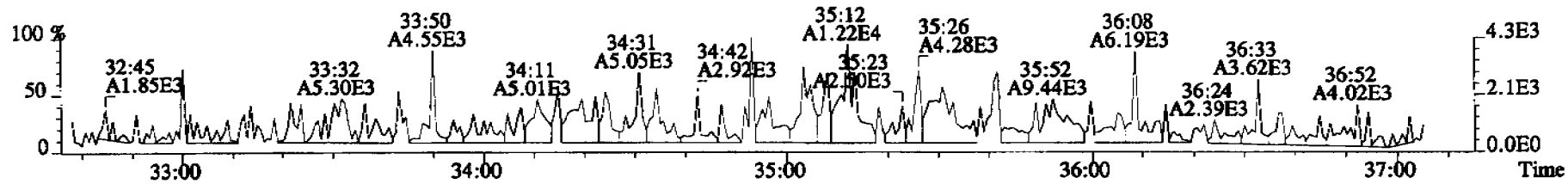
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



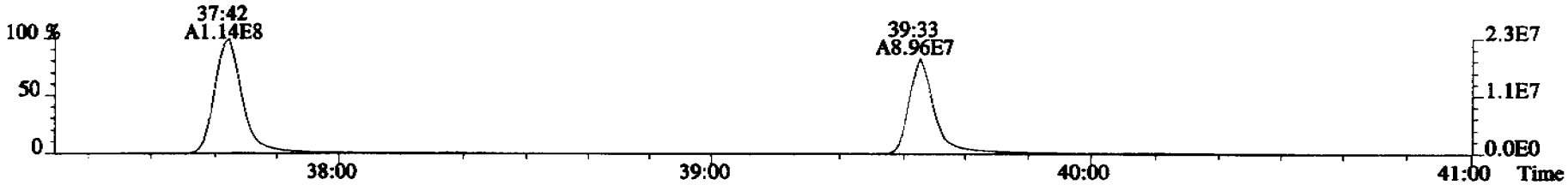
385.8610 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



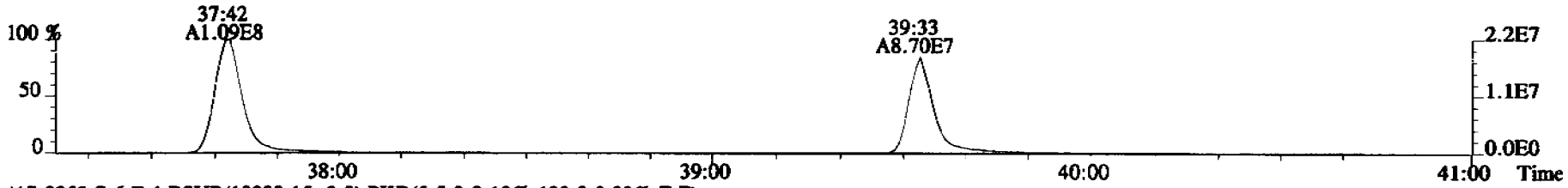
445.7555 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



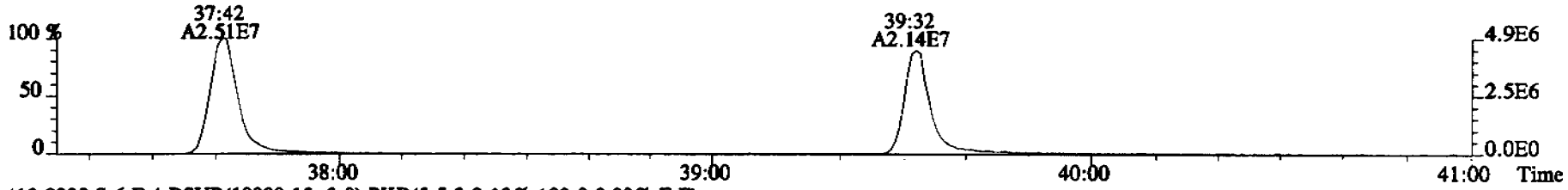
File:050423D1 #1-348 Acq:23-APR-2005 15:26:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-5 1613 CS4 050420I Exp:OCDD_DB5
407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



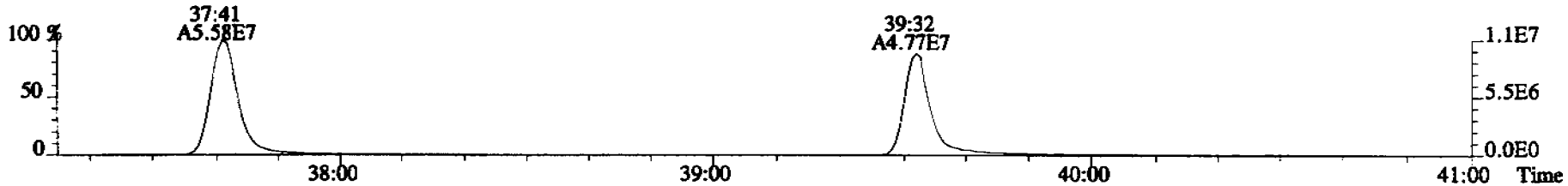
409.7788 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



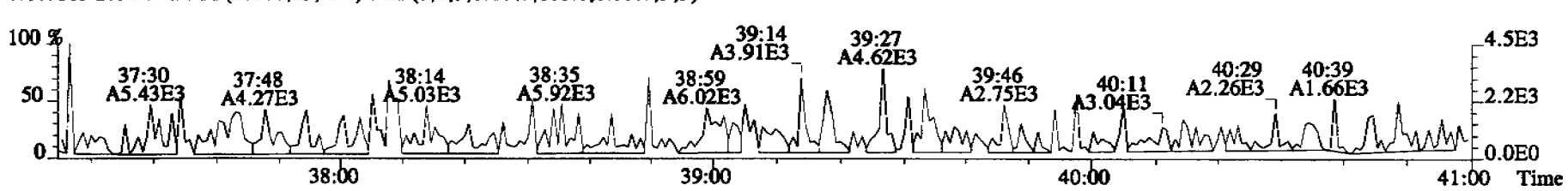
417.8253 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



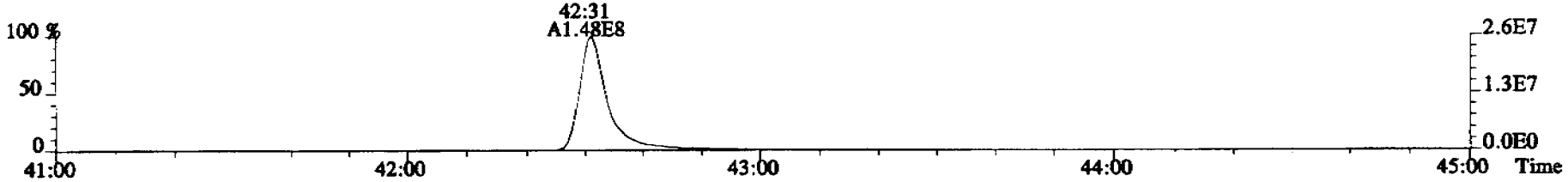
419.8220 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



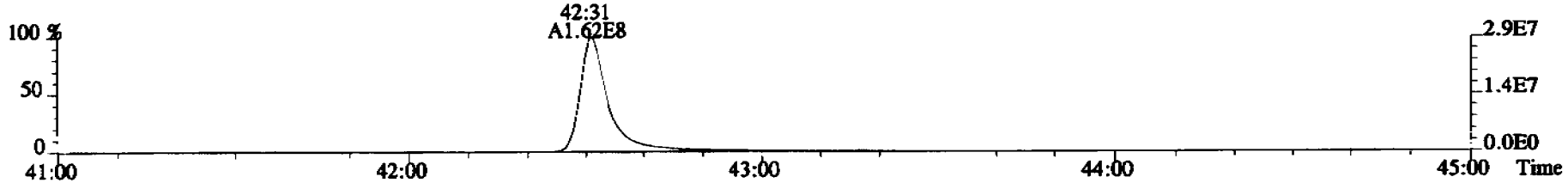
479.7165 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



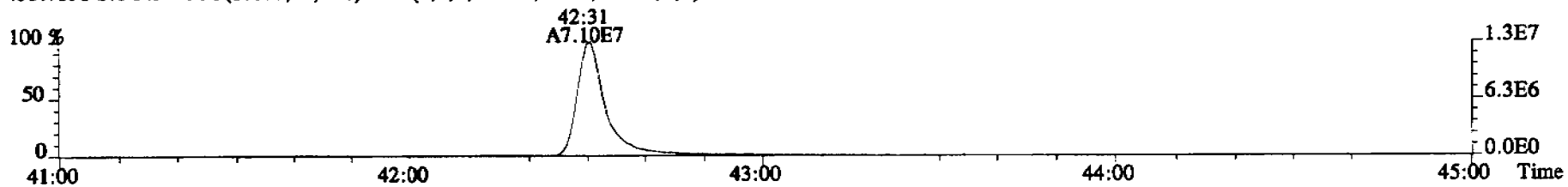
File:050423D1 #1-345 Acq:23-APR-2005 15:26:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-5 1613 CS4 0504201 Exp:OCDD_DB5
441.7428 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



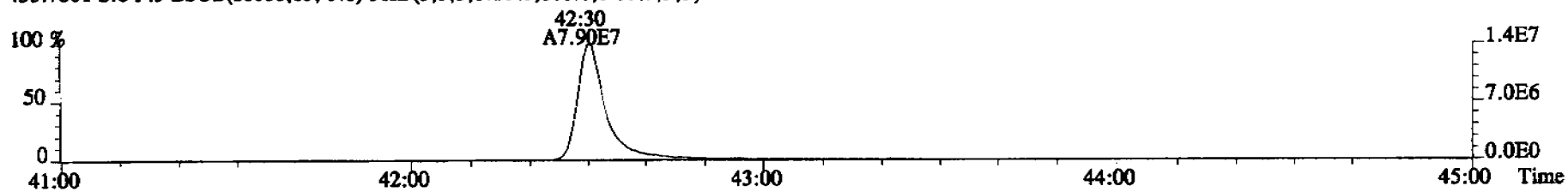
443.7398 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



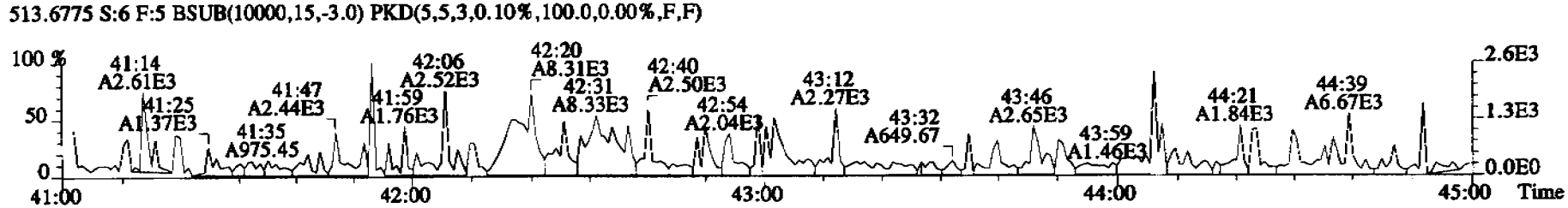
453.7831 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



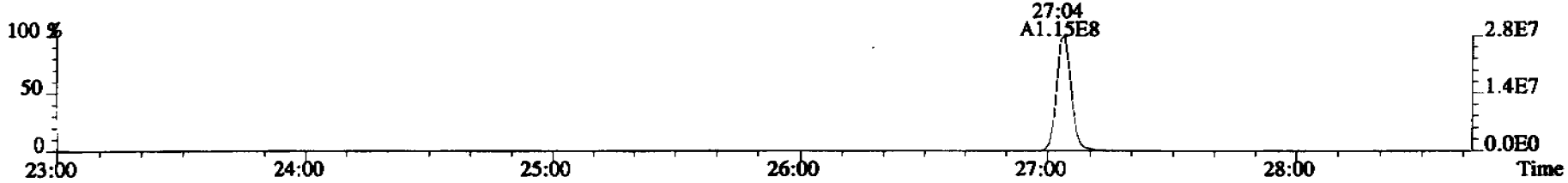
455.7801 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



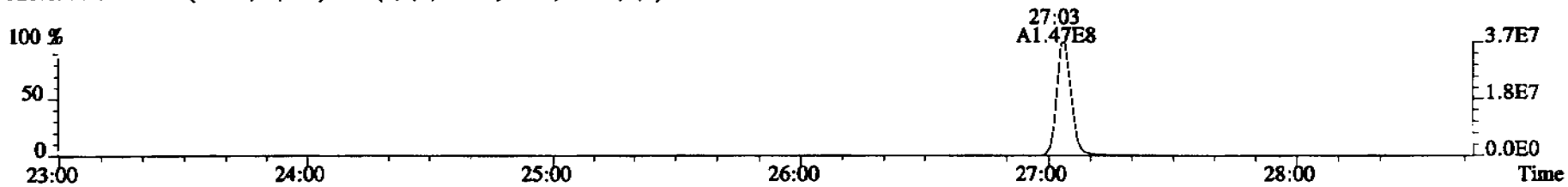
513.6775 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



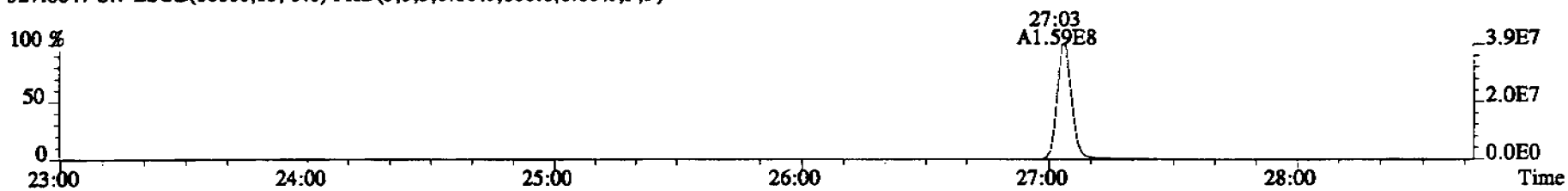
File:050423D1 #1-558 Acq:23-APR-2005 16:15:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-6 1613 CS5 050420J Exp:OCDD_DB5
319.8965 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



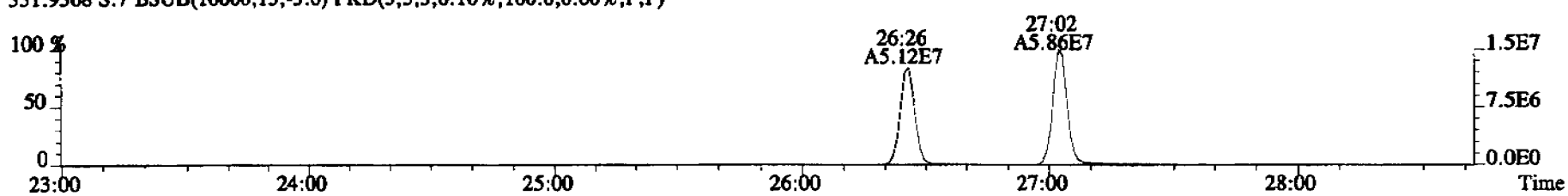
321.8936 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



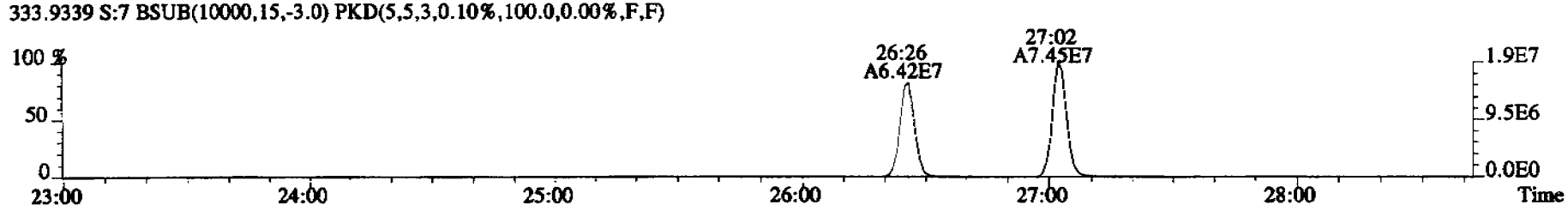
327.8847 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



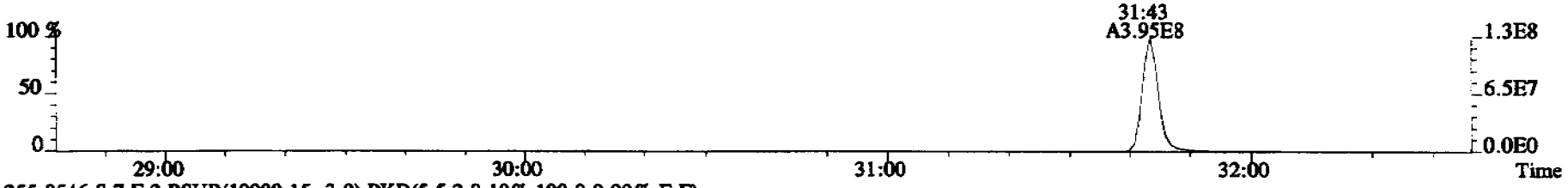
331.9368 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



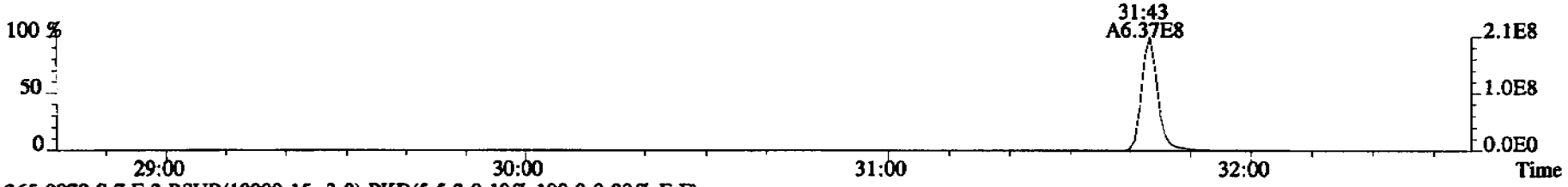
333.9339 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



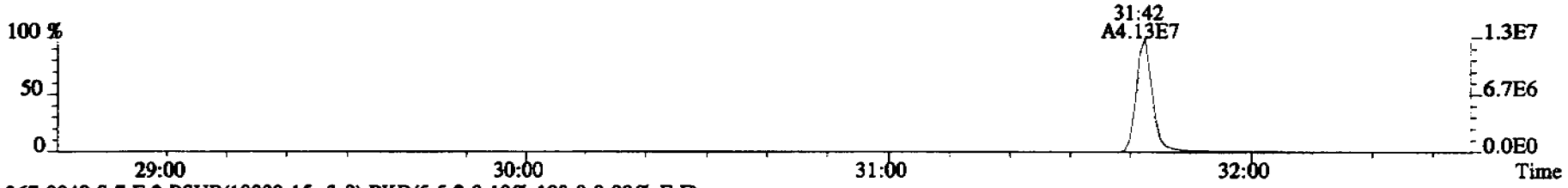
File:050423D1 #1-273 Acq:23-APR-2005 16:15:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-6 1613 CS5 050420J Exp:OCDD_DB5
353.8576 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



355.8546 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

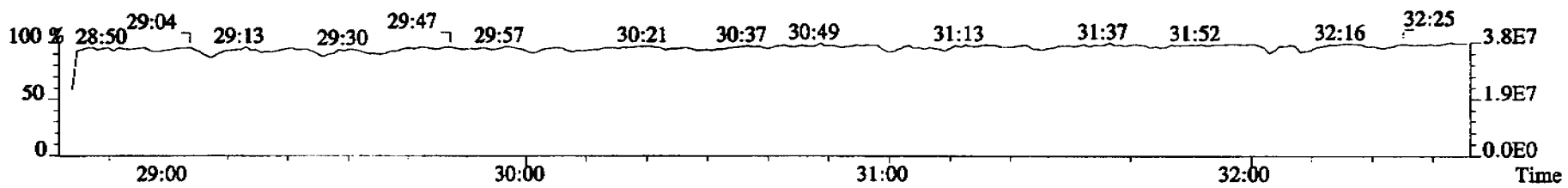


365.8978 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

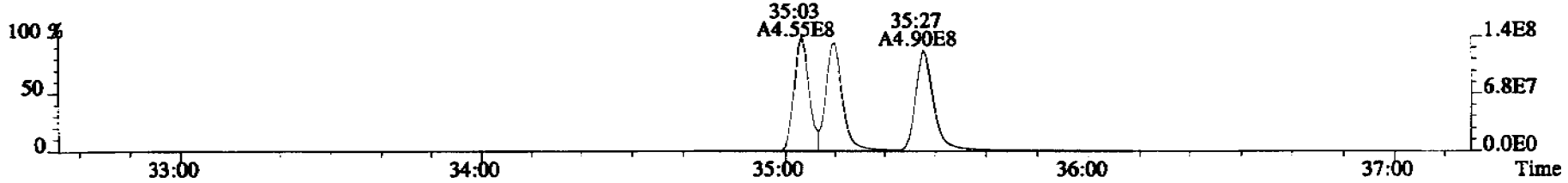


367.8949 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

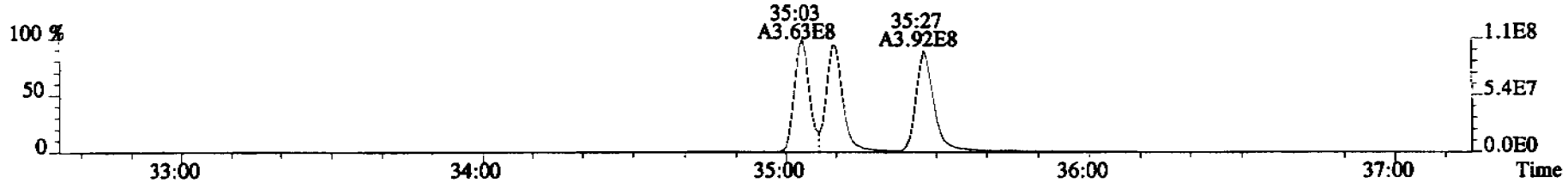
366.9792 S:7 F:2



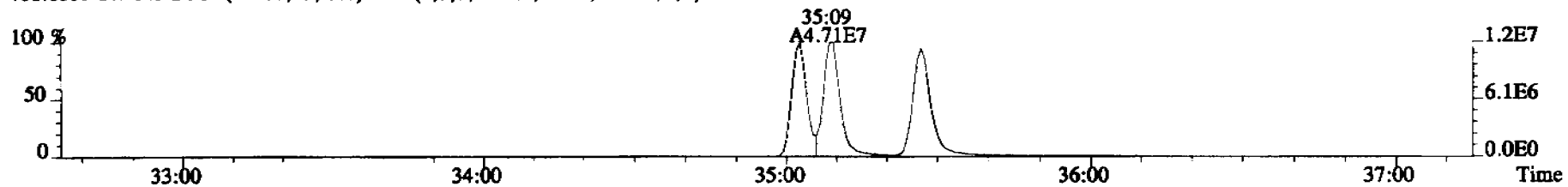
File:050423D1 #1-398 Acq:23-APR-2005 16:15:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-6 1613 CS5 050420J Exp:OCDD_DB5
389.8156 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



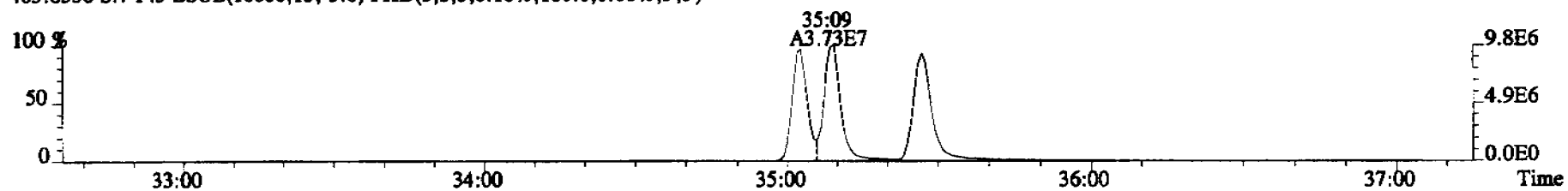
391.8127 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



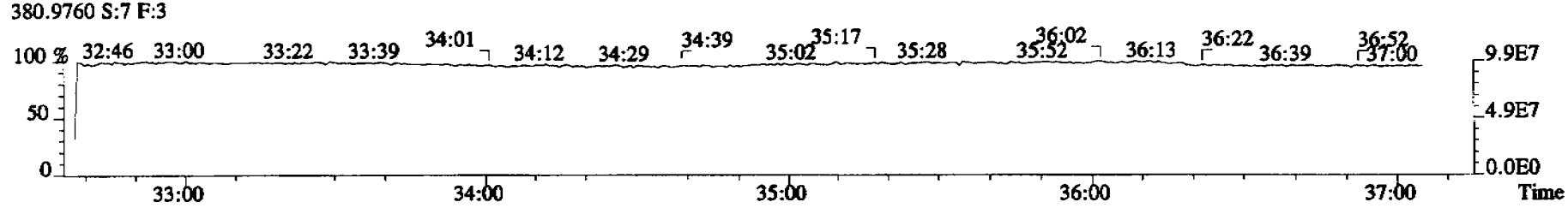
401.8559 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



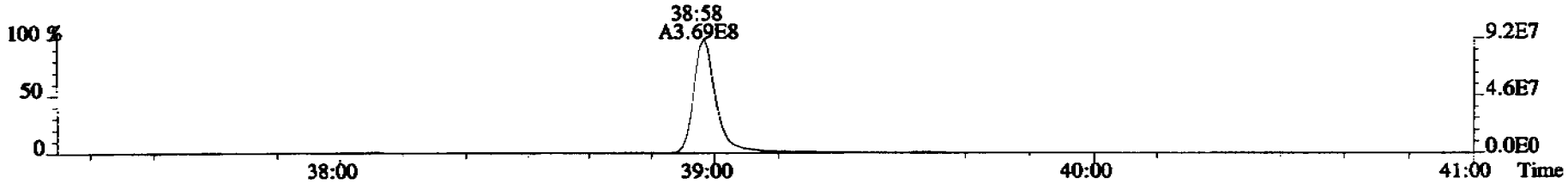
403.8530 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



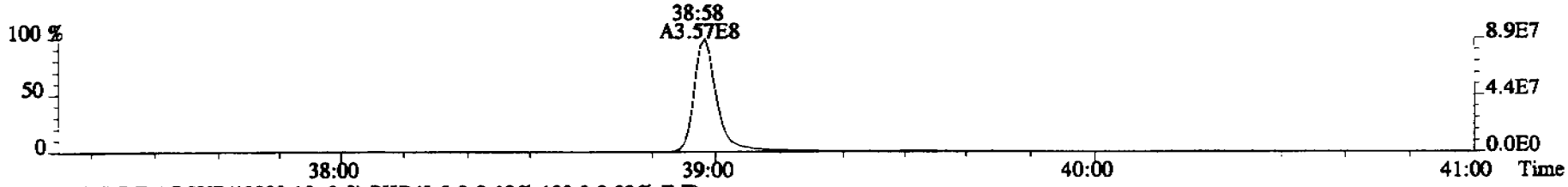
380.9760 S:7 F:3



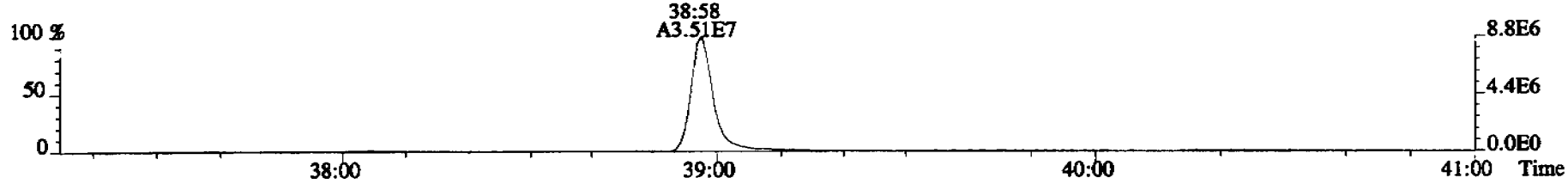
File:050423D1 #1-348 Acq:23-APR-2005 16:15:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-6 1613 CS5 050420J Exp:OCDD_DB5
423.7767 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



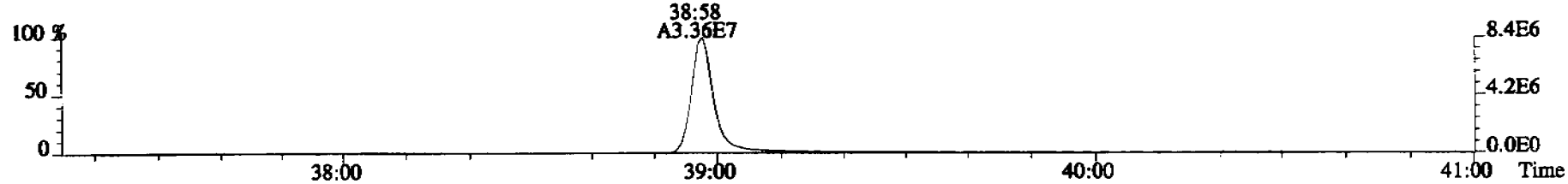
425.7737 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



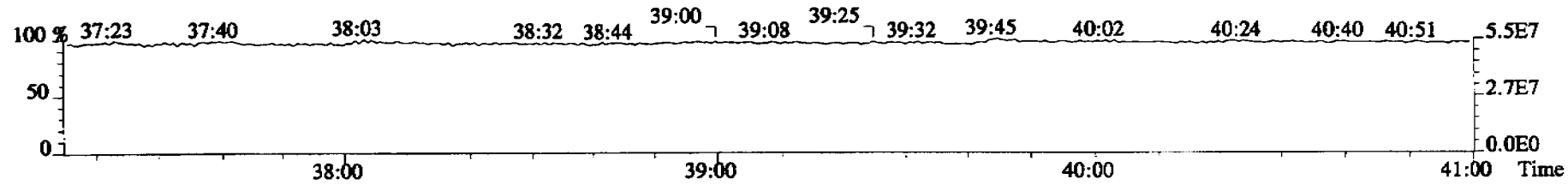
435.8169 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



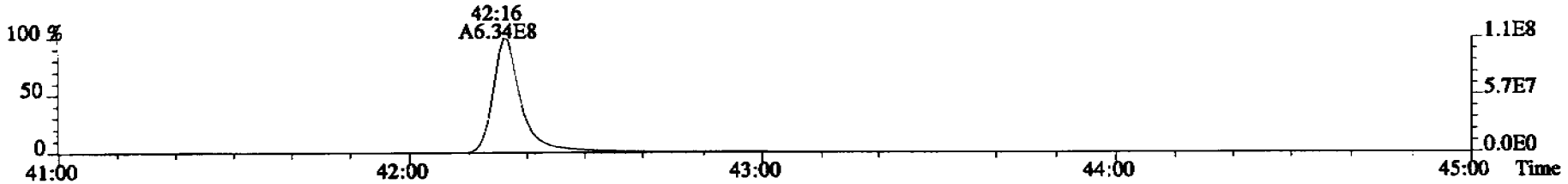
437.8140 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



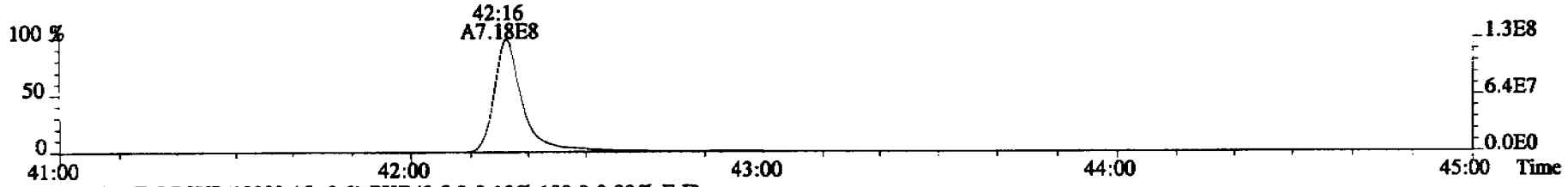
430.9728 S:7 F:4



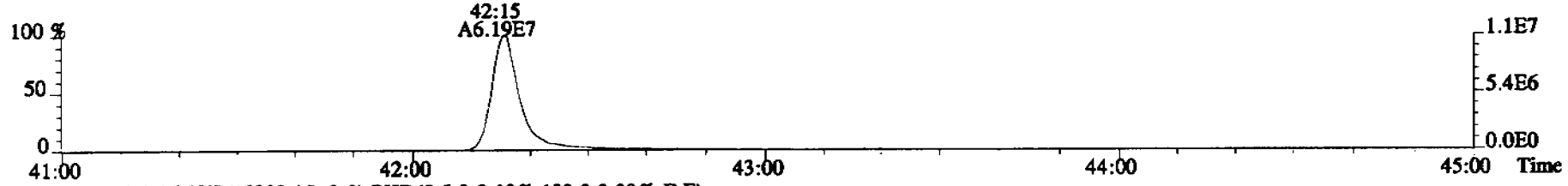
File:050423D1 #1-345 Acq:23-APR-2005 16:15:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-6 1613 CS5 050420J Exp:OCDD_DB5
457.7377 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



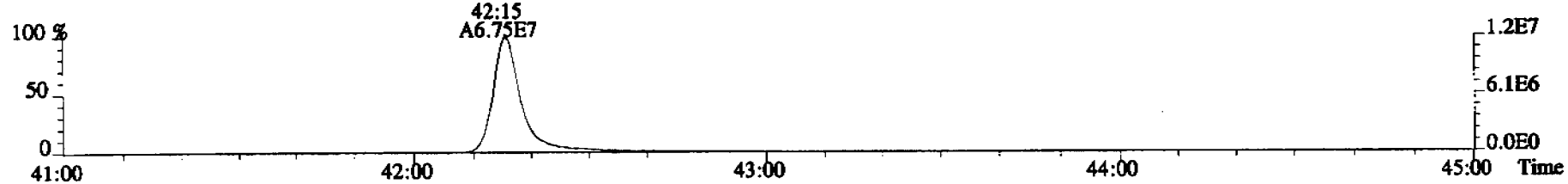
459.7348 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



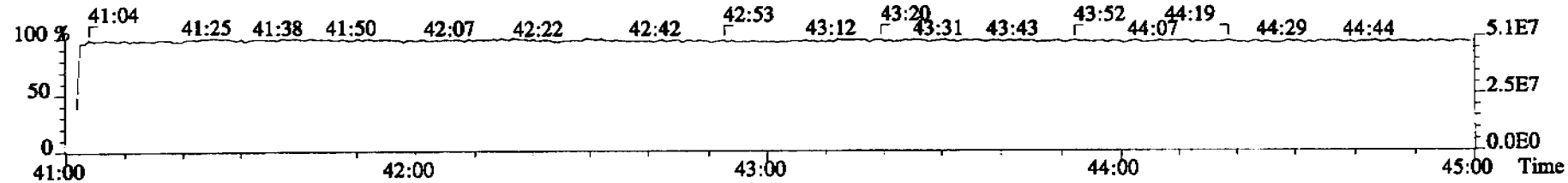
469.7780 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



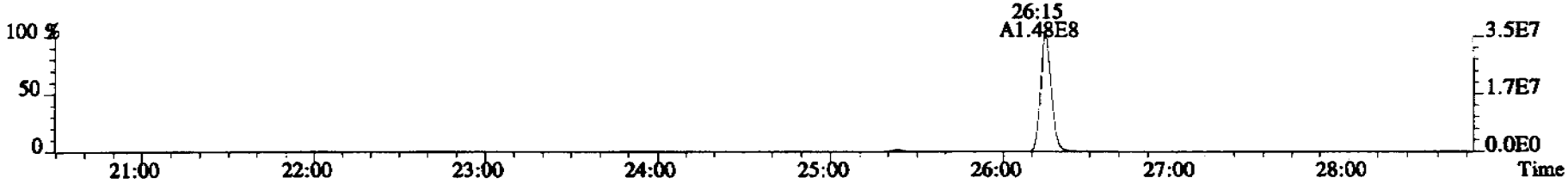
471.7750 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



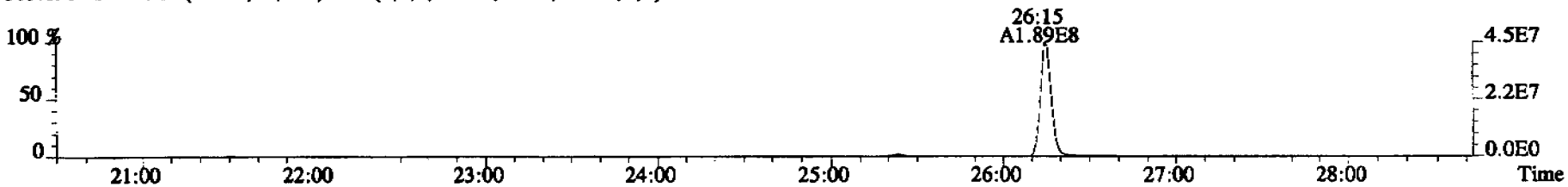
454.9728 S:7 F:5



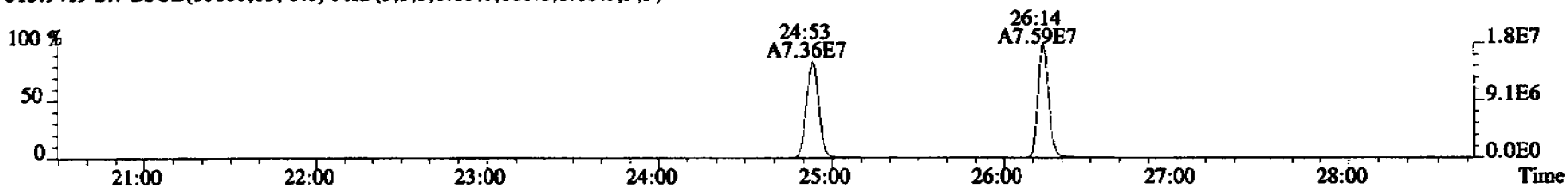
File:050423D1 #1-558 Acq:23-APR-2005 16:15:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-6 1613 CS5 050420J Exp:OCDD_DB5
303.9016 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



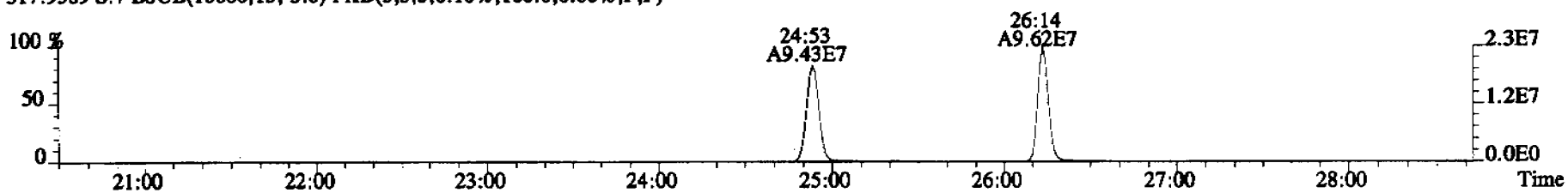
305.8987 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



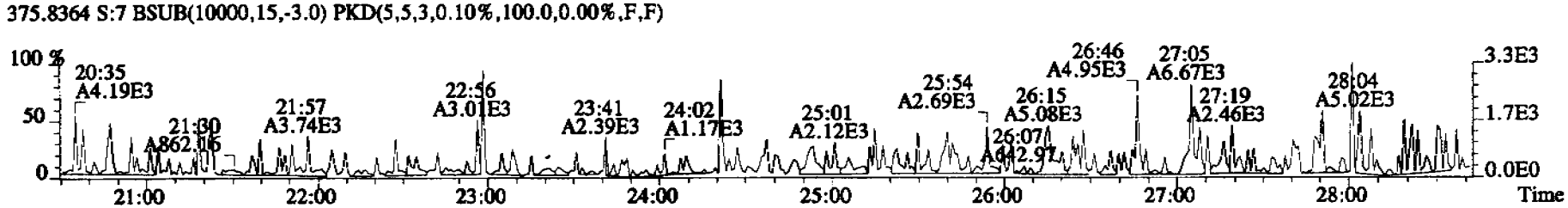
315.9419 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

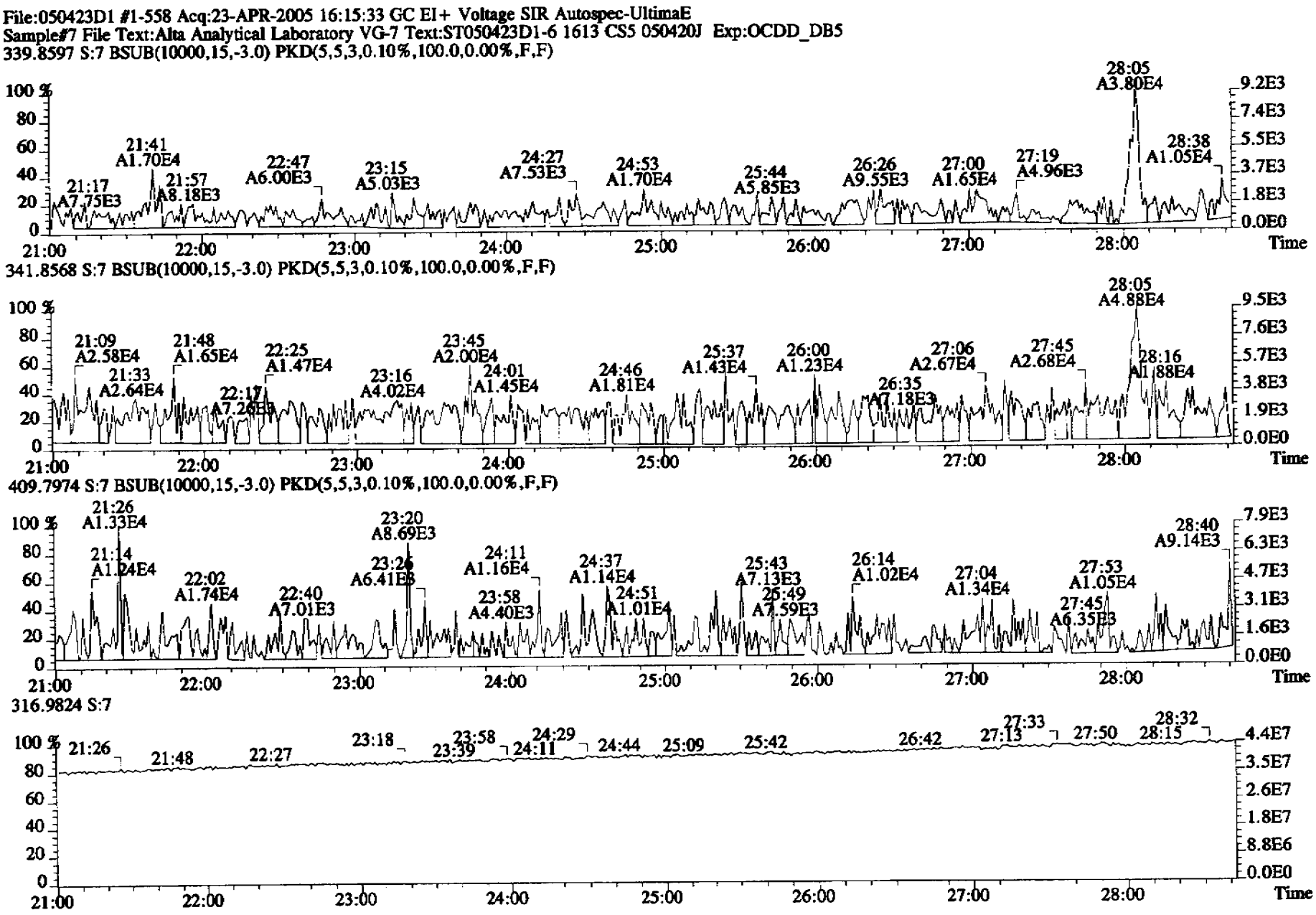


317.9389 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

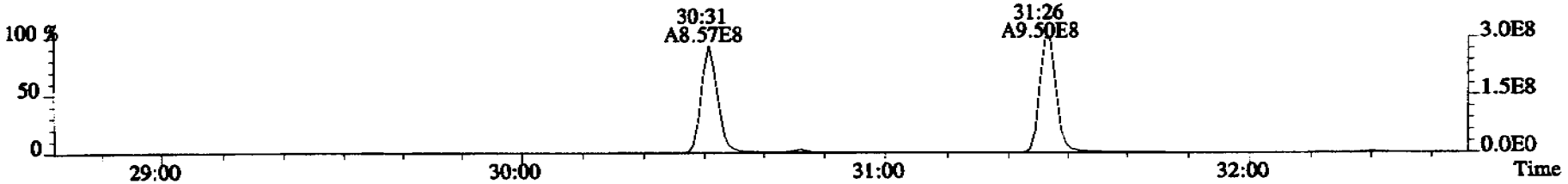


375.8364 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

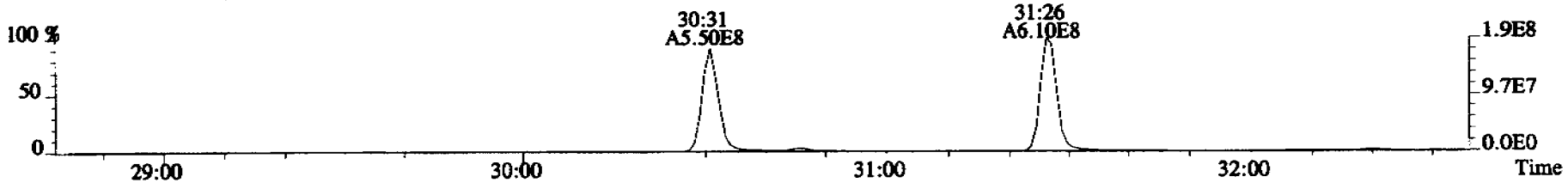



File:050423D1 #1-558 Acq:23-APR-2005 16:15:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-6 1613 CS5 050420J Exp:OCDD_DB5
339.8597 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
341.8568 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
409.7974 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
316.9824 S:7
Time

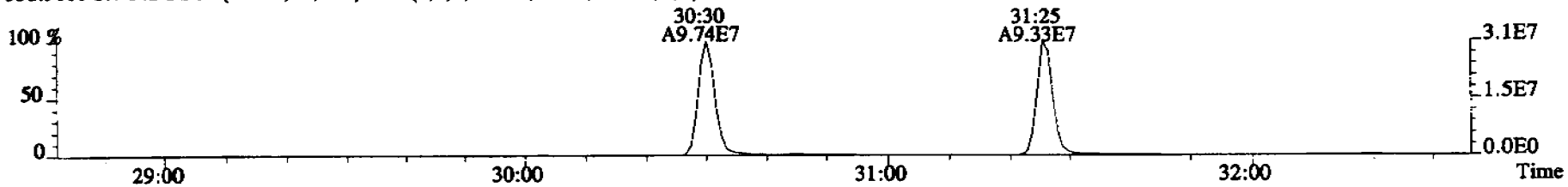
File:050423D1 #1-273 Acq:23-APR-2005 16:15:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-6 1613 CS5 050420J Exp:OCDD_DB5
339.8597 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



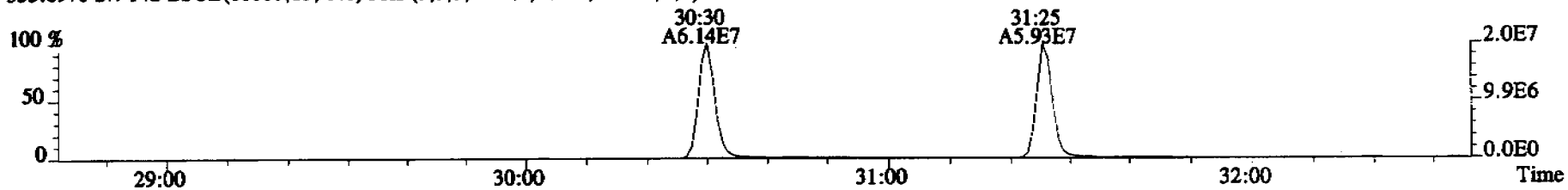
341.8568 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



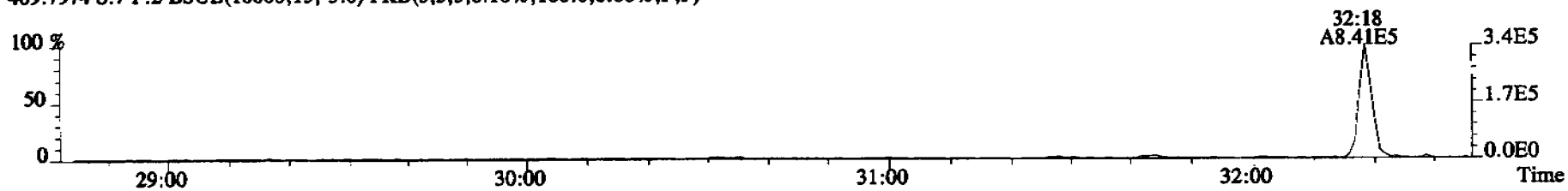
351.9000 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



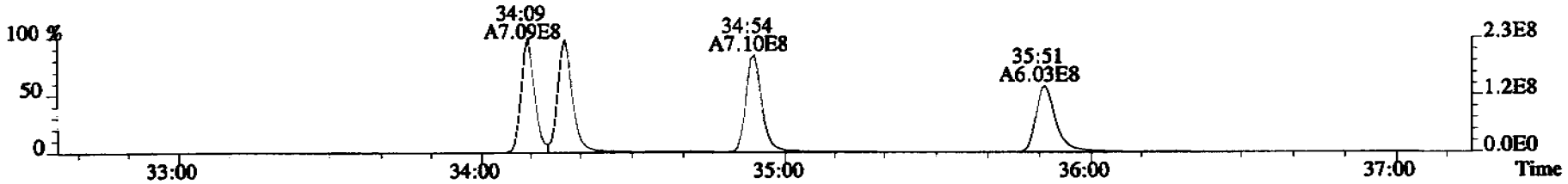
353.8970 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



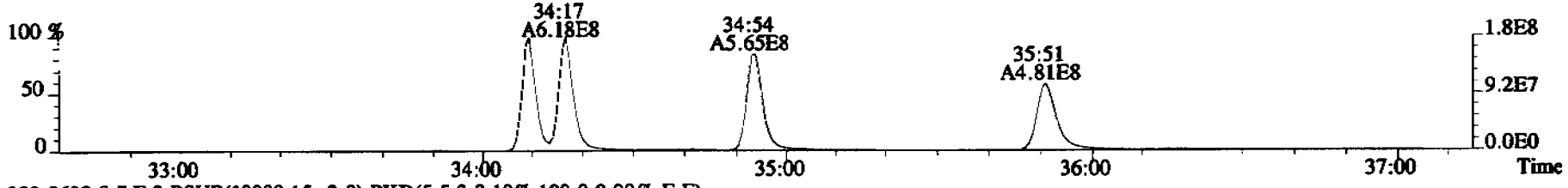
409.7974 S:7 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



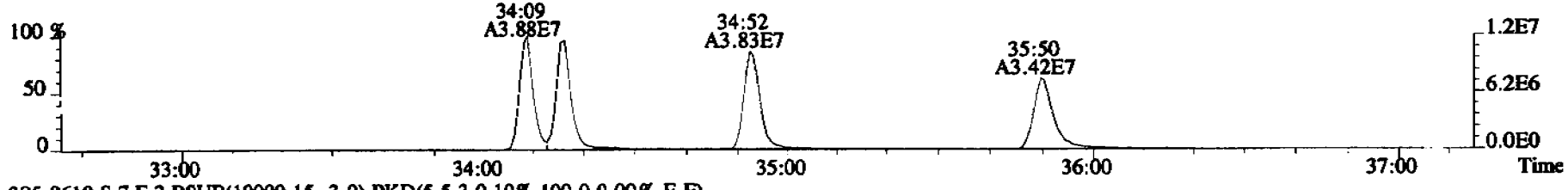
File:050423D1 #1-398 Acq:23-APR-2005 16:15:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-6 1613 CS5 050420J Exp:OCDD_DB5
373.8207 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



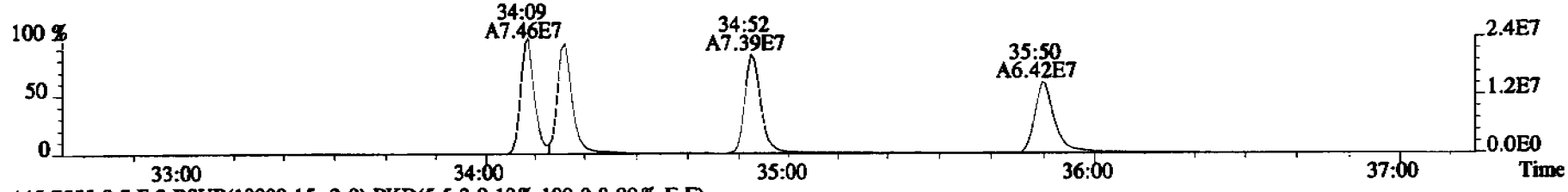
375.8178 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



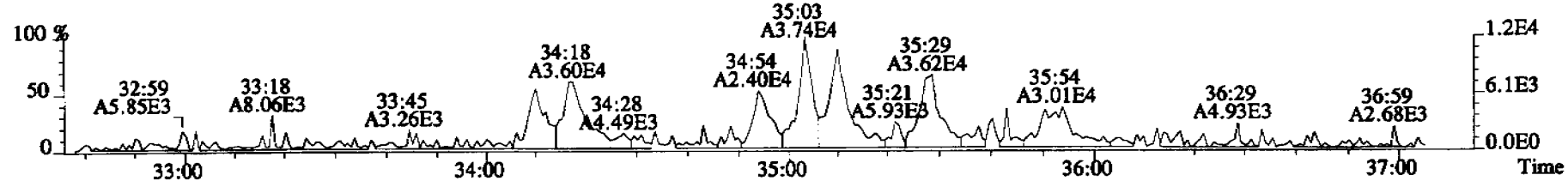
383.8639 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



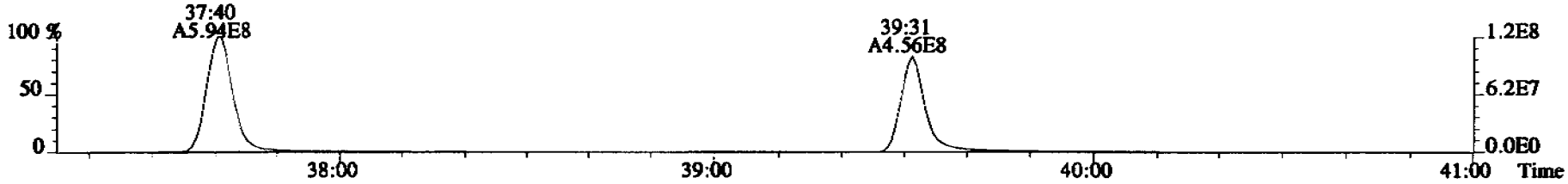
385.8610 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



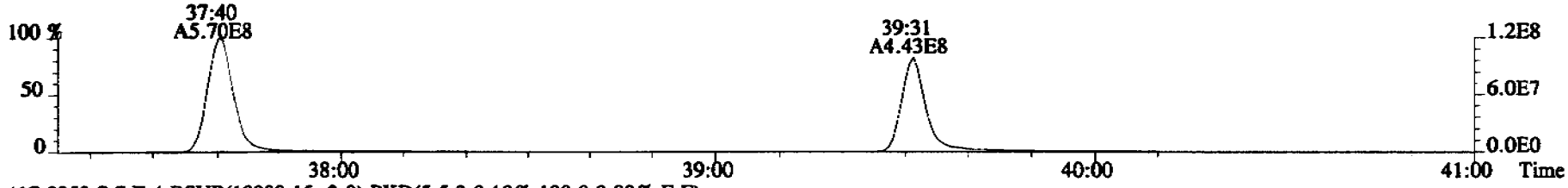
445.7555 S:7 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



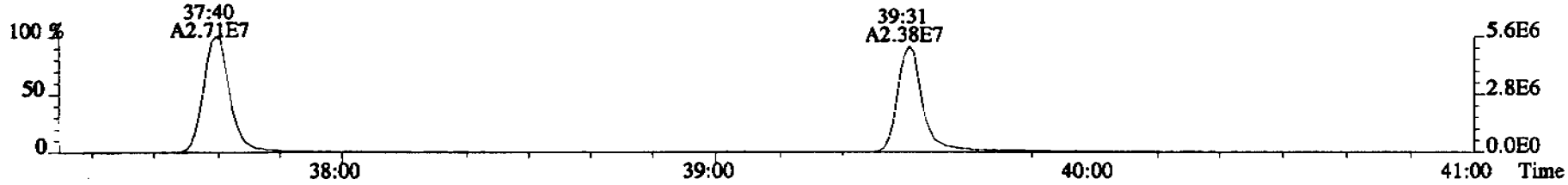
File:050423D1 #1-348 Acq:23-APR-2005 16:15:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-6 1613 CS5 050420J Exp:OCDD_DB5
407.7818 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



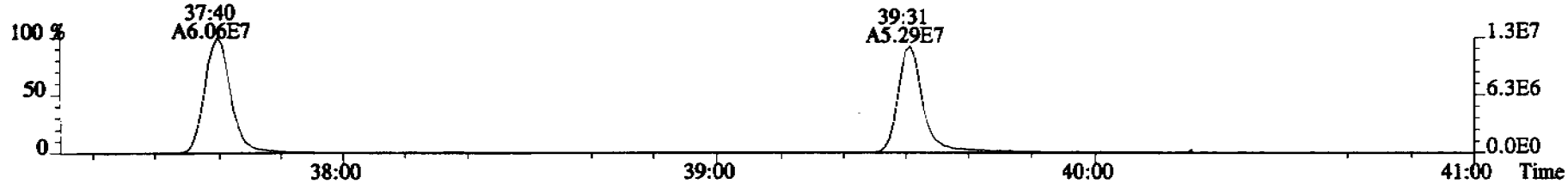
409.7788 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



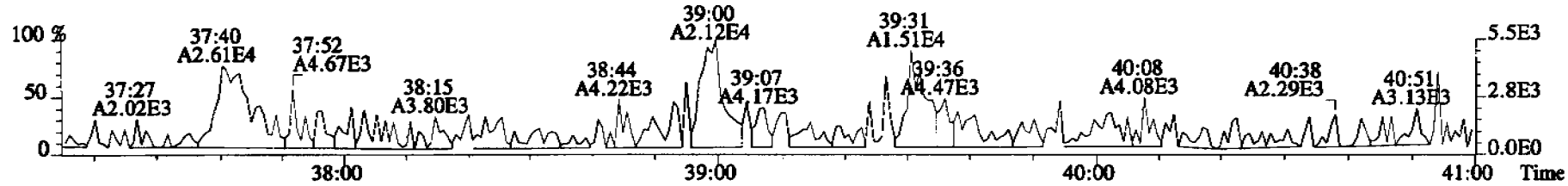
417.8253 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



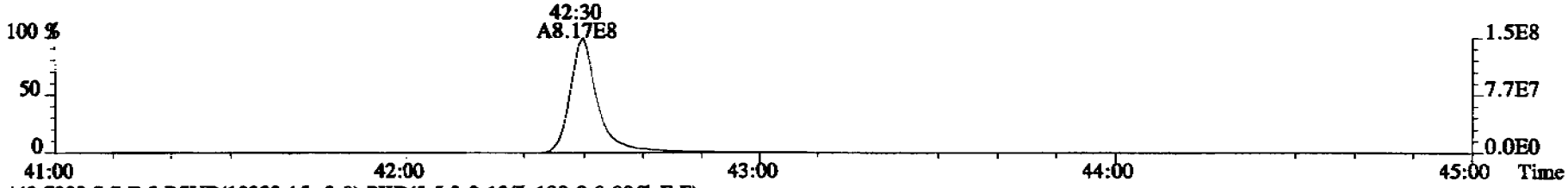
419.8220 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



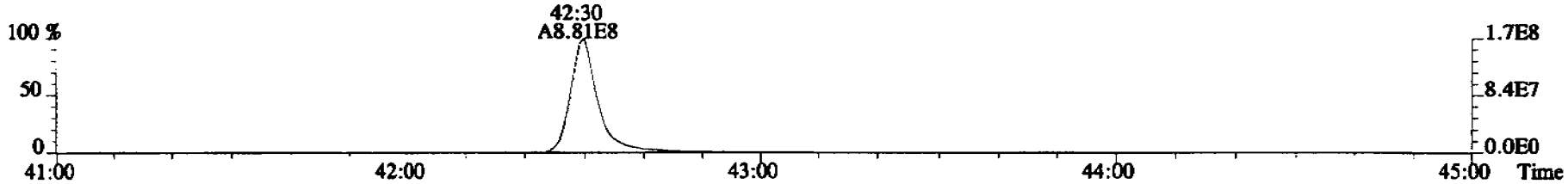
479.7165 S:7 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



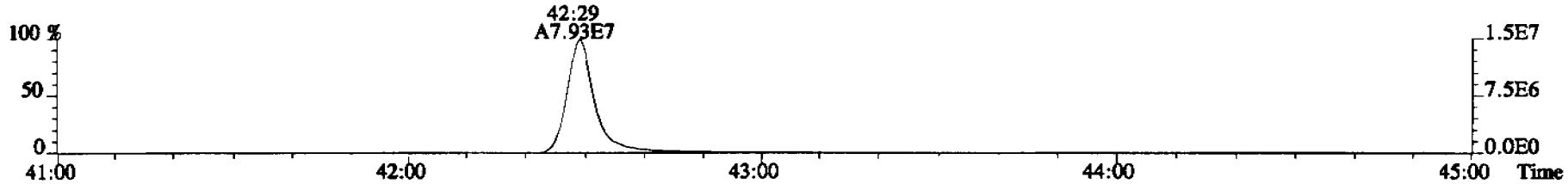
File:050423D1 #1-345 Acq:23-APR-2005 16:15:33 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-6 1613 CS5 050420J Exp:OCDD_DB5
441.7428 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



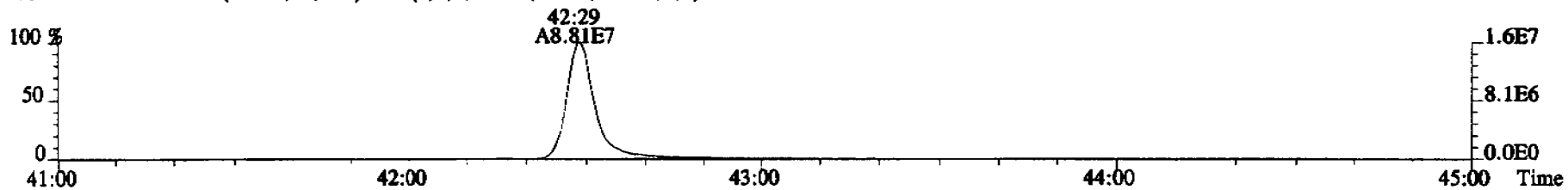
443.7398 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



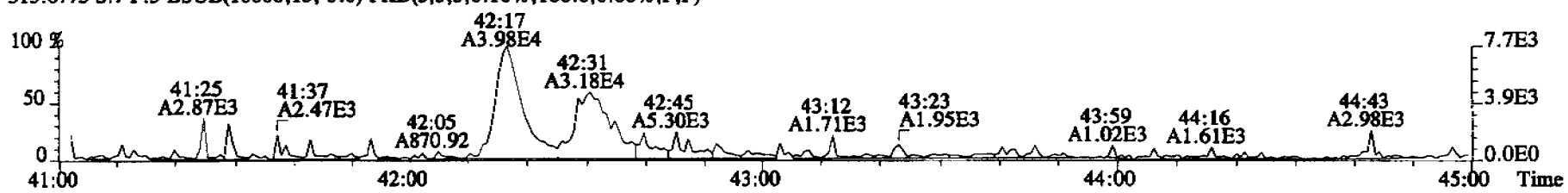
453.7831 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

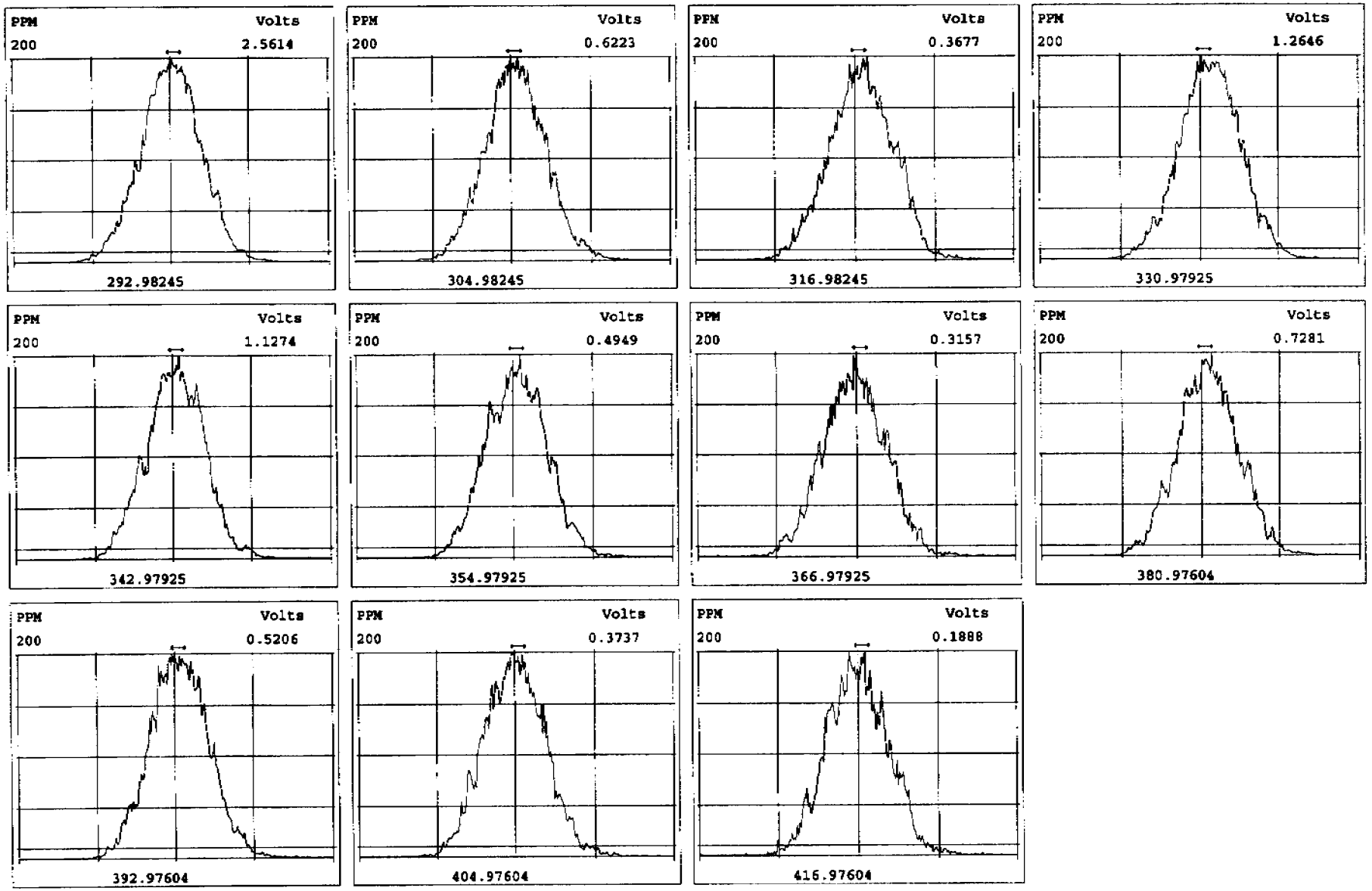


513.6775 S:7 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



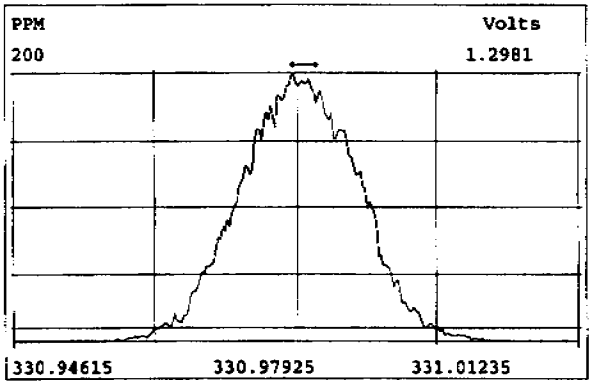
Peak Locate Examination:23-APR-2005:19:40 File:RES_CHECK

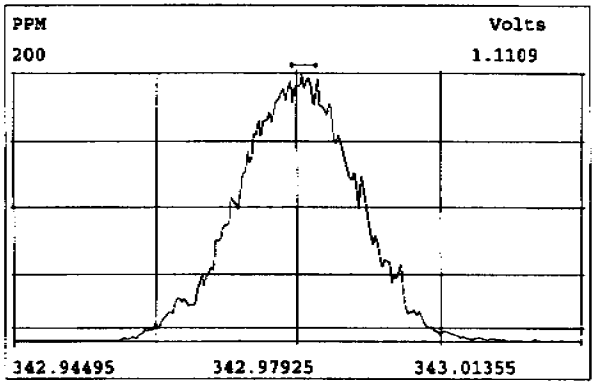
Experiment:OCDD_DB5 Function:1 Reference:PFK

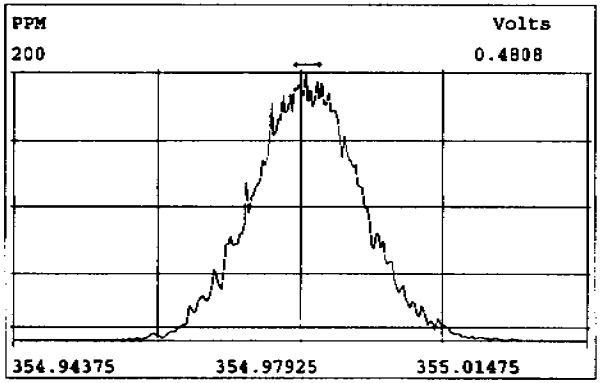


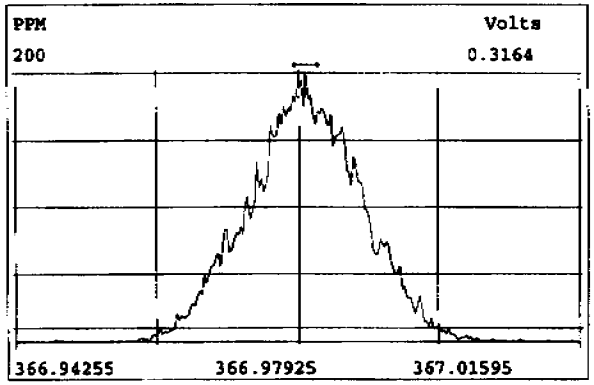
Peak Locate Examination:23-APR-2005:19:41 File:RES_CHECK

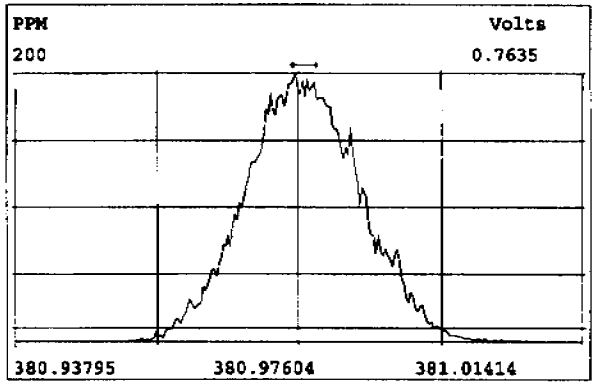
Experiment:OCDD_DB5 Function:2 Reference:PFK

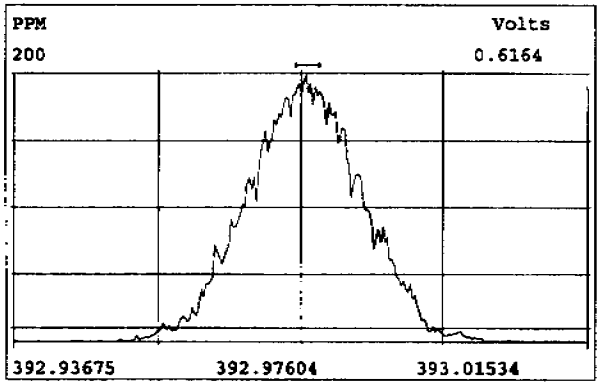


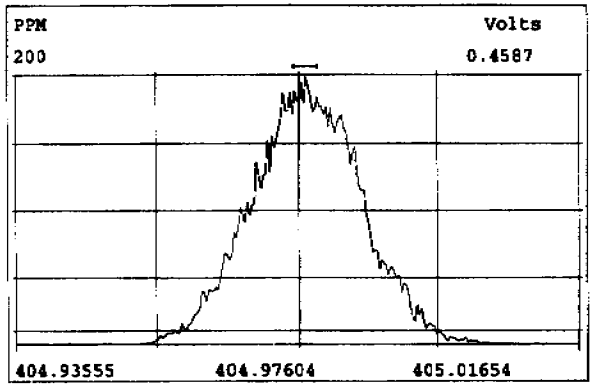


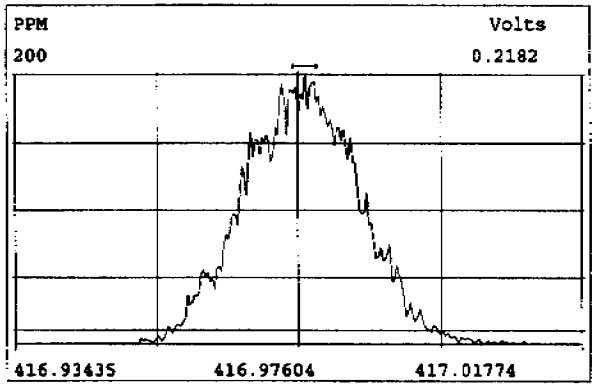






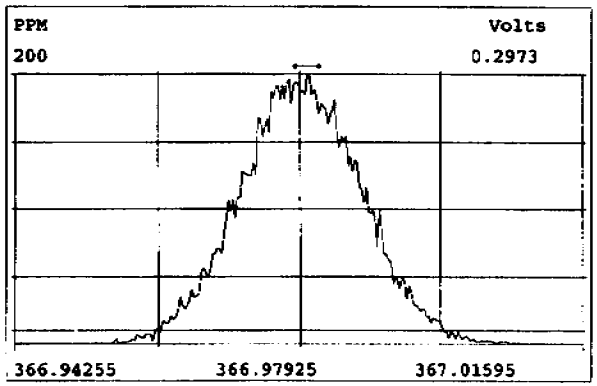


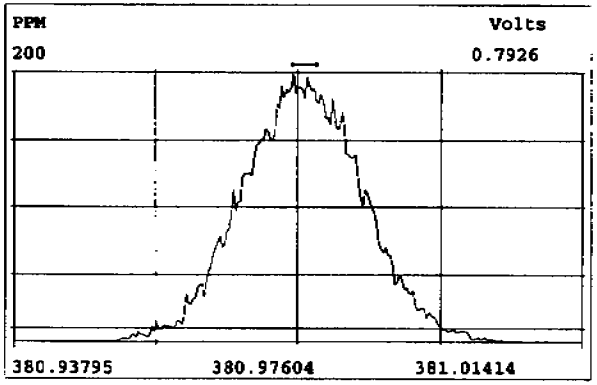


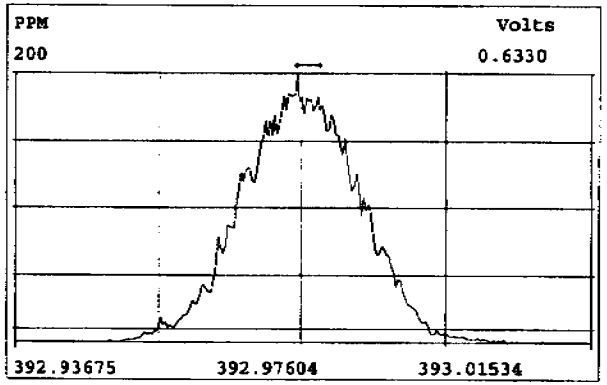


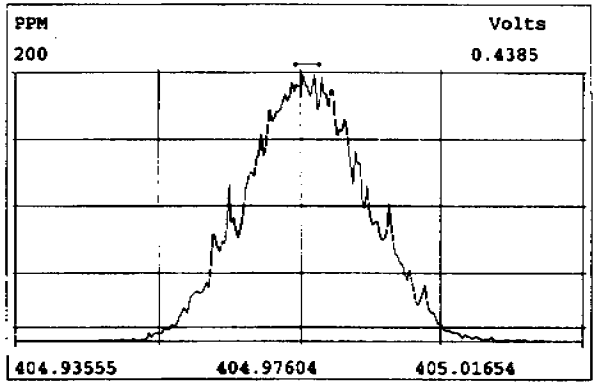
Peak Locate Examination:23-APR-2005:19:42 File:RBS_CHECK

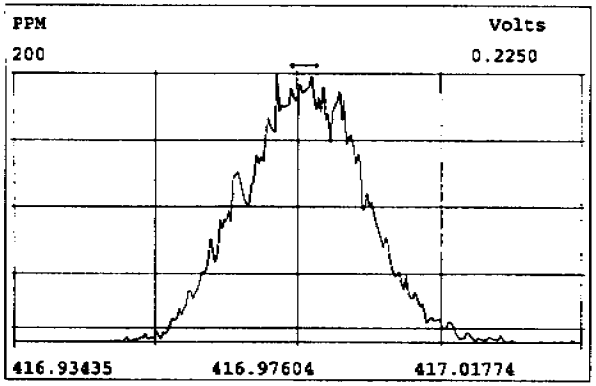
Experiment:OCDD_DB5 Function:3 Reference:PFK

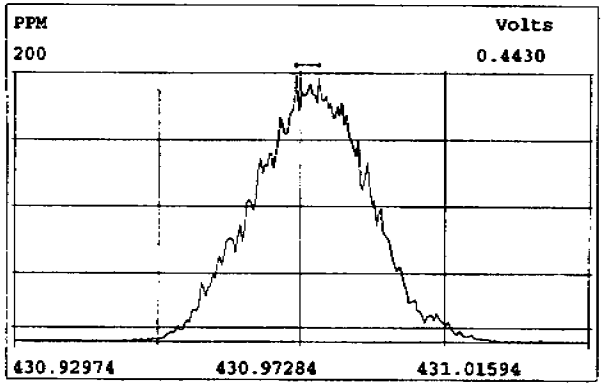


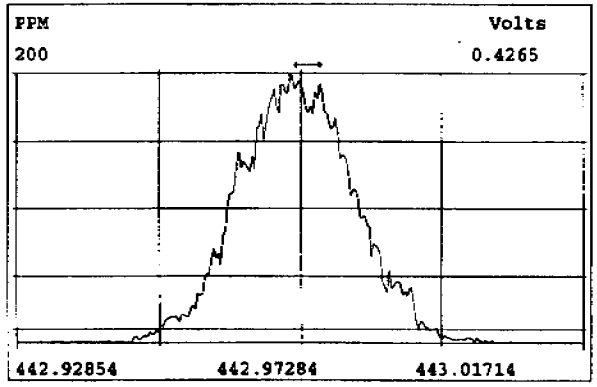


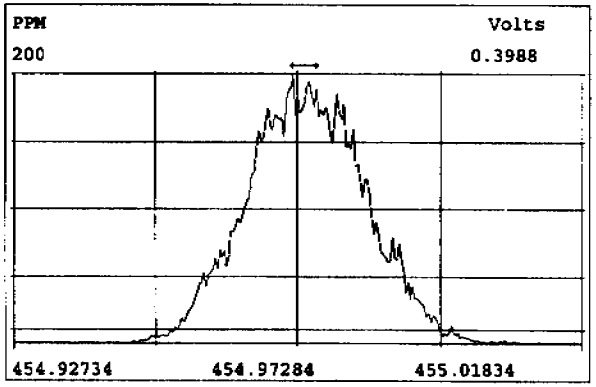






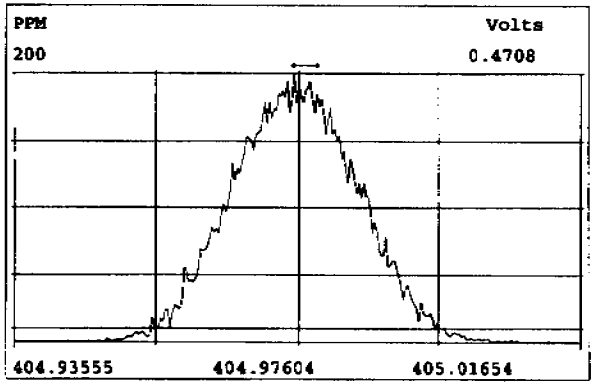


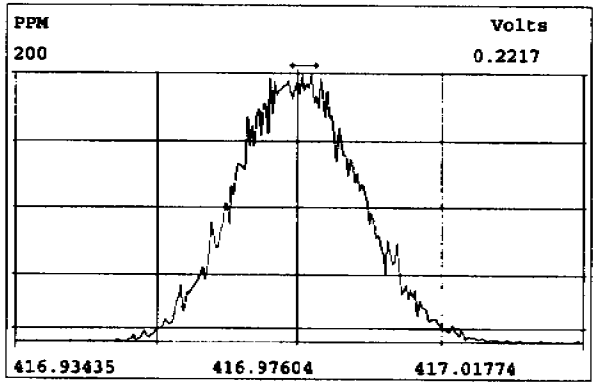


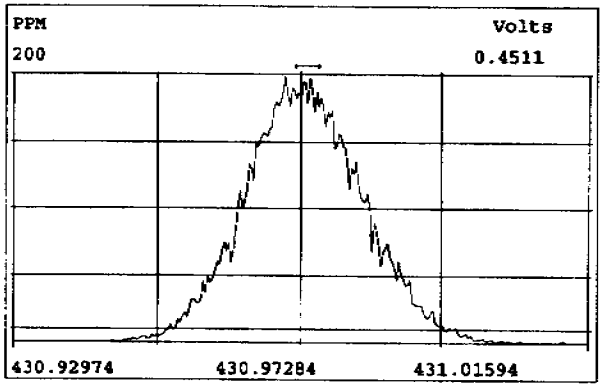


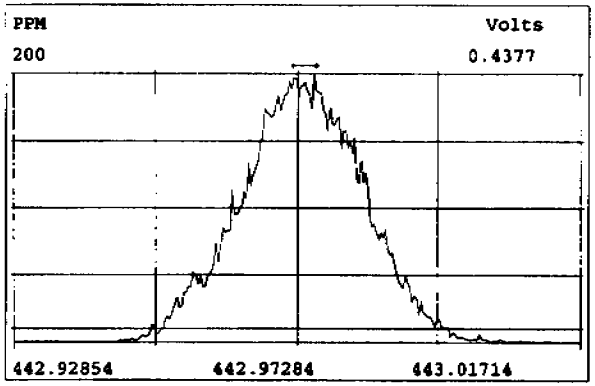
Peak Locate Examination:23-APR-2005:19:43 File:RES_CHECK

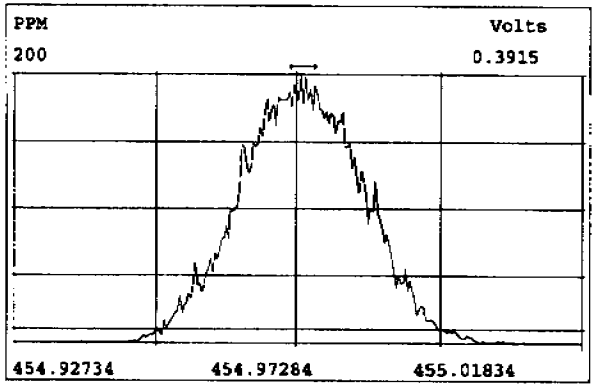
Experiment:OCDD_DB5 Function:4 Reference:PFK

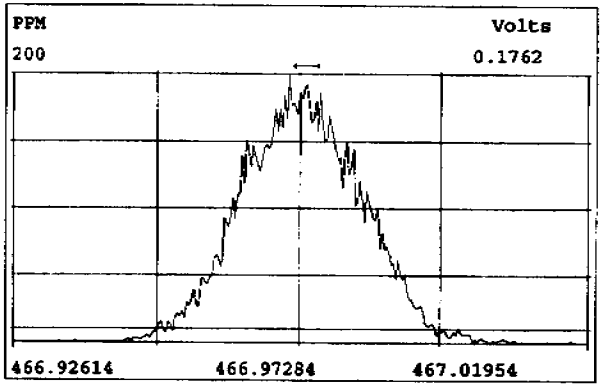


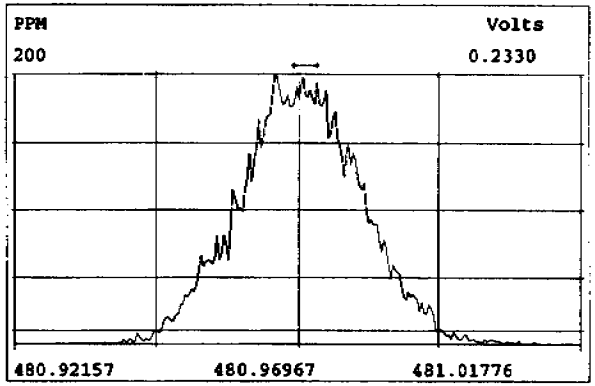






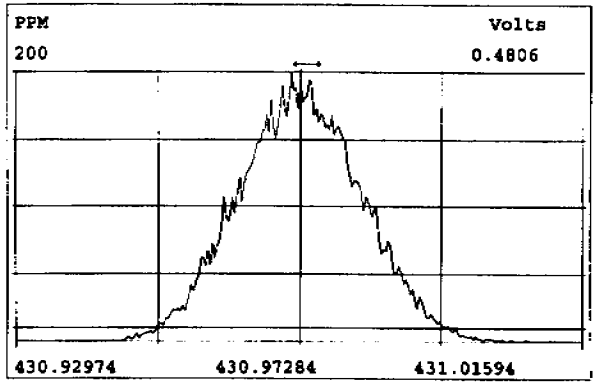


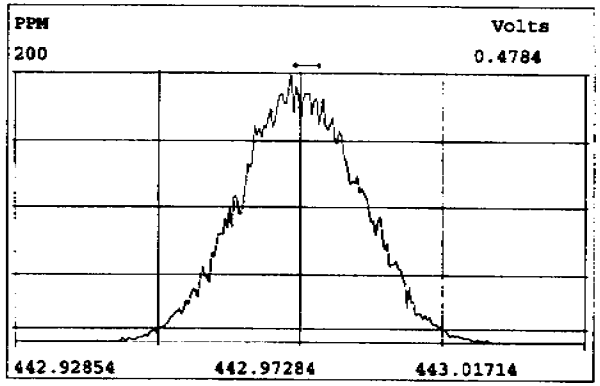


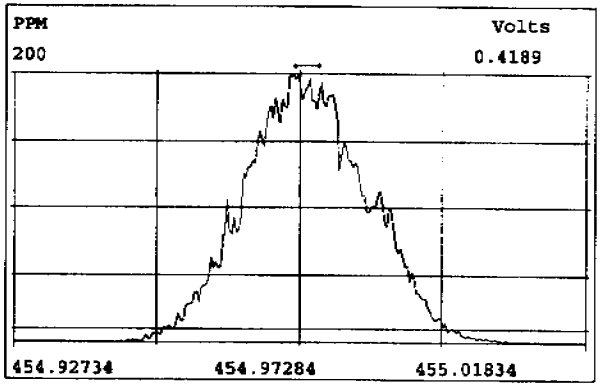


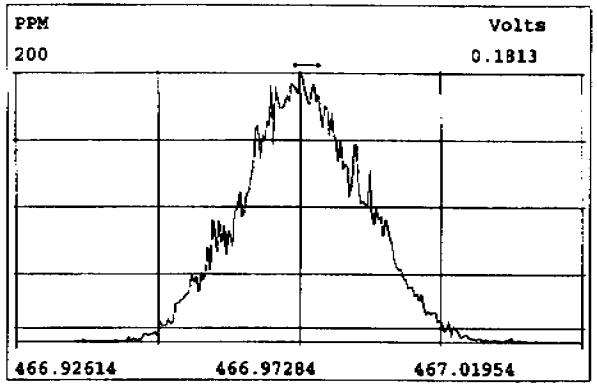
Peak Locate Examination:23-APR-2005:19:44 File:RES_CHECK

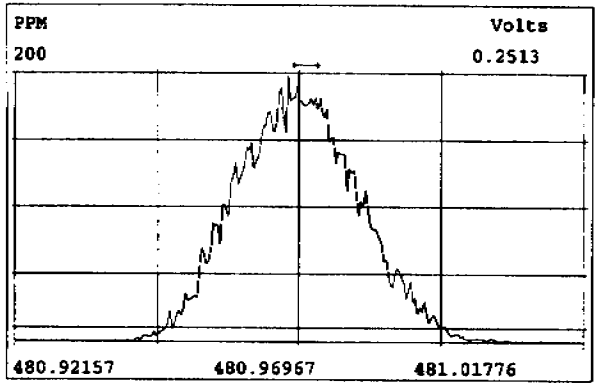
Experiment:OCDD_DB5 Function:5 Reference:PFK

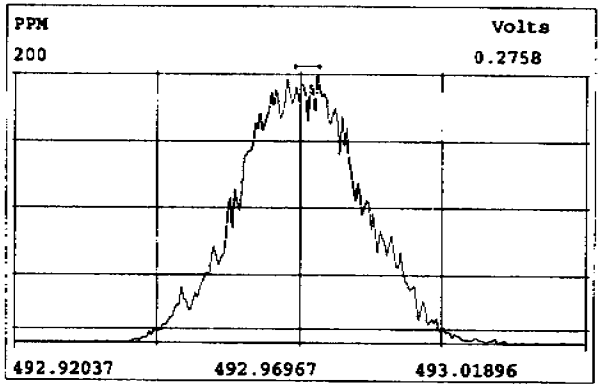


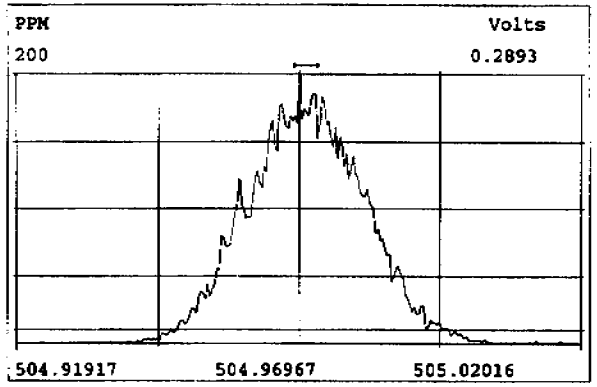


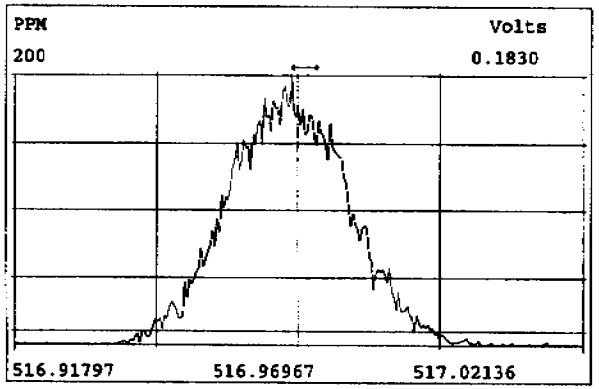












Client ID: 1613 SSS L010608B Filename: 050423D1 S:9 Acq:23-APR-05 17:53:07 ConCal: ST050423D1-1
Lab ID: ST050423D1-7 GC Column ID: DB-5 ICal: 1613vg7-4-23-05 wt/vol: 1.000 EndCAL: ST050423D1-8

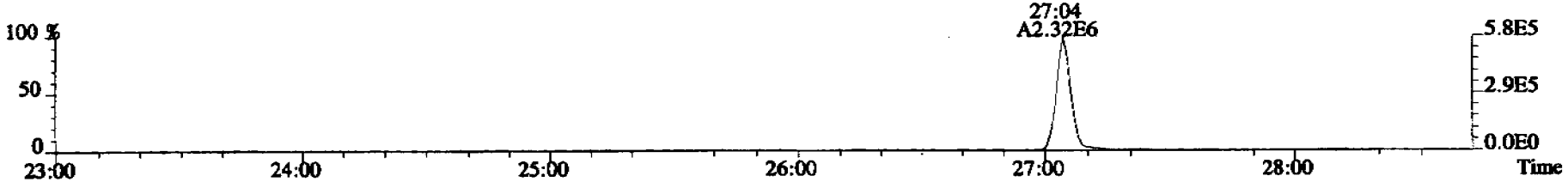
	Name	Resp	RA	RRF	RT	Conc	Qual	noise	Pac	DL	Rec	Qual
	2,3,7,8-TCDD	5.35e+06	0.77 y	1.06	27:04	9.34		*	2.5	*		
	1,2,3,7,8-PeCDD	2.12e+07	0.61 y	0.99	31:44	50.7		*	2.5	*		
	1,2,3,4,7,8-HxCDD	1.65e+07	1.24 y	1.11	35:05	45.4		*	2.5	*		
	1,2,3,6,7,8-HxCDD	2.00e+07	1.25 y	1.07	35:11	42.4		*	2.5	*		
	1,2,3,7,8,9-HxCDD	2.01e+07	1.24 y	1.15	35:29	45.3		*	2.5	*		
	1,2,3,4,6,7,8-HpCDD	1.76e+07	1.03 y	1.05	39:00	51.2		*	2.5	*		
	OCDD	3.00e+07	0.88 y	1.04	42:18	103		*	2.5	*		
	2,3,7,8-TCDF	8.04e+06	0.78 y	1.05	26:15	9.59		*	2.5	*		
	1,2,3,7,8-PeCDF	3.27e+07	1.58 y	0.95	30:32	50.7		*	2.5	*		
	2,3,4,7,8-PeCDF	3.41e+07	1.52 y	1.08	31:27	47.2		*	2.5	*		
	1,2,3,4,7,8-HxCDF	2.79e+07	1.27 y	1.19	34:11	50.2		*	2.5	*		
	1,2,3,6,7,8-HxCDF	3.44e+07	1.24 y	1.22	34:18	48.1		*	2.5	*		
	2,3,4,6,7,8-HxCDF	2.92e+07	1.24 y	1.20	34:55	50.3		*	2.5	*		
	1,2,3,7,8,9-HxCDF	2.52e+07	1.22 y	1.13	35:53	50.7		*	2.5	*		
	1,2,3,4,6,7,8-HpCDF	2.68e+07	1.05 y	1.38	37:43	48.5		*	2.5	*		
	1,2,3,4,7,8,9-HpCDF	2.22e+07	1.05 y	1.23	39:33	50.7		*	2.5	*		
	OCDF	3.67e+07	0.92 y	1.02	42:32	* 112		*	2.5	*		
IS	13C-2,3,7,8-TCDD	5.41e+07	0.80 y	1.12	27:03	98.4					98.4	
IS	13C-1,2,3,7,8-PeCDD	4.22e+07	0.64 y	0.89	31:43	97.3					97.3	
IS	13C-1,2,3,4,7,8-HxCDD	3.27e+07	1.34 y	0.83	35:04	93.0					93.0	
IS	13C-1,2,3,6,7,8-HxCDD	4.41e+07	1.21 y	1.00	35:10	105					105	
IS	13C-1,2,3,4,6,7,8-HpCDD	3.27e+07	1.06 y	0.82	38:59	93.9					93.9	
IS	13C-OCDD	5.64e+07	0.89 y	0.74	42:17	180					89.8	
IS	13C-2,3,7,8-TCDF	7.95e+07	0.77 y	1.02	26:14	*					* 116%	
IS	13C-1,2,3,7,8-PeCDF	6.77e+07	1.58 y	0.90	30:31	*					* 115%	
IS	13C-2,3,4,7,8-PeCDF	6.71e+07	1.59 y	0.87	31:26	*					* 119%	
IS	13C-1,2,3,4,7,8-HxCDF	4.68e+07	0.53 y	1.27	34:09	87.5					87.5	
IS	13C-1,2,3,6,7,8-HxCDF	5.88e+07	0.53 y	1.40	34:17	99.2					99.2	
IS	13C-2,3,4,6,7,8-HxCDF	4.83e+07	0.53 y	1.29	34:54	88.5					88.5	
IS	13C-1,2,3,7,8,9-HxCDF	4.41e+07	0.54 y	1.12	35:52	93.2					93.2	
IS	13C-1,2,3,4,6,7,8-HpCDF	4.02e+07	0.45 y	1.01	37:42	94.2					94.2	
IS	13C-1,2,3,4,7,8,9-HpCDF	3.58e+07	0.45 y	0.88	39:33	96.4					96.4	
IS	13C-OCDF	*	* n	0.94	NotFnd	*					*	
C/Up	37Cl-2,3,7,8-TCDD	5.78e+06		0.62	27:04	19.0					47.6	
RS/RT	13C-1,2,3,4-TCDD	4.89e+07	0.79 y	1.00	26:26	100						
RS	13C-1,2,3,4-TCDF	*	* n	1.00	NotFnd	*						
RS/RT	13C-1,2,3,7,8,9-HxCDD	4.22e+07	1.25 y	1.00	35:29	100						

Name	Conc	EMPC	Qual	noise	DL
Total Tetra-Dioxins	9.56	10.2		*	*
Total Penta-Dioxins	51.2	51.4		*	*
Total Hexa-Dioxins	134	135		*	*
Total Hepta-Dioxins	51.6	53.3		*	*
Total Tetra-Furans	9.81	10.5		*	*
Total Penta-Furans	99.1	100		*	*
Total Hexa-Furans	201	201		*	*
Total Hepta-Furans	99.2	101		*	*

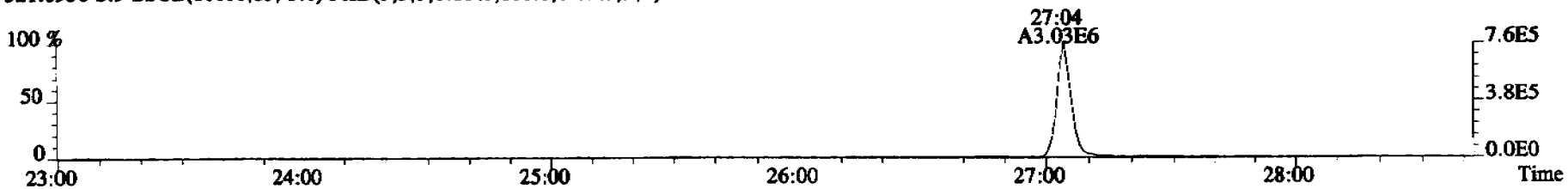
Intergrations by Analyst: _____

Date: 4/26/05

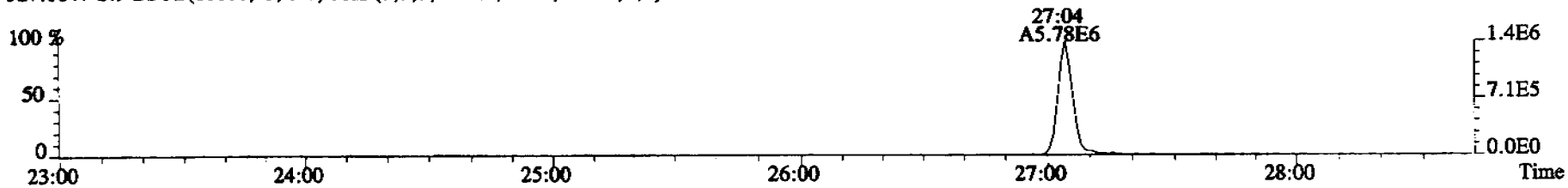
File:050423D1 #1-558 Acq:23-APR-2005 17:53:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-7 1613 SSS L010608B Exp:OCDD_DB5
319.8965 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



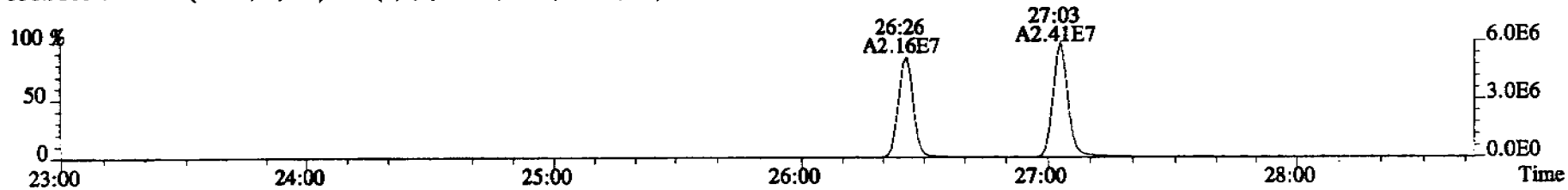
321.8936 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



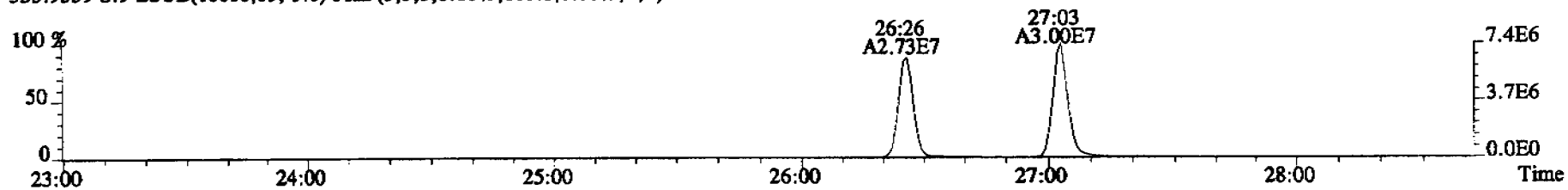
327.8847 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



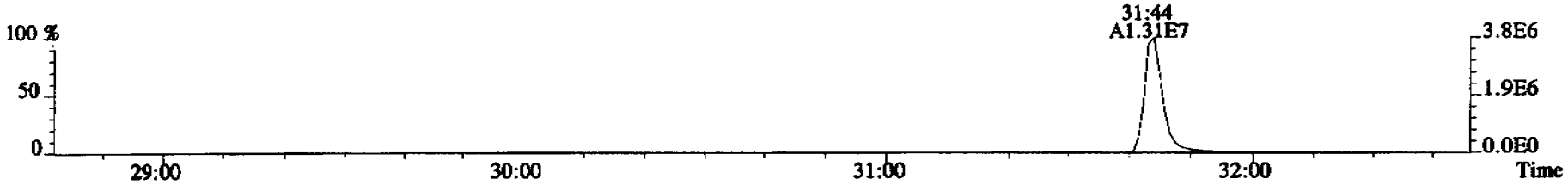
331.9368 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



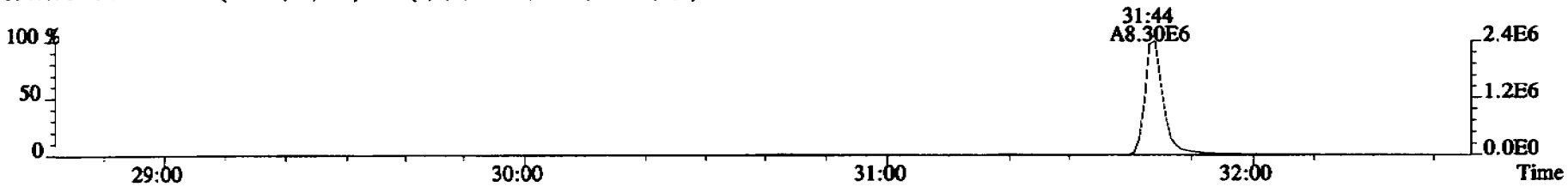
333.9339 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



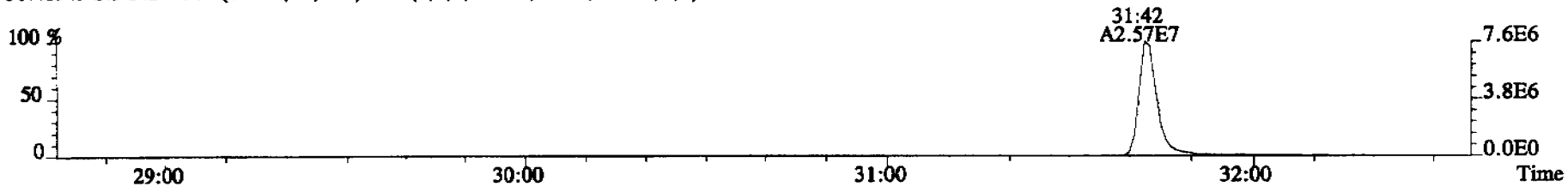
File:050423D1 #1-273 Acq:23-APR-2005 17:53:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-7 1613 SSS L010608B Exp:OCDD_DB5
355.8546 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



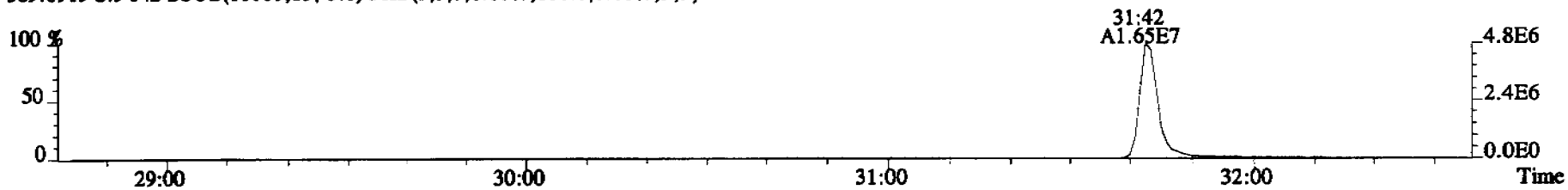
357.8517 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



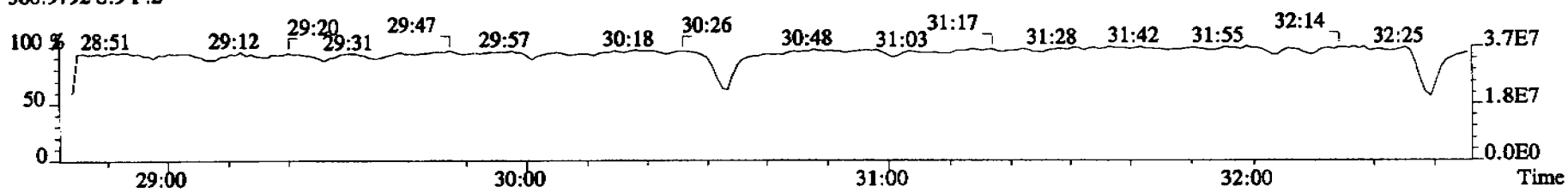
367.8949 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



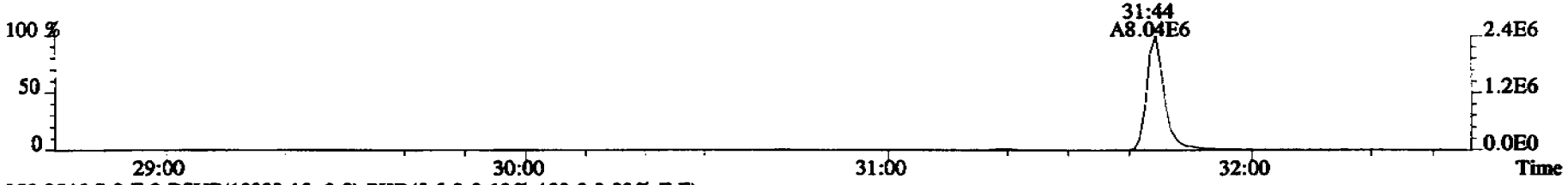
369.8919 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



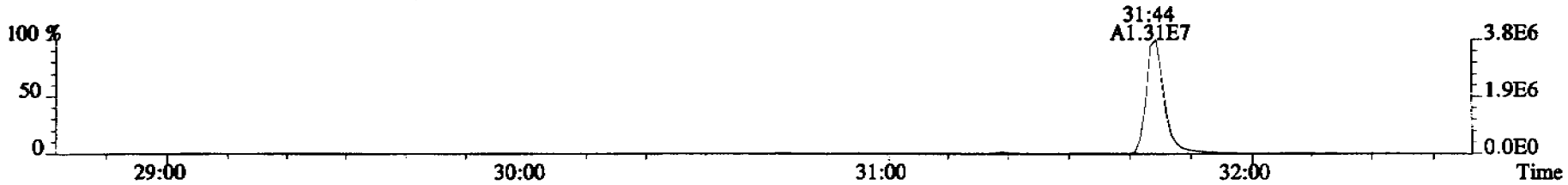
366.9792 S:9 F:2



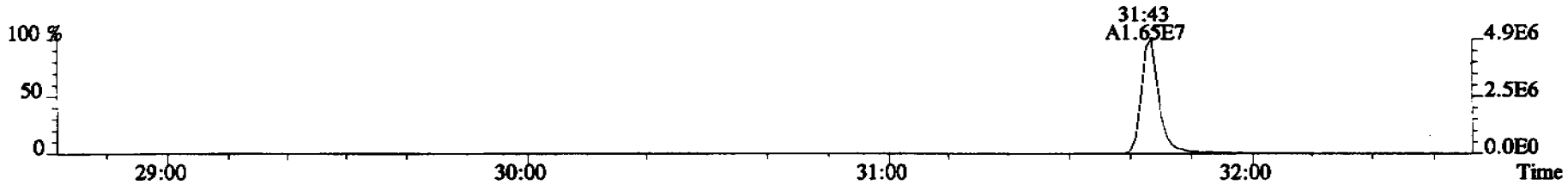
File:050423D1 #1-273 Acq:23-APR-2005 17:53:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-7 1613 SSS L010608B Exp:OCDD_DB5
353.8576 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



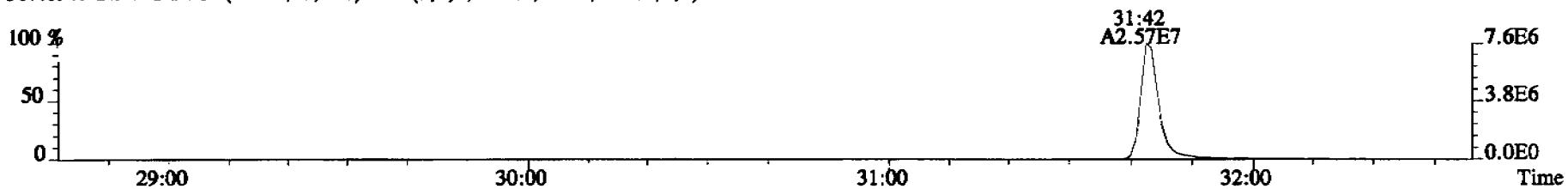
355.8546 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



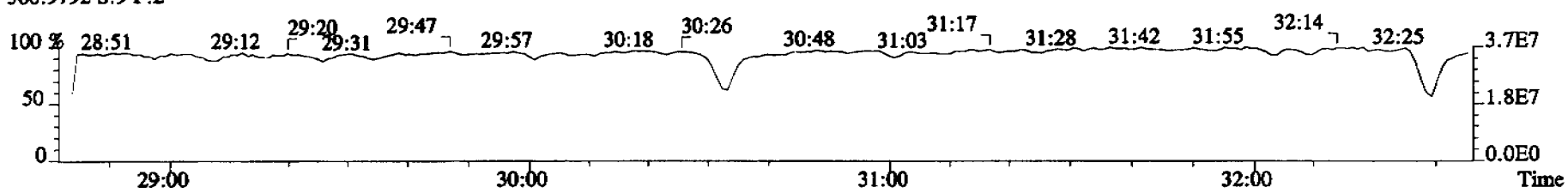
365.8978 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



367.8949 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

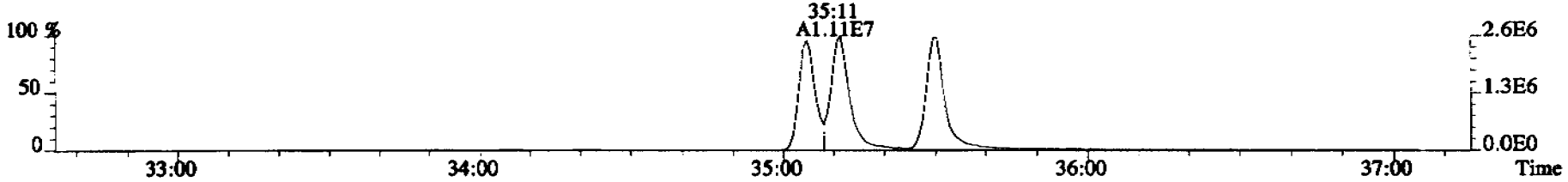


366.9792 S:9 F:2

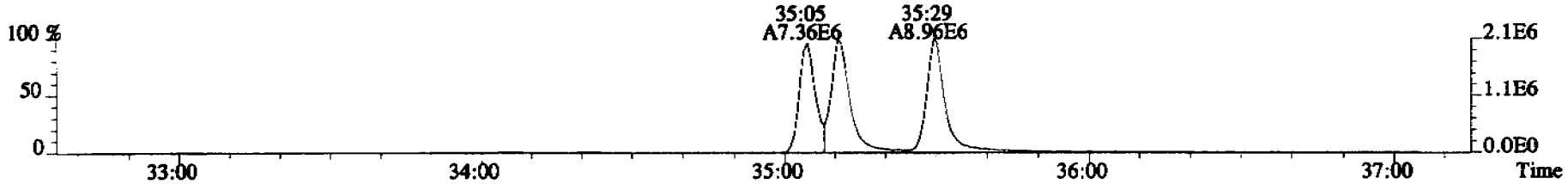


File:050423D1 #1-398 Acq:23-APR-2005 17:53:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-7 1613 SSS L010608B Exp:OCDD_DB5

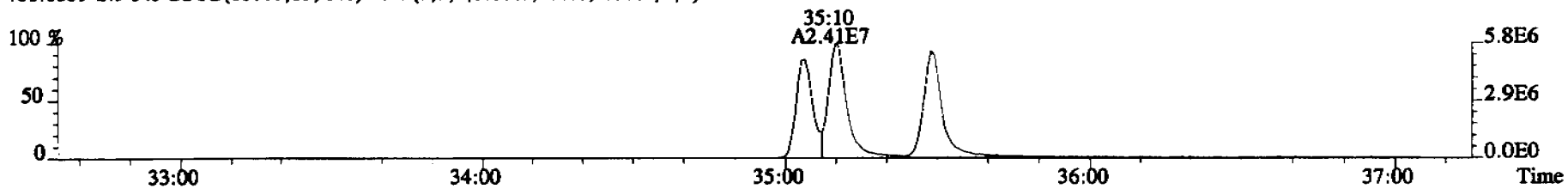
389.8156 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



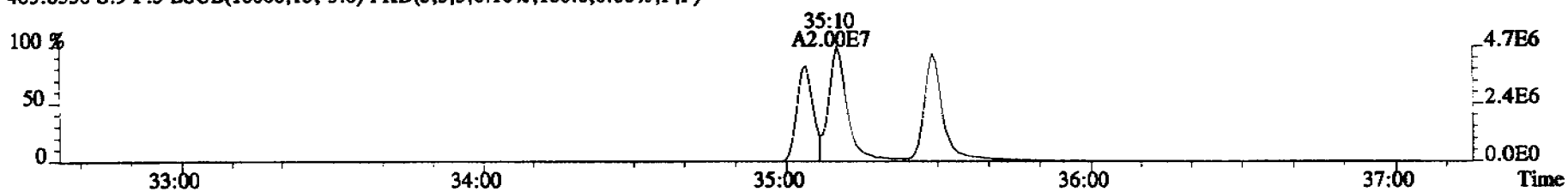
391.8127 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



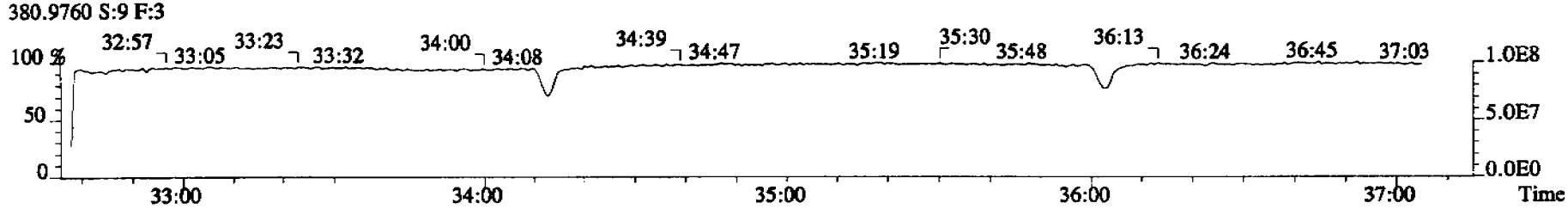
401.8559 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



403.8530 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

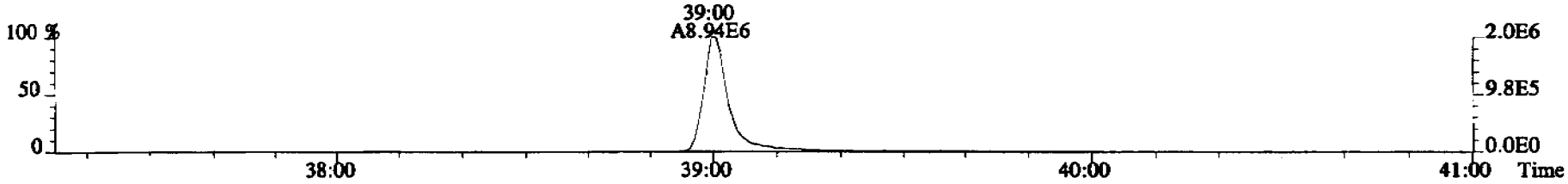


380.9760 S:9 F:3

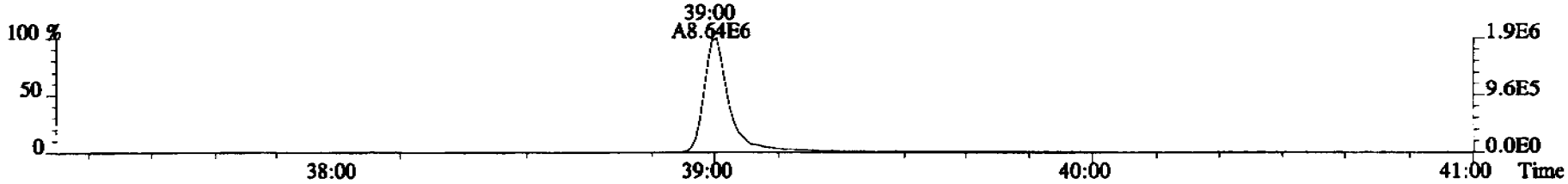


File:050423D1 #1-348 Acq:23-APR-2005 17:53:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-7 1613 SSS L010608B Exp:OCDD_DB5

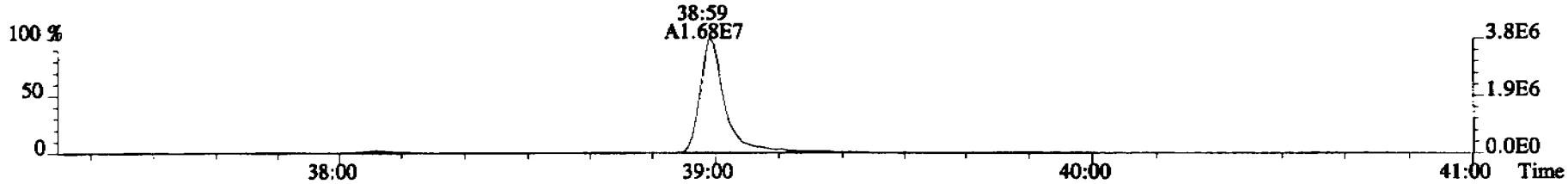
423.7767 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



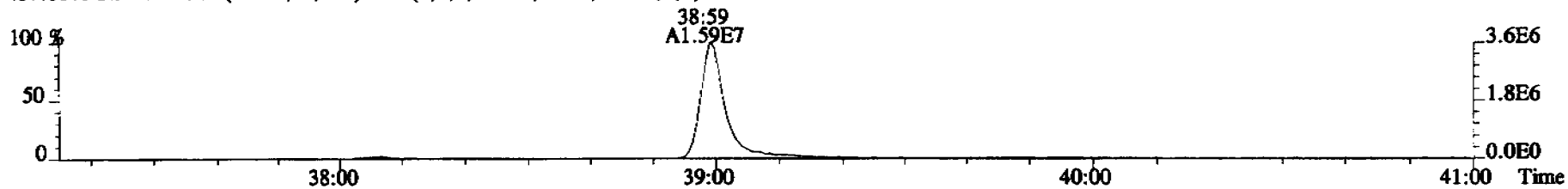
425.7737 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



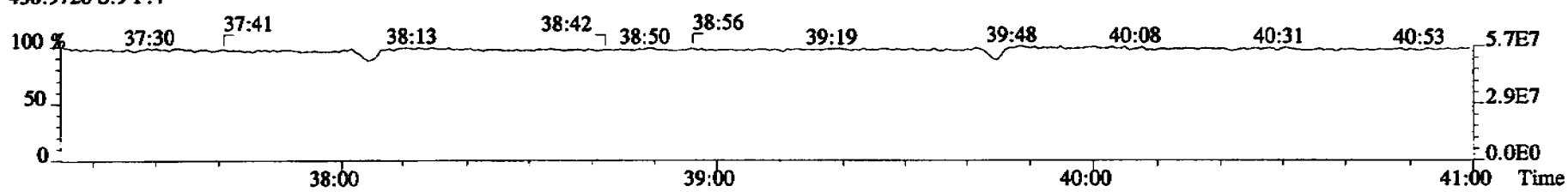
435.8169 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



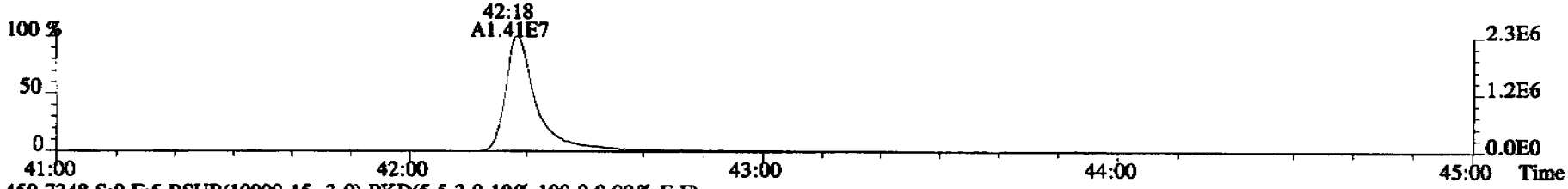
437.8140 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



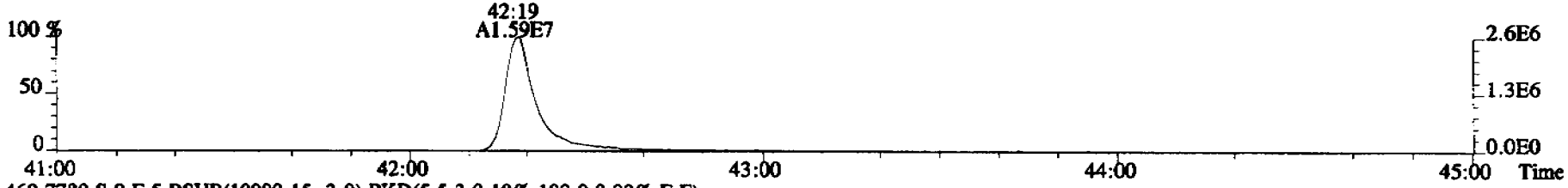
430.9728 S:9 F:4



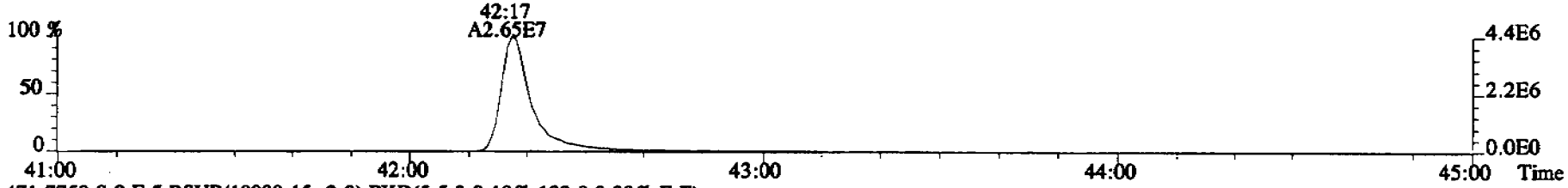
File:050423D1 #1-345 Acq:23-APR-2005 17:53:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-7 1613 SSS L010608B Exp:OCDD_DB5
457.7377 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



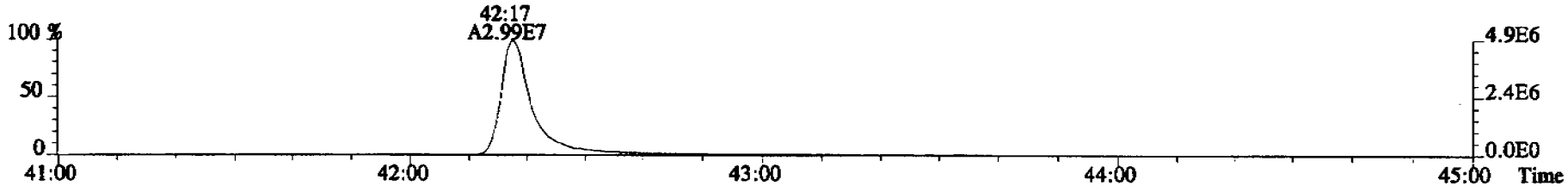
459.7348 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



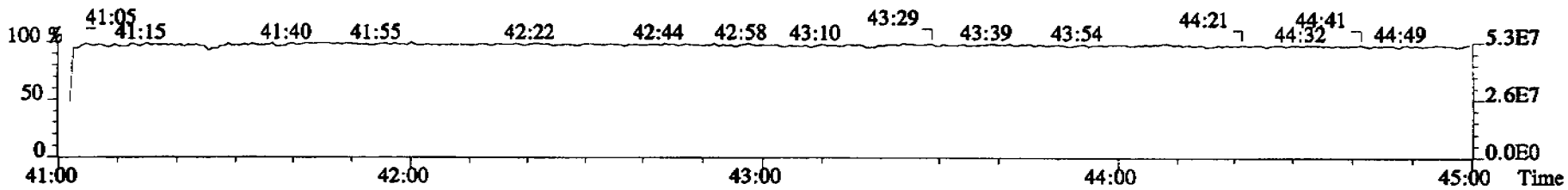
469.7780 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



471.7750 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

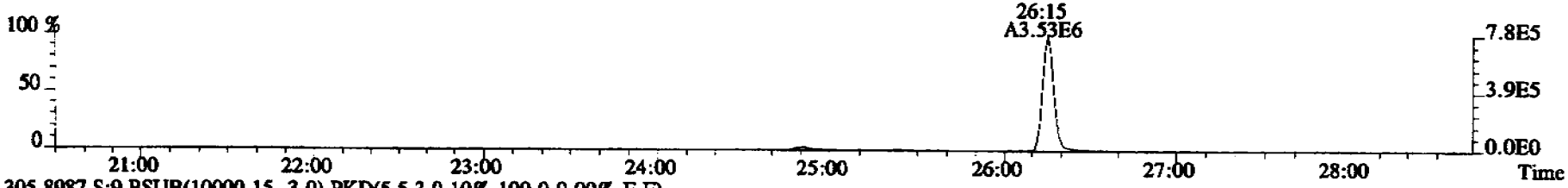


454.9728 S:9 F:5

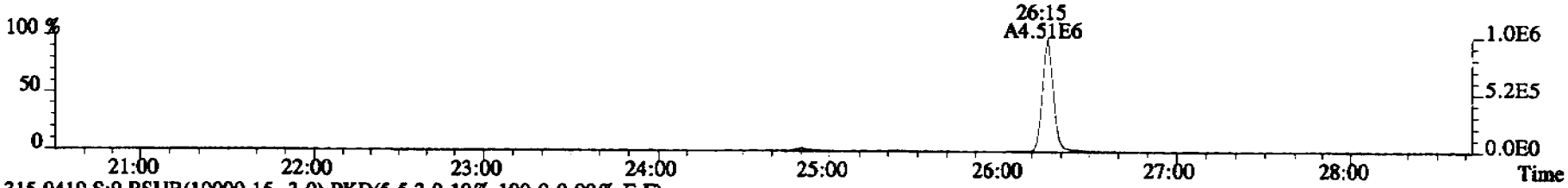


File:050423D1 #1-558 Acq:23-APR-2005 17:53:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-7 1613 SSS L010608B Exp:OCDD_DB5

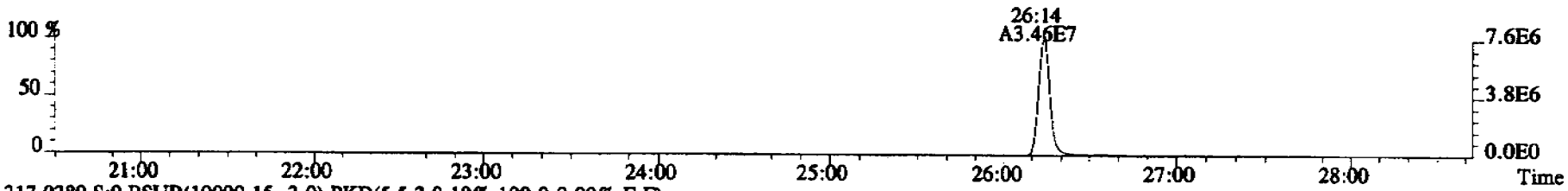
303.9016 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



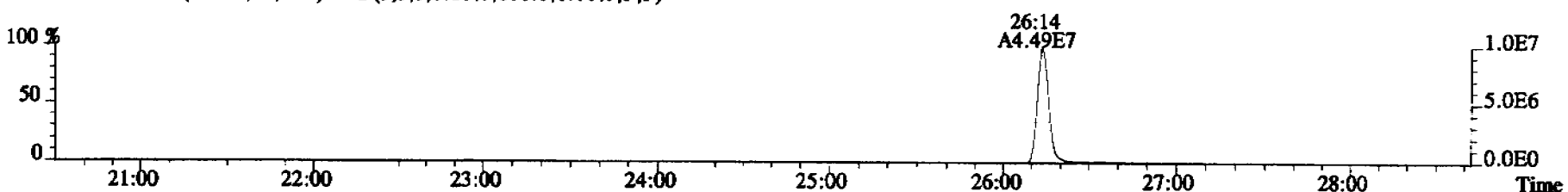
305.8987 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



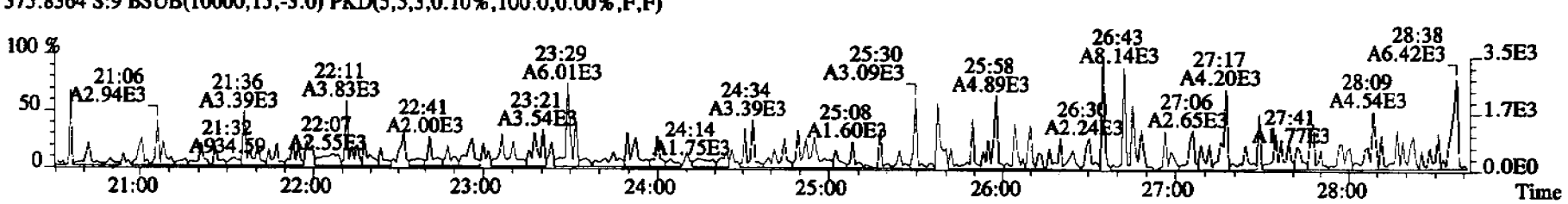
315.9419 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



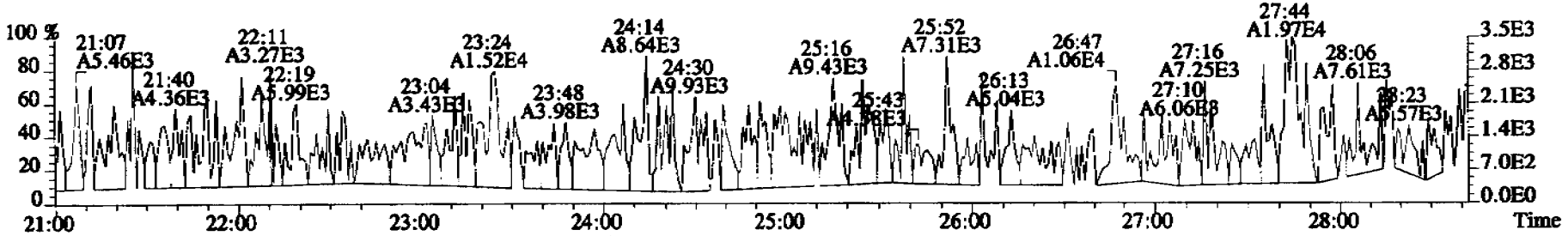
317.9389 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



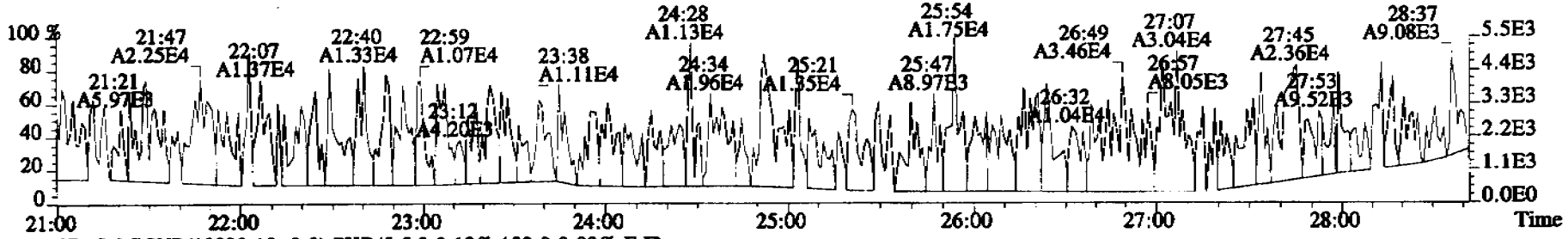
375.8364 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



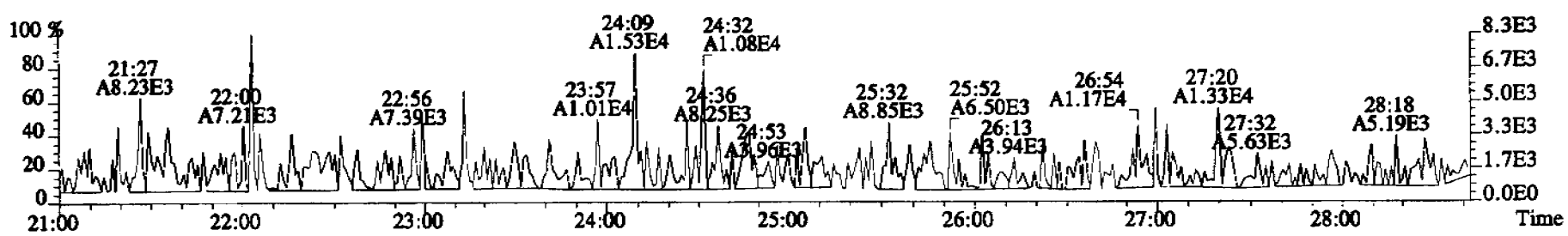
File:050423D1 #1-558 Acq:23-APR-2005 17:53:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-7 1613 SSS L010608B Exp:OCDD_DB5
339.8597 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



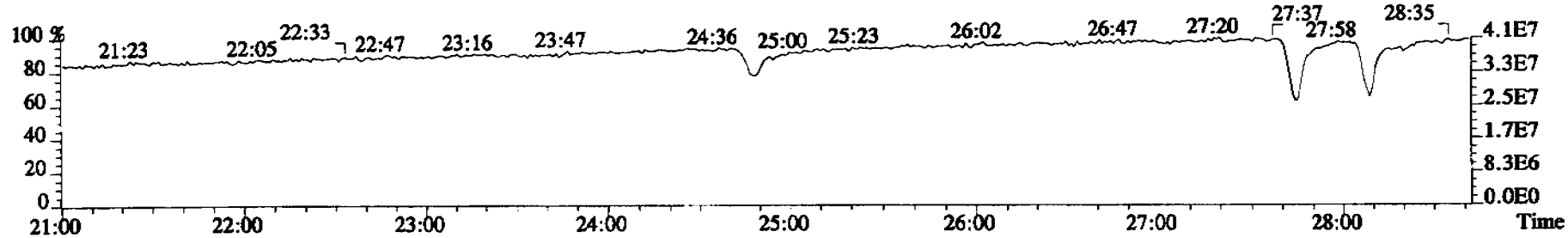
341.8568 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



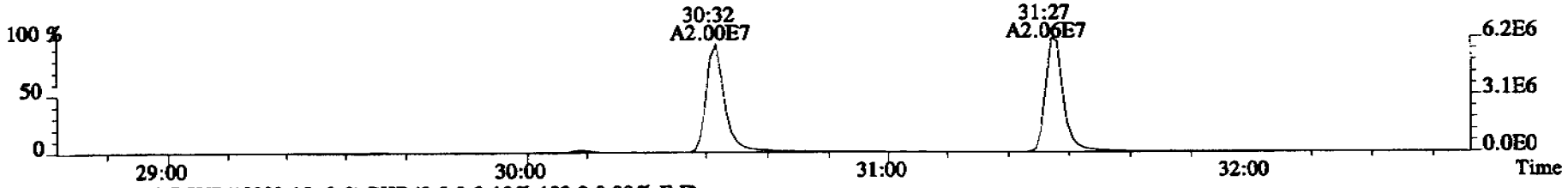
409.7974 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



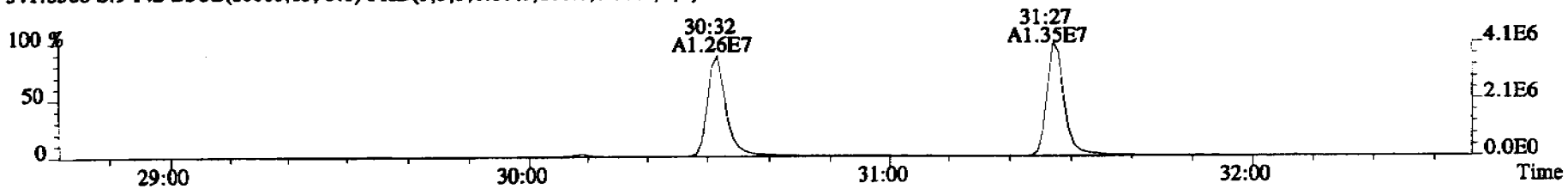
316.9824 S:9



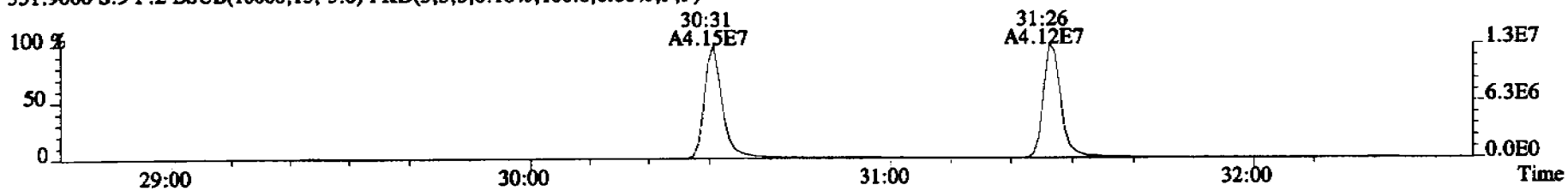
File:050423D1 #1-273 Acq:23-APR-2005 17:53:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-7 1613 SSS L010608B Exp:OCDD_DB5
339.8597 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



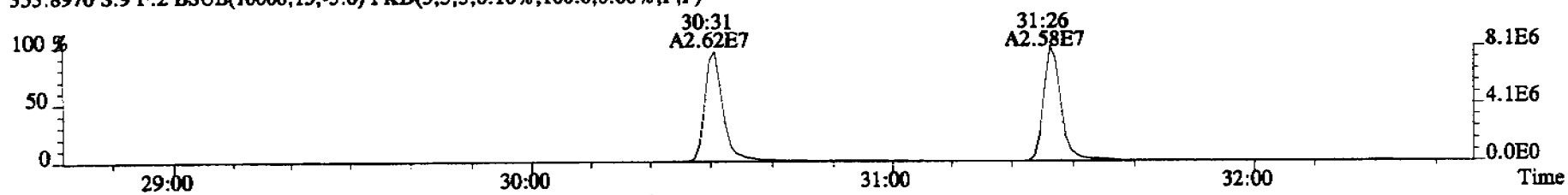
341.8568 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



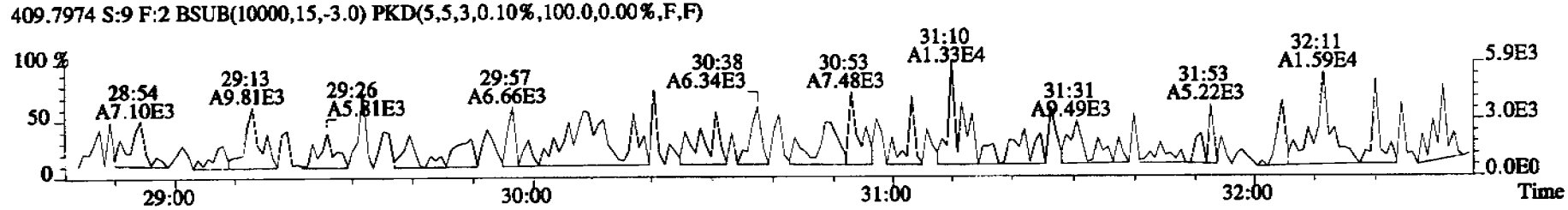
351.9000 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



353.8970 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

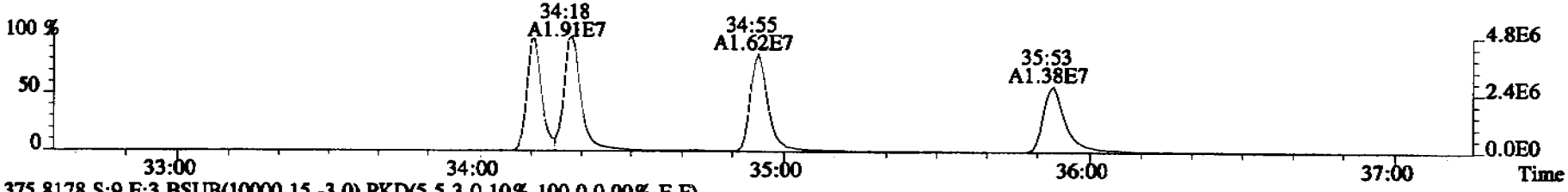


409.7974 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

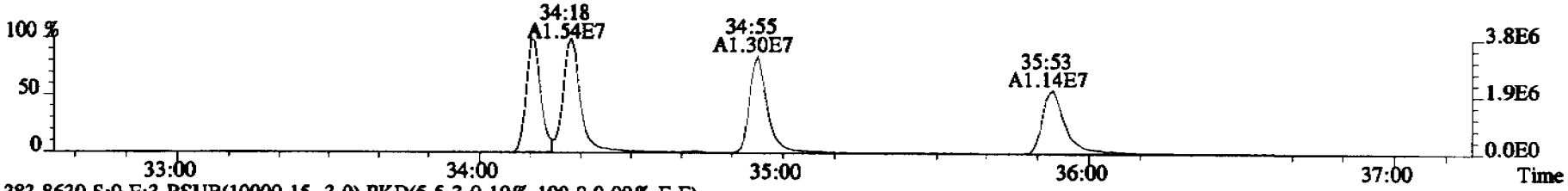


File:050423D1 #1-398 Acq:23-APR-2005 17:53:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-7 1613 SSS L010608B Exp:OCDD_DB5

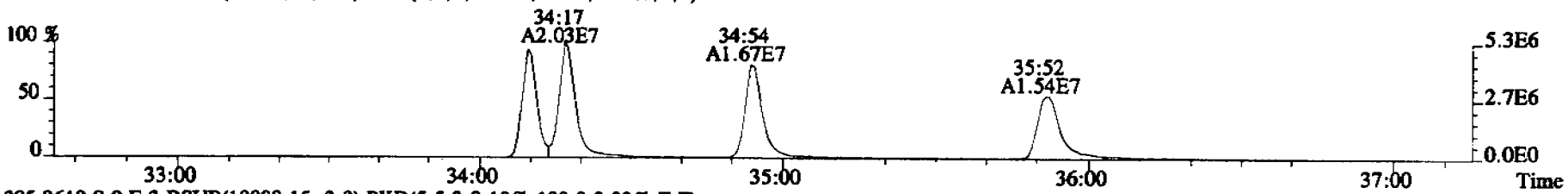
373.8207 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



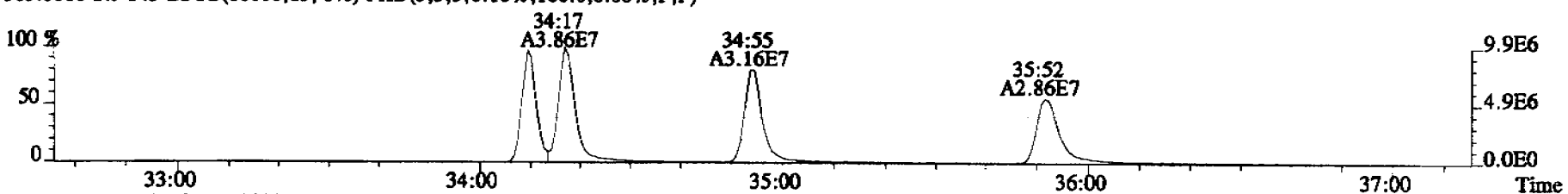
375.8178 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



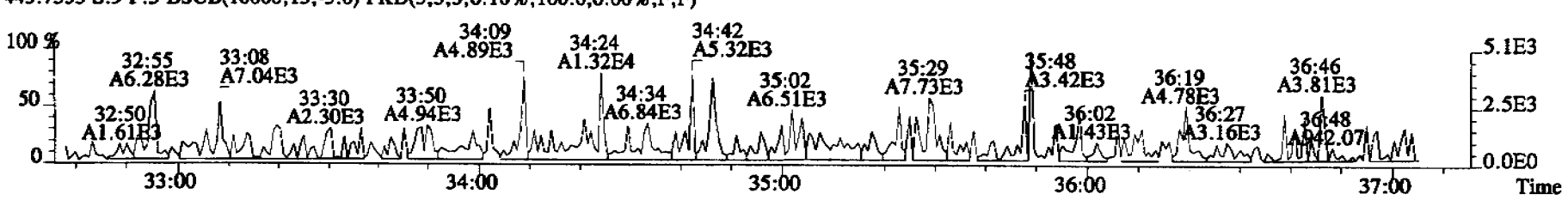
383.8639 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

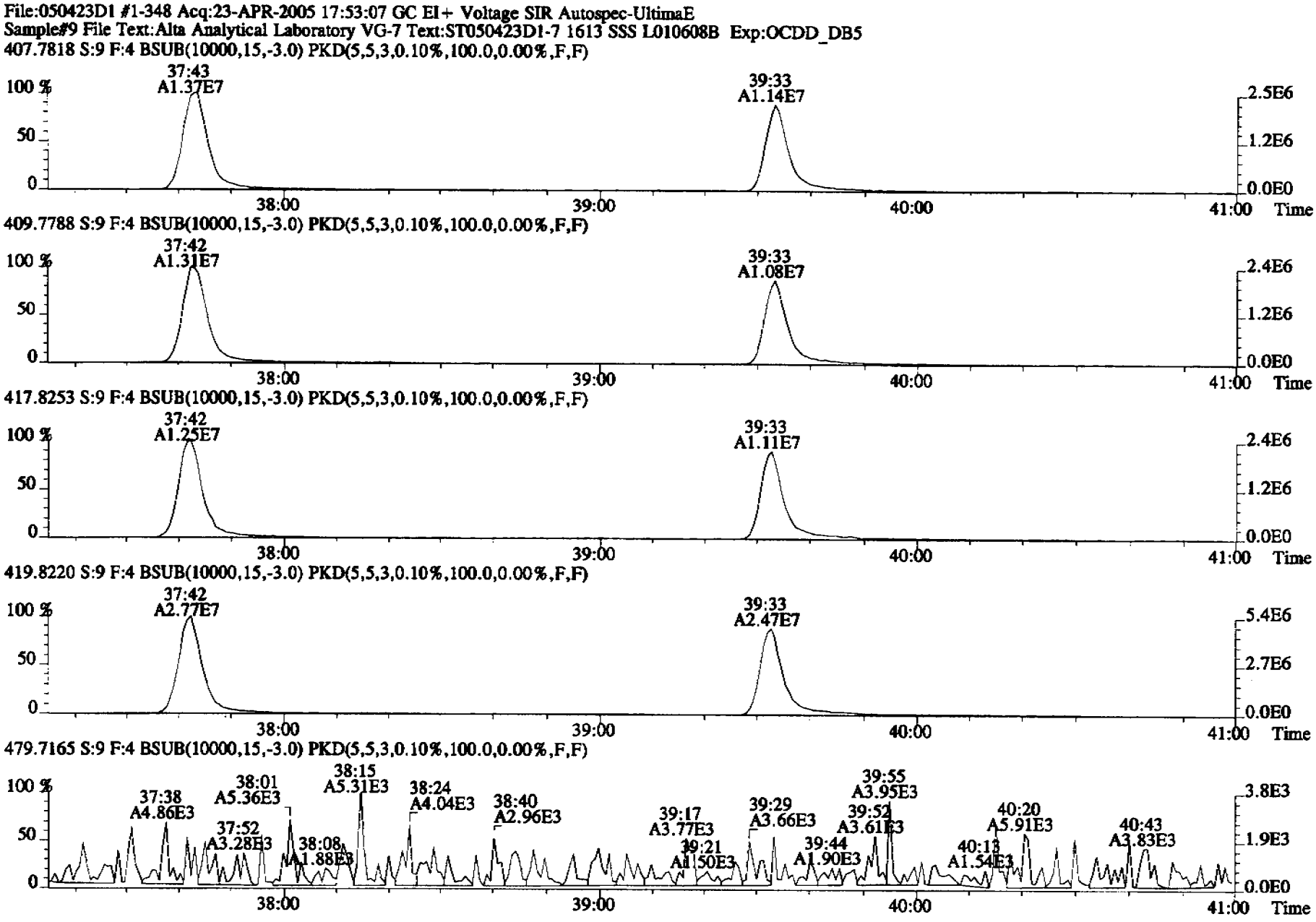


385.8610 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



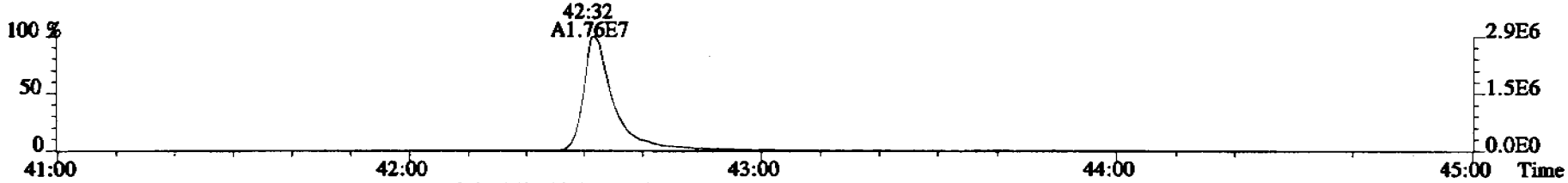
445.7555 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



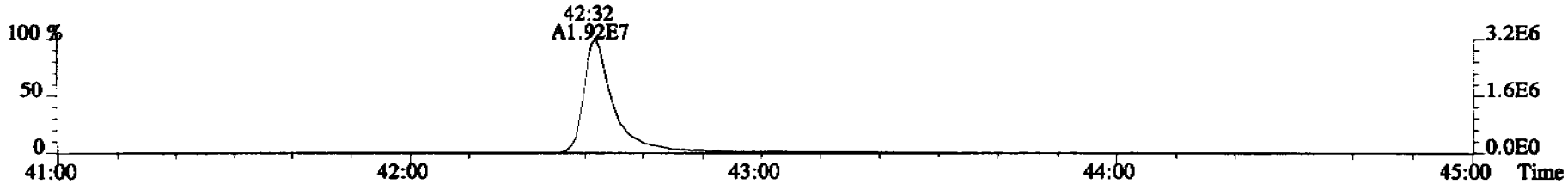

File:050423D1 #1-348 Acq:23-APR-2005 17:53:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-7 1613 SSS L010608B Exp:OCDD_DB5
407.7818 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
37:43 A1.37E7
39:33 A1.14E7
409.7788 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
37:42 A1.31E7
39:33 A1.08E7
417.8253 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
37:42 A1.25E7
39:33 A1.11E7
419.8220 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
37:42 A2.77E7
39:33 A2.47E7
479.7165 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
37:38 A4.86E3
38:01 A5.36E3
37:52 A3.28E3
38:08 A1.88E3
38:15 A5.31E3
38:24 A4.04E3
38:40 A2.96E3
39:17 A3.77E3
39:21 A1.50E3
39:29 A3.66E3
39:44 A1.90E3
39:55 A3.95E3
39:52 A3.61E3
40:13 A1.54E3
40:20 A5.91E3
40:43 A3.83E3
100 %
50
0
38:00
39:00
40:00
41:00
Time
2.5E6
1.2E6
0.0E0
2.4E6
5.4E6
2.7E6
3.8E3
1.9E3

File:050423D1 #1-345 Acq:23-APR-2005 17:53:07 GC EI+ Voltage SIR Autospec-UltimaE
Sample#9 File Text:Alta Analytical Laboratory VG-7 Text:ST050423D1-7 1613 SSS L010608B Exp:OCDD_DB5

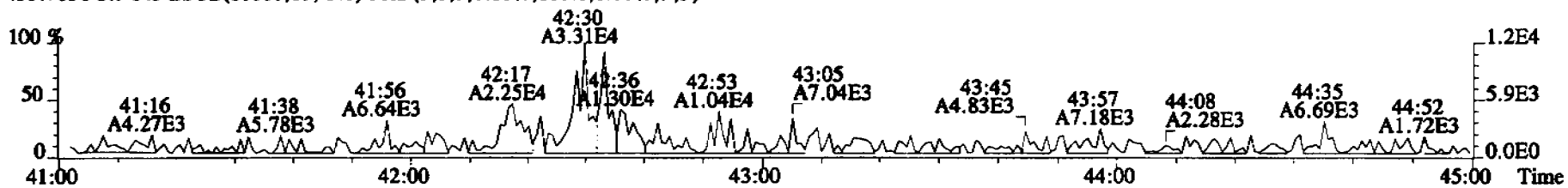
441.7428 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



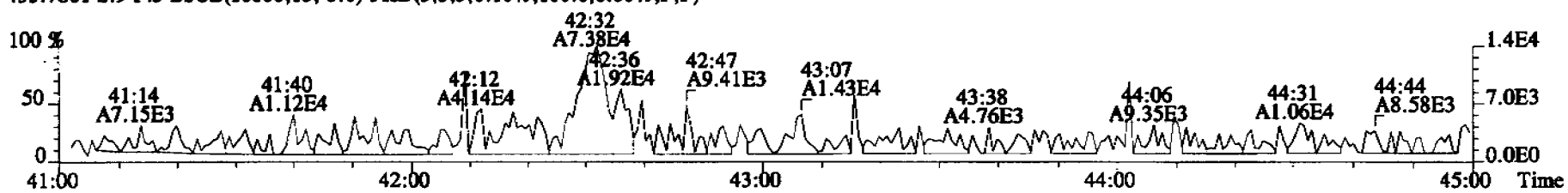
443.7398 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



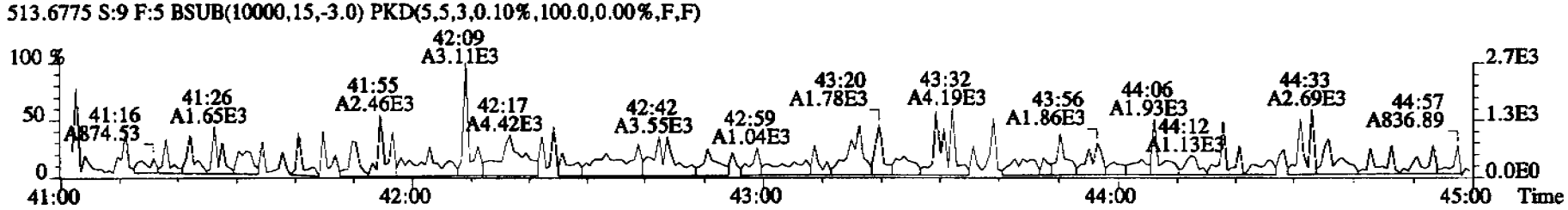
453.7831 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



455.7801 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



513.6775 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



Initial Calibration RRF Summary Alta Analytical Laboratory
Run: Analyte: tcdf Cal: 1613tcdfvg6-4-29-05 Inst. ID: VG-6

Filename: 050429A1

Name	Mean RRF	%RSD	S2 RRF#1	S5 RRF#2	S6 RRF#3	S7 RRF#4	S8 RRF#5
13C-1,2,3,4-TCDF	1.00	0.00 %	1.00	1.00	1.00	1.00	1.00
13C-2,3,7,8-TCDF	1.04	1.48 %	1.06	1.03	1.02	1.04	1.05
2,3,7,8-TCDF	1.07	3.75 %	1.08	1.11	1.07	1.09	1.00

DMS 4/30/05

OK W/R 5/11/05

Filename: 050429A1 S: 2 Acquired: 29-APR-05 11:36:00
Run: Analyte: tcdf Cal: 1613tcdfvg6-4-29-05 Results:
Sample text: ST050429A1-1 1613 CS3 050420H

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	RS	13C-1,2,3,4-TCDF	100.00	3.15e+07	0.78 y	20:20	-	1.00
2	IS	13C-2,3,7,8-TCDF	100.00	3.33e+07	0.80 y	23:36	-	1.06
3	Unk	2,3,7,8-TCDF	10.00	3.61e+06	0.76 y	23:36	-	1.08

Filename: 050429A1 S: 5 Acquired: 29-APR-05 13:38:50
Run: Analyte: tcdf Cal: 1613tcdfvg6-4-29-05 Results:
Sample text: ST050429A1-3 1613 CS1 050420F

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	RS	13C-1,2,3,4-TCDF	100.00	4.55e+07	0.79 y	20:12	-	1.00
2	IS	13C-2,3,7,8-TCDF	100.00	4.67e+07	0.79 y	23:32	-	1.03
3	Unk	2,3,7,8-TCDF	0.50	2.58e+05	0.70 y	23:33	-	1.11

Filename: 050429A1 S: 6 Acquired: 29-APR-05 14:19:46
Run: Analyte: tcdf Cal: 1613tcdfvg6-4-29-05 Results:
Sample text: ST050429A1-4 1613 CS2 050420G

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	RS	13C-1,2,3,4-TCDF	100.00	4.45e+07	0.78 y	20:11	-	1.00
2	IS	13C-2,3,7,8-TCDF	100.00	4.55e+07	0.80 y	23:32	-	1.02
3	Unk	2,3,7,8-TCDF	2.00	9.76e+05	0.81 y	23:33	-	1.07

Filename: 050429A1 S: 7 Acquired: 29-APR-05 15:00:41
Run: Analyte: tcdf Cal: 1613tcdfvg6-4-29-05 Results:
Sample text: ST050429A1-5 1613 CS4 050420I

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	RS	13C-1,2,3,4-TCDF	100.00	4.53e+07	0.79 y	20:12	-	1.00
2	IS	13C-2,3,7,8-TCDF	100.00	4.72e+07	0.80 y	23:32	-	1.04
3	Unk	2,3,7,8-TCDF	40.00	2.05e+07	0.78 y	23:34	-	1.09

Filename: 050429A1 S: 8 Acquired: 29-APR-05 15:41:37
Run: Analyte: tcdf Cal: 1613tcdfvg6-4-29-05 Results:
Sample text: ST050429A1-6 1613 CS5 050420J

	Typ	Name	Amount	Resp	RA	RT	RF	RRF
1	RS	13C-1,2,3,4-TCDF	100.00	4.63e+07	0.77 y	20:11	-	1.00
2	IS	13C-2,3,7,8-TCDF	100.00	4.85e+07	0.78 y	23:32	-	1.05
3	Unk	2,3,7,8-TCDF	200.00	9.72e+07	0.78 y	23:33	-	1.00

FORM 4A/4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Alta Analytical Laboratory

CCAL ID: ST050429A1-1

Initial Calibration Date: 4-29-05

Instrument ID: VG-6 GC Column ID: DB-225

VER Data Filename: 050429A1 S#2 Analysis Date: 29-APR-05 Time: 11:36:00

ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CONC. FOUND	CONC. RANGE (3) (ng/mL)
2,3,7,8-TCDF	M/M+2	0.75	0.65-0.89	10.2	8.6 - 11.6 8.0 - 12.0 (8290)
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65-0.89	101.8	76.0 - 131.0 70.0 - 130 (8290)

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6a, Method 1613, under VER.

10/94

Analyst: DMS

Date: 4/30/05

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Alta Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: VG-6 Initial Calibration Date:

DB-225 IS Data Filename: 050429A1 S#1 Analysis Date: 29-APR-05 Time: 10:55:04

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

ISOMERS	% VALLEY HEIGHT BETWEEN COMPARED PEAKS (1)
2347-TCDF	
2378-TCDF	<25%
2378-TCDF	
1239-TCDF	<25%

(1) To meet contract requirements, %Valley Height Between Compared Peaks shall not exceed 25% (section 14.4.2.2, Method 1613.

Analyst: DMS

Date: 4/30/05

Client ID: 1613 CS3 050420H Filename: 050429A1 S:2 Acq:29-APR-05 11:36:00 ConCal: NA
Lab ID: ST050429A1-1 GC Column ID: DB-225 ICal: 1613tcdfvg6-4-29-05 wt/vol: 1.000 EndCAL: NA

Name	Resp	RA	RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	3.15e+07	0.78 y	20:20	1.00	100.0	-
13C-2,3,7,8-TCDF	3.33e+07	0.80 y	23:36	1.04	101.8	101.8
2,3,7,8-TCDF	3.64e+06	0.75 y	23:37	1.07	10.21	

Analyst: DMS

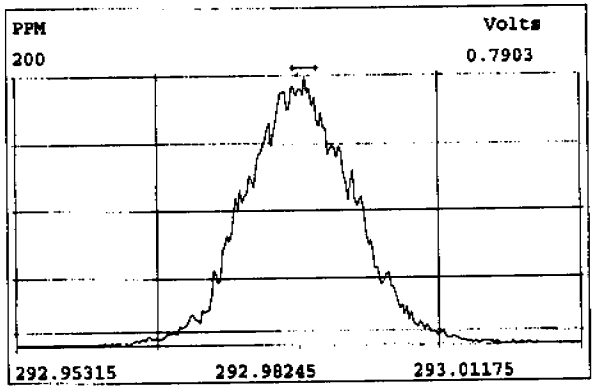
Date: 4/30/05

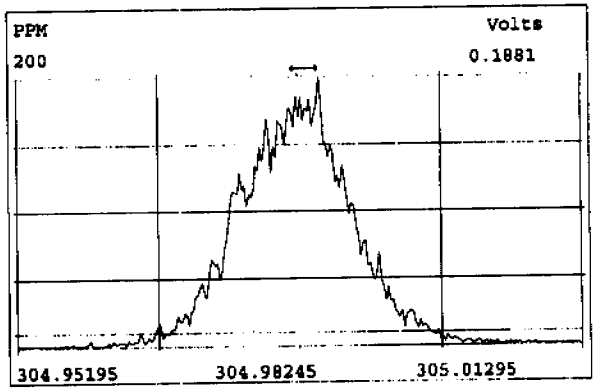
Alta Analytical Laboratory - Injection Log Run file: 050429A1 Instrument ID: VG-6 GC Column ID: DB-225

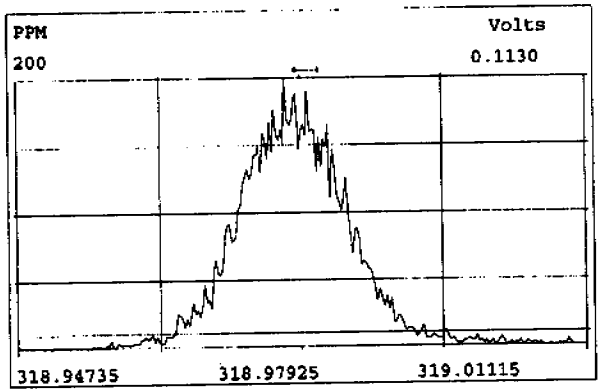
Data file	S#	Sample ID	Analyst	Acq date	Acq time	CCal	ECal
050429A1	1	CP050429A1-1 DB-225 CPSM	DMS	29-APR-05	10:55:04	NA	NA
050429A1	2	ST050429A1-1 1613 CS3 050420H	DMS	29-APR-05	11:36:00	NA	NA
050429A1	3	SOLVENT BLANK	DMS	29-APR-05	12:16:57	NA	NA
050429A1	4	ST050429A1-2 1613 CS0 050420E	DMS	29-APR-05	12:57:53	NA	NA
050429A1	5	ST050429A1-3 1613 CS1 050420F	DMS	29-APR-05	13:38:50	NA	NA
050429A1	6	ST050429A1-4 1613 CS2 050420G	DMS	29-APR-05	14:19:46	NA	NA
050429A1	7	ST050429A1-5 1613 CS4 050420I	DMS	29-APR-05	15:00:41	NA	NA
050429A1	8	ST050429A1-6 1613 CS5 050420J	DMS	29-APR-05	15:41:37	NA	NA
050429A1	9	SOLVENT BLANK	DMS	29-APR-05	16:22:34	NA	NA
050429A1	10	ST050429A1-7 1613 SSS L010608B	DMS	29-APR-05	17:03:29	NA	NA

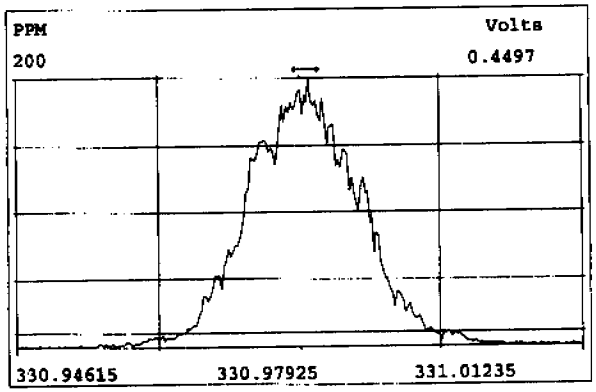
Peak Locate Examination:29-APR-2005:10:54 File:050429A1

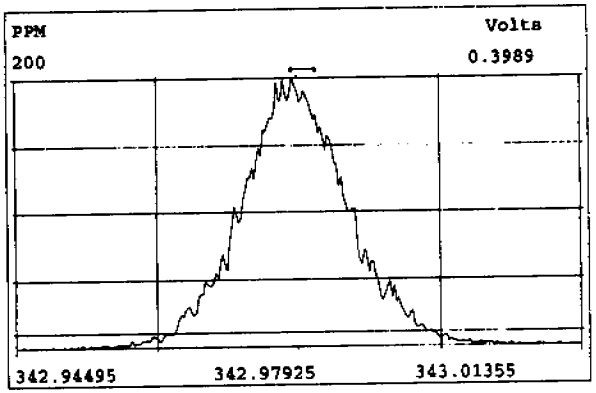
Experiment:TCDF_DB225 Function:1 Reference:PPK

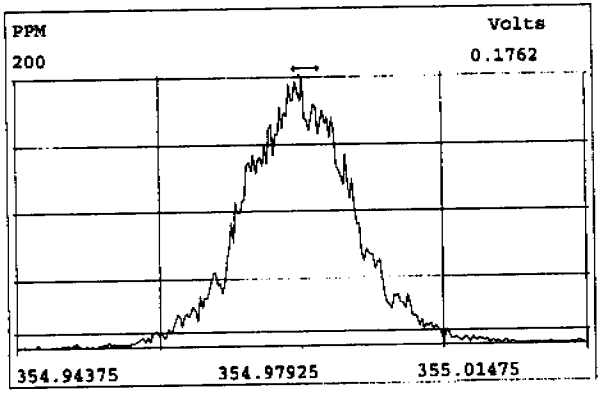


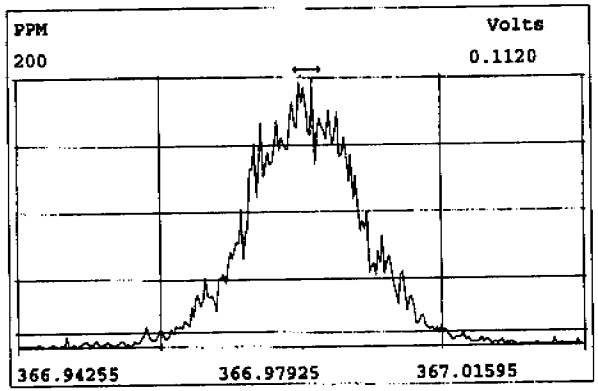


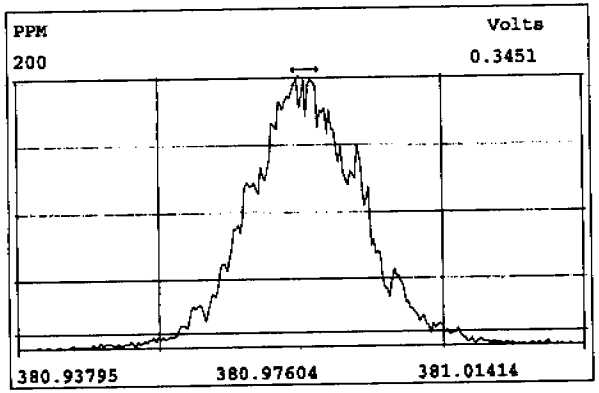




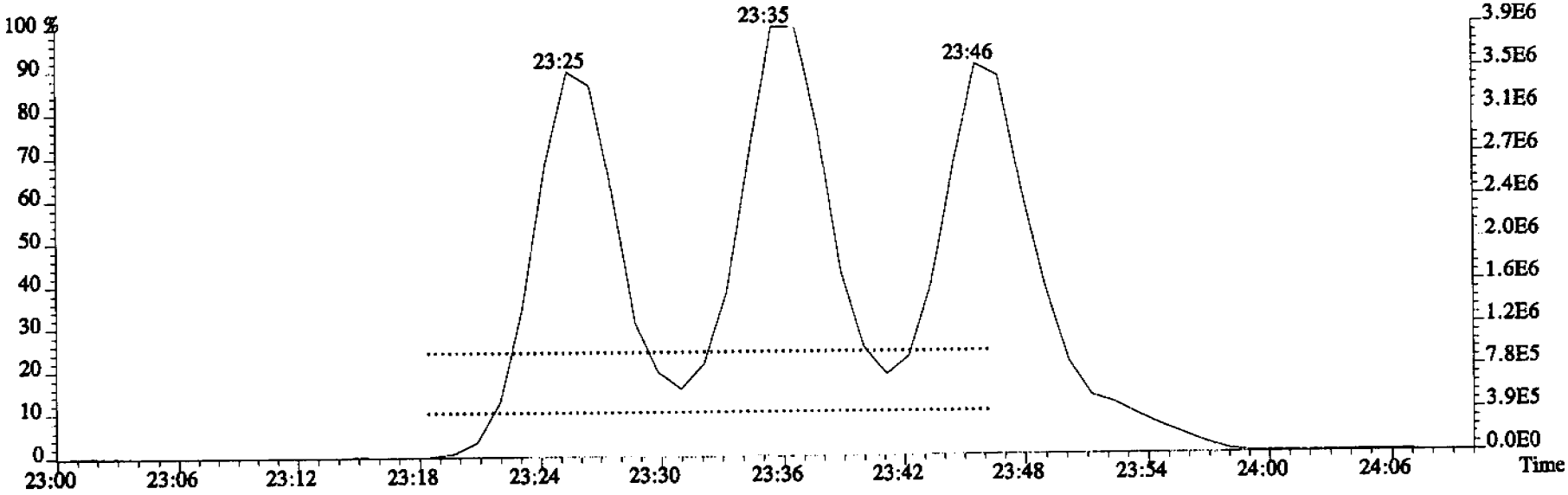




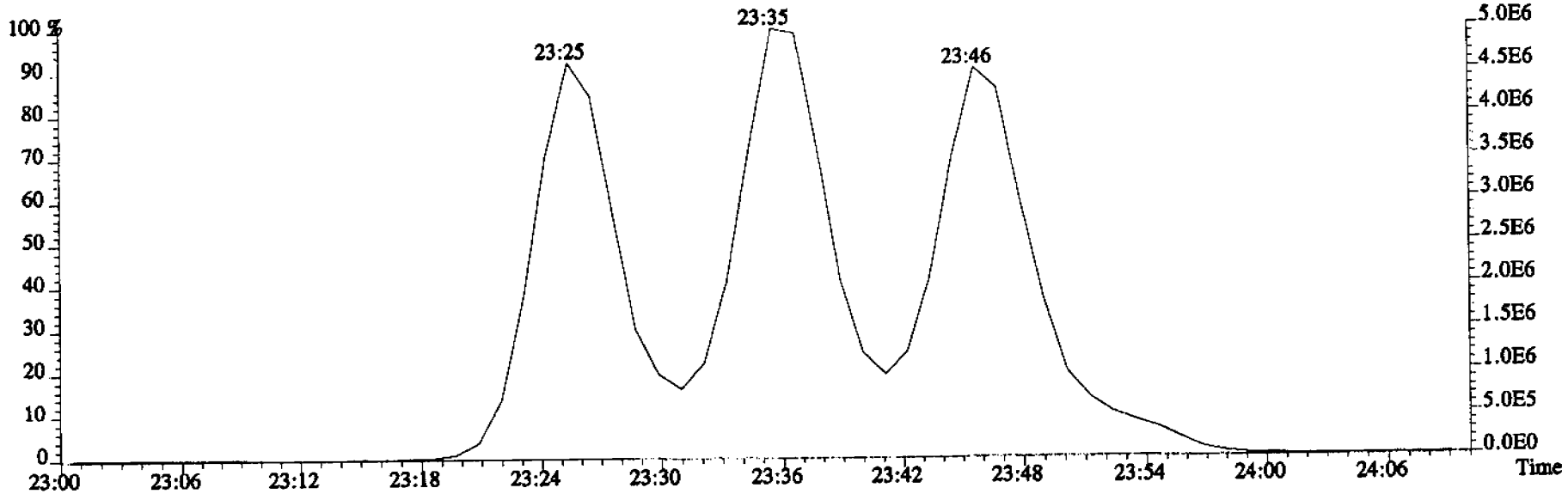




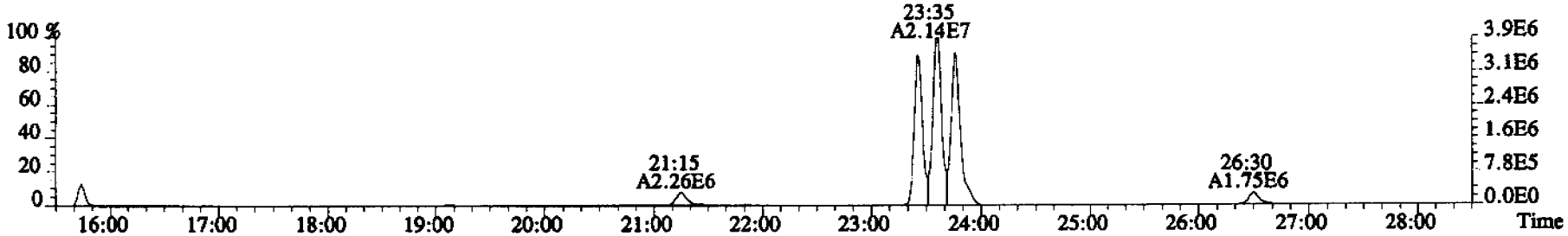
File:050429A1 #1-1174 Acq:29-APR-2005 10:55:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory Text:CP050429A1-1 DB-225 CPSM Exp:TCDF_DB225
303.9016



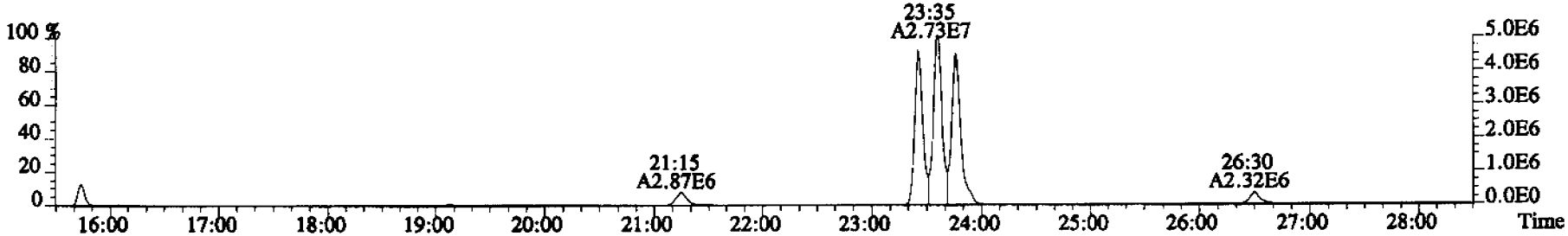
305.8987



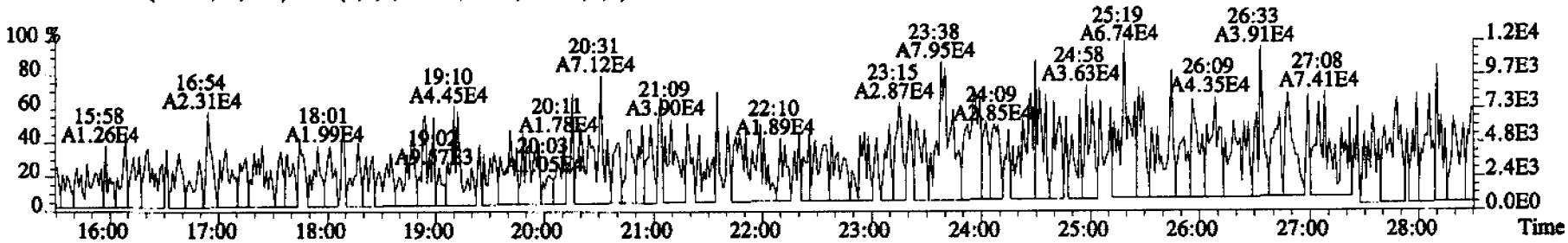
File:050429A1 #1-1174 Acq:29-APR-2005 10:55:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory Text:CP050429A1-1 DB-225 CPSM Exp:TCDF_DB225
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



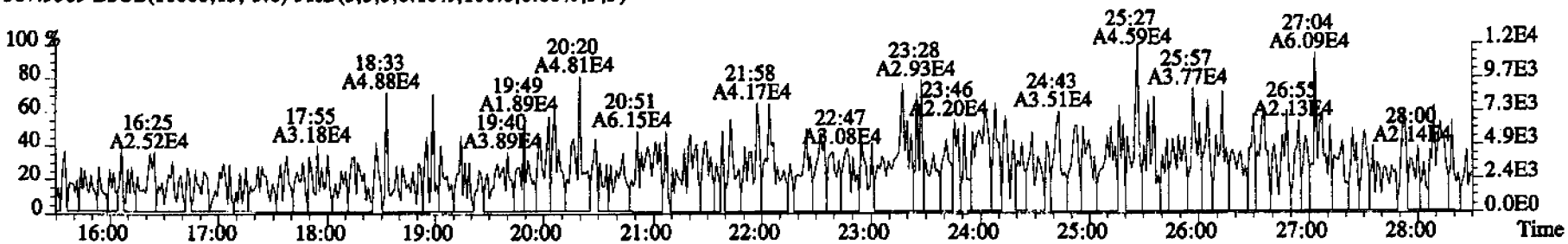
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



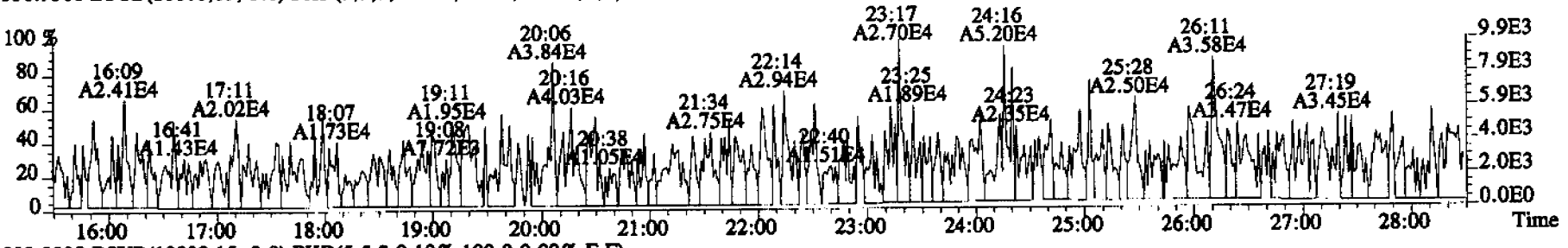
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



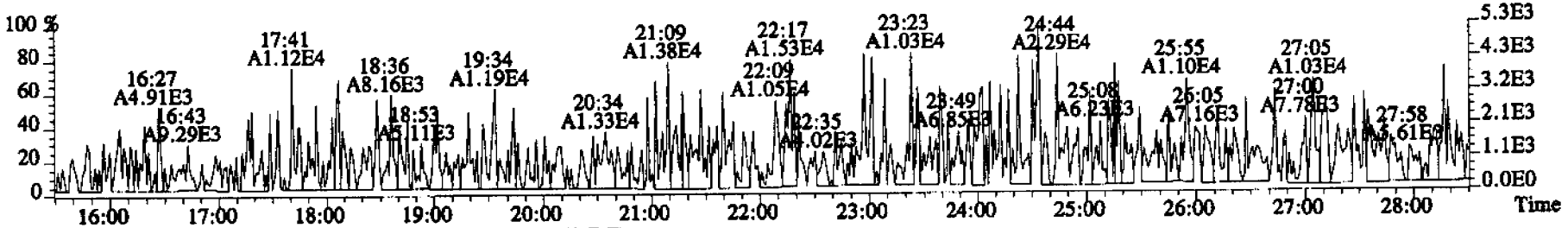
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



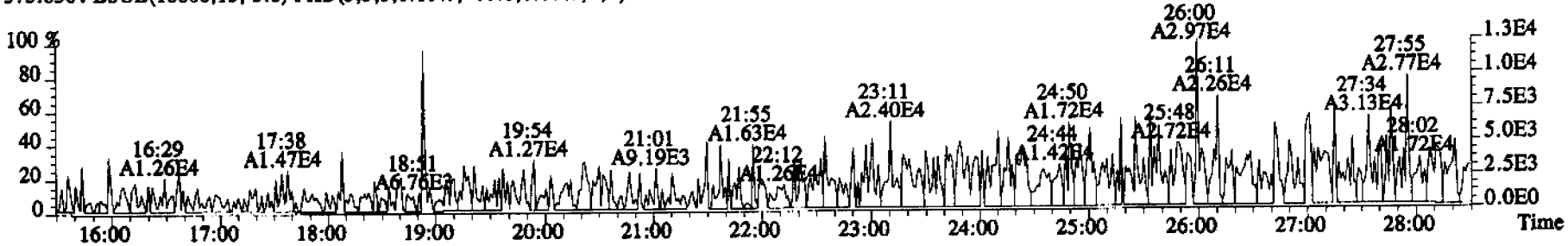
File:050429A1 #1-1174 Acq:29-APR-2005 10:55:04 GC EI+ Voltage SIR Autospec-UltimaE
Sample#1 File Text:Alta Analytical Laboratory Text:CP050429A1-1 DB-225 CPSM Exp:TCDF_DB225
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



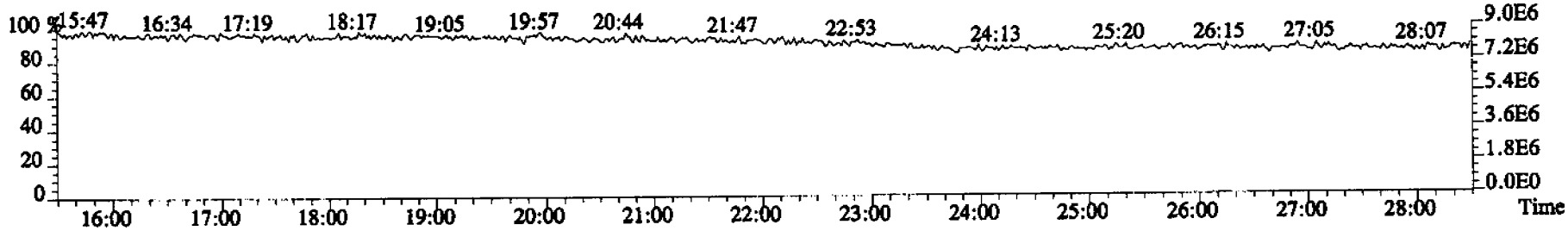
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



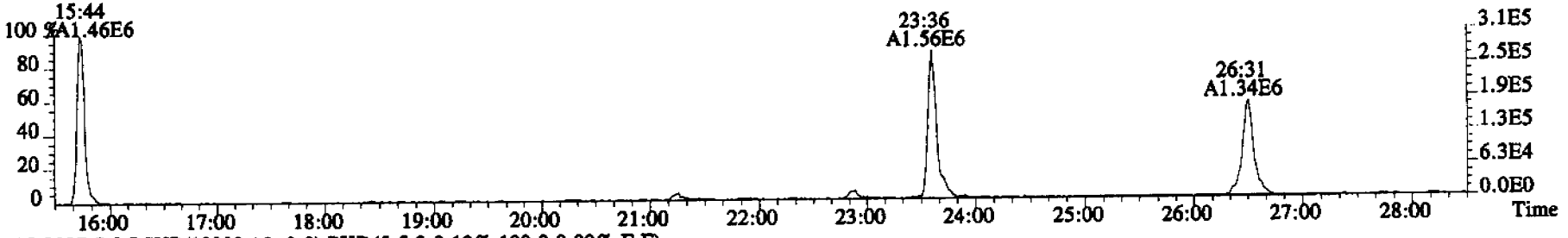
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



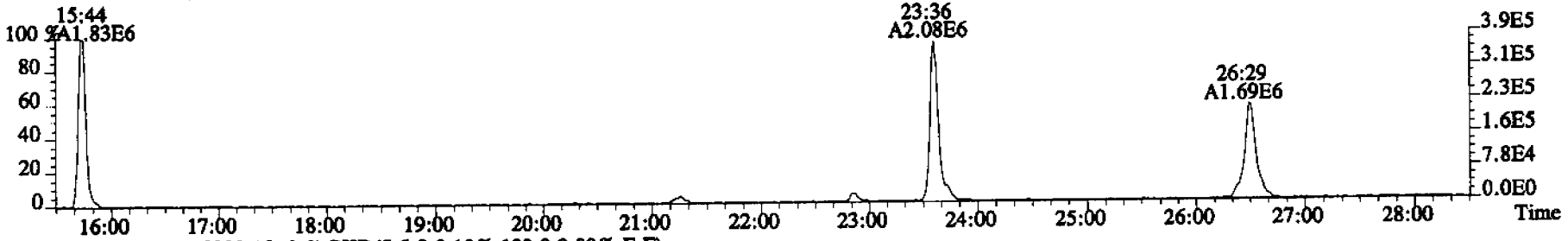
318.9792



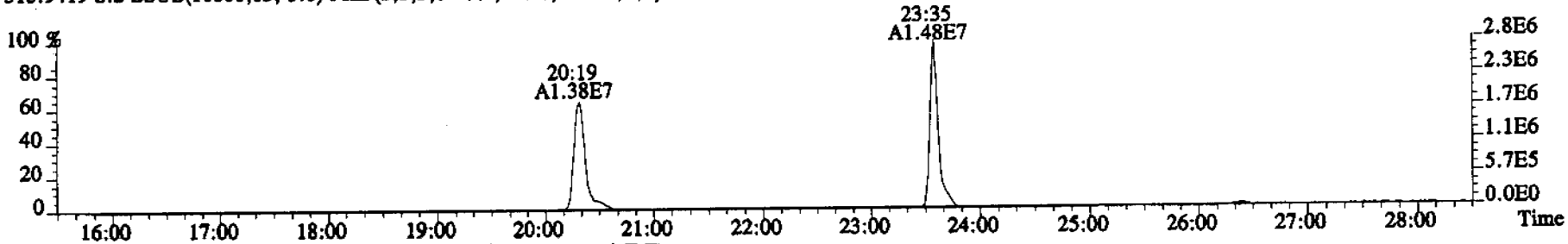
File:050429A1 #1-1173 Acq:29-APR-2005 11:36:00 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory Text:ST050429A1-1 1613 CS3 050420H Exp:TCDF_DB225
303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



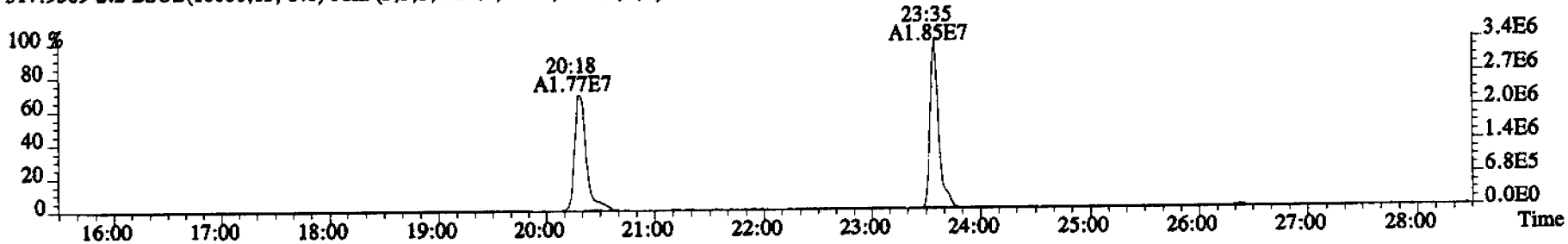
305.8987 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



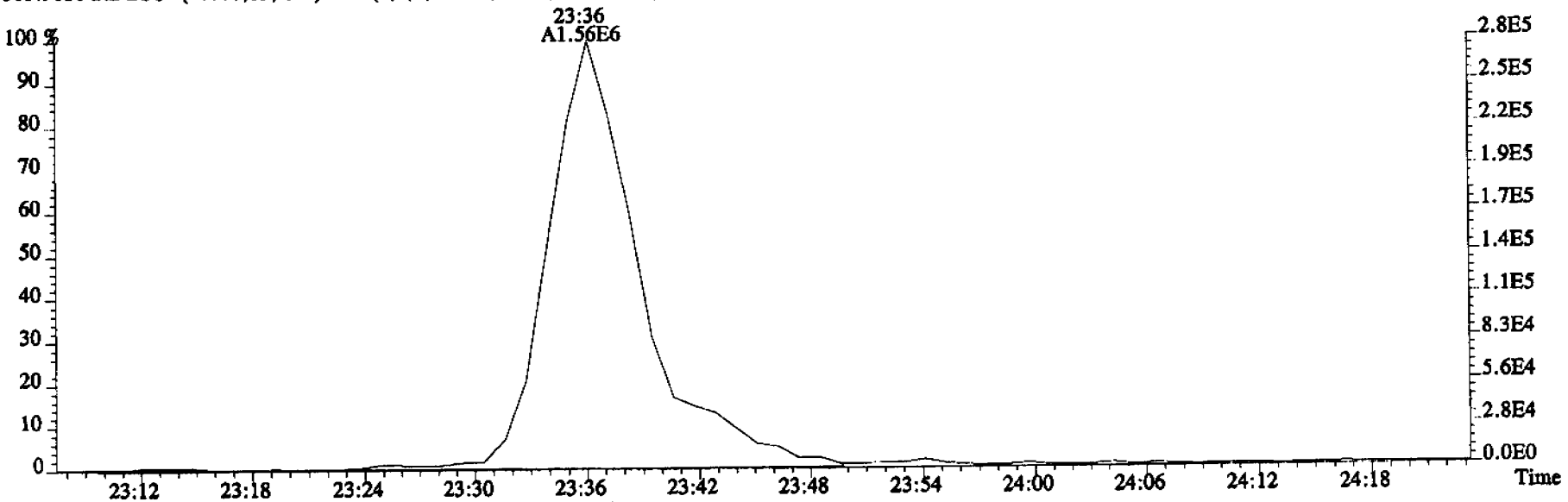
315.9419 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



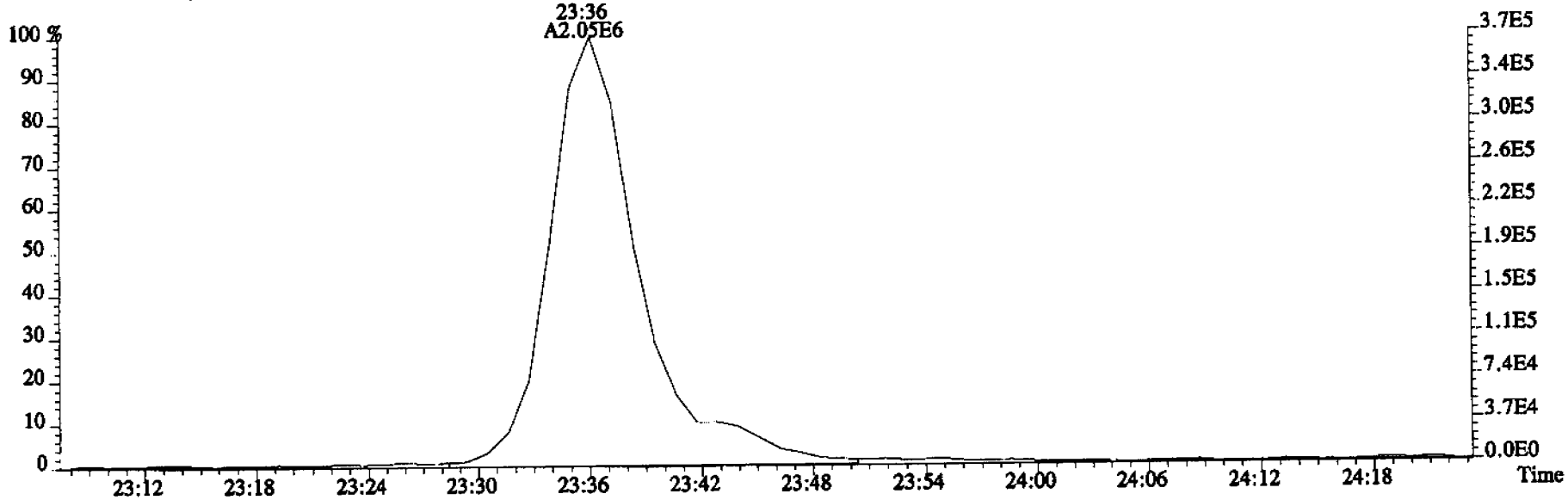
317.9389 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



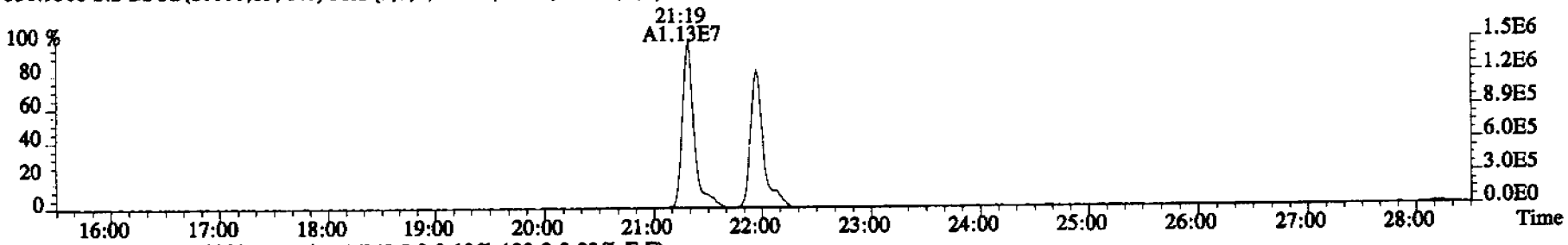
File:050429A1 #1-1173 Acq:29-APR-2005 11:36:00 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory Text:ST050429A1-1 1613 CS3 050 Exp:TCDF_DB225
303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



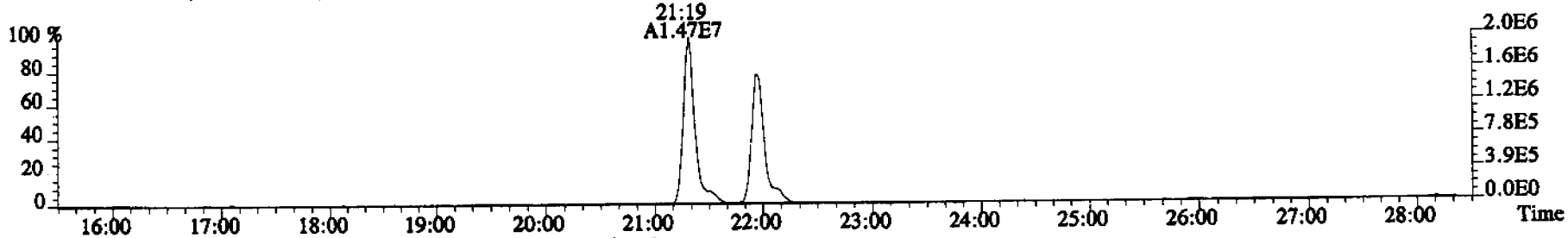
305.8987 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



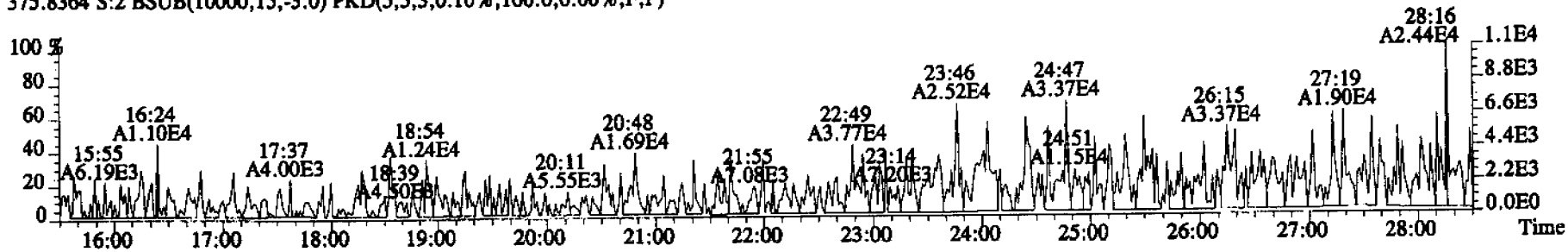
File:050429A1 #1-1173 Acq:29-APR-2005 11:36:00 GC EI+ Voltage SIR Autospec-UltimaE
Sample#2 File Text:Alta Analytical Laboratory Text:ST050429A1-1 1613 CS3 050420H Exp:TCDF_DB225
331.9368 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



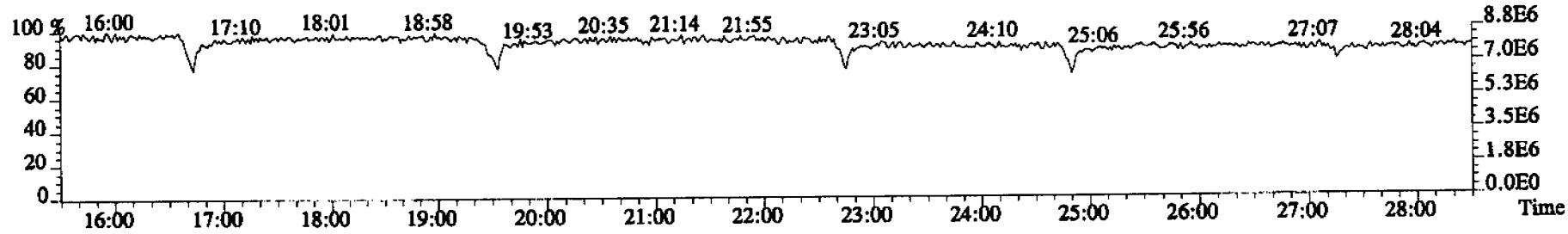
333.9339 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



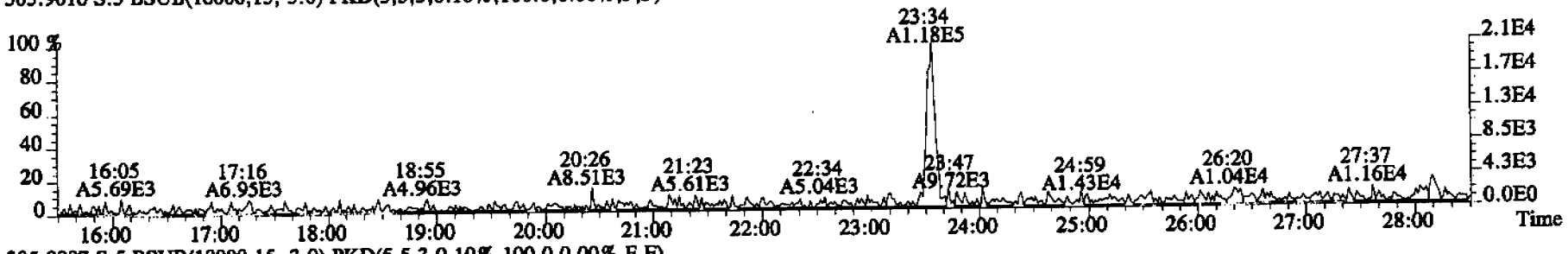
375.8364 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



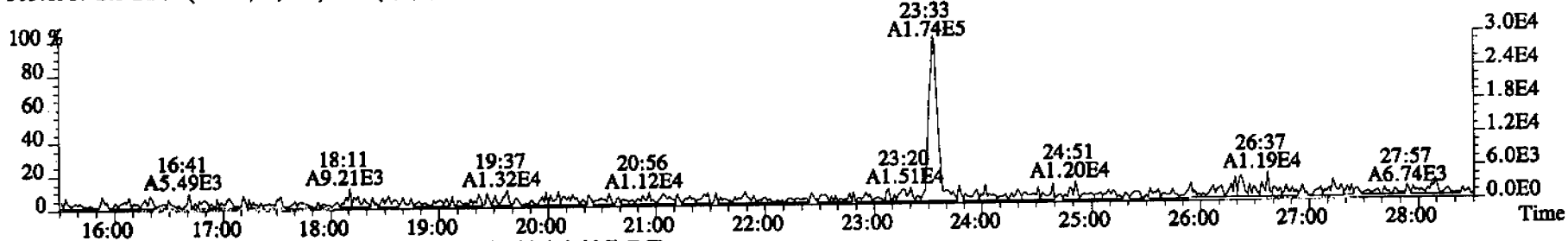
318.9792 S:2



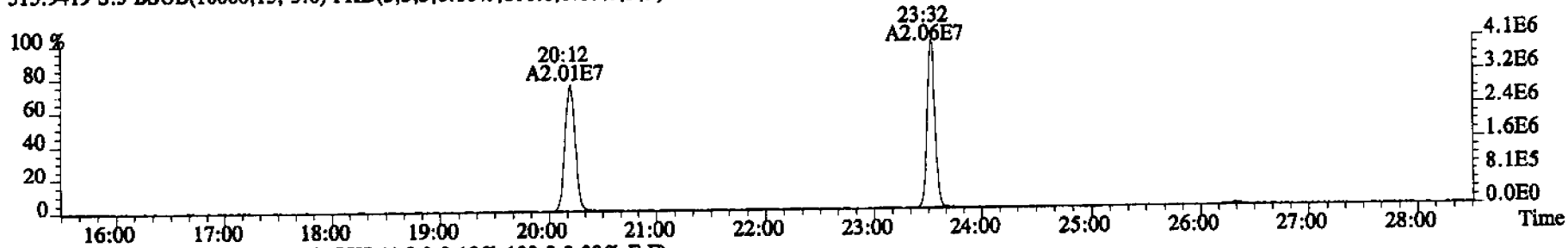
File:050429A1 #1-1173 Acq:29-APR-2005 13:38:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory Text:ST050429A1-3 1613 CS1 050420F Exp:TCDF_DB225
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



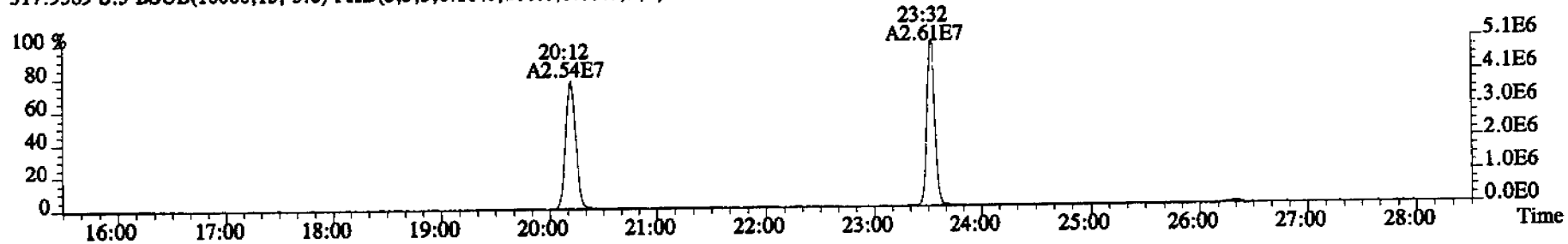
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



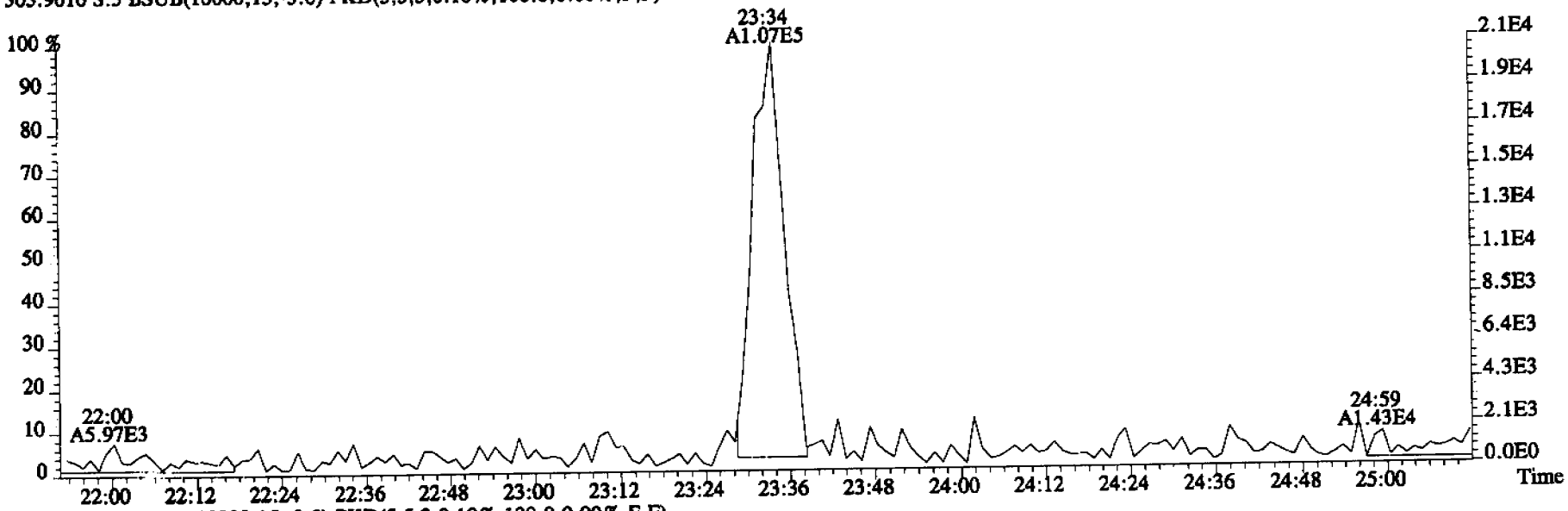
315.9419 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



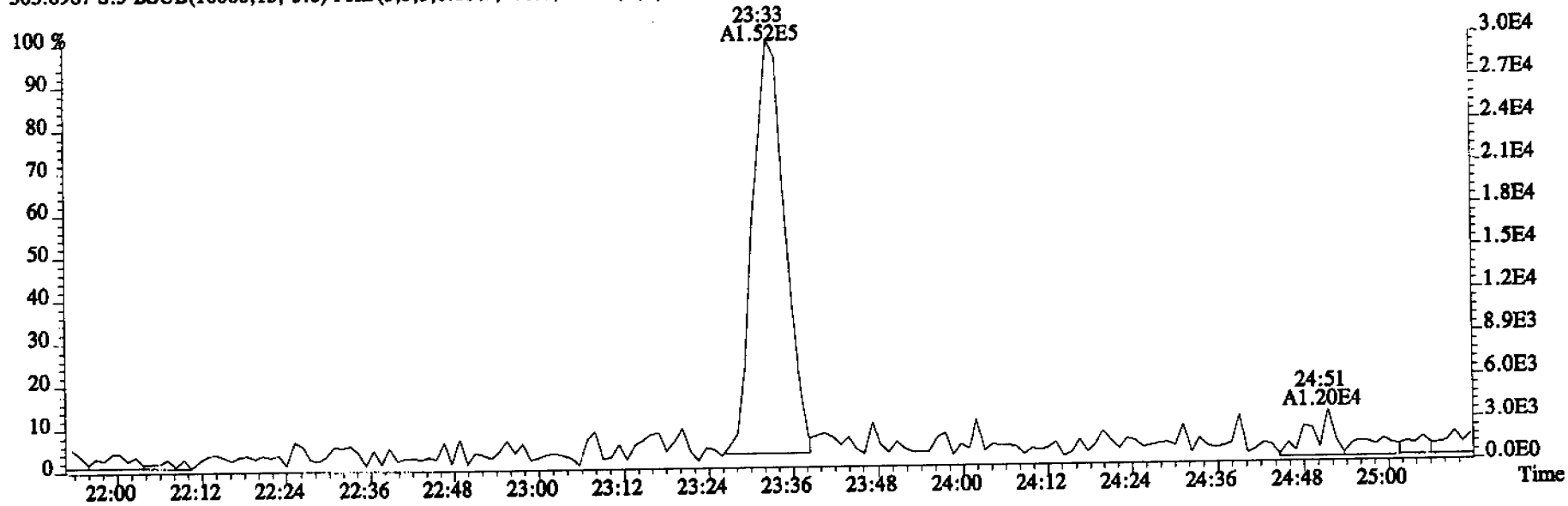
317.9389 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

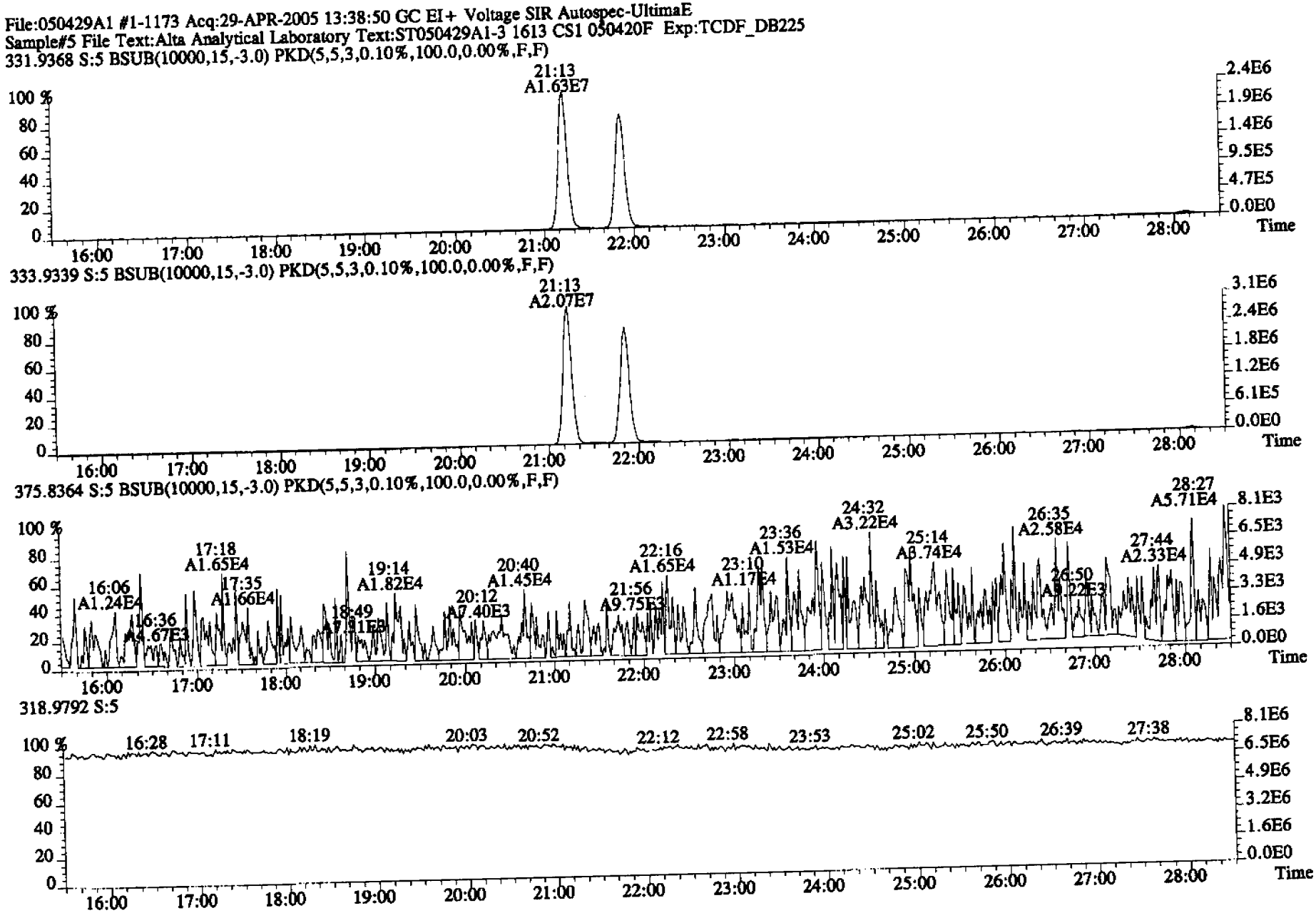


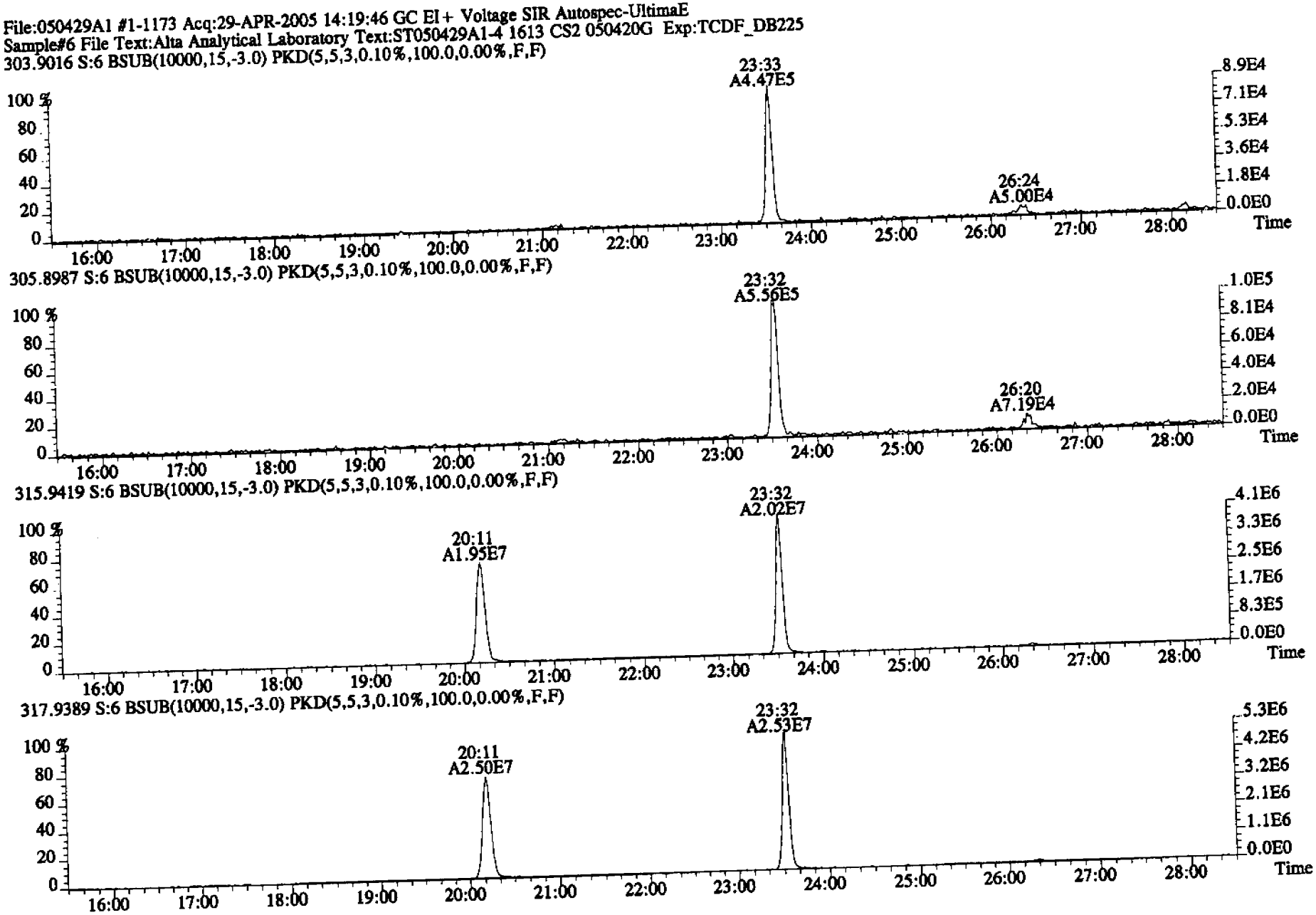
File:050429A1 #1-1173 Acq:29-APR-2005 13:38:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory Text:ST050429A1-3 1613 CS1 050 Exp:TCDF_DB225
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

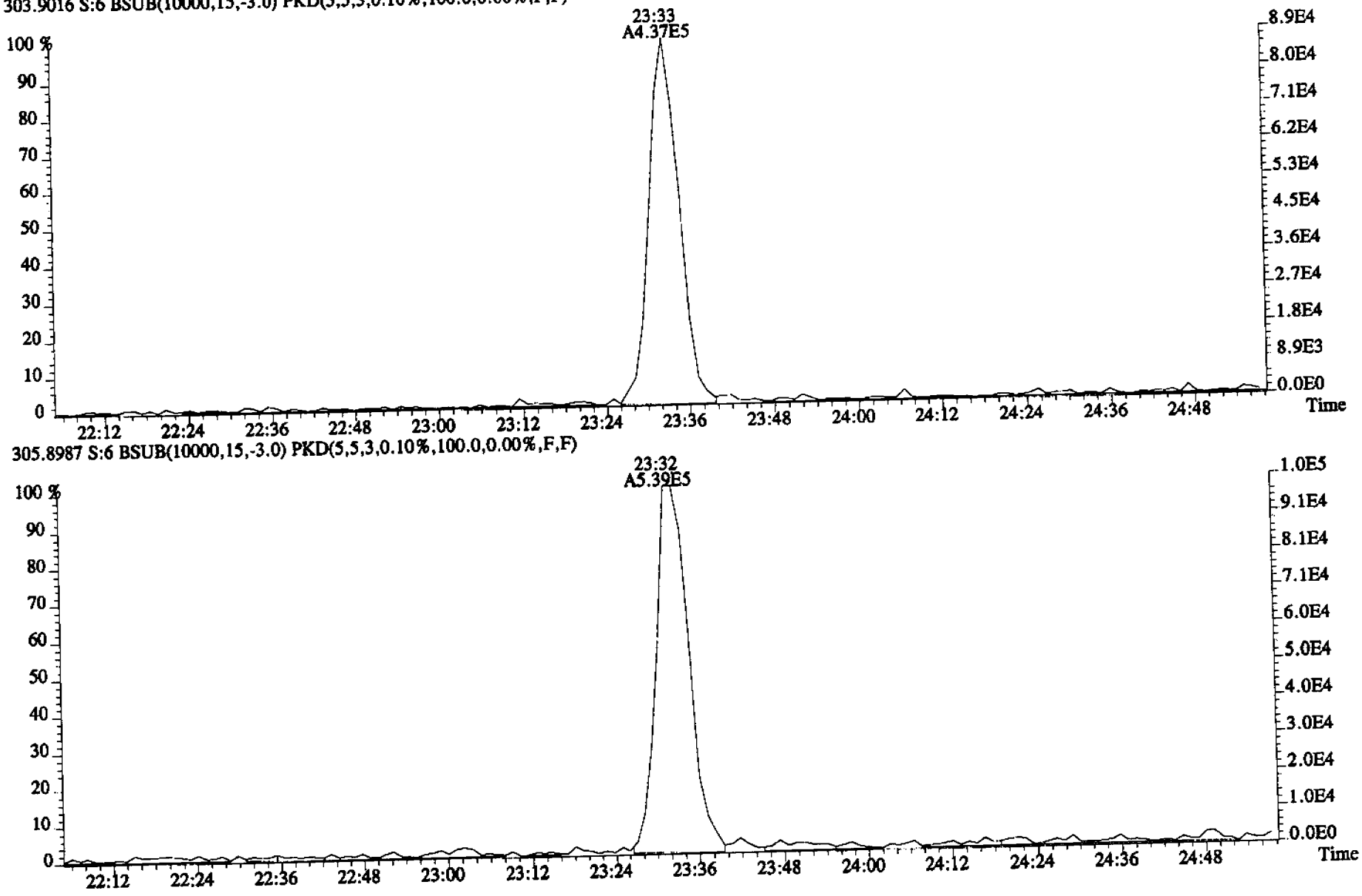


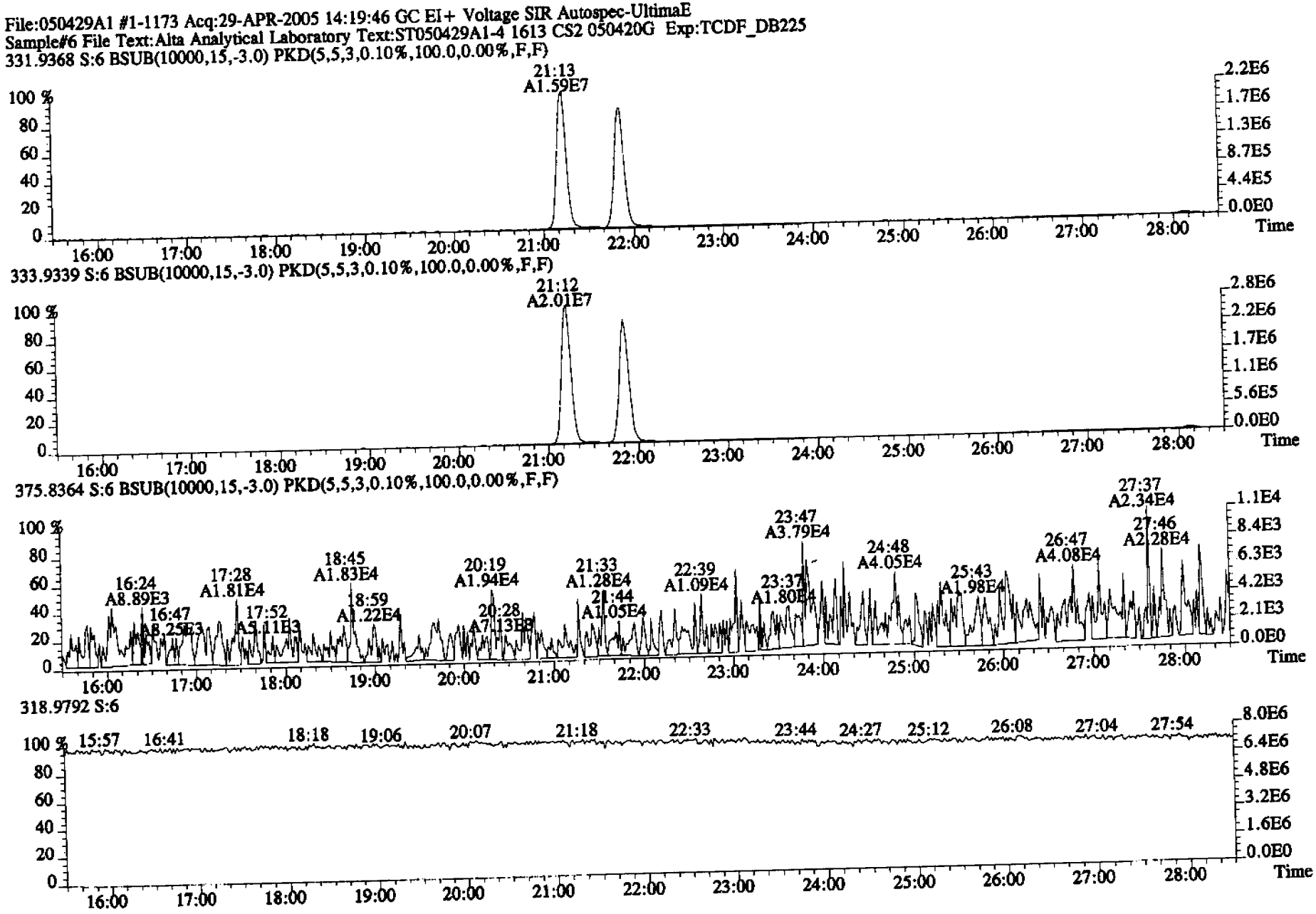
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



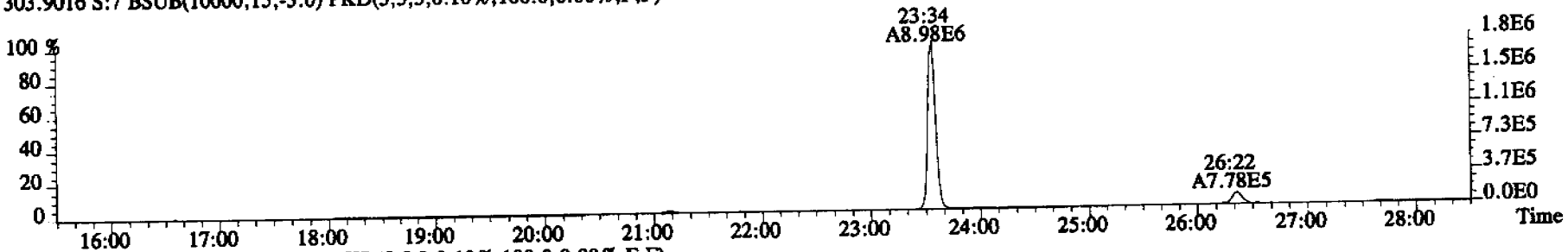

File:050429A1 #1-1173 Acq:29-APR-2005 13:38:50 GC EI+ Voltage SIR Autospec-UltimaE
Sample#5 File Text:Alta Analytical Laboratory Text:ST050429A1-3 1613 CS1 050420F Exp:TCDF_DB225
331.9368 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:13
A1.63E7
333.9339 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:13
A2.07E7
375.8364 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
16:06
A1.24E4
16:36
A4.67E3
17:18
A1.65E4
17:35
A1.66E4
18:49
19:14
A1.82E4
20:12
A7.40E3
20:40
A1.45E4
21:56
A9.75E3
22:16
A1.65E4
23:10
A1.17E4
23:36
A1.53E4
24:32
A3.22E4
25:14
A8.74E4
26:35
A2.58E4
26:50
27:44
A2.33E4
28:27
A5.71E4
318.9792 S:5
16:28
17:11
18:19
20:03
20:52
22:12
22:58
23:53
25:02
25:50
26:39
27:38
Time


File:050429A1 #1-1173 Acq:29-APR-2005 14:19:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory Text:ST050429A1-4 1613 CS2 050420G Exp:TCDF_DB225
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
23:33
A4.47E5
26:24
A5.00E4
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
23:32
A5.56E5
26:20
A7.19E4
315.9419 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
23:32
A2.02E7
20:11
A1.95E7
317.9389 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
23:32
A2.53E7
20:11
A2.50E7
Time

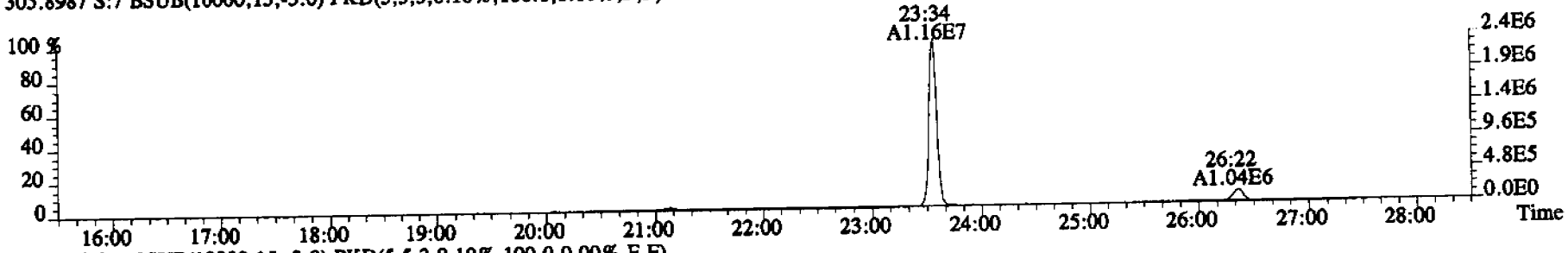

File:050429A1 #1-1173 Acq:29-APR-2005 14:19:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory Text:ST050429A1-4 1613 CS2 050 Exp:TCDF_DB225
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
23:33
A4.37E5
100 %
90
80
70
60
50
40
30
20
10
0
8.9E4
8.0E4
7.1E4
6.2E4
5.3E4
4.5E4
3.6E4
2.7E4
1.8E4
8.9E3
0.0E0
Time
22:12
22:24
22:36
22:48
23:00
23:12
23:24
23:36
23:48
24:00
24:12
24:24
24:36
24:48
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
23:32
A5.39E5
100 %
90
80
70
60
50
40
30
20
10
0
1.0E5
9.1E4
8.1E4
7.1E4
6.0E4
5.0E4
4.0E4
3.0E4
2.0E4
1.0E4
0.0E0
Time
22:12
22:24
22:36
22:48
23:00
23:12
23:24
23:36
23:48
24:00
24:12
24:24
24:36
24:48


File:050429A1 #1-1173 Acq:29-APR-2005 14:19:46 GC EI+ Voltage SIR Autospec-UltimaE
Sample#6 File Text:Alta Analytical Laboratory Text:ST050429A1-4 1613 CS2 050420G Exp:TCDF_DB225
331.9368 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:13
A1.59E7
333.9339 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:12
A2.01E7
375.8364 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
16:24
A8.89E3
16:47
A8.25E3
17:28
A1.81E4
17:52
A5.11E3
18:45
A1.83E4
18:59
A1.22E4
20:19
A1.94E4
20:28
A7.13E3
21:33
A1.28E4
21:44
A1.05E4
22:39
A1.09E4
23:37
A1.80E4
23:47
A3.79E4
24:48
A4.05E4
25:43
A1.98E4
26:47
A4.08E4
27:37
A2.34E4
27:46
A2.28E4
318.9792 S:6
15:57
16:41
18:18
19:06
20:07
21:18
22:33
23:44
24:27
25:12
26:08
27:04
27:54
Time

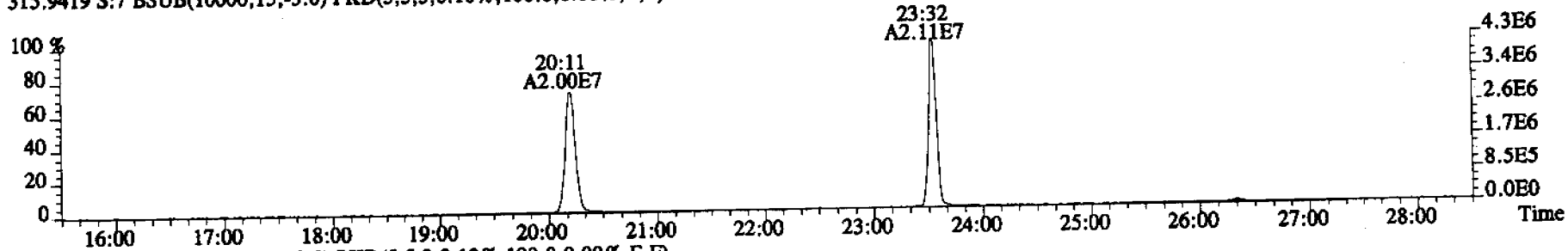
File:050429A1 #1-1173 Acq:29-APR-2005 15:00:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory Text:ST050429A1-5 1613 CS4 050420I Exp:TCDF_DB225
303.9016 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



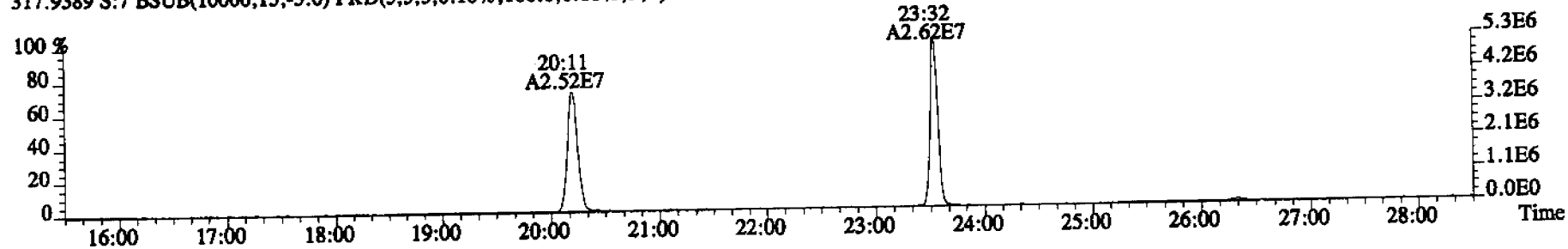
305.8987 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

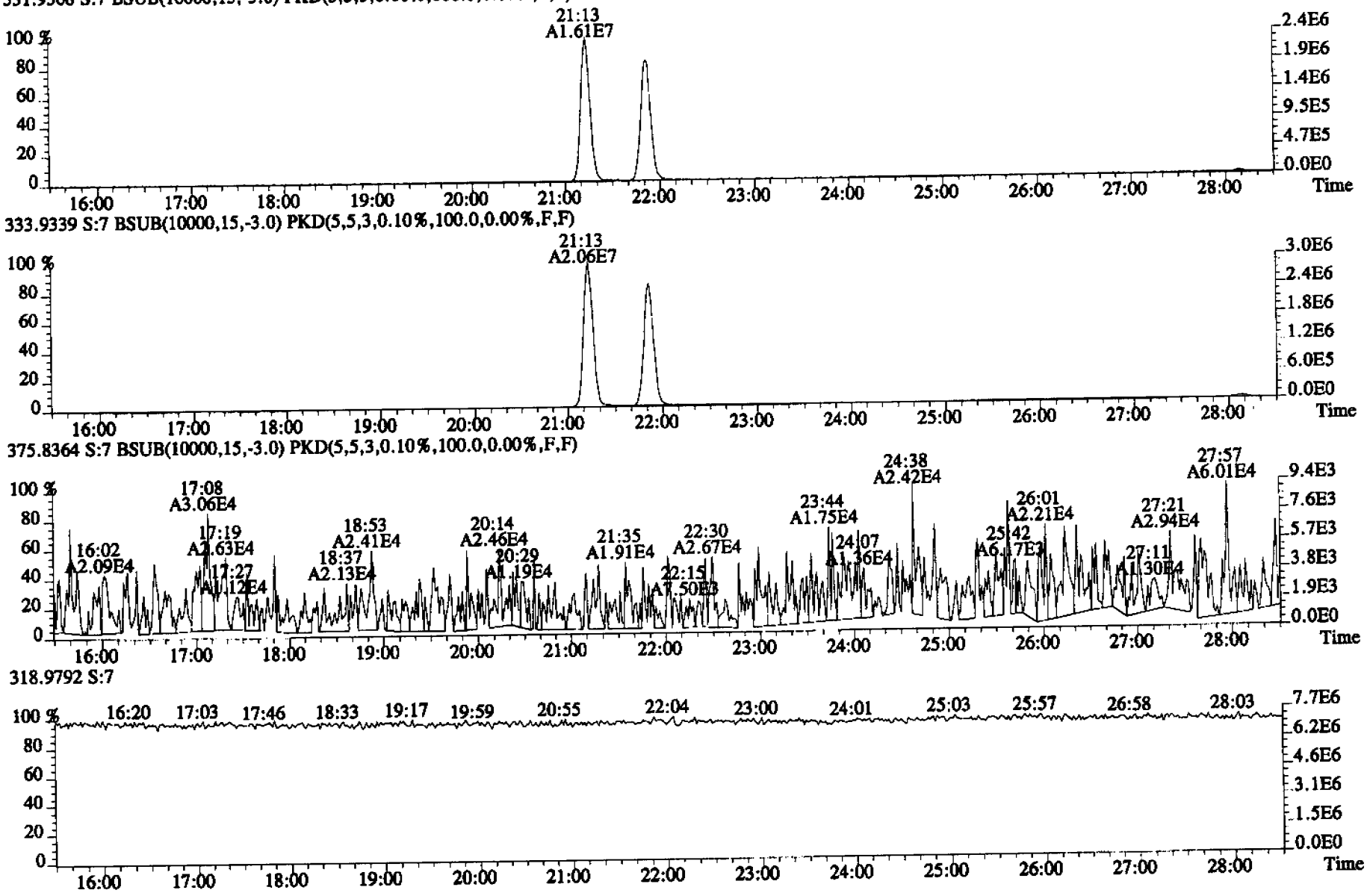


315.9419 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

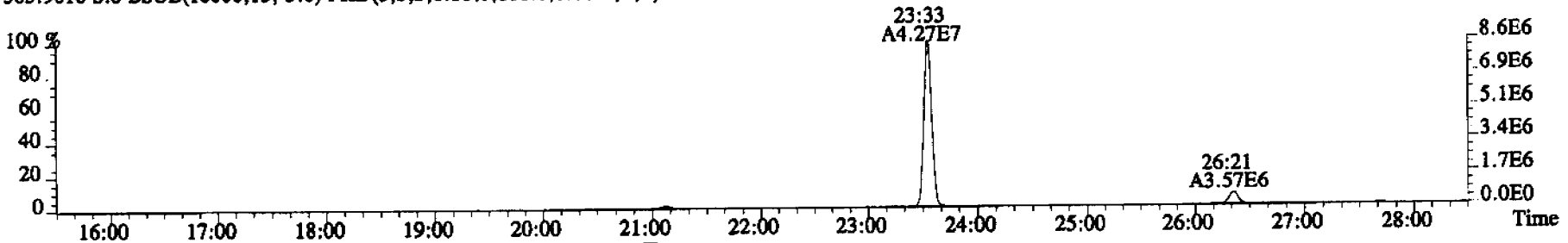


317.9389 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

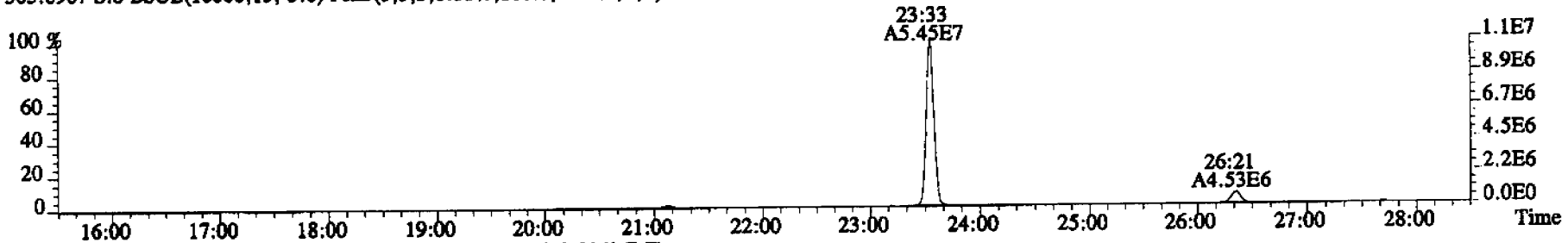



File:050429A1 #1-1173 Acq:29-APR-2005 15:00:41 GC EI+ Voltage SIR Autospec-UltimaE
Sample#7 File Text:Alta Analytical Laboratory Text:ST050429A1-5 1613 CS4 050420I Exp:TCDF_DB225
331.9368 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:13
A1.61E7
333.9339 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
21:13
A2.06E7
375.8364 S:7 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)
17:08
A3.06E4
16:02
A2.09E4
17:19
A2.63E4
17:27
A1.12E4
18:53
A2.41E4
18:37
A2.13E4
20:14
A2.46E4
20:29
A1.19E4
21:35
A1.91E4
22:30
A2.67E4
22:15
A7.50E3
23:44
A1.75E4
24:38
A2.42E4
24:07
A1.36E4
25:42
A6.17E3
26:01
A2.21E4
27:11
A1.30E4
27:21
A2.94E4
27:57
A6.01E4
318.9792 S:7
16:20
17:03
17:46
18:33
19:17
19:59
20:55
22:04
23:00
24:01
25:03
25:57
26:58
28:03
Time

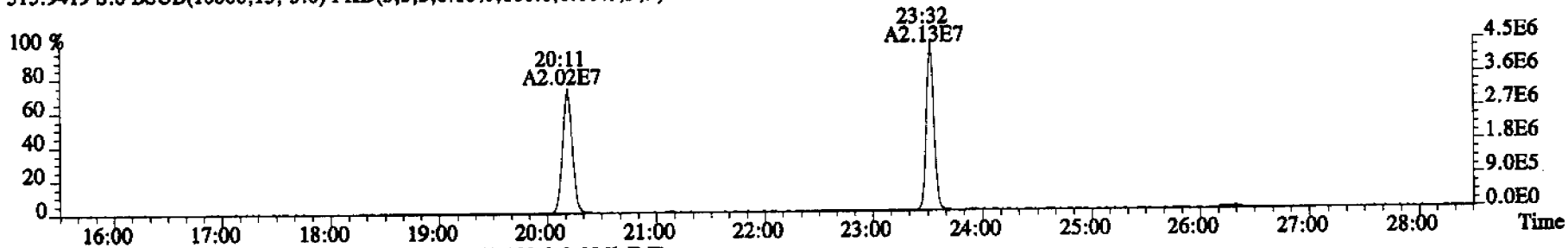
File:050429A1 #1-1173 Acq:29-APR-2005 15:41:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Alta Analytical Laboratory Text:ST050429A1-6 1613 CS5 050420J Exp:TCDF_DB225
303.9016 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



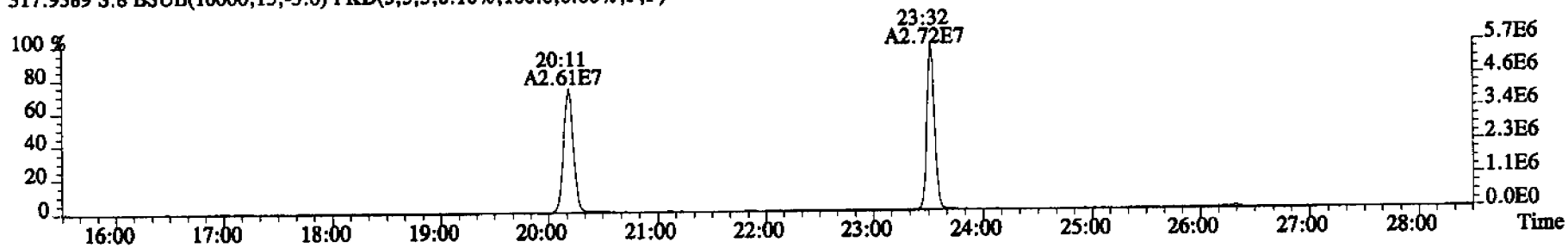
305.8987 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



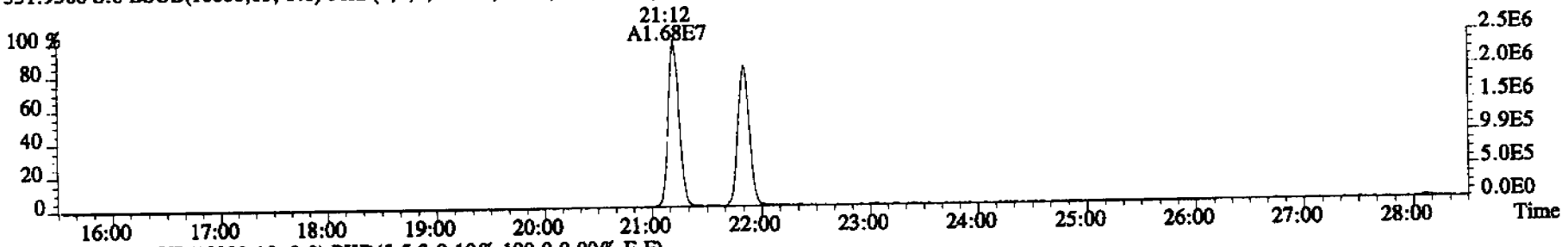
315.9419 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



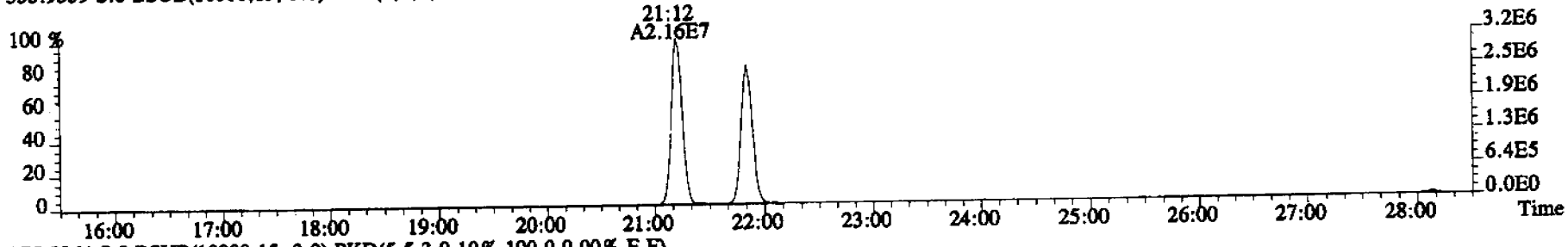
317.9389 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



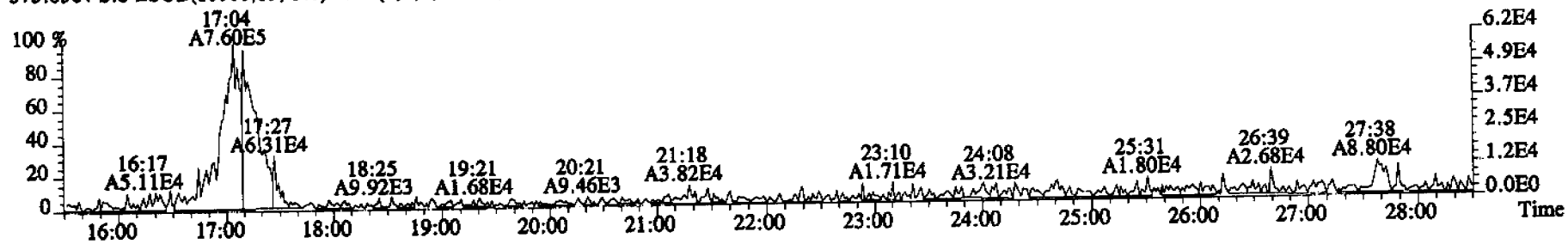
File:050429A1 #1-1173 Acq:29-APR-2005 15:41:37 GC EI+ Voltage SIR Autospec-UltimaE
Sample#8 File Text:Alta Analytical Laboratory Text:ST050429A1-6 1613 CS5 050420J Exp:TCDF_DB225
331.9368 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



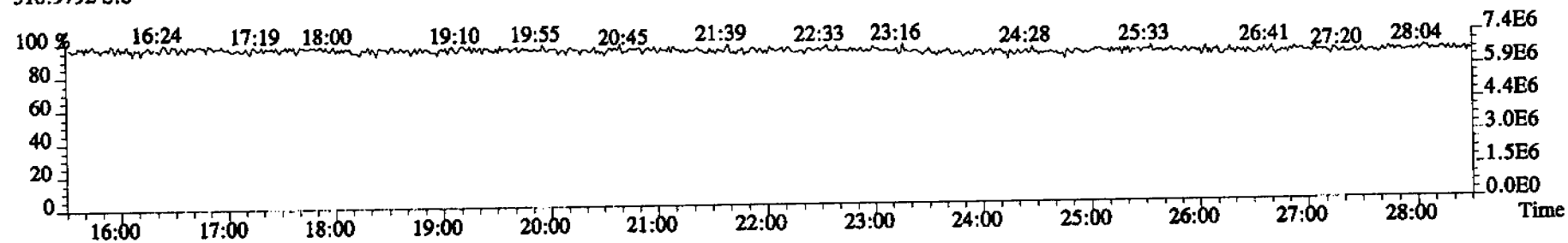
333.9339 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



375.8364 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)

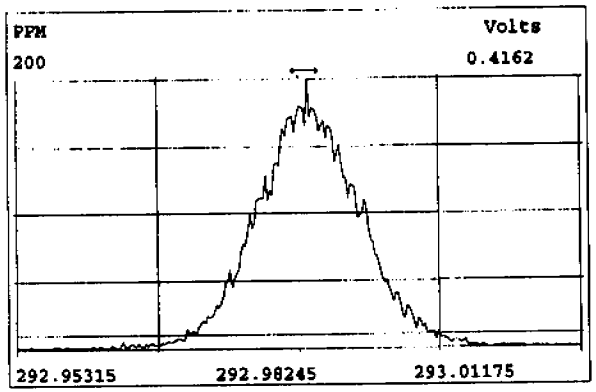


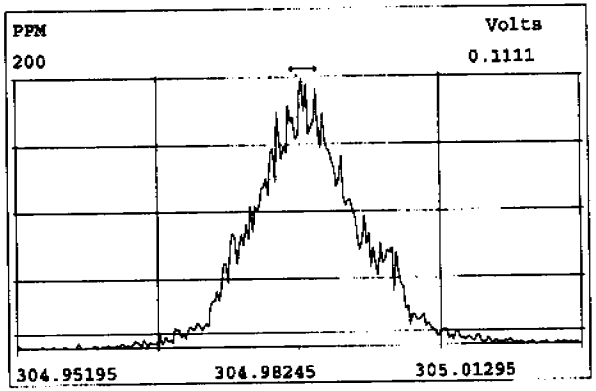
318.9792 S:8

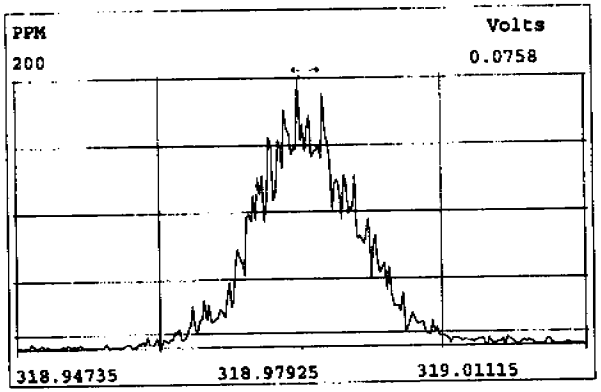


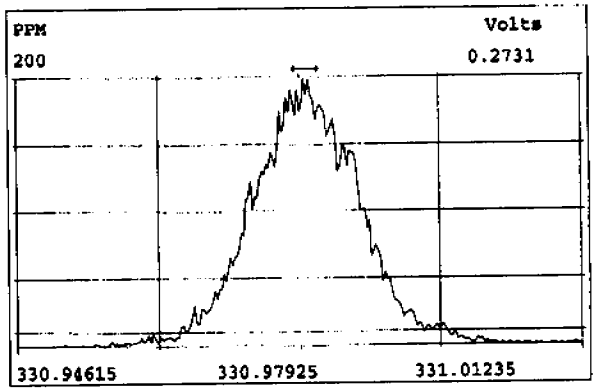
Peak Locate Examination:29-APR-2005:17:50 File:RES_CHECK

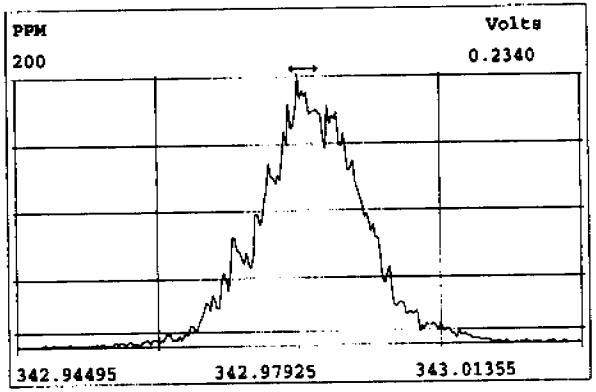
Experiment:TCDF_DB225 Function:1 Reference:PPK

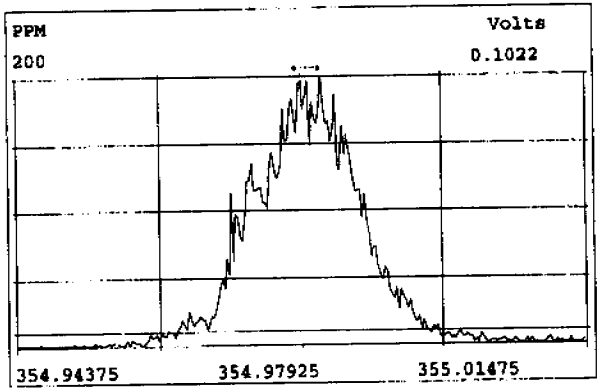


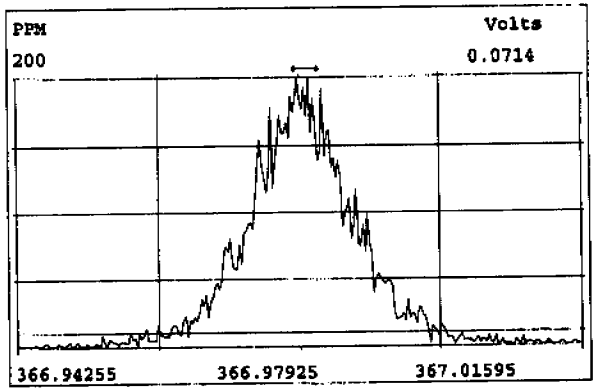


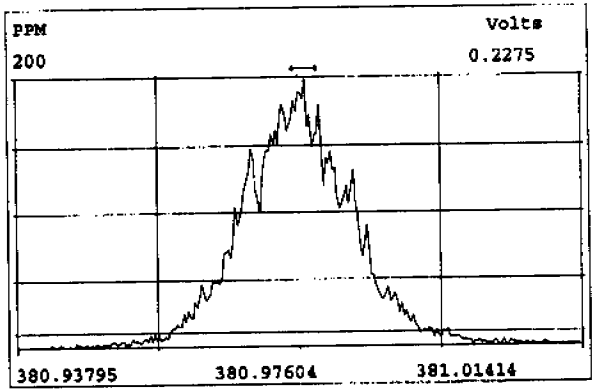












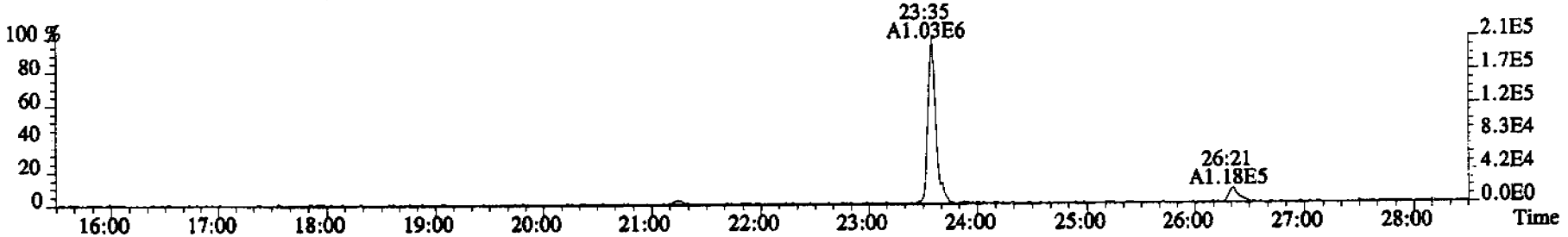
Client ID: 1613 SSS L010608B Filename: 050429A1 S:10 Acq:29-APR-05 17:03:29 ConCal: NA
Lab ID: ST050429A1-7 GC Column ID: DB-225 ICal: 1613tcdfvg6-4-29-05 wt/vol: 1.000 EndCAL: NA

Name	Resp	RA		RT	RRF	Conc	Rec
13C-1,2,3,4-TCDF	*	*	n	NotFnd	1.00	*	-
13C-2,3,7,8-TCDF	2.40e+07	0.78	y	23:34	1.04	*	*
2,3,7,8-TCDF	2.39e+06	0.76	y	23:36	1.07	9.313	

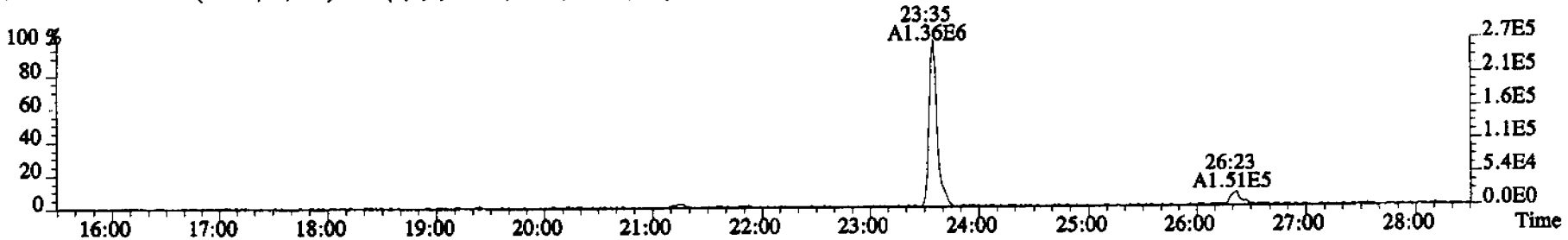
Analyst: DMS

Date: 4/30/05

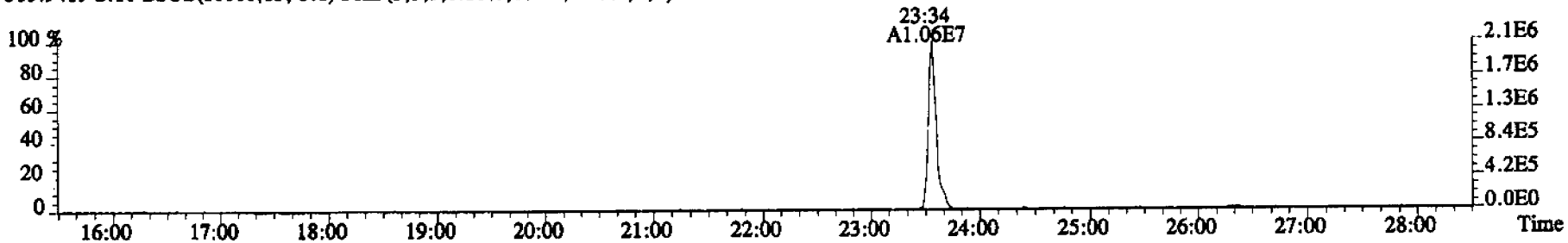
File:050429A1 #1-1173 Acq:29-APR-2005 17:03:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Alta Analytical Laboratory Text:ST050429A1-7 1613 SSS L010608B Exp:TCDF_DB225
303.9016 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



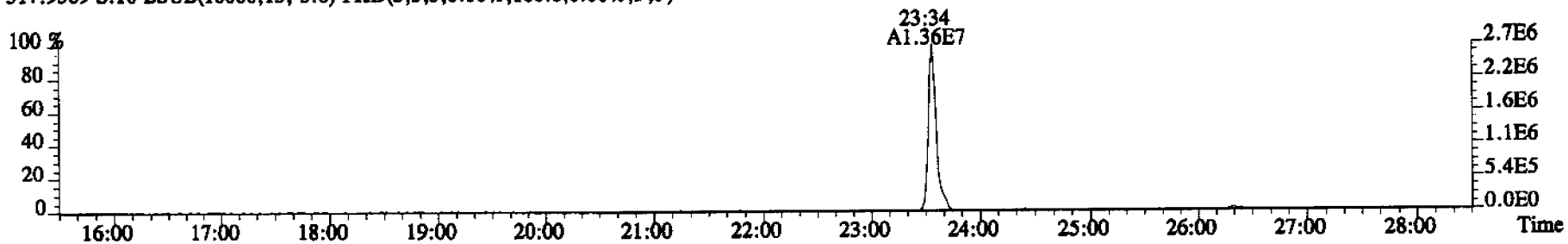
305.8987 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



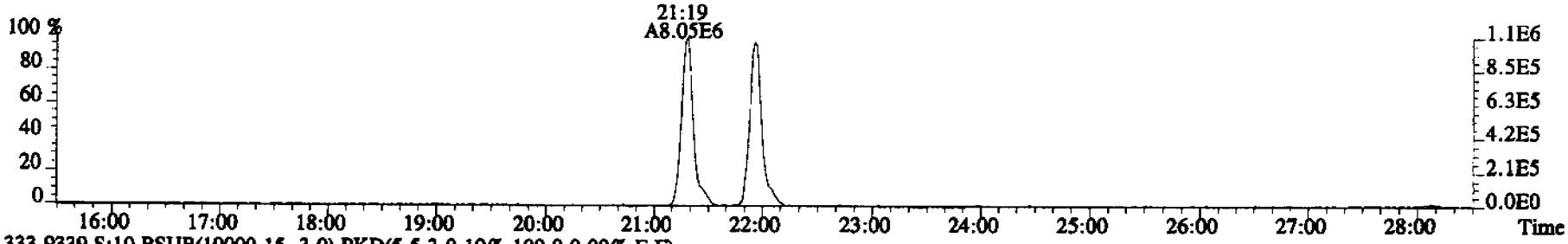
315.9419 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



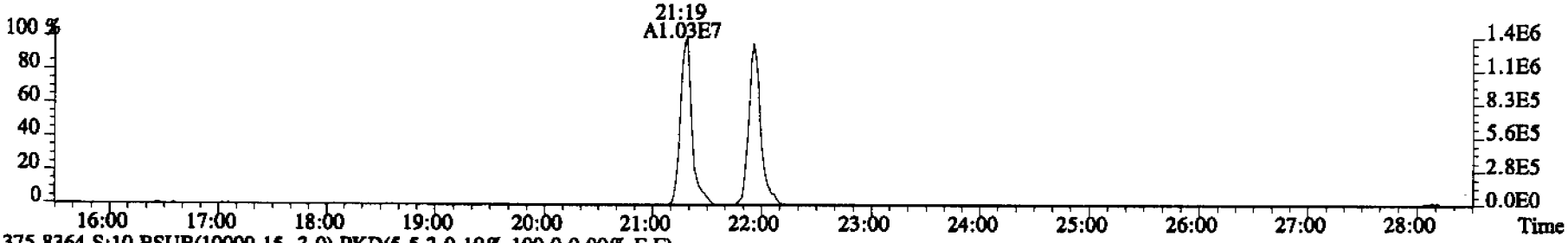
317.9389 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



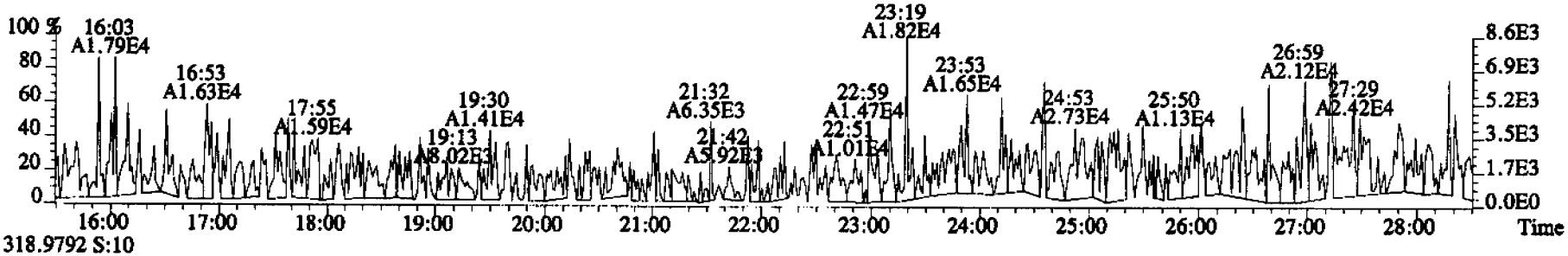
File:050429A1 #1-1173 Acq:29-APR-2005 17:03:29 GC EI+ Voltage SIR Autospec-UltimaE
Sample#10 File Text:Alta Analytical Laboratory Text:ST050429A1-7 1613 SSS L010608B Exp:TCDF_DB225
331.9368 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



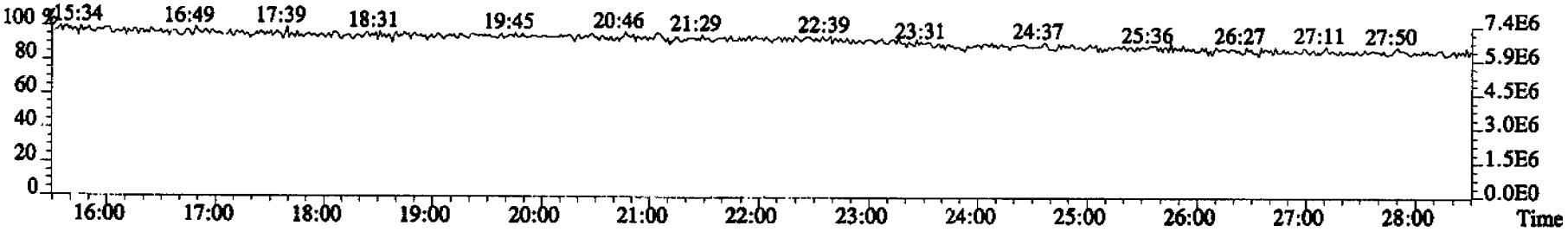
333.9339 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



375.8364 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F)



318.9792 S:10



Analytical Data Package

Request Number: 3161S

ERID Number: _____

EVENT: 4802

Relinquished by: _____ **Date:** _____

Received By: _____ **Date:** _____

Comments: DATA PACKAGE JOINT WITH 3157S

Thursday, April 21, 2005

REQUEST NUMBER: 3161S

ANALYSIS TYPE: OTHER

Los Alamos
NATIONAL LABORATORY

ATTN: Mark Ankeny
Daniel B. Stevens & Associates
6020 Acedemy NE, Suite 100
Albuquerque, NM 87109

Please analyze the enclosed samples according to the schedule indicated:

SHIP DATE: 04/21/2005
REPORT DUE: 05/06/2005
TURN AROUND REQ'D: 15

RAD SCREENING: NOT REQ
COMMENTS:

These samples are on:

LANL Request Number: 3161S
Per Agreement Number:
Project Cost Code: MT3R0223KGT0

LANL ER SMO CONTACT:
Signature:

METHOD CODE	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
ASTM:D2216	RE73-05-58879	5	S	04/20/2005	
ASTM:D2937	RE73-05-58879	5	S	04/20/2005	
ASTM:D422	RE73-05-58879	5	S	04/20/2005	
ASTM:D854	RE73-05-58879	5	S	04/20/2005	
MOSA:18-1986	RE73-05-58879	5	S	04/20/2005	

Final Page of REQUEST NUMBER 3161S

Thursday, April 21, 2005

CHAIN OF CUSTODY DOCUMENT NUMBER: 3161SC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 3161S

ANALYSIS TYPE: OTHER

ATTN: Mark Ankeny
Daniel B. Stevens & Associates
6020 Acedemy NE, Suite 100
Albuquerque, NM 87109

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ORDER TEMPLATE CODE	PRESERVATIVE	MATRIX
RE73-05-58879	5	PROTECORE BAG	PSDA+PROP-DBS	ICE	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 3161S

Relinquished By:	Date	Time	Received By:	Date	Time
PRINTED NAME SIGNATURE	4/14/05		PRINTED NAME SIGNATURE		
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		
PRINTED NAME SIGNATURE			PRINTED NAME SIGNATURE		

Received for DISPOSAL By:	Date	Time	Remarks:
PRINTED NAME SIGNATURE			

2.5 ANALYTICAL CRITERIA

Samples will be analyzed for the following:

Analyses	Frequency of Analyses: Every Sample (approx. 1 per 100 yds^3)	Frequency of Analyses: Composite of 5 samples (approx. 1 per 500 yds^3)
TCLP Analyses (including zinc) [1][2]	X	
VOCs by EPA Method 8260B[1]		X
SVOCs by EPA Method 8270C[1][3]		X
PCBs by EPA Method 8082[1][3]		X
Dioxins and Furans by EPA Method 8290[3]		X
Metals (Total) by EPA Method 6010B/7471[3]	X	
Gross Alpha, Beta and Gamma by EPA Method 9310[3]	X	
Gamma Spectroscopy[1]	X	
Specific Radioisotope analyses (based on previous detections) (2): - Americium 241 - Cesium 137 - Plutonium (Pu-238, 239, 240, 241) - Radium 226 - Uranium (U-234, 235, 238)	X	
Physical characteristics - Density (lbs/ft^3)[1] - Grain-size analysis[1] - Proctor (ASTM D-698)[1] - Paint filter test (EPA Method 9095)[1][2]		X
Miscellaneous Analyses - Reactive Cyanide (EPA Method 9014)[1] - Reactive Sulfide (EPA Method 9034)[1] - pH (EPA Method 9045)[1] - RCI[2]		X

[1] Required to complete waste profile forms for EnviroCare of Utah.
[2] Required for potential acceptance by Rio Rancho, based on 20 NMED 9.1, Sect. 704 and/or release modeling.
[3] Criteria for confirmation samples per Scope of Work
yd^3 – cubic yards
TCLP – toxicity characteristic leaching procedure
VOC – volatile organic compounds
EPA – United States Environmental Protection Agency
SVOC – semivolatile organic compounds
PCB – polychlorinated biphenyls
lbs/ft^3 – pounds per cubic feet
RCI – reactivity, corrosivity, ignitability

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218682 **Event ID:**4802

SAMPLE ID: RE73-05-58878
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
1	8260B	125 SEPTUM AMBER GLASS	Ice	Y		

RELINQUISHED BY (printed name): (signature):	**Date/Time:** 4.20.05 1520	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4.20.05 1520	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218862 **Event ID:**4802

SAMPLE ID: RE73-05-58844 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): K Elwood (signature):	**Date/Time:** 4-2-05 1520	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4/2/05 1520	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218852 **Event ID:**4802

SAMPLE ID: RE73-05-58843 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	**Date/Time:** 4.20.05 1520	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4/20/05 1520	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218872 **Event ID:**4802

SAMPLE ID: RE73-05-58845
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	**Date/Time:** 4-20-05 1530	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4/20/05 1530	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218882 **Event ID:**4802

SAMPLE ID: RE73-05-58846 **ER TEAM LEADER:** Terry Rust **DESTINATION:** SMO

SAMPLE ORDER MATRIX: Soil **FIELD TEAM LEADER:** John Tymkowych **DEST. POC:**

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	**Date/Time:** 4-20-05 1530	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4/20/05 1530	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 218842 **Event ID:**4802

SAMPLE ID: RE73-05-58842
SAMPLE ORDER MATRIX: Soil
ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych
DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	AM241+GS+ISOPU+ISOU	1 L POLY	None	Y		Analyze for Gross A/B/G also
1	TAL metals + TCLP metals	1 L POLY	Ice	Y		Analyze for TCLP Zinc also

RELINQUISHED BY (printed name): (signature):	**Date/Time:** 4.20.05 1530	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4/20/05 1530	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Los Alamos National Laboratory
Environmental Restoration Project
Los Alamos, NM 87545

FIELD CHAIN OF CUSTODY

EVENT NAME: TA-73 Ash Pile

COC ID: 219172 **Event ID:**4802

SAMPLE ID: RE73-05-58879
SAMPLE ORDER MATRIX: Soil

ER TEAM LEADER: Terry Rust
FIELD TEAM LEADER: John Tymkowych

DESTINATION: SMO
DEST. POC:

ANALYSES REQUESTED

CONT. ID	ORDER	CONTAINER DESCRIPTION	PRESERVATIVE	COLLECTED Y / N	REASON	SPECIAL INSTRUCTIONS
2	8260B	~~125 SEPTUM AMBER GLASS~~ 2"x6" SS TUBE	Ice	Y		
1	8270C+8082	250 ML AMBER GLASS	Ice	Y		
3	8290	125 ML GLASS	Ice	Y		
4	8290	125 ML GLASS	Ice	Y		
5	PSDA+PROP-DBS	~~PROTECORE BAG~~ 2"x6" SS TUBE	Ice	Y		
6	RC+RS+ph+PF+I	500 ML POLY	Ice	Y		

RELINQUISHED BY (printed name): (signature):	**Date/Time:** 4-20-05 1530	**RELINQUISHED BY** (printed name): (signature):	**Date/Time:**
RECEIVED BY (printed name): (signature):	**Date/Time:** 4/20/05 15:30	**RECEIVED BY** (printed name): (signature):	**Date/Time:**

Rad Screening Data Release Form

The Following samples were received at the Field Support Facility (FSF) without screening data (list sample number):

These samples will not be shipped until radiological screening data documentation arrives at the FSF. I understand that it is my responsibility to ensure this information arrives at the FSF in a timely manner. If holding times are missed because screening data does not arrive, I will pick up the samples.

The following samples do not require rad screening data for the reasons stated (list sample numbers):

~~SAMPLES WERE~~ ALL RE73-05-58842
-58843
-58844
-58845
-58846
-58879
-58878

Reason: SAMPLES WERE SCREENED IN THE FIELD
READINGS RECORDED ON SCL.

Print Last Name LEONARD Signature [signature] Date 4/20/05

RECD JUN 27 2005

Laboratory Report for
Los Alamos National Laboratory
(Request # 3157S) 3161 S

June 16, 2005

Daniel B. Stephens & Associates, Inc.

6020 Academy NE, Suite 100 • Albuquerque, New Mexico 87109

lebrating
20 Years

June 16, 2005

Keith Greene
Los Alamos National Laboratory
TA00 Building 1237
MS M707
Droppoint 03U
Los Alamos, NM 87545
(505) 665-9966

Re: DBS&A Laboratory Report for LANL Ash Pile samples (REQ # 3157S)

Dear Mr. Greene:

Enclosed is the final report for the fourth batch of the LANL Ash Pile samples (REQ # 3157S). Please review this report and provide any comments as samples will be held for a maximum of 30 days. After 30 days samples will be returned or disposed of in an appropriate manner.

All testing results were evaluated subjectively for consistency and reasonableness, and the results appear to be reasonably representative of the material tested. However, DBS&A does not assume any responsibility for interpretations or analyses based on the data enclosed, nor can we guarantee that these data are fully representative of the undisturbed materials at the field site. We recommend that careful evaluation of these laboratory results be made for your particular application.

The testing utilized to generate the enclosed final report employs methods that are standard for the industry. The results do not constitute a professional opinion by DBS&A, nor can the results affect any professional or expert opinions rendered with respect thereto by DBS&A. You have acknowledged that all the testing undertaken by us, and the final report provided, constitutes mere test results using standardized methods, and cannot be used to disqualify DBS&A from rendering any professional or expert opinion, having waived any claim of conflict of interest by DBS&A.

We are pleased to provide this service to LANL and look forward to future laboratory testing on other projects. If you have any questions about the enclosed data, please do not hesitate to call.

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.
LABORATORY / TESTING FACILITY

Joleen Hines, Laboratory Supervising Manager
Enclosure

Daniel B. Stephens & Associates, Inc.
6020 Academy NE, Suite 100 505-822-9400
Albuquerque, NM 87109 FAX 505-822-8877

Summaries

Summary of Tests Performed

Laboratory Sample Number	Initial Soil Properties[1] (θ, ρ_d, ϕ)	Saturated Hydraulic Conductivity[2]		Moisture Characteristics[3]					Unsaturated Hydraulic Conductivity	Particle Size[4]			Effective Porosity	Particle Density	Air Permeability	1/3, 15 Bar Points and Water Holding Capacity	Atterberg Limits	Proctor Compaction
		CH	FH	HC	PP	TH	WP	RH		DS	WS	H						
RE73-05-58829	X									X								
RE73-05-58835	X									X								
RE73-05-58841	X									X								
RE73-05-58879	X									X								

[1] θ = Initial moisture content, ρ_d = Dry bulk density, ϕ = Calculated porosity

[2] CH = Constant head, FH = falling head

[3] HC = Hanging column, PP = Pressure plate, TH = Thermocouple psychrometer, WP = Water activity meter, RH = Relative humidity box

[4] DS = Dry sieve, WS = Wet sieve, H = Hydrometer

Summary of Initial Moisture Content, Dry Bulk Density Wet Bulk Density and Calculated Porosity

Sample Number	Initial Moisture Content		Dry Bulk Density	Wet Bulk Density	Calculated Porosity
	Gravimetric (%, g/g)	Volumetric (%, cm^3/cm^3)	(g/cm^3)	(g/cm^3)	(%)
RE73-05-58829	34.2	25.3	0.74	0.99	72.1
RE73-05-58835	38.5	25.4	0.66	0.91	75.1
RE73-05-58841	22.2	19.0	0.86	1.04	67.7
RE73-05-58879	16.5	16.1	0.98	1.14	63.1

NA = Not analyzed

Summary of Particle Size Characteristics

Sample Number	d_{10} (mm)	d_{50} (mm)	d_{60} (mm)	C_u	C_c	Method	ASTM Classification	USDA Classification
RE73-05-58829	0.15	3.3	5.4	36	1.0	DS	Classification by ASTM 2487 requires Atterberg test	Sand †
RE73-05-58835	0.085	1.9	3.4	40	0.76	DS	Classification by ASTM 2487 requires Atterberg test	Sand †
RE73-05-58841	0.13	7.4	16	123	0.81	DS	Classification by ASTM 2487 requires Atterberg test	Sand †
RE73-05-58879	0.11	2.7	4.2	38	1.3	DS	Classification by ASTM 2487 requires Atterberg test	Sand †

d_{50} = Median particle diameter

Est = Reported values for d_{10}, C_u, C_c, and soil classification are estimates, since extrapolation was required to obtain the d_{10} diameter

$$C_u = \frac{d_{60}}{d_{10}}$$

$$C_c = \frac{(d_{30})^2}{(d_{10})(d_{60})}$$

DS = Dry sieve

H = Hydrometer

WS = Wet sieve

† Greater than 10% of sample is coarse material

Laboratory Data and Graphical Plots

Initial Properties

Data for Initial Moisture Content, Bulk Density, Porosity, and Percent Saturation

Job Name:	LANL - Ash Pile
Job Number:	LB05.0097.00
Sample Number:	RE73-05-58829
Location:	73-24456
Sampled Date/Time:	4/19/05 0930
Test Date:	5-May-05
Field weight of sample* (g):	490.90
Tare weight, ring (g):	0.00
Tare weight, cap/plate/epoxy (g):	210.27
Dry weight of sample (g):	209.12
Sample volume (cm^3):	282.70
Assumed particle density:	2.65

Initial Volumetric Moisture Content (% vol):	25.3
Initial Gravimetric Moisture Content (% g/g):	34.2
Dry bulk density (g/cm^3):	0.74
Wet bulk density (g/cm^3):	0.99
Calculated Porosity (% vol):	72.1
Percent Saturation:	35.1

Comments:

* Weight including tares
NA = Not analyzed

Laboratory analysis by: S. Shannon
Data entered by: D. O'Dowd
Checked by: J. Hines

Data for Initial Moisture Content, Bulk Density, Porosity, and Percent Saturation

Job Name: LANL - Ash Pile
Job Number: LB05.0097.00
Sample Number: RE73-05-58835
Location: 73-24456
Sampled Date/Time: 4/19/05 1130

Test Date: 5-May-05

Field weight of sample* (g): 469.59
Tare weight, ring (g): 0.00
Tare weight, cap/plate/epoxy (g): 208.49

Dry weight of sample (g): 188.51
Sample volume (cm^3): 285.59
Assumed particle density: 2.65

Initial Volumetric Moisture Content (% vol): 25.4
Initial Gravimetric Moisture Content (% g/g): 38.5
Dry bulk density (g/cm^3): 0.66
Wet bulk density (g/cm^3): 0.91
Calculated Porosity (% vol): 75.1
Percent Saturation: 33.8

Comments:

* Weight including tares
NA = Not analyzed

Laboratory analysis by: S. Shannon
Data entered by: D. O'Dowd
Checked by: J. Hines

Data for Initial Moisture Content, Bulk Density, Porosity, and Percent Saturation

Job Name: LANL - Ash Pile
Job Number: LB05.0097.00
Sample Number: RE73-05-58841
Location: 73-24456
Sampled Date/Time: 4/19/05 1530
Test Date: 5-May-05

Field weight of sample* (g): 509.66
Tare weight, ring (g): 0.00
Tare weight, cap/plate/epoxy (g): 209.99

Dry weight of sample (g): 245.21
Sample volume (cm^3): 286.79
Assumed particle density: 2.65

Initial Volumetric Moisture Content (% vol):	19.0
Initial Gravimetric Moisture Content (% g/g):	22.2
Dry bulk density (g/cm^3):	0.86
Wet bulk density (g/cm^3):	1.04
Calculated Porosity (% vol):	67.7
Percent Saturation:	28.0

Comments:

* Weight including tares
NA = Not analyzed

Laboratory analysis by: S. Shannon
Data entered by: D. O'Dowd
Checked by: J. Hines

Data for Initial Moisture Content, Bulk Density, Porosity, and Percent Saturation

Job Name:	LANL - Ash Pile
Job Number:	LB05.0097.00
Sample Number:	RE73-05-58879
Location:	UA
Sampled Date/Time:	Not provided
Test Date:	26-May-05
Field weight of sample* (g):	273.28
Tare weight, ring (g):	113.86
Tare weight, cap/plate/epoxy (g):	0.00
Dry weight of sample (g):	136.83
Sample volume (cm^3):	140.11
Assumed particle density:	2.65

Initial Volumetric Moisture Content (% vol):	16.1
Initial Gravimetric Moisture Content (% g/g):	16.5
Dry bulk density (g/cm^3):	0.98
Wet bulk density (g/cm^3):	1.14
Calculated Porosity (% vol):	63.1
Percent Saturation:	25.5

Comments:

* Weight including tares
NA = Not analyzed

Laboratory analysis by:	D. O'Dowd
Data entered by:	J. Hines
Checked by:	J. Hines

Particle Size Analysis

Summary of Particle Size Characteristics

Sample Number	d_{10} (mm)	d_{50} (mm)	d_{60} (mm)	C_u	C_c	Method	ASTM Classification	USDA Classification
RE73-05-58829	0.15	3.3	5.4	36	1.0	DS	Classification by ASTM 2487 requires Atterberg test	Sand †
RE73-05-58835	0.085	1.9	3.4	40	0.76	DS	Classification by ASTM 2487 requires Atterberg test	Sand †
RE73-05-58841	0.13	7.4	16	123	0.81	DS	Classification by ASTM 2487 requires Atterberg test	Sand †
RE73-05-58879	0.11	2.7	4.2	38	1.3	DS	Classification by ASTM 2487 requires Atterberg test	Sand †

d_{50} = Median particle diameter

Est = Reported values for d_{10}, C_u, C_c, and soil classification are estimates, since extrapolation was required to obtain the d_{10} diameter

$$C_u = \frac{d_{60}}{d_{10}}$$

$$C_c = \frac{(d_{30})^2}{(d_{10})(d_{60})}$$

DS = Dry sieve

H = Hydrometer

WS = Wet sieve

† Greater than 10% of sample is coarse material

Particle Size Analysis
Dry Sieve Data

Job Name: LANL - Ash Pile
Job Number: LB05.0097.00
Sample Number: RE73-05-58829
Location: 73-24456
Sampled Date/Time: 4/19/05 0930

Test Date: 18-May-05

Shape: Angular
Hardness: Weathered and friable

Total Sample Weight (g): 209.42

Sieve Number	Diameter (mm)	Wt. Retained (g)	Cum Wt. Retained (g)	Wt. Passing (g)	% Passing
3"	75	0.00	0.00	209.42	100.00
2"	50	0.00	0.00	209.42	100.00
1.5"	38.1	0.00	0.00	209.42	100.00
1"	25	0.00	0.00	209.42	100.00
3/4"	19.0	9.70	9.70	199.72	95.37
3/8"	9.5	41.79	51.49	157.93	75.41
4	4.75	40.17	91.66	117.76	56.23
10	2.00	31.42	123.08	86.34	41.23
20	0.85	25.63	148.71	60.71	28.99
40	0.425	18.48	167.19	42.23	20.17
60	0.250	13.02	180.21	29.21	13.95
140	0.106	13.72	193.93	15.49	7.40
200	0.075	4.22	198.15	11.27	5.38
pan		11.55	209.70	- 0.28	

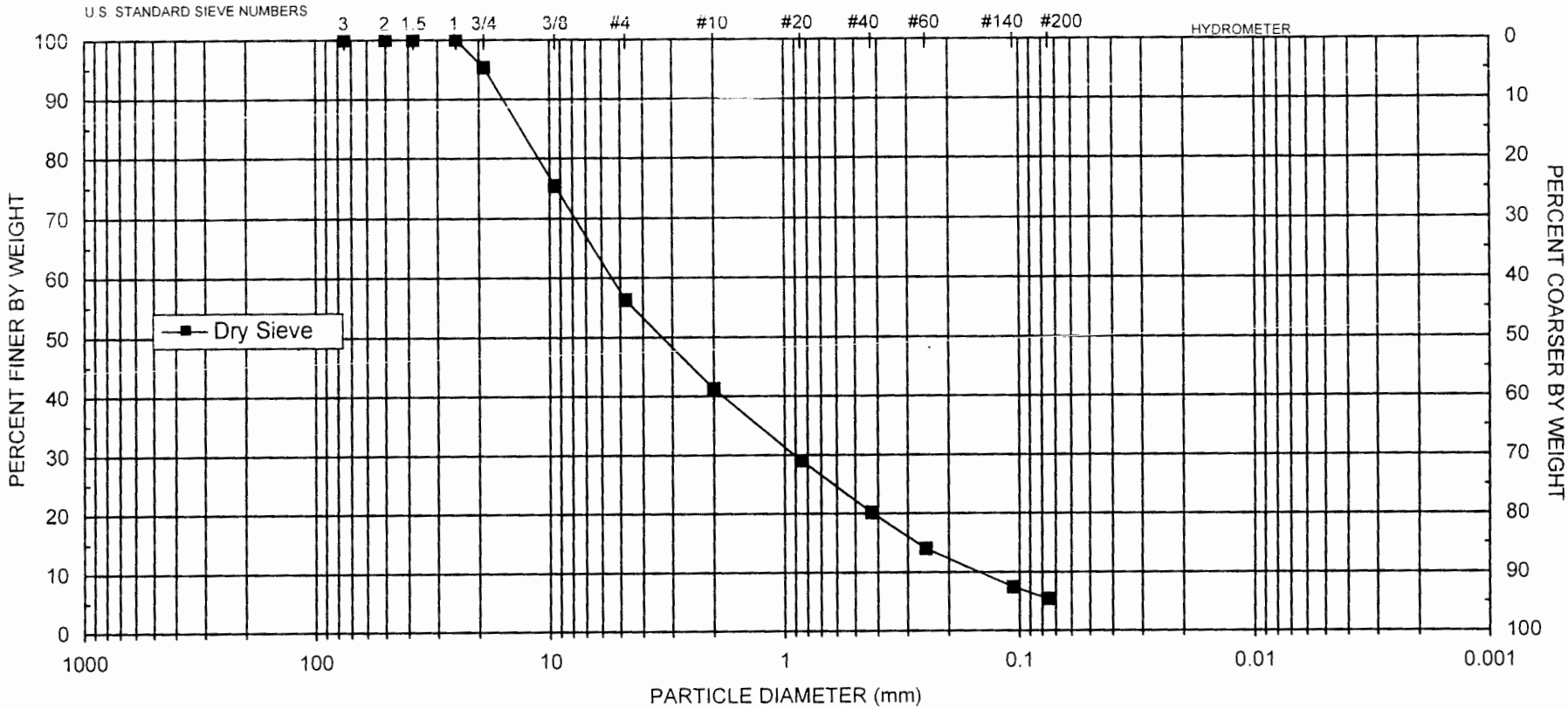
d_{10} (mm): 0.15
d_{16} (mm): 0.30
d_{30} (mm): 0.91
d_{50} (mm): 3.3
d_{60} (mm): 5.4
d_{84} (mm): 13

Median Particle Diameter--d_{50} (mm): 3.3
Uniformity Coefficient, Cu--$[d_{60}/d_{10}]$ (mm): 36
Coefficient of Curvature, Cc--$[(d_{30})^2/(d_{10}*d_{60})]$ (mm): 1.0
Mean Particle Diameter--$[(d_{16}+d_{50}+d_{84})/3]$ (mm): 5.5

ASTM Soil Classification: Classification by ASTM 2487 requires Atterberg test
USDA Soil Classification: Sand †

† Greater than 10% of sample is coarse material

Laboratory analysis by: D. O'Dowd
Data entered by: J. Hines
Checked by: J. Hines



UNIFIED	COBBLES	GRAVEL		SAND		SILT OR CLAY
		Coarse	Fine	Coarse	Medium	Fine	
USDA	COBBLES	GRAVEL	SAND				SILT	CLAY
			Very coarse	Coarse	Medium	Fine	Very fine		

d_{10} = **0.15**	d_{30} = **0.91**	d_{50} = **3.3**	d_{60} = **5.4**	C_u = **36**	C_c = **1.0**

SAMPLE NUMBER	SAMPLED DATE/TIME	ASTM CLASSIFICATION	USDA CLASSIFICATION
RE73-05-58829	**4/19/05 0930**	**Classification by ASTM 2487 requires Atterberg test**	**Sand †**

† Greater than 10% of sample is coarse material

Daniel B. Stephens & Associates, Inc.

Particle Size Analysis
Dry Sieve Data

Job Name: LANL - Ash Pile
Job Number: LB05.0097.00
Sample Number: RE73-05-58835
Location: 73-24456
Sampled Date/Time: 4/19/05 1130

Test Date: 18-May-05

Shape: Angular
Hardness: Weathered and friable

Total Sample Weight (g): 188.07

Sieve Number	Diameter (mm)	Wt. Retained (g)	Cum Wt. Retained (g)	Wt. Passing (g)	% Passing
3"	75	0.00	0.00	188.07	100.00
2"	50	0.00	0.00	188.07	100.00
1.5"	38.1	0.00	0.00	188.07	100.00
1"	25	0.00	0.00	188.07	100.00
3/4"	19.0	0.00	0.00	188.07	100.00
3/8"	9.5	27.74	27.74	160.33	85.25
4	4.75	36.93	64.67	123.40	65.61
10	2.00	28.29	92.96	95.11	50.57
20	0.85	22.69	115.65	72.42	38.51
40	0.425	18.92	134.57	53.50	28.45
60	0.250	14.65	149.22	38.85	20.66
140	0.106	16.25	165.47	22.60	12.02
200	0.075	5.85	171.32	16.75	8.91
pan		16.95	188.27	- 0.20	

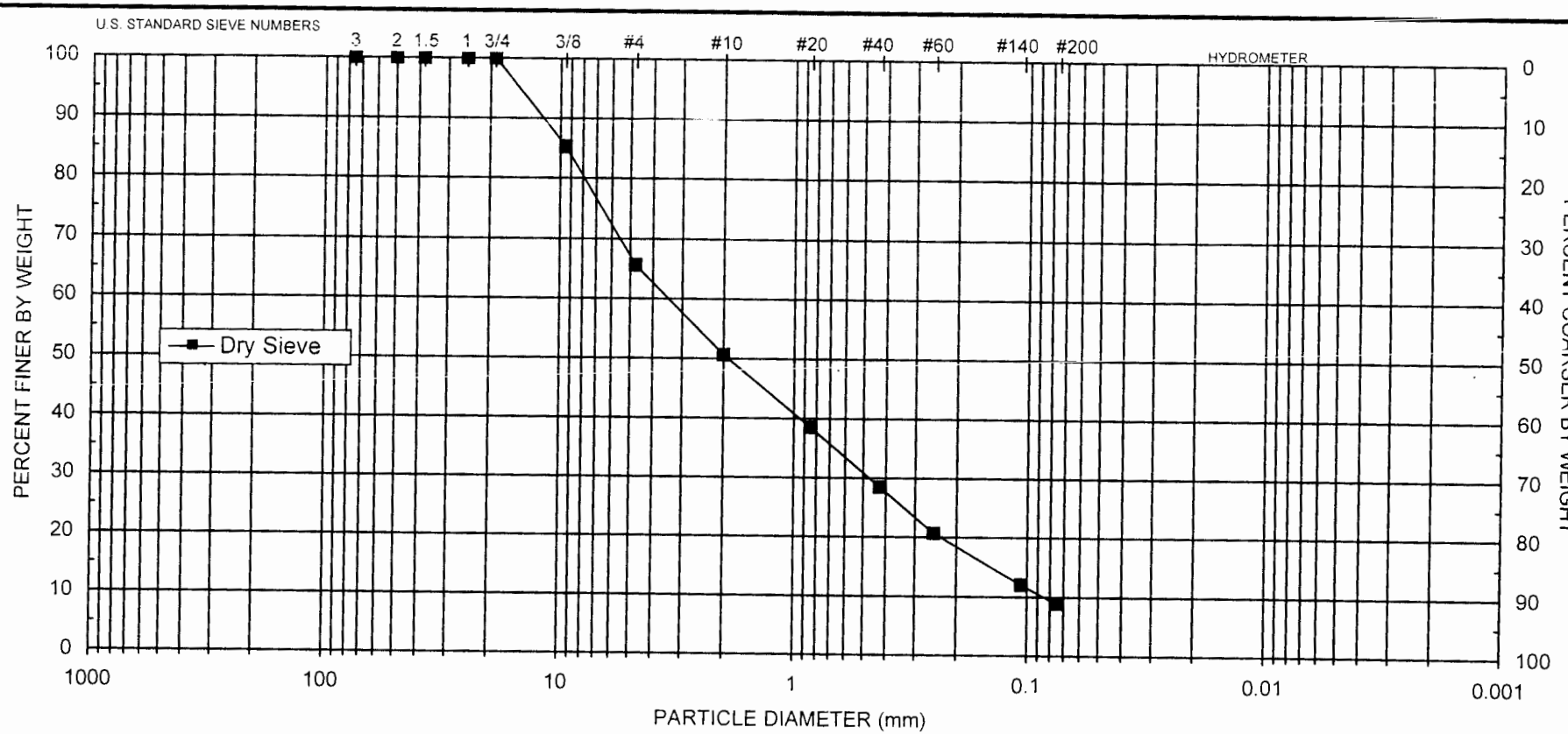
d_{10} (mm): 0.085
d_{16} (mm): 0.16
d_{30} (mm): 0.47
d_{50} (mm): 1.9
d_{60} (mm): 3.4
d_{84} (mm): 9.1

Median Particle Diameter--d_{50} (mm): 1.9
Uniformity Coefficient, Cu--$[d_{60}/d_{10}]$ (mm): 40
Coefficient of Curvature, Cc--$[(d_{30})^2/(d_{10}*d_{60})]$ (mm): 0.76
Mean Particle Diameter--$[(d_{16}+d_{50}+d_{84})/3]$ (mm): 3.7

ASTM Soil Classification: Classification by ASTM 2487 requires Atterberg test
USDA Soil Classification: Sand †

† Greater than 10% of sample is coarse material

Laboratory analysis by: D. O'Dowd
Data entered by: J. Hines
Checked by: J. Hines



UNIFIED	COBBLES	GRAVEL		SAND			SILT OR CLAY				
		Coarse	Fine	Coarse	Medium	Fine					
USDA	COBBLES	GRAVEL		SAND				SILT	CLAY		
				Very coarse	Coarse	Medium	Fine	Very fine			

d_{10} = **0.085**	d_{30} = **0.47**	d_{50} = **1.9**	d_{60} = **3.4**	C_u = **40**	C_c = **0.76**

SAMPLE NUMBER	SAMPLED DATE/TIME	ASTM CLASSIFICATION	USDA CLASSIFICATION
RE73-05-58835	**4/19/05 1130**	**Classification by ASTM 2487 requires Atterberg test**	**Sand †**

† Greater than 10% of sample is coarse material

Daniel B. Stephens & Associates, Inc.

Particle Size Analysis
Dry Sieve Data

Job Name: LANL - Ash Pile
Job Number: LB05.0097.00
Sample Number: RE73-05-58841
Location: 73-24456
Sampled Date/Time: 4/19/05 1530

Test Date: 18-May-05

Shape: Angular
Hardness: Weathered and friable

Total Sample Weight (g): 245.10

Sieve Number	Diameter (mm)	Wt. Retained (g)	Cum Wt. Retained (g)	Wt. Passing (g)	% Passing
3"	75	0.00	0.00	245.10	100.00
2"	50	0.00	0.00	245.10	100.00
1.5"	38.1	0.00	0.00	245.10	100.00
1"	25	0.00	0.00	245.10	100.00
3/4"	19.0	93.18	93.18	151.92	61.98
3/8"	9.5	21.31	114.49	130.61	53.29
4	4.75	22.48	136.97	108.13	44.12
10	2.00	24.24	161.21	83.89	34.23
20	0.85	20.52	181.73	63.37	25.85
40	0.425	16.53	198.26	46.84	19.11
60	0.250	11.79	210.05	35.05	14.30
140	0.106	13.39	223.44	21.66	8.84
200	0.075	4.49	227.93	17.17	7.01
pan		17.17	245.10	0.00	

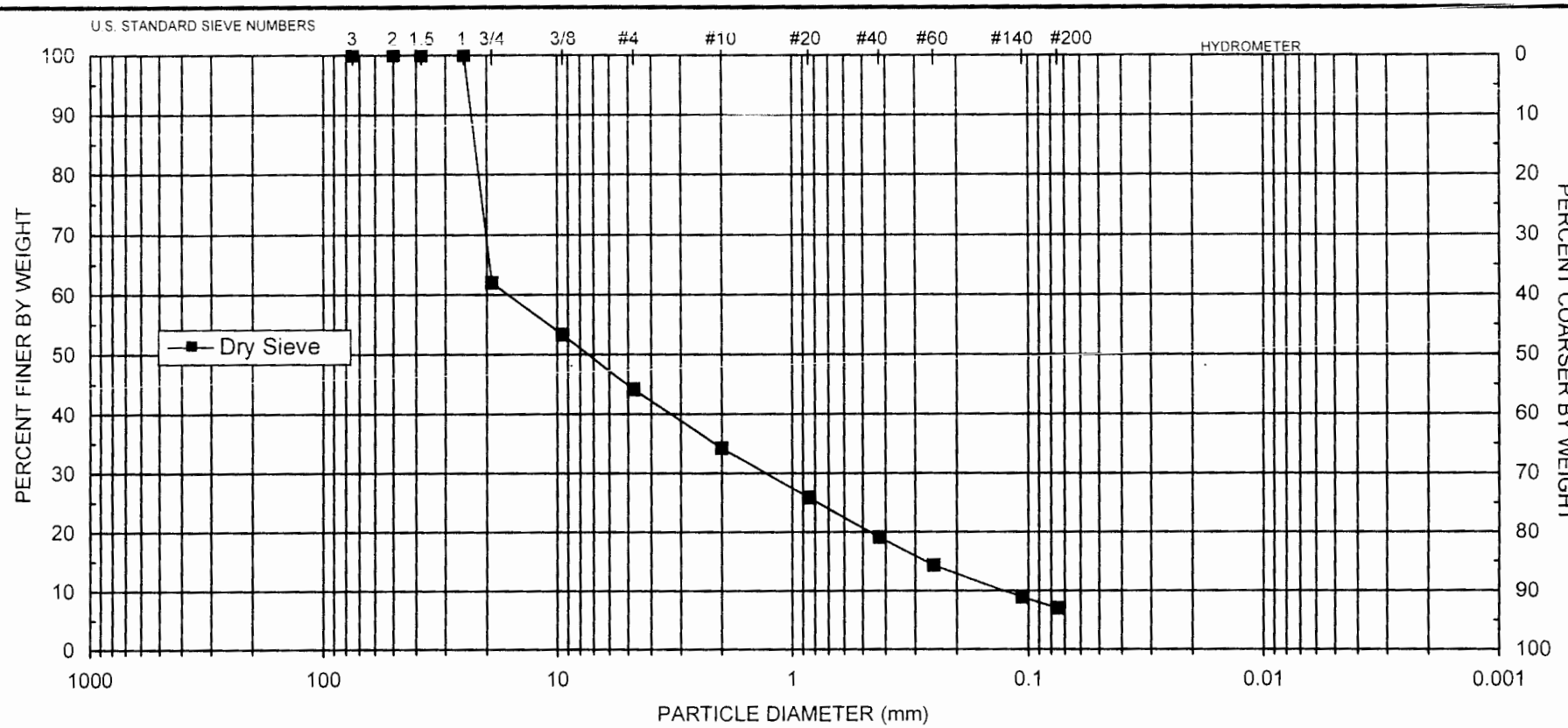
d_{10} (mm): 0.13
d_{16} (mm): 0.30
d_{30} (mm): 1.3
d_{50} (mm): 7.4
d_{60} (mm): 16
d_{84} (mm): 22

Median Particle Diameter--d_{50} (mm): 7.4
Uniformity Coefficient, Cu--$[d_{60}/d_{10}]$ (mm): 123
Coefficient of Curvature, Cc--$[(d_{30})^2/(d_{10}*d_{60})]$ (mm): 0.81
Mean Particle Diameter--$[(d_{16}+d_{50}+d_{84})/3]$ (mm): 9.9

ASTM Soil Classification: Classification by ASTM 2487 requires Atterberg test
USDA Soil Classification: Sand †

† Greater than 10% of sample is coarse material

Laboratory analysis by: D. O'Dowd
Data entered by: J. Hines
Checked by: J. Hines



UNIFIED	COBBLES	GRAVEL		SAND			SILT OR CLAY			
		Coarse	Fine	Coarse	Medium	Fine				
USDA	COBBLES	GRAVEL		SAND				SILT	CLAY	
				Very coarse	Coarse	Medium	Fine	Very fine		

d_{10} = **0.13**	d_{30} = **1.3**	d_{50} = **7.4**	d_{60} = **16**	C_u = **123**	C_c = **0.81**
SAMPLE NUMBER	SAMPLED DATE/TIME	ASTM CLASSIFICATION		USDA CLASSIFICATION	
RE73-05-58841	**4/19/05 1530**	**Classification by ASTM 2487 requires Atterberg test**		**Sand** †	

† Greater than 10% of sample is coarse material

Daniel B. Stephens & Associates, Inc.

Particle Size Analysis
Dry Sieve Data

Job Name: LANL - Ash Pile
Job Number: LB05.0097.00
Sample Number: RE73-05-58879
Location: UA
Sampled Date/Time: Not provided

Test Date: 2-Jun-05

Shape: Angular
Hardness: Weathered and friable

Total Sample Weight (g): 111.01

Sieve Number	Diameter (mm)	Wt. Retained (g)	Cum Wt. Retained (g)	Wt. Passing (g)	% Passing
3"	75	0.00	0.00	111.01	100.00
2"	50	0.00	0.00	111.01	100.00
1.5"	38.1	0.00	0.00	111.01	100.00
1"	25	0.00	0.00	111.01	100.00
3/4"	19.0	0.00	0.00	111.01	100.00
3/8"	9.5	12.89	12.89	98.12	88.39
4	4.75	28.54	41.43	69.58	62.68
10	2.00	21.75	63.18	47.83	43.09
20	0.85	13.24	76.42	34.59	31.16
40	0.425	9.78	86.20	24.81	22.35
60	0.250	6.36	92.56	18.45	16.62
140	0.106	7.81	100.37	10.64	9.58
200	0.075	2.86	103.23	7.78	7.01
pan		7.92	111.15	- 0.14	

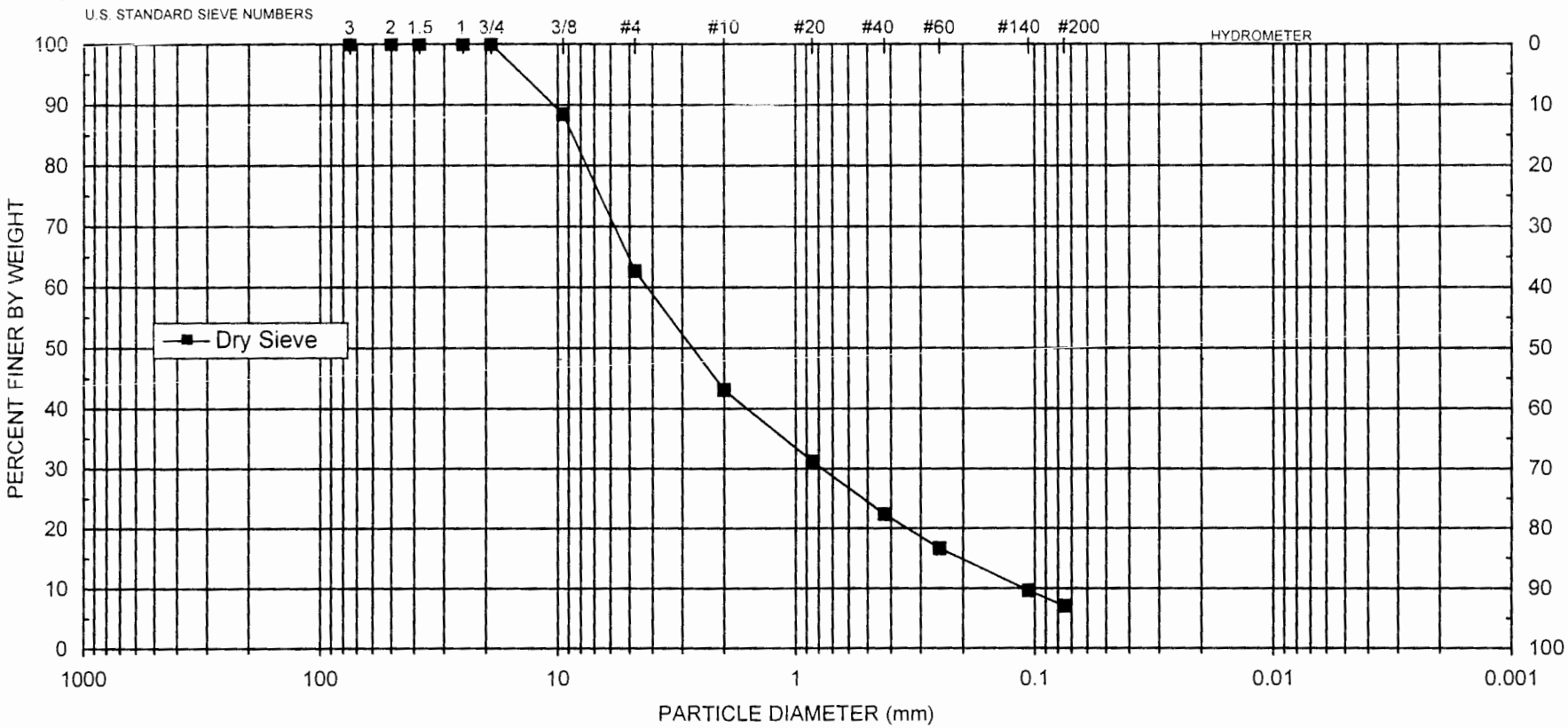
d_{10} (mm): 0.11
d_{16} (mm): 0.23
d_{30} (mm): 0.78
d_{50} (mm): 2.7
d_{60} (mm): 4.2
d_{84} (mm): 8.4

Median Particle Diameter--d_{50} (mm): 2.7
Uniformity Coefficient, Cu--$[d_{60}/d_{10}]$ (mm): 38
Coefficient of Curvature, Cc--$[(d_{30})^2/(d_{10}*d_{60})]$ (mm): 1.3
Mean Particle Diameter--$[(d_{16}+d_{50}+d_{84})/3]$ (mm): 3.8

ASTM Soil Classification: Classification by ASTM 2487 requires Atterberg test
USDA Soil Classification: Sand †

† Greater than 10% of sample is coarse material

Laboratory analysis by: S. Shannon
Data entered by: D. O'Dowd
Checked by: J. Hines



UNIFIED	COBBLES	GRAVEL		SAND			SILT OR CLAY			
		Coarse	Fine	Coarse	Medium	Fine				
USDA	COBBLES	GRAVEL		SAND				SILT	CLAY	
				Very coarse	Coarse	Medium	Fine	Very fine		

d_{10} = **0.11**	d_{30} = **0.78**	d_{50} = **2.7**	d_{60} = **4.2**	C_u = **38**	C_c = **1.3**

SAMPLE NUMBER	SAMPLED DATE/TIME	ASTM CLASSIFICATION	USDA CLASSIFICATION
RE73-05-58879	**Not provided**	**Classification by ASTM 2487 requires Atterberg test**	**Sand** †

† Greater than 10% of sample is coarse material

Laboratory Tests and Methods

Tests and Methods

Dry Bulk Density:	ASTM D 4531
Moisture Content:	ASTM D 2216
Calculated Porosity:	Klute, A. 1986. Porosty. Chp.18-2.1, pp. 444-445, in A. Klute (ed.), Methods of Soil Analysis, American Society of Agronomy, Madison, WI
Particle Size Analysis:	ASTM D 422